OPTIMIZATION REPORT ADDENDUM TO 2002 OPERATION AND MAINTENANCE EFFECTIVENESS REPORT

FOR

U.S. AIR FORCE PLANT NO. 6
MARIETTA, GEORGIA

PREPARED FOR

AERONAUTICAL SYSTEMS CENTER, WRIGHT-PATTERSON AIR FORCE BASE, OHIO

AIR FORCE CENTER FOR ENVIRONMENTAL EXCELLENCE, BROOKS AIR FORCE BASE, TEXAS

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OPTIMIZATION REPORT ADDENDUM TO THE
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LONG-TERM OPERATION AND MAINTENANCE OF THE ICM SYSTEM AT B04, B10, AND B90 AREAS FOR U.S. AIR FORCE PLANT NO. 6 MARIETTA, GEORGIA

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AERONAUTICAL SYSTEMS CENTER,
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ENVIRONMENTAL EXCELLENCE,
BROOKS AIR FORCE BASE, TEXAS

Reviewed and Approved by:

Sharon A. Schultz

Stephen Offner, P.G.

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Executive Summary

CH2M HILL, under contract with the Air Force Center for Environmental Excellence (AFCEE) Contract No. F41624-00-D-8021-0137, was tasked with performing the long-term operations and maintenance (O&M) of the Interim Corrective Measures (ICM) system from November 1, 2001, through February 5, 2003 (O&M 2002 services period of performance) at Air Force Plant (AFP) 6 in Marietta, Georgia. As part of this task order, a long-term monitoring (LTM) optimization analysis was performed by MacStats Consulting, Inc. This report includes the temporal and spatial analysis results, as well as the recommendations for optimizing the LTM programs (groundwater monitoring and O&M).

Data queries were made of all available electronic sampling records from AFP 6 over the historical life of the facility. The data covered the period from approximately 1982 to the present. Exploratory statistical analyses were performed to pare down the initial list of possible constituents to two to four candidate constituents of concern (COCs). The goal was to include only those parameters in the optimization routine that offer *the most statistical information* concerning temporal and spatial redundancy. The parameters selected typically exhibit larger detection rates and more widespread spatial occurrence. Overall, the most promising candidates appeared to be trichloroethene (TCE) (the single best candidate by far), 1,1-dichloroethene (DCE11), and chloroform (TCLME). These three were chosen for the optimization analysis. Other COCs had much lower detection rates and/or poorer spatial distributions.

The other major step in the data preparation was to divide the available data for each COC into two separate time slices. The first time slice consisted of all measurements procured between the beginning of 1999 and the end of 2000. The second time slice consisted of all measurements sampled since the beginning of 2001. Data prior to 1999 were not used in the spatial analysis, in part to ensure that the most current well network was optimized and in part because there were known analytical problems with some of the sampling events from 1998. Based on the results of temporal and spatial analyses, recommendations for optimizing the LTM programs(O&M and groundwater monitoring) have been developed.

Spatial Analysis

The primary goal of the spatial analysis (see Section 1.0 of this report) is to determine whether there are statistical redundancies within the spatial network (not taking into consideration groundwater bearing unit monitored) of well locations being monitored and to recommend well locations that could be sampled less frequently or dropped from the monitoring programs. The purpose is to optimize the LTM program at AFP 6 by determining whether there are sampling and analysis resources that might be pared without sacrificing critical information.

Thirty five wells were determined to be redundant for both TCE and 1,2 DCE. Of these wells, twenty four are currently included in the O&M and groundwater monitoring programs. Table 1.5 identifies the redundant wells that are currently part of the LTM programs (O&M and groundwater monitoring). However, the decision to reduce sampling

frequency or eliminate the well(s) from the monitoring program needs to be assessed against the objectives of the ICM systems effectiveness and monitoring plume stabilization for the EI 2005 program.

The secondary goal of the spatial analysis was to determine whether there are specific areas at AFP 6 where siting additional wells will provide important, previously unknown information about the extent of contamination. Eliminating redundant wells from over-sampled areas and adding wells to under-sampled areas will effectively place the monitoring wells to capture key information about the contaminant plume(s) and optimize the spatial network. Figure 3.1 presents those locations considered to be the areas of greatest uncertainty. Since TCE is the primary COC, those proposed well locations that address areas of greatest uncertainty and that are listed the highest priority (MWI and MWJ) should be consider for installation in the future.

Temporal Analysis

The temporal analysis (see Section 2.0 of this report) summarizes the temporal statistical analyses conducted at Sites B04, B10, and B90 of AFP 6 using the GTS algorithm on LTM groundwater data collected from approximately 1982 to the present. The goal of this study was to determine to what extent sampling frequencies at these sites could be optimized in order to pare sampling and analysis budgets without sacrificing information critical to the success of the LTM program at AFP 6.

The temporal optimization report includes descriptions of: 1) initial exploratory data analyses and how the data were prepared for input to the GTS algorithm; 2) the GTS temporal algorithm, including changes that were made to the algorithm since the last published version (Cameron and Hunter, 2002); and 3) the results of the AFP 6 temporal analysis.

The temporal variograms for AFP 6 were prepared with 10 temporal variograms per COC, representing not only each major site (B04, B10, B90) but also the subsite B76, and 6 variograms of well subsystems connected with the following ICM locations: RW101, RW102C, RW103, RW301, RW302, and RW303.

Table 2.8 recommends an optimal sampling interval, providing the best practical estimate of an optimal sampling frequency, given the available data. As was noted for iterative thinning, the recommendations on sampling frequency for these well groups are strictly data driven. Based on these results, the majority of the wells monitored quarterly could be considered for monitoring every three quarters with sufficient historical data (2 years of quarterly sampling results, i.e. 8 sampling events). The importance of these wells in evaluating the effectiveness of the ICM systems should be further evaluated prior to reducing the sampling frequency. Other regulatory or engineering considerations may need to be considered (plume stabilization monitoring) in the assignment of final sampling schedules. The sampling intervals listed offer a summary of the statistical information provided by AFP 6 data and how that information can be used to influence AFP 6 operations.

Recommendations

Based on the results of the spatial and temporal analyses, the following recommendations are presented for consideration:

- Thirty five wells were considered to be redundant. Twenty four of these wells are currently included in the O&M and groundwater monitoring programs. It is recommend that the redundant wells be evaluated further for possible elimination from the monitoring programs by considering their value in evaluating the effectiveness of the ICM systems and for monitoring plume stability.
- Two new monitoring wells are proposed for installation in the areas of greatest uncertainty to delineate the extent of TCE contamination (MWI and MWJ).
- The optimized sampling frequency for the ICM influent and effluent (currently biweekly) is recommended to be monthly.
- The optimized sampling frequency for the groundwater and O&M monitoring programs should be reduced to every three quarters for those wells with sufficient historical data (2 years of quarterly sampling results). Prior to reducing the sampling frequency, the wells included in these program should be evaluated to determine their usefulness in evaluating the effectiveness of the ICM systems and for monitoring plume stability.

1.0 Spatial Optimization at Sites B04, B10, and B90 at Air Force Plant 6 Using the Geostatistical Temporal/Spatial Algorithm

This report summarizes the spatial statistical analyses conducted at Sites B04, B10, and B90 at Air Force Plant (AFP) 6, using the Geostatistical Temporal / Spatial (GTS) algorithm on long-term monitoring (LTM) groundwater data collected from 1999 to the present. The primary goal of this study is to determine whether there are statistical redundancies within the spatial network of well locations being monitored at these sites and to recommend well locations that could be sampled less frequently or dropped from the network. The purpose is to optimize the LTM program at AFP 6 by determining whether there are sampling and analysis resources that might be pared without sacrificing critical information.

A secondary goal of the spatial analysis is to determine whether there are specific areas at AFP 6 where siting additional wells will provide important, previously unknown information about the extent of contamination. Eliminating redundant wells from over-sampled areas and adding wells to under-sampled areas will effectively place the monitoring wells to capture key information about the contaminant plume(s) and optimize the spatial network.

This spatial optimization report includes descriptions of 1) the data preparations that were made for input to the GTS spatial algorithm; 2) the GTS spatial algorithm itself, including changes that were made to the algorithm since the last published version (Cameron and Hunter, 2002); and 3) the results of the AFP 6 spatial analysis.

1.1 Data Preparation

As discussed in the temporal optimization report at Plant 6AFP 6, data queries were made for all chemical analytical data collected at wells in and around the B04, B10, and B90 sites. Exploratory statistical analyses were then performed to pare the initial list of possible constituents of concern (COCs) to between two and four candidates. Typically, including a large number of possible COCs significantly increases the amount of work required to run the GTS algorithm without improving the results. The goal was to include only those parameters in the optimization routine that offer the most statistical information concerning temporal and spatial redundancy. The best such parameters typically exhibit larger detection rates and more widespread spatial occurrence.

Overall, the most promising COC candidates for the optimization analysis were chosen: trichloroethene (TCE) (the single best candidate by far), 1,1-dichloroethene (DCE11), and chloroform (TCLME). Other COCs had much lower detection rates and/or poorer spatial distributions.

Whereas the temporal analysis averaged sampling data at a given well and date that was collected over multiple depths to ensure that there was only one value per sampling event per well, the spatial analysis was designed to be three-dimensional in nature, so every sample measurement was assigned an easting, a northing, and a depth / elevation value. Only data that could be placed within three-dimensional space could be used in the analysis. Data points missing any of these components were excluded.

Because a significant minority of the existing well locations were missing either the depth or surface elevation component, attempts were made to fill in the missing information where possible. After obtaining the most up-to-date well log data, 36 of 89 partially-defined locations were rendered usable for the spatial analysis. However, 18 of the 36 locations had depth information but no surface elevation measurement. For these cases, a crude triangulation and interpolation was done manually by examining surface elevations of neighboring wells and the rate at which the surface elevation seemed to be changing.

The other major step in the data preparation was to divide the available data for each COC into two separate time slices. The first time slice consisted of all measurements procured between the beginning of 1999 and the end of 2000. The second time slice consisted of all measurements sampled since the beginning of 2001. Data prior to 1999 were not used in the spatial analysis in part to ensure that the most current well network was optimized and in part because there were known analytical problems with some of the sampling events from 1998.

The reason for analyzing separate time slices was three-fold. First, because the character and extent of contamination is likely to change over time and maps of a site represent only snapshots, it is important to analyze data from a limited time frame in order to create reasonably accurate maps. Second, unless sampling events are highly regimented and all wells are sampled at the same time during the same sampling event, it may be impossible to analyze a specific sampling event to get a full representation of the spatial well network as opposed to a slice of time that includes a limited range of events. Third, to help ensure that well locations are optimized over the life of the LTM program, wells are only identified as potentially redundant if they exhibit redundancy across time slices (note, however, that newer wells might not have any data for earlier time slices; such wells would exhibit redundancy only in more recent time slices).

In practical terms at AFP 6, with three COCs and two time slices per COC, six distinct data sets were analyzed under the spatial optimization algorithm. This allowed for a six-fold comparison of redundancy in identifying wells that were either essential or potentially redundant in their statistical information. On a final note, as in the temporal optimization analysis, non-detects were handled by converting them to half the listed reporting limit (RL).

1.2 Methodology

The heart of the spatial optimization analysis in GTS consists of the following basic steps:

1) Estimating a declustered, univariate cumulative distribution (CDF) of concentration values for each COC;

2) Determining an appropriate spatial bandwidth and neighborhood search radius;

3) 3) Creating a base map using locally weighted quadratic regression (LWQR) and all existing site data;

4) Calculating a global regression weight at each well; and

5) Iteratively eliminating wells with the lowest global regression weights and re-estimating the site map based on the reduced data set. Each of these steps is explained below.

1.2.1 Declustered CDF

The first task of the spatial analysis was to determine an appropriate univariate distribution of concentration values for each COC. The measurement data at AFP 6, especially for TCE, range over several orders of magnitude. There is a complex, three-dimensional spatial distribution associated with these values, dependent on the fractured subsurface and the intensity and location of the contaminant plumes. Extremely high concentrations tend to cluster together, although not uniformly or in a predictable fashion. Because of this, most standard geospatial techniques, including typical forms of kriging, have a reduced ability to produce reasonable site maps. Univariate and parametric forms of kriging, in particular, such as ordinary or lognormal kriging, often have great difficulty in accurately reproducing the highs and lows of widely spread concentration ranges, except at known data locations, where kriging honors the data by reproducing it exactly.

A better strategy is to use a non-parametric form of spatial analysis, such as probability kriging or quantile kriging. Probability kriging transforms the original concentration data into a series of indicator variables and a variable representing the uniform scores of the original data. Each indicator is a binary 0-1 variable associated with a particular reference concentration level. All samples with values no greater than the reference level are converted to ones and all values larger than the reference level are converted to zeros. The basic idea is to convert each data value into known probabilities: if the reference level is, for example, 10 parts per billion (ppb), an indicator value of one means it is certain that the data point in question does not exceed 10 ppb (the probability of not exceeding the reference level being equal to one), while an indicator value of zero means that the actual concentration is certainly greater than 10 ppb (the probability of not exceeding the reference being zero).

Typically in probability kriging, a series of increasing reference levels is used to define key portions of the actual concentration range (e.g., 5 ppb, 100 ppb, 1,000 ppb, 5,000 ppb, 10,000 ppb). Indicator variables are defined for each reference level and kriging is performed on each indicator. The ultimate goal at each unknown map location is to form a weighted combination of the known 0's and 1's to estimate a probability that the unknown location does not exceed the reference level. Then, by having such probabilities in hand for the entire series of indicators, a reasonable estimate can be made of the actual concentration at the unknown location (more on that below).

To improve these estimates, probability kriging employs an extra variable computed as the uniform scores of the original concentration distribution. This transformation simply orders the data and converts each value to its rank divided by the data set sample size, thus giving a transformed value between 0 and 1. Higher values thus have uniform scores closer to 1, while lower values have uniform scores closer to 0.

The same strategy is used in quantile kriging. While no indicator variables are formed as in probability kriging, kriging is performed on the uniform scores directly instead of the actual concentrations, leading to kriged estimates between 0 and 1. These estimates can be thought of as percentiles, since they represent a probability of not exceeding a certain concentration level. The concentration level itself is known as the quantile associated with the particular percentile, hence the name quantile kriging. So for example, if the kriged estimate were 0.7, the estimated value at that location would represent the 70th percentile of the possible distribution of concentration measurements.

To re-transform these percentile estimates back to the original concentration scale, some form of the cumulative distribution of concentration measurements must be used. Unfortunately, because sampling in contaminated areas is often done to “chase the plume,” clusters of high values are often over-represented in the raw, univariate concentration distribution, biasing the results. A better solution is to make use of the declustered cumulative distribution or declustered CDF for short. The declustered CDF adjusts the raw distribution for spatial clustering and generally offers a more accurate estimate of the true concentration distribution.

While a variety of techniques exist to form the declustered CDF, the one utilized in GTS is based on a method for finding declustering weights (Bourgault, 1999). In this method, simple quantile kriging is performed on the set of known measurements, not to estimate unknown locations, but rather to cross-validate the known locations. This is done by temporarily removing a known value from the data set and then calculating a kriged estimate at that spot using the remaining data (otherwise known as leave-one-out, cross-validation, or jackknifing). As it turns out, the local kriging variance associated with each data location being cross-validated can be considered a declustering weight: higher variances represent locations with minimal spatial clustering, while lower variances represent locations with significant clustering. By weighting the original concentrations according to these declustering weights, the declustered CDF is formed as the resulting weighted univariate distribution.

To perform the cross-validation and simple quantile kriging, two preparation steps had to be accomplished: 1) Convert the original data into uniform scores, and 2) Develop a three-dimensional model of spatial covariance for the uniform scores. This was accomplished by analyzing omnidirectional variograms of the uniform scores for each of the three COCs and fitting appropriate spatial correlation models to these plots. Parameters for each model are provided in Table 1.1.

TABLE 1.1
Parameters for Spatial Correlation Models
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

COC	Nugget	Spherical Component		Exponential Component		Gaussian Component	
		Sill	Range	Sill	Range	Sill	Range
DCE11	0.8	0.18	800	—	—	0.06	675
TCE	0.53	—	—	0.4	4,000	0.18	500
TCLME	0.74	—	—	0.27	4,200	0.06	560

The result of this step was a declustered univariate CDF for each COC. Note that this cumulative distribution of concentration values was designed to represent the range of concentrations likely to be observed at AFP 6. As such, the declustered CDF includes data from 1999 until the present, the entire time period under consideration. Furthermore, as will be explained below, the declustered CDF was ultimately used to derive concentration estimates of each COC along a grid of unknown locations encompassing the heart of the volume bounded by sites B04, B10, and B90.

1.3 Spatial Bandwidth and Search Radius

An important step to building an estimated site map at AFP 6 was to choose a spatial bandwidth. The fitting procedure used in the latest version of GTS, namely LWQR, works by estimating the surface value at a given unknown grid location using a weighted linear combination of the known sample values close to the grid point. The analyst must select, however, how many neighboring sample measurements to use. In GTS this is done by selecting a bandwidth parameter that represents the fraction of known samples to be included in the neighborhood of any given grid point. For a one-dimensional time series, these bandwidths typically range from 40 percent to 80 percent. With volumetric or three-dimensional data, roughly equivalent bandwidths (in terms of data density included in the neighborhood per unit of volume) are on the order of 10 percent to 40 percent.

In general, the higher the bandwidth, the greater the amount of smoothing that will occur over the estimated surface. If the bandwidth is too high, the surface trend may miss important peaks and valleys. If the bandwidth is too low, the surface trend may exhibit artifactual jumps and/or dips between known sample values.

To guard against these scenarios, it is important to run a pre-flight check of the LWQR fits at several possible bandwidths prior to constructing a base map of the site. This pre-flighting is done by computing diagnostic checks of the residuals obtained when the surface trend is estimated at each known sample location and the known value is subtracted from this estimate.

Using GTS at AFP 6, several tests of the surface residuals were made, including the following calculations: Mallow's CP statistic, correlation of the residuals with the estimated surface trend, average bias of the residuals, and Filliben's probability plot correlation coefficient. Each of these statistics is designed to provide a numerical indication of the soundness of the estimated trend relative to a given bandwidth. In GTS, these residual diagnostic measures are plotted simultaneously against bandwidth in order to search for the most appropriate fitting neighborhood. The residuals are also plotted in space to look for obvious anomalies or areas of substantial lack of fit.

Mallow's CP statistic is a scaled measure of the sum of squared residuals. Lower values of Mallow's CP usually indicate a better fit. The correlation with the estimated surface trend is used to determine if the fit is worse over certain ranges of the variable being estimated than over others. Values close to zero are best. Values close to zero are also good when examining the average bias, which simply measures the average difference between the estimated surface value and the known measurement. Filliben's correlation coefficient is a test of normality that can be used to check the shape and symmetry of the residual distribution. LWQR works best when the residual distribution is symmetric and normally distributed. Coefficient values closer to one are best.

Taken together, it is usually possible to find an acceptable bandwidth with which to construct the surface maps. At AFP 6, a value of 20 percent was deemed a reasonably good choice for all three COCs. Once selected, the bandwidth was also used to determine a search radius. In most cases, using a percentage bandwidth to define search neighborhoods negates the need to specify a search radius. A bandwidth of 20 percent simply means that the nearest one-fifth of the data measurements are used to help estimate the unknown grid point, regardless of their distance from that location. However, when performing spatial optimization under GTS, a fixed search radius for locating neighbors is important, because as wells are temporarily removed from the data set on subsequent iterations of the algorithm, it is critical to document the loss of that information. In the extreme case, if no wells remain within the search radius of a given grid point, that point becomes inestimable. GTS specifically records the percentage of voxels that cannot be estimated for this reason, and uses this information to help gauge redundancy.

To ensure that all of the base maps at AFP 6 could be fully estimated, the search radius was chosen to approximately match the maximal distance required to populate search neighborhoods using a 20 percent bandwidth parameter. This distance was 4,000 feet. All subsequent iterations of the spatial algorithm used this same search radius, regardless of whether the 20 percent criterion was met.

1.3.1 Creating Base Maps with LWQR

Once a search radius and bandwidth were chosen, the next task was to create a three-dimensional base map for each COC and time slice. The base map under GTS serves as the primary means to assess degrees of spatial redundancy. Not only is a baseline established as each COC is mapped across the site area, but measures of local and global variance are also computed. At each additional iteration of the GTS algorithm, new maps created from reductions in the original data set are compared to the base map to determine how much plume information has been lost and at what price in increased

map uncertainty. For this reason, it is important to build as accurate a base map as possible.

The previously published version of GTS employed a fairly simple strategy for creating base maps (and subsequent maps); in order to avoid data complexity, handle large fractions of non-detect values, and aid in the fitting of spatial covariance models, all measurements were converted to a single indicator variable (i.e., zeros and ones), where the reference concentration level was taken as either the detection / reporting limit or a regulatory limit (such as an MCL). Base maps constructed from these indicators were not re-converted to concentrations, but rather represented maps of the probability that the true concentration was below the reference level. As such, these maps did not provide detailed information about plume intensity, but still were useful for assessing spatial redundancy. However, a significant amount of statistical information concerning the spatial distribution of contaminants was not utilized.

In the updated version of GTS that was applied to AFP 6, an attempt was made to map the plume or contaminant distribution more completely. This was done by converting the sample concentrations into a series of five indicator variables, with each reference concentration representing a key quantile of the original, univariate declustered CDF, as shown in Table 1.2. The goal was not to choose specific regulatory limits as reference values, but to choose levels that adequately divided or spanned the univariate distribution of COC concentrations, paying particular attention to the highly skewed upper end of these distributions. Although the quantiles were chosen to match the 20th, 60th, 80th, 90th, and 95th percentiles as closely as possible, the TCE distribution in particular had too many non-detects to enable the first indicator variable to be set near the 20th percentile.

TABLE 1.2
COC Indicator Variables With Reference Concentrations and Percentiles
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Indicator Variable	DCE11		TCE		TCLME	
	Reference	Percentile	Reference	Percentile	Reference	Percentile
I-1	1	0.26	15	0.51	0.5	.22
I-2	2.5	0.61	160	0.61	2.5	.67
I-3	15	0.81	500	0.80	10	.81
I-4	50	0.90	5,000	0.91	25	.90
I-5	125	0.96	20,000	0.95	45	.95

Another facet of the previous version of GTS was that all analyses were conducted in two-dimensional (2D) space. Depth information was simply ignored or collapsed so that all well locations were treated as if they resided in a 2D plane. Furthermore, the technique used to estimate the base map and all subsequent maps was ordinary indicator kriging. Kriging takes a neighborhood of known values around an unknown grid point and solves a set of simultaneous linear equations to find the best estimate for

that grid point. The known locations are honored in the sense that a kriged estimate at a known location returns the original data value. In this way, kriging can be thought of as a kind of spatial interpolator, where grid points between known locations are interpolated based on the known values.

A key aspect of the kriging method is that it fundamentally depends on having a spatial covariance model that adequately describes the strength of the spatial correlation between adjacent sample points. Much effort in fact can be devoted to analyzing the empirical spatial correlation measure (typically called the variogram or semi-variogram) and then developing an appropriate mathematical model of the spatial covariance.

In order to streamline this process, a different technique has been incorporated into the GTS algorithm: LWQR. Like kriging, LWQR takes a neighborhood of sample values located near an unknown grid point and solves a system of linear equations to determine the optimal estimate. Like kriging, LWQR is a linear estimator. Both techniques assign numerical weights to the sample values in the neighborhood and form the new estimate as a weighted average of the sample values. However, there are also a number of differences.

First, kriging requires that all the sample data have distinct locations in space. Otherwise the kriging algorithm does not return a solution. In practice, if some locations have multiple measurements during a given time slice (say from distinct sampling events), these values must first be averaged or pre-processed in such a way that only a single value is used for kriging. Some information about the individual measurements and data variability is necessarily lost in this step. LWQR does not have a similar requirement, so multiple values at a given well or given sampling location are acceptable.

Second, kriging is a spatial interpolator that honors the known data values. LWQR is a smoother. Applied to spatial fields, LWQR attempts to find the best overall surface to fit the available sample points, but it does not require that any individual data value be honored. The best analogy is standard linear regression. When a best-fitting line is estimated for a time series or an XY-scatterplot, the line may or may not exactly pass through any given individual value. Nevertheless, the line is chosen to minimize the sum of squared deviations from it and to fit the overall trend. In a similar way, the standard version of LWQR is designed to determine the best-fitting quadratic surface through the sample points, but will not necessarily pass through any one of them exactly.

In practical terms, LWQR attempts to fit the best overall surface to the sample data while implicitly assuming that the measured samples may not precisely fit the surface trend due either to error or some other source of variation. Standard forms of kriging basically assume that all sample data are known exactly. Of course, there is no guarantee that some measurements might not include elements of laboratory or sampling error. Variation is also introduced by the fact that the groundwater quality and/or plume intensity may change slightly from one sampling event to the next.

Third, LWQR does not require prior development of a spatial covariance model. With LWQR, a locally quadratic surface is fit to each grid point. Spatial correlation is

incorporated in this method, not through an explicit prior correlation model, but rather through the apparent curvature in the sample points themselves. The quadratic surface is fit to this curvature, with the degree of curvature potentially changing with each grid point. In this way, spatial clustering is accommodated by the LWQR technique.

1.3.2 Constructing the Base Map

To build the base maps at AFP 6, a volume surrounding the region encompassing sites B04, B10, and B90 was constructed and a rectangular grid was imposed on this volume. To limit computational time and to optimize only the sites in question, the enclosing volume did not include perimeter areas of AFP 6. The specific coordinate ranges bounding B04, B10 and B90 areas analysis region are listed in Table 1.3. Due to the surface topography, occasionally nodes on the upper layer of the grid were higher than the ground level. For the most part, though, grid nodes corresponded to real subsurface locations at AFP 6.

TABLE 1.3
Bounding Coordinate Ranges for Surrounding the B04, B10, and B90 Areas
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Direction	Minimum	Maximum	Step Size
Easting	389,000 ft	393,200 ft	150 ft
Northing	1,426,600 ft	1,431,700 ft	150 ft
Elevation	825 ft	1,075 ft	25 ft

At each grid node, an LWQR estimate was made using each of the five indicator variables in turn. At each indicator level, the zeros and ones corresponding to the sample data were employed to compute an estimate of the probability that the reference concentration level had not been exceeded. This process was repeated for each indicator to give a series of five probability values at each grid node, representing updated information helping to bracket the best estimate of the concentration at that node. For example, consider the following hypothetical results for TCE at node 10 represented in Table 1.4:

TABLE 1.4
Hypothetical LWQR Results for TCE Using Five Indicator Variables
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

COC	Indicator Variable	Reference Level (ppb)	LWQR Result
TCE	I-1	15	0.10
TCE	I-2	160	0.20
TCE	I-3	500	0.80
TCE	I-4	5,000	0.98
TCE	I-5	20,000	0.99

Based on the LWQR results, the estimate would be that there was only a 10 percent probability that the true concentration was below 15 ppb, a 20 percent probability that the true concentration was below 160 ppb, an 80 percent probability that the true value was below 500 ppb, a 98 percent probability that the value was below 5,000 ppb, and a 99 percent probability that the value was below 20,000 ppb. The most likely range would therefore be between 160 ppb and 500 ppb.

To determine a concentration estimate for this hypothetical grid node, the approach taken in GTS is to update the declustered univariate CDF using the LWQR results for the series of indicators. This leads to what is known as the conditional cumulative distribution function or CCDF. The basic idea is to condition or adjust the overall univariate distribution of measured values using the updated information provided by the LWQR indicator results. So, for instance, in the hypothetical example above, the declustered CDF for TCE indicates that 61 percent of all the available TCE measurements from 1999 onward at sites B04, B10, and B90 were no greater than 160 ppb (see previous table). At the hypothetical grid node being estimated, however, the probability that the true value does not exceed 160 ppb is only 20 percent. Therefore, the overall univariate CDF must be updated so that values less than 160 ppb occur only 20 percent of the time at this grid node. In this manner, an updated CCDF can be calculated independently for each grid node and estimates of the (locally-varying) true mean concentration made across the site using the formula:

$$\hat{v} = \sum_i v_i \left(CCDF\left(v_i\right) - CCDF\left(v_{i-1}\right) \right)$$

where indexes the observed concentration values from the declustered, univariate CDF.

1.3.3 Global Regression Weights

In addition to the base map built from the LWQR estimates, another key output is the computation of global regression weights. The vector of global regression weights associates each known well location with a numerical index representing that well's overall relative contribution to the base map. Positive global regression weights represent wells that are more influential in the base map estimation; negative or zero weights represent wells that play a smaller, more redundant statistical role in the creation of the map. Thus, the global regression weights serve to identify degrees of spatial redundancy among the set of existing well locations.

The global regression weights are calculated by accumulating in an appropriate way a series of intermediate vectors known as the local regression weights. These intermediate weights are found as a by-product of computing the estimated probability of non-exceedance for each indicator variable at a given grid node: the LWQR results are manipulated to compute what is known as the local weight diagram. The weight diagram is a vector of numerical weights, one per sample measurement in the search neighborhood, such that the probability of non-exceedance for a specific indicator level is proportional to a weighted average of the product of the sample indicator values and the weight diagram. Thus the weight diagram represents the set of local regression weights that gets applied to the observed indicator data to produce the LWQR estimate.

There are two important things to note about the local weight diagram. First, each grid node involves a different set of neighborhood samples, but across the site as a whole, any given sample value is likely to be used in the neighborhood of a number of distinct grid nodes. Thus, the search neighborhoods tend to overlap as one moves about the grid. Second, unlike typical applications of ordinary kriging—a by-product of which is the set of local kriging weights—the local weights in LWQR do not necessarily sum to one. Nor are these weights necessarily positive.

With these items in mind, how are the global regression weights then computed from the local weights? First, the local weights at each node are normalized so that the absolute value of the local weight vector components sums to one. This ensures that each grid node at the site is given equal weight when assessing redundancy. Second, the normalized local weight vectors are augmented to give zero weight to any sample location located outside the search neighborhood for that grid node. This numerically represents the fact that samples outside the neighborhood have no influence (positive or negative) on the LWQR result for the node being estimated. Third, the augmented local weight vectors are averaged across all the grid nodes by sample location. This means that given a known sample location at well X, the local weights associated with that location (one per grid node, with some possibly equaling zero) are summed and then divided by the total number of nodes. Finally the averaged weights are adjusted for wells with multiple sampling depths. Here the weights are summed across depths for each well. Weights at wells with only a single sampling depth remain unchanged.

After all these steps are completed, there is exactly one weight per well location, and it is this numerical vector that is deemed the set of global regression weights. The term global is used because the final weights are built by averaging the local influence on the base map of each sample across the grid, and hence, across the site as a whole. With this vector in hand, the wells are ranked according to their statistical influence on the base map. Wells with higher global regression weights are deemed more essential to the map estimate, while those with lower weights are deemed least essential and potentially redundant.

1.3.4 Local and Global Variance Measures

In addition to forming the basis for the global regression weights, the local regression weights are useful for estimating the relative local and global variance measures. These measures provide a way to assess the relative degree of statistical uncertainty associated with a given map estimate. First, a local uncertainty measure is computed at each grid node using the local weight diagram and the following formula:

$$locvar(w_k) = \sum_i \left| lx^i(w_k) \right|^2$$

where wk denotes the kth grid node, i indexes the sample values in the search neighborhood around the kth node, and lx represents the local regression weight vector.

Because a different relative local variance is computed at each grid node, the set of local variances can be mapped, much like the base map of concentration estimates. One can also determine from such a variance map whether there are certain areas of the site

where the local variance is particularly high, representing places of greater statistical uncertainty connected with the mapped concentration estimate.

With the local variances in hand, GTS also computes a global variance measure for the site as a whole. To do this, the local variances are simply summed across the set of grid nodes, using the following formula:

$$gvar = \sum_k locvar(w_k)$$

where, as before, wk denotes the kth grid node and the summation is taken over the entire grid.

The global variance is valuable because it provides a single numerical summary of the total relative statistical uncertainty associated with a given configuration of well locations. In other words, the global variance from the base map—utilizing all the original well locations—can be compared against the global variance computed from estimating the same map on a reduced or different set of well locations. Increases in global uncertainty then represent configurations that are less statistically reliable.

1.3.5 Alterative Elimination of Wells

Given that the global regression weights provide a relative but not an absolute measure of spatial redundancy, it is important to use other measures to test how many wells are redundant and what degree of redundancy should be tolerated. The global regression weights provide a strategy for identifying potentially redundant wells. However, the acid test is to see how accurately maps can be estimated when these possibly redundant wells are temporarily removed from the data set.

To accomplish this goal in a systematic fashion, GTS uses the following procedure. First, the remaining wells are sorted by global regression weight. Second, the subset with the lowest 5 percent of global regression weight scores are flagged and removed from the data. Then LWQR is used on the reduced data set to re-estimate the site map. When comparing this re-estimated map to the original base map, four basic statistical quantities are measured: 1) change in global regression variance; 2) number of grid nodes that could not be estimated due to a shortage of remaining data; 3) changes in local node-specific variances, including tracking of the percentage of nodes with local variances greater than a pre-defined threshold; and 4) changes in the mapped concentration estimates.

The same process is repeated several times by removing 5 percent of the lowest ranked well locations (that is, ranked by global regression weight) at each incremental iteration. In this fashion, a small number of wells is temporarily eliminated at each step, until the map estimates show obvious deterioration and the variance measures show substantial change.

The final step in the spatial analysis is to review the results of the iterative well location removal algorithm and to decide at what point the re-estimated maps have deteriorated beyond a reasonable level. Such a decision is necessarily subjective. However, it is often helpful to examine the rate of deterioration in the maps and the rate of change in the

global and local variance measures as a function of the percentage of well locations that have been removed.

Once a stopping point has been decided, only wells deemed potentially redundant at the previous removal step are ultimately tagged as redundant for that COC and time slice. Then the lists of redundant wells are compared across the COCs and time slices in order to determine that subset of locations which is redundant in every case. These wells then make up the final redundancy list for the site.

1.4 Spatial Optimization Results

The spatial optimization results are contained in a series of graphs and tables. As noted in the temporal optimization report, the hydrogeologic environment at AFP 6 is complex and the AFP 6 data exhibit a large number of irregularities, sometimes due to the nature of the fractured subsurface. Because of these complexities, the spatial analysis has certain limitations discussed below. In addition, further testing of slightly alternate spatial optimization schemes may be valuable to validate these initial results further.

Overall, the spatial analysis of the two time slices (1999-2000 and 2001-2003) revealed different levels of spatial redundancy. For the older data that also included a smaller number of well locations, a safe level of redundancy amounted to only approximately 10 percent of the well network or approximately 18 wells. Furthermore, when matching lists of redundant wells across the three COCs that were analyzed, only 11 wells were commonly listed, amounting to 6 percent of the total well set. For the most recent data (second time slice), a safe level of redundancy is approximately 25 percent, corresponding to about 50 well locations. When matching the redundant locations across the three COCs, the common list dropped to 26 wells or approximately 13 percent of the well network.

From strictly a statistical point of view, all of these redundant wells might be eliminated from the AFP 6 LTM network. However, other considerations must be factored in before making a decision. The spatial analysis only considers statistical contributions of each well to concentration maps of the site. It does not consider other purposes for these wells. Some of them may be essential for engineering or site characterization reasons or because they form an integral part of an existing treatment system. Each potentially redundant well should be reviewed by site geologists and hydrologists to determine if overriding factors exist.

1.4.1 Global Measures of Redundancy

To help assess redundancy at a global level, the graphs in Appendix A were prepared. These graphs plot selected summary statistics from the spatial mapping exercise against the percentage of wells that were removed from the data for each COC. Examination of these graphs can provide one indication of when too much data have been removed (that is, when a reasonable level of statistical redundancy has been exceeded), especially if the trend is flat or very gradual at first, for example, for lower fractions of data removal, but then begins to trend more sharply at an increased level of data removal.

The first measure of global redundancy is given in Figures A-1 through A-3 in Appendix A. These graphs plot the trend in global variance for each COC and each time slice. In general, the global variance is expected to increase as more data are removed and the maps are re-estimated. In other words, less data equals less certainty and higher variance. Beyond this, two things can be noted in these plots. First, for each COC, the global variance is higher for the first time slice than for the second. This reflects not only the larger number of well locations available in the more recent data, but also the larger number of apparent anomalies within the data from 1999-2000. Closely adjacent sample measurements were less well behaved and showed less spatial correlation than data from the most recent period. Perhaps this was due to the sampling of isolated fractures at some well locations or to analytical inconsistencies or irregularities. Whatever the cause, all the tested COCs exhibited greater uncertainty on the site maps for the first time slice than for the second.

Second, the shape of the trends in global variance differ by time slice. Especially for DCE11 and TCE, the second time slice global variance for removal fractions up to about 25-30 percent is fairly flat or only gradually increasing, but rises more sharply after that point. No flat period is evident for the first time slice global variance trends. Even the removal of small numbers of wells increases the global variance by a significant amount. This pattern is consistent with other redundancy measures (discussed below) showing that more data can be safely removed from the second time slice than from the first.

Additional measures of global redundancy are shown in Figures A-4 through A-6 and Figures A-7 through A-9 in Appendix A. Figures A-4 through A-6 documents the change in two measures: the percentage of voxels with very high grid-node-specific local variances (denoted REDUCED-VARPCT on the plots) and the average level of difference between the estimated indicator values from the reduced data set and those of the base map (denoted AVE-IDIFF). The first of these (i.e., REDUCED-VARPCT) simply counts across the site grid the percentage of estimated nodes where the local variance value was determined to be in the extreme upper tail of the distribution of local variances. As the fraction of data removal increases, the percentage of extreme local variances is also expected to increase.

The second measure (i.e., AVE-IDIFF) was computed by taking the difference at each of the five indicator levels between the reduced data set indicator estimate and the corresponding base map indicator estimate. These indicator differences were then summed across the five indicator levels and finally averaged across all the nodes on the site grid. The interpretation of the average indicator difference is as follows: each indicator variable corresponds to a particular concentration level from the overall declustered CDF, for instance, the first indicator for TCE corresponds to a concentration value of 5 ppb. The indicator estimate after mapping the site with LWQR is the probability of not exceeding this reference concentration value. To the extent that the indicator estimates at a particular grid node for both the base map and the reduced-data map are the same, both maps provide the same statistical information about the expected concentration level at that node. On the other hand, if the indicator estimates differ, the estimated concentration values will also differ, leading the reduced-data map to differ in pattern and magnitude from the base map. Averaged across all the nodes on

the site grid, the average indicator difference then provides a summary measure of how much change is to be expected between the base and reduced-data maps.

In Figures A-4 through A-6, the REDUCED-VARPCT measure is again fairly flat, up until at least a 25 percent removal for each COC in the second time slice, when it begins to rise more quickly, especially for TCLME. On the other hand, in the first time slice, the percentage of extreme local variances for DCE11 rises quickly right away, but is fairly flat until at least a 20 percent removal for the other COCs. The average indicator difference measure (AVE-IDIFF) traces a more complicated pattern. Negative values of this measure signify an overall over-estimation of the site grid on the reduced-data set compared to the base map. Positive values signify an overall under-estimation. For all three COCs, low levels of data removal correspond to negative values of AVE-IDIFF, corresponding to some over-estimation. However, for DCE11, the change in the degree of over-estimation is fairly gradual up to about 15 percent removal, when it jumps close to zero for the second time slice (corresponding to a rough balance between the local indicator over- and under-estimates across the site). For TCE, the degree of change in AVE-IDIFF is gradual up to 25 percent removal for the second time slice, but it is fairly steep after 10 percent removal for the first time slice. For TCLME, the change in AVE-IDIFF is fairly significant for both time slices after about 10 percent removal.

The final set of global redundancy measures is plotted in Figures A-7 through A-9. These are denoted by MEAN-MISCLASS, PCT-IDIFF, and PCT-IMISCLASS. MEAN-MISCLASS refers to the percentage of voxels or nodes that were classified one way relative to a regulatory limit on the base map and are classified the opposite way on the reduced-data map. For example, using the MCL of 5 ppb for TCE, just under 10 percent of all the estimated grid nodes were misclassified when 5 percent of the wells were removed in the second time slice (see Figure A-8). That percentage rises to about 20 percent by the time 40 percent of the wells have been removed. For all the COCs, while the percentage of such misclassifications increases as expected with increased data removal, the trends provide no obvious way to measure a specific degree of acceptable redundancy. Note also that for TCLME, no MCL apparently exists and a value of 100 ppb was used as the regulatory limit to mimic the ceiling on total chlorinated methanes. Very few voxels were misclassified using this limit for TCLME in either time slice.

PCT-IDIFF and PCT-IMISCLASS are two additional measures of how much the reduced-data map indicator estimates differ from the base map indicator estimates. The first counts the percentage of nodes at which at least one reduced-data indicator differs from the corresponding base map indicator by at least 0.5. Remember that all the indicator estimates are between 0 and 1; a difference of at least 0.5 is a large change in the estimated probability of non-exceedance for the associated reference concentration level. The second measures the percentage of nodes at which the indicator would be classified one way on the base map and the opposite way on the reduced-data map. Note that classification in this case refers to the likelihood of the estimated node being below or above the reference concentration level. So for DCE11, if the estimated indicator value at node Z on the base map is 0.2 for a reference level of 100 ppb, the probability of the true concentration at node Z being less than 100 is only 20 percent. Based on this probability, it is more likely that the true value exceeds 100 ppb and therefore the node would be classified as an exceedance. But if the same node on a

reduced-data map had an indicator estimate of 0.75, it would be classified as a likely non-exceedance. In that case, the node would be misclassified for the indicator variable relative to the base map. By counting all the nodes at which such misclassifications occur, a misclassification rate for the site as a whole can be computed.

Unfortunately, while both PCT-IDIFF and PCT-IMISCLASS trend upwards with increased data removal for all three COCs and both time slices, Figures A-7 through A-9 show little evidence of any flat portions of the trends upon which to judge degrees of redundancy. The only thing reasonably clear is that misclassification rates tend to be higher in the first time slice than the second, due in part to the greater variability and uncertainty associated with the estimates on the older data.

As a final note, given the amount of data at AFP 6 and the spatial spread of the existing well locations, no grid nodes went unestimated, regardless of the amount of data removed. The GTS algorithm tracks the number of unestimated nodes, but the vast majority of the wells would have to be removed for this to occur at AFP 6.

1.4.2 Local Indications of Redundancy

While global measures of redundancy are quite useful, they do not provide the full story. Global misclassification rates, for example, do not indicate where the misclassification is occurring or to what degree. Actual maps of the site were prepared and evaluated to provide this type of information. To this end, two sets of maps were prepared for each COC and time slice. Appendix B includes two sets of maps for TCE as an example. The first time slice figures, at each level of data removal, the local indicator value differences between the base map and each reduced-data map (Appendix B) Local areas of over-estimation (corresponding to negative indicator differences) are shaded in orange and red. Local areas of under-estimation (corresponding to positive indicator differences) are shaded in blue. By comparing these maps relative to the increase in the amount of data removed, the point at which too many local areas of over- and under-estimation pop-up can be assessed.

The second set of maps (Appendix C) details in a similar way the changes that occur in the local variance with increasing data removal. Are there particular areas of the site at which the local uncertainty is unacceptably high? Do the areas with high local variance change as more data are removed? Do new areas emerge? All these questions can be assessed by viewing the maps in Appendix C.

In general, the maps in Appendices B and C support the conclusion that 1) too much local information is lost from the base map, and / or 2) too much extreme local uncertainty is introduced when the data removal fraction rises above approximately 10 percent for the data in the first time slice and approximately 25 percent for the second time slice.

One important thing to note about the maps in Appendices B and C is that they are presented as two-dimensional plan-view contour surfaces. The actual map estimates at AFP 6 were three-dimensional. However, it is difficult to adequately visualize three-dimensional data within a static report. To solve this difficulty, all the indicator difference maps and local variance maps were first averaged over depth in order to provide two-dimensional projections of the three-dimensional surface estimates.

Although some information is lost when averaging is done, the results can be presented and visualized more easily.

1.4.3 Base Map Accuracy

Besides the indicator difference maps in Appendix B, there is also a base map of the estimated concentrations, overlaid with a scatter plot of the actual data locations used in the analysis. Both the base map and the scatter plot of actual data are colored by concentration level. This representation shows that most of the observed data levels correspond reasonably well with the surrounding nearby base map estimates. There are, however, some notable exceptions.

Multiple reasons may account for areas where there is poor base map accuracy, including the following reasons:

1) The two-dimensional base map representation is again averaged over depth, but is in reality three-dimensional. Most of the TCE plume evident in and around the B76 source area, for instance, lies well below the ground surface, but appears to be at ground level on the 2D surface map. Although unavoidable, this averaging process affects to some degree how well the observed data appear to match the estimated contours on the base map.

2) LWQR is a smoothing technique rather than a spatial interpolator. Because of this, the estimated surface may not precisely equal the value of any given observed data point. This will be especially true in those cases where one sample is high and a neighboring sample is low.

3) The TCE plume at AFP 6 is a formidable estimation challenge because of the range of concentration values spanned. The spatial analysis at AFP 6 used a series of five indicator variables to represent key portions of the TCE concentration distribution. However, more indicator variables could have been used to better define or “bin” the actual distribution. Only five indicator variables were used in order to limit computing time for the analysis. Nevertheless, it may not have been enough to adequately estimate the plume’s upper end.

4) The LWQR algorithm may need to be tweaked in terms of the search radius or bandwidth in order to improve the base map estimates.

Ultimately, having an accurate base map is an important key to a successful spatial optimization analysis using GTS. As noted, all assessments of redundancy flow from a comparison between the base map and subsequent maps constructed from reduced-data sets. Although it is likely that the GTS algorithm is robust to some base map inaccuracy, it is the case that spatial redundancy cannot be judged fairly unless the base map matches the actual data to a reasonable degree.

It may also be that the base maps generated using LWQR do not adequately coincide with similar hand-drawn maps created by project geologists. The estimated base maps from the spatial analysis are strictly data driven and do not account for special features of the terrain or hydrogeology. Furthermore, due to the relative paucity of hard data in areas to the northwest and southwest of the B76 source area, the smoothing process

extended the plume in these directions in large part because the B76 source zone data were still within the search radius for these areas and thus had a significant impact on the grid estimates. Allowing the search radius to adaptively shrink or expand depending on the degree of clustering within the concentration data (part of the tweaking process suggested in reason No. 4 in the list above) might be a way to improve the base map estimates in these areas.

1.4.4 Recommendations Regarding Spatial Redundancy

As noted earlier, the ultimate decision about when too much data have been removed is subjective. Specific lists of redundant wells for TCE and DCE11 for time slice two are provided in Table 1.5 Also included in this table is a ranking of wells based on the value they provide. Those wells with the higher ranking numbers provide are most valuable.

Several of the wells designated as redundant occur within the B76 source area. Although these wells may have been helpful in pinning down the nature and extent of the TCE source zone, it also seems reasonable that not all of them are crucial to the LTM program at AFP 6.

1.4.5 Recommendations Regarding Siting of New Wells

While the primary motivation for the spatial analysis at AFP 6 was to identify potentially redundant wells, a secondary goal was to locate areas of the site where additional wells might provide significant improvements in accuracy of the estimated site maps and thus improve information on the nature and extent of the groundwater plume(s). In GTS, the most straightforward way to do this is by examining the local variance base maps for each time slice and COC. There the local variances offer an indication of the relative local uncertainty associated with the mapped grid estimates. The higher the local uncertainty at a particular spot, the greater the benefit to siting a new well in that location.

It should be noted that high local uncertainty arises from two basic sources using the LWQR estimation technique. First, there may be areas of data sparsity, such as the locations north and northwest of the B76 source area. Estimates in these spots tend to be uncertain because few wells are sited there. Secondly, there may be areas of data inconsistency, where nearby wells exhibit very different concentration levels. This second phenomenon occurs for instance at the B76 source area for TCE, where a couple of the wells with very low concentrations are located near the highest recorded TCE measurements. High local uncertainty at grid nodes in this vicinity is then a result of the inconsistency of the known data located within the search neighborhood. In such cases, it may not be advantageous to site a new well nearby to several existing well locations, especially since the inconsistency might be due to the complex pattern of groundwater flow through the fractured subsurface.

The approximate locations exhibiting the greatest local uncertainty are listed in Table 1.6 and are represented in Figure 3.1. Any of these spots might serve as locations for siting additional wells, but particularly those locations where nearby wells are sparse. The “Priority” column of Table 1.6 offers a very crude ranking of the uncertainty hot

TABLE 1.5
Second Time Slice Redundant Wells
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

1,1 DCE				TCE			
Well Number	**WELL ID**	**Ranking**	**Currently Monitored**	**Well Number**	**WELL ID**	**Ranking**	**Currently Monitored**
21	B10518	5	No	22	B10520	5	No
38	B10B9	5	No	51	B4MWA	5	No
83	B90E3	5	No	76	B90D2	5	Yes GWM-S
100	D5-35	5	No	101	D5-36	5	No
101	D5-36	5	No	133	MW-2	5	No
127	ITS4	5	Yes GWM-S	135	MW-W4	5	No
134	MW-W3	5	No	155	MW23	5	Yes GWM-S
135	MW-W4	5	No	185	MWG2	5	No
192	MWG5-5R	5	No	254	RW101	5	Yes O&M-Q
199	MWOS-04	5	No	259	RW203	5	Yes O&M-Q
51	B4MWA	4	No	12	B04546	4	No
72	B90BR2	4	Yes GWM-S	38	B10B9	4	No
76	B90D2	4	Yes GWM-S	59	B4MWU	4	No
78	B90D4	4	Yes GWM-S	83	B90E3	4	No
79	B90D5	4	Yes GWM-S	109	DPT509	4	No
109	DPT509	4	No	118	ITD2	4	Yes GWM-S
115	DPW-2	4	Yes O&M-Q	127	ITS4	4	Yes GWM-S
122	ITD7	4	No	156	MW24	4	Yes GWM-Q
190	MWG5	4	No	163	MW5	4	No
262	RW208	4	No	188	MWG3	4	No
55	B4MWH	3	No	106	DPT504	3	No
64	B90B1	3	No	111	DPT512	3	NO
66	B90B3	3	Yes GWM-Q	115	DPW-2	3	Yes O&M-Q
111	DPT512	3	No	152	MW03	3	No
152	MW03	3	No	175	MWG1	3	No
159	MW27	3	No	177	MWG11	3	No
163	MW5	3	No	190	MWG5	3	No

TABLE 1.5
Second Time Slice Redundant Wells
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

1,1 DCE				TCE			
Well Number	**WELL ID**	**Ranking**	**Currently Monitored**	**Well Number**	**WELL ID**	**Ranking**	**Currently Monitored**
175	MWG1	3	No	192	MWG5-5R	3	No
177	MWG11	3	No	221	PER556	3	No
265	RW303	3	Yes O&M-Q	262	RW208	3	No
106	DPT504	2	No	107	DPT505	2	No
107	DPT505	2	No	108	DPT506	2	No
108	DPT506	2	No	120	ITD5	2	Yes GWM -S
118	ITD2	2	Yes GWM -S	122	ITD7	2	No
157	MW25	2	Yes GWM - Q	159	MW27	2	No
217	OW8	2	No	216	OW7	2	Yes O&M-Q
218	PER536	2	No	217	OW8	2	No
219	PER537	2	No	218	PER536	2	No
221	PER556	2	No	219	PER537	2	No
245	PZ05	2	No	245	PZ05	2	No
37	B10B8	1	No	15	B04549	1	No
81	B90D7	1	Yes GWM-S	16	B04550	1	No
86	B90E7	1	Yes GWM-S	37	B10B8	1	No
114	DPW-1	1	Yes O&M-Q	55	B4MWH	1	No
116	DPW-3	1	Yes O&M-Q	114	DPW-1	1	Yes O&M-Q
120	ITD5	1	Yes GWM -S	116	DPW-3	1	Yes O&M-Q
121	ITD6	1	Yes GWM -S	121	ITD6	1	Yes GWM -S
158	MW26	1	Yes O&M-Q	158	MW26	1	Yes O&M-Q
184	MWG1A	1	Yes O&M-Q	184	MWG1A	1	Yes O&M-Q
263	RW301	1	Yes O&M-Q	255	RW102C	1	Yes O&M-Q

- Redundant for both TCE and 1,1 DCE

O&M - Q -Sampled quarterly under the O&M program.

GWM - Q - Sampled quarterly under the O&M program.B63

GWM- S - sampled semiannually under the groundwater monitoring program.

Figure 3.1

Back of Figure 3.1

spots within each time slice. Please note, however, that since the determination of local variance depends both upon the spatial configuration of the well network and the actual concentration values at those locations, it cannot be determined a priori exactly which additional sites would provide the greatest informational benefit, nor to what degree the accuracy would be improved of revised maps based on the additional wells. In addition, Table 1.6 takes no account of physical obstacles at the site (e.g., buildings) that might preclude siting of wells in the listed locations.

TABLE 1.6
Approximate Locations of Greatest Local Relative Uncertainty
Spatial Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

COC	Monitoring Well ID	Time Slice	Easting (ft)	Northing (ft)	Priority
DCE11	MWA	One	390,300	1,428,700	*
	MWB		390,500	1,429,000	
	MWC		389,700	1,429,500	
	MWD	Two	389,600	1,429,600	**
	MWE		391,000	1,429,700	
	MWF		392,900	1,429,200	*
TCE	MWG	One	390,800	1,430,000	
	MWH		390,900	1,429,000	
	MWI	Two	389,600	1,431,100	***
	MWJ		389,700	1,430,200	***
	MWK		389,700	1,429,600	
TCLME	MWL	One	390,400	1,429,000	*
	MWM		390,100	1,428,700	
	MWN	Two	389,200	1,427,700	*
	MWO		389,700	1,429,700	
	MWP		389,600	1,430,200	
	MWQ		391,200	1,427,100	
	MWR		392,500	1,428,900	*

1.5 Conclusions

Although the measurement data and hydrogeology at AFP 6 are reasonably challenging and complex, both the temporal and spatial analyses demonstrate that the GTS optimization algorithm can be adapted to handle complicated sites. Refinements of particularly the spatial analysis may be possible and probably should be explored, but

even the current results show that efficiencies can be gained by streamlining the LTM program at AFP 6. Despite the fractured subsurface, reasonably good estimates of plume magnitude and extent can be made using fewer wells than the current network and sampling at a lower frequency than is presently in place. Estimates of specific potential cost savings will depend on how many wells are deemed redundant after further review by AFP 6 project managers and to what extent sampling frequencies can be reduced to levels recommended in the temporal analysis.

1.6 References

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2.0 Temporal Optimization at Sites B04, B10, and B90 at Air Force Plant 6 Using the Geostatistical Temporal/Spatial Algorithm

This section summarizes the temporal statistical analyses conducted at Sites B04, B10, and B90 of AFP 6 using the GTS algorithm on LTM groundwater data collected from approximately 1982 to the present. The goal of this study is to determine to what extent sampling frequencies at these sites can be optimized in order to pare sampling and analysis budgets without sacrificing information critical to the success of the LTM program at AFP 6.

Although this report focuses on sampling frequencies, another part of the optimization strategy provided by GTS analyzes sampling locations to ensure that monitoring wells are effectively placed to capture contaminant plume information. That analysis is contained in the companion spatial optimization report covering the spatial statistical analysis at AFP 6.

This temporal optimization report includes descriptions of 1) initial exploratory data analyses and how the data were prepared for input to the GTS algorithm; 2) the GTS temporal algorithm, including changes that were made to the algorithm since the last published version (Cameron and Hunter, 2002); and 3) the results of the AFP 6 temporal analysis.

2.1 Data Preparation

Data queries were made of all available electronic sampling records from AFP 6 over the historical life of the facility, starting from approximately 1982 until the present. Most usable data for the temporal analysis were collected after 1990. In order to better gauge sources of variability—especially spatial variation—among the chemical data, data queries specifically asked for field duplicates as well as normal environmental samples. However, a large number of multiple sets of records associated with a single field sample identifier were unexpectedly included in the database. Each set apparently represented multiple laboratory runs on the same sample, but unlike the vast majority of the database, less reliable runs had not been weeded out by either project chemists or database managers.

To ensure that only one sample result of a given type (field duplicate or normal) was kept per sampling date (at a given location and depth), the multiple sets of data were manually screened, which led to the removal of 1,579 records from the analysis database. Although this screening process was subjective, a list of rules and priorities was developed to make the screening as consistent as possible. The rules included the following:

- Giving priority to sampling records with lower dilution factors (when dilution information was available) or lower RLs.
- Retaining quantified concentrations (hits) over estimated concentrations ("J" values) or non-detects (NDs).
- Retaining records not listed as "R" values.
- Giving priority to hits with higher dilution over either J values or NDs with lower dilution, and J values with higher dilution over NDs with lower dilution, even when dilution factors were present.
- Giving priority to hits with the lowest dilution when sets contained multiple hits. However, in a very small number of cases, multiple hits on a given sampling date were retained when the RL and dilution information was identical across records.

Overall, after the manual screening process and removal of a number of other records listing a surface water instead of a groundwater matrix, the database included 36,855 records covering the following 10 COCs: benzene (BZ), chlorobenzene (CLBZ), 1,1-dichloroethane (DCA11), DCE11, perchloroethene (PCE), 1,1,1-trichloroethane (TCA111), 1,1,2-trichloroethane (TCA112), TCE, TCLME, and vinyl chloride (VC). These COCs were initially queried based on exploratory statistical analyses showing higher detection rates for these constituents compared to other compounds in the AFP 6 database. Initial detection rates by sample record for these COCs are given in Table 2.1:

TABLE 2.1
COC Initial Detection Rates by Sample Record
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

COC	Pre-2000 Rate (percent)	Post-1999 Rate (percent)	Overall Rate (percent)
BZ	5.8	18.6	11.7
CLBZ	9.2	12.6	10.7
DCA11	27.1	35.2	30.9
DCE11	26.7	37.5	31.7
PCE	12.5	27.8	19.7
TCA111	19.9	20.1	20.0
TCA112	4.5	8.4	6.4
TCE	65.8	69.2	67.4
TCLME	15.6	39.4	26.8
VC	13.9	21.3	17.4

Although TCE, DCA11, DCE11, and TCLME appear with the highest frequency among these compounds, another useful exploratory statistic is per-well detection rates, which is the fraction of wells for a given compound with at least one detection. In addition, it is

helpful to consider per-well detection rates above MCLs or above specific concentration levels of interest. Summaries of these statistics are given in Table 2.2.

TABLE 2.2
Compound Detection Rates Above MCLS or Levels of Concern
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

COC	Well Hit Rate (percent)	Hits > 5 ppb (percent)	MCL (ppb)	Hits > MCL (percent)
BZ	25.7	16.7	1	22.2
CLBZ	11.7	9.7	—	—
DCA11	32.3	22.2	5	22.2
DCE11	40.6	33.4	6	31.5
PCE	34.3	23.8	5	23.8
TCA111	23.0	18.0	200	5.4
TCA112	14.3	9.9	5	9.9
TCE	76.8	64.4	5	64.4
TCLME	50.0	35.7	—	—
VC	20.0	17.2	0.5	19.6

Based on these summaries and initial time series plots of all the COCs (not shown), the most promising candidates for the GTS optimization routine were TCE, DCE11, DCA11, PCE, and TCLME. Spatial plotting of the maximum per-well concentration values were conducted to determine the crude spatial distribution of the hits for each parameter. These plots generally confirmed that the most frequently detected COCs also had the most widespread spatial distribution at AFP 6. TCA111's pattern was the only exception, because TCA111 also exhibited a distinctive spatial pattern of well detections. Nevertheless, very few of these TCA111 hits were above its MCL of 200 ppb, suggesting that this COC was a poor optimization candidate.

One of the purposes of the initial exploratory analysis is to determine the best two to four candidates for the optimization routine. Typically, including a larger number of COCs significantly increases the amount of work required to run the GTS algorithm without improving the results. The aim is not to determine which COCs to monitor, but to include only those parameters in the optimization routine that offer the most statistical information concerning temporal and spatial redundancy. The best such parameters typically exhibit larger detection rates and more widespread spatial occurrence.

Overall, the most promising candidates were TCE (the single best candidate by far), DCE11, and TCLME. These three COCs were chosen for the optimization analysis. Other COCs had much lower detection rates and/or poorer spatial distributions.

Another preparation step that was taken to prepare the remaining data for temporal optimization was to average the values for a given sampling date by duplicate status and across multiple depths (when they existed). If a given well on a given date had both normal samples and field duplicates and/or had multiple samples collected at different depths, all of these values were averaged in order to create a single analysis value for that well and sampling event. This step ensures that estimates of the typical interval between samples are not biased downward by the presence of multiple samples on a given date. Most of the wells and sampling dates only included a single sample at depth, so to include all the sample records without this averaging step would skew the results.

As a final note, non-detects were handled prior to analysis by converting them to half the listed RL. In addition, part of the temporal analysis required keeping track of which samples were non-detects and which were detects. Tracking was not difficult for single, non-averaged samples, but values that were averaged across duplicate status and/or depth were more problematic. In their case, if any of the samples being averaged were hits, the average value was also considered a hit. If all values were non-detect, the average value was also considered non-detect.

2.2 Methodology

The temporal optimization analysis in GTS consists of three basic components:

1) Iterative thinning of individual wells.

2) Trend mapping over specific time periods.

3) Temporal variograms applied to groups of wells.

Each of these components is explained below. The goal of temporal analysis is not to determine which well locations might be redundant and unnecessary to the LTM program, but to optimize well sampling frequencies for currently existing locations.

2.2.1 Iterative Thinning

Iterative thinning refers to the technique by which the well sampling frequencies at individual wells are optimized. Because each location is analyzed separately, it is possible to have a different recommended sampling interval for each well after applying the iterative thinning routine. Nevertheless, a site manager can treat the optimized sampling intervals as upper bounds and adjust the operational sampling frequencies for a group of related wells in order to fit a convenient sampling schedule, without exceeding the optimized interval for any given location.

The iterative thinning process is based on a relatively simple idea: Using the existing, historical data for a given well location and constituent, determine the current average sampling frequency and sampling interval, then fit a trend to these initial data, along with statistical confidence bounds around this trend. At that point, iteratively remove, at random, certain fractions of the original data and re-estimate the trend based on the reduced data set to determine whether or not the trend still lies within the original confidence bounds. If too much of the new trend falls outside the confidence limits, stop

removing data and compute a new, optimized sampling frequency and sampling interval based on the portion of data removed.

The original version of GTS fit trends during iterative thinning by way of Sen's slope statistic, which is a non-parametric estimate of the slope of a linear trend. Although useful, Sen's statistic is not highly informative for cases of more complicated, non-linear trends. Previously, this meant that the GTS analyst would have to screen out those wells that did not exhibit roughly linear trends over time. At AFP 6, GTS was modified to estimate the initial trend via a statistical technique known as LWQR (Loader, 1999). This procedure readily fits complex trends and confidence bounds around those trends. Moreover, the data requirements for using LWQR are similar to Sen's slope method, and the process can be automated to essentially the same degree.

To perform iterative thinning, LWQR was used to construct an initial trend and 90 percent confidence bounds around this trend. Also, the baseline sampling frequency was computed over the entire record of sampling at the well, and the baseline sampling interval was estimated by averaging the set of intervals between consecutive samples. Greater emphasis was given to more recent sampling information when constructing these baselines, especially if any large gaps appeared within the sampling record. Still, it is possible that the baseline sampling interval for a given well may not directly correspond to the nominal operational sampling schedule currently being used. The iterative thinning routine is data driven and includes as much useful trend information as possible, even if it is contributed by multiple contractors operating under different sampling schedules or goals.

Once the initial trend was fit, data points were removed at random in systematic increments of 5 percent at each level, up to a maximum of 95 percent. At each stage, the trend was re-estimated on the reduced data set and then compared to the initial confidence bounds. Since data points were removed randomly and it was possible to remove points from only one portion of the existing sampling record, the same removal process was repeated 500 times at each removal level, having each iteration use a new set of randomly chosen points. This step helped to ensure that the trend results were not artifacts of the removal process, but reflected the kind of trend estimate that was possible at each stage of removal.

Because 500 new trends were fit to the reduced data at each removal level, key statistical summaries were used to express the results, including the median trend value (calculated at a series of dates throughout the sampling record), the lower quartile trend value (i.e., 25th percentile), and the upper quartile trend value (i.e., 75th percentile). The median trend summaries are plotted on the graphs in Appendix A for two specific removal levels: 1) the percentage at which too much data have been removed to adequately reconstruct the original trend, and 2) the removal level just below this, which represents the optimal stopping point for the iterative thinning algorithm. For example, for DCE11 at well B10B1, the initial trend is plotted in blue, with 90 percent confidence bounds around this trend shaded in light blue; the median fit of the set of new trends when 20 percent of the data has been removed is plotted in red; and the median fit of the optimal stopping point of 15 percent removal is plotted in green. This same pattern and color scheme were used for all of the Appendix A graphs.

The other summary plotted on each Appendix A graph is the pair of upper and lower quartile fits (identified by a red dashed trace) on the reduced data when too much sampling information was removed. These statistics are important for a couple of reasons. First, the upper quartile represents the point that is exceeded by 25 percent of all the new trend values (and the same for the lower quartile on the low end of the concentration range). If this trace falls outside the original confidence bounds, it demonstrates that at least a quarter of the new trend values constructed from the reduced data were outside the initial confidence limits. This can happen even when the median trend fit does not look that bad, especially in the case where the new trend value is "swinging wildly" from iteration to iteration above and below the initial fit, causing the median fit to fall somewhere near the original trend, but at the expense of substantial variability in the 500 trend fits at that removal level. Therefore it can be informative to compare the lower and upper quartile fit traces against the original confidence bounds. Sometimes there are key stretches of the data record where these fits lie outside the confidence band, indicating too much variability in the fitting process to allow for reliable trend reconstruction.

Second, the difference between the upper and lower quartile fits—also known as the interquartile range or IQR—was computed at each fitting point along the sampling record and averaged to form the average IQR. This statistic offers a numerical indication of the typical level of variation exhibited among the 500 trend fits computed at a given removal level. It is also plotted against removal level (i.e., fraction of data removed) for each well and parameter in the graphs of Appendix B. There the average IQR typically increases as more of the data are removed, up until and often beyond the optimal stopping point.

However, note that the average IQR is not a fail-safe indicator. In some cases, this statistic begins to drop near or beyond the optimal stopping point, rather than continuing to increase. The primary reason for such behavior is that when enough data are removed—and depending on the configuration of the original time series—instead of swinging above and below the initial fit, the re-estimated trend merely stays either consistently above or below the original trend, leading to a lower than expected difference between the upper and lower quartile fits.

It is for this reason that the optimal stopping point was chosen not on the basis of the average IQR, but rather by determining what fraction of the new trend values fell outside the original 90 percent confidence band. For AFP 6, a threshold of 30 percent was chosen, meaning that too much removal was judged to have occurred when at least 30 percent of the reduced-data trend values fell beyond the initial confidence bounds. While the choice of threshold is arbitrary, tests of the data at AFP 6 show that it gave generally good results, though it may not be the ideal threshold for each and every time series. Remember, the overall goal in iterative thinning is to determine how much data can be removed (and thus how much the interval between sampling events can be lengthened) while still allowing the major features of the original trend to be reconstructed. Some finer features of the time series trend are lost when less data are collected, but often it is difficult to determine whether these features are real or due to measurement and/or field variation in the data.

To graphically illustrate at what point the out-of-bounds fraction of new trend values exceeded the threshold of 30 percent, a graph of this measure plotted against the removal level is provided for each well and COC in Appendix B. The graph and the plot of the average IQR are denoted by red traces and set in the top panel of the page for each well. The graphs also have a vertical reference line that indicates the optimal stopping point of data removal as determined by the iterative thinning routine. In the bottom panel are two graphs representing optimal sampling interval (in green) and optimal sampling frequency (in blue). These graphs were constructed by adjusting the baseline sampling interval and baseline frequency according to the amount of data thinned at each removal level. The graphs also include two reference lines that indicate the optimal stopping point and the optimal interval or sampling frequency associated with that stopping point. For DCE11 at well B10B1, for example, the baseline sampling interval is just over 32 weeks between sampling events, while the optimal interval is found to be just greater than 38 weeks. Conversely, the baseline sampling frequency at this well is a bit less than 0.03 samples per week, compared to a recommended optimal frequency of just over 0.025 samples per week.

2.2.2 Data Screening prior to LWQR

Certain steps were necessary to apply the LWQR technique. While extremely flexible as a statistical tool, its flexibility comes with certain restrictions and assumptions. First, it became clear in testing AFP 6 data that reliable fitting of an initial trend, and especially confidence bounds around that trend, were almost impossible with less than 8 to 10 sample measurements (i.e., data from distinct sampling events). Because of this, well locations with fewer sampling events were automatically screened out of the iterative thinning routine and do not appear in the graphs of Appendices A and B.

Furthermore, large data gaps in the sampling record are also troublesome to the LWQR algorithm and tend to cause artifactual-looking trends. For this reason, historical sampling data prior to a large gap were screened from that well's time series before fitting. In this case, a large gap was defined as an outlier among the set of time-lags between consecutive sampling events using Tukey's box plot outlier rule, where a sampling gap outlier was identified whenever the lag exceeded the upper hinge of the box plot of time-lags. (The upper hinge is defined as the upper quartile plus 1.5 times the interquartile range [IQR] of the box plot.)

Another data feature that can significantly affect the trend estimate is the presence of concentration outliers. The modified GTS algorithm screened these values prior to fitting with LWQR by using Tukey's box plot rule on the concentration values. To ensure that only very significant outliers were identified and removed, two passes of the box plot test were run, once on the raw data and once on the logged concentrations. Only samples that were identified as outliers on both scales were screened from the time series prior to fitting.

A final screening check was made for wells with no observable variation, typically in the case where all the data for a time series were non-detects with a common RL. Although LWQR can estimate a (flat) trend to such data, it is impossible to construct a confidence band around the trend or to determine an optimal stopping point for data removal. These latter statistics require the measurements to exhibit some variation (the same is

true of other trend estimation methods). Because of this, wells with no observable variation were screened from the iterative thinning routine. In addition, the data at some wells—after removing apparent concentration outliers and sampling events prior to large data gaps—consisted of only a string of identically-valued non-detects. These wells were consequently also screened from iterative thinning. Compilation of approximately 2000 boring logs and monitoring well construction logs collected over approximately seven years allowed increased efficiencies by the data evaluation teams and provided a single repository for these logs

Along these lines, a special note should be made about the ICM effluent data stream beginning in early 1999. Because the vast majority of the measurements were non-detects at a common RL, Tukey's box plot rule identified essentially every one of the remaining measurements as concentration outliers, causing the time series to be initially screened from iterative fitting due to lack of observable variation. In order to make sure this data stream was included in the analysis, the ICM effluent time series was adjusted manually, mainly by unflagging several of the tagged concentration outliers. Also, the pre-ICM influent treatment stream was not included in the temporal analysis; the pre-ICM influent treatment stream did not include enough sampling points to make trend fitting possible.

2.2.3 Trend Fitting with LWQR

After screening the time series measurements for data gaps, concentration outliers, and observable variation, one final step remained before constructing the initial trend estimates: choosing a bandwidth for fitting. LWQR works by estimating the trend value at a given fitting point (i.e., a particular date within the range of dates between the start and end of the sampling record) using a weighted linear combination of the known sample values close to the fitting point. What must be selected by the analyst is how many neighboring sample measurements to use. In GTS this is done by selecting a bandwidth parameter that represents the fraction of known samples to be included in the neighborhood of any given fitting point. These bandwidths typically range from 40 percent to 80 percent, depending, among other things, on the number of points in the time series and its shape.

In order to automate the GTS routines as much as possible, especially when there are a large number of wells to analyze, every attempt was made to simplify the choice of bandwidth. In general, the higher the bandwidth, the greater the amount of smoothing that will occur within the fitted trend. If the bandwidth is too high, the trend may miss important peaks and valleys in the time series. If the bandwidth is too low, the trend may exhibit artifactual jumps and/or dips between known sample values. Also, the fitted trend can mostly disregard the known data, leading to highly inaccurate trend estimates.

To guard against these scenarios, it is important to check the LWQR fits at several possible bandwidths prior to running the iterative thinning routine. This check is performed in two ways: 1) by visually comparing the estimated fits obtained by systematically changing the bandwidth for each well, and 2) by computing diagnostic checks of the residuals obtained when the trend is estimated at each known sample value and the known value is subtracted from this estimate. The goal is to automate this

process as much as possible. However, visual inspection of the results at each well is still necessary.

Using the first check, the plots of the known sampling data can be overlaid with LWQR trend estimates at several possible bandwidths. In this setting, the fit should be visually pleasing and bad fits should be excluded.

The following calculations are included in the second check: Mallow's CP statistic, correlation of the residuals with date of sampling, skewness of the residuals, and Filliben's probability plot correlation coefficient. Each of these statistics is designed to provide a numerical indication of the goodness of the estimated trend relative to a given bandwidth. In GTS, these residual diagnostic measures are plotted simultaneously against bandwidth in order to search for the most appropriate fitting neighborhood. None of them, however, is fail-safe.

Mallow's CP statistic is a scaled measure of the sum of squared residuals. Lower values of Mallow's CP usually indicate a better fit. However, it is possible to have a very low Mallow's CP and a visually unacceptable fit between known sample values. The correlation with sampling date is used to check whether the fit is worse over certain portions of the sampling record than others. Values close to zero are best. The skewness coefficient is used to check for lopsidedness in the distribution of residuals. LWQR works best when the residual distribution is symmetric and normally distributed, so skewness values closer to zero are better. Along the same lines, Filliben's correlation coefficient is a test of normality that can be used to check the shape of the residual distribution. Coefficient values closer to one are best.

As noted, none of the residual diagnostic measures are fool-proof by themselves. In some situations, they can give conflicting indications for the same time series. Nevertheless, when examined together, along with graphs of the possible fits by bandwidth, an acceptable initial trend estimate can almost always be found.

2.2.4 Trend Mapping

One of the natural by-products of constructing the initial trend fits at each well location during iterative fitting is the ability to create a map of the trend estimates for any specific time period. In order to construct the confidence band around the initial fit on the known sample data, LWQR estimates not only the trend value at each fitting point, but also the local first derivative or slope. These local slopes can then be averaged in an appropriate way to determine the general direction and magnitude of the trend for a given portion of the sampling record.

At AFP 6, three different time windows were chosen for estimating average trend slopes: 1) the historical trend, based on all the available and usable data at a well location; 2) the recent trend, based on data collected since the start of 2000; and 3) the newest trend, based on the four latest sampling measurements. Each of these trends was also characterized as increasing (with an average slope > 0) or decreasing / flat (with an average slope no greater than 0).

To estimate the typical slope, the median slope value was selected from the set of fitting points falling within the specified time period. This was done to ensure that the

dominant trend direction was identified. With non-linear trends, there can be short periods of very steep trends that do not represent the dominant direction of the trend over the time interval in question. The mean slope can be skewed by a few very large local slope values, whereas the median slope tends to be resistant to this problem.

In addition, it was possible to compute a non-parametric confidence interval around the median slope, in order to characterize the strength of each trend. Using a 95 percent nominal target confidence level, each trend was characterized as either fairly certain or uncertain, depending on whether the confidence interval around the slope contained the value zero.

Finally, all of this trend information was mapped by well location. The maps presented in Appendix C offer for each COC and designated time period a spatial representation of the types of trends at AFP 6, along with an indication of their strength and relative magnitude. Specifically, increasing trends are listed in red and pink, with trends definitely above zero identified in red and less definite increases in pink. Flat or decreasing trends are colored in blue and light blue, with definitely decreasing trends in blue and less sure trends (including flat trends) in light blue.

These maps also indicate the relative magnitude of each trend. To do this, the actual slope estimates were divided into quintiles (each quintile representing 20 percent of the ranked slope estimates). Then, an increasing series of symbol sizes was assigned to the set of quintiles for plotting purposes. Consequently, the largest red symbols on the trend maps, for example, represent increases in the top 20 percent of magnitude, while the smallest red symbols designate increases in the lowest 20 percent of magnitude. The same patterns apply to the other trends. The largest blue symbols represent those trends that exhibited the largest decreases, while the smallest blue symbols represent the smallest downward trends.

2.2.5 Temporal Variograms

The last piece of the GTS temporal puzzle is the temporal variogram. The temporal variogram technique is designed to optimize sampling frequencies simultaneously over a group of well locations. These locations might represent all wells at a given site, those connected with a particular regulatory unit, or even selected wells that are part of a treatment system network. Whatever the grouping, the temporal variogram aims to provide a single optimal sampling interval that can be applied to every well within the group. Thus, this technique can be particularly helpful when a site manager wants to establish uniform operational sampling schedules at the site, and the optimization of individual well frequencies is not deemed as high a priority.

Results from the temporal variogram should not be viewed as optimal for any single well. The temporal variogram in GTS combines data from all wells in the group in its construction. Consequently, it attempts to find an optimal sampling interval, on average, for the group. Some individual wells might be better optimized with shorter or longer sampling intervals. Nevertheless, when a uniform sampling frequency is desired, the temporal variogram can provide a reasonable way to estimate it for the well group simultaneously.

Like earlier versions of GTS, the temporal variogram is constructed using nested pairs of concentration measurements from each well in the group. Nested means that given a particular location, all pairs of measurements are formed for that well and one-half the squared difference is then computed for each pair. Pairs are never formed across distinct wells, which would introduce unwanted spatial variability, but rather are nested within wells. This allows an independent estimate of temporal variability from each well. Then, to allow the inclusion of wells with only minimal amounts of sampling data and to gauge average temporal variation for the group as a whole, the squared differences are amalgamated together into a single set of pair differences for the entire group.

In previous versions of GTS, a temporal variogram was constructed for each well, but then a weighted average of the individual variograms was formed to get the final overall temporal variogram. The current version of GTS streamlines the process by simply estimating the final variogram from the entire unweighted set of half-squared pair differences. In this fashion, wells with more data are naturally given greater weight in the final temporal variogram (since they contribute more pairs), while well locations with less data are given less weight.

The temporal variogram is now estimated using LWQR, taking the half-squared difference pairs as the y-variable and the time lag or time difference between sampling event pairs as the x-variable. In the case of AFP 6, all sampling dates were converted into number of weeks since a reference date prior to any actual historical sampling. The time lag differences were thus expressed in number of weeks between sampling events.

As with the use of LWQR in iterative fitting, the GTS analyst must choose an appropriate bandwidth parameter prior to estimating the temporal variogram. However, testing of the AFP 6 data showed that smaller bandwidths did not capture the most important features of the variogram very well. Instead larger bandwidths provided better and more interpretable results. For this reason, all the AFP 6 temporal variograms are computed at two large bandwidths: 50 percent and 70 percent. Both of these estimated fits are graphed for each well group and constituent in Appendix D. The use of LWQR also allowed the estimation of confidence bands around the fit, in order to better gauge possible variation in the estimate. Confidence bands were constructed for both bandwidths; however, for visual clarity only the 50 percent bandwidth confidence bands are plotted on the graphs in Appendix D. Sometimes the LWQR fit at the 70 percent bandwidth is different enough from the 50 percent bandwidth fit to make the former estimate fall outside the confidence bands. Nonetheless, as described below, the key to comparing the results at different bandwidths is not whether the magnitude of the temporal variogram differs from one bandwidth to the next, but whether the fundamental shapes of the variograms differ. Most of the time at AFP 6 they did not.

A couple of additional technical points are important to the temporal variogram methodology. First, concentration outliers can skew the results of the temporal variogram as much as they can skew the iterative thinning routine. Because of this possibility, Tukey's box plot was run on the concentration data from each well, both on the raw and logged scales of measurement. As with iterative thinning, only data values that were tagged as outliers on both scales were excluded from the temporal variogram computations. In addition, to avoid the problem of some wells having vastly different average concentration levels and thus vastly different squared-difference pair

contributions to the temporal variogram, each well's remaining data were temporarily re-scaled to have a maximum of one before the temporal variogram calculations and fitting were performed. Thus, every well in the group was more or less put on an equal footing in terms of its concentration range.

Another potential problem involved non-detects. Testing of the AFP 6 data showed that wells with too many non-detects exhibited too little temporal variation to help estimate the temporal variogram. For this reason, all wells with less than a 30 percent detection rate were excluded from the variogram computations.

Finally, two different types of temporal variograms were tested on the AFP 6 data: the mean variogram and the median variogram. In each case, the LWQR procedure looks at a neighborhood of half-squared-difference pairs surrounding a time lag point to be estimated. However, in the case of the mean variogram, the local regression estimate attempts to pinpoint the arithmetic average of the difference pairs, while in the case of the median variogram, a similar estimate is made on the ranks of the set of difference pairs rather than the pair values themselves. These tests showed that the mean variogram rarely offered interpretable results, mainly because it was too erratic, while the median variogram was typically more promising and well-behaved. Consequently, the temporal variograms of Appendix D all exhibit the median variogram results.

The ultimate goal when analyzing a temporal variogram is to identify an approximate range in its structure, that is, at what point does the variogram start to level out and remain at roughly a constant level? Ideally, any variogram offers a measure of correlation between the measured data and either time or space. For cases of positive temporal or spatial correlation, such a linkage is evident on the variogram by smaller values for smaller lags (e.g., time lags between sampling events or distance lags between well locations) and larger values for larger lags. Smaller values on a variogram are typically indicative of high degrees of correlation, while larger values represent a loss of correlation and greater statistical independence.

On many variograms, the range is identified at the point that the larger lags no longer lead to larger variogram values. The magnitude of the leveled-out portion of the variogram is known as its sill. Lags at least as large as the range—and thereby associated with the sill—are thought to represent sampling pairs having essentially no statistical correlation. Smaller lags, on the other hand, having variogram values smaller than the sill, represent pairs that are correlated to some degree and, therefore, contain a certain level of statistical redundancy in the information they offer.

It is for this reason that GTS sets the optimal sampling interval for a group of wells as the range of the temporal variogram, if it can be identified. Sampling intervals smaller than the range are associated with somewhat correlated, and therefore redundant, sampling results. On the other hand, sampling intervals at least as large at the range tend to be uncorrelated, and therefore from a statistical standpoint, optimal in the sense that consecutive samples collected at such lags will provide the shortest sampling interval at which the maximal statistical information per sample is achieved.

While the temporal variogram is a useful tool, sometimes a range cannot be reliably identified because some of the wells in the group do not possess the same basic temporal

correlation structure as other wells. Sometimes a range may be identified but the result is different from that estimated via iterative thinning. This can happen in part because the temporal variogram tries to optimize a group of locations on average, rather than individually.

2.3 Temporal Optimization Results

The temporal optimization results are contained in a series of graphs and tables. Although the hydrogeologic environment at AFP 6 is complex and the AFP 6 data provide certain challenges to the GTS optimization scheme, there is room to adjust and optimize the LTM program. If feasible from an engineering and operational standpoint, many of the monitoring wells could have their sampling frequencies reduced by at least 40 percent and still retain the most useful statistical information concerning their long-term trends. It would also be possible to adjust the common sampling schedule for selected groups of wells, although the temporal variograms at AFP 6 are less clear cut in interpretation, perhaps due to the complex, fractured subsurface. Evidence of this complexity is documented on the trend maps.

2.3.1 Iterative Thinning

The graphs in Appendices A and B provide visual results of the iterative thinning process. As described above, Appendix A includes a time series graph of each eligible well, overlaid with the initial trend fit, a confidence band around that trend, and selected results of the iterative thinning routine, including an indication of the optimal stopping point for data removal. These results are further detailed in the graphs of Appendix B, where there are four plots for each well and COC: 1) the percentage of trend fits on the reduced data that fall outside the initial confidence band, plotted against the percent of data removed; 2) the average IQR of the reduced-data trend fits, plotted against the percentage of data removed; 3) the optimal average sampling interval, plotted against the percentage of data removed; and 4) the optimal average sampling frequency, plotted against the percentage of data removed.

Key numerical portions of this same information are summarized in Table 2.3. For each well, the optimal and recommended sampling intervals and frequencies are summarized for the three COCs input into GTS. Depending on the COC utilized, different stopping points sometimes occur for the same well. From an operational standpoint, a site manager could place more emphasis on TCE as the primary COC—as documented in Table 2.4—or alternatively, the minimum data removal percentage across the COCs could be chosen to select the optimal sampling interval and frequency, as shown in Table 2.5.

As Tables 2.4 and 2.5 show, the suggested operational sampling interval for the majority of the wells at AFP 6 is at least once every 3 quarters, with a smaller subset requiring quarterly sampling. In addition, the suggested operational sampling interval for the ICM

TABLE 2.3
Summary of Iterative Thinning Results, By COC and Well Location
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELL#	WELLID	EASTING	NORTHING	COC	CUT	OUTPCT	INTERVAL	FREQ	AVE-IQR
37	B10A1	389492.08	1427123.18	TCE	0.35	0.248	37.0453	0.0265	14.47
38	B10A2	389767.05	1427027.80	TCE	0.15	0.254	40.92486	0.0238	1.764
47	B10B1	389675.55	1427150.47	DCE11	0.15	0.234	38.38327	0.0253	1.115
47	B10B1	389675.55	1427150.47	TCE	0.3	0.251	53.80612	0.0184	67.2
47	B10B1	389675.55	1427150.47	TCLME	0.3	0.295	47.00832	0.0207	1.88
48	B10B10	390127.44	1426968.65	TCE	0.65	0.245	42.04476	0.0229	0.5804
49	B10B11	390220.84	1427287.91	DCE11	0.2	0.296	19.41292	0.0502	5.637
49	B10B11	390220.84	1427287.91	TCE	0.45	0.295	28.87717	0.0341	1231
49	B10B11	390220.84	1427287.91	TCLME	0.5	0.285	24.74902	0.0396	2.741
51	B10B4	389537.48	1427226.49	TCE	0.6	0.268	37.64734	0.0249	1.823
52	B10B5	389481.11	1427101.98	TCE	0.55	0.29	89.36634	0.011	110.3
121	B90B2	392238.86	1427976.17	DCE11	0.8	0.241	75.94693	0.0124	23.23
121	B90B2	392238.86	1427976.17	TCE	0.6	0.298	40.40661	0.0232	12.47
121	B90B2	392238.86	1427976.17	TCLME	0.8	0.287	77.94932	0.0121	4.672
122	B90B3	392396.03	1427929.04	DCE11	0.6	0.288	38.5853	0.0243	2.53
122	B90B3	392396.03	1427929.04	TCE	0.55	0.291	33.61578	0.028	6.78
123	B90B4	392563.39	1427930.59	DCE11	0.65	0.286	51.61405	0.0182	51.8
123	B90B4	392563.39	1427930.59	TCE	0.6	0.269	44.13082	0.0213	45.94
127	B90B8	392554.48	1427426.48	DCE11	0.05	0.262	13.65606	0.074	1.369
127	B90B8	392554.48	1427426.48	TCLME	0	0	12.98413	0.0778	0
130	B90BR2	392346.19	1427766.11	DCE11	0.45	0.273	55.01714	0.0174	15.48
130	B90BR2	392346.19	1427766.11	TCE	0.35	0.28	46.22778	0.0208	12.17
133	B90D1	392314.27	1427791.18	DCE11	0.45	0.28	58.91183	0.0165	24.66
133	B90D1	392314.27	1427791.18	TCE	0.2	0.296	40.4831	0.0239	37.1
134	B90D2	392666.13	1427877.03	DCE11	0.45	0.242	52.79037	0.0184	293
134	B90D2	392666.13	1427877.03	TCE	0.3	0.26	40.98957	0.0235	162.4
134	B90D2	392666.13	1427877.03	TCLME	0.7	0.293	91.39566	0.0102	6.486
135	B90D3	392148.24	1427814.95	TCE	0.4	0.26	53.62558	0.018	3.77
136	B90D4	392534.12	1427692.04	DCE11	0.25	0.233	40.13574	0.024	55.11
136	B90D4	392534.12	1427692.04	TCE	0.25	0.248	40.66277	0.0238	93.45
136	B90D4	392534.12	1427692.04	TCLME	0.2	0.29	38.04713	0.0253	6.289
137	B90D5	392830.01	1427885.79	DCE11	0.45	0.279	44.40305	0.0223	8.294
137	B90D5	392830.01	1427885.79	TCE	0.35	0.25	56.26198	0.0175	12.48
138	B90D6	392992.55	1428040.58	DCE11	0.3	0.249	42.07859	0.023	0.3529
138	B90D6	392992.55	1428040.58	TCE	0.55	0.278	50.20377	0.0189	0.5213
138	B90D6	392992.55	1428040.58	TCLME	0.65	0.282	55.43463	0.0171	1.187
141	B90E1	392825.07	1428478.36	DCE11	0.25	0.284	80.64472	0.0126	2.602
141	B90E1	392825.07	1428478.36	TCE	0.15	0.295	72.76	0.014	0.9379
143	B90E3	393692.76	1427382.72	DCE11	0.4	0.259	99.79815	0.0103	1.25
143	B90E3	393692.76	1427382.72	TCE	0.4	0.268	100.39752	0.0102	1.311
143	B90E3	393692.76	1427382.72	TCLME	0.4	0.281	101.30005	0.01	1.285
145	B90E5	391863.63	1427868.22	TCE	0.5	0.299	58.1337	0.0166	8.165
147	B90E7	392364.59	1427627.74	DCE11	0.6	0.281	93.03569	0.0106	104.3
147	B90E7	392364.59	1427627.74	TCE	0.45	0.278	67.36045	0.0144	107.6
147	B90E7	392364.59	1427627.74	TCLME	0.4	0.24	70.42391	0.0139	1.656
154	B90MWD	392729.88	1427361.49	TCE	0.05	0.177	7.22627	0.1331	0.5717
154	B90MWD	392729.88	1427361.49	TCLME	0.2	0.274	9.79409	0.0991	0.7467
156	B90MWG	392766.32	1427344.88	TCE	0.2	0.255	18.67508	0.0555	0.4698
158	B90MWH	392763.04	1427785.22	DCE11	0.25	0.228	19.71701	0.0519	1.36

TABLE 2.3
Summary of Iterative Thinning Results, By COC and Well Location
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WELL#	WELLID	EASTING	NORTHING	COC	CUT	OUTPCT	INTERVAL	FREQ	AVE-IQR
158	B90MWH	392763.04	1427785.22	TCE	0.25	0.221	19.40417	0.0526	19.55
158	B90MWH	392763.04	1427785.22	TCLME	0.15	0.248	17.21265	0.0593	0.03053
162	B90N2	392092.63	1427985.74	DCE11	0.1	0.202	31.68131	0.0303	4.671
162	B90N2	392092.63	1427985.74	TCE	0.2	0.289	35.71338	0.0268	7.711
162	B90N2	392092.63	1427985.74	TCLME	0.2	0.296	36.02589	0.0267	8.495
220	DPW-1	389920.93	1429639.01	DCE11	0.15	0.24	12.15397	0.0838	70.07
220	DPW-1	389920.93	1429639.01	TCE	0.25	0.294	15.2707	0.0687	122500
220	DPW-1	389920.93	1429639.01	TCLME	0.1	0.223	11.48878	0.089	6.814
221	DPW-2	389880.03	1429699.26	DCE11	0.45	0.298	22.26218	0.0473	6.024
221	DPW-2	389880.03	1429699.26	TCE	0.15	0.242	13.82701	0.075	6591
222	DPW-3	389978.84	1429670.75	DCE11	0.25	0.253	12.35	0.0816	3.561
222	DPW-3	389978.84	1429670.75	TCE	0.3	0.224	14.07133	0.0721	61640
222	DPW-3	389978.84	1429670.75	TCLME	0.25	0.225	12.05516	0.0836	6.595
223	EFF	.	.	TCE	0.3	0.268	19.77757	0.0497	11.09
232	ICMEFF	.	.	DCE11	0.8	0.291	9.44626	0.0968	0.2918
232	ICMEFF	.	.	TCE	0.9	0.296	18.99485	0.0484	2.861
232	ICMEFF	.	.	TCLME	0.8	0.29	9.26604	0.099	0.1731
233	ICMINF	.	.	DCE11	0.6	0.267	4.74079	0.1932	14.52
233	ICMINF	.	.	TCE	0.65	0.285	5.2999	0.1734	3052
233	ICMINF	.	.	TCLME	0.55	0.267	4.42404	0.2074	1.878
236	ITD2	390053.33	1427270.95	DCE11	0.25	0.29	43.86236	0.0221	1.441
236	ITD2	390053.33	1427270.95	TCE	0.4	0.26	47.48731	0.0202	204.8
236	ITD2	390053.33	1427270.95	TCLME	0.05	0.222	39.01549	0.025	1.277
238	ITD4	389418.67	1427247.80	TCE	0.35	0.285	40.6204	0.0248	2.969
239	ITD5	389794.39	1427246.93	DCE11	0.3	0.281	40.99608	0.0234	8.821
239	ITD5	389794.39	1427246.93	TCE	0.45	0.293	51.24824	0.0188	508.3
239	ITD5	389794.39	1427246.93	TCLME	0.3	0.283	40.63306	0.0235	9.069
240	ITD6	389880.17	1427386.70	DCE11	0.6	0.291	71.917	0.0134	99.94
240	ITD6	389880.17	1427386.70	TCE	0.35	0.256	44.40763	0.0218	1020
240	ITD6	389880.17	1427386.70	TCLME	0.55	0.294	65.37893	0.0148	132.4
241	ITD7	389865.85	1427483.45	DCE11	0.1	0.225	63.75916	0.0162	13.18
241	ITD7	389865.85	1427483.45	TCLME	0.1	0.269	65.53856	0.016	16.78
247	ITS3	390049.05	1427293.30	DCE11	0.3	0.267	53.55666	0.0182	3.753
247	ITS3	390049.05	1427293.30	TCE	0.25	0.264	49.75615	0.0196	137.3
247	ITS3	390049.05	1427293.30	TCLME	0.3	0.254	52.84756	0.0184	3.74
248	ITS4	389499.23	1427381.25	DCE11	0.25	0.284	53.49347	0.0183	69.66
248	ITS4	389499.23	1427381.25	TCE	0.4	0.277	68.20626	0.0145	3834
248	ITS4	389499.23	1427381.25	TCLME	0.2	0.278	50.2321	0.0194	53.83
253	ITS9	390460.45	1427309.68	DCE11	0.5	0.291	57.98522	0.0166	17.08
253	ITS9	390460.45	1427309.68	TCE	0.25	0.259	40.47309	0.0238	40.84
253	ITS9	390460.45	1427309.68	TCLME	0.3	0.261	43.21158	0.0223	2.765
286	MW1	390098.28	1430102.41	TCE	0.65	0.261	69.18795	0.0142	1.154
292	MW24	389890.98	1427303.14	DCE11	0.6	0.276	43.79107	0.0214	1.94
292	MW24	389890.98	1427303.14	TCE	0.45	0.279	29.45195	0.0319	74.06
293	MW25	389841.18	1427469.74	DCE11	0.5	0.291	30.90615	0.0303	129.7
293	MW25	389841.18	1427469.74	TCE	0.7	0.291	52.55198	0.0177	10710
293	MW25	389841.18	1427469.74	TCLME	0.5	0.29	31.3545	0.03	130.3
294	MW26	389939.56	1429596.80	DCE11	0.05	0.275	28.05499	0.034	475.9
294	MW26	389939.56	1429596.80	TCE	0.2	0.24	35.0725	0.0275	121300
294	MW26	389939.56	1429596.80	TCLME	0	0	26.67857	0.0358	0
295	MW27	390355.32	1429988.40	DCE11	0.25	0.248	70.21919	0.0143	37.39

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WELL#	WELLID	EASTING	NORTHING	COC	CUT	OUTPCT	INTERVAL	FREQ	AVE-IQR
295	MW27	390355.32	1429988.40	TCE	0.35	0.274	79.93253	0.0127	206.9
297	MW29	390848.69	1430557.78	DCE11	0.25	0.298	36.83426	0.0263	2.041
297	MW29	390848.69	1430557.78	TCE	0.3	0.298	39.92815	0.0243	113.9
298	MW30A	391100.59	1430872.21	TCE	0.1	0.273	63.55429	0.0163	0.9801
299	MW30B	391096.78	1430876.38	DCE11	0.7	0.279	40.43508	0.0234	0.5114
299	MW30B	391096.78	1430876.38	TCE	0.4	0.254	39.63051	0.0239	93.2
299	MW30B	391096.78	1430876.38	TCLME	0.55	0.279	53.36667	0.0177	7.268
300	MW31	390987.64	1430191.72	TCE	0.55	0.248	90.81245	0.0113	18.4
302	MW5	390538.26	1430020.14	DCE11	0.5	0.253	132.17738	0.0077	18.35
302	MW5	390538.26	1430020.14	TCE	0.5	0.264	115.98051	0.0087	752.2
302	MW5	390538.26	1430020.14	TCLME	0.45	0.256	118.70966	0.0086	26.16
304	MW53	391515.65	1430113.84	DCE11	0.3	0.271	39.41894	0.0246	27.72
304	MW53	391515.65	1430113.84	TCE	0.2	0.249	37.3952	0.0261	21.52
304	MW53	391515.65	1430113.84	TCLME	0.65	0.267	78.63826	0.0122	0.8388
305	MW54	391469.75	1430193.22	DCE11	0.3	0.297	71.49124	0.0143	20.13
305	MW54	391469.75	1430193.22	TCE	0.2	0.263	62.4151	0.0163	18.44
306	MW56	391363.95	1430438.33	DCE11	0.25	0.265	12.85642	0.0754	298.5
306	MW56	391363.95	1430438.33	TCE	0.75	0.201	76.17344	0.0125	97.85
306	MW56	391363.95	1430438.33	TCLME	0.15	0.284	27.42187	0.0355	15.11
307	MW6	390375.42	1429767.19	TCLME	0.35	0.288	66.74546	0.0158	5.327
311	MW7	391637.29	1430175.61	DCE11	0.3	0.283	54.09915	0.0182	36.22
311	MW7	391637.29	1430175.61	TCE	0.5	0.279	82.68462	0.012	2.862
312	MW9	389713.00	1427563.19	DCE11	0.1	0.244	35.91539	0.027	2.015
312	MW9	389713.00	1427563.19	TCE	0.3	0.287	46.54556	0.0208	18.16
312	MW9	389713.00	1427563.19	TCLME	0.3	0.286	45.86828	0.0211	3.787
313	MW99-01A	391862.77	1430282.71	DCE11	0.55	0.291	33.05086	0.0303	0.7223
313	MW99-01A	391862.77	1430282.71	TCE	0.5	0.234	30.31829	0.0339	0.9691
313	MW99-01A	391862.77	1430282.71	TCLME	0.35	0.263	22.35943	0.0453	0.4862
314	MW99-01B	391848.73	1430293.32	DCE11	0.5	0.236	30.10694	0.0344	0.9004
314	MW99-01B	391848.73	1430293.32	TCE	0.5	0.27	29.93424	0.0341	1.002
314	MW99-01B	391848.73	1430293.32	TCLME	0.55	0.295	33.02788	0.0307	0.8461
319	MWG1	389951.44	1429630.23	DCE11	0.05	0.168	28.73444	0.0335	257.1
319	MWG1	389951.44	1429630.23	TCE	0.4	0.294	48.78156	0.0199	62230
319	MWG1	389951.44	1429630.23	TCLME	0.05	0.163	28.91762	0.0334	59.72
321	MWG11	390841.83	1430616.58	DCE11	0.25	0.237	76.91651	0.0131	104.7
321	MWG11	390841.83	1430616.58	TCE	0.15	0.265	55.79673	0.018	4139
321	MWG11	390841.83	1430616.58	TCLME	0.6	0.28	130.17588	0.0078	67.85
322	MWG12	391633.43	1429886.81	TCE	0.2	0.224	55.39907	0.0182	0.9227
323	MWG14	391368.36	1430003.25	DCE11	0.25	0.278	82.75753	0.0123	17.3
323	MWG14	391368.36	1430003.25	TCE	0.3	0.265	88.13373	0.0117	600.9
323	MWG14	391368.36	1430003.25	TCLME	0.15	0.264	72.83412	0.0141	8.151
324	MWG15	391335.53	1430101.70	TCE	0.5	0.28	100.98365	0.0101	14.51
326	MWG17	391718.66	1430136.86	DCE11	0.2	0.287	16.12424	0.0611	43.8
326	MWG17	391718.66	1430136.86	TCE	0.4	0.274	21.74856	0.0454	43.12
326	MWG17	391718.66	1430136.86	TCLME	0.3	0.279	19.92078	0.0494	1.238
327	MWG19	391646.29	1430132.59	DCE11	0.55	0.27	65.1825	0.0149	59.29

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WELL#	WELLID	EASTING	NORTHING	COC	CUT	OUTPCT	INTERVAL	FREQ	AVE-IQR
327	MWG19	391646.29	1430132.59	TCE	0.35	0.288	42.93751	0.0227	2.459
327	MWG19	391646.29	1430132.59	TCLME	0.5	0.25	55.03599	0.0179	2.049
328	MWG1A	389950.31	1429626.79	DCE11	0.65	0.277	51.99509	0.0182	8445
328	MWG1A	389950.31	1429626.79	TCE	0	0	18.05102	0.0522	0
328	MWG1A	389950.31	1429626.79	TCLME	0.7	0.29	60.05708	0.0159	8718
329	MWG2	390162.47	1429689.52	TCE	0.5	0.29	130.66473	0.0078	1.724
332	MWG22	391499.62	1430490.72	DCE11	0.15	0.298	28.61901	0.0332	0.913
332	MWG22	391499.62	1430490.72	TCE	0.2	0.259	30.08286	0.0317	44.83
332	MWG22	391499.62	1430490.72	TCLME	0.7	0.285	78.75846	0.0119	4.352
335	MWG3	389836.31	1429719.02	TCE	0.15	0.21	67.68466	0.0149	2.804
337	MWG4	390562.10	1429820.92	DCE11	0.5	0.273	131.40521	0.0078	1.478
337	MWG4	390562.10	1429820.92	TCE	0.25	0.237	66.95453	0.0153	40.45
337	MWG4	390562.10	1429820.92	TCLME	0.4	0.278	98.37492	0.0103	7.832
338	MWG5	390432.26	1429974.05	DCE11	0.65	0.224	145.53168	0.0068	123.6
338	MWG5	390432.26	1429974.05	TCE	0.35	0.294	64.95897	0.0152	16510
338	MWG5	390432.26	1429974.05	TCLME	0.05	0.192	54.88629	0.0182	23.64
339	MWG5-5	390639.03	1430787.67	DCE11	0.25	0.282	76.55281	0.0136	167.6
339	MWG5-5	390639.03	1430787.67	TCLME	0.25	0.272	75.97804	0.0137	171.2
341	MWG5-6	390729.87	1430718.45	DCE11	0.5	0.256	102.42017	0.0099	1.361
341	MWG5-6	390729.87	1430718.45	TCE	0.55	0.286	111.91815	0.009	34.87
343	MWG7	390844.21	1429759.71	TCE	0.2	0.261	52.66021	0.0196	111.3
344	MWOS-01	390640.46	1431650.49	DCE11	0.6	0.246	32.53012	0.0303	0.4975
344	MWOS-01	390640.46	1431650.49	TCE	0.2	0.28	18.80037	0.0543	2.622
344	MWOS-01	390640.46	1431650.49	TCLME	0.65	0.268	33.43857	0.0288	0.2895
352	MWOS-09	392250.50	1430914.92	DCE11	0.3	0.229	17.22415	0.0584	1.674
352	MWOS-09	392250.50	1430914.92	TCE	0.15	0.217	13.65031	0.0752	12.29
352	MWOS-09	392250.50	1430914.92	TCLME	0.6	0.222	30.17014	0.0334	0.5282
353	MWOS-10	392239.14	1430920.36	DCE11	0.15	0.241	14.12068	0.0707	0.4416
353	MWOS-10	392239.14	1430920.36	TCE	0.4	0.291	19.94638	0.0514	59.07
353	MWOS-10	392239.14	1430920.36	TCLME	0.65	0.29	34.11045	0.029	0.5104
356	OB201A	390483.21	1431264.71	DCE11	0.15	0.289	10.90376	0.0928	1.404
356	OB201A	390483.21	1431264.71	TCE	0.25	0.297	12.41627	0.0811	45.81
356	OB201A	390483.21	1431264.71	TCLME	0.45	0.298	16.66719	0.0607	2.785
359	OB204B	391358.91	1430664.95	DCE11	0.35	0.243	22.24771	0.044	1.933
359	OB204B	391358.91	1430664.95	TCE	0.2	0.288	16.89184	0.0602	37.15
359	OB204B	391358.91	1430664.95	TCLME	0.15	0.294	14.71761	0.0664	2.546
360	OB205A	391492.68	1430489.64	DCE11	0.15	0.292	21.50443	0.0457	3.917
360	OB205A	391492.68	1430489.64	TCE	0.05	0.223	15.69391	0.0631	10.86
360	OB205A	391492.68	1430489.64	TCLME	0.2	0.295	20.53886	0.0487	0.195
361	OB208A	390695.39	1431206.90	DCE11	0.7	0.297	67.26611	0.0145	1.218
361	OB208A	390695.39	1431206.90	TCE	0.55	0.288	44.19858	0.0218	63.52
361	OB208A	390695.39	1431206.90	TCLME	0.65	0.248	58.04777	0.0167	2.156
362	OB208C	390619.55	1431253.09	DCE11	0.3	0.216	19.67979	0.0502	1.304
362	OB208C	390619.55	1431253.09	TCE	0.3	0.268	17.76513	0.0562	146.8
362	OB208C	390619.55	1431253.09	TCLME	0.25	0.251	22.10616	0.0454	0.08552
363	OB209A	391306.49	1430739.75	DCE11	0.35	0.27	22.03715	0.0472	5.474
363	OB209A	391306.49	1430739.75	TCLME	0.55	0.221	31.09388	0.0326	1.054
368	OW7	390020.46	1427487.53	DCE11	0.15	0.249	13.54299	0.072	1.86
368	OW7	390020.46	1427487.53	TCE	0.35	0.263	16.73012	0.0588	426.4
368	OW7	390020.46	1427487.53	TCLME	0.65	0.215	31.463	0.0307	1.923
405	PMW7D	390038.39	1431433.98	TCE	0.35	0.261	18.90975	0.0516	12.75

TABLE 2.3
Summary of Iterative Thinning Results, By COC and Well Location
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELL#	WELLID	EASTING	NORTHING	COC	CUT	OUTPCT	INTERVAL	FREQ	AVE-IQR
410	PZ-1A	390207.88	1427393.65	DCE11	0.15	0.249	17.17698	0.0566	7.636
410	PZ-1A	390207.88	1427393.65	TCE	0.1	0.26	16.34965	0.0598	698.2
410	PZ-1A	390207.88	1427393.65	TCLME	0.6	0.273	28.7564	0.0334	5.36
432	RW101	390065.57	1427200.26	DCE11	0.45	0.271	20.88261	0.0464	8.2
432	RW101	390065.57	1427200.26	TCE	0.15	0.238	12.96263	0.0762	90.52
432	RW101	390065.57	1427200.26	TCLME	0.5	0.255	23.25537	0.042	7.052
433	RW102C	389854.89	1427523.09	DCE11	0.1	0.214	16.04191	0.0605	1.83
433	RW102C	389854.89	1427523.09	TCE	0.35	0.299	22.0137	0.0441	1846
433	RW102C	389854.89	1427523.09	TCLME	0.45	0.239	20.73663	0.0471	8.78
434	RW103	389701.39	1427050.94	TCE	0.05	0.243	12.04137	0.081	3.296
434	RW103	389701.39	1427050.94	TCLME	0.45	0.27	20.37849	0.0476	0.2205
435	RW201	390530.36	1431288.09	DCE11	0.15	0.246	17.20337	0.0578	0.2535
435	RW201	390530.36	1431288.09	TCE	0.4	0.273	22.45661	0.044	31.5
436	RW202	390860.33	1431063.92	DCE11	0.25	0.247	17.88459	0.055	4.815
436	RW202	390860.33	1431063.92	TCE	0.25	0.22	17.5163	0.0571	7.858
436	RW202	390860.33	1431063.92	TCLME	0.3	0.282	20.5776	0.0483	0.979
437	RW203	391036.25	1430933.80	DCE11	0.25	0.291	24.31959	0.0402	2.905
437	RW203	391036.25	1430933.80	TCE	0.3	0.244	14.68626	0.0703	840.8
437	RW203	391036.25	1430933.80	TCLME	0.35	0.278	15.89015	0.0642	3.723
439	RW206	391613.51	1430265.29	DCE11	0.1	0.213	17.64967	0.0552	5.379
439	RW206	391613.51	1430265.29	TCE	0.2	0.275	15.77779	0.0621	17.52
440	RW207	391155.17	1430837.07	DCE11	0.25	0.28	24.4029	0.0403	7.554
440	RW207	391155.17	1430837.07	TCE	0.1	0.207	20.18788	0.0488	212.5
440	RW207	391155.17	1430837.07	TCLME	0.45	0.266	26.16857	0.0374	1.934
443	RW301	392566.74	1427750.10	DCE11	0.35	0.287	13.26574	0.0729	571.8
443	RW301	392566.74	1427750.10	TCE	0.4	0.28	15.67338	0.0623	217.3
443	RW301	392566.74	1427750.10	TCLME	0	0	10.00893	0.0965	0
444	RW302	392821.51	1427921.57	DCE11	0.4	0.225	18.72636	0.0515	9.392
444	RW302	392821.51	1427921.57	TCE	0.4	0.251	19.00493	0.051	4.43
445	RW303	392416.95	1427758.51	DCE11	0.45	0.275	22.07989	0.0444	36.06
445	RW303	392416.95	1427758.51	TCE	0.4	0.251	21.73335	0.0453	8.275
445	RW303	392416.95	1427758.51	TCLME	0.4	0.222	22.00062	0.0451	0.2398
446	SCT1	391593.96	1431490.94	TCE	0.4	0.268	26.00897	0.0404	274.1
448	SCT3	391220.25	1431186.94	DCE11	0.35	0.265	18.73412	0.0535	1.052
448	SCT3	391220.25	1431186.94	TCE	0.25	0.27	15.28782	0.0668	97.79
448	SCT3	391220.25	1431186.94	TCLME	0.55	0.295	27.19956	0.0376	1.15

Notes:
CUT = optimal data removal percentage; OUTPCT = percent of estimated trend pts outside confidence band
INTERVAL = optimal sampling interval (in weeks); FREQ = optimal sampling frequency per week
AVE-IQR = average interquartile range across 500 iterative fits

TABLE 2.4
Optimal Sampling Intervals and Frequencies for TCE
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELL#	WELLID	EASTING	NORTHING	COC	REMOVAL	OUTPCT	INTERVAL	FREQ	AVE-IQR	SUGGESTED INTERVAL
37	B10A1	389492.08	1427123.18	TCE	0.35	0.248	37.0453	0.0265	14.47	3Q
38	B10A2	389767.05	1427027.80	TCE	0.15	0.254	40.92486	0.0238	1.764	3Q
47	B10B1	389675.55	1427150.47	TCE	0.3	0.251	53.80612	0.0184	67.2	4Q
48	B10B10	390127.44	1426968.65	TCE	0.65	0.245	42.04476	0.0229	0.5804	3Q
49	B10B11	390220.84	1427287.91	TCE	0.45	0.295	28.87717	0.0341	1231	2Q
51	B10B4	389537.48	1427226.49	TCE	0.6	0.268	37.64734	0.0249	1.823	3Q
52	B10B5	389481.11	1427101.98	TCE	0.55	0.29	89.36634	0.011	110.3	7Q
121	B90B2	392238.86	1427976.17	TCE	0.6	0.298	40.40661	0.0232	12.47	3Q
122	B90B3	392396.03	1427929.04	TCE	0.55	0.291	33.61578	0.028	6.78	2Q
123	B90B4	392563.39	1427930.59	TCE	0.6	0.269	44.13082	0.0213	45.94	3Q
130	B90BR2	392346.19	1427766.11	TCE	0.35	0.28	46.22778	0.0208	12.17	3Q
133	B90D1	392314.27	1427791.18	TCE	0.2	0.296	40.4831	0.0239	37.1	3Q
134	B90D2	392666.13	1427877.03	TCE	0.3	0.26	40.98957	0.0235	162.4	3Q
135	B90D3	392148.24	1427814.95	TCE	0.4	0.26	53.62558	0.018	3.77	4Q
136	B90D4	392534.12	1427692.04	TCE	0.25	0.248	40.66277	0.0238	93.45	3Q
137	B90D5	392830.01	1427885.79	TCE	0.35	0.25	56.26198	0.0175	12.48	4Q
138	B90D6	392992.55	1428040.58	TCE	0.55	0.278	50.20377	0.0189	0.5213	4Q
141	B90E1	392825.07	1428478.36	TCE	0.15	0.295	72.76	0.014	0.9379	5Q
143	B90E3	393692.76	1427382.72	TCE	0.4	0.268	100.39752	0.0102	1.311	8Q
145	B90E5	391863.63	1427868.22	TCE	0.5	0.299	58.1337	0.0166	8.165	4Q
147	B90E7	392364.59	1427627.74	TCE	0.45	0.278	67.36045	0.0144	107.6	5Q
154	B90MWD	392729.88	1427361.49	TCE	0.05	0.177	7.22627	0.1331	0.5717	1Q
156	B90MWG	392766.32	1427344.88	TCE	0.2	0.255	18.67508	0.0555	0.4698	1Q
158	B90MWH	392763.04	1427785.22	TCE	0.25	0.221	19.40417	0.0526	19.55	1Q
162	B90N2	392092.63	1427985.74	TCE	0.2	0.289	35.71338	0.0268	7.711	3Q
220	DPW-1	389920.93	1429639.01	TCE	0.25	0.294	15.2707	0.0687	122500	1Q
221	DPW-2	389880.03	1429699.26	TCE	0.15	0.242	13.82701	0.075	6591	1Q
222	DPW-3	389978.84	1429670.75	TCE	0.3	0.224	14.07133	0.0721	61640	1Q
223	EFF	.	.	TCE	0.3	0.268	19.77757	0.0497	11.09	1Q
232	ICMEFF	.	.	TCE	0.9	0.296	18.99485	0.0484	2.861	19W
233	ICMINF	.	.	TCE	0.65	0.285	5.2999	0.1734	3052	5W
236	ITD2	390053.33	1427270.95	TCE	0.4	0.26	47.48731	0.0202	204.8	4Q
238	ITD4	389418.67	1427247.80	TCE	0.35	0.285	40.6204	0.0248	2.969	3Q

TABLE 2.4
Optimal Sampling Intervals and Frequencies for TCE
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELL#	WELLID	EASTING	NORTHING	COC	REMOVAL	OUTPCT	INTERVAL	FREQ	AVE-IQR	SUGGESTED INTERVAL
239	ITD5	389794.39	1427246.93	TCE	0.45	0.293	51.24824	0.0188	508.3	4Q
240	ITD6	389880.17	1427386.70	TCE	0.35	0.256	44.40763	0.0218	1020	3Q
247	ITS3	390049.05	1427293.30	TCE	0.25	0.264	49.75615	0.0196	137.3	4Q
248	ITS4	389499.23	1427381.25	TCE	0.4	0.277	68.20626	0.0145	3834	5Q
253	ITS9	390460.45	1427309.68	TCE	0.25	0.259	40.47309	0.0238	40.84	3Q
286	MW1	390098.28	1430102.41	TCE	0.65	0.261	69.18795	0.0142	1.154	5Q
292	MW24	389890.98	1427303.14	TCE	0.45	0.279	29.45195	0.0319	74.06	2Q
293	MW25	389841.18	1427469.74	TCE	0.7	0.291	52.55198	0.0177	10710	4Q
294	MW26	389939.56	1429596.80	TCE	0.2	0.24	35.0725	0.0275	121300	3Q
295	MW27	390355.32	1429988.40	TCE	0.35	0.274	79.93253	0.0127	206.9	6Q
297	MW29	390848.69	1430557.78	TCE	0.3	0.298	39.92815	0.0243	113.9	3Q
298	MW30A	391100.59	1430872.21	TCE	0.1	0.273	63.55429	0.0163	0.9801	5Q
299	MW30B	391096.78	1430876.38	TCE	0.4	0.254	39.63051	0.0239	93.2	3Q
300	MW31	390987.64	1430191.72	TCE	0.55	0.248	90.81245	0.0113	18.4	7Q
302	MW5	390538.26	1430020.14	TCE	0.5	0.264	115.98051	0.0087	752.2	9Q
304	MW53	391515.65	1430113.84	TCE	0.2	0.249	37.3952	0.0261	21.52	3Q
305	MW54	391469.75	1430193.22	TCE	0.2	0.263	62.4151	0.0163	18.44	5Q
306	MW56	391363.95	1430438.33	TCE	0.75	0.201	76.17344	0.0125	97.85	6Q
311	MW7	391637.29	1430175.61	TCE	0.5	0.279	82.68462	0.012	2.862	6Q
312	MW9	389713.00	1427563.19	TCE	0.3	0.287	46.54556	0.0208	18.16	3Q
313	MW99-01A	391862.77	1430282.71	TCE	0.5	0.234	30.31829	0.0339	0.9691	2Q
314	MW99-01B	391848.73	1430293.32	TCE	0.5	0.27	29.93424	0.0341	1.002	2Q
319	MWG1	389951.44	1429630.23	TCE	0.4	0.294	48.78156	0.0199	62230	4Q
321	MWG11	390841.83	1430616.58	TCE	0.15	0.265	55.79673	0.018	4139	4Q
322	MWG12	391633.43	1429886.81	TCE	0.2	0.224	55.39907	0.0182	0.9227	4Q
323	MWG14	391368.36	1430003.25	TCE	0.3	0.265	88.13373	0.0117	600.9	7Q
324	MWG15	391335.53	1430101.70	TCE	0.5	0.28	100.98365	0.0101	14.51	8Q
326	MWG17	391718.66	1430136.86	TCE	0.4	0.274	21.74856	0.0454	43.12	2Q
327	MWG19	391646.29	1430132.59	TCE	0.35	0.288	42.93751	0.0227	2.459	3Q
328	MWG1A	389950.31	1429626.79	TCE	0	0	18.05102	0.0522	0	1Q
329	MWG2	390162.47	1429689.52	TCE	0.5	0.29	130.66473	0.0078	1.724	10Q
332	MWG22	391499.62	1430490.72	TCE	0.2	0.259	30.08286	0.0317	44.83	2Q
335	MWG3	389836.31	1429719.02	TCE	0.15	0.21	67.68466	0.0149	2.804	5Q

TABLE 2.4
Optimal Sampling Intervals and Frequencies for TCE
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELL#	WELLID	EASTING	NORTHING	COC	REMOVAL	OUTPCT	INTERVAL	FREQ	AVE-IQR	SUGGESTED INTERVAL
337	MWG4	390562.10	1429820.92	TCE	0.25	0.237	66.95453	0.0153	40.45	5Q
338	MWG5	390432.26	1429974.05	TCE	0.35	0.294	64.95897	0.0152	16510	5Q
341	MWG5-6	390729.87	1430718.45	TCE	0.55	0.286	111.91815	0.009	34.87	8Q
343	MWG7	390844.21	1429759.71	TCE	0.2	0.261	52.66021	0.0196	111.3	4Q
344	MWOS-01	390640.46	1431650.49	TCE	0.2	0.28	18.80037	0.0543	2.622	1Q
352	MWOS-09	392250.50	1430914.92	TCE	0.15	0.217	13.65031	0.0752	12.29	1Q
353	MWOS-10	392239.14	1430920.36	TCE	0.4	0.291	19.94638	0.0514	59.07	1Q
356	OB201A	390483.21	1431264.71	TCE	0.25	0.297	12.41627	0.0811	45.81	1Q
359	OB204B	391358.91	1430664.95	TCE	0.2	0.288	16.89184	0.0602	37.15	1Q
360	OB205A	391492.68	1430489.64	TCE	0.05	0.223	15.69391	0.0631	10.86	1Q
361	OB208A	390695.39	1431206.90	TCE	0.55	0.288	44.19858	0.0218	63.52	3Q
362	OB208C	390619.55	1431253.09	TCE	0.3	0.268	17.76513	0.0562	146.8	1Q
368	OW7	390020.46	1427487.53	TCE	0.35	0.263	16.73012	0.0588	426.4	1Q
405	PMW7D	390038.39	1431433.98	TCE	0.35	0.261	18.90975	0.0516	12.75	1Q
410	PZ-1A	390207.88	1427393.65	TCE	0.1	0.26	16.34965	0.0598	698.2	1Q
432	RW101	390065.57	1427200.26	TCE	0.15	0.238	12.96263	0.0762	90.52	1Q
433	RW102C	389854.89	1427523.09	TCE	0.35	0.299	22.0137	0.0441	1846	2Q
434	RW103	389701.39	1427050.94	TCE	0.05	0.243	12.04137	0.081	3.296	1Q
435	RW201	390530.36	1431288.09	TCE	0.4	0.273	22.45661	0.044	31.5	2Q
436	RW202	390860.33	1431063.92	TCE	0.25	0.22	17.5163	0.0571	7.858	1Q
437	RW203	391036.25	1430933.80	TCE	0.3	0.244	14.68626	0.0703	840.8	1Q
439	RW206	391613.51	1430265.29	TCE	0.2	0.275	15.77779	0.0621	17.52	1Q
440	RW207	391155.17	1430837.07	TCE	0.1	0.207	20.18788	0.0488	212.5	1Q
443	RW301	392566.74	1427750.10	TCE	0.4	0.28	15.67338	0.0623	217.3	1Q
444	RW302	392821.51	1427921.57	TCE	0.4	0.251	19.00493	0.051	4.43	1Q
445	RW303	392416.95	1427758.51	TCE	0.4	0.251	21.73335	0.0453	8.275	2Q
446	SCT1	391593.96	1431490.94	TCE	0.4	0.268	26.00897	0.0404	274.1	2Q
448	SCT3	391220.25	1431186.94	TCE	0.25	0.27	15.28782	0.0668	97.79	1Q

Notes:
REMOVAL = fraction of data removed; OUTPCT = fraction of estimated trend pts outside confidence band
INTERVAL = optimal sampling interval; FREQ = optimal sampling frequency
AVE-IQR = average interquartile range over 500 iterative fits; Suggested INTERVAL = closest operational sampling interval

TABLE 2.5
Optimal Sampling Intervals and Frequencies Measured Across All COCs
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Well#	Wellid	Easting	Northing	N-cocs	Min (removal)	Min (interval)	Max (freq)	Suggested interval
37	B10A1	389492.08	1427123.18	1	0.35	37.0453	0.0265	3Q
38	B10A2	389767.05	1427027.80	1	0.15	40.92486	0.0238	3Q
47	B10B1	389675.55	1427150.47	3	0.15	38.38327	0.0253	3Q
48	B10B10	390127.44	1426968.65	1	0.65	42.04476	0.0229	3Q
49	B10B11	390220.84	1427287.91	3	0.2	19.41292	0.0502	1Q
51	B10B4	389537.48	1427226.49	1	0.6	37.64734	0.0249	3Q
52	B10B5	389481.11	1427101.98	1	0.55	89.36634	0.011	7Q
121	B90B2	392238.86	1427976.17	3	0.6	40.40661	0.0232	3Q
122	B90B3	392396.03	1427929.04	2	0.55	33.61578	0.028	2Q
123	B90B4	392563.39	1427930.59	2	0.6	44.13082	0.0213	3Q
127	B90B8	392554.48	1427426.48	2	0	12.98413	0.0778	1Q
130	B90BR2	392346.19	1427766.11	2	0.35	46.22778	0.0208	3Q
133	B90D1	392314.27	1427791.18	2	0.2	40.4831	0.0239	3Q
134	B90D2	392666.13	1427877.03	3	0.3	40.98957	0.0235	3Q
135	B90D3	392148.24	1427814.95	1	0.4	53.62558	0.018	4Q
136	B90D4	392534.12	1427692.04	3	0.2	38.04713	0.0253	3Q
137	B90D5	392830.01	1427885.79	2	0.35	44.40305	0.0223	3Q
138	B90D6	392992.55	1428040.58	3	0.3	42.07859	0.023	3Q
141	B90E1	392825.07	1428478.36	2	0.15	72.76	0.014	5Q
143	B90E3	393692.76	1427382.72	3	0.4	99.79815	0.0103	8Q
145	B90E5	391863.63	1427868.22	1	0.5	58.1337	0.0166	4Q
147	B90E7	392364.59	1427627.74	3	0.4	67.36045	0.0144	5Q
154	B90MWD	392729.88	1427361.49	2	0.05	7.22627	0.1331	1Q
156	B90MWG	392766.32	1427344.88	1	0.2	18.67508	0.0555	1Q
158	B90MWH	392763.04	1427785.22	3	0.15	17.21265	0.0593	1Q
162	B90N2	392092.63	1427985.74	3	0.1	31.68131	0.0303	2Q
220	DPW-1	389920.93	1429639.01	3	0.1	11.48878	0.089	1Q
221	DPW-2	389880.03	1429699.26	2	0.15	13.82701	0.075	1Q
222	DPW-3	389978.84	1429670.75	3	0.25	12.05516	0.0836	1Q
223	EFF	.	.	1	0.3	19.77757	0.0497	1Q
232	ICMEFF	.	.	3	0.8	9.26604	0.099	9W
233	ICMINF	.	.	3	0.55	4.42404	0.2074	4W
236	ITD2	390053.33	1427270.95	3	0.05	39.01549	0.025	3Q
238	ITD4	389418.67	1427247.80	1	0.35	40.6204	0.0248	3Q
239	ITD5	389794.39	1427246.93	3	0.3	40.63306	0.0235	3Q
240	ITD6	389880.17	1427386.70	3	0.35	44.40763	0.0218	3Q
241	ITD7	389865.85	1427483.45	2	0.1	63.75916	0.0162	5Q
247	ITS3	390049.05	1427293.30	3	0.25	49.75615	0.0196	4Q
248	ITS4	389499.23	1427381.25	3	0.2	50.2321	0.0194	4Q
253	ITS9	390460.45	1427309.68	3	0.25	40.47309	0.0238	3Q
286	MW1	390098.28	1430102.41	1	0.65	69.18795	0.0142	5Q
292	MW24	389890.98	1427303.14	2	0.45	29.45195	0.0319	2Q

TABLE 2.5
Optimal Sampling Intervals and Frequencies Measured Across All COCs
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Well#	Wellid	Easting	Northing	N-cocs	Min (removal)	Min (interval)	Max (freq)	Suggested interval
293	MW25	389841.18	1427469.74	3	0.5	30.90615	0.0303	2Q
294	MW26	389939.56	1429596.80	3	0	26.67857	0.0358	2Q
295	MW27	390355.32	1429988.40	2	0.25	70.21919	0.0143	5Q
297	MW29	390848.69	1430557.78	2	0.25	36.83426	0.0263	3Q
298	MW30A	391100.59	1430872.21	1	0.1	63.55429	0.0163	5Q
299	MW30B	391096.78	1430876.38	3	0.4	39.63051	0.0239	3Q
300	MW31	390987.64	1430191.72	1	0.55	90.81245	0.0113	7Q
302	MW5	390538.26	1430020.14	3	0.45	115.98051	0.0087	9Q
304	MW53	391515.65	1430113.84	3	0.2	37.3952	0.0261	3Q
305	MW54	391469.75	1430193.22	2	0.2	62.4151	0.0163	5Q
306	MW56	391363.95	1430438.33	3	0.15	12.85642	0.0754	1Q
307	MW6	390375.42	1429767.19	1	0.35	66.74546	0.0158	5Q
311	MW7	391637.29	1430175.61	2	0.3	54.09915	0.0182	4Q
312	MW9	389713.00	1427563.19	3	0.1	35.91539	0.027	3Q
313	MW99-01A	391862.77	1430282.71	3	0.35	22.35943	0.0453	2Q
314	MW99-01B	391848.73	1430293.32	3	0.5	29.93424	0.0344	2Q
319	MWG1	389951.44	1429630.23	3	0.05	28.73444	0.0335	2Q
321	MWG11	390841.83	1430616.58	3	0.15	55.79673	0.018	4Q
322	MWG12	391633.43	1429886.81	1	0.2	55.39907	0.0182	4Q
323	MWG14	391368.36	1430003.25	3	0.15	72.83412	0.0141	5Q
324	MWG15	391335.53	1430101.70	1	0.5	100.98365	0.0101	8Q
326	MWG17	391718.66	1430136.86	3	0.2	16.12424	0.0611	1Q
327	MWG19	391646.29	1430132.59	3	0.35	42.93751	0.0227	3Q
328	MWG1A	389950.31	1429626.79	3	0	18.05102	0.0522	1Q
329	MWG2	390162.47	1429689.52	1	0.5	130.66473	0.0078	10Q
332	MWG22	391499.62	1430490.72	3	0.15	28.61901	0.0332	2Q
335	MWG3	389836.31	1429719.02	1	0.15	67.68466	0.0149	5Q
337	MWG4	390562.10	1429820.92	3	0.25	66.95453	0.0153	5Q
338	MWG5	390432.26	1429974.05	3	0.05	54.88629	0.0182	4Q
339	MWG5-5	390639.03	1430787.67	2	0.25	75.97804	0.0137	6Q
341	MWG5-6	390729.87	1430718.45	2	0.5	102.42017	0.0099	8Q
343	MWG7	390844.21	1429759.71	1	0.2	52.66021	0.0196	4Q
344	MWOS-01	390640.46	1431650.49	3	0.2	18.80037	0.0543	1Q
352	MWOS-09	392250.50	1430914.92	3	0.15	13.65031	0.0752	1Q
353	MWOS-10	392239.14	1430920.36	3	0.15	14.12068	0.0707	1Q
356	OB201A	390483.21	1431264.71	3	0.15	10.90376	0.0928	1Q
359	OB204B	391358.91	1430664.95	3	0.15	14.71761	0.0664	1Q
360	OB205A	391492.68	1430489.64	3	0.05	15.69391	0.0631	1Q
361	OB208A	390695.39	1431206.90	3	0.55	44.19858	0.0218	3Q
362	OB208C	390619.55	1431253.09	3	0.25	17.76513	0.0562	1Q
363	OB209A	391306.49	1430739.75	2	0.35	22.03715	0.0472	2Q
368	OW7	390020.46	1427487.53	3	0.15	13.54299	0.072	1Q
405	PMW7D	390038.39	1431433.98	1	0.35	18.90975	0.0516	1Q

TABLE 2.5
Optimal Sampling Intervals and Frequencies Measured Across All COCs
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Well#	Wellid	Easting	Northing	N-cocs	Min (removal)	Min (interval)	Max (freq)	Suggested interval
410	PZ-1A	390207.88	1427393.65	3	0.1	16.34965	0.0598	1Q
432	RW101	390065.57	1427200.26	3	0.15	12.96263	0.0762	1Q
433	RW102C	389854.89	1427523.09	3	0.1	16.04191	0.0605	1Q
434	RW103	389701.39	1427050.94	2	0.05	12.04137	0.081	1Q
435	RW201	390530.36	1431288.09	2	0.15	17.20337	0.0578	1Q
436	RW202	390860.33	1431063.92	3	0.25	17.5163	0.0571	1Q
437	RW203	391036.25	1430933.80	3	0.25	14.68626	0.0703	1Q
439	RW206	391613.51	1430265.29	2	0.1	15.77779	0.0621	1Q
440	RW207	391155.17	1430837.07	3	0.1	20.18788	0.0488	1Q
443	RW301	392566.74	1427750.10	3	0	10.00893	0.0965	1Q
444	RW302	392821.51	1427921.57	2	0.4	18.72636	0.0515	1Q
445	RW303	392416.95	1427758.51	3	0.4	21.73335	0.0453	2Q
446	SCT1	391593.96	1431490.94	1	0.4	26.00897	0.0404	2Q
448	SCT3	391220.25	1431186.94	3	0.25	15.28782	0.0668	1Q

Notes:
N-COCs = Number of COCs with Results; Min(REMOVAL) = Minimum fraction of data removed
Min(INTERVAL) = Minimum Optimal Sampling Interval; Max(FREQ) = Maximum Optimal Sampling Frequency
SUGGESTED INTERVAL = closest operational sampling interval (i.e., 3Q = 3 quarters, 9W = 9 weeks)

treatment influent stream is at least 4 weeks, and the suggested sampling interval for the ICM effluent is at least 9 weeks.

2.3.2 Trend Maps

The trend maps were described above (see also Appendix C). Perhaps most noticeable in comparisons of the different time periods is that some measure of increasing contamination has been seen at several wells since 2000, particularly in the B04 area of the site. However, the trends at nearby wells sometimes differ in direction, even for those trends that are labeled as definite increases or definite decreases. One factor that may partially account for this result is sampling depth. Since the overall trend maps do not differentiate wells by depth, additional maps in Appendix C separate overburden from bedrock wells so that the well groups are plotted on different maps, which helps to provide an overview of the trends within each general hydrostratigraphic zone.

It is also possible that the fractured subsurface at AFP 6 may not allow for as much hydraulic connectivity between nearby wells as might be expected, potentially leading to some wells increasing in concentration while other wells nearby are decreasing, even over the same time period, or perhaps another facet of AFP 6 hydrogeology is at work. In any case, numerical information about the estimated trend magnitudes—including the confidence bounds around each trend—is listed by well and COC in Table 2.6.

2.3.3 Temporal Variograms

The temporal variograms for AFP 6 are contained in the graphs of Appendix D. There are 10 temporal variograms per COC, representing not only each major site (B04, B10, B90) but also the subsite B76, and 6 variograms of well subsystems connected with the following ICM locations: RW101, RW102C, RW103, RW301, RW302, and RW303. The individual well locations comprising each of these 10 well groupings are listed in Table 2.7.

At AFP 6, only a few of the temporal variograms provide a clear interpretation. In some cases, such as the B76 well set for DCE11 or the RW301 well set for TCLME, there does not appear to be an identifiable range, meaning it is unclear when the sampling information provided by consecutive pairs of measurements first becomes uncorrelated, if at all. In these cases, no recommendation about an optimal group-wide sampling interval can be made.

In other cases, such as area B10 for DCE11 or the RW102C well set for TCLME, the variogram is initially much higher for very short lags, then drops quickly only to rise slowly again for larger lags. While the initially large variogram values are difficult to interpret and may be related to wells in the group exhibiting fundamentally different temporal patterns, there is evidence of a lower but reasonably stable sill at larger lags. In these situations, a cautious recommendation as to an approximate range and optimal sampling interval can be made, as given in the table below.

In a few other cases, such as area B90 for DCE11, area B04 for TCLME, and the RW301 well set for TCE, there does not appear to be an ultimate sill over lag times less than about 200 weeks (or approximately 4 years). However, the temporal variograms do exhibit a secondary sill for some smaller lag times, representing a partial stabilizing of

TABLE 2.6
Estimated Trend Magnitudes and Confidence Intervals by COC and Well Location
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
37	B10A1	389492.08	1427123.18	DCE11	Historical	0.9615	0	0	0
37	B10A1	389492.08	1427123.18	DCE11	Post-1999	0.9773	0	0	0
37	B10A1	389492.08	1427123.18	DCE11	Latest	0.9775	0	0	0
37	B10A1	389492.08	1427123.18	TCE	Historical	0.96	-0.13398	-0.28039	0.07161
37	B10A1	389492.08	1427123.18	TCE	Post-1999	0.9567	-0.19144	-0.33636	0.07161
37	B10A1	389492.08	1427123.18	TCE	Latest	0.9775	0.12526	-0.09004	0.39868
37	B10A1	389492.08	1427123.18	TCLME	Historical	0.9615	0	0	0
37	B10A1	389492.08	1427123.18	TCLME	Post-1999	0.9773	0	0	0
37	B10A1	389492.08	1427123.18	TCLME	Latest	0.9775	0	0	0
38	B10A2	389767.05	1427027.8	DCE11	Historical	0.9511	0	0	0
38	B10A2	389767.05	1427027.8	DCE11	Post-1999	0.9775	0	0	0
38	B10A2	389767.05	1427027.8	DCE11	Latest	0.9922	0	0	0
38	B10A2	389767.05	1427027.8	TCE	Historical	0.97	-0.0608	-0.08326	-0.04483
38	B10A2	389767.05	1427027.8	TCE	Post-1999	0.9871	-0.05055	-0.07775	-0.02943
38	B10A2	389767.05	1427027.8	TCE	Latest	0.9609	-0.06434	-0.08326	-0.05034
38	B10A2	389767.05	1427027.8	TCLME	Historical	0.9511	0	0	0
38	B10A2	389767.05	1427027.8	TCLME	Post-1999	0.9775	0	0	0
38	B10A2	389767.05	1427027.8	TCLME	Latest	0.9922	0	0	0
47	B10B1	389675.55	1427150.47	DCE11	Historical	0.9637	-0.01046	-0.01429	-0.00098
47	B10B1	389675.55	1427150.47	DCE11	Post-1999	0.9648	0.0122	-0.0293	0.02008
47	B10B1	389675.55	1427150.47	DCE11	Latest	0.9883	-0.00138	-0.07973	0.02172
47	B10B1	389675.55	1427150.47	TCE	Historical	0.9511	-0.29242	-0.45357	0.11809
47	B10B1	389675.55	1427150.47	TCE	Post-1999	0.9775	-0.27652	-1.45457	0.44069
47	B10B1	389675.55	1427150.47	TCE	Latest	0.9808	0.30923	-0.62615	0.64245
47	B10B1	389675.55	1427150.47	TCLME	Historical	0.9637	-0.01237	-0.0203	-0.00002
47	B10B1	389675.55	1427150.47	TCLME	Post-1999	0.9648	0.02878	-0.05057	0.04542
47	B10B1	389675.55	1427150.47	TCLME	Latest	0.9883	-0.00124	-0.1207	0.05931
48	B10B10	390127.44	1426968.65	DCE11	Historical	0.96	0	0	0
48	B10B10	390127.44	1426968.65	DCE11	Post-1999	0.9643	0	0	0
48	B10B10	390127.44	1426968.65	DCE11	Latest	0.9614	0	0	0
48	B10B10	390127.44	1426968.65	TCE	Historical	0.9615	-0.00131	-0.00438	-0.00079
48	B10B10	390127.44	1426968.65	TCE	Post-1999	0.9725	-0.00129	-0.00438	-0.0007
48	B10B10	390127.44	1426968.65	TCE	Latest	0.9883	0.00065	-0.0027	0.00188
48	B10B10	390127.44	1426968.65	TCLME	Historical	0.96	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
48	B10B10	390127.44	1426968.65	TCLME	Post-1999	0.9643	0	0	0
48	B10B10	390127.44	1426968.65	TCLME	Latest	0.9614	0	0	0
49	B10B11	390220.84	1427287.91	DCE11	Historical	0.97	-0.05973	-0.07253	-0.04401
49	B10B11	390220.84	1427287.91	DCE11	Post-1999	0.9763	-0.04401	-0.0575	-0.03565
49	B10B11	390220.84	1427287.91	DCE11	Latest	0.9785	-0.005	-0.02257	0.00977
49	B10B11	390220.84	1427287.91	TCE	Historical	0.96	-7.85577	-17.56649	2.03921
49	B10B11	390220.84	1427287.91	TCE	Post-1999	0.9706	-12.5963	-20.8582	-1.16514
49	B10B11	390220.84	1427287.91	TCE	Latest	0.9614	-14.99543	-20.8582	-6.99685
49	B10B11	390220.84	1427287.91	TCLME	Historical	0.9511	-0.01184	-0.03947	0
49	B10B11	390220.84	1427287.91	TCLME	Post-1999	0.9556	-0.01299	-0.04286	0
49	B10B11	390220.84	1427287.91	TCLME	Latest	0.9775	0	-0.03947	0
50	B10B2	389313.54	1427083.2	DCE11	Historical	0.9615	0	0	0
50	B10B2	389313.54	1427083.2	DCE11	Post-1999	0.9883	0	0	0
50	B10B2	389313.54	1427083.2	DCE11	Latest	0.9808	0	0	0
50	B10B2	389313.54	1427083.2	TCE	Historical	0.9649	0	0	0
50	B10B2	389313.54	1427083.2	TCE	Post-1999	0.9922	0	0	0
50	B10B2	389313.54	1427083.2	TCE	Latest	0.9787	0	0	0
50	B10B2	389313.54	1427083.2	TCLME	Historical	0.9615	0	0	0
50	B10B2	389313.54	1427083.2	TCLME	Post-1999	0.9883	0	0	0
50	B10B2	389313.54	1427083.2	TCLME	Latest	0.9808	0	0	0
51	B10B4	389537.48	1427226.49	DCE11	Historical	0.9531	0	0	0
51	B10B4	389537.48	1427226.49	DCE11	Post-1999	0.9572	0	0	0
51	B10B4	389537.48	1427226.49	DCE11	Latest	0.9609	0	0	0
51	B10B4	389537.48	1427226.49	TCE	Historical	0.9644	-0.01178	-0.01755	-0.00681
51	B10B4	389537.48	1427226.49	TCE	Post-1999	0.9664	-0.00928	-0.01547	-0.00344
51	B10B4	389537.48	1427226.49	TCE	Latest	0.9785	-0.0183	-0.01919	-0.01755
51	B10B4	389537.48	1427226.49	TCLME	Historical	0.9646	0	0	0
51	B10B4	389537.48	1427226.49	TCLME	Post-1999	0.9653	0	0	0
51	B10B4	389537.48	1427226.49	TCLME	Latest	0.9844	0	0	0
52	B10B5	389481.11	1427101.98	DCE11	Historical	0.953	0	0	0
52	B10B5	389481.11	1427101.98	DCE11	Post-1999	0.9785	0	0	0
52	B10B5	389481.11	1427101.98	DCE11	Latest	0.9691	0	0	0
52	B10B5	389481.11	1427101.98	TCE	Historical	0.96	-0.0402	-0.19588	0.12799
52	B10B5	389481.11	1427101.98	TCE	Post-1999	0.9614	-0.76041	-1.0001	-0.33094

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
52	B10B5	389481.11	1427101.98	TCE	Latest	0.9691	-0.45575	-0.85766	-0.06336
52	B10B5	389481.11	1427101.98	TCLME	Historical	0.953	0	0	0
52	B10B5	389481.11	1427101.98	TCLME	Post-1999	0.9785	0	0	0
52	B10B5	389481.11	1427101.98	TCLME	Latest	0.9691	0	0	0
121	B90B2	392238.86	1427976.17	DCE11	Historical	0.9644	-0.09128	-0.10827	-0.06399
121	B90B2	392238.86	1427976.17	DCE11	Post-1999	0.9664	-0.01271	-0.023	-0.00666
121	B90B2	392238.86	1427976.17	DCE11	Latest	0.9785	-0.0186	-0.03049	-0.01175
121	B90B2	392238.86	1427976.17	TCE	Historical	0.9531	-0.02841	-0.04475	-0.01124
121	B90B2	392238.86	1427976.17	TCE	Post-1999	0.959	-0.00594	-0.01533	-0.00243
121	B90B2	392238.86	1427976.17	TCE	Latest	0.9609	-0.03471	-0.04374	-0.02523
121	B90B2	392238.86	1427976.17	TCLME	Historical	0.9672	-0.02295	-0.04314	-0.00294
121	B90B2	392238.86	1427976.17	TCLME	Post-1999	0.9712	0	0	0
121	B90B2	392238.86	1427976.17	TCLME	Latest	0.9609	0	0	0
122	B90B3	392396.03	1427929.04	DCE11	Historical	0.9672	0	-0.0002	0.00735
122	B90B3	392396.03	1427929.04	DCE11	Post-1999	0.9712	0.0237	0.0134	0.04755
122	B90B3	392396.03	1427929.04	DCE11	Latest	0.9609	0.08339	0.07052	0.08713
122	B90B3	392396.03	1427929.04	TCE	Historical	0.9644	-0.0038	-0.0054	-0.00155
122	B90B3	392396.03	1427929.04	TCE	Post-1999	0.9664	0.01598	0.01137	0.04149
122	B90B3	392396.03	1427929.04	TCE	Latest	0.9785	0.11371	0.08554	0.12831
122	B90B3	392396.03	1427929.04	TCLME	Historical	0.954	0	0	0
122	B90B3	392396.03	1427929.04	TCLME	Post-1999	0.9759	0	0	0
122	B90B3	392396.03	1427929.04	TCLME	Latest	0.9844	0	0	0
123	B90B4	392563.39	1427930.59	DCE11	Historical	0.962	-0.18256	-0.18912	-0.16979
123	B90B4	392563.39	1427930.59	DCE11	Post-1999	0.9649	-0.15259	-0.17825	-0.08921
123	B90B4	392563.39	1427930.59	DCE11	Latest	0.9922	0.15016	-0.01096	0.27403
123	B90B4	392563.39	1427930.59	TCE	Historical	0.962	-0.23085	-0.31873	-0.12994
123	B90B4	392563.39	1427930.59	TCE	Post-1999	0.9649	-0.2699	-0.34822	-0.14634
123	B90B4	392563.39	1427930.59	TCE	Latest	0.9922	0.00324	-0.08431	0.05304
123	B90B4	392563.39	1427930.59	TCLME	Historical	0.9687	0	0	0
123	B90B4	392563.39	1427930.59	TCLME	Post-1999	0.971	0	0	0
123	B90B4	392563.39	1427930.59	TCLME	Latest	0.9922	0	0	0
124	B90B5	392508.75	1428533.41	DCE11	Historical	0.9511	0	0	0
124	B90B5	392508.75	1428533.41	DCE11	Post-1999	0	0	0	0
124	B90B5	392508.75	1428533.41	DCE11	Latest	0.9773	0	0	0

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
124	B90B5	392508.75	1428533.41	TCE	Historical	0.96	0	0	0
124	B90B5	392508.75	1428533.41	TCE	Post-1999	0	0	0	0
124	B90B5	392508.75	1428533.41	TCE	Latest	0.9831	0	0	0
124	B90B5	392508.75	1428533.41	TCLME	Historical	0.9511	0	0	0
124	B90B5	392508.75	1428533.41	TCLME	Post-1999	0	0	0	0
124	B90B5	392508.75	1428533.41	TCLME	Latest	0.9773	0	0	0
125	B90B6	392778.84	1428060.62	DCE11	Historical	0.96	0	0	0
125	B90B6	392778.84	1428060.62	DCE11	Post-1999	0.9614	0	0	0
125	B90B6	392778.84	1428060.62	DCE11	Latest	0.9688	0	0	0
125	B90B6	392778.84	1428060.62	TCE	Historical	0.9511	0	0	0
125	B90B6	392778.84	1428060.62	TCE	Post-1999	0.9775	0	0	0
125	B90B6	392778.84	1428060.62	TCE	Latest	0.9688	0	0	0
125	B90B6	392778.84	1428060.62	TCLME	Historical	0.97	0	0	0
125	B90B6	392778.84	1428060.62	TCLME	Post-1999	0.9787	0	0	0
125	B90B6	392778.84	1428060.62	TCLME	Latest	0.9609	0	0	0
126	B90B7	392353.14	1428569.86	DCE11	Historical	0.9647	0	0	0
126	B90B7	392353.14	1428569.86	DCE11	Post-1999	0.959	0	0	0
126	B90B7	392353.14	1428569.86	DCE11	Latest	0.9609	0	0	0
126	B90B7	392353.14	1428569.86	TCE	Historical	0.9654	0	0	0
126	B90B7	392353.14	1428569.86	TCE	Post-1999	0.9808	0	0	0
126	B90B7	392353.14	1428569.86	TCE	Latest	0.9922	0	0	0
126	B90B7	392353.14	1428569.86	TCLME	Historical	0.962	0	0	0
126	B90B7	392353.14	1428569.86	TCLME	Post-1999	0.9643	0	0	0
126	B90B7	392353.14	1428569.86	TCLME	Latest	0.9609	0	0	0
127	B90B8	392554.48	1427426.48	DCE11	Historical	0.953	-0.60482	-0.74996	-0.25637
127	B90B8	392554.48	1427426.48	DCE11	Post-1999	0.9763	-0.60482	-0.74996	-0.25637
127	B90B8	392554.48	1427426.48	DCE11	Latest	0.9775	0.15001	-0.05368	0.33341
127	B90B8	392554.48	1427426.48	TCLME	Historical	0.953	-0.02306	-0.03088	-0.00296
127	B90B8	392554.48	1427426.48	TCLME	Post-1999	0.9763	-0.02348	-0.03309	-0.00296
127	B90B8	392554.48	1427426.48	TCLME	Latest	0.9775	0.00354	-0.00229	0.00997
129	B90BR1	392351.34	1428391.11	DCE11	Historical	0.9647	0	0	0
129	B90BR1	392351.34	1428391.11	DCE11	Post-1999	0.959	0	0	0
129	B90BR1	392351.34	1428391.11	DCE11	Latest	0.9609	0	0	0
129	B90BR1	392351.34	1428391.11	TCE	Historical	0.9687	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
129	B90BR1	392351.34	1428391.11	TCE	Post-1999	0.971	0	0	0
129	B90BR1	392351.34	1428391.11	TCE	Latest	0.9922	0	0	0
129	B90BR1	392351.34	1428391.11	TCLME	Historical	0.9585	0	0	0
129	B90BR1	392351.34	1428391.11	TCLME	Post-1999	0.9799	0	0	0
129	B90BR1	392351.34	1428391.11	TCLME	Latest	0.9609	0	0	0
130	B90BR2	392346.19	1427766.11	DCE11	Historical	0.9536	-0.11001	-0.16187	-0.05694
130	B90BR2	392346.19	1427766.11	DCE11	Post-1999	0.9808	0.07183	0.00265	0.13737
130	B90BR2	392346.19	1427766.11	DCE11	Latest	0.9785	0.13002	0.08356	0.21285
130	B90BR2	392346.19	1427766.11	TCE	Historical	0.9536	-0.0603	-0.08676	-0.03892
130	B90BR2	392346.19	1427766.11	TCE	Post-1999	0.9808	0.0423	-0.05761	0.1584
130	B90BR2	392346.19	1427766.11	TCE	Latest	0.9785	0.12782	-0.05761	0.25516
130	B90BR2	392346.19	1427766.11	TCLME	Historical	0.96	0	0	0
130	B90BR2	392346.19	1427766.11	TCLME	Post-1999	0.9614	0	0	0
130	B90BR2	392346.19	1427766.11	TCLME	Latest	0.9922	0	0	0
131	B90BR3	392369.23	1427763.36	DCE11	Historical	0.9604	0	0	0
131	B90BR3	392369.23	1427763.36	DCE11	Post-1999	0.9691	0	0	0
131	B90BR3	392369.23	1427763.36	DCE11	Latest	0.9609	0	0	0
131	B90BR3	392369.23	1427763.36	TCE	Historical	0.97	0	0	0
131	B90BR3	392369.23	1427763.36	TCE	Post-1999	0.9787	0	0	0
131	B90BR3	392369.23	1427763.36	TCE	Latest	0.9609	0	0	0
131	B90BR3	392369.23	1427763.36	TCLME	Historical	0.9637	0	0	0
131	B90BR3	392369.23	1427763.36	TCLME	Post-1999	0.9691	0	0	0
131	B90BR3	392369.23	1427763.36	TCLME	Latest	0.9785	0	0	0
133	B90D1	392314.27	1427791.18	DCE11	Historical	0.9604	-0.21888	-0.23003	-0.20781
133	B90D1	392314.27	1427791.18	DCE11	Post-1999	0.9691	0.0618	-0.04047	0.19532
133	B90D1	392314.27	1427791.18	DCE11	Latest	0.9609	-0.04047	-0.59659	0.17158
133	B90D1	392314.27	1427791.18	TCE	Historical	0.9604	-0.1696	-0.30411	-0.06641
133	B90D1	392314.27	1427791.18	TCE	Post-1999	0.9691	0.02741	-0.26402	0.26113
133	B90D1	392314.27	1427791.18	TCE	Latest	0.9609	-0.06641	-1.32011	0.45953
133	B90D1	392314.27	1427791.18	TCLME	Historical	0.96	0	0	0
133	B90D1	392314.27	1427791.18	TCLME	Post-1999	0.9871	0	0	0
133	B90D1	392314.27	1427791.18	TCLME	Latest	0.9922	0	0	0
134	B90D2	392666.13	1427877.03	DCE11	Historical	0.9536	0.02775	-0.23797	0.43095
134	B90D2	392666.13	1427877.03	DCE11	Post-1999	0.9787	-0.47867	-3.42132	0.38106

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
134	B90D2	392666.13	1427877.03	DCE11	Latest	0.9785	-2.18995	-5.49461	-0.28622
134	B90D2	392666.13	1427877.03	TCE	Historical	0.9536	-3.04881	-3.43583	-1.78715
134	B90D2	392666.13	1427877.03	TCE	Post-1999	0.9787	-1.61702	-1.7278	-1.41406
134	B90D2	392666.13	1427877.03	TCE	Latest	0.9785	-1.47941	-1.7278	-1.37217
134	B90D2	392666.13	1427877.03	TCLME	Historical	0.9705	-0.05216	-0.0595	-0.02831
134	B90D2	392666.13	1427877.03	TCLME	Post-1999	0.9586	-0.05492	-0.05809	-0.04406
134	B90D2	392666.13	1427877.03	TCLME	Latest	0.9883	-0.04406	-0.05809	-0.01709
135	B90D3	392148.24	1427814.95	DCE11	Historical	0.9637	0	0	0
135	B90D3	392148.24	1427814.95	DCE11	Post-1999	0.9691	0	0	0
135	B90D3	392148.24	1427814.95	DCE11	Latest	0.9609	0	0	0
135	B90D3	392148.24	1427814.95	TCE	Historical	0.9604	-0.01565	-0.02332	-0.00897
135	B90D3	392148.24	1427814.95	TCE	Post-1999	0.9691	-0.00657	-0.01246	0.00859
135	B90D3	392148.24	1427814.95	TCE	Latest	0.9609	0.00859	-0.00697	0.04734
135	B90D3	392148.24	1427814.95	TCLME	Historical	0.97	0	0	0
135	B90D3	392148.24	1427814.95	TCLME	Post-1999	0.9871	0	0	0
135	B90D3	392148.24	1427814.95	TCLME	Latest	0.9609	0	0	0
136	B90D4	392534.12	1427692.04	DCE11	Historical	0.9604	0.28346	-0.76448	1.21634
136	B90D4	392534.12	1427692.04	DCE11	Post-1999	0.9648	-0.67794	-1.45367	2.09793
136	B90D4	392534.12	1427692.04	DCE11	Latest	0.9609	1.21634	-0.82385	4.25641
136	B90D4	392534.12	1427692.04	TCE	Historical	0.9604	-1.04723	-2.52858	1.26752
136	B90D4	392534.12	1427692.04	TCE	Post-1999	0.9648	-1.82519	-3.03858	0.89594
136	B90D4	392534.12	1427692.04	TCE	Latest	0.9609	-0.07882	-2.4605	3.0255
136	B90D4	392534.12	1427692.04	TCLME	Historical	0.9536	-0.02484	-0.04351	-0.00649
136	B90D4	392534.12	1427692.04	TCLME	Post-1999	0.9808	-0.03102	-0.05432	-0.014
136	B90D4	392534.12	1427692.04	TCLME	Latest	0.9785	-0.03593	-0.08853	-0.00649
137	B90D5	392830.01	1427885.79	DCE11	Historical	0.96	-0.01763	-0.0298	-0.00714
137	B90D5	392830.01	1427885.79	DCE11	Post-1999	0.9567	-0.03817	-0.09719	-0.00893
137	B90D5	392830.01	1427885.79	DCE11	Latest	0.9775	-0.11136	-0.20296	-0.06079
137	B90D5	392830.01	1427885.79	TCE	Historical	0.96	-0.03226	-0.10386	-0.01017
137	B90D5	392830.01	1427885.79	TCE	Post-1999	0.9787	0.0155	-0.09562	0.04006
137	B90D5	392830.01	1427885.79	TCE	Latest	0.9922	-0.08223	-0.13052	0.01243
137	B90D5	392830.01	1427885.79	TCLME	Historical	0.9615	0	0	0
137	B90D5	392830.01	1427885.79	TCLME	Post-1999	0.9614	0	0	0
137	B90D5	392830.01	1427885.79	TCLME	Latest	0.9922	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
138	B90D6	392992.55	1428040.58	DCE11	Historical	0.9637	0	0	0
138	B90D6	392992.55	1428040.58	DCE11	Post-1999	0.9883	-0.00596	-0.02122	0
138	B90D6	392992.55	1428040.58	DCE11	Latest	0.9883	-0.00596	-0.02122	0
138	B90D6	392992.55	1428040.58	TCE	Historical	0.9686	0	-0.00212	0
138	B90D6	392992.55	1428040.58	TCE	Post-1999	0.971	-0.00379	-0.00534	-0.00219
138	B90D6	392992.55	1428040.58	TCE	Latest	0.9775	-0.00721	-0.0181	0.00015
138	B90D6	392992.55	1428040.58	TCLME	Historical	0.954	-0.00163	-0.00264	-0.00079
138	B90D6	392992.55	1428040.58	TCLME	Post-1999	0.9572	-0.00039	-0.00178	0.00357
138	B90D6	392992.55	1428040.58	TCLME	Latest	0.9844	0.01734	0.00935	0.02844
139	B90D7	392861.75	1427407.49	DCE11	Historical	0.9536	0	0	0
139	B90D7	392861.75	1427407.49	DCE11	Post-1999	0.9808	0	0	0
139	B90D7	392861.75	1427407.49	DCE11	Latest	0.9785	0	0	0
139	B90D7	392861.75	1427407.49	TCE	Historical	0.9536	0	0	0
139	B90D7	392861.75	1427407.49	TCE	Post-1999	0.9808	0	0	0
139	B90D7	392861.75	1427407.49	TCE	Latest	0.9785	0	0	0
139	B90D7	392861.75	1427407.49	TCLME	Historical	0.9536	0	0	0
139	B90D7	392861.75	1427407.49	TCLME	Post-1999	0.9808	0	0	0
139	B90D7	392861.75	1427407.49	TCLME	Latest	0.9785	0	0	0
141	B90E1	392825.07	1428478.36	DCE11	Historical	0.9649	-0.00562	-0.01425	0.00385
141	B90E1	392825.07	1428478.36	DCE11	Post-1999	0.9922	-0.00167	-0.0072	0.00385
141	B90E1	392825.07	1428478.36	DCE11	Latest	0.9567	-0.00404	-0.01193	0.00385
141	B90E1	392825.07	1428478.36	TCE	Historical	0.9649	-0.00355	-0.00763	-0.00194
141	B90E1	392825.07	1428478.36	TCE	Post-1999	0.9922	-0.00178	-0.0029	-0.00066
141	B90E1	392825.07	1428478.36	TCE	Latest	0.9567	-0.00275	-0.00462	-0.0013
143	B90E3	393692.76	1427382.72	DCE11	Historical	0.9649	-0.00009	-0.00359	0
143	B90E3	393692.76	1427382.72	DCE11	Post-1999	0.9922	0.00316	-0.00114	0.00745
143	B90E3	393692.76	1427382.72	DCE11	Latest	0.9567	-0.00114	-0.00736	0
143	B90E3	393692.76	1427382.72	TCE	Historical	0.9649	-0.00009	-0.00359	0
143	B90E3	393692.76	1427382.72	TCE	Post-1999	0.9922	0.00316	-0.00114	0.00745
143	B90E3	393692.76	1427382.72	TCE	Latest	0.9567	-0.00114	-0.00736	0
143	B90E3	393692.76	1427382.72	TCLME	Historical	0.9649	-0.00009	-0.00359	0
143	B90E3	393692.76	1427382.72	TCLME	Post-1999	0.9922	0.00316	-0.00114	0.00745
143	B90E3	393692.76	1427382.72	TCLME	Latest	0.9567	-0.00114	-0.00736	0
145	B90E5	391863.63	1427868.22	DCE11	Historical	0.9536	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
145	B90E5	391863.63	1427868.22	DCE11	Post-1999	0.9808	0	0	0
145	B90E5	391863.63	1427868.22	DCE11	Latest	0.9785	0	0	0
145	B90E5	391863.63	1427868.22	TCE	Historical	0.9705	-0.05165	-0.06744	-0.03533
145	B90E5	391863.63	1427868.22	TCE	Post-1999	0.9586	-0.01741	-0.03533	-0.00717
145	B90E5	391863.63	1427868.22	TCE	Latest	0.9883	-0.03158	-0.06694	-0.00645
145	B90E5	391863.63	1427868.22	TCLME	Historical	0.9604	0	0	0
145	B90E5	391863.63	1427868.22	TCLME	Post-1999	0.9648	0	0	0
145	B90E5	391863.63	1427868.22	TCLME	Latest	0.9609	0	0	0
147	B90E7	392364.59	1427627.74	DCE11	Historical	0.97	-0.03689	-0.20648	0.03005
147	B90E7	392364.59	1427627.74	DCE11	Post-1999	0.9787	-0.17765	-0.61058	-0.03672
147	B90E7	392364.59	1427627.74	DCE11	Latest	0.9609	-0.08551	-0.19062	0.0115
147	B90E7	392364.59	1427627.74	TCE	Historical	0.97	-0.55226	-0.80924	-0.31281
147	B90E7	392364.59	1427627.74	TCE	Post-1999	0.9787	-0.16101	-0.4795	-0.04829
147	B90E7	392364.59	1427627.74	TCE	Latest	0.9609	-0.09895	-0.16536	-0.00546
147	B90E7	392364.59	1427627.74	TCLME	Historical	0.96	-0.00122	-0.00411	0
147	B90E7	392364.59	1427627.74	TCLME	Post-1999	0.9871	-0.00029	-0.00312	0
147	B90E7	392364.59	1427627.74	TCLME	Latest	0.9844	0	-0.00015	0
154	B90MWD	392729.88	1427361.49	DCE11	Historical	0.97	0	0	0
154	B90MWD	392729.88	1427361.49	DCE11	Post-1999	0.9521	0	0	0
154	B90MWD	392729.88	1427361.49	DCE11	Latest	0.9808	0	0	0
154	B90MWD	392729.88	1427361.49	TCE	Historical	0.9536	-0.00143	-0.00748	0.00268
154	B90MWD	392729.88	1427361.49	TCE	Post-1999	0.9705	-0.00243	-0.00916	0.00238
154	B90MWD	392729.88	1427361.49	TCE	Latest	0.9831	-0.00096	-0.00692	0.0032
154	B90MWD	392729.88	1427361.49	TCLME	Historical	0.9637	-0.00069	-0.00273	0
154	B90MWD	392729.88	1427361.49	TCLME	Post-1999	0.97	-0.00084	-0.00207	0
154	B90MWD	392729.88	1427361.49	TCLME	Latest	0.9586	0	-0.00029	0.00001
156	B90MWG	392766.32	1427344.88	DCE11	Historical	0.9649	0	0	0
156	B90MWG	392766.32	1427344.88	DCE11	Post-1999	0.959	0	0	0
156	B90MWG	392766.32	1427344.88	DCE11	Latest	0.9883	0	0	0
156	B90MWG	392766.32	1427344.88	TCE	Historical	0.9649	-0.01793	-0.036	-0.00485
156	B90MWG	392766.32	1427344.88	TCE	Post-1999	0.959	-0.02359	-0.04894	-0.00782
156	B90MWG	392766.32	1427344.88	TCE	Latest	0.9883	-0.00882	-0.12096	0.03126
156	B90MWG	392766.32	1427344.88	TCLME	Historical	0.9649	0	0	0
156	B90MWG	392766.32	1427344.88	TCLME	Post-1999	0.959	0	0	0

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
156	B90MWG	392766.32	1427344.88	TCLME	Latest	0.9883	0	0	0
158	B90MWH	392763.04	1427785.22	DCE11	Historical	0.9649	0.04132	-0.02954	0.11424
158	B90MWH	392763.04	1427785.22	DCE11	Post-1999	0.959	0.03081	-0.02761	0.09844
158	B90MWH	392763.04	1427785.22	DCE11	Latest	0.9883	-0.04724	-0.06697	0.27906
158	B90MWH	392763.04	1427785.22	TCE	Historical	0.9649	-0.01744	-0.45869	0.28496
158	B90MWH	392763.04	1427785.22	TCE	Post-1999	0.959	-0.08136	-0.65182	0.27427
158	B90MWH	392763.04	1427785.22	TCE	Latest	0.9883	0.22919	-0.20665	1.30246
158	B90MWH	392763.04	1427785.22	TCLME	Historical	0.9649	-0.0024	-0.00496	-0.00012
158	B90MWH	392763.04	1427785.22	TCLME	Post-1999	0.959	-0.00277	-0.00504	-0.00113
158	B90MWH	392763.04	1427785.22	TCLME	Latest	0.9883	0.00208	-0.00323	0.00572
162	B90N2	392092.63	1427985.74	DCE11	Historical	0.9705	-0.0204	-0.11139	0.05909
162	B90N2	392092.63	1427985.74	DCE11	Post-1999	0.9586	0.05758	-0.0153	0.0873
162	B90N2	392092.63	1427985.74	DCE11	Latest	0.9883	-0.0153	-0.41953	0.13253
162	B90N2	392092.63	1427985.74	TCE	Historical	0.9705	-0.04953	-0.15306	0.05571
162	B90N2	392092.63	1427985.74	TCE	Post-1999	0.9586	0.06341	-0.04953	0.08924
162	B90N2	392092.63	1427985.74	TCE	Latest	0.9883	-0.04953	-0.50821	0.12535
162	B90N2	392092.63	1427985.74	TCLME	Historical	0.9705	-0.04969	-0.1452	0.05608
162	B90N2	392092.63	1427985.74	TCLME	Post-1999	0.9586	0.05758	-0.0153	0.0873
162	B90N2	392092.63	1427985.74	TCLME	Latest	0.9883	-0.0153	-0.41953	0.13253
220	DPW-1	389920.9282	1429639.0058	DCE11	Historical	0.9649	4.67914	-0.54565	13.72625
220	DPW-1	389920.9282	1429639.0058	DCE11	Post-1999	0.9572	5.96244	-0.54565	13.72625
220	DPW-1	389920.9282	1429639.0058	DCE11	Latest	0.9734	8.57744	-3.74248	37.58863
220	DPW-1	389920.9282	1429639.0058	TCE	Historical	0.9759	6219.68758	1899.62826	12104.48705
220	DPW-1	389920.9282	1429639.0058	TCE	Post-1999	0.9808	5170.15204	1627.79845	12104.48705
220	DPW-1	389920.9282	1429639.0058	TCE	Latest	0.9808	6219.68758	1899.62826	21293.4584
220	DPW-1	389920.9282	1429639.0058	TCLME	Historical	0.9649	0.34672	-0.1566	1.68393
220	DPW-1	389920.9282	1429639.0058	TCLME	Post-1999	0.9572	0.29833	-0.1566	1.68393
220	DPW-1	389920.9282	1429639.0058	TCLME	Latest	0.9734	1.12365	-0.29316	4.36128
221	DPW-2	389880.0333	1429699.2565	DCE11	Historical	0.9759	-0.09982	-0.53211	0.79314
221	DPW-2	389880.0333	1429699.2565	DCE11	Post-1999	0.9808	-0.06831	-0.53211	0.8292
221	DPW-2	389880.0333	1429699.2565	DCE11	Latest	0.9653	0.27186	-0.58965	1.01494
221	DPW-2	389880.0333	1429699.2565	TCE	Historical	0.9759	449.30691	424.02053	880.01044
221	DPW-2	389880.0333	1429699.2565	TCE	Post-1999	0.9808	563.31063	427.41412	925.54454
221	DPW-2	389880.0333	1429699.2565	TCE	Latest	0.9653	743.3983	437.86193	960.08072

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
222	DPW-3	389978.8424	1429670.7509	DCE11	Historical	0.953	0.0815	-0.01201	0.24861
222	DPW-3	389978.8445	1429670.7509	DCE11	Post-1999	0.9757	0.08585	-0.01201	0.33868
222	DPW-3	389978.8424	1429670.7509	DCE11	Latest	0.9691	0.44224	0.0815	1.1092
222	DPW-3	389978.8424	1429670.7509	TCE	Historical	0.9649	1043.07991	339.20545	1346.97159
222	DPW-3	389978.8424	1429670.7509	TCE	Post-1999	0.9706	904.05616	-231.58044	1346.97159
222	DPW-3	389978.8424	1429670.7509	TCE	Latest	0.9787	2592.49275	1143.24444	6516.48421
222	DPW-3	389978.8424	1429670.7509	TCLME	Historical	0.953	0.06871	-0.01334	0.16472
222	DPW-3	389978.8424	1429670.7509	TCLME	Post-1999	0.9757	0.06613	-0.03454	0.16472
222	DPW-3	389978.8424	1429670.7509	TCLME	Latest	0.9691	0.27107	0.09995	0.73596
223	EFF	.	.	DCE11	Historical	0.96	0	0	0
223	EFF	.	.	DCE11	Post-1999	0	0	0	0
223	EFF	.	.	DCE11	Latest	0.9648	0	0	0
223	EFF	.	.	TCE	Historical	0.96	0.0662	-0.04802	0.16913
223	EFF	.	.	TCE	Post-1999	0	0	0	0
223	EFF	.	.	TCE	Latest	0.9648	0.10556	-0.0977	0.74507
223	EFF	.	.	TCLME	Historical	0.96	0	0	0
223	EFF	.	.	TCLME	Post-1999	0	0	0	0
223	EFF	.	.	TCLME	Latest	0.9648	0	0	0
232	ICMEFF	.	.	DCE11	Historical	0.96	0	0	0
232	ICMEFF	.	.	DCE11	Post-1999	0.9536	0	0	0.0003
232	ICMEFF	.	.	DCE11	Latest	0.9844	0.0007	-0.00047	0.00073
232	ICMEFF	.	.	TCE	Historical	0.9542	-0.01231	-0.05018	0.01928
232	ICMEFF	.	.	TCE	Post-1999	0.9636	-0.04253	-0.09032	0.01902
232	ICMEFF	.	.	TCE	Latest	0.9688	0.14646	0.03776	0.19422
232	ICMEFF	.	.	TCLME	Historical	0.96	0	0	0
232	ICMEFF	.	.	TCLME	Post-1999	0.9536	0	0	0
232	ICMEFF	.	.	TCLME	Latest	0.9844	0	0	0
233	ICMINF	.	.	DCE11	Historical	0.9542	0.03418	-0.02324	0.09237
233	ICMINF	.	.	DCE11	Post-1999	0.9636	0.12018	0.0337	0.14854
233	ICMINF	.	.	DCE11	Latest	0.9844	0.61857	0.58195	0.68304
233	ICMINF	.	.	TCE	Historical	0.9618	22.09805	-7.99013	75.82875
233	ICMINF	.	.	TCE	Post-1999	0.9571	-22.36229	-80.41915	2.19462
233	ICMINF	.	.	TCE	Latest	0.9844	173.08071	120.04788	211.36269
233	ICMINF	.	.	TCLME	Historical	0.9608	-0.00475	-0.01893	0.00672

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
233	ICMINF	.	.	TCLME	Post-1999	0.9618	-0.0255	-0.03291	-0.0104
233	ICMINF	.	.	TCLME	Latest	0.9688	-0.17162	-0.20626	-0.11589
235	ITD1	389234.23	1427520.43	DCE11	Historical	0.9644	0	0	0
235	ITD1	389234.23	1427520.43	DCE11	Post-1999	0.9664	0	0	0
235	ITD1	389234.23	1427520.43	DCE11	Latest	0.9785	0	0	0
235	ITD1	389234.23	1427520.43	TCE	Historical	0.9531	0	0	0
235	ITD1	389234.23	1427520.43	TCE	Post-1999	0.959	0	0	0
235	ITD1	389234.23	1427520.43	TCE	Latest	0.9609	0	0	0
235	ITD1	389234.23	1427520.43	TCLME	Historical	0.9644	0	0	0
235	ITD1	389234.23	1427520.43	TCLME	Post-1999	0.9664	0	0	0
235	ITD1	389234.23	1427520.43	TCLME	Latest	0.9785	0	0	0
236	ITD2	390053.33	1427270.95	DCE11	Historical	0.9604	0.00071	-0.00465	0.00677
236	ITD2	390053.33	1427270.95	DCE11	Post-1999	0.9691	0.02999	-0.20611	0.17217
236	ITD2	390053.33	1427270.95	DCE11	Latest	0.9648	-0.04276	-0.25987	0.14851
236	ITD2	390053.33	1427270.95	TCE	Historical	0.9536	0.3563	-0.29716	2.99023
236	ITD2	390053.33	1427270.95	TCE	Post-1999	0.9787	9.27975	-4.69307	15.63227
236	ITD2	390053.33	1427270.95	TCE	Latest	0.9785	0.29867	-10.70953	10.3194
236	ITD2	390053.33	1427270.95	TCLME	Historical	0.97	-0.00135	-0.00653	0.00107
236	ITD2	390053.33	1427270.95	TCLME	Post-1999	0.9787	-0.01881	-0.18816	0.31965
236	ITD2	390053.33	1427270.95	TCLME	Latest	0.9808	0.0339	-0.14938	0.26854
238	ITD4	389418.67	1427247.8	DCE11	Historical	0.9615	0	0	0
238	ITD4	389418.67	1427247.8	DCE11	Post-1999	0.9773	0	0	0
238	ITD4	389418.67	1427247.8	DCE11	Latest	0.9775	0	0	0
238	ITD4	389418.67	1427247.8	TCE	Historical	0.9615	-0.01045	-0.03382	0.01129
238	ITD4	389418.67	1427247.8	TCE	Post-1999	0.9773	-0.016	-0.04077	0.0108
238	ITD4	389418.67	1427247.8	TCE	Latest	0.9775	0.0108	-0.02561	0.03851
238	ITD4	389418.67	1427247.8	TCLME	Historical	0.953	0	0	0
238	ITD4	389418.67	1427247.8	TCLME	Post-1999	0.9586	0	0	0
238	ITD4	389418.67	1427247.8	TCLME	Latest	0.9614	0	0	0
239	ITD5	389794.39	1427246.93	DCE11	Historical	0.9705	0.00223	-0.06497	0.05609
239	ITD5	389794.39	1427246.93	DCE11	Post-1999	0.9586	0.00613	-0.08099	0.09324
239	ITD5	389794.39	1427246.93	DCE11	Latest	0.9883	-0.08095	-0.76347	0.11886
239	ITD5	389794.39	1427246.93	TCE	Historical	0.9536	0.77419	-1.02034	2.4066
239	ITD5	389794.39	1427246.93	TCE	Post-1999	0.9787	10.39395	7.74984	11.11418

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
239	ITD5	389794.39	1427246.93	TCE	Latest	0.9785	10.92649	10.21658	13.37276
239	ITD5	389794.39	1427246.93	TCLME	Historical	0.9705	-0.00059	-0.06497	0.05465
239	ITD5	389794.39	1427246.93	TCLME	Post-1999	0.9586	-0.00389	-0.12289	0.09324
239	ITD5	389794.39	1427246.93	TCLME	Latest	0.9883	-0.12289	-0.87462	0.11342
240	ITD6	389880.17	1427386.7	DCE11	Historical	0.9705	0.09402	-0.21944	0.18877
240	ITD6	389880.17	1427386.7	DCE11	Post-1999	0.9586	-0.07675	-1.56953	0.09912
240	ITD6	389880.17	1427386.7	DCE11	Latest	0.9883	-1.56953	-3.355	0.05262
240	ITD6	389880.17	1427386.7	TCE	Historical	0.9536	4.35994	2.99991	5.99981
240	ITD6	389880.17	1427386.7	TCE	Post-1999	0.9787	-7.18563	-19.04393	3.16915
240	ITD6	389880.17	1427386.7	TCE	Latest	0.9922	-16.65571	-35.82245	-7.77607
240	ITD6	389880.17	1427386.7	TCLME	Historical	0.9705	0.07741	-0.15846	0.2074
240	ITD6	389880.17	1427386.7	TCLME	Post-1999	0.9586	-0.05015	-1.43161	0.16149
240	ITD6	389880.17	1427386.7	TCLME	Latest	0.9883	-1.43161	-2.73894	0.00557
241	ITD7	389865.85	1427483.45	DCE11	Historical	0.9759	0	-0.58747	0.00338
241	ITD7	389865.85	1427483.45	DCE11	Post-1999	0.875	-1.54133	-1.76142	-1.32123
241	ITD7	389865.85	1427483.45	DCE11	Latest	0.9831	-0.15746	-1.02774	0.05923
241	ITD7	389865.85	1427483.45	TCLME	Historical	0.9759	0	-0.09365	0
241	ITD7	389865.85	1427483.45	TCLME	Post-1999	0.875	0.46751	0.35298	0.58202
241	ITD7	389865.85	1427483.45	TCLME	Latest	0.9831	-0.01005	-0.19349	0.20026
245	ITS11	389261.15	1427265.76	DCE11	Historical	0.9536	0	0	0
245	ITS11	389261.15	1427265.76	DCE11	Post-1999	0.9808	0	0	0
245	ITS11	389261.15	1427265.76	DCE11	Latest	0.9785	0	0	0
245	ITS11	389261.15	1427265.76	TCE	Historical	0.9604	0	0	0
245	ITS11	389261.15	1427265.76	TCE	Post-1999	0.9648	0	0	0
245	ITS11	389261.15	1427265.76	TCE	Latest	0.9609	0	0	0
245	ITS11	389261.15	1427265.76	TCLME	Historical	0.9536	0	0	0
245	ITS11	389261.15	1427265.76	TCLME	Post-1999	0.9808	0	0	0
245	ITS11	389261.15	1427265.76	TCLME	Latest	0.9785	0	0	0
246	ITS2	390112.42	1427579.73	DCE11	Historical	0.9604	0	0	0
246	ITS2	390112.42	1427579.73	DCE11	Post-1999	0.9691	0	0	0
246	ITS2	390112.42	1427579.73	DCE11	Latest	0.9609	0	0	0
246	ITS2	390112.42	1427579.73	TCE	Historical	0.9637	0	0	0
246	ITS2	390112.42	1427579.73	TCE	Post-1999	0.9691	0	0	0
246	ITS2	390112.42	1427579.73	TCE	Latest	0.9785	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
246	ITS2	390112.42	1427579.73	TCLME	Historical	0.9604	0	0	0
246	ITS2	390112.42	1427579.73	TCLME	Post-1999	0.9691	0	0	0
246	ITS2	390112.42	1427579.73	TCLME	Latest	0.9609	0	0	0
247	ITS3	390049.05	1427293.3	DCE11	Historical	0.97	0.00166	-0.00372	0.01838
247	ITS3	390049.05	1427293.3	DCE11	Post-1999	0.9787	-0.013	-0.02746	0.00005
247	ITS3	390049.05	1427293.3	DCE11	Latest	0.9609	-0.00041	-0.01122	0.00137
247	ITS3	390049.05	1427293.3	TCE	Historical	0.97	0.72557	0.16579	0.95346
247	ITS3	390049.05	1427293.3	TCE	Post-1999	0.9787	-1.6753	-2.70217	-0.2279
247	ITS3	390049.05	1427293.3	TCE	Latest	0.9609	-0.6636	-1.5659	0.16579
247	ITS3	390049.05	1427293.3	TCLME	Historical	0.97	0.00166	-0.00372	0.01838
247	ITS3	390049.05	1427293.3	TCLME	Post-1999	0.9787	-0.013	-0.02746	0.00005
247	ITS3	390049.05	1427293.3	TCLME	Latest	0.9609	-0.00041	-0.01122	0.00137
248	ITS4	389499.23	1427381.25	DCE11	Historical	0.9511	-0.64404	-0.9975	-0.09145
248	ITS4	389499.23	1427381.25	DCE11	Post-1999	0.9648	-0.94186	-1.38633	-0.64404
248	ITS4	389499.23	1427381.25	DCE11	Latest	0.9586	-1.09845	-1.36779	-0.79638
248	ITS4	389499.23	1427381.25	TCE	Historical	0.96	-10.72542	-25.67281	5.21626
248	ITS4	389499.23	1427381.25	TCE	Post-1999	0.9614	-34.46954	-35.02978	-32.90736
248	ITS4	389499.23	1427381.25	TCE	Latest	0.9691	-34.46954	-38.836	-32.16487
248	ITS4	389499.23	1427381.25	TCLME	Historical	0.9511	-0.64404	-0.99154	-0.09145
248	ITS4	389499.23	1427381.25	TCLME	Post-1999	0.9648	-0.94186	-1.37576	-0.64404
248	ITS4	389499.23	1427381.25	TCLME	Latest	0.9586	-1.09845	-1.36779	-0.79638
249	ITS5	389467.12	1426709.22	DCE11	Historical	0.9604	0	0	0
249	ITS5	389467.12	1426709.22	DCE11	Post-1999	0.9691	0	0	0
249	ITS5	389467.12	1426709.22	DCE11	Latest	0.9609	0	0	0
249	ITS5	389467.12	1426709.22	TCE	Historical	0.9604	0	0	0
249	ITS5	389467.12	1426709.22	TCE	Post-1999	0.9691	0	0	0
249	ITS5	389467.12	1426709.22	TCE	Latest	0.9609	0	0	0
249	ITS5	389467.12	1426709.22	TCLME	Historical	0.9536	0	0	0
249	ITS5	389467.12	1426709.22	TCLME	Post-1999	0.9808	0	0	0
249	ITS5	389467.12	1426709.22	TCLME	Latest	0.9785	0	0	0
250	ITS6	389969.1	1426722.97	DCE11	Historical	0.9536	0	0	0
250	ITS6	389969.1	1426722.97	DCE11	Post-1999	0.9808	0	0	0
250	ITS6	389969.1	1426722.97	DCE11	Latest	0.9785	0	0	0
250	ITS6	389969.1	1426722.97	TCE	Historical	0.9536	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
250	ITS6	389969.1	1426722.97	TCE	Post-1999	0.9808	0	0	0
250	ITS6	389969.1	1426722.97	TCE	Latest	0.9785	0	0	0
250	ITS6	389969.1	1426722.97	TCLME	Historical	0.9536	0	0	0
250	ITS6	389969.1	1426722.97	TCLME	Post-1999	0.9808	0	0	0
250	ITS6	389969.1	1426722.97	TCLME	Latest	0.9785	0	0	0
251	ITS7	390200.26	1426950.41	DCE11	Historical	0.9604	0	0	0
251	ITS7	390200.26	1426950.41	DCE11	Post-1999	0.9691	0	0	0
251	ITS7	390200.26	1426950.41	DCE11	Latest	0.9609	0	0	0
251	ITS7	390200.26	1426950.41	TCE	Historical	0.9604	0	0	0
251	ITS7	390200.26	1426950.41	TCE	Post-1999	0.9691	0	0	0
251	ITS7	390200.26	1426950.41	TCE	Latest	0.9609	0	0	0
251	ITS7	390200.26	1426950.41	TCLME	Historical	0.9604	0	0	0
251	ITS7	390200.26	1426950.41	TCLME	Post-1999	0.9691	0	0	0
251	ITS7	390200.26	1426950.41	TCLME	Latest	0.9609	0	0	0
253	ITS9	390460.45	1427309.68	DCE11	Historical	0.9705	0.03744	-0.02715	0.10988
253	ITS9	390460.45	1427309.68	DCE11	Post-1999	0.9586	0.03969	-0.15049	0.28965
253	ITS9	390460.45	1427309.68	DCE11	Latest	0.9883	-0.15049	-0.25464	0.00143
253	ITS9	390460.45	1427309.68	TCE	Historical	0.9604	0.43645	0.22541	0.59263
253	ITS9	390460.45	1427309.68	TCE	Post-1999	0.9648	0.69616	0.25663	0.86864
253	ITS9	390460.45	1427309.68	TCE	Latest	0.9609	0.81946	0.07687	0.93395
253	ITS9	390460.45	1427309.68	TCLME	Historical	0.9536	0.01277	0.00209	0.02743
253	ITS9	390460.45	1427309.68	TCLME	Post-1999	0.9808	0.04625	0.03628	0.07624
253	ITS9	390460.45	1427309.68	TCLME	Latest	0.9785	0.06903	0.04143	0.18419
286	MW1	390098.28	1430102.41	DCE11	Historical	0.9511	0	0	0
286	MW1	390098.28	1430102.41	DCE11	Post-1999	0	0	0	0
286	MW1	390098.28	1430102.41	DCE11	Latest	0.9775	0	0	0
286	MW1	390098.28	1430102.41	TCE	Historical	0.9511	0.00072	0.00009	0.00109
286	MW1	390098.28	1430102.41	TCE	Post-1999	0	0	0	0
286	MW1	390098.28	1430102.41	TCE	Latest	0.9643	0.00054	0.00003	0.00088
286	MW1	390098.28	1430102.41	TCLME	Historical	0.9511	0	0	0
286	MW1	390098.28	1430102.41	TCLME	Post-1999	0	0	0	0
286	MW1	390098.28	1430102.41	TCLME	Latest	0.9775	0	0	0
290	MW22	389246.87	1427501.11	DCE11	Historical	0.9644	0	0	0
290	MW22	389246.87	1427501.11	DCE11	Post-1999	0.9664	0	0	0

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
290	MW22	389246.87	1427501.11	DCE11	Latest	0.9785	0	0	0
290	MW22	389246.87	1427501.11	TCE	Historical	0.9531	0	0	0
290	MW22	389246.87	1427501.11	TCE	Post-1999	0.9572	0	0	0
290	MW22	389246.87	1427501.11	TCE	Latest	0.9609	0	0	0
290	MW22	389246.87	1427501.11	TCLME	Historical	0.9644	0	0	0
290	MW22	389246.87	1427501.11	TCLME	Post-1999	0.9664	0	0	0
290	MW22	389246.87	1427501.11	TCLME	Latest	0.9785	0	0	0
291	MW23	389708.4	1427253.61	DCE11	Historical	0.9531	0	0	0
291	MW23	389708.4	1427253.61	DCE11	Post-1999	0.959	0	0	0
291	MW23	389708.4	1427253.61	DCE11	Latest	0.9609	0	0	0
291	MW23	389708.4	1427253.61	TCE	Historical	0.962	0	0	0
291	MW23	389708.4	1427253.61	TCE	Post-1999	0.9643	0	0	0
291	MW23	389708.4	1427253.61	TCE	Latest	0.9609	0	0	0
291	MW23	389708.4	1427253.61	TCLME	Historical	0.9672	0	0	0
291	MW23	389708.4	1427253.61	TCLME	Post-1999	0.953	0	0	0
291	MW23	389708.4	1427253.61	TCLME	Latest	0.9609	0	0	0
292	MW24	389890.98	1427303.14	DCE11	Historical	0.962	0	0	0.00328
292	MW24	389890.98	1427303.14	DCE11	Post-1999	0.9649	0.0123	-0.00781	0.05017
292	MW24	389890.98	1427303.14	DCE11	Latest	0.9883	-0.01754	-0.02341	-0.00677
292	MW24	389890.98	1427303.14	TCE	Historical	0.9647	0.04327	0.03764	0.04942
292	MW24	389890.98	1427303.14	TCE	Post-1999	0.9649	7.83723	4.05999	10.41439
292	MW24	389890.98	1427303.14	TCE	Latest	0.9785	-7.15135	-15.71817	-0.09411
292	MW24	389890.98	1427303.14	TCLME	Historical	0.9646	0	0	0
292	MW24	389890.98	1427303.14	TCLME	Post-1999	0.9831	0	0	0
292	MW24	389890.98	1427303.14	TCLME	Latest	0.9586	0	0	0
293	MW25	389841.18	1427469.74	DCE11	Historical	0.9672	-0.73605	-1.16618	-0.32562
293	MW25	389841.18	1427469.74	DCE11	Post-1999	0.953	-0.424	-0.81807	-0.19978
293	MW25	389841.18	1427469.74	DCE11	Latest	0.9609	-1.39759	-2.47689	-0.85635
293	MW25	389841.18	1427469.74	TCE	Historical	0.9531	-27.17491	-51.18877	-5.25751
293	MW25	389841.18	1427469.74	TCE	Post-1999	0.9649	-27.17491	-53.45304	-5.95833
293	MW25	389841.18	1427469.74	TCE	Latest	0.9609	-77.57061	-105.06037	-53.75075
293	MW25	389841.18	1427469.74	TCLME	Historical	0.9672	-0.74046	-1.17001	-0.3284
293	MW25	389841.18	1427469.74	TCLME	Post-1999	0.953	-0.46941	-0.81791	-0.20448
293	MW25	389841.18	1427469.74	TCLME	Latest	0.9609	-1.44486	-2.52792	-0.90271

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
294	MW26	389939.56	1429596.8	DCE11	Historical	0.9605	-31.29937	-42.78389	-24.67279
294	MW26	389939.56	1429596.8	DCE11	Post-1999	0.9653	-16.58016	-23.98761	-4.33388
294	MW26	389939.56	1429596.8	DCE11	Latest	0.9688	47.0778	-4.33388	76.94659
294	MW26	389939.56	1429596.8	TCE	Historical	0.9705	-2039.1974	-2648.41784	-1337.72664
294	MW26	389939.56	1429596.8	TCE	Post-1999	0.9691	-2505.5134	-2931.63735	-2083.97805
294	MW26	389939.56	1429596.8	TCE	Latest	0.9831	-2348.7186	-2880.78998	-1784.10633
294	MW26	389939.56	1429596.8	TCLME	Historical	0.9605	-31.3294	-51.81516	-23.15155
294	MW26	389939.56	1429596.8	TCLME	Post-1999	0.9653	-16.17576	-23.01208	-5.91327
294	MW26	389939.56	1429596.8	TCLME	Latest	0.9688	53.4254	0.12284	90.01669
295	MW27	390355.32	1429988.4	DCE11	Historical	0.9615	-0.28516	-0.45376	-0.06237
295	MW27	390355.32	1429988.4	DCE11	Post-1999	0.9614	-0.20459	-0.43141	0.37784
295	MW27	390355.32	1429988.4	DCE11	Latest	0.9691	-0.41481	-0.48367	-0.07647
295	MW27	390355.32	1429988.4	TCE	Historical	0.9615	-0.06145	-1.12258	0.99951
295	MW27	390355.32	1429988.4	TCE	Post-1999	0.9614	0.9073	0.0495	2.28445
295	MW27	390355.32	1429988.4	TCE	Latest	0.9691	0.17609	-0.96097	1.21829
297	MW29	390848.69	1430557.78	DCE11	Historical	0.9637	0	-0.00739	0
297	MW29	390848.69	1430557.78	DCE11	Post-1999	0.9688	-0.03539	-0.04136	-0.02942
297	MW29	390848.69	1430557.78	DCE11	Latest	0.953	0	-0.0127	0.00213
297	MW29	390848.69	1430557.78	TCE	Historical	0.9637	0.2786	-0.28324	0.35106
297	MW29	390848.69	1430557.78	TCE	Post-1999	0.9688	0.43849	0.41812	0.4506
297	MW29	390848.69	1430557.78	TCE	Latest	0.953	0.35017	0.2887	0.3848
297	MW29	390848.69	1430557.78	TCLME	Historical	0.9685	0	0	0
297	MW29	390848.69	1430557.78	TCLME	Post-1999	0.875	0	0	0
297	MW29	390848.69	1430557.78	TCLME	Latest	0.9572	0	0	0
298	MW30A	391100.59	1430872.21	DCE11	Historical	0.9759	0	0	0
298	MW30A	391100.59	1430872.21	DCE11	Post-1999	0.75	0	0	0
298	MW30A	391100.59	1430872.21	DCE11	Latest	0.9831	0	-0.0574	0.00201
298	MW30A	391100.59	1430872.21	TCE	Historical	0.9759	-0.00004	-0.02367	0.00029
298	MW30A	391100.59	1430872.21	TCE	Post-1999	0.75	-0.03963	-0.04495	-0.03431
298	MW30A	391100.59	1430872.21	TCE	Latest	0.9586	0	-0.01835	0.00681
298	MW30A	391100.59	1430872.21	TCLME	Historical	0.9759	0	0	0
298	MW30A	391100.59	1430872.21	TCLME	Post-1999	0.75	0	0	0
298	MW30A	391100.59	1430872.21	TCLME	Latest	0.9831	0	-0.0574	0.00201
299	MW30B	391096.78	1430876.38	DCE11	Historical	0.9511	-0.00633	-0.01511	0.01327

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
299	MW30B	391096.78	1430876.38	DCE11	Post-1999	0.9556	-0.00319	-0.01453	0.01572
299	MW30B	391096.78	1430876.38	DCE11	Latest	0.9787	0.03996	0.02878	0.05013
299	MW30B	391096.78	1430876.38	TCE	Historical	0.9525	-1.24771	-1.60688	-0.38322
299	MW30B	391096.78	1430876.38	TCE	Post-1999	0.9586	0.96039	0.03541	3.11561
299	MW30B	391096.78	1430876.38	TCE	Latest	0.9922	3.89203	2.13537	6.31328
299	MW30B	391096.78	1430876.38	TCLME	Historical	0.9686	-0.02719	-0.03268	-0.01152
299	MW30B	391096.78	1430876.38	TCLME	Post-1999	0.9567	-0.00199	-0.02767	0.0237
299	MW30B	391096.78	1430876.38	TCLME	Latest	0.9922	0.0399	0.0237	0.05367
300	MW31	390987.64	1430191.72	TCE	Historical	0.9759	-0.47914	-1.02039	0.19466
300	MW31	390987.64	1430191.72	TCE	Post-1999	0	0	0	0
300	MW31	390987.64	1430191.72	TCE	Latest	0.9808	-0.53437	-1.02039	-0.04835
302	MW5	390538.26	1430020.14	DCE11	Historical	0.9649	-0.01059	-0.05312	0.04689
302	MW5	390538.26	1430020.14	DCE11	Post-1999	0.9785	-0.29841	-0.66149	-0.02476
302	MW5	390538.26	1430020.14	DCE11	Latest	0.9653	-0.02476	-0.14278	0.05236
302	MW5	390538.26	1430020.14	TCE	Historical	0.953	-0.18	-3.88566	6.14443
302	MW5	390538.26	1430020.14	TCE	Post-1999	0.9883	-19.54015	-44.16821	1.54089
302	MW5	390538.26	1430020.14	TCE	Latest	0.971	0.68045	-7.22368	9.01745
302	MW5	390538.26	1430020.14	TCLME	Historical	0.9649	-0.01305	-0.07883	0.03222
302	MW5	390538.26	1430020.14	TCLME	Post-1999	0.9785	-0.29841	-0.66149	-0.02476
302	MW5	390538.26	1430020.14	TCLME	Latest	0.9653	-0.02476	-0.14278	0.05236
304	MW53	391515.65	1430113.84	DCE11	Historical	0.9637	-0.09438	-0.11396	-0.05693
304	MW53	391515.65	1430113.84	DCE11	Post-1999	0.9688	-0.00821	-0.02121	0.00703
304	MW53	391515.65	1430113.84	DCE11	Latest	0.953	-0.04177	-0.07125	-0.01082
304	MW53	391515.65	1430113.84	TCE	Historical	0.97	-0.07699	-0.13644	-0.02342
304	MW53	391515.65	1430113.84	TCE	Post-1999	0.9375	-0.13644	-0.16662	-0.11782
304	MW53	391515.65	1430113.84	TCE	Latest	0.959	-0.0812	-0.13644	-0.03734
304	MW53	391515.65	1430113.84	TCLME	Historical	0.9637	0	-0.00272	0
304	MW53	391515.65	1430113.84	TCLME	Post-1999	0.9688	0.02809	0.0234	0.03292
304	MW53	391515.65	1430113.84	TCLME	Latest	0.953	0	-0.00091	0.01028
305	MW54	391469.75	1430193.22	DCE11	Historical	0.9649	-0.05276	-0.23188	-0.01058
305	MW54	391469.75	1430193.22	DCE11	Post-1999	0.75	0.02103	0.0105	0.03156
305	MW54	391469.75	1430193.22	DCE11	Latest	0.9653	-0.01987	-0.05276	0.02815
305	MW54	391469.75	1430193.22	TCE	Historical	0.9649	0.08884	-0.05142	0.19811
305	MW54	391469.75	1430193.22	TCE	Post-1999	0.75	0.31572	0.28632	0.34511

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
305	MW54	391469.75	1430193.22	TCE	Latest	0.9653	0.16871	0.08664	0.31572
305	MW54	391469.75	1430193.22	TCLME	Historical	0.9759	0	0	0
305	MW54	391469.75	1430193.22	TCLME	Post-1999	0.75	0	0	0
305	MW54	391469.75	1430193.22	TCLME	Latest	0.9831	0	-0.05858	0.0017
306	MW56	391363.95	1430438.33	DCE11	Historical	0.9604	-0.34088	-0.9166	0.70847
306	MW56	391363.95	1430438.33	DCE11	Post-1999	0	0	0	0
306	MW56	391363.95	1430438.33	DCE11	Latest	0.9799	0.84159	-0.34088	2.59832
306	MW56	391363.95	1430438.33	TCE	Historical	0.9536	-1.41923	-2.6064	-0.24287
306	MW56	391363.95	1430438.33	TCE	Post-1999	0	0	0	0
306	MW56	391363.95	1430438.33	TCE	Latest	0.9643	-0.74346	-1.75873	0.56051
306	MW56	391363.95	1430438.33	TCLME	Historical	0.97	-0.00744	-0.00965	-0.00506
306	MW56	391363.95	1430438.33	TCLME	Post-1999	0	0	0	0
306	MW56	391363.95	1430438.33	TCLME	Latest	0.9564	-0.00698	-0.00868	-0.00506
307	MW6	390375.4189	1429767.1944	TCLME	Historical	0.9759	0	0	0.01616
307	MW6	390375.4189	1429767.1944	TCLME	Post-1999	0	0	0	0
307	MW6	390375.4189	1429767.1944	TCLME	Latest	0.9808	0.0141	-0.12847	0.02443
311	MW7	391637.2898	1430175.6076	DCE11	Historical	0.9685	-0.09997	-0.26576	0.16829
311	MW7	391637.2898	1430175.6076	DCE11	Post-1999	0.9375	0.15898	-0.06031	0.46813
311	MW7	391637.2898	1430175.6076	DCE11	Latest	0.9688	0.0891	-0.09997	0.46813
311	MW7	391637.2898	1430175.6076	TCE	Historical	0.9615	0.00607	0	0.01189
311	MW7	391637.2898	1430175.6076	TCE	Post-1999	0.9375	0.01599	-0.54018	0.01613
311	MW7	391637.2898	1430175.6076	TCE	Latest	0.9844	0.01528	-0.54018	0.01613
311	MW7	391637.2898	1430175.6076	TCLME	Historical	0.953	0	0	0
311	MW7	391637.2898	1430175.6076	TCLME	Post-1999	0.875	0	0	0
311	MW7	391637.2898	1430175.6076	TCLME	Latest	0.9653	0	0	0
312	MW9	389713	1427563.19	DCE11	Historical	0.9604	-0.11121	-0.1752	-0.04772
312	MW9	389713	1427563.19	DCE11	Post-1999	0.9691	-0.00521	-0.022	-0.00096
312	MW9	389713	1427563.19	DCE11	Latest	0.9609	-0.022	-0.04957	-0.00999
312	MW9	389713	1427563.19	TCE	Historical	0.9604	-0.10029	-0.13735	-0.01267
312	MW9	389713	1427563.19	TCE	Post-1999	0.9691	0.01344	-0.00757	0.07256
312	MW9	389713	1427563.19	TCE	Latest	0.9609	-0.00461	-0.01166	0.09416
312	MW9	389713	1427563.19	TCLME	Historical	0.9604	-0.00555	-0.01391	-0.00287
312	MW9	389713	1427563.19	TCLME	Post-1999	0.9691	0	-0.00119	0
312	MW9	389713	1427563.19	TCLME	Latest	0.9609	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
313	MW99-01A	391862.77	1430282.71	DCE11	Historical	0.9649	0	-0.00777	0
313	MW99-01A	391862.77	1430282.71	DCE11	Post-1999	0.959	0	-0.00275	0
313	MW99-01A	391862.77	1430282.71	DCE11	Latest	0.9883	0	0	0
313	MW99-01A	391862.77	1430282.71	TCE	Historical	0.9649	0	-0.01155	0
313	MW99-01A	391862.77	1430282.71	TCE	Post-1999	0.959	0	-0.00828	0
313	MW99-01A	391862.77	1430282.71	TCE	Latest	0.9883	0	0	0
313	MW99-01A	391862.77	1430282.71	TCLME	Historical	0.9649	0	-0.01165	0
313	MW99-01A	391862.77	1430282.71	TCLME	Post-1999	0.959	0	-0.00777	0
313	MW99-01A	391862.77	1430282.71	TCLME	Latest	0.9883	0	0	0
314	MW99-01B	391848.73	1430293.32	DCE11	Historical	0.9649	0	-0.00799	0
314	MW99-01B	391848.73	1430293.32	DCE11	Post-1999	0.959	0	-0.00284	0
314	MW99-01B	391848.73	1430293.32	DCE11	Latest	0.9883	0	0	0
314	MW99-01B	391848.73	1430293.32	TCE	Historical	0.9649	0	-0.01167	0
314	MW99-01B	391848.73	1430293.32	TCE	Post-1999	0.959	0	-0.00899	0
314	MW99-01B	391848.73	1430293.32	TCE	Latest	0.9883	0	0	0
314	MW99-01B	391848.73	1430293.32	TCLME	Historical	0.9649	0	-0.00799	0
314	MW99-01B	391848.73	1430293.32	TCLME	Post-1999	0.959	0	-0.00284	0
314	MW99-01B	391848.73	1430293.32	TCLME	Latest	0.9883	0	0	0
319	MWG1	389951.44	1429630.23	DCE11	Historical	0.9604	-10.02134	-14.52057	-8.05182
319	MWG1	389951.44	1429630.23	DCE11	Post-1999	0.9922	-6.89239	-7.42675	-6.33655
319	MWG1	389951.44	1429630.23	DCE11	Latest	0.9664	-10.14165	-13.43678	-8.06398
319	MWG1	389951.44	1429630.23	TCE	Historical	0.9637	152.1168	108.52192	168.34349
319	MWG1	389951.44	1429630.23	TCE	Post-1999	0.9609	207.4265	171.92896	278.29873
319	MWG1	389951.44	1429630.23	TCE	Latest	0.953	157.94452	148.29205	171.92896
319	MWG1	389951.44	1429630.23	TCLME	Historical	0.9604	-10.5426	-13.26423	-8.0885
319	MWG1	389951.44	1429630.23	TCLME	Post-1999	0.9922	-5.77832	-6.6201	-5.37324
319	MWG1	389951.44	1429630.23	TCLME	Latest	0.9664	-10.23453	-12.39482	-8.0885
320	MWG10	390358.87	1430287.86	DCE11	Historical	0.9759	0	0	0
320	MWG10	390358.87	1430287.86	DCE11	Post-1999	0.75	0	0	0
320	MWG10	390358.87	1430287.86	DCE11	Latest	0.9831	0	-0.05762	0.00193
320	MWG10	390358.87	1430287.86	TCLME	Historical	0.9759	0	0	0
320	MWG10	390358.87	1430287.86	TCLME	Post-1999	0.75	0	0	0
320	MWG10	390358.87	1430287.86	TCLME	Latest	0.9831	0	-0.05762	0.00193
321	MWG11	390841.83	1430616.58	DCE11	Historical	0.953	-0.06644	-1.06632	0.2375

TABLE 2.6
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
321	MWG11	390841.83	1430616.58	DCE11	Post-1999	0.9883	-1.26134	-2.62987	-0.06644
321	MWG11	390841.83	1430616.58	DCE11	Latest	0.971	-0.29582	-1.60351	0.33573
321	MWG11	390841.83	1430616.58	TCE	Historical	0.953	12.84199	6.72011	18.23062
321	MWG11	390841.83	1430616.58	TCE	Post-1999	0.9688	23.20502	20.30843	31.68825
321	MWG11	390841.83	1430616.58	TCE	Latest	0.9773	11.2884	4.58786	19.26631
321	MWG11	390841.83	1430616.58	TCLME	Historical	0.9615	-0.55576	-1.11643	-0.20052
321	MWG11	390841.83	1430616.58	TCLME	Post-1999	0.9775	-0.99369	-1.46487	-0.59209
321	MWG11	390841.83	1430616.58	TCLME	Latest	0.9691	-0.70139	-1.23694	-0.37492
322	MWG12	391633.43	1429886.81	DCE11	Historical	0.953	0	0	0
322	MWG12	391633.43	1429886.81	DCE11	Post-1999	0.875	0	0	0
322	MWG12	391633.43	1429886.81	DCE11	Latest	0.9653	0	0	0
322	MWG12	391633.43	1429886.81	TCE	Historical	0.953	0.00975	0	0.02351
322	MWG12	391633.43	1429886.81	TCE	Post-1999	0.875	0.07945	0.06508	0.10064
322	MWG12	391633.43	1429886.81	TCE	Latest	0.9653	0.02834	0.01309	0.05268
322	MWG12	391633.43	1429886.81	TCLME	Historical	0.953	0	0	0
322	MWG12	391633.43	1429886.81	TCLME	Post-1999	0.875	0	0	0
322	MWG12	391633.43	1429886.81	TCLME	Latest	0.9653	0	0	0
323	MWG14	391368.36	1430003.25	DCE11	Historical	0.9649	-0.02534	-0.10218	0.02346
323	MWG14	391368.36	1430003.25	DCE11	Post-1999	0.9609	-0.00581	-0.0351	0.02346
323	MWG14	391368.36	1430003.25	DCE11	Latest	0.9773	-0.02046	-0.06439	0.02346
323	MWG14	391368.36	1430003.25	TCE	Historical	0.9649	-3.66961	-5.55516	-1.40715
323	MWG14	391368.36	1430003.25	TCE	Post-1999	0.9609	-4.61293	-5.55516	-3.66961
323	MWG14	391368.36	1430003.25	TCE	Latest	0.9773	-3.82688	-5.55516	-0.04749
323	MWG14	391368.36	1430003.25	TCLME	Historical	0.9649	-0.02863	-0.07713	0.00868
323	MWG14	391368.36	1430003.25	TCLME	Post-1999	0.9609	-0.0197	-0.041	0.00158
323	MWG14	391368.36	1430003.25	TCLME	Latest	0.9773	-0.02772	-0.0623	0.00868
324	MWG15	391335.53	1430101.7	DCE11	Historical	0.9759	0	0	0
324	MWG15	391335.53	1430101.7	DCE11	Post-1999	0.75	0	0	0
324	MWG15	391335.53	1430101.7	DCE11	Latest	0.9831	0	-0.05818	0.00176
324	MWG15	391335.53	1430101.7	TCE	Historical	0.9649	0.16799	-0.20101	0.20355
324	MWG15	391335.53	1430101.7	TCE	Post-1999	0.75	0.22598	0.22037	0.23159
324	MWG15	391335.53	1430101.7	TCE	Latest	0.9653	0.18675	0.04581	0.20979
324	MWG15	391335.53	1430101.7	TCLME	Historical	0.9759	0	0	0
324	MWG15	391335.53	1430101.7	TCLME	Post-1999	0.75	0	0	0

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
324	MWG15	391335.53	1430101.7	TCLME	Latest	0.9831	0	-0.05818	0.00176
325	MWG16	391645.56	1430136.14	DCE11	Historical	0.9685	0	0	0
325	MWG16	391645.56	1430136.14	DCE11	Post-1999	0.875	0	0	0
325	MWG16	391645.56	1430136.14	DCE11	Latest	0.9759	0	0	0
325	MWG16	391645.56	1430136.14	TCE	Historical	0.9685	0	0	0
325	MWG16	391645.56	1430136.14	TCE	Post-1999	0.875	0	0	0
325	MWG16	391645.56	1430136.14	TCE	Latest	0.9759	0	0	0
325	MWG16	391645.56	1430136.14	TCLME	Historical	0.9685	0	0	0
325	MWG16	391645.56	1430136.14	TCLME	Post-1999	0.875	0	0	0
325	MWG16	391645.56	1430136.14	TCLME	Latest	0.9759	0	0	0
326	MWG17	391718.66	1430136.86	DCE11	Historical	0.96	0.33639	-0.86912	1.69218
326	MWG17	391718.66	1430136.86	DCE11	Post-1999	0	0	0	0
326	MWG17	391718.66	1430136.86	DCE11	Latest	0.9775	1.04741	-0.16828	4.37531
326	MWG17	391718.66	1430136.86	TCE	Historical	0.96	-1.00959	-1.4612	-0.45236
326	MWG17	391718.66	1430136.86	TCE	Post-1999	0	0	0	0
326	MWG17	391718.66	1430136.86	TCE	Latest	0.9775	-0.14649	-0.86636	-0.0293
326	MWG17	391718.66	1430136.86	TCLME	Historical	0.9685	-0.00636	-0.02895	0.00482
326	MWG17	391718.66	1430136.86	TCLME	Post-1999	0	0	0	0
326	MWG17	391718.66	1430136.86	TCLME	Latest	0.9614	0.04107	-0.04964	0.07829
327	MWG19	391646.29	1430132.59	DCE11	Historical	0.97	-0.44128	-0.83651	-0.23754
327	MWG19	391646.29	1430132.59	DCE11	Post-1999	0.9375	0.14907	0.06319	0.23509
327	MWG19	391646.29	1430132.59	DCE11	Latest	0.9712	-0.40178	-0.8184	-0.1516
327	MWG19	391646.29	1430132.59	TCE	Historical	0.9637	-0.00046	-0.01047	0.00304
327	MWG19	391646.29	1430132.59	TCE	Post-1999	0.9688	0.03249	0.02719	0.03802
327	MWG19	391646.29	1430132.59	TCE	Latest	0.953	0.00222	-0.00038	0.01337
327	MWG19	391646.29	1430132.59	TCLME	Historical	0.9637	-0.00102	-0.01227	0
327	MWG19	391646.29	1430132.59	TCLME	Post-1999	0.9688	0.03078	0.02565	0.03607
327	MWG19	391646.29	1430132.59	TCLME	Latest	0.953	0	-0.00102	0.01129
328	MWG1A	389950.31	1429626.79	DCE11	Historical	0.962	-21.65549	-27.28791	-4.83673
328	MWG1A	389950.31	1429626.79	DCE11	Post-1999	0.9649	-4.83673	-19.41455	-3.142
328	MWG1A	389950.31	1429626.79	DCE11	Latest	0.9922	-0.40677	-3.09492	1.1153
328	MWG1A	389950.31	1429626.79	TCE	Historical	0.9687	-1402.7995	-1509.16507	-771.87833
328	MWG1A	389950.31	1429626.79	TCE	Post-1999	0.9808	-1906.2693	-2163.67962	-609.29199
328	MWG1A	389950.31	1429626.79	TCE	Latest	0.9883	-248.28348	-907.10469	1094.6785

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
328	MWG1A	389950.31	1429626.79	TCLME	Historical	0.962	-34.99251	-48.56104	-4.77211
328	MWG1A	389950.31	1429626.79	TCLME	Post-1999	0.9649	-3.26767	-4.77211	-1.56176
328	MWG1A	389950.31	1429626.79	TCLME	Latest	0.9922	-1.30773	-1.79091	-1.0712
329	MWG2	390162.47	1429689.52	TCE	Historical	0.9649	0	0	0.00373
329	MWG2	390162.47	1429689.52	TCE	Post-1999	0.9785	0.01096	0.00662	0.0611
329	MWG2	390162.47	1429689.52	TCE	Latest	0.9567	0.00083	0	0.00709
329	MWG2	390162.47	1429689.52	TCLME	Historical	0.9759	0	0	0
329	MWG2	390162.47	1429689.52	TCLME	Post-1999	0.75	0	0	0
329	MWG2	390162.47	1429689.52	TCLME	Latest	0.9831	0	-0.05817	0.00173
330	MWG20	391635.89	1430299.92	DCE11	Historical	0.9759	0	0	0
330	MWG20	391635.89	1430299.92	DCE11	Post-1999	0	0	0	0
330	MWG20	391635.89	1430299.92	DCE11	Latest	0.9871	0	0	0
330	MWG20	391635.89	1430299.92	TCE	Historical	0.9759	0	0	0
330	MWG20	391635.89	1430299.92	TCE	Post-1999	0	0	0	0
330	MWG20	391635.89	1430299.92	TCE	Latest	0.9871	0	0	0
330	MWG20	391635.89	1430299.92	TCLME	Historical	0.9759	0	0	0
330	MWG20	391635.89	1430299.92	TCLME	Post-1999	0	0	0	0
330	MWG20	391635.89	1430299.92	TCLME	Latest	0.9871	0	0	0
331	MWG21	391354.63	1430435.35	DCE11	Historical	0.9759	0	0	0
331	MWG21	391354.63	1430435.35	DCE11	Post-1999	0.75	0	0	0
331	MWG21	391354.63	1430435.35	DCE11	Latest	0.9831	0	-0.05798	0.00183
331	MWG21	391354.63	1430435.35	TCLME	Historical	0.9759	0	0	0
331	MWG21	391354.63	1430435.35	TCLME	Post-1999	0.75	0	0	0
331	MWG21	391354.63	1430435.35	TCLME	Latest	0.9831	0	-0.05798	0.00183
332	MWG22	391499.62	1430490.72	DCE11	Historical	0.9525	-0.01858	-0.0209	-0.01269
332	MWG22	391499.62	1430490.72	DCE11	Post-1999	0.9773	-0.02609	-0.03788	0.00178
332	MWG22	391499.62	1430490.72	DCE11	Latest	0.9922	-0.03999	-0.04637	-0.02193
332	MWG22	391499.62	1430490.72	TCE	Historical	0.967	-0.27553	-0.55654	0.01319
332	MWG22	391499.62	1430490.72	TCE	Post-1999	0.9734	0.08031	-2.308	0.69549
332	MWG22	391499.62	1430490.72	TCE	Latest	0.9609	-3.34525	-7.20643	-0.28207
332	MWG22	391499.62	1430490.72	TCLME	Historical	0.9525	-0.01256	-0.01432	-0.01004
332	MWG22	391499.62	1430490.72	TCLME	Post-1999	0.9773	-0.01224	-0.01535	-0.00873
332	MWG22	391499.62	1430490.72	TCLME	Latest	0.9922	-0.01237	-0.01535	-0.00751
335	MWG3	389836.31	1429719.02	TCE	Historical	0.953	-0.05105	-0.12513	-0.02496

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335	MWG3	389836.31	1429719.02	TCE	Post-1999	0.9883	-0.03239	-0.15863	0.02902
335	MWG3	389836.31	1429719.02	TCE	Latest	0.971	-0.04172	-0.12513	-0.02496
337	MWG4	390562.0991	1429820.9182	DCE11	Historical	0.9649	-0.00001	-0.00477	0
337	MWG4	390562.0991	1429820.9182	DCE11	Post-1999	0.9785	-0.01054	-0.02815	0.00165
337	MWG4	390562.0991	1429820.9182	DCE11	Latest	0.9653	-0.00299	-0.01095	0.00165
337	MWG4	390562.0991	1429820.9182	TCE	Historical	0.9649	0.24666	-0.43875	1.21874
337	MWG4	390562.0991	1429820.9182	TCE	Post-1999	0.75	2.38719	2.15351	2.62087
337	MWG4	390562.0991	1429820.9182	TCE	Latest	0.9653	-0.10039	-0.84783	1.21874
337	MWG4	390562.0991	1429820.9182	TCLME	Historical	0.953	0.02624	-0.02334	0.05376
337	MWG4	390562.0991	1429820.9182	TCLME	Post-1999	0.9883	0.05491	0.04243	0.06146
337	MWG4	390562.0991	1429820.9182	TCLME	Latest	0.971	0.01682	-0.03207	0.05164
338	MWG5	390432.26	1429974.05	DCE11	Historical	0.9615	-1.22025	-2.98272	-0.00004
338	MWG5	390432.26	1429974.05	DCE11	Post-1999	0.9775	-2.98272	-5.34354	-1.33143
338	MWG5	390432.26	1429974.05	DCE11	Latest	0.9691	-1.79401	-4.13163	-0.22959
338	MWG5	390432.26	1429974.05	TCE	Historical	0.9615	34.51827	-52.38888	40.25031
338	MWG5	390432.26	1429974.05	TCE	Post-1999	0.9688	68.5668	48.37801	96.31545
338	MWG5	390432.26	1429974.05	TCE	Latest	0.971	40.4555	35.77297	44.65837
338	MWG5	390432.26	1429974.05	TCLME	Historical	0.9615	-1.54184	-1.90222	-0.40706
338	MWG5	390432.26	1429974.05	TCLME	Post-1999	0.9775	-1.04762	-1.90112	0.77103
338	MWG5	390432.26	1429974.05	TCLME	Latest	0.9691	-1.84623	-1.92001	-0.13803
339	MWG5-5	390639.0257	1430787.6651	DCE11	Historical	0.9759	-1.52824	-2.88769	-0.19322
339	MWG5-5	390639.0257	1430787.6651	DCE11	Post-1999	0.75	1.9933	1.62889	2.3577
339	MWG5-5	390639.0257	1430787.6651	DCE11	Latest	0.9831	-1.4972	-3.21964	0.53564
339	MWG5-5	390639.0257	1430787.6651	TCLME	Historical	0.9759	-1.52824	-2.88769	-0.19322
339	MWG5-5	390639.0257	1430787.6651	TCLME	Post-1999	0.75	1.9933	1.62889	2.3577
339	MWG5-5	390639.0257	1430787.6651	TCLME	Latest	0.9831	-1.4972	-3.21964	0.53564
341	MWG5-6	390729.87	1430718.45	DCE11	Historical	0.9649	0	-0.00341	0.00315
341	MWG5-6	390729.87	1430718.45	DCE11	Post-1999	0.75	0.01008	0.00893	0.01124
341	MWG5-6	390729.87	1430718.45	DCE11	Latest	0.9653	0	-0.00164	0.0043
341	MWG5-6	390729.87	1430718.45	TCE	Historical	0.9649	0.18266	-0.00344	0.36801
341	MWG5-6	390729.87	1430718.45	TCE	Post-1999	0.75	0.3989	0.36801	0.4298
341	MWG5-6	390729.87	1430718.45	TCE	Latest	0.9653	0.21355	0.08248	0.36801
343	MWG7	390844.21	1429759.71	DCE11	Historical	0.9759	0	0	0
343	MWG7	390844.21	1429759.71	DCE11	Post-1999	0.75	0	0	0

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343	MWG7	390844.21	1429759.71	DCE11	Latest	0.9831	0	-0.05761	0.00192
343	MWG7	390844.21	1429759.71	TCE	Historical	0.9759	-0.10886	-1.16224	0.94451
343	MWG7	390844.21	1429759.71	TCE	Post-1999	0	0	0	0
343	MWG7	390844.21	1429759.71	TCE	Latest	0.9808	-0.07015	-1.51336	1.29564
344	MWOS-01	390640.46	1431650.49	DCE11	Historical	0.953	0	-0.00086	0
344	MWOS-01	390640.46	1431650.49	DCE11	Post-1999	0.9763	0	-0.00086	0
344	MWOS-01	390640.46	1431650.49	DCE11	Latest	0.9787	0	0	0
344	MWOS-01	390640.46	1431650.49	TCE	Historical	0.9649	0.04197	-0.01658	0.06757
344	MWOS-01	390640.46	1431650.49	TCE	Post-1999	0.959	0.03117	-0.02611	0.05968
344	MWOS-01	390640.46	1431650.49	TCE	Latest	0.9871	0.05388	0.00815	0.10431
344	MWOS-01	390640.46	1431650.49	TCLME	Historical	0.9615	-0.00444	-0.00588	-0.00205
344	MWOS-01	390640.46	1431650.49	TCLME	Post-1999	0.9685	-0.0039	-0.00587	-0.00167
344	MWOS-01	390640.46	1431650.49	TCLME	Latest	0.9775	-0.00454	-0.00535	0.00953
352	MWOS-09	392250.5	1430914.92	DCE11	Historical	0.9615	-0.04996	-0.08789	0.00938
352	MWOS-09	392250.5	1430914.92	DCE11	Post-1999	0.9685	-0.06343	-0.09771	0.00883
352	MWOS-09	392250.5	1430914.92	DCE11	Latest	0.9775	0.04736	-0.20159	0.14065
352	MWOS-09	392250.5	1430914.92	TCE	Historical	0.9649	-1.31429	-2.53341	2.26239
352	MWOS-09	392250.5	1430914.92	TCE	Post-1999	0.959	-1.43865	-2.72834	1.68241
352	MWOS-09	392250.5	1430914.92	TCE	Latest	0.9808	-1.31429	-4.39008	3.85893
352	MWOS-09	392250.5	1430914.92	TCLME	Historical	0.9615	-0.00982	-0.02001	-0.00264
352	MWOS-09	392250.5	1430914.92	TCLME	Post-1999	0.9685	-0.01281	-0.02825	-0.00379
352	MWOS-09	392250.5	1430914.92	TCLME	Latest	0.9775	-0.00182	-0.01281	0.00066
353	MWOS-10	392239.14	1430920.36	DCE11	Historical	0.9615	-0.00226	-0.03812	0.00442
353	MWOS-10	392239.14	1430920.36	DCE11	Post-1999	0.9685	-0.00639	-0.05048	0.00364
353	MWOS-10	392239.14	1430920.36	DCE11	Latest	0.9775	-0.03263	-0.06422	0.00446
353	MWOS-10	392239.14	1430920.36	TCE	Historical	0.953	-1.0307	-1.82893	-0.45819
353	MWOS-10	392239.14	1430920.36	TCE	Post-1999	0.9763	-1.0943	-2.19795	-0.45819
353	MWOS-10	392239.14	1430920.36	TCE	Latest	0.9775	-2.41387	-4.15495	-1.69738
353	MWOS-10	392239.14	1430920.36	TCLME	Historical	0.9615	-0.0032	-0.01489	-0.0022
353	MWOS-10	392239.14	1430920.36	TCLME	Post-1999	0.9685	-0.00412	-0.02587	-0.00246
353	MWOS-10	392239.14	1430920.36	TCLME	Latest	0.9775	-0.00258	-0.00412	-0.0022
356	OB201A	390483.21	1431264.71	DCE11	Historical	0.953	-0.02358	-0.04004	-0.00361
356	OB201A	390483.21	1431264.71	DCE11	Post-1999	0.9757	-0.02558	-0.04243	-0.00361
356	OB201A	390483.21	1431264.71	DCE11	Latest	0.9691	-0.02158	-0.03879	-0.0076

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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
356	OB201A	390483.21	1431264.71	TCE	Historical	0.953	-0.72642	-1.21361	0.25725
356	OB201A	390483.21	1431264.71	TCE	Post-1999	0.9757	-0.7331	-1.32501	0.25725
356	OB201A	390483.21	1431264.71	TCE	Latest	0.9691	-0.58225	-0.97384	0.25725
356	OB201A	390483.21	1431264.71	TCLME	Historical	0.953	-0.00001	-0.04841	0
356	OB201A	390483.21	1431264.71	TCLME	Post-1999	0.9757	-0.00001	-0.09652	0
356	OB201A	390483.21	1431264.71	TCLME	Latest	0.9691	0	-0.00001	0
359	OB204B	391358.91	1430664.95	DCE11	Historical	0.9685	-0.00323	-0.0091	0.01572
359	OB204B	391358.91	1430664.95	DCE11	Post-1999	0.9564	-0.00096	-0.00848	0.01572
359	OB204B	391358.91	1430664.95	DCE11	Latest	0.9775	0.03679	0.02886	0.0585
359	OB204B	391358.91	1430664.95	TCE	Historical	0.953	-0.66125	-2.54477	1.24257
359	OB204B	391358.91	1430664.95	TCE	Post-1999	0.959	-0.26143	-2.40868	1.47727
359	OB204B	391358.91	1430664.95	TCE	Latest	0.9734	-0.23018	-9.51921	6.1906
359	OB204B	391358.91	1430664.95	TCLME	Historical	0.9511	-0.00367	-0.01635	-0.00103
359	OB204B	391358.91	1430664.95	TCLME	Post-1999	0.9556	-0.00333	-0.00927	-0.00096
359	OB204B	391358.91	1430664.95	TCLME	Latest	0.9787	-0.00171	-0.00394	0.00081
360	OB205A	391492.682	1430489.6351	DCE11	Historical	0.96	-0.03574	-0.05004	-0.00661
360	OB205A	391492.682	1430489.6351	DCE11	Post-1999	0.9757	-0.03997	-0.05032	-0.01659
360	OB205A	391492.682	1430489.6351	DCE11	Latest	0.951	-0.04556	-0.05004	-0.03279
360	OB205A	391492.682	1430489.6351	TCE	Historical	0.9685	-0.99331	-2.10933	0.08618
360	OB205A	391492.682	1430489.6351	TCE	Post-1999	0.9564	-0.89062	-1.86141	0.08618
360	OB205A	391492.682	1430489.6351	TCE	Latest	0.9734	0.08618	-0.6694	0.52766
360	OB205A	391492.682	1430489.6351	TCLME	Historical	0.9615	-0.00165	-0.00326	0
360	OB205A	391492.682	1430489.6351	TCLME	Post-1999	0.9763	-0.00193	-0.00345	0
360	OB205A	391492.682	1430489.6351	TCLME	Latest	0.9586	-0.00365	-0.0062	-0.00197
361	OB208A	390695.3903	1431206.901	DCE11	Historical	0.97	0.01668	-0.00701	0.05633
361	OB208A	390695.3903	1431206.901	DCE11	Post-1999	0.9706	0.01378	-0.00901	0.05165
361	OB208A	390695.3903	1431206.901	DCE11	Latest	0.9787	0.06571	0.02663	0.11289
361	OB208A	390695.3903	1431206.901	TCE	Historical	0.97	-0.17687	-0.33966	0.09402
361	OB208A	390695.3903	1431206.901	TCE	Post-1999	0.9706	-0.22905	-0.34543	0.05713
361	OB208A	390695.3903	1431206.901	TCE	Latest	0.9787	-0.34254	-0.40681	-0.22905
361	OB208A	390695.3903	1431206.901	TCLME	Historical	0.97	0.01221	-0.01003	0.02729
361	OB208A	390695.3903	1431206.901	TCLME	Post-1999	0.9706	-0.00026	-0.03311	0.02379
361	OB208A	390695.3903	1431206.901	TCLME	Latest	0.9787	0.02971	0.01221	0.04962
362	OB208C	390619.55	1431253.09	DCE11	Historical	0.96	-0.01699	-0.02611	-0.0045

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362	OB208C	390619.55	1431253.09	DCE11	Post-1999	0.9643	-0.0127	-0.02514	-0.00373
362	OB208C	390619.55	1431253.09	DCE11	Latest	0.9871	-0.02223	-0.03056	0.02971
362	OB208C	390619.55	1431253.09	TCE	Historical	0.9685	-0.40064	-2.57576	2.03519
362	OB208C	390619.55	1431253.09	TCE	Post-1999	0.9725	-0.20467	-2.08742	2.35467
362	OB208C	390619.55	1431253.09	TCE	Latest	0.951	-0.51025	-3.71453	2.03519
362	OB208C	390619.55	1431253.09	TCLME	Historical	0.9615	-0.00059	-0.0032	0.00175
362	OB208C	390619.55	1431253.09	TCLME	Post-1999	0.9763	-0.00036	-0.0032	0.00209
362	OB208C	390619.55	1431253.09	TCLME	Latest	0.9775	0.00247	-0.00306	0.00534
363	OB209A	391306.4943	1430739.7539	DCE11	Historical	0.9759	0.03653	-0.2577	0.94999
363	OB209A	391306.4943	1430739.7539	DCE11	Post-1999	0.9883	-0.11154	-0.62372	0.51767
363	OB209A	391306.4943	1430739.7539	DCE11	Latest	0.9609	-0.20526	-0.62372	-0.02471
363	OB209A	391306.4943	1430739.7539	TCLME	Historical	0.9759	-0.09804	-0.26802	0.08559
363	OB209A	391306.4943	1430739.7539	TCLME	Post-1999	0.9883	0.08559	-0.26802	1.46789
363	OB209A	391306.4943	1430739.7539	TCLME	Latest	0.9609	0.08559	-0.26802	1.46789
368	OW7	390020.46	1427487.53	DCE11	Historical	0.97	0.04608	-0.00845	0.09277
368	OW7	390020.46	1427487.53	DCE11	Post-1999	0.973	0.02777	-0.01081	0.07826
368	OW7	390020.46	1427487.53	DCE11	Latest	0.9871	0.09431	-0.0273	0.31603
368	OW7	390020.46	1427487.53	TCE	Historical	0.96	-4.97565	-15.91754	2.97927
368	OW7	390020.46	1427487.53	TCE	Post-1999	0.9643	-3.60505	-15.23282	4.88498
368	OW7	390020.46	1427487.53	TCE	Latest	0.951	-23.63387	-28.68573	-17.84722
368	OW7	390020.46	1427487.53	TCLME	Historical	0.97	0.00139	-0.0561	0.03607
368	OW7	390020.46	1427487.53	TCLME	Post-1999	0.973	0.01029	-0.05169	0.03681
368	OW7	390020.46	1427487.53	TCLME	Latest	0.9871	0.03644	-0.0187	0.03875
405	PMW7D	390038.39	1431433.98	DCE11	Historical	0.96	0	0	0
405	PMW7D	390038.39	1431433.98	DCE11	Post-1999	0.9741	0	0	0
405	PMW7D	390038.39	1431433.98	DCE11	Latest	0.9883	0	0	0
405	PMW7D	390038.39	1431433.98	TCE	Historical	0.9511	-0.05537	-0.18292	0.06766
405	PMW7D	390038.39	1431433.98	TCE	Post-1999	0.9672	-0.0455	-0.18292	0.07507
405	PMW7D	390038.39	1431433.98	TCE	Latest	0.9614	0.06152	-0.07556	0.17538
405	PMW7D	390038.39	1431433.98	TCLME	Historical	0.96	0	0	0
405	PMW7D	390038.39	1431433.98	TCLME	Post-1999	0.9741	0	0	0
405	PMW7D	390038.39	1431433.98	TCLME	Latest	0.9883	0	0	0
410	PZ-1A	390207.88	1427393.65	DCE11	Historical	0.9637	0.0509	-0.09668	0.1921
410	PZ-1A	390207.88	1427393.65	DCE11	Post-1999	0.9725	0.0509	-0.09668	0.19705

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410	PZ-1A	390207.88	1427393.65	DCE11	Latest	0.9883	0.27055	0.21241	0.28958
410	PZ-1A	390207.88	1427393.65	TCE	Historical	0.9511	2.71063	-2.08512	17.33973
410	PZ-1A	390207.88	1427393.65	TCE	Post-1999	0.9649	2.71063	-5.11333	15.71411
410	PZ-1A	390207.88	1427393.65	TCE	Latest	0.9775	29.70488	15.71411	48.4027
410	PZ-1A	390207.88	1427393.65	TCLME	Historical	0.97	-0.05759	-0.17492	0.07513
410	PZ-1A	390207.88	1427393.65	TCLME	Post-1999	0.973	-0.05646	-0.15355	0.07731
410	PZ-1A	390207.88	1427393.65	TCLME	Latest	0.9871	0.17019	-0.05759	0.19216
432	RW101	390065.57	1427200.26	DCE11	Historical	0.97	0.01209	-0.13888	0.09069
432	RW101	390065.57	1427200.26	DCE11	Post-1999	0.973	0.01898	-0.11645	0.09891
432	RW101	390065.57	1427200.26	DCE11	Latest	0.9871	0.40843	0.17806	0.50002
432	RW101	390065.57	1427200.26	TCE	Historical	0.96	0.92951	-7.3736	4.5229
432	RW101	390065.57	1427200.26	TCE	Post-1999	0.9643	2.17222	-5.19358	4.86601
432	RW101	390065.57	1427200.26	TCE	Latest	0.951	-5.19358	-11.48861	11.39352
432	RW101	390065.57	1427200.26	TCLME	Historical	0.97	-0.02413	-0.07989	0.02557
432	RW101	390065.57	1427200.26	TCLME	Post-1999	0.973	-0.03778	-0.09449	0.02161
432	RW101	390065.57	1427200.26	TCLME	Latest	0.9871	0.16992	0.02161	0.2612
433	RW102C	389854.89	1427523.09	DCE11	Historical	0.9637	-0.04916	-0.05739	-0.01125
433	RW102C	389854.89	1427523.09	DCE11	Post-1999	0.9564	-0.03628	-0.05705	-0.00311
433	RW102C	389854.89	1427523.09	DCE11	Latest	0.9883	-0.04278	-0.05914	0.04784
433	RW102C	389854.89	1427523.09	TCE	Historical	0.9511	-27.38196	-35.02608	-9.08655
433	RW102C	389854.89	1427523.09	TCE	Post-1999	0.9757	-8.3101	-35.02608	37.71103
433	RW102C	389854.89	1427523.09	TCE	Latest	0.9775	-42.52797	-55.58729	43.00453
433	RW102C	389854.89	1427523.09	TCLME	Historical	0.97	-0.0196	-0.04019	-0.00294
433	RW102C	389854.89	1427523.09	TCLME	Post-1999	0.973	-0.02105	-0.04306	-0.00417
433	RW102C	389854.89	1427523.09	TCLME	Latest	0.9871	0.01854	-0.03782	0.04914
434	RW103	389701.39	1427050.94	DCE11	Historical	0.97	0	0	0
434	RW103	389701.39	1427050.94	DCE11	Post-1999	0.973	0	0	0
434	RW103	389701.39	1427050.94	DCE11	Latest	0.9871	0	0	0
434	RW103	389701.39	1427050.94	TCE	Historical	0.97	-0.226	-0.2765	-0.09482
434	RW103	389701.39	1427050.94	TCE	Post-1999	0.973	-0.21562	-0.26547	-0.0944
434	RW103	389701.39	1427050.94	TCE	Latest	0.9871	0.08278	-0.04812	0.143
434	RW103	389701.39	1427050.94	TCLME	Historical	0.97	-0.00242	-0.0037	0.00026
434	RW103	389701.39	1427050.94	TCLME	Post-1999	0.973	-0.00243	-0.00375	-0.00022
434	RW103	389701.39	1427050.94	TCLME	Latest	0.9871	0.00146	-0.00032	0.00301

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435	RW201	390530.3622	1431288.0863	DCE11	Historical	0.9685	-0.00456	-0.00765	0
435	RW201	390530.3622	1431288.0863	DCE11	Post-1999	0.9725	-0.00456	-0.00765	0
435	RW201	390530.3622	1431288.0863	DCE11	Latest	0.9734	-0.00471	-0.00894	0
435	RW201	390530.3622	1431288.0863	TCE	Historical	0.96	-0.4615	-0.61965	-0.27011
435	RW201	390530.3622	1431288.0863	TCE	Post-1999	0.9643	-0.46512	-0.68599	-0.29692
435	RW201	390530.3622	1431288.0863	TCE	Latest	0.9653	-0.61965	-0.83356	-0.06684
435	RW201	390530.3622	1431288.0863	TCLME	Historical	0.9685	0	0	0
435	RW201	390530.3622	1431288.0863	TCLME	Post-1999	0.9725	0	0	0
435	RW201	390530.3622	1431288.0863	TCLME	Latest	0.9734	0	0	0
436	RW202	390860.3272	1431063.9248	DCE11	Historical	0.96	-0.13819	-0.15346	-0.11388
436	RW202	390860.3272	1431063.9248	DCE11	Post-1999	0.9643	-0.13819	-0.15346	-0.11388
436	RW202	390860.3272	1431063.9248	DCE11	Latest	0.9653	-0.1491	-0.16381	-0.1345
436	RW202	390860.3272	1431063.9248	TCE	Historical	0.9615	-0.50676	-0.82948	-0.3676
436	RW202	390860.3272	1431063.9248	TCE	Post-1999	0.9664	-0.4744	-0.73727	-0.31467
436	RW202	390860.3272	1431063.9248	TCE	Latest	0.9808	-0.87276	-1.43123	-0.15603
436	RW202	390860.3272	1431063.9248	TCLME	Historical	0.9685	-0.02872	-0.03067	-0.00594
436	RW202	390860.3272	1431063.9248	TCLME	Post-1999	0.9725	-0.02872	-0.03067	-0.00594
436	RW202	390860.3272	1431063.9248	TCLME	Latest	0.9734	-0.03002	-0.03338	-0.02839
437	RW203	391036.2493	1430933.7996	DCE11	Historical	0.96	0.002	-0.02603	0.03915
437	RW203	391036.2493	1430933.7996	DCE11	Post-1999	0.9787	-0.00601	-0.04893	0.05124
437	RW203	391036.2493	1430933.7996	DCE11	Latest	0.9883	0.0076	-0.1835	0.09536
437	RW203	391036.2493	1430933.7996	TCE	Historical	0.9649	38.08456	18.70655	63.05445
437	RW203	391036.2493	1430933.7996	TCE	Post-1999	0.9572	41.80302	6.07411	65.49016
437	RW203	391036.2493	1430933.7996	TCE	Latest	0.9734	63.05445	38.08456	88.14422
437	RW203	391036.2493	1430933.7996	TCLME	Historical	0.9649	0.02506	-0.07184	0.16752
437	RW203	391036.2493	1430933.7996	TCLME	Post-1999	0.9572	0.00631	-0.08272	0.12694
437	RW203	391036.2493	1430933.7996	TCLME	Latest	0.9734	0.08002	-0.25358	0.19856
439	RW206	391613.51	1430265.29	DCE11	Historical	0.97	0.04768	-0.08913	0.20035
439	RW206	391613.51	1430265.29	DCE11	Post-1999	0.9763	0.14919	-0.08913	0.29752
439	RW206	391613.51	1430265.29	DCE11	Latest	0.9775	0.36599	0.29752	0.41326
439	RW206	391613.51	1430265.29	TCE	Historical	0.9511	-0.12334	-0.26762	0.21523
439	RW206	391613.51	1430265.29	TCE	Post-1999	0.9556	-0.12317	-0.23602	0.22949
439	RW206	391613.51	1430265.29	TCE	Latest	0.9787	0.41032	-0.58313	0.58918
439	RW206	391613.51	1430265.29	TCLME	Historical	0.9685	0	0	0

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439	RW206	391613.51	1430265.29	TCLME	Post-1999	0.9564	0	0	0
439	RW206	391613.51	1430265.29	TCLME	Latest	0.9775	0	0	0
440	RW207	391155.1672	1430837.0742	DCE11	Historical	0.96	-0.04593	-0.09297	-0.02607
440	RW207	391155.1672	1430837.0742	DCE11	Post-1999	0.9649	-0.05774	-0.09297	-0.02921
440	RW207	391155.1672	1430837.0742	DCE11	Latest	0.951	-0.07949	-0.1132	-0.00449
440	RW207	391155.1672	1430837.0742	TCE	Historical	0.96	-2.99243	-10.00493	5.47381
440	RW207	391155.1672	1430837.0742	TCE	Post-1999	0.9649	-7.56224	-12.19104	-0.64643
440	RW207	391155.1672	1430837.0742	TCE	Latest	0.951	-10.00493	-13.98368	-0.5529
440	RW207	391155.1672	1430837.0742	TCLME	Historical	0.9685	-0.02007	-0.04547	0.0026
440	RW207	391155.1672	1430837.0742	TCLME	Post-1999	0.9725	-0.0234	-0.04733	-0.00049
440	RW207	391155.1672	1430837.0742	TCLME	Latest	0.9734	-0.0234	-0.04733	-0.00049
443	RW301	392566.74	1427750.1	DCE11	Historical	0.9637	-6.60461	-11.86785	-2.55812
443	RW301	392566.74	1427750.1	DCE11	Post-1999	0.956	-5.56627	-9.67251	-2.31811
443	RW301	392566.74	1427750.1	DCE11	Latest	0.9831	-15.34564	-27.41585	-7.65549
443	RW301	392566.74	1427750.1	TCE	Historical	0.97	-1.48501	-3.02981	-0.52844
443	RW301	392566.74	1427750.1	TCE	Post-1999	0.9635	-1.26505	-2.60087	-0.4628
443	RW301	392566.74	1427750.1	TCE	Latest	0.9653	-2.60087	-5.97843	-0.90726
443	RW301	392566.74	1427750.1	TCLME	Historical	0.9604	-0.01823	-0.03021	0.0062
443	RW301	392566.74	1427750.1	TCLME	Post-1999	0.9637	-0.01473	-0.0297	0.00693
443	RW301	392566.74	1427750.1	TCLME	Latest	0.9648	-0.06658	-0.0823	-0.04367
444	RW302	392821.51	1427921.57	DCE11	Historical	0.97	-0.18327	-0.19973	-0.10691
444	RW302	392821.51	1427921.57	DCE11	Post-1999	0.973	-0.17848	-0.19581	-0.10152
444	RW302	392821.51	1427921.57	DCE11	Latest	0.9871	0.08406	0.01818	0.10939
444	RW302	392821.51	1427921.57	TCE	Historical	0.97	-0.05282	-0.09043	-0.00572
444	RW302	392821.51	1427921.57	TCE	Post-1999	0.973	-0.05282	-0.09043	-0.00572
444	RW302	392821.51	1427921.57	TCE	Latest	0.9871	0.02114	0.00964	0.03097
444	RW302	392821.51	1427921.57	TCLME	Historical	0.96	0	0	0
444	RW302	392821.51	1427921.57	TCLME	Post-1999	0.9643	0	0	0
444	RW302	392821.51	1427921.57	TCLME	Latest	0.9614	0	0	0
445	RW303	392416.95	1427758.51	DCE11	Historical	0.9511	-0.19975	-0.33523	-0.0683
445	RW303	392416.95	1427758.51	DCE11	Post-1999	0.9556	-0.19975	-0.33523	-0.0683
445	RW303	392416.95	1427758.51	DCE11	Latest	0.9775	0.07665	-0.33523	0.16361
445	RW303	392416.95	1427758.51	TCE	Historical	0.96	-0.12399	-0.16277	0.04998
445	RW303	392416.95	1427758.51	TCE	Post-1999	0.9741	-0.12138	-0.16277	0.08849

TABLE 2.6
Estimated Trend Magnitudes and Confidence Intervals by COC and Well Location
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WELL#	WELLID	EASTING	NORTHING	COC	TYPE	CONF-LEV	TREND	LOWER-LIMIT	UPPER-LIMIT
445	RW303	392416.95	1427758.51	TCE	Latest	0.9614	0.42753	0.31178	0.47546
445	RW303	392416.95	1427758.51	TCLME	Historical	0.96	-0.00196	-0.00218	-0.00155
445	RW303	392416.95	1427758.51	TCLME	Post-1999	0.9741	-0.00196	-0.00219	-0.00155
445	RW303	392416.95	1427758.51	TCLME	Latest	0.9614	-0.00516	-0.01024	-0.0029
446	SCT1	391593.96	1431490.94	TCE	Historical	0.9759	-5.77815	-10.45319	-1.64244
446	SCT1	391593.96	1431490.94	TCE	Post-1999	0.9706	-7.0277	-11.67306	-2.08777
446	SCT1	391593.96	1431490.94	TCE	Latest	0.9785	-2.47603	-7.74415	1.31029
448	SCT3	391220.25	1431186.94	DCE11	Historical	0.9615	0.01264	-0.00273	0.02657
448	SCT3	391220.25	1431186.94	DCE11	Post-1999	0.9685	0.01719	-0.0021	0.02964
448	SCT3	391220.25	1431186.94	DCE11	Latest	0.9775	0.03755	-0.01599	0.04909
448	SCT3	391220.25	1431186.94	TCE	Historical	0.9649	-2.72634	-4.47636	-0.28272
448	SCT3	391220.25	1431186.94	TCE	Post-1999	0.959	-2.88049	-4.75761	-0.9303
448	SCT3	391220.25	1431186.94	TCE	Latest	0.9808	-3.67224	-5.97405	-1.48006
448	SCT3	391220.25	1431186.94	TCLME	Historical	0.9615	0.00327	-0.00583	0.00455
448	SCT3	391220.25	1431186.94	TCLME	Post-1999	0.9685	0.00363	-0.00372	0.00458
448	SCT3	391220.25	1431186.94	TCLME	Latest	0.9775	0.00443	-0.00785	0.00463

Notes:
Historical = all data; Latest = last 4 sampling events
CONF-LEV = Achieved confidence level of non-parametric confidence interval around median slope
TREND = estimated magnitude of median slope; LOWER-LIMIT = lower 95% confidence bound on trend magnitude
UPPER-LIMIT = upper 95% confidence bound on trend magnitude

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
6MW8	389103.190	1427829.410	—	√√	—	—	—	—	—	—	—	—
8MWT01	390632.320	1431155.800	√√	—	—	—	—	—	—	—	—	—
8MWT02	390536.830	1431251.000	√√	—	—	—	—	—	—	—	—	—
8MWT03	390459.730	1431132.600	√√	—	—	—	—	—	—	—	—	—
B01531	389485.054	1428458.765	—	√√	—	—	—	—	—	—	—	—
B01532	389701.377	1428935.329	√√	—	—	√√	—	—	—	—	—	—
B04539	390386.996	1428707.268	√√	—	—	—	—	—	—	—	—	—
B04540	390788.423	1428459.555	√√	—	—	—	—	—	—	—	—	—
B04541	390206.864	1428998.555	√√	—	—	—	—	—	—	—	—	—
B04542	390549.647	1429172.903	√√	—	—	—	—	—	—	—	—	—
B04543	391422.643	1428921.050	√√	—	—	—	—	—	—	—	—	—
B04545	389784.885	1429462.059	√√	—	—	√√	—	—	—	—	—	—
B04546	389957.791	1429590.172	√√	—	—	—	—	—	—	—	—	—
B04547	390007.668	1429859.622	√√	—	—	—	—	—	—	—	—	—
B04548	390140.056	1429860.359	√√	—	—	√√	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B04549	390239.863	1430044.601	√√	—	—	—	—	—	—	—	—	—
B04550	390516.704	1430226.825	√√	—	—	—	—	—	—	—	—	—
B04551	390483.757	1430602.673	√√	—	—	—	—	—	—	—	—	—
B04552	390763.610	1430994.905	√√	—	—	—	—	—	—	—	—	—
B04553	390854.770	1430515.085	√√	—	—	—	—	—	—	—	—	—
B04557	390823.000	1430183.000	√√	—	—	√√	—	—	—	—	—	—
B10-MWFD	.	.	—	√√	—	—	—	—	—	—	—	—
B10518	389411.116	1427247.020	—	√√	—	—	—	—	—	—	—	—
B10520	389528.409	1427513.075	—	√√	—	—	—	—	—	—	—	—
B10522	389831.654	1427627.507	—	√√	—	—	—	—	—	—	—	—
B10524	390172.090	1427470.162	—	√√	—	—	—	—	—	—	—	—
B10525	390255.054	1427301.375	—	√√	—	—	—	—	—	—	—	—
B10526	389914.618	1427175.499	—	√√	—	—	—	—	—	—	—	—
B10527	389834.362	1428061.812	—	√√	—	—	—	—	—	—	—	—
B10528	390600.977	1426743.919	—	√√	—	—	—	—	√√	—	—	—
B1091HP001	389483.582	1427840.238	—	√√	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B1091HP002	389580.369	1427808.836	—	√√	—	—	—	—	—	—	—	—
B1091HP005	389621.445	1427636.445	—	√√	—	—	—	—	—	—	—	—
B10A1	389492.080	1427123.180	—	√√	—	—	—	—	√√	—	—	—
B10A2	389767.050	1427027.800	—	√√	—	—	—	—	√√	—	—	—
B10ABHP001	389803.288	1427712.182	—	√√	—	—	—	—	—	—	—	—
B10ABHP002	389870.680	1427715.465	—	√√	—	—	—	—	—	—	—	—
B10ABHP004	389830.442	1427621.506	—	√√	—	—	—	—	—	—	—	—
B10ABHP005	389797.600	1427573.722	—	√√	—	—	—	—	—	—	—	—
B10ABHP007	389890.519	1427565.866	—	√√	—	—	—	—	—	—	—	—
B10ABHP008	389898.899	1427516.362	—	√√	—	—	—	—	—	—	—	—
B10ABHP009	389764.373	1427470.118	—	√√	—	—	—	—	—	—	—	—
B10ABHP010	389910.794	1427455.589	—	√√	—	—	—	—	—	—	—	—
B10B1	389675.550	1427150.470	—	√√	—	—	—	—	√√	—	—	—
B10B10	390127.440	1426968.650	—	√√	—	—	—	—	√√	—	—	—
B10B11	390220.840	1427287.910	—	√√	—	—	—	√√	—	—	—	—
B10B2	389313.540	1427083.200	—	√√	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B10B4	389537.480	1427226.490	—	√√	—	—	—	—	√√	—	—	—
B10B5	389481.110	1427101.980	—	√√	—	—	—	—	—	—	—	—
B10B8	389489.590	1427150.900	—	√√	—	—	—	—	√√	—	—	—
B10B9	389474.130	1427130.190	—	√√	—	—	—	—	√√	—	—	—
B10BGHP003	389257.995	1427445.177	—	√√	—	—	—	—	—	—	—	—
B10BGHP004	389197.333	1427461.486	—	√√	—	—	—	—	—	—	—	—
B10BGHP005	389303.560	1427520.285	—	√√	—	—	—	—	—	—	—	—
B10FD	390341.000	1427286.000	—	√√	—	—	—	—	—	—	—	—
B10MW1	389255.205	1428289.289	—	√√	—	—	—	—	—	—	—	—
B10MW2	389281.547	1428158.253	—	√√	—	—	—	—	—	—	—	—
B10MW3	389348.790	1428168.770	—	√√	—	—	—	—	—	—	—	—
B10MWA	389765.220	1427798.750	—	√√	—	—	—	√√	—	—	—	—
B10MWC	389258.650	1428290.380	—	√√	—	—	—	—	—	—	—	—
B10MWD	389925.200	1428068.820	—	√√	—	—	—	—	—	—	—	—
B10MWL	390992.950	1427033.480	—	√√	—	—	√√	—	—	—	—	—
B10MWM	390998.160	1427023.390	—	√√	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B10PIIBH001	.	.	—	√√	—	—	—	—	—	—	—	—
B10PIIBH003	.	.	—	√√	—	—	—	—	—	—	—	—
B10PIIBH004	.	.	—	√√	—	—	—	—	—	—	—	—
B10PIIBH006	389508.277	1427503.434	—	√√	—	—	—	—	—	—	—	—
B10PIIBH007	389485.922	1427510.256	—	√√	—	—	—	—	—	—	—	—
B10PIIBH009	389474.792	1427531.295	—	√√	—	—	—	—	—	—	—	—
B10PIIBH010	389486.639	1427521.266	—	√√	—	—	—	—	—	—	—	—
B10PIIBH013	.	.	—	√√	—	—	—	—	—	—	—	—
B10PIIBH014	.	.	—	√√	—	—	—	—	—	—	—	—
B10PIIBH015	389532.005	1427508.348	—	√√	—	—	—	—	—	—	—	—
B10PIIBH016	389528.854	1427524.096	—	√√	—	—	—	—	—	—	—	—
B10PIIBH019	389512.614	1427417.060	—	√√	—	—	—	—	—	—	—	—
B10PIIBH020	389426.317	1427487.853	—	√√	—	—	—	—	—	—	—	—
B10SOHP001	389368.110	1427879.601	—	√√	—	—	—	—	—	—	—	—
B10SOHP002	389561.418	1427919.050	—	√√	—	—	—	—	—	—	—	—
B10SOHP005	390236.702	1427617.066	—	√√	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B10SOHP006	390594.255	1427340.886	—	√√	—	—	—	—	—	—	—	—
B10SOHP014	389364.373	1428110.638	—	√√	—	—	—	—	—	—	—	—
B10SOHP015	390173.320	1427683.840	—	√√	—	—	—	—	—	—	—	—
B10SOHP016	390455.850	1427585.630	—	√√	—	—	—	—	—	—	—	—
B10SOHP019	390754.020	1427357.720	—	√√	—	—	—	—	—	—	—	—
B10SOHP020	390994.770	1426989.180	—	√√	—	—	—	—	—	—	—	—
B10SOHP022	389879.853	1427686.884	—	√√	—	—	—	—	—	—	—	—
B10WTHP004	389784.622	1427831.164	—	√√	—	—	—	—	—	—	—	—
B10WTHP006	389715.629	1427826.689	—	√√	—	—	—	—	—	—	—	—
B30HP020	390098.604	1430095.979	√√	—	—	—	—	—	—	—	—	—
B30HP021	389962.330	1430138.540	√√	—	—	—	—	—	—	—	—	—
B30HP023	390054.539	1430132.010	√√	—	—	—	—	—	—	—	—	—
B4MWA	391058.100	1429128.750	√√	—	—	—	—	—	—	—	—	—
B4MWAA	390201.640	1431421.590	√√	—	—	—	—	—	—	—	—	—
B4MWBB	389935.310	1430374.370	√√	—	—	—	—	—	—	—	—	—
B4MWDD	391954.130	1429350.850	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B4MWF	389651.020	1430751.230	√√	—	—	—	—	—	—	—	—	—
B4MWH	390506.370	1430372.580	√√	—	—	√√	—	—	—	—	—	—
B4MWHH	391036.490	1429825.080	√√	—	—	—	—	—	—	—	—	—
B4MWI	390517.480	1430362.210	√√	—	—	√√	—	—	—	—	—	—
B4MWQ	390642.230	1430791.460	√√	—	—	—	—	—	—	—	—	—
B4MWT	389992.370	1429611.250	√√	—	—	√√	—	—	—	—	—	—
B4MWU	390264.700	1430131.160	√√	—	—	√√	—	—	—	—	—	—
B4MWV	390711.450	1429390.550	√√	—	—	—	—	—	—	—	—	—
B76DWHP007	389940.551	1429791.731	√√	—	—	—	—	—	—	—	—	—
B76DWHP010	390050.164	1429904.397	√√	—	—	—	—	—	—	—	—	—
B76HP034	389744.079	1429723.262	√√	—	—	—	—	—	—	—	—	—
B76HP040	390133.587	1429604.740	√√	—	—	—	—	—	—	—	—	—
B76HP041	390240.713	1429535.656	√√	—	—	—	—	—	—	—	—	—
B76HP046	389579.480	1429670.840	√√	—	—	—	—	—	—	—	—	—
B76HP050	389341.690	1429766.200	√√	—	—	—	—	—	—	—	—	—
B80HP014	391837.900	1429236.950	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B90529	392254.406	1427288.402	—	—	√√	—	—	—	—	—	—	√√
B90554	392125.315	1428730.024	—	—	√√	—	—	—	—	—	—	—
B90A	392437.030	1428500.410	—	—	√√	—	—	—	—	—	—	—
B90B	392514.760	1428428.840	—	—	√√	—	—	—	—	—	—	—
B90B1	392574.480	1428280.700	—	—	√√	—	—	—	—	—	—	—
B90B10	392485.590	1427310.730	—	—	√√	—	—	—	—	—	—	—
B90B2	392238.860	1427976.170	—	—	√√	—	—	—	—	—	—	√√
B90B3	392396.030	1427929.040	—	—	√√	—	—	—	—	√√	—	√√
B90B4	392563.390	1427930.590	—	—	√√	—	—	—	—	√√	—	—
B90B5	392508.750	1428533.410	—	—	√√	—	—	—	—	—	—	—
B90B6	392778.840	1428060.620	—	—	√√	—	—	—	—	—	—	—
B90B7	392353.140	1428569.860	—	—	√√	—	—	—	—	—	—	—
B90B8	392554.480	1427426.480	—	—	√√	—	—	—	—	—	—	—
B90B9	392780.040	1427627.600	—	—	√√	—	—	—	—	—	—	—
B90BR1	392351.340	1428391.110	—	—	√√	—	—	—	—	—	—	—
B90BR2	392346.190	1427766.110	—	—	√√	—	—	—	—	—	—	√√

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B90BR3	392369.230	1427763.360	—	—	√√	—	—	—	—	—	—	√√
B90D	392543.850	1428385.680	—	—	√√	—	—	—	—	—	—	—
B90D1	392314.270	1427791.180	—	—	√√	—	—	—	—	—	—	—
B90D2	392666.130	1427877.030	—	—	√√	—	—	—	—	√√	—	—
B90D3	392148.240	1427814.950	—	—	√√	—	—	—	—	—	—	—
B90D4	392534.120	1427692.040	—	—	√√	—	—	—	—	—	—	—
B90D5	392830.010	1427885.790	—	—	√√	—	—	—	—	—	√√	—
B90D6	392992.550	1428040.580	—	—	√√	—	—	—	—	—	√√	—
B90D7	392861.750	1427407.490	—	—	√√	—	—	—	—	√√	√√	—
B90D9	.	.	—	—	√√	—	—	—	—	—	—	—
B90E1	392825.070	1428478.360	—	—	√√	—	—	—	—	—	—	—
B90E2	393257.900	1428058.850	—	—	√√	—	—	—	—	—	—	—
B90E3	393692.760	1427382.720	—	—	√√	—	—	—	—	—	—	—
B90E4	392174.100	1427551.020	—	—	√√	—	—	—	—	—	—	—
B90E5	391863.630	1427868.220	—	—	√√	—	—	—	—	—	—	—
B90E6	391890.970	1428247.130	—	—	√√	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B90E7	392364.590	1427627.740	—	—	√√	—	—	—	—	—	—	—
B90E8	392230.010	1427809.700	—	—	√√	—	—	—	—	—	—	—
B90E9	392343.000	1427614.010	—	—	√√	—	—	—	—	—	—	—
B90FD	392515.000	1427383.000	—	—	√√	—	—	—	—	—	—	—
B90GAHP005	392065.504	1428250.781	—	—	√√	—	—	—	—	—	—	—
B90MWA	392082.880	1427986.560	—	—	√√	—	—	—	—	—	—	—
B90MWB	392533.960	1427697.810	—	—	√√	—	—	—	—	—	—	—
B90MWD	392729.880	1427361.490	—	—	√√	—	—	—	—	√√	—	√√
B90MWE	391946.820	1428581.780	—	—	√√	—	—	—	—	—	—	—
B90MWG	392766.320	1427344.880	—	—	√√	—	—	—	—	√√	—	√√
B90MWGA	392656.480	1427427.440	—	—	√√	—	—	—	—	—	—	—
B90MWH	392763.040	1427785.220	—	—	√√	—	—	—	—	—	√√	—
B90MWI	392126.230	1428795.280	—	—	√√	—	—	—	—	—	—	—
B90MWJ	393097.640	1427762.670	—	—	√√	—	—	—	—	—	—	—
B90MWL	392986.950	1427021.000	—	—	√√	—	—	—	—	—	—	√√
B90N2	392092.630	1427985.740	—	—	√√	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B90PIIBH001	392429.666	1427257.773	—	—	√√	—	—	—	—	—	—	—
B90PIIBH002	392502.288	1427200.248	—	—	√√	—	—	—	—	—	—	—
B90PIIBH003	392659.226	1427141.442	—	—	√√	—	—	—	—	—	—	—
B90PIIBH004	392731.823	1427371.002	—	—	√√	—	—	—	—	—	—	—
B90PIIBH005	392829.784	1427665.732	—	—	√√	—	—	—	—	—	—	—
B90PIIBH006	.	.	—	—	√√	—	—	—	—	—	—	—
B90PSHP006	392496.443	1428509.636	—	—	√√	—	—	—	—	—	—	—
B90PZ1	392667.180	1427766.400	—	—	√√	—	—	—	—	—	—	—
B90RW1	392574.760	1427773.470	—	—	√√	—	—	—	—	√√	—	—
B90RW2	392669.730	1427838.640	—	—	√√	—	—	—	—	√√	—	—
B90RW3A	392742.720	1427877.130	—	—	√√	—	—	—	—	—	√√	—
B90SOHP002	392993.690	1428343.480	—	—	√√	—	—	—	—	—	—	—
B90SOHP003	392956.070	1427365.070	—	—	√√	—	—	—	—	—	—	—
B90SOHP004	392638.070	1427102.920	—	—	√√	—	—	—	—	—	—	—
B90SOHP005	392004.230	1427686.640	—	—	√√	—	—	—	—	—	—	—
B90SOHP006	391695.550	1427788.890	—	—	√√	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B90SOHP008	392256.830	1428697.500	—	—	√√	—	—	—	—	—	—	—
B90SOHP009	391498.650	1427930.900	—	—	√√	—	—	—	—	—	—	—
B90SOHP013	391795.953	1427472.621	—	—	√√	—	—	—	—	—	—	—
B96SRHP020	390568.553	1430817.653	√√	—	—	—	—	—	—	—	—	—
B96SRHP021	390625.660	1430834.312	√√	—	—	—	—	—	—	—	—	—
B96SRHP022	390622.153	1430805.643	√√	—	—	—	—	—	—	—	—	—
B96SRHP023	390588.681	1430789.077	√√	—	—	—	—	—	—	—	—	—
B96SRHP024	390622.742	1430761.511	√√	—	—	—	—	—	—	—	—	—
B96SRHP025	390636.274	1430786.723	√√	—	—	—	—	—	—	—	—	—
B96SRHP026	390654.880	1430808.052	√√	—	—	—	—	—	—	—	—	—
B96SRHP030	390304.976	1430704.321	√√	—	—	—	—	—	—	—	—	—
B96SRHP034	389935.647	1430374.297	√√	—	—	—	—	—	—	—	—	—
B96SRHP035	390674.481	1430774.281	√√	—	—	—	—	—	—	—	—	—
B96SRHP038	390696.298	1430816.537	√√	—	—	—	—	—	—	—	—	—
B96SRHP039	390674.290	1430841.580	√√	—	—	—	—	—	—	—	—	—
B96SRHP040	390706.282	1430881.151	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
B96SRHP042	390764.100	1430832.100	√√	—	—	—	—	—	—	—	—	—
B96SRHP043	.	.	√√	—	—	—	—	—	—	—	—	—
B96SRHP053	389963.100	1431477.210	√√	—	—	—	—	—	—	—	—	—
C130HP026	390749.660	1429465.690	√√	—	—	—	—	—	—	—	—	—
D5-10	390388.519	1427076.569	—	√√	—	—	√√	—	—	—	—	—
D5-11	390576.617	1427075.618	—	√√	—	—	√√	—	—	—	—	—
D5-26	390495.333	1427185.193	—	√√	—	—	√√	—	—	—	—	—
D5-34	390414.371	1427179.979	—	√√	—	—	√√	—	—	—	—	—
D5-35	390696.920	1427107.030	—	√√	—	—	√√	—	—	—	—	—
D5-36	390776.250	1427016.030	—	√√	—	—	√√	—	—	—	—	—
D5-37	390890.480	1426919.050	—	√√	—	—	√√	—	—	—	—	—
D5-9	390448.730	1426727.320	—	√√	—	—	—	—	√√	—	—	—
DPT502	389133.217	1427850.329	—	√√	—	—	—	—	—	—	—	—
DPT511	389105.303	1428479.728	—	√√	—	—	—	—	—	—	—	—
DPT516	389684.287	1429704.202	√√	—	—	—	—	—	—	—	—	—
DPW-1	389920.928	1429639.006	√√	—	—	√√	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
DPW-2	389880.033	1429699.257	√√	—	—	√√	—	—	—	—	—	—
DPW-3	389978.842	1429670.751	√√	—	—	√√	—	—	—	—	—	—
GWD001	389389.794	1428434.882	—	√√	—	—	—	—	—	—	—	—
GWD002	390418.305	1428235.184	√√	—	—	—	—	—	—	—	—	—
GWD003	390519.746	1428567.970	√√	—	—	—	—	—	—	—	—	—
GWD005	391120.524	1428956.304	√√	—	—	—	—	—	—	—	—	—
GWD006	391235.271	1428732.872	√√	—	—	—	—	—	—	—	—	—
GWD007	391314.327	1428590.413	√√	—	—	—	—	—	—	—	—	—
GWD036	390403.690	1428194.520	√√	—	—	—	—	—	—	—	—	—
ITD1	389234.230	1427520.430	—	√√	—	—	—	√√	—	—	—	—
ITD2	390053.330	1427270.950	—	√√	—	—	√√	—	—	—	—	—
ITD3	389854.320	1426865.350	—	√√	—	—	—	—	√√	—	—	—
ITD4	389418.670	1427247.800	—	√√	—	—	√√	—	√√	—	—	—
ITD5	389794.390	1427246.930	—	√√	—	—	√√	—	—	—	—	—
ITD6	389880.170	1427386.700	—	√√	—	—	—	√√	—	—	—	—
ITD7	389865.850	1427483.450	—	√√	—	—	—	√√	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
ITD8	389104.800	1427536.400	—	√√	—	—	—	√√	—	—	—	—
ITS1	389775.160	1427572.720	—	√√	—	—	—	√√	—	—	—	—
ITS10	389770.650	1427800.460	—	√√	—	—	—	√√	—	—	—	—
ITS11	389261.150	1427265.760	—	√√	—	—	√√	—	√√	—	—	—
ITS2	390112.420	1427579.730	—	√√	—	—	—	—	—	—	—	—
ITS3	390049.050	1427293.300	—	√√	—	—	√√	—	—	—	—	—
ITS4	389499.230	1427381.250	—	√√	—	—	—	—	—	—	—	—
ITS5	389467.120	1426709.220	—	√√	—	—	—	—	√√	—	—	—
ITS6	389969.100	1426722.970	—	√√	—	—	—	—	√√	—	—	—
ITS7	390200.260	1426950.410	—	√√	—	—	—	—	√√	—	—	—
ITS8	390358.110	1427060.230	—	√√	—	—	√√	—	—	—	—	—
ITS9	390460.450	1427309.680	—	√√	—	—	—	√√	—	—	—	—
LD-TW-01	390565.560	1429757.100	√√	—	—	—	—	—	—	—	—	—
LD-TW-02	390579.040	1430883.300	√√	—	—	—	—	—	—	—	—	—
LD-TW-03	390401.370	1429790.500	√√	—	—	—	—	—	—	—	—	—
LD-TW-04	390293.340	1429746.300	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
LD-TW-05	390602.290	1429712.800	√√	—	—	—	—	—	—	—	—	—
LD-TW-06	390225.290	1429794.800	√√	—	—	—	—	—	—	—	—	—
LD-TW-07	390635.140	1430814.800	√√	—	—	—	—	—	—	—	—	—
LD-TW-08	390178.840	1429872.600	√√	—	—	—	—	—	—	—	—	—
LD-TW-09	390345.190	1429706.300	√√	—	—	—	—	—	—	—	—	—
MW-2	389668.680	1429091.720	√√	—	—	√√	—	—	—	—	—	—
MW-W1	389787.910	1429465.250	√√	—	—	√√	—	—	—	—	—	—
MW-W2	390408.671	1429978.657	√√	—	—	√√	—	—	—	—	—	—
MW1	390098.280	1430102.410	√√	—	—	—	—	—	—	—	—	—
MW10	391444.740	1428222.790	√√	—	—	—	—	—	—	—	—	—
MW11	391342.650	1428154.170	√√	—	—	—	—	—	—	—	—	—
MW11A	391342.650	1428154.170	√√	—	—	—	—	—	—	—	—	—
MW22	389246.870	1427501.110	—	√√	—	—	—	√√	—	—	—	—
MW23	389708.400	1427253.610	—	√√	—	—	√√	—	—	—	—	—
MW24	389890.980	1427303.140	—	√√	—	—	√√	√√	—	—	—	—
MW25	389841.180	1427469.740	—	√√	—	—	—	√√	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
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WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
MW26	389939.560	1429596.800	√√	—	—	—	—	—	—	—	—	—
MW27	390355.320	1429988.400	√√	—	—	√√	—	—	—	—	—	—
MW28	390745.100	1429918.300	√√	—	—	—	—	—	—	—	—	—
MW29	390848.690	1430557.780	√√	—	—	—	—	—	—	—	—	—
MW30A	391100.590	1430872.210	√√	—	—	—	—	—	—	—	—	—
MW30B	391096.780	1430876.380	√√	—	—	—	—	—	—	—	—	—
MW31	390987.640	1430191.720	√√	—	—	—	—	—	—	—	—	—
MW5	390538.260	1430020.140	√√	—	—	√√	—	—	—	—	—	—
MW52	391791.330	1430049.170	√√	—	—	—	—	—	—	—	—	—
MW53	391515.650	1430113.840	√√	—	—	—	—	—	—	—	—	—
MW54	391469.750	1430193.220	√√	—	—	—	—	—	—	—	—	—
MW56	391363.950	1430438.330	√√	—	—	—	—	—	—	—	—	—
MW6	390375.419	1429767.194	√√	—	—	√√	—	—	—	—	—	—
MW7	391637.290	1430175.608	√√	—	—	—	—	—	—	—	—	—
MW9	389713.000	1427563.190	—	√√	—	—	—	√√	—	—	—	—
MWG1	389951.440	1429630.230	√√	—	—	√√	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
MWG10	390358.870	1430287.860	√√	—	—	√√	—	—	—	—	—	—
MWG11	390841.830	1430616.580	√√	—	—	—	—	—	—	—	—	—
MWG12	391633.430	1429886.810	√√	—	—	—	—	—	—	—	—	—
MWG14	391368.360	1430003.250	√√	—	—	—	—	—	—	—	—	—
MWG15	391335.530	1430101.700	√√	—	—	—	—	—	—	—	—	—
MWG16	391645.560	1430136.140	√√	—	—	—	—	—	—	—	—	—
MWG17	391718.660	1430136.860	√√	—	—	—	—	—	—	—	—	—
MWG19	391646.290	1430132.590	√√	—	—	—	—	—	—	—	—	—
MWG1A	389950.310	1429626.790	√√	—	—	√√	—	—	—	—	—	—
MWG2	390162.470	1429689.520	√√	—	—	√√	—	—	—	—	—	—
MWG20	391635.890	1430299.920	√√	—	—	—	—	—	—	—	—	—
MWG21	391354.630	1430435.350	√√	—	—	—	—	—	—	—	—	—
MWG22	391499.620	1430490.720	√√	—	—	—	—	—	—	—	—	—
MWG3	389836.310	1429719.020	√√	—	—	√√	—	—	—	—	—	—
MWG31	390987.640	1430191.720	√√	—	—	—	—	—	—	—	—	—
MWG4	390562.099	1429820.918	√√	—	—	√√	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
MWG5	390432.260	1429974.050	√√	—	—	√√	—	—	—	—	—	—
MWG5-5	390639.026	1430787.665	√√	—	—	—	—	—	—	—	—	—
MWG5-5R	390639.060	1430789.880	√√	—	—	—	—	—	—	—	—	—
MWG5-6	390729.870	1430718.450	√√	—	—	—	—	—	—	—	—	—
MWG6	390485.370	1430546.760	√√	—	—	√√	—	—	—	—	—	—
MWG7	390844.210	1429759.710	√√	—	—	—	—	—	—	—	—	—
OB201A	390483.210	1431264.710	√√	—	—	—	—	—	—	—	—	—
OB201B	390484.360	1431259.430	√√	—	—	—	—	—	—	—	—	—
OB204A	391400.320	1430633.240	√√	—	—	—	—	—	—	—	—	—
OB204B	391358.910	1430664.950	√√	—	—	—	—	—	—	—	—	—
OB205A	391492.682	1430489.635	√√	—	—	—	—	—	—	—	—	—
OB208A	390695.390	1431206.901	√√	—	—	—	—	—	—	—	—	—
OB208C	390619.550	1431253.090	√√	—	—	—	—	—	—	—	—	—
OB209A	391306.494	1430739.754	√√	—	—	—	—	—	—	—	—	—
OB302C	392756.640	1427885.850	—	—	√√	—	—	—	—	—	√√	—
OW1A	391111.370	1430776.010	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
OW5A	389893.740	1427431.720	—	√√	—	—	—	√√	—	—	—	—
OW6	390008.930	1427552.480	—	√√	—	—	—	√√	—	—	—	—
OW7	390020.460	1427487.530	—	√√	—	—	—	√√	—	—	—	—
OW8	389901.200	1427396.930	—	√√	—	—	—	√√	—	—	—	—
PMW10	390418.250	1428235.550	√√	—	—	—	—	—	—	—	—	—
PMW10D	390416.140	1428224.260	√√	—	—	—	—	—	—	—	—	—
PMW7	390024.930	1431438.810	√√	—	—	—	—	—	—	—	—	—
PMW7D	390038.390	1431433.980	√√	—	—	—	—	—	—	—	—	—
PZ-1A	390207.880	1427393.650	—	√√	—	—	—	√√	—	—	—	—
PZ-1B	390209.590	1427394.700	—	√√	—	—	—	√√	—	—	—	—
PZ-1C	390213.300	1427396.520	—	√√	—	—	—	√√	—	—	—	—
PZ-2A	390286.340	1427400.490	—	√√	—	—	—	√√	—	—	—	—
PZ-2B	390283.710	1427403.980	—	√√	—	—	—	√√	—	—	—	—
PZ-2C	390281.360	1427407.640	—	√√	—	—	—	√√	—	—	—	—
PZ-3A	390366.983	1427256.281	—	√√	—	—	—	—	—	—	—	—
PZ-3B	390367.970	1427257.640	—	√√	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
PZ-4A	390452.870	1427288.060	—	√√	—	—	—	√√	—	—	—	—
PZ-4B	390453.760	1427291.830	—	√√	—	—	—	√√	—	—	—	—
PZ-4C	390454.980	1427295.670	—	√√	—	—	—	√√	—	—	—	—
RW-1	392677.520	1428522.150	—	—	√√	—	—	—	—	—	—	—
RW-10	392745.834	1428154.639	—	—	√√	—	—	—	—	—	—	—
RW-2	392551.490	1428513.000	—	—	√√	—	—	—	—	—	—	—
RW-3	392723.920	1428449.960	—	—	√√	—	—	—	—	—	—	—
RW-4	392377.440	1428375.630	—	—	√√	—	—	—	—	—	—	—
RW-5	392616.320	1428377.640	—	—	√√	—	—	—	—	—	—	—
RW-6	392725.830	1428319.510	—	—	√√	—	—	—	—	—	—	—
RW-7	392529.120	1428330.120	—	—	√√	—	—	—	—	—	—	—
RW-8	392659.630	1428252.250	—	—	√√	—	—	—	—	—	—	—
RW101	390065.570	1427200.260	—	√√	—	—	√√	—	—	—	—	—
RW102C	389854.890	1427523.090	—	√√	—	—	—	√√	—	—	—	—
RW103	389701.390	1427050.940	—	√√	—	—	—	—	√√	—	—	—
RW201	390530.362	1431288.086	√√	—	—	—	—	—	—	—	—	—

TABLE 2.7
Wells Included in Temporal Variogram Analyses, Broken Down by Site and ICM Well Set
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

WELLID	EASTING	NORTHING	B04-SET	B10-SET	B90-SET	B76-SET	RW101-SET	RW102C-SET	RW103-SET	RW301-SET	RW302-SET	RW303-SET
RW202	390860.327	1431063.925	√√	—	—	—	—	—	—	—	—	—
RW203	391036.249	1430933.800	√√	—	—	—	—	—	—	—	—	—
RW204	391389.280	1430635.300	√√	—	—	—	—	—	—	—	—	—
RW206	391613.510	1430265.290	√√	—	—	—	—	—	—	—	—	—
RW207	391155.167	1430837.074	√√	—	—	—	—	—	—	—	—	—
RW208	390687.661	1431210.987	√√	—	—	—	—	—	—	—	—	—
RW209	391306.520	1430738.610	√√	—	—	—	—	—	—	—	—	—
RW301	392566.740	1427750.100	—	—	√√	—	—	—	—	√√	—	—
RW302	392821.510	1427921.570	—	—	√√	—	—	—	—	—	√√	—
RW303	392416.950	1427758.510	—	—	√√	—	—	—	—	—	—	√√
SRB1PIIHP005	390375.318	1431195.940	√√	—	—	—	—	—	—	—	—	—
ST08-DP04C	389292.710	1426829.770	—	√√	—	—	—	—	—	—	—	—
ST08-DP08	389318.290	1426833.550	—	√√	—	—	—	—	—	—	—	—
ST08-DP09	389268.520	1426825.500	—	√√	—	—	—	—	—	—	—	—
U-133	392657.012	1427140.674	—	—	√√	—	—	—	—	—	—	—
U-134	392312.970	1427368.040	—	—	√√	—	—	—	—	—	—	—

the temporal correlation information contained in the sampling data. Operationally, consecutive samples collected at this secondary range are still correlated to some degree, but are much less correlated than samples with shorter lag times. In this sense, Table 2.8 below recommends the secondary range as an optimal sampling interval, since it provides the best practical estimate of an optimal sampling frequency, given the available data.

As was noted for iterative thinning, the recommendations on sampling frequency for these well groups are strictly data driven. Other regulatory or engineering considerations may need to be accommodated in the assignment of final sampling schedules. The sampling intervals listed below offer a summary of the statistical information provided by AFP 6 data and how that information can be used to influence AFP 6 operations.

TABLE 2.8
Recommended Well Set Sampling Intervals
Temporal Analysis, Optimization Report
Air Force Plant 6, Marietta, GA

Well Set	Temporal Variogram Range			Sampling Interval
	DCE11	TCE	TCLME	
B-04	160 wks; 70 wks (secondary)	150 wks	70 wks (secondary)	5 qtrs or 12 qtrs
B10	110-120 wks	100 wks	70-100 wks	8 qtrs
B90	None < 200 wks	110 wks	50-60 wks (secondary)	8 qtrs
B76	None apparent	None < 200 wks	None apparent	—
RW101	100-110 wks (possible); 50 wks (secondary)	120 wks	100-110 wks (possible)	8 qtrs
RW102C	None < 200 wks	150 wks	60-70 wks	12 qtrs
RW103	Insufficient data	80-90 wks (possible)	None apparent	—
RW301	35-50 wks (secondary)	40-50 wks (secondary)	None apparent	3 qtrs
RW302	110-120 wks (possible)	60-80 wks (possible)	40-50 wks (secondary)	4 qtrs
RW303	None < 200 wks	150-160 wks; 40-50 wks (secondary)	50-60 wks (secondary)	4 qtrs

2.4 References

Cameron, K. & Hunter, P. (2002) Using spatial models and kriging techniques to optimize long-term groundwater monitoring networks: a case study. Environmetrics, 13:629-656.

Loader, C. (1999) Local Regression and Likelihood. New York: Springer-Verlag.

Spatial Analysis Appendix A

Figure A-1. DCE11: Change in Global Variance as Percent Removal Varies

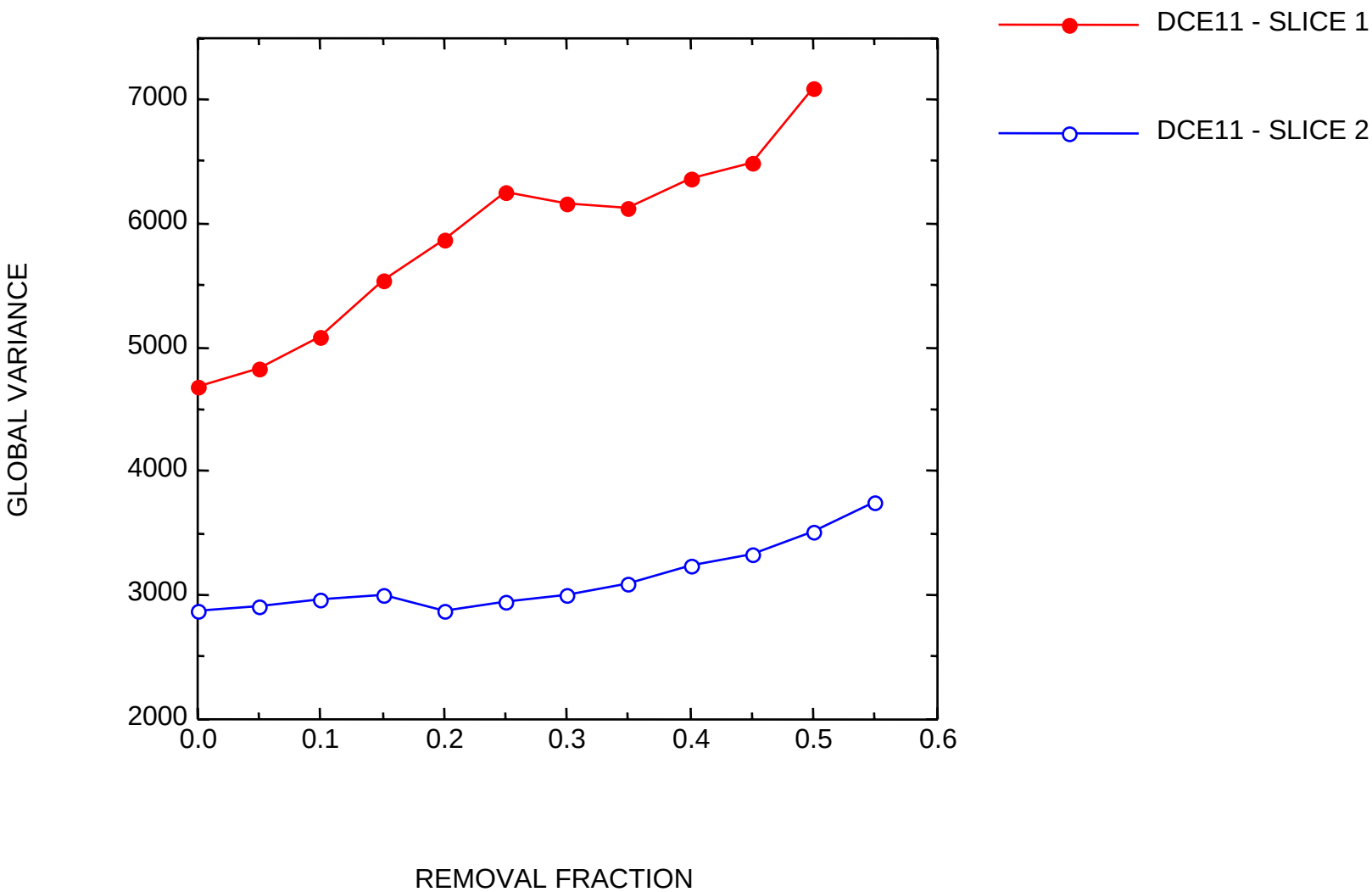


Figure A-2. TCE: Change in Global Variance as Percent Removal Varies

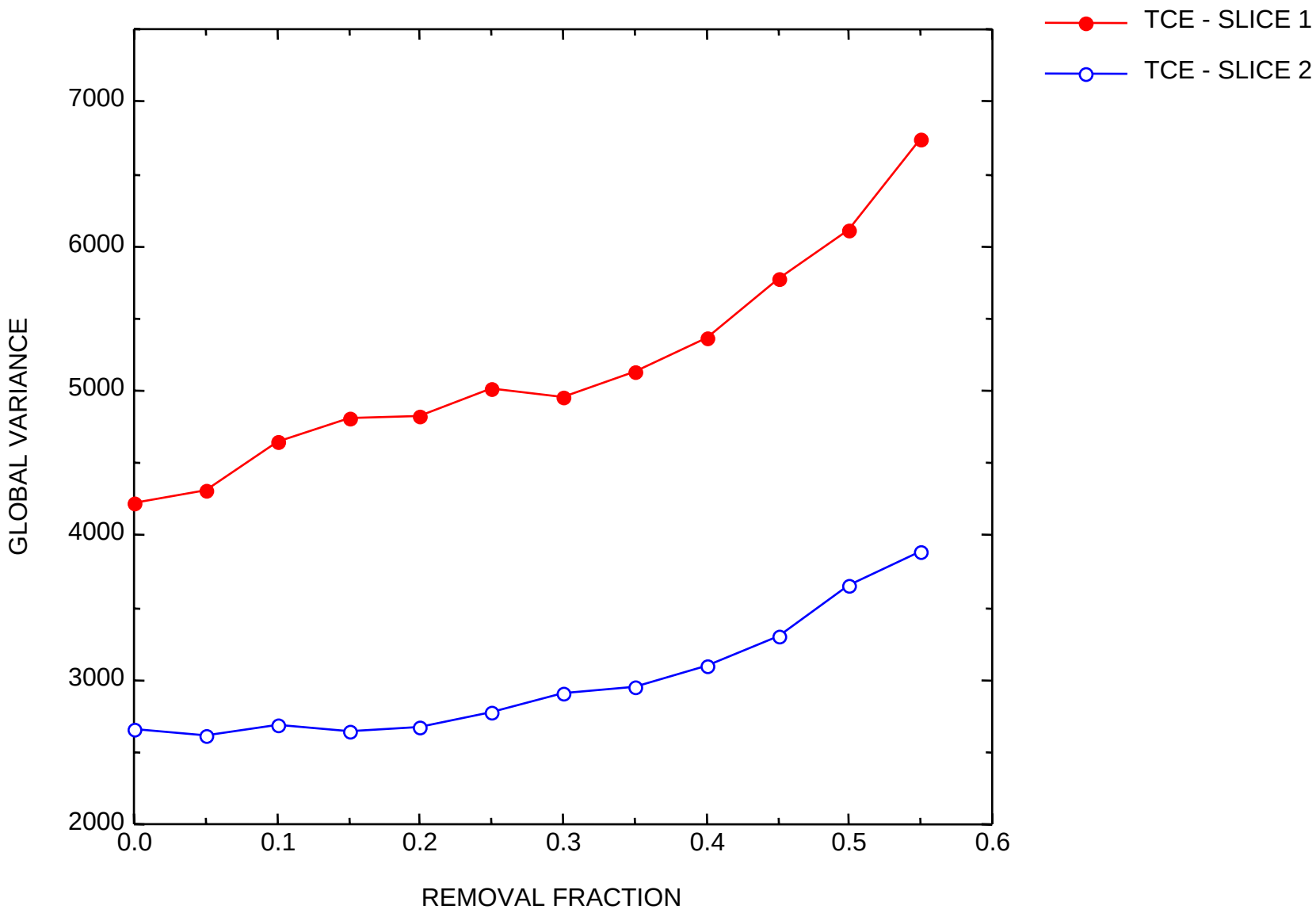


Figure A-3. TCLME: Change in Global Variance as Percent Removal Varies

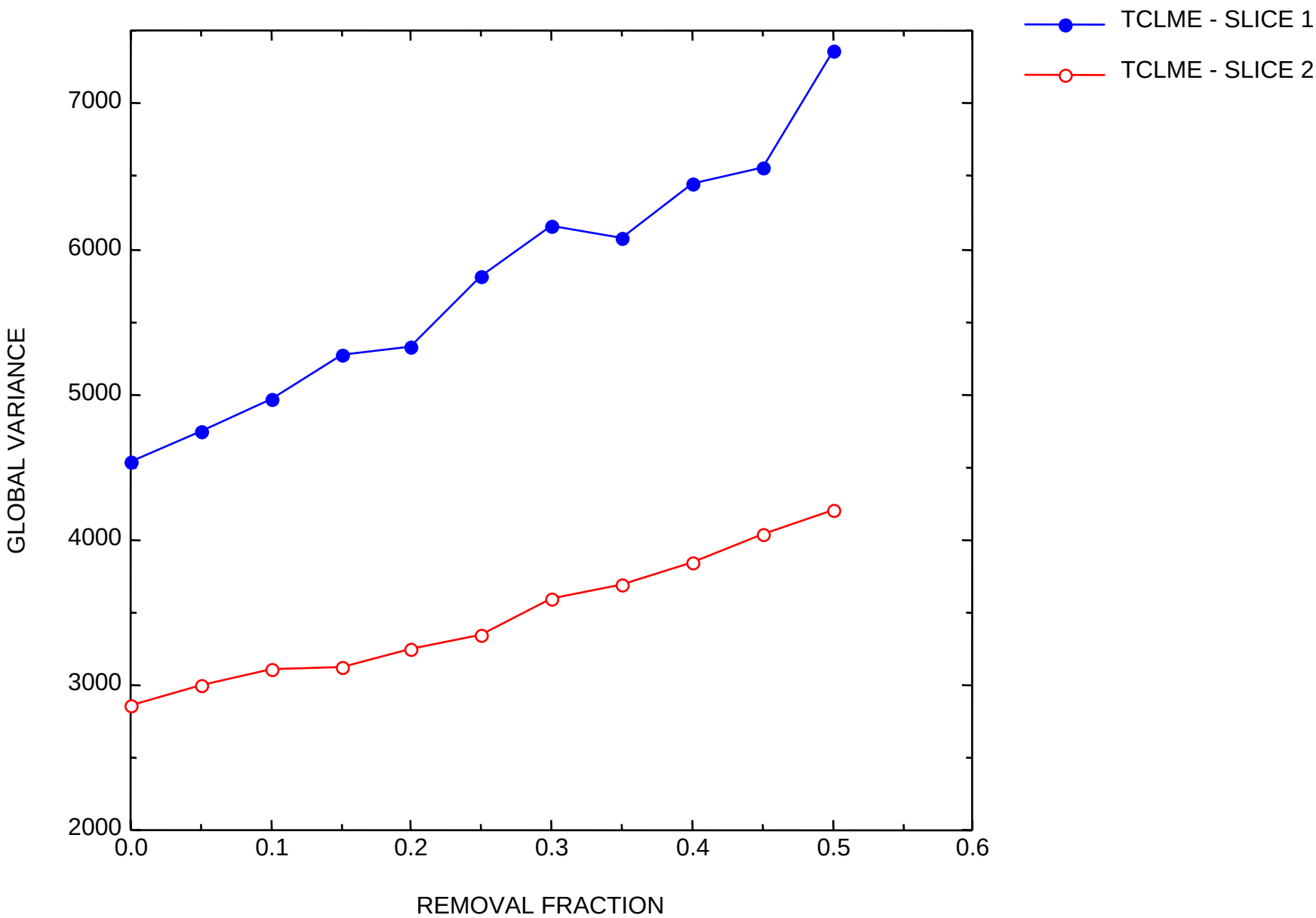


Figure A-4. DCE11: Relative Measures of Map Deterioration, Part 1

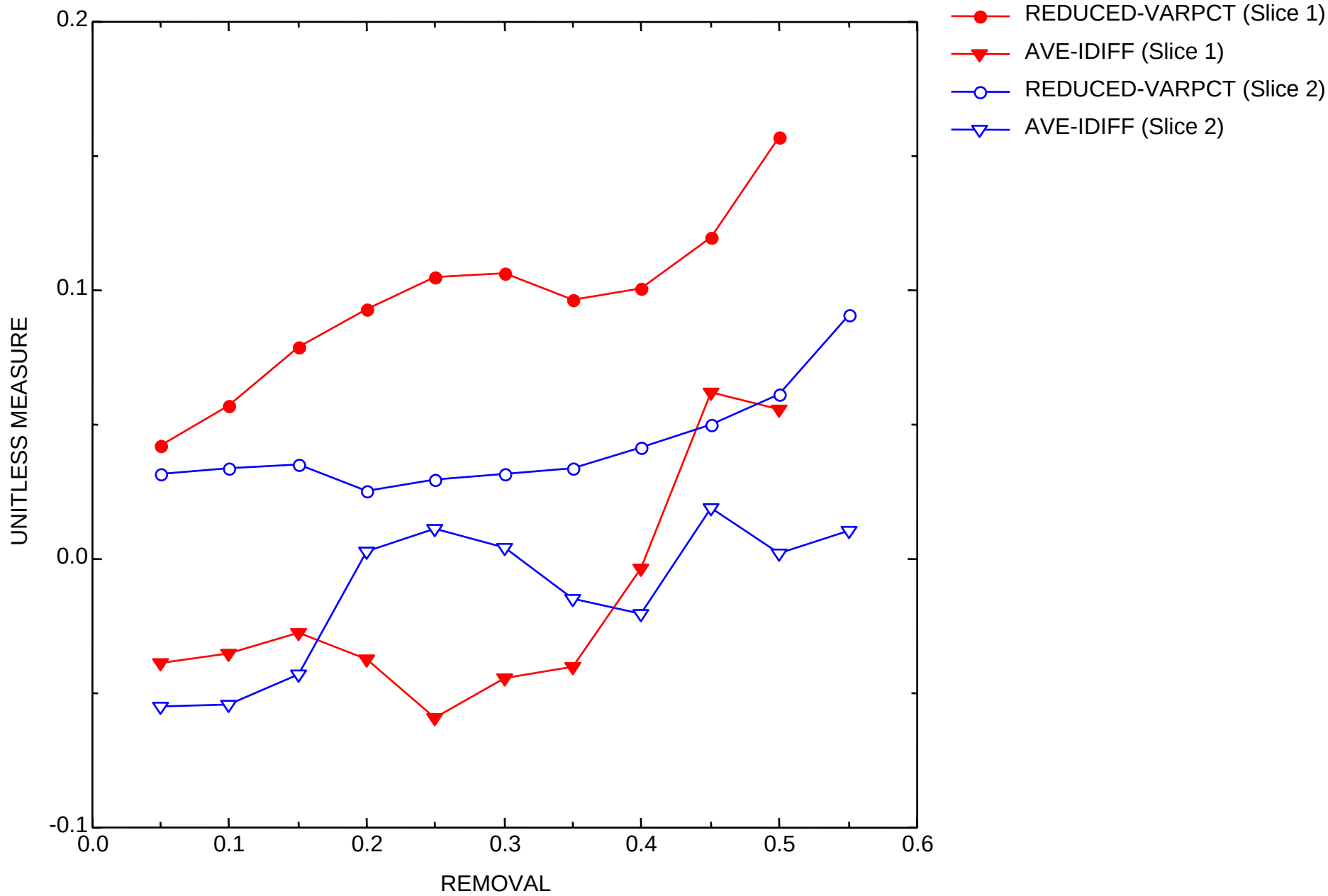


Figure A-5. TCE: Relative Measures of Map Deterioration, Part 1

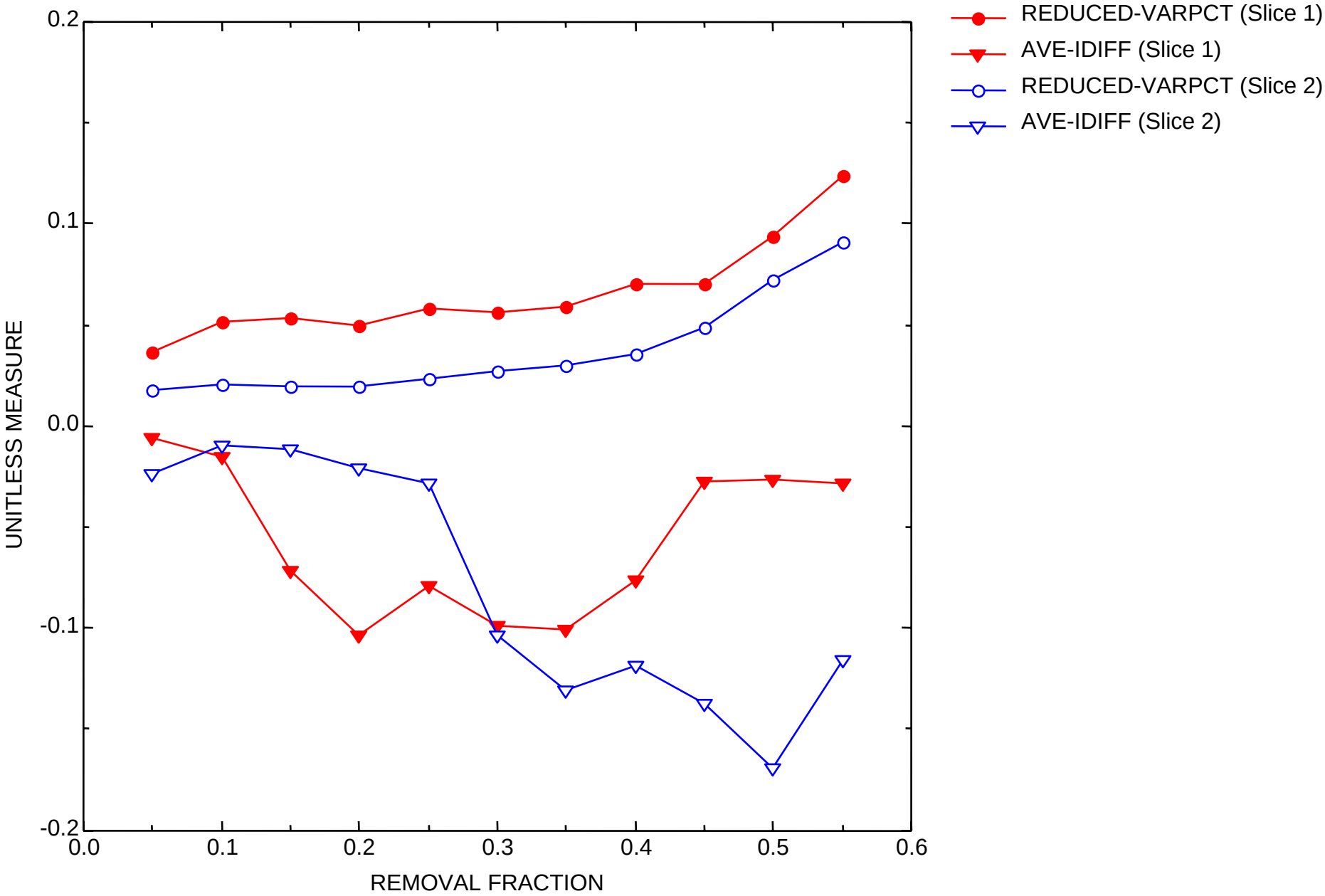


Figure A-6. TCLME: Relative Measures of Map Deterioration, Part 1

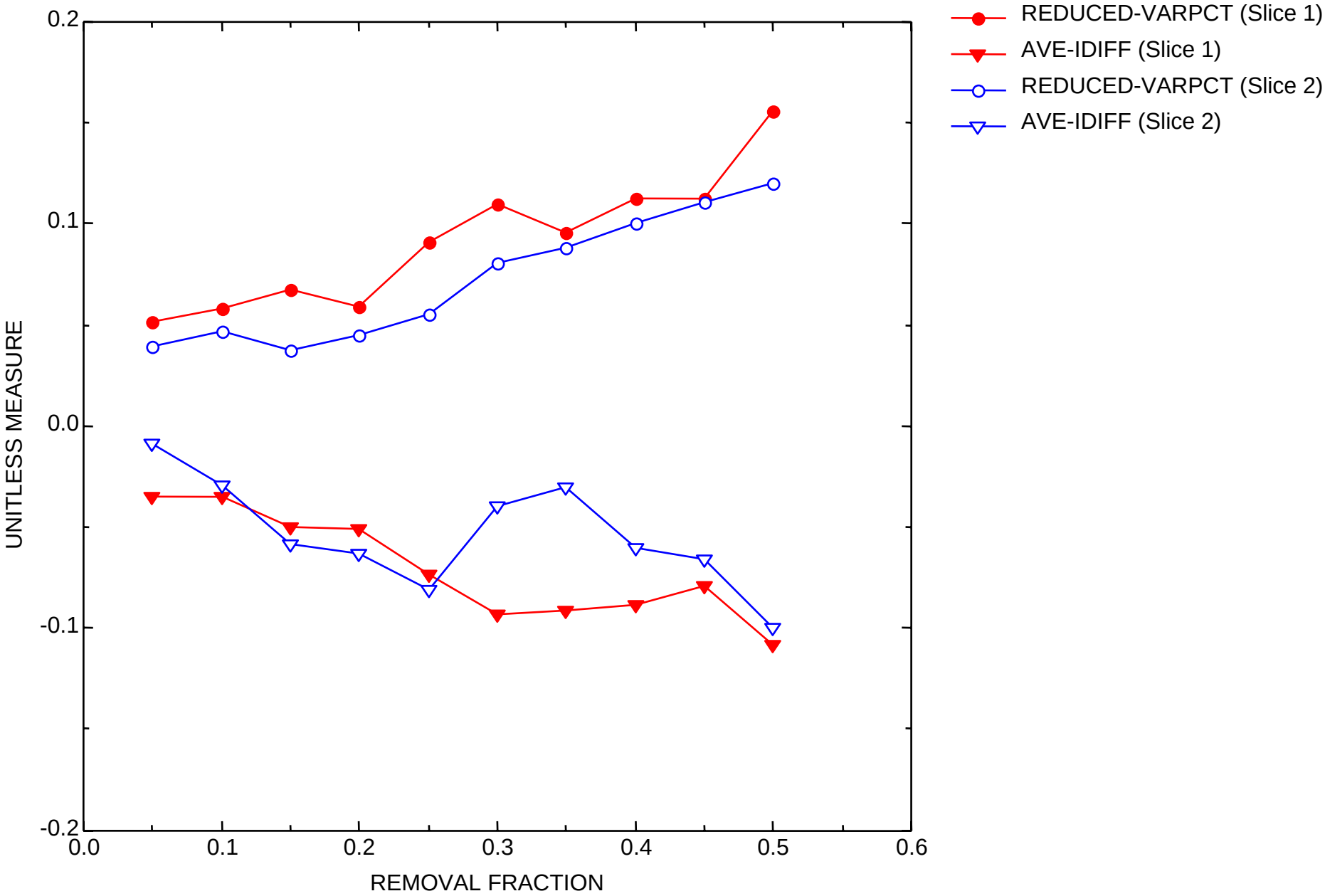


Figure A-7. DCE11: Relative Measures of Map Deterioration, Part II

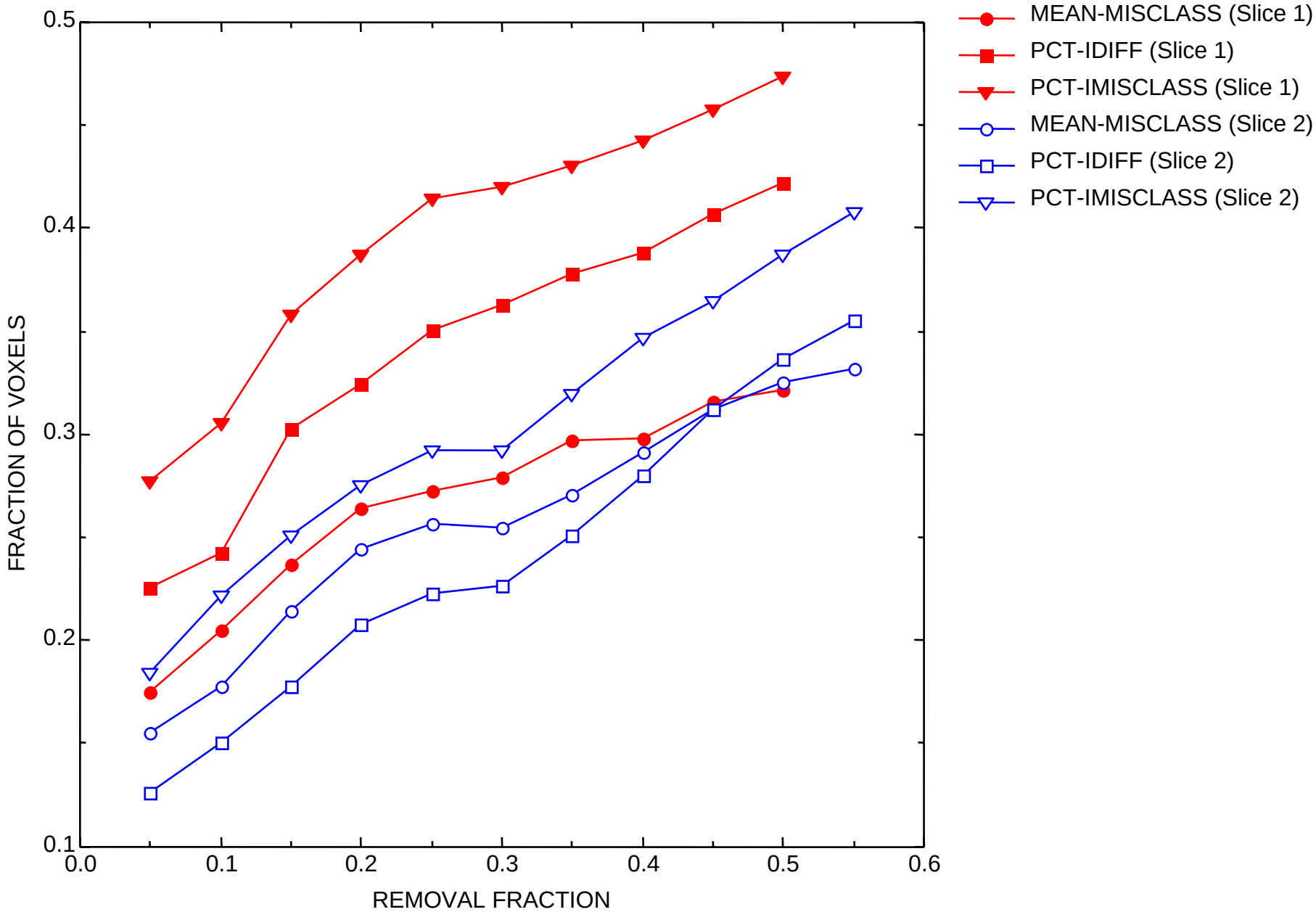


Figure A-8. TCE: Relative Measures of Map Deterioration, Part II

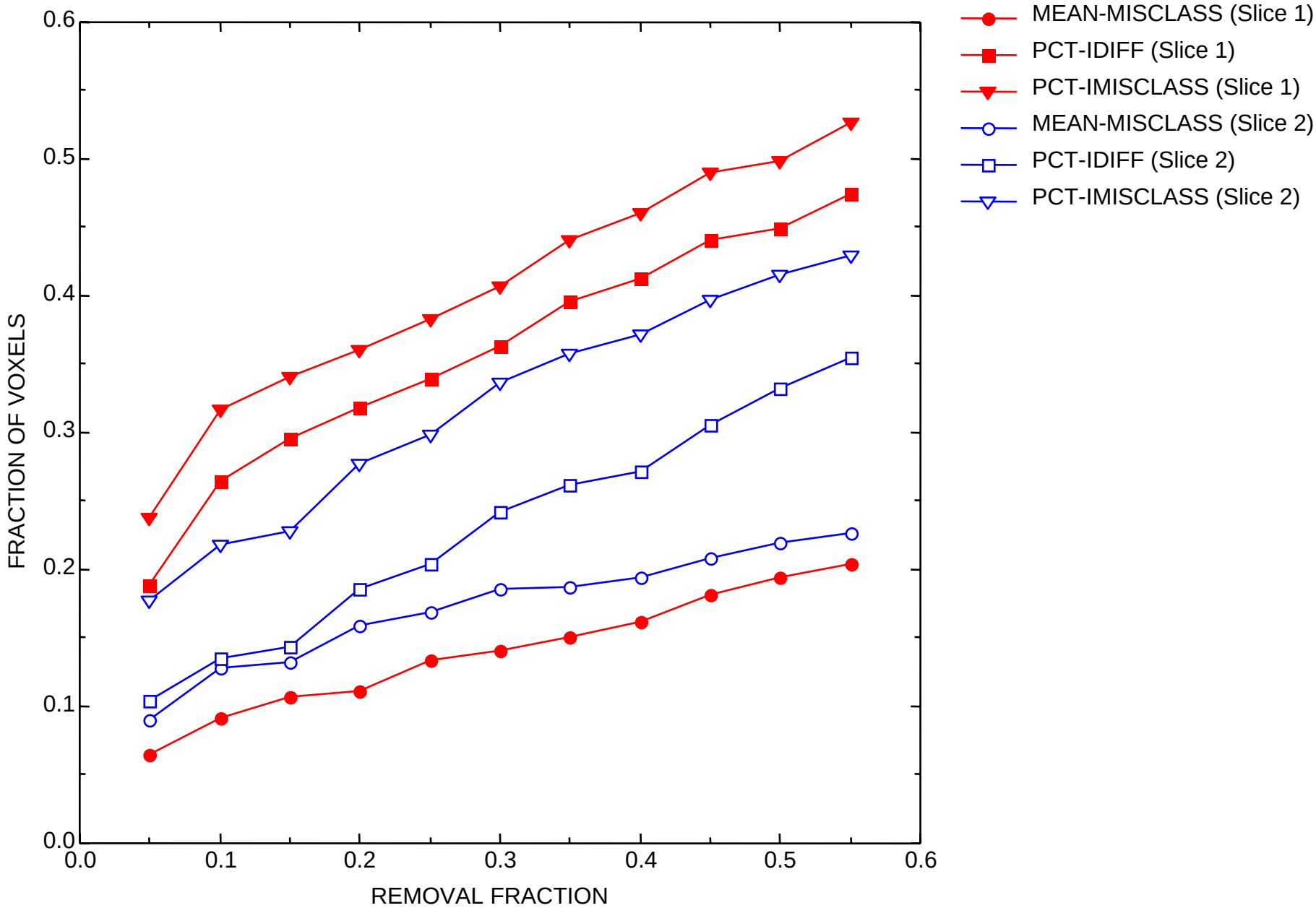
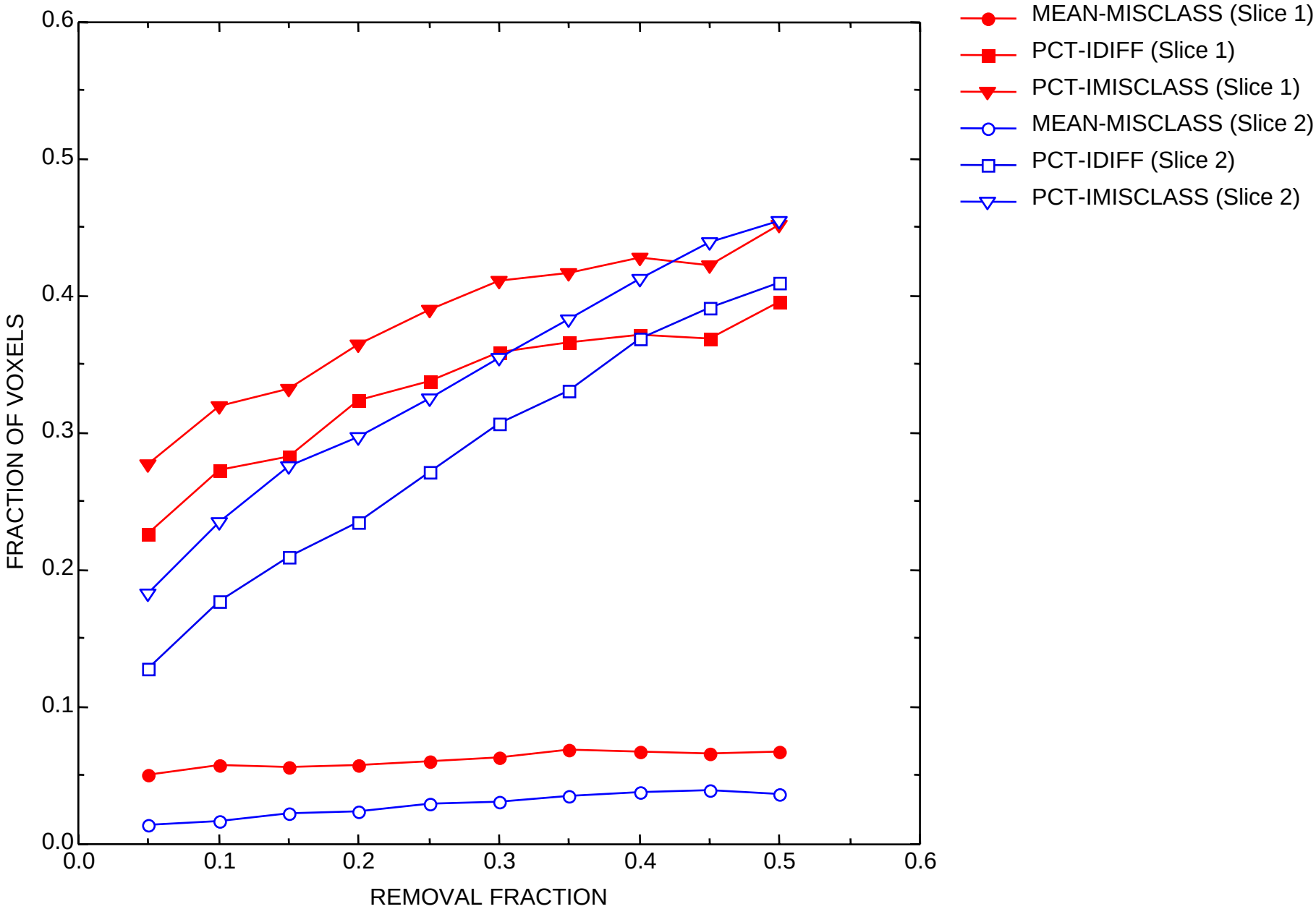
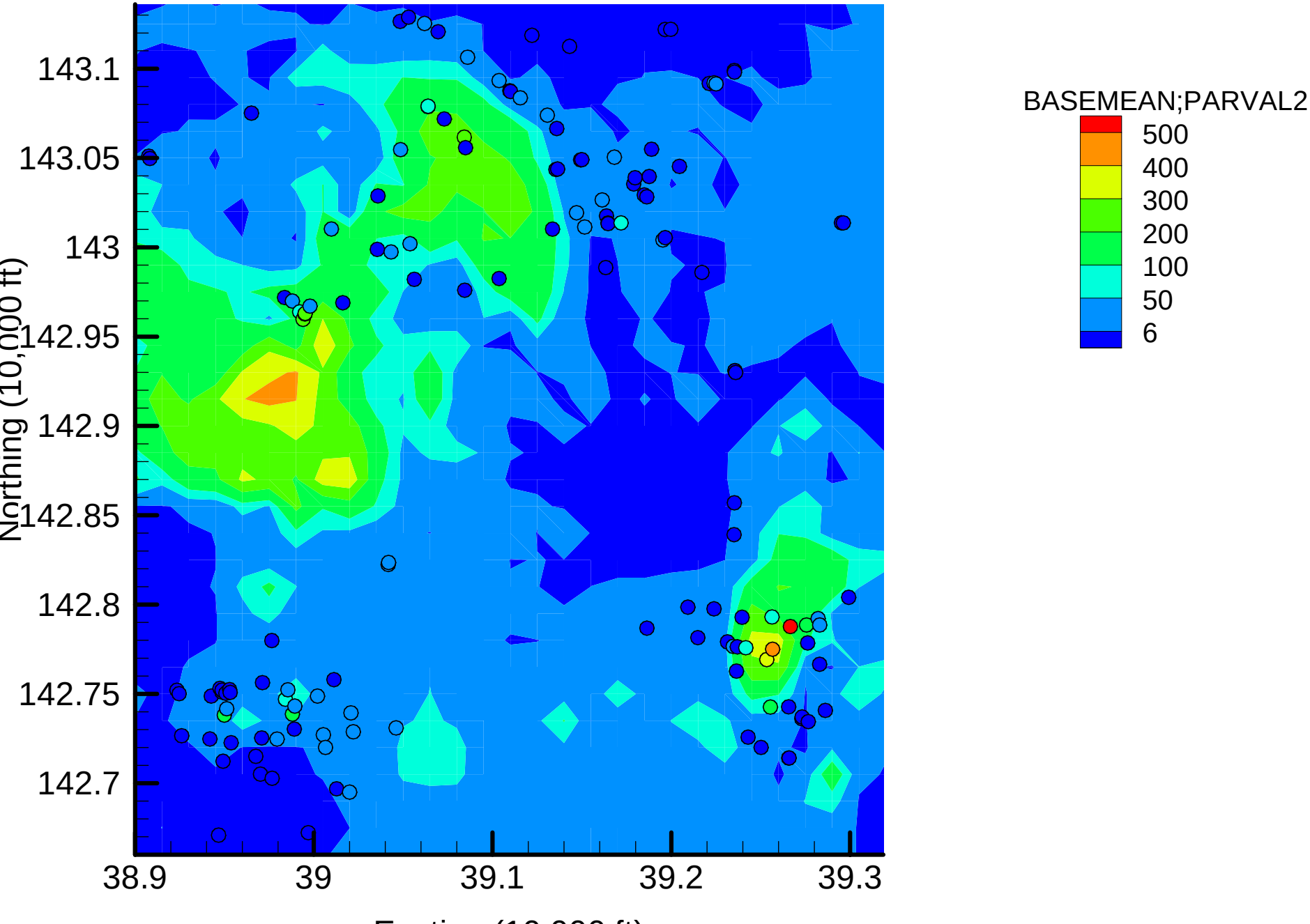


Figure A-9. TCLME: Relative Measures of Map Deterioration, Part II

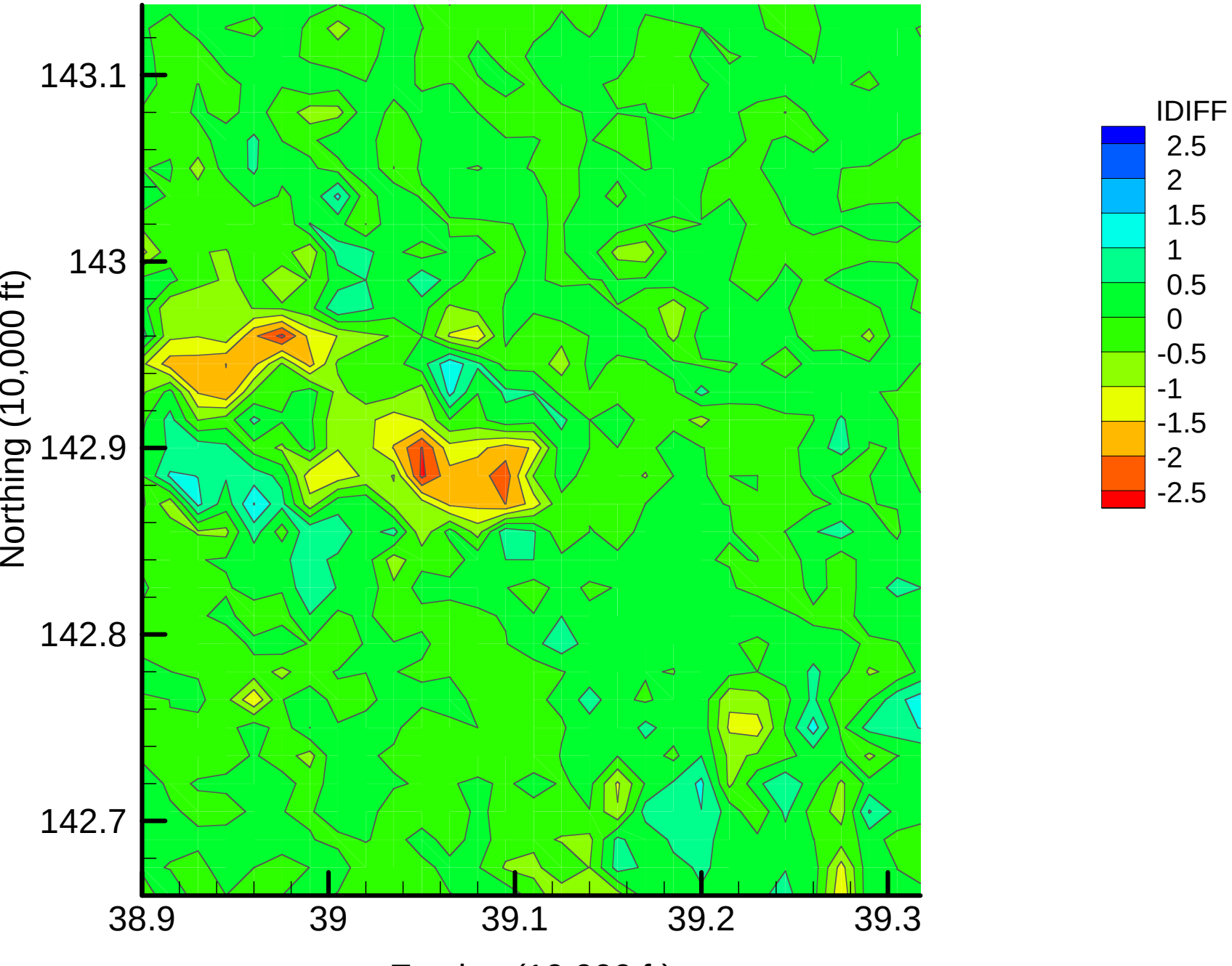


Spatial Analysis Appendix B

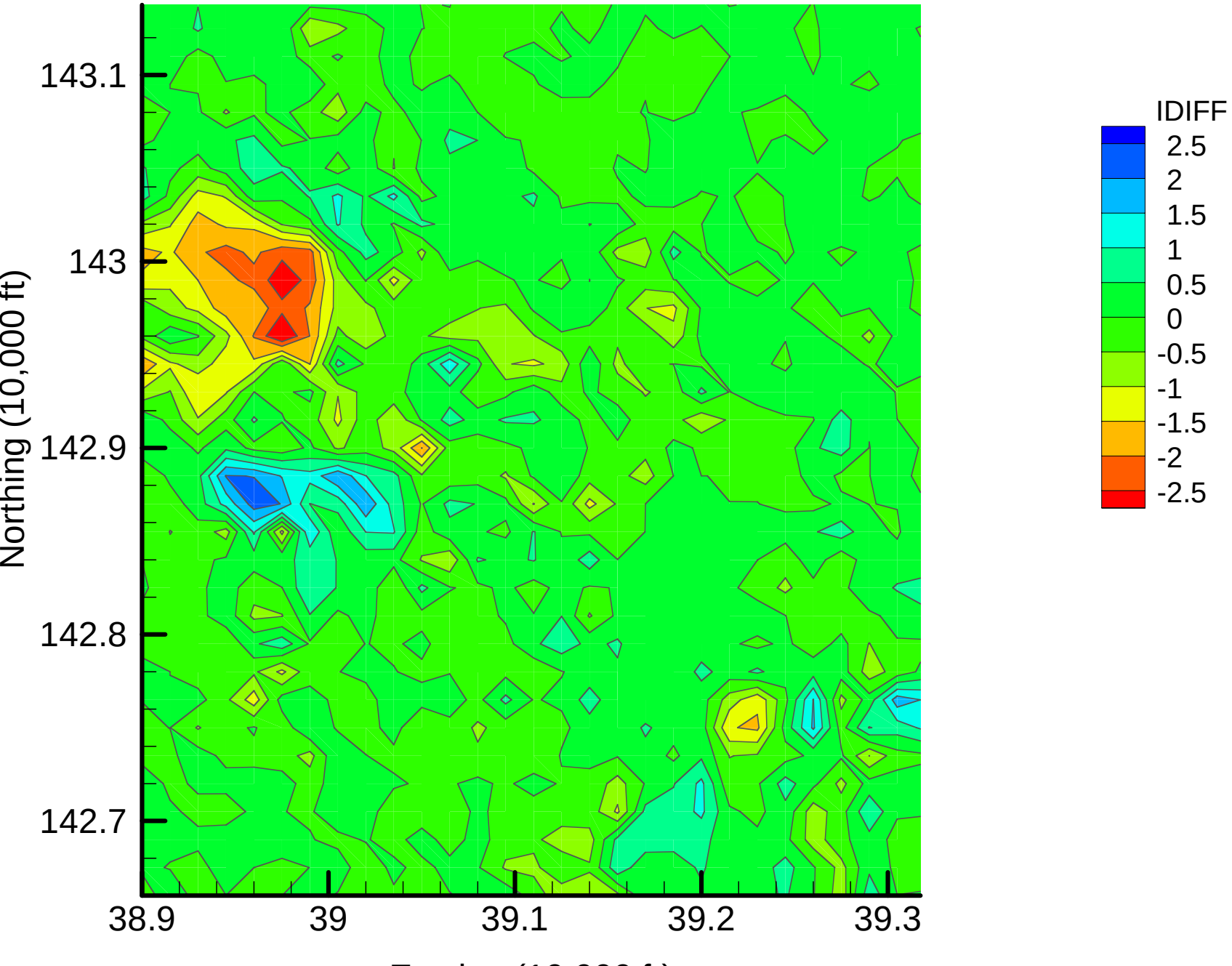
DCE11: Slice 1: Estimated Concentration Base Map (ppb)



DCE11: Slice 1: Indicator Difference Map: 5% Removal



DCE11: Slice 1: Indicator Difference Map: 10% Removal



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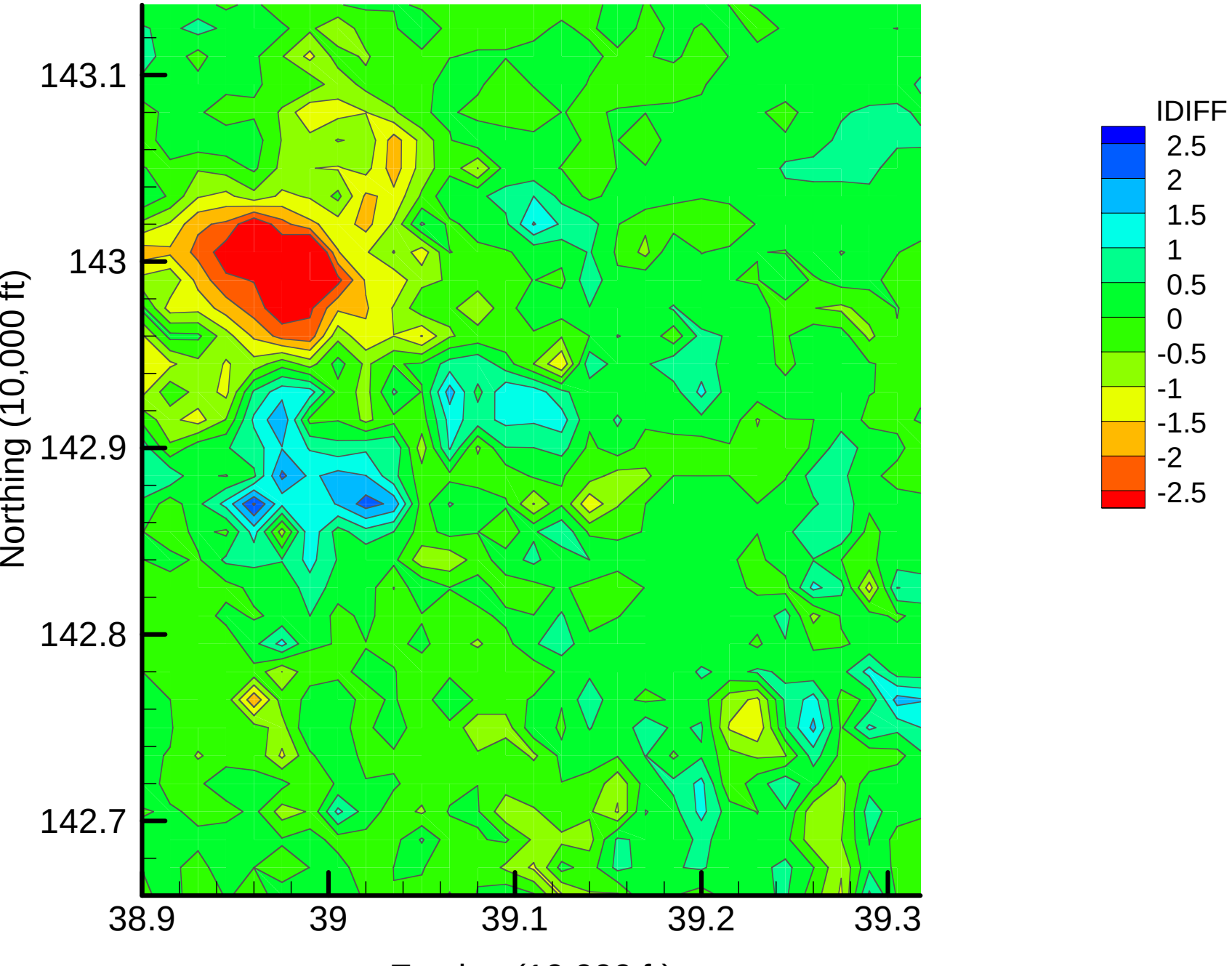
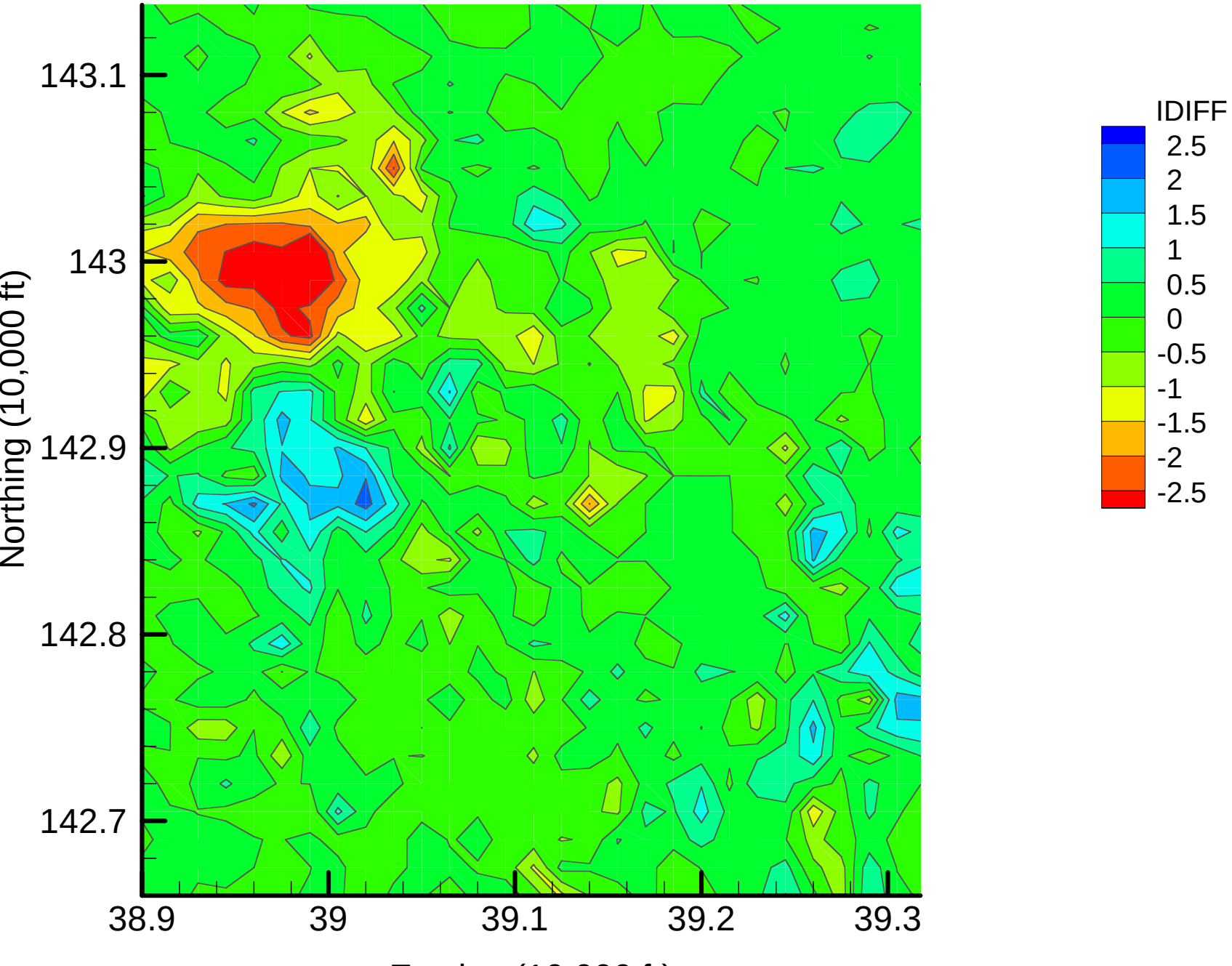
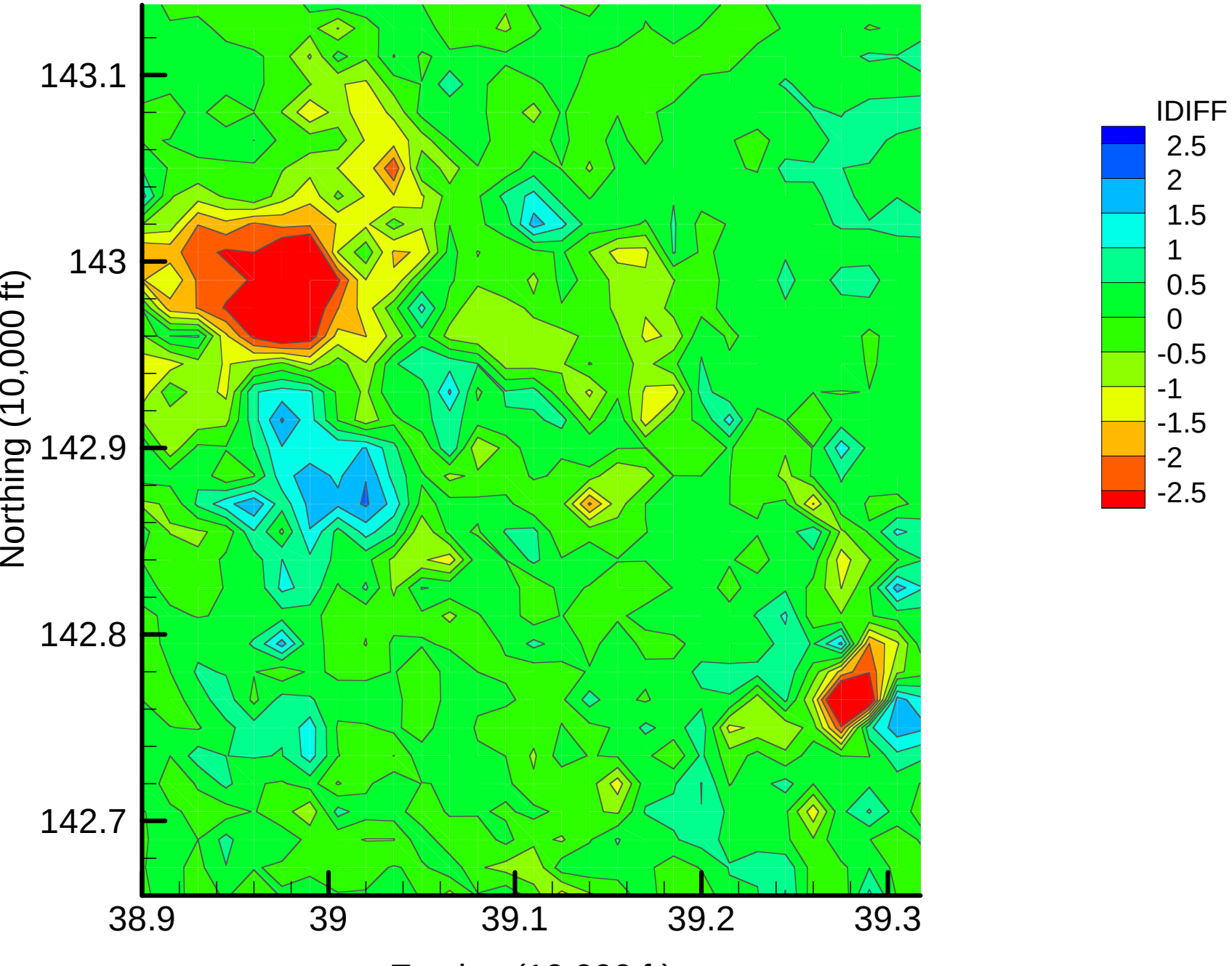


DCE11: Slice 1: Indicator Difference Map: 20% Removal



DCE11: Slice 1: Indicator Difference Map: 25% Removal



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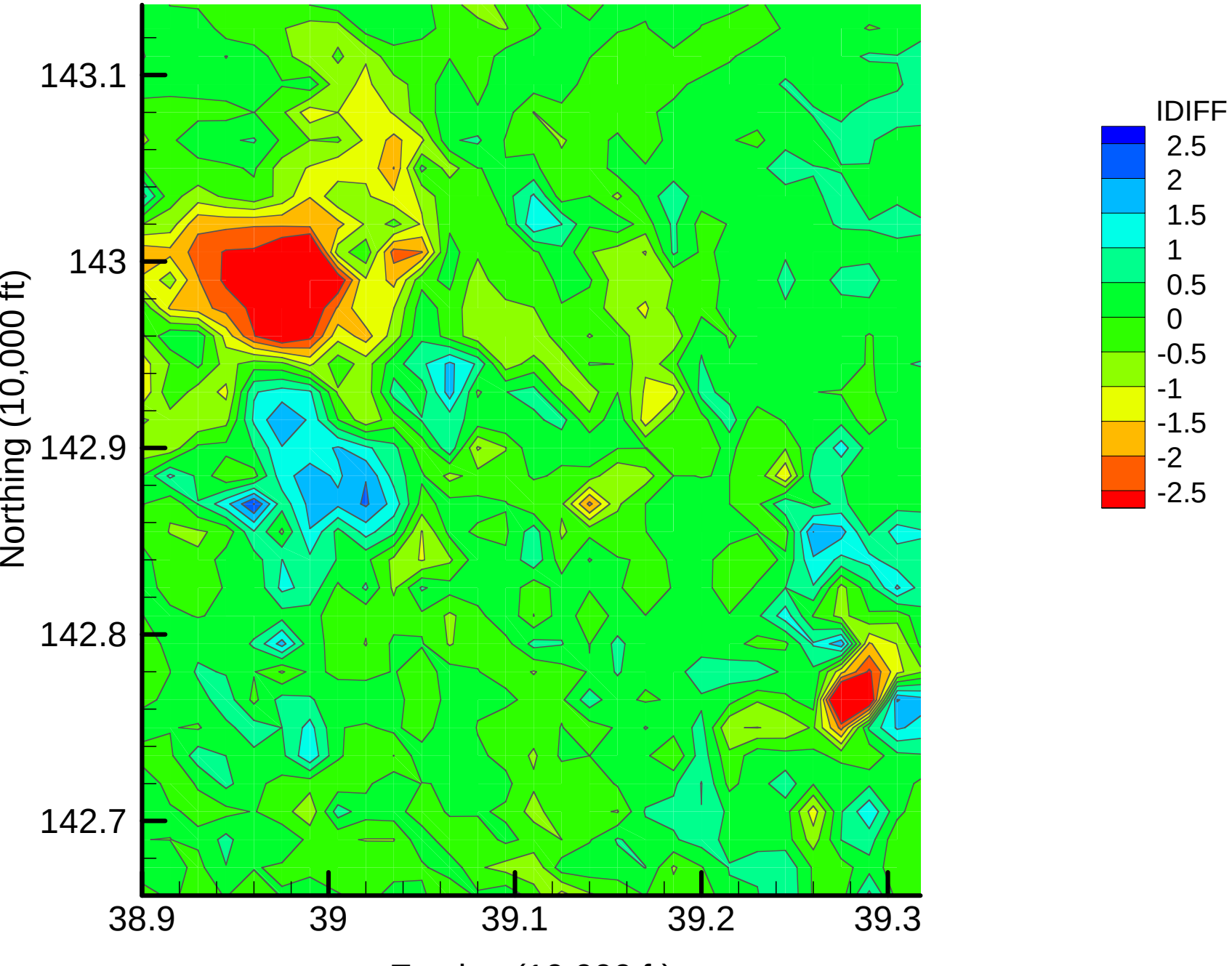

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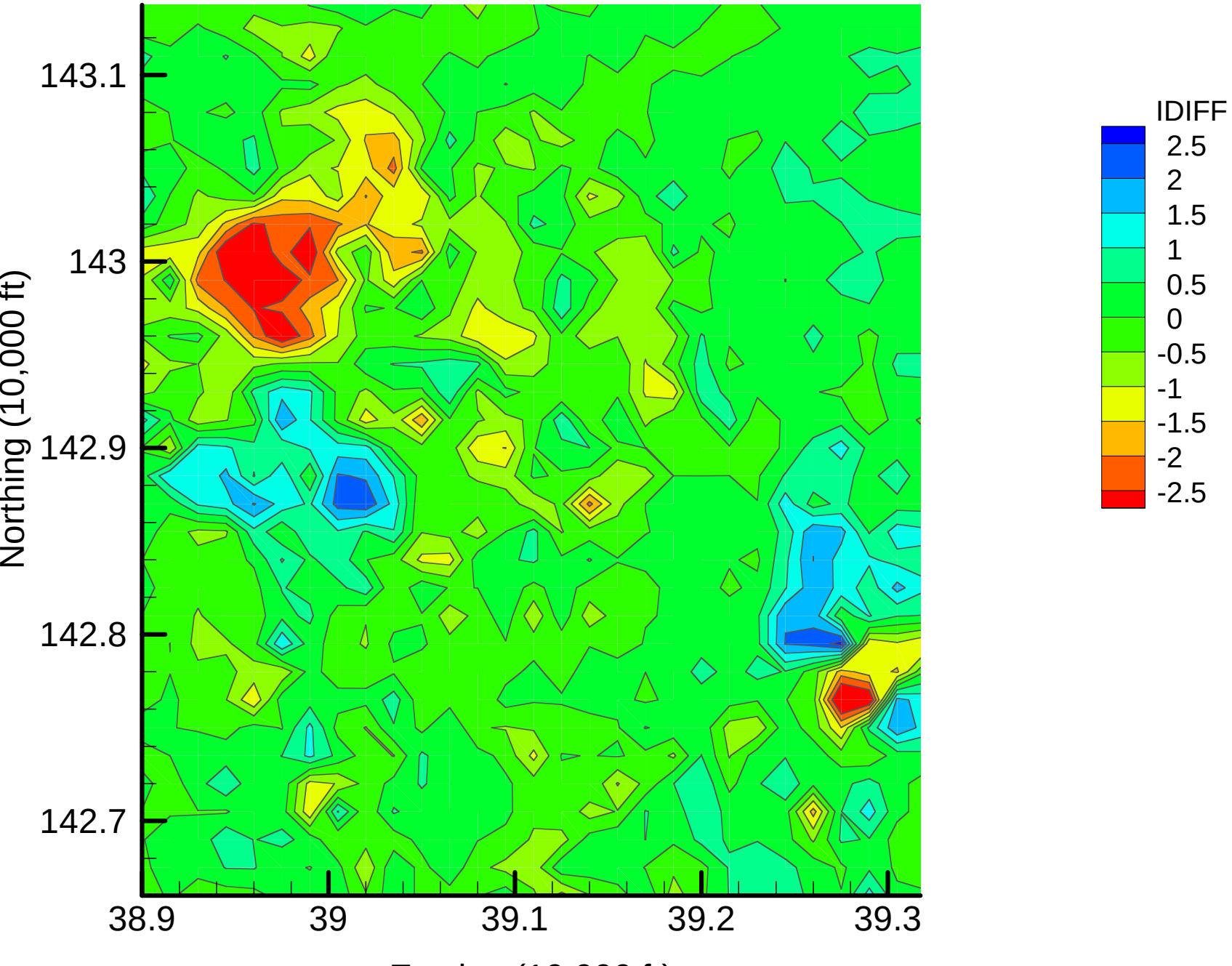

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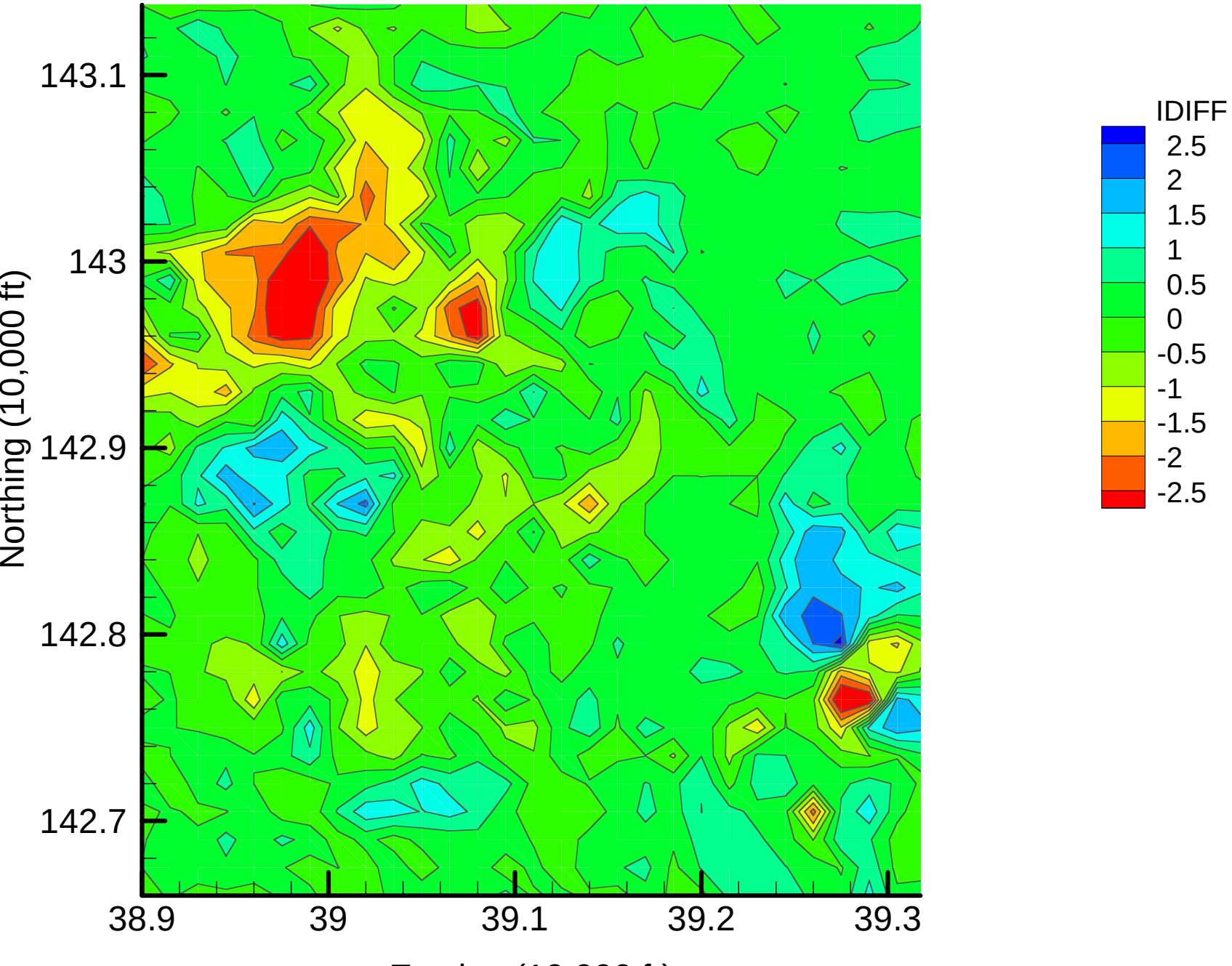

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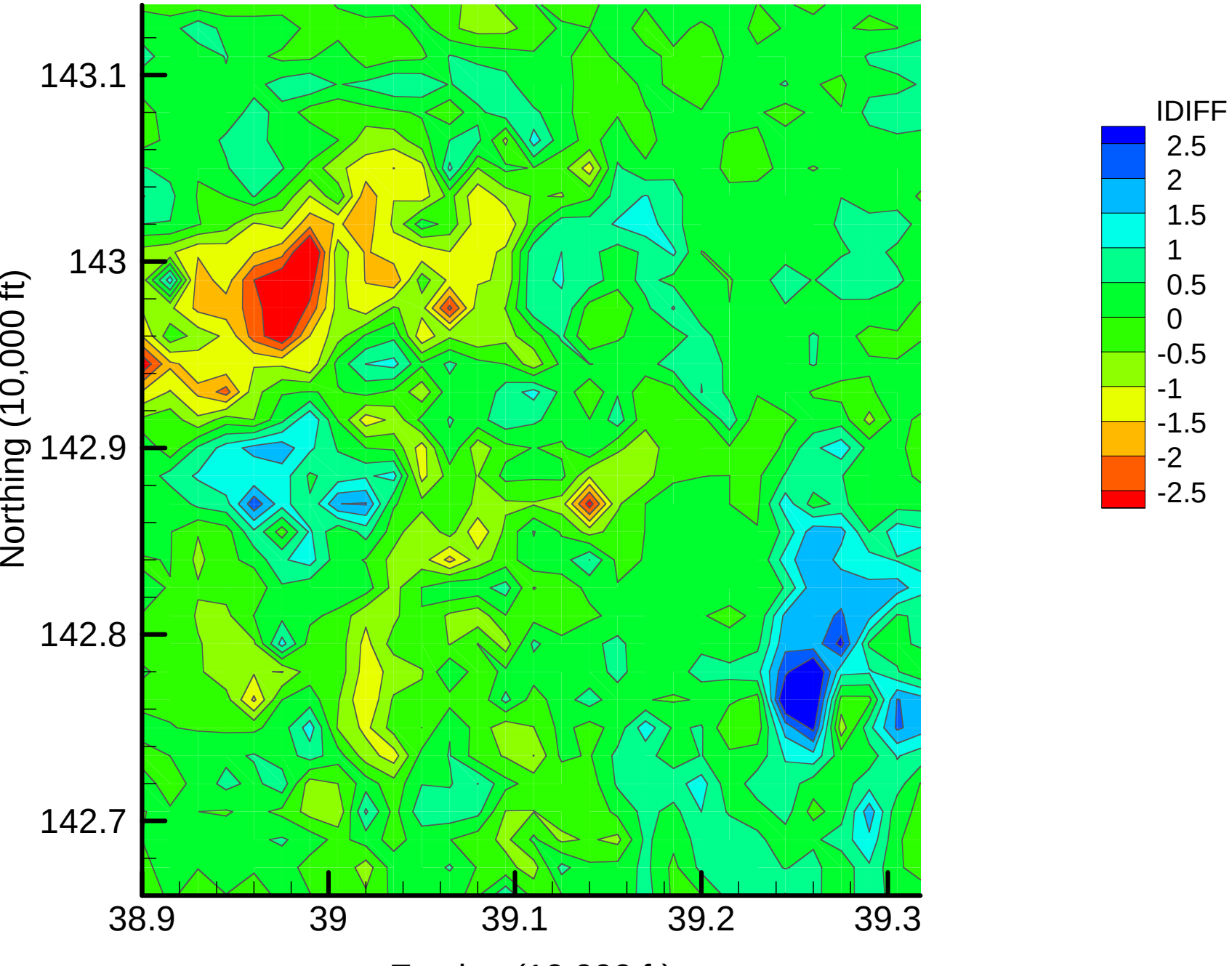

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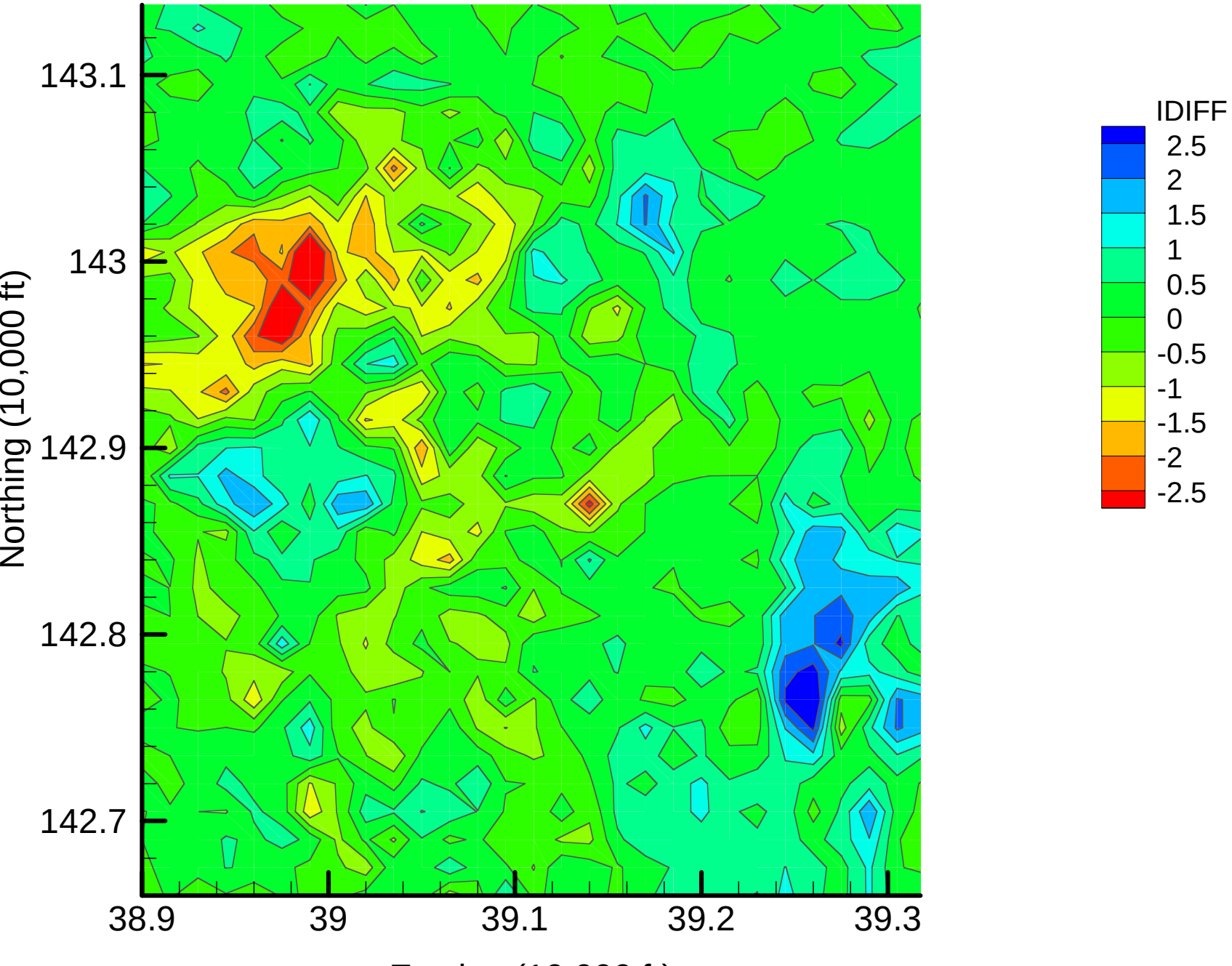
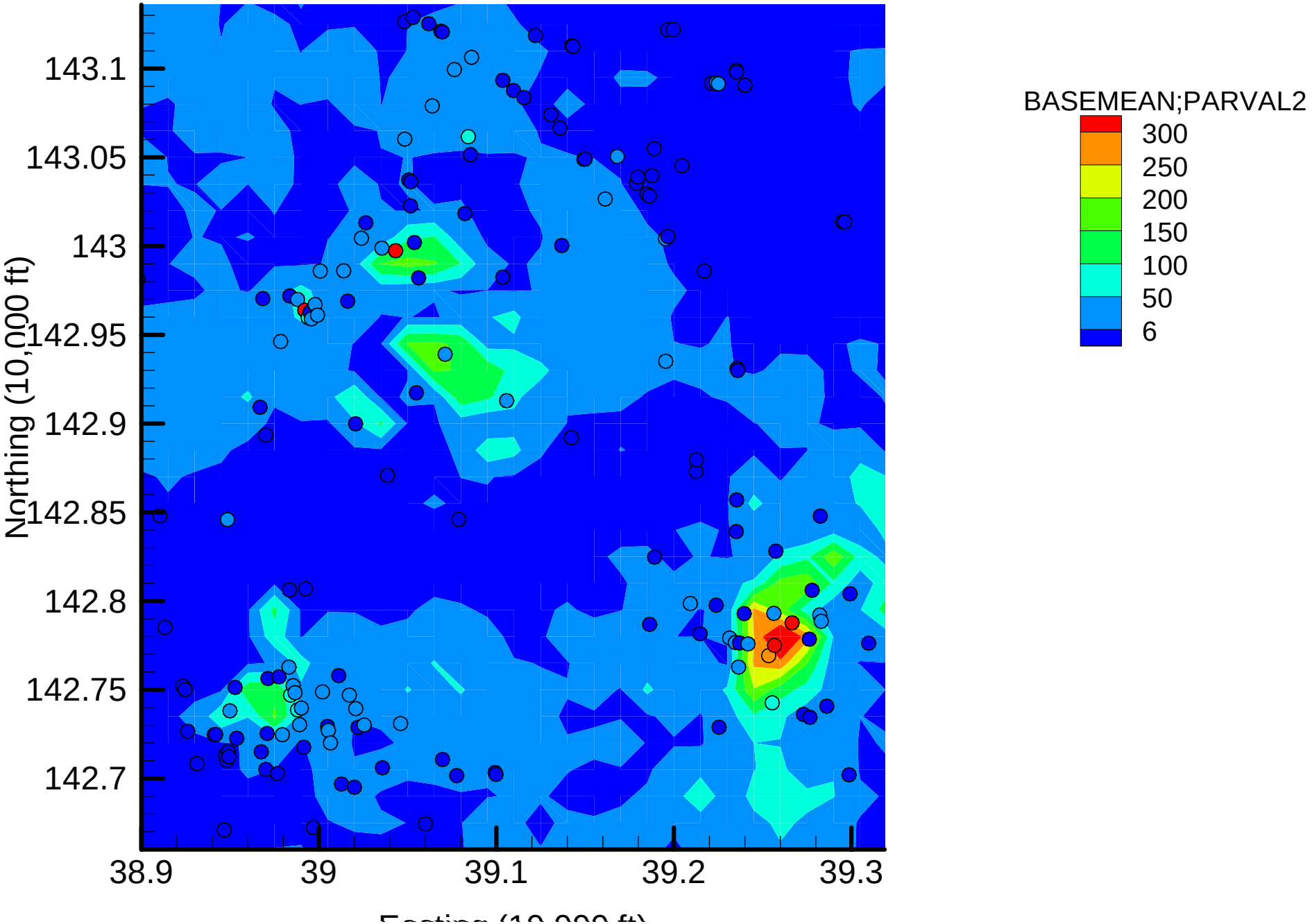


DCE11: Slice 2: Estimated Concentration Base Map (ppb)



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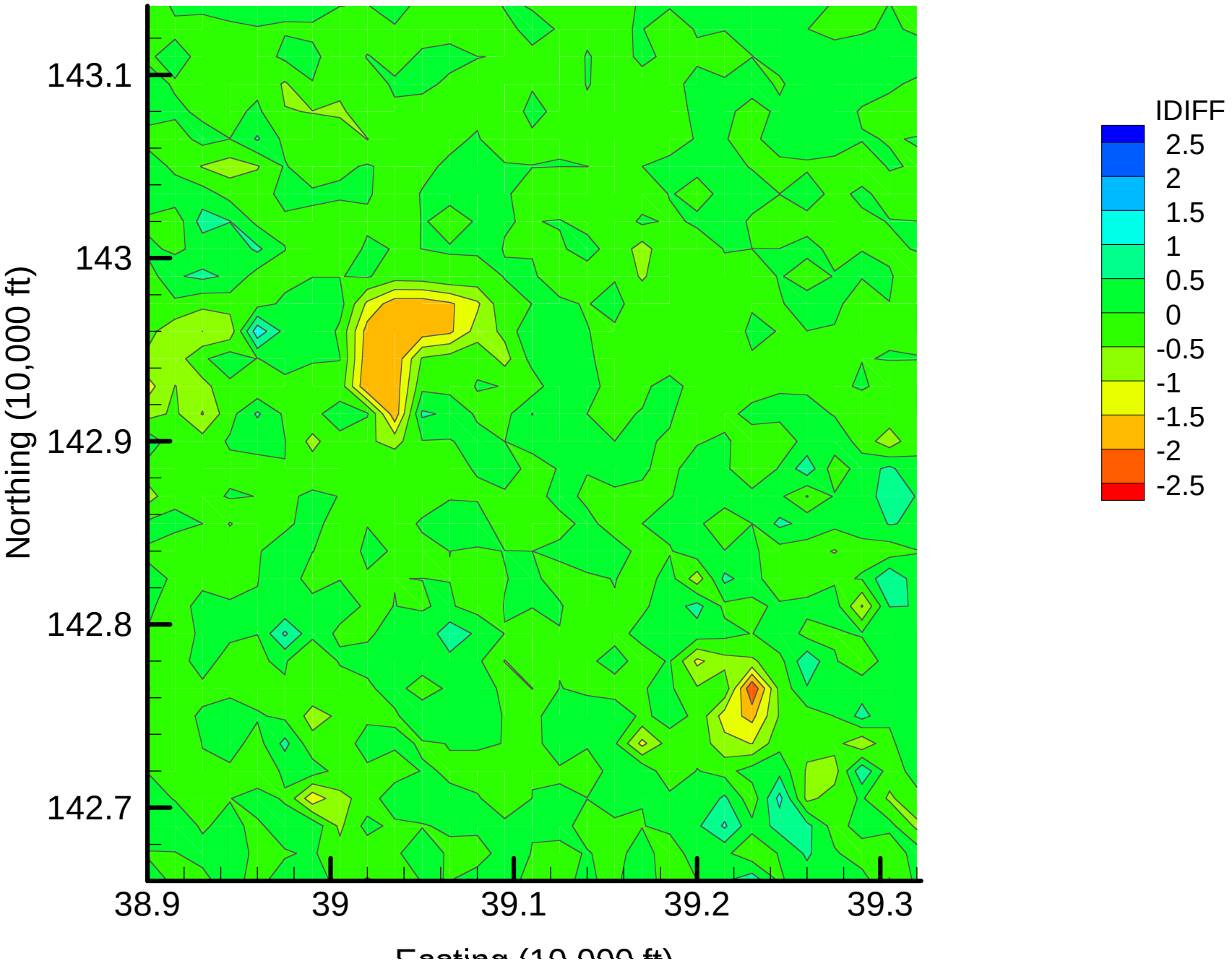

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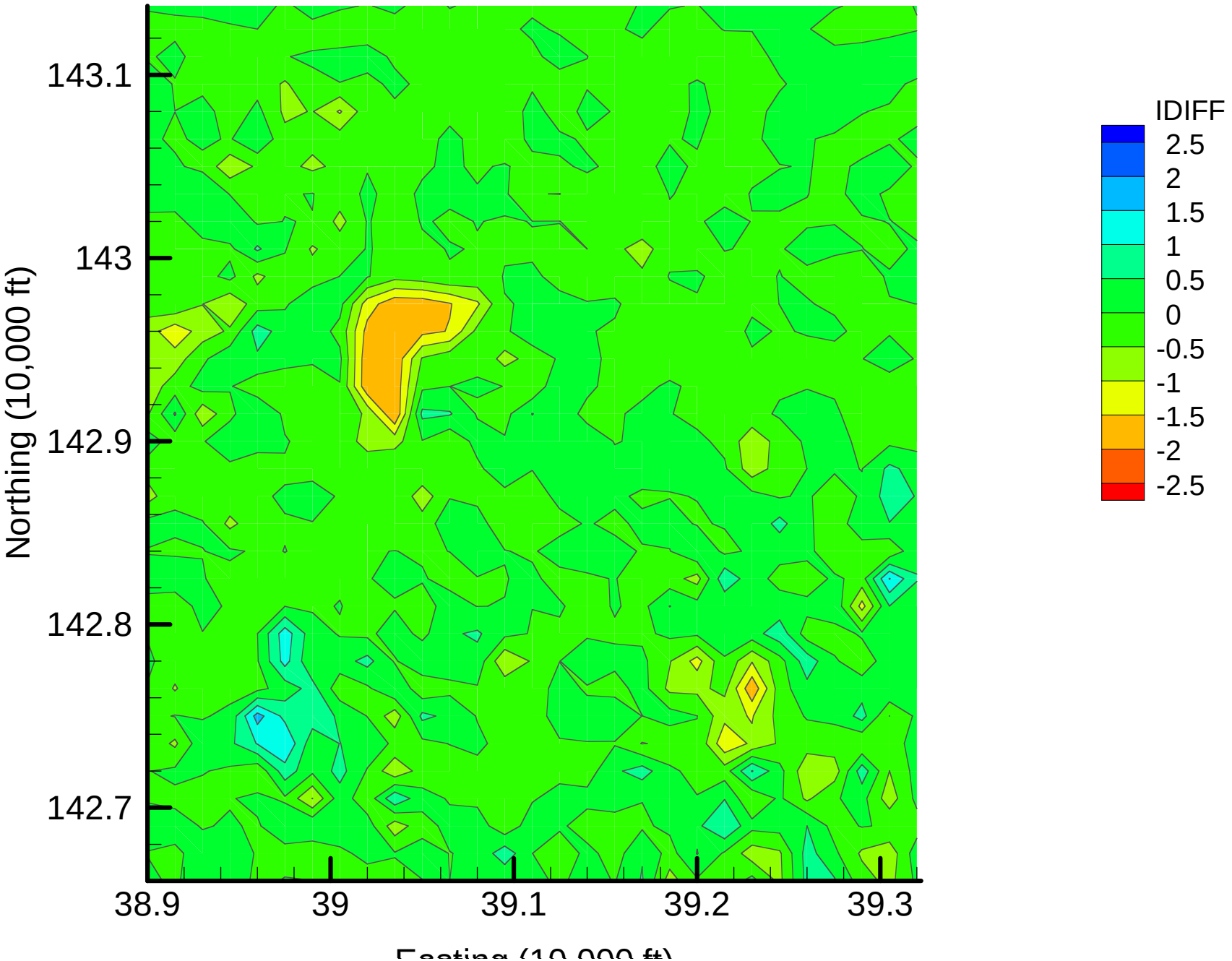

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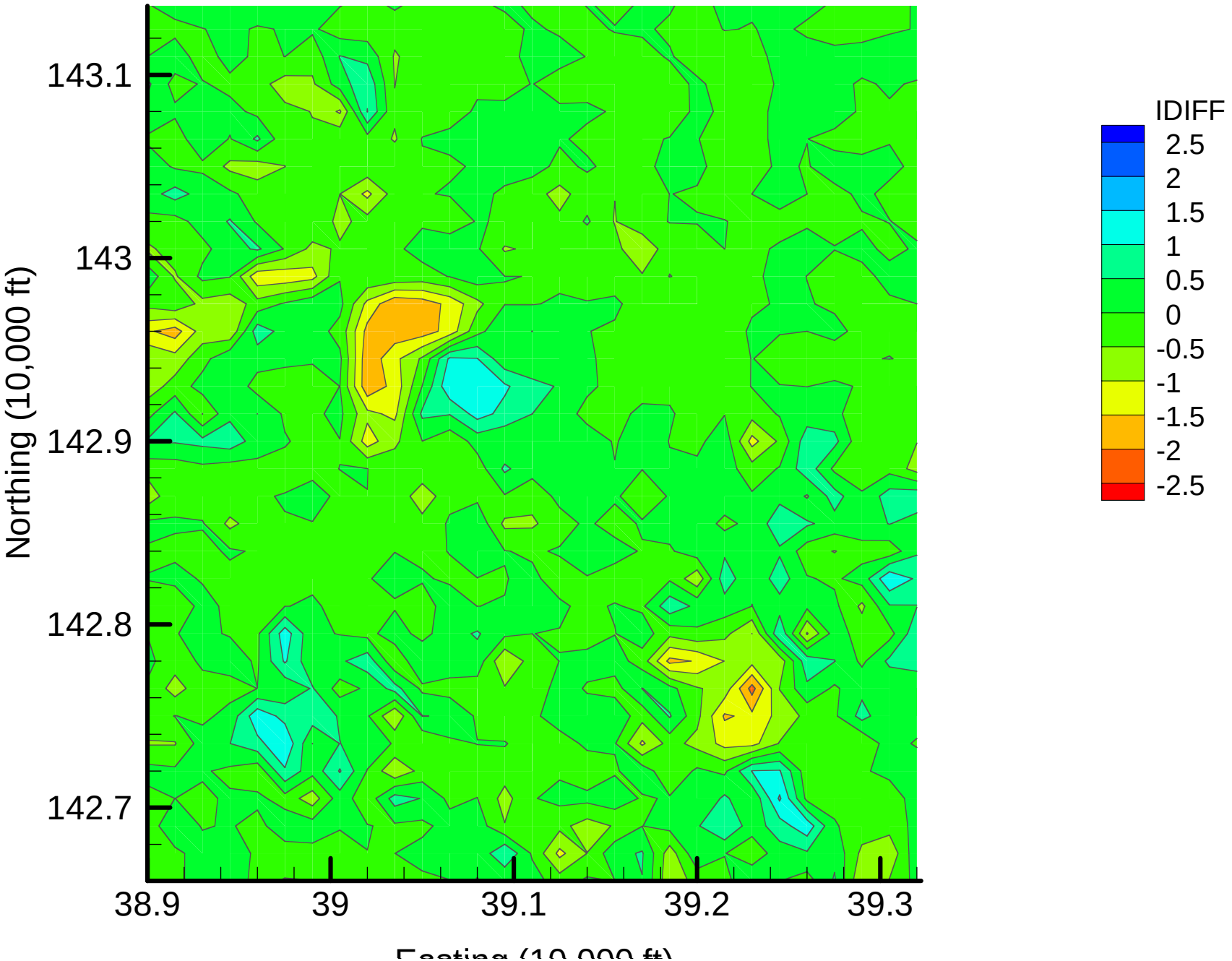

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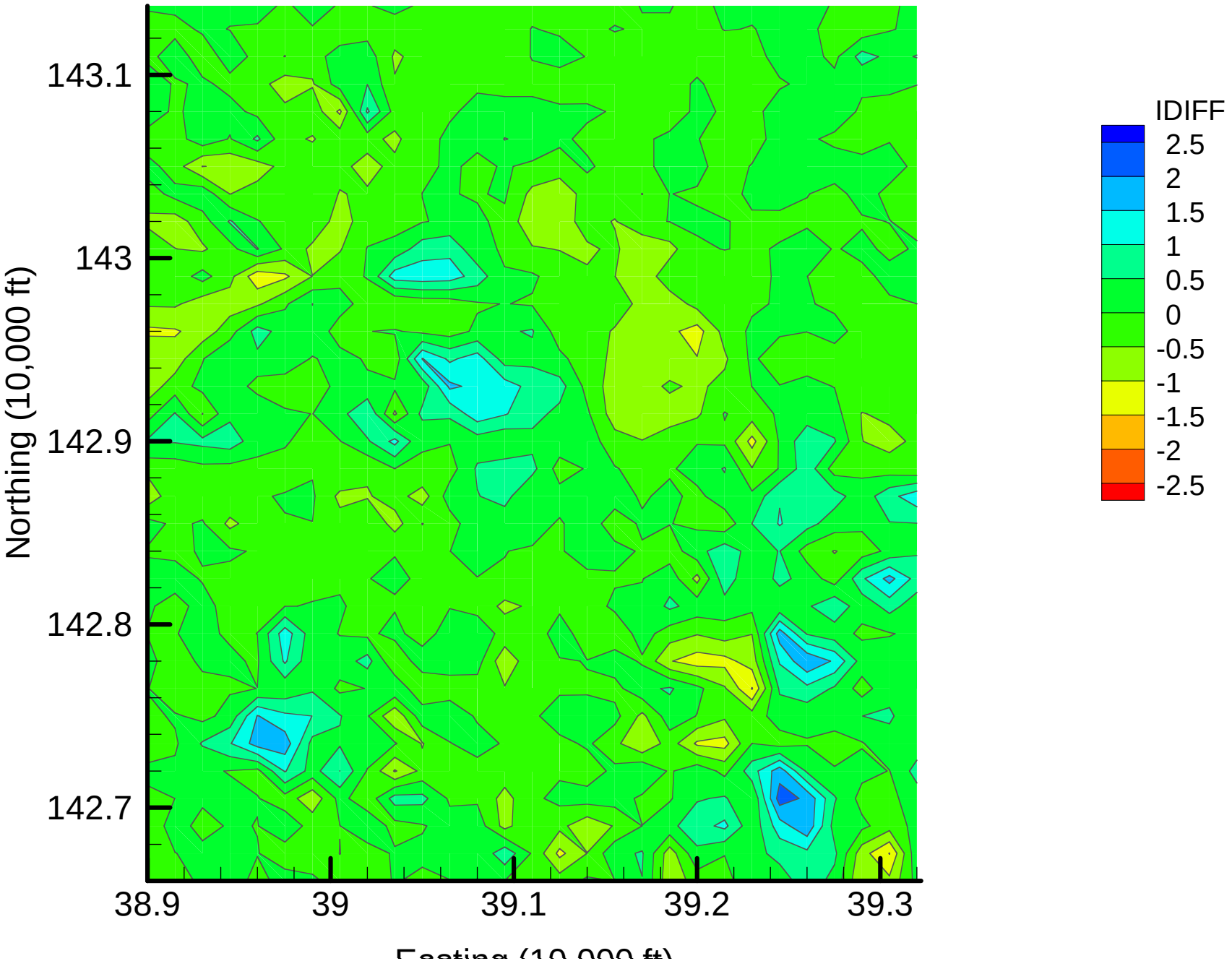

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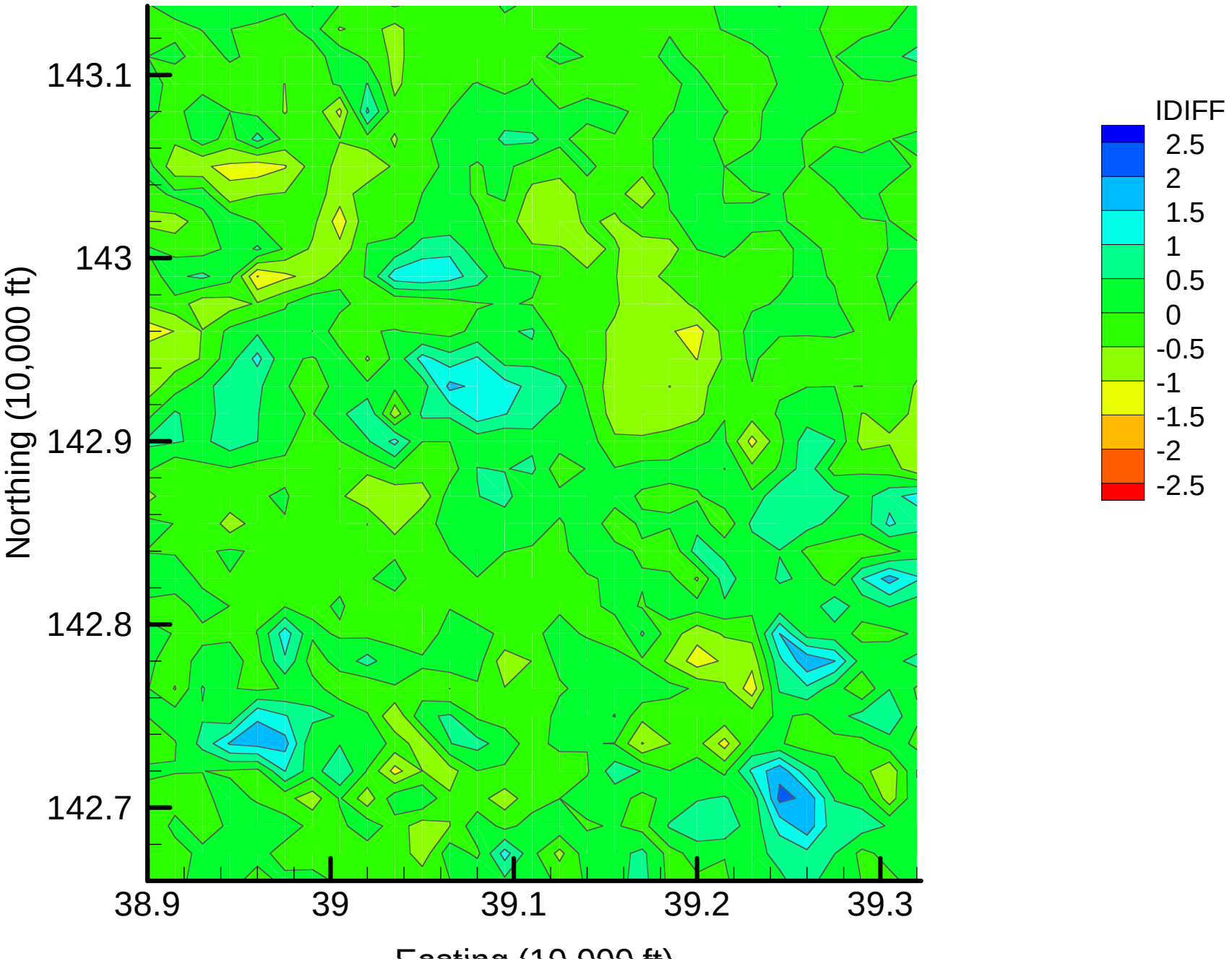

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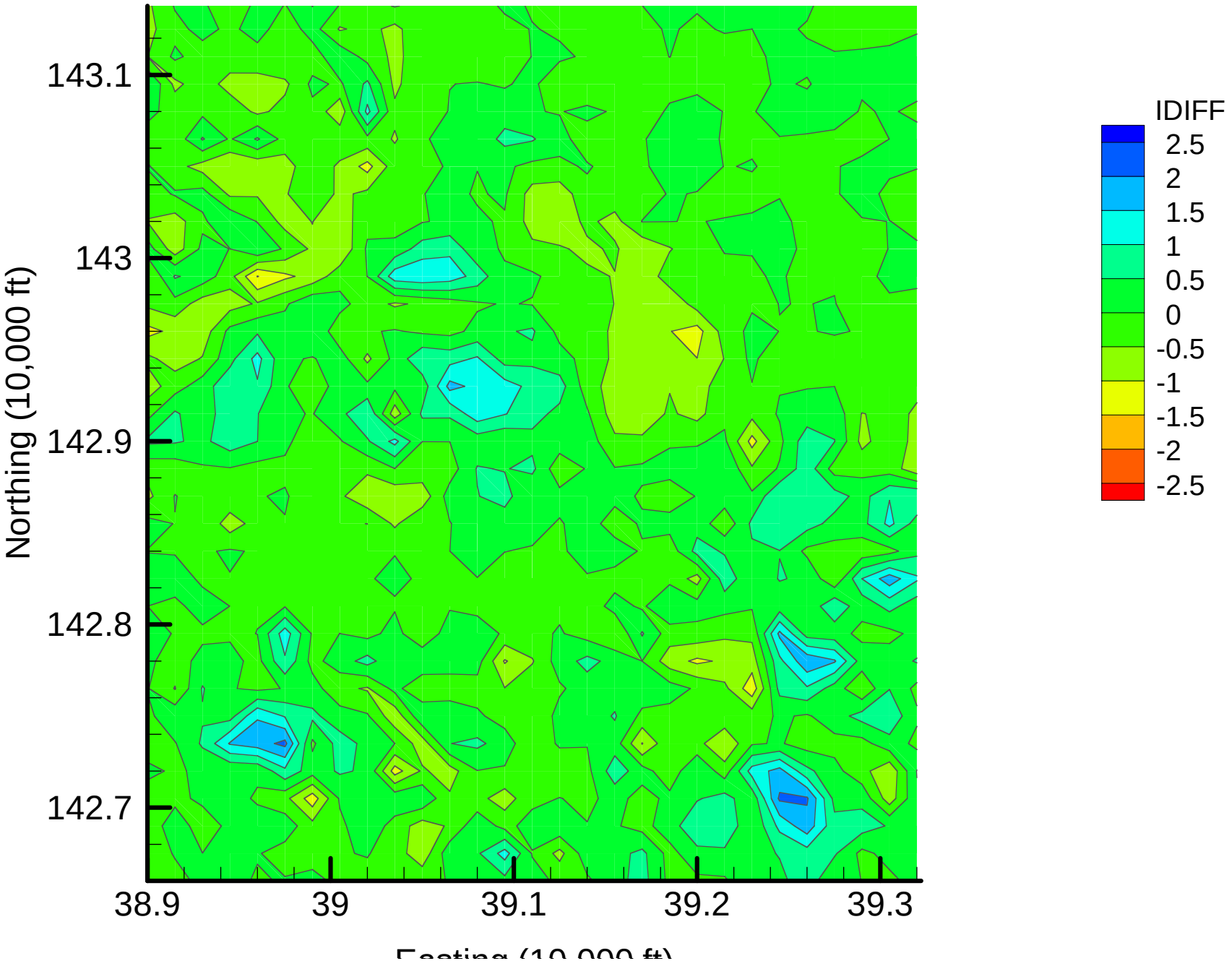

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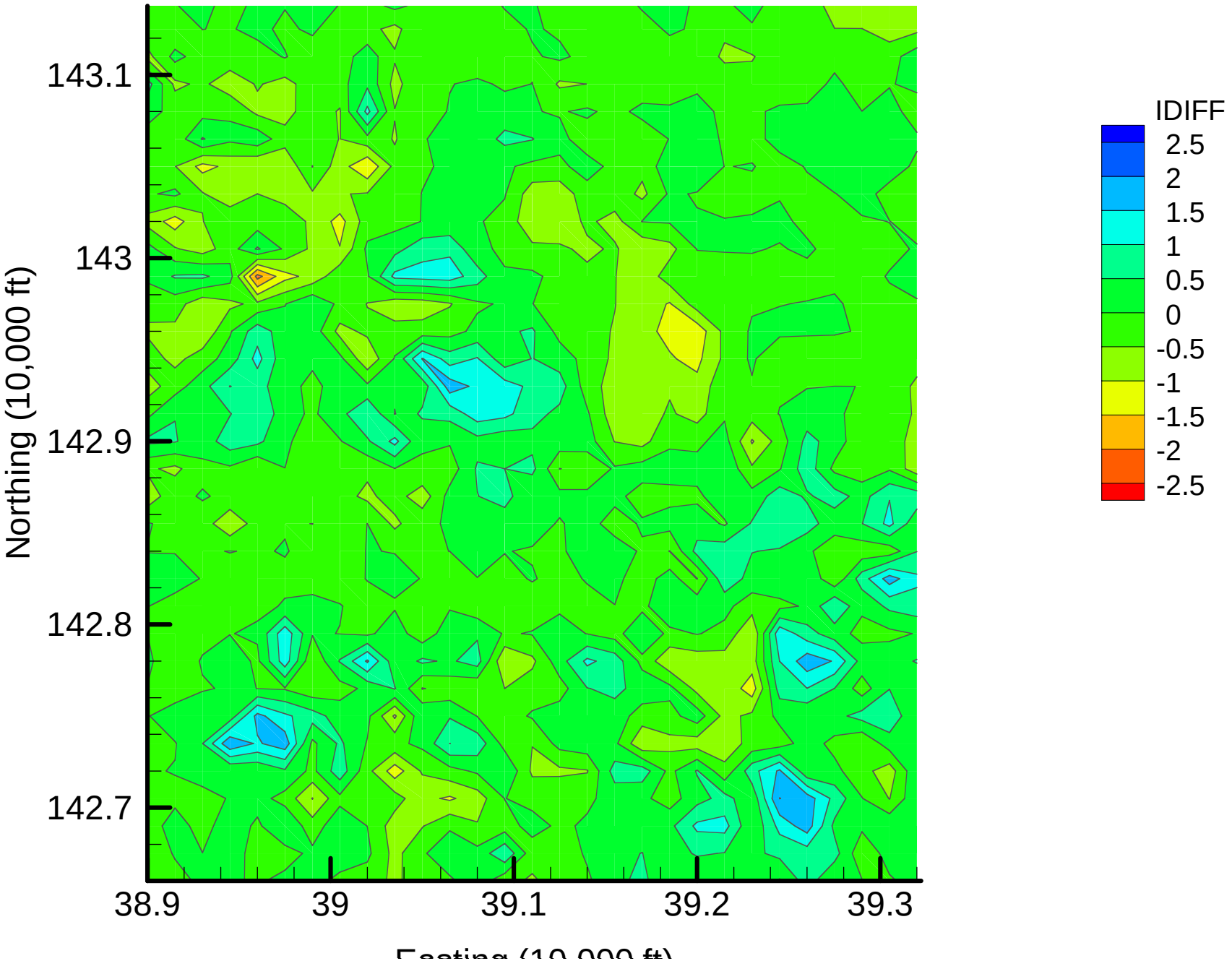

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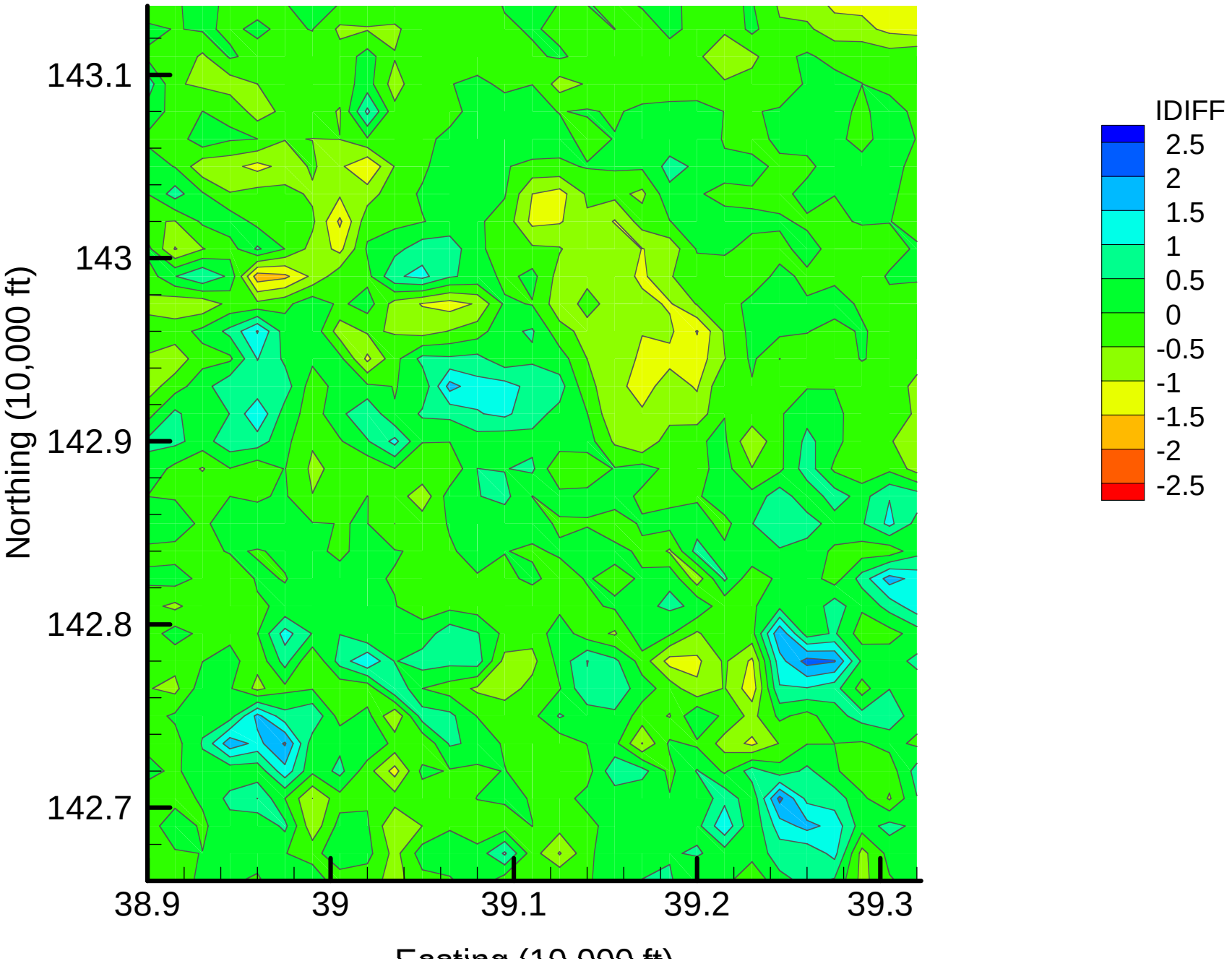
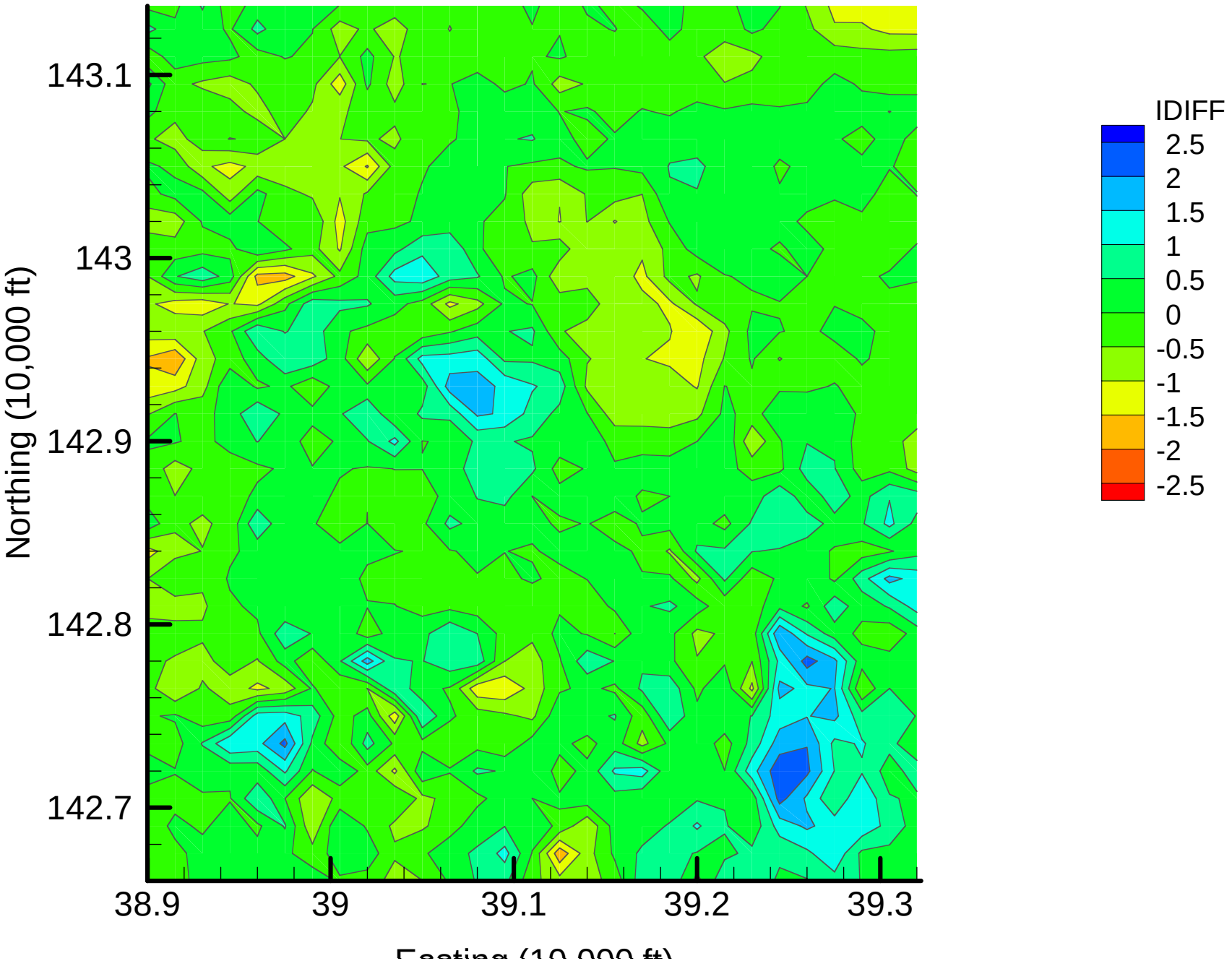
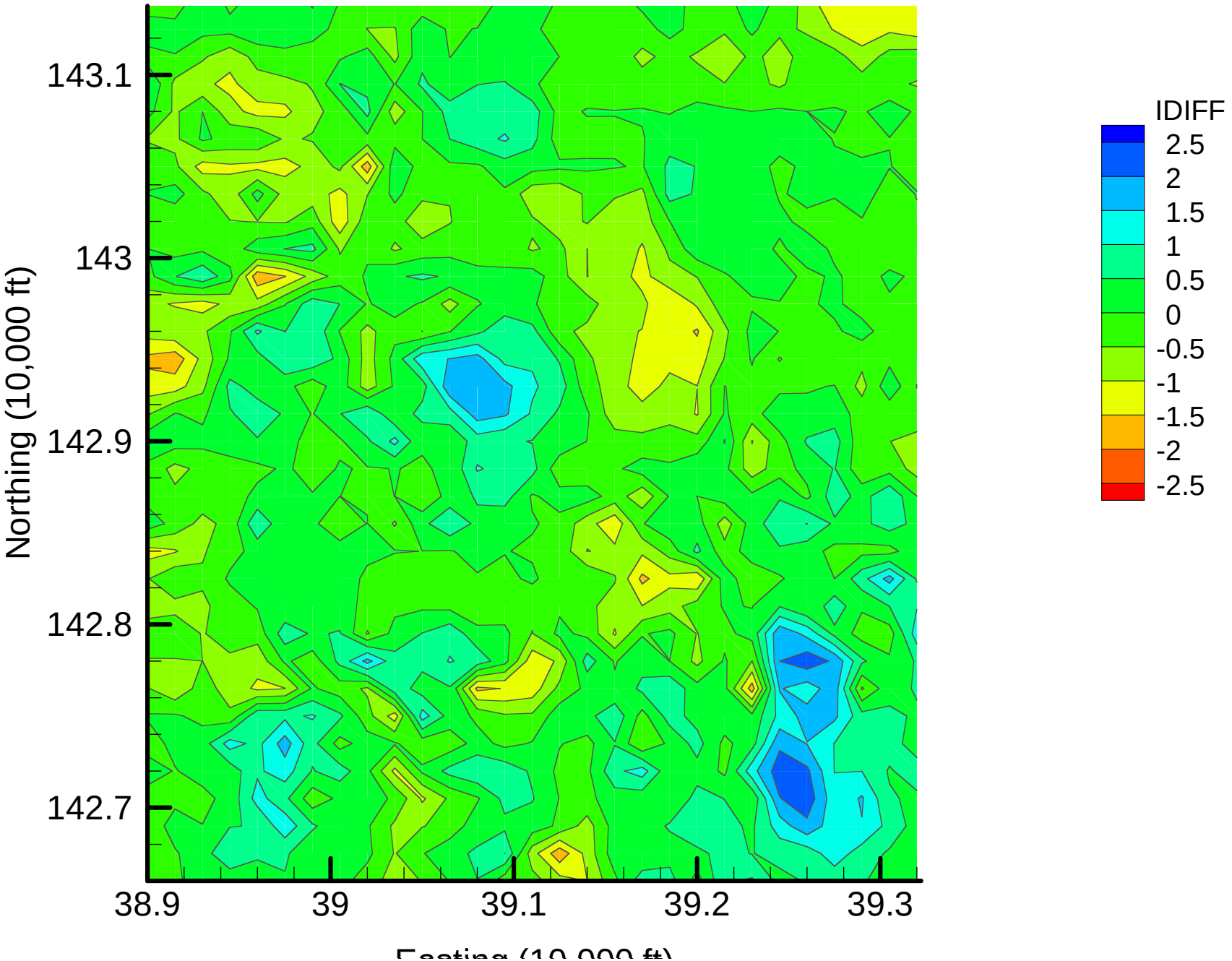


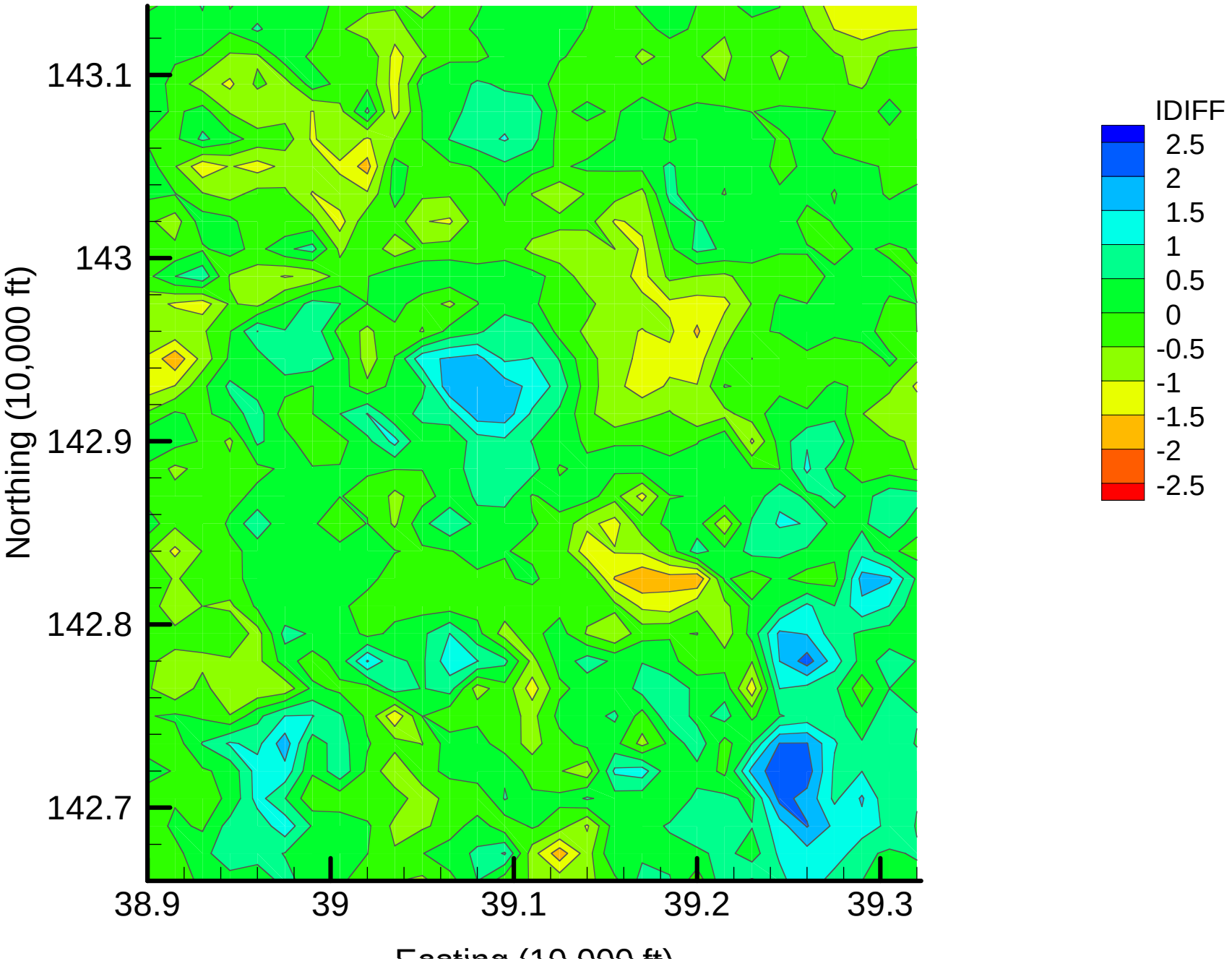
DCE11: Slice 2: Indicator Difference Map: 45% Removal



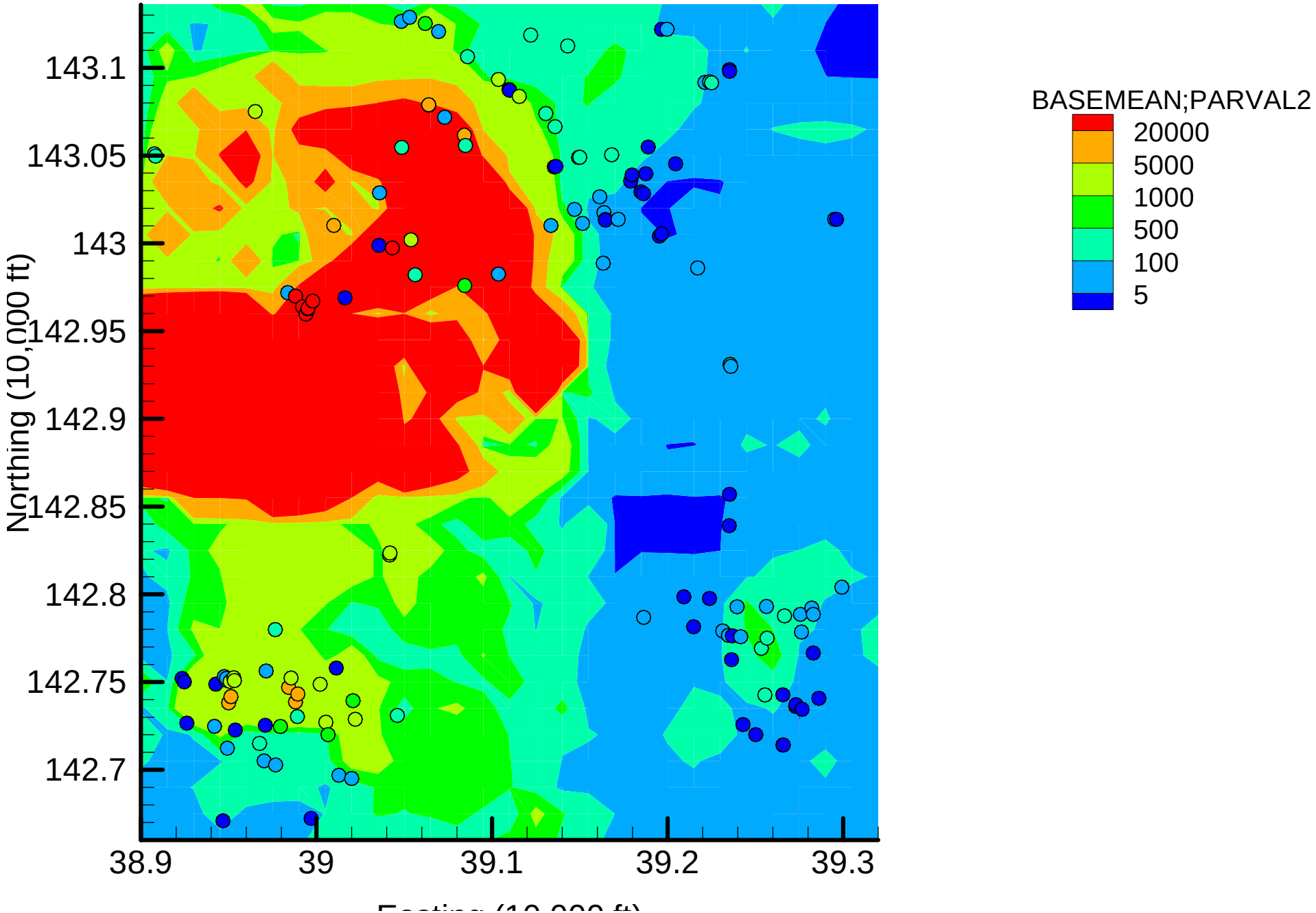
DCE11: Slice 2: Indicator Difference Map: 50% Removal



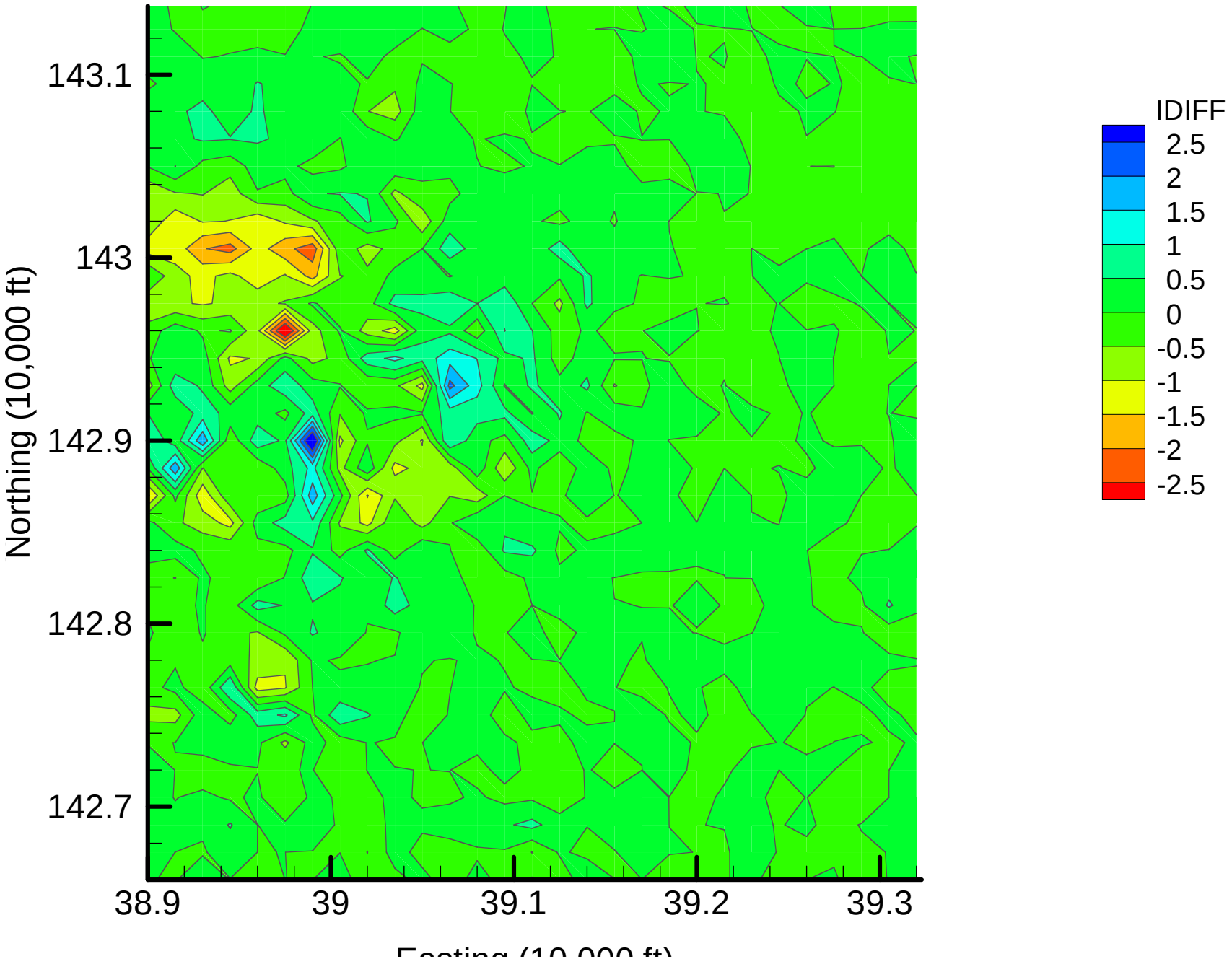
DCE11: Slice 2: Indicator Difference Map: 55% Removal



TCE: Slice 1: Estimated Concentration Base Map (ppb)



TCE: Slice 1: Indicator Difference Map: 5% Removal



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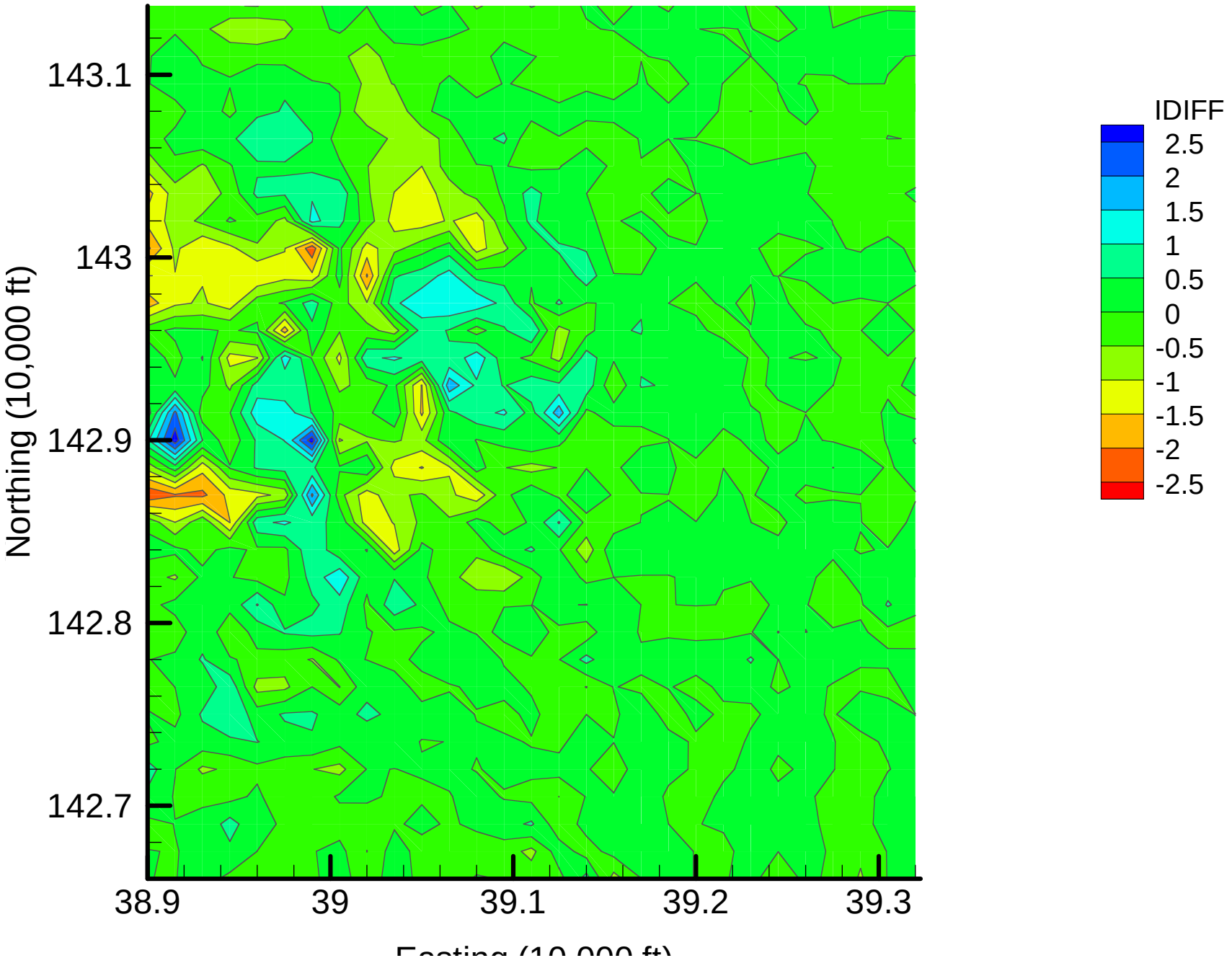

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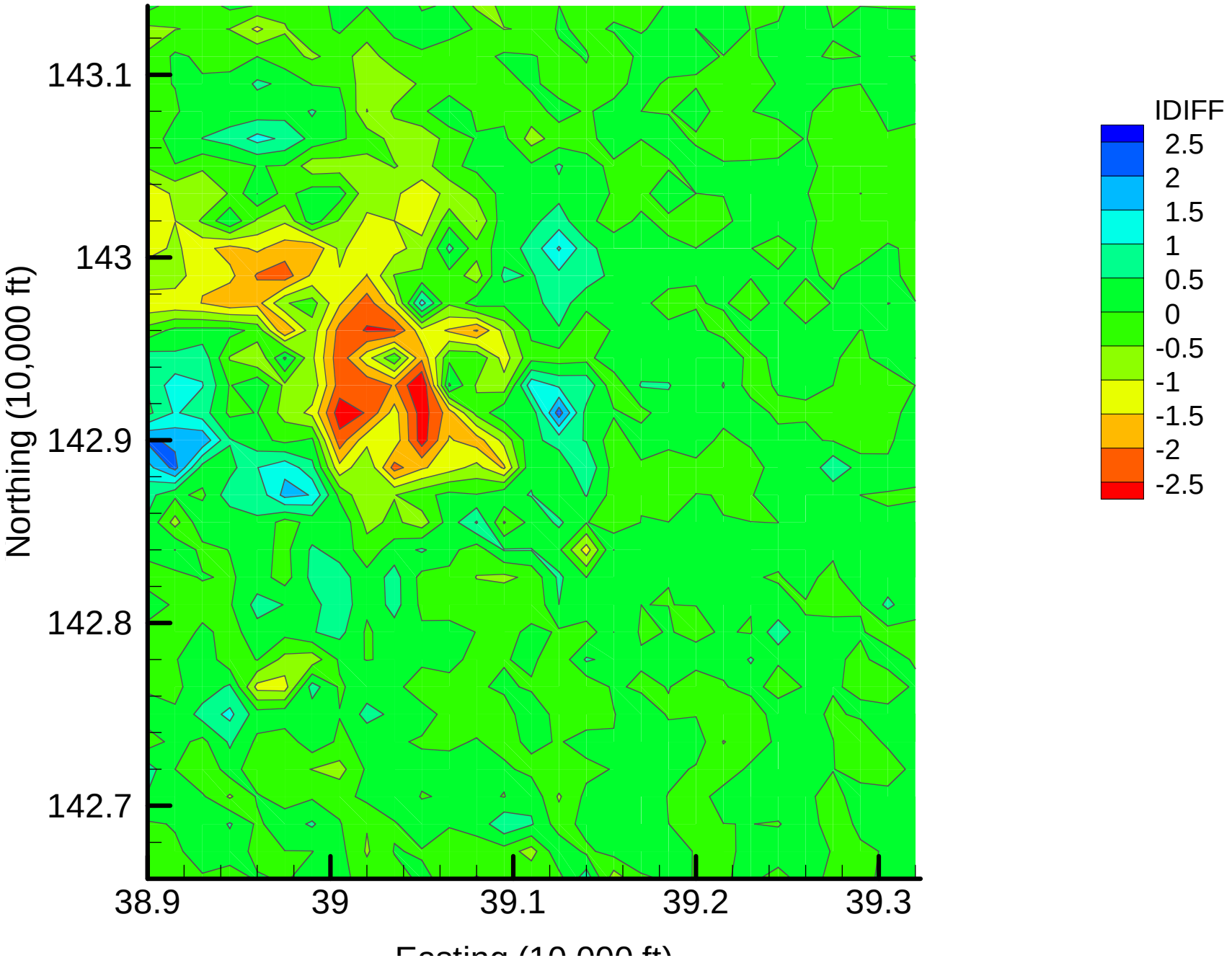

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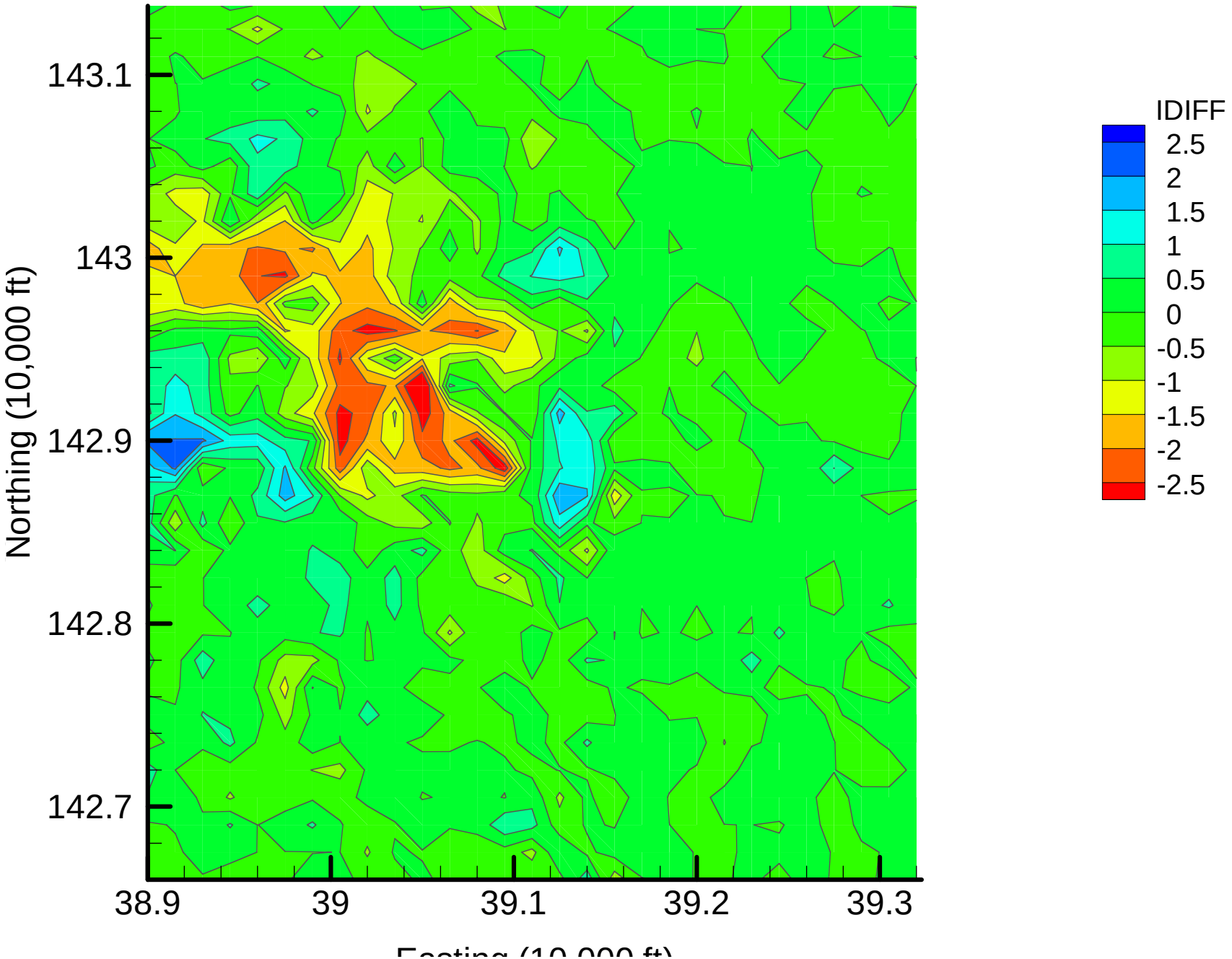
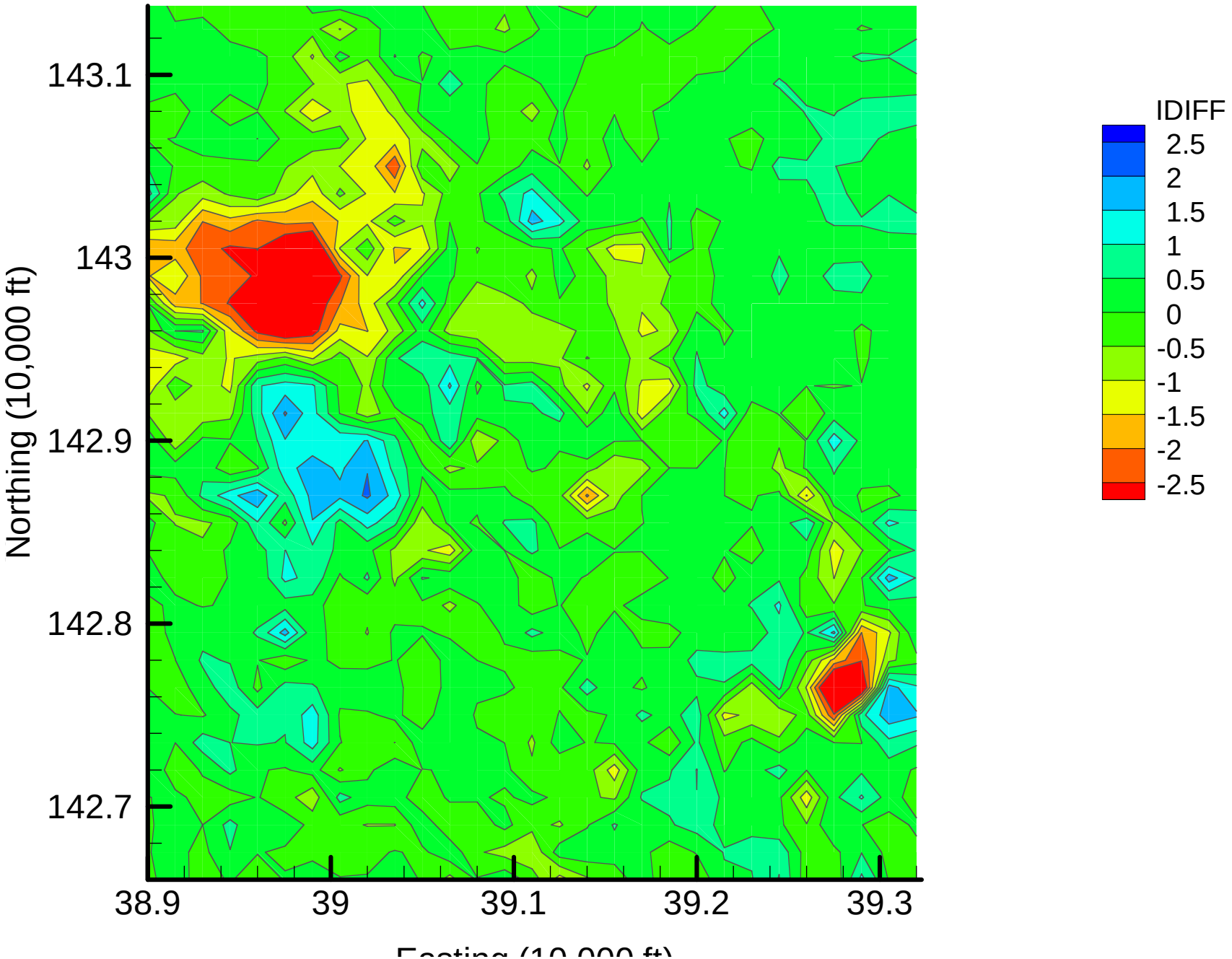


TCE: Slice 1: Indicator Difference Map: 25% Removal



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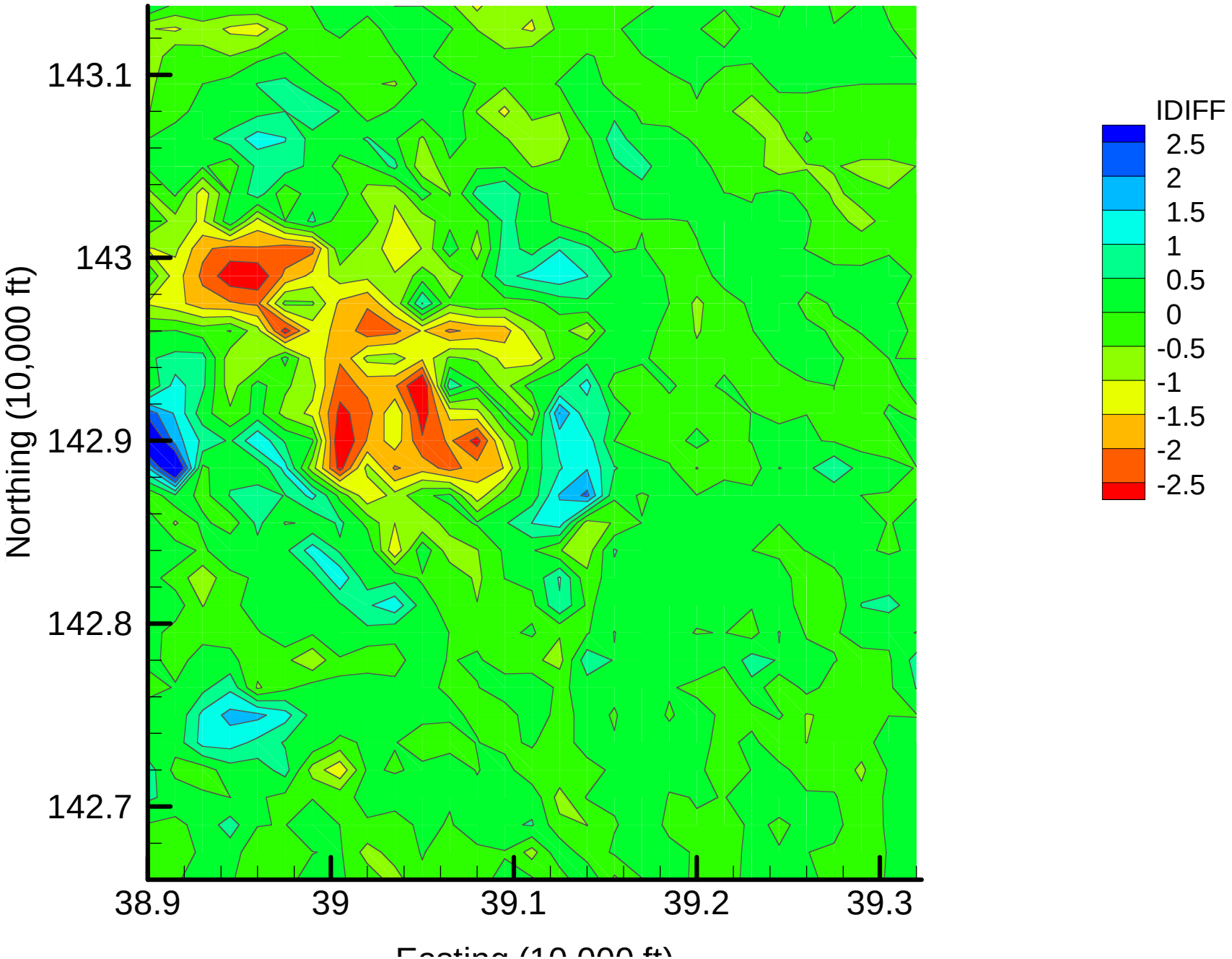
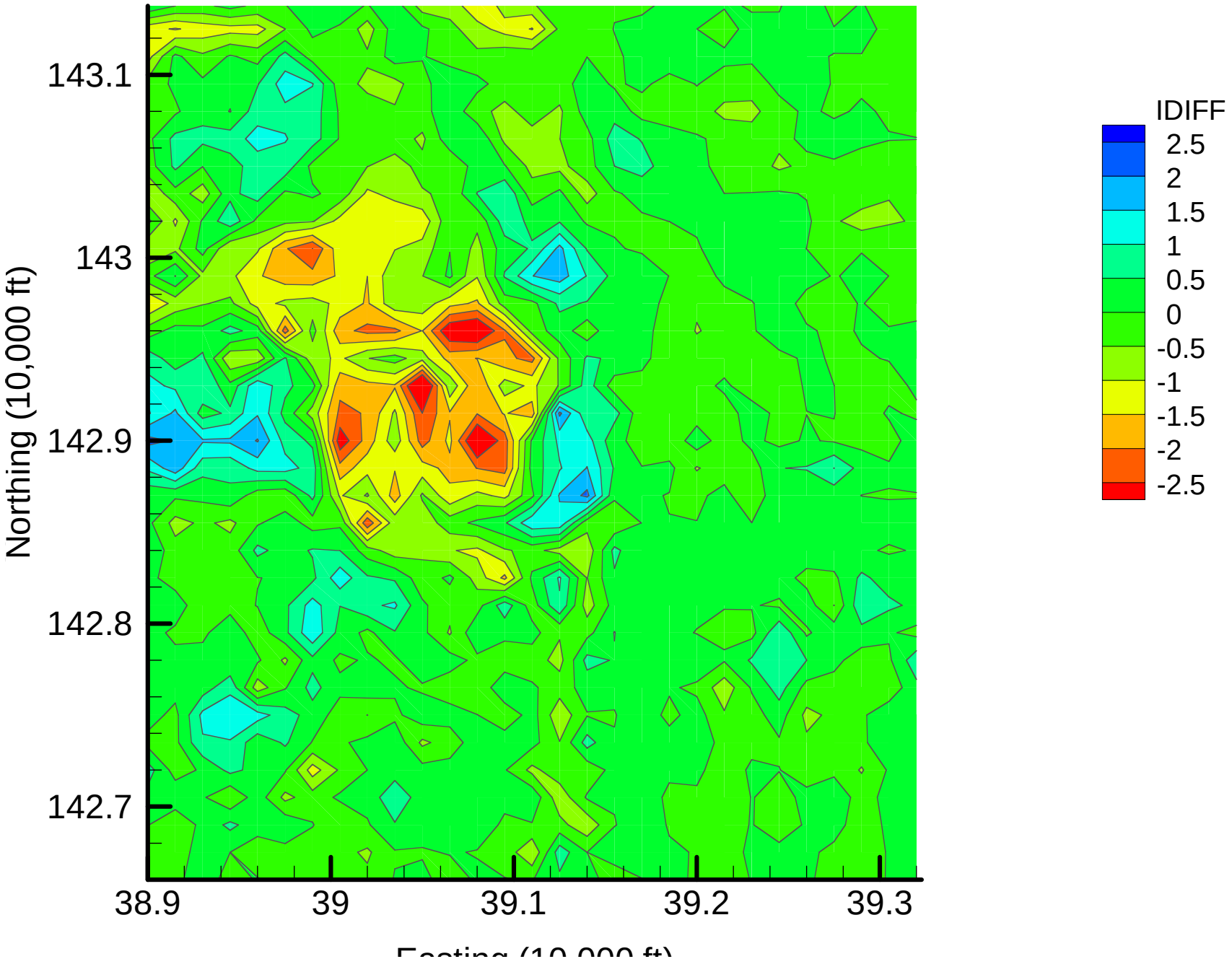


TCE: Slice 1: Indicator Difference Map: 35% Removal



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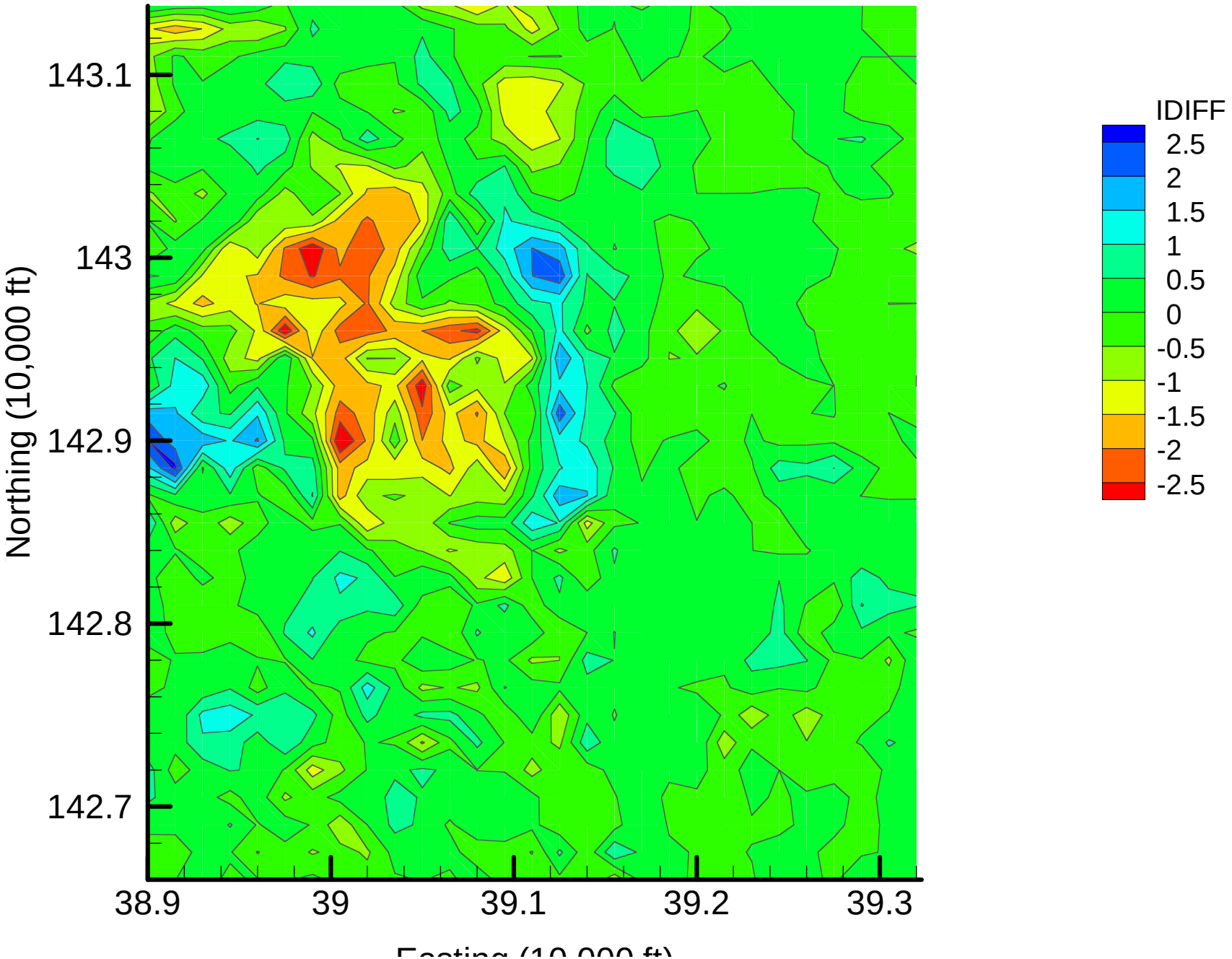
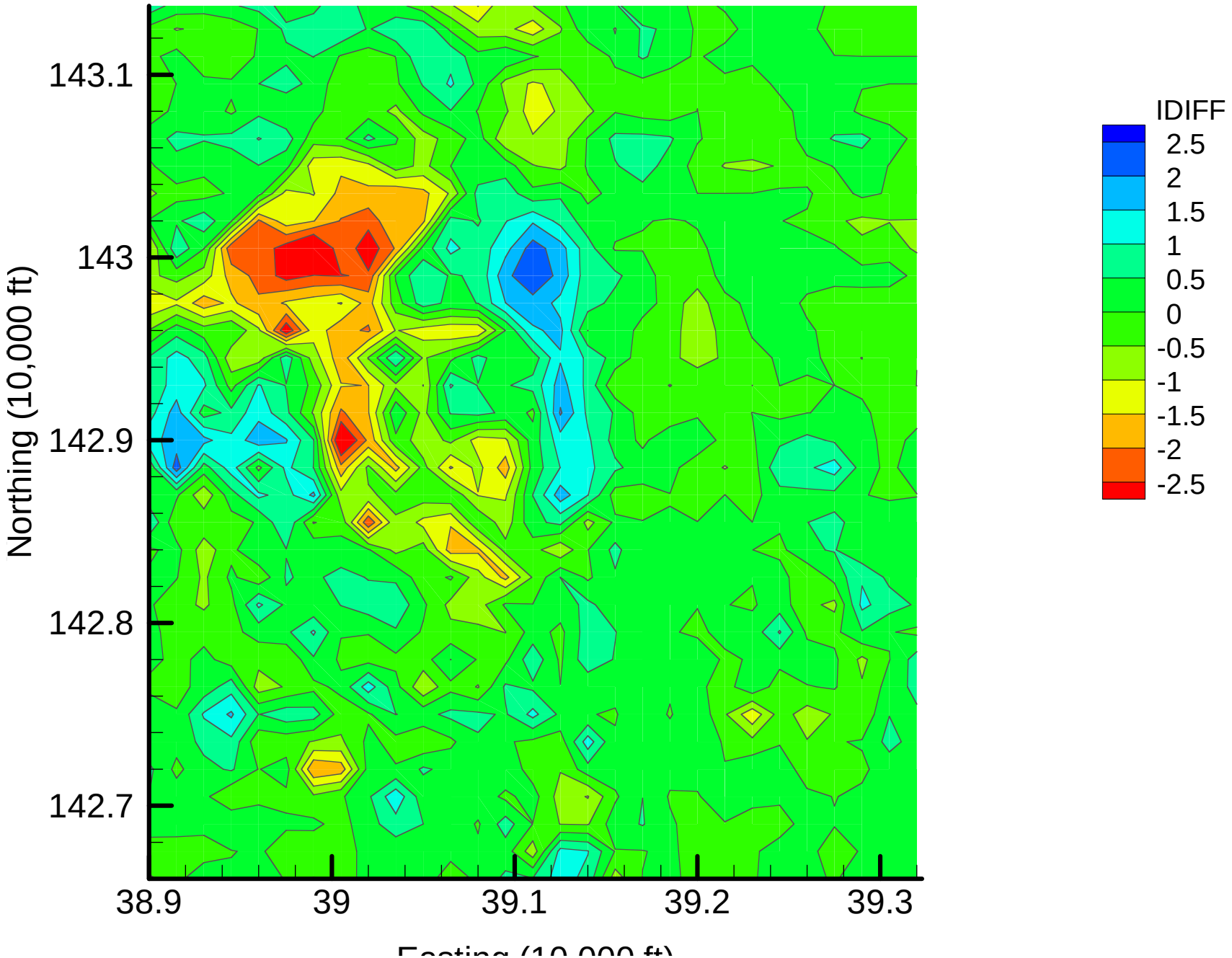
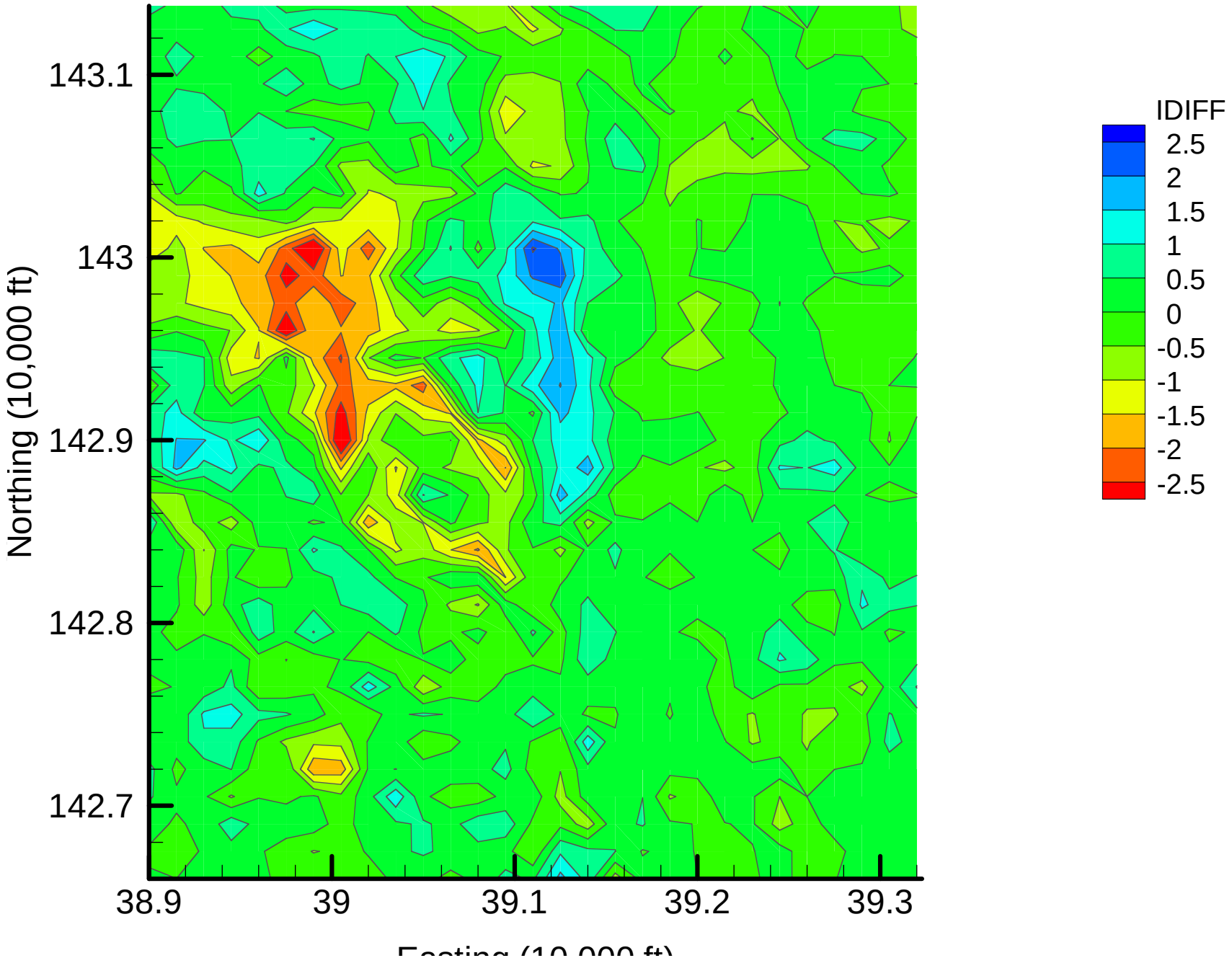


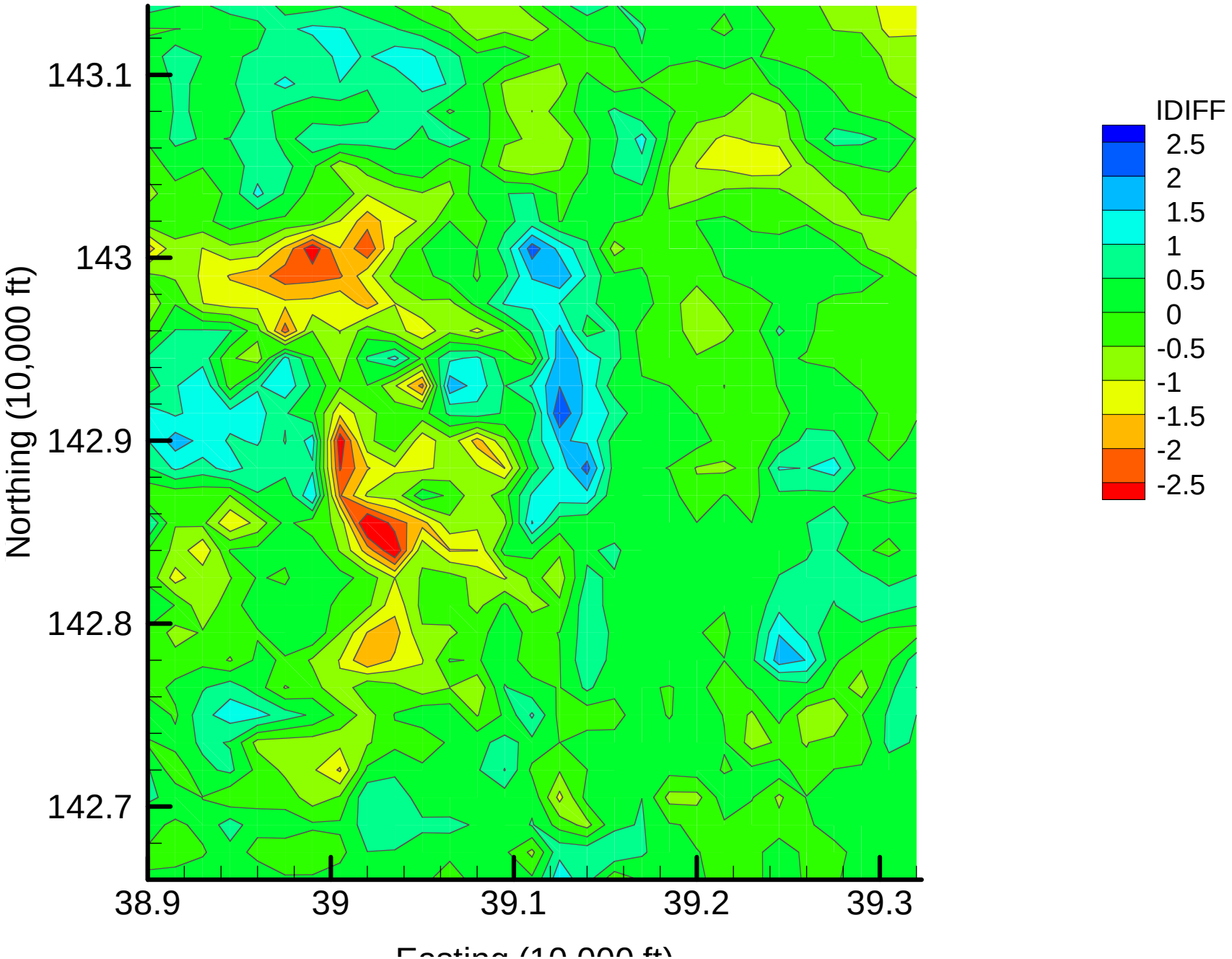
TCE: Slice 1: Indicator Difference Map: 45% Removal

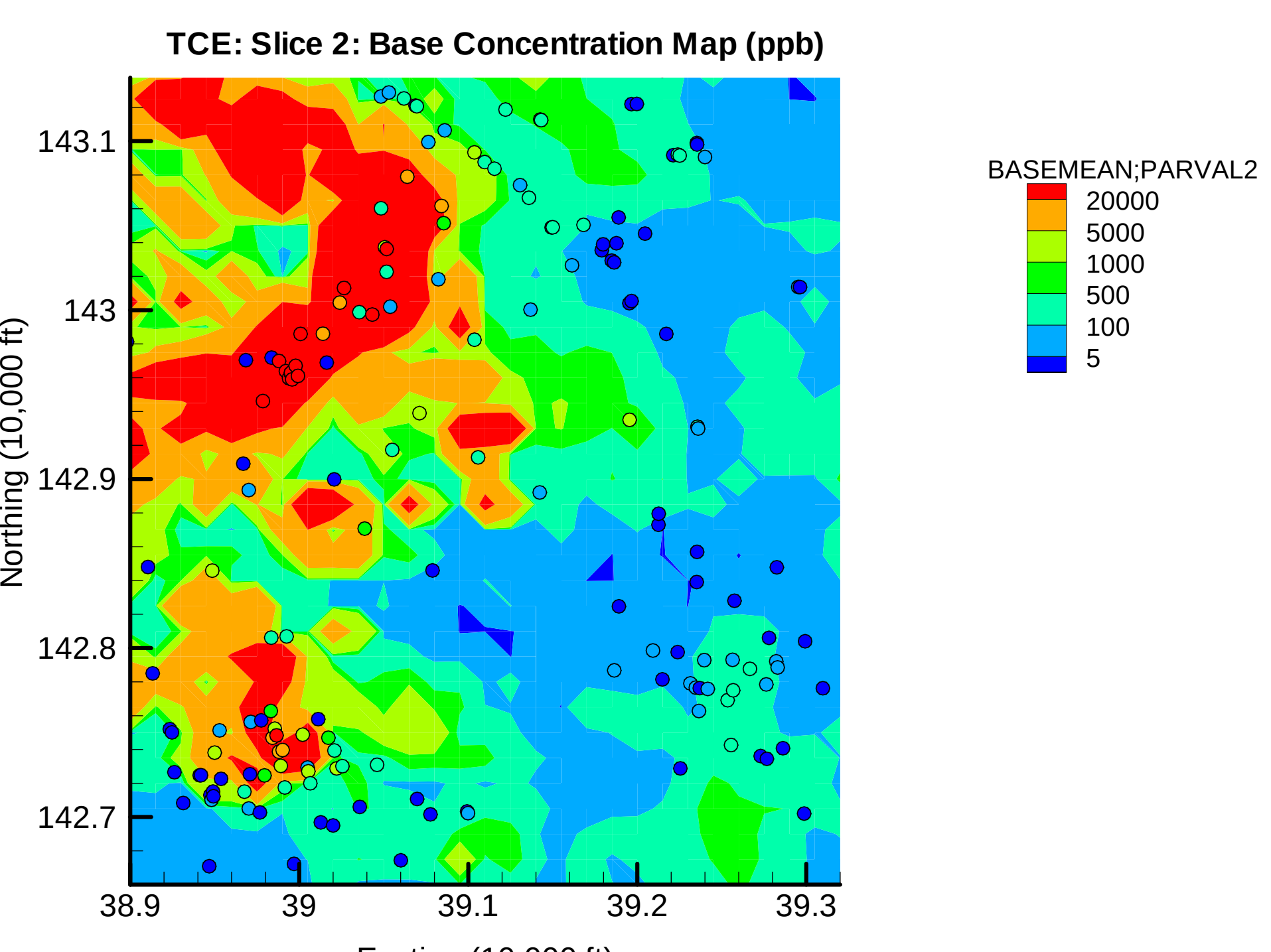


TCE: Slice 1: Indicator Difference Map: 50% Removal

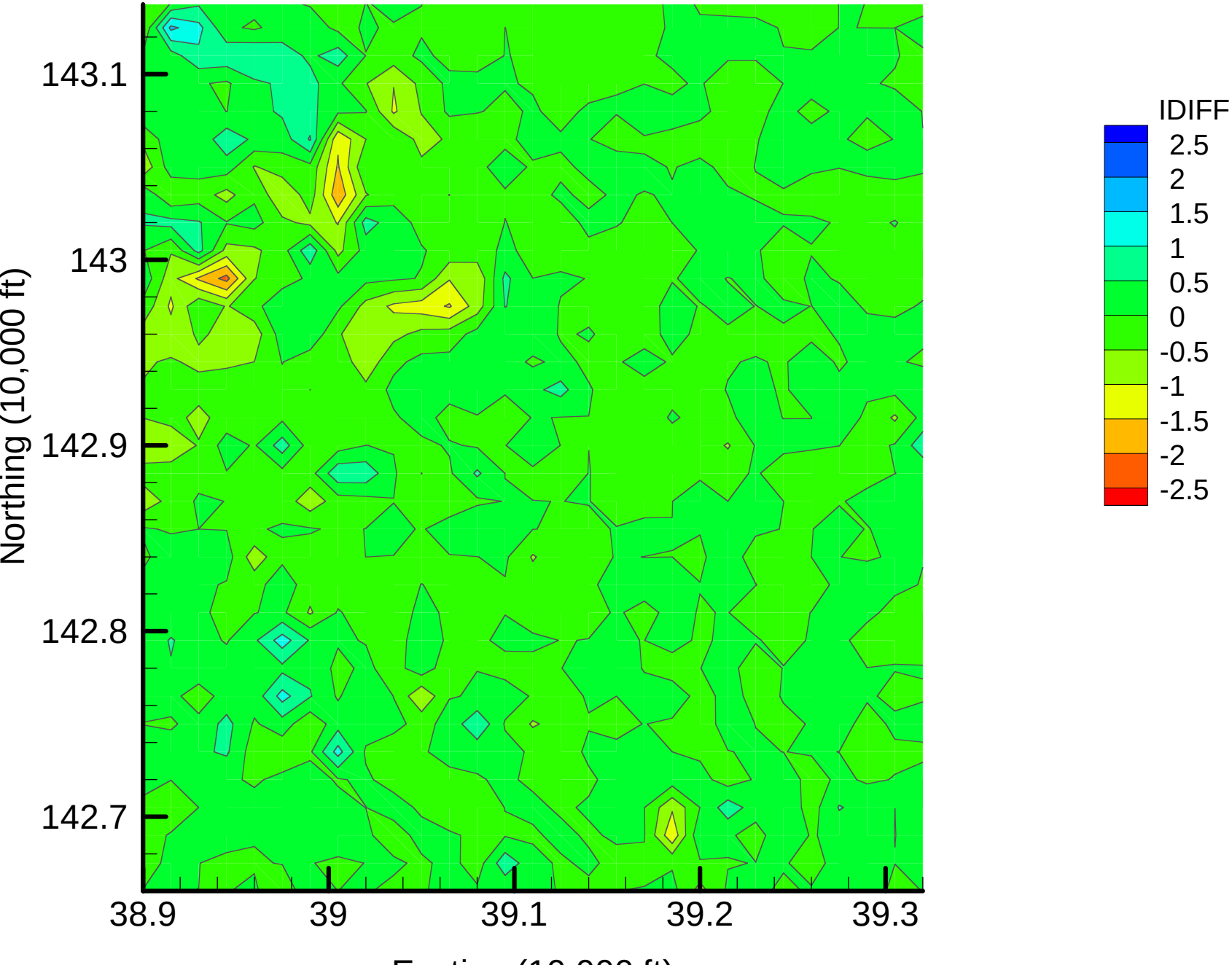


TCE: Slice 1: Indicator Difference Map: 55% Removal




TCE: Slice 2: Base Concentration Map (ppb)
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
BASEMEAN;PARVAL2
20000
5000
1000
500
100
5

TCE: Slice 2: Indicator Difference Map: 5% Removal



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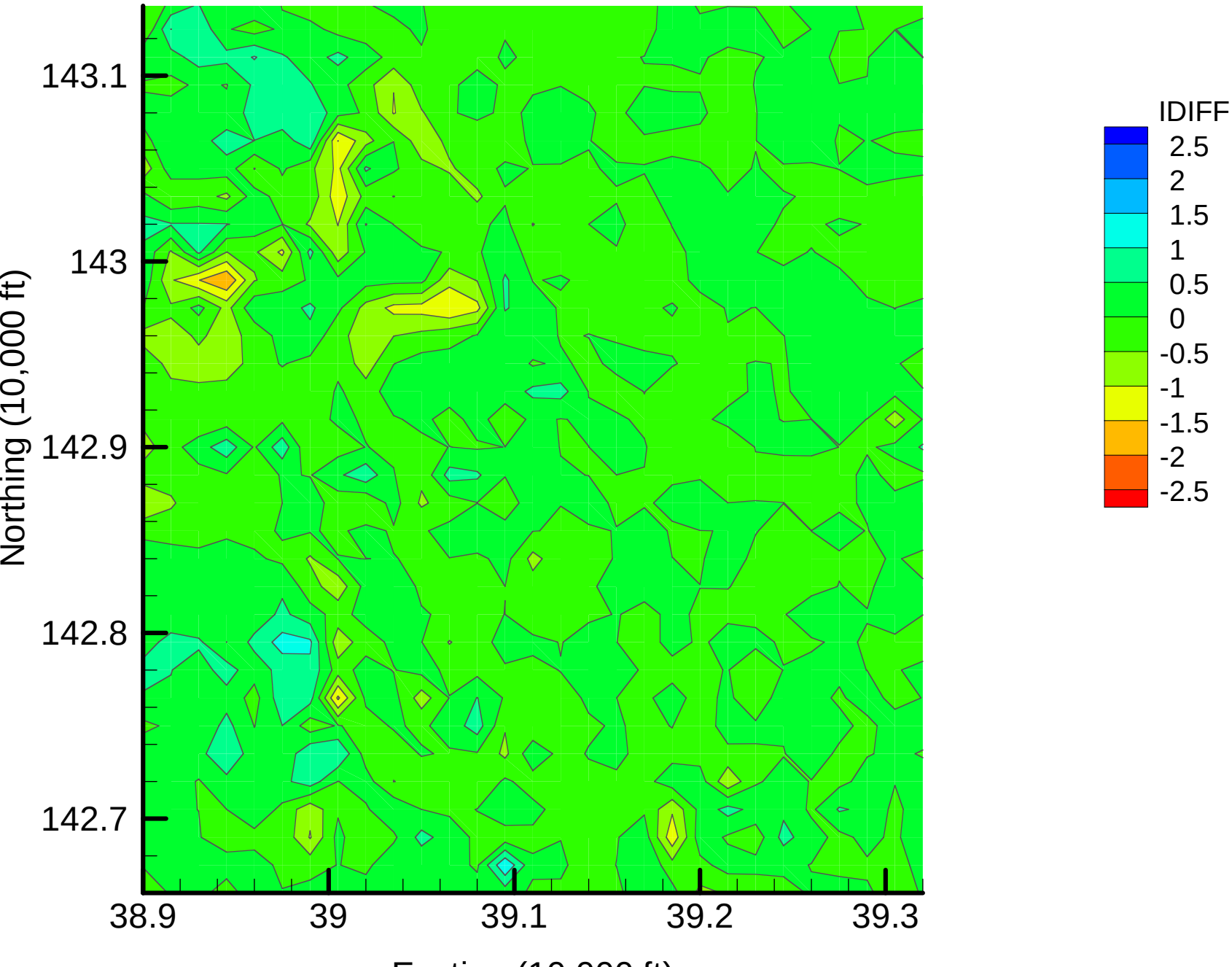
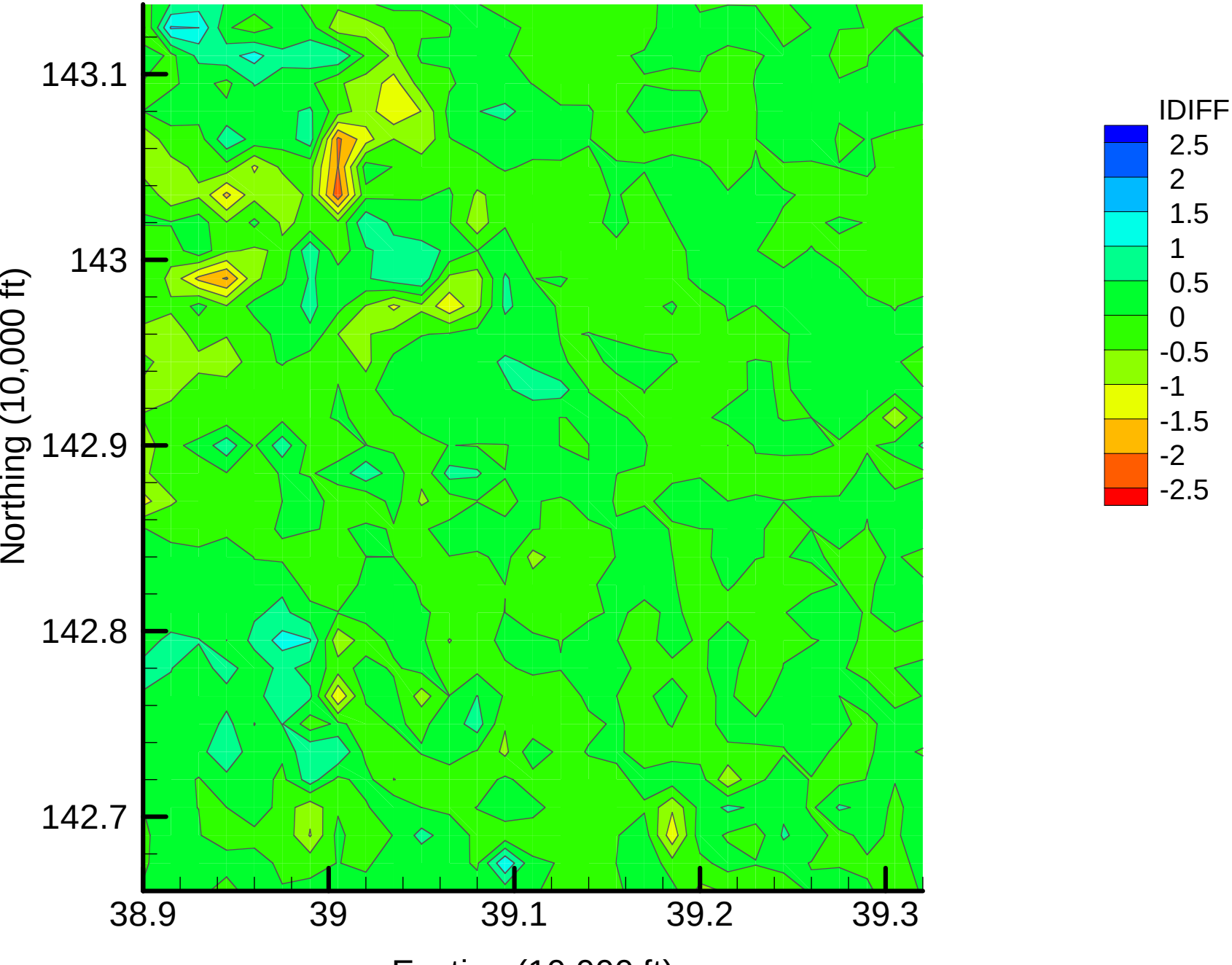


TCE: Slice 2: Indicator Difference Map: 15% Removal



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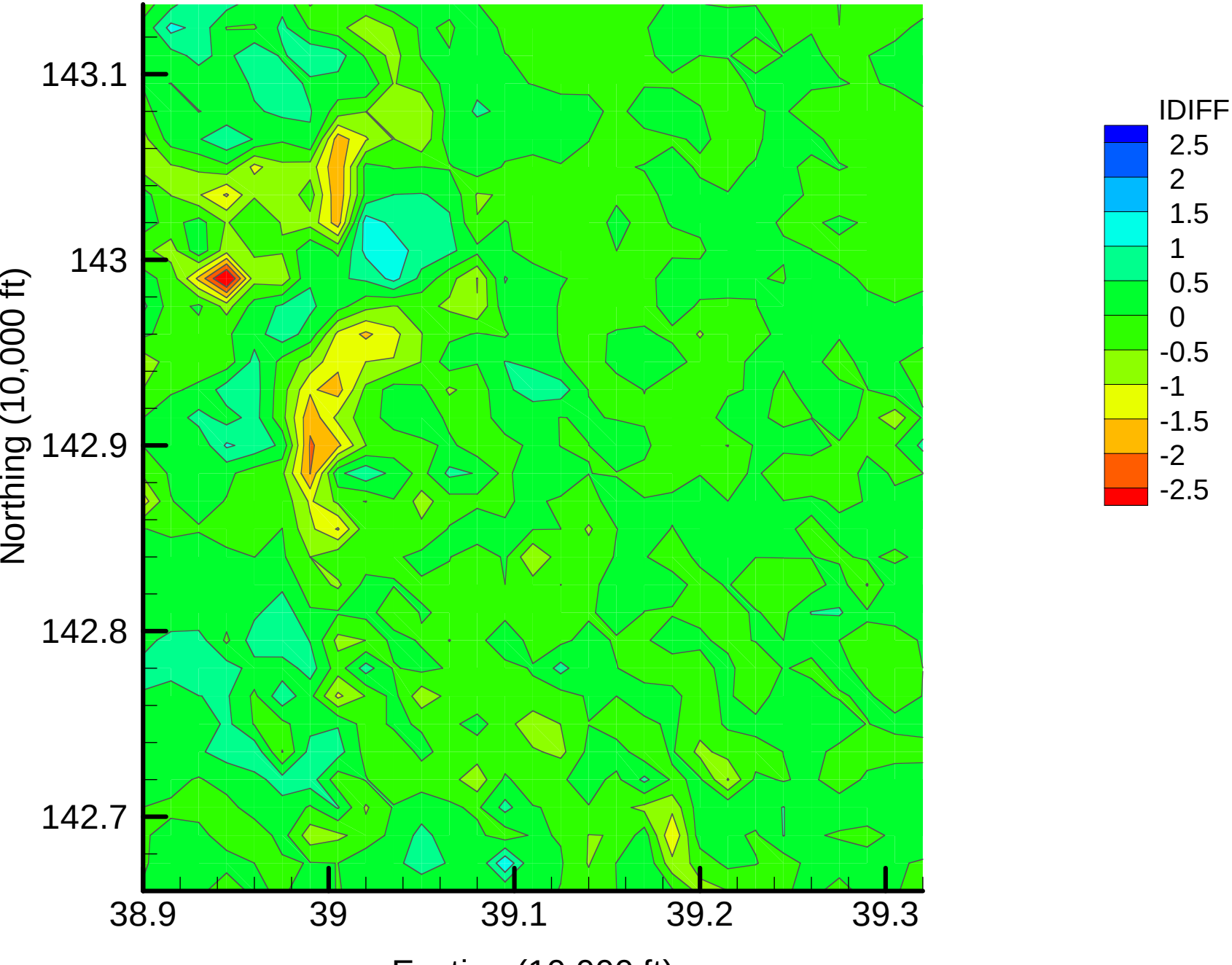
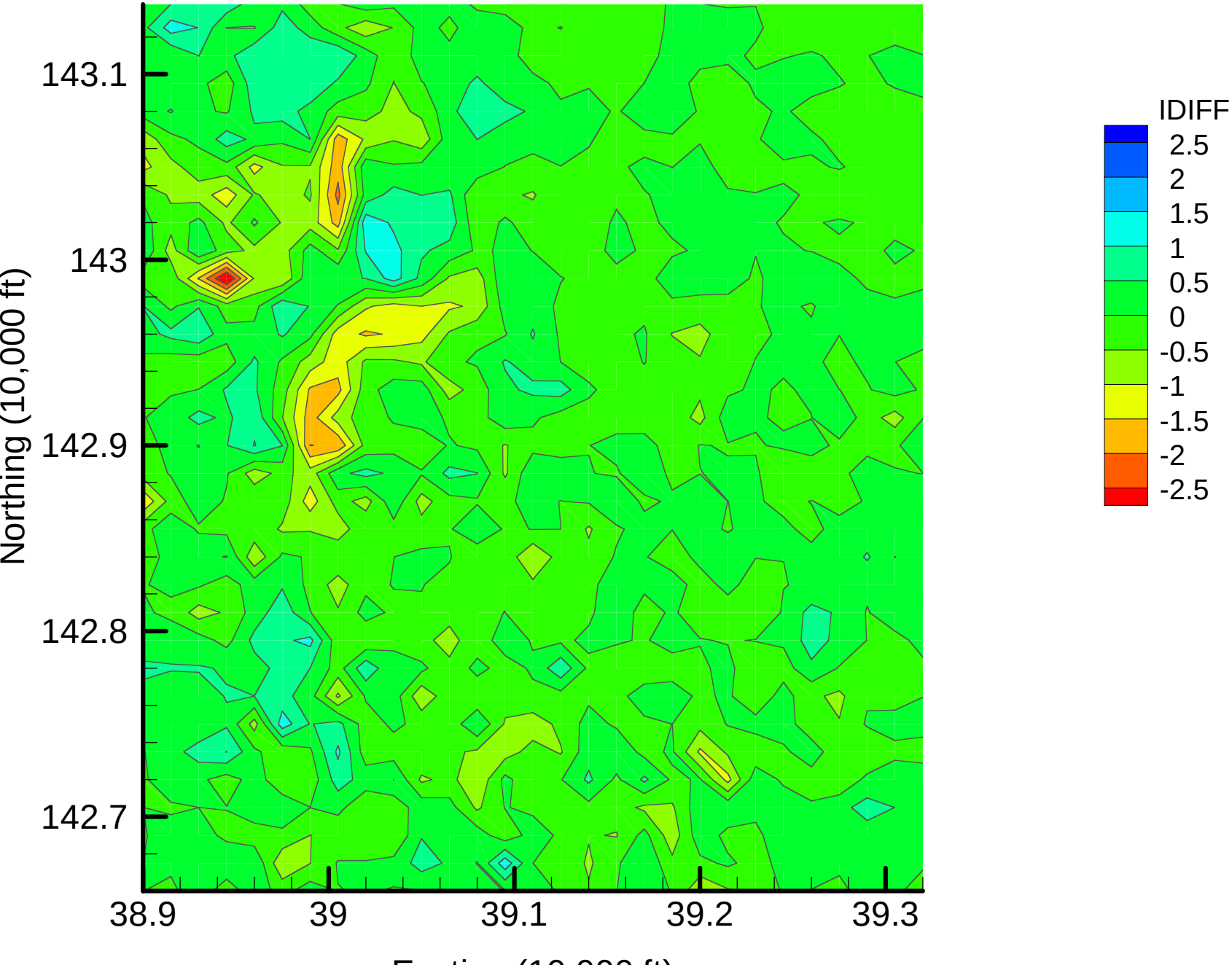
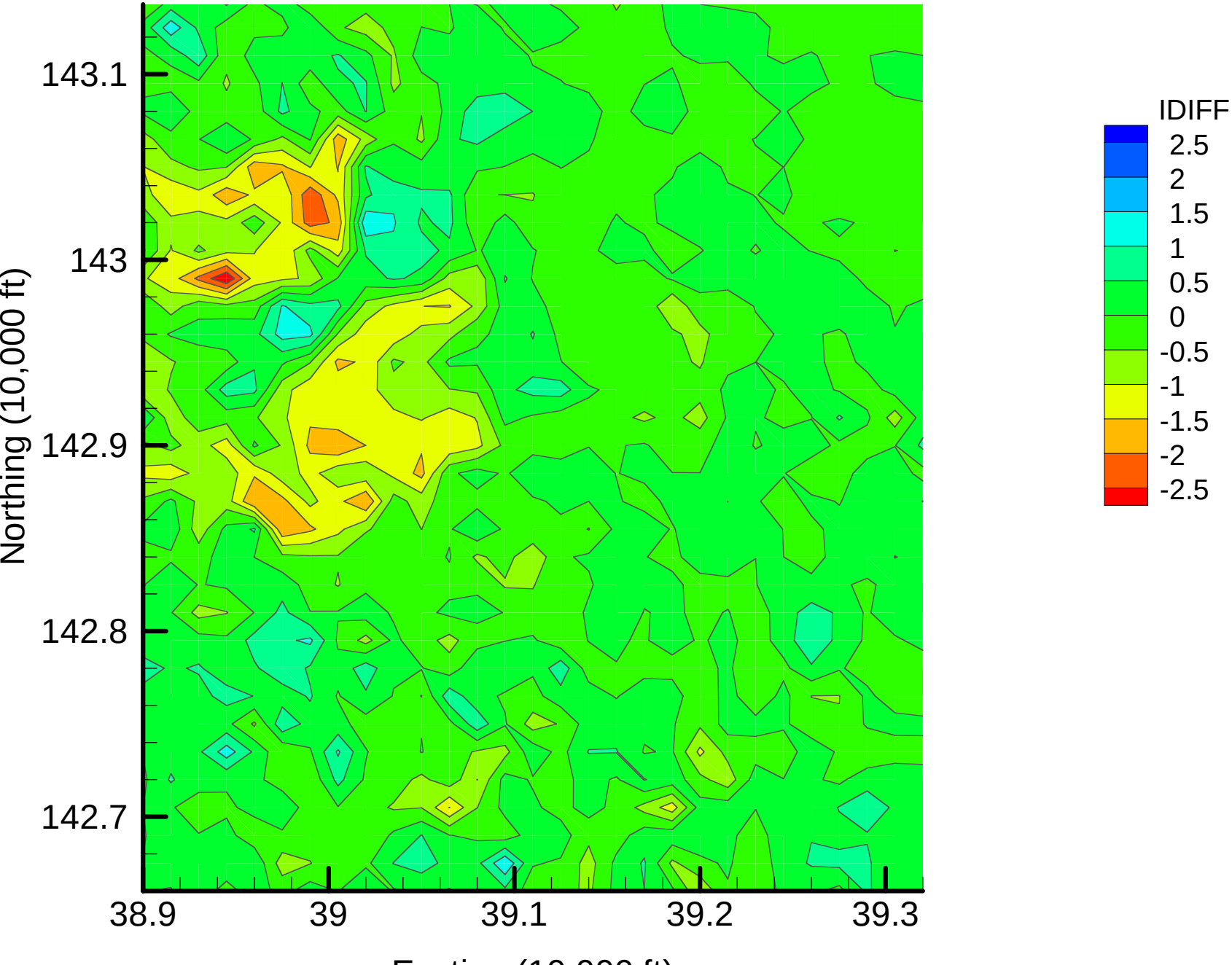


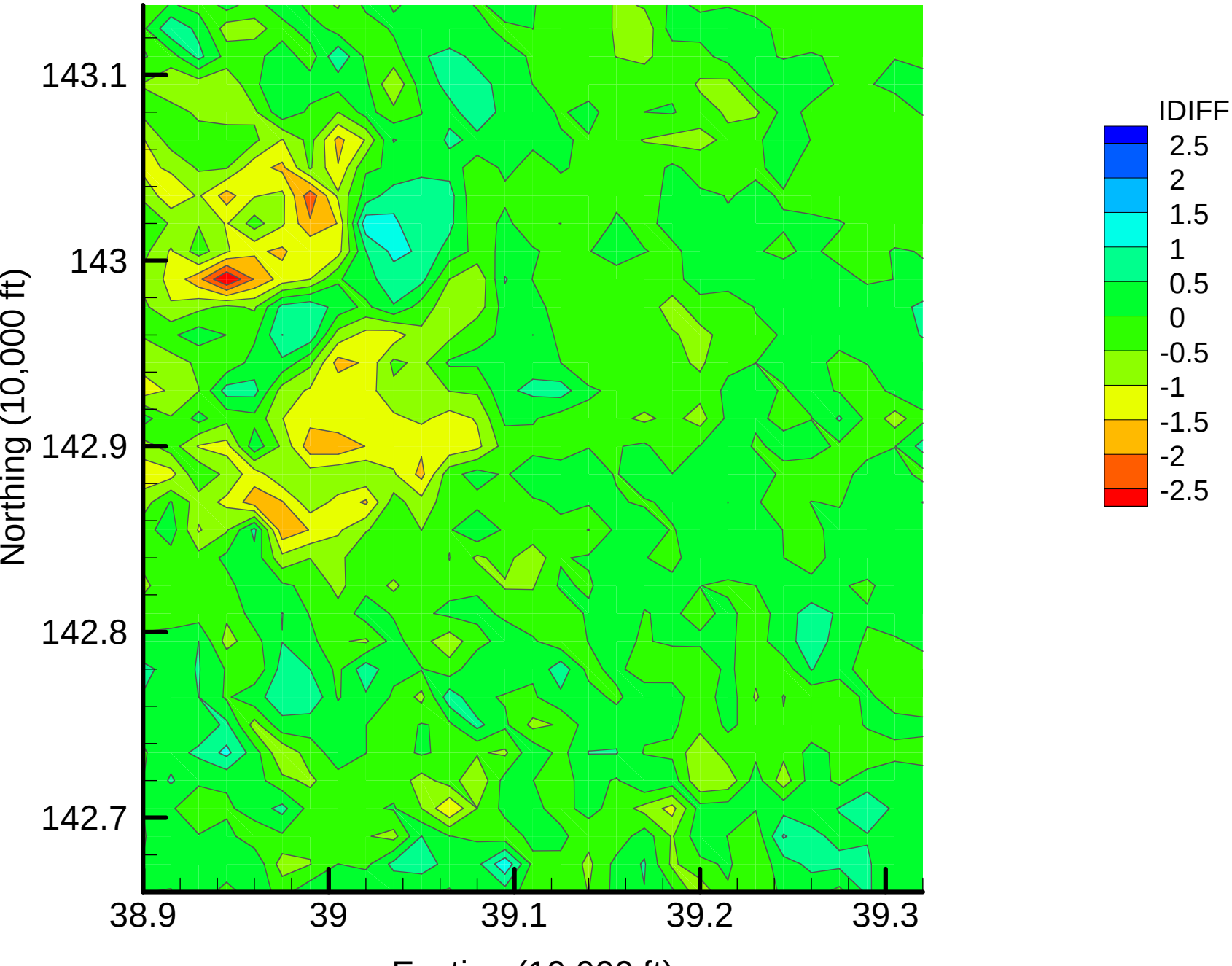
TCE: Slice 2: Indicator Difference Map: 25% Removal



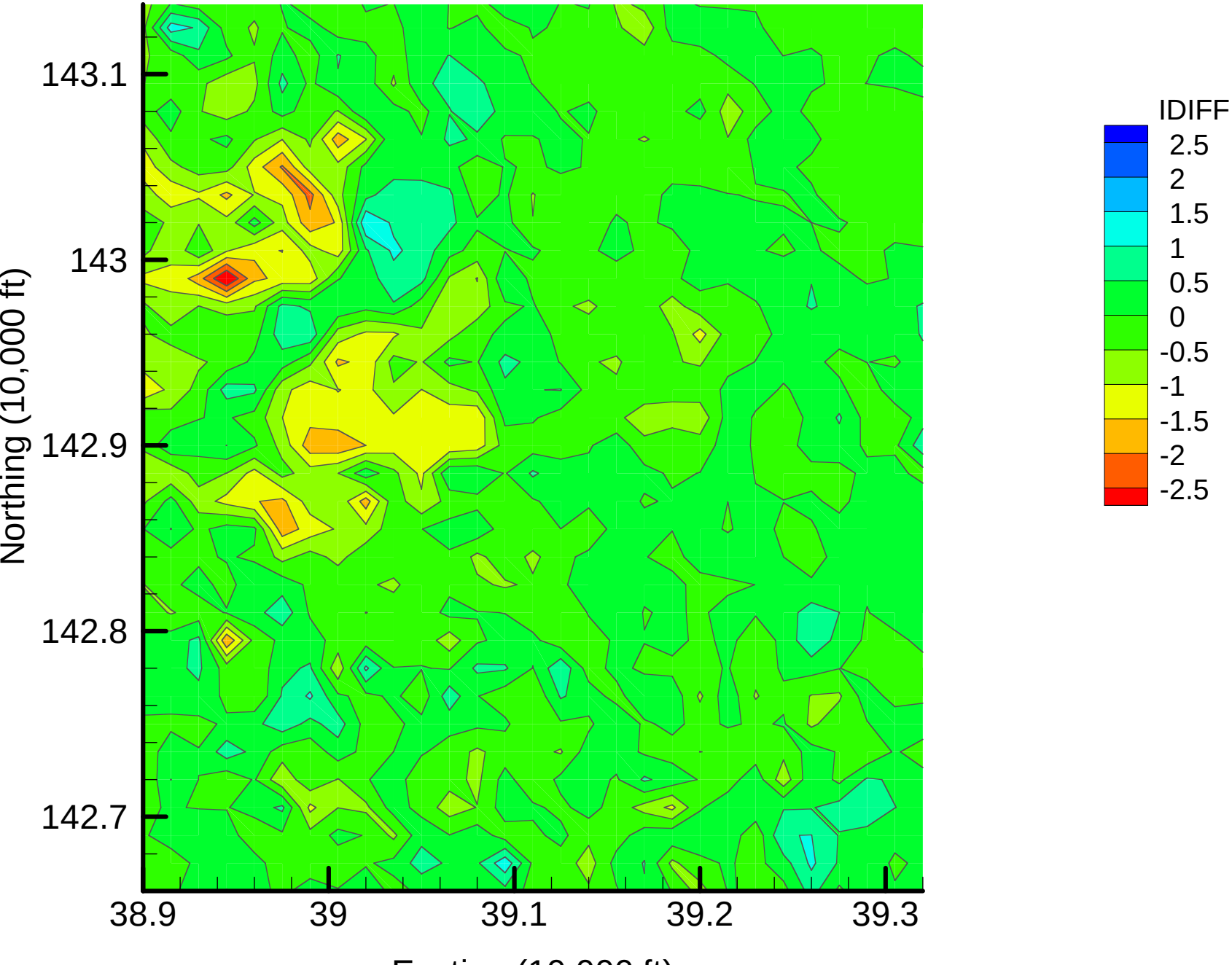
TCE: Slice 2: Indicator Difference Map: 30% Removal



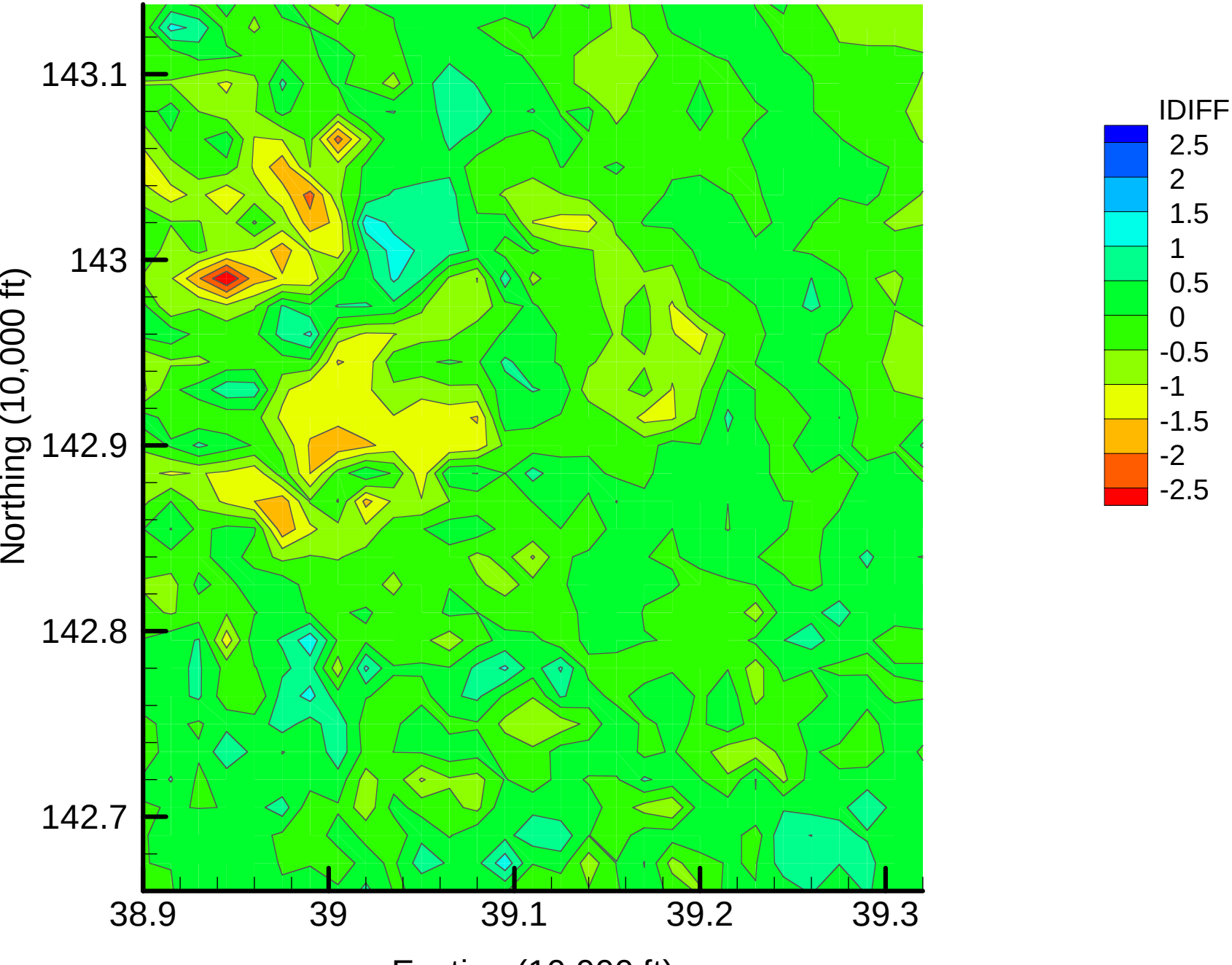
TCE: Slice 2: Indicator Difference Map: 35% Removal



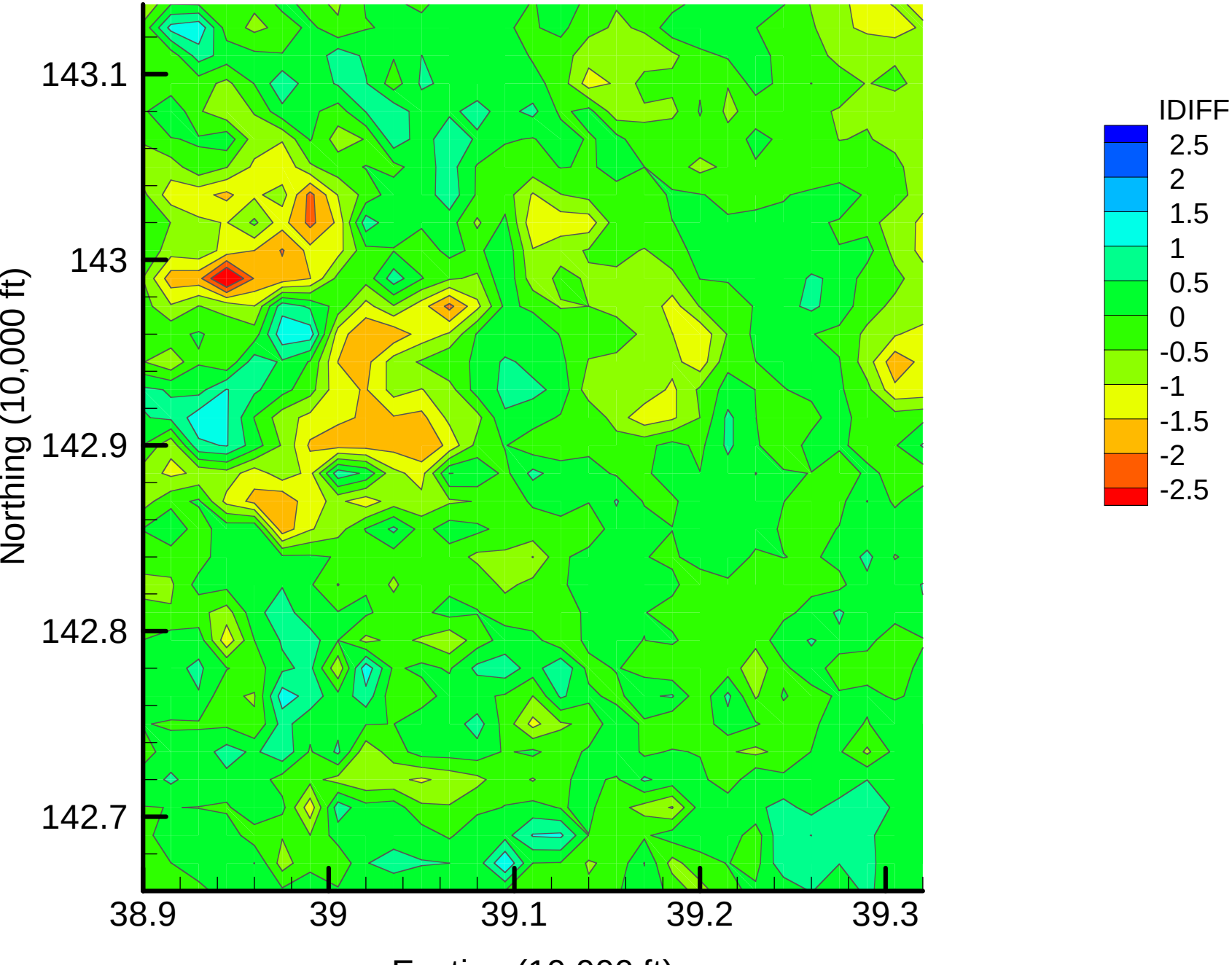
TCE: Slice 2: Indicator Difference Map: 40% Removal



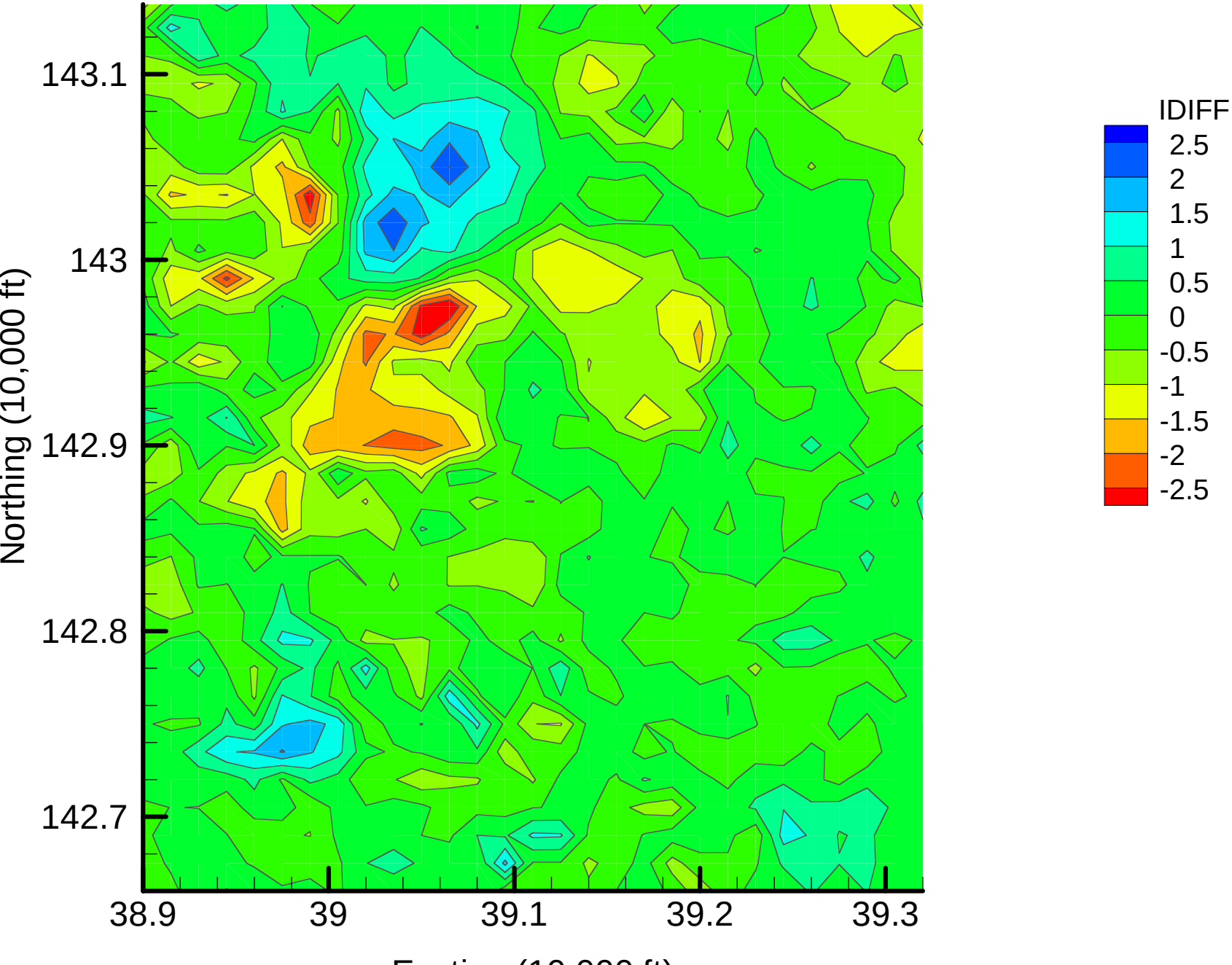
TCE: Slice 2: Indicator Difference Map: 45% Removal



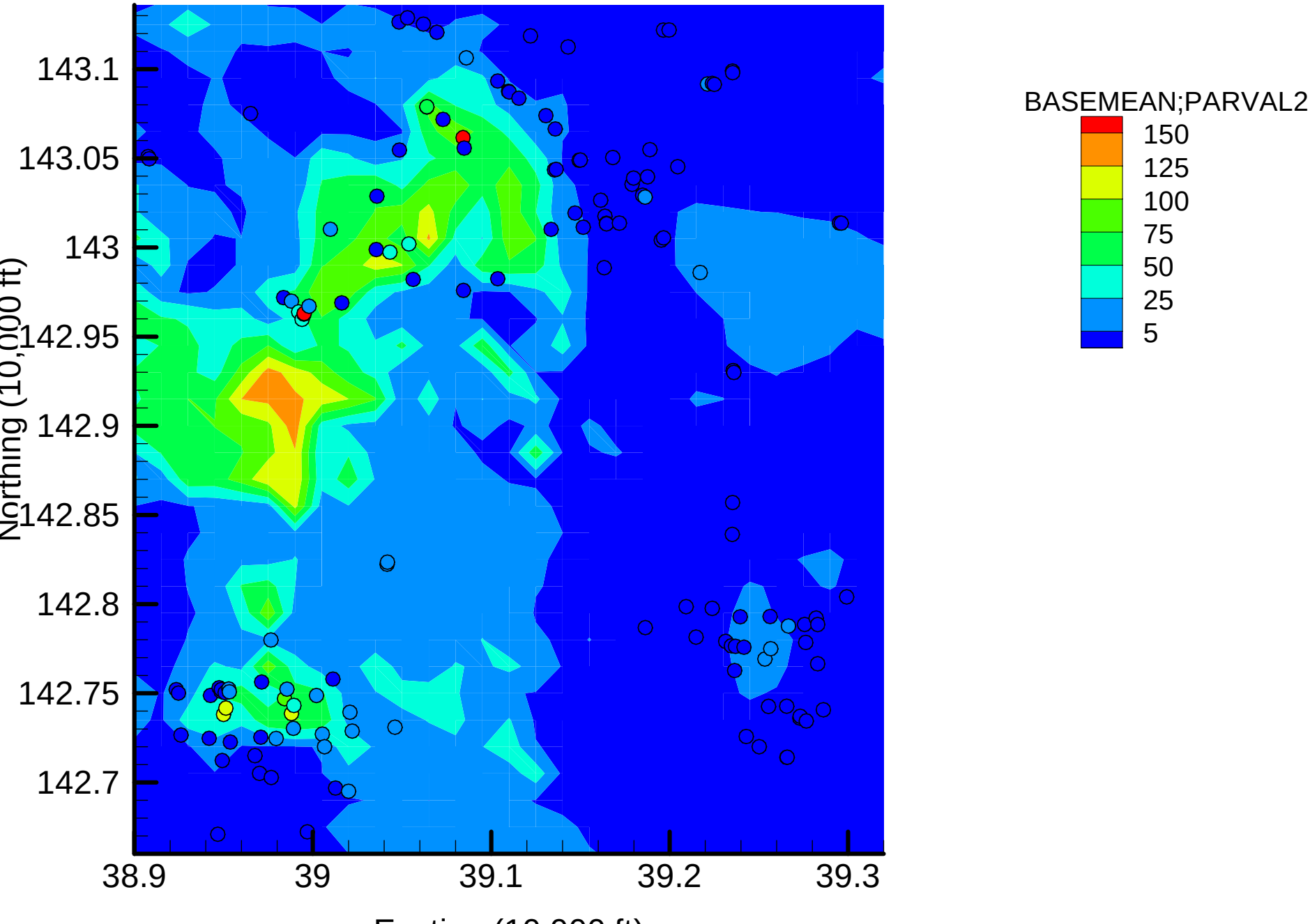
TCE: Slice 2: Indicator Difference Map: 50% Removal



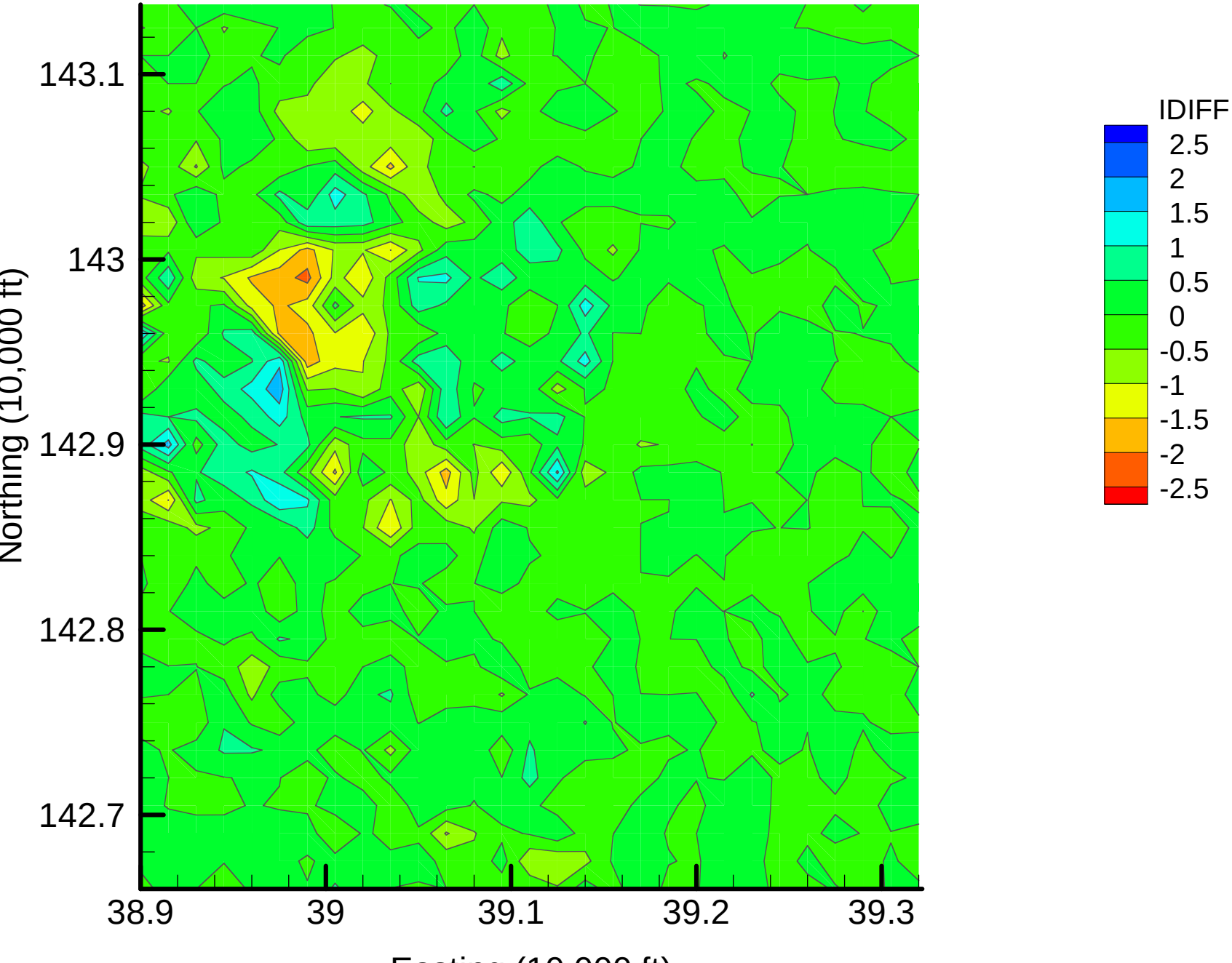
TCE: Slice 2: Indicator Difference Map: 55% Removal



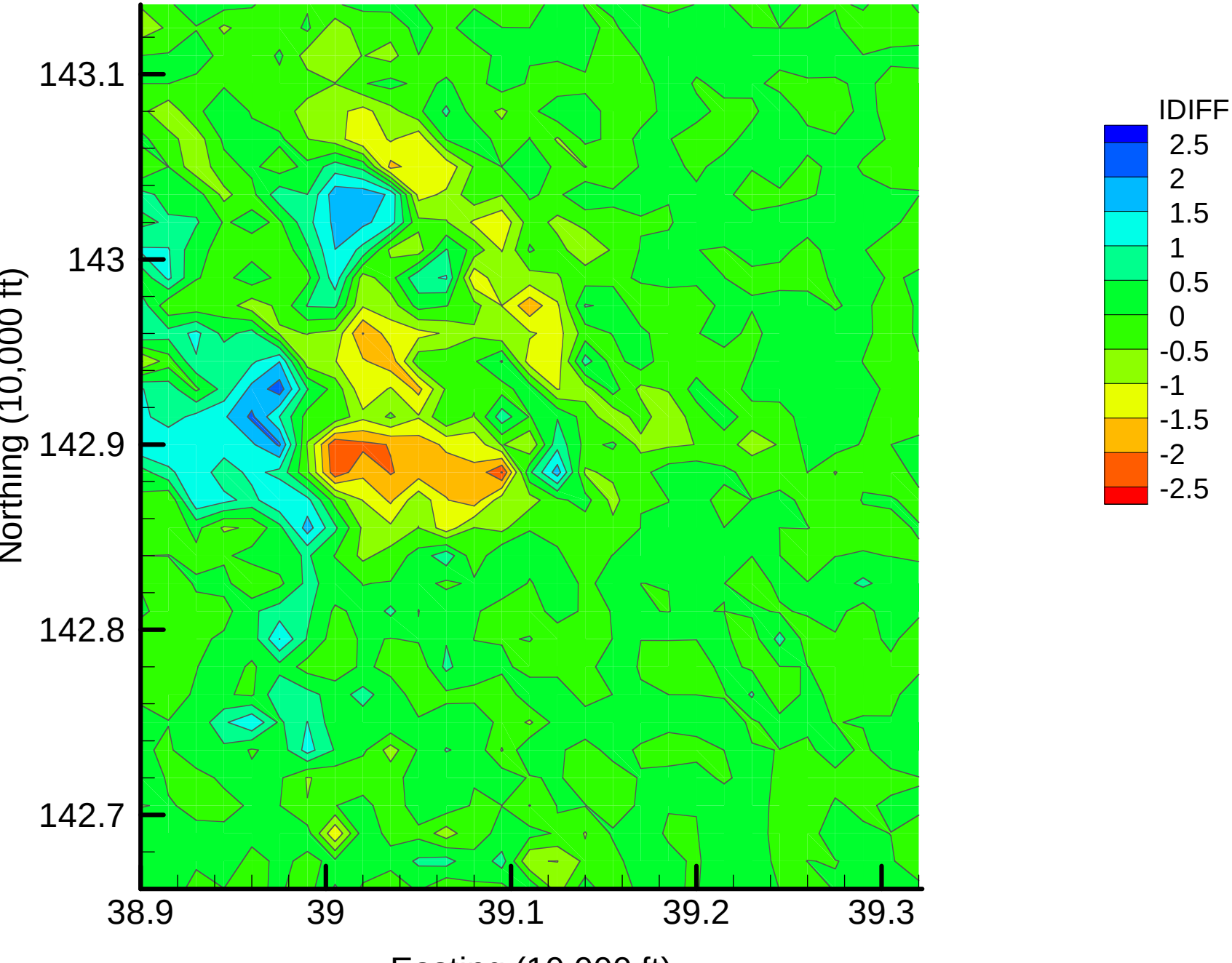
TCLME: Slice 1: Estimated Concentration Base Map (ppb)



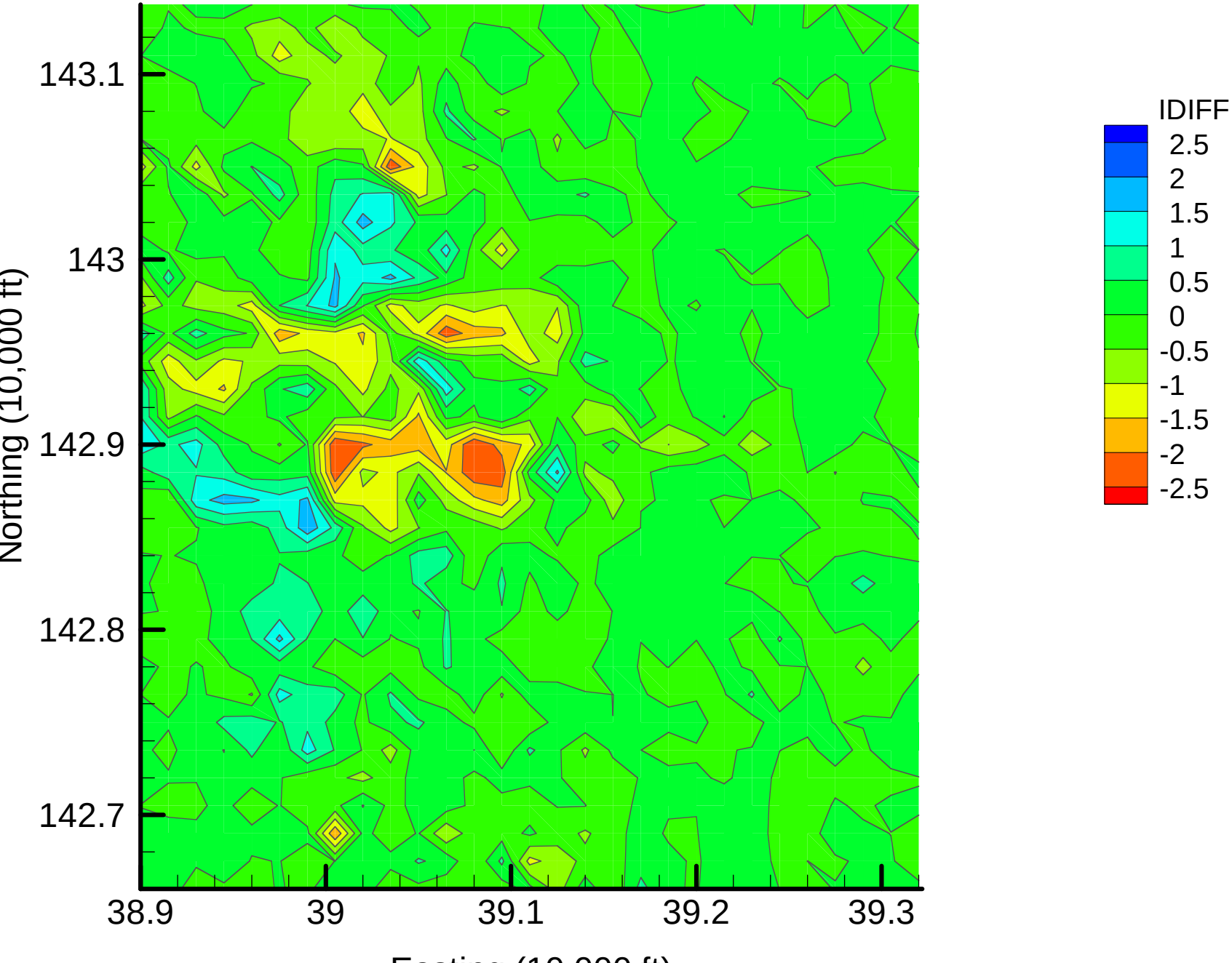
TCLME: Slice 1: Indicator Difference Map: 5% Removal



TCLME: Slice 1: Indicator Difference Map: 10% Removal



TCLME: Slice 1: Indicator Difference Map: 15% Removal



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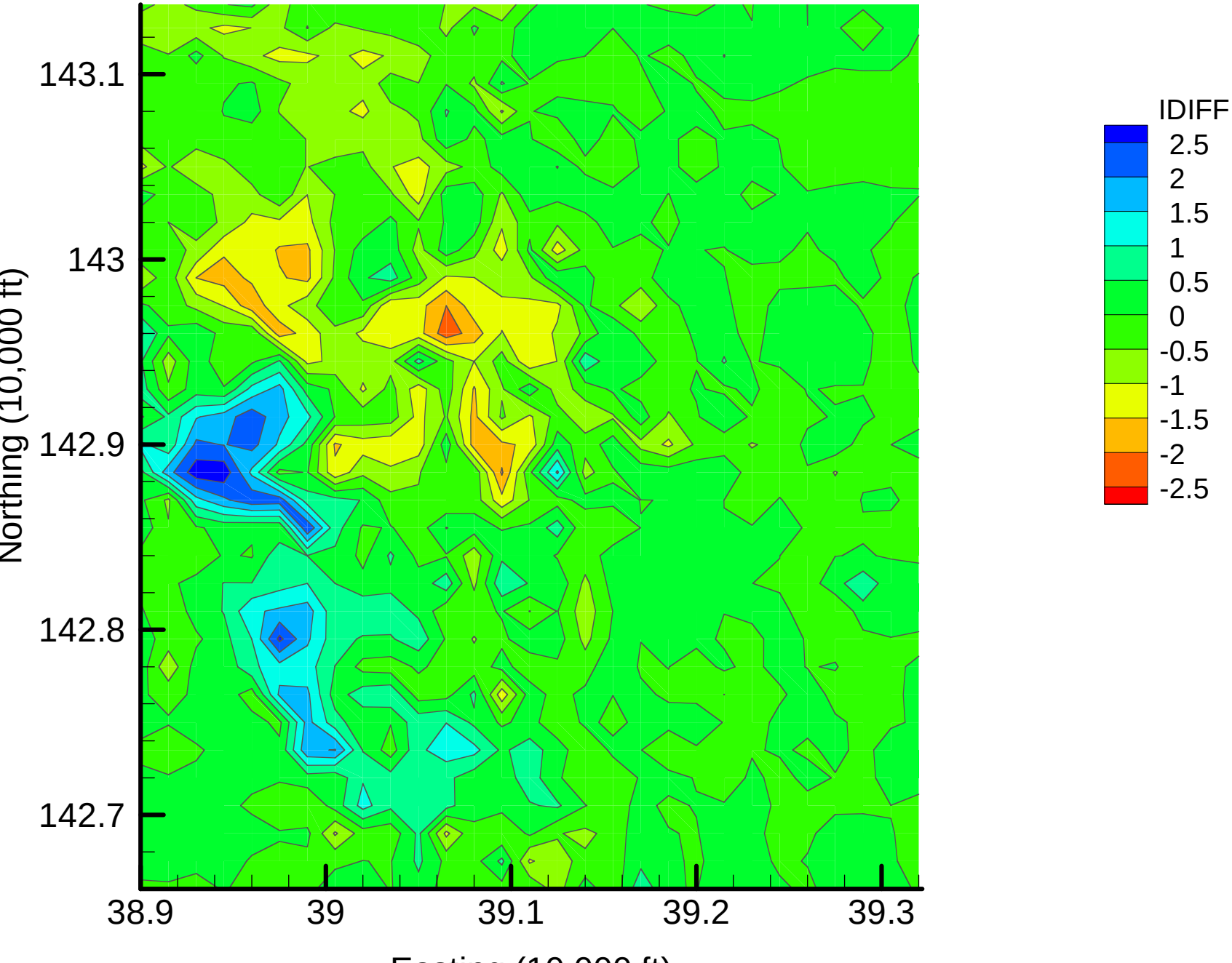
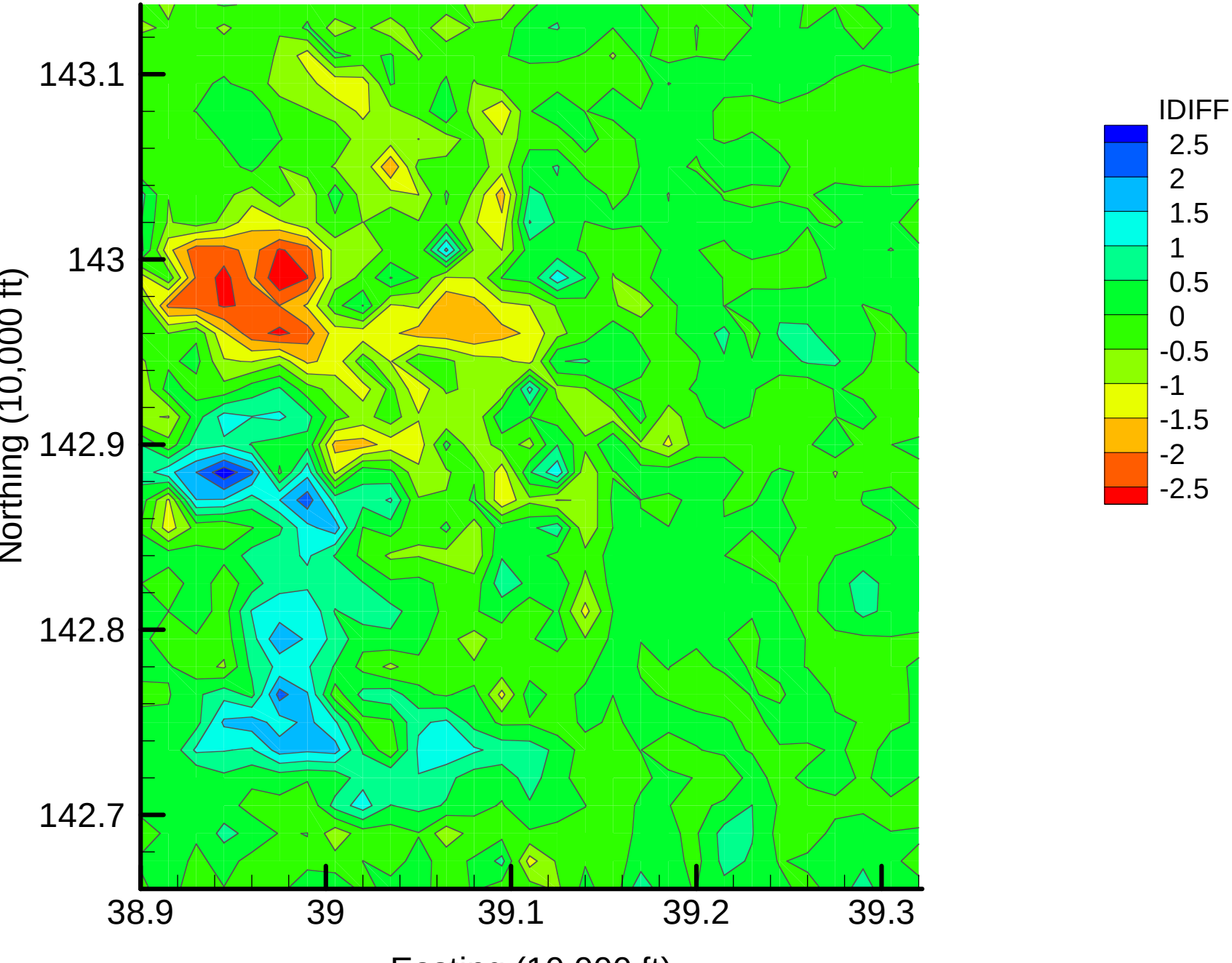
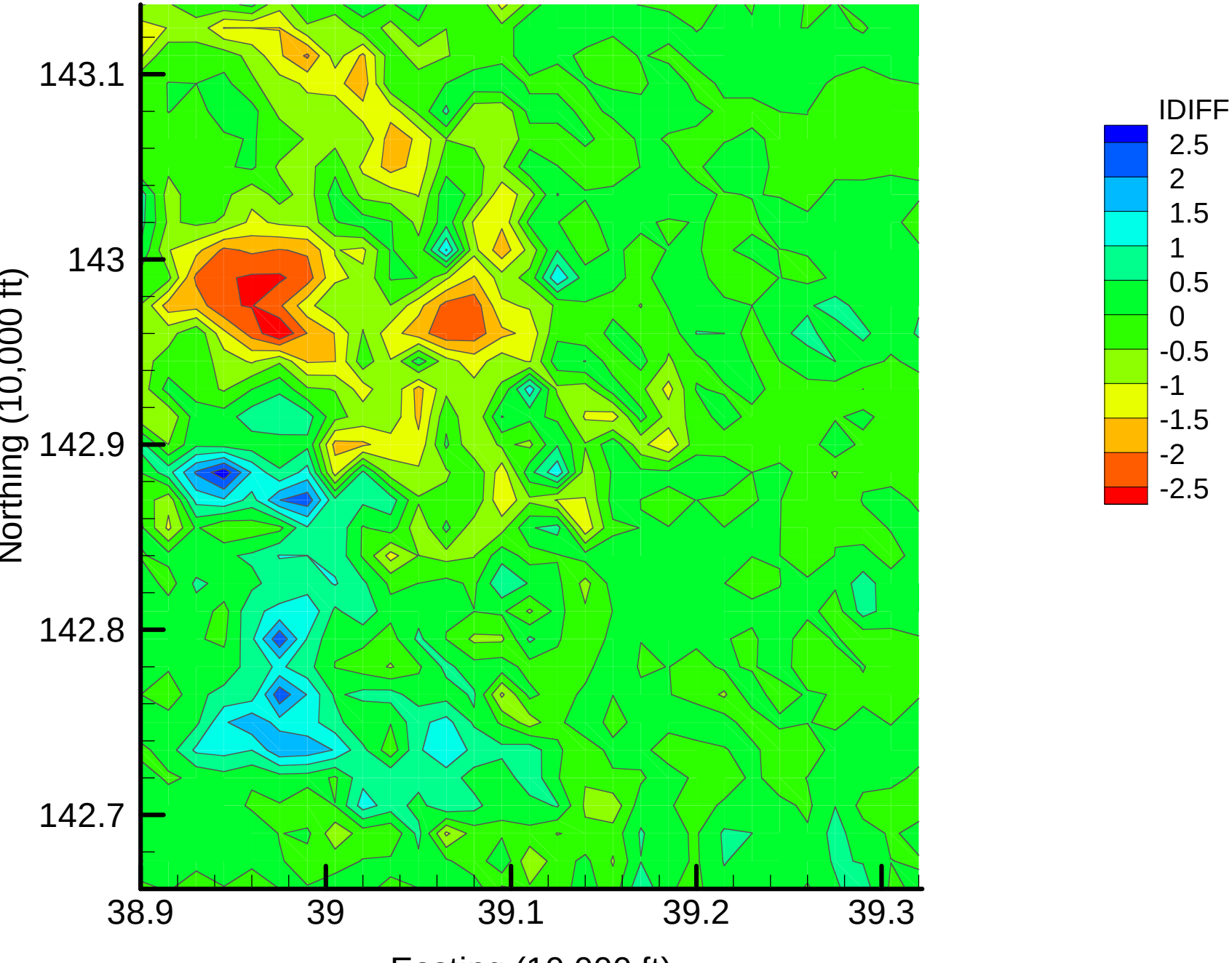


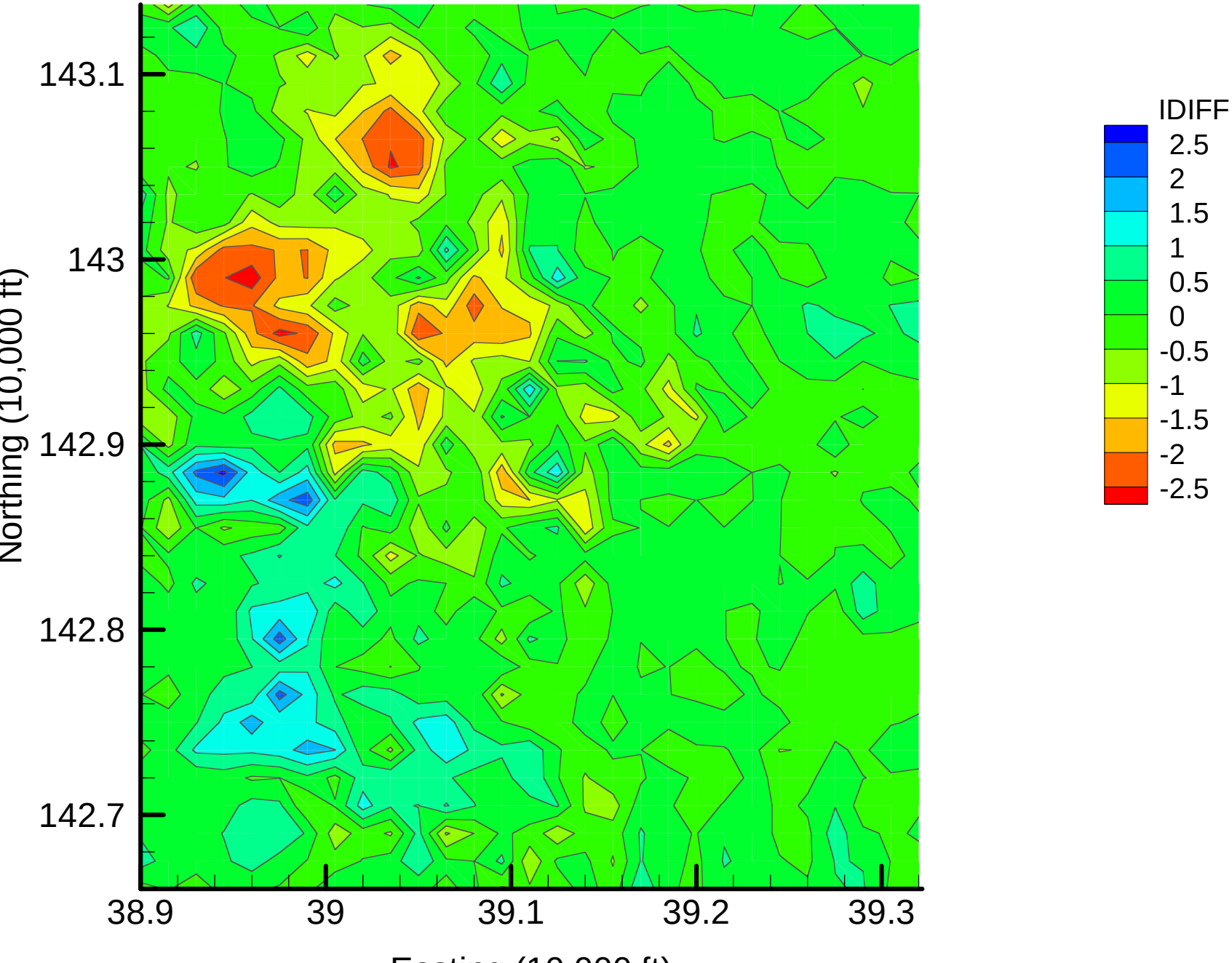
TCLME: Slice 1: Indicator Difference Map: 25% Removal



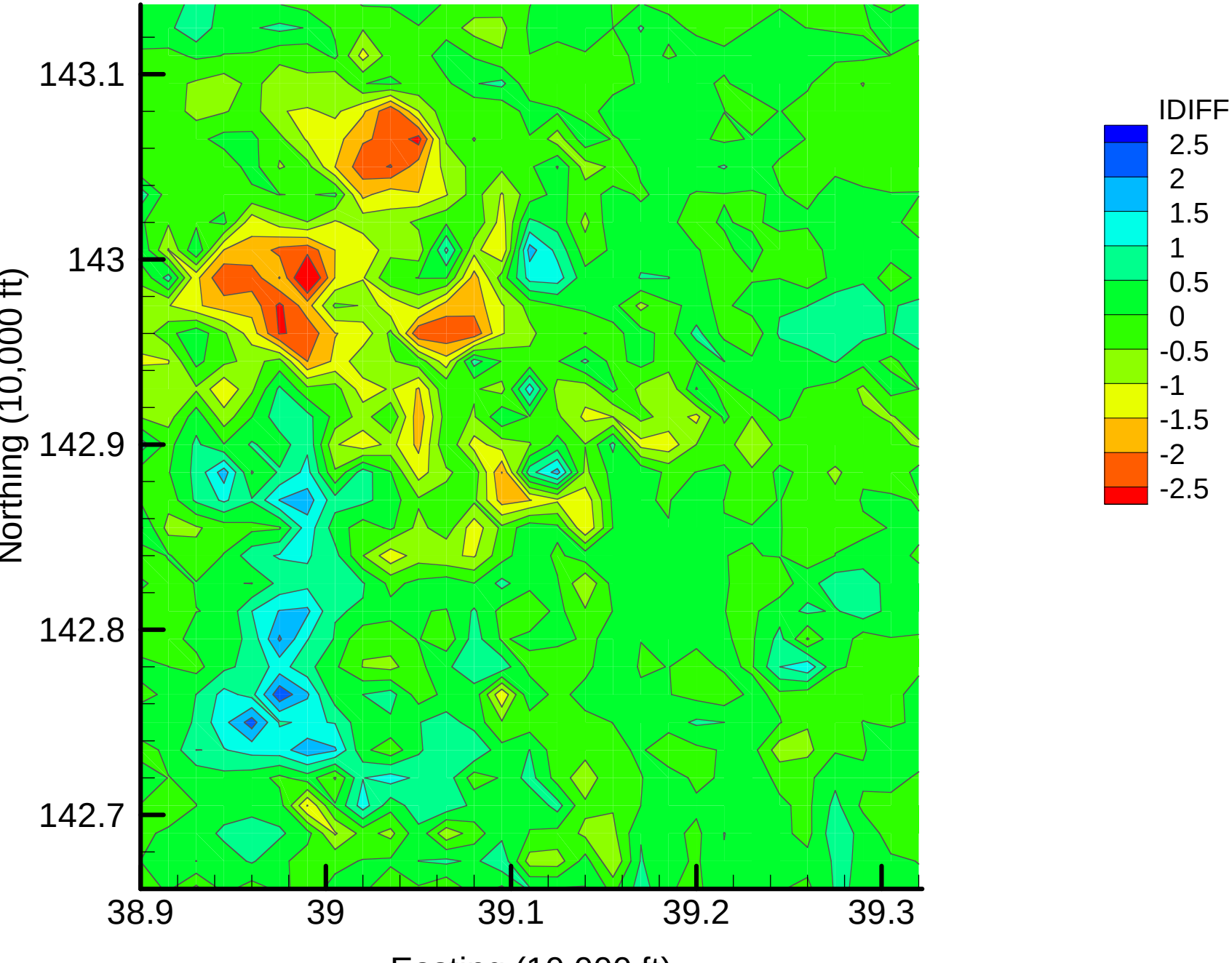
TCLME: Slice 1: Indicator Difference Map: 30% Removal



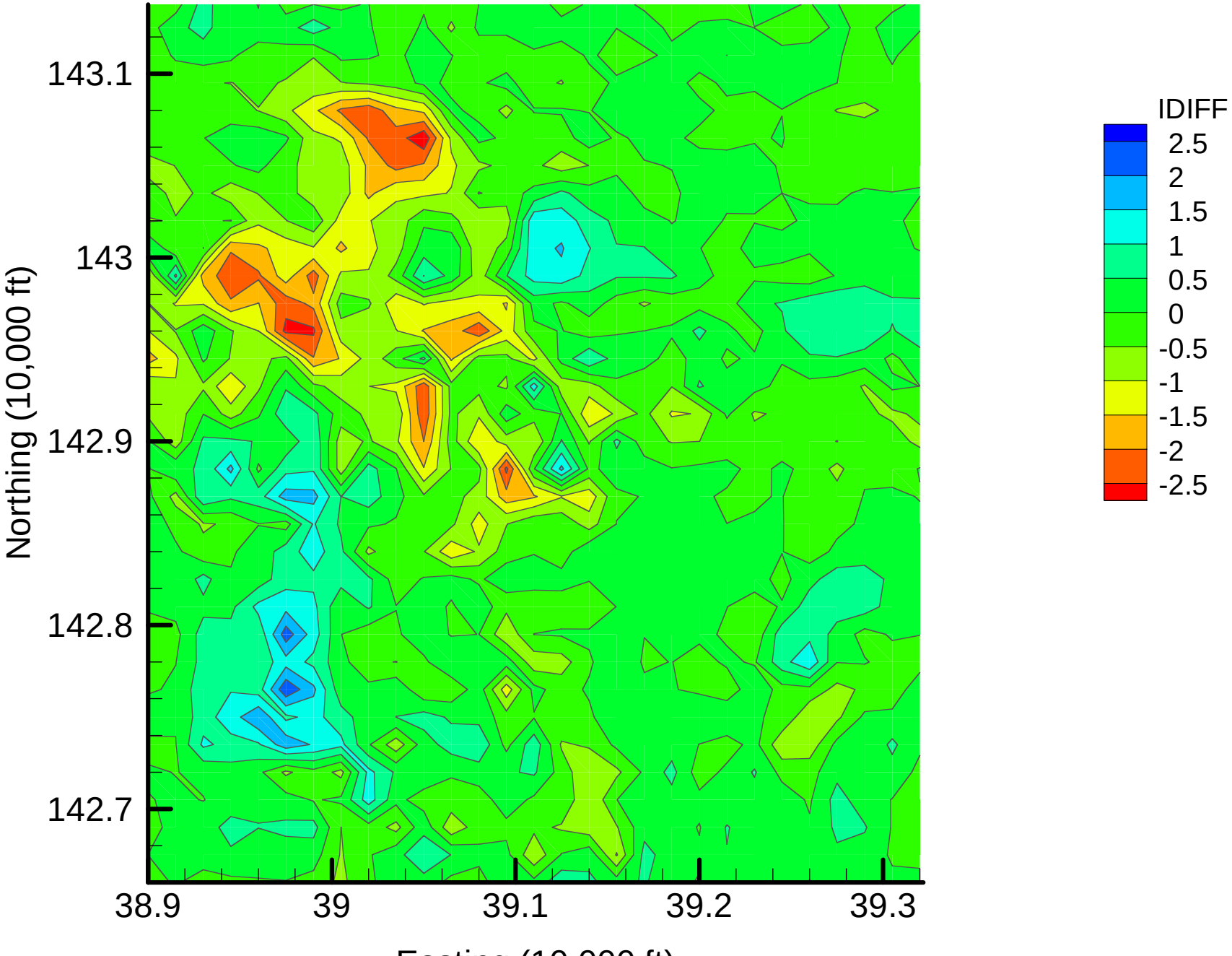
TCLME: Slice 1: Indicator Difference Map: 35% Removal



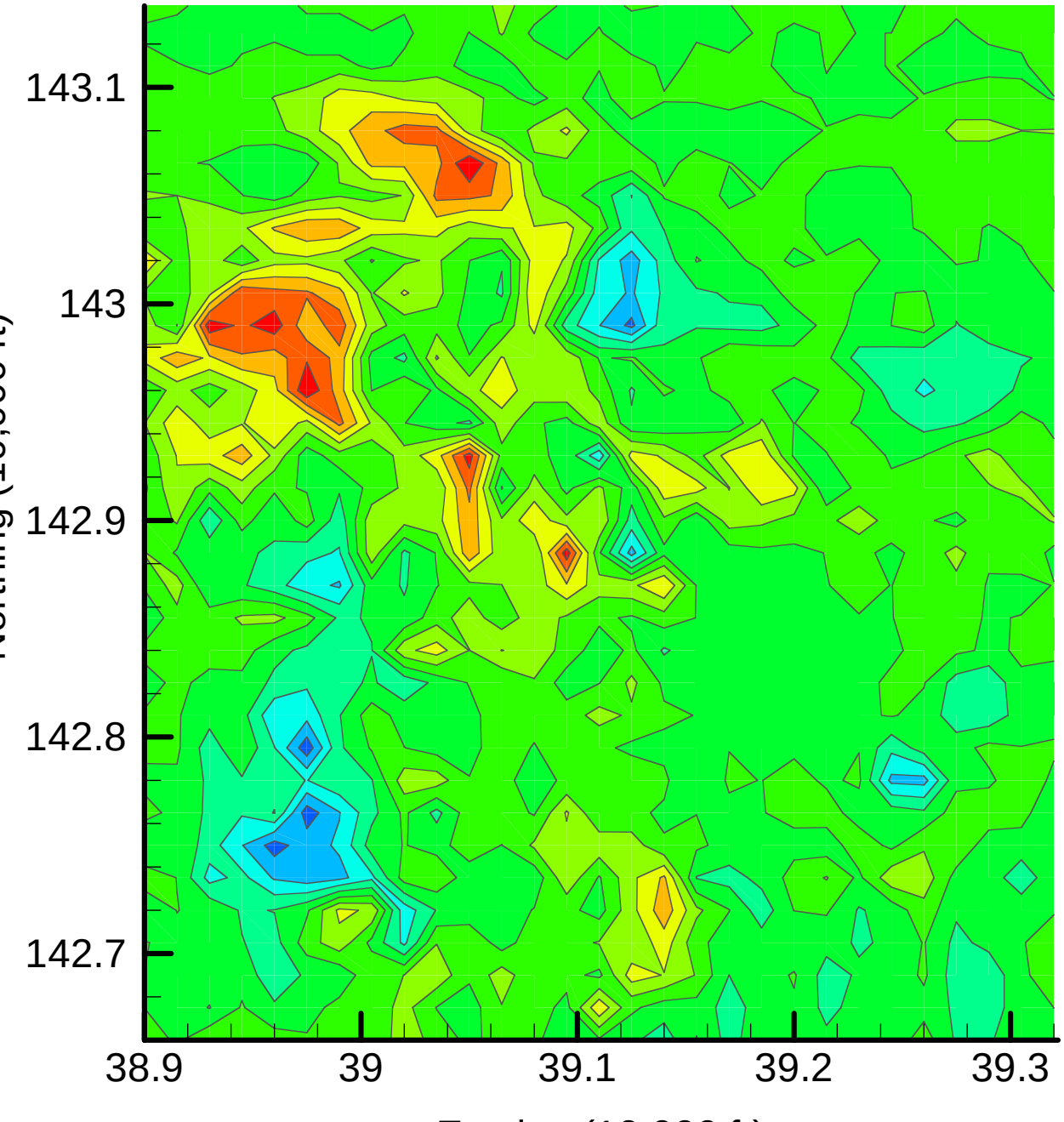
TCLME: Slice 1: Indicator Difference Map: 40% Removal

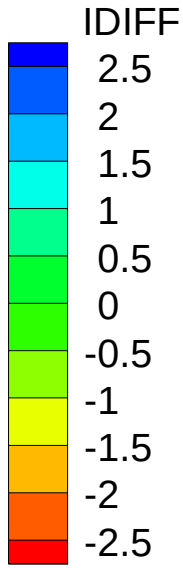


TCLME: Slice 1: Indicator Difference Map: 45% Removal

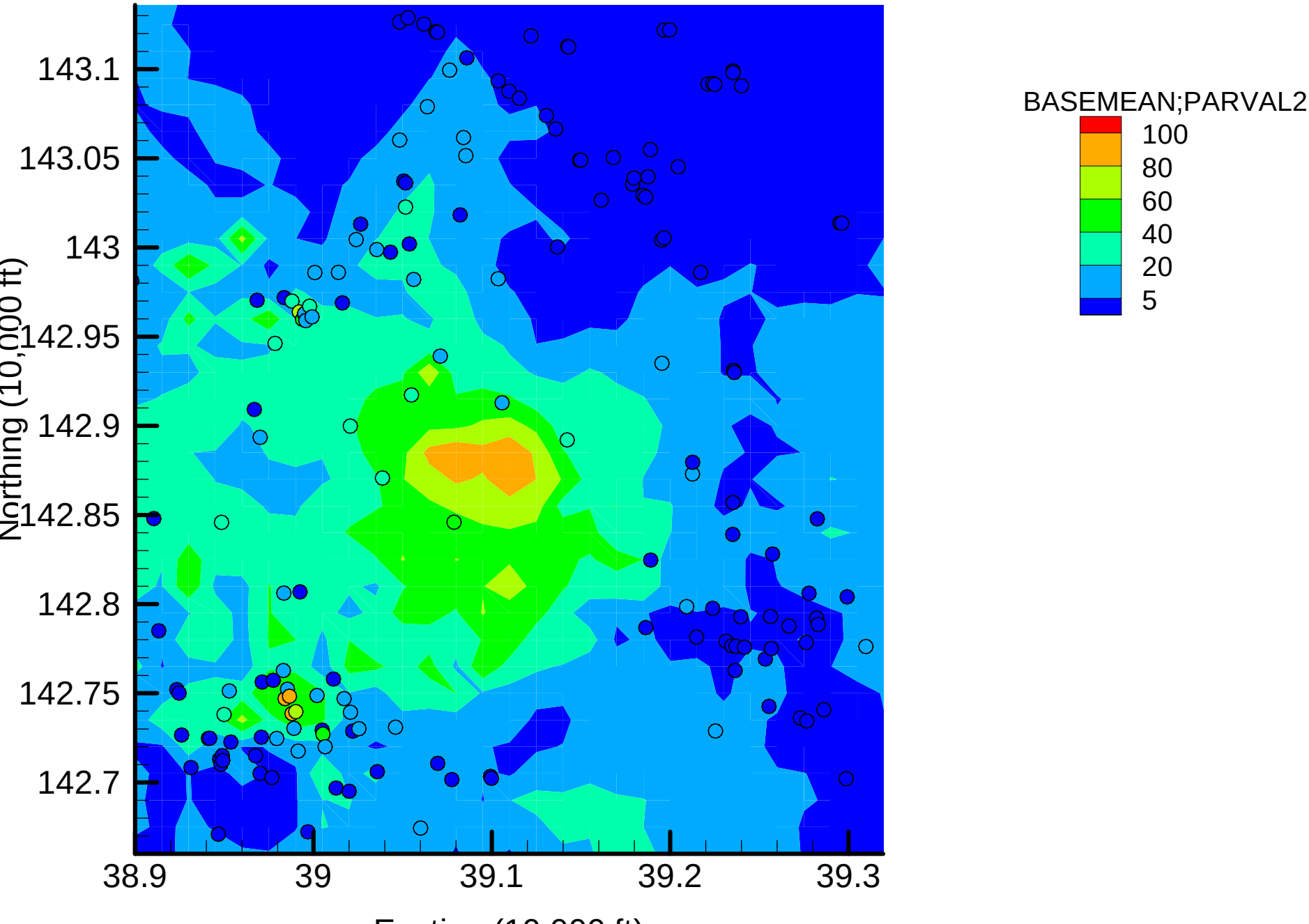


TCLME: Slice 1: Indicator Difference Map: 50% Removal

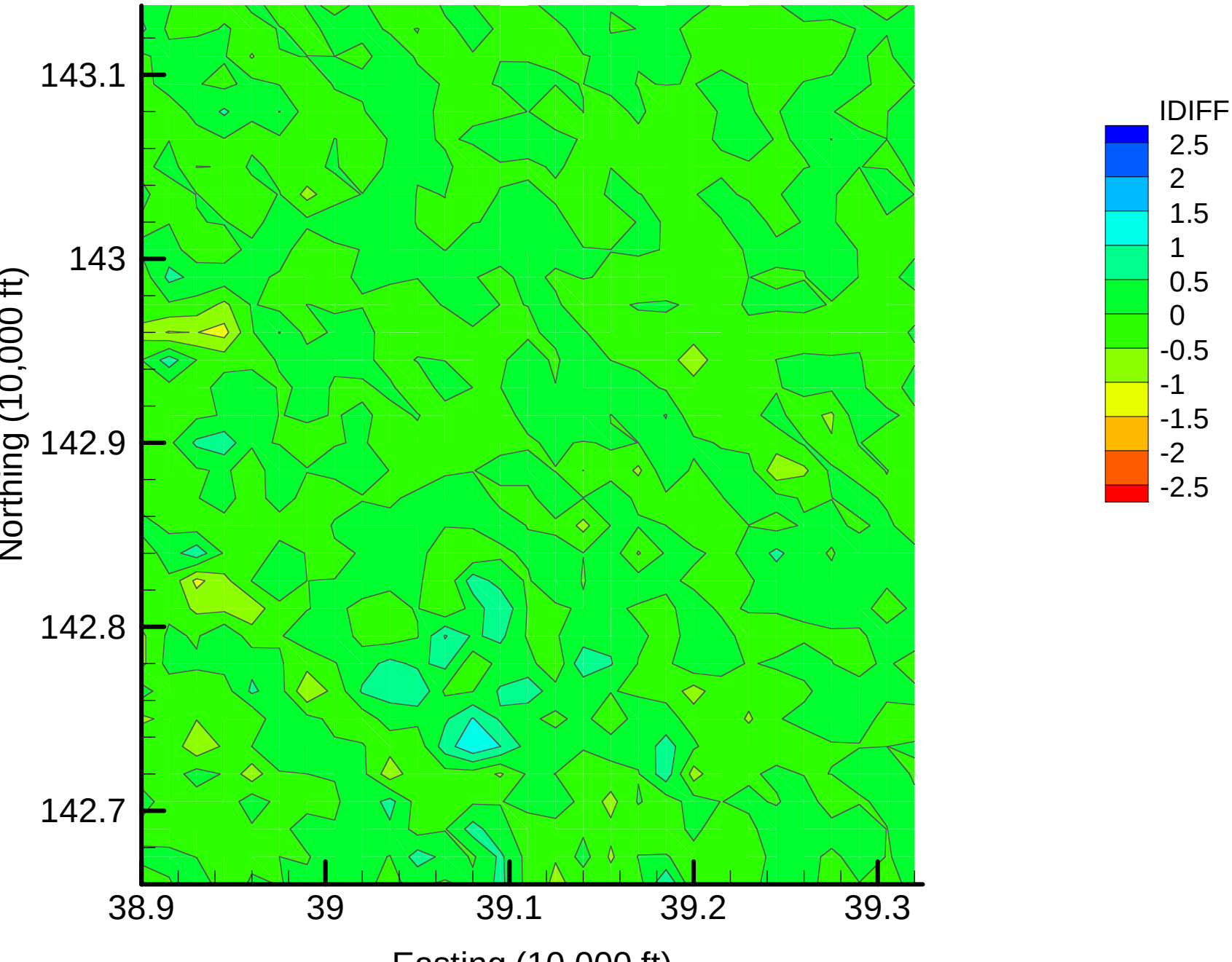




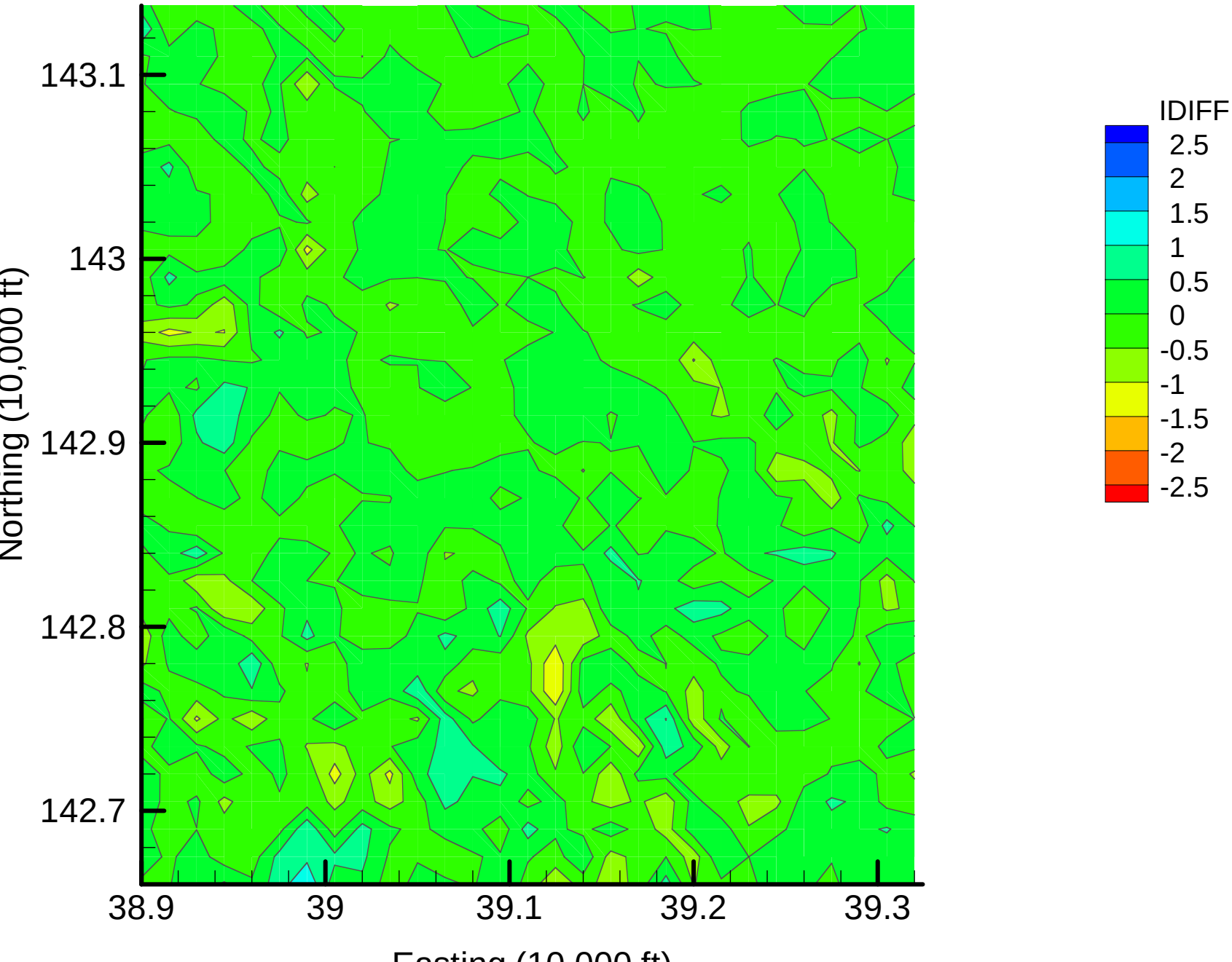
TCLME: Slice 2: Estimated Concentration Base Map (ppb)



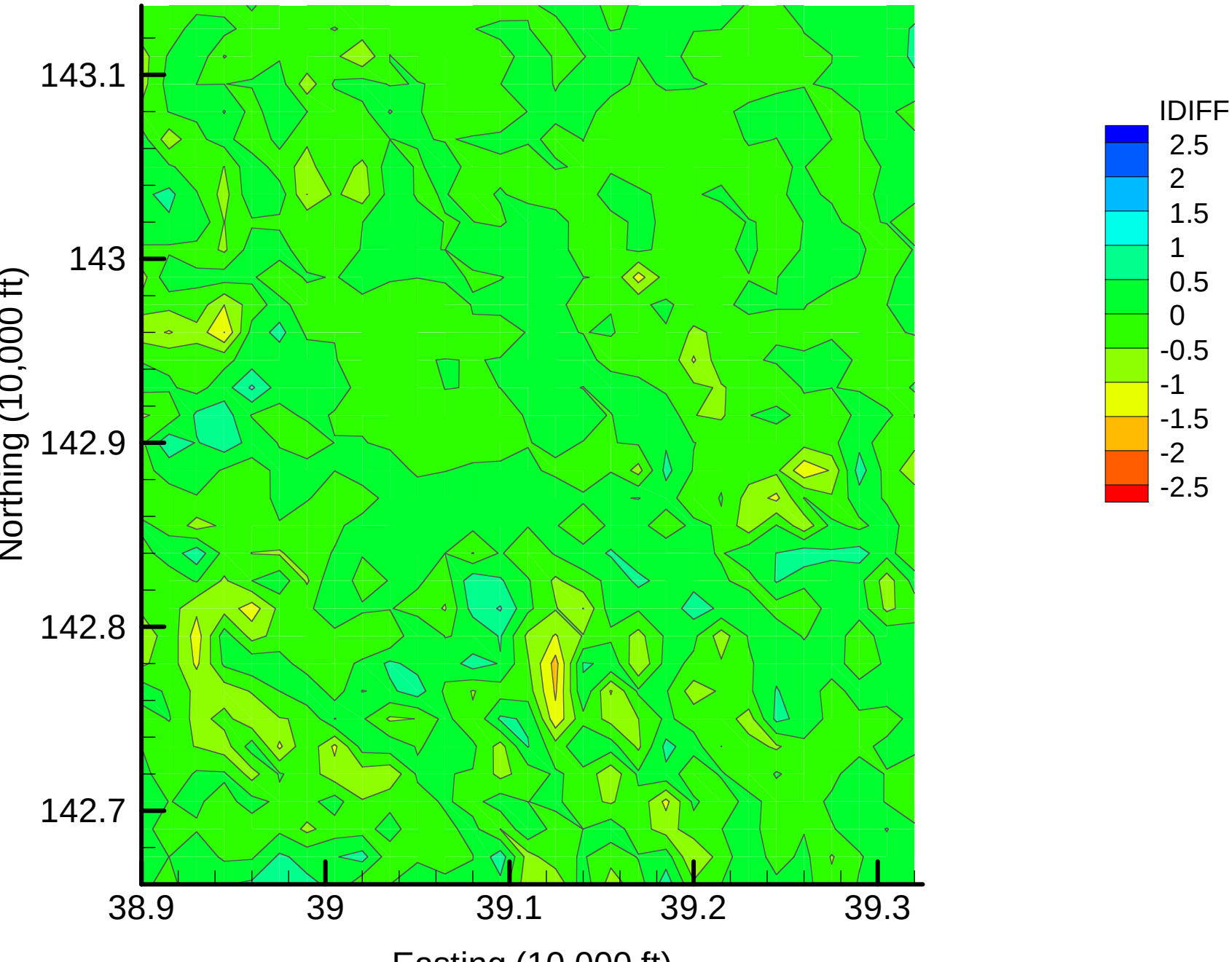
TCLME: Slice 2: Indicator Difference Map: 5% Removal



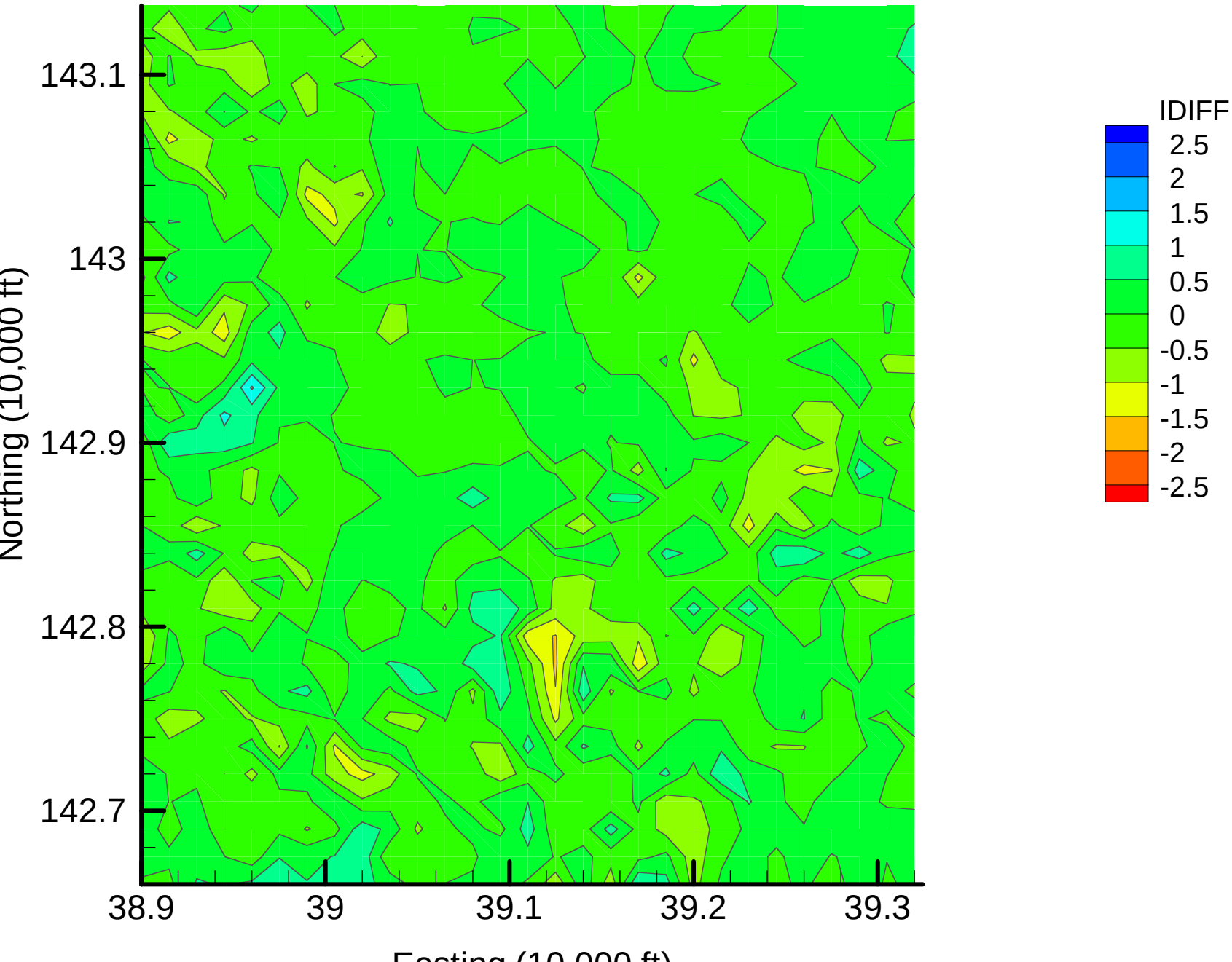
TCLME: Slice 2: Indicator Difference Map: 10% Removal



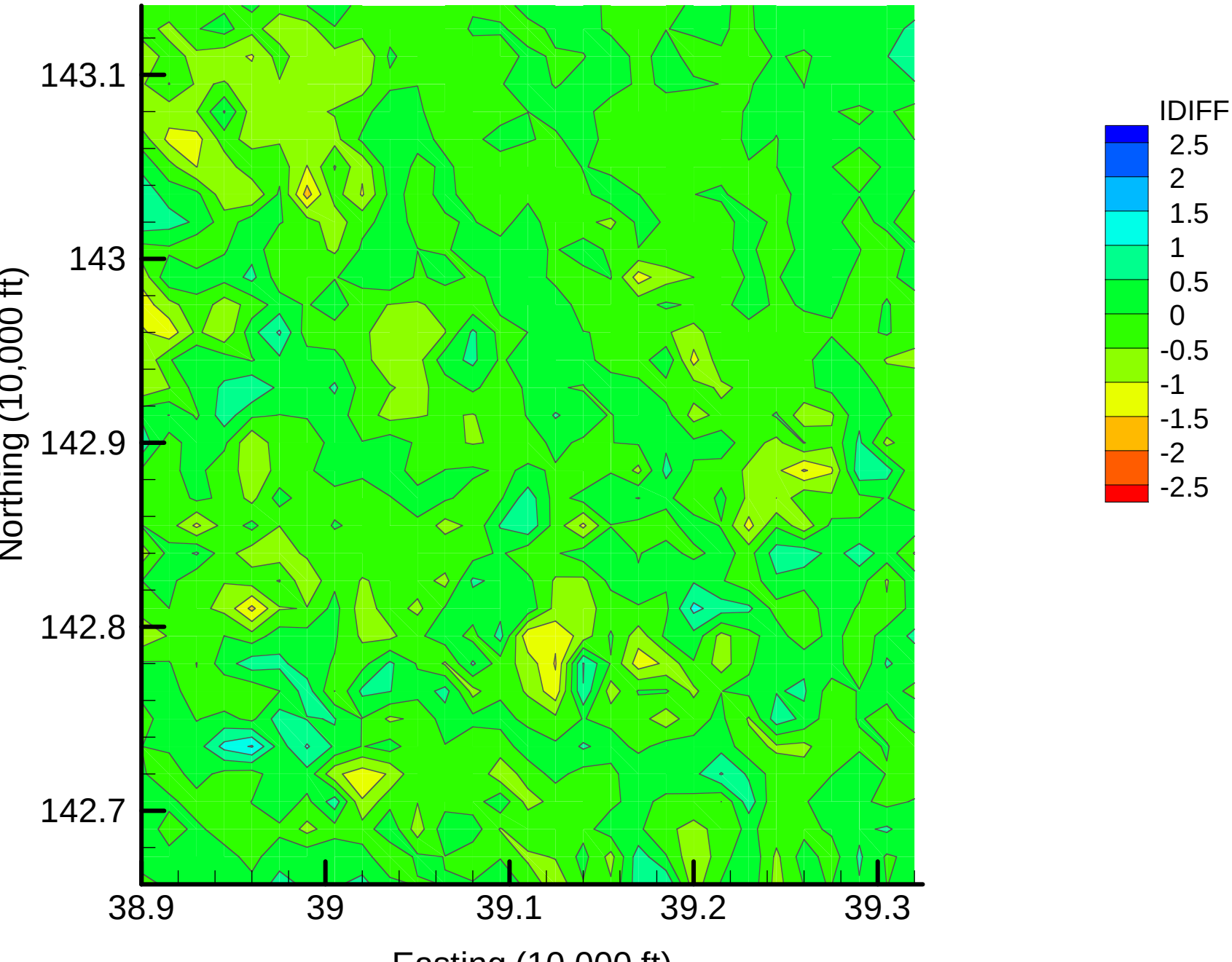
TCLME: Slice 2: Indicator Difference Map: 15% Removal



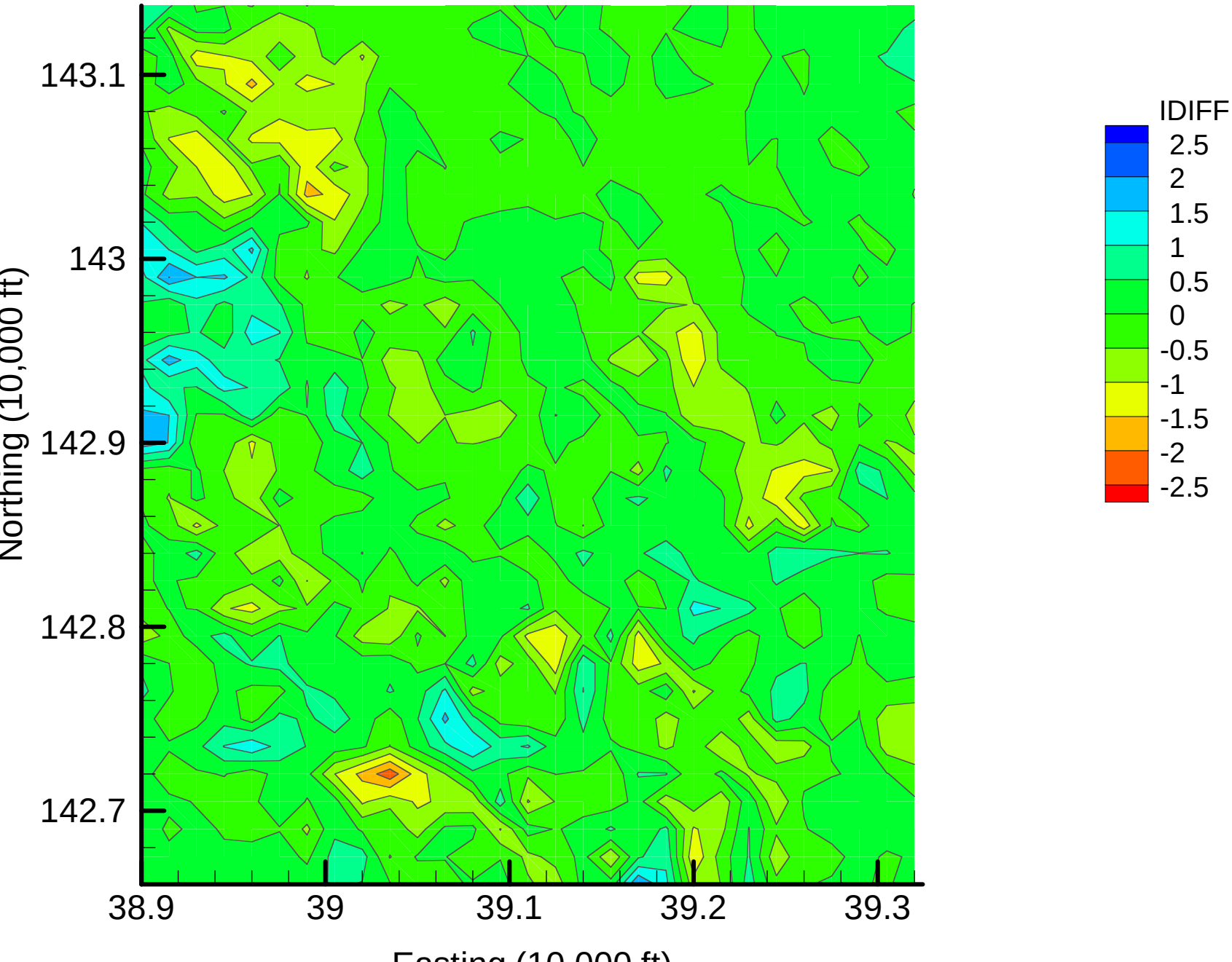
TCLME: Slice 2: Indicator Difference Map: 20% Removal



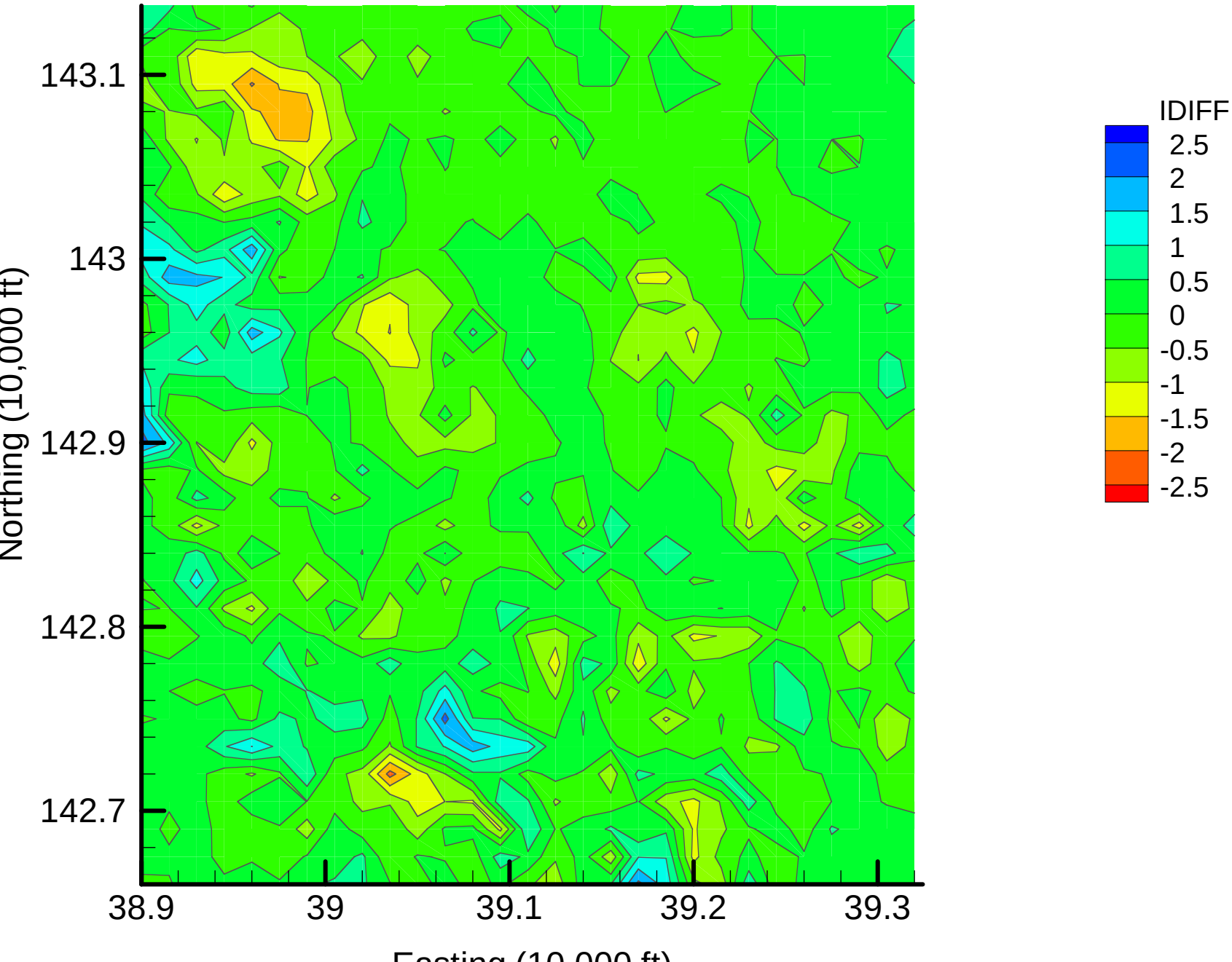
TCLME: Slice 2: Indicator Difference Map: 25% Removal



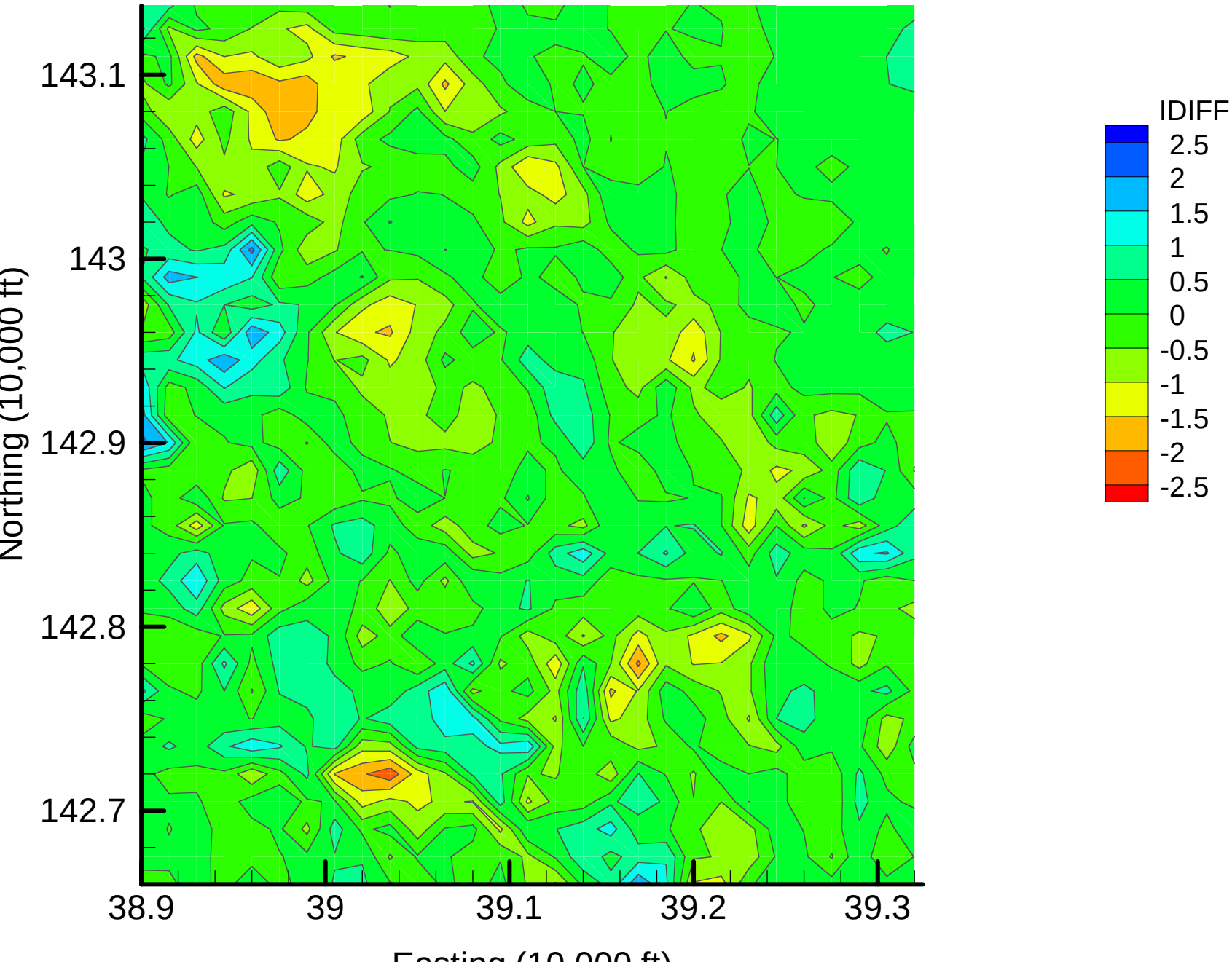
TCLME: Slice 2: Indicator Difference Map: 30% Removal



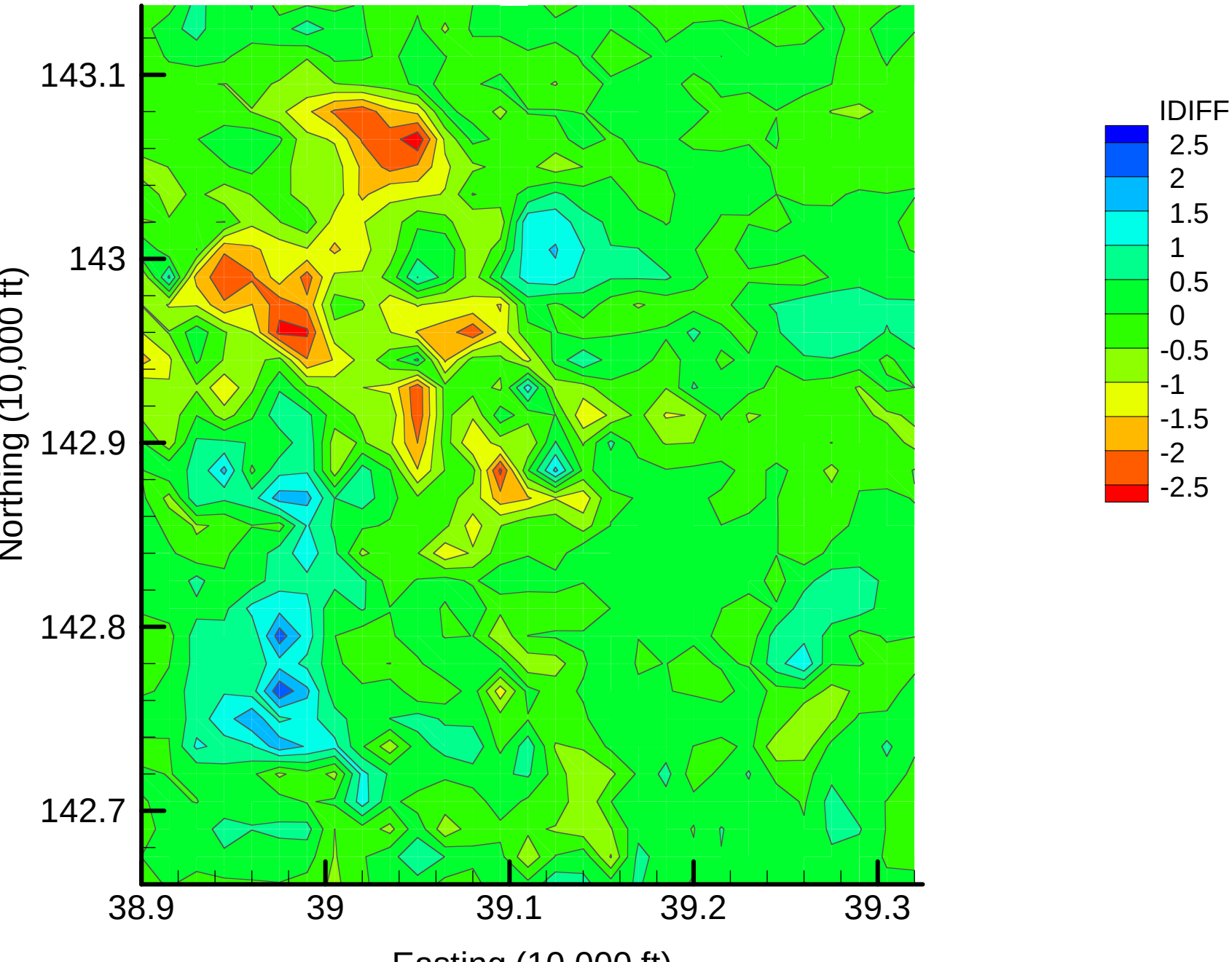
TCLME: Slice 2: Indicator Difference Map: 35% Removal



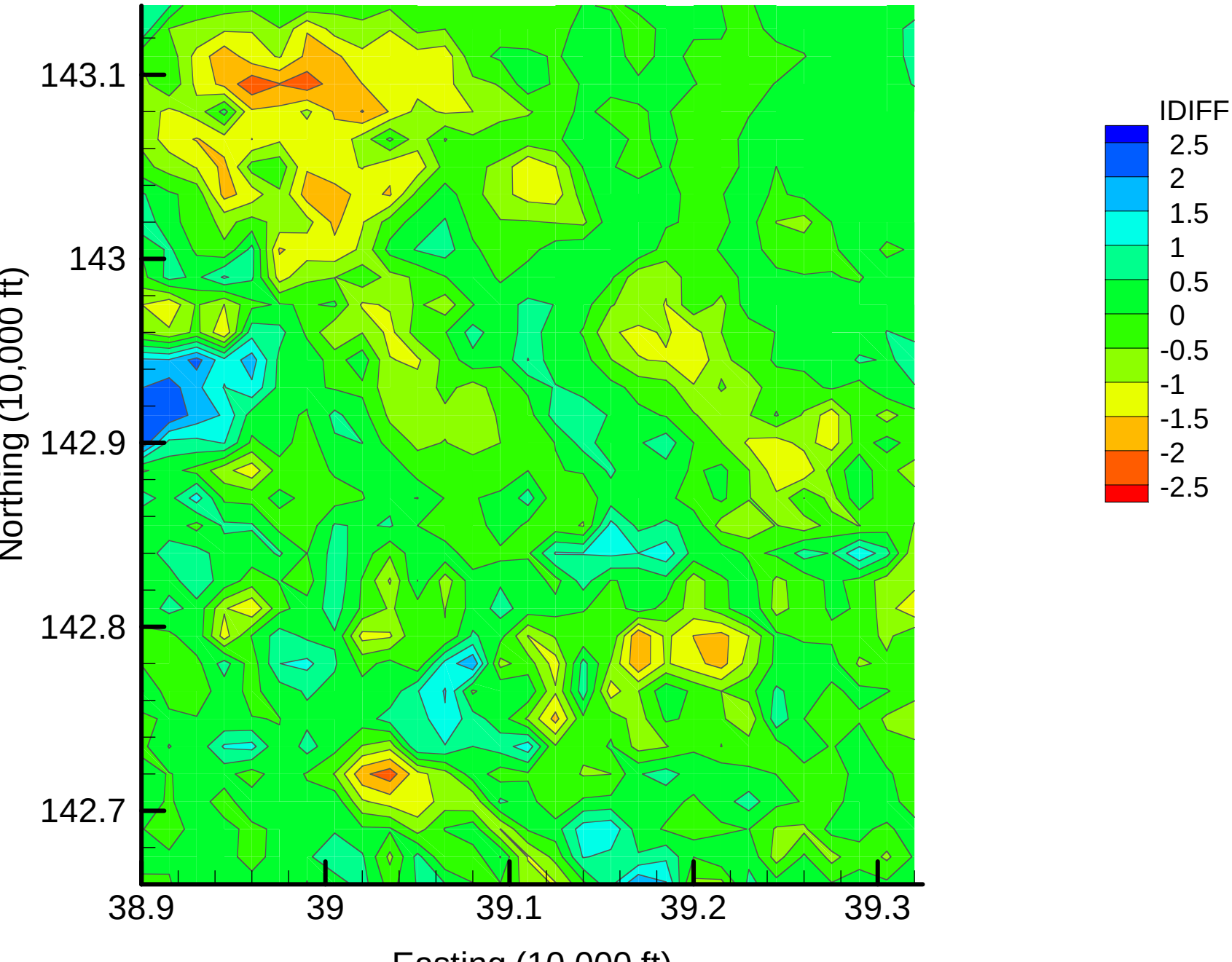
TCLME: Slice 2: Indicator Difference Map: 40% Removal



TCLME: Slice 2: Indicator Difference Map: 45% Removal

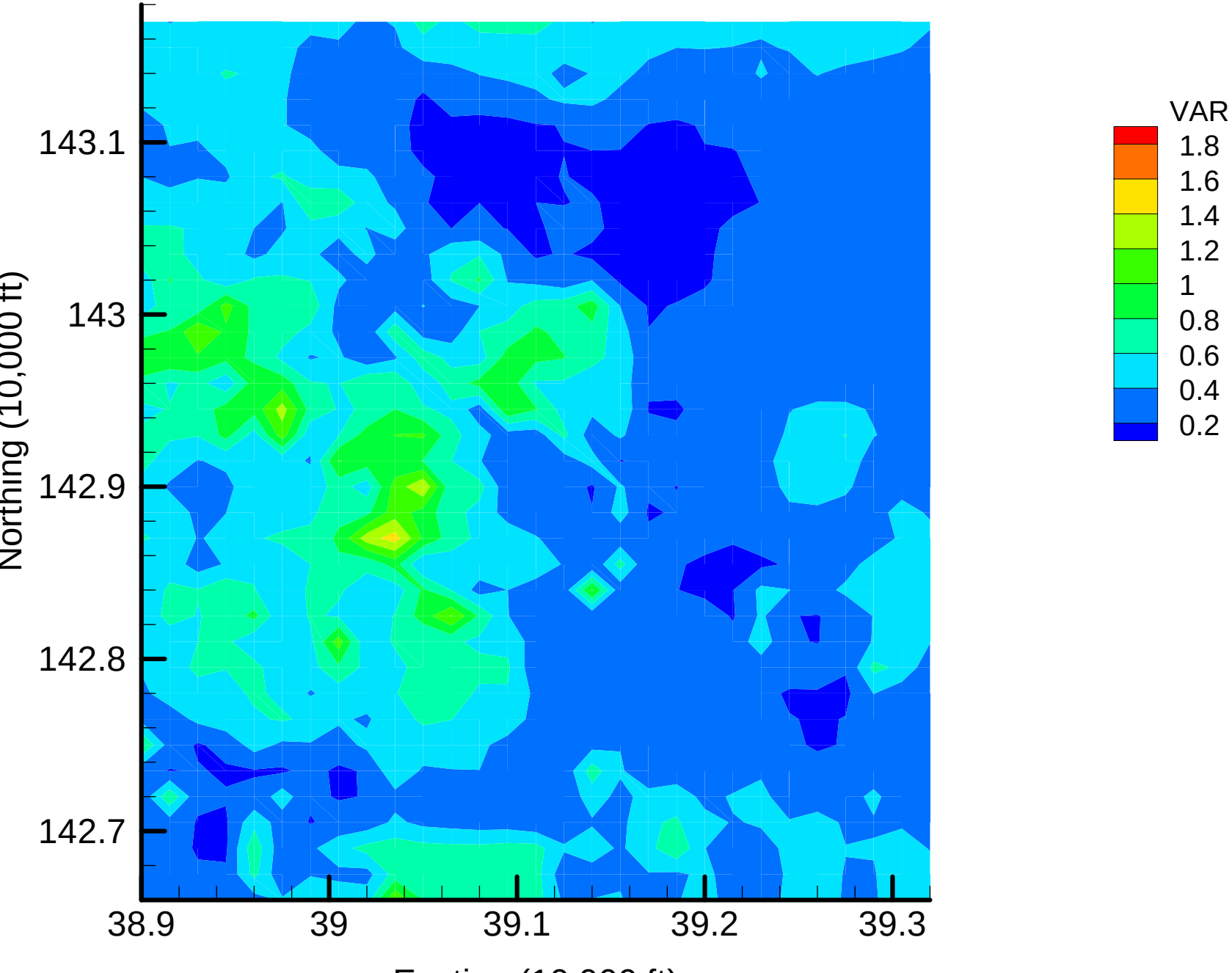


TCLME: Slice 2: Indicator Difference Map: 50% Removal

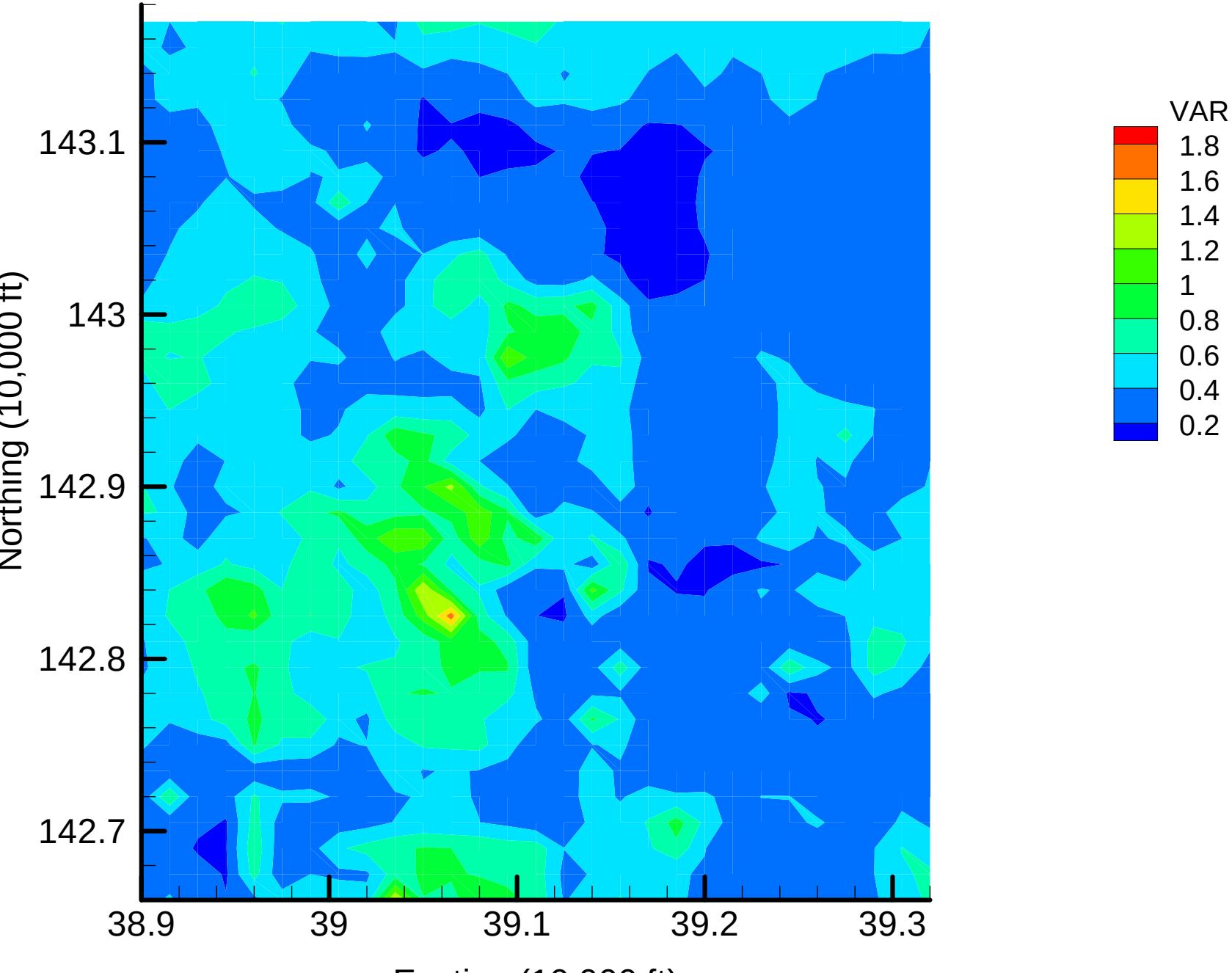


Spatial Analysis Appendix C

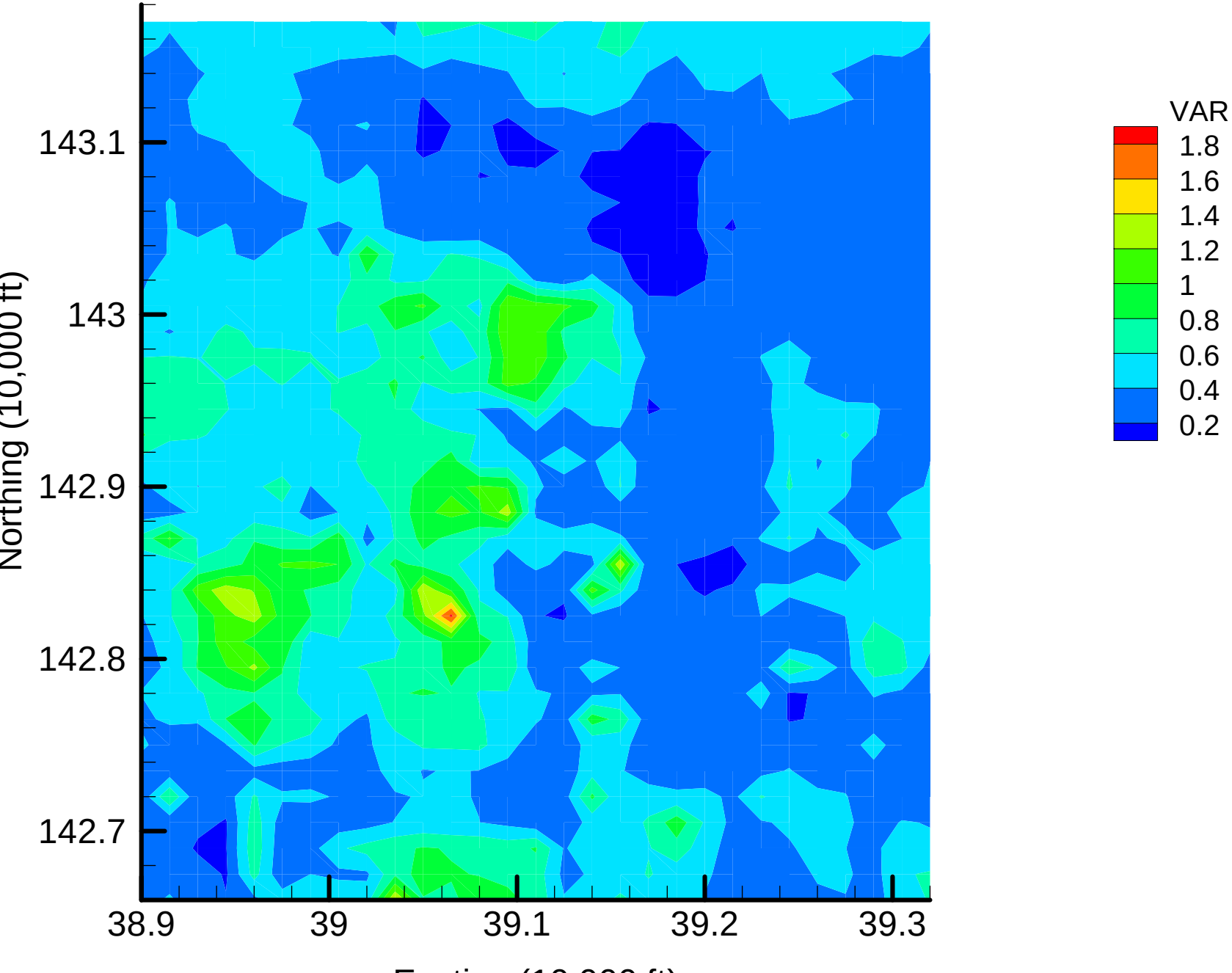
DCE11: Slice 1: Local Variance Base Map



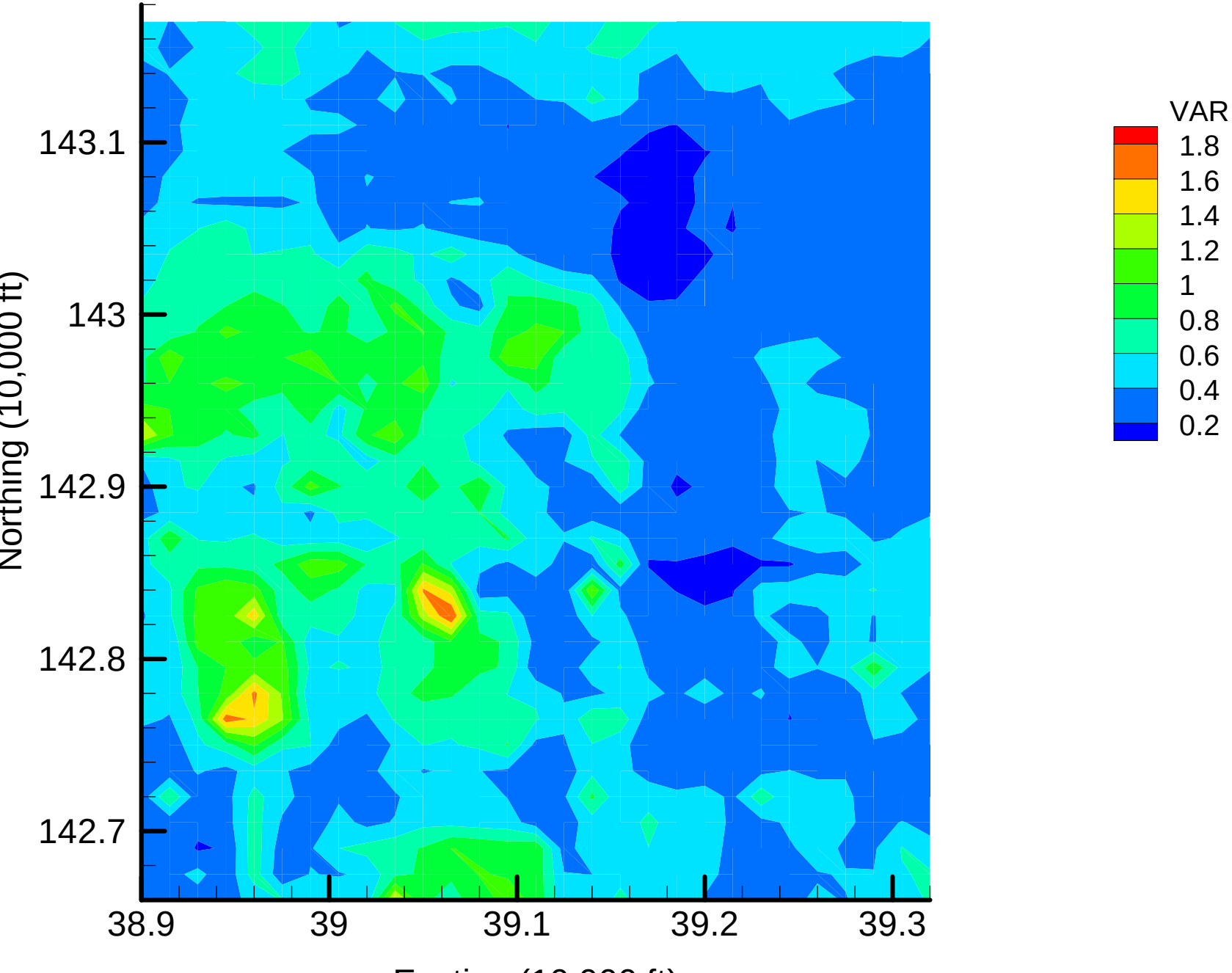
DCE11: Slice 1: Local Variance Map: 5% Removal



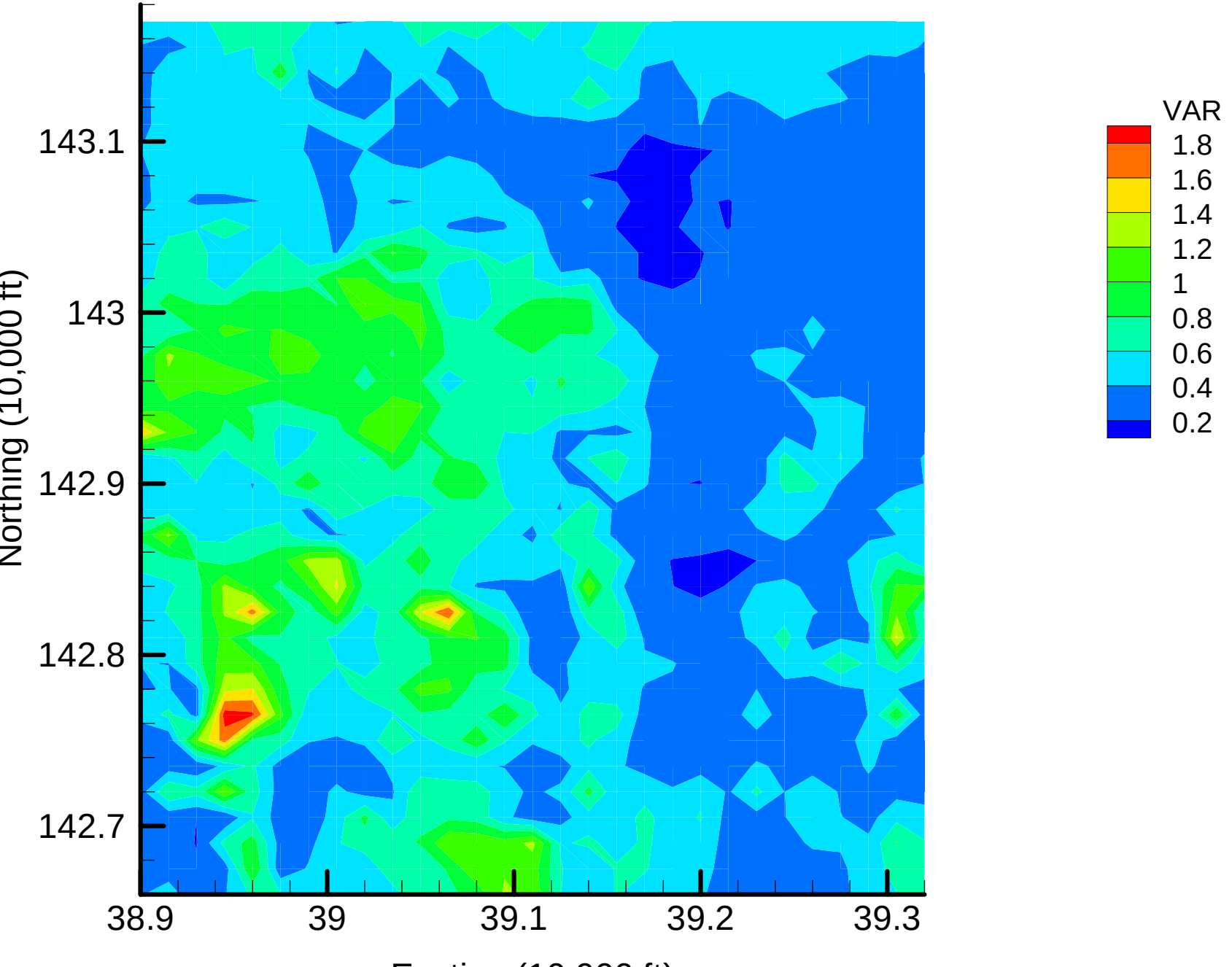
DCE11: Slice 1: Local Variance Map: 10% Removal



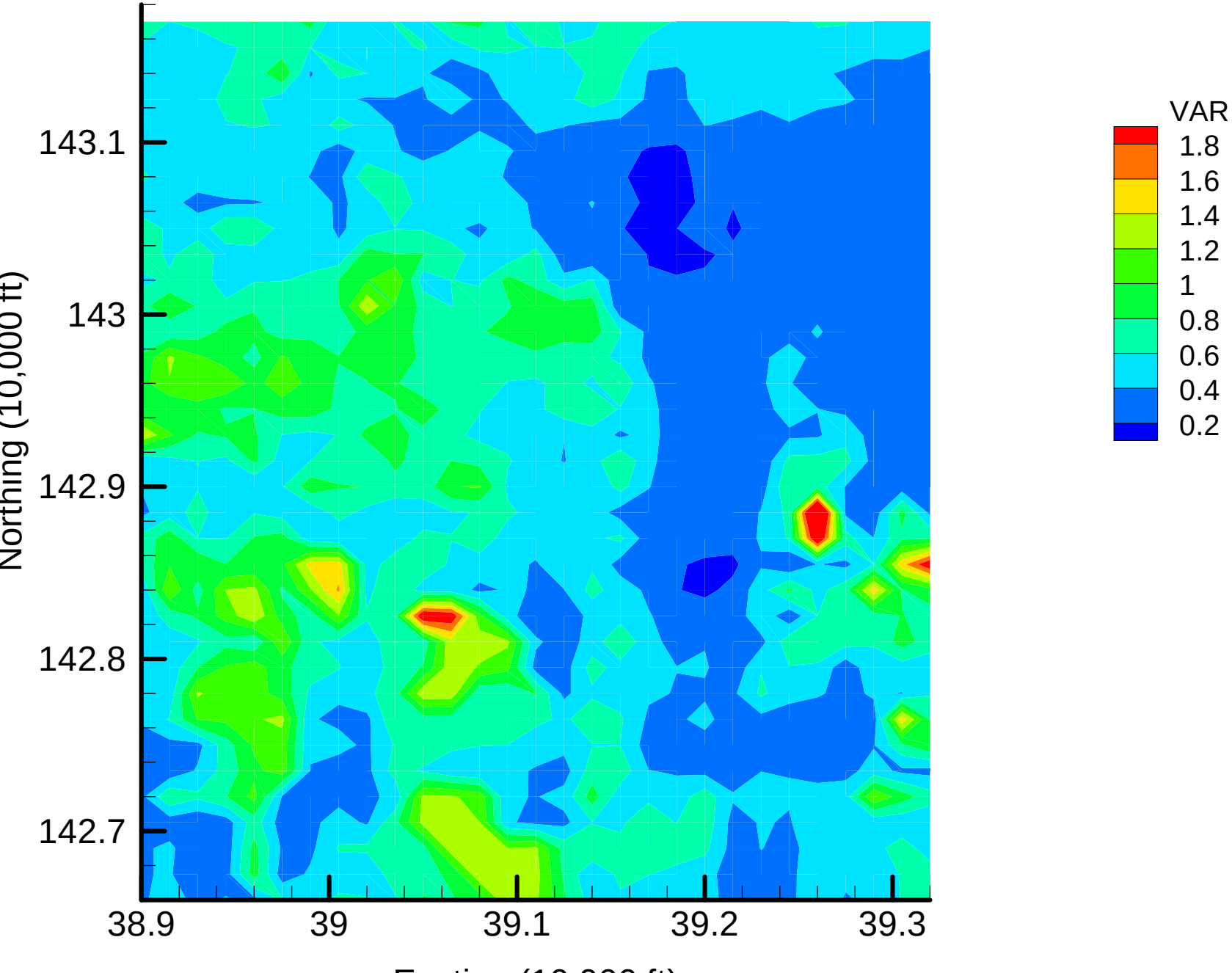
DCE11: Slice 1: Local Variance Map: 15% Removal



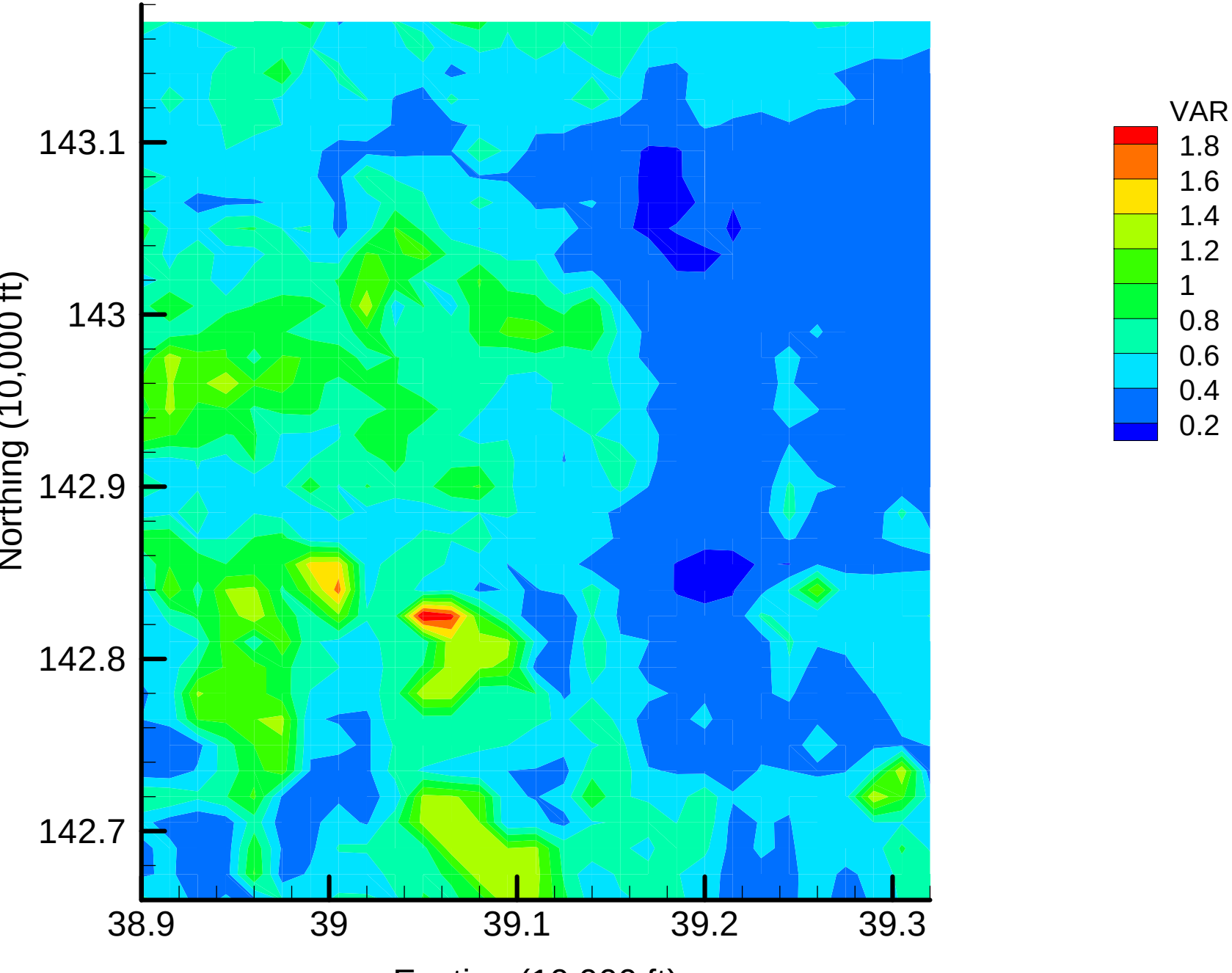
DCE11: Slice 1: Local Variance Map: 20% Removal



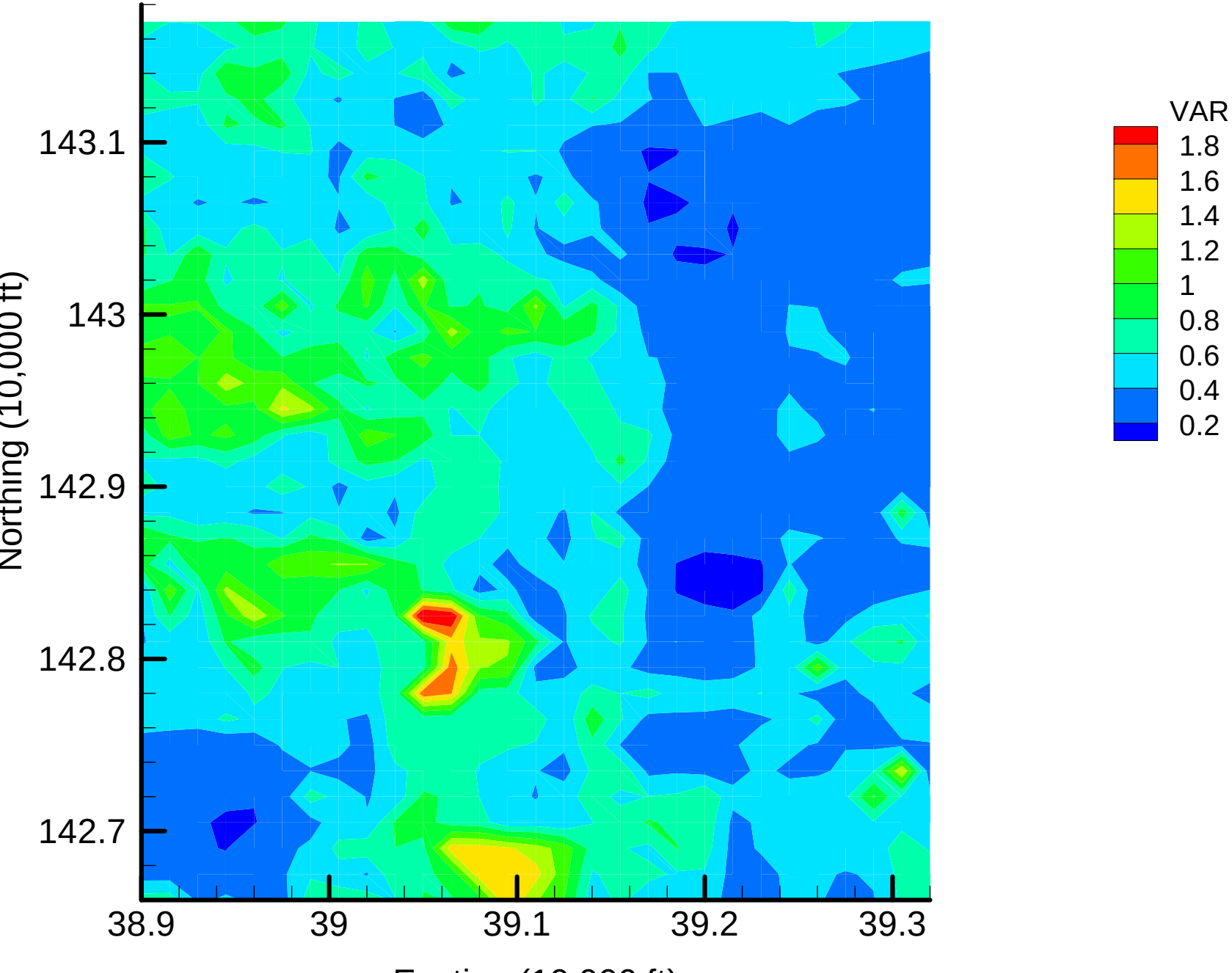
DCE11: Slice 1: Local Variance Map: 25% Removal



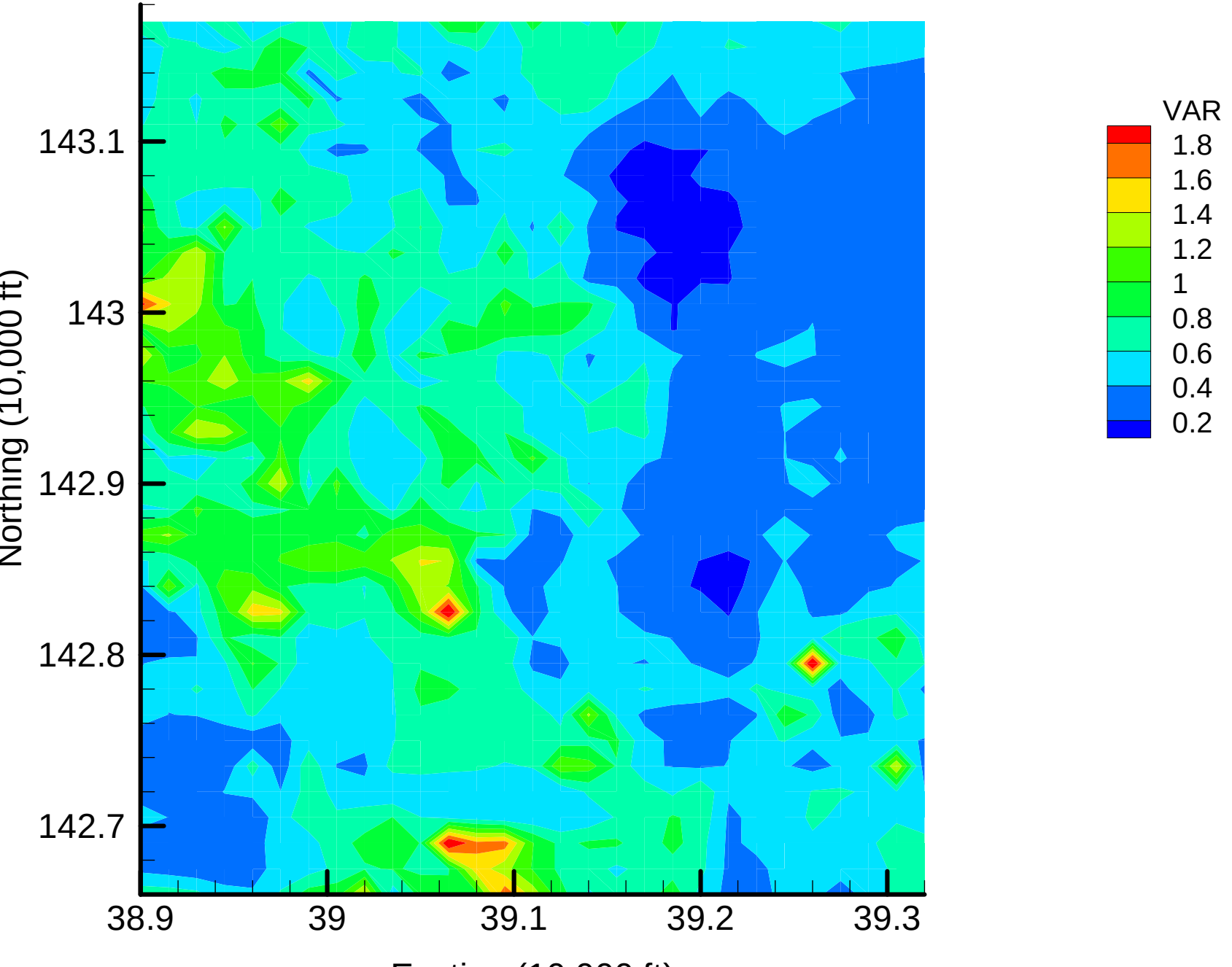
DCE11: Slice 1: Local Variance Map: 30% Removal



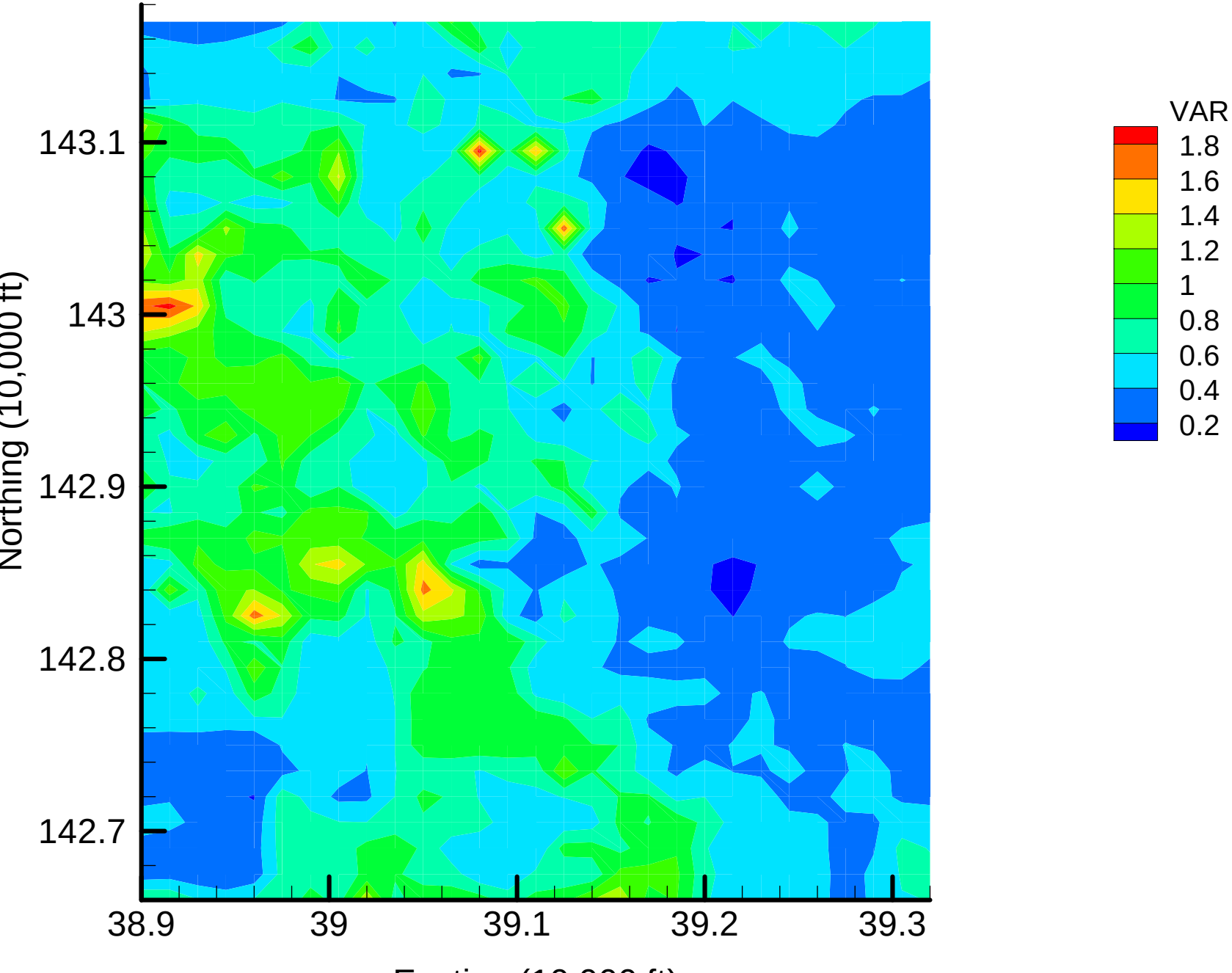
DCE11: Slice 1: Local Variance Map: 35% Removal



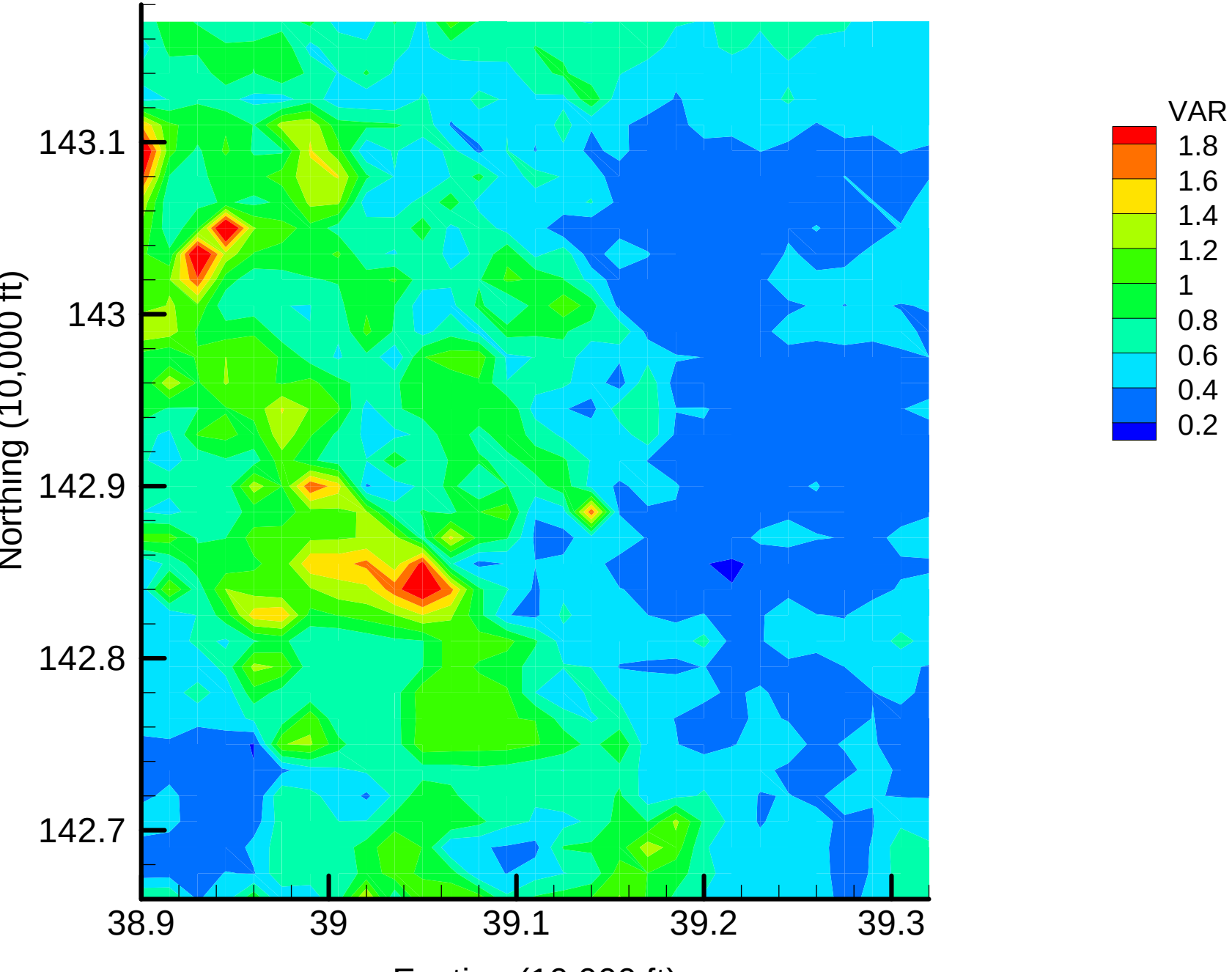
DCE11: Slice 1: Local Variance Map: 40% Removal



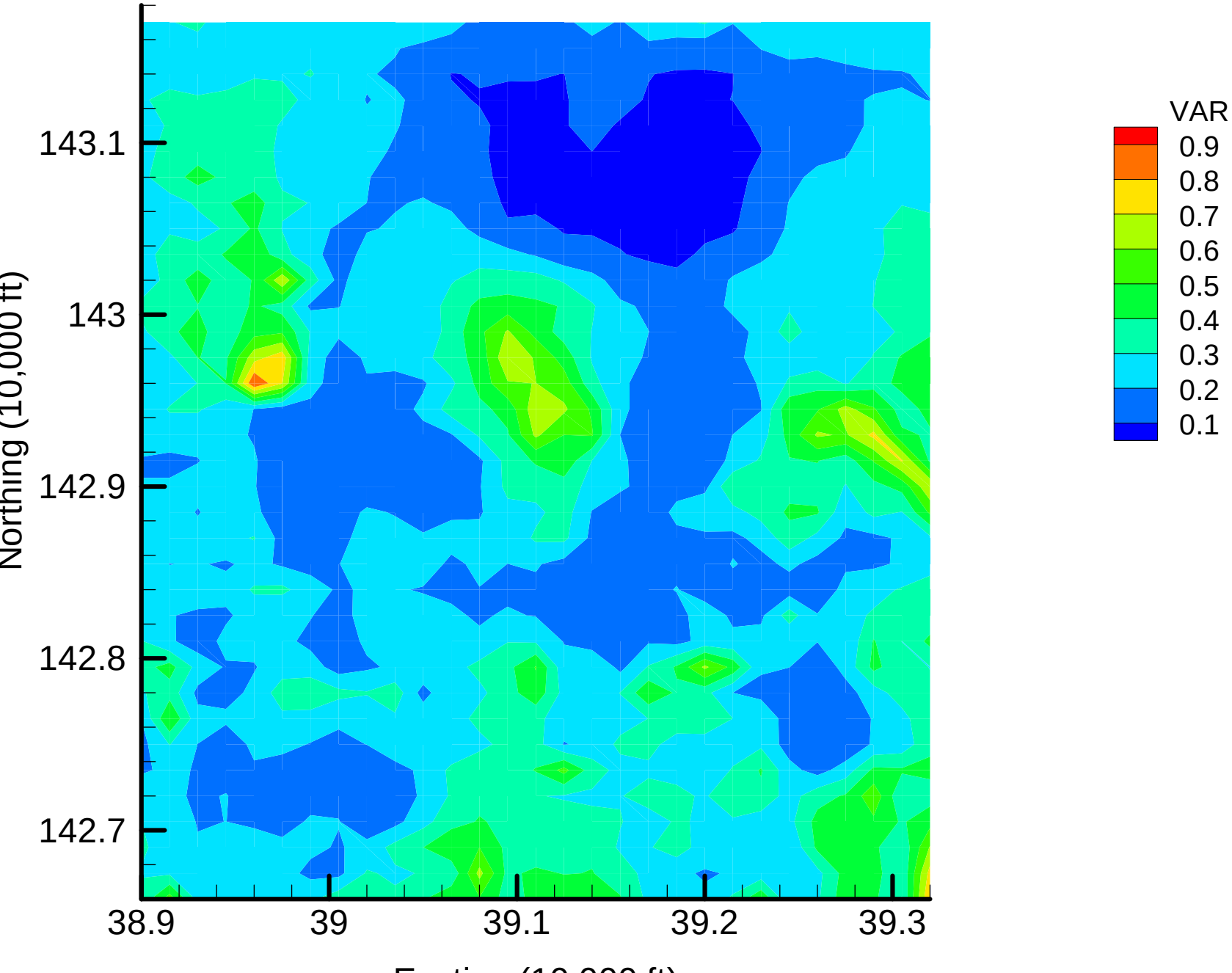
DCE11: Slice 1: Local Variance Map: 45% Removal



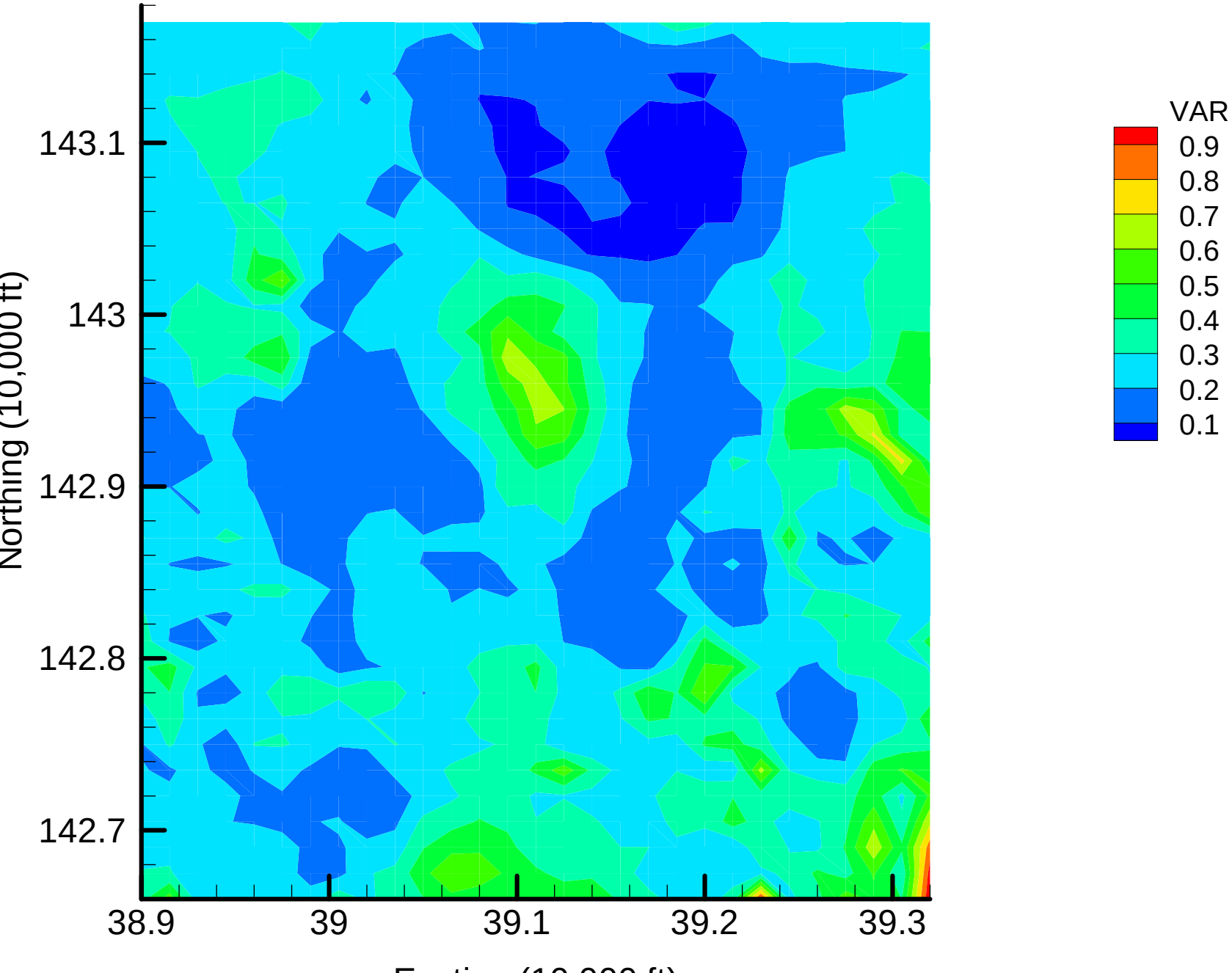
DCE11: Slice 1: Local Variance Map: 50% Removal



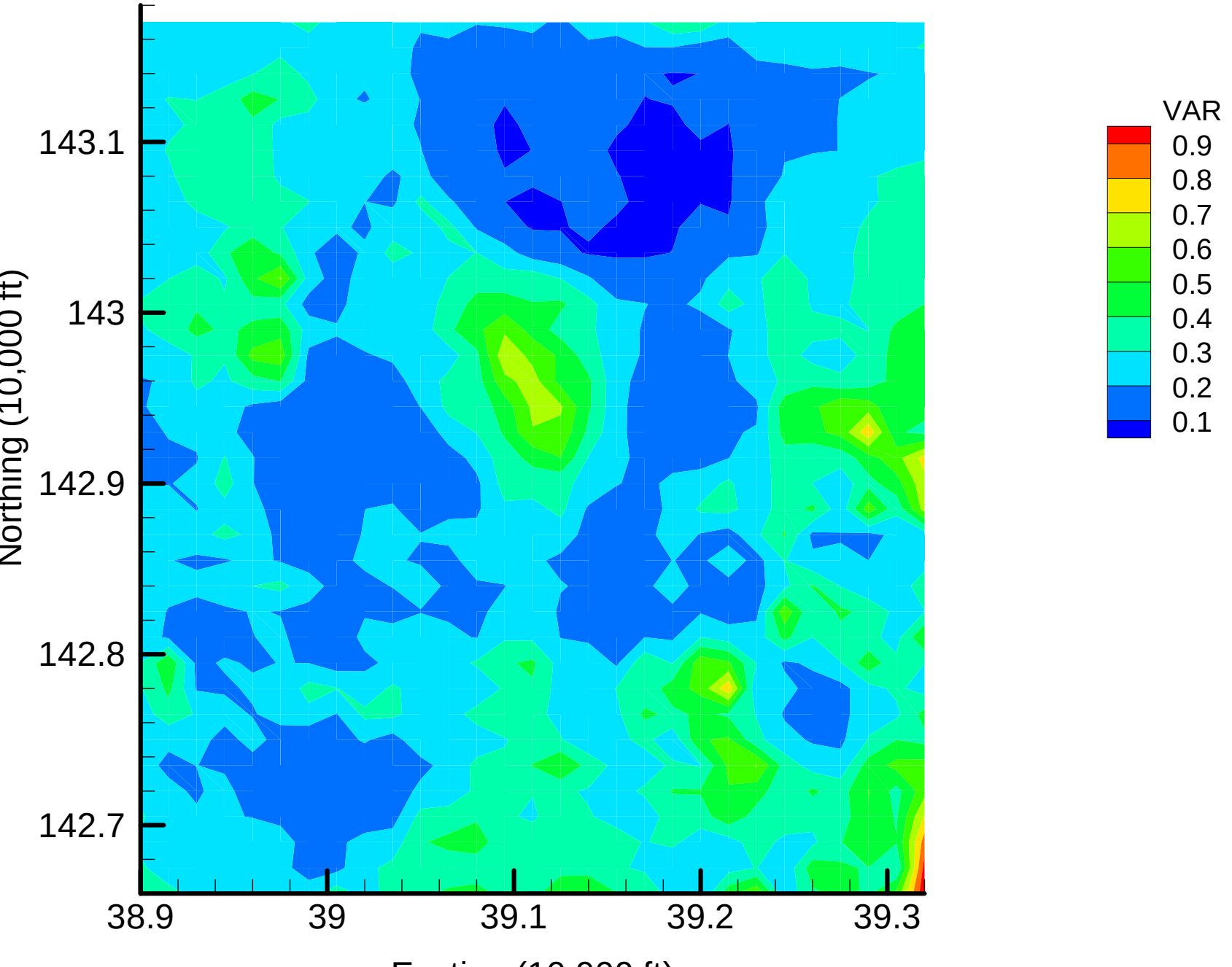
DCE11: Slice 2: Local Variance Base Map



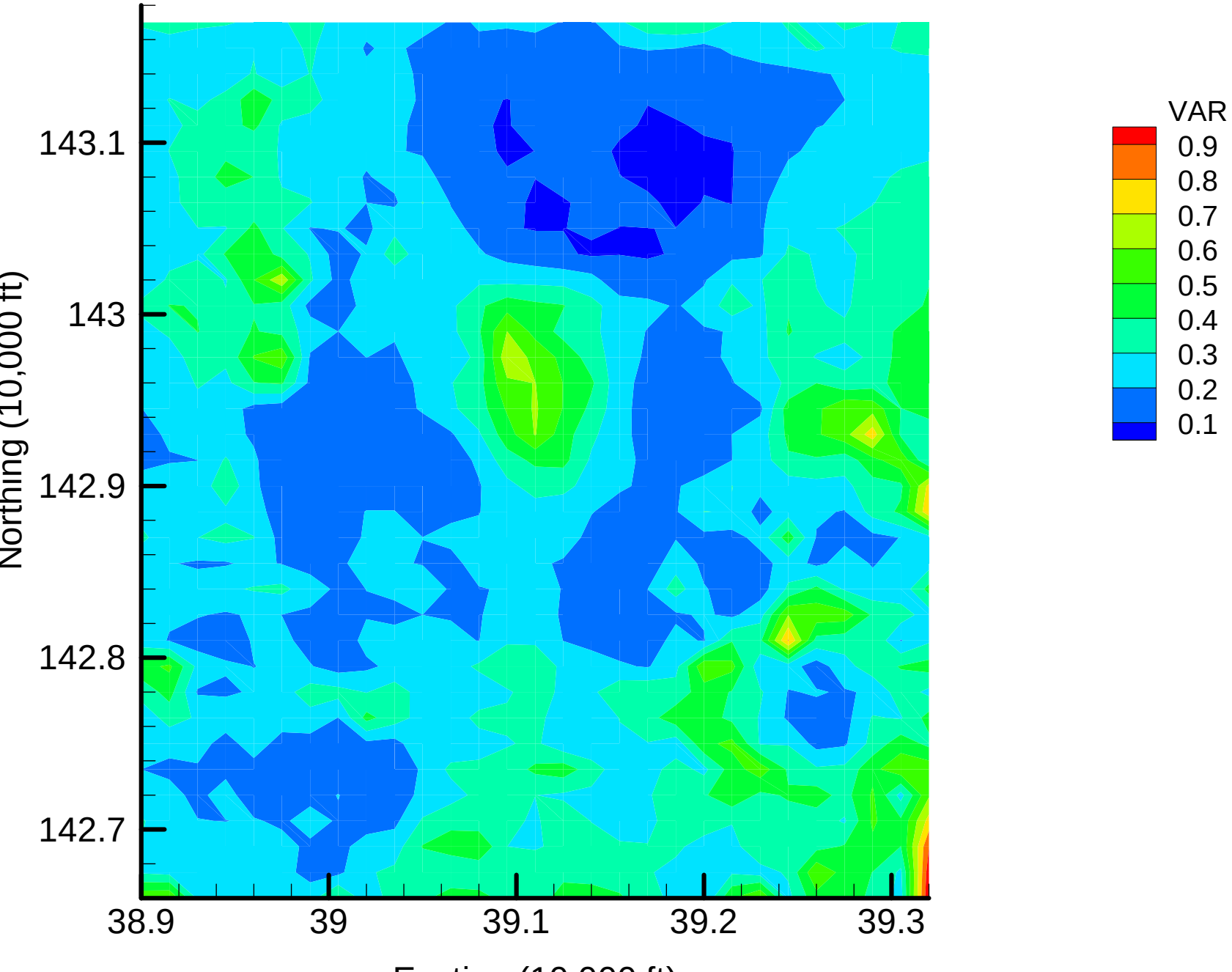
DCE11: Slice 2: Local Variance Map: 5% Removal



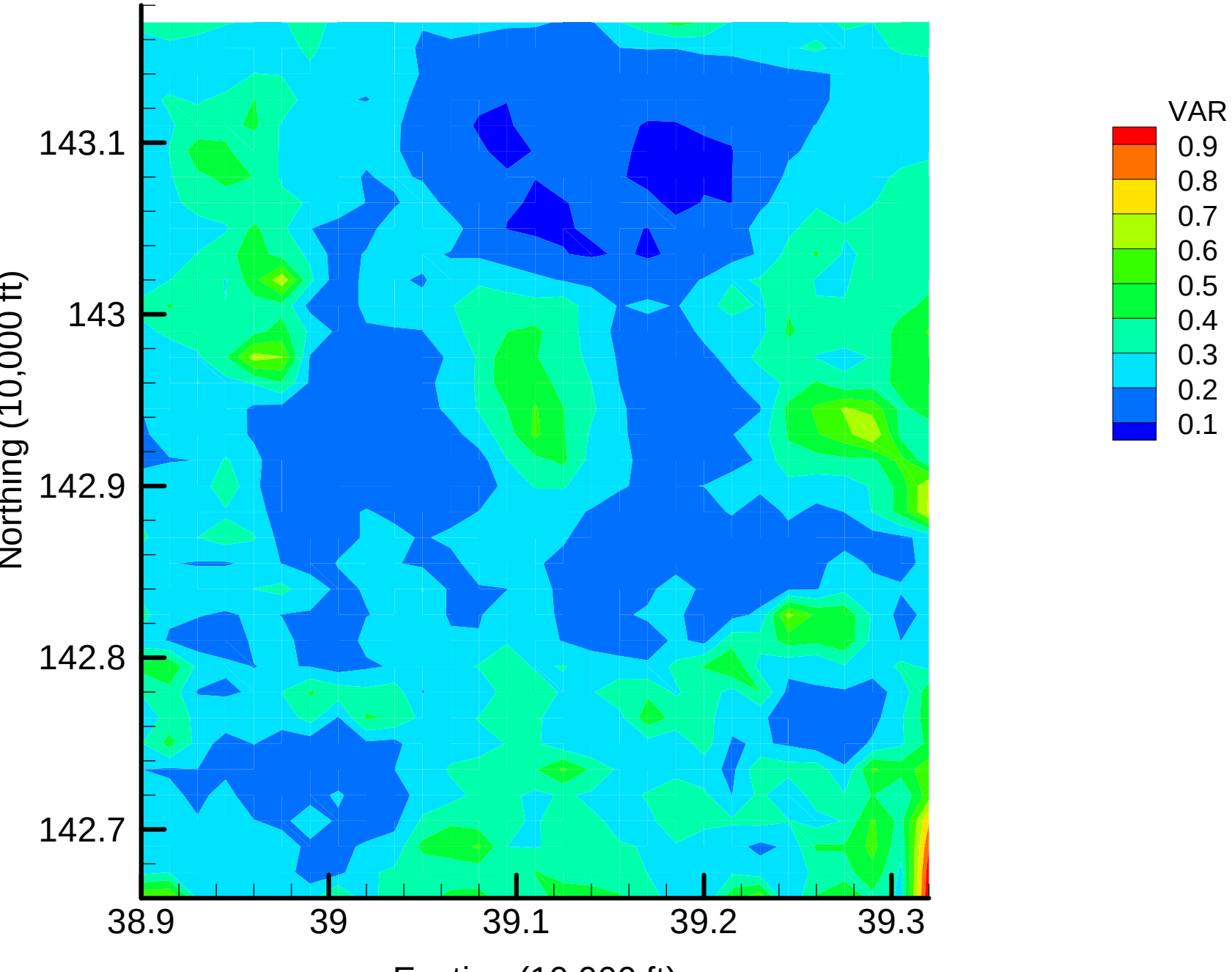
DCE11: Slice 2: Local Variance Map: 10% Removal



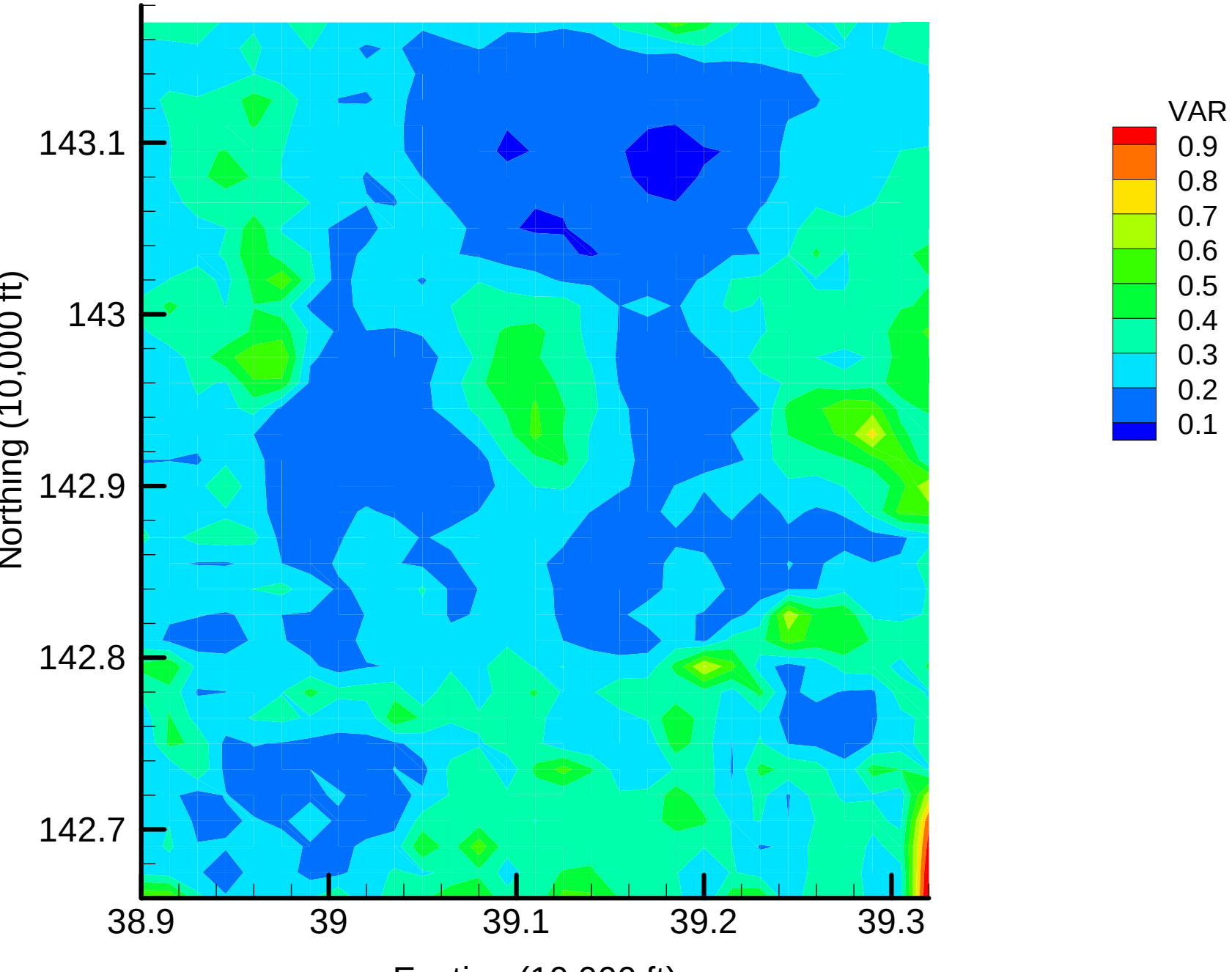
DCE11: Slice 2: Local Variance Map: 15% Removal



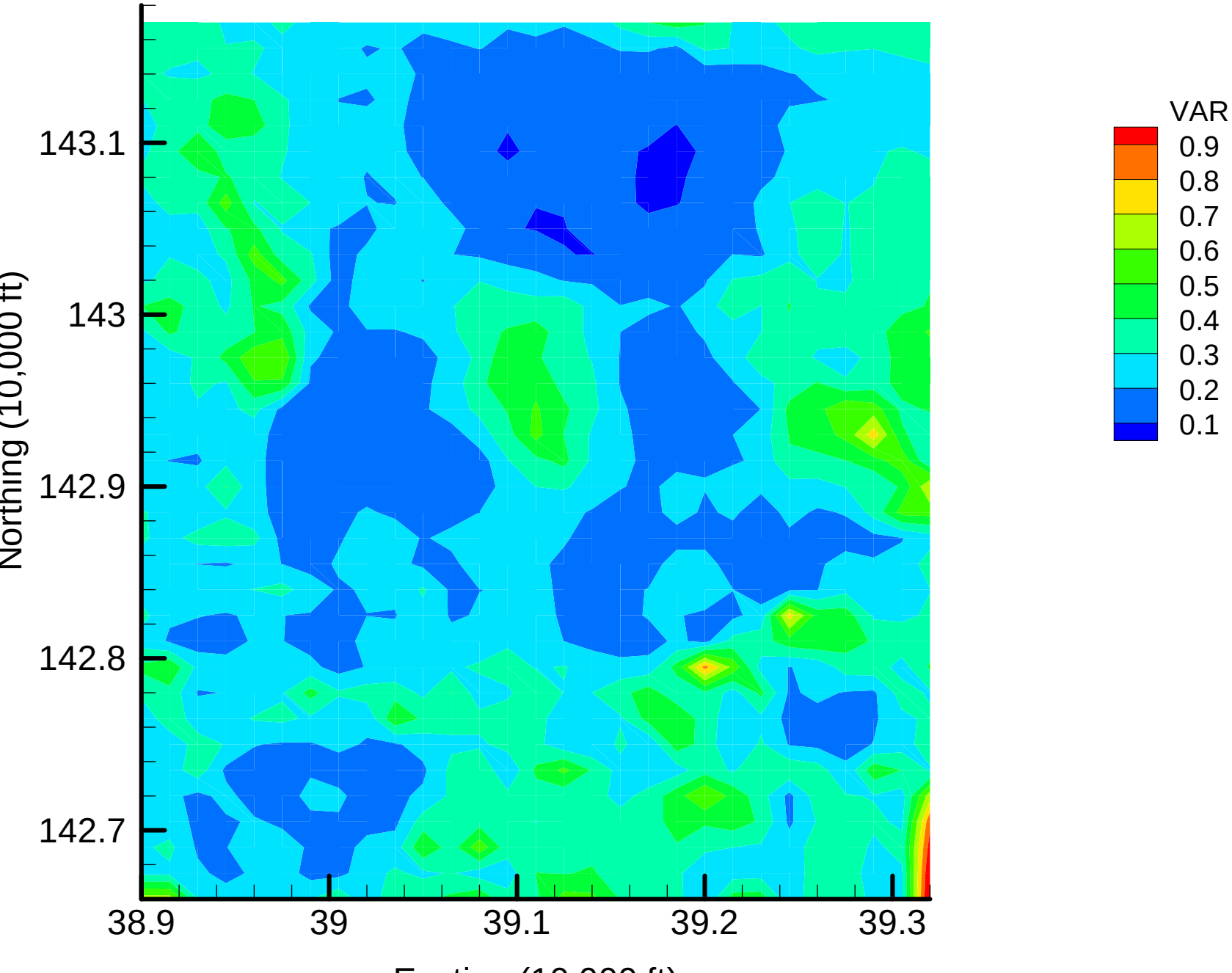
DCE11: Slice 2: Local Variance Map: 20% Removal



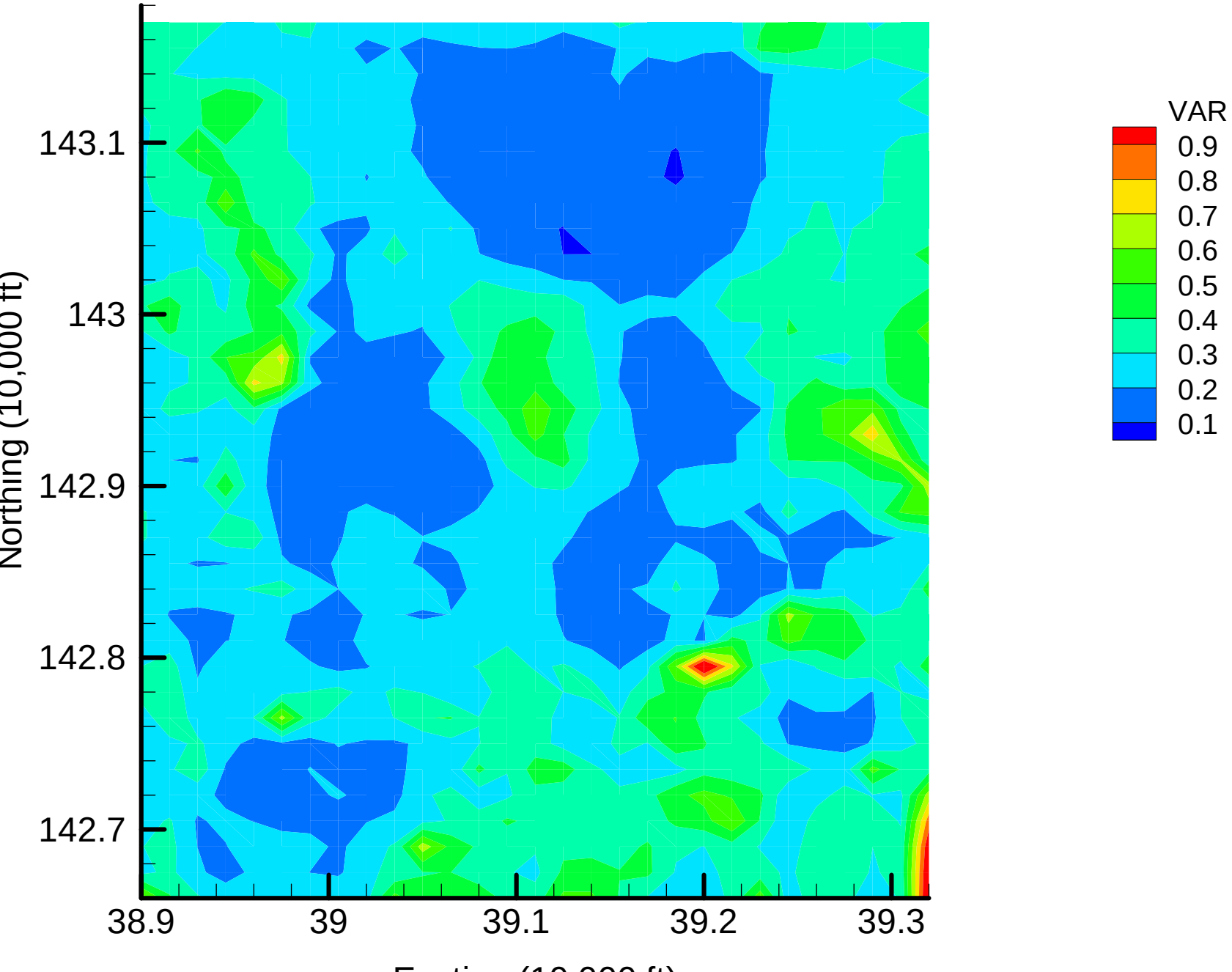
DCE11: Slice 2: Local Variance Map: 25% Removal



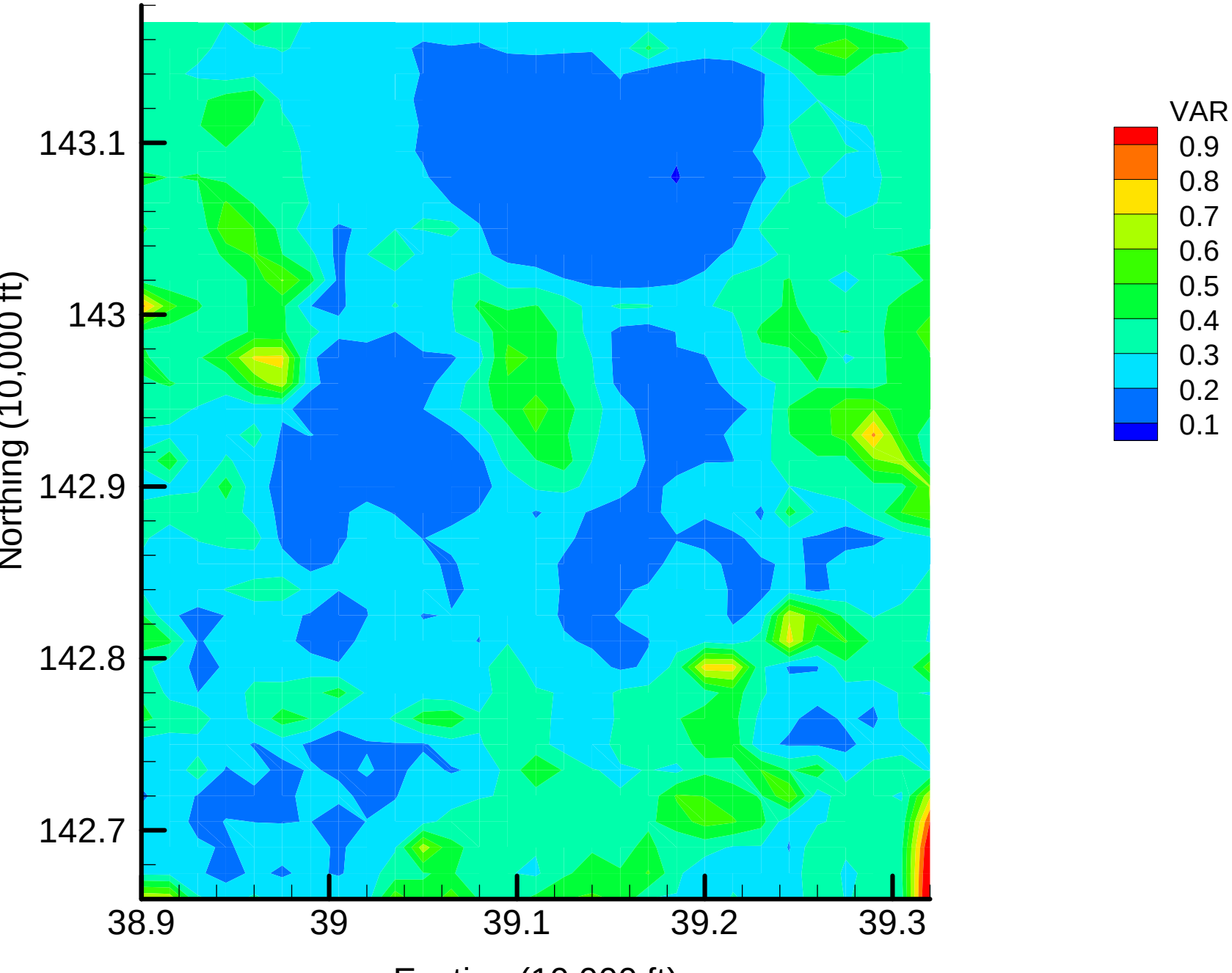
DCE11: Slice 2: Local Variance Map: 30% Removal



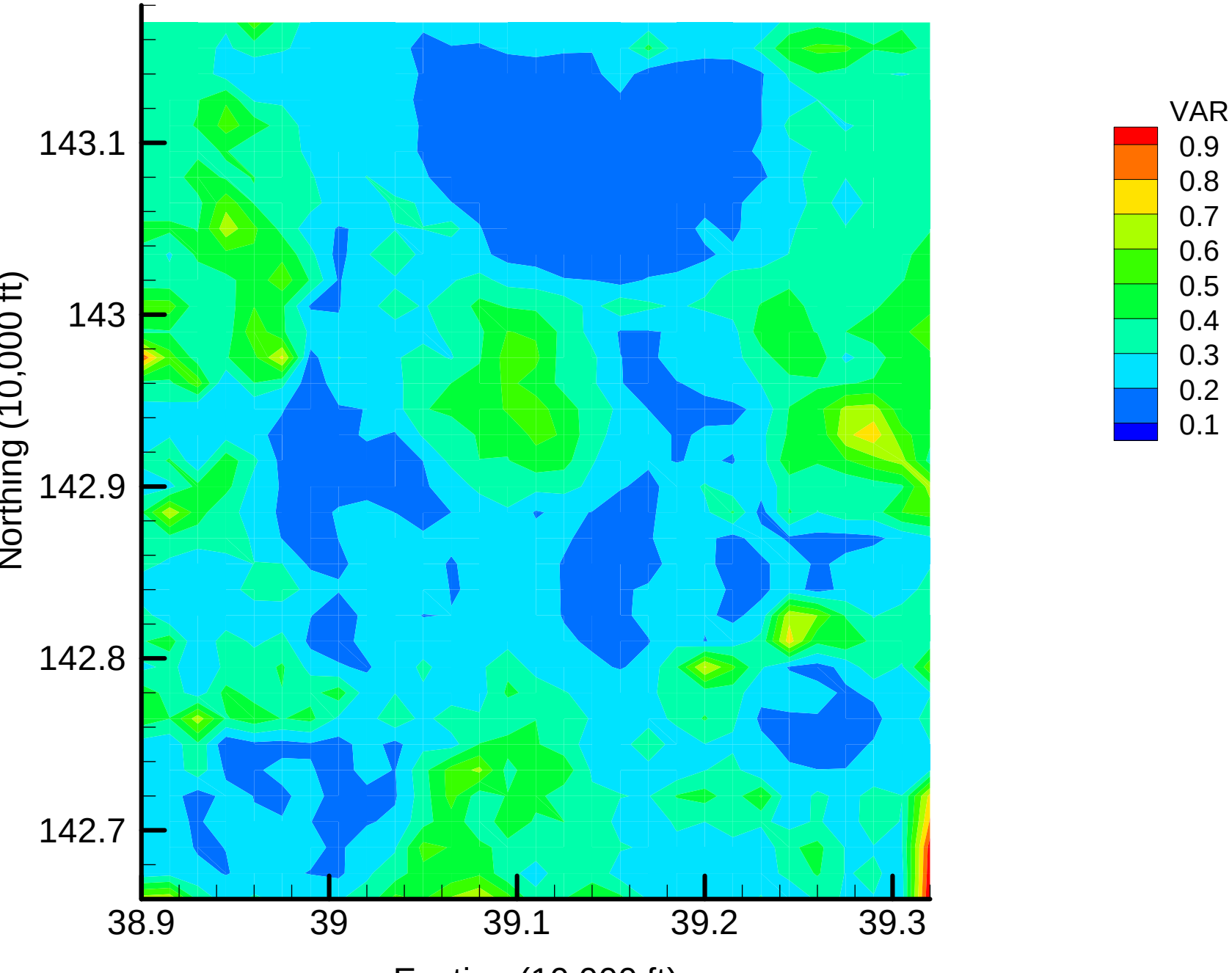
DCE11: Slice 2: Local Variance Map: 35% Removal



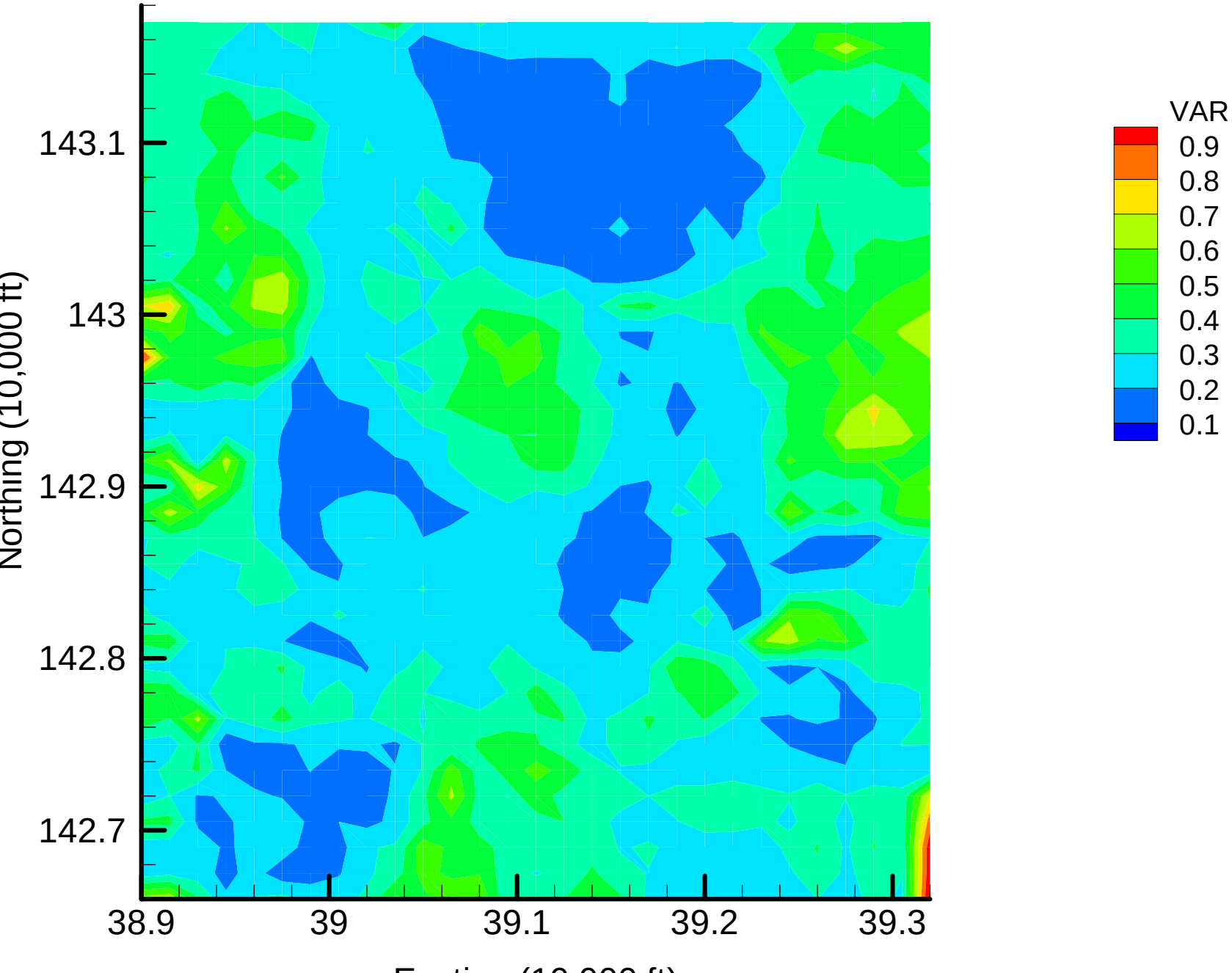
DCE11: Slice 2: Local Variance Map: 40% Removal



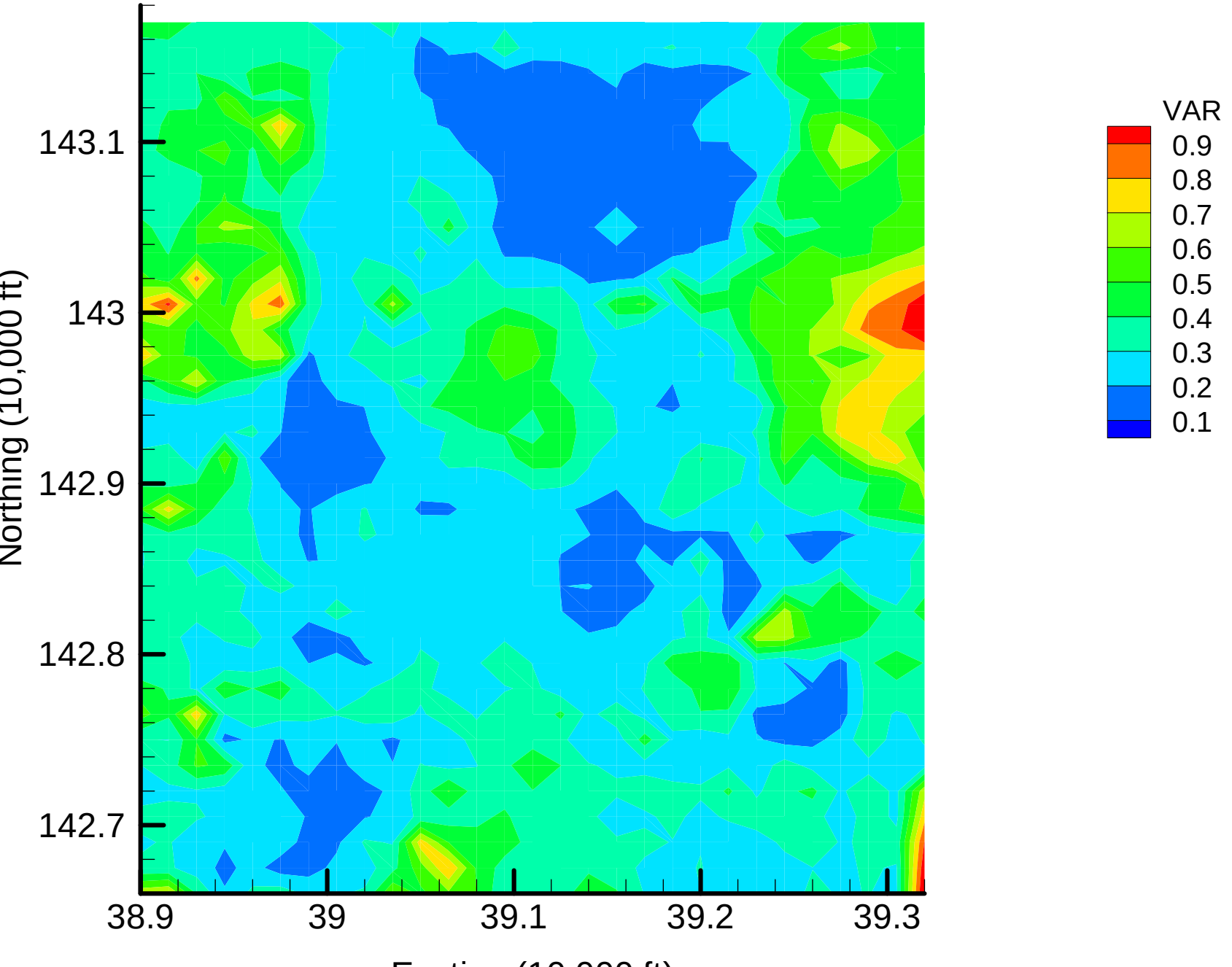
DCE11: Slice 2: Local Variance Map: 45% Removal

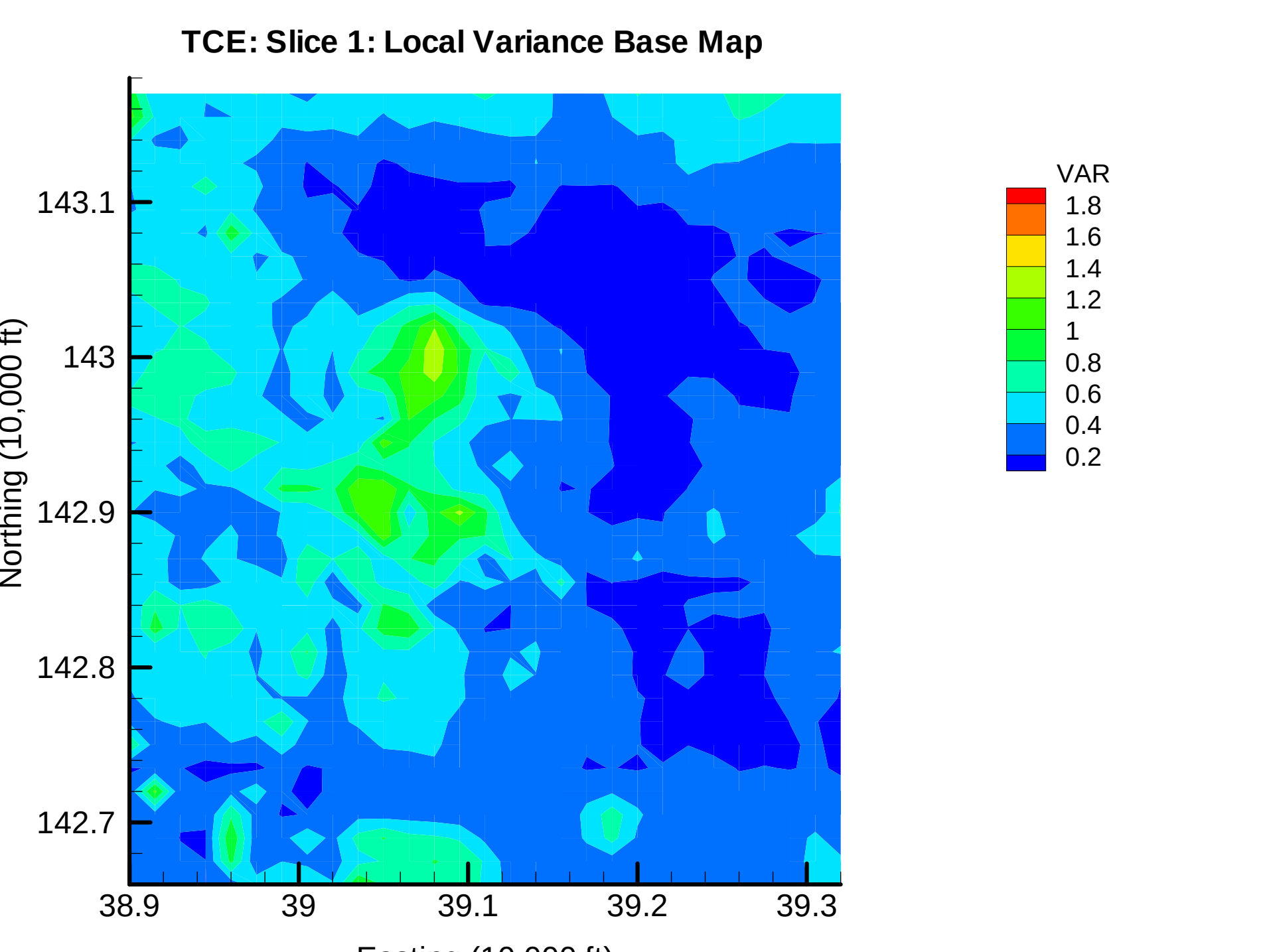


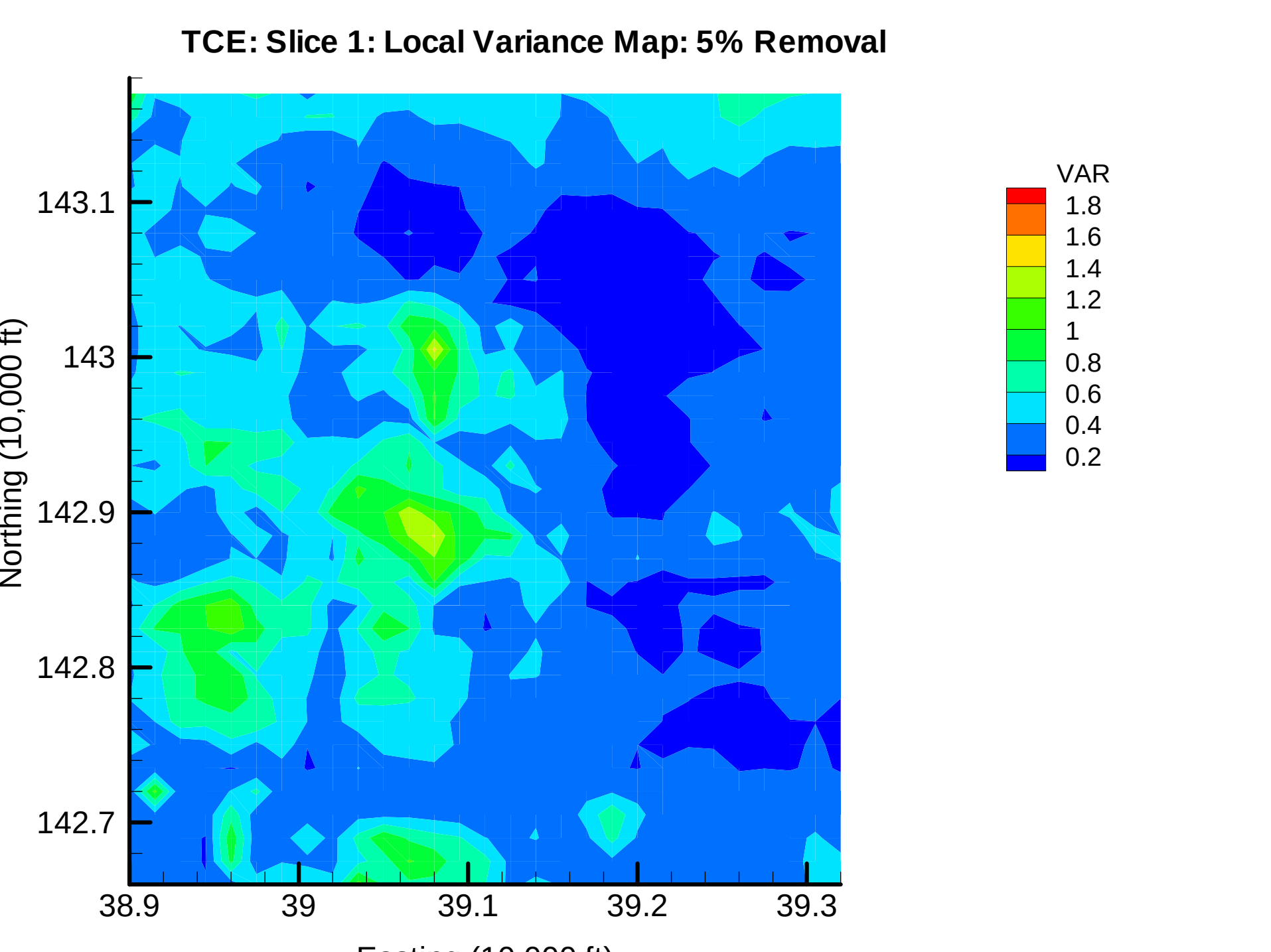
DCE11: Slice 2: Local Variance Map: 50% Removal



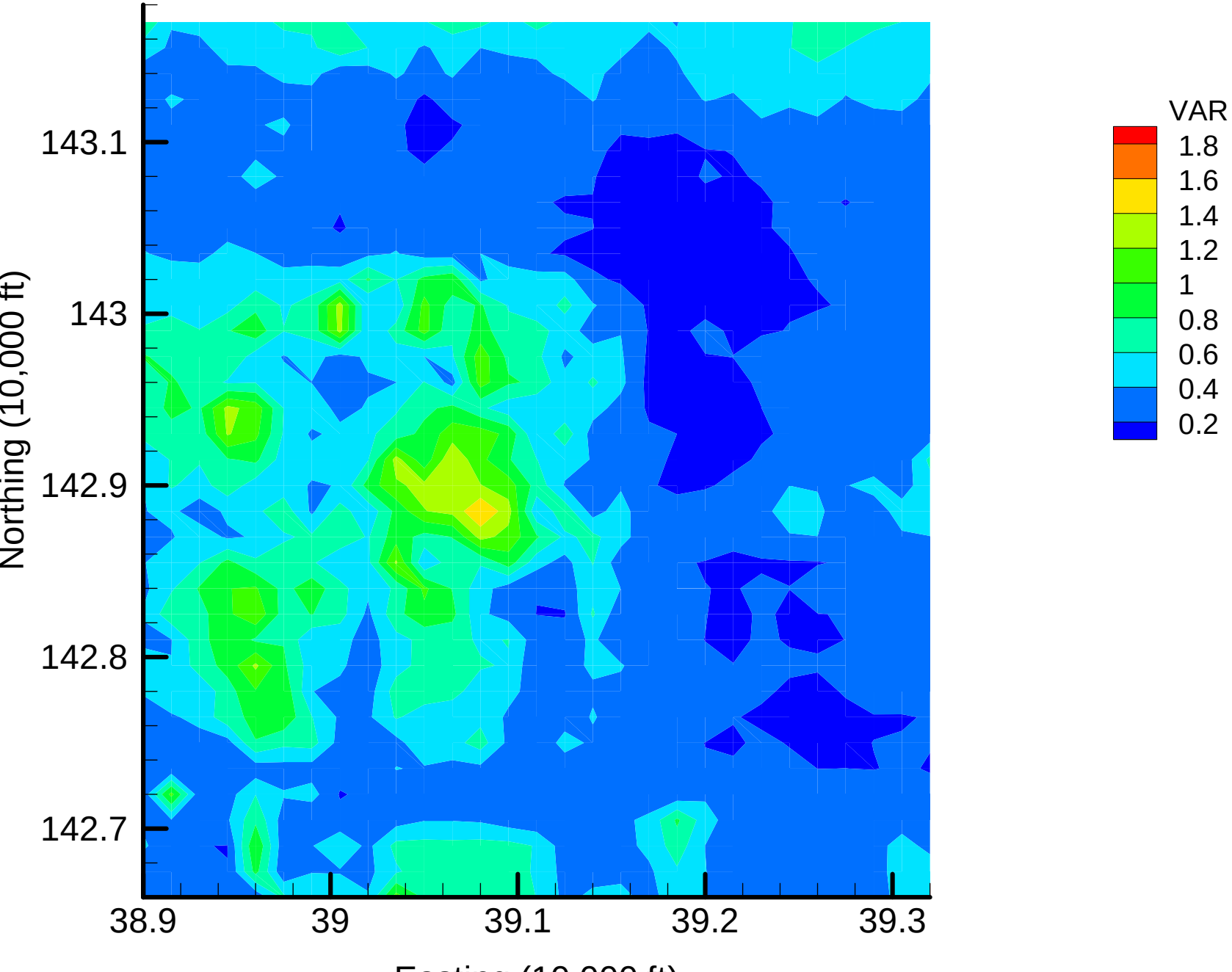
DCE11: Slice 2: Local Variance Map: 55% Removal



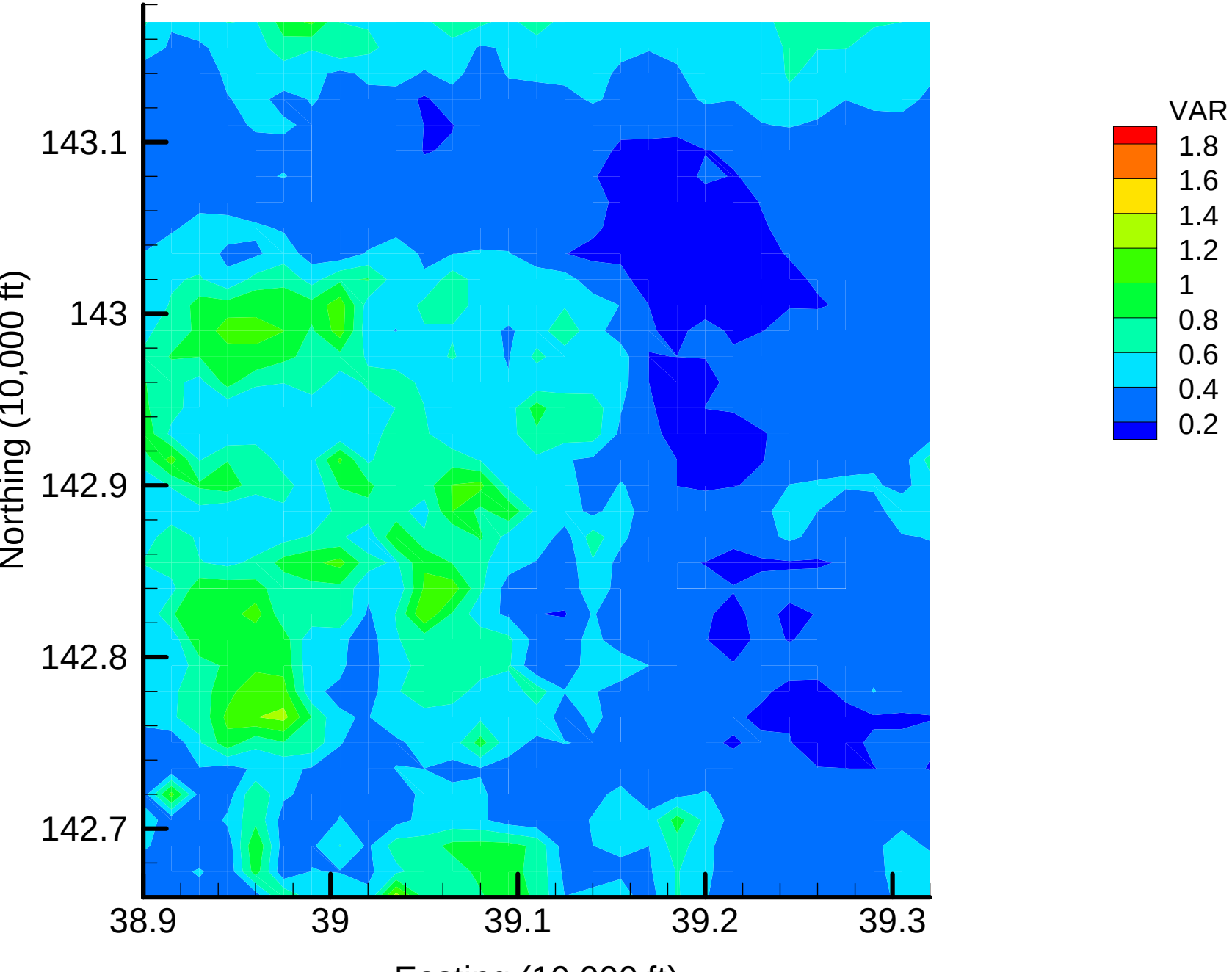

TCE: Slice 1: Local Variance Base Map
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
VAR
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2


TCE: Slice 1: Local Variance Map: 5% Removal
VAR
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3

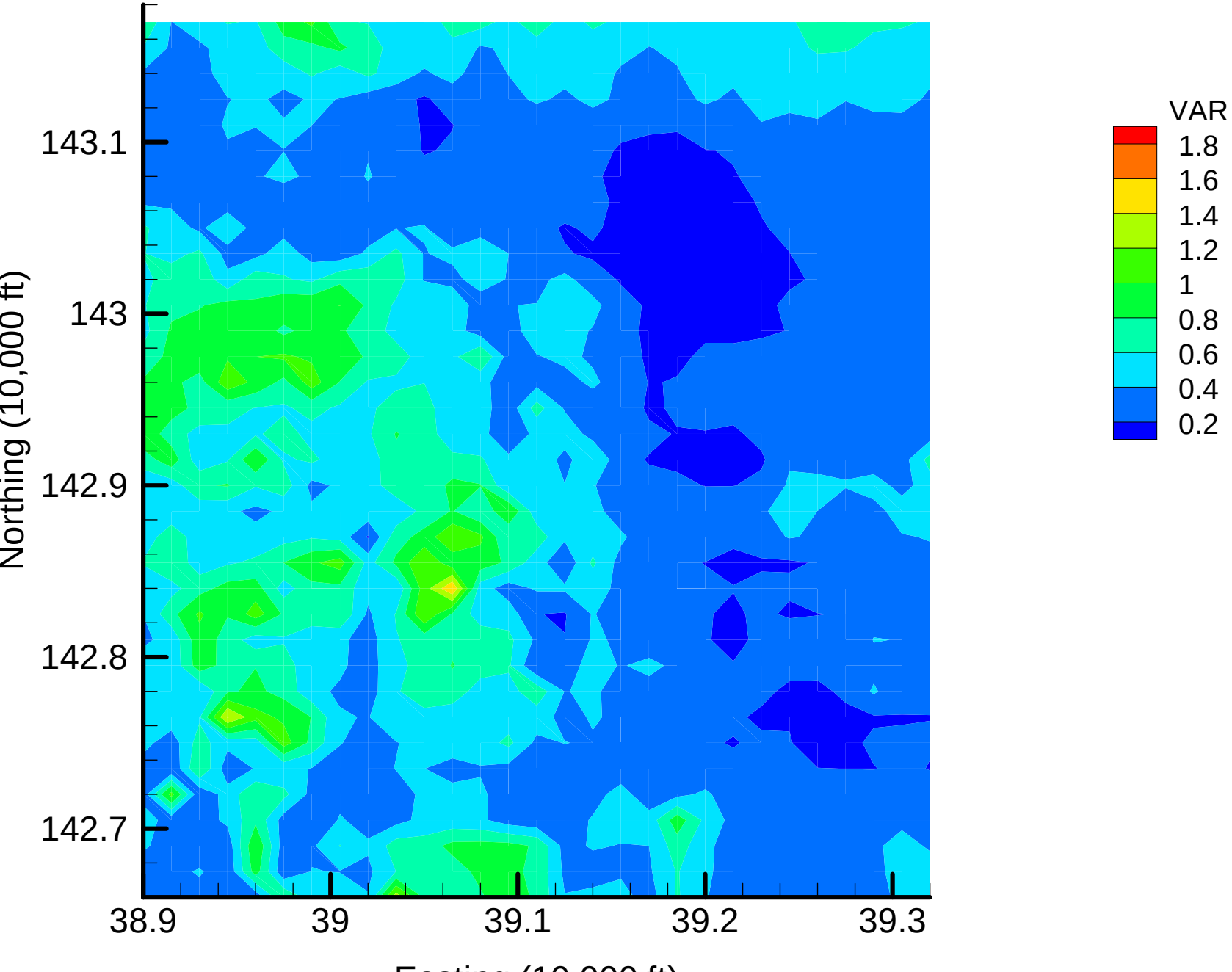
TCE: Slice 1: Local Variance Map: 10% Removal



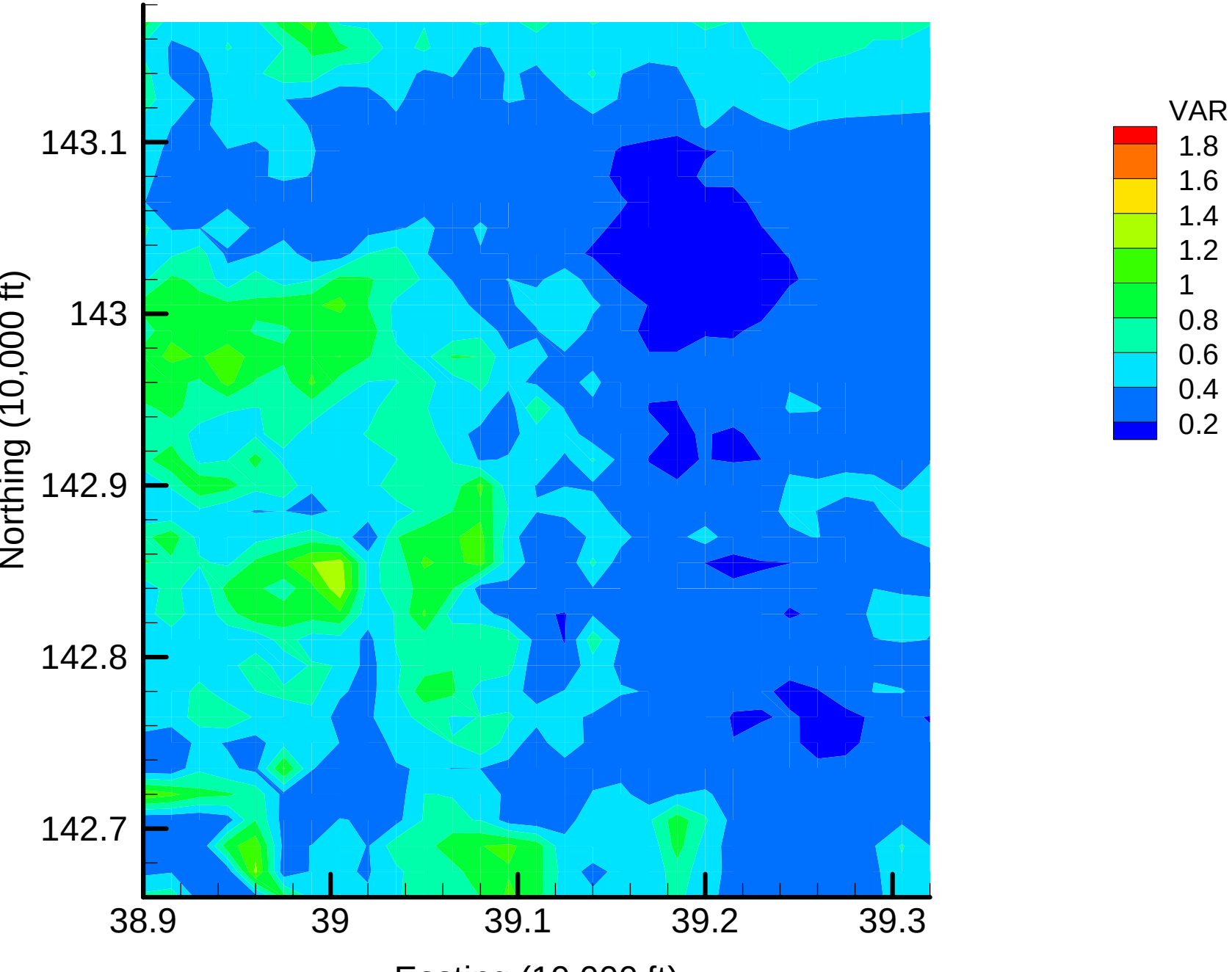
TCE: Slice 1: Local Variance Map: 15% Removal



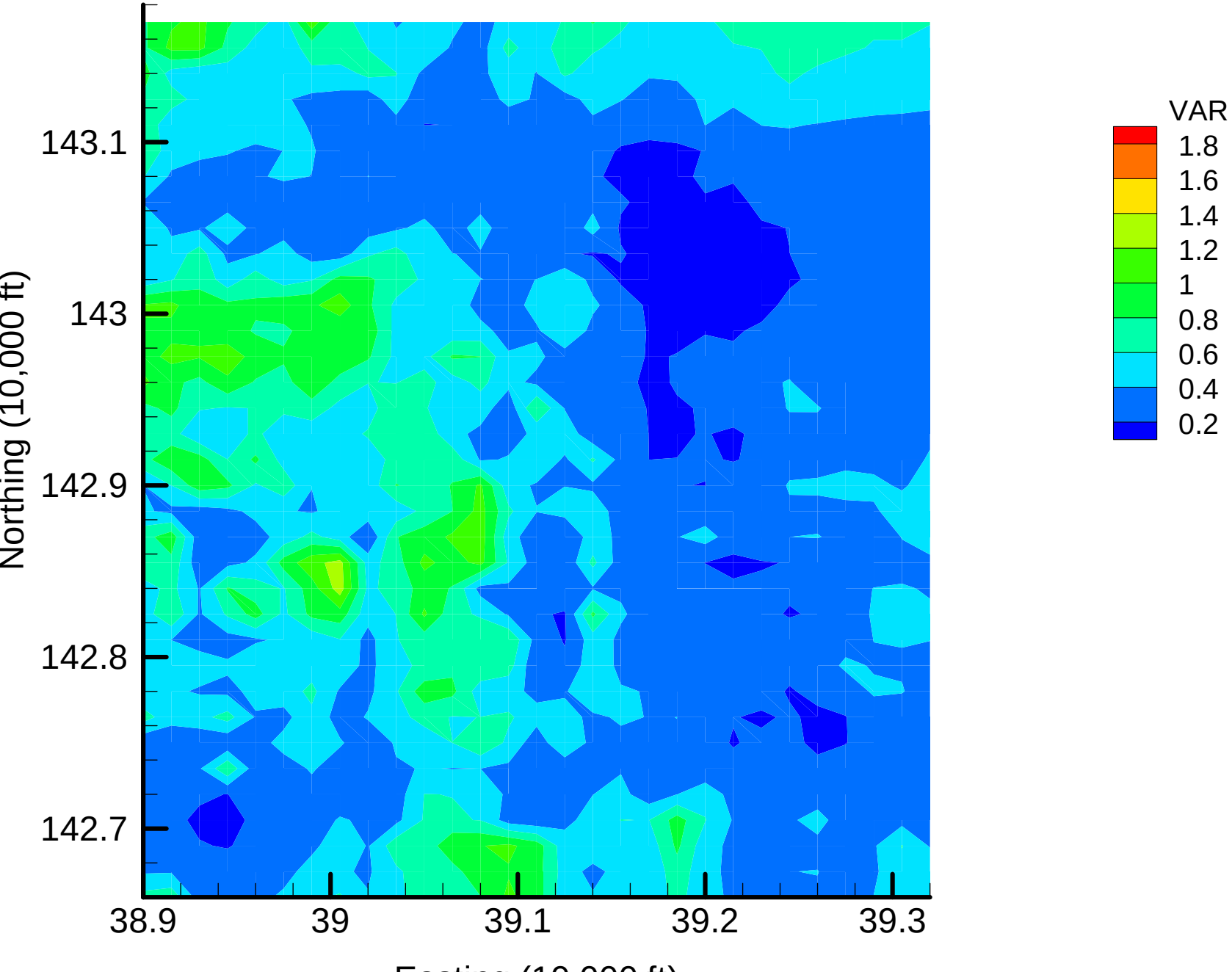
TCE: Slice 1: Local Variance Map: 20% Removal



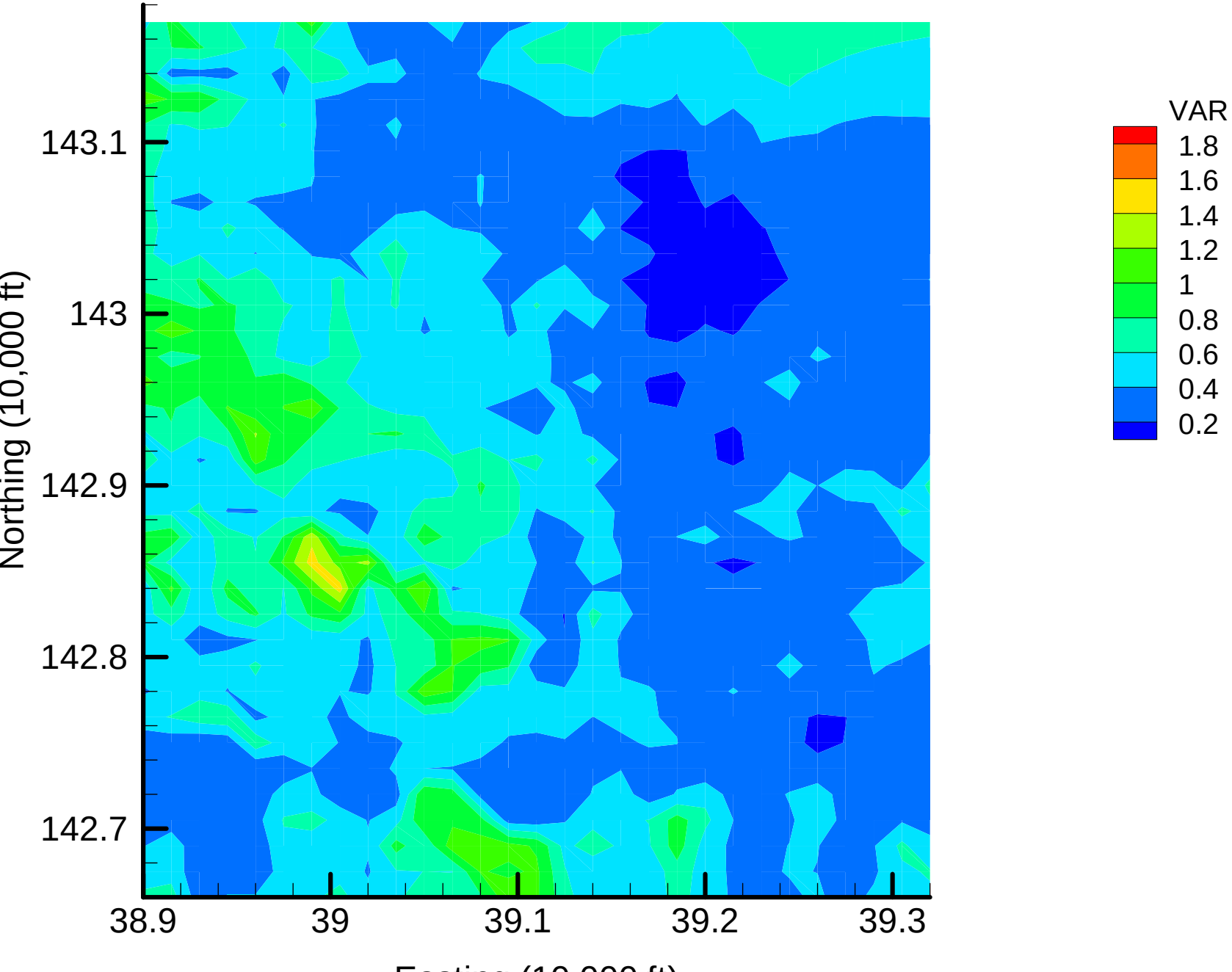
TCE: Slice 1: Local Variance Map: 25% Removal



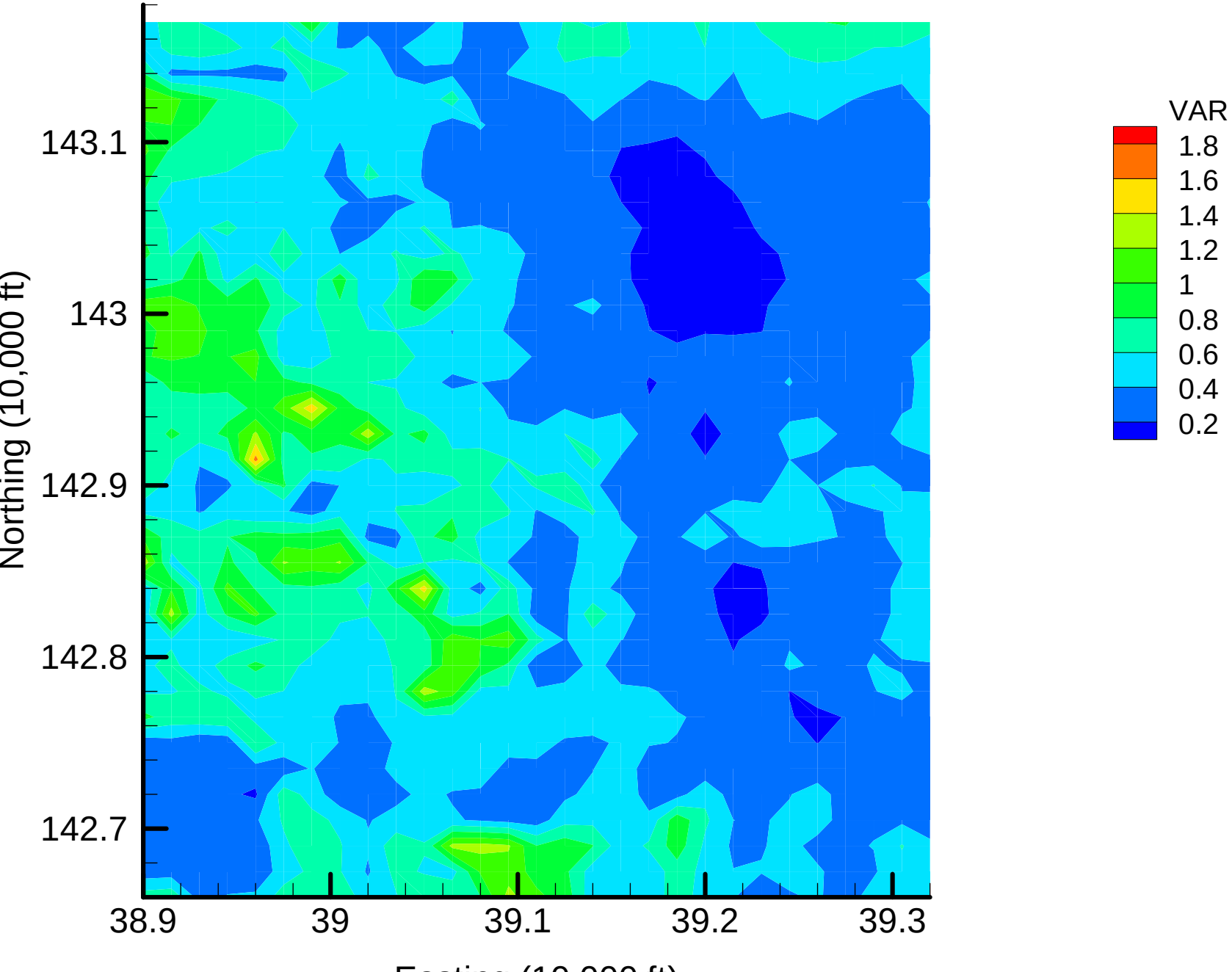
TCE: Slice 1: Local Variance Map: 30% Removal



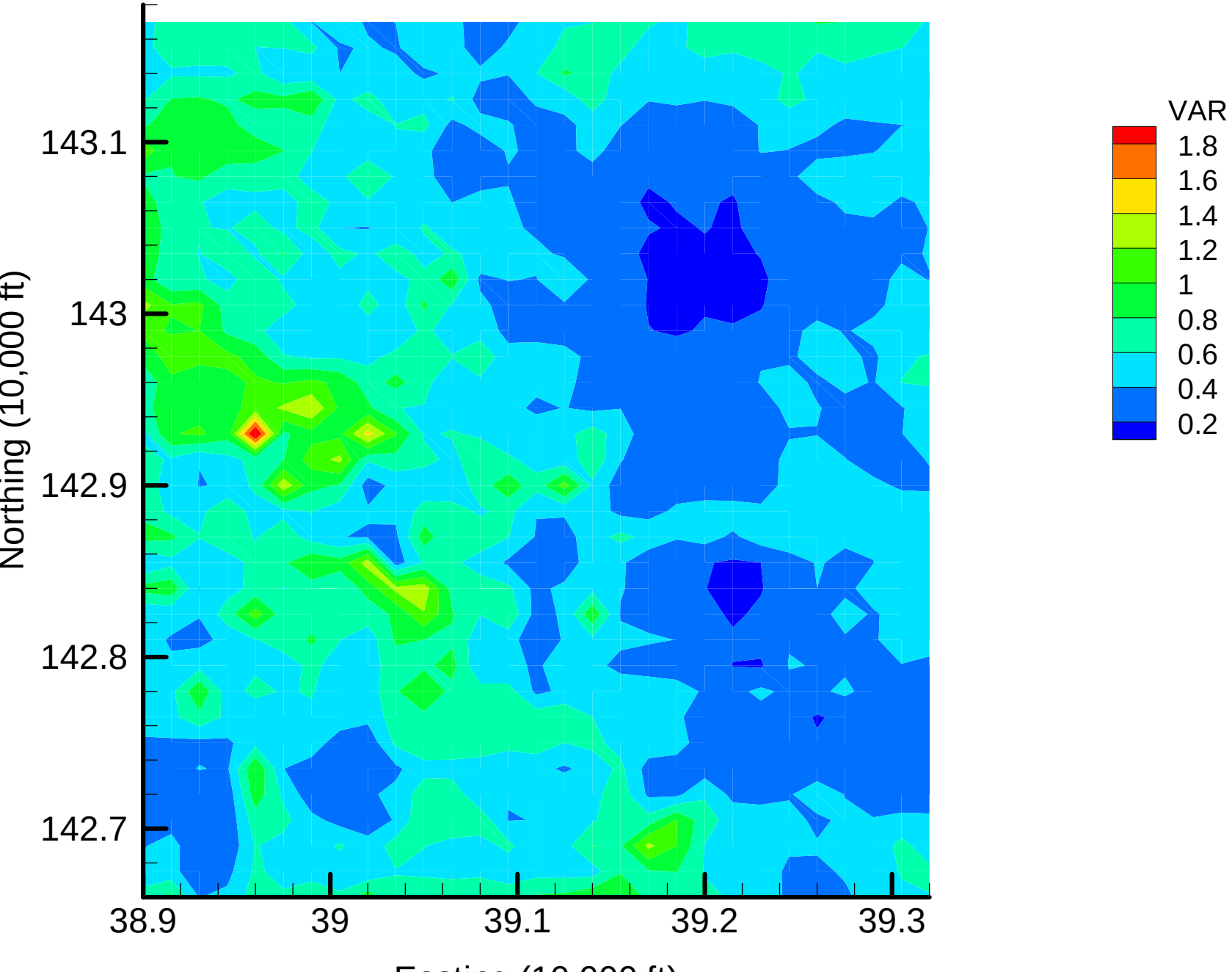
TCE: Slice 1: Local Variance Map: 35% Removal

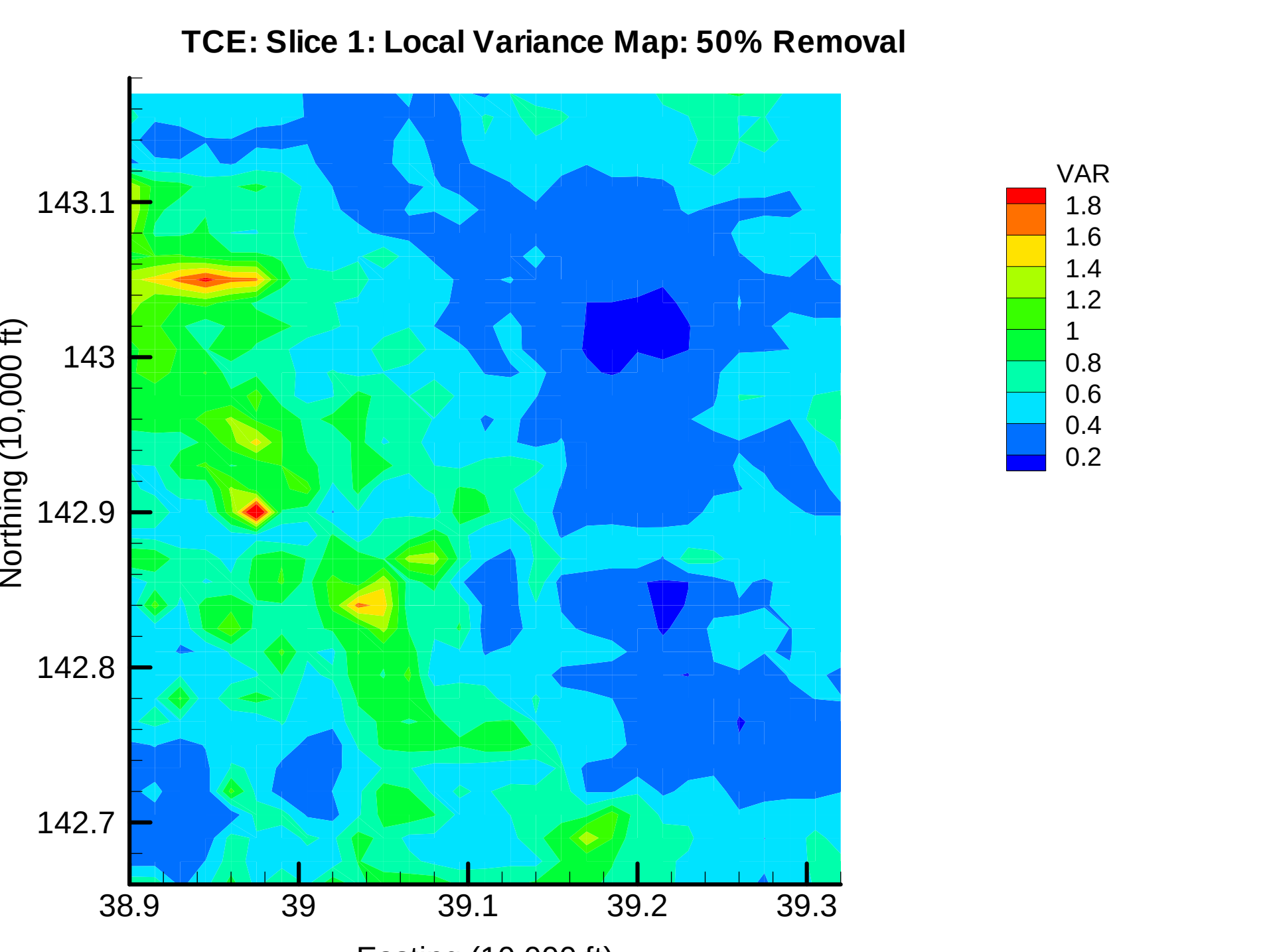


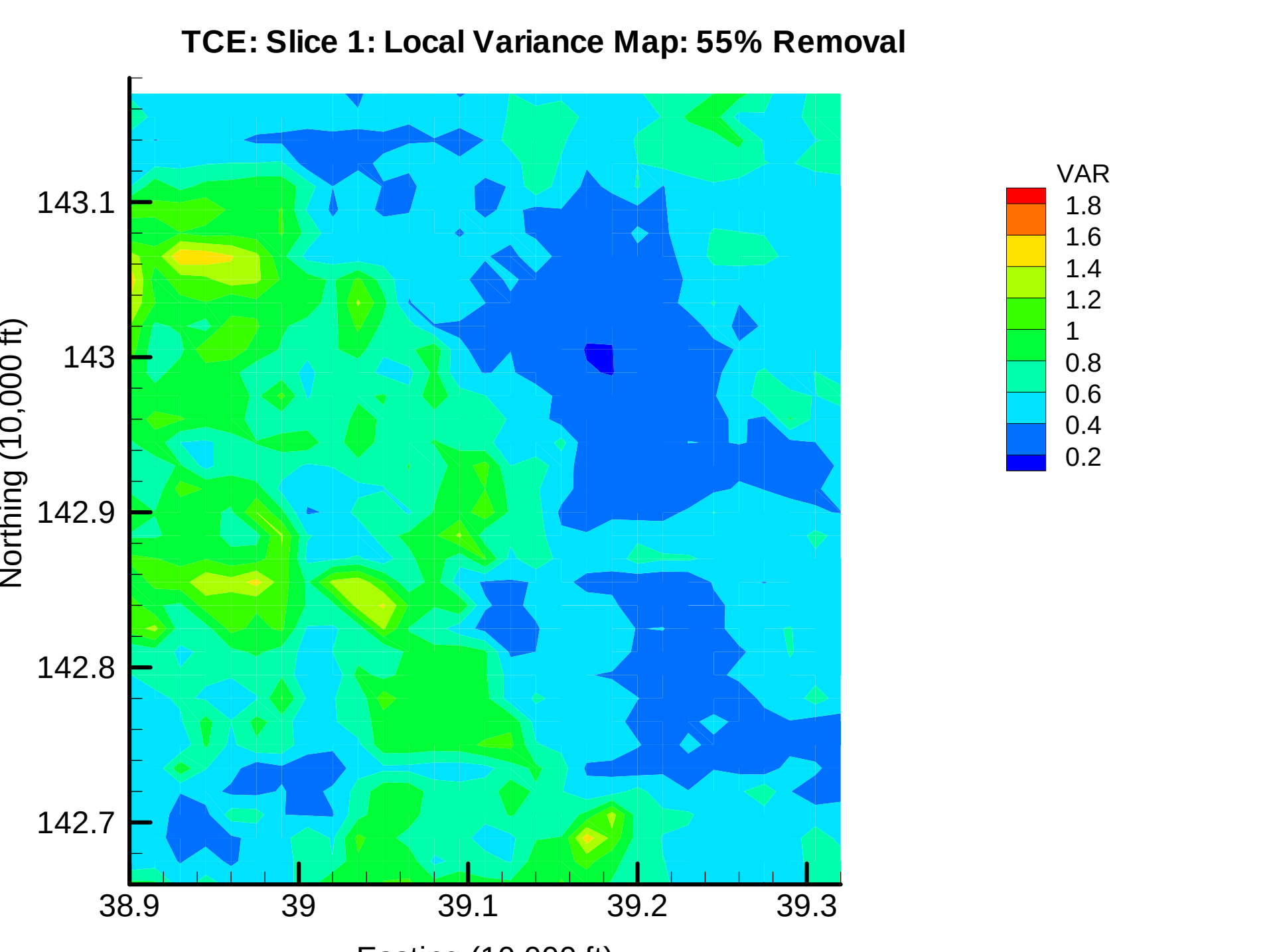
TCE: Slice 1: Local Variance Map: 40% Removal

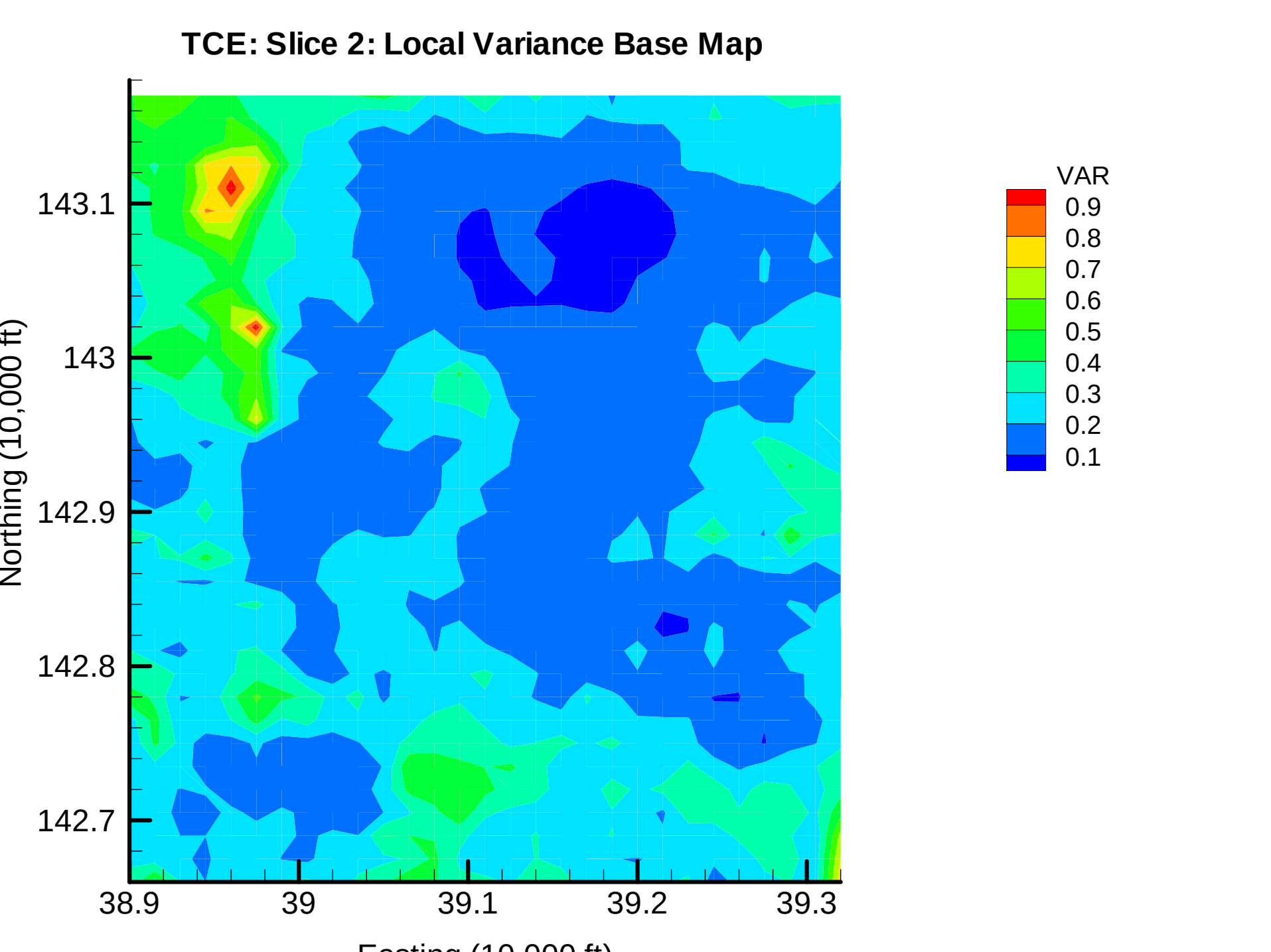


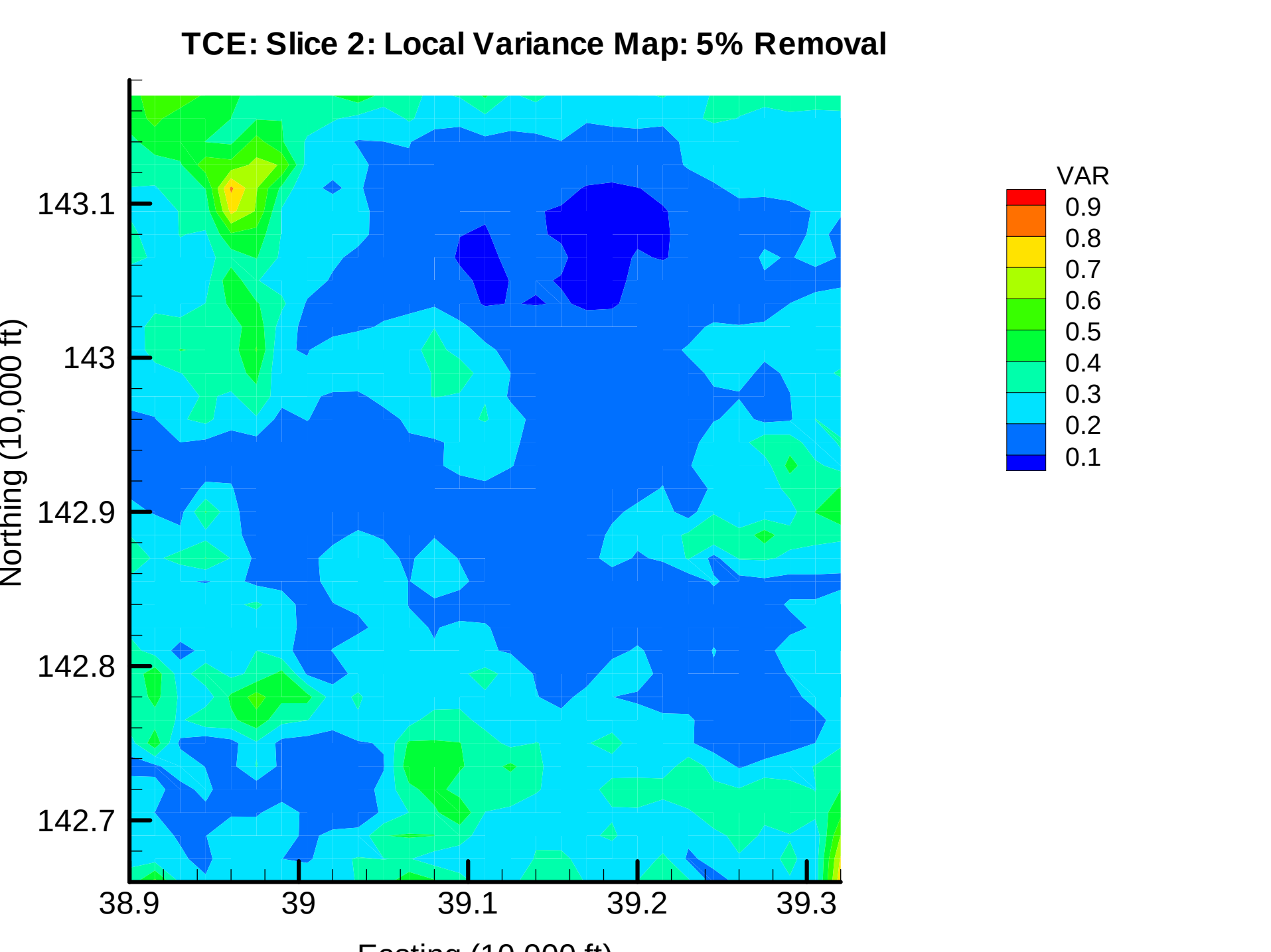
TCE: Slice 1: Local Variance Map: 45% Removal

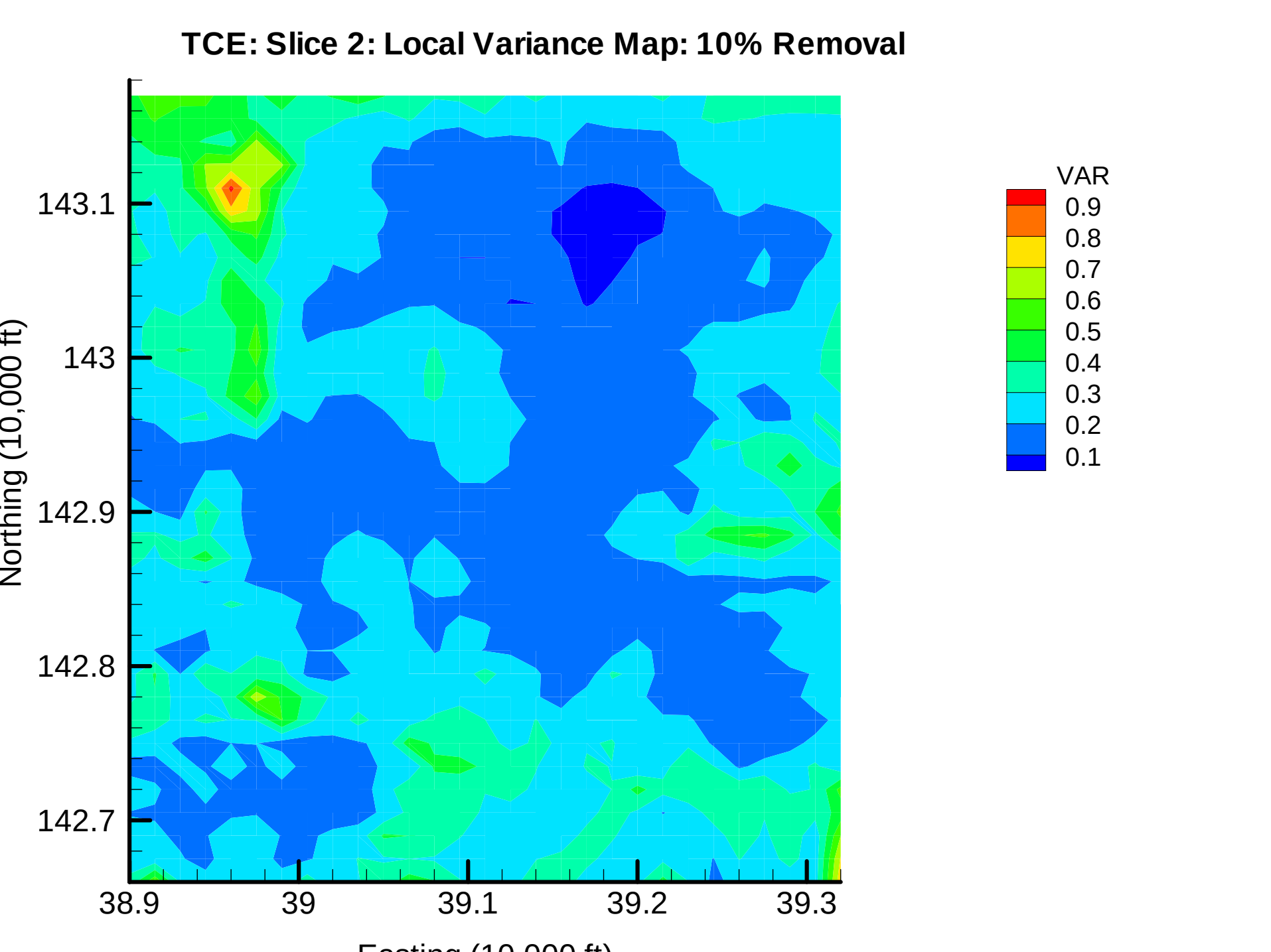



TCE: Slice 1: Local Variance Map: 50% Removal
VAR
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3

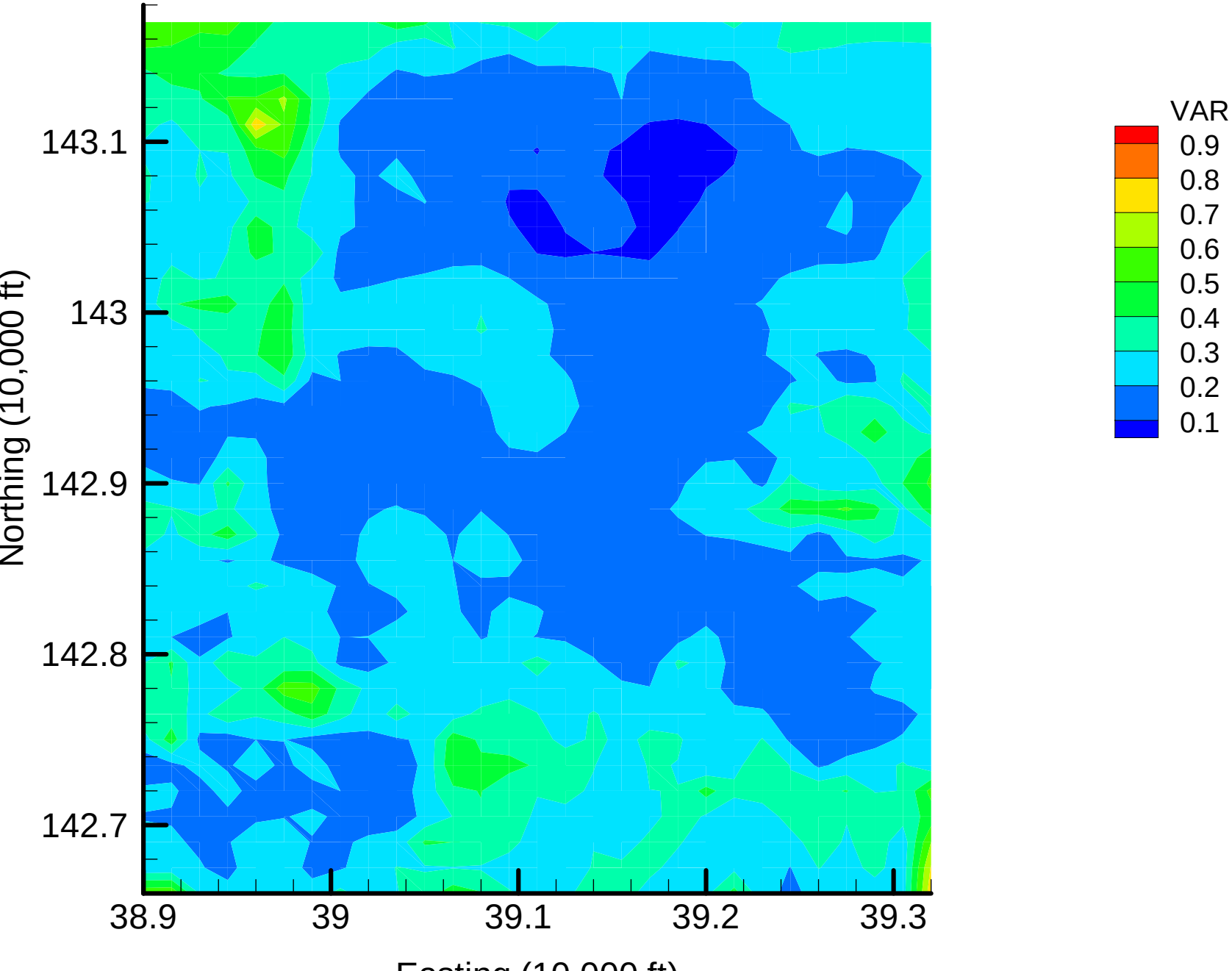

TCE: Slice 1: Local Variance Map: 55% Removal
VAR
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3

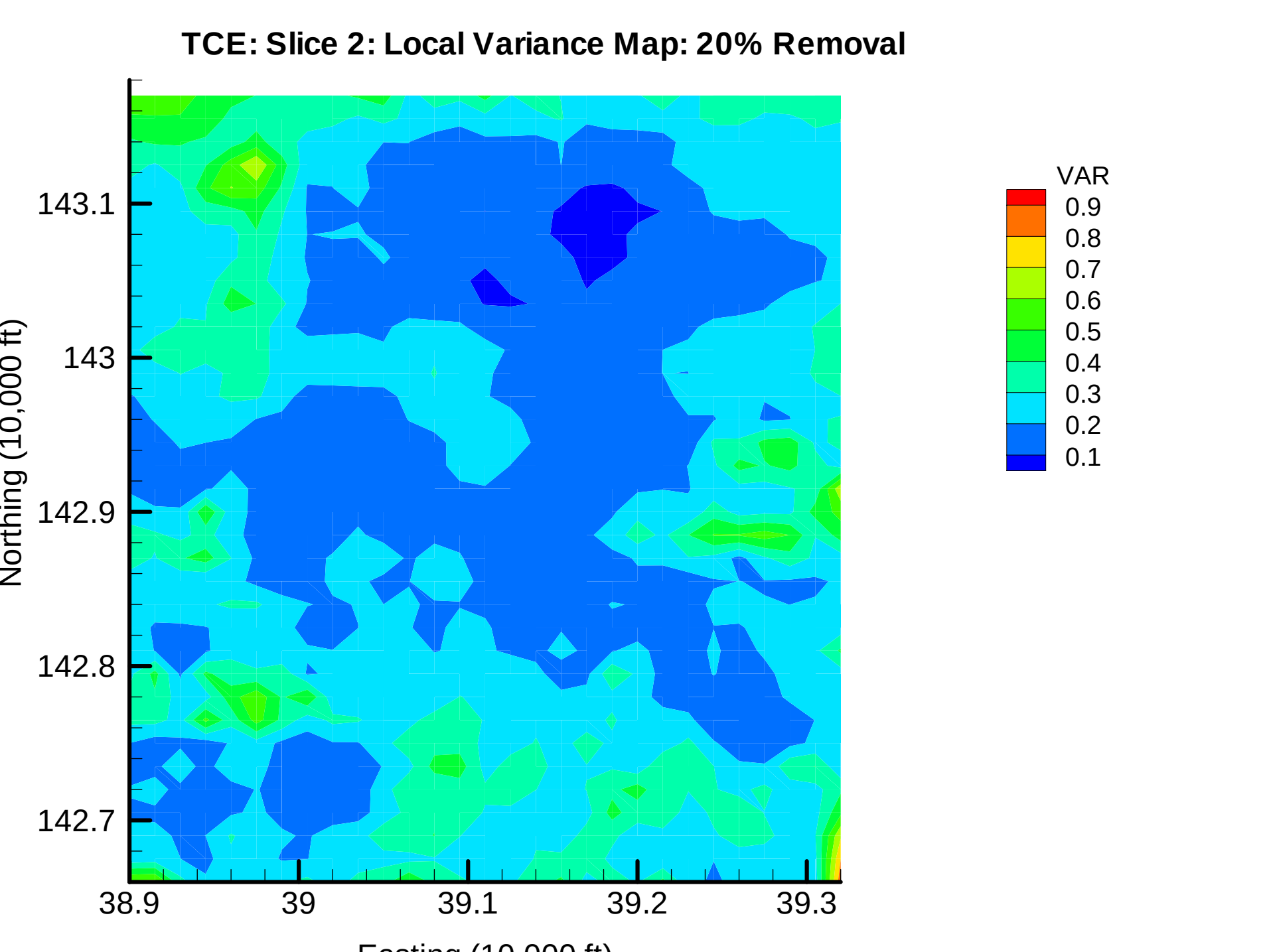

TCE: Slice 2: Local Variance Base Map
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

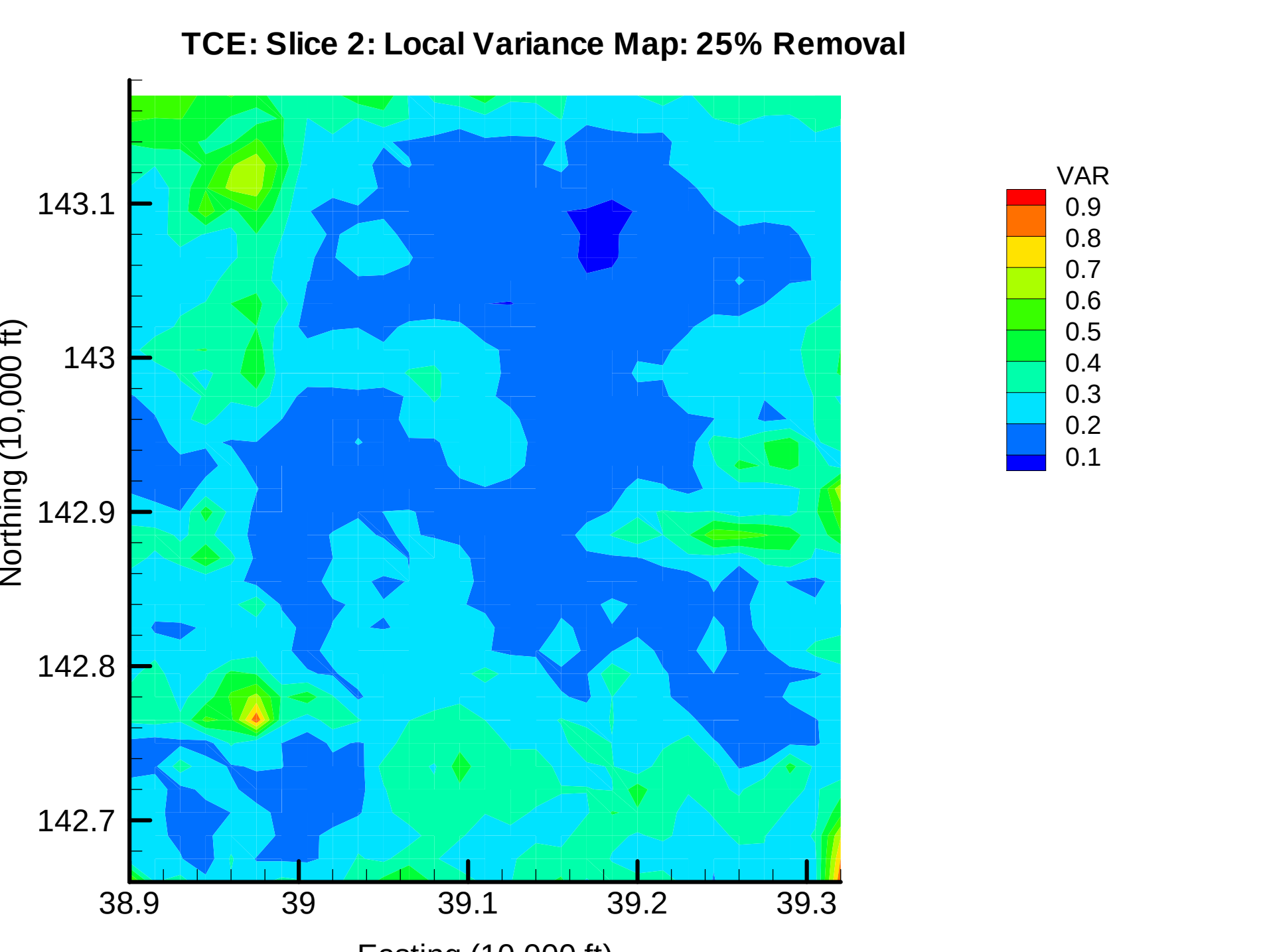

TCE: Slice 2: Local Variance Map: 5% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

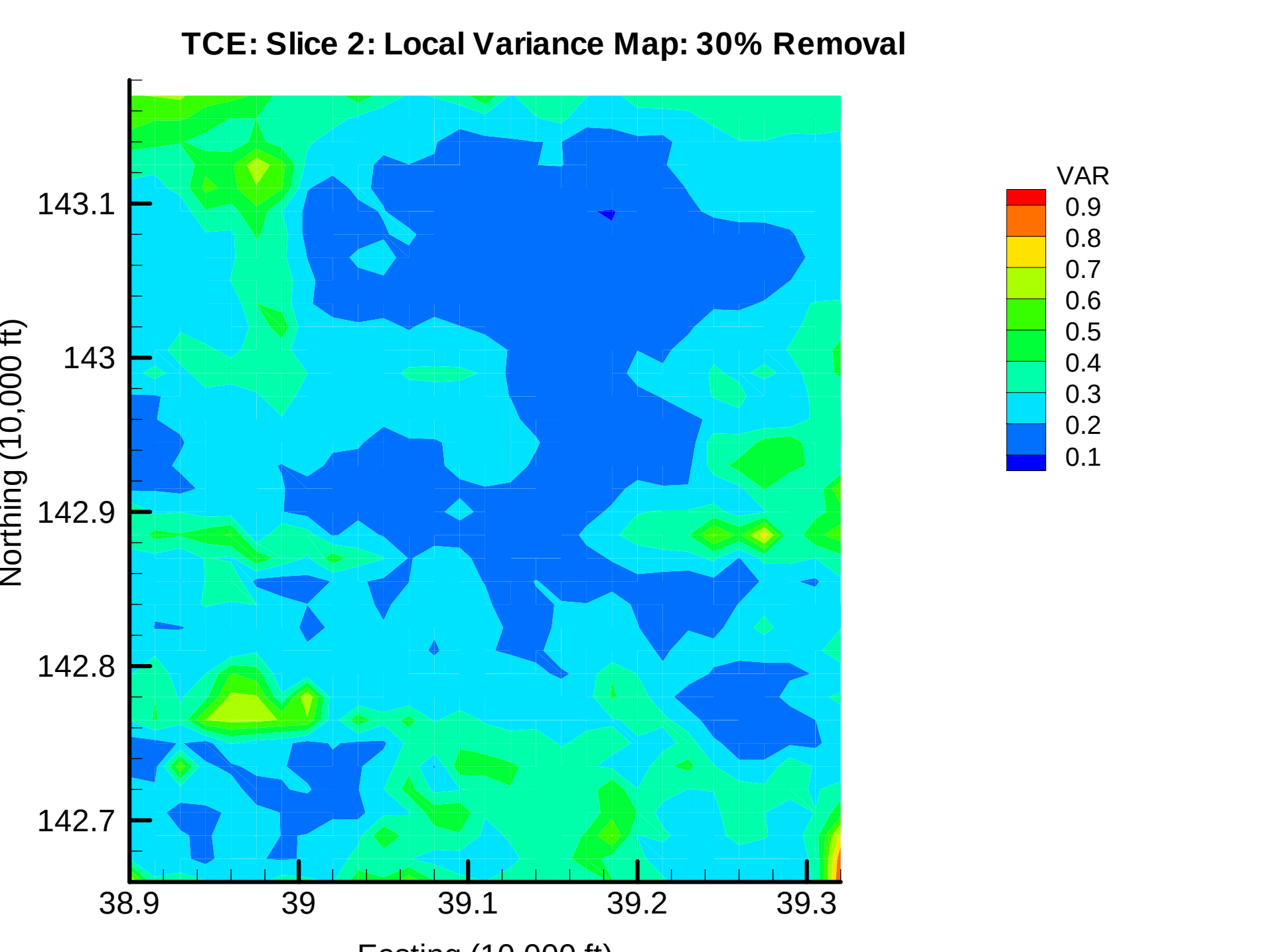

TCE: Slice 2: Local Variance Map: 10% Removal
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)

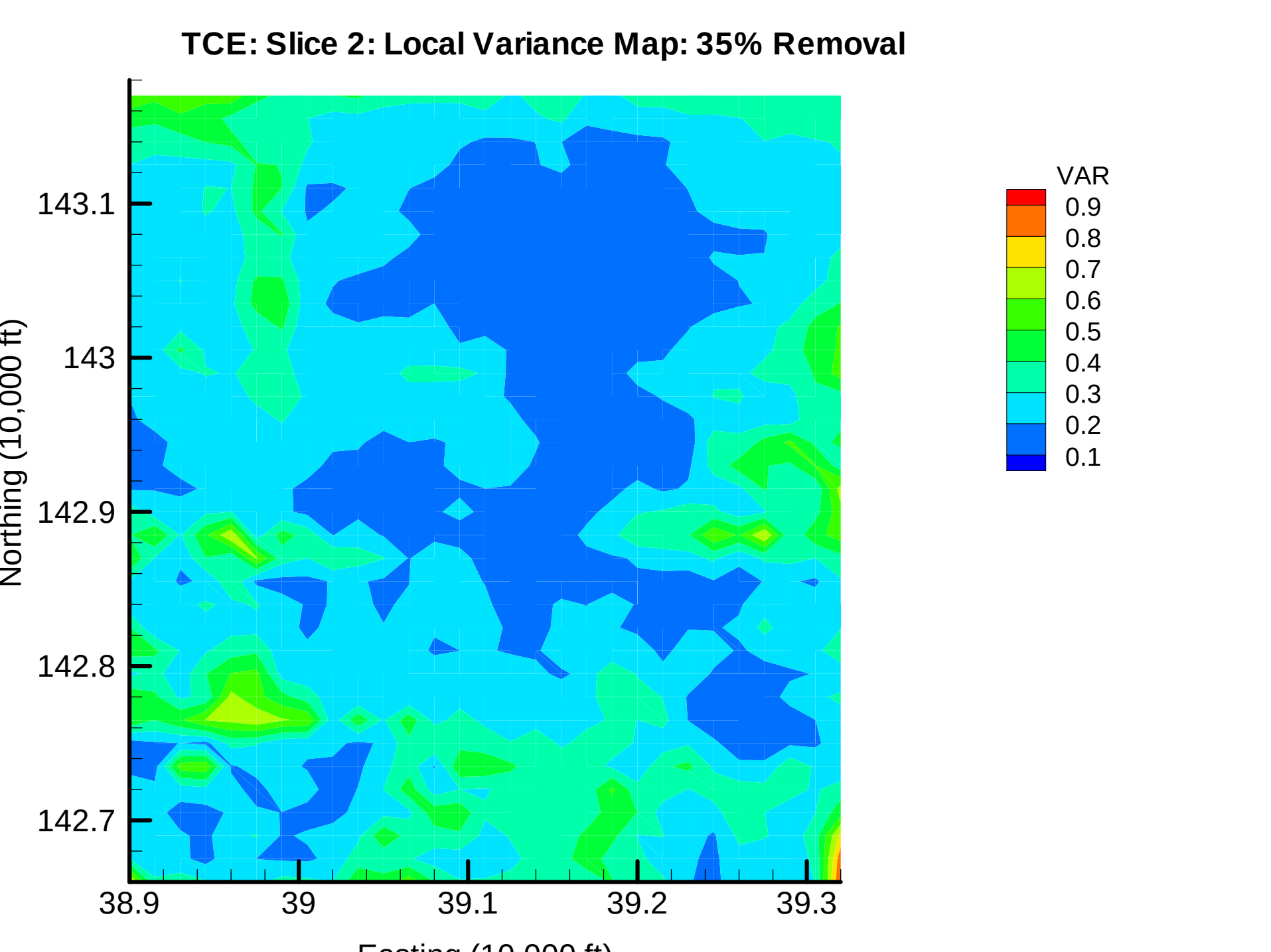
TCE: Slice 2: Local Variance Map: 15% Removal

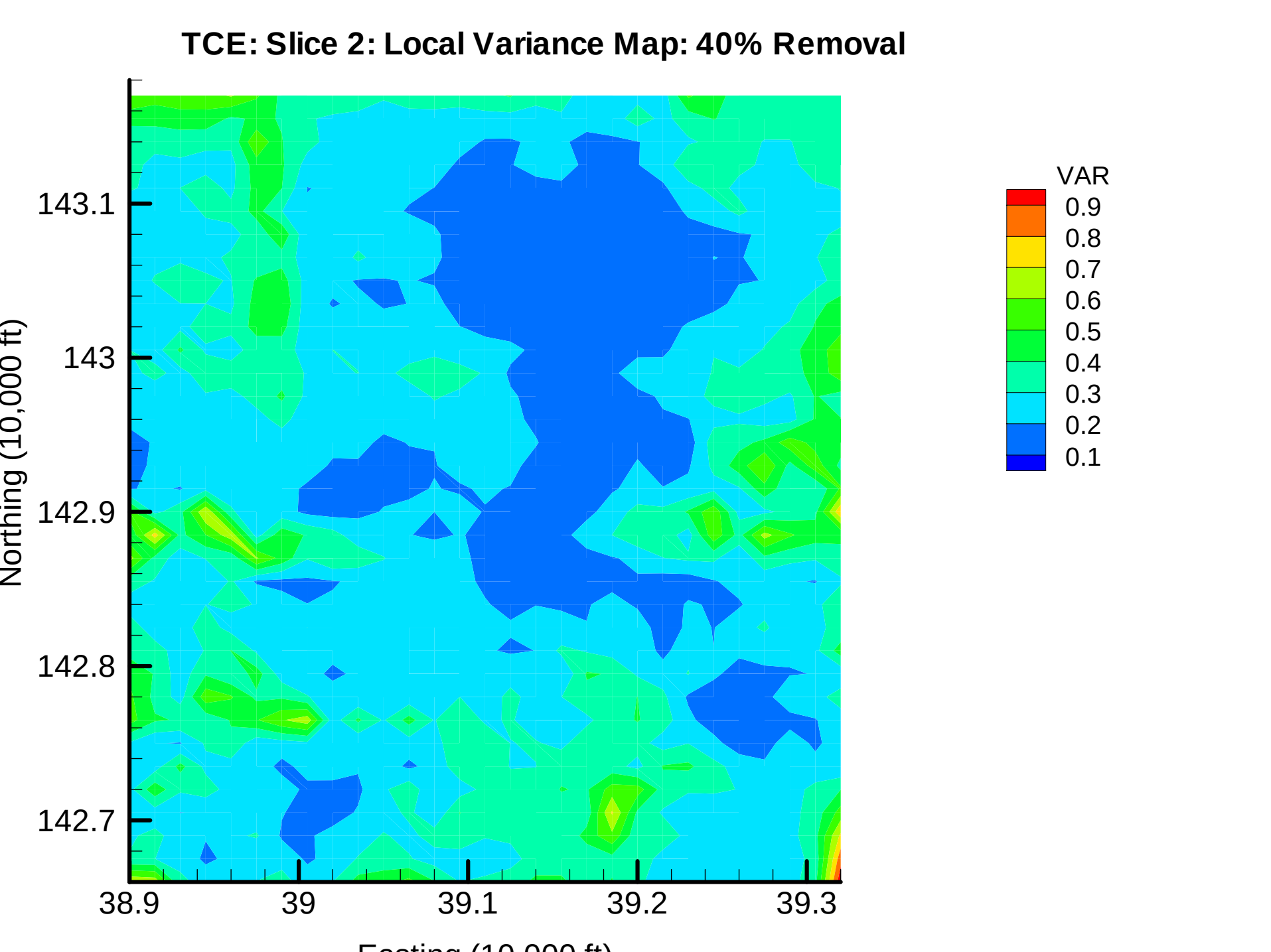



TCE: Slice 2: Local Variance Map: 20% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

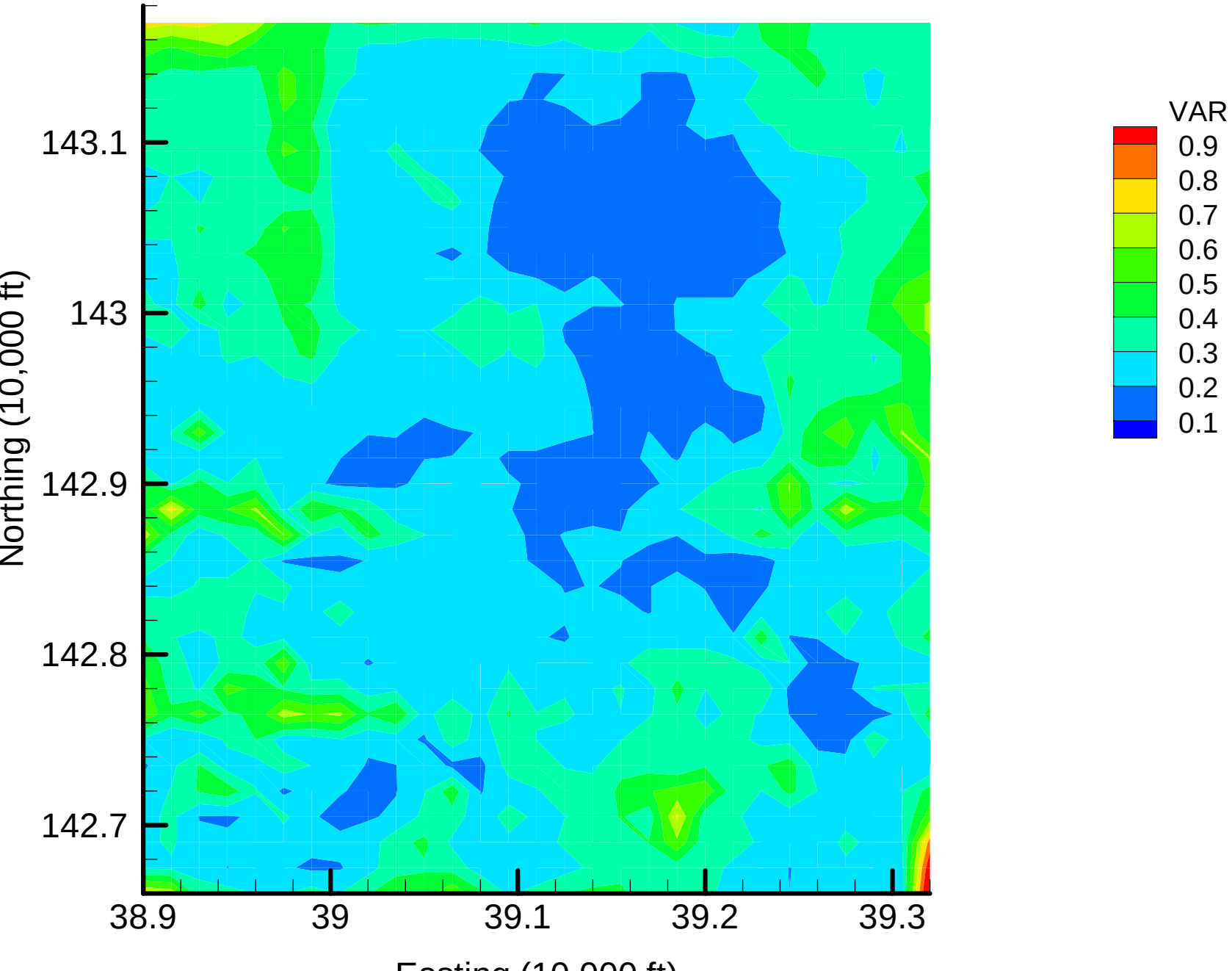

TCE: Slice 2: Local Variance Map: 25% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

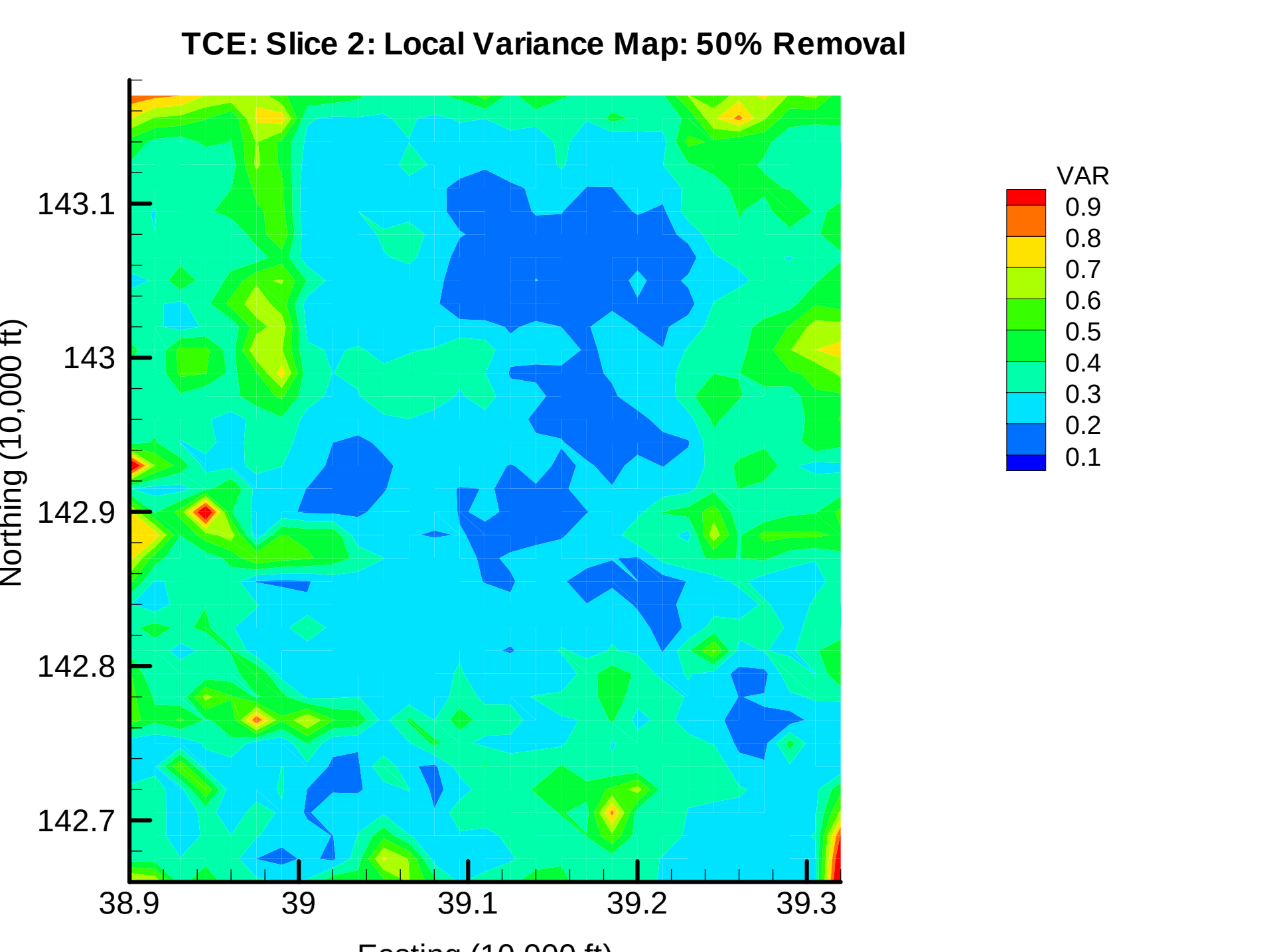

TCE: Slice 2: Local Variance Map: 30% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

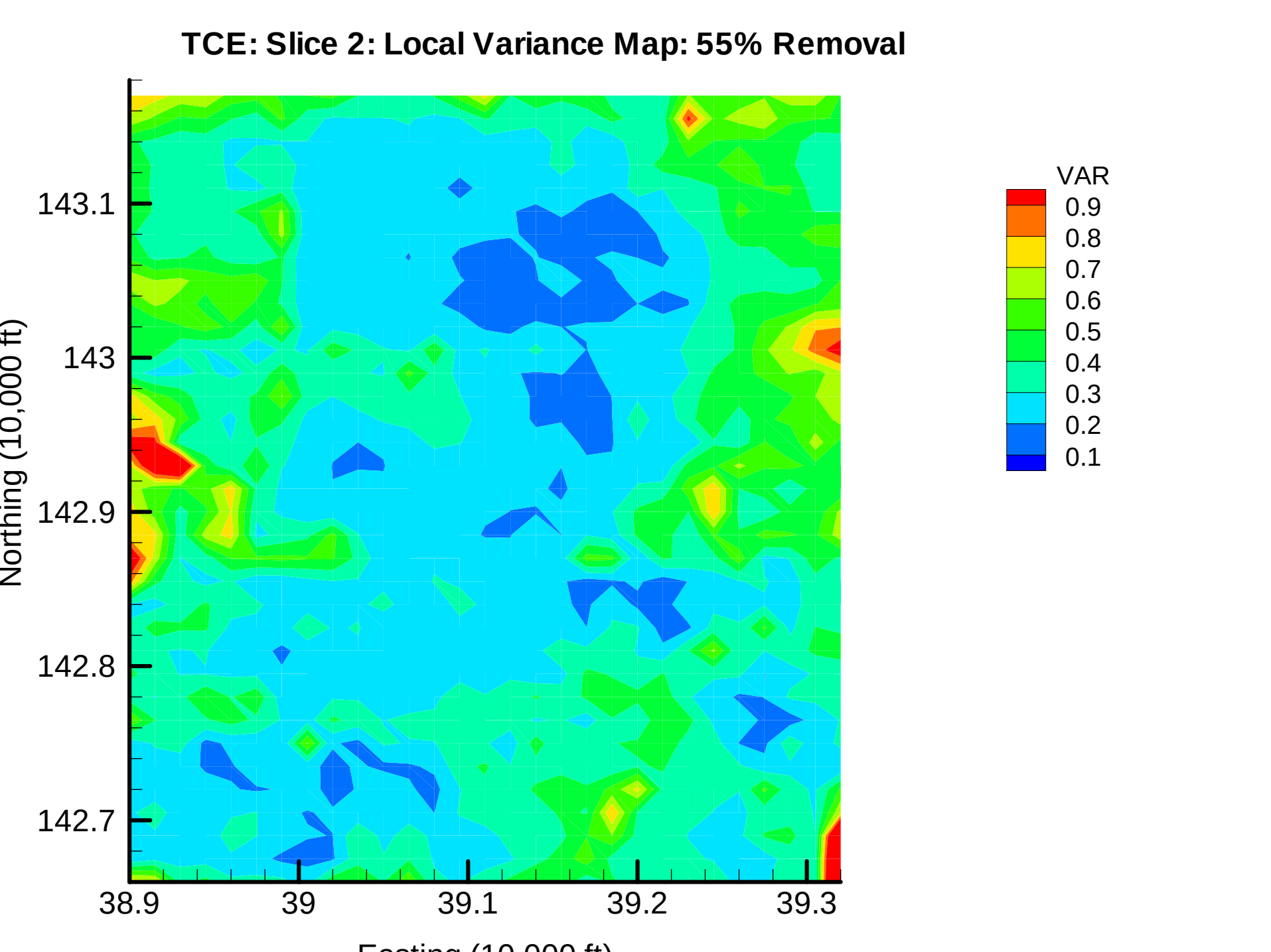

TCE: Slice 2: Local Variance Map: 35% Removal
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)

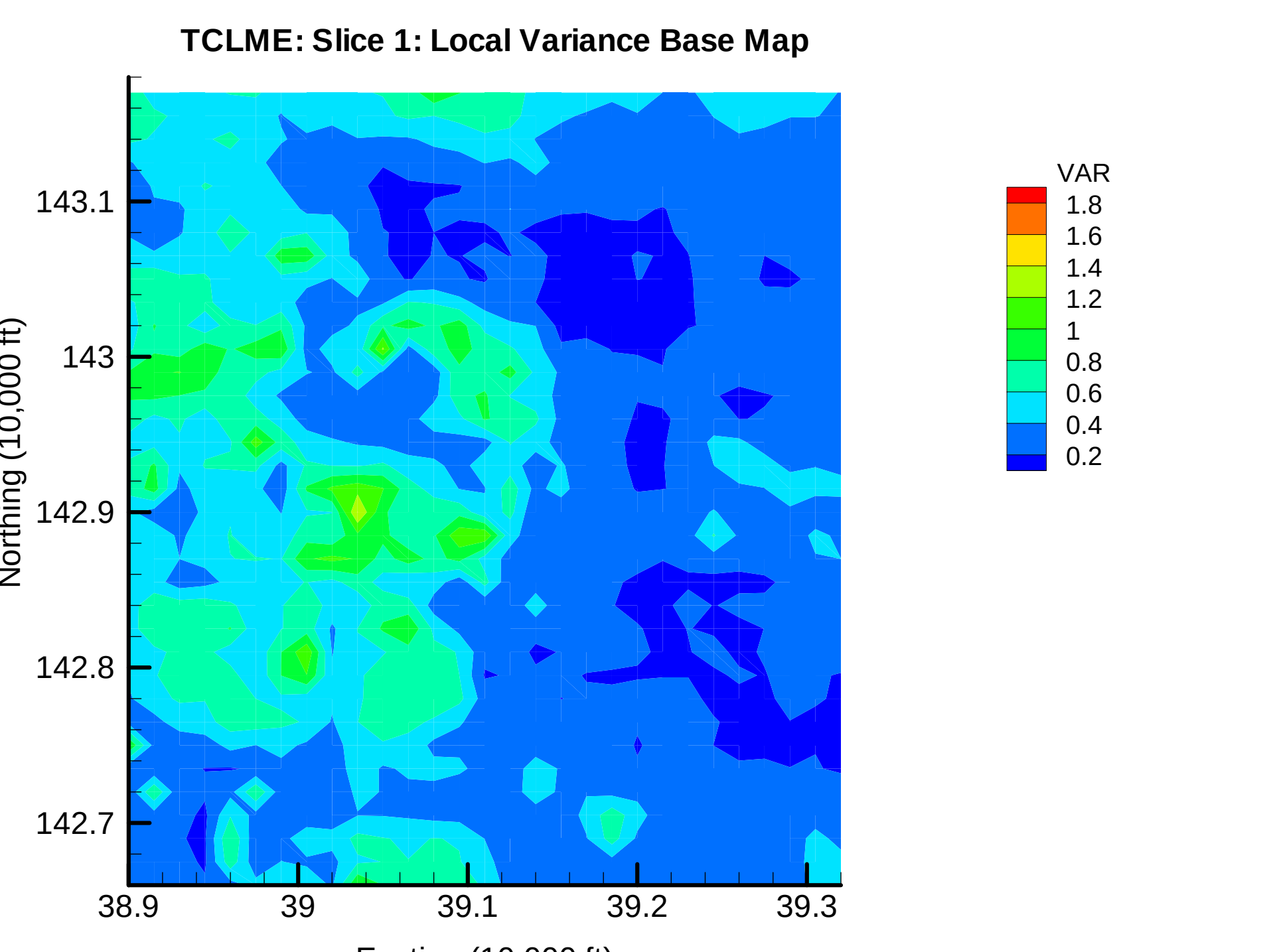

TCE: Slice 2: Local Variance Map: 40% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

TCE: Slice 2: Local Variance Map: 45% Removal

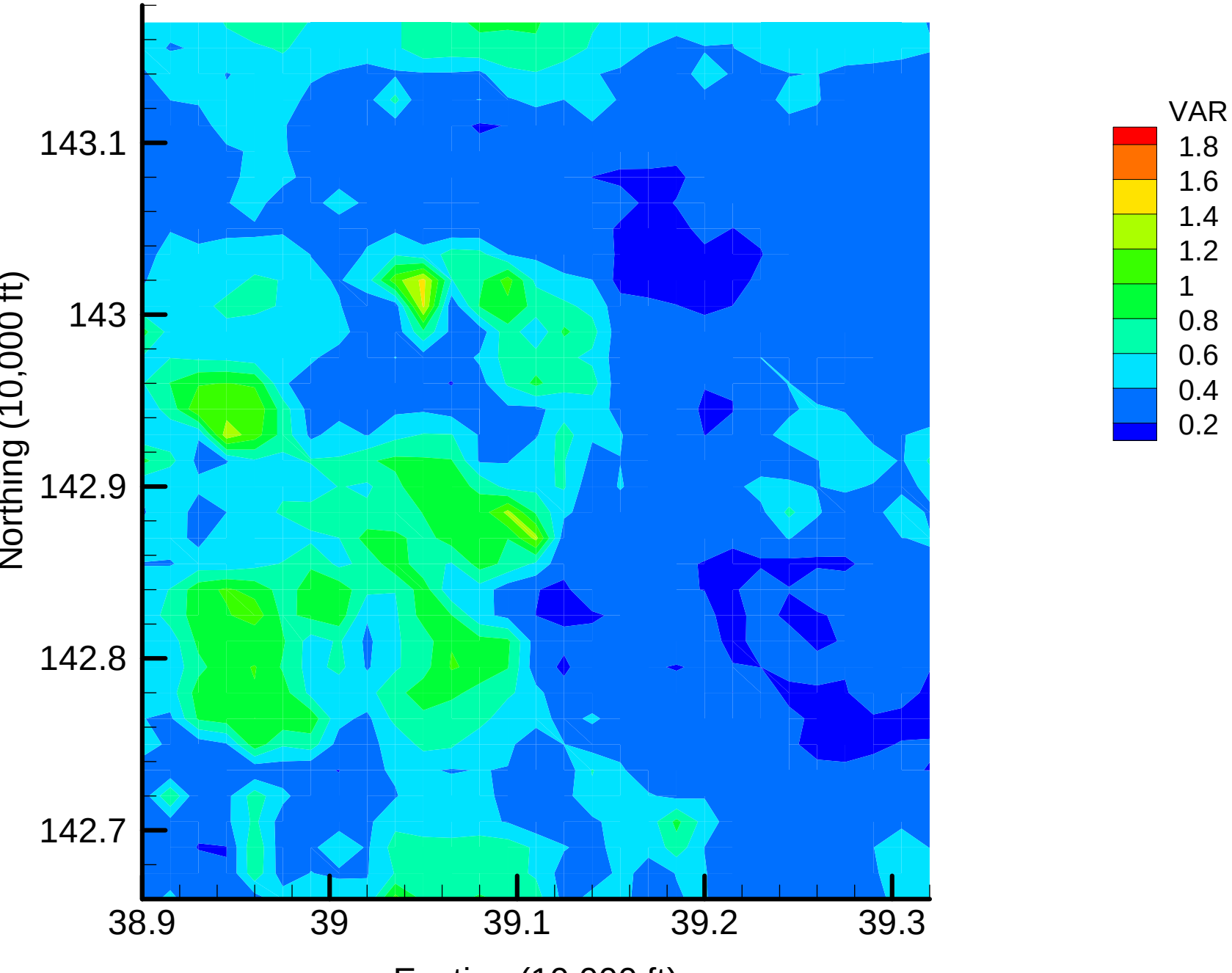



TCE: Slice 2: Local Variance Map: 50% Removal
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1

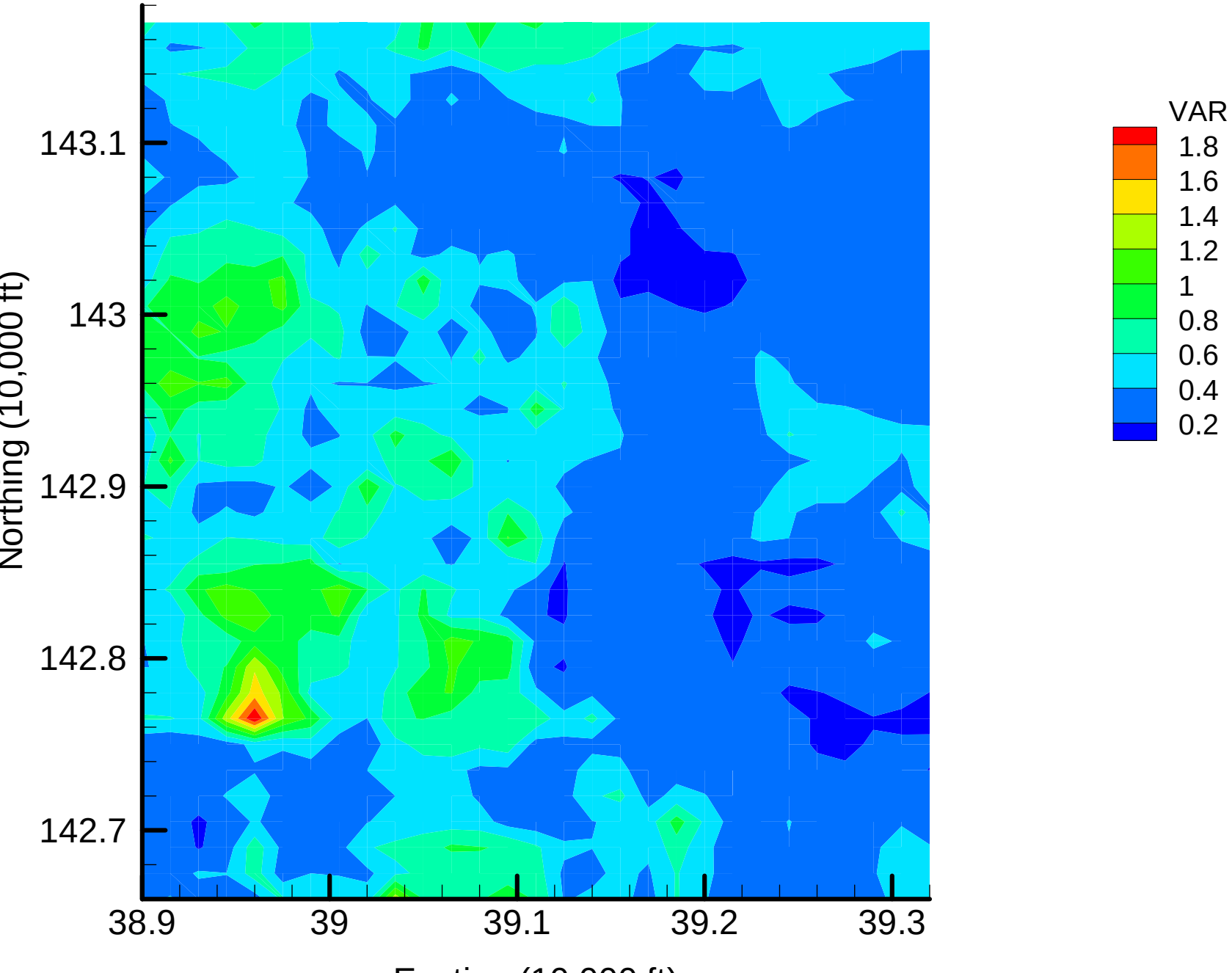

TCE: Slice 2: Local Variance Map: 55% Removal
VAR
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
Easting (10,000 ft)


TCLME: Slice 1: Local Variance Base Map
143.1
143
142.9
142.8
142.7
Northing (10,000 ft)
38.9
39
39.1
39.2
39.3
VAR
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2

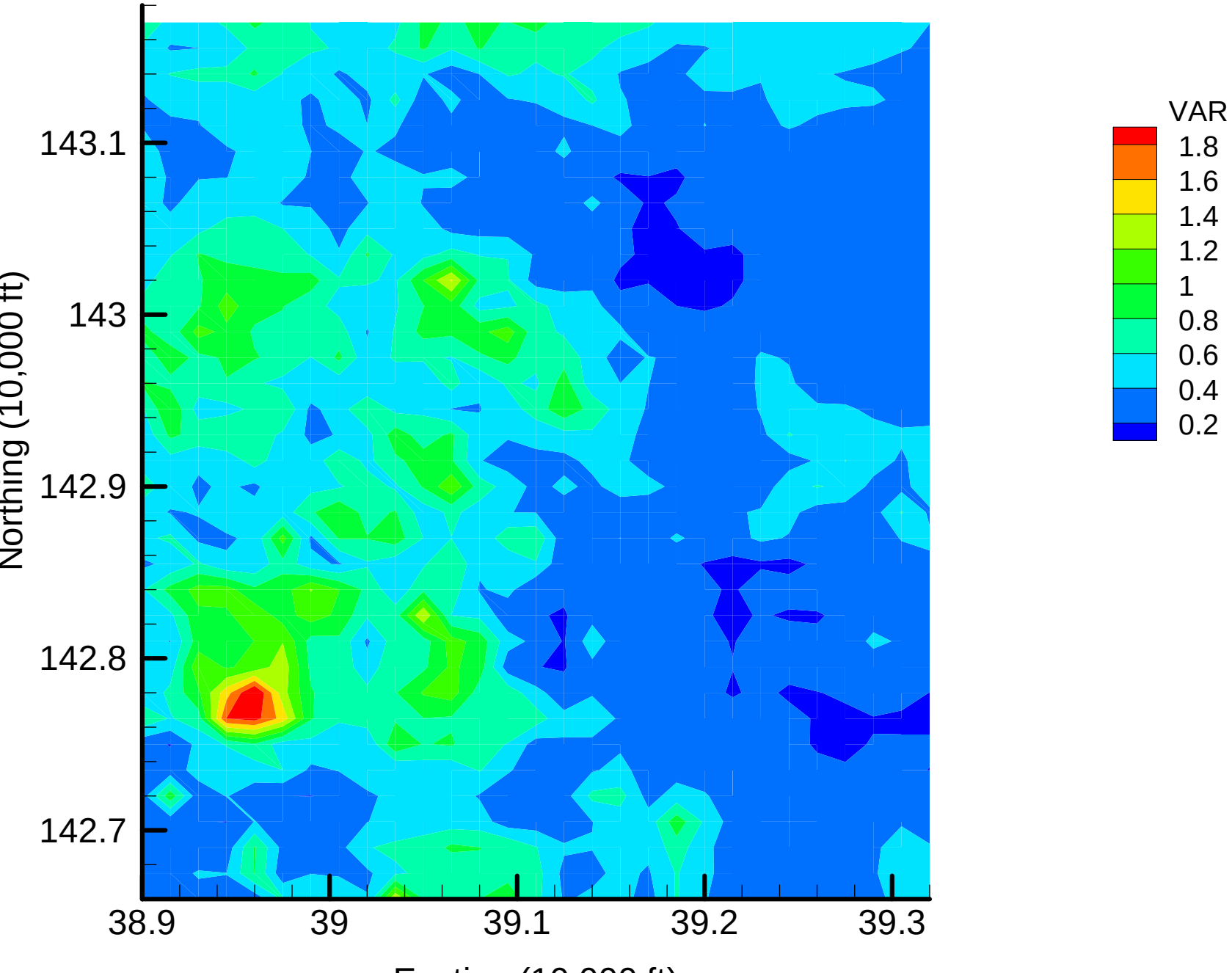
TCLME: Slice 1: Local Variance Map: 5% Removal



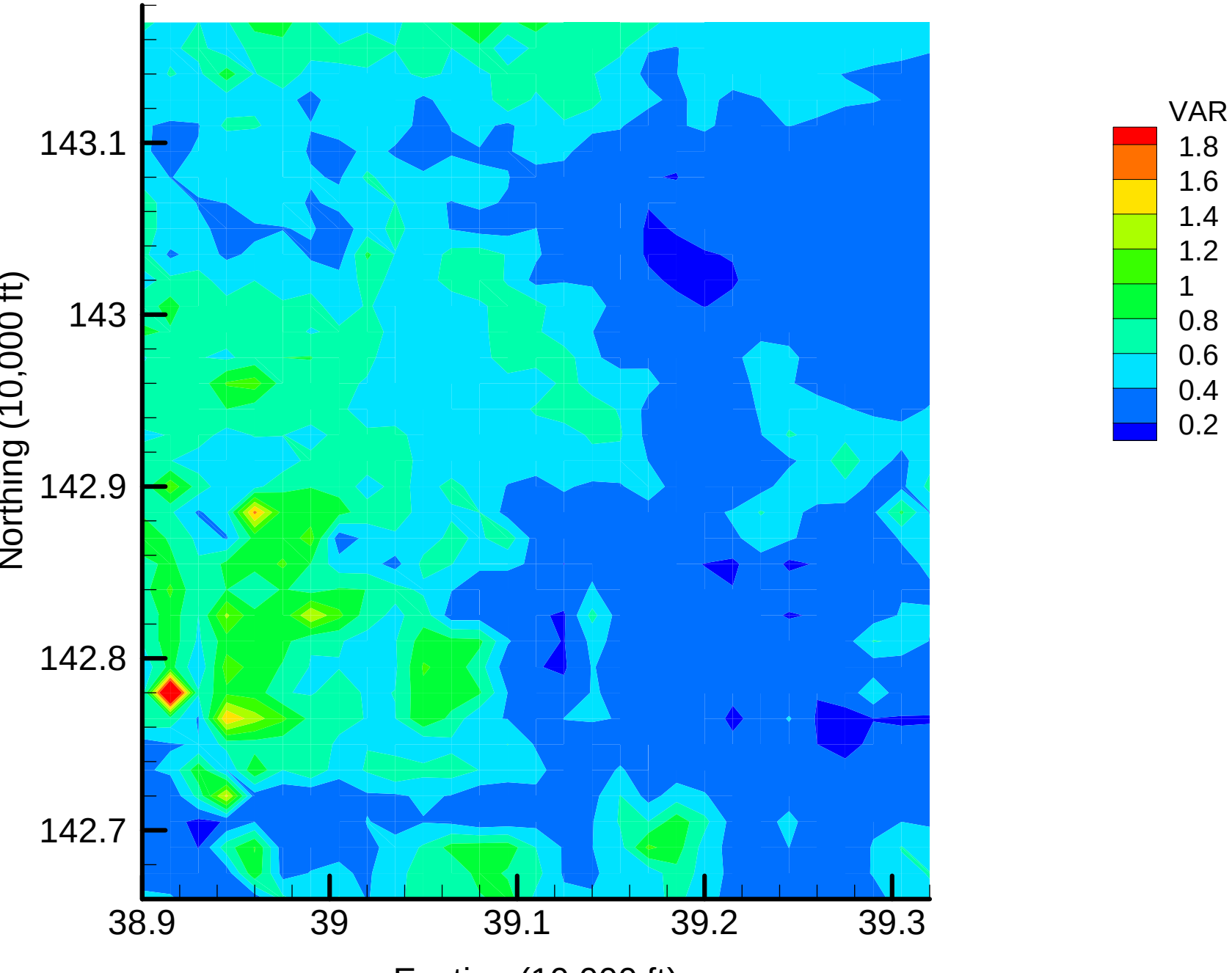
TCLME: Slice 1: Local Variance Map: 10% Removal



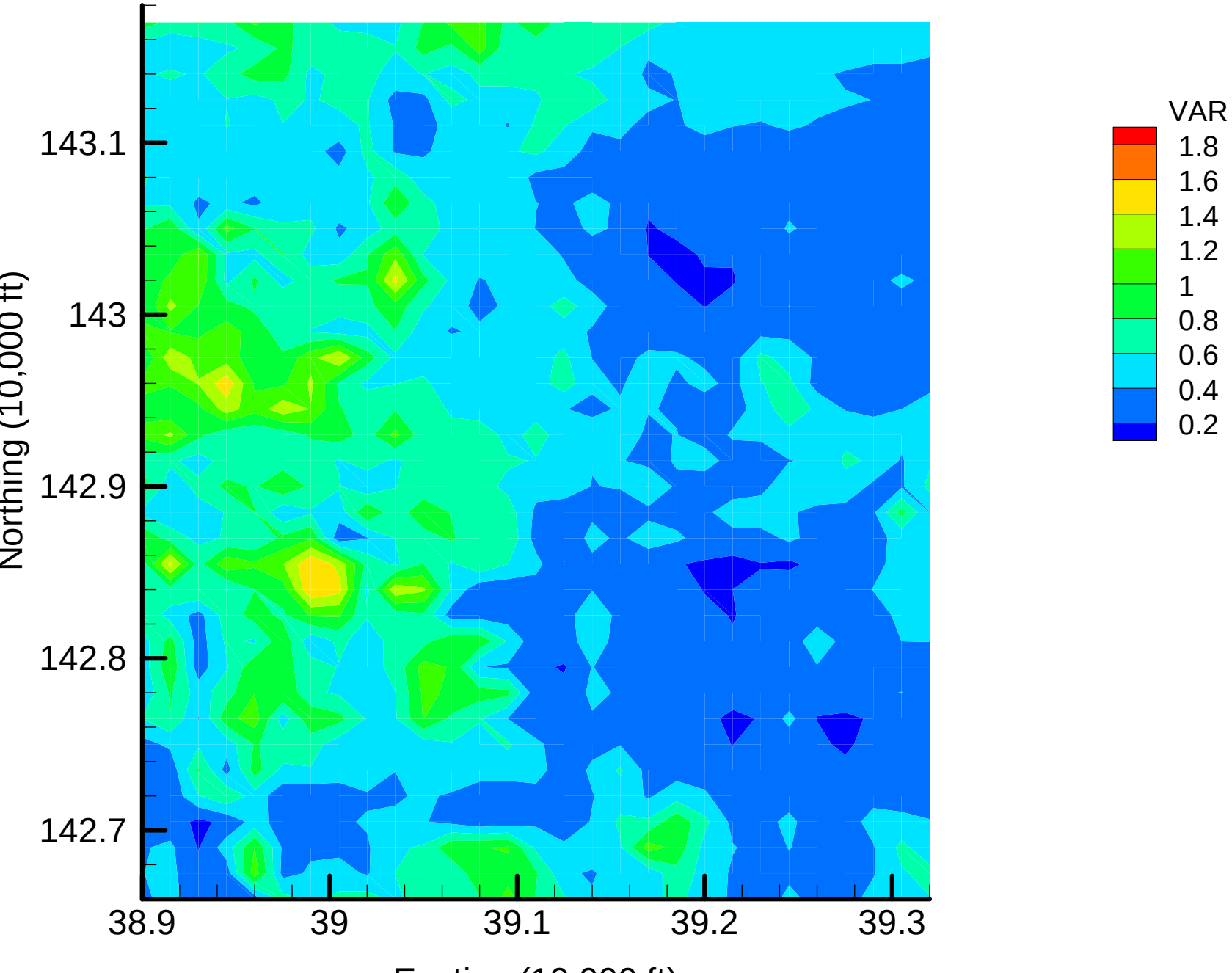
TCLME: Slice 1: Local Variance Map: 15% Removal



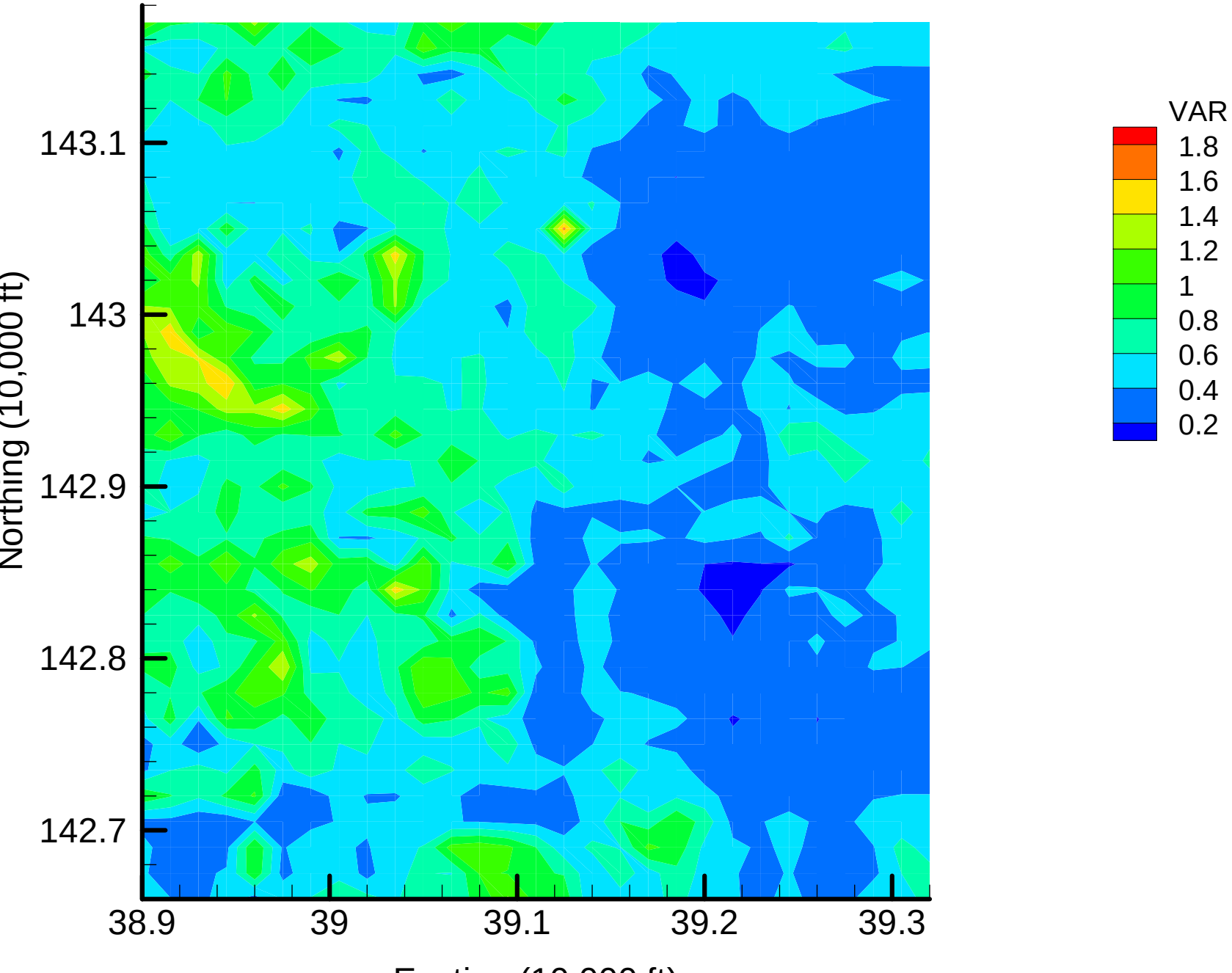
TCLME: Slice 1: Local Variance Map: 20% Removal



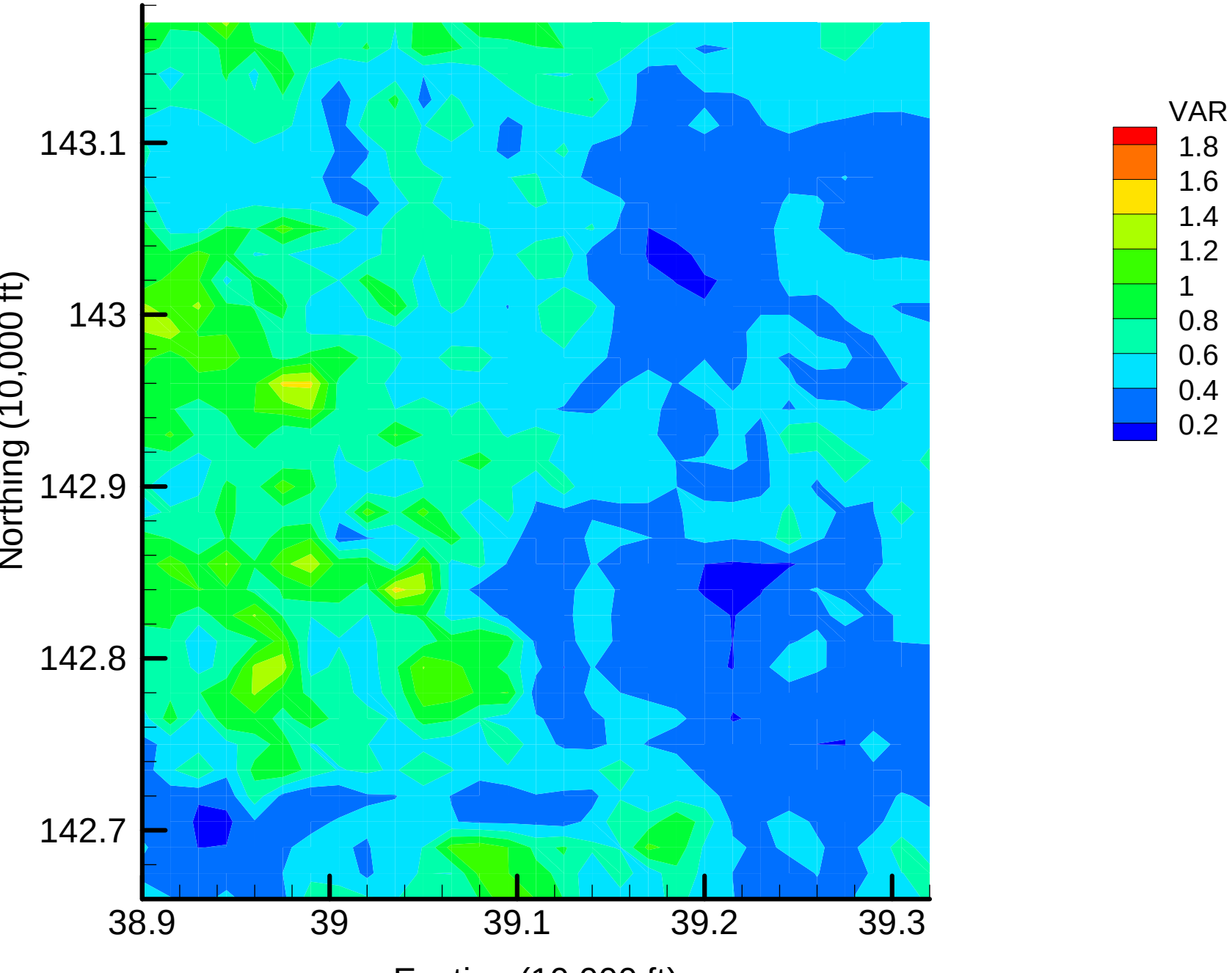
TCLME: Slice 1: Local Variance Map: 25% Removal



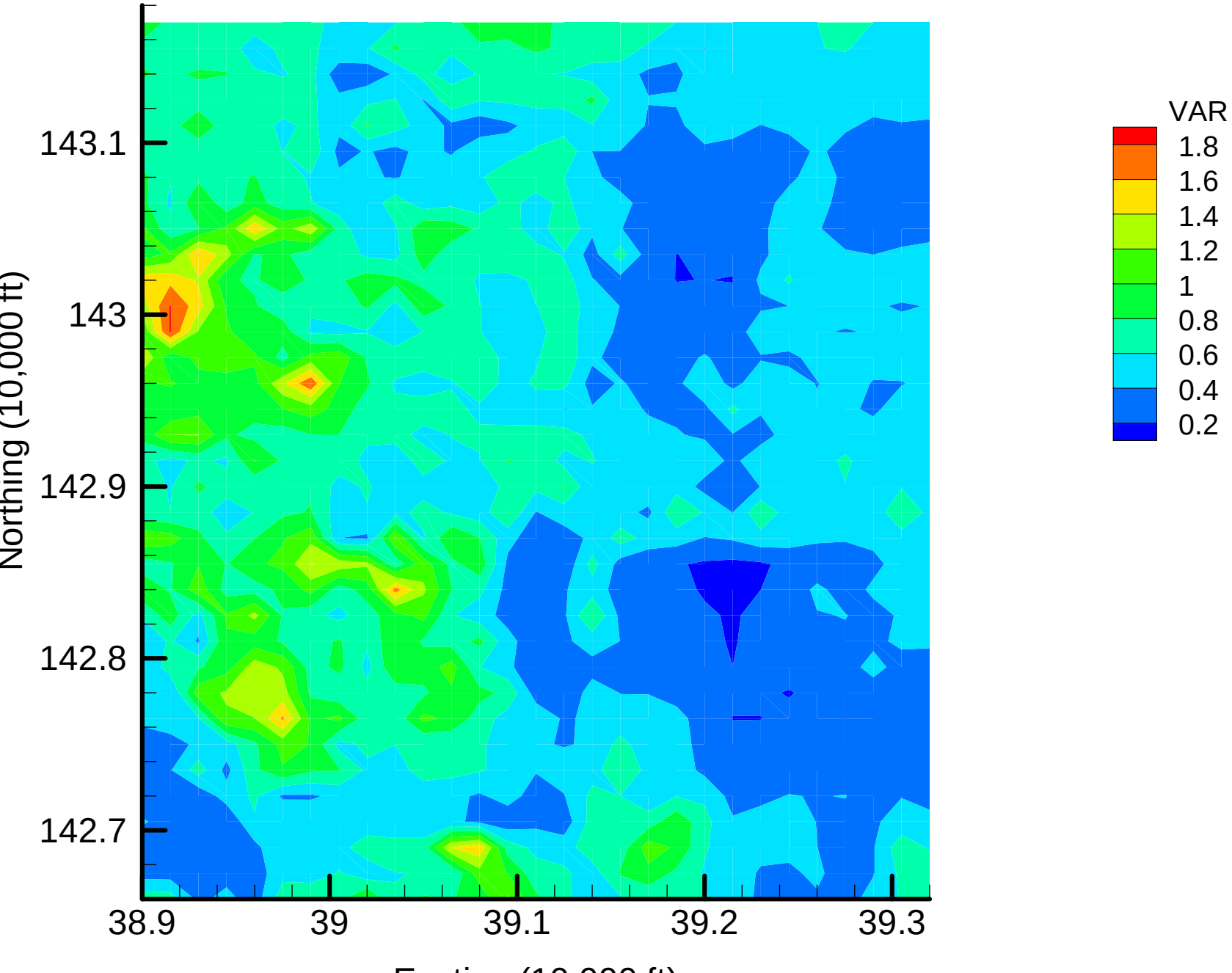
TCLME: Slice 1: Local Variance Map: 30% Removal



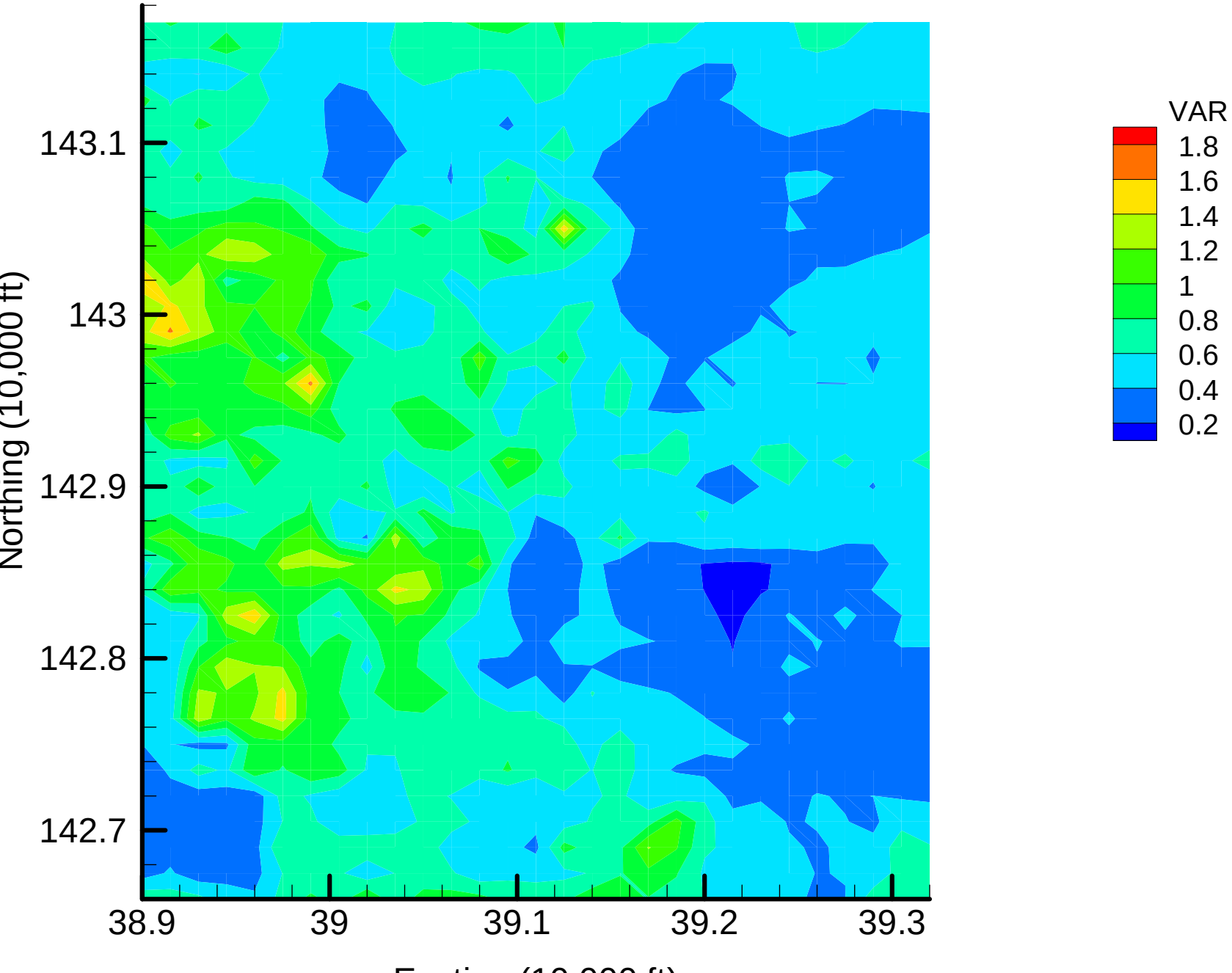
TCLME: Slice 1: Local Variance Map: 35% Removal



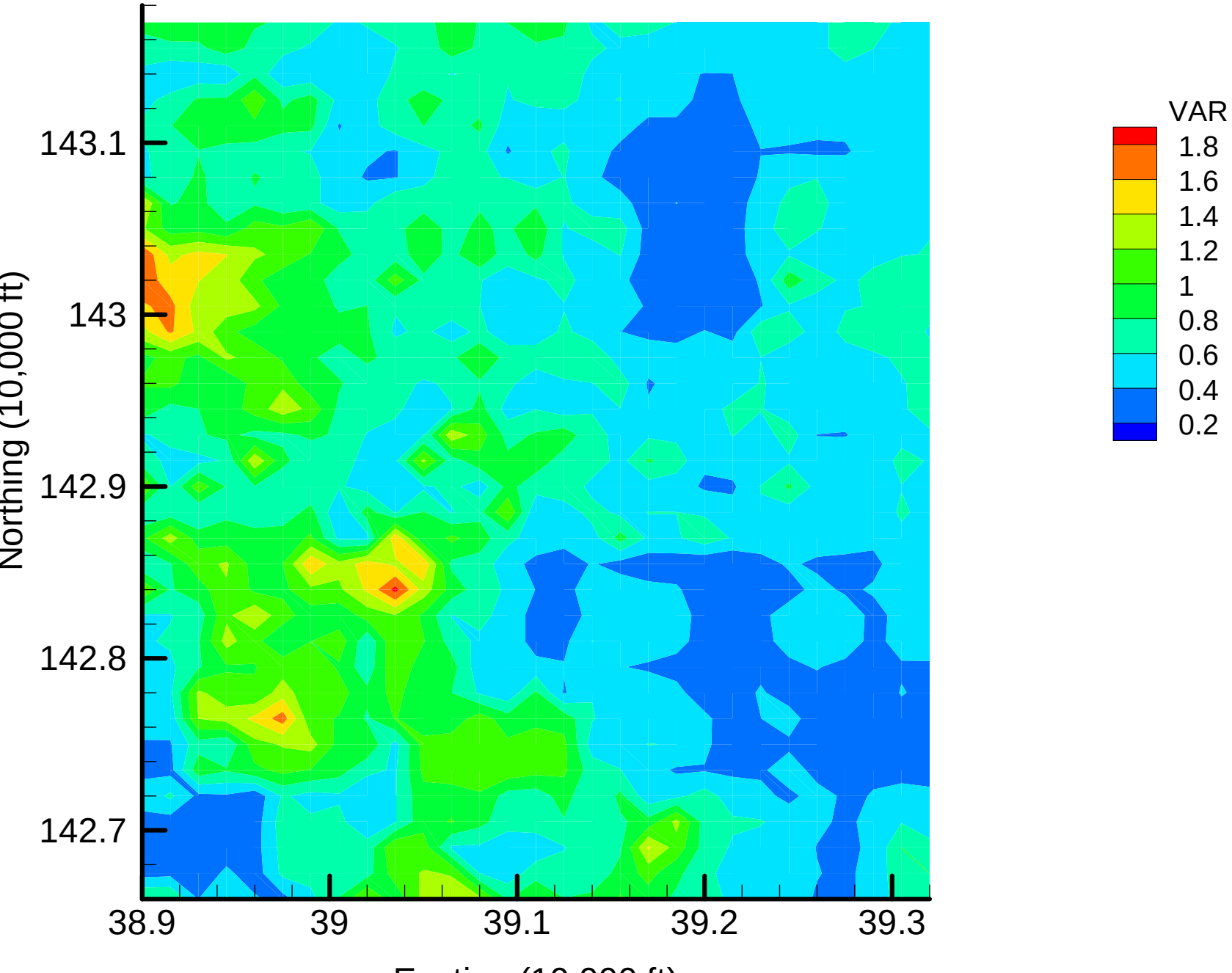
TCLME: Slice 1: Local Variance Map: 40% Removal



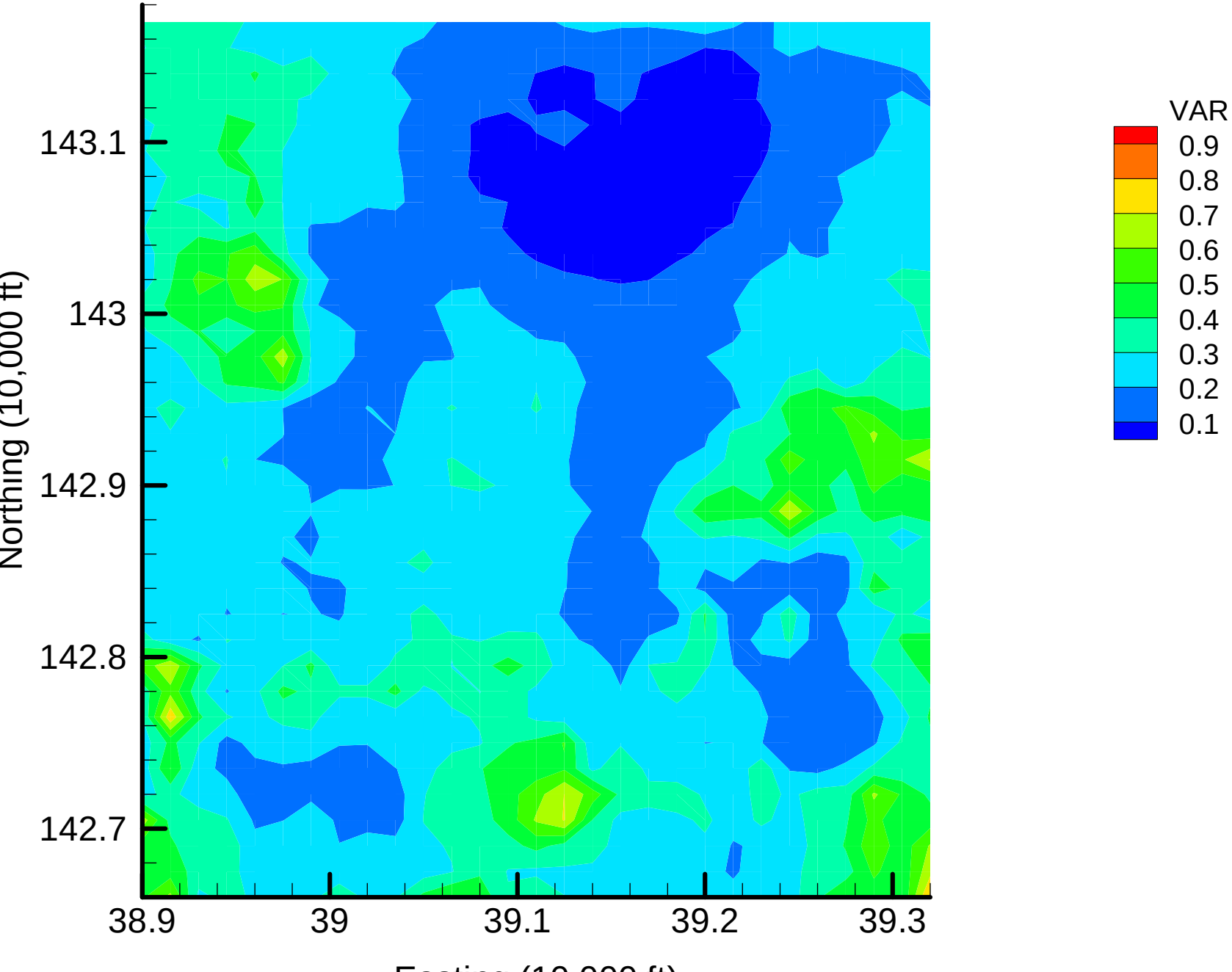
TCLME: Slice 1: Local Variance Map: 45% Removal



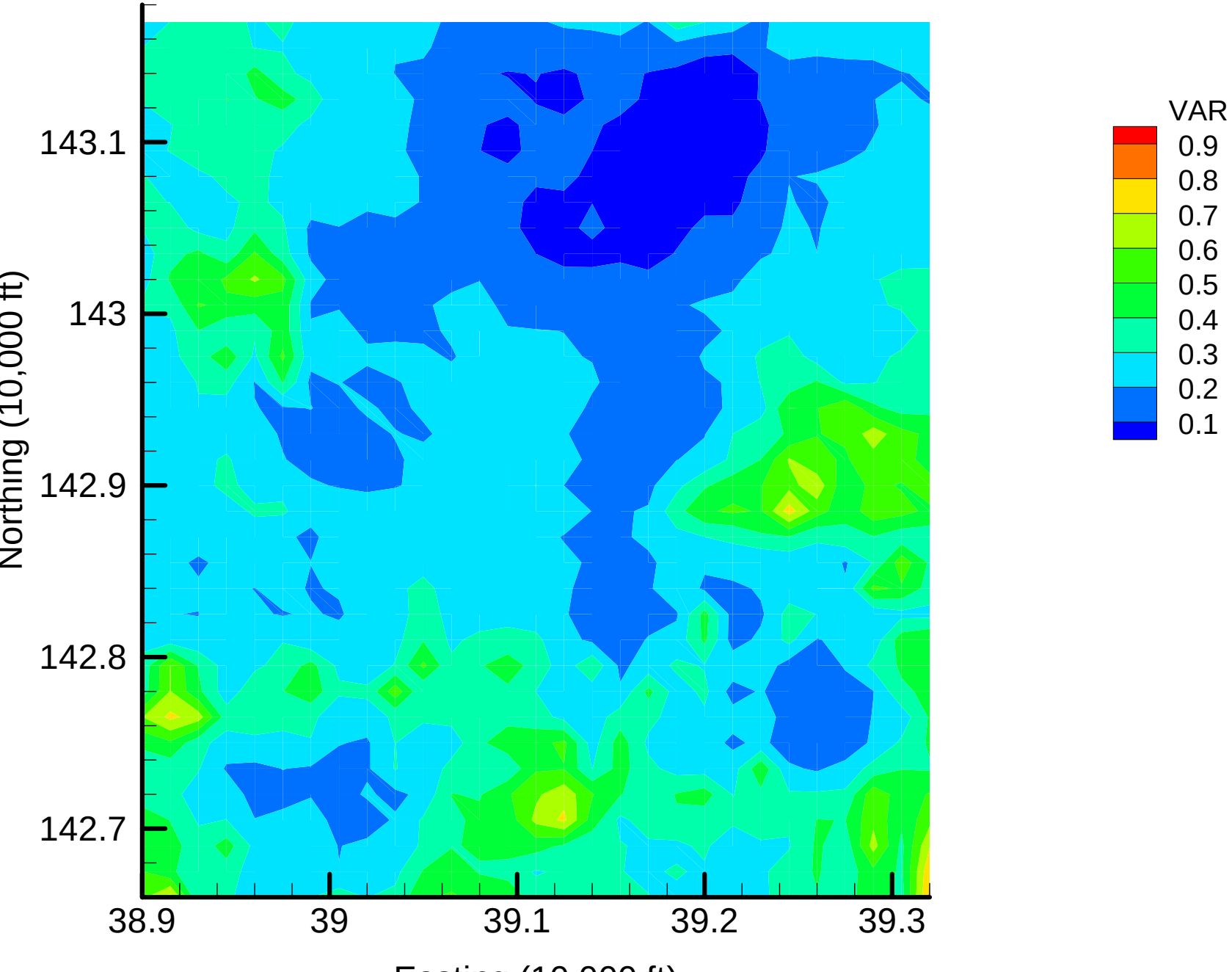
TCLME: Slice 1: Local Variance Map: 50% Removal



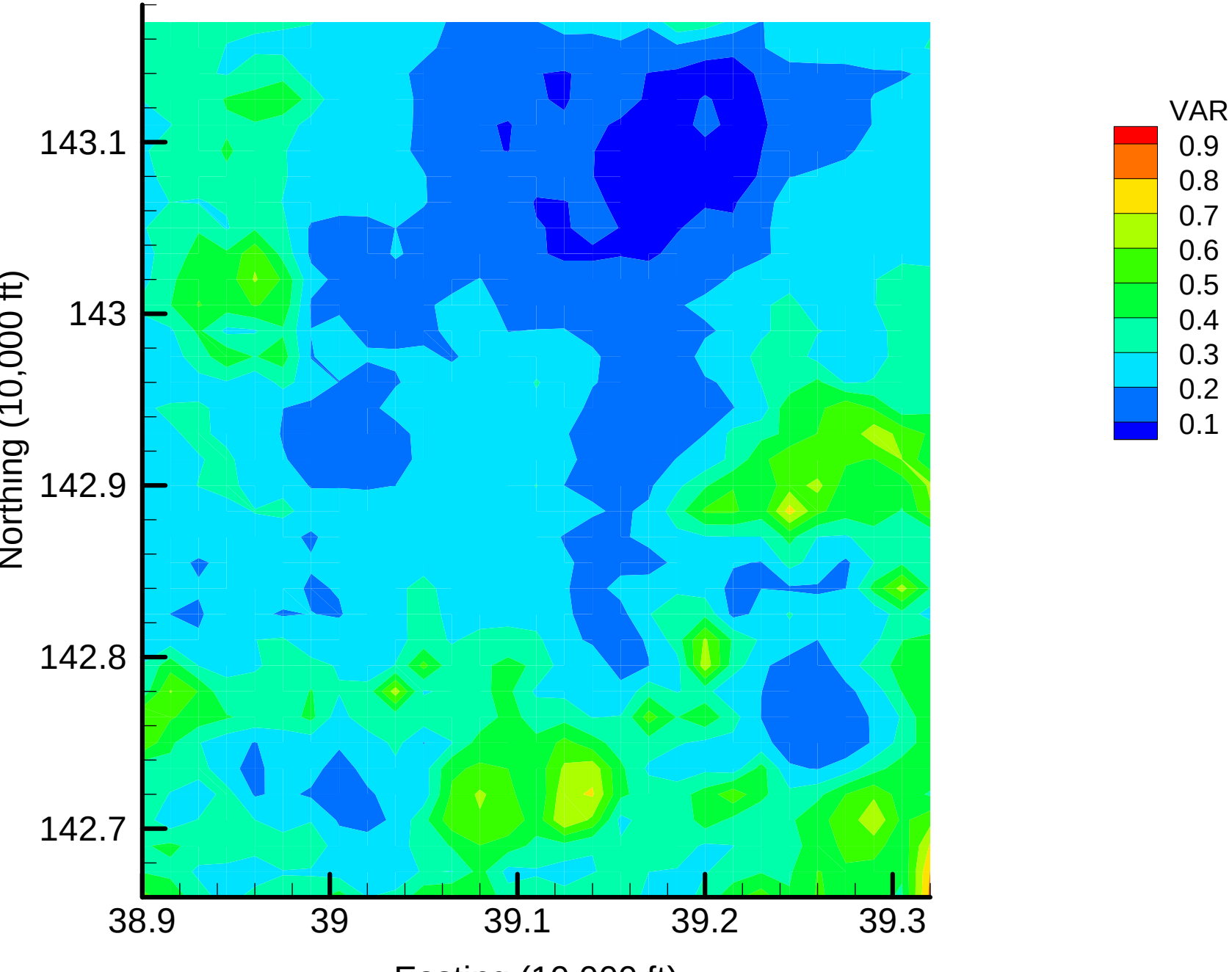
TCLME: Slice 2: Local Variance Base Map



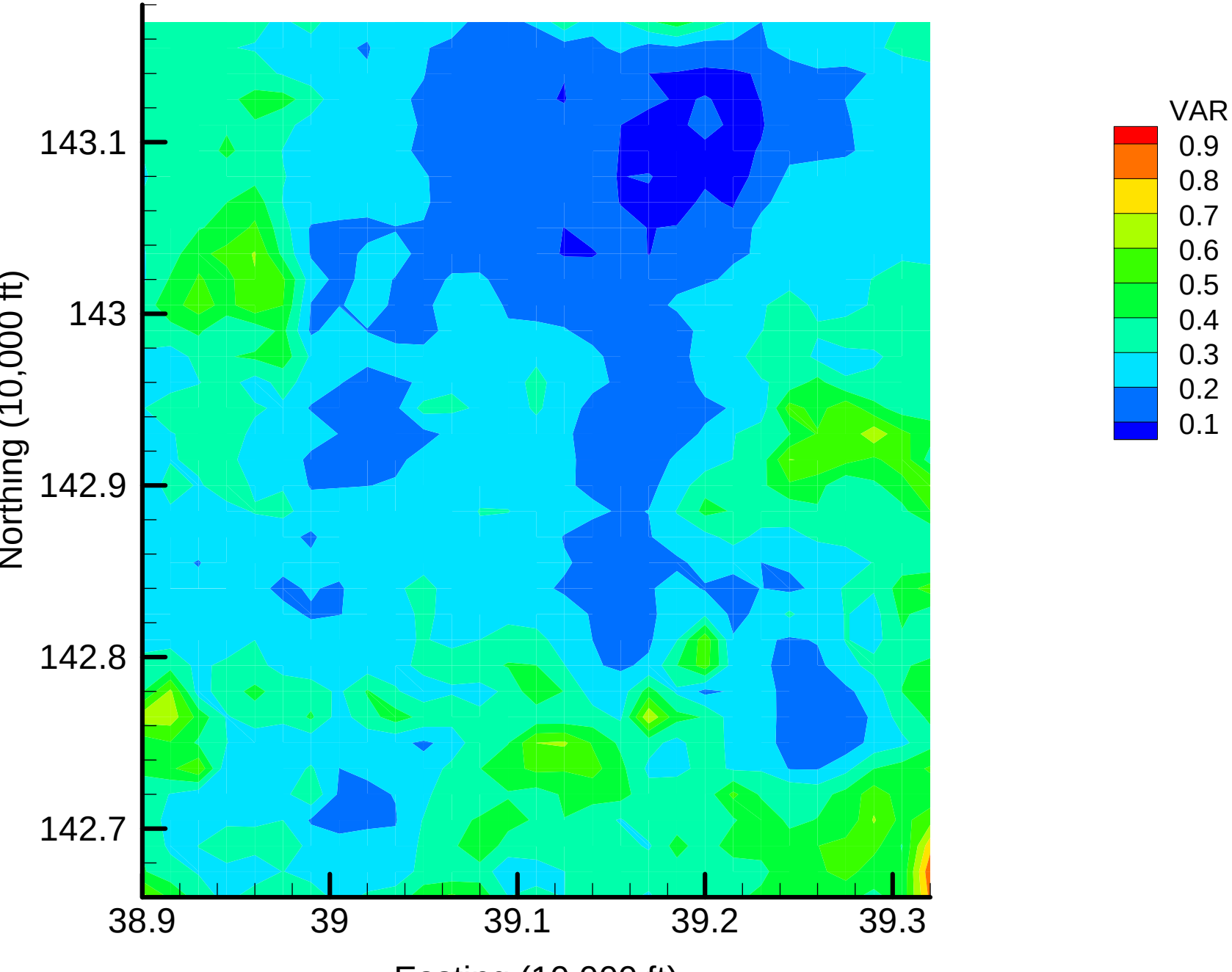
TCLME: Slice 2: Local Variance Map: 5% Removal



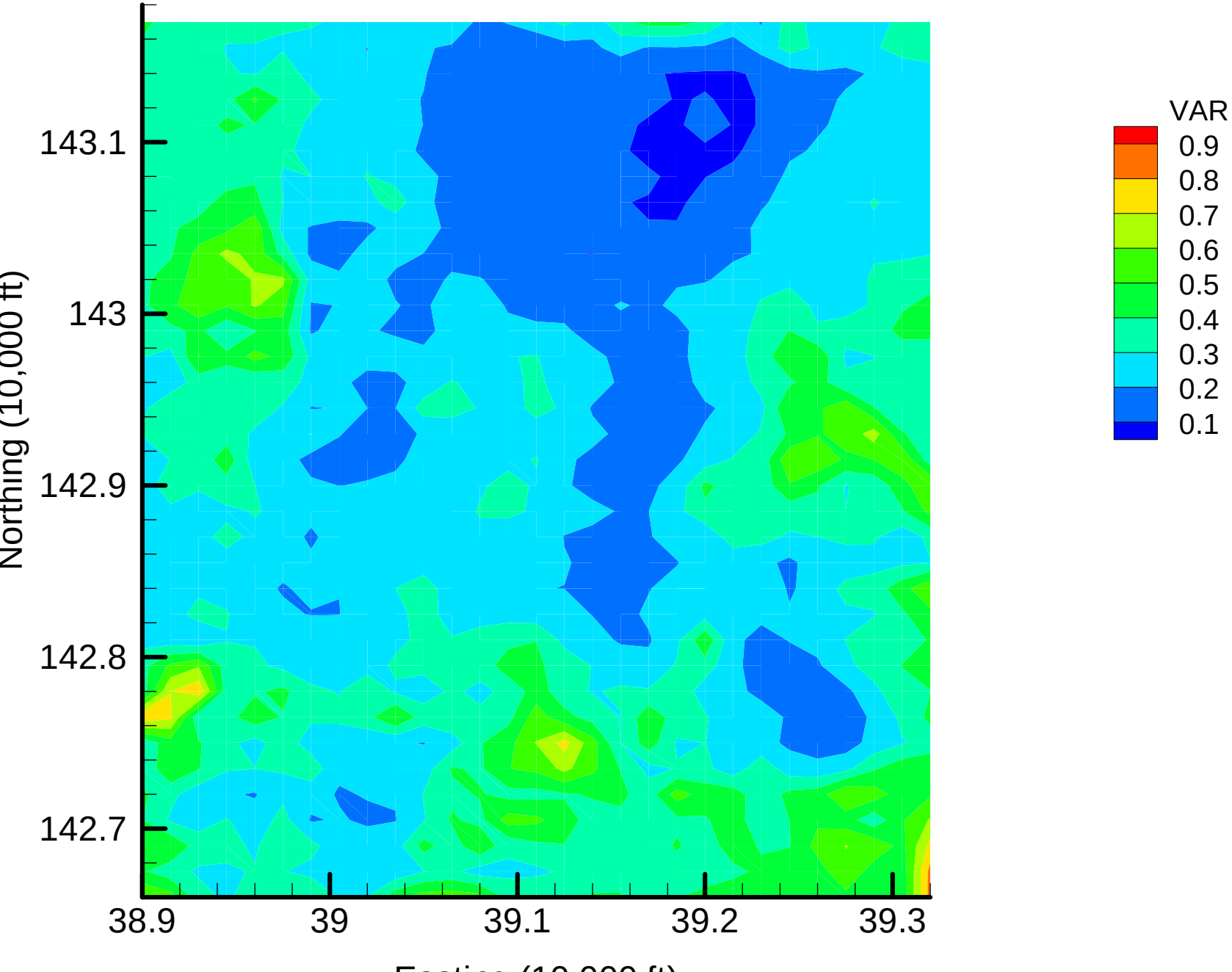
TCLME: Slice 2: Local Variance Map: 10% Removal



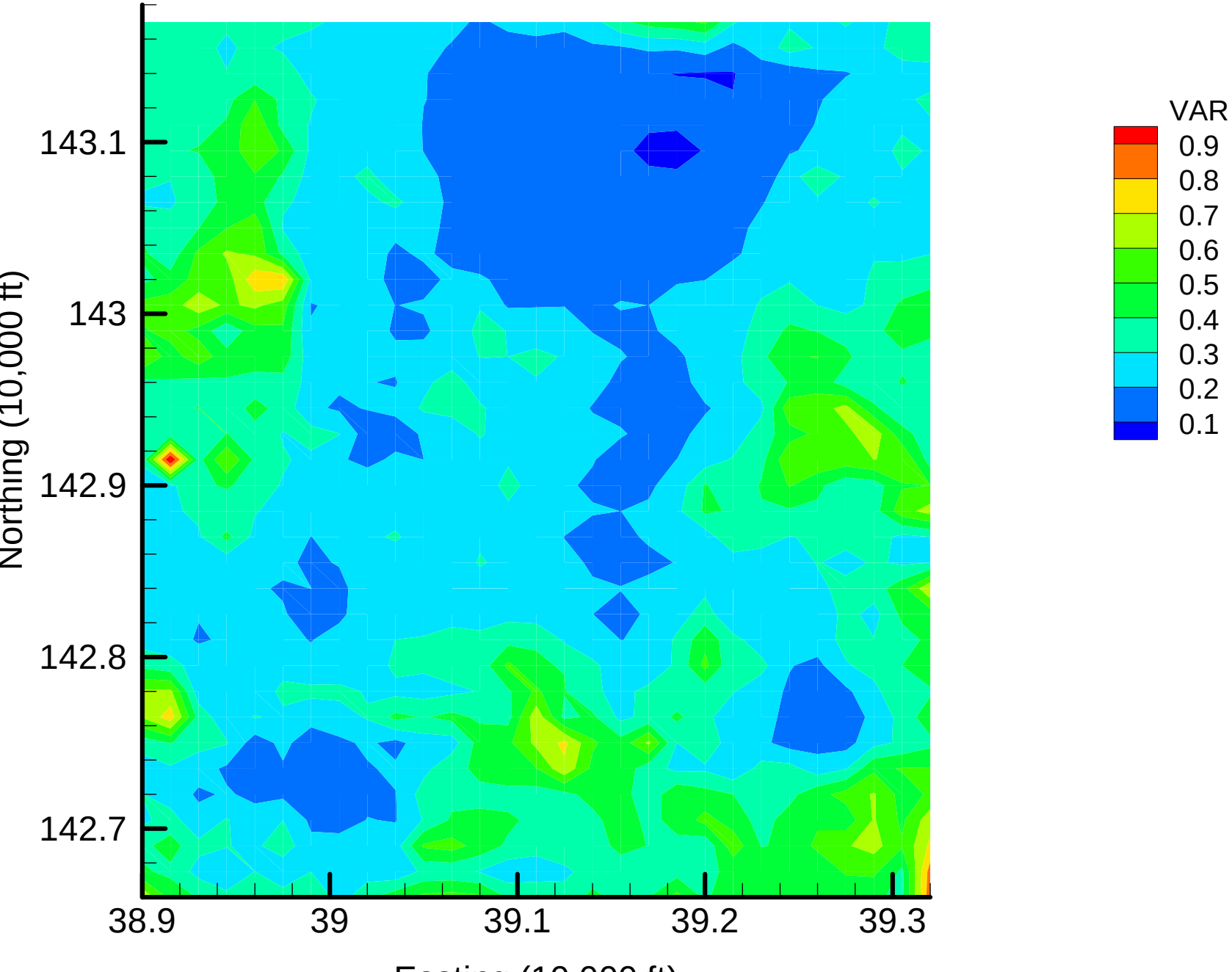
TCLME: Slice 2: Local Variance Map: 15% Removal



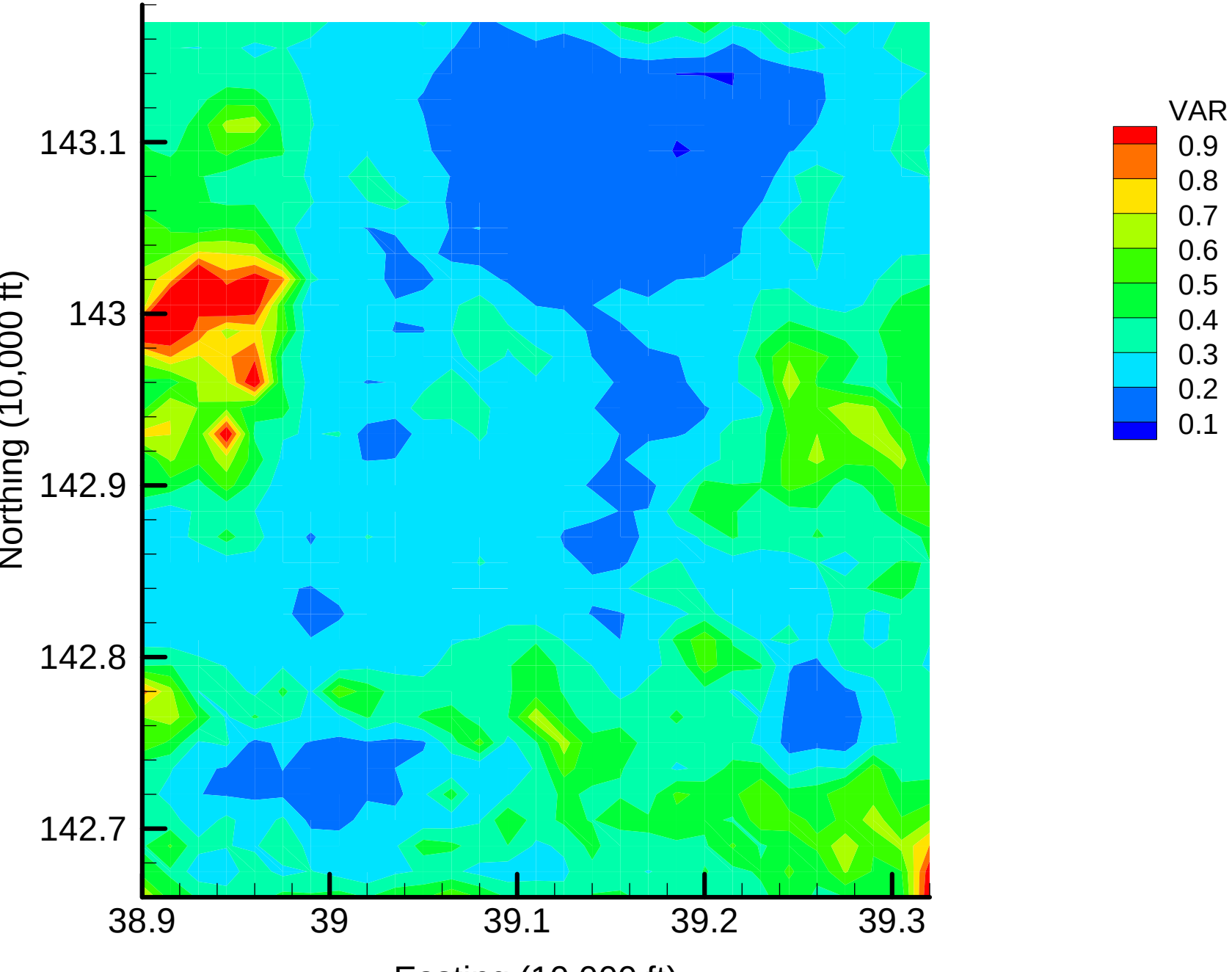
TCLME: Slice 2: Local Variance Map: 20% Removal



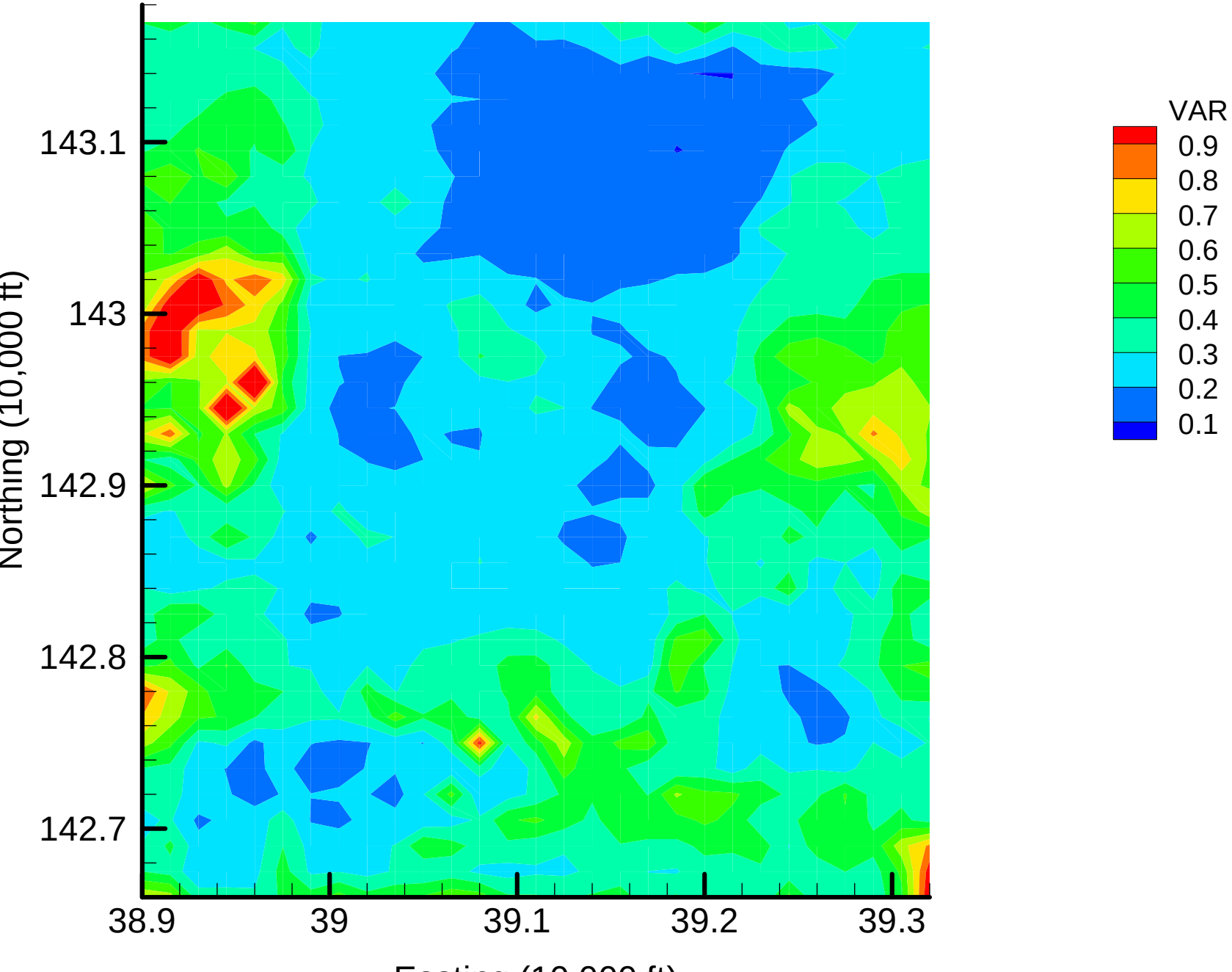
TCLME: Slice 2: Local Variance Map: 25% Removal



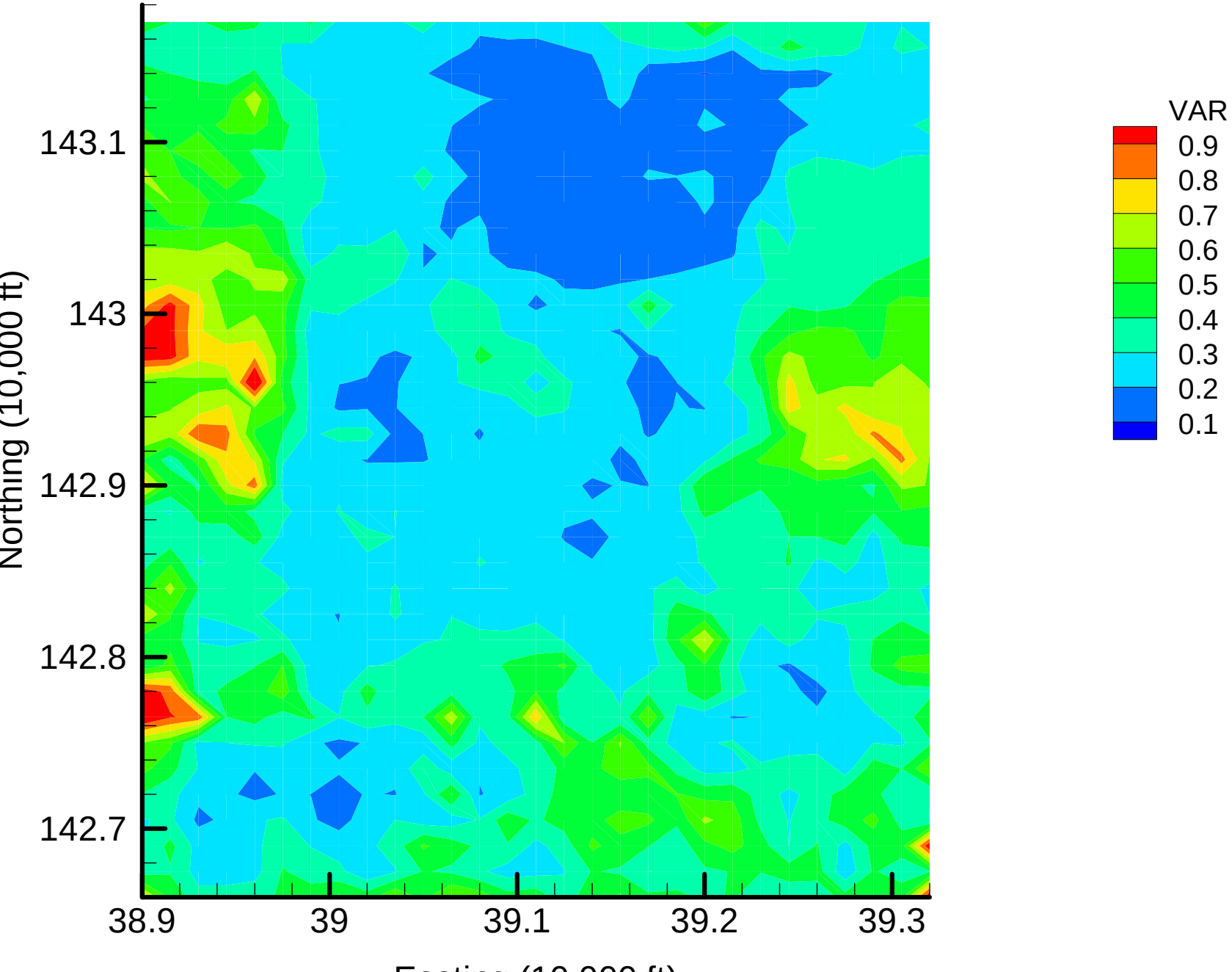
TCLME: Slice 2: Local Variance Map: 30% Removal



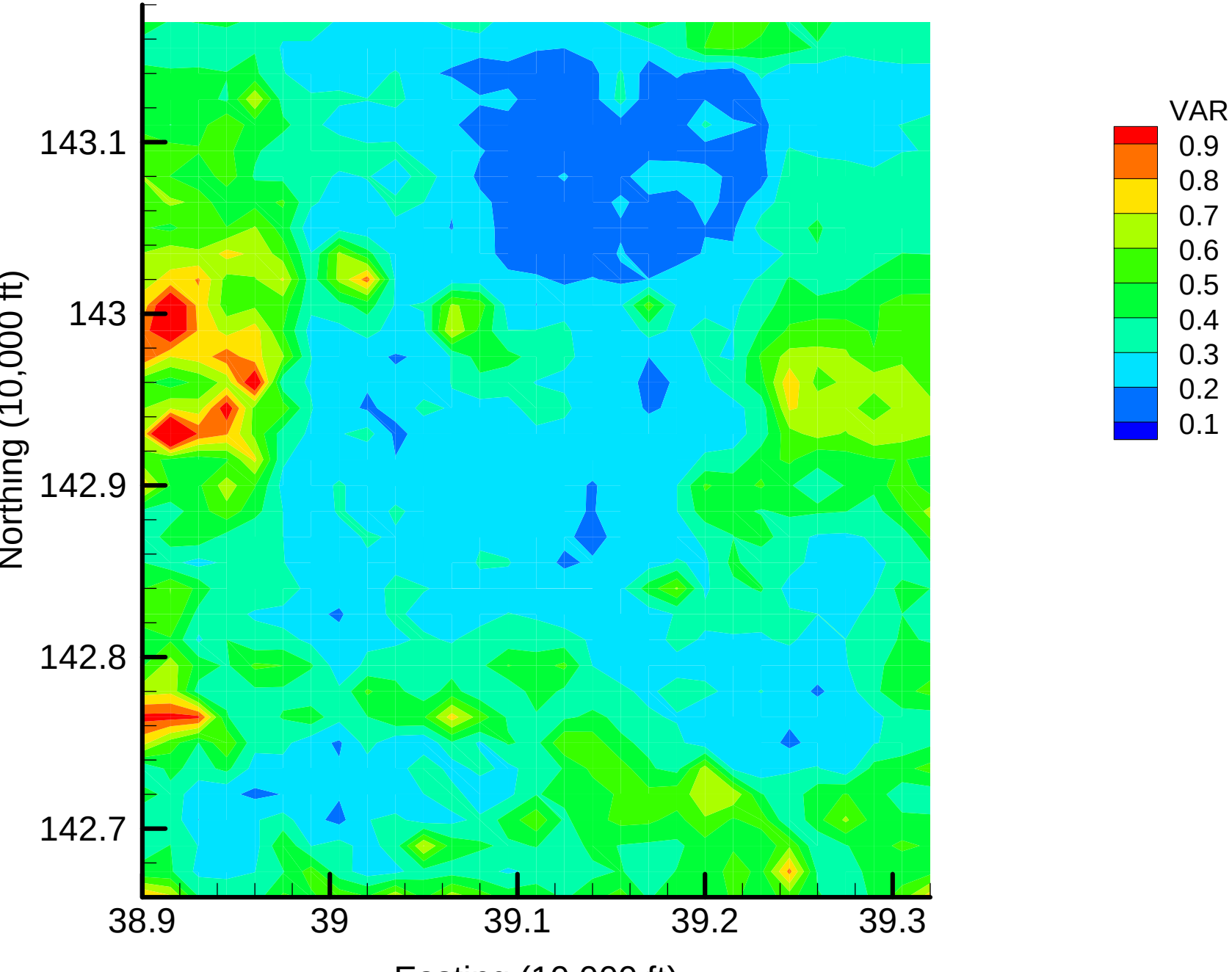
TCLME: Slice 2: Local Variance Map: 35% Removal



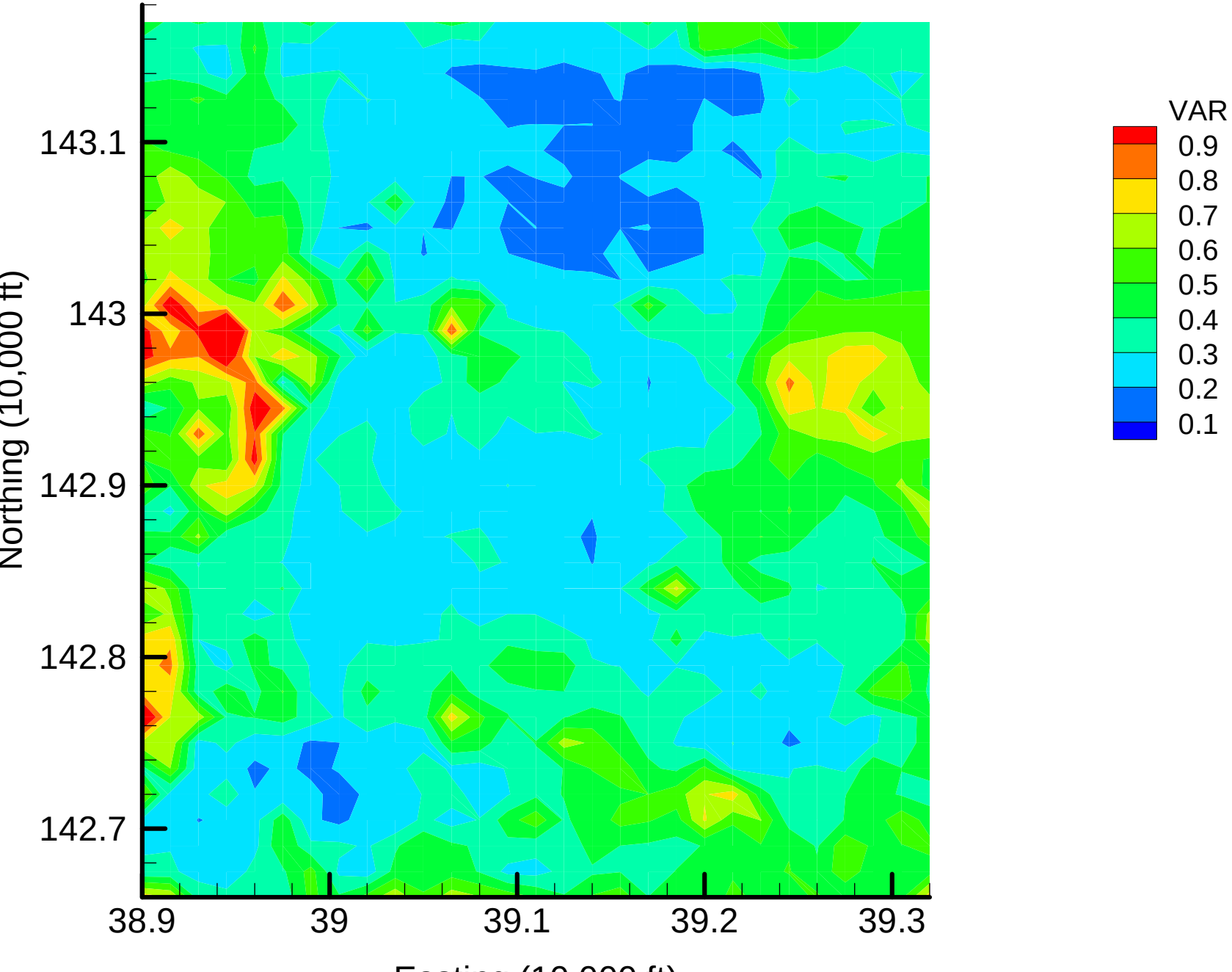
TCLME: Slice 2: Local Variance Map: 40% Removal



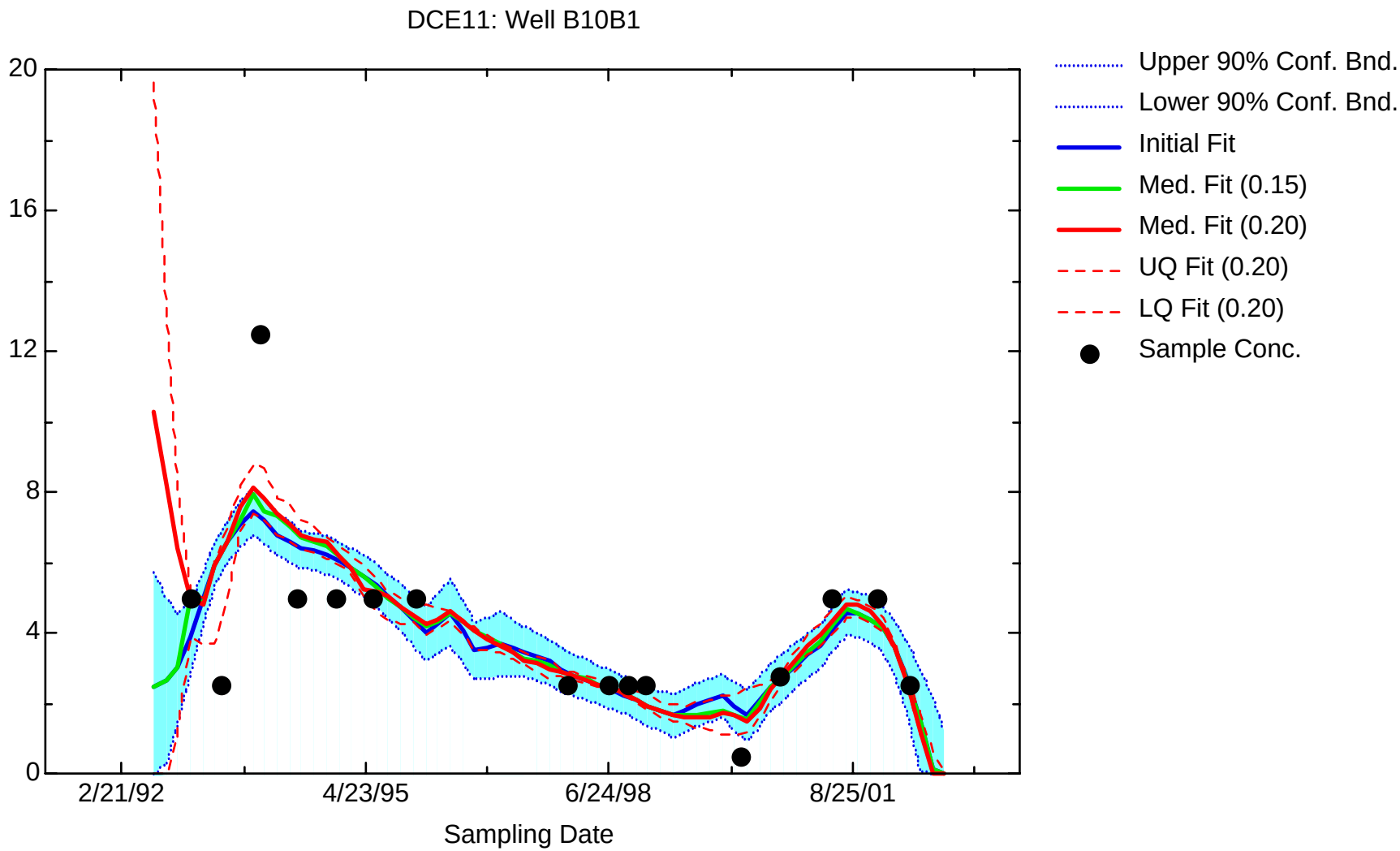
TCLME: Slice 2: Local Variance Map: 45% Removal

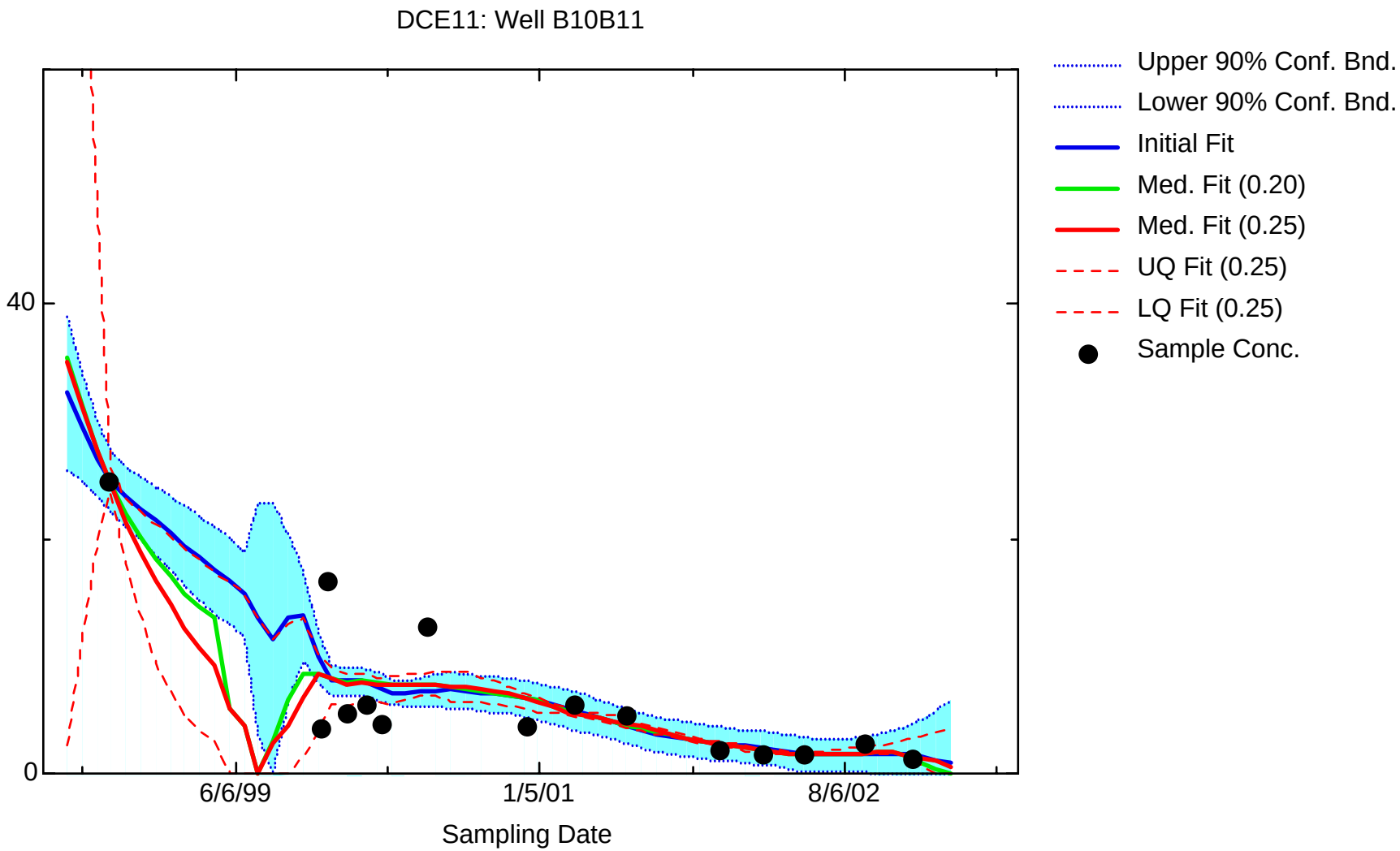


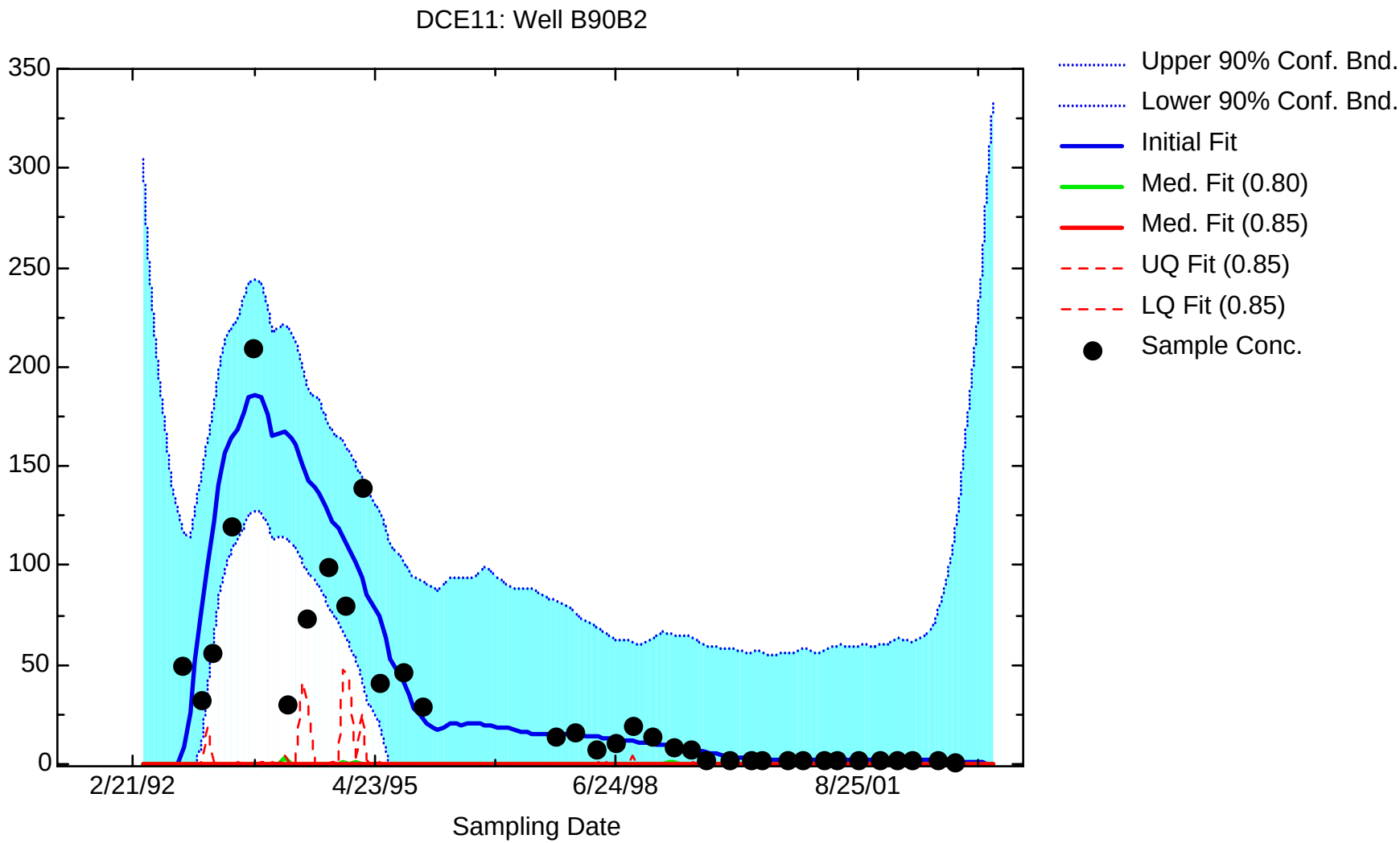
TCLME: Slice 2: Local Variance Map: 50% Removal

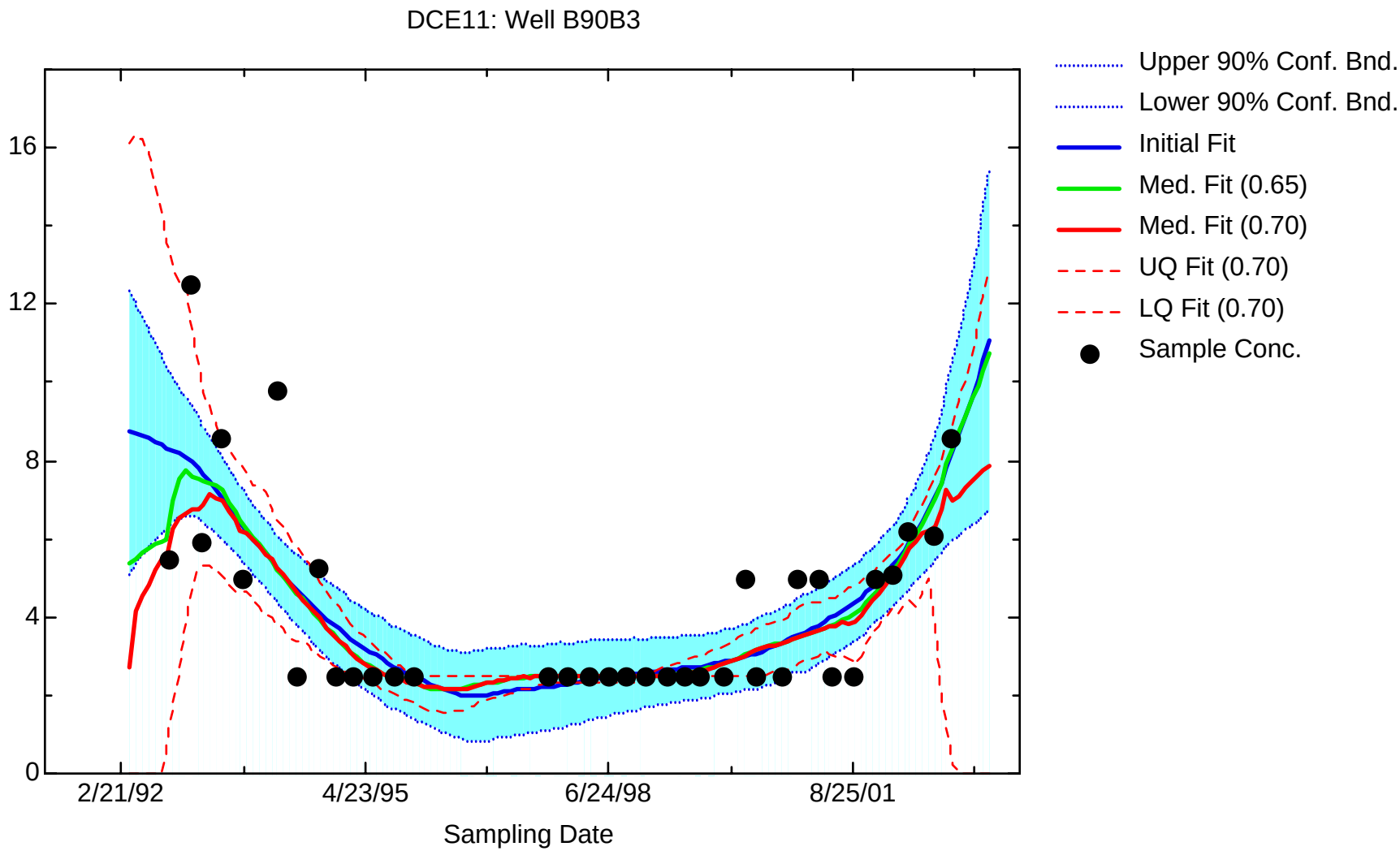


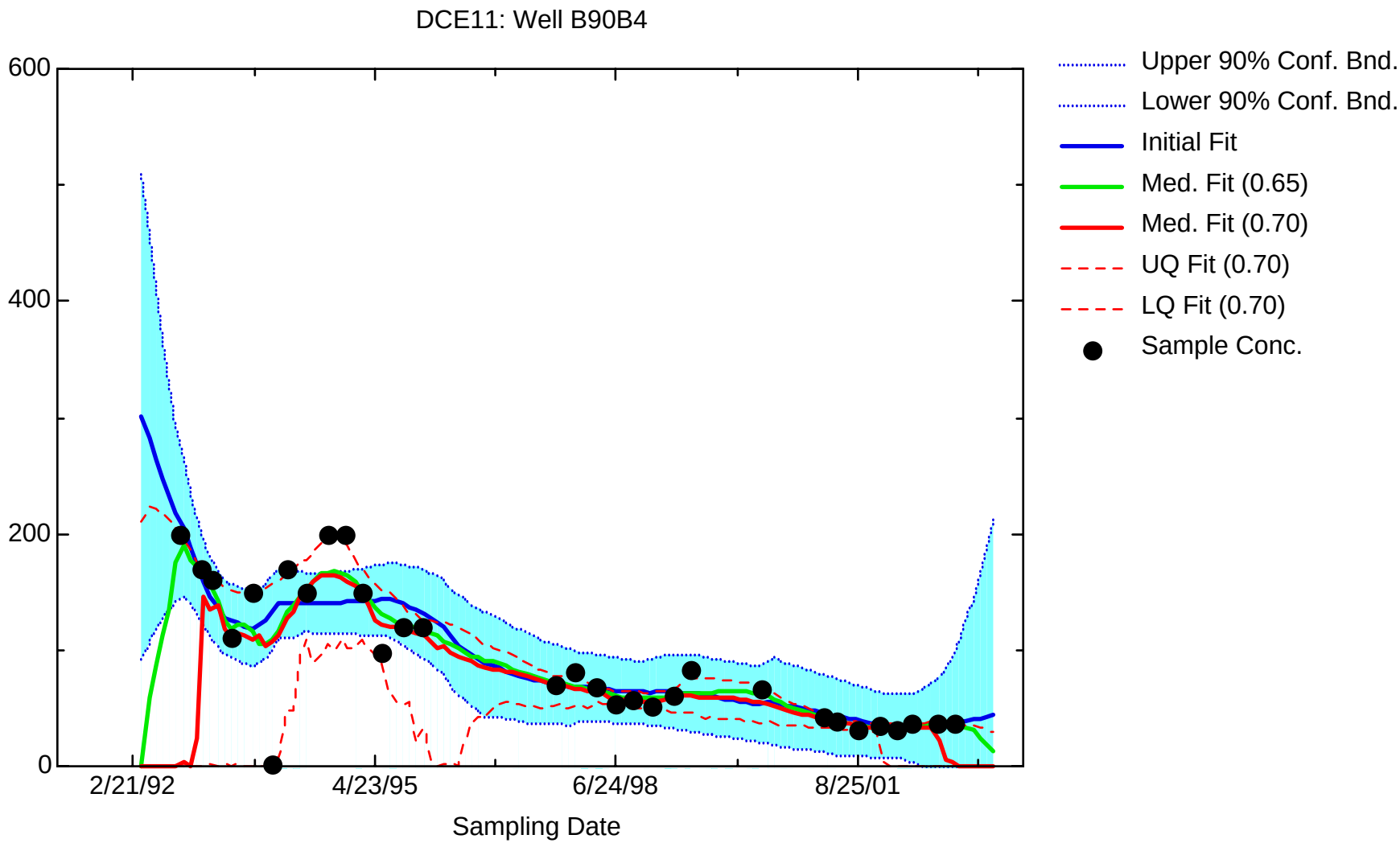
Temporal Analysis Appendix A

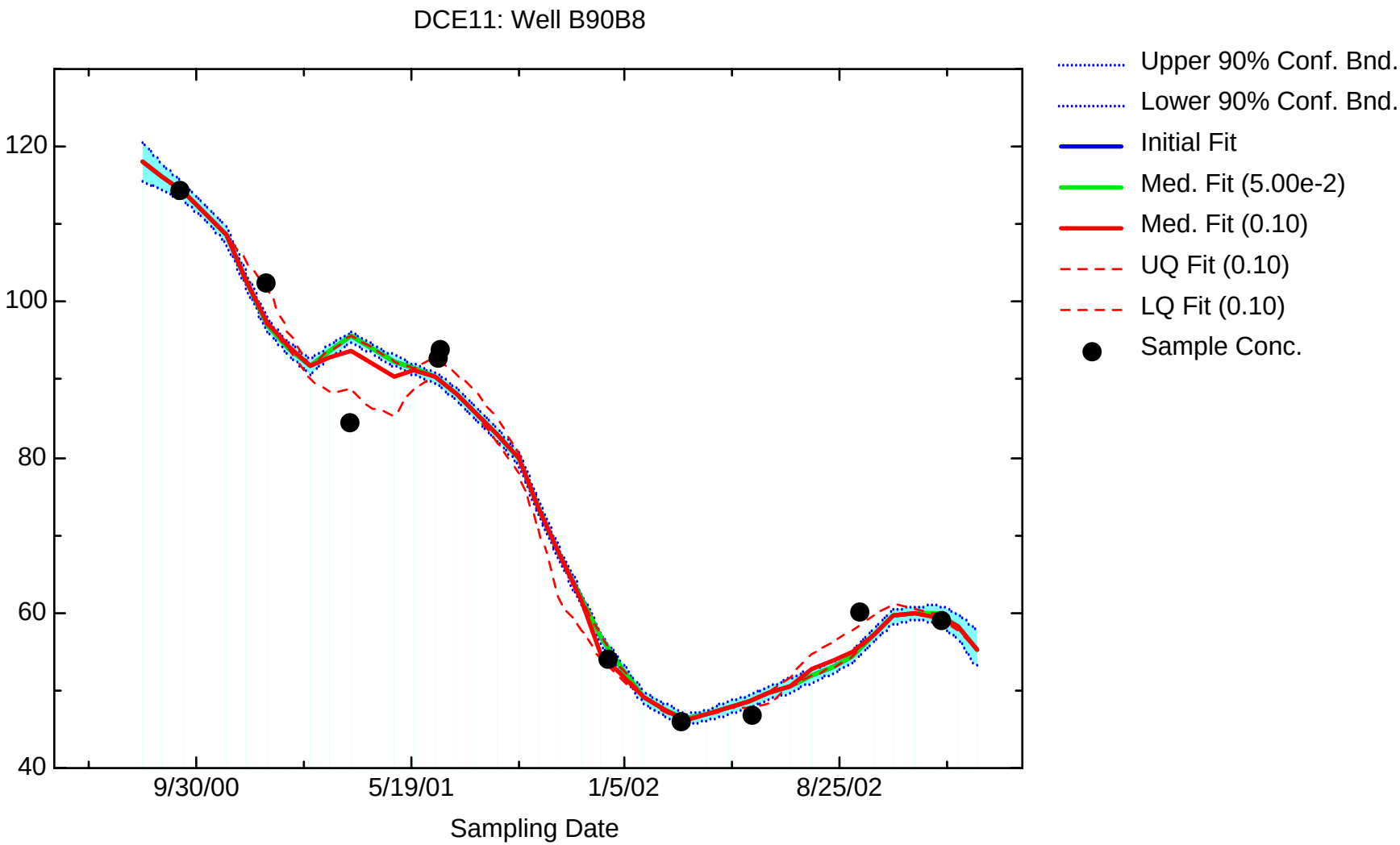

DCE11: Well B10B1
20
16
12
8
4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

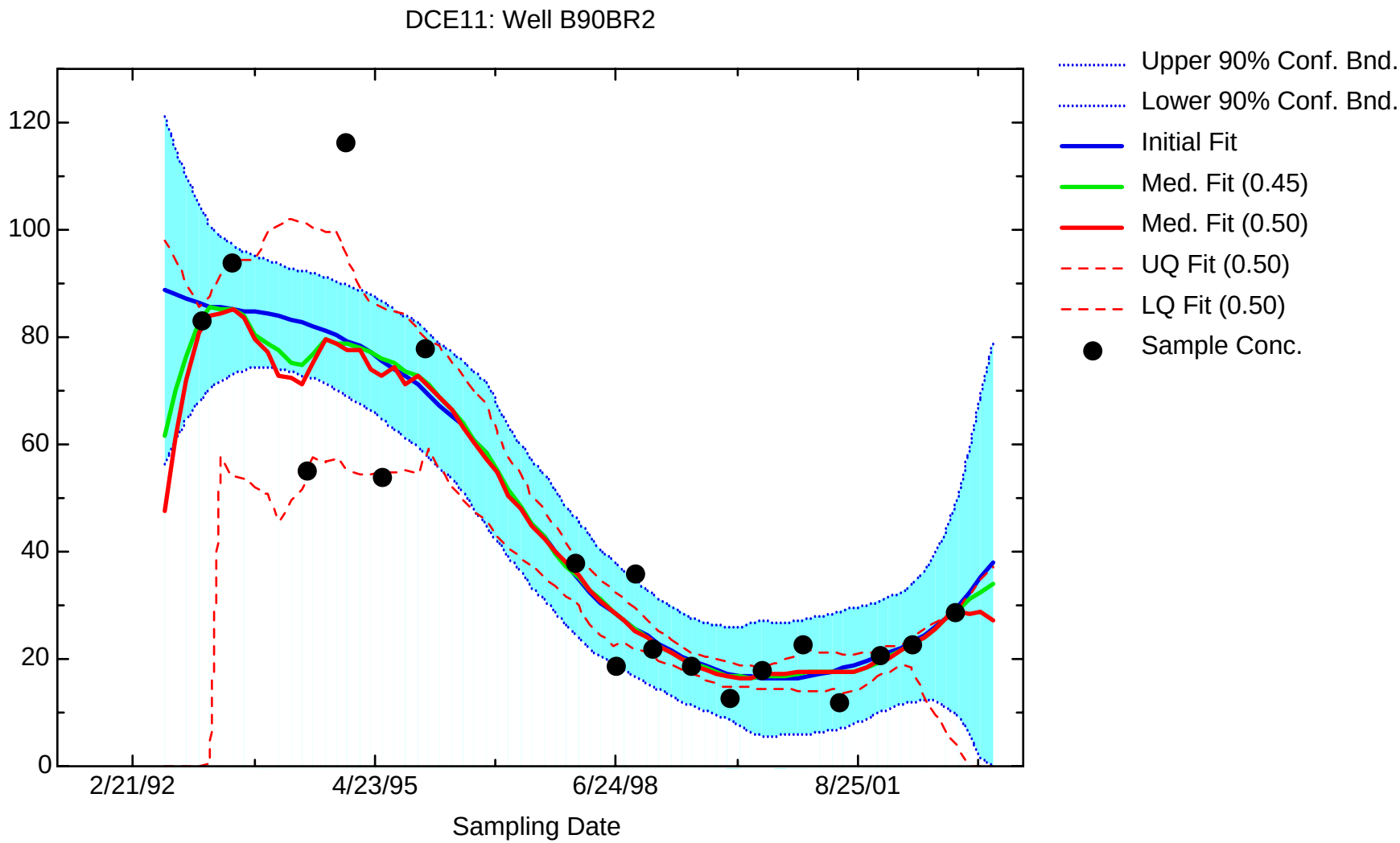

DCE11: Well B10B11
40
0
6/6/99
1/5/01
8/6/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

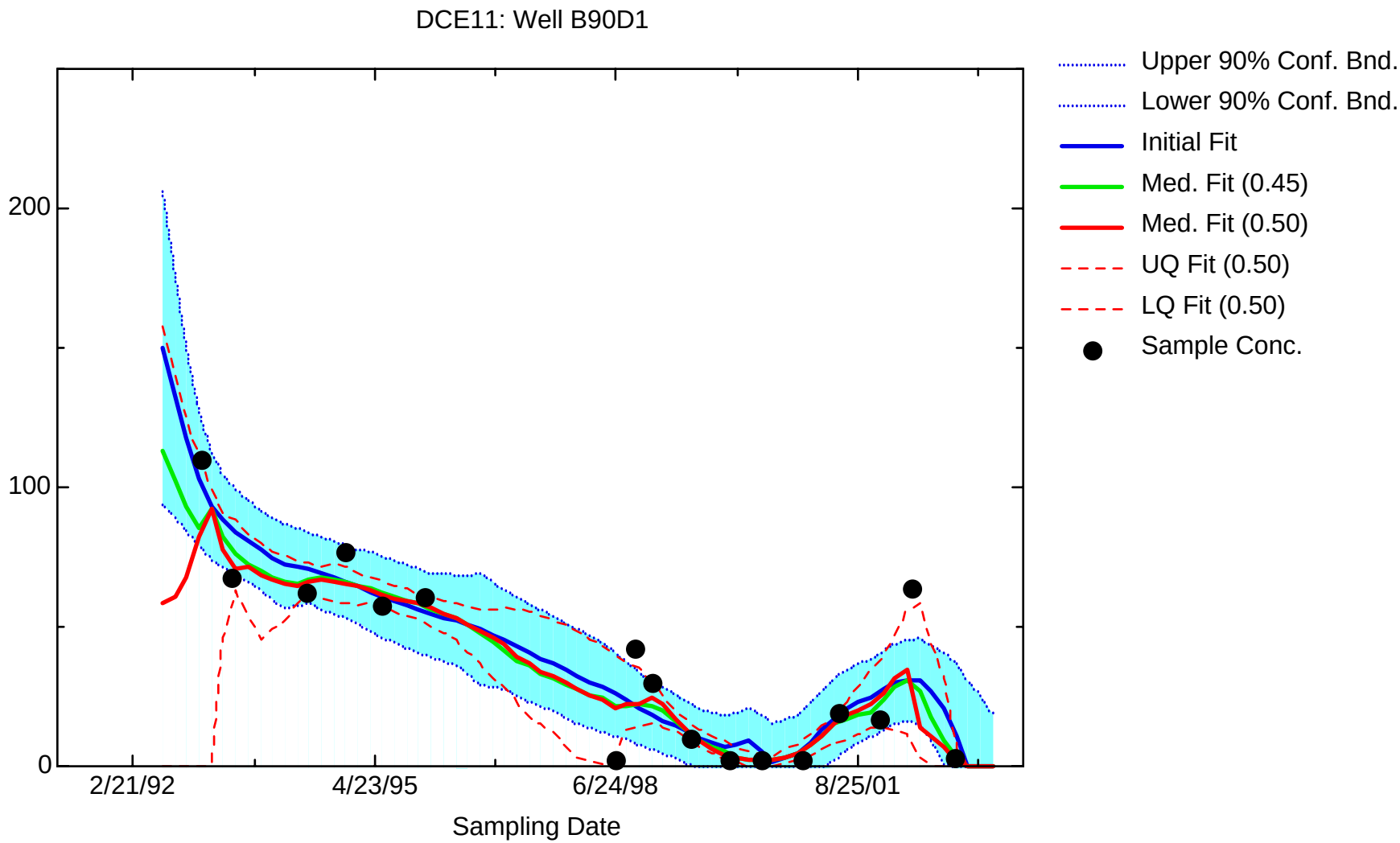

DCE11: Well B90B2
350
300
250
200
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.80)
Med. Fit (0.85)
UQ Fit (0.85)
LQ Fit (0.85)
Sample Conc.

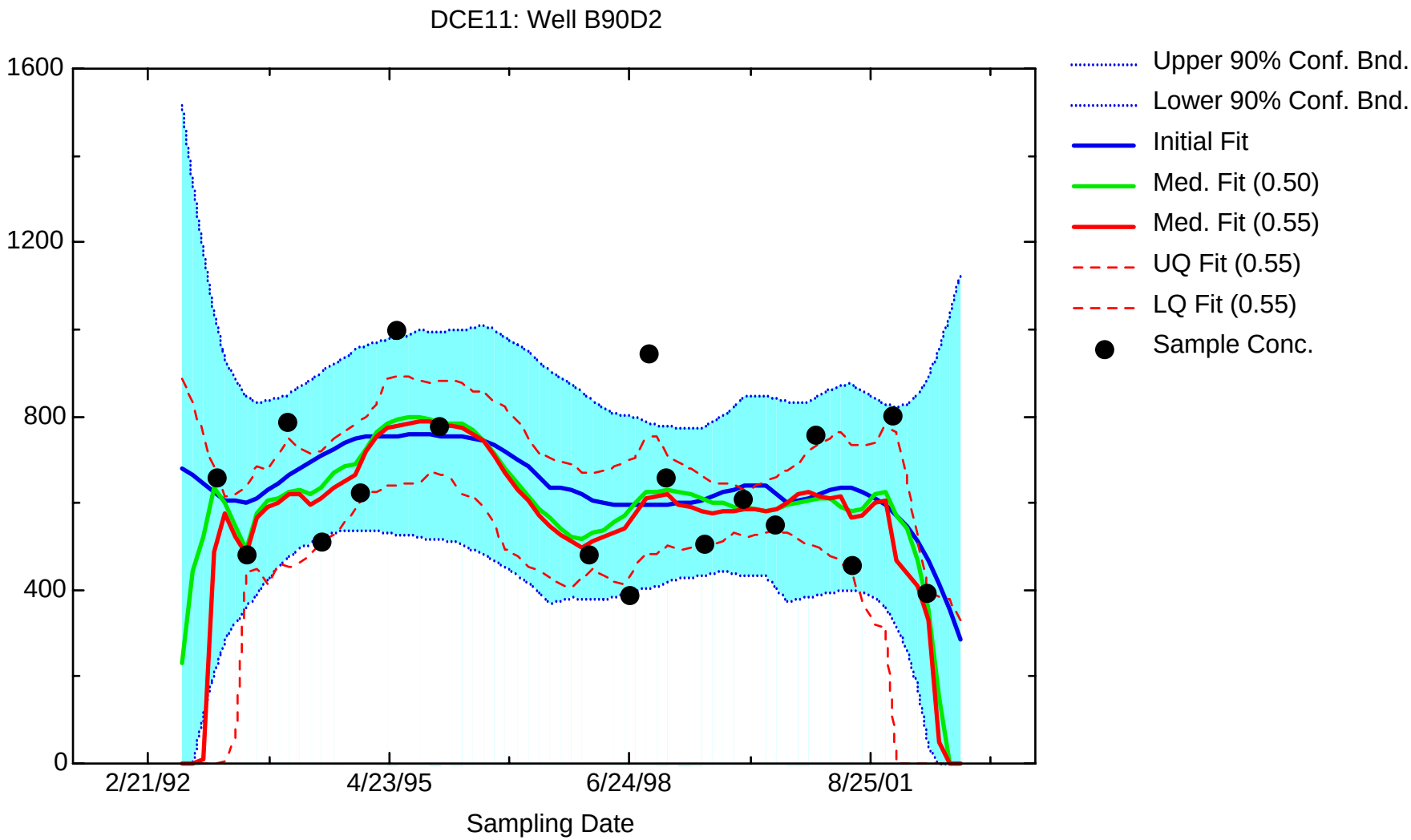

DCE11: Well B90B3
16
12
8
4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

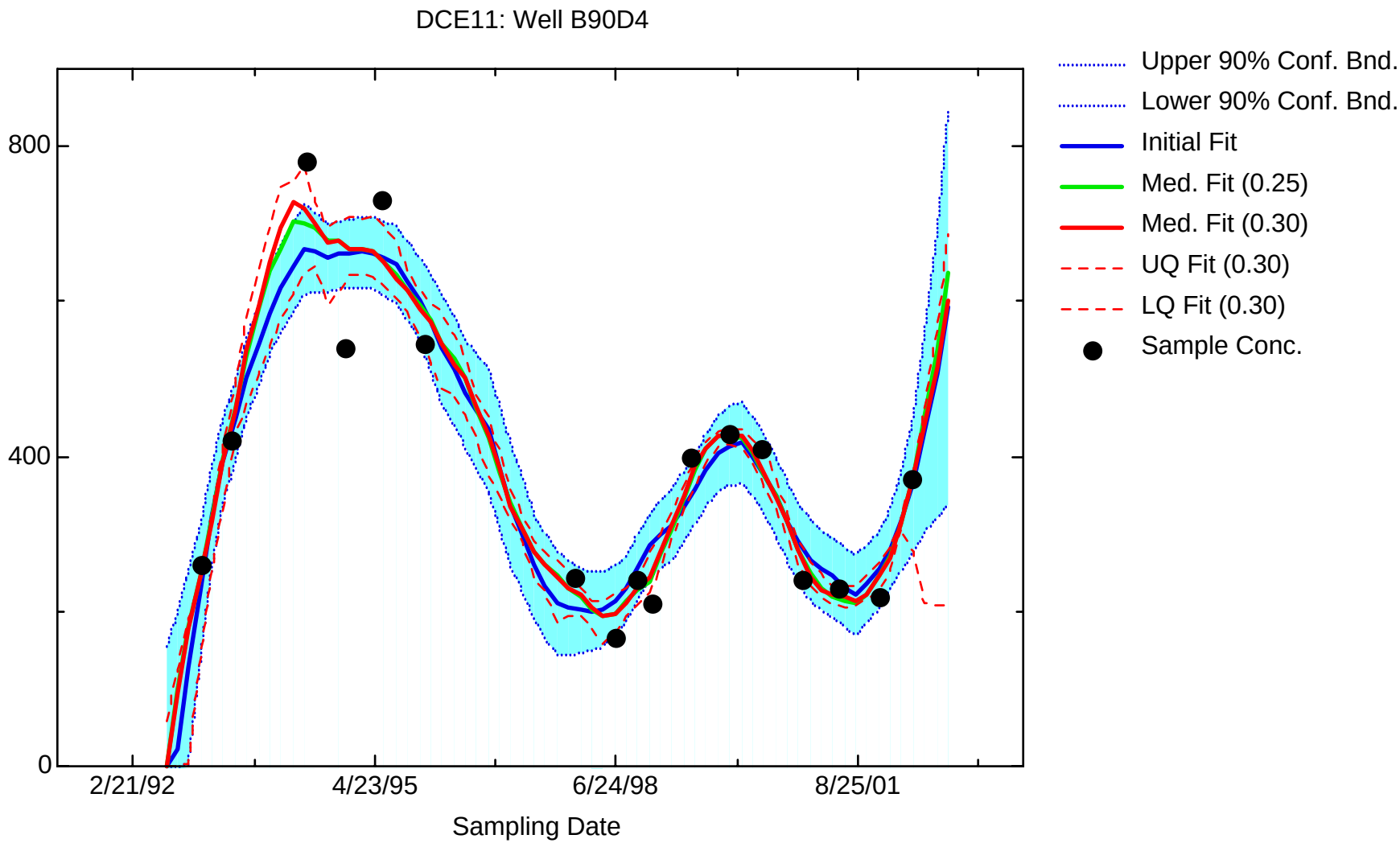

DCE11: Well B90B4
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

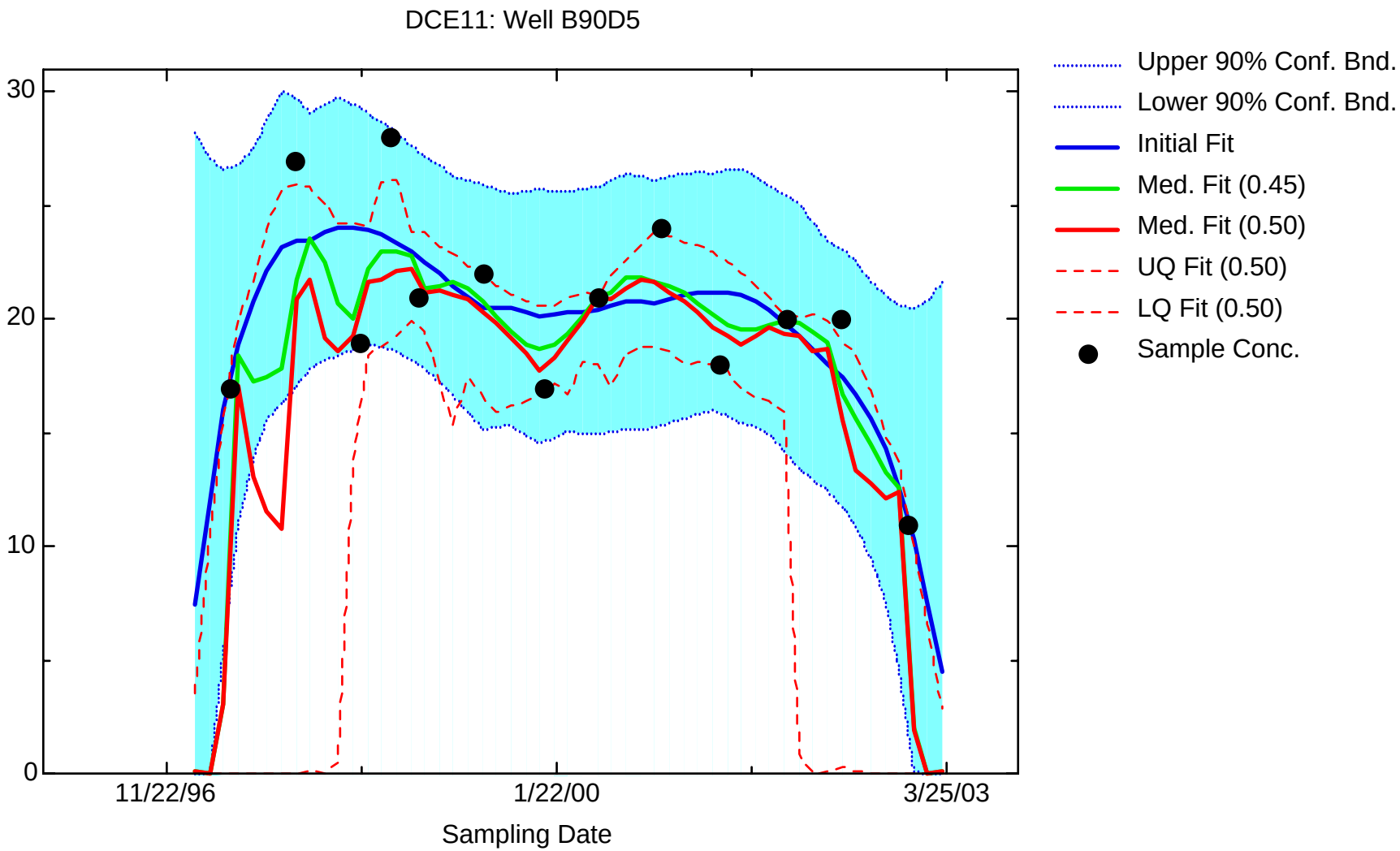

DCE11: Well B90B8
120
100
80
60
40
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

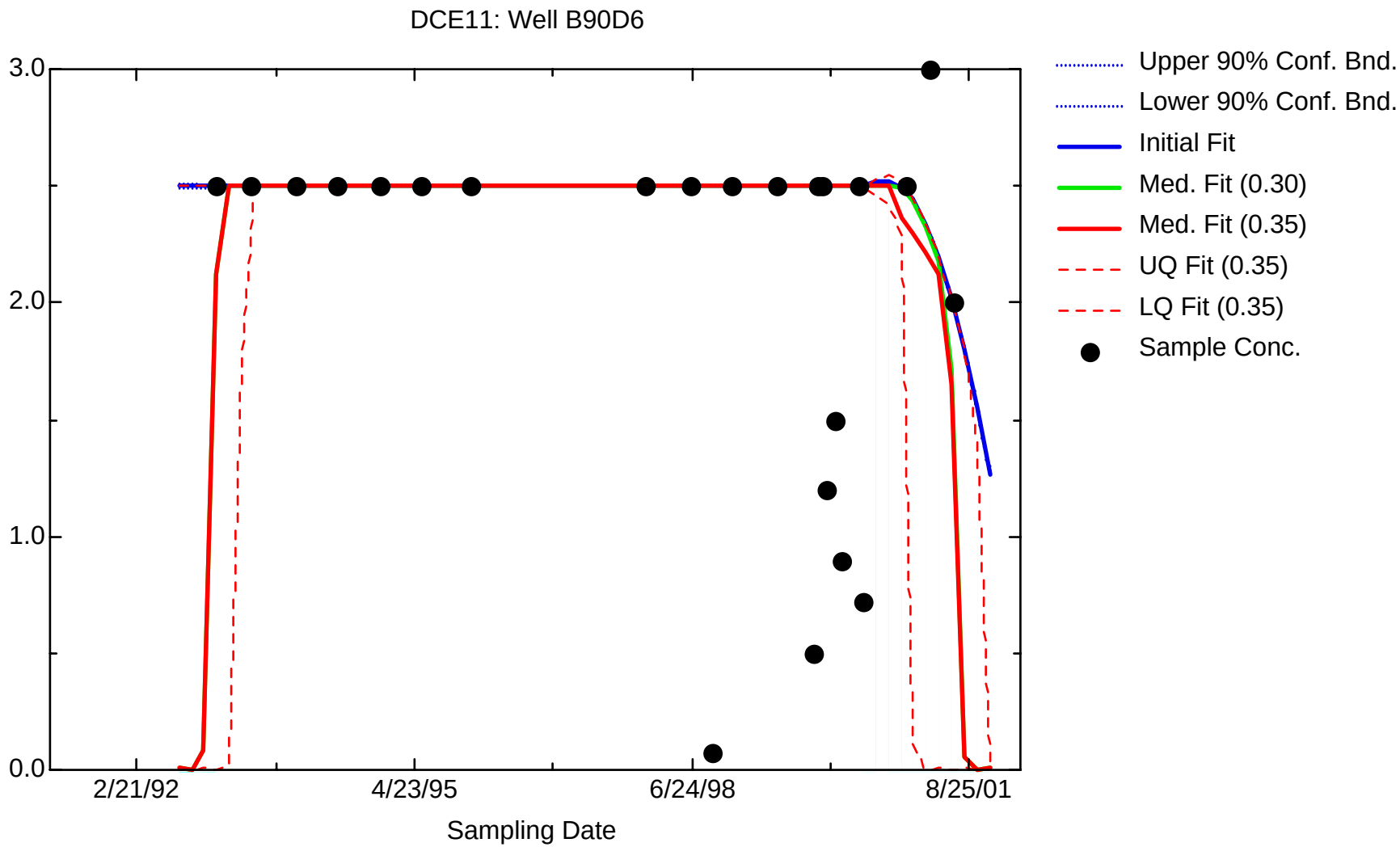

DCE11: Well B90BR2
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
120
100
80
60
40
20
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

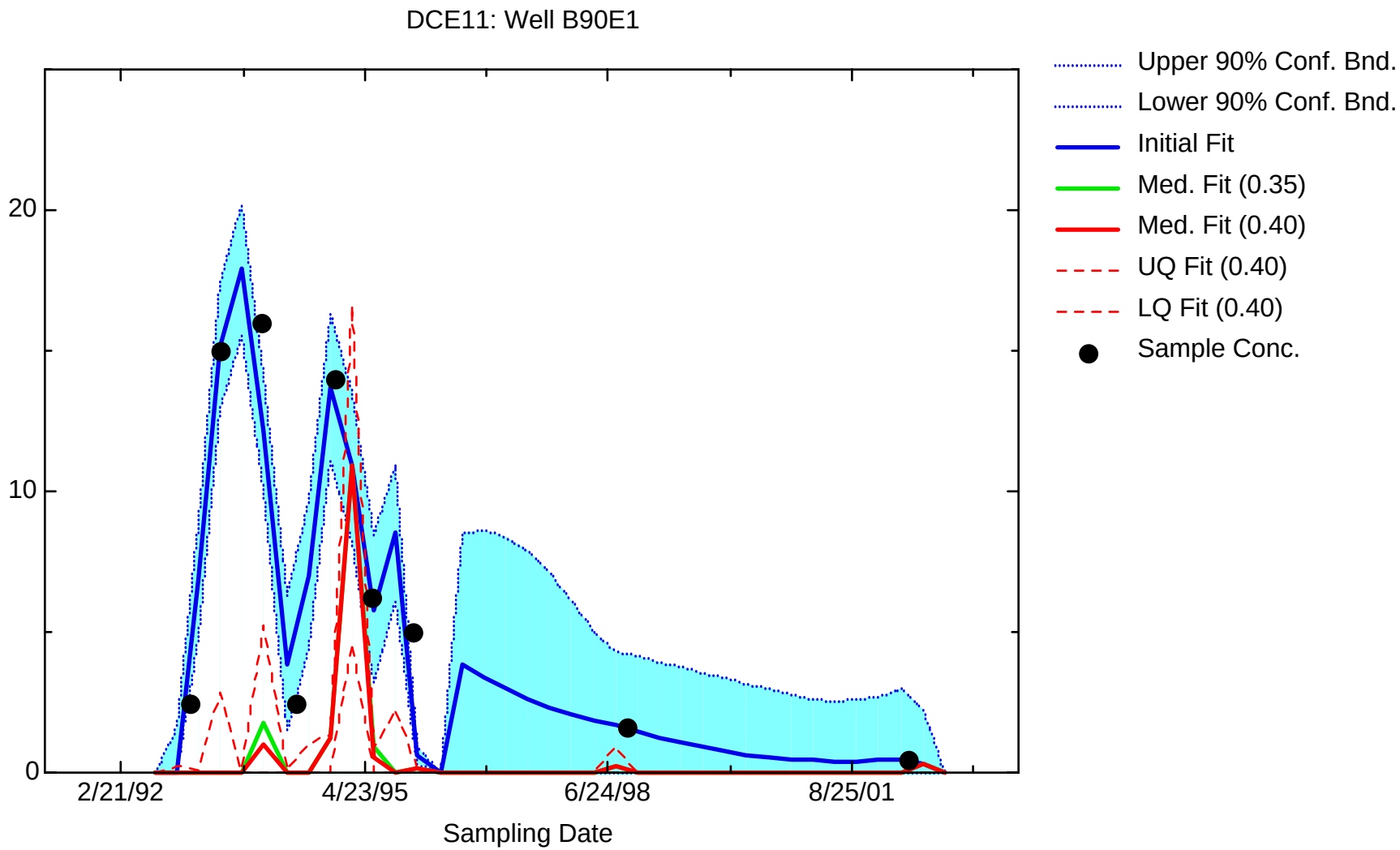

DCE11: Well B90D1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
200
100
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

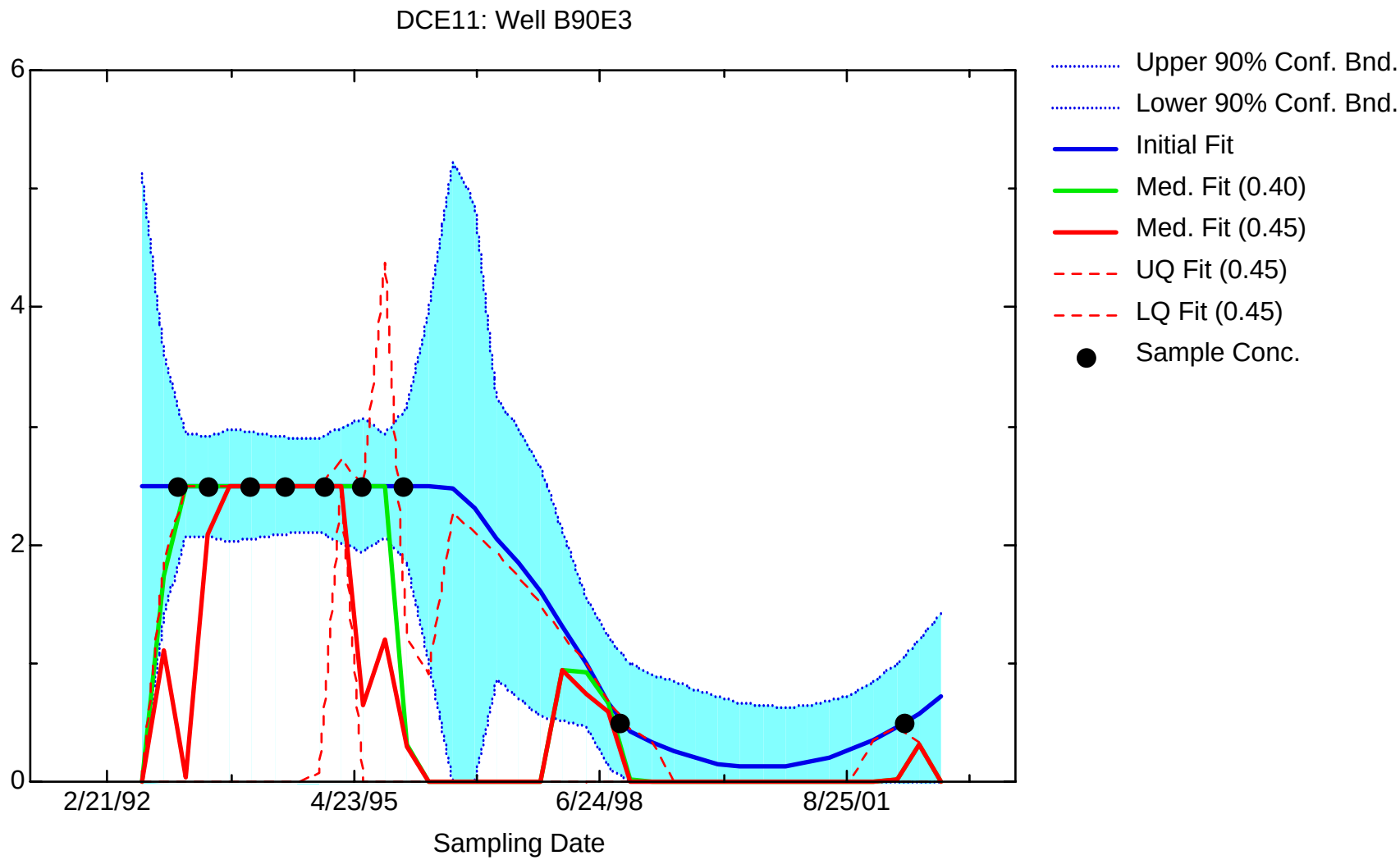

DCE11: Well B90D2
1600
1200
800
400
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

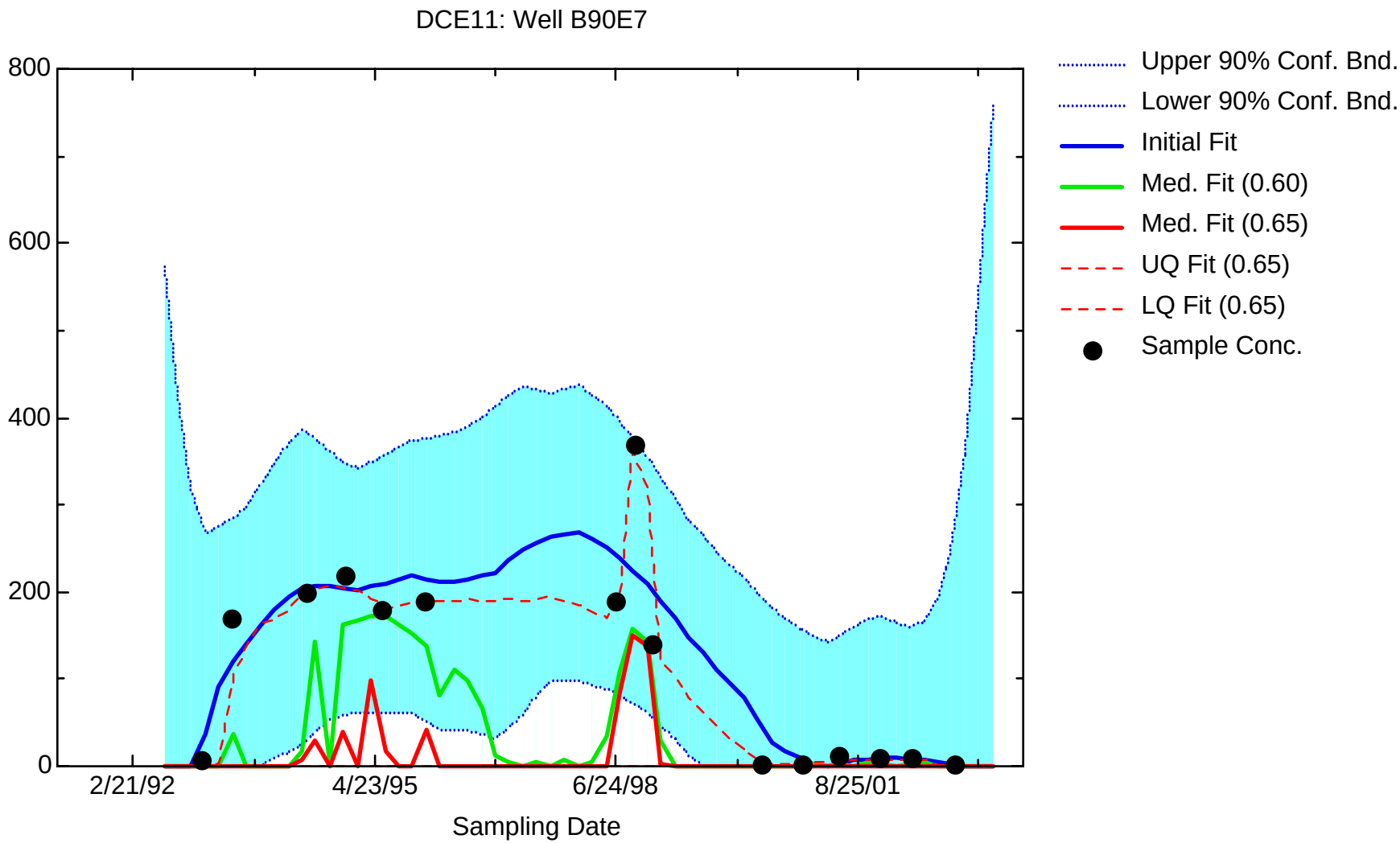

DCE11: Well B90D4
800
400
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

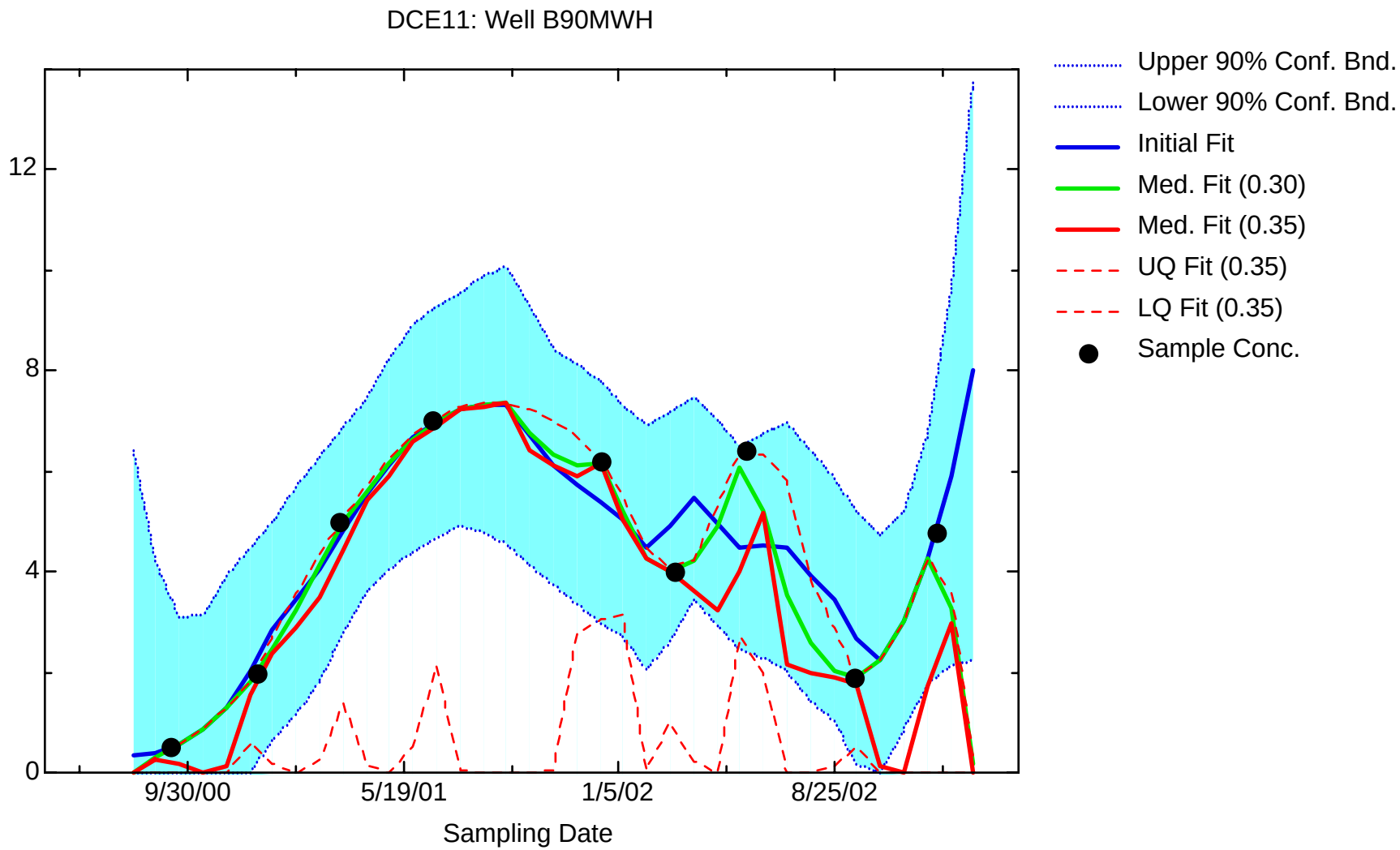

DCE11: Well B90D5
30
20
10
0
11/22/96
1/22/00
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

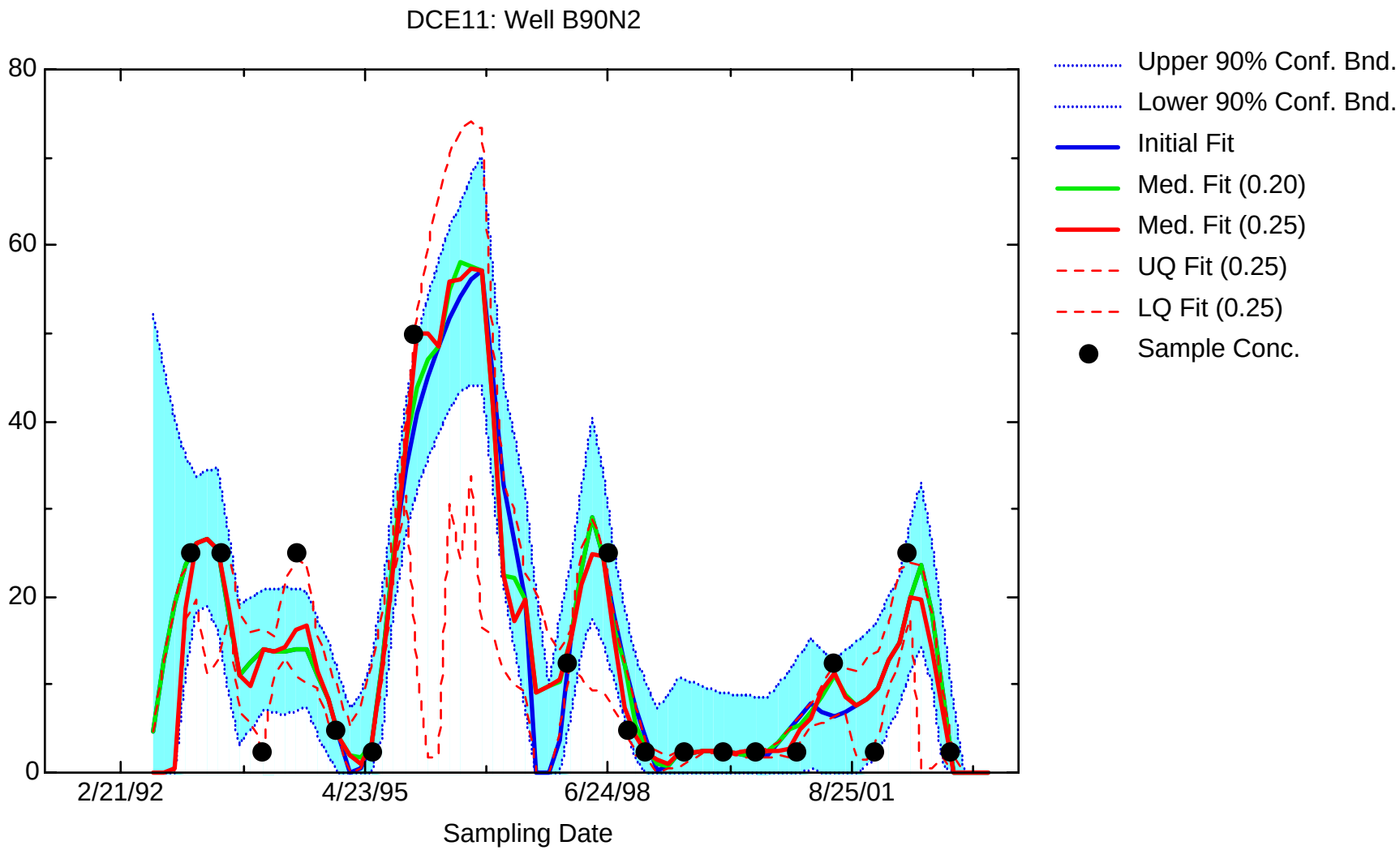

DCE11: Well B90D6
3.0
2.0
1.0
0.0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

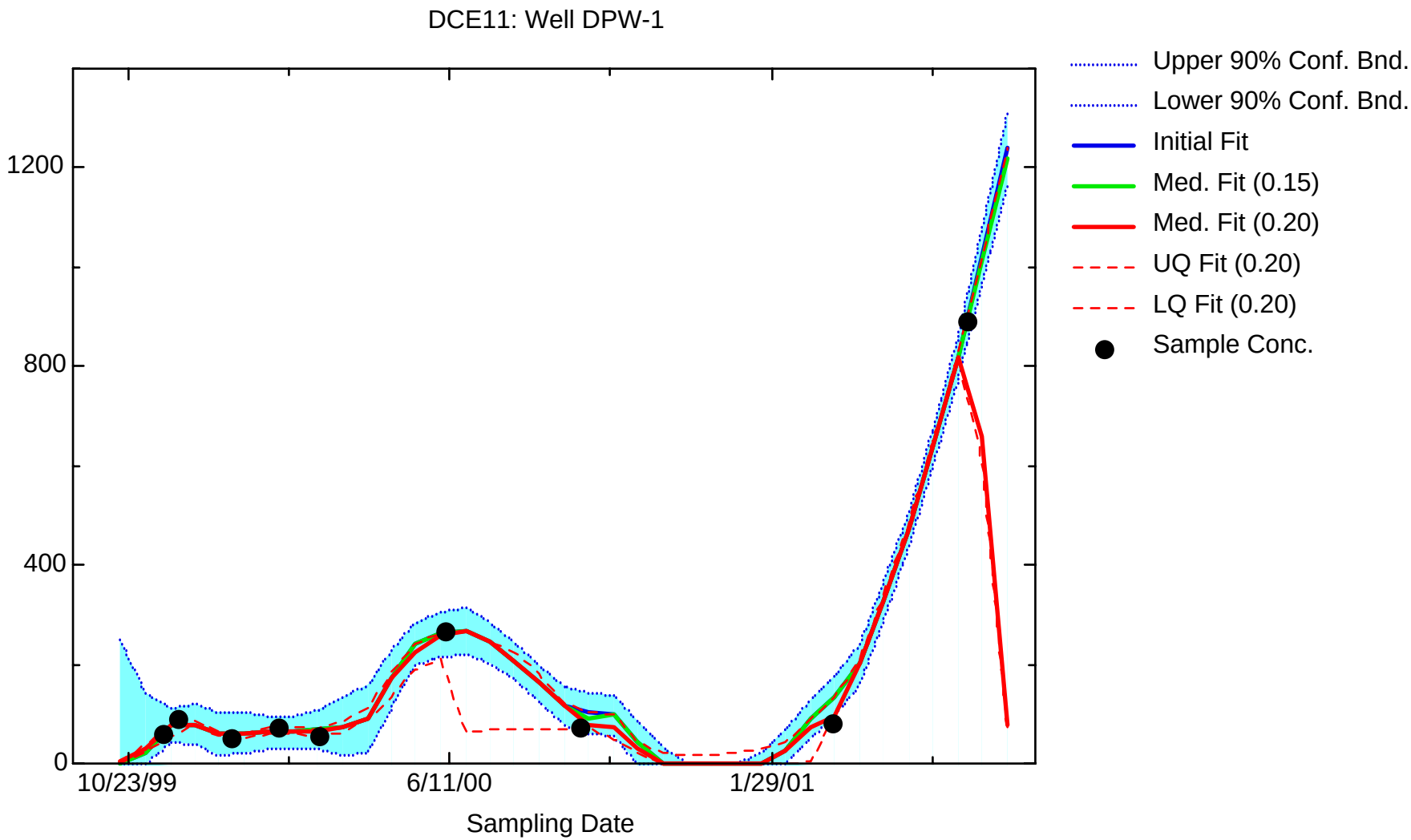

DCE11: Well B90E1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
20
10
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

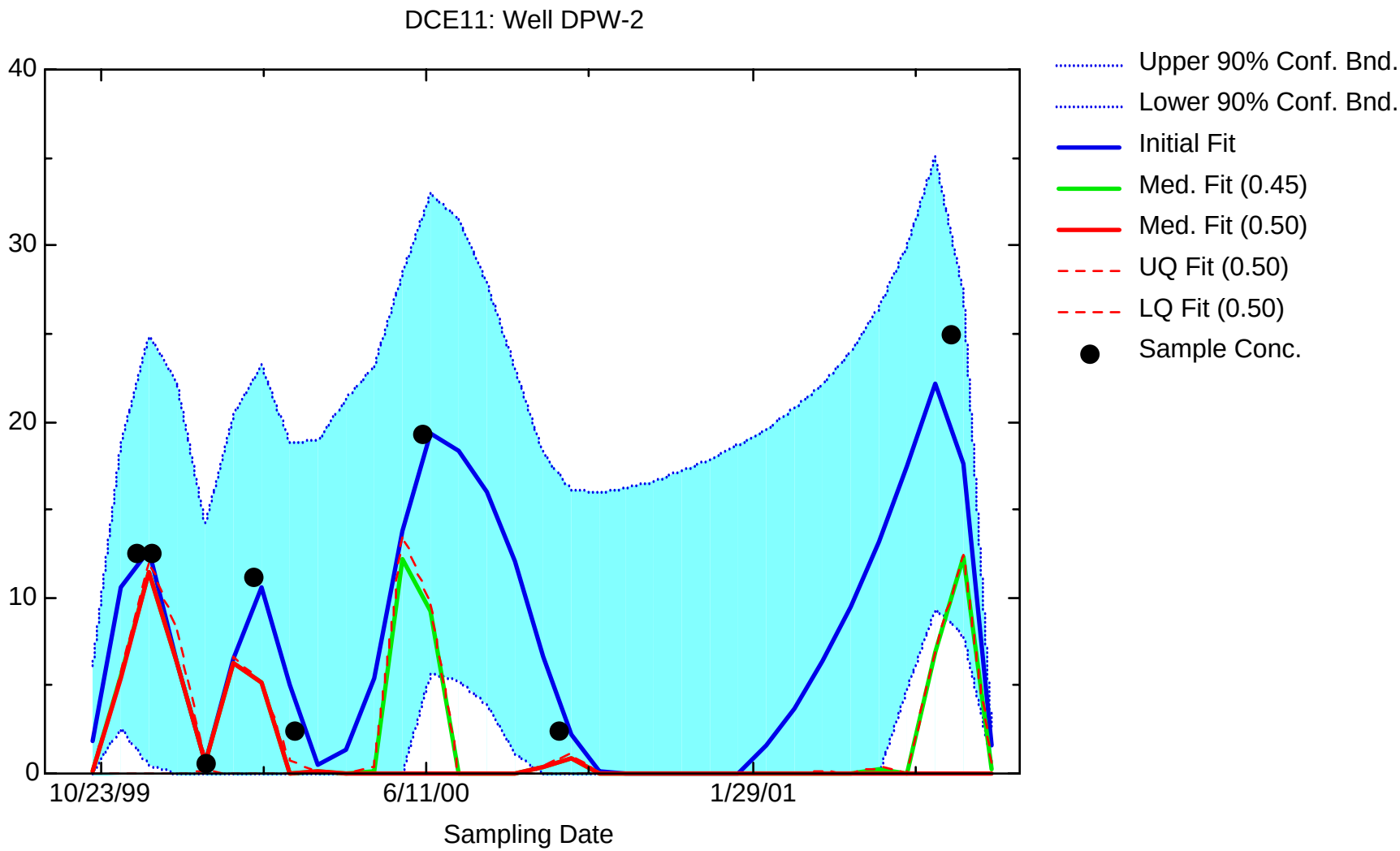

DCE11: Well B90E3
6
4
2
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

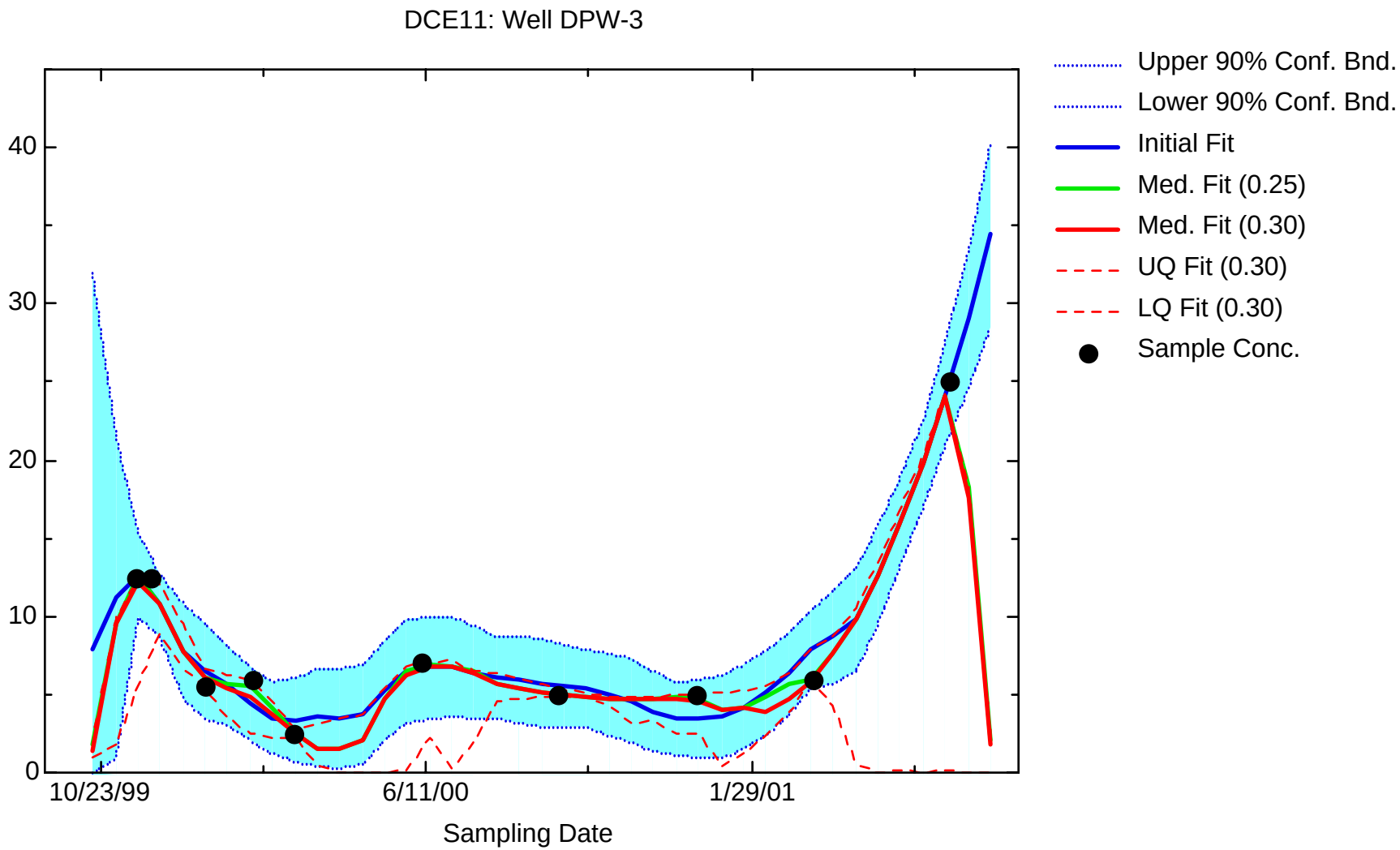

DCE11: Well B90E7
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

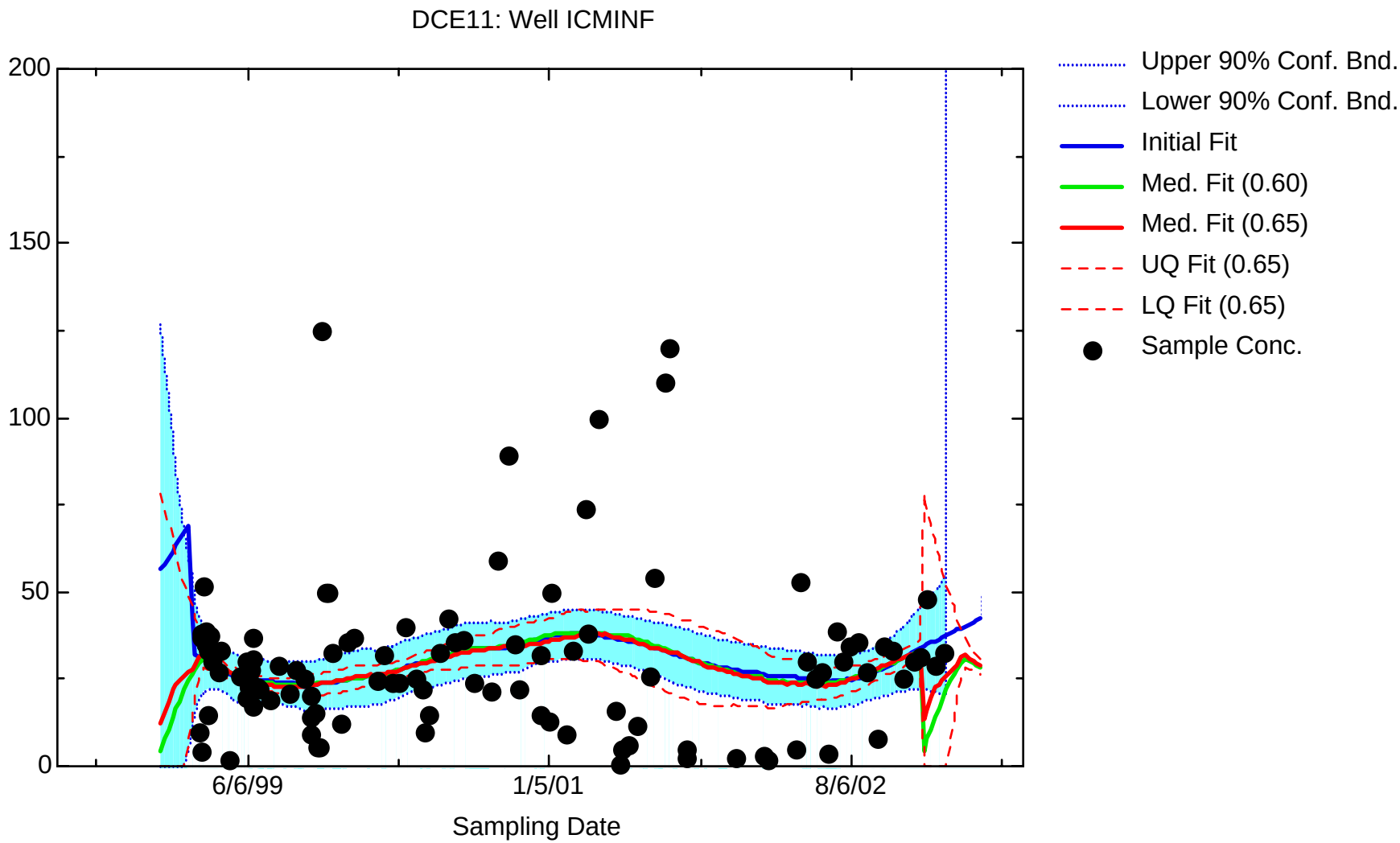

DCE11: Well B90MWH
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
12
8
4
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

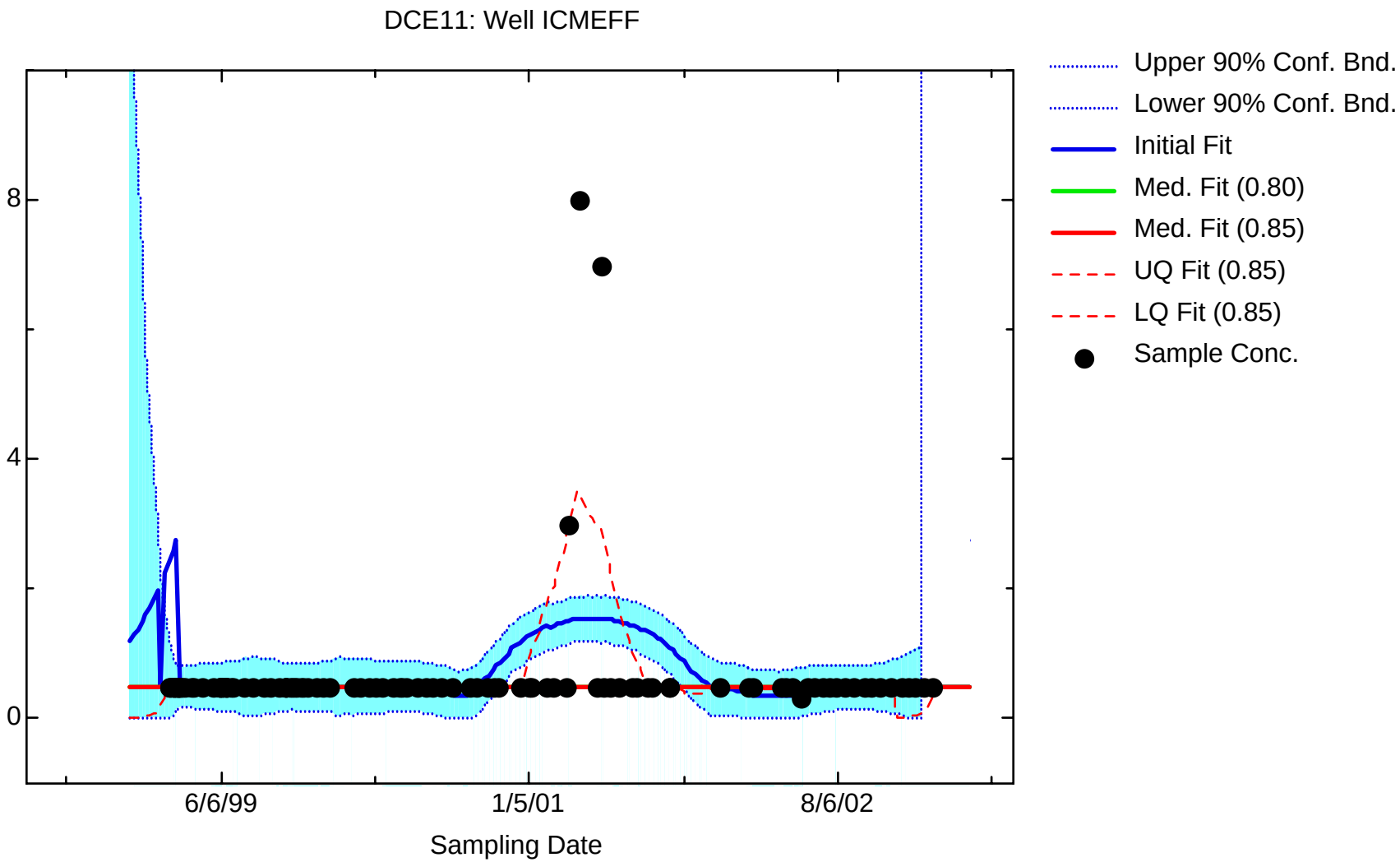

DCE11: Well B90N2
80
60
40
20
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

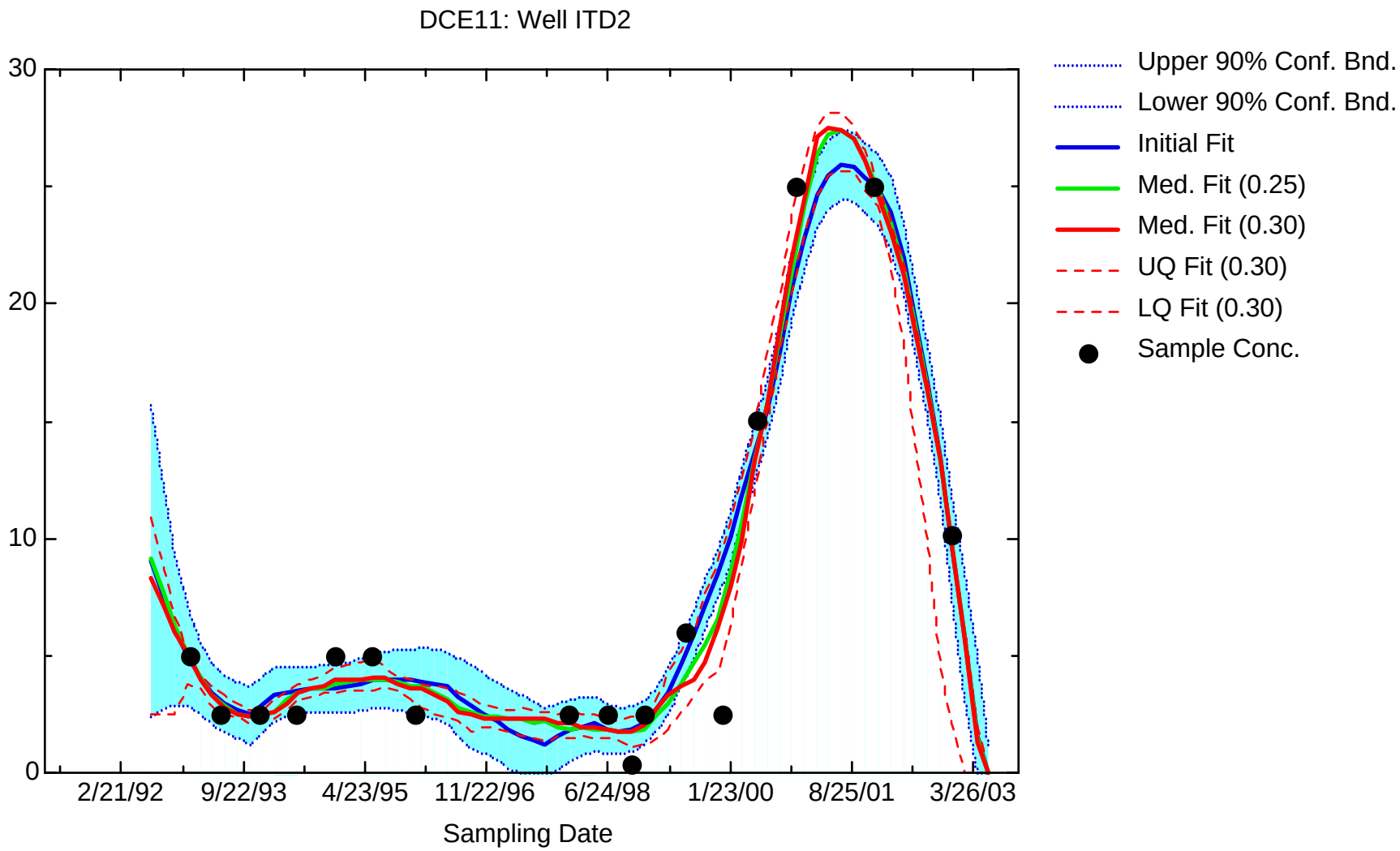

DCE11: Well DPW-1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
1200
800
400
0
10/23/99
6/11/00
1/29/01
Sampling Date

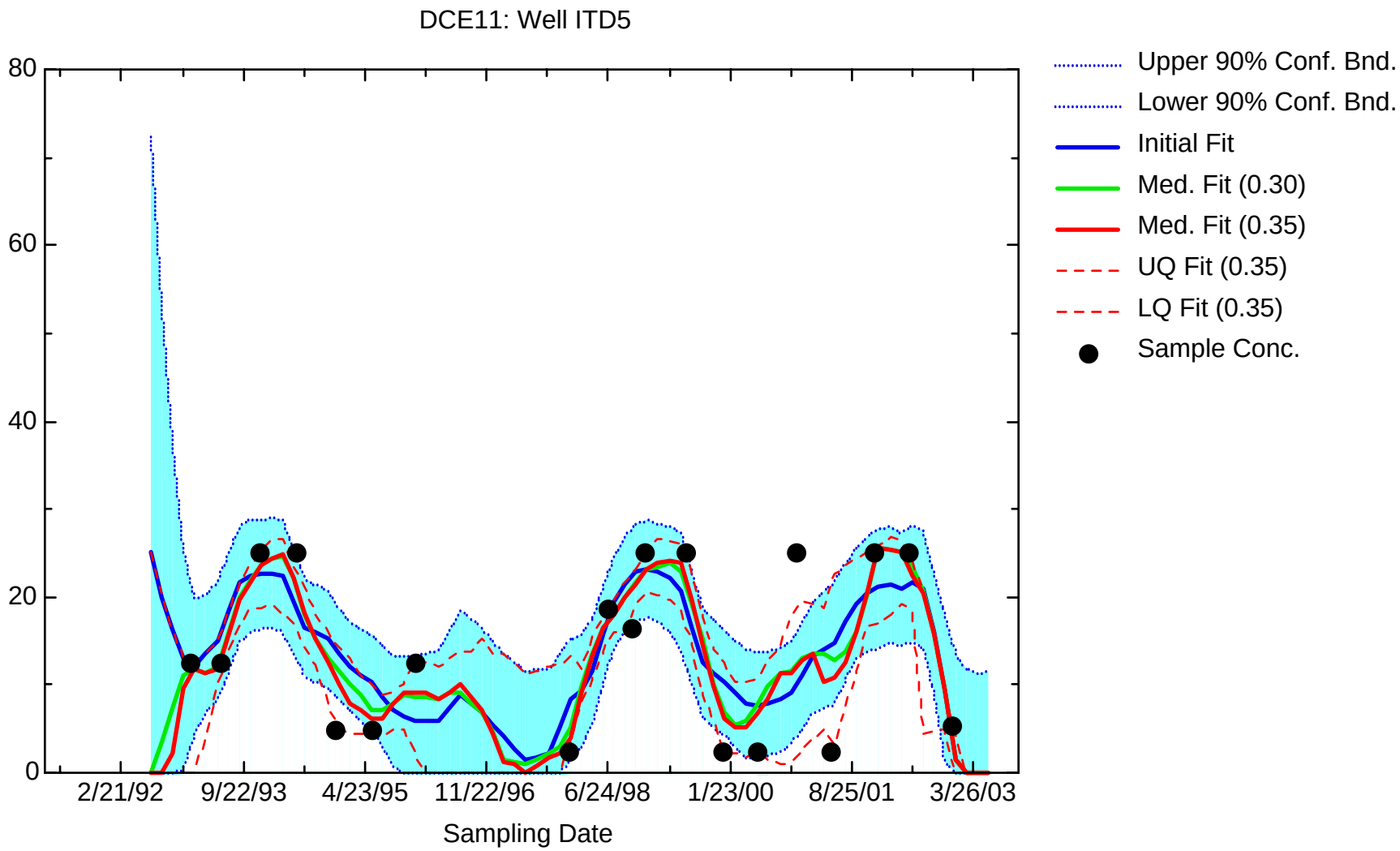

DCE11: Well DPW-2
40
30
20
10
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

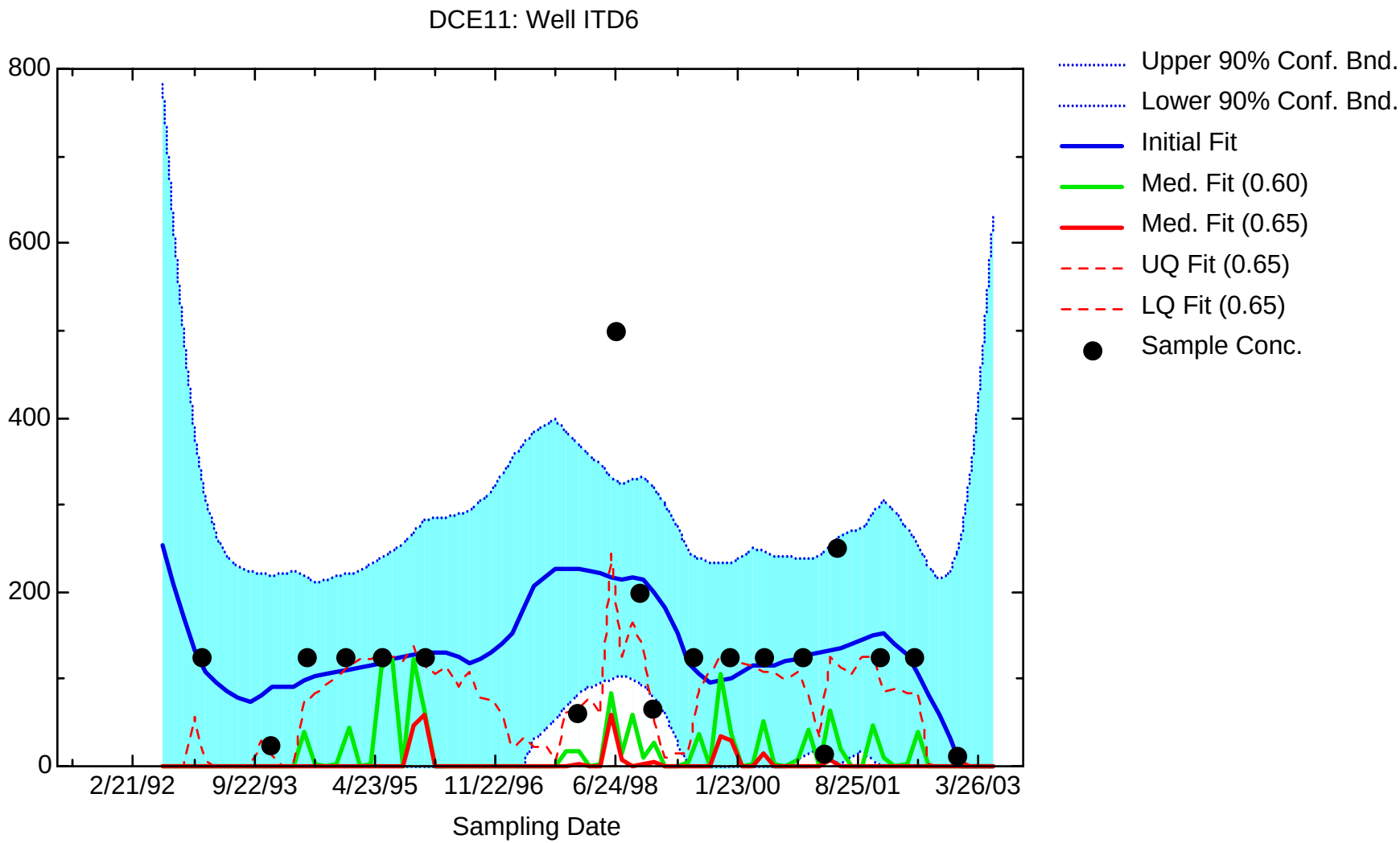

DCE11: Well DPW-3
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
40
30
20
10
0
10/23/99
6/11/00
1/29/01
Sampling Date

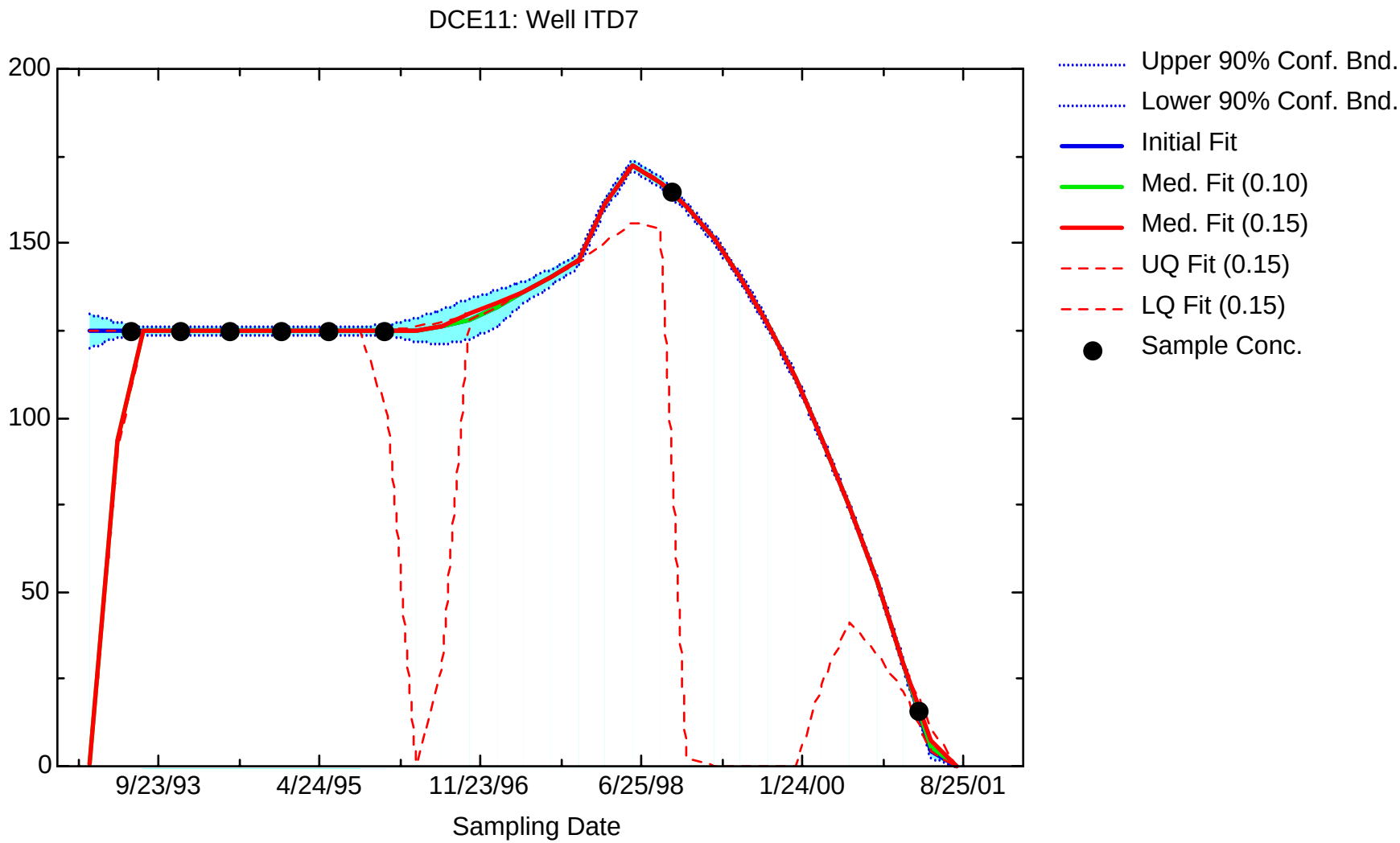

DCE11: Well ICMINF
200
150
100
50
0
6/6/99
1/5/01
8/6/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

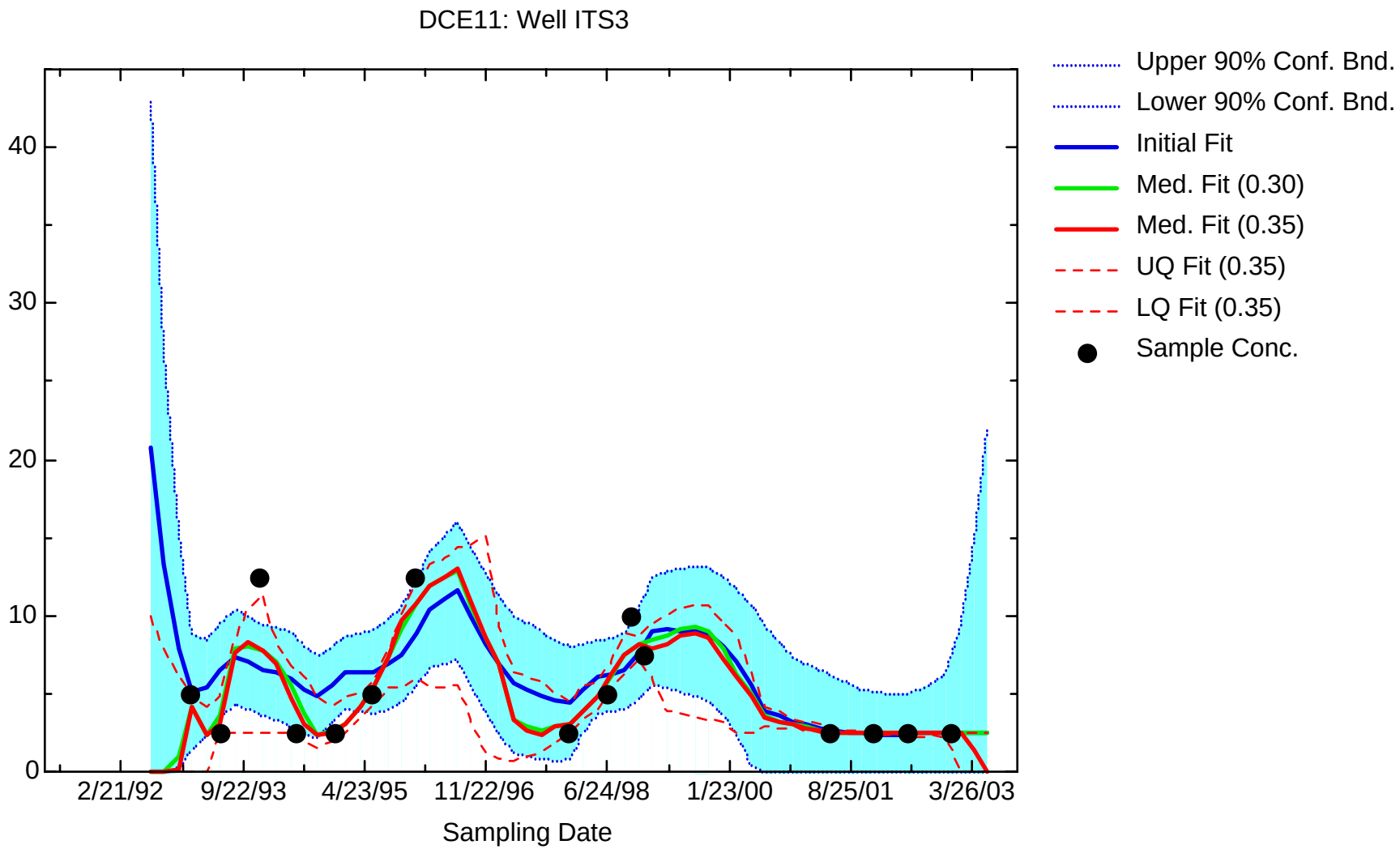

DCE11: Well ICMEFF
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.80)
Med. Fit (0.85)
UQ Fit (0.85)
LQ Fit (0.85)
Sample Conc.
8
4
0
6/6/99
1/5/01
8/6/02
Sampling Date

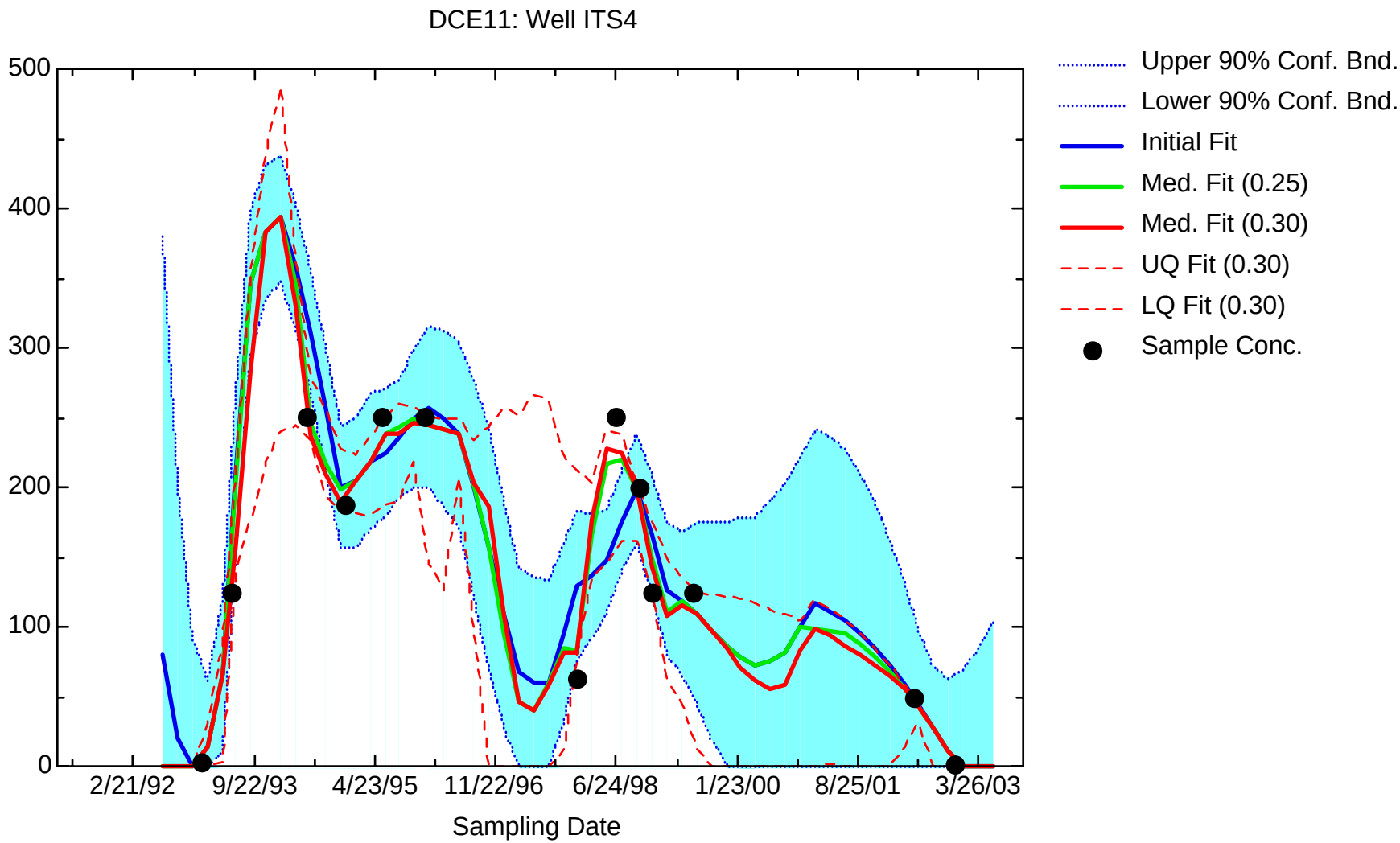

DCE11: Well ITD2
30
20
10
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

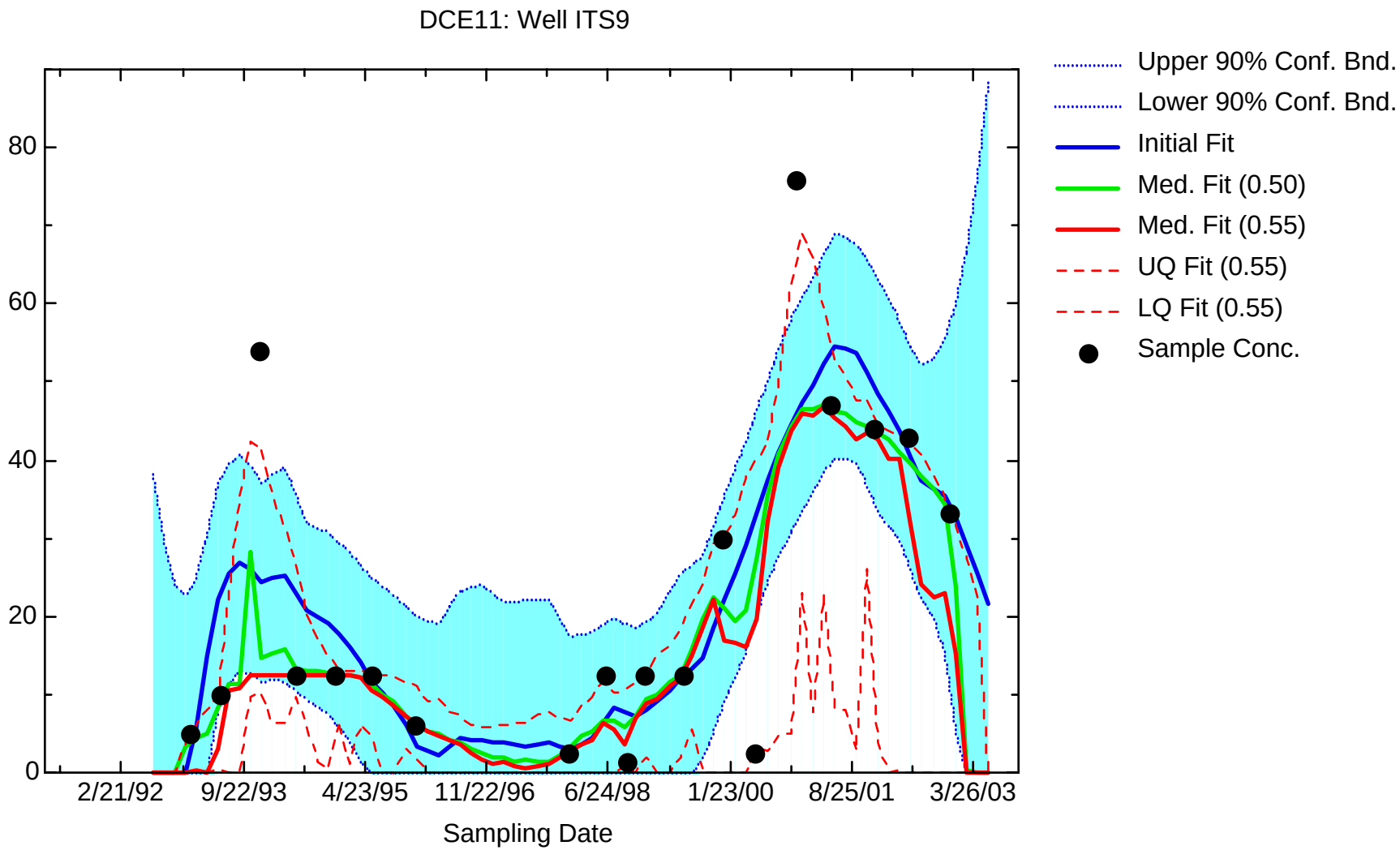

DCE11: Well ITD5
80
60
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

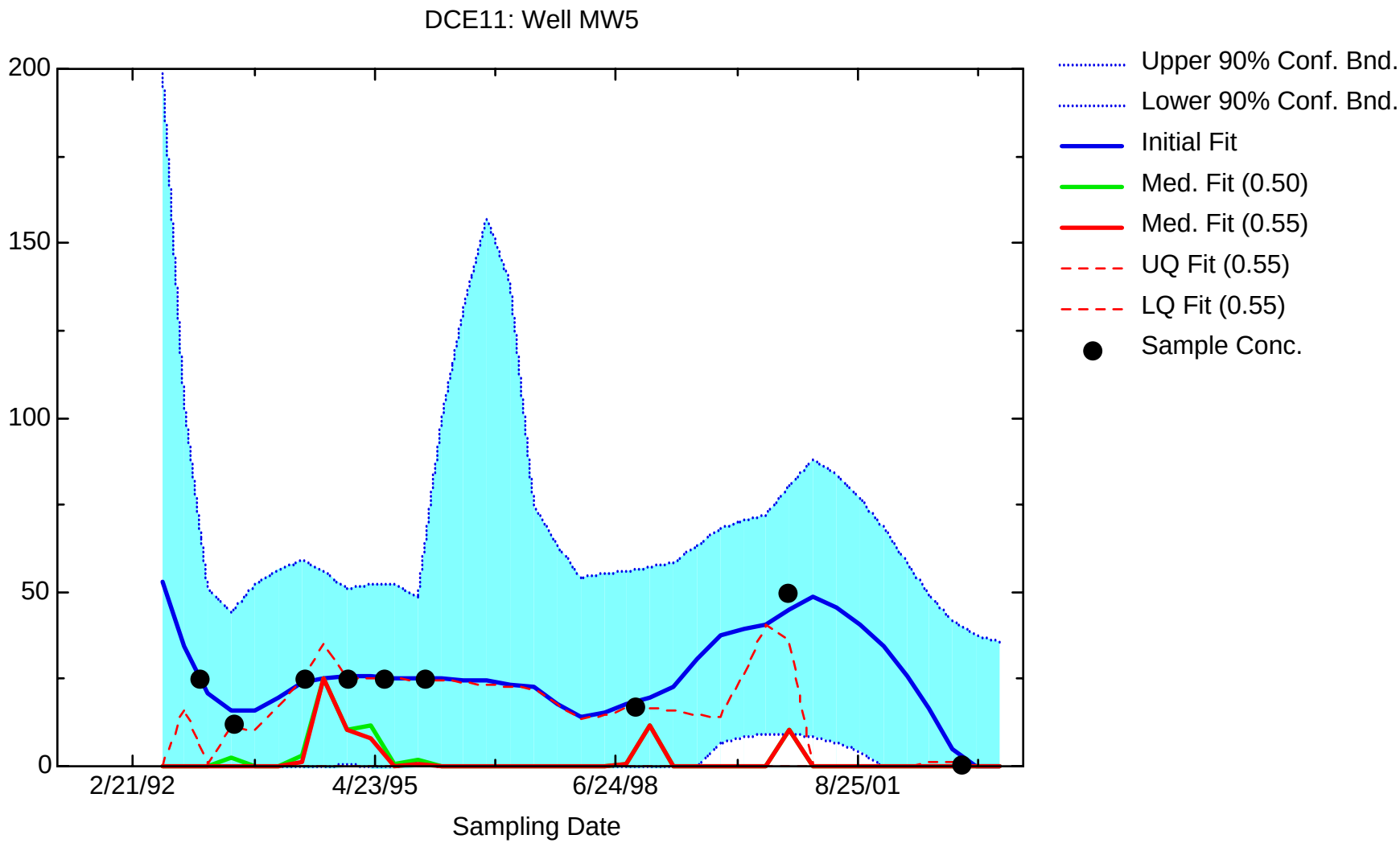

DCE11: Well ITD6
800
600
400
200
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

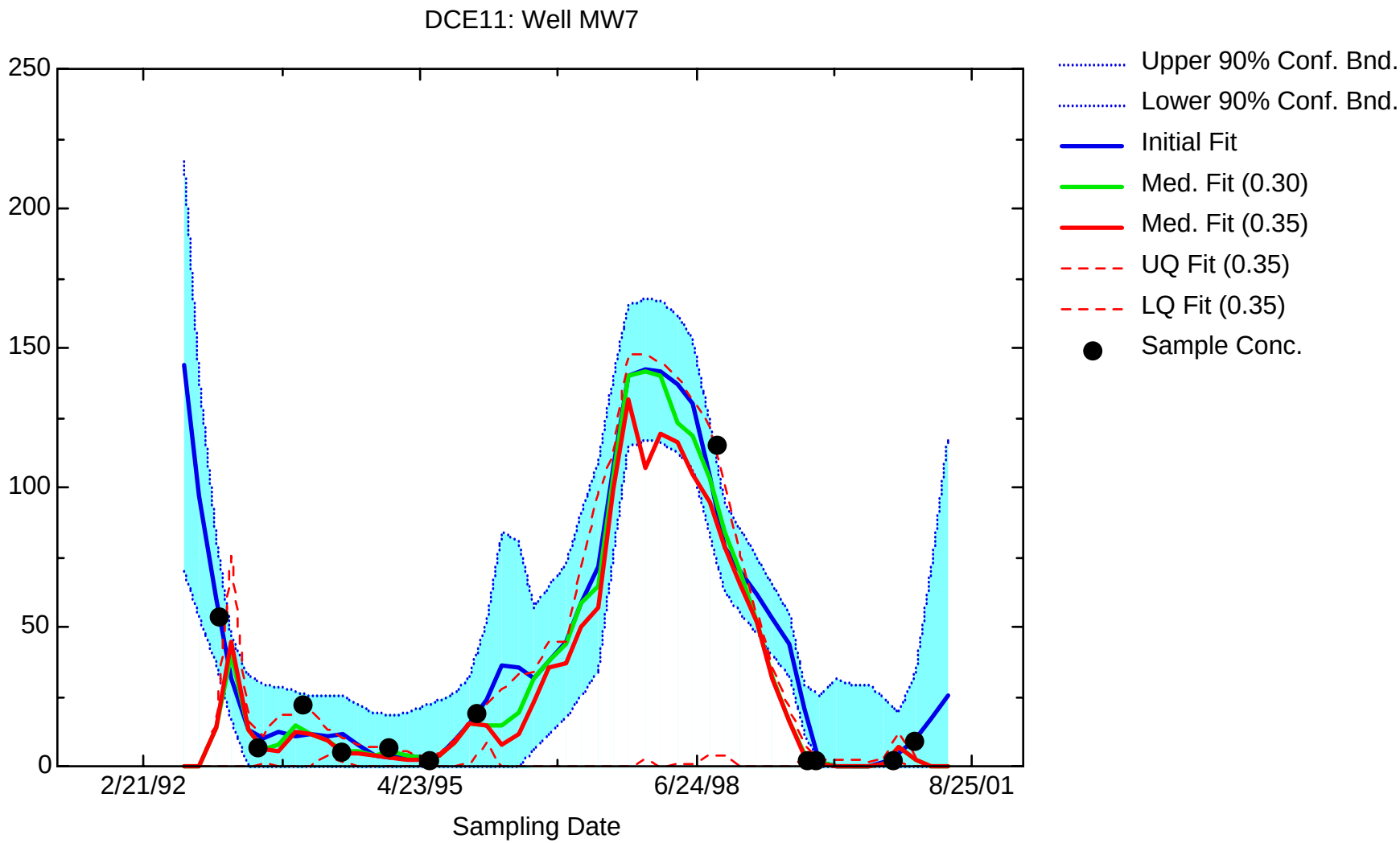

DCE11: Well ITD7
200
150
100
50
0
9/23/93
4/24/95
11/23/96
6/25/98
1/24/00
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

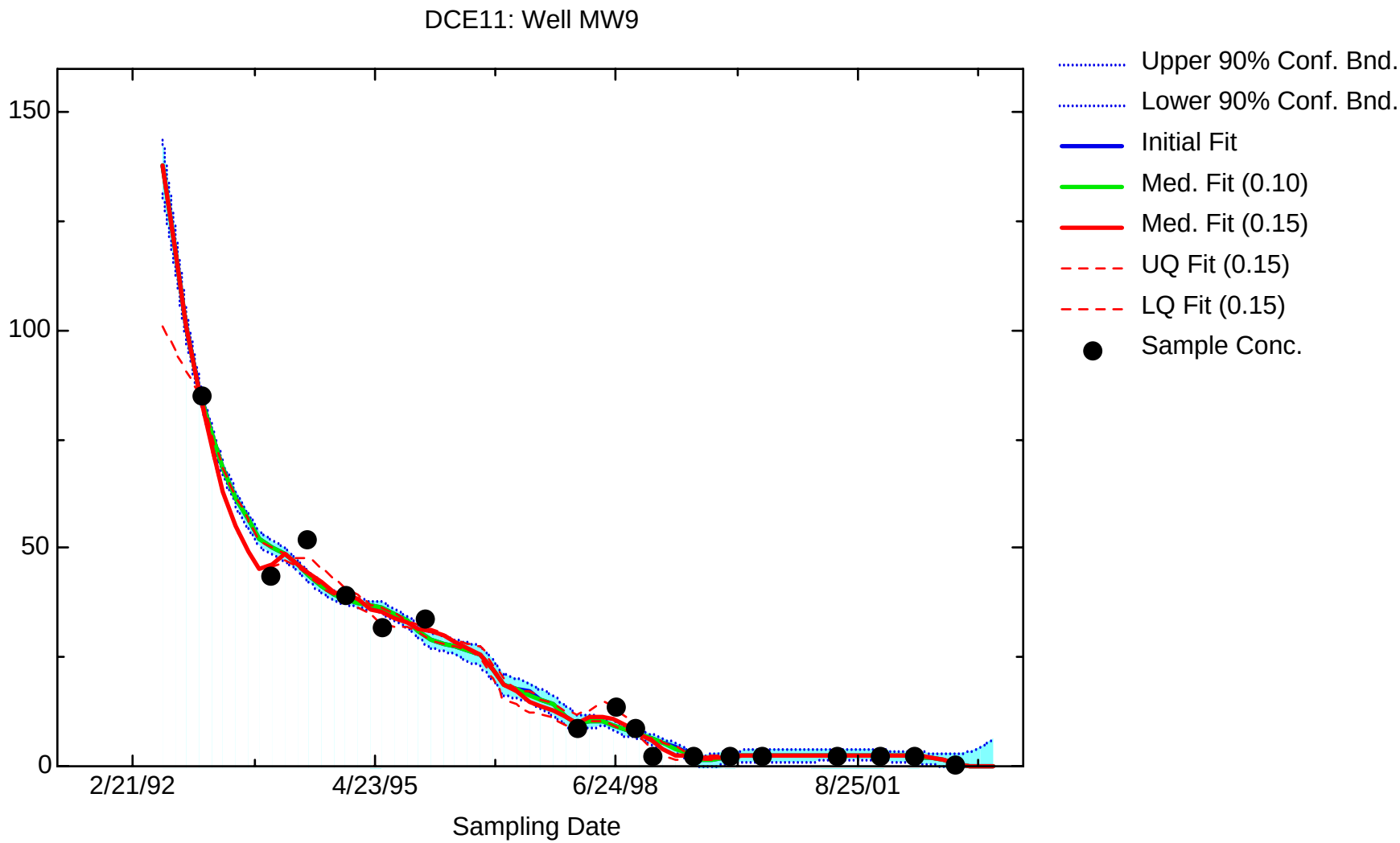

DCE11: Well ITS3
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
0
10
20
30
40
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

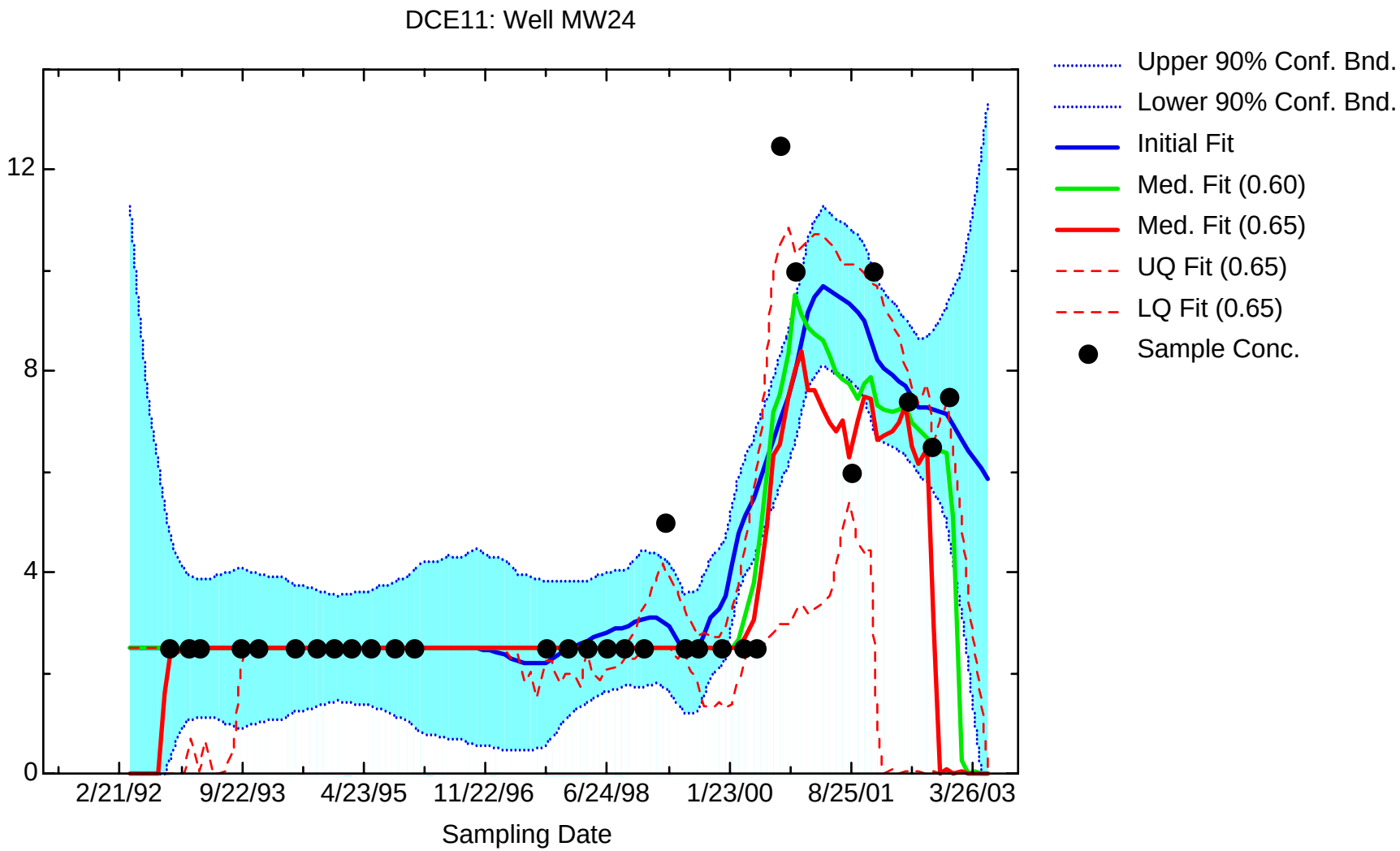

DCE11: Well ITS4
500
400
300
200
100
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

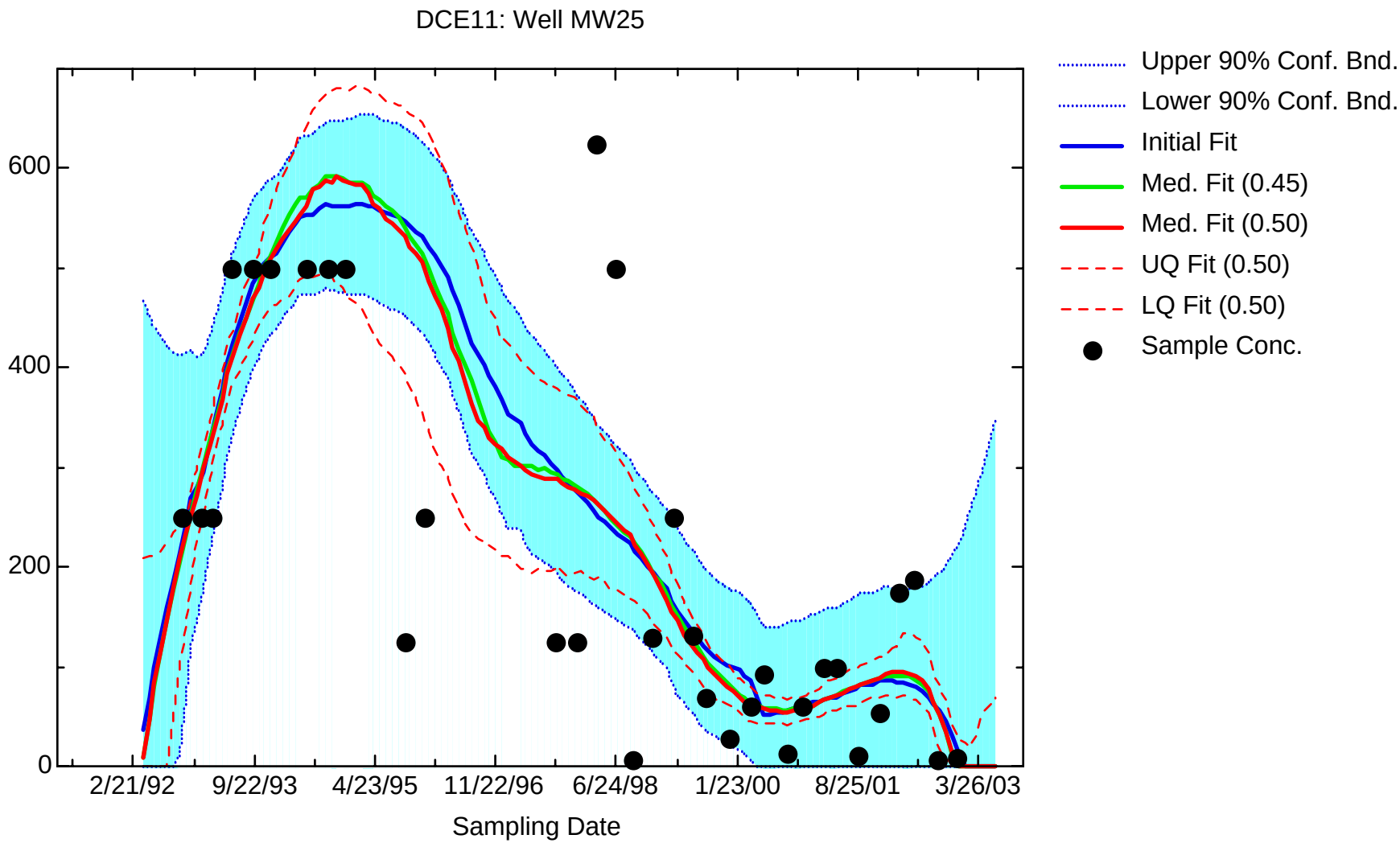

DCE11: Well ITS9
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.
0
20
40
60
80
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

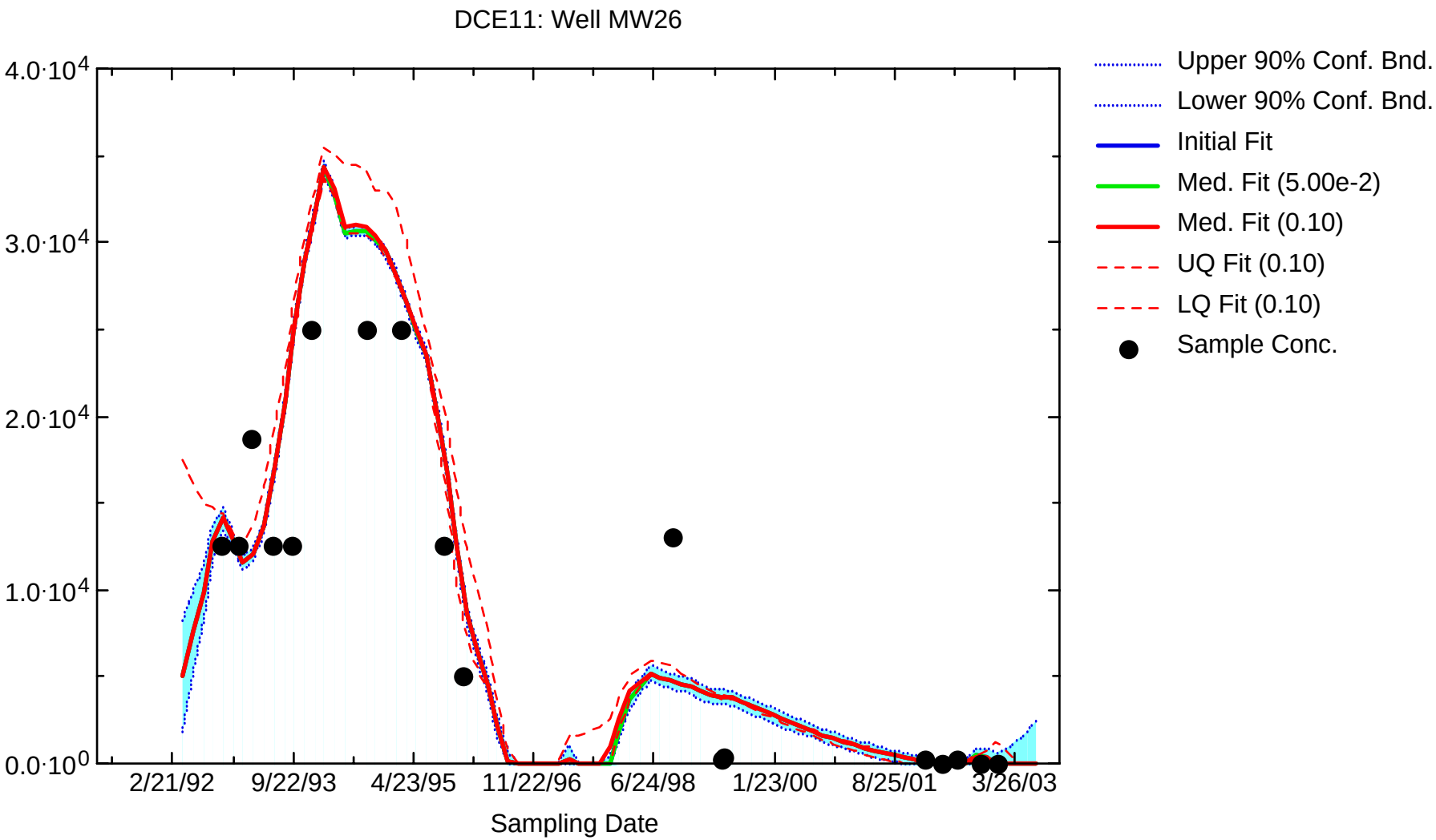

DCE11: Well MW5
200
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

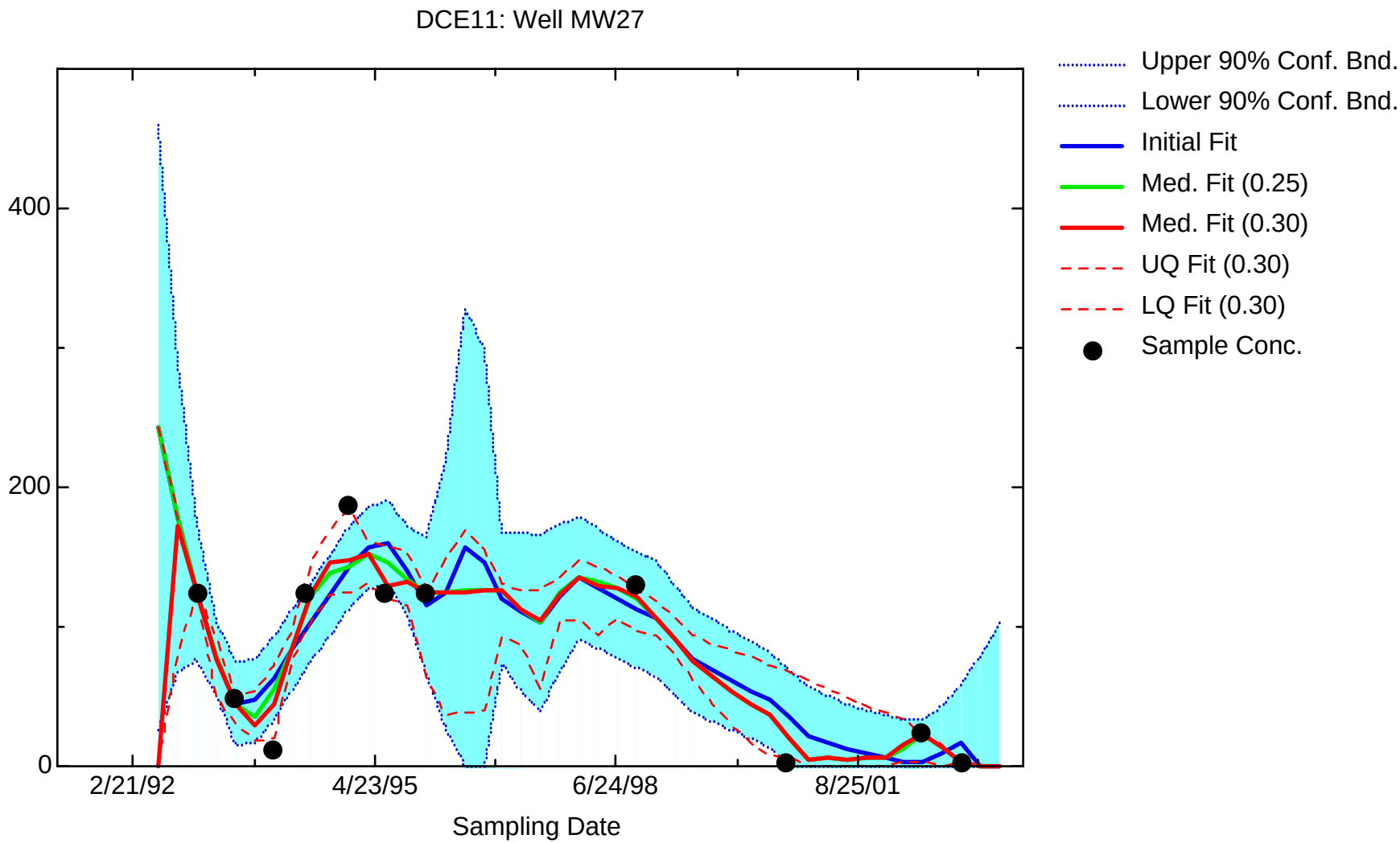

DCE11: Well MW7
250
200
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

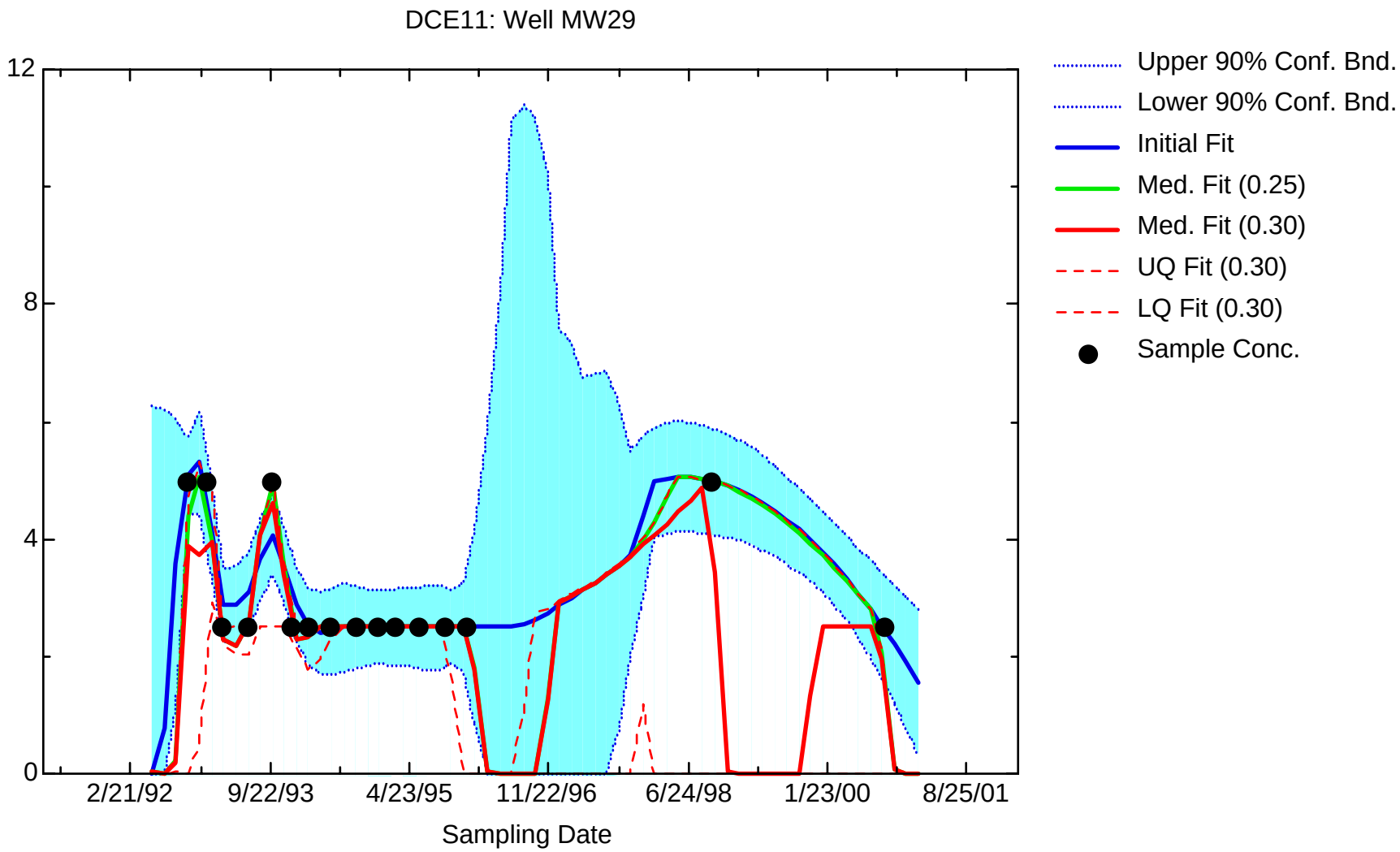

DCE11: Well MW9
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

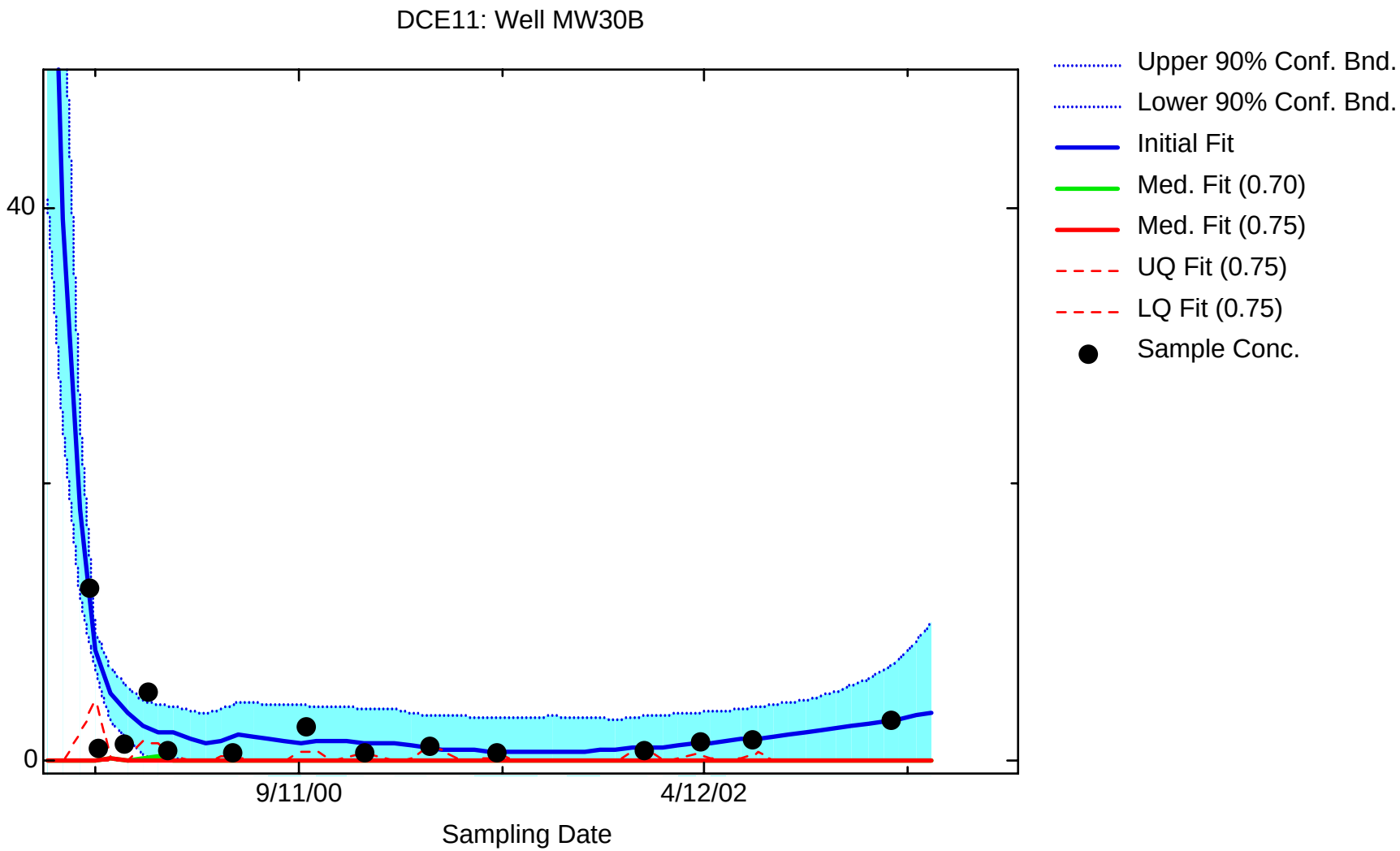

DCE11: Well MW24
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.
12
8
4
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

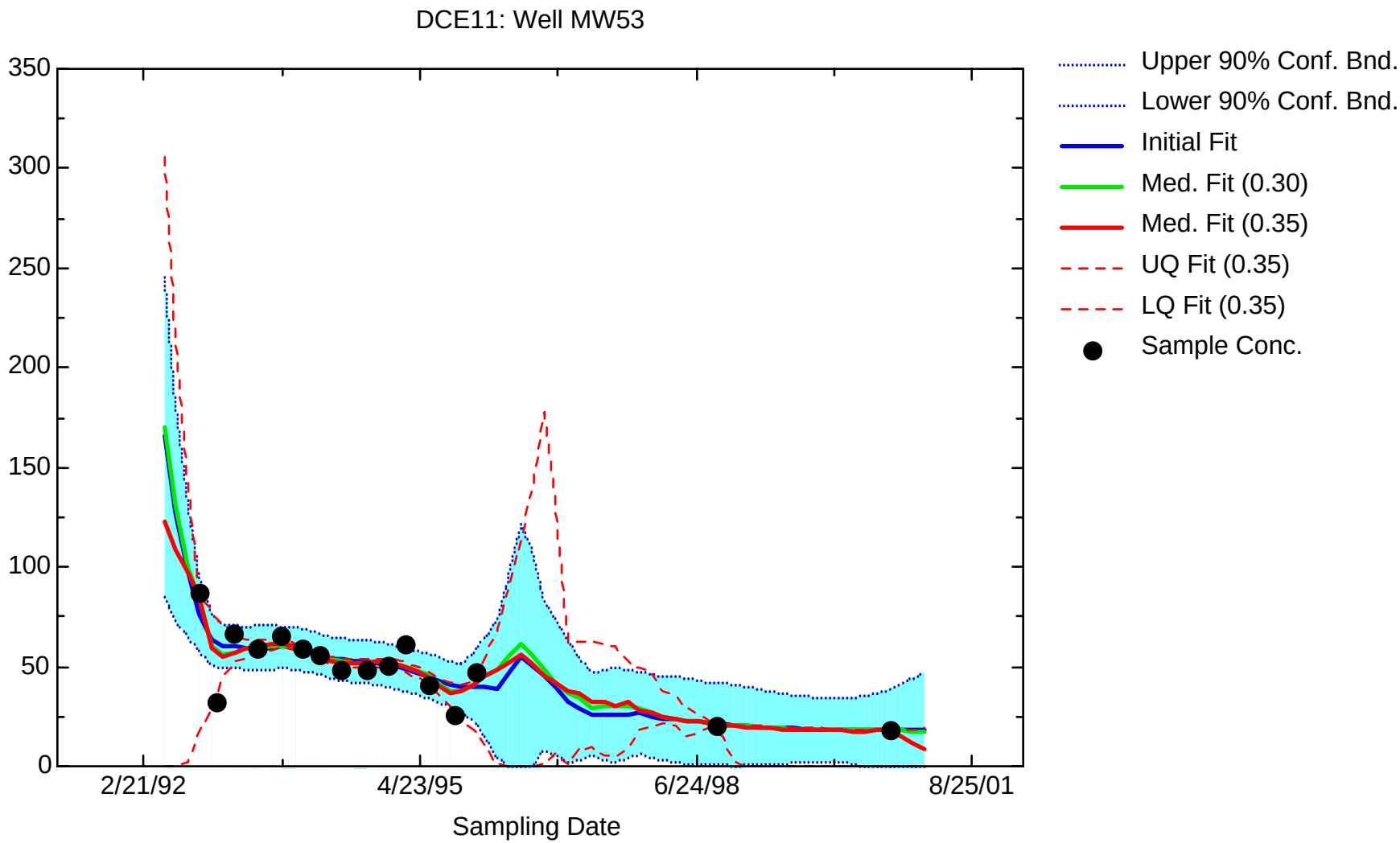

DCE11: Well MW25
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
600
400
200
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

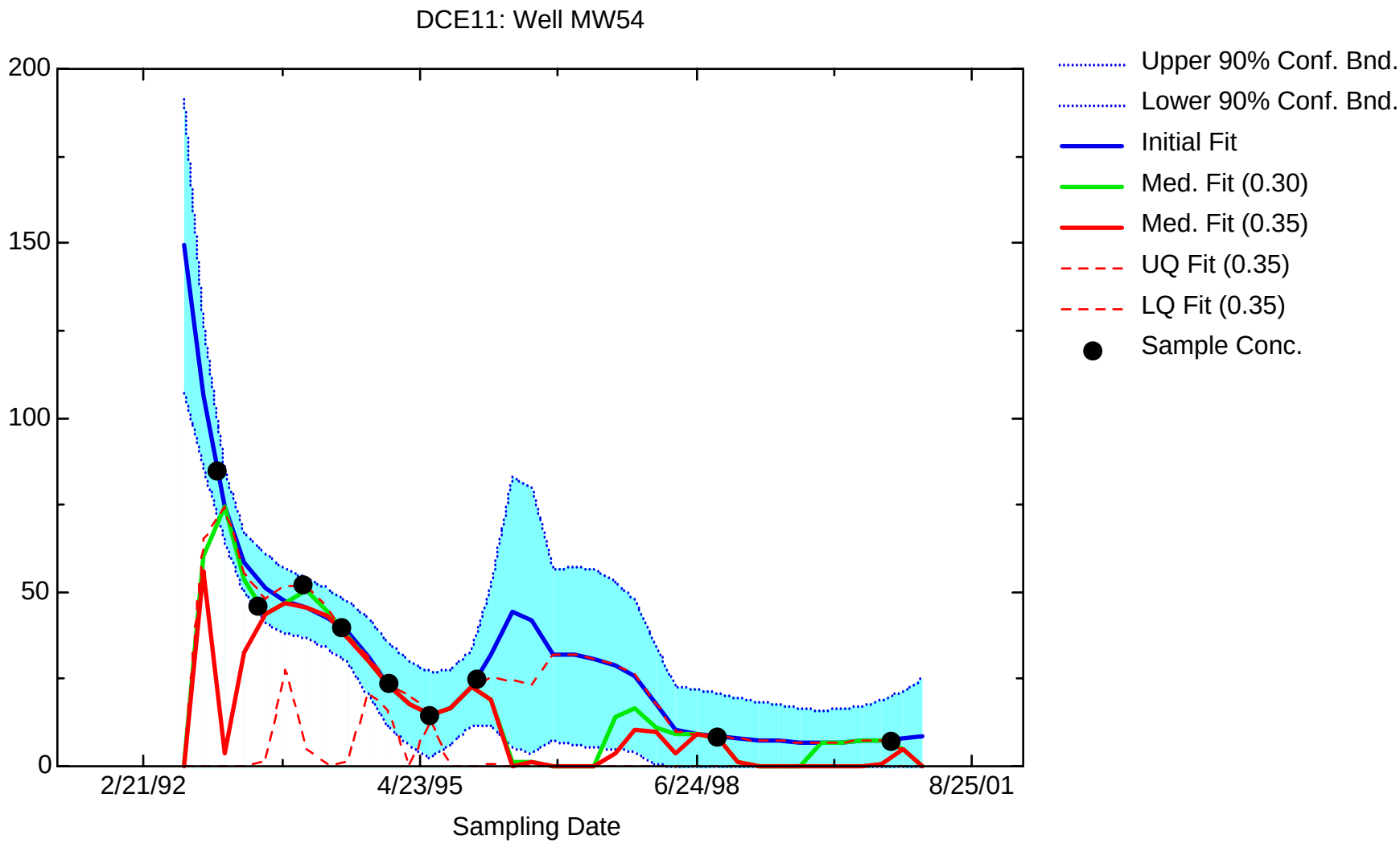

DCE11: Well MW26
4.0·10^4
3.0·10^4
2.0·10^4
1.0·10^4
0.0·10^0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

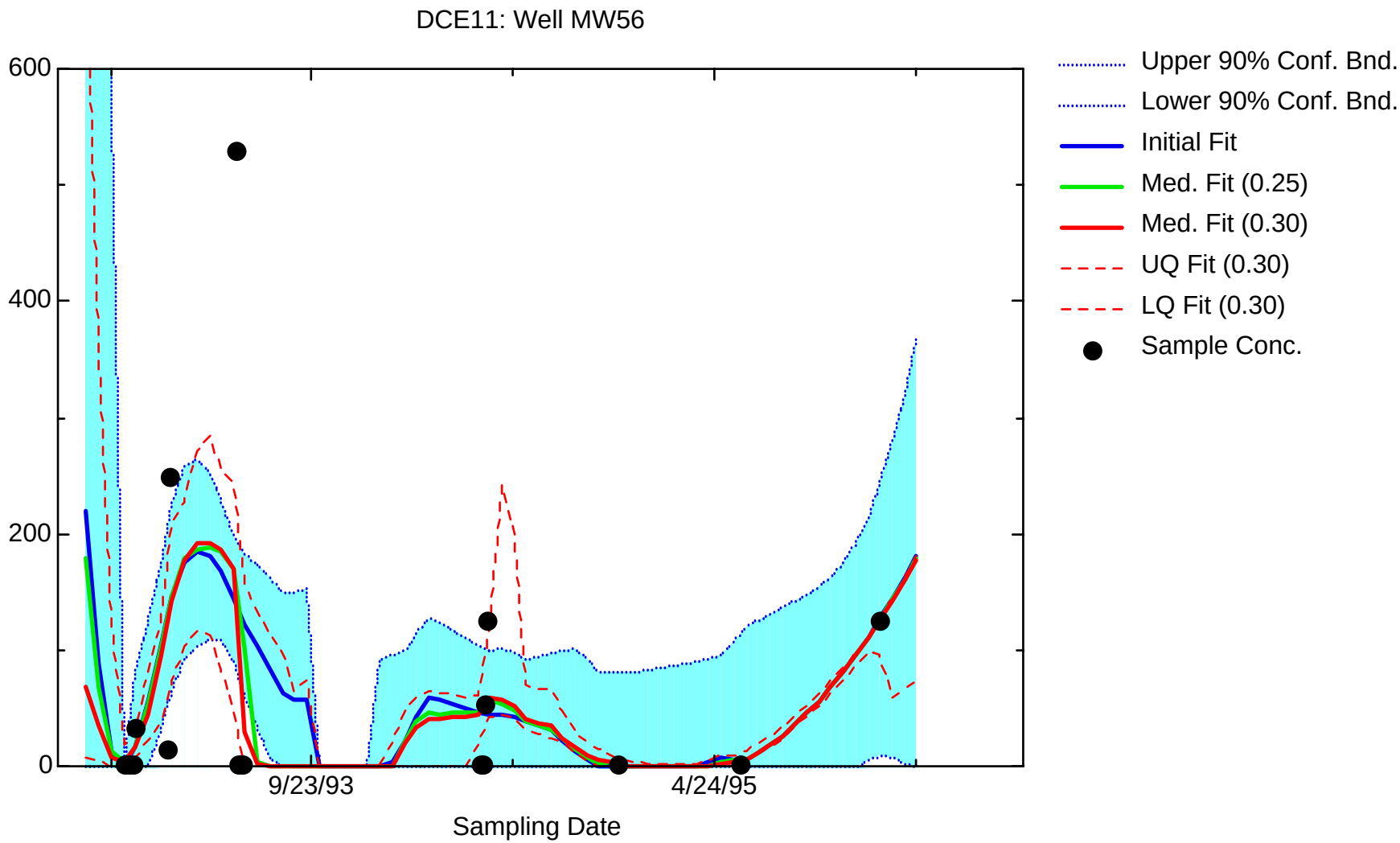

DCE11: Well MW27
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

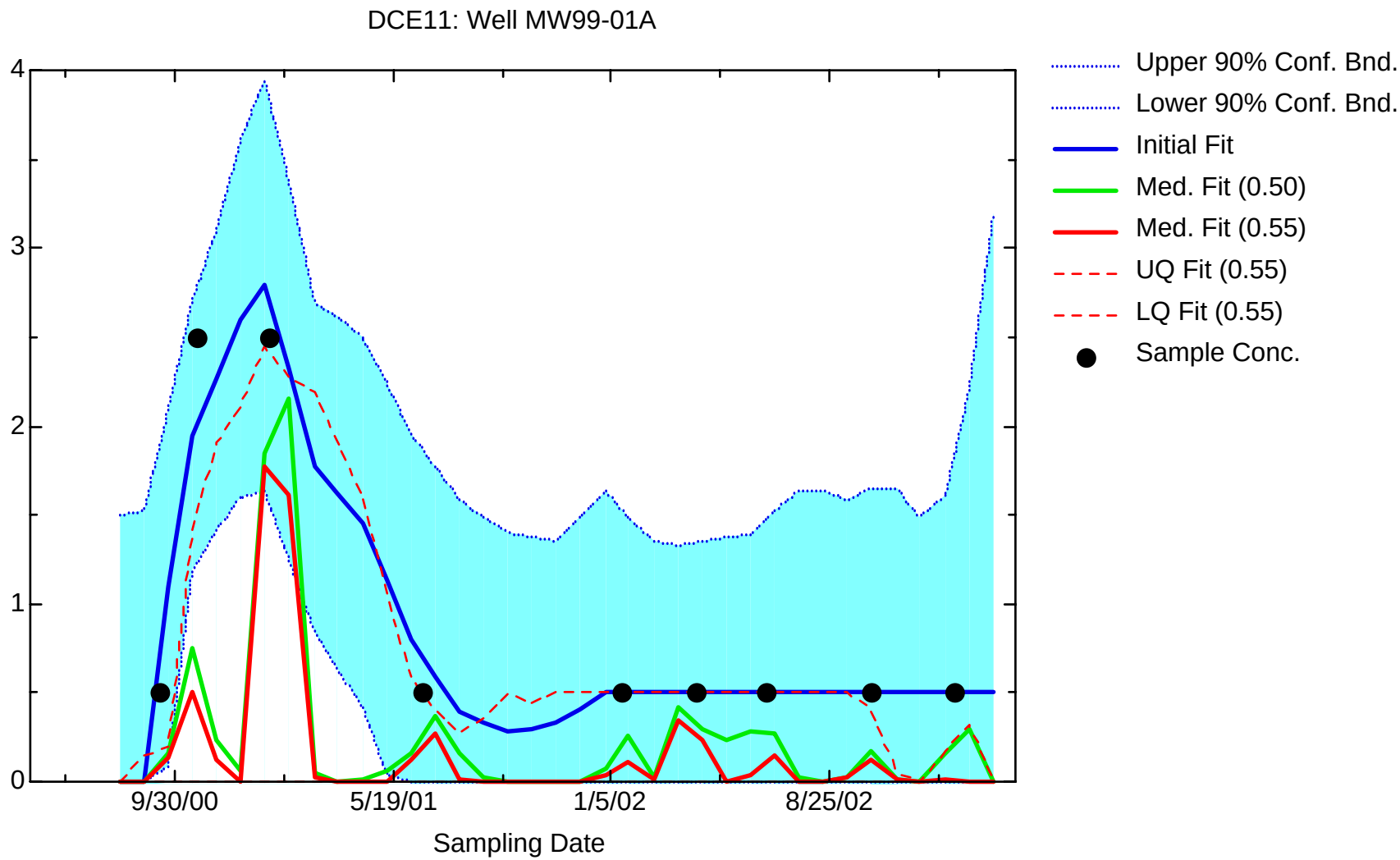

DCE11: Well MW29
12
8
4
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

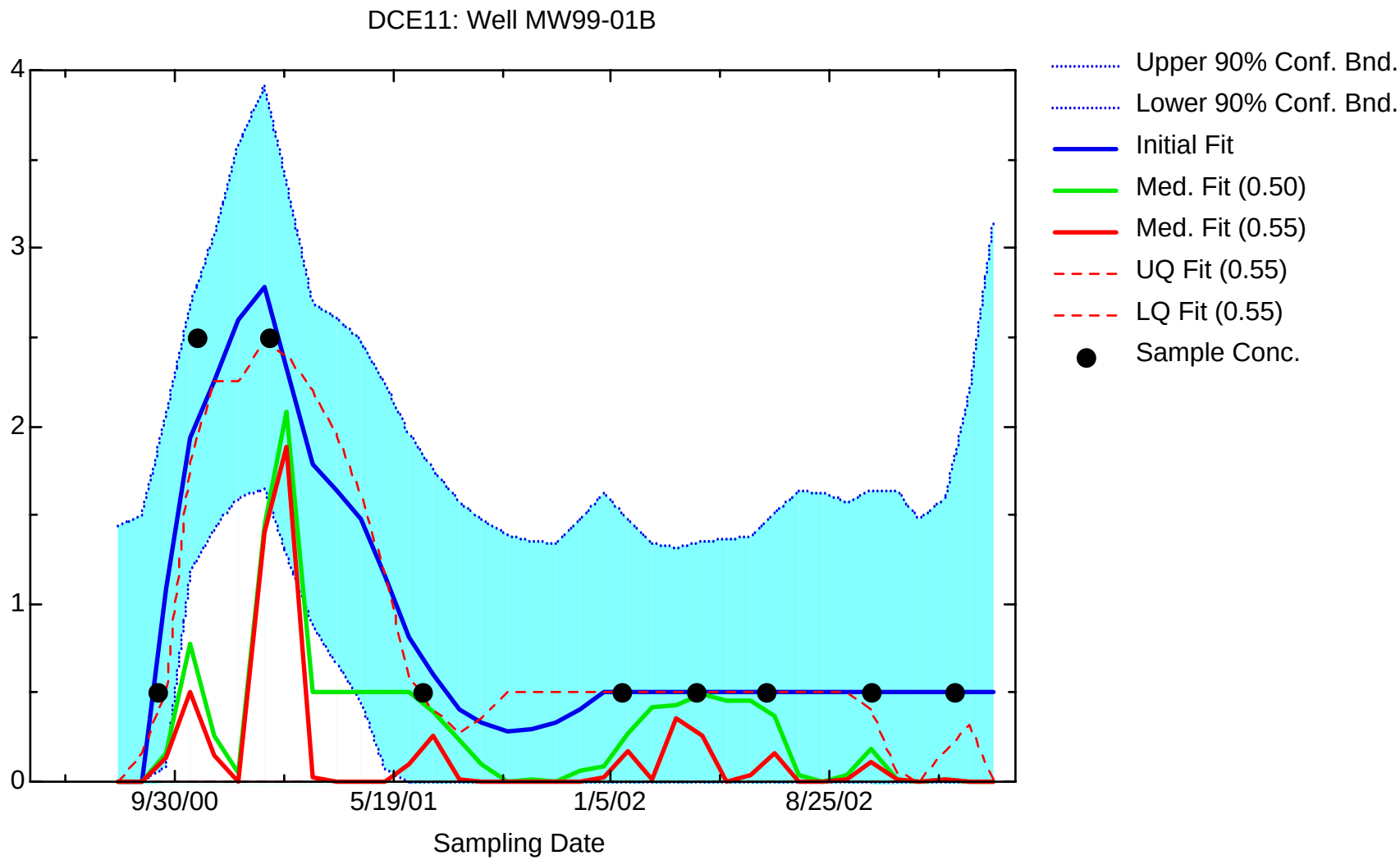

DCE11: Well MW30B
40
0
9/11/00
4/12/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.70)
Med. Fit (0.75)
UQ Fit (0.75)
LQ Fit (0.75)
Sample Conc.

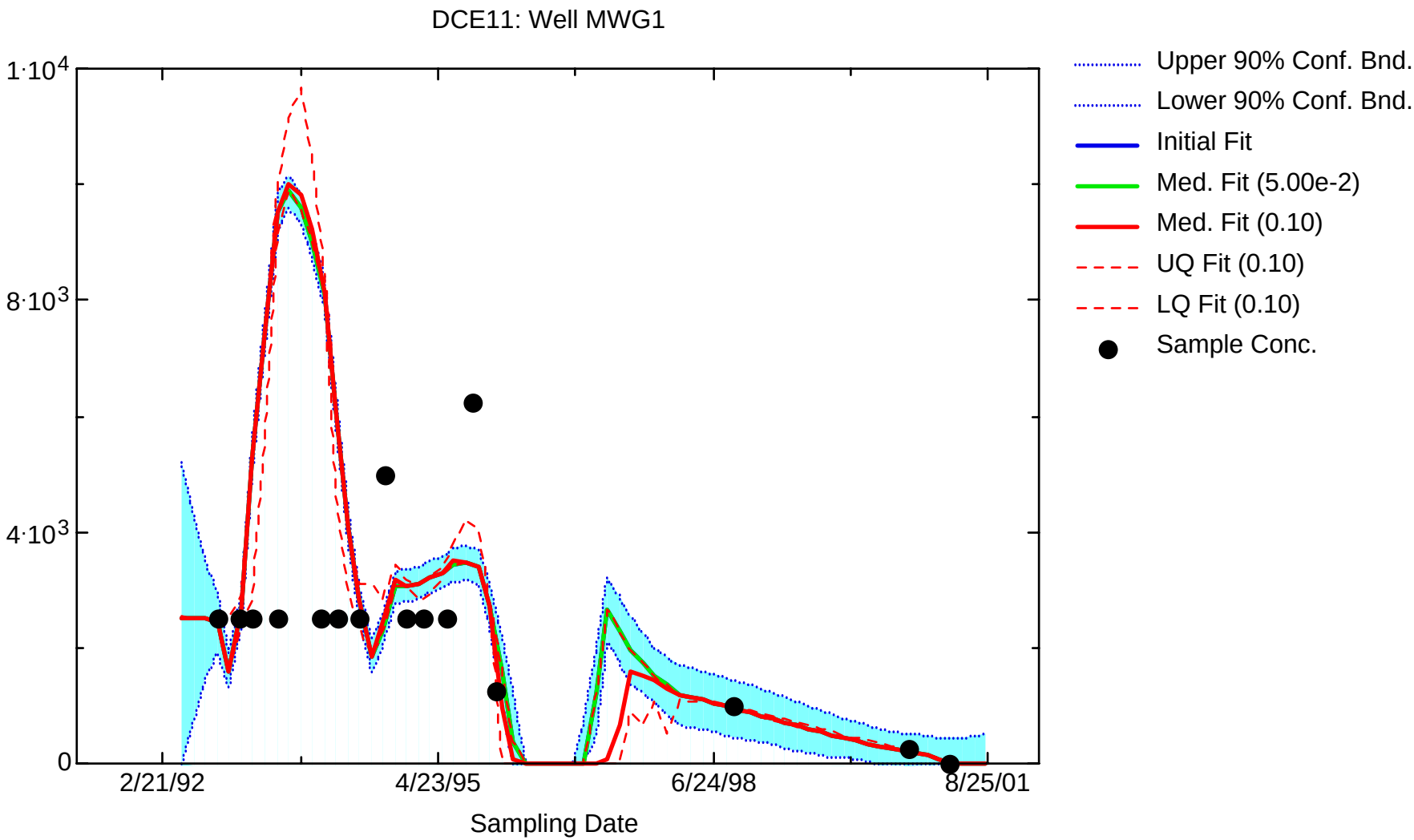

DCE11: Well MW53
350
300
250
200
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

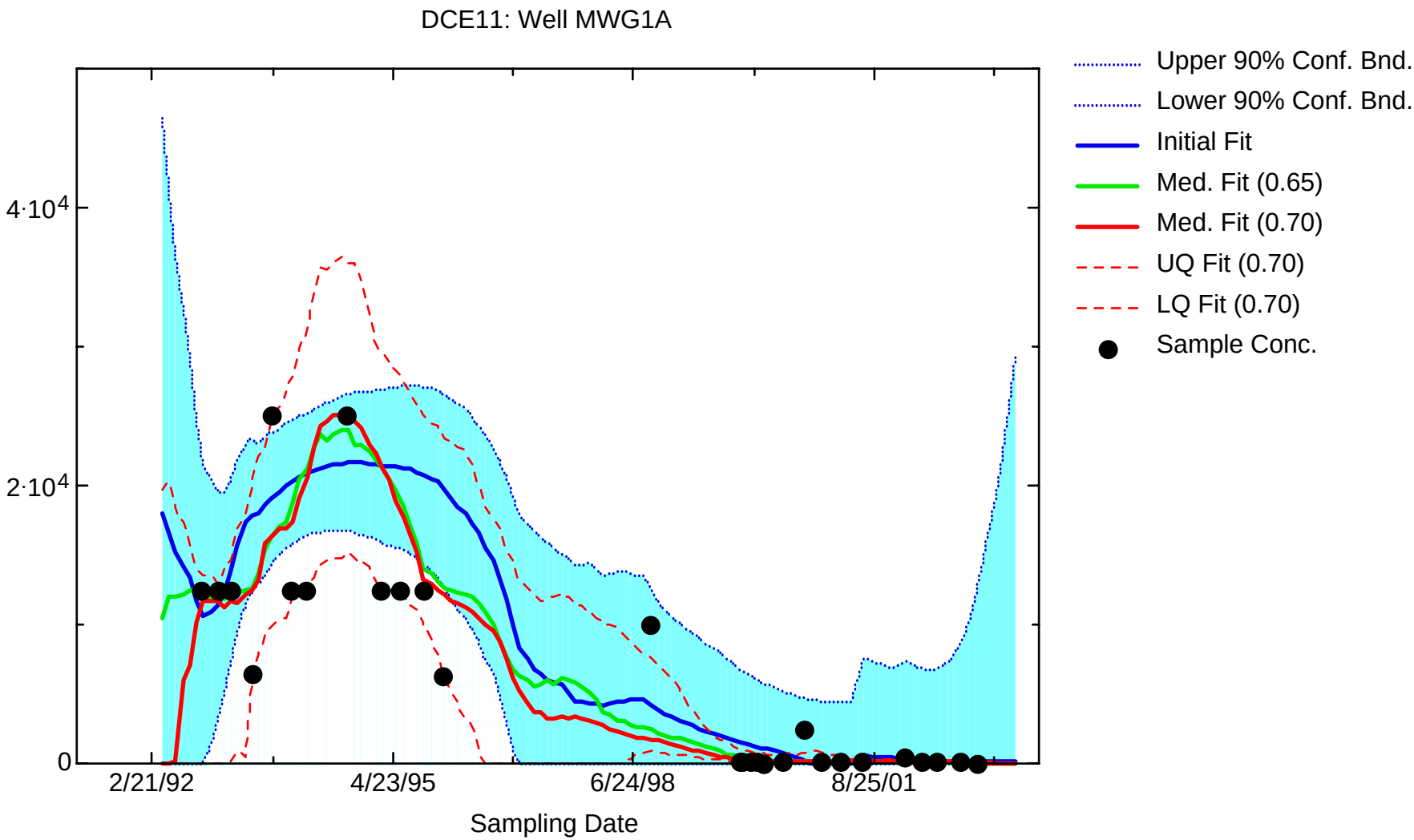

DCE11: Well MW54
200
150
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

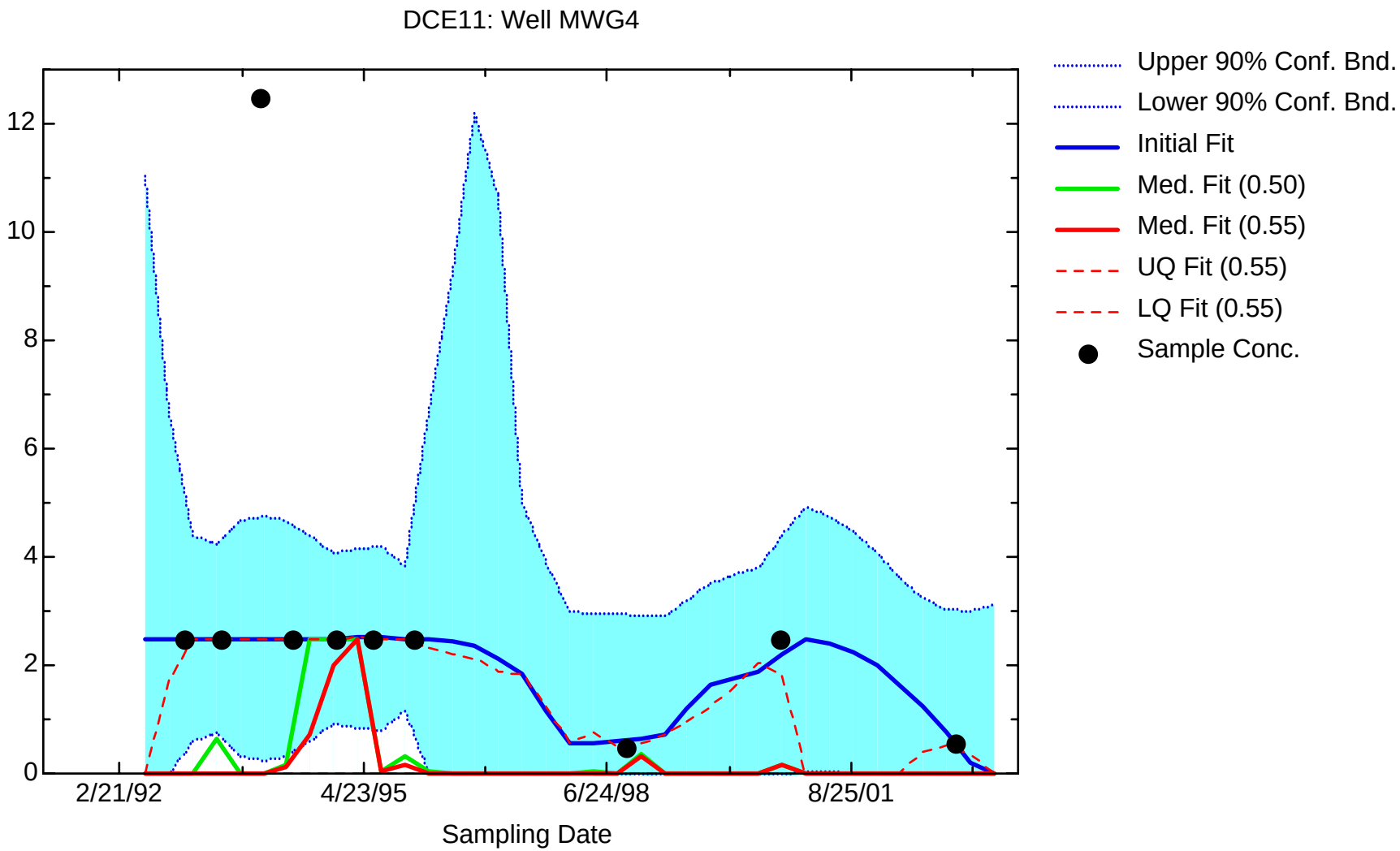

DCE11: Well MW56
600
400
200
0
9/23/93
4/24/95
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

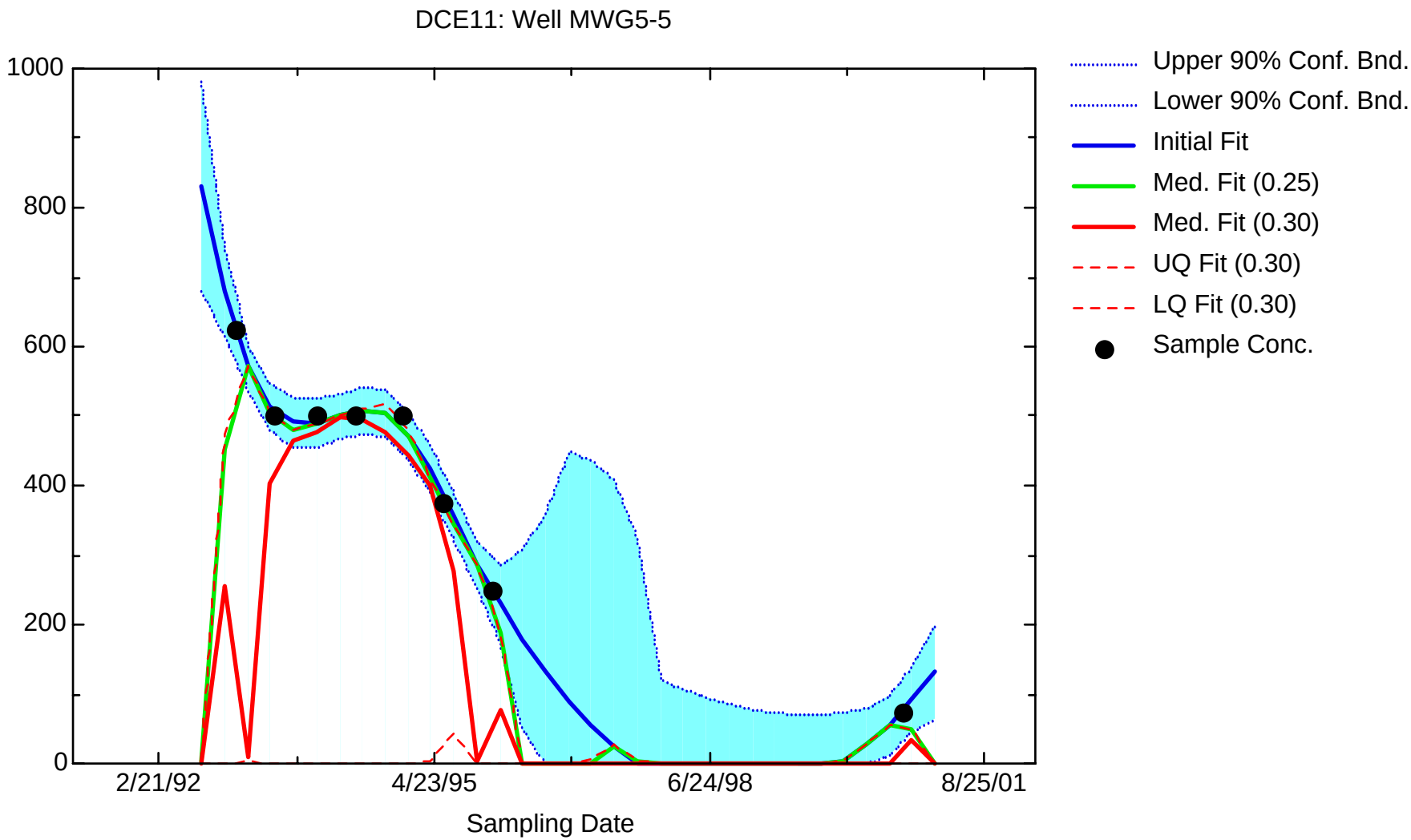

DCE11: Well MW99-01A
4
3
2
1
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

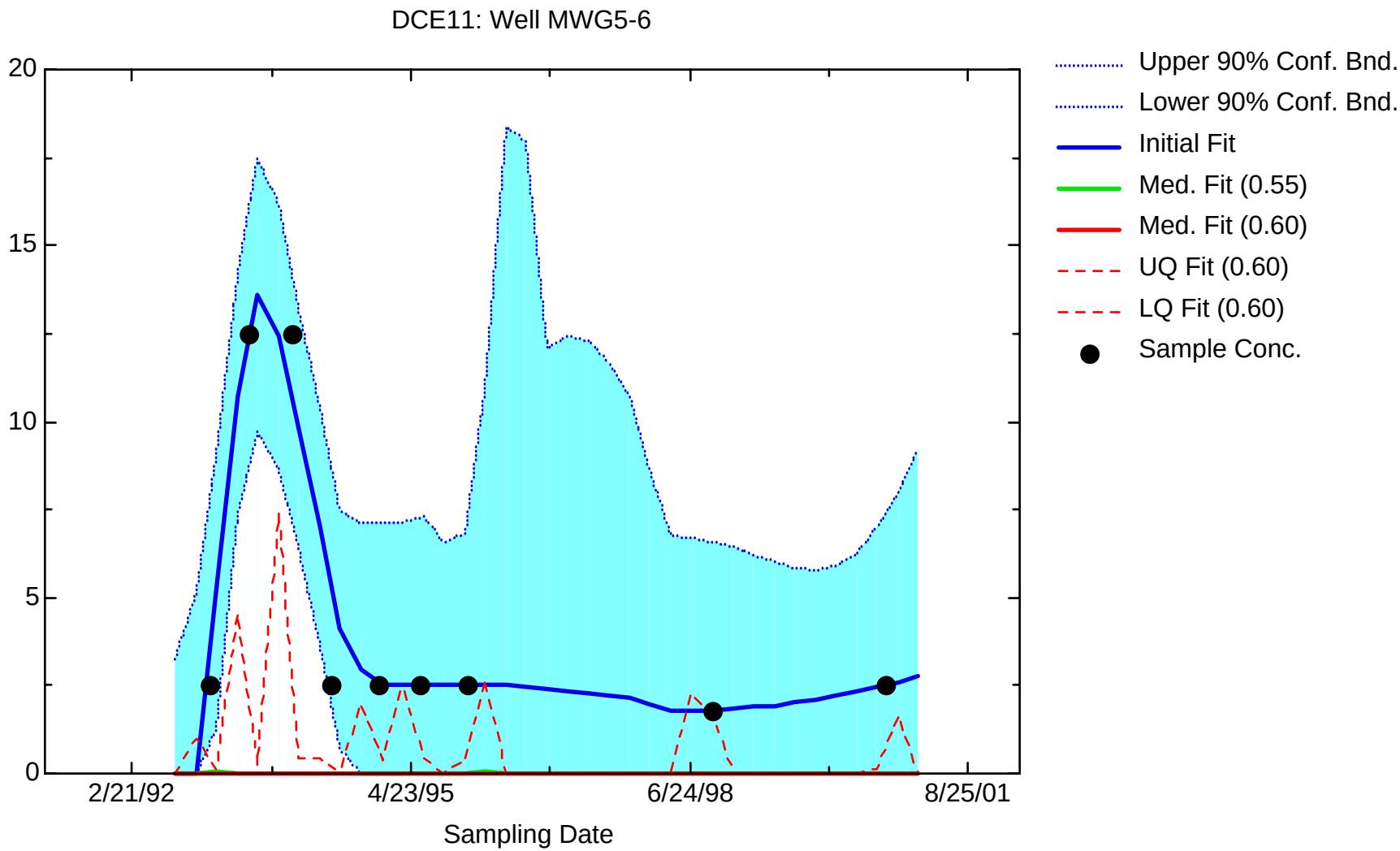

DCE11: Well MW99-01B
4
3
2
1
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

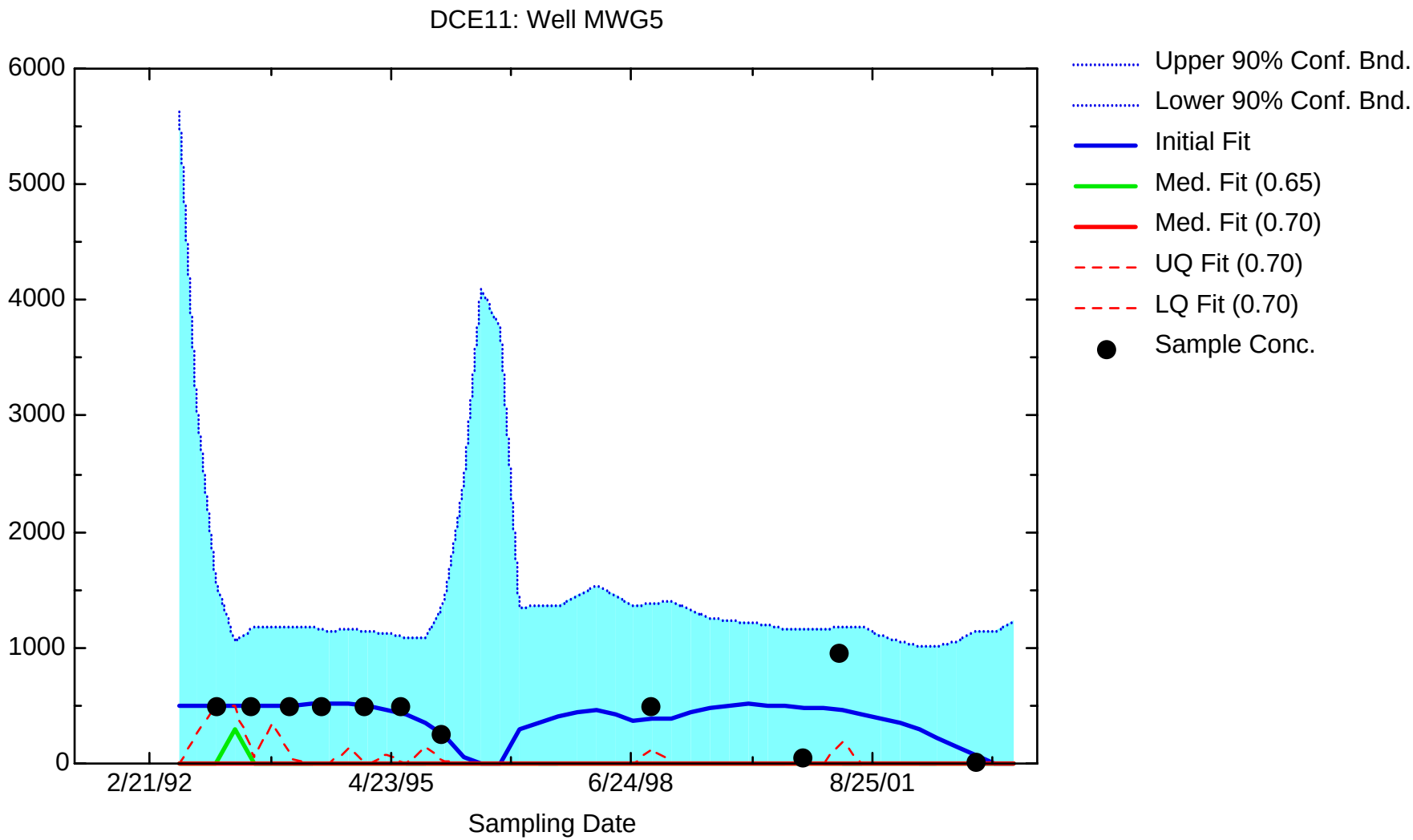

DCE11: Well MWG1
1·10^4
8·10^3
4·10^3
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

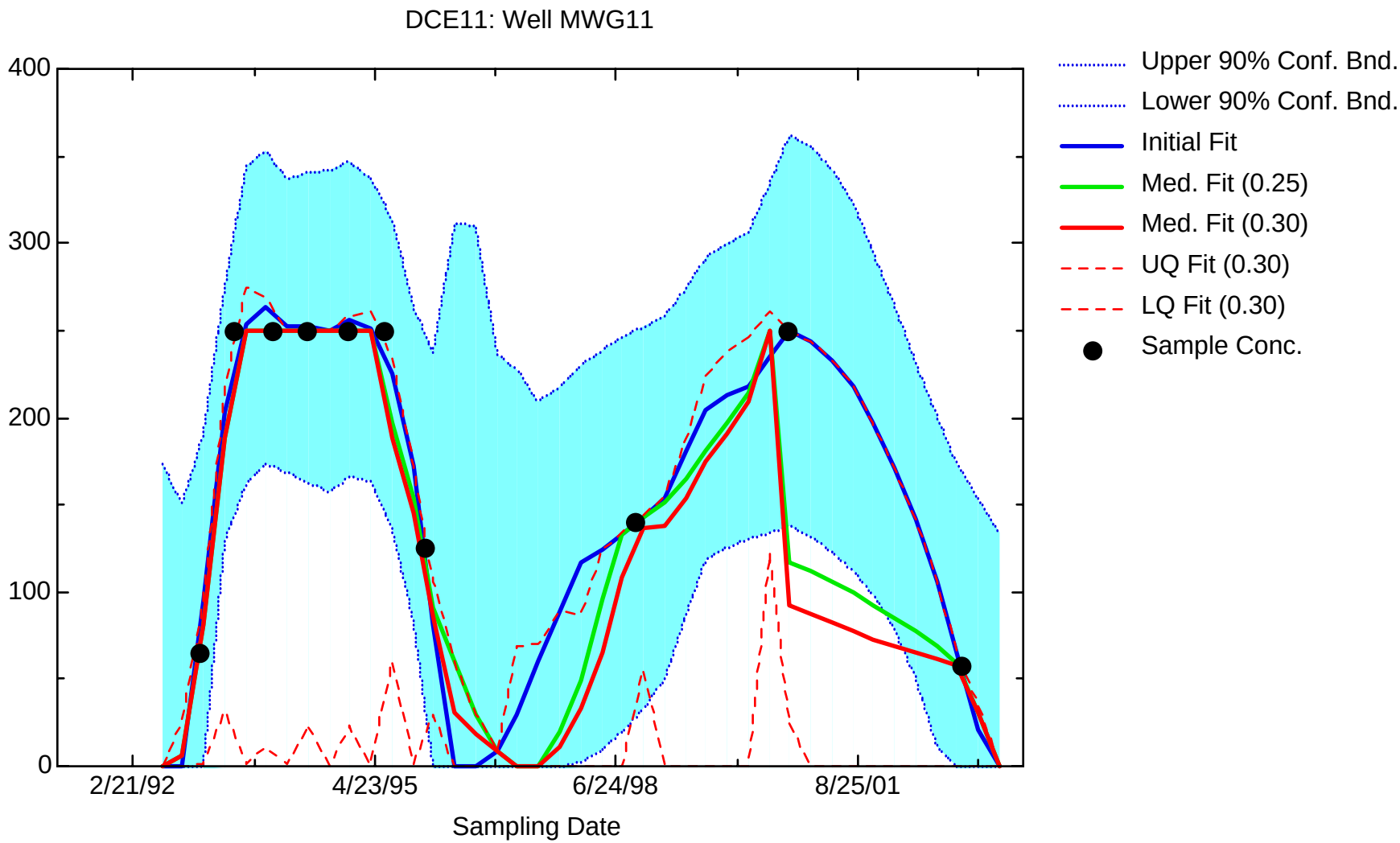

DCE11: Well MWG1A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
4·10^4
2·10^4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

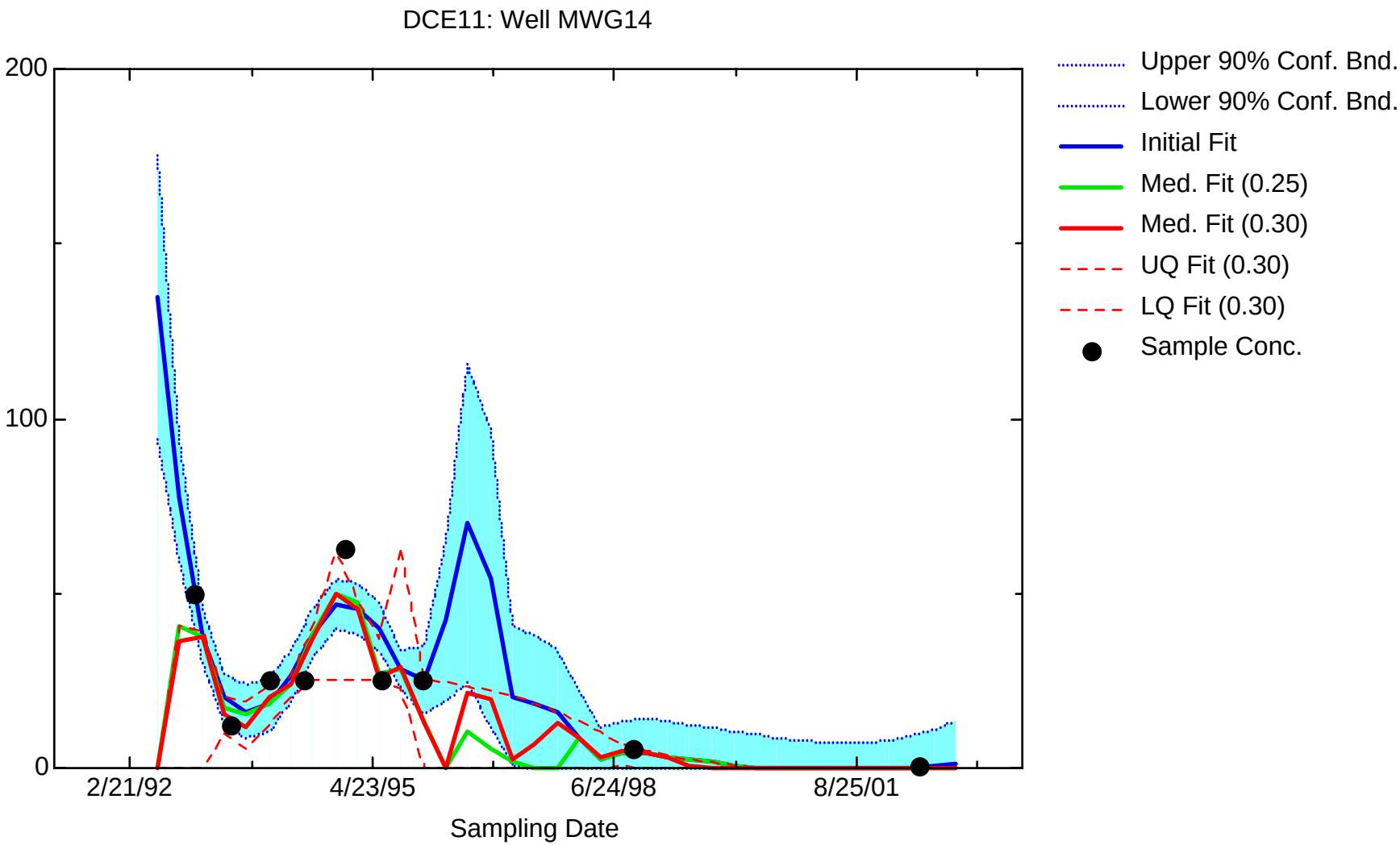

DCE11: Well MWG4
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.
0
2
4
6
8
10
12
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

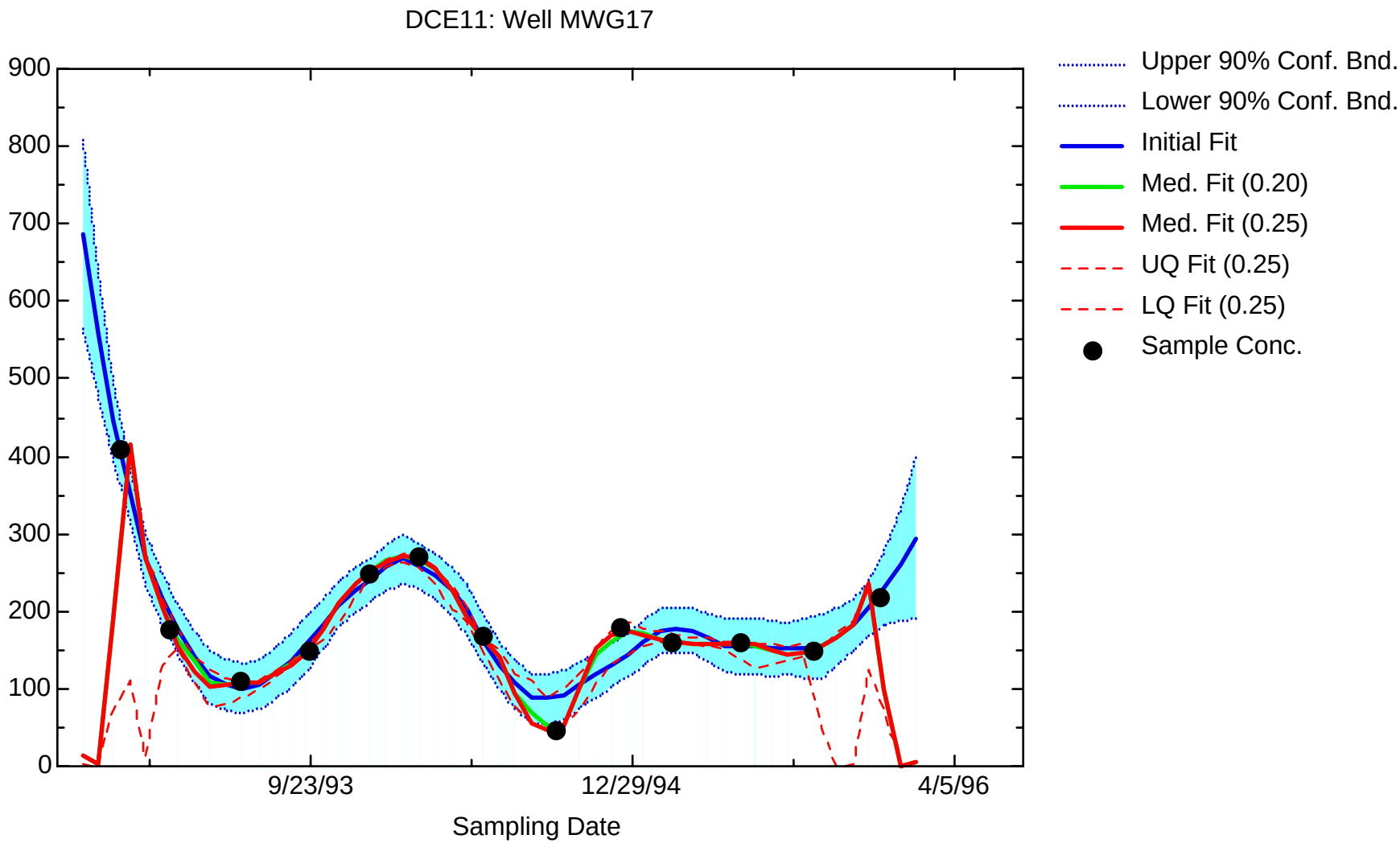

DCE11: Well MWG5-5
1000
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

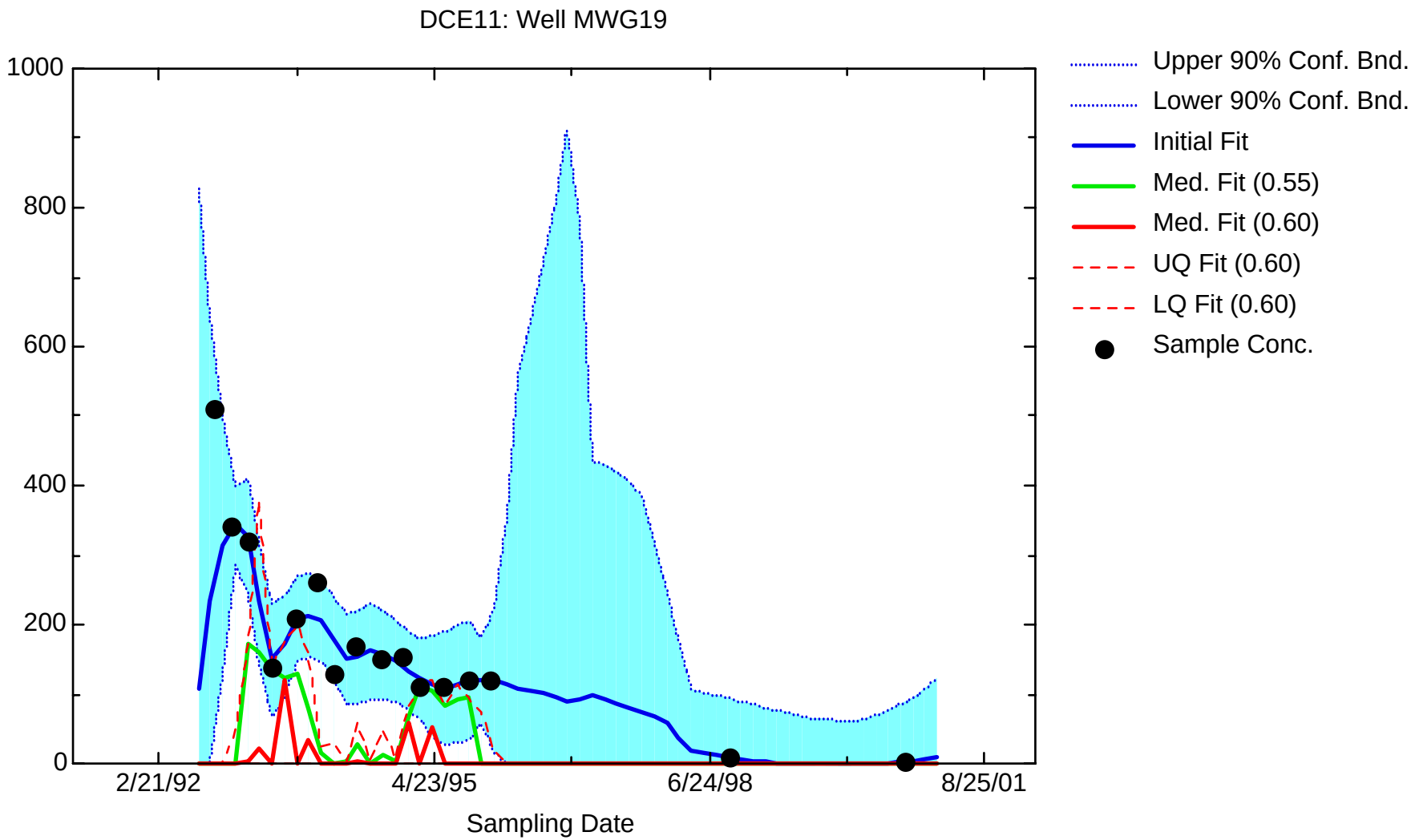

DCE11: Well MWG5-6
20
15
10
5
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

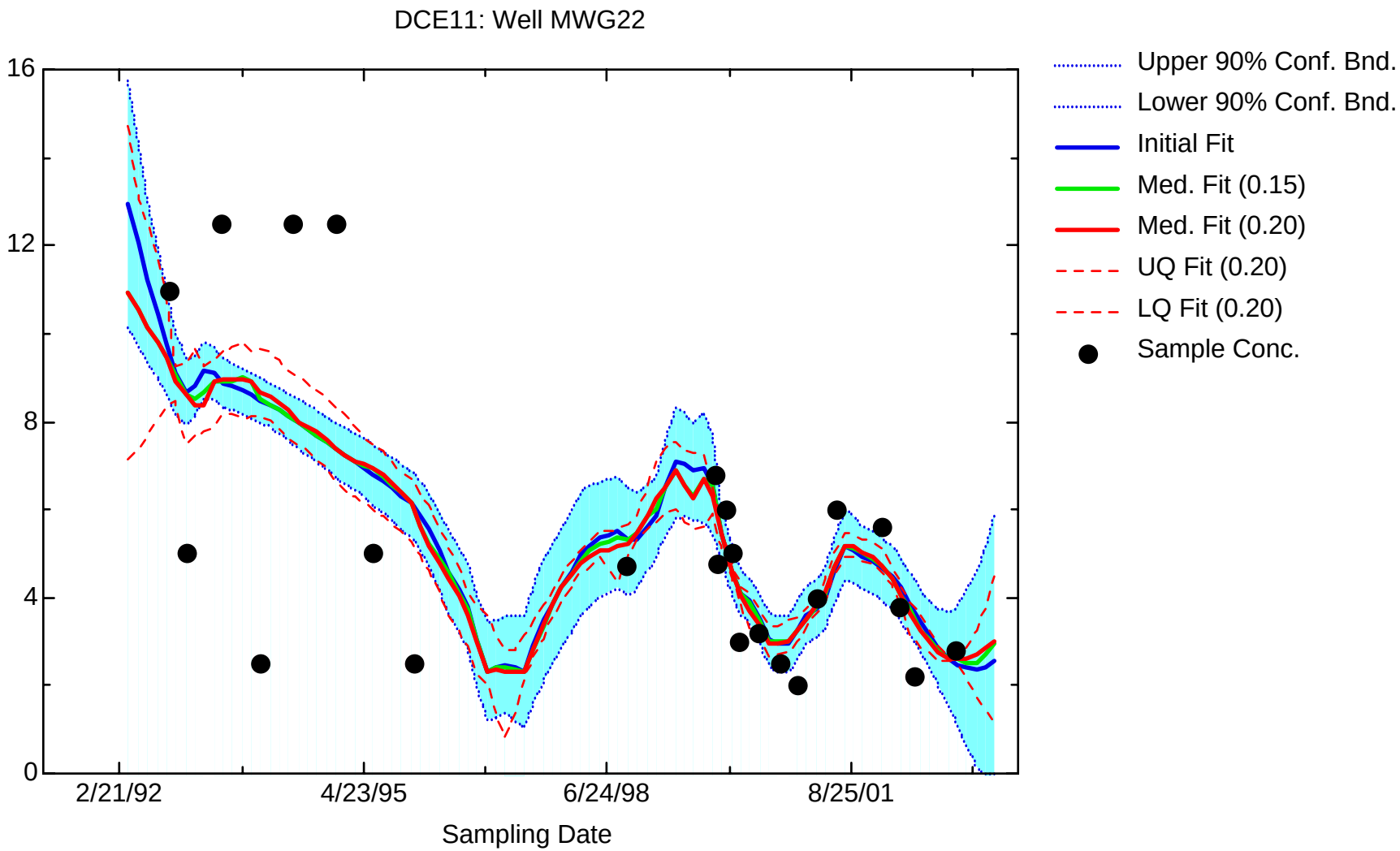

DCE11: Well MWG5
6000
5000
4000
3000
2000
1000
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

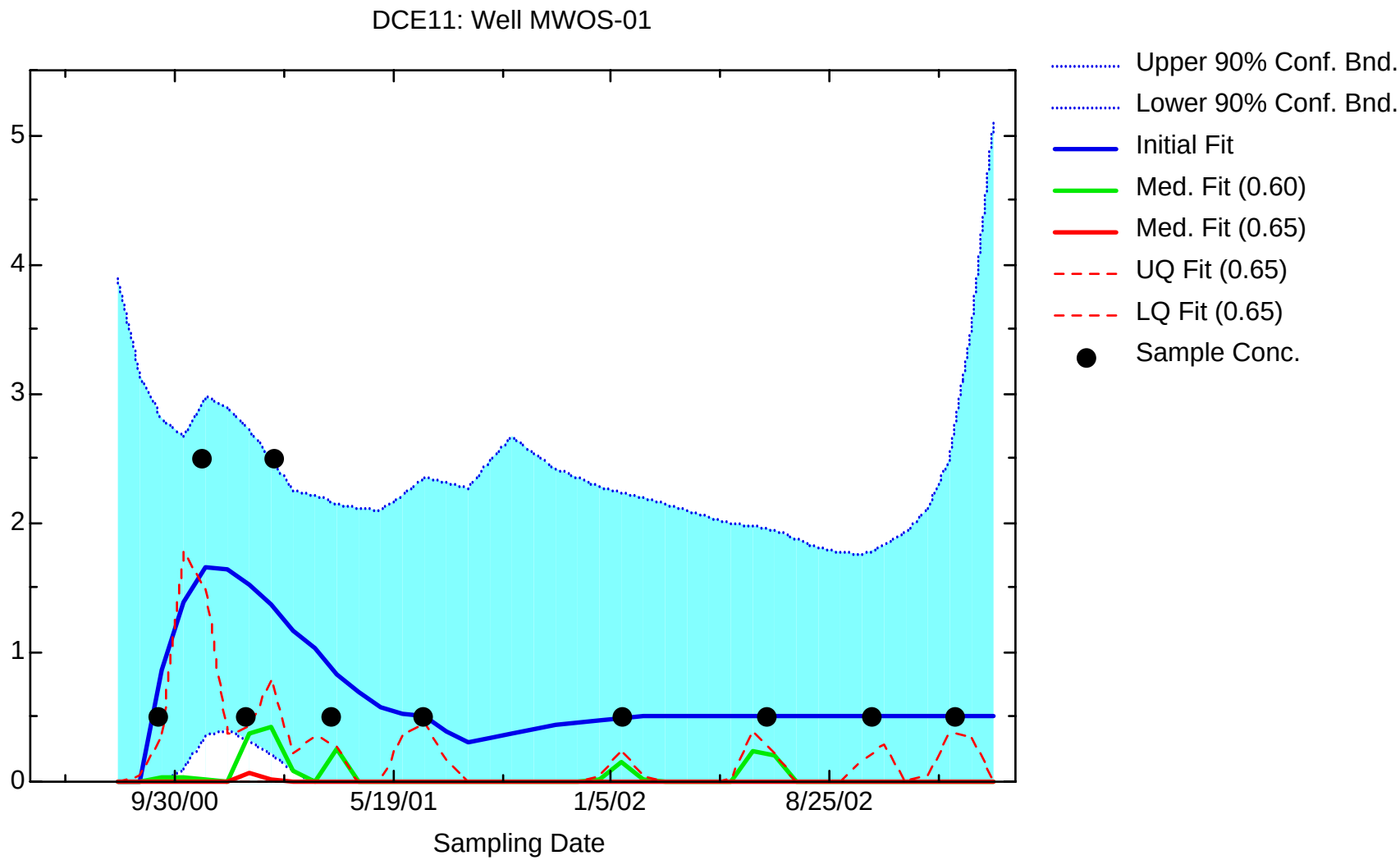

DCE11: Well MWG11
400
300
200
100
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

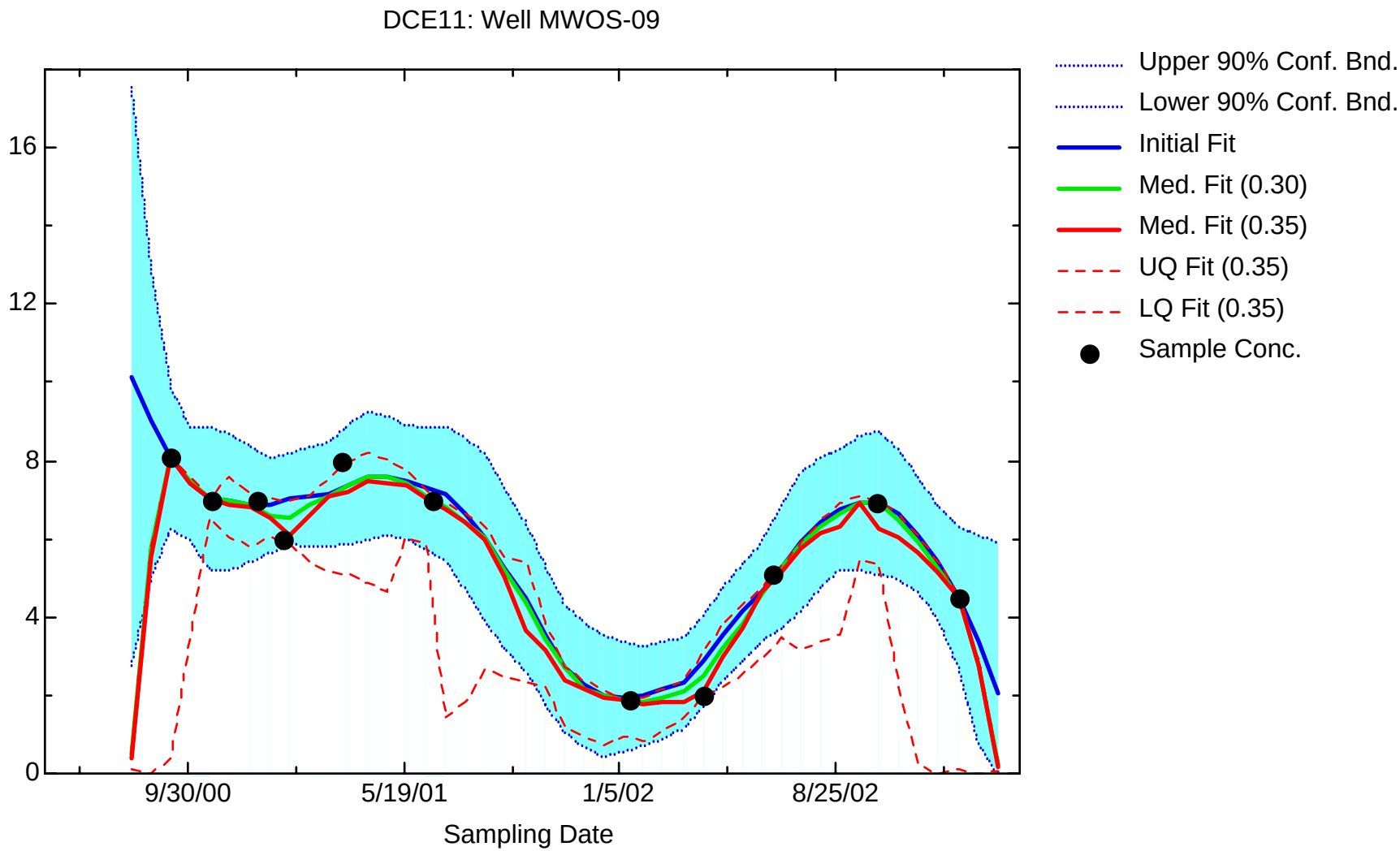

DCE11: Well MWG14
200
100
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

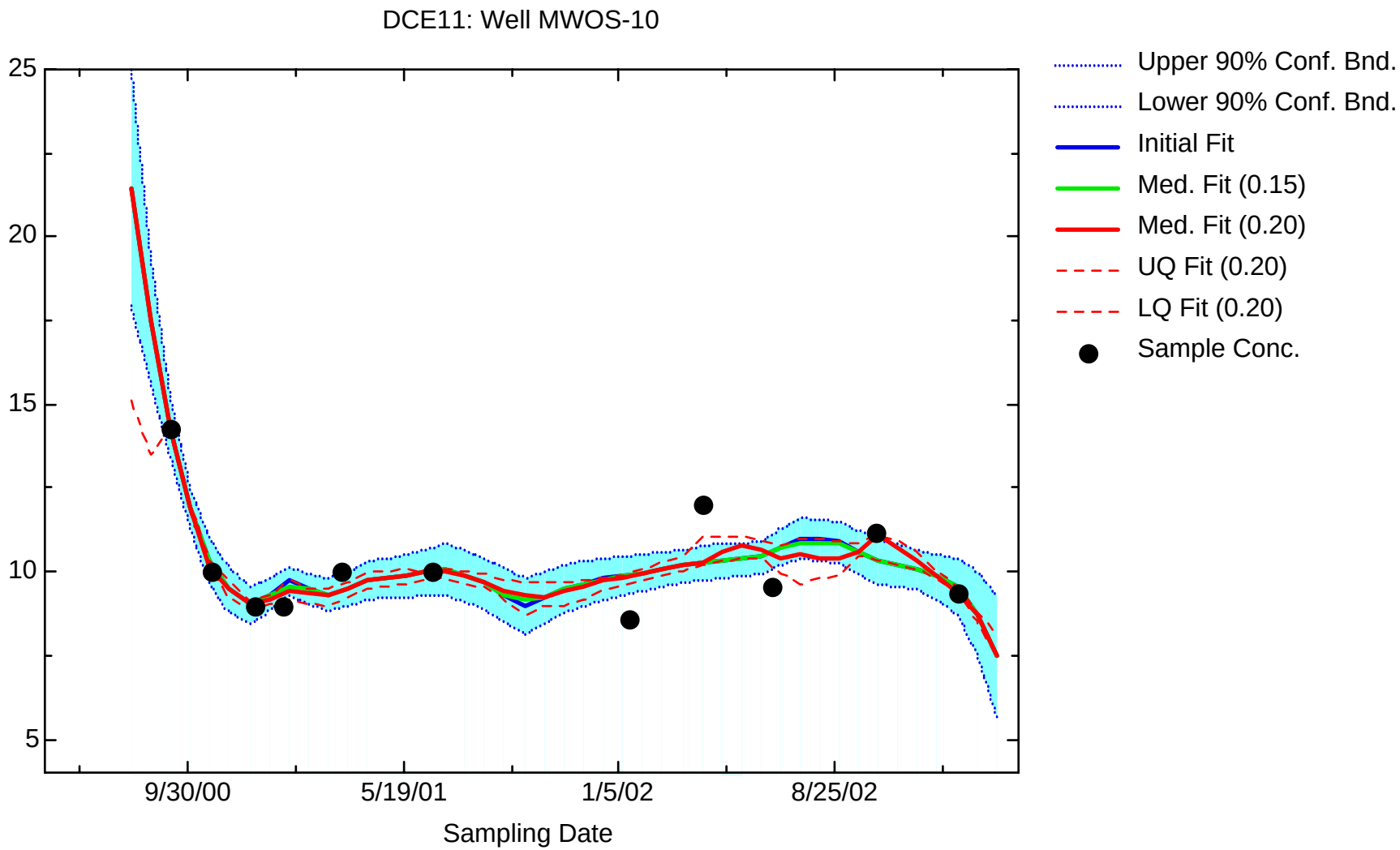

DCE11: Well MWG17
900
800
700
600
500
400
300
200
100
0
9/23/93
12/29/94
4/5/96
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

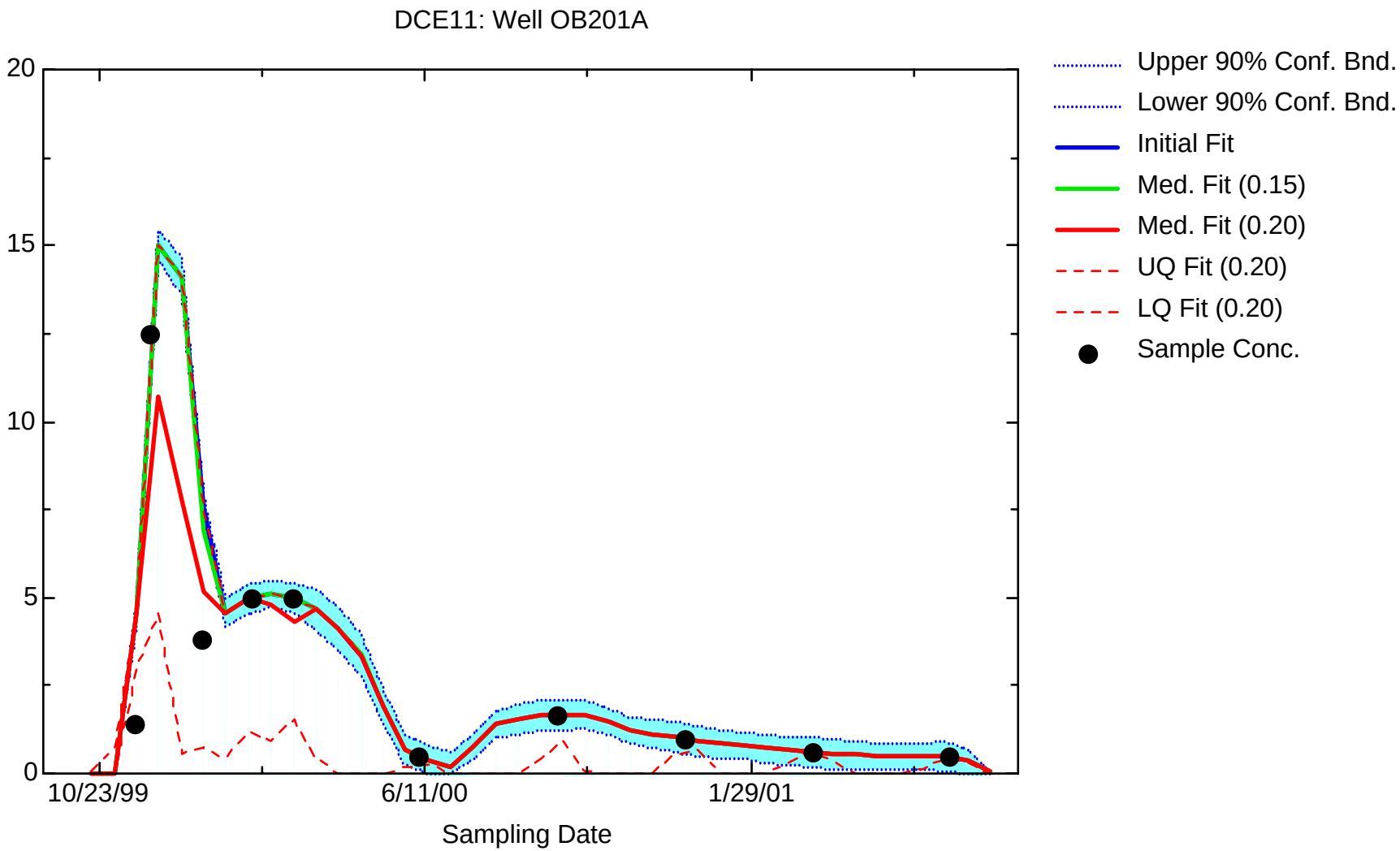

DCE11: Well MWG19
1000
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

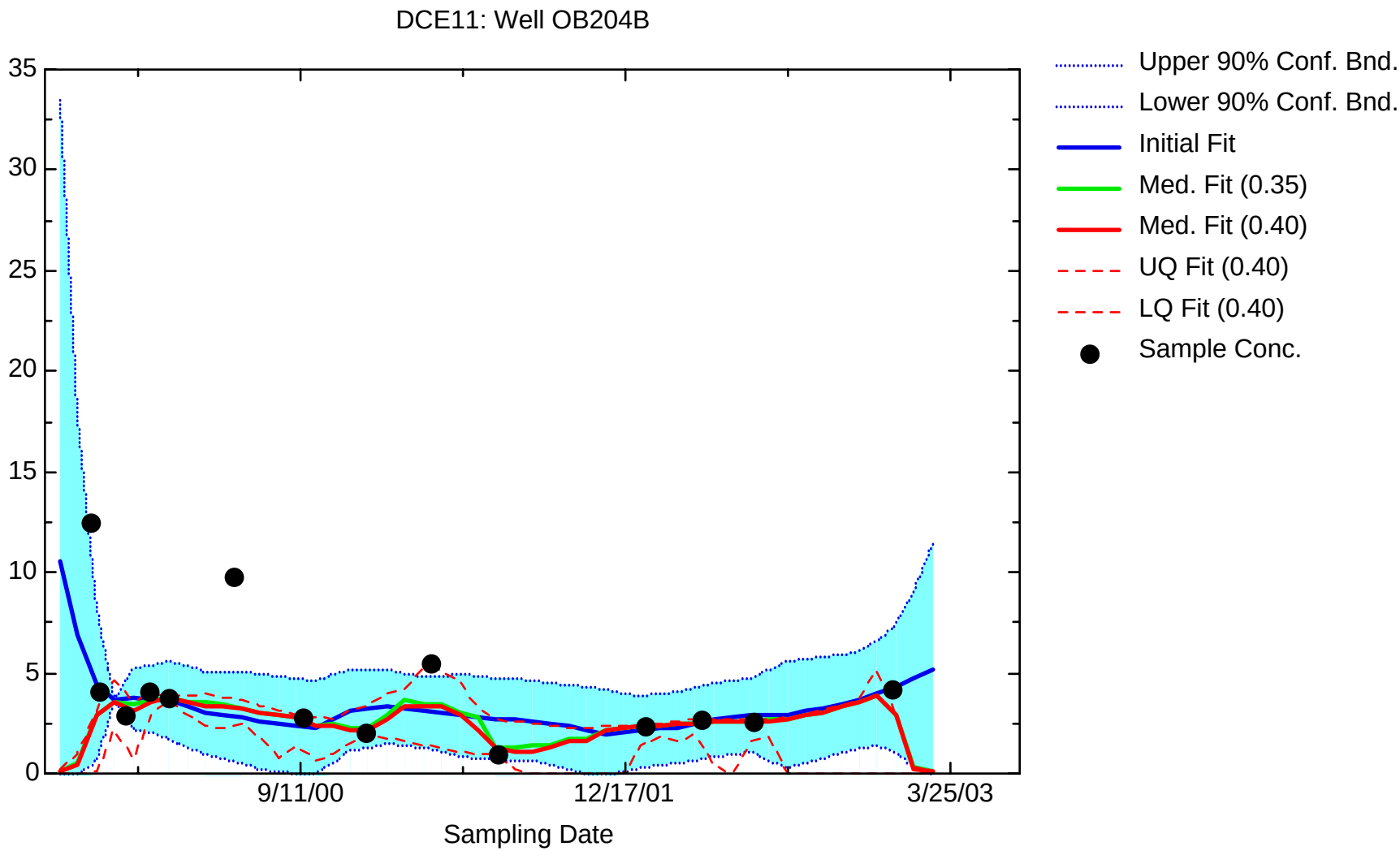

DCE11: Well MWG22
16
12
8
4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

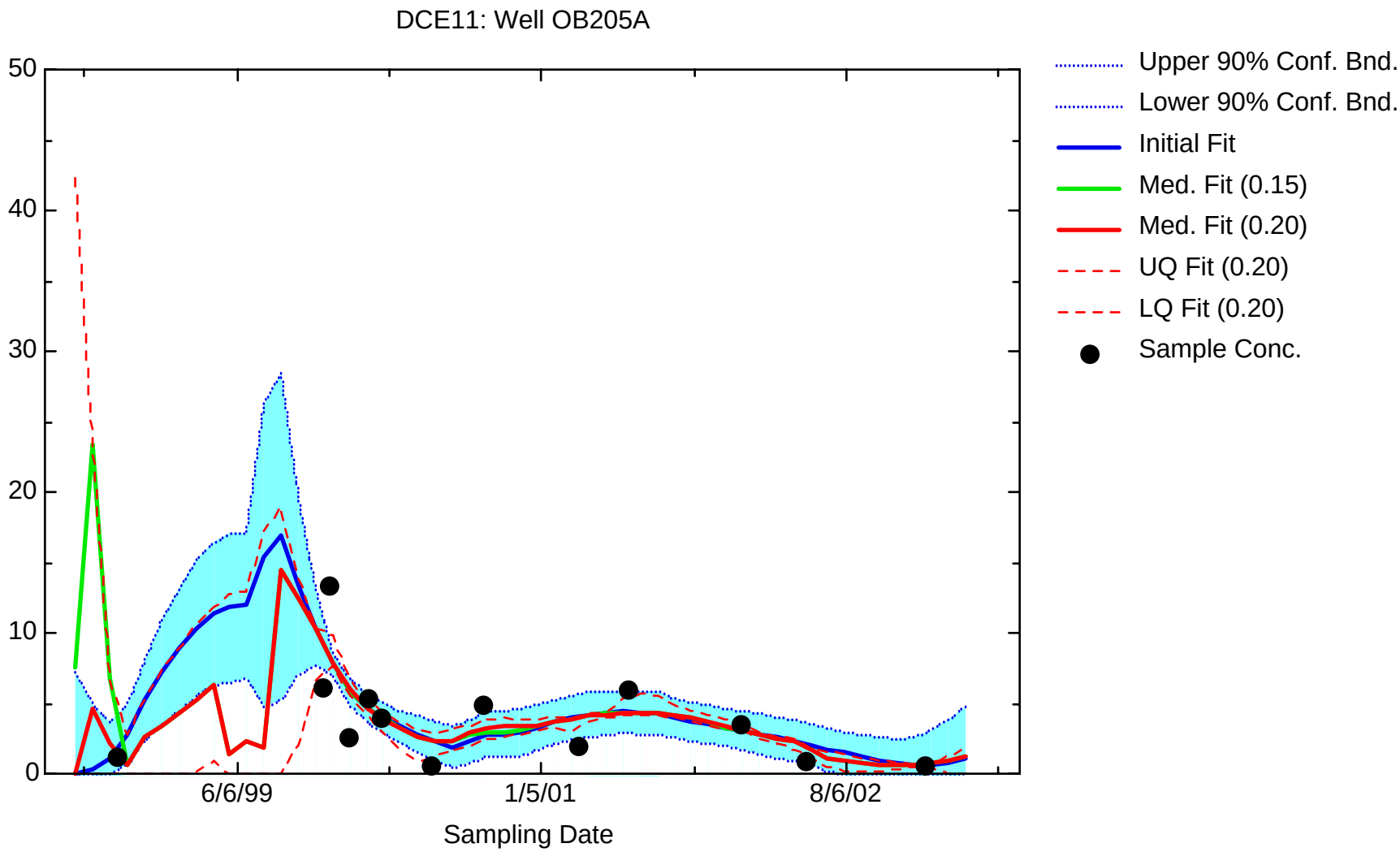

DCE11: Well MWOS-01
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.
0
1
2
3
4
5
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

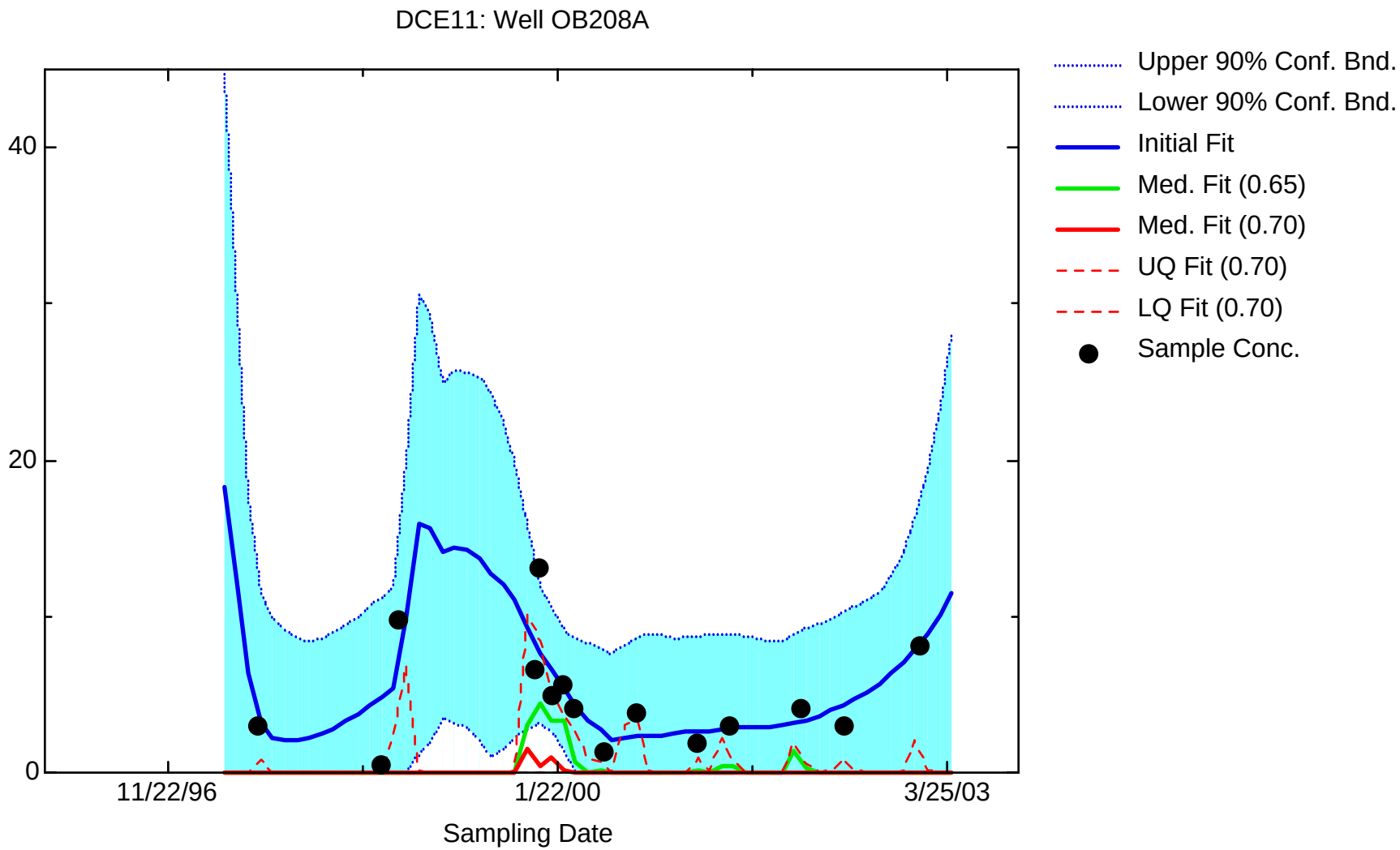

DCE11: Well MWOS-09
16
12
8
4
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

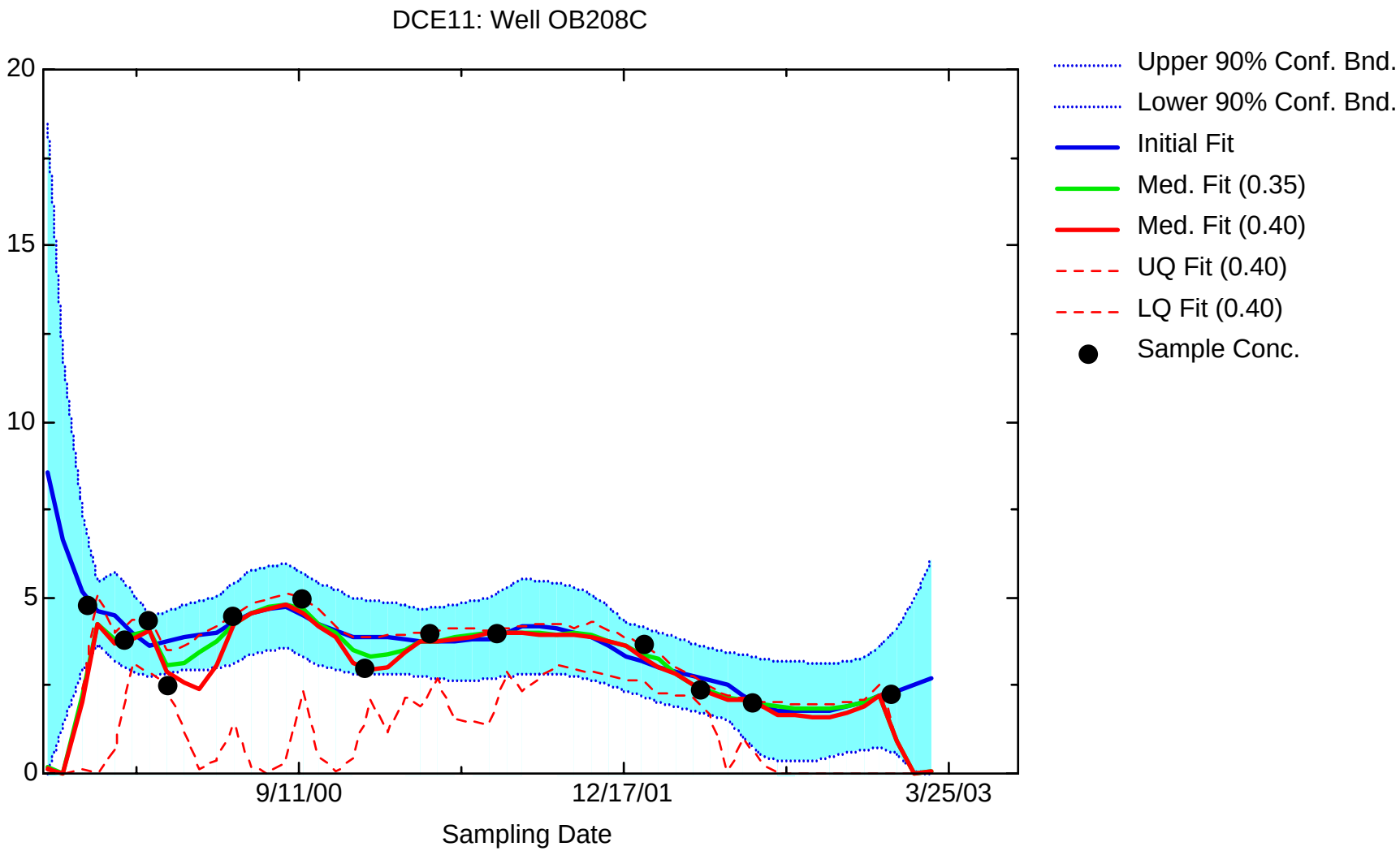

DCE11: Well MWOS-10
25
20
15
10
5
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

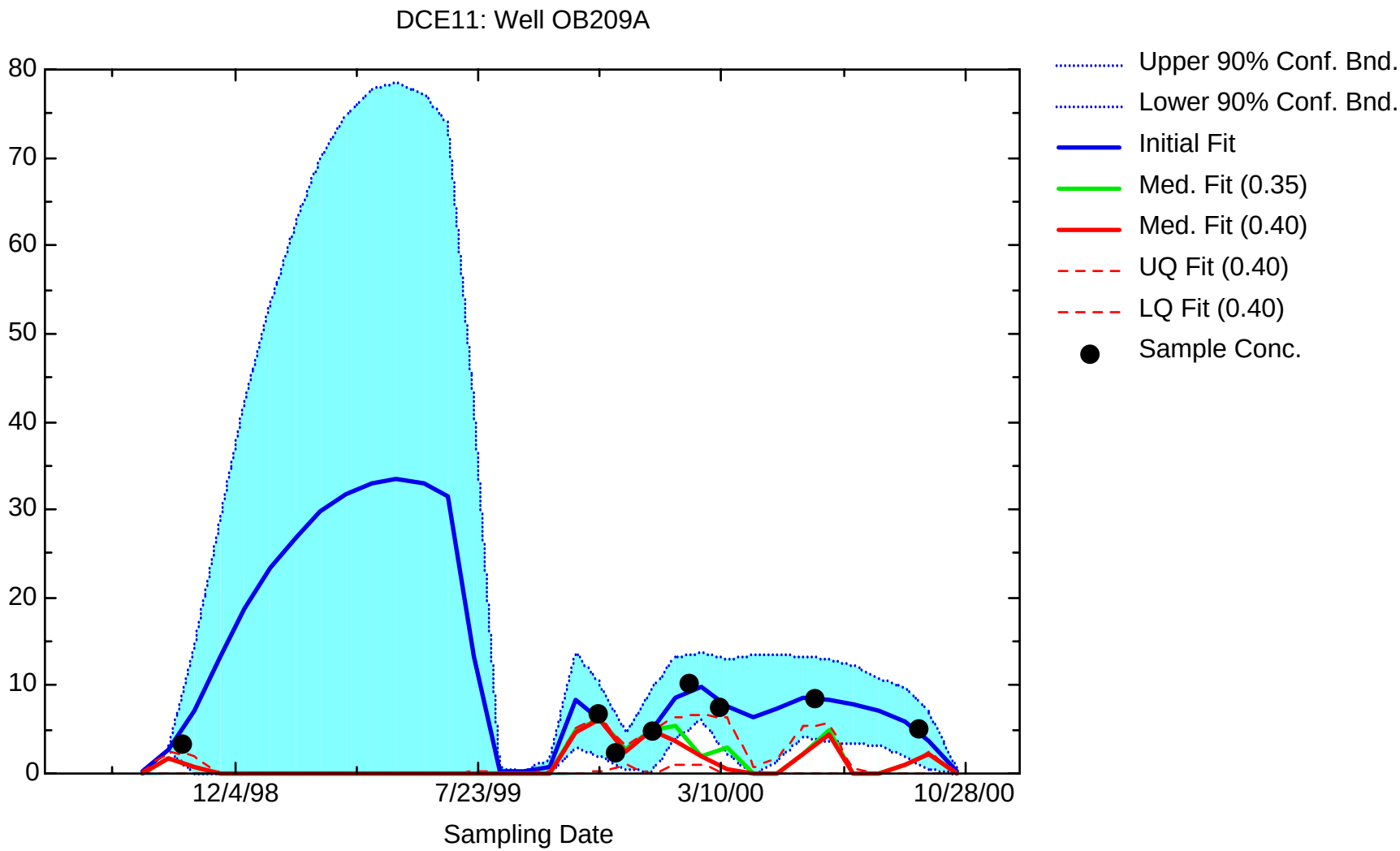

DCE11: Well OB201A
20
15
10
5
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

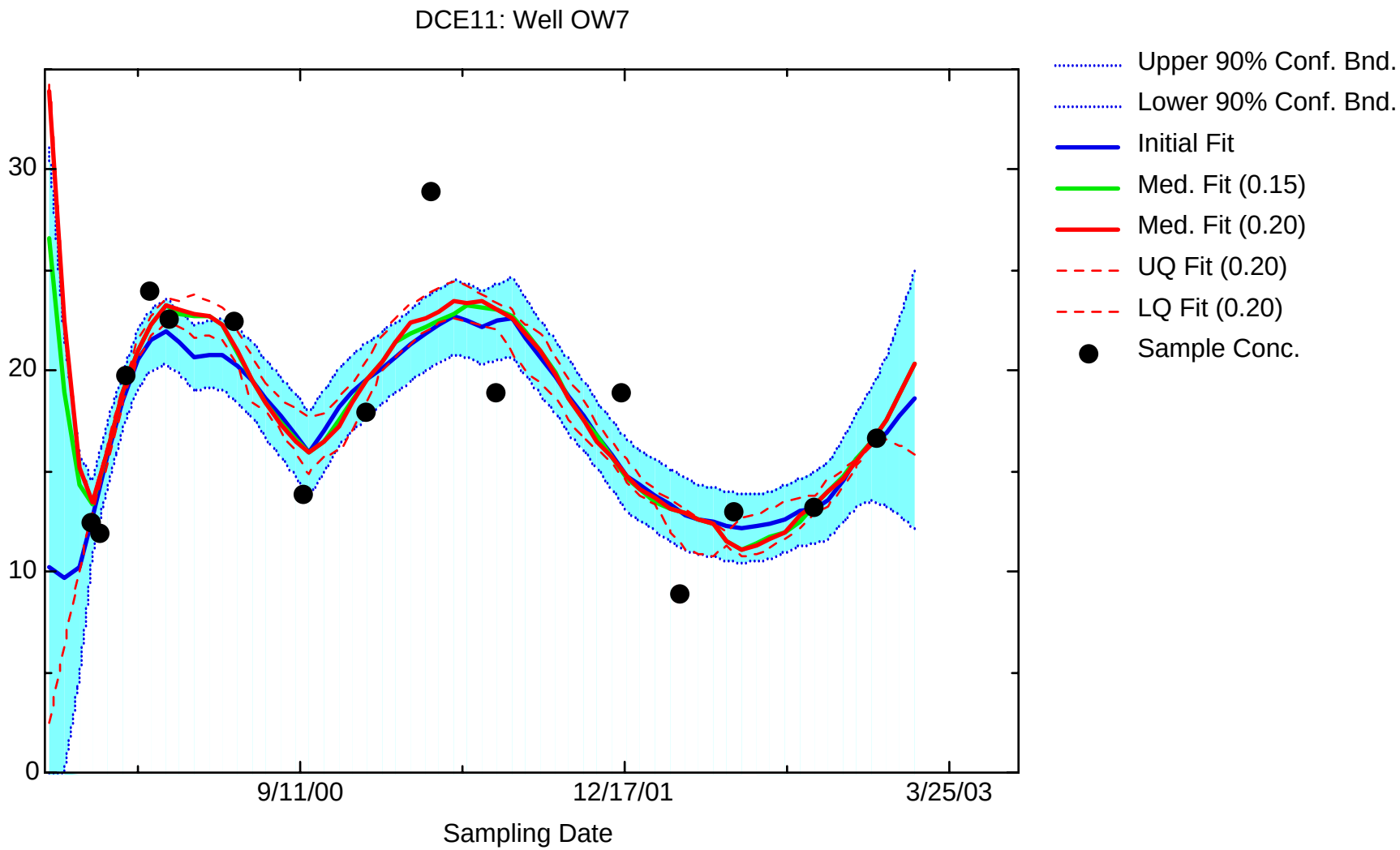

DCE11: Well OB204B
35
30
25
20
15
10
5
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

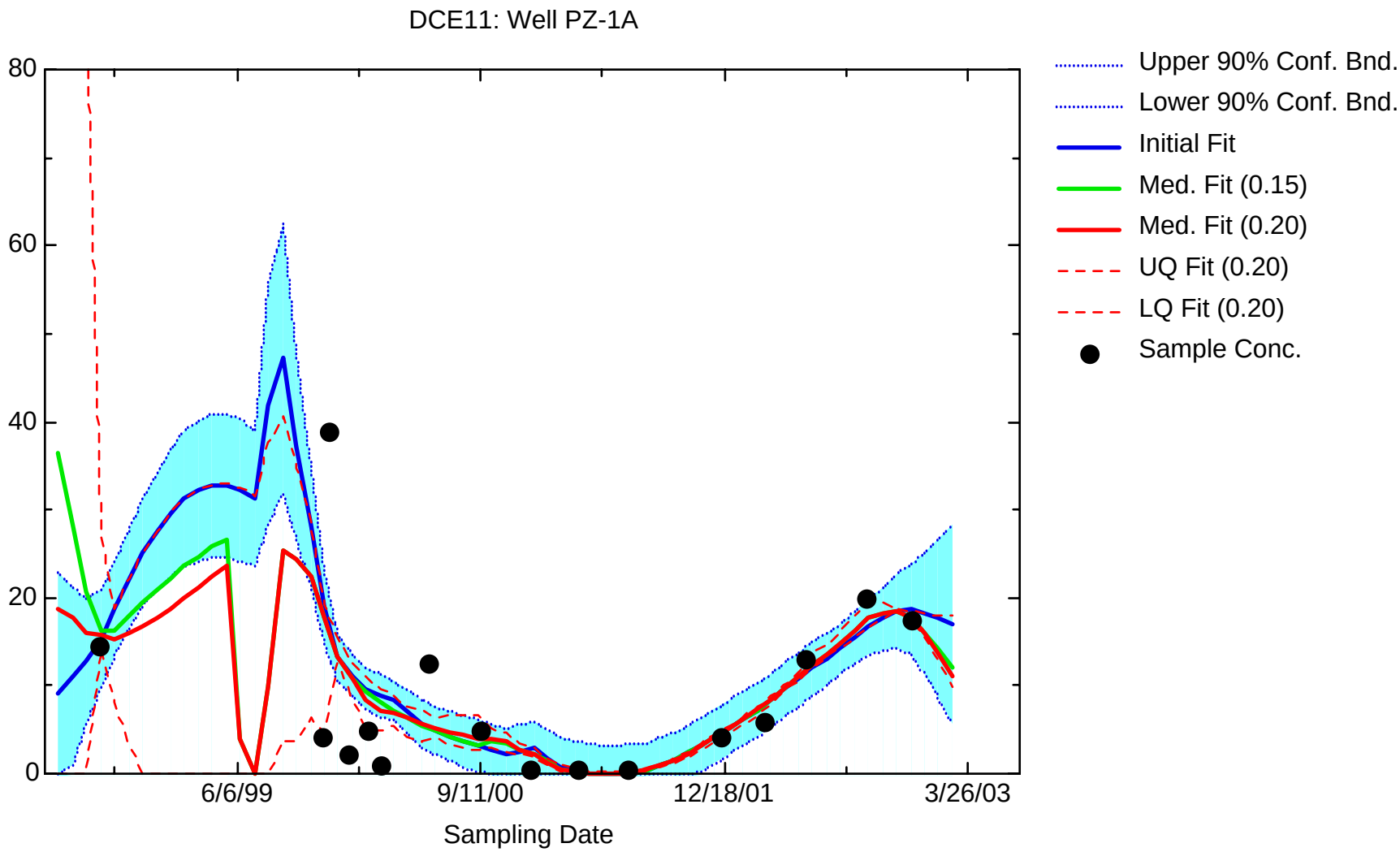

DCE11: Well OB205A
50
40
30
20
10
0
6/6/99
1/5/01
8/6/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

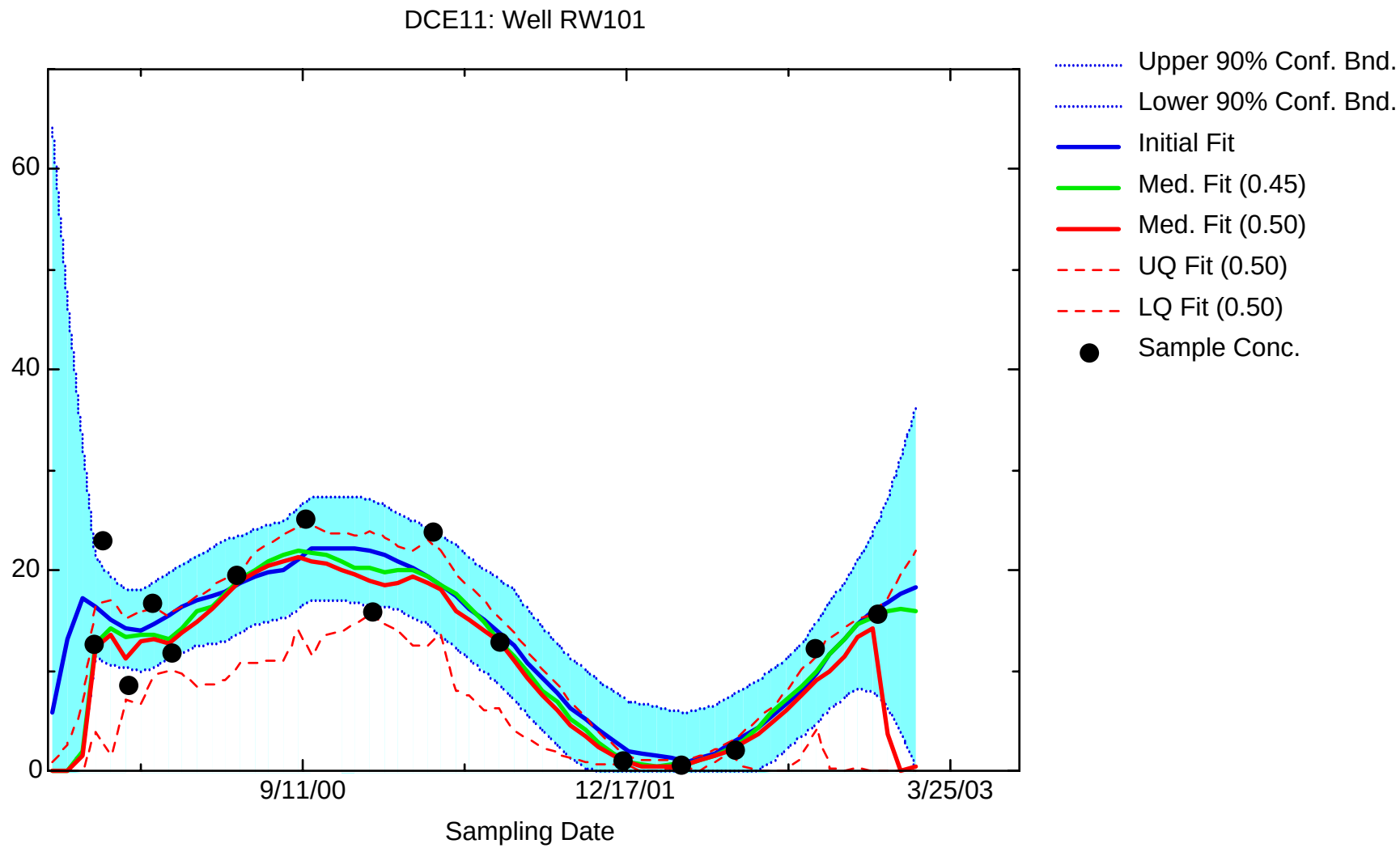

DCE11: Well OB208A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
40
20
0
11/22/96
1/22/00
3/25/03
Sampling Date

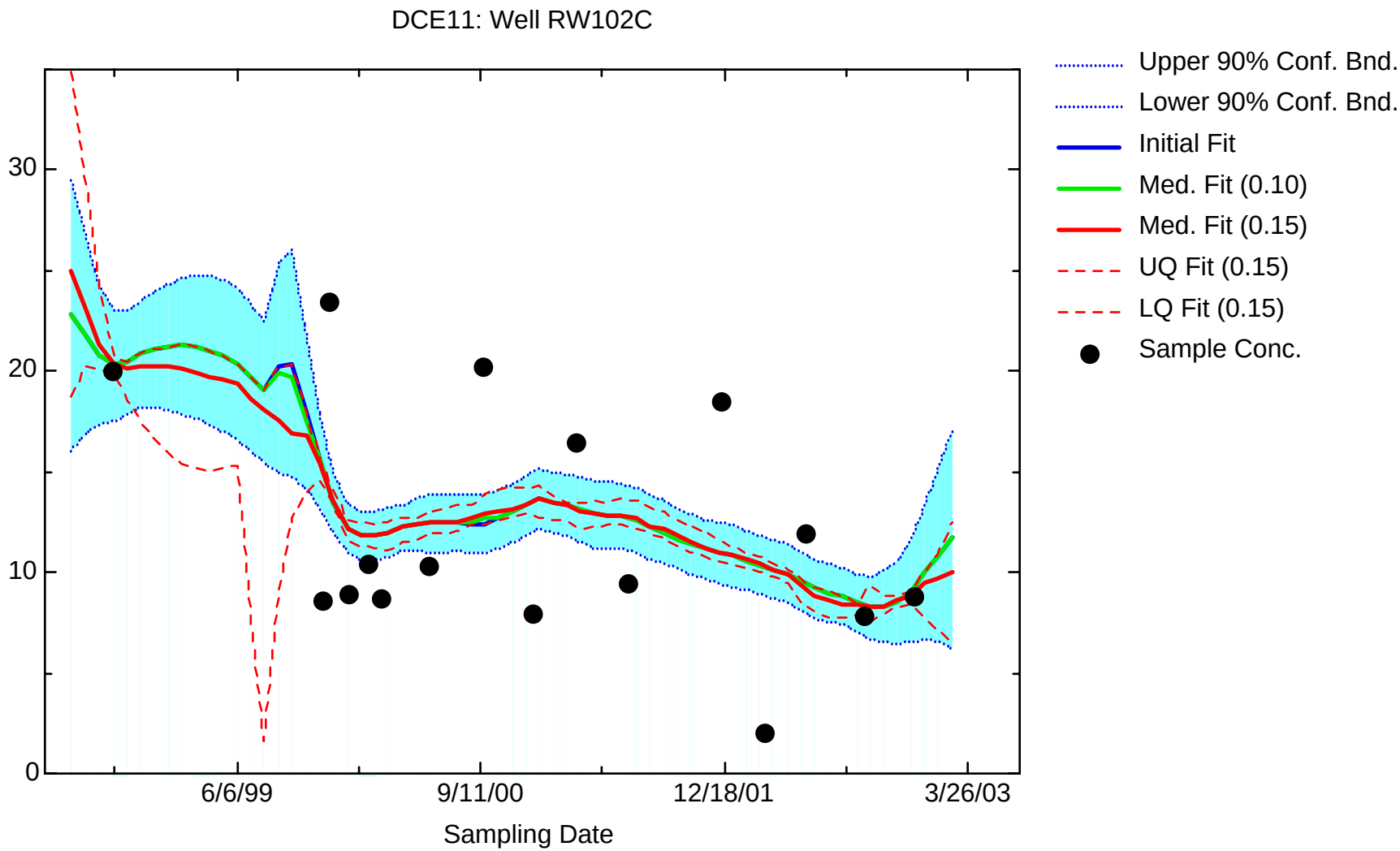

DCE11: Well OB208C
20
15
10
5
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

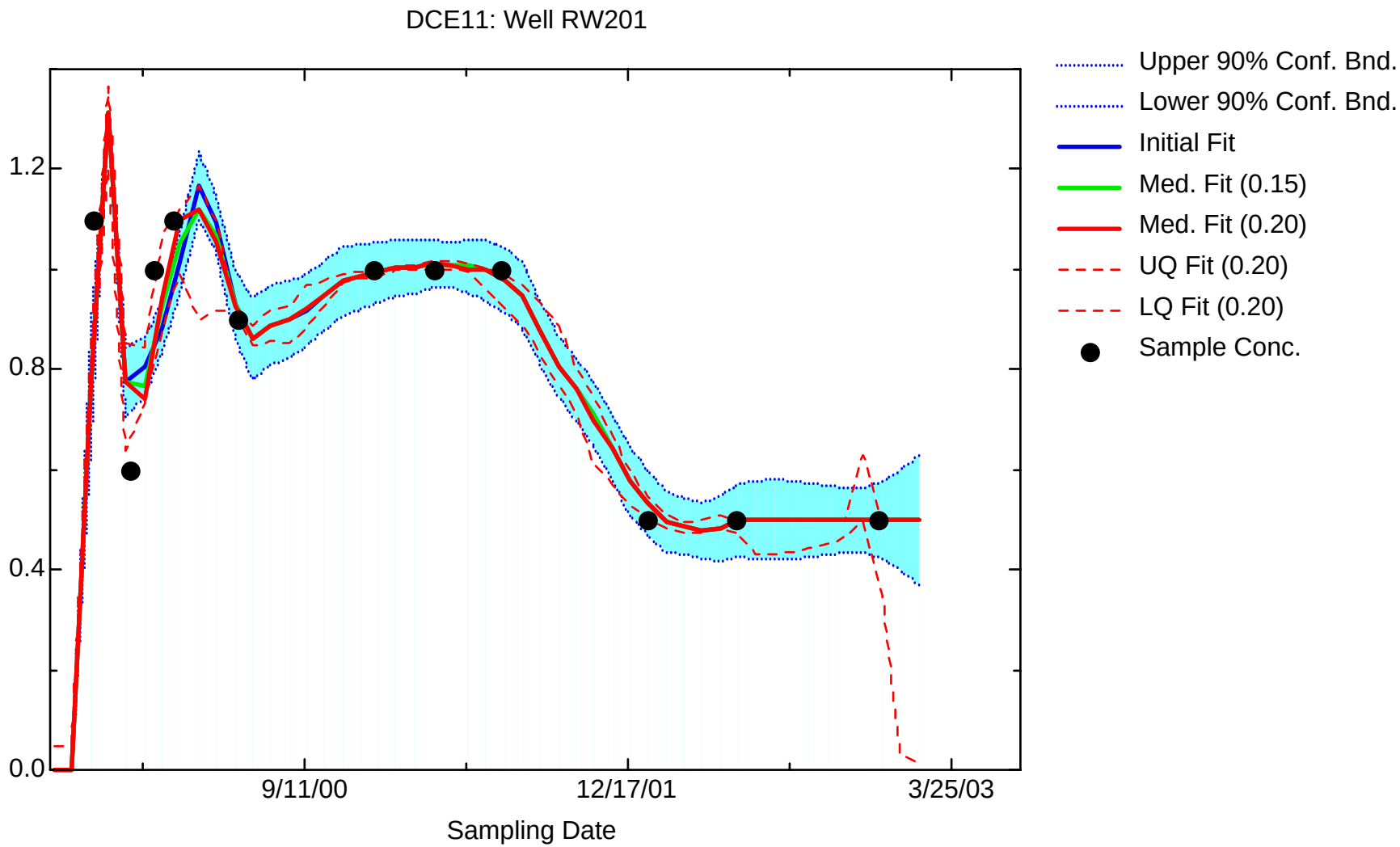

DCE11: Well OB209A
80
70
60
50
40
30
20
10
0
12/4/98
7/23/99
3/10/00
10/28/00
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

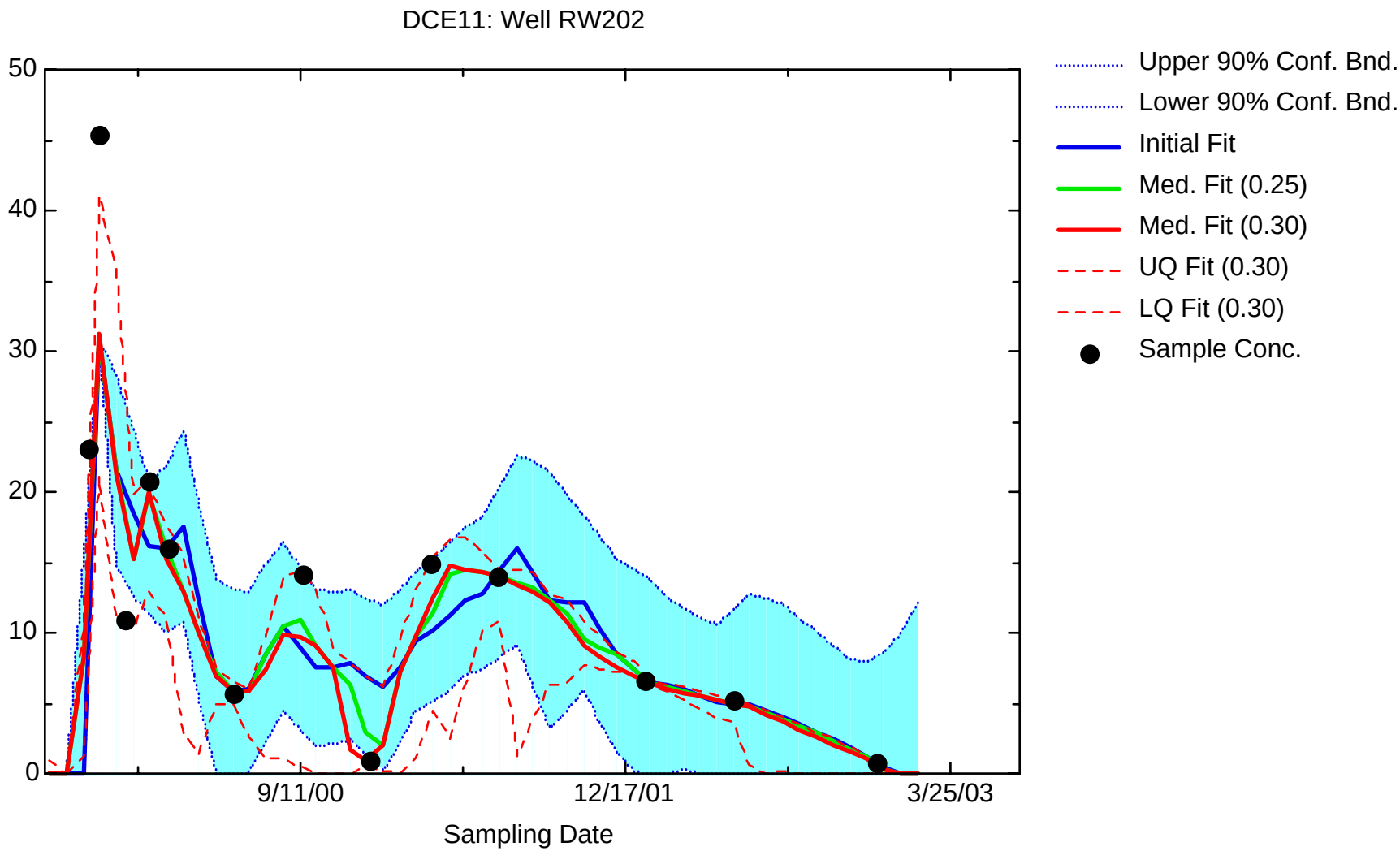

DCE11: Well OW7
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
30
20
10
0
9/11/00
12/17/01
3/25/03
Sampling Date

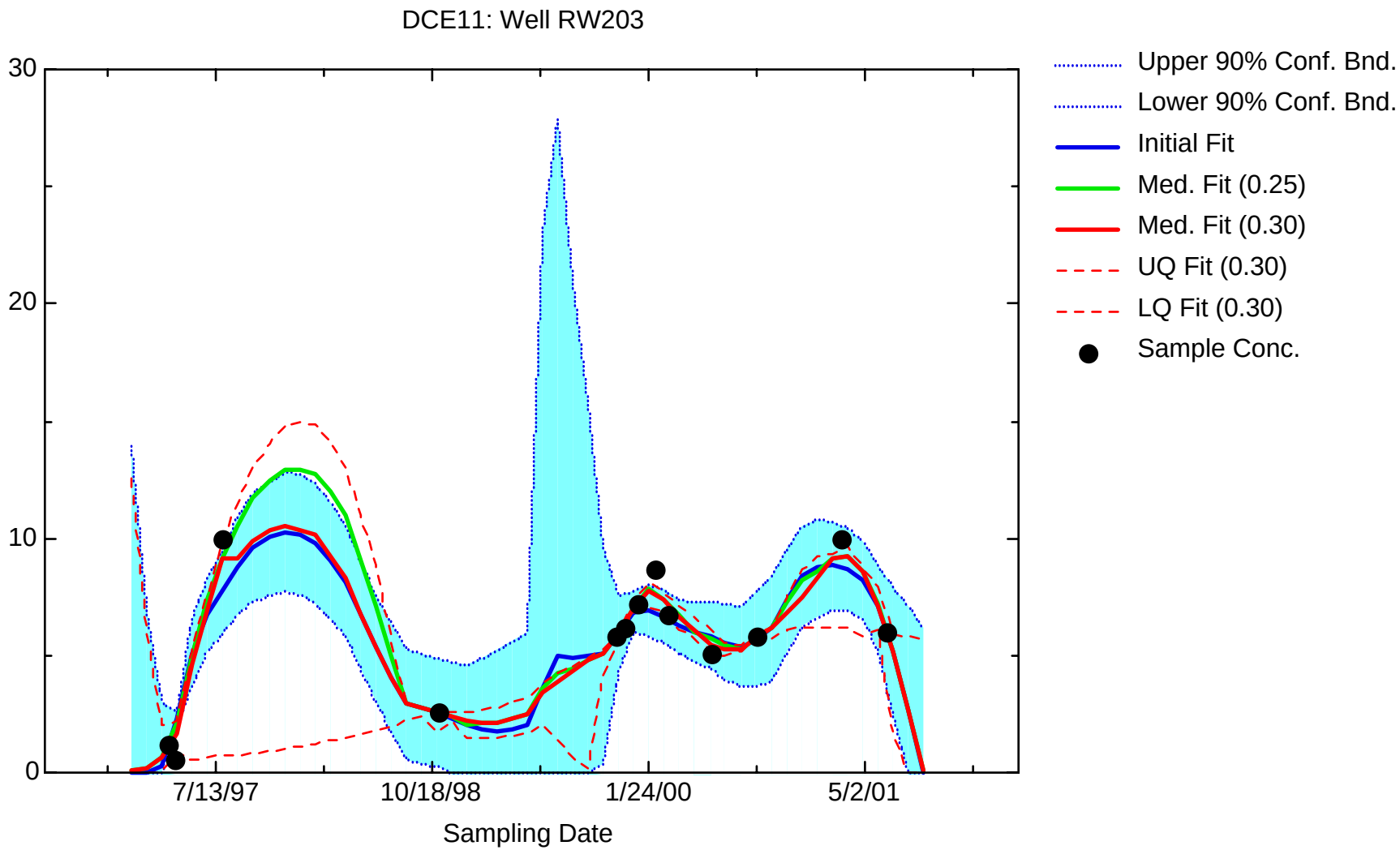

DCE11: Well PZ-1A
80
60
40
20
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

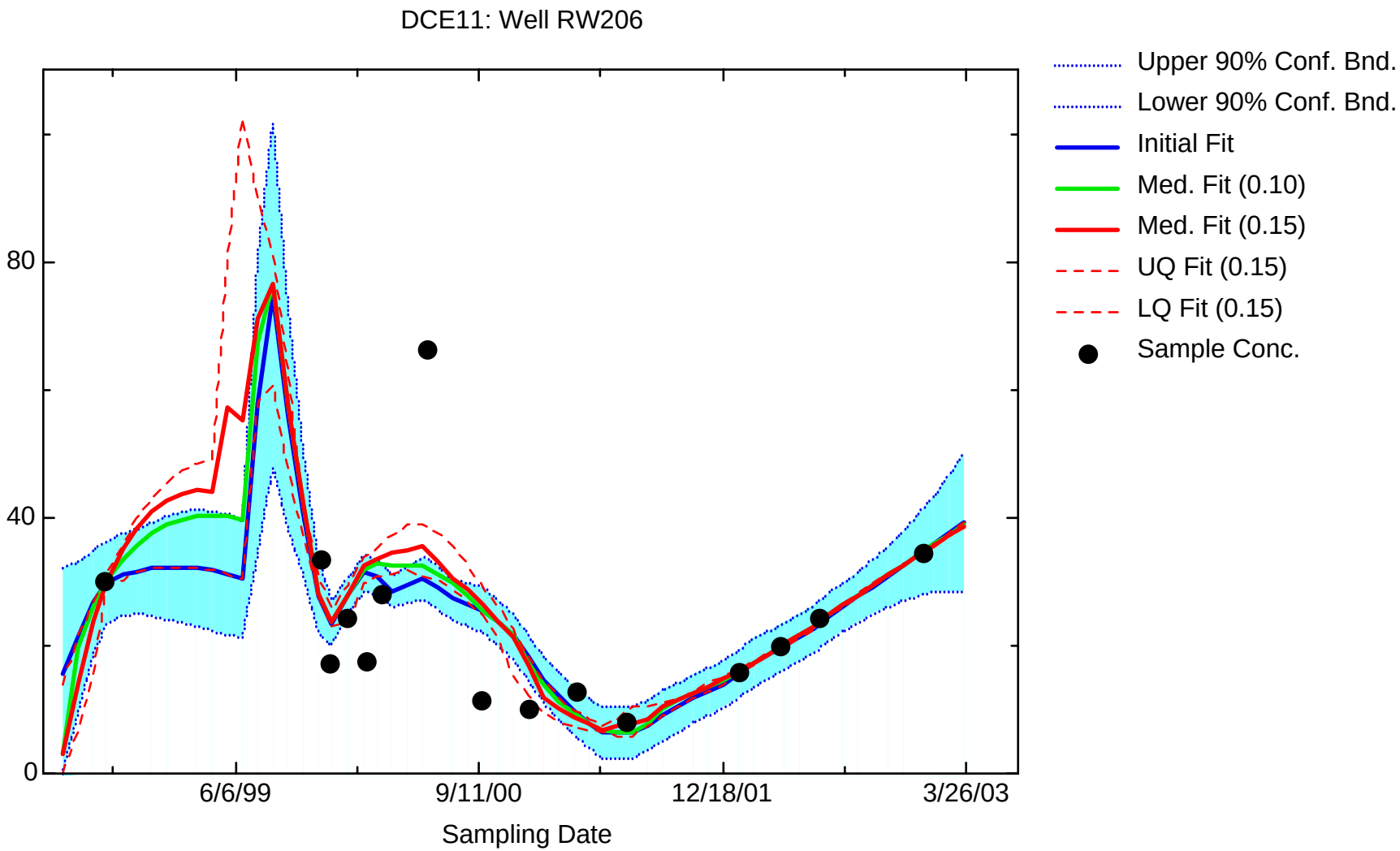

DCE11: Well RW101
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
60
40
20
0
9/11/00
12/17/01
3/25/03
Sampling Date

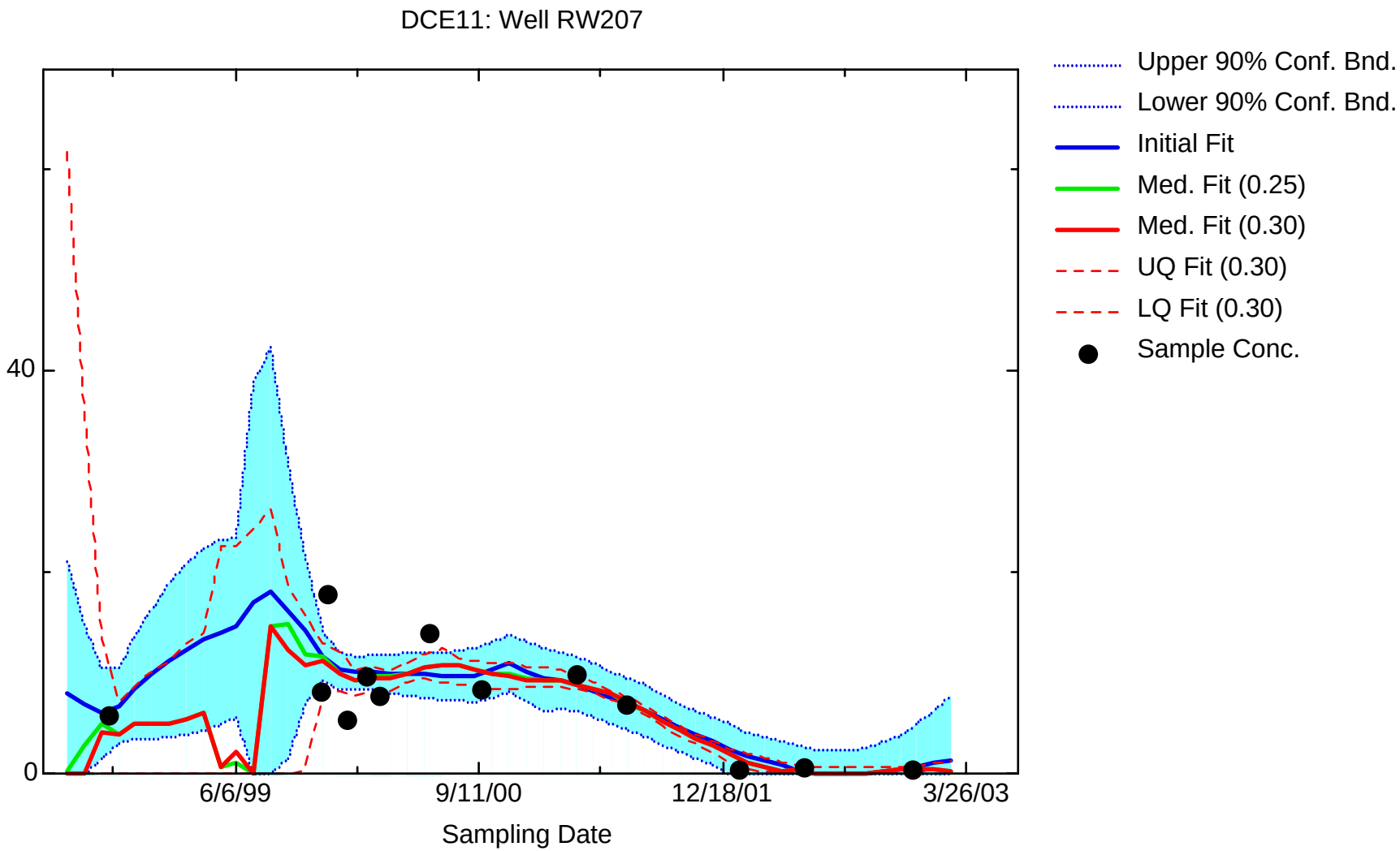

DCE11: Well RW102C
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.
30
20
10
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date

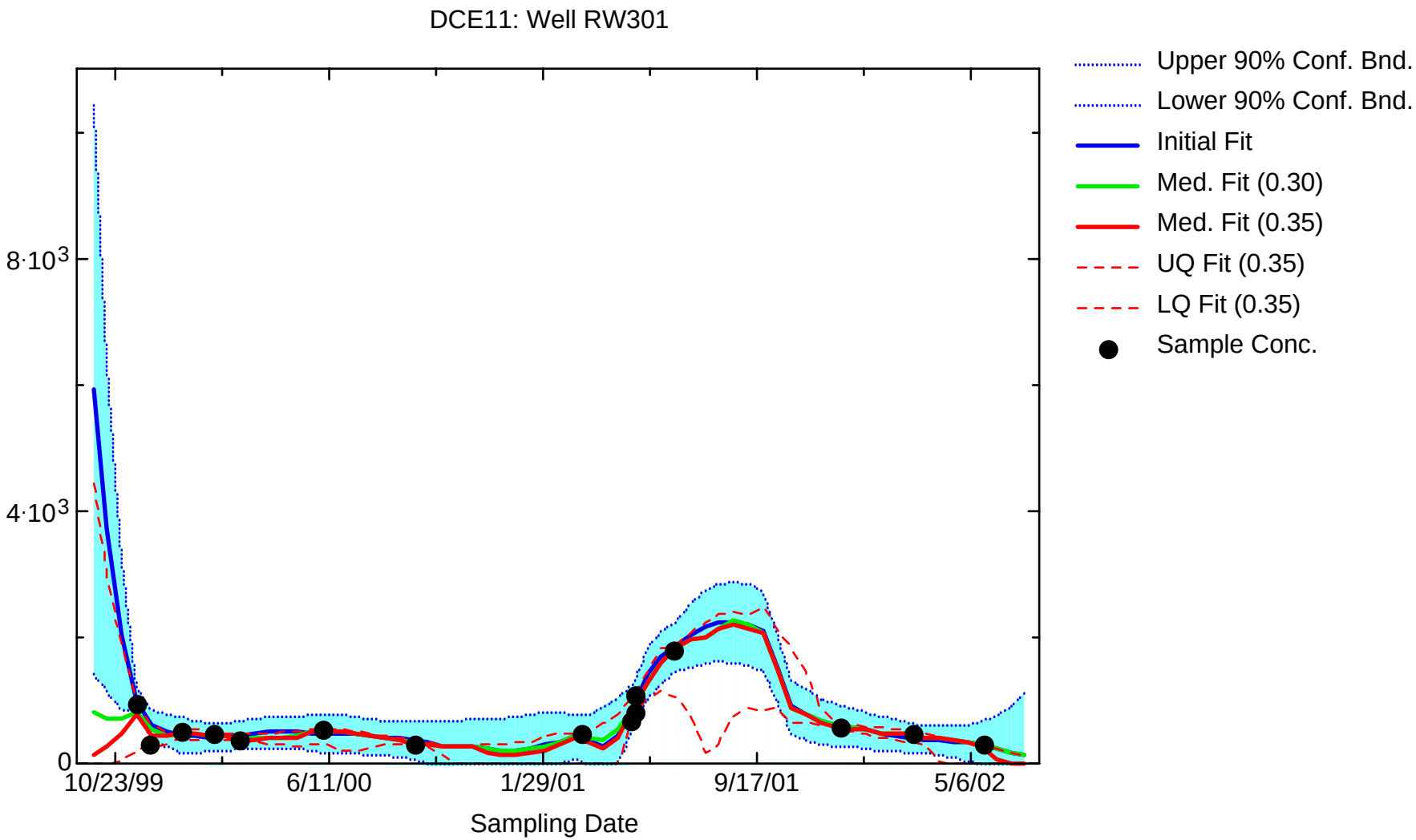

DCE11: Well RW201
1.2
0.8
0.4
0.0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

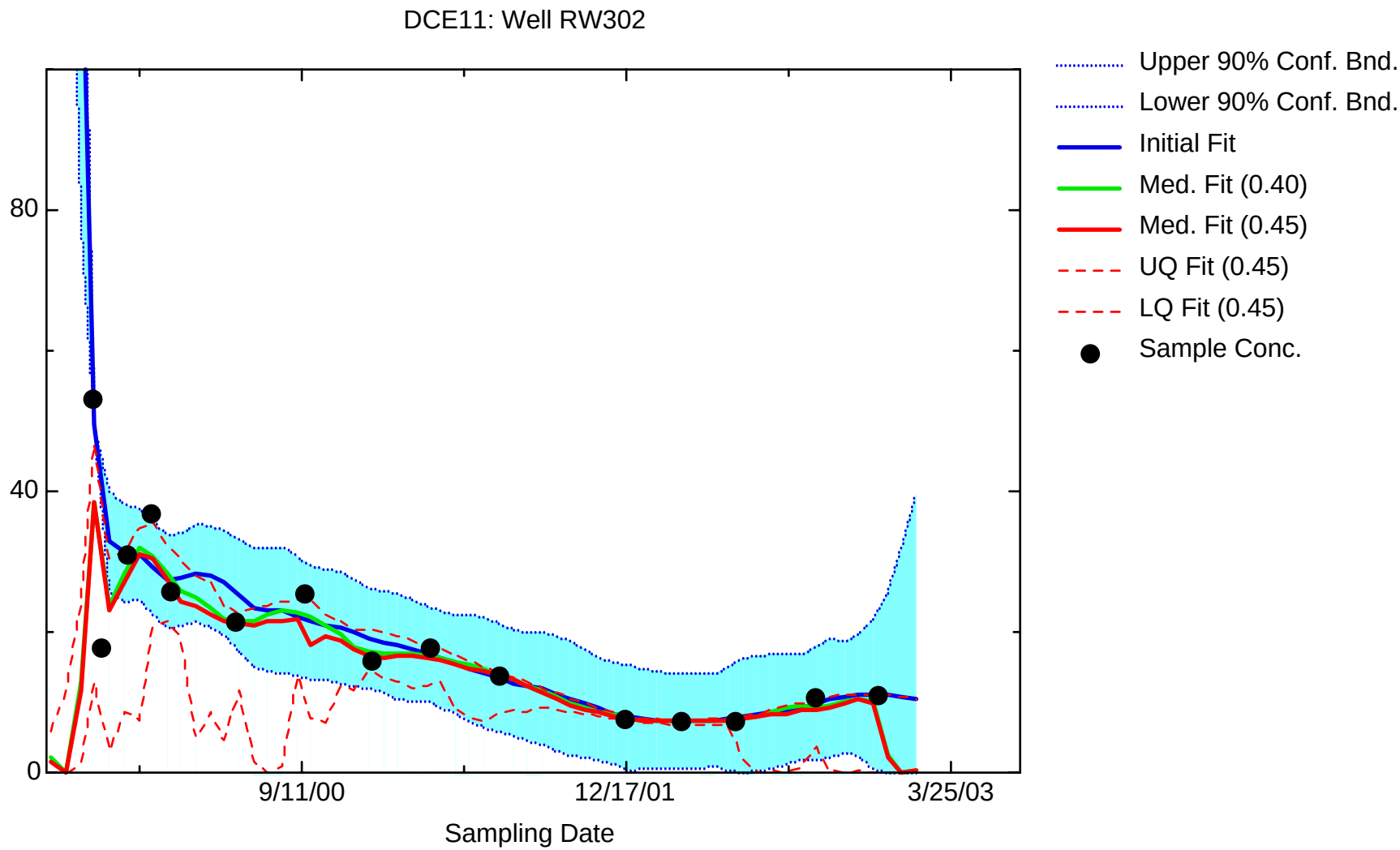

DCE11: Well RW202
50
40
30
20
10
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

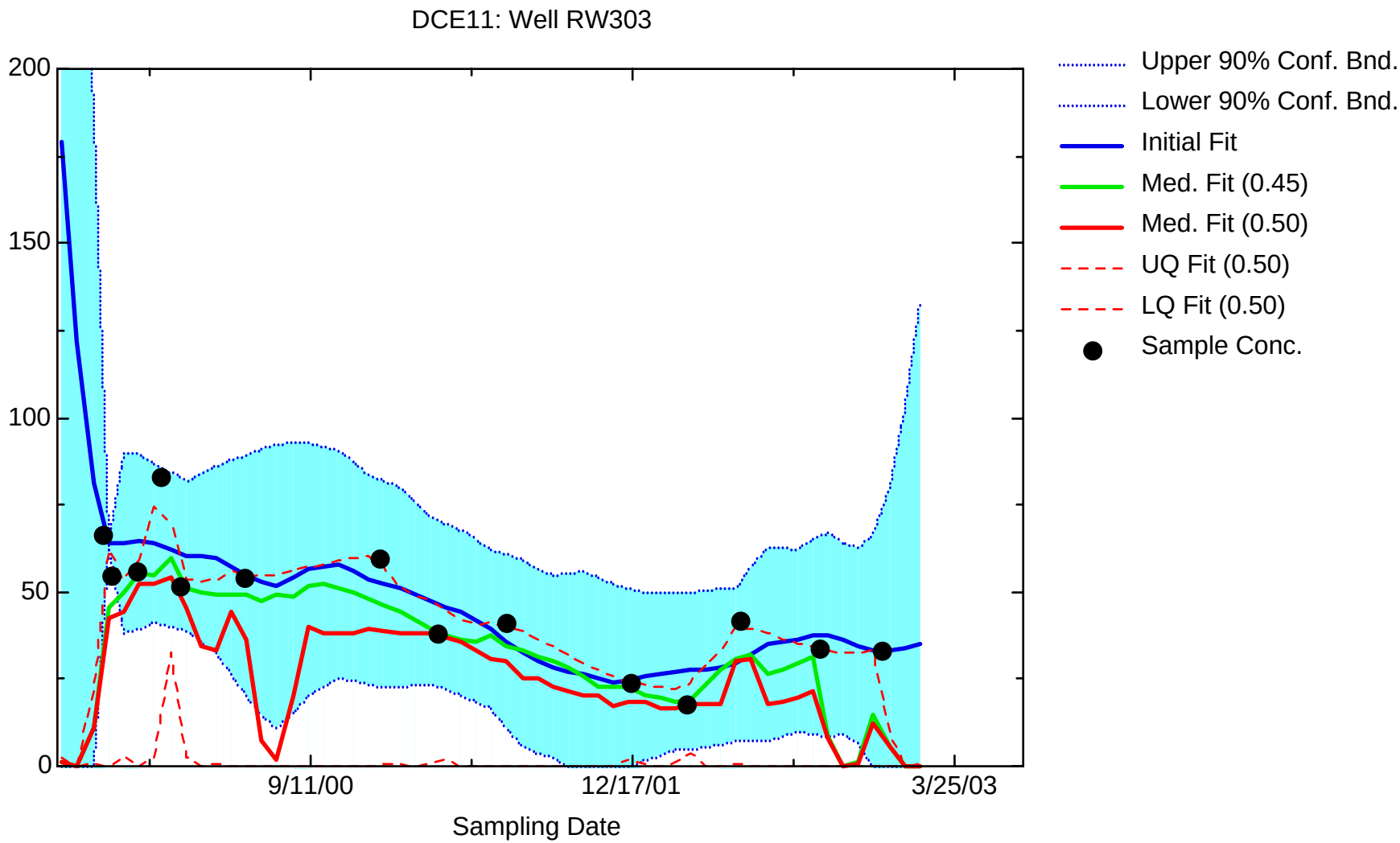

DCE11: Well RW203
30
20
10
0
7/13/97
10/18/98
1/24/00
5/2/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

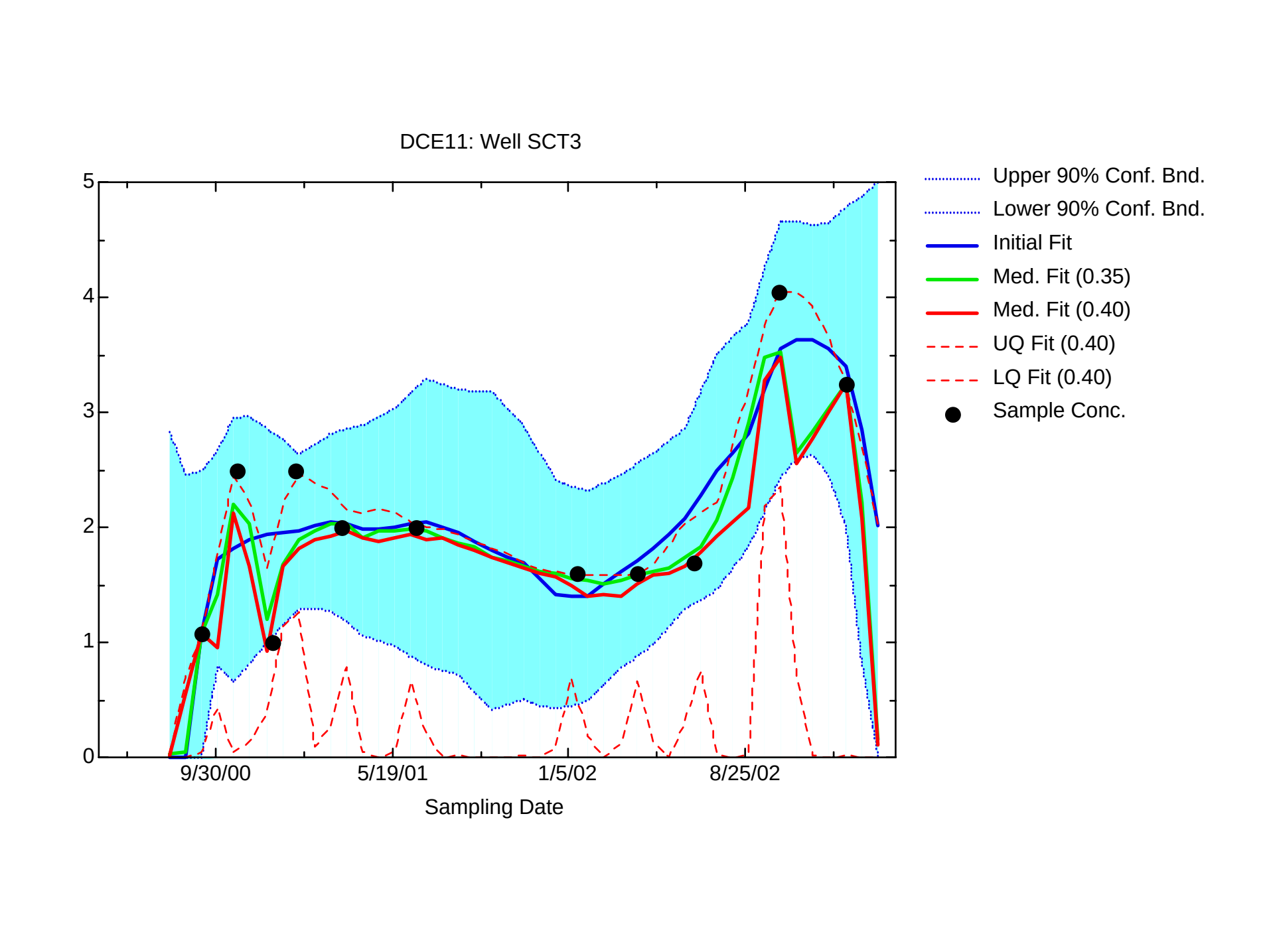

DCE11: Well RW206
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.
80
40
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date

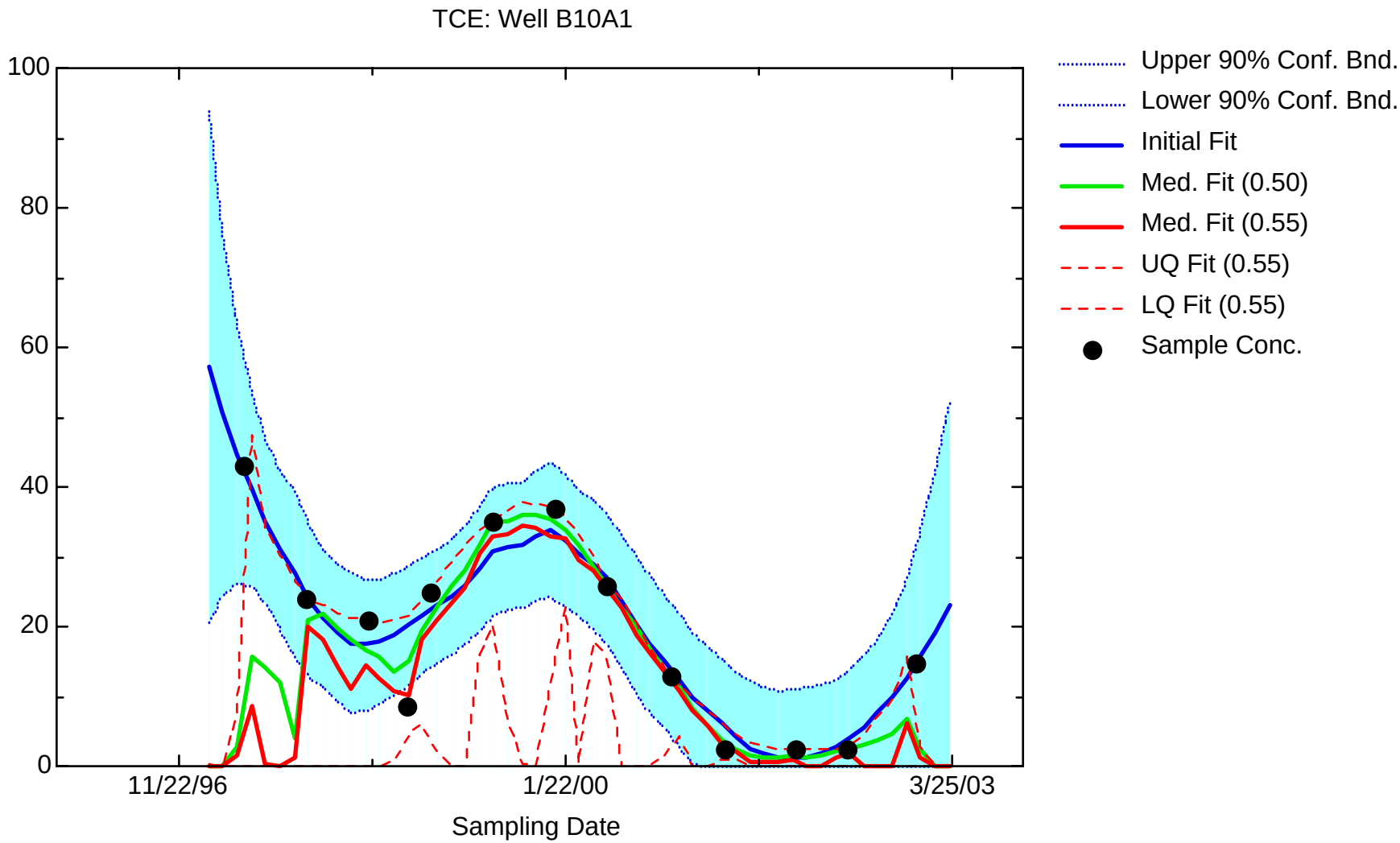

DCE11: Well RW207
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
40
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date

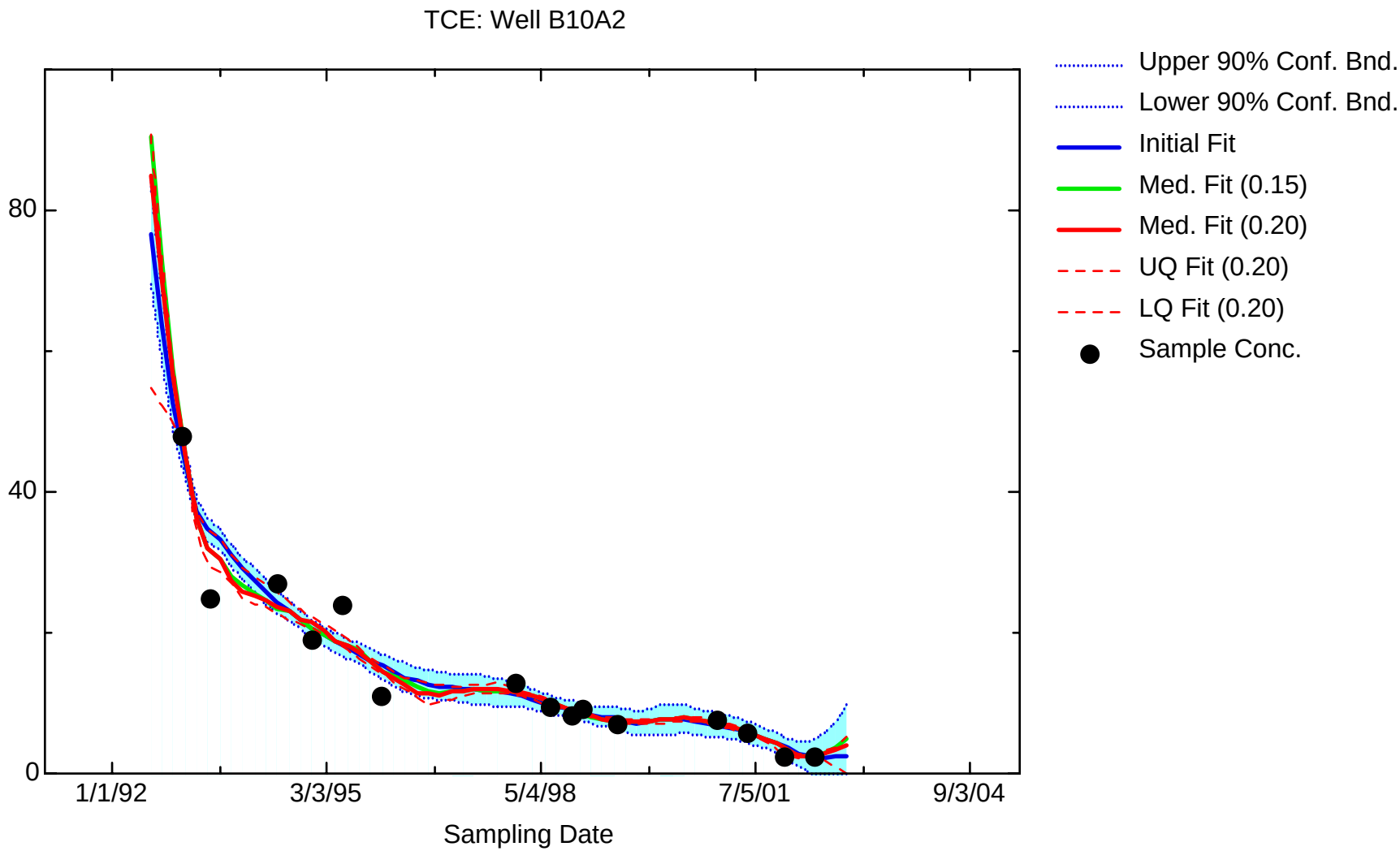

DCE11: Well RW301
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
8·10^3
4·10^3
0
10/23/99
6/11/00
1/29/01
9/17/01
5/6/02
Sampling Date

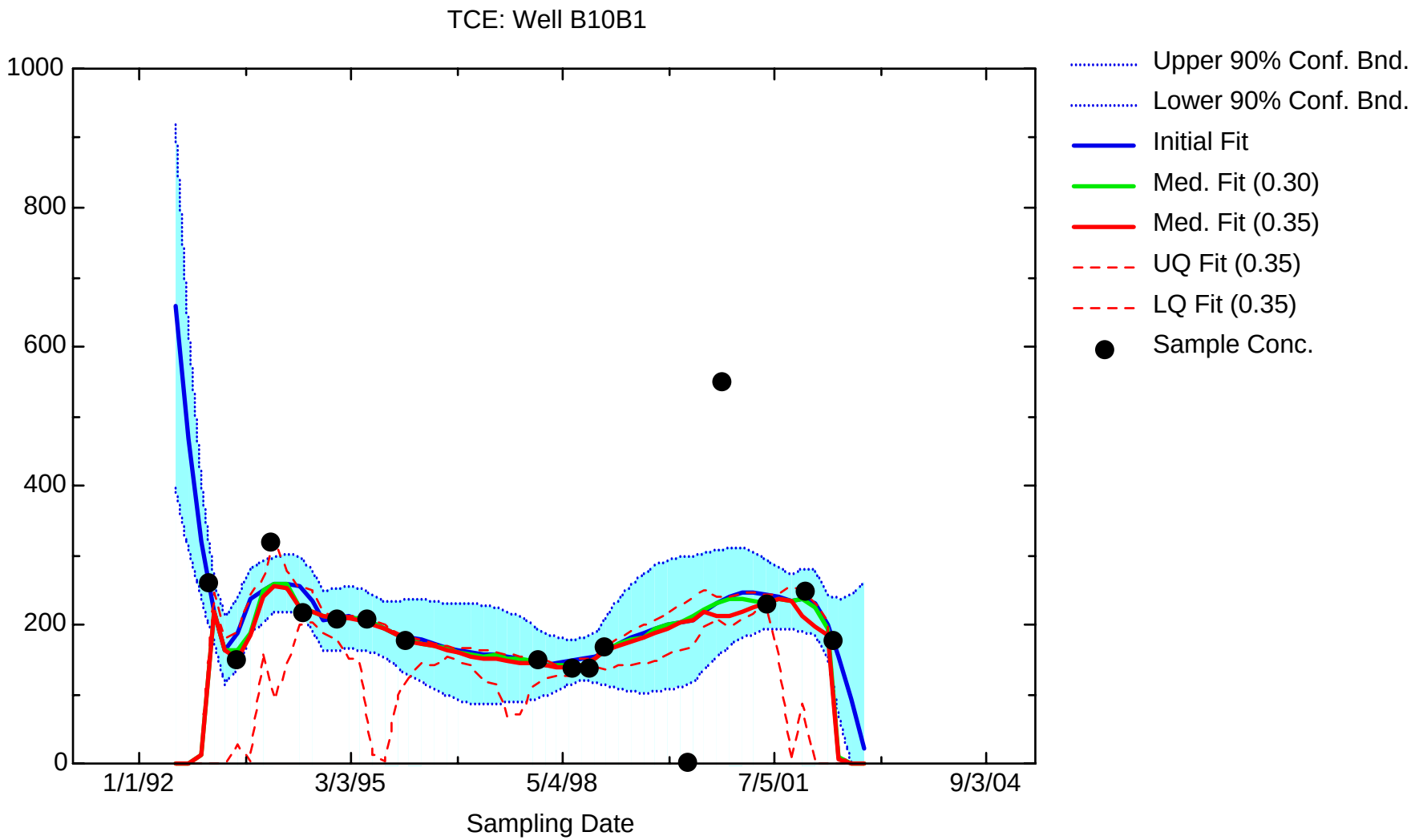

DCE11: Well RW302
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.
80
40
0
9/11/00
12/17/01
3/25/03
Sampling Date

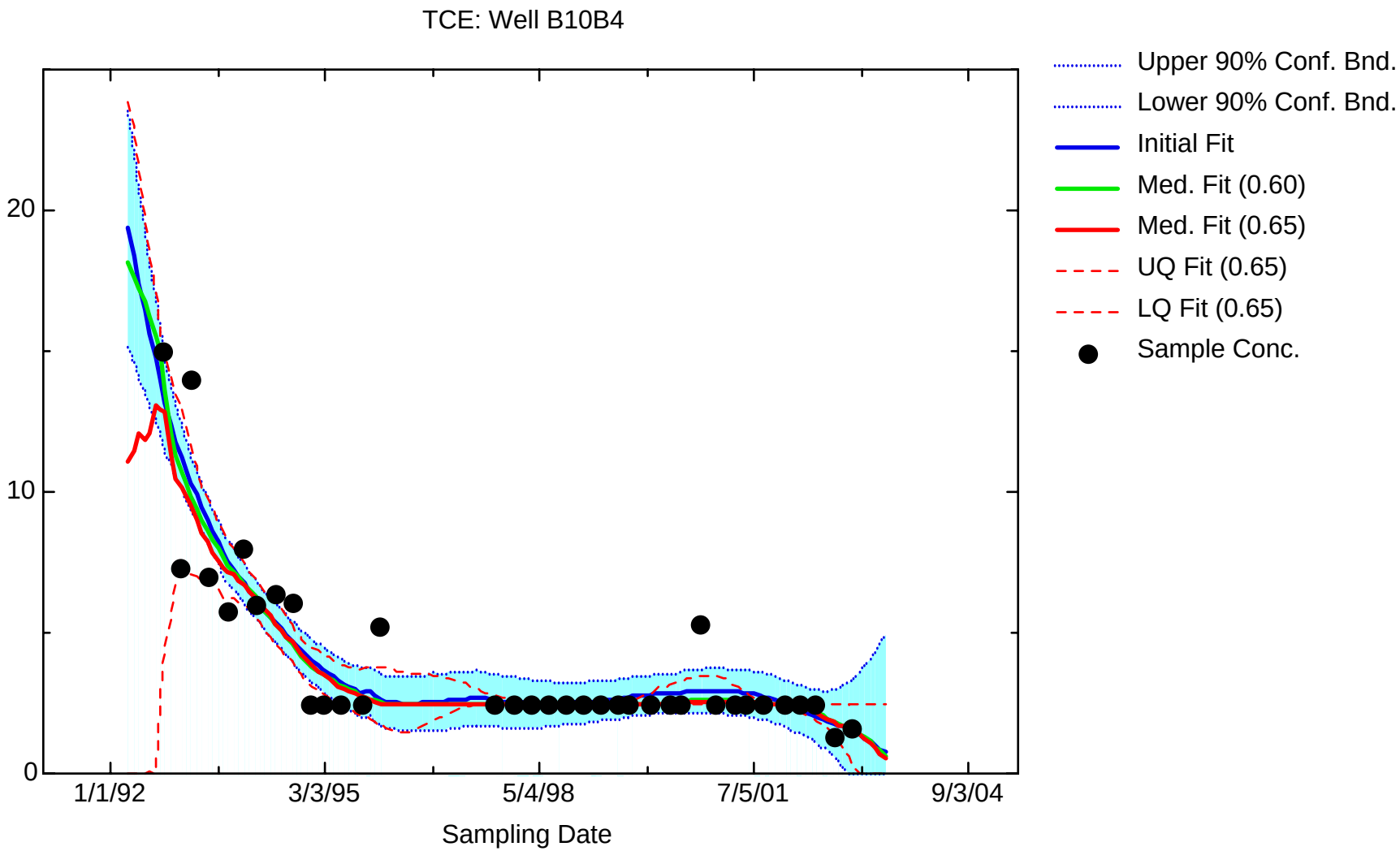

DCE11: Well RW303
200
150
100
50
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

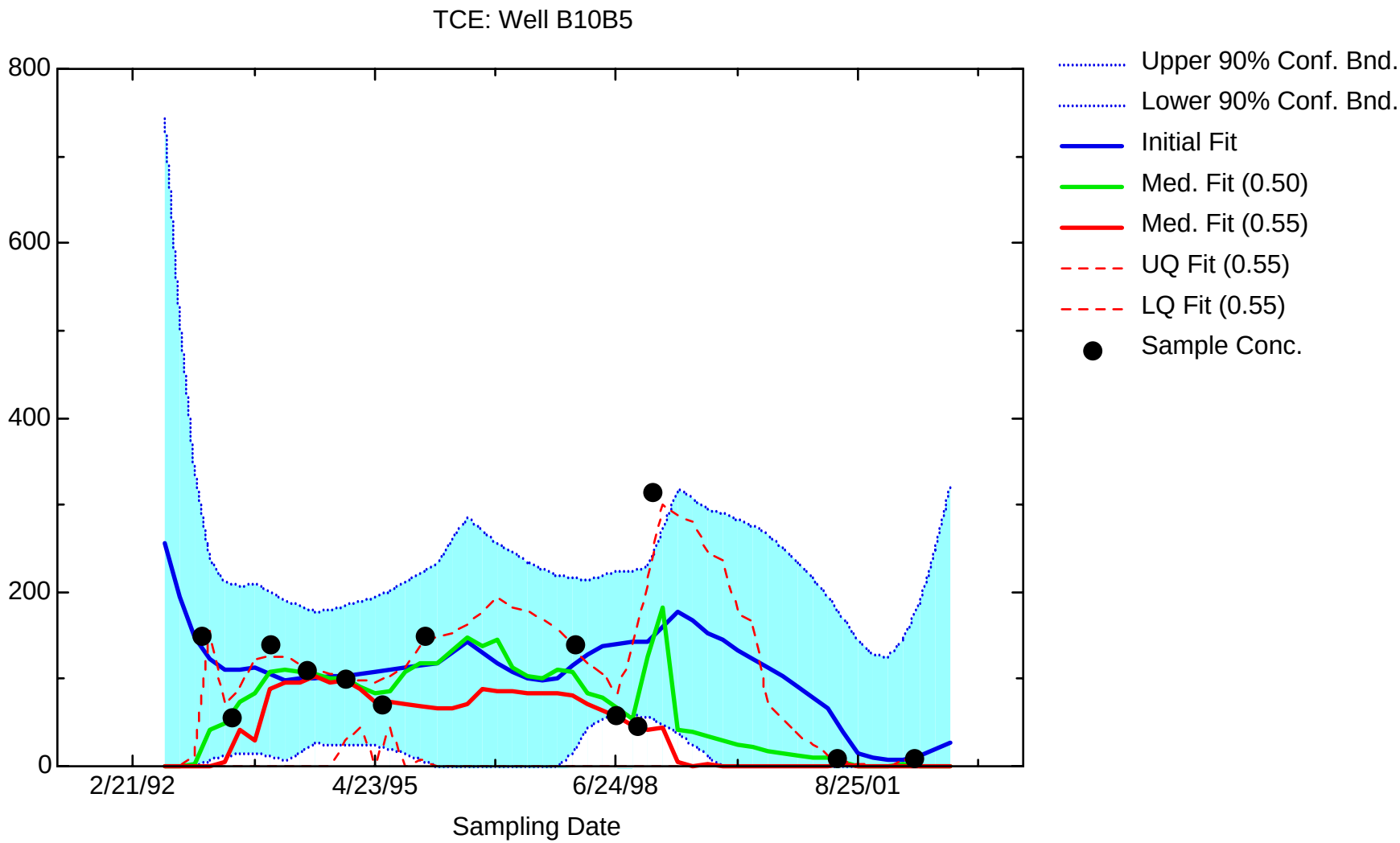

DCE11: Well SCT3
5
4
3
2
1
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

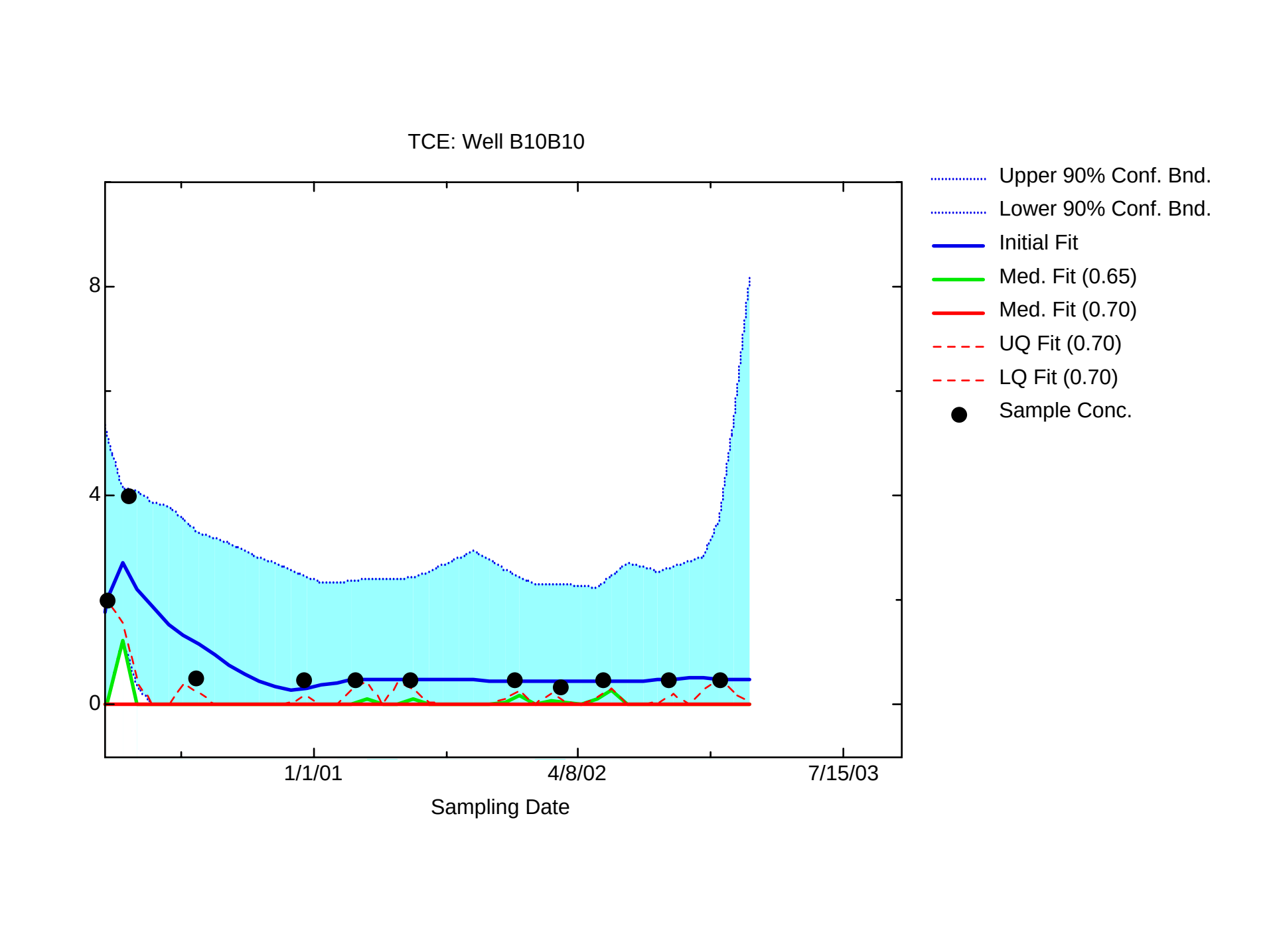

TCE: Well B10A1
100
80
60
40
20
0
11/22/96
1/22/00
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

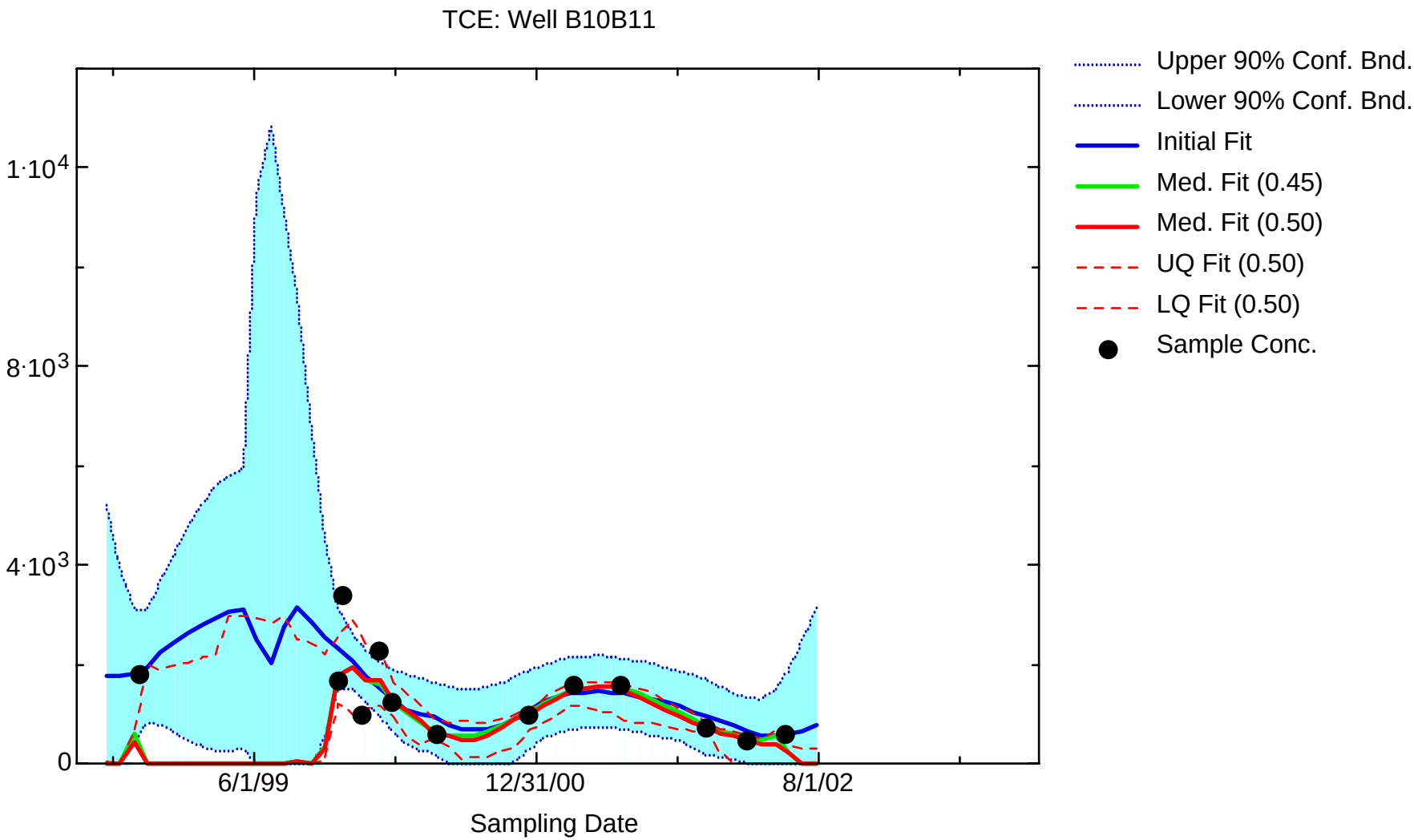

TCE: Well B10A2
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
80
40
0
1/1/92
3/3/95
5/4/98
7/5/01
9/3/04
Sampling Date

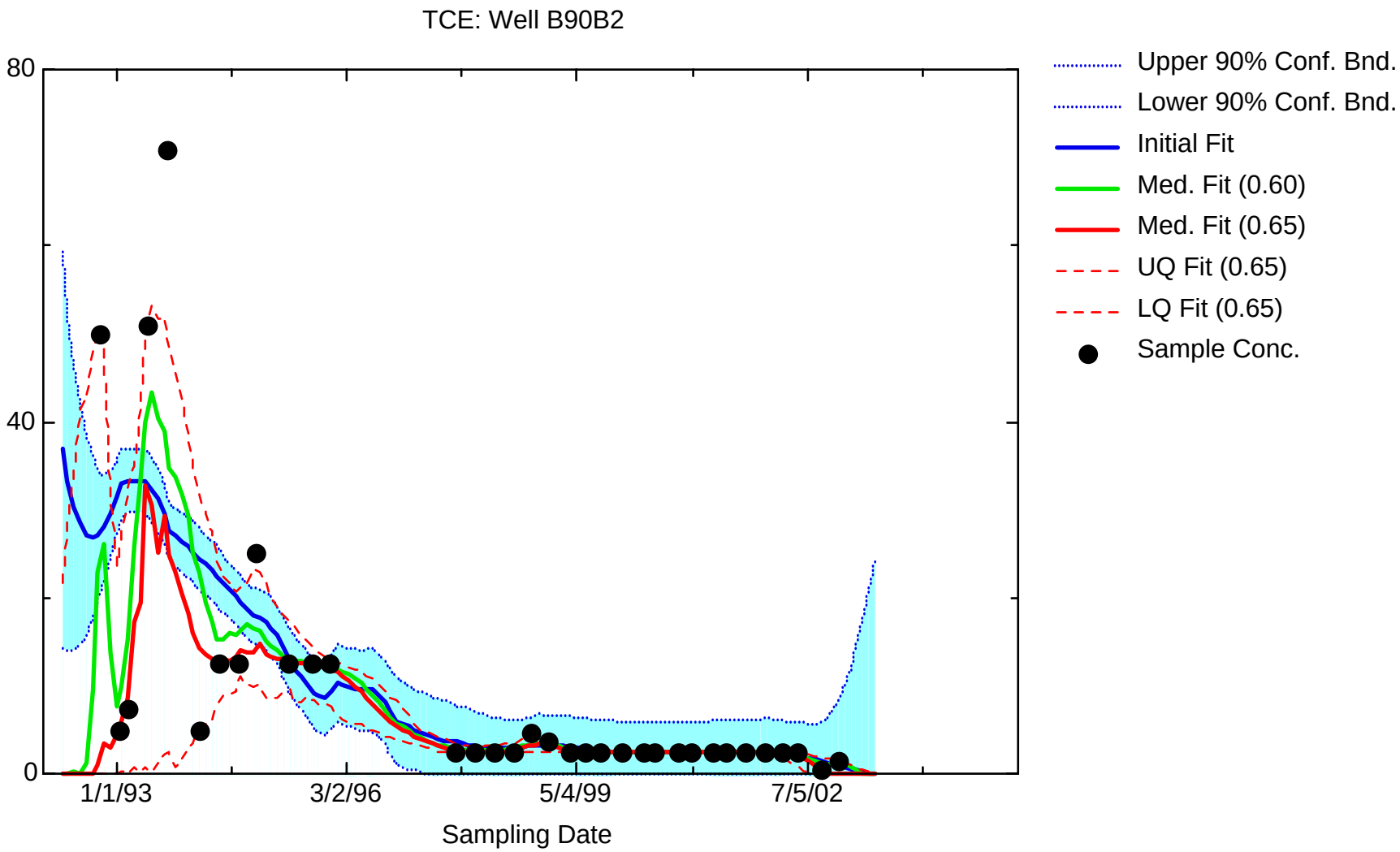

TCE: Well B10B1
1000
800
600
400
200
0
1/1/92
3/3/95
5/4/98
7/5/01
9/3/04
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

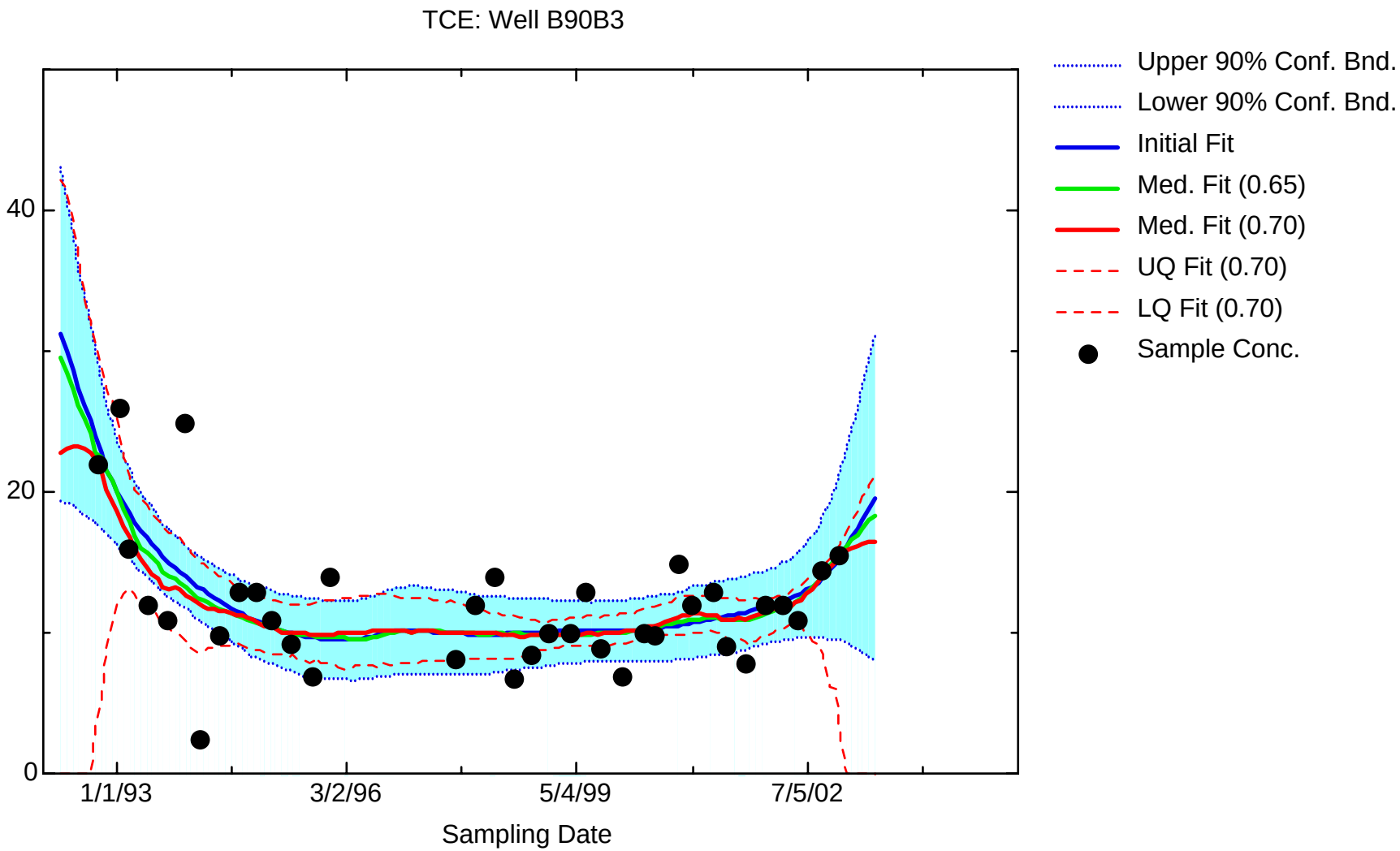

TCE: Well B10B4
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.
20
10
0
1/1/92
3/3/95
5/4/98
7/5/01
9/3/04
Sampling Date

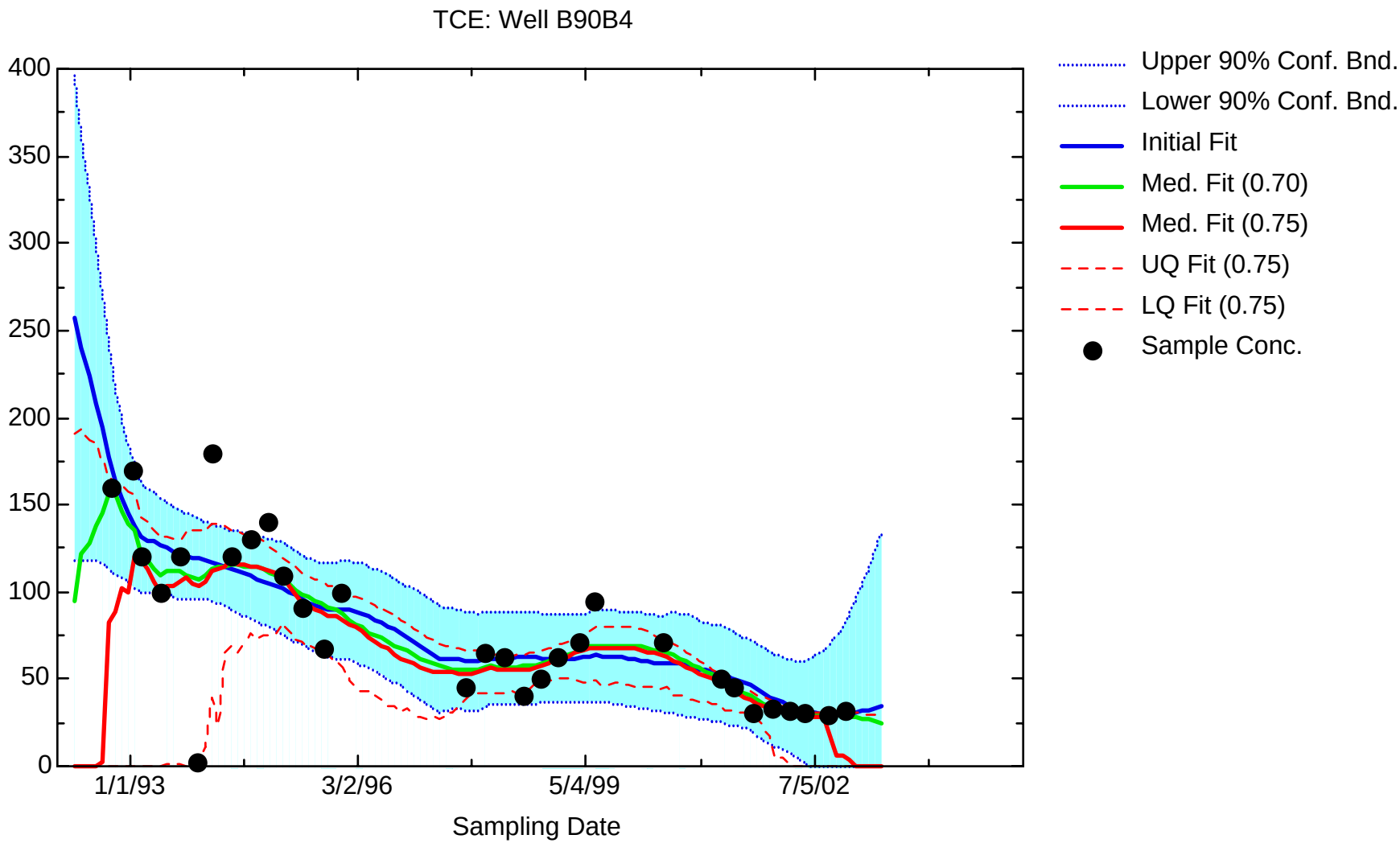

TCE: Well B10B5
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

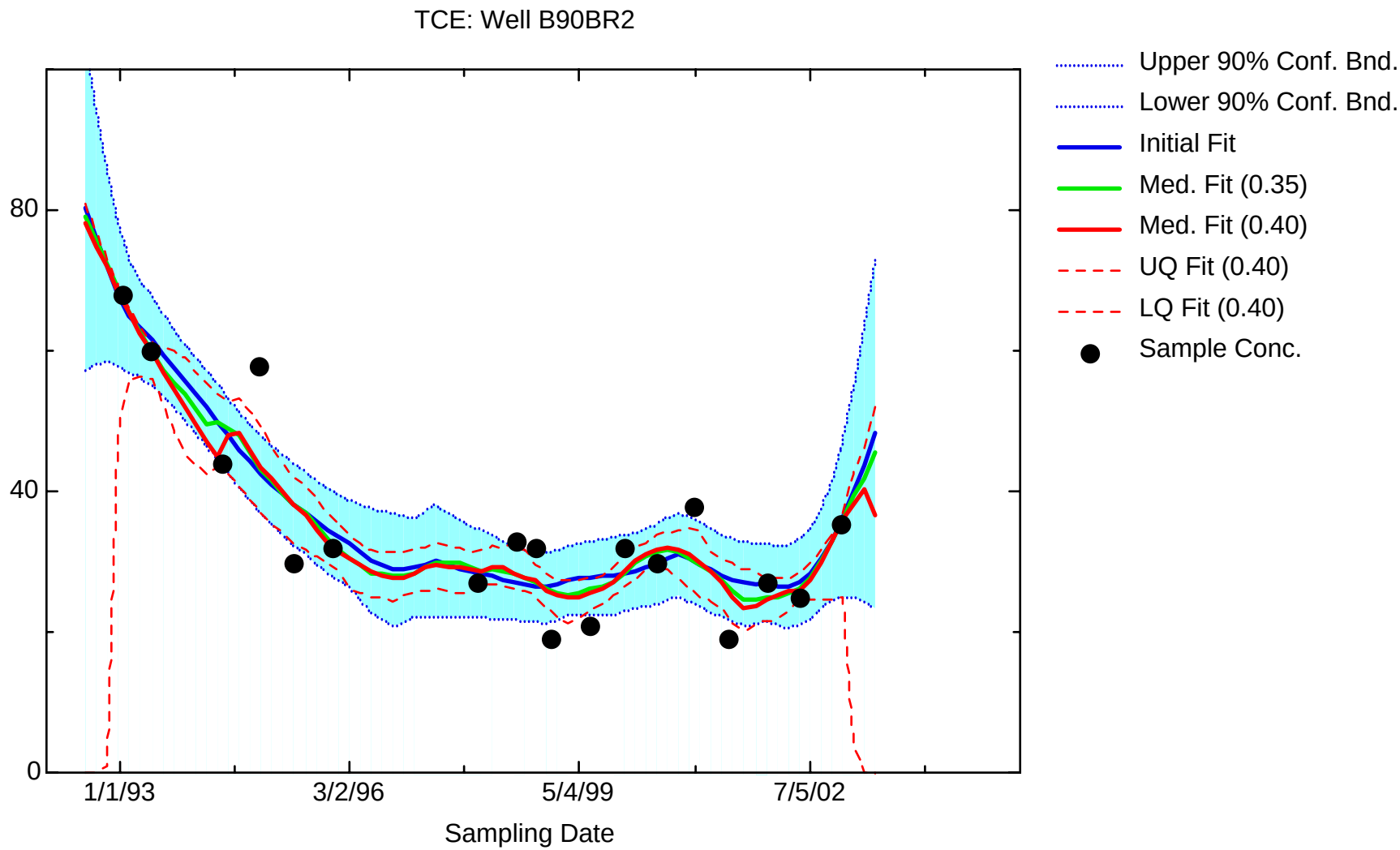

TCE: Well B10B10
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
8
4
0
1/1/01
4/8/02
7/15/03
Sampling Date

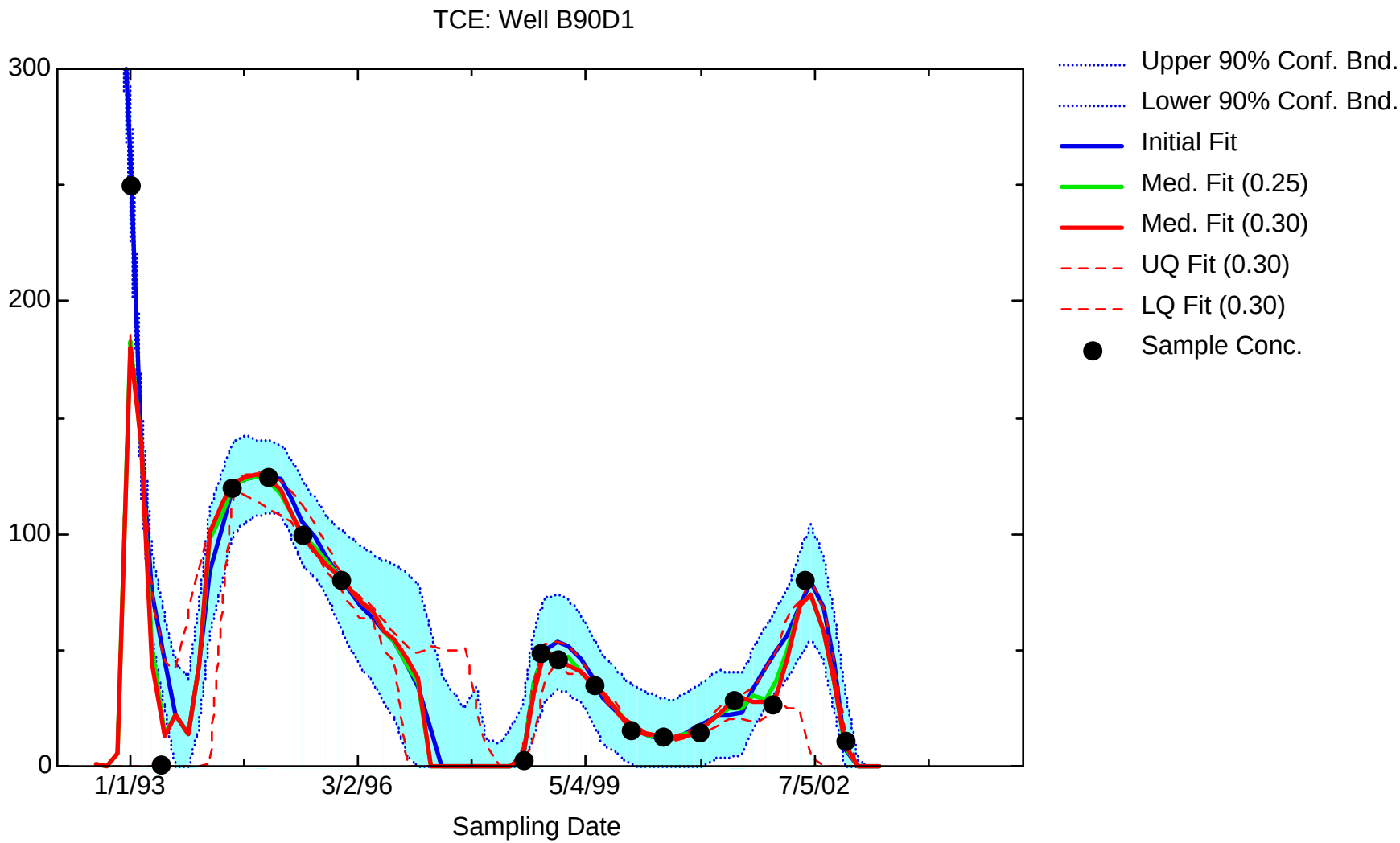

TCE: Well B10B11
1·10^4
8·10^3
4·10^3
0
6/1/99
12/31/00
8/1/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

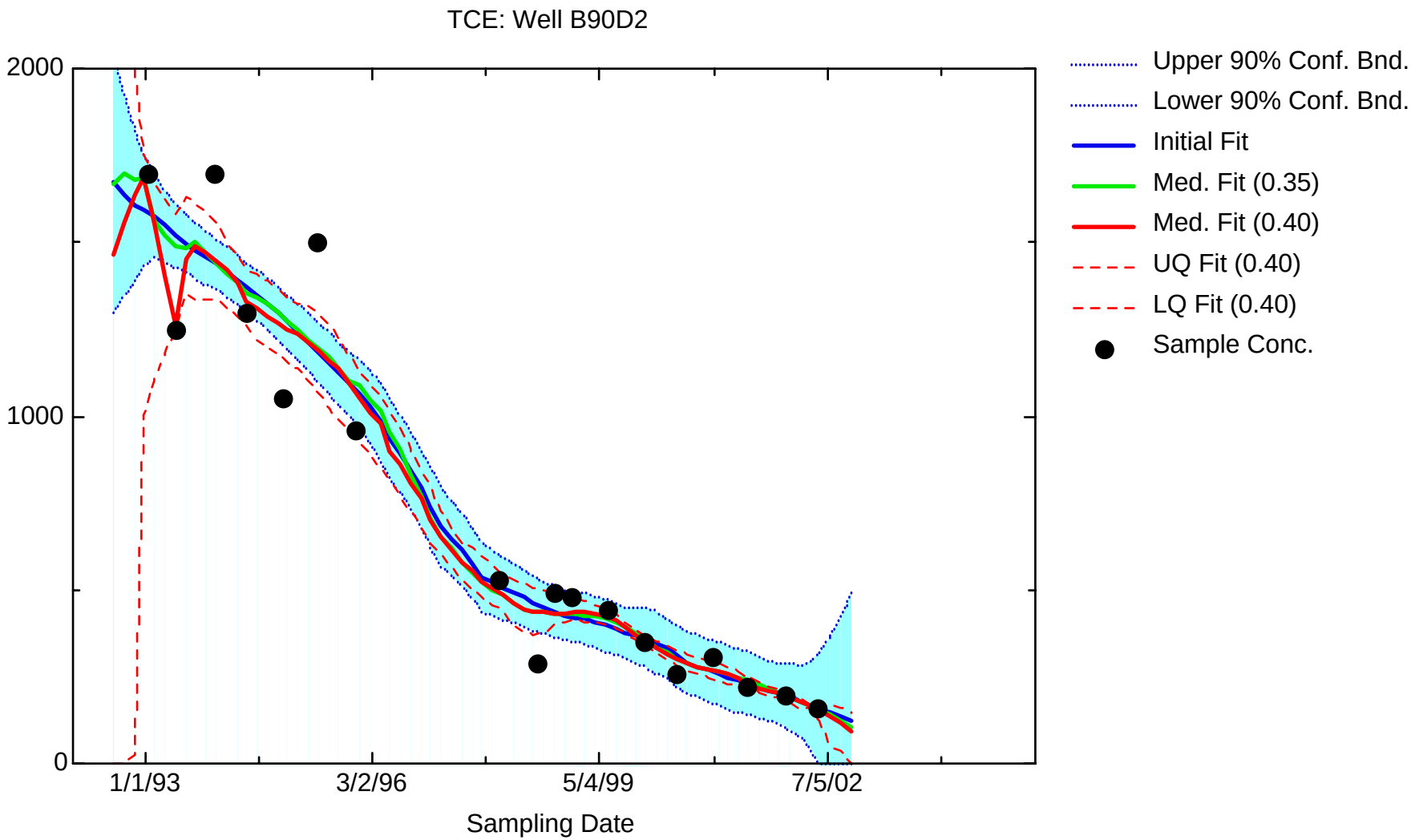

TCE: Well B90B2
80
40
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

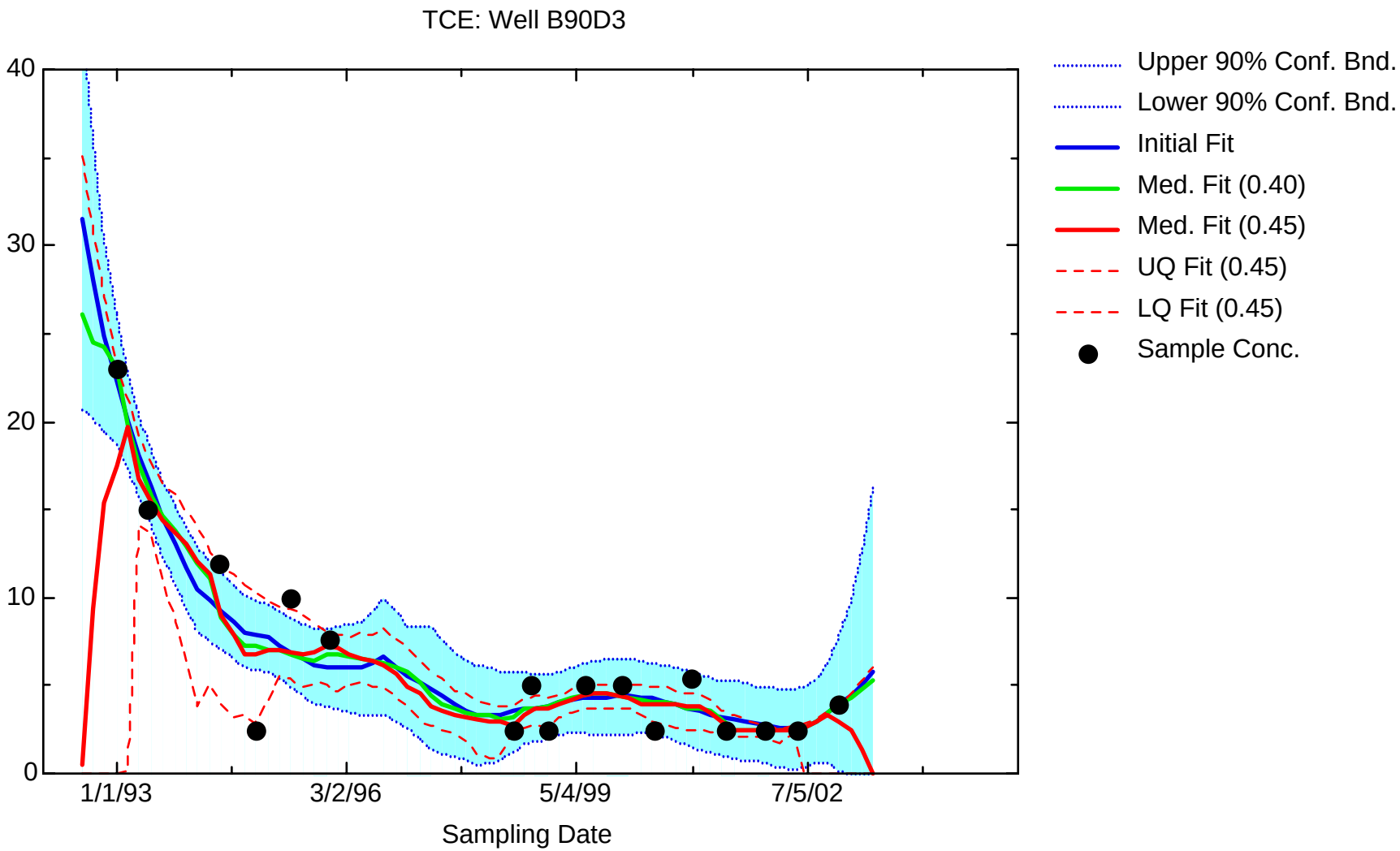

TCE: Well B90B3
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
40
20
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

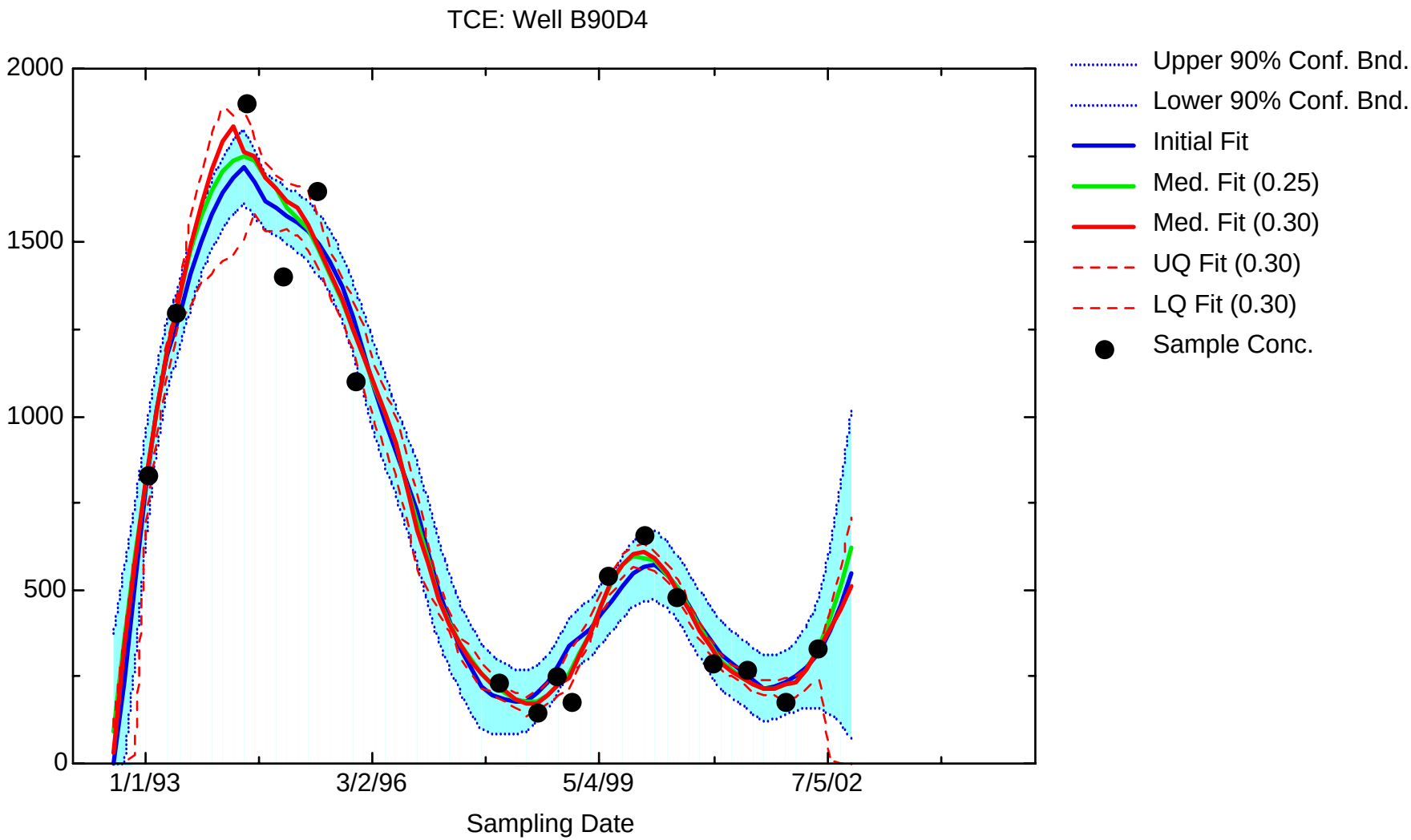

TCE: Well B90B4
400
350
300
250
200
150
100
50
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.70)
Med. Fit (0.75)
UQ Fit (0.75)
LQ Fit (0.75)
Sample Conc.

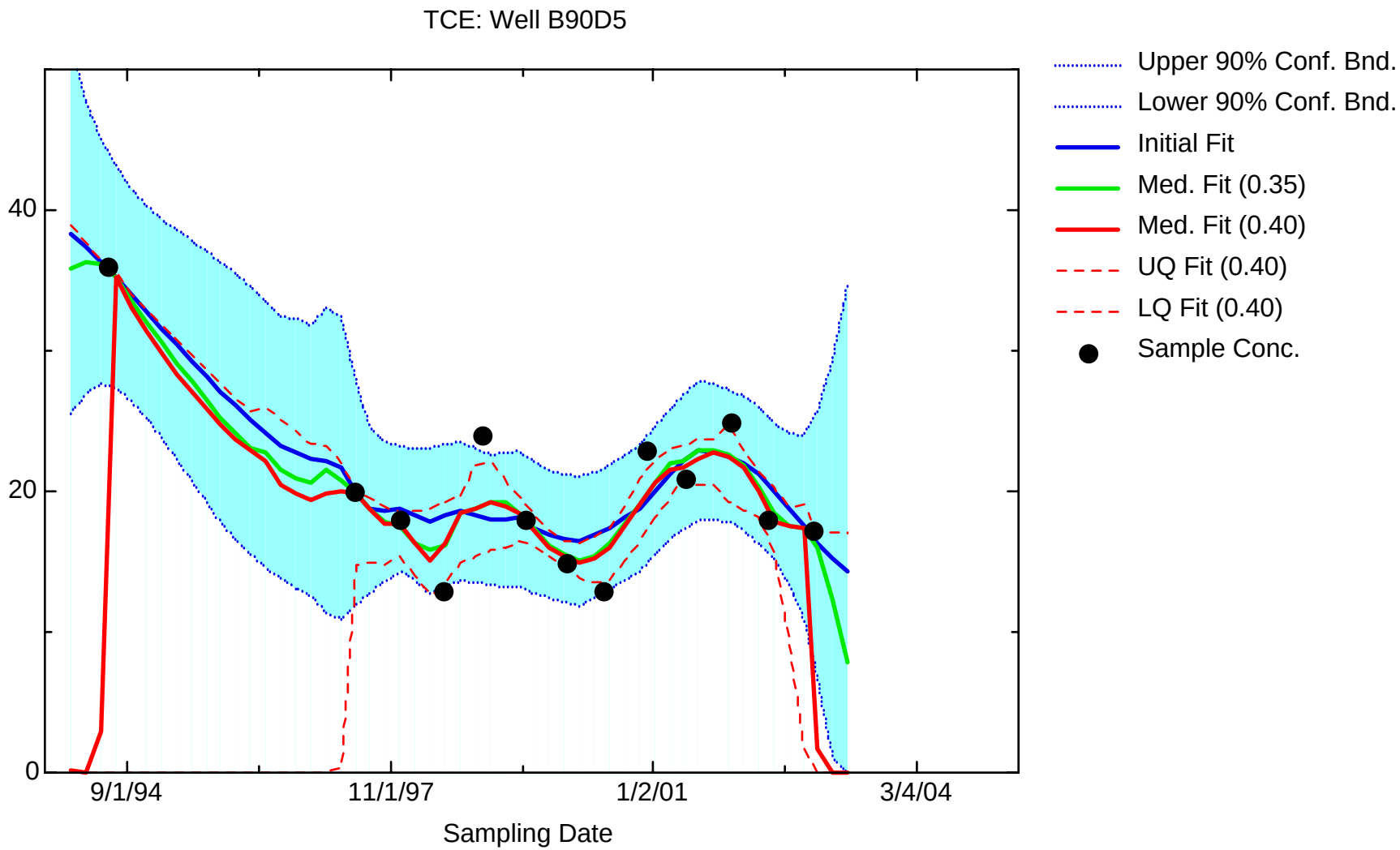

TCE: Well B90BR2
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
80
40
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

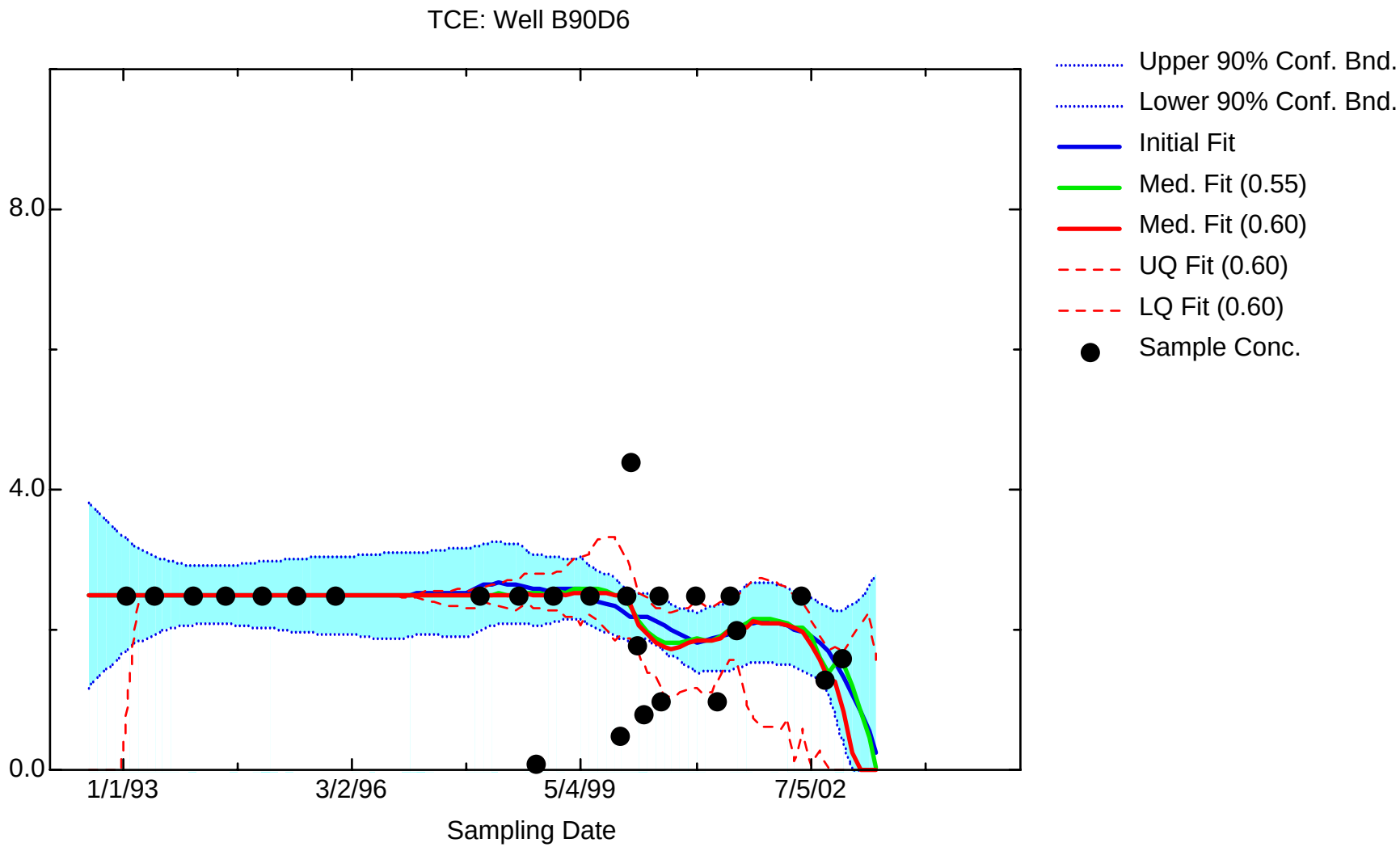

TCE: Well B90D1
300
200
100
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

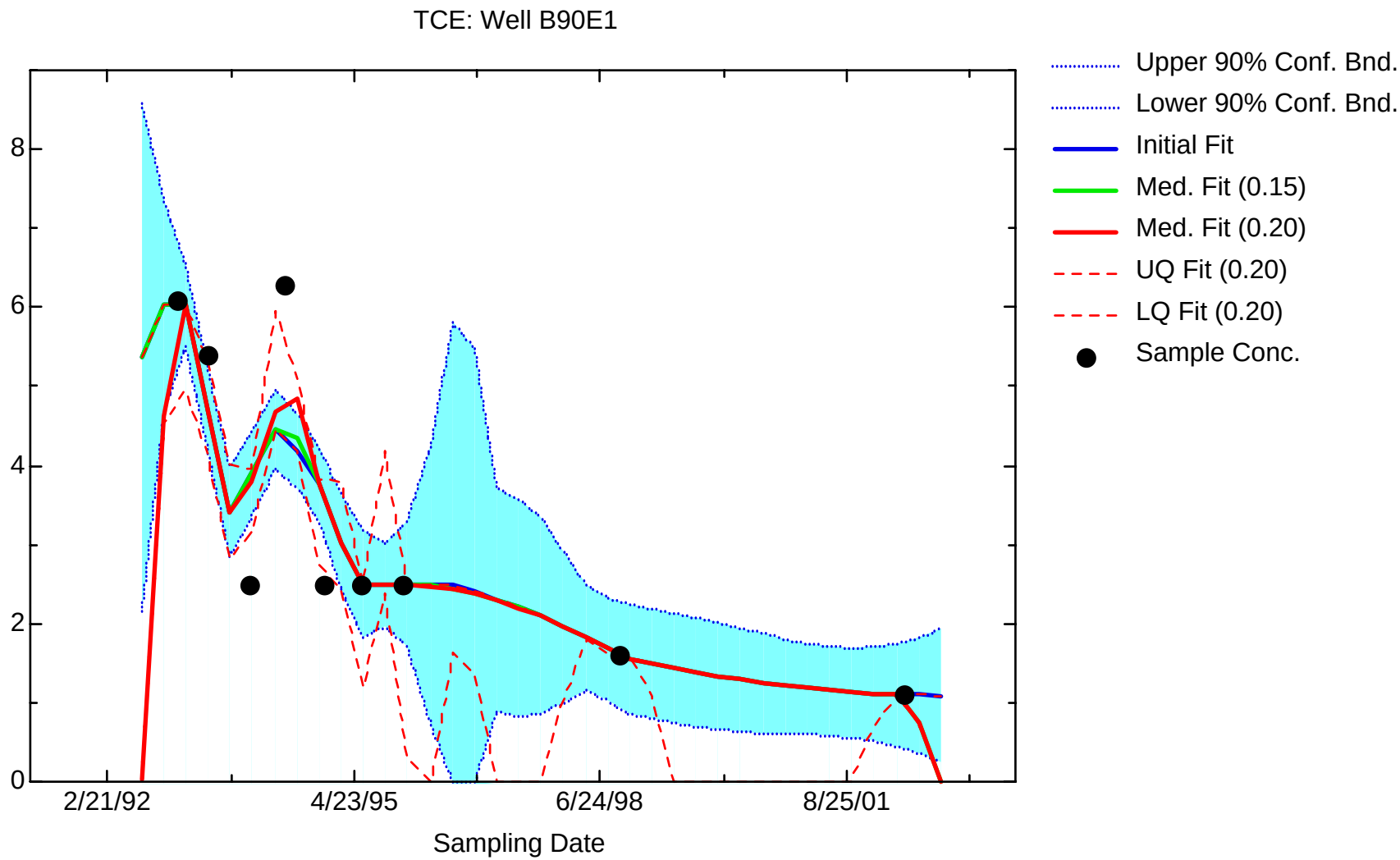

TCE: Well B90D2
2000
1000
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

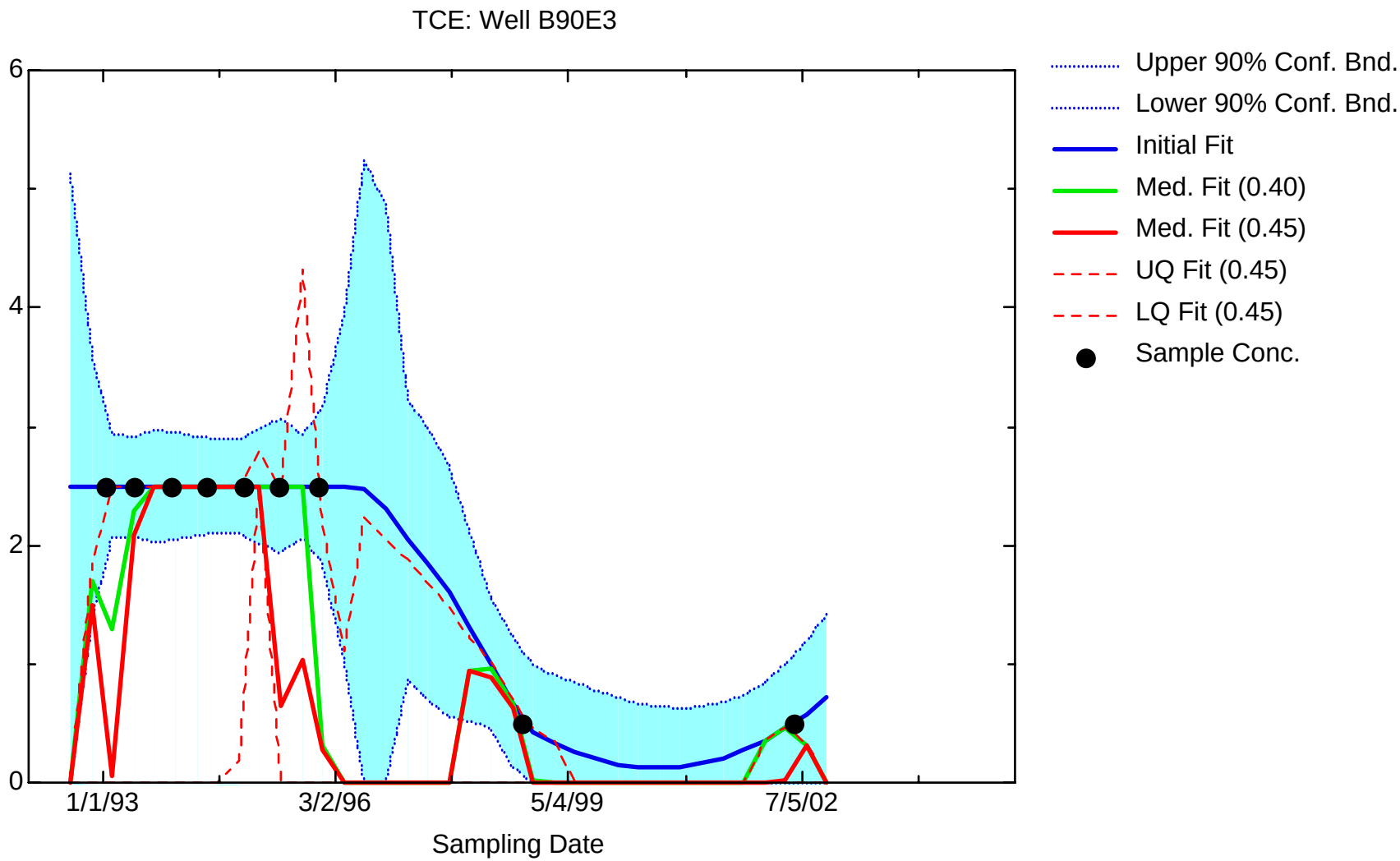

TCE: Well B90D3
40
30
20
10
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

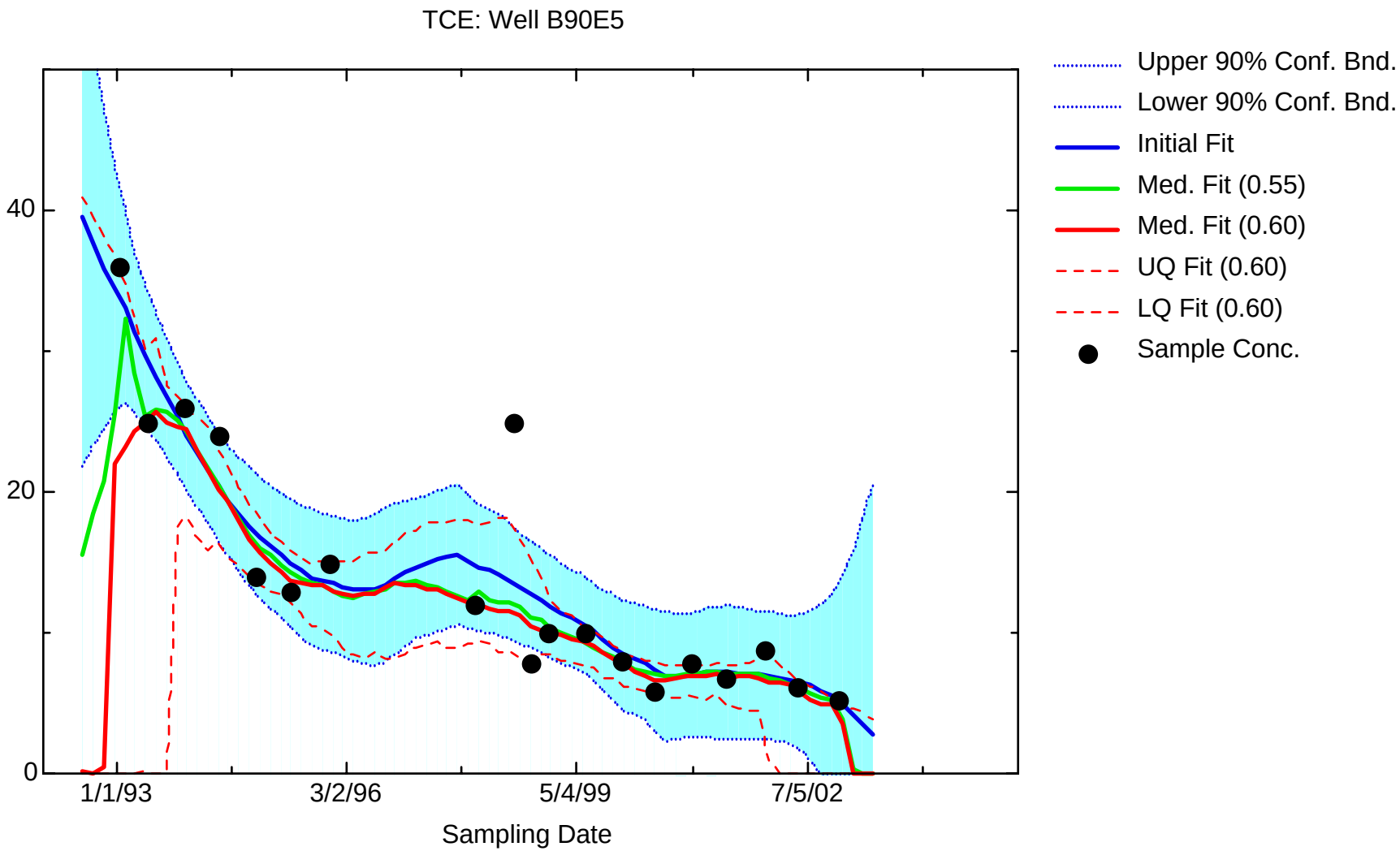

TCE: Well B90D4
2000
1500
1000
500
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

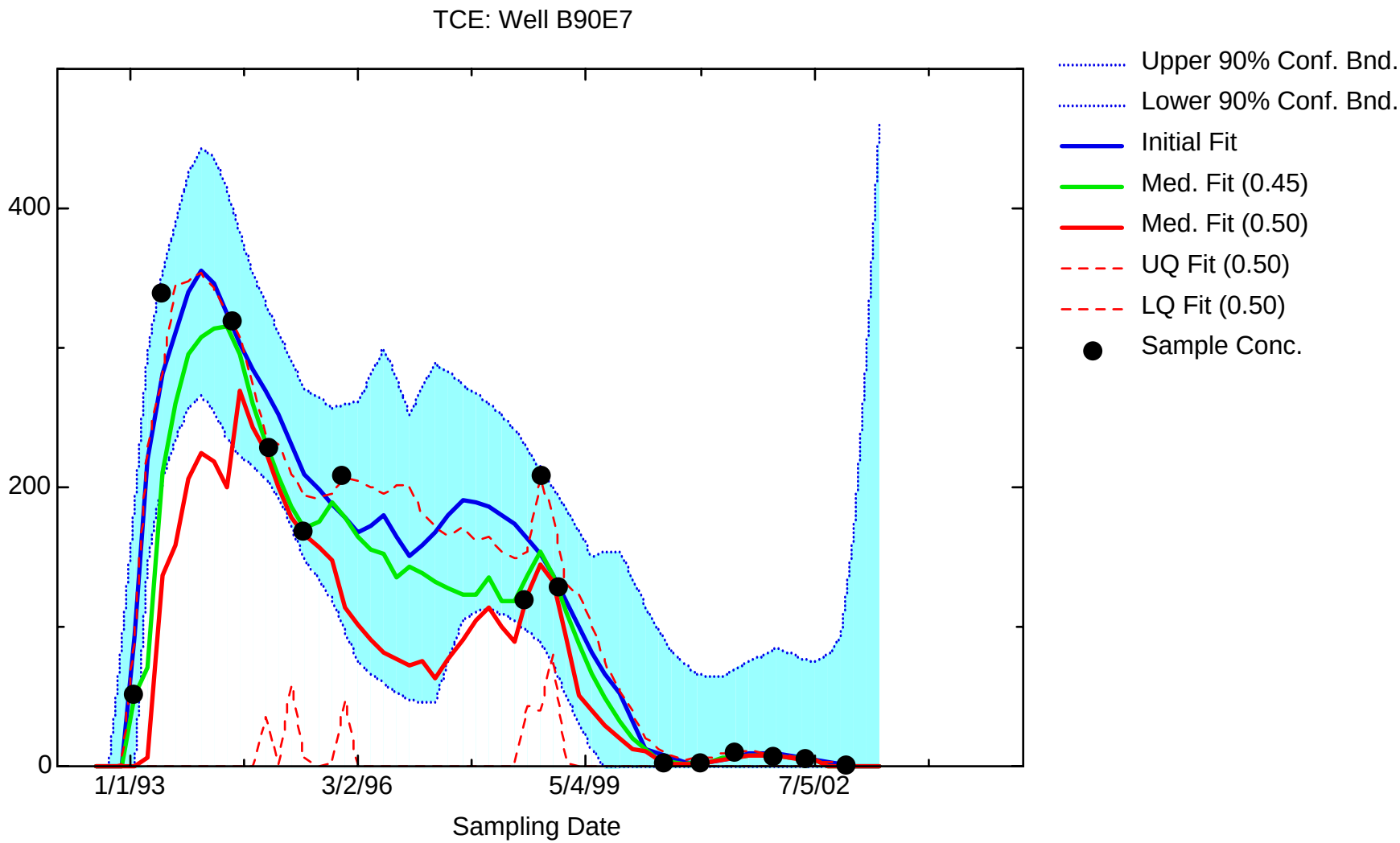

TCE: Well B90D5
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
40
20
0
9/1/94
11/1/97
1/2/01
3/4/04
Sampling Date

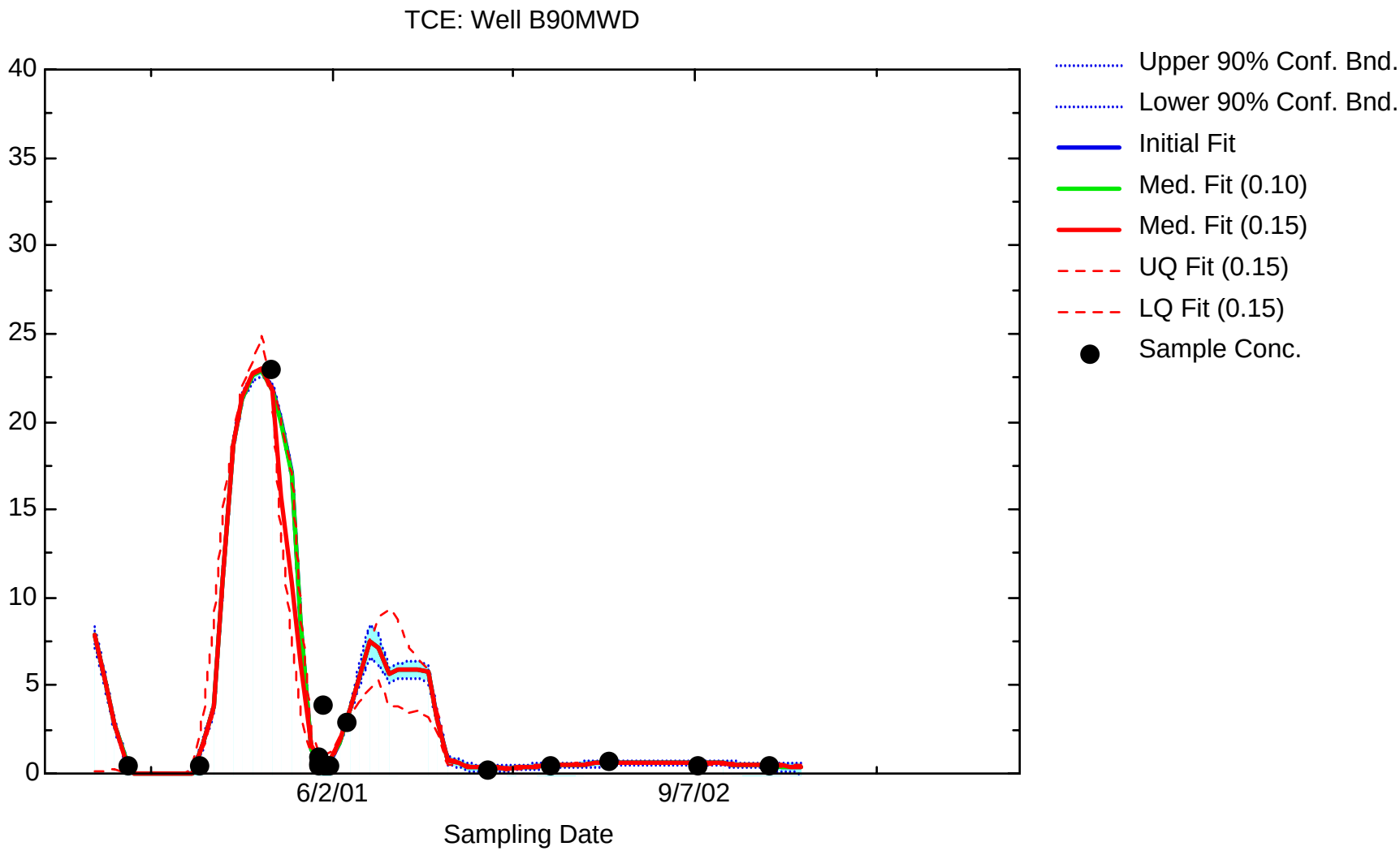

TCE: Well B90D6
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.
8.0
4.0
0.0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

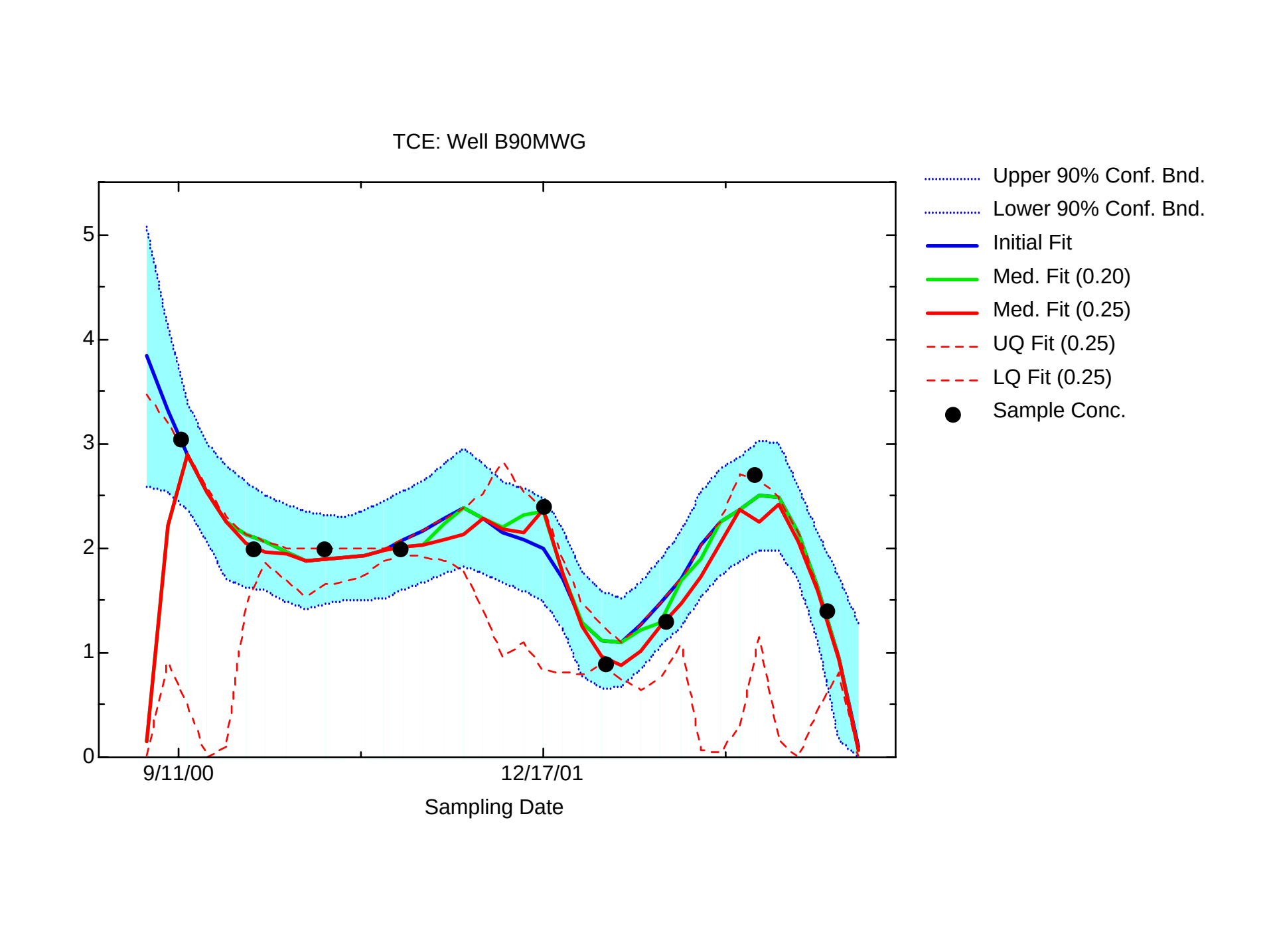

TCE: Well B90E1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
0
2
4
6
8
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

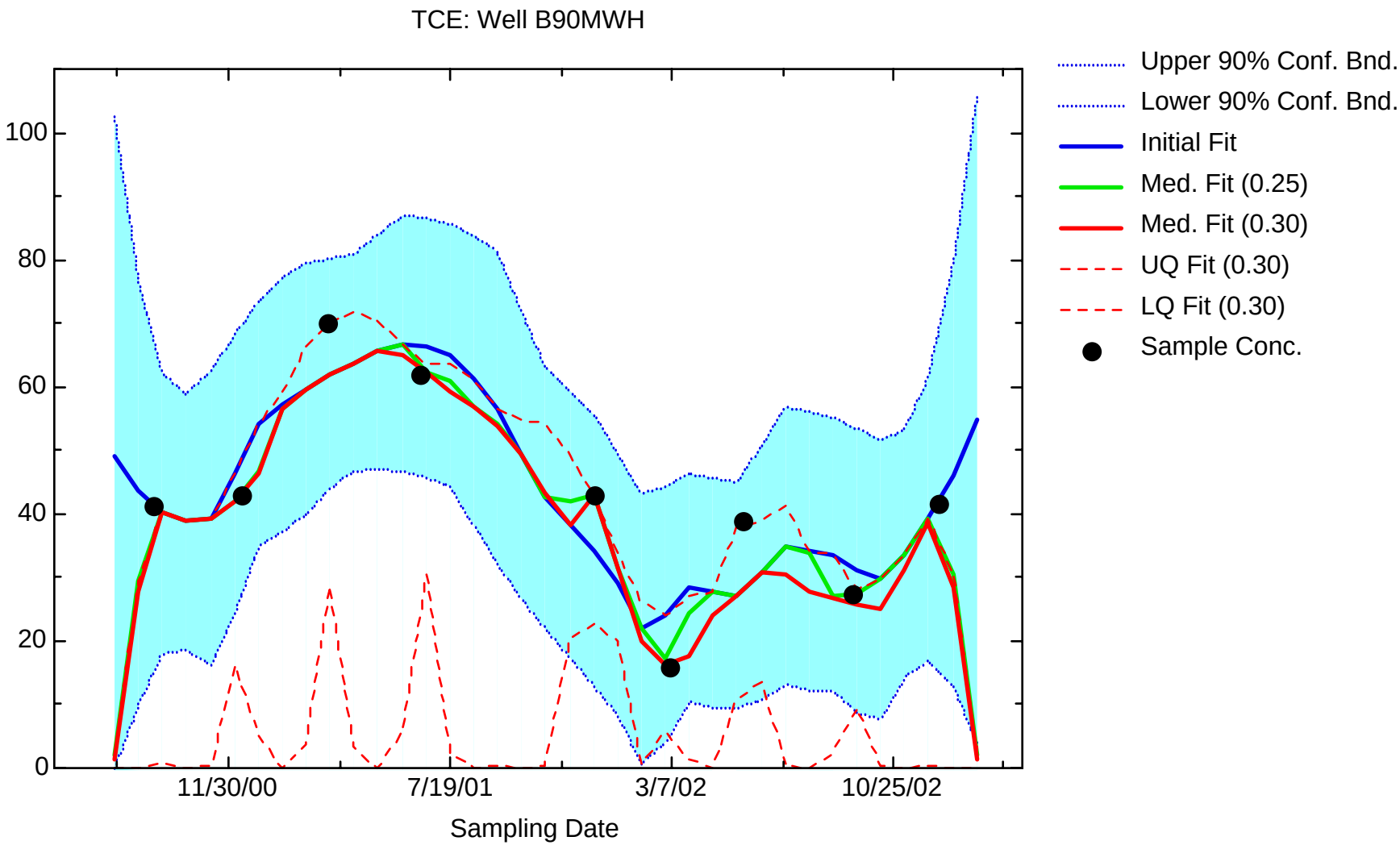

TCE: Well B90E3
6
4
2
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

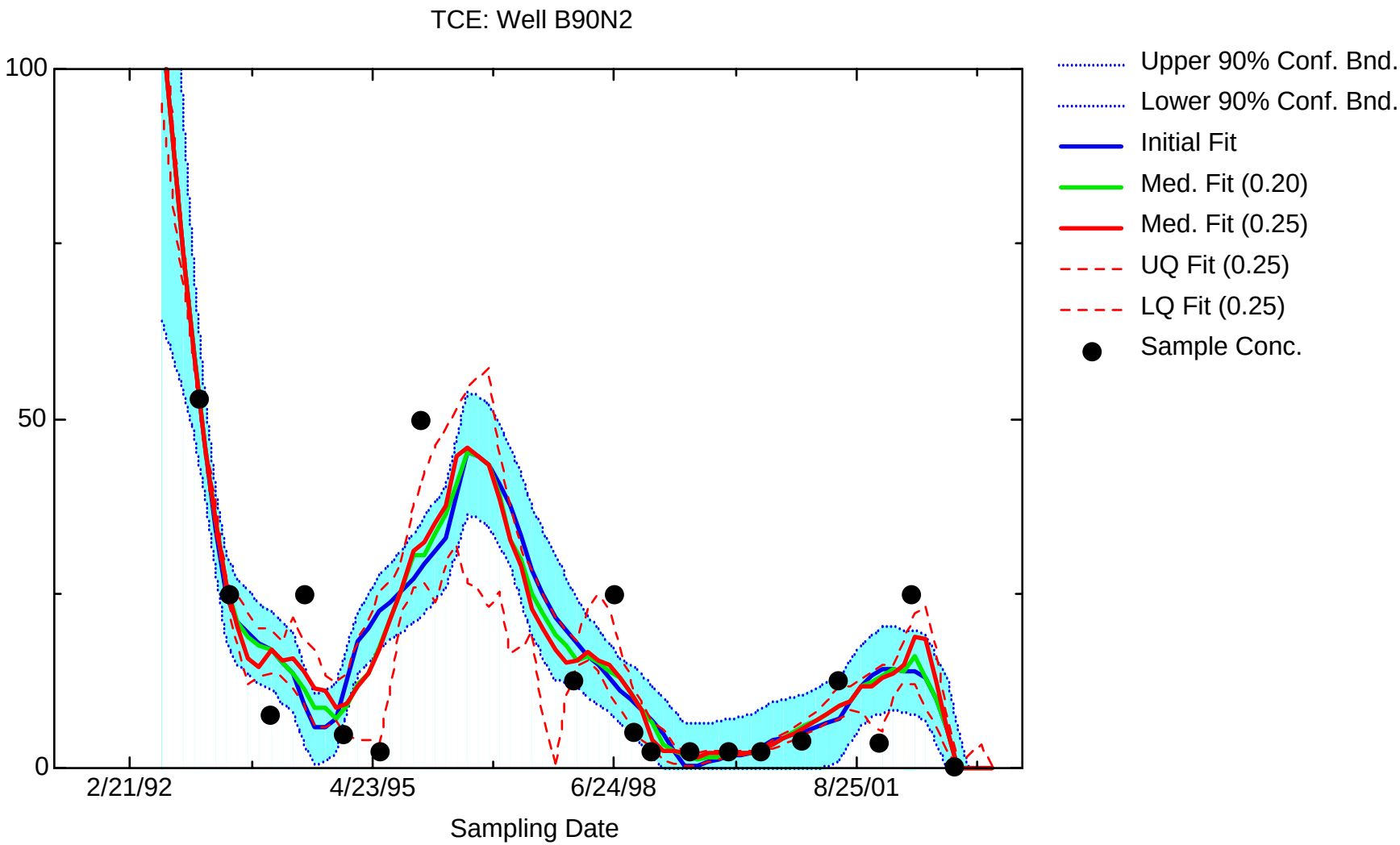

TCE: Well B90E5
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.
40
20
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

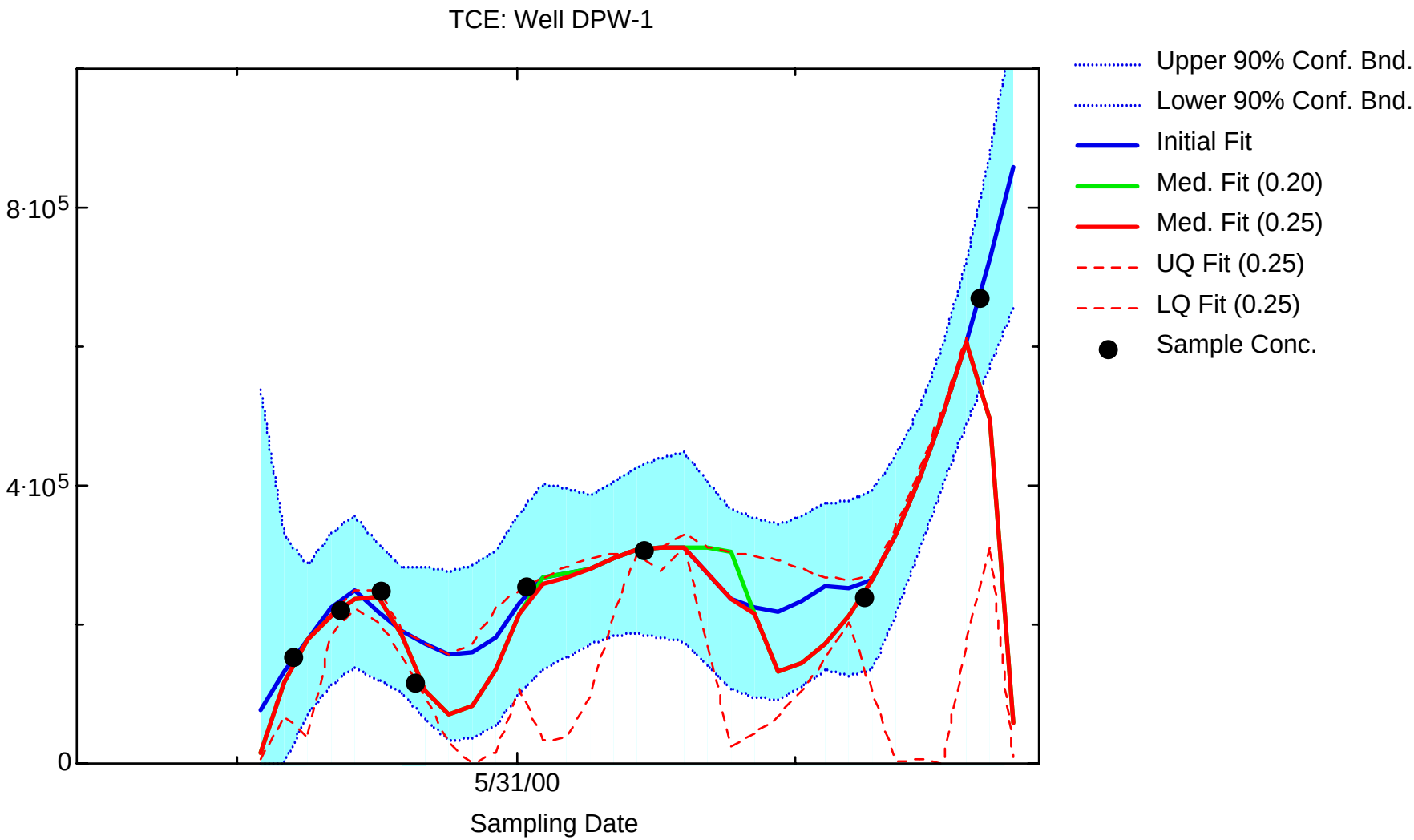

TCE: Well B90E7
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
400
200
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

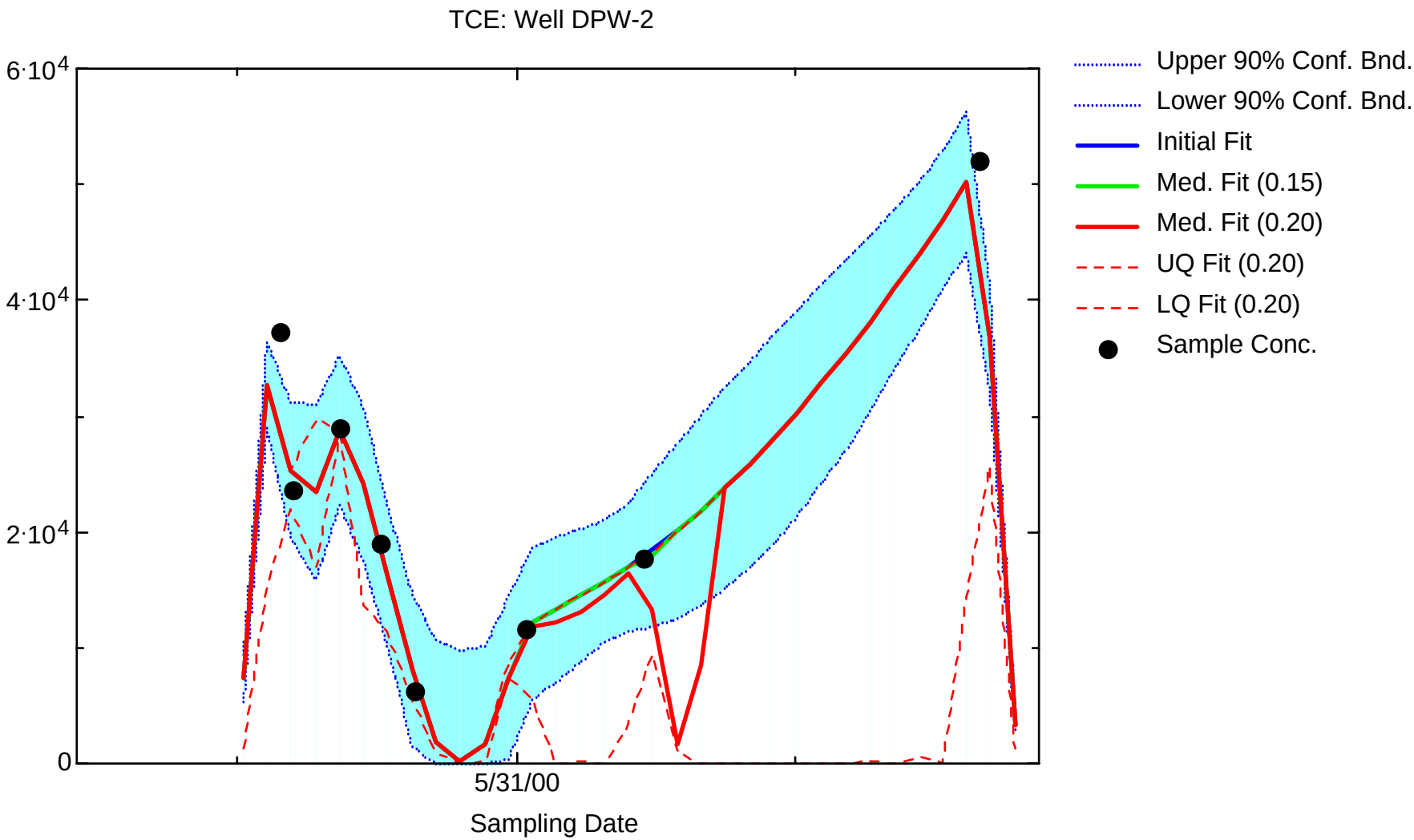

TCE: Well B90MWD
40
35
30
25
20
15
10
5
0
6/2/01
9/7/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

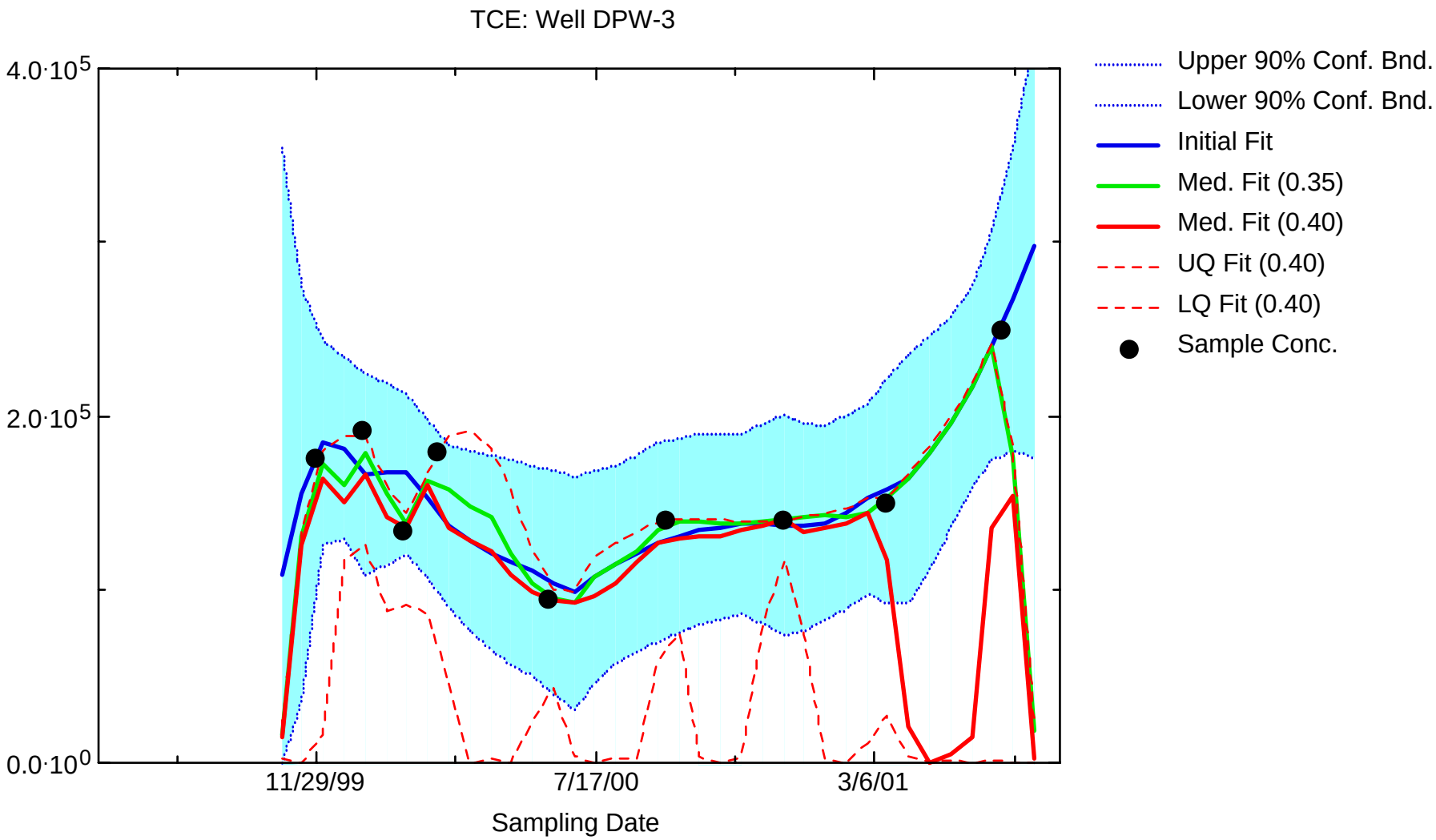

TCE: Well B90MWG
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
0
1
2
3
4
5
9/11/00
12/17/01
Sampling Date

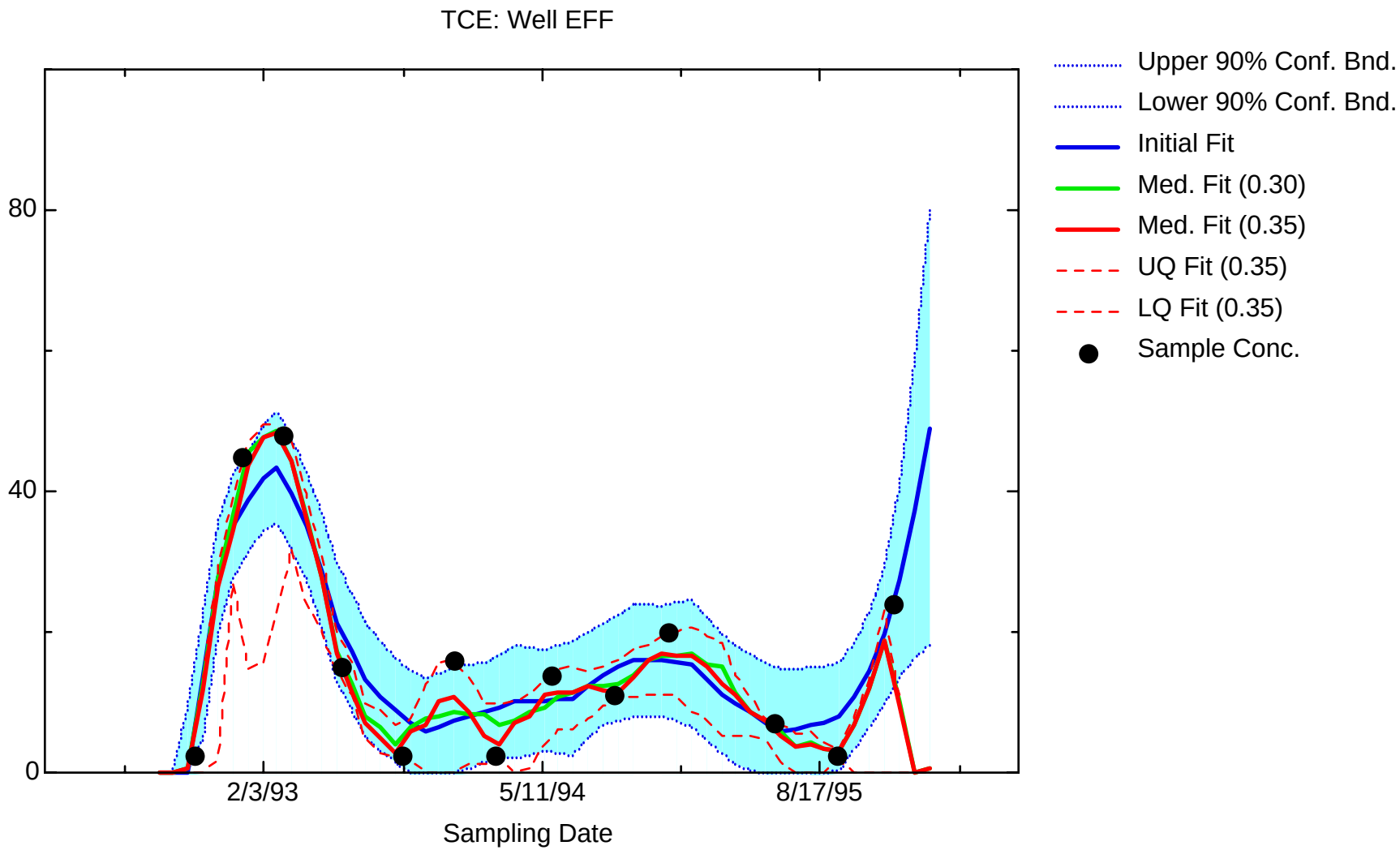

TCE: Well B90MWH
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
100
80
60
40
20
0
11/30/00
7/19/01
3/7/02
10/25/02
Sampling Date

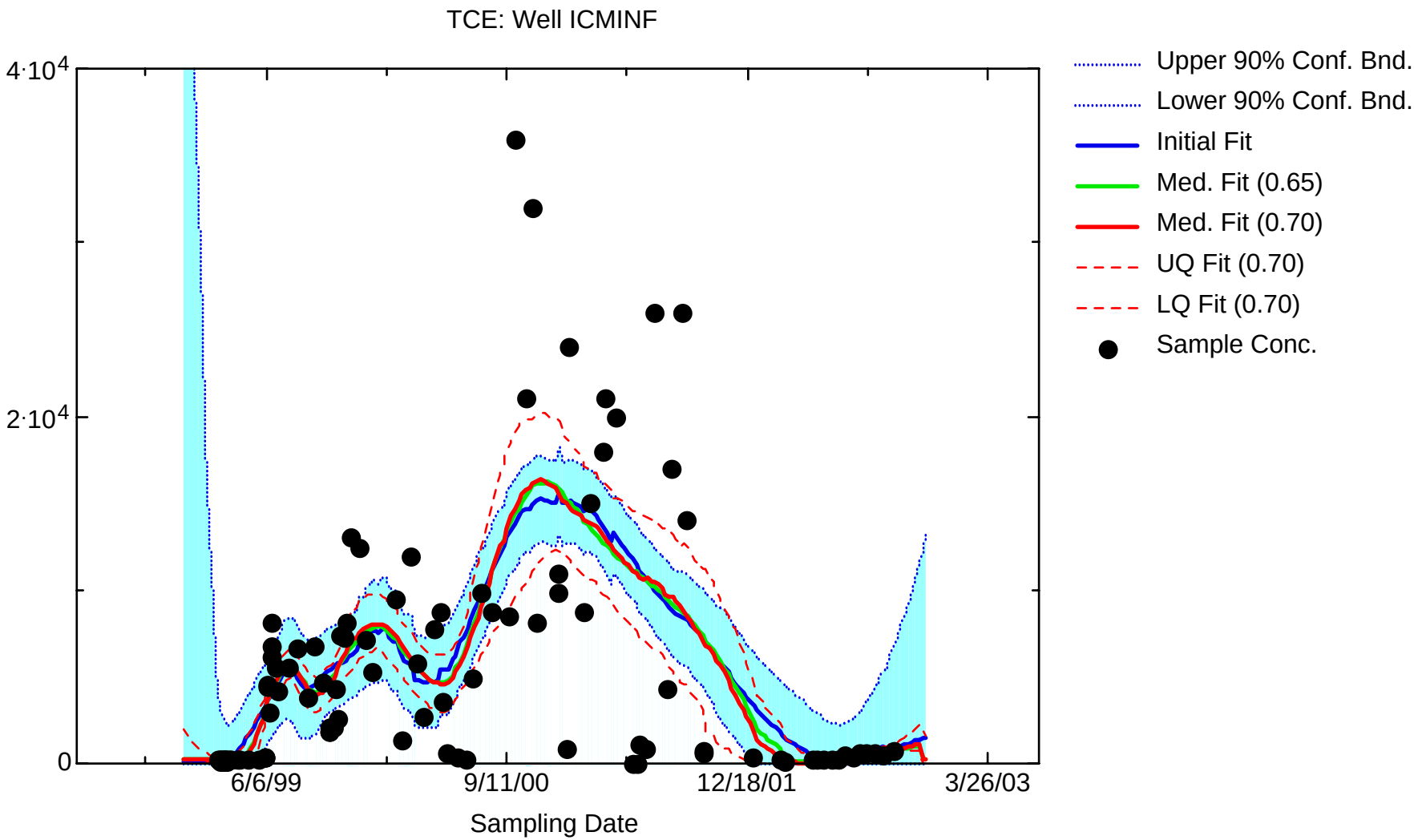

TCE: Well B90N2
100
50
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

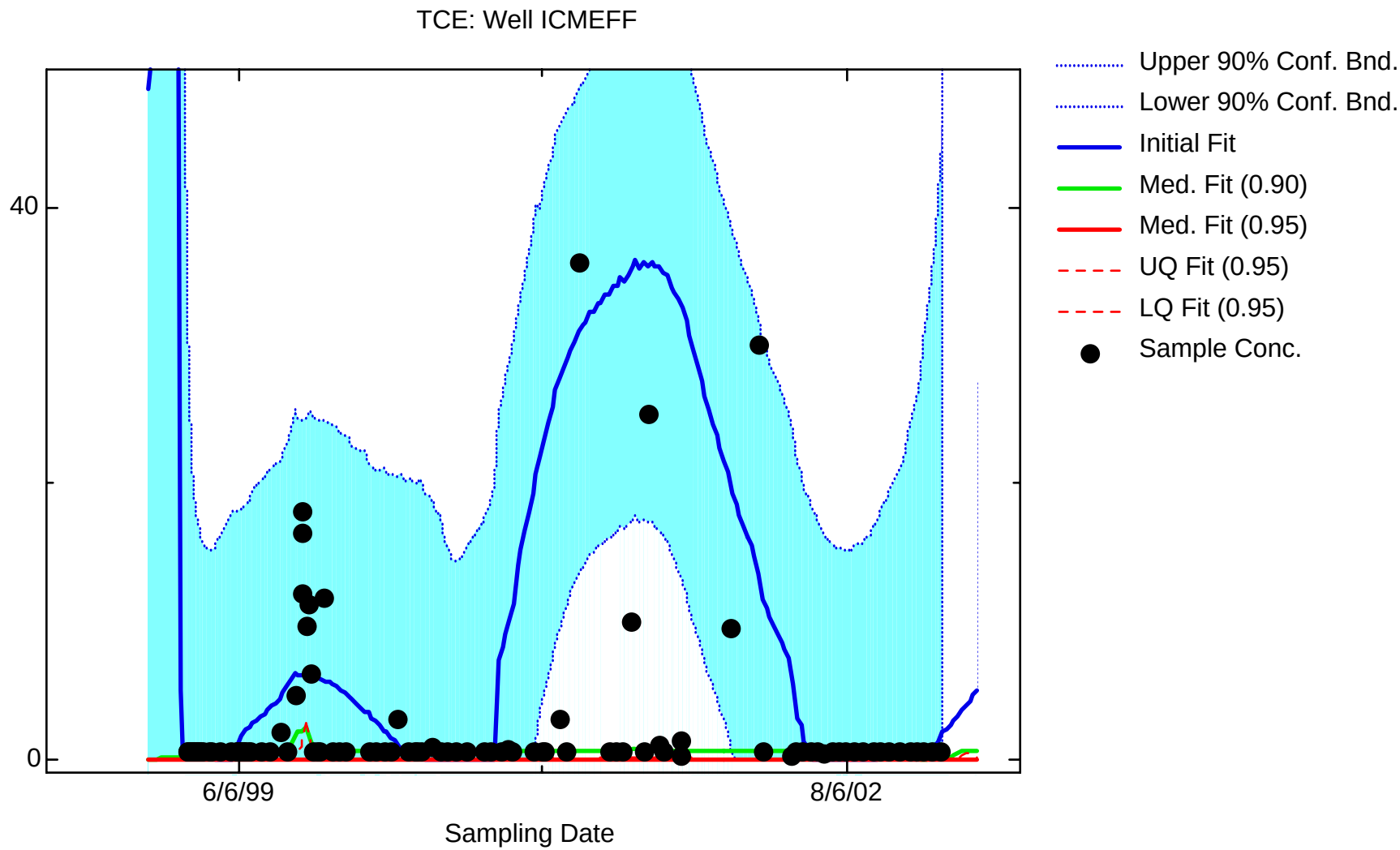

TCE: Well DPW-1
8·10^5
4·10^5
0
5/31/00
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

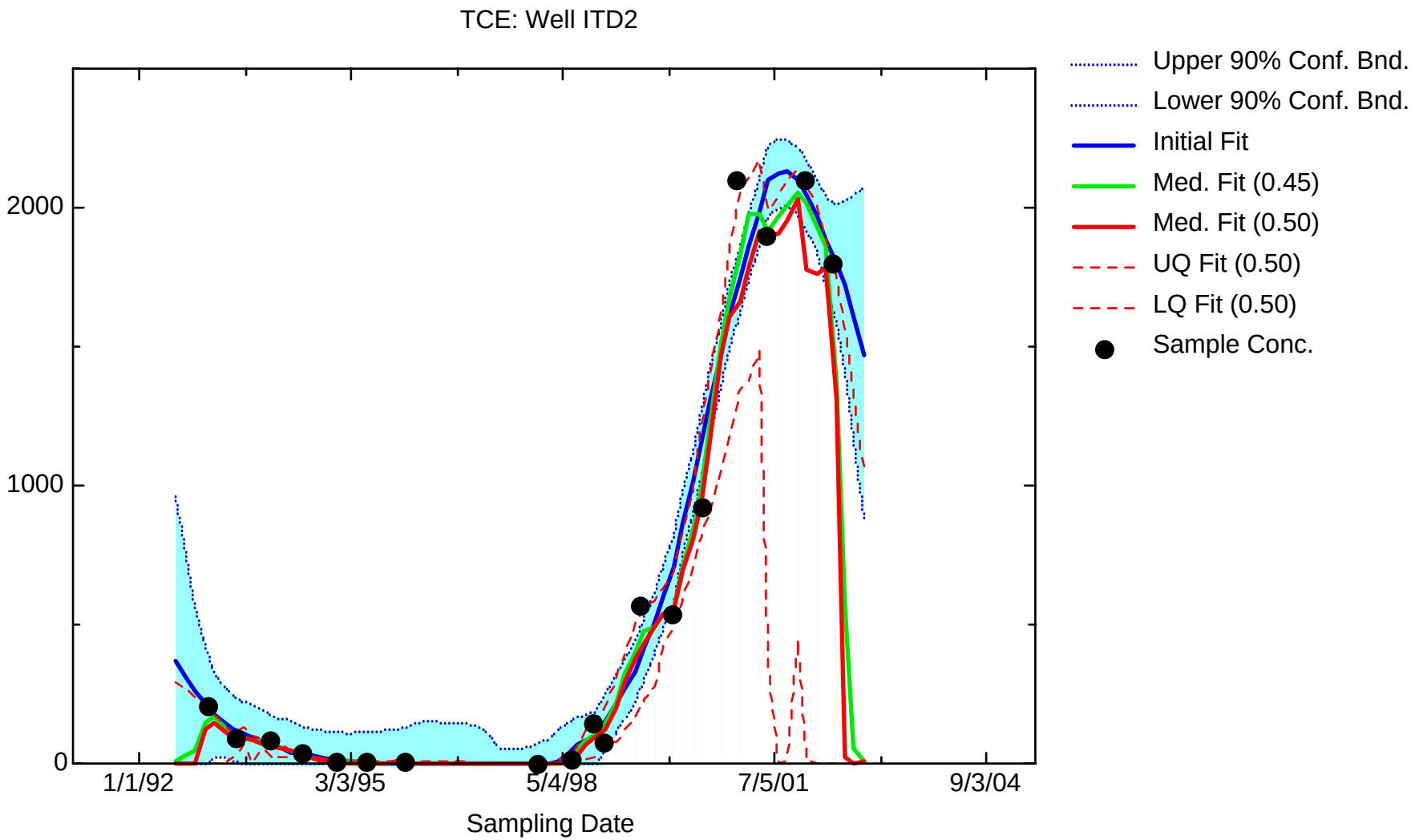

TCE: Well DPW-2
6·10^4
4·10^4
2·10^4
0
5/31/00
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

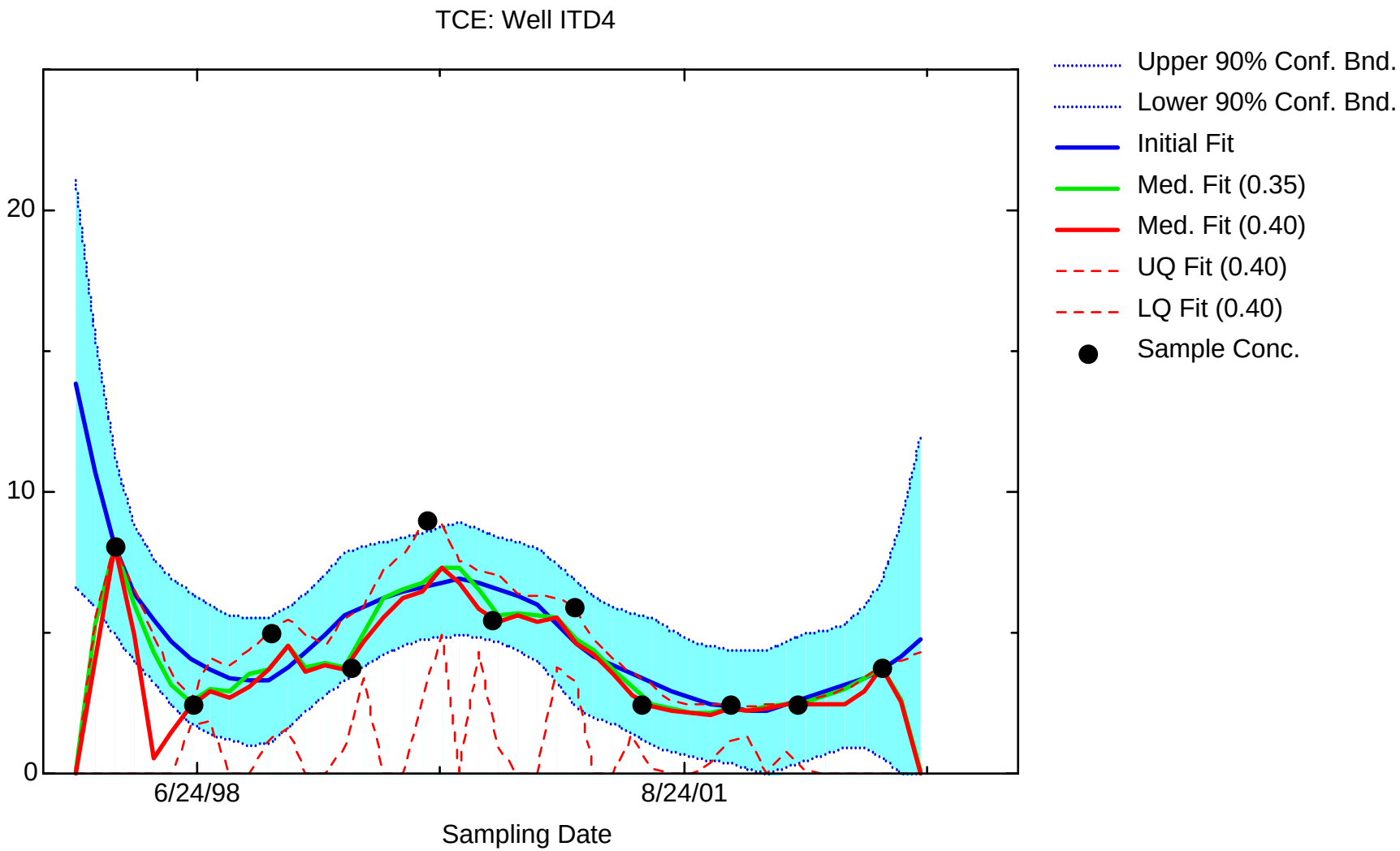

TCE: Well DPW-3
4.0·10^5
2.0·10^5
0.0·10^0
11/29/99
7/17/00
3/6/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

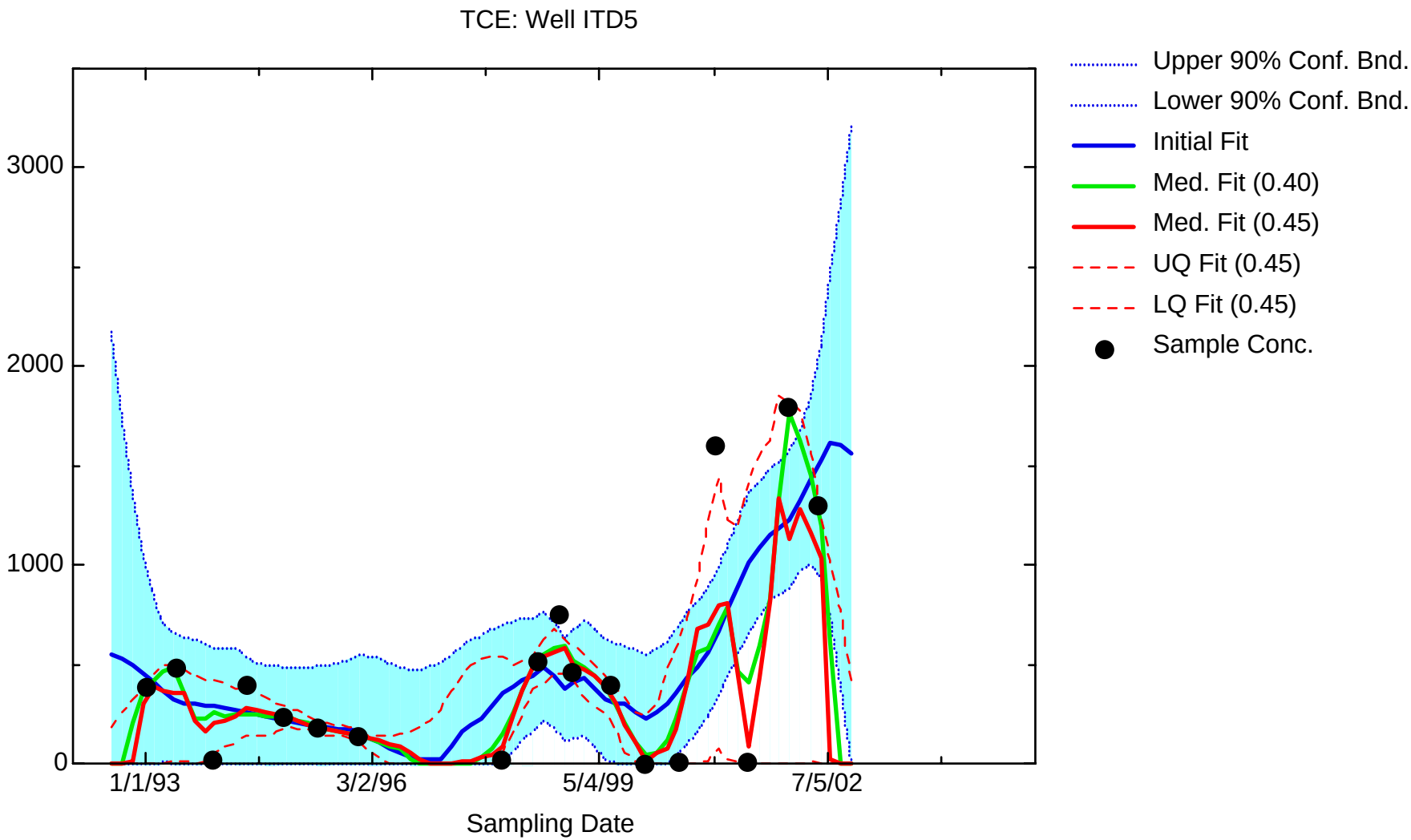

TCE: Well EFF
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
80
40
0
2/3/93
5/11/94
8/17/95
Sampling Date

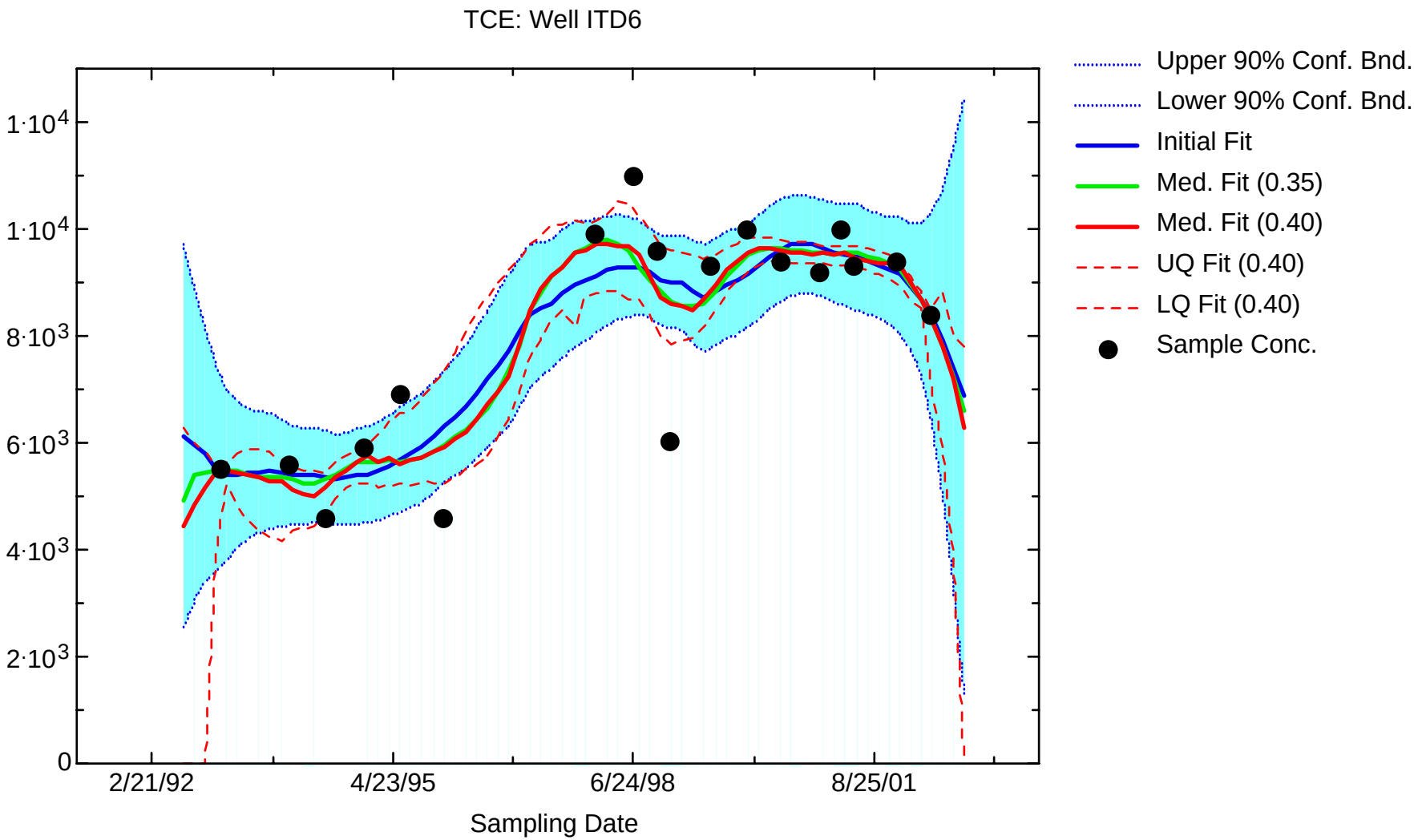

TCE: Well ICMINF
4·10^4
2·10^4
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

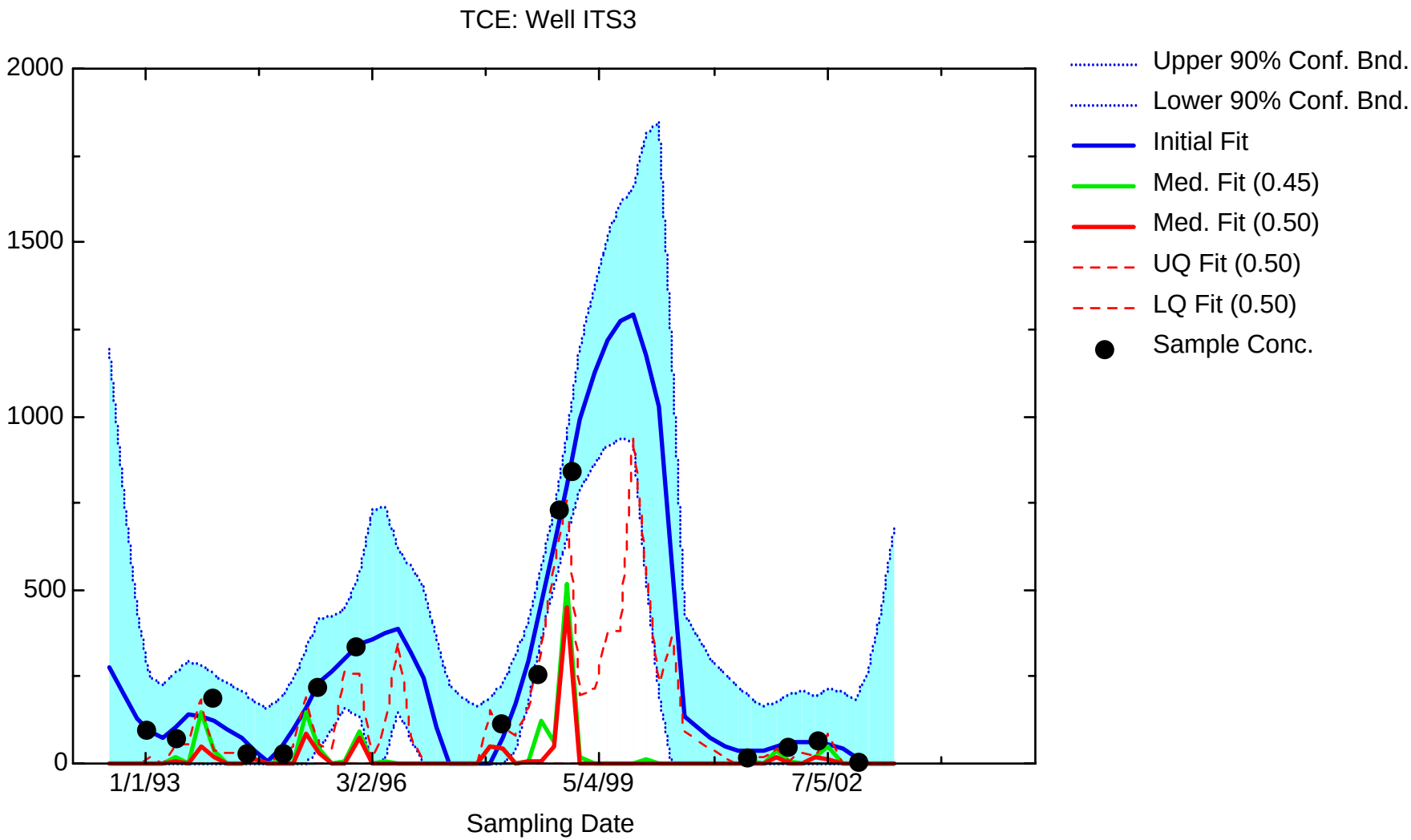

TCE: Well ICMEFF
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.90)
Med. Fit (0.95)
UQ Fit (0.95)
LQ Fit (0.95)
Sample Conc.
40
0
6/6/99
8/6/02
Sampling Date

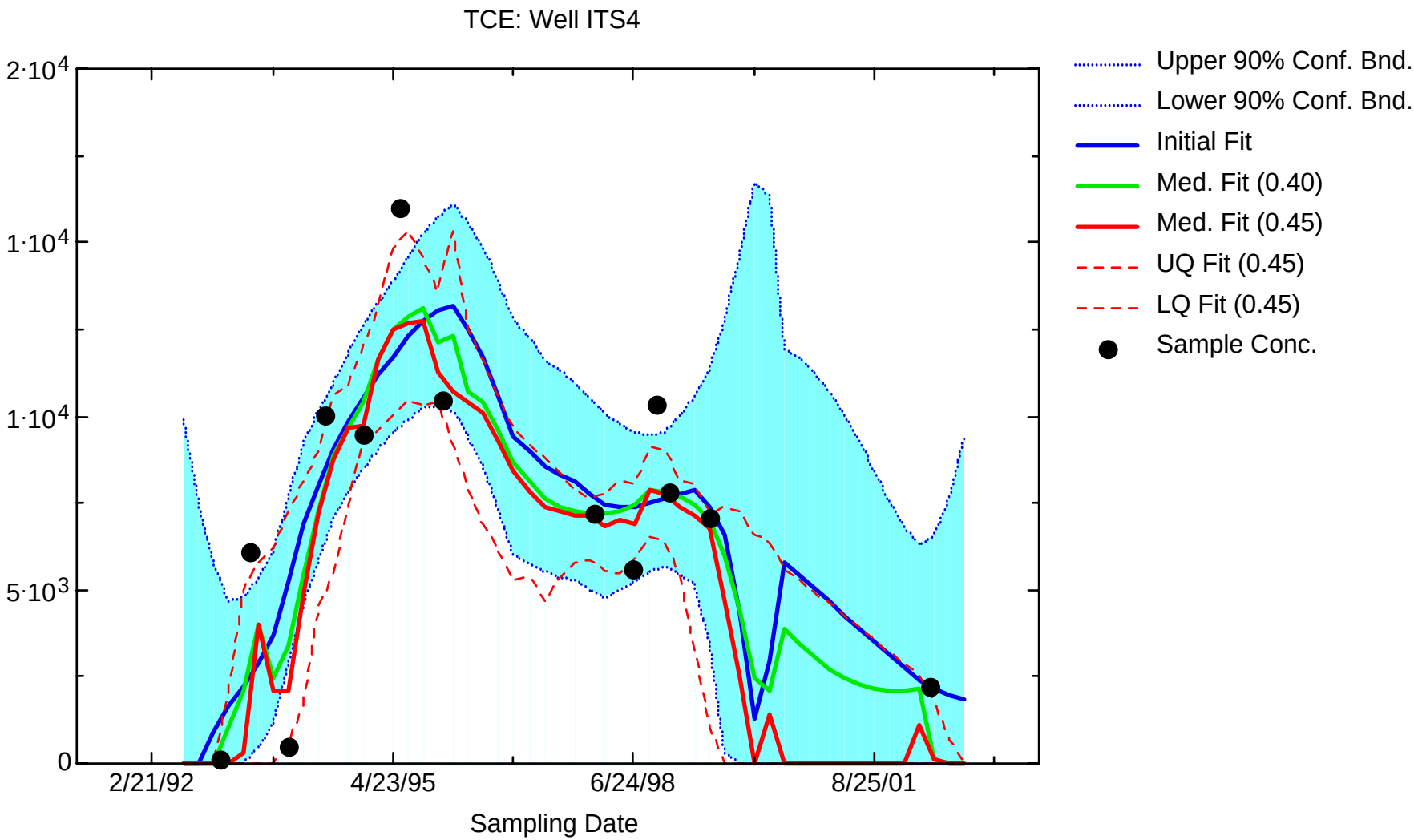

TCE: Well ITD2
2000
1000
0
1/1/92
3/3/95
5/4/98
7/5/01
9/3/04
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

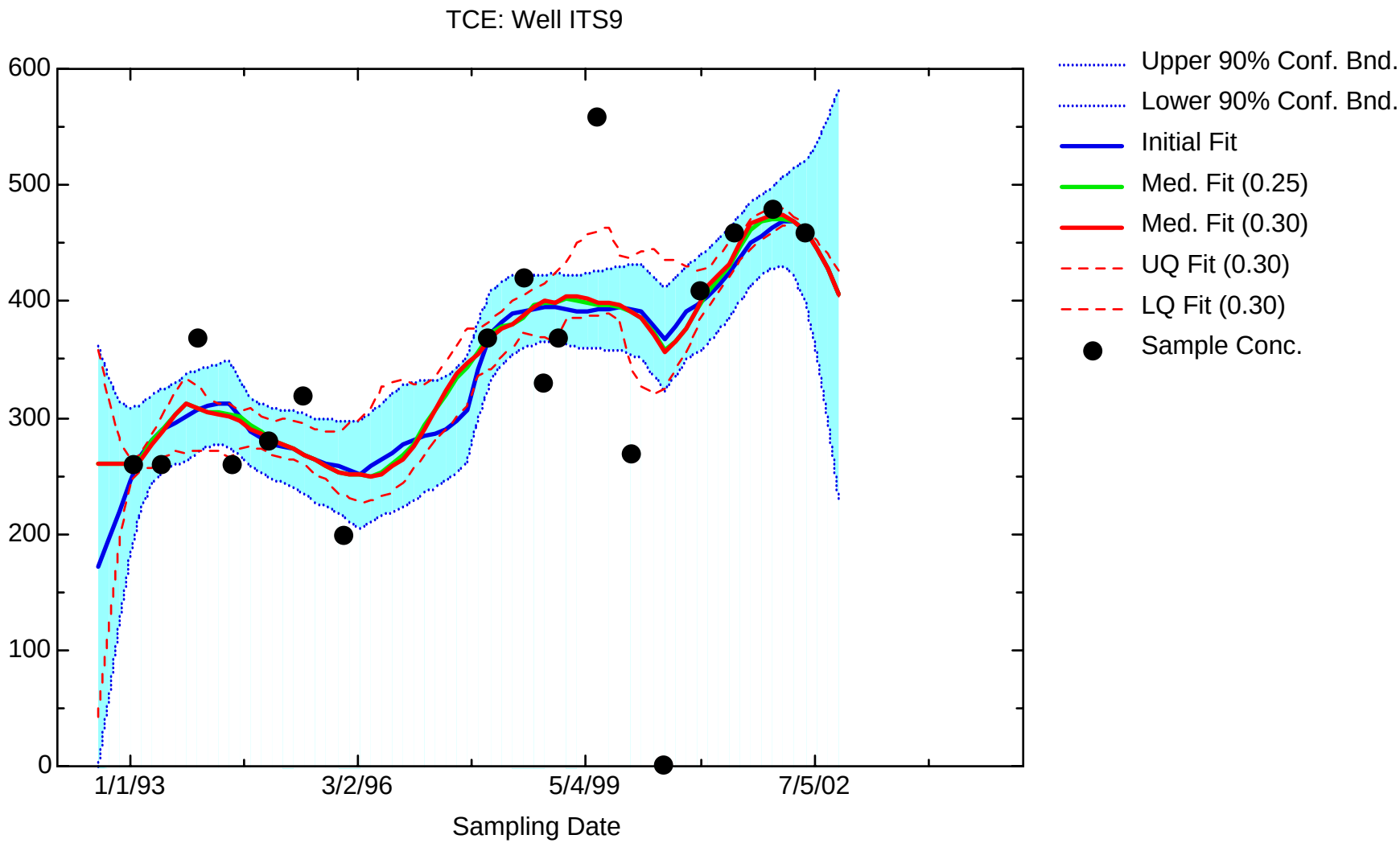

TCE: Well ITD4
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
20
10
0
6/24/98
8/24/01
Sampling Date

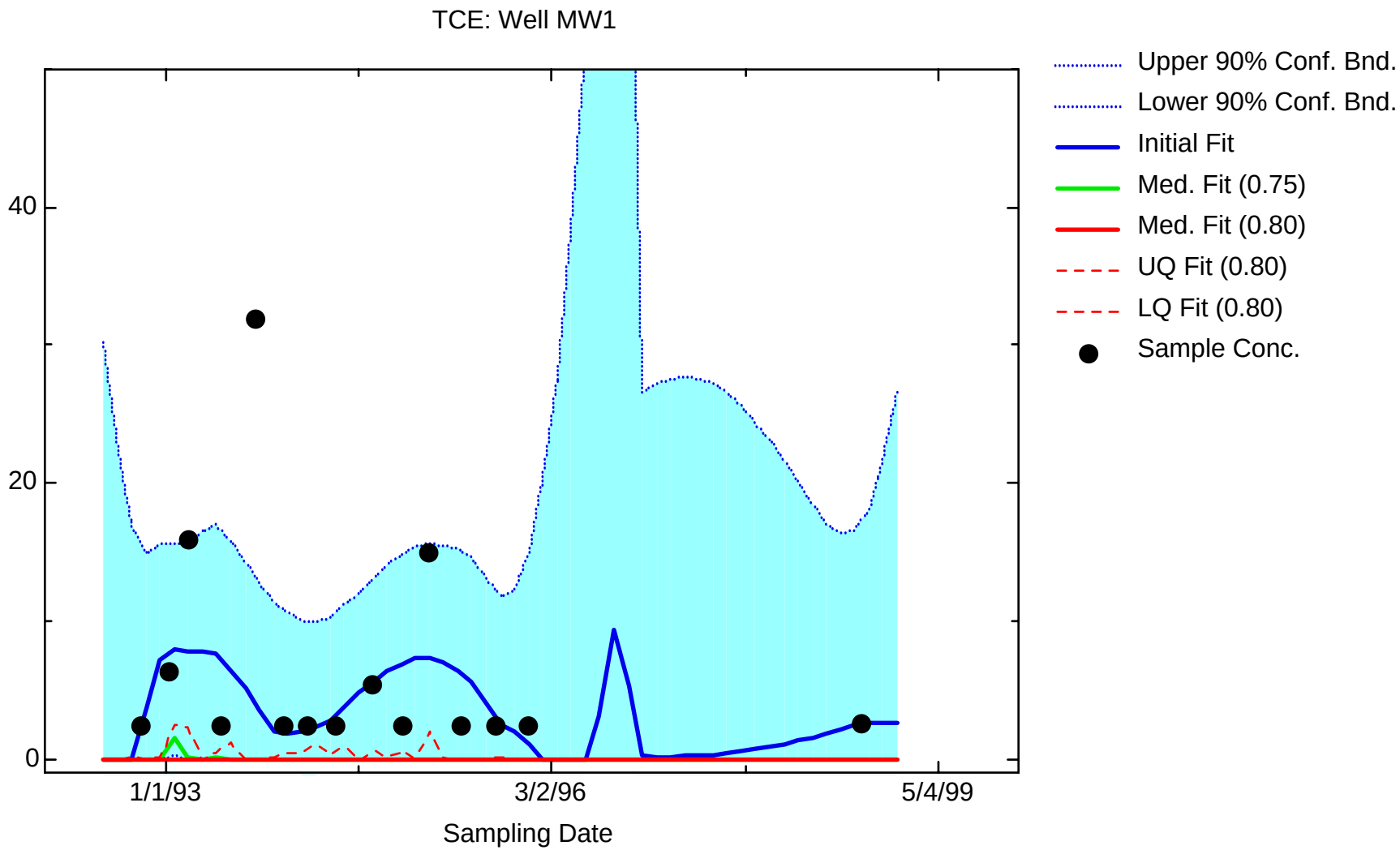

TCE: Well ITD5
3000
2000
1000
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

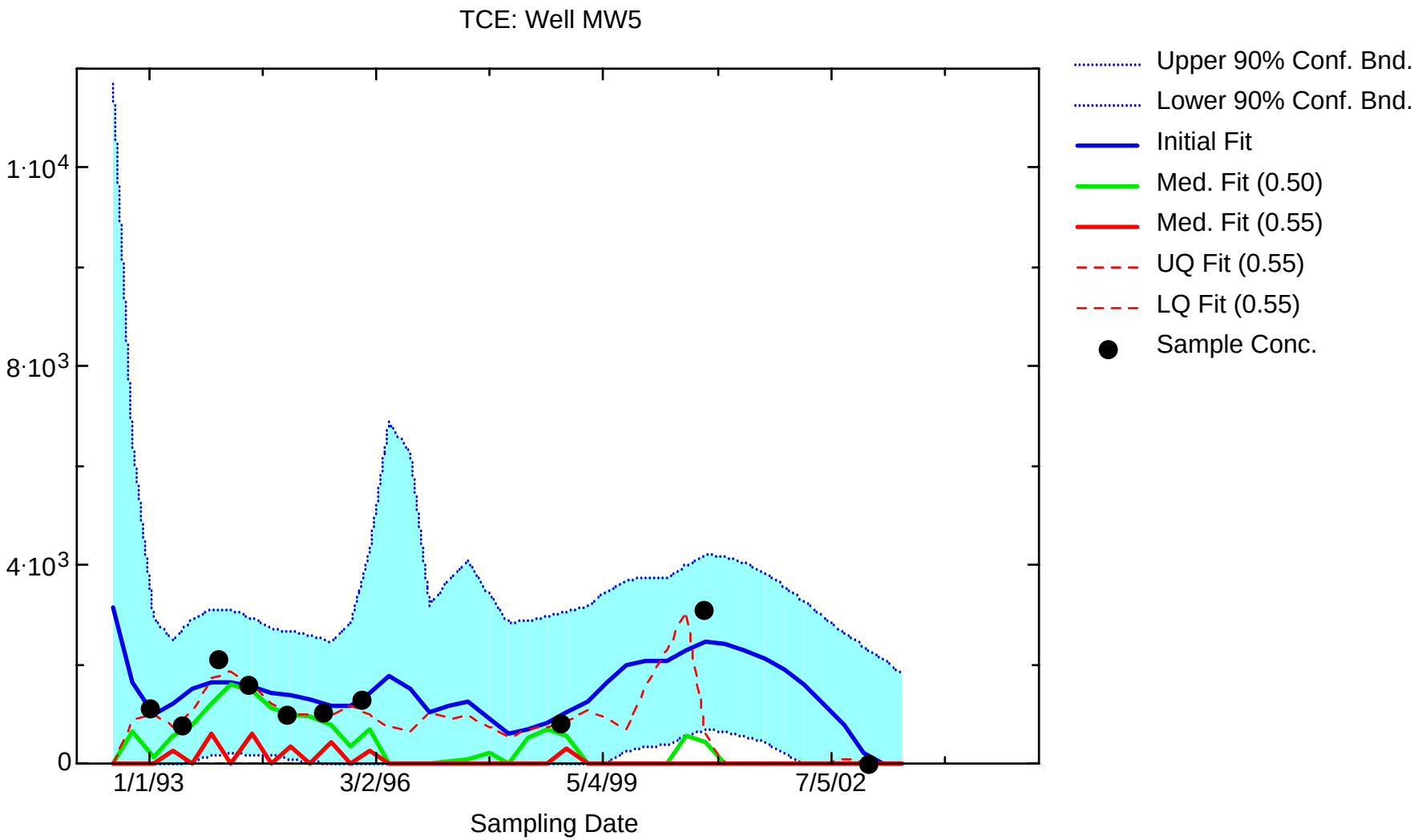

TCE: Well ITD6
1·10^4
1·10^4
8·10^3
6·10^3
4·10^3
2·10^3
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

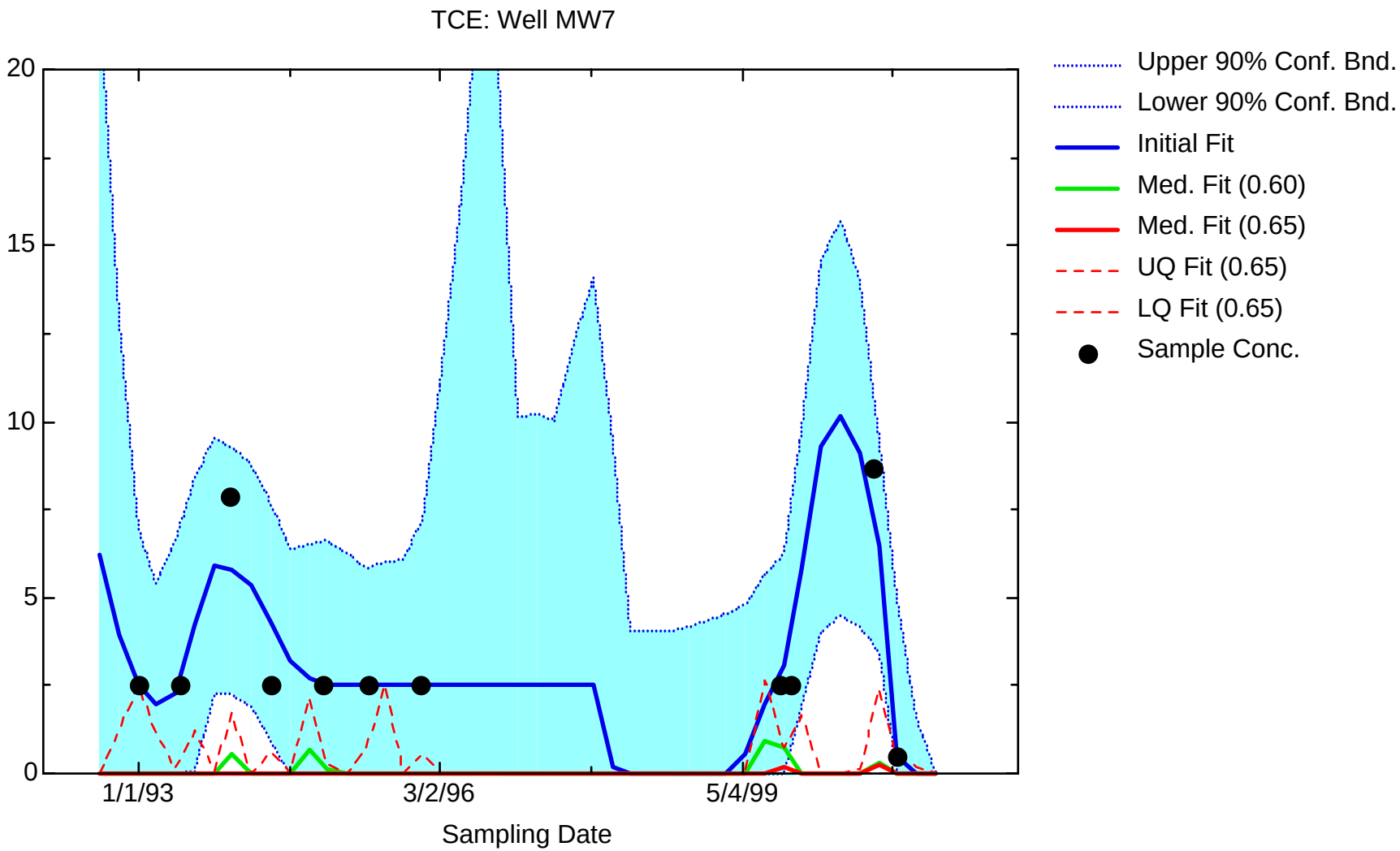

TCE: Well ITS3
2000
1500
1000
500
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

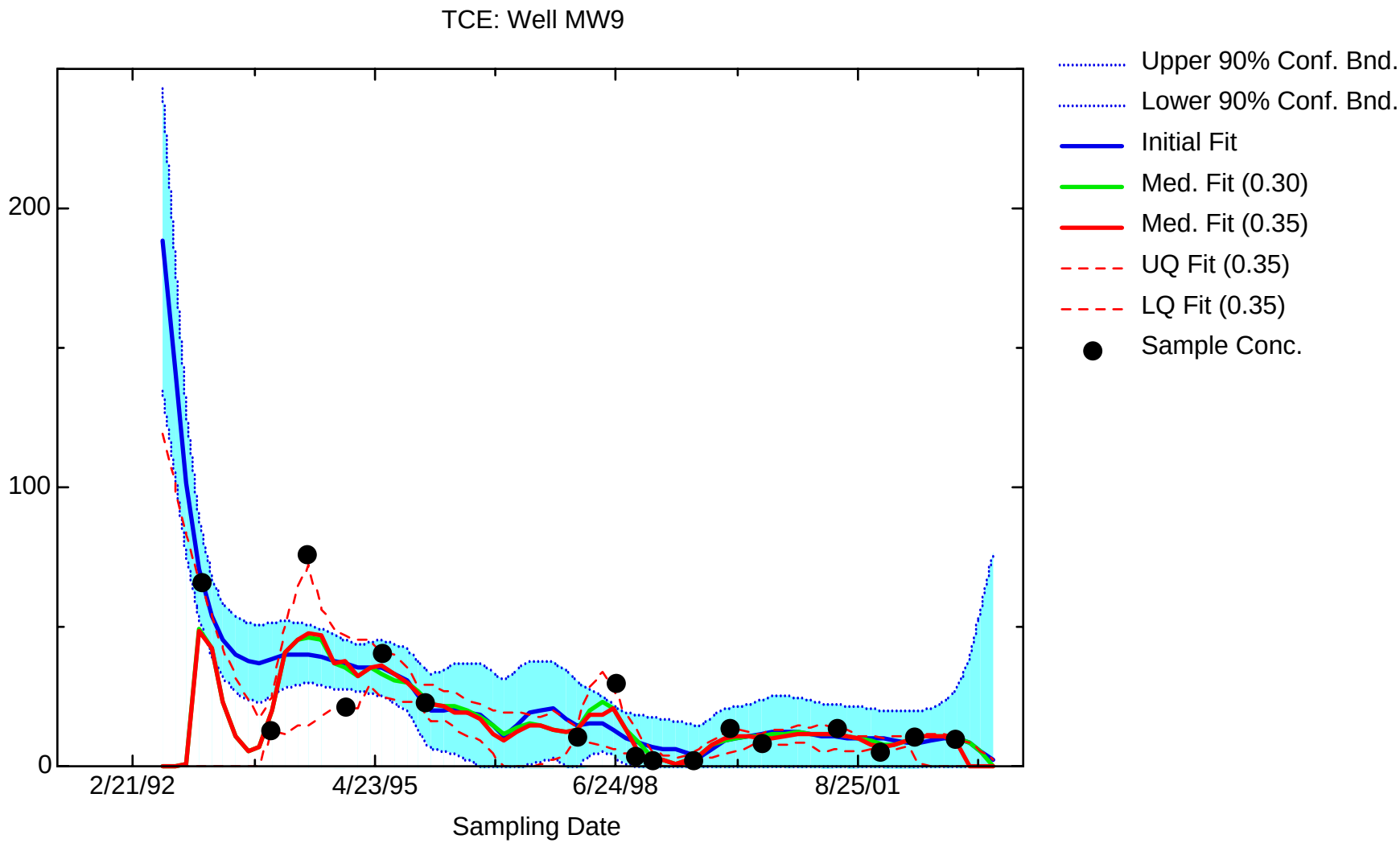

TCE: Well ITS4
2·10^4
1·10^4
1·10^4
5·10^3
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

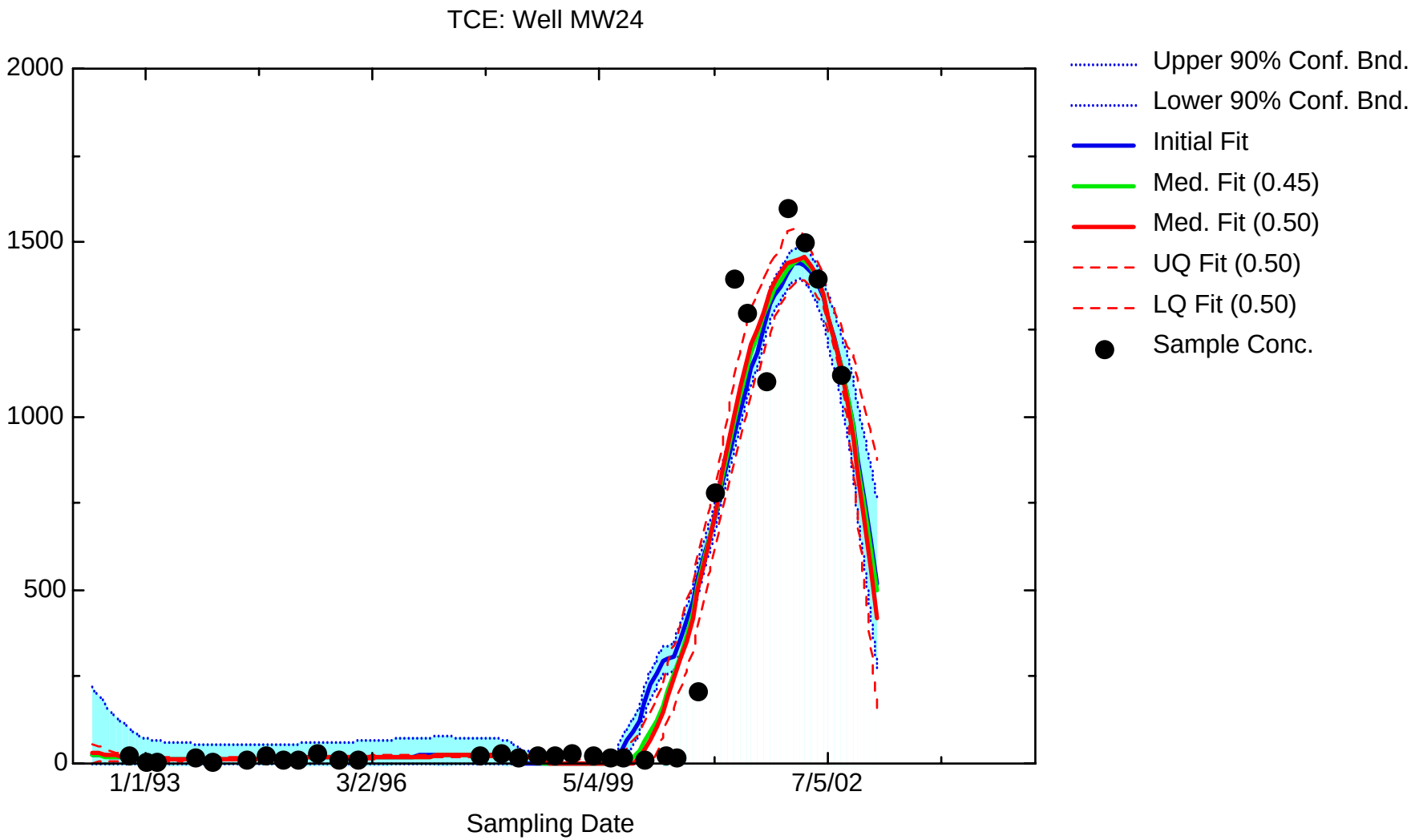

TCE: Well ITS9
600
500
400
300
200
100
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

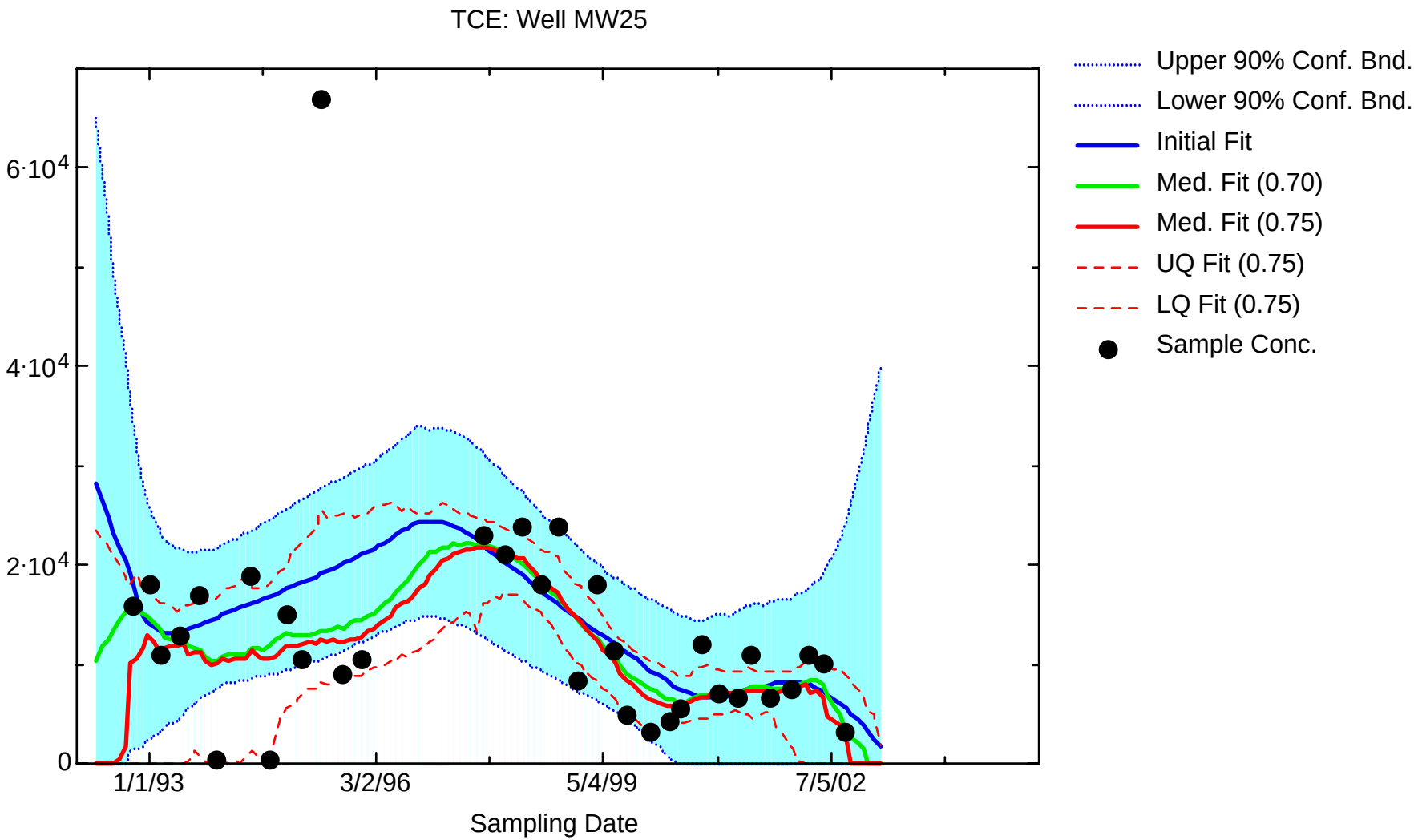

TCE: Well MW1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.75)
Med. Fit (0.80)
UQ Fit (0.80)
LQ Fit (0.80)
Sample Conc.
40
20
0
1/1/93
3/2/96
5/4/99
Sampling Date

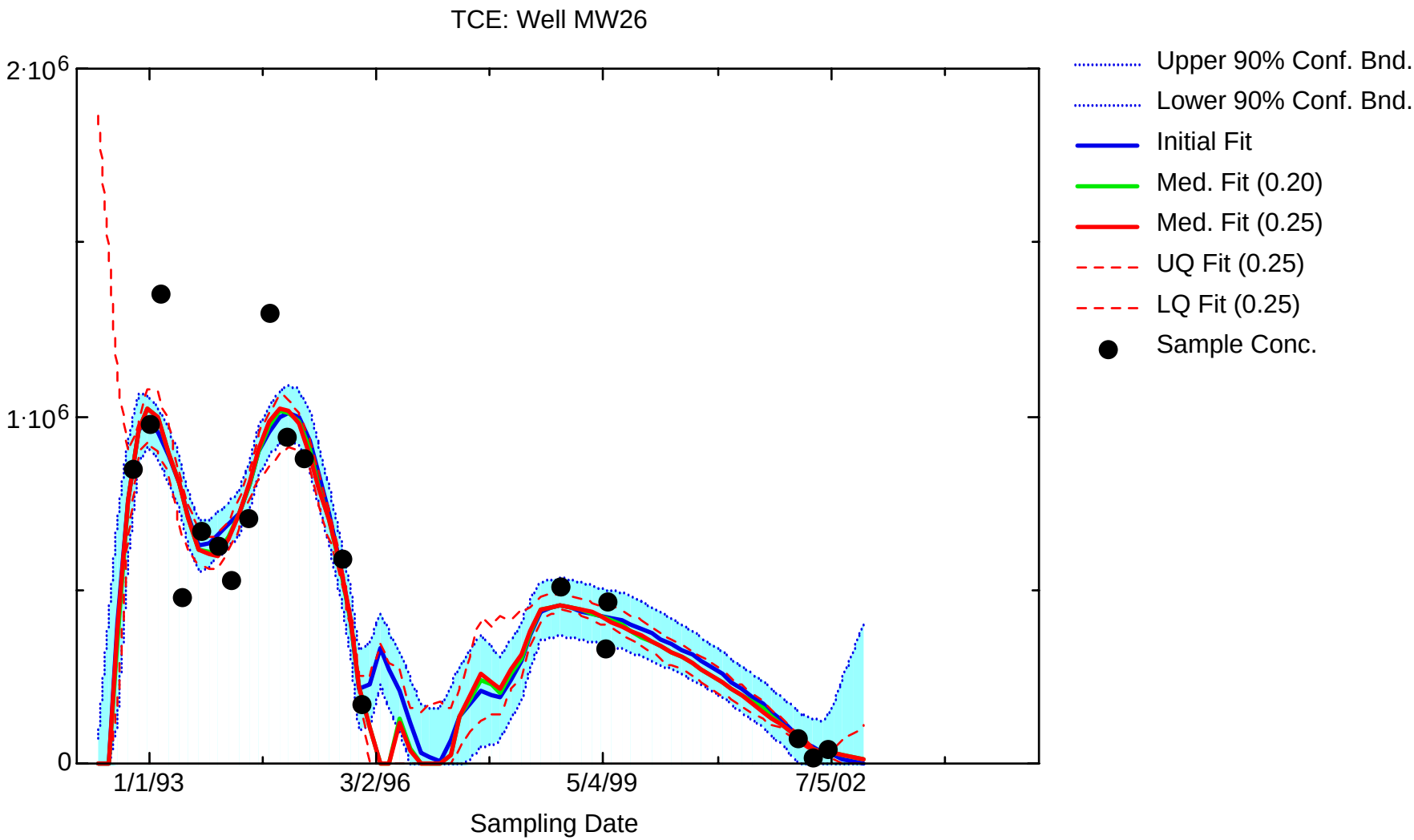

TCE: Well MW5
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.
1·10^4
8·10^3
4·10^3
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

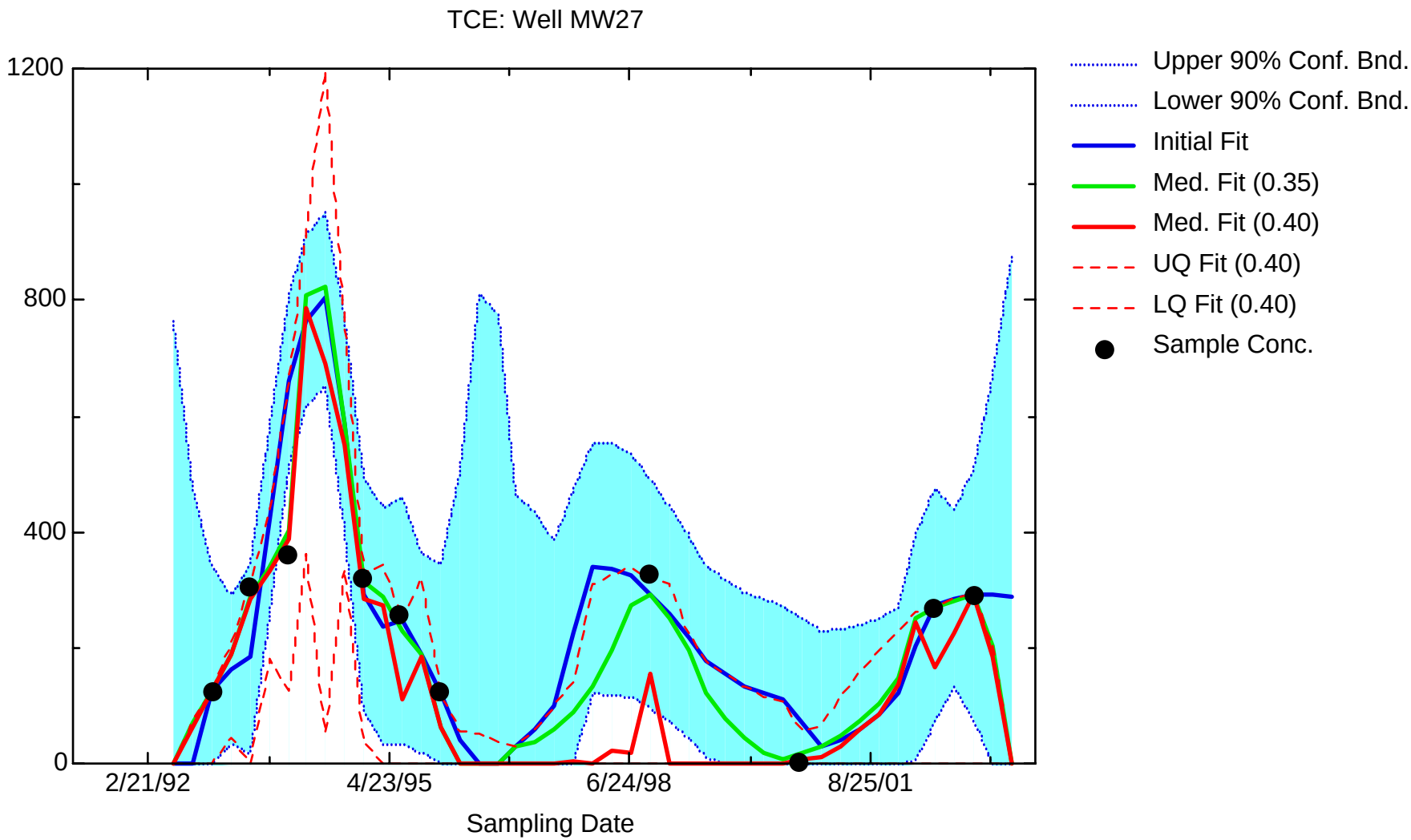

TCE: Well MW7
20
15
10
5
0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

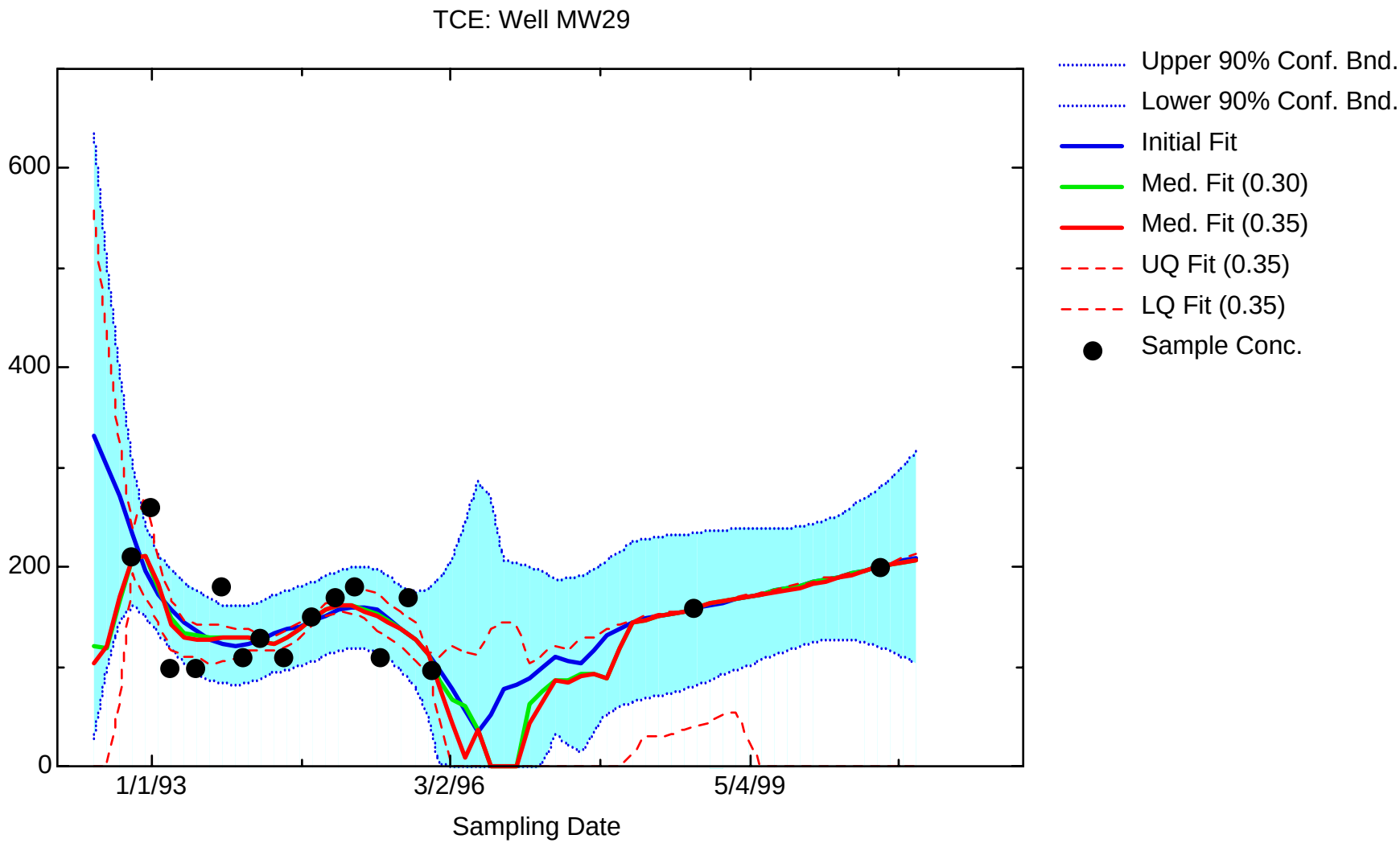

TCE: Well MW9
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
200
100
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

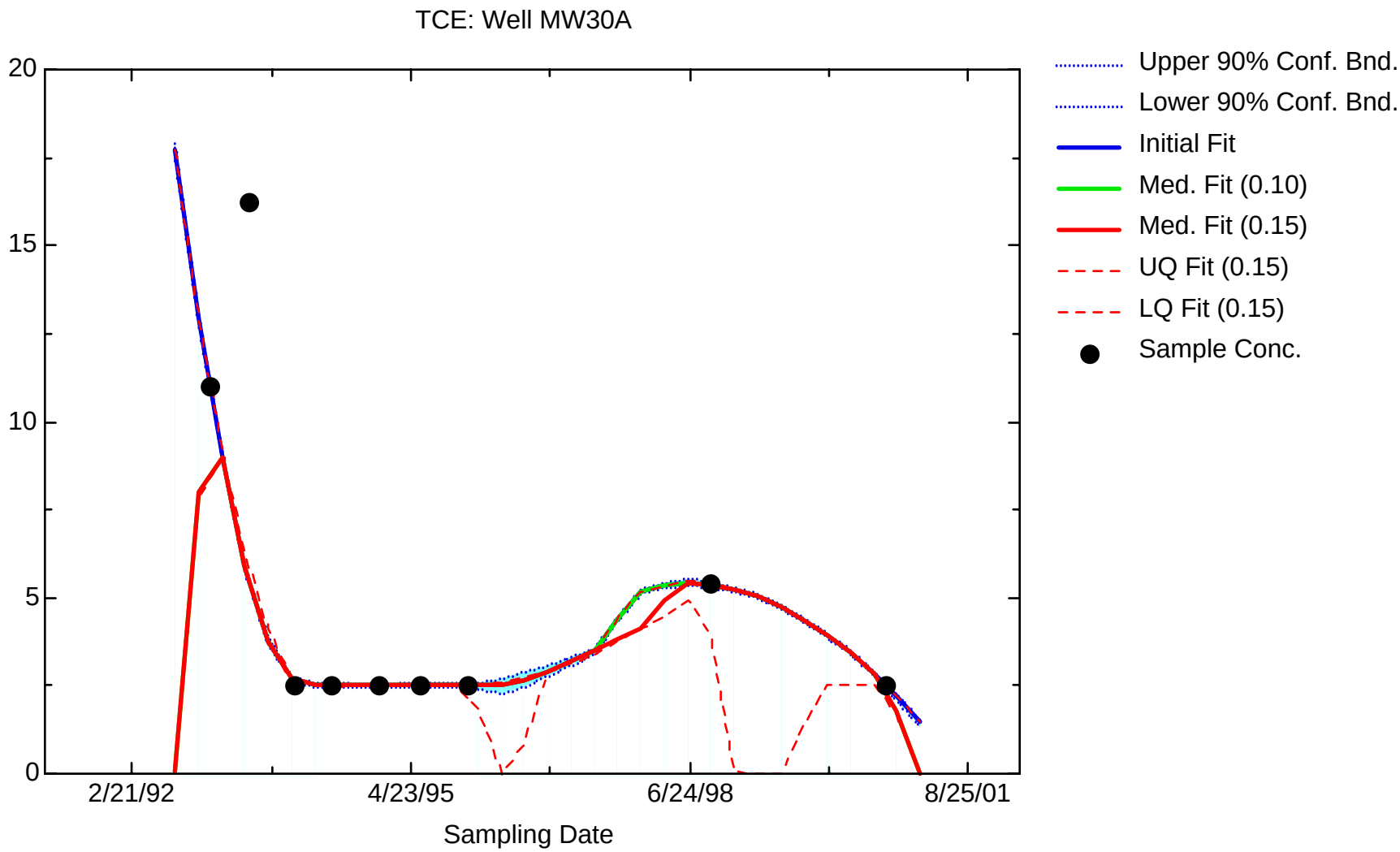

TCE: Well MW24
2000
1500
1000
500
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

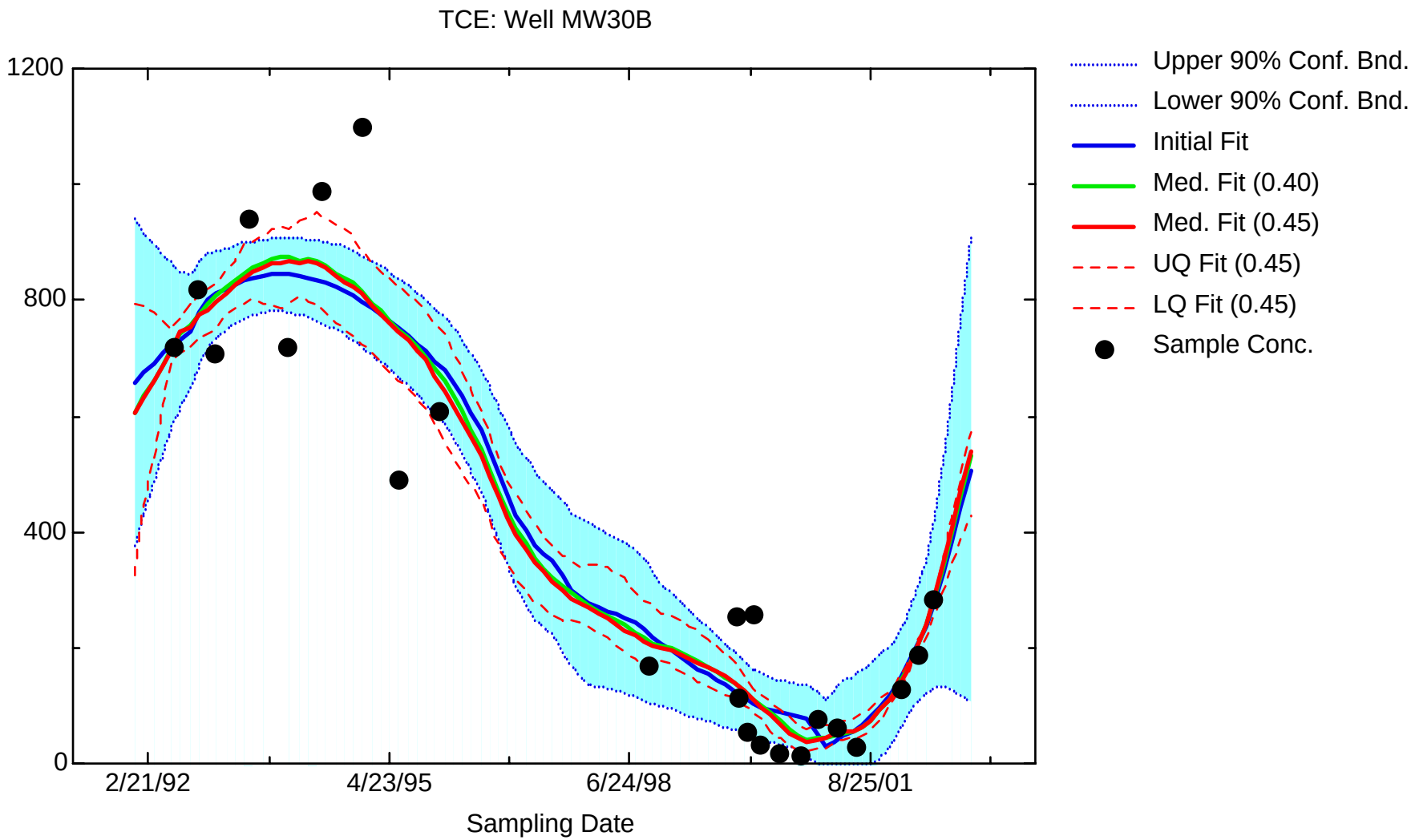

TCE: Well MW25
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.70)
Med. Fit (0.75)
UQ Fit (0.75)
LQ Fit (0.75)
Sample Conc.
6·10^4
4·10^4
2·10^4
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date

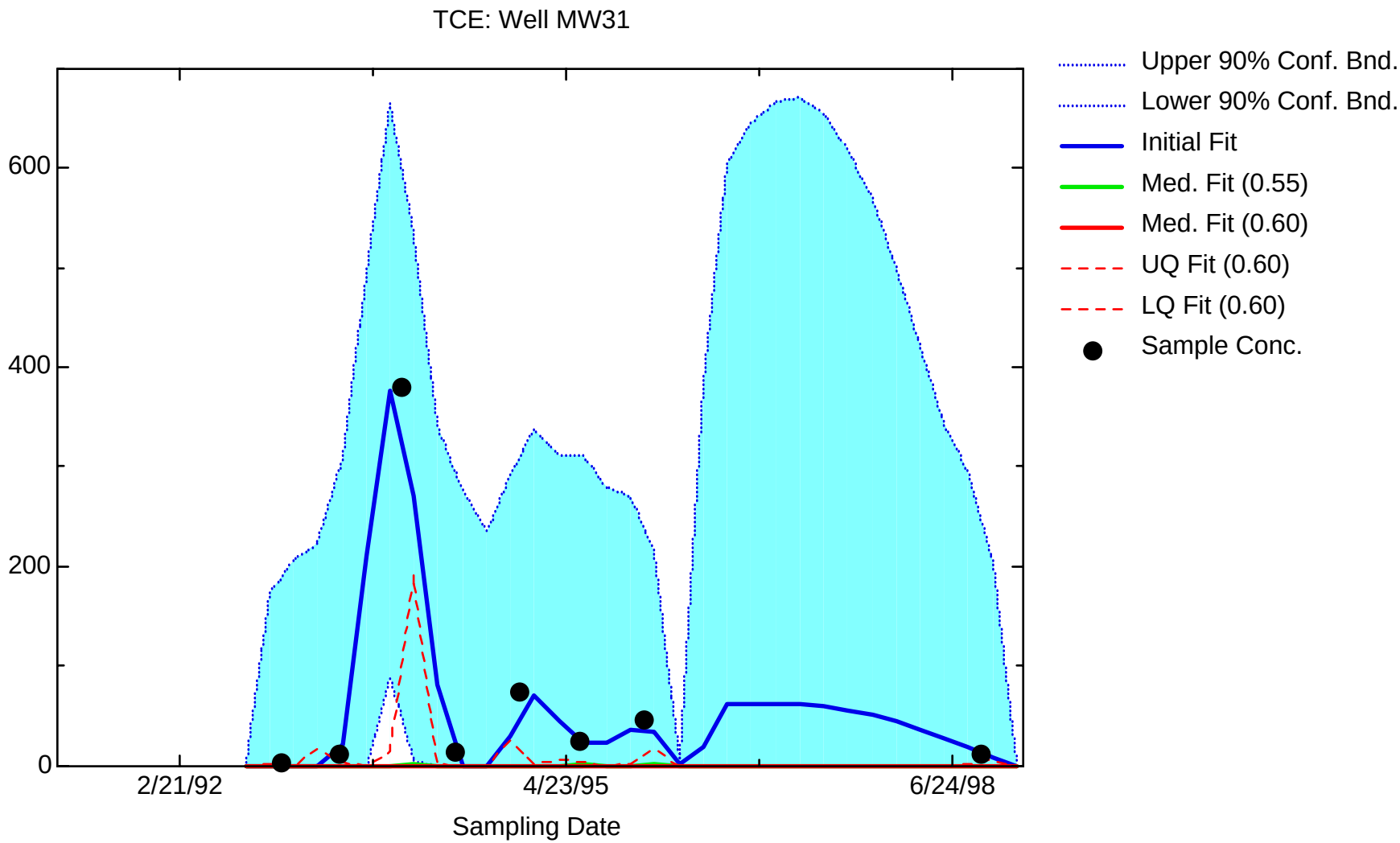

TCE: Well MW26
2·10^6
1·10^6
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

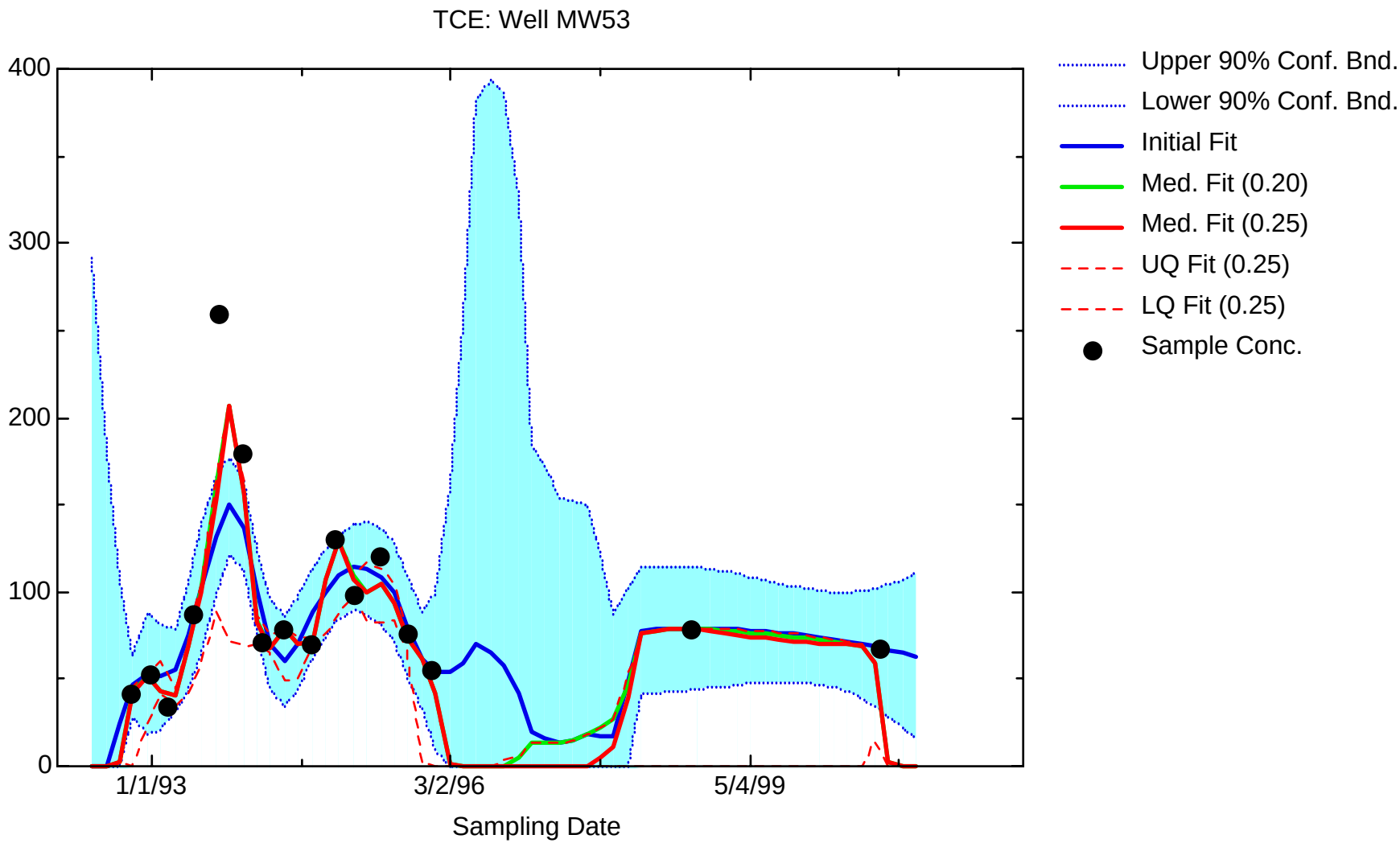

TCE: Well MW27
1200
800
400
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

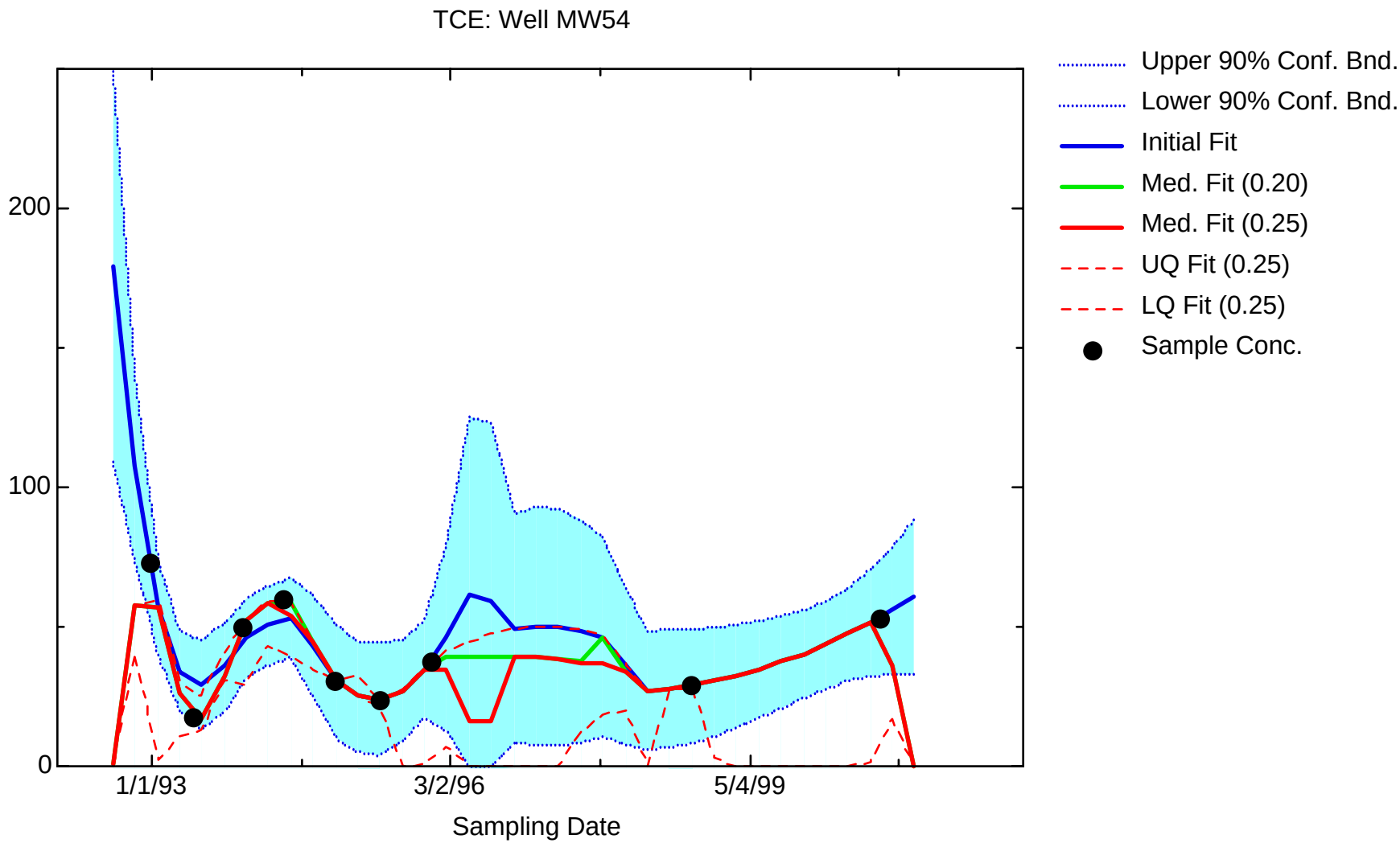

TCE: Well MW29
600
400
200
0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

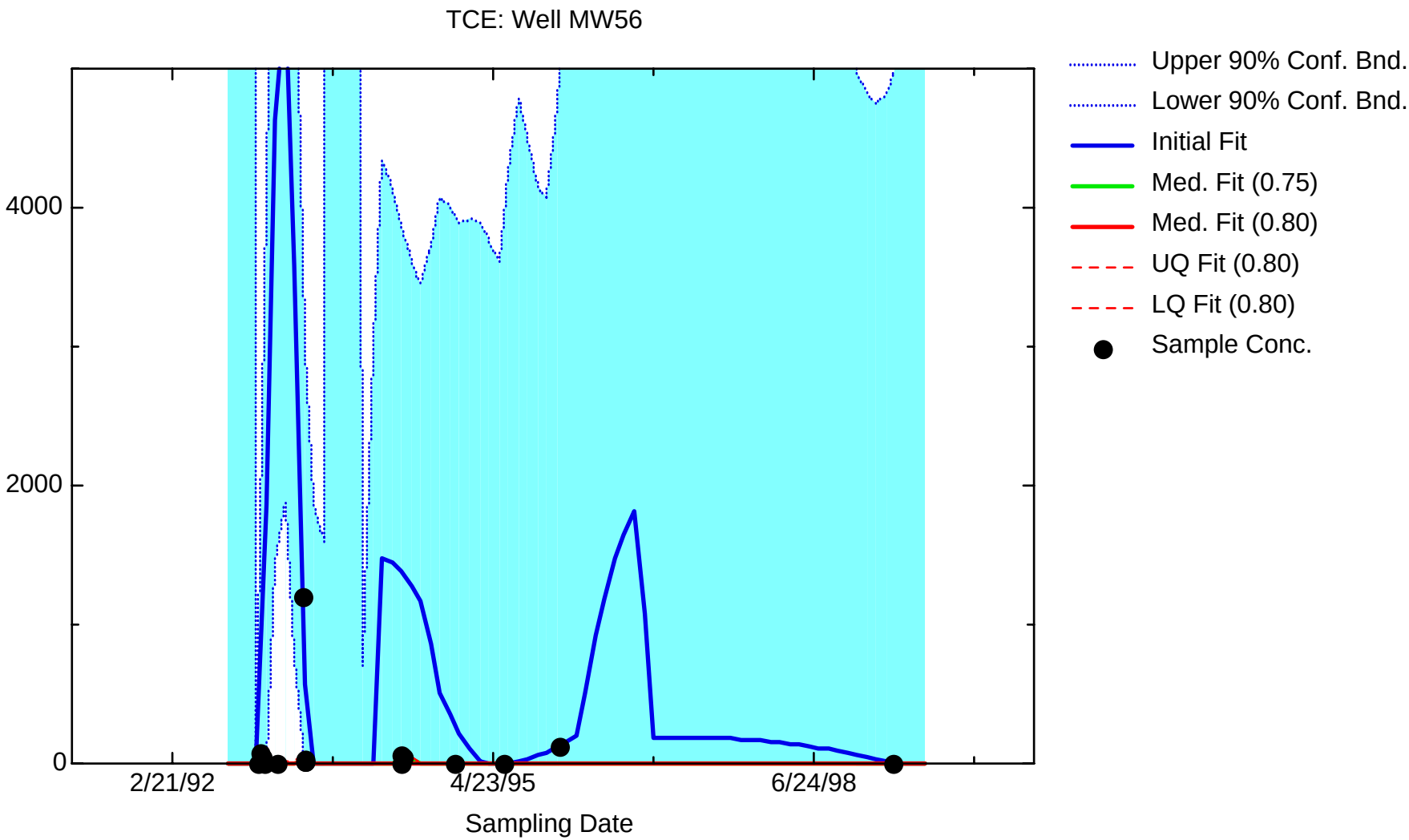

TCE: Well MW30A
20
15
10
5
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

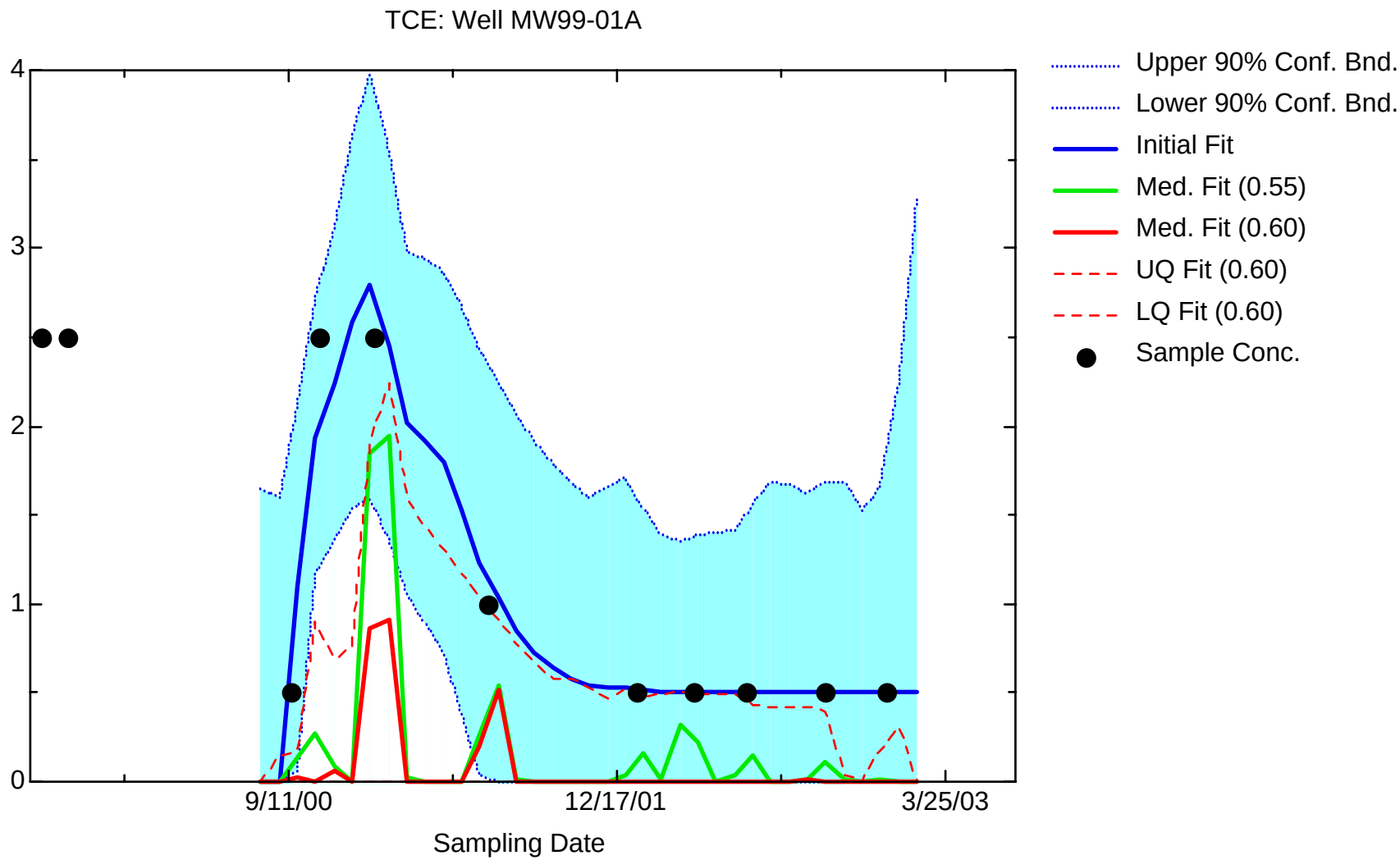

TCE: Well MW30B
1200
800
400
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

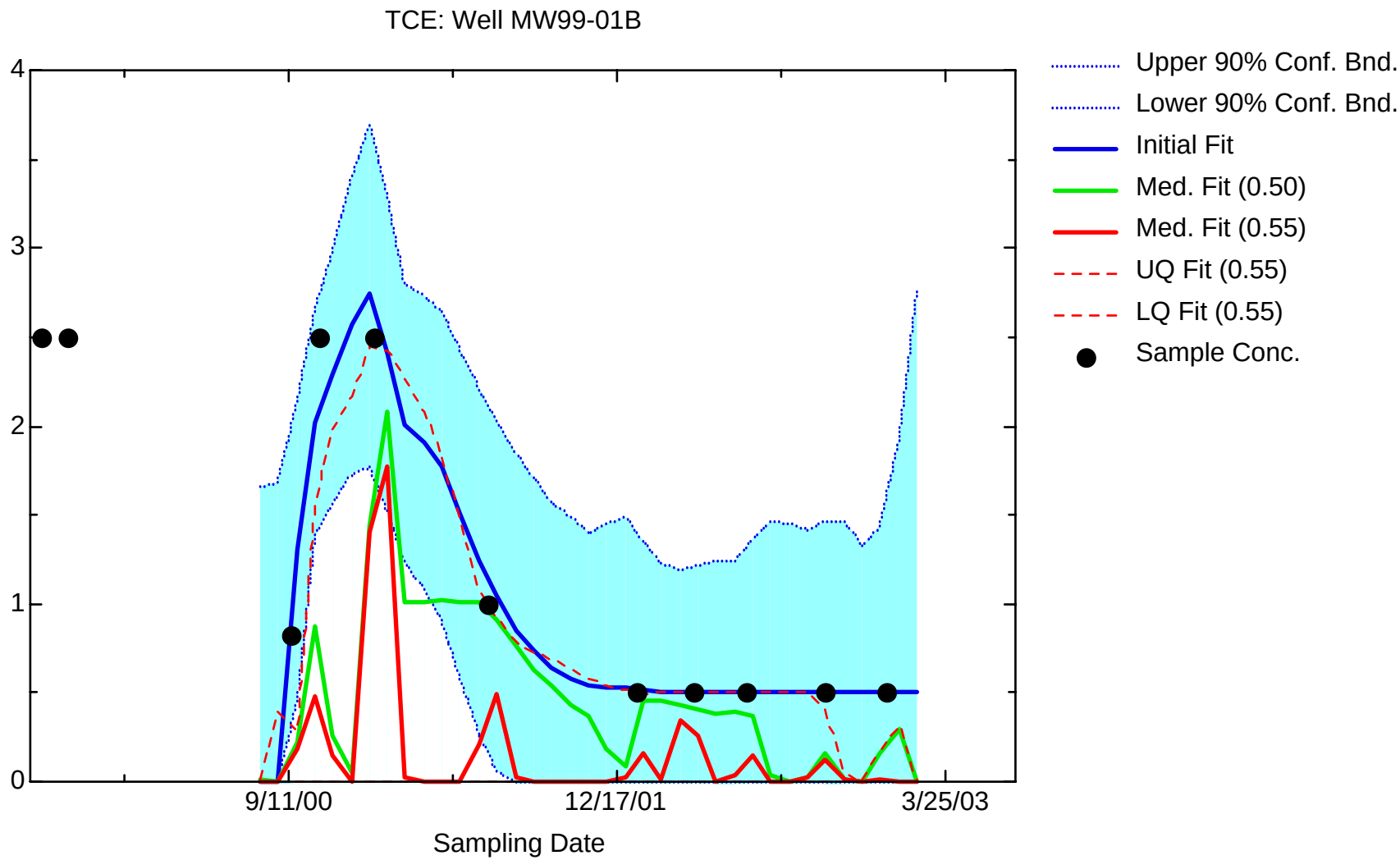

TCE: Well MW31
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.
600
400
200
0
2/21/92
4/23/95
6/24/98
Sampling Date

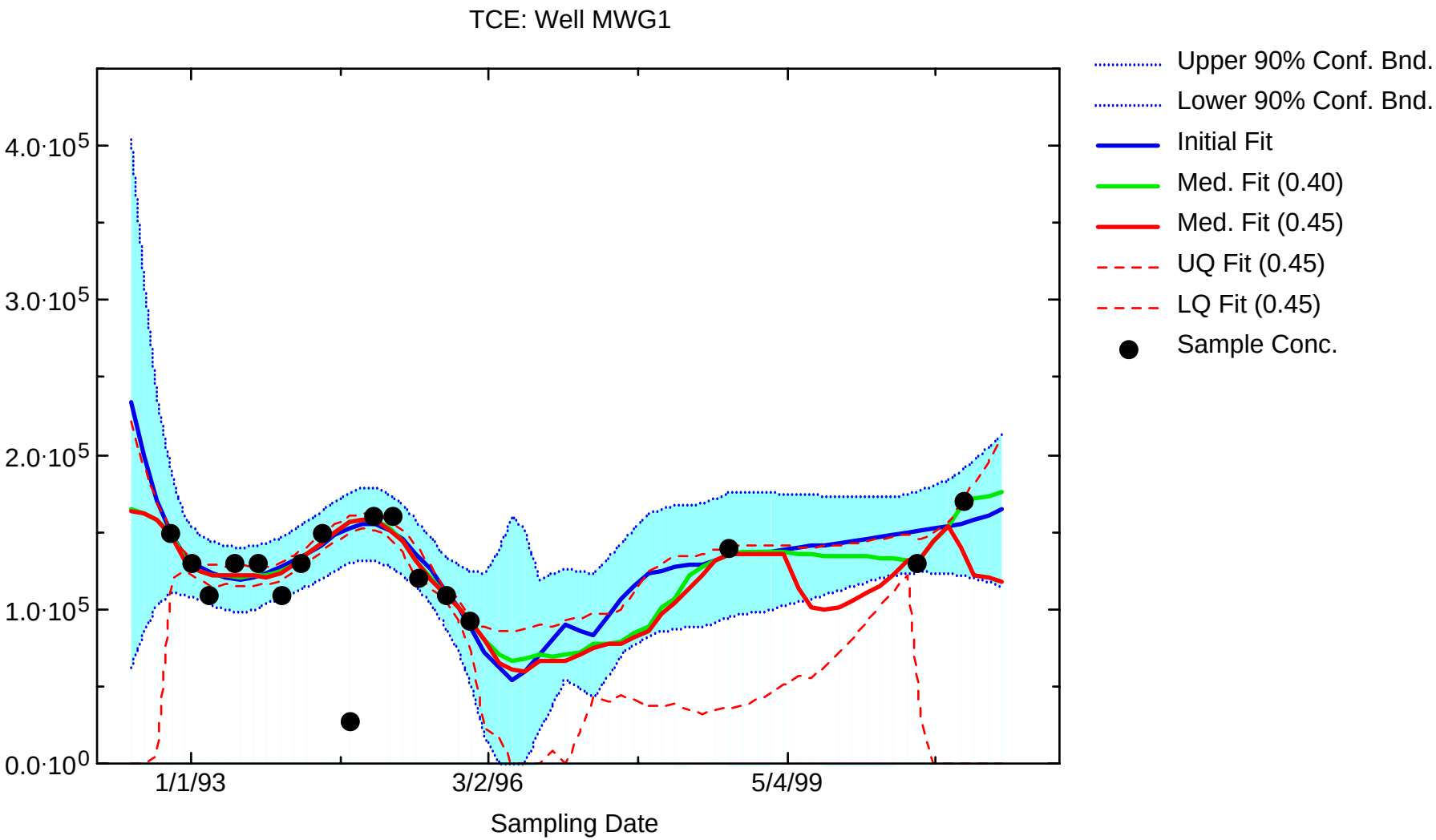

TCE: Well MW53
400
300
200
100
0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

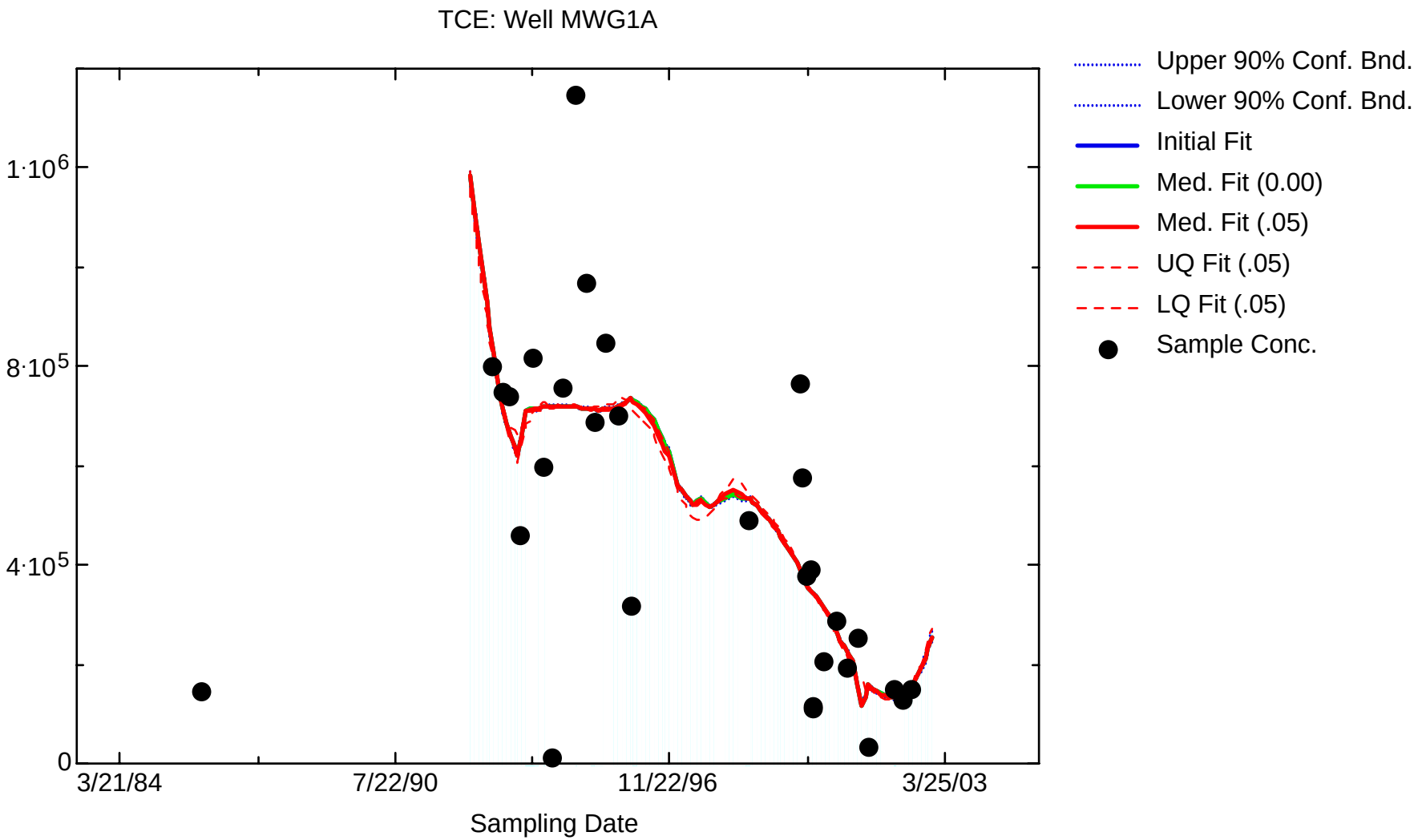

TCE: Well MW54
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
200
100
0
1/1/93
3/2/96
5/4/99
Sampling Date

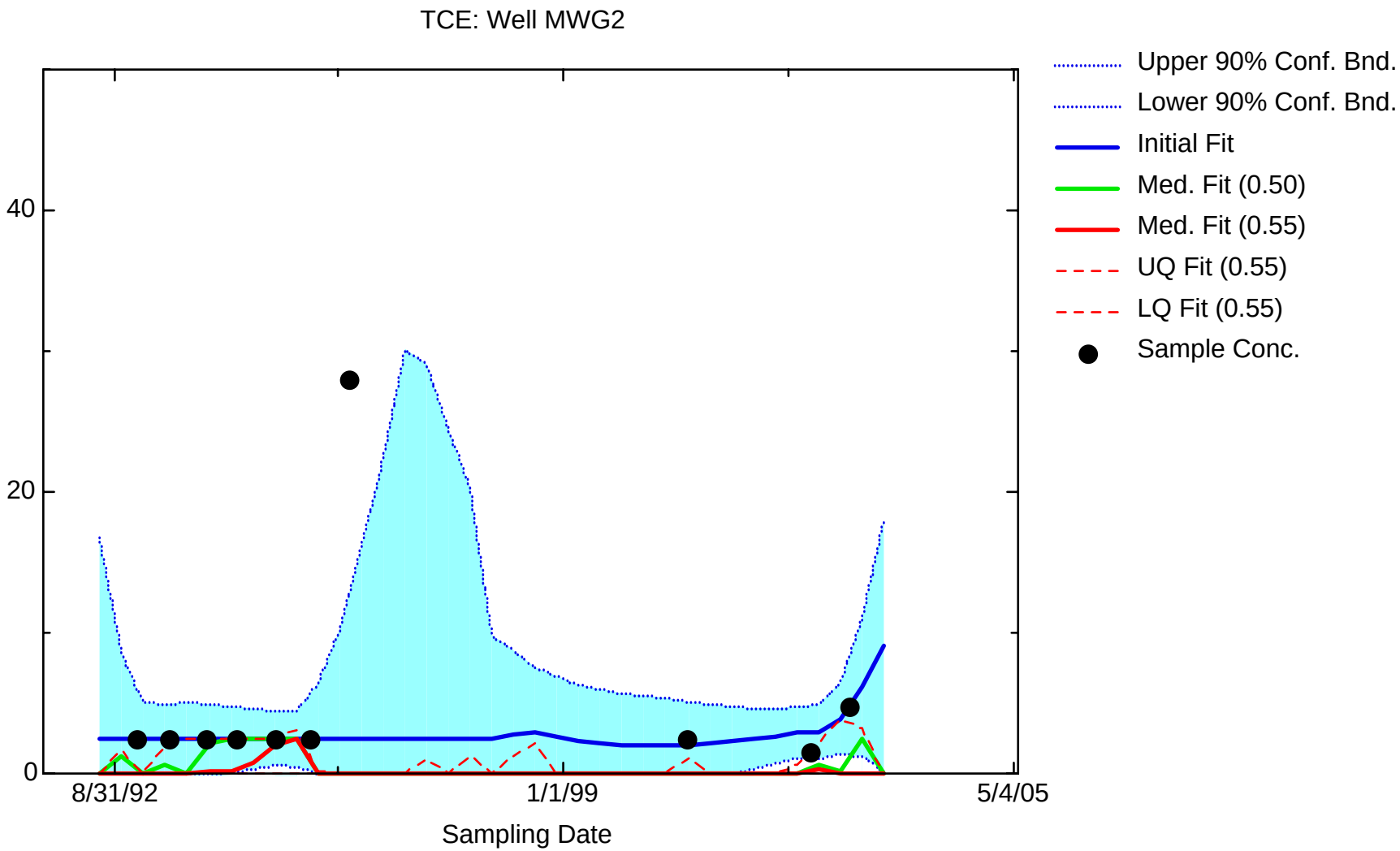

TCE: Well MW56
4000
2000
0
2/21/92
4/23/95
6/24/98
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.75)
Med. Fit (0.80)
UQ Fit (0.80)
LQ Fit (0.80)
Sample Conc.

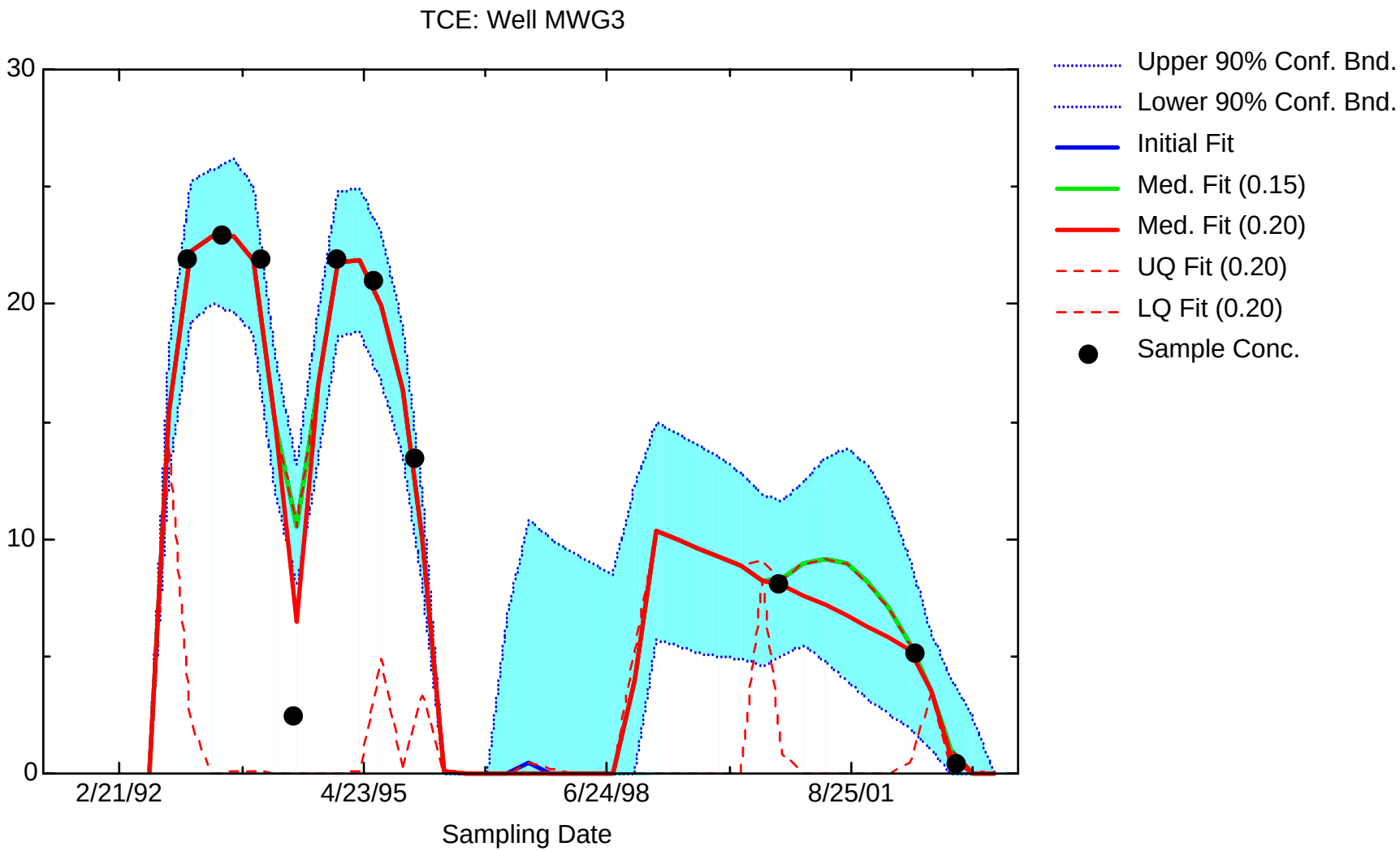

TCE: Well MW99-01A
4
3
2
1
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

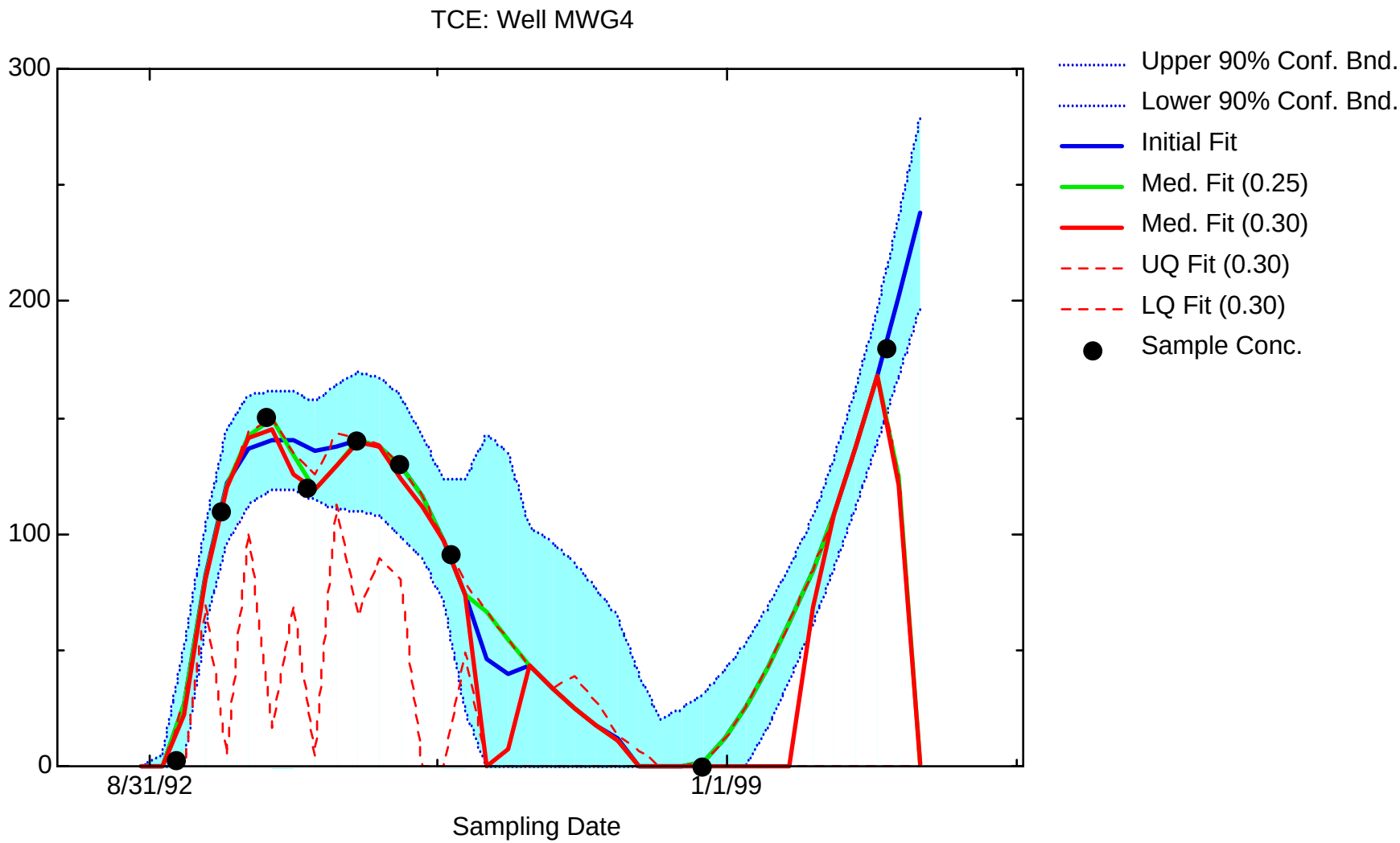

TCE: Well MW99-01B
4
3
2
1
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

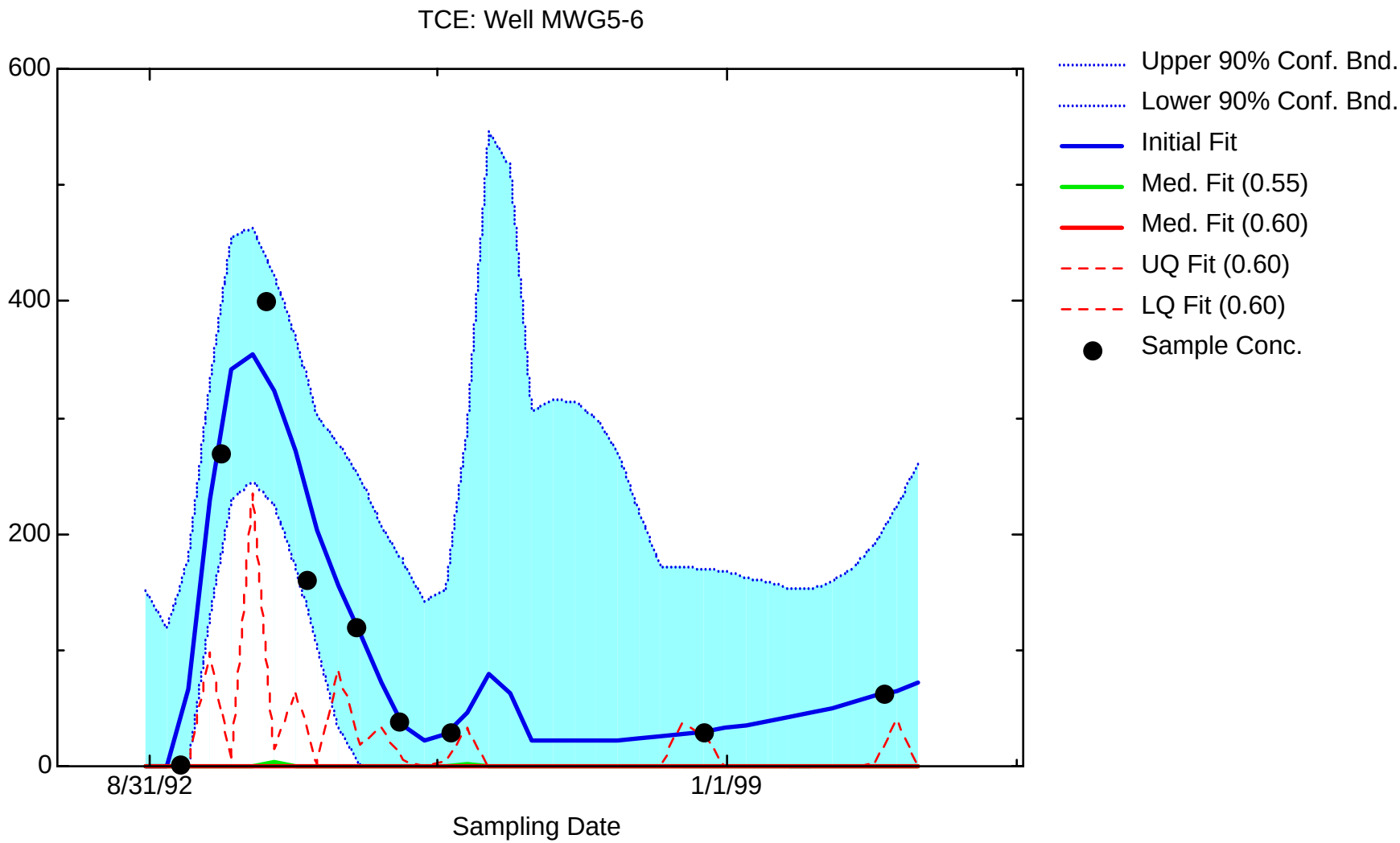

TCE: Well MWG1
4.0·10^5
3.0·10^5
2.0·10^5
1.0·10^5
0.0·10^0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

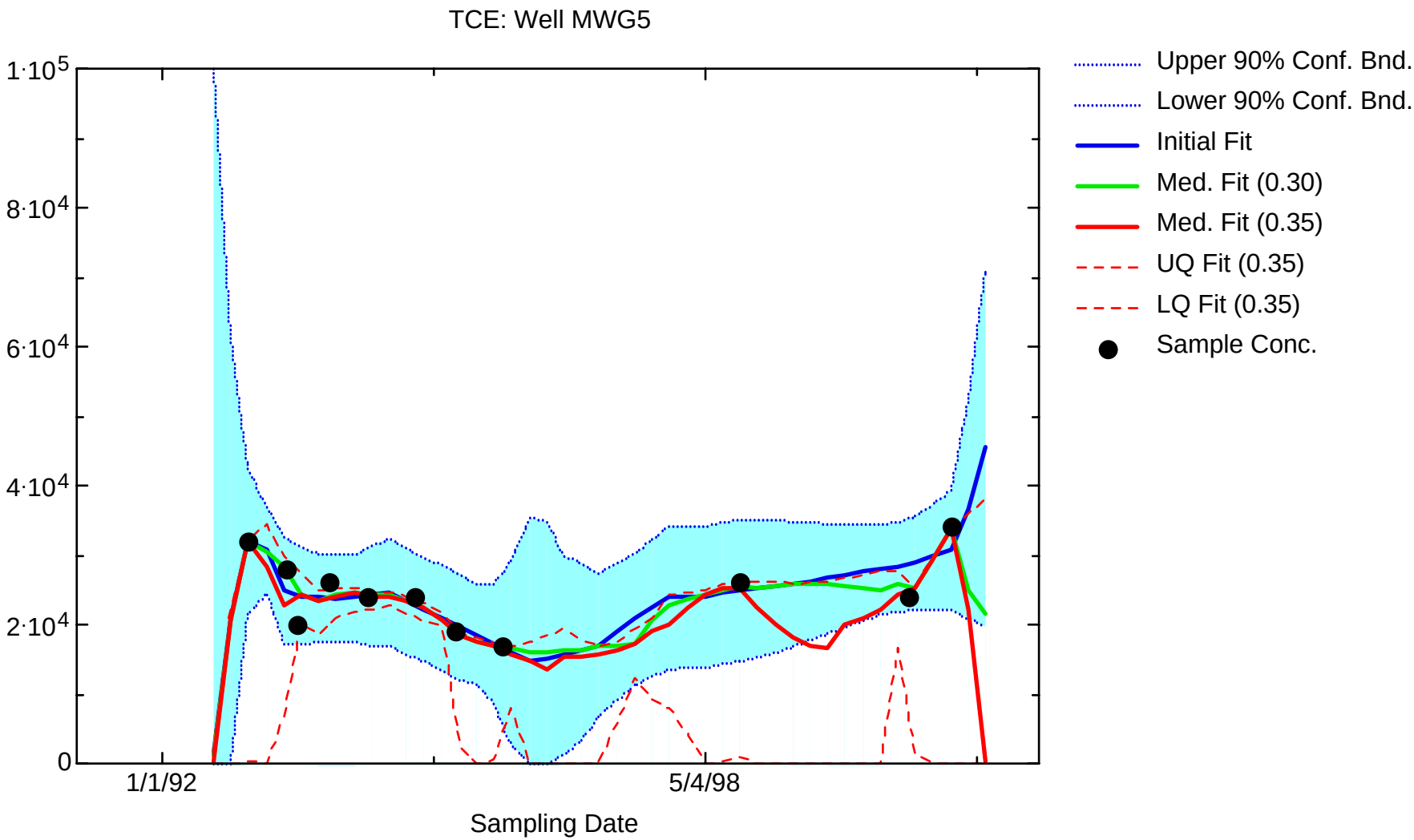

TCE: Well MWG1A
1·10^6
8·10^5
4·10^5
0
3/21/84
7/22/90
11/22/96
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.00)
Med. Fit (.05)
UQ Fit (.05)
LQ Fit (.05)
Sample Conc.

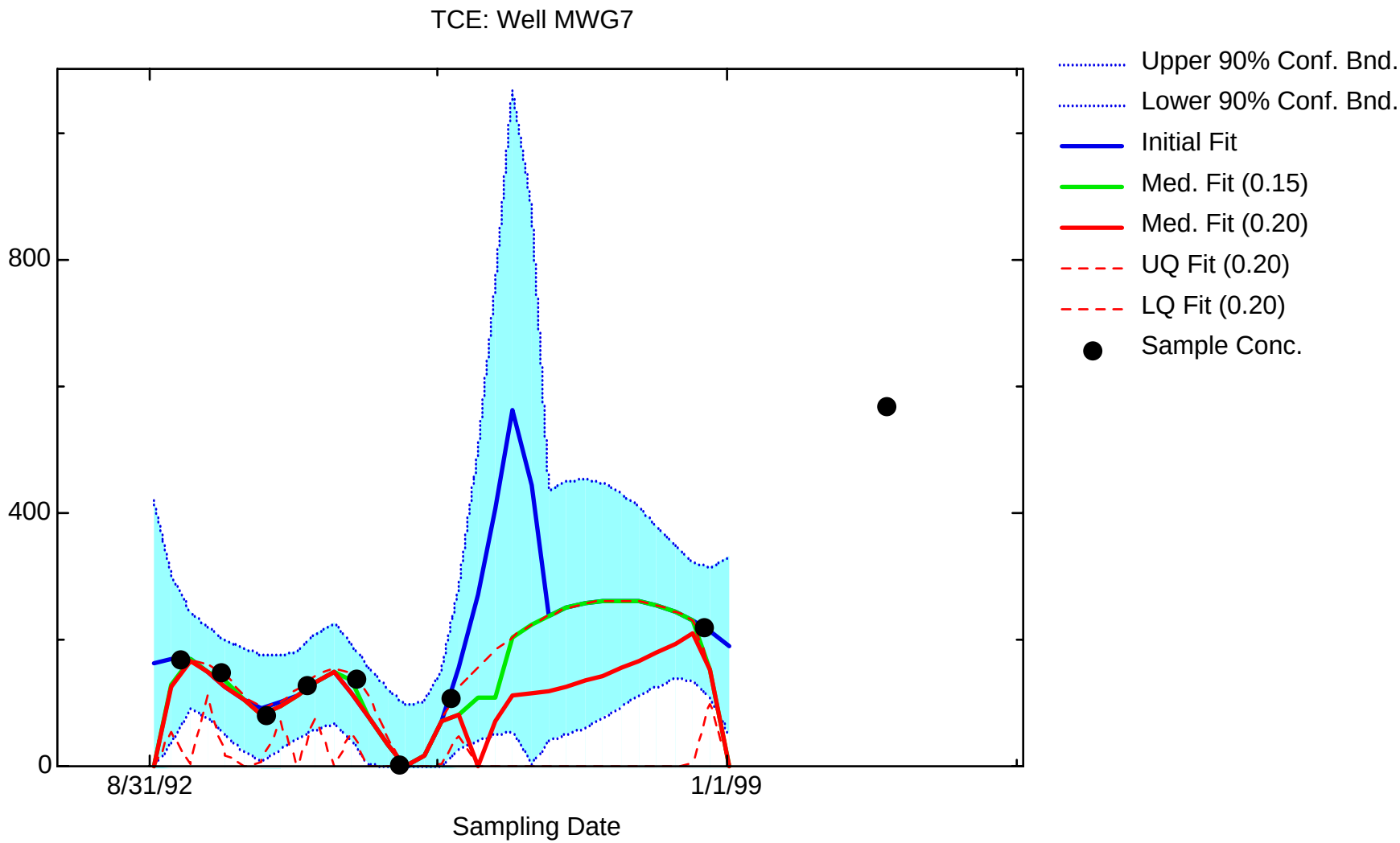

TCE: Well MWG2
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.
40
20
0
8/31/92
1/1/99
5/4/05
Sampling Date

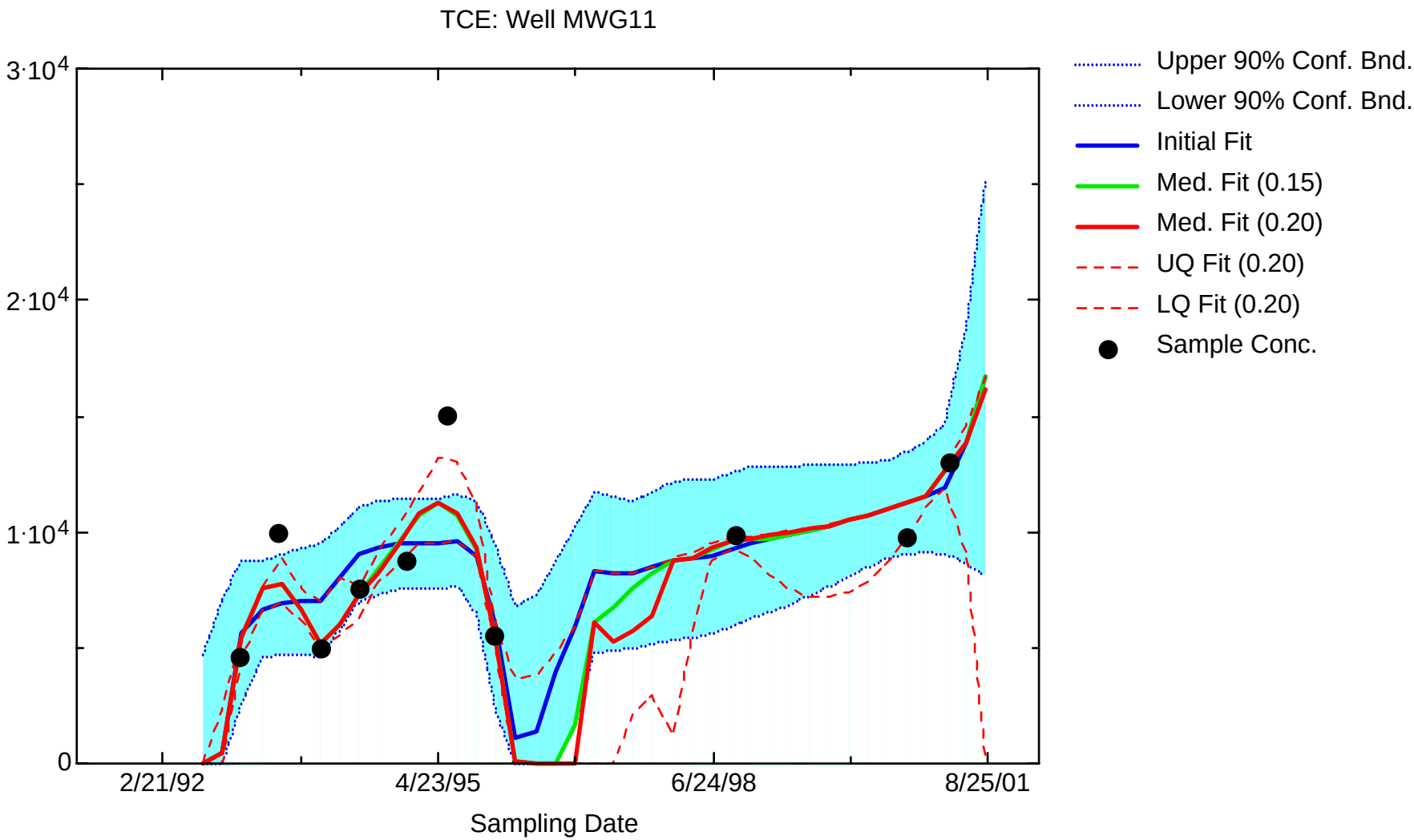

TCE: Well MWG3
30
20
10
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

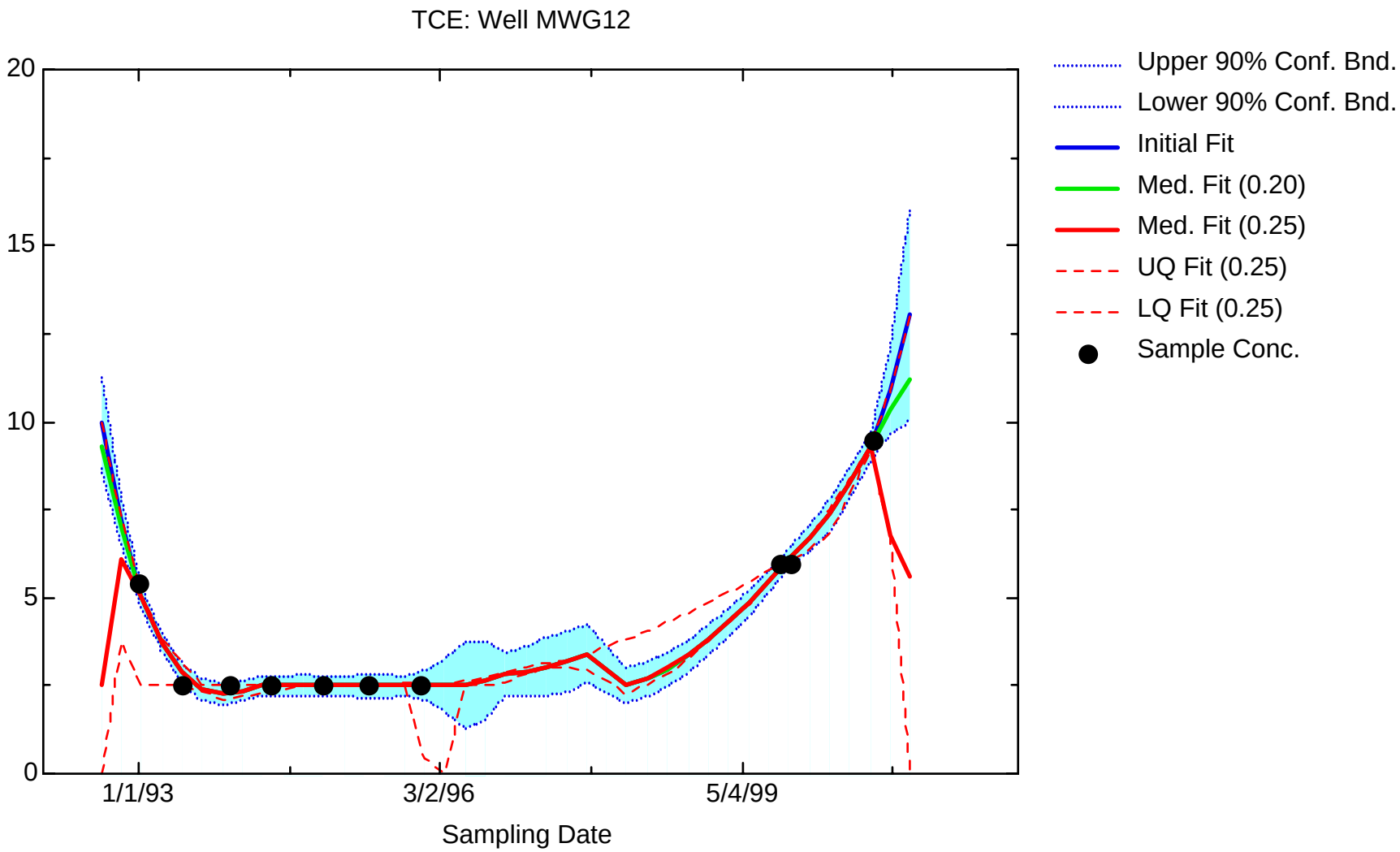

TCE: Well MWG4
300
200
100
0
8/31/92
1/1/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

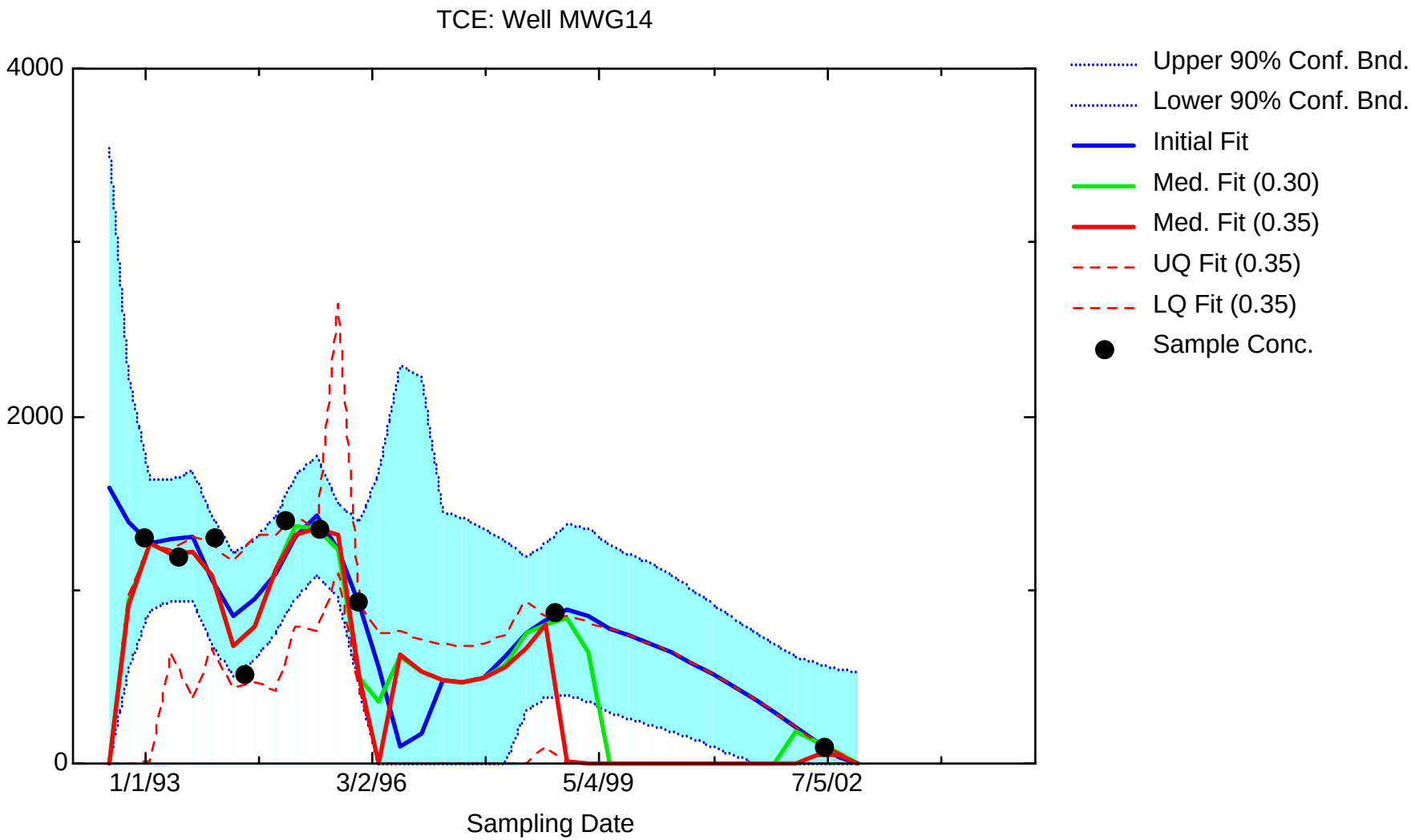

TCE: Well MWG5-6
600
400
200
0
8/31/92
1/1/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

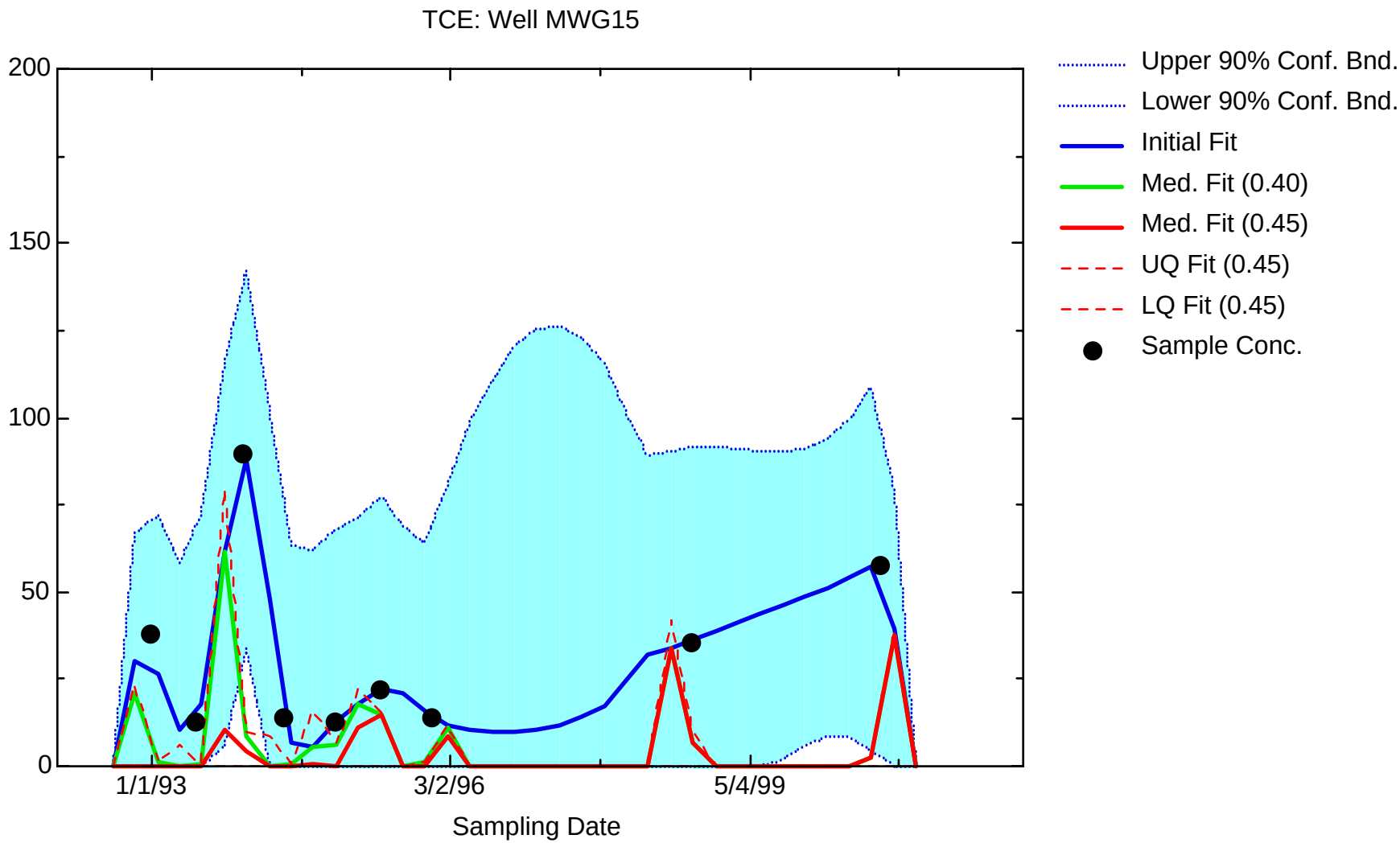

TCE: Well MWG5
1·10^5
8·10^4
6·10^4
4·10^4
2·10^4
0
1/1/92
5/4/98
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

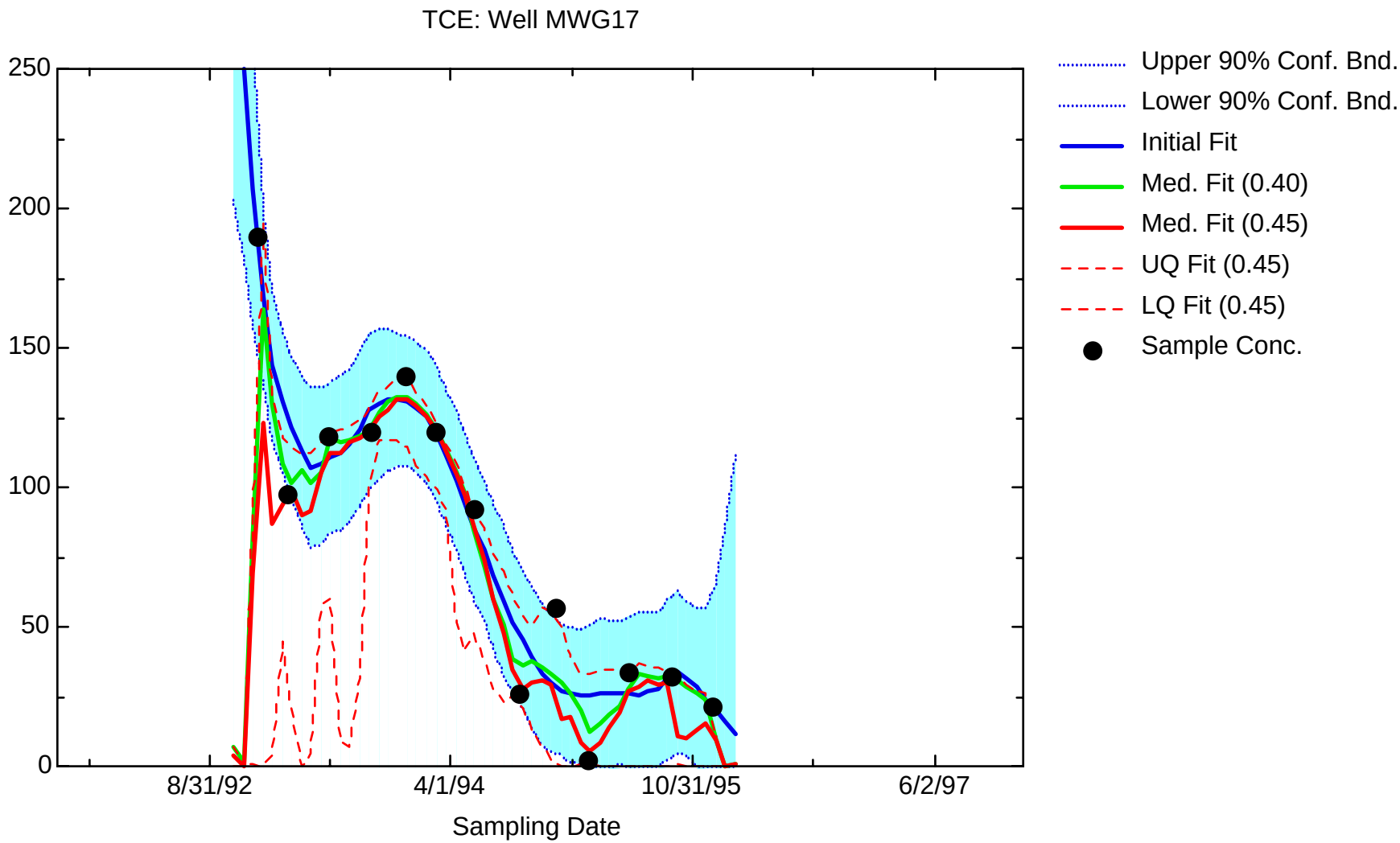

TCE: Well MWG7
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
800
400
0
8/31/92
1/1/99
Sampling Date

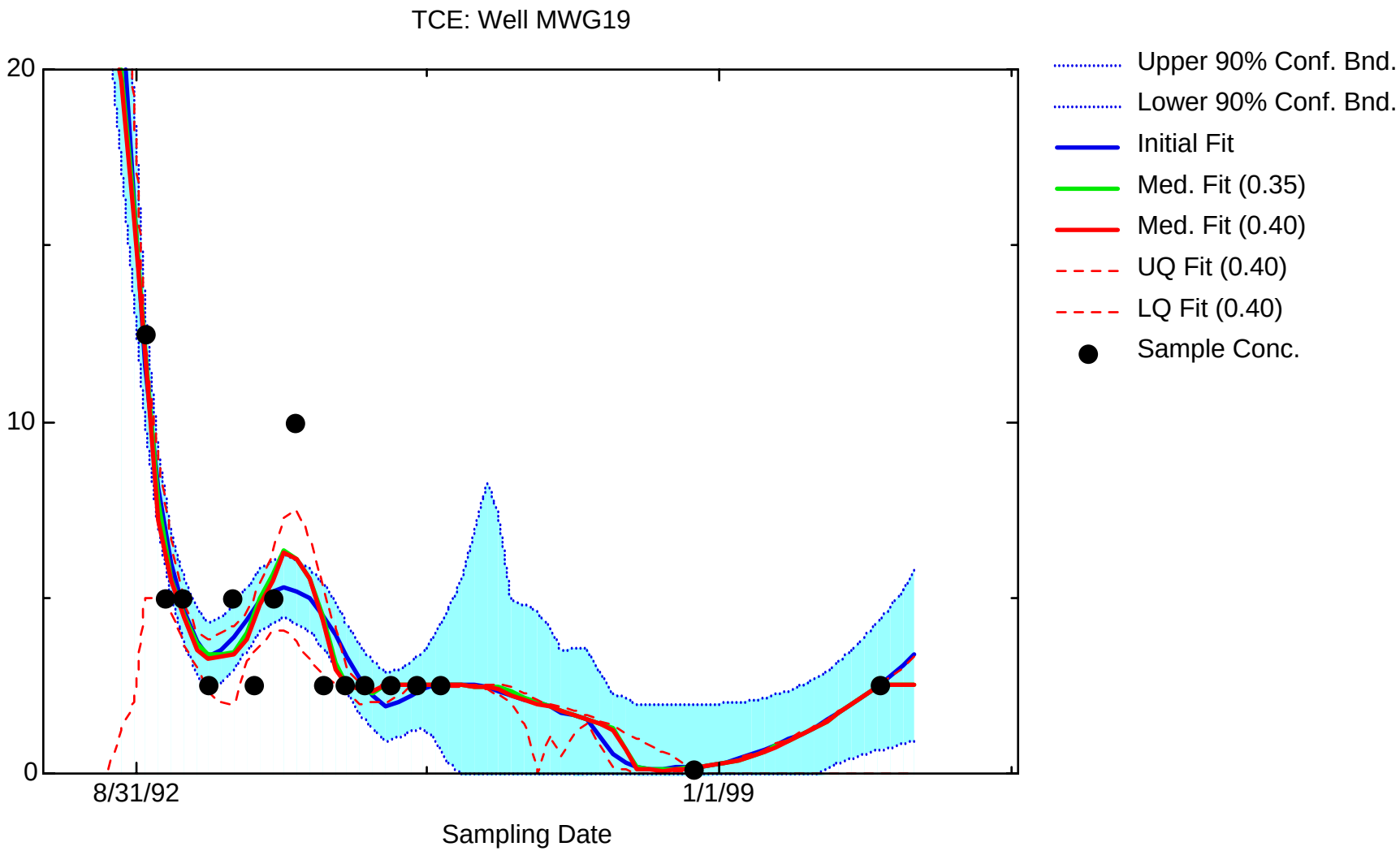

TCE: Well MWG11
3·10^4
2·10^4
1·10^4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

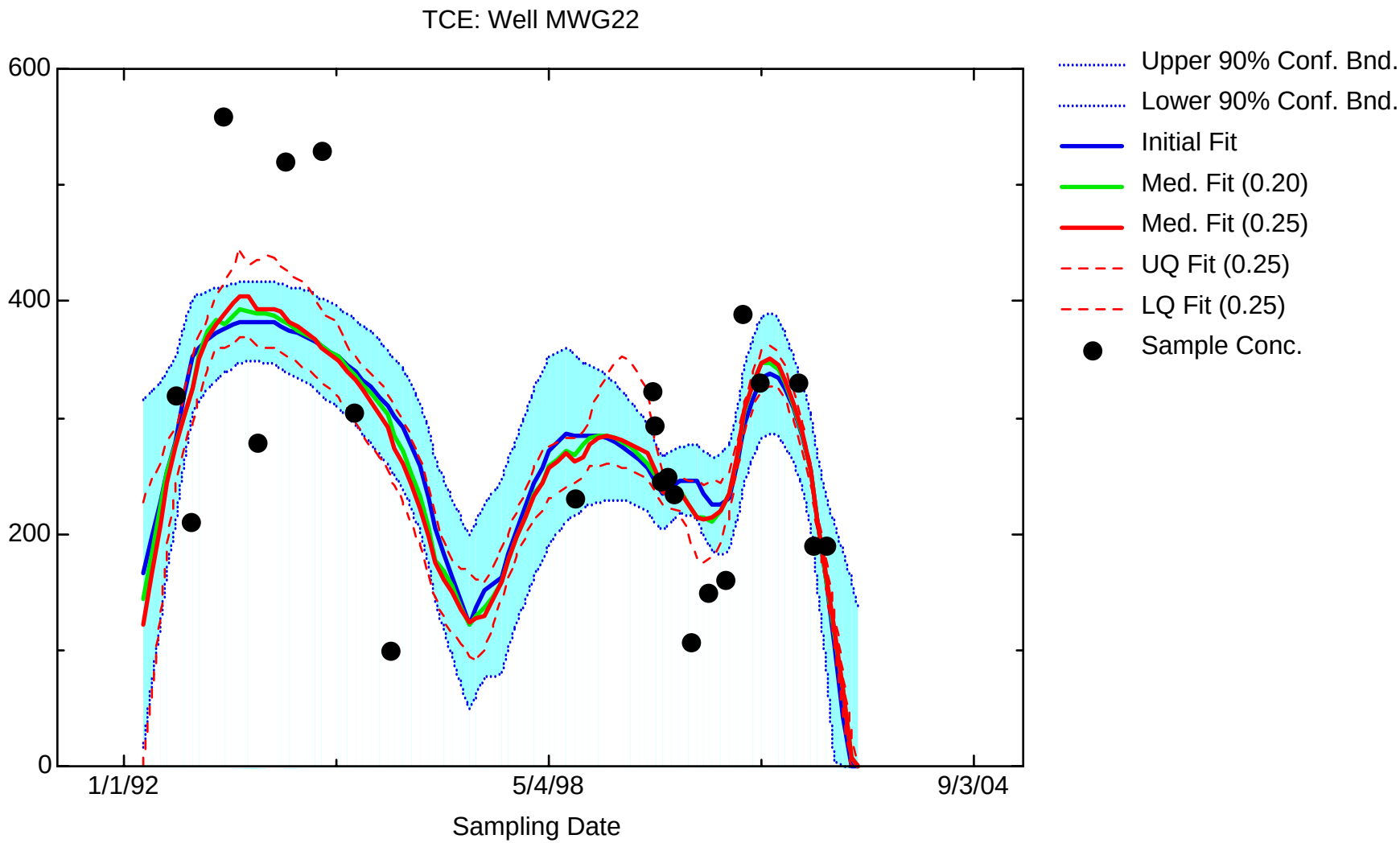

TCE: Well MWG12
20
15
10
5
0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

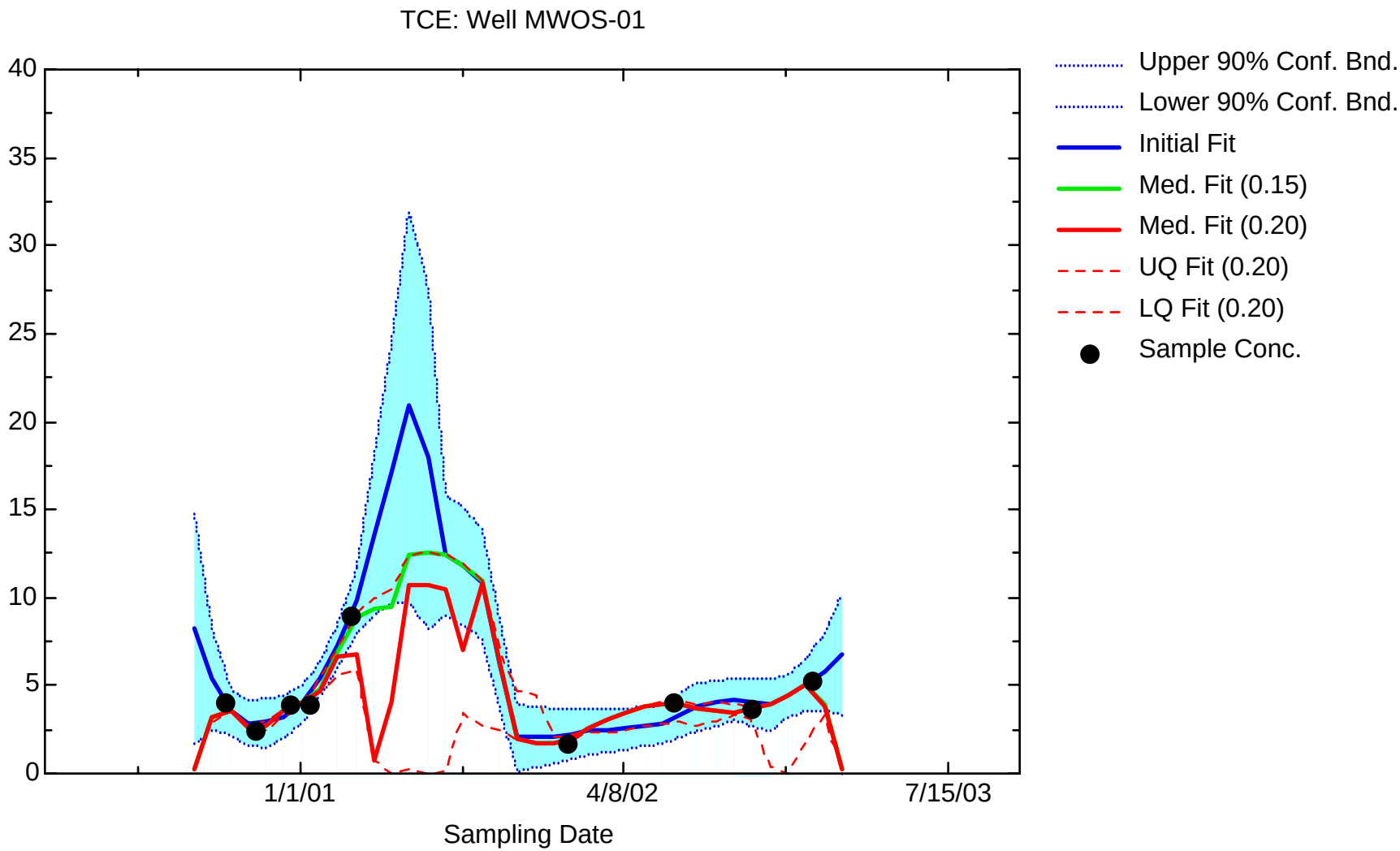

TCE: Well MWG14
4000
2000
0
1/1/93
3/2/96
5/4/99
7/5/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

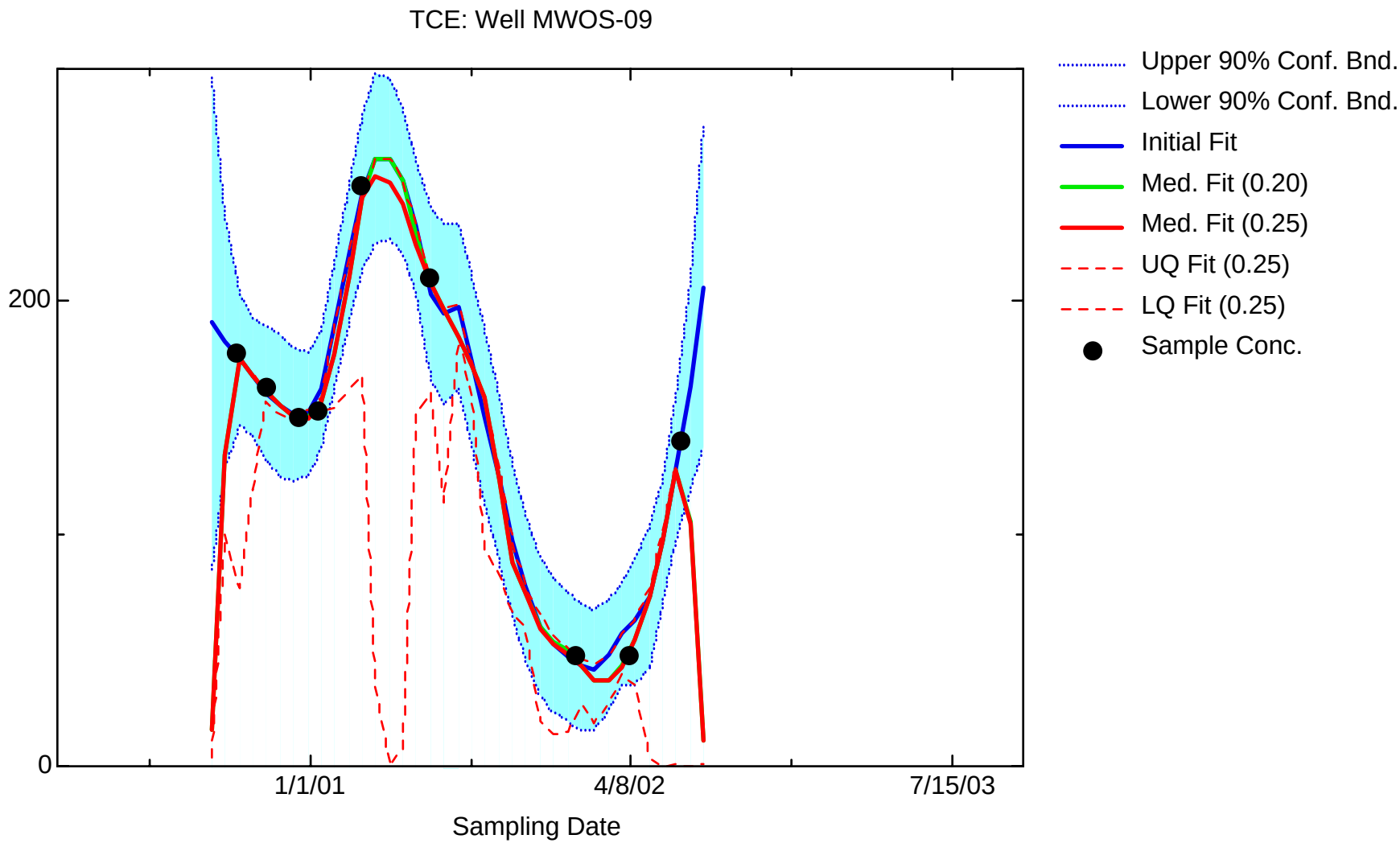

TCE: Well MWG15
200
150
100
50
0
1/1/93
3/2/96
5/4/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

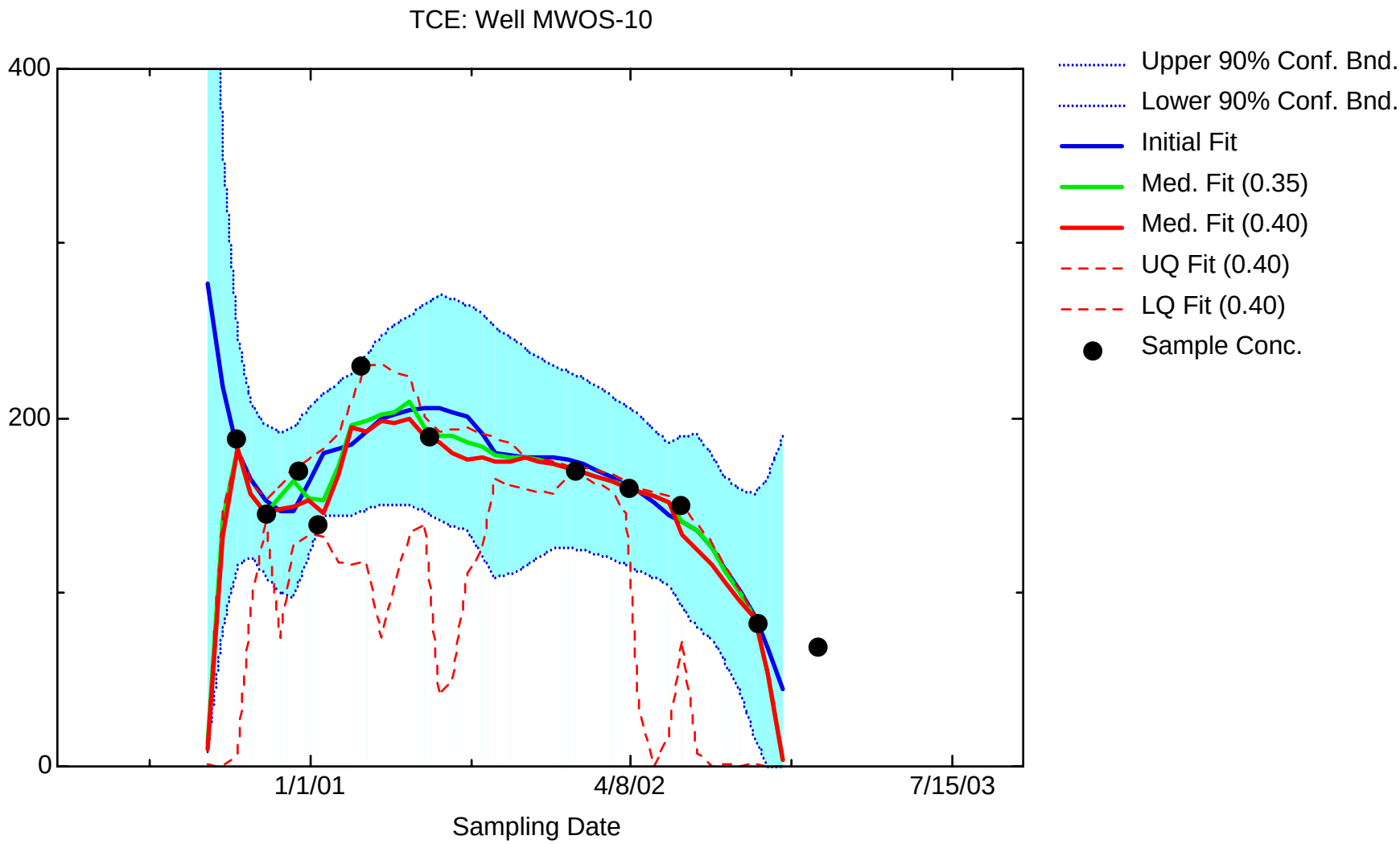

TCE: Well MWG17
250
200
150
100
50
0
8/31/92
4/1/94
10/31/95
6/2/97
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

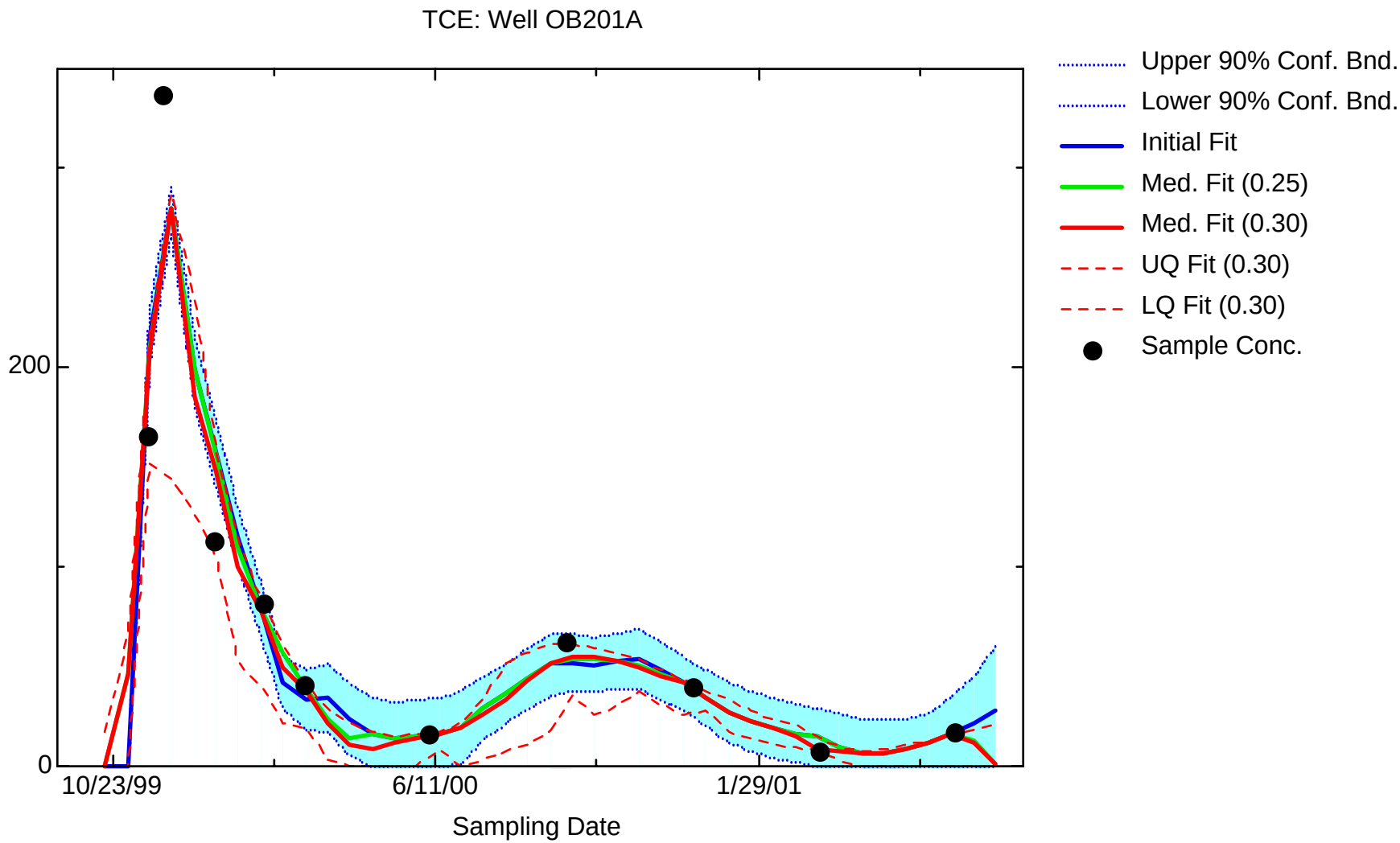

TCE: Well MWG19
20
10
0
8/31/92
1/1/99
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

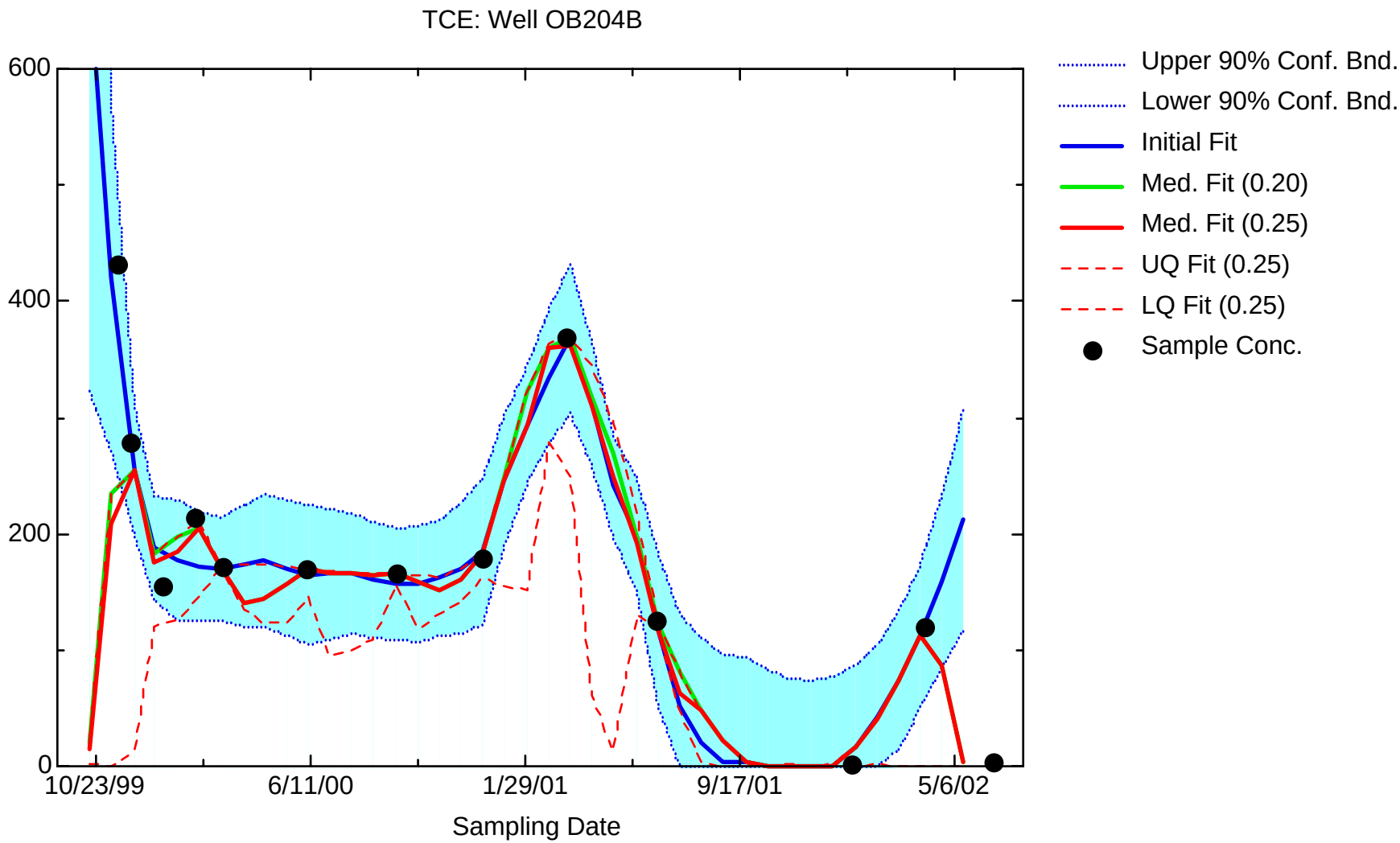

TCE: Well MWG22
600
400
200
0
1/1/92
5/4/98
9/3/04
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

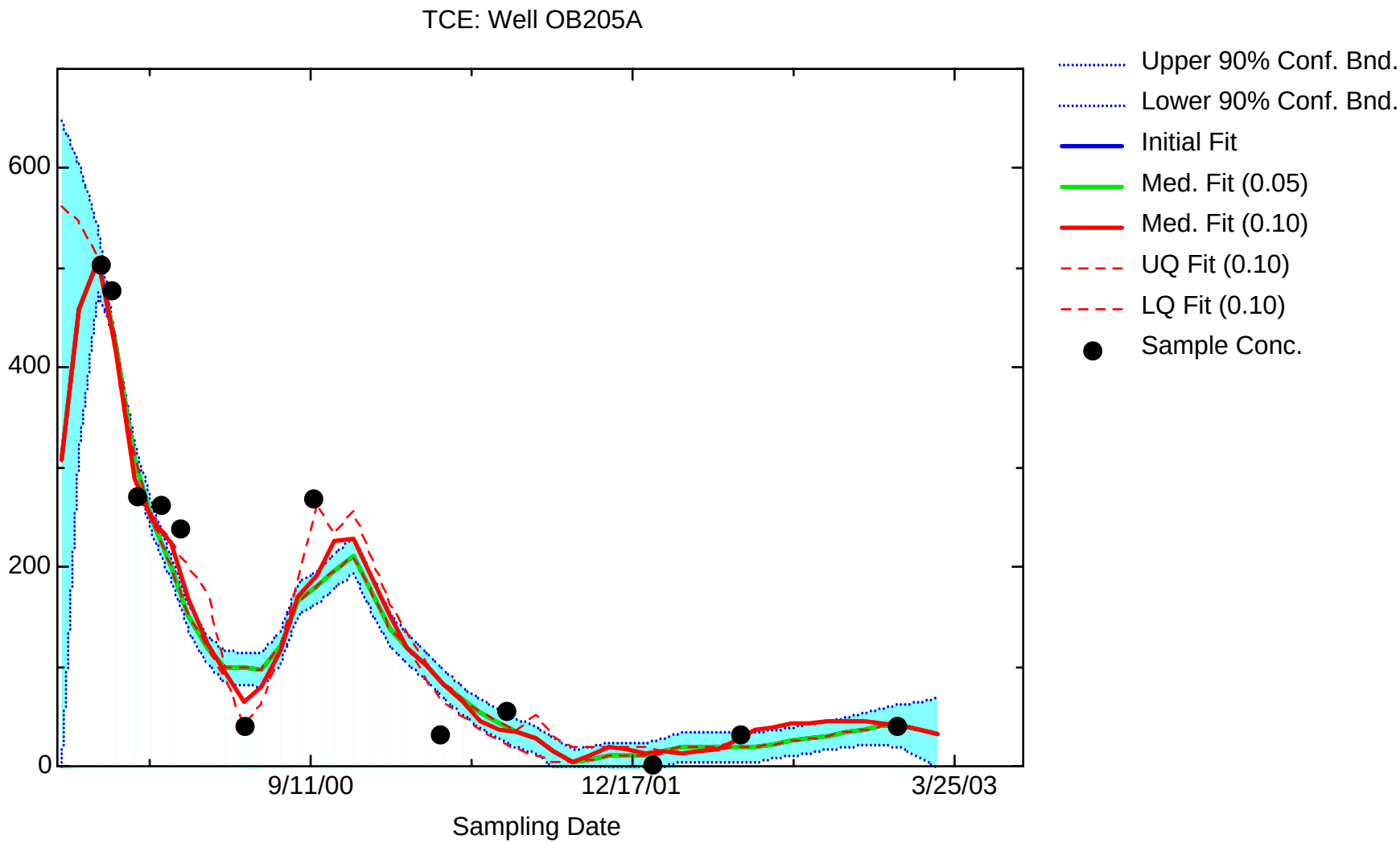

TCE: Well MWOS-01
40
35
30
25
20
15
10
5
0
1/1/01
4/8/02
7/15/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

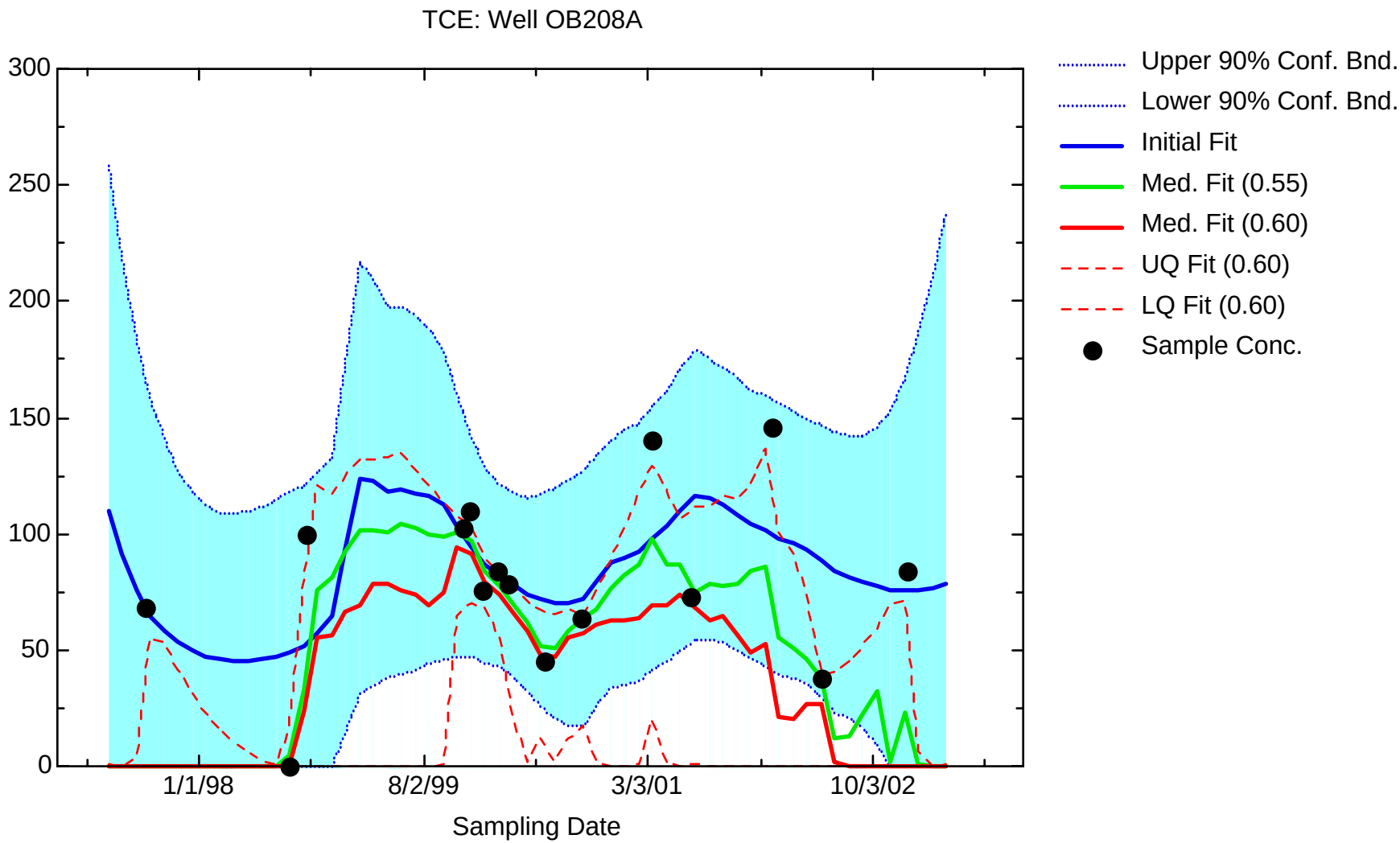

TCE: Well MWOS-09
200
0
1/1/01
4/8/02
7/15/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

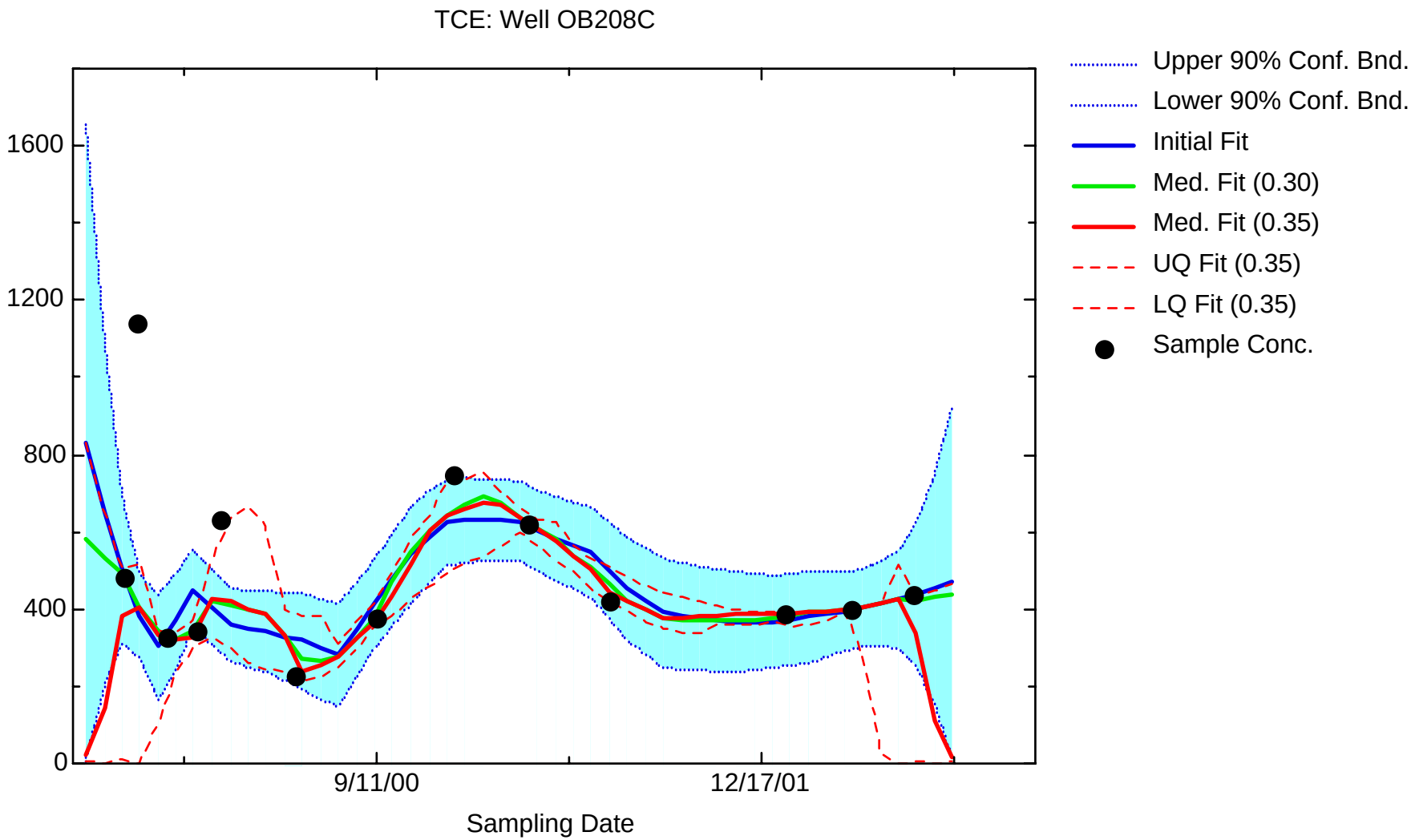

TCE: Well MWOS-10
400
200
0
1/1/01
4/8/02
7/15/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

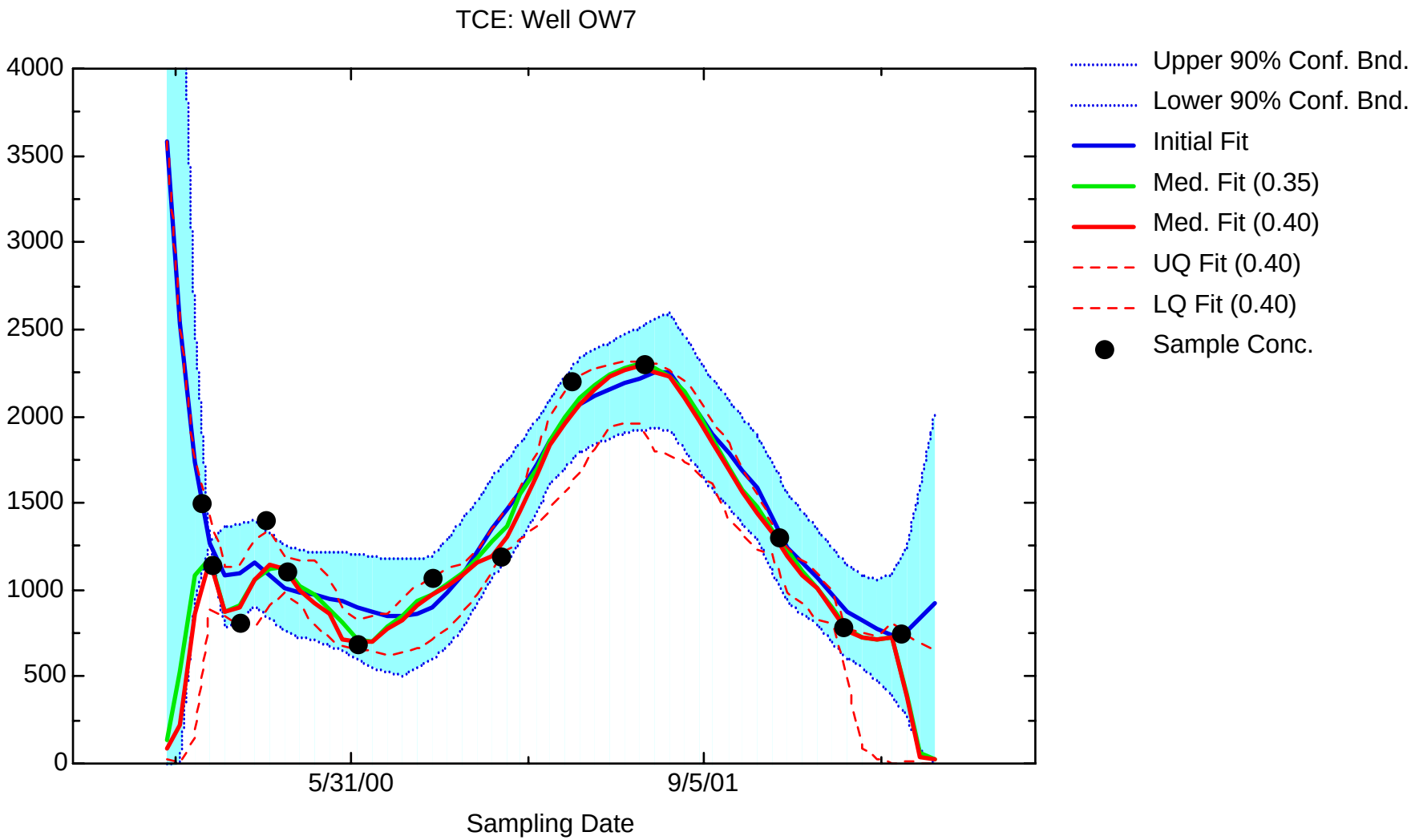

TCE: Well OB201A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
200
0
10/23/99
6/11/00
1/29/01
Sampling Date

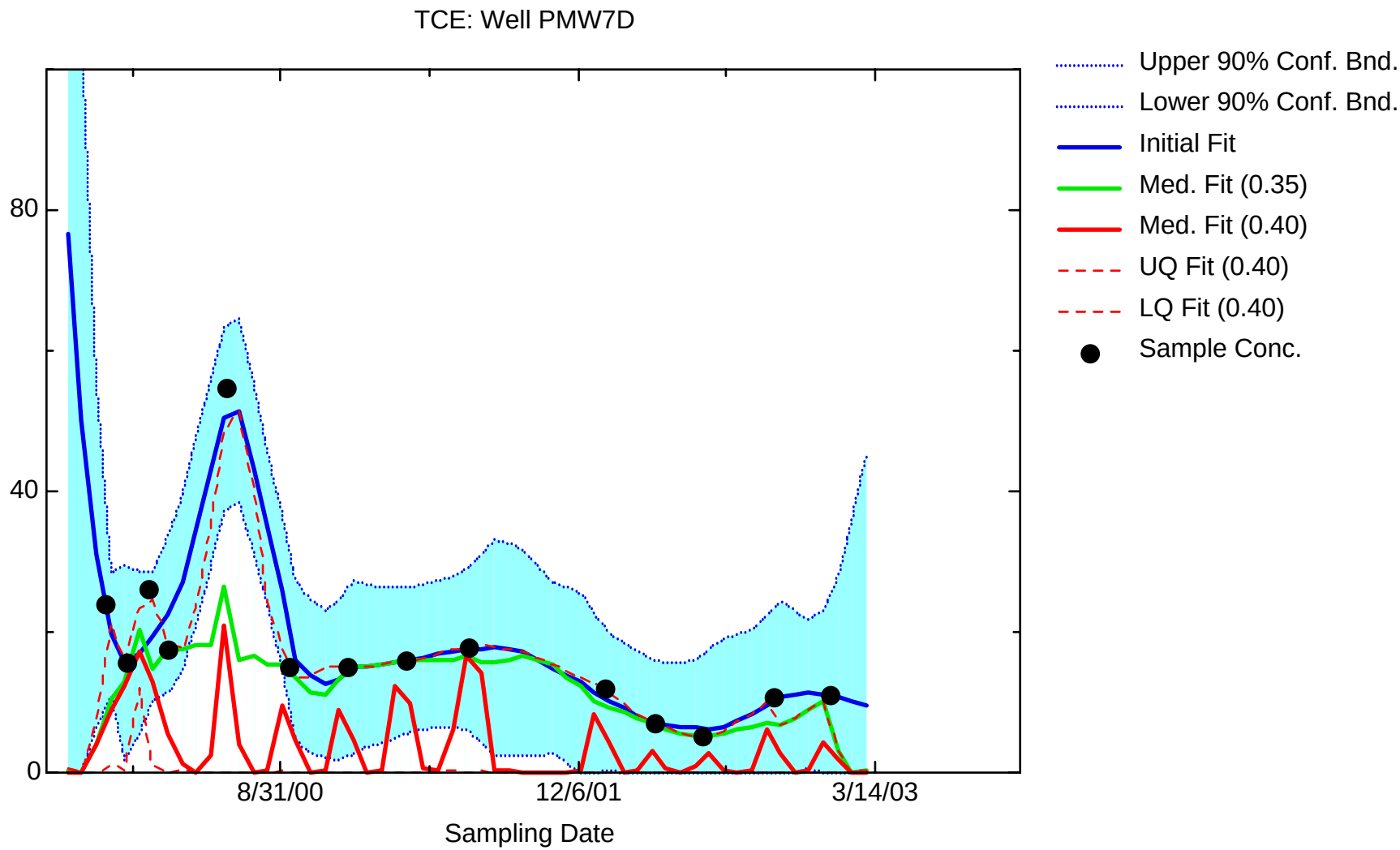

TCE: Well OB204B
600
400
200
0
10/23/99
6/11/00
1/29/01
9/17/01
5/6/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

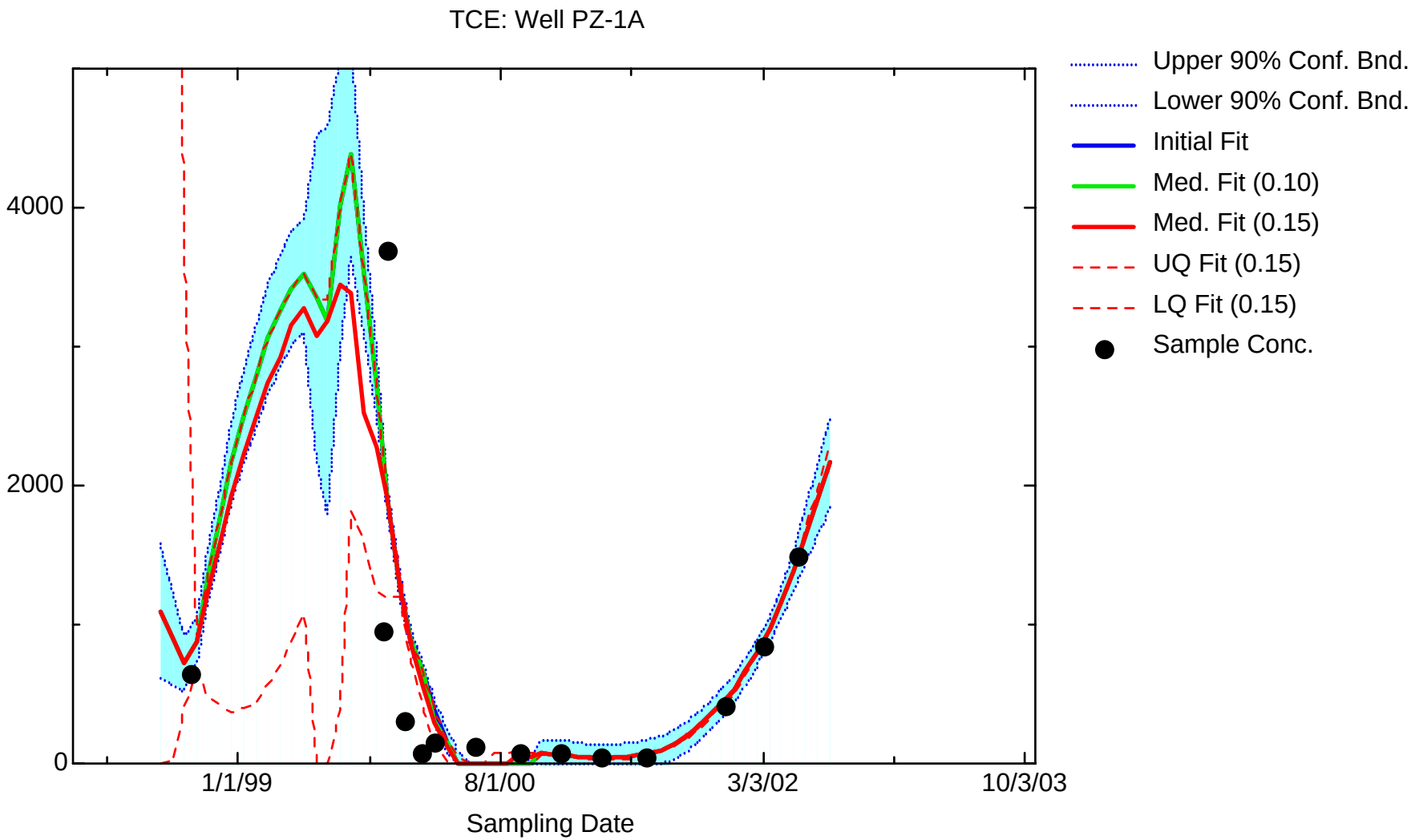

TCE: Well OB205A
600
400
200
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.05)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

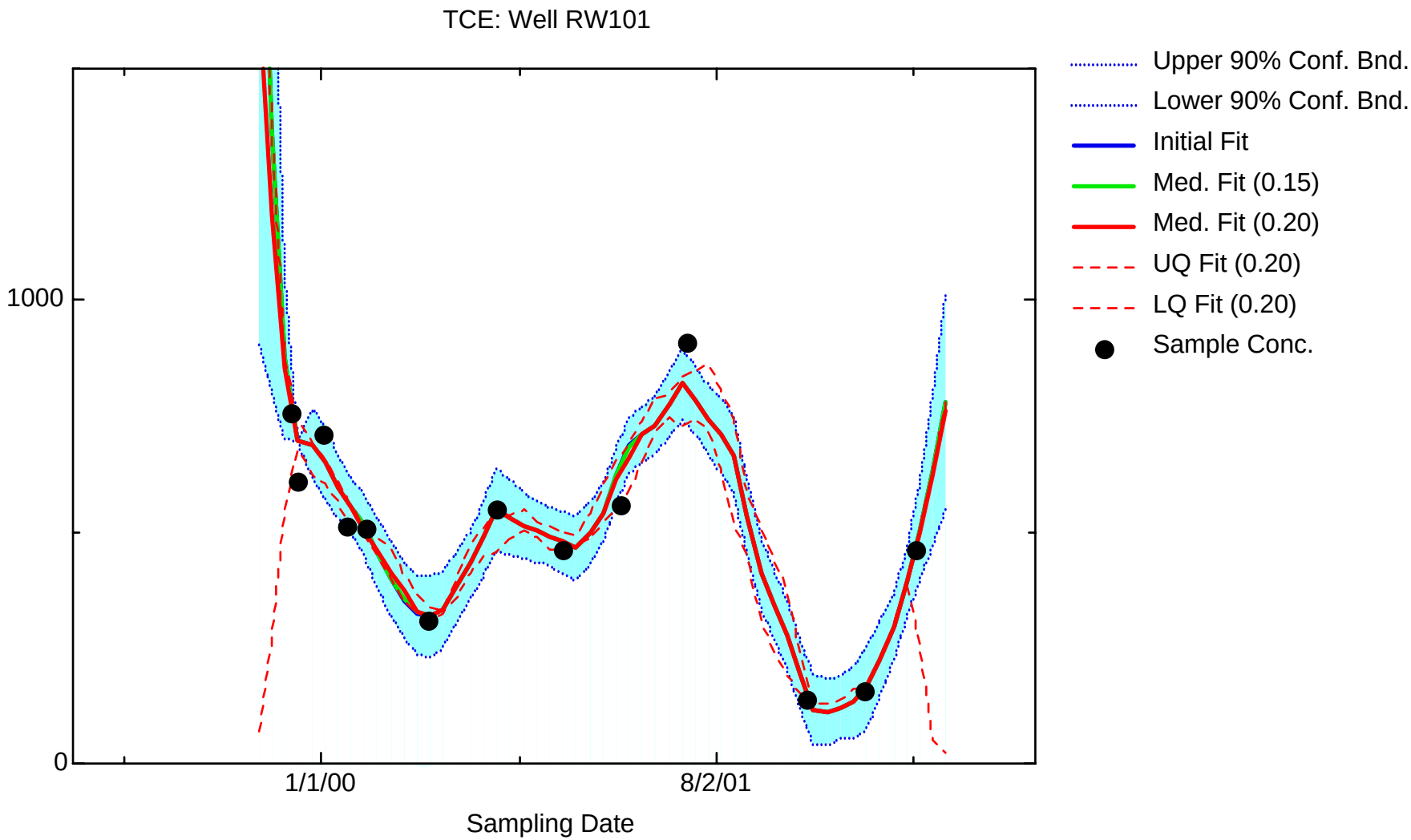

TCE: Well OB208A
300
250
200
150
100
50
0
1/1/98
8/2/99
3/3/01
10/3/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

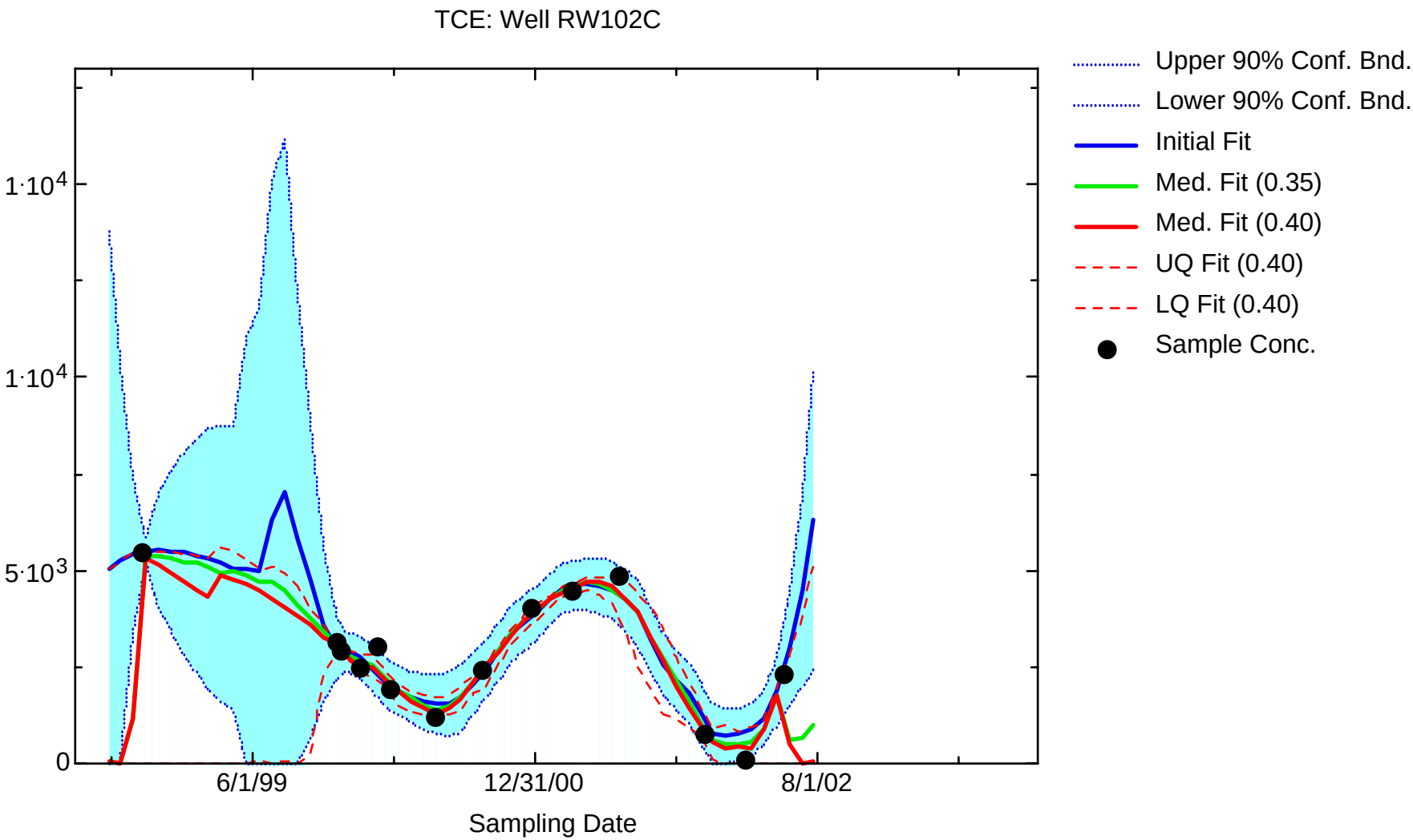

TCE: Well OB208C
1600
1200
800
400
0
9/11/00
12/17/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

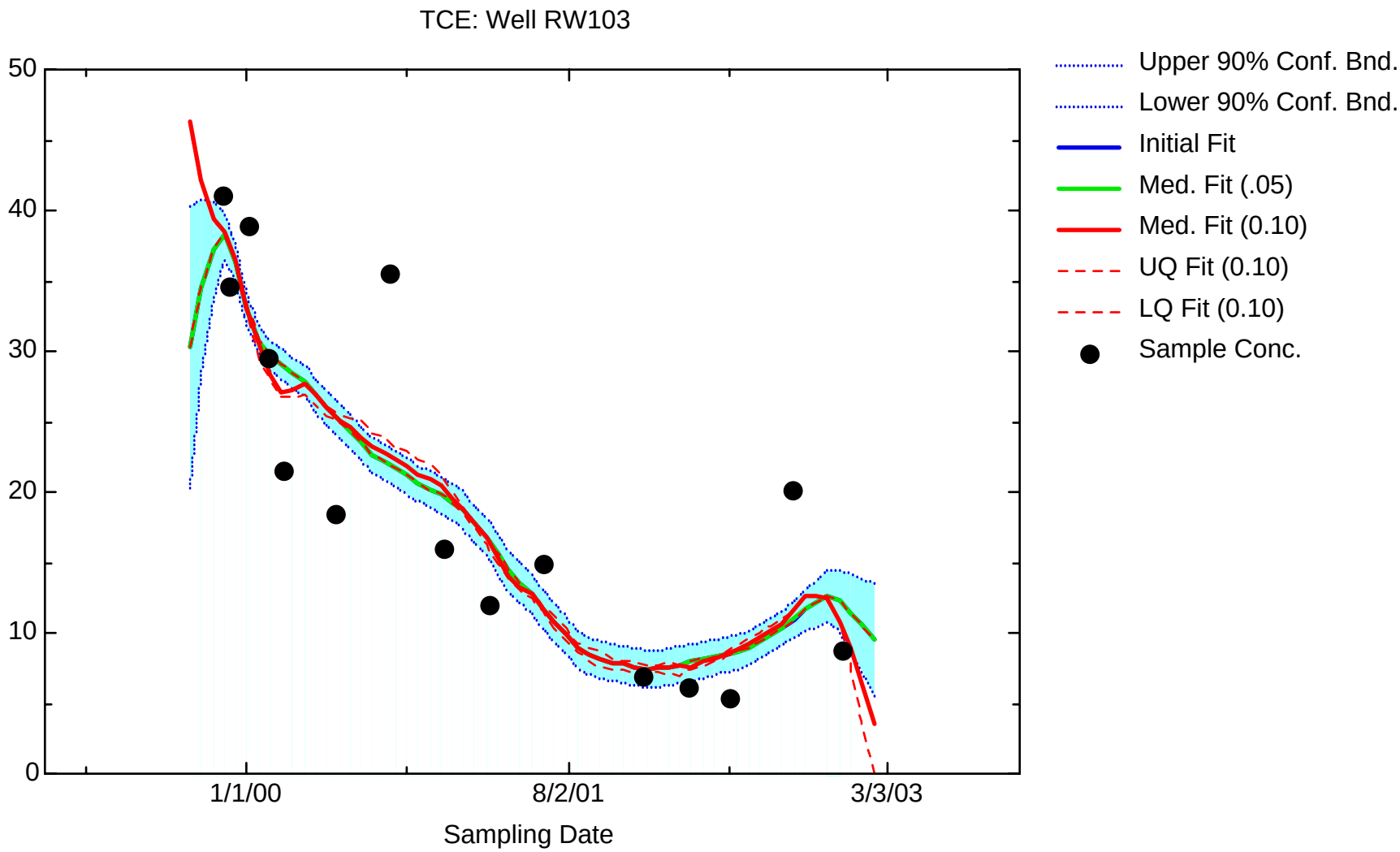

TCE: Well OW7
4000
3500
3000
2500
2000
1500
1000
500
0
5/31/00
9/5/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

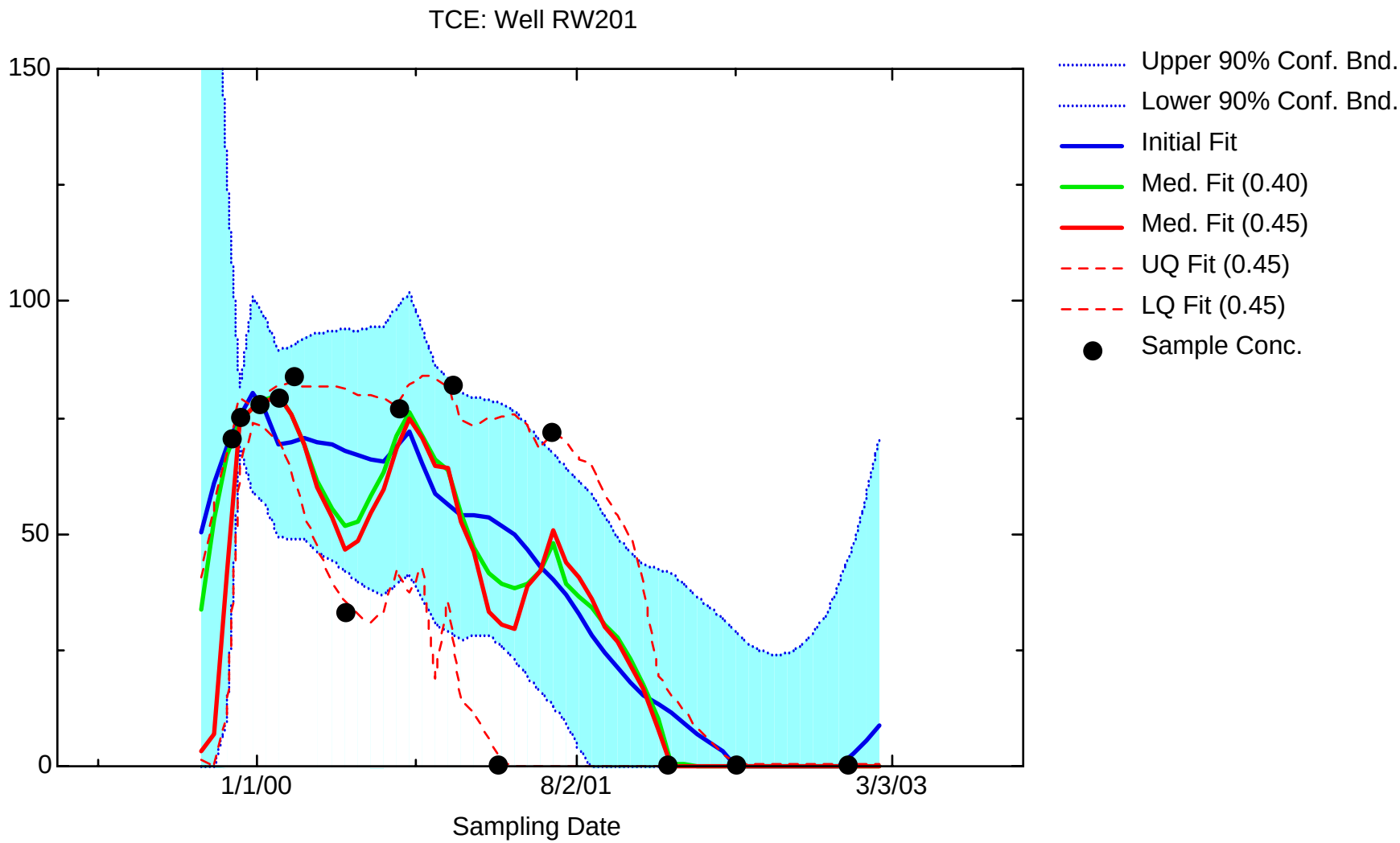

TCE: Well PMW7D
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
80
40
0
8/31/00
12/6/01
3/14/03
Sampling Date

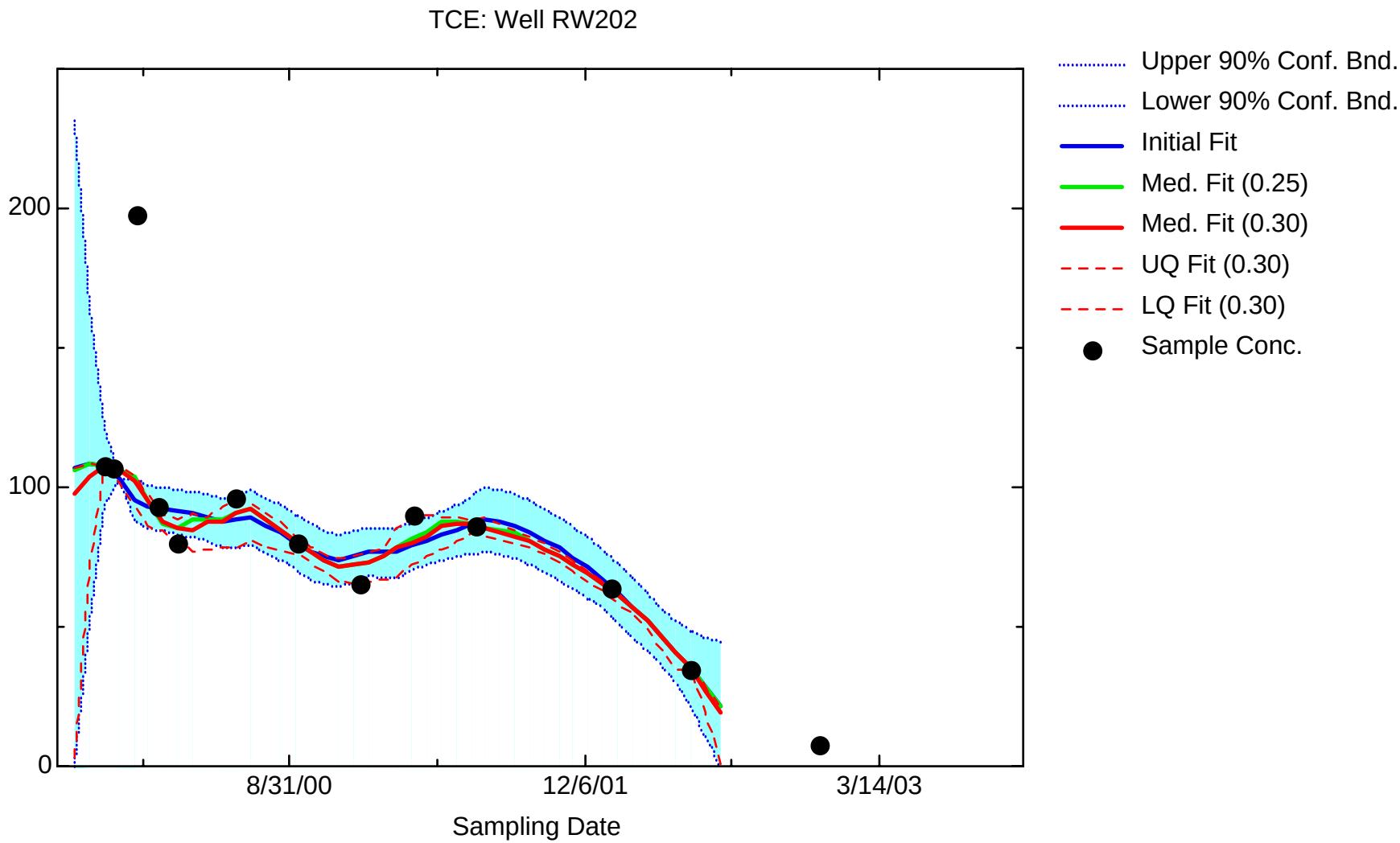

TCE: Well PZ-1A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.
4000
2000
0
1/1/99
8/1/00
3/3/02
10/3/03
Sampling Date

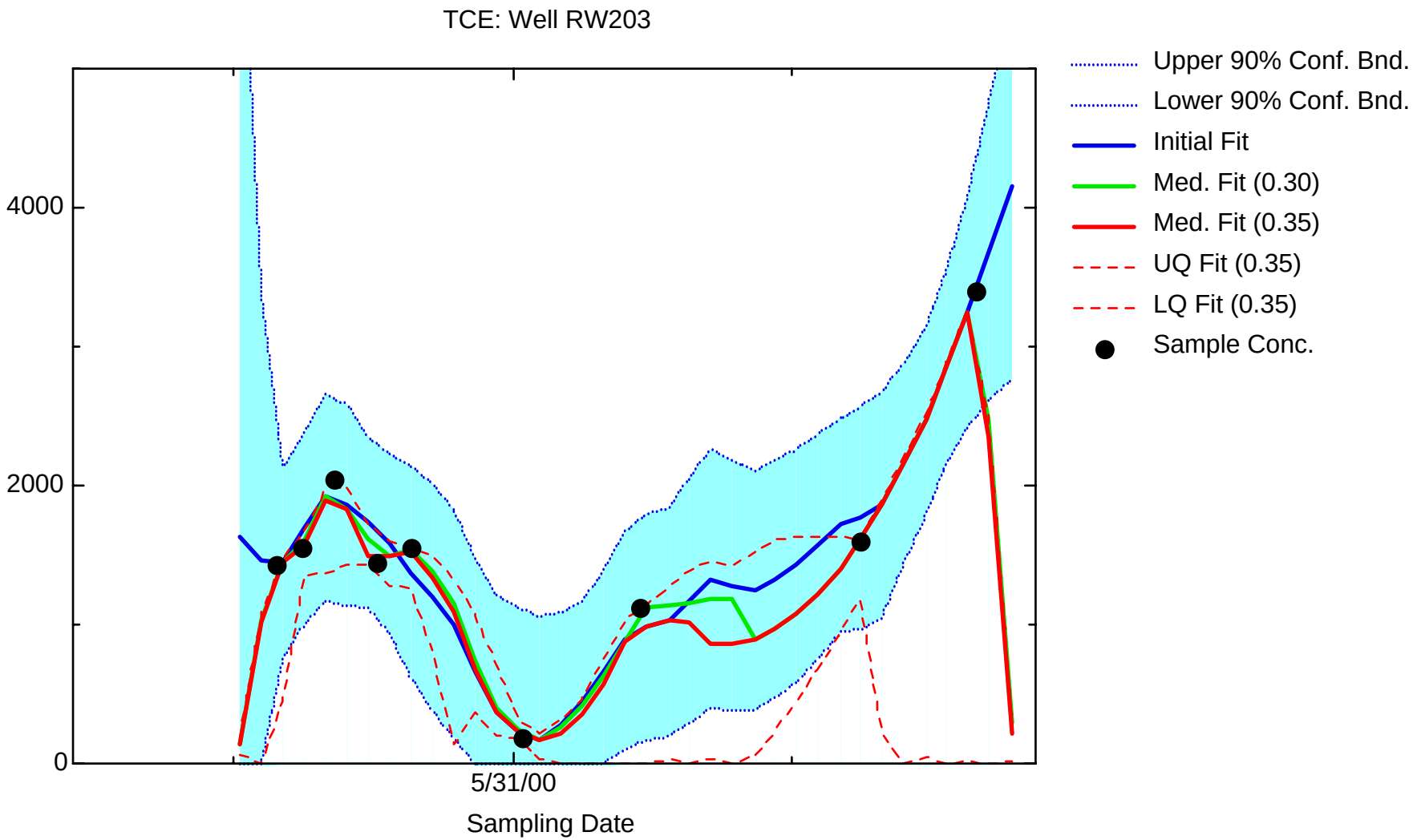

TCE: Well RW101
1000
0
1/1/00
8/2/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

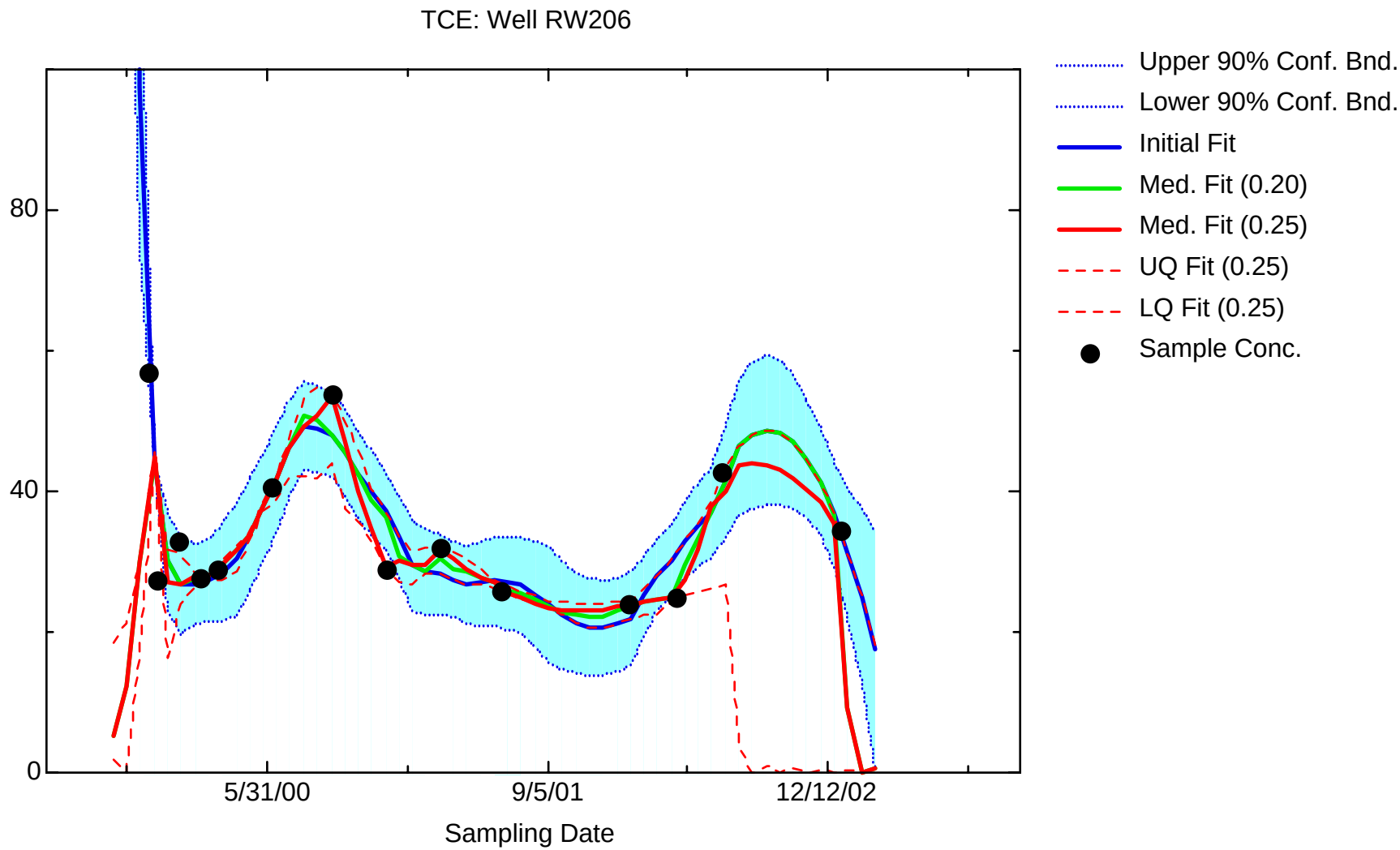

TCE: Well RW102C
1·10^4
1·10^4
5·10^3
0
6/1/99
12/31/00
8/1/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

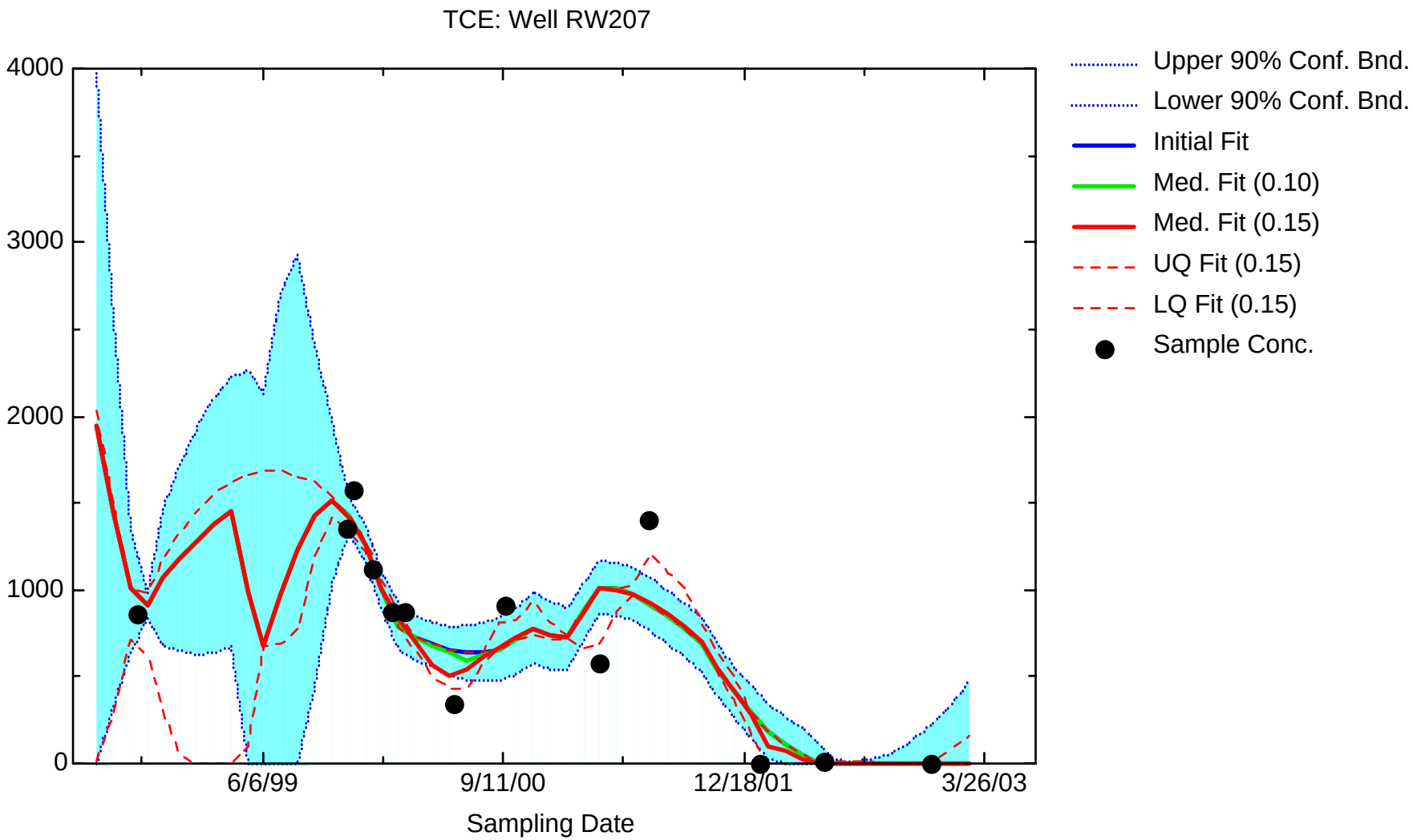

TCE: Well RW103
50
40
30
20
10
0
1/1/00
8/2/01
3/3/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (.05)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

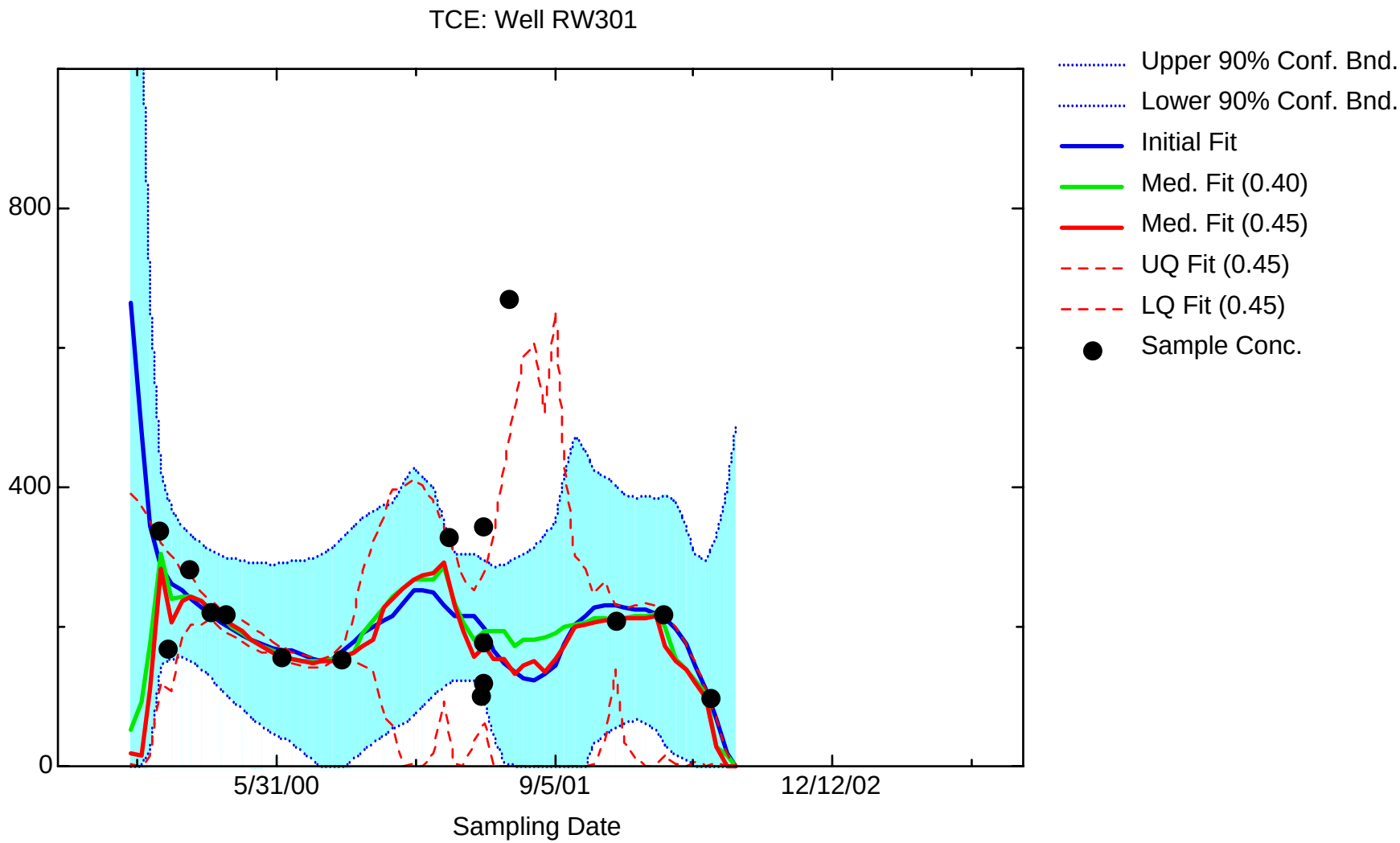

TCE: Well RW201
150
100
50
0
1/1/00
8/2/01
3/3/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

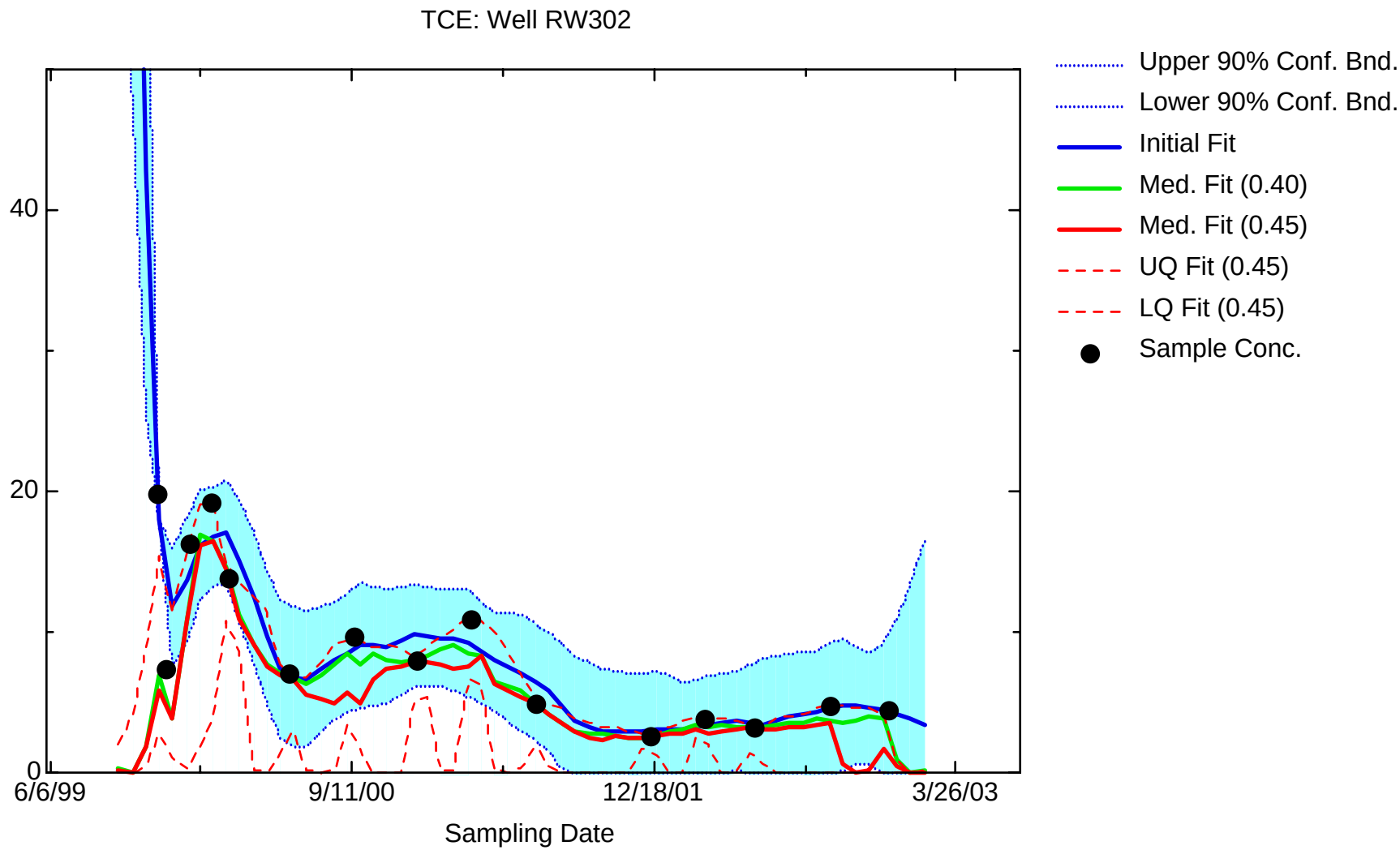

TCE: Well RW202
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
200
100
0
8/31/00
12/6/01
3/14/03
Sampling Date

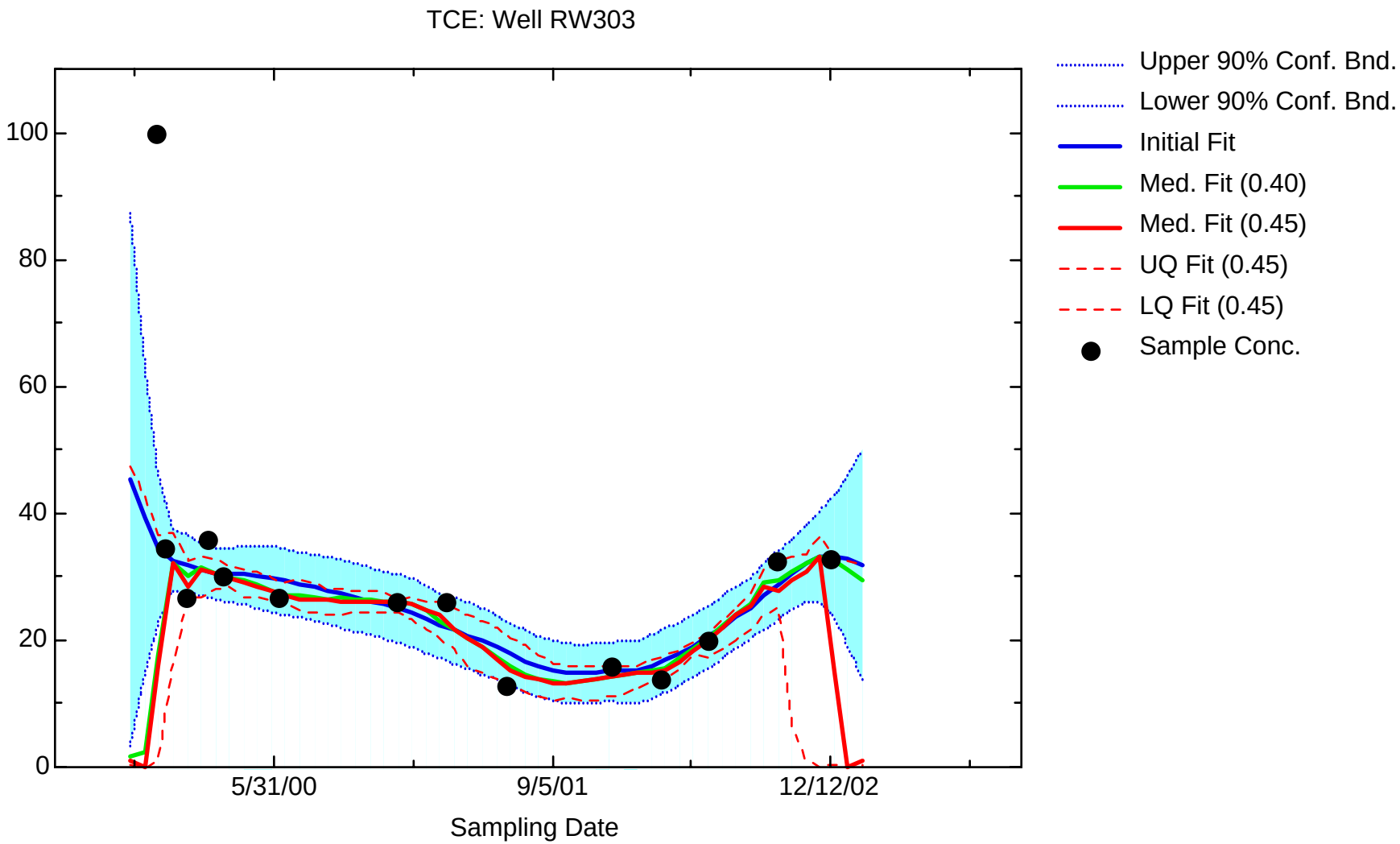

TCE: Well RW203
4000
2000
0
5/31/00
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

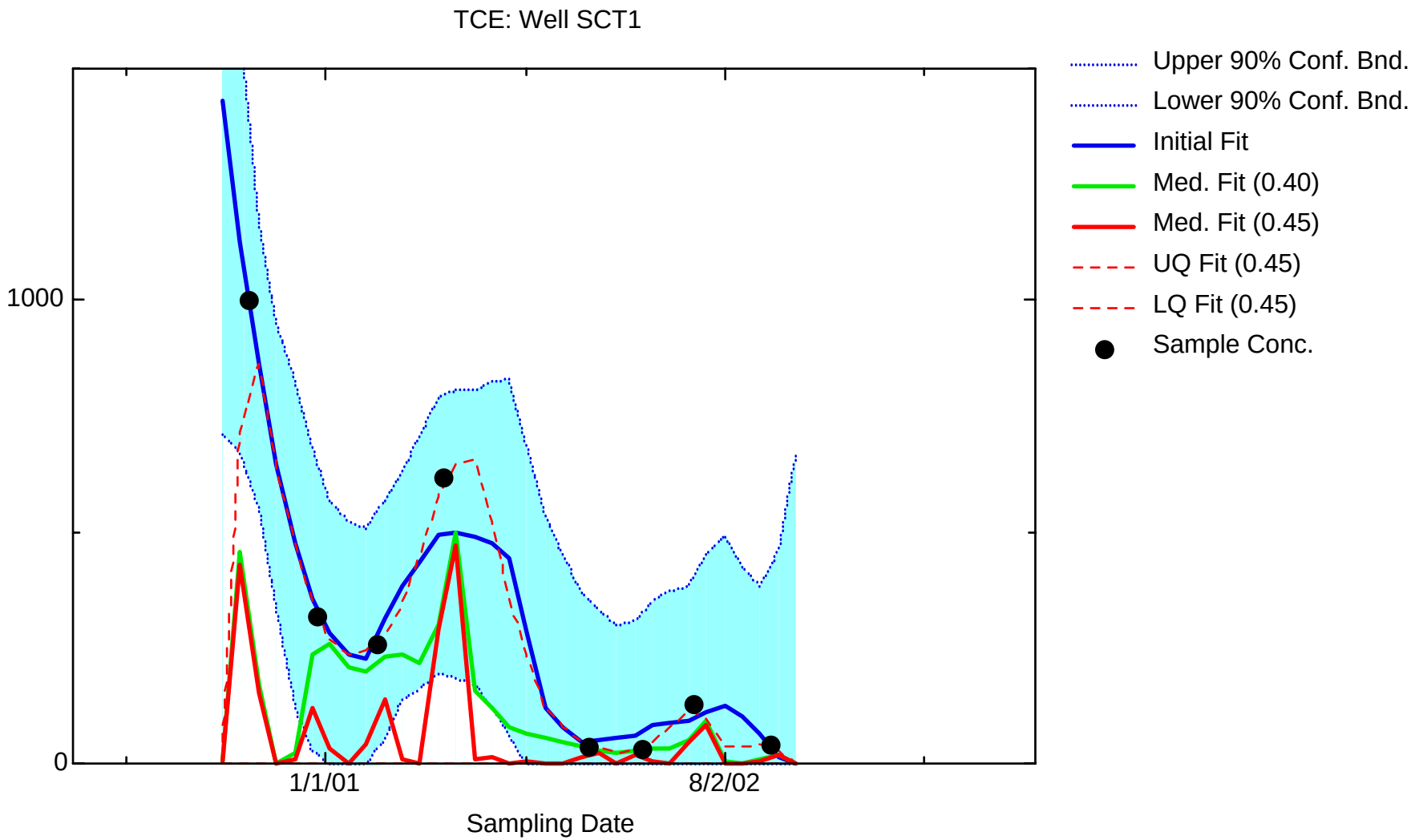

TCE: Well RW206
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
80
40
0
5/31/00
9/5/01
12/12/02
Sampling Date

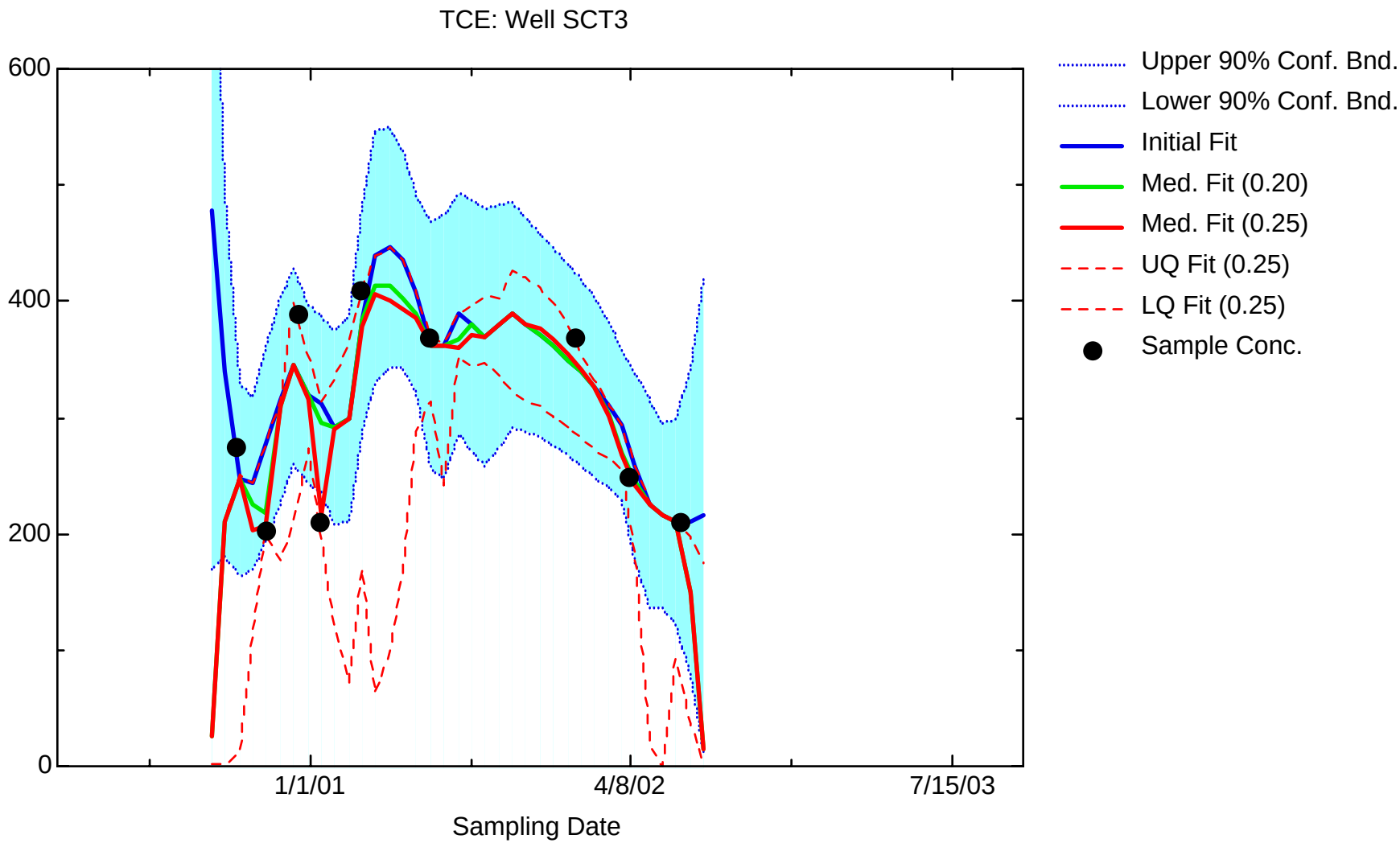

TCE: Well RW207
4000
3000
2000
1000
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

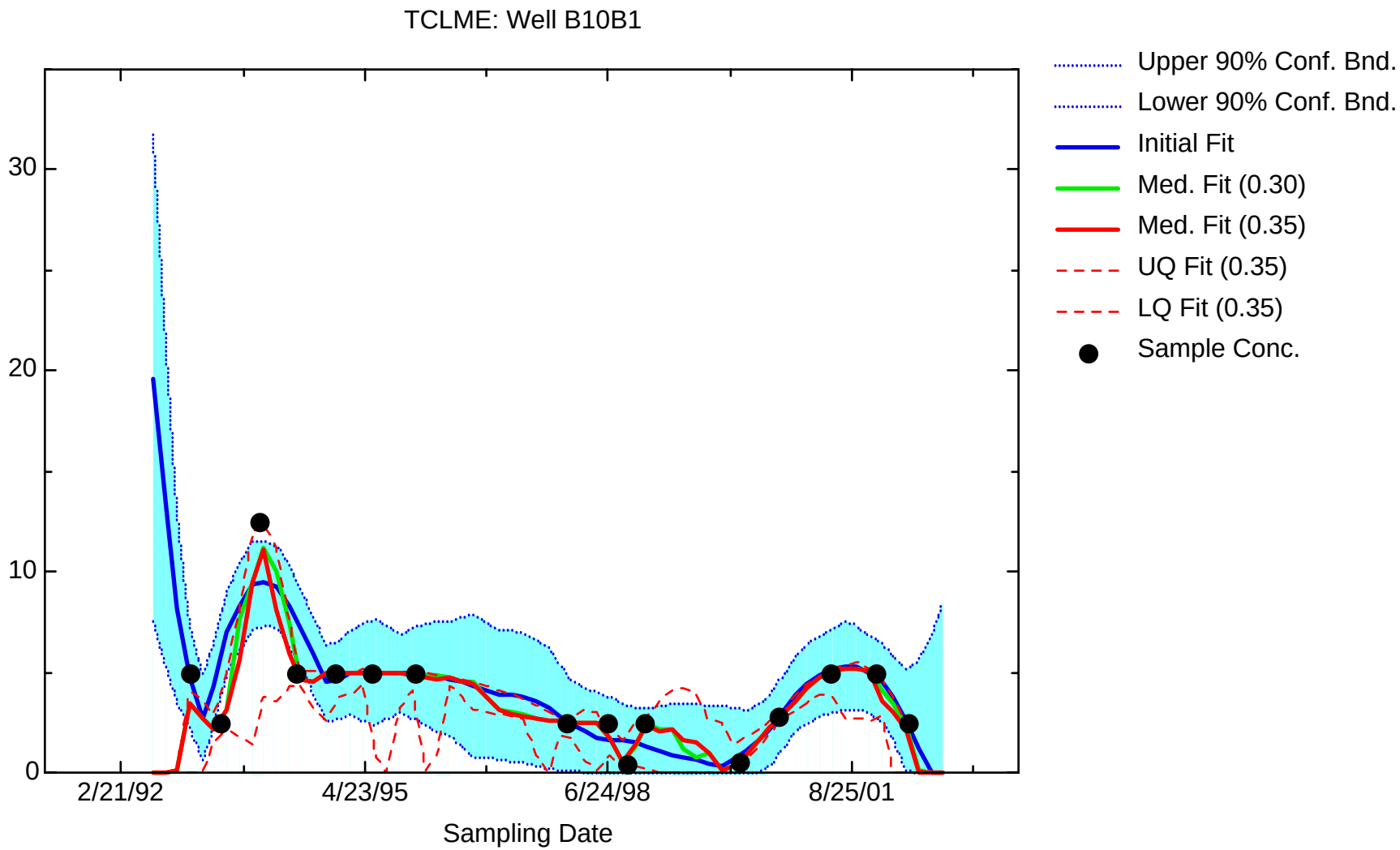

TCE: Well RW301
800
400
0
5/31/00
9/5/01
12/12/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

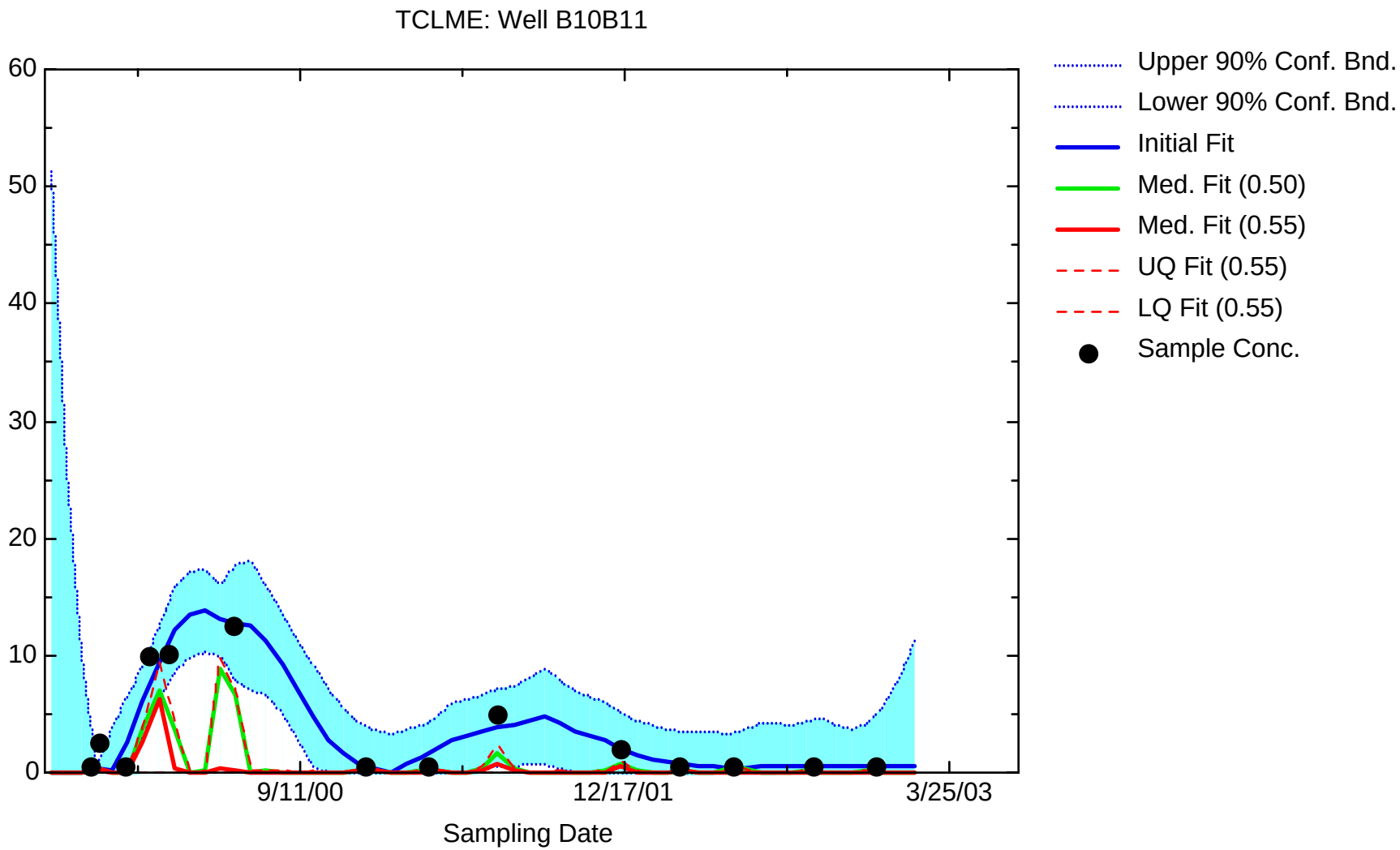

TCE: Well RW302
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.
40
20
0
6/6/99
9/11/00
12/18/01
3/26/03
Sampling Date

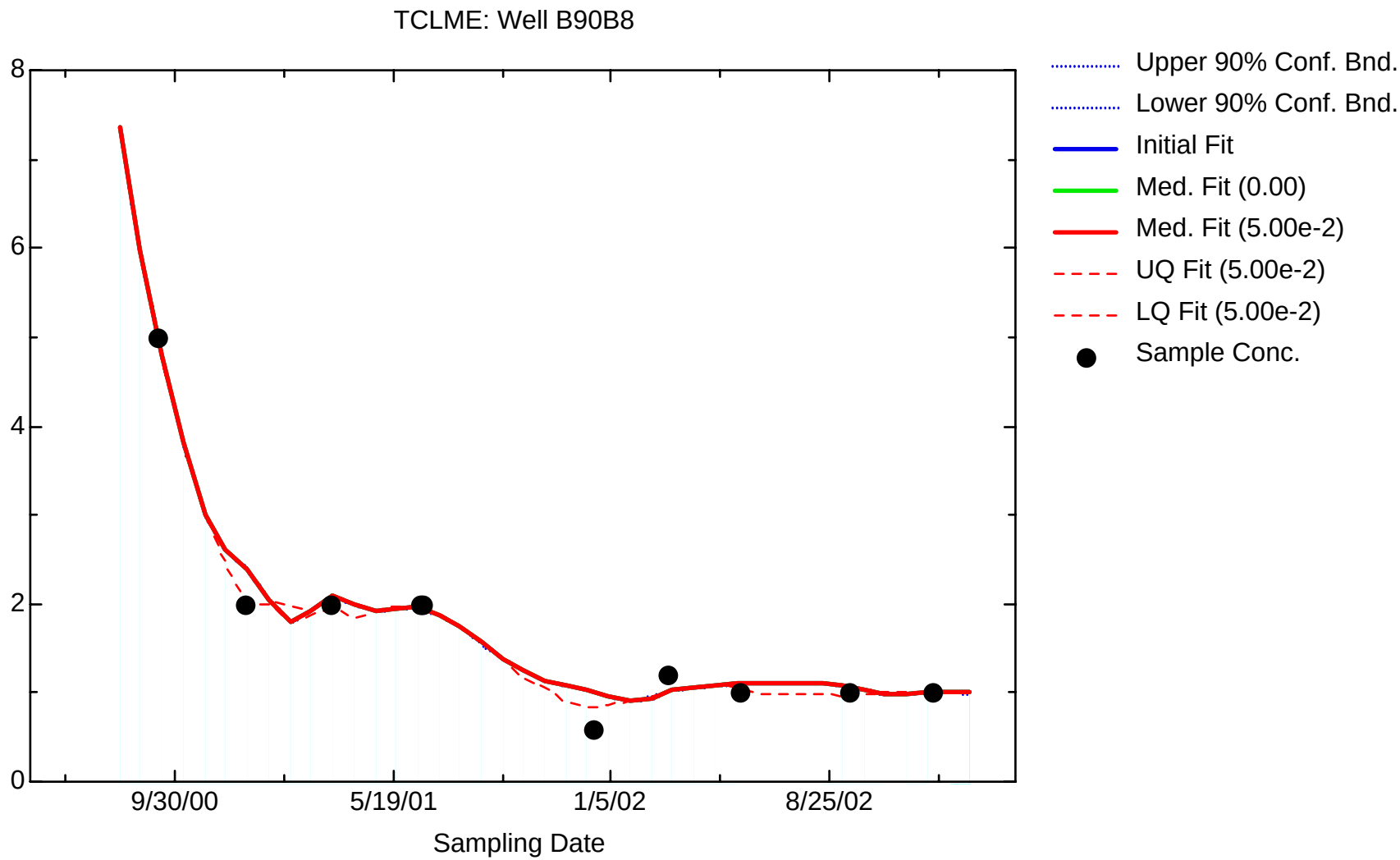

TCE: Well RW303
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.
100
80
60
40
20
0
5/31/00
9/5/01
12/12/02
Sampling Date

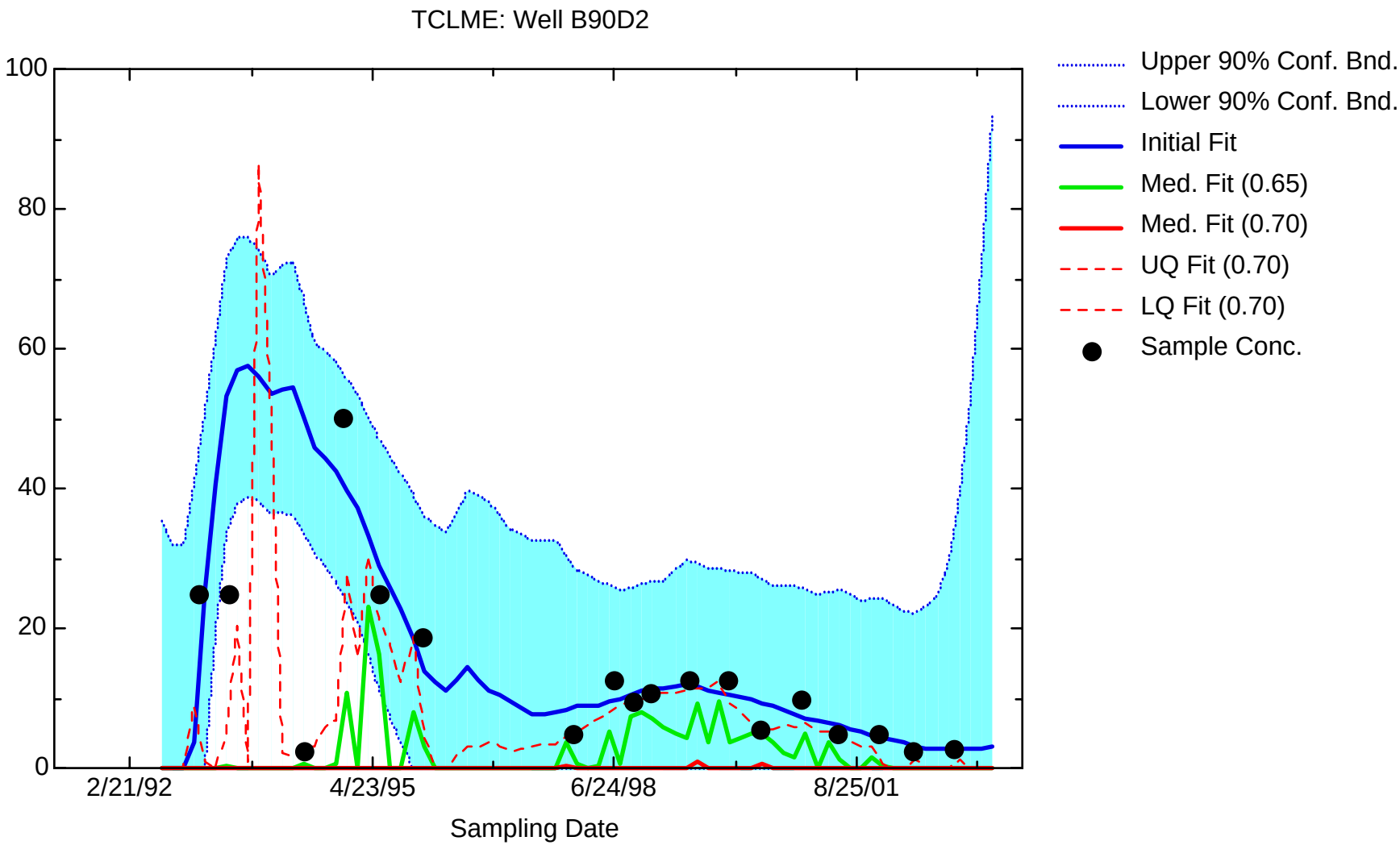

TCE: Well SCT1
1000
0
1/1/01
8/2/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

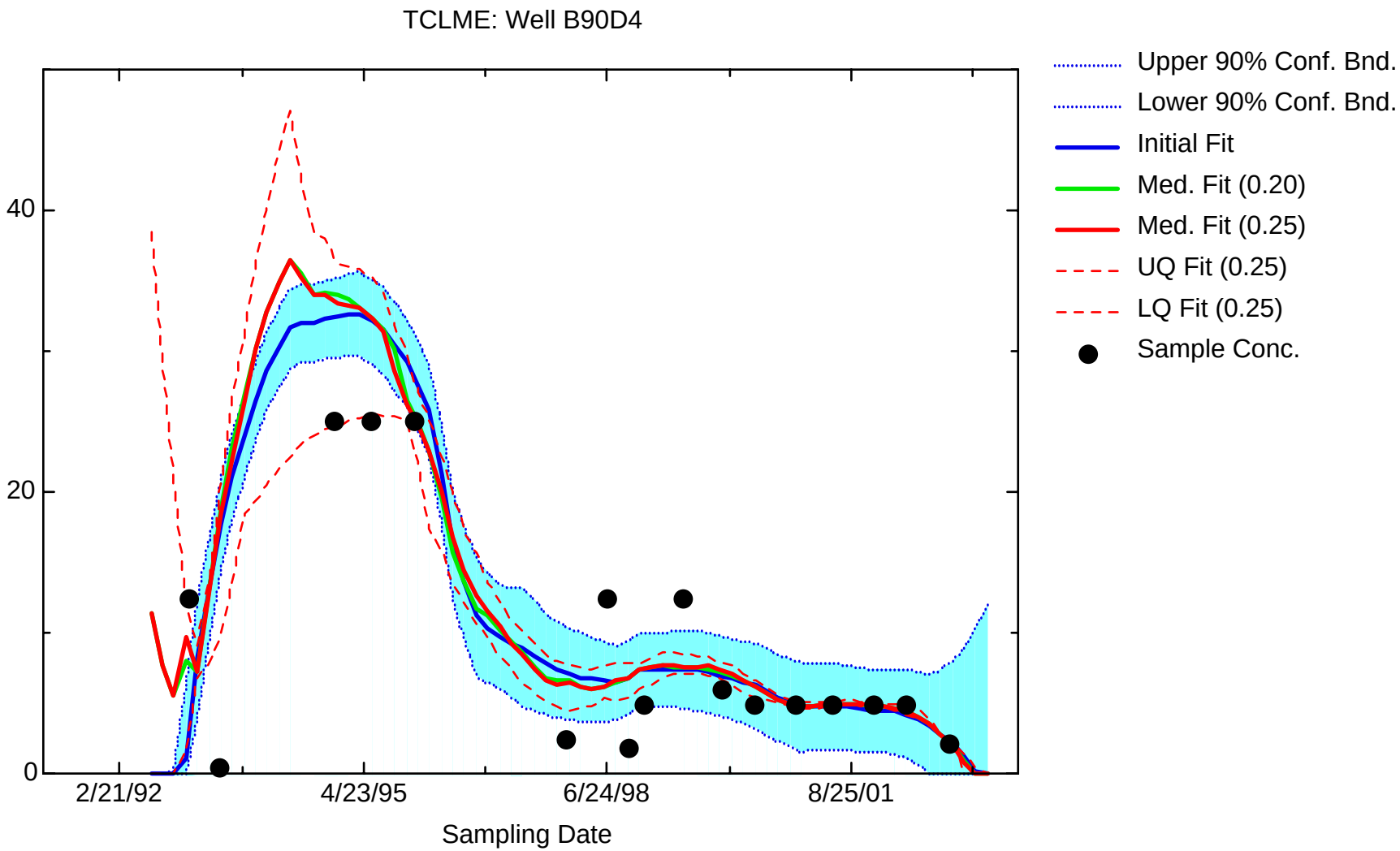

TCE: Well SCT3
600
400
200
0
1/1/01
4/8/02
7/15/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

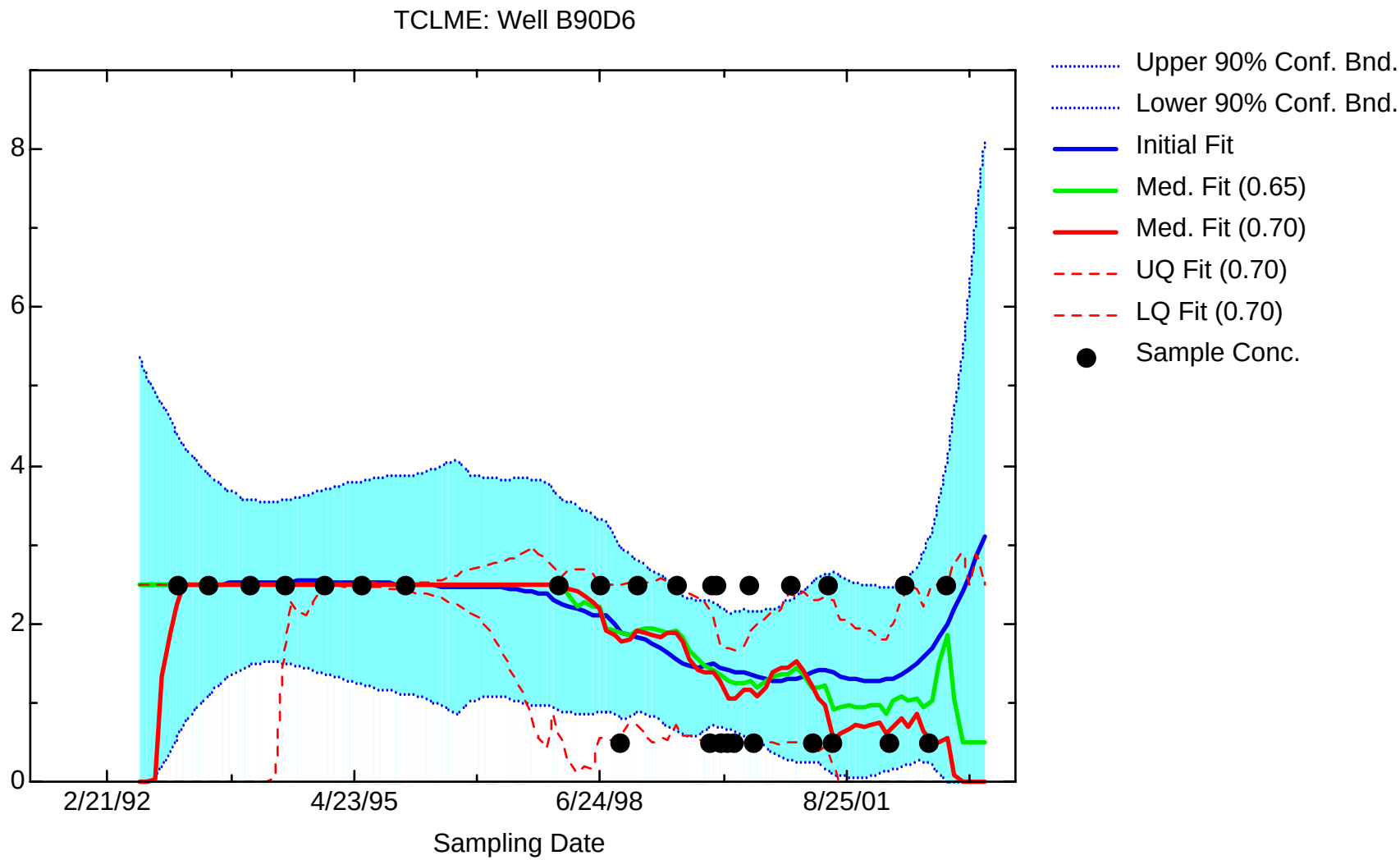

TCLME: Well B10B1
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
30
20
10
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

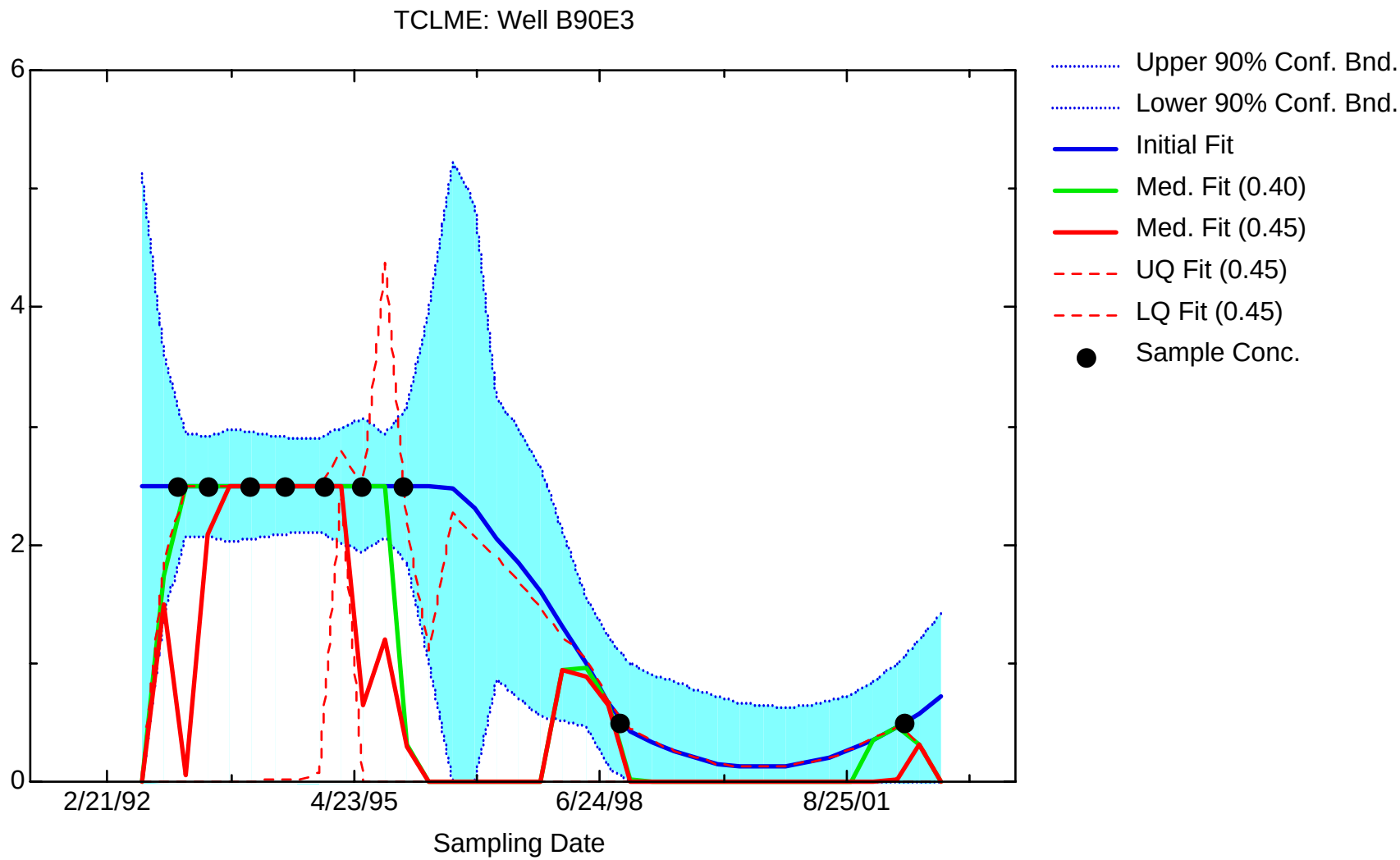

TCLME: Well B10B11
60
50
40
30
20
10
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

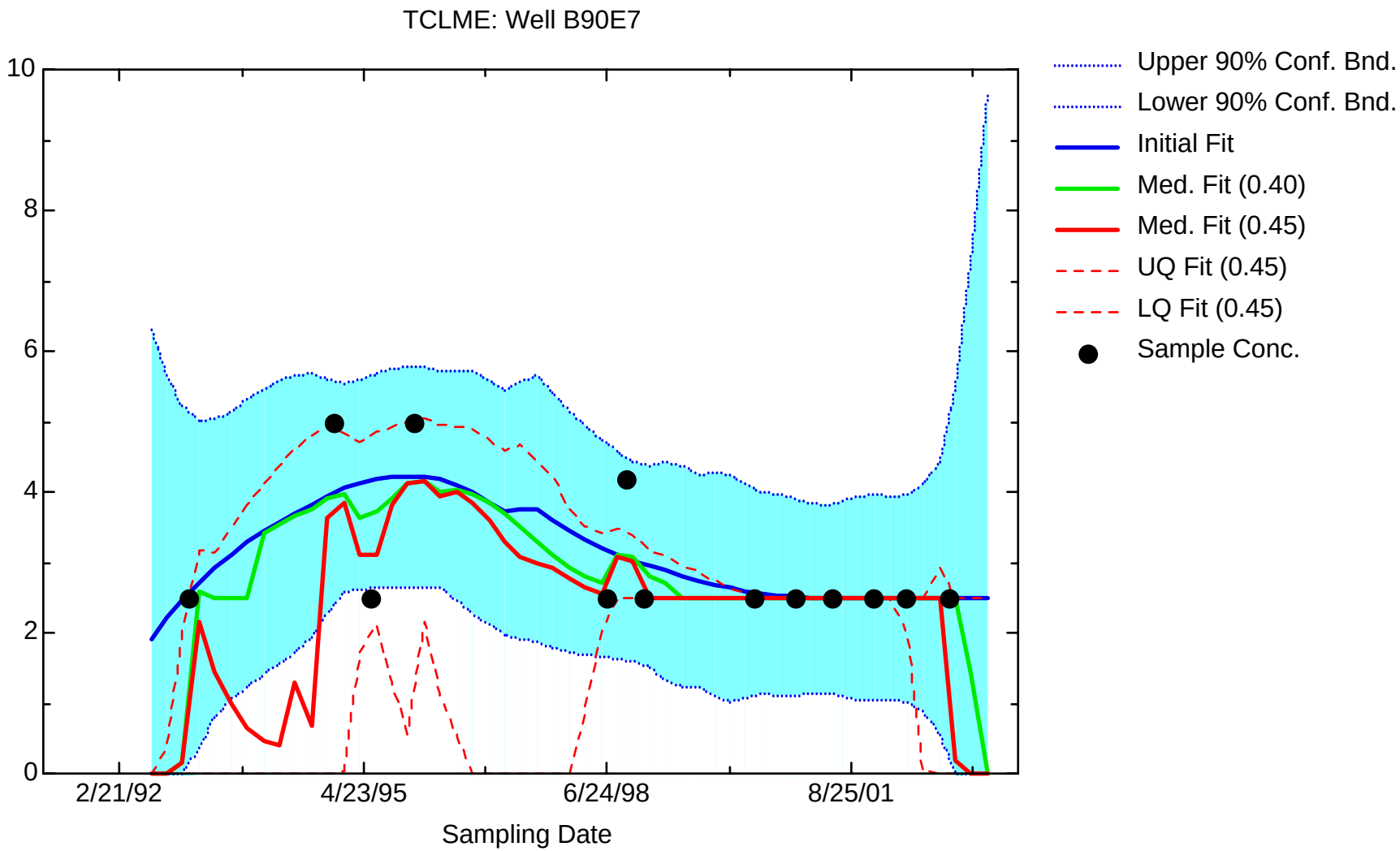

TCLME: Well B90B8
8
6
4
2
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.00)
Med. Fit (5.00e-2)
UQ Fit (5.00e-2)
LQ Fit (5.00e-2)
Sample Conc.

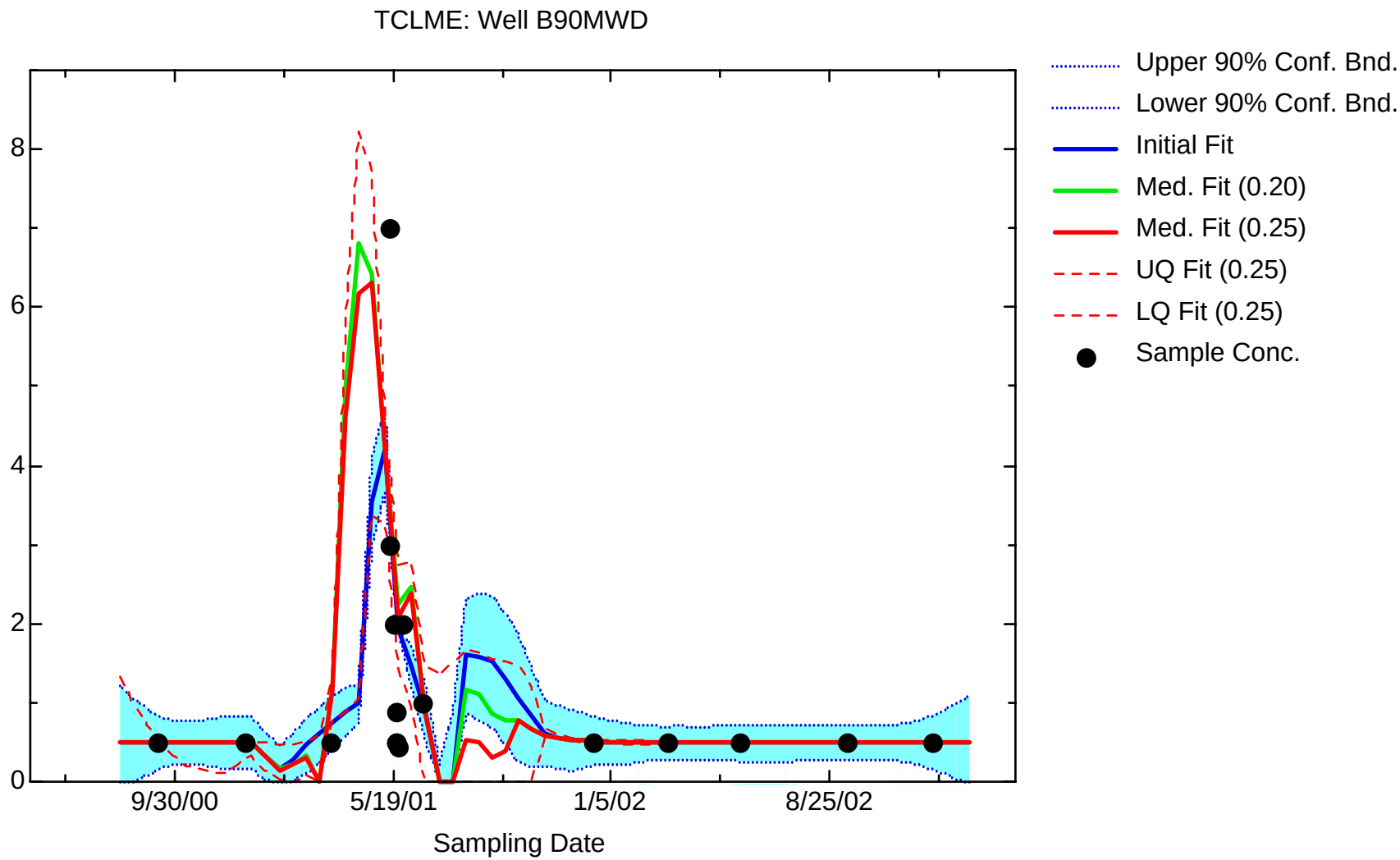

TCLME: Well B90D2
100
80
60
40
20
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

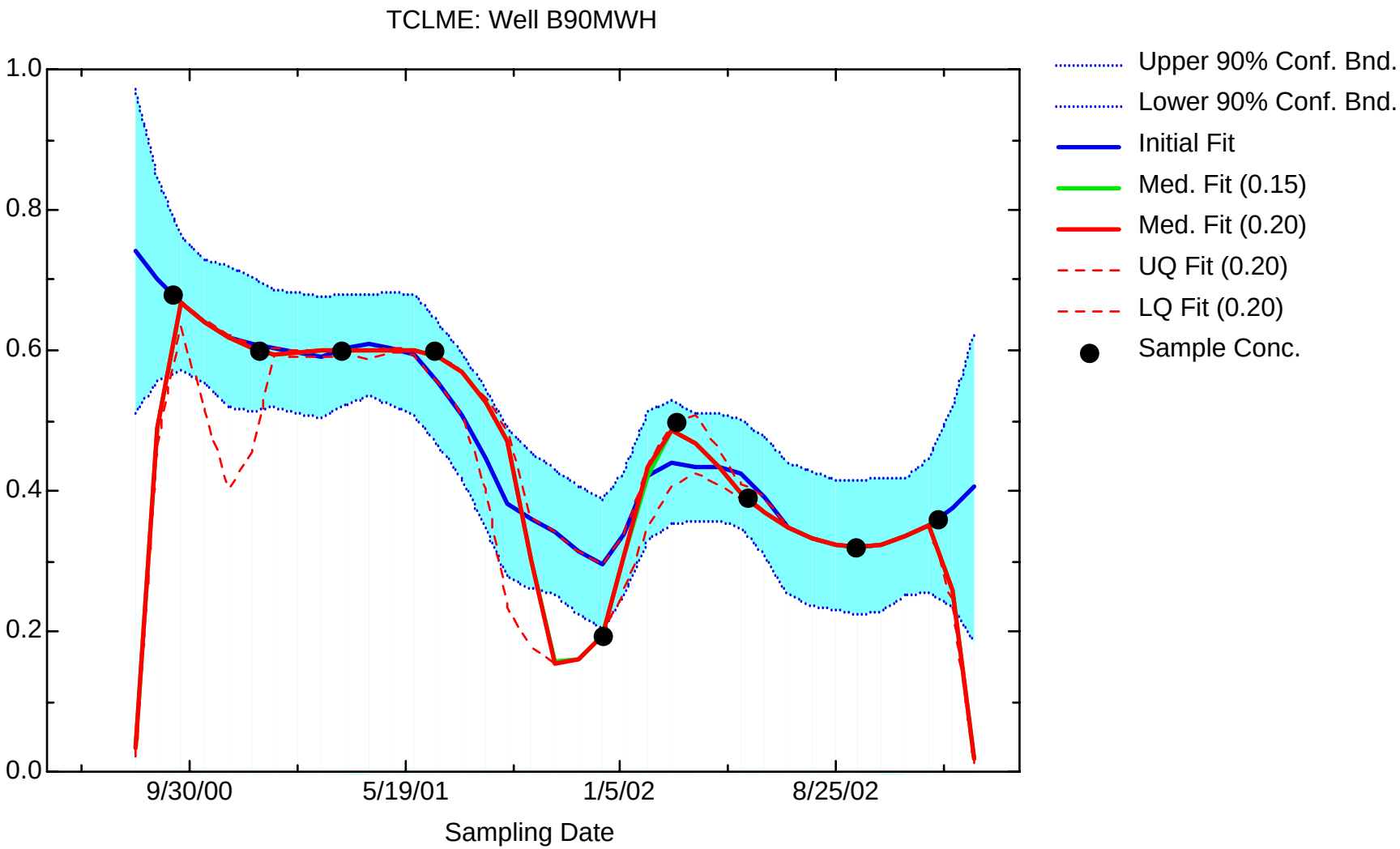

TCLME: Well B90D4
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
40
20
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

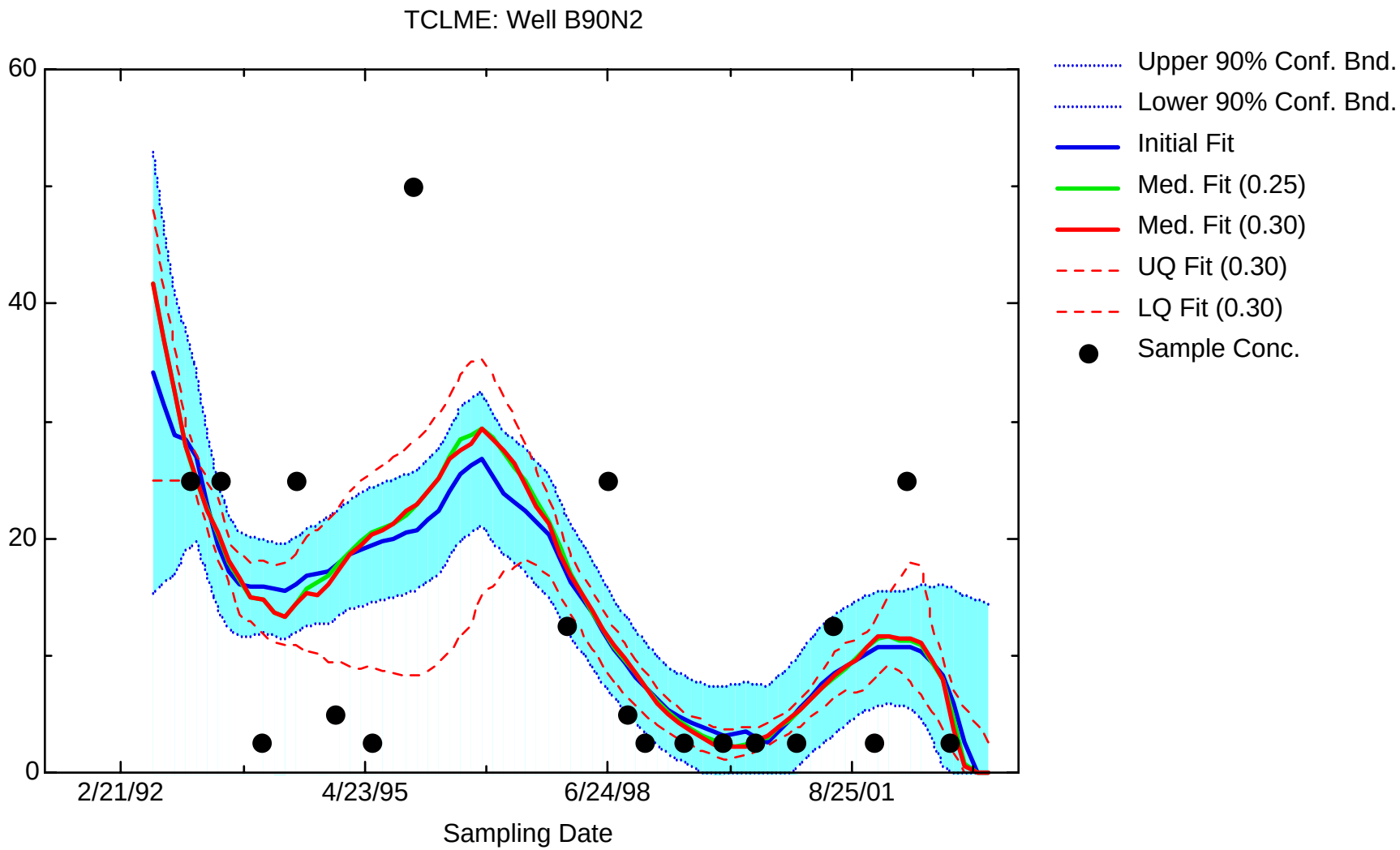

TCLME: Well B90D6
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
0
2
4
6
8
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

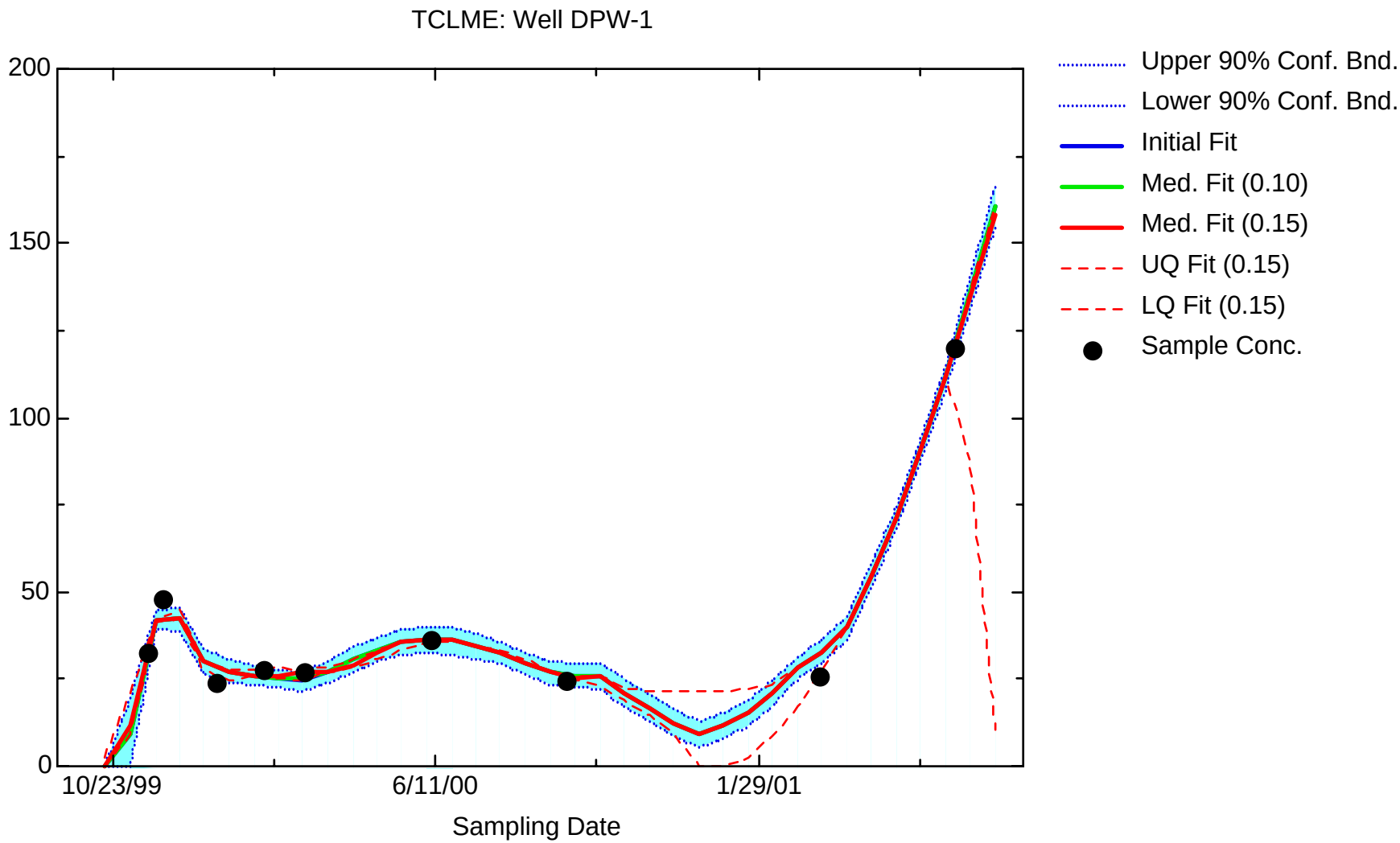

TCLME: Well B90E3
6
4
2
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

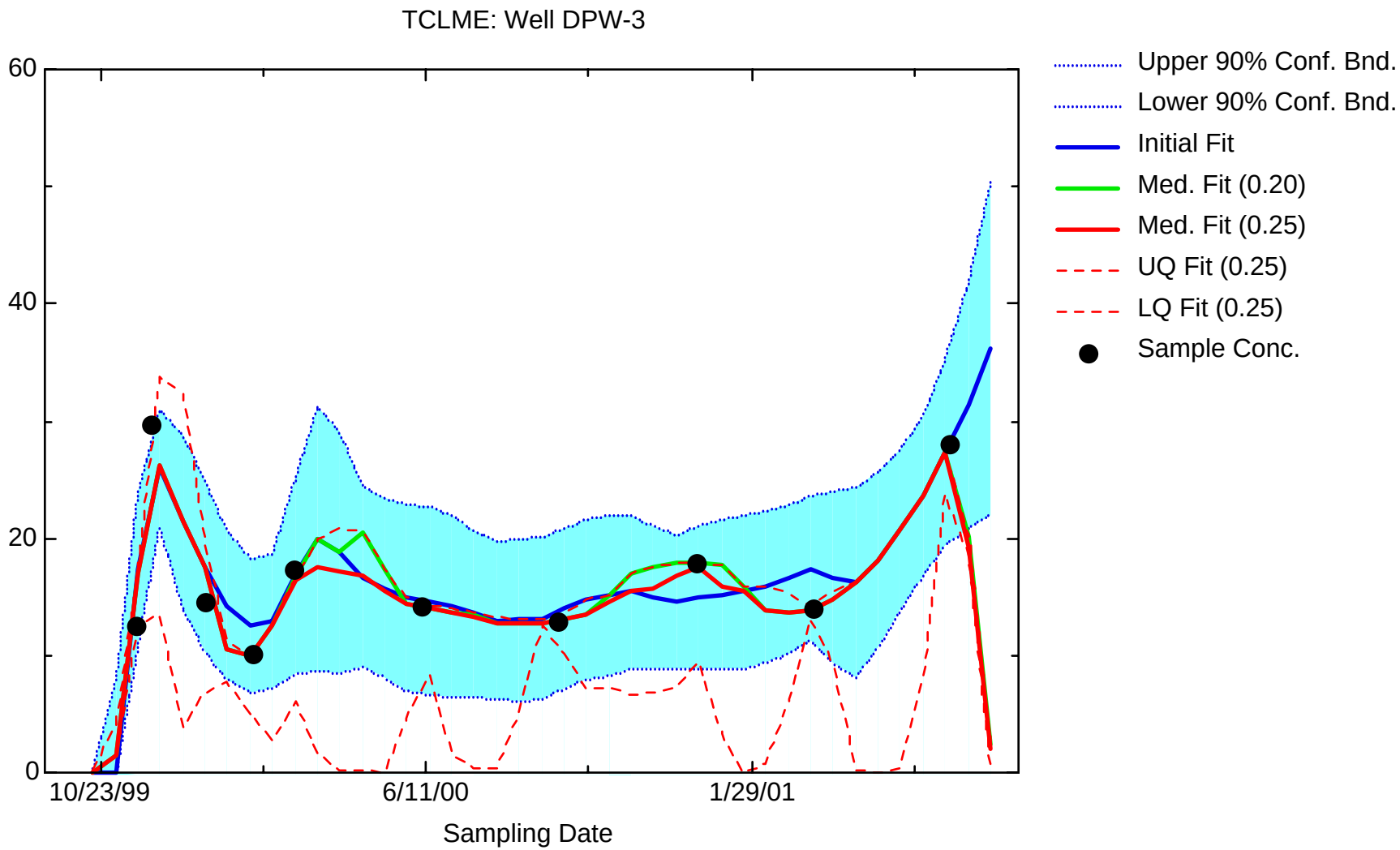

TCLME: Well B90E7
10
8
6
4
2
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

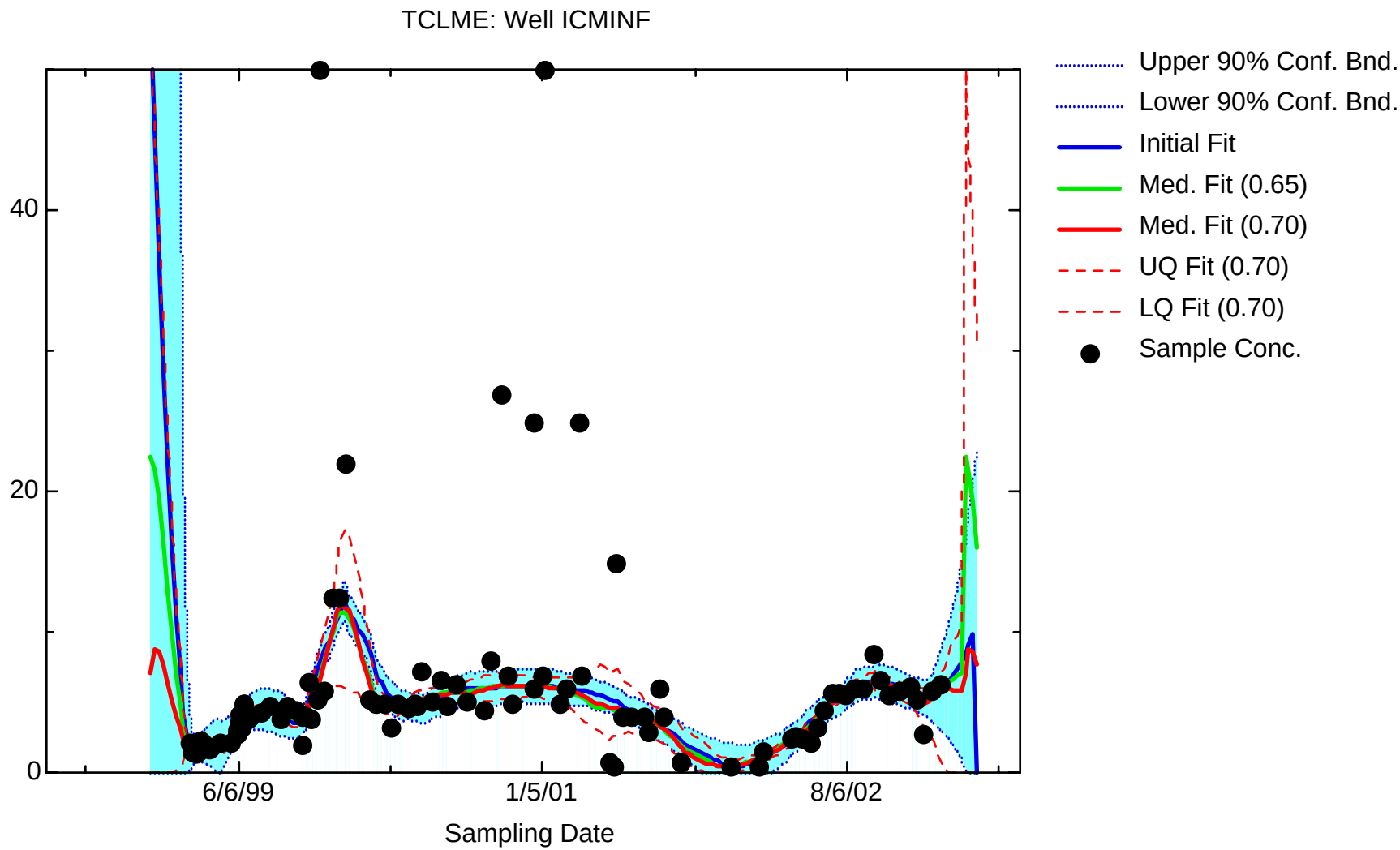

TCLME: Well B90MWD
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
0
2
4
6
8
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

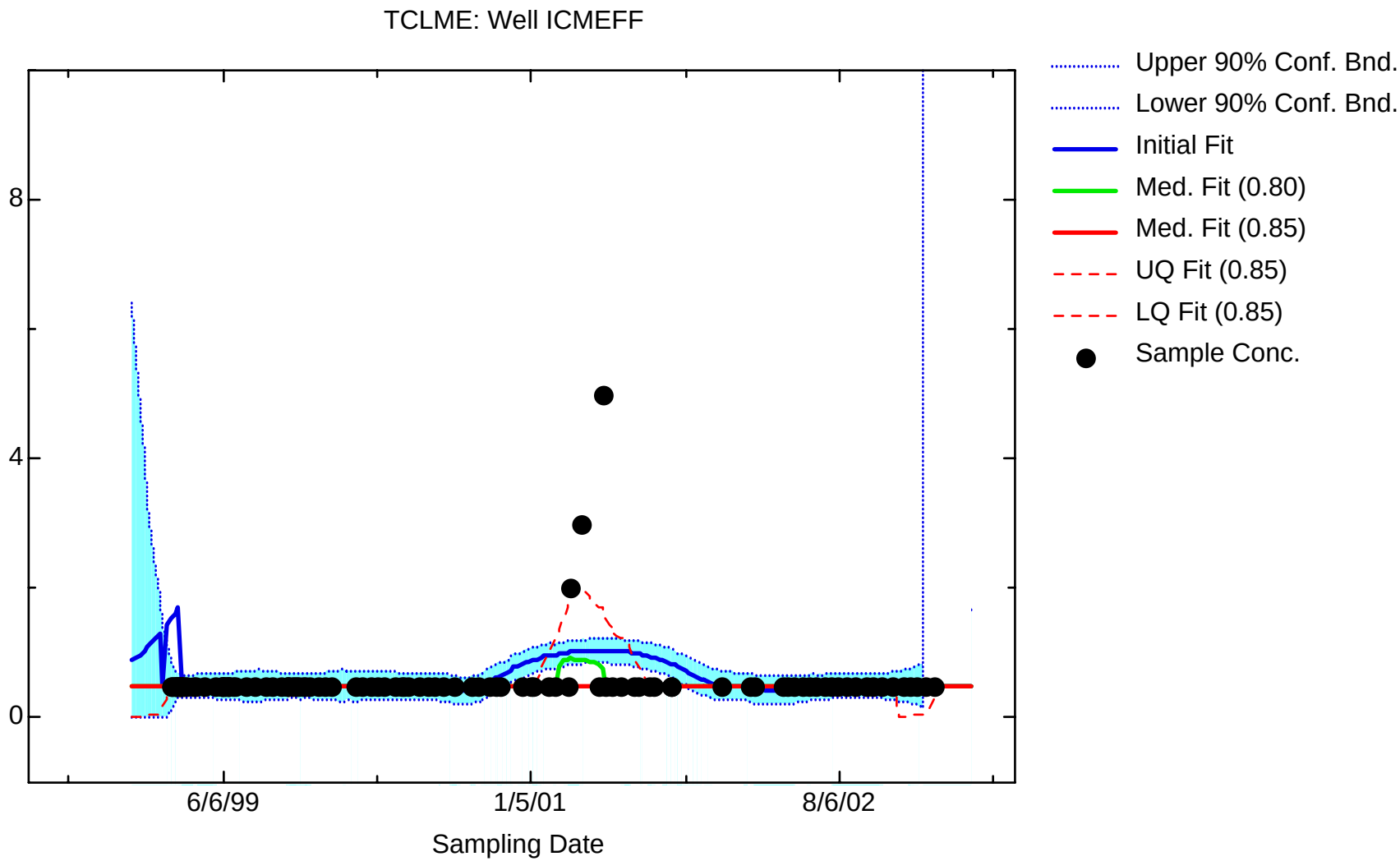

TCLME: Well B90MWH
1.0
0.8
0.6
0.4
0.2
0.0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

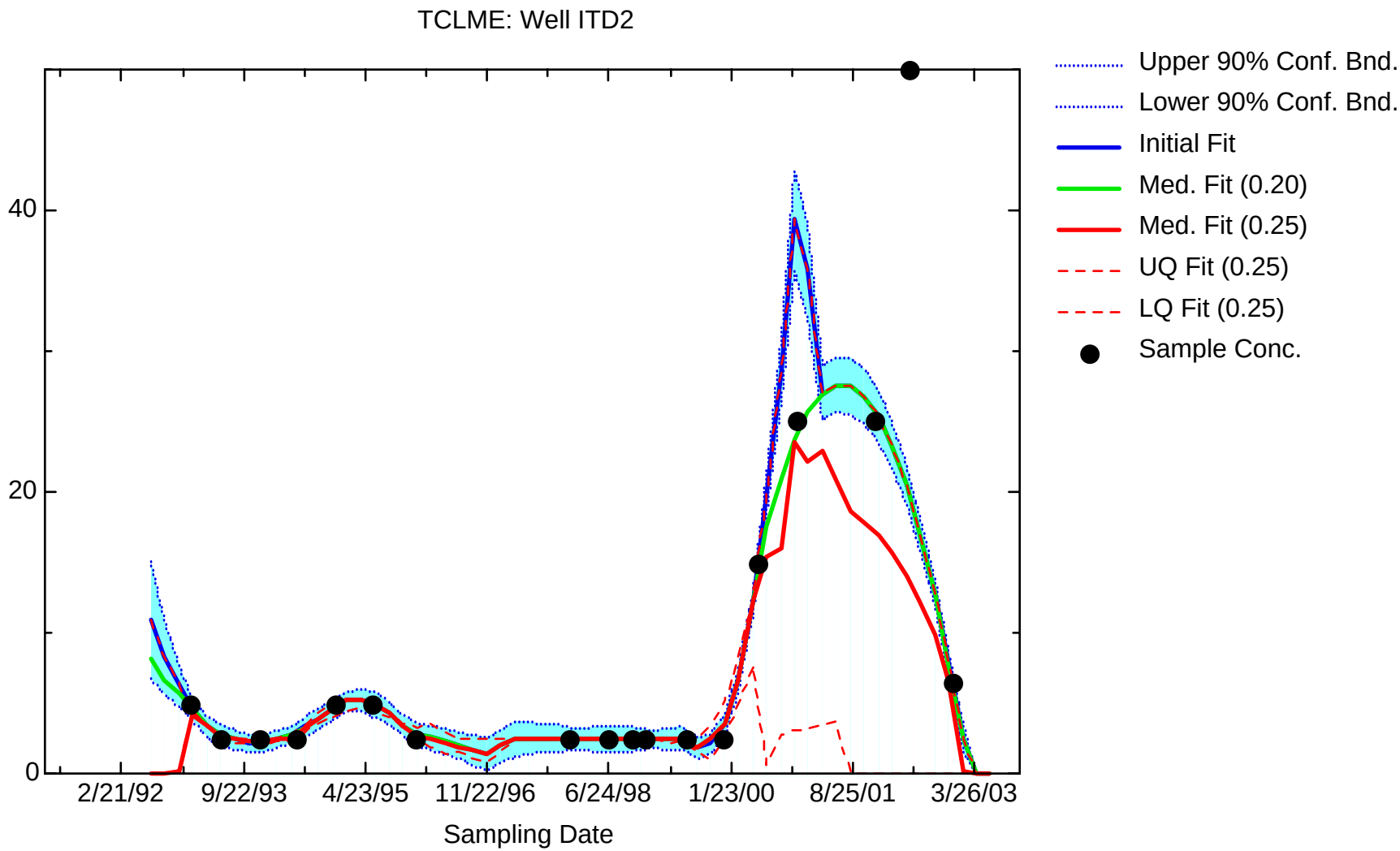

TCLME: Well B90N2
60
40
20
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

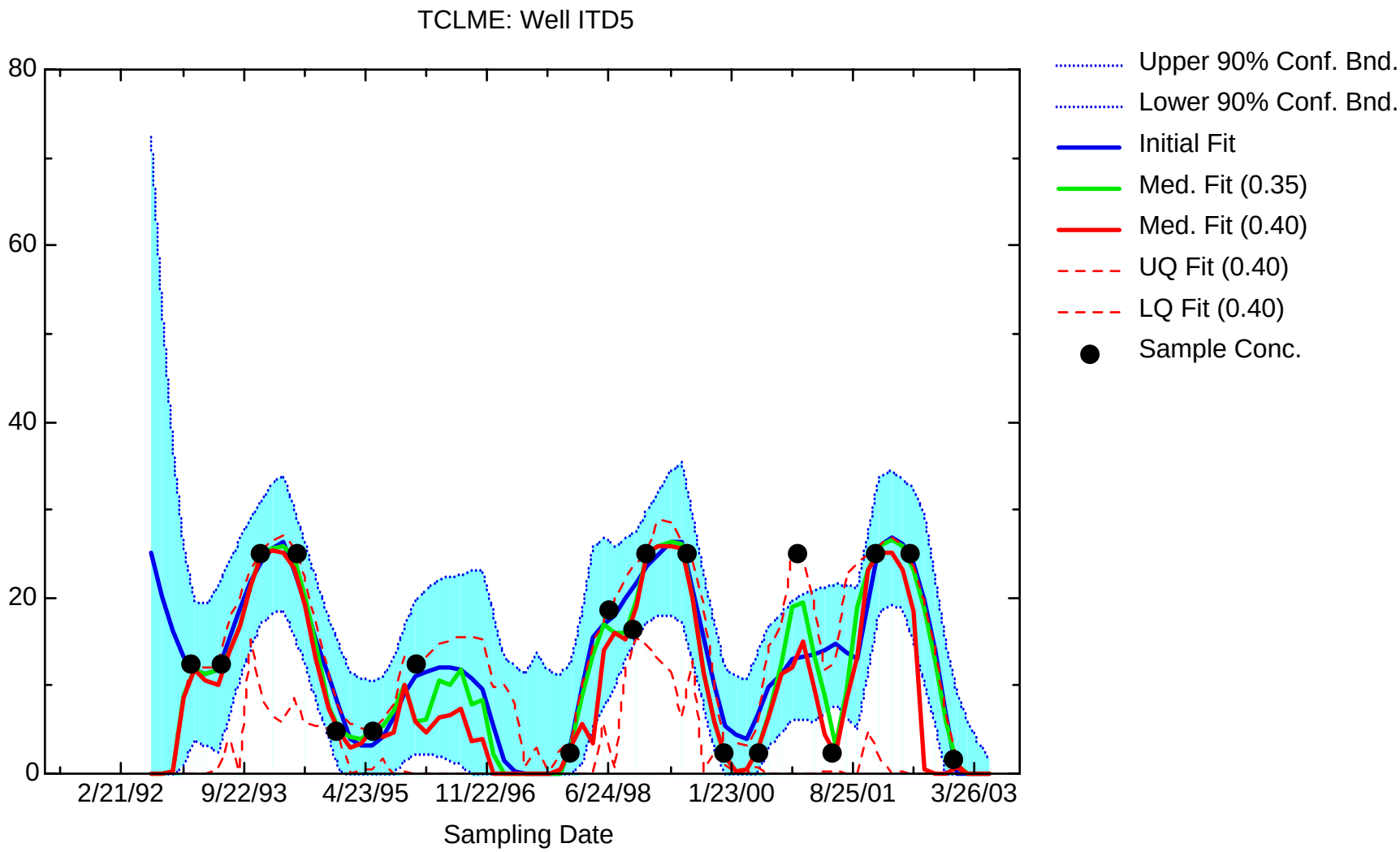

TCLME: Well DPW-1
200
150
100
50
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

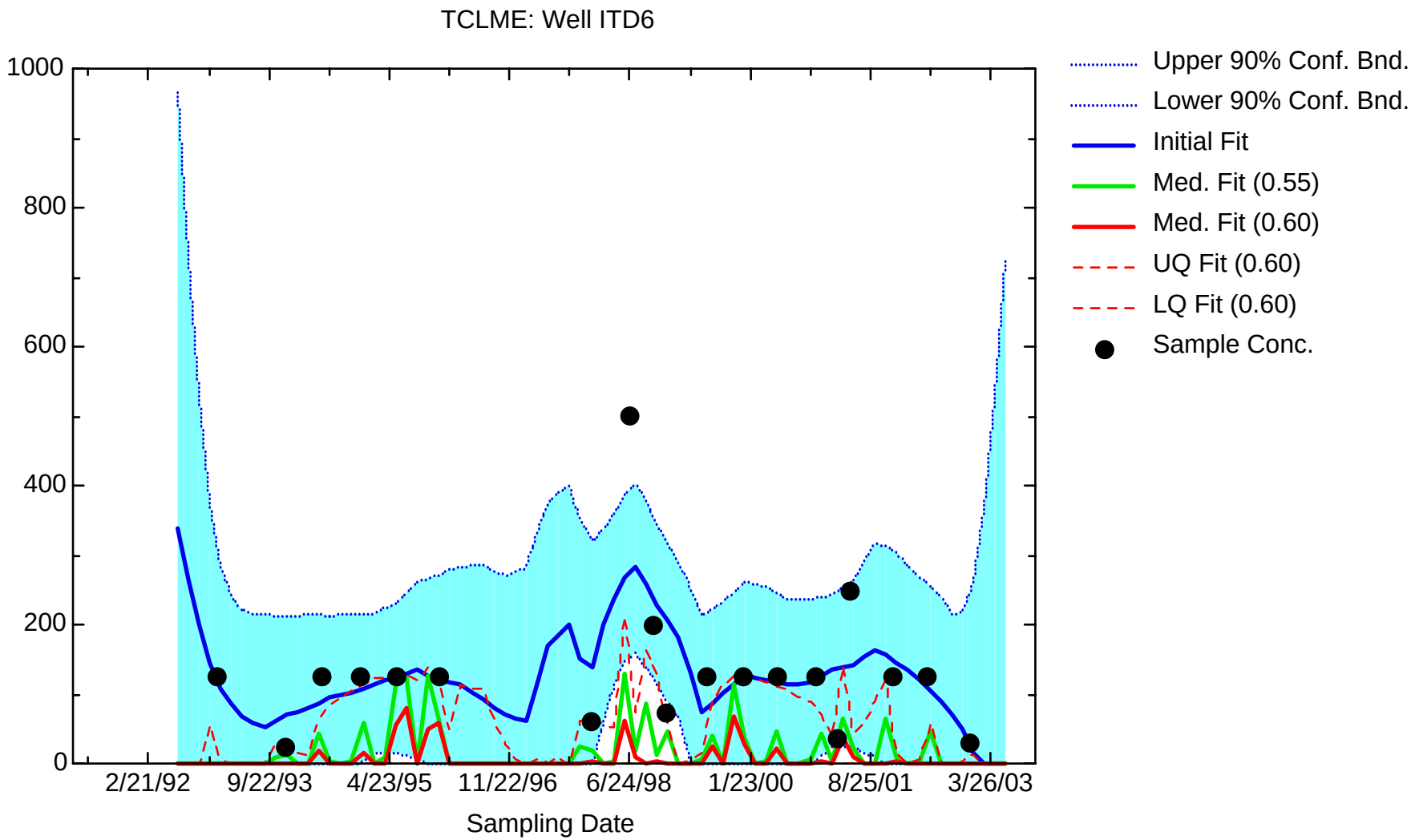

TCLME: Well DPW-3
60
40
20
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

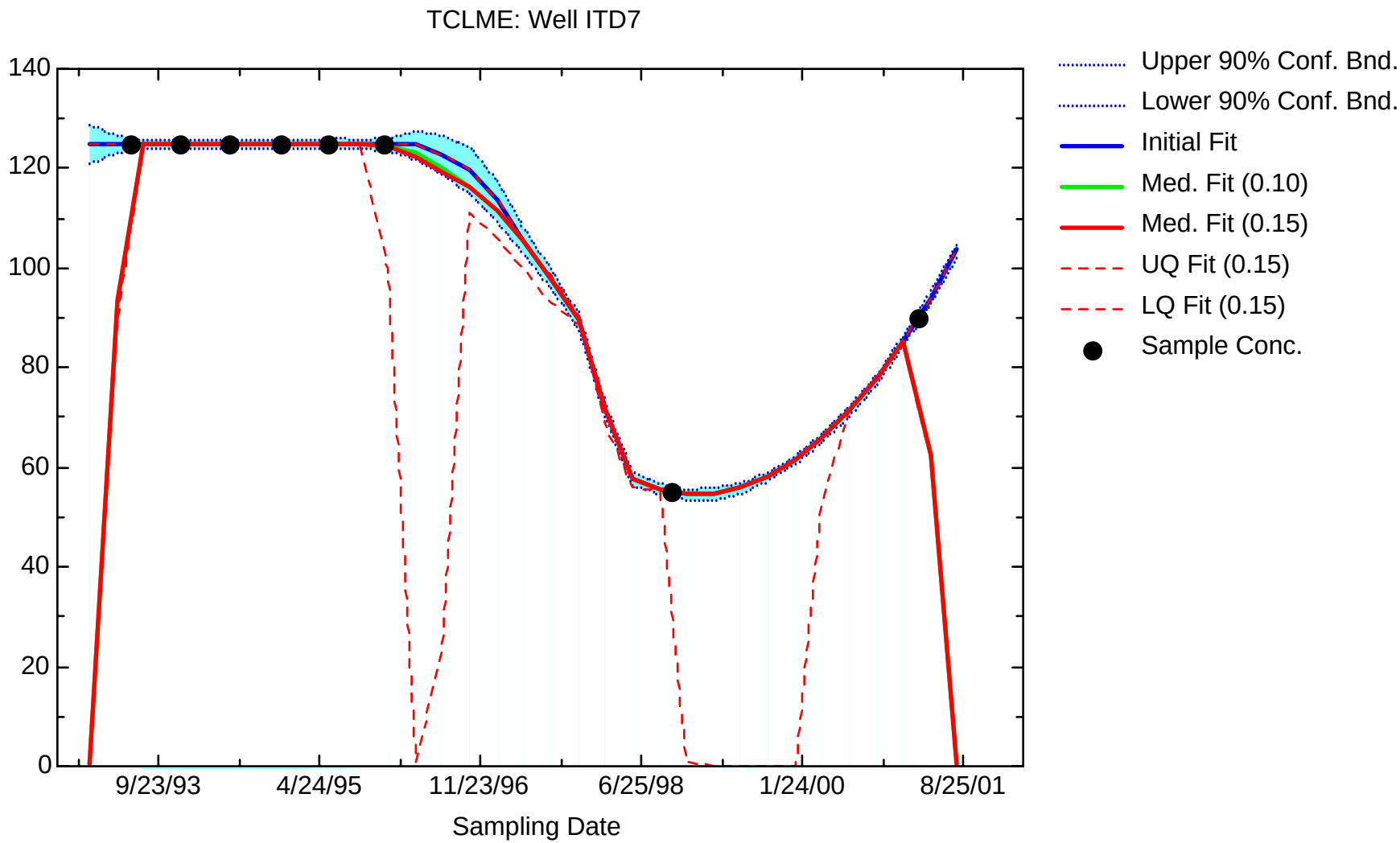

TCLME: Well ICMINF
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
40
20
0
6/6/99
1/5/01
8/6/02
Sampling Date

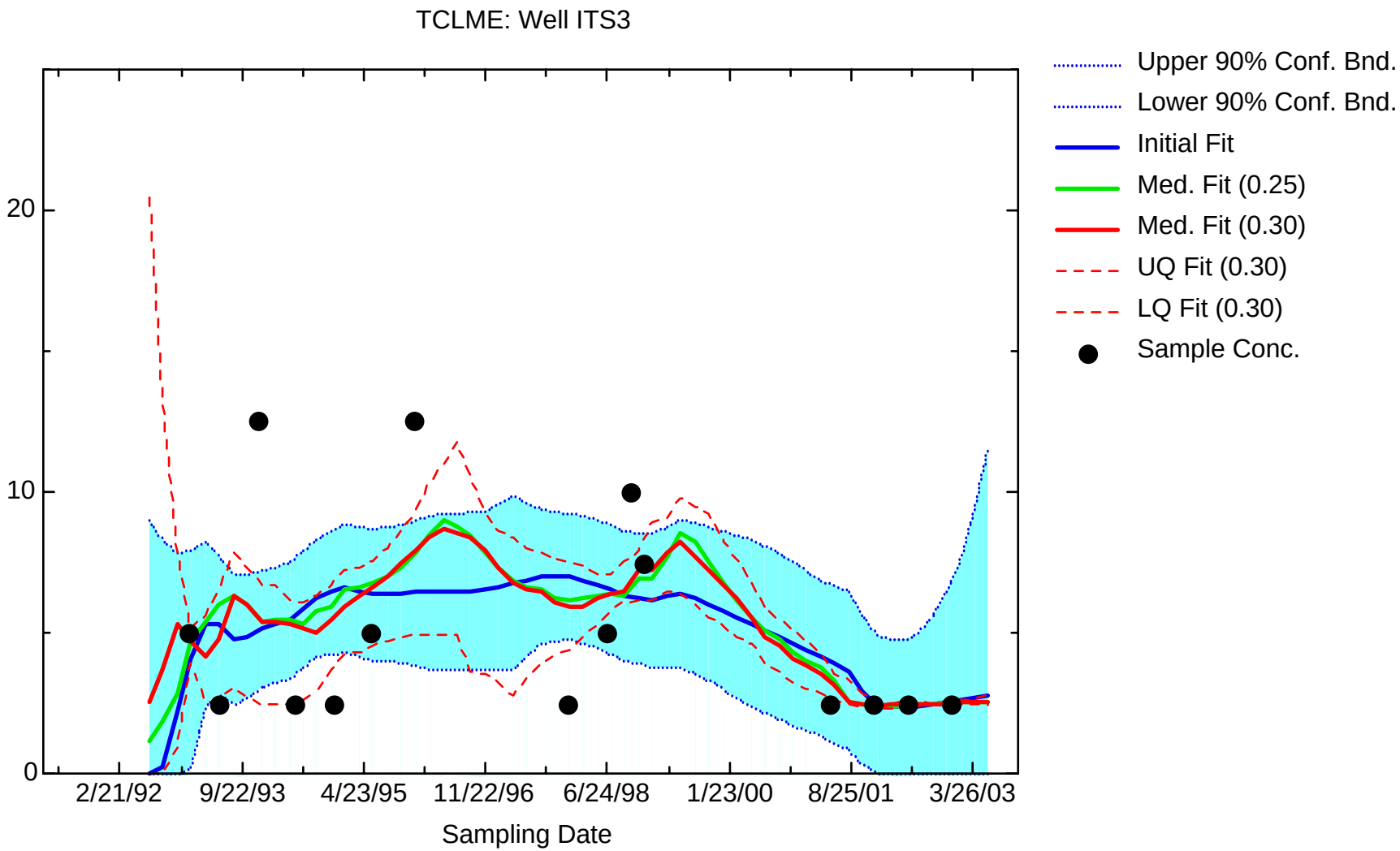

TCLME: Well ICMEFF
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.80)
Med. Fit (0.85)
UQ Fit (0.85)
LQ Fit (0.85)
Sample Conc.
8
4
0
6/6/99
1/5/01
8/6/02
Sampling Date

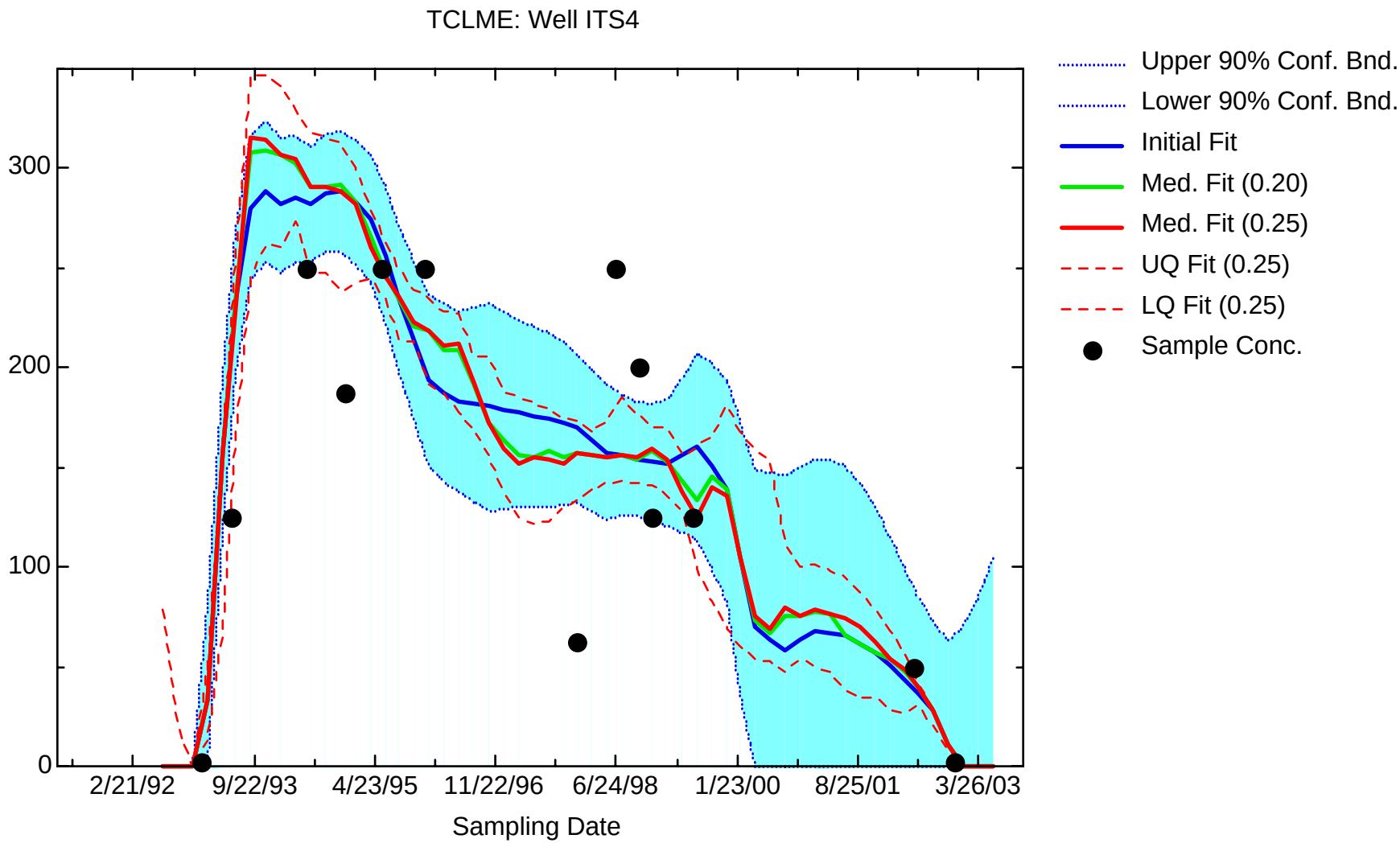

TCLME: Well ITD2
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

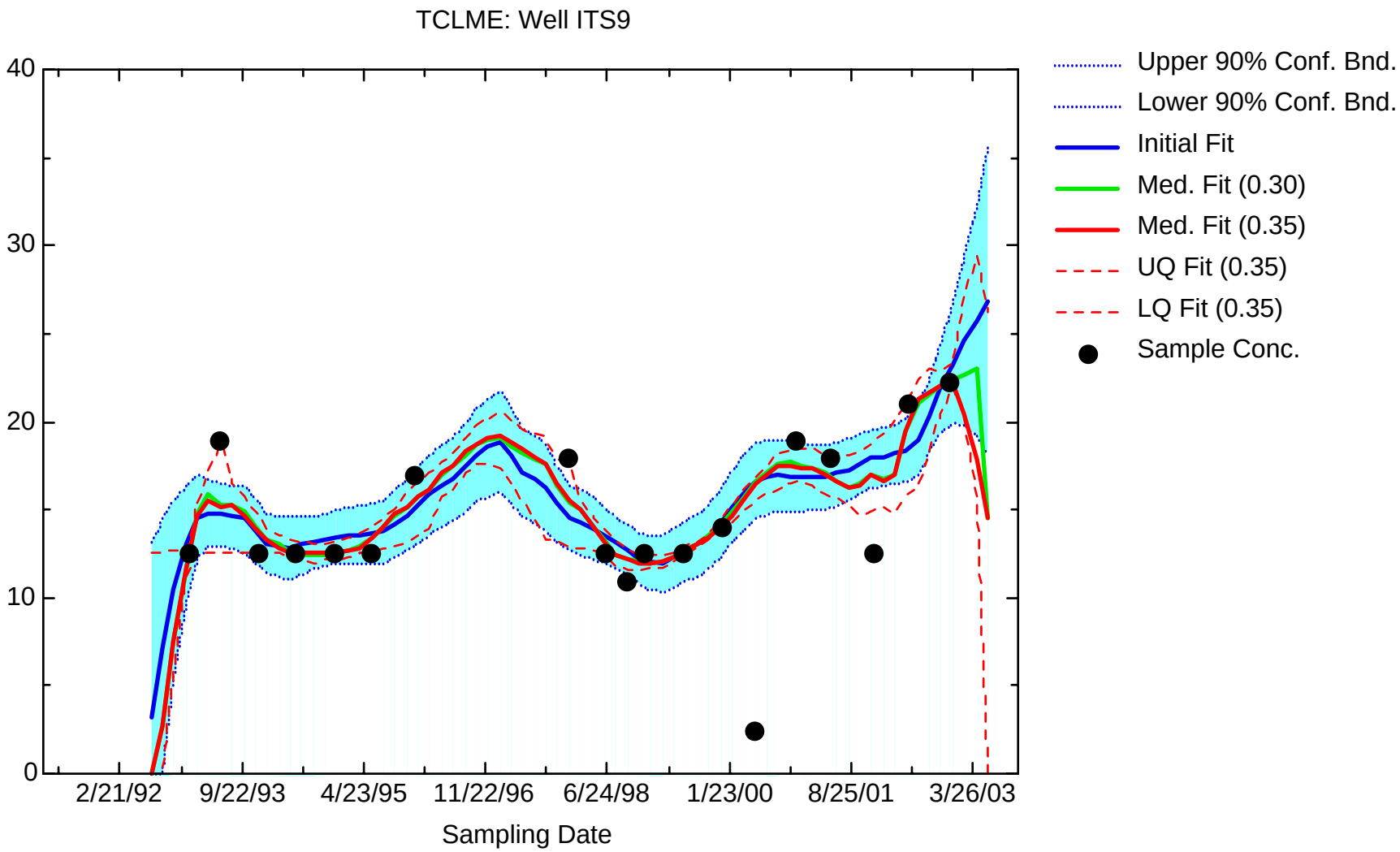

TCLME: Well ITD5
80
60
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

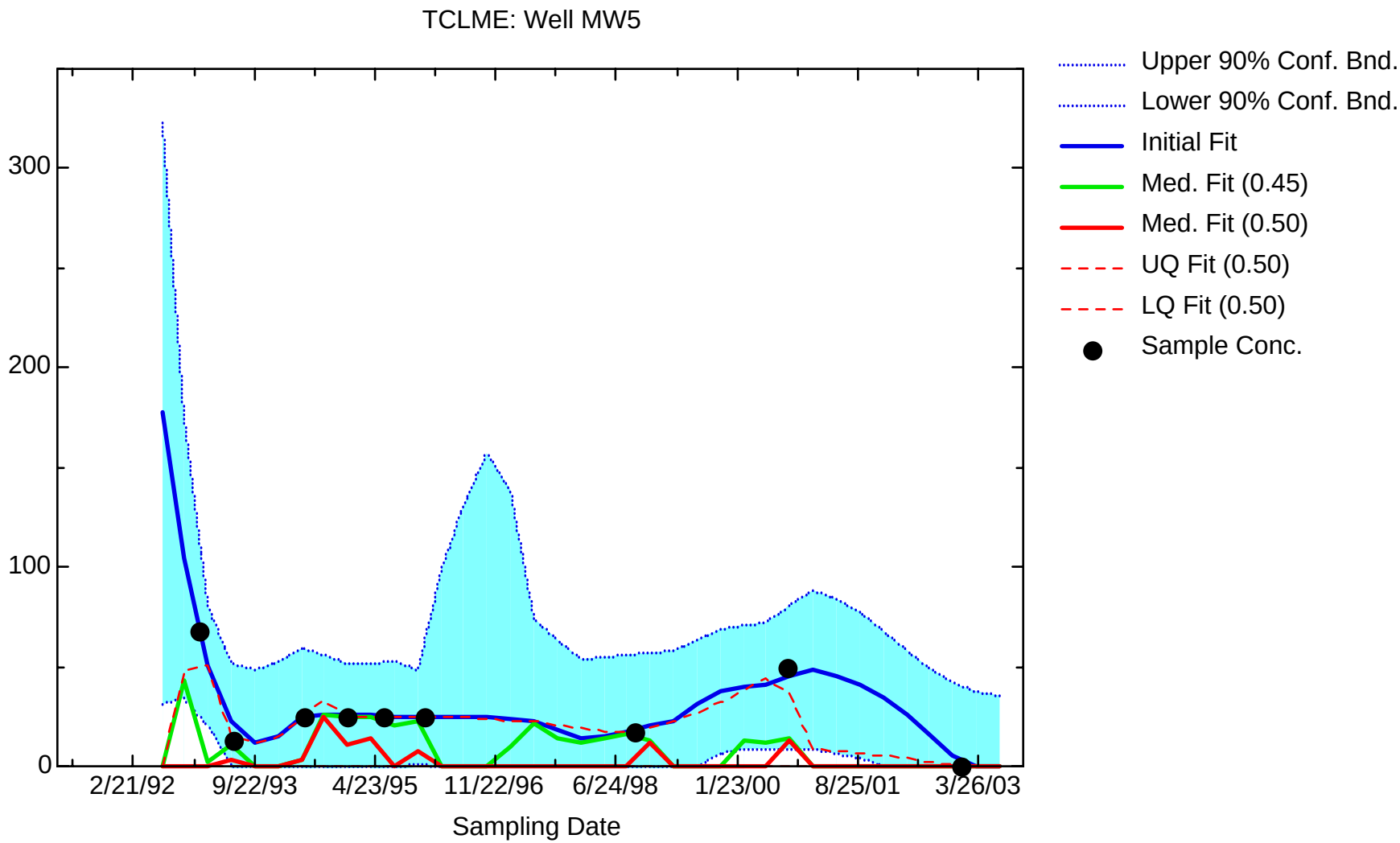

TCLME: Well ITD6
1000
800
600
400
200
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

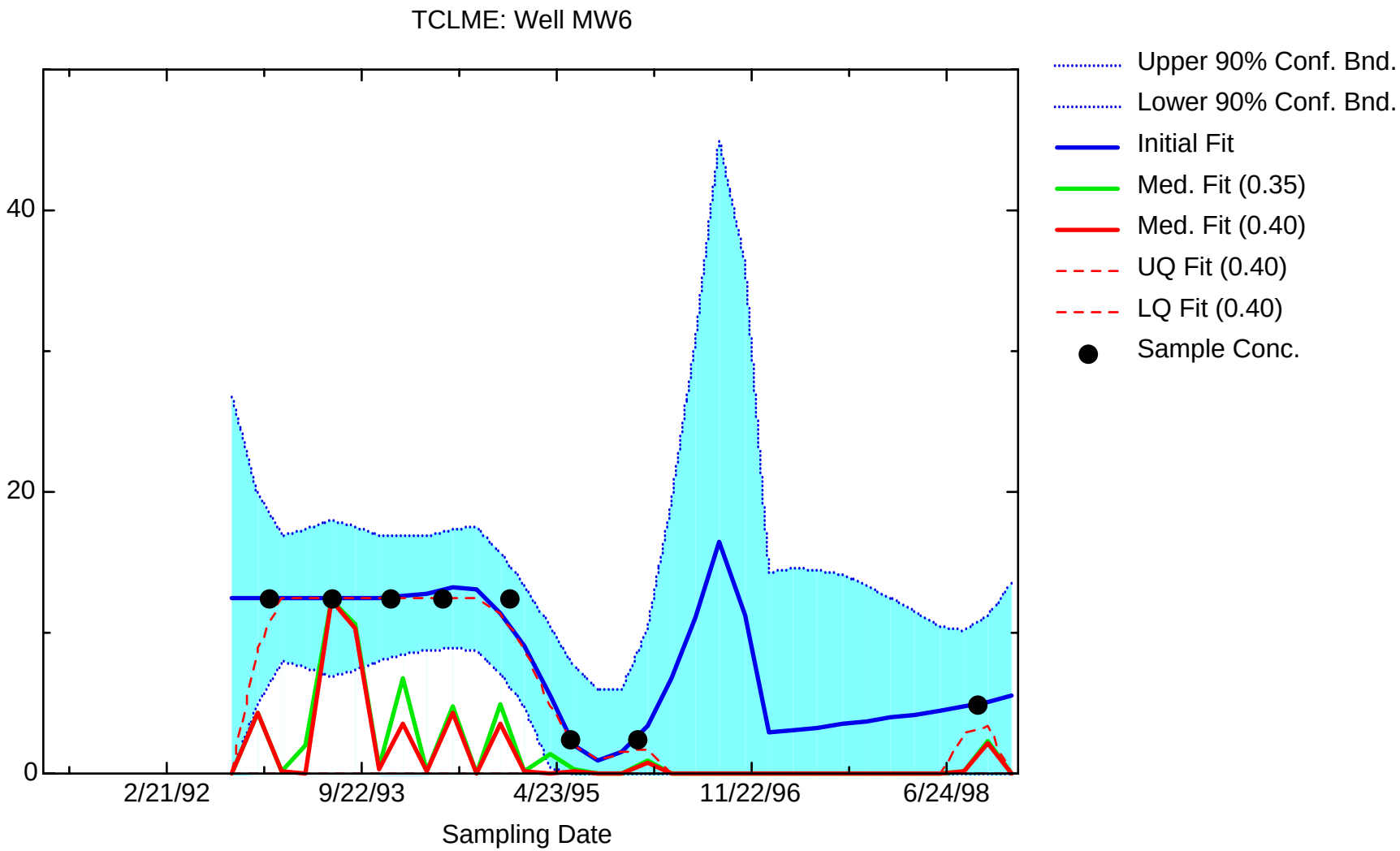

TCLME: Well ITD7
140
120
100
80
60
40
20
0
9/23/93
4/24/95
11/23/96
6/25/98
1/24/00
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

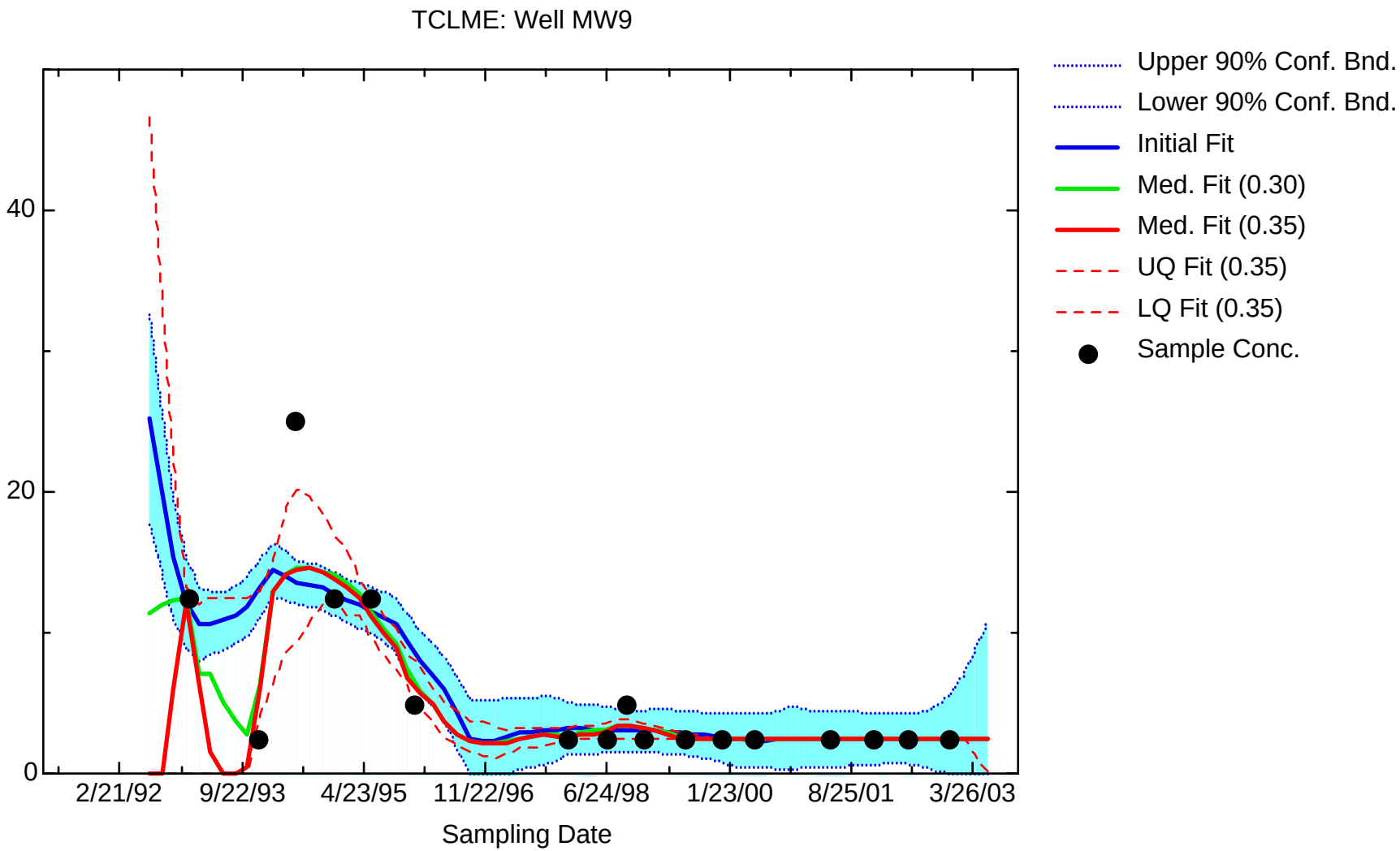

TCLME: Well ITS3
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
20
10
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

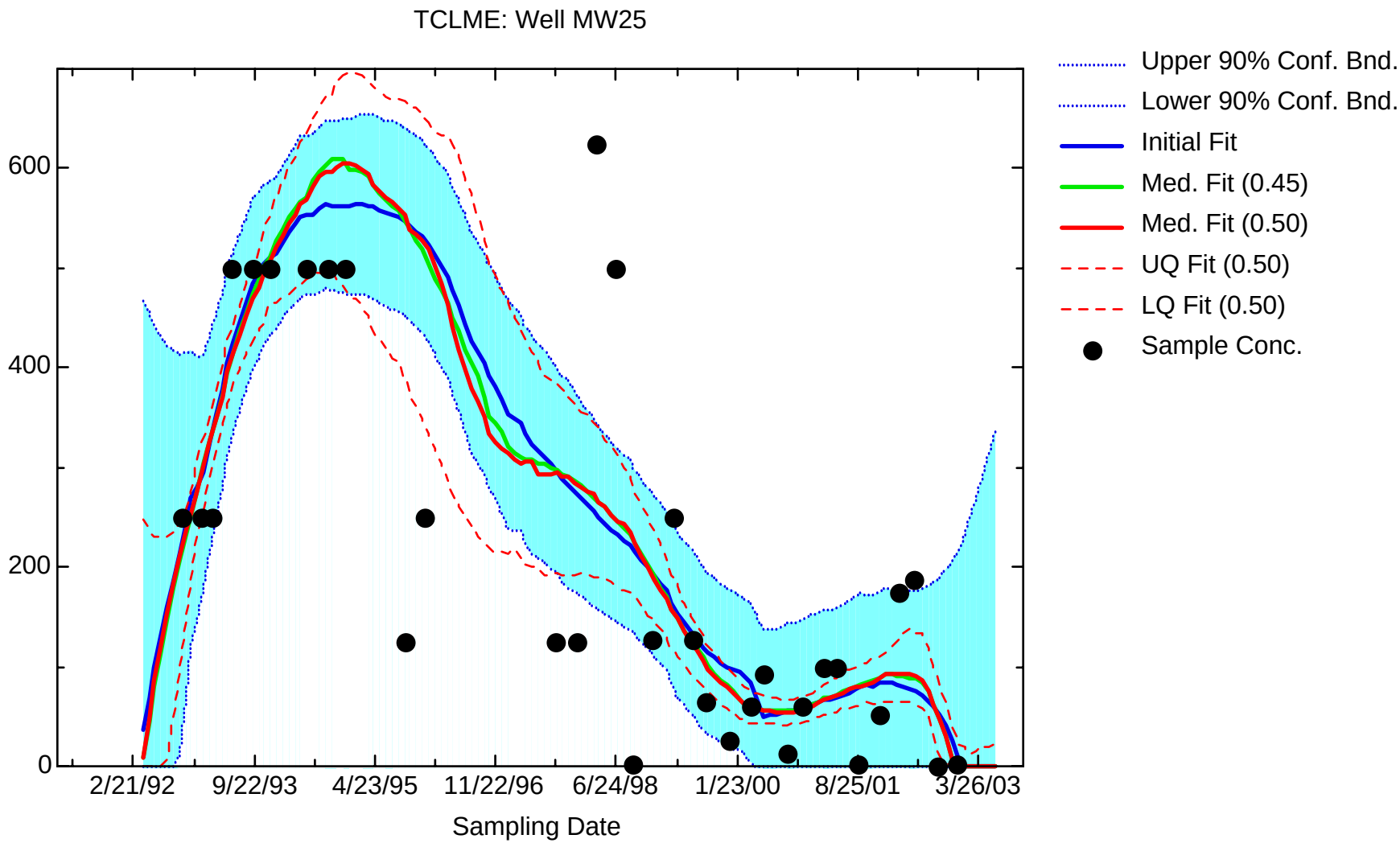

TCLME: Well ITS4
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
300
200
100
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

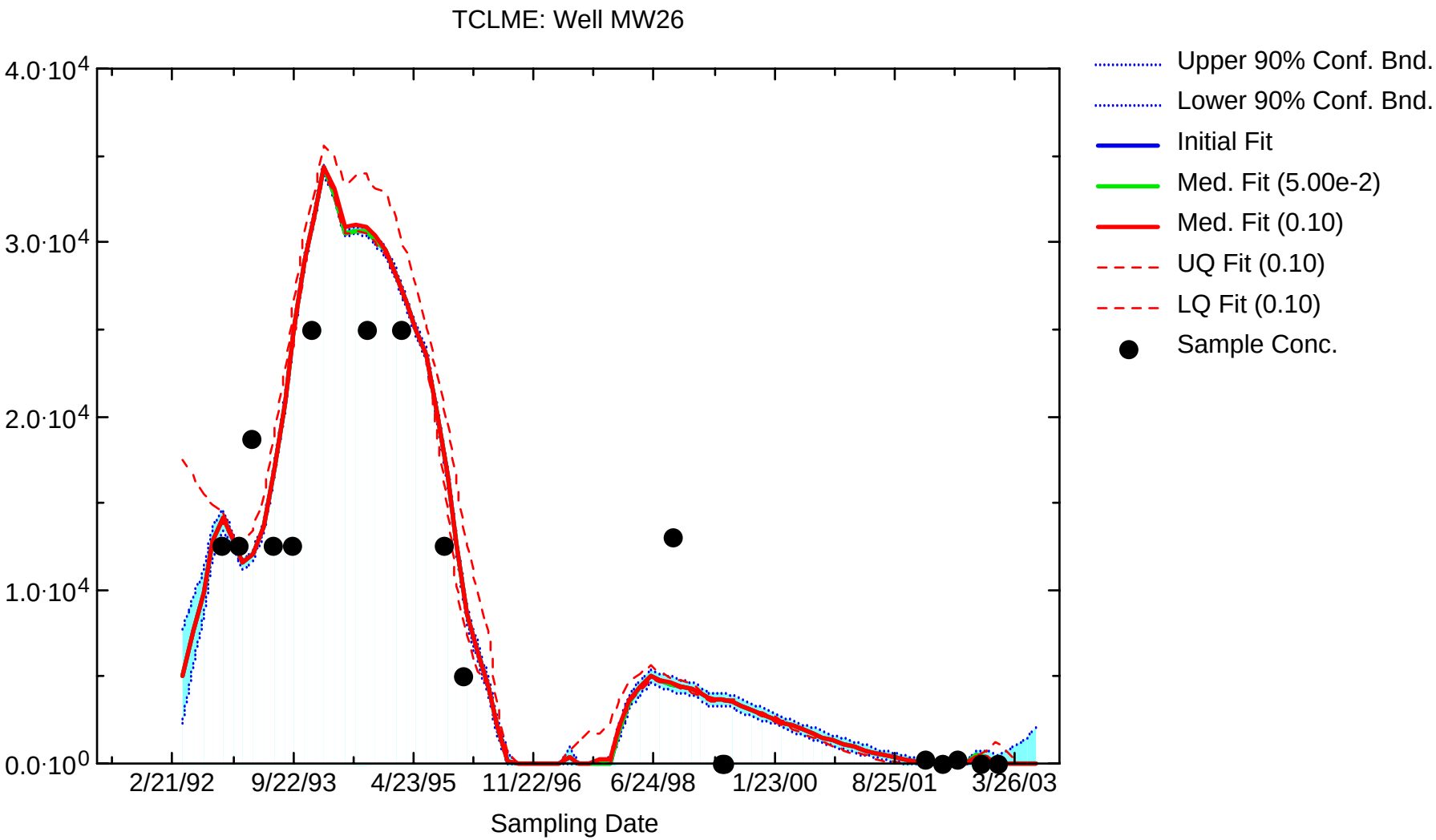

TCLME: Well ITS9
40
30
20
10
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.

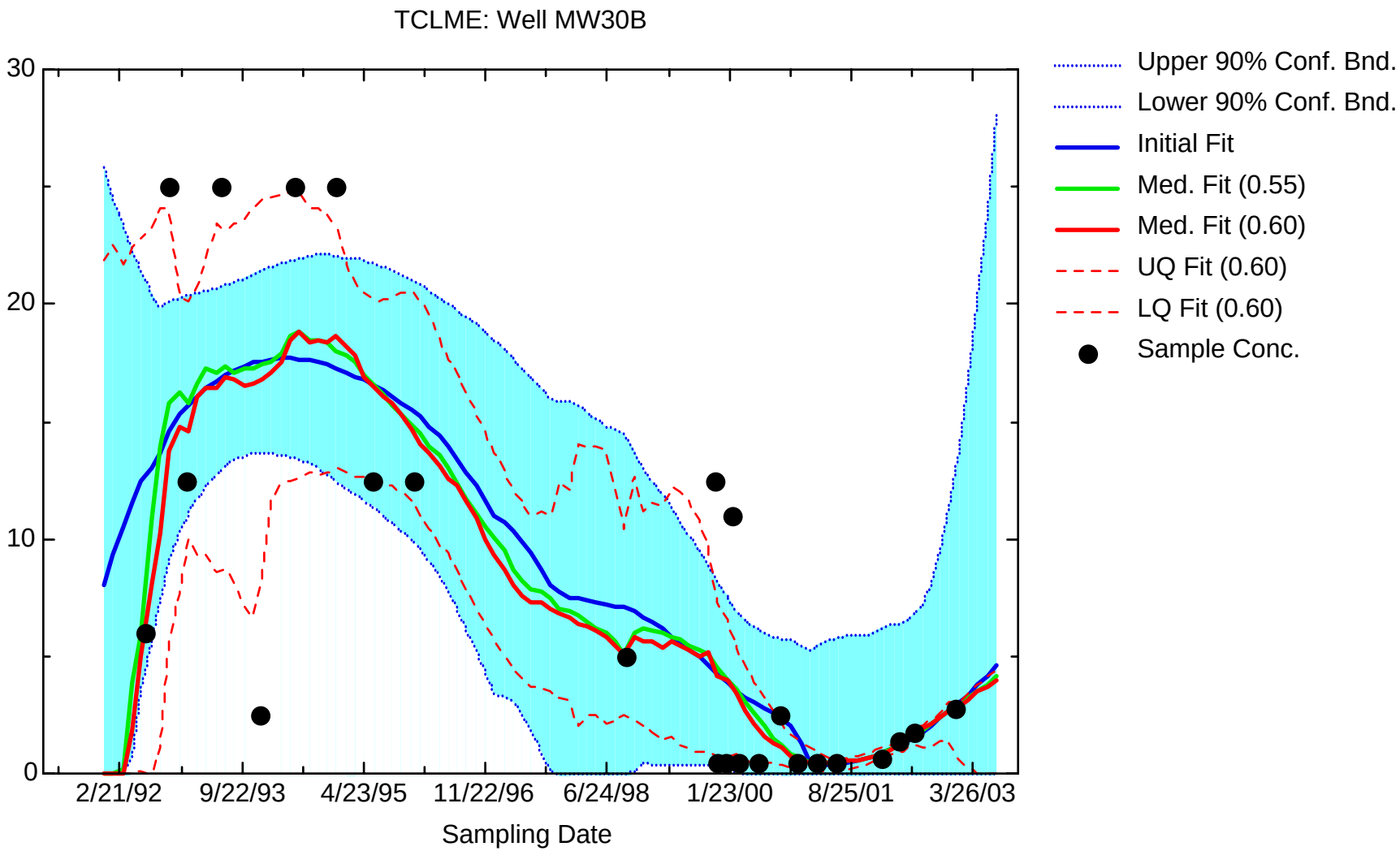

TCLME: Well MW5
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
300
200
100
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

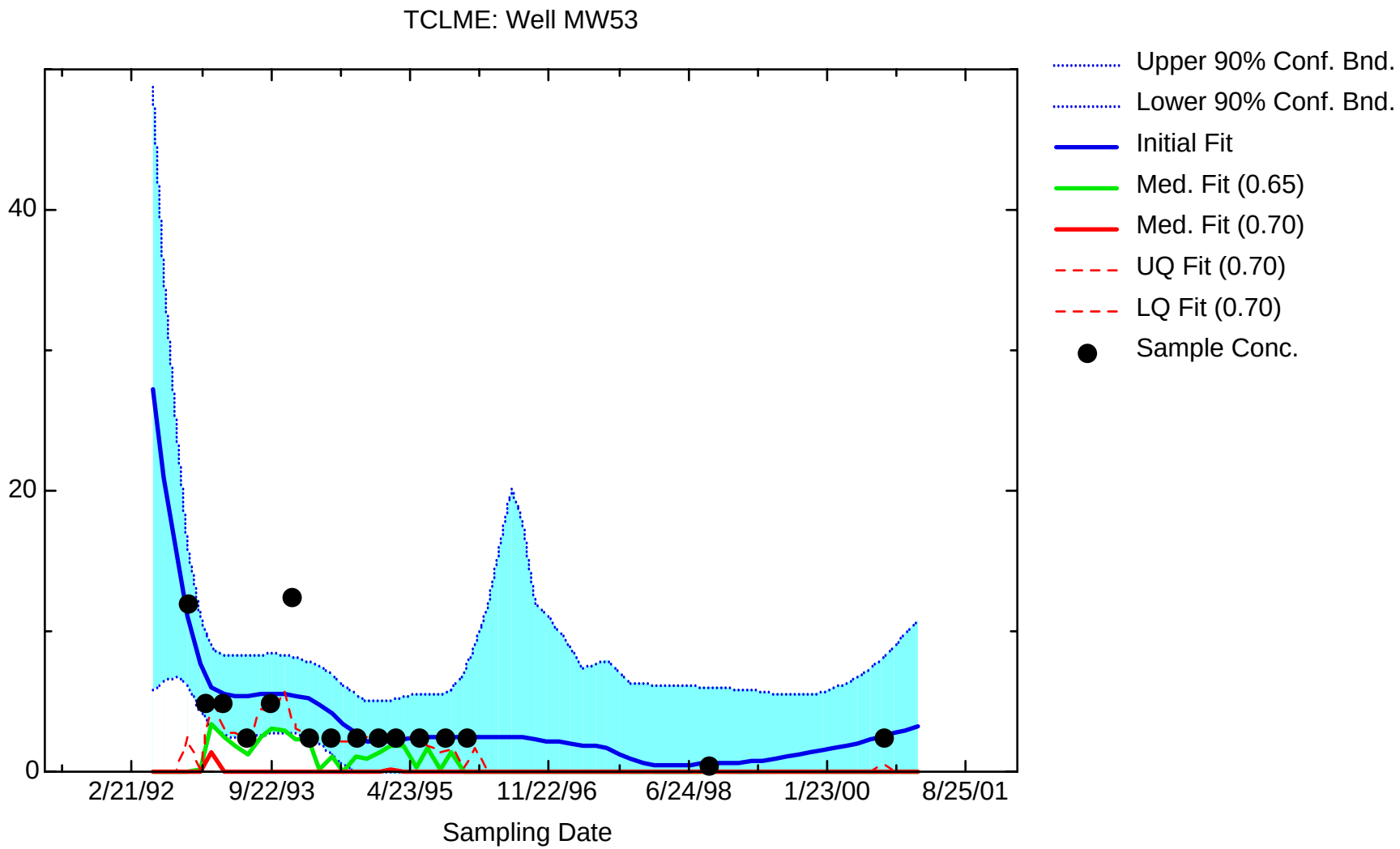

TCLME: Well MW6
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
Sampling Date

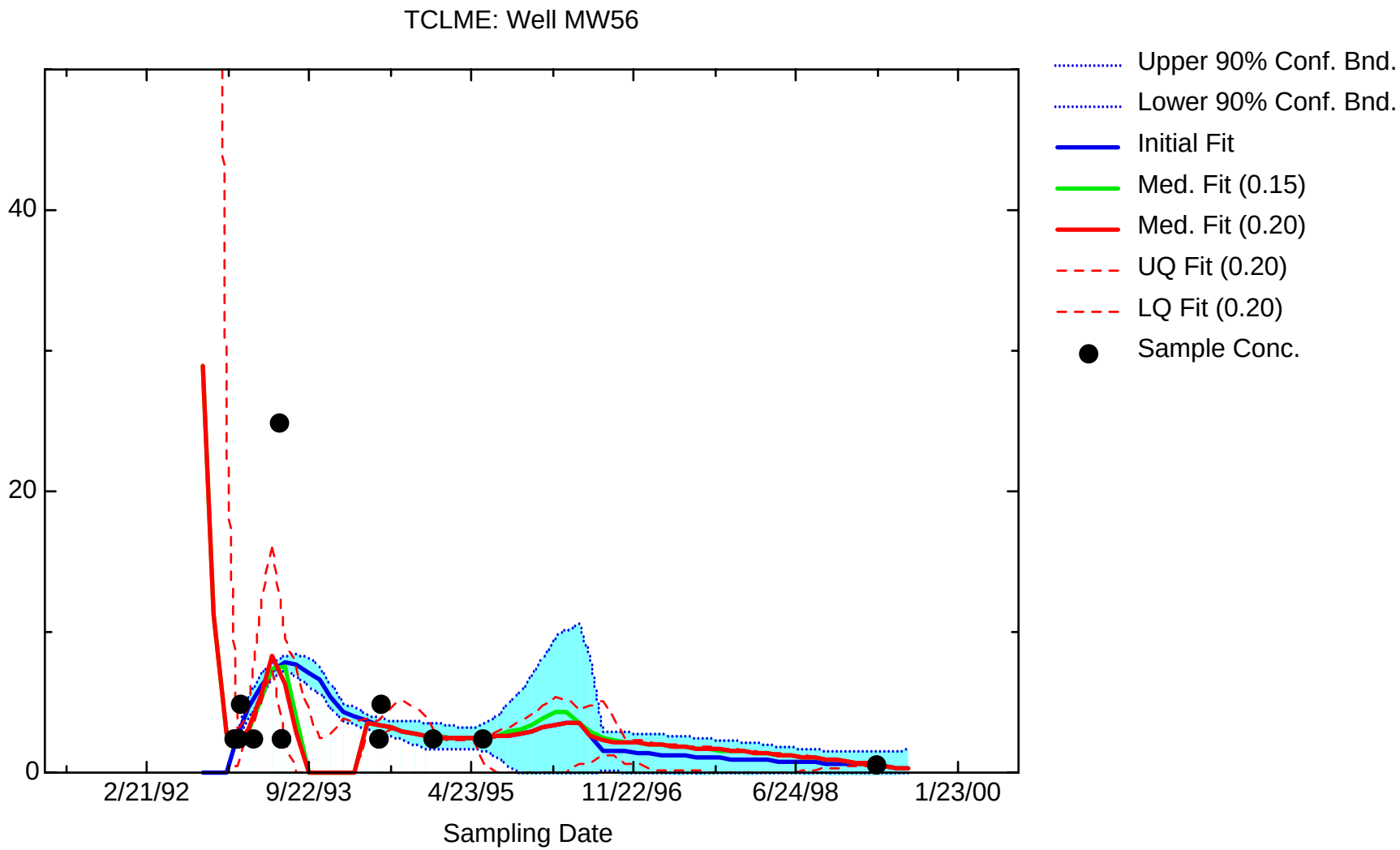

TCLME: Well MW9
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

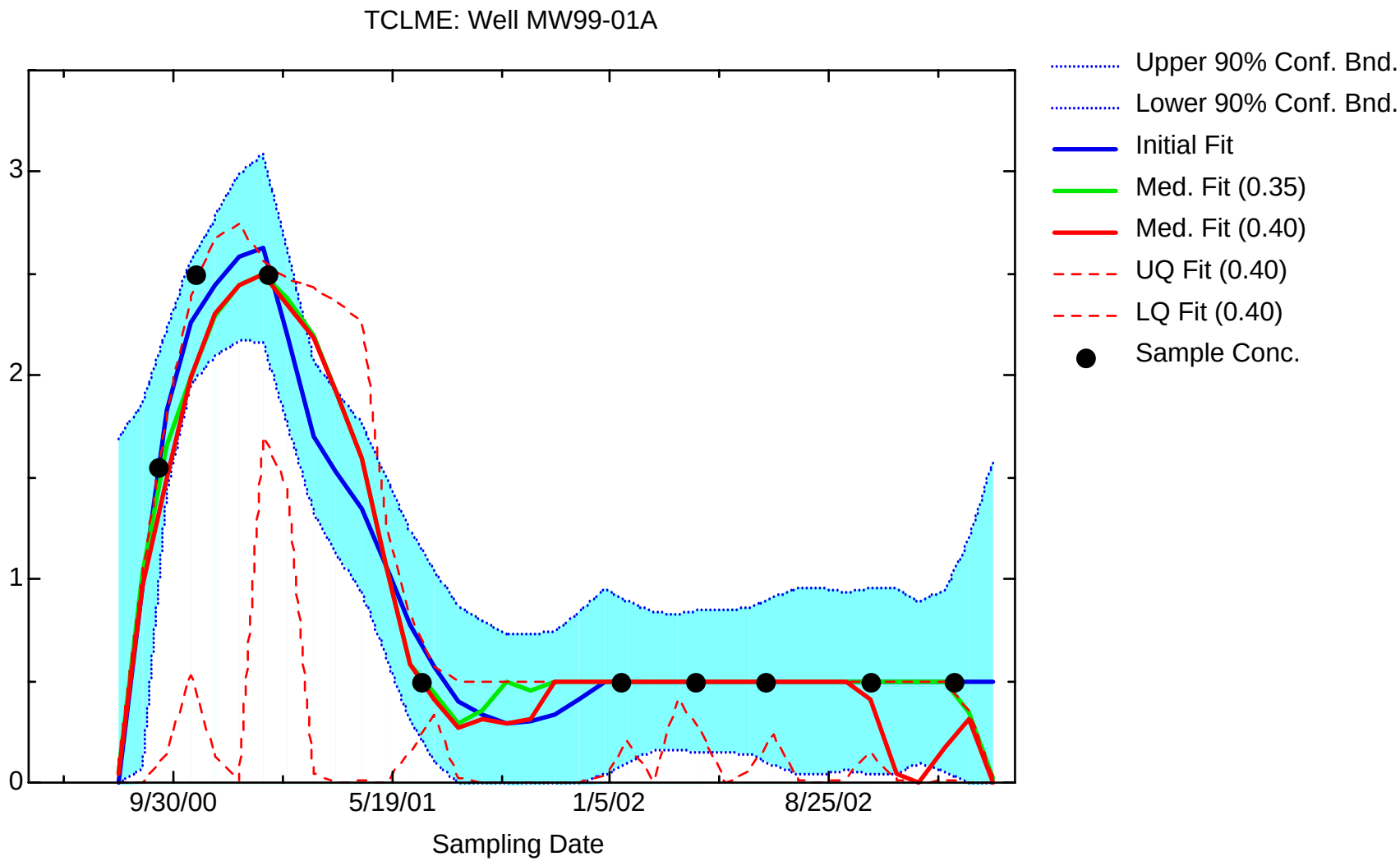

TCLME: Well MW25
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
600
400
200
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date

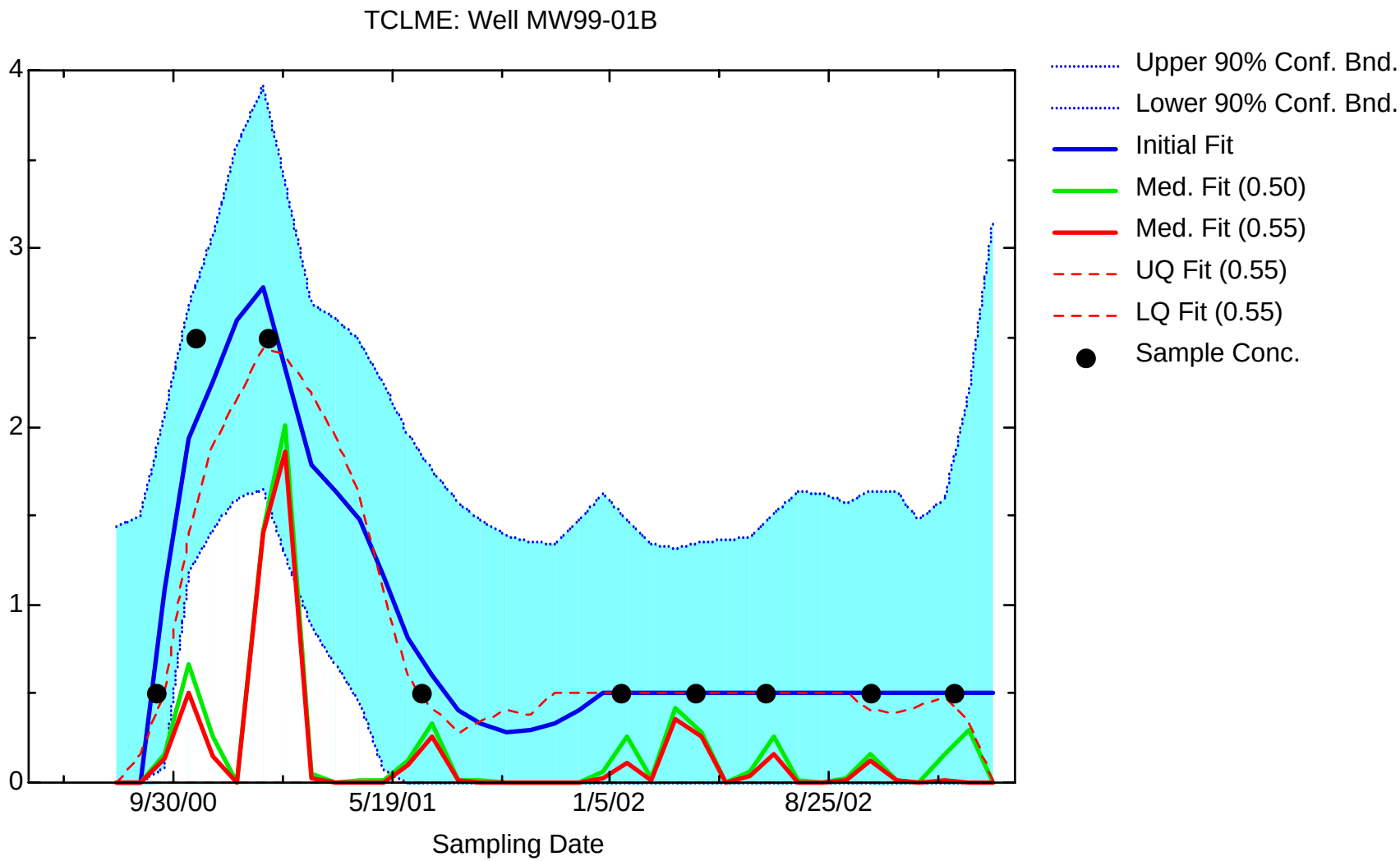

TCLME: Well MW26
4.0·10^4
3.0·10^4
2.0·10^4
1.0·10^4
0.0·10^0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

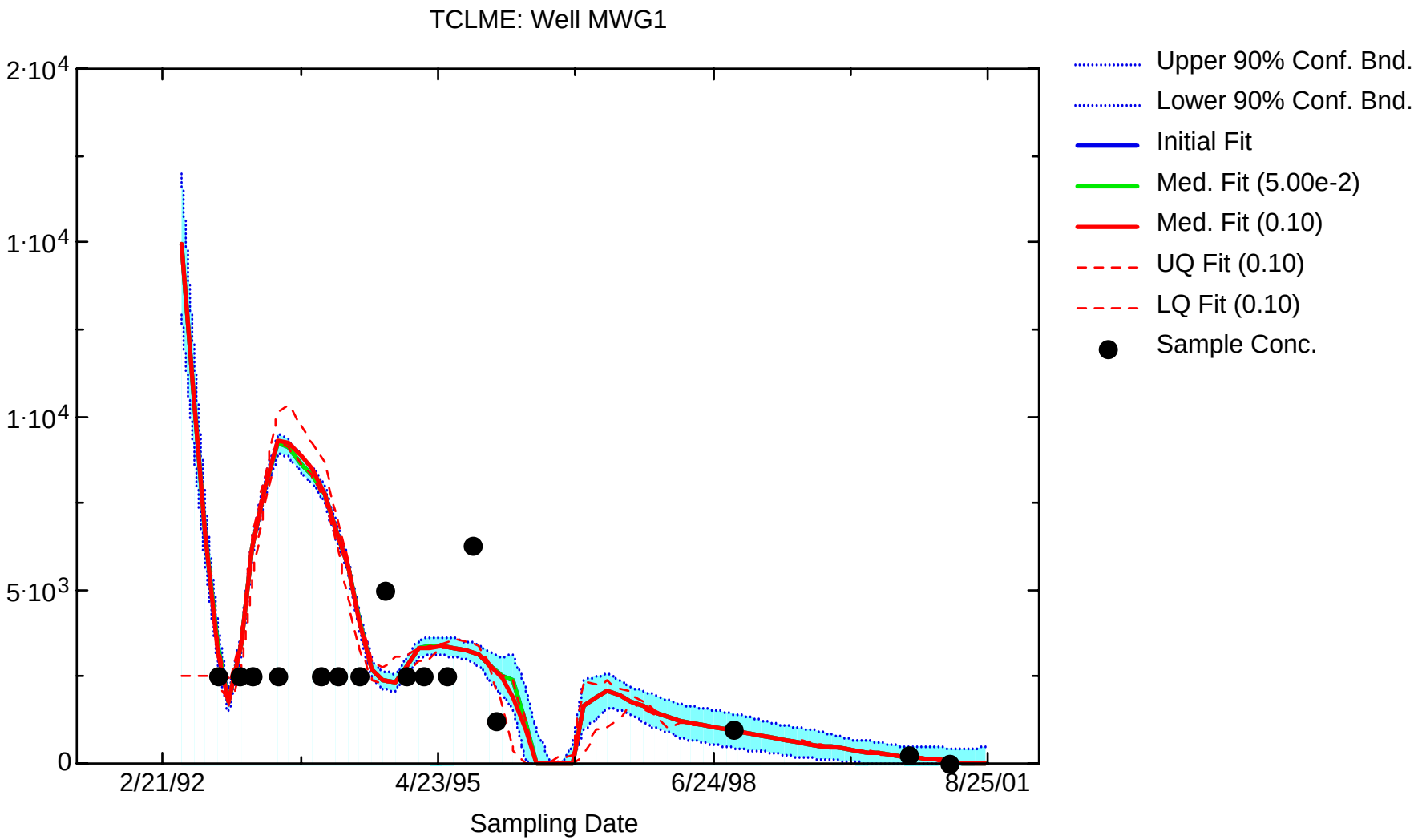

TCLME: Well MW30B
30
20
10
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

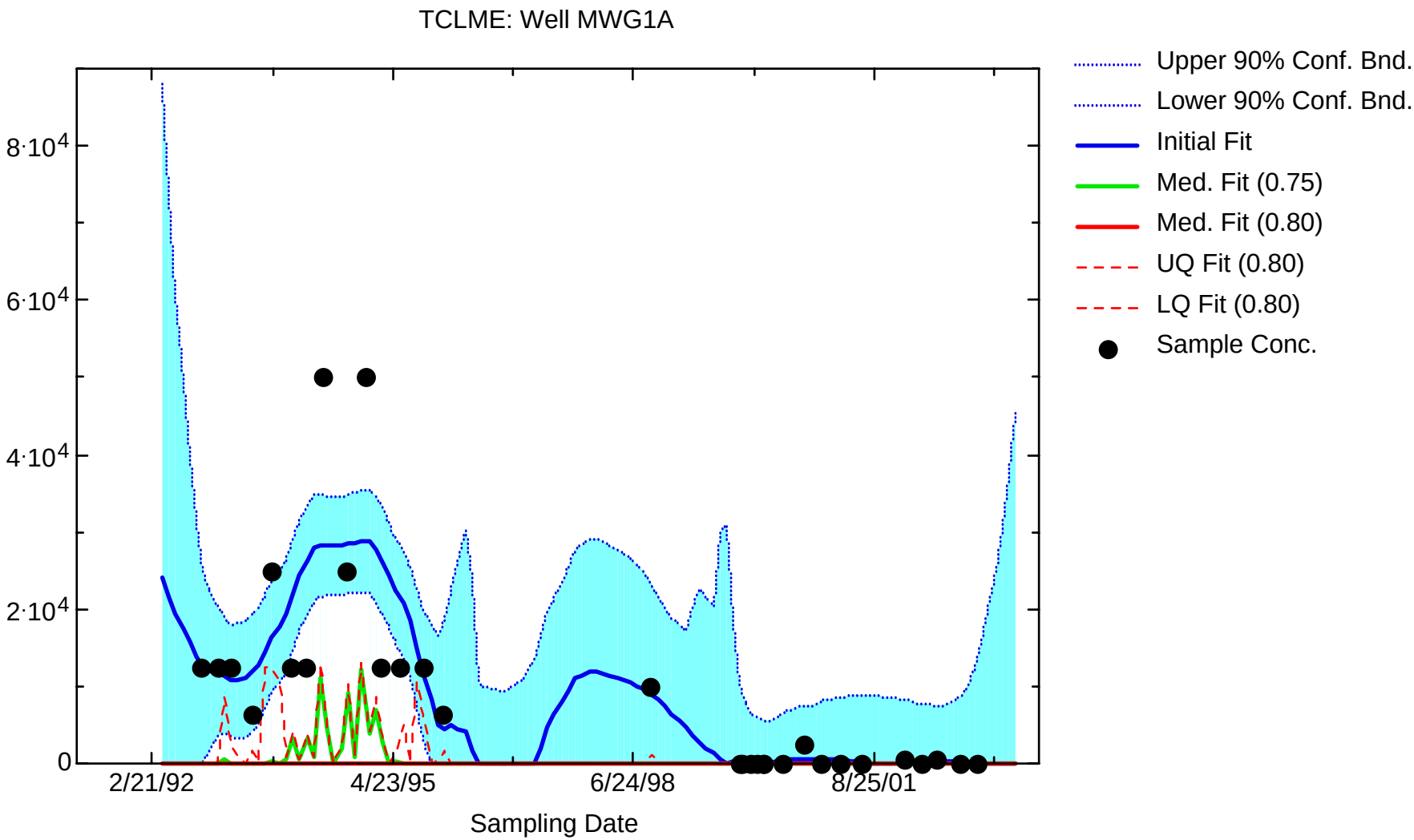

TCLME: Well MW53
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
Sampling Date

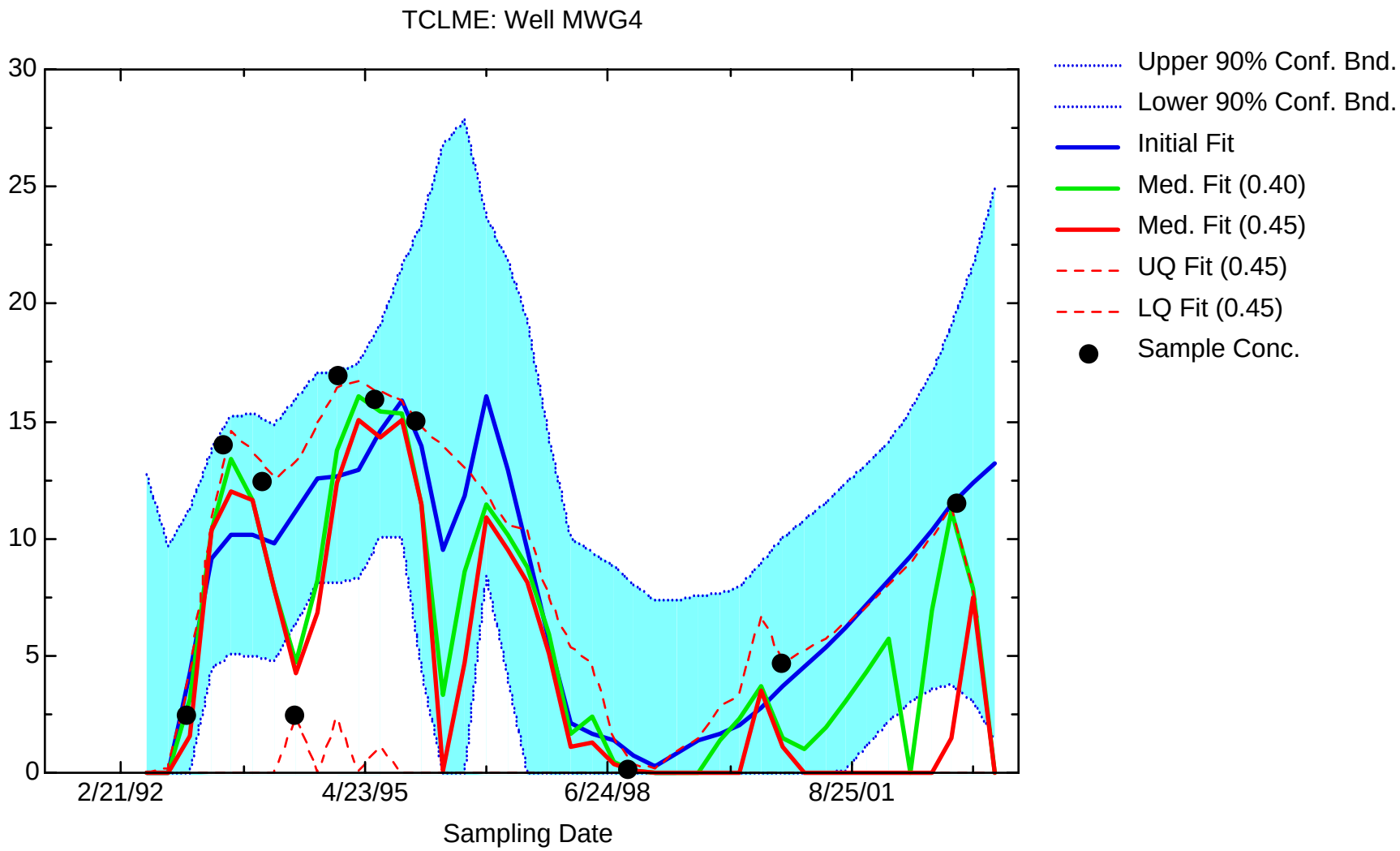

TCLME: Well MW56
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.
40
20
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
Sampling Date

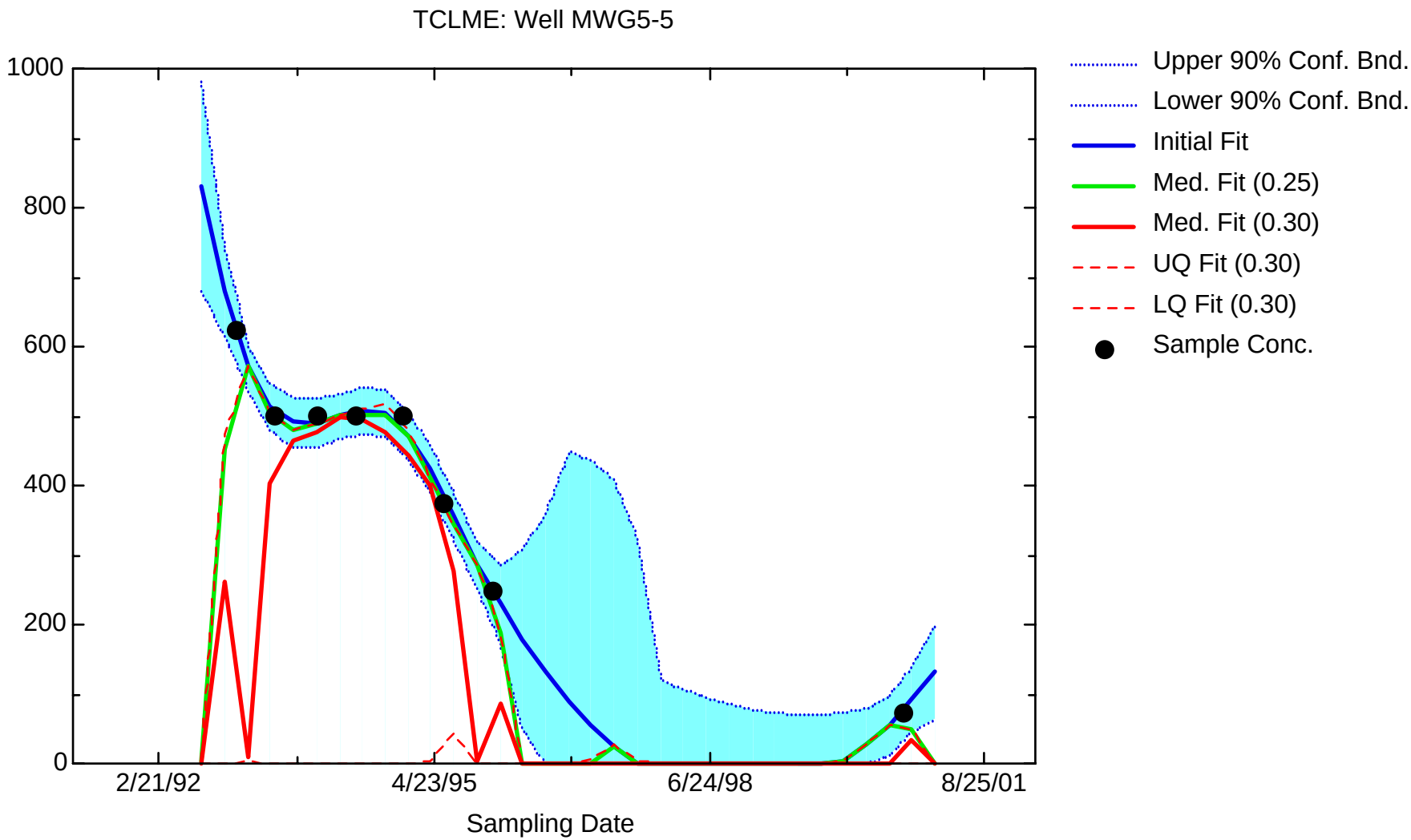

TCLME: Well MW99-01A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.
0
1
2
3
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

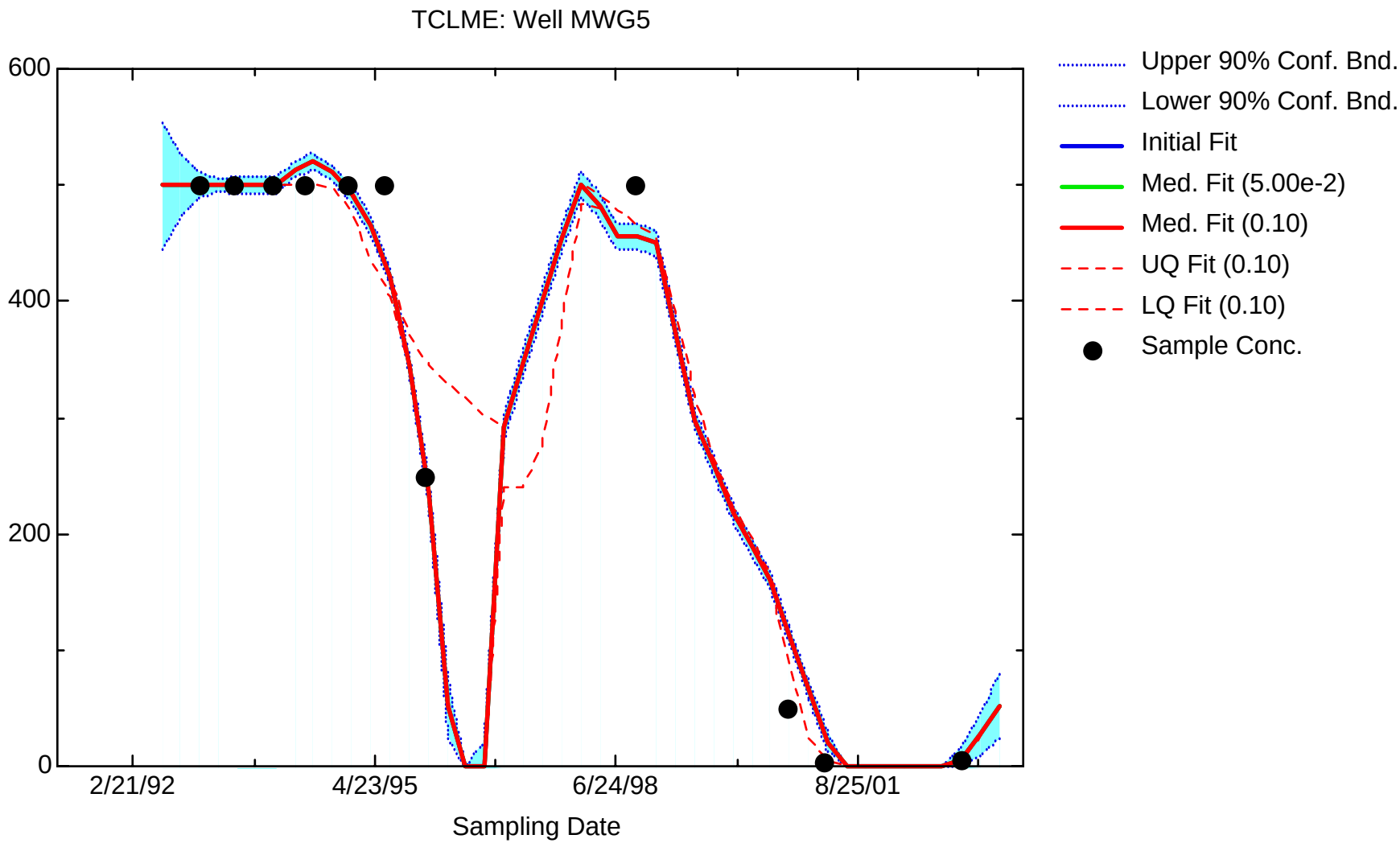

TCLME: Well MW99-01B
4
3
2
1
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

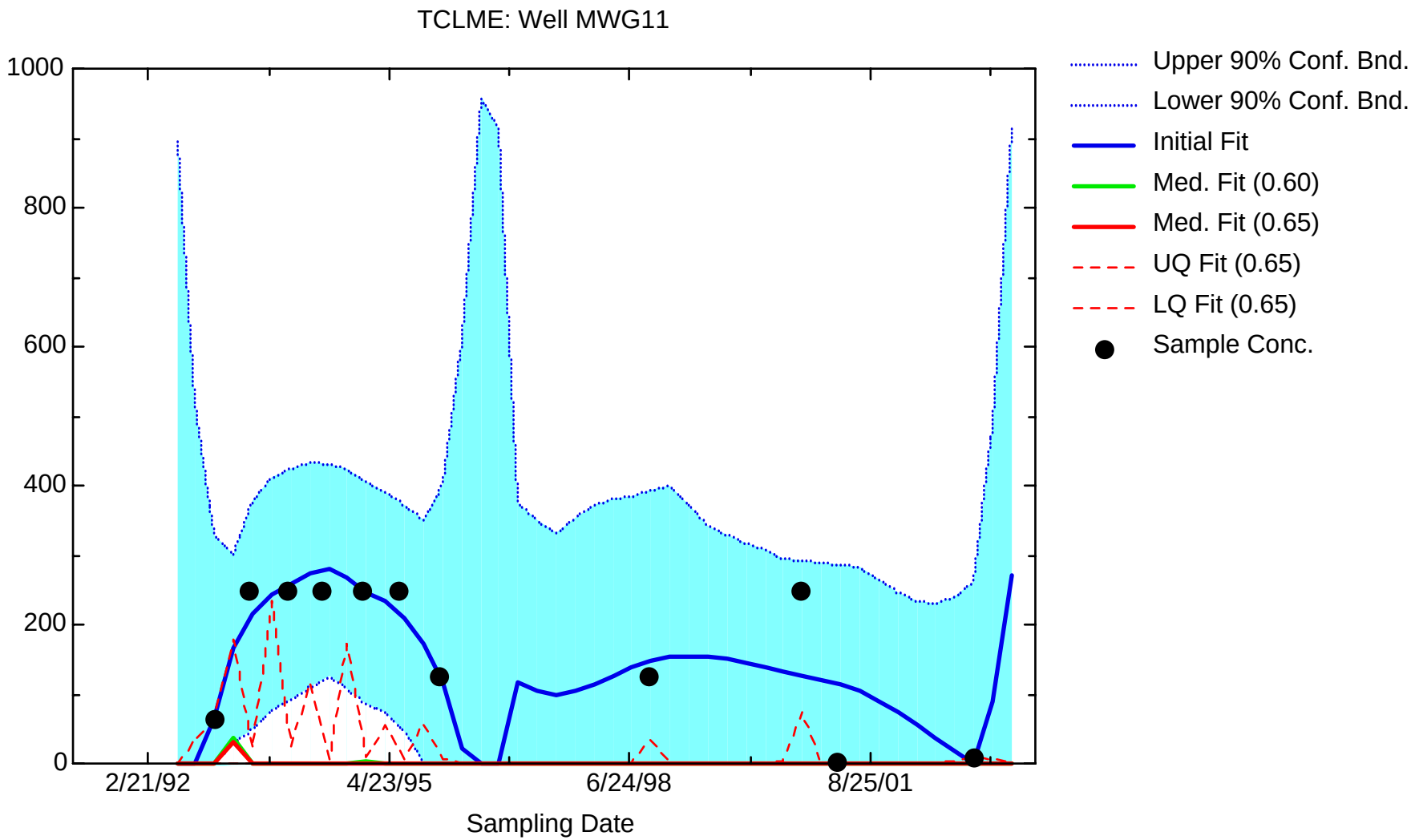

TCLME: Well MWG1
2·10^4
1·10^4
1·10^4
5·10^3
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

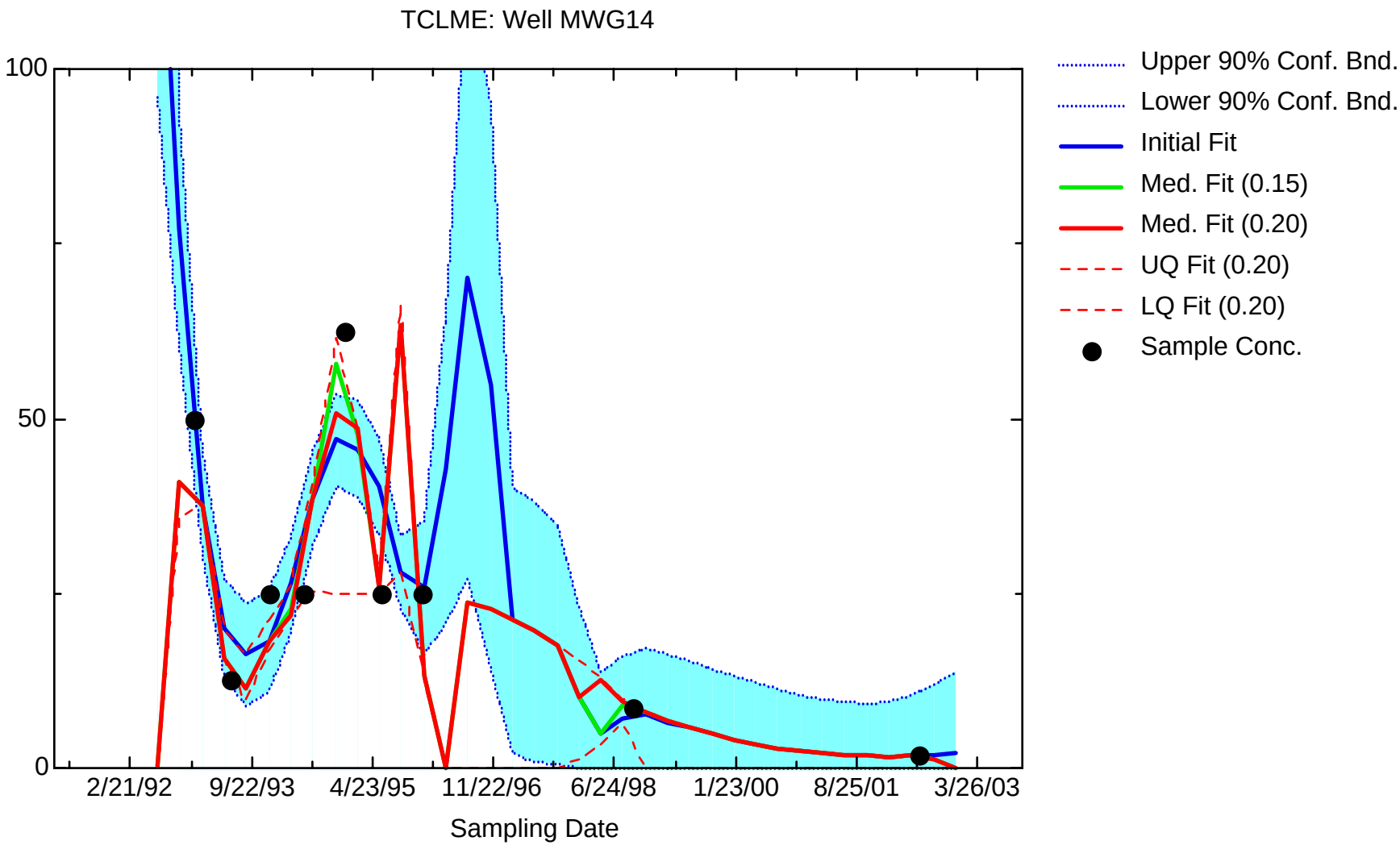

TCLME: Well MWG1A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.75)
Med. Fit (0.80)
UQ Fit (0.80)
LQ Fit (0.80)
Sample Conc.
8·10^4
6·10^4
4·10^4
2·10^4
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date

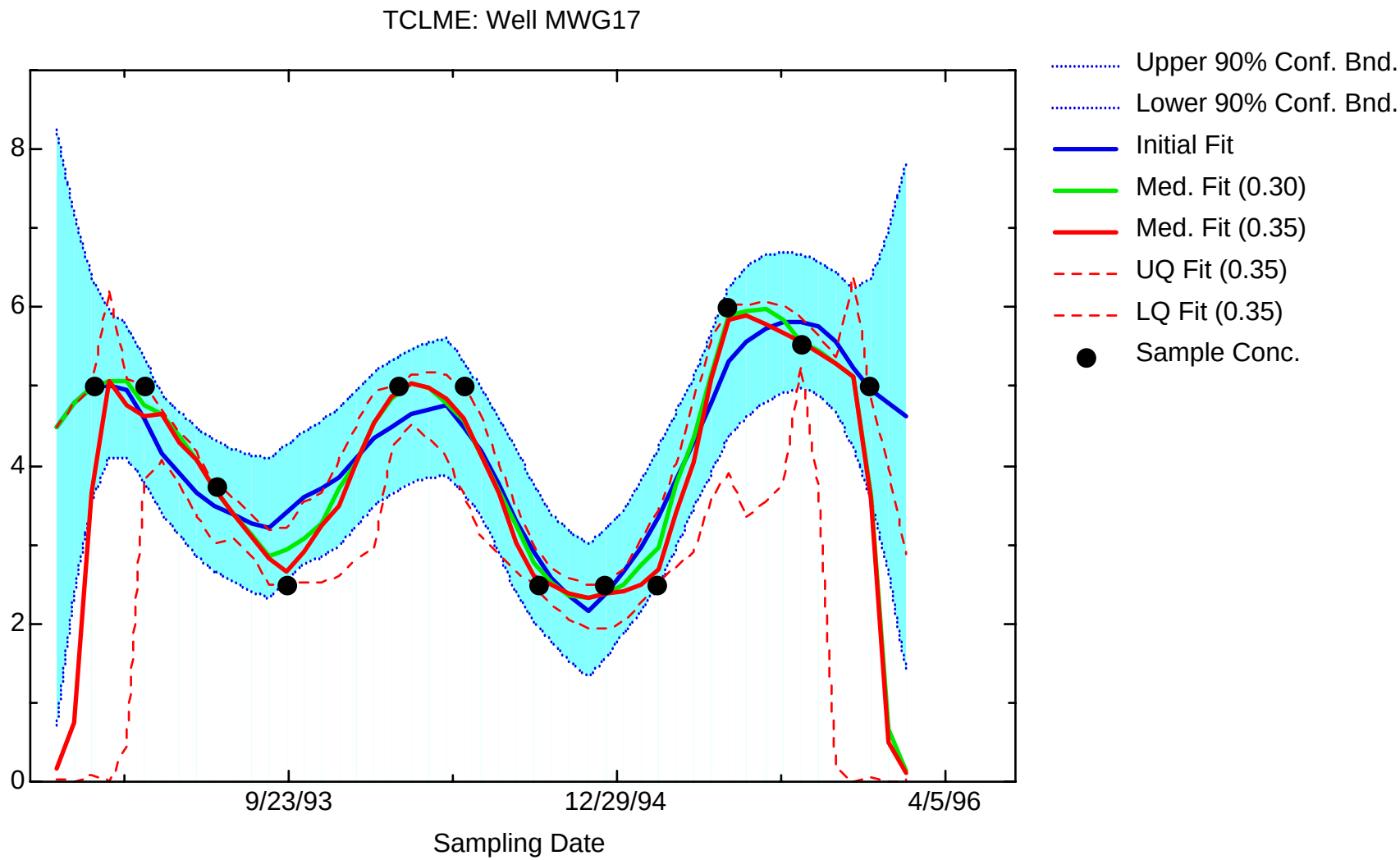

TCLME: Well MWG4
30
25
20
15
10
5
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

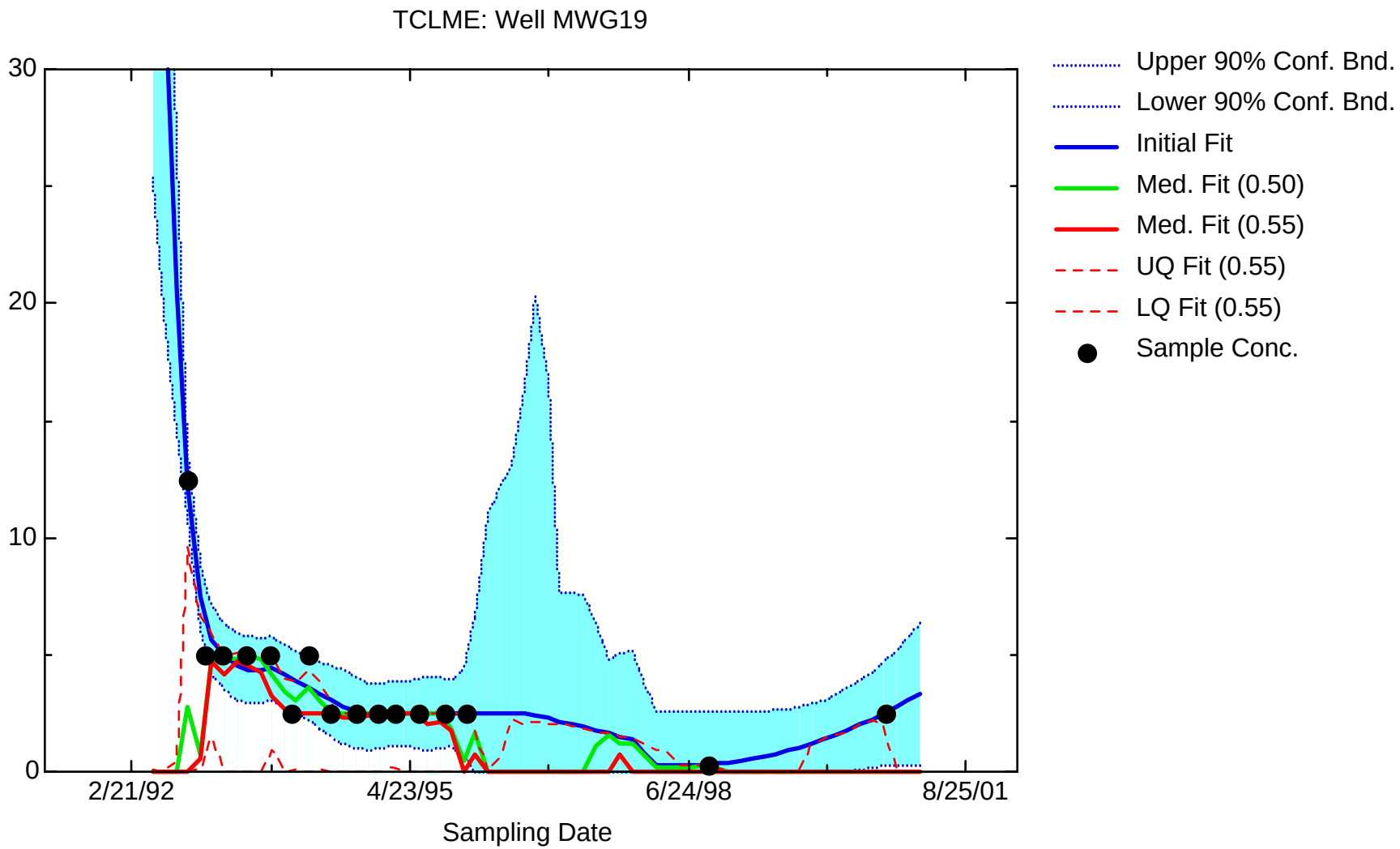

TCLME: Well MWG5-5
1000
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.

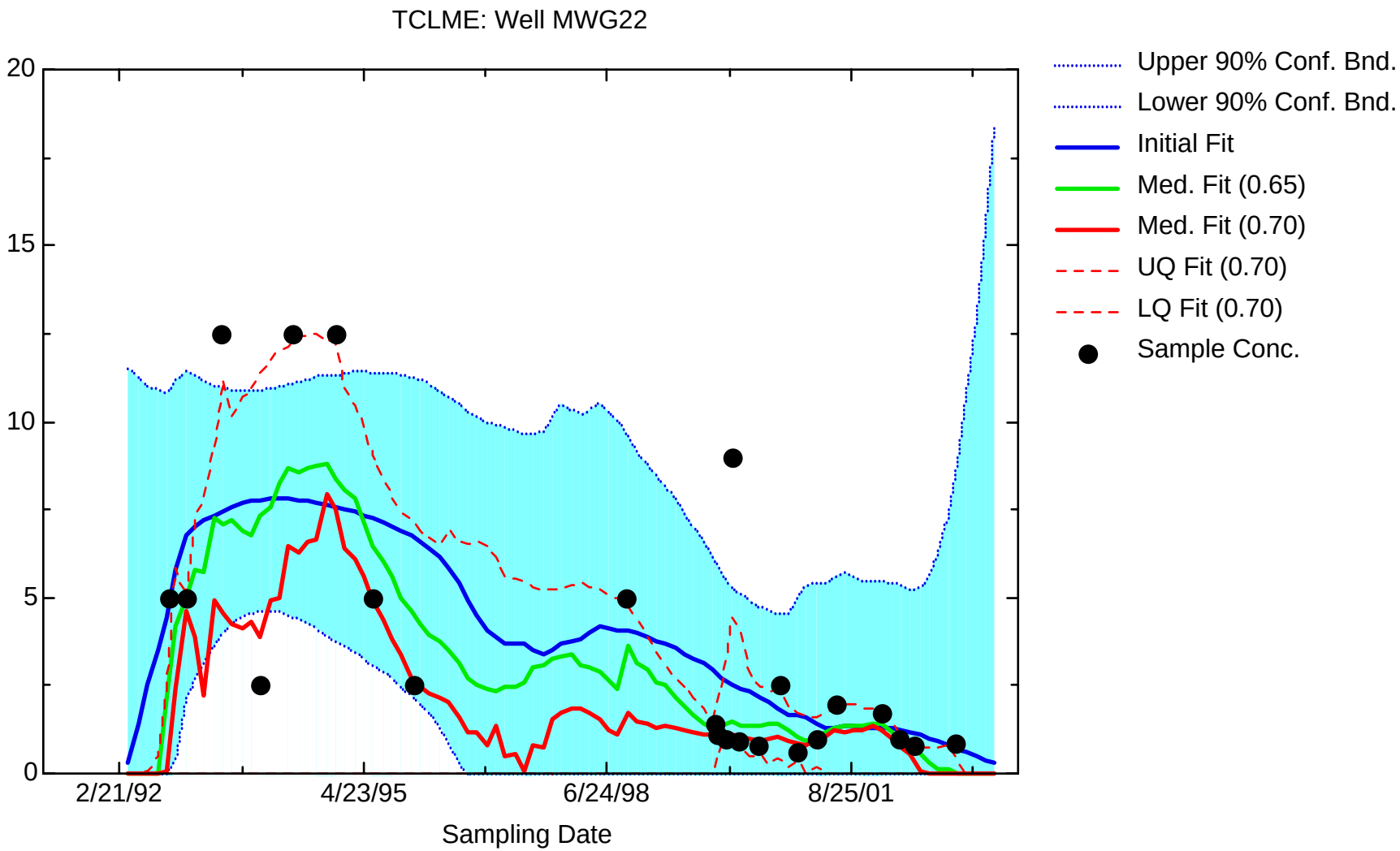

TCLME: Well MWG5
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

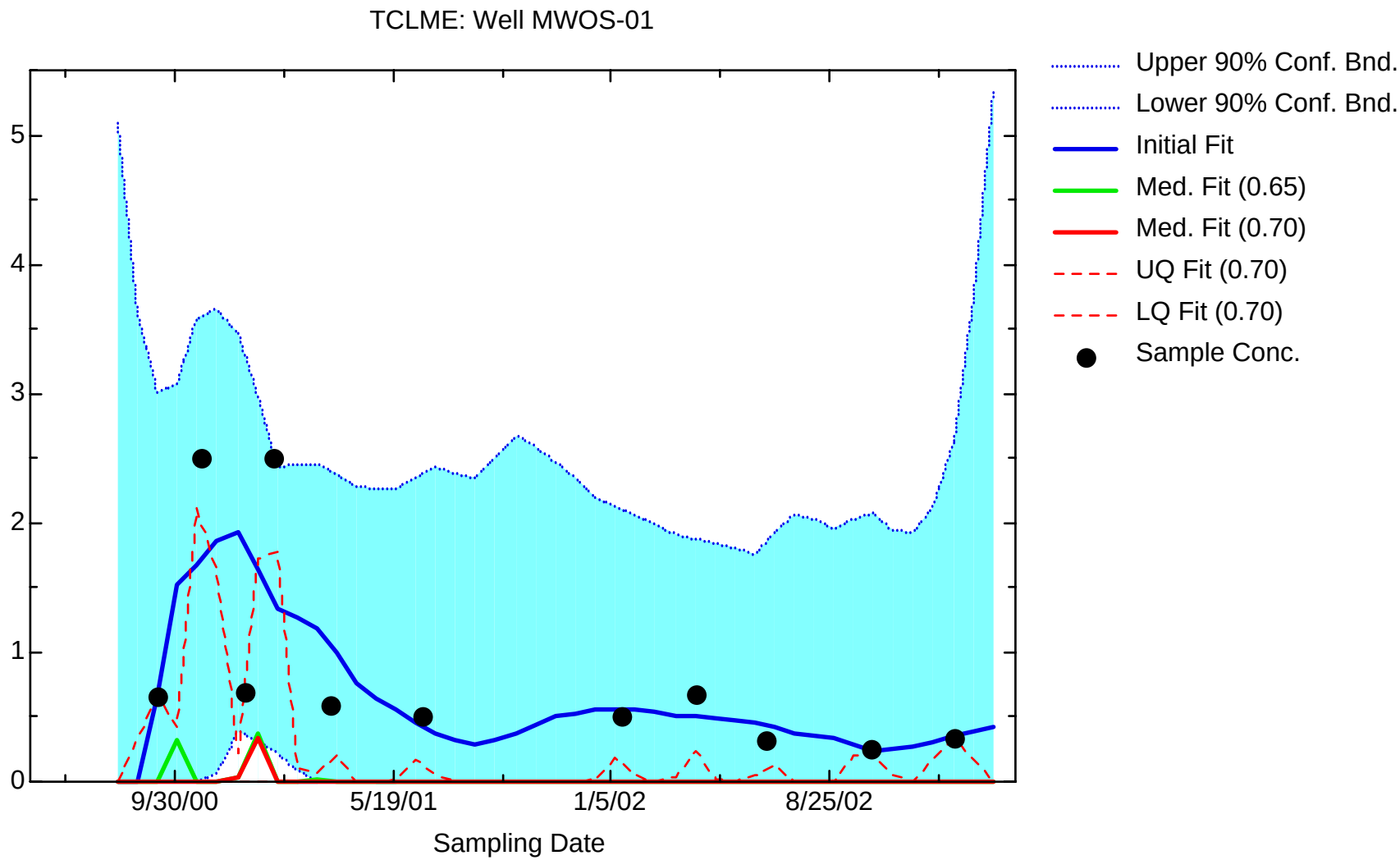

TCLME: Well MWG11
1000
800
600
400
200
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

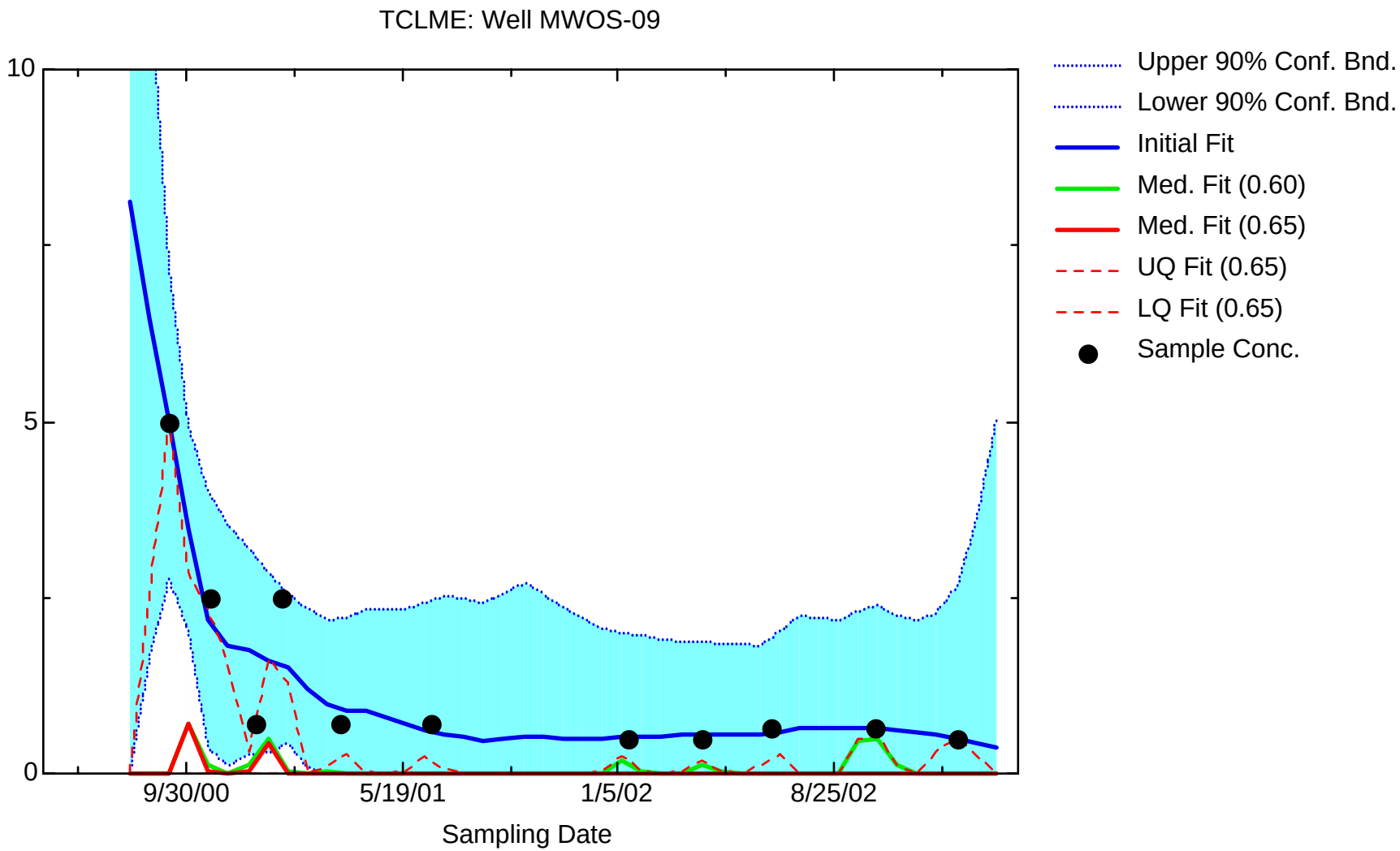

TCLME: Well MWG14
100
50
0
2/21/92
9/22/93
4/23/95
11/22/96
6/24/98
1/23/00
8/25/01
3/26/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.15)
Med. Fit (0.20)
UQ Fit (0.20)
LQ Fit (0.20)
Sample Conc.

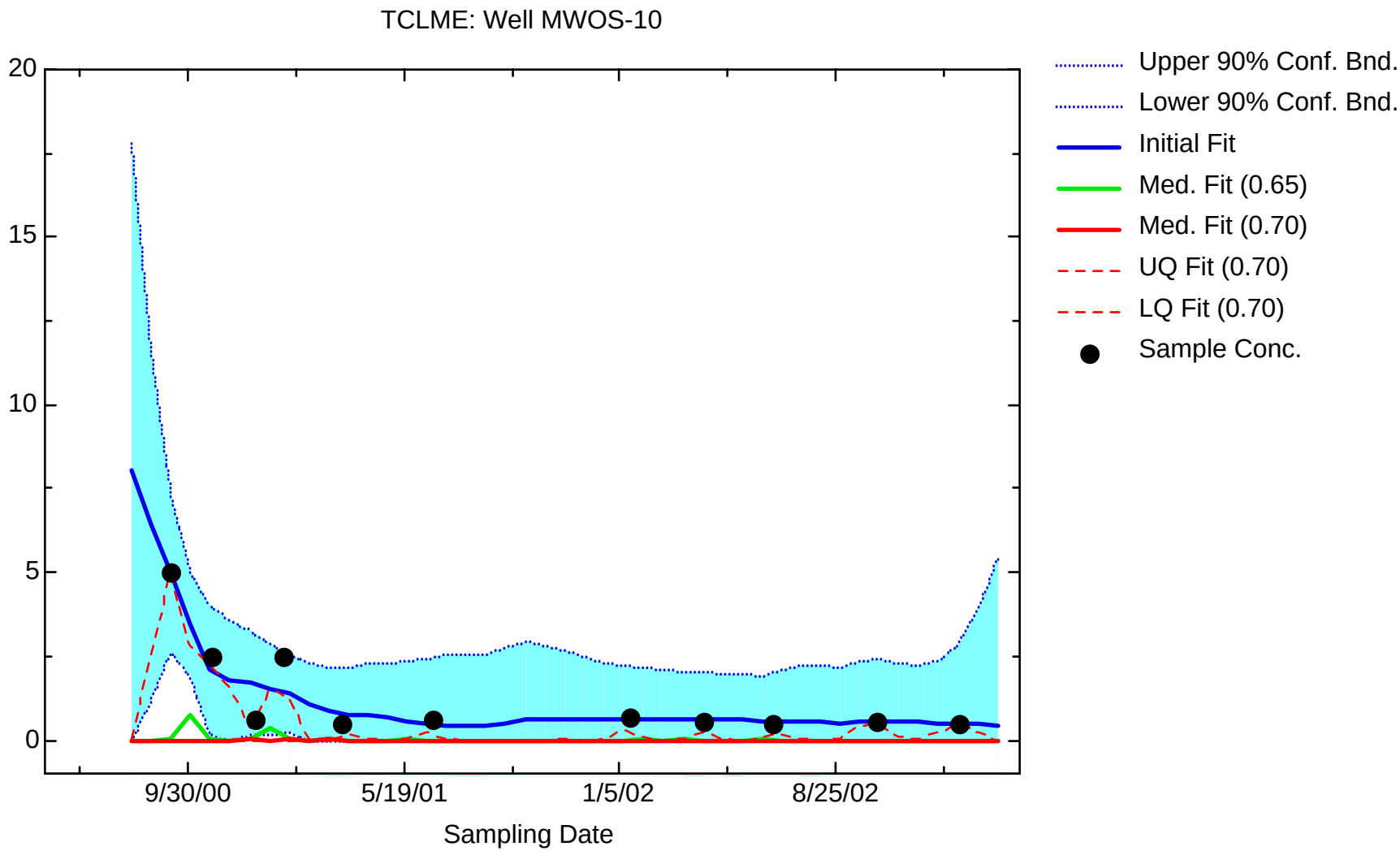

TCLME: Well MWG17
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.30)
Med. Fit (0.35)
UQ Fit (0.35)
LQ Fit (0.35)
Sample Conc.
0
2
4
6
8
9/23/93
12/29/94
4/5/96
Sampling Date

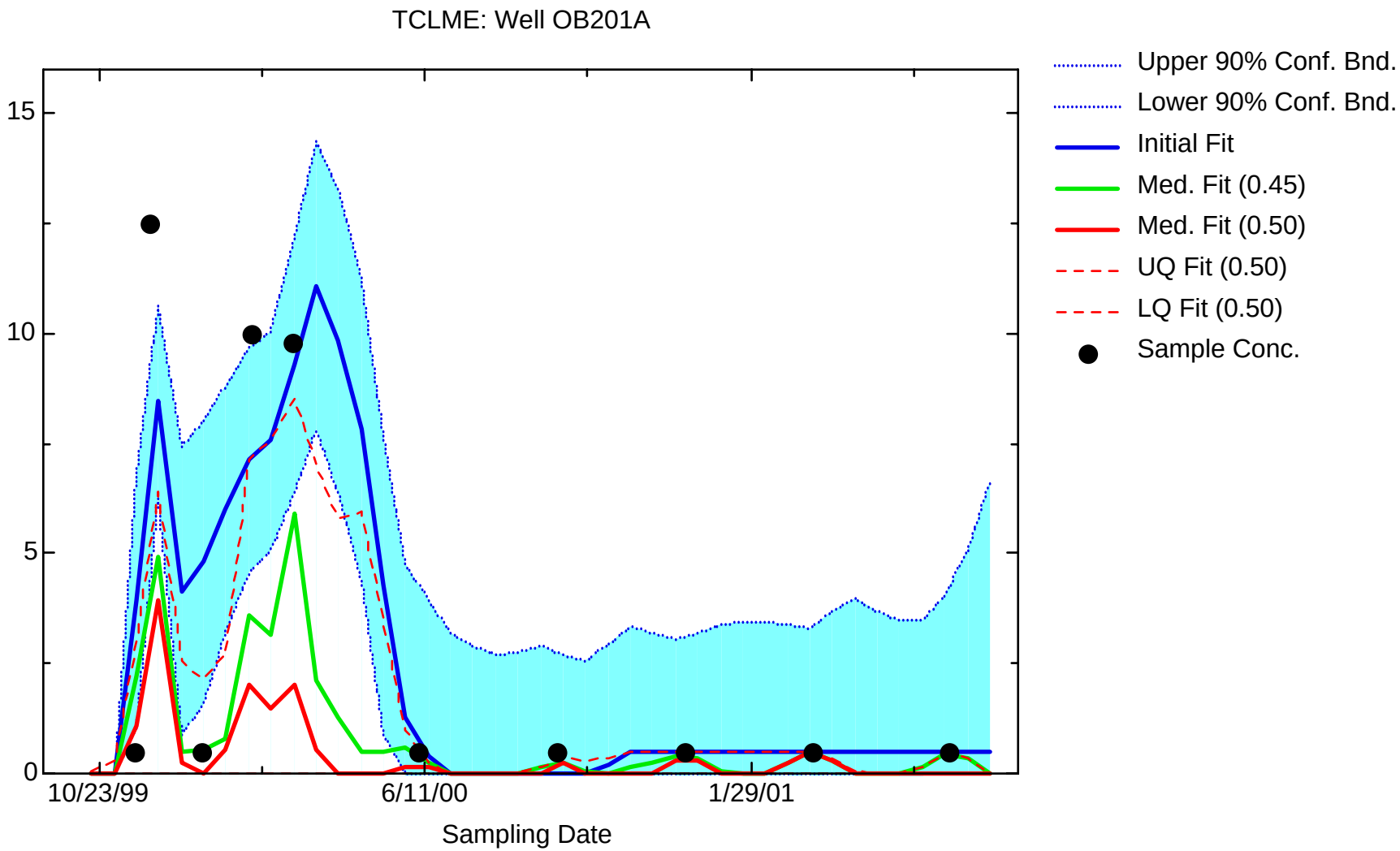

TCLME: Well MWG19
30
20
10
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.50)
Med. Fit (0.55)
UQ Fit (0.55)
LQ Fit (0.55)
Sample Conc.

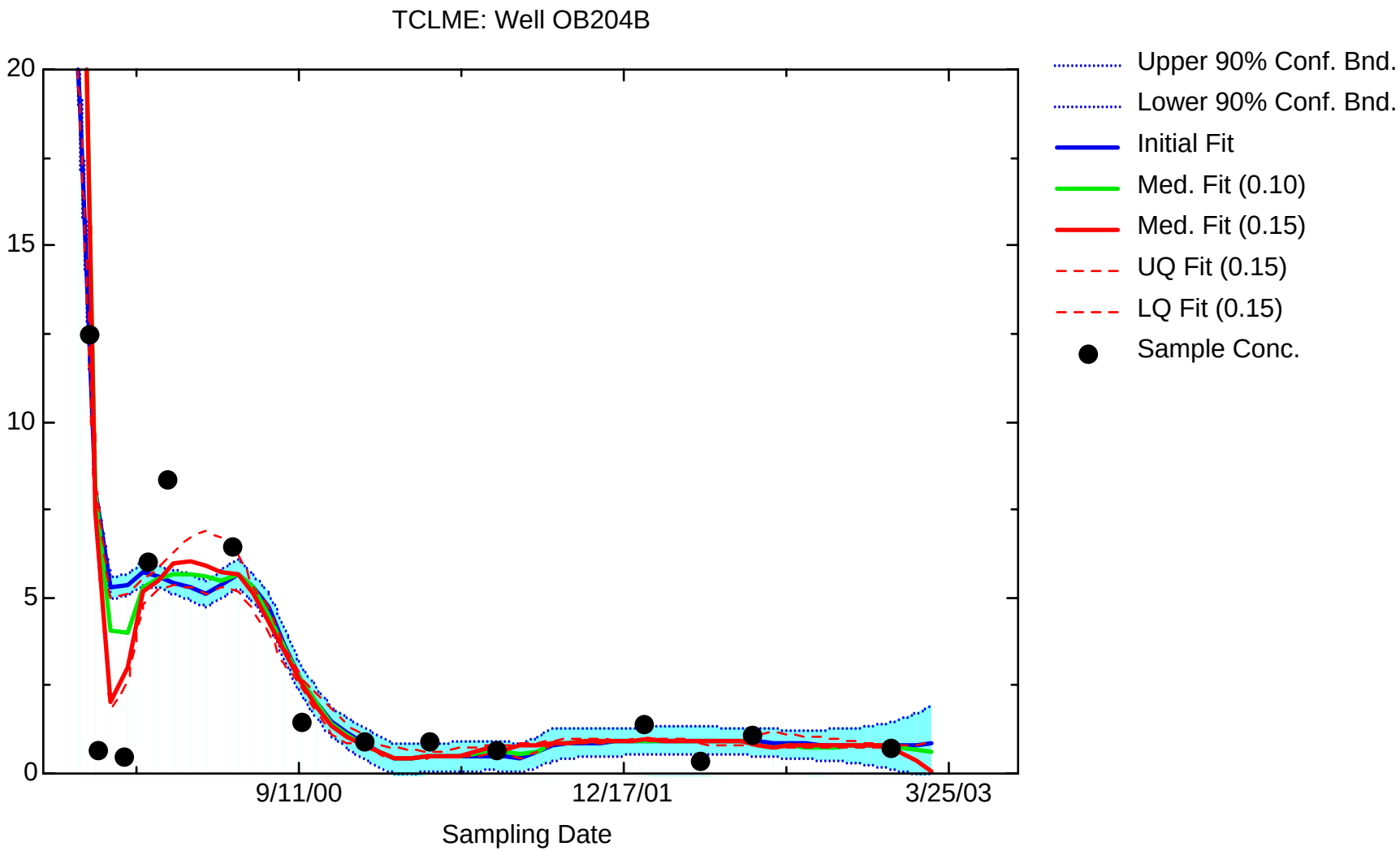

TCLME: Well MWG22
20
15
10
5
0
2/21/92
4/23/95
6/24/98
8/25/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

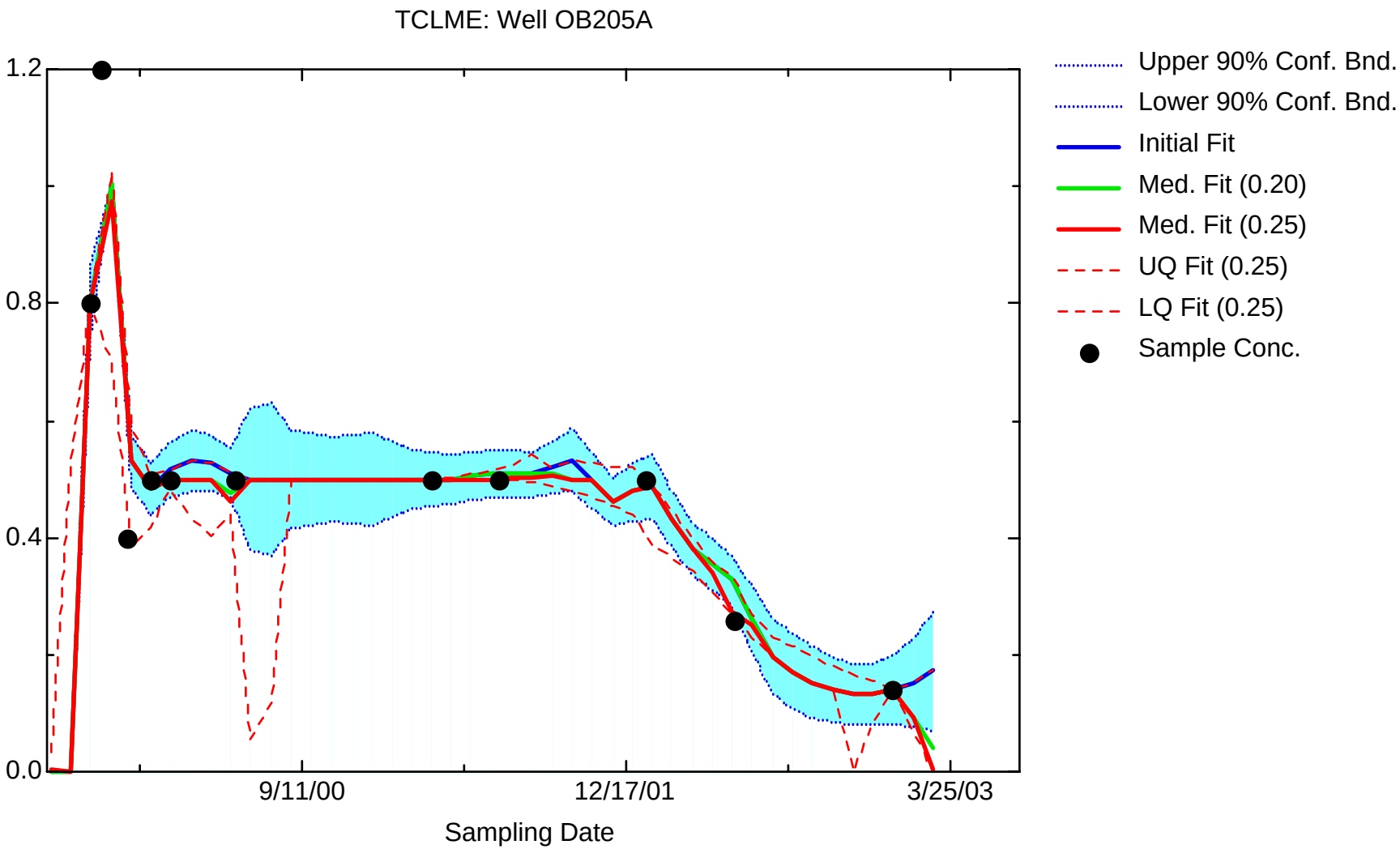

TCLME: Well MWOS-01
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
0
1
2
3
4
5
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

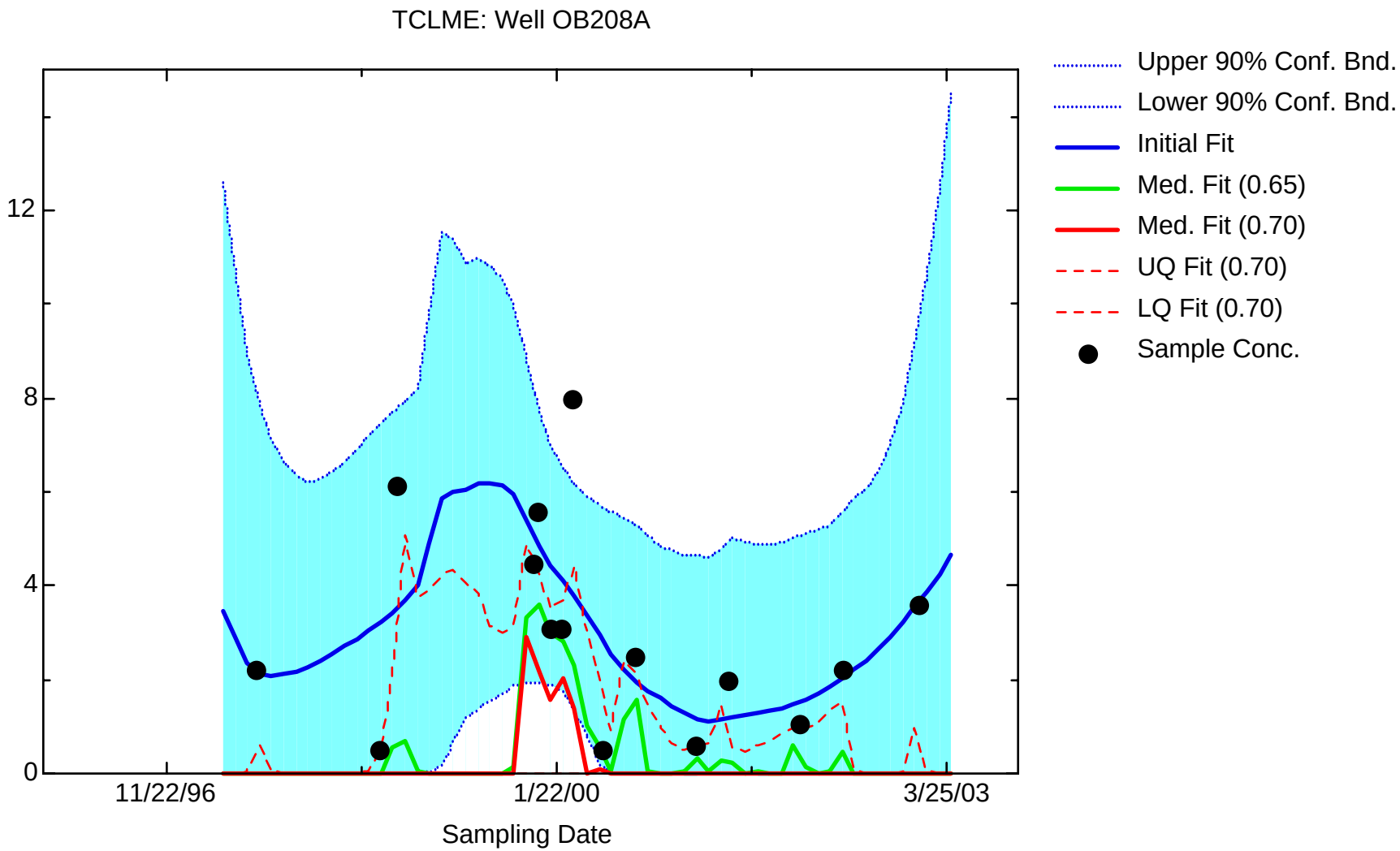

TCLME: Well MWOS-09
10
5
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

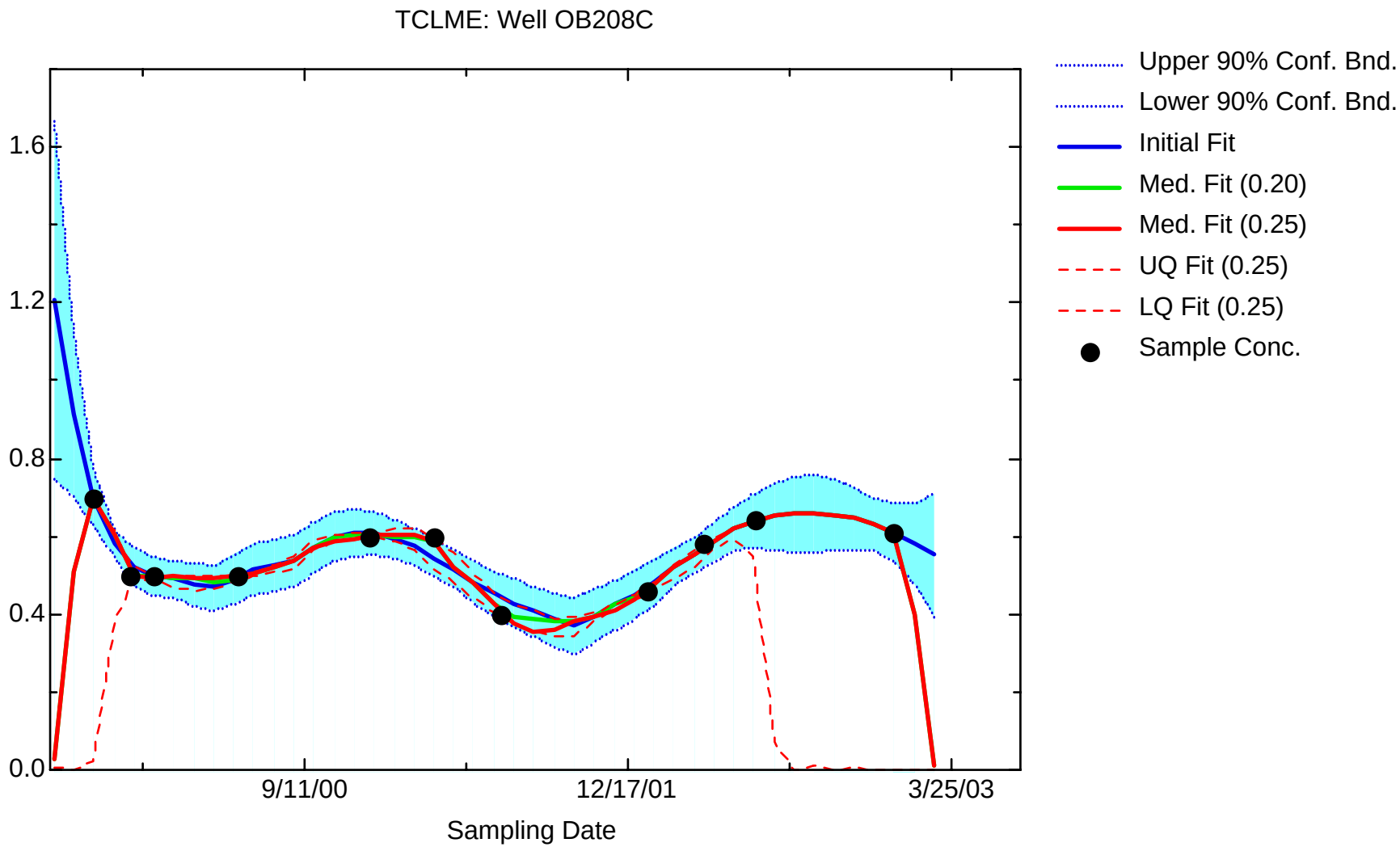

TCLME: Well MWOS-10
20
15
10
5
0
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.

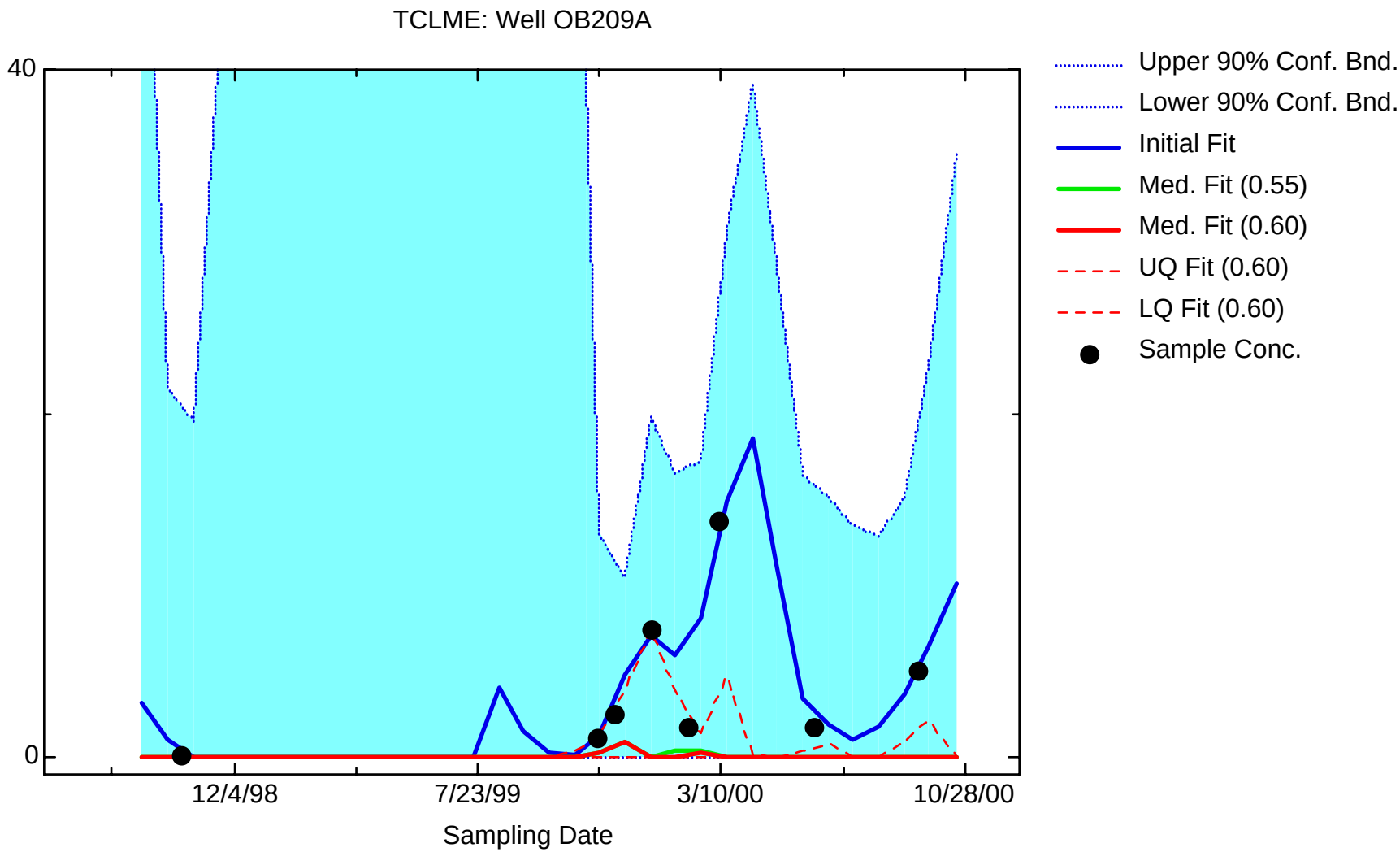

TCLME: Well OB201A
15
10
5
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

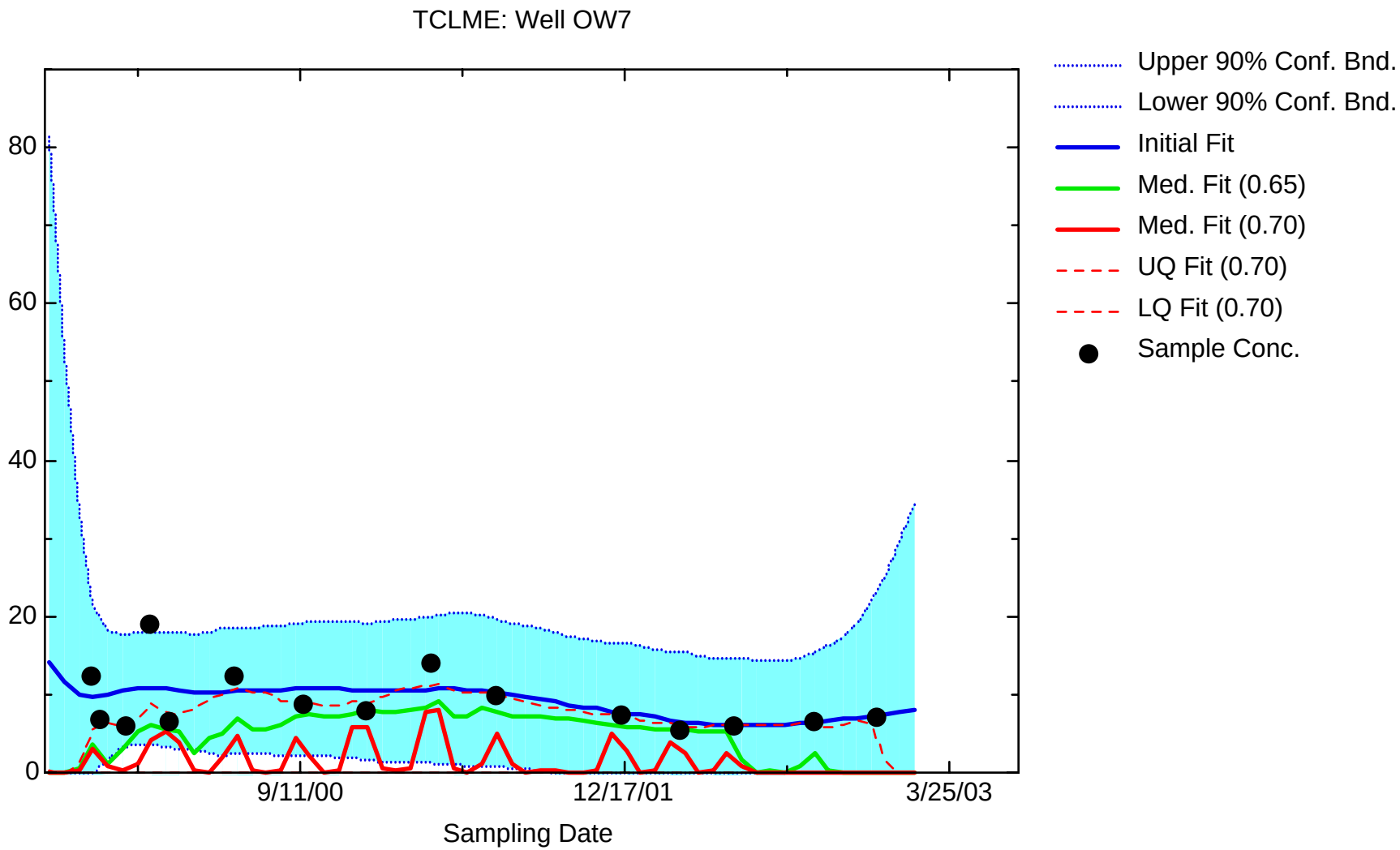

TCLME: Well OB204B
20
15
10
5
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.10)
Med. Fit (0.15)
UQ Fit (0.15)
LQ Fit (0.15)
Sample Conc.

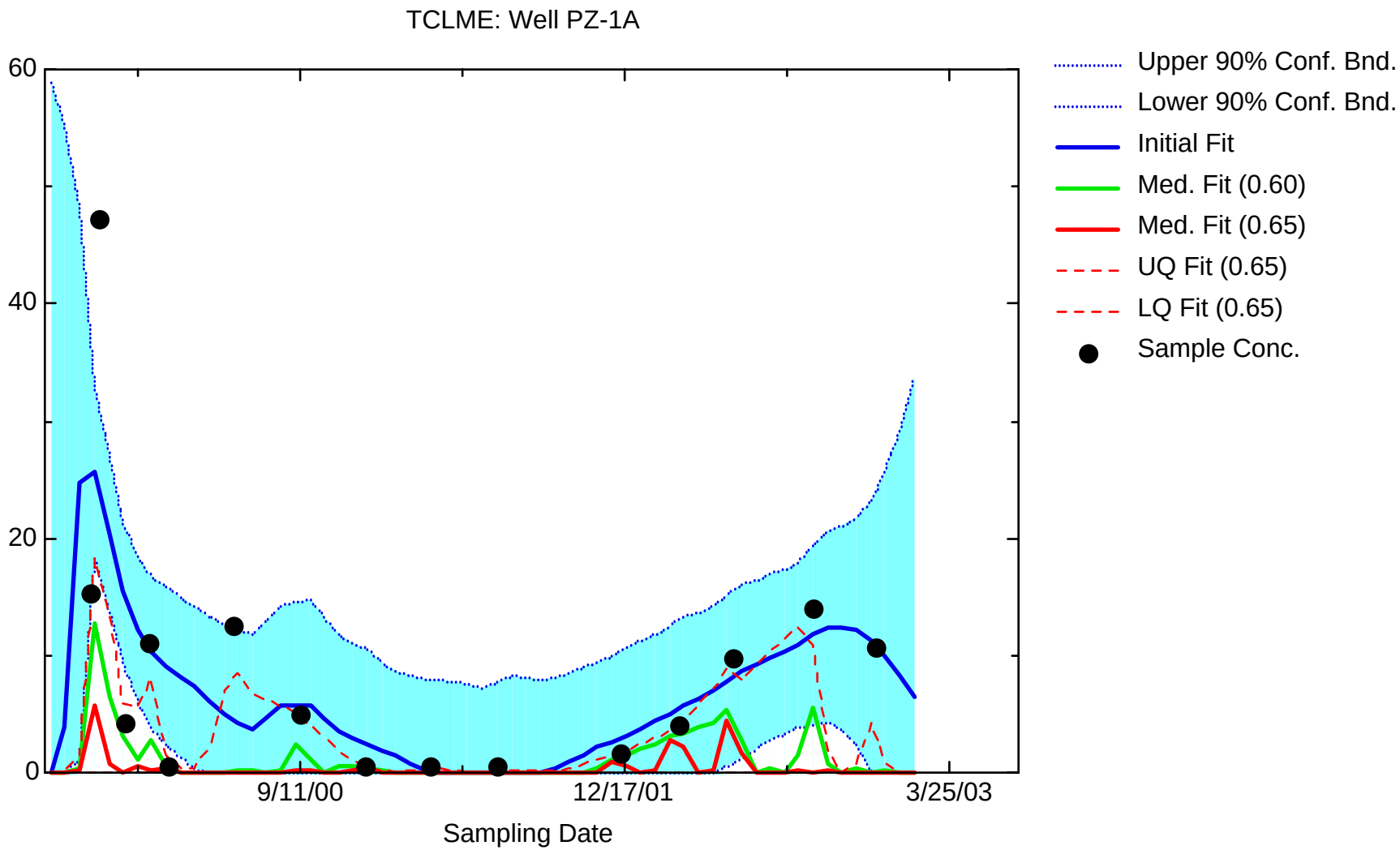

TCLME: Well OB205A
1.2
0.8
0.4
0.0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.

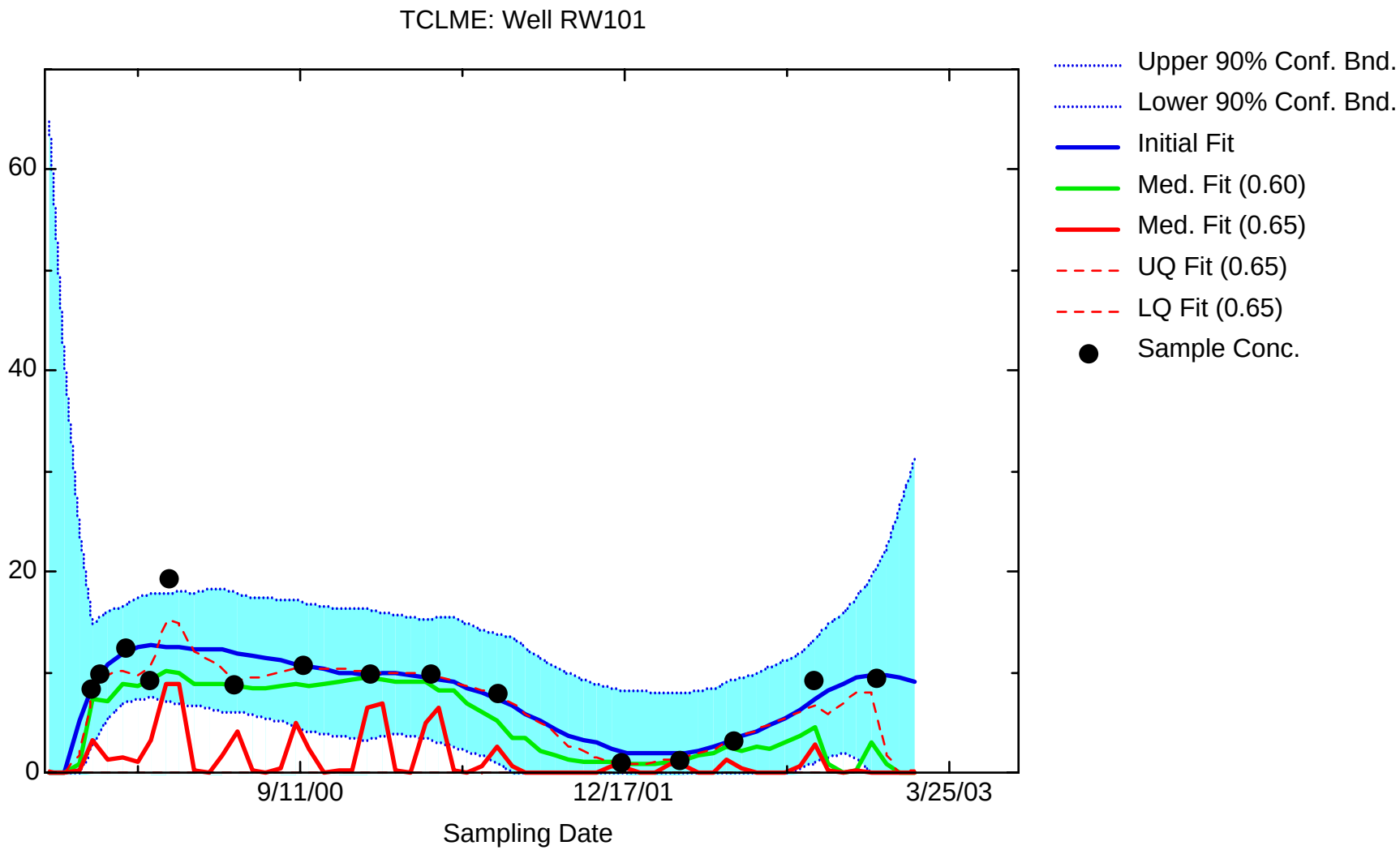

TCLME: Well OB208A
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
12
8
4
0
11/22/96
1/22/00
3/25/03
Sampling Date

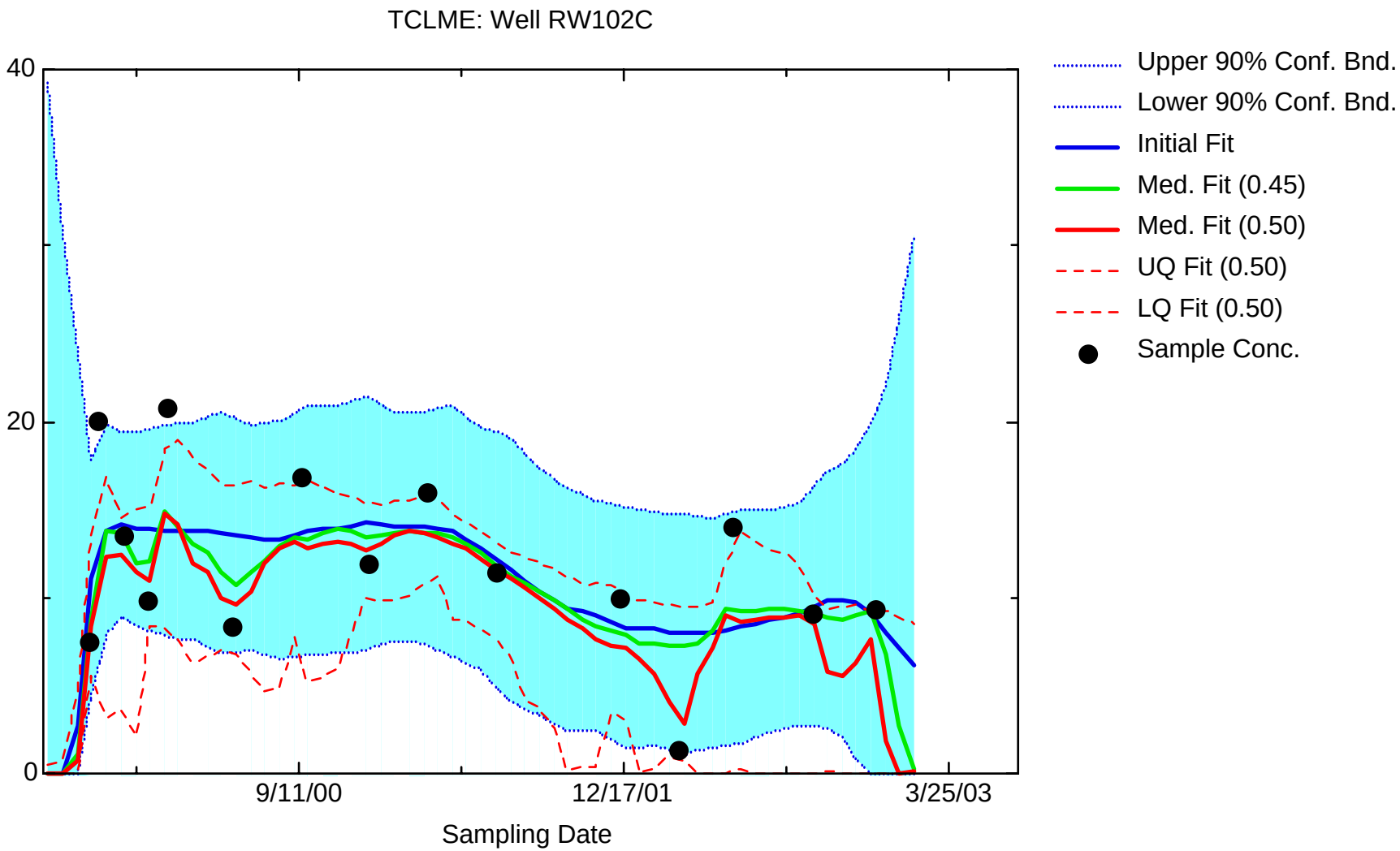

TCLME: Well OB208C
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.20)
Med. Fit (0.25)
UQ Fit (0.25)
LQ Fit (0.25)
Sample Conc.
1.6
1.2
0.8
0.4
0.0
9/11/00
12/17/01
3/25/03
Sampling Date

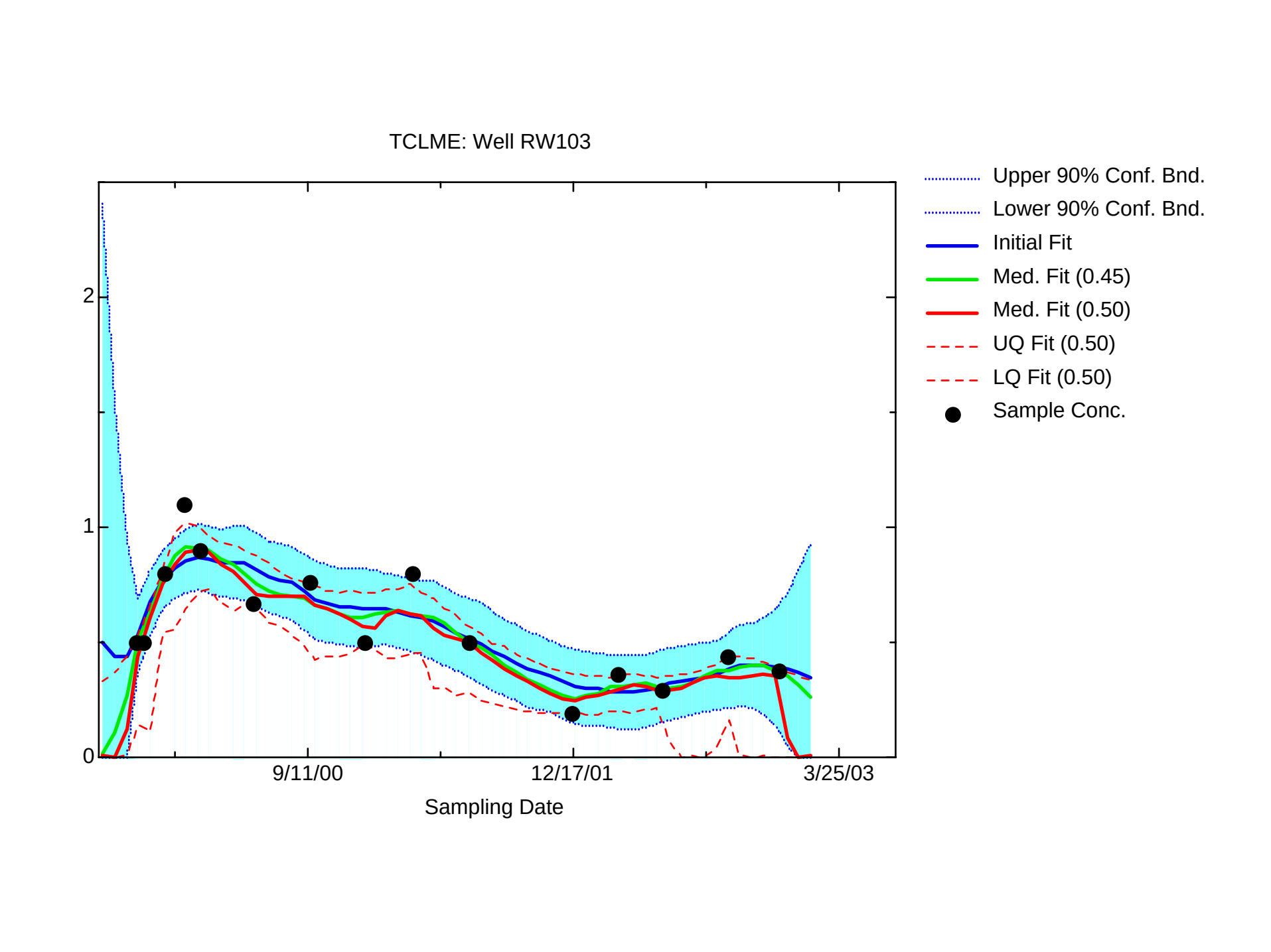

TCLME: Well OB209A
40
0
12/4/98
7/23/99
3/10/00
10/28/00
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.

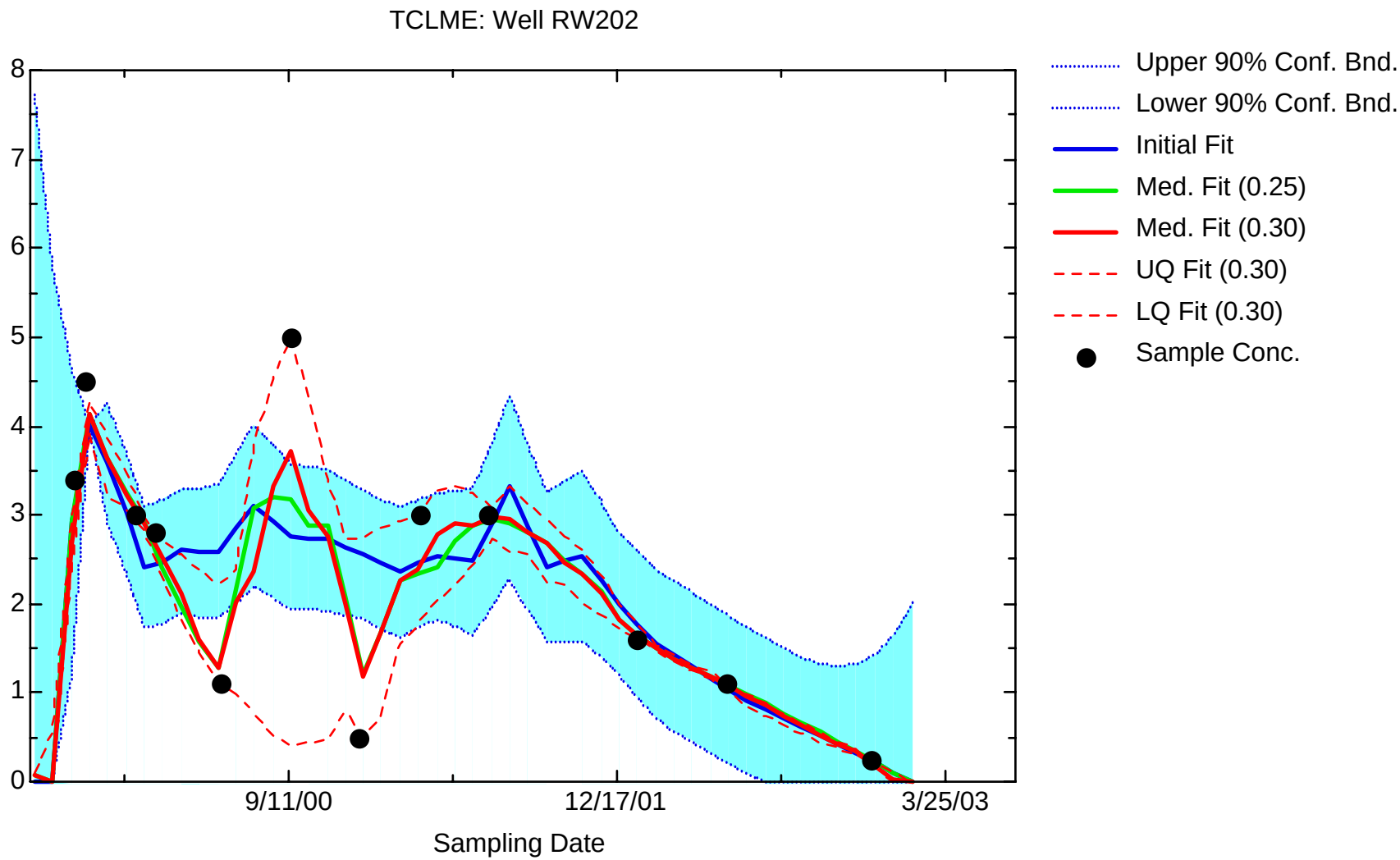

TCLME: Well OW7
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.65)
Med. Fit (0.70)
UQ Fit (0.70)
LQ Fit (0.70)
Sample Conc.
80
60
40
20
0
9/11/00
12/17/01
3/25/03
Sampling Date

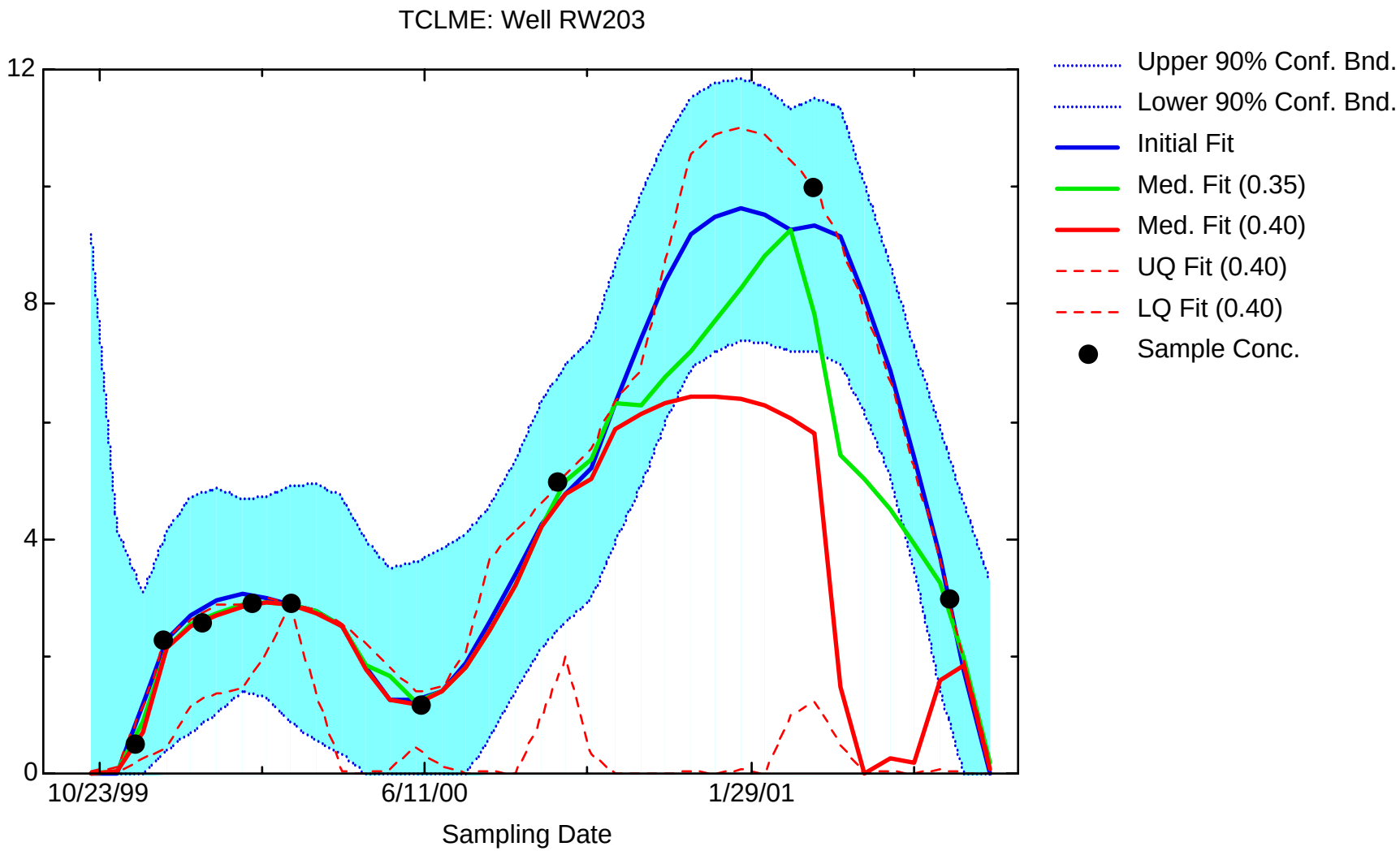

TCLME: Well PZ-1A
60
40
20
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.

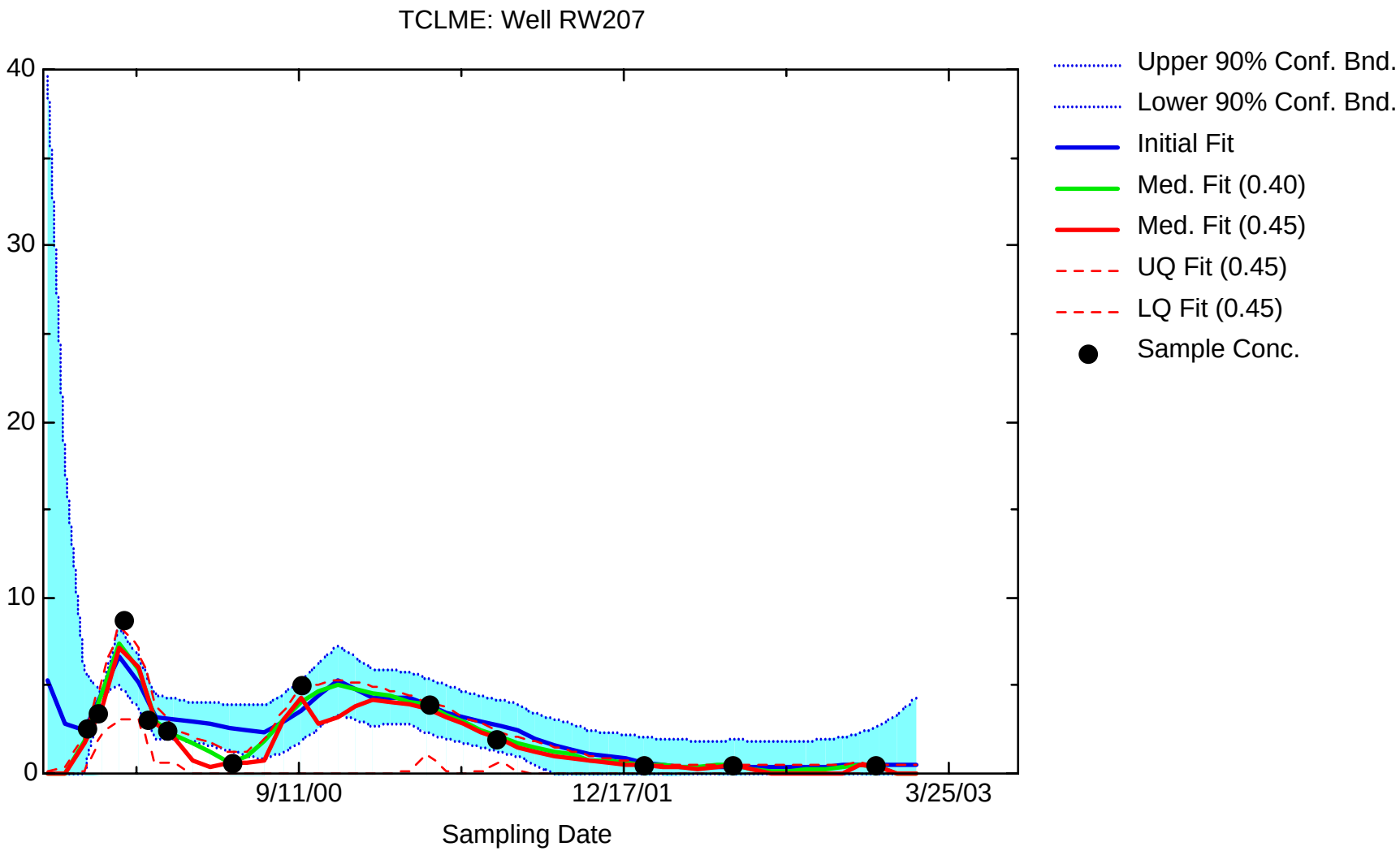

TCLME: Well RW101
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.60)
Med. Fit (0.65)
UQ Fit (0.65)
LQ Fit (0.65)
Sample Conc.
60
40
20
0
9/11/00
12/17/01
3/25/03
Sampling Date

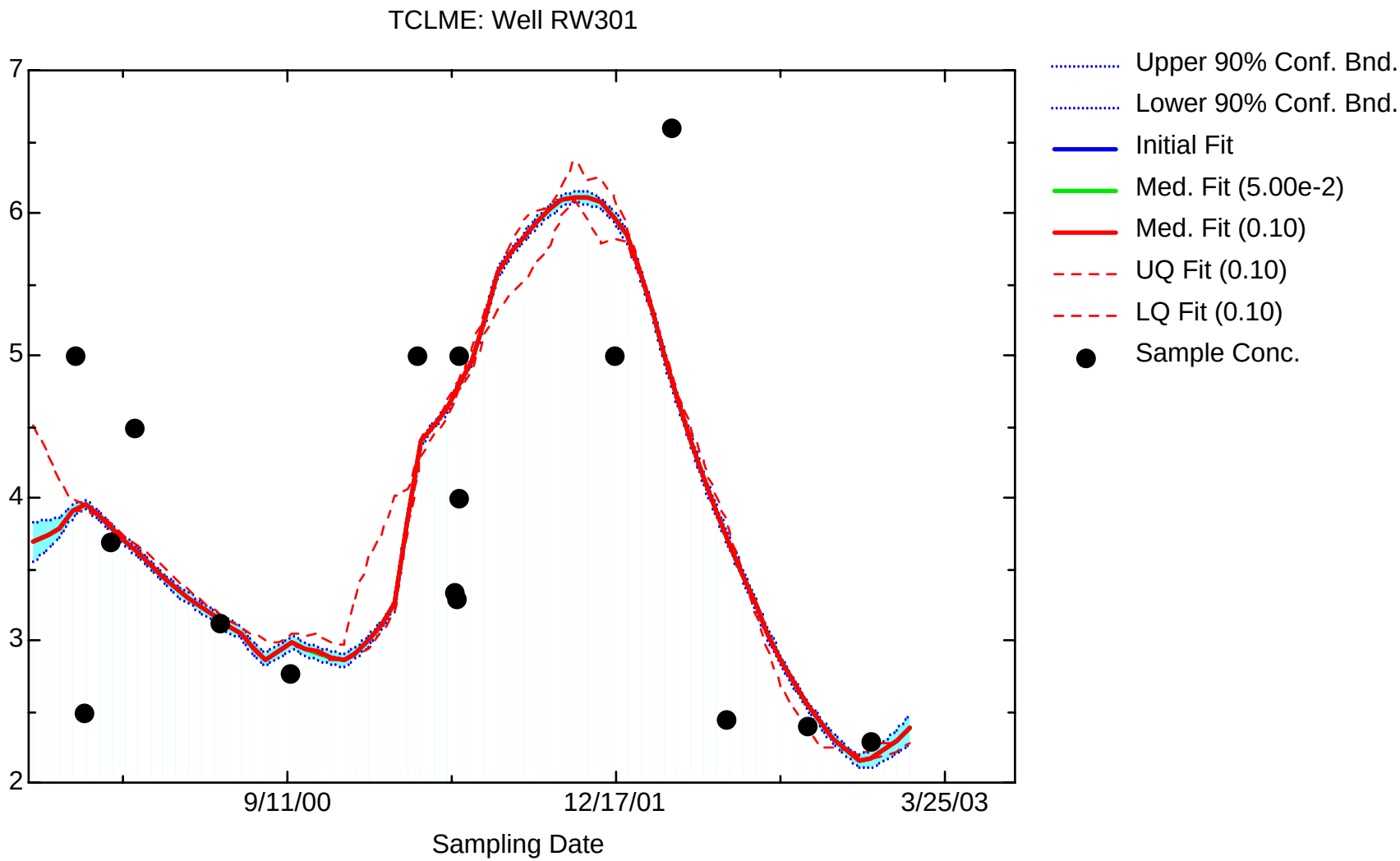

TCLME: Well RW102C
40
20
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

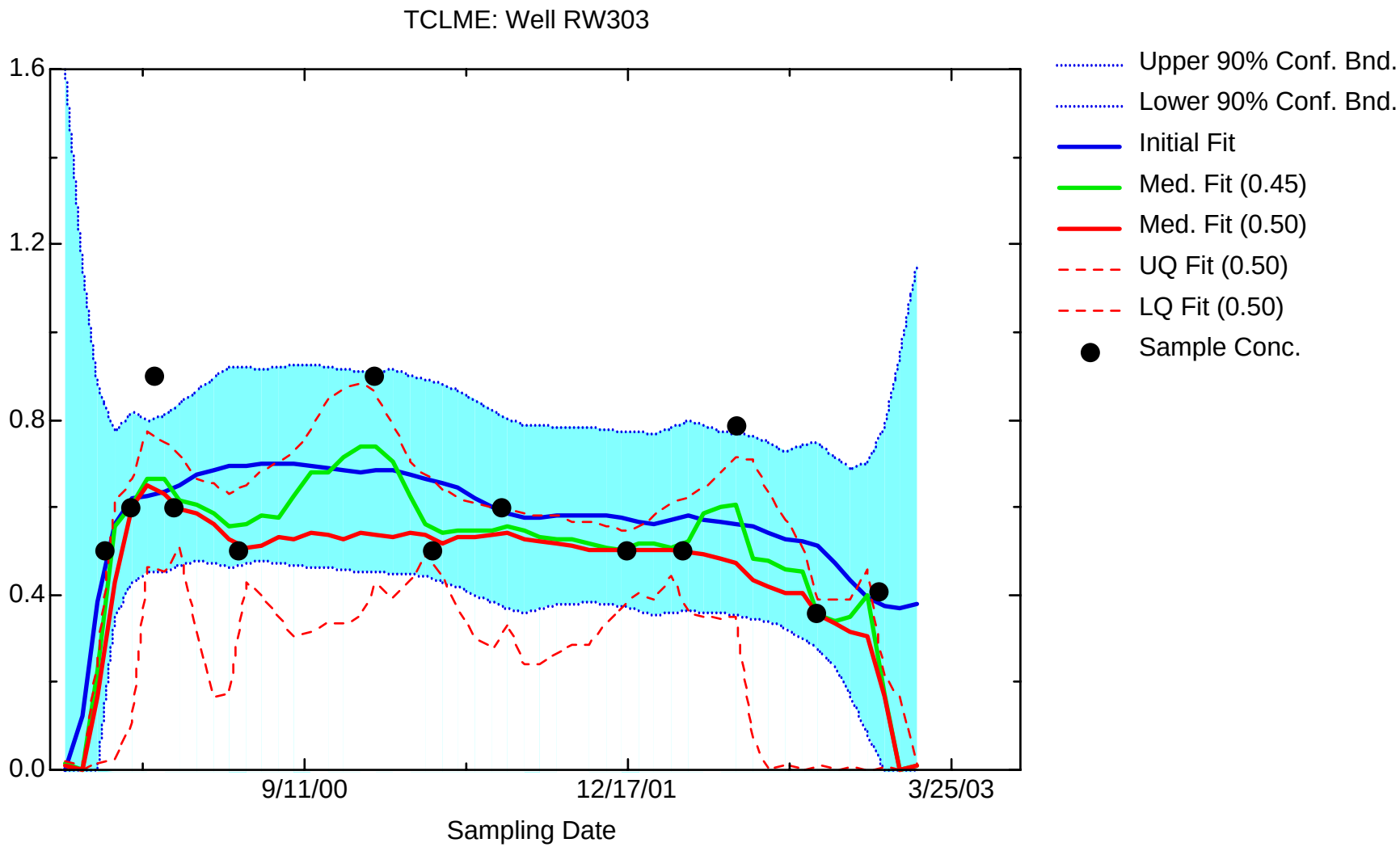

TCLME: Well RW103
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.
2
1
0
9/11/00
12/17/01
3/25/03
Sampling Date

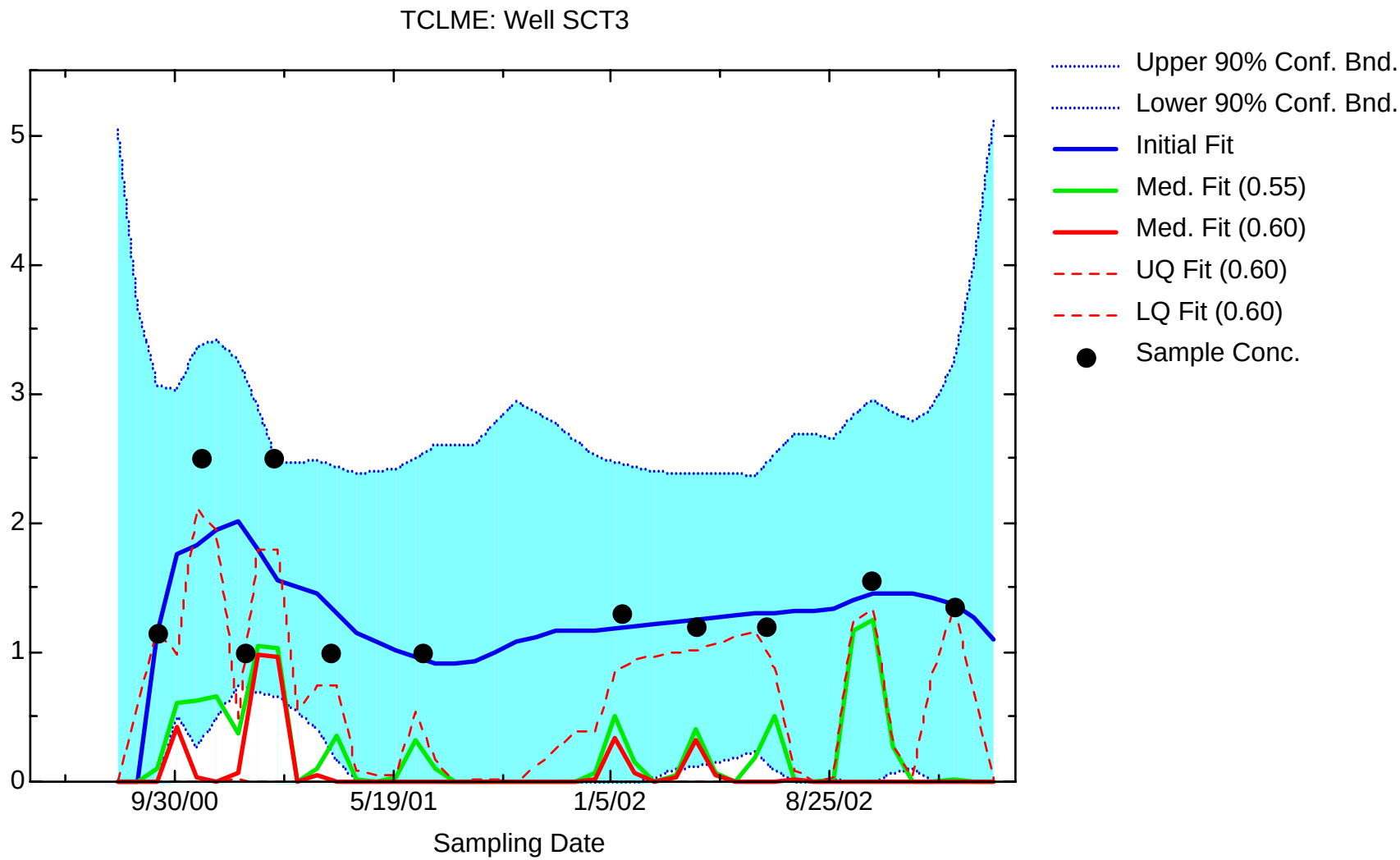

TCLME: Well RW202
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.25)
Med. Fit (0.30)
UQ Fit (0.30)
LQ Fit (0.30)
Sample Conc.
8
7
6
5
4
3
2
1
0
9/11/00
12/17/01
3/25/03
Sampling Date


TCLME: Well RW203
12
8
4
0
10/23/99
6/11/00
1/29/01
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.35)
Med. Fit (0.40)
UQ Fit (0.40)
LQ Fit (0.40)
Sample Conc.

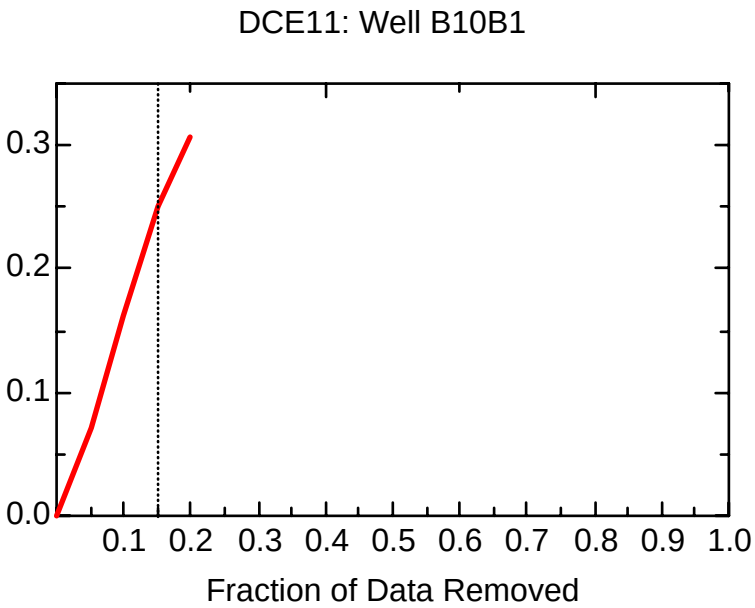

TCLME: Well RW207
40
30
20
10
0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.40)
Med. Fit (0.45)
UQ Fit (0.45)
LQ Fit (0.45)
Sample Conc.

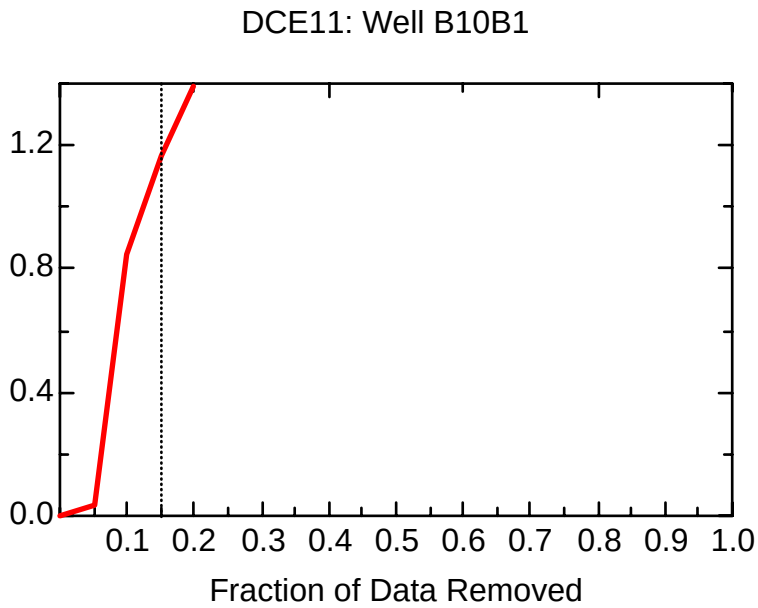

TCLME: Well RW301
7
6
5
4
3
2
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (5.00e-2)
Med. Fit (0.10)
UQ Fit (0.10)
LQ Fit (0.10)
Sample Conc.

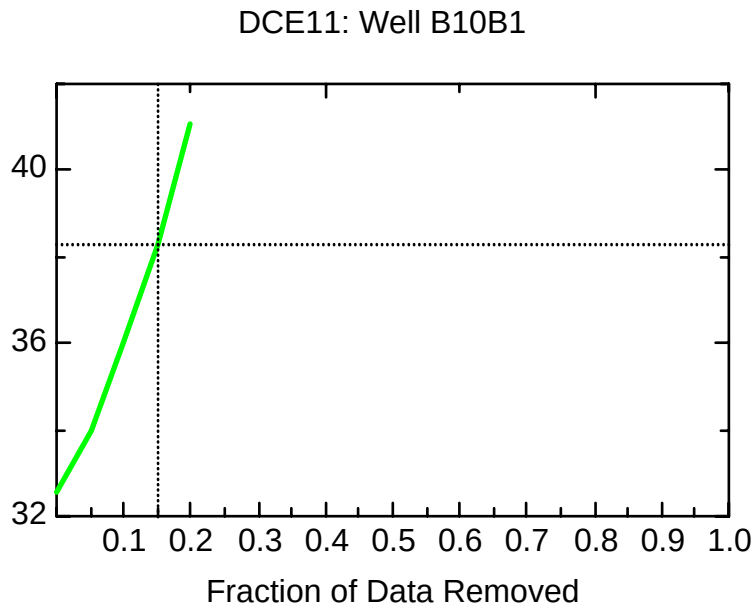

TCLME: Well RW303
1.6
1.2
0.8
0.4
0.0
9/11/00
12/17/01
3/25/03
Sampling Date
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.45)
Med. Fit (0.50)
UQ Fit (0.50)
LQ Fit (0.50)
Sample Conc.

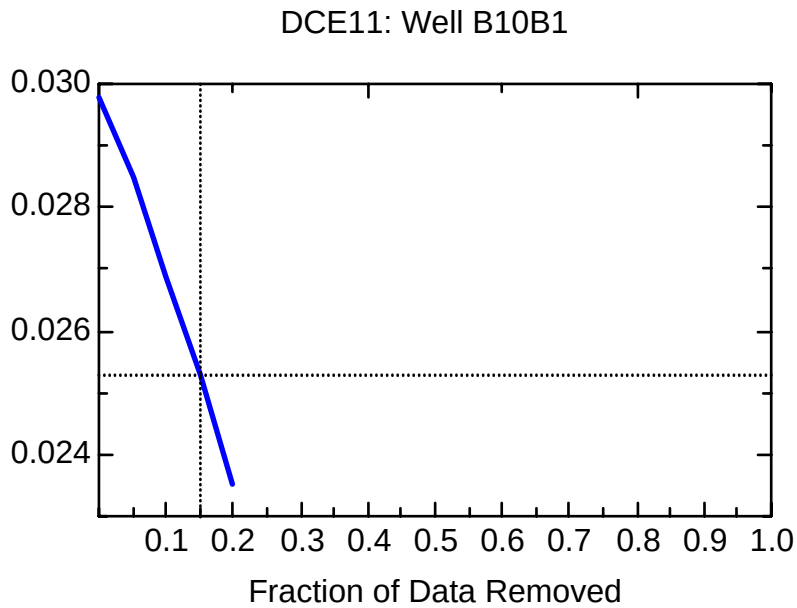

TCLME: Well SCT3
Upper 90% Conf. Bnd.
Lower 90% Conf. Bnd.
Initial Fit
Med. Fit (0.55)
Med. Fit (0.60)
UQ Fit (0.60)
LQ Fit (0.60)
Sample Conc.
0
1
2
3
4
5
9/30/00
5/19/01
1/5/02
8/25/02
Sampling Date

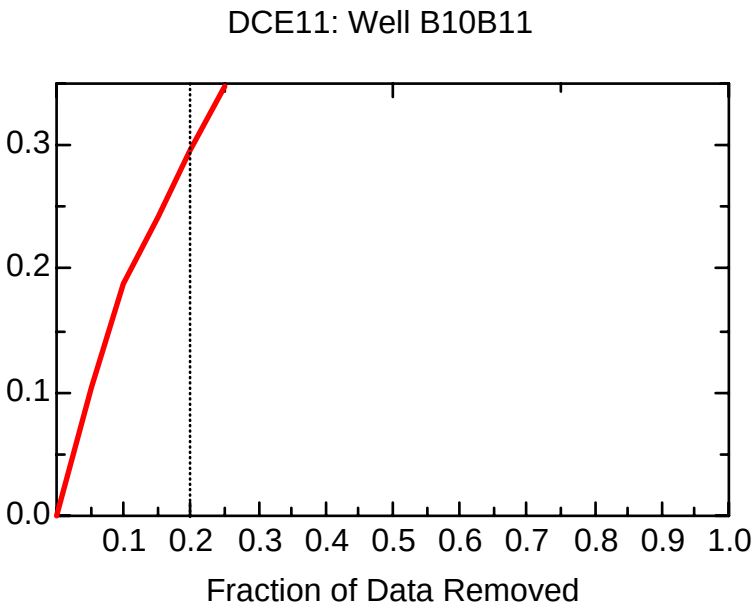
Temporal Analysis Appendix B

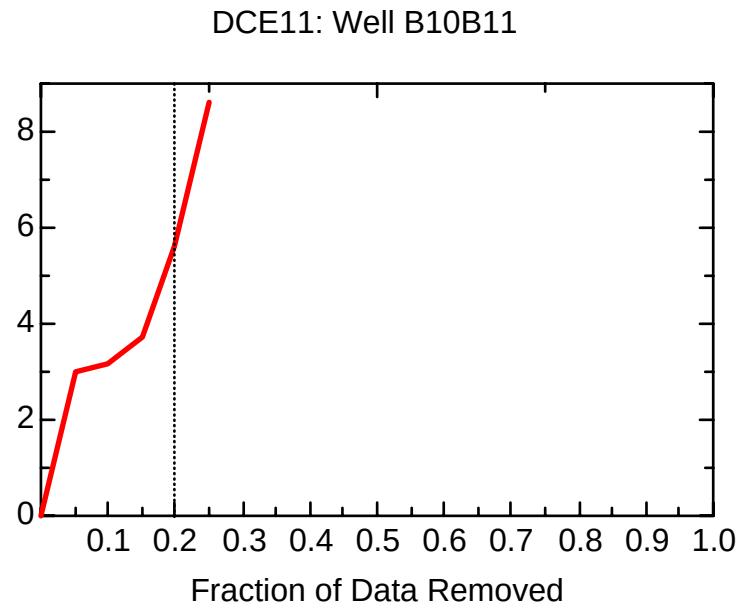

DCE11: Well B10B1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

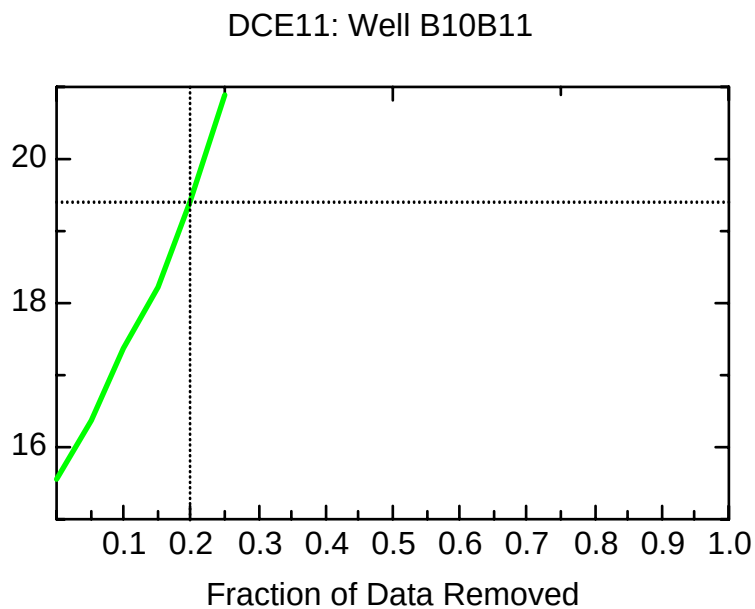

DCE11: Well B10B1
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

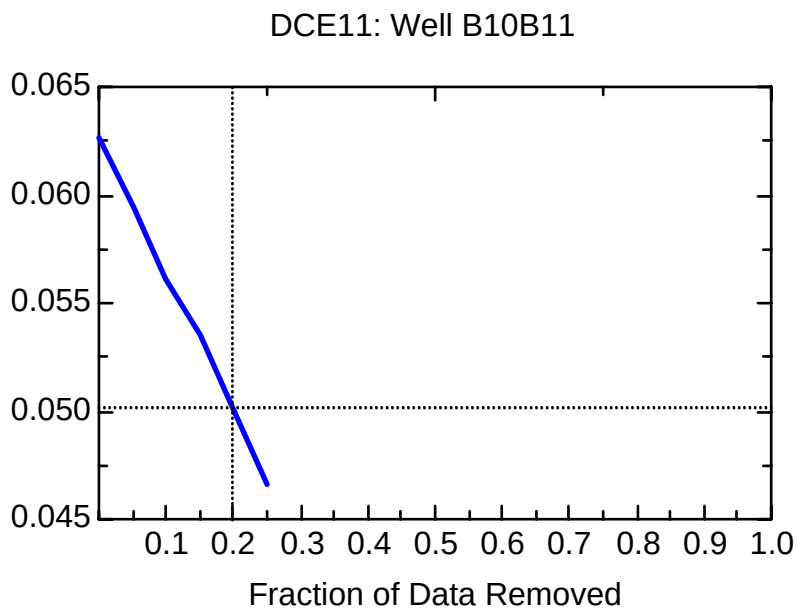

DCE11: Well B10B1
40
36
32
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

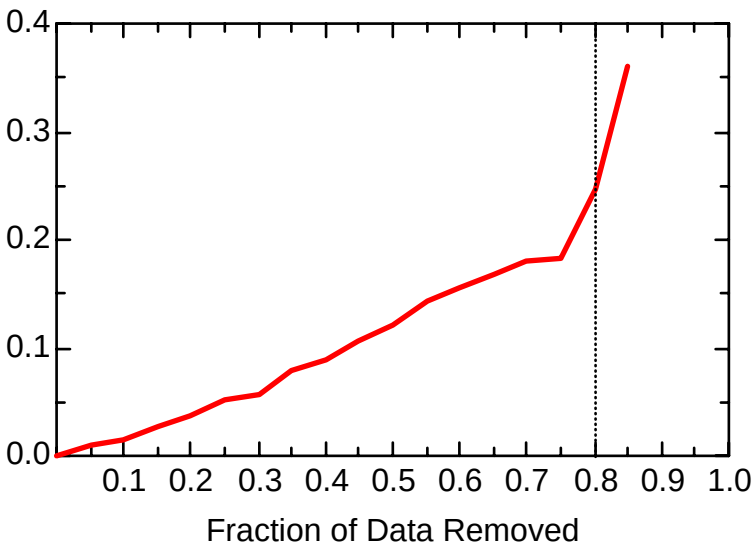

DCE11: Well B10B1
0.030
0.028
0.026
0.024
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

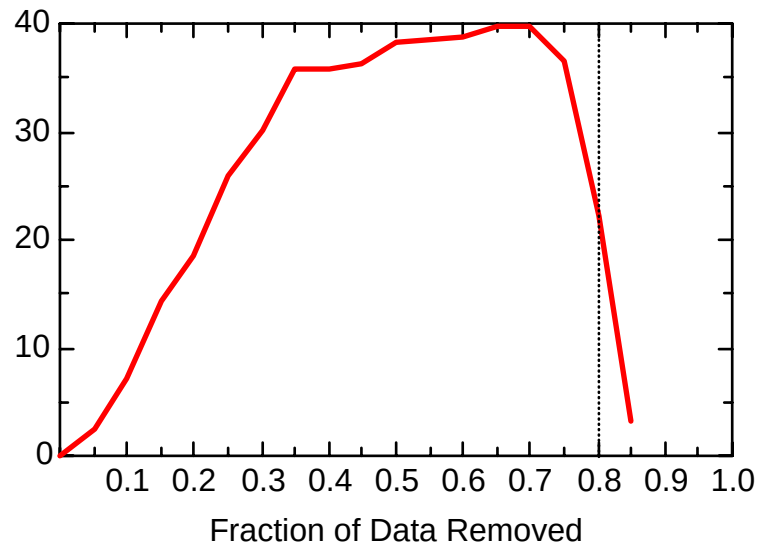

DCE11: Well B10B11
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

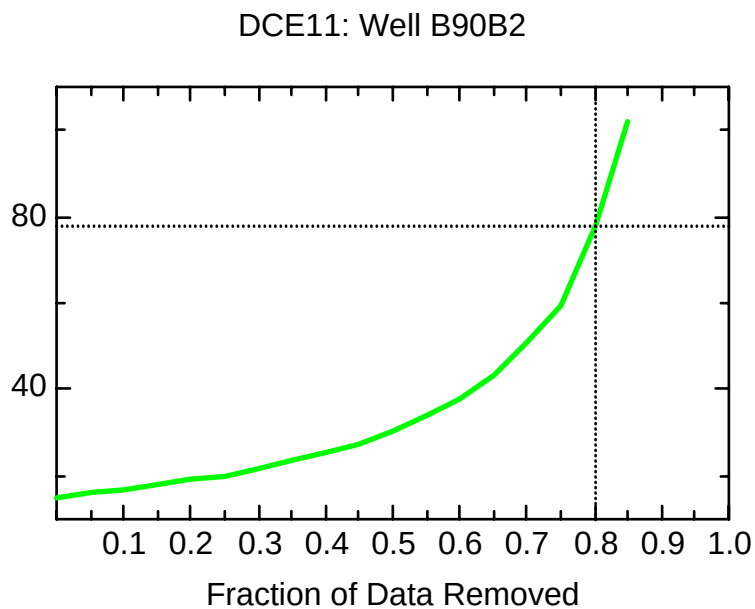

DCE11: Well B10B11
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B10B11
20
18
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B10B11
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B90B2
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B90B2
40
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed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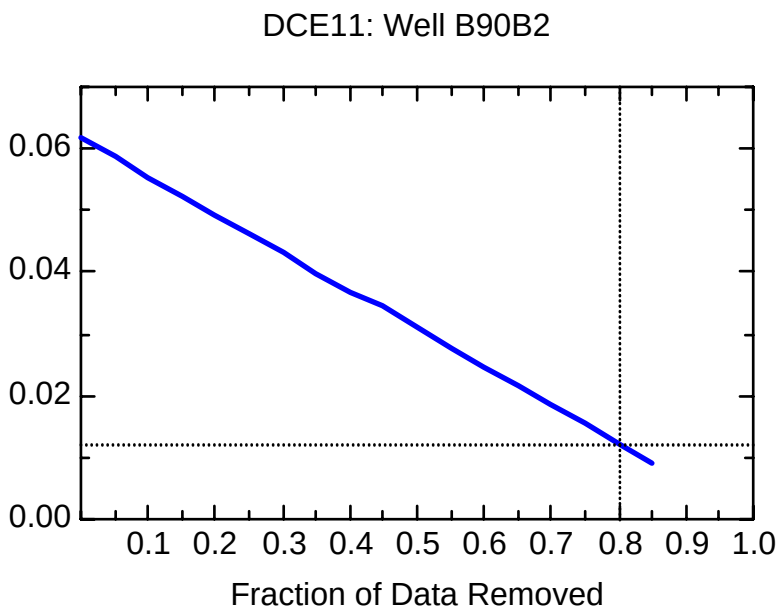
DCE11: Well B90B2
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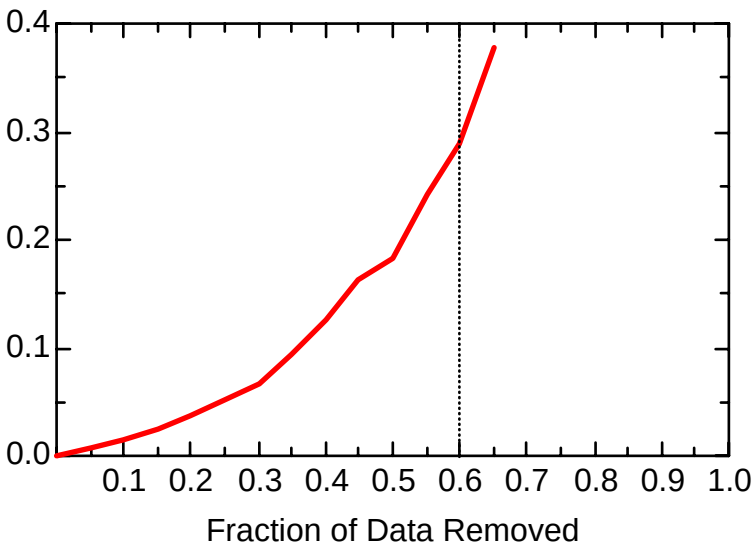
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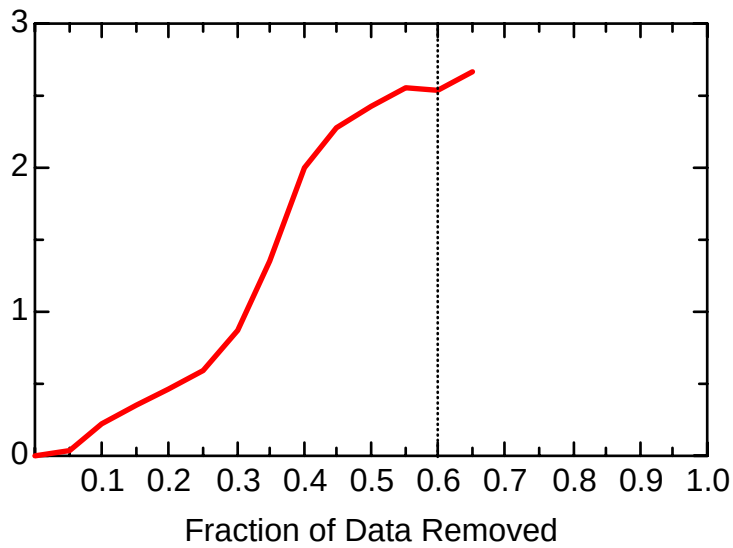
DCE11: Well B90B3
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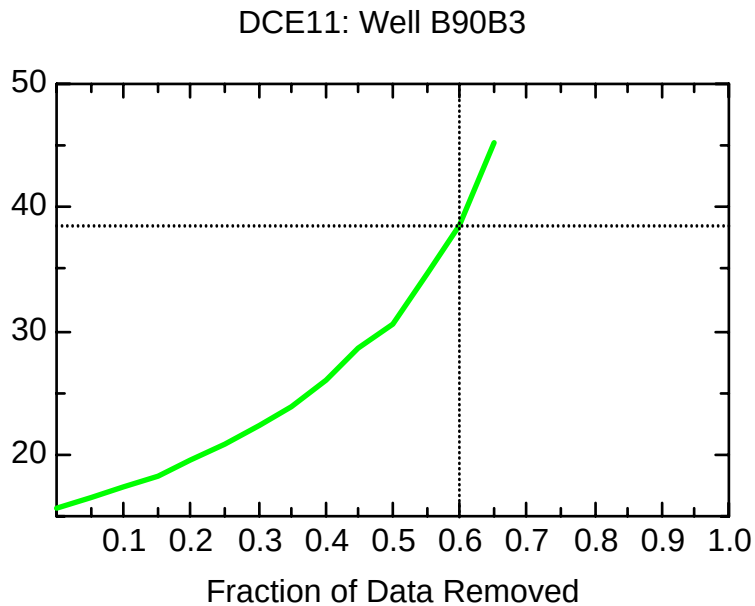
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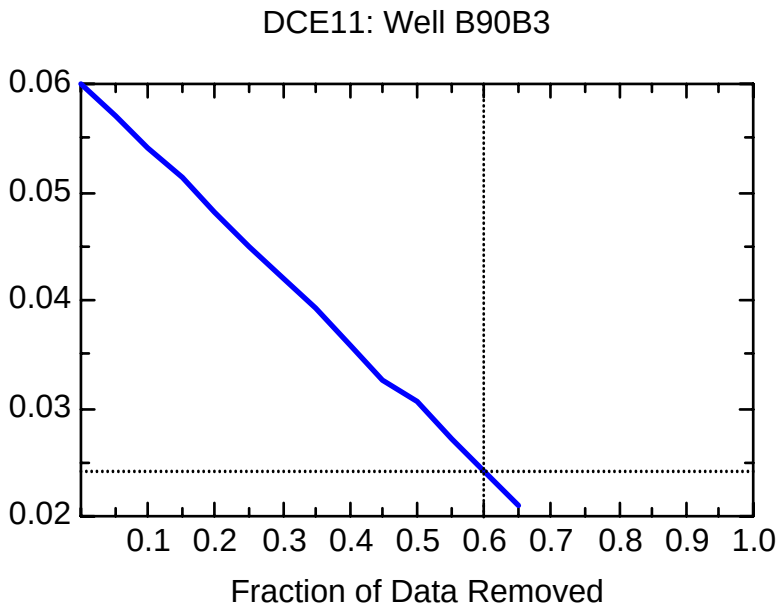
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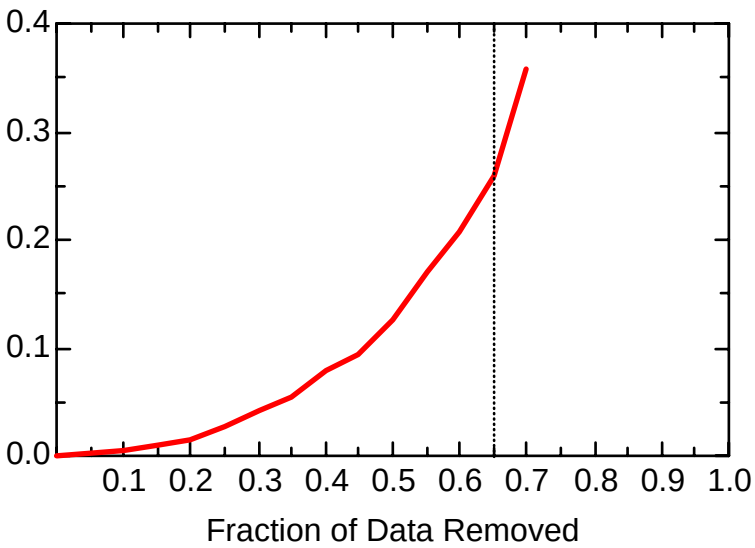
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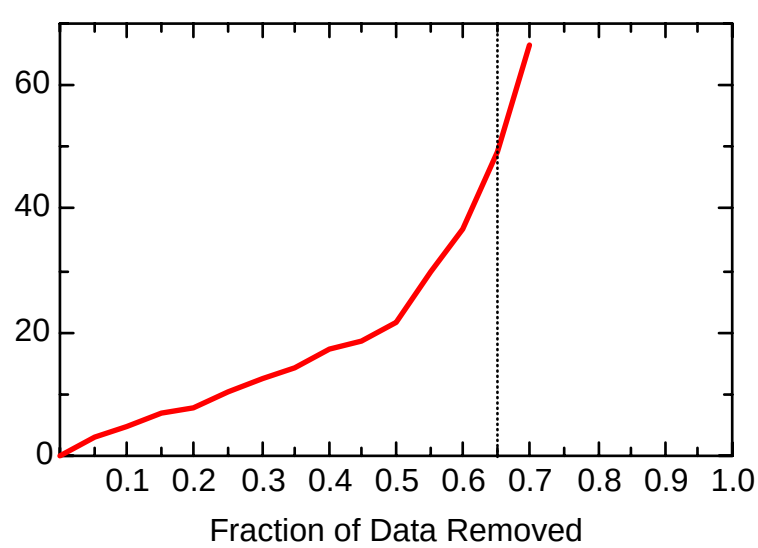
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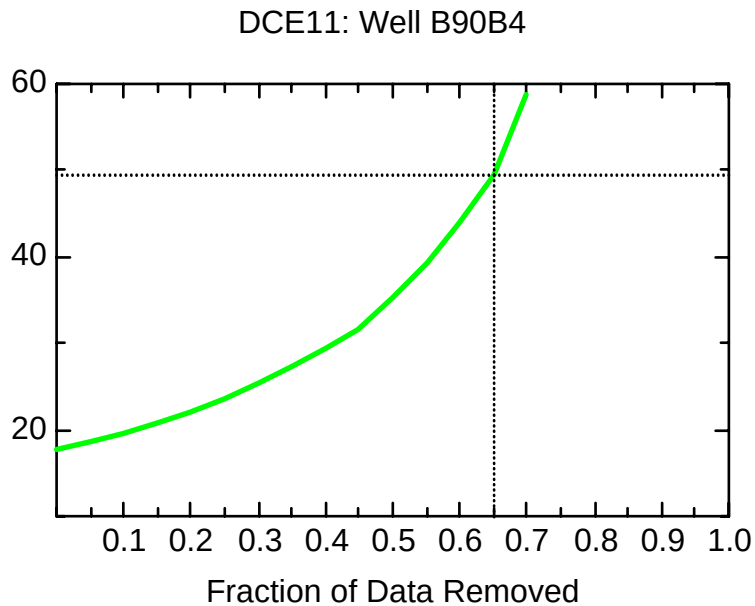
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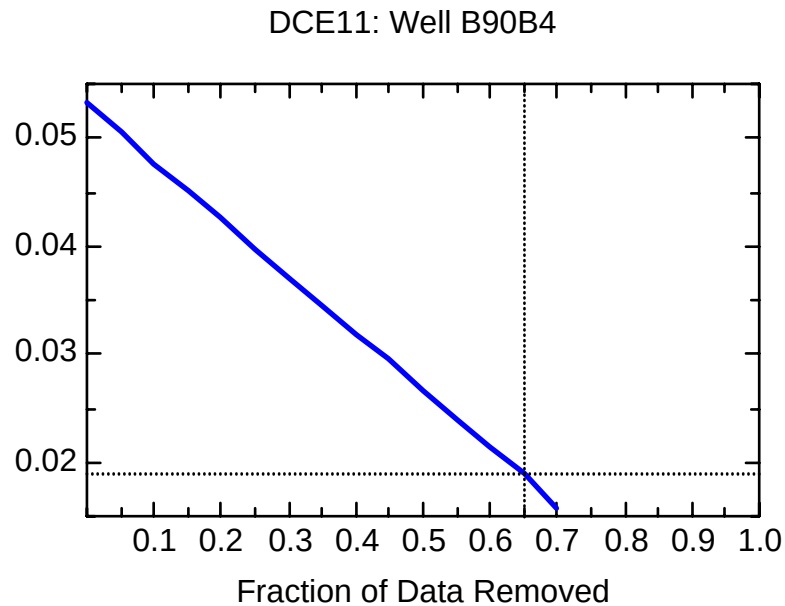
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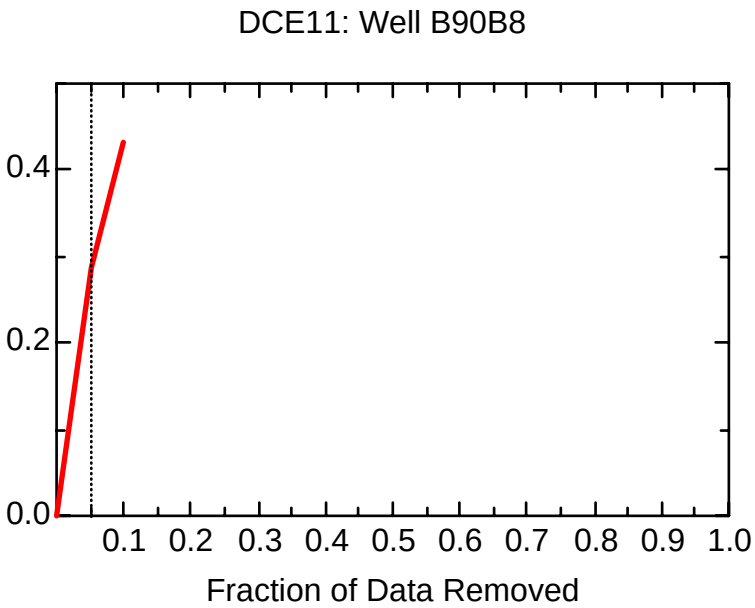
Fraction of Data Removed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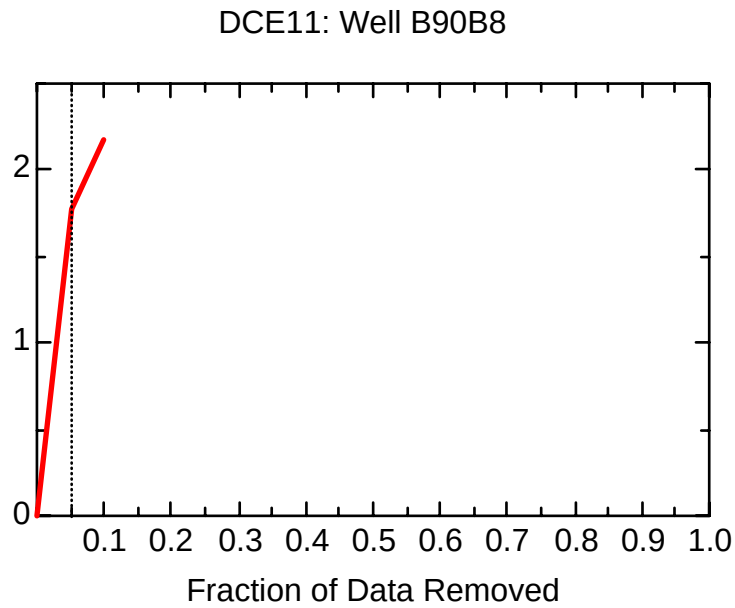
DCE11: Well B90B8
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0
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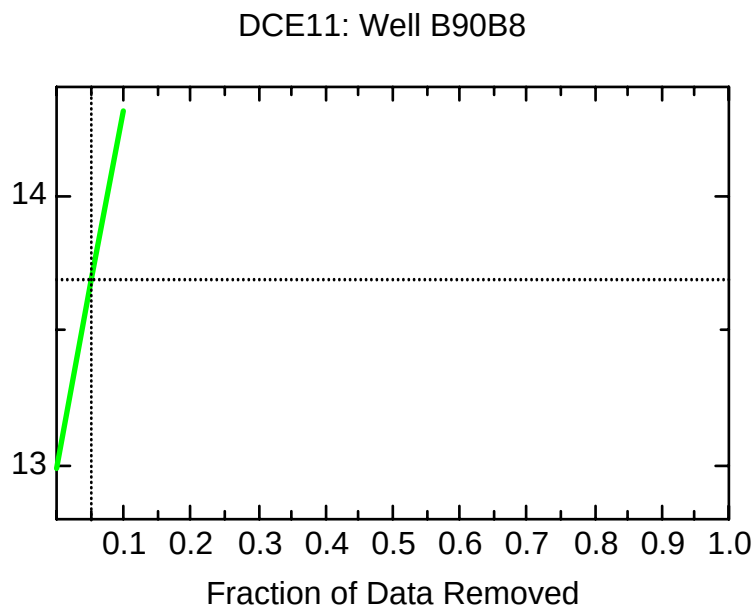
Fraction of Data Removed


DCE11: Well B90B8
14
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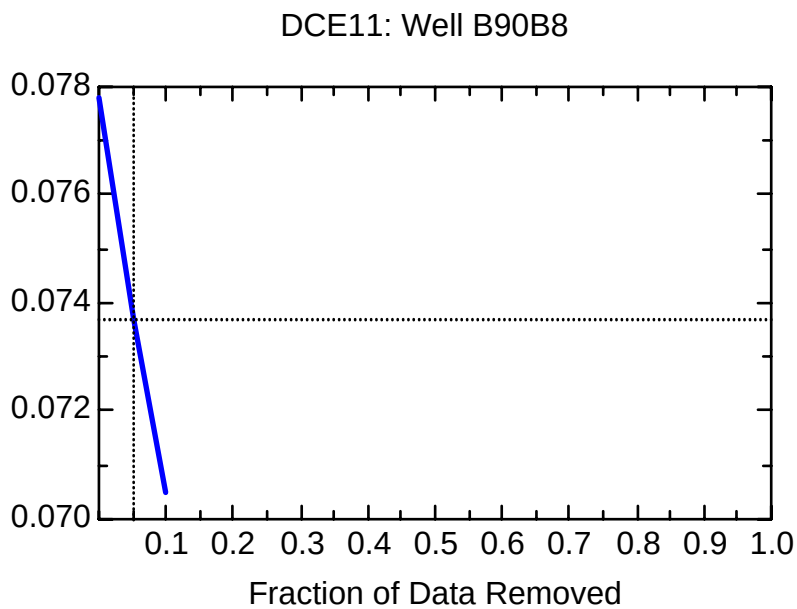
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0.074
0.072
0.070
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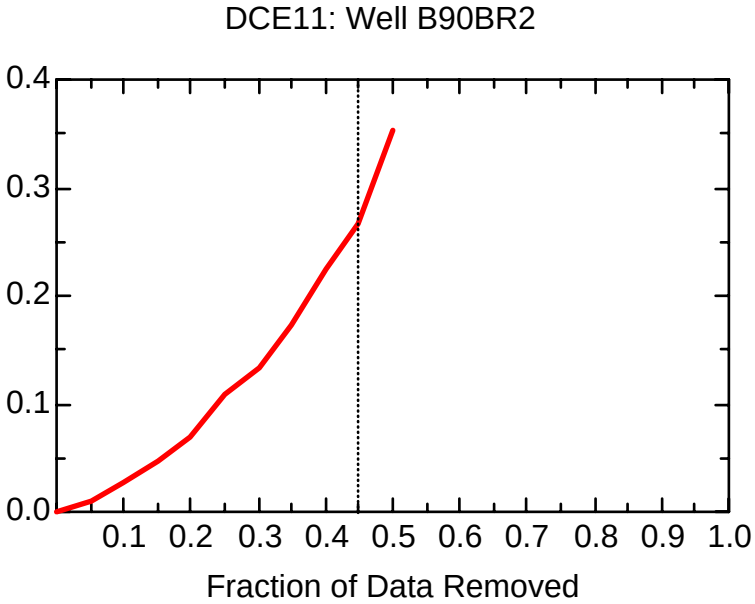
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0.2
0.1
0.0
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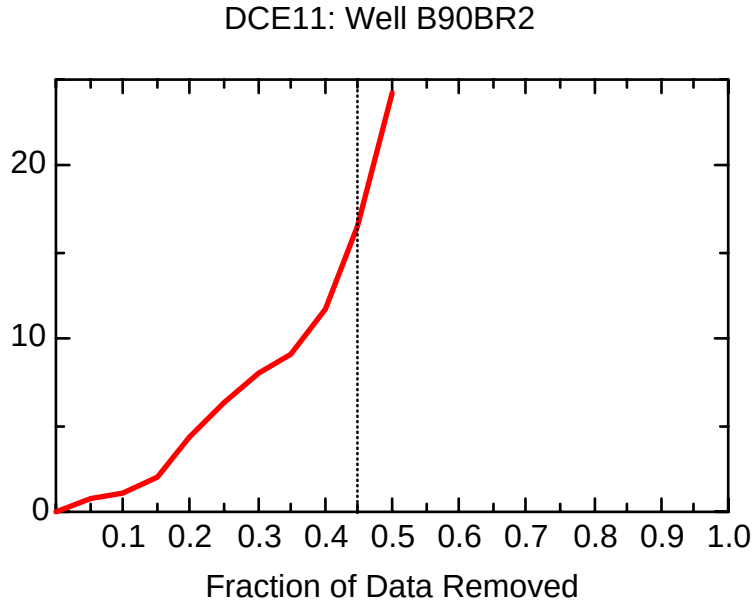
Fraction of Data Removed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0
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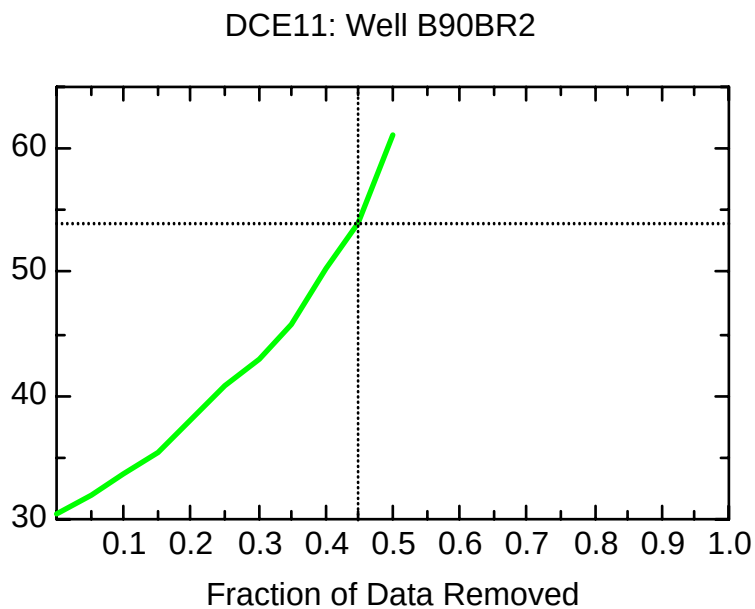
DCE11: Well B90BR2
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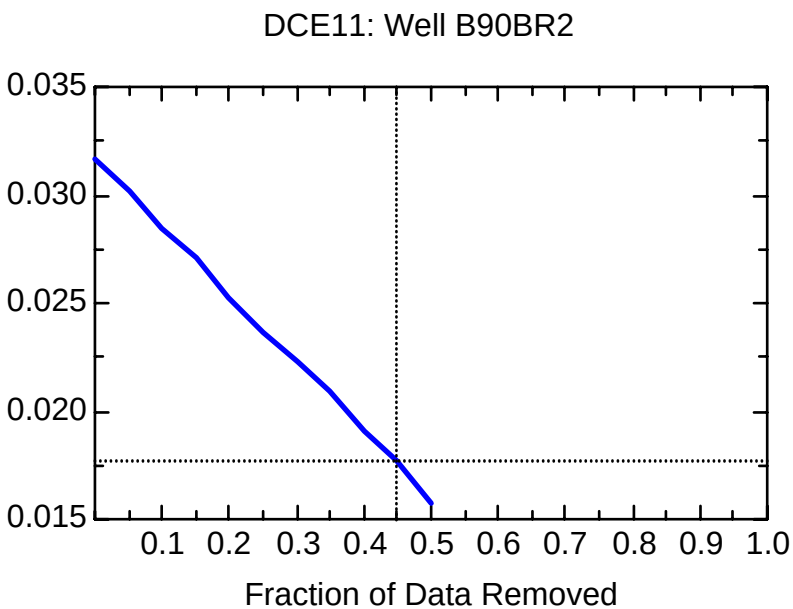
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed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0.020
0.015
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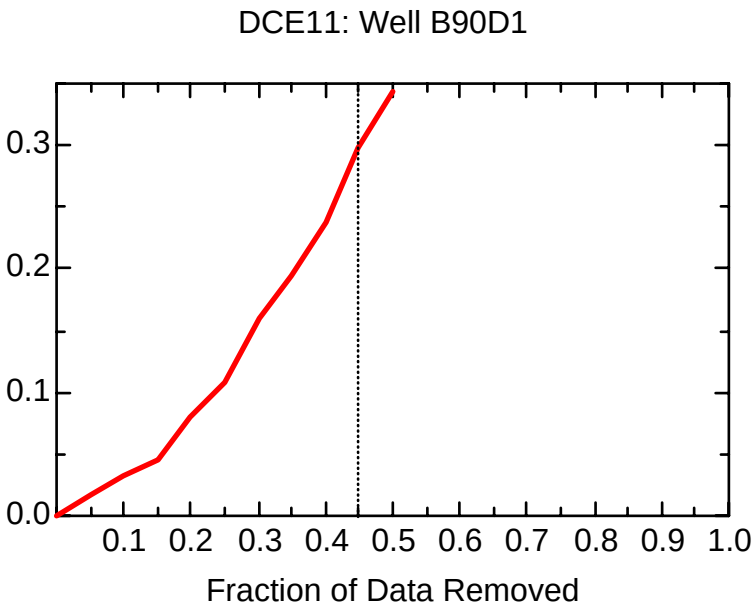
Fraction of Data Removed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0.2
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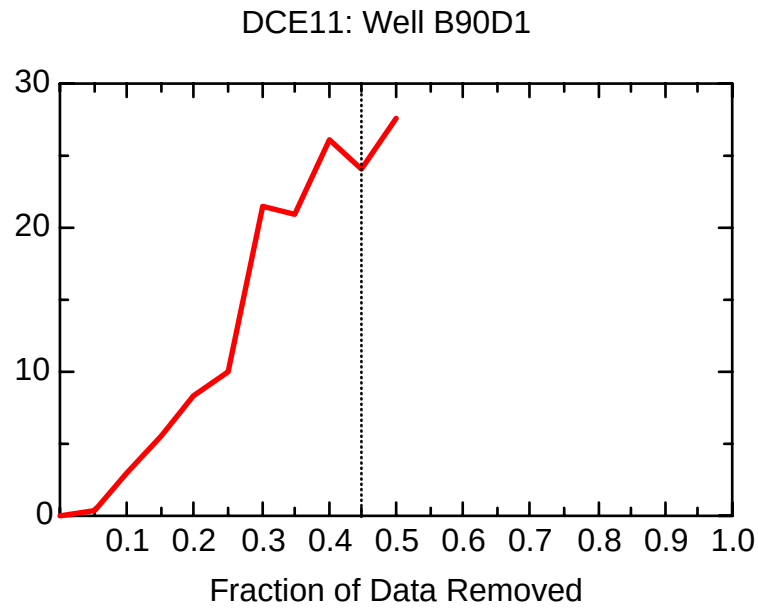
Fraction of Data Removed


DCE11: Well B90D1
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10
20
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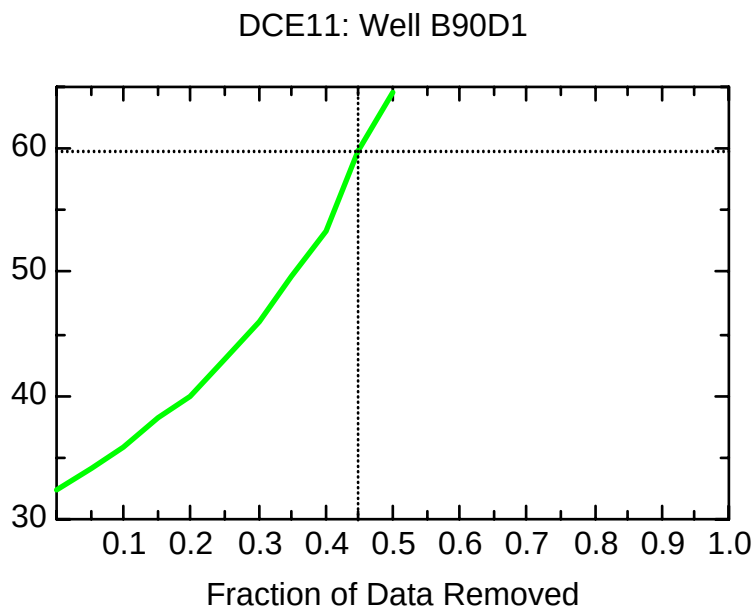
Fraction of Data Removed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50
60
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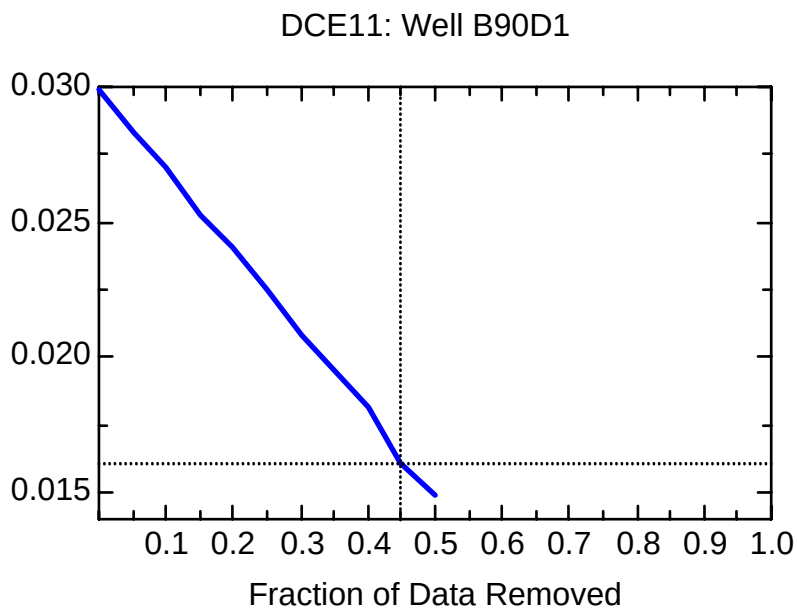
Fraction of Data Removed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0.020
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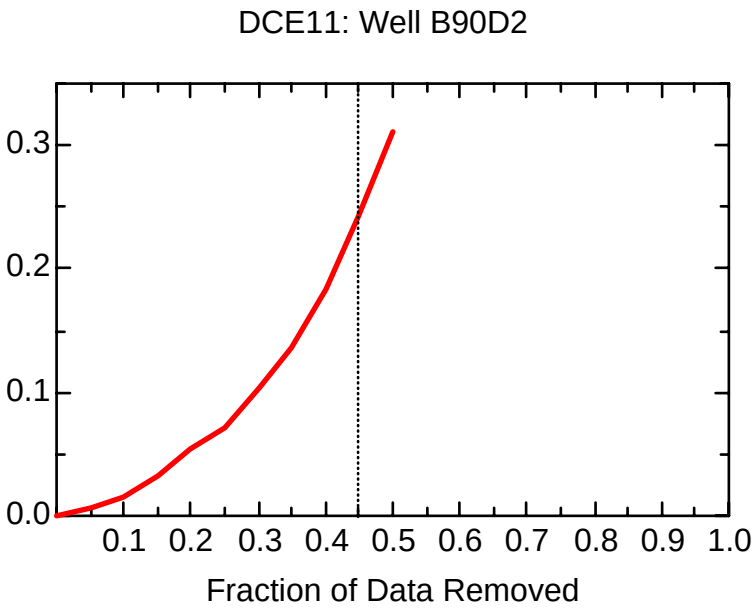
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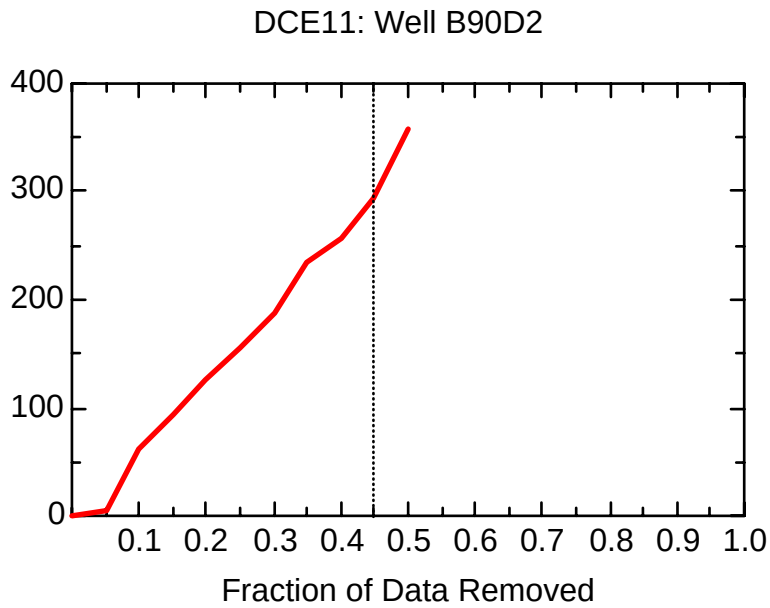
Fraction of Data Removed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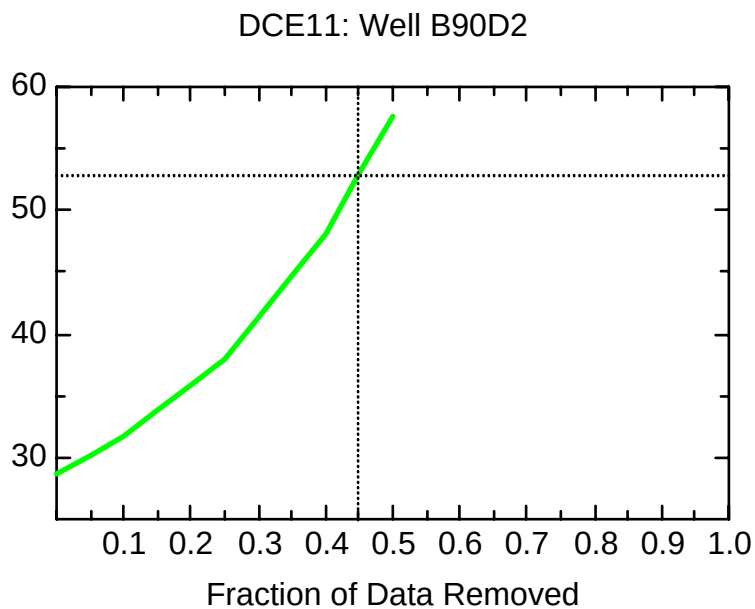
DCE11: Well B90D2
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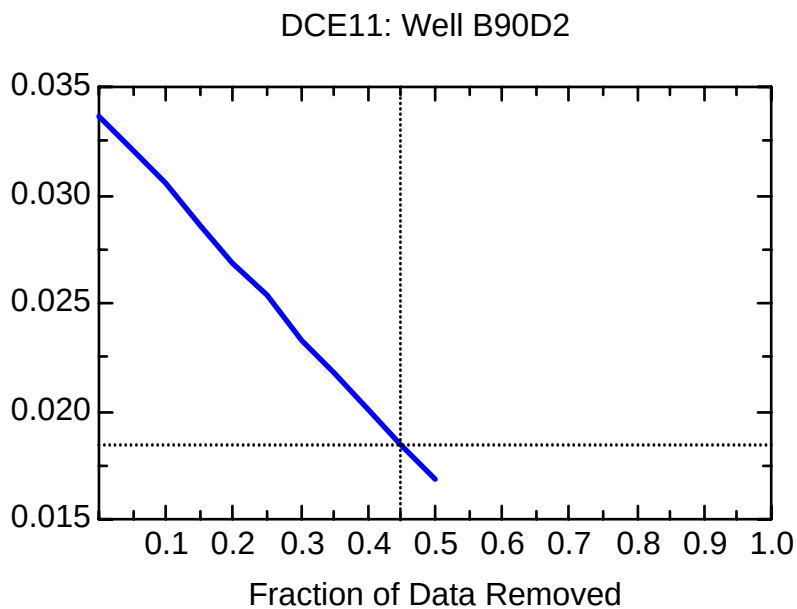
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0.025
0.020
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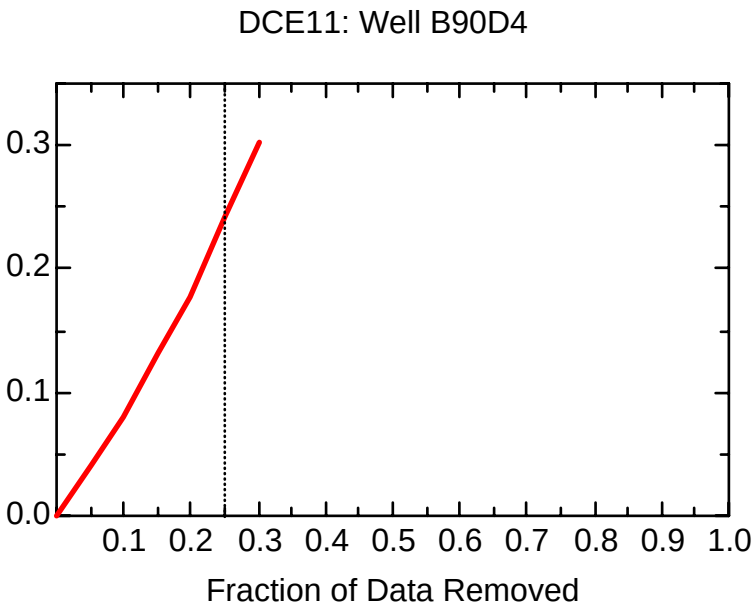
Fraction of Data Removed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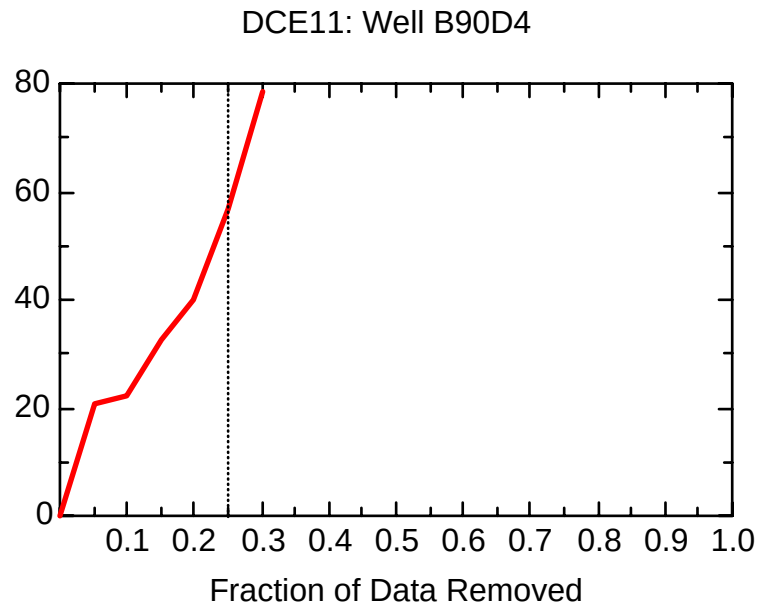
DCE11: Well B90D4
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0
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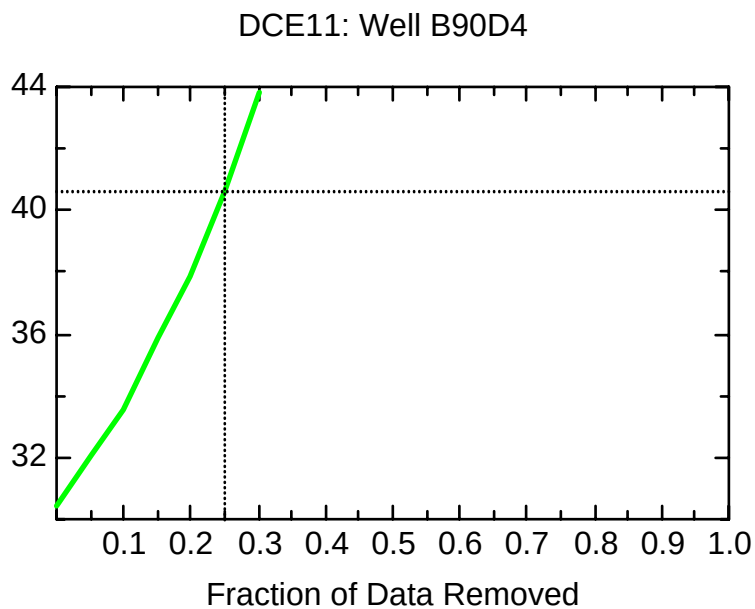
Fraction of Data Removed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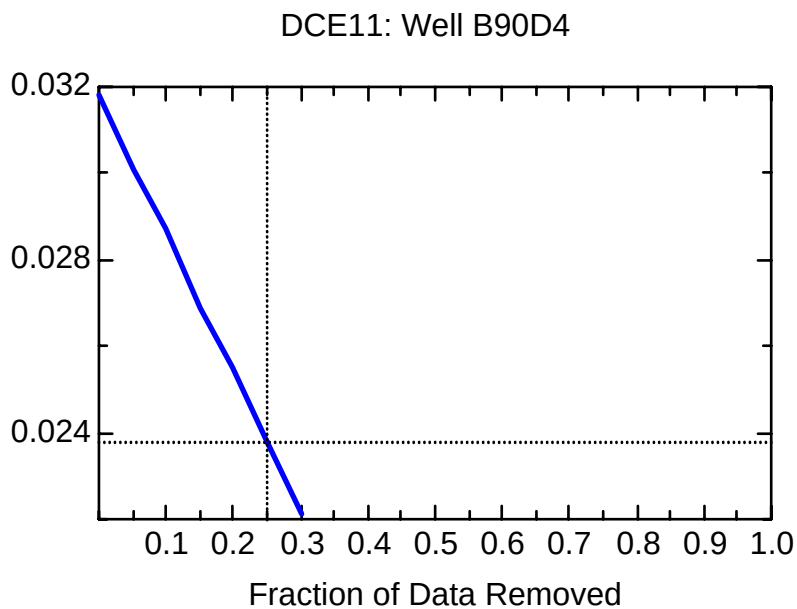
DCE11: Well B90D4
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0.028
0.024
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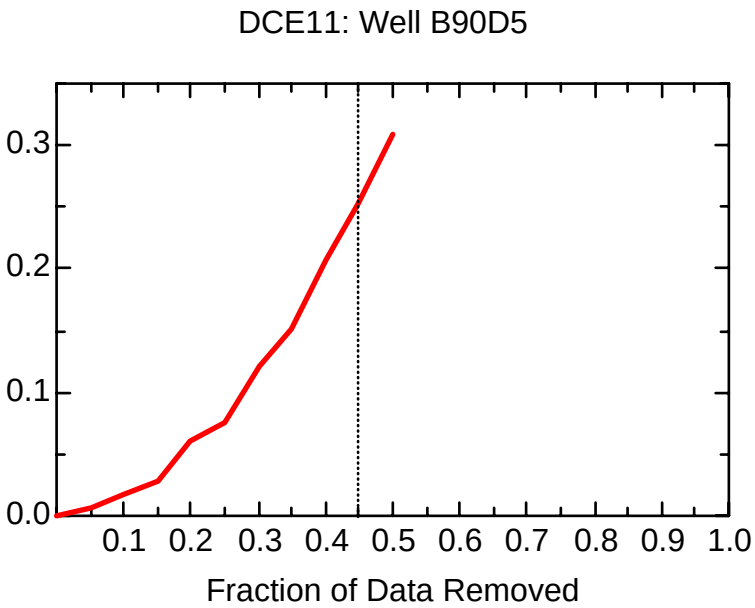
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0.1
0.0
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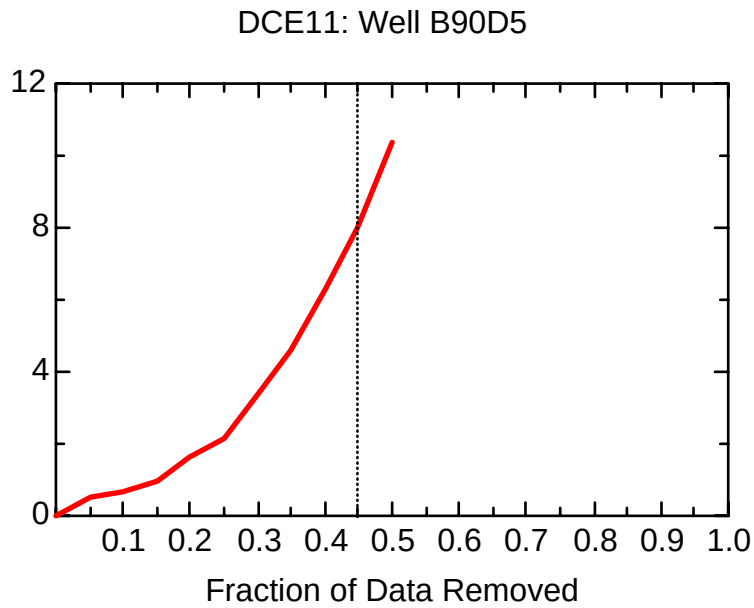
Fraction of Data Removed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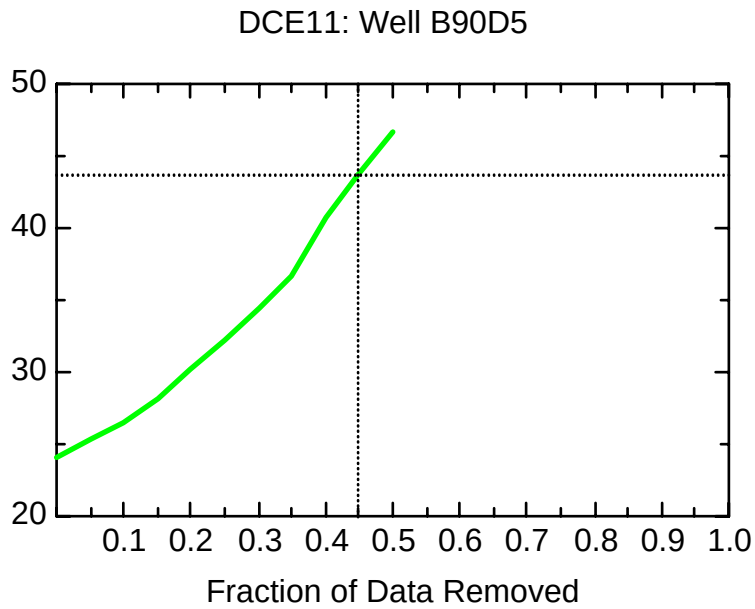
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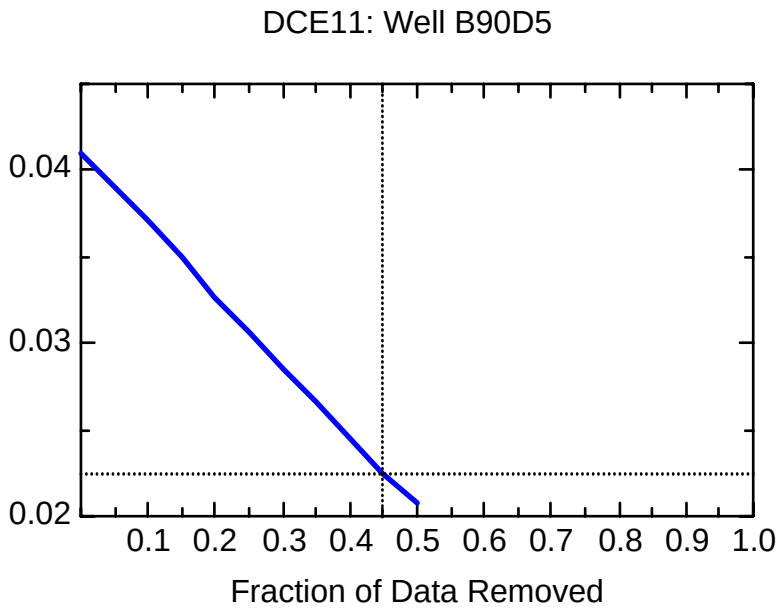
Fraction of Data Removed


DCE11: Well B90D5
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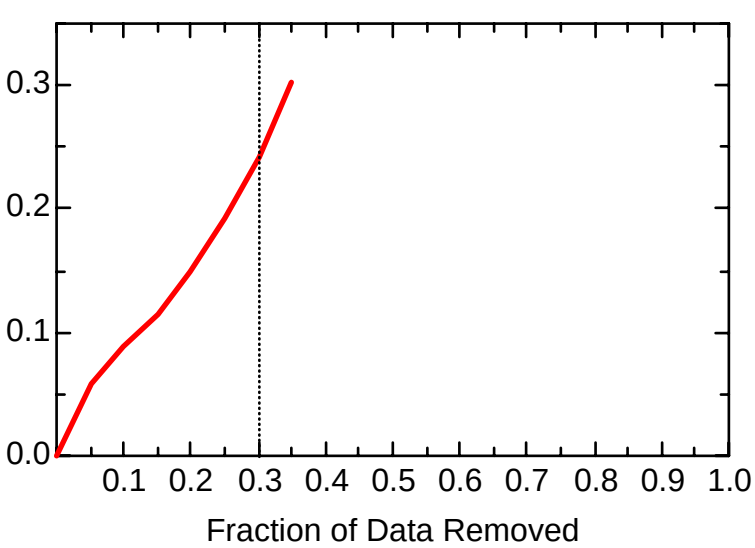
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0.3
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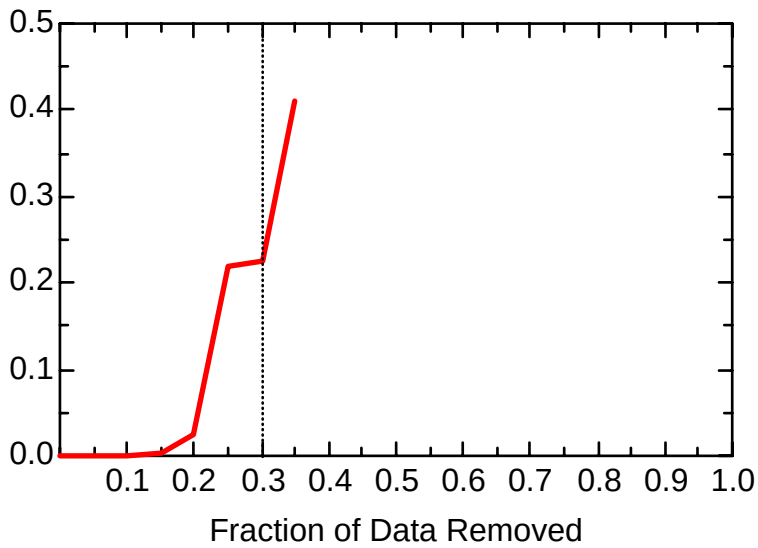
DCE11: Well B90D6
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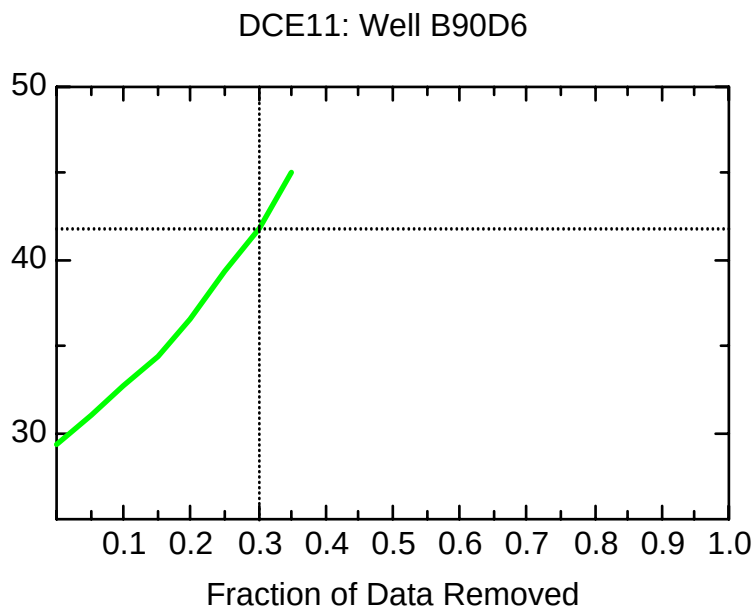
0.3
0.4
0.5
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B90D6
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40
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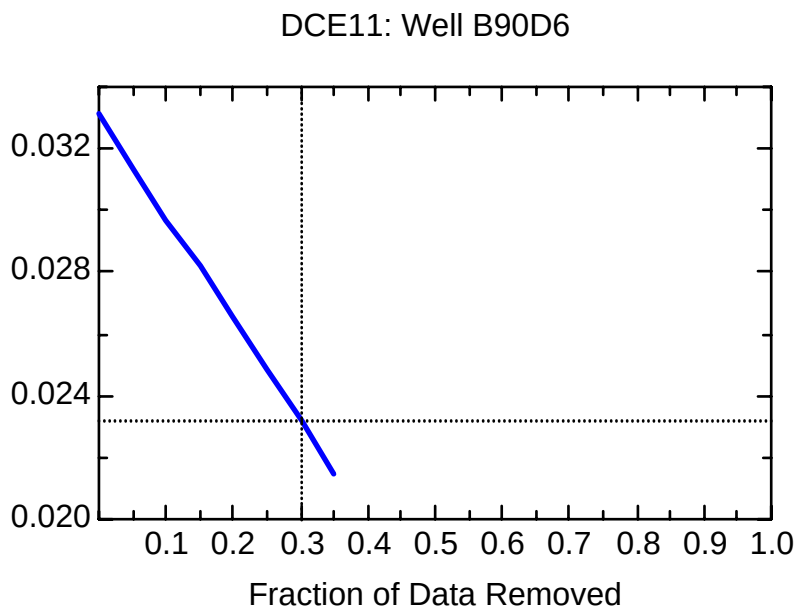
Fraction of Data Removed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0.028
0.032
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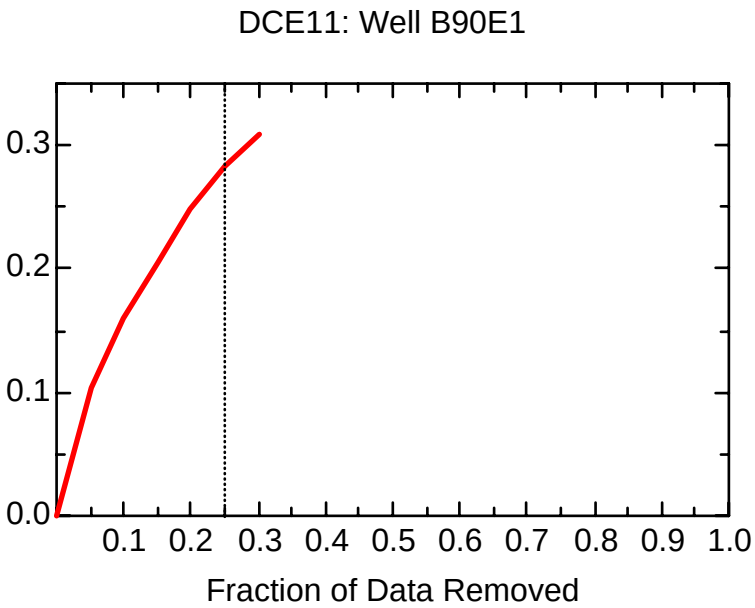
Fraction of Data Removed


DCE11: Well B90E1
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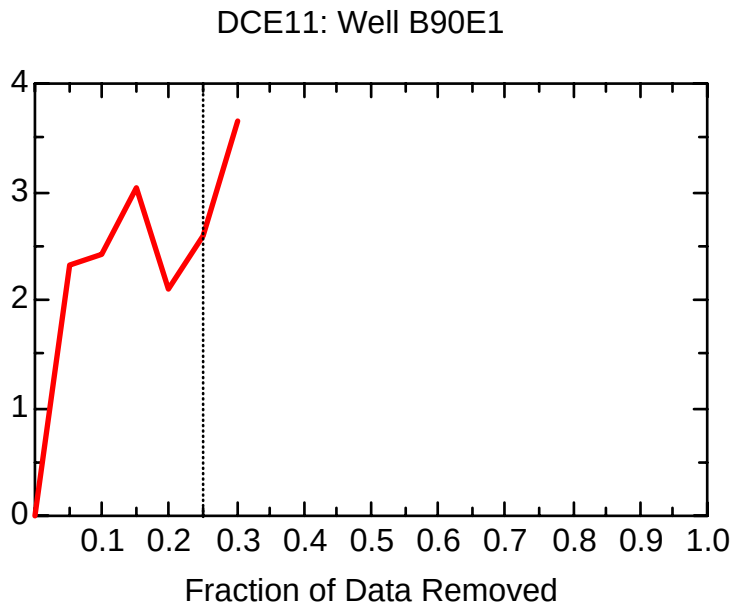
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B90E1
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2
1
0
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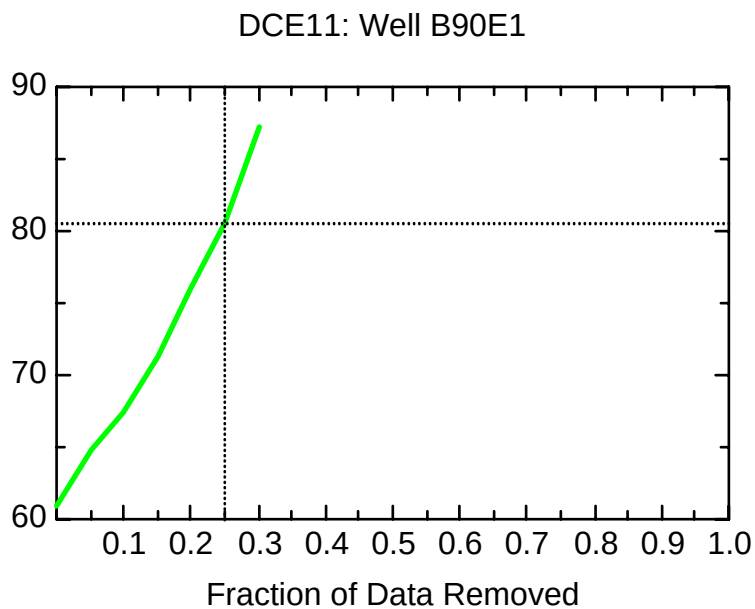
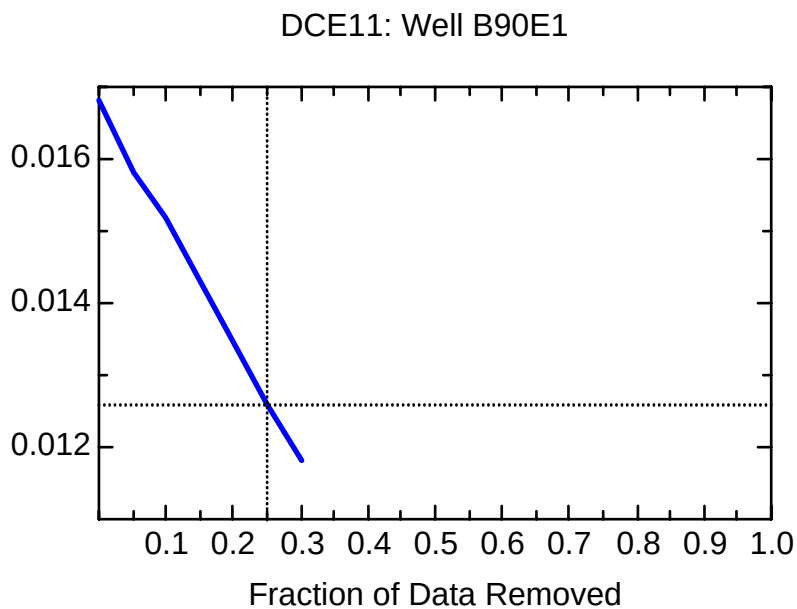
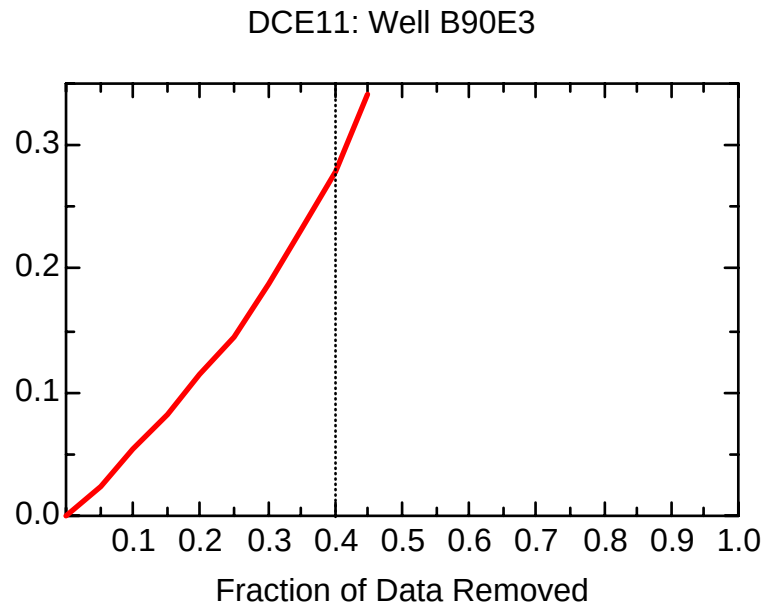
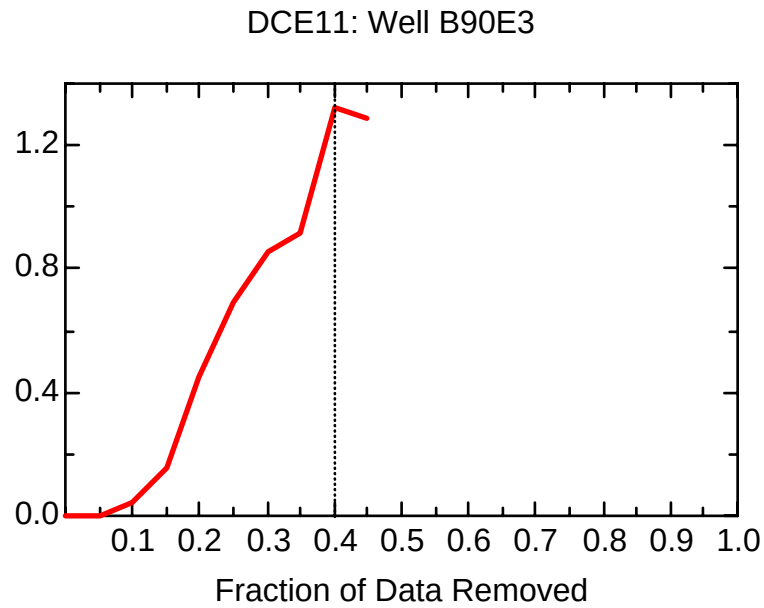
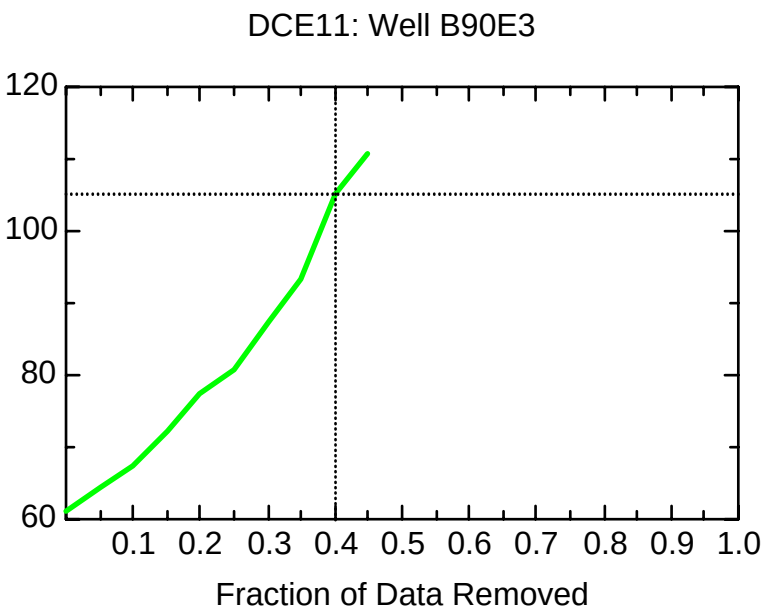
Fraction of Data Removed

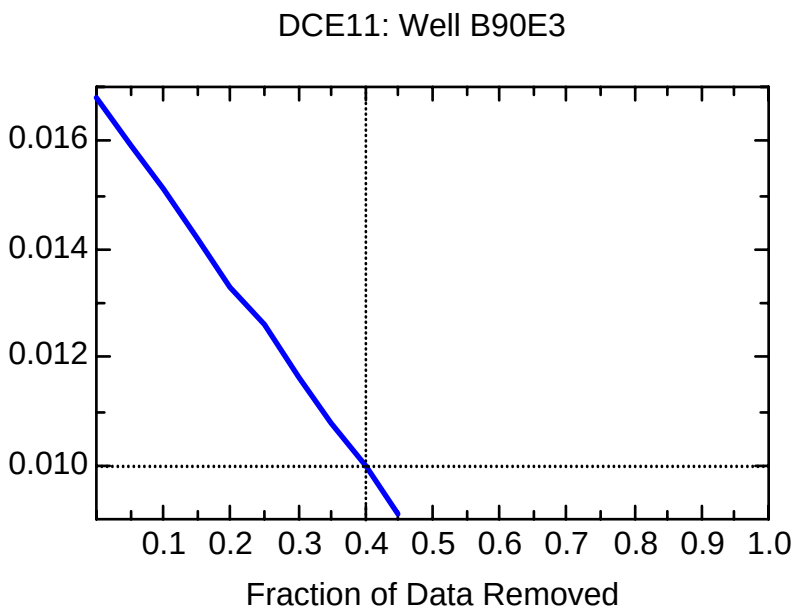

DCE11: Well B90E1
90
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

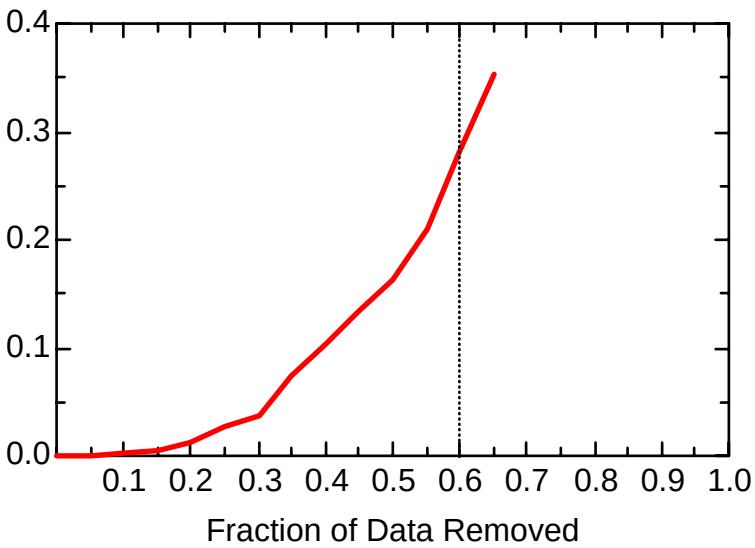

DCE11: Well B90E1
0.016
0.014
0.012
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

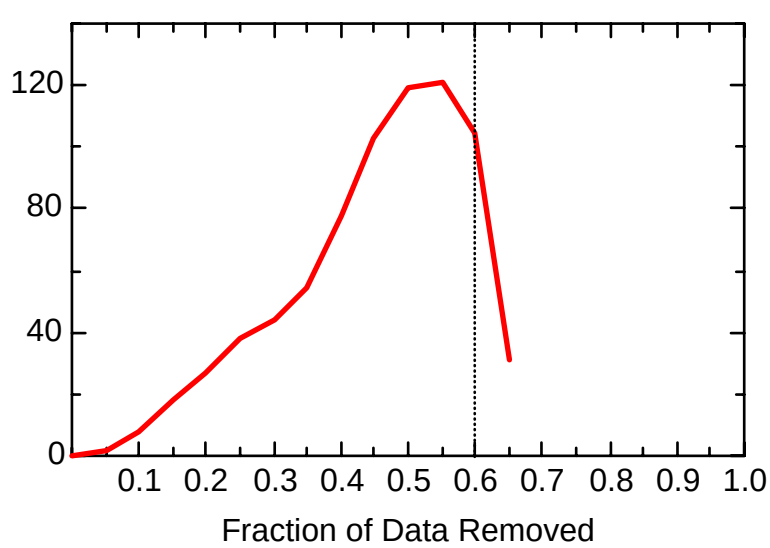

DCE11: Well B90E3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

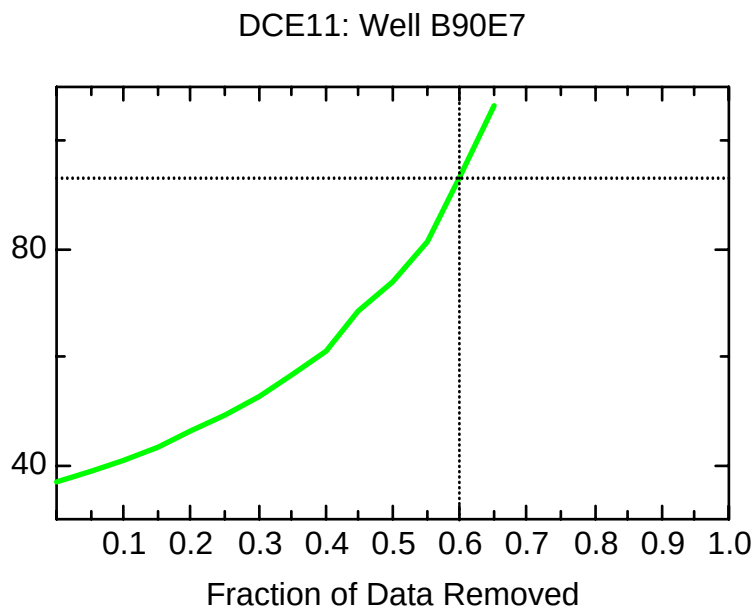

DCE11: Well B90E3
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

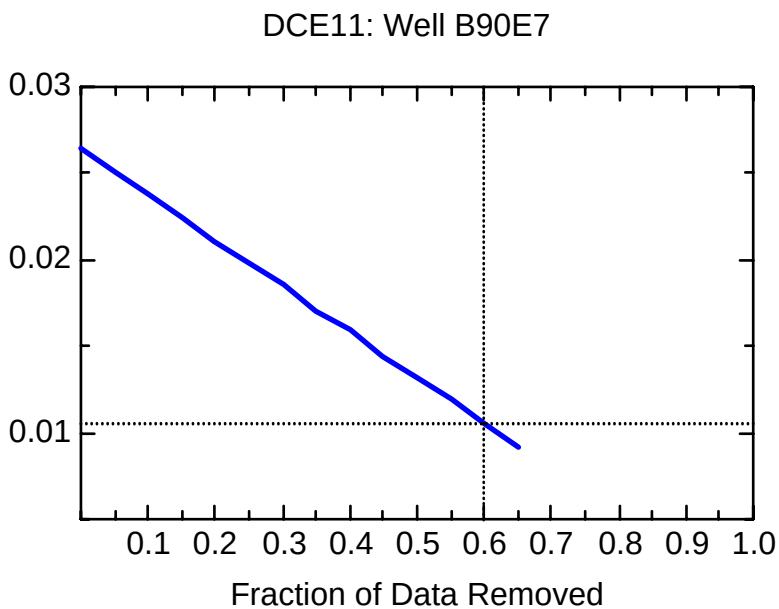

DCE11: Well B90E3
120
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

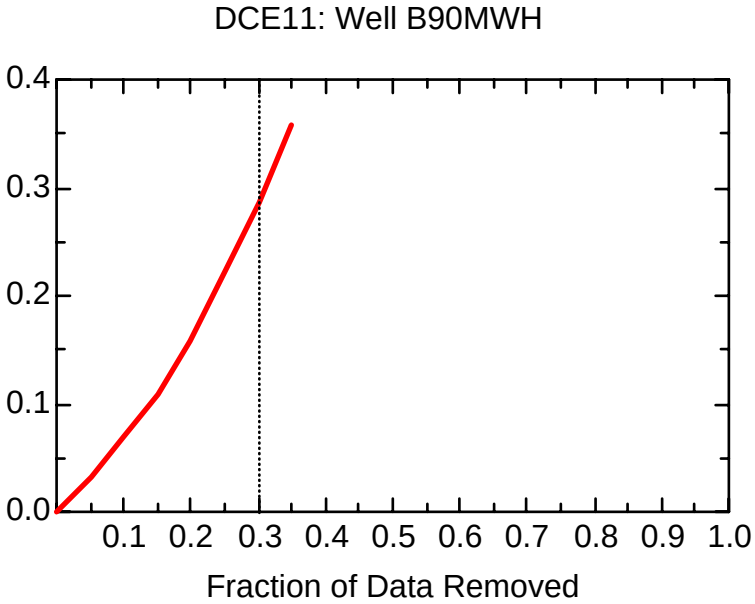

DCE11: Well B90E3
0.016
0.014
0.012
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

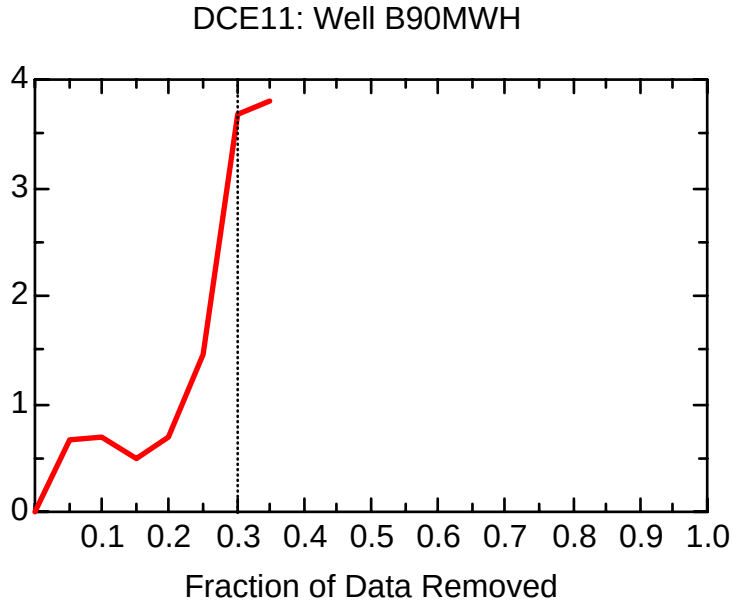

DCE11: Well B90E7
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

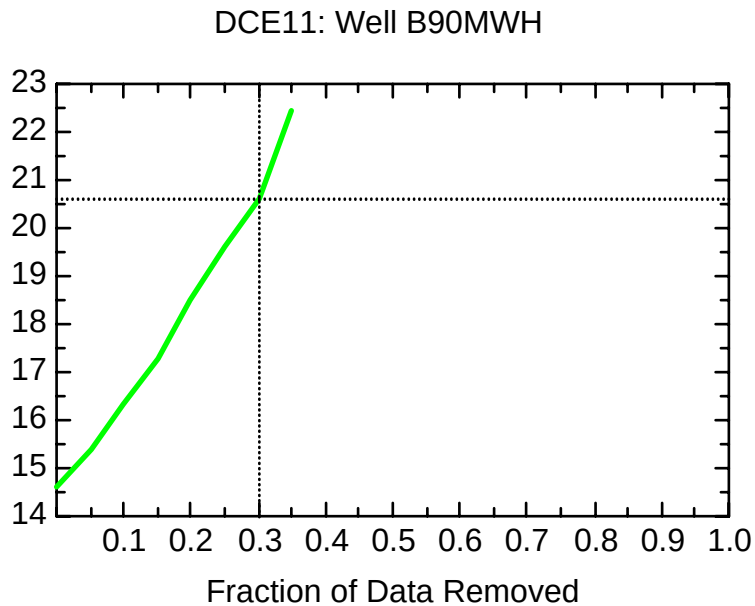

DCE11: Well B90E7
120
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

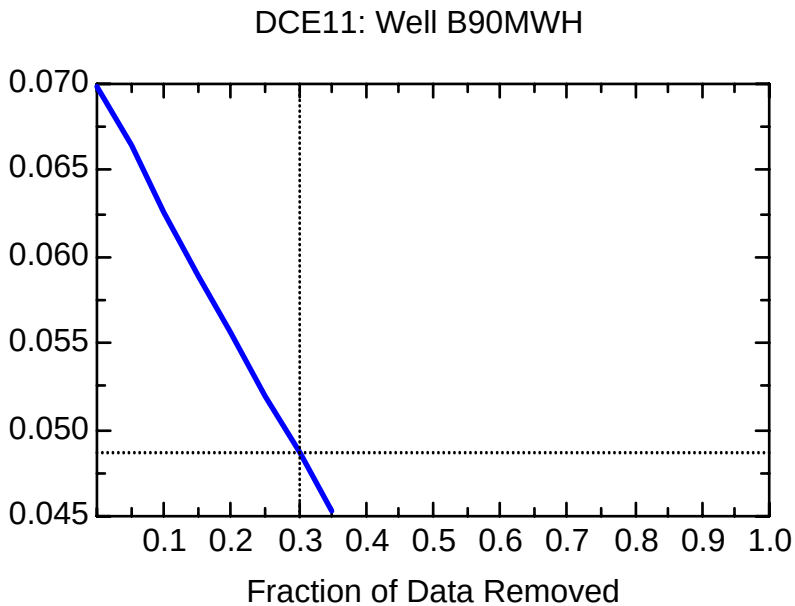

DCE11: Well B90E7
80
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

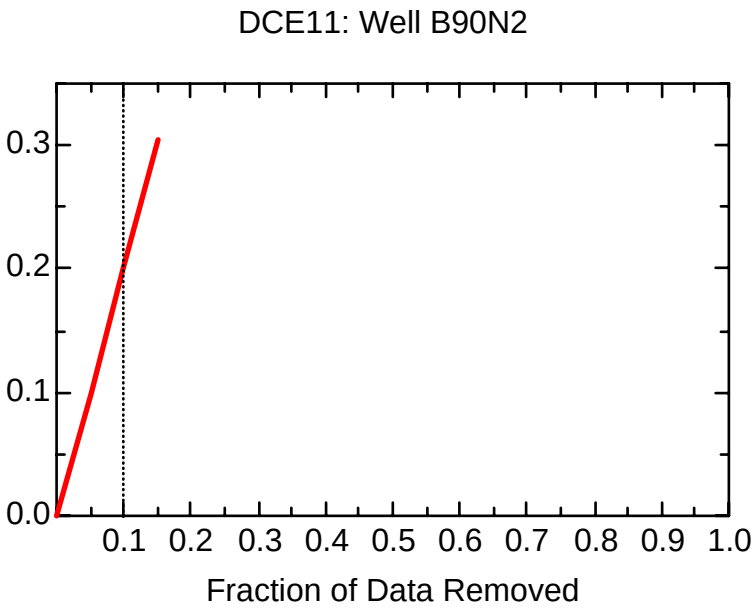

DCE11: Well B90E7
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

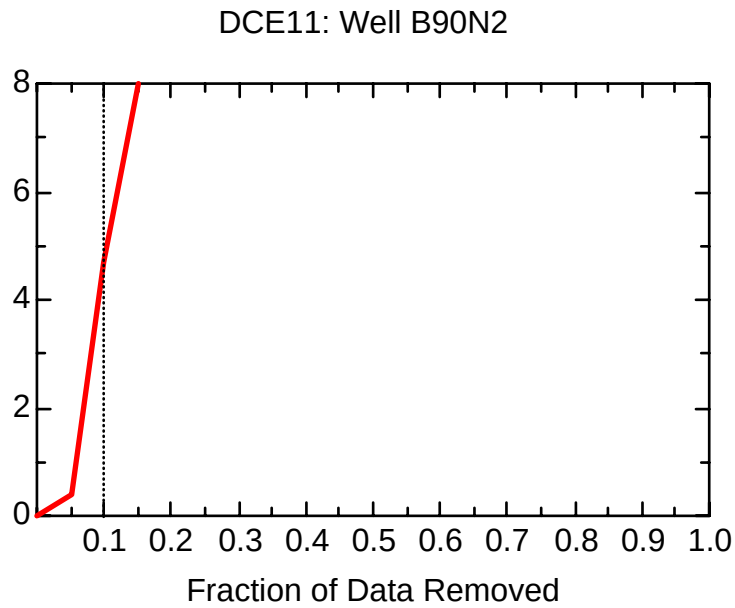

DCE11: Well B90MWH
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

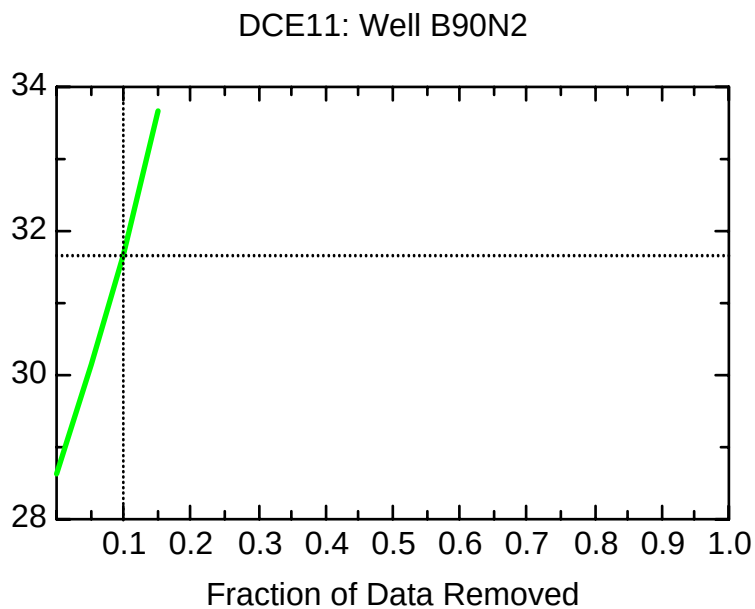

DCE11: Well B90MWH
4
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

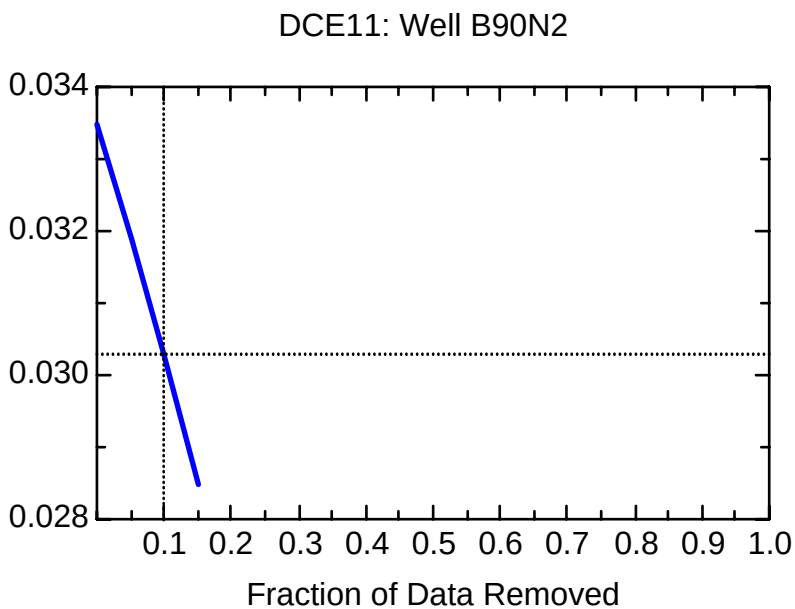

DCE11: Well B90MWH
23
22
21
20
19
18
17
16
15
14
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

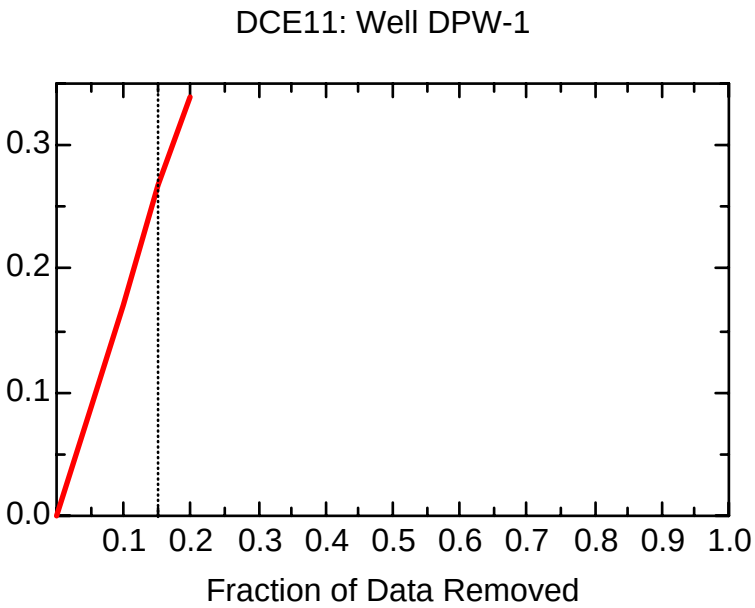

DCE11: Well B90MWH
0.070
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

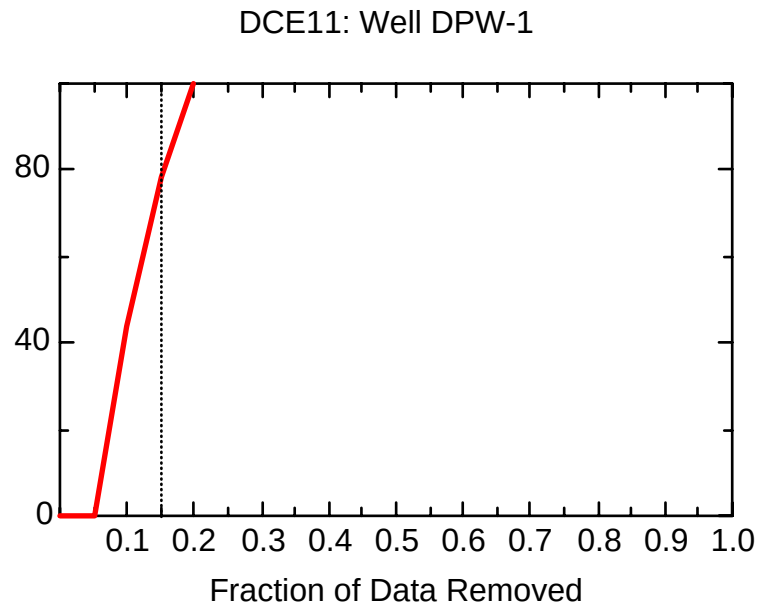

DCE11: Well B90N2
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

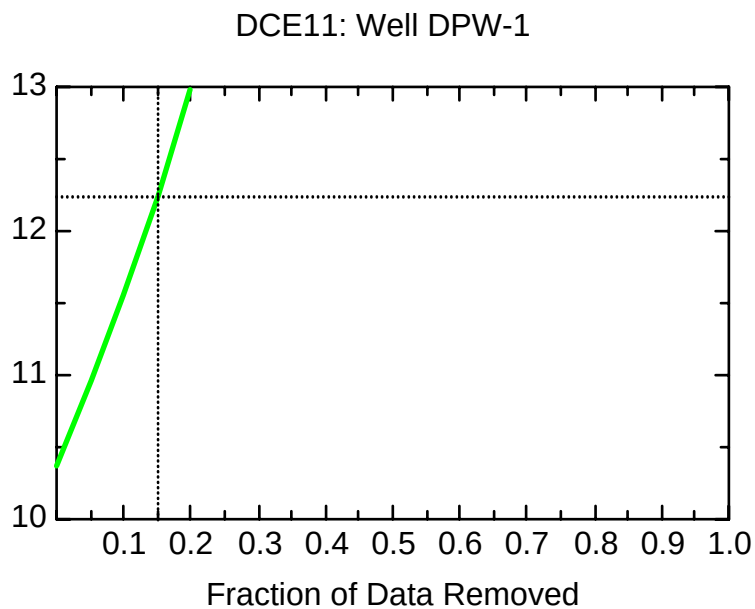

DCE11: Well B90N2
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

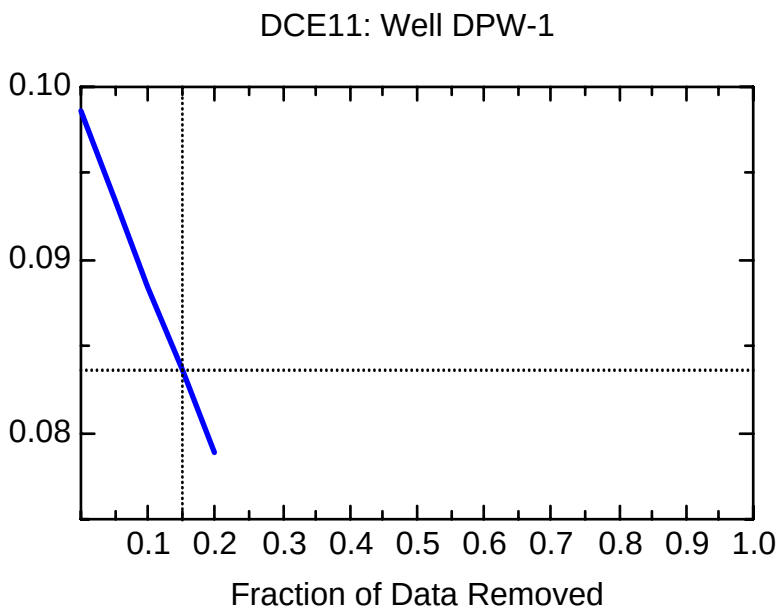

DCE11: Well B90N2
34
32
30
28
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well B90N2
0.034
0.032
0.030
0.028
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

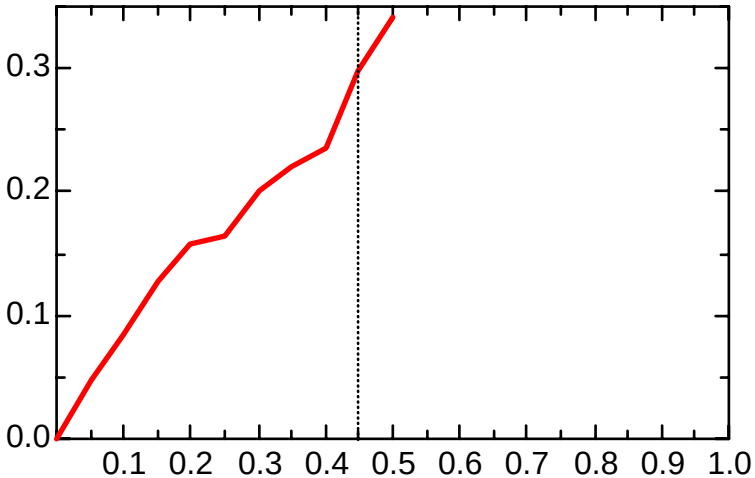

DCE11: Well DPW-1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well DPW-1
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

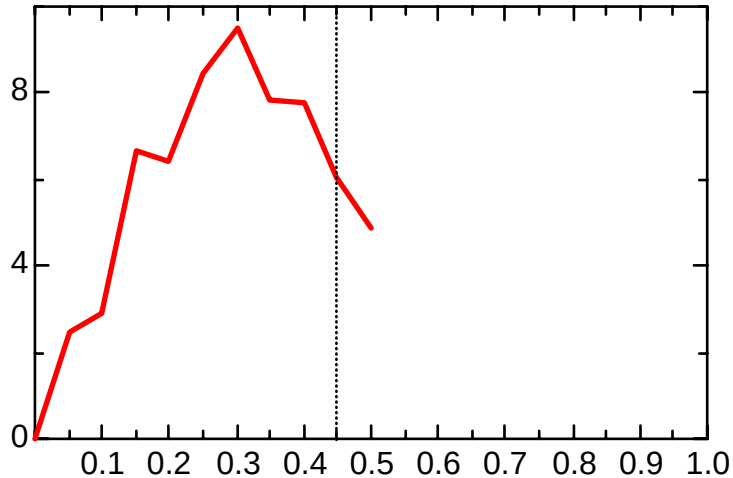

DCE11: Well DPW-1
13
12
11
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well DPW-1
0.10
0.09
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

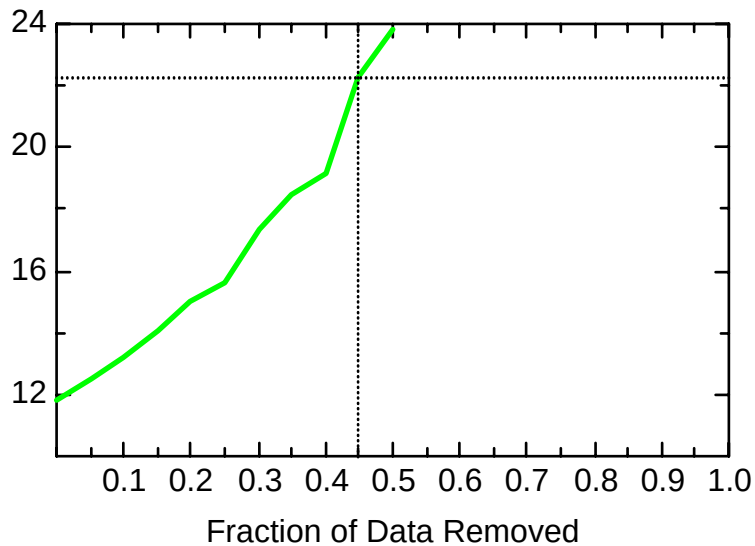
DCE11: Well DPW-2



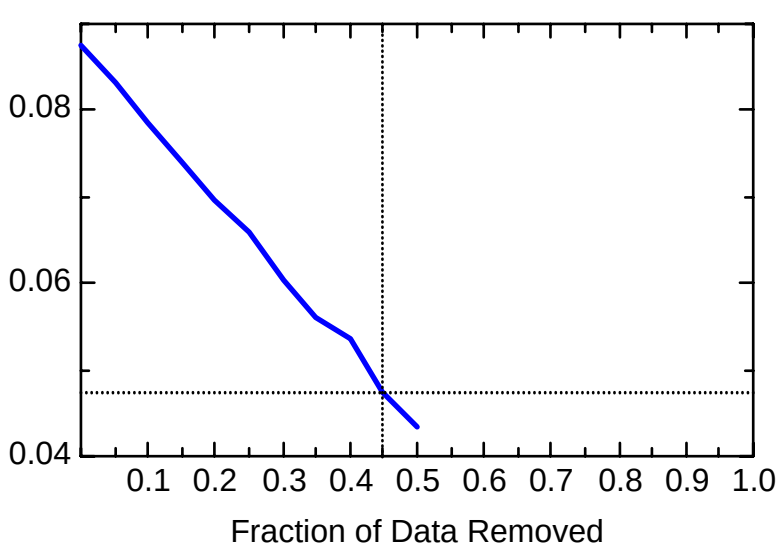
DCE11: Well DPW-2

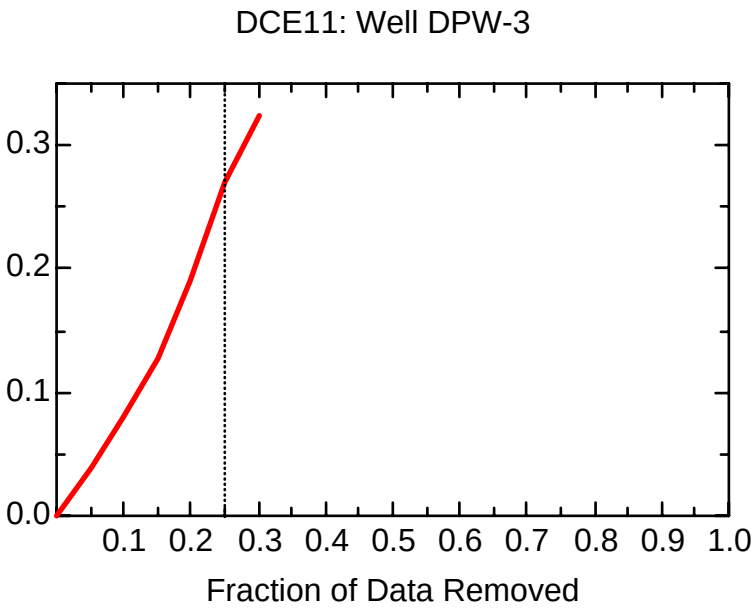


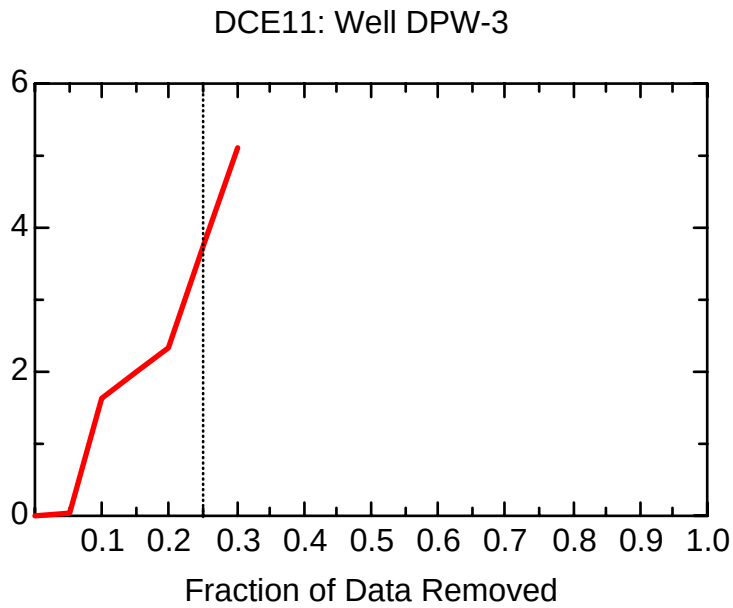
DCE11: Well DPW-2

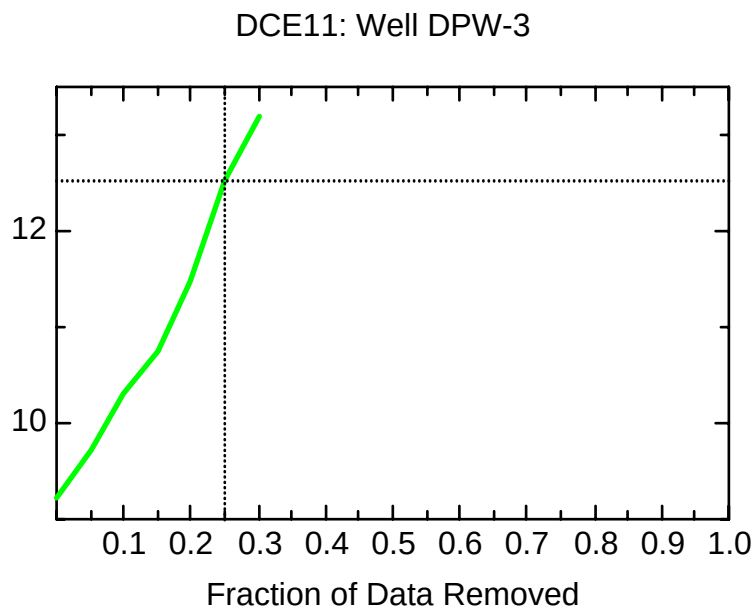


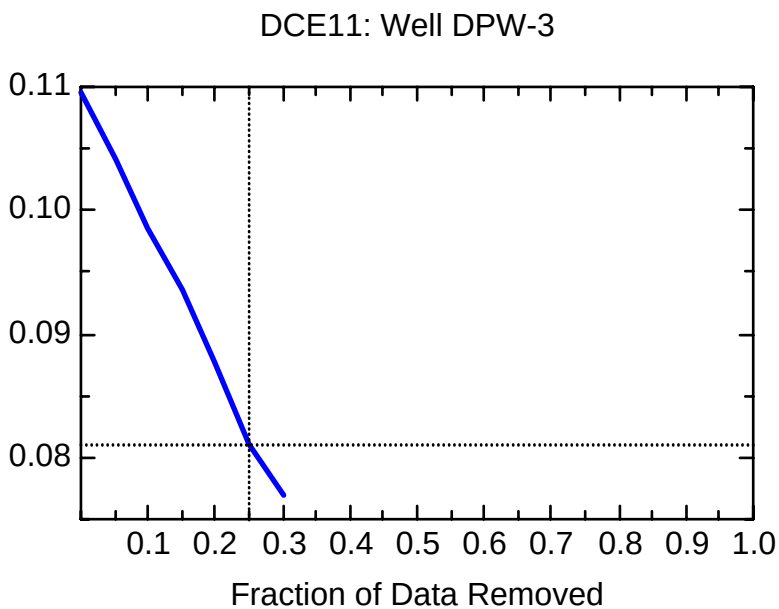
DCE11: Well DPW-2

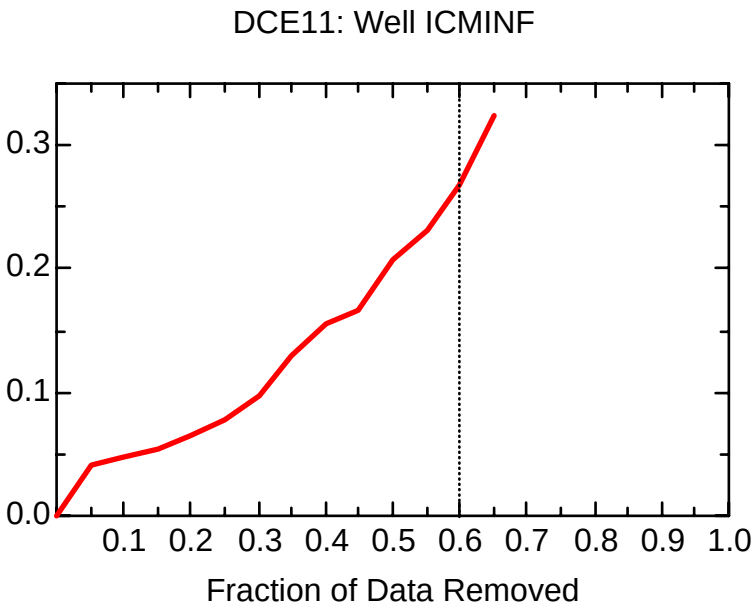


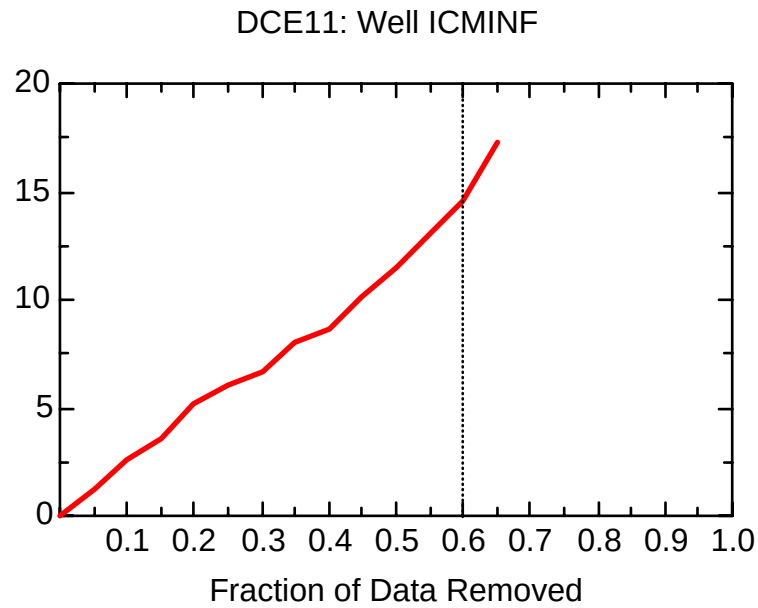

DCE11: Well DPW-3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

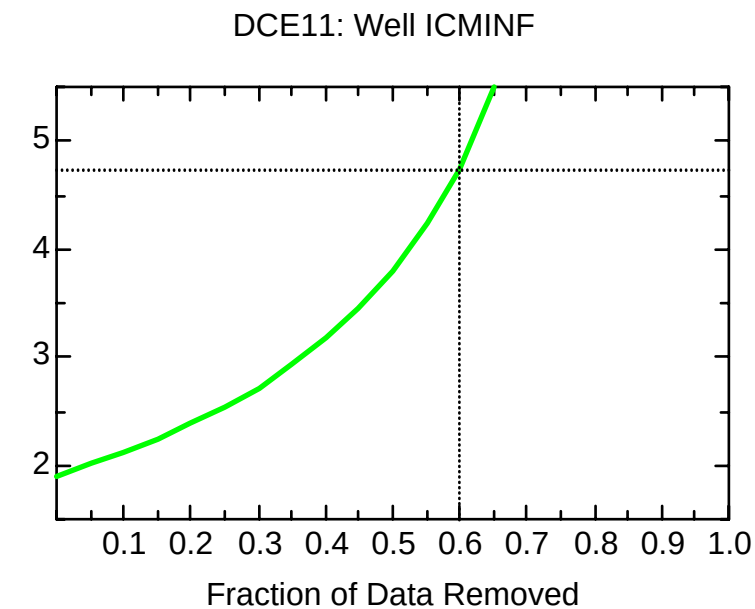

DCE11: Well DPW-3
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

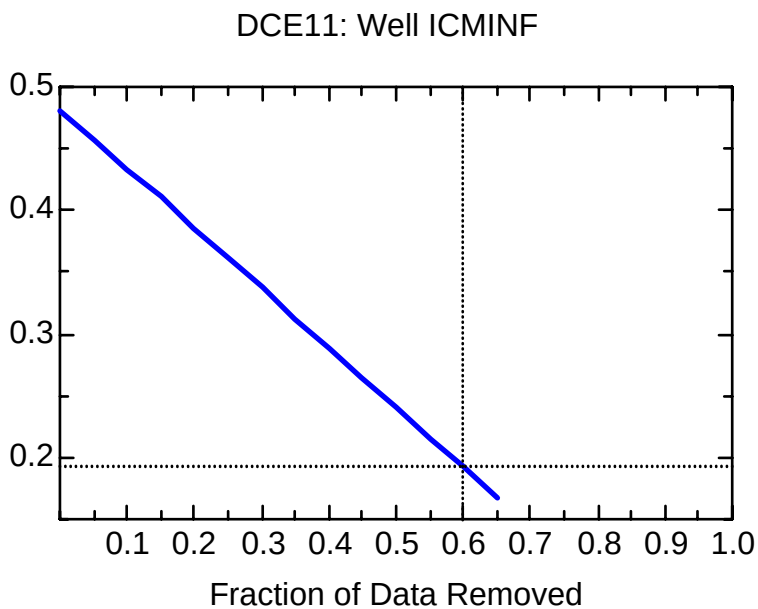

DCE11: Well DPW-3
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

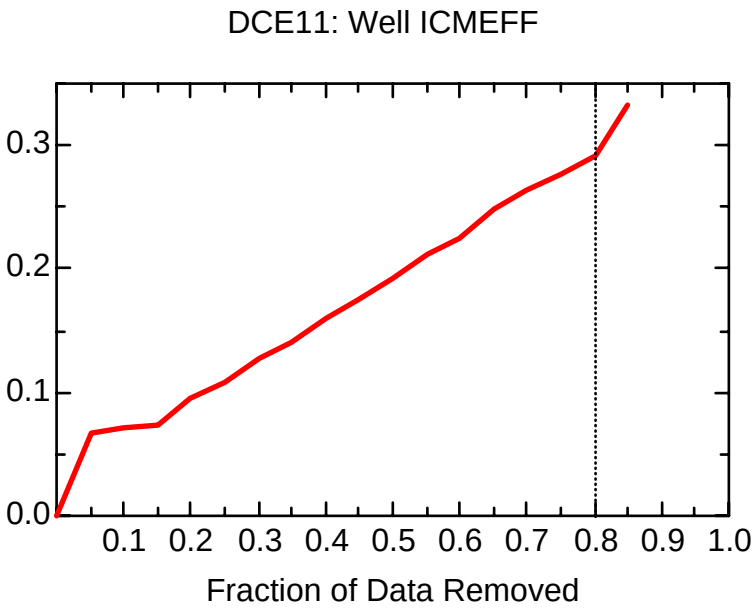

DCE11: Well DPW-3
0.11
0.10
0.09
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

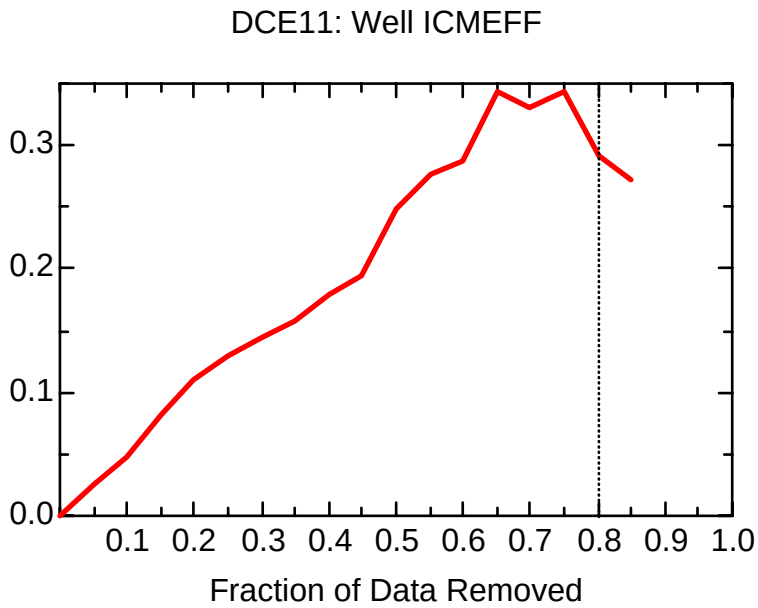

DCE11: Well ICMINF
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

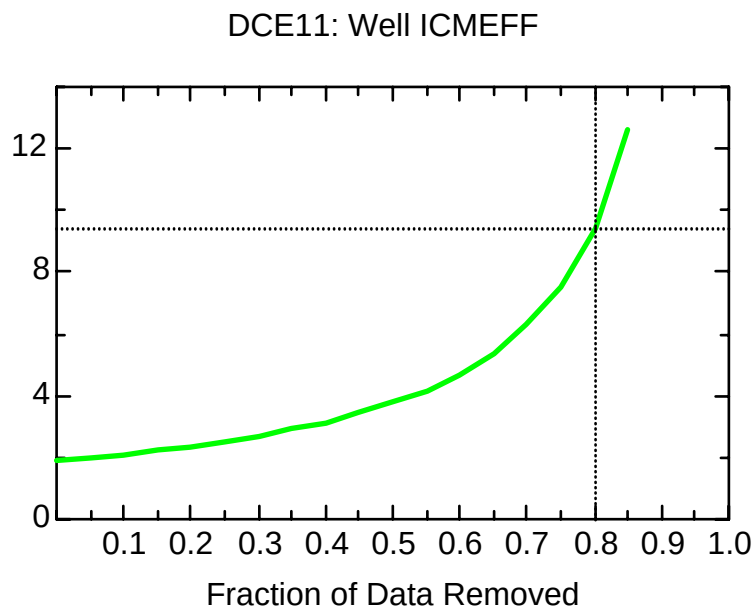

DCE11: Well ICMINF
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

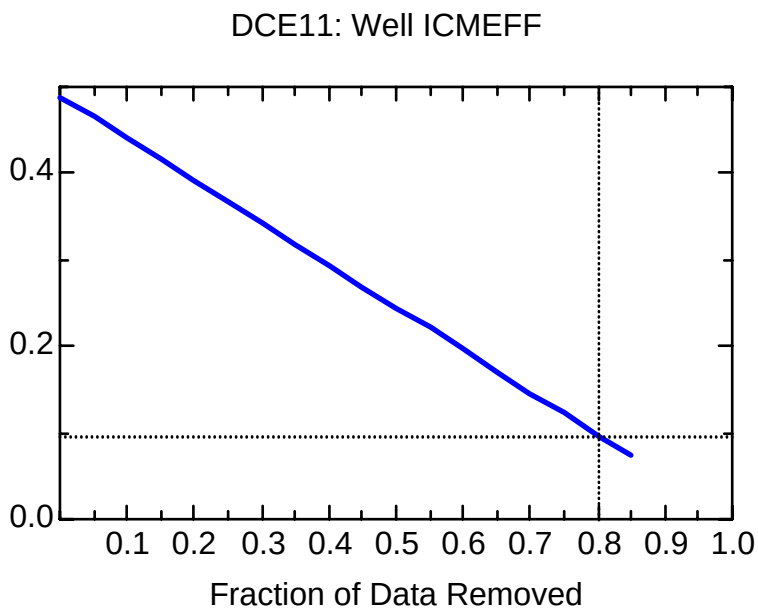

DCE11: Well ICMINF
5
4
3
2
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ICMINF
0.5
0.4
0.3
0.2
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

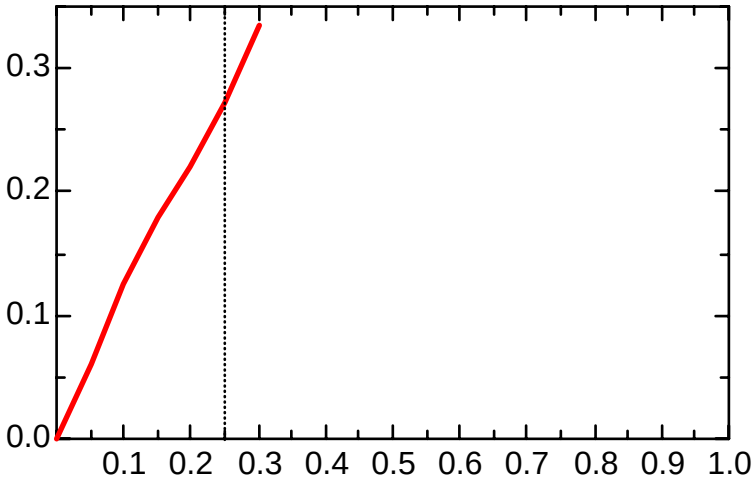

DCE11: Well ICMEFF
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ICMEFF
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

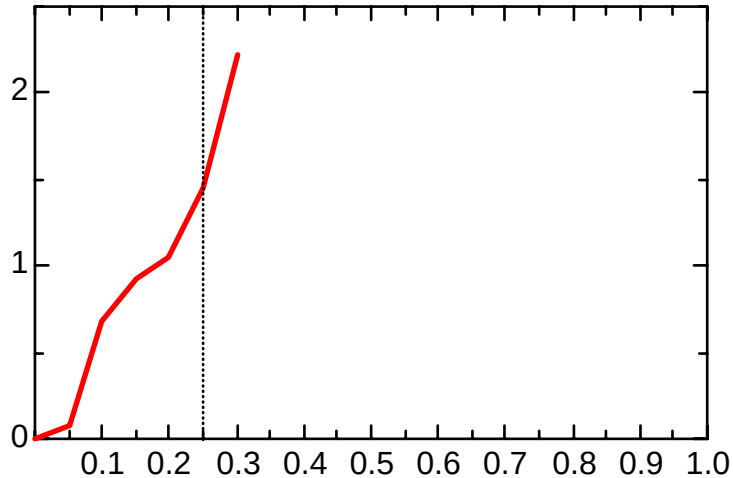

DCE11: Well ICMEFF
0
4
8
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ICMEFF
0.0
0.2
0.4
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

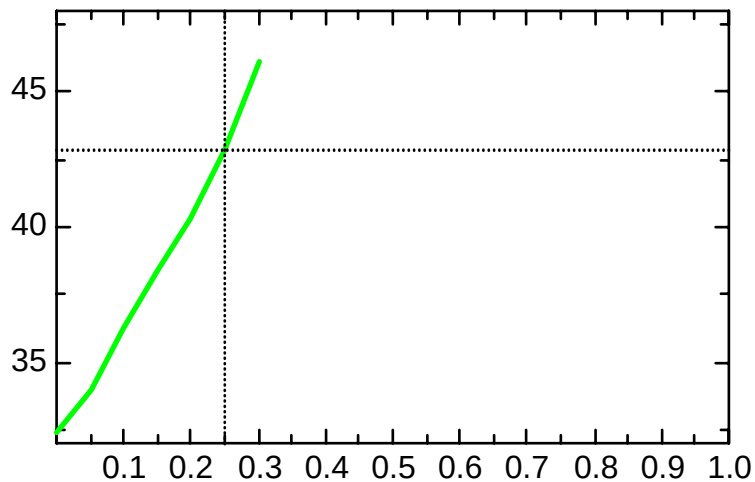
DCE11: Well ITD2



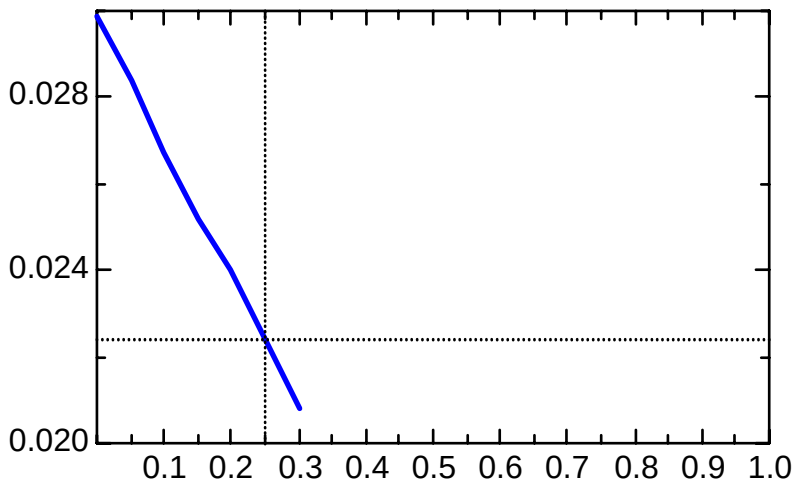
DCE11: Well ITD2

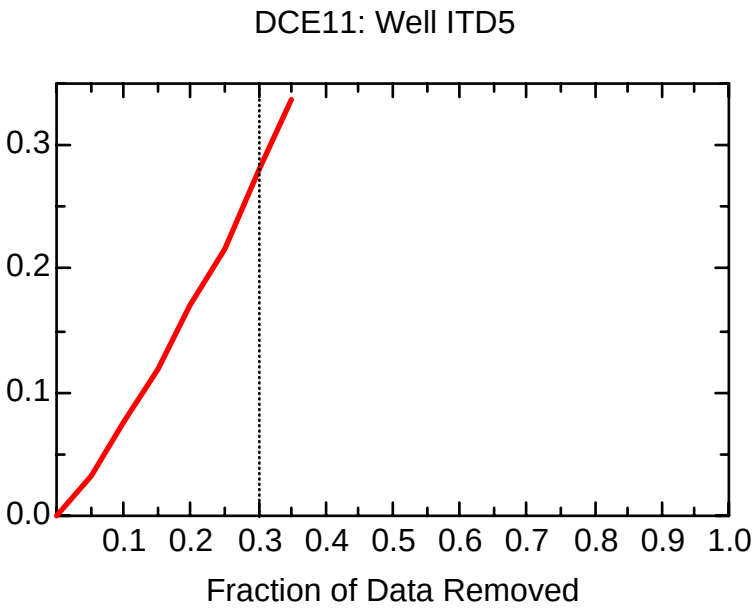


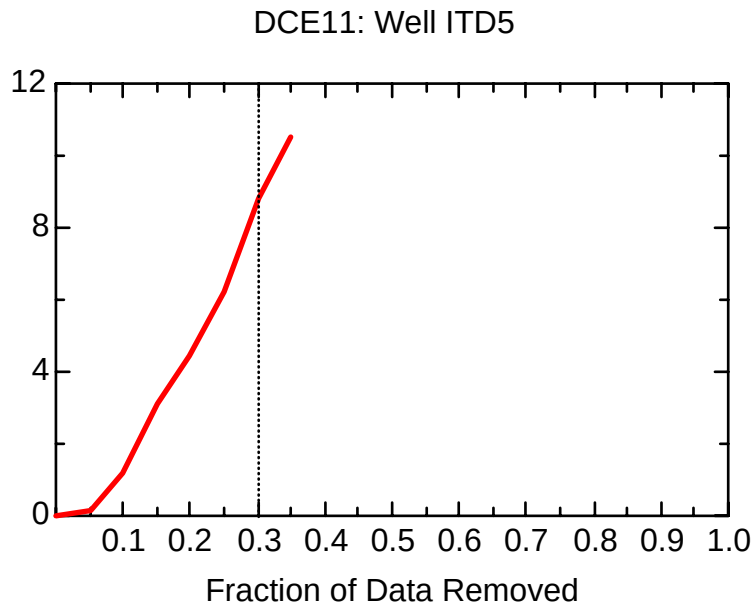
DCE11: Well ITD2

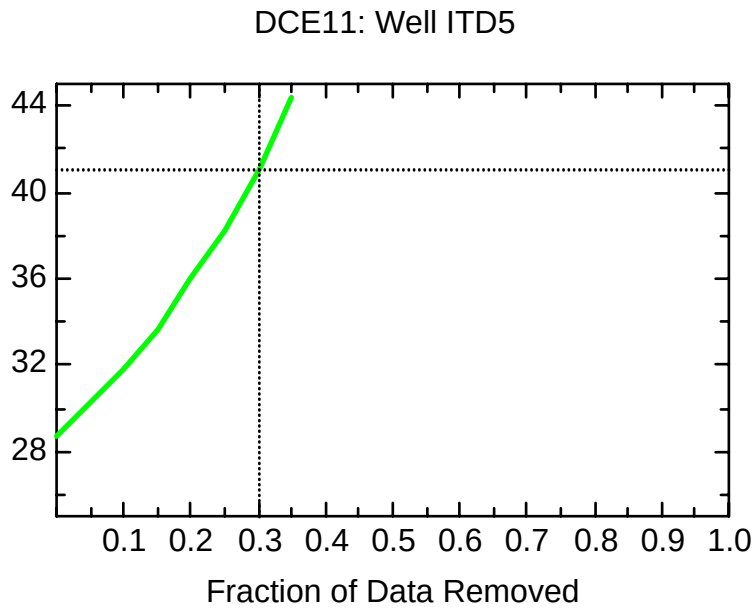


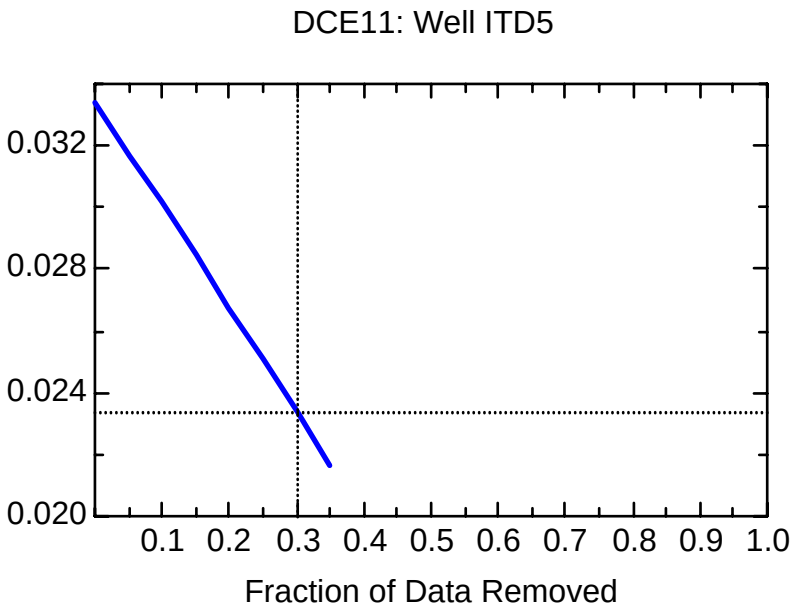
DCE11: Well ITD2



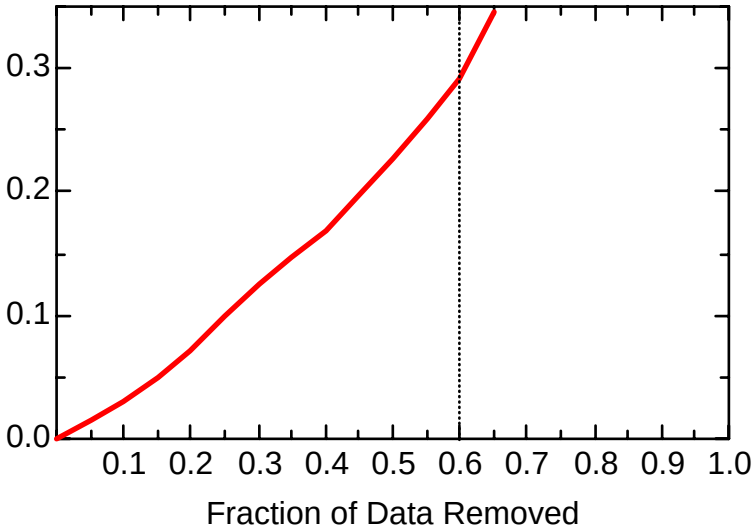

DCE11: Well ITD5
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ITD5
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

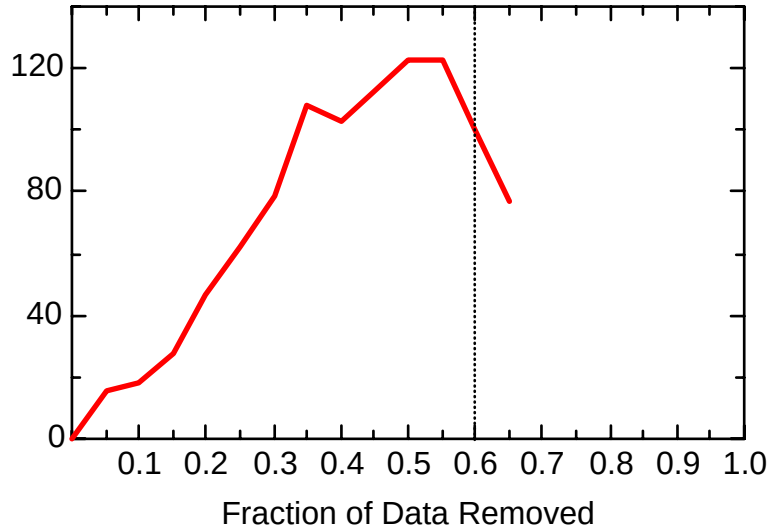

DCE11: Well ITD5
44
40
36
32
28
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ITD5
0.032
0.028
0.024
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

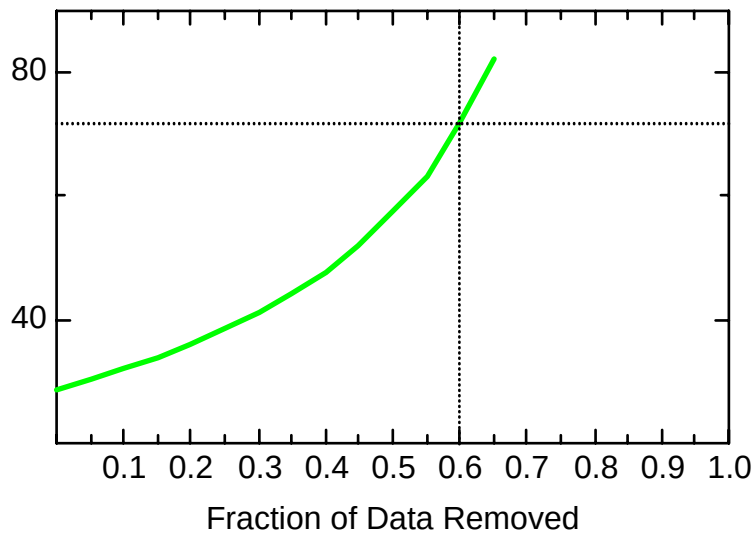
DCE11: Well ITD6



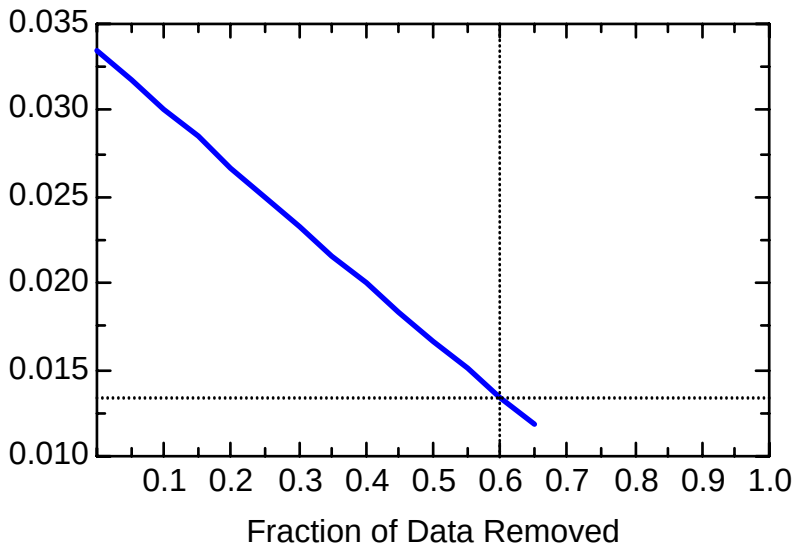
DCE11: Well ITD6

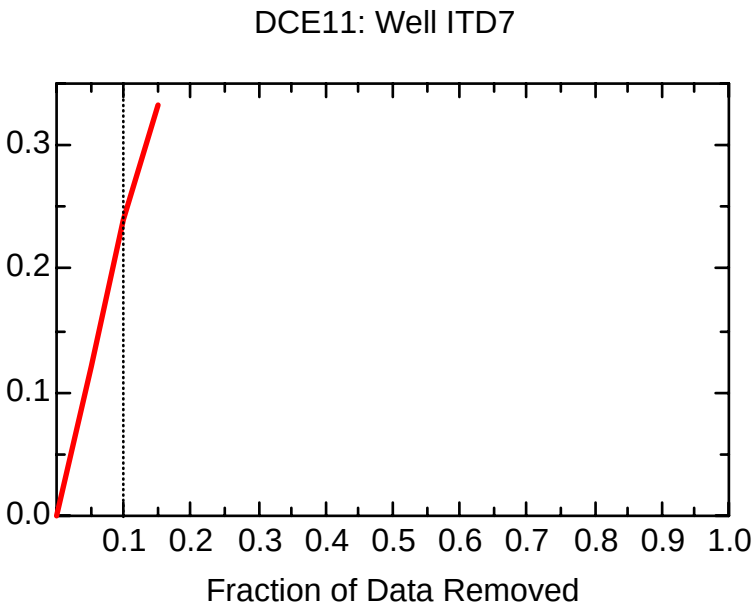


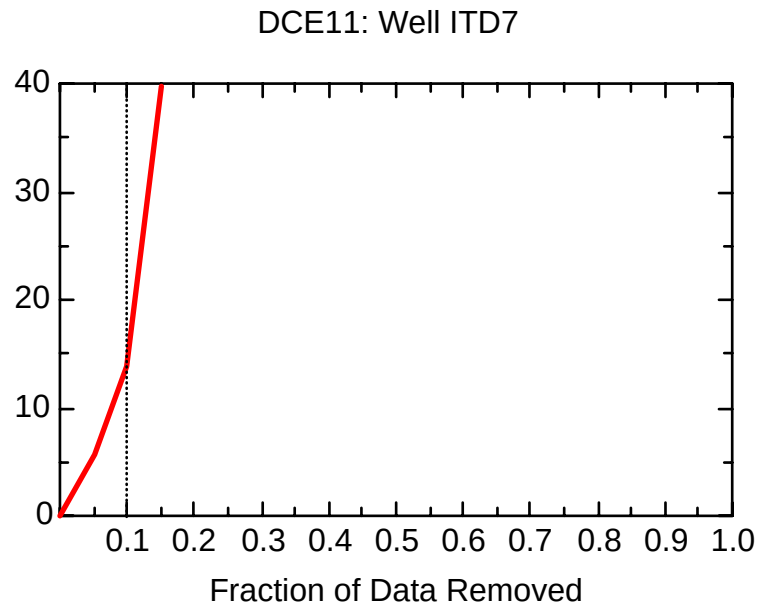
DCE11: Well ITD6

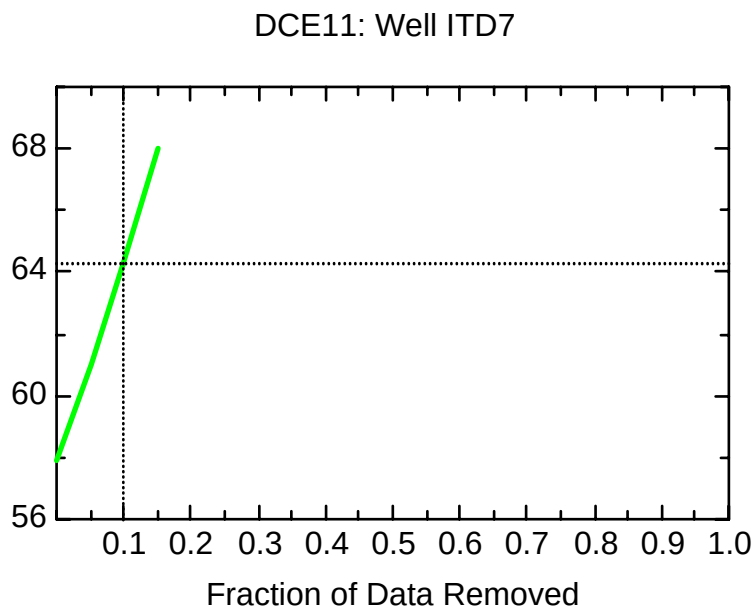


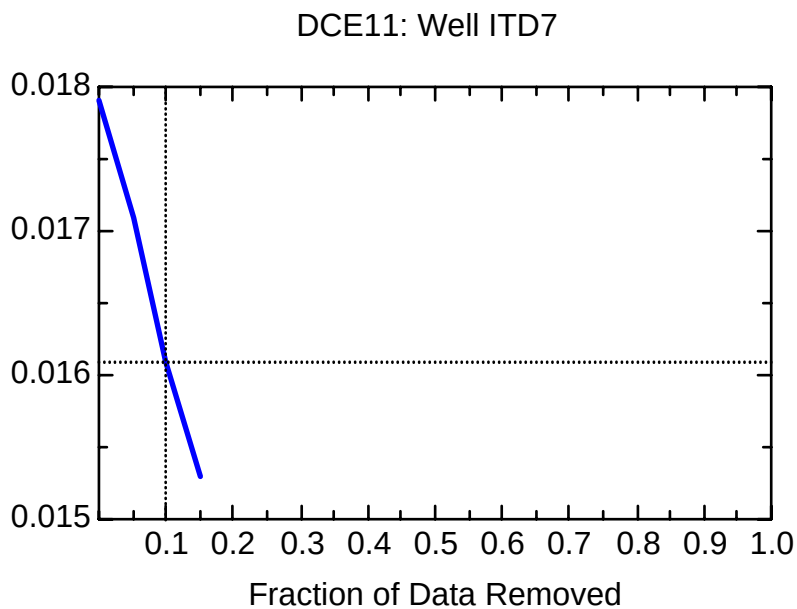
DCE11: Well ITD6

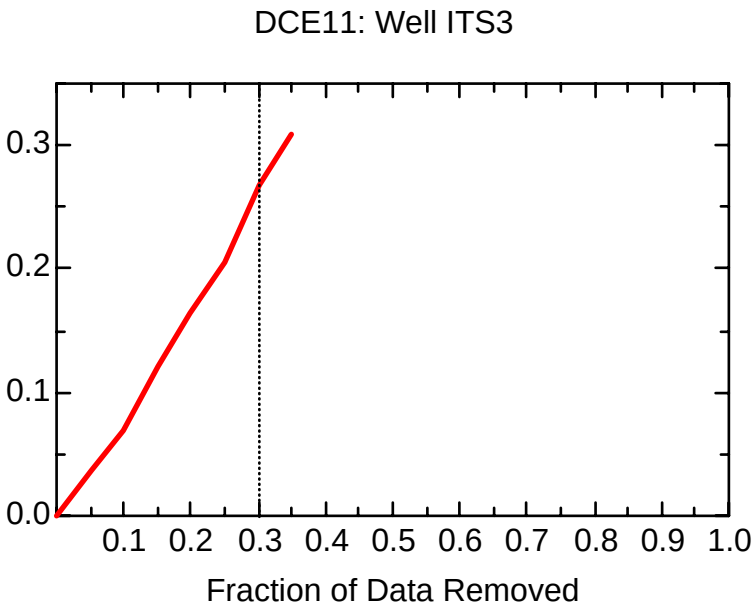


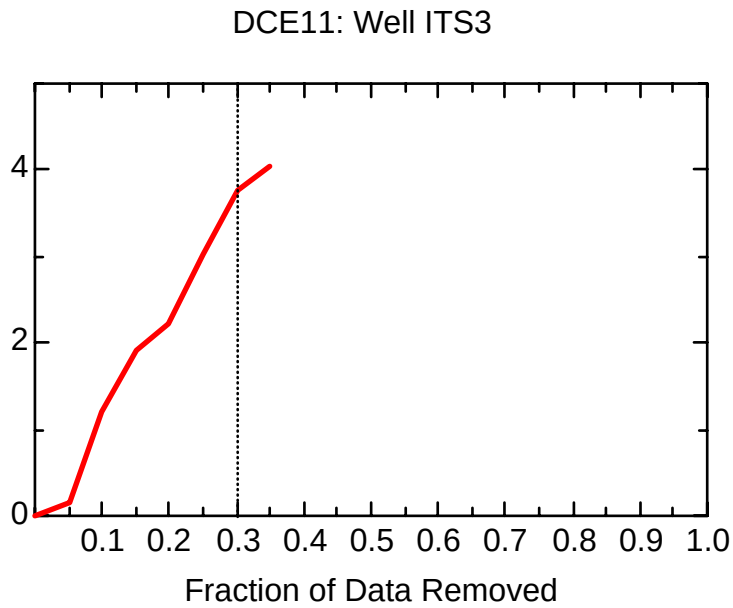

DCE11: Well ITD7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

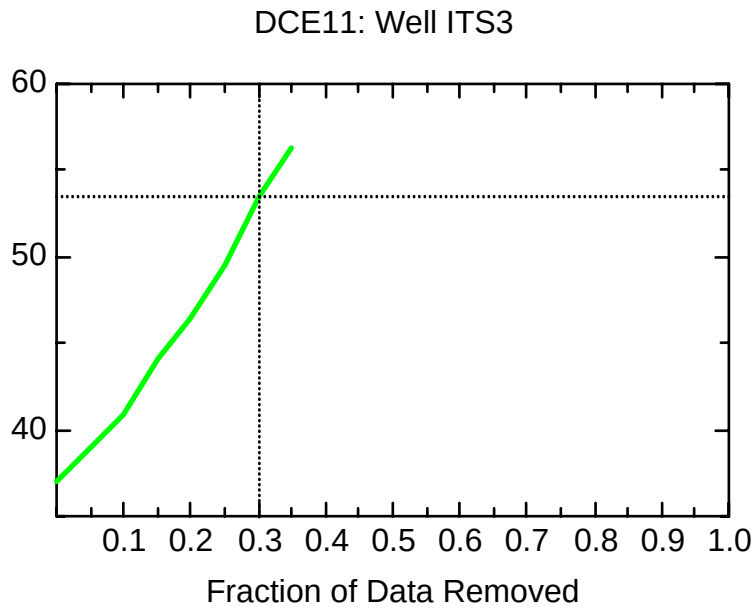

DCE11: Well ITD7
40
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

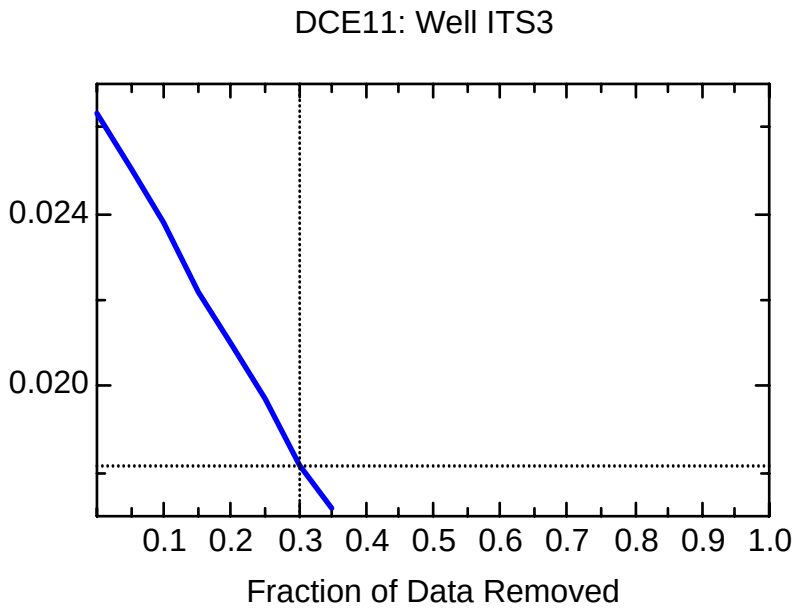

DCE11: Well ITD7
68
64
60
56
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

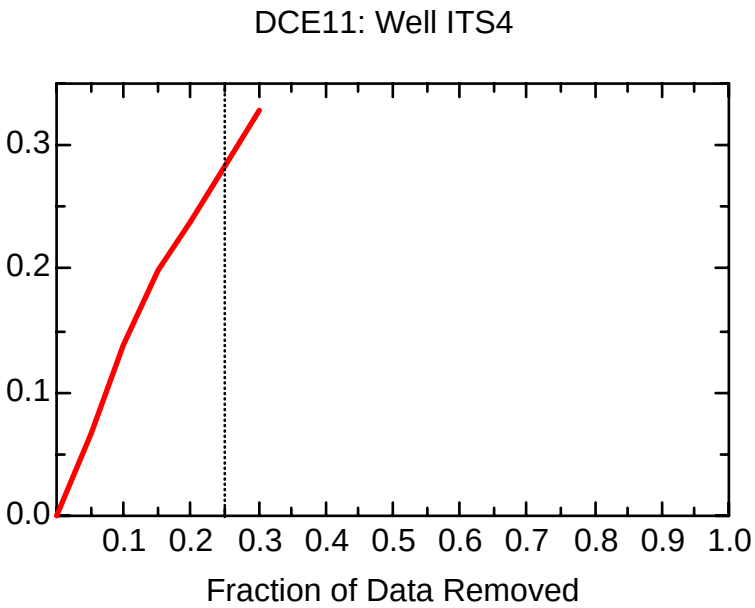

DCE11: Well ITD7
0.018
0.017
0.016
0.015
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

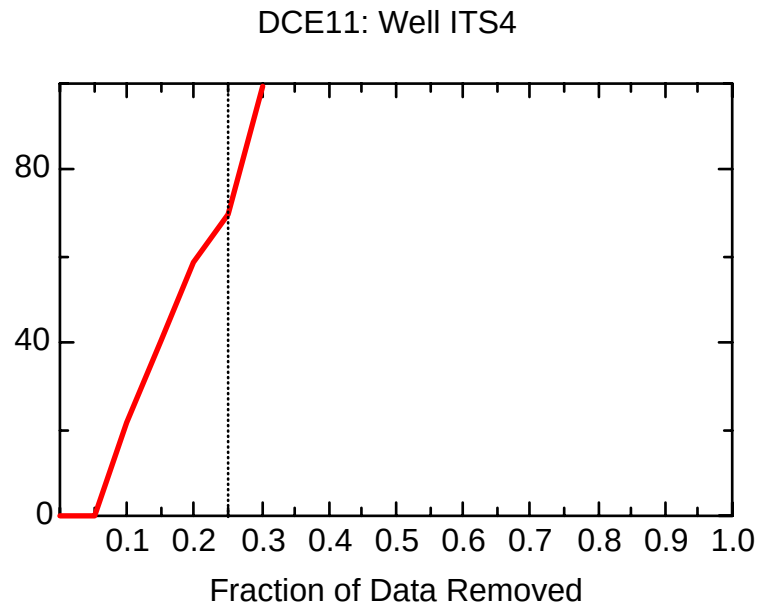

DCE11: Well ITS3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

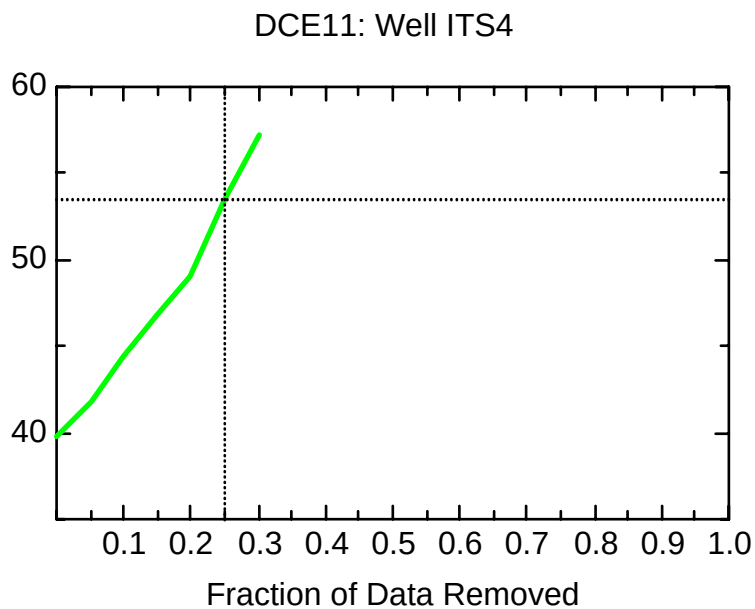

DCE11: Well ITS3
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

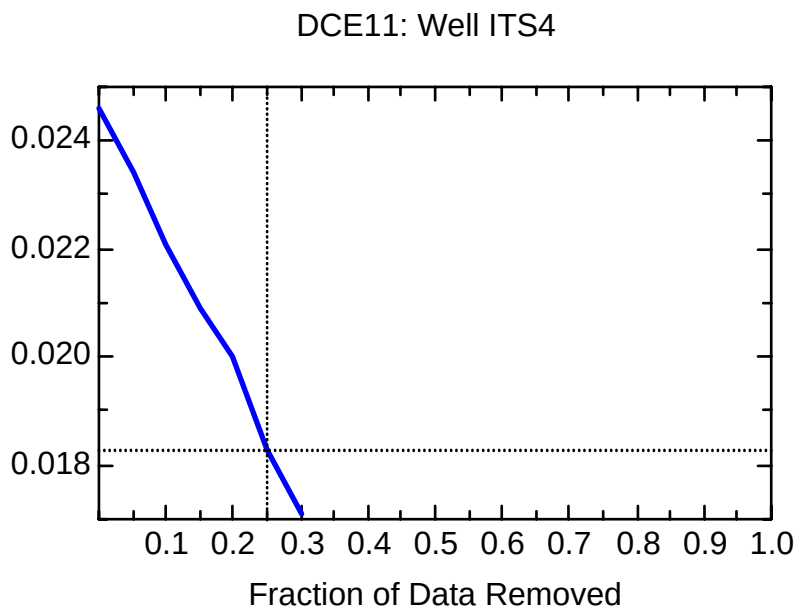

DCE11: Well ITS3
60
50
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

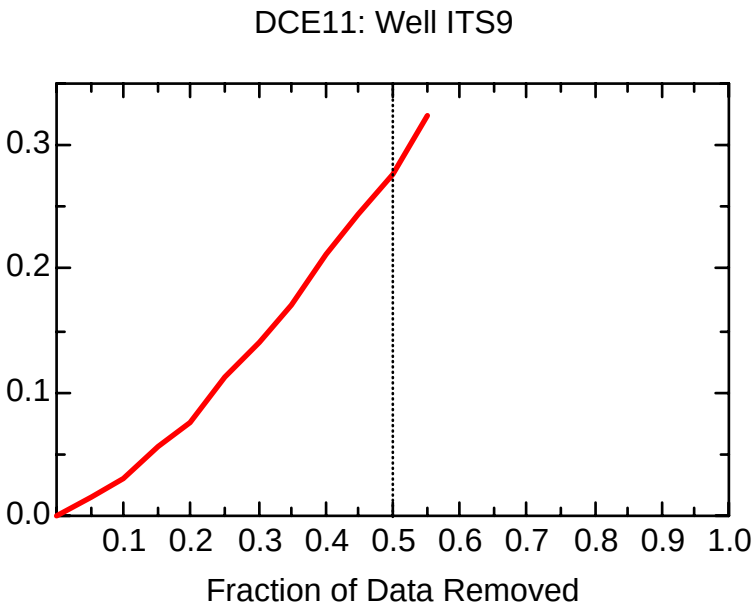

DCE11: Well ITS3
0.024
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

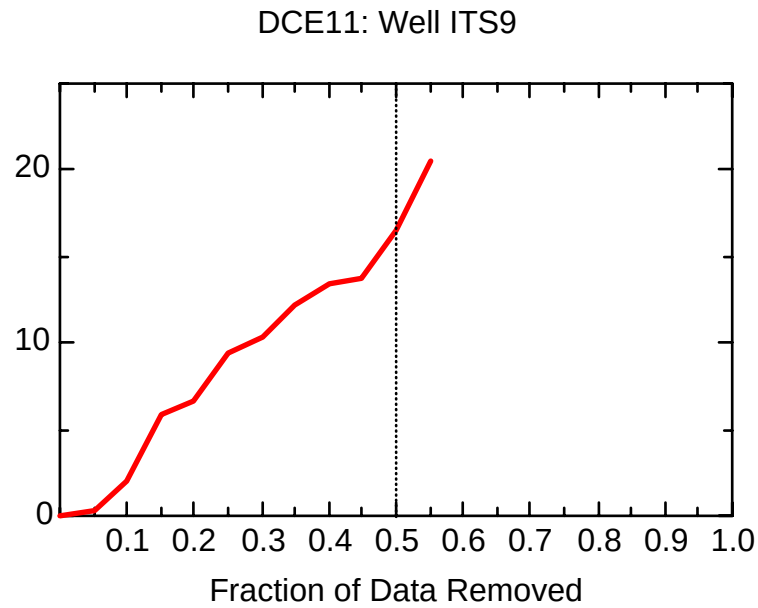

DCE11: Well ITS4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

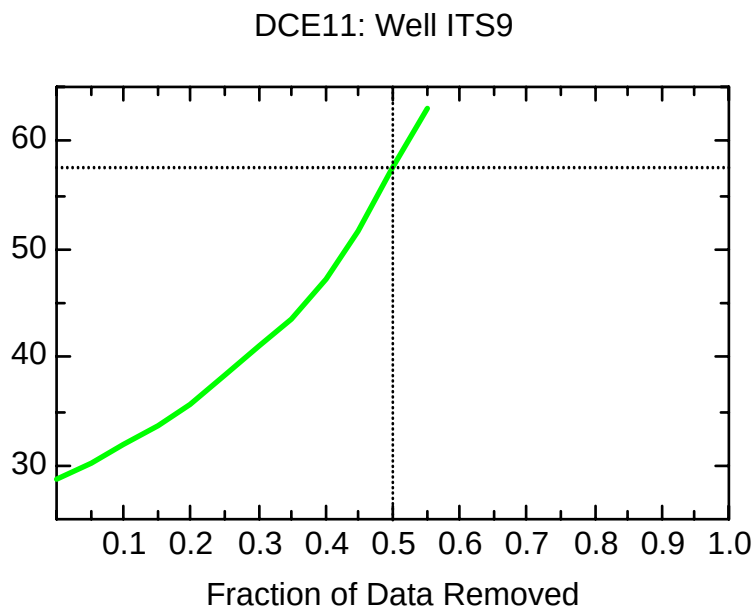

DCE11: Well ITS4
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

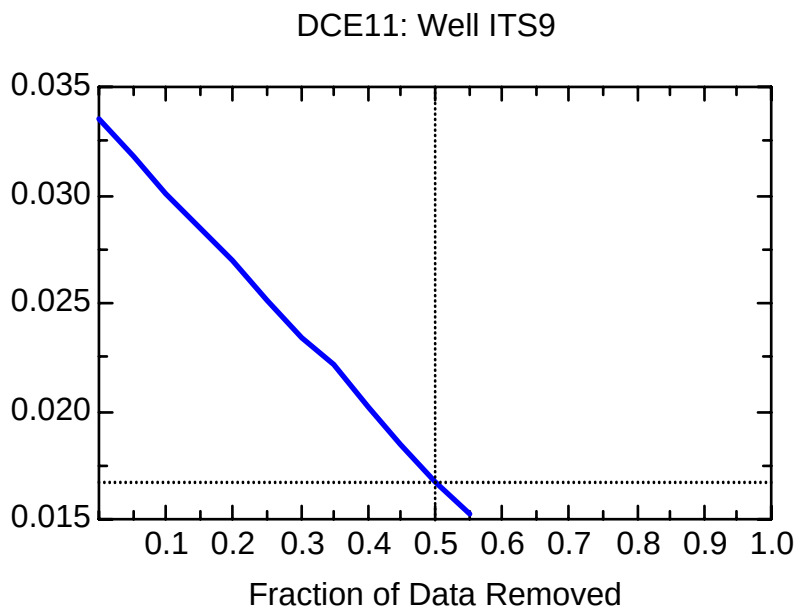

DCE11: Well ITS4
60
50
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ITS4
0.024
0.022
0.020
0.018
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

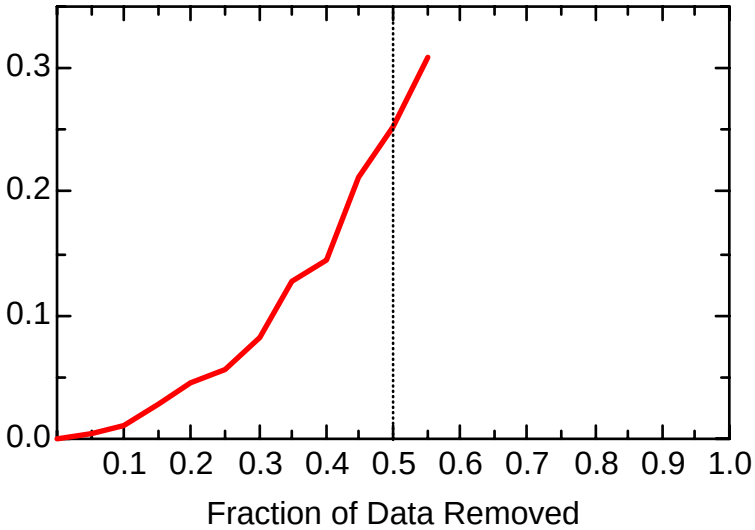

DCE11: Well ITS9
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ITS9
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

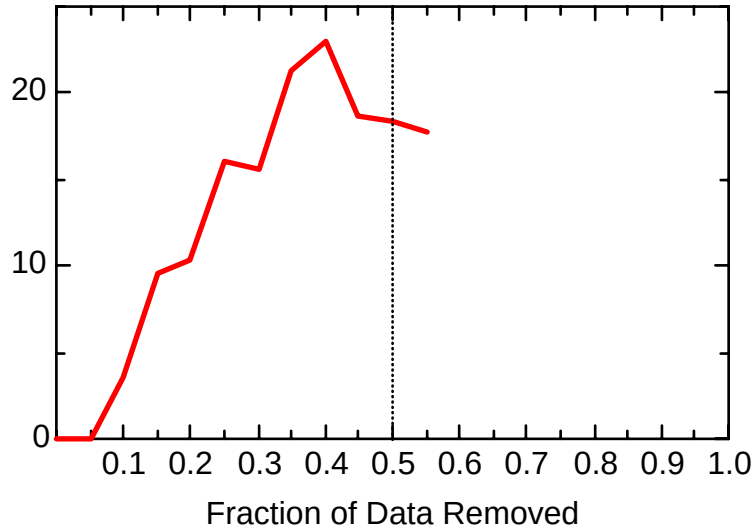

DCE11: Well ITS9
60
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well ITS9
0.035
0.030
0.025
0.020
0.015
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

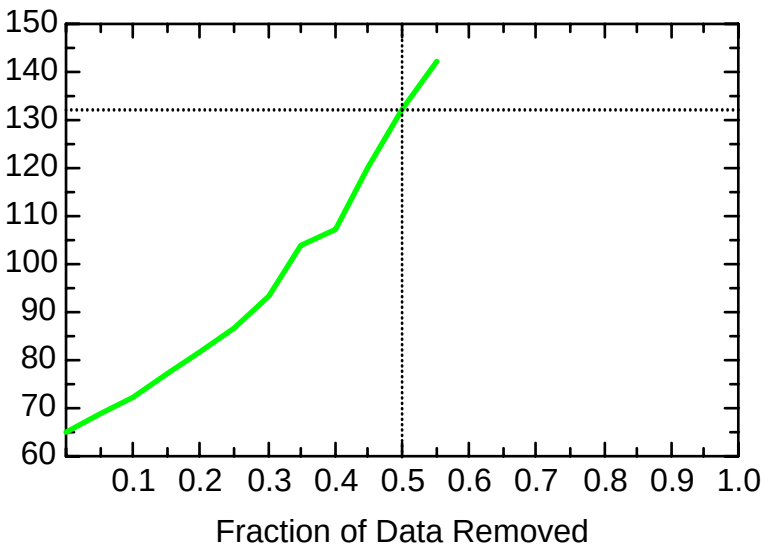
DCE11: Well MW5



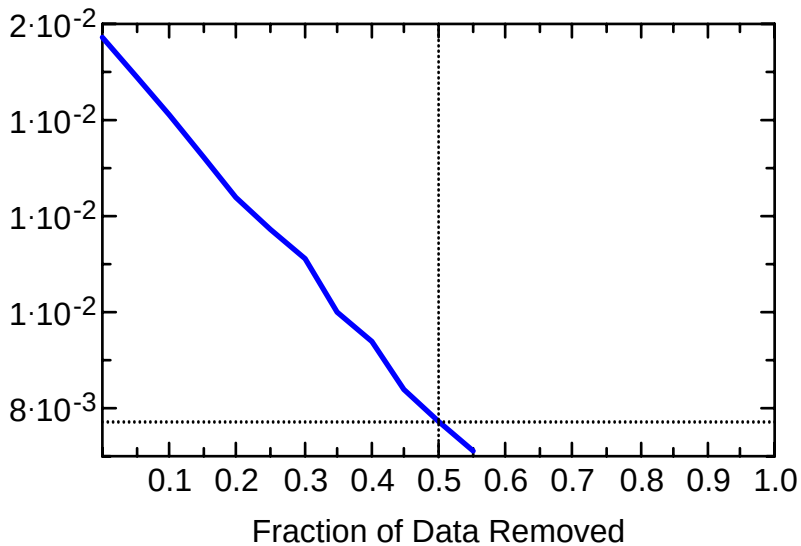
DCE11: Well MW5

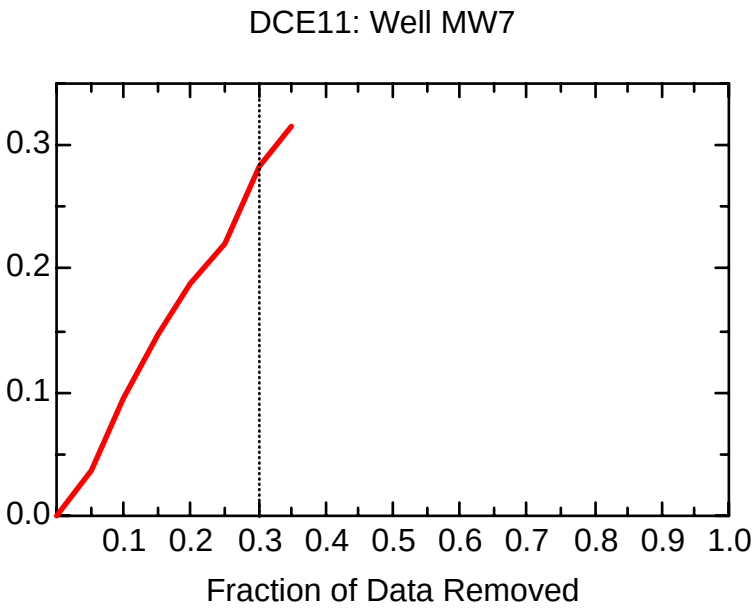


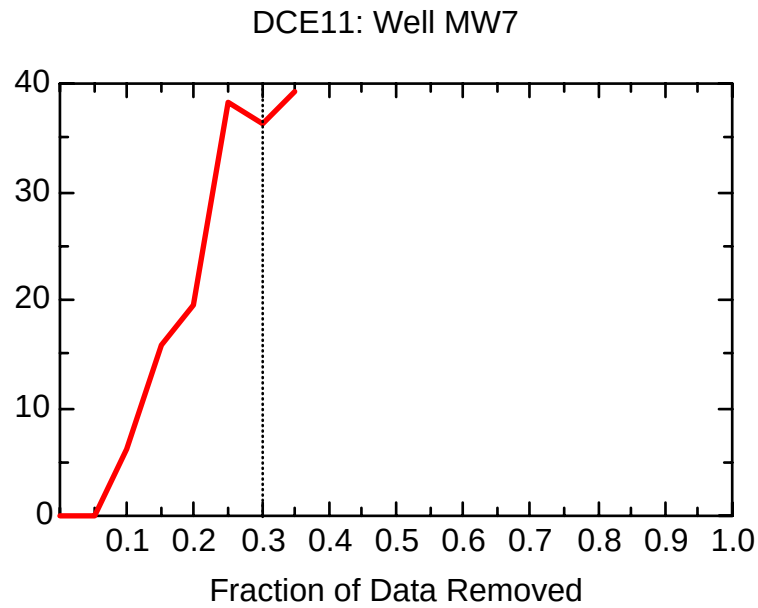
DCE11: Well MW5

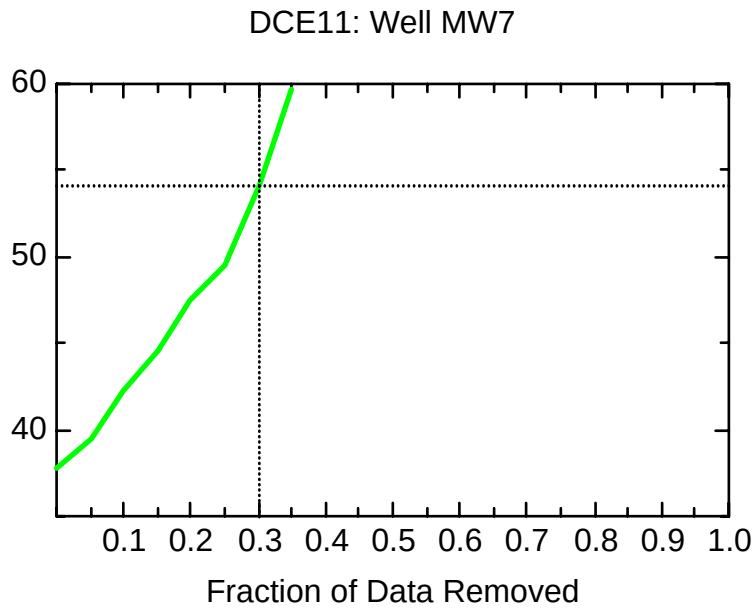


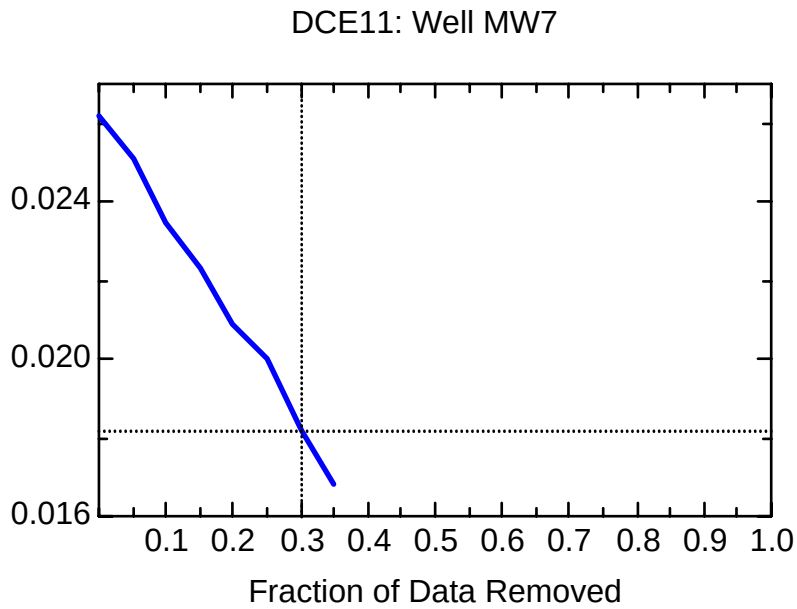
DCE11: Well MW5



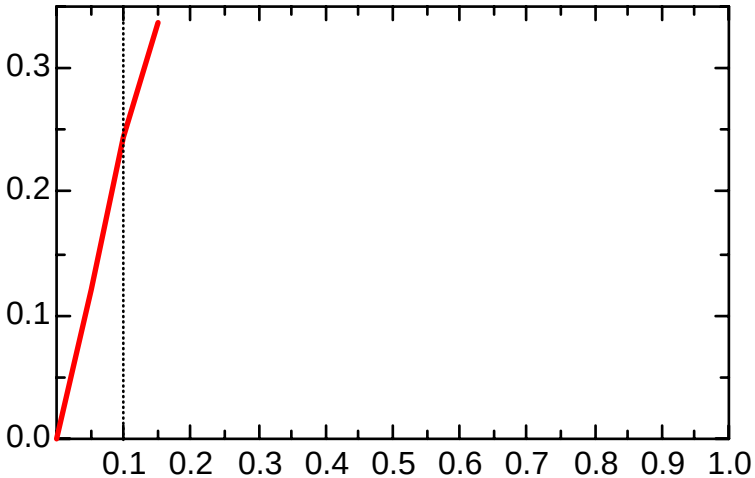

DCE11: Well MW7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW7
40
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

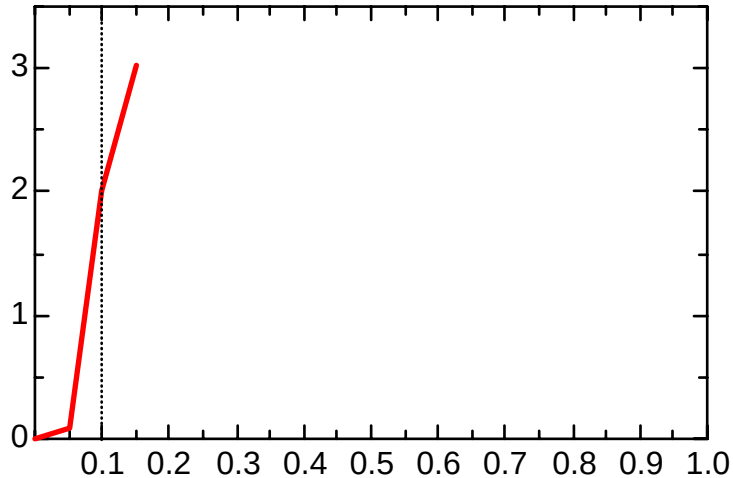

DCE11: Well MW7
60
50
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW7
0.024
0.020
0.016
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

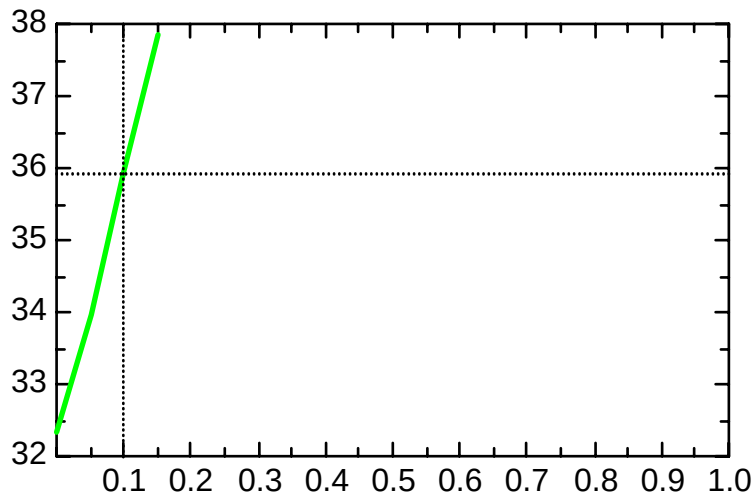
DCE11: Well MW9



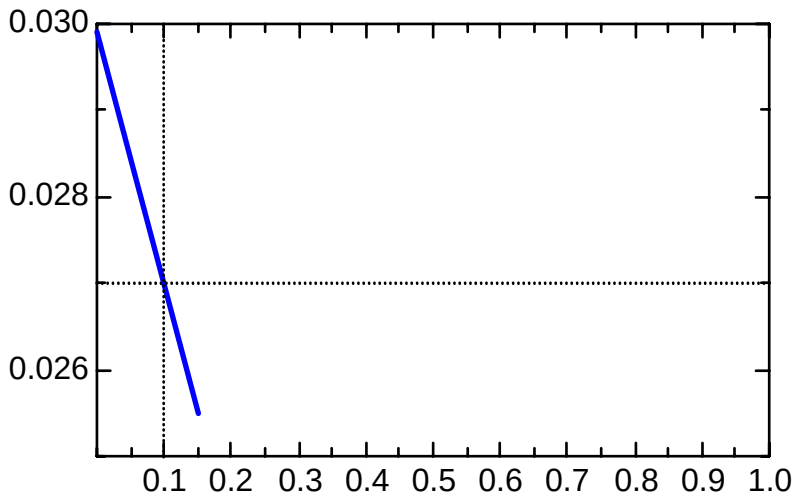
DCE11: Well MW9



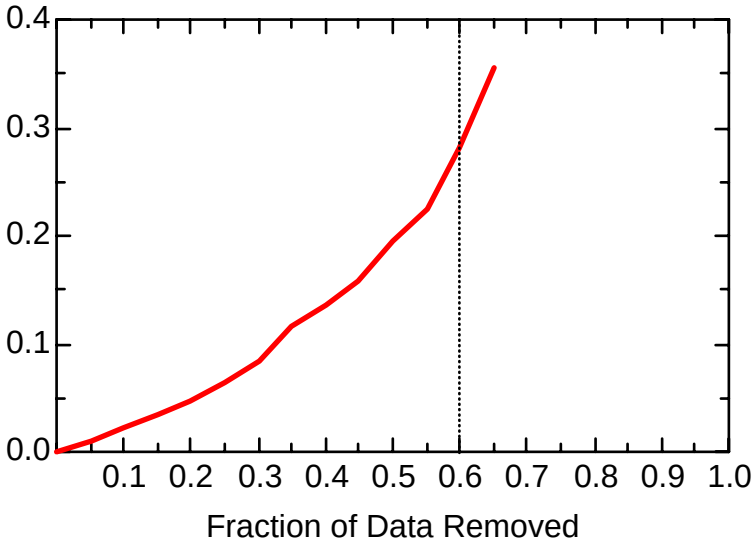
DCE11: Well MW9



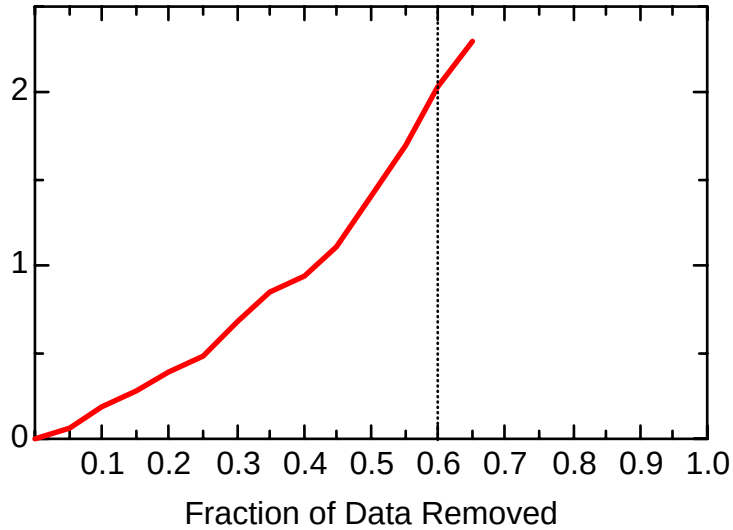
DCE11: Well MW9



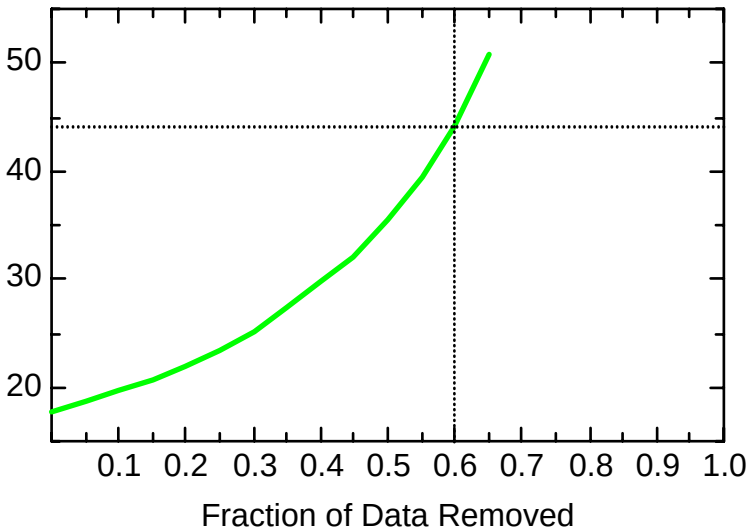
DCE11: Well MW24



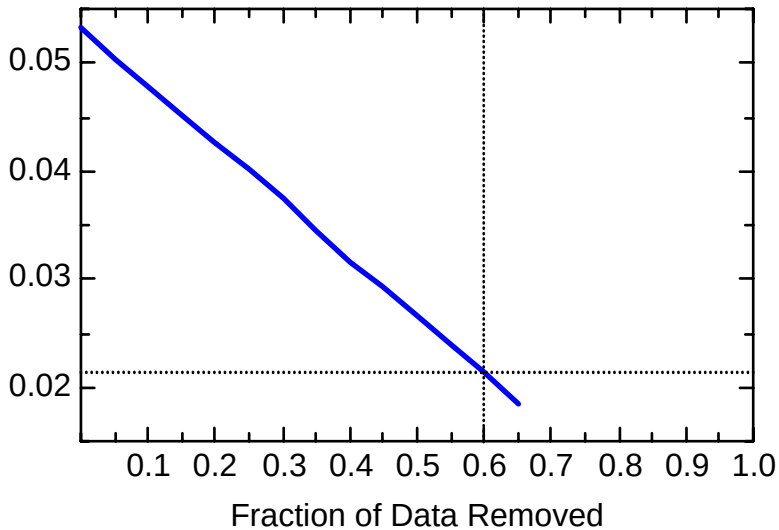
DCE11: Well MW24

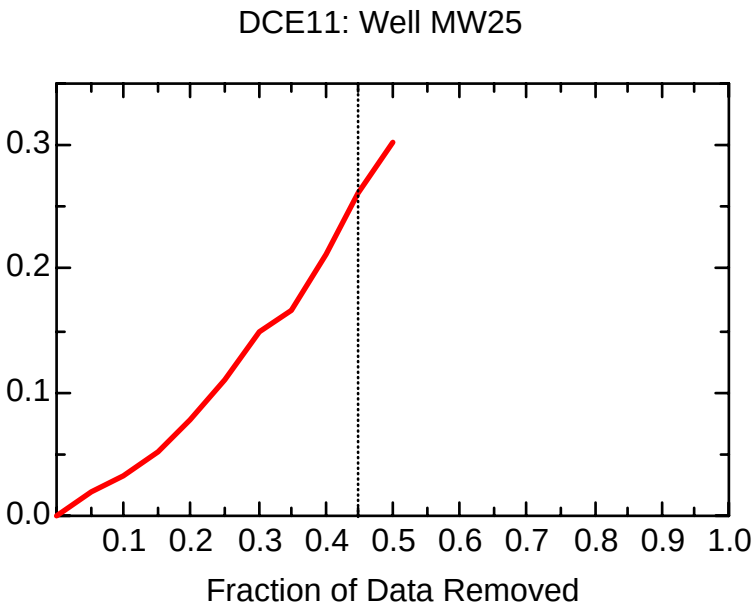


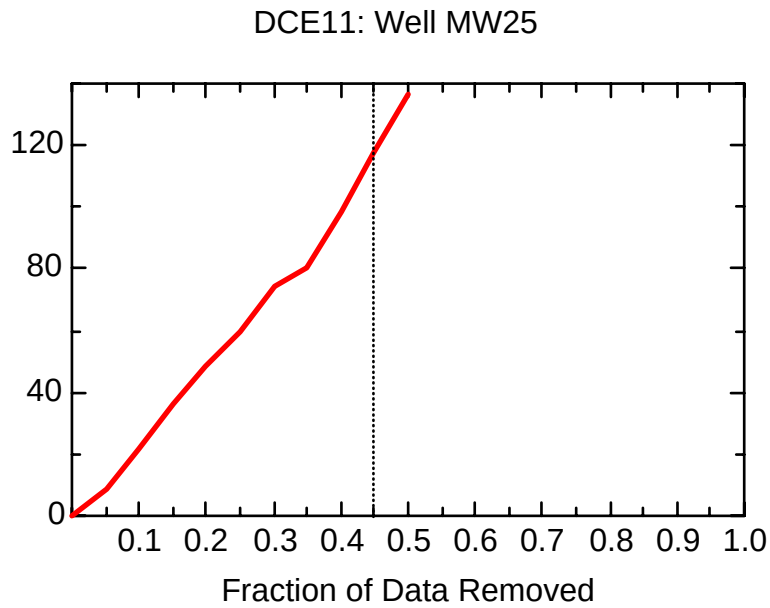
DCE11: Well MW24

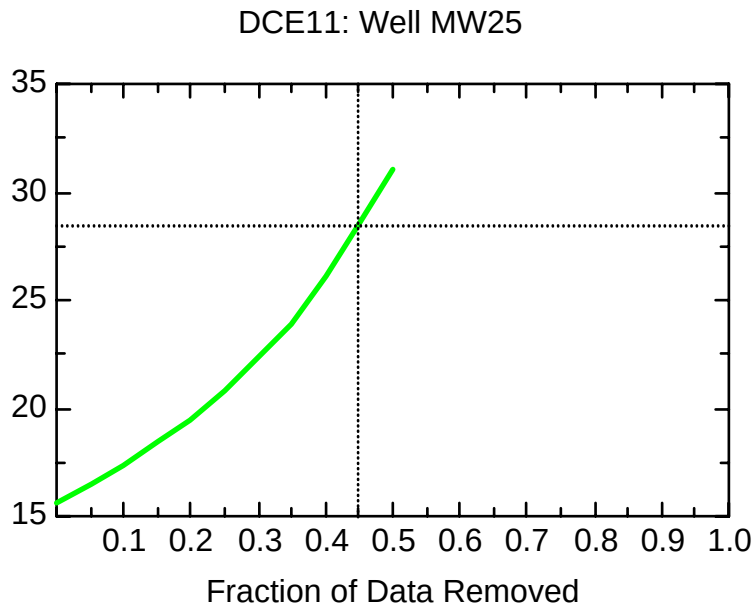


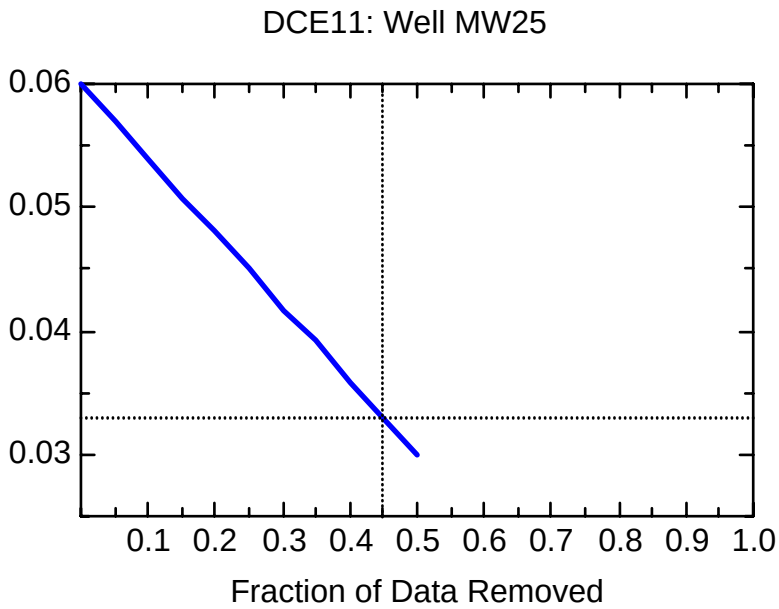
DCE11: Well MW24

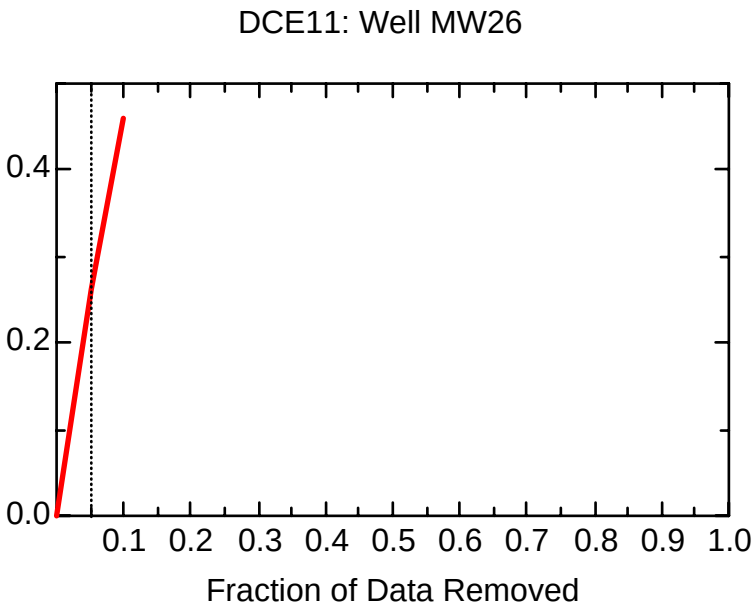


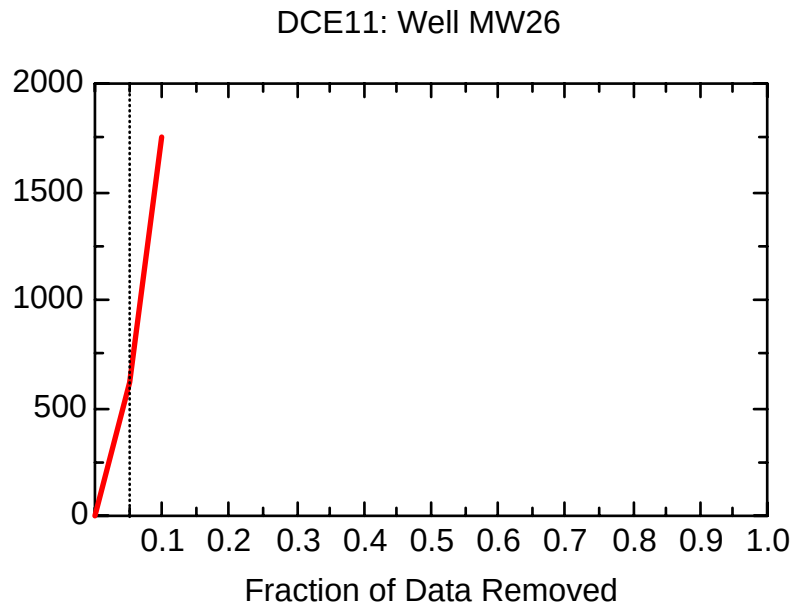

DCE11: Well MW25
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

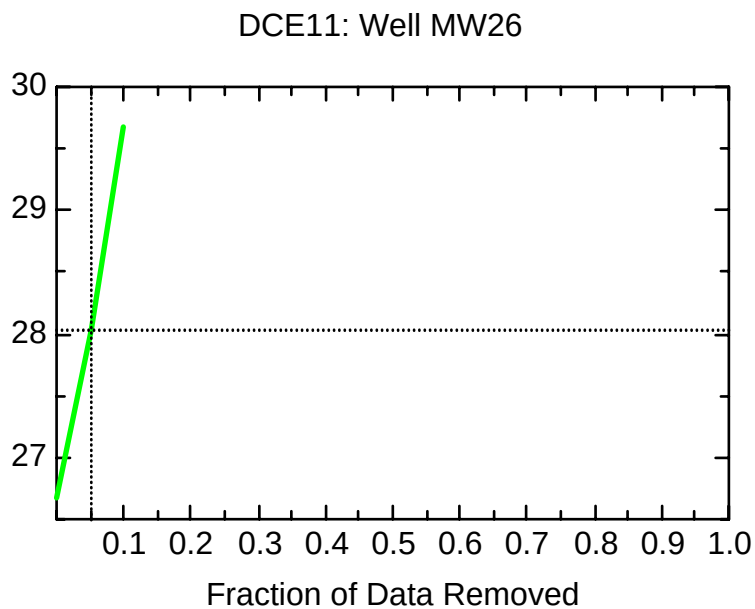

DCE11: Well MW25
120
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

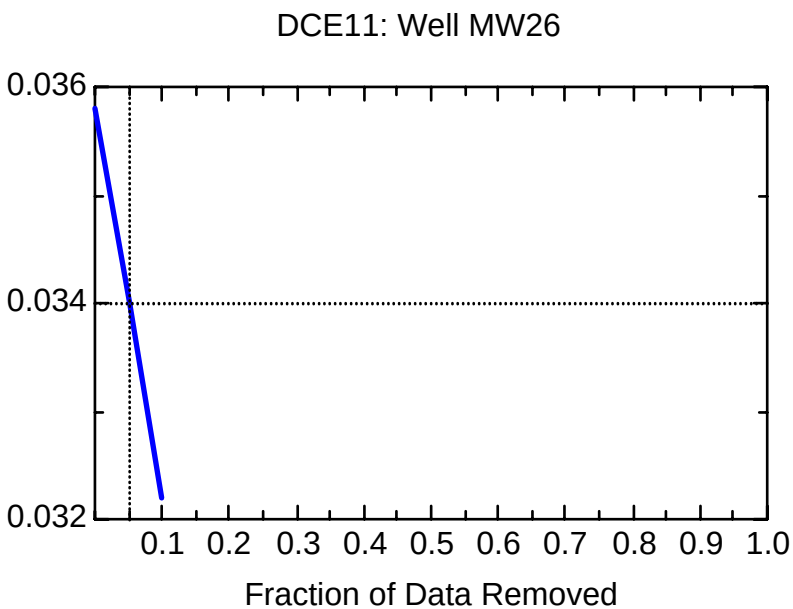

DCE11: Well MW25
35
30
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW25
0.06
0.05
0.04
0.03
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

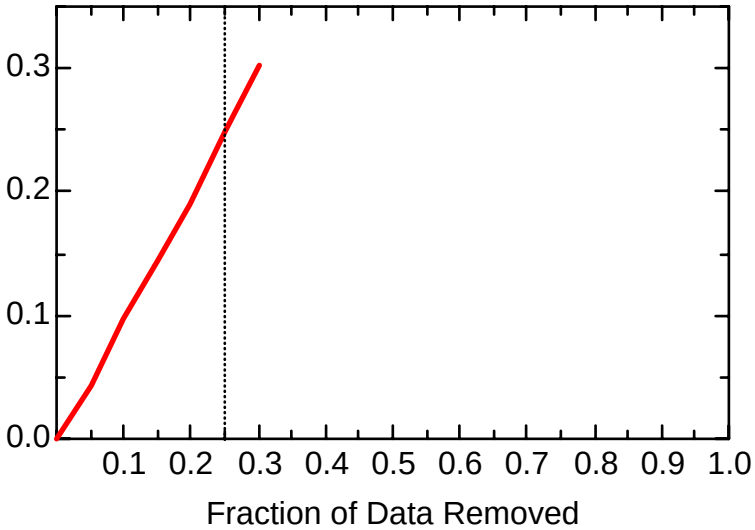

DCE11: Well MW26
0.4
0.2
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW26
2000
1500
1000
500
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

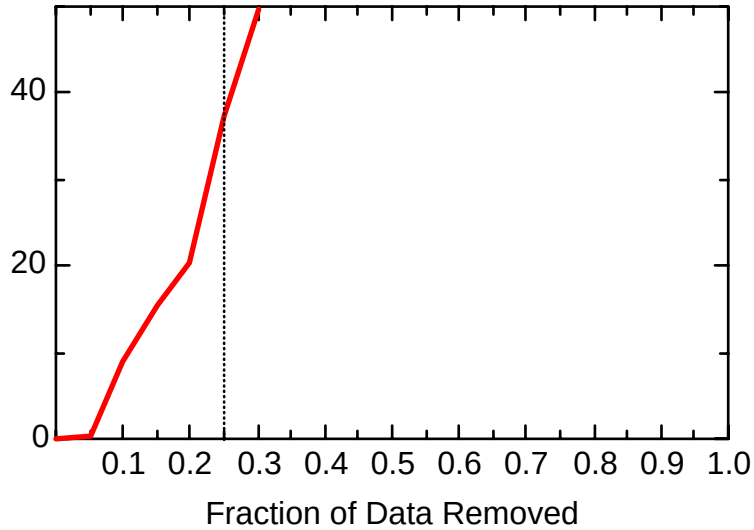

DCE11: Well MW26
30
29
28
27
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW26
0.036
0.034
0.032
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

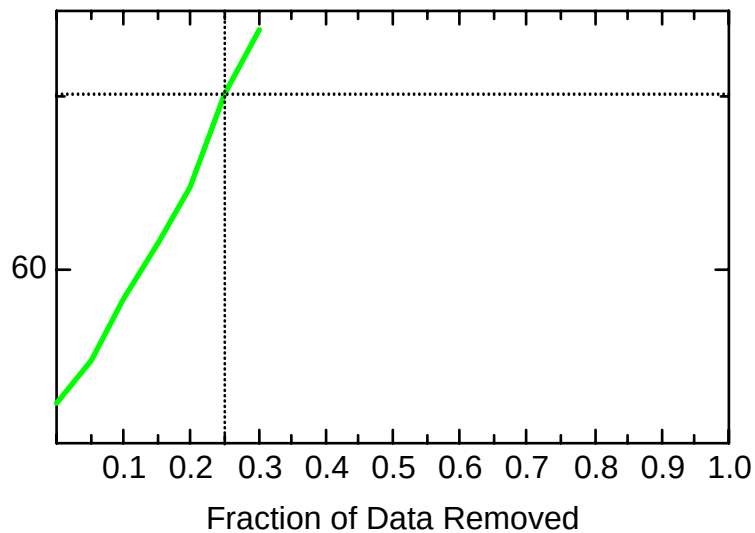
DCE11: Well MW27



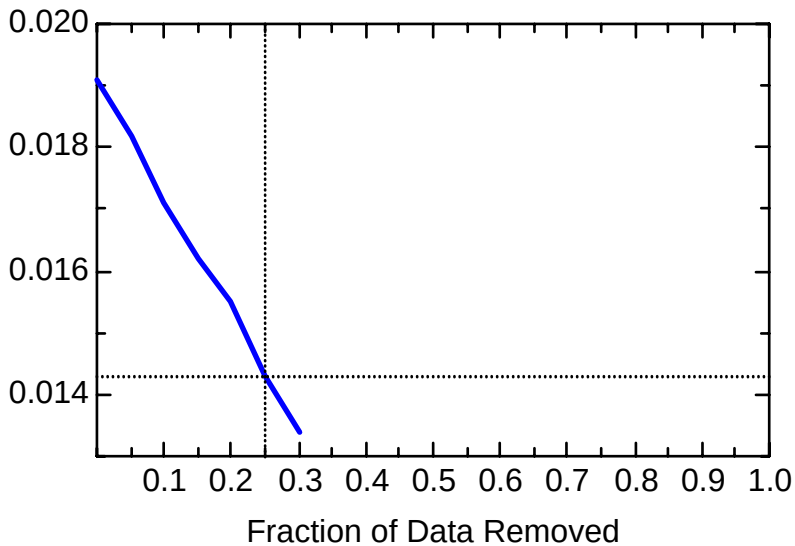
DCE11: Well MW27

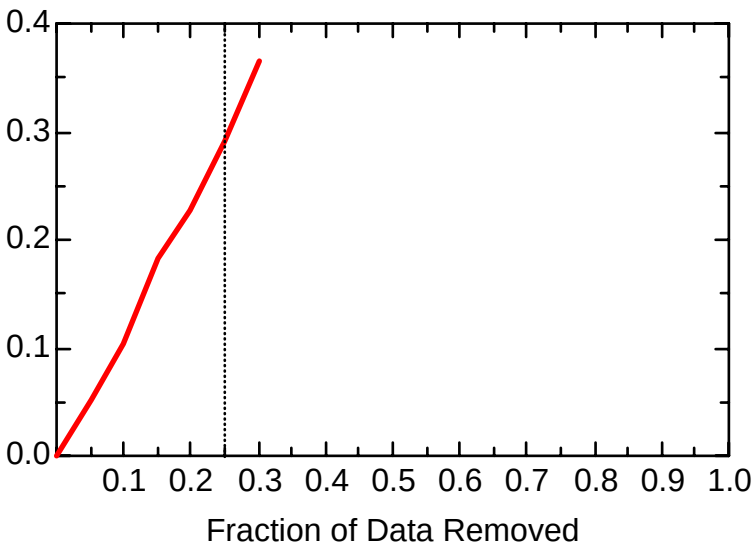


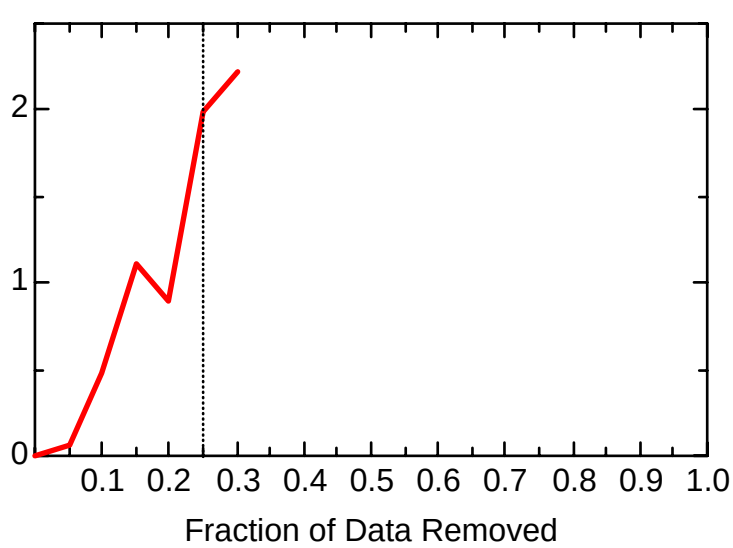
DCE11: Well MW27

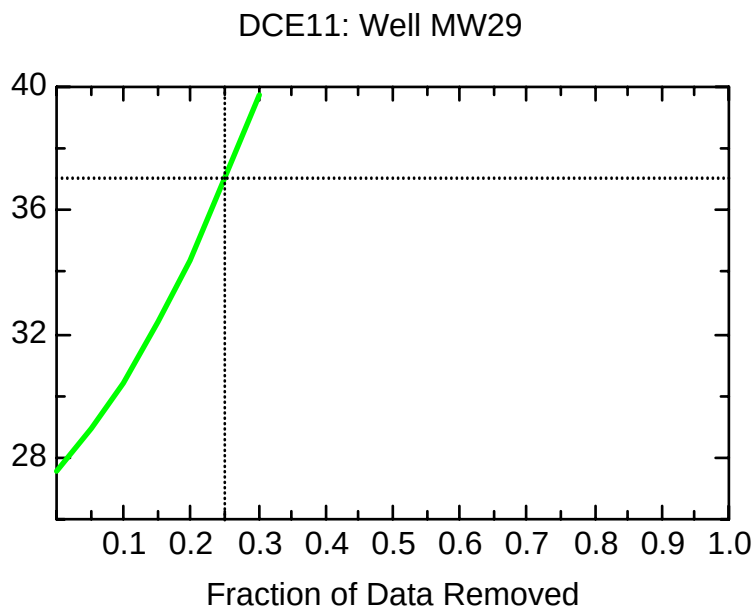


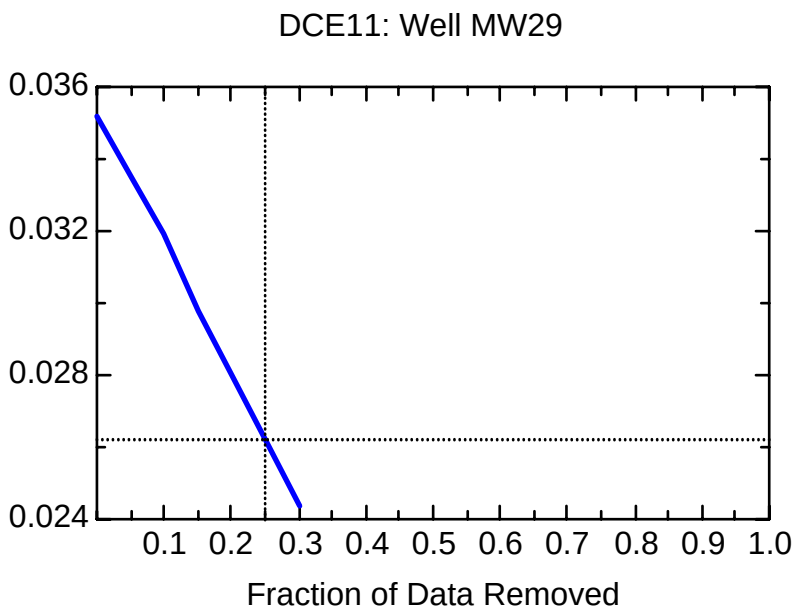
DCE11: Well MW27

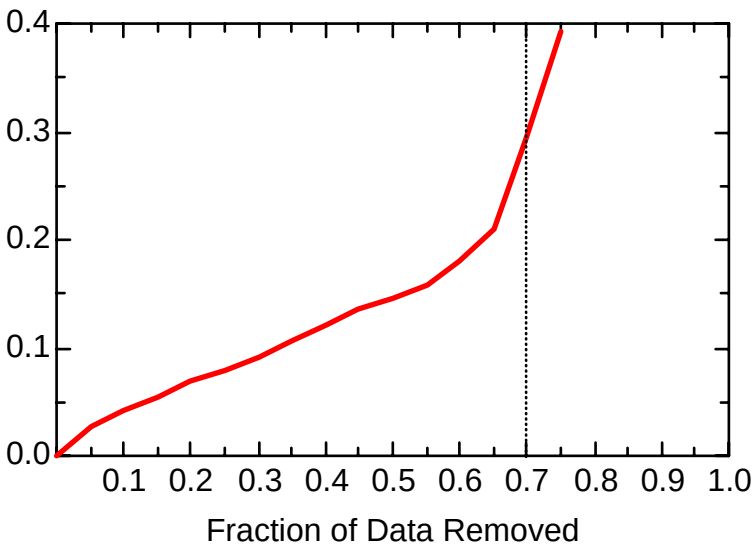


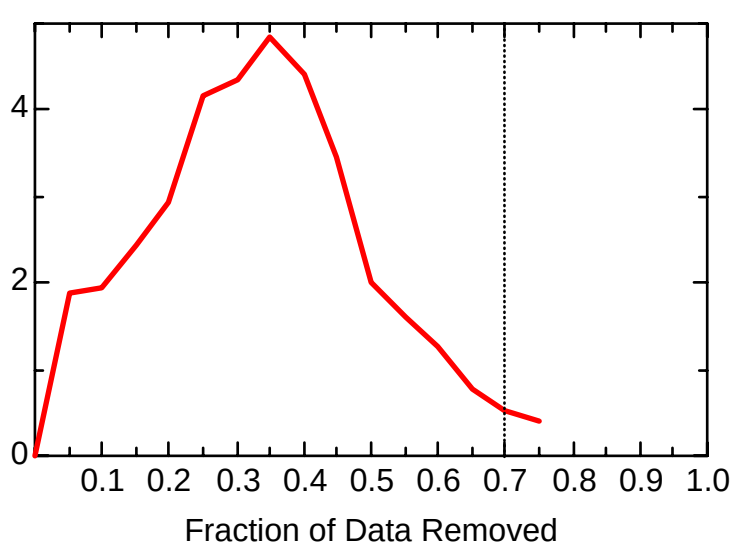

DCE11: Well MW29
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

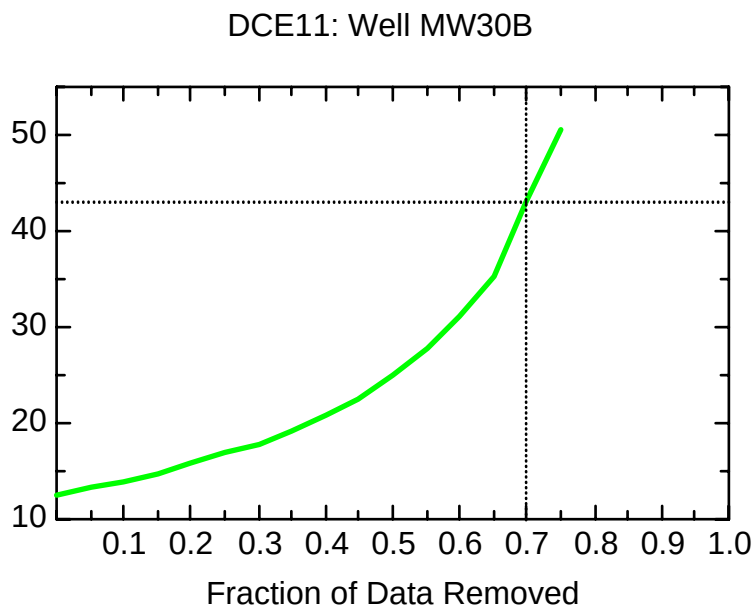

DCE11: Well MW29
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

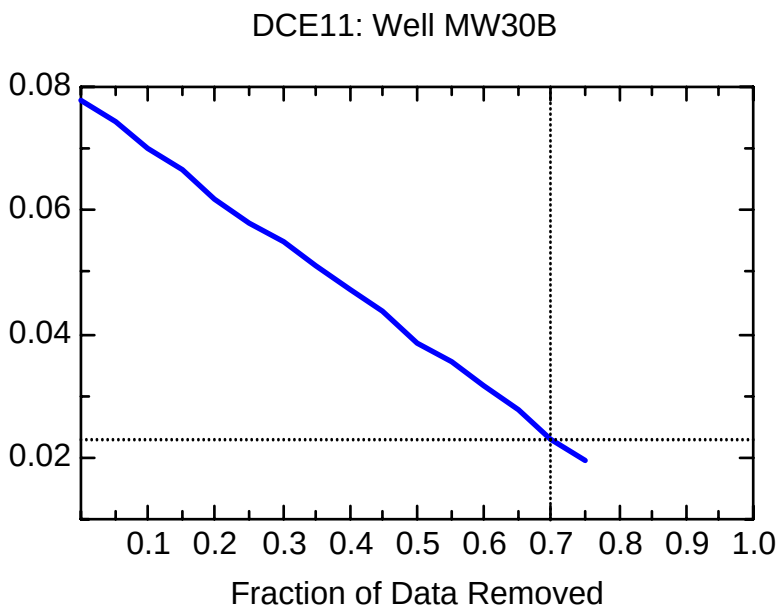

DCE11: Well MW29
40
36
32
28
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW29
0.036
0.032
0.028
0.024
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

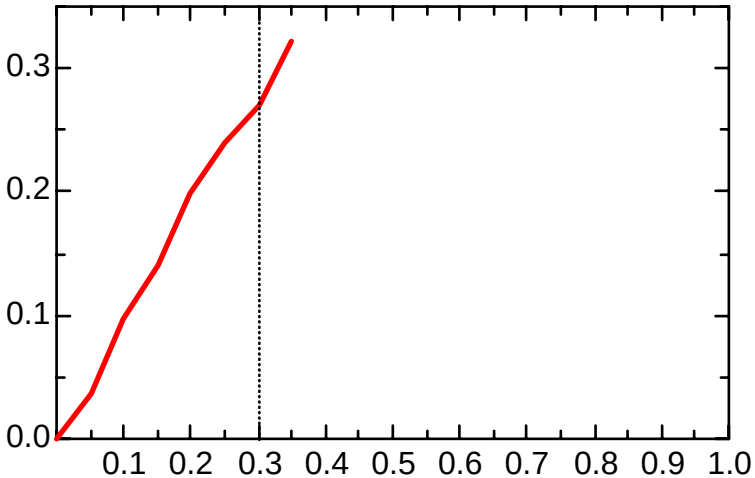

DCE11: Well MW30B
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW30B
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

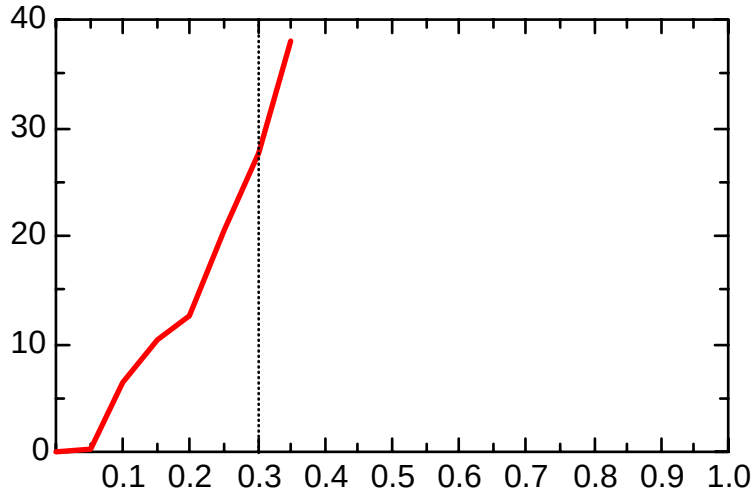

DCE11: Well MW30B
50
40
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW30B
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

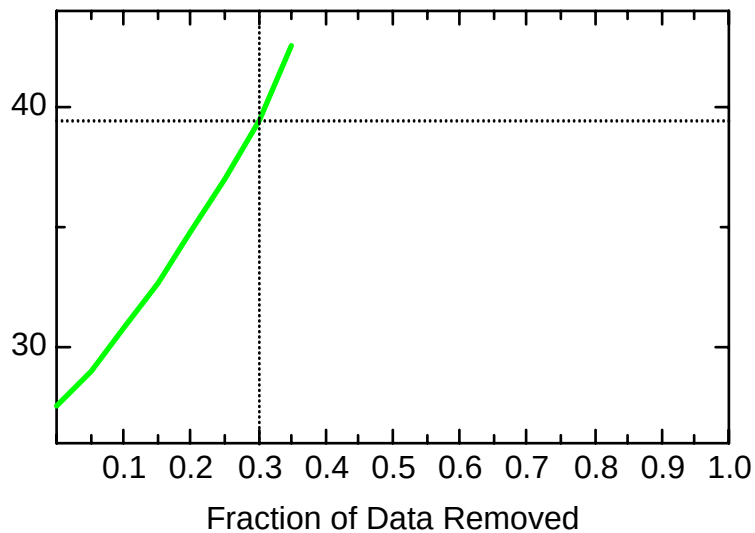
DCE11: Well MW53



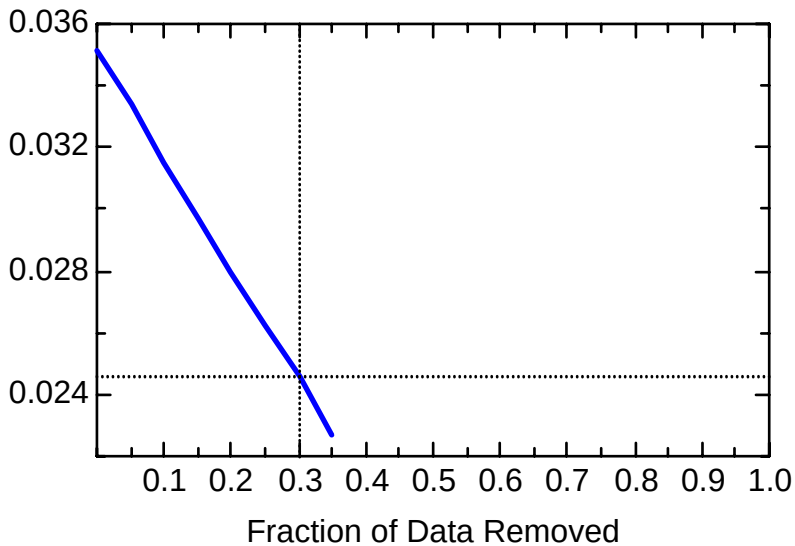
DCE11: Well MW53



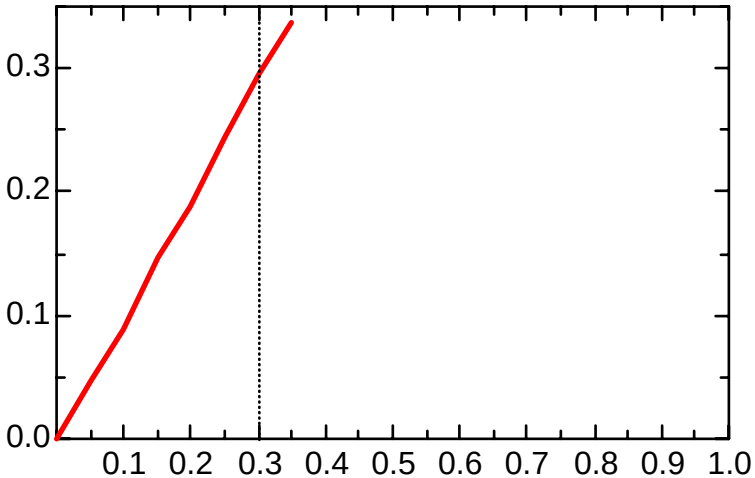
DCE11: Well MW53



DCE11: Well MW53



DCE11: Well MW54



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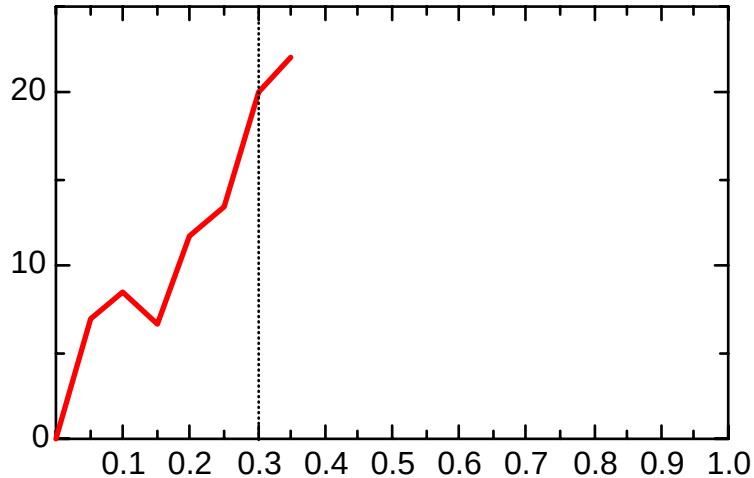

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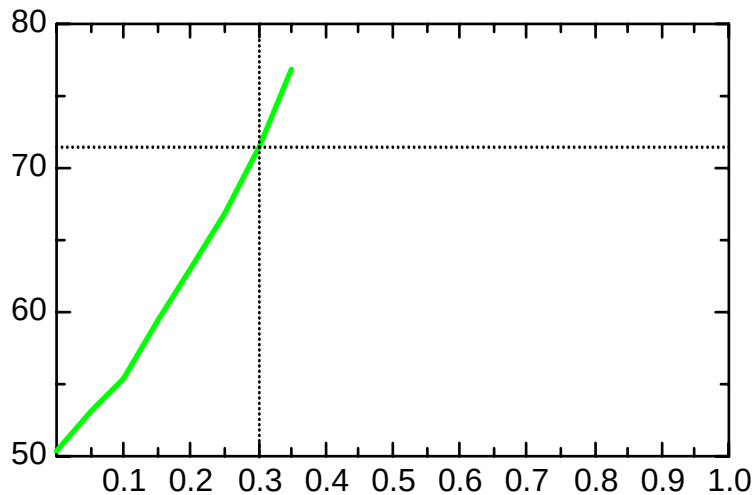

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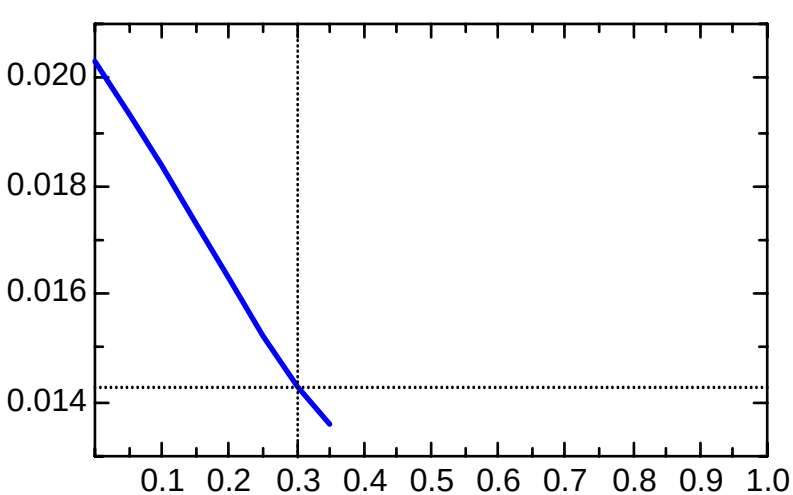
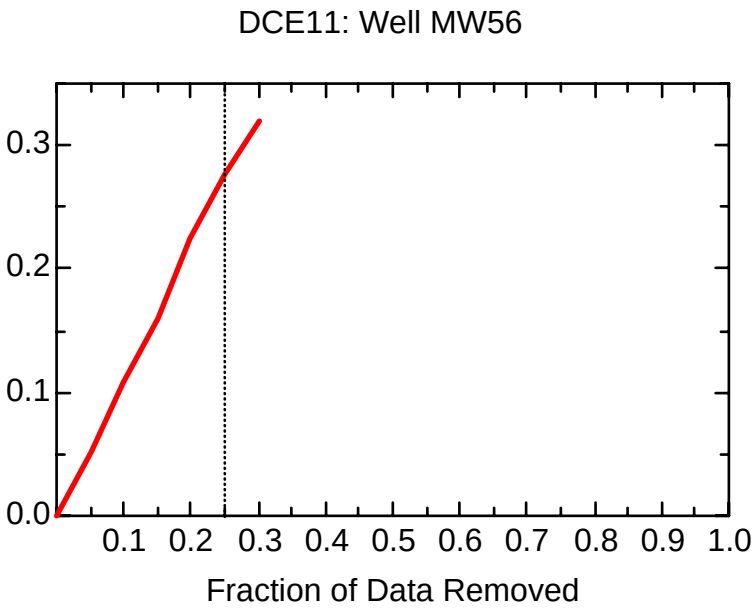
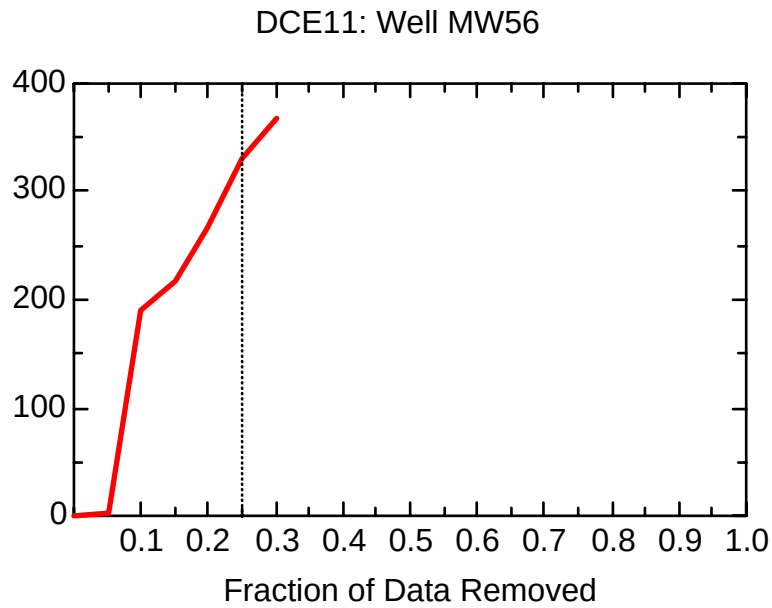
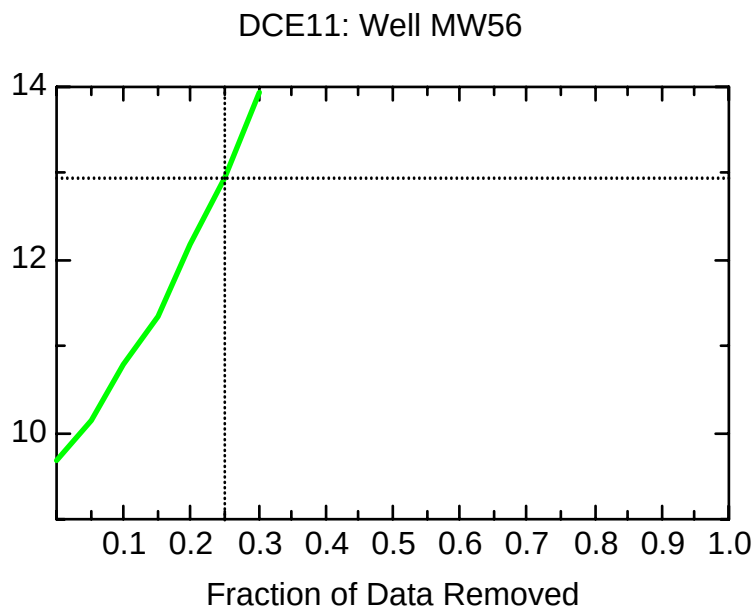
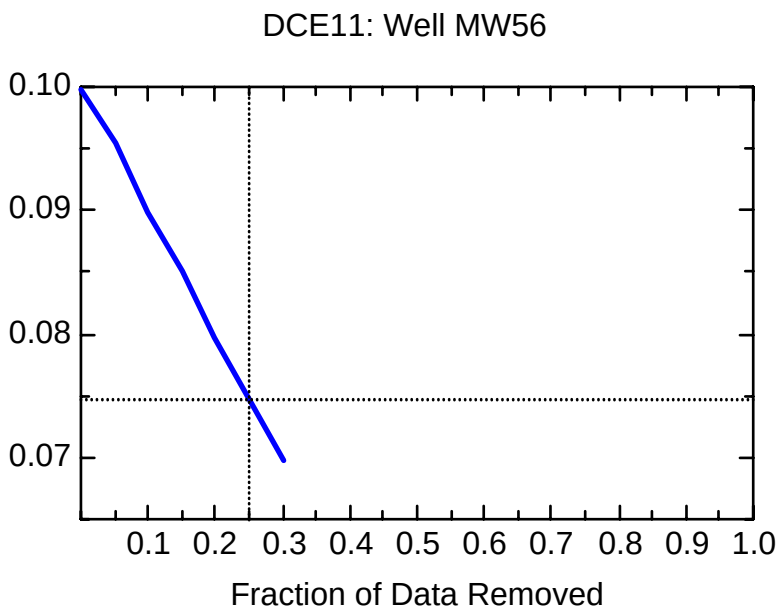
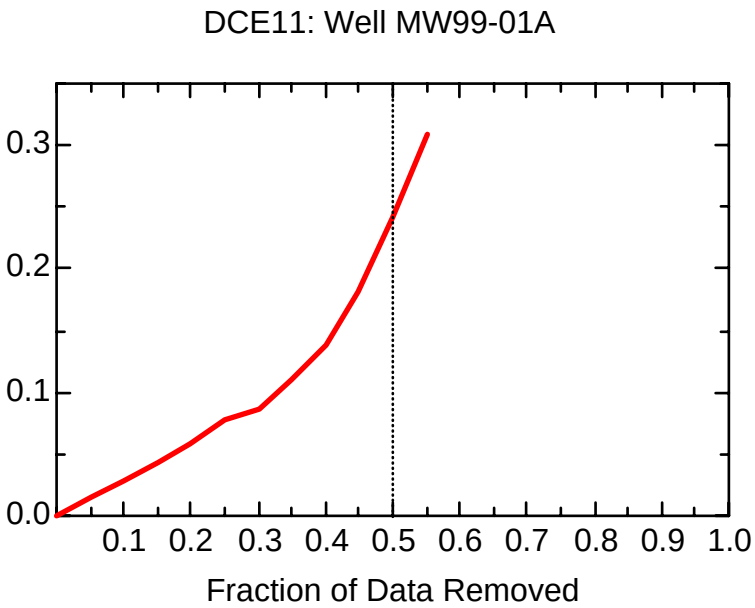


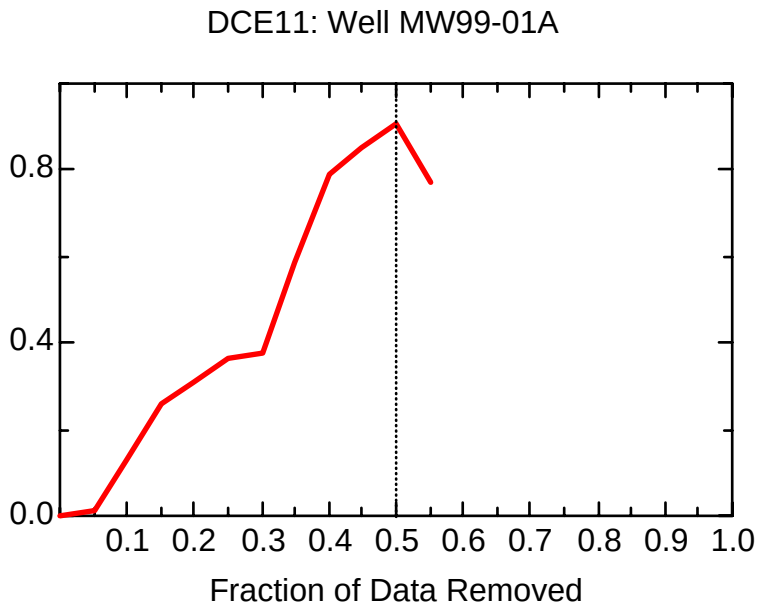

DCE11: Well MW56
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

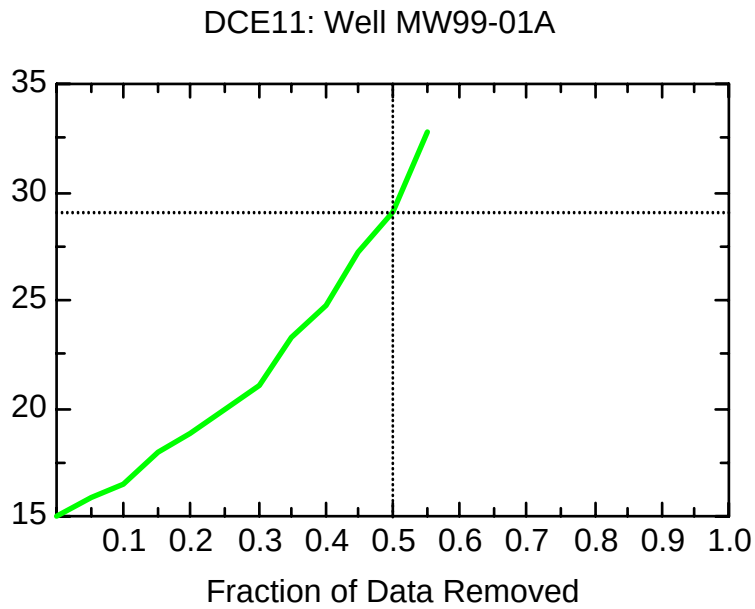

DCE11: Well MW56
400
300
200
100
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

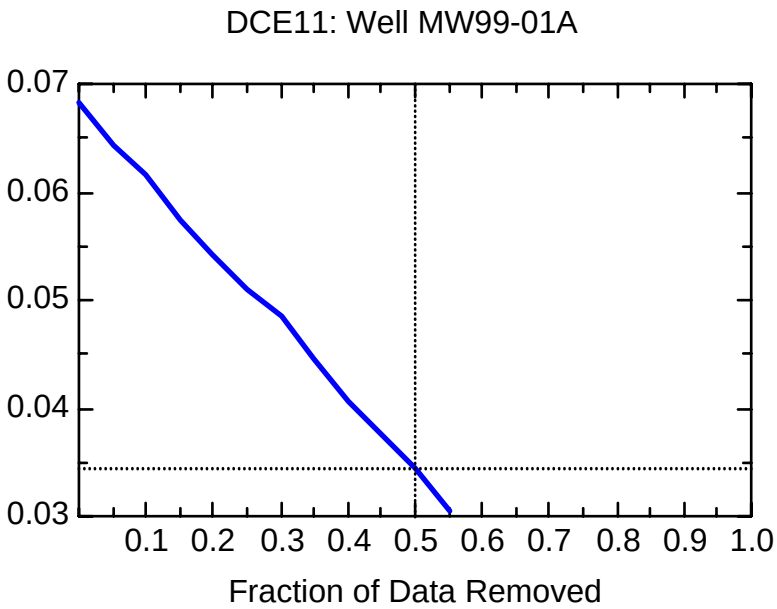

DCE11: Well MW56
14
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

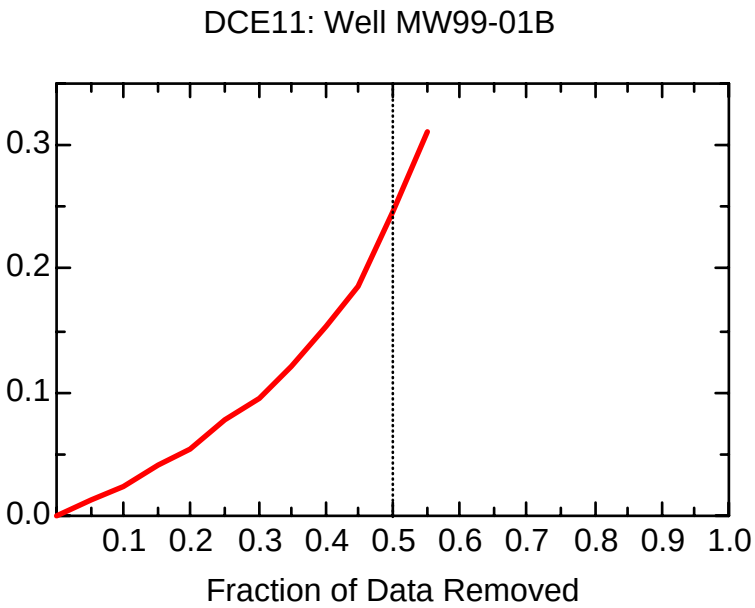

DCE11: Well MW56
0.10
0.09
0.08
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

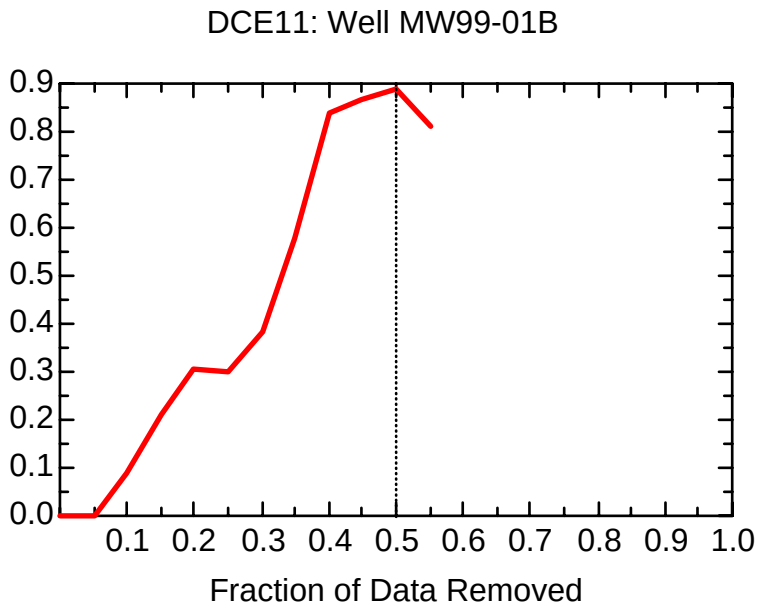

DCE11: Well MW99-01A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

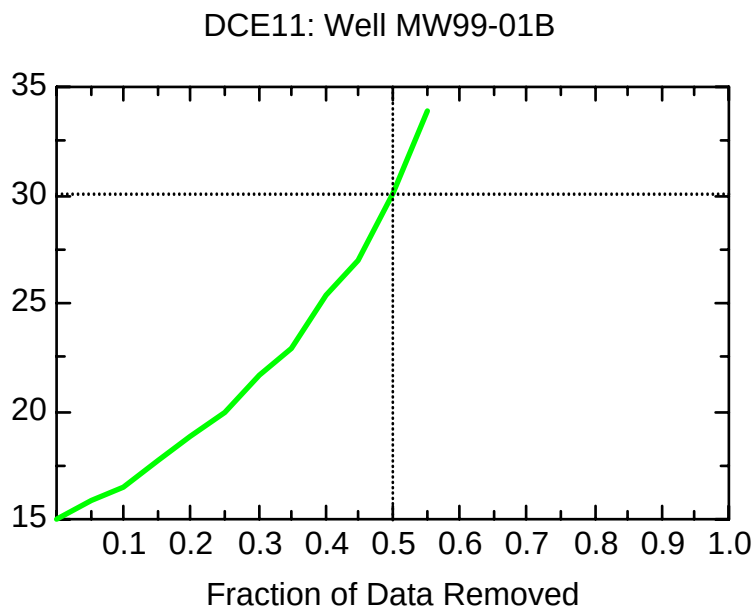

DCE11: Well MW99-01A
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

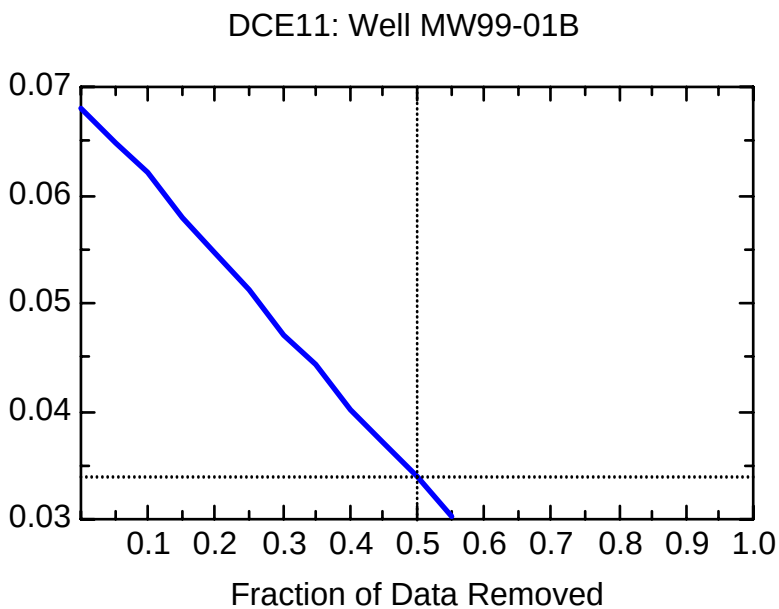

DCE11: Well MW99-01A
35
30
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

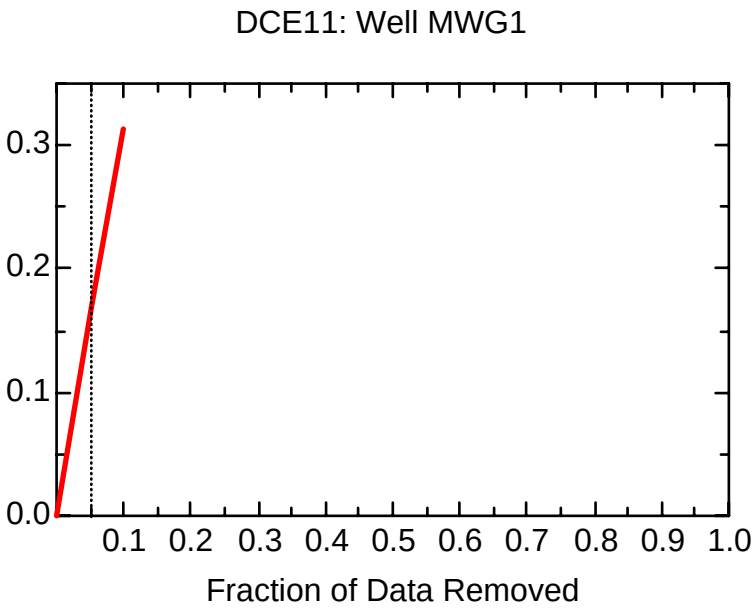

DCE11: Well MW99-01A
0.07
0.06
0.05
0.04
0.03
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

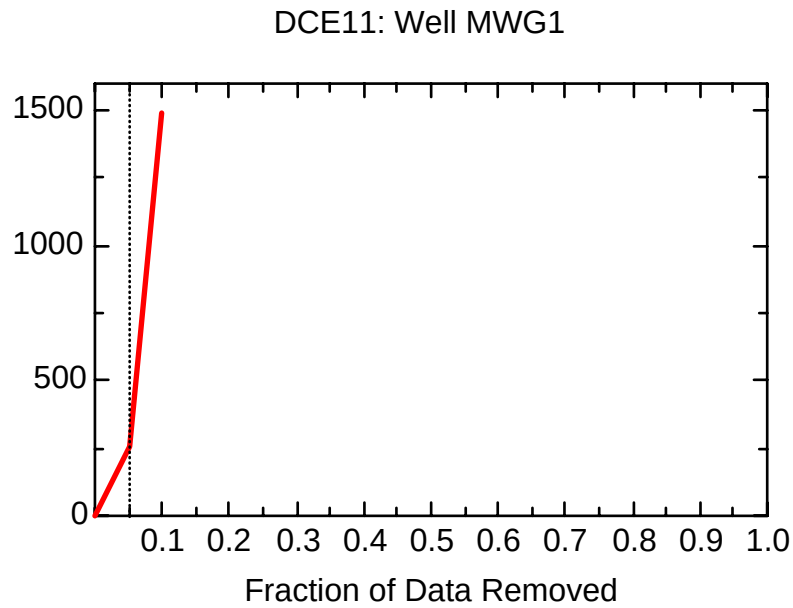

DCE11: Well MW99-01B
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

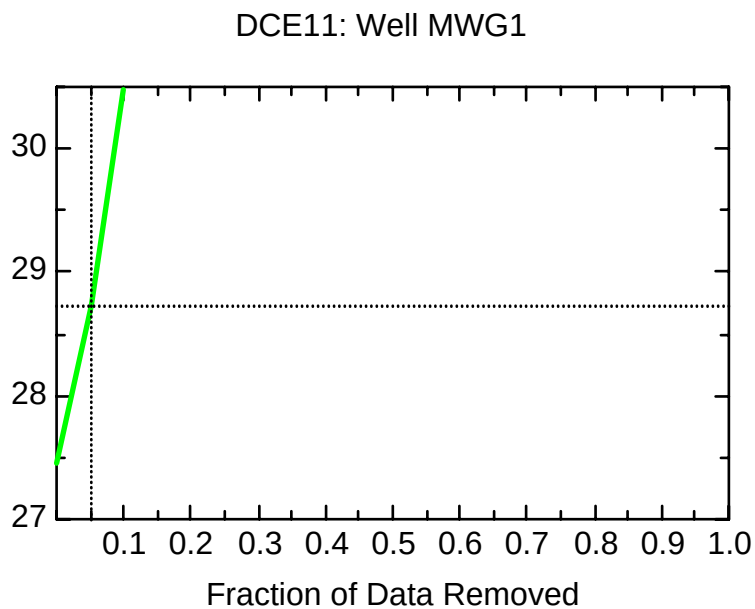

DCE11: Well MW99-01B
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

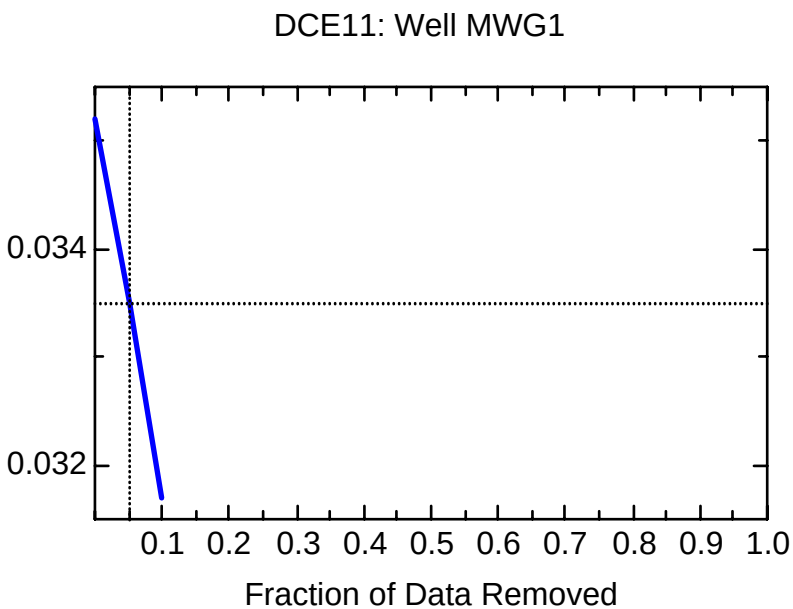

DCE11: Well MW99-01B
15
20
25
30
35
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MW99-01B
0.03
0.04
0.05
0.06
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

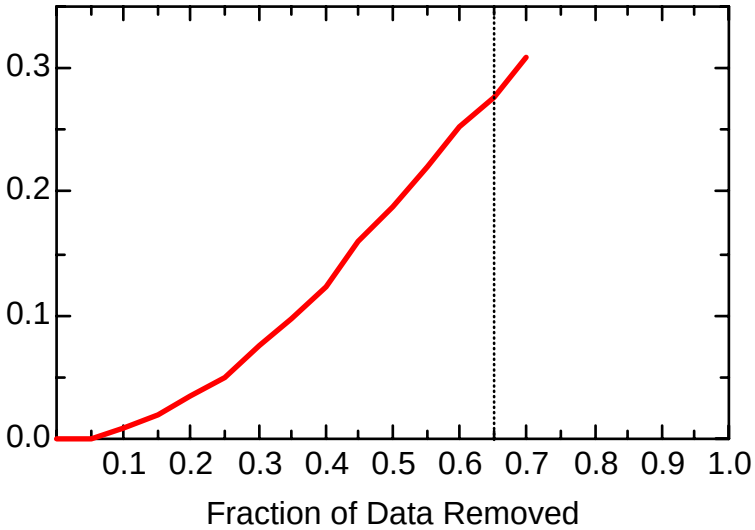

DCE11: Well MWG1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG1
1500
1000
500
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

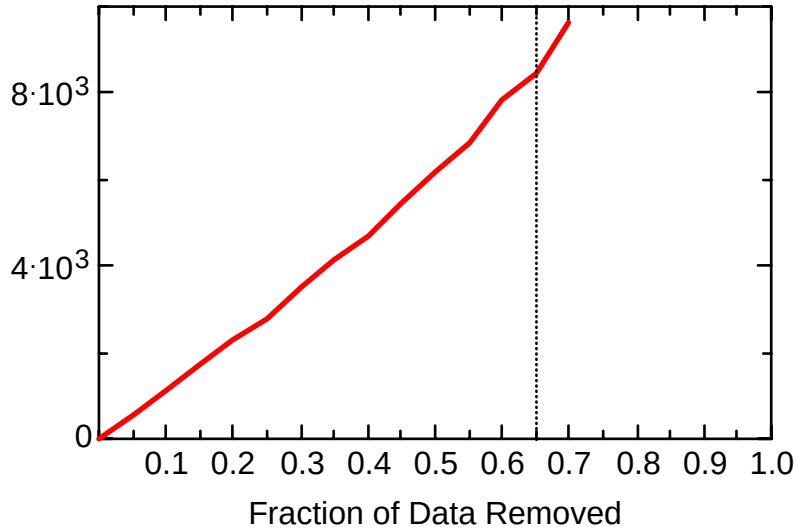

DCE11: Well MWG1
30
29
28
27
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG1
0.034
0.032
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

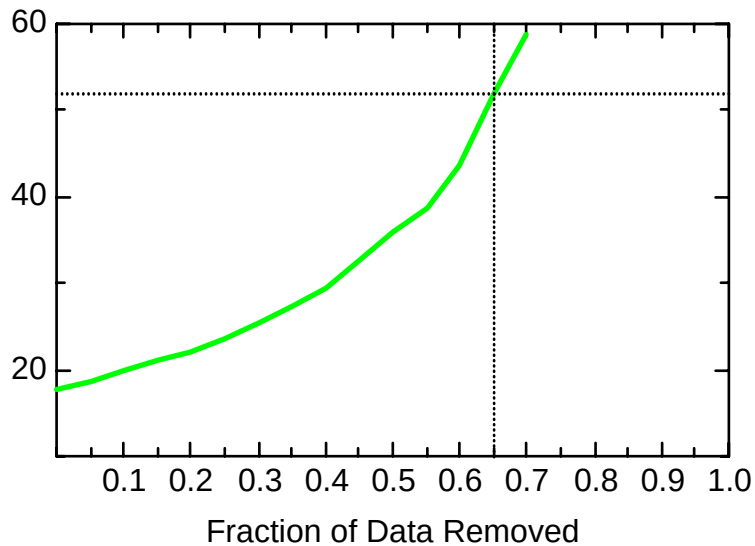
DCE11: Well MWG1A



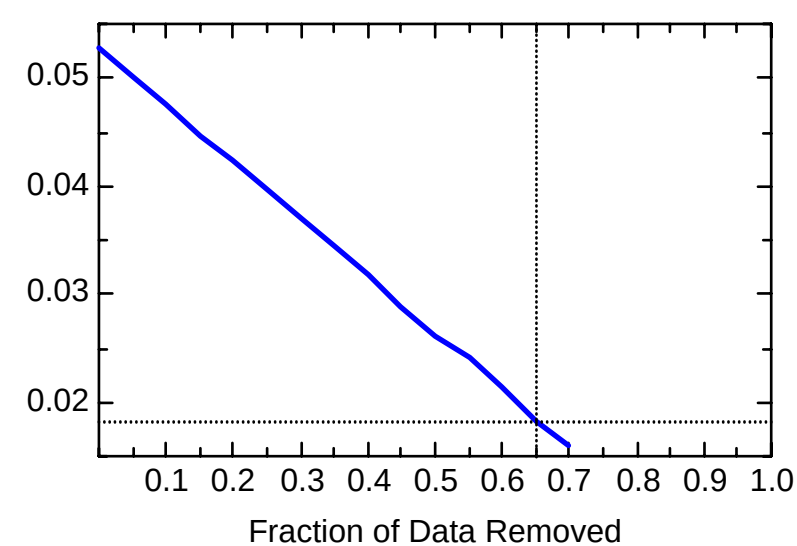
DCE11: Well MWG1A

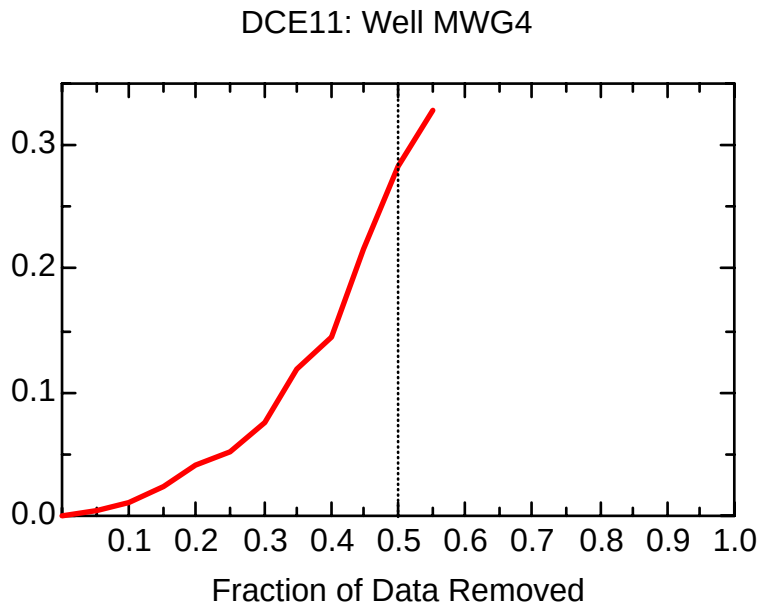


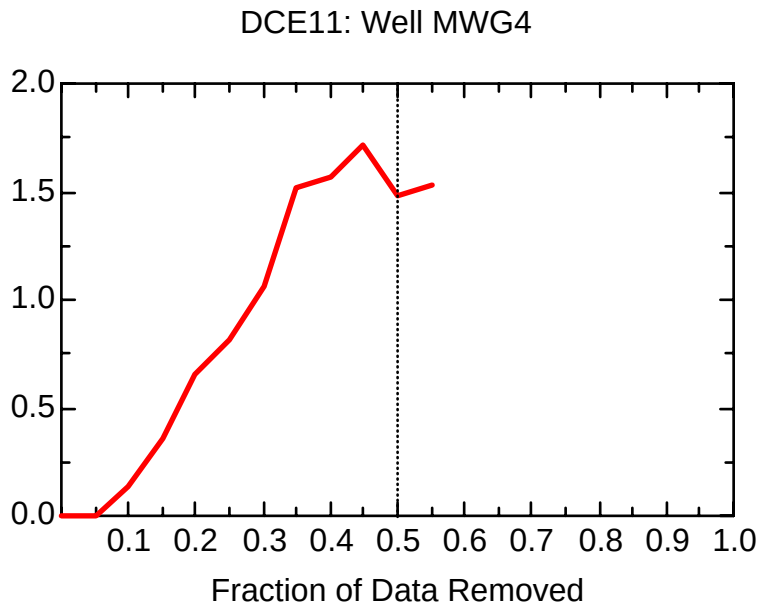
DCE11: Well MWG1A

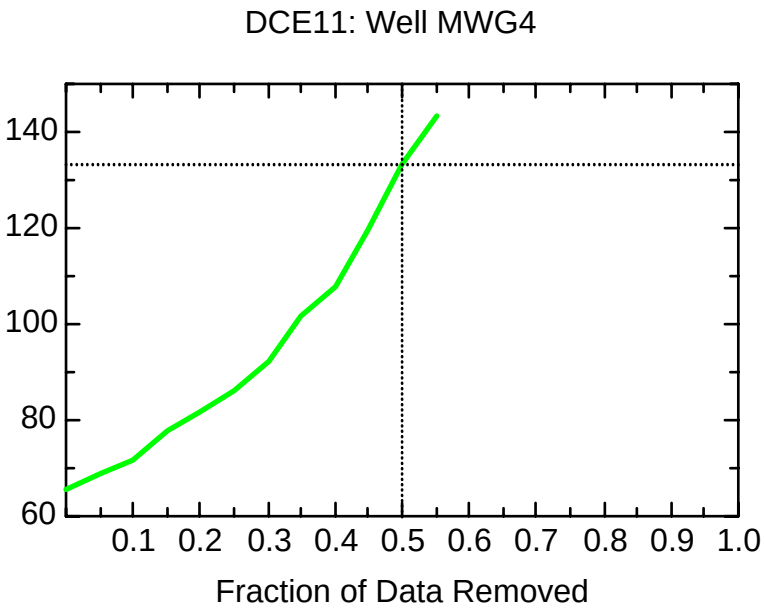


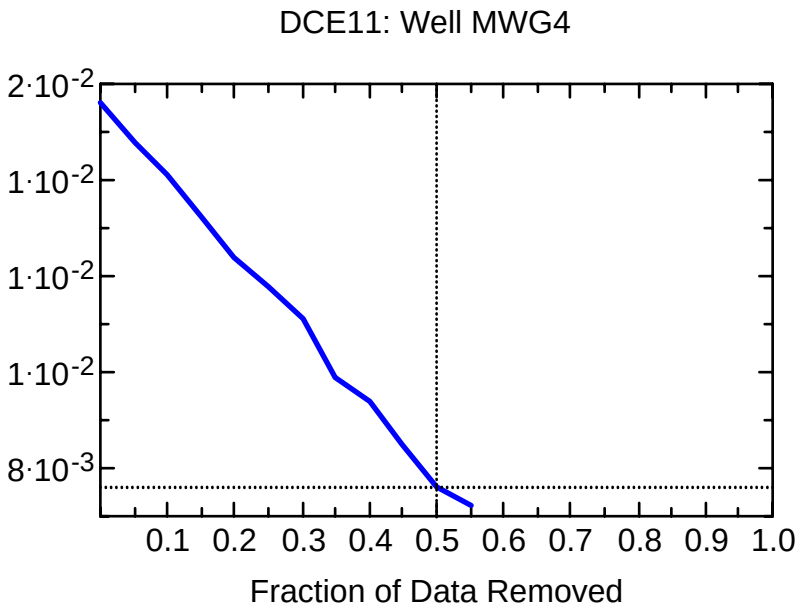
DCE11: Well MWG1A



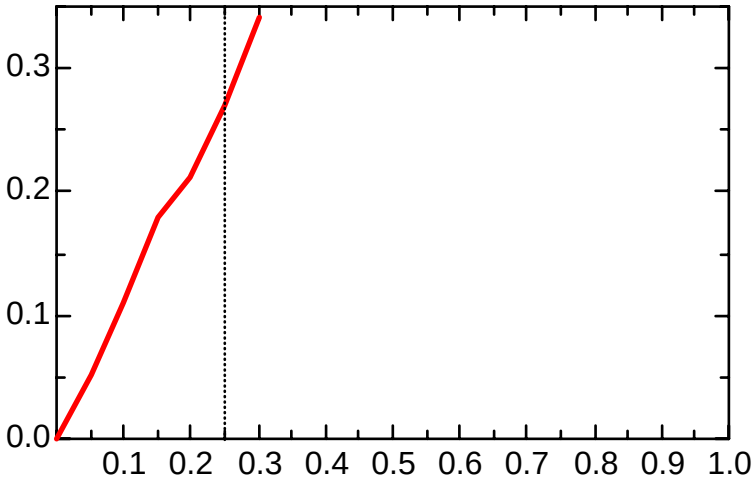

DCE11: Well MWG4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG4
2.0
1.5
1.0
0.5
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

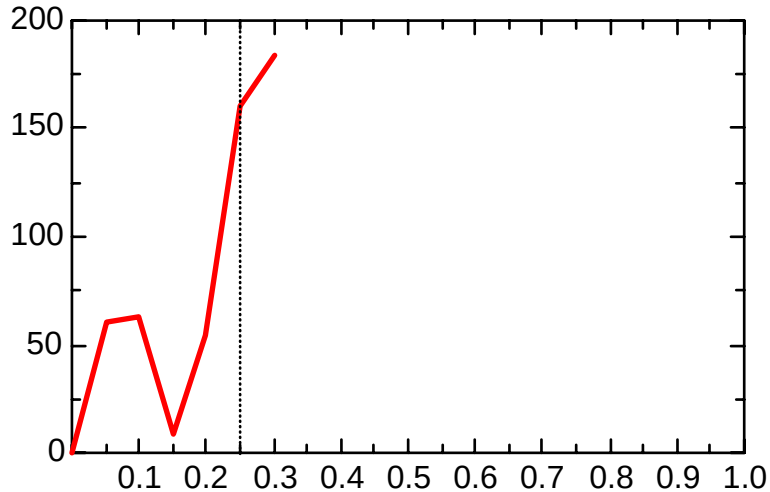

DCE11: Well MWG4
140
120
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG4
2·10-2
1·10-2
1·10-2
1·10-2
8·10-3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

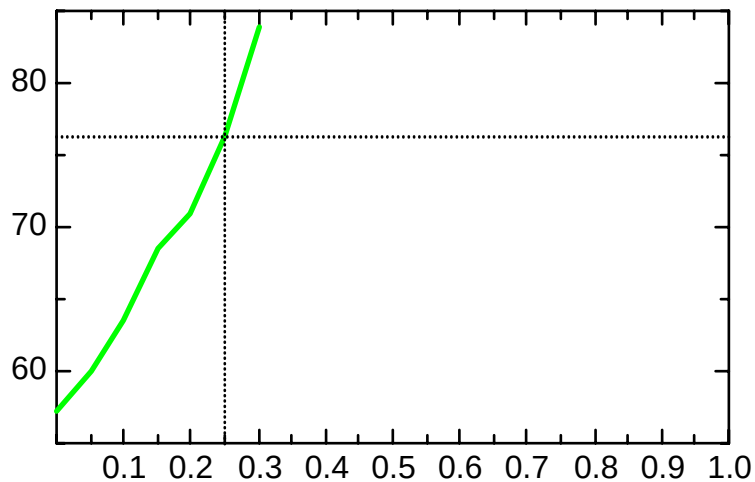
DCE11: Well MWG5-5



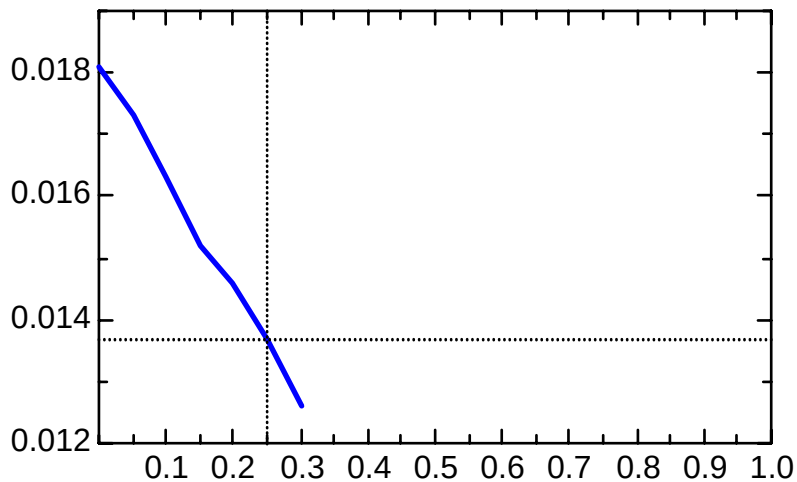
DCE11: Well MWG5-5

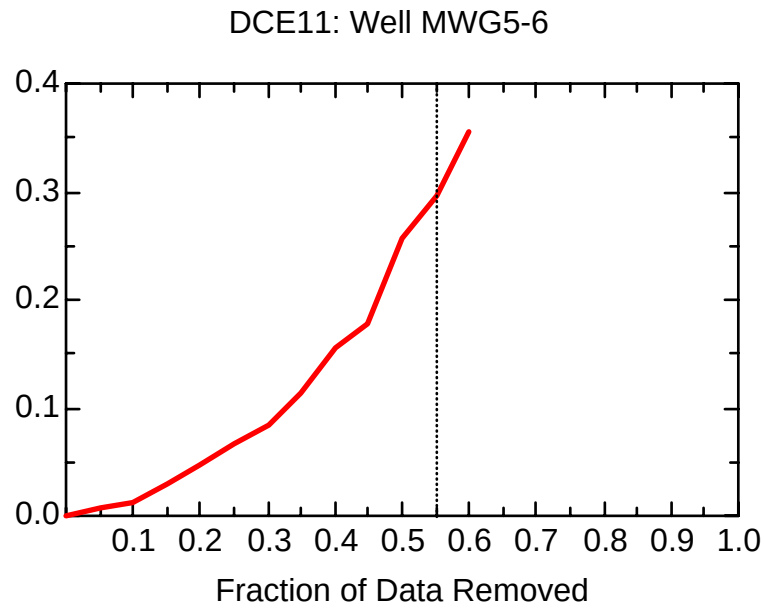


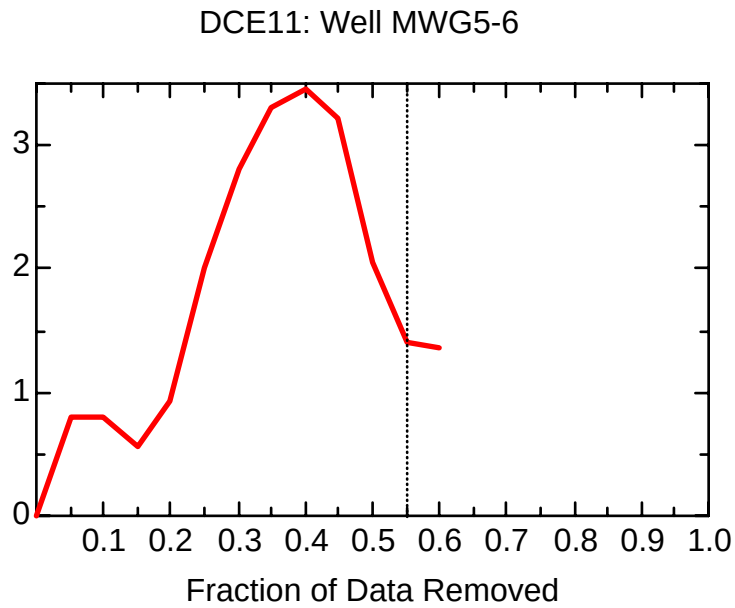
DCE11: Well MWG5-5

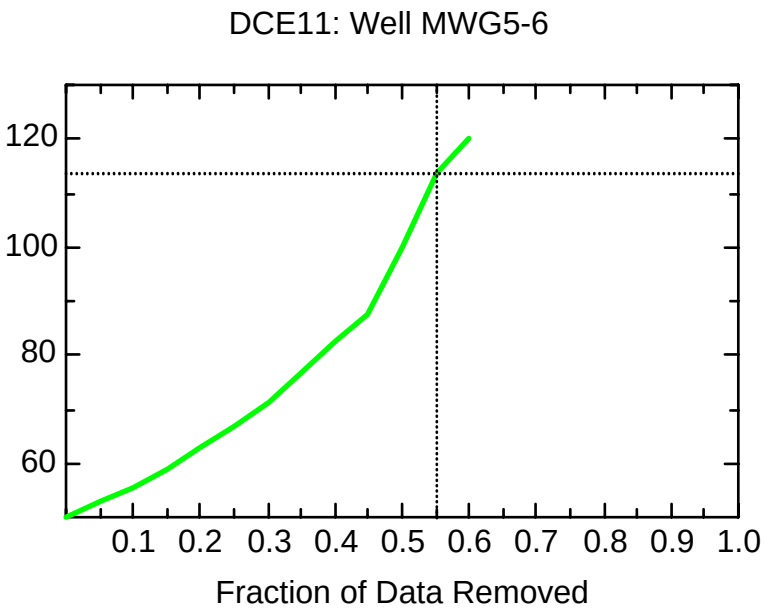


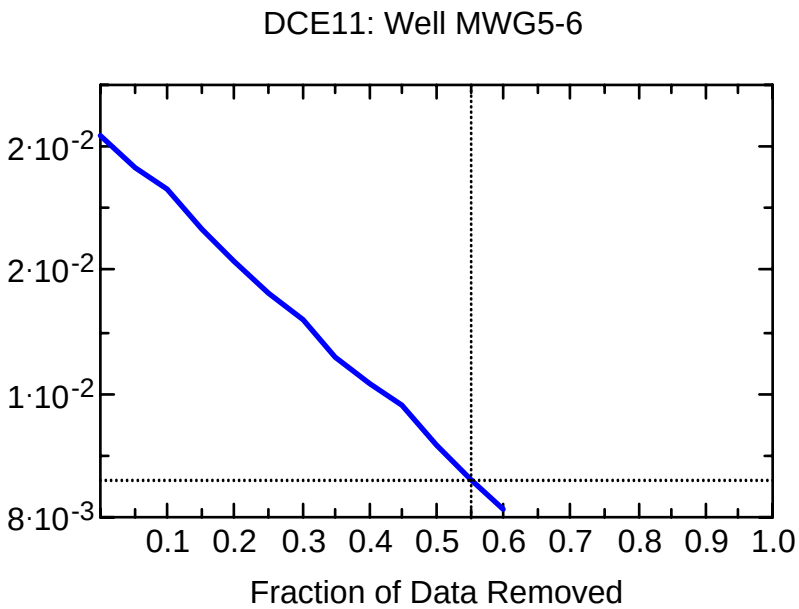
DCE11: Well MWG5-5

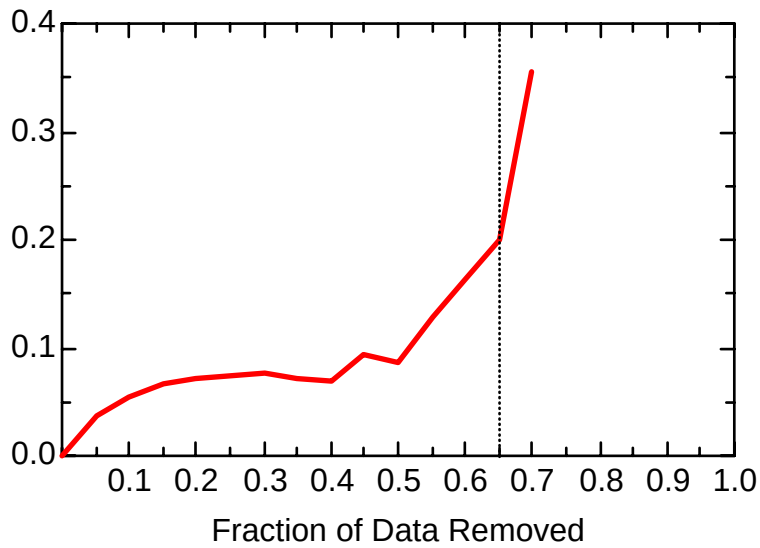


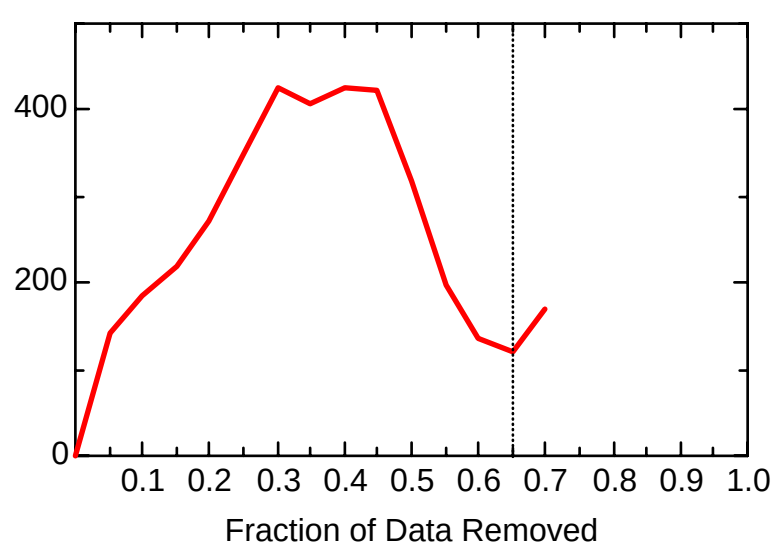

DCE11: Well MWG5-6
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

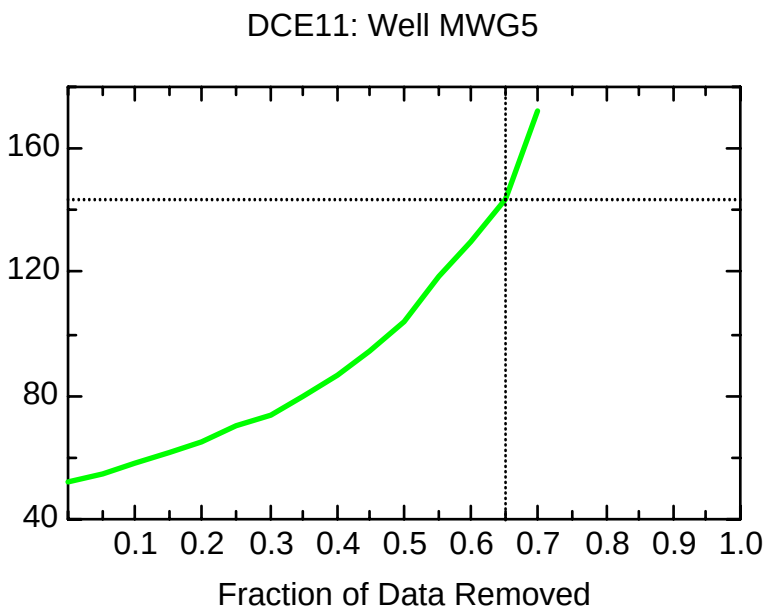

DCE11: Well MWG5-6
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

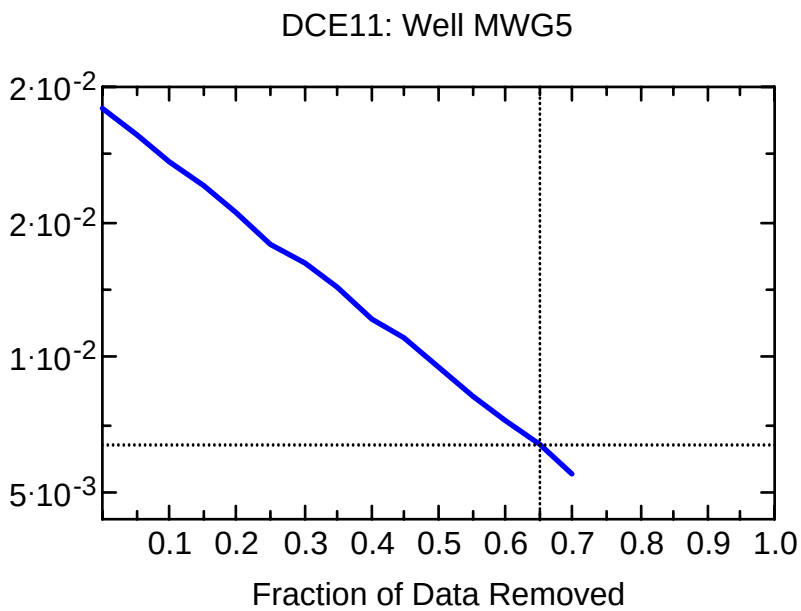

DCE11: Well MWG5-6
120
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

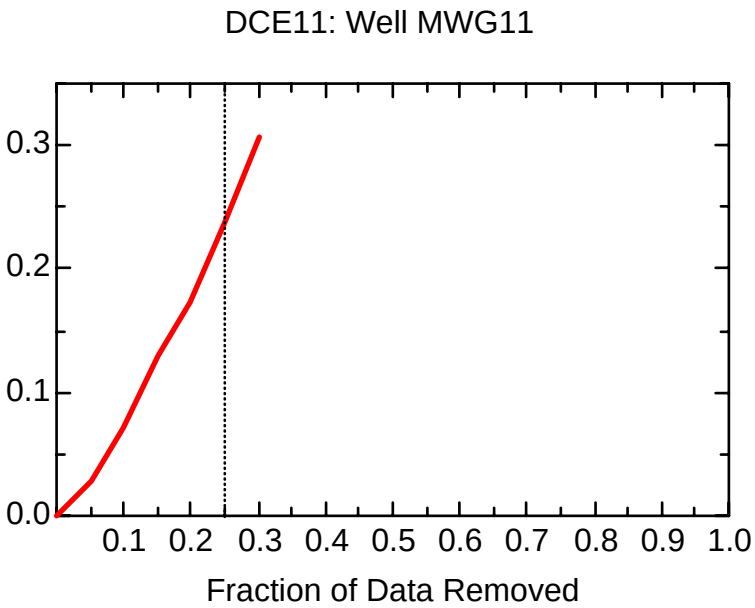

DCE11: Well MWG5-6
2·10-2
2·10-2
1·10-2
8·10-3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

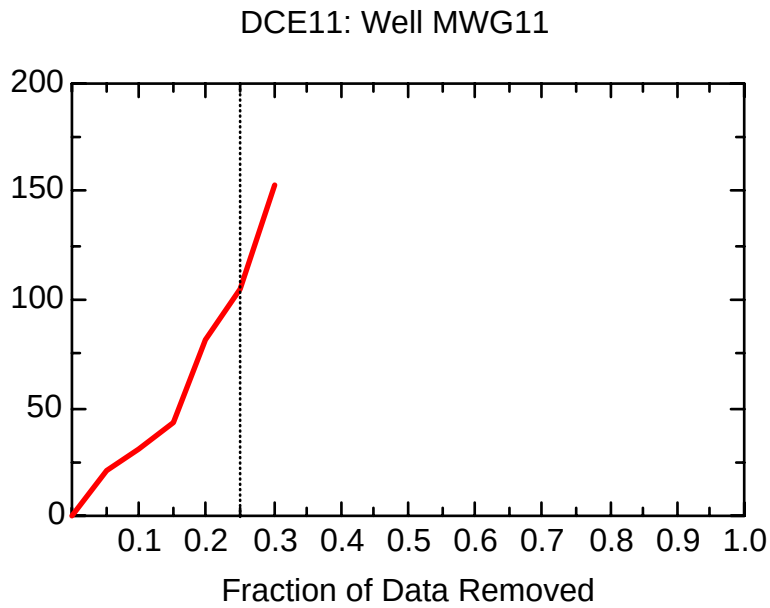

DCE11: Well MWG5
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

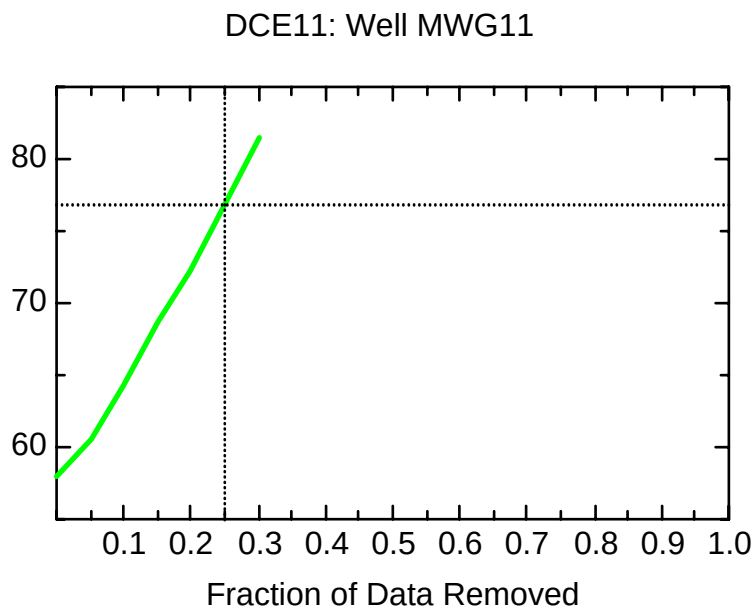

DCE11: Well MWG5
400
200
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

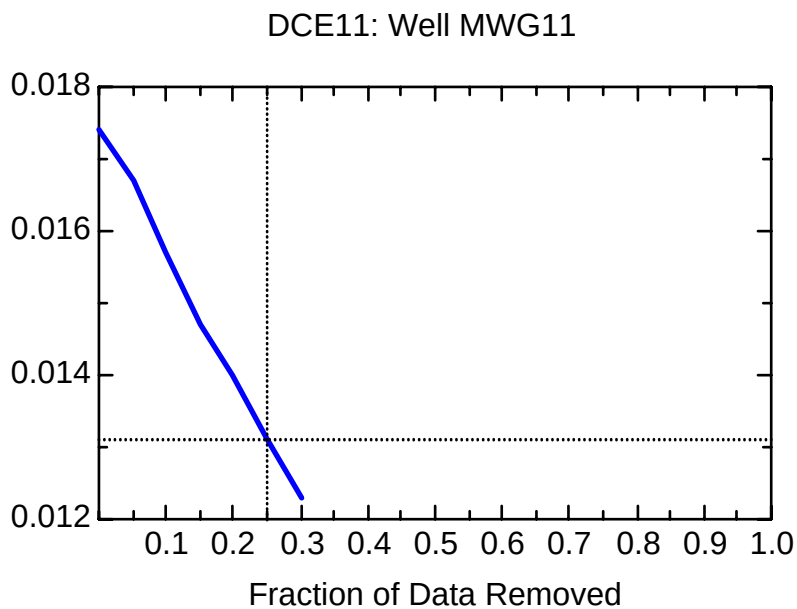

DCE11: Well MWG5
160
120
80
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG5
2·10-2
2·10-2
1·10-2
5·10-3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

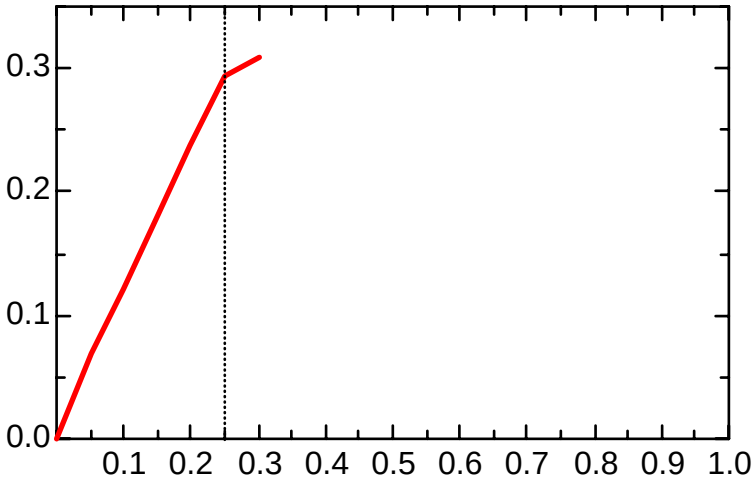

DCE11: Well MWG11
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG11
200
150
100
50
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

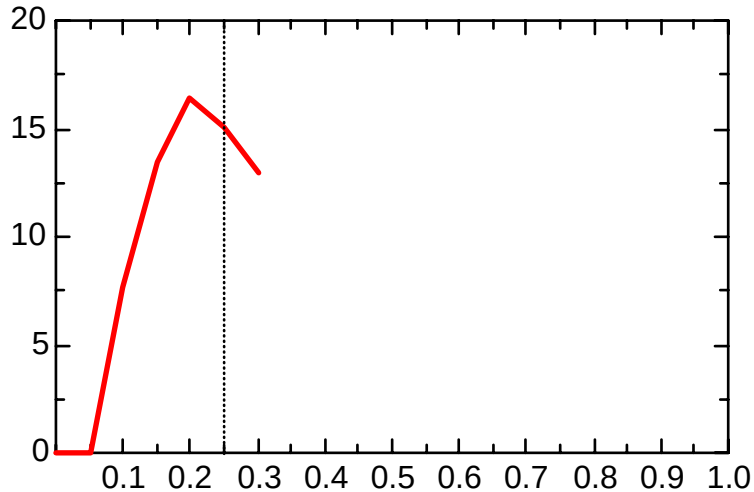

DCE11: Well MWG11
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWG11
0.018
0.016
0.014
0.012
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

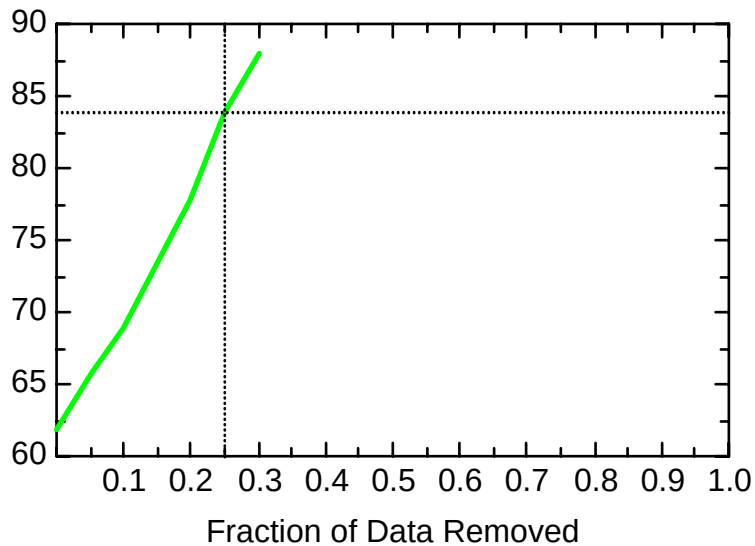
DCE11: Well MWG14



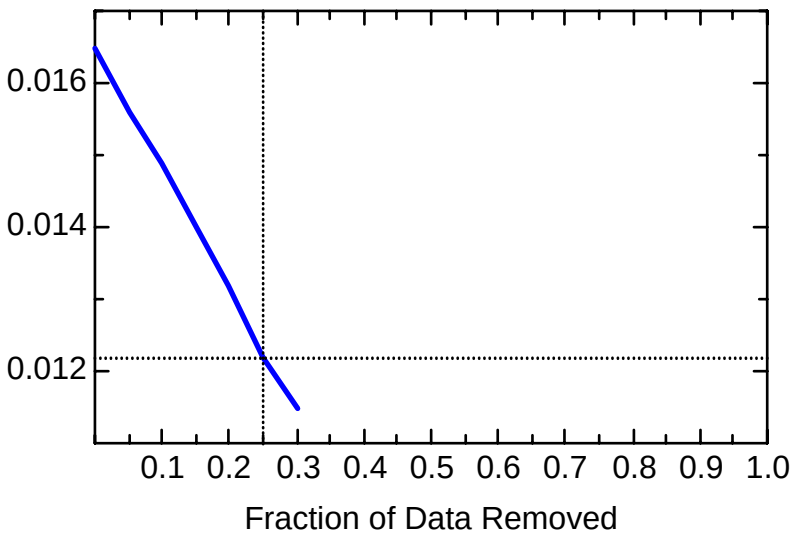
DCE11: Well MWG14

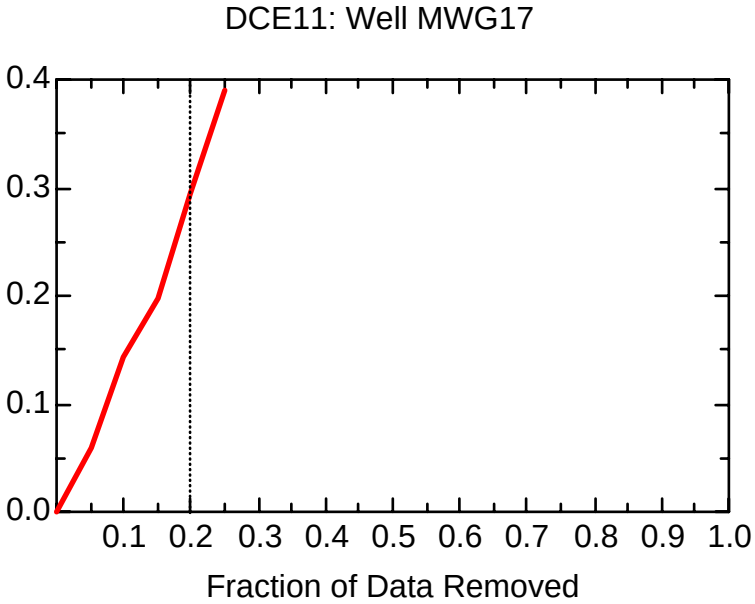


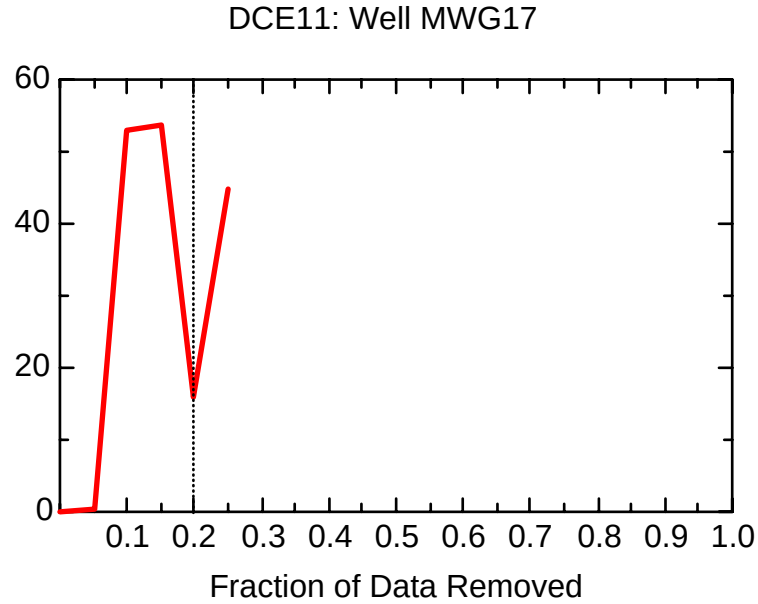
DCE11: Well MWG14

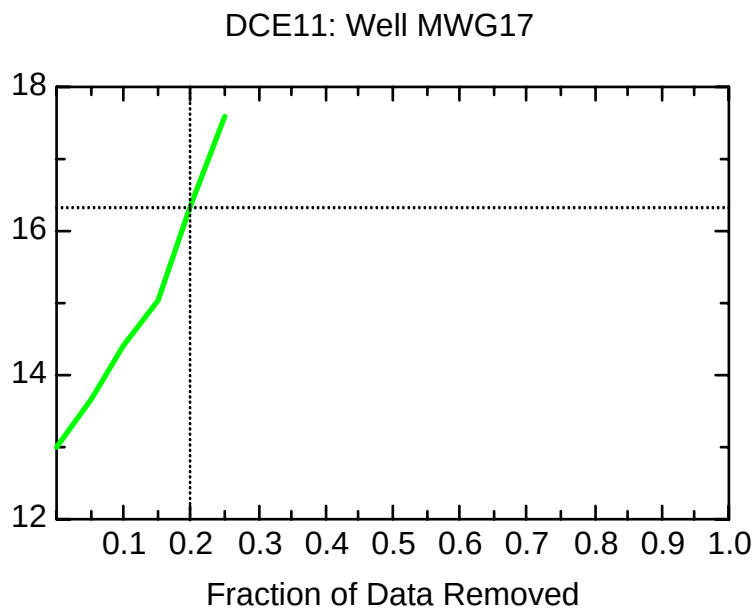


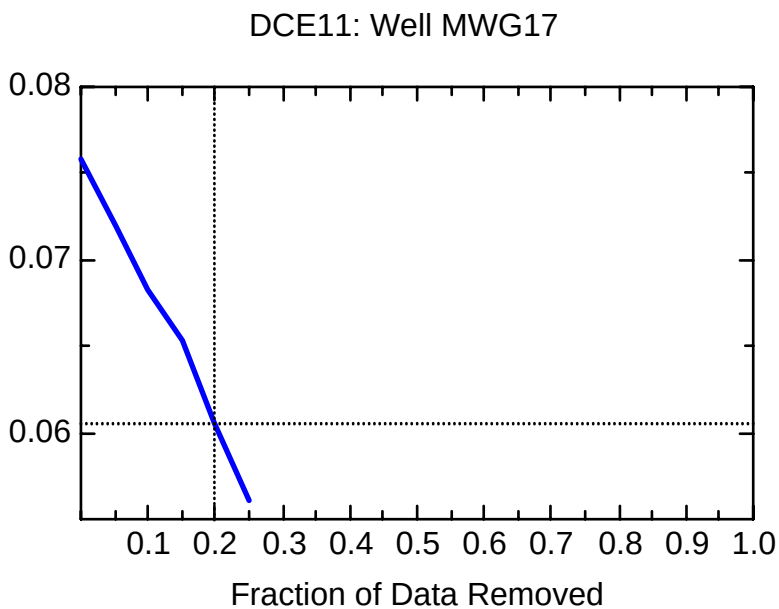
DCE11: Well MWG14

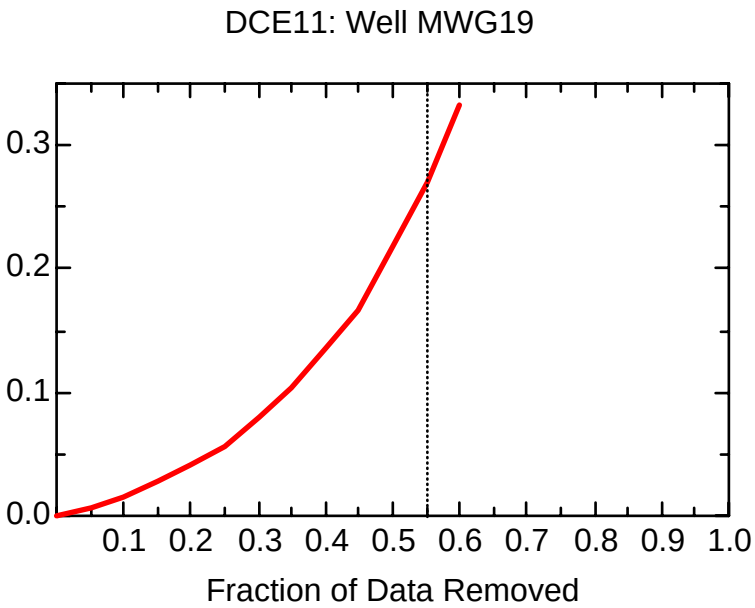


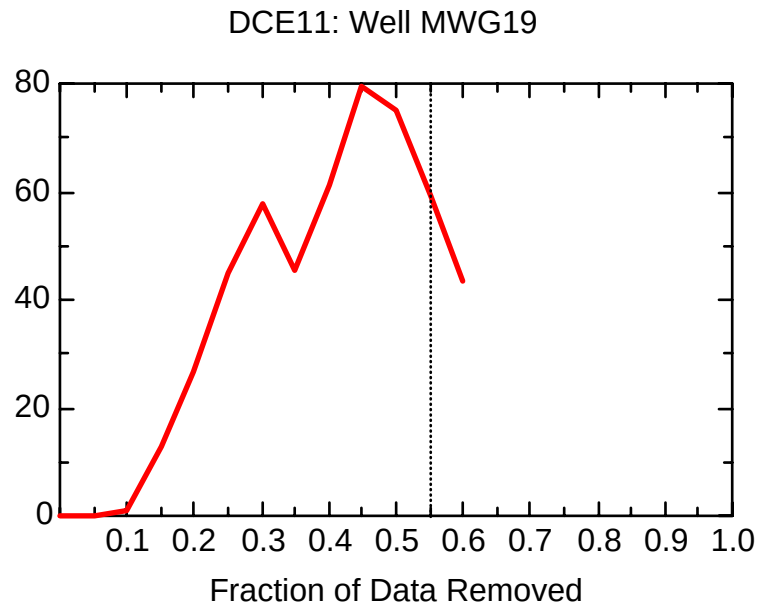

DCE11: Well MWG17
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

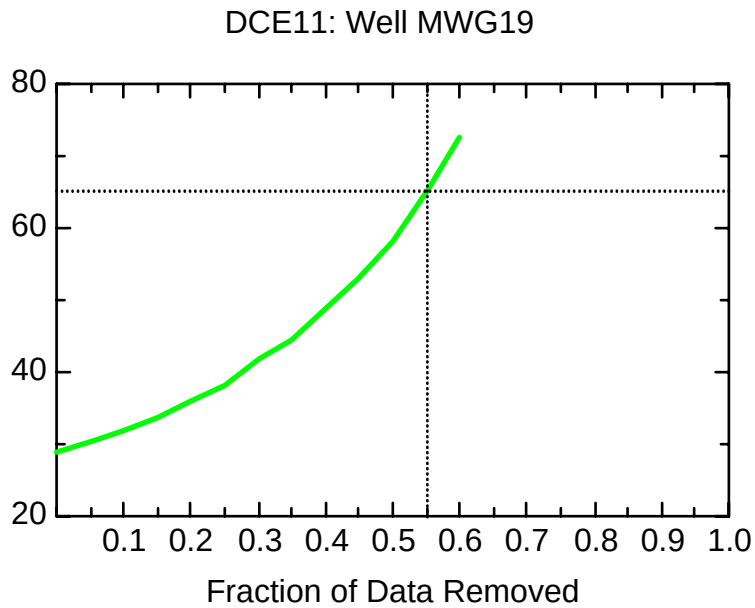

DCE11: Well MWG17
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

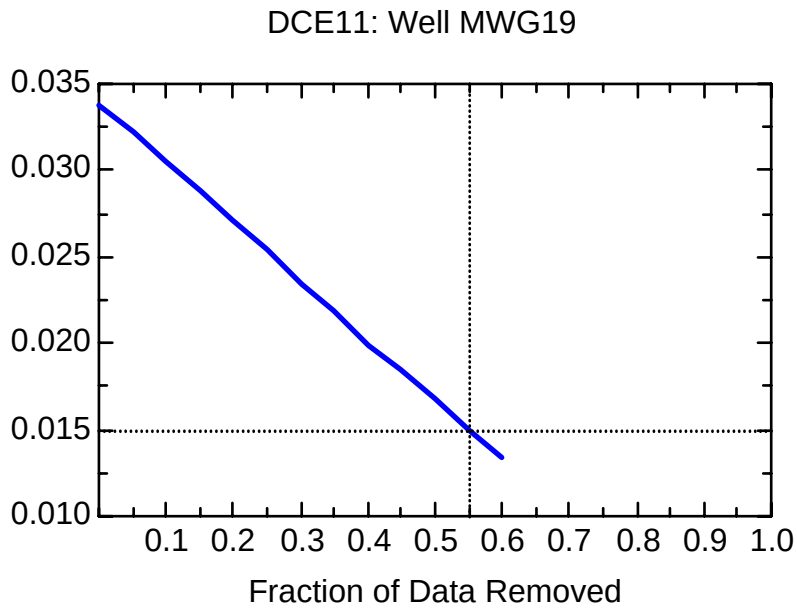

DCE11: Well MWG17
18
16
14
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

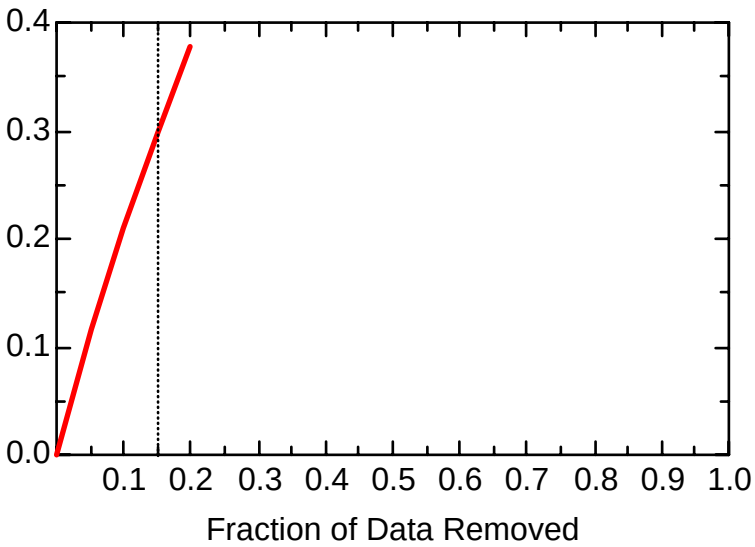

DCE11: Well MWG17
0.08
0.07
0.06
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

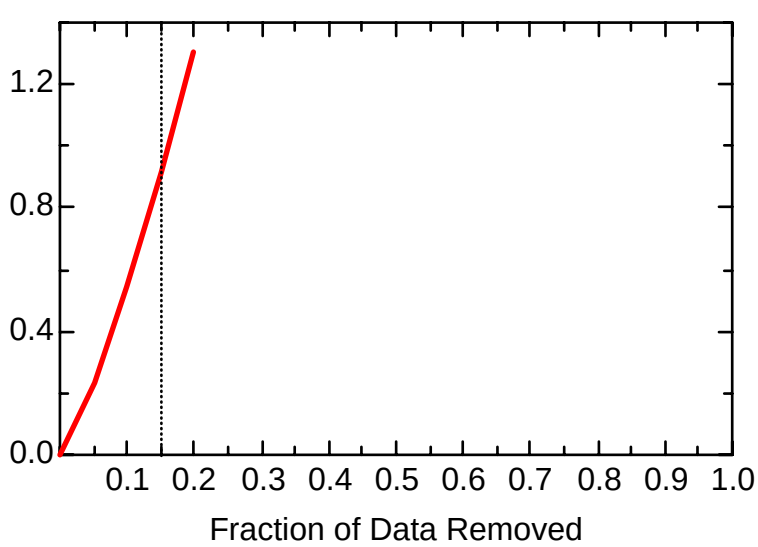

DCE11: Well MWG19
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

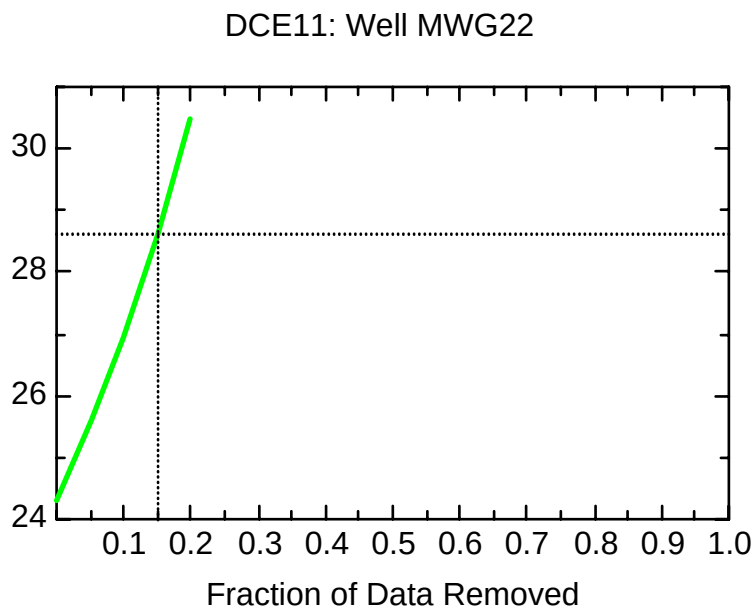

DCE11: Well MWG19
80
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

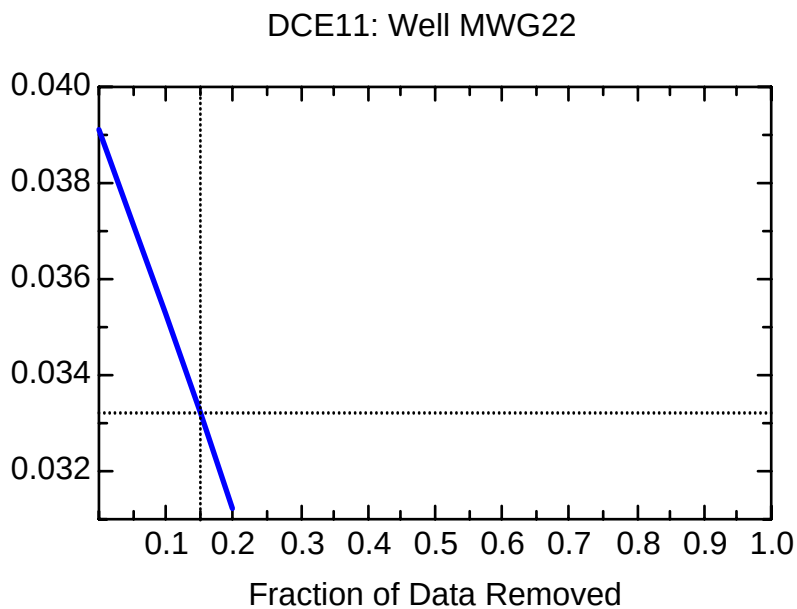

DCE11: Well MWG19
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

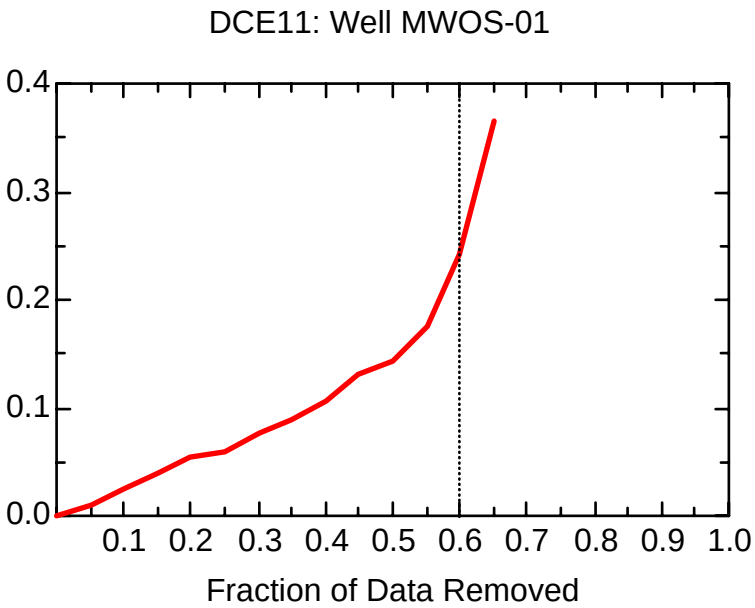

DCE11: Well MWG19
0.035
0.030
0.025
0.020
0.015
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

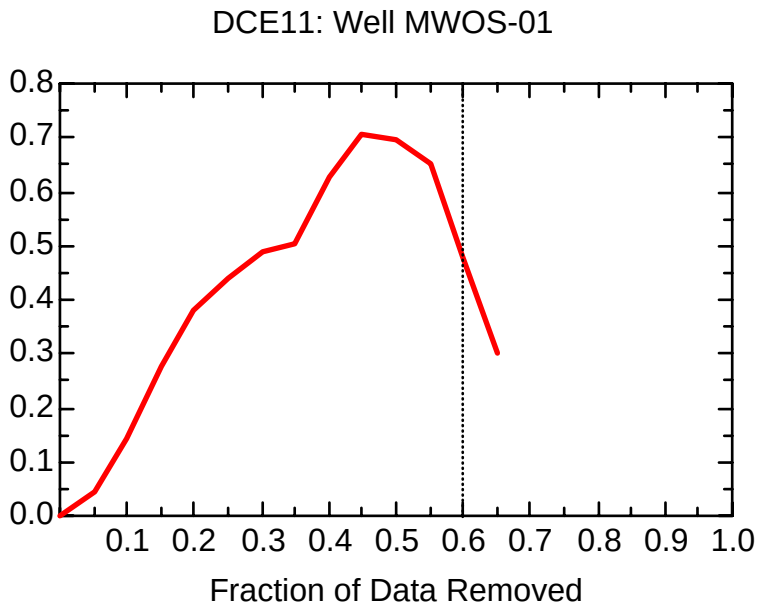

DCE11: Well MWG22
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

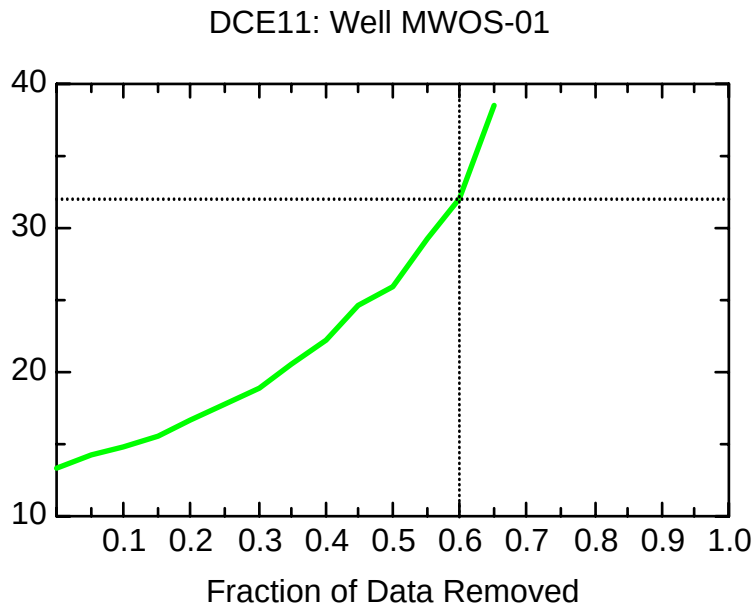

DCE11: Well MWG22
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

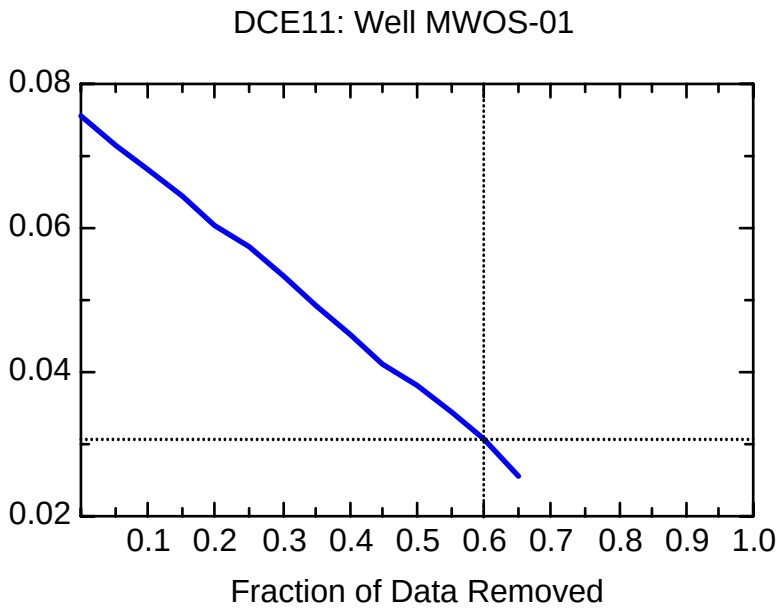

DCE11: Well MWG22
30
28
26
24
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

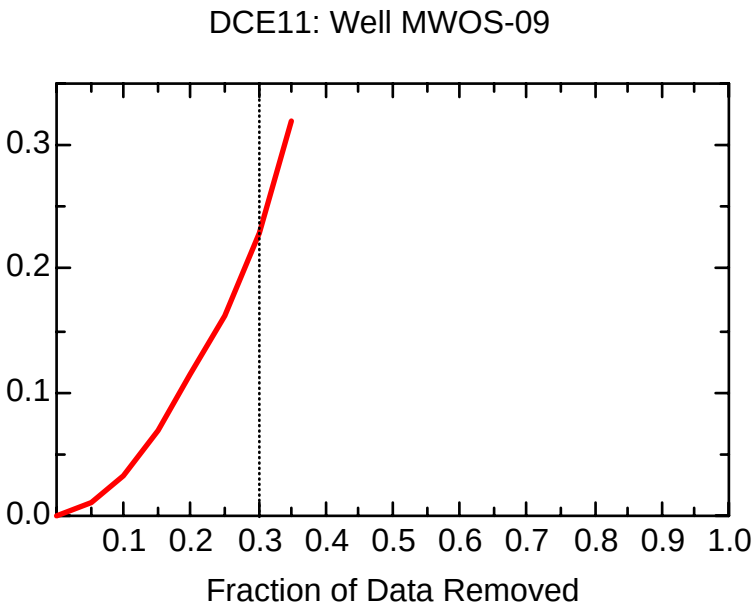

DCE11: Well MWG22
0.040
0.038
0.036
0.034
0.032
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

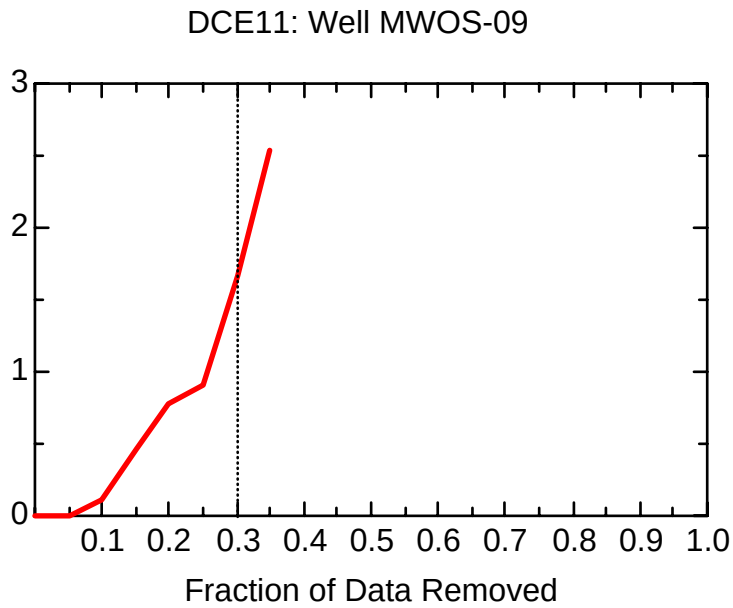

DCE11: Well MWOS-01
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

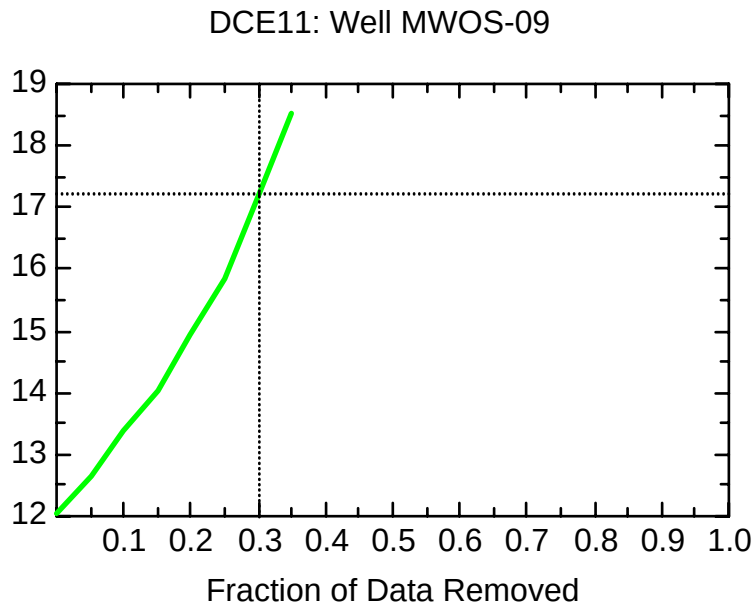

DCE11: Well MWOS-01
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

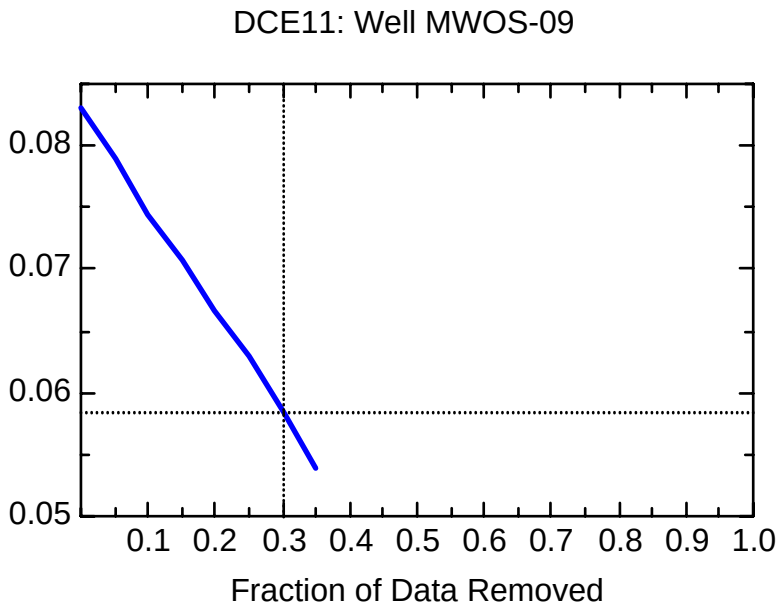

DCE11: Well MWOS-01
40
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

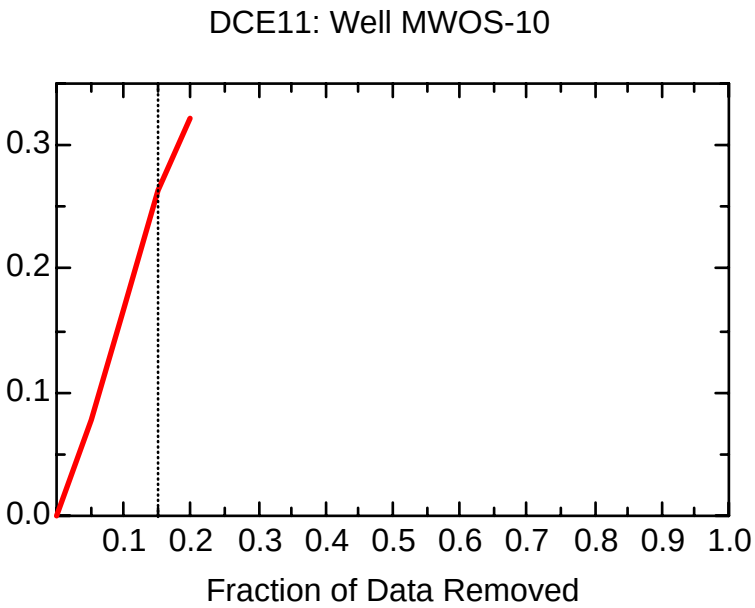

DCE11: Well MWOS-01
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

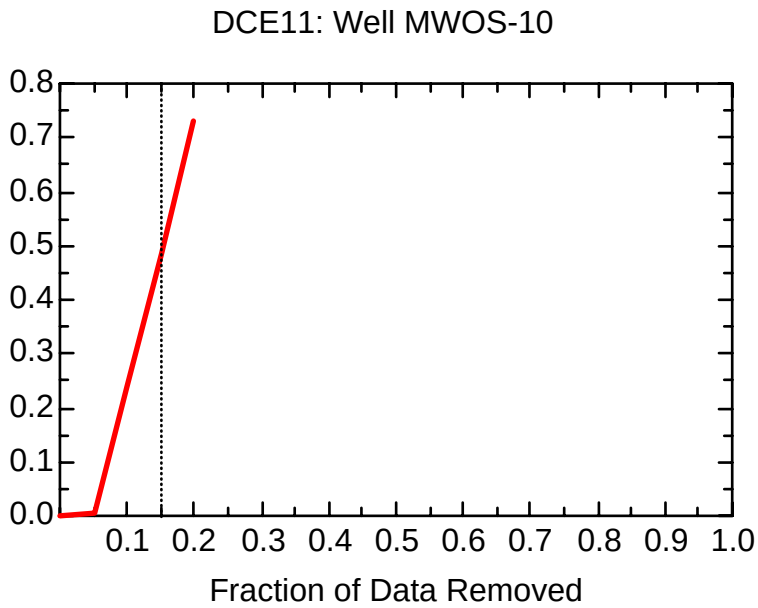

DCE11: Well MWOS-09
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

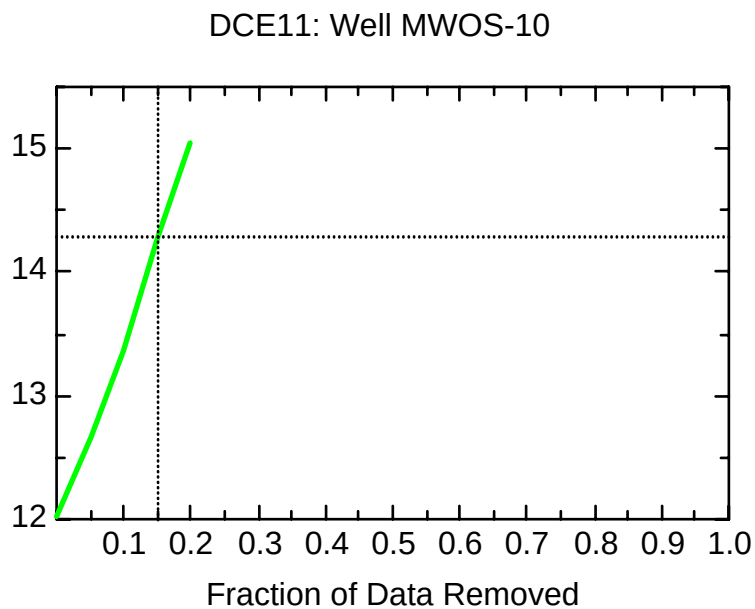

DCE11: Well MWOS-09
0
1
2
3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

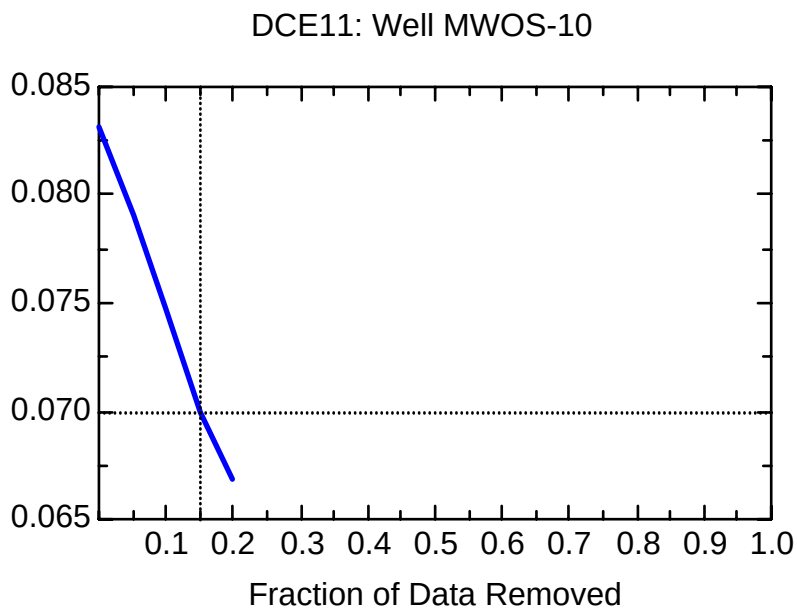

DCE11: Well MWOS-09
12
13
14
15
16
17
18
19
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

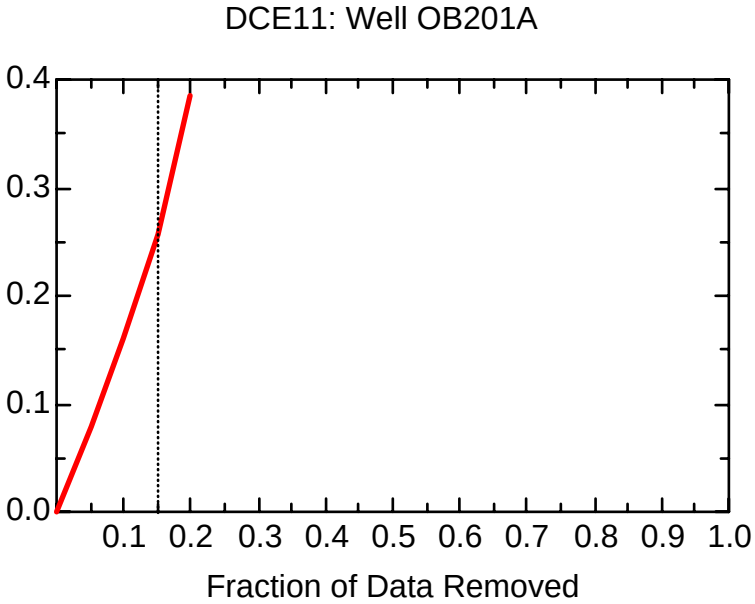

DCE11: Well MWOS-09
0.05
0.06
0.07
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

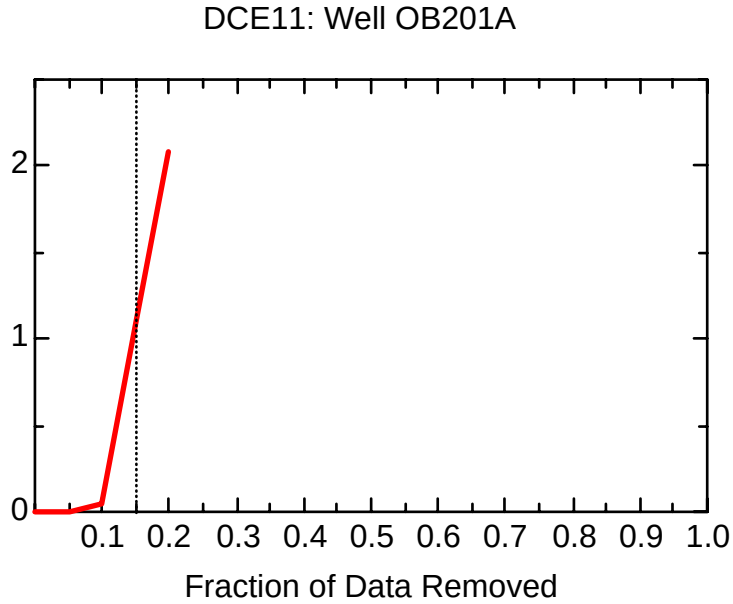

DCE11: Well MWOS-10
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

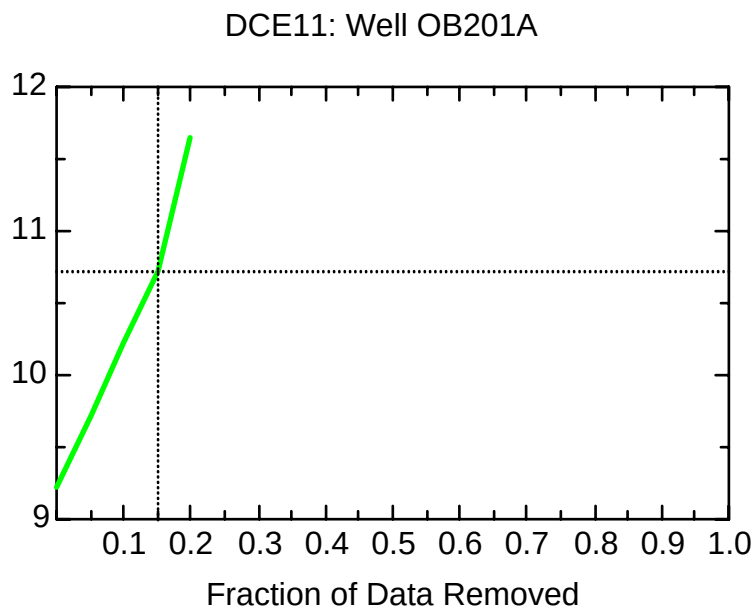

DCE11: Well MWOS-10
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

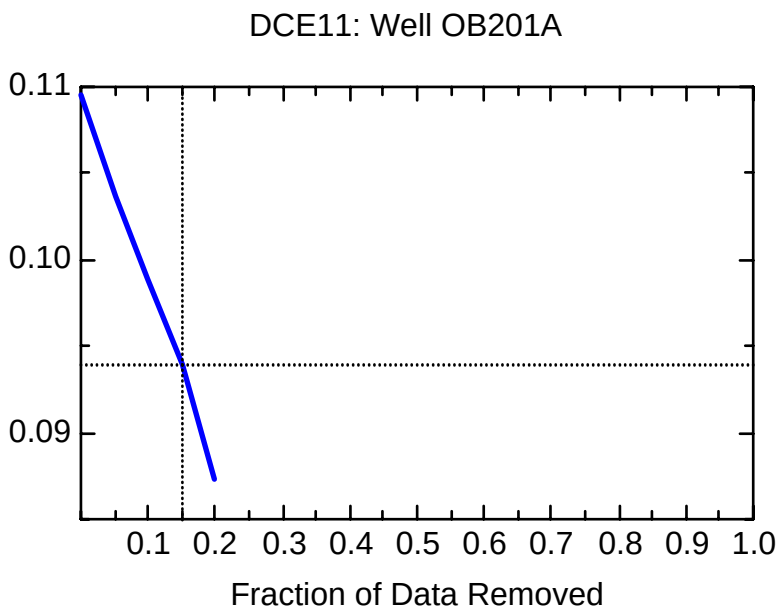

DCE11: Well MWOS-10
15
14
13
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well MWOS-10
0.085
0.080
0.075
0.070
0.065
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

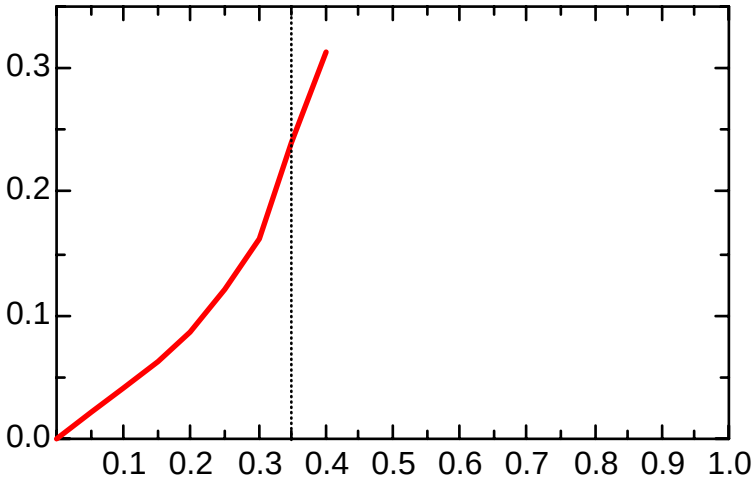

DCE11: Well OB201A
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB201A
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

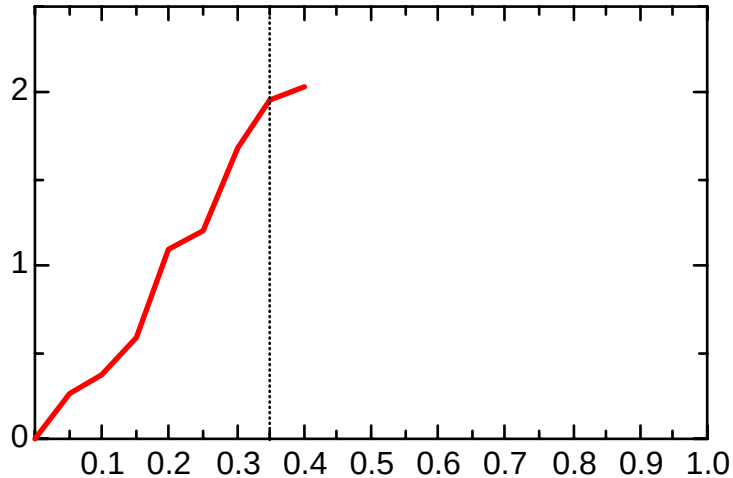

DCE11: Well OB201A
12
11
10
9
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB201A
0.11
0.10
0.09
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

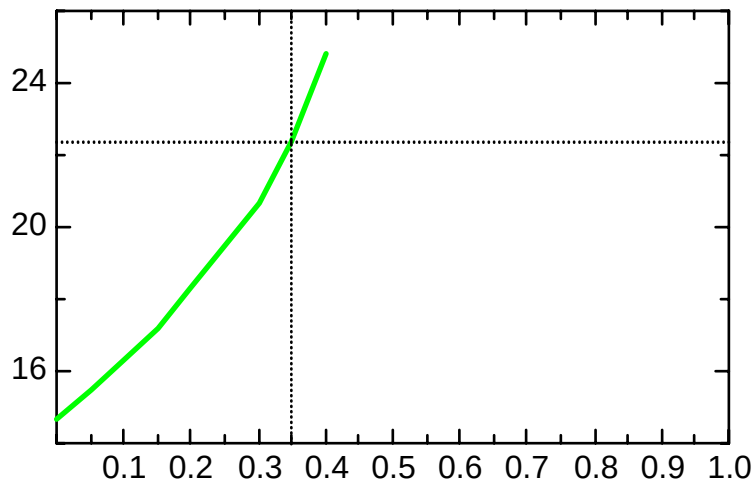
DCE11: Well OB204B



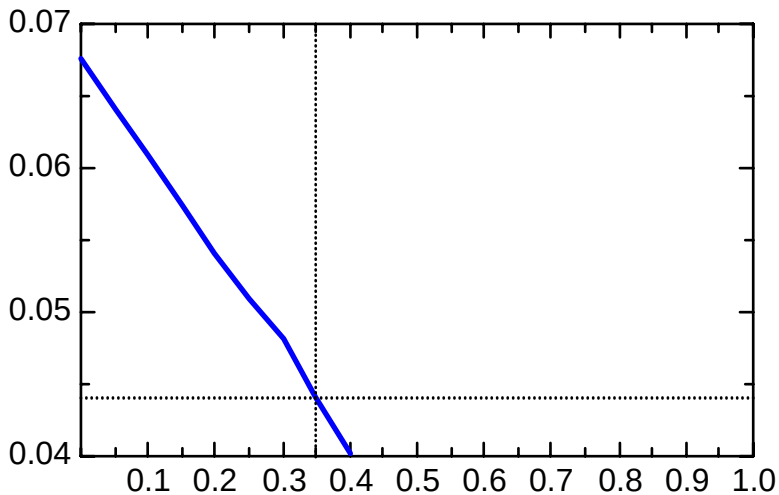
DCE11: Well OB204B

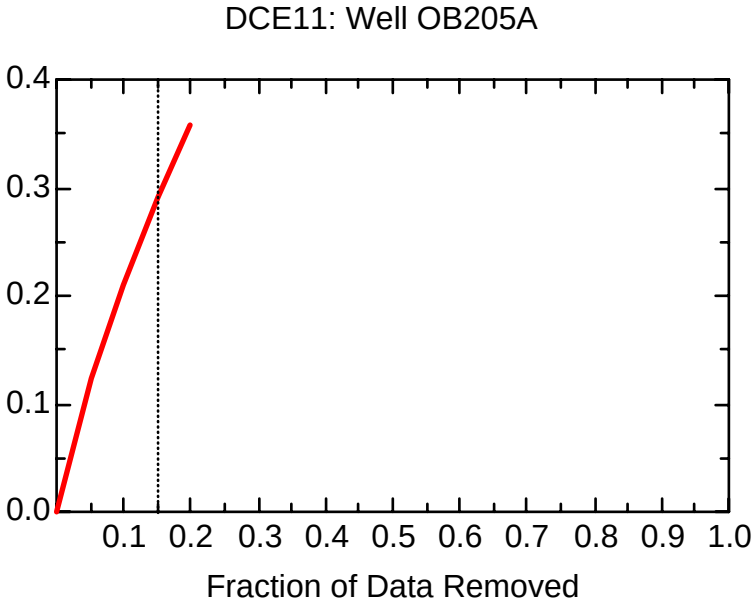


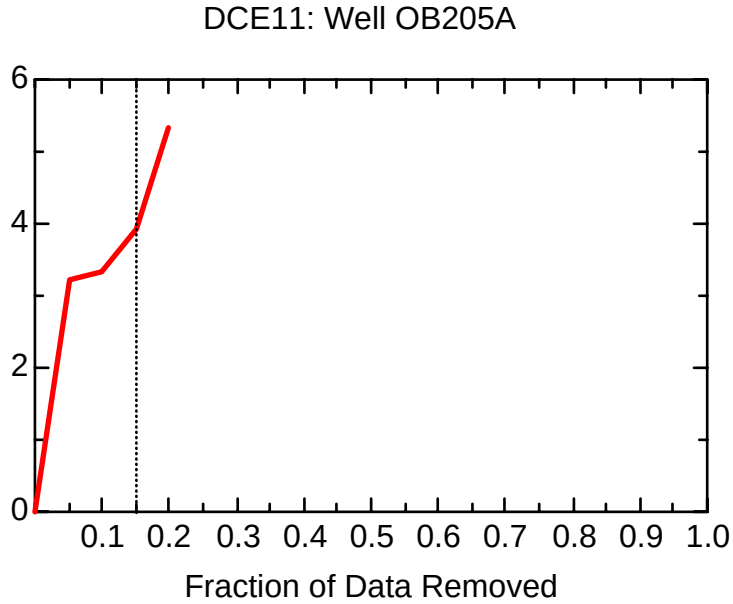
DCE11: Well OB204B

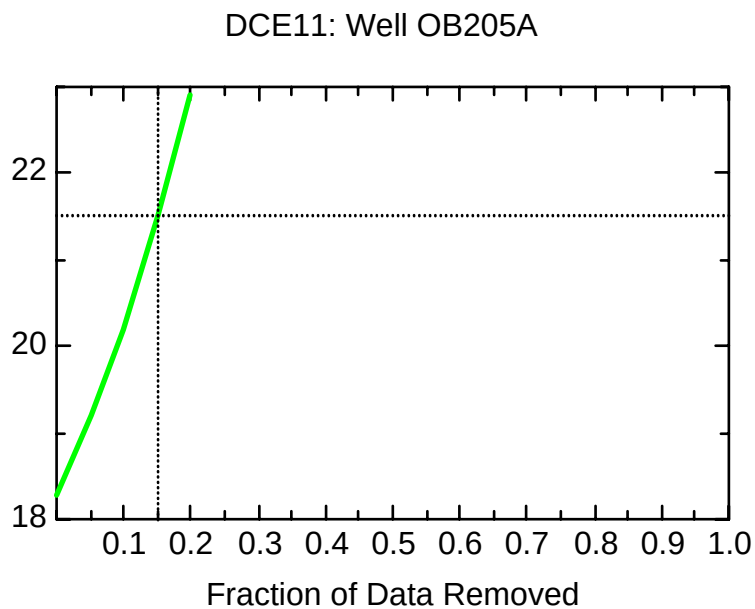


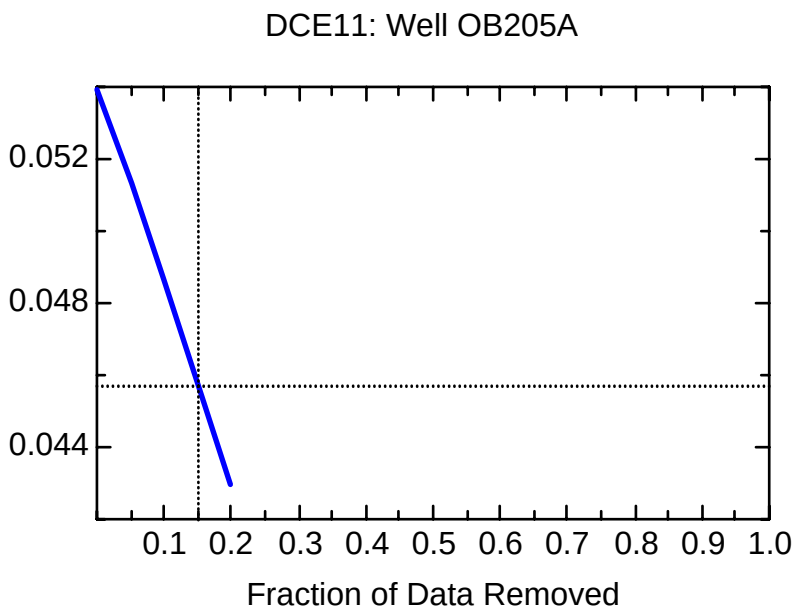
DCE11: Well OB204B

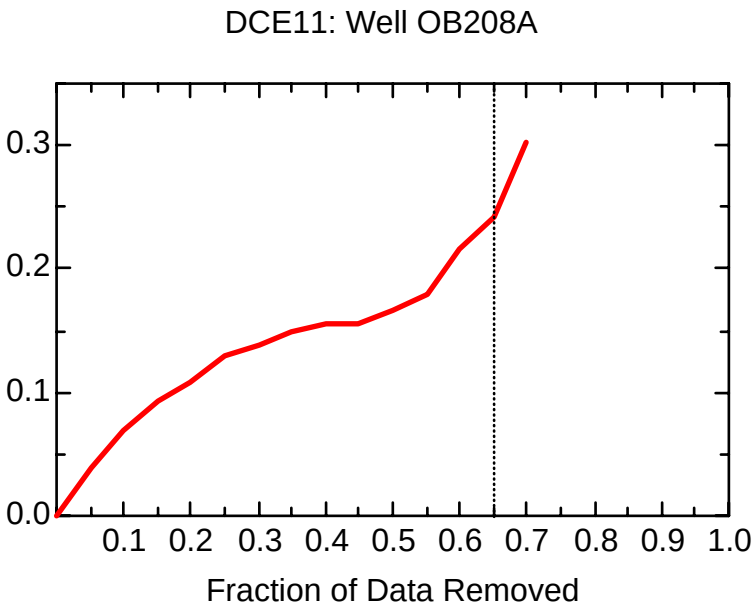


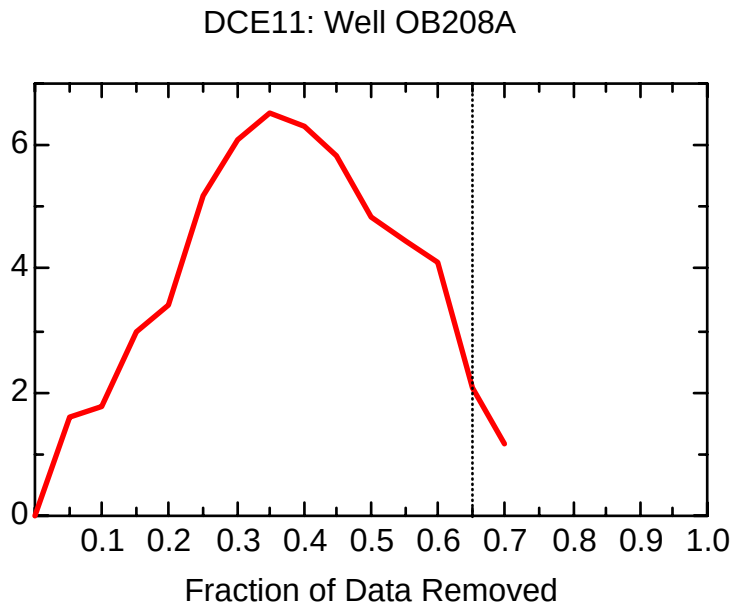

DCE11: Well OB205A
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

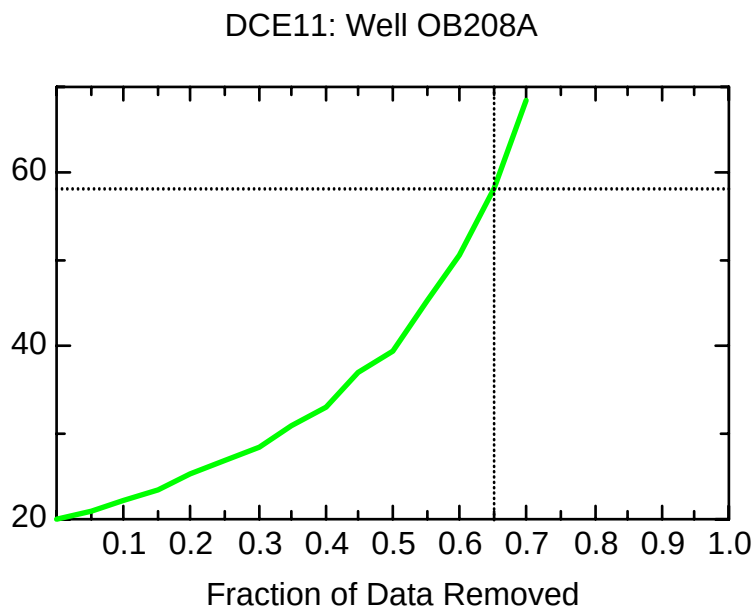

DCE11: Well OB205A
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

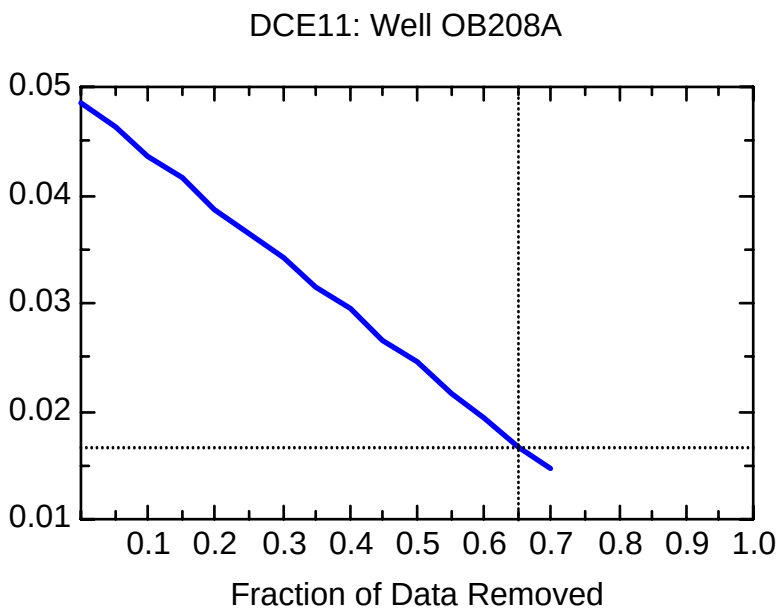

DCE11: Well OB205A
22
20
18
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

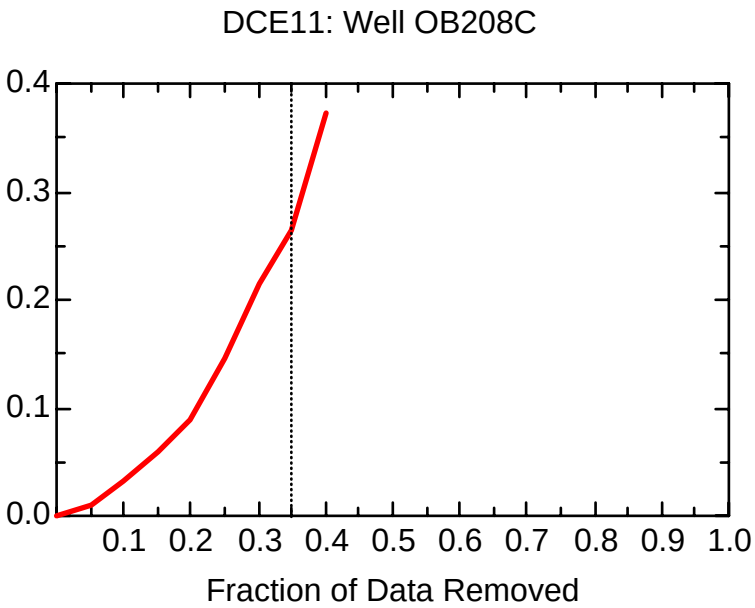

DCE11: Well OB205A
0.052
0.048
0.044
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

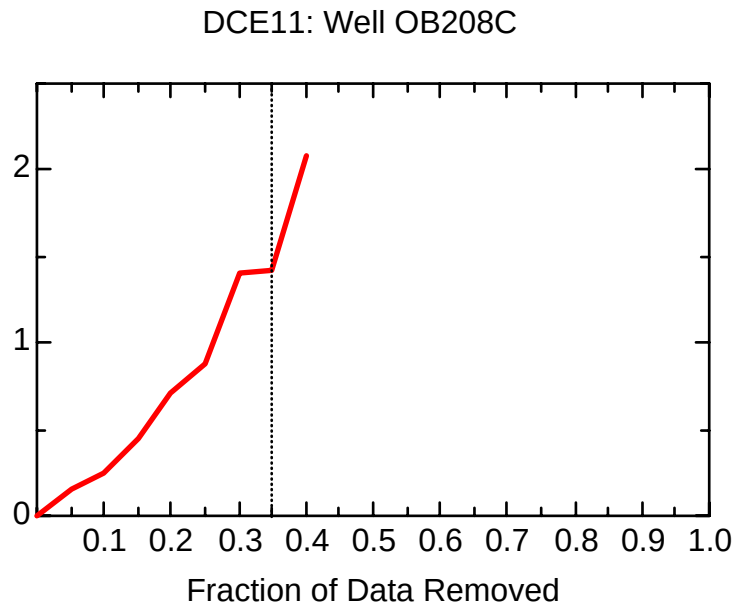

DCE11: Well OB208A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

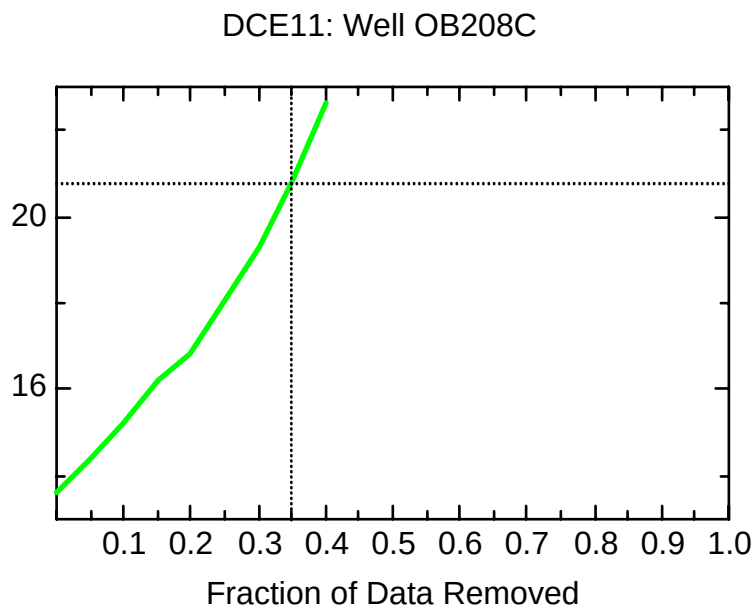

DCE11: Well OB208A
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

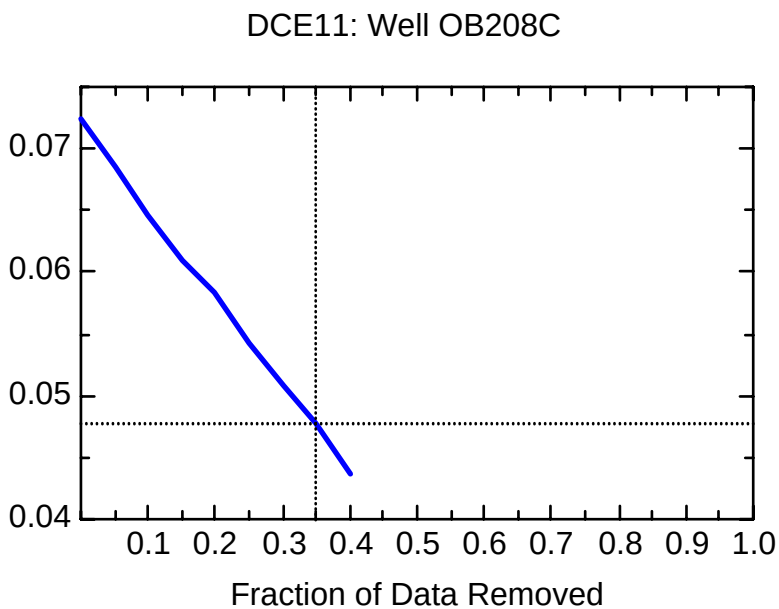

DCE11: Well OB208A
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

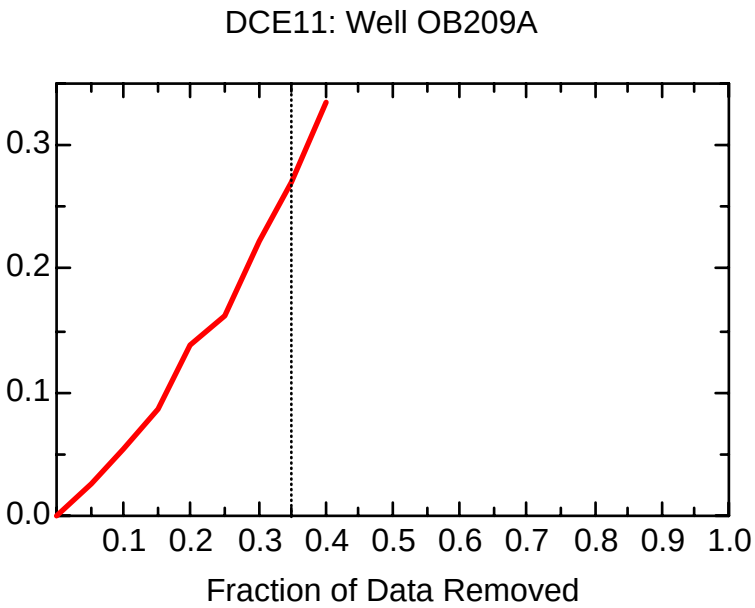

DCE11: Well OB208A
0.05
0.04
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB208C
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB208C
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB208C
20
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB208C
0.07
0.06
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB209A
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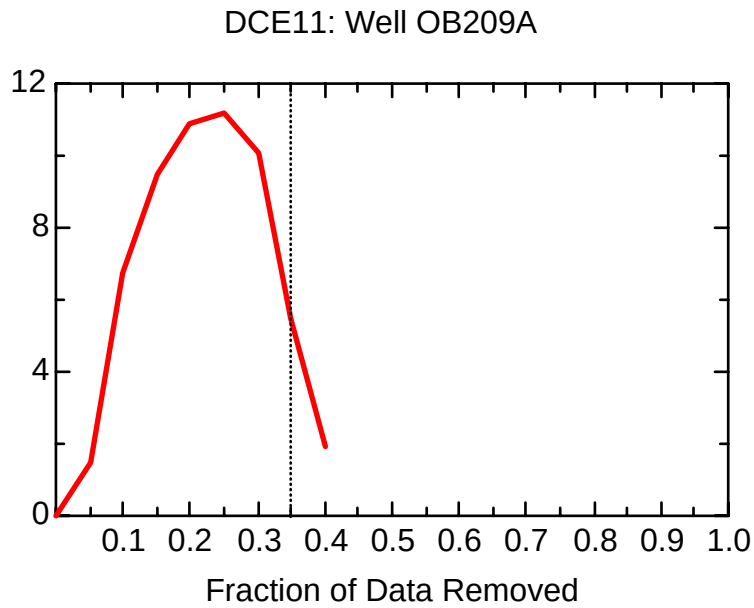
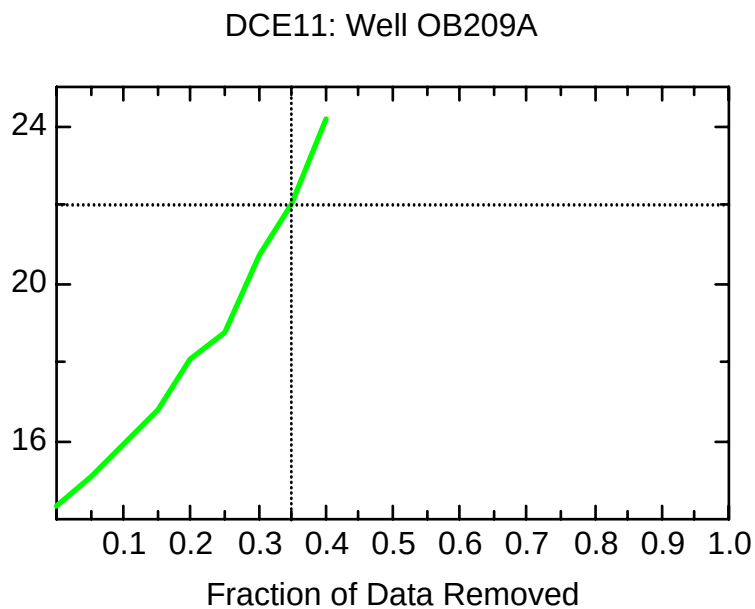
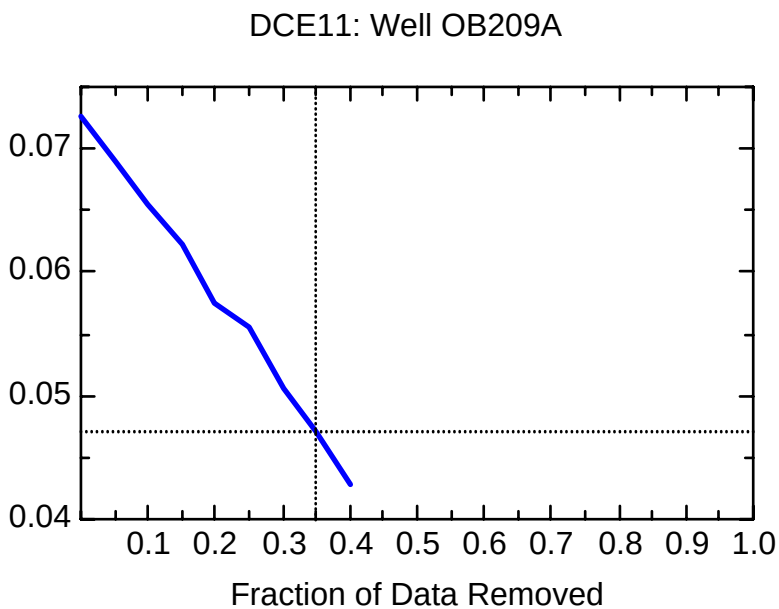
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB209A
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB209A
24
20
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OB209A
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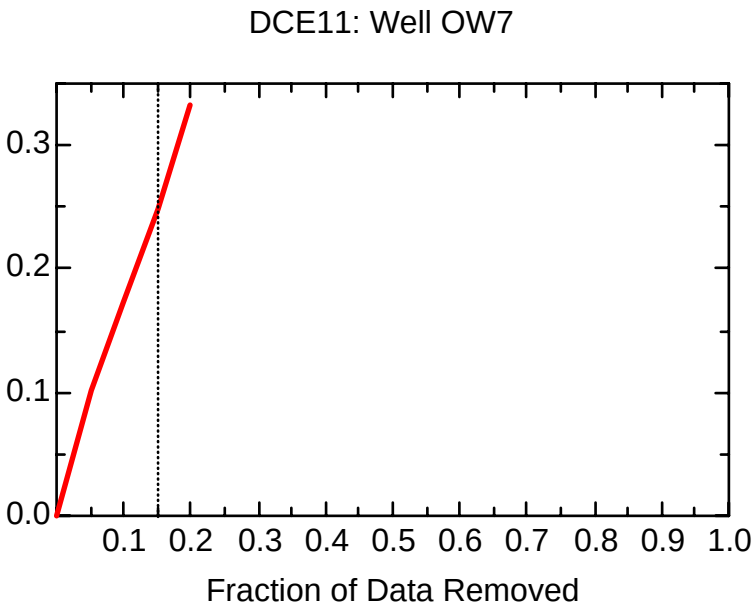
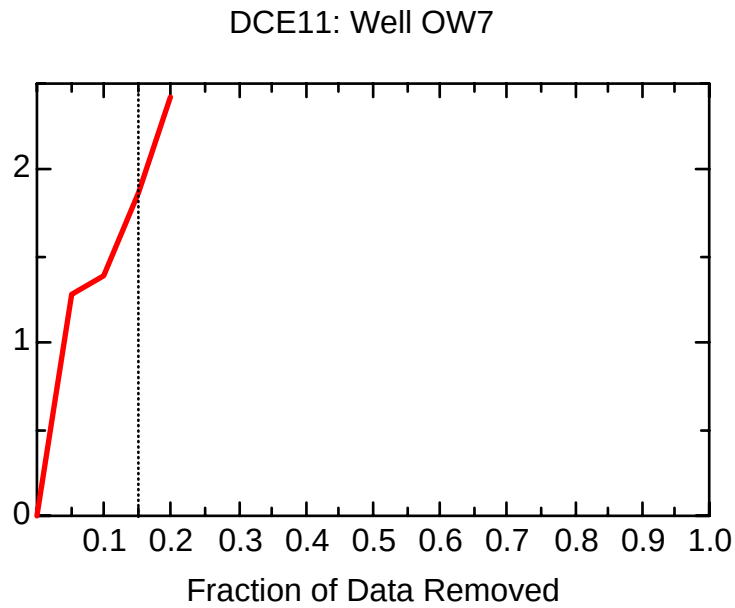
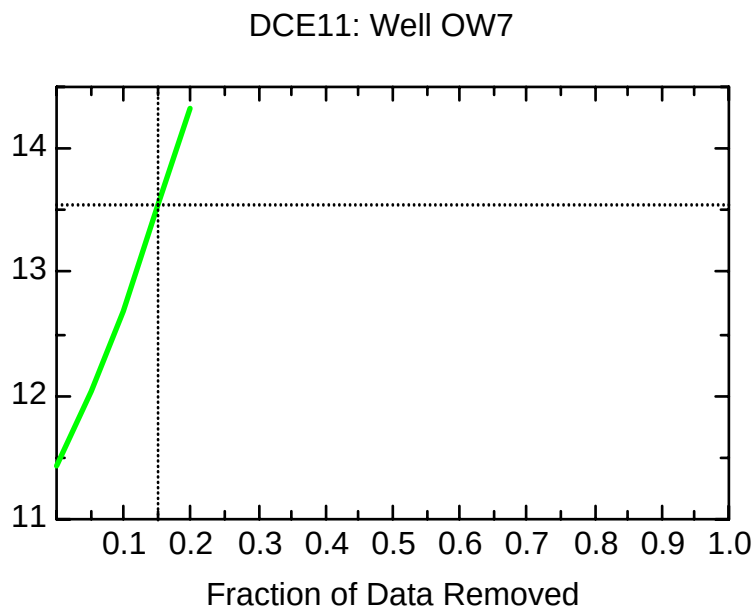
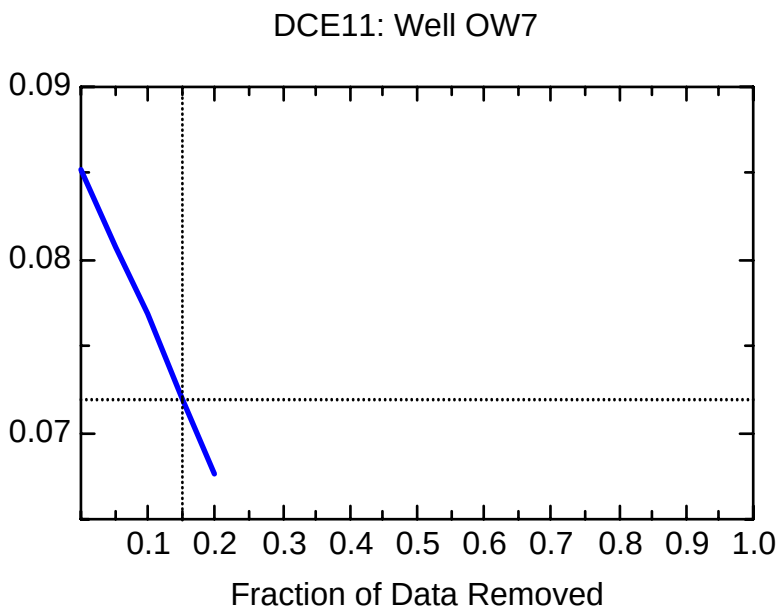
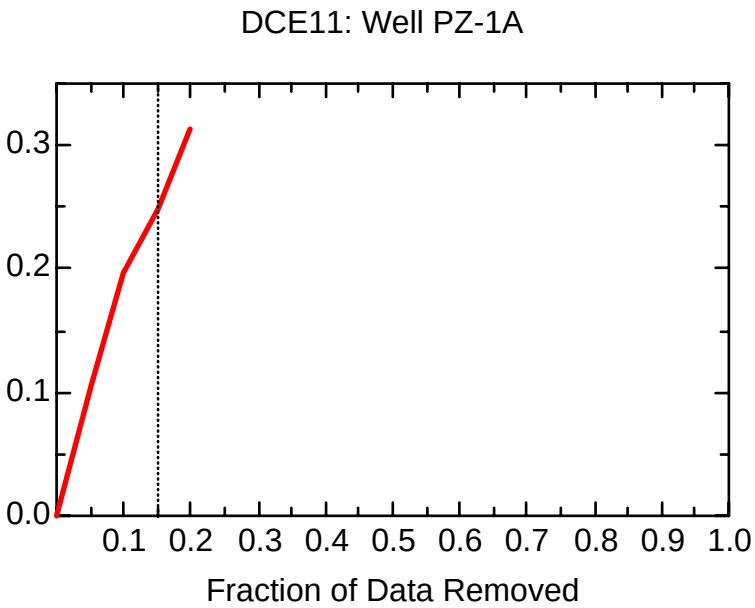
0.06
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

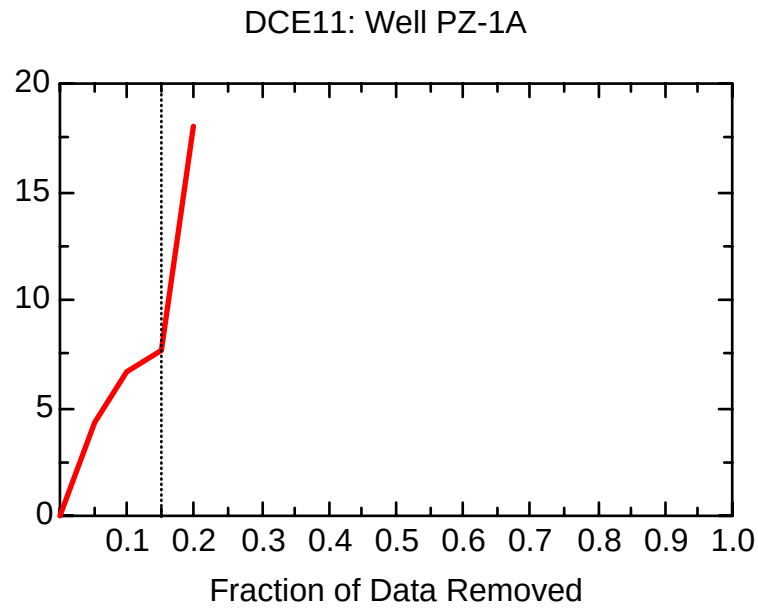

DCE11: Well OW7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

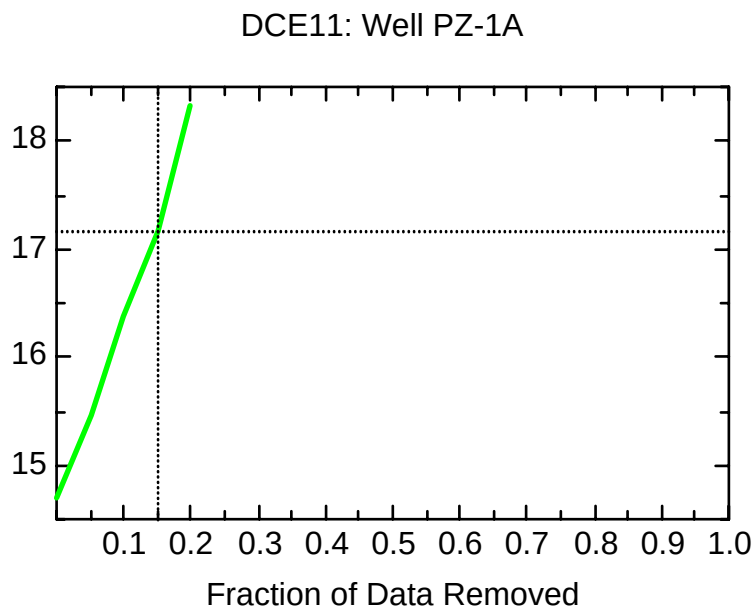

DCE11: Well OW7
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

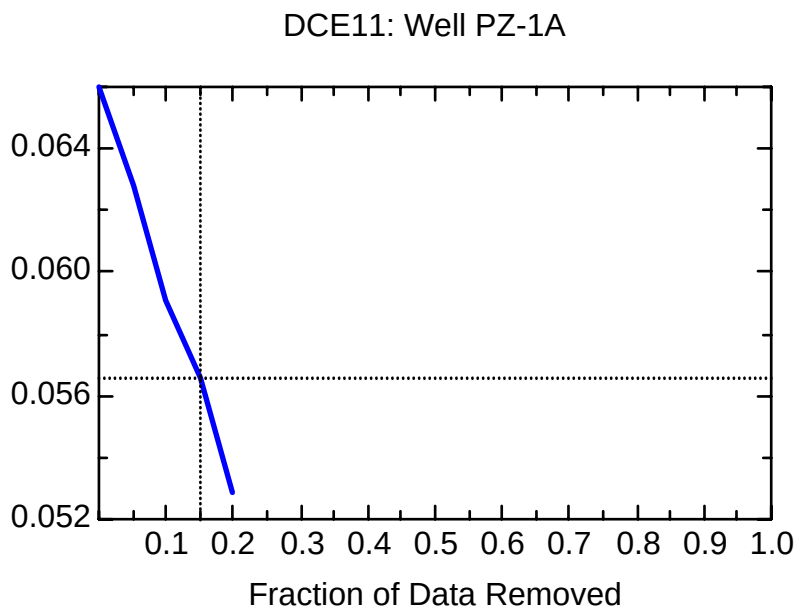

DCE11: Well OW7
14
13
12
11
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well OW7
0.09
0.08
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well PZ-1A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well PZ-1A
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well PZ-1A
18
17
16
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well PZ-1A
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0.060
0.056
0.052
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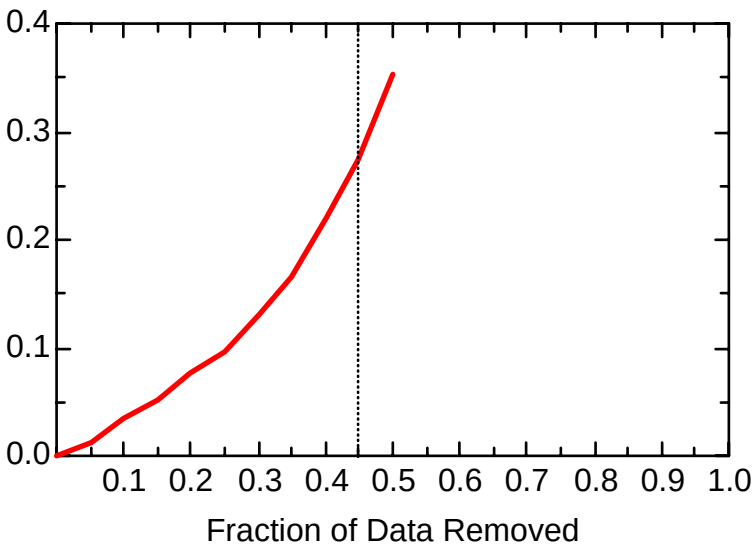
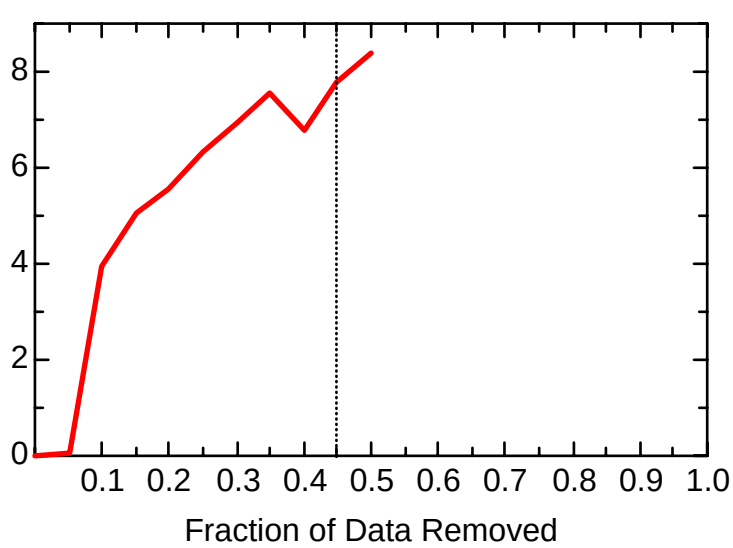
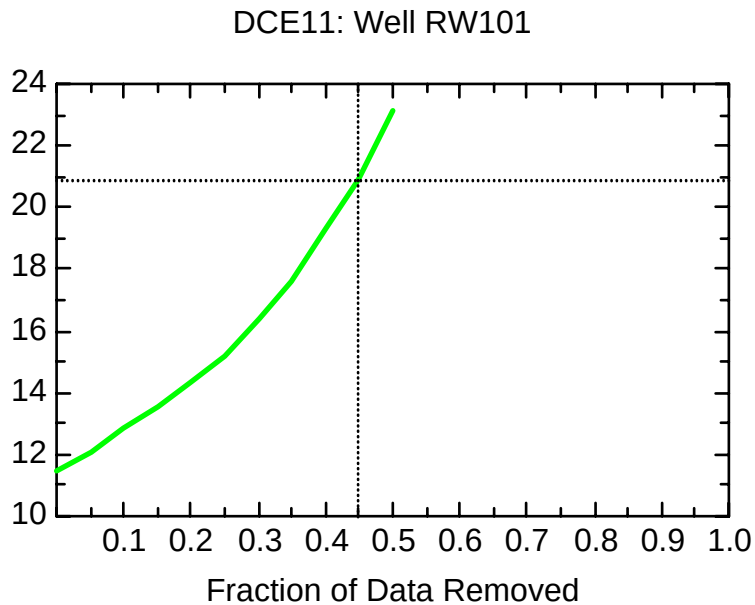
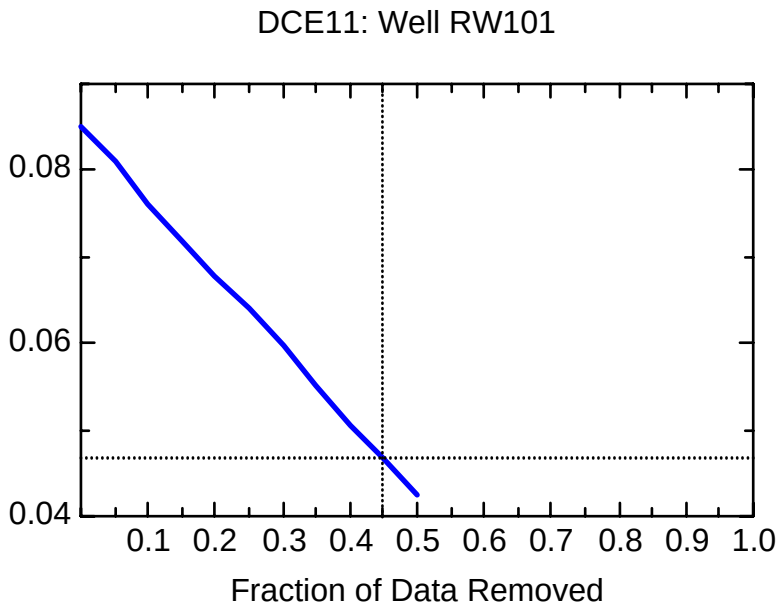
Fraction of Data Removed


DCE11: Well RW101
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW101
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW101
24
22
20
18
16
14
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW101
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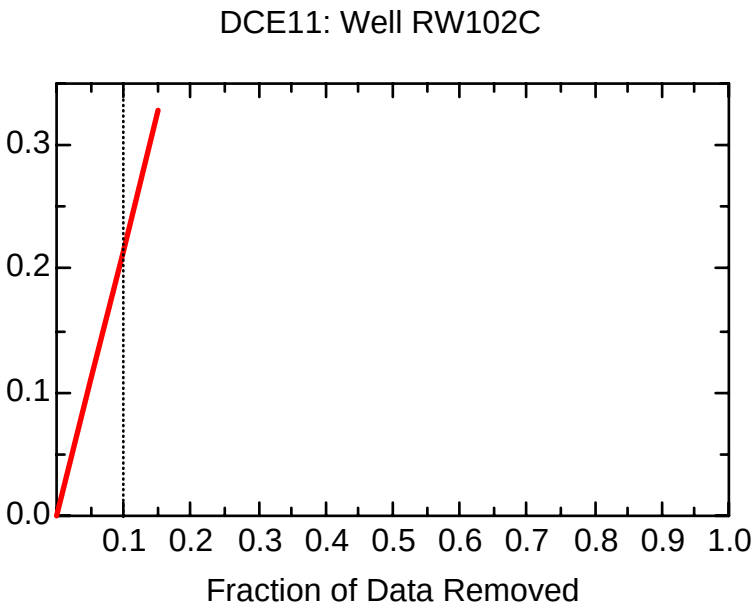
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW102C
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0.1
0.2
0.3
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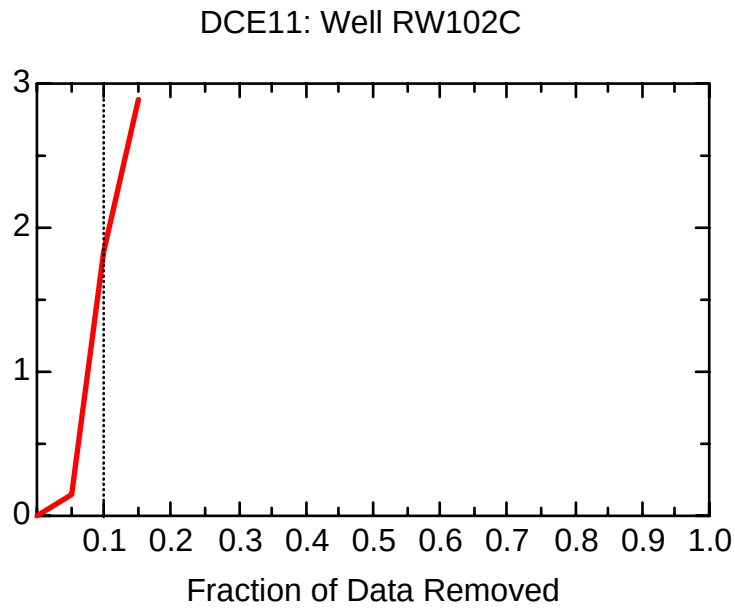
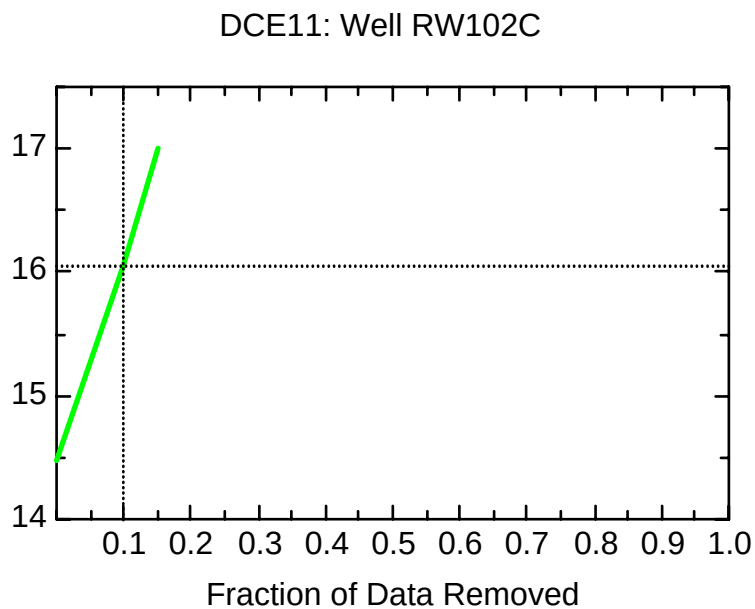
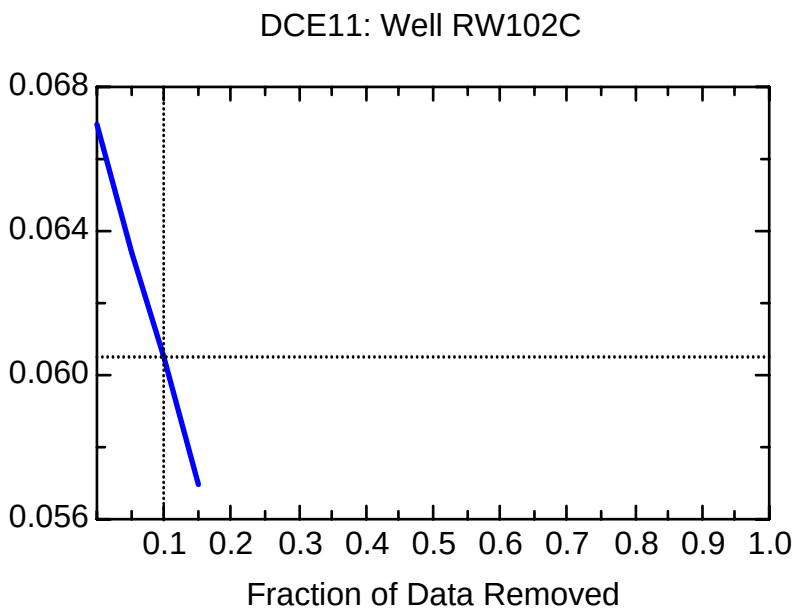
Fraction of Data Removed


DCE11: Well RW102C
0
1
2
3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW102C
14
15
16
17
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW102C
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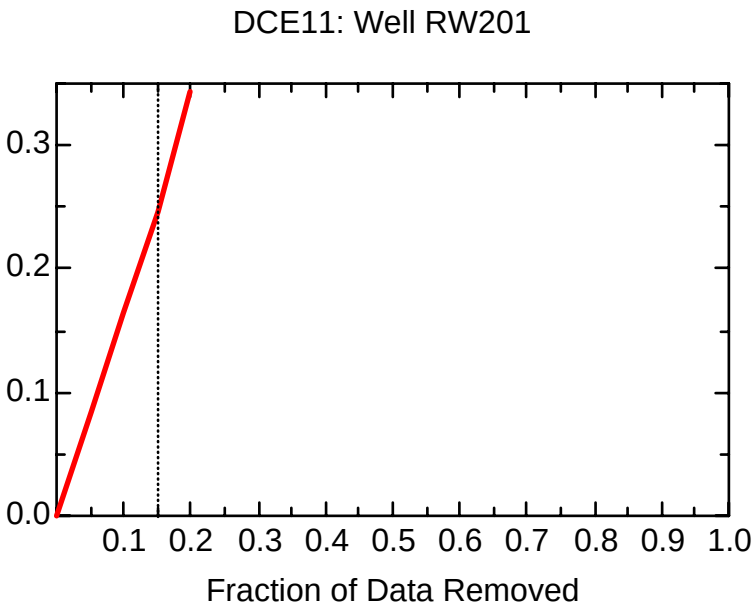
0.060
0.064
0.068
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW201
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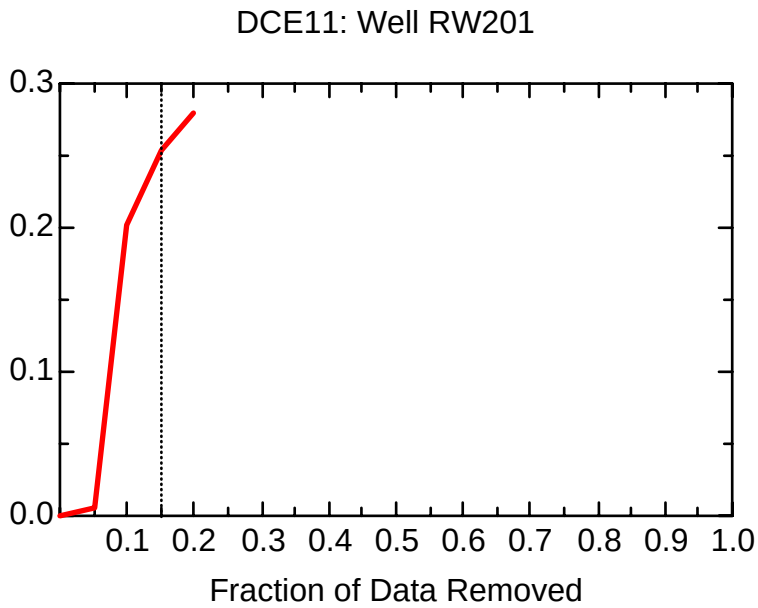
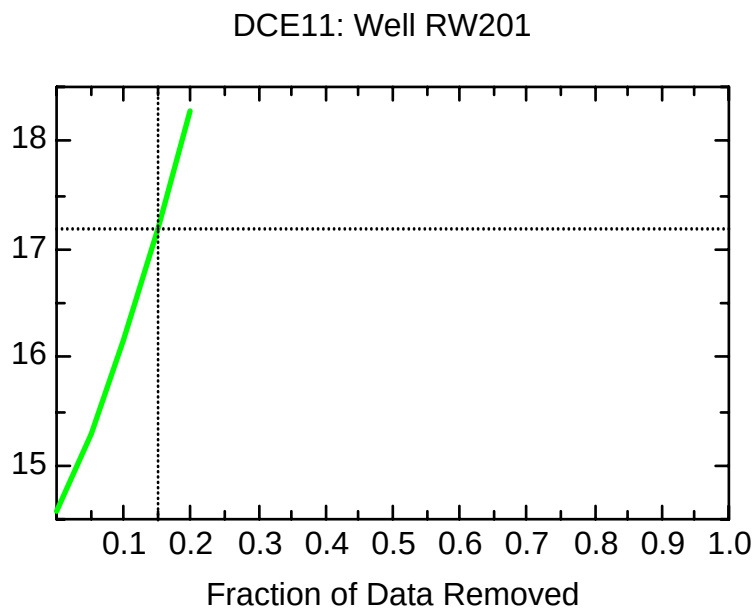
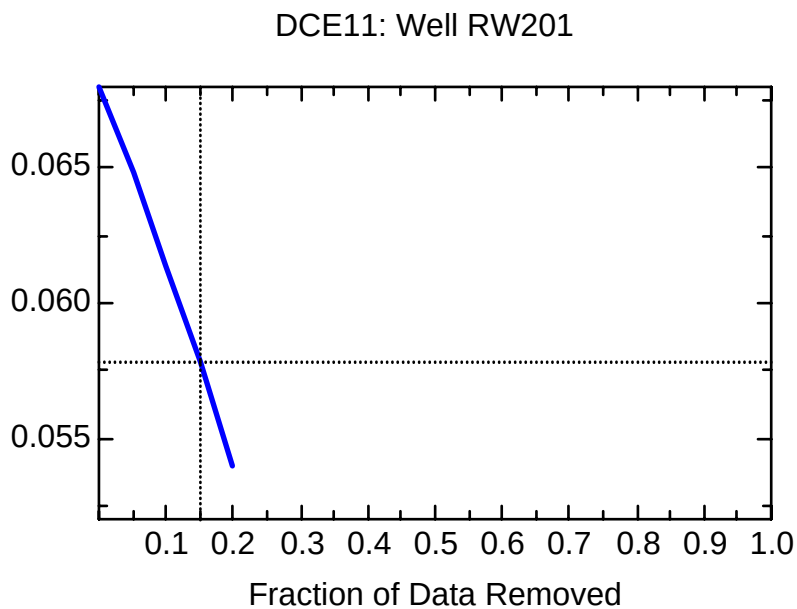
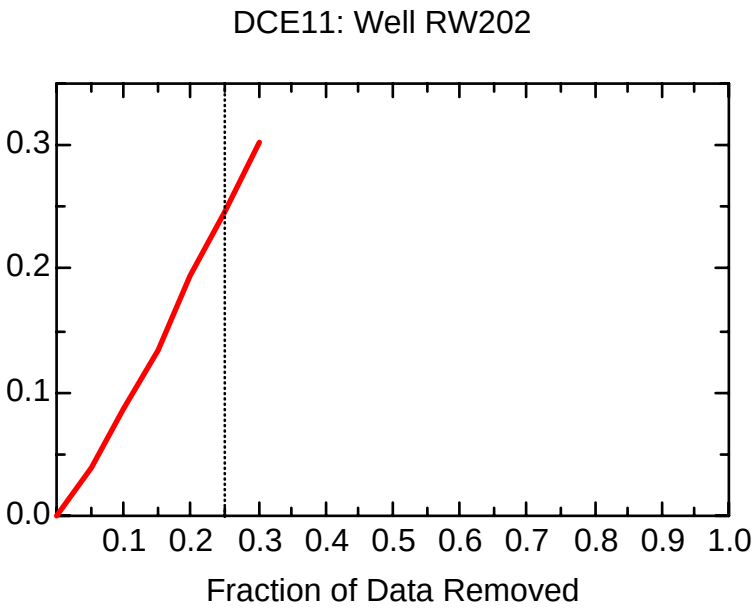
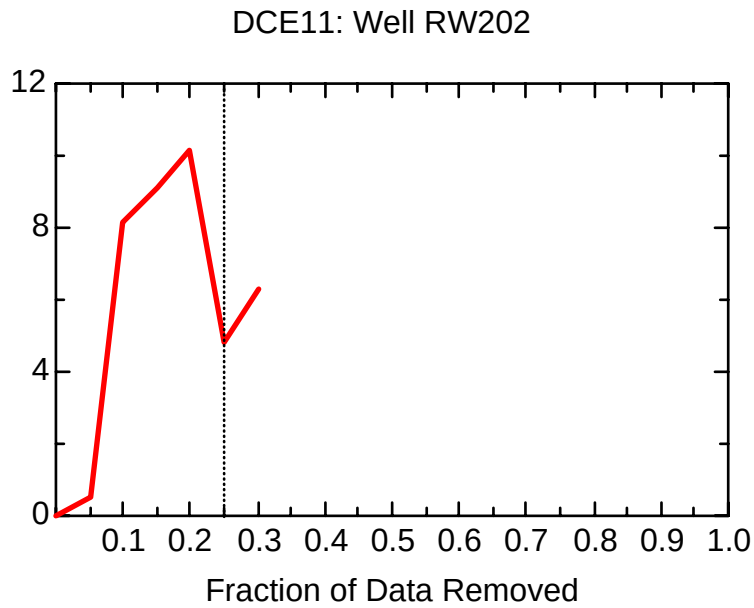
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

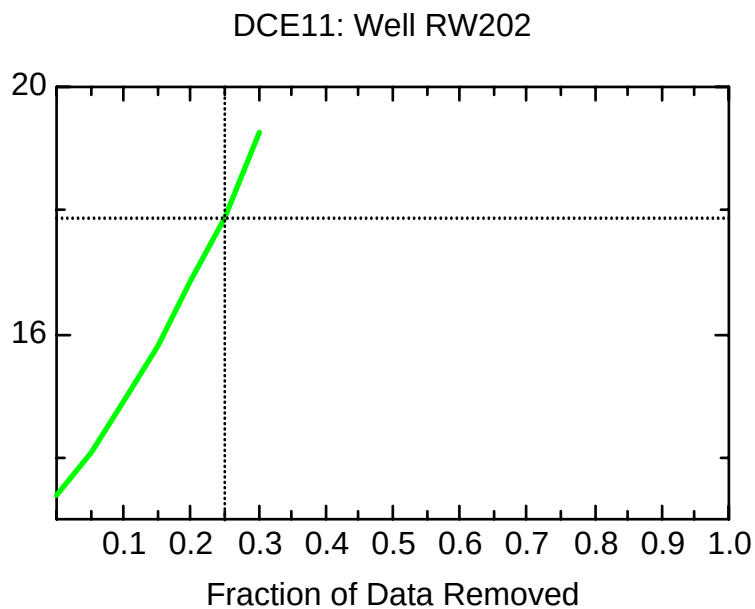

DCE11: Well RW201
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

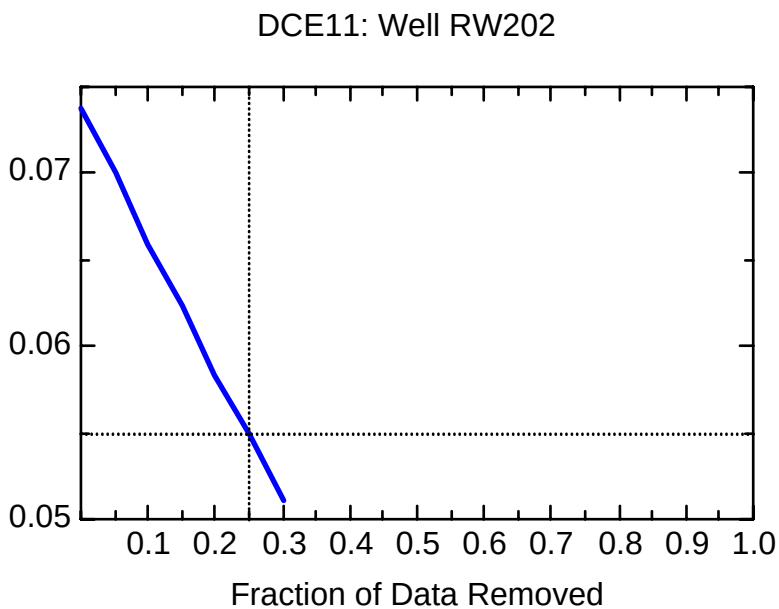

DCE11: Well RW201
18
17
16
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW201
0.065
0.060
0.055
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

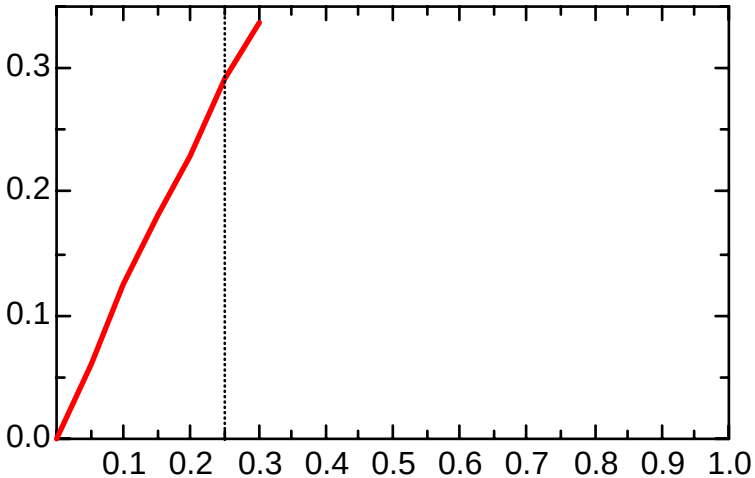

DCE11: Well RW202
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW202
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

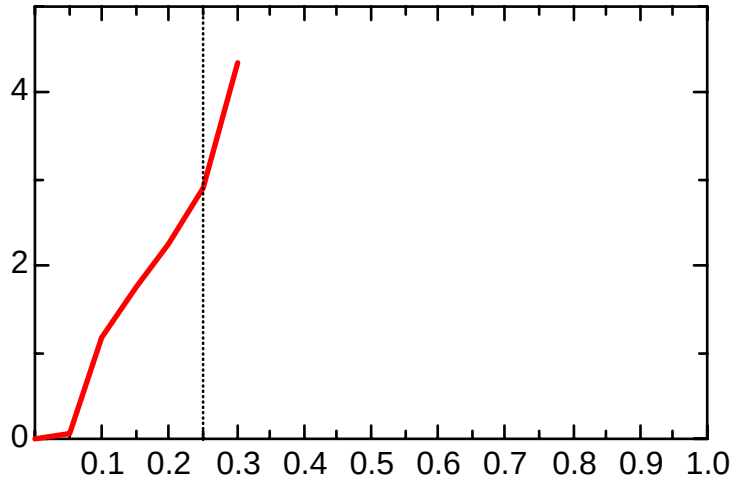

DCE11: Well RW202
20
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW202
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

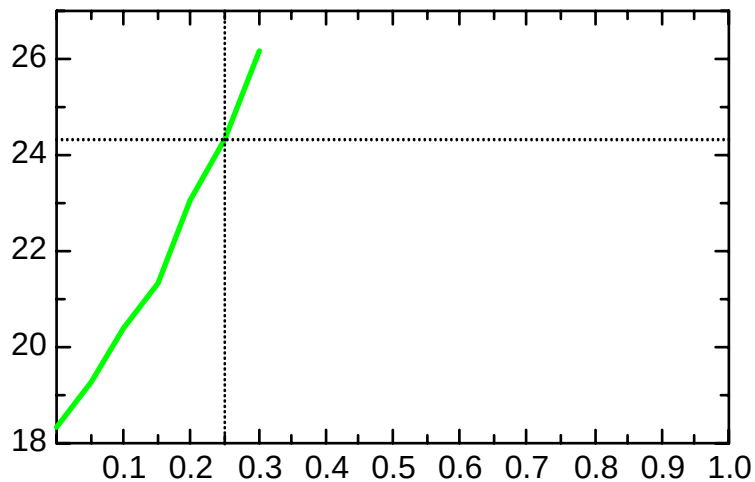
DCE11: Well RW203



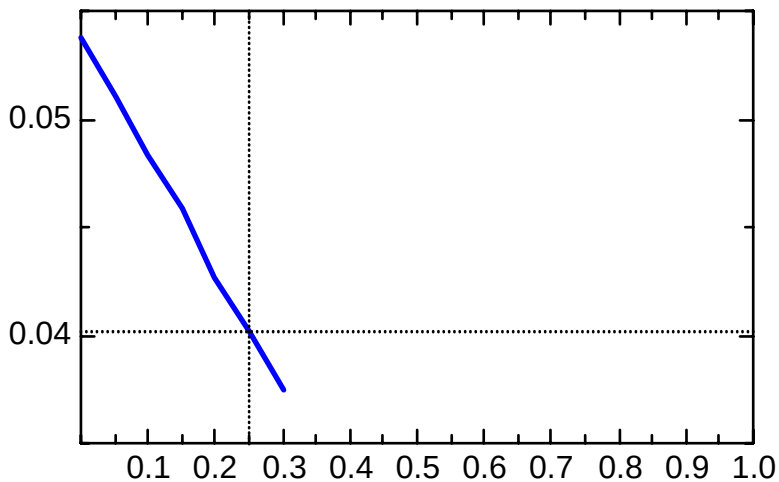
DCE11: Well RW203

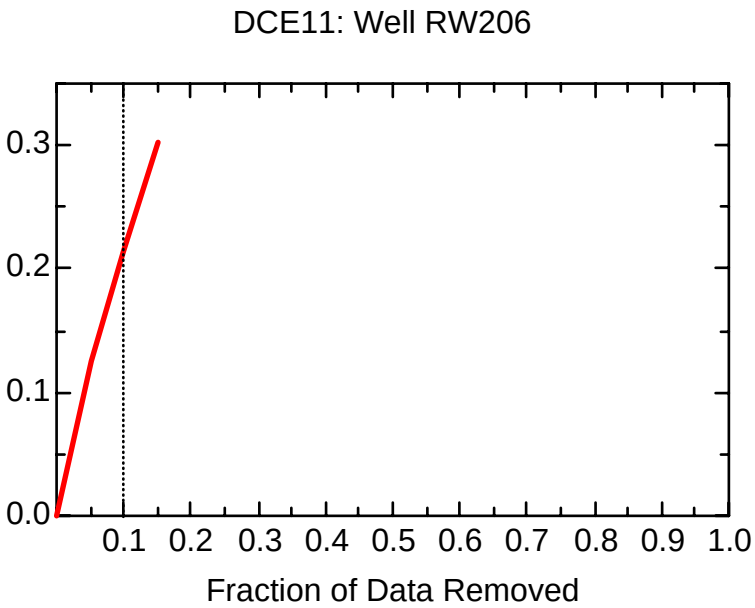


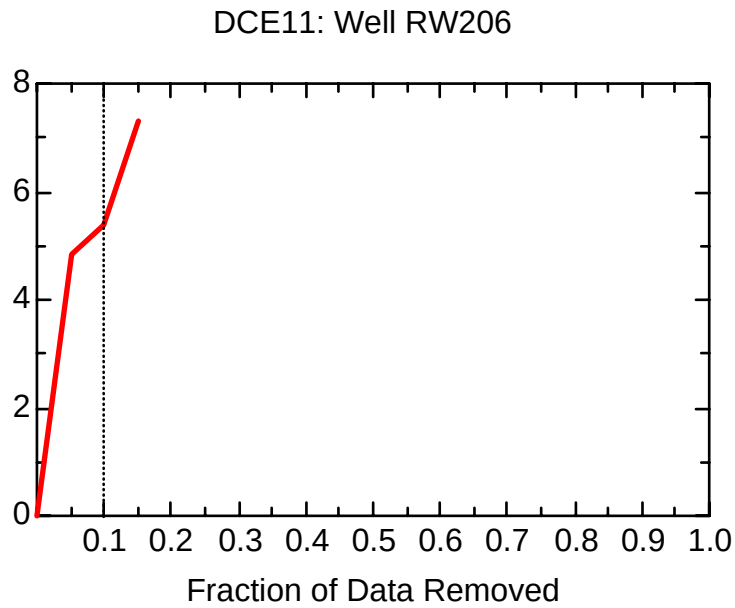
DCE11: Well RW203

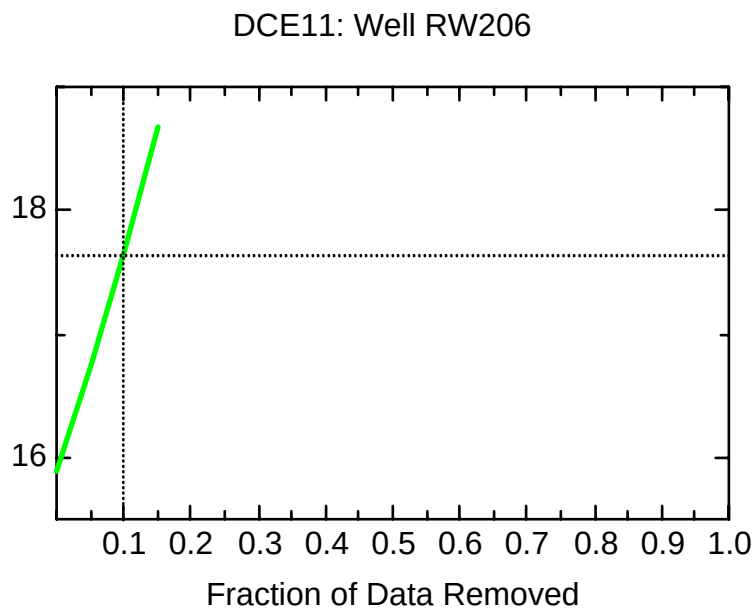


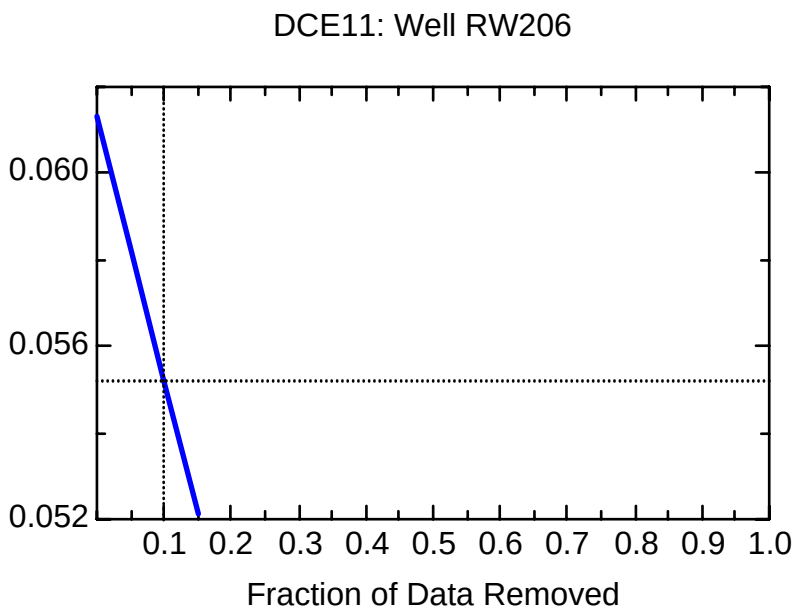
DCE11: Well RW203

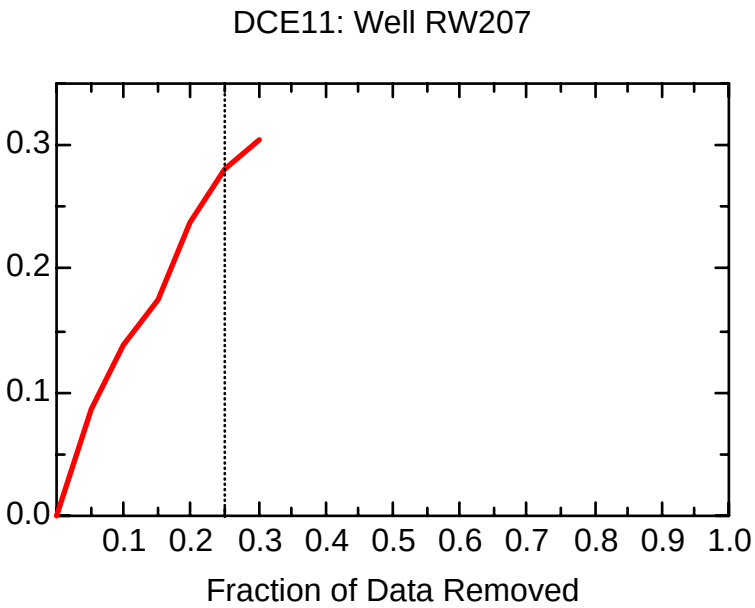


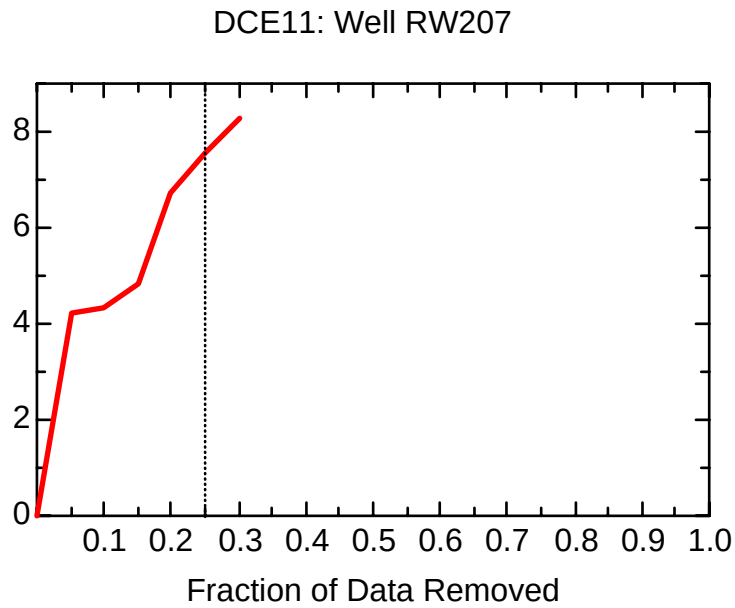

DCE11: Well RW206
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

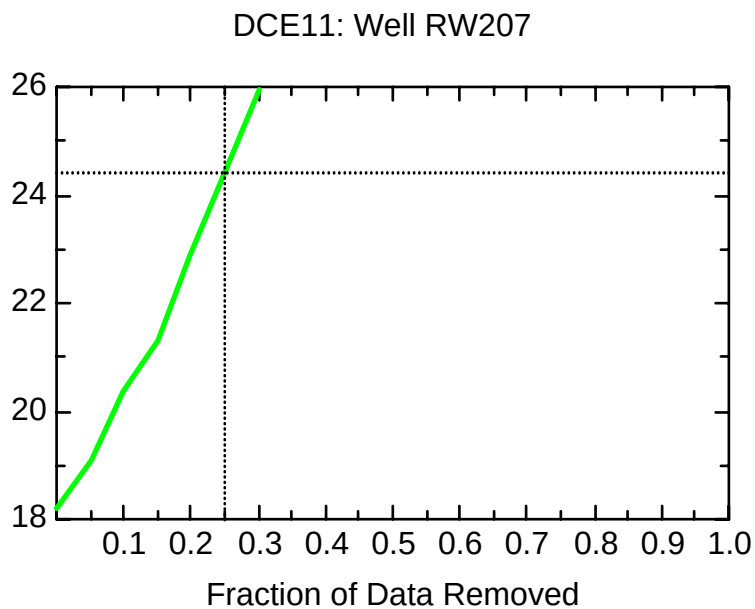

DCE11: Well RW206
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

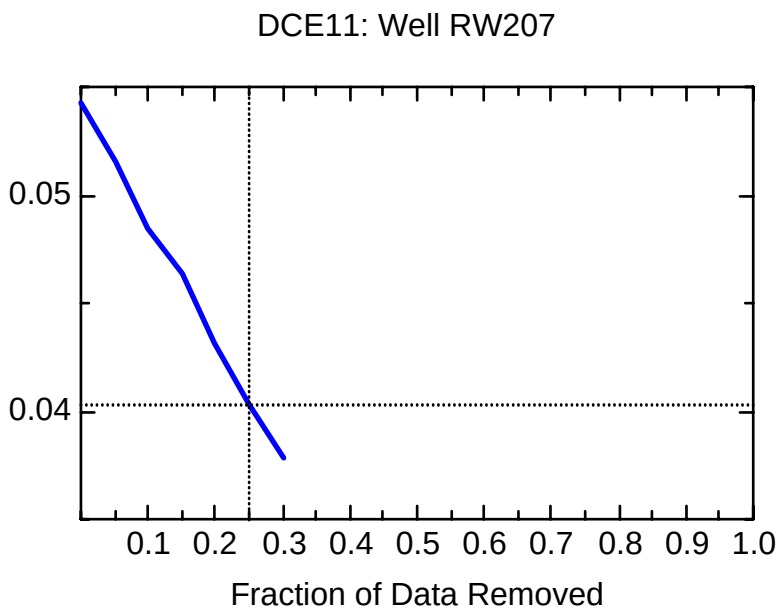

DCE11: Well RW206
18
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

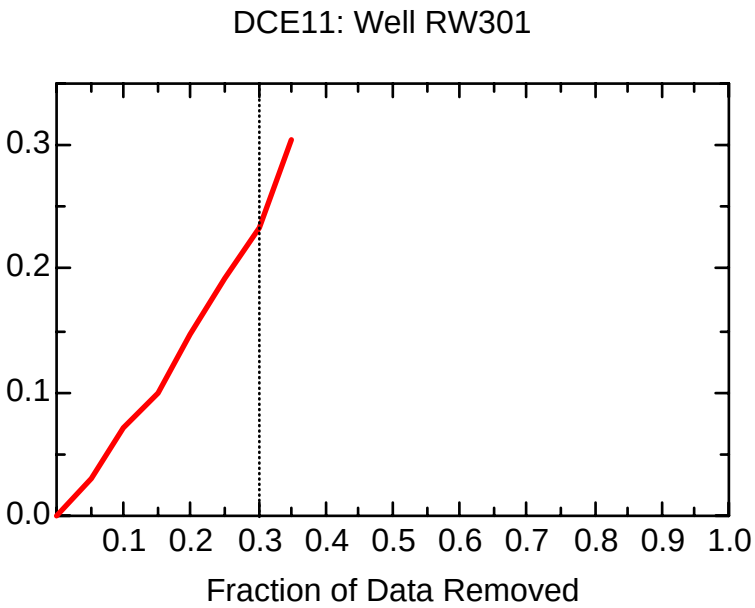

DCE11: Well RW206
0.060
0.056
0.052
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

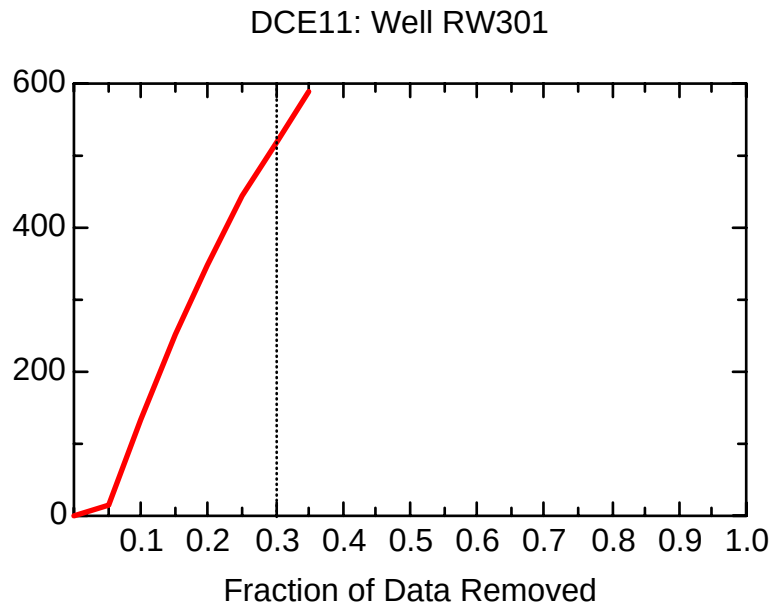

DCE11: Well RW207
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

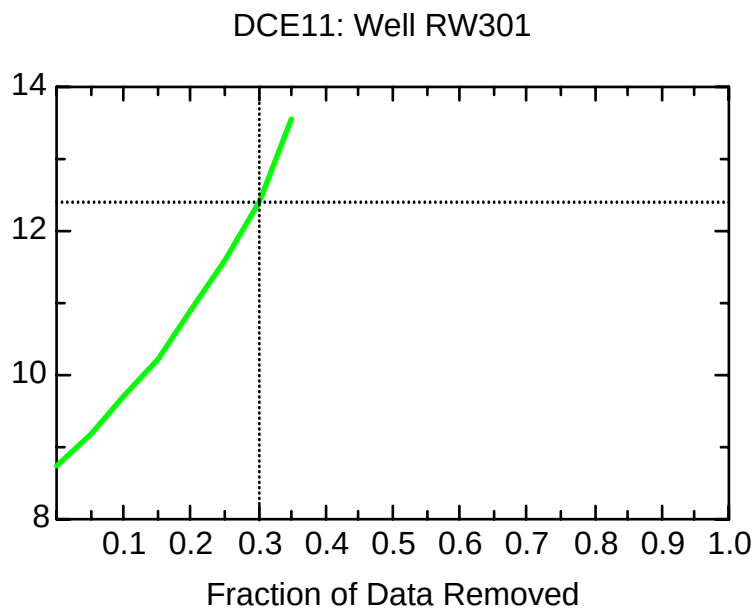

DCE11: Well RW207
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

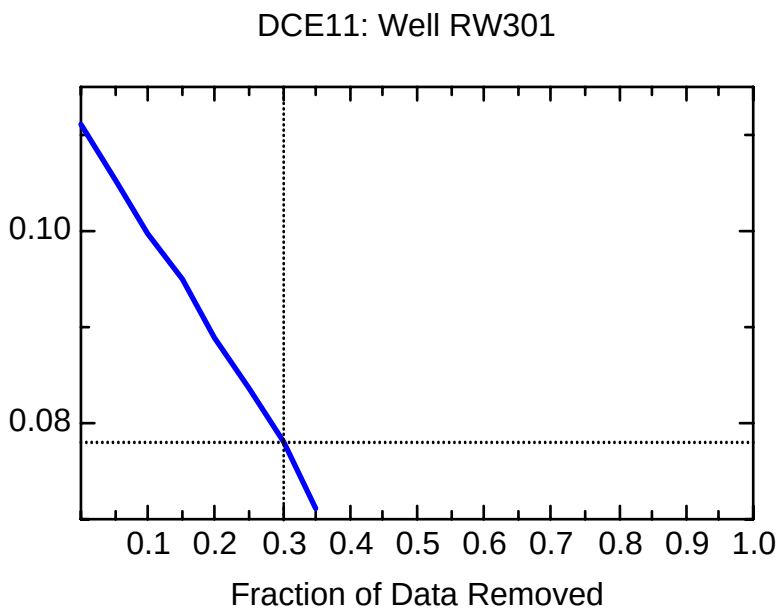

DCE11: Well RW207
26
24
22
20
18
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

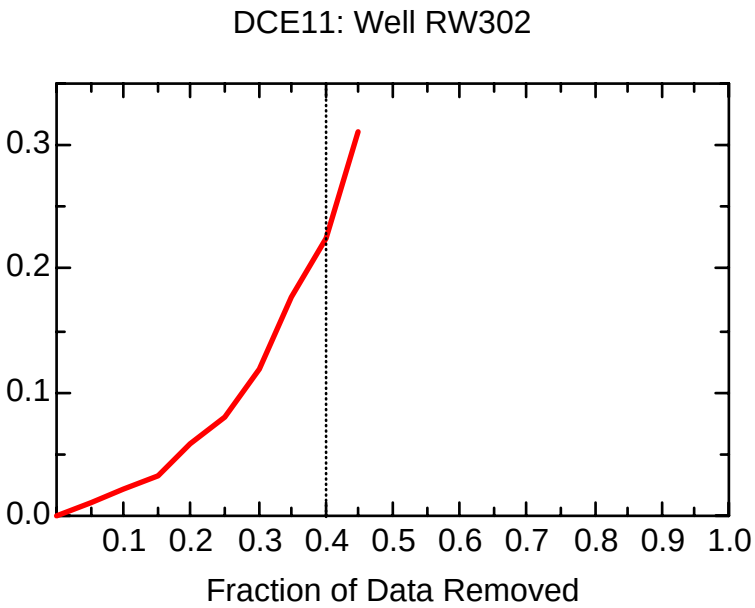

DCE11: Well RW207
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

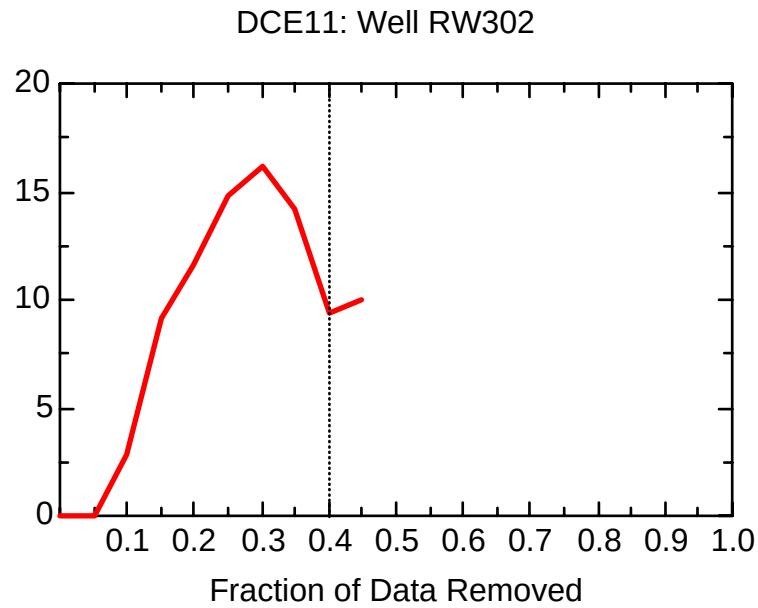

DCE11: Well RW301
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

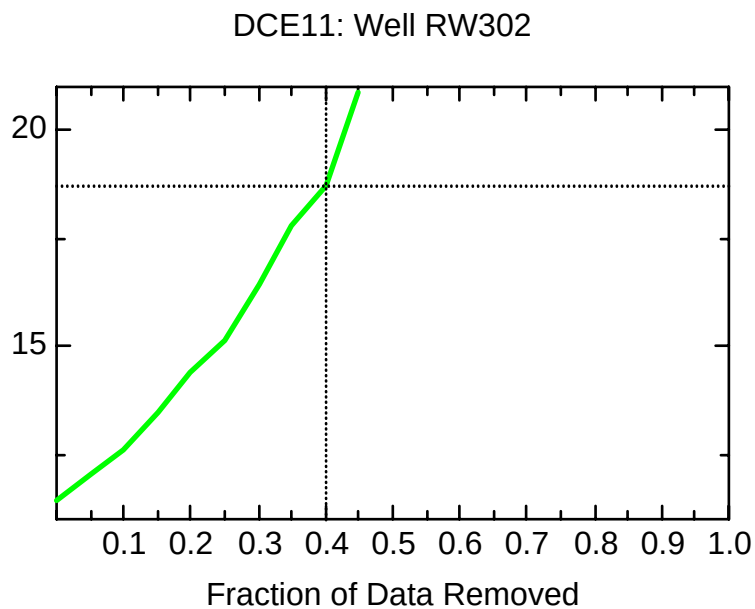

DCE11: Well RW301
600
400
200
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

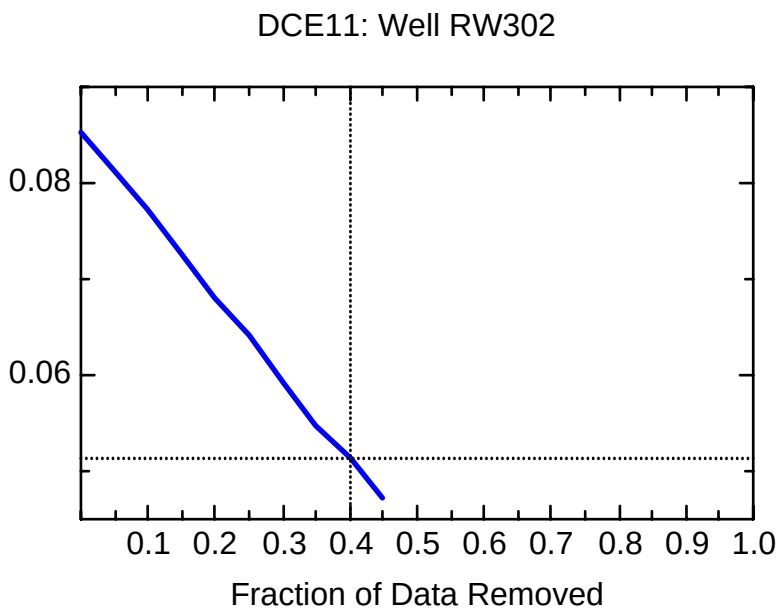

DCE11: Well RW301
14
12
10
8
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

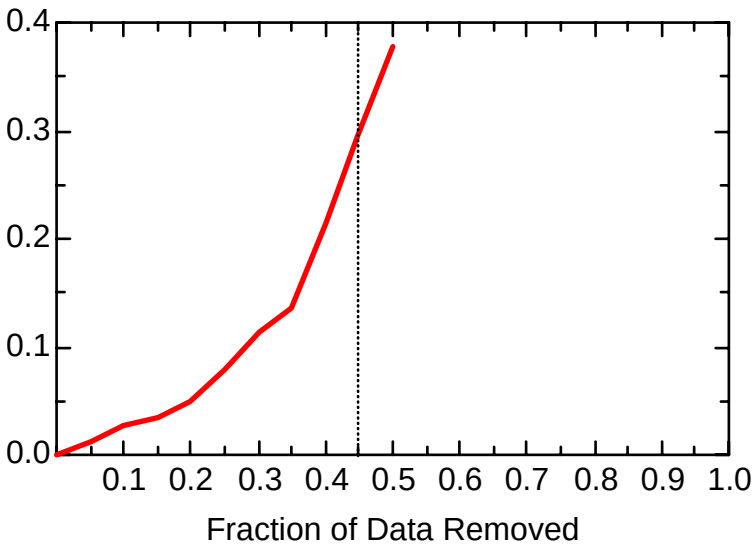

DCE11: Well RW301
0.10
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

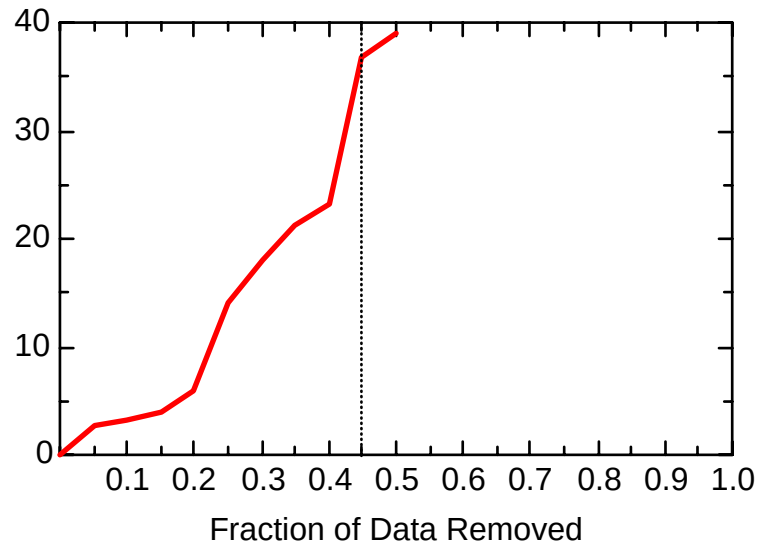

DCE11: Well RW302
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

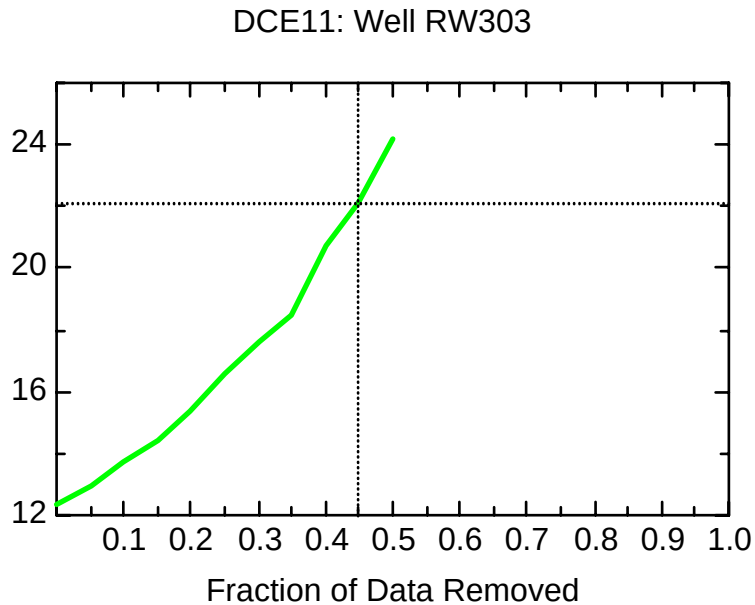

DCE11: Well RW302
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

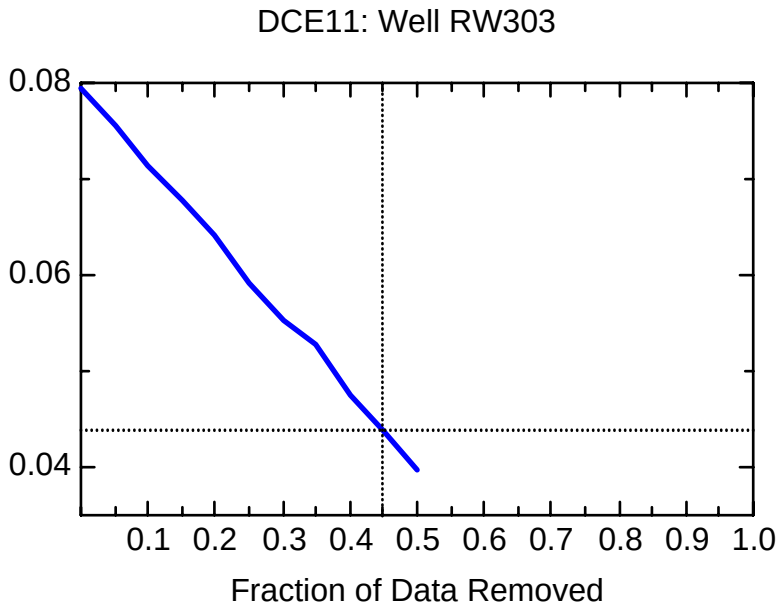

DCE11: Well RW302
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

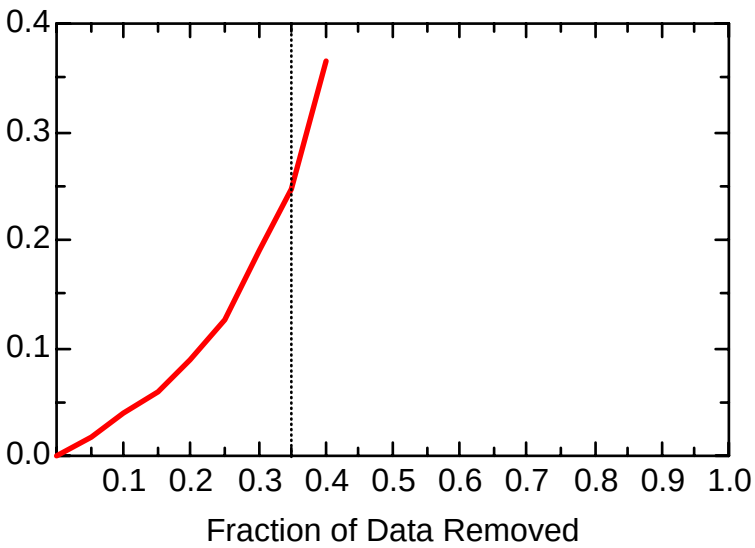

DCE11: Well RW302
0.08
0.06
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

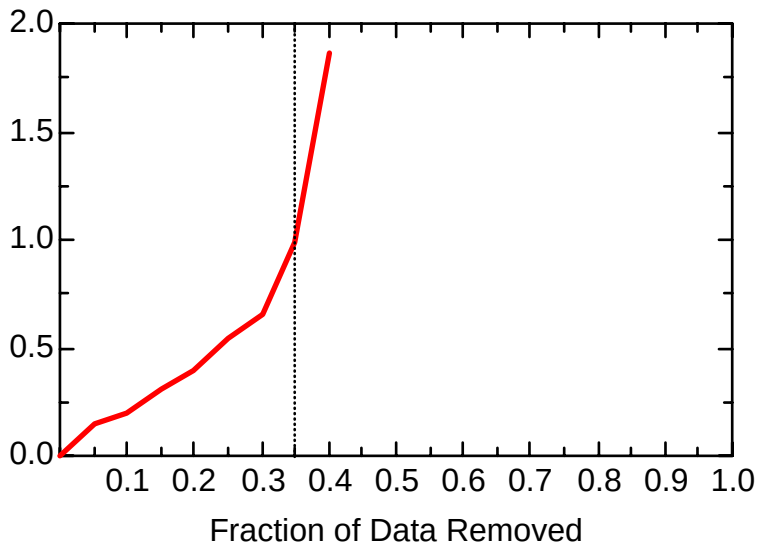

DCE11: Well RW303
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

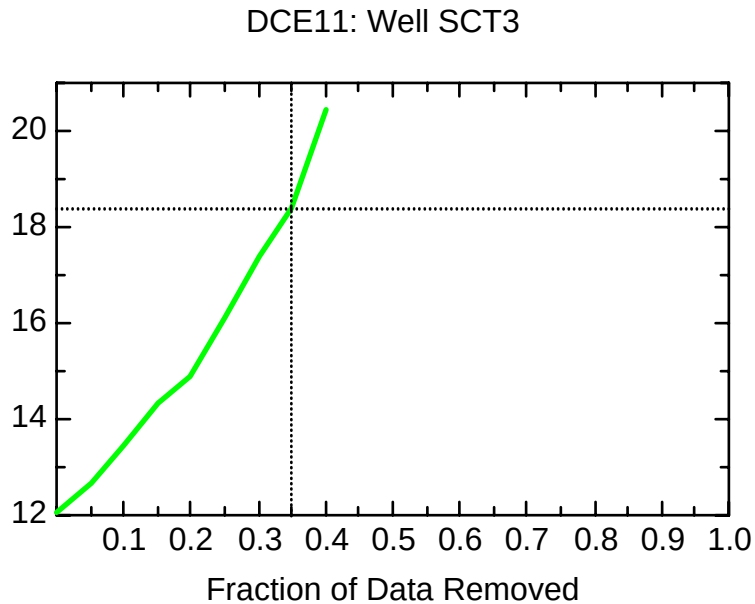

DCE11: Well RW303
40
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

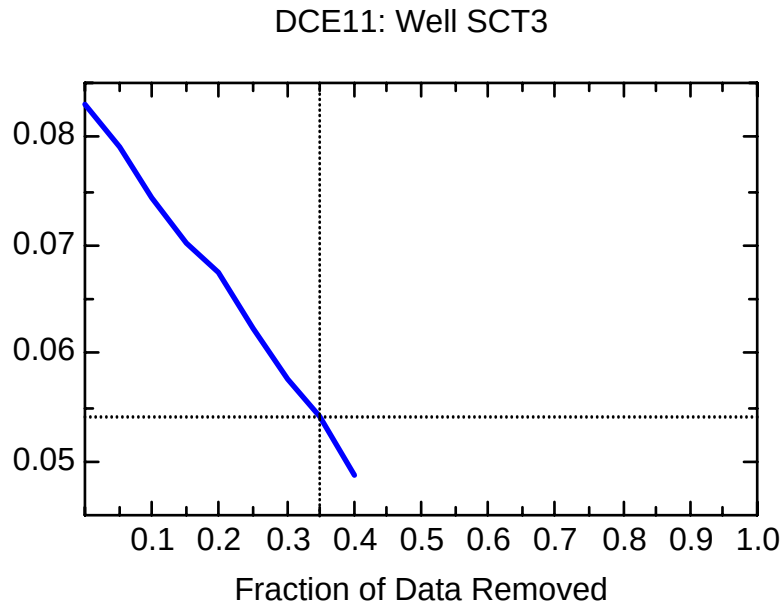

DCE11: Well RW303
24
20
16
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well RW303
0.08
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

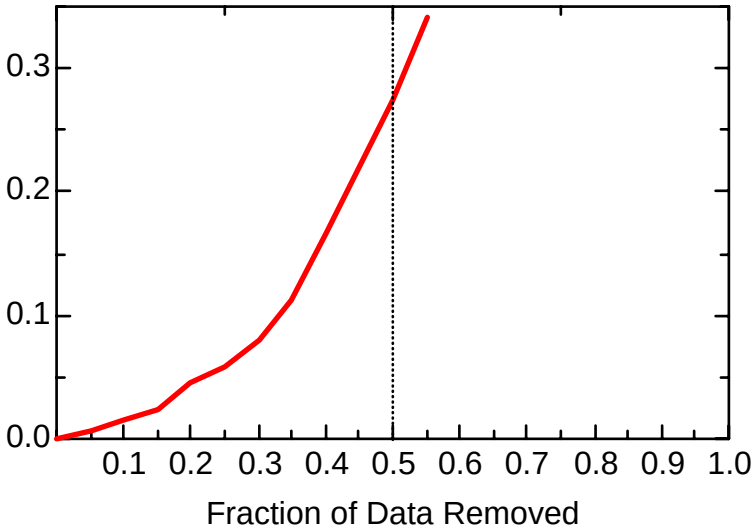

DCE11: Well SCT3
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well SCT3
2.0
1.5
1.0
0.5
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

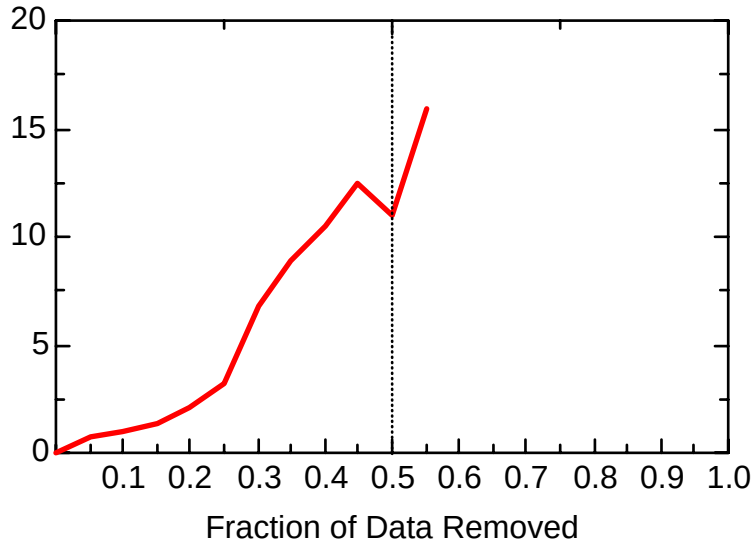

DCE11: Well SCT3
20
18
16
14
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


DCE11: Well SCT3
0.08
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

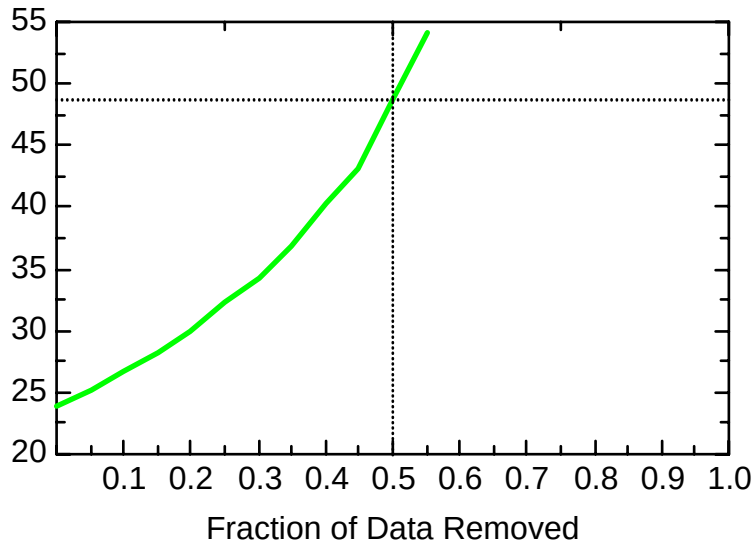
TCE: Well B10A1



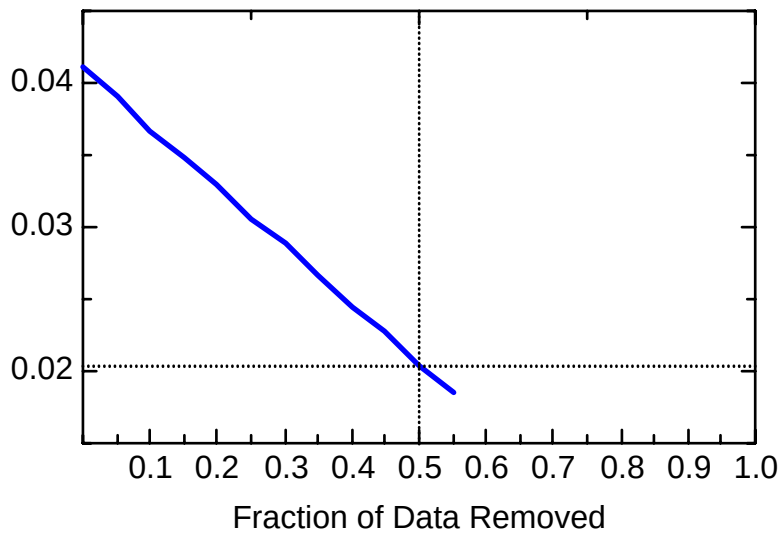
TCE: Well B10A1

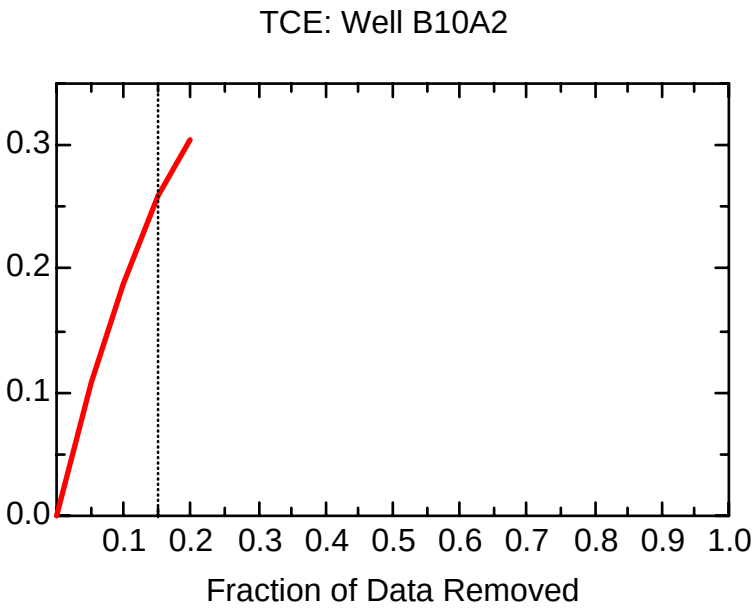


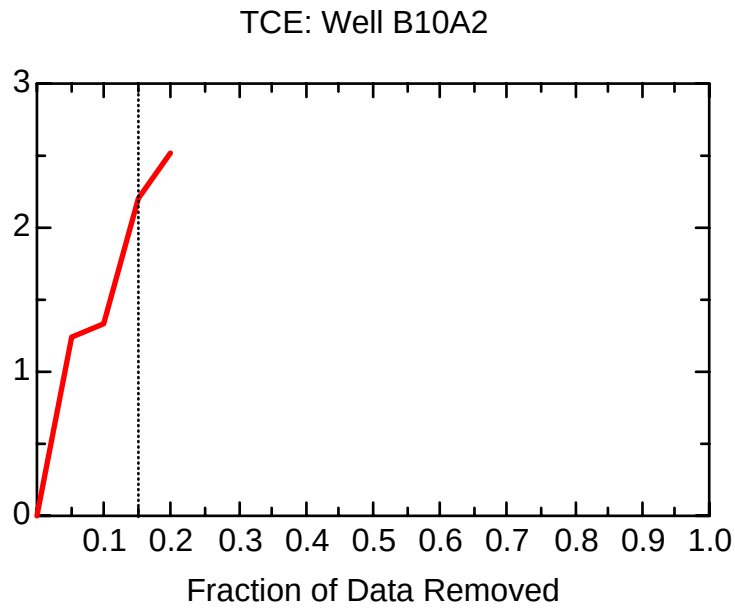
TCE: Well B10A1

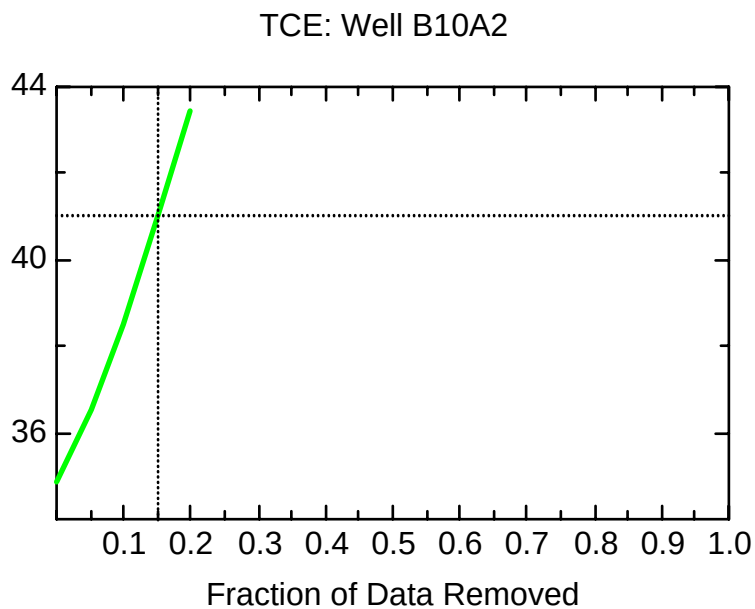


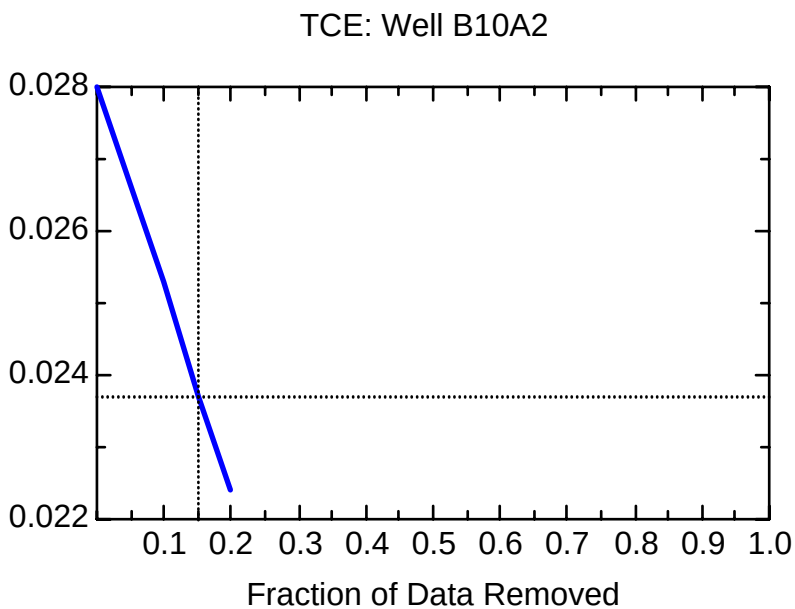
TCE: Well B10A1



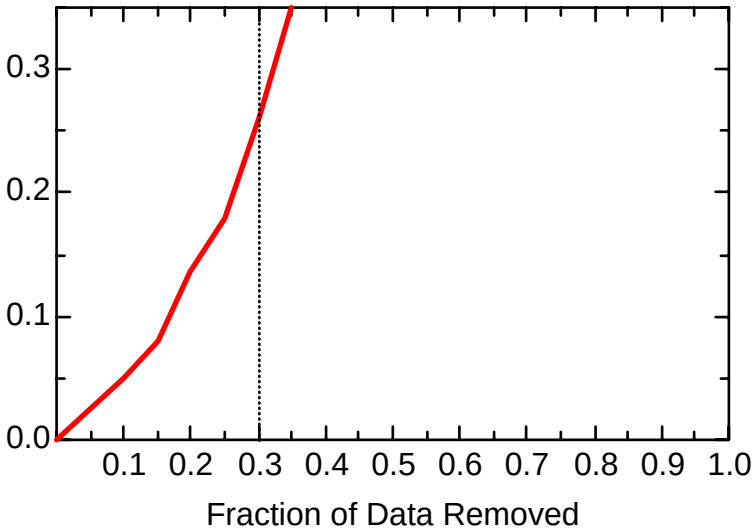

TCE: Well B10A2
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B10A2
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

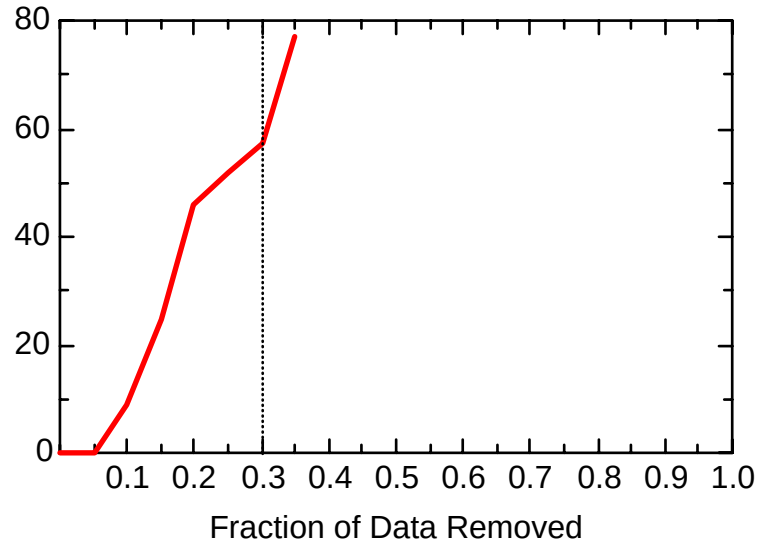

TCE: Well B10A2
44
40
36
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B10A2
0.028
0.026
0.024
0.022
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

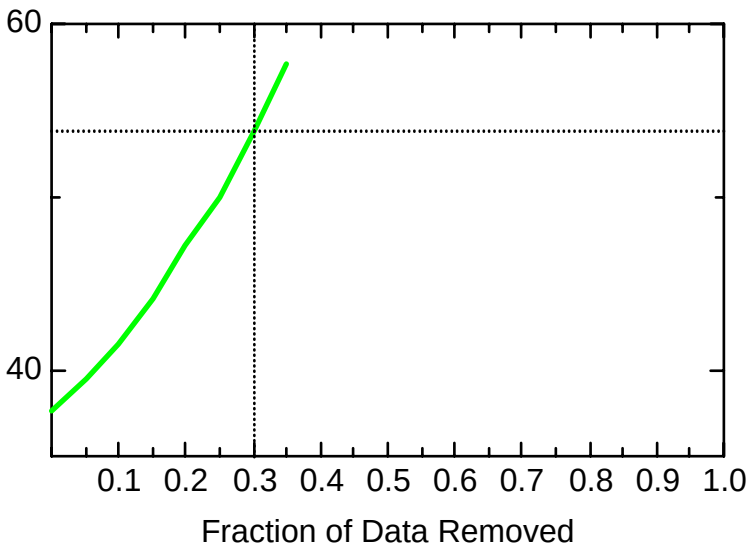
TCE: Well B10B1



TCE: Well B10B1



TCE: Well B10B1



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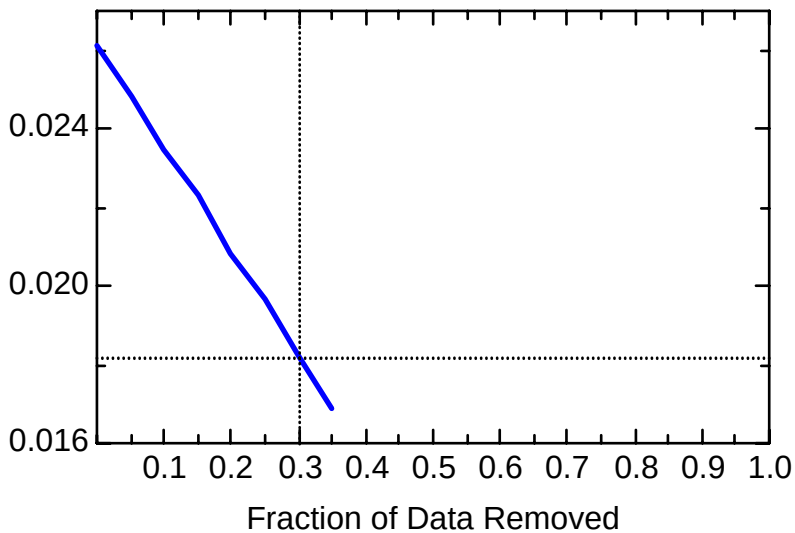

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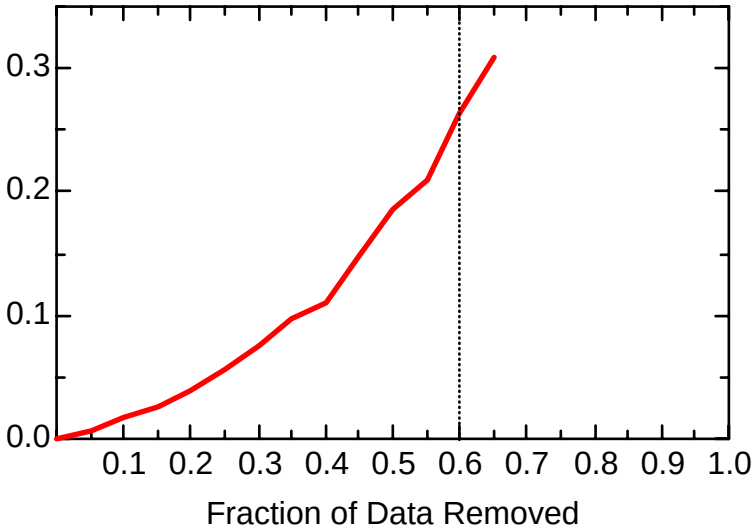

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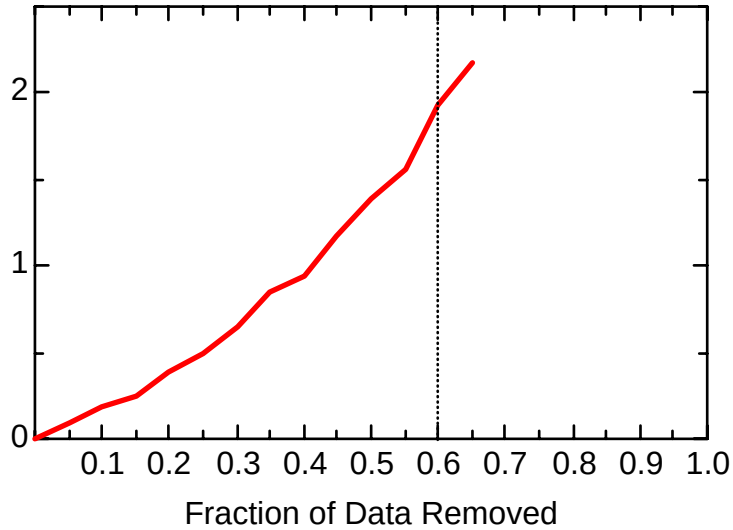

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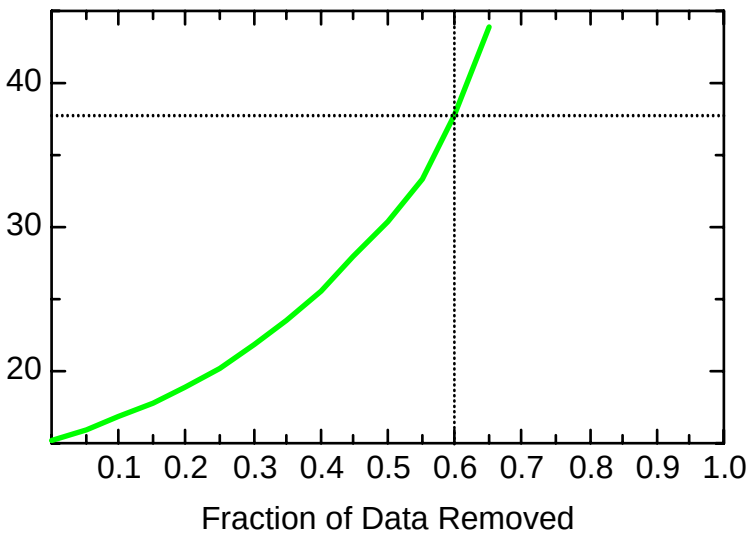

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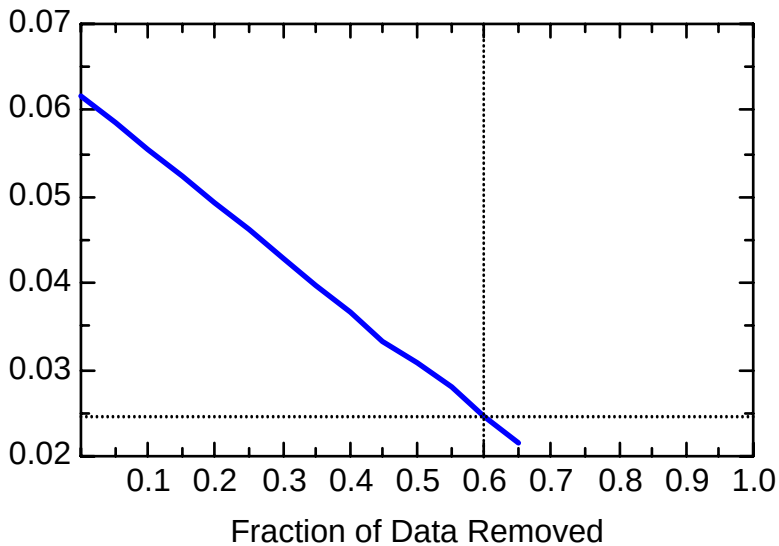

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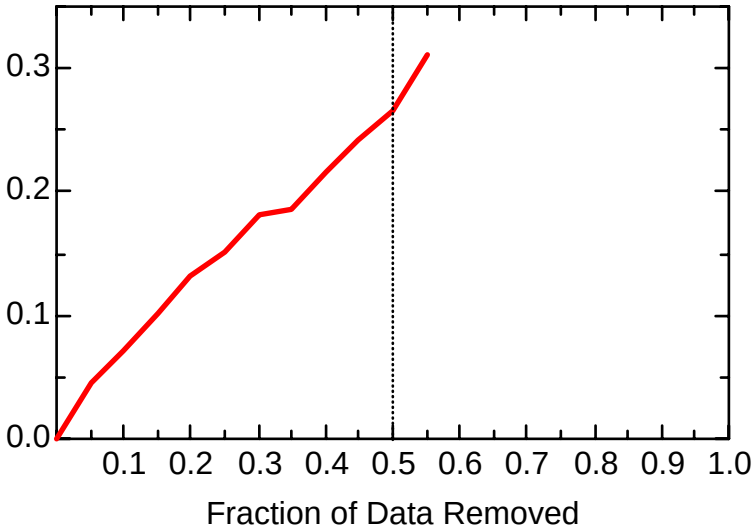

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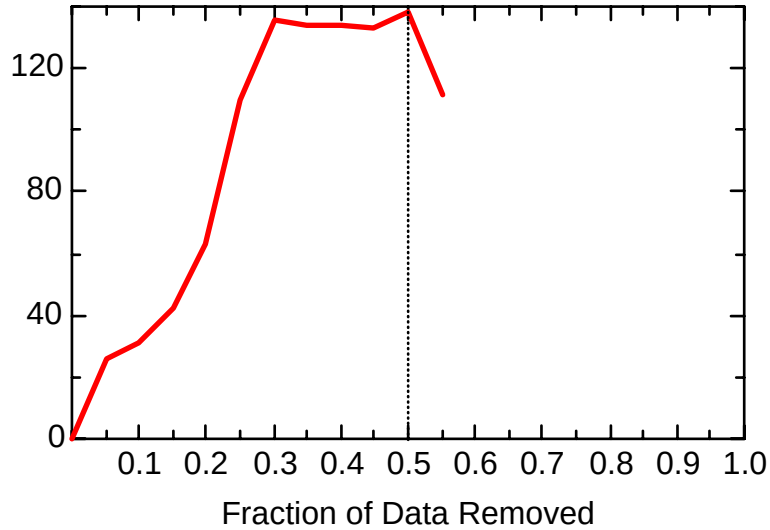

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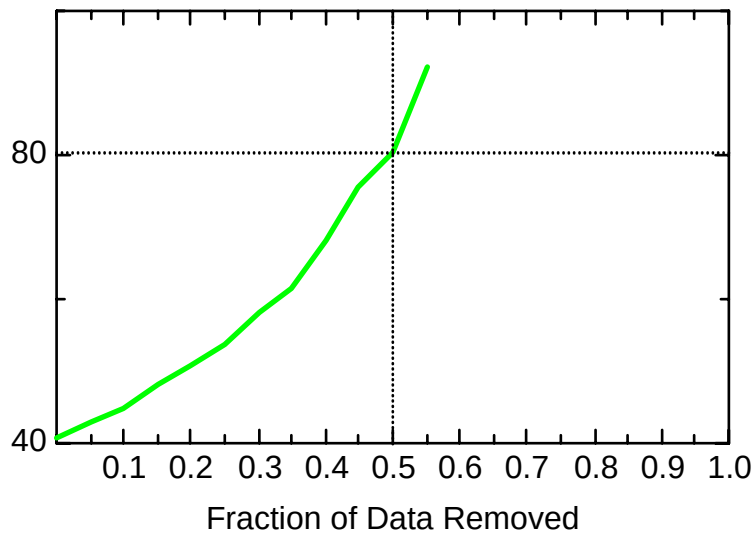

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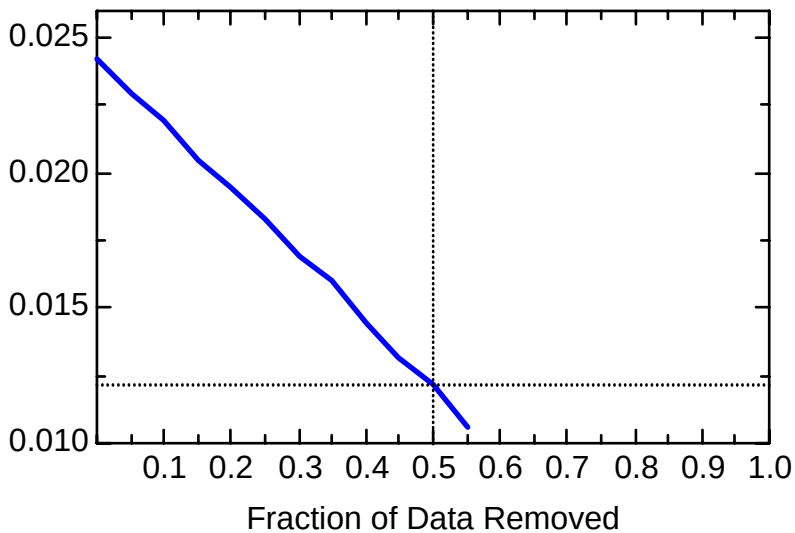

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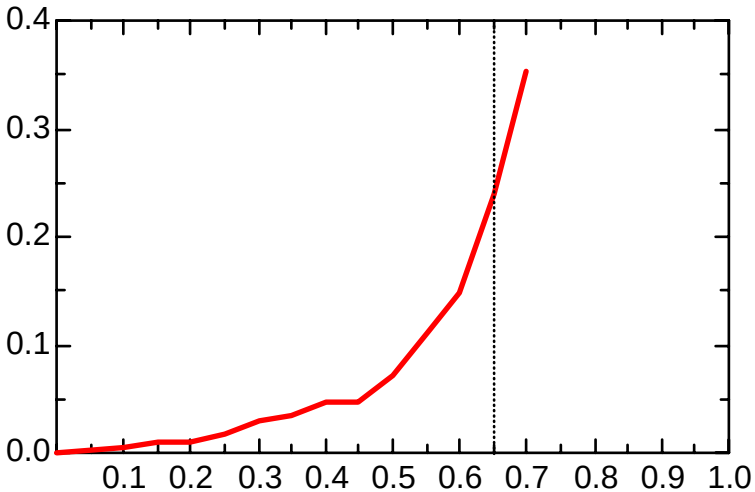

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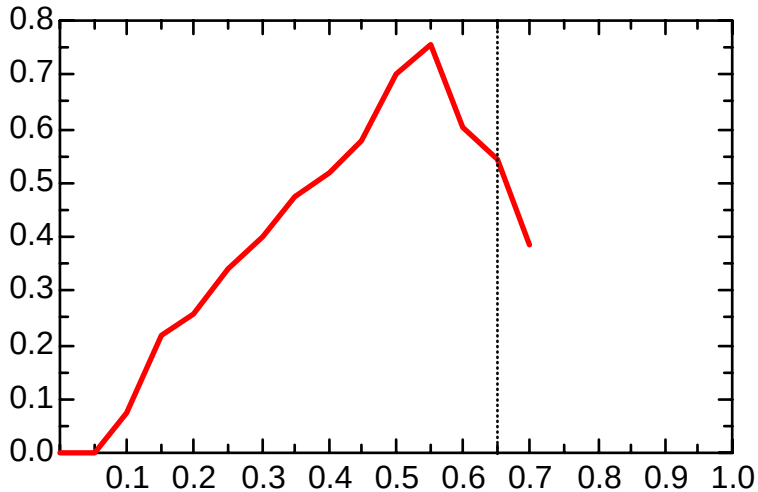

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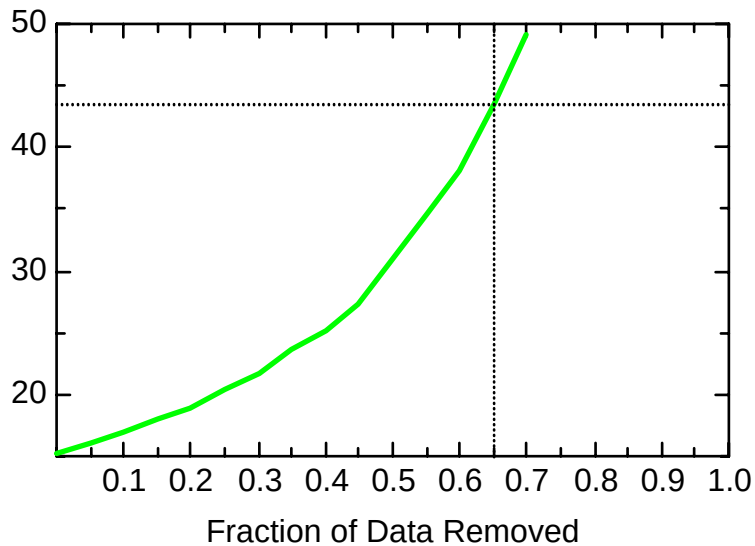

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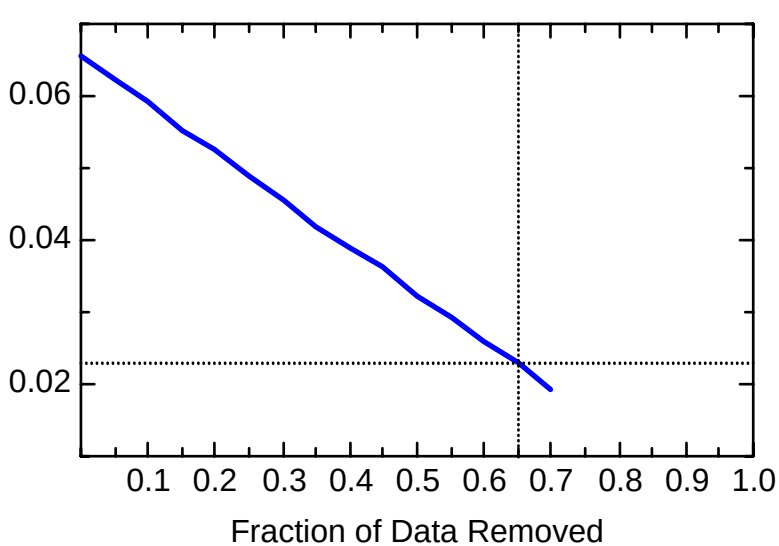

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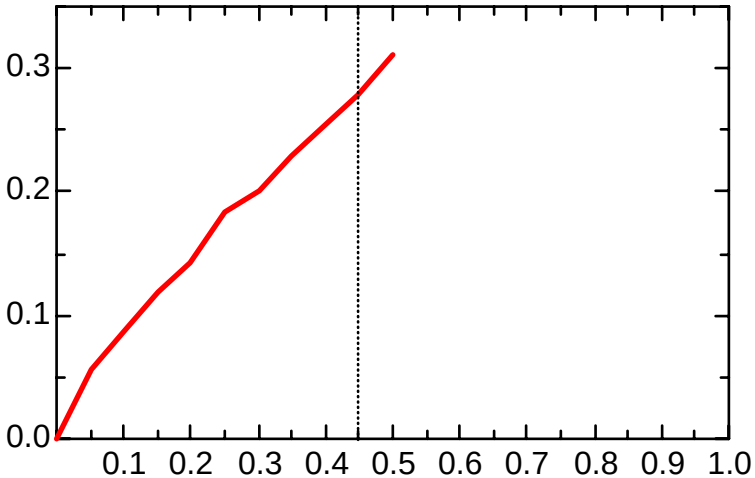

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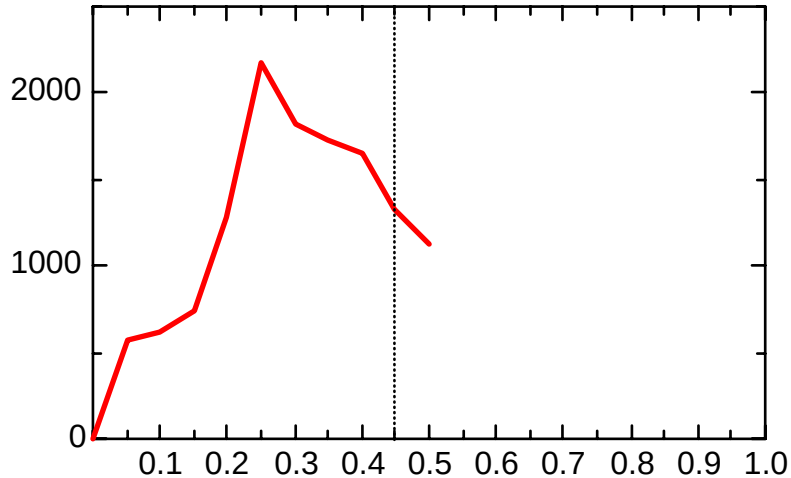

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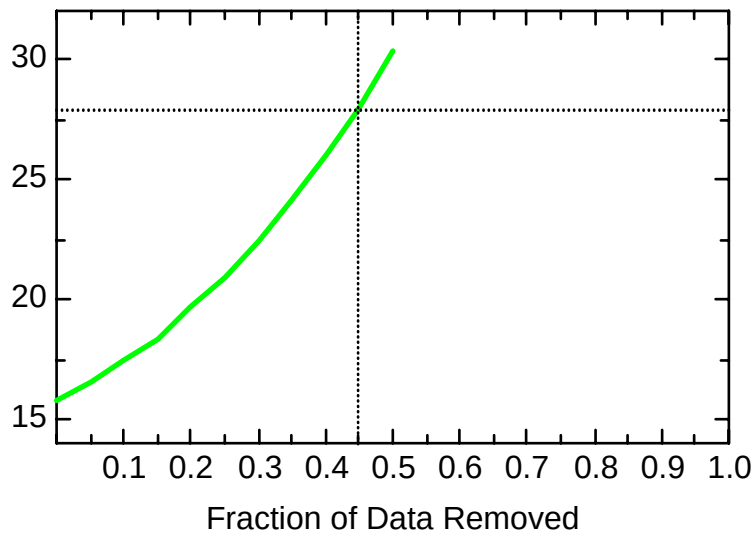

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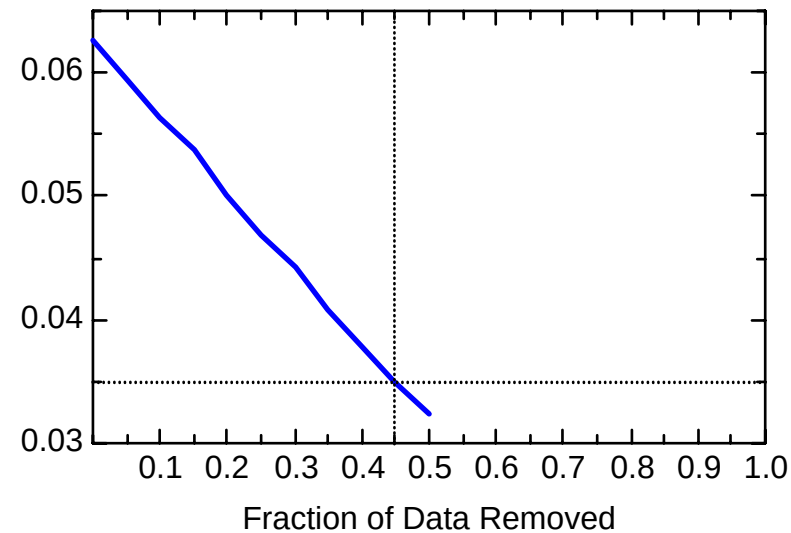

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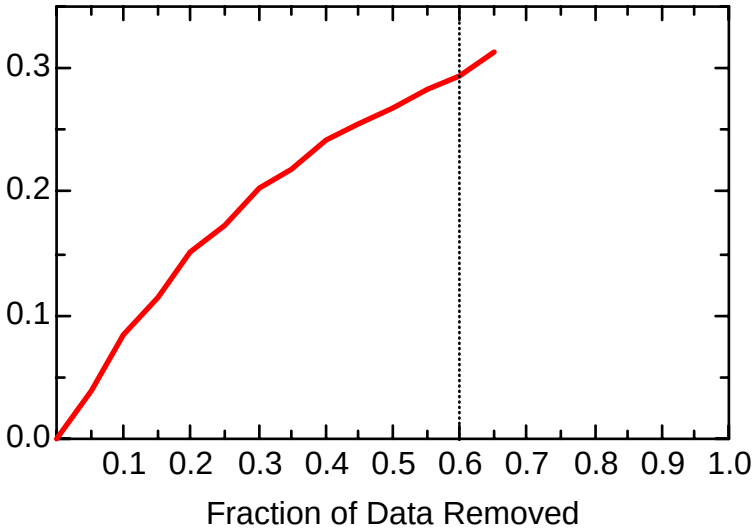

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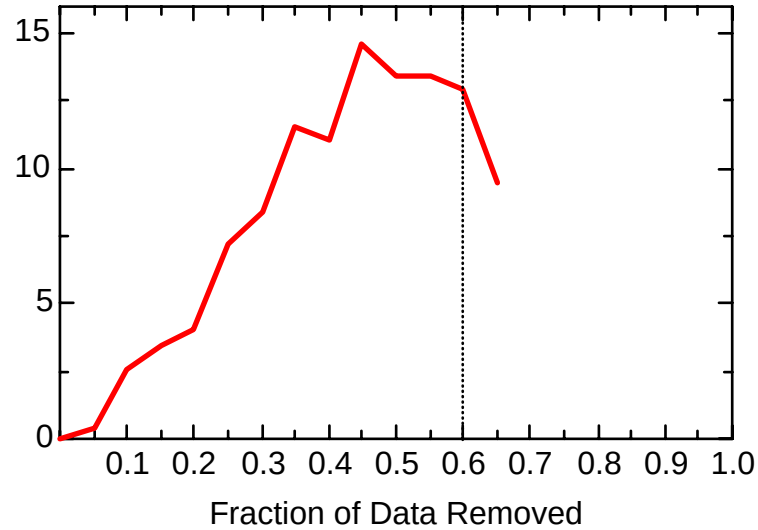

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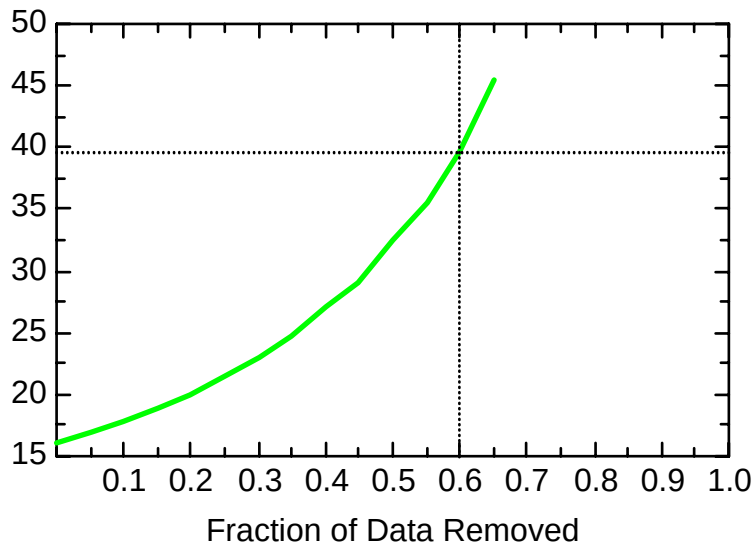

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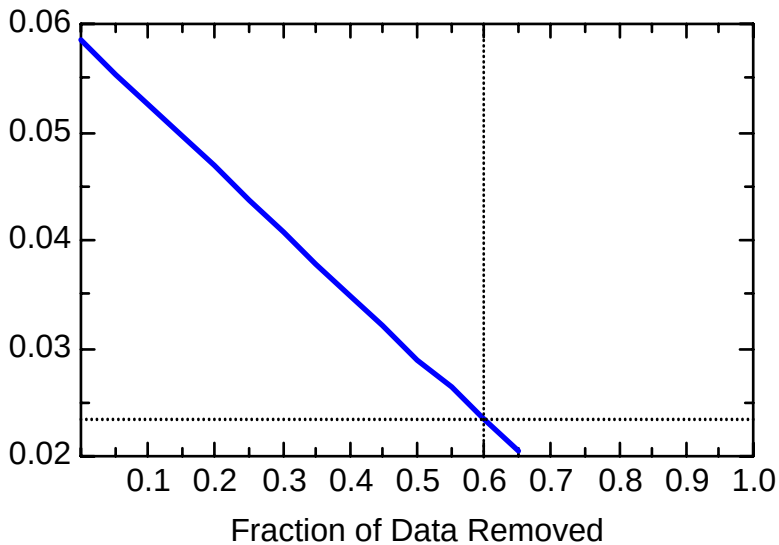

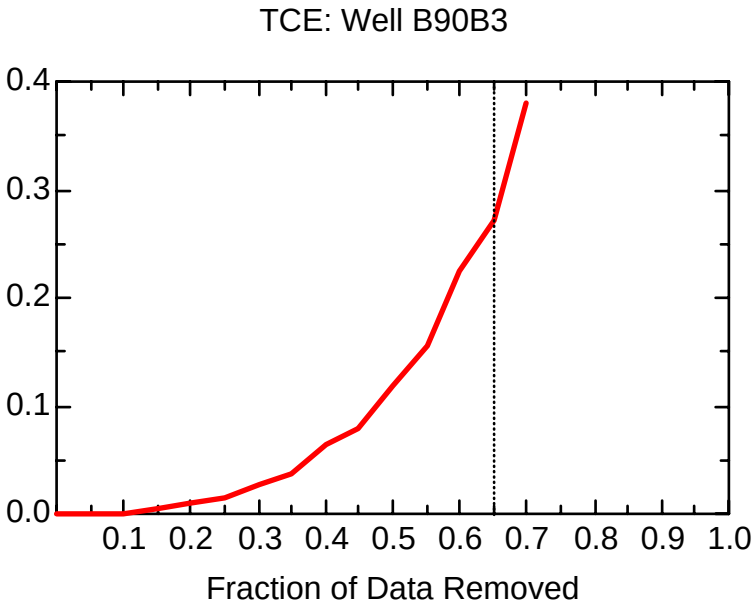
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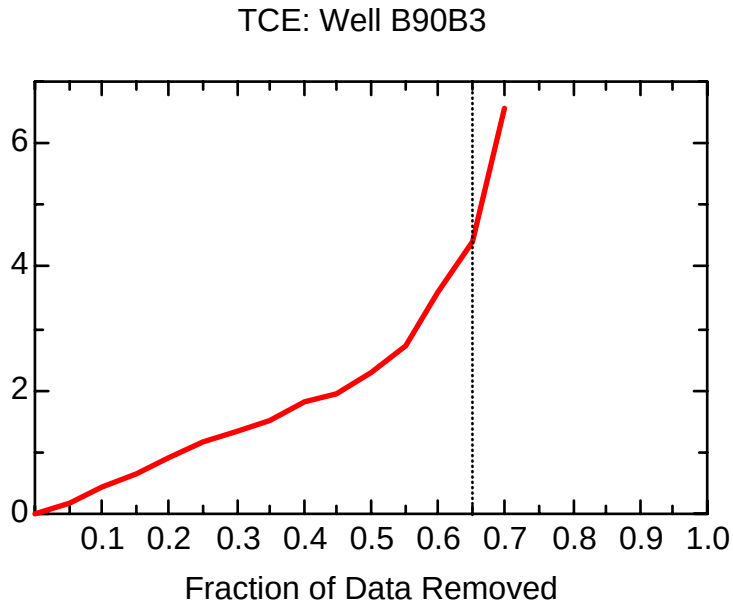
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4
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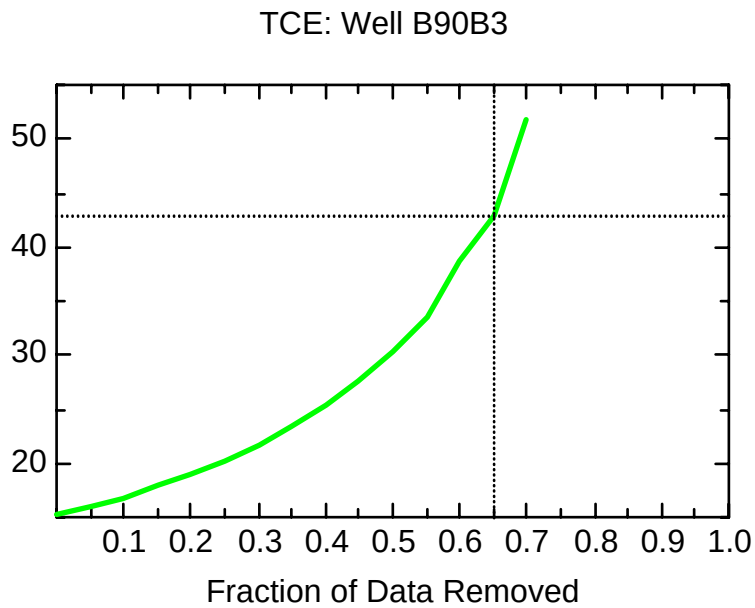
Fraction of Data Removed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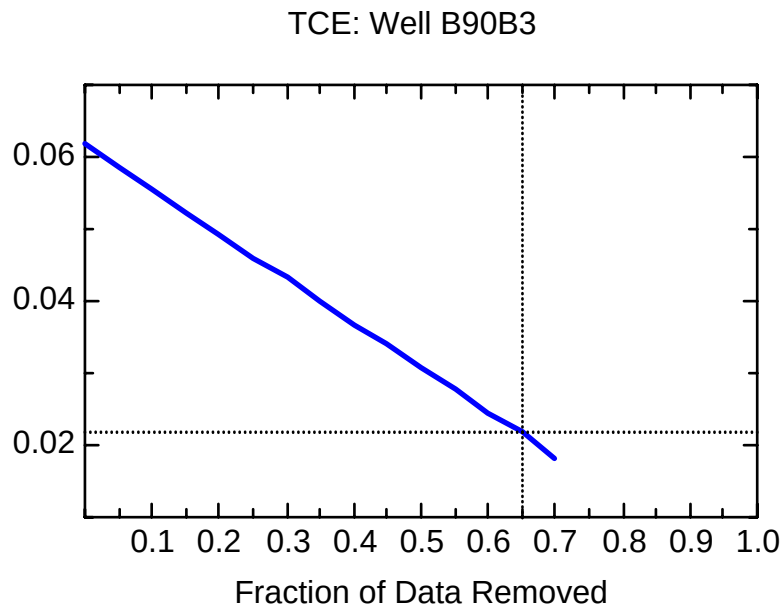
Fraction of Data Removed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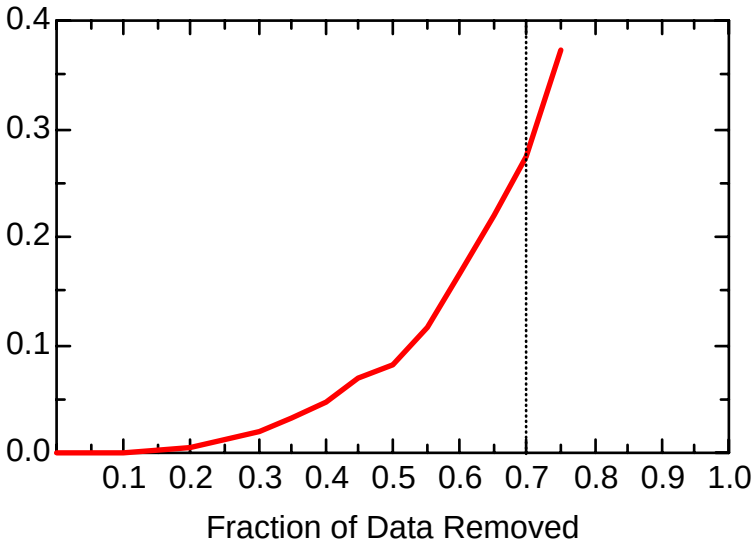
TCE: Well B90B4



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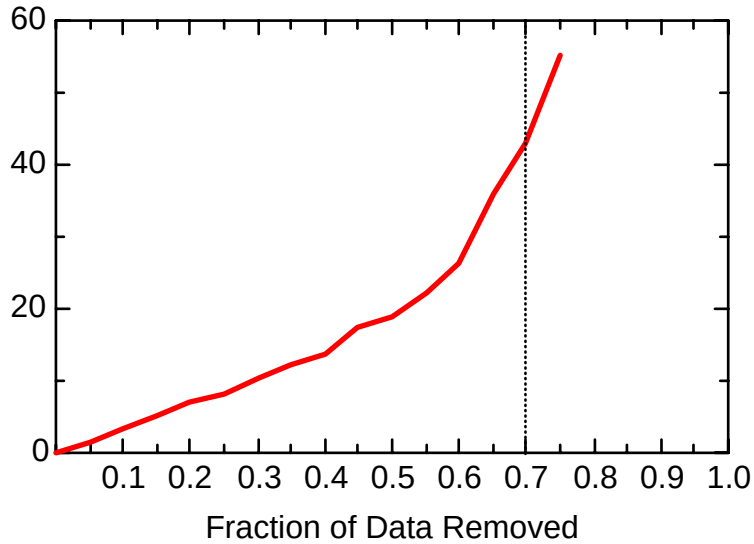

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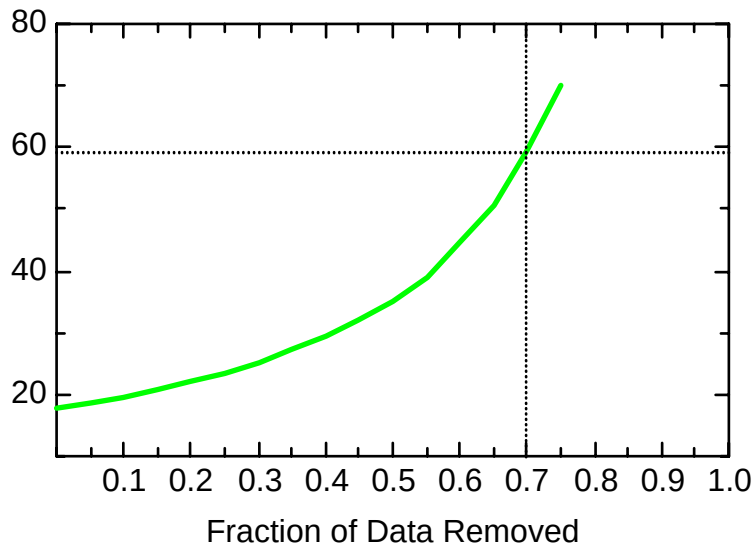

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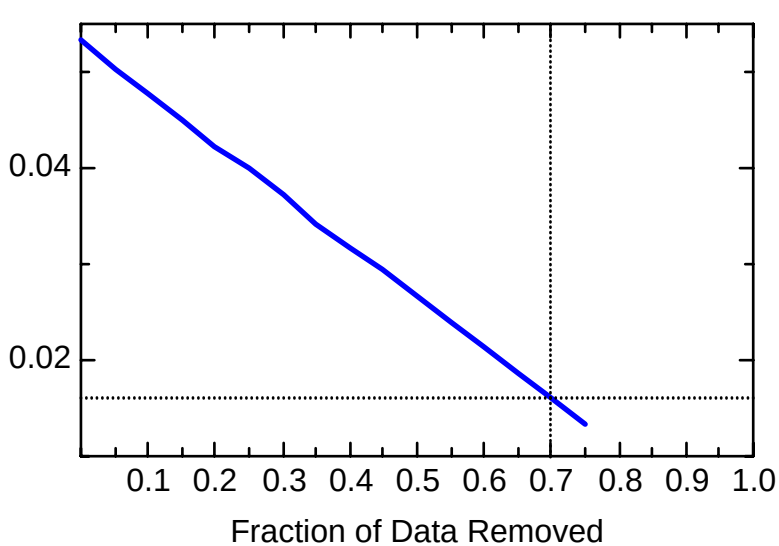

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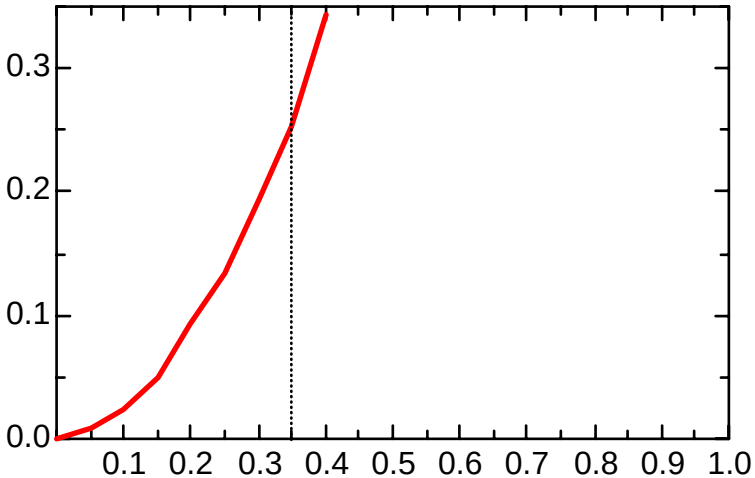

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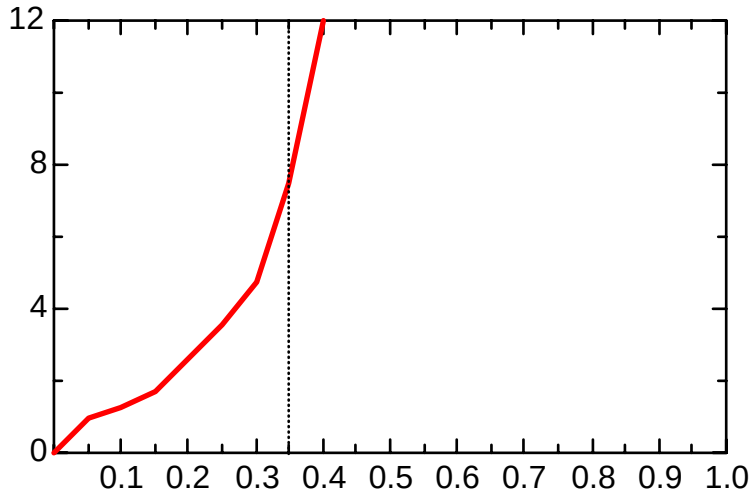

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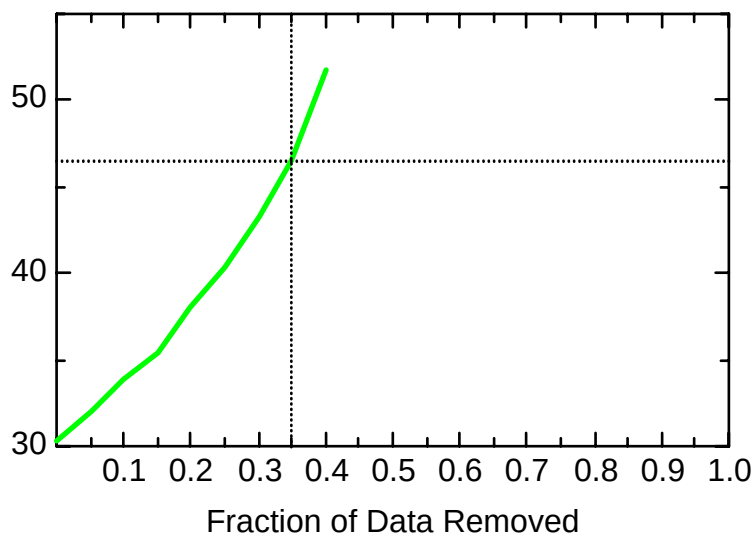

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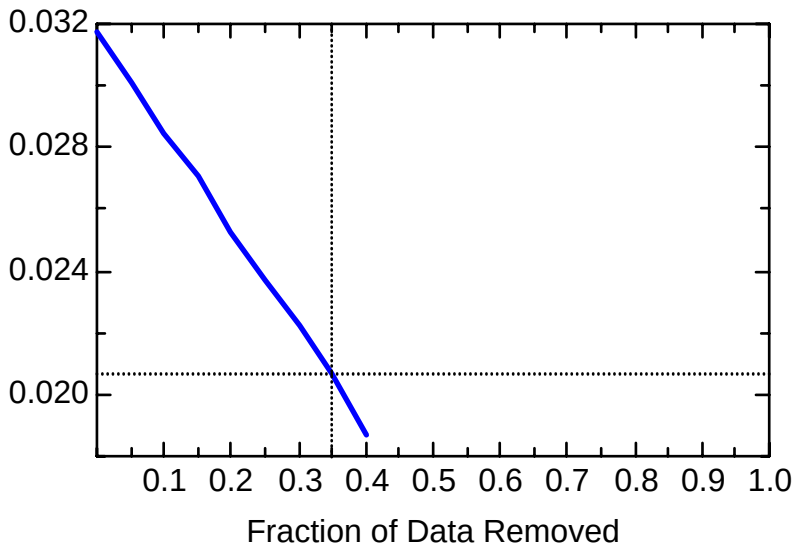

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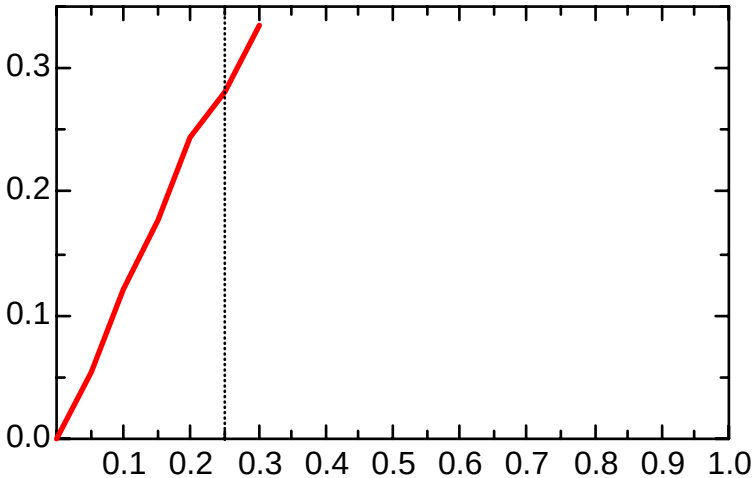

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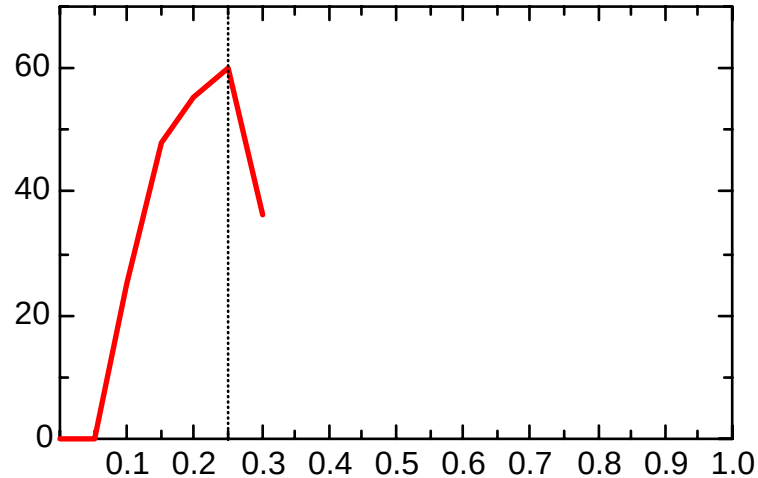

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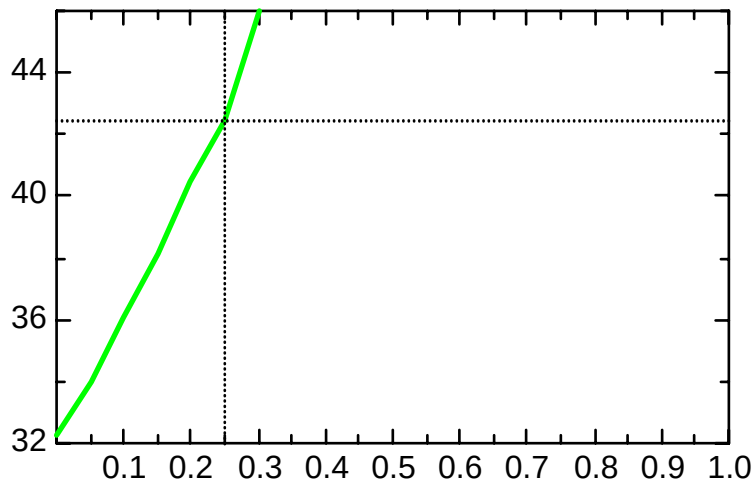

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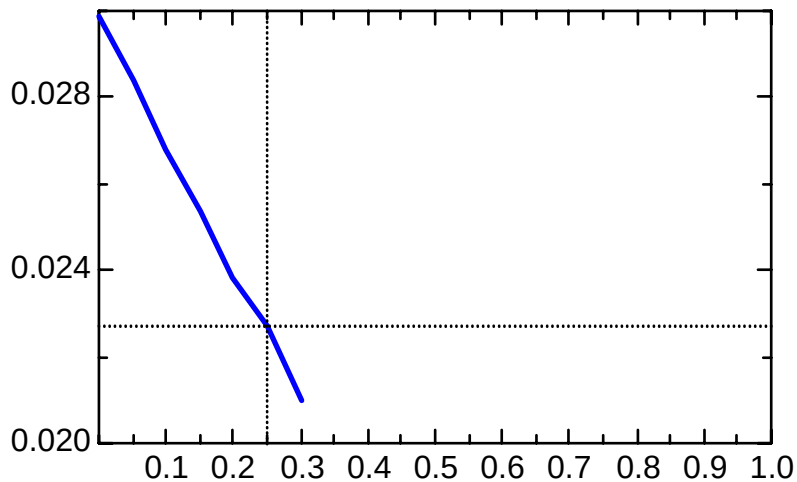

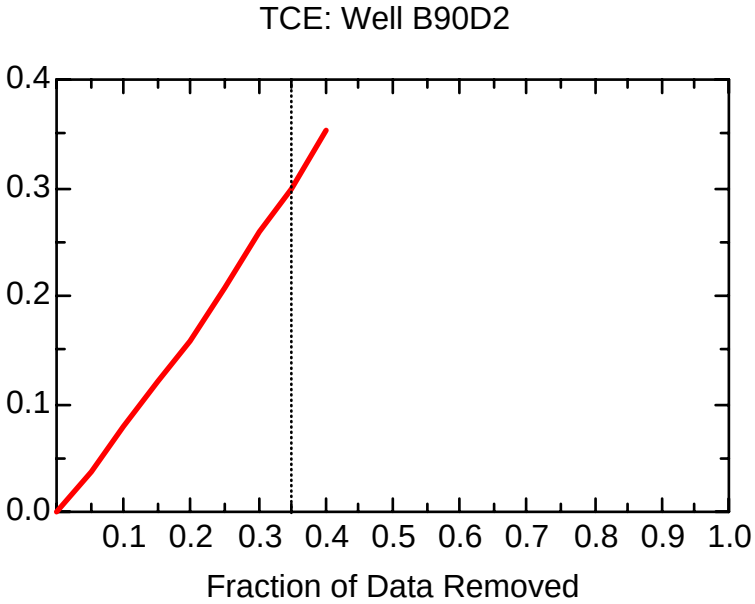
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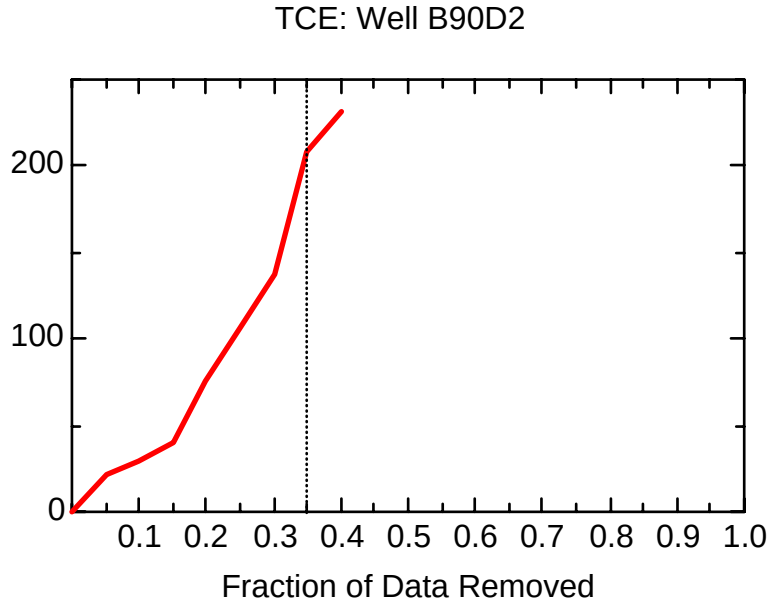
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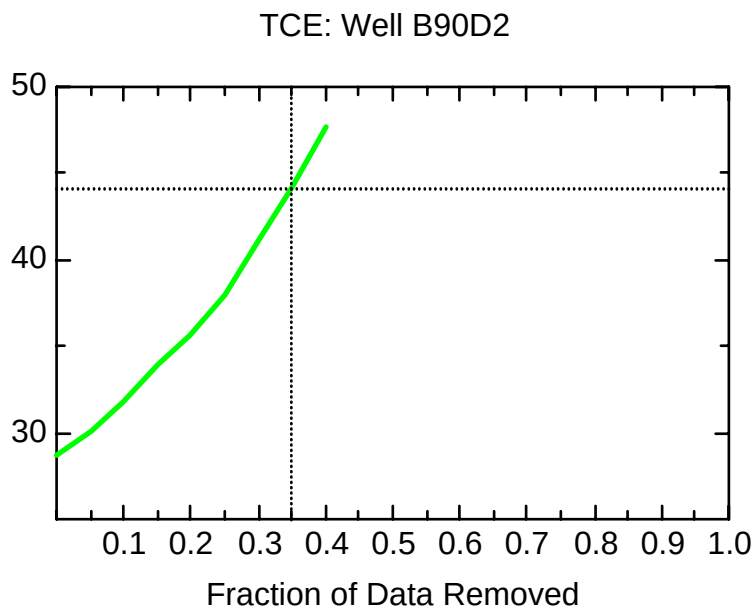
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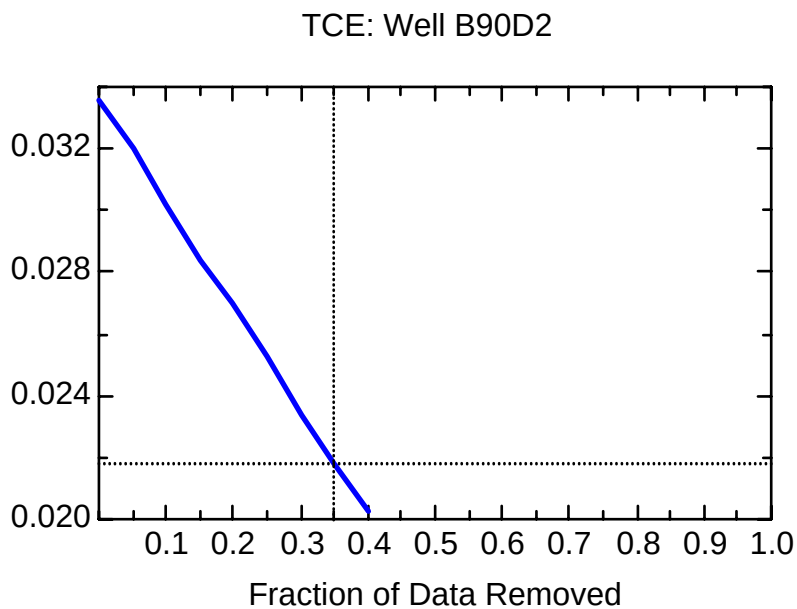
TCE: Well B90D2
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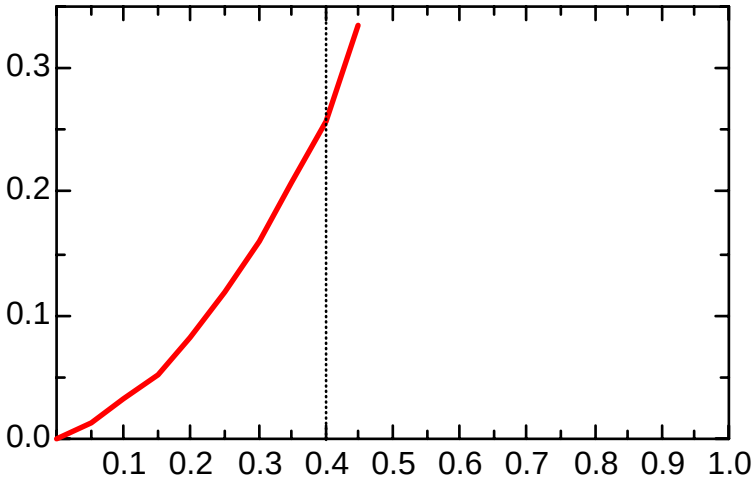

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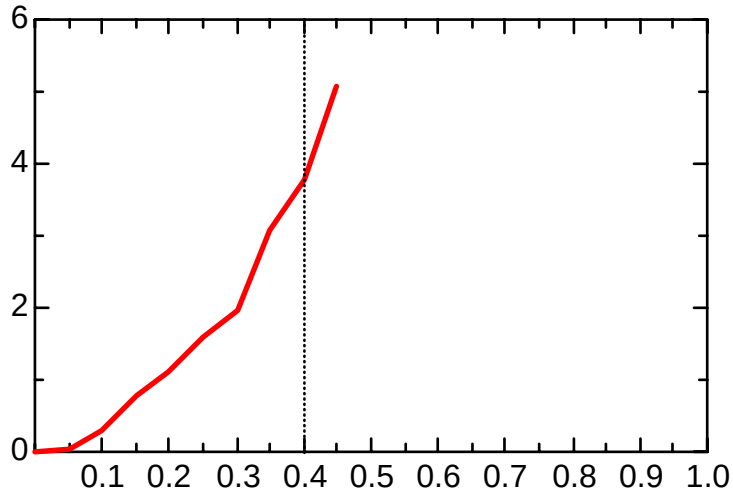

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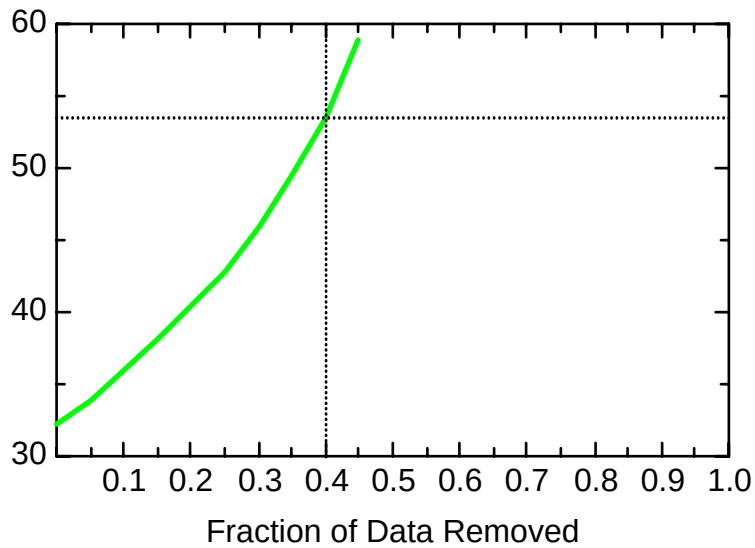

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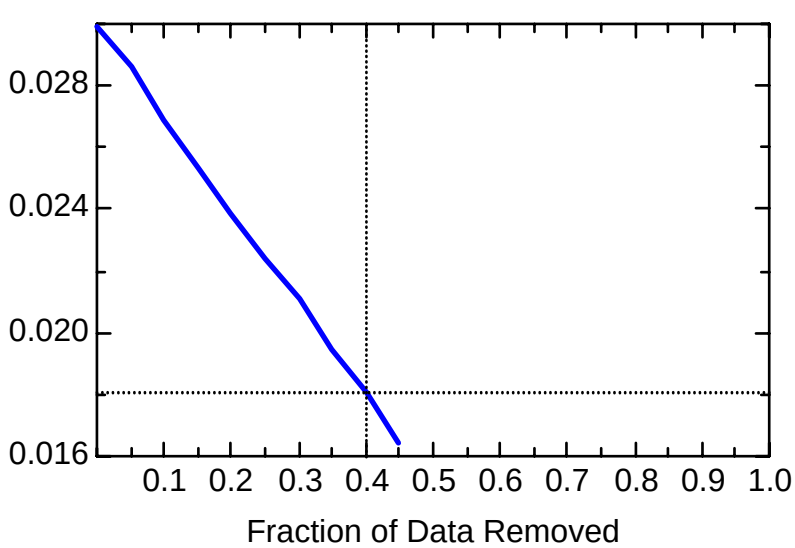

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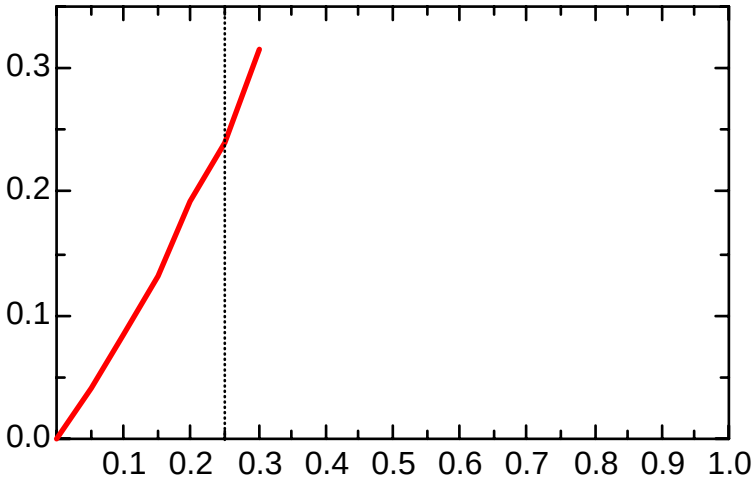

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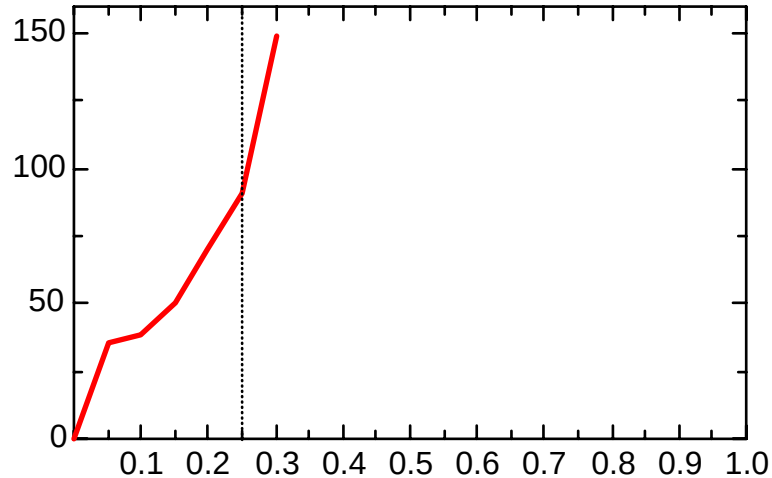

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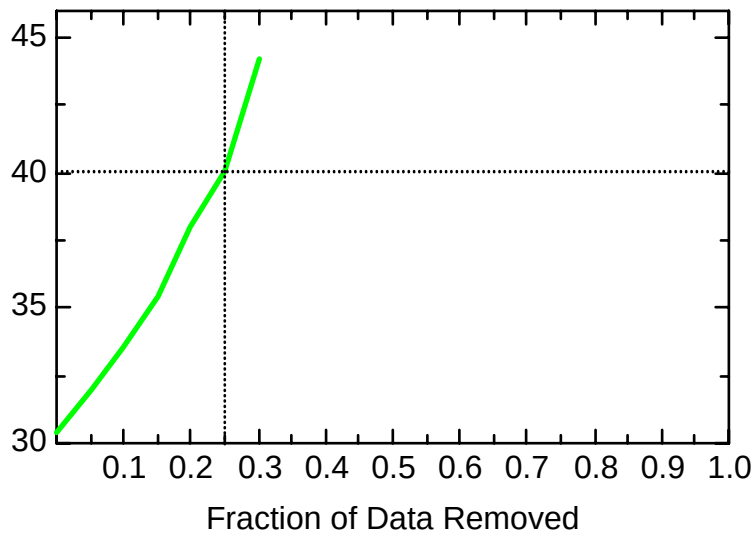

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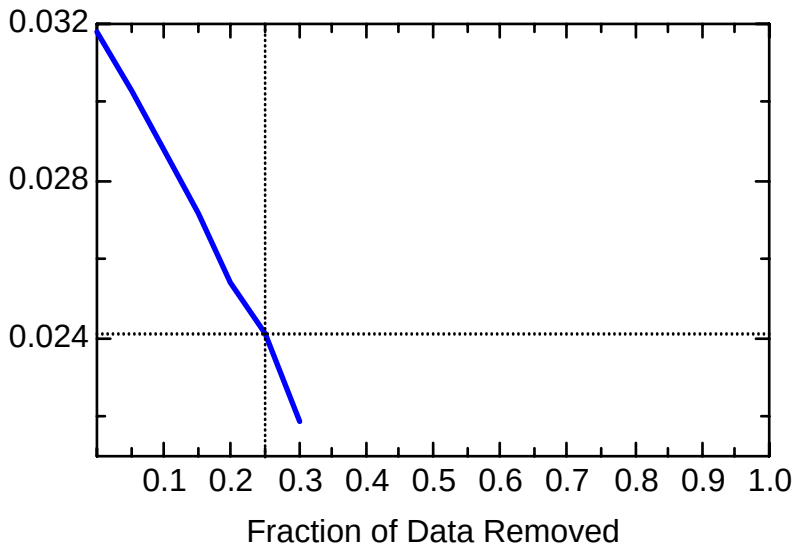

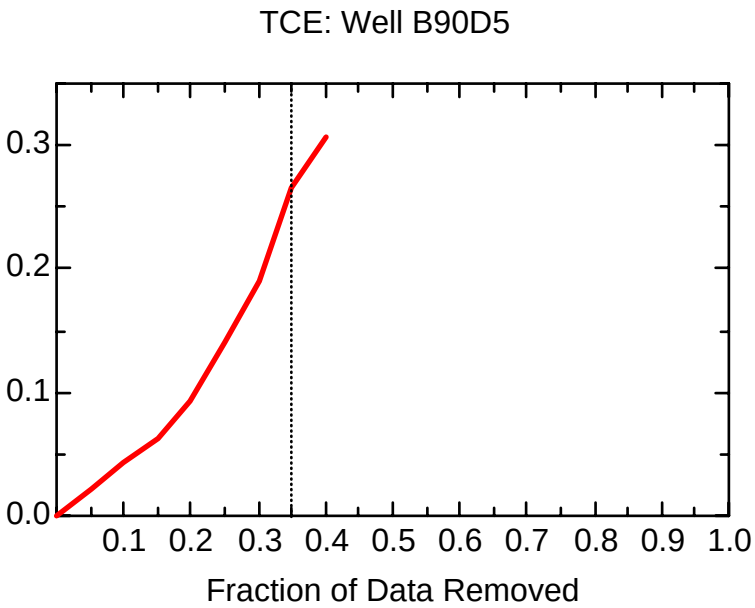
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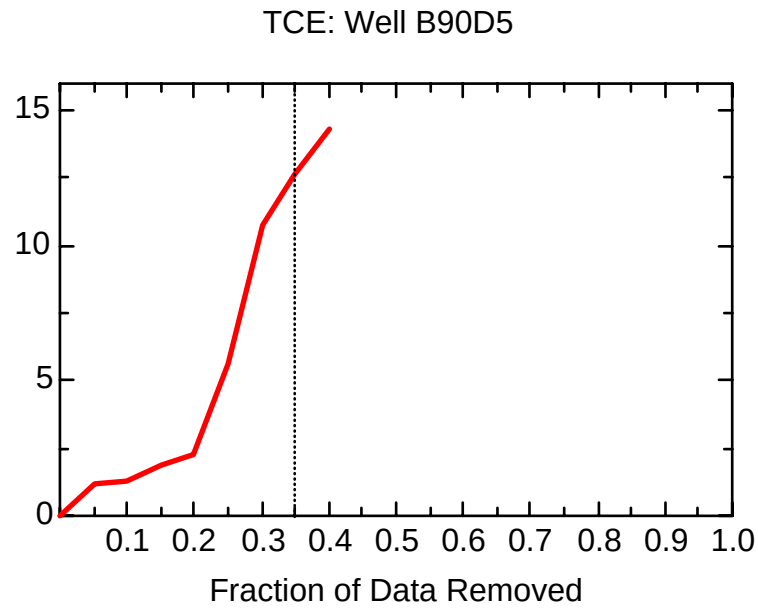
Fraction of Data Removed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10
5
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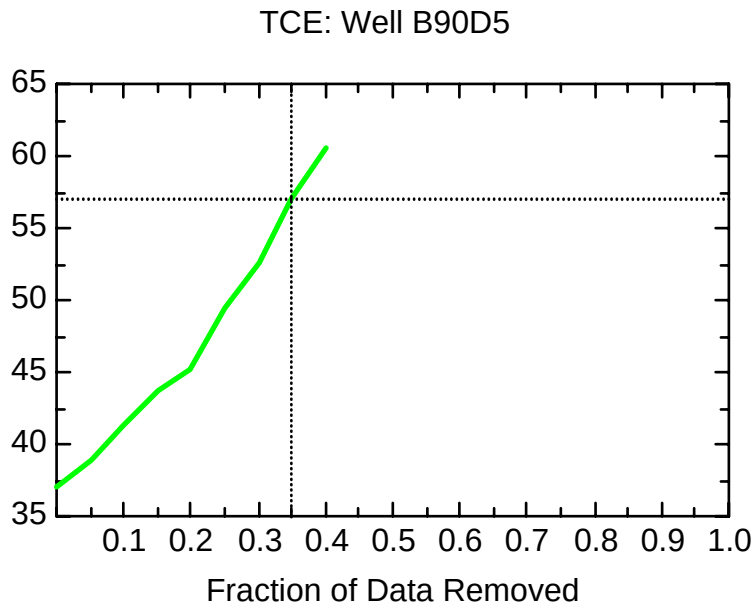
Fraction of Data Removed


TCE: Well B90D5
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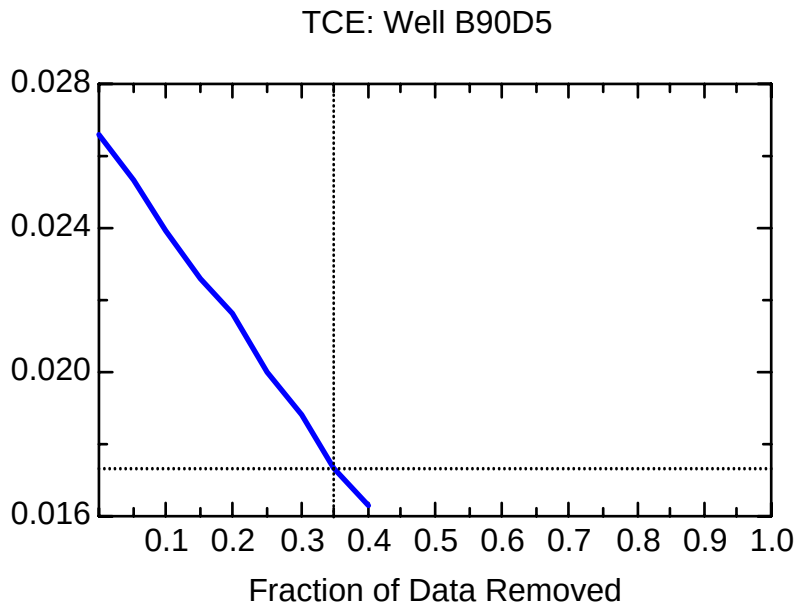
55
50
45
40
35
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90D5
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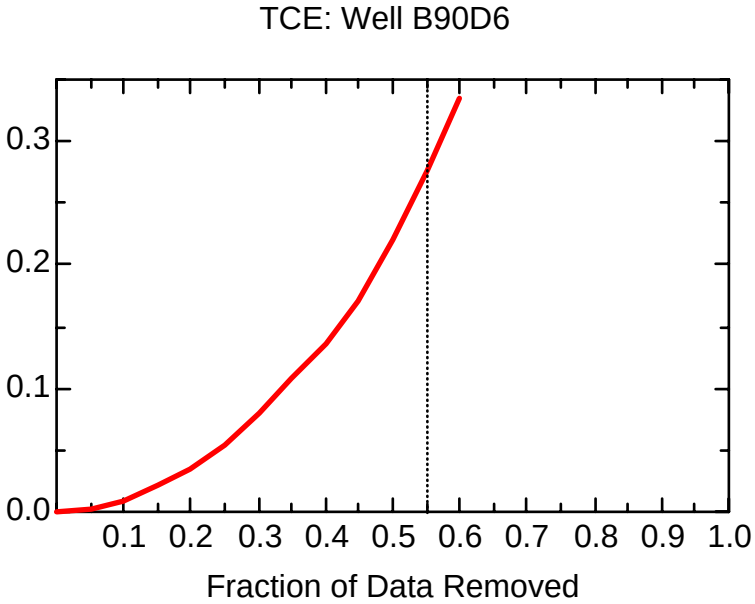
0.024
0.020
0.016
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90D6
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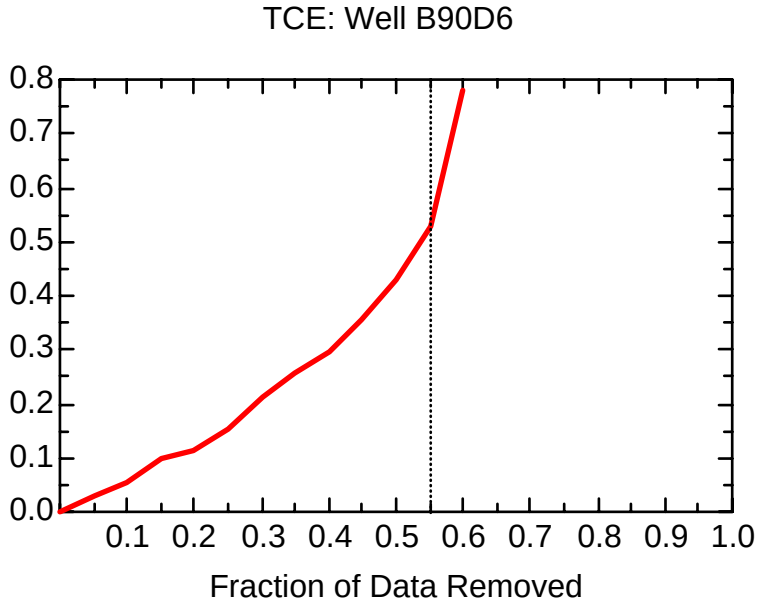
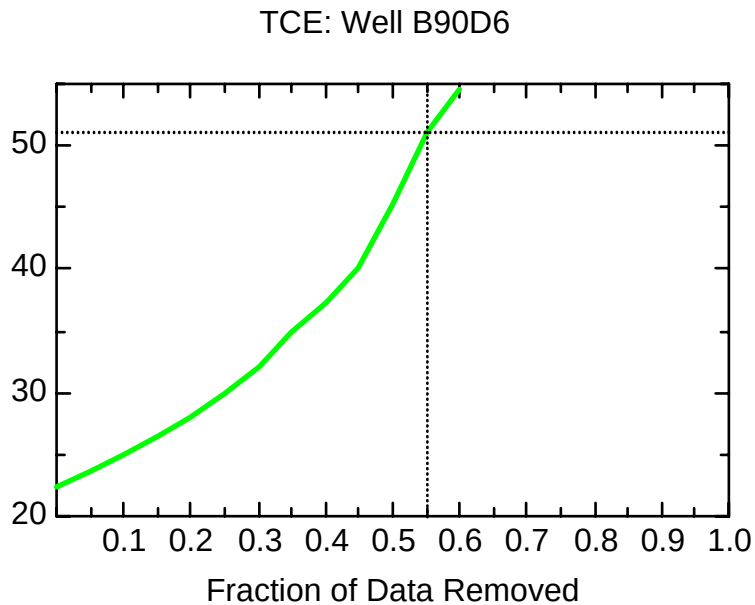
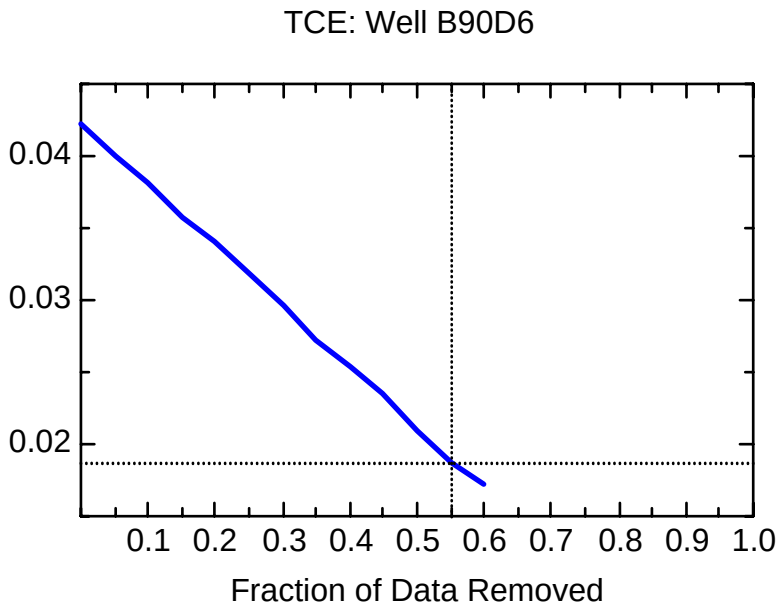
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90D6
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90D6
20
30
40
50
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90D6
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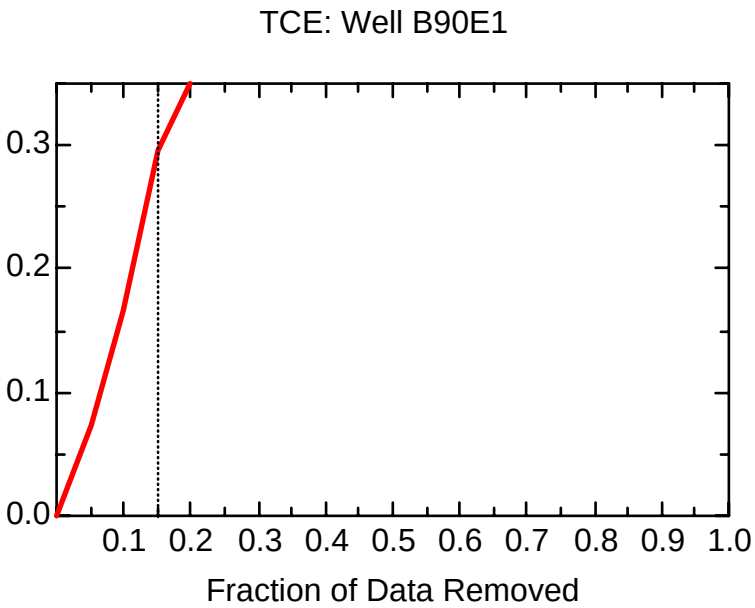
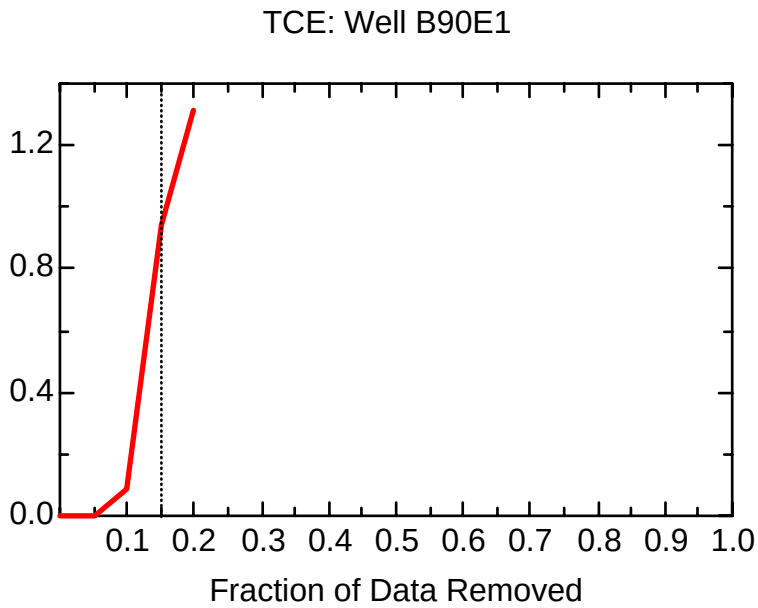
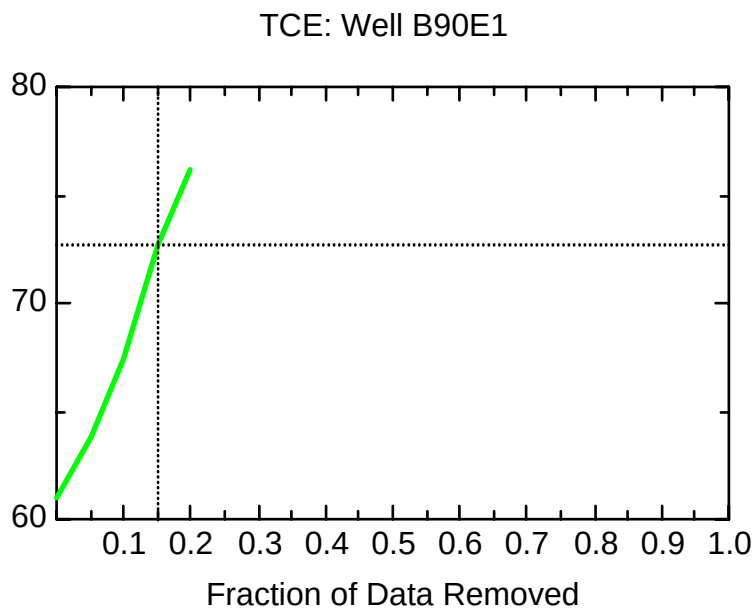
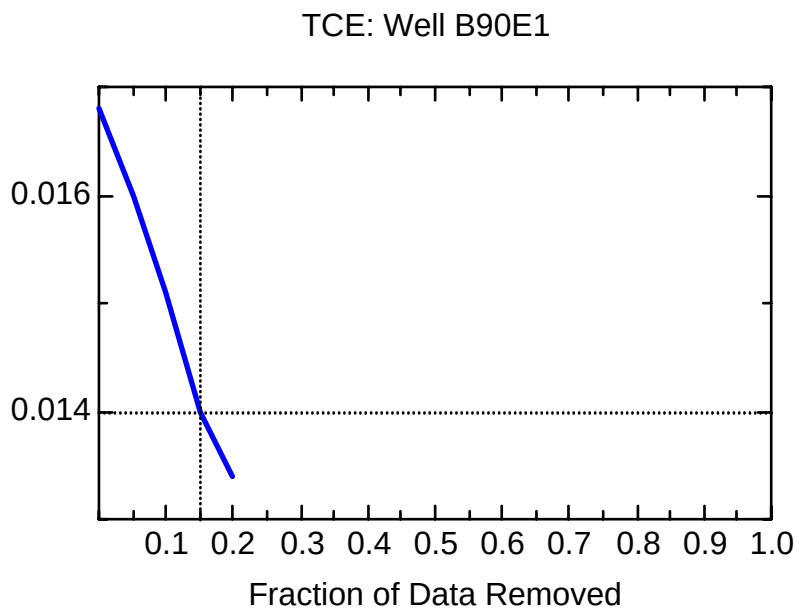
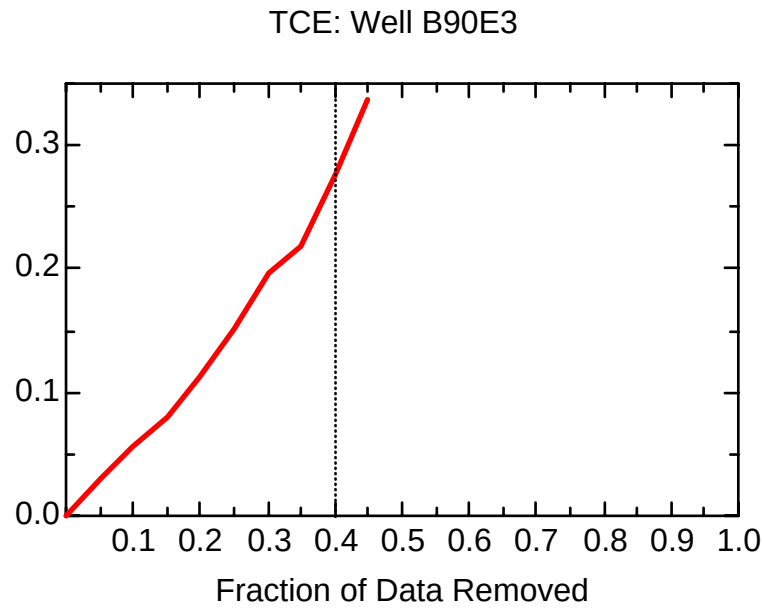
0.03
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

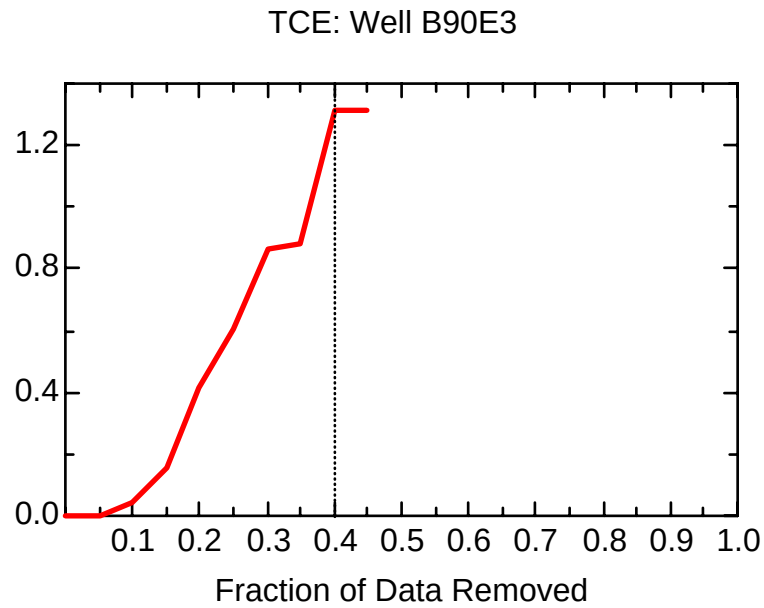

TCE: Well B90E1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

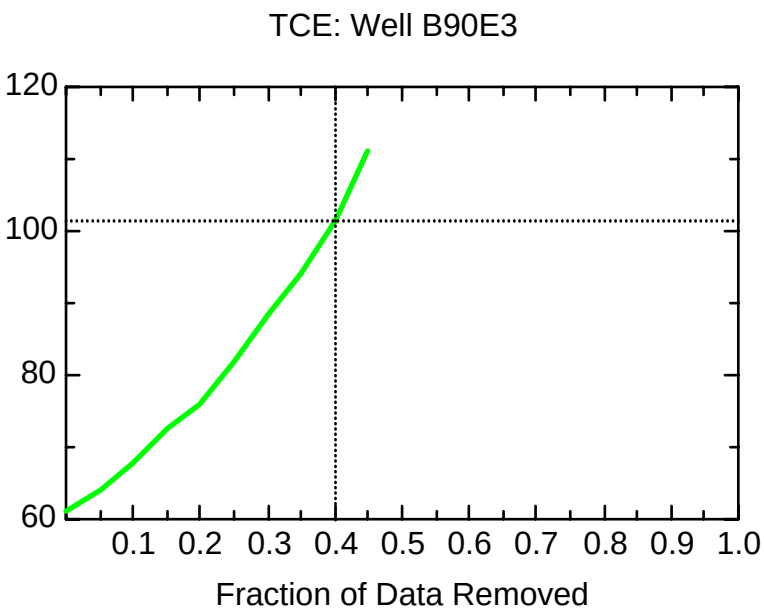

TCE: Well B90E1
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

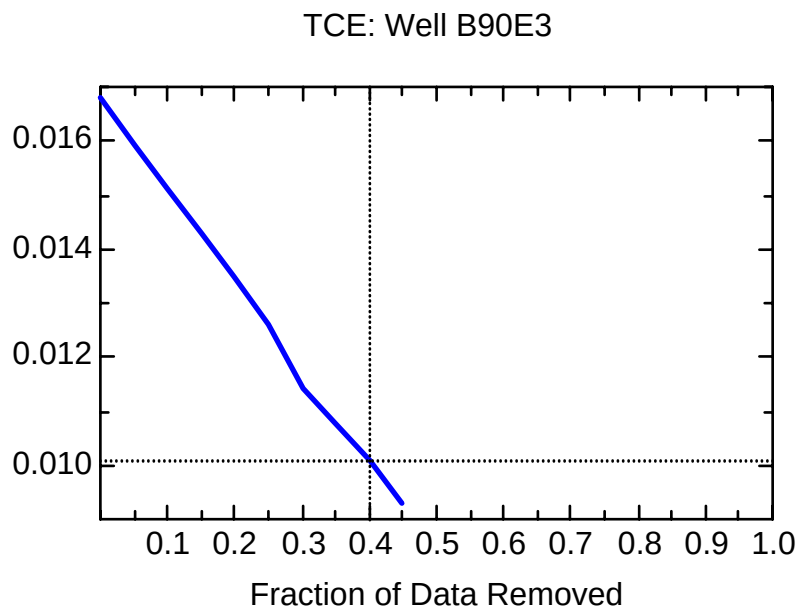

TCE: Well B90E1
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

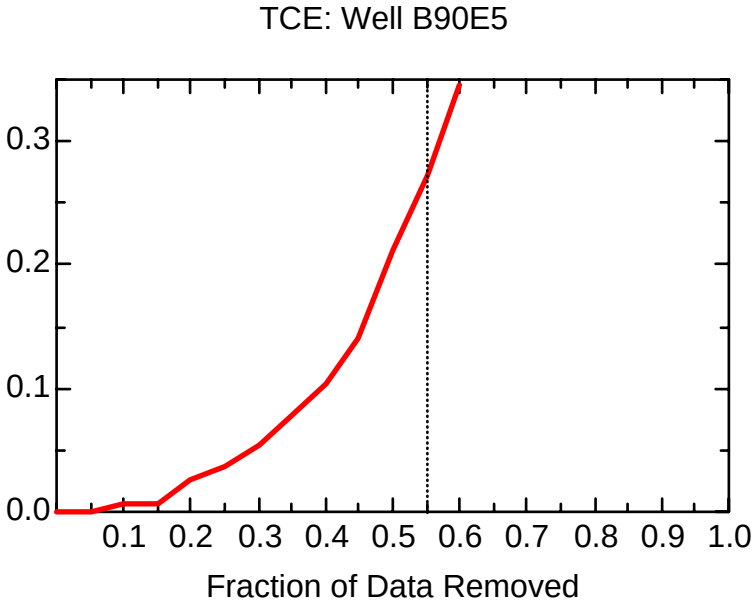

TCE: Well B90E1
0.016
0.014
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

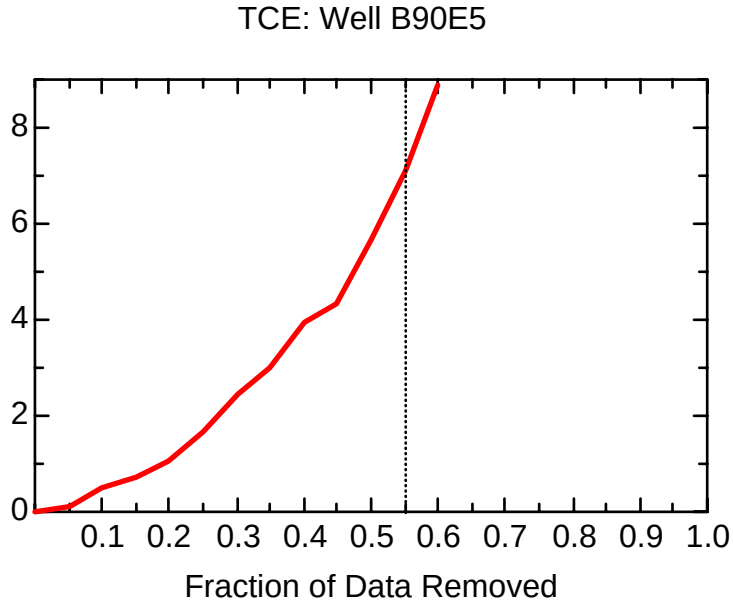

TCE: Well B90E3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

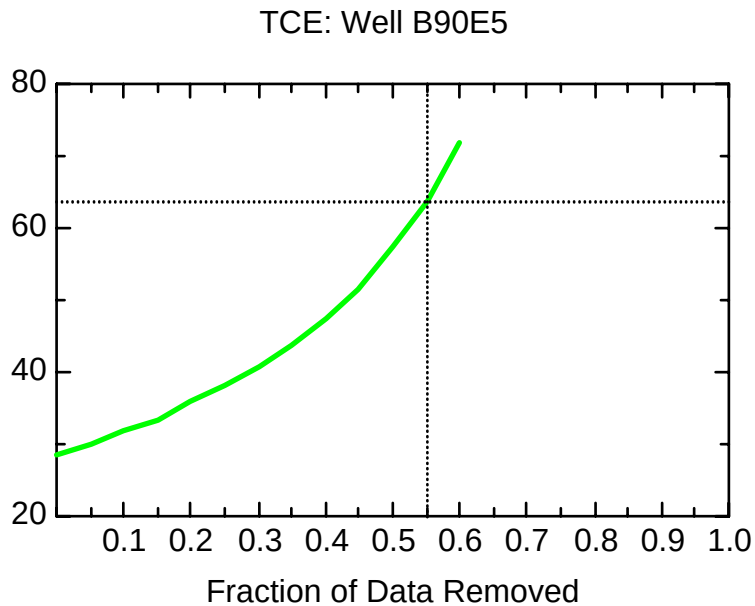

TCE: Well B90E3
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

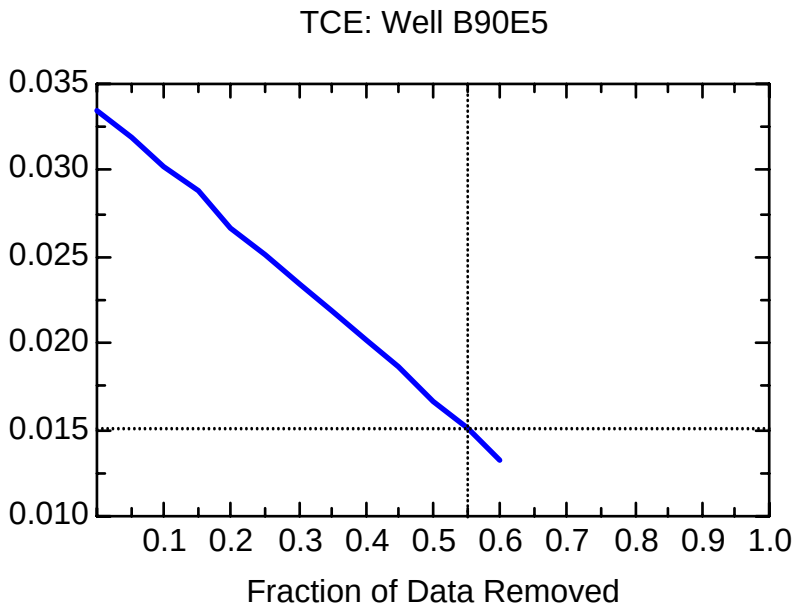

TCE: Well B90E3
120
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90E3
0.016
0.014
0.012
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

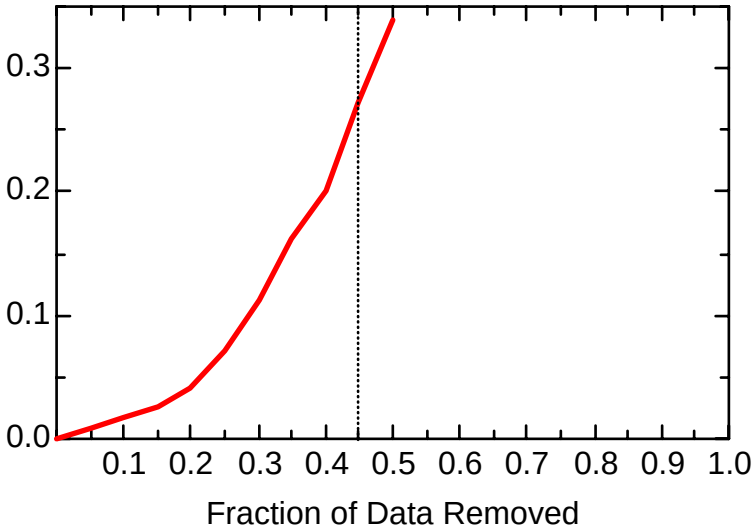

TCE: Well B90E5
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90E5
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

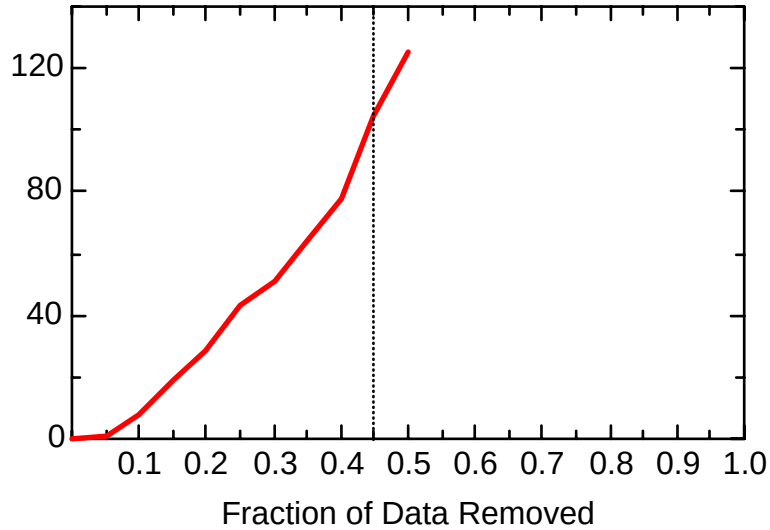

TCE: Well B90E5
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90E5
0.035
0.030
0.025
0.020
0.015
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

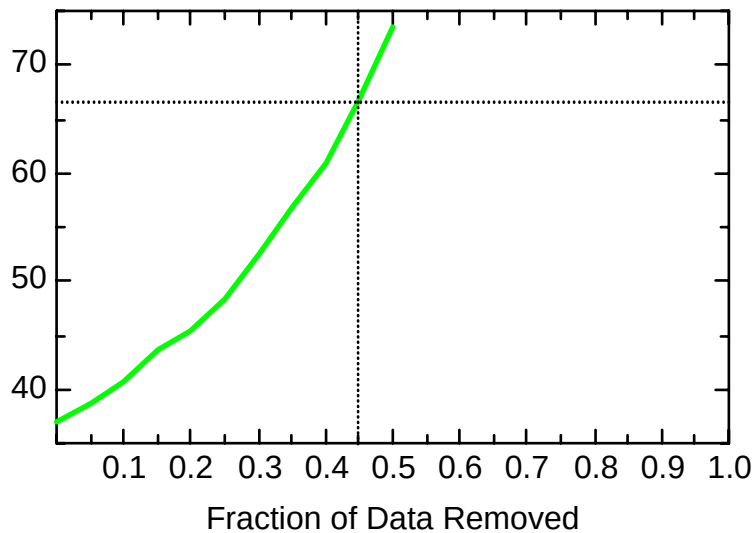
TCE: Well B90E7



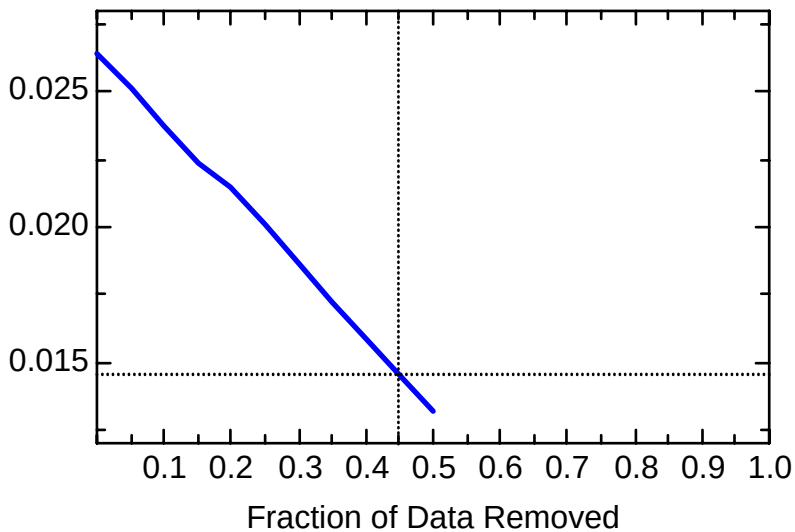
TCE: Well B90E7

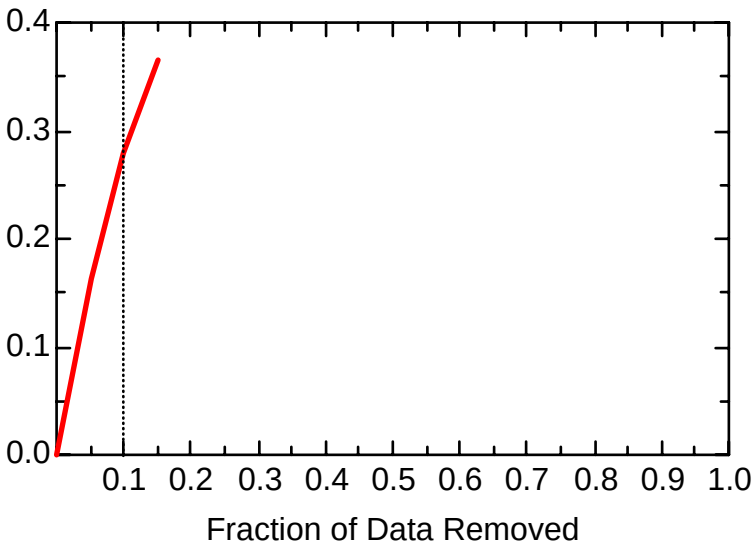


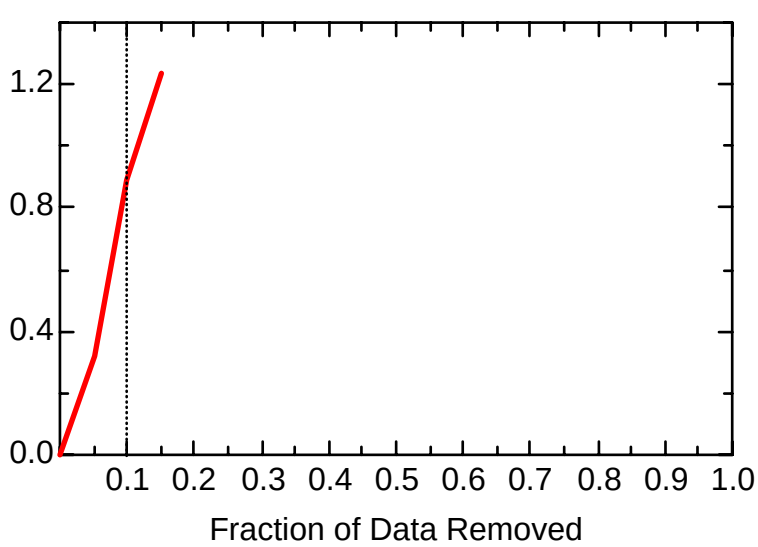
TCE: Well B90E7

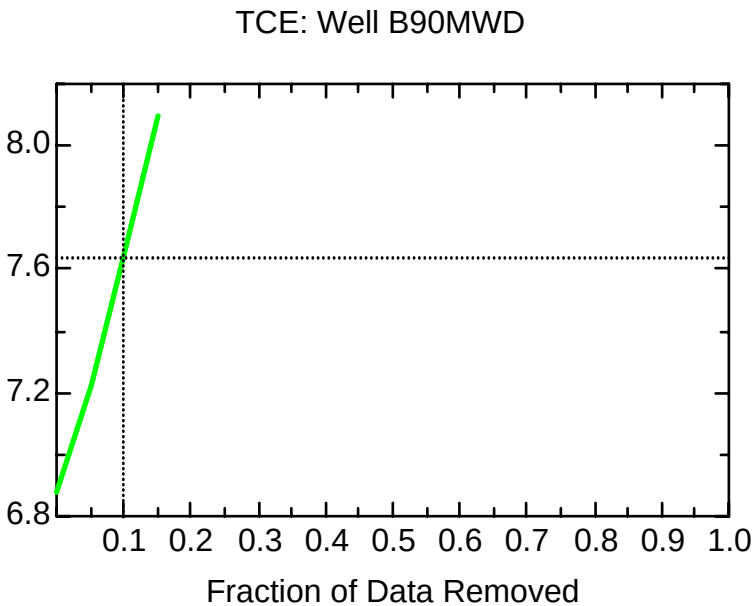


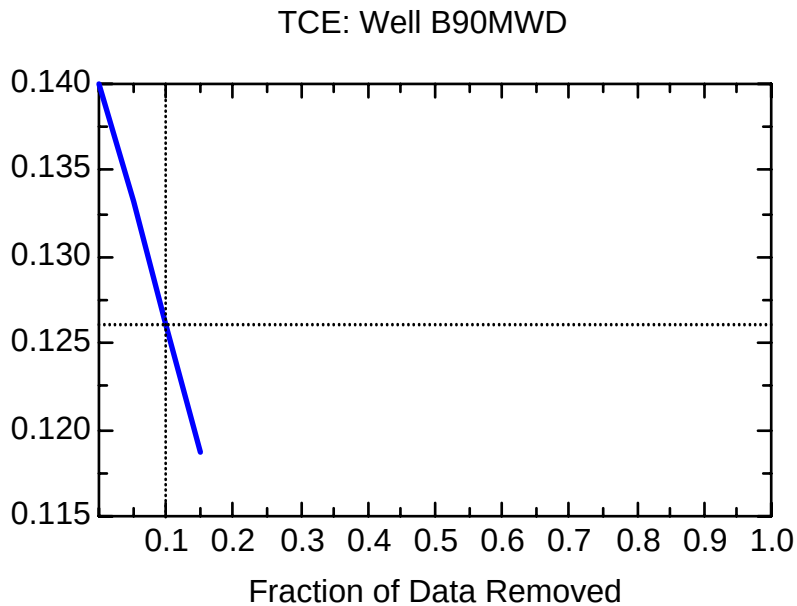
TCE: Well B90E7

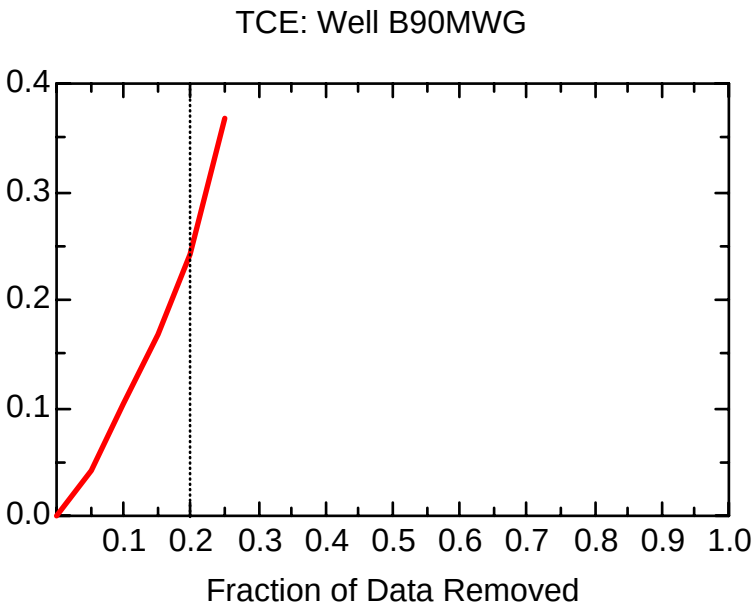


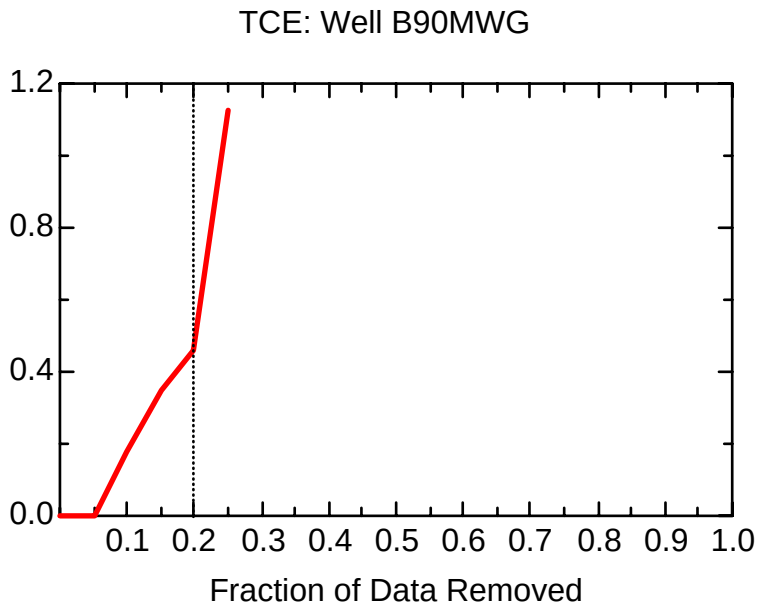

TCE: Well B90MWD
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

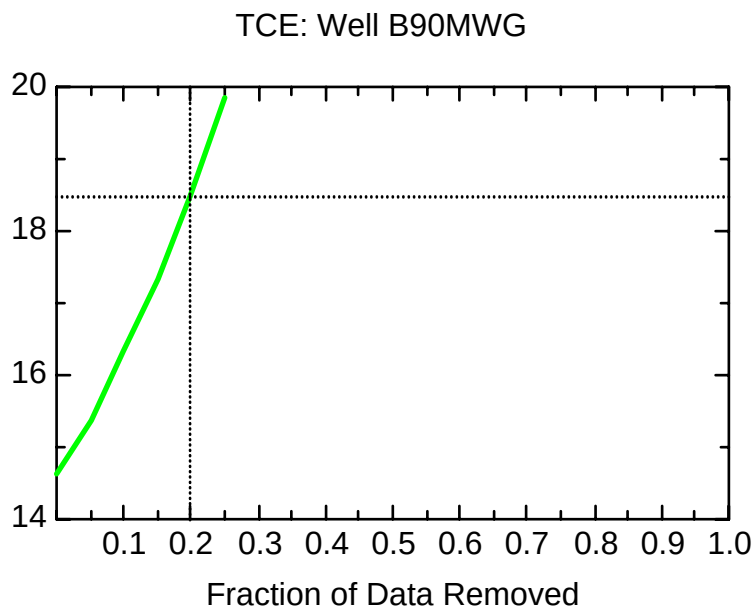

TCE: Well B90MWD
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

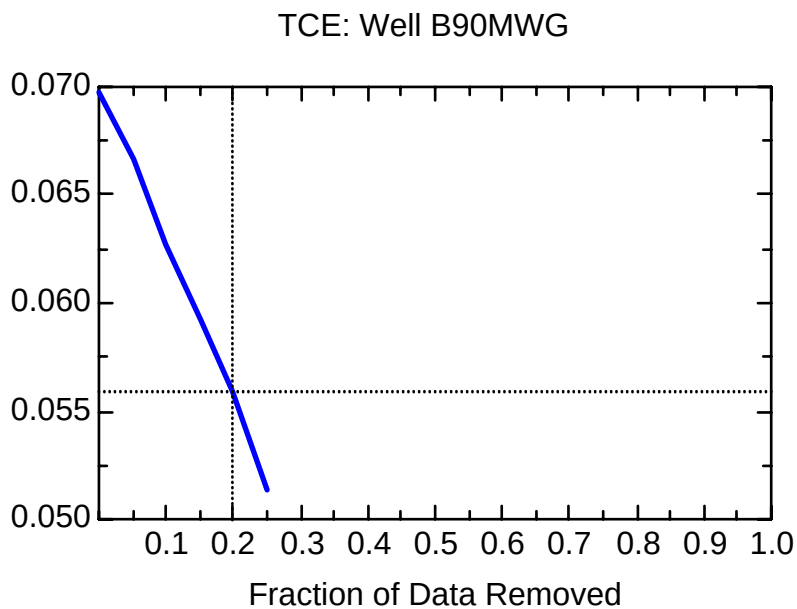

TCE: Well B90MWD
8.0
7.6
7.2
6.8
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

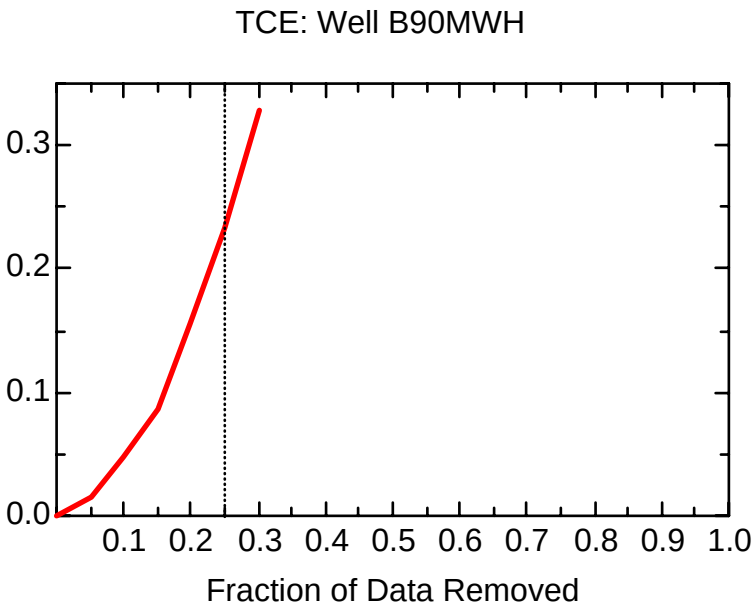

TCE: Well B90MWD
0.140
0.135
0.130
0.125
0.120
0.115
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWG
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWG
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWG
20
18
16
14
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWG
0.070
0.065
0.060
0.055
0.050
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWH
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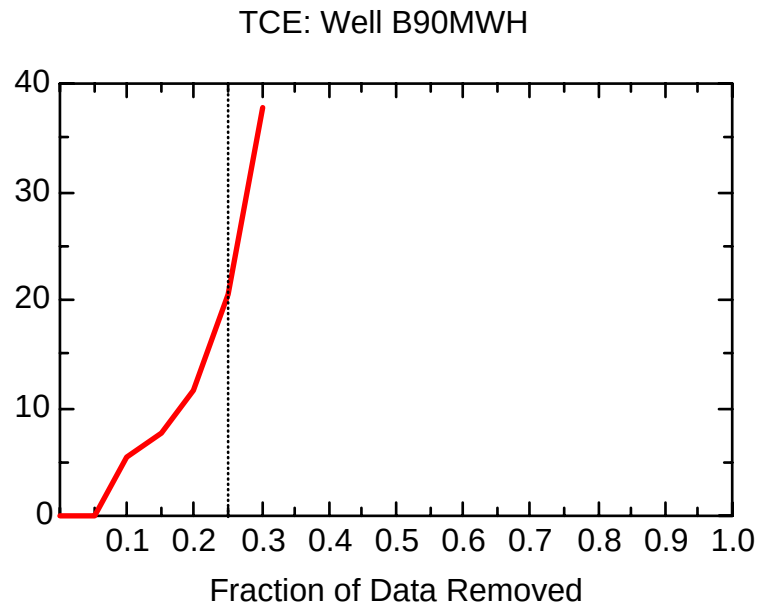
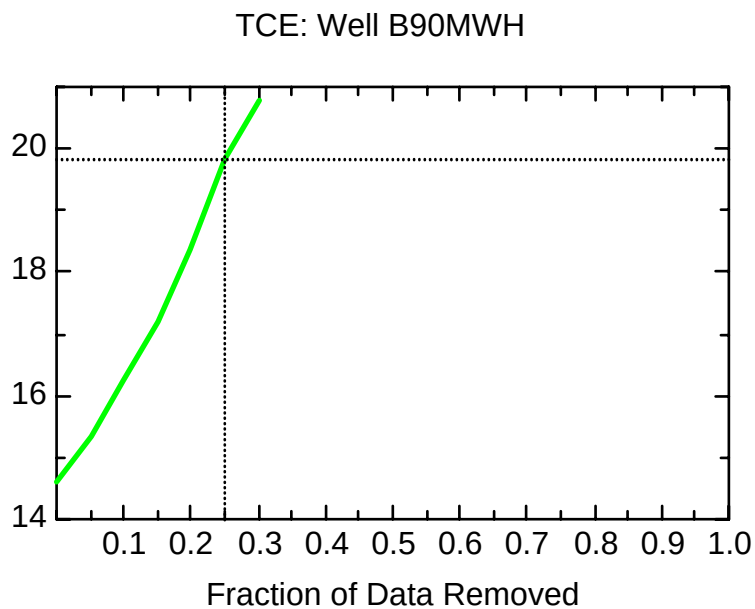
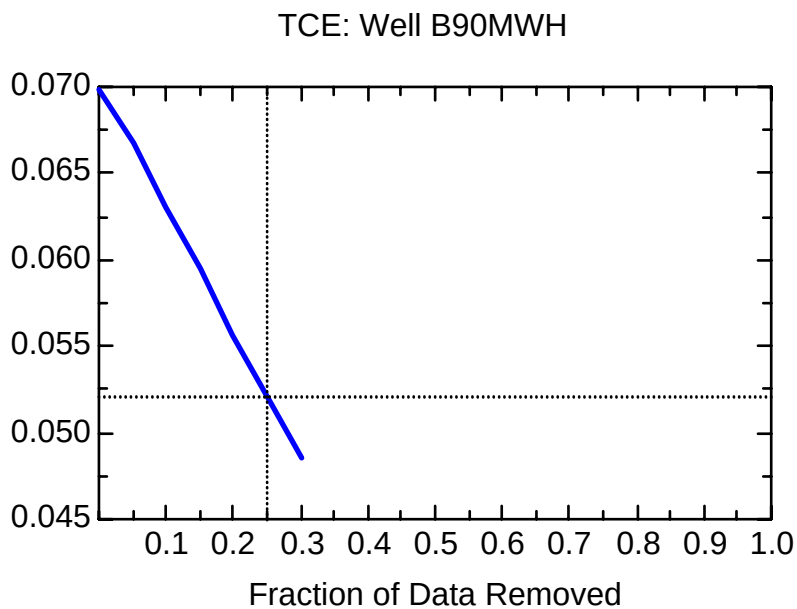
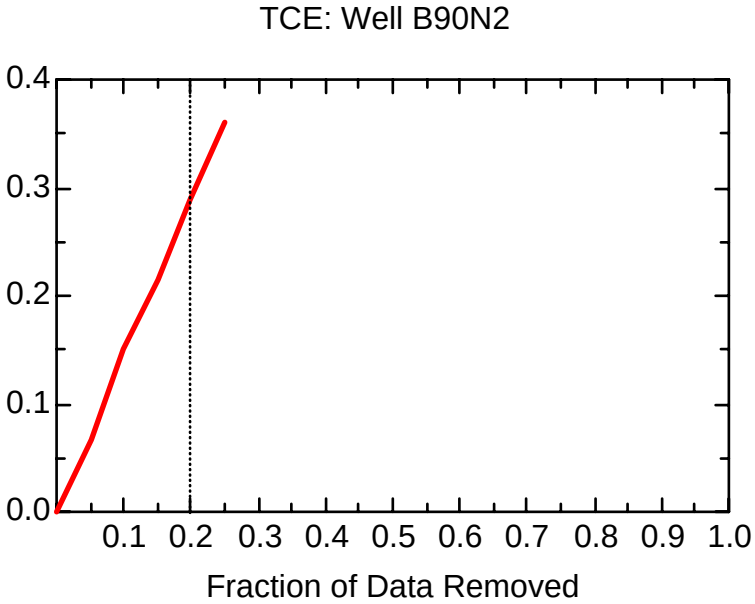
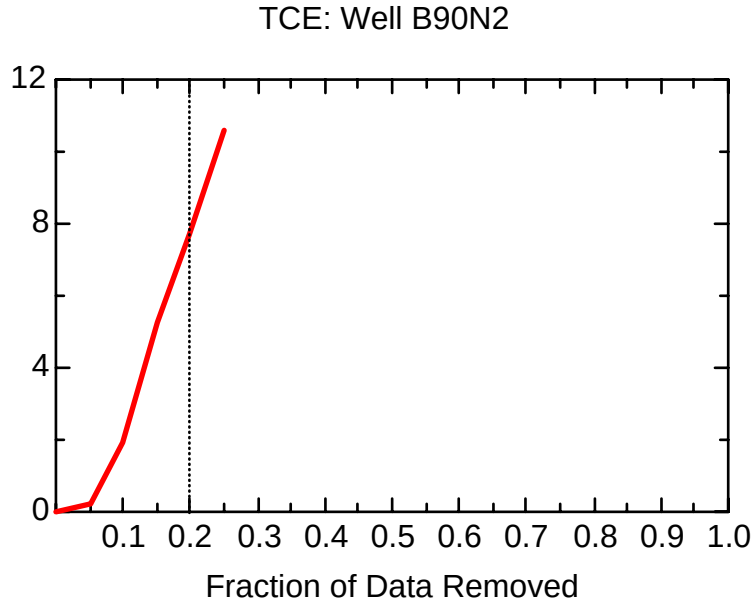
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

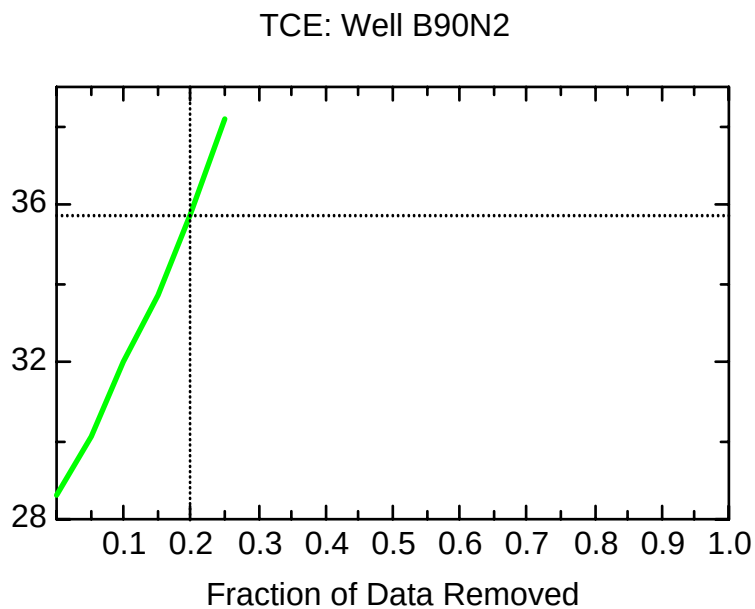

TCE: Well B90MWH
40
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

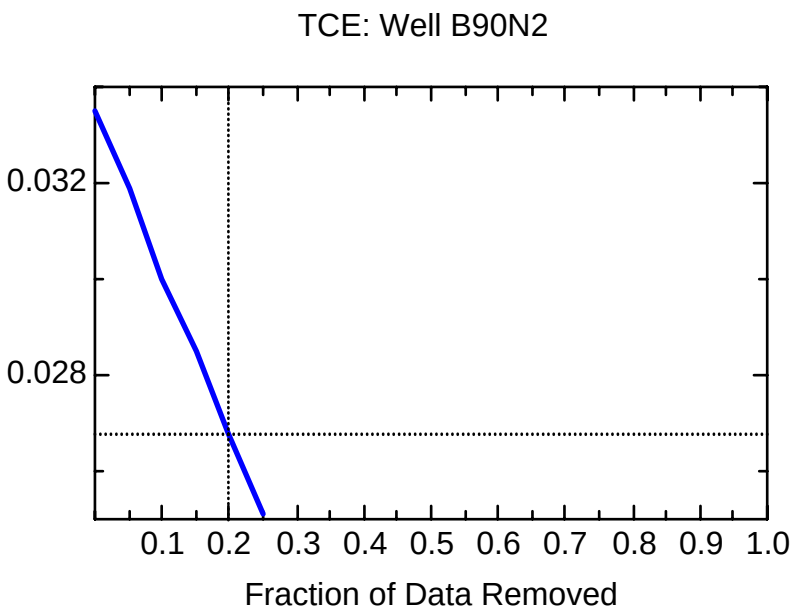

TCE: Well B90MWH
20
18
16
14
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90MWH
0.070
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

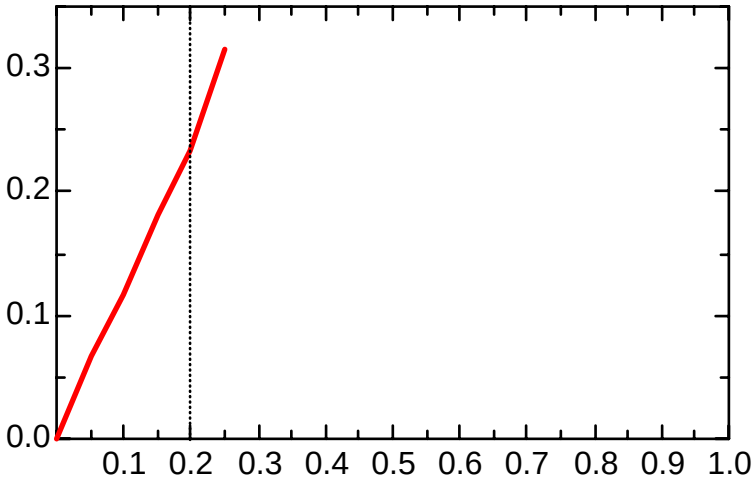

TCE: Well B90N2
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90N2
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

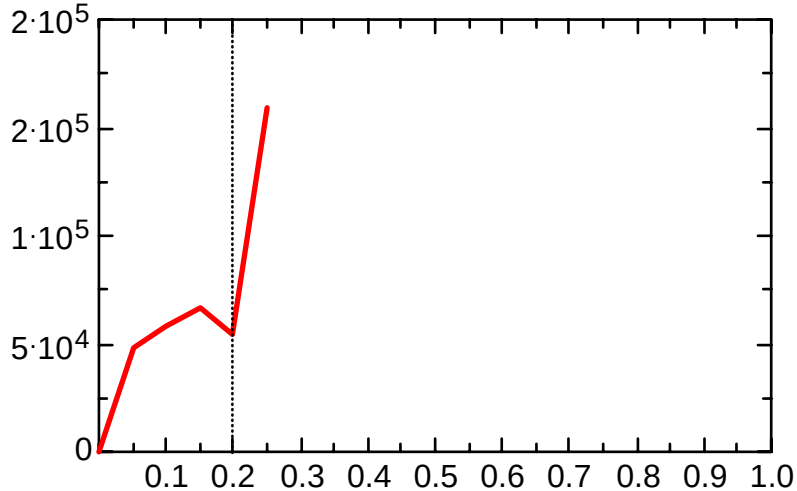

TCE: Well B90N2
36
32
28
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well B90N2
0.032
0.028
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

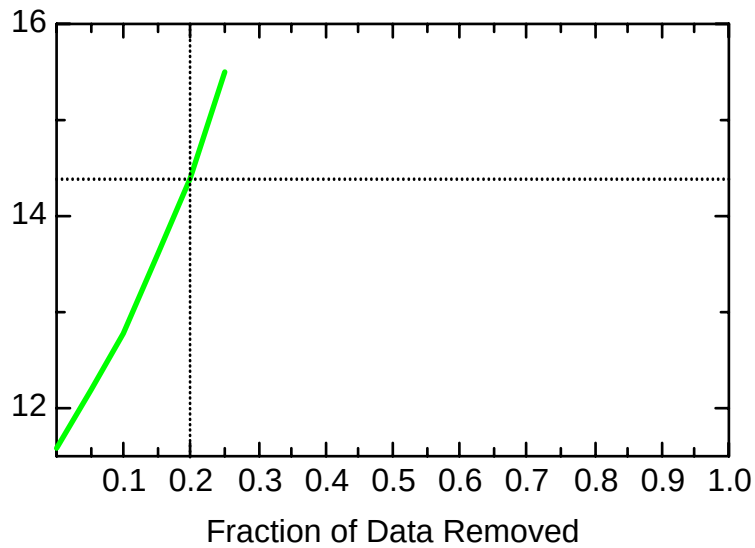
TCE: Well DPW-1



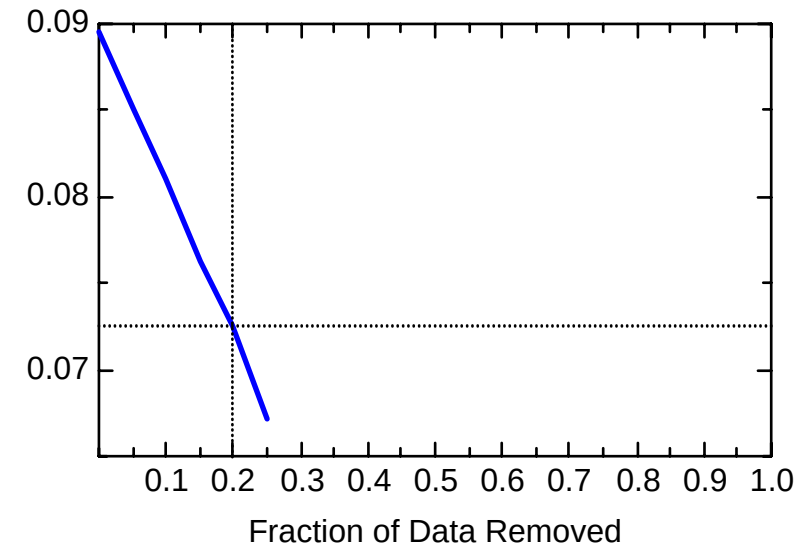
TCE: Well DPW-1



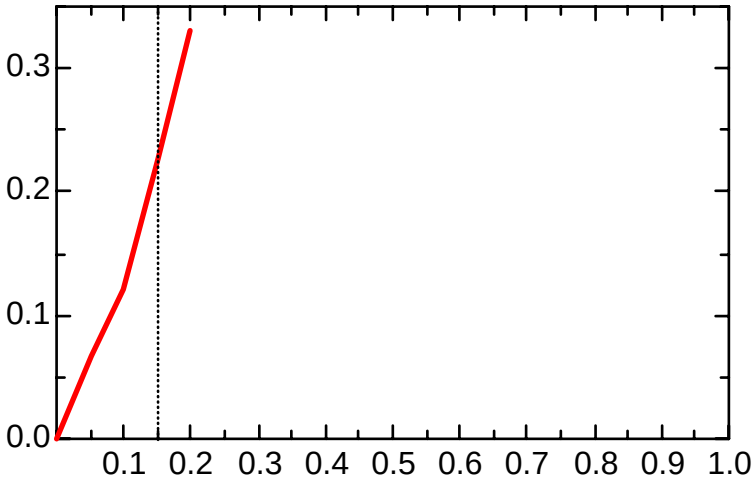
TCE: Well DPW-1



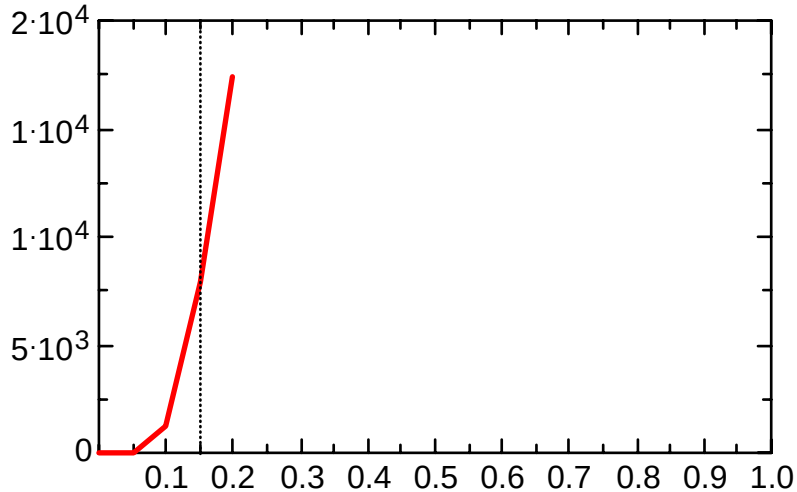
TCE: Well DPW-1



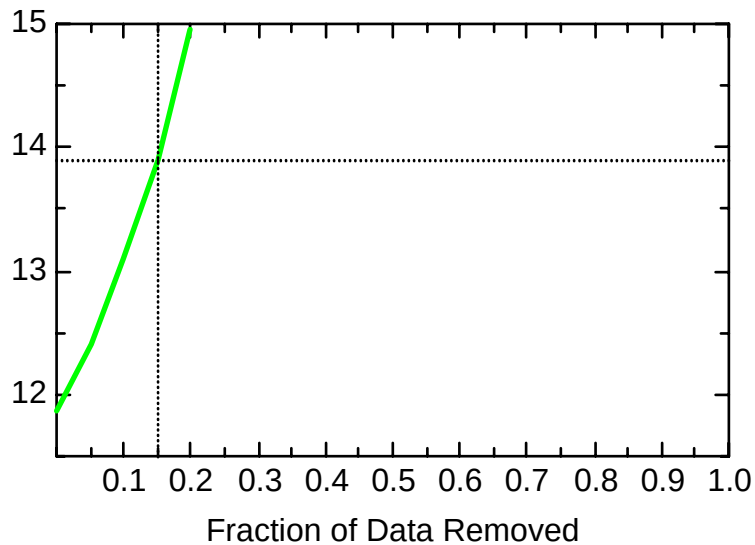
TCE: Well DPW-2



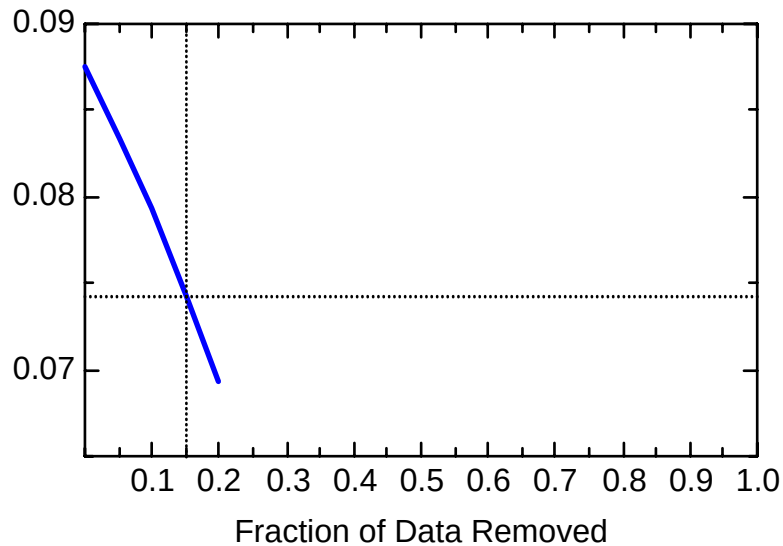
TCE: Well DPW-2



TCE: Well DPW-2



TCE: Well DPW-2



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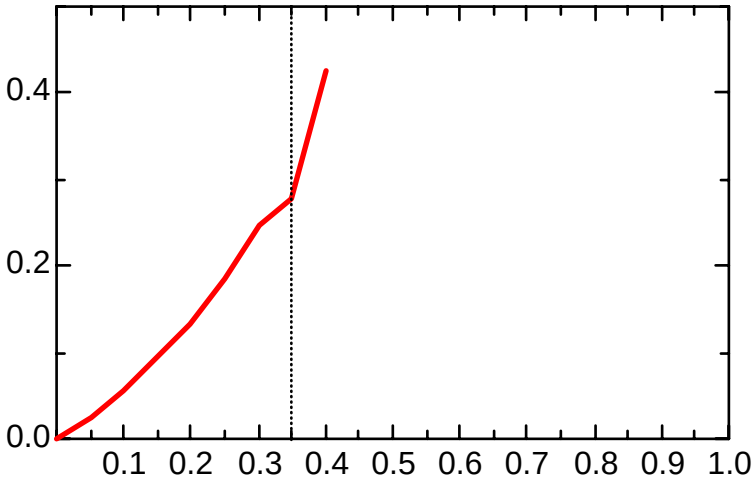
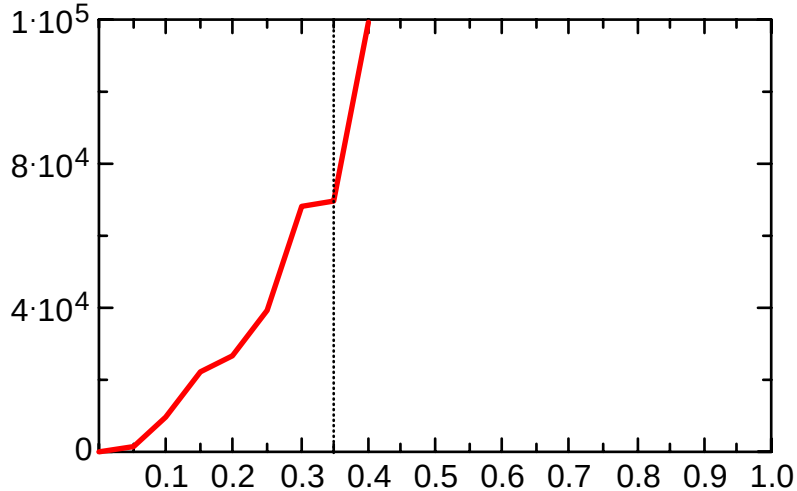
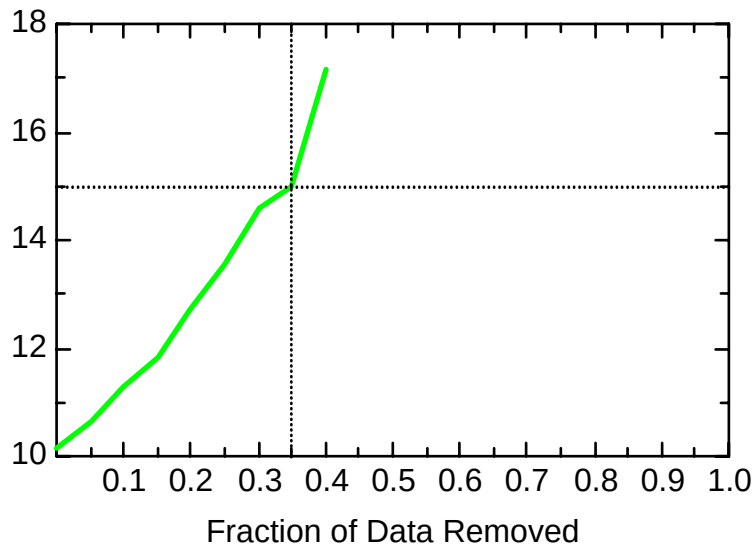


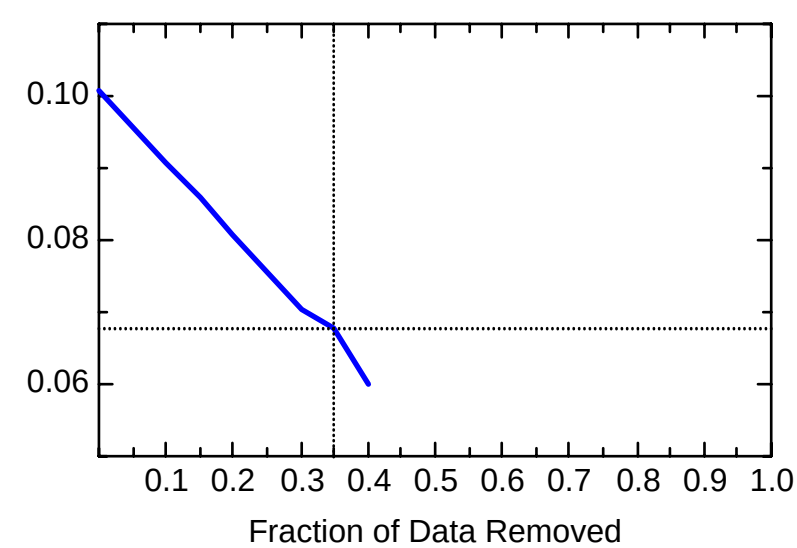
TCE: Well DPW-3



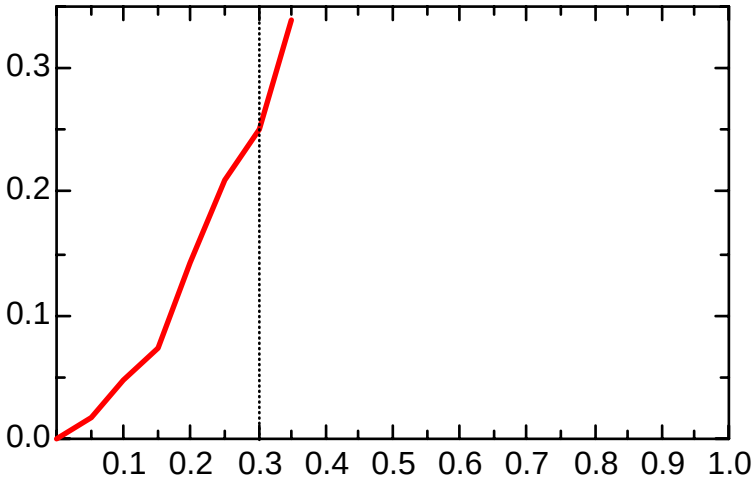
TCE: Well DPW-3



TCE: Well DPW-3



TCE: Well EFF



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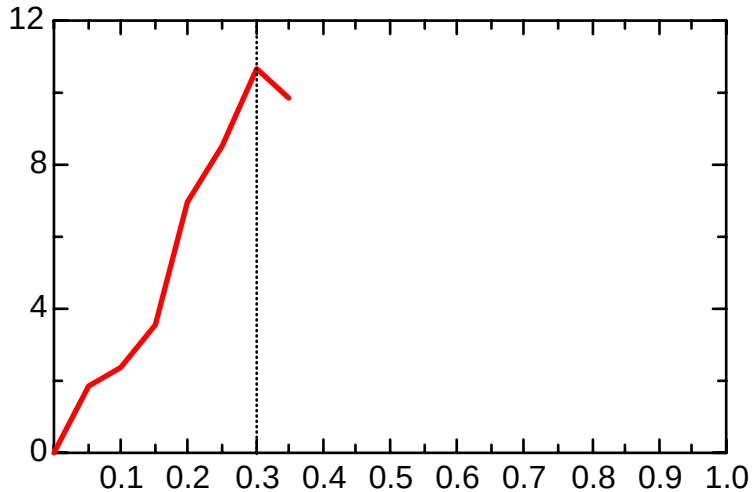

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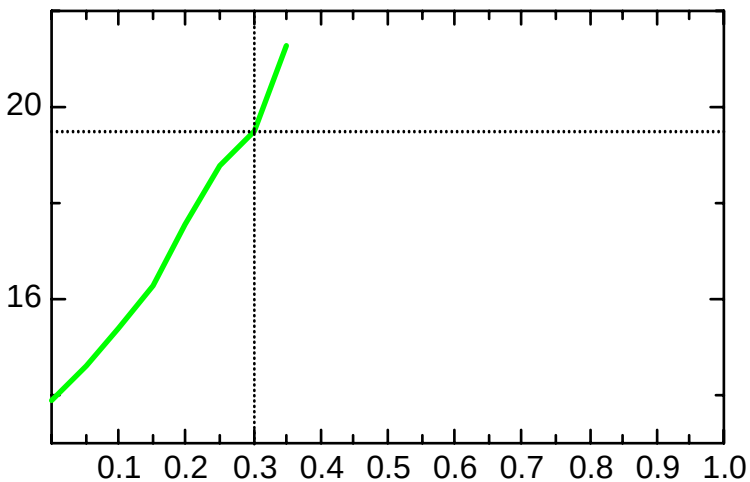

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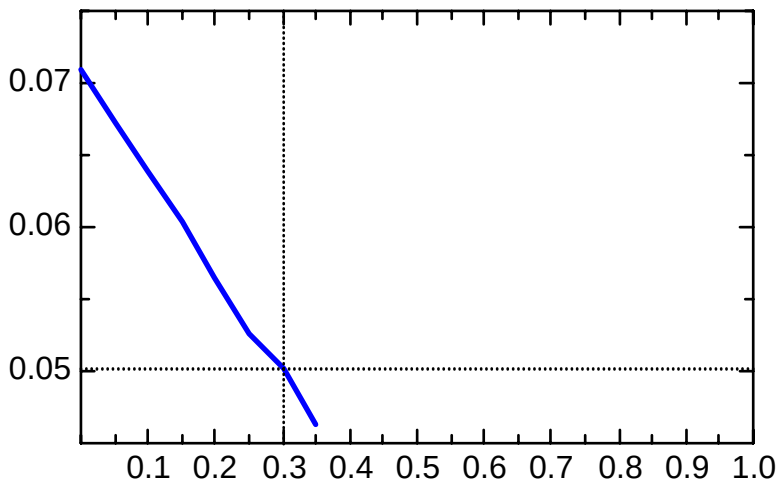

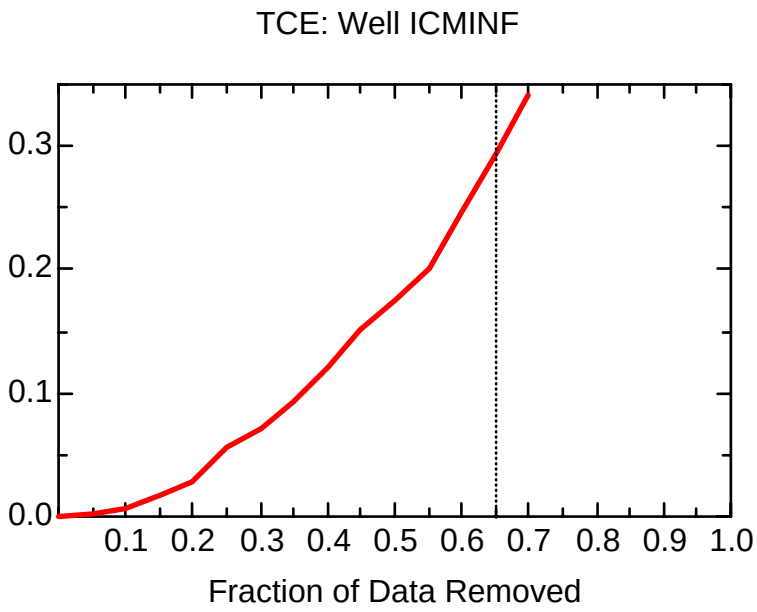
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0.2
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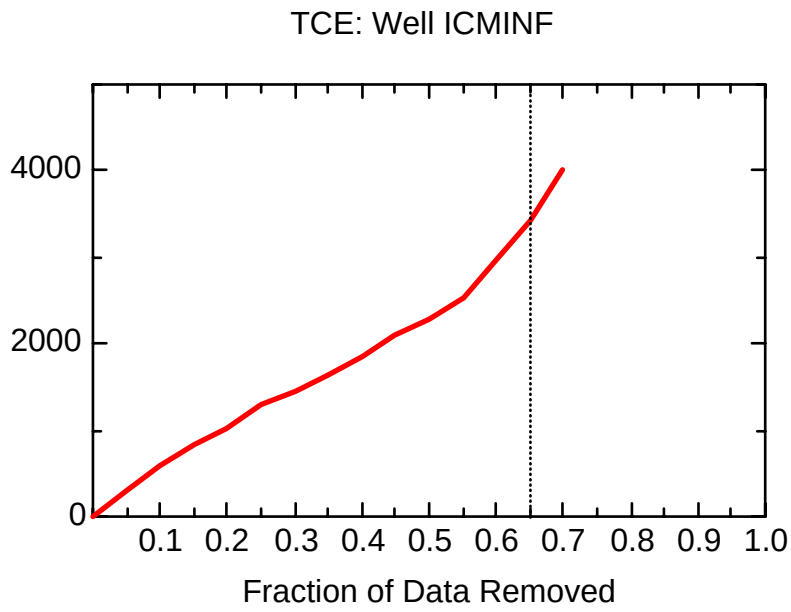
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed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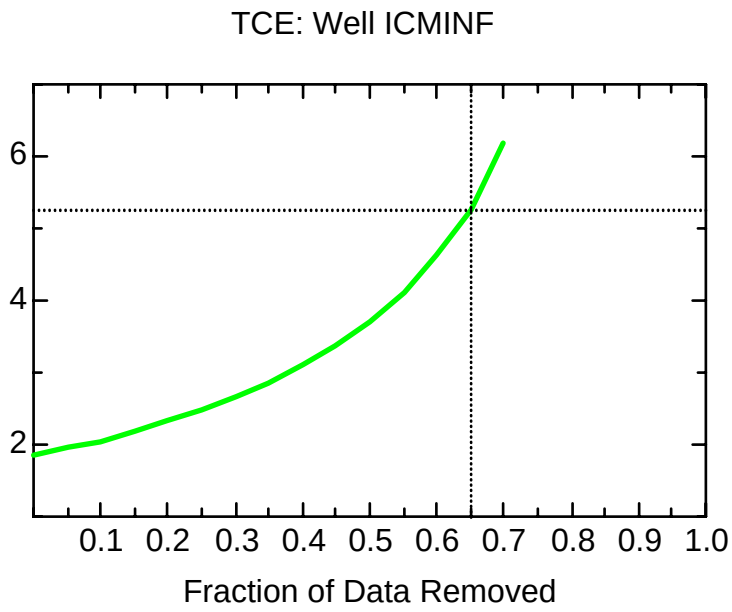
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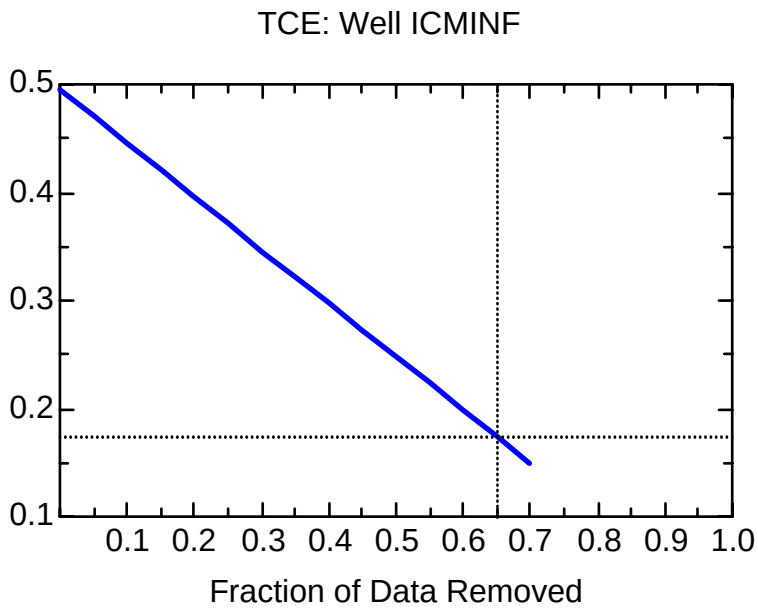
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0.1
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
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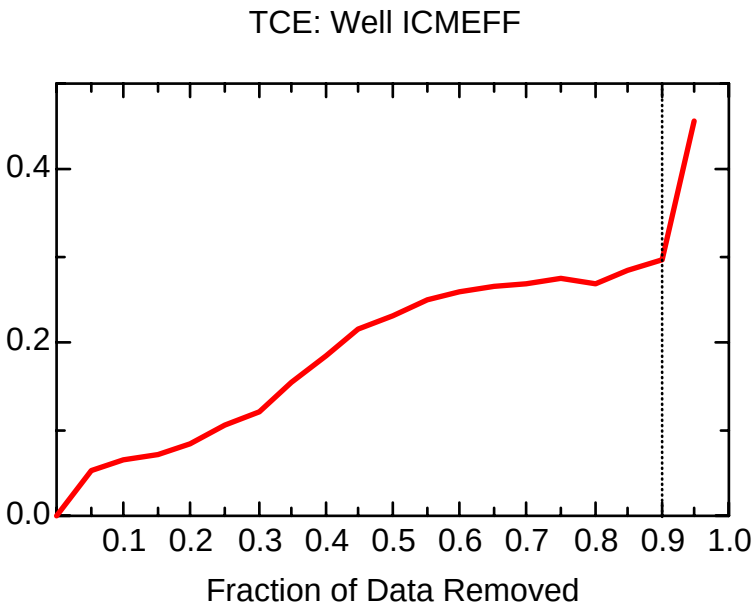
TCE: Well ICMEFF
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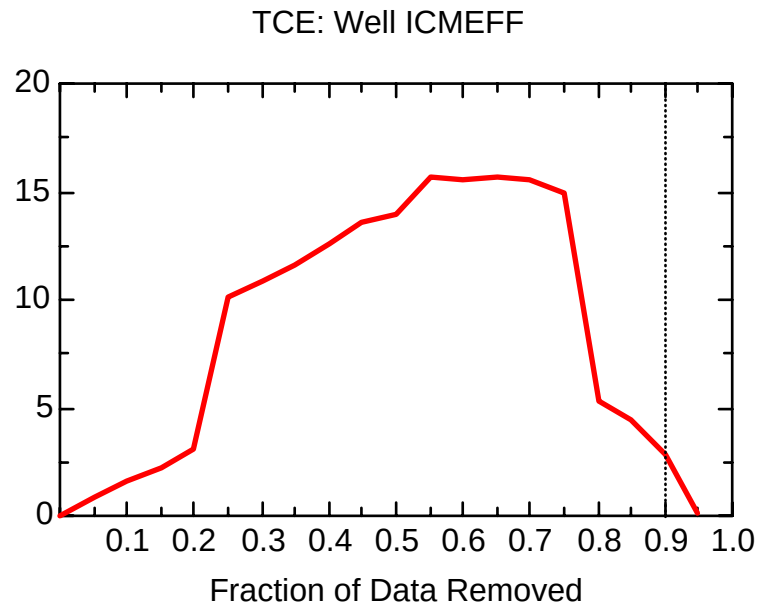
TCE: Well ICMEFF
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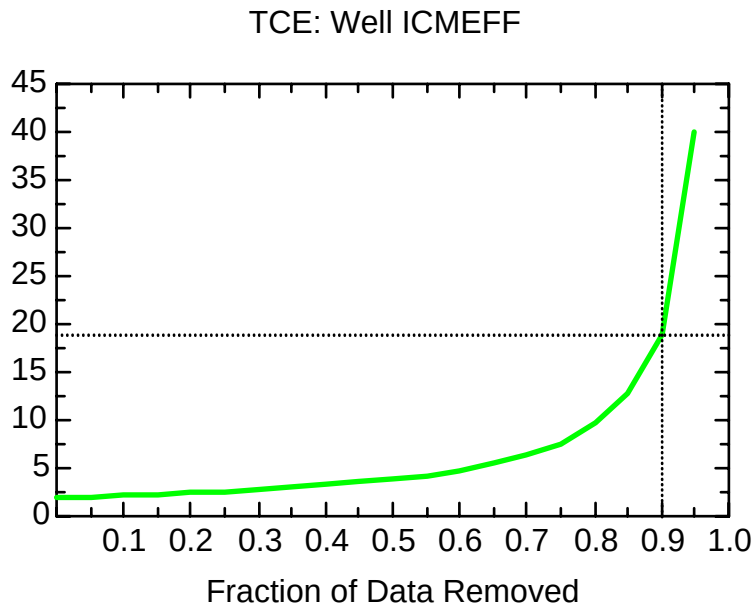
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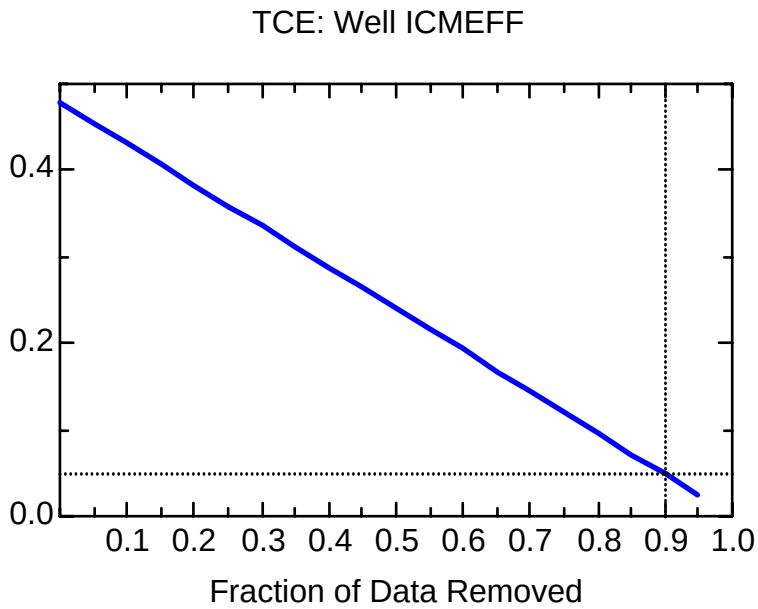
Fraction of Data Removed


TCE: Well ICMEFF
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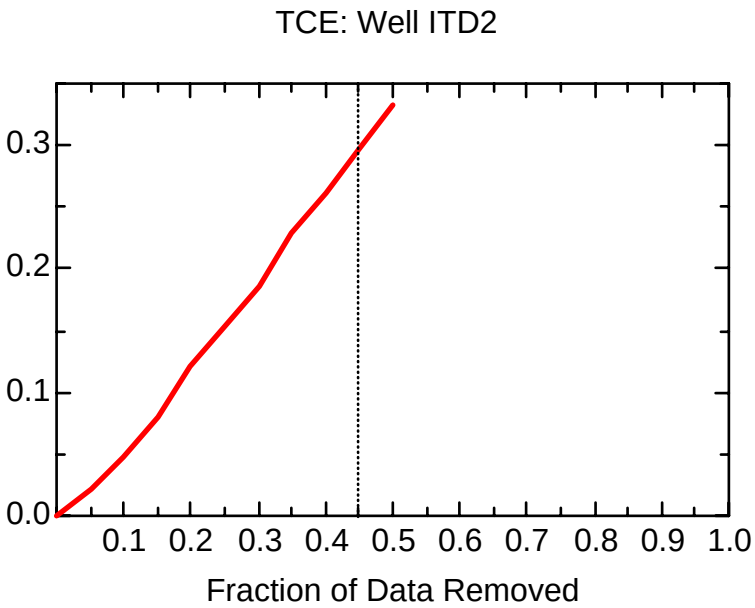
Fraction of Data Removed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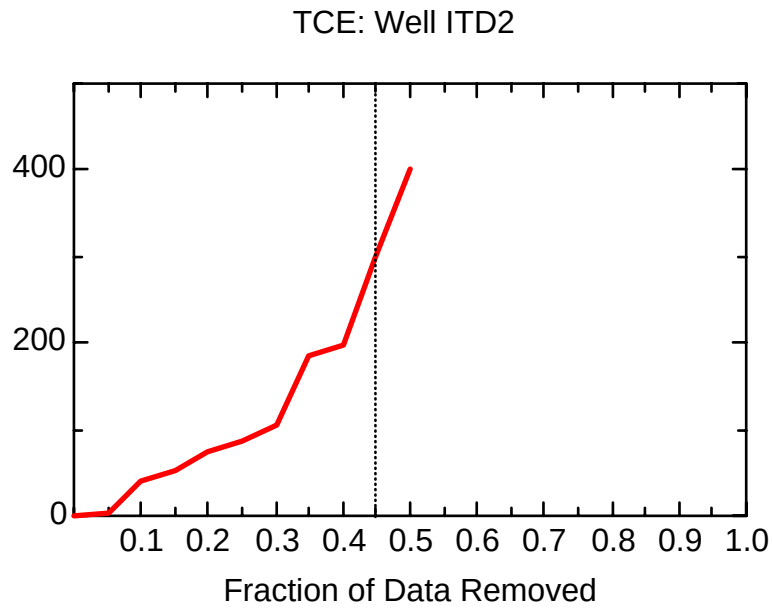
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed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200
0
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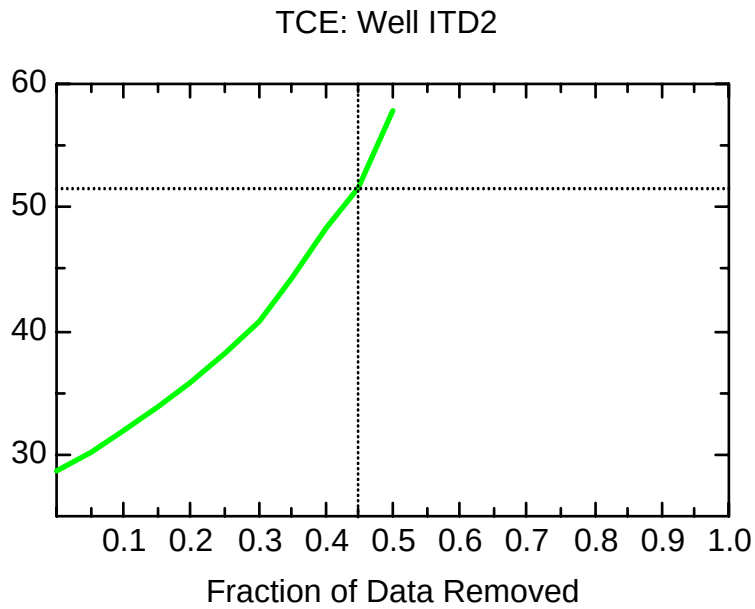
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50
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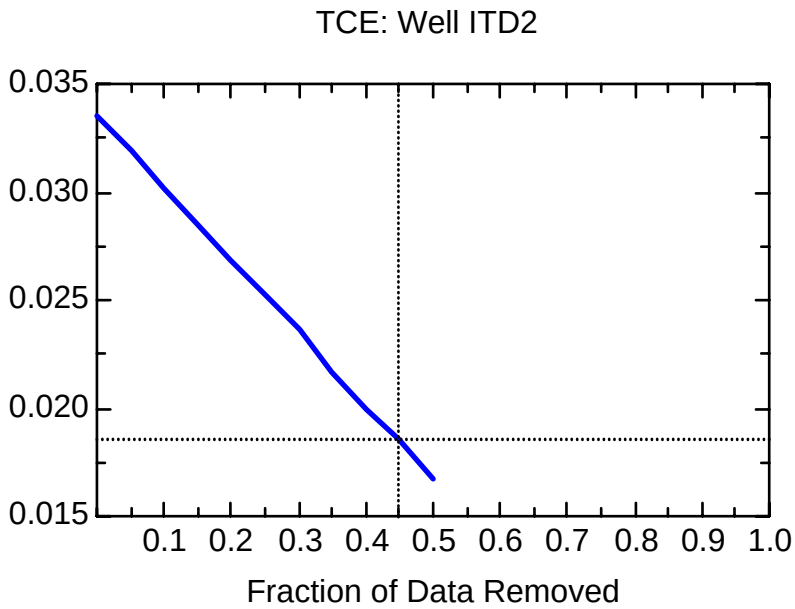
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0.025
0.020
0.015
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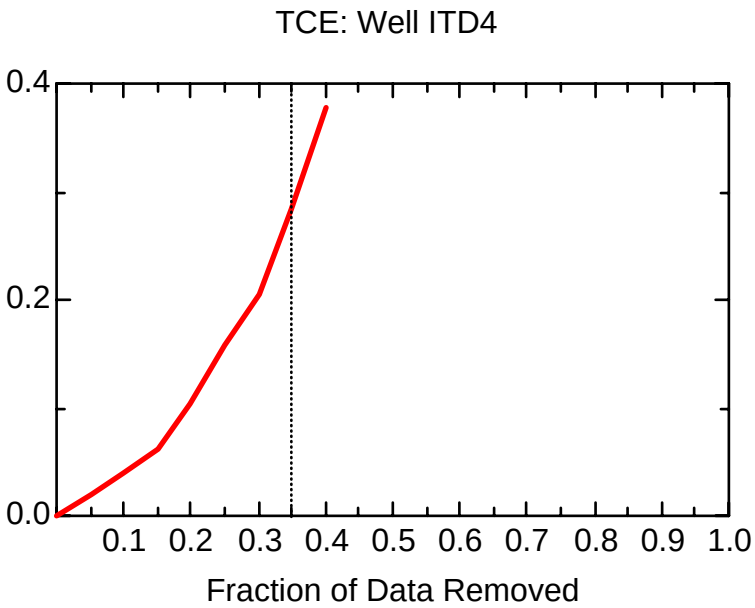
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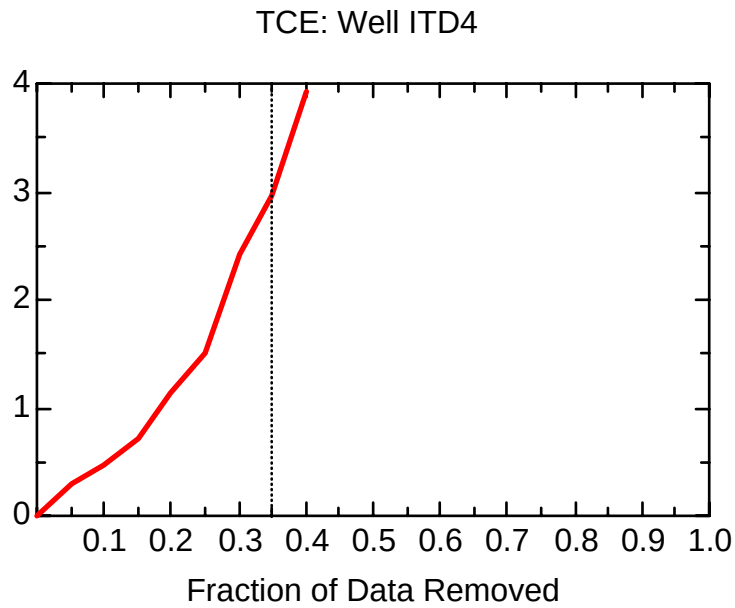
TCE: Well ITD4
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2
1
0
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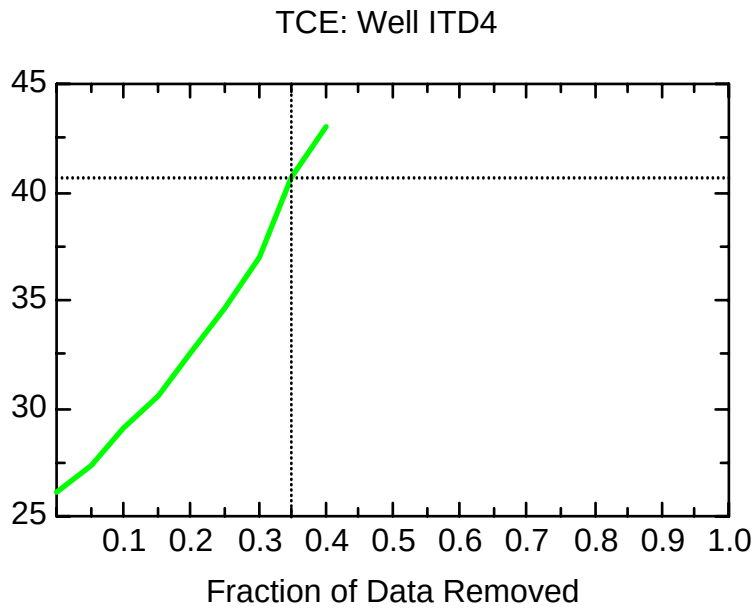
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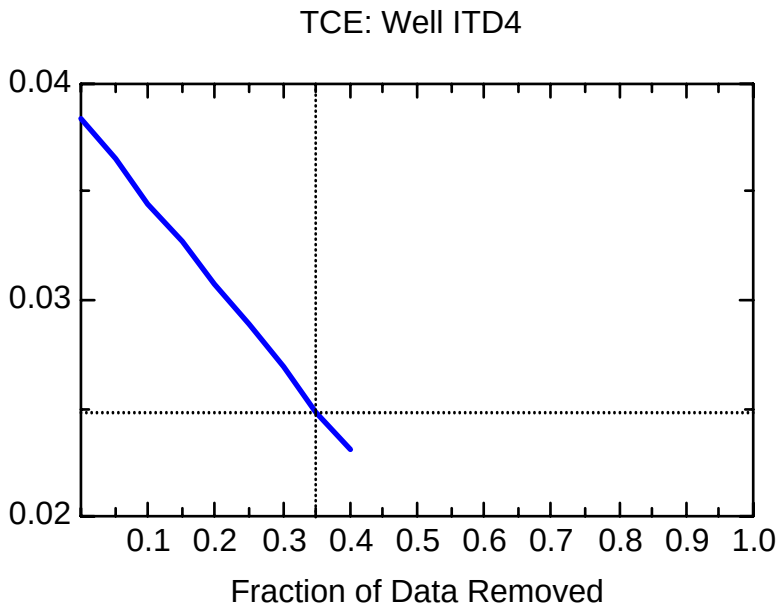
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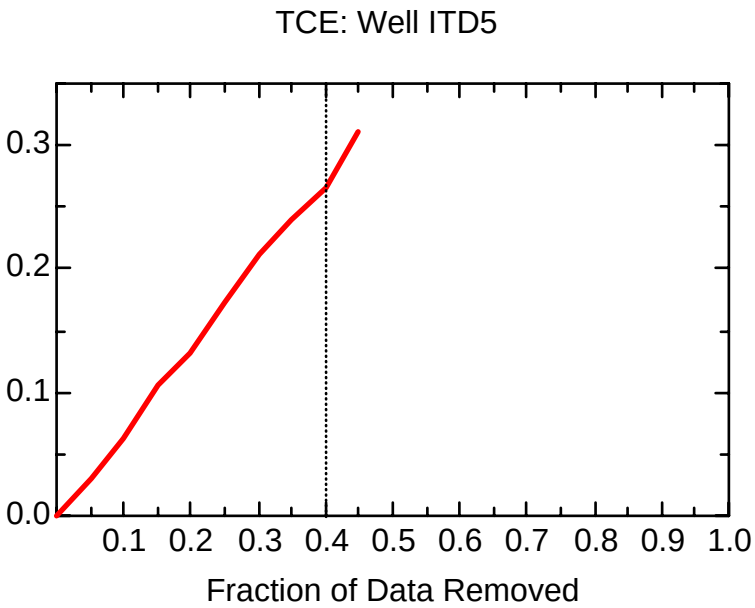
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0.2
0.1
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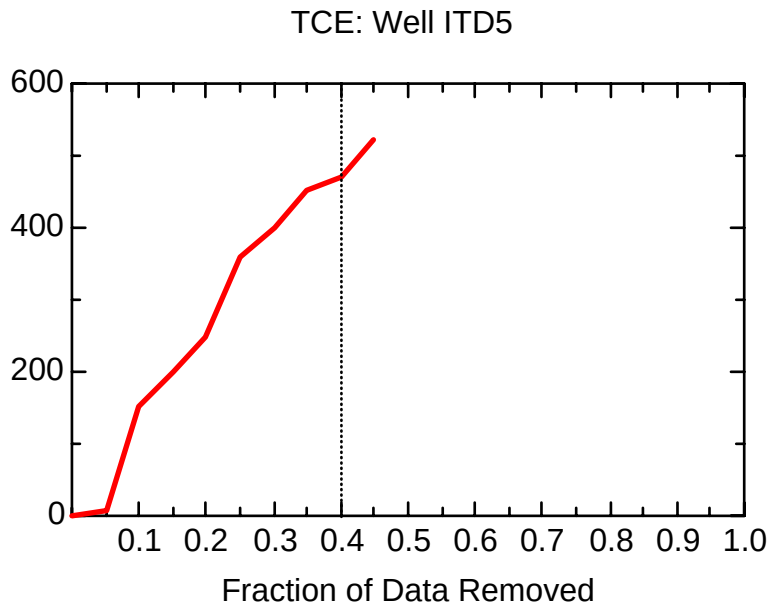
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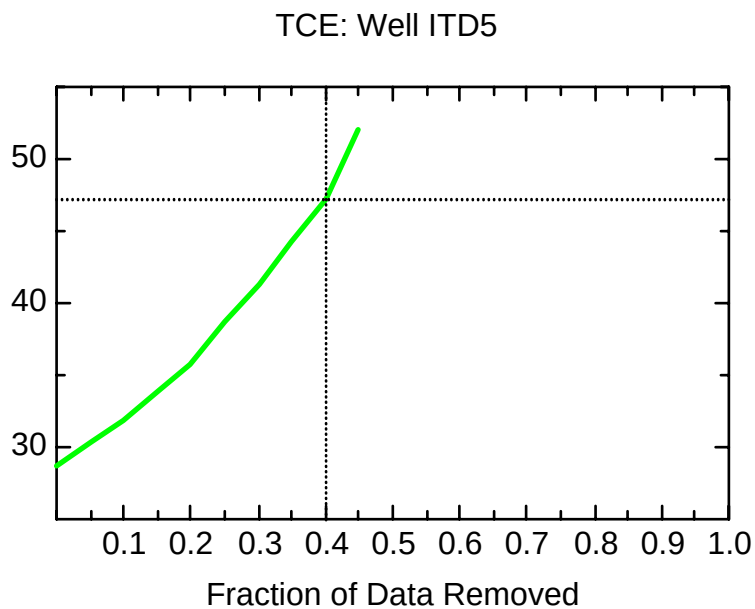
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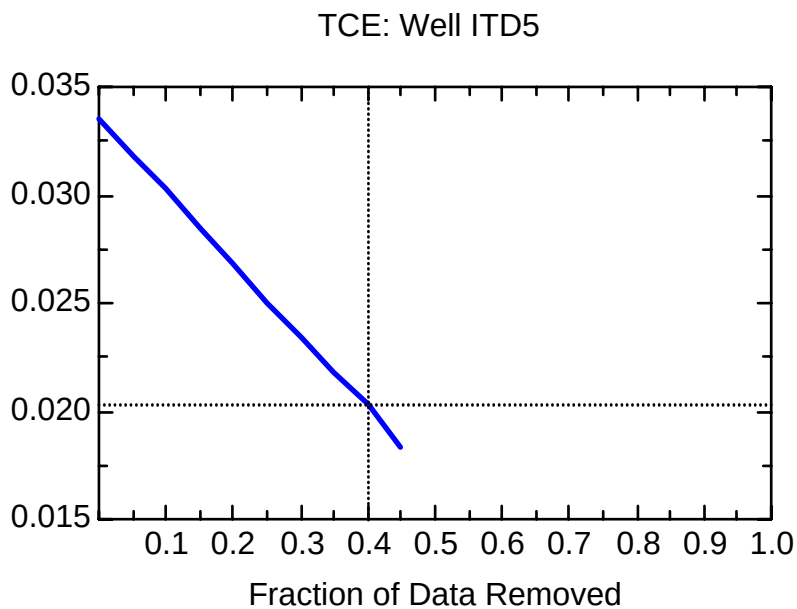
TCE: Well ITD5
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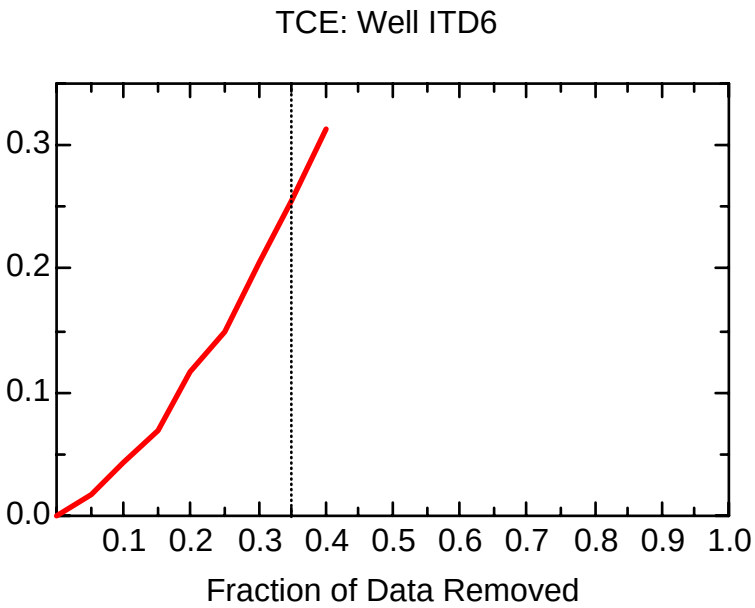
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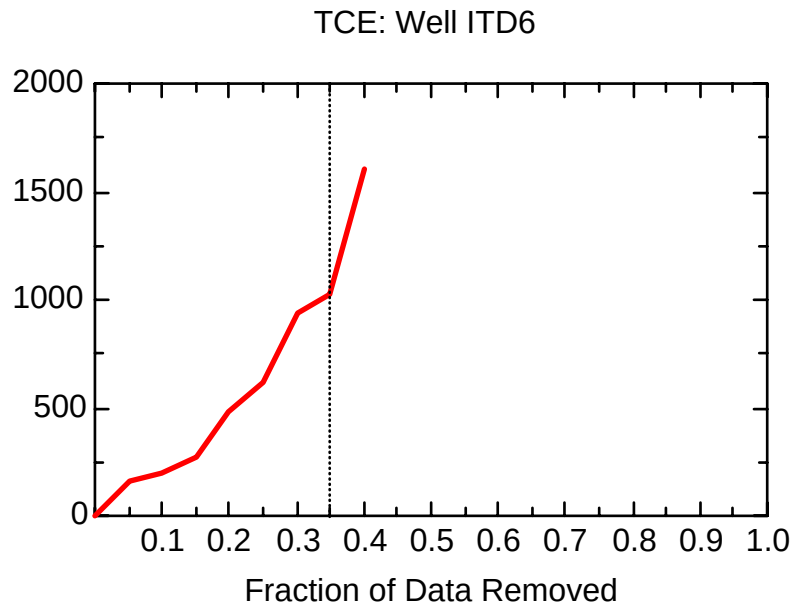
TCE: Well ITD6
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1000
500
0
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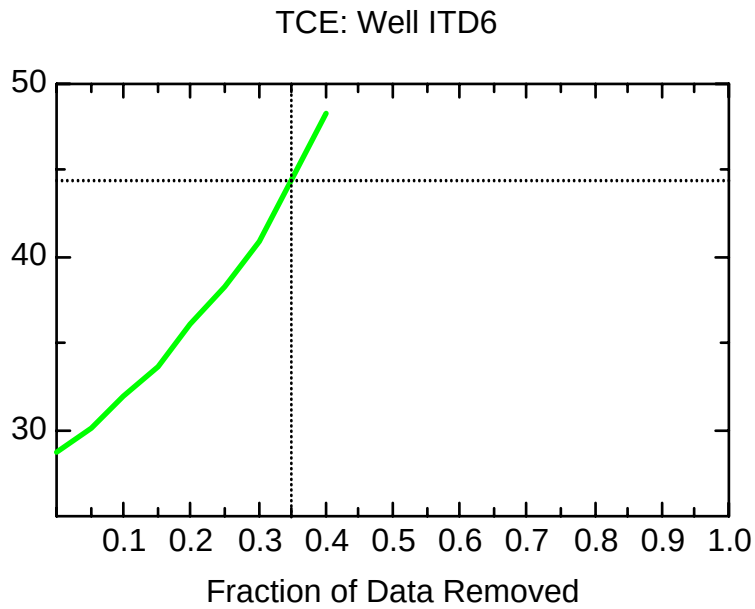
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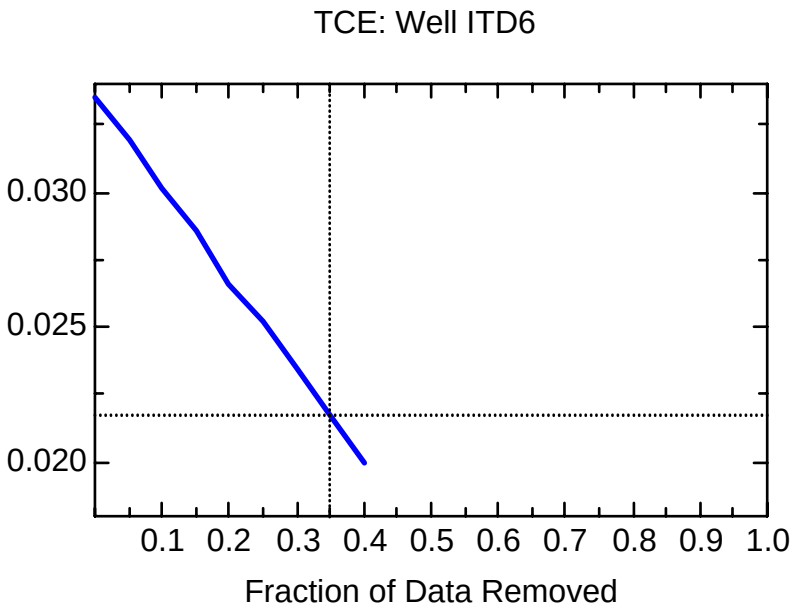
Fraction of Data Removed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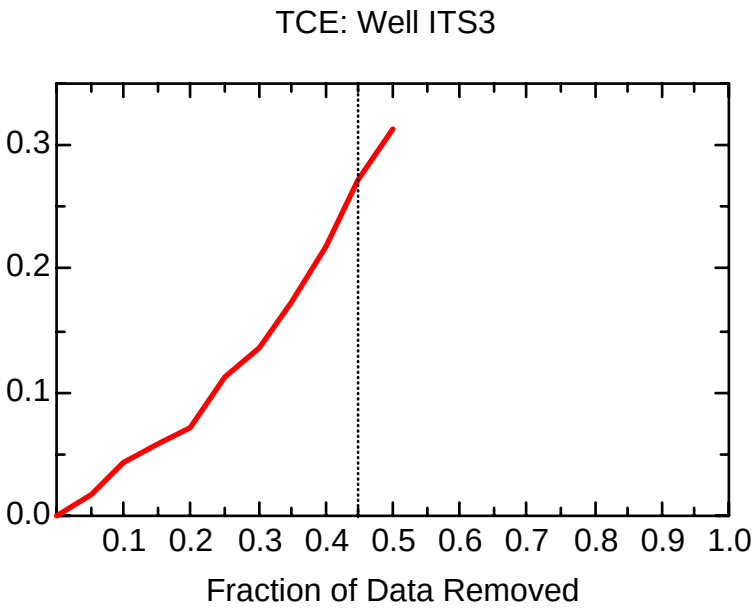
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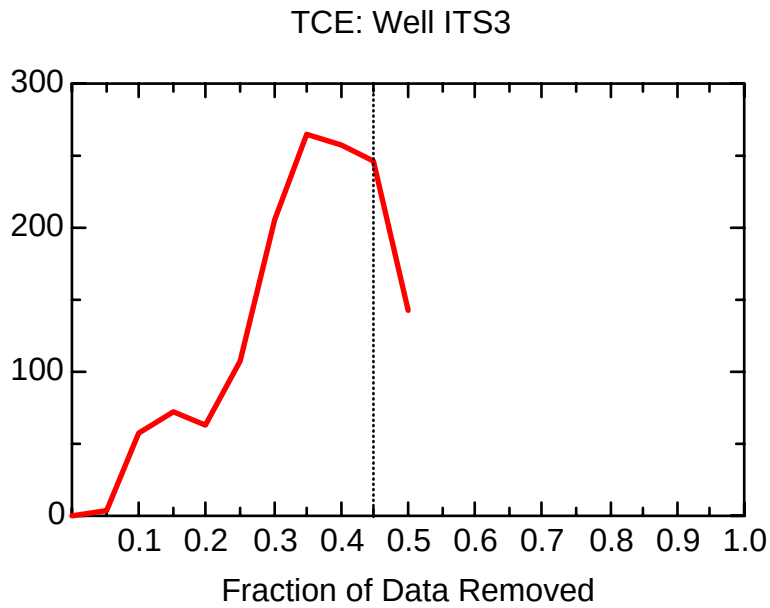
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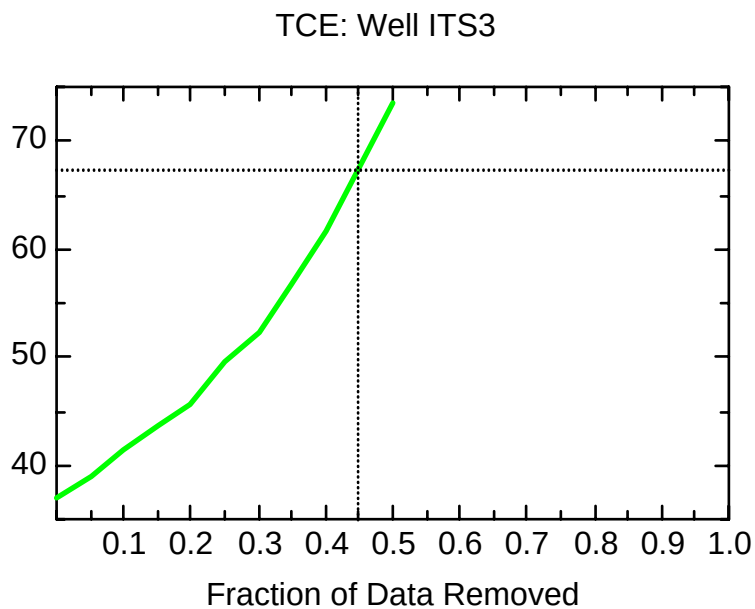
Fraction of Data Removed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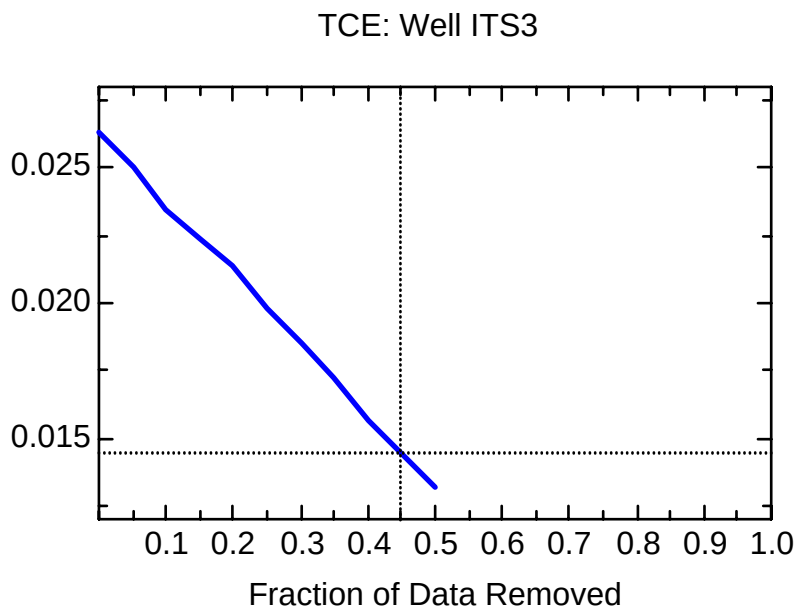
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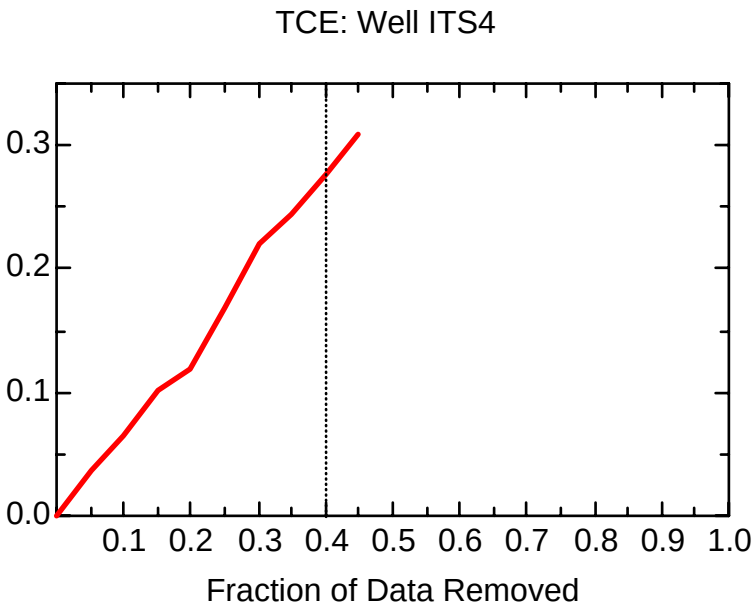
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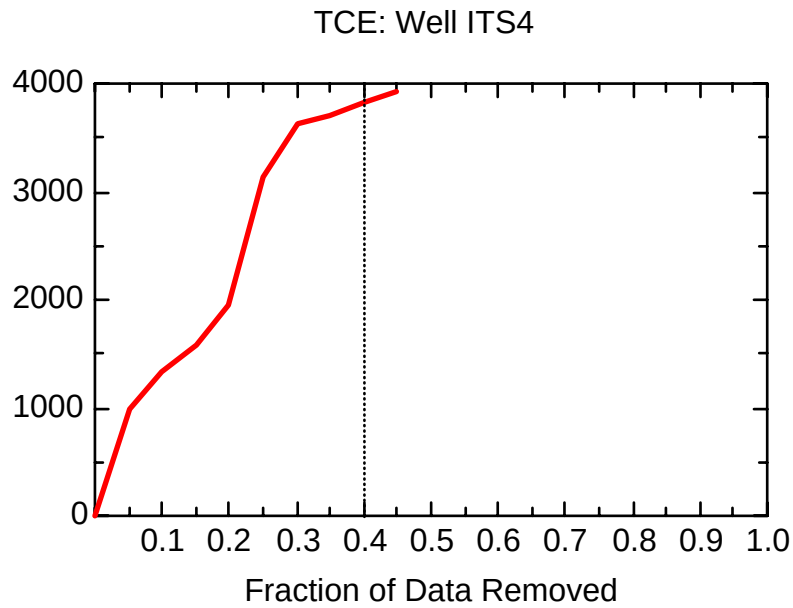
Fraction of Data Removed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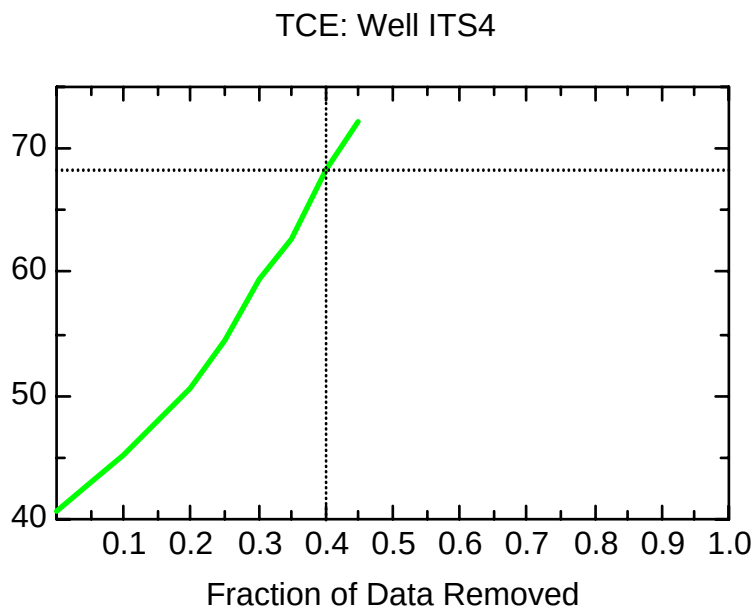
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40
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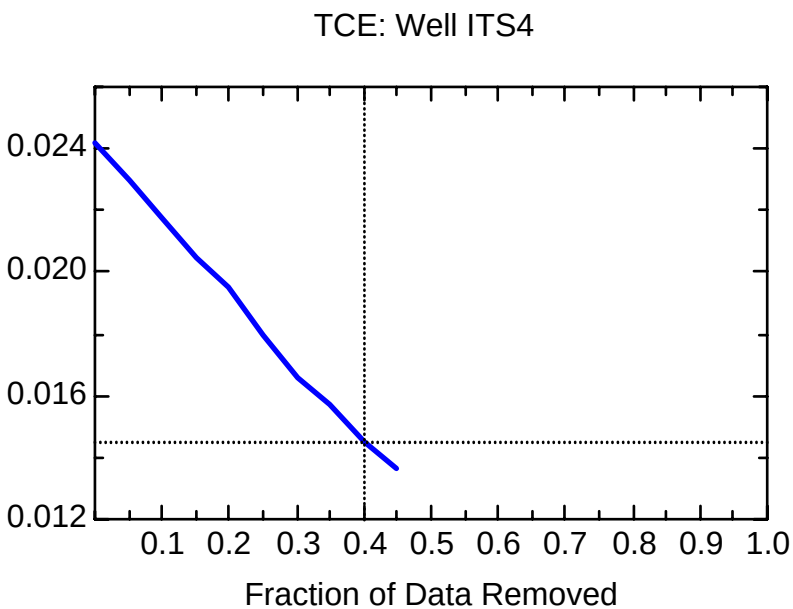
Fraction of Data Removed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0.016
0.012
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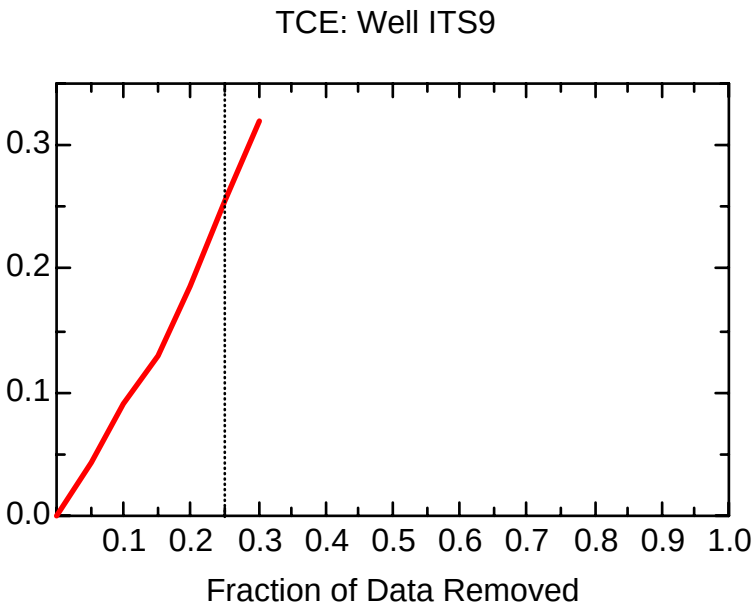
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0.1
0.0
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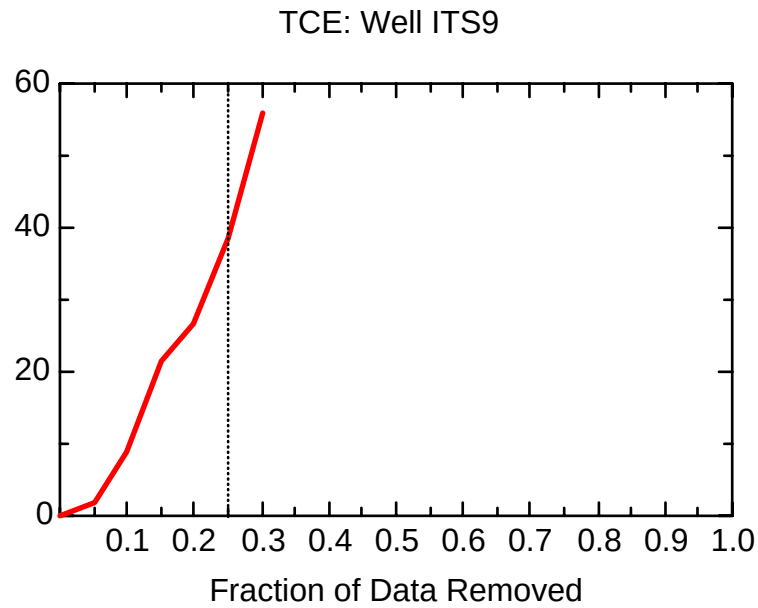
Fraction of Data Removed


TCE: Well ITS9
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40
20
0
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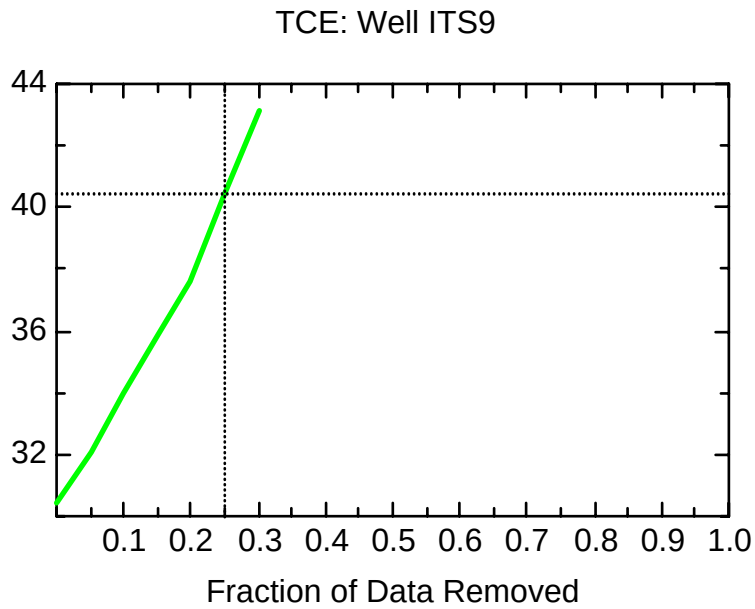
Fraction of Data Removed


TCE: Well ITS9
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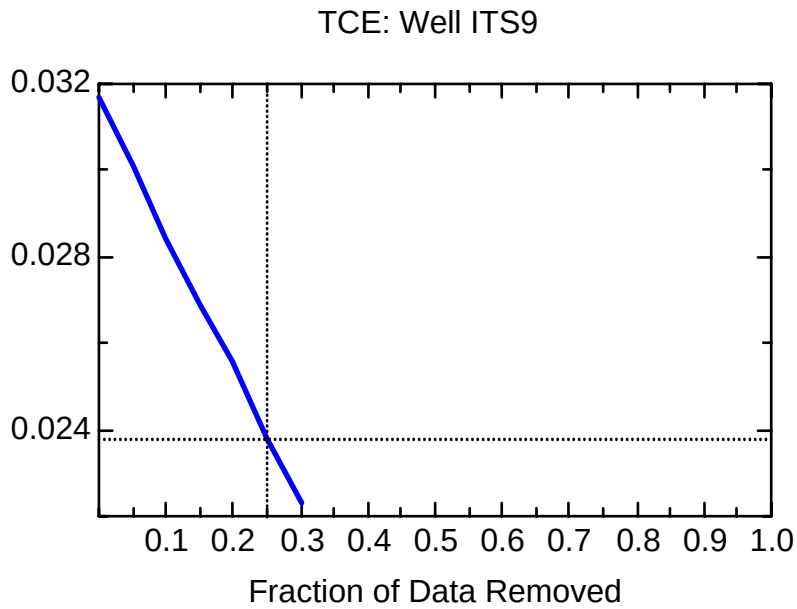
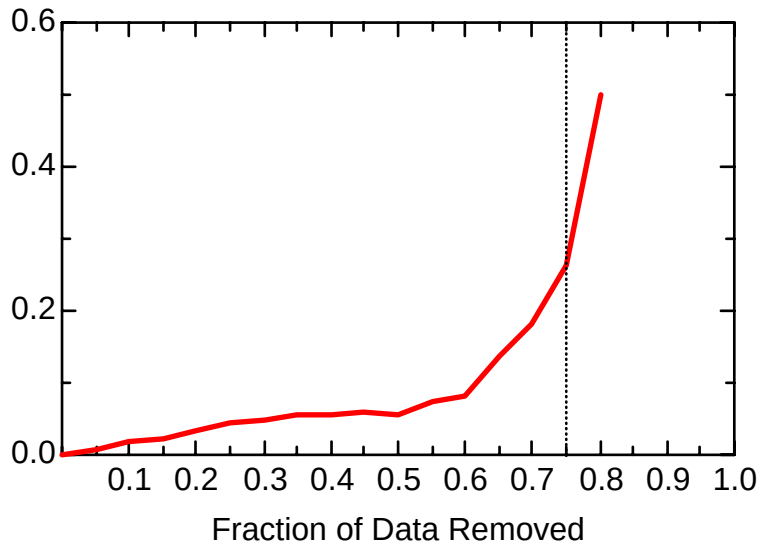
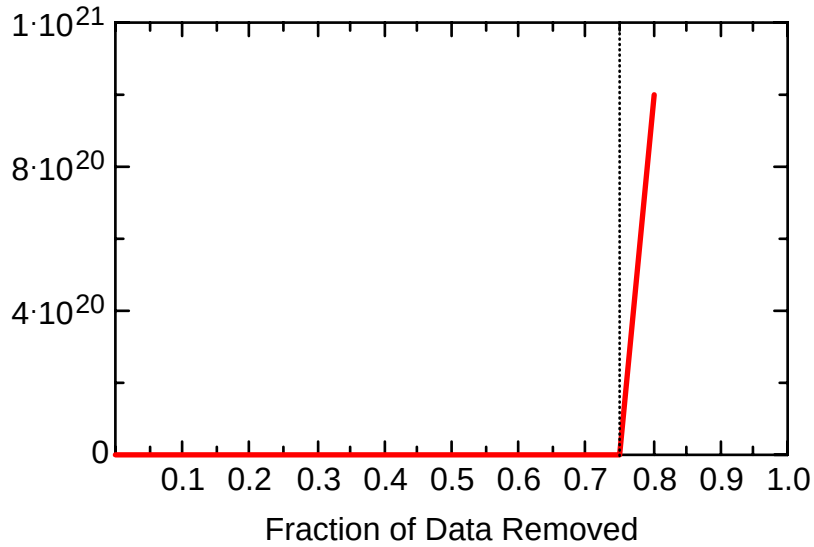
40
36
32
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well ITS9
0.032
0.028
0.024
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

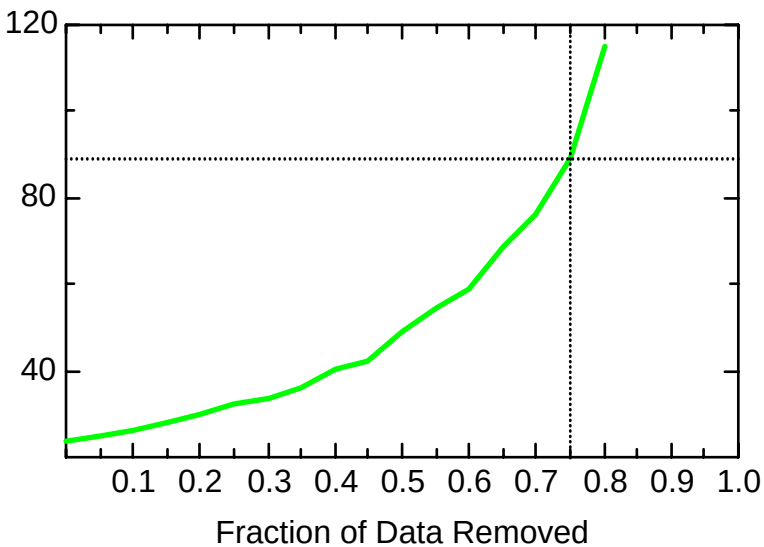
TCE: Well MW1



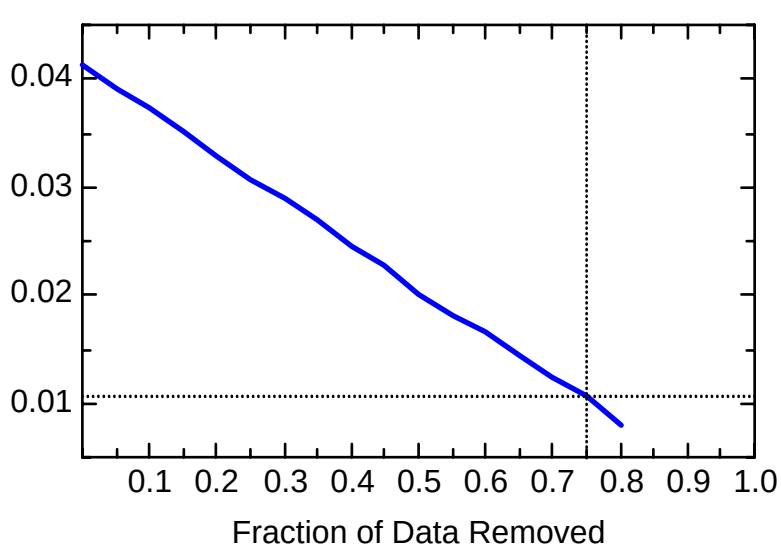
TCE: Well MW1



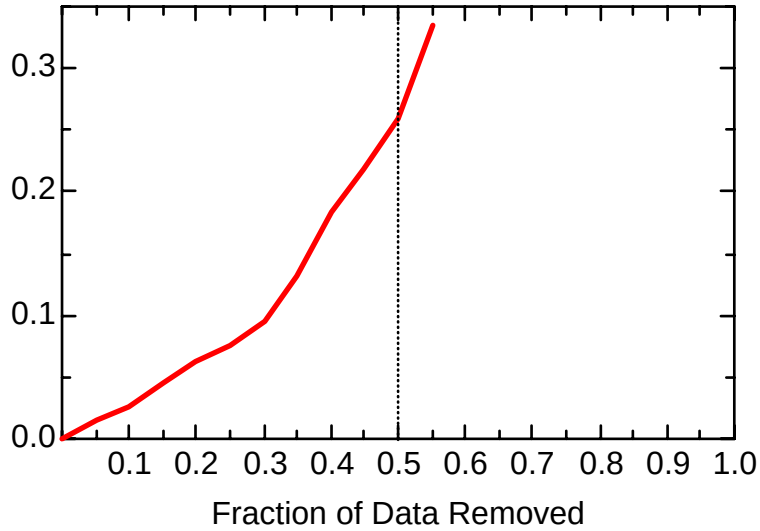
TCE: Well MW1



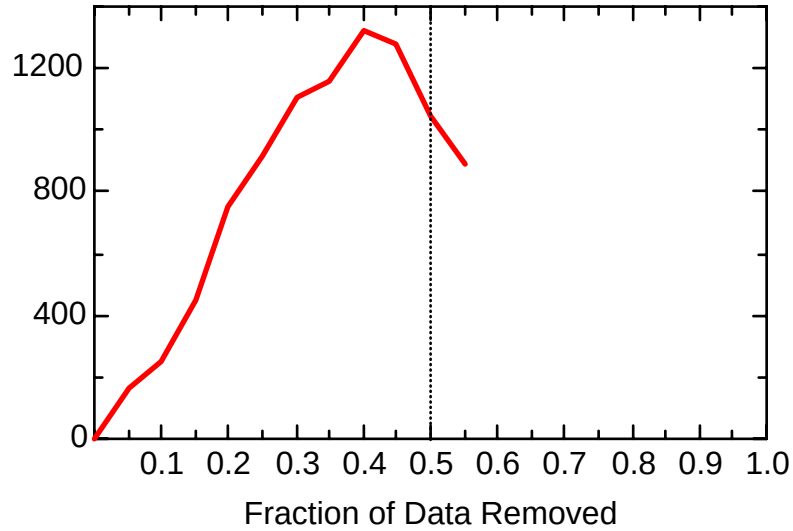
TCE: Well MW1



TCE: Well MW5



TCE: Well MW5



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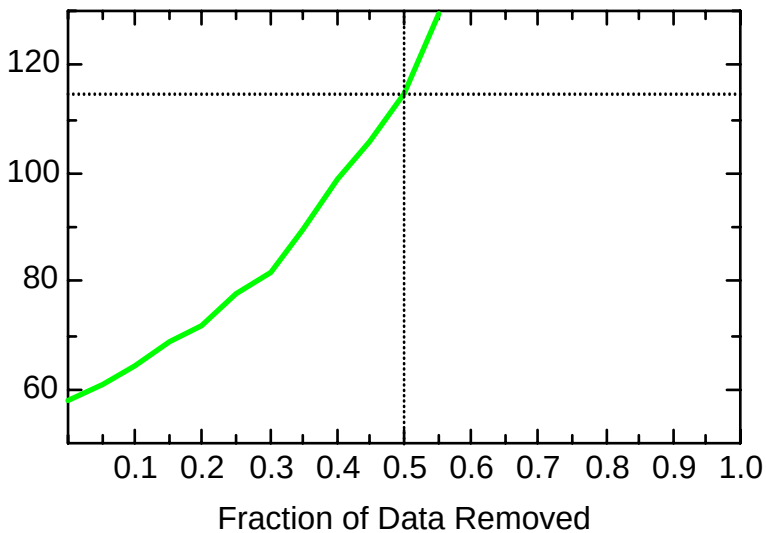
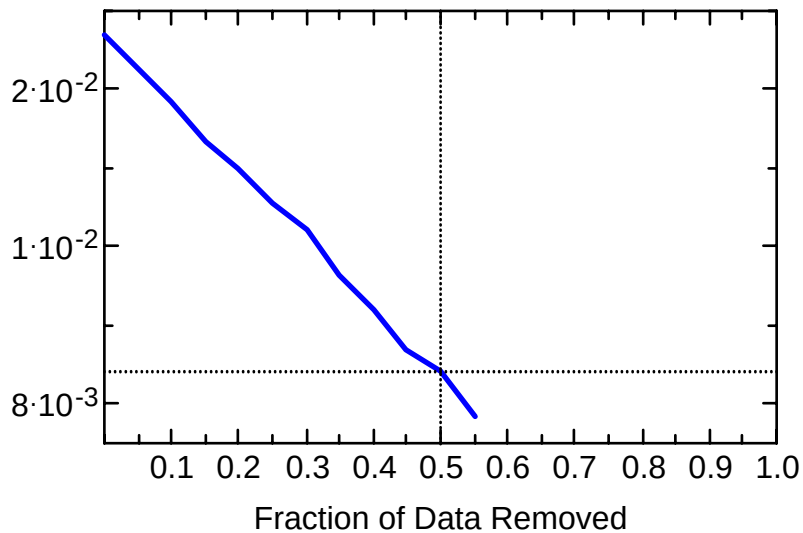
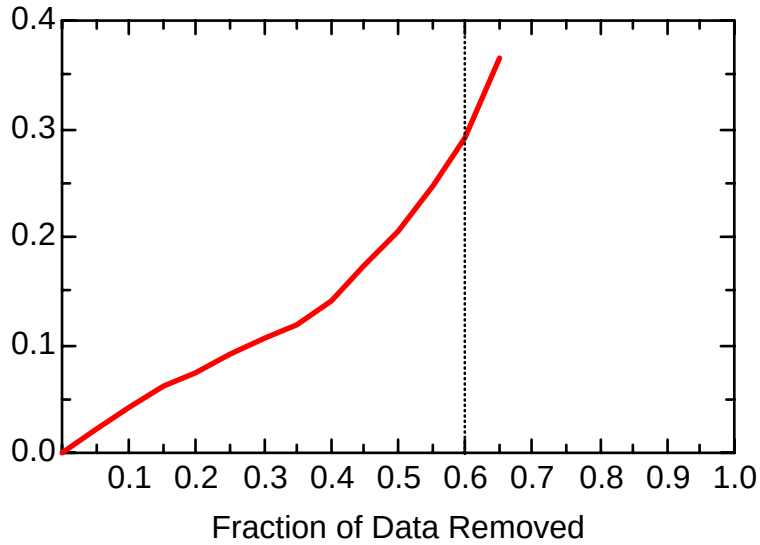


TCE: Well MW5



TCE: Well MW7



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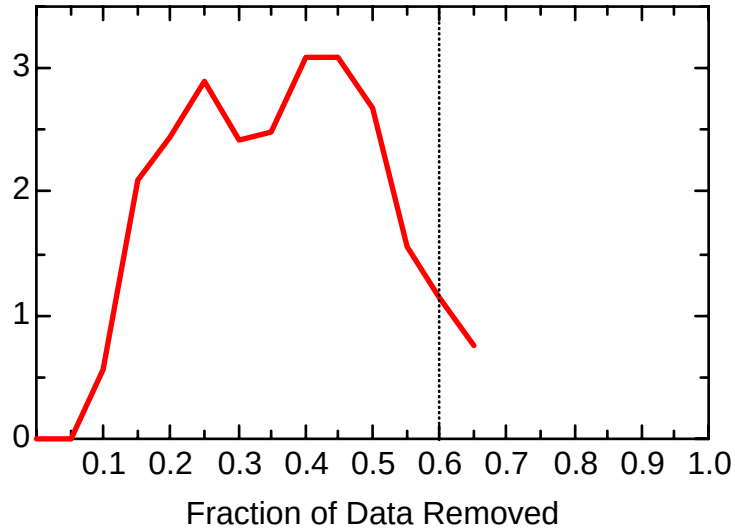
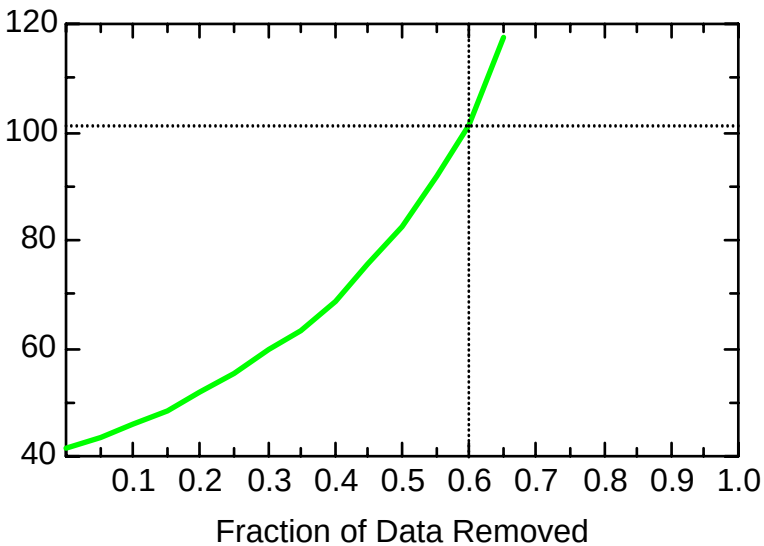
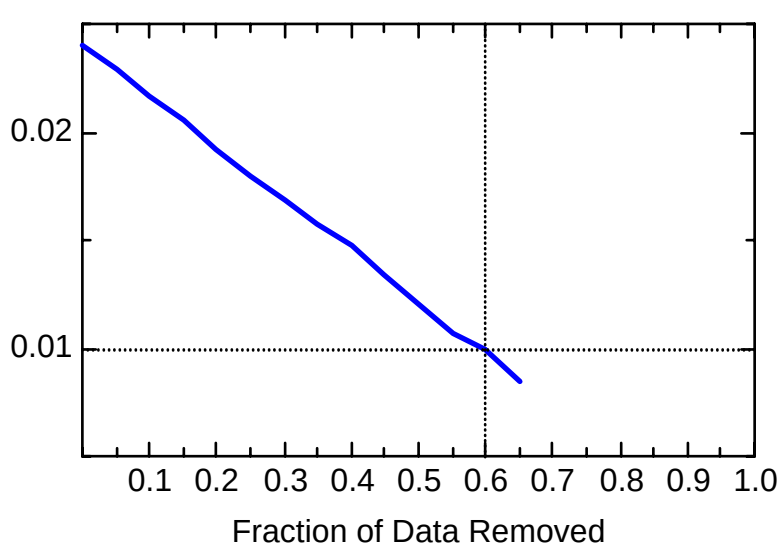


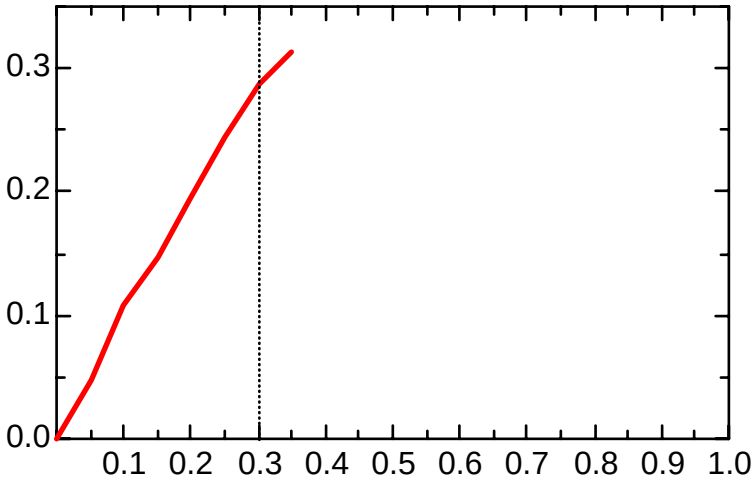
TCE: Well MW7



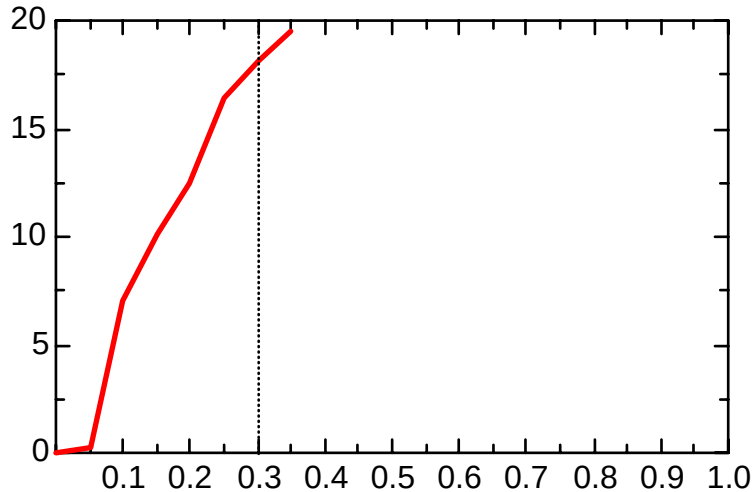
TCE: Well MW7



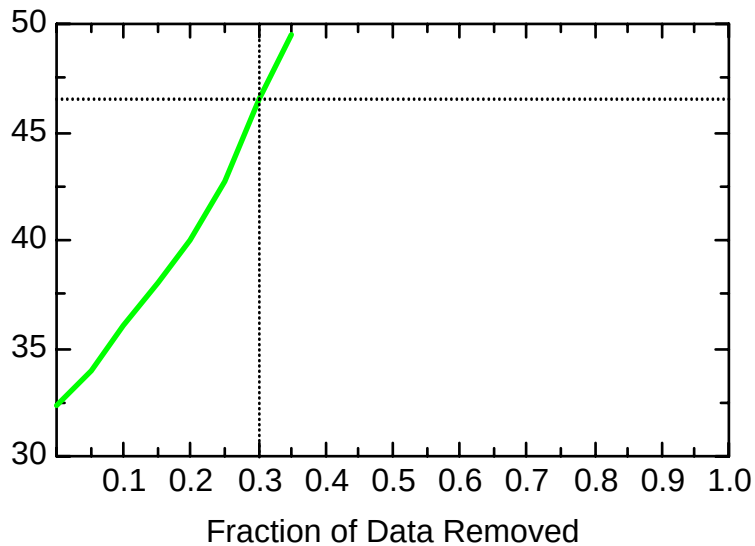
TCE: Well MW9



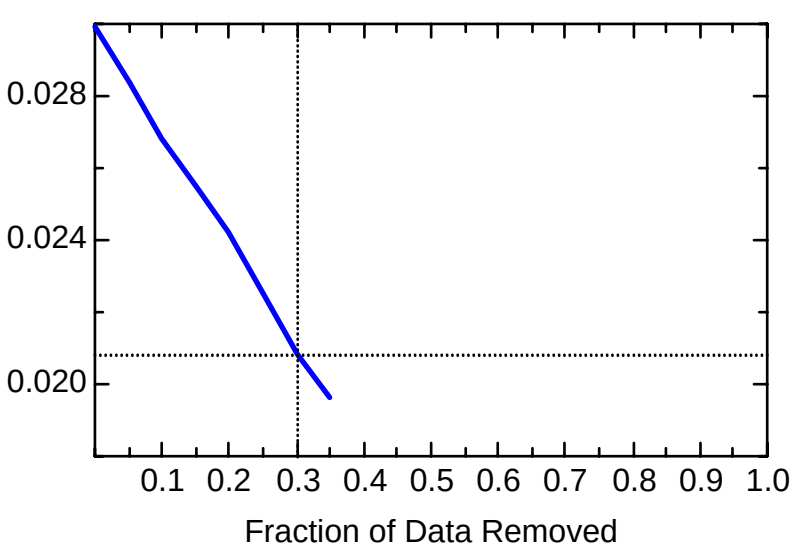
TCE: Well MW9

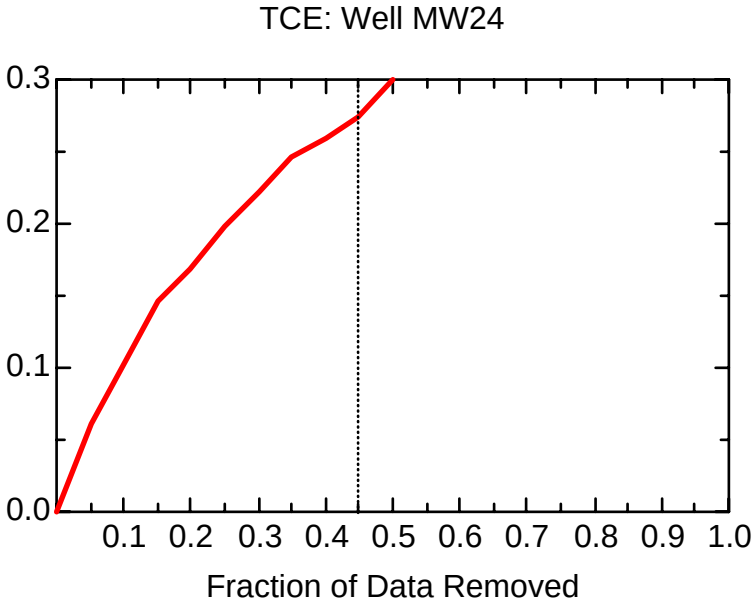


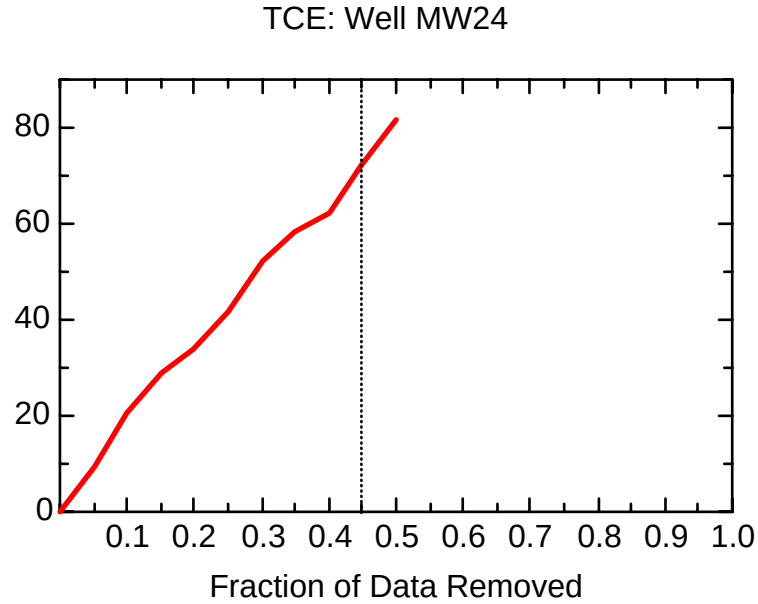
TCE: Well MW9

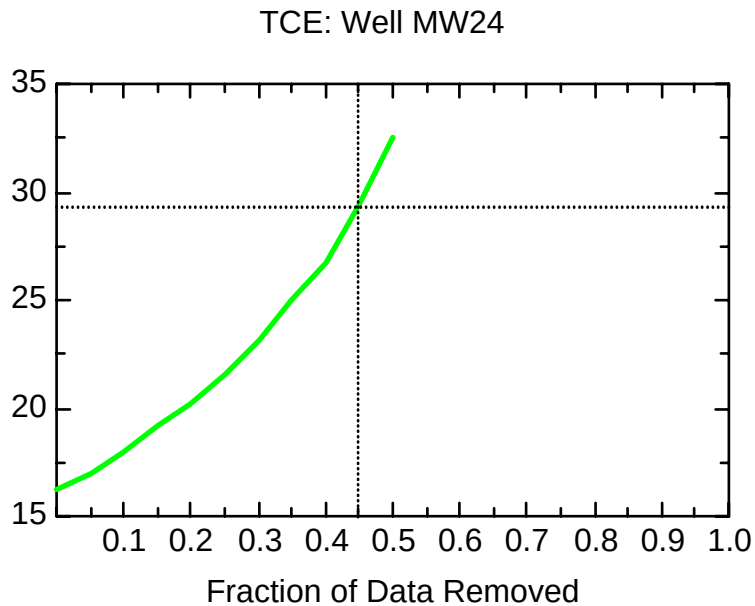


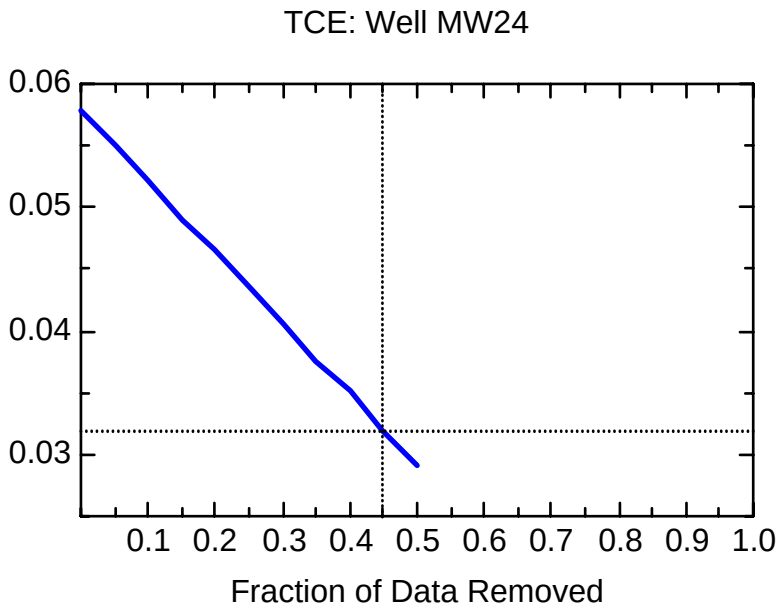
TCE: Well MW9



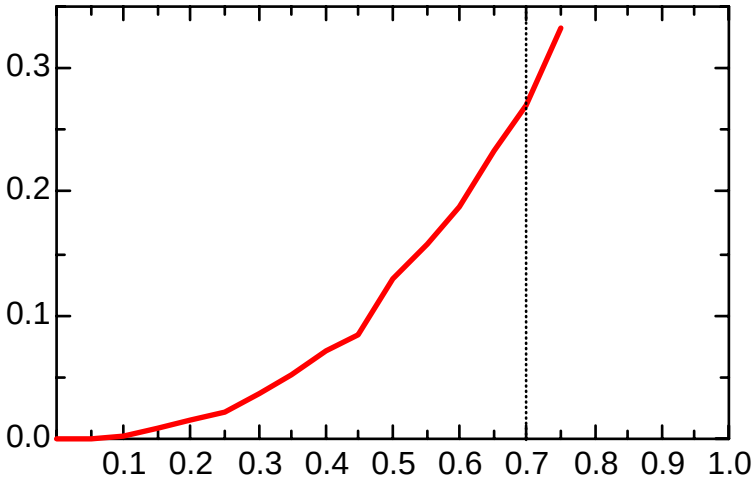

TCE: Well MW24
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW24
80
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW24
35
30
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW24
0.06
0.05
0.04
0.03
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

TCE: Well MW25



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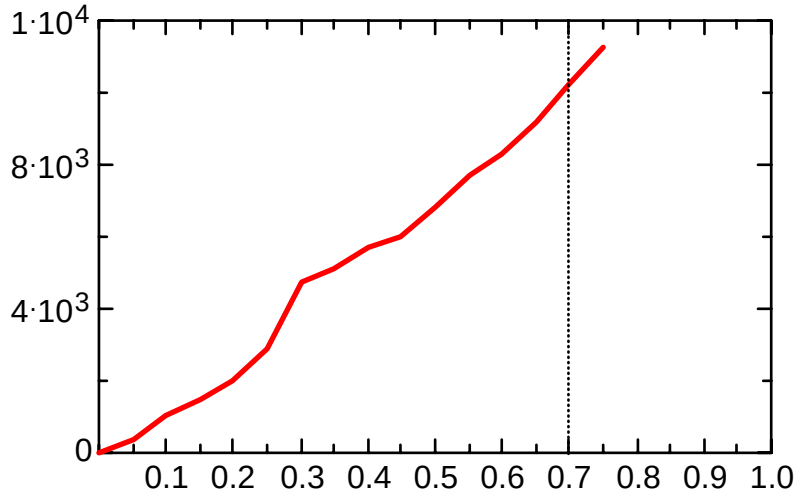
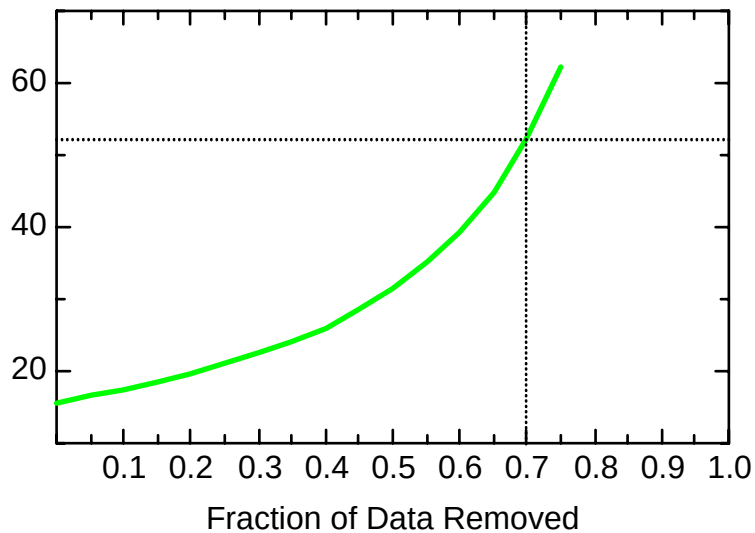
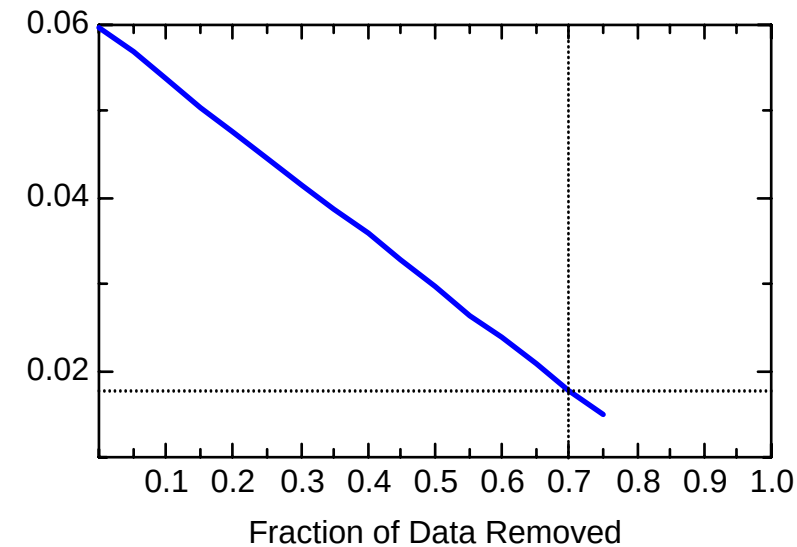


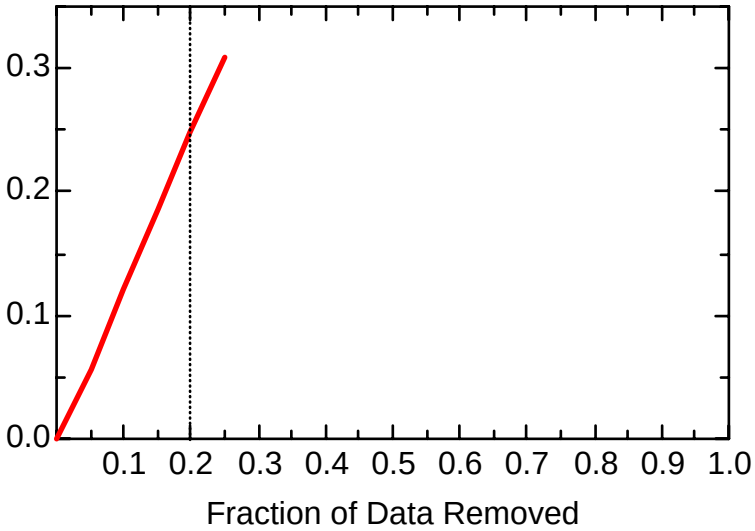
TCE: Well MW25



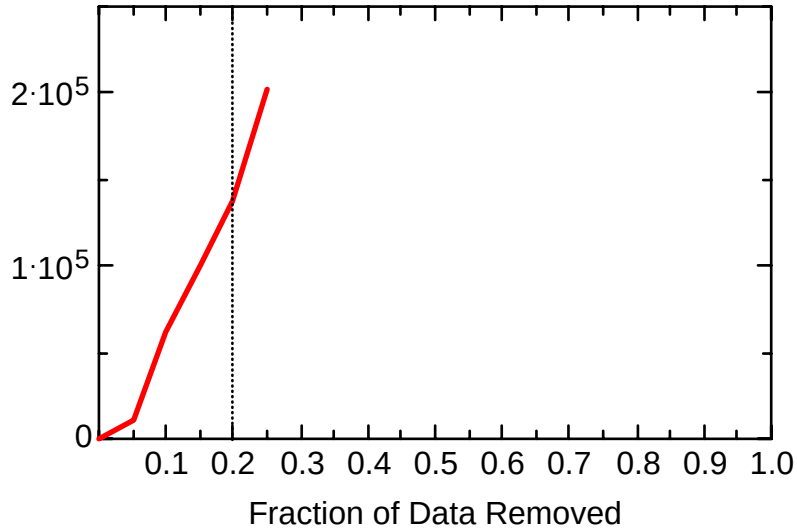
TCE: Well MW25



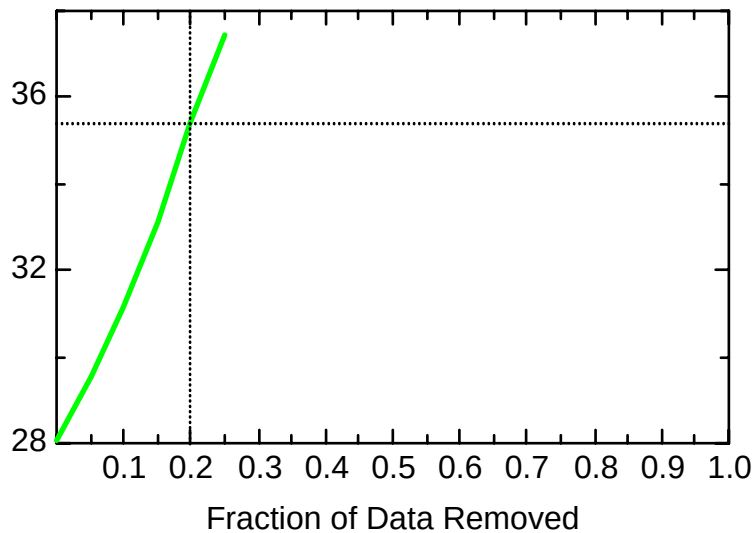
TCE: Well MW26



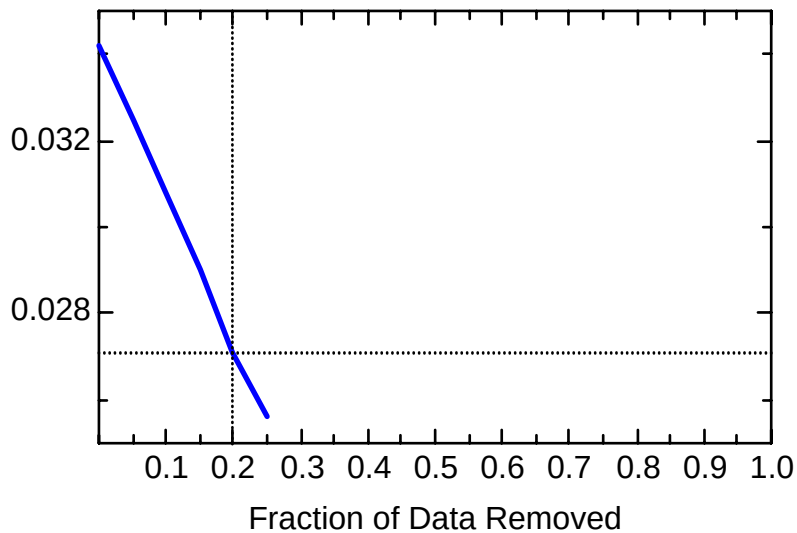
TCE: Well MW26



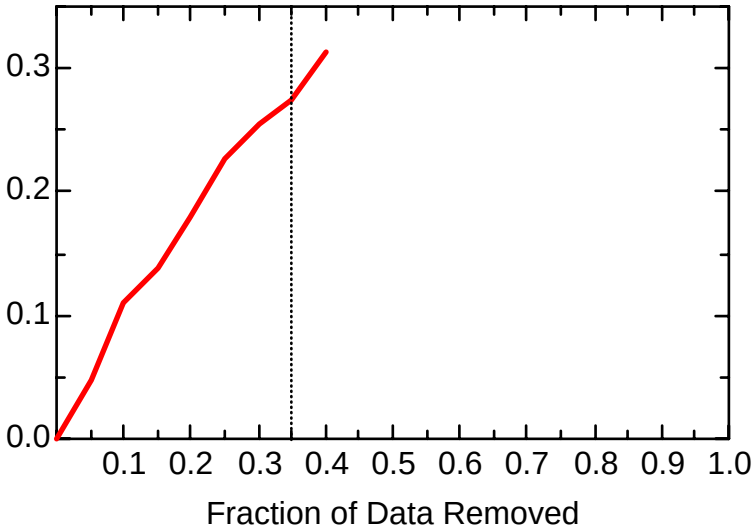
TCE: Well MW26



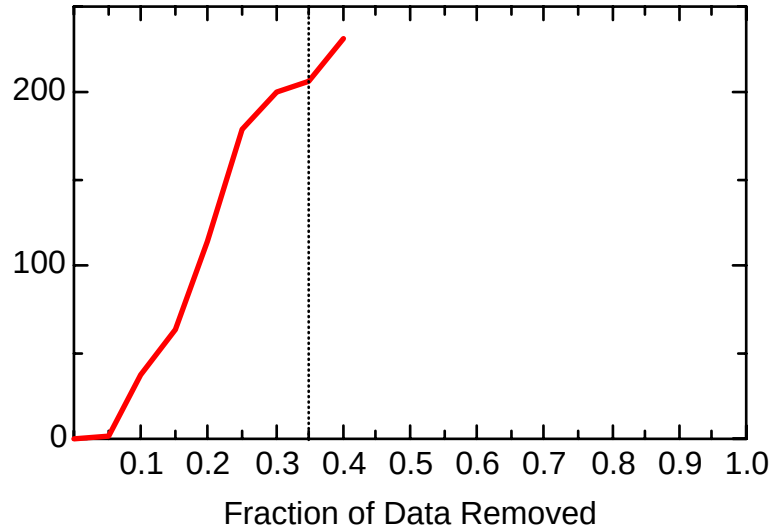
TCE: Well MW26



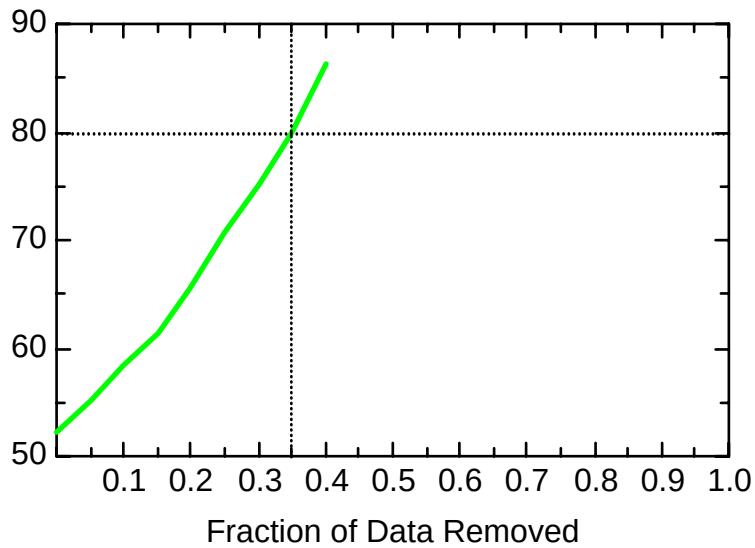
TCE: Well MW27



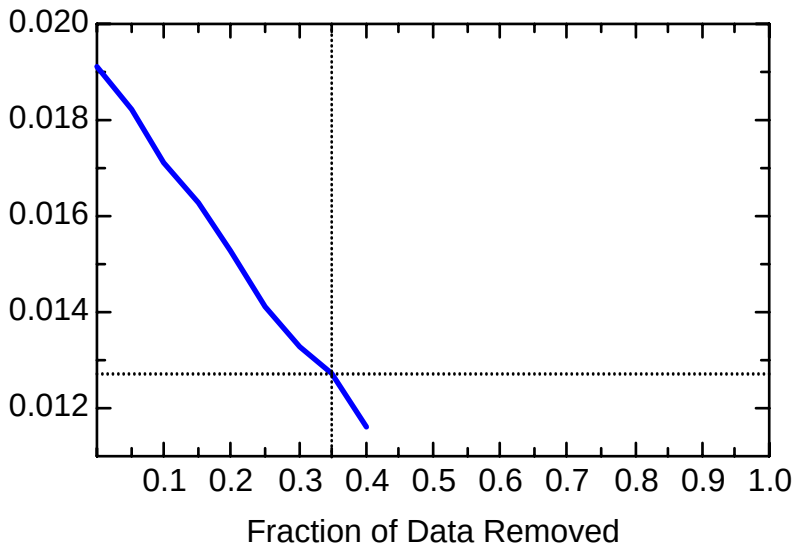
TCE: Well MW27



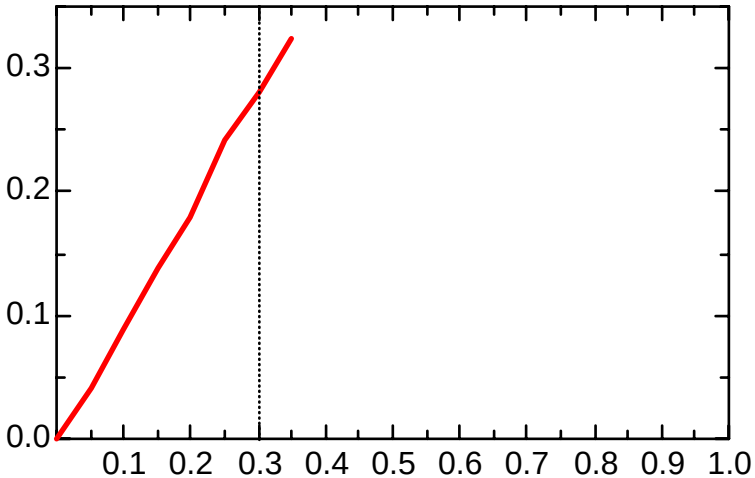
TCE: Well MW27



TCE: Well MW27



TCE: Well MW29



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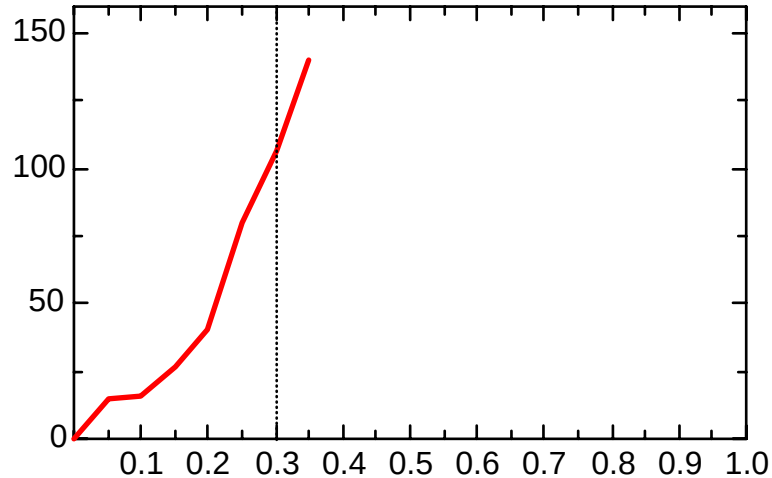
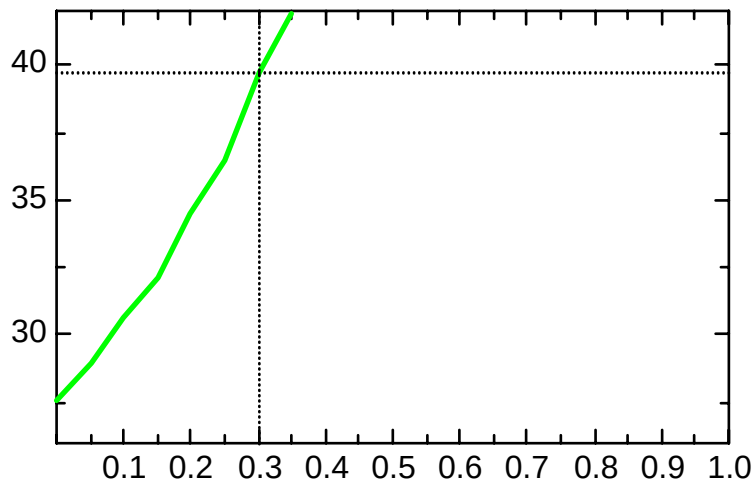


TCE: Well MW29



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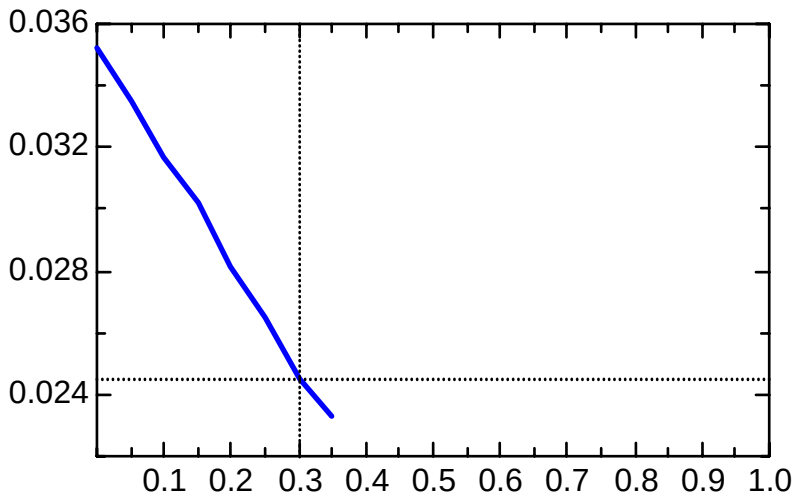
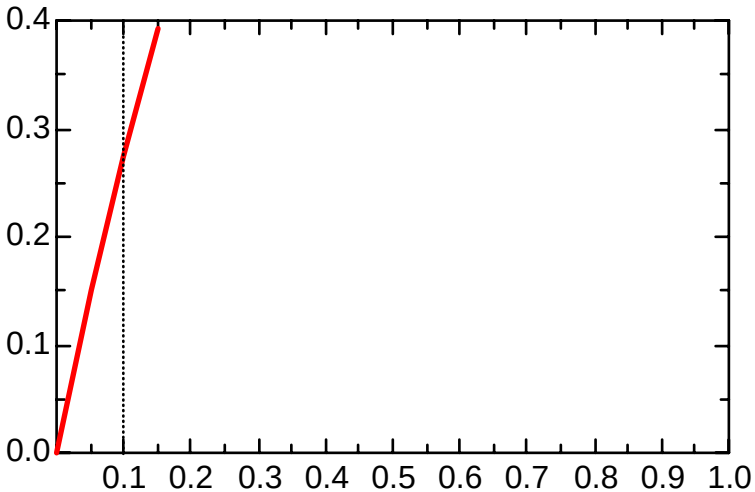
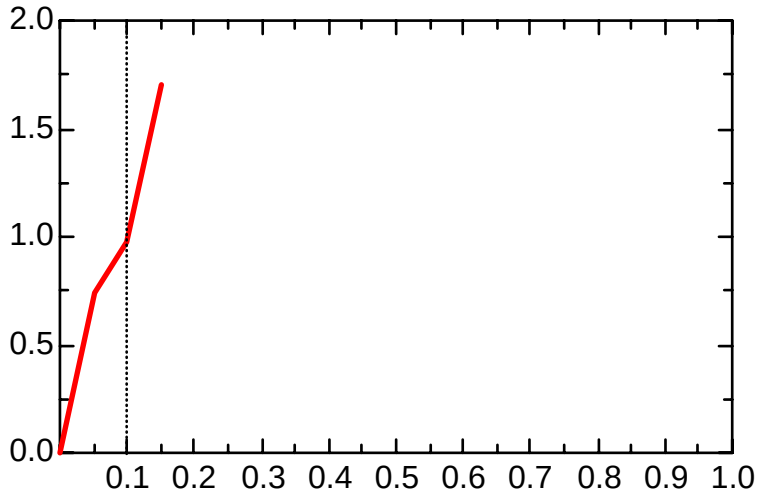


TCE: Well MW30A



TCE: Well MW30A



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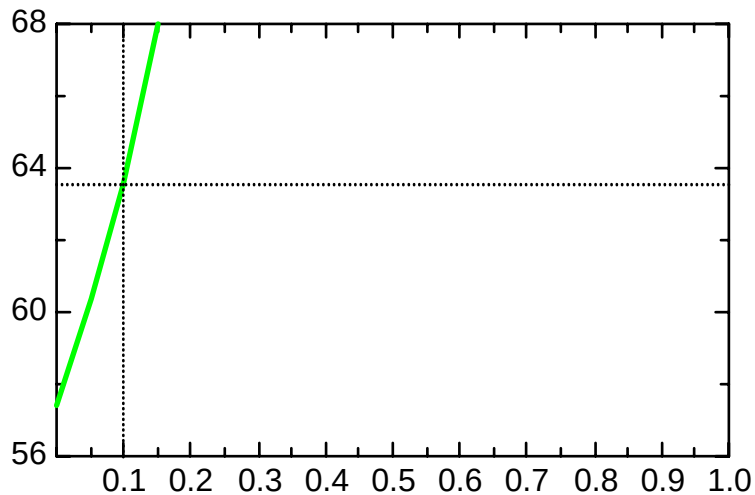
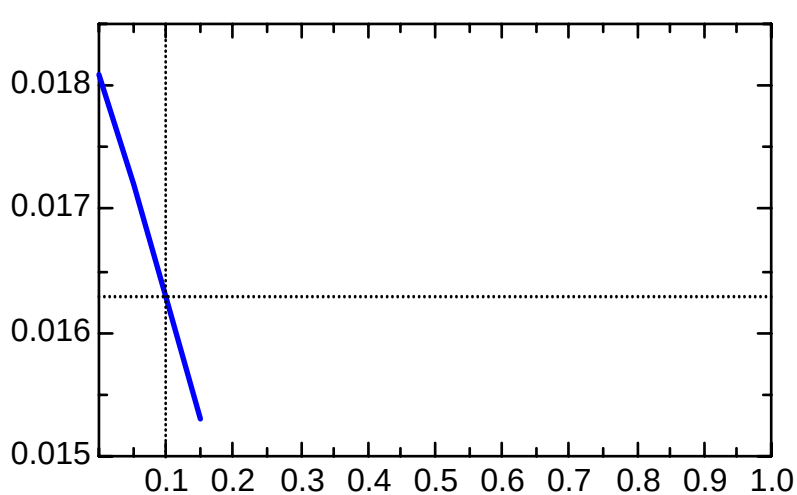
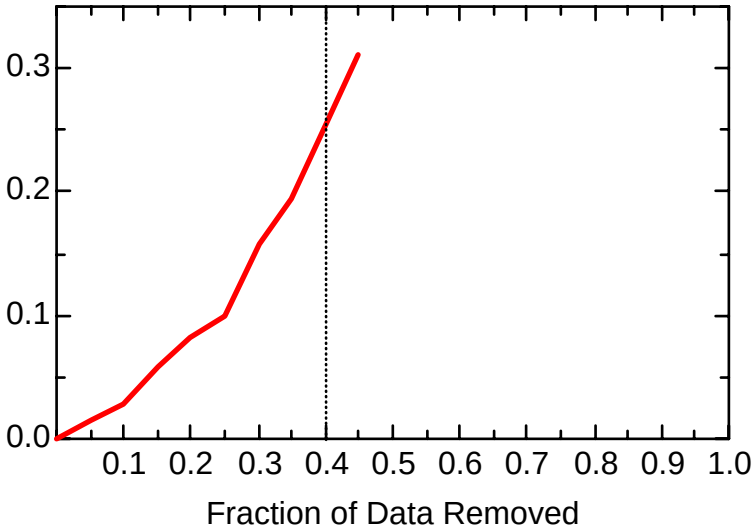


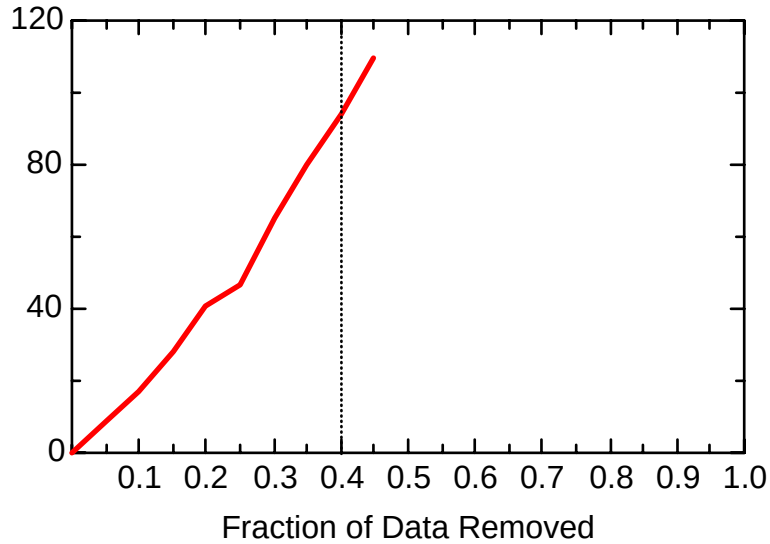
TCE: Well MW30A



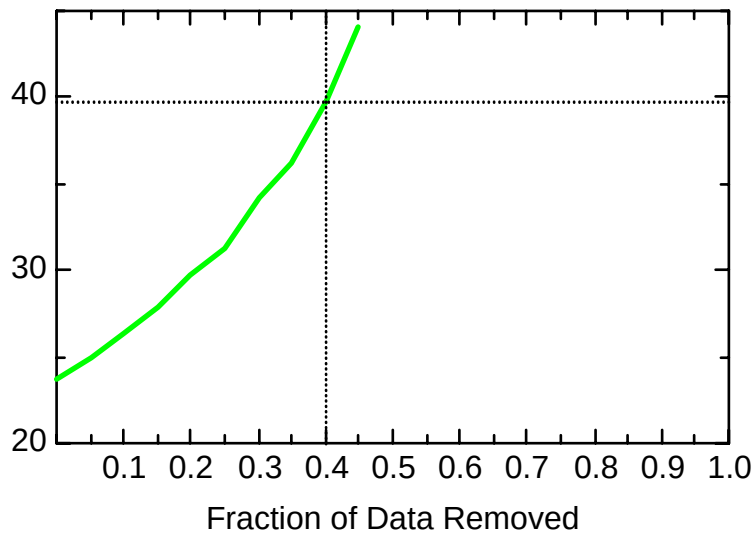
TCE: Well MW30B



TCE: Well MW30B



TCE: Well MW30B



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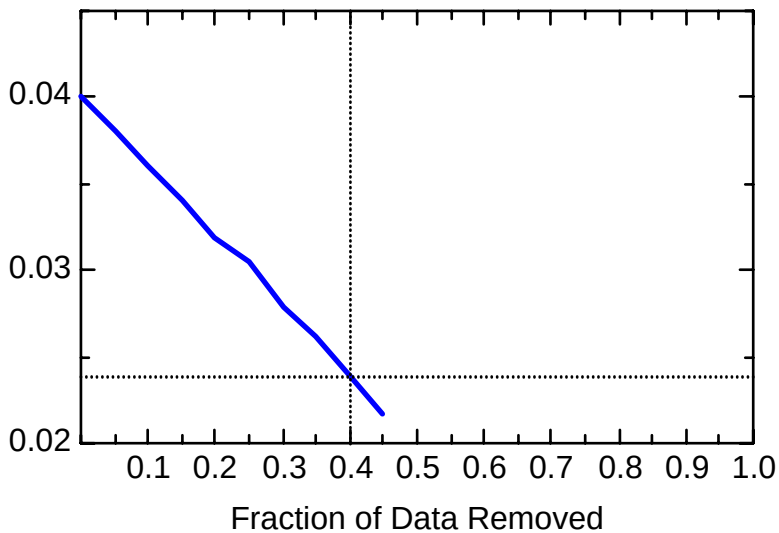

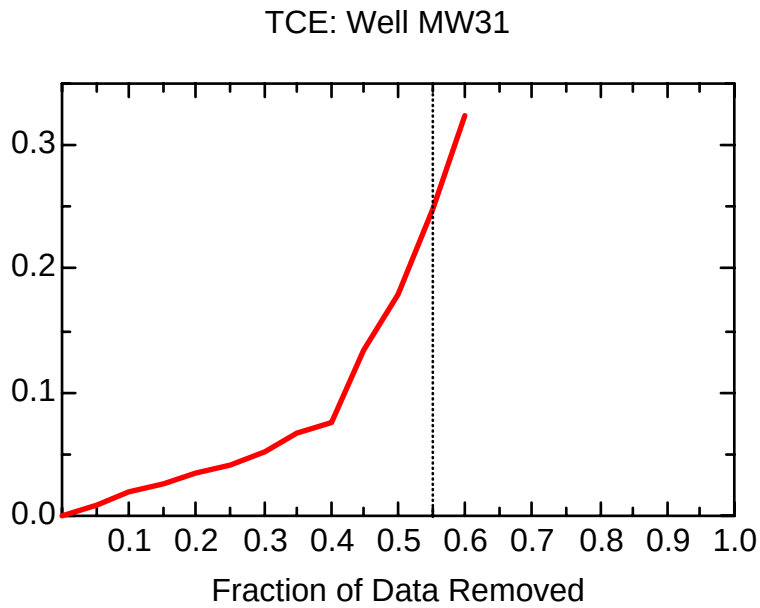
TCE: Well MW31
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0.1
0.0
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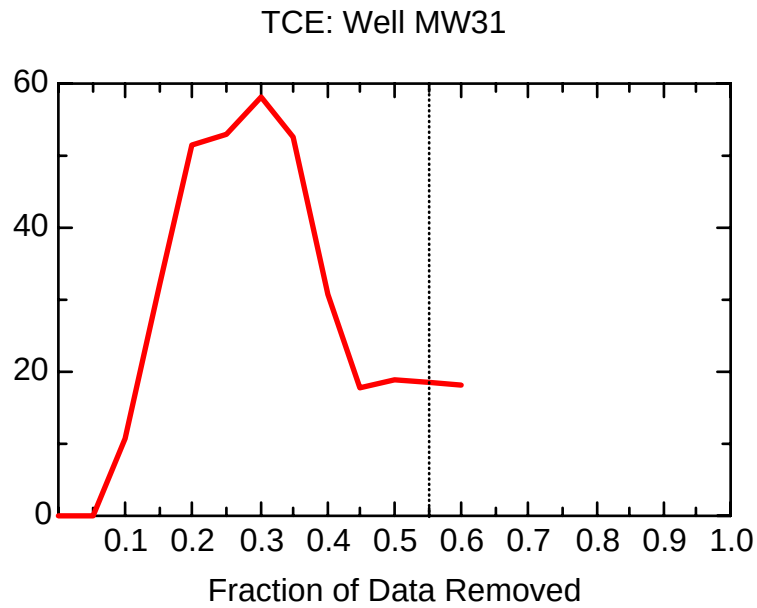
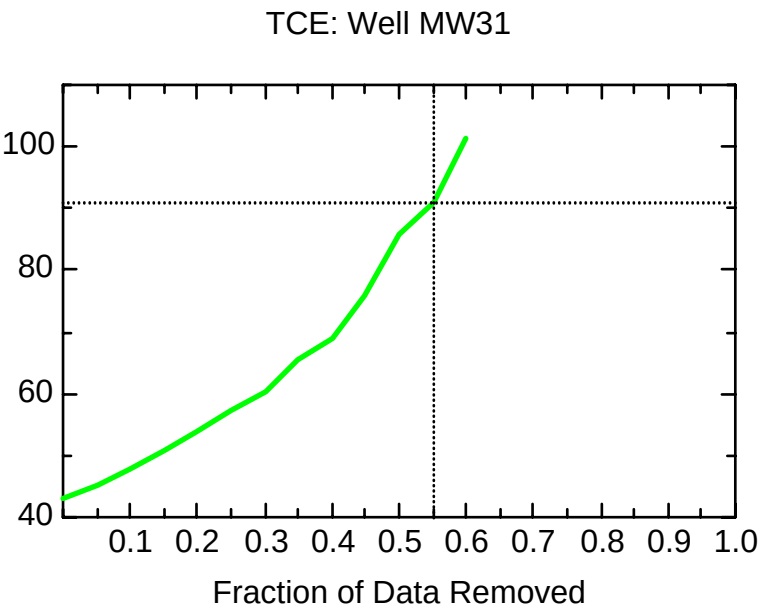
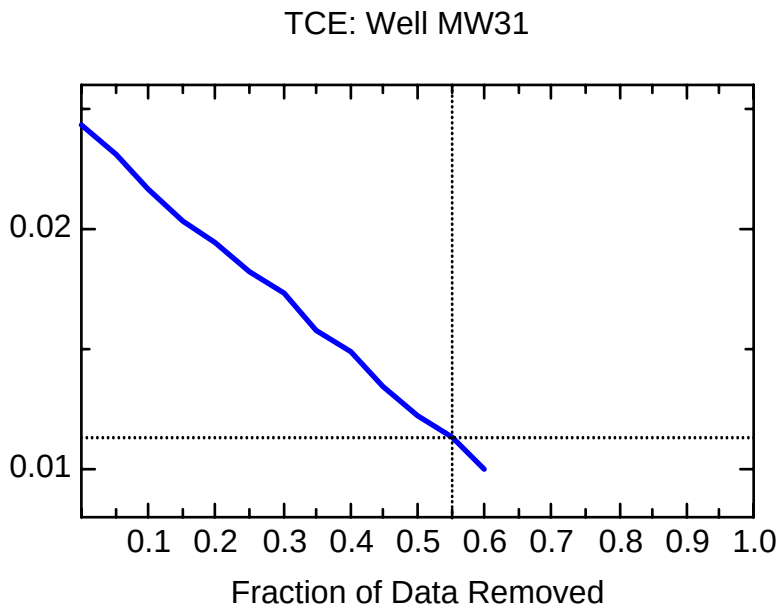
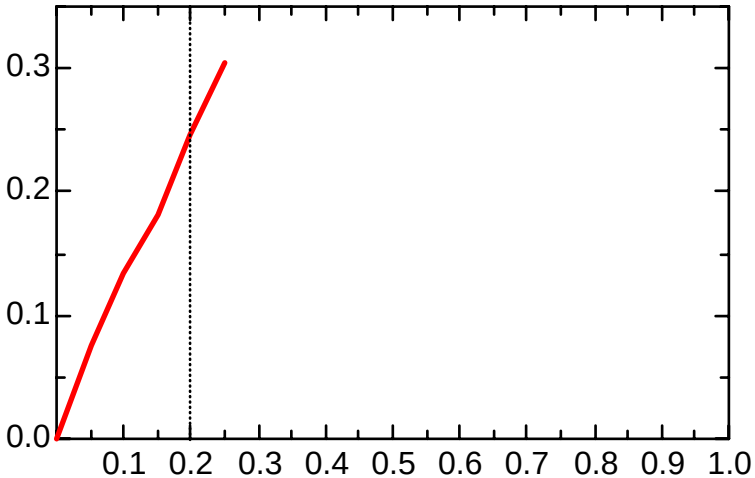
Fraction of Data Removed


TCE: Well MW31
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

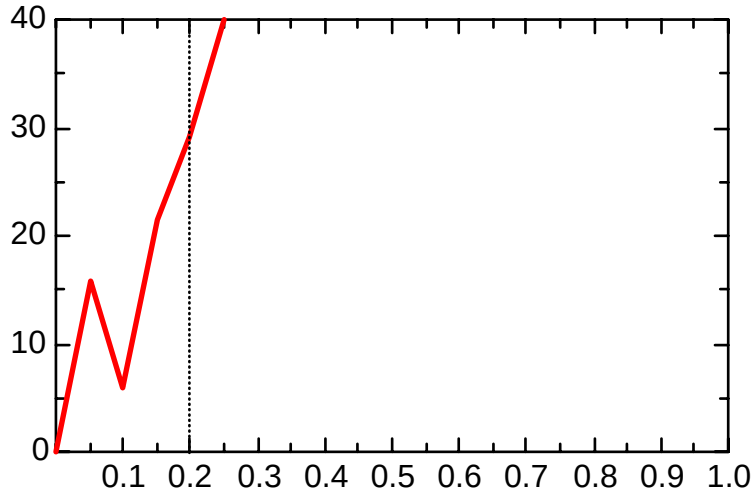

TCE: Well MW31
100
80
60
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW31
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

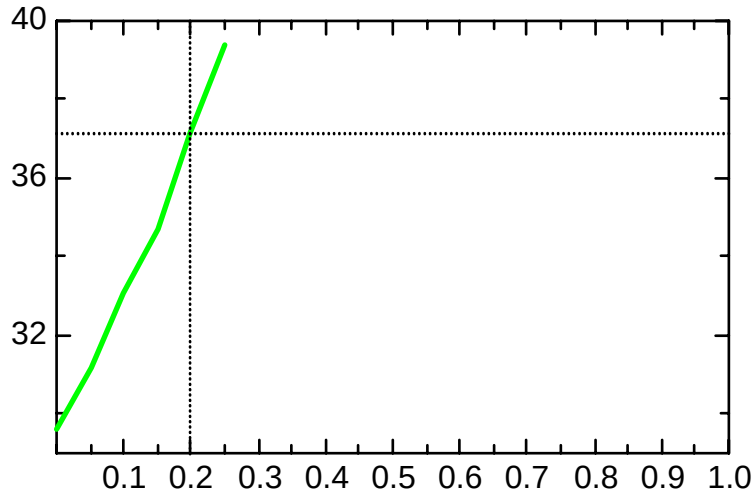
TCE: Well MW53



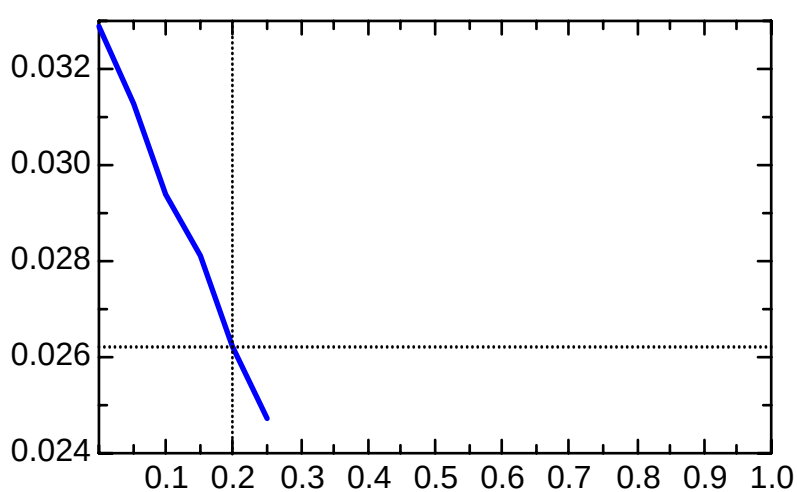
TCE: Well MW53

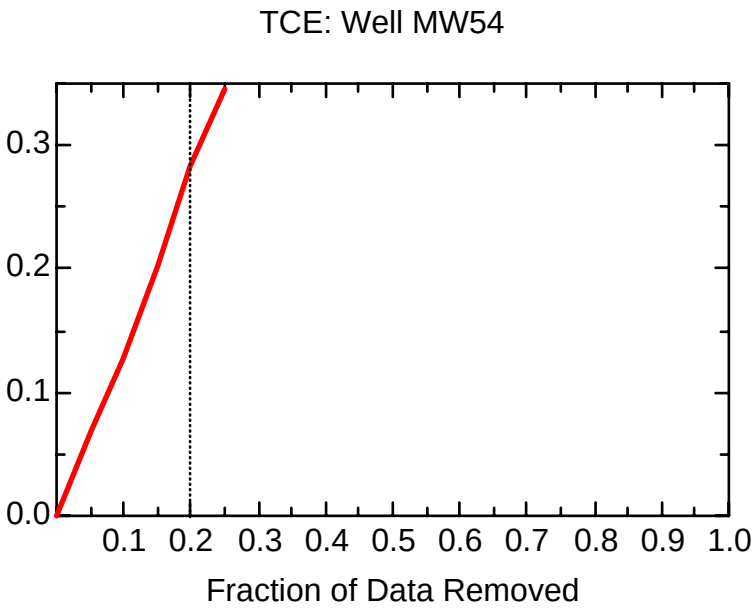


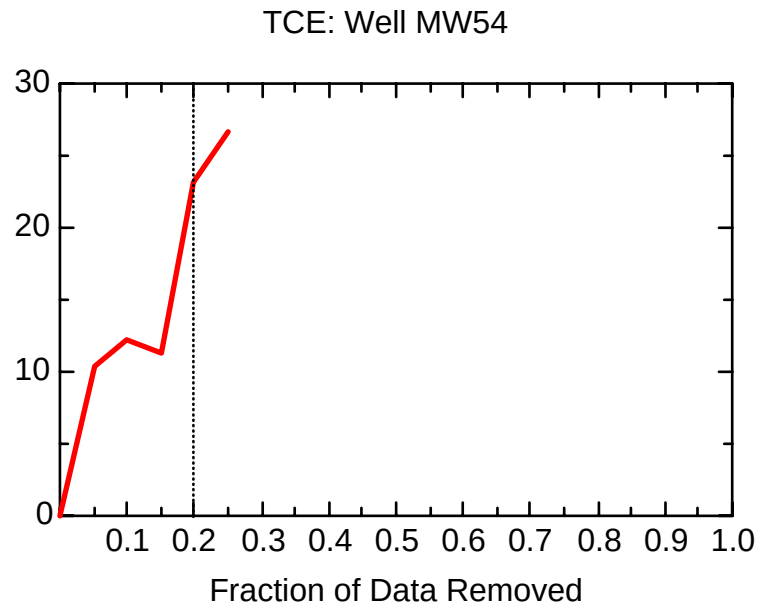
TCE: Well MW53

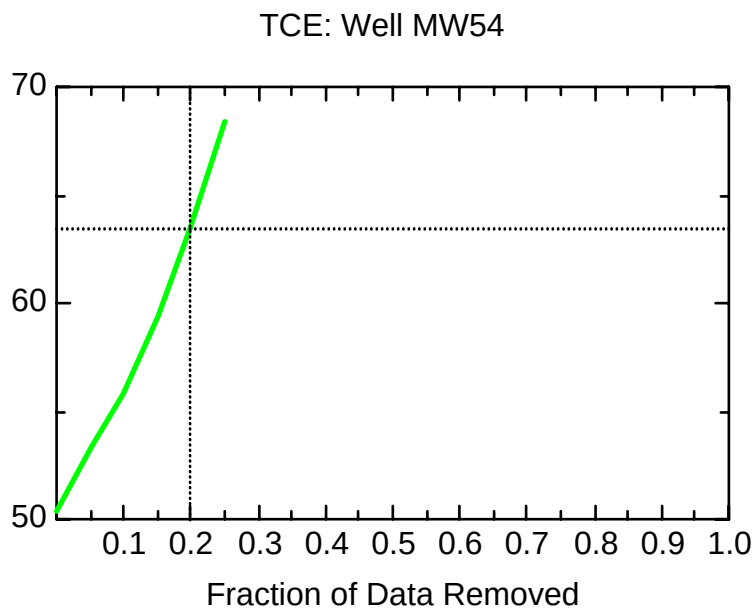


TCE: Well MW53




TCE: Well MW54
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW54
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW54
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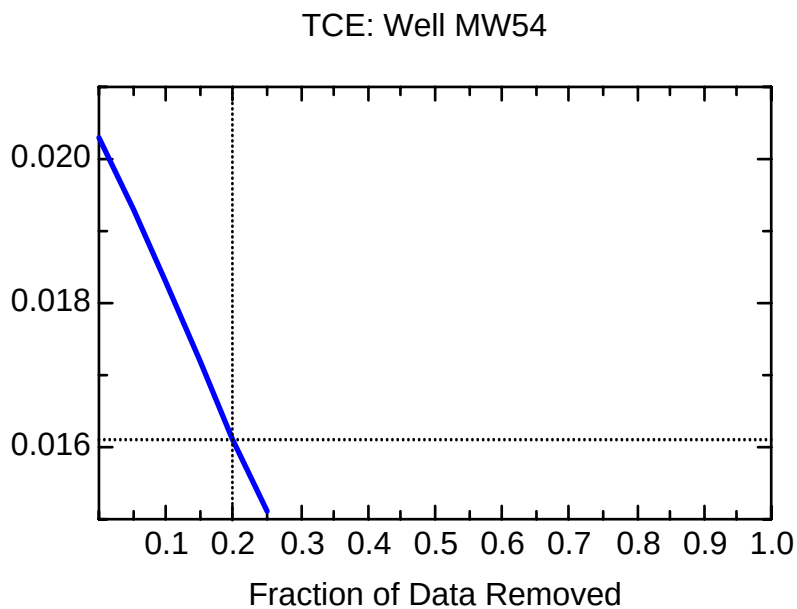
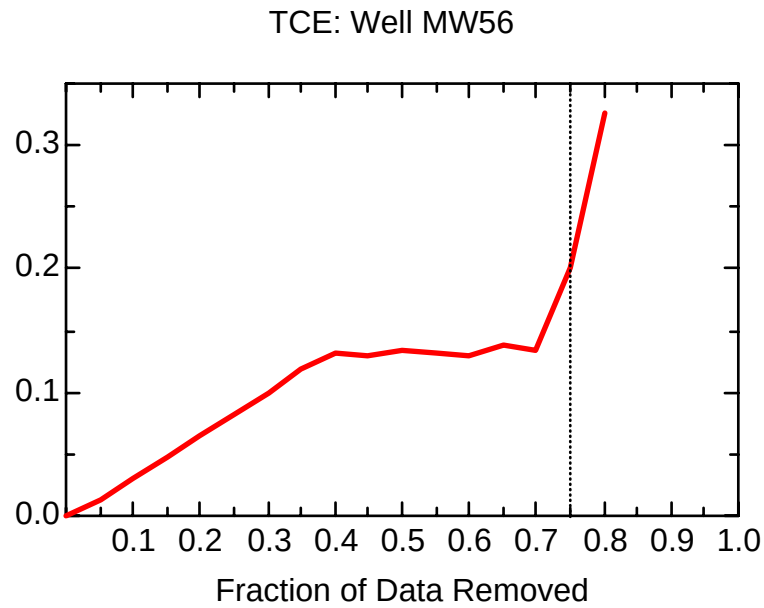
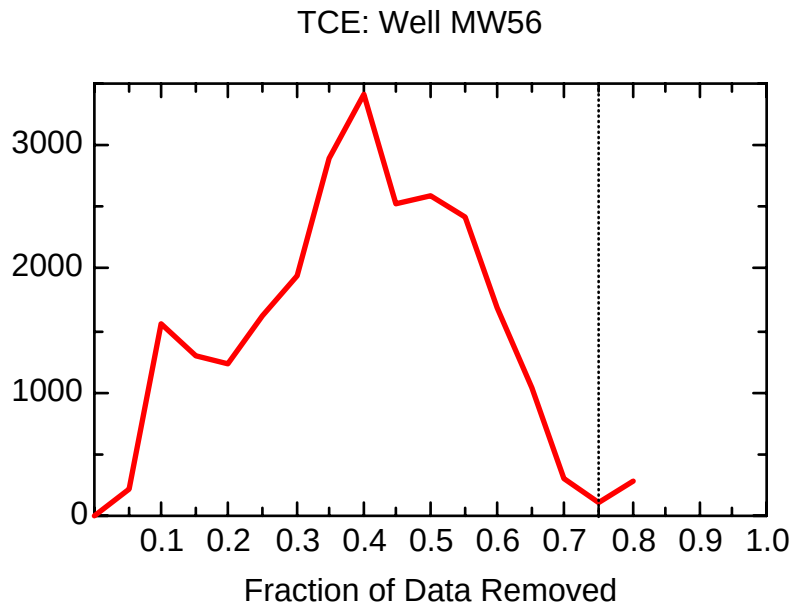
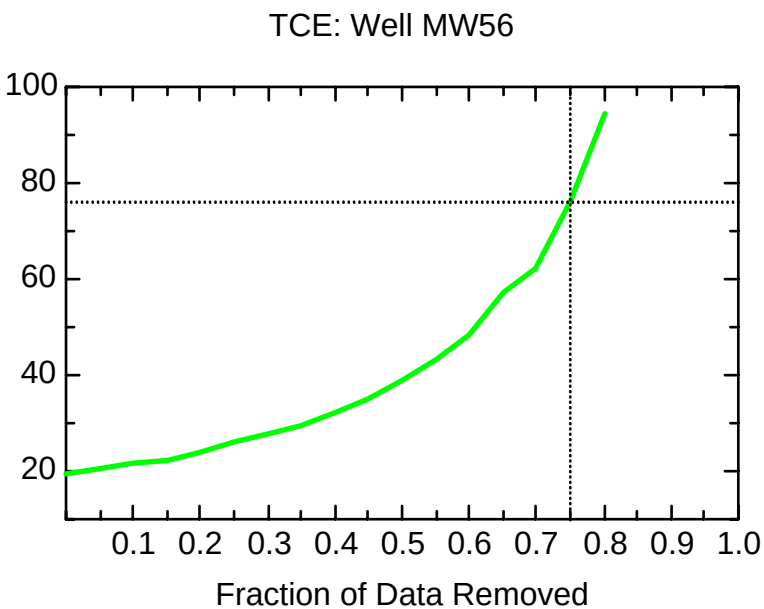
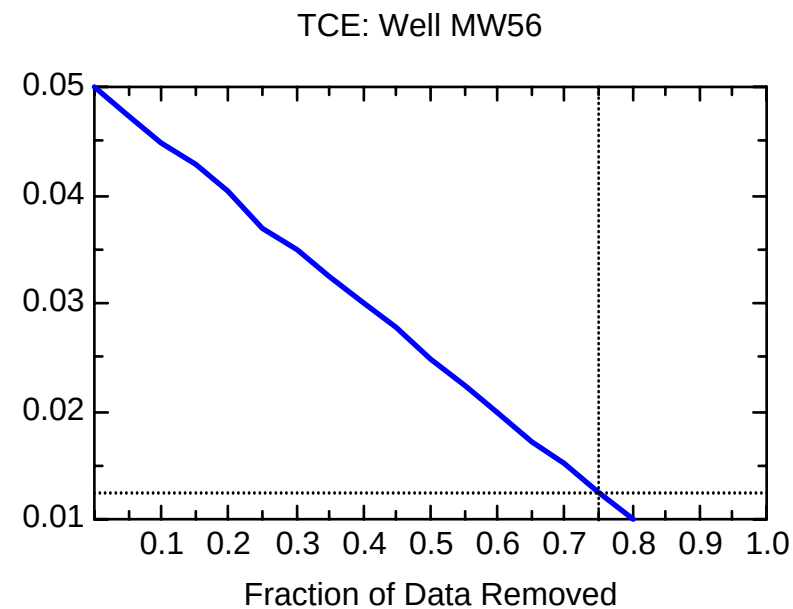
60
50
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

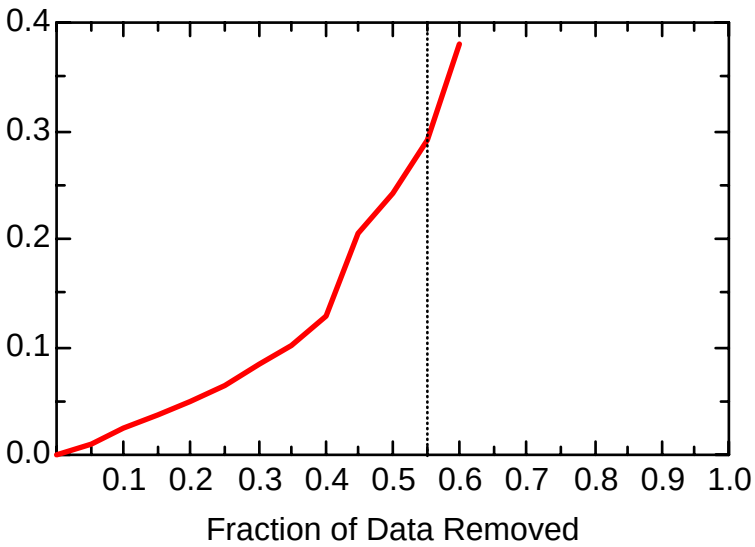

TCE: Well MW54
0.020
0.018
0.016
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

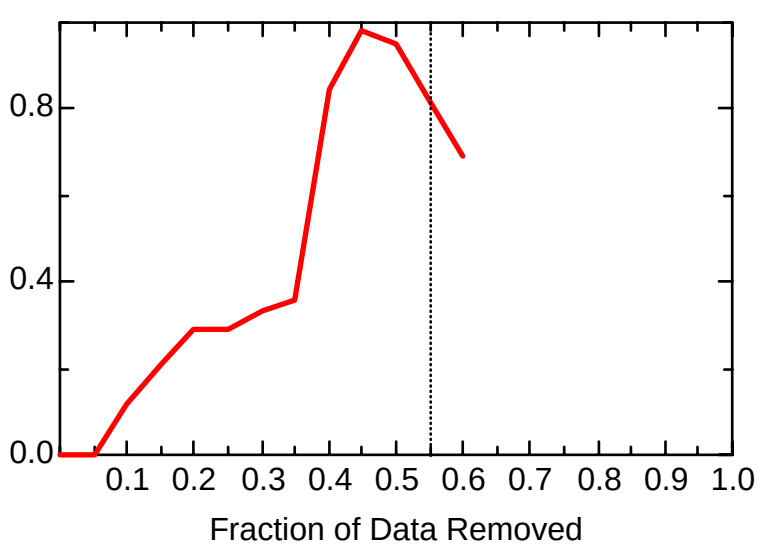

TCE: Well MW56
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

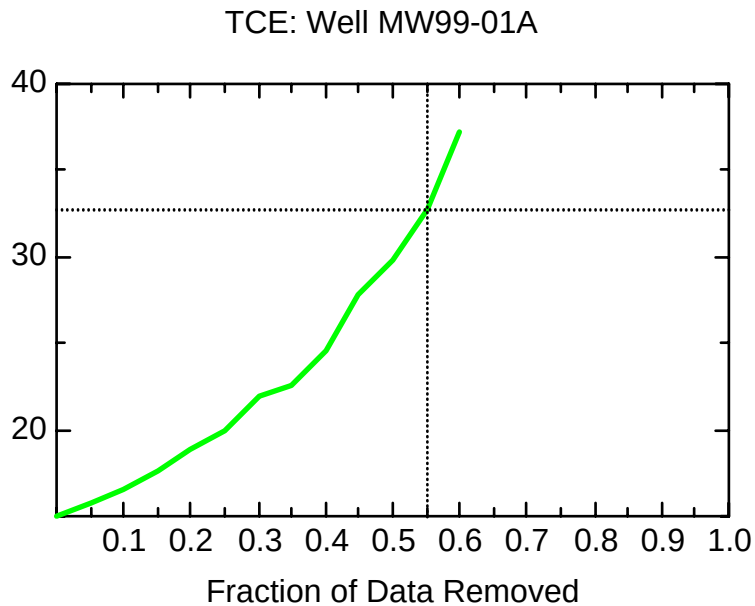

TCE: Well MW56
3000
2000
1000
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

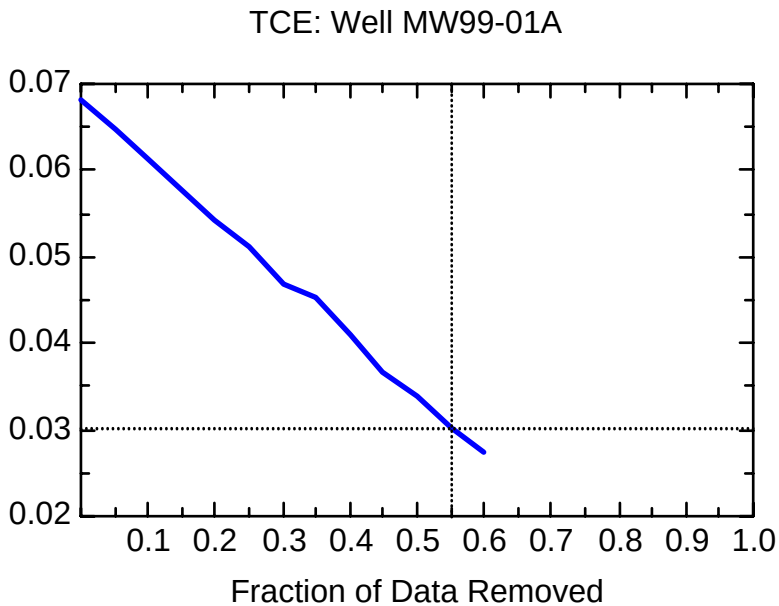

TCE: Well MW56
100
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

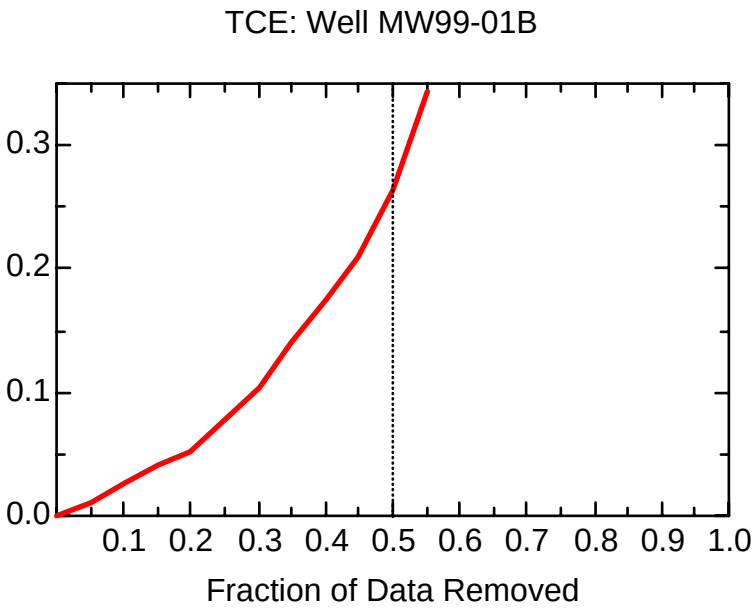

TCE: Well MW56
0.05
0.04
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01A
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01A
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01A
40
30
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01A
0.07
0.06
0.05
0.04
0.03
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01B
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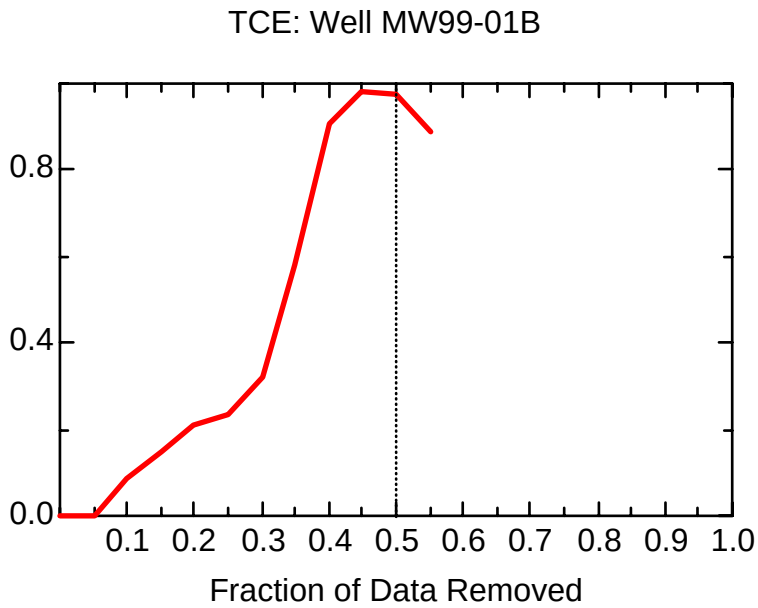
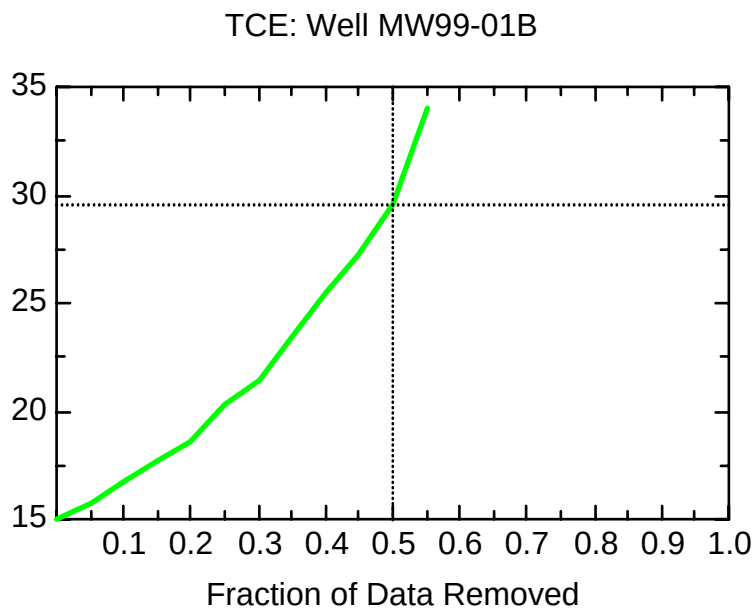
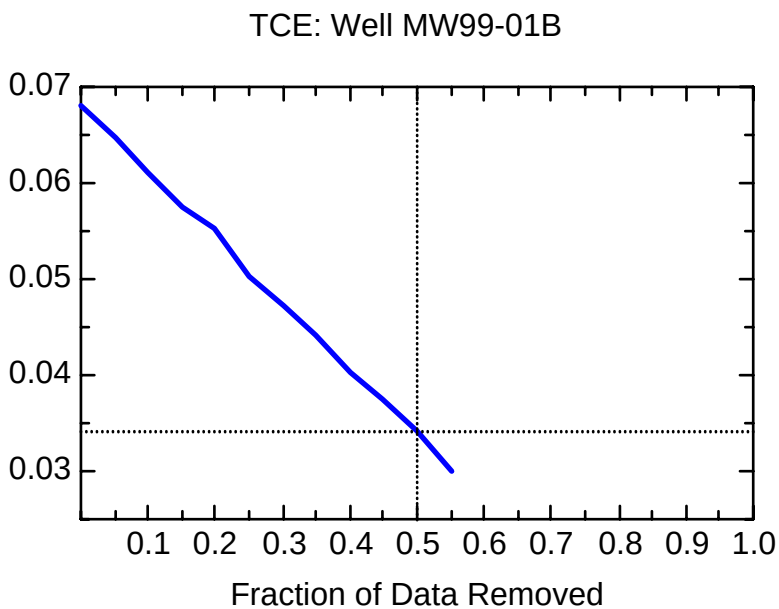
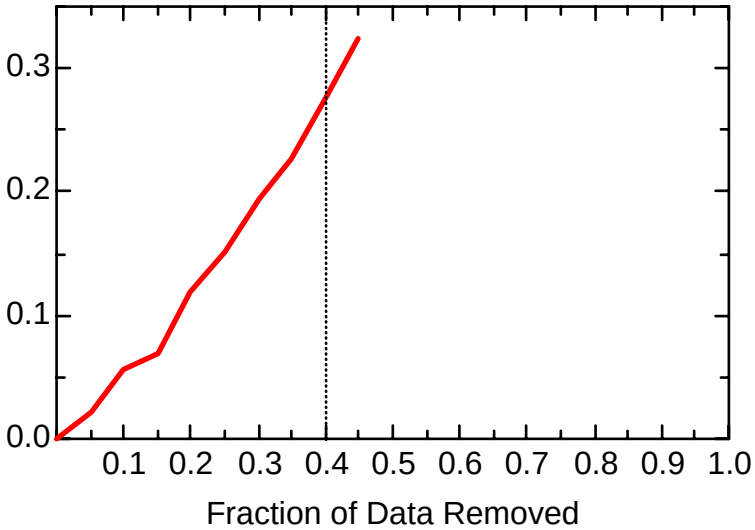
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01B
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

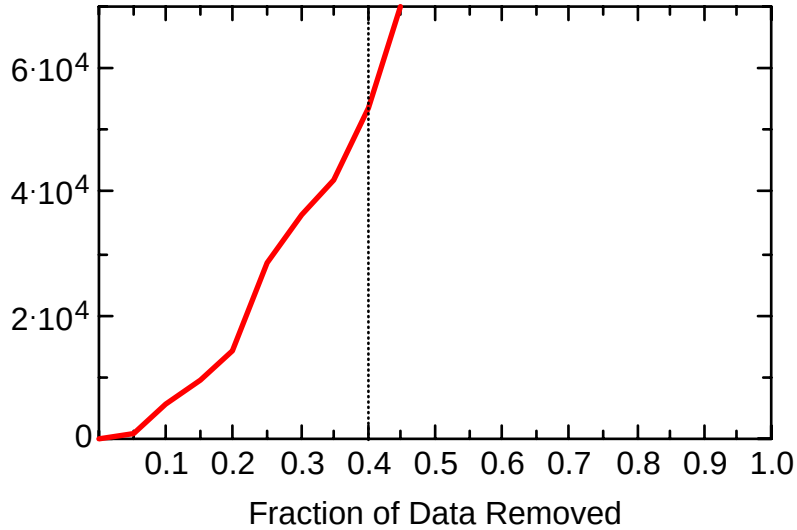

TCE: Well MW99-01B
35
30
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MW99-01B
0.07
0.06
0.05
0.04
0.03
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

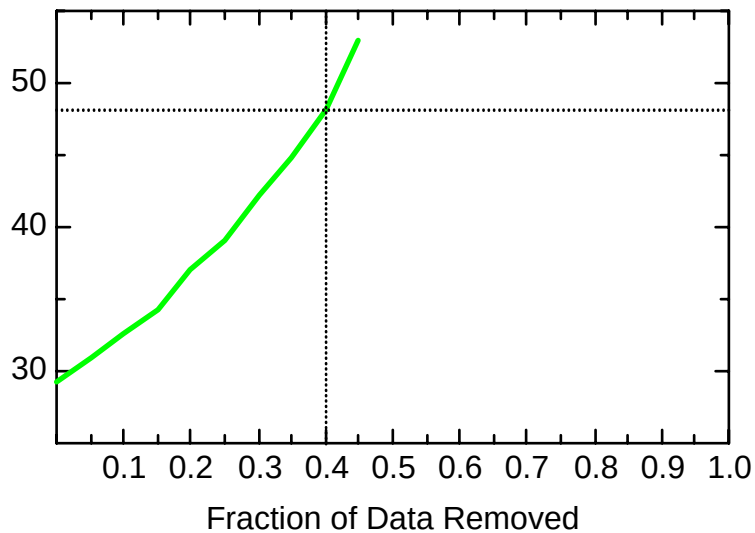
TCE: Well MWG1



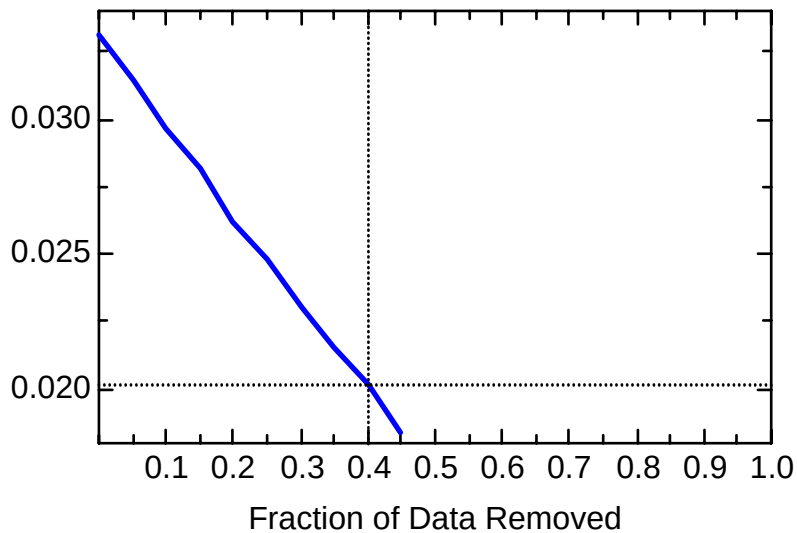
TCE: Well MWG1

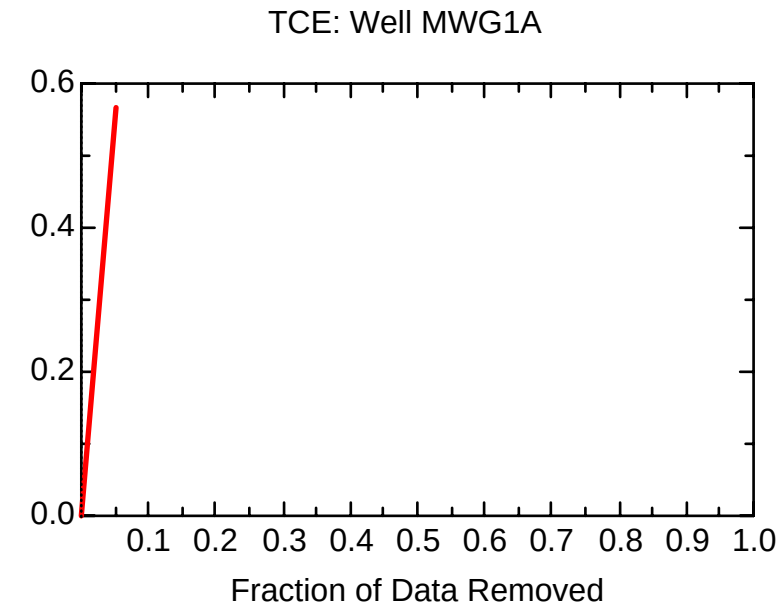


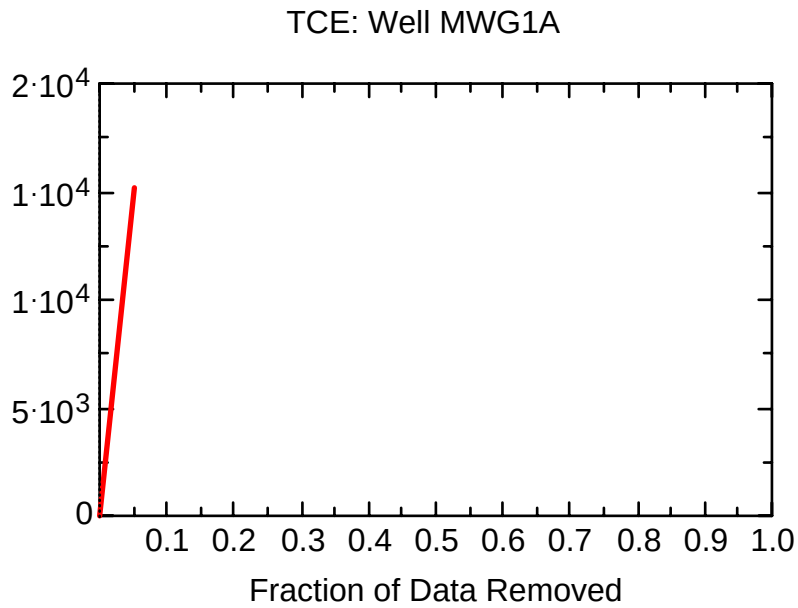
TCE: Well MWG1

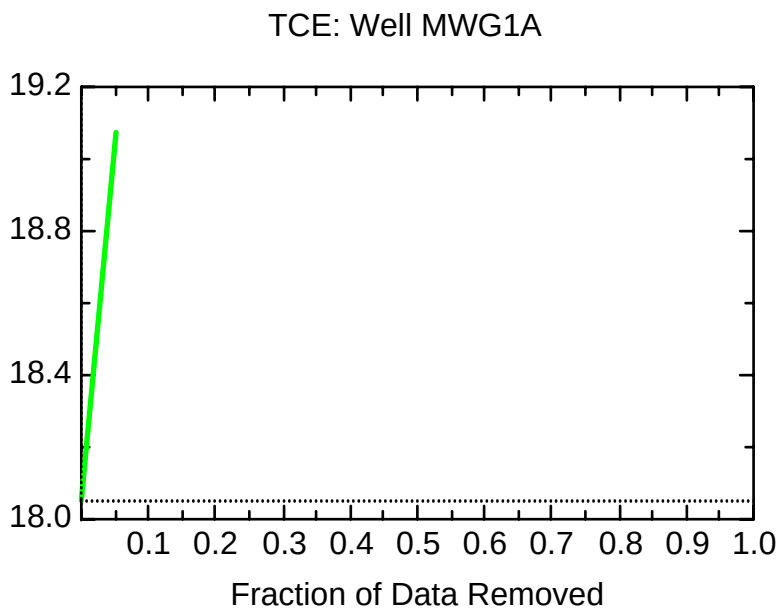


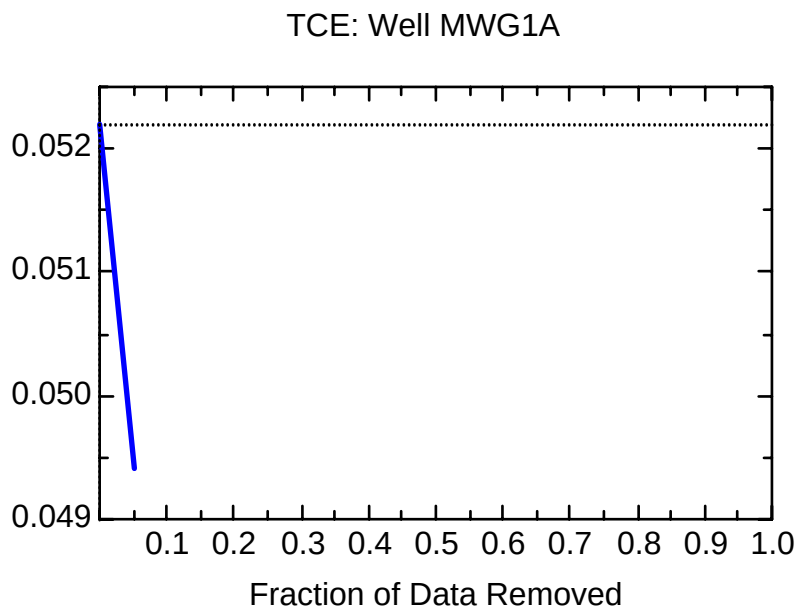
TCE: Well MWG1



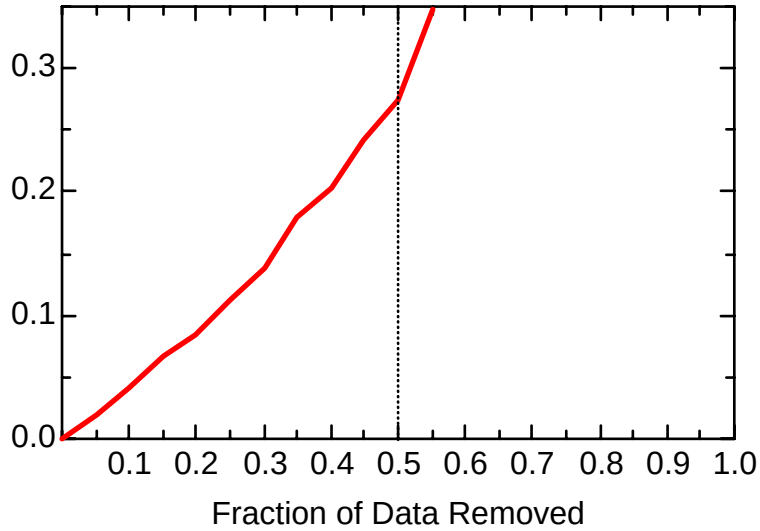

TCE: Well MWG1A
0.6
0.4
0.2
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG1A
2·10^4
1·10^4
1·10^4
5·10^3
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

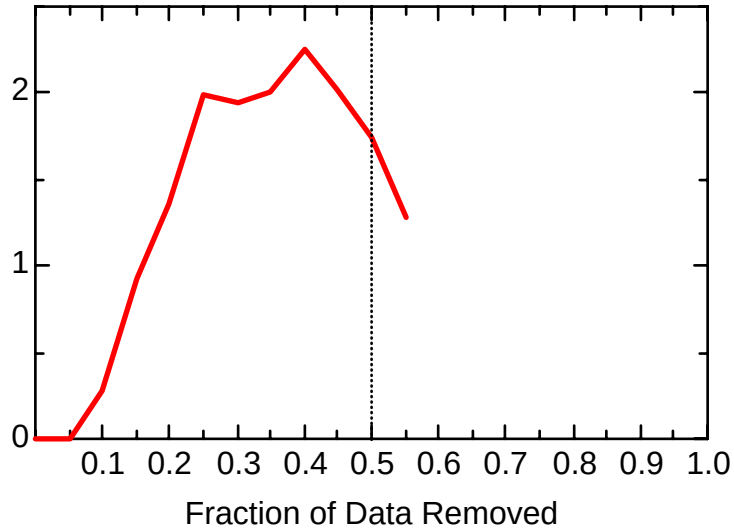

TCE: Well MWG1A
19.2
18.8
18.4
18.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG1A
0.052
0.051
0.050
0.049
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

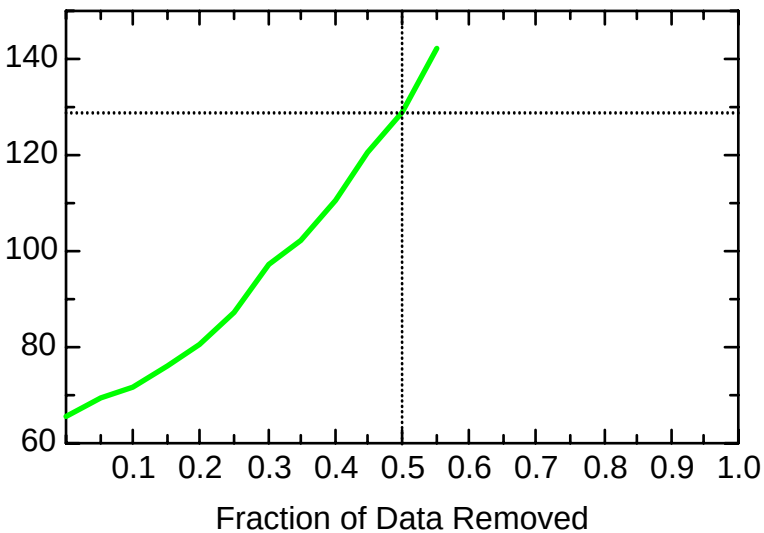
TCE: Well MWG2



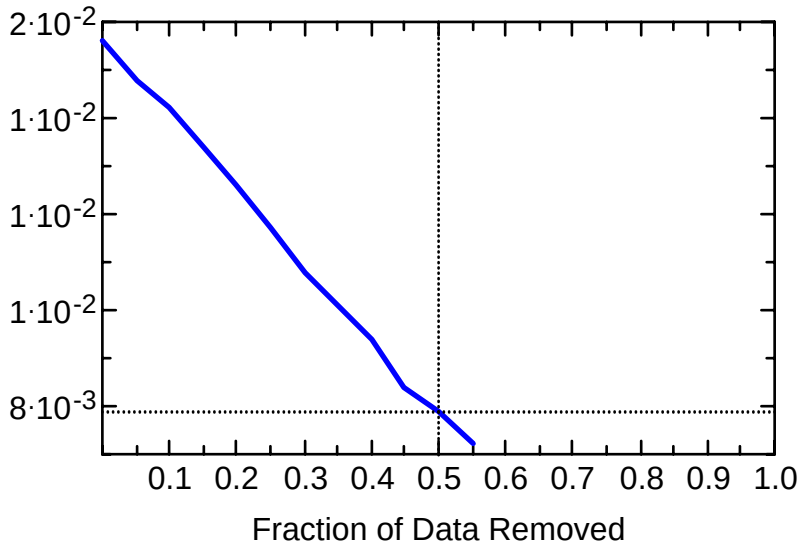
TCE: Well MWG2



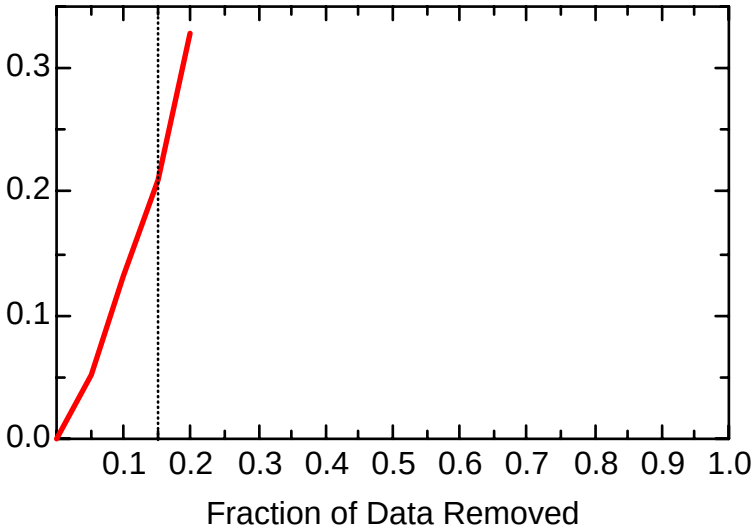
TCE: Well MWG2



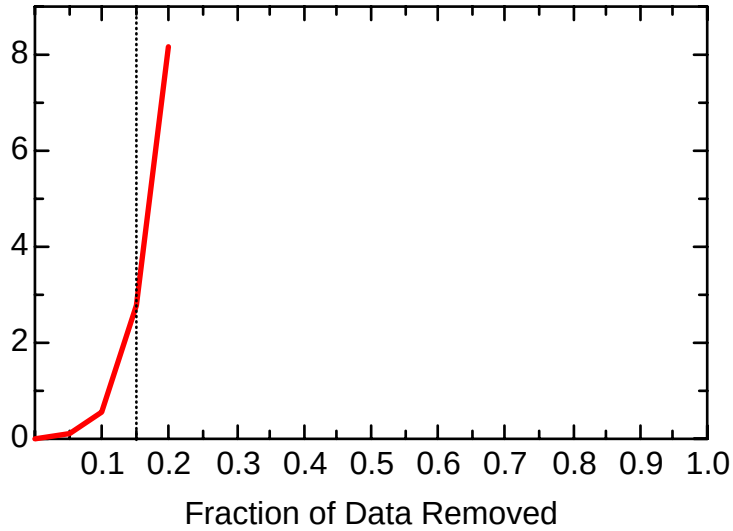
TCE: Well MWG2



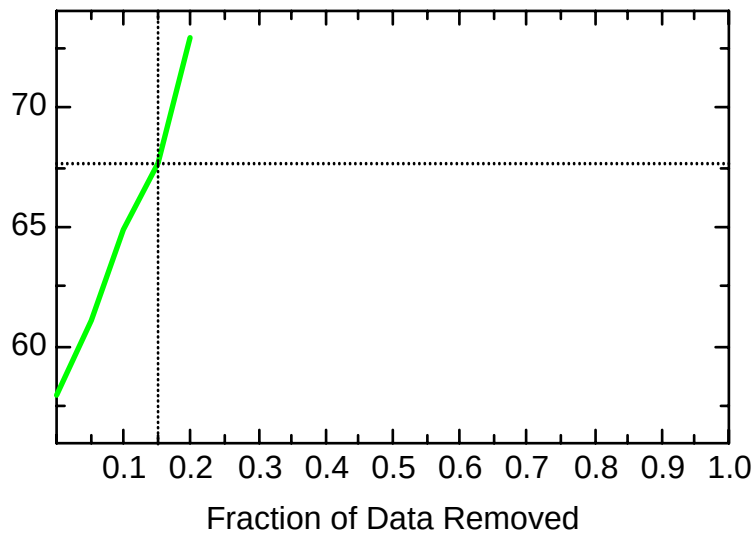
TCE: Well MWG3



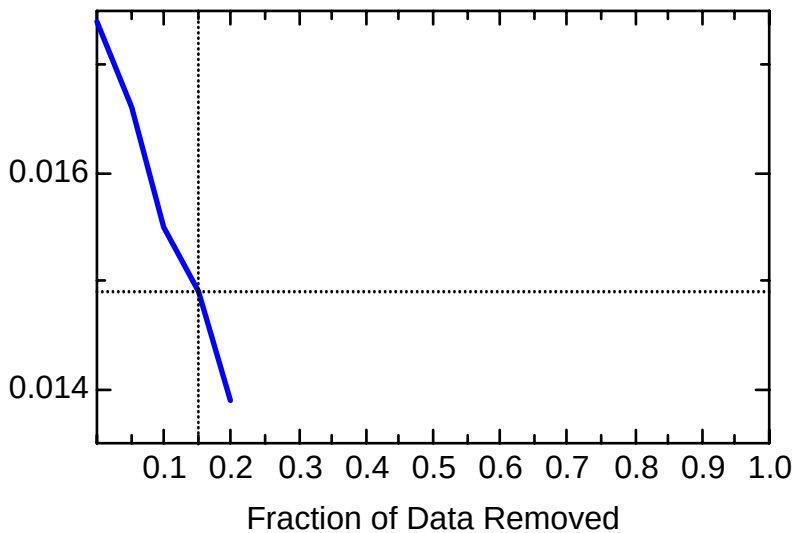
TCE: Well MWG3



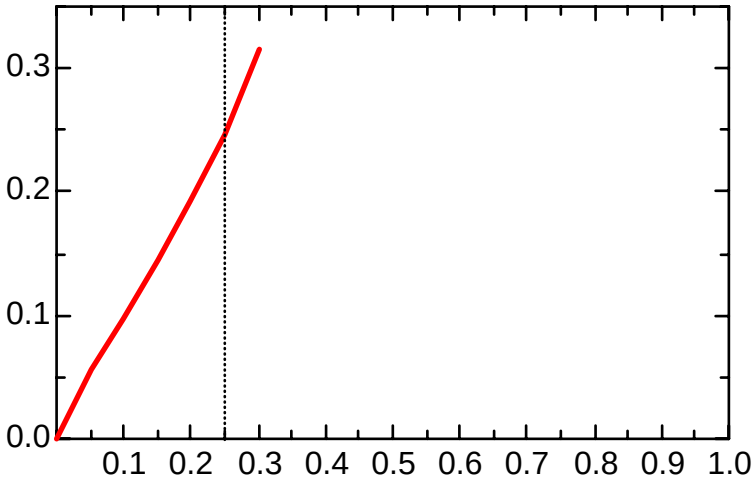
TCE: Well MWG3



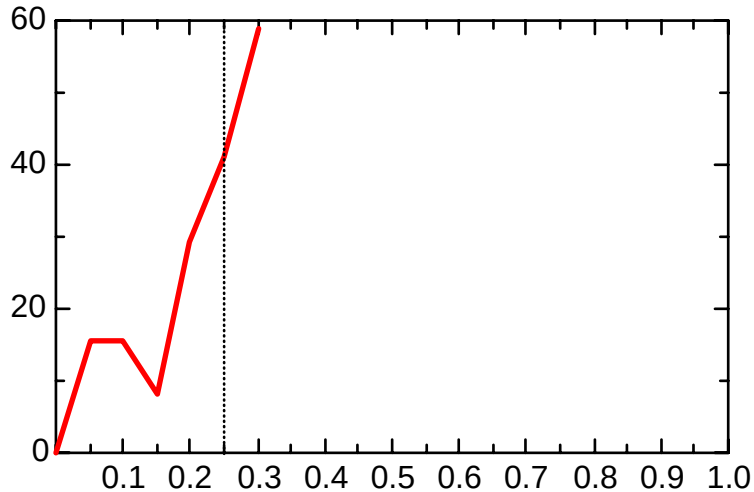
TCE: Well MWG3



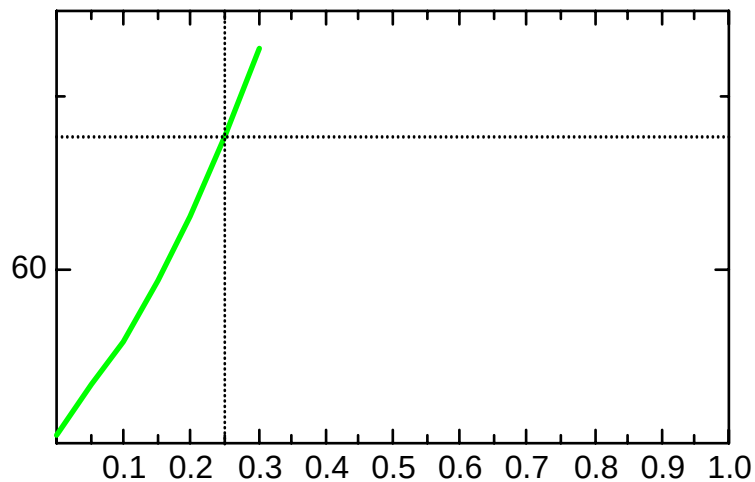
TCE: Well MWG4



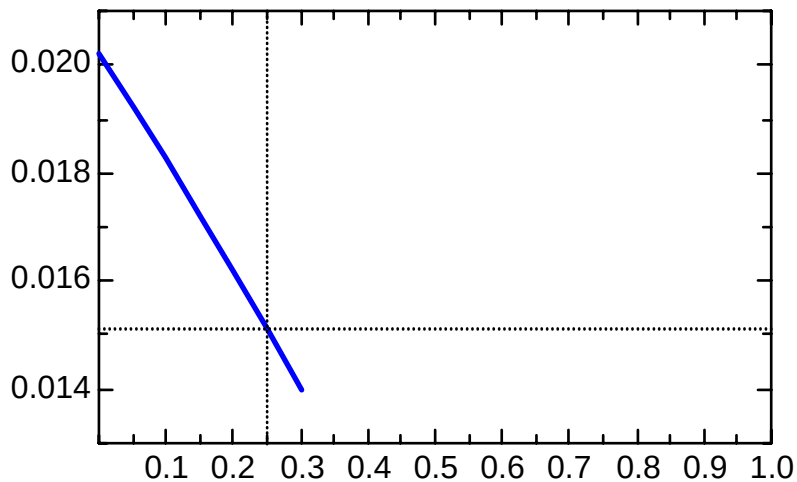
TCE: Well MWG4



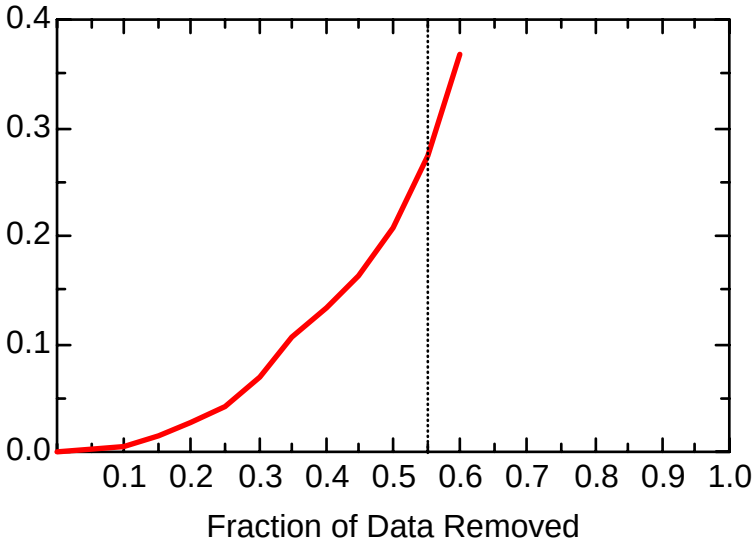
TCE: Well MWG4



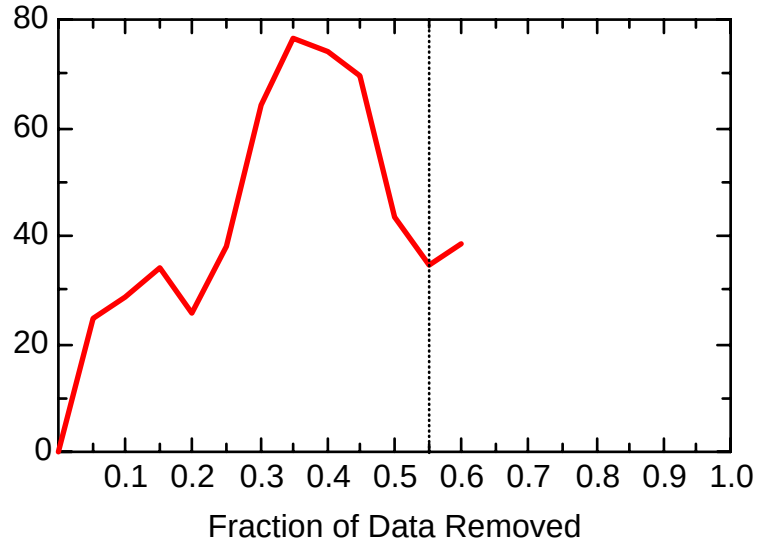
TCE: Well MWG4



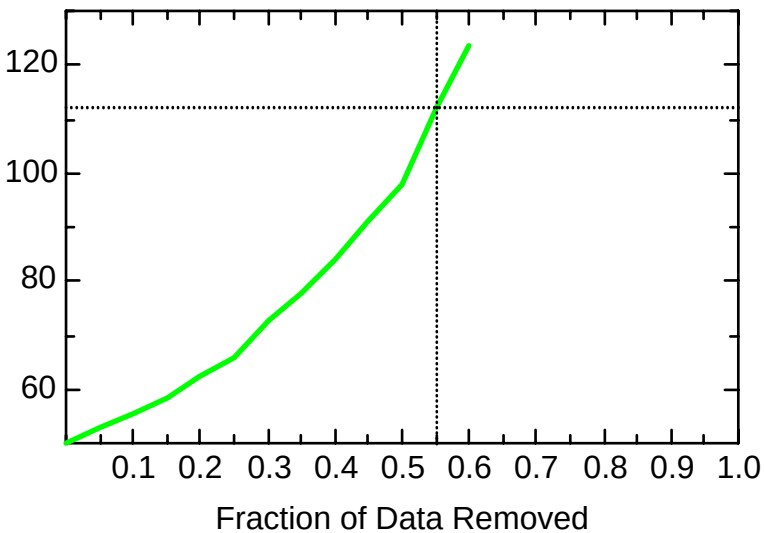
TCE: Well MWG5-6



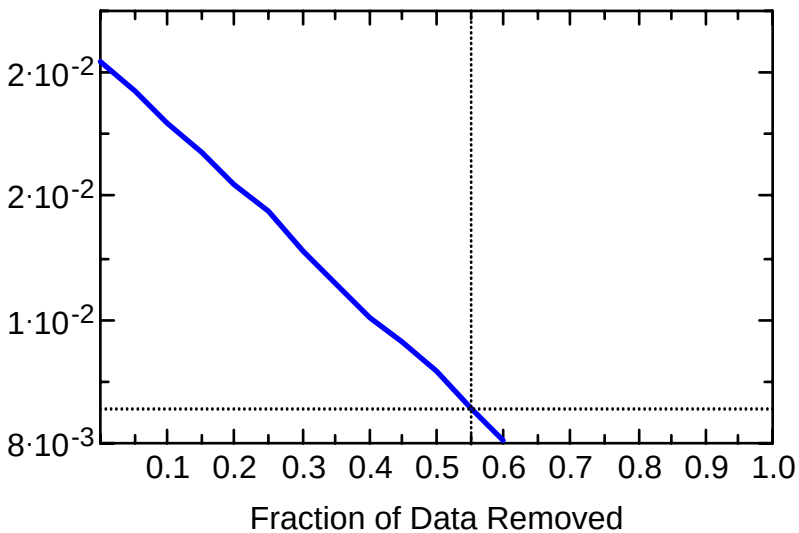
TCE: Well MWG5-6



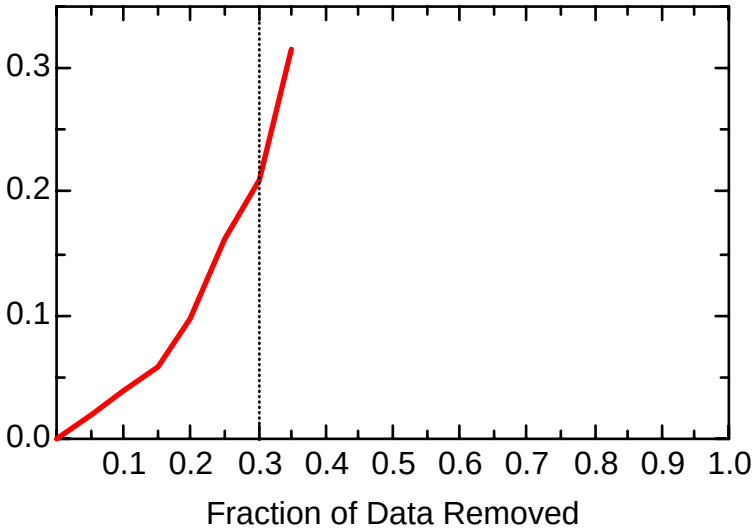
TCE: Well MWG5-6



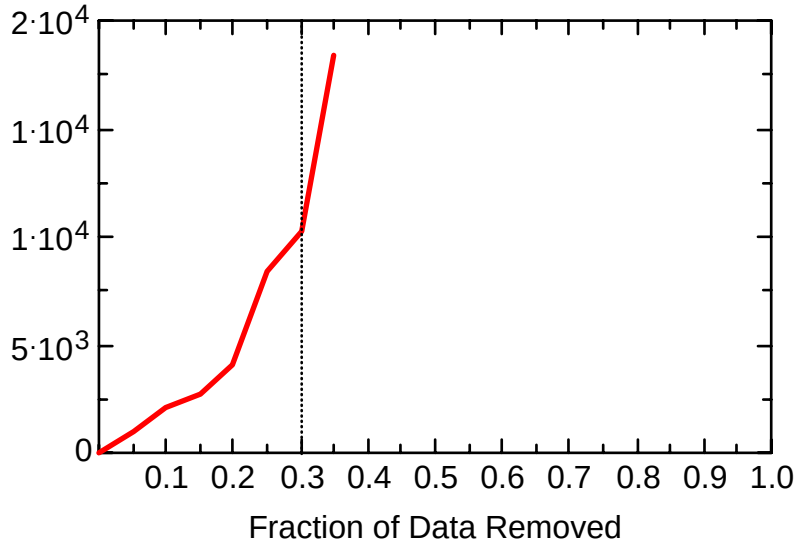
TCE: Well MWG5-6



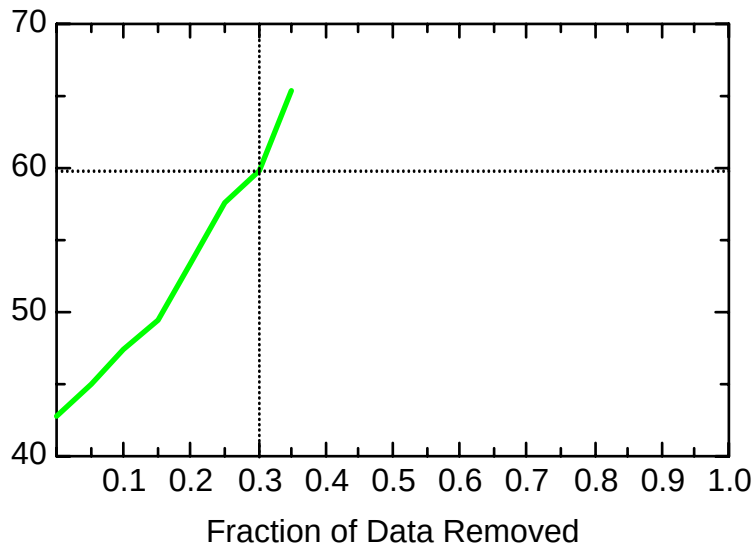
TCE: Well MWG5



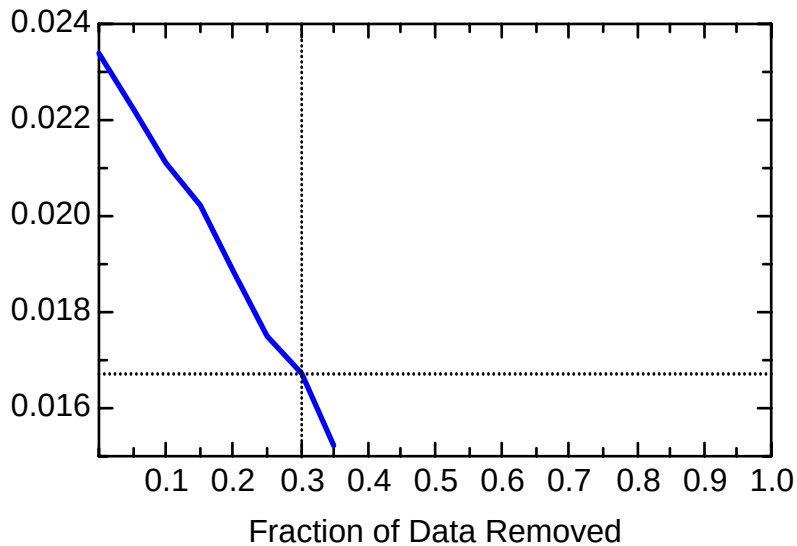
TCE: Well MWG5



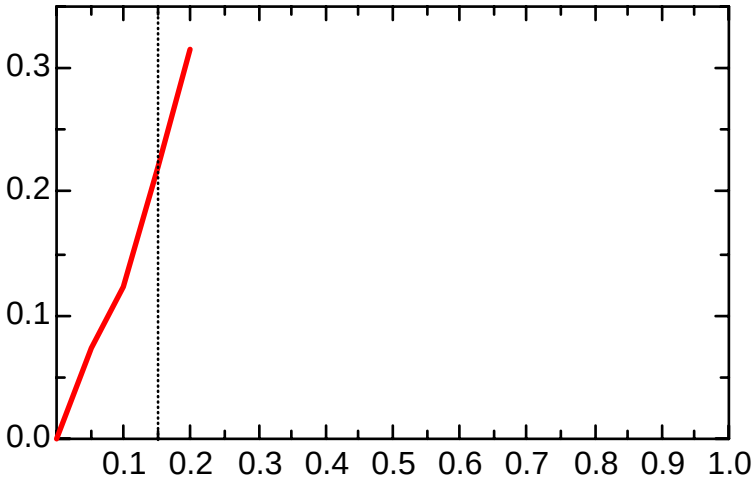
TCE: Well MWG5



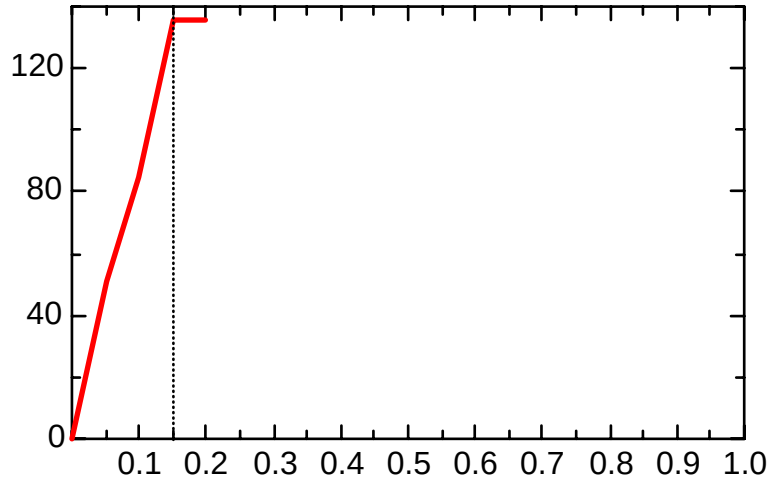
TCE: Well MWG5



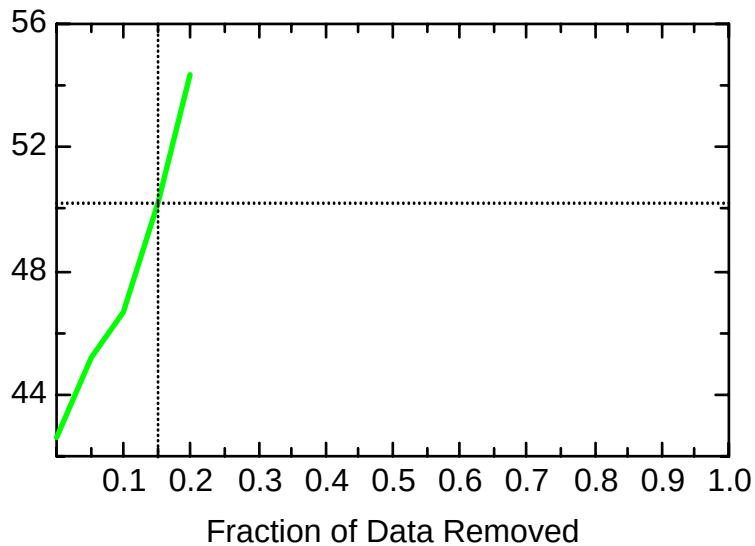
TCE: Well MWG7



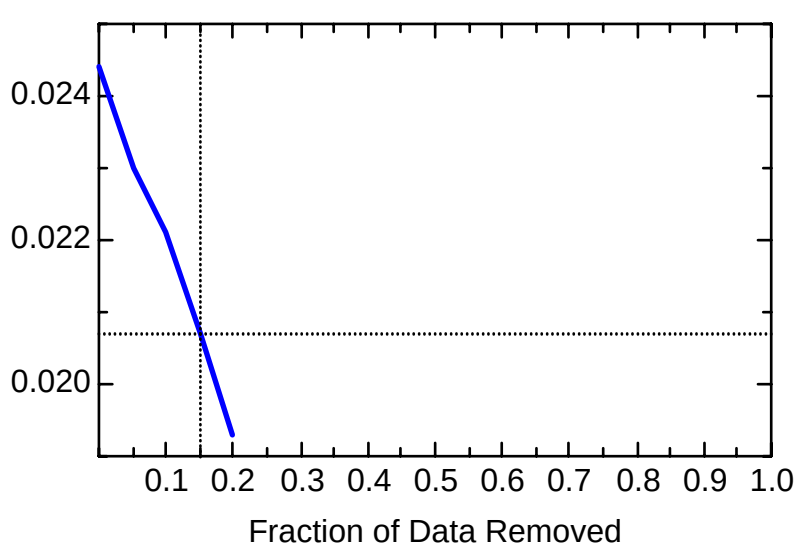
TCE: Well MWG7

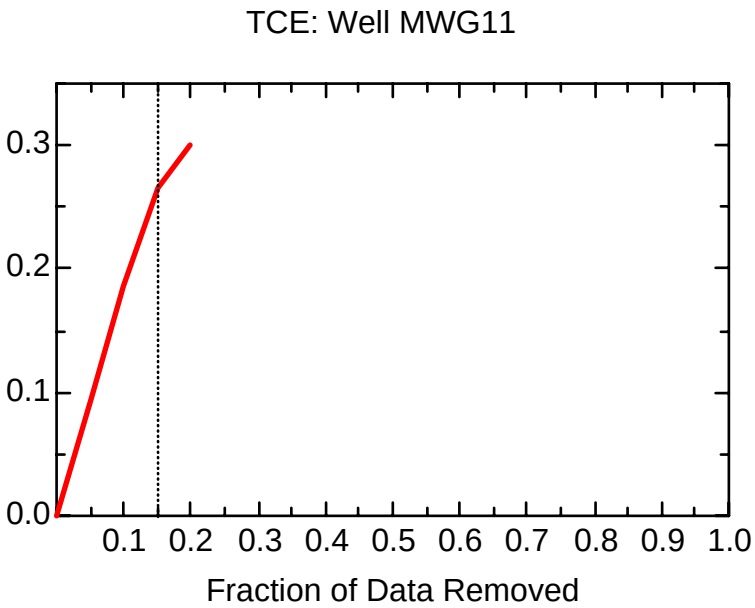


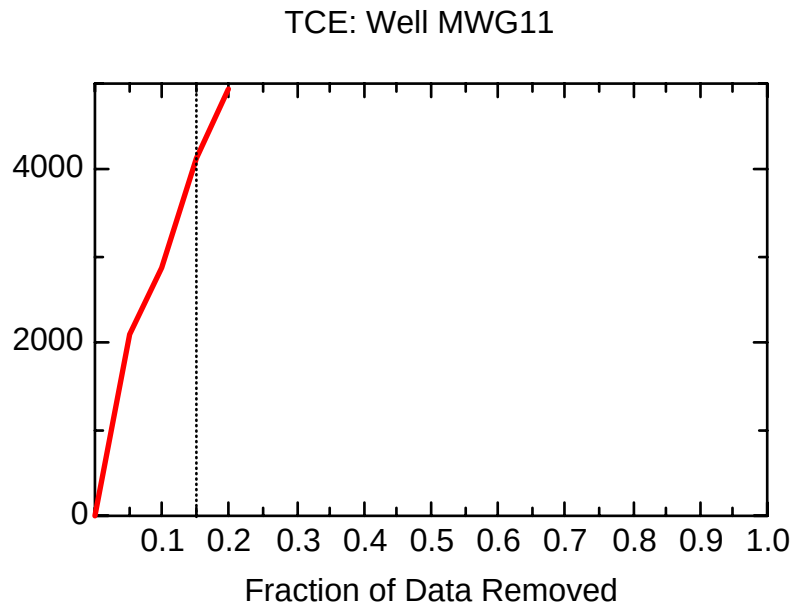
TCE: Well MWG7

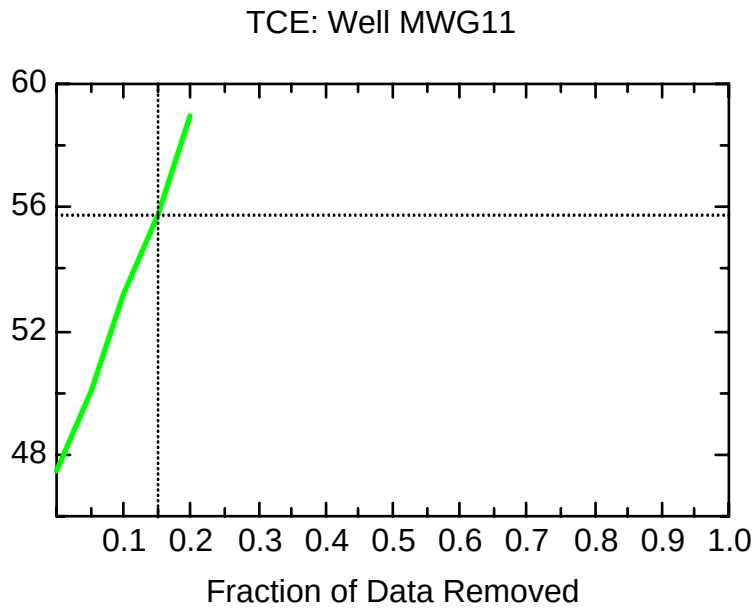


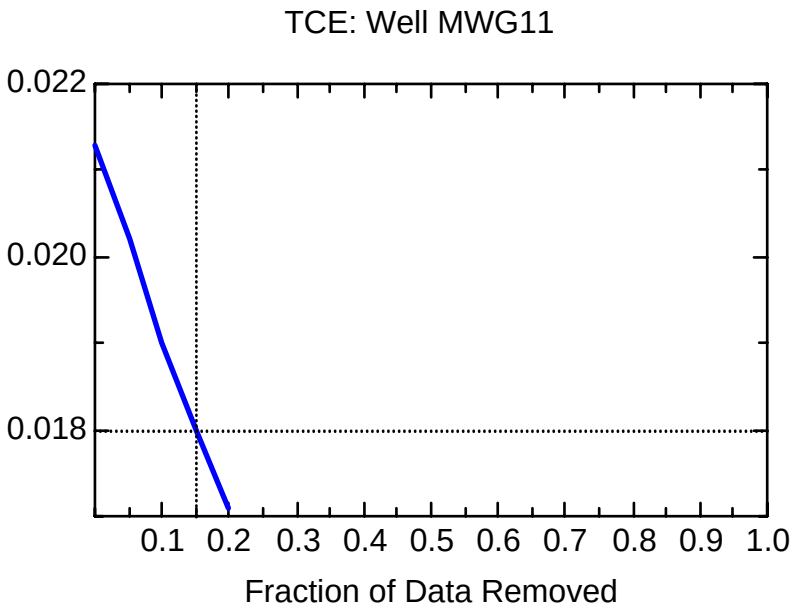
TCE: Well MWG7



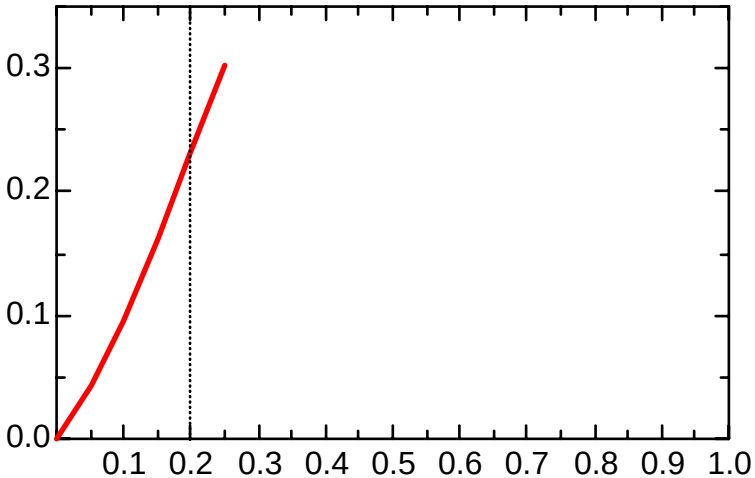

TCE: Well MWG11
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG11
4000
2000
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

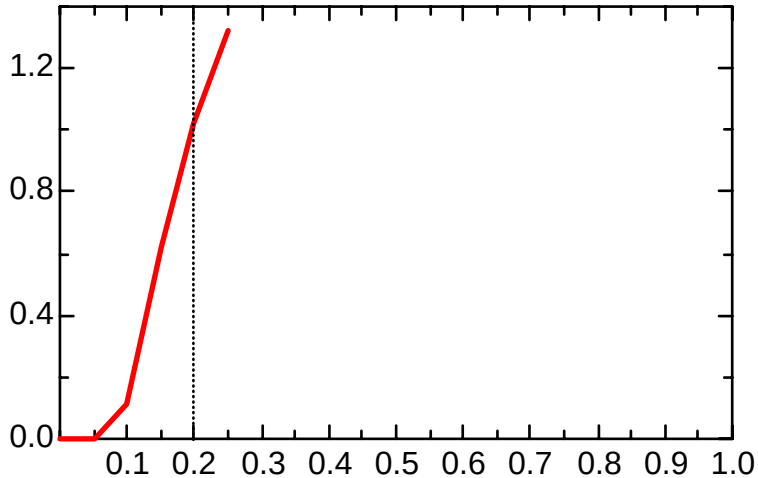

TCE: Well MWG11
60
56
52
48
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG11
0.022
0.020
0.018
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

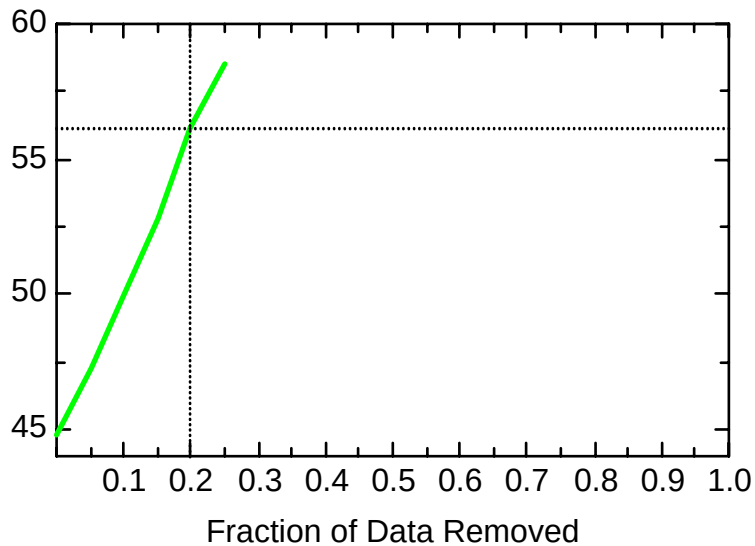
TCE: Well MWG12



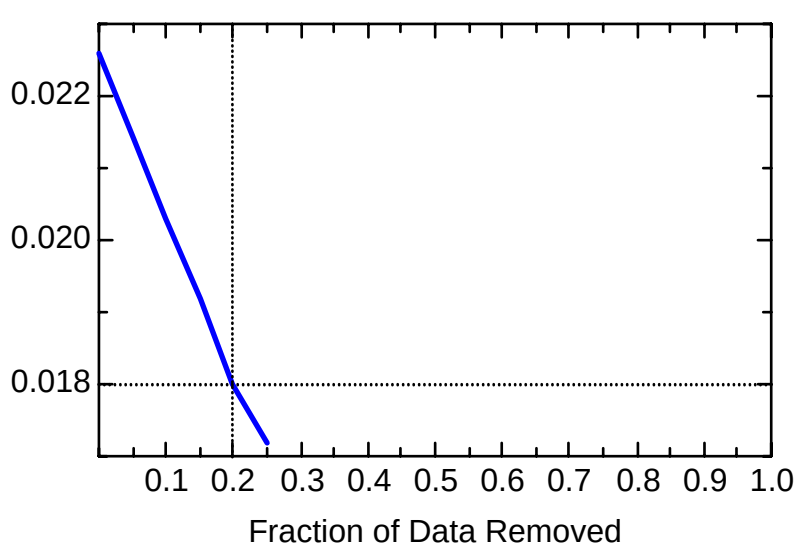
TCE: Well MWG12



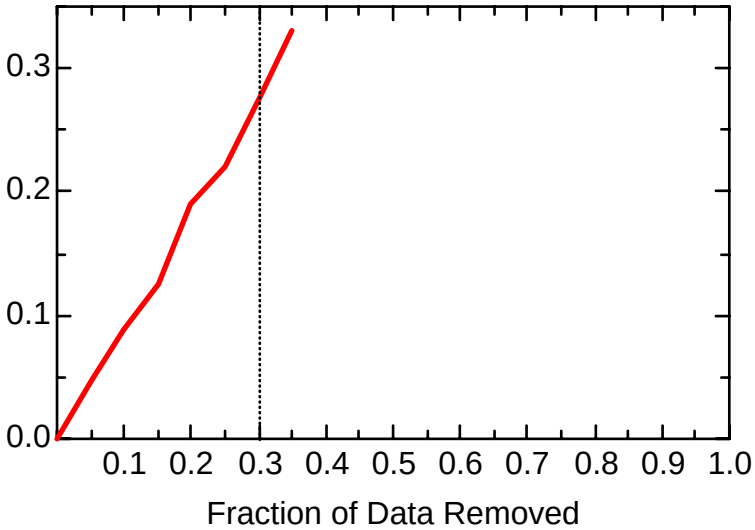
TCE: Well MWG12



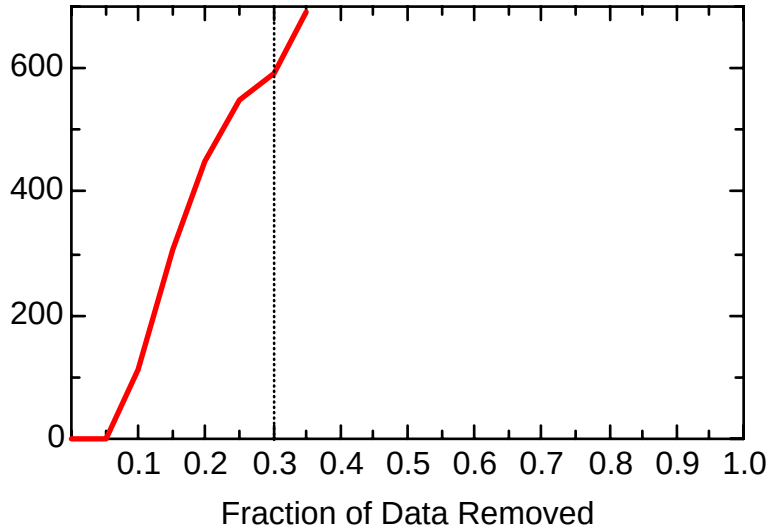
TCE: Well MWG12



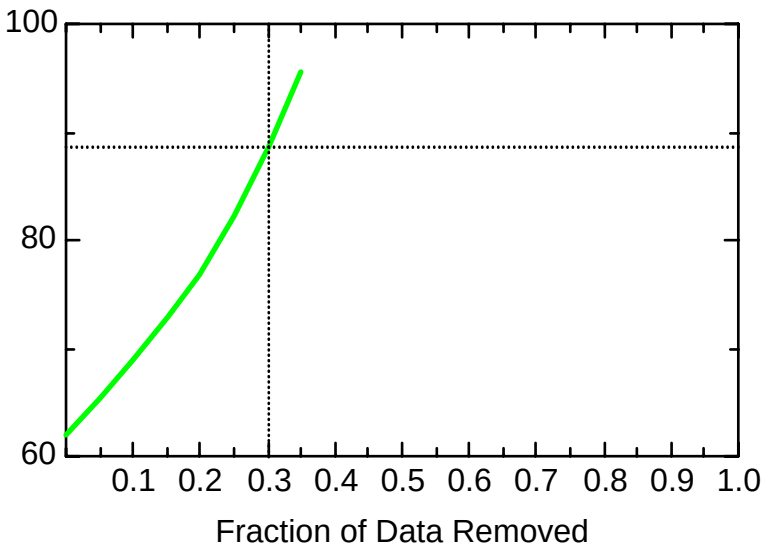
TCE: Well MWG14



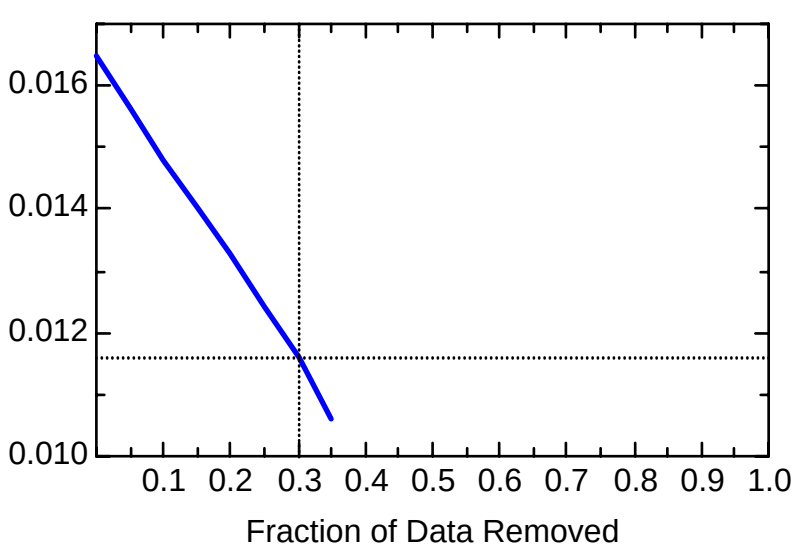
TCE: Well MWG14

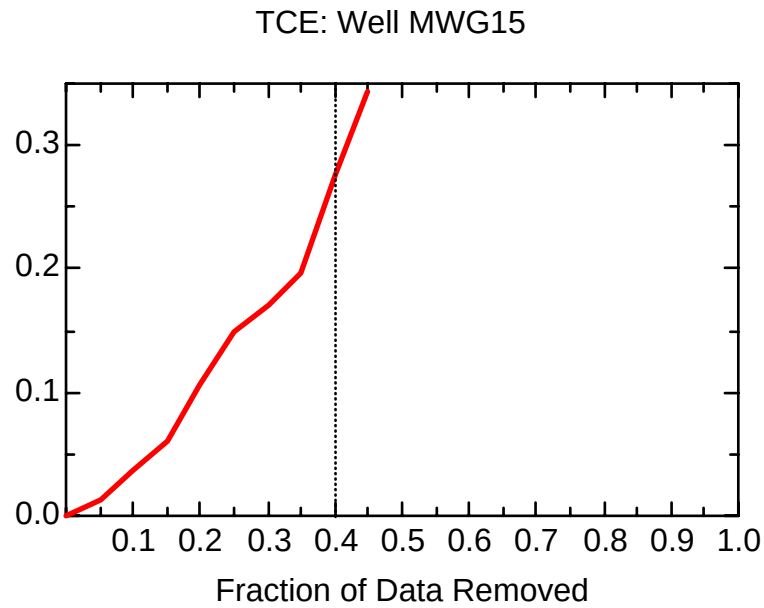


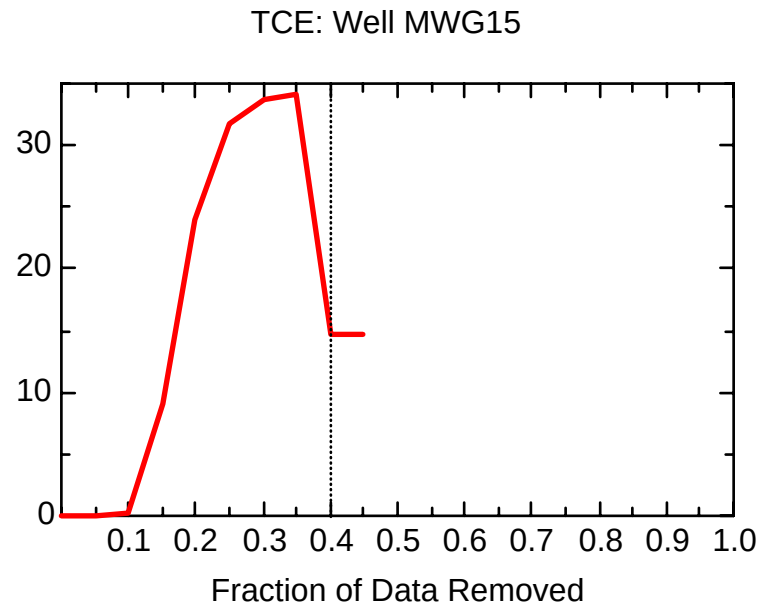
TCE: Well MWG14

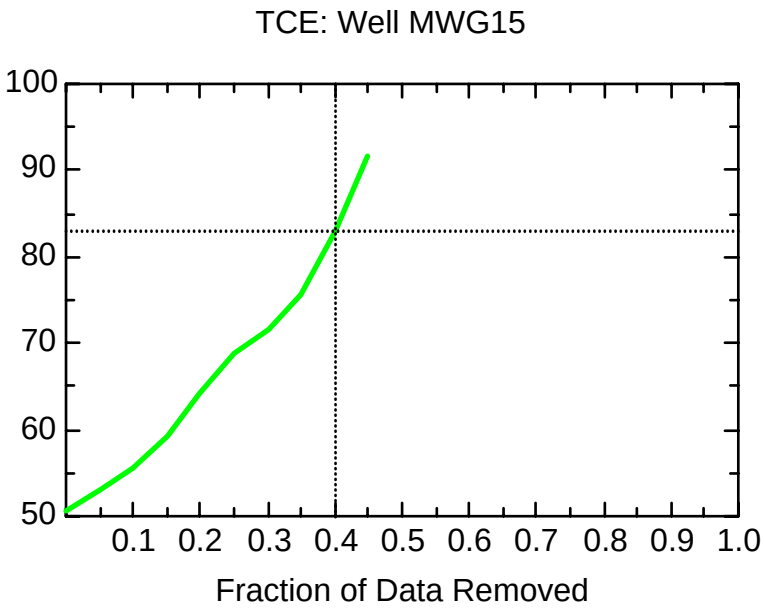


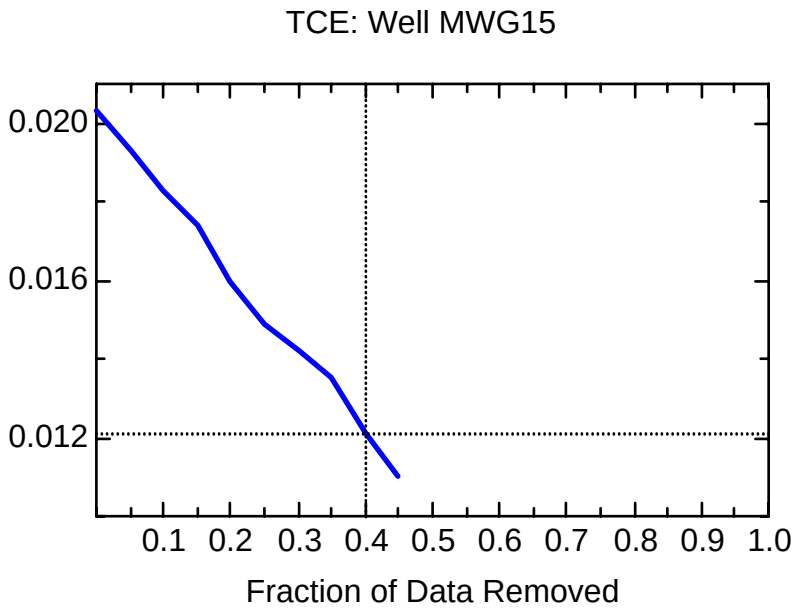
TCE: Well MWG14



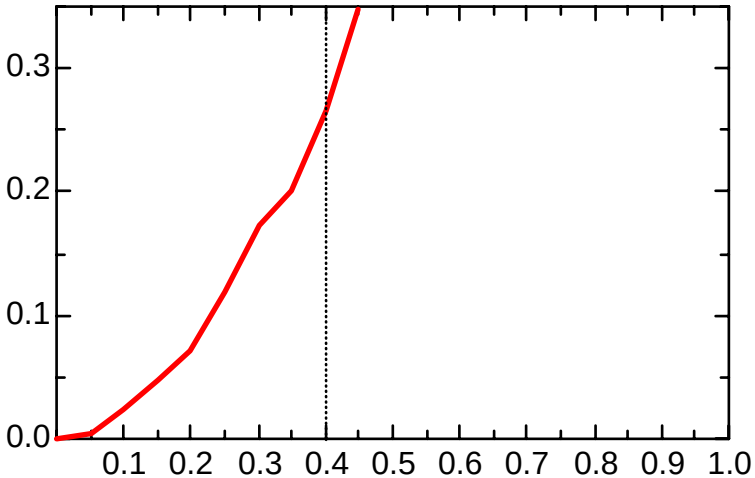

TCE: Well MWG15
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG15
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

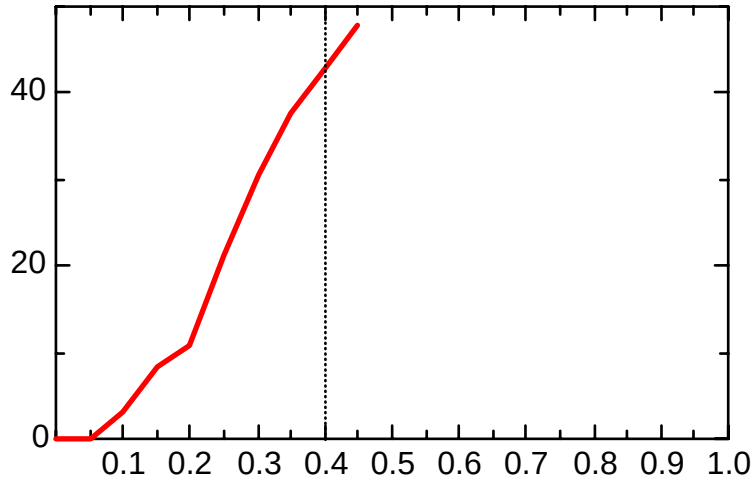

TCE: Well MWG15
100
90
80
70
60
50
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG15
0.020
0.016
0.012
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

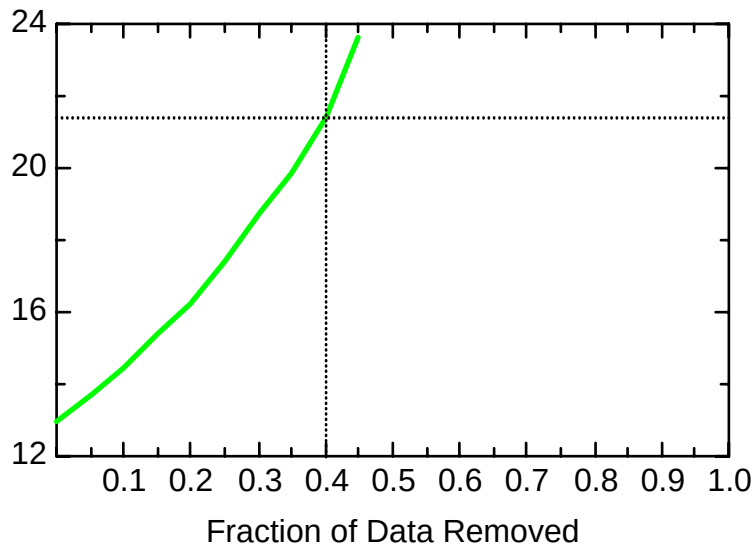
TCE: Well MWG17



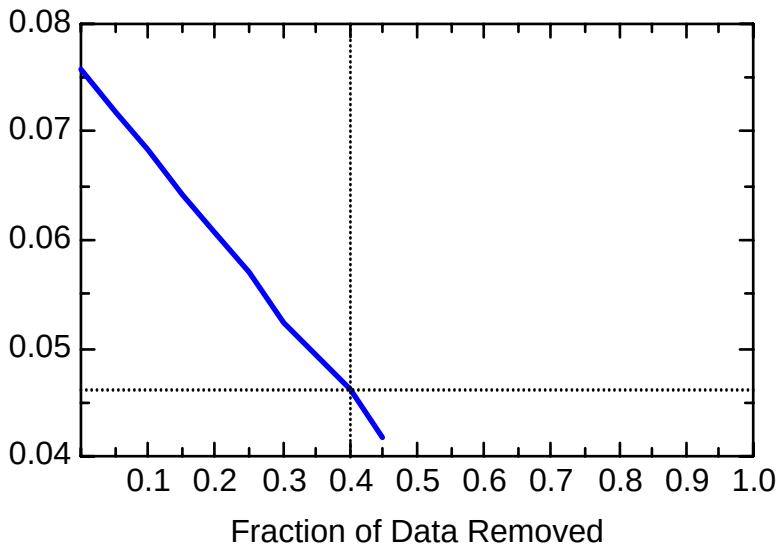
TCE: Well MWG17

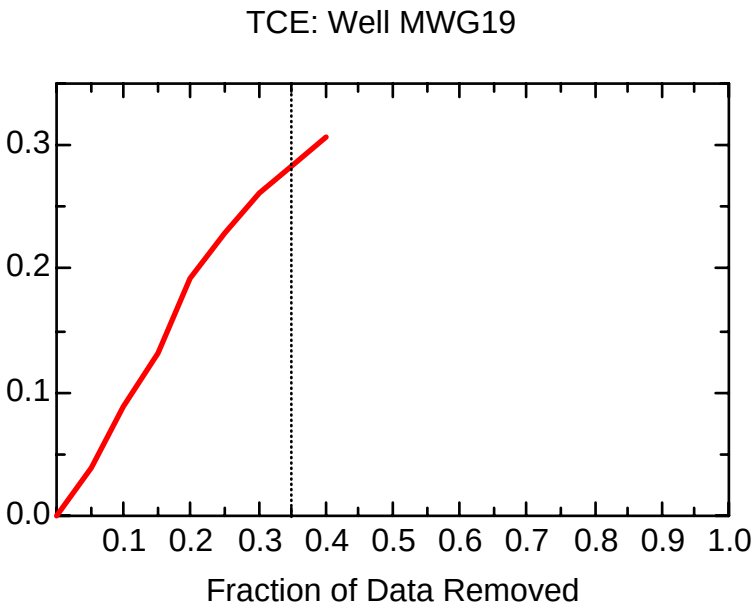


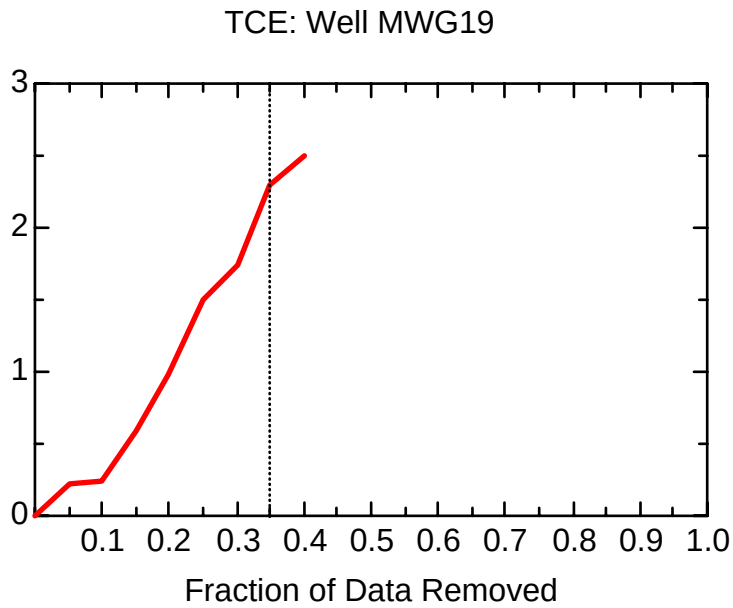
TCE: Well MWG17

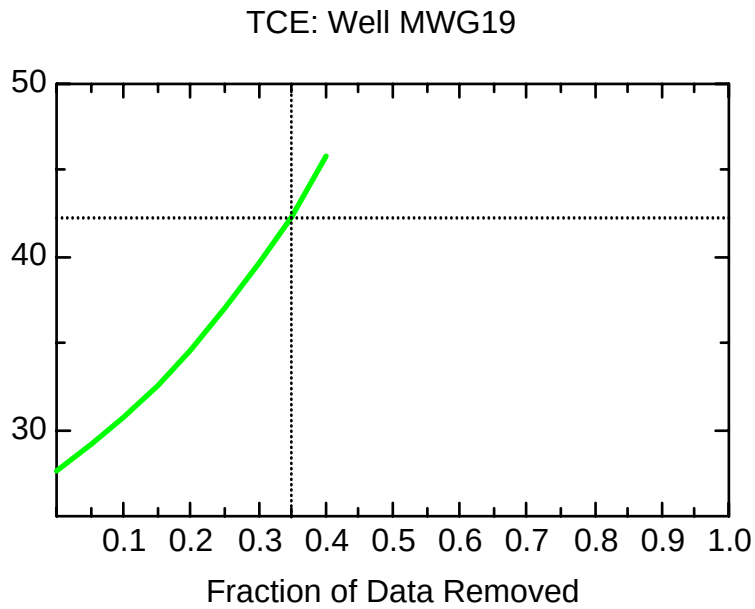


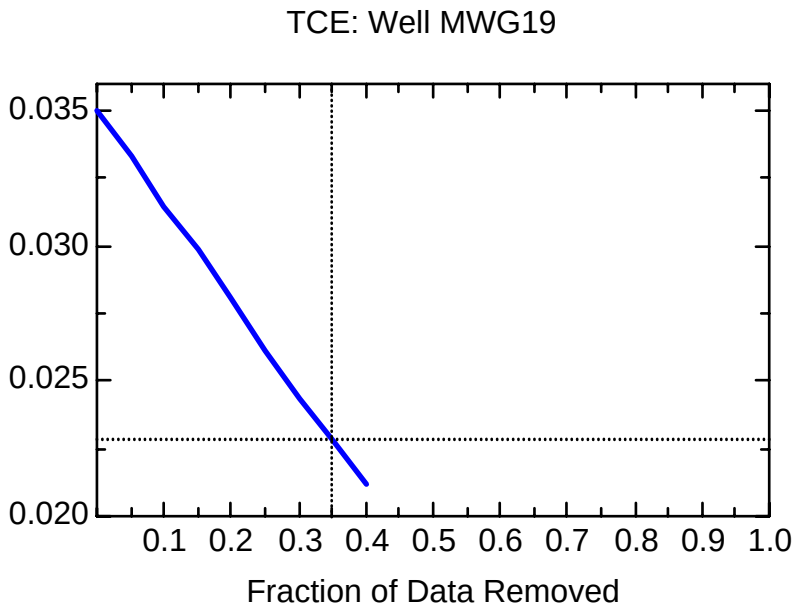
TCE: Well MWG17



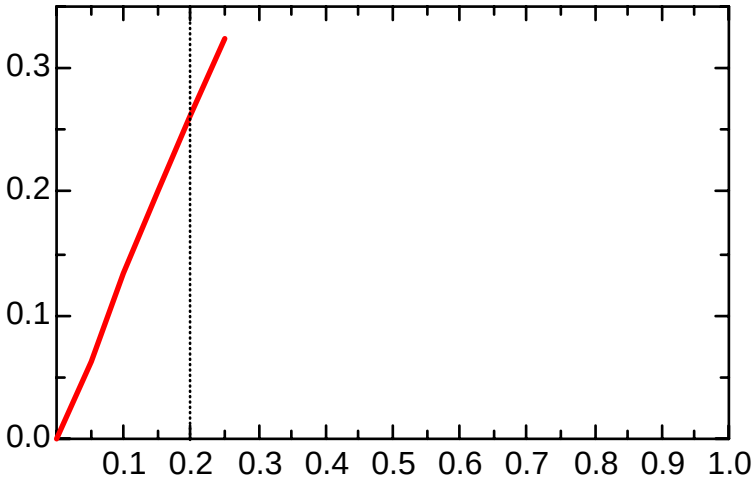

TCE: Well MWG19
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG19
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

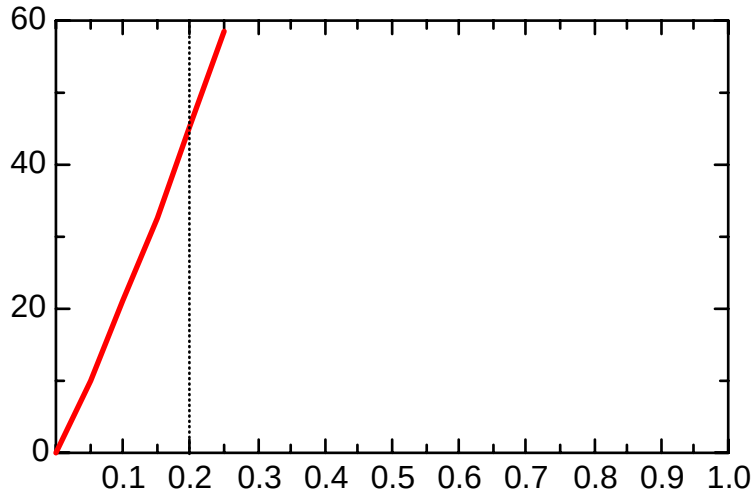

TCE: Well MWG19
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWG19
0.035
0.030
0.025
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

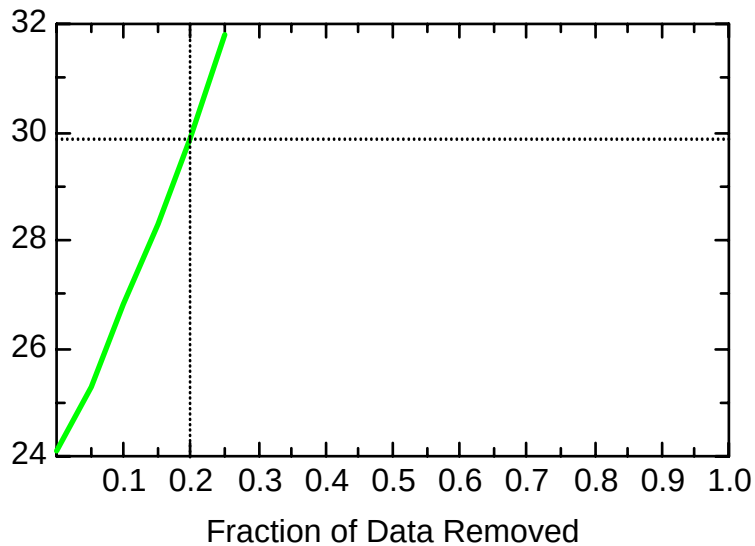
TCE: Well MWG22



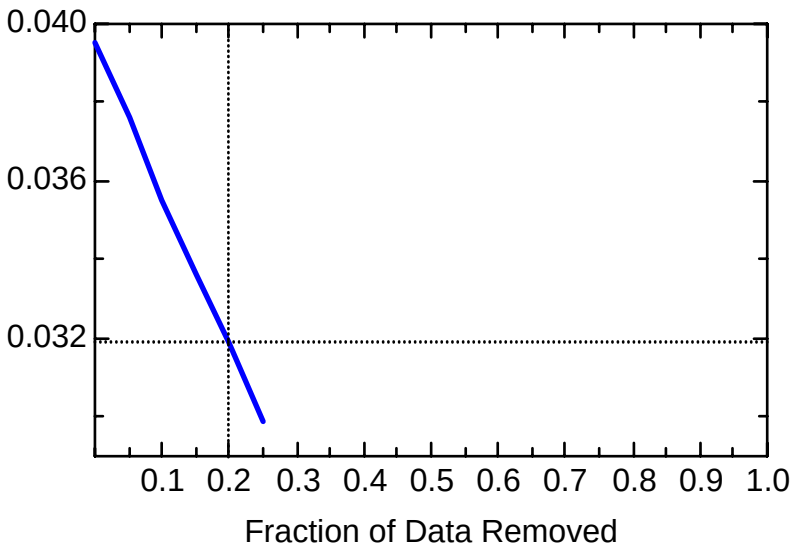
TCE: Well MWG22

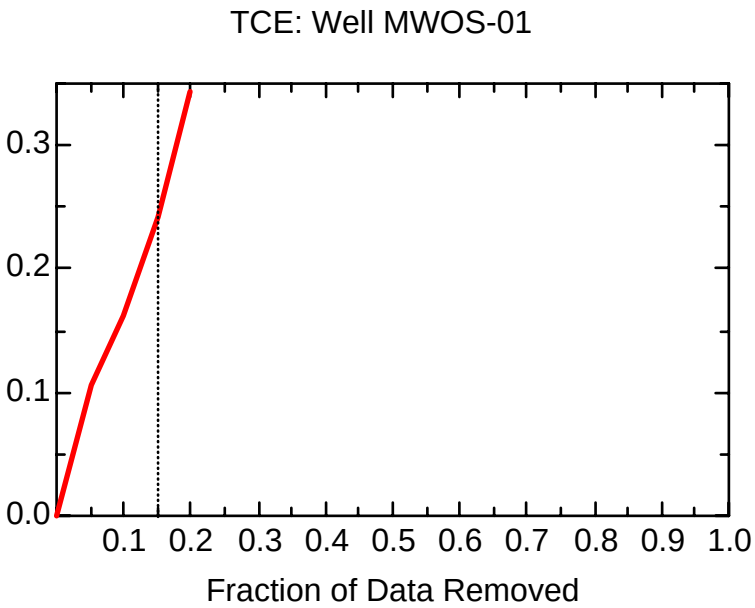


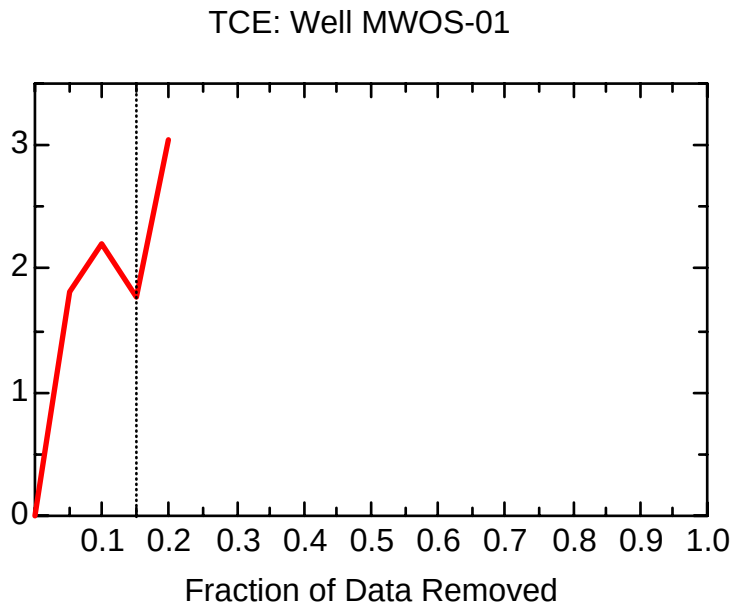
TCE: Well MWG22

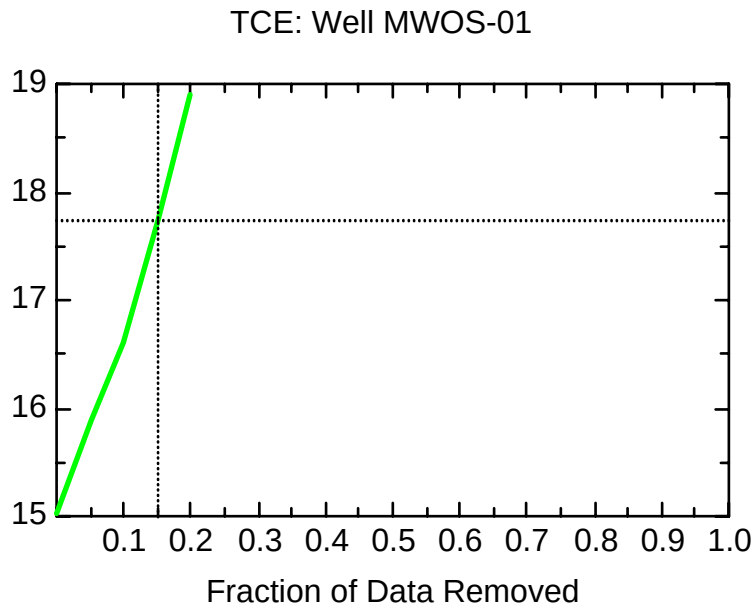


TCE: Well MWG22




TCE: Well MWOS-01
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWOS-01
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWOS-01
19
18
17
16
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
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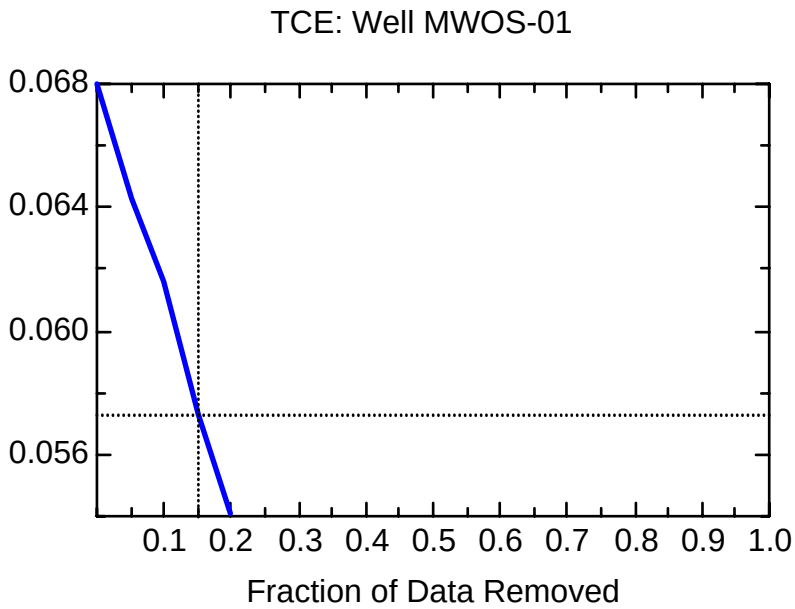
TCE: Well MWOS-01
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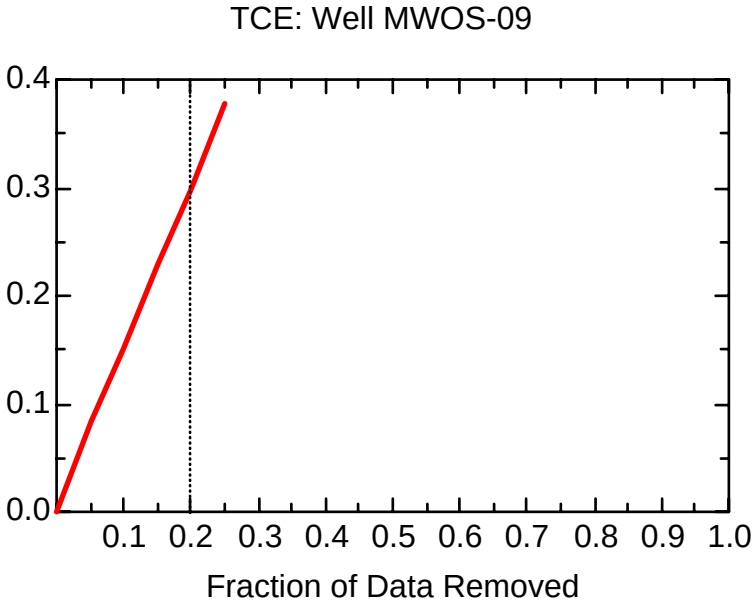
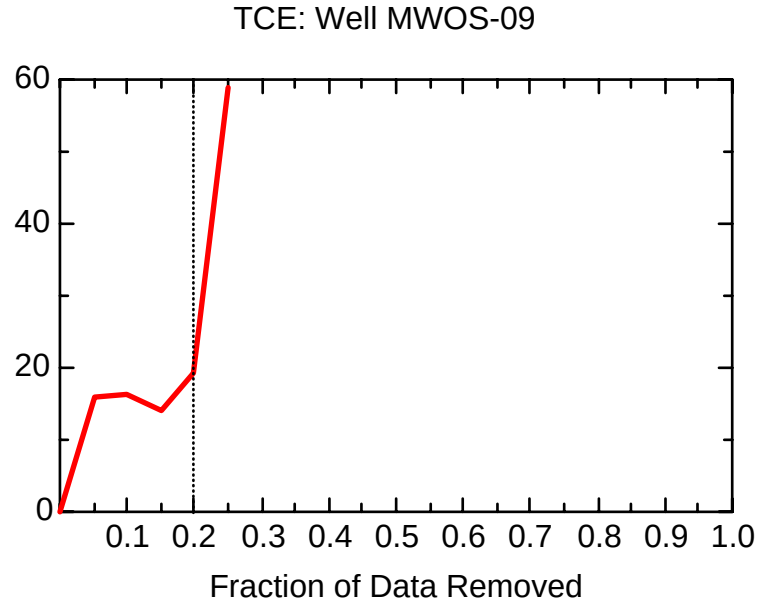
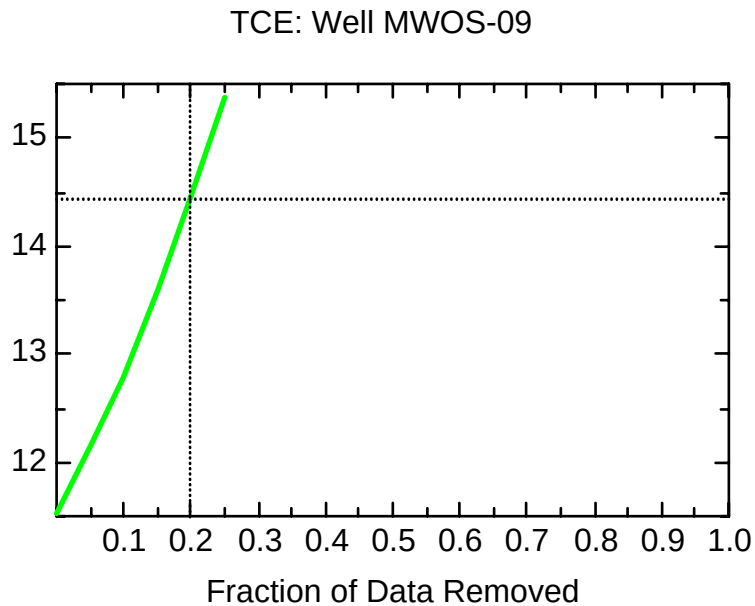
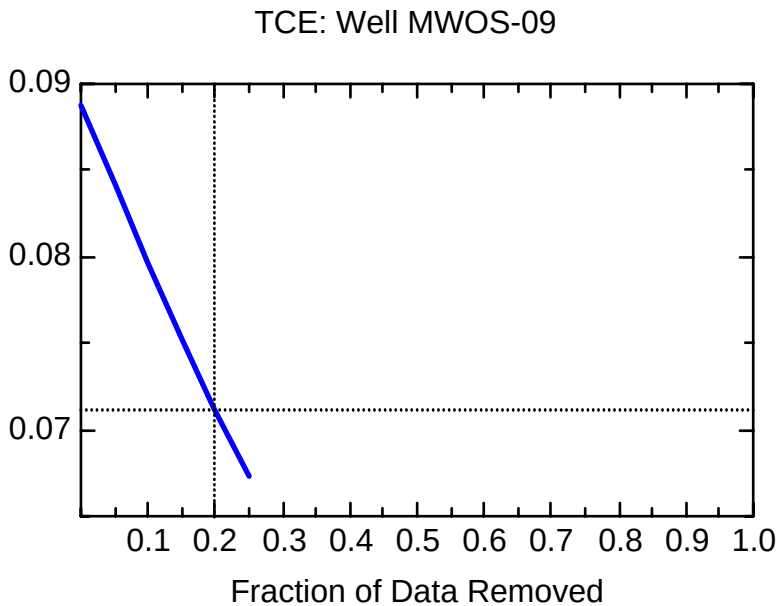
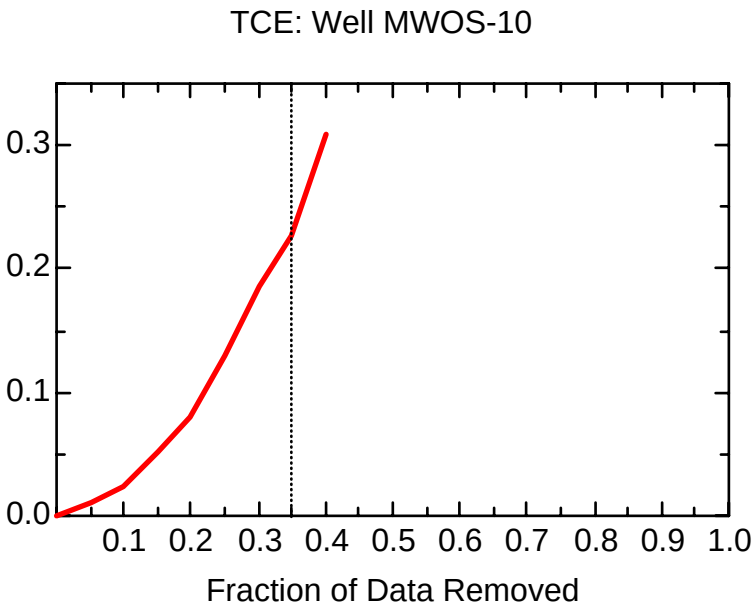
0.064
0.060
0.056
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

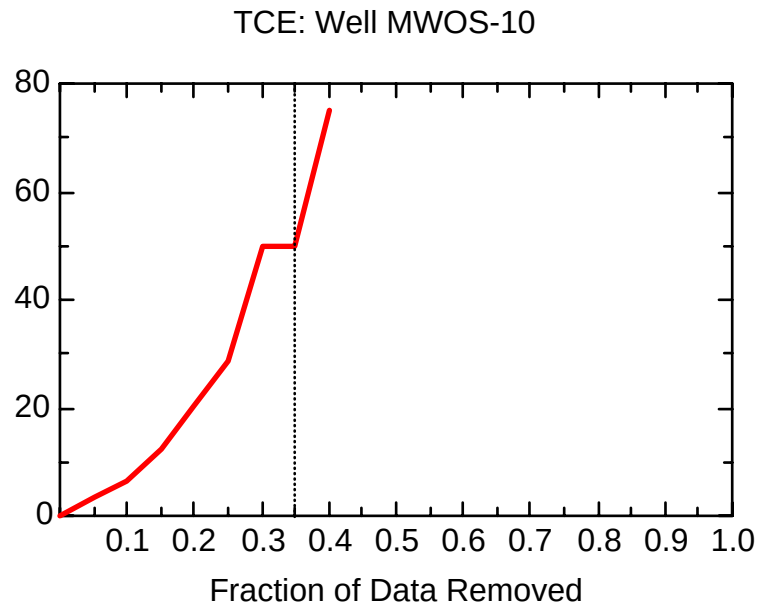

TCE: Well MWOS-09
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

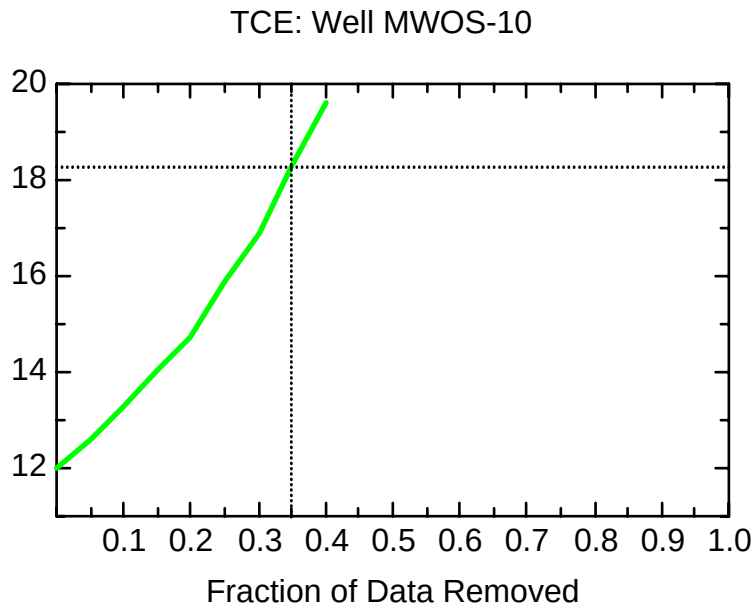

TCE: Well MWOS-09
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

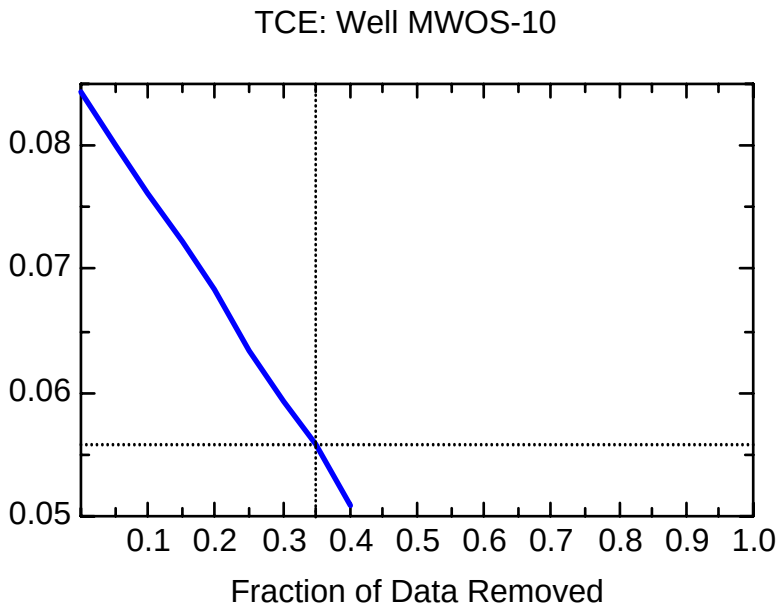

TCE: Well MWOS-09
15
14
13
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWOS-09
0.09
0.08
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

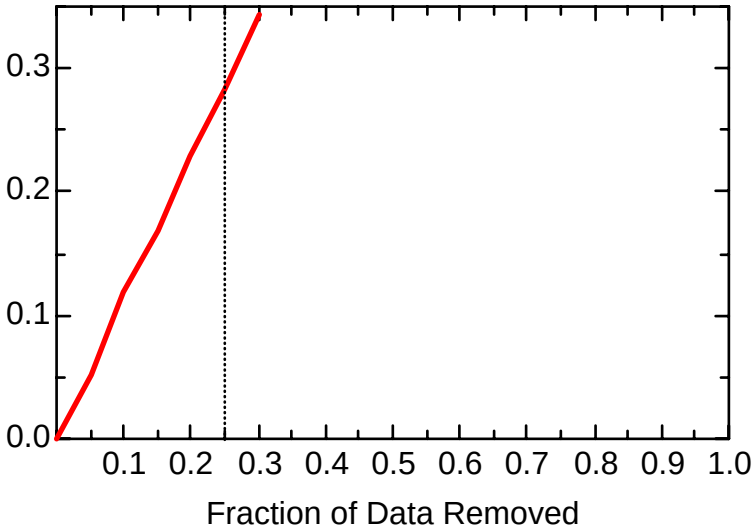

TCE: Well MWOS-10
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWOS-10
80
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

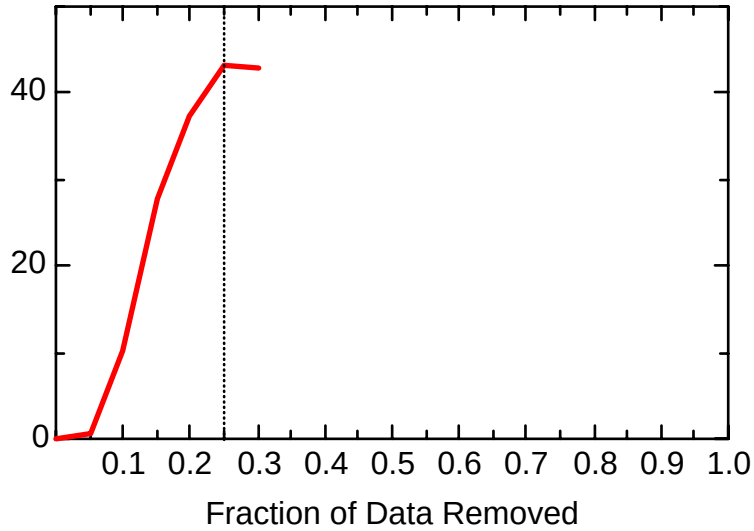

TCE: Well MWOS-10
20
18
16
14
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well MWOS-10
0.08
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

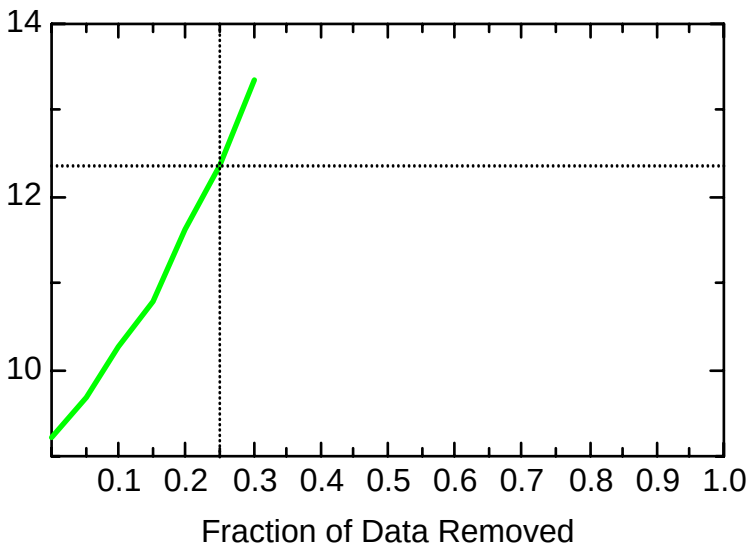
TCE: Well OB201A



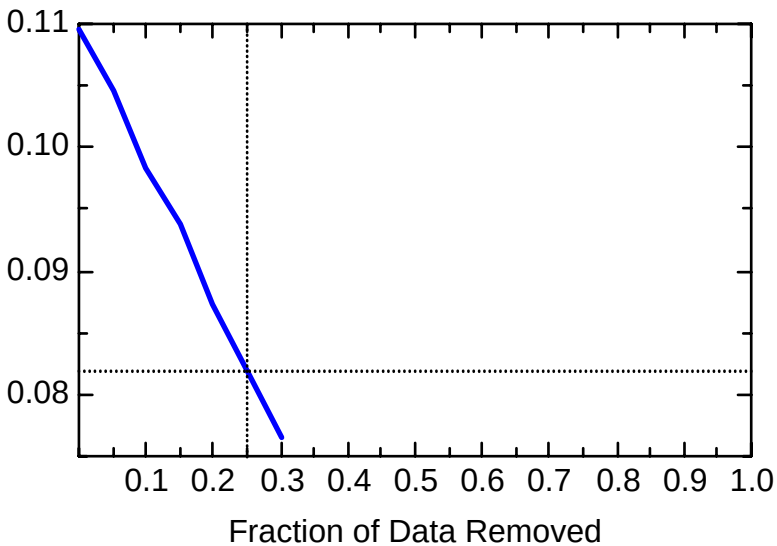
TCE: Well OB201A



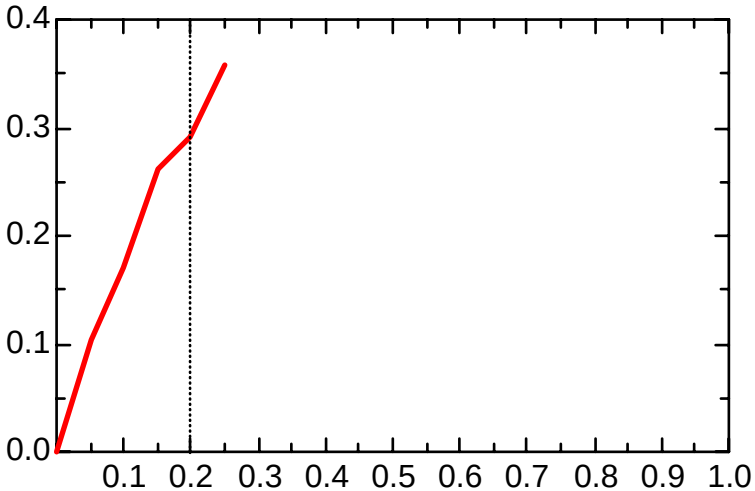
TCE: Well OB201A



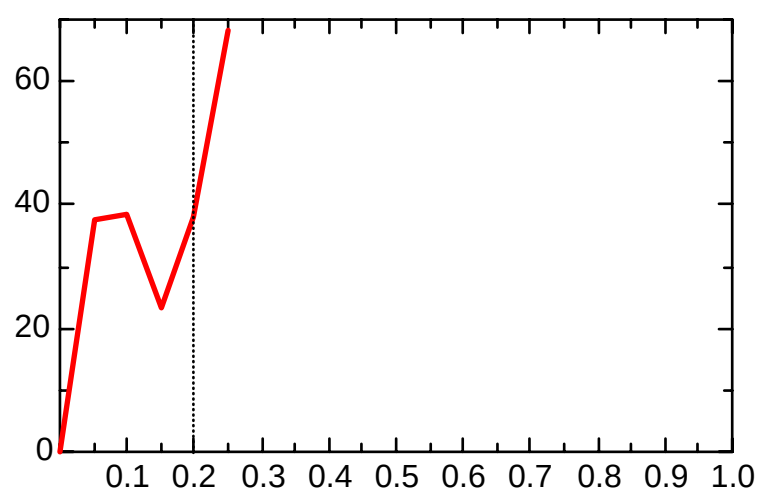
TCE: Well OB201A



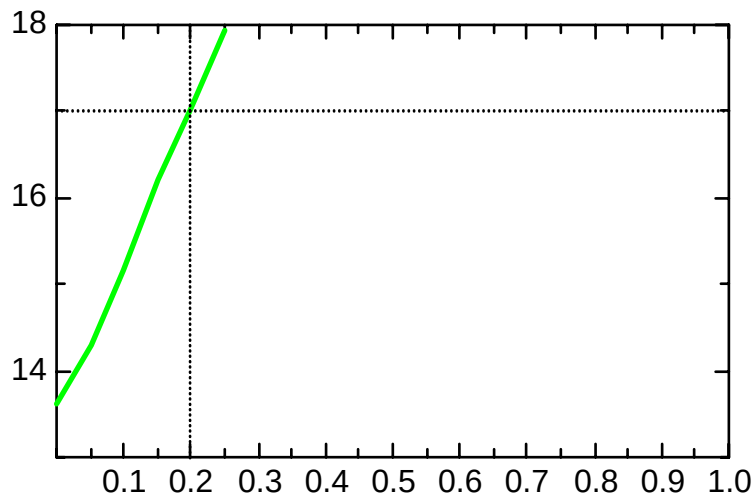
TCE: Well OB204B



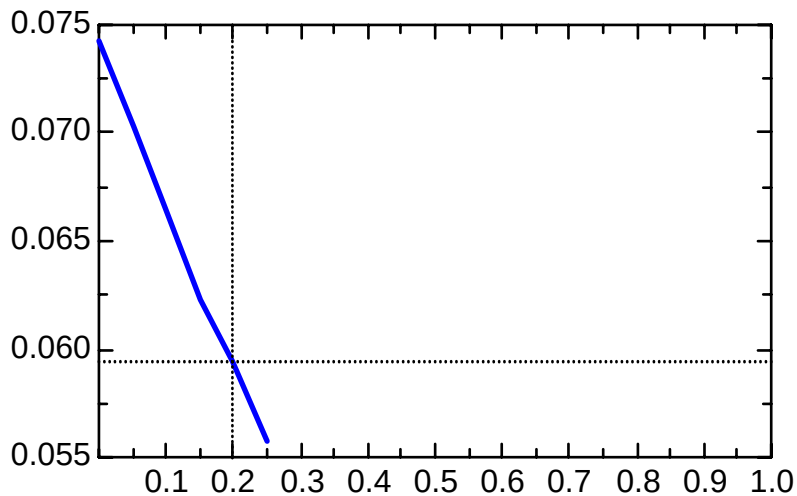
TCE: Well OB204B

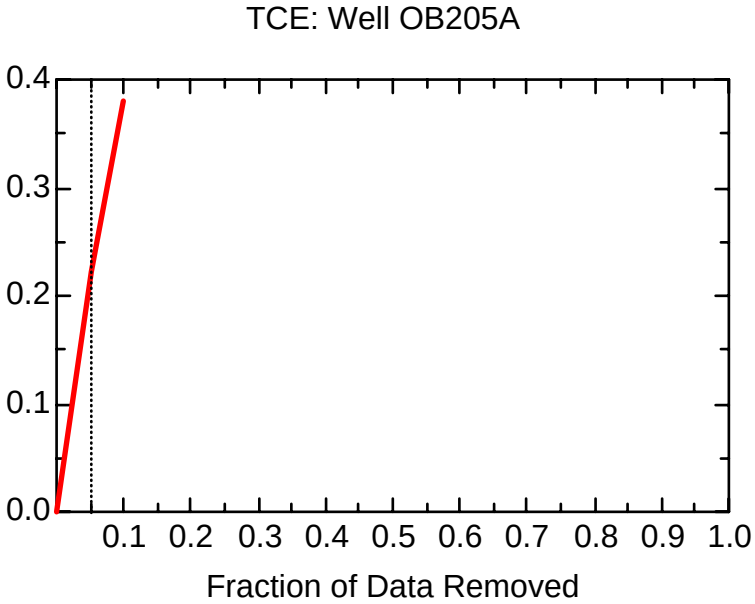


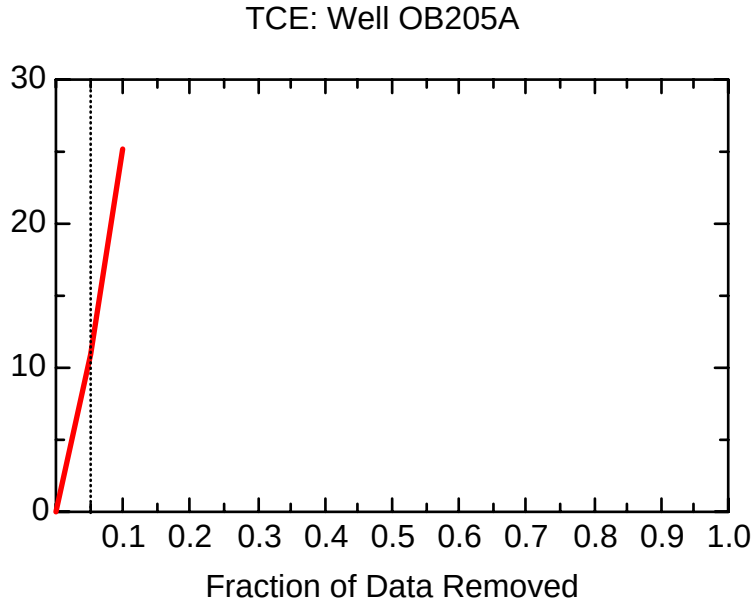
TCE: Well OB204B



TCE: Well OB204B




TCE: Well OB205A
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well OB205A
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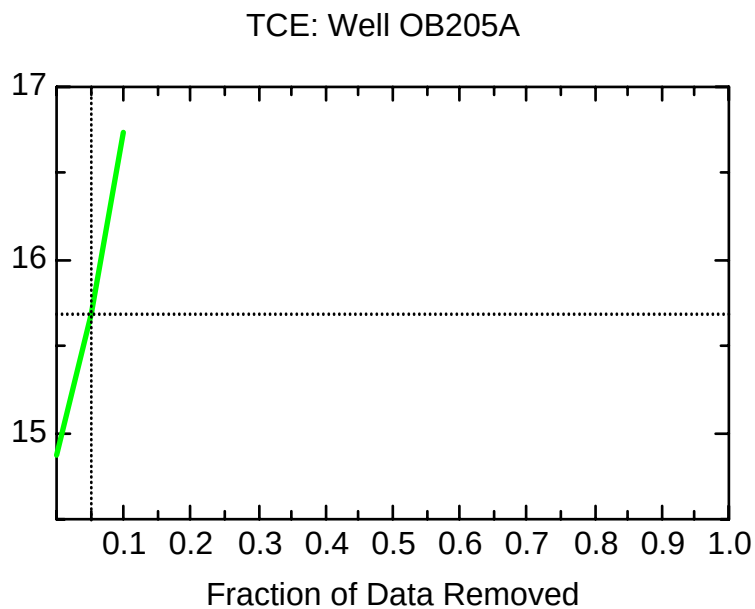
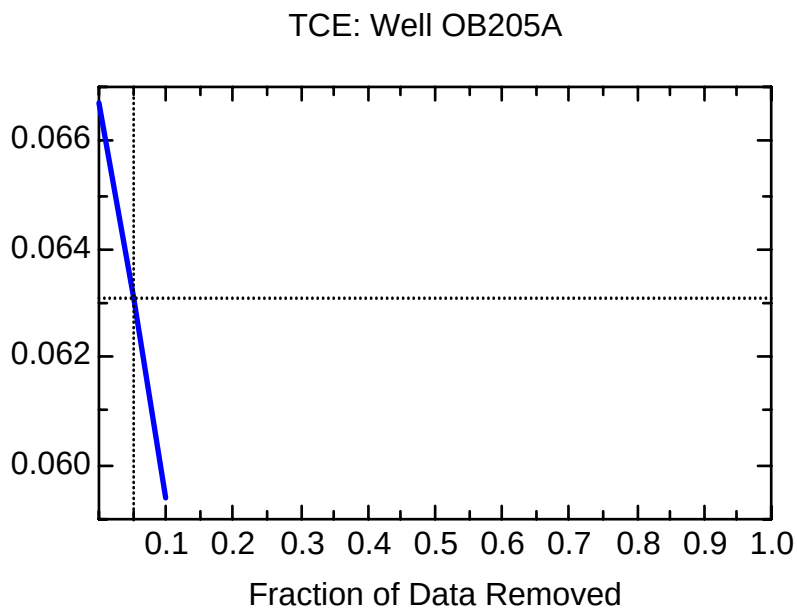
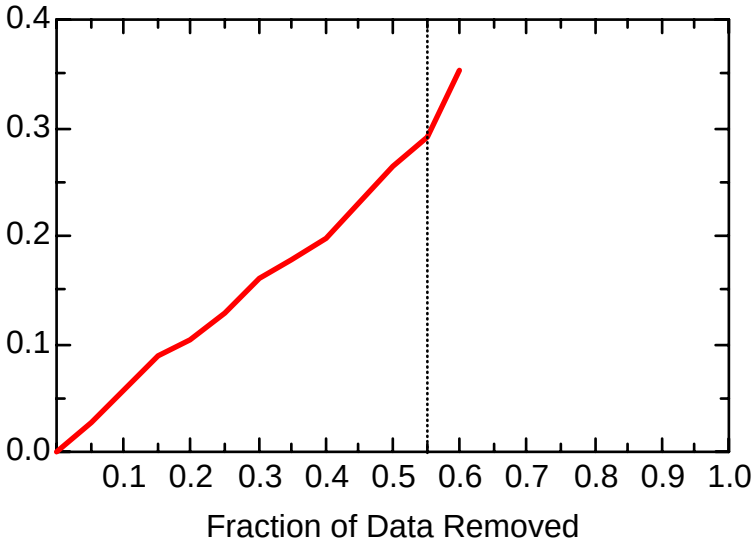
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

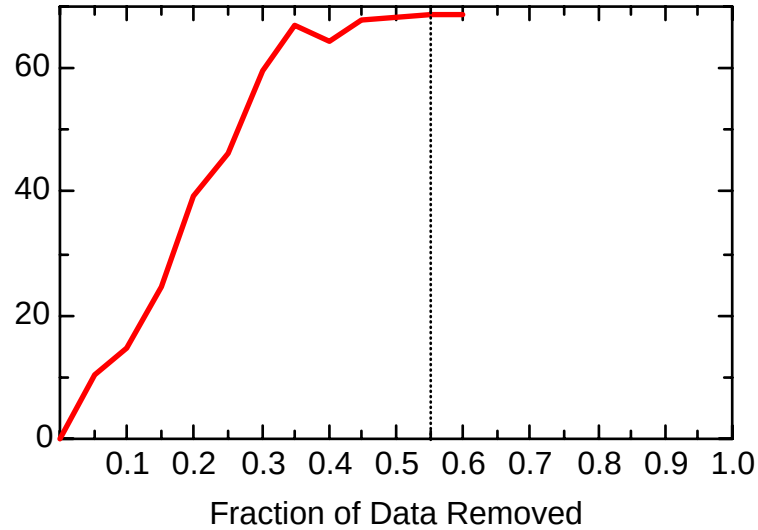

TCE: Well OB205A
17
16
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well OB205A
0.066
0.064
0.062
0.060
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

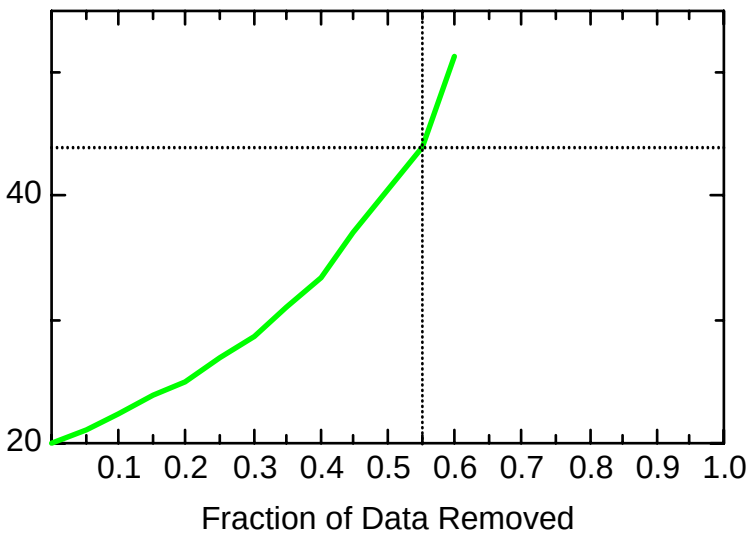
TCE: Well OB208A



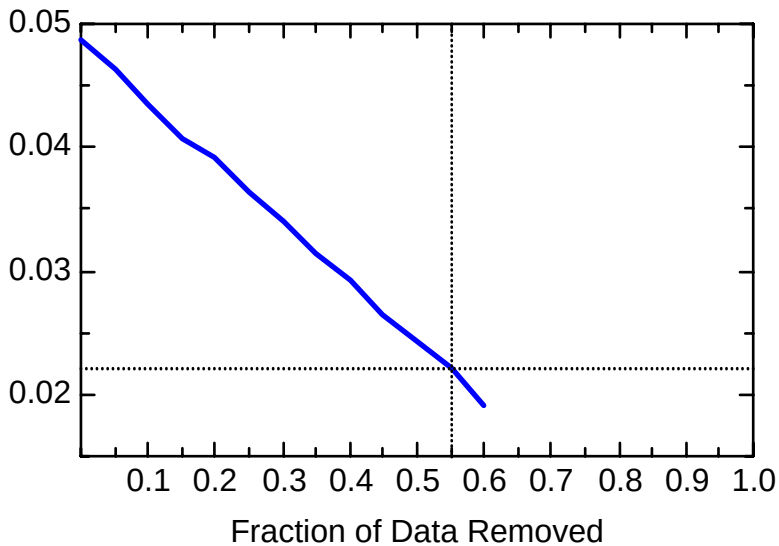
TCE: Well OB208A



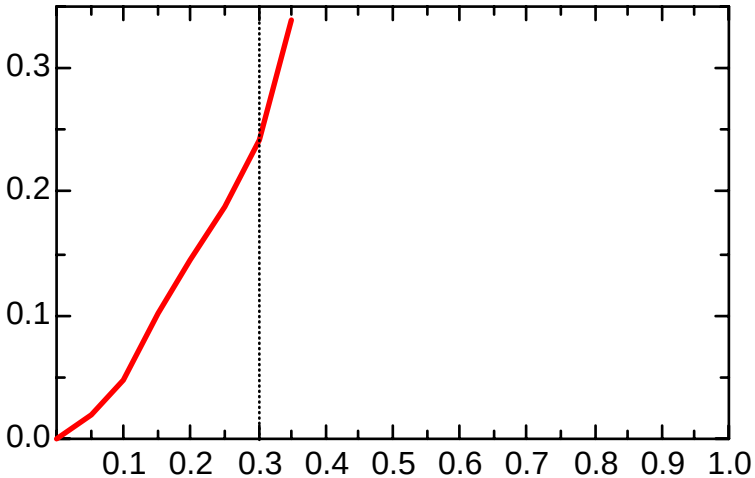
TCE: Well OB208A



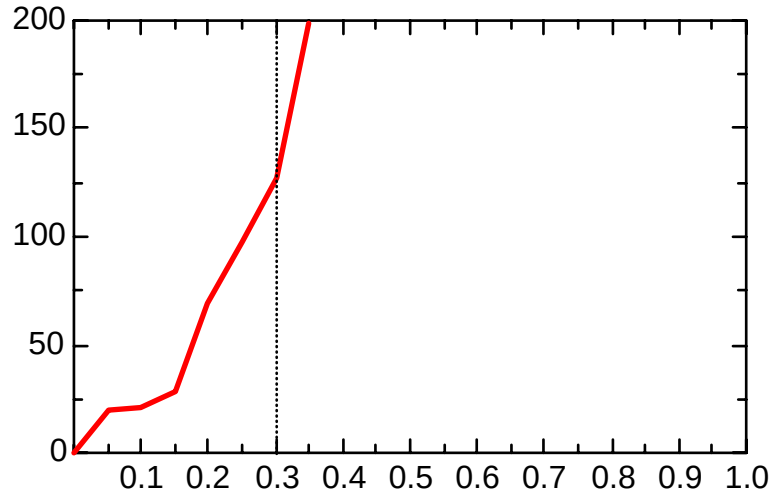
TCE: Well OB208A



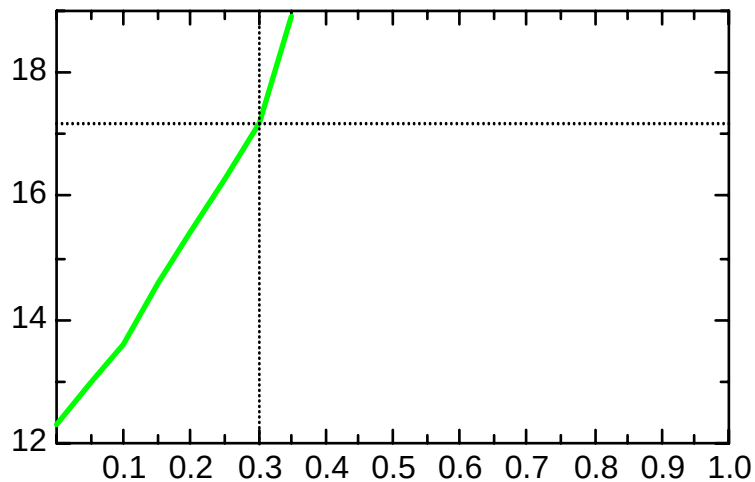
TCE: Well OB208C



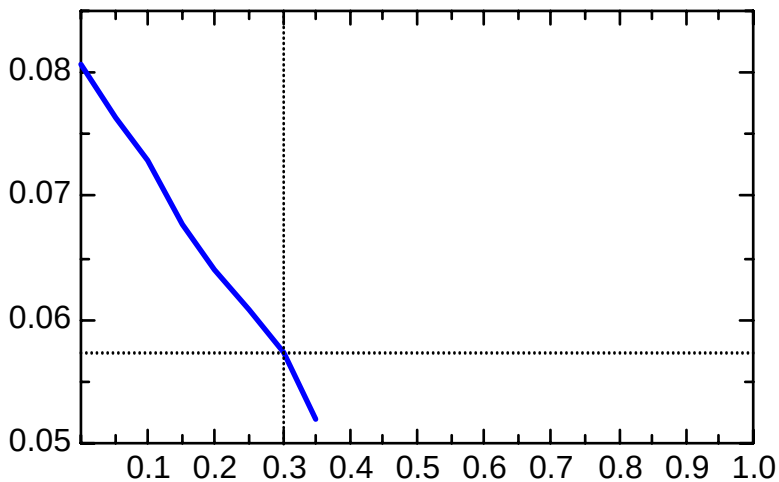
TCE: Well OB208C

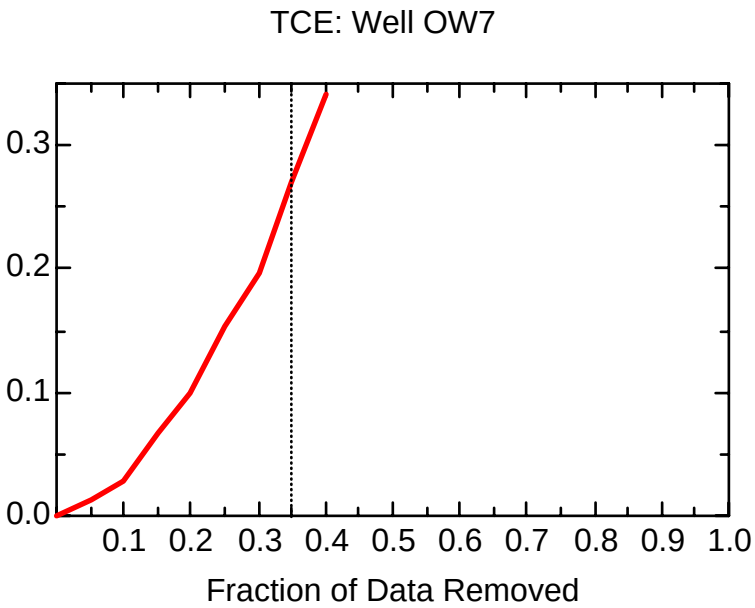


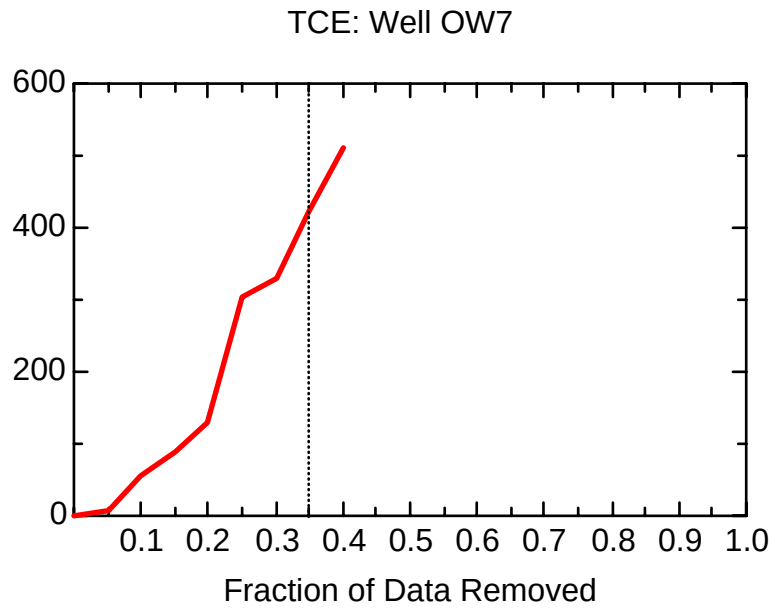
TCE: Well OB208C

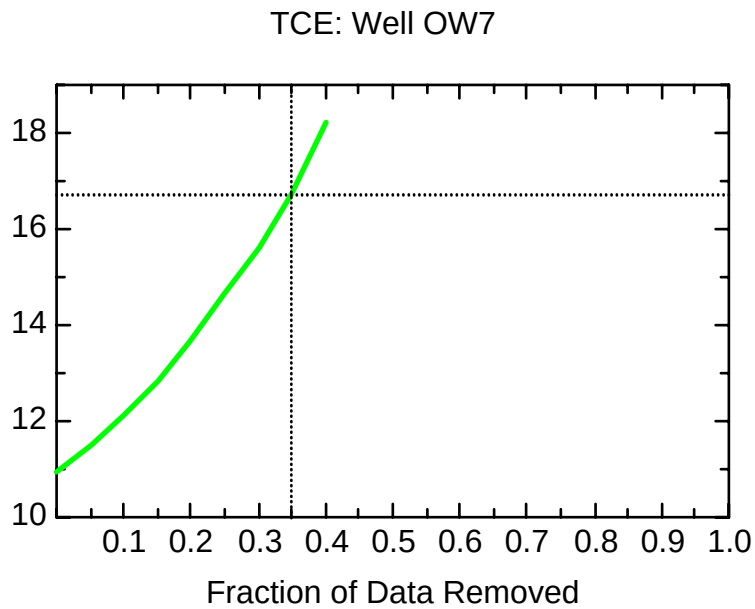


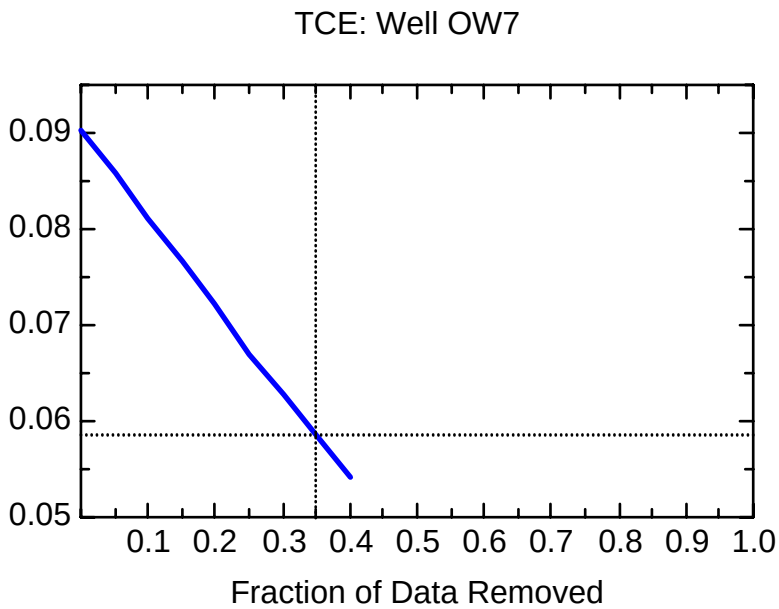
TCE: Well OB208C

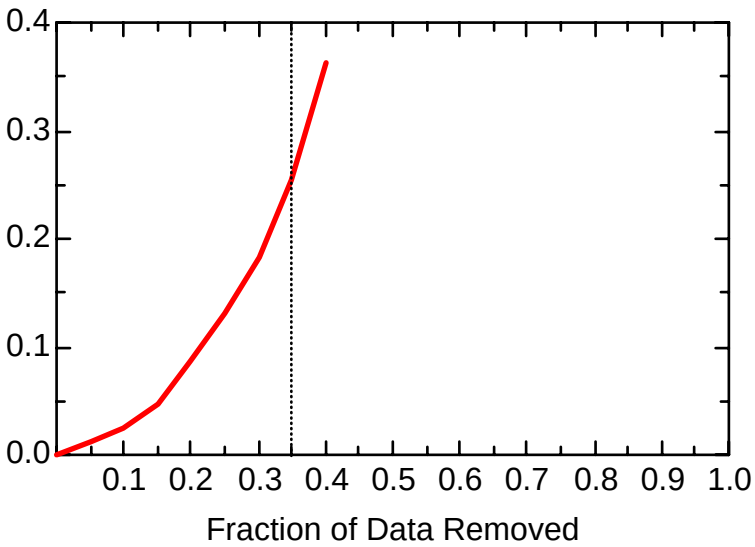


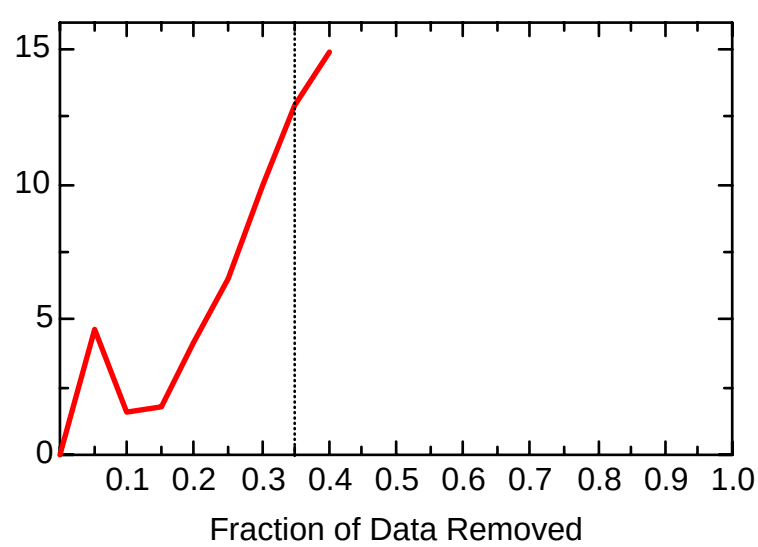

TCE: Well OW7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

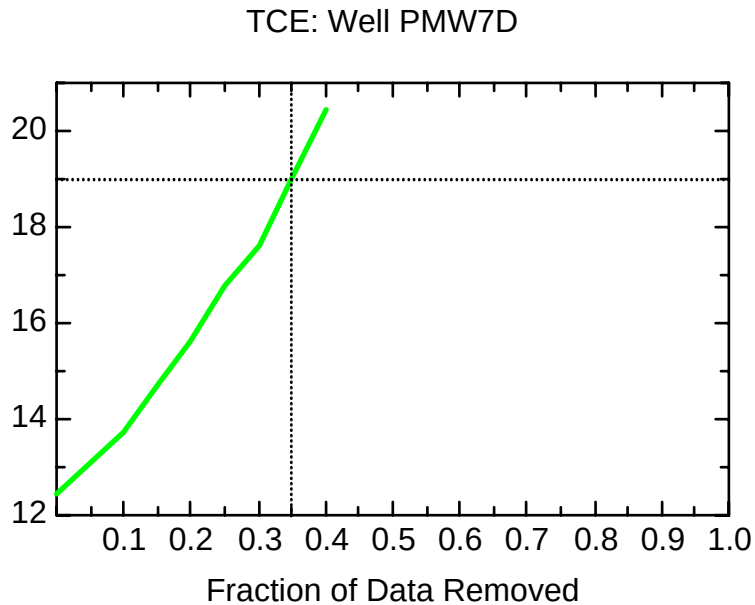

TCE: Well OW7
600
400
200
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

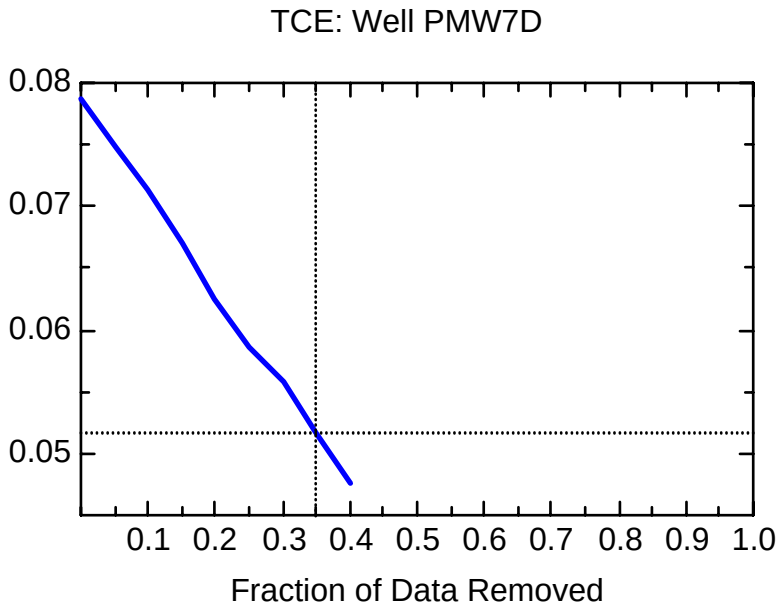

TCE: Well OW7
18
16
14
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well OW7
0.09
0.08
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

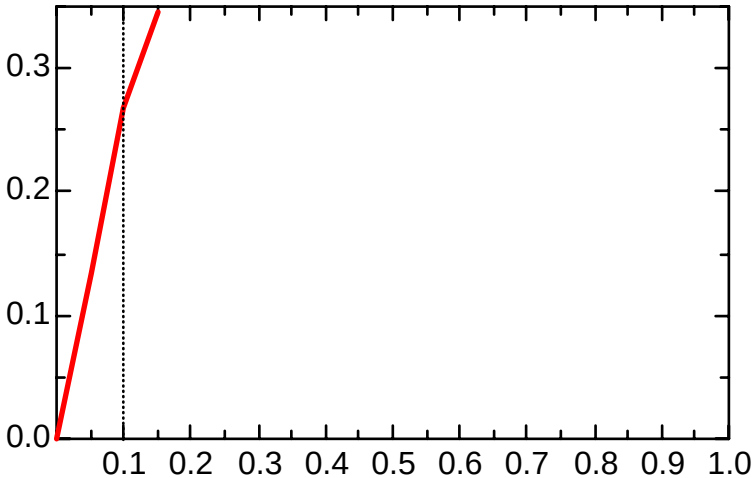

TCE: Well PMW7D
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well PMW7D
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

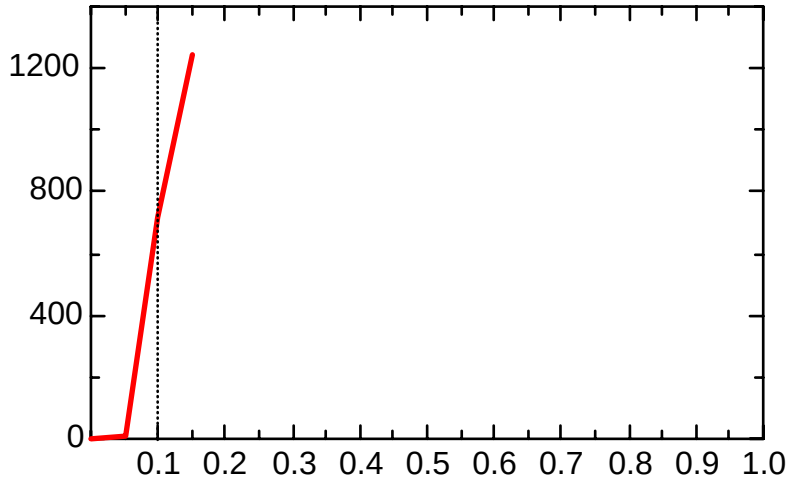

TCE: Well PMW7D
20
18
16
14
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well PMW7D
0.08
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

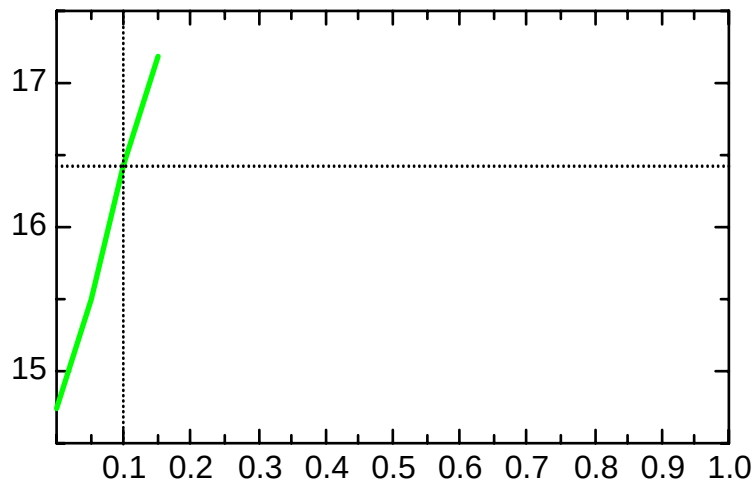
TCE: Well PZ-1A



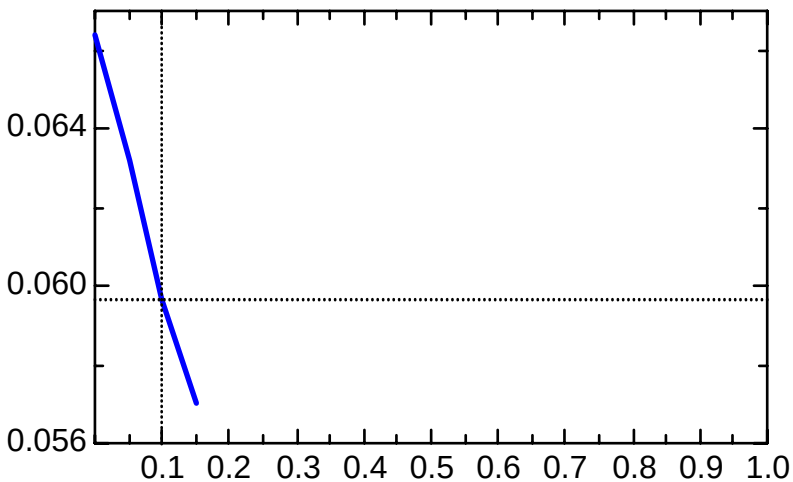
TCE: Well PZ-1A

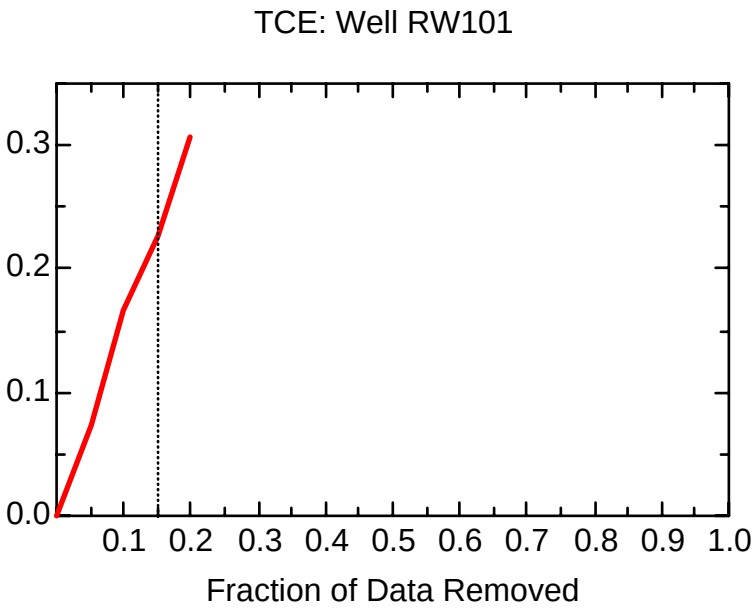


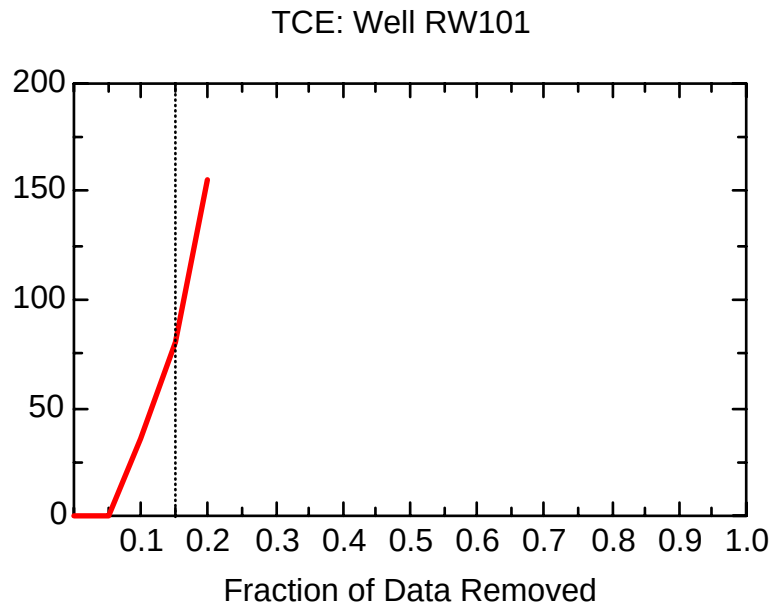
TCE: Well PZ-1A

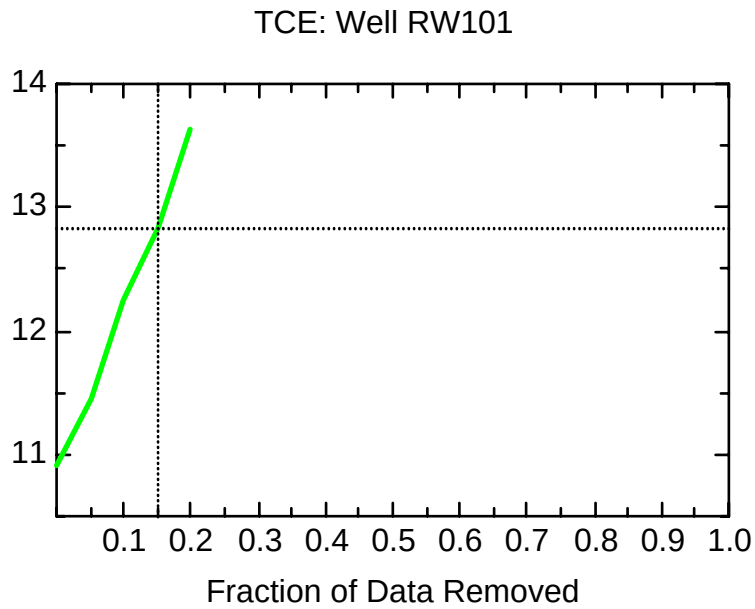


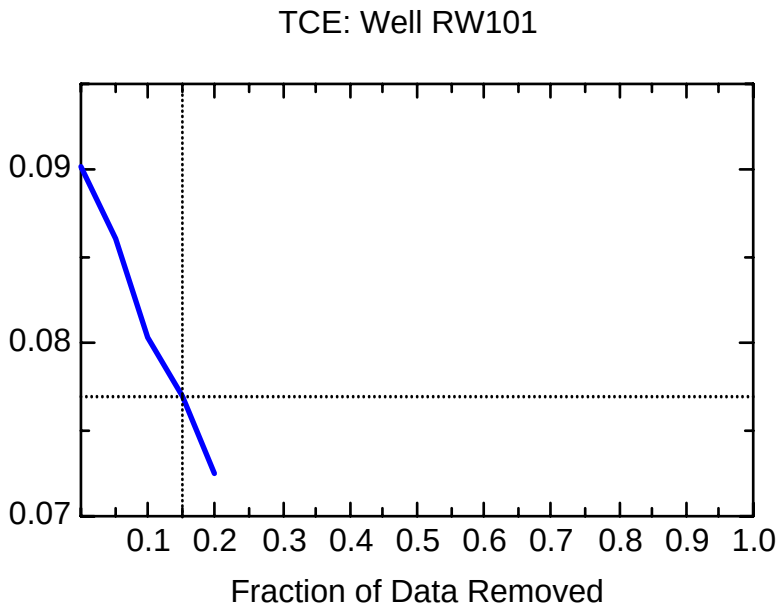
TCE: Well PZ-1A



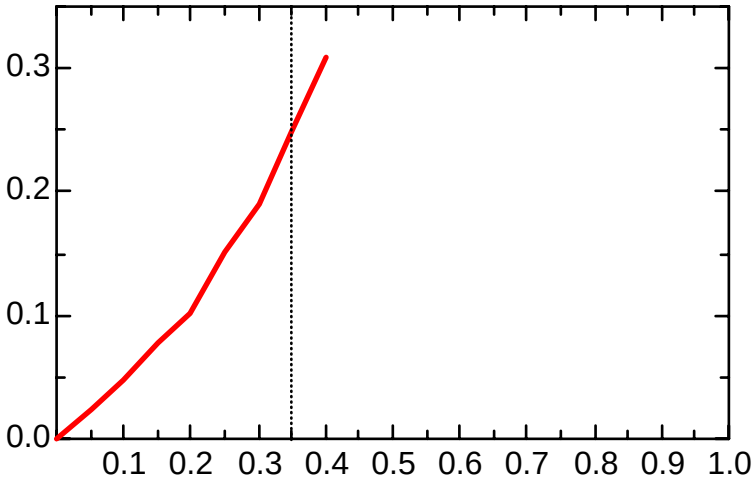

TCE: Well RW101
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW101
200
150
100
50
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

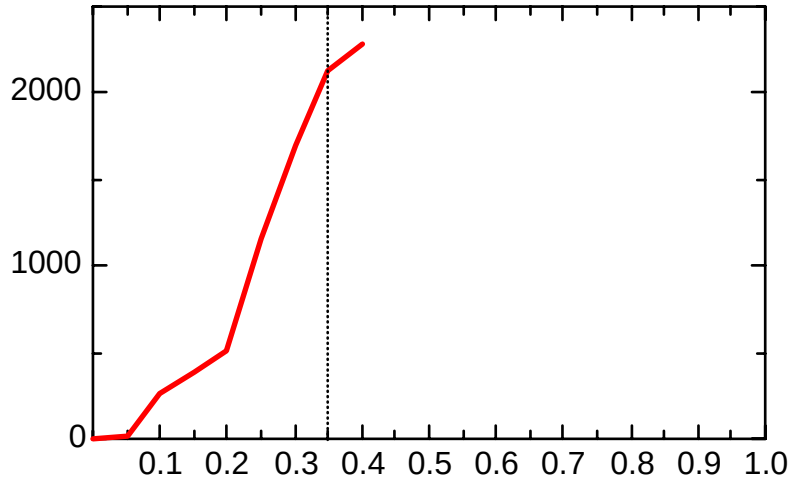

TCE: Well RW101
14
13
12
11
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW101
0.09
0.08
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

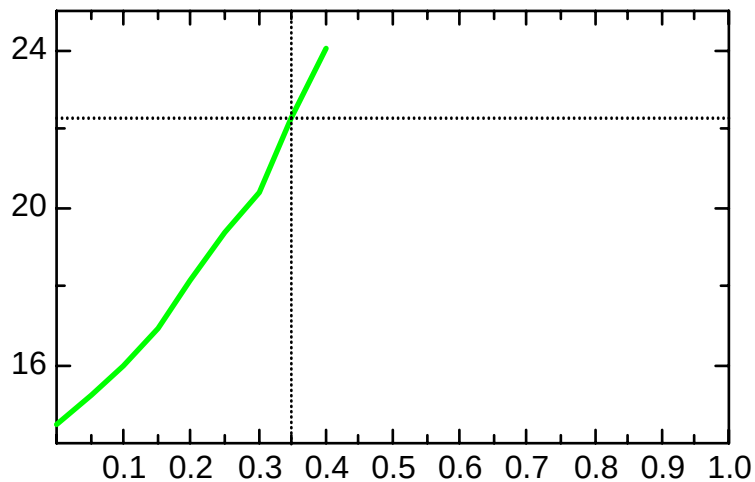
TCE: Well RW102C



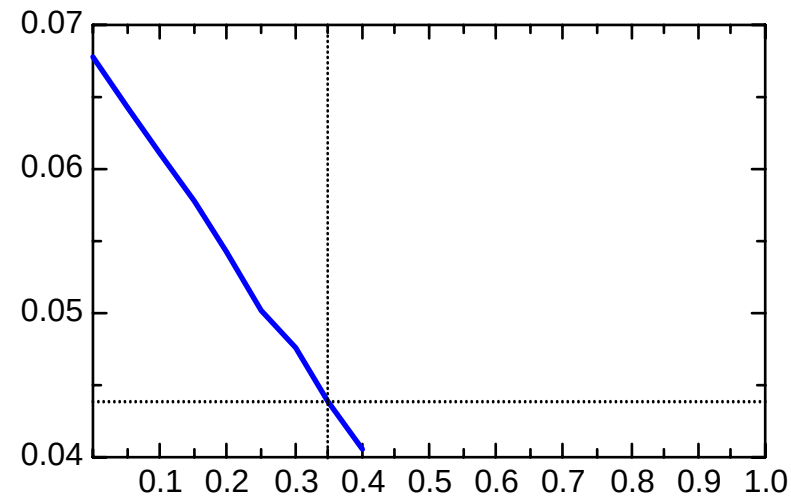
TCE: Well RW102C



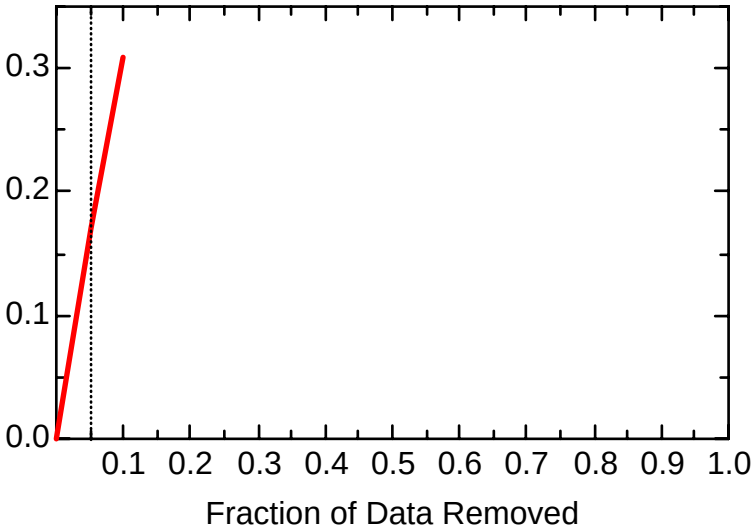
TCE: Well RW102C



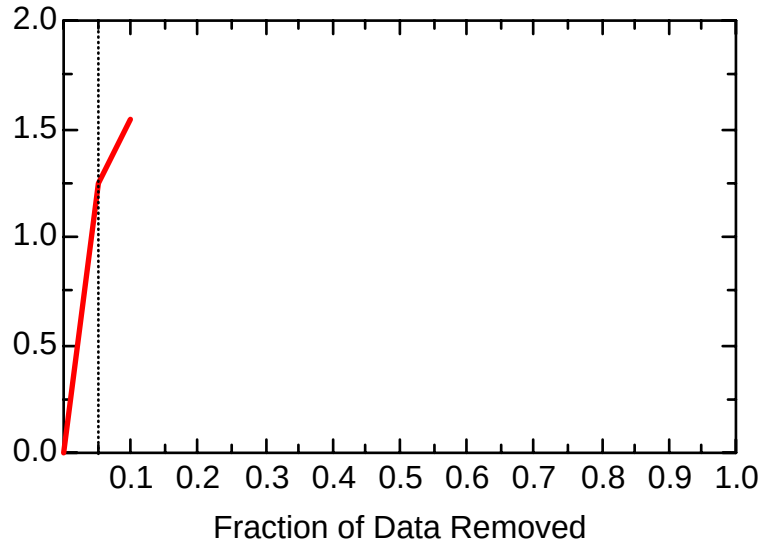
TCE: Well RW102C



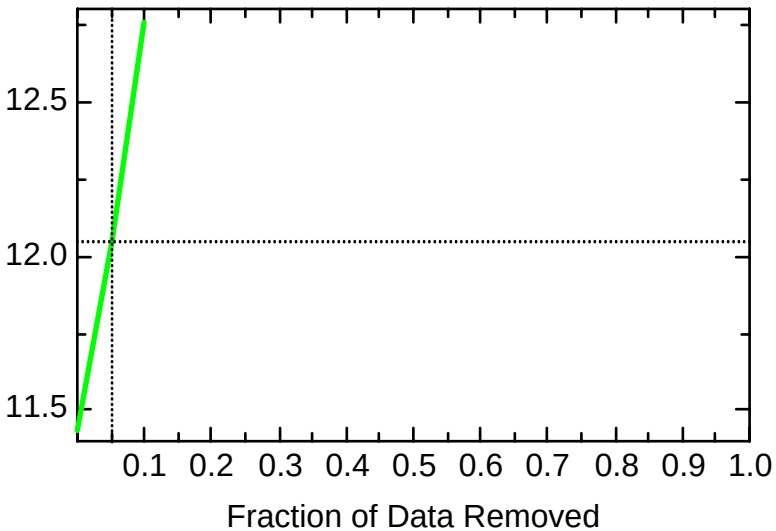
TCE: Well RW103



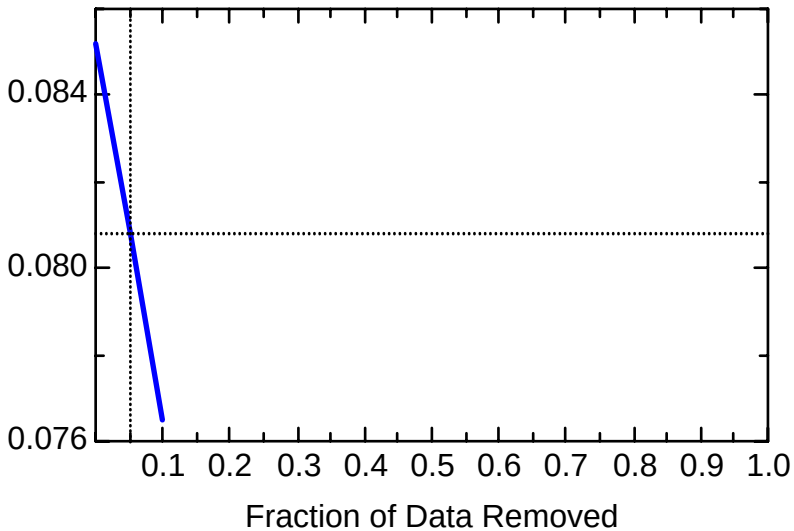
TCE: Well RW103



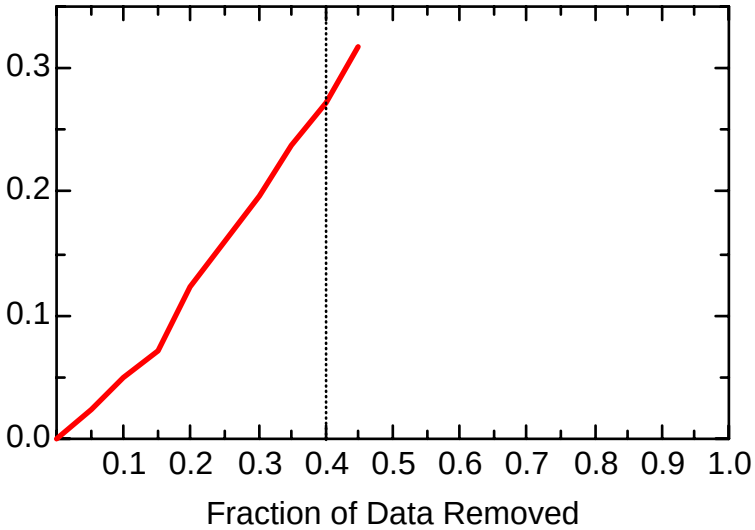
TCE: Well RW103



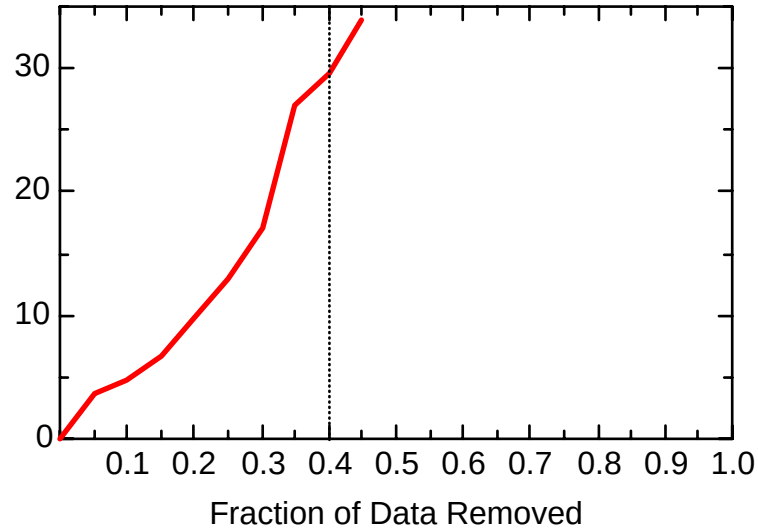
TCE: Well RW103



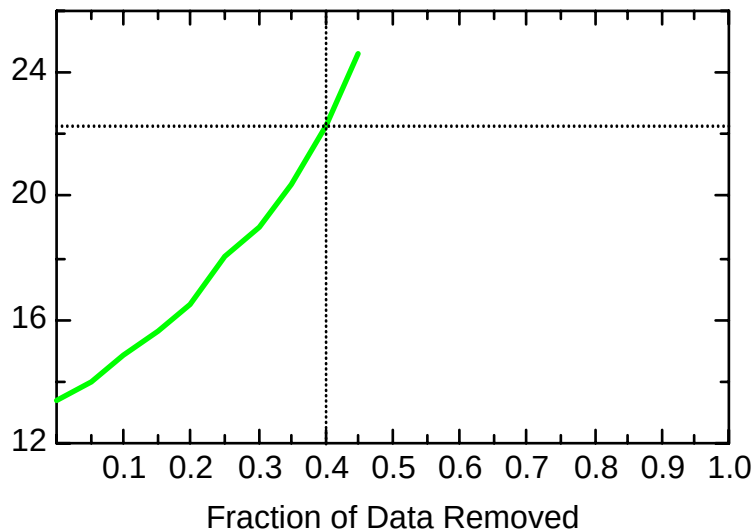
TCE: Well RW201



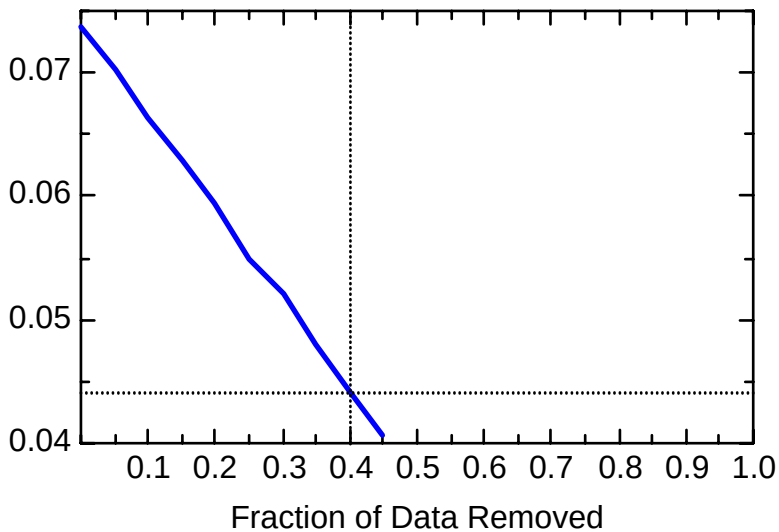
TCE: Well RW201

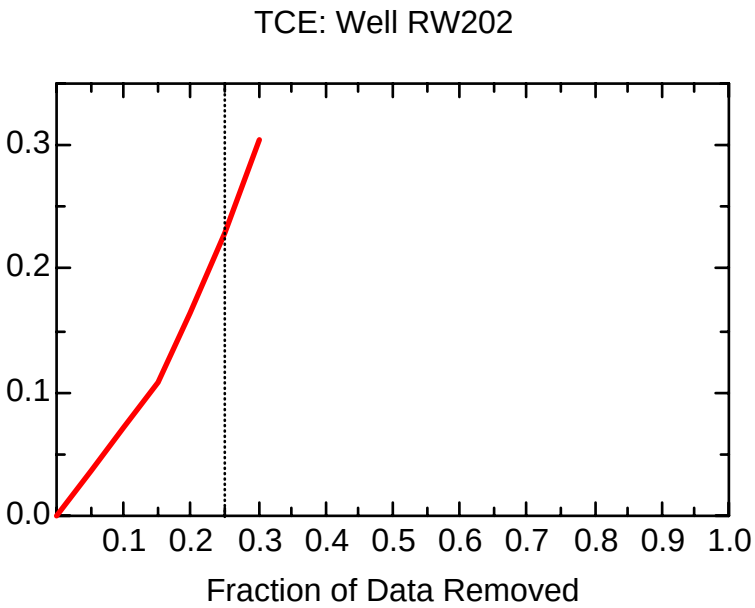


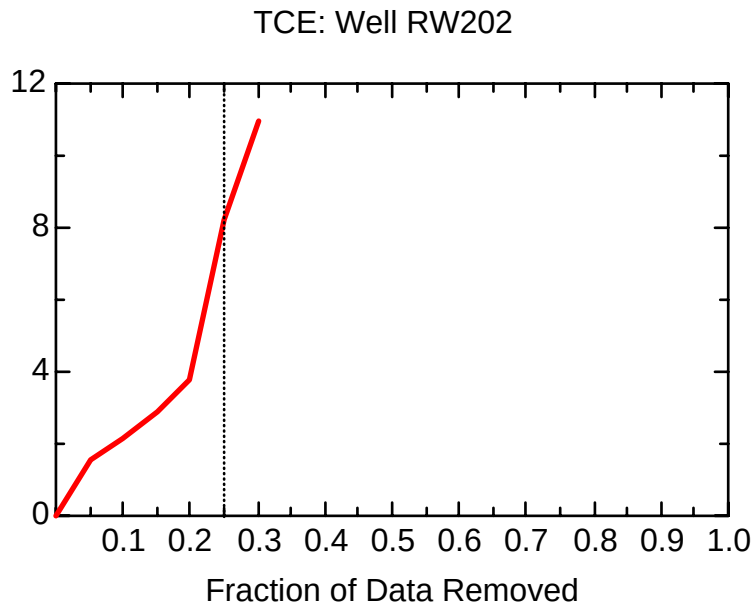
TCE: Well RW201

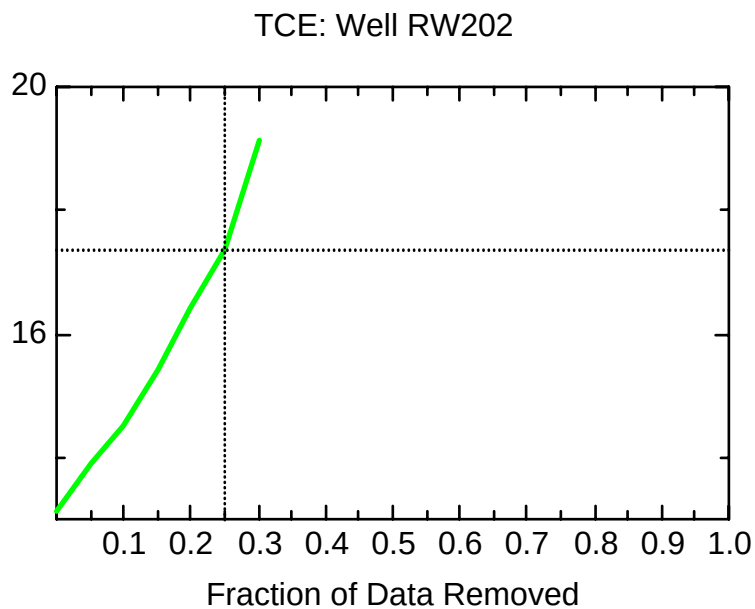


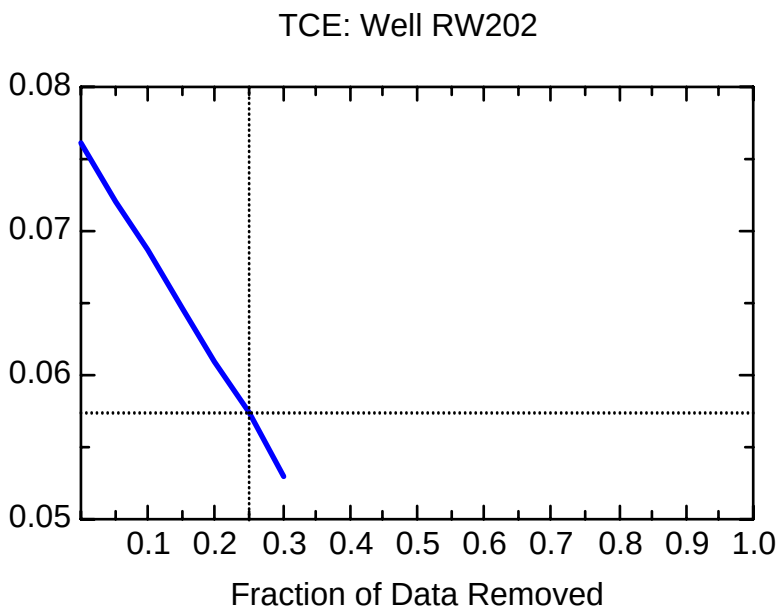
TCE: Well RW201



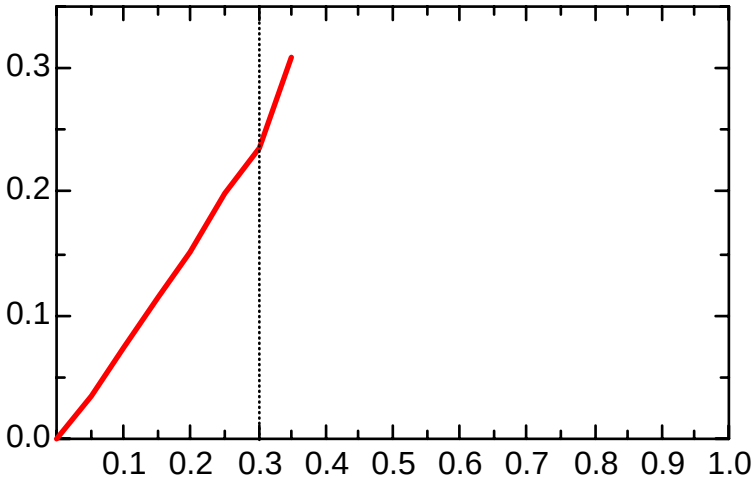

TCE: Well RW202
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW202
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

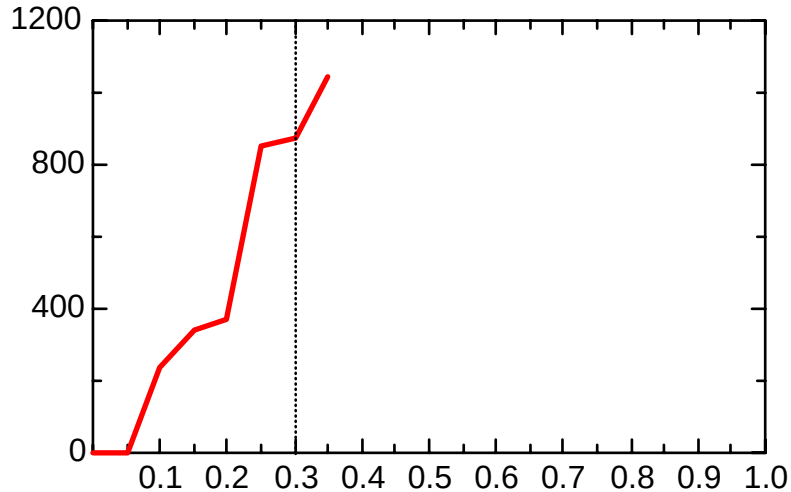

TCE: Well RW202
20
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW202
0.08
0.07
0.06
0.05
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

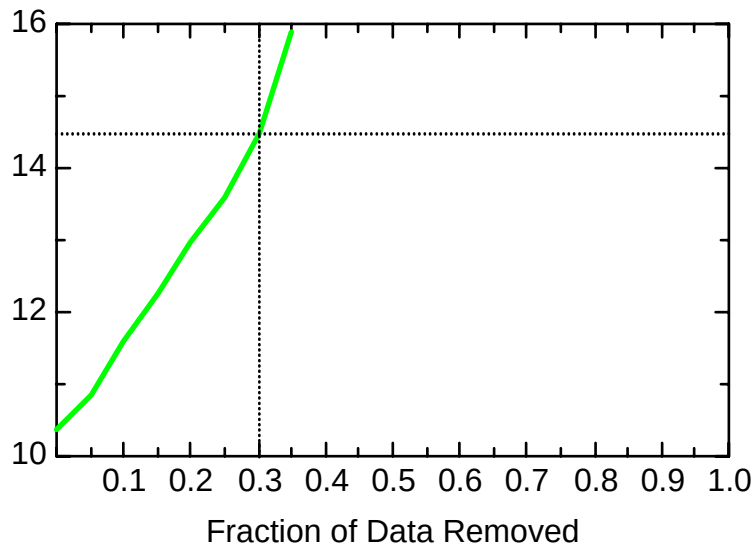
TCE: Well RW203



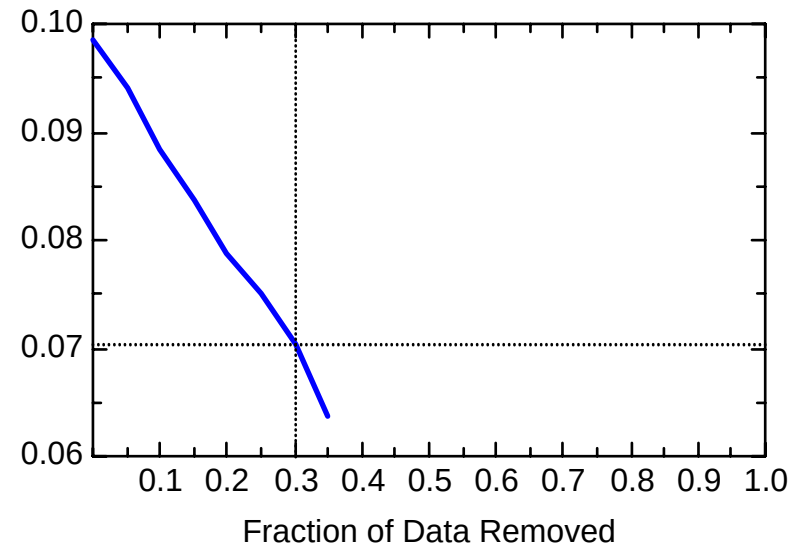
TCE: Well RW203

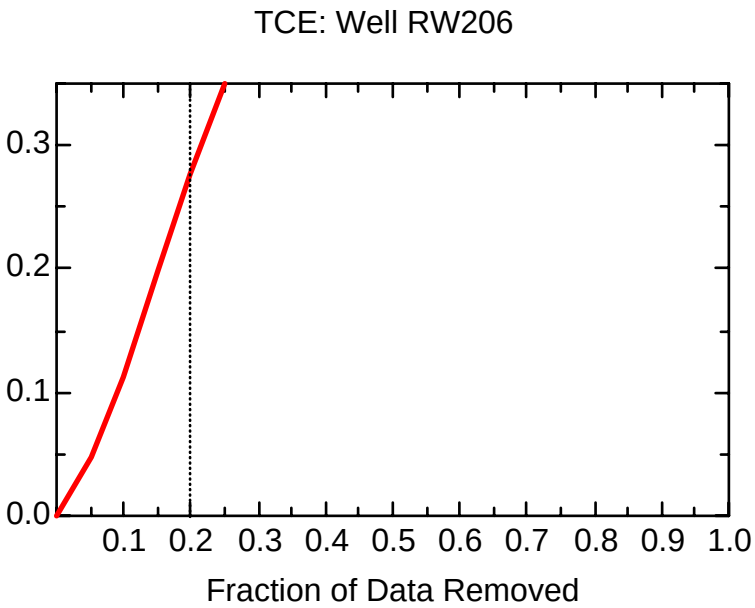


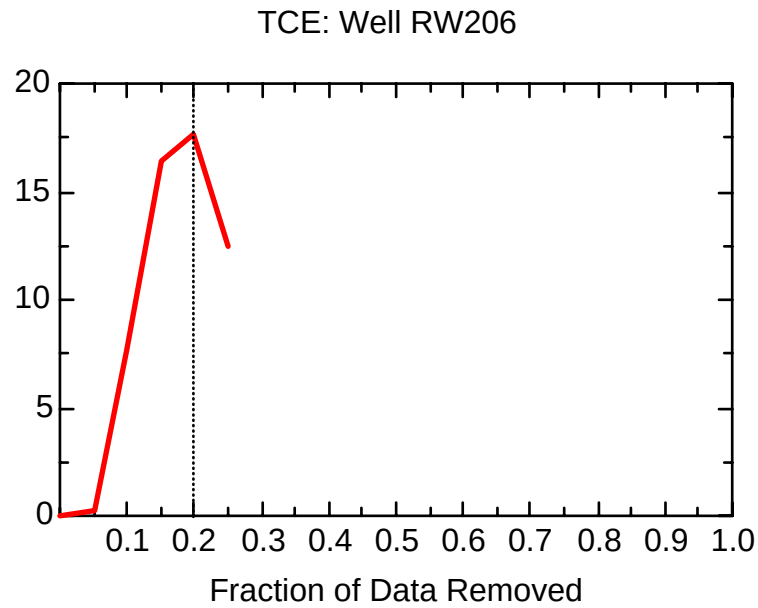
TCE: Well RW203

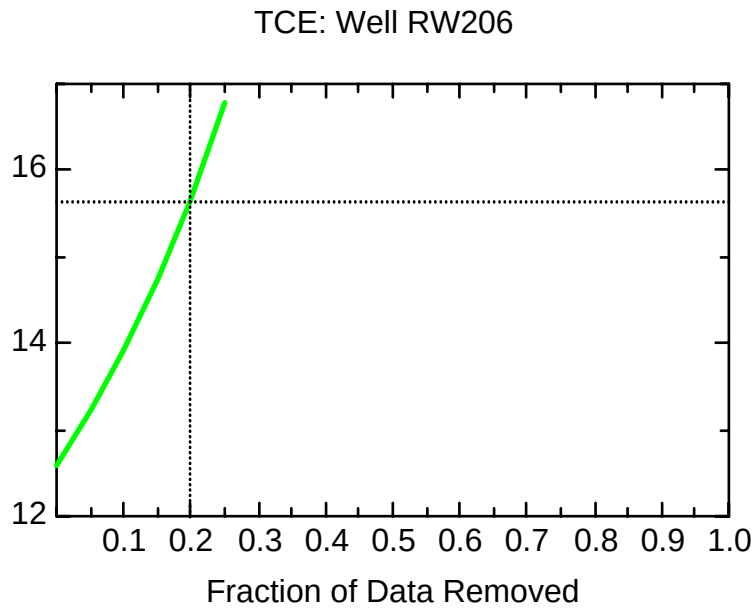


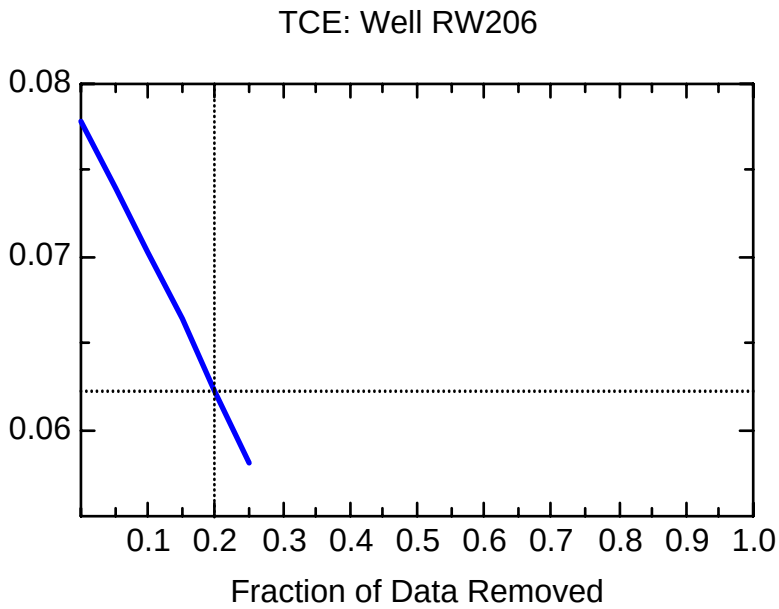
TCE: Well RW203



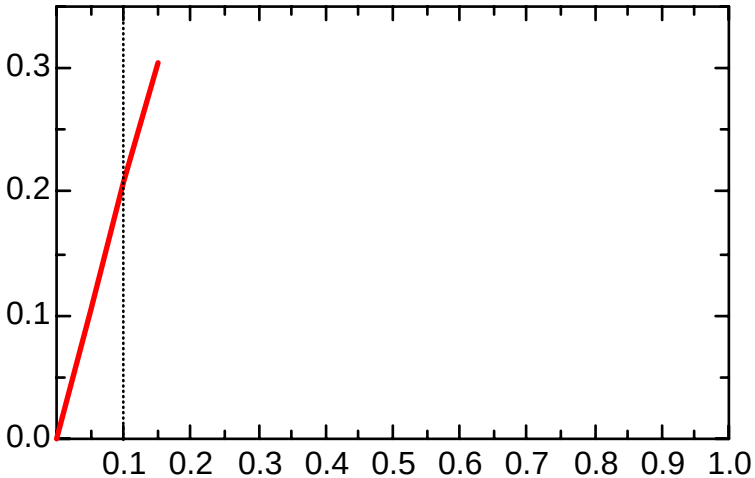

TCE: Well RW206
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW206
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW206
16
14
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well RW206
0.08
0.07
0.06
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

TCE: Well RW207



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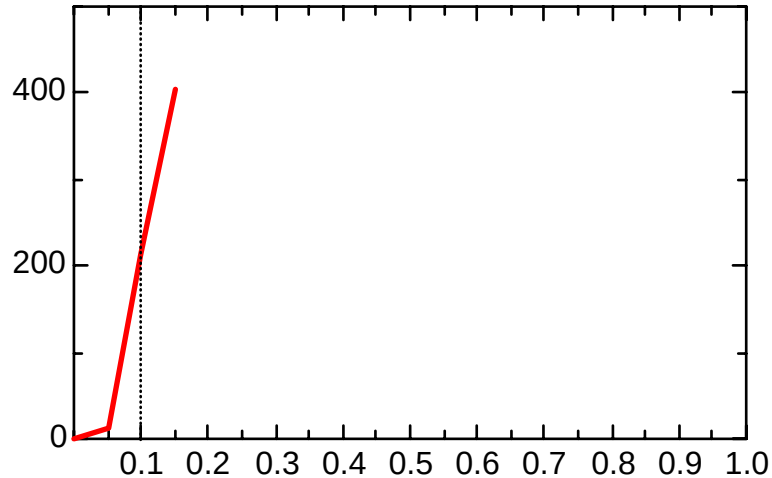
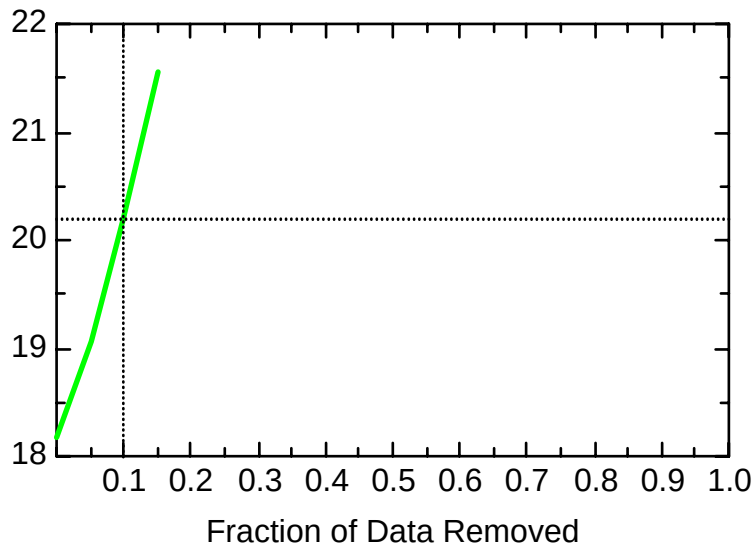


TCE: Well RW207



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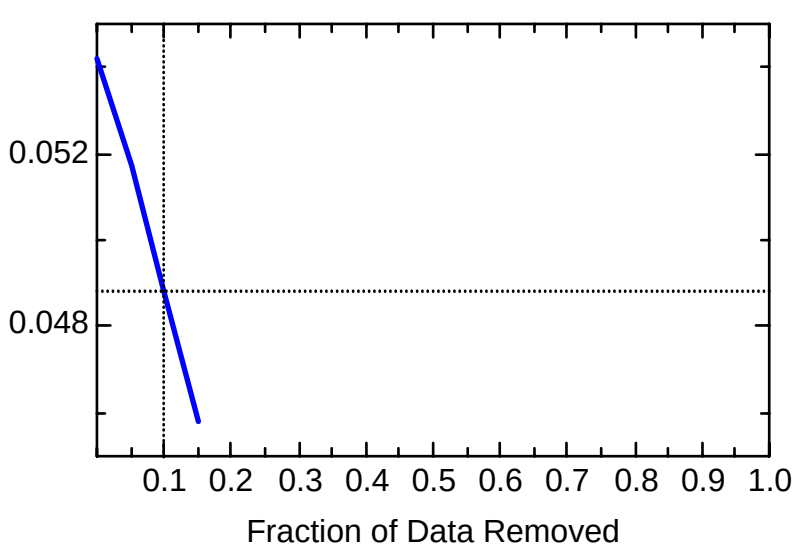
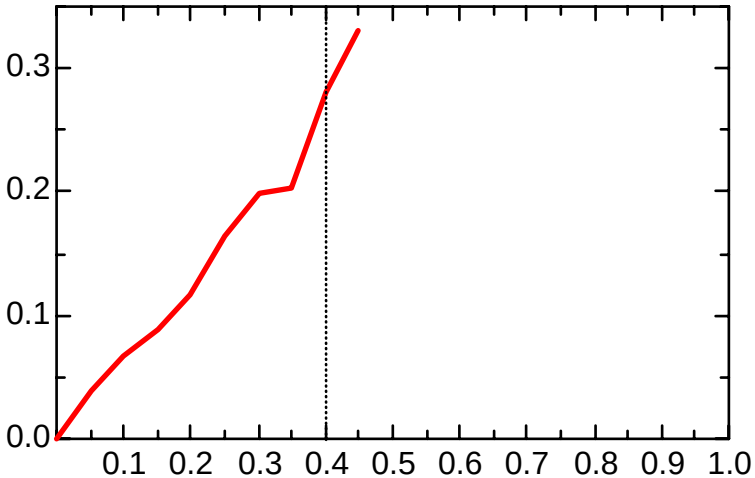
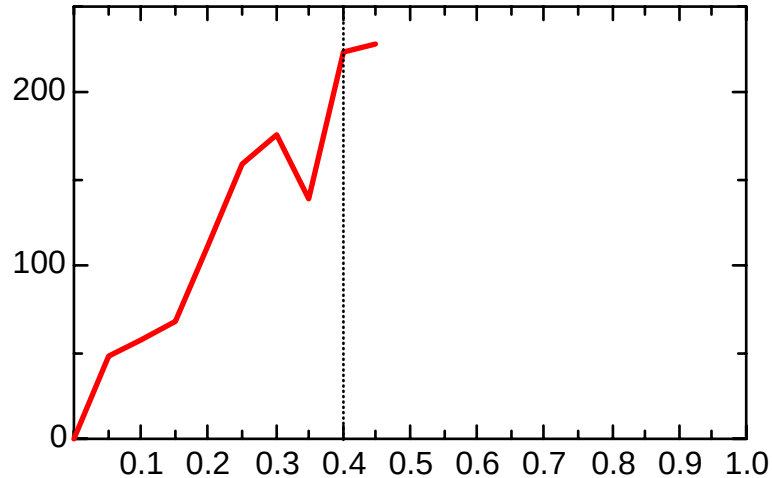


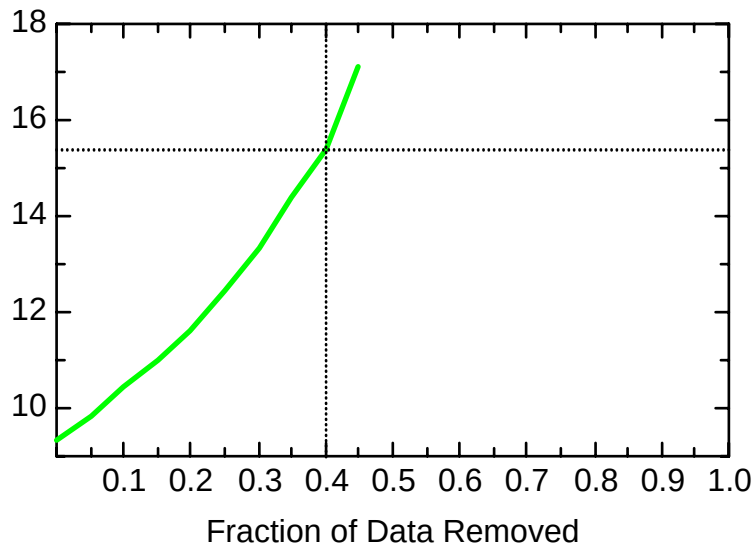
TCE: Well RW301



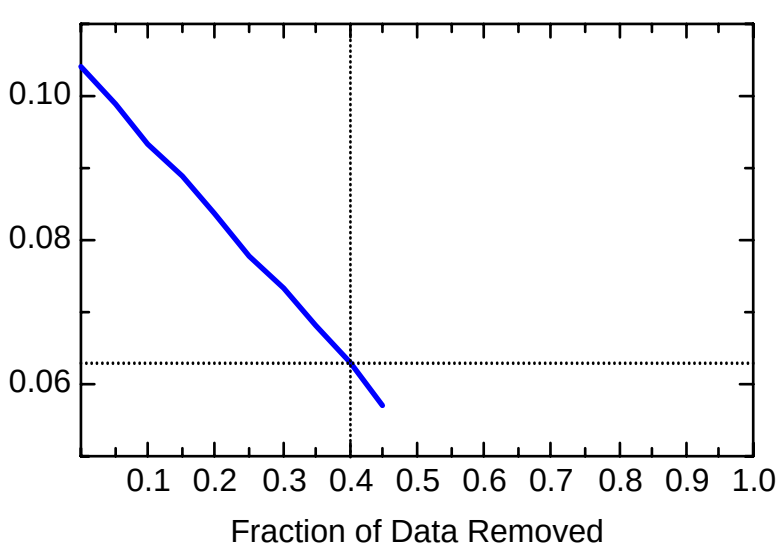
TCE: Well RW301



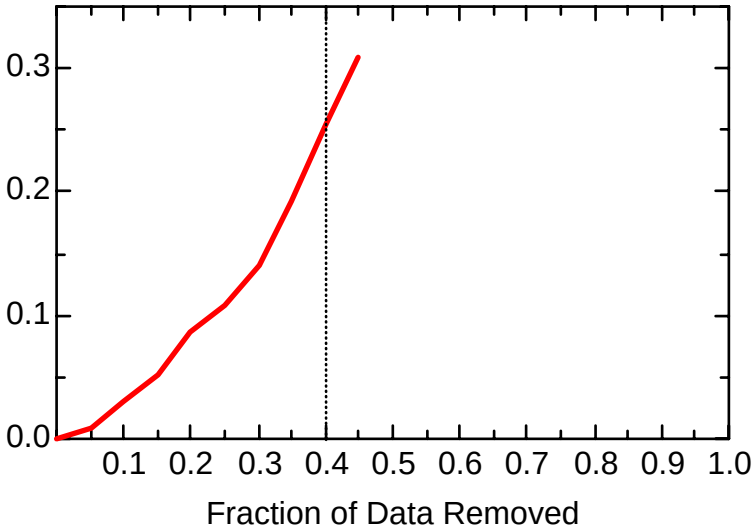
TCE: Well RW301



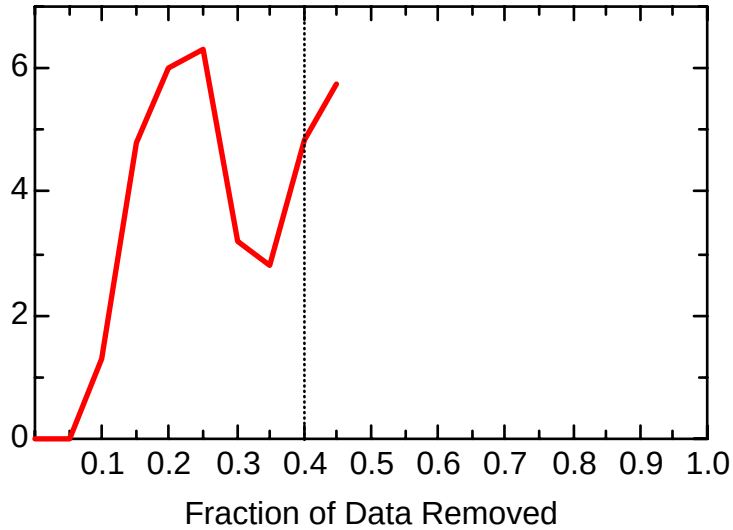
TCE: Well RW301



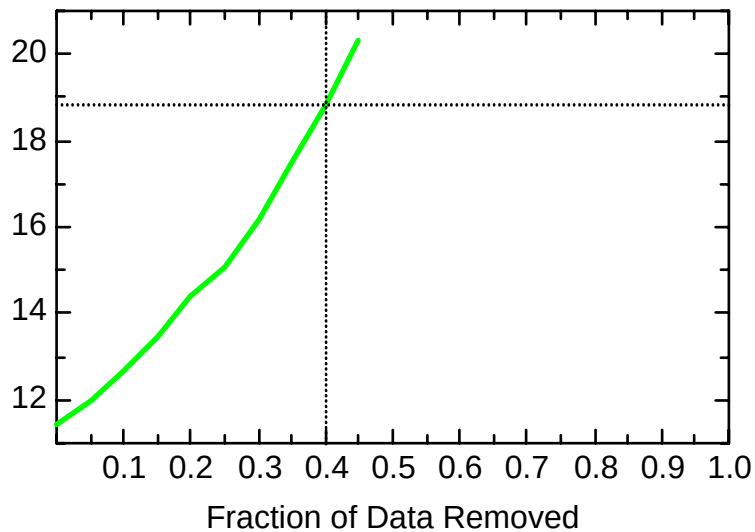
TCE: Well RW302



TCE: Well RW302



TCE: Well RW302



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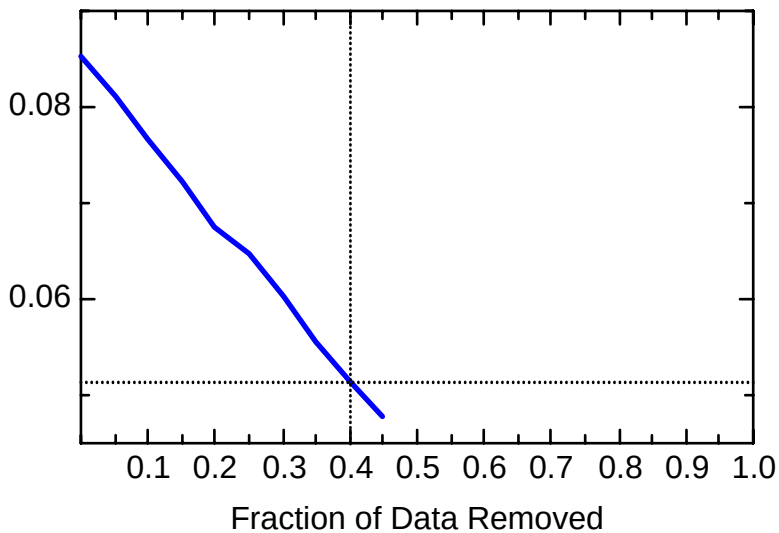

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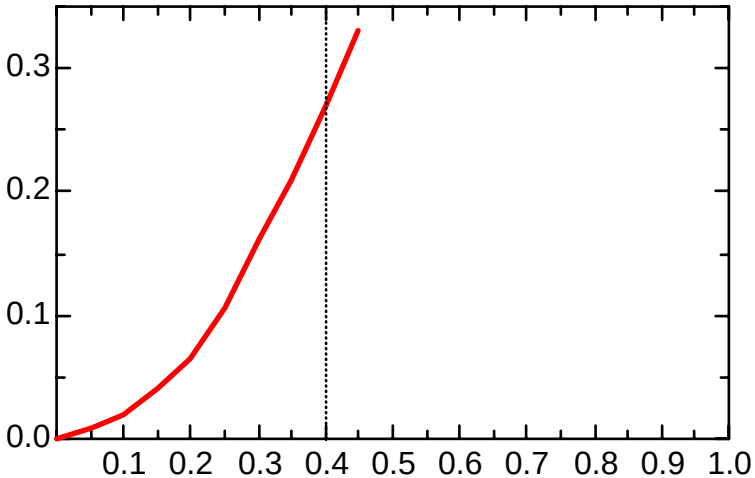
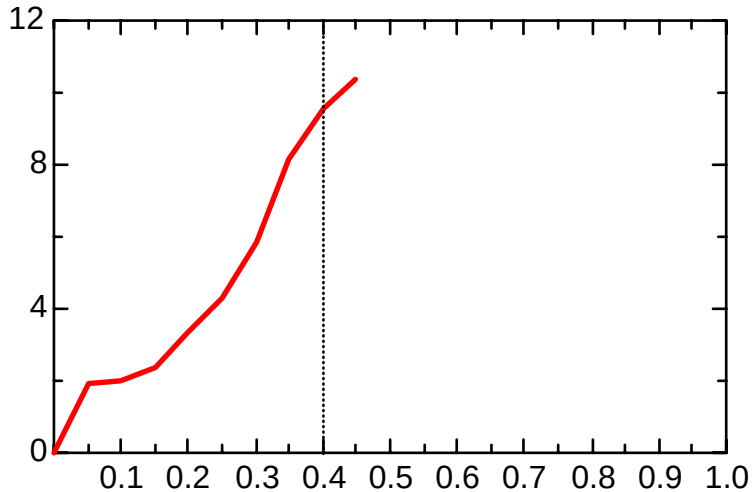
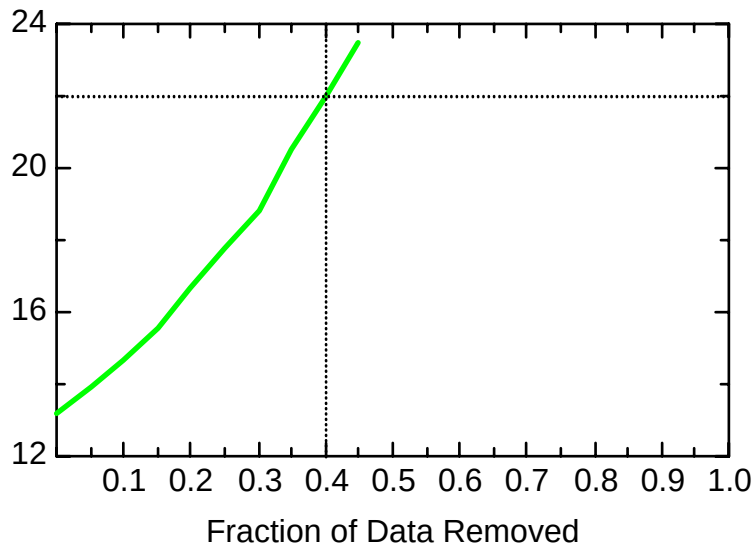


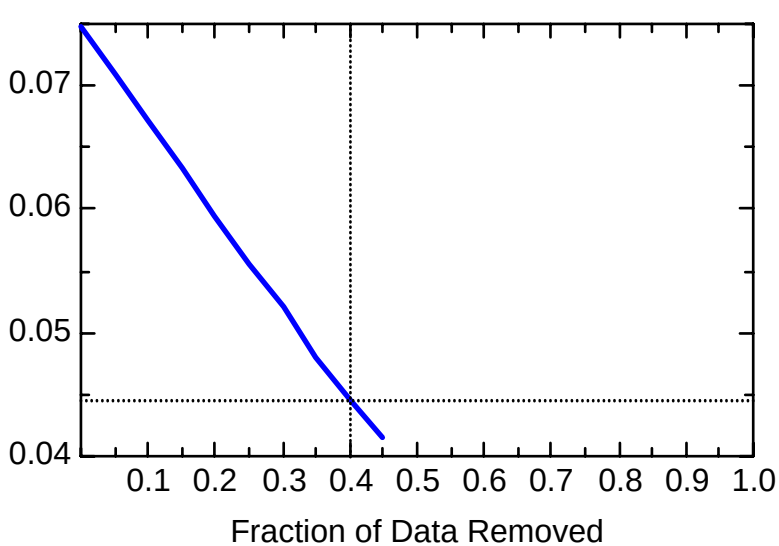
TCE: Well RW303

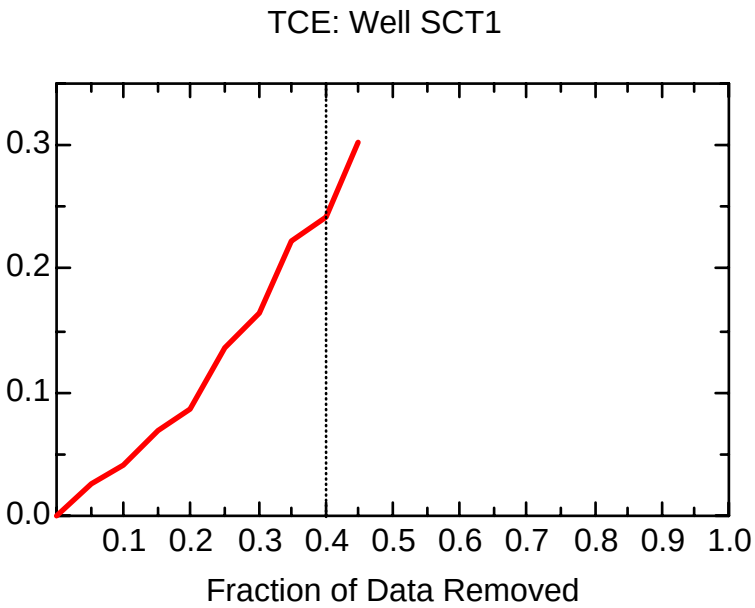


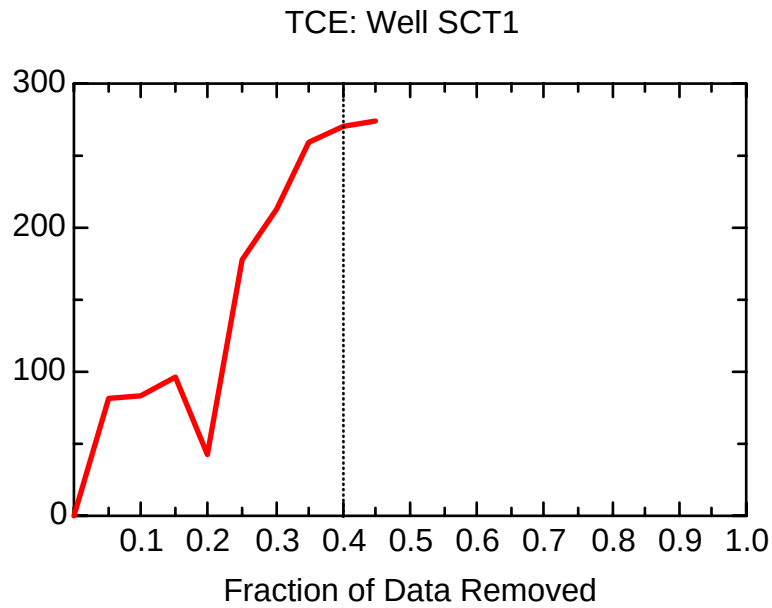
TCE: Well RW303

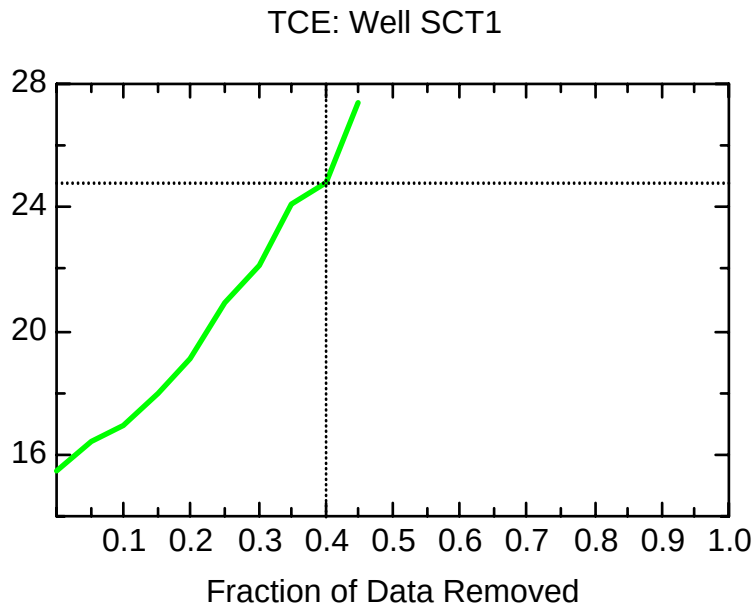


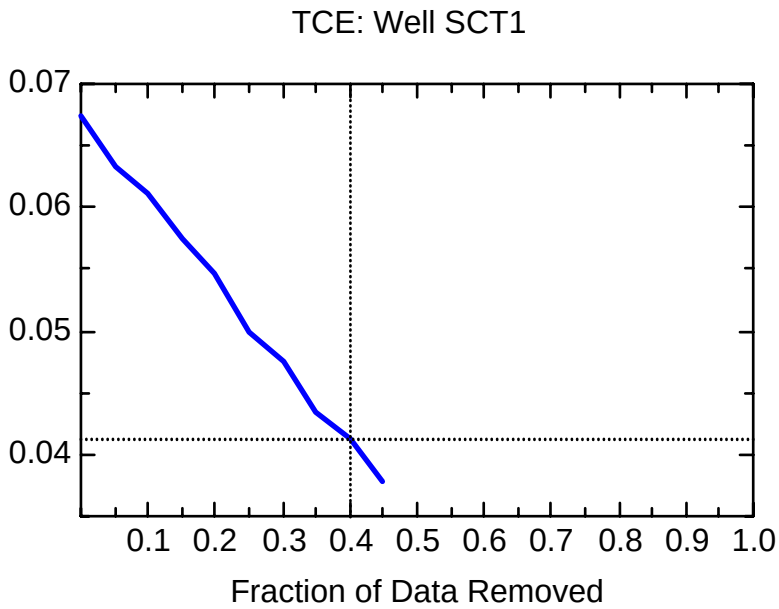
TCE: Well RW303

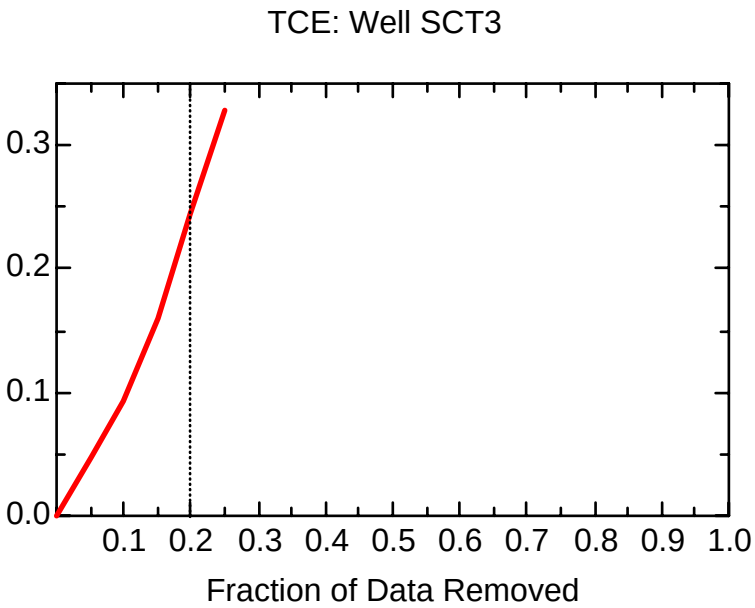


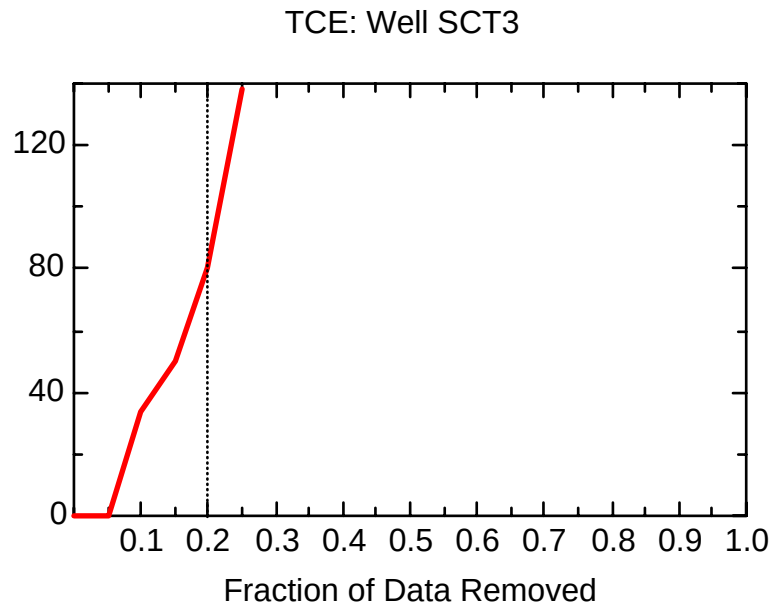

TCE: Well SCT1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

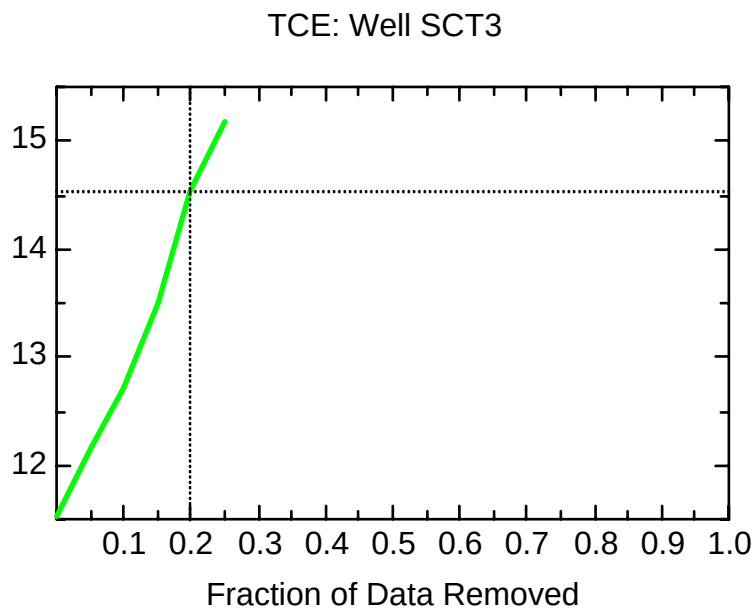

TCE: Well SCT1
300
200
100
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

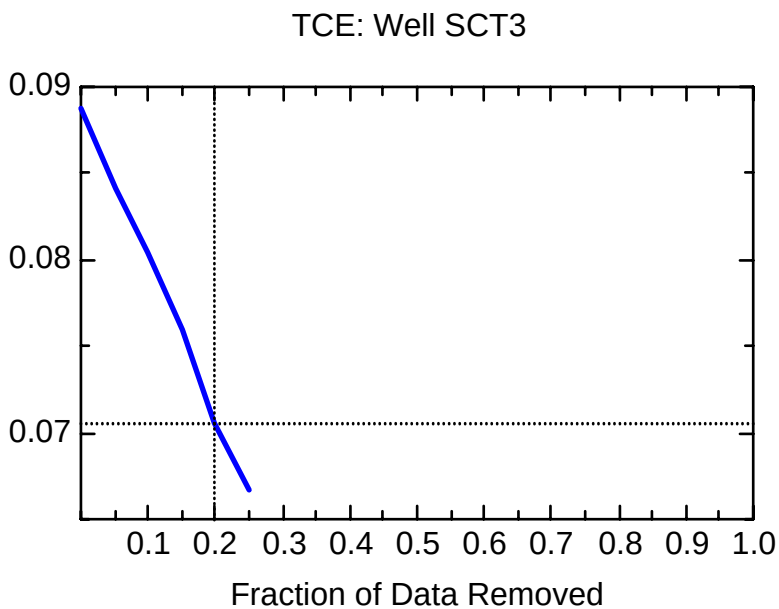

TCE: Well SCT1
28
24
20
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

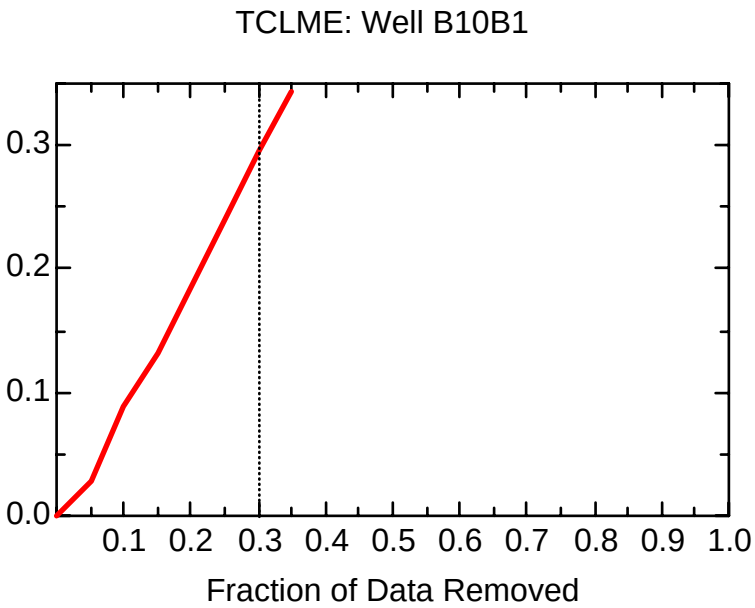

TCE: Well SCT1
0.07
0.06
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

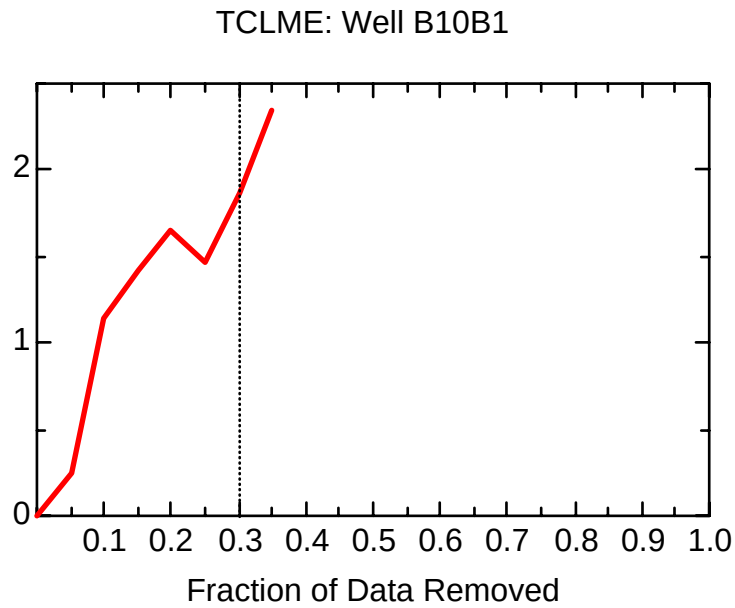

TCE: Well SCT3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

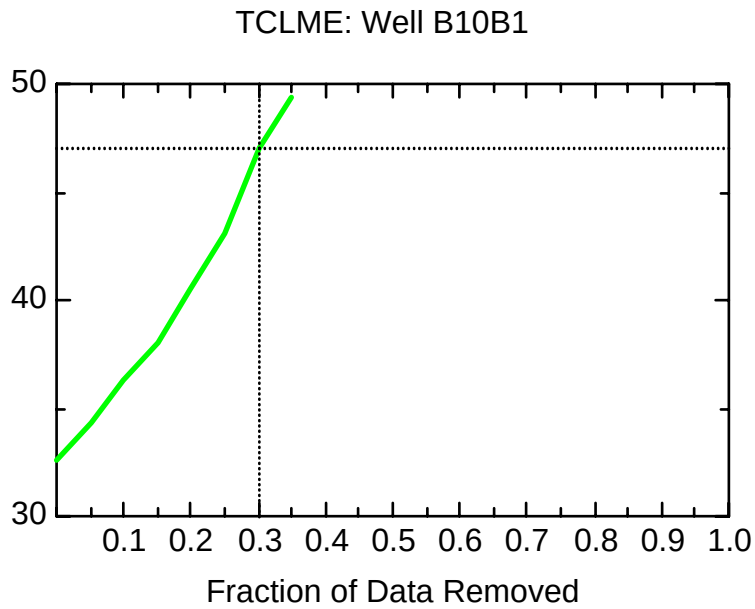

TCE: Well SCT3
120
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

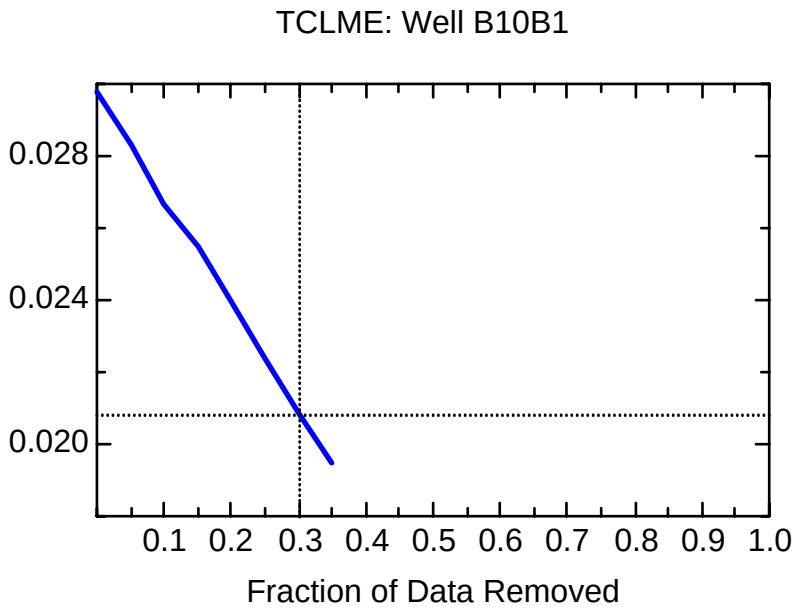

TCE: Well SCT3
15
14
13
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCE: Well SCT3
0.09
0.08
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B1
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B1
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B1
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0.024
0.020
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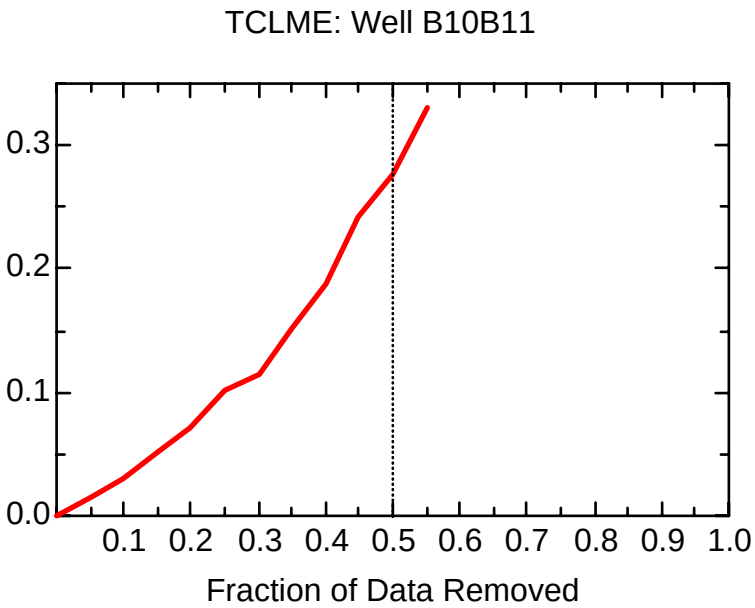
TCLME: Well B10B11
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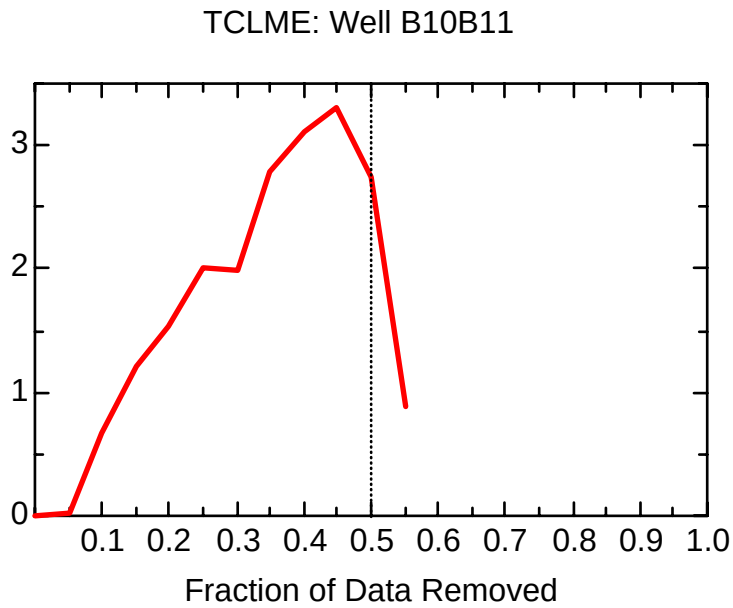
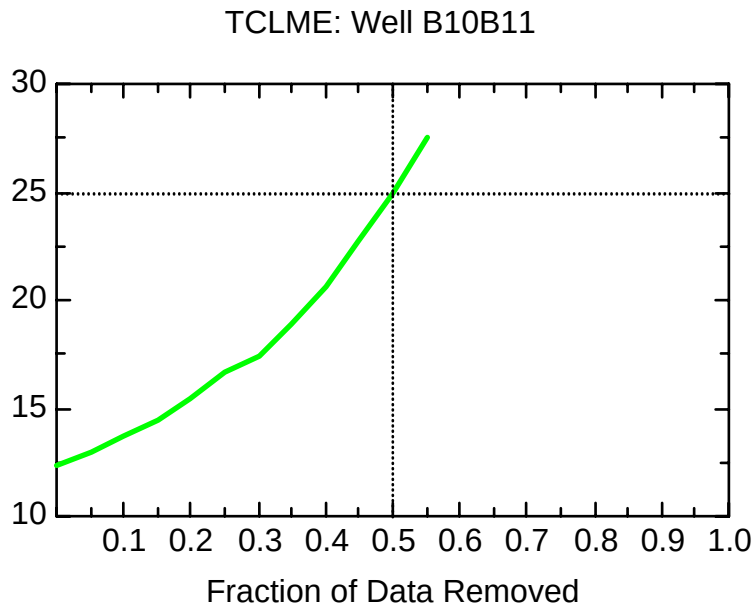
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B11
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B10B11
30
25
20
15
10
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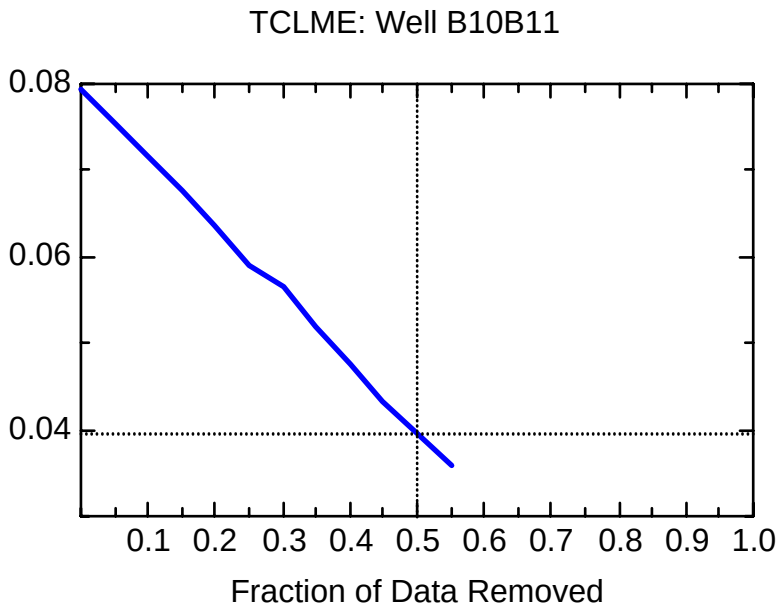
Fraction of Data Removed


TCLME: Well B10B11
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0.04
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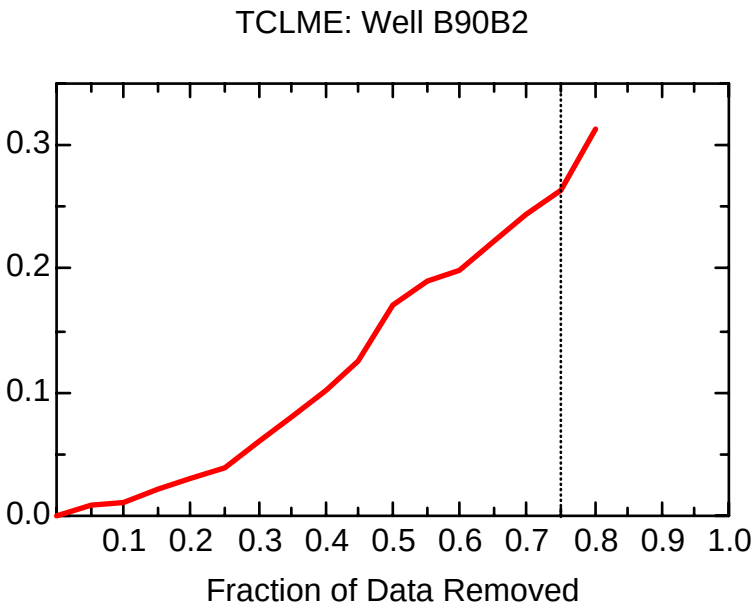
TCLME: Well B90B2
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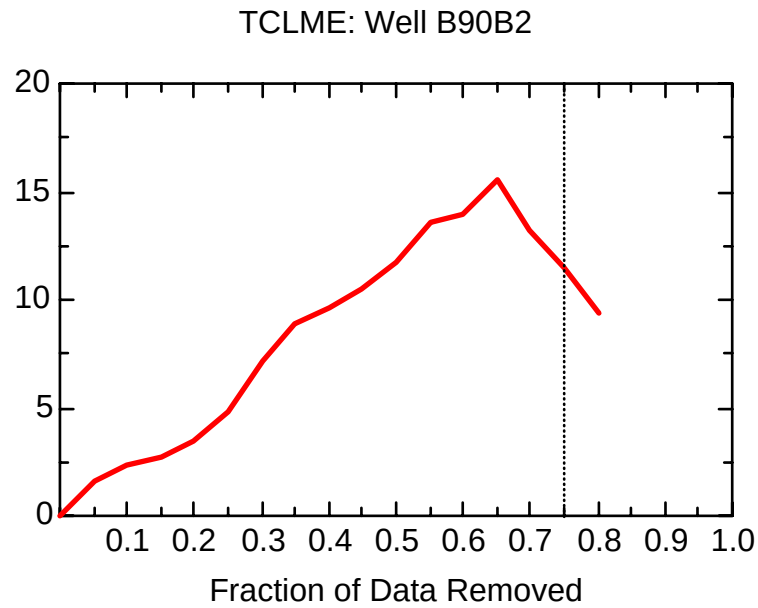
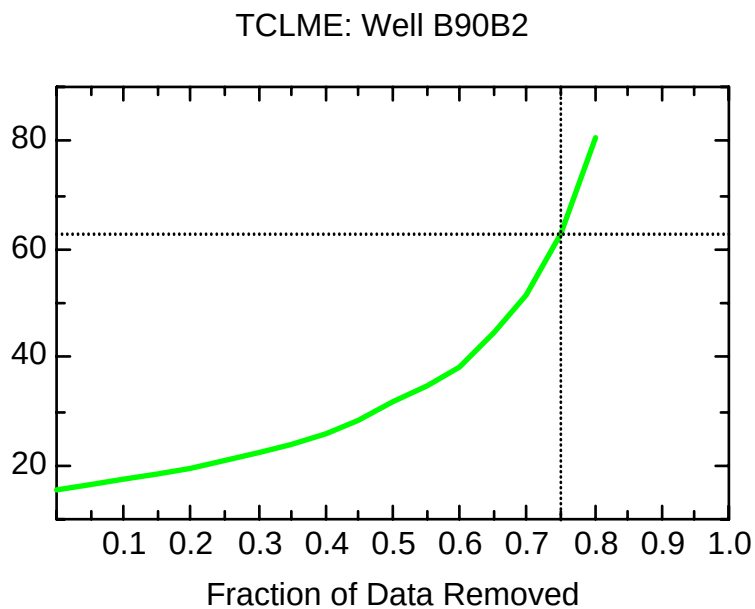
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B2
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B2
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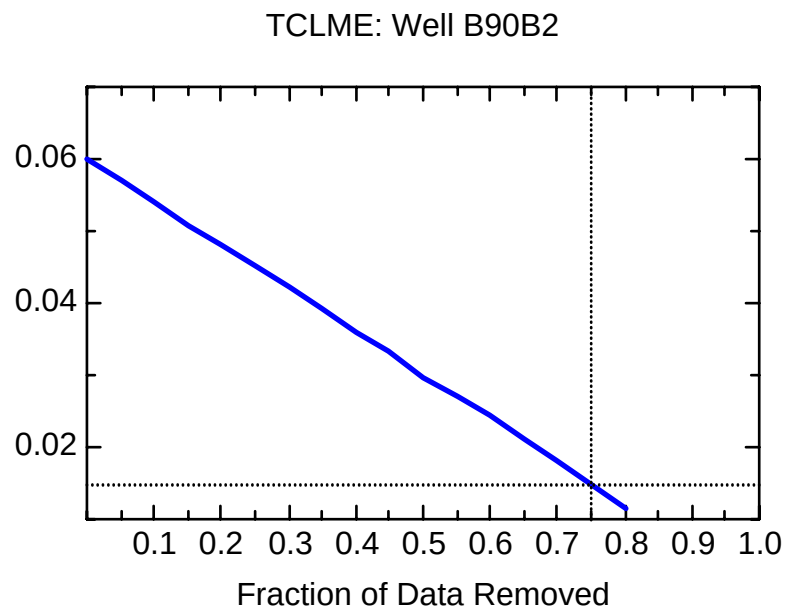
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B2
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0.04
0.02
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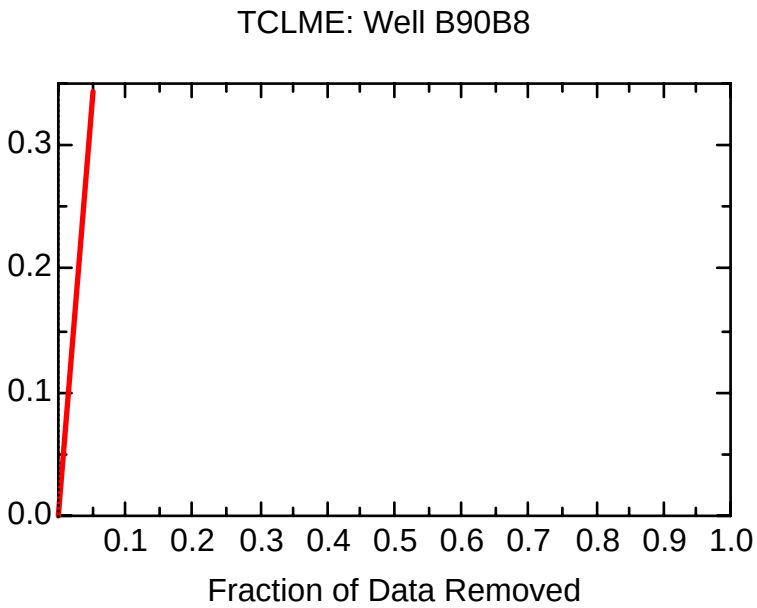
Fraction of Data Removed


TCLME: Well B90B8
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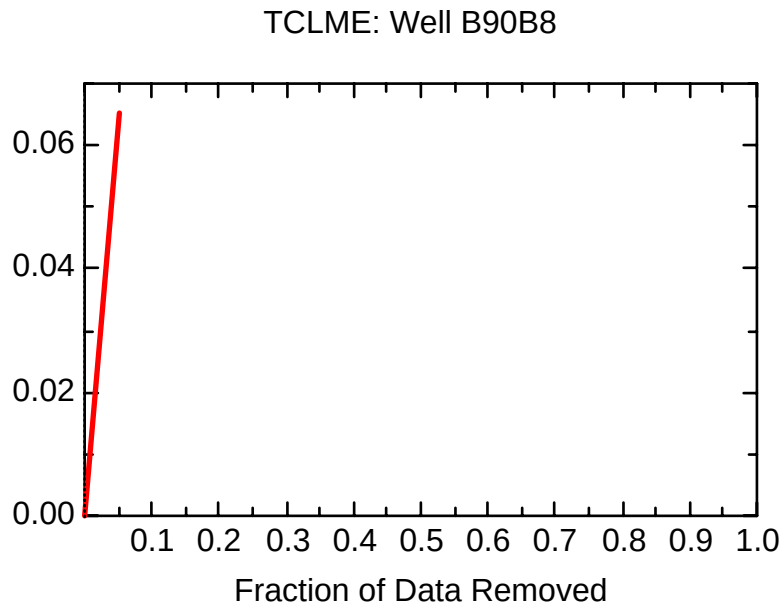
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B8
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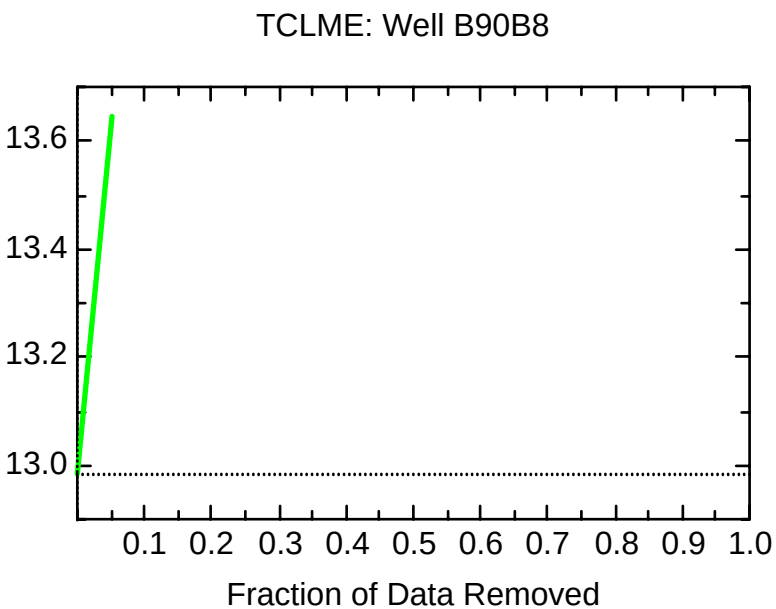
0.04
0.02
0.00
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B8
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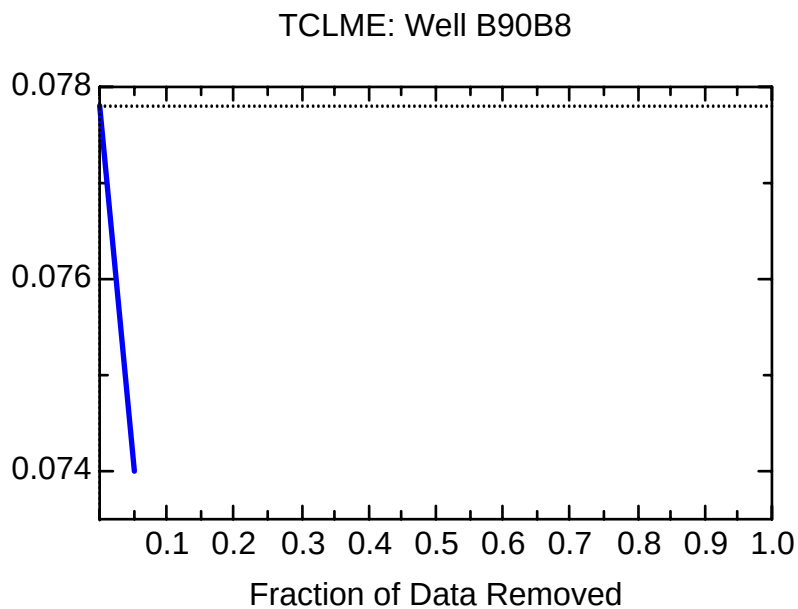
13.4
13.2
13.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90B8
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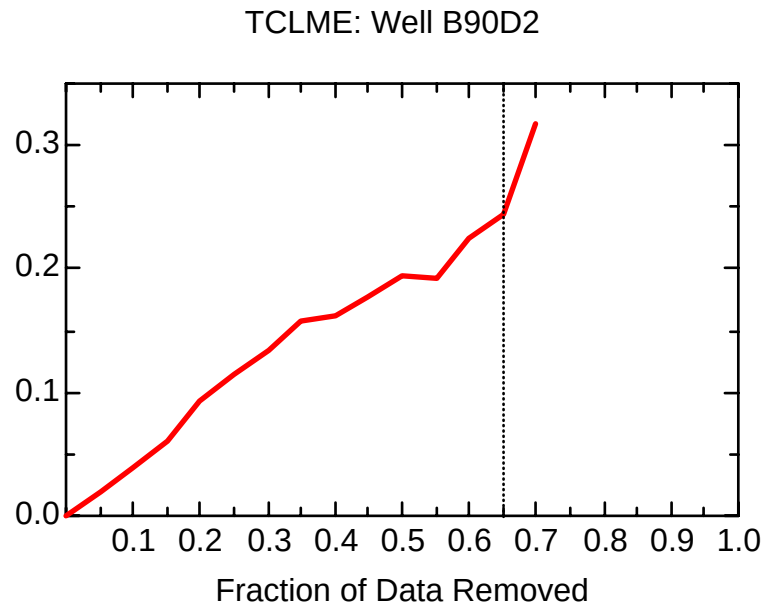
0.076
0.074
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90D2
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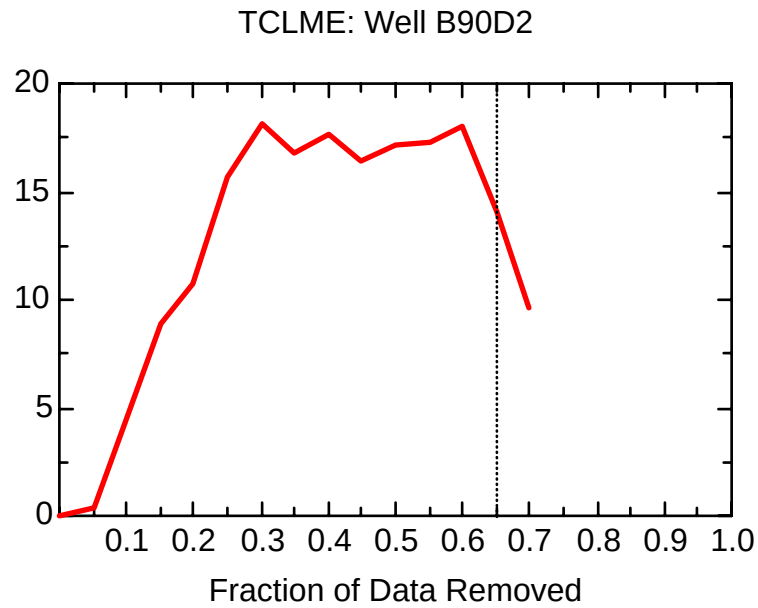
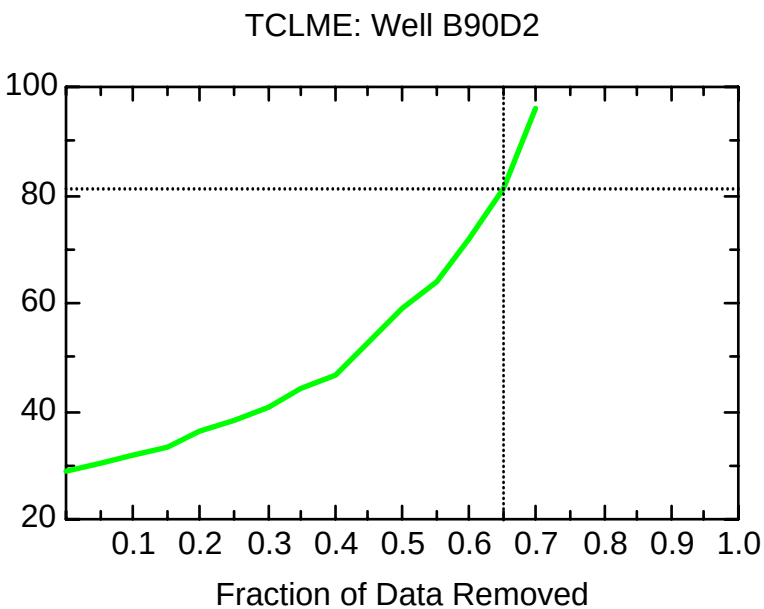
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90D2
0
5
10
15
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90D2
20
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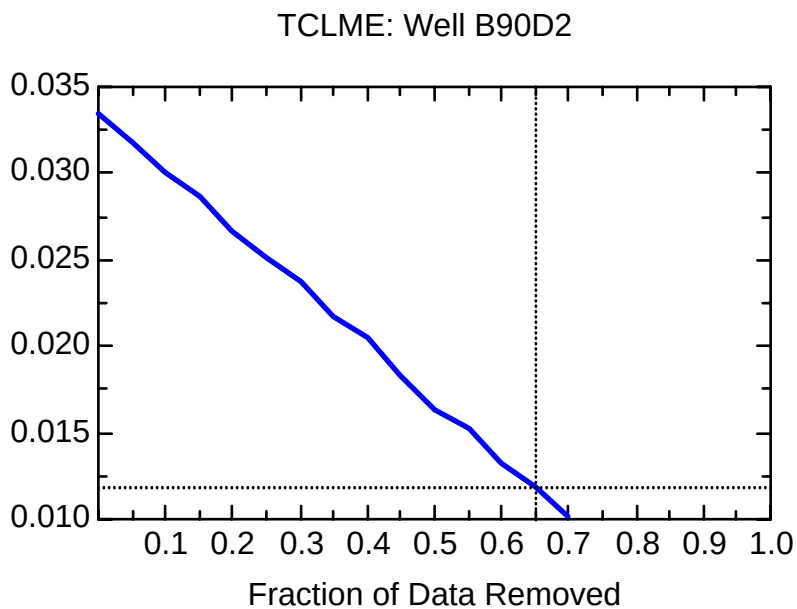
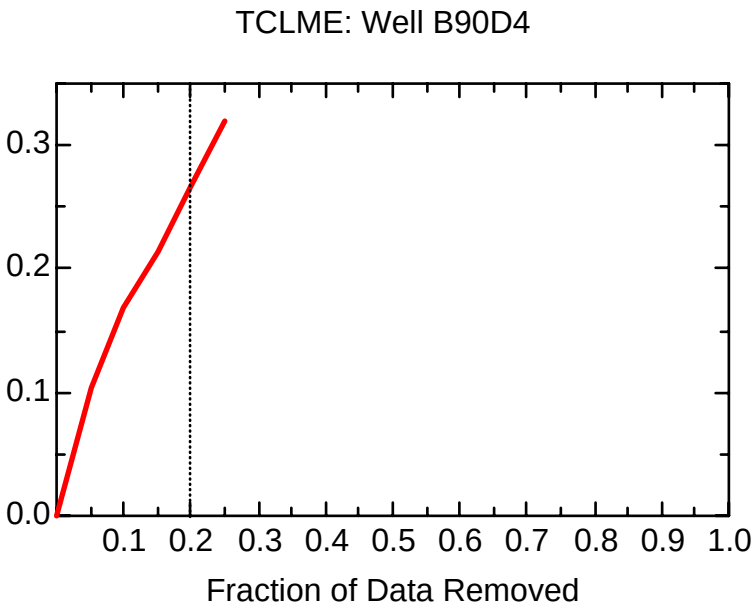
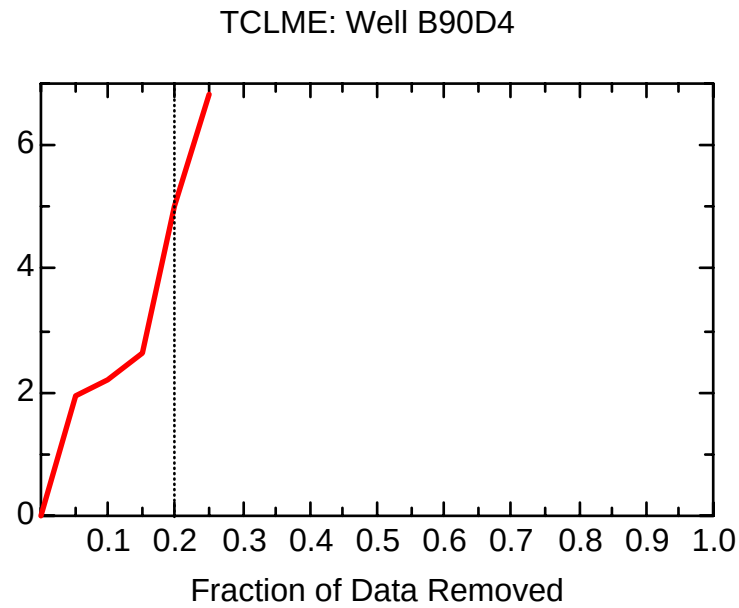
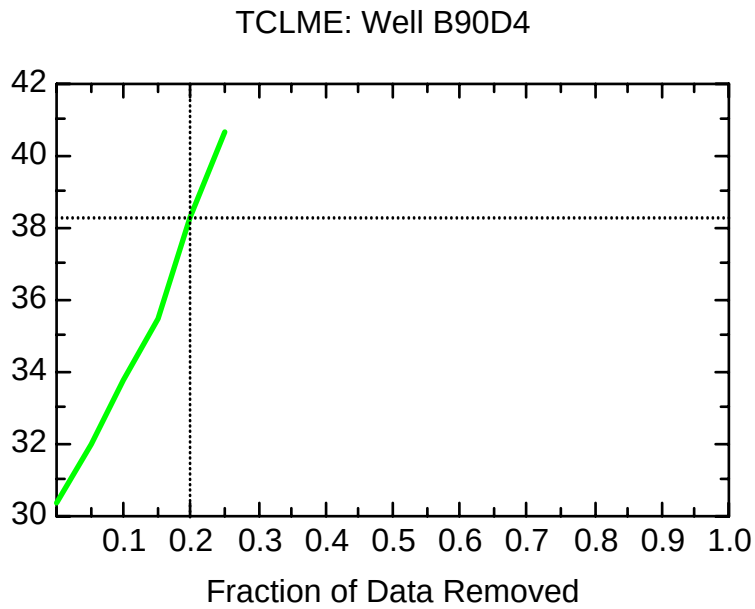
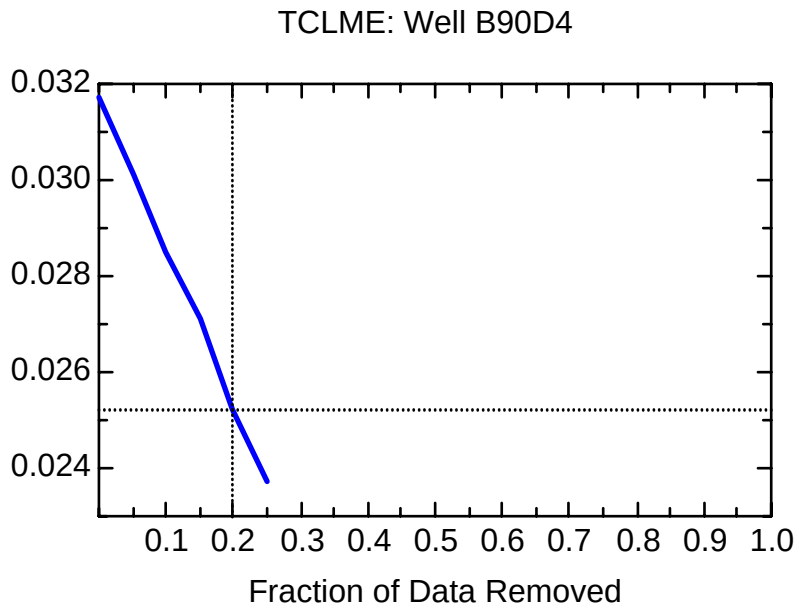
60
80
100
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

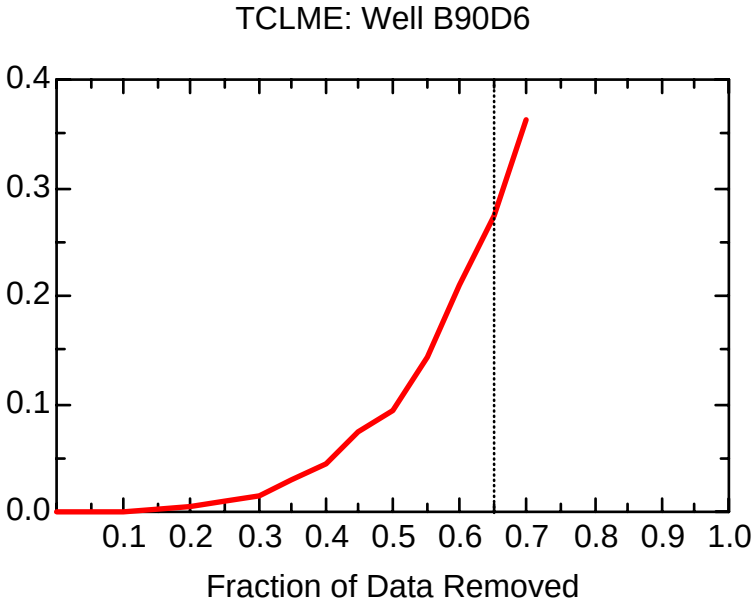

TCLME: Well B90D2
0.010
0.015
0.020
0.025
0.030
0.035
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

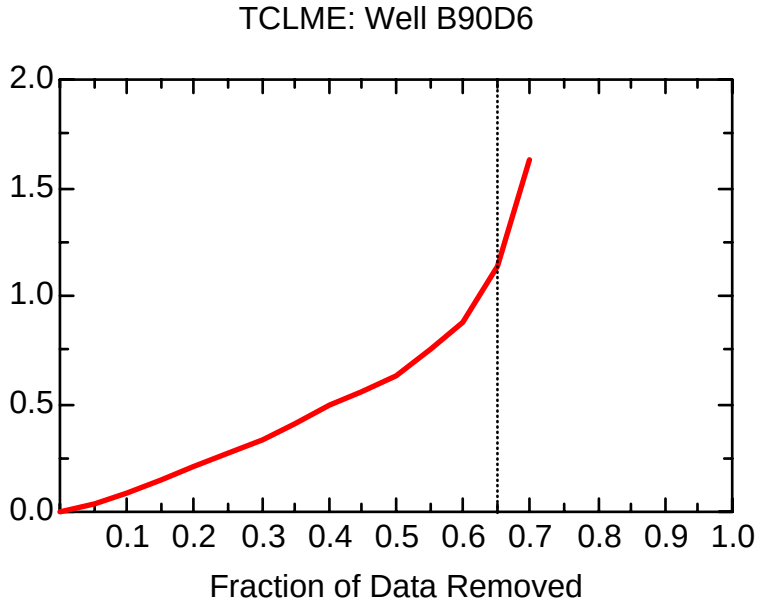

TCLME: Well B90D4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

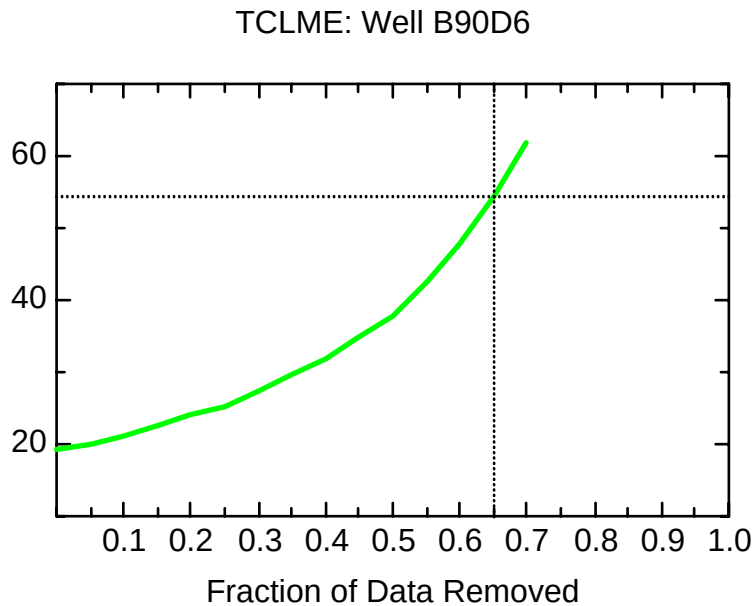

TCLME: Well B90D4
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

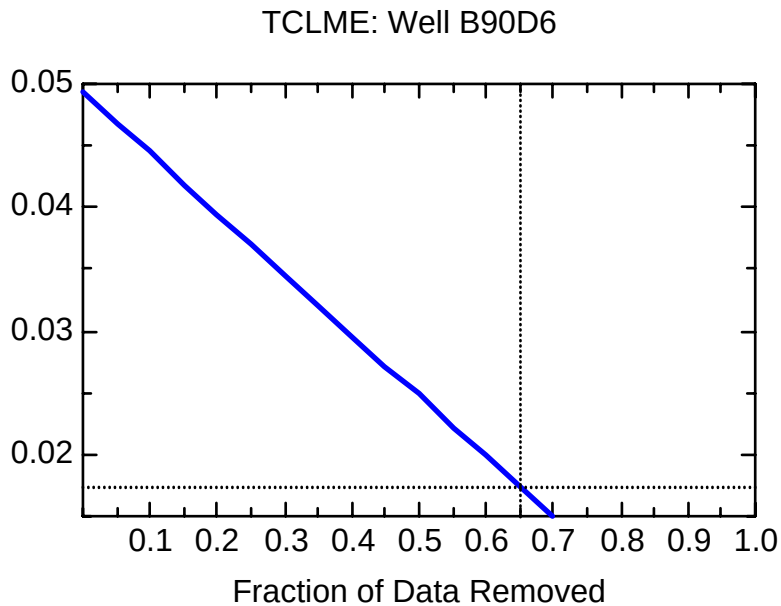

TCLME: Well B90D4
42
40
38
36
34
32
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

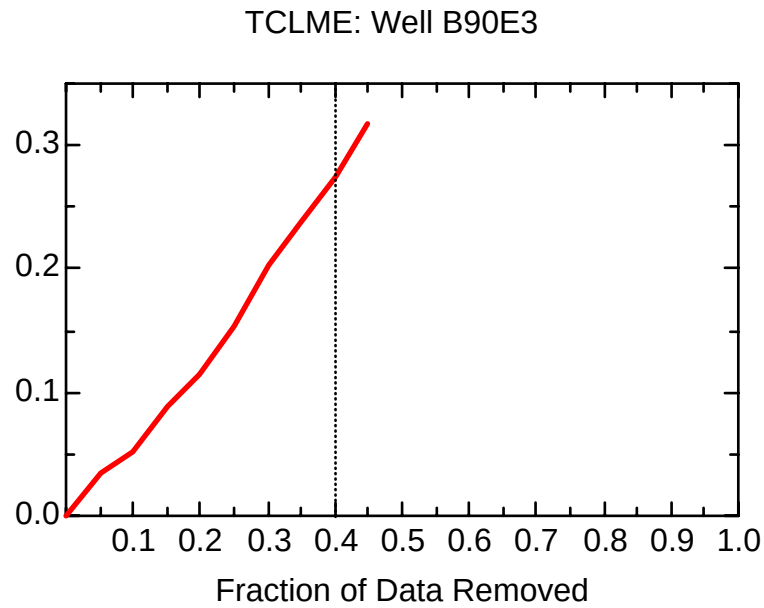

TCLME: Well B90D4
0.032
0.030
0.028
0.026
0.024
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

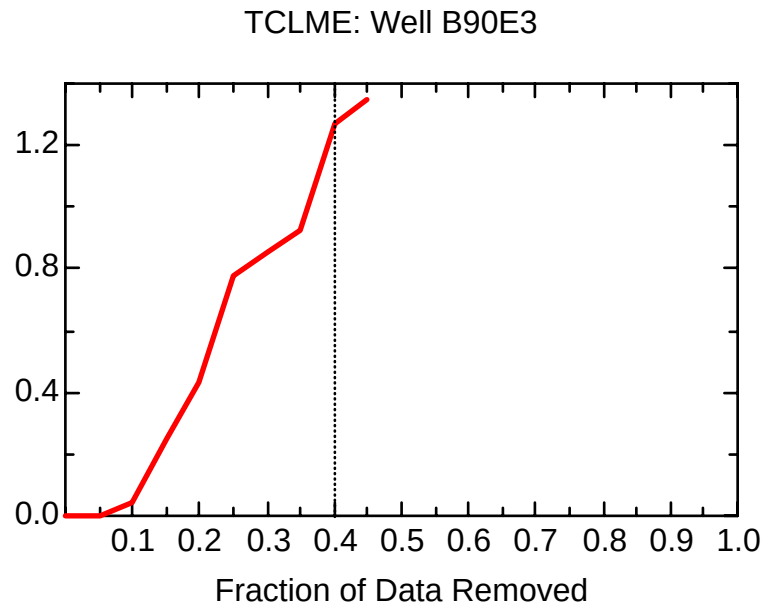

TCLME: Well B90D6
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

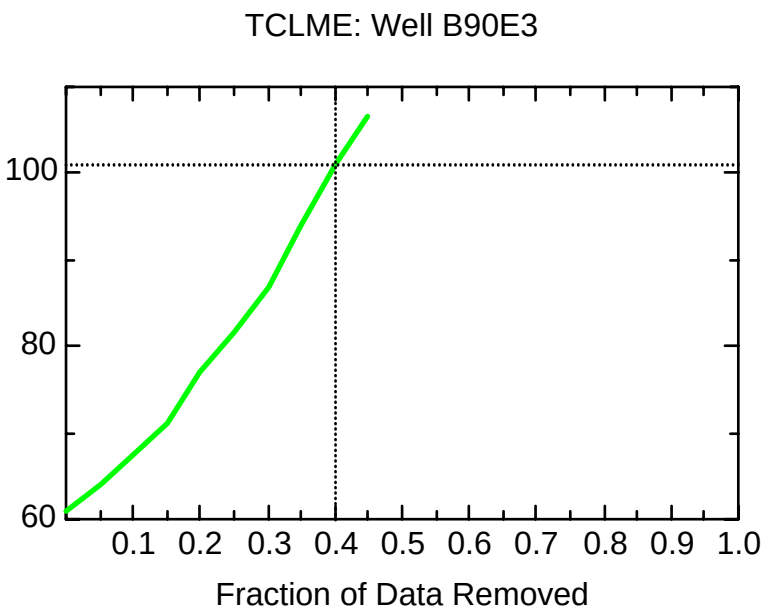

TCLME: Well B90D6
2.0
1.5
1.0
0.5
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

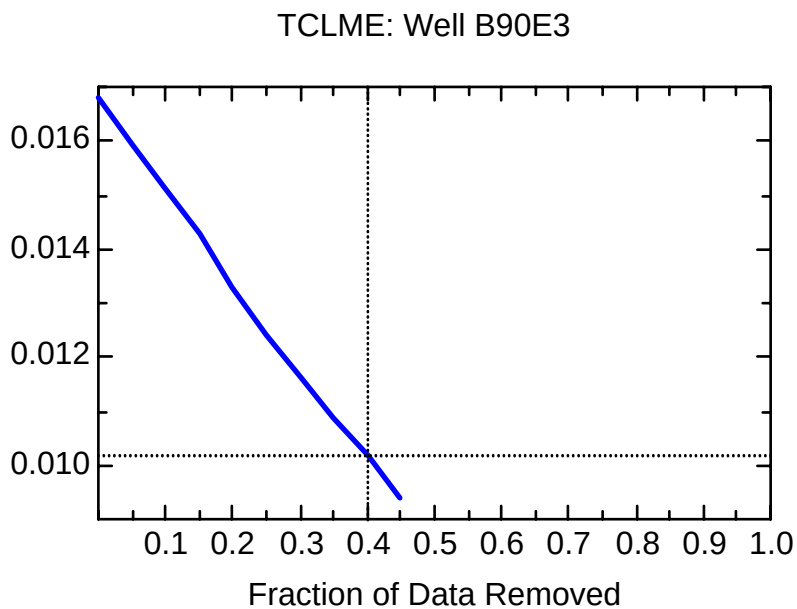

TCLME: Well B90D6
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

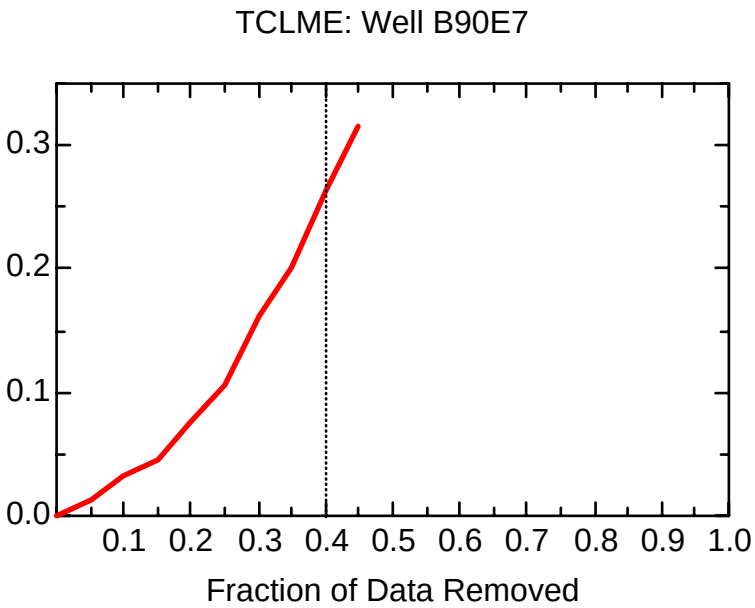

TCLME: Well B90D6
0.05
0.04
0.03
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

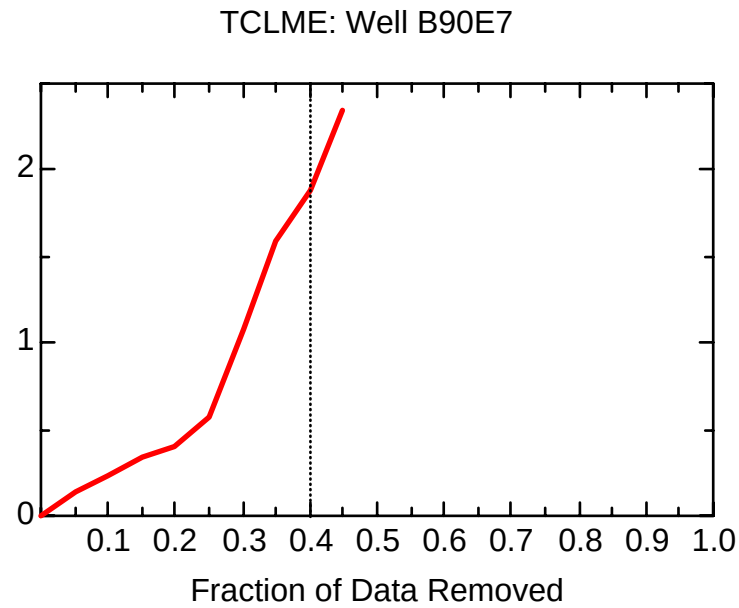

TCLME: Well B90E3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

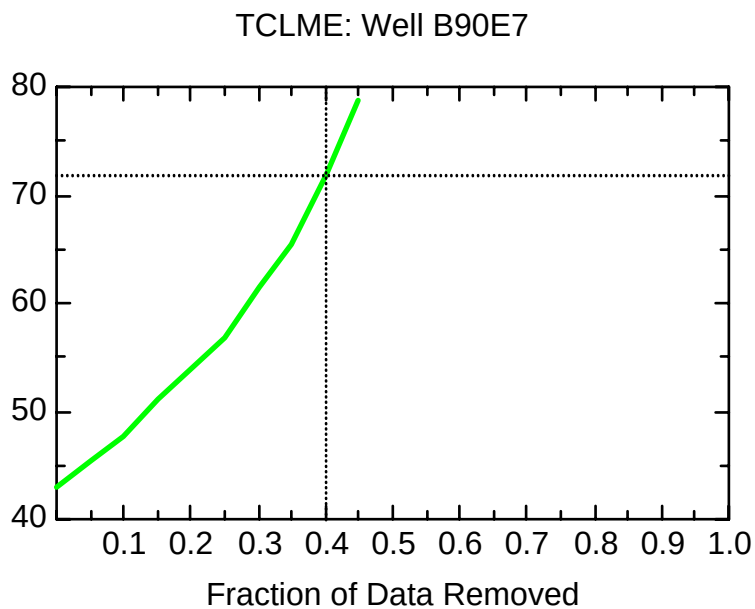

TCLME: Well B90E3
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

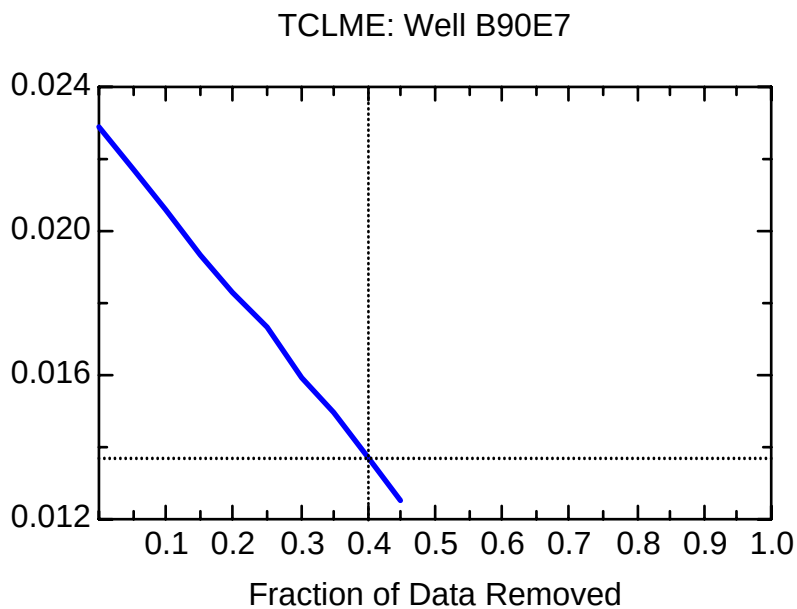

TCLME: Well B90E3
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

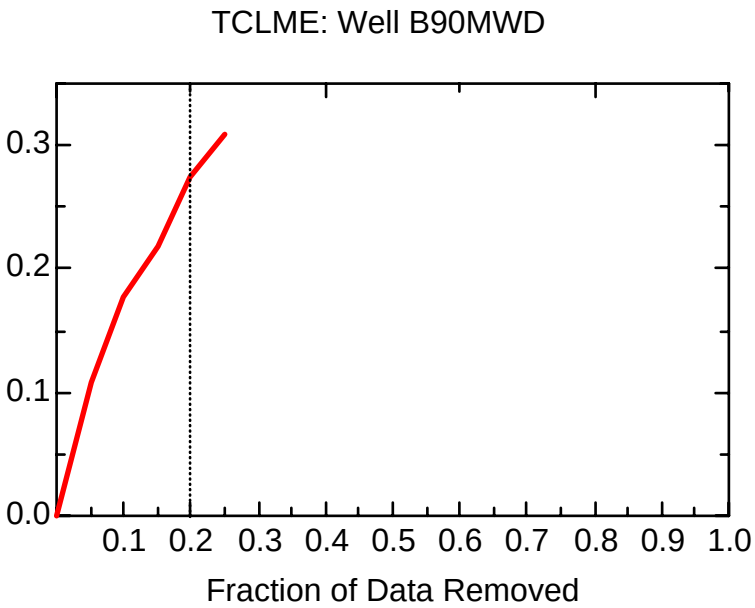

TCLME: Well B90E3
0.016
0.014
0.012
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

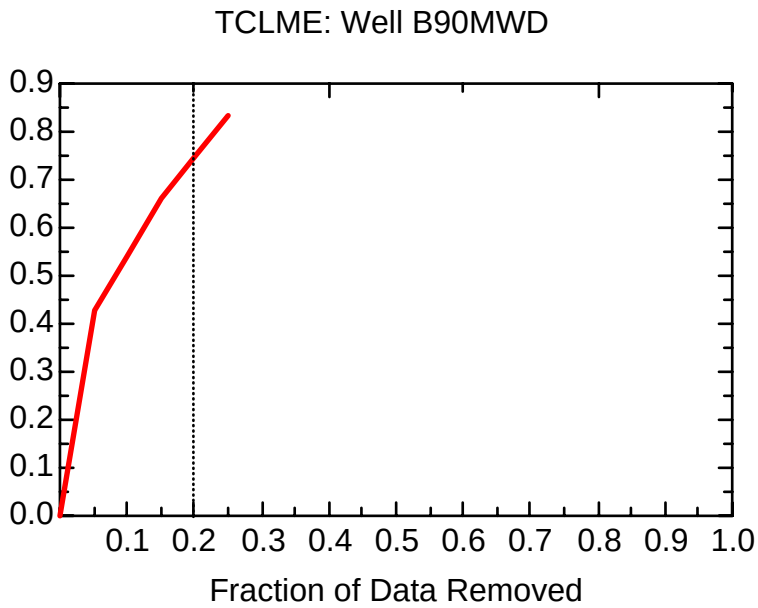

TCLME: Well B90E7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

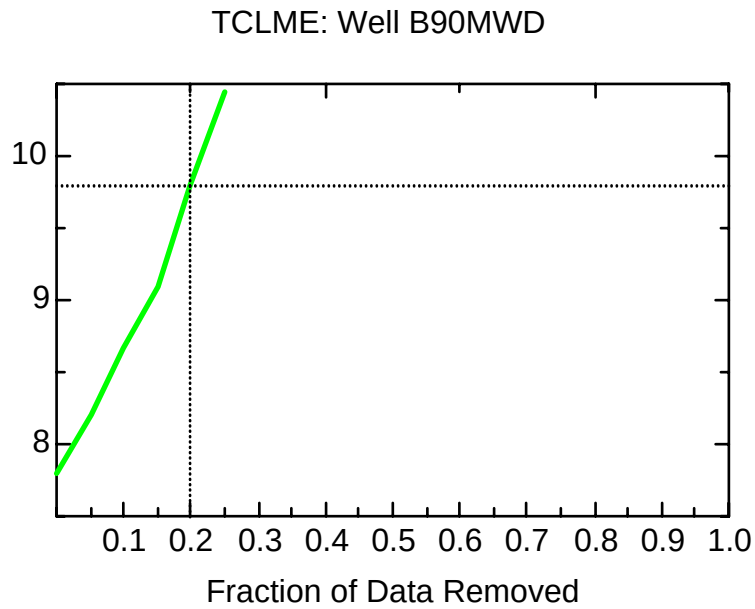

TCLME: Well B90E7
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

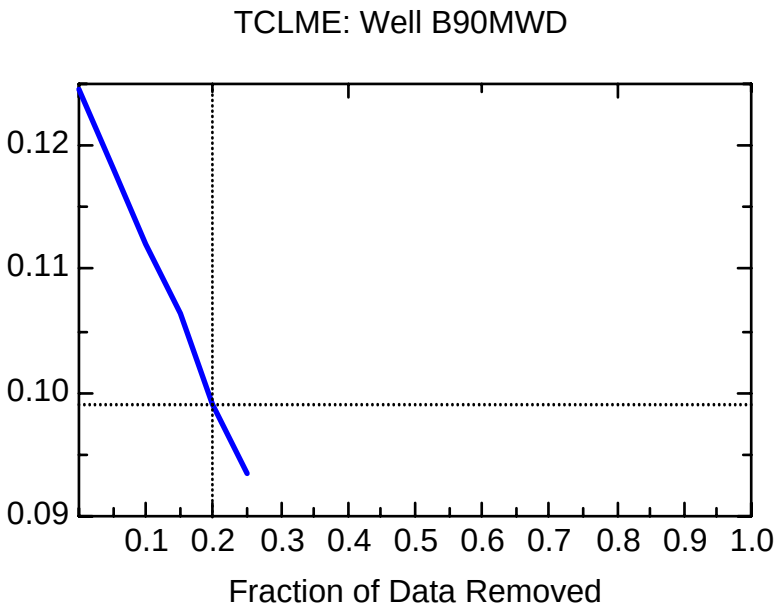

TCLME: Well B90E7
80
70
60
50
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

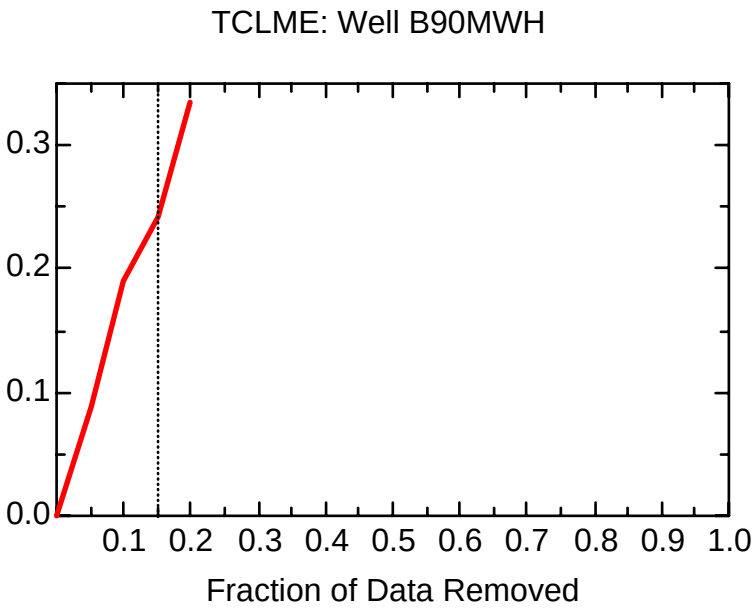

TCLME: Well B90E7
0.024
0.020
0.016
0.012
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

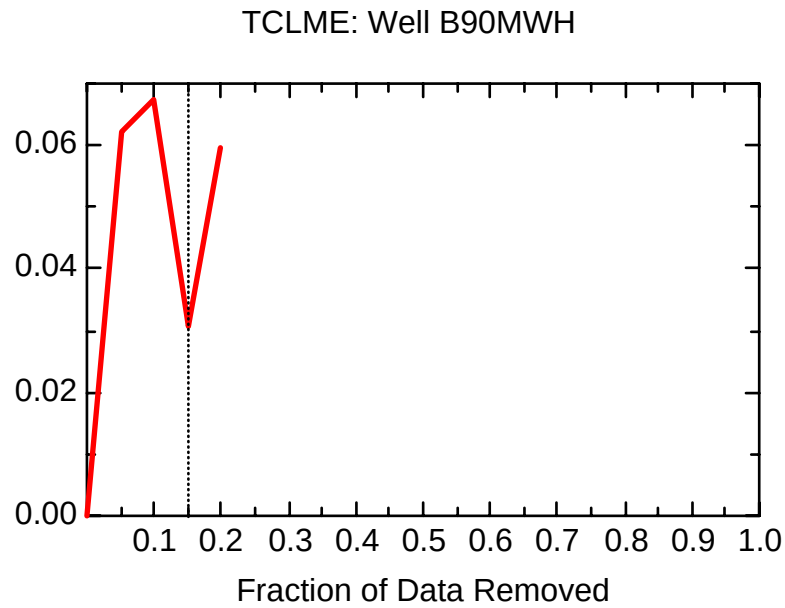

TCLME: Well B90MWD
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWD
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWD
10
9
8
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWD
0.12
0.11
0.10
0.09
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWH
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWH
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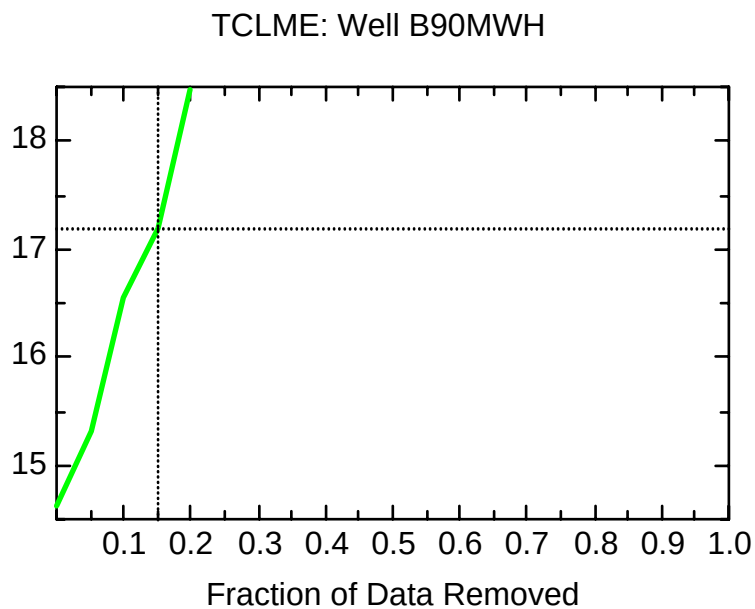
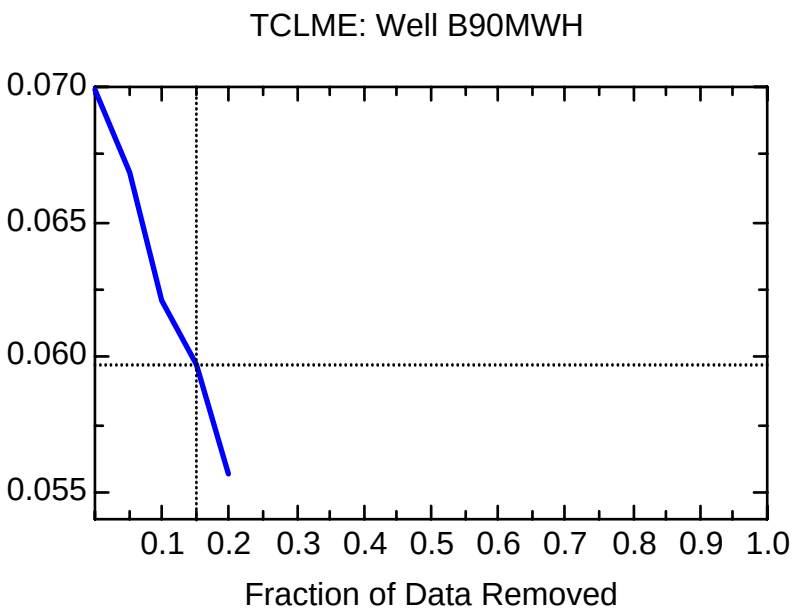
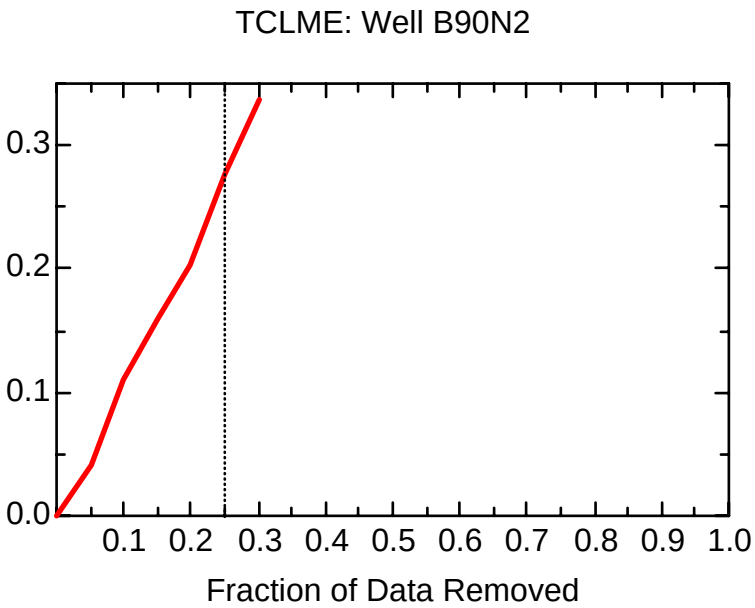
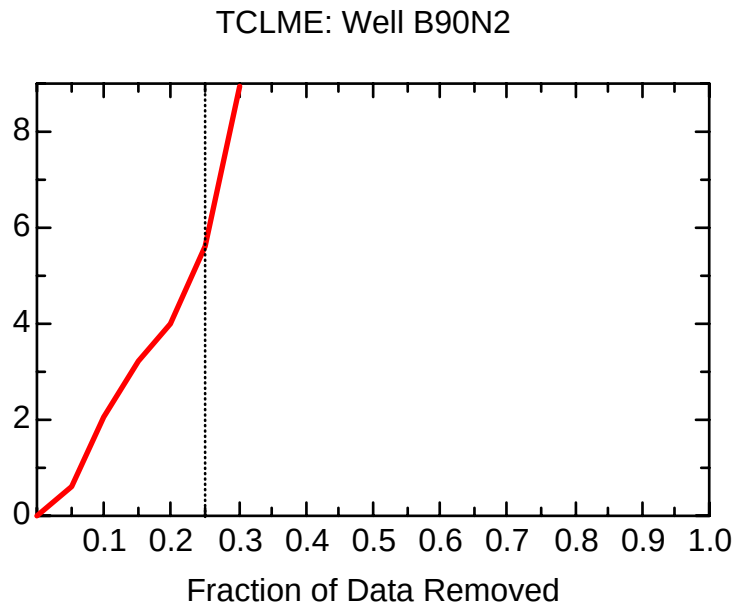
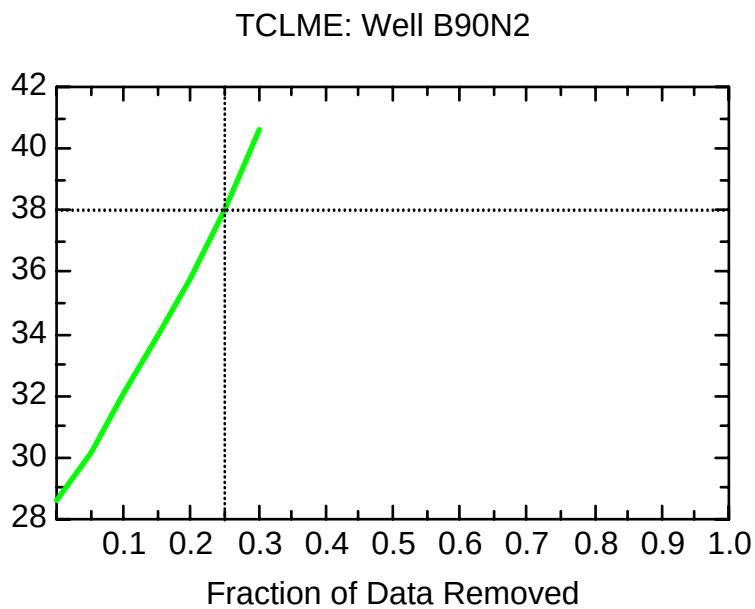
0.04
0.02
0.00
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

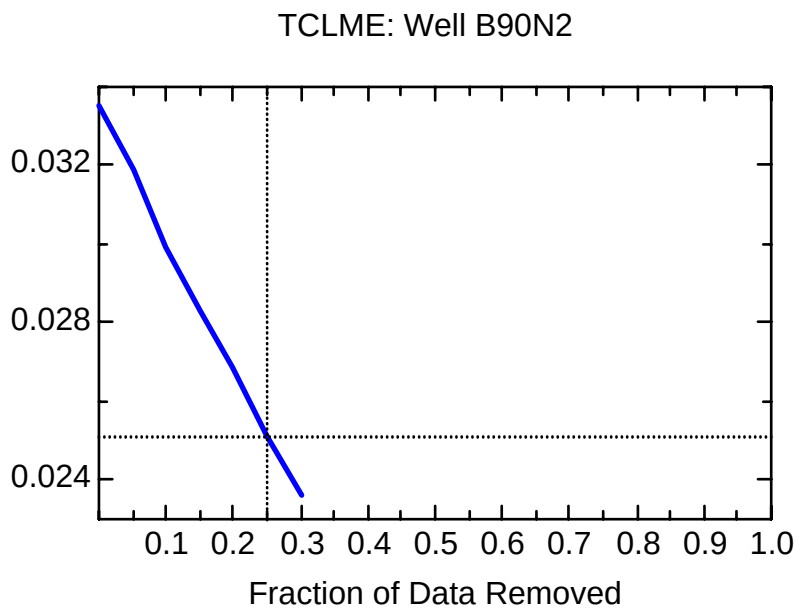

TCLME: Well B90MWH
18
17
16
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90MWH
0.070
0.065
0.060
0.055
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90N2
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90N2
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90N2
42
40
38
36
34
32
30
28
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well B90N2
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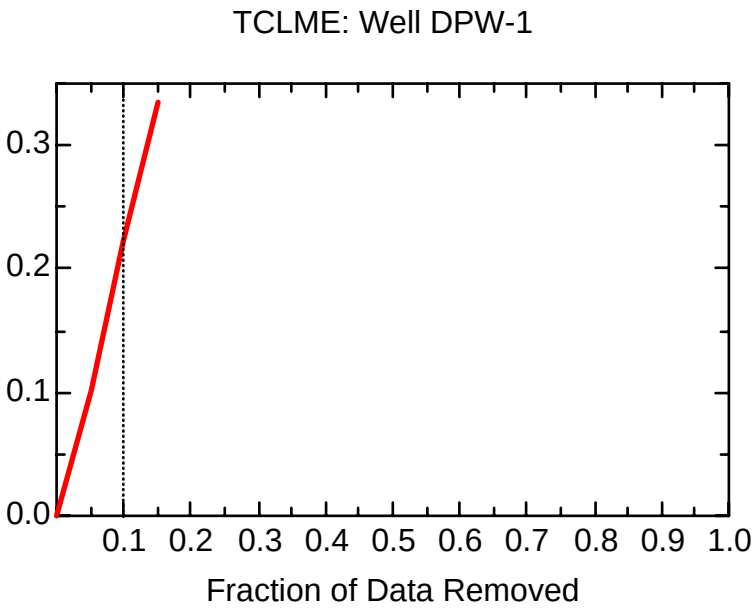
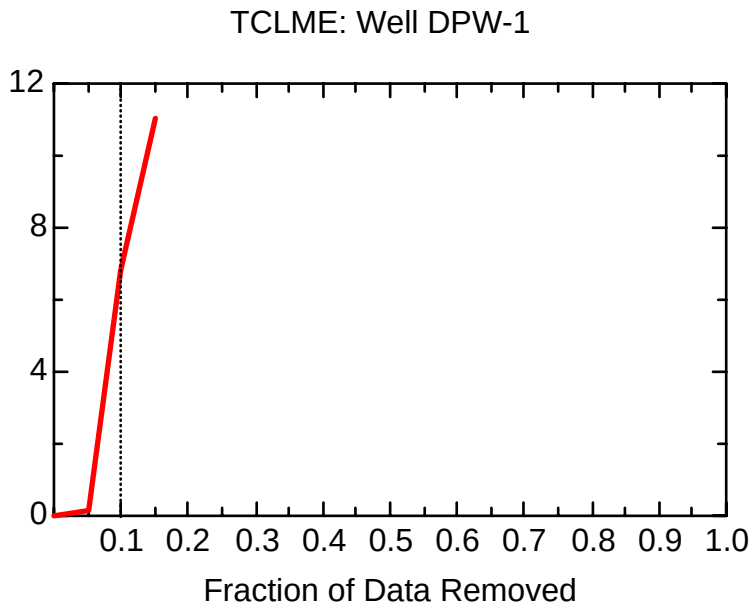
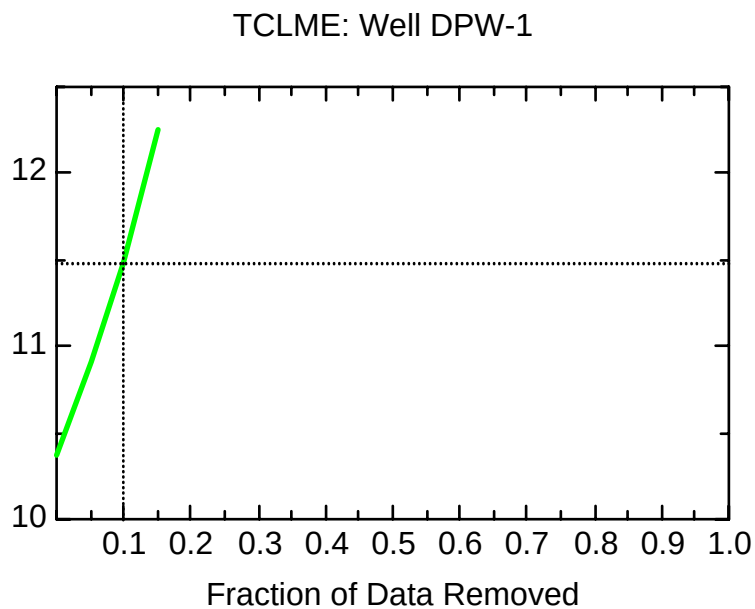
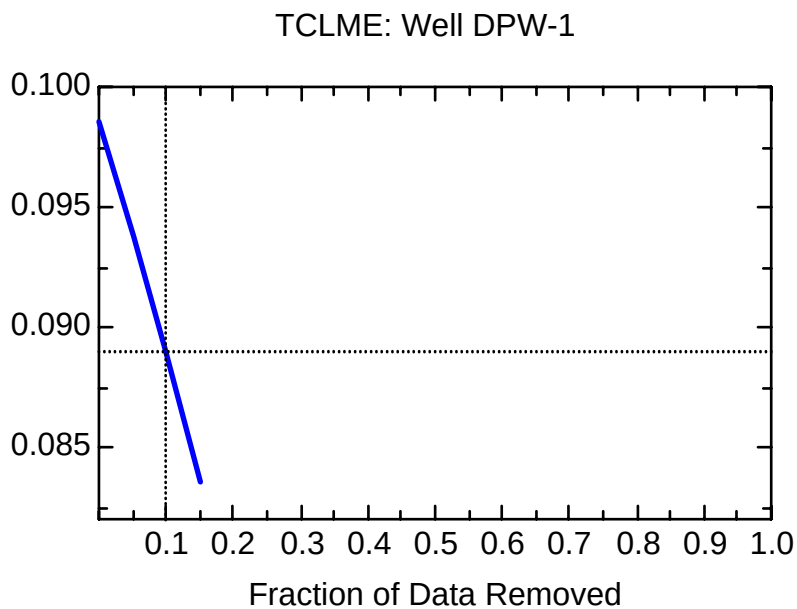
0.028
0.024
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well DPW-1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well DPW-1
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well DPW-1
12
11
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well DPW-1
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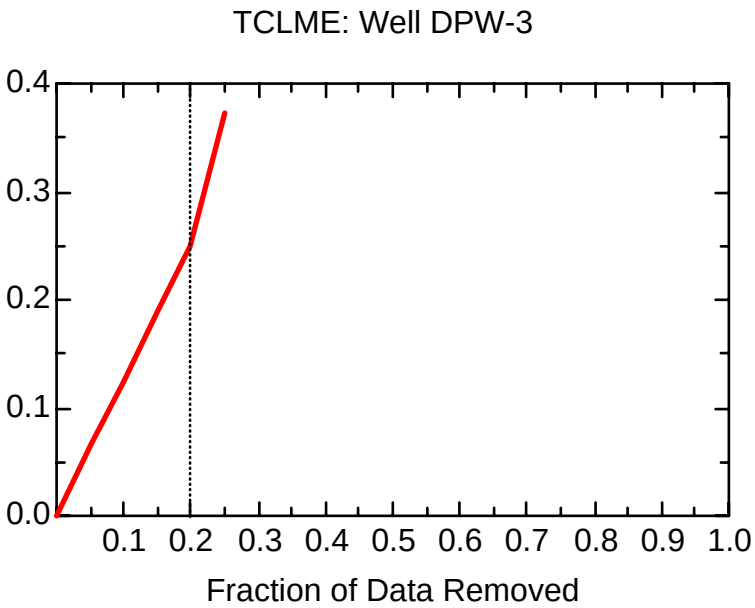
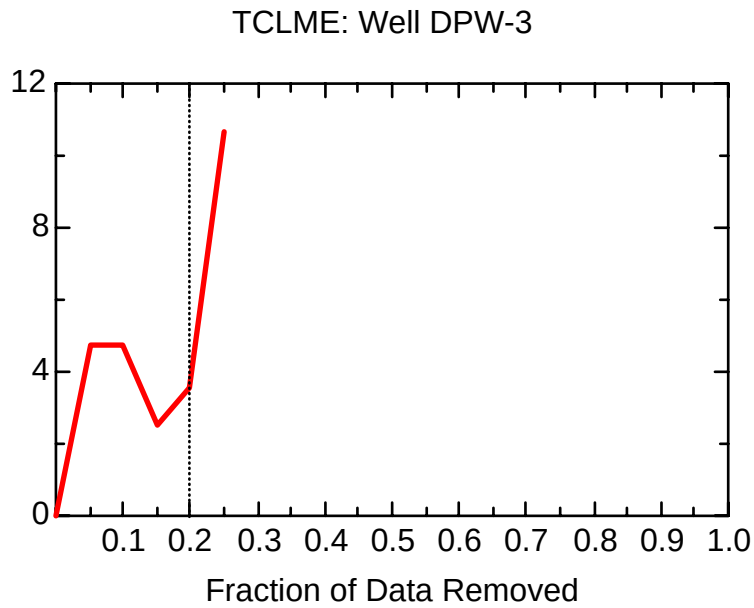
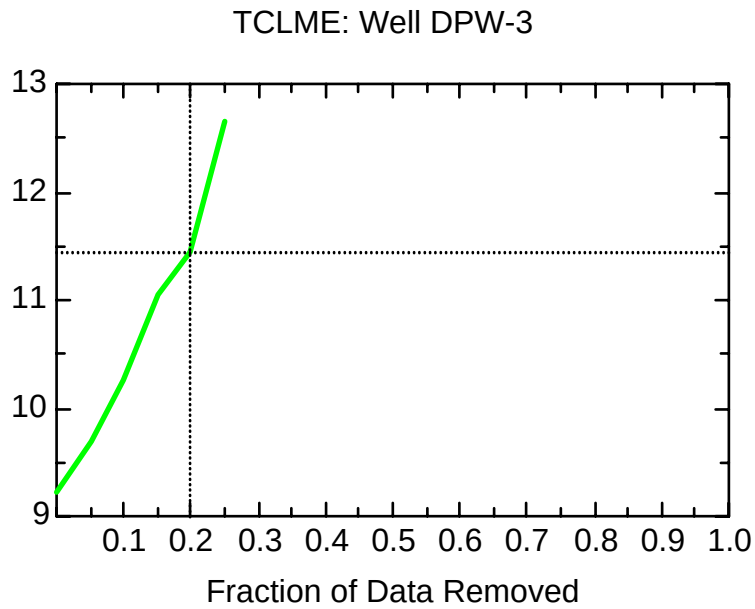
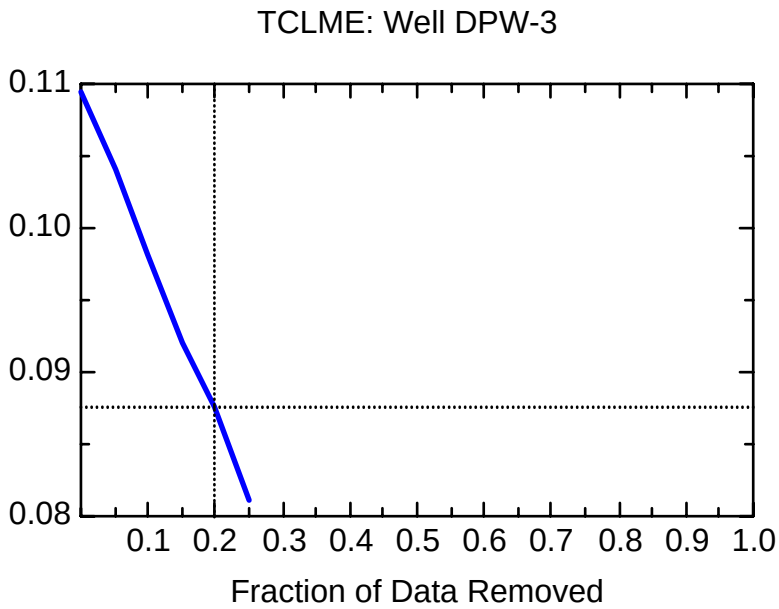
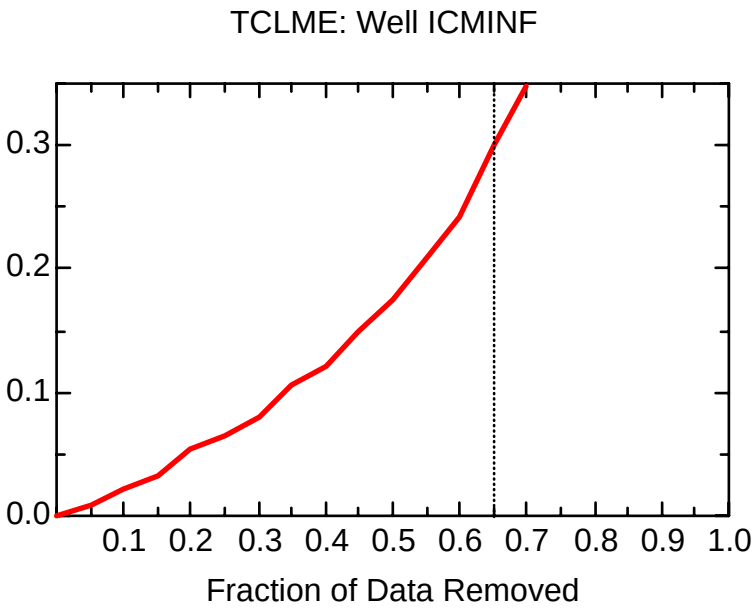
0.095
0.090
0.085
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

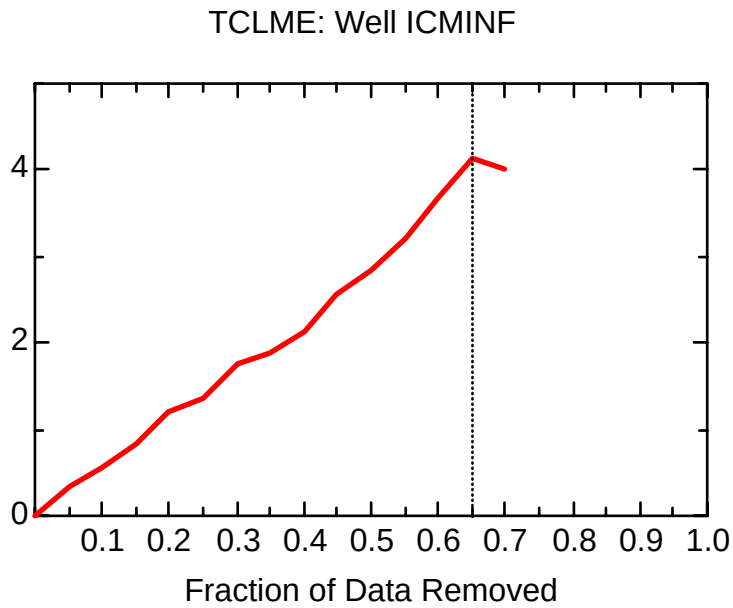

TCLME: Well DPW-3
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

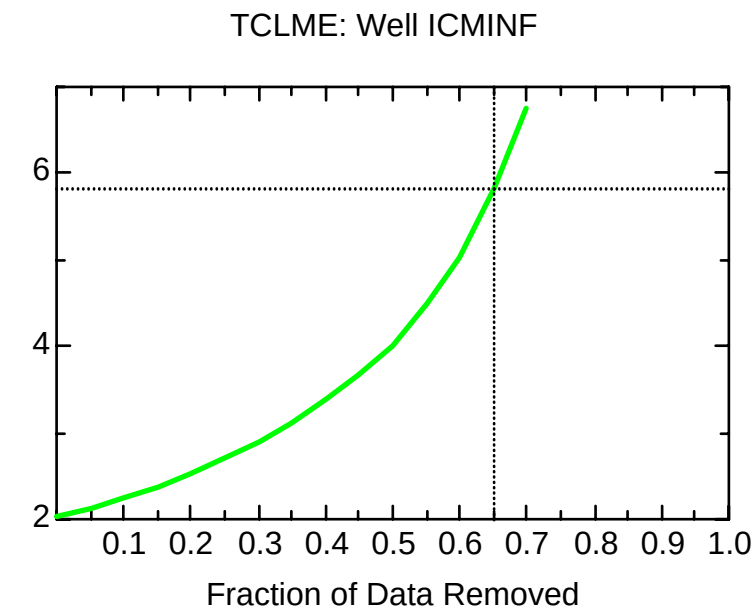

TCLME: Well DPW-3
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

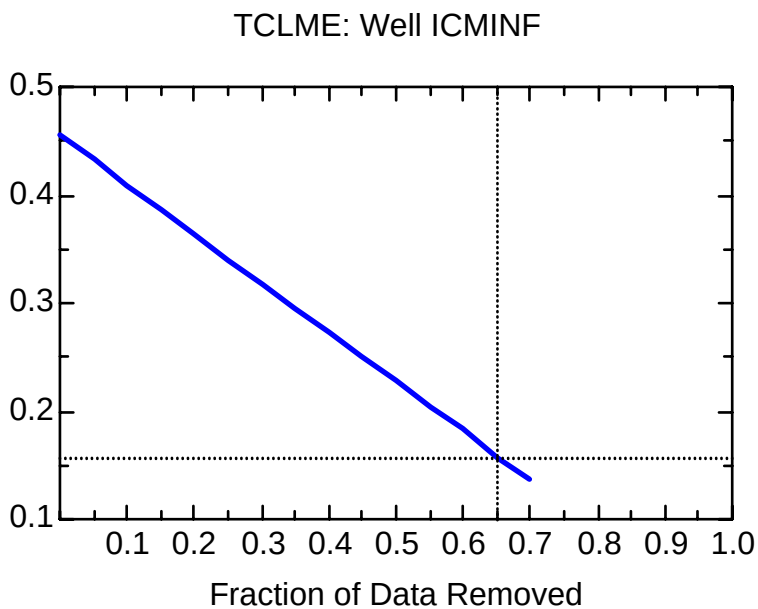

TCLME: Well DPW-3
13
12
11
10
9
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

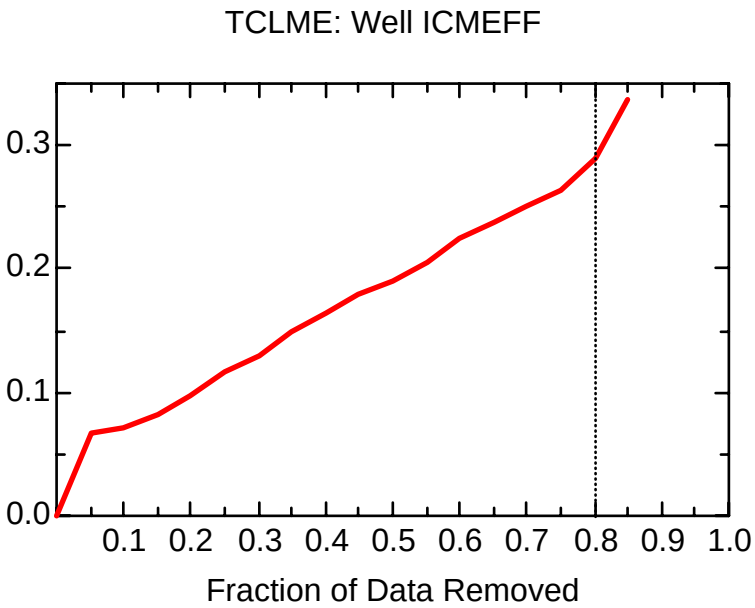

TCLME: Well DPW-3
0.11
0.10
0.09
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

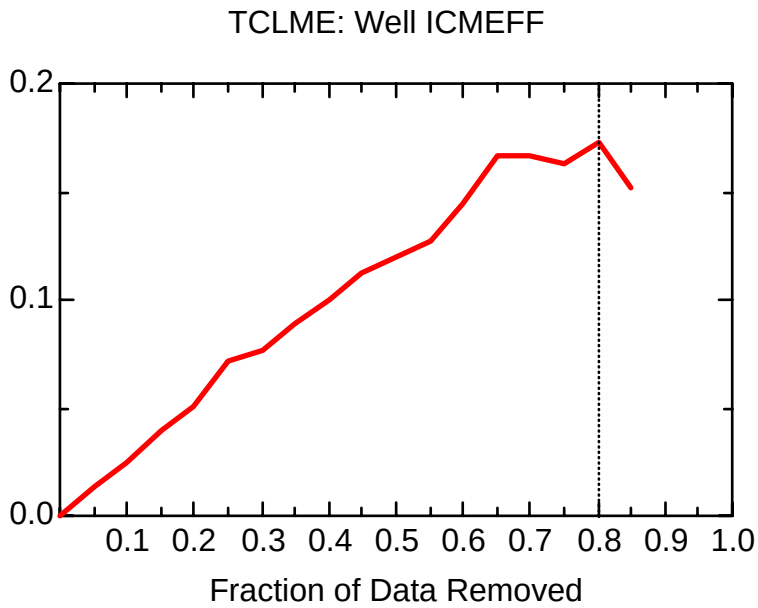

TCLME: Well ICMINF
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

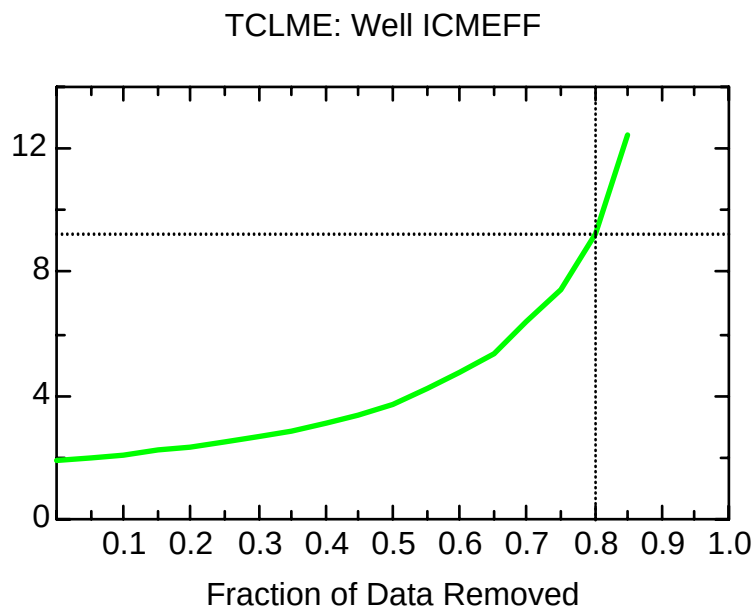

TCLME: Well ICMINF
0
2
4
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

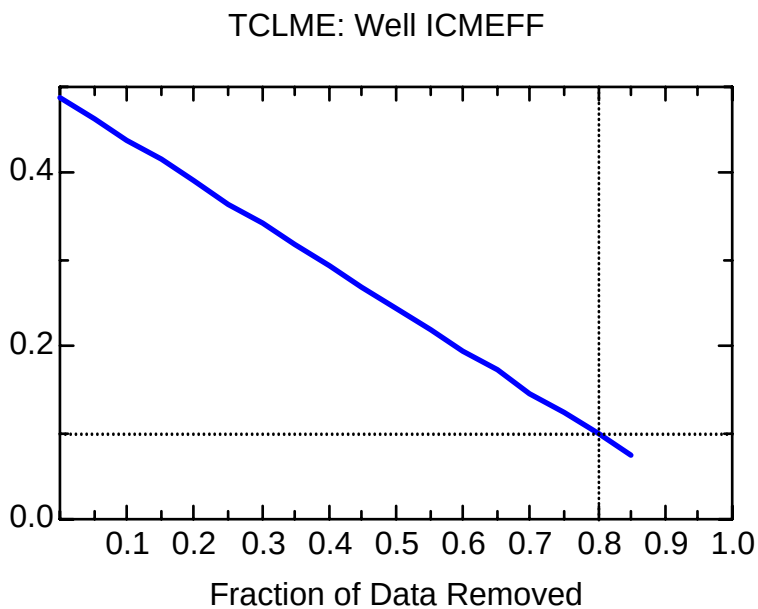

TCLME: Well ICMINF
2
4
6
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

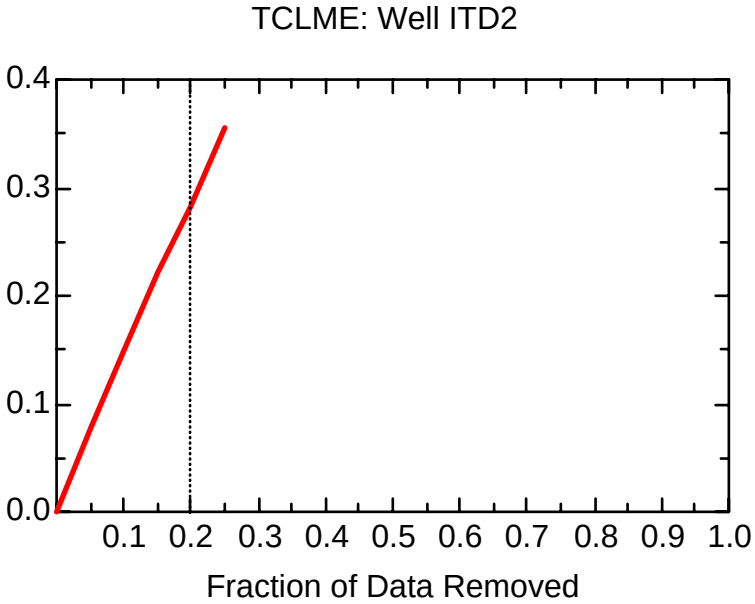

TCLME: Well ICMINF
0.1
0.2
0.3
0.4
0.5
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

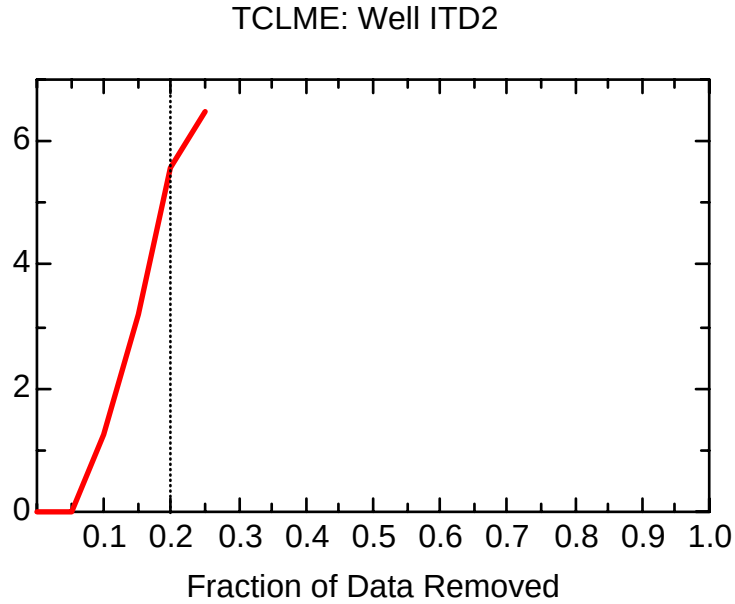

TCLME: Well ICMEFF
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

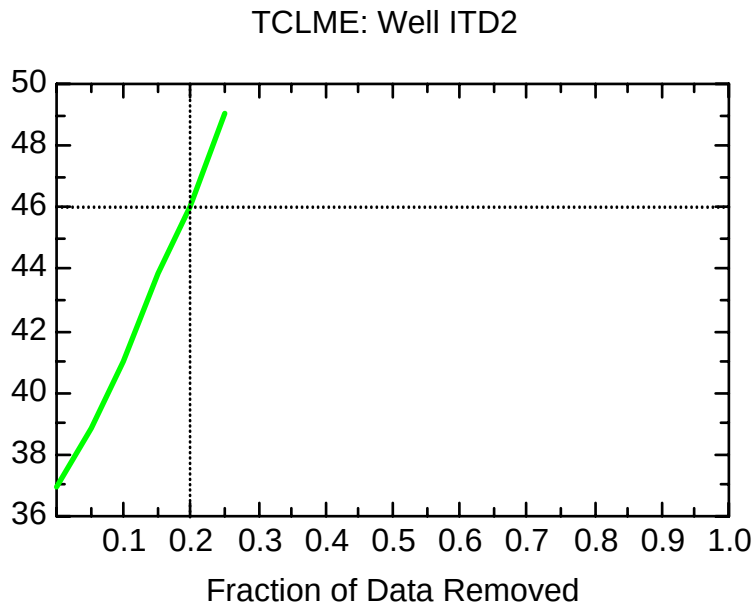

TCLME: Well ICMEFF
0.0
0.1
0.2
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

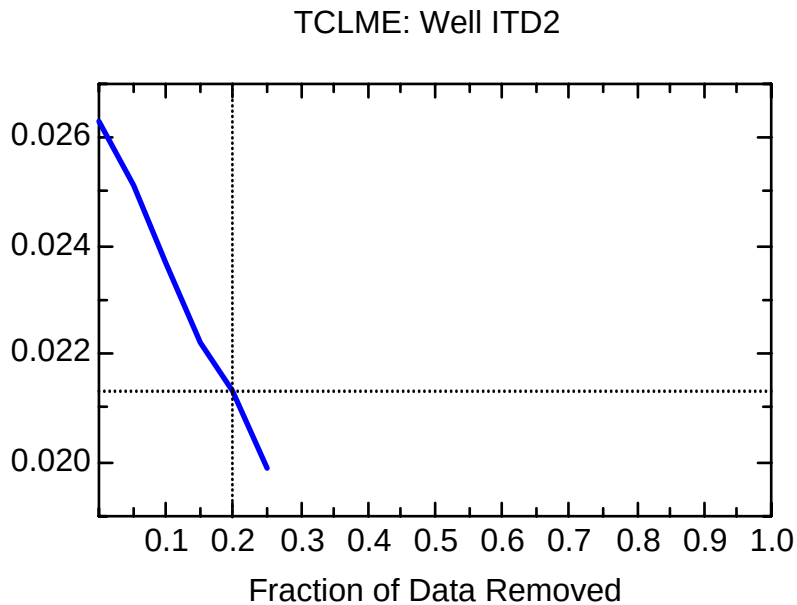

TCLME: Well ICMEFF
0
4
8
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

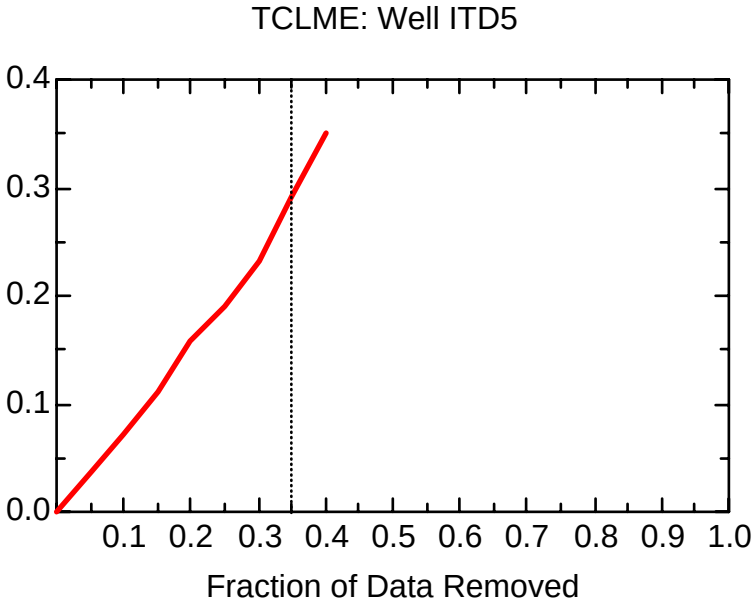

TCLME: Well ICMEFF
0.0
0.2
0.4
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

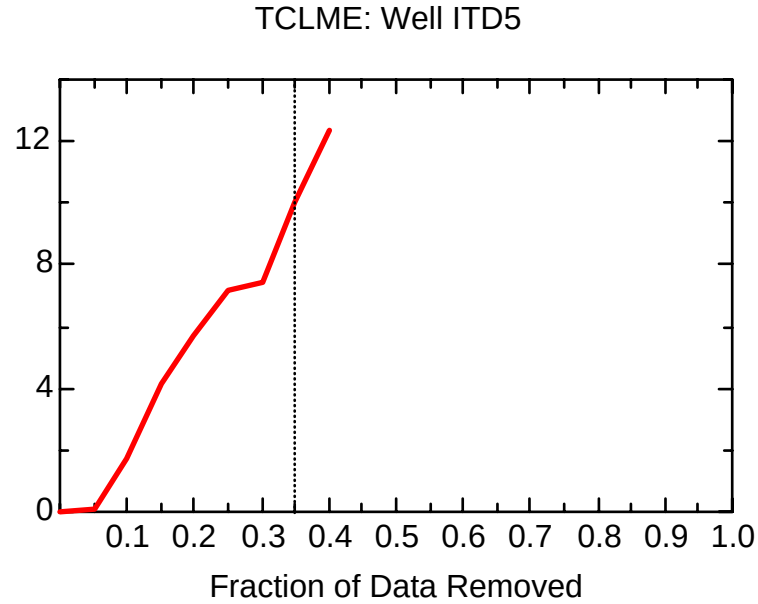

TCLME: Well ITD2
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

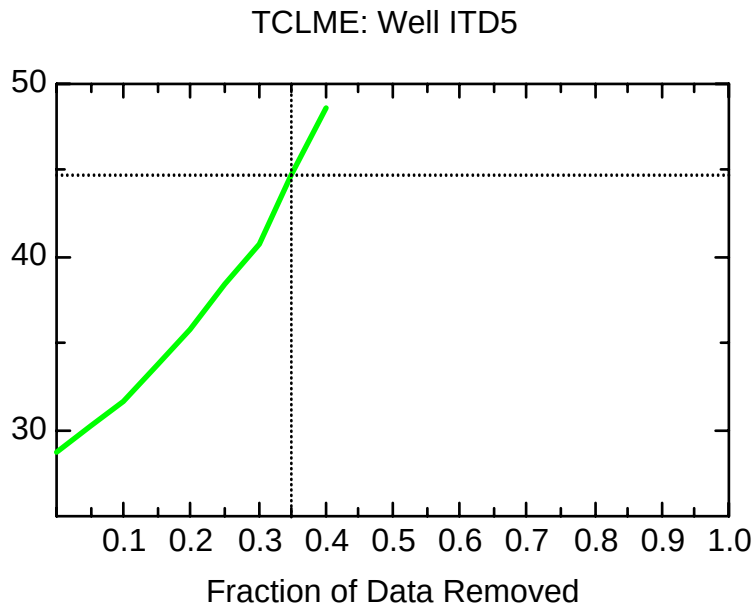

TCLME: Well ITD2
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

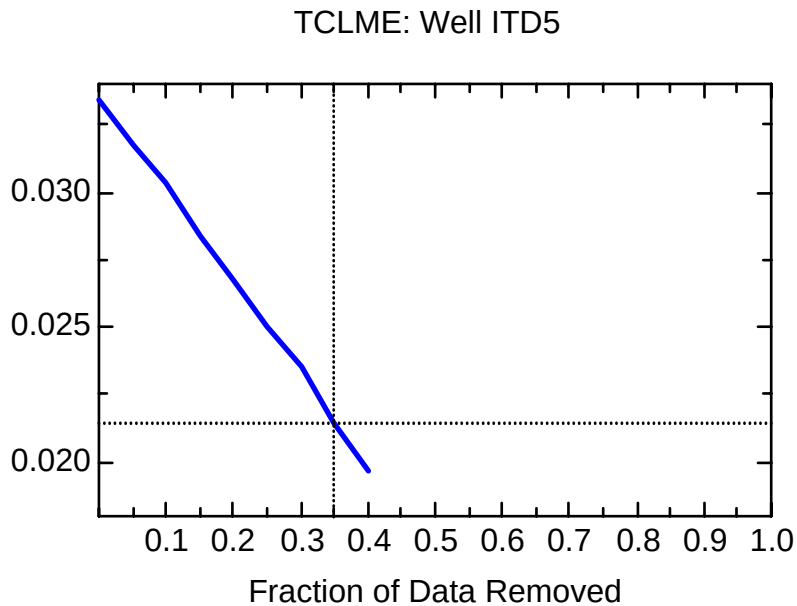

TCLME: Well ITD2
50
48
46
44
42
40
38
36
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

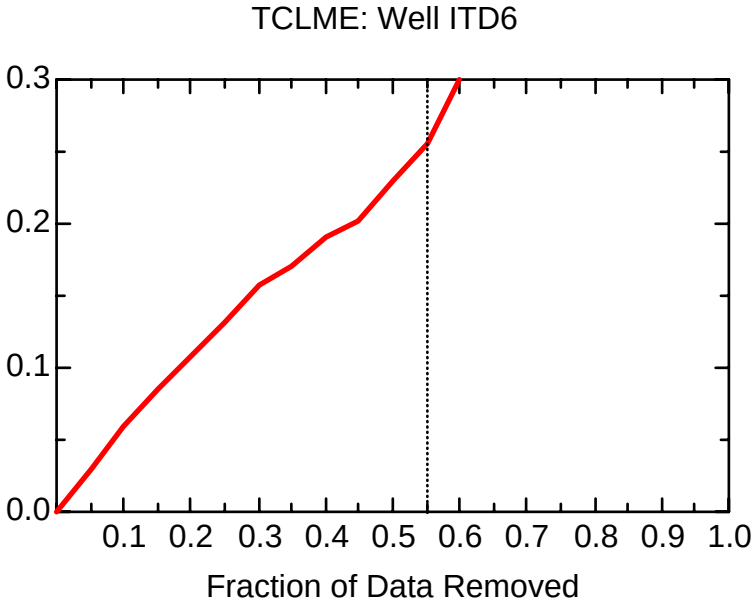

TCLME: Well ITD2
0.026
0.024
0.022
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

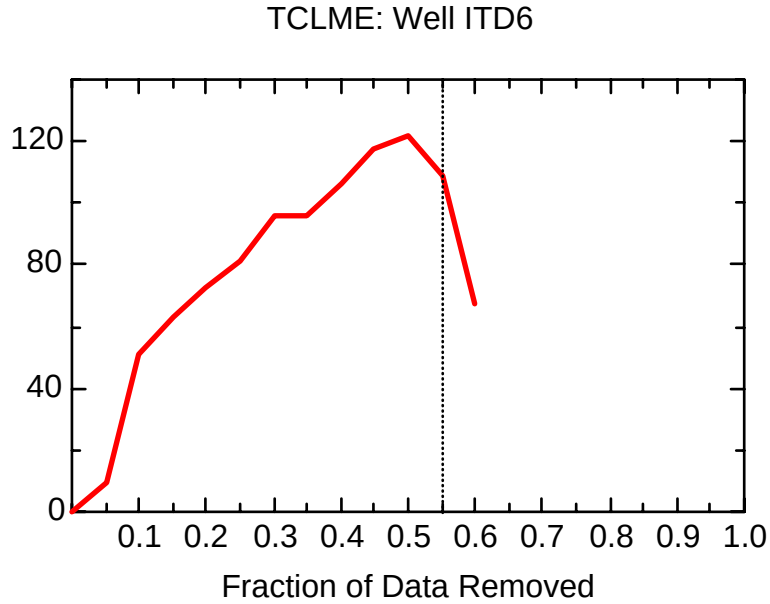

TCLME: Well ITD5
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

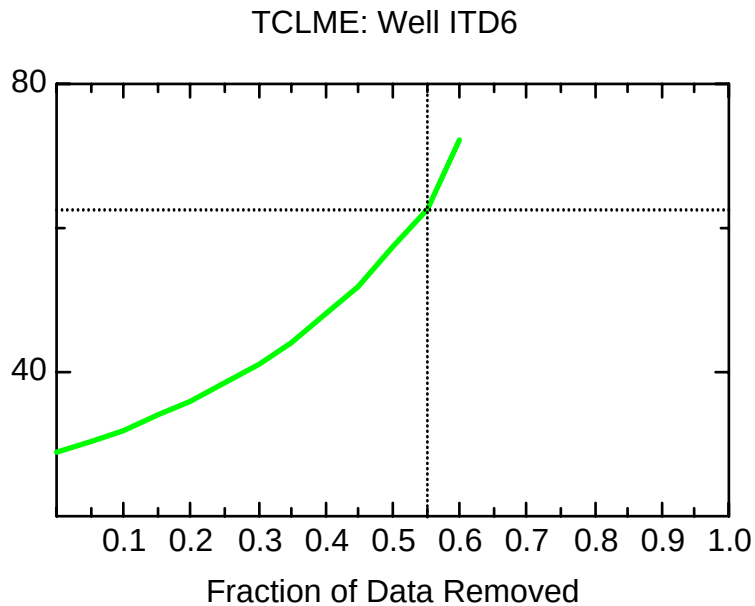

TCLME: Well ITD5
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

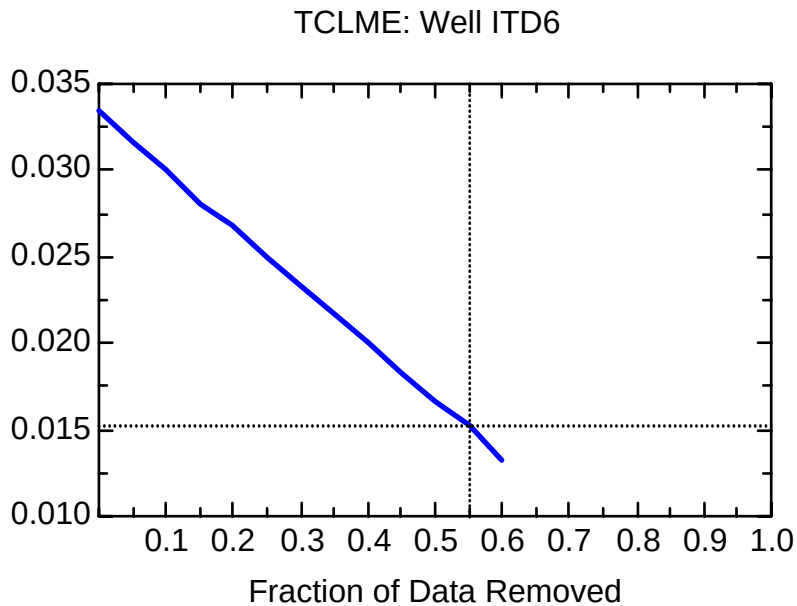

TCLME: Well ITD5
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

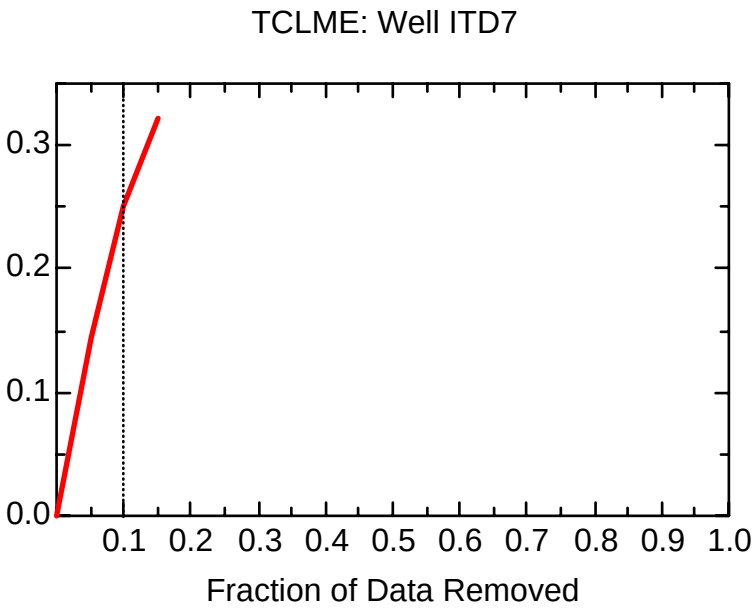

TCLME: Well ITD5
0.030
0.025
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

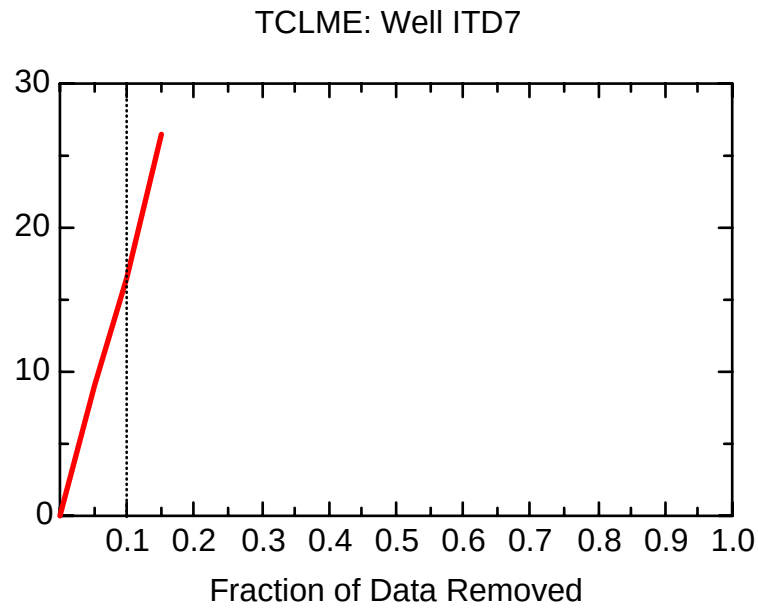

TCLME: Well ITD6
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

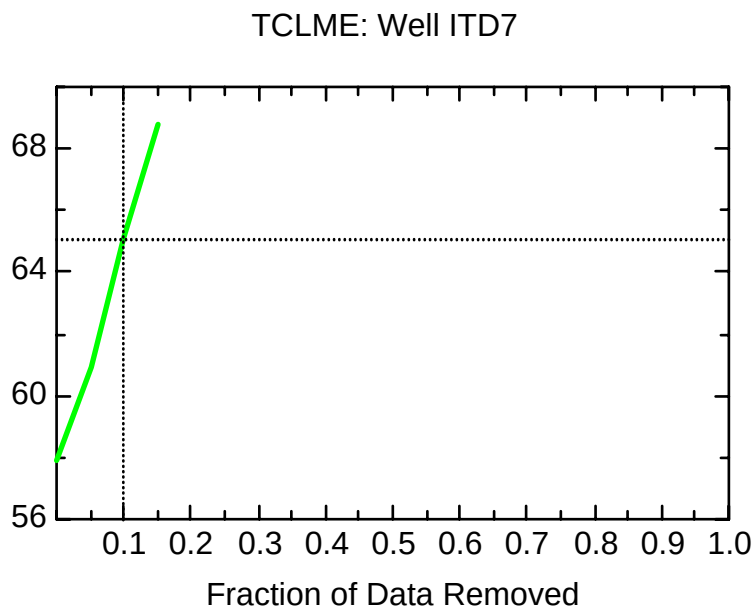

TCLME: Well ITD6
120
80
40
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

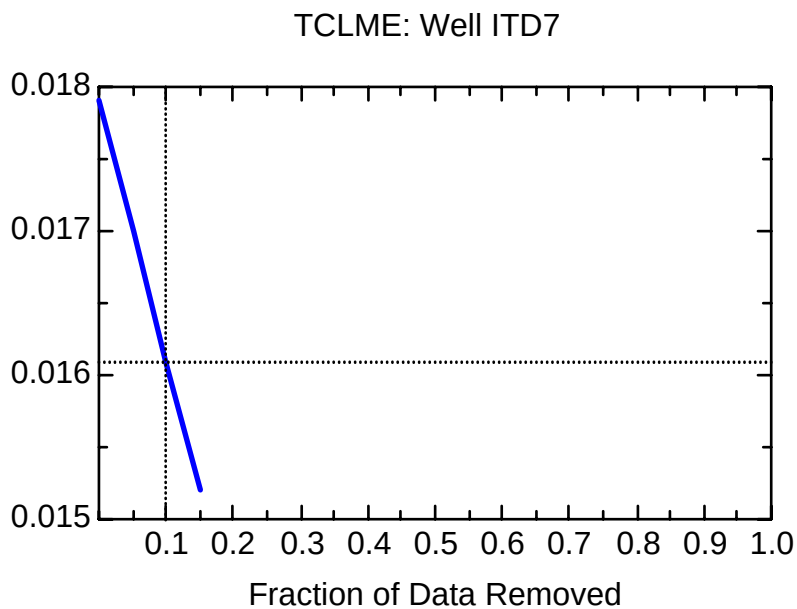

TCLME: Well ITD6
80
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

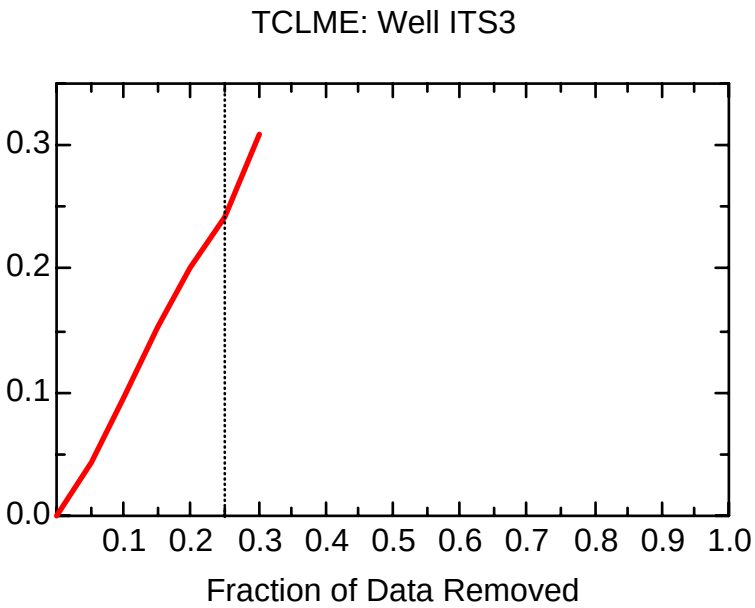

TCLME: Well ITD6
0.035
0.030
0.025
0.020
0.015
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

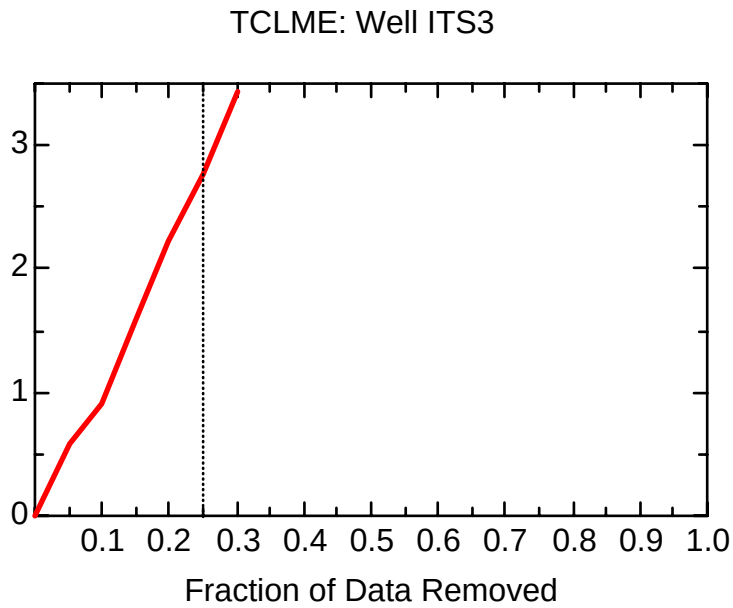

TCLME: Well ITD7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

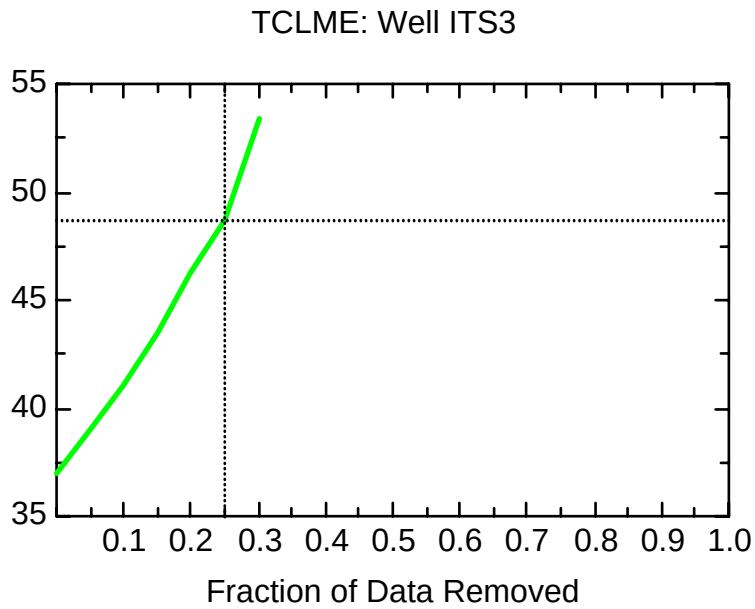

TCLME: Well ITD7
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

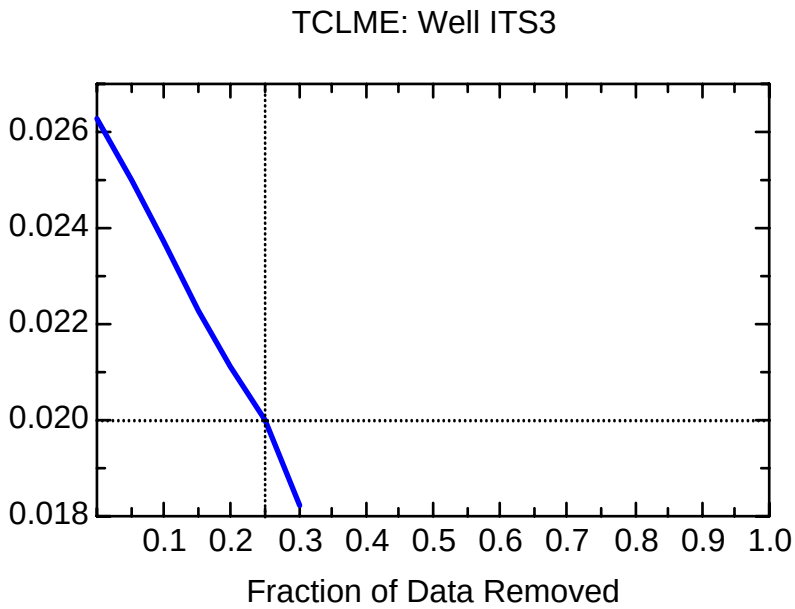

TCLME: Well ITD7
68
64
60
56
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

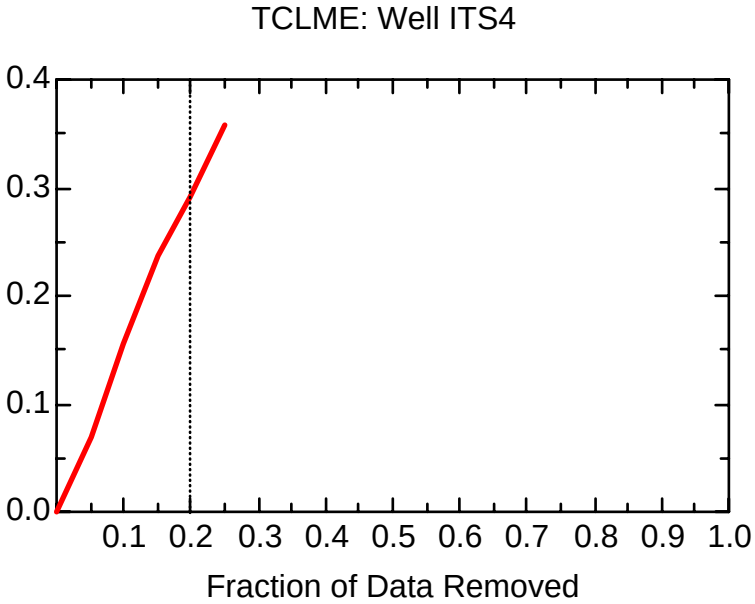

TCLME: Well ITD7
0.018
0.017
0.016
0.015
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

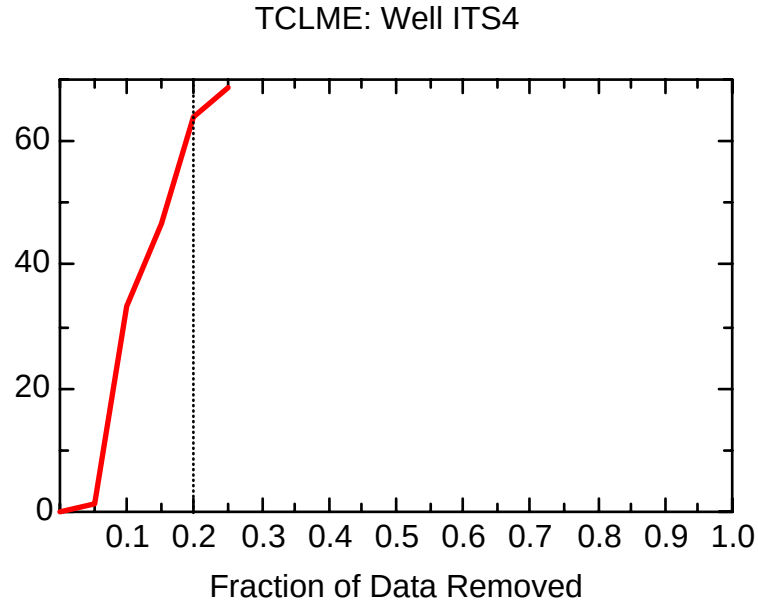

TCLME: Well ITS3
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

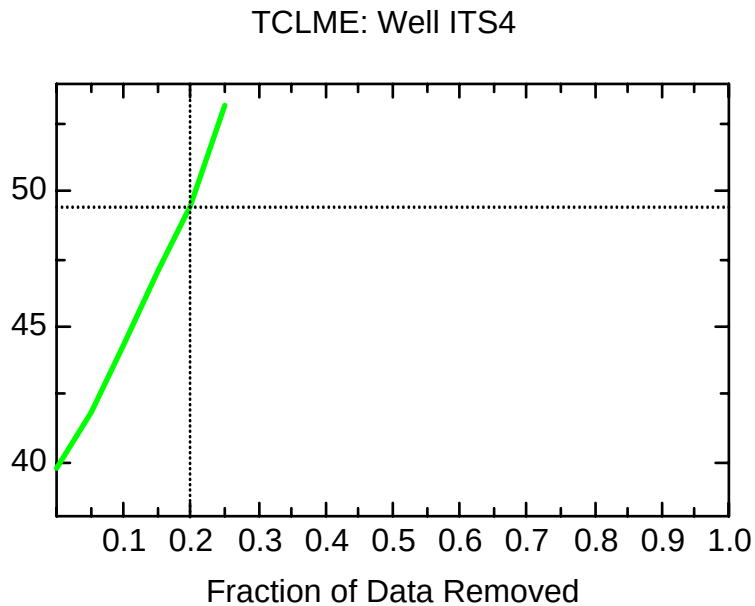

TCLME: Well ITS3
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

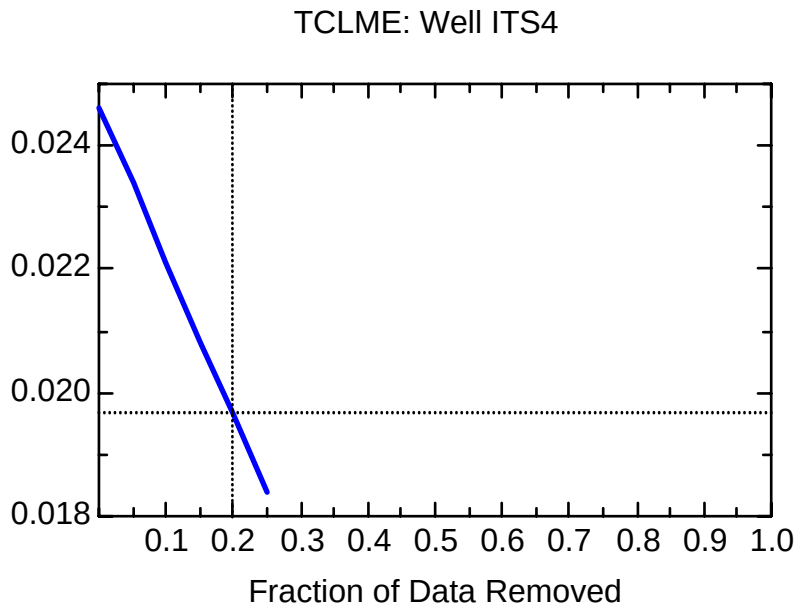

TCLME: Well ITS3
55
50
45
40
35
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

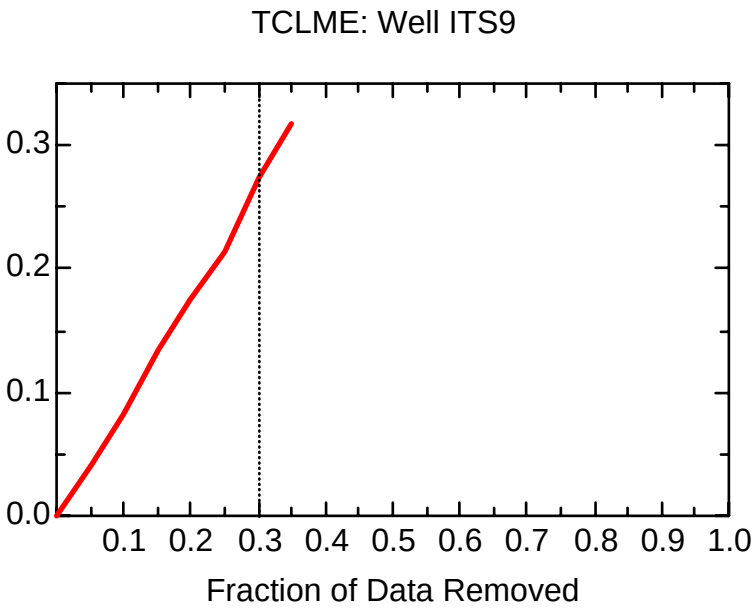

TCLME: Well ITS3
0.026
0.024
0.022
0.020
0.018
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

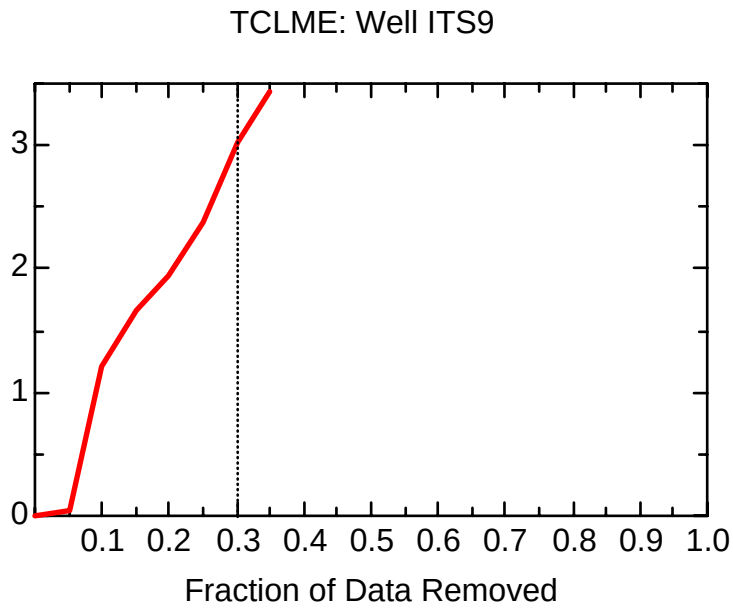

TCLME: Well ITS4
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

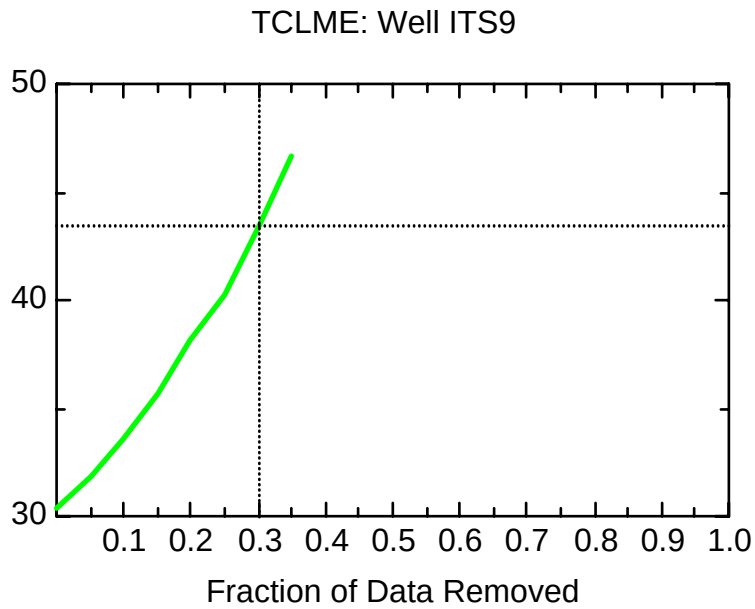

TCLME: Well ITS4
60
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

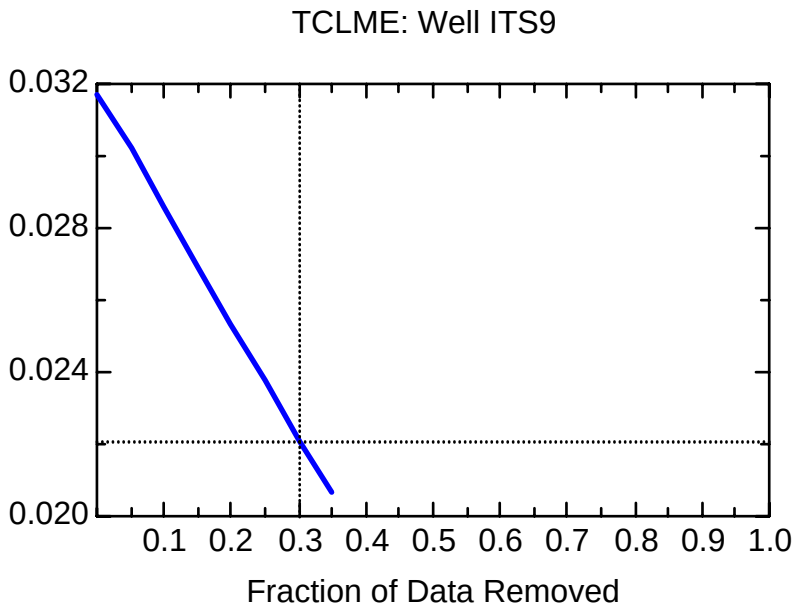

TCLME: Well ITS4
50
45
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

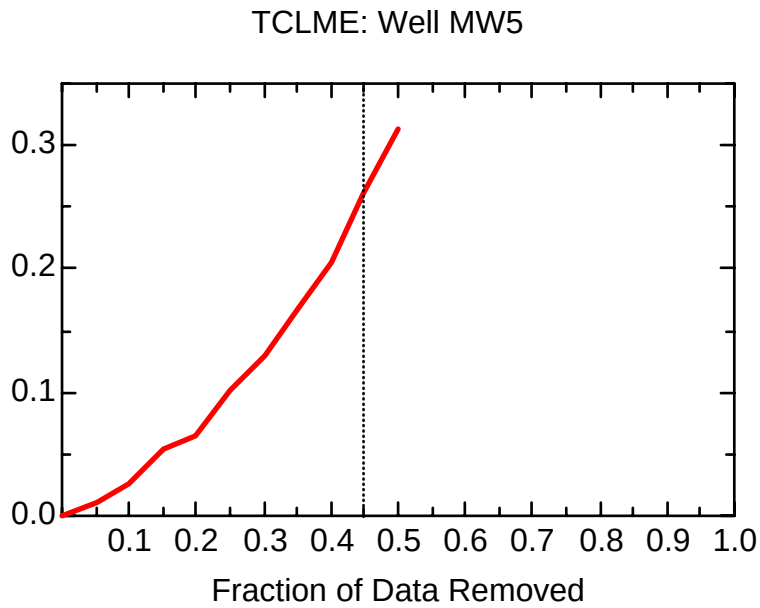

TCLME: Well ITS4
0.024
0.022
0.020
0.018
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

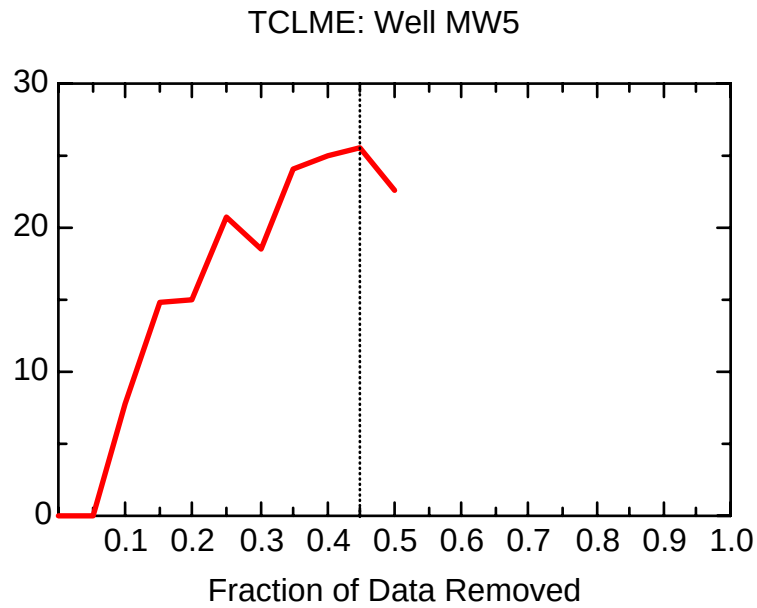

TCLME: Well ITS9
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

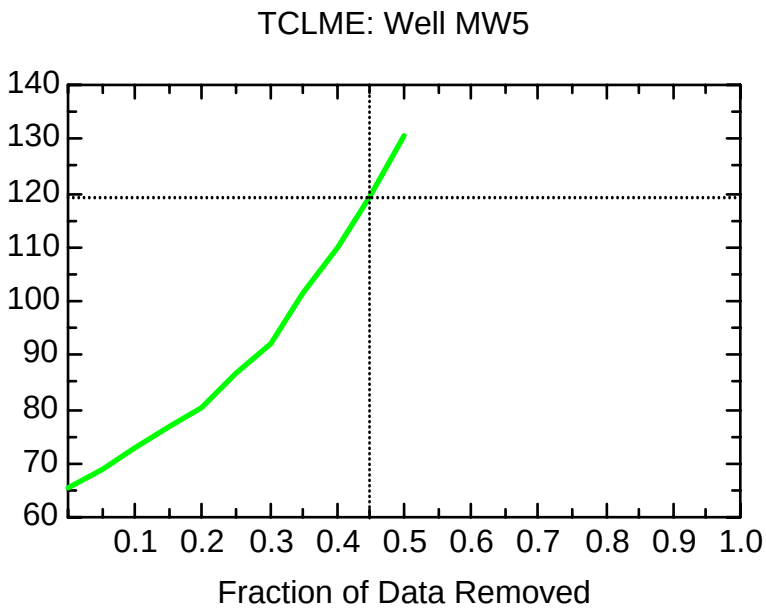

TCLME: Well ITS9
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

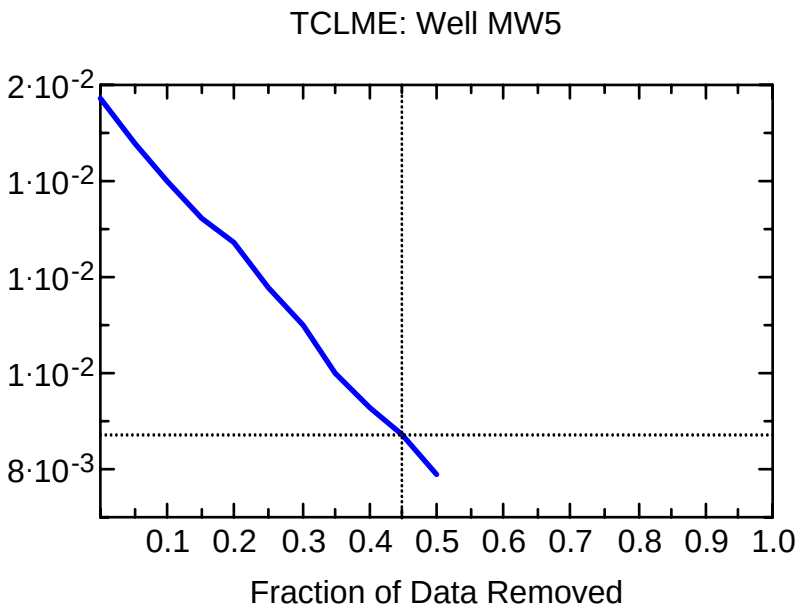

TCLME: Well ITS9
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

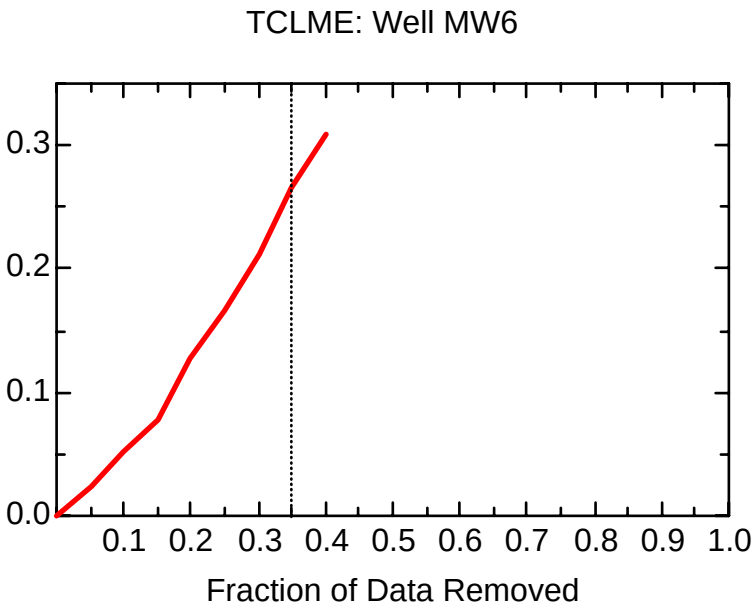

TCLME: Well ITS9
0.032
0.028
0.024
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

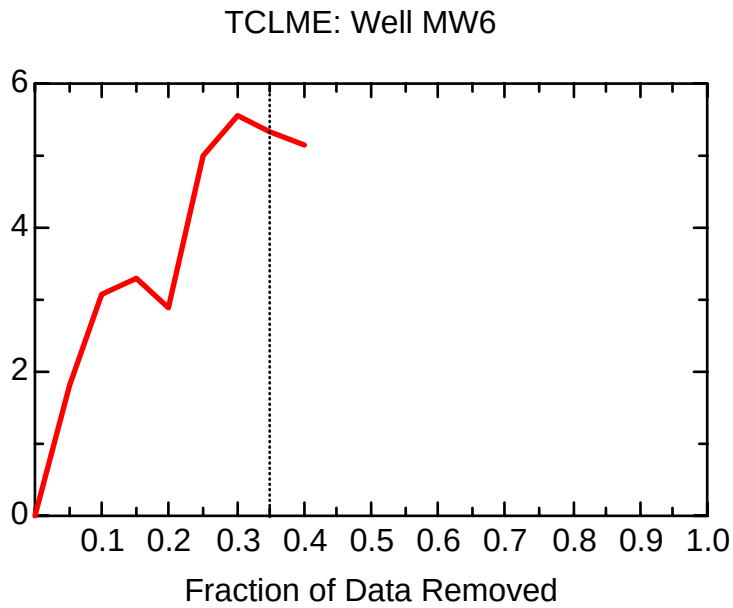

TCLME: Well MW5
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

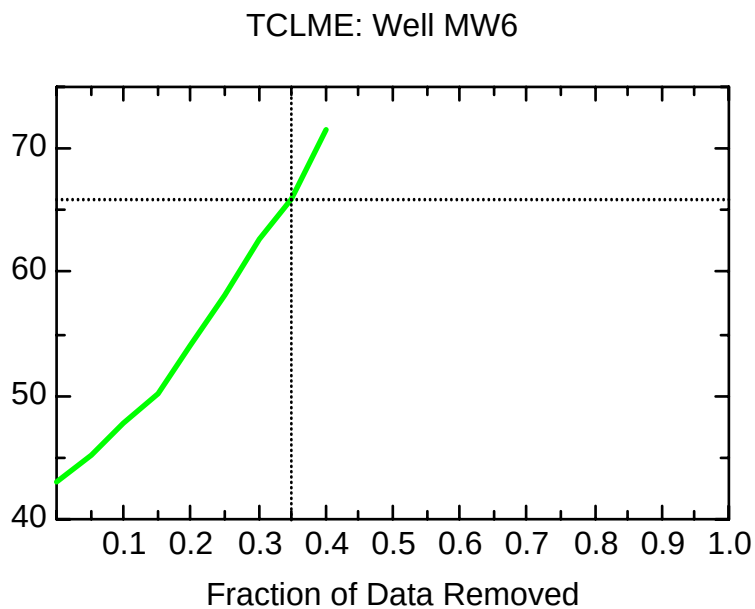

TCLME: Well MW5
30
20
10
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

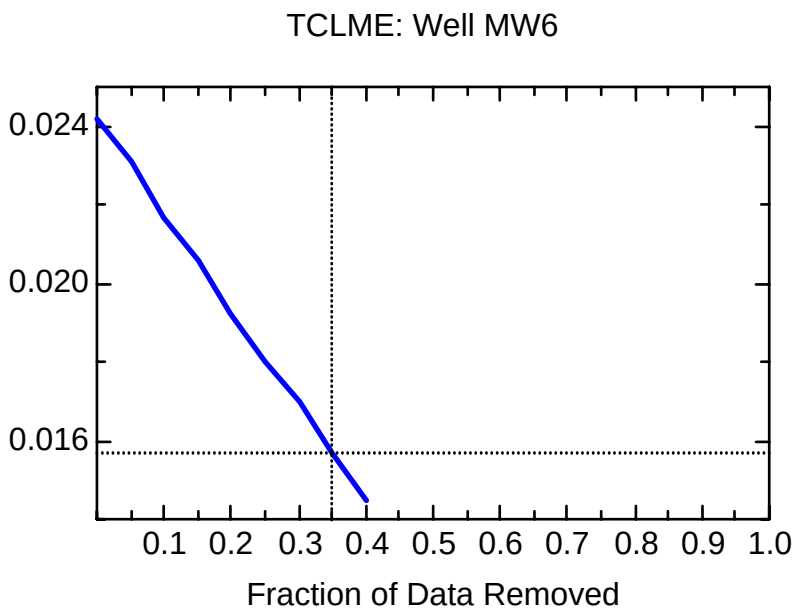

TCLME: Well MW5
140
130
120
110
100
90
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

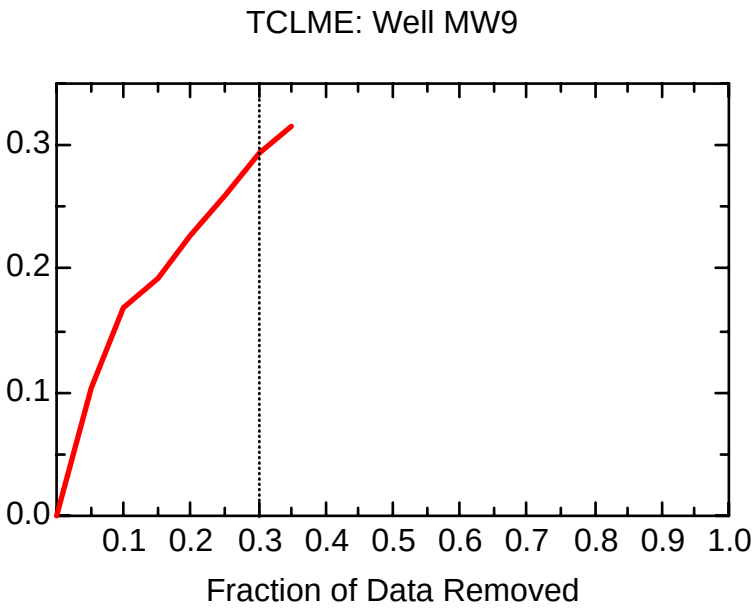

TCLME: Well MW5
2·10-2
1·10-2
1·10-2
1·10-2
8·10-3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

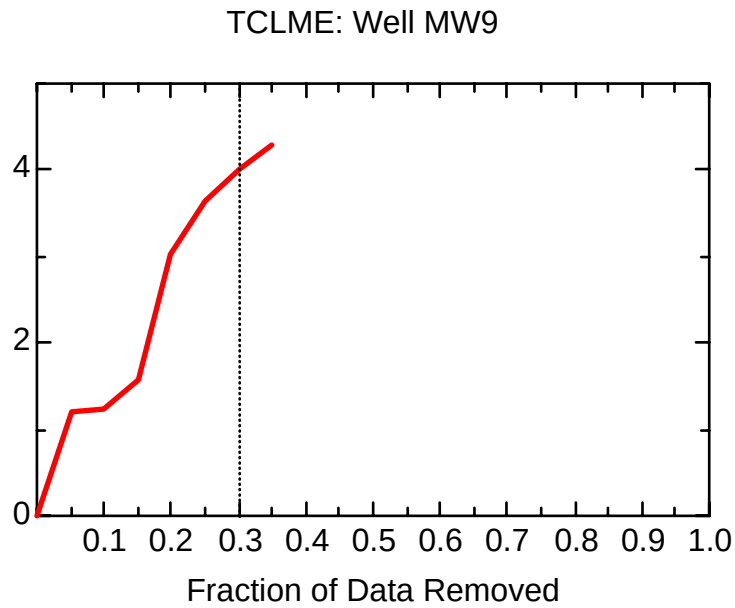

TCLME: Well MW6
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

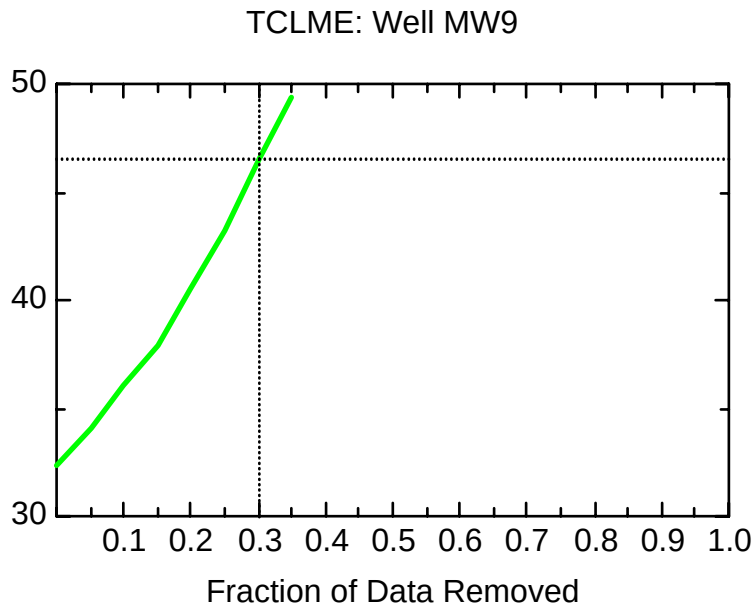

TCLME: Well MW6
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

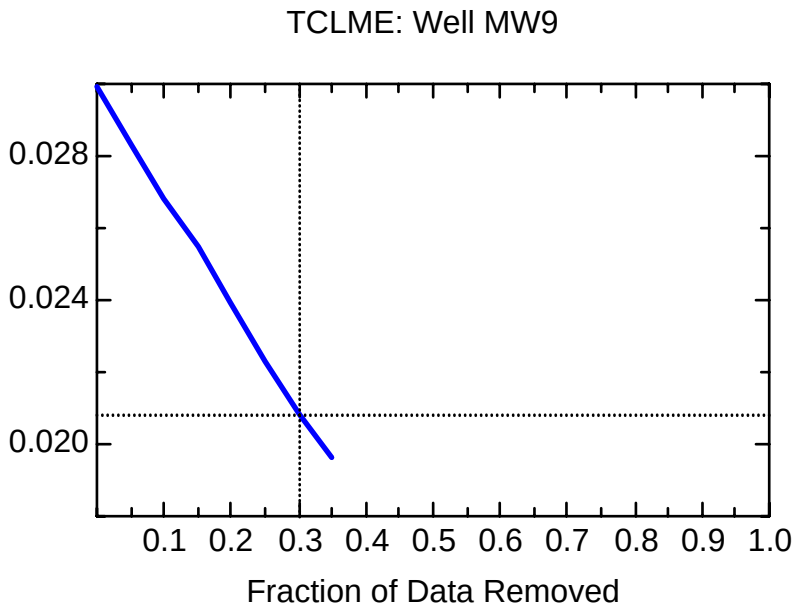

TCLME: Well MW6
70
60
50
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MW6
0.024
0.020
0.016
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

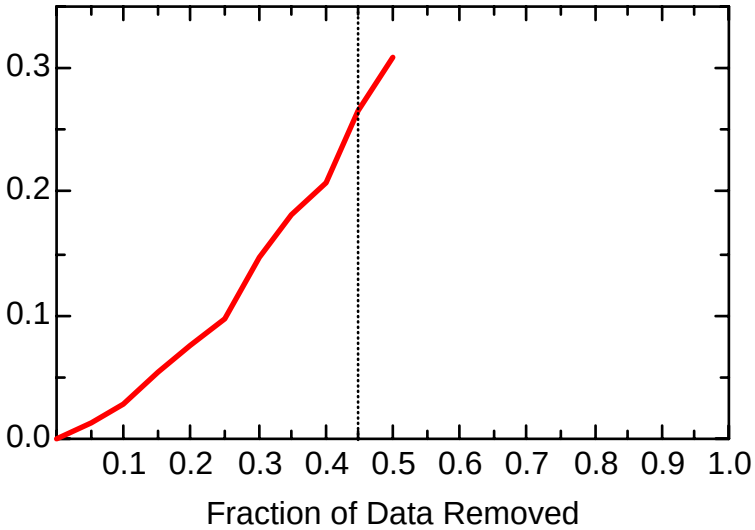

TCLME: Well MW9
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MW9
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

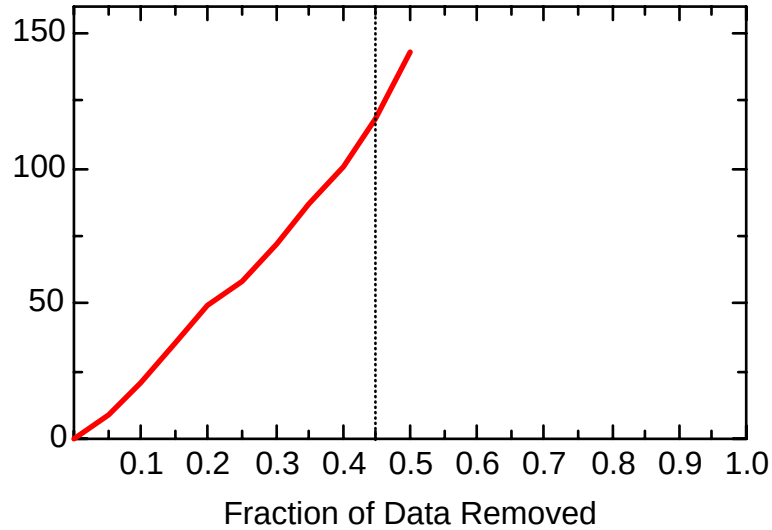

TCLME: Well MW9
50
40
30
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MW9
0.028
0.024
0.020
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

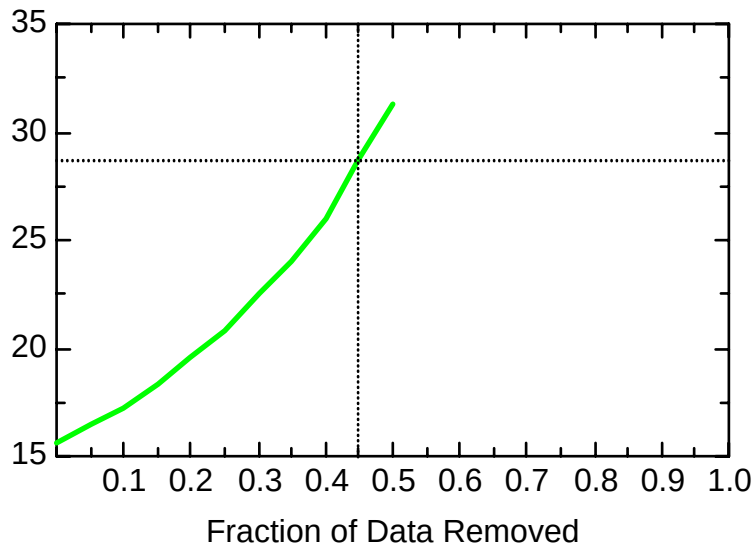
TCLME: Well MW25



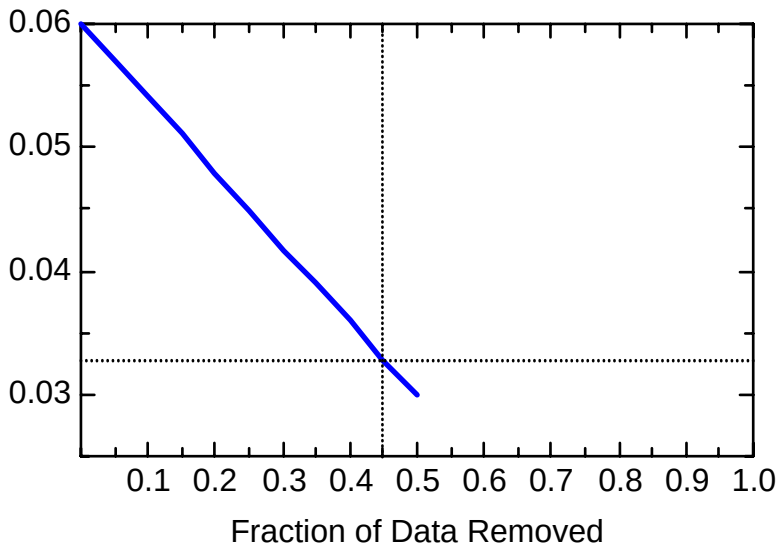
TCLME: Well MW25

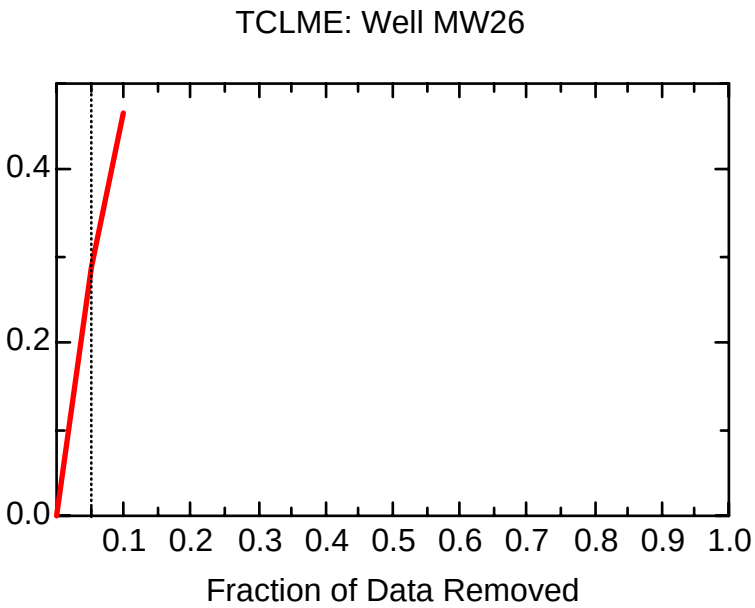


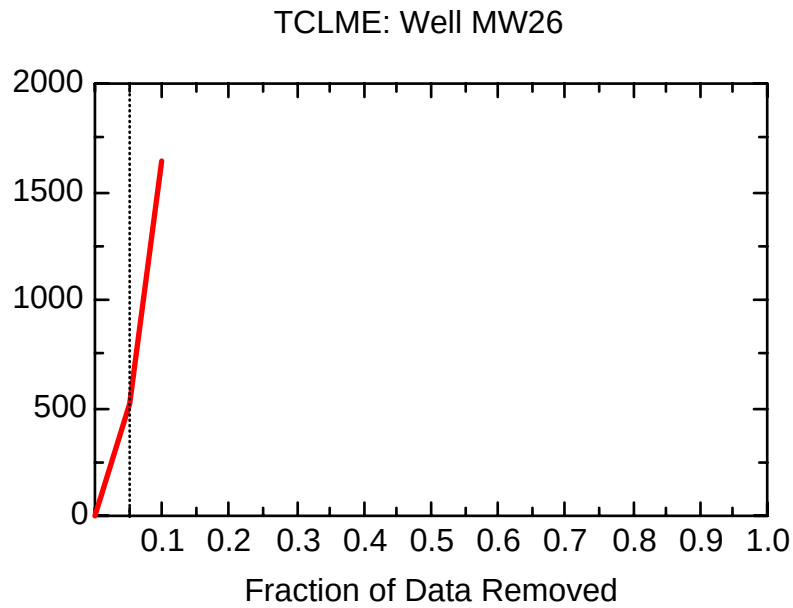
TCLME: Well MW25

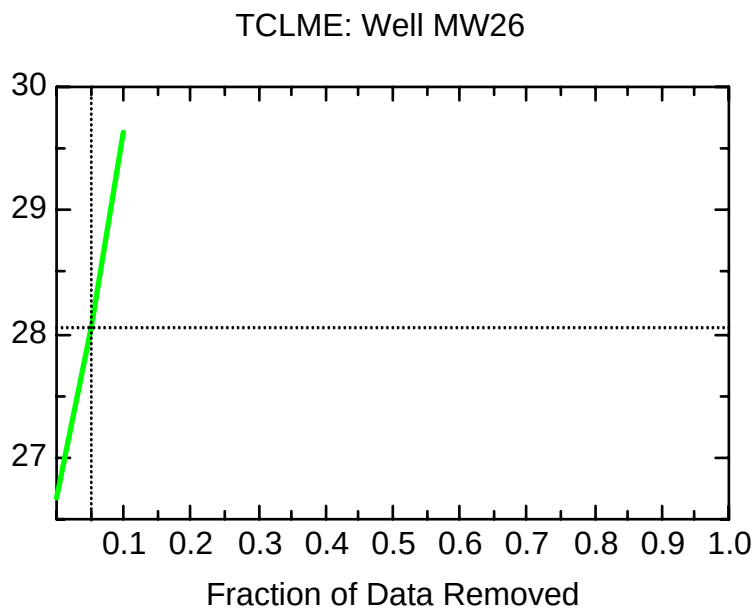


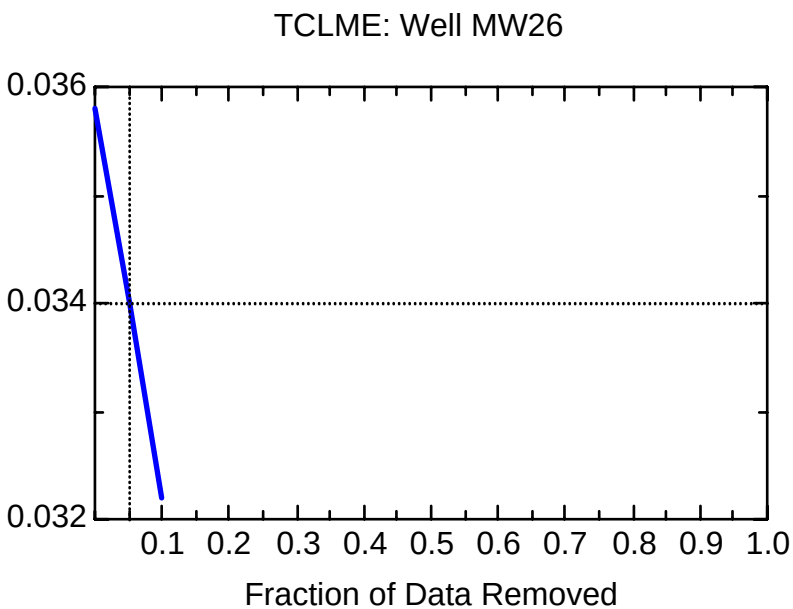
TCLME: Well MW25

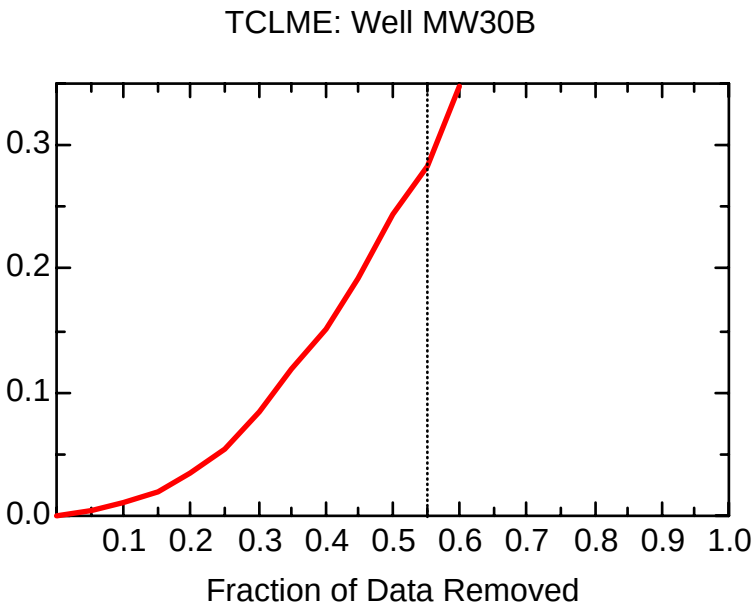


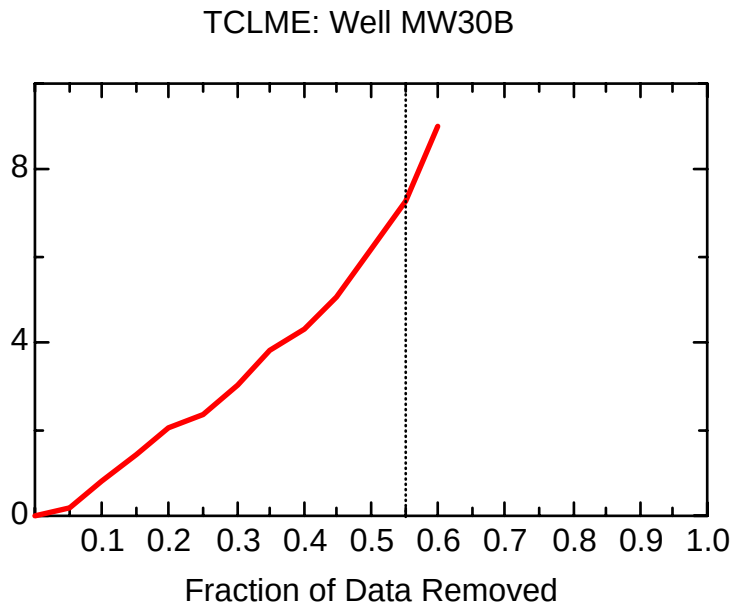

TCLME: Well MW26
0.4
0.2
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

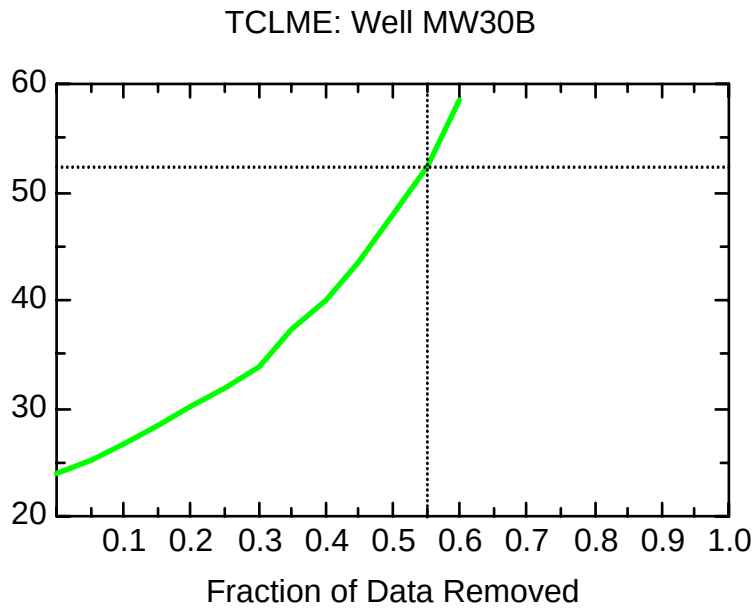

TCLME: Well MW26
2000
1500
1000
500
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

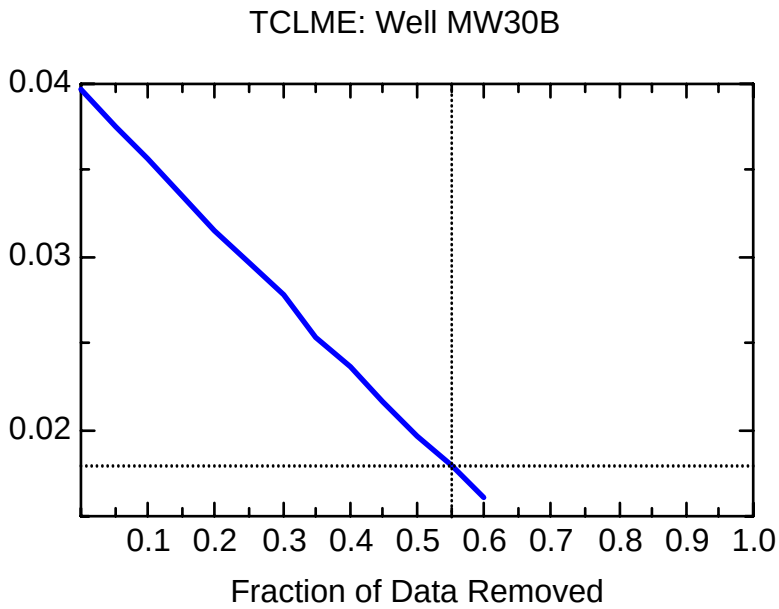

TCLME: Well MW26
30
29
28
27
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

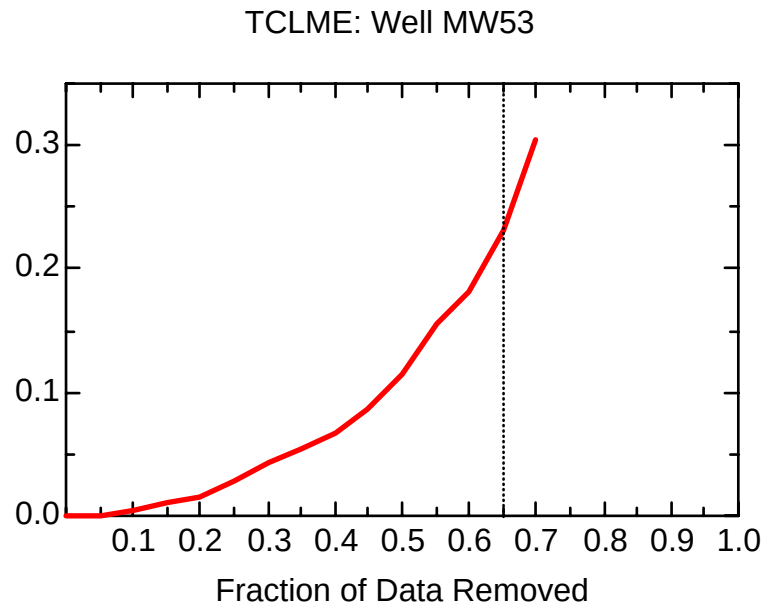

TCLME: Well MW26
0.036
0.034
0.032
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

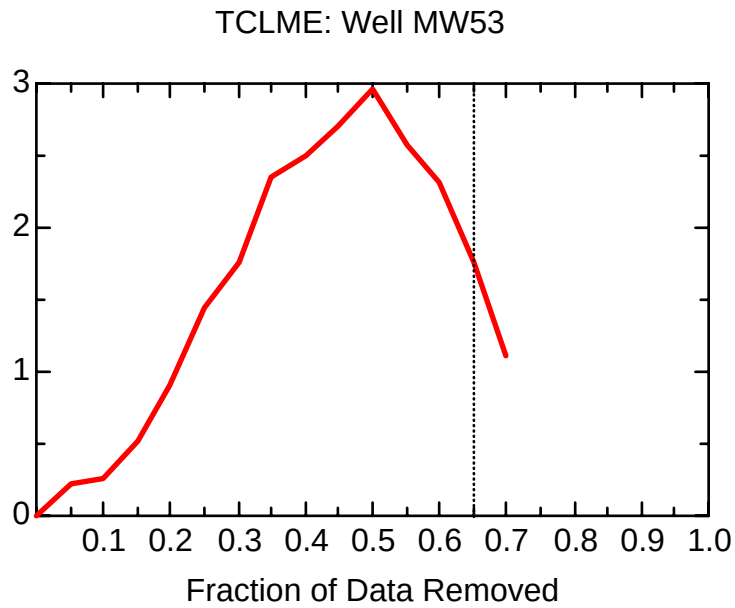

TCLME: Well MW30B
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

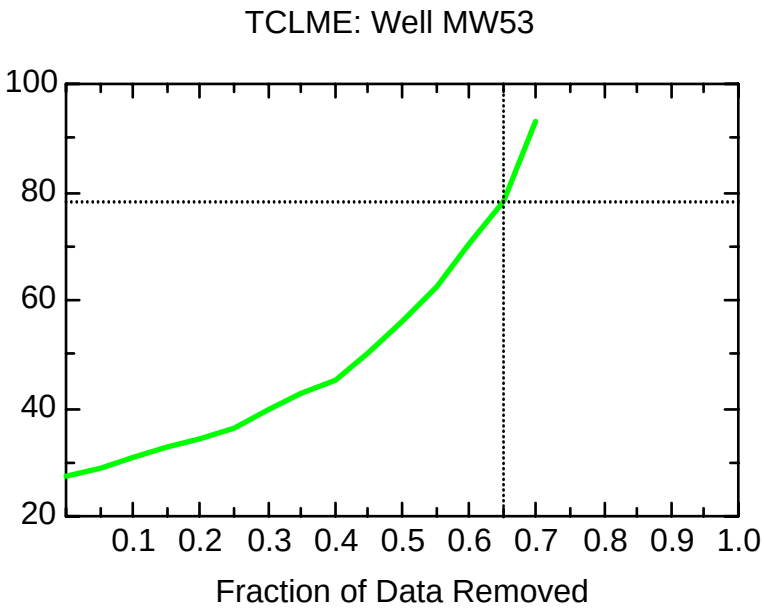

TCLME: Well MW30B
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

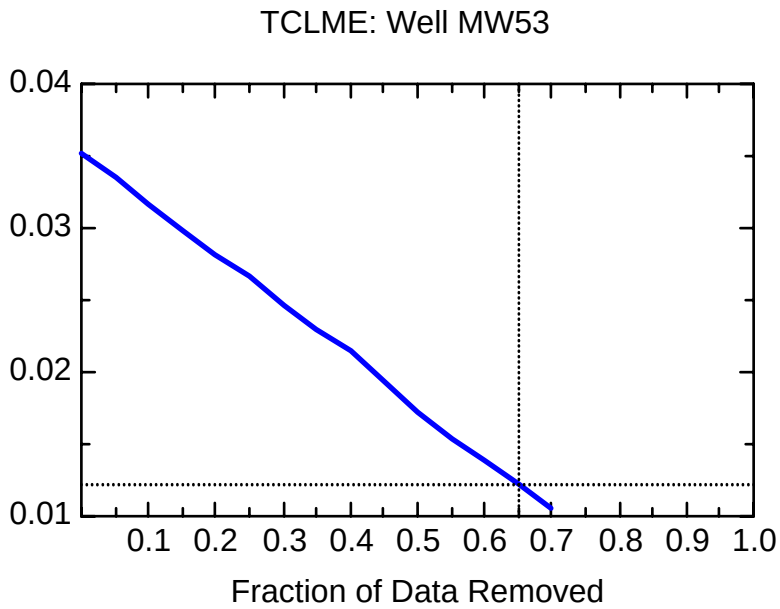

TCLME: Well MW30B
60
50
40
30
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

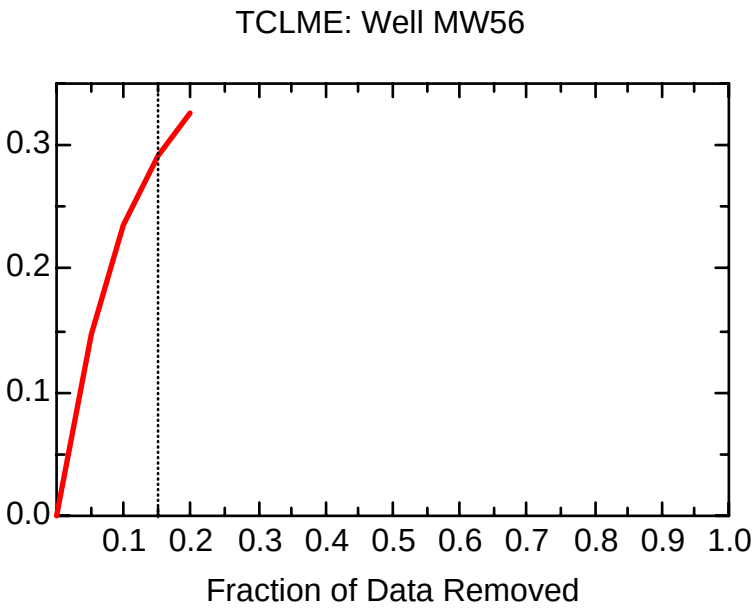

TCLME: Well MW30B
0.04
0.03
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

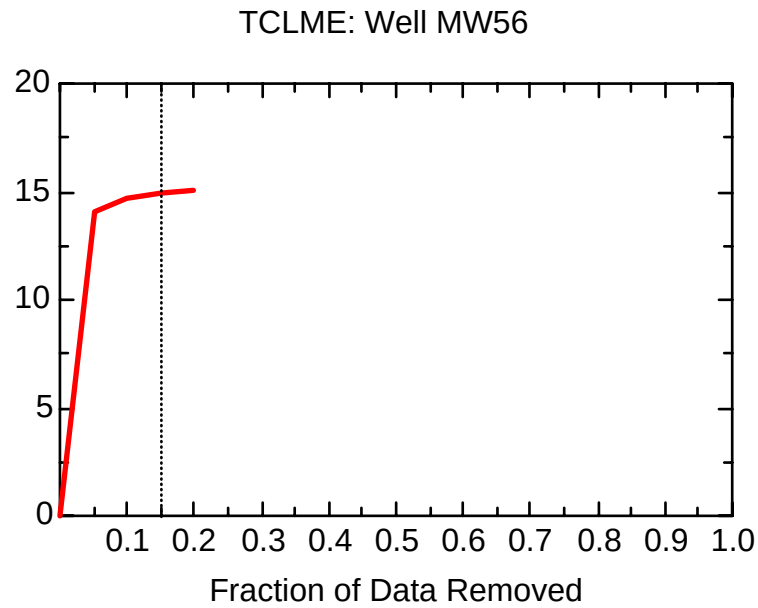

TCLME: Well MW53
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

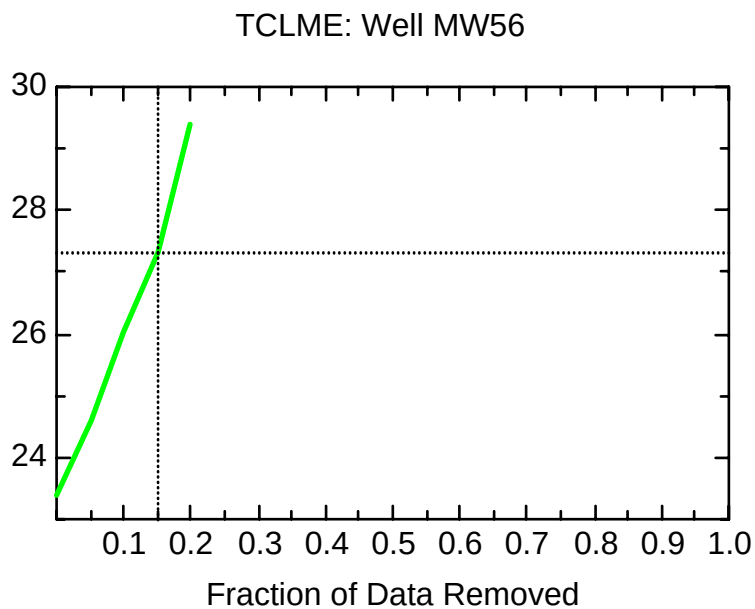

TCLME: Well MW53
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

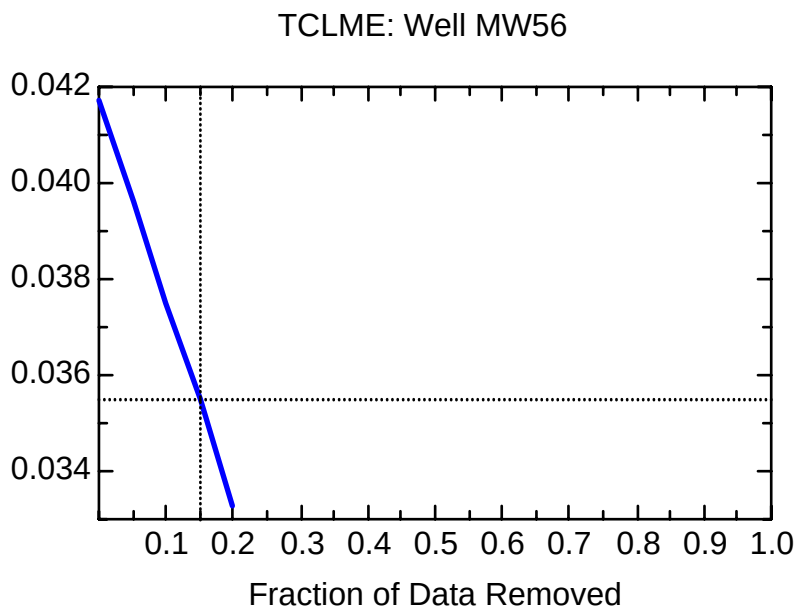

TCLME: Well MW53
100
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

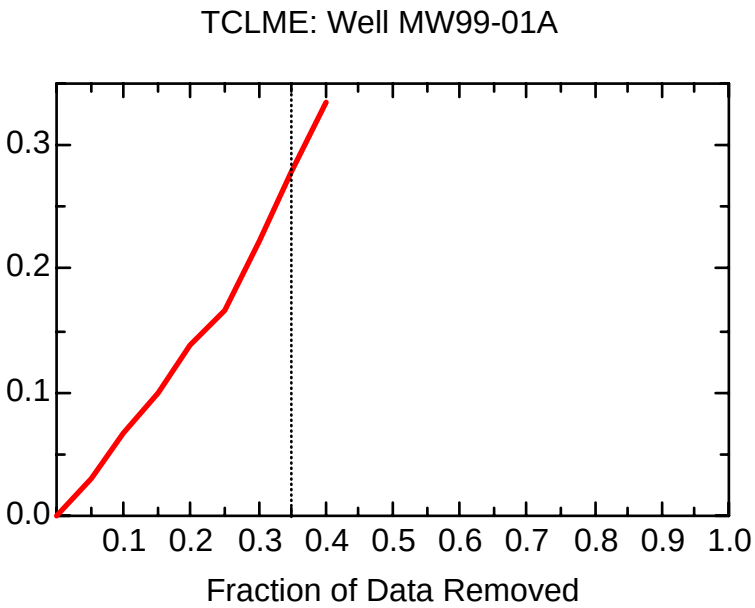

TCLME: Well MW53
0.04
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

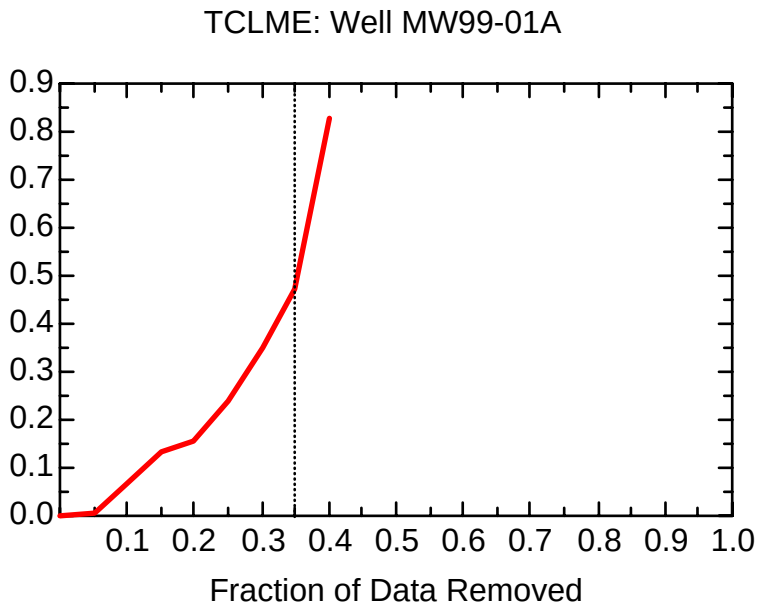

TCLME: Well MW56
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

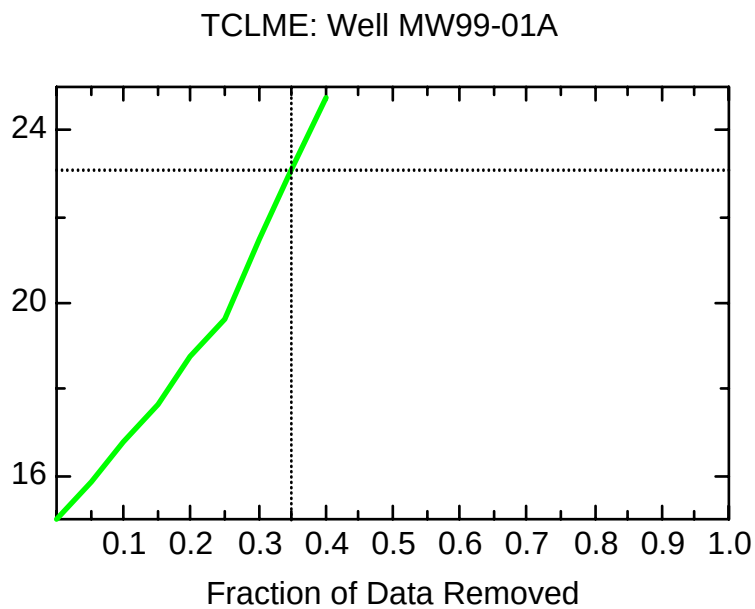

TCLME: Well MW56
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

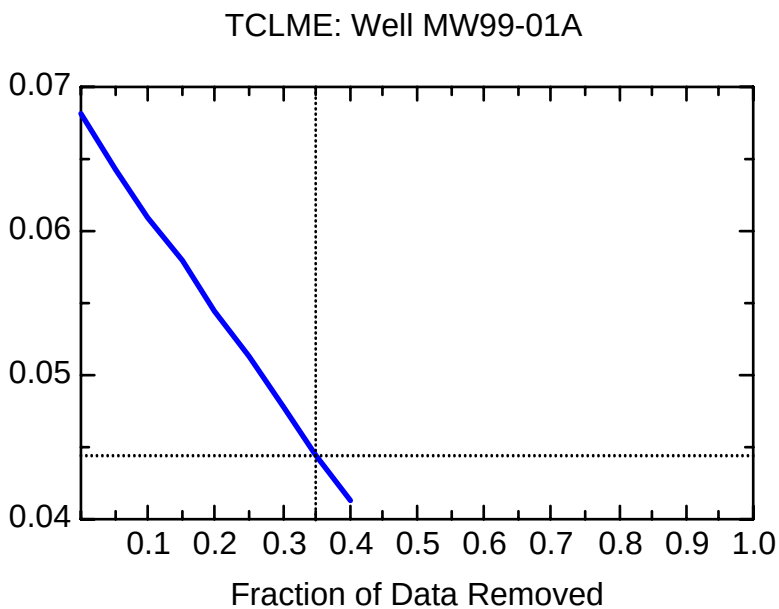

TCLME: Well MW56
30
28
26
24
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

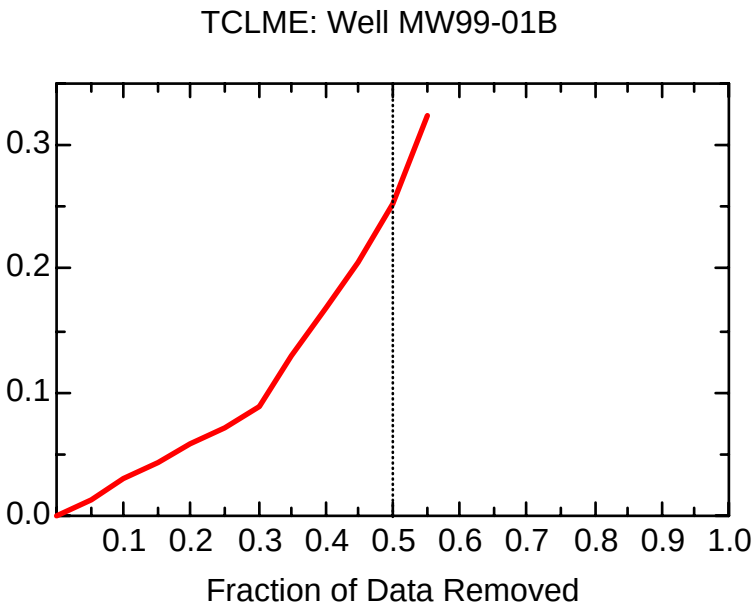

TCLME: Well MW56
0.042
0.040
0.038
0.036
0.034
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

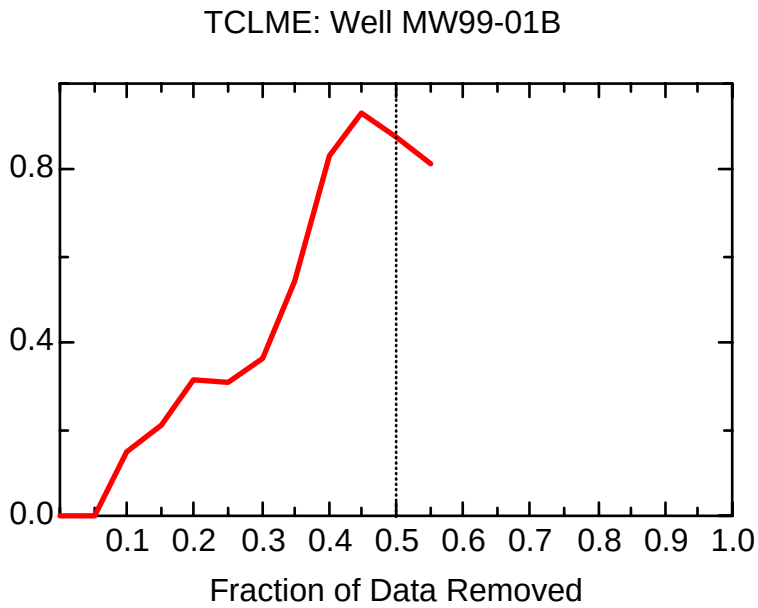

TCLME: Well MW99-01A
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

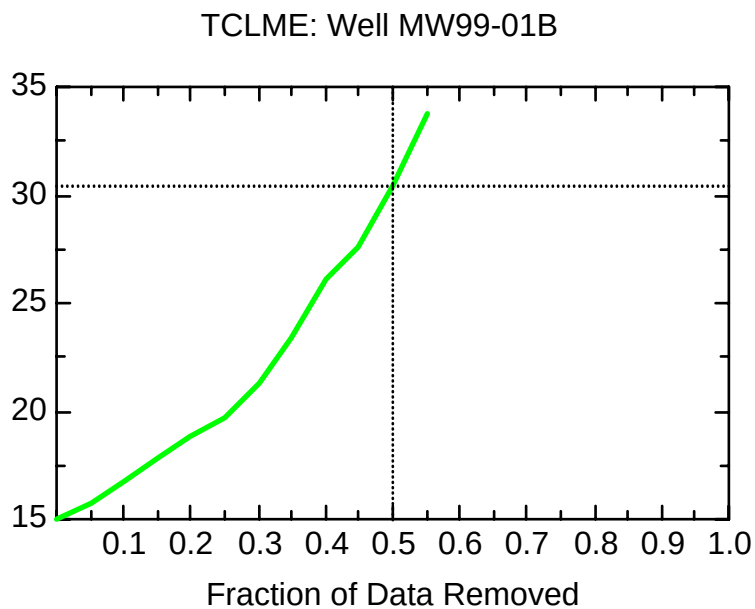

TCLME: Well MW99-01A
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

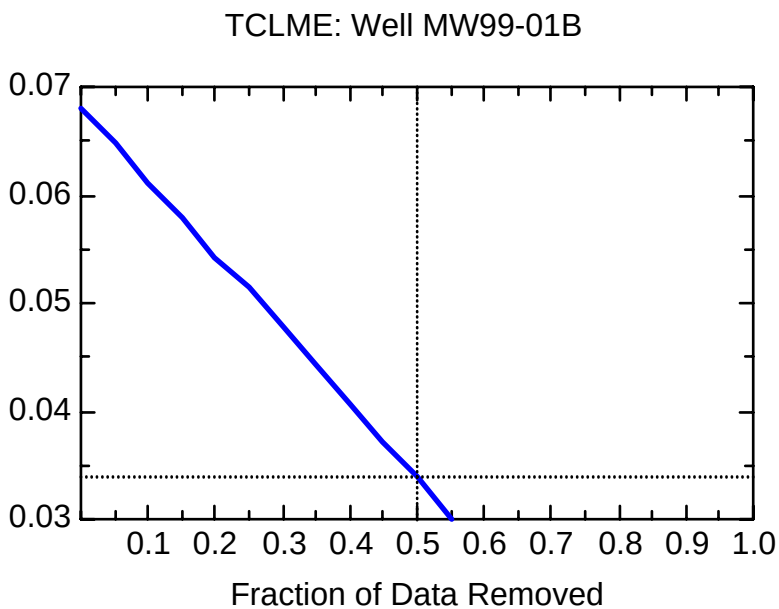

TCLME: Well MW99-01A
16
20
24
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

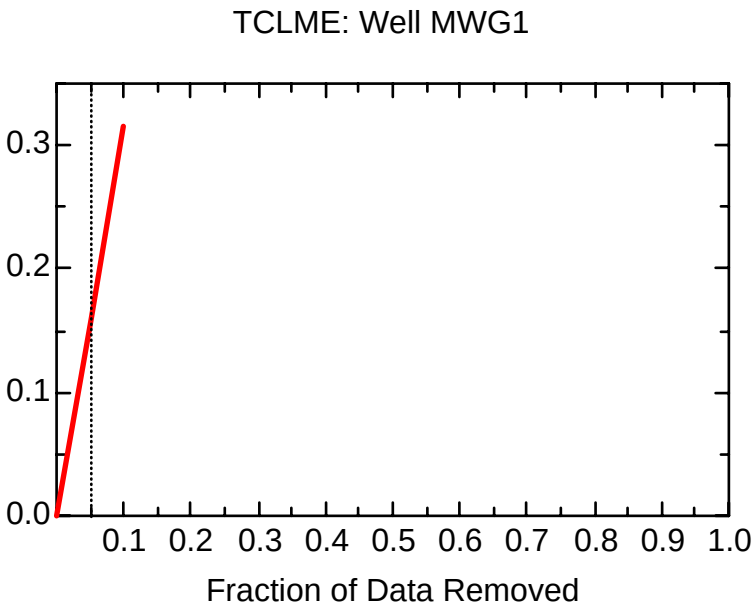

TCLME: Well MW99-01A
0.04
0.05
0.06
0.07
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

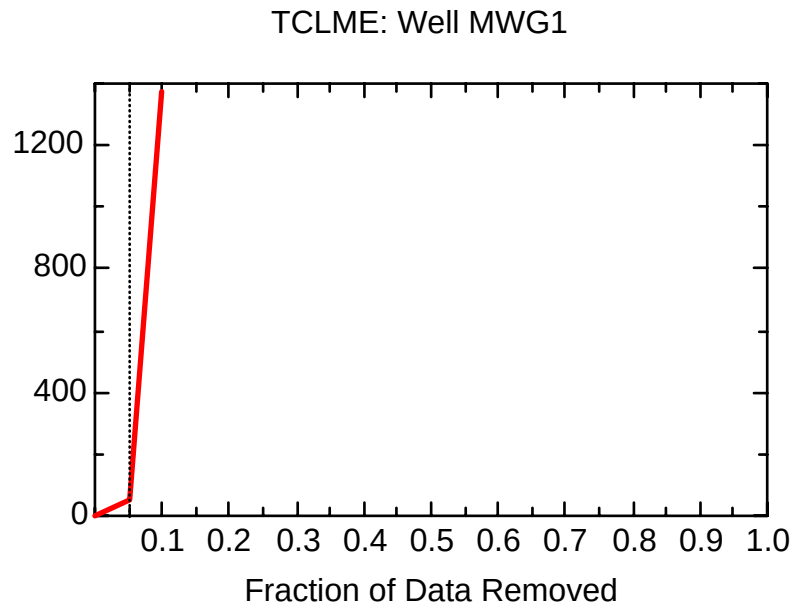

TCLME: Well MW99-01B
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

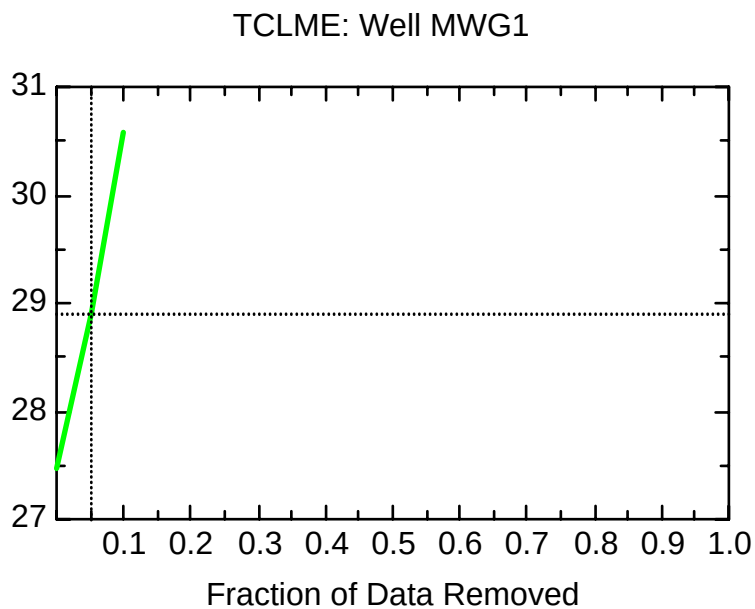

TCLME: Well MW99-01B
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

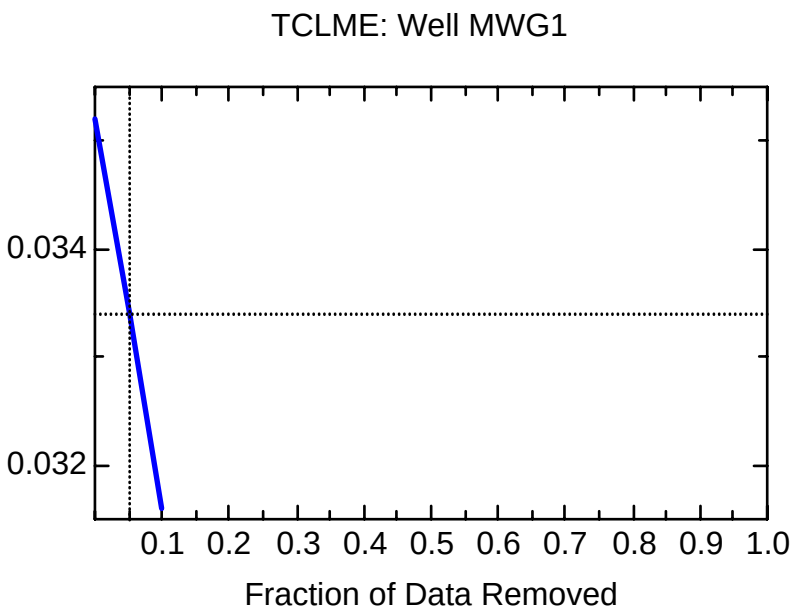

TCLME: Well MW99-01B
35
30
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

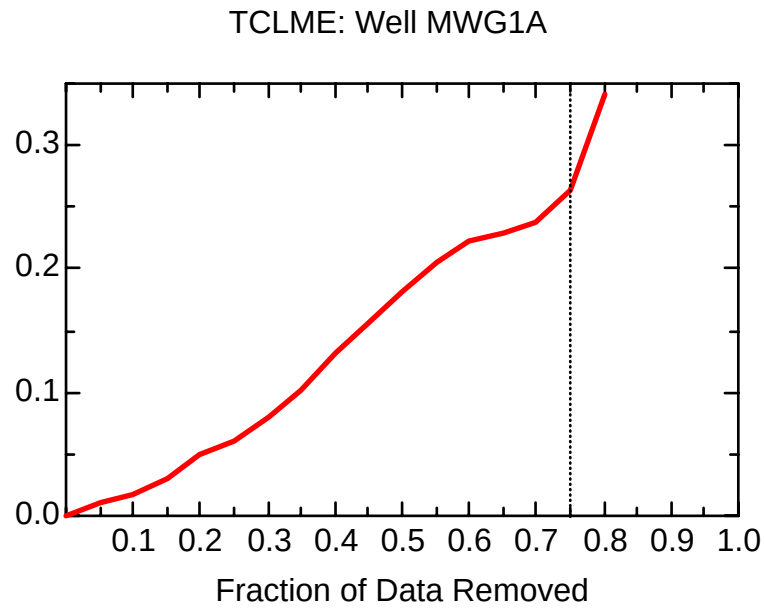

TCLME: Well MW99-01B
0.07
0.06
0.05
0.04
0.03
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

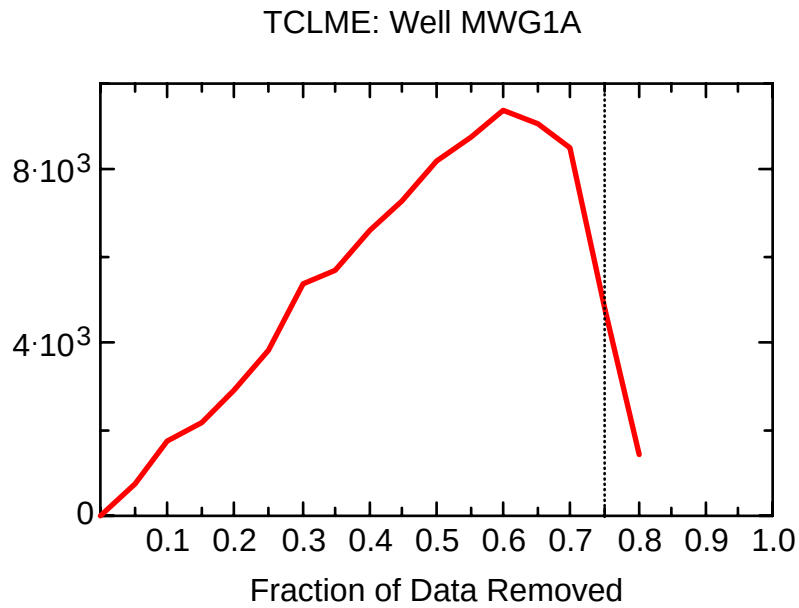

TCLME: Well MWG1
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

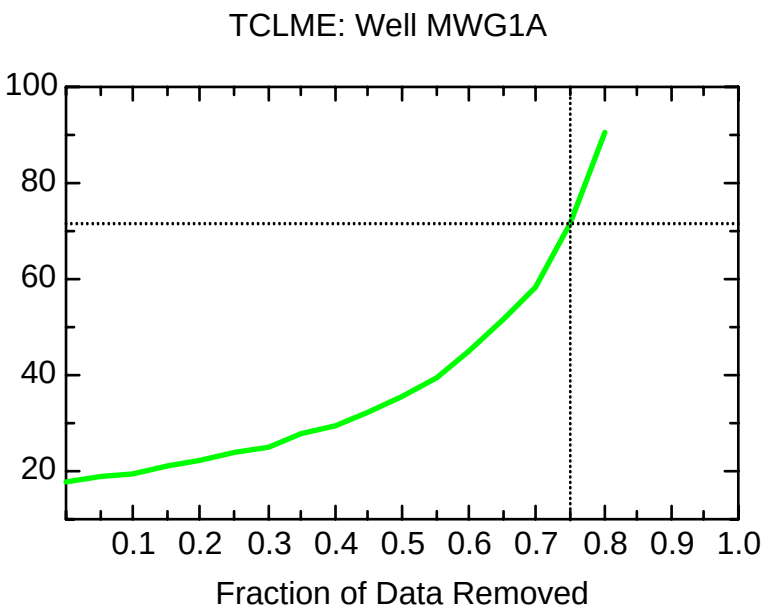

TCLME: Well MWG1
1200
800
400
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

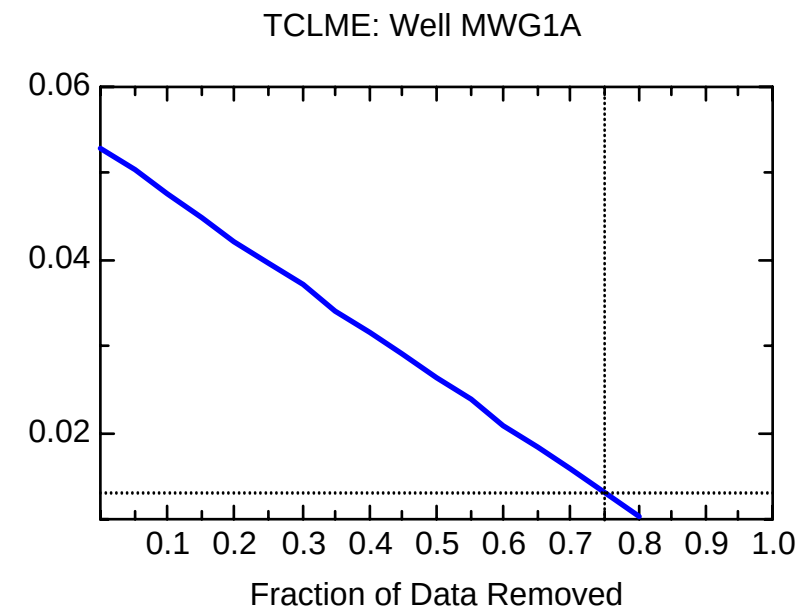

TCLME: Well MWG1
31
30
29
28
27
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

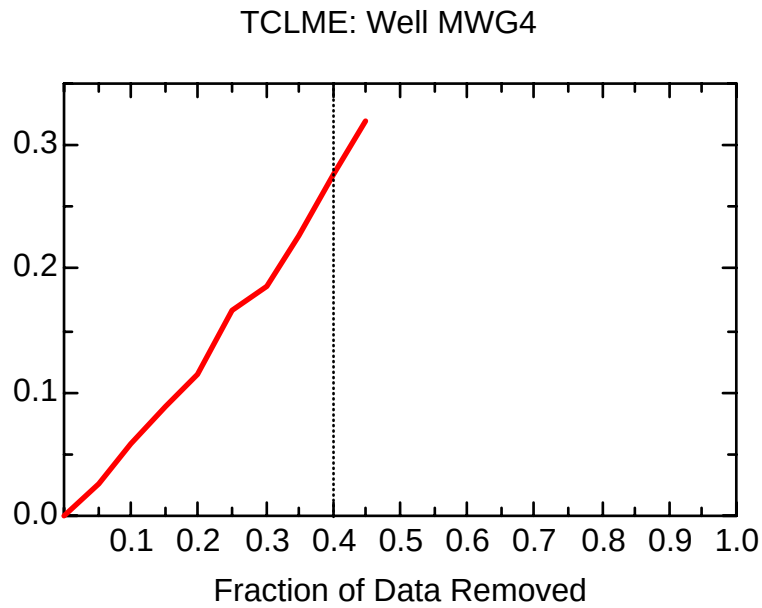

TCLME: Well MWG1
0.034
0.032
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

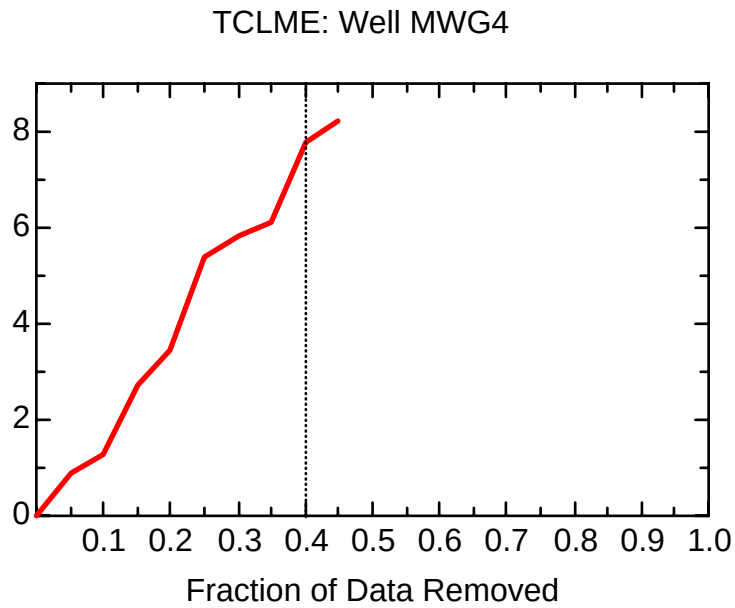

TCLME: Well MWG1A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

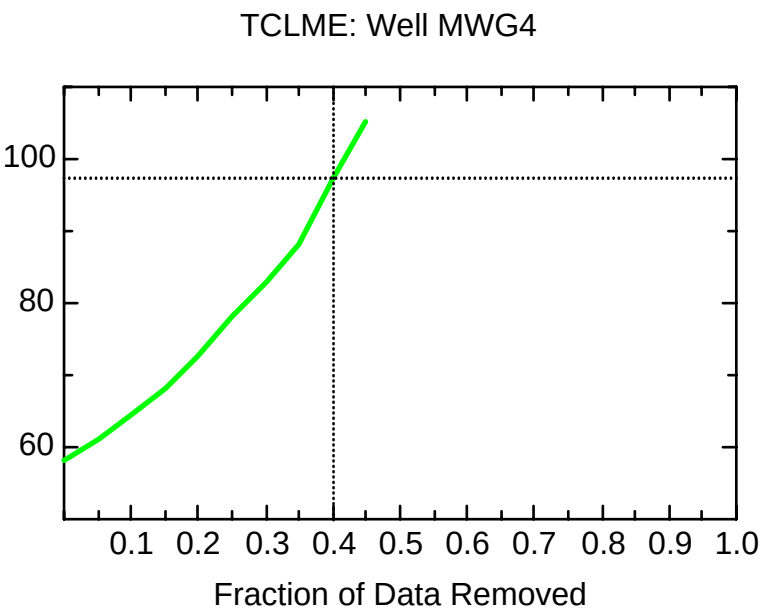

TCLME: Well MWG1A
8·10^3
4·10^3
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

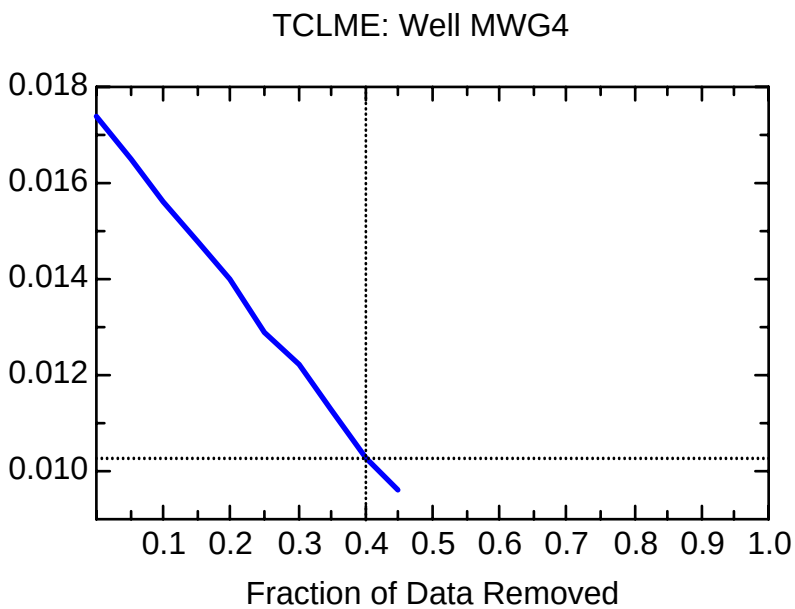

TCLME: Well MWG1A
100
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

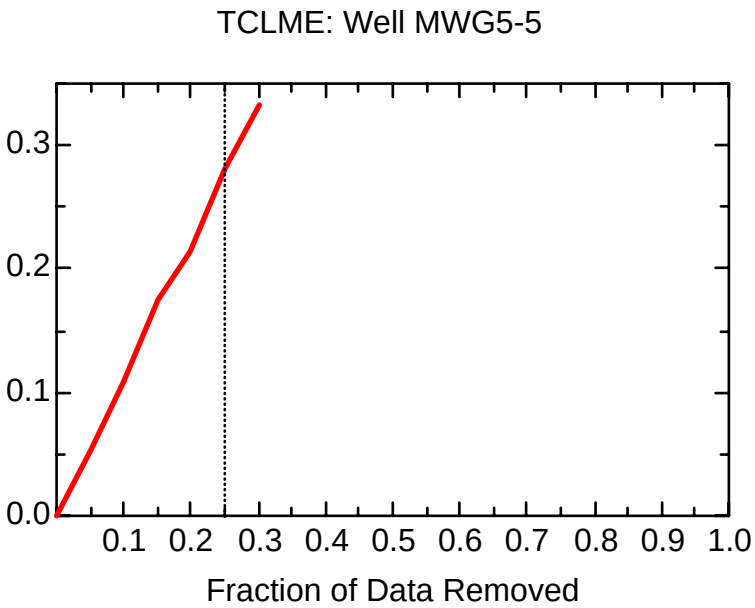

TCLME: Well MWG1A
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

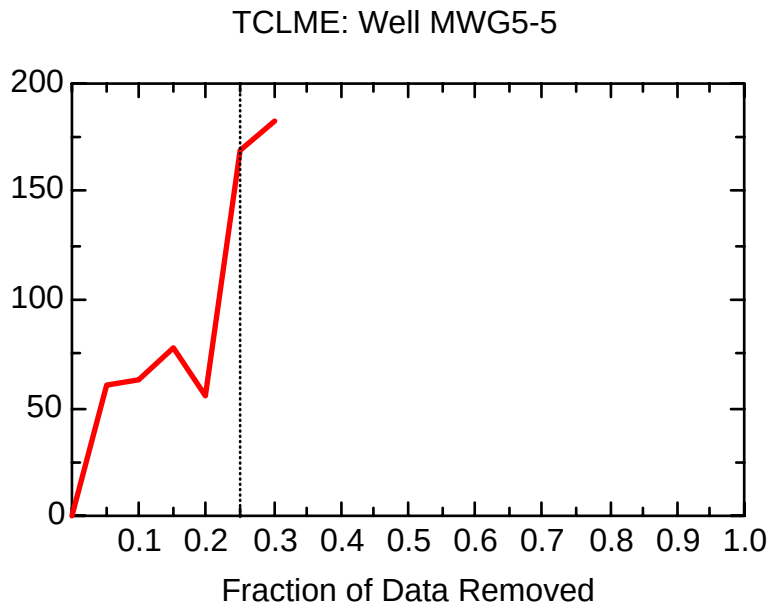

TCLME: Well MWG4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

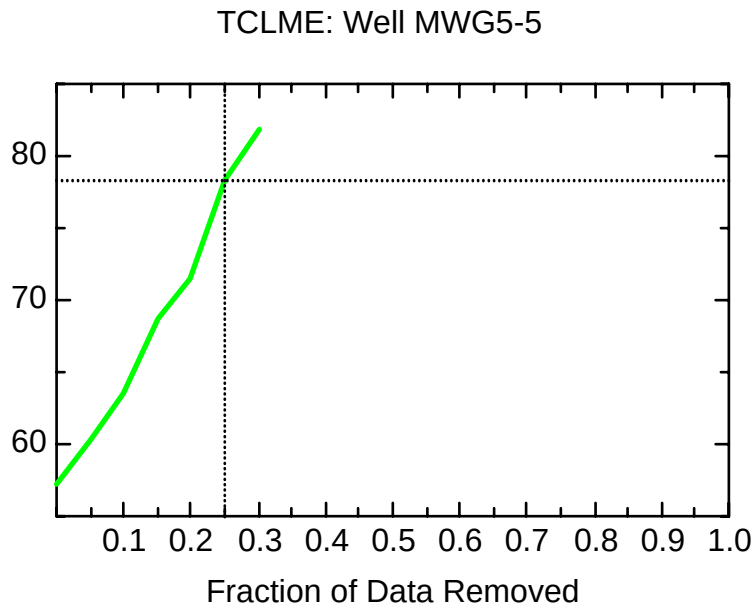

TCLME: Well MWG4
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

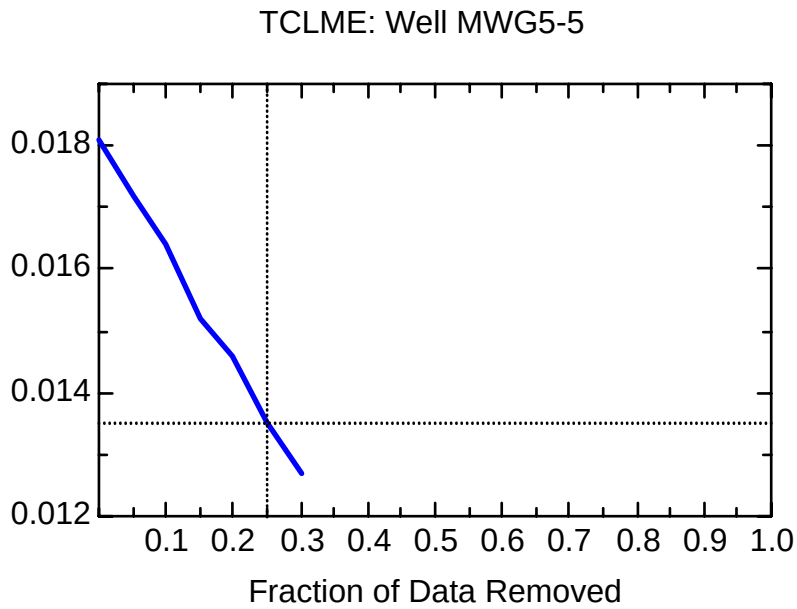

TCLME: Well MWG4
100
80
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

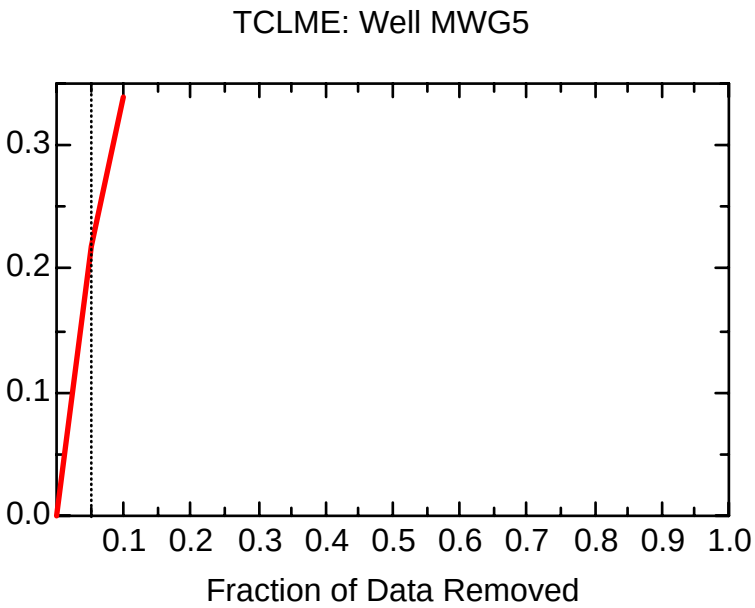

TCLME: Well MWG4
0.018
0.016
0.014
0.012
0.010
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

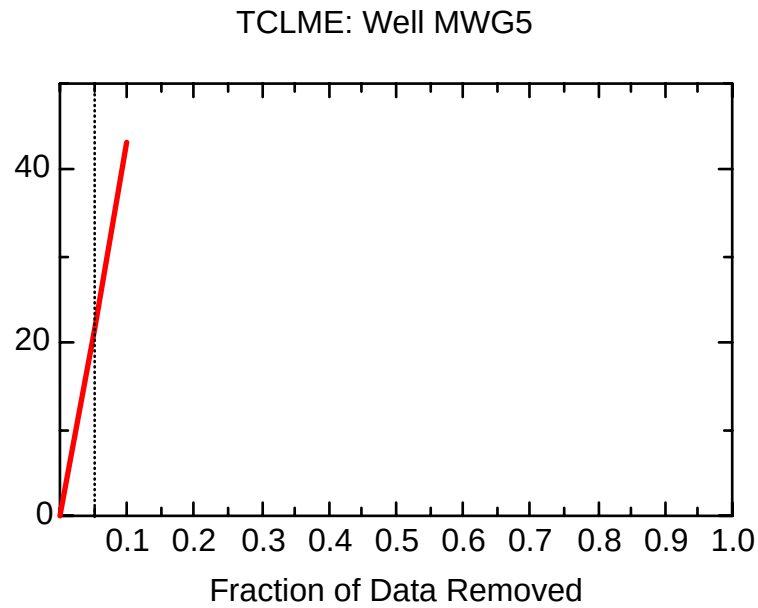

TCLME: Well MWG5-5
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

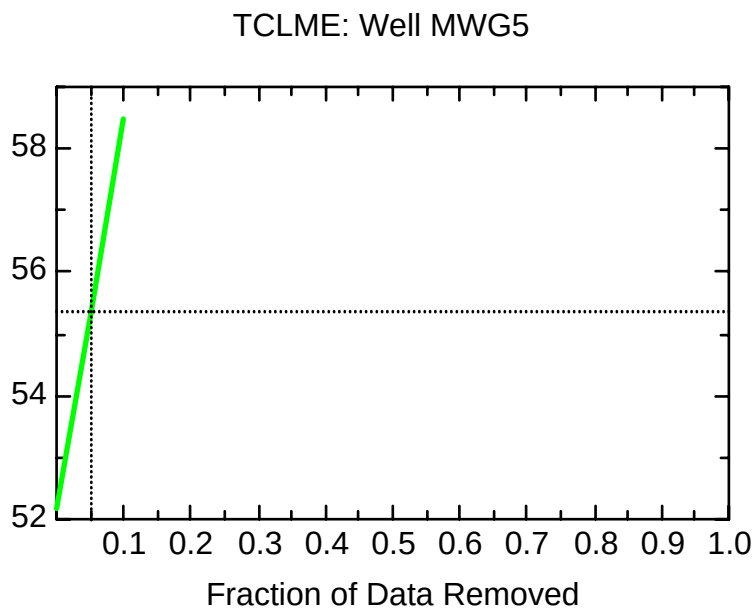

TCLME: Well MWG5-5
200
150
100
50
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

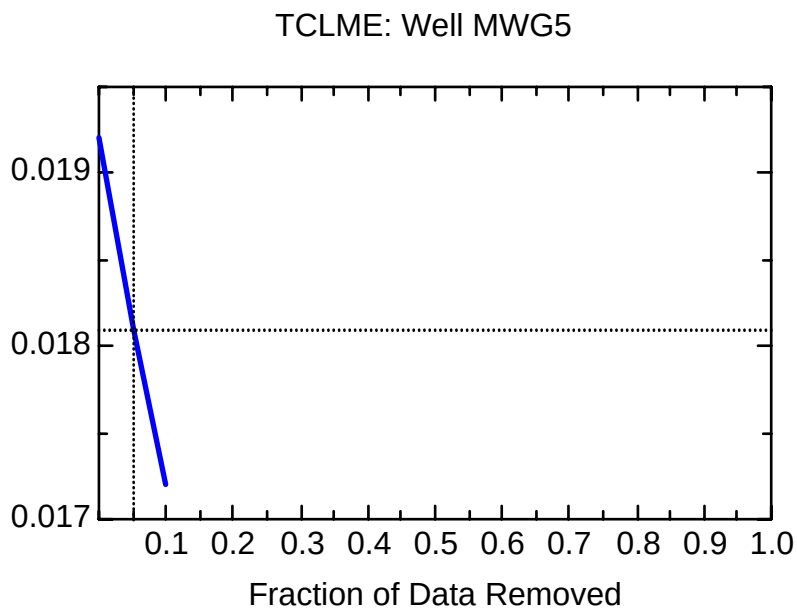

TCLME: Well MWG5-5
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG5-5
0.018
0.016
0.014
0.012
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

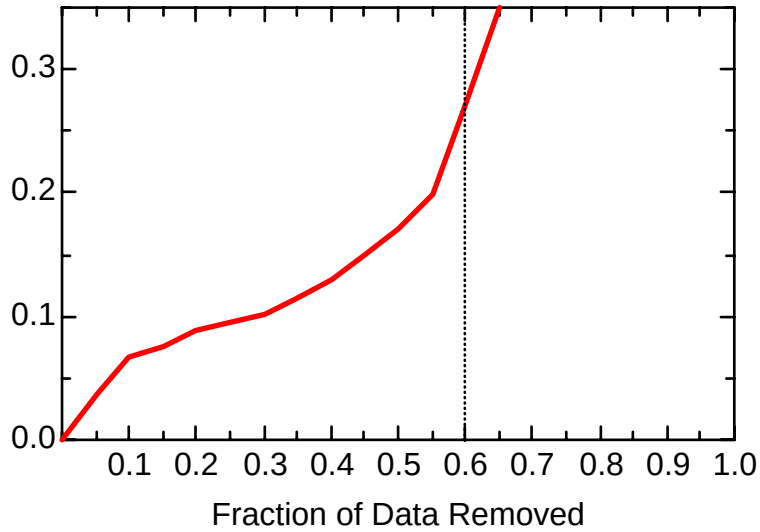

TCLME: Well MWG5
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG5
40
20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

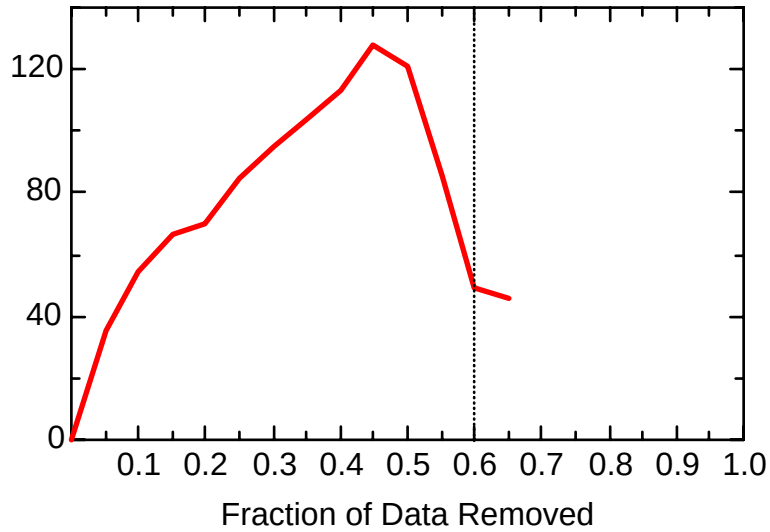

TCLME: Well MWG5
58
56
54
52
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG5
0.019
0.018
0.017
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

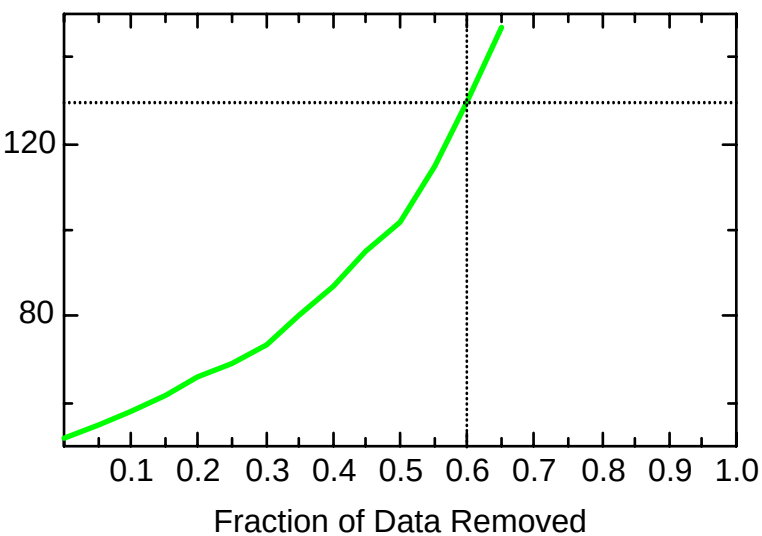
TCLME: Well MWG11



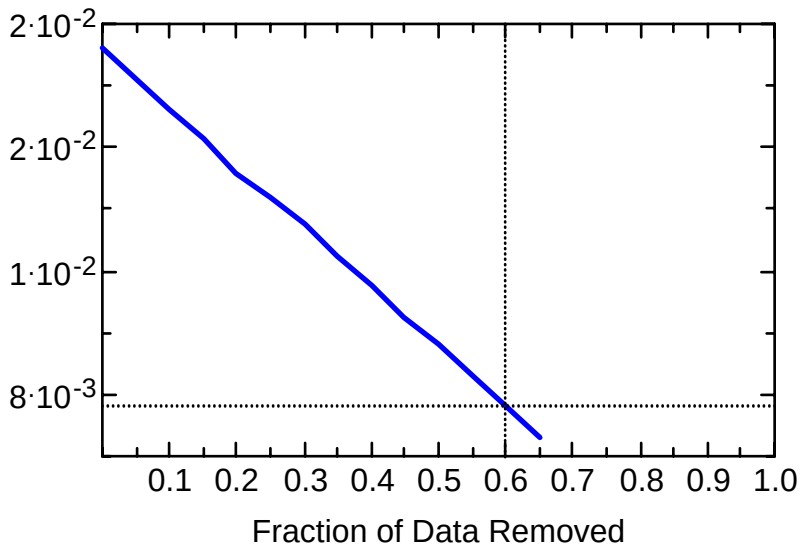
TCLME: Well MWG11

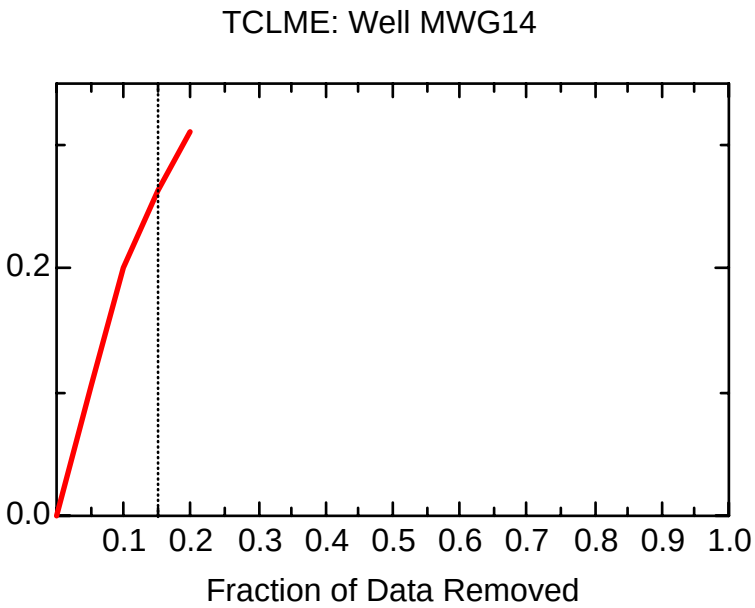


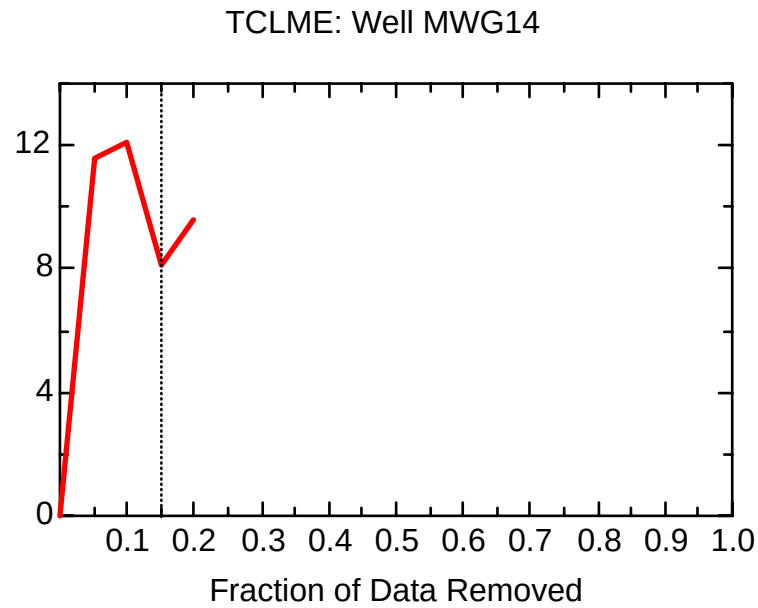
TCLME: Well MWG11

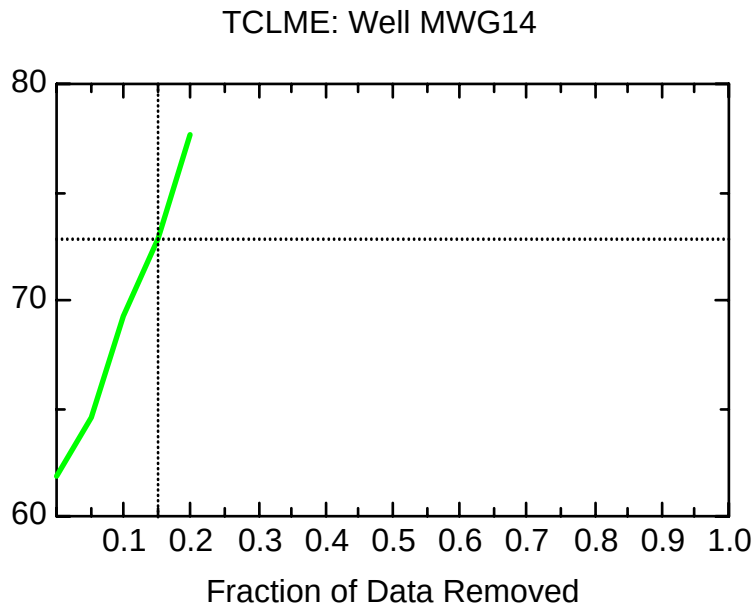


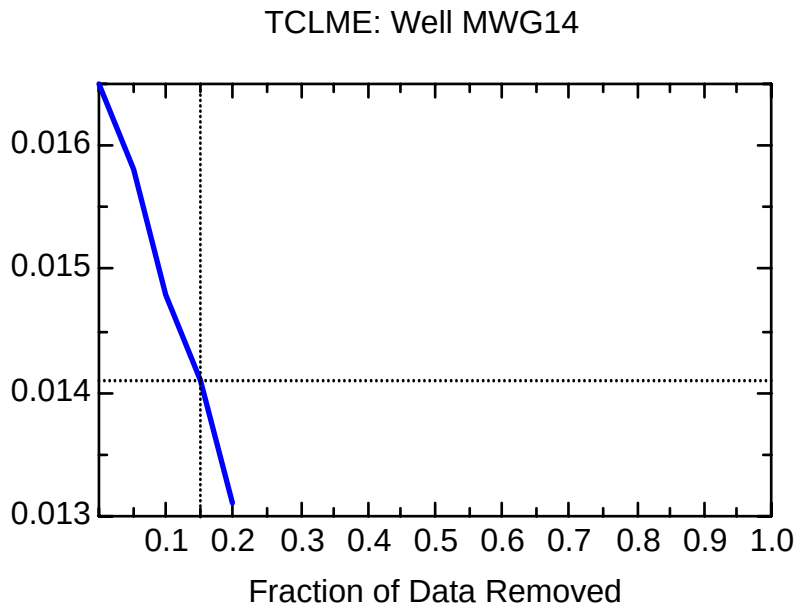
TCLME: Well MWG11

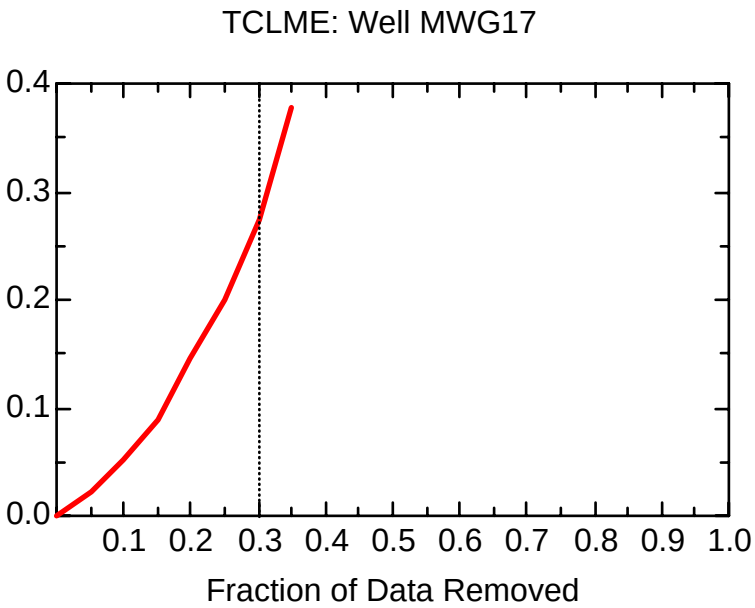


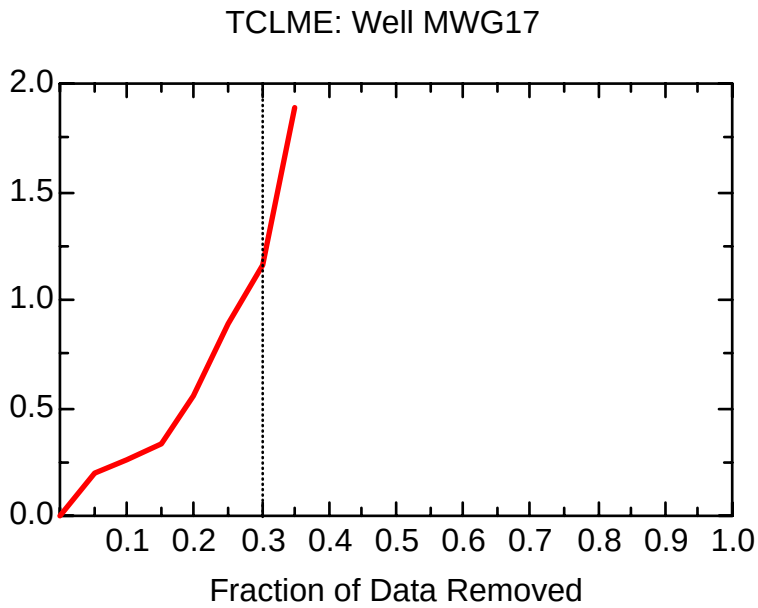

TCLME: Well MWG14
0.2
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

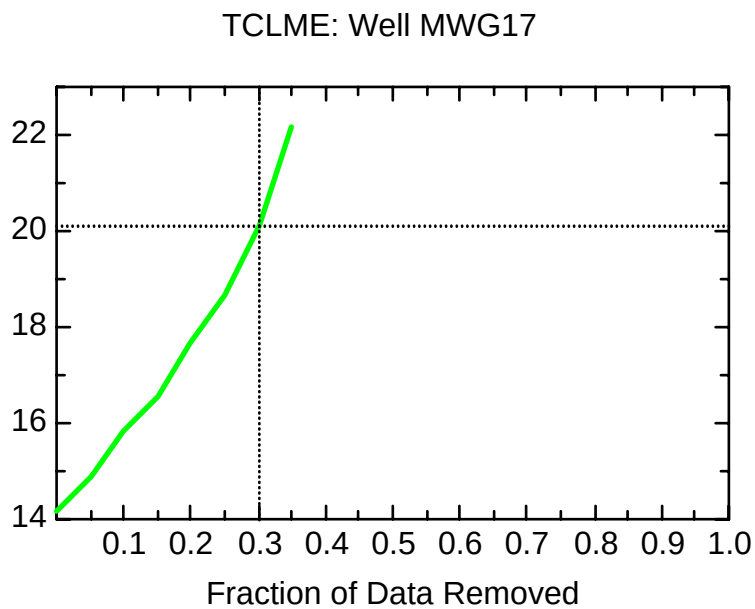

TCLME: Well MWG14
12
8
4
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

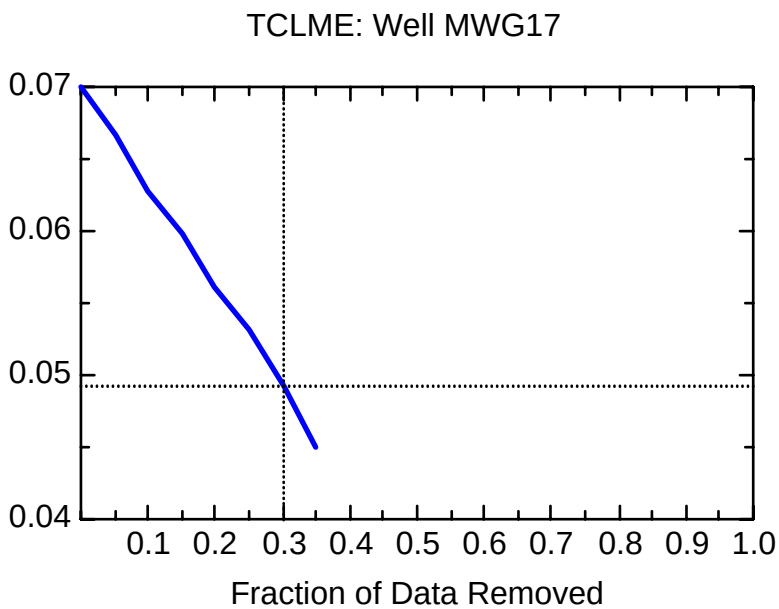

TCLME: Well MWG14
80
70
60
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG14
0.016
0.015
0.014
0.013
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

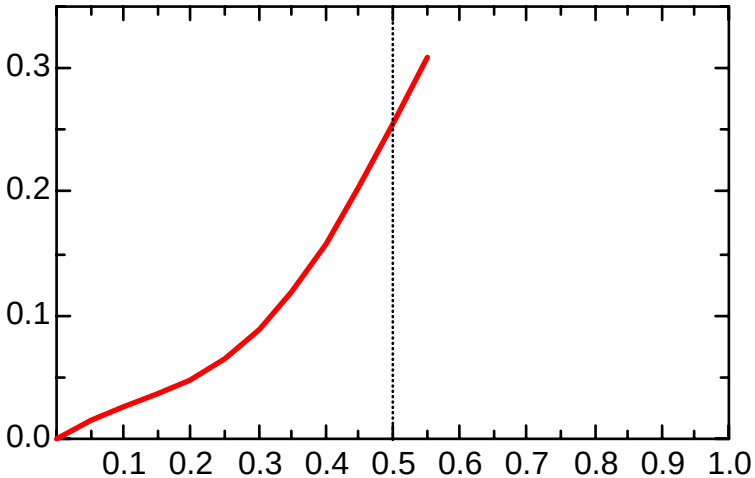

TCLME: Well MWG17
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG17
2.0
1.5
1.0
0.5
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

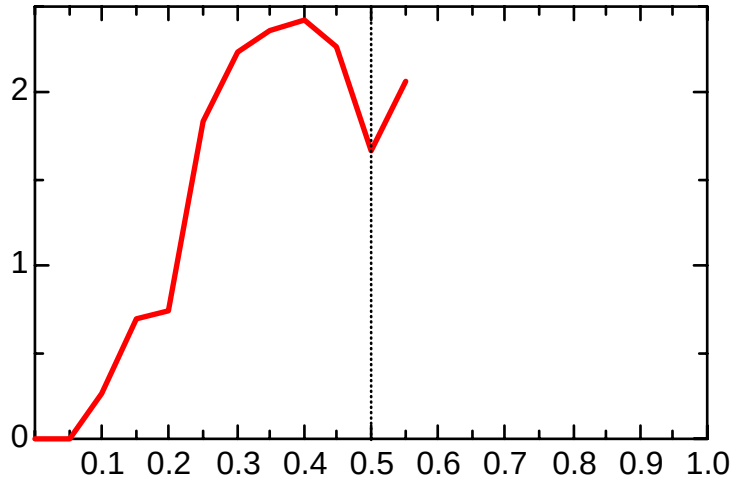

TCLME: Well MWG17
22
20
18
16
14
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well MWG17
0.07
0.06
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

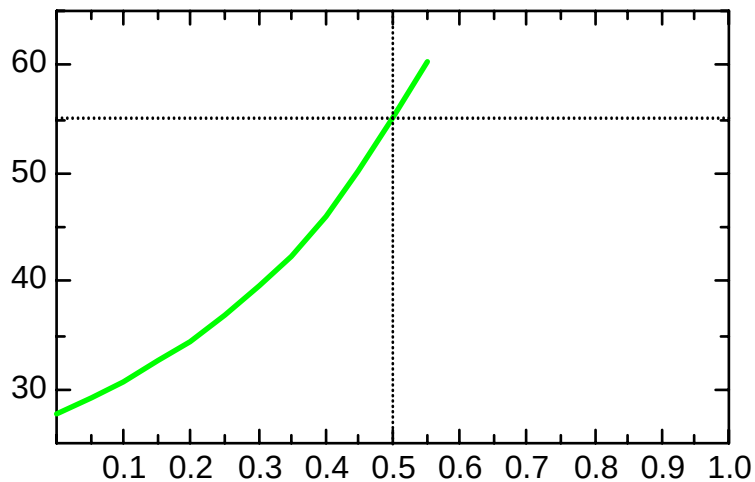
TCLME: Well MWG19



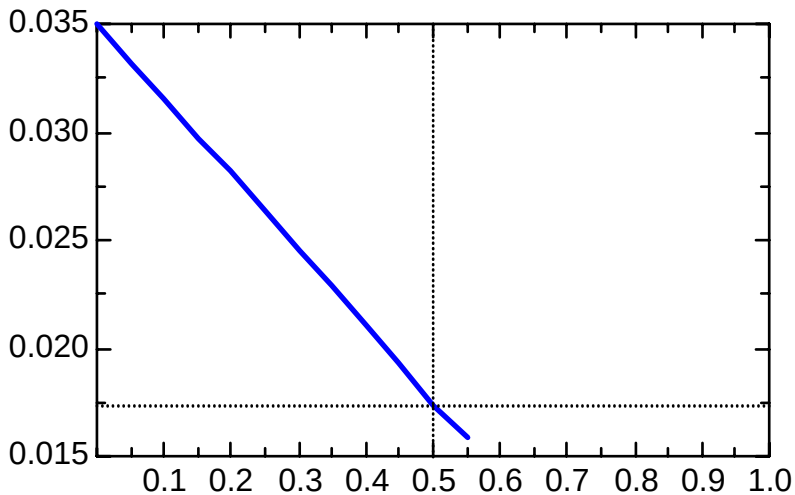
TCLME: Well MWG19

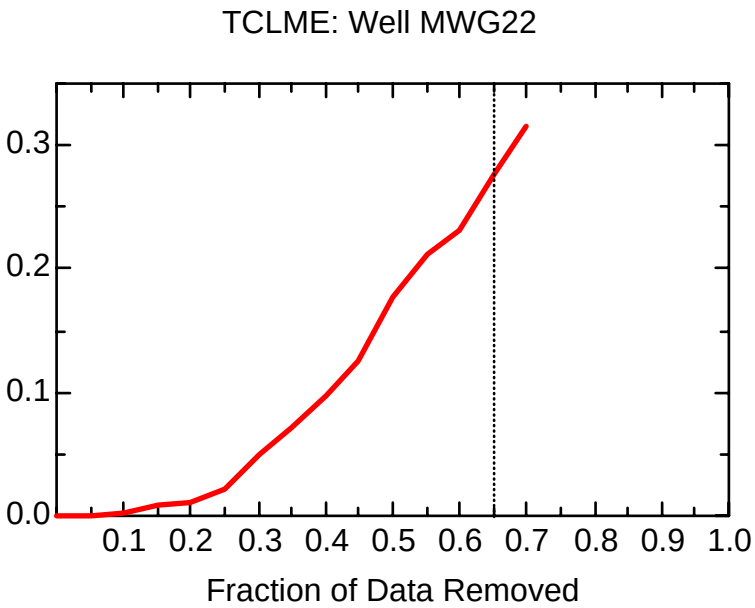


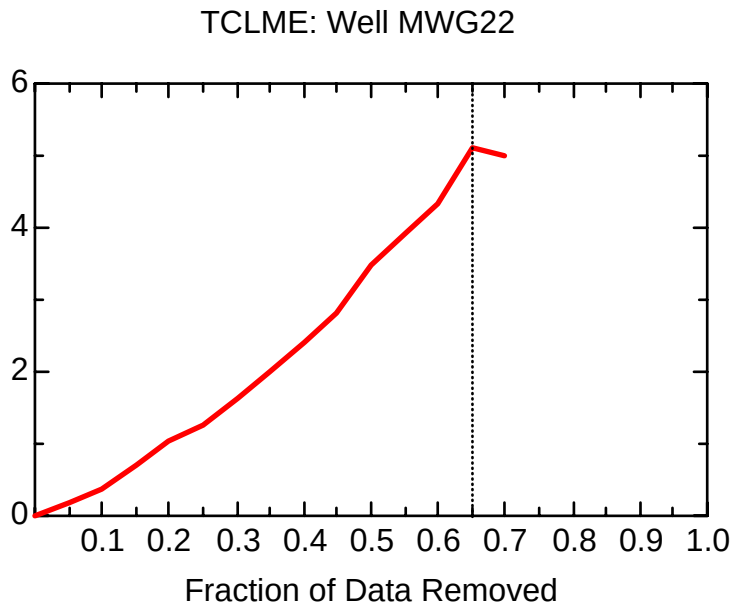
TCLME: Well MWG19

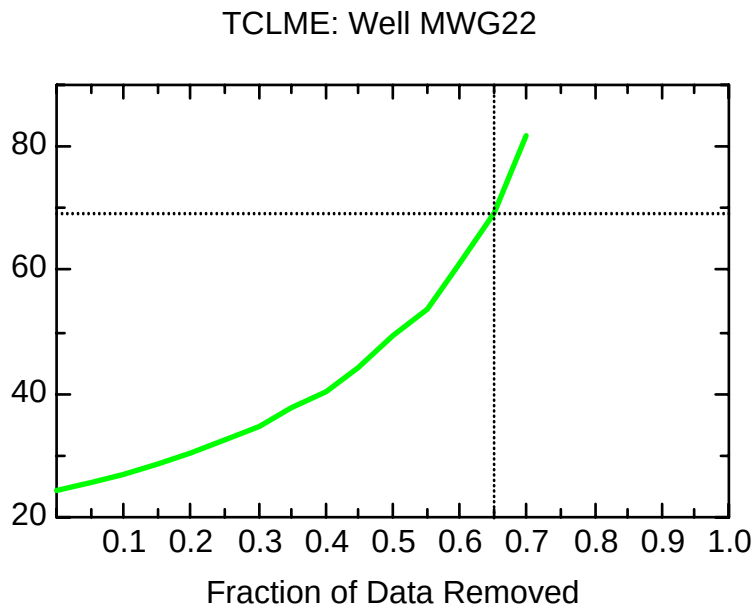


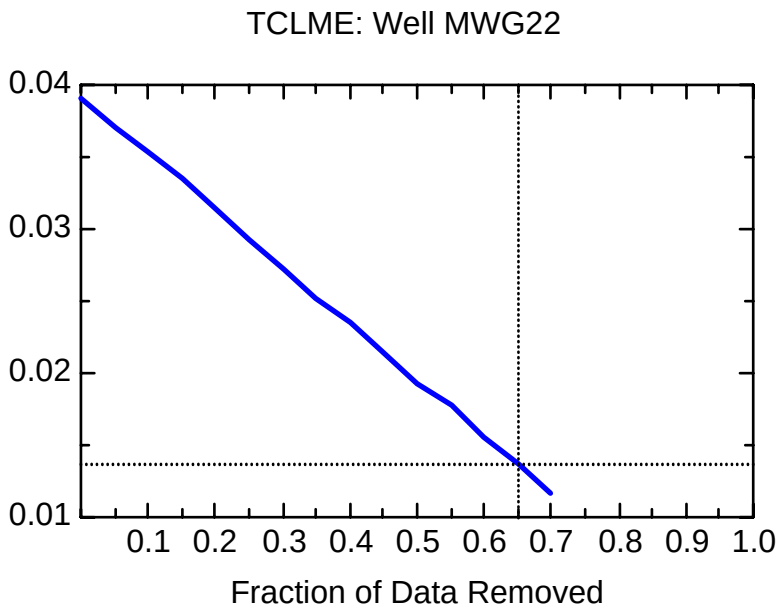
TCLME: Well MWG19

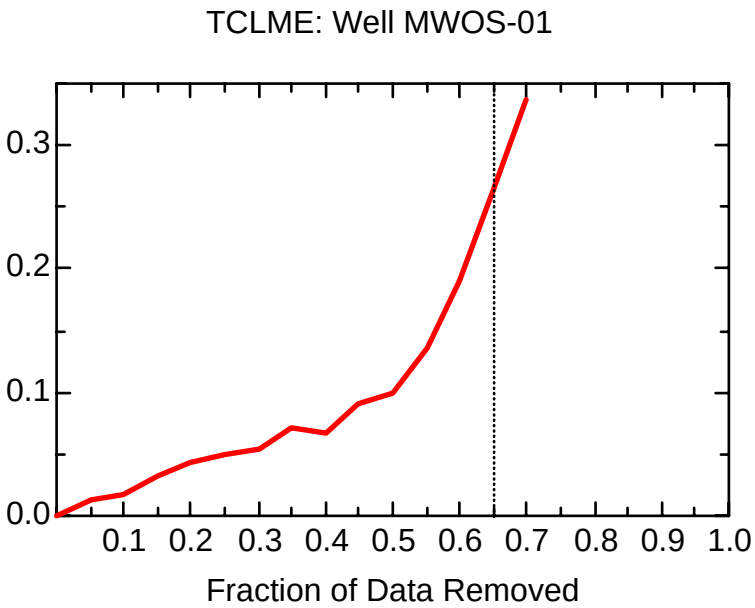


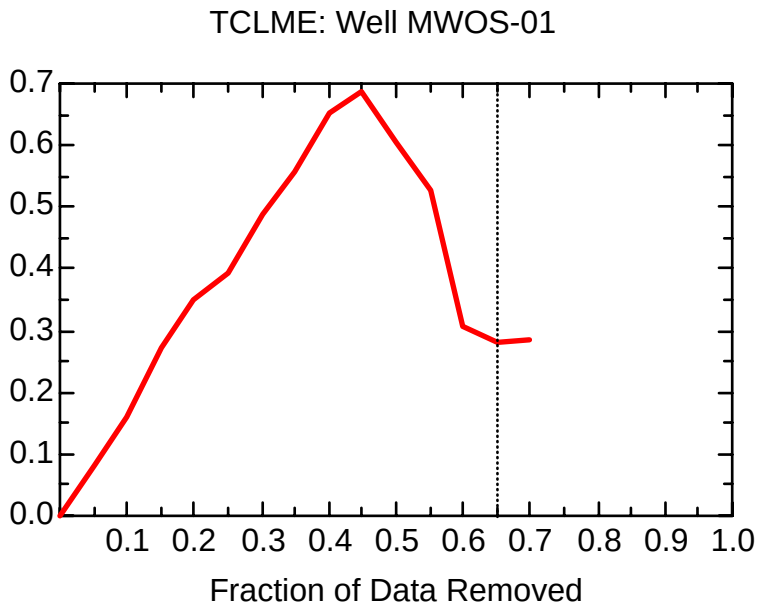

TCLME: Well MWG22
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

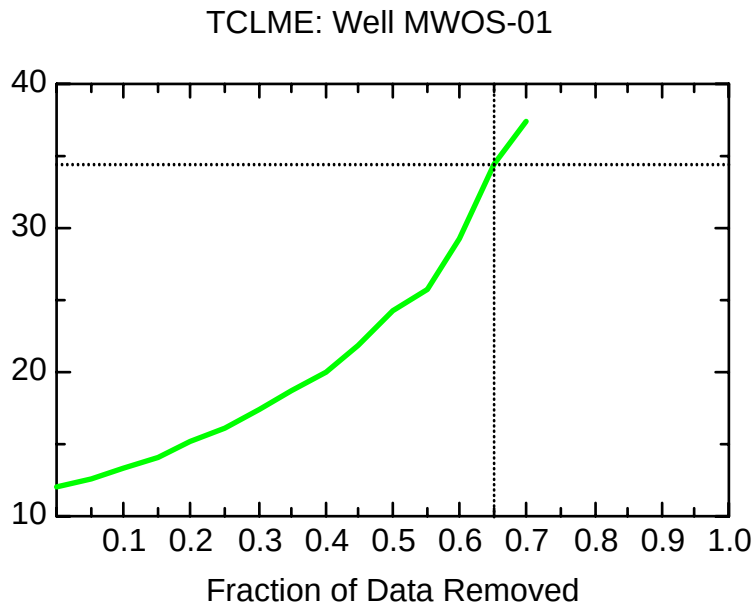

TCLME: Well MWG22
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

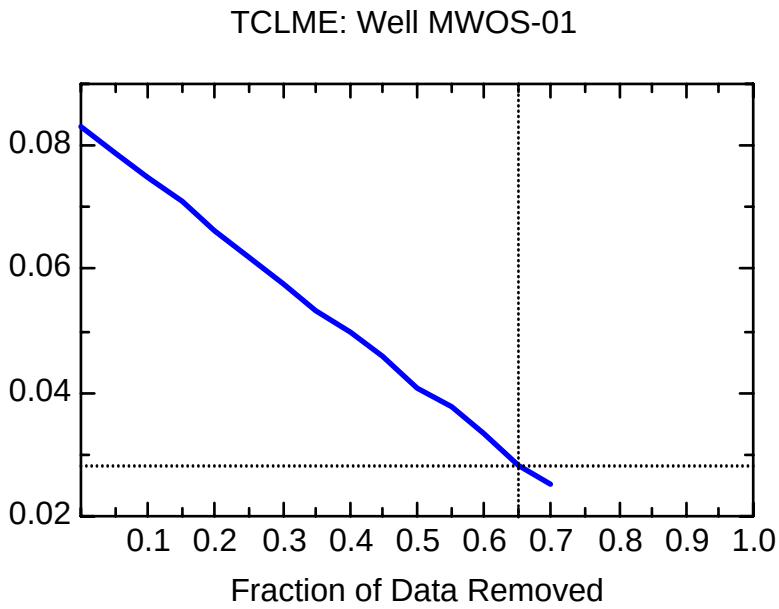

TCLME: Well MWG22
80
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

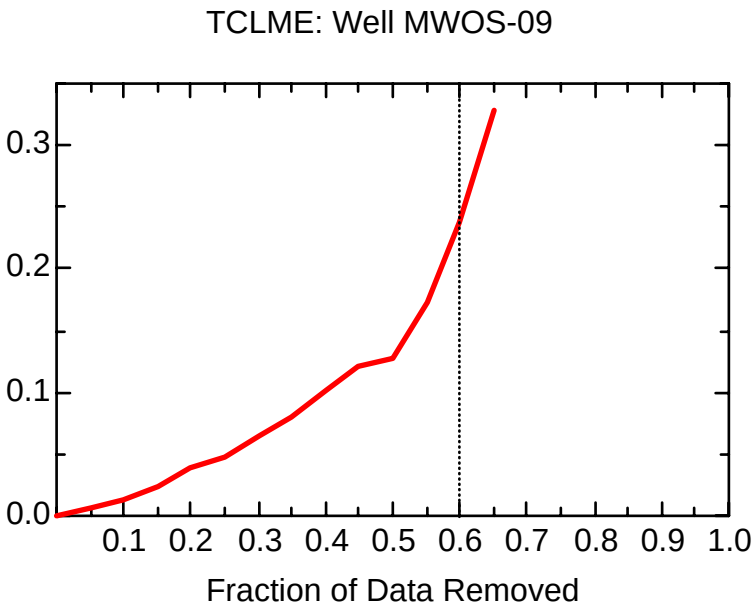

TCLME: Well MWG22
0.04
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

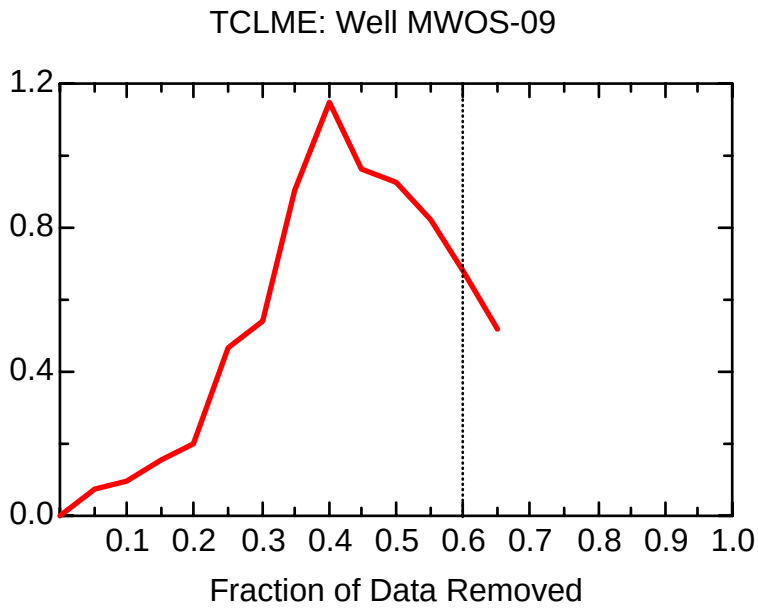

TCLME: Well MWOS-01
0.0
0.1
0.2
0.3
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

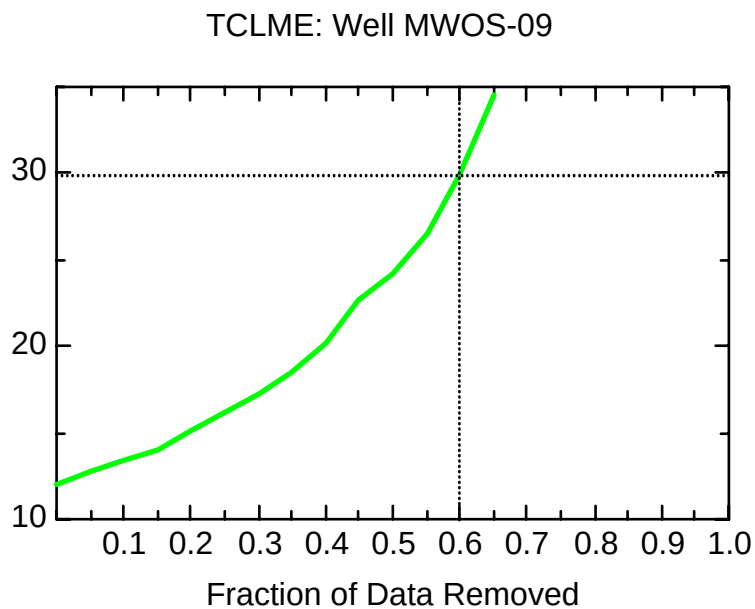

TCLME: Well MWOS-01
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

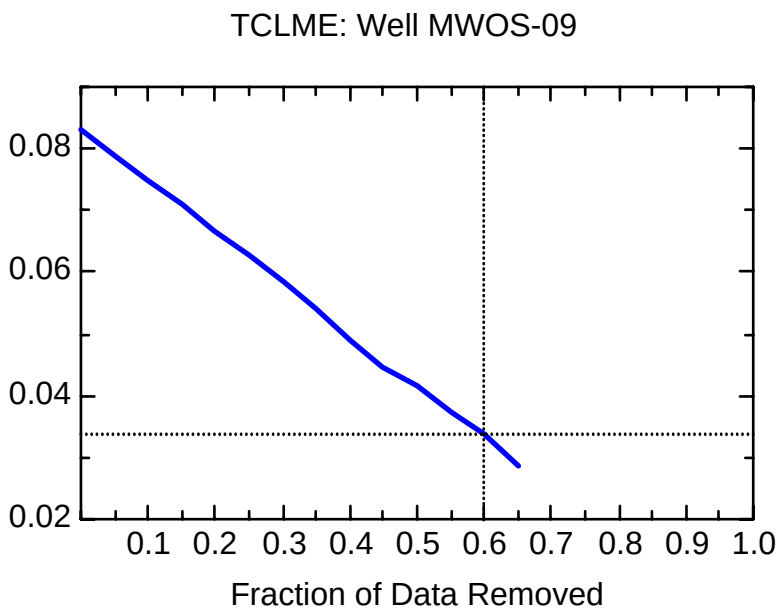

TCLME: Well MWOS-01
10
20
30
40
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

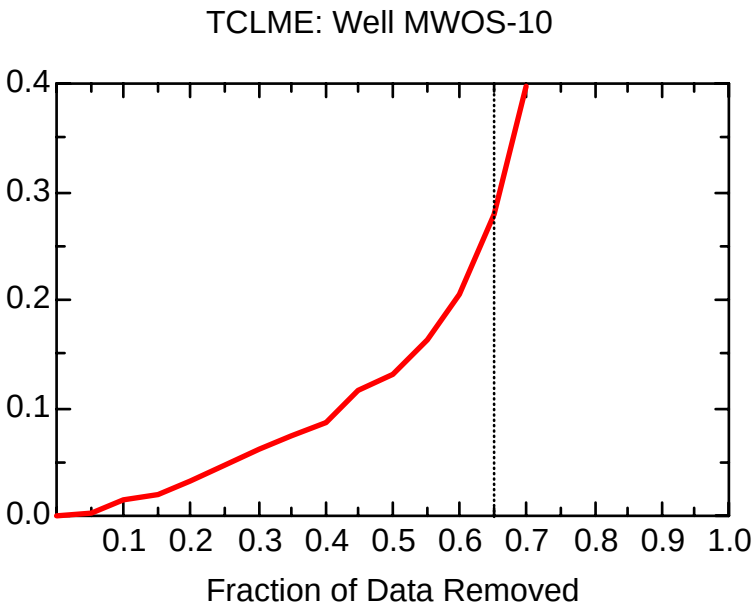

TCLME: Well MWOS-01
0.02
0.04
0.06
0.08
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

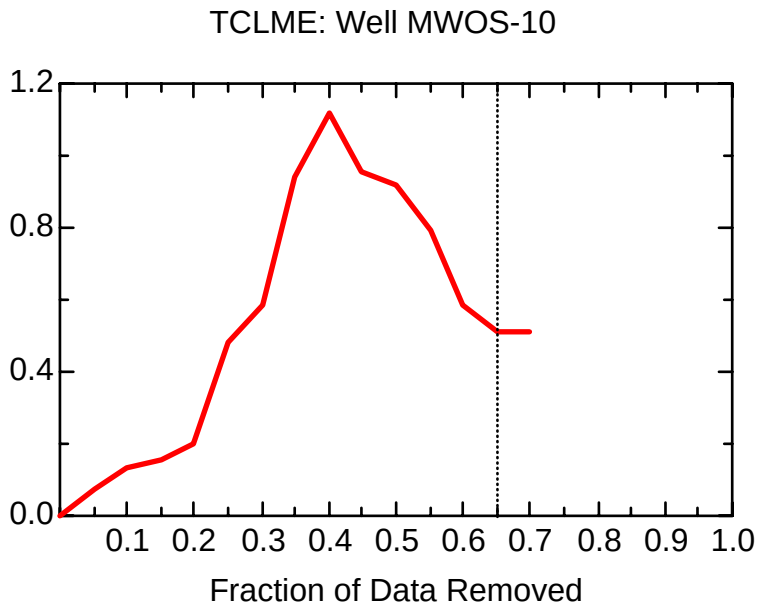

TCLME: Well MWOS-09
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

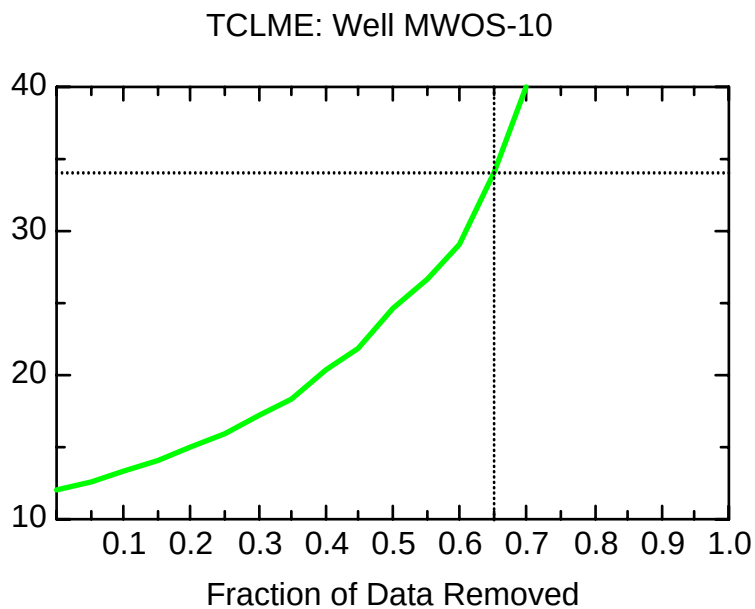

TCLME: Well MWOS-09
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

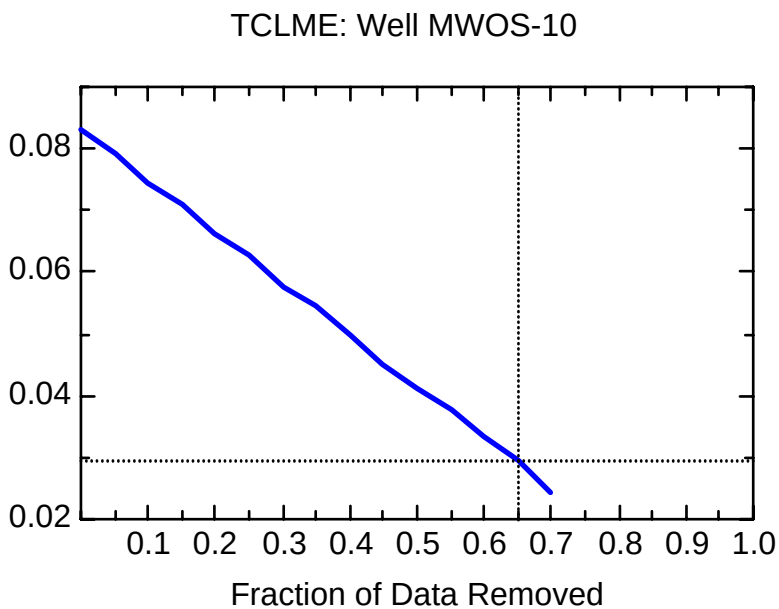

TCLME: Well MWOS-09
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

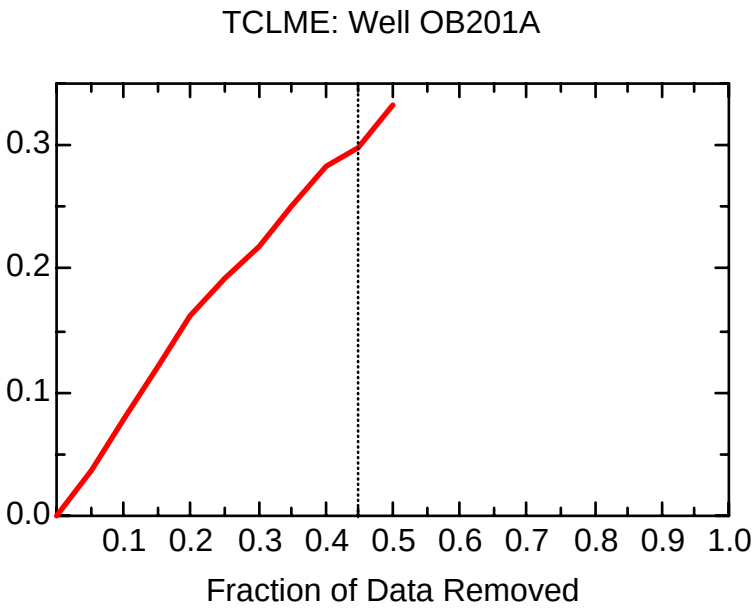

TCLME: Well MWOS-09
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

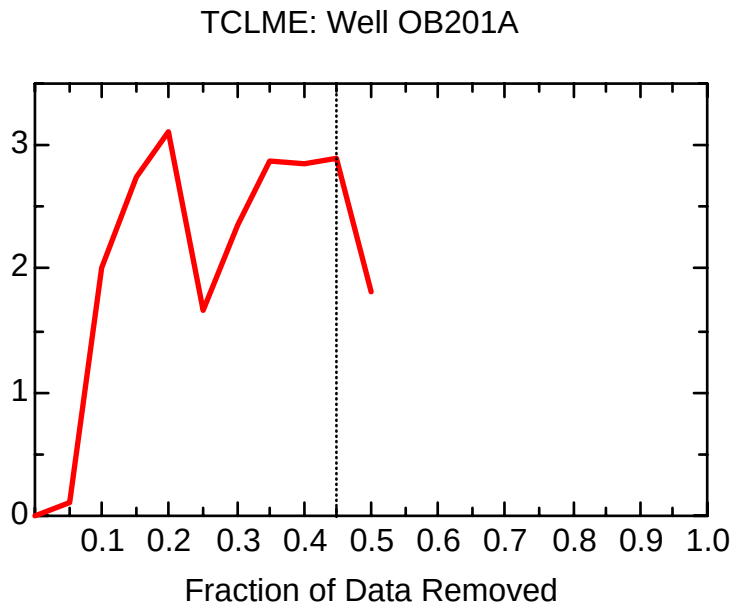

TCLME: Well MWOS-10
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

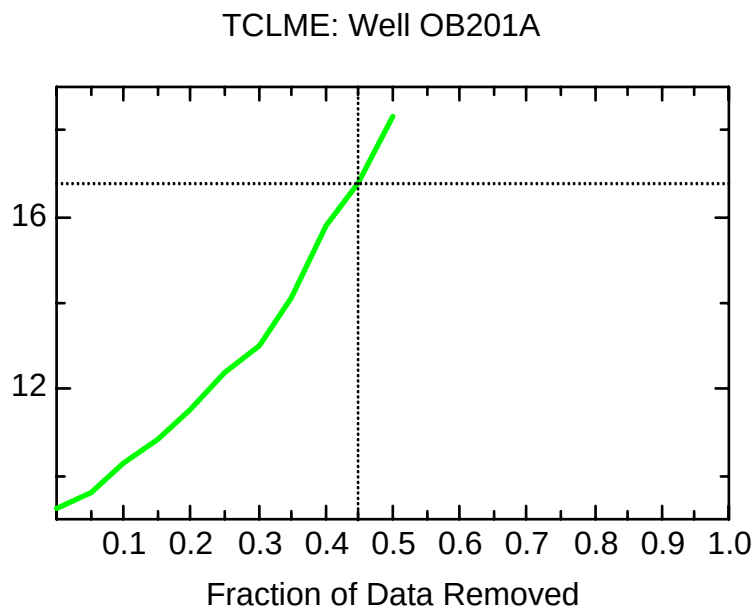

TCLME: Well MWOS-10
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

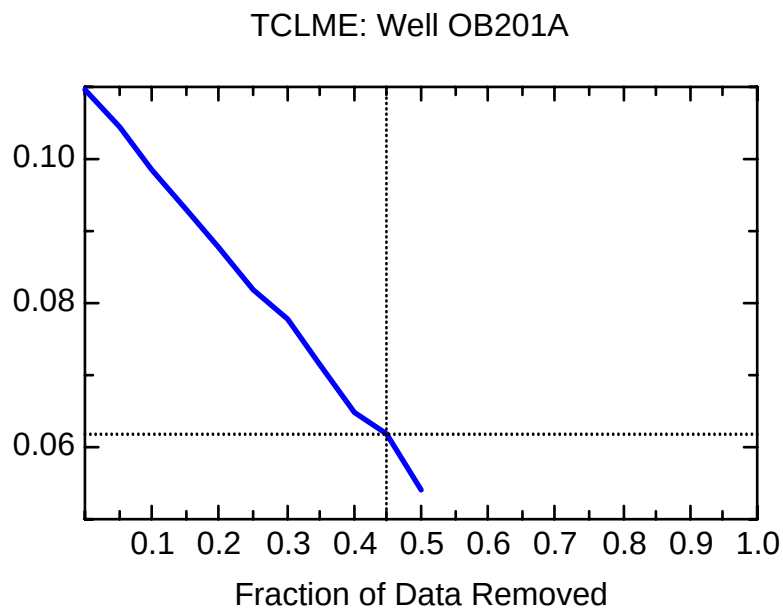

TCLME: Well MWOS-10
40
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

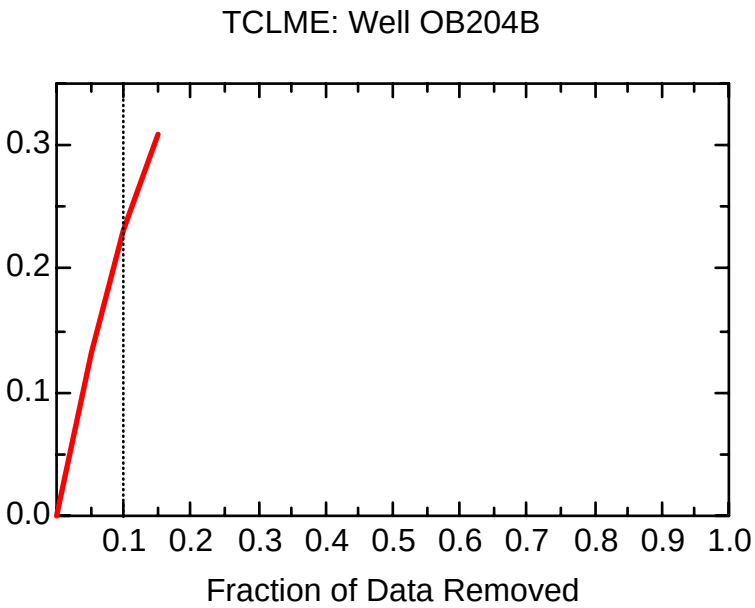

TCLME: Well MWOS-10
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

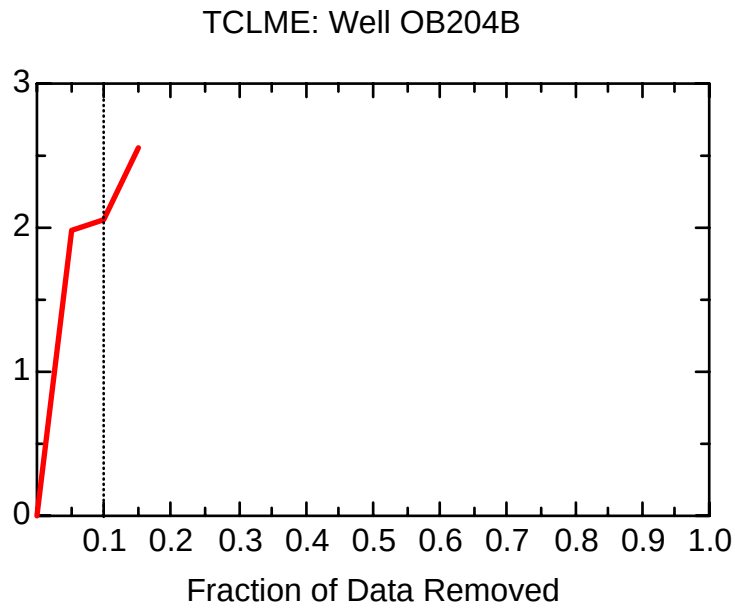

TCLME: Well OB201A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

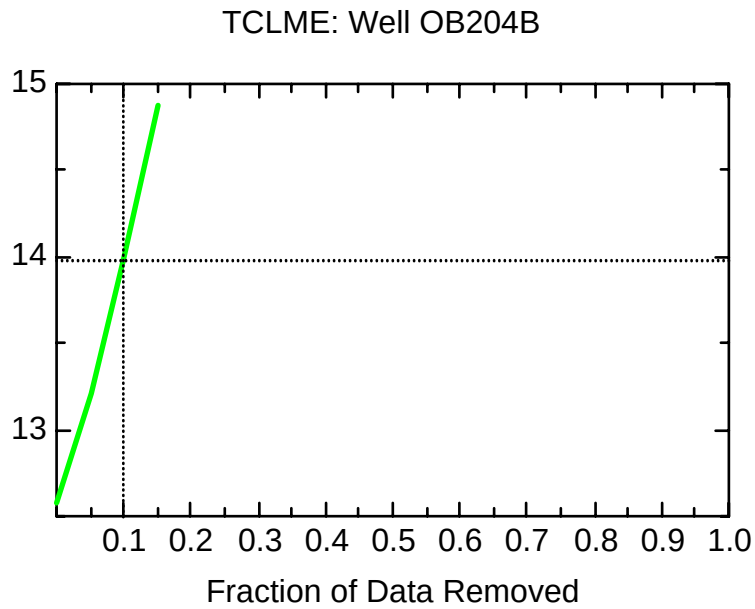

TCLME: Well OB201A
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

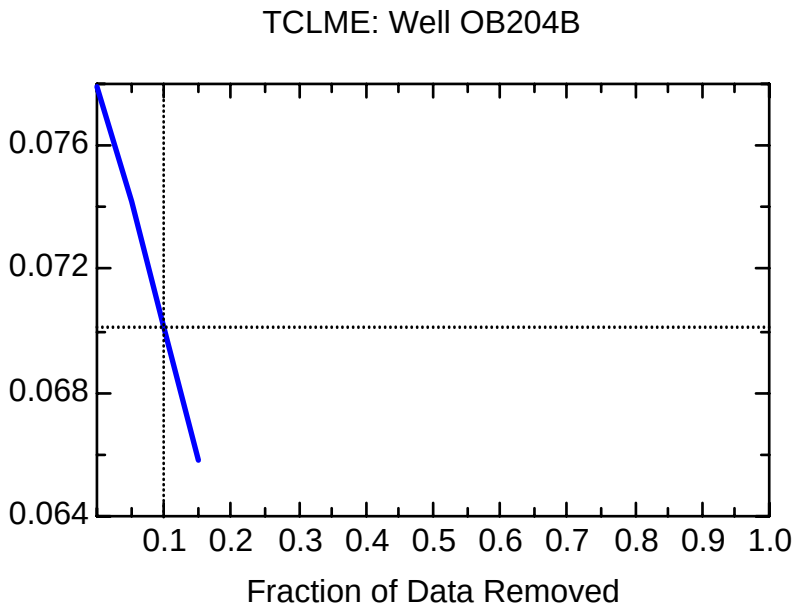

TCLME: Well OB201A
16
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

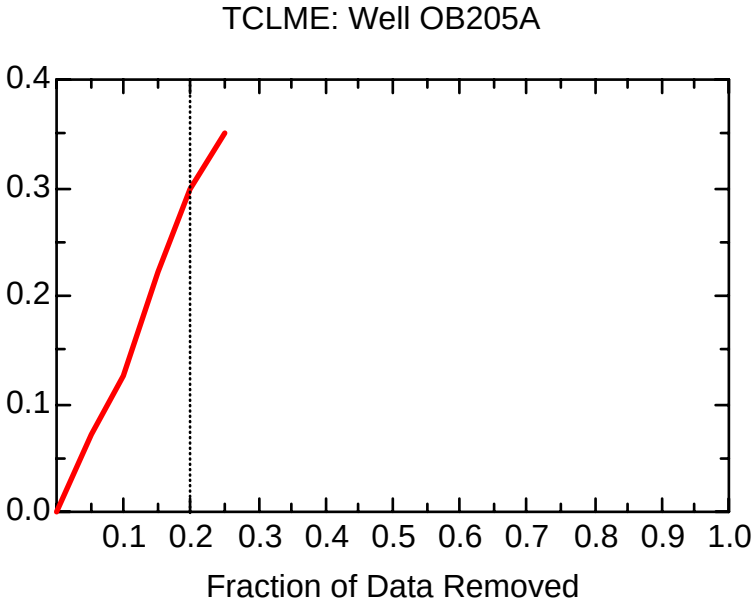

TCLME: Well OB201A
0.10
0.08
0.06
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

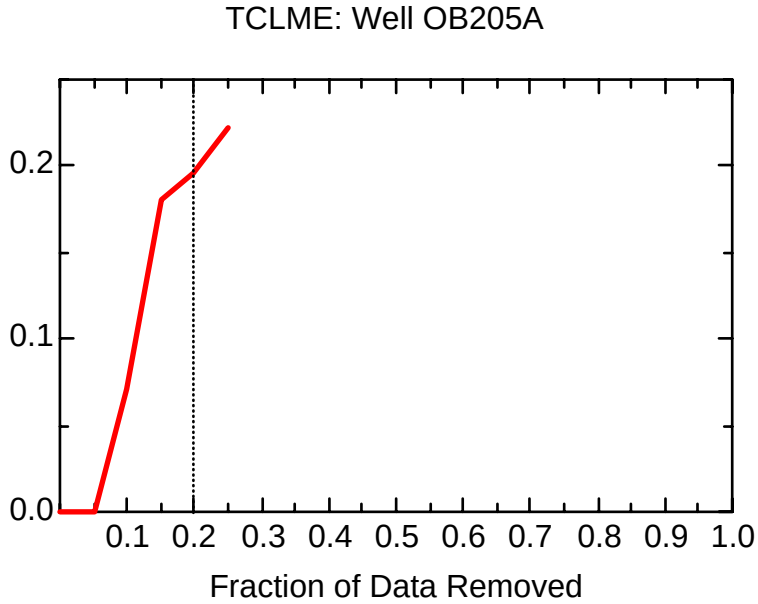

TCLME: Well OB204B
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

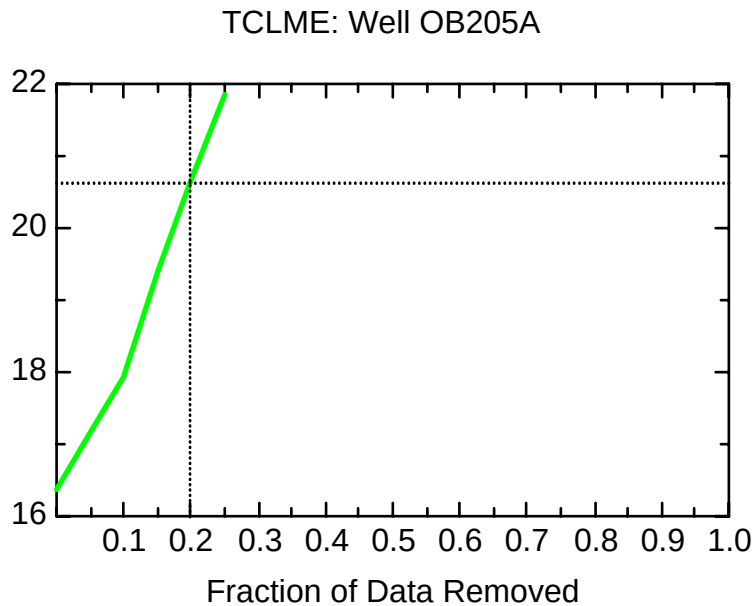

TCLME: Well OB204B
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

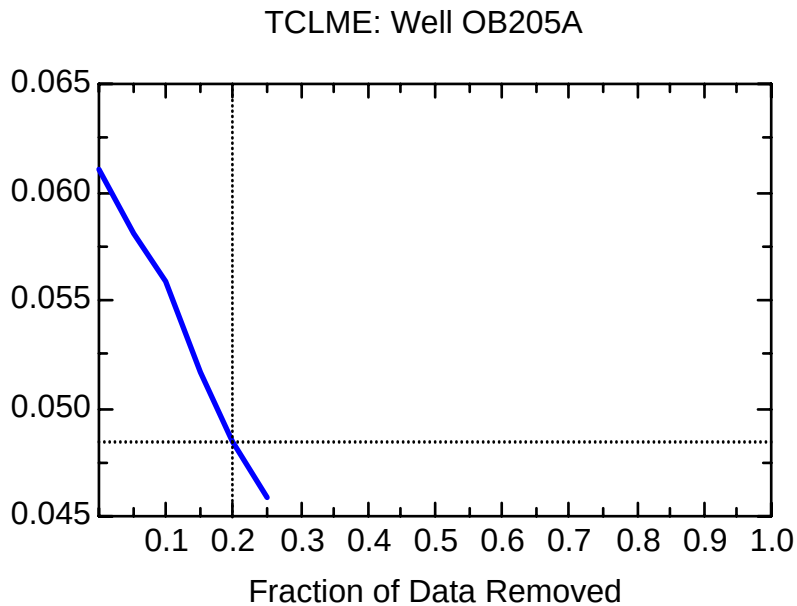

TCLME: Well OB204B
15
14
13
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

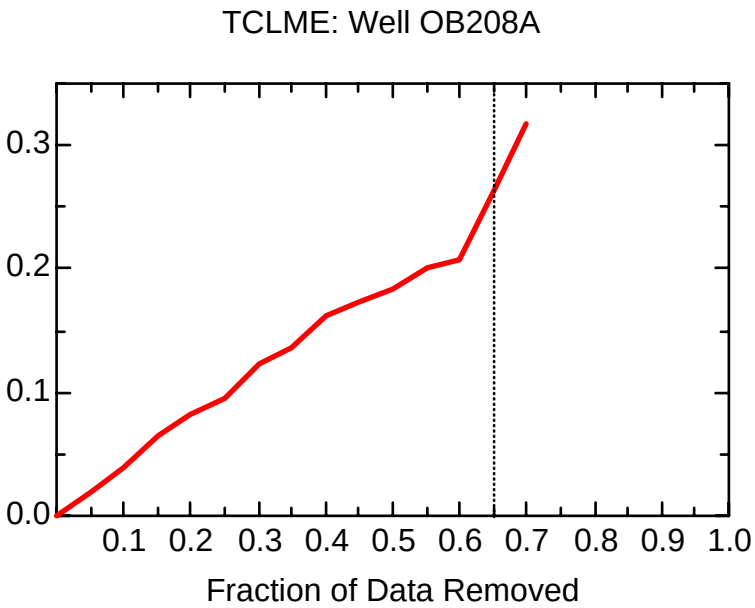

TCLME: Well OB204B
0.076
0.072
0.068
0.064
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

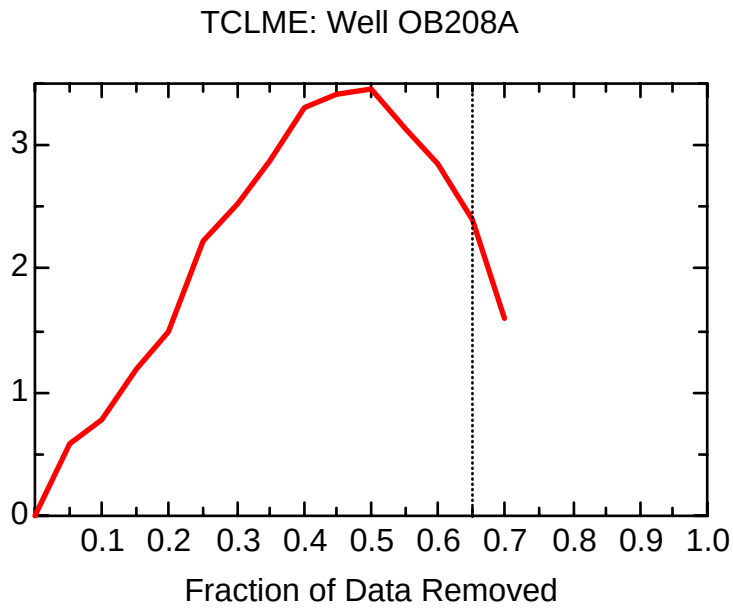

TCLME: Well OB205A
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

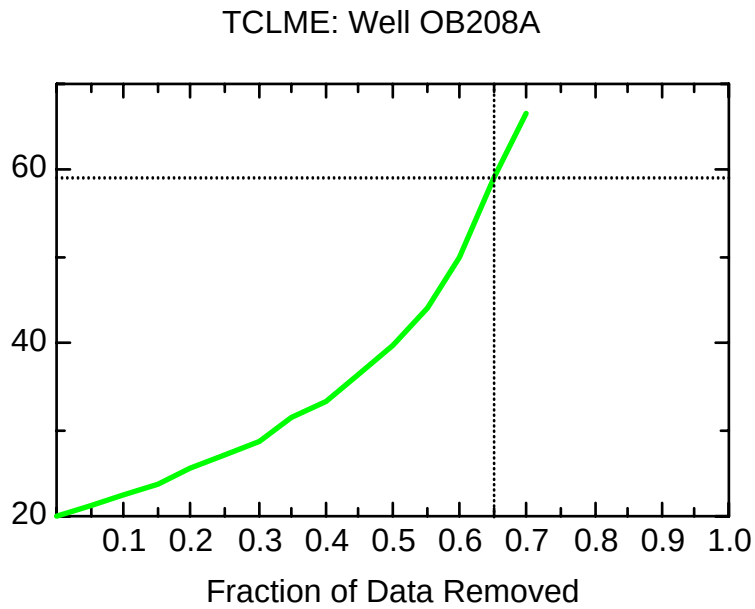

TCLME: Well OB205A
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

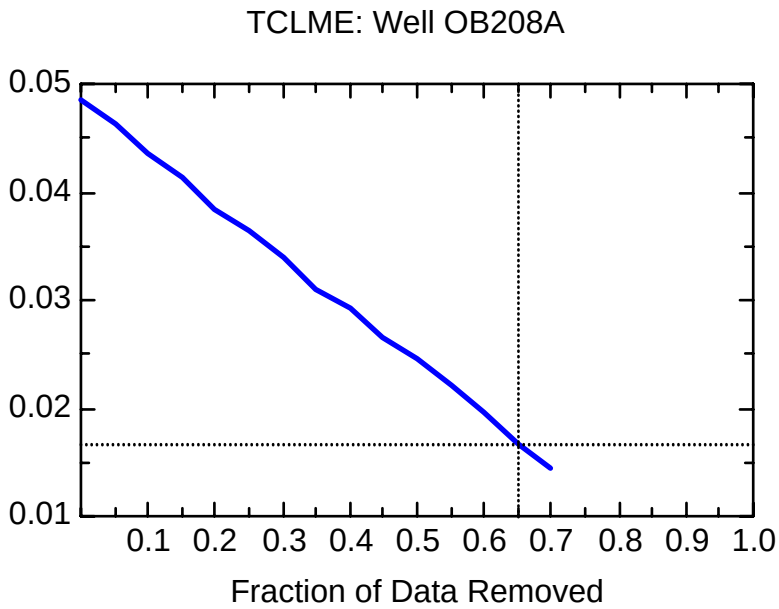

TCLME: Well OB205A
22
20
18
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

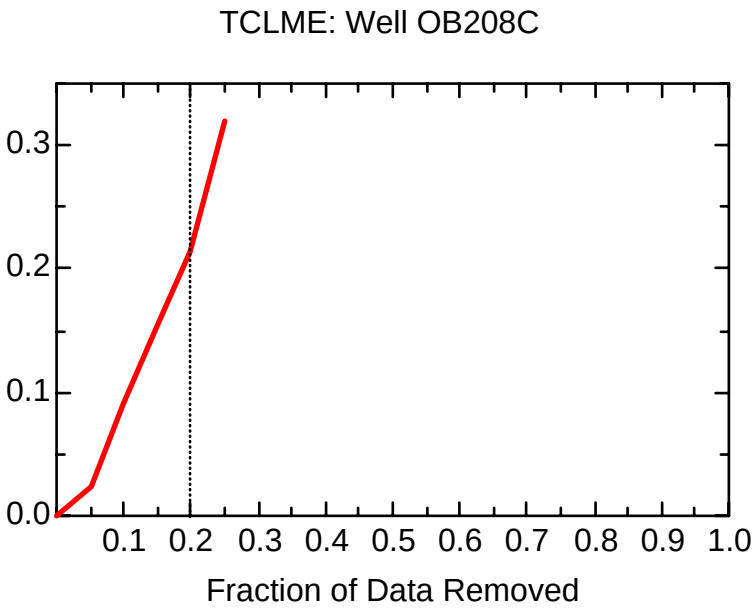

TCLME: Well OB205A
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

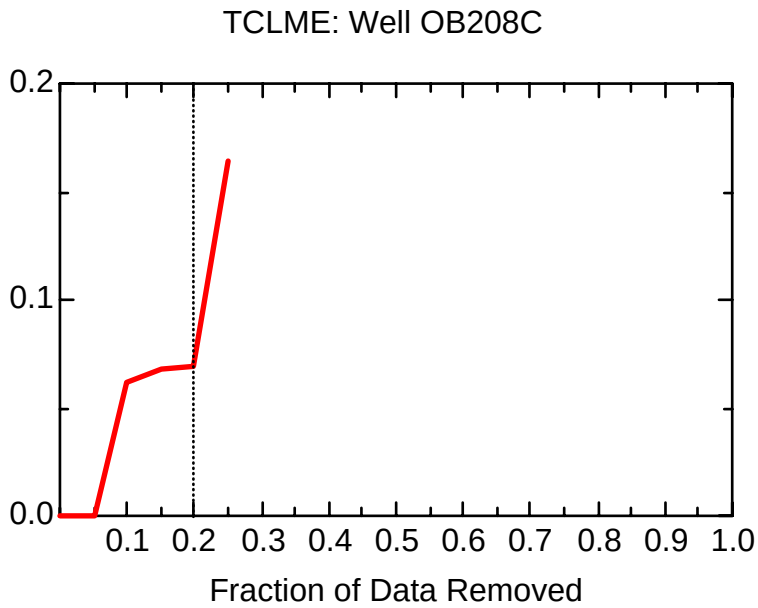

TCLME: Well OB208A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

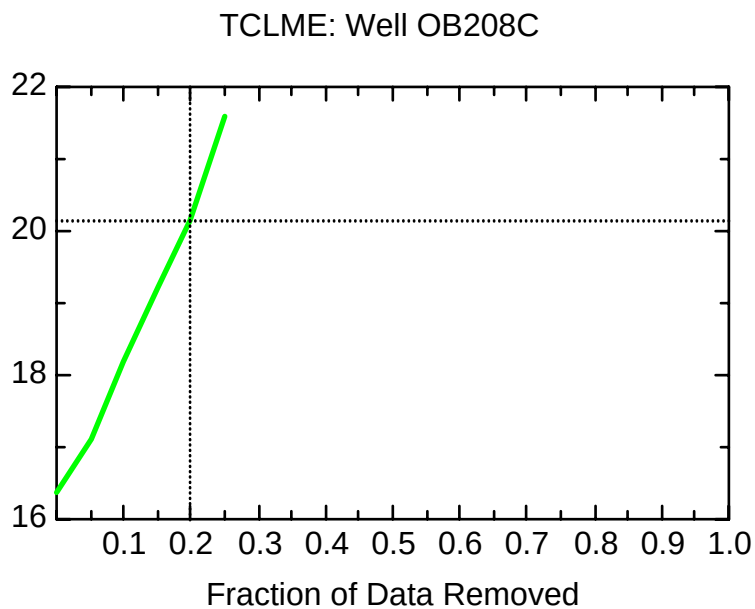

TCLME: Well OB208A
3
2
1
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

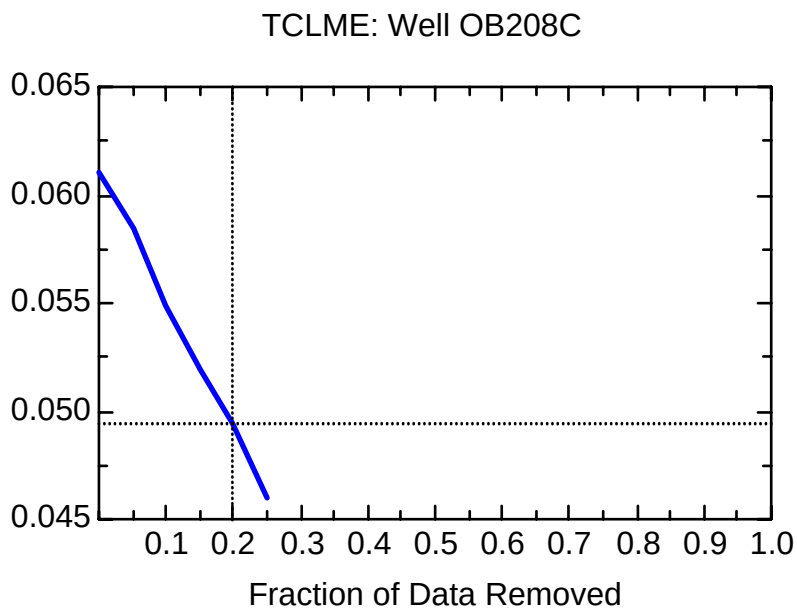

TCLME: Well OB208A
60
40
20
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

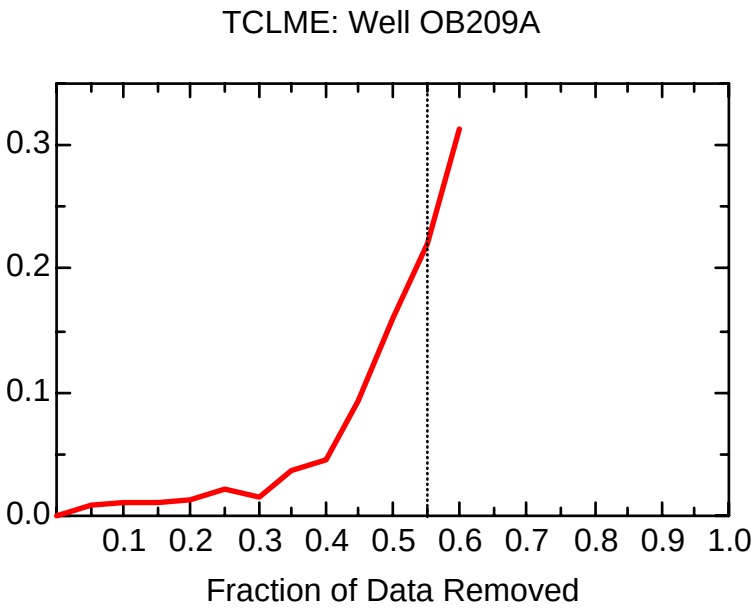

TCLME: Well OB208A
0.05
0.04
0.03
0.02
0.01
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

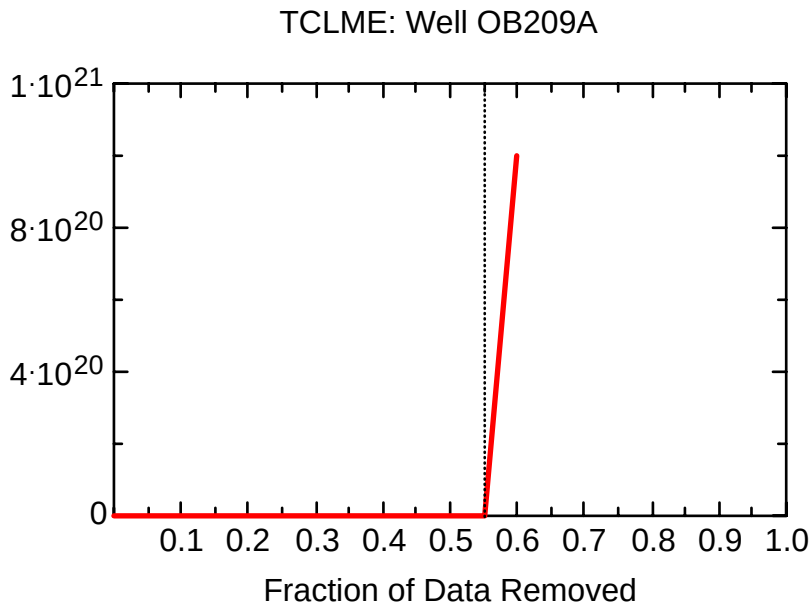

TCLME: Well OB208C
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

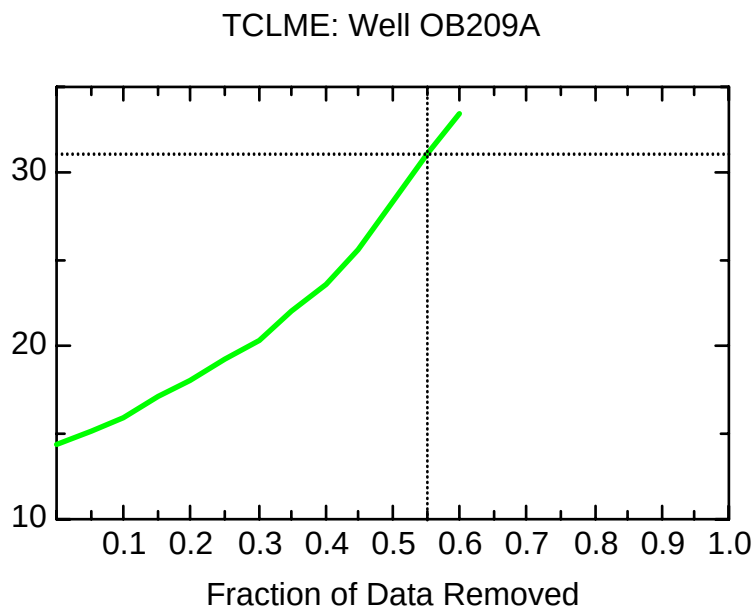

TCLME: Well OB208C
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

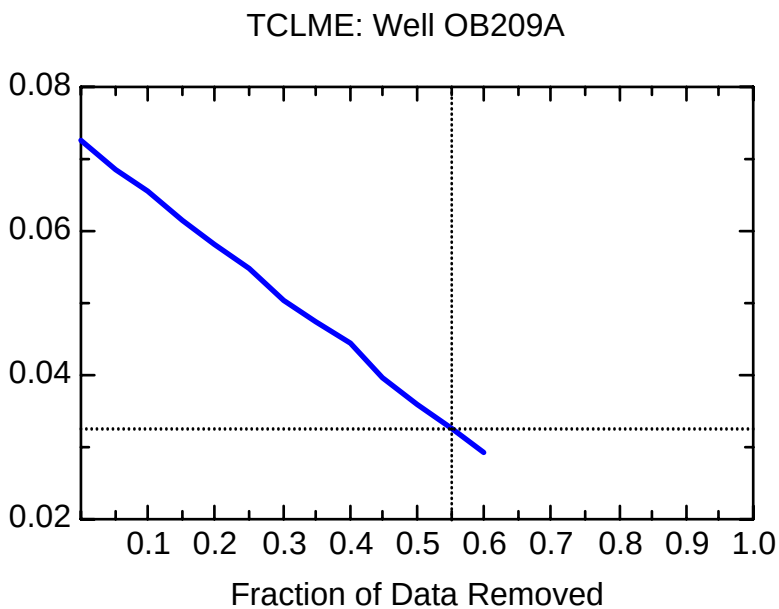

TCLME: Well OB208C
22
20
18
16
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

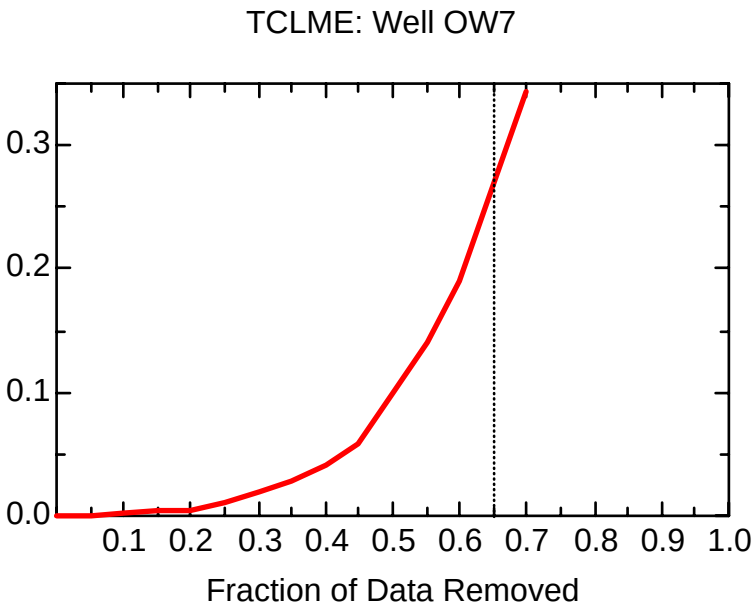

TCLME: Well OB208C
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

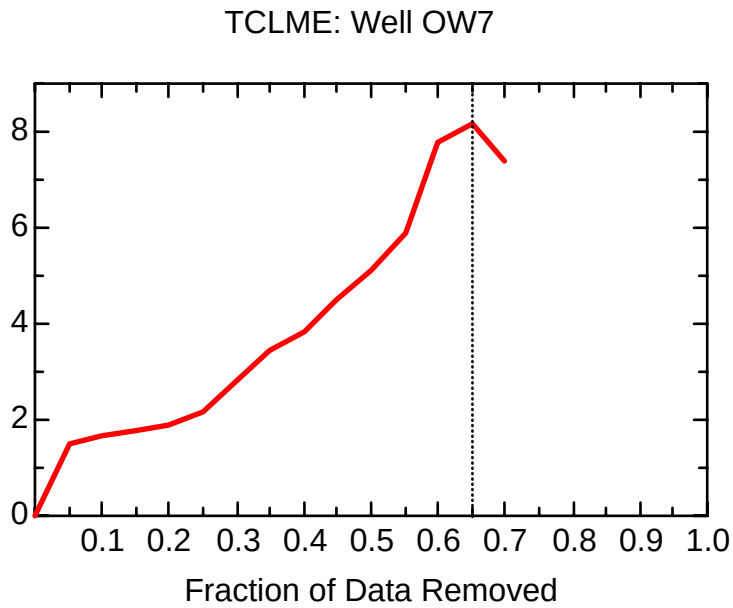

TCLME: Well OB209A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

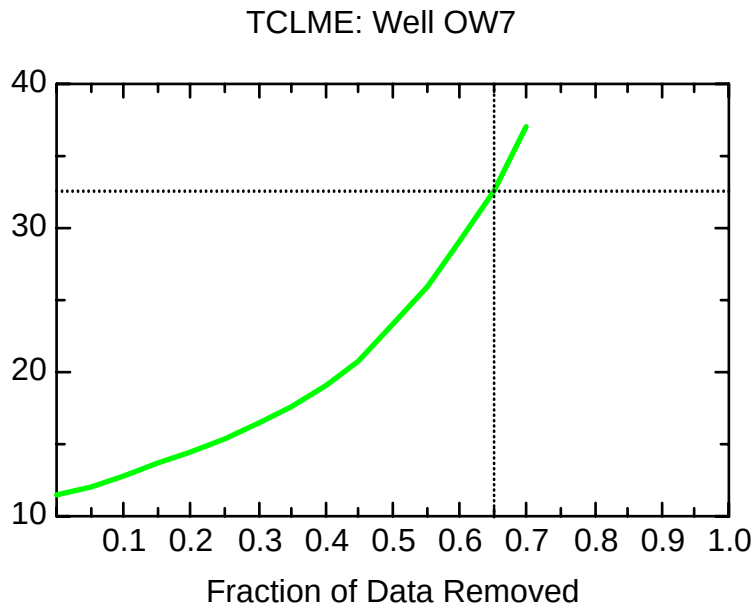

TCLME: Well OB209A
1·10^21
8·10^20
4·10^20
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

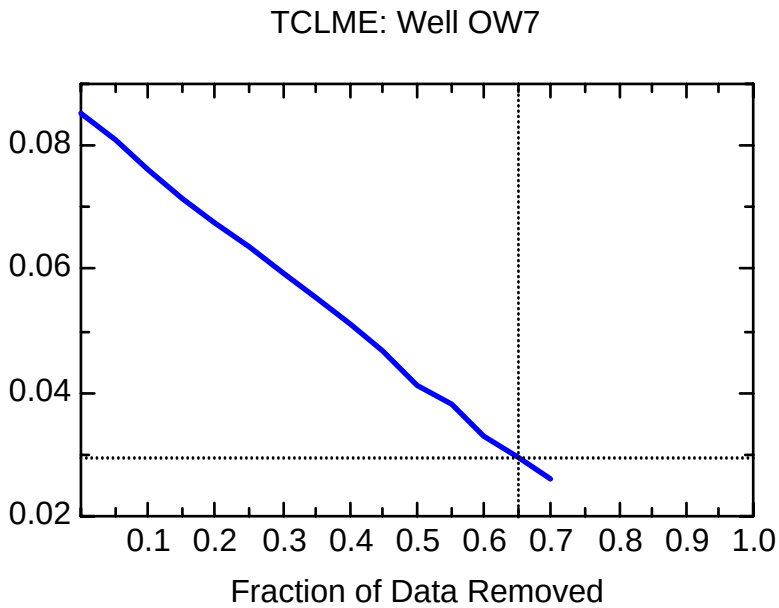

TCLME: Well OB209A
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

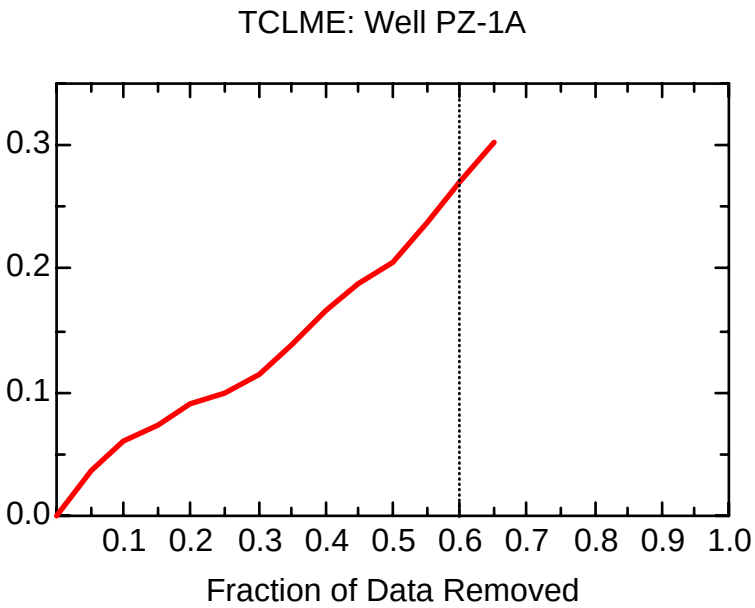

TCLME: Well OB209A
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

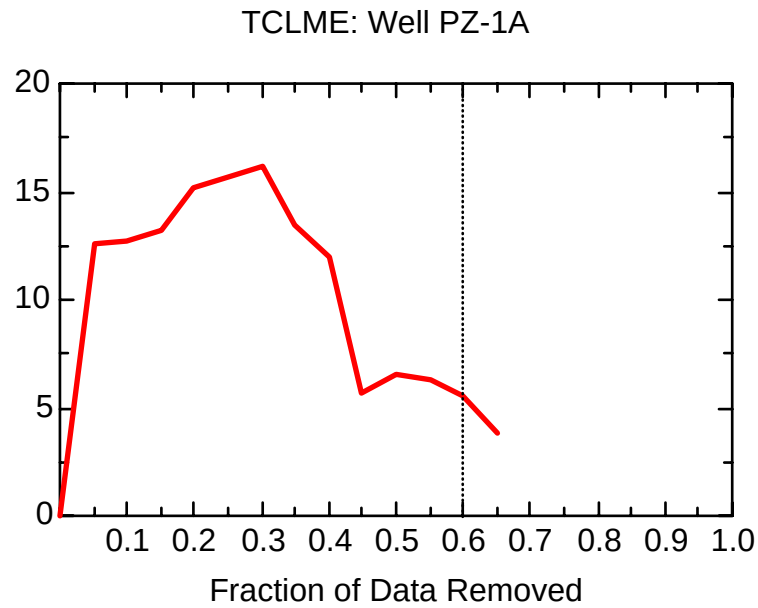

TCLME: Well OW7
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

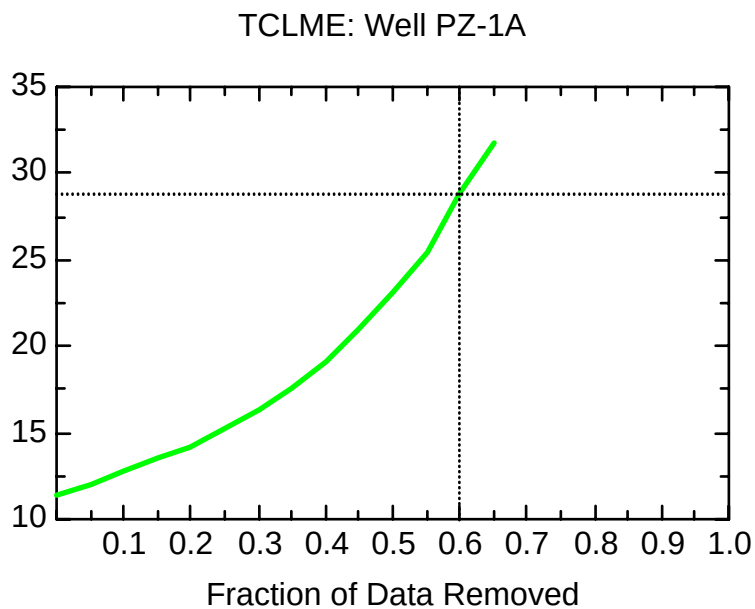

TCLME: Well OW7
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

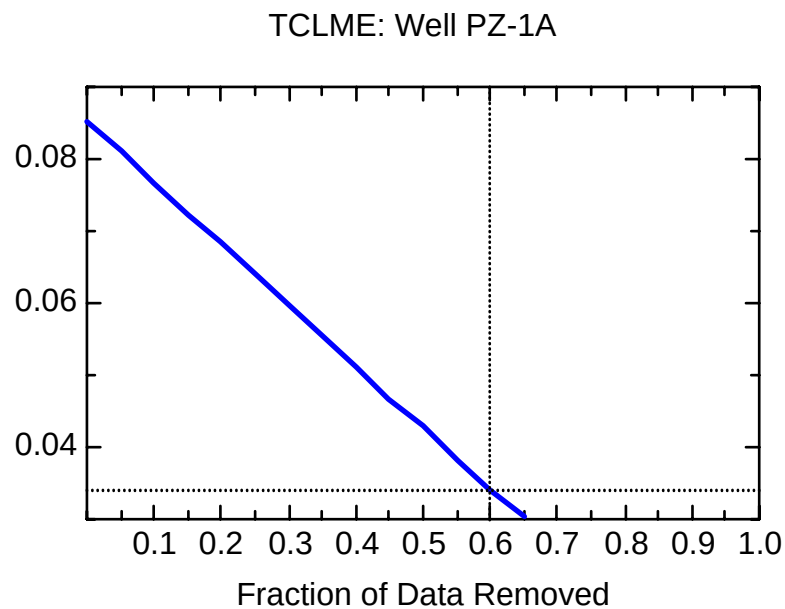

TCLME: Well OW7
40
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

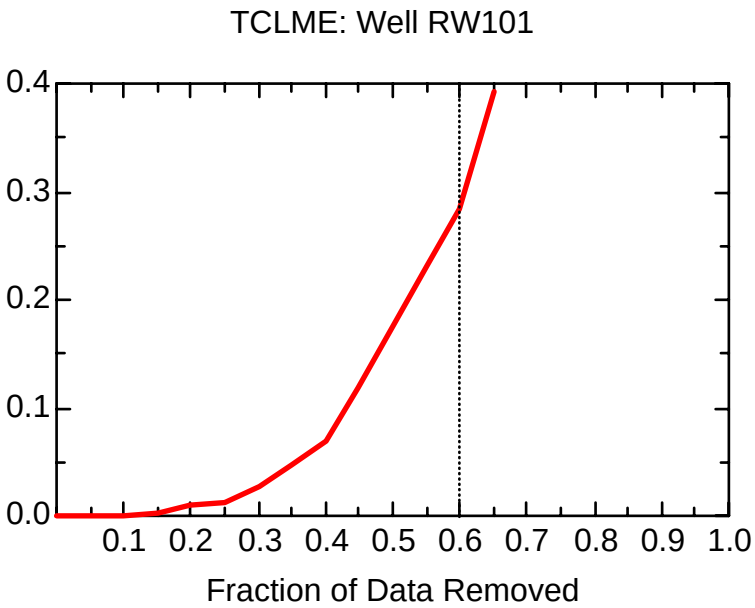

TCLME: Well OW7
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

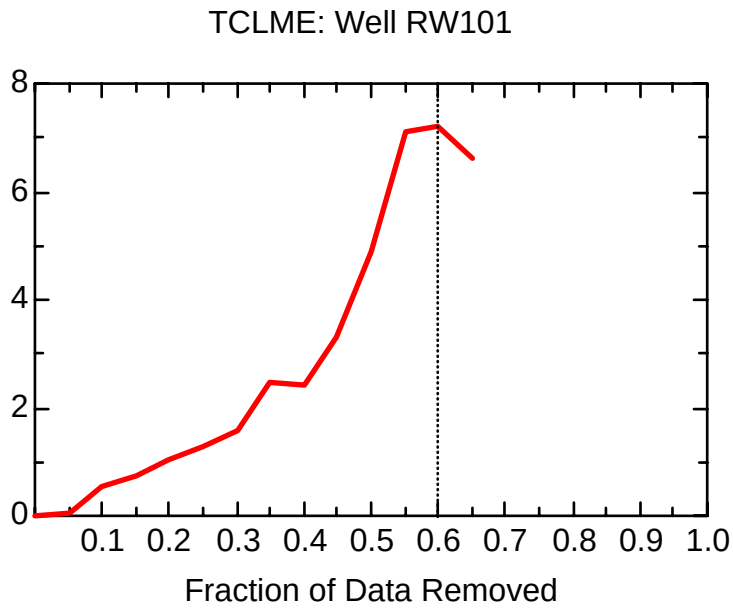

TCLME: Well PZ-1A
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

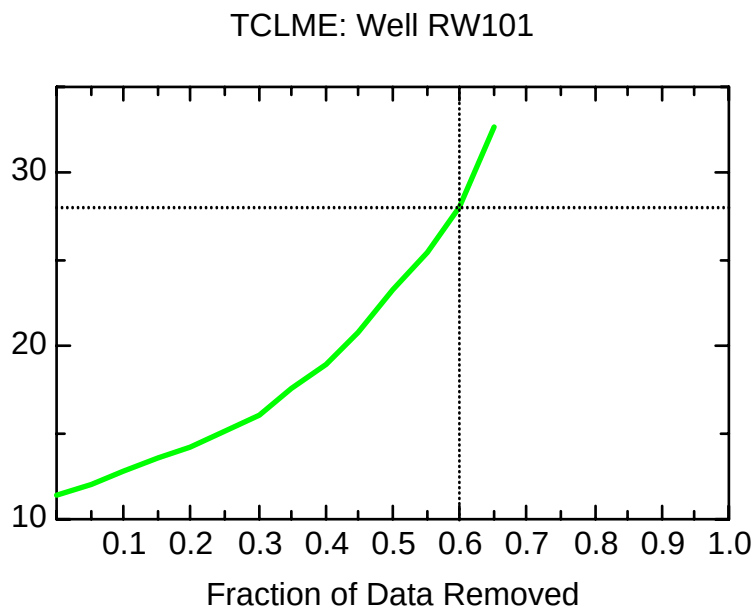

TCLME: Well PZ-1A
20
15
10
5
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

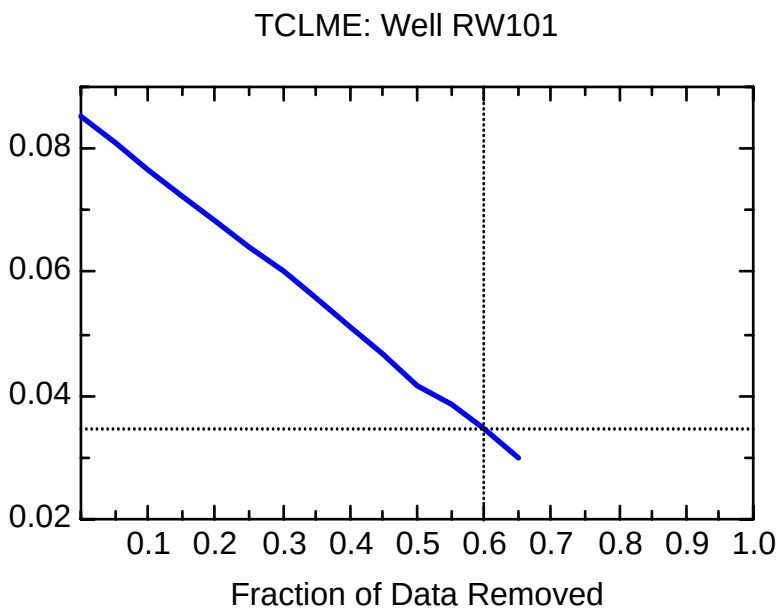

TCLME: Well PZ-1A
35
30
25
20
15
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

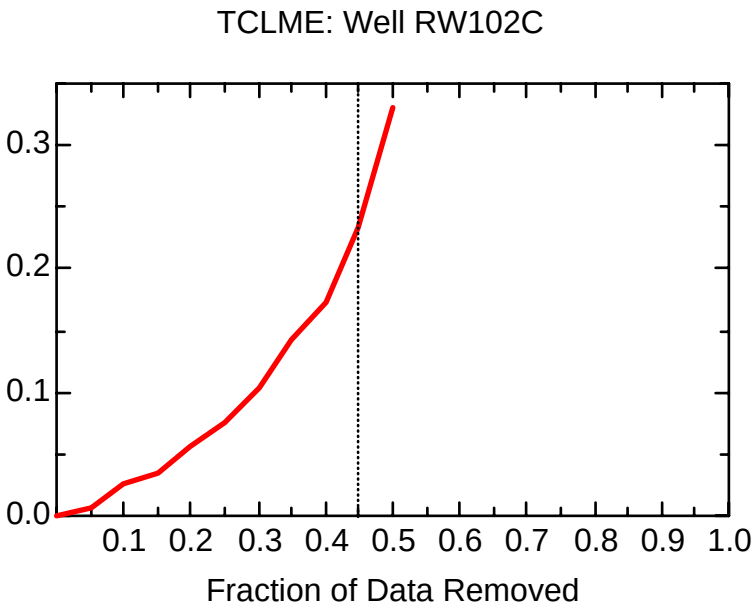

TCLME: Well PZ-1A
0.08
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

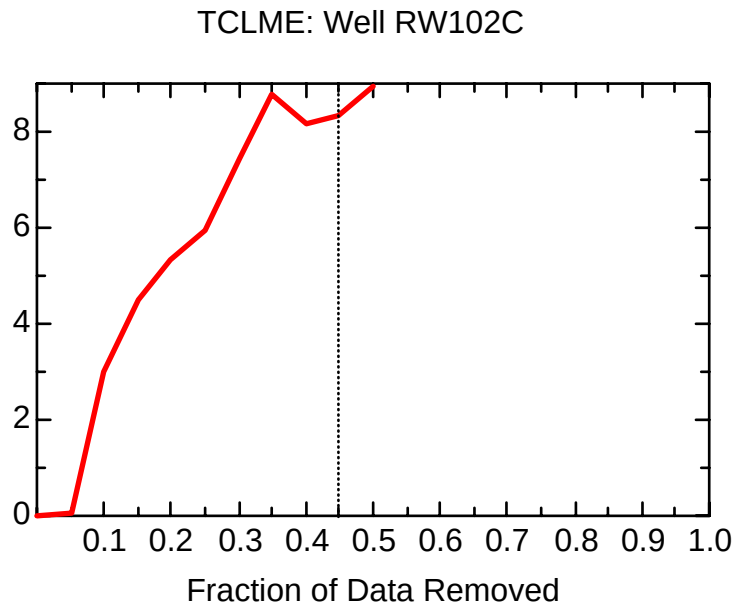

TCLME: Well RW101
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

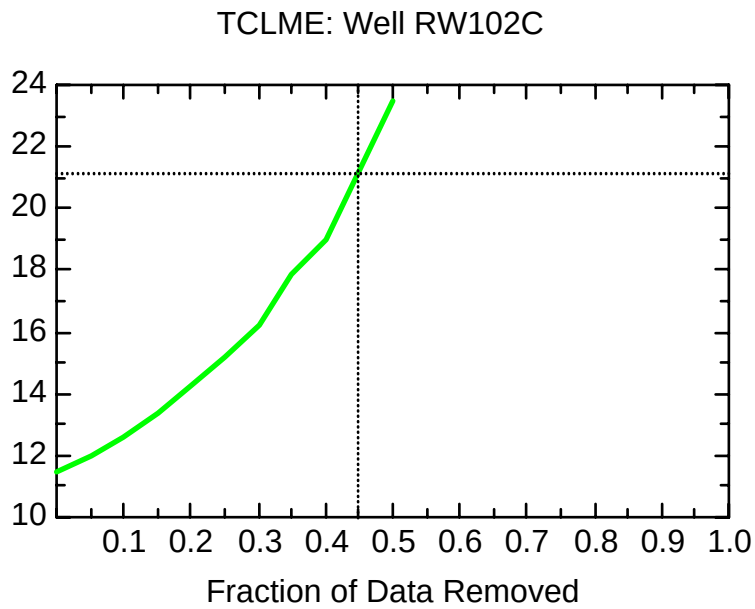

TCLME: Well RW101
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

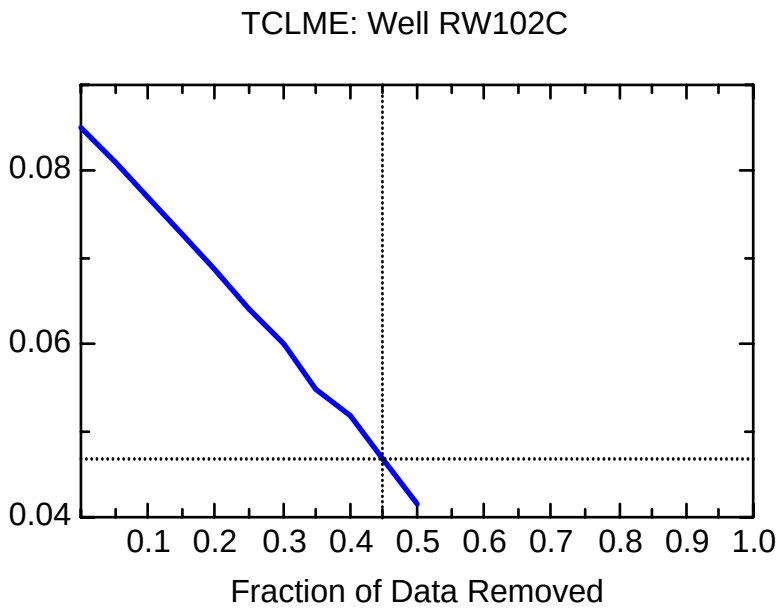

TCLME: Well RW101
30
20
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

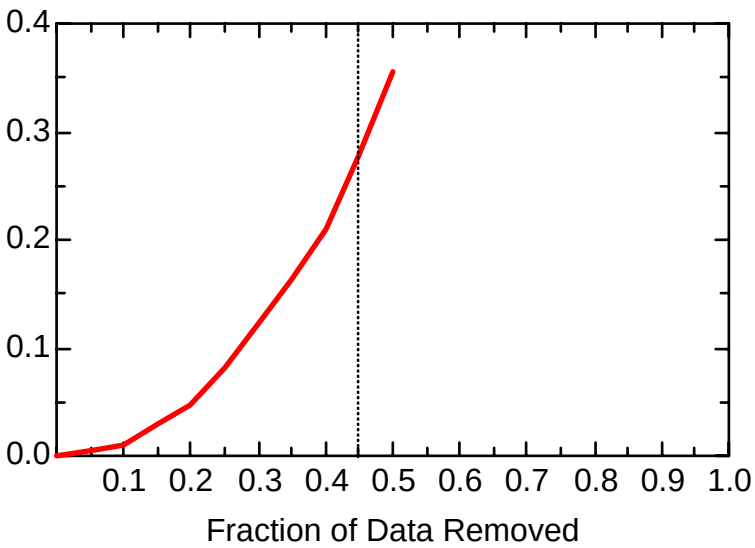

TCLME: Well RW101
0.08
0.06
0.04
0.02
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

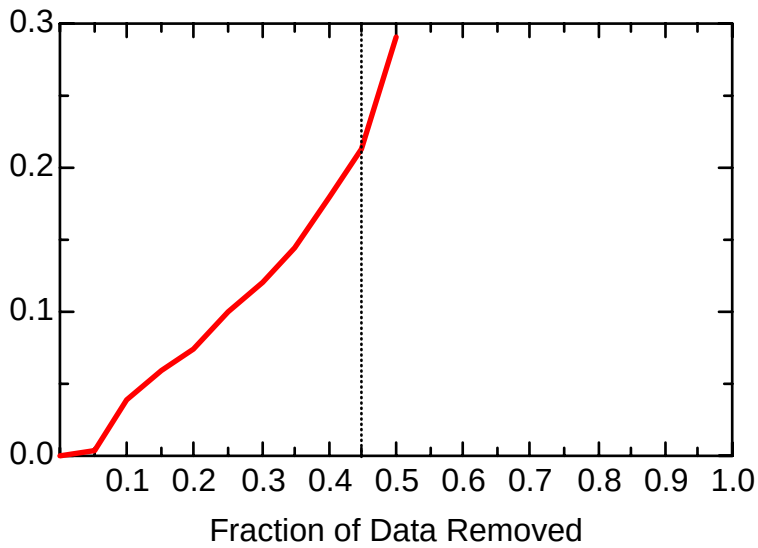

TCLME: Well RW102C
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

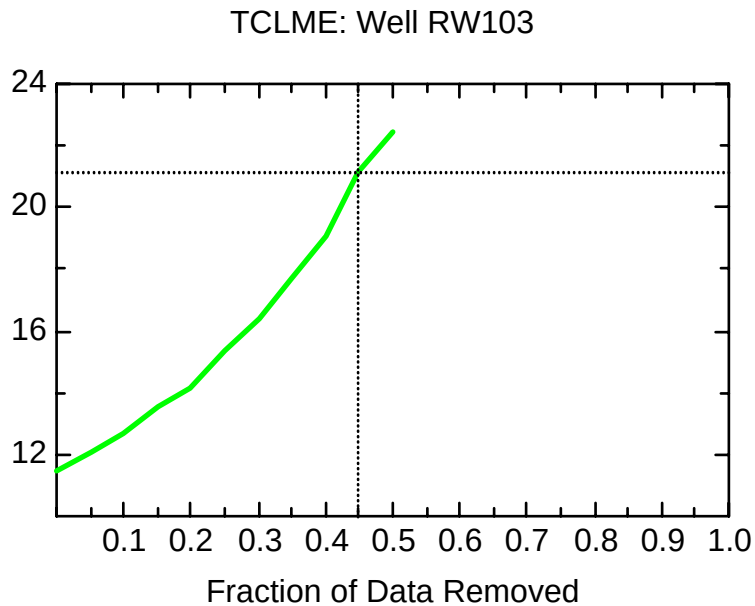

TCLME: Well RW102C
8
6
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

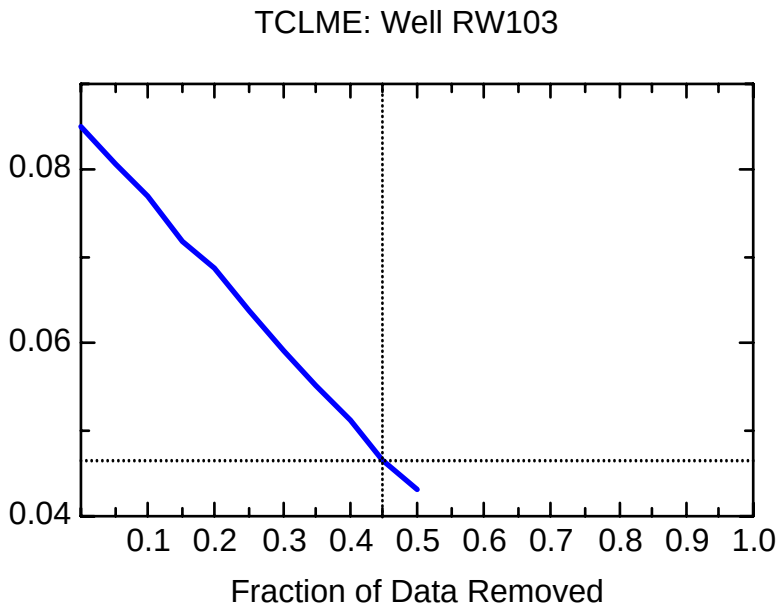

TCLME: Well RW102C
24
22
20
18
16
14
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

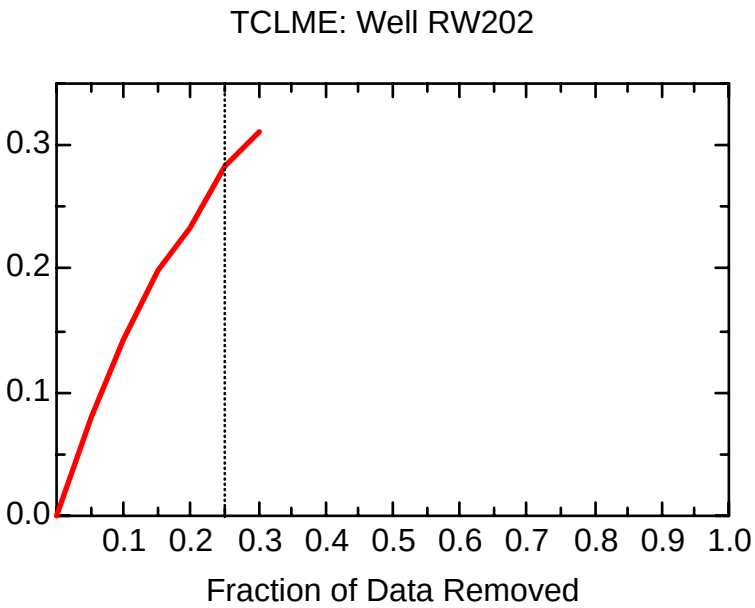

TCLME: Well RW102C
0.08
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

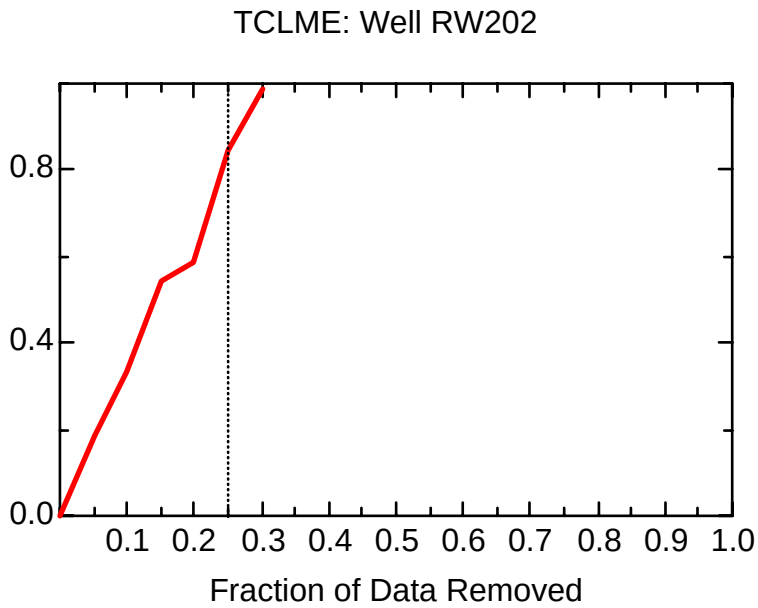

TCLME: Well RW103
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW103
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW103
24
20
16
12
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW103
0.08
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW202
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW202
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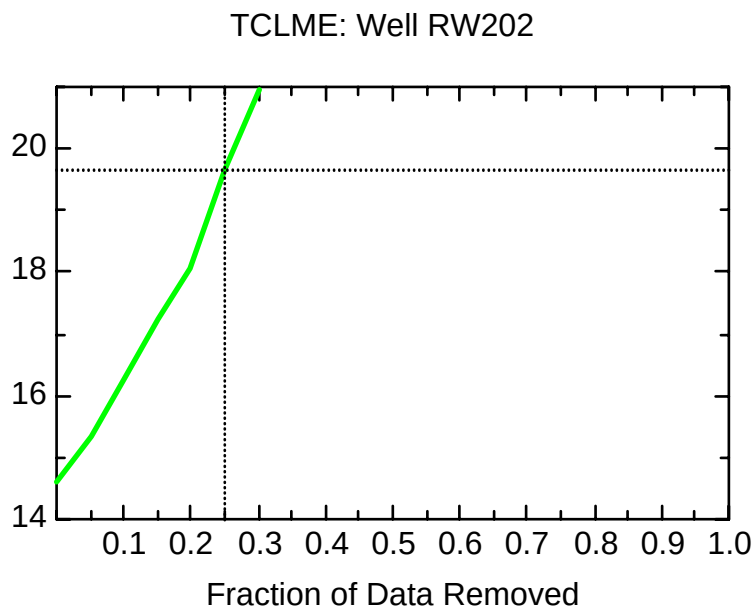
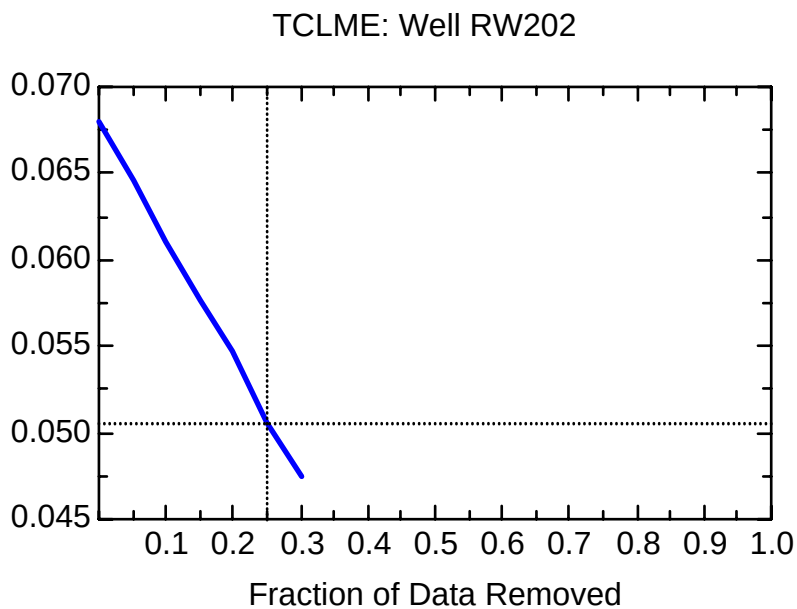
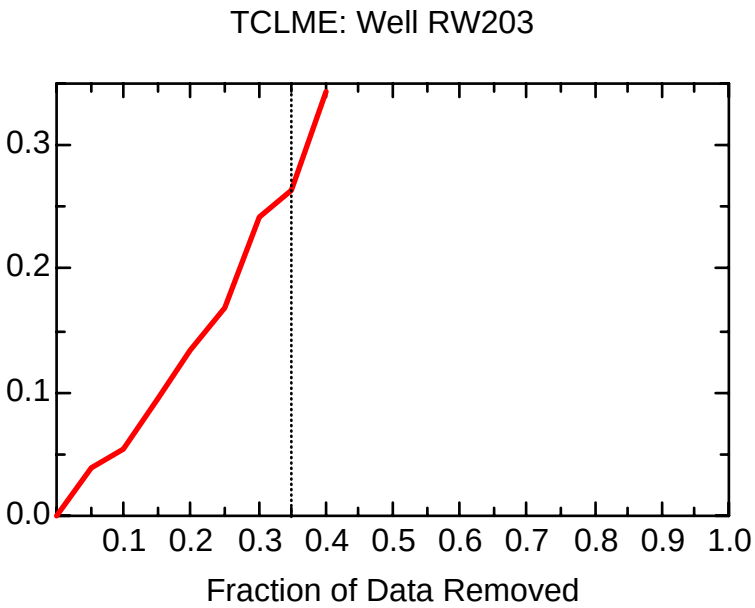
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW202
20
18
16
14
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW202
0.070
0.065
0.060
0.055
0.050
0.045
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW203
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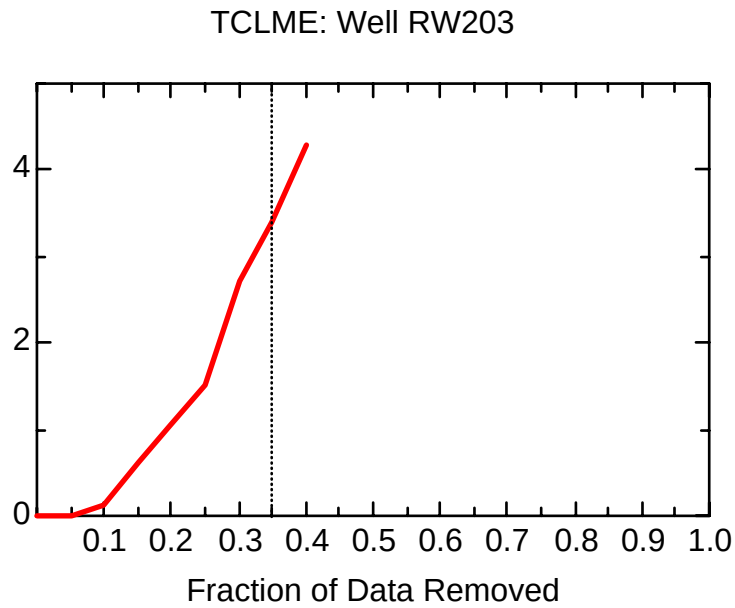
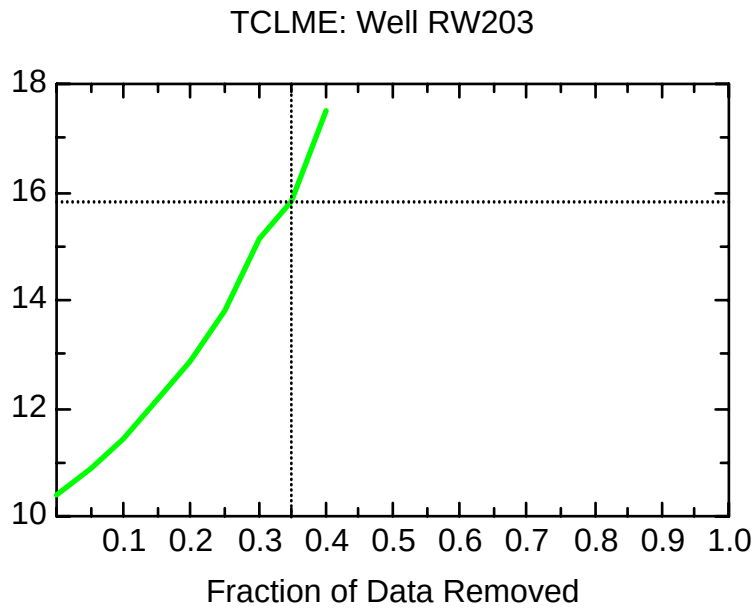
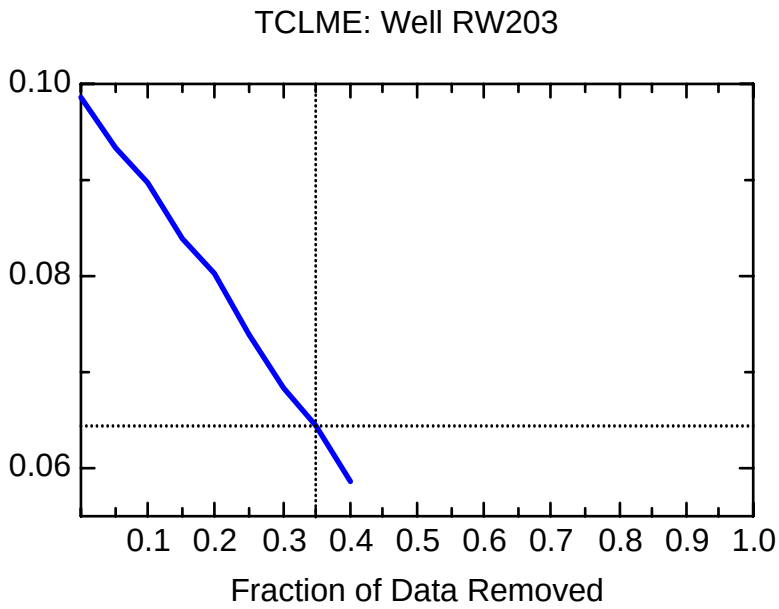
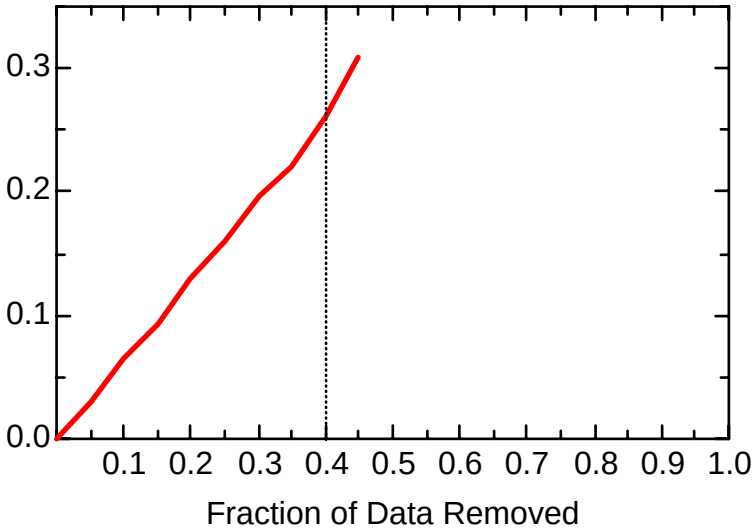
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW203
4
2
0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

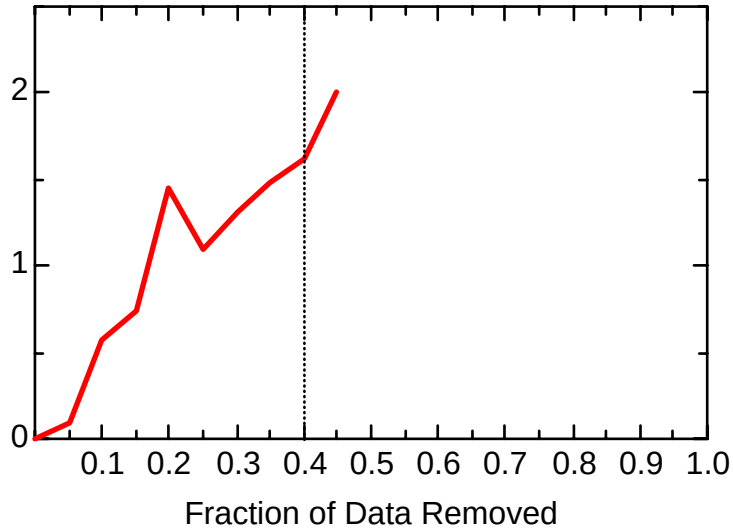

TCLME: Well RW203
18
16
14
12
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW203
0.10
0.08
0.06
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

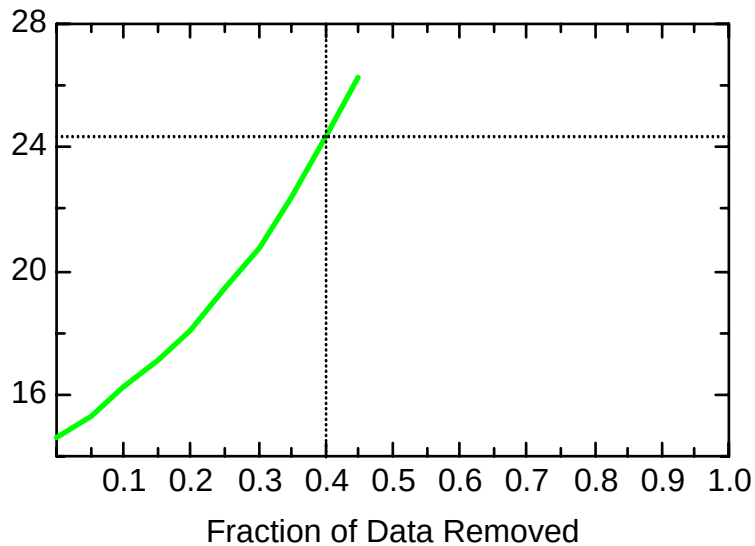
TCLME: Well RW207



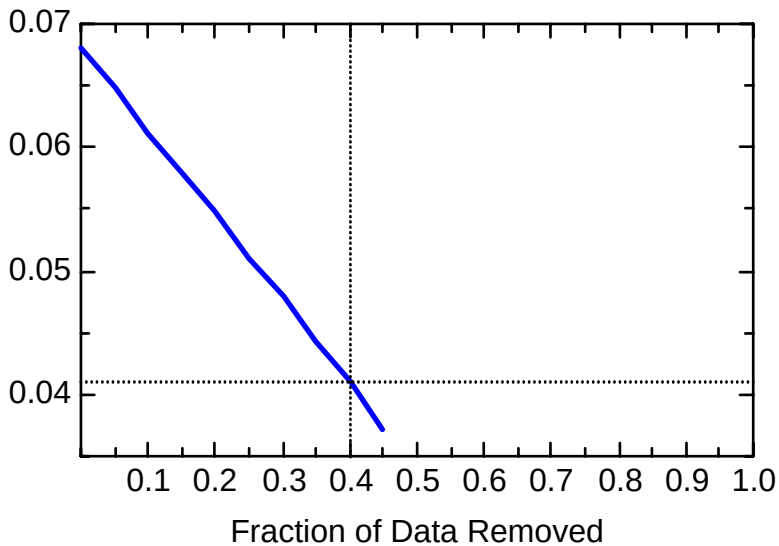
TCLME: Well RW207

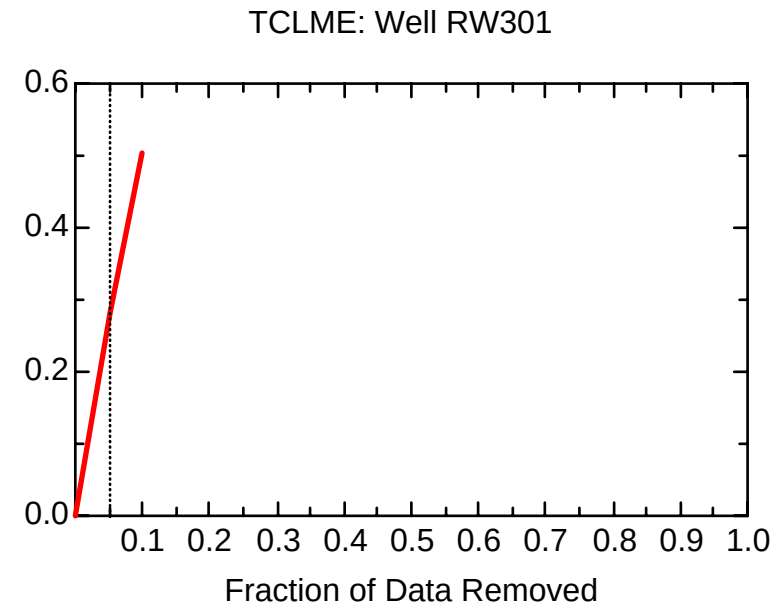


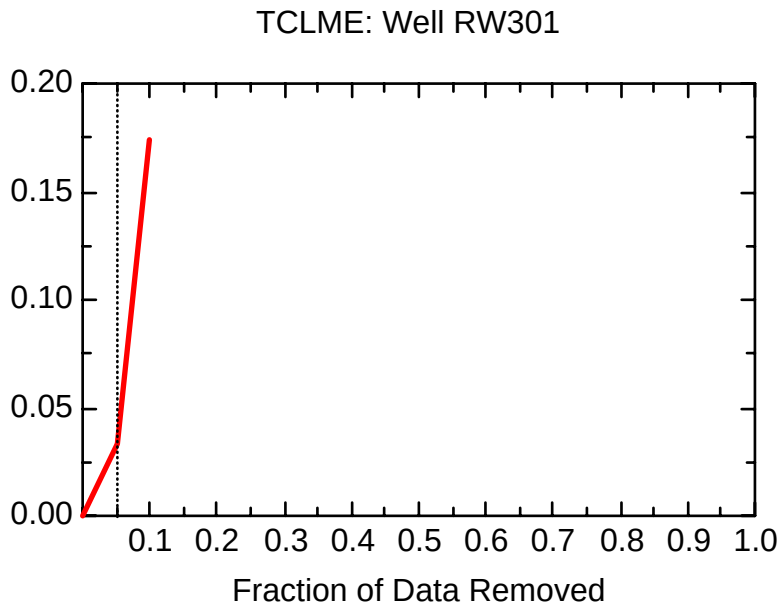
TCLME: Well RW207

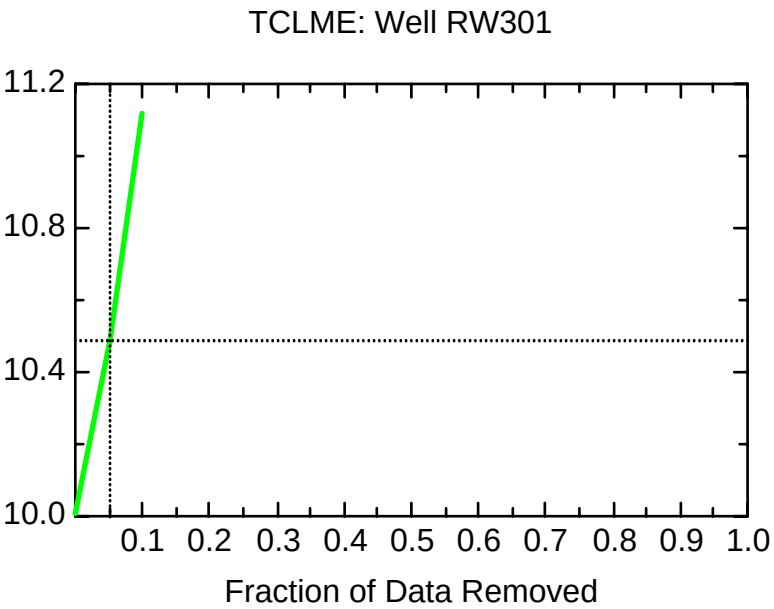


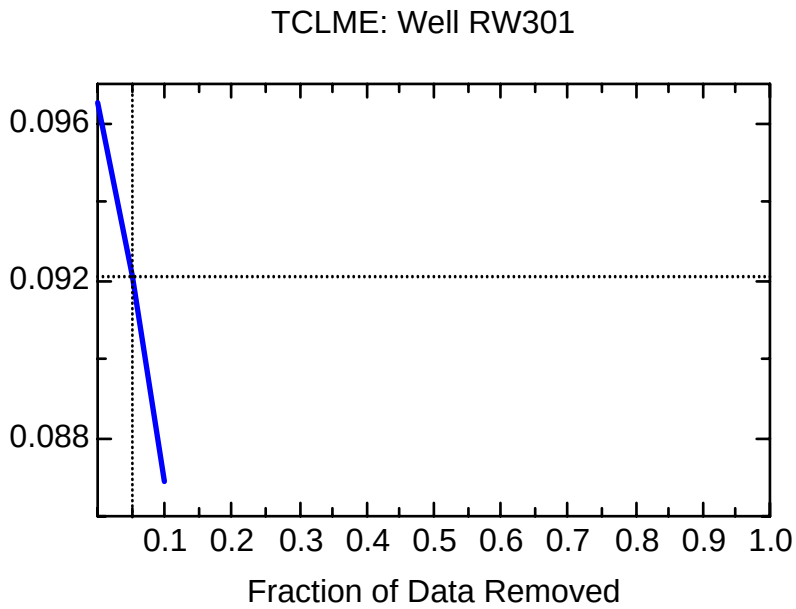
TCLME: Well RW207

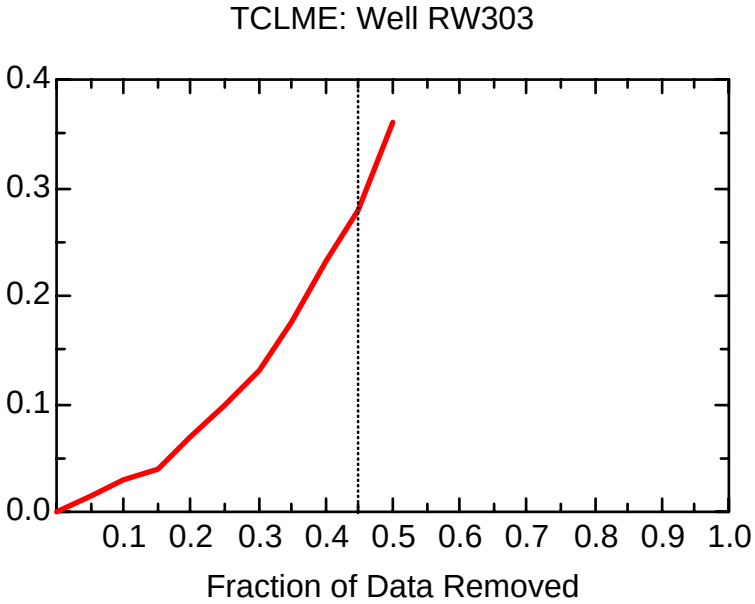


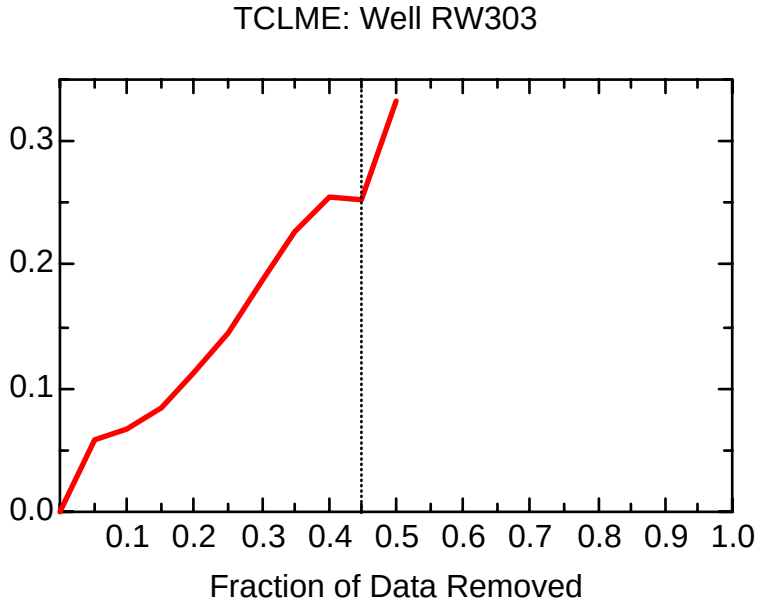

TCLME: Well RW301
0.6
0.4
0.2
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

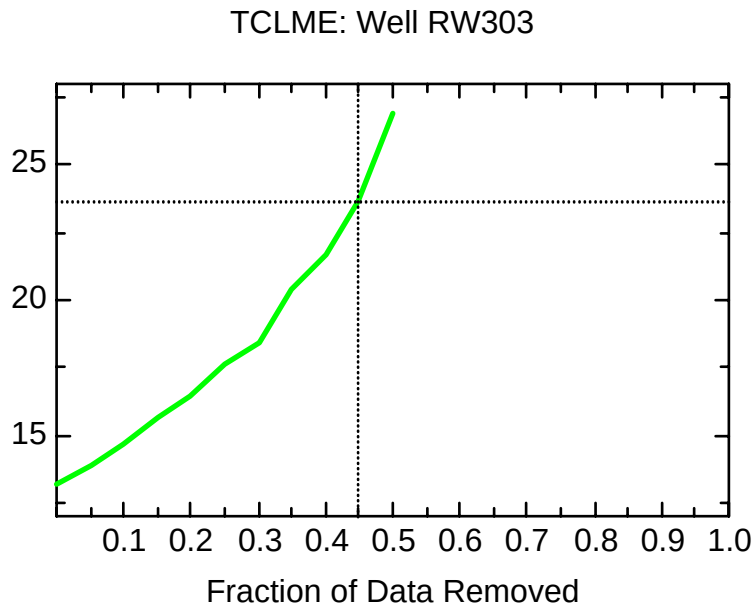

TCLME: Well RW301
0.20
0.15
0.10
0.05
0.00
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

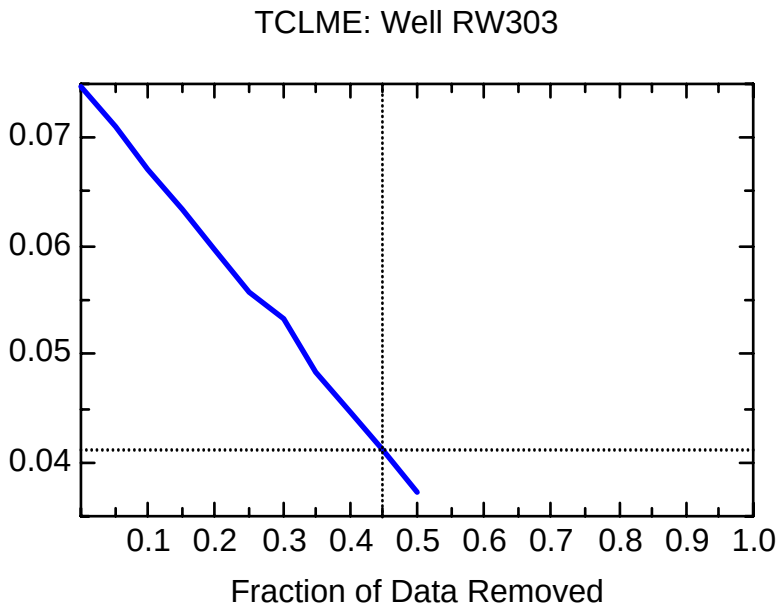

TCLME: Well RW301
11.2
10.8
10.4
10.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW301
0.096
0.092
0.088
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW303
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW303
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW303
25
20
15
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well RW303
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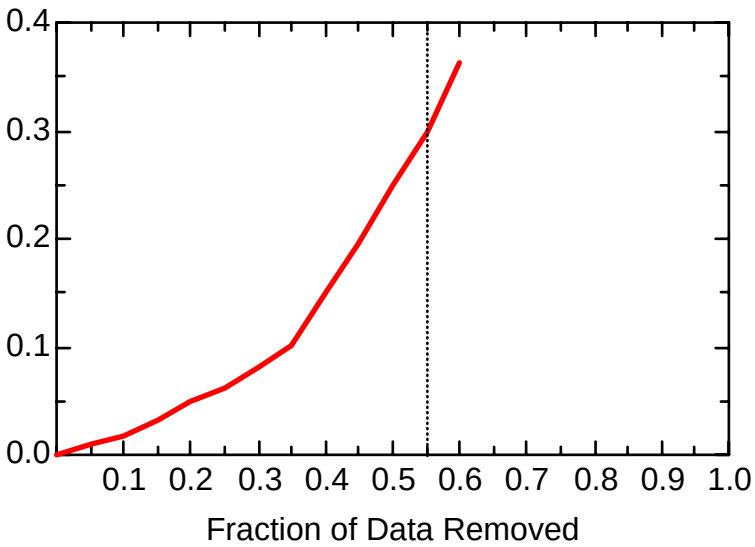
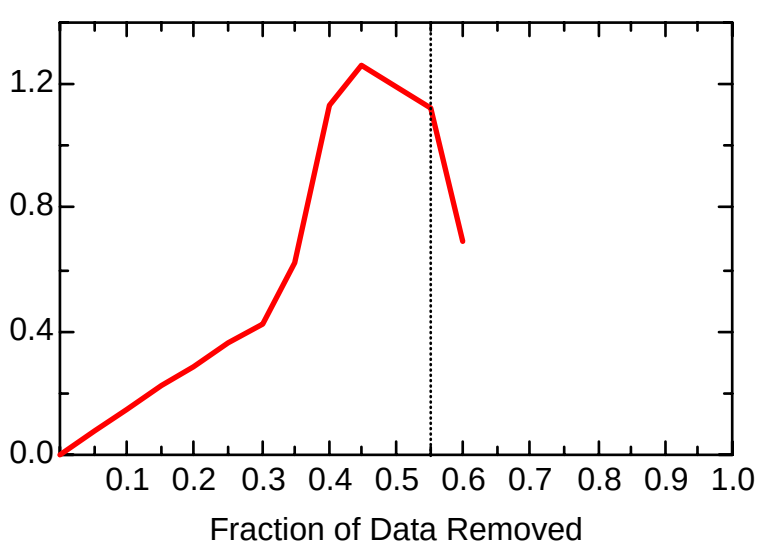
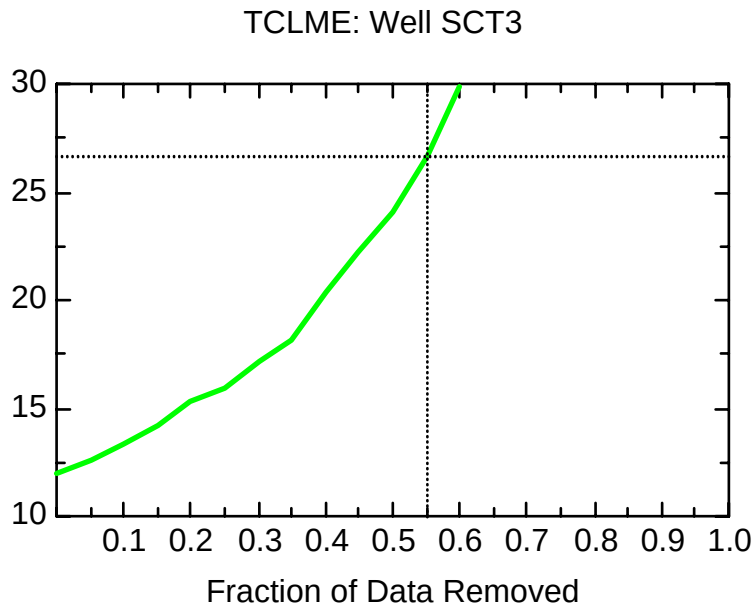
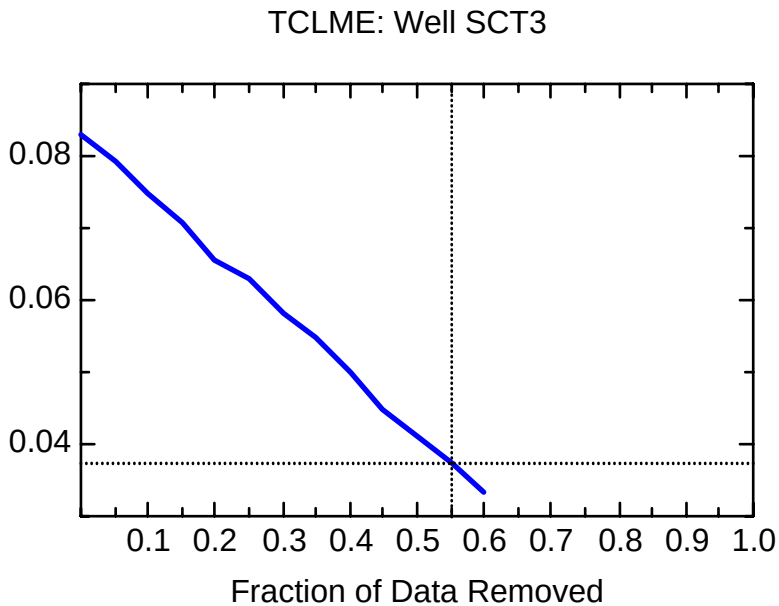
0.06
0.05
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed


TCLME: Well SCT3
0.4
0.3
0.2
0.1
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

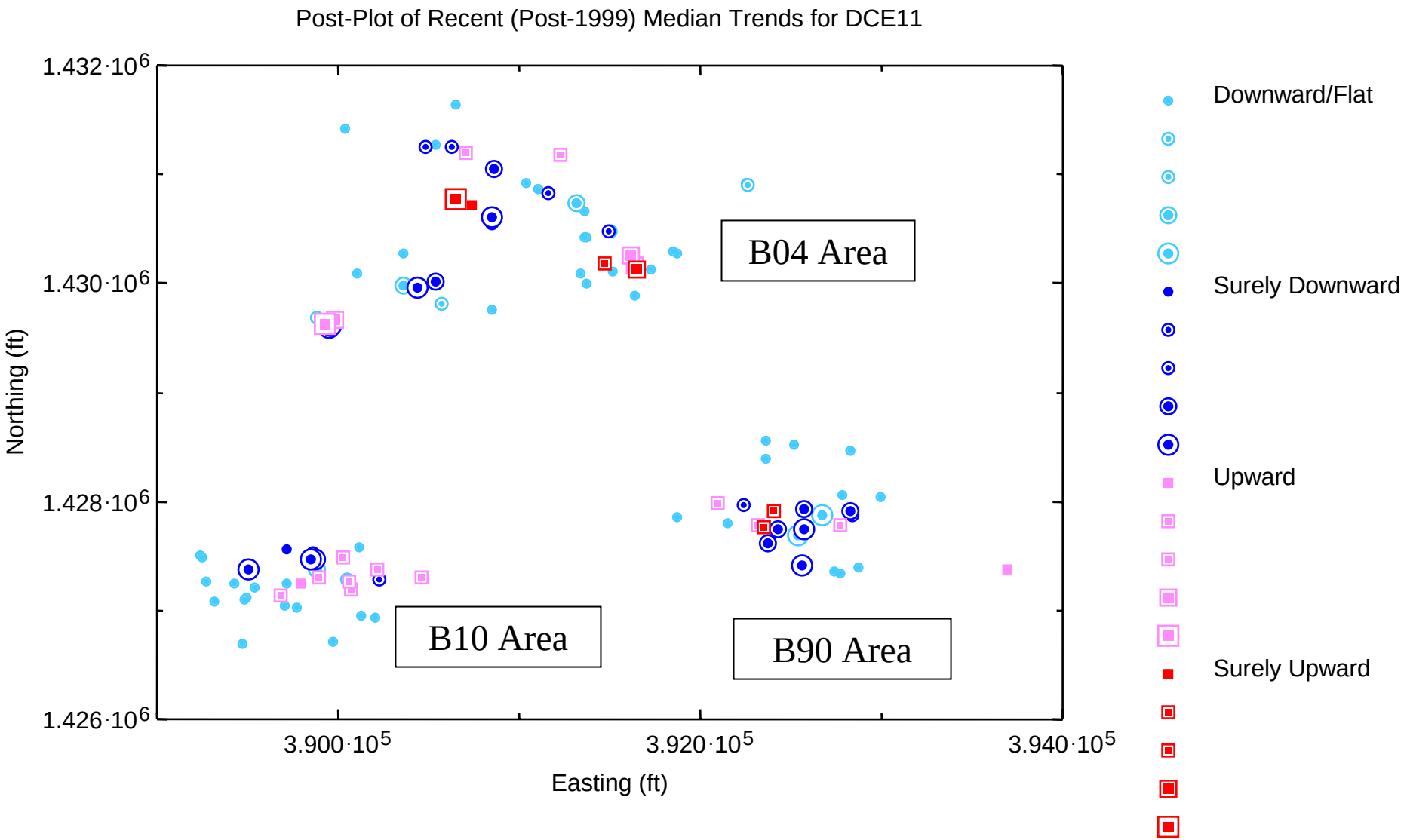

TCLME: Well SCT3
1.2
0.8
0.4
0.0
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

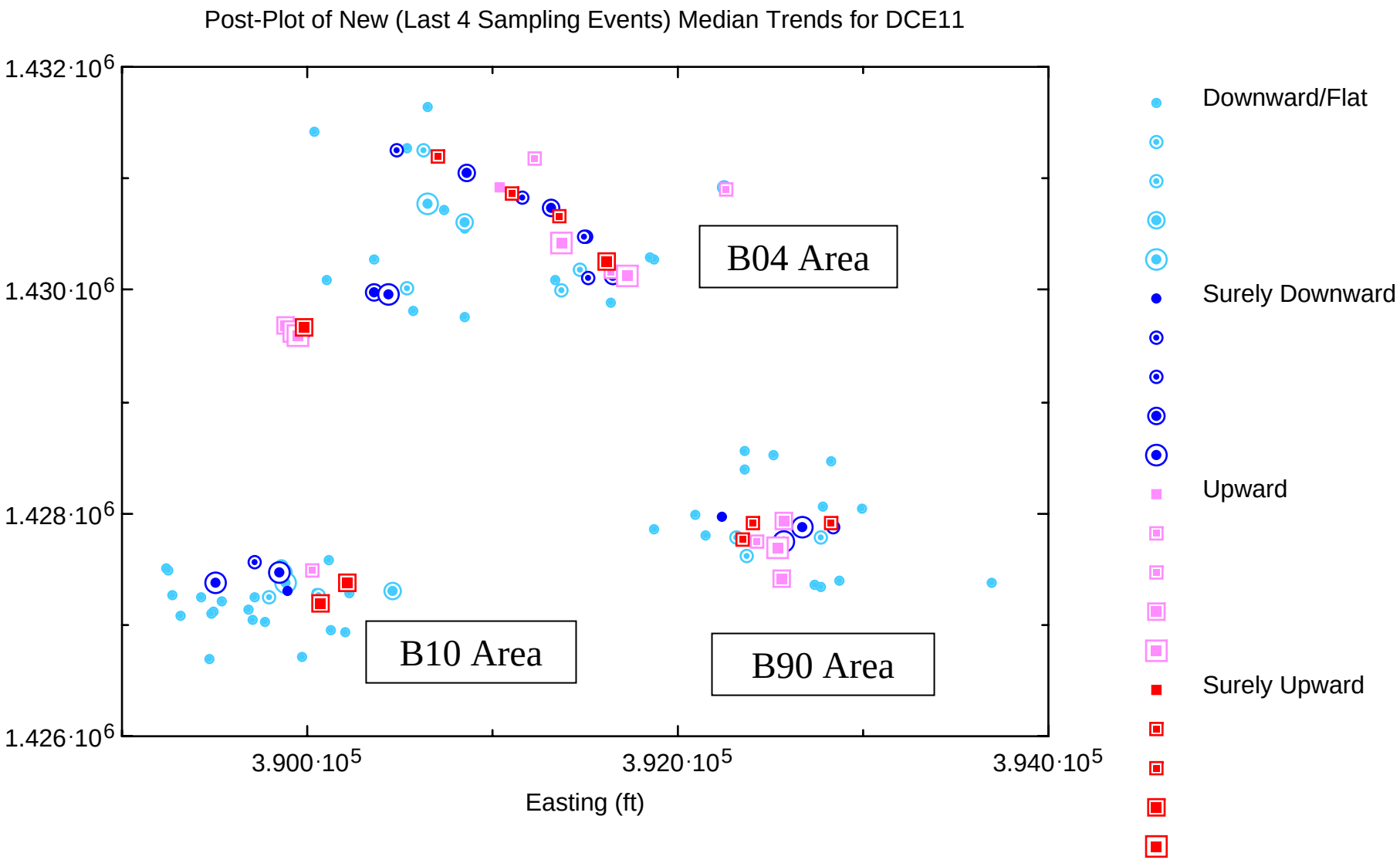

TCLME: Well SCT3
30
25
20
15
10
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

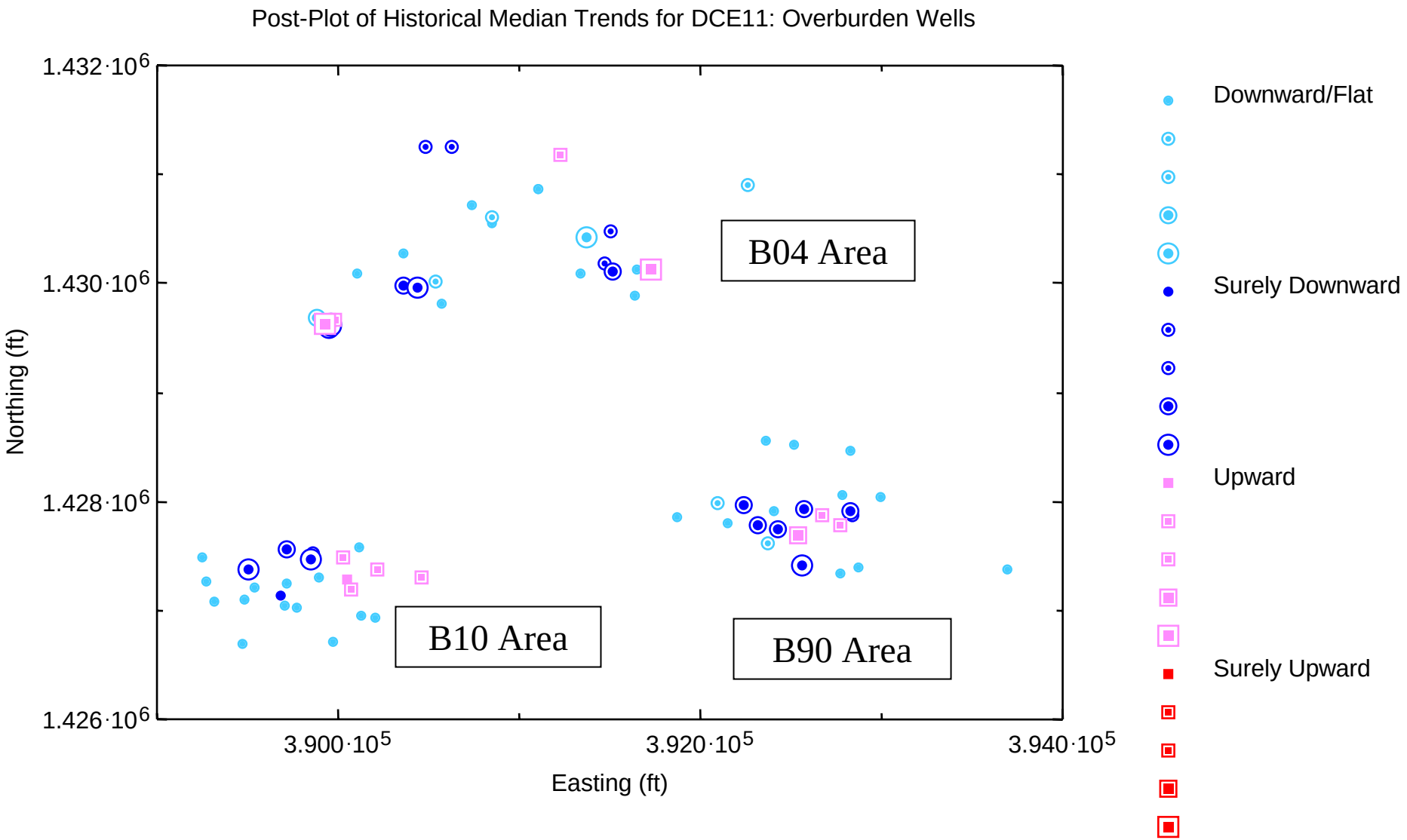

TCLME: Well SCT3
0.08
0.06
0.04
0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0
Fraction of Data Removed

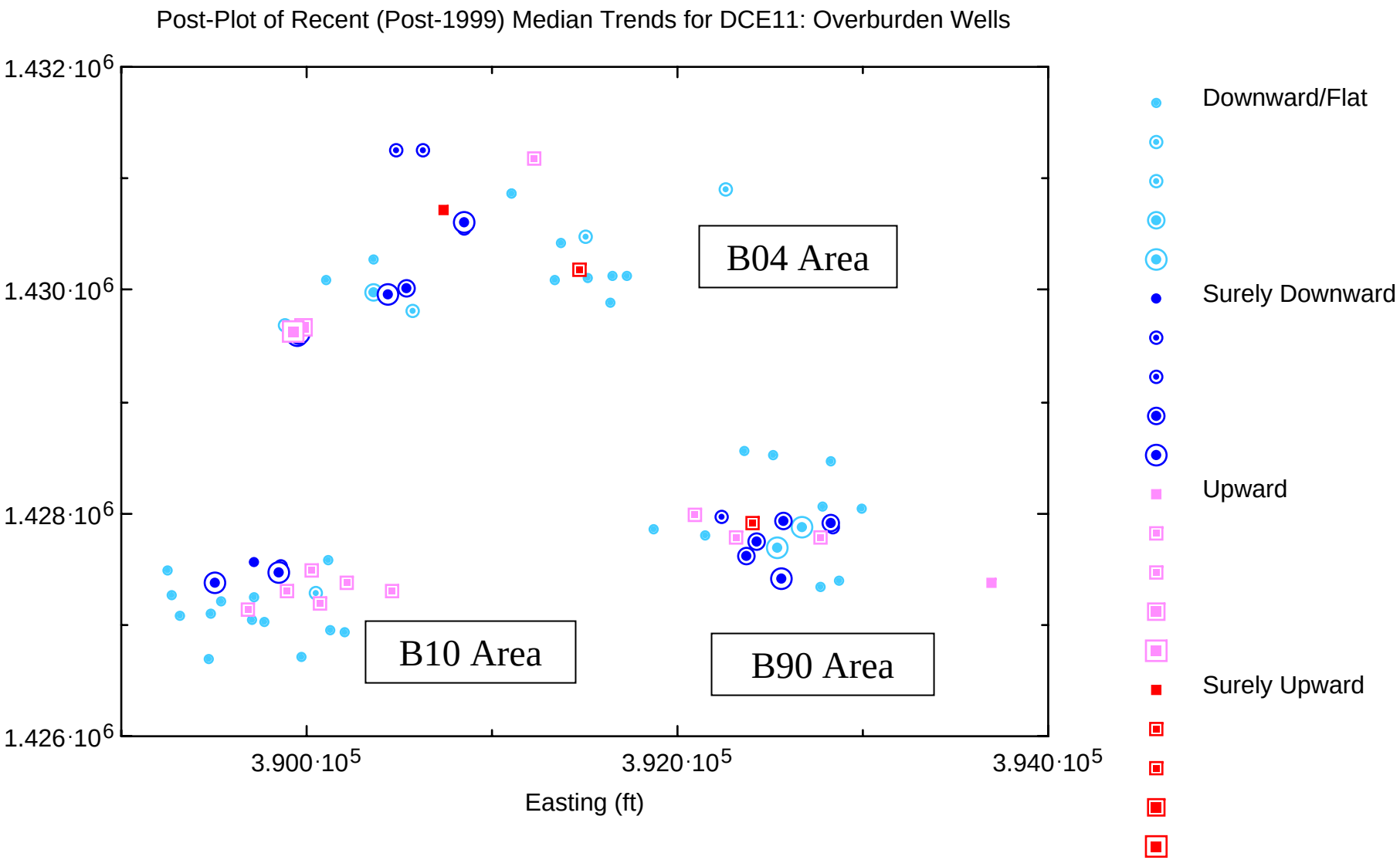
Temporal Analysis Appendix C

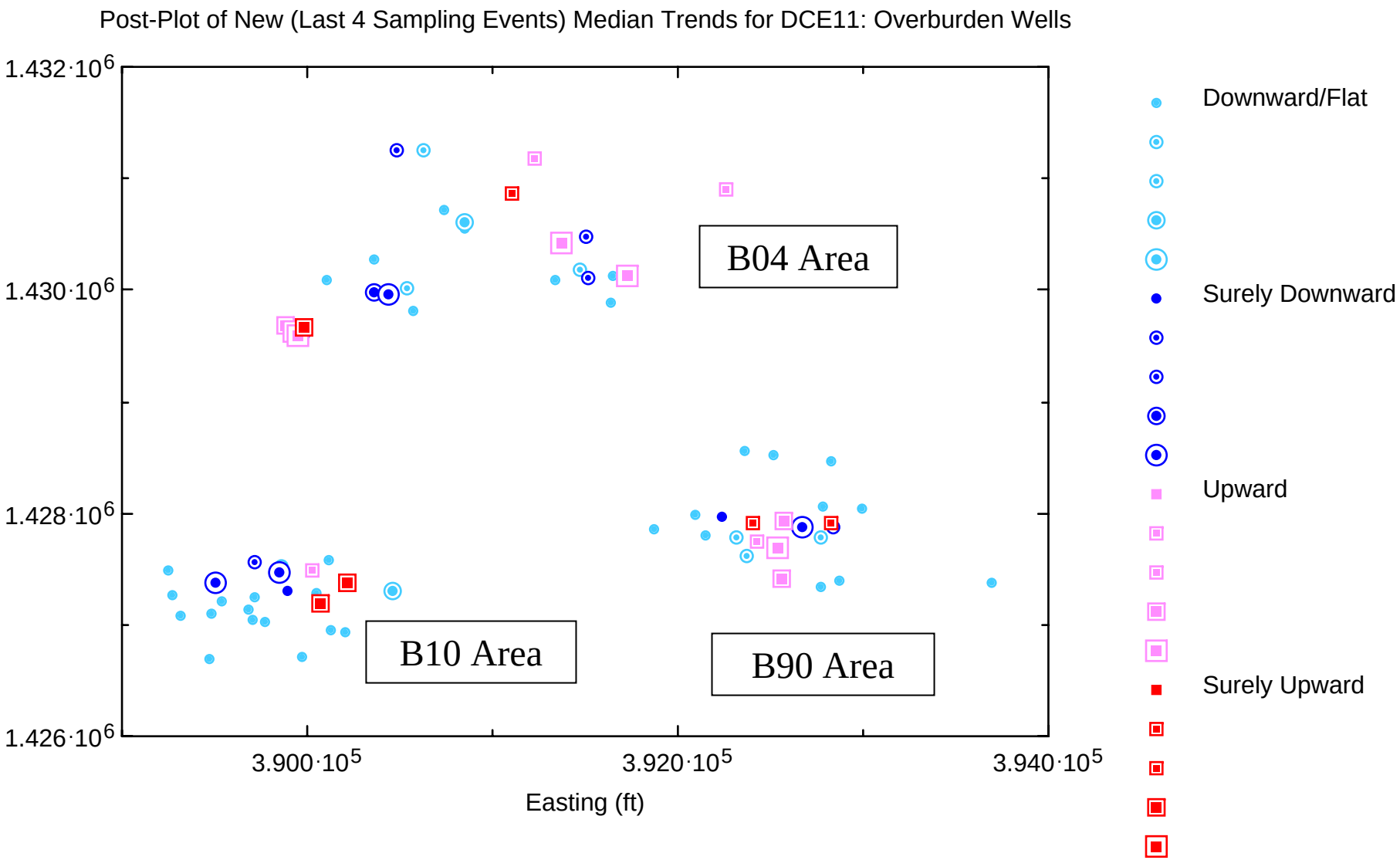

Post-Plot of Historical Median Trends for DCE11
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

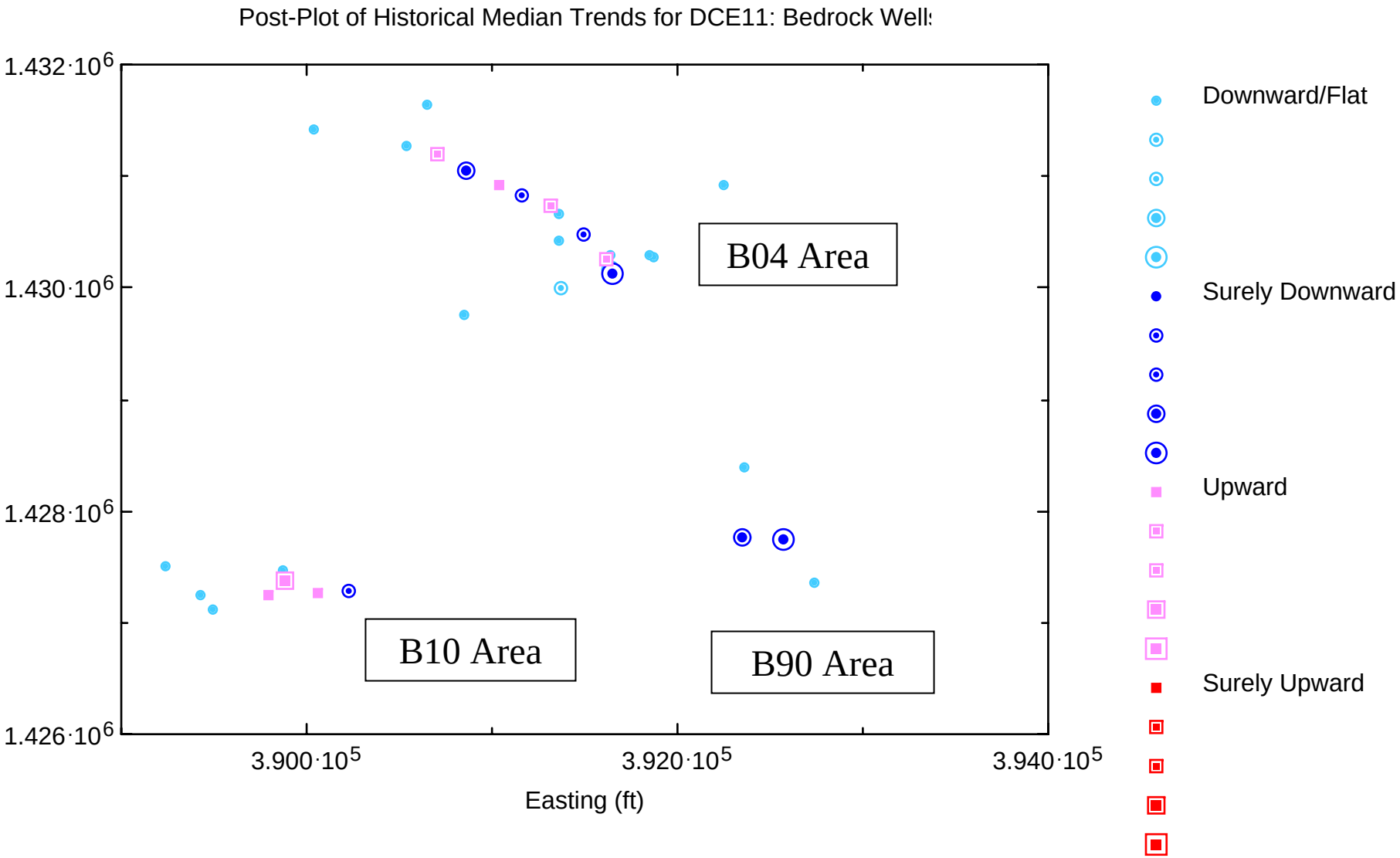

Post-Plot of Recent (Post-1999) Median Trends for DCE11
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

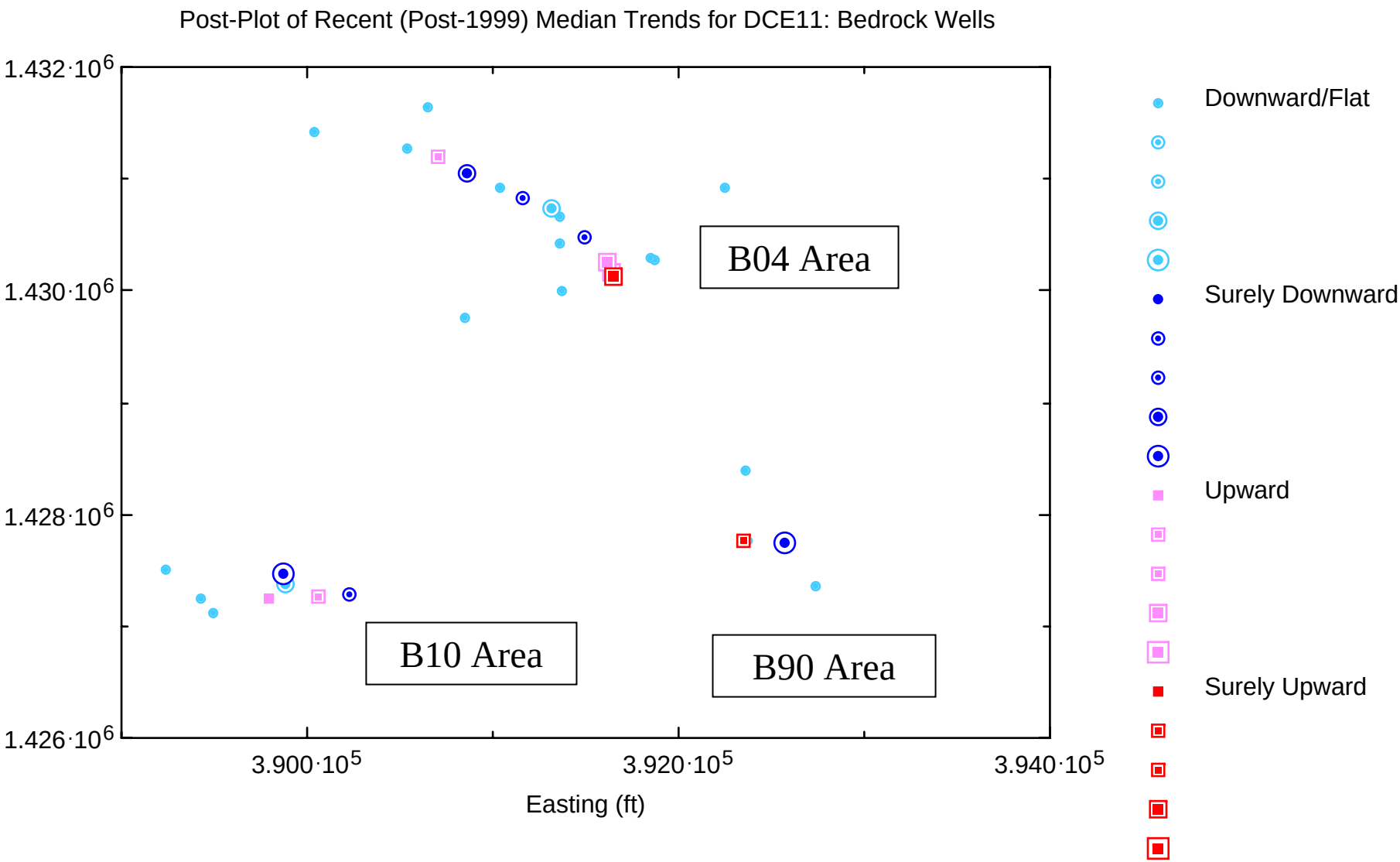

Post-Plot of New (Last 4 Sampling Events) Median Trends for DCE11
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

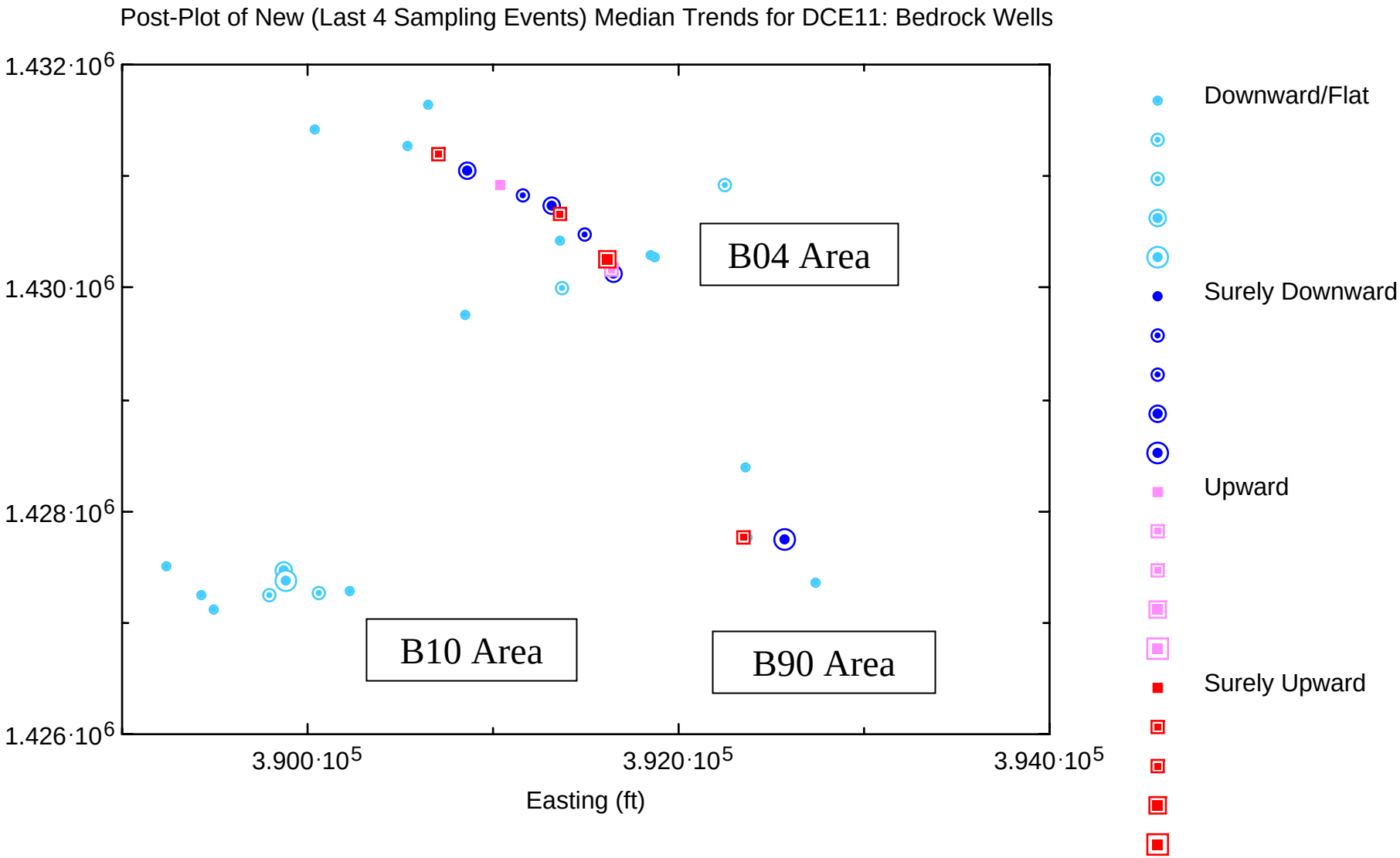

Post-Plot of Historical Median Trends for DCE11: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

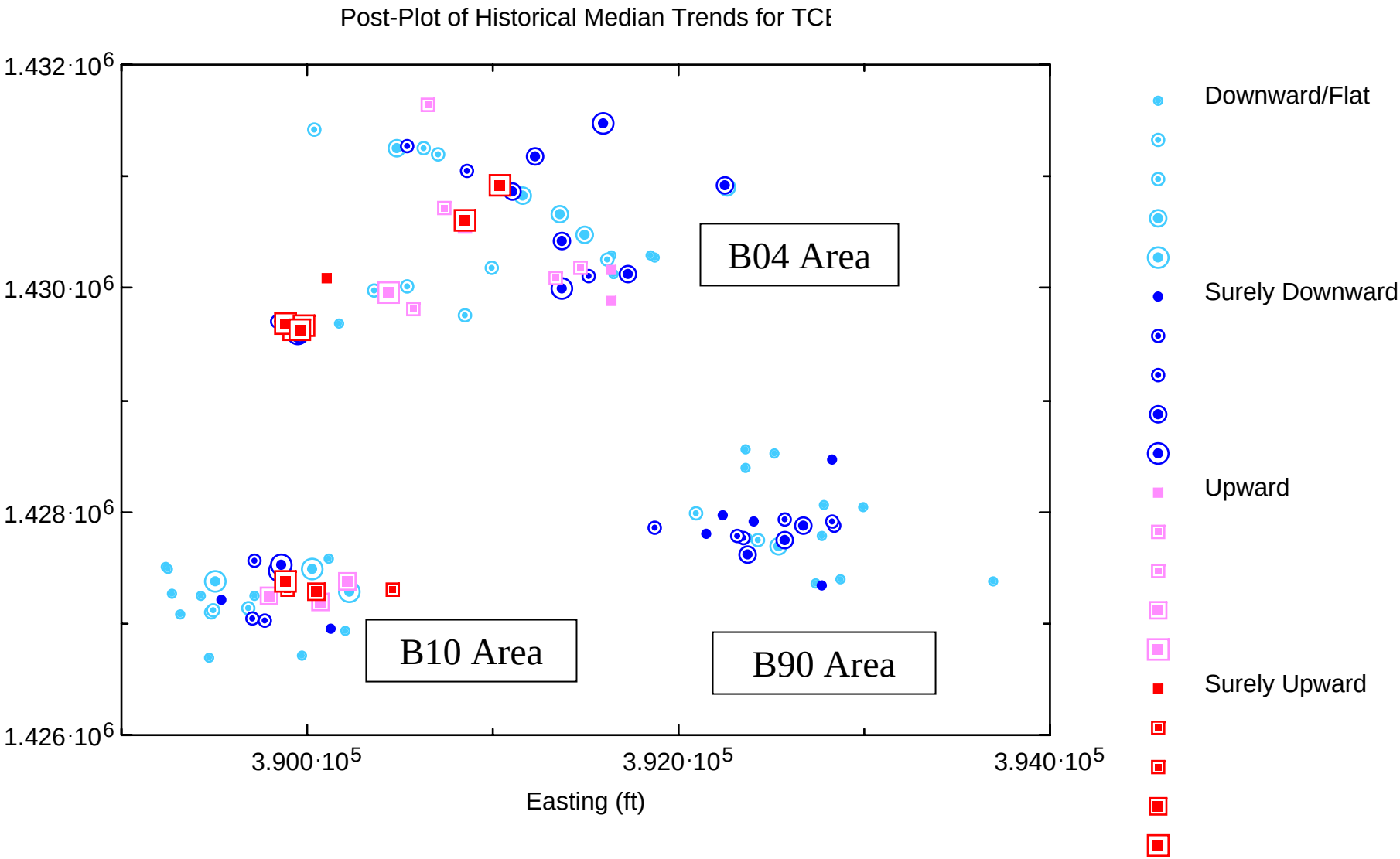

Post-Plot of Recent (Post-1999) Median Trends for DCE11: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward


Post-Plot of New (Last 4 Sampling Events) Median Trends for DCE11: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

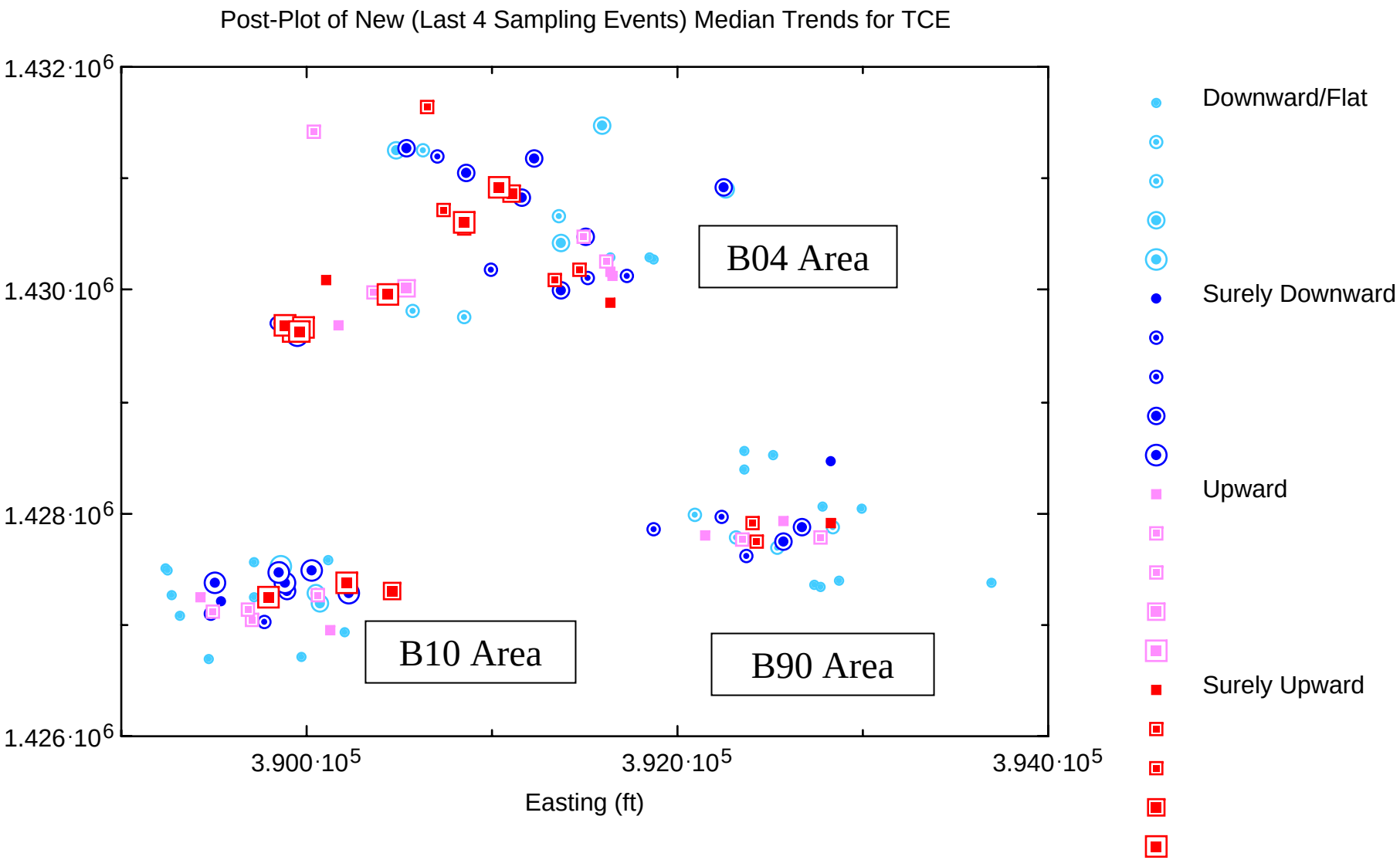

Post-Plot of Historical Median Trends for DCE11: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

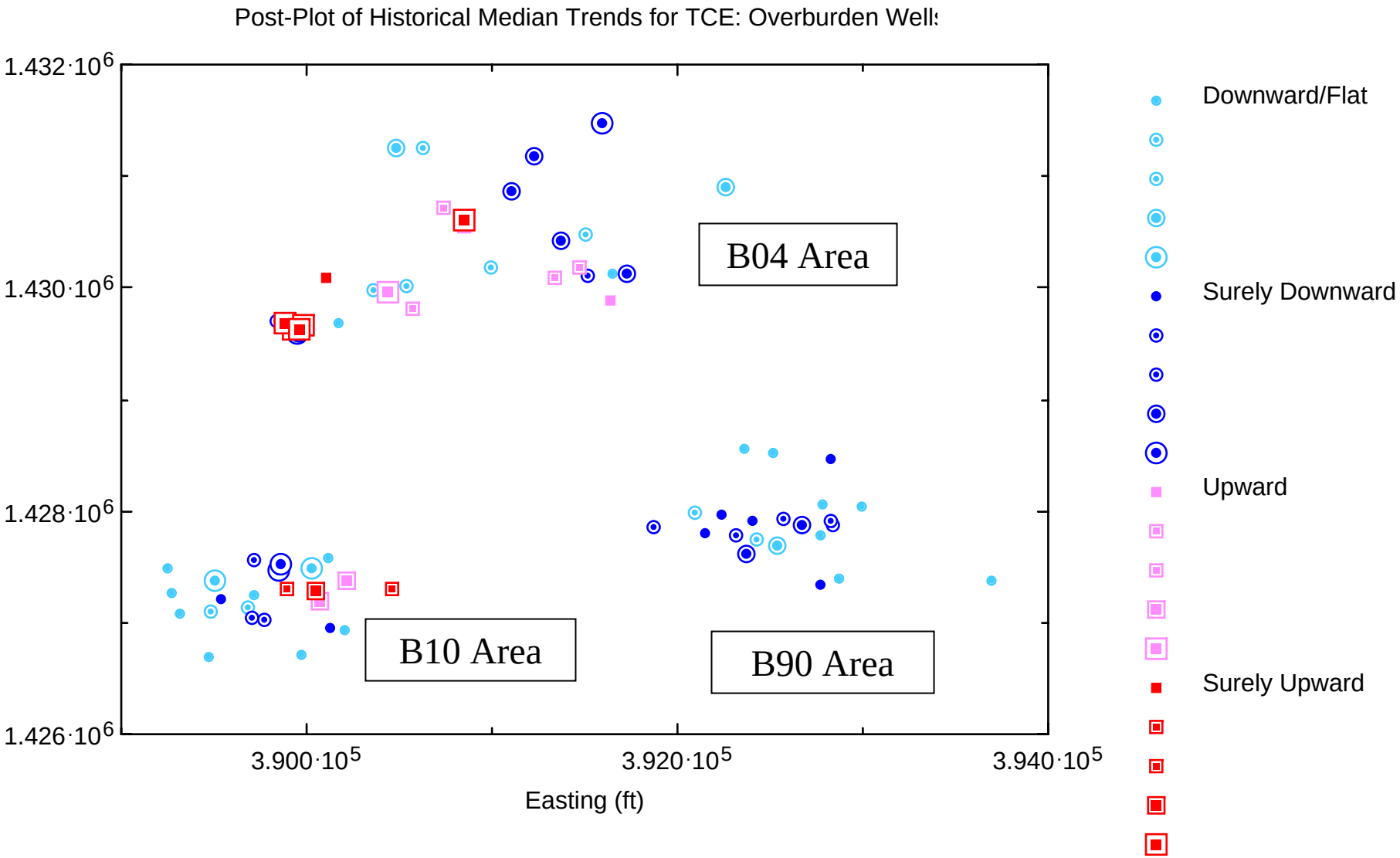

Post-Plot of Recent (Post-1999) Median Trends for DCE11: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

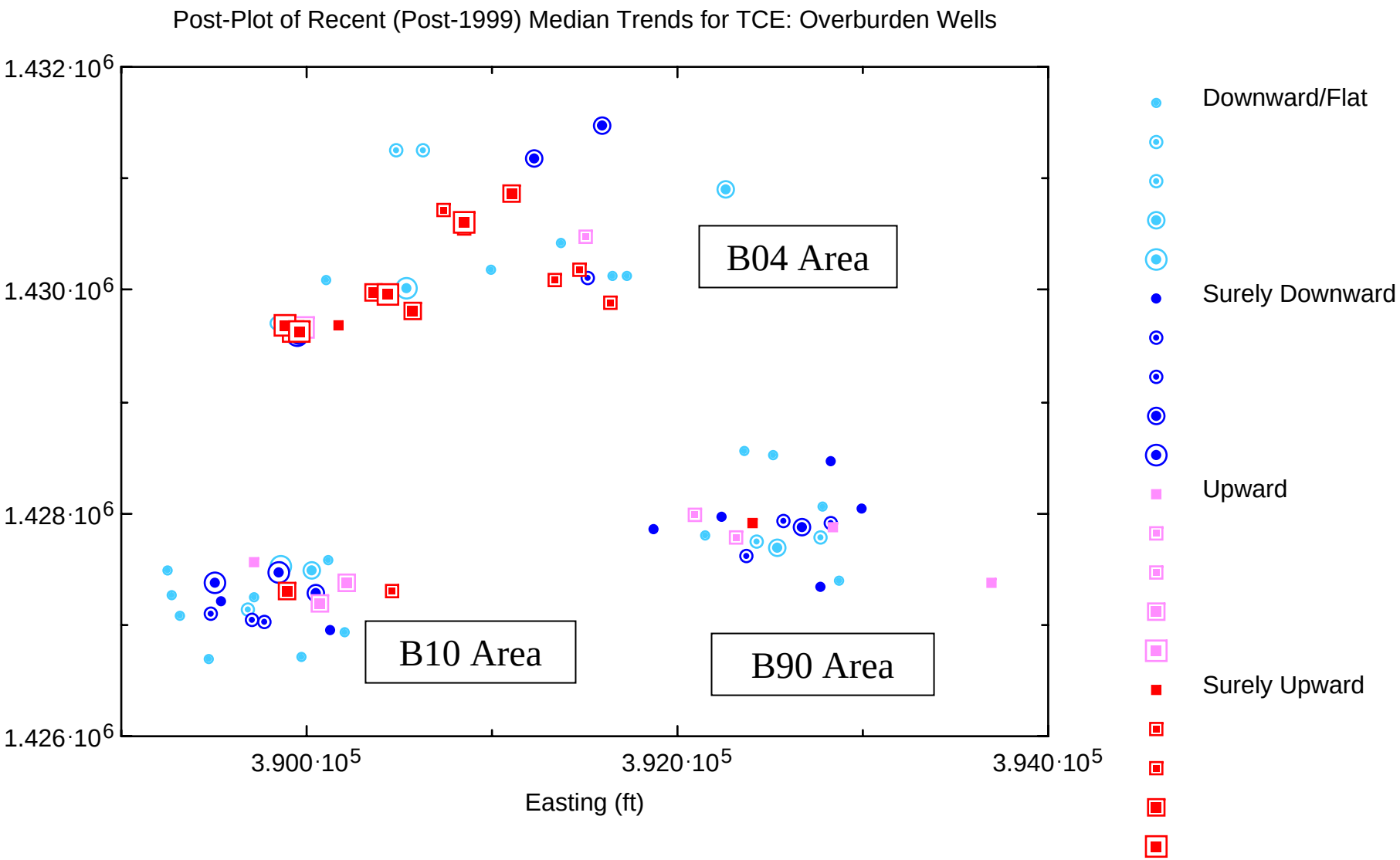

Post-Plot of New (Last 4 Sampling Events) Median Trends for DCE11: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

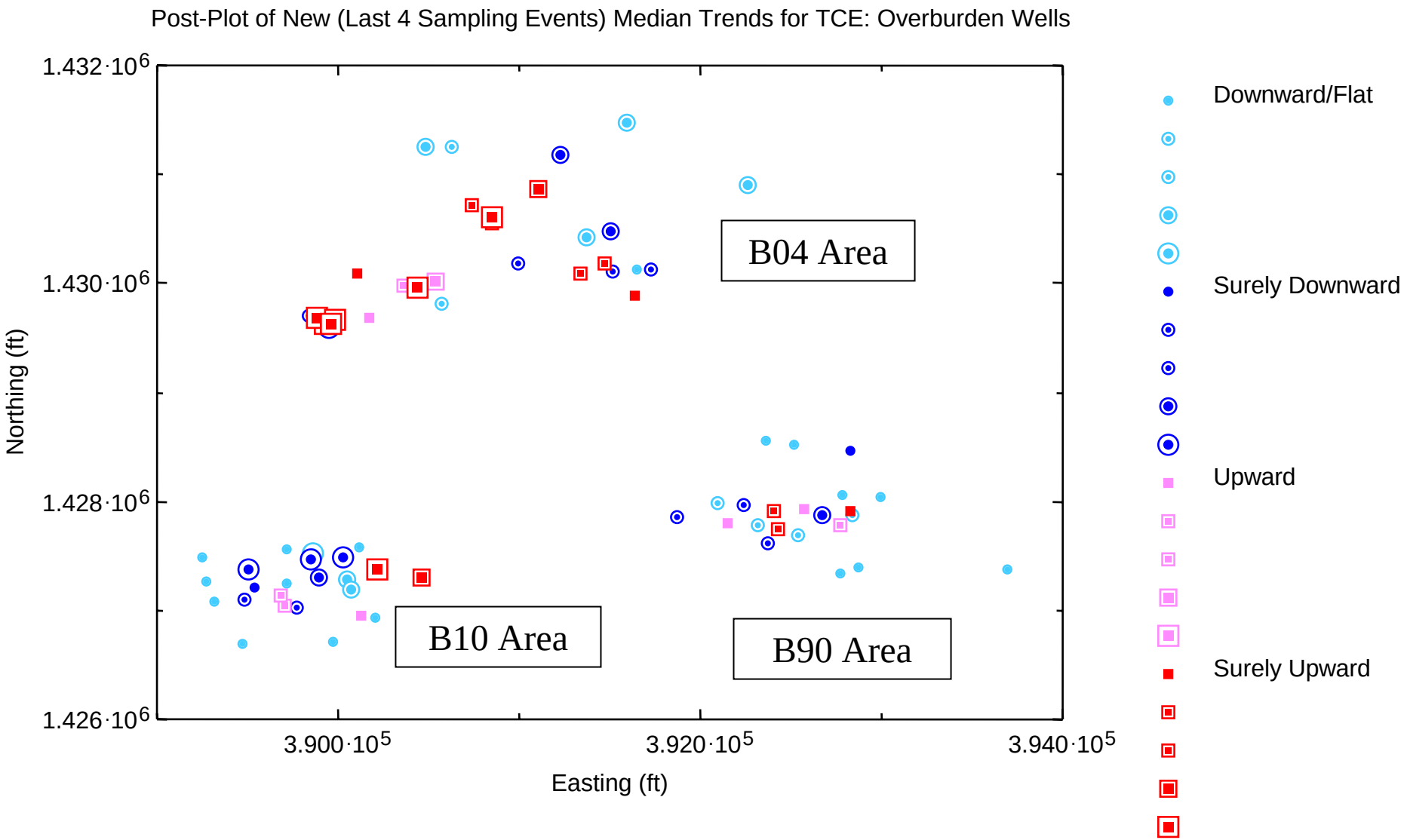

Post-Plot of Historical Median Trends for TCE
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

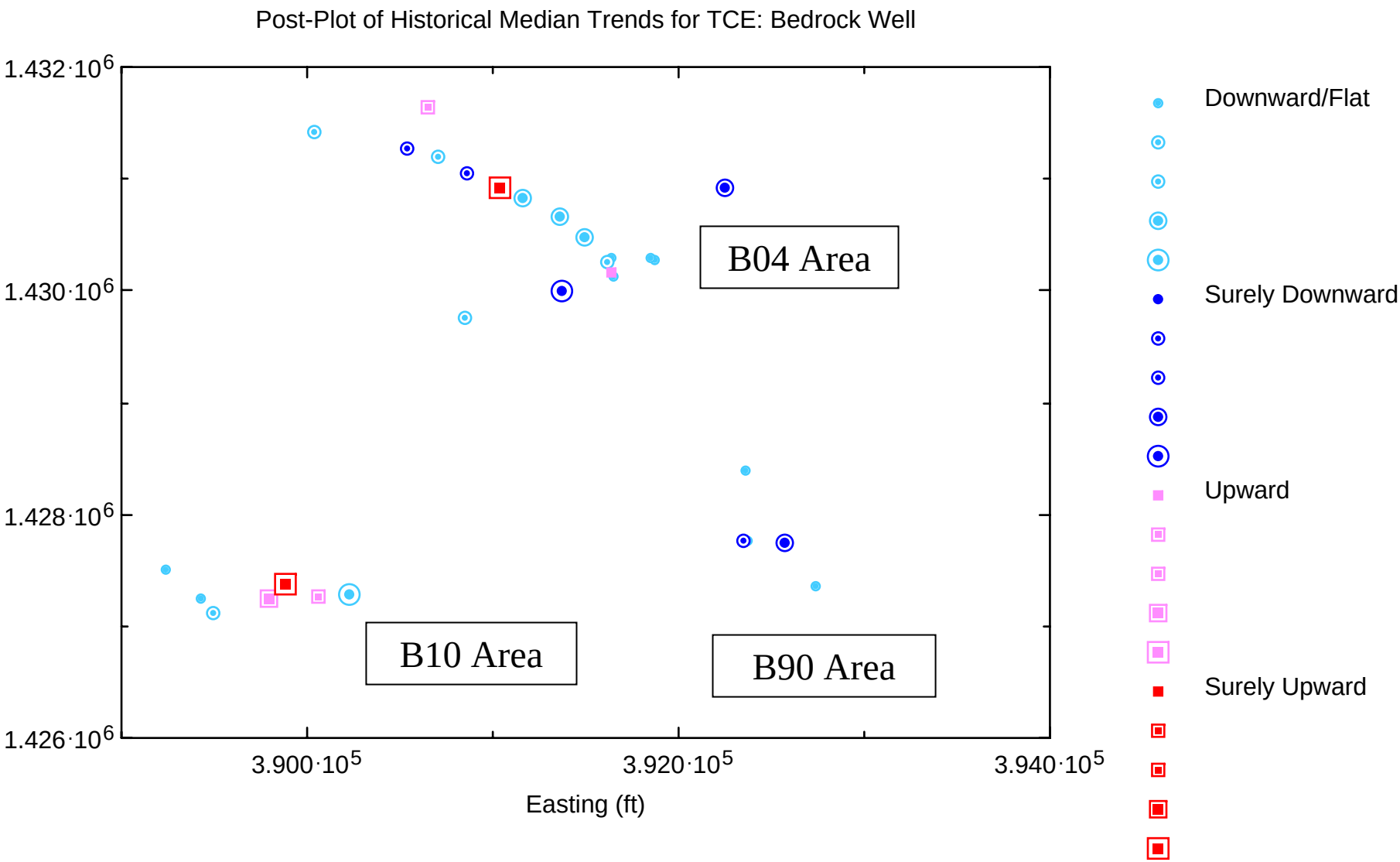

Post-Plot of Recent (Post-1999) Median Trends for TCE
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

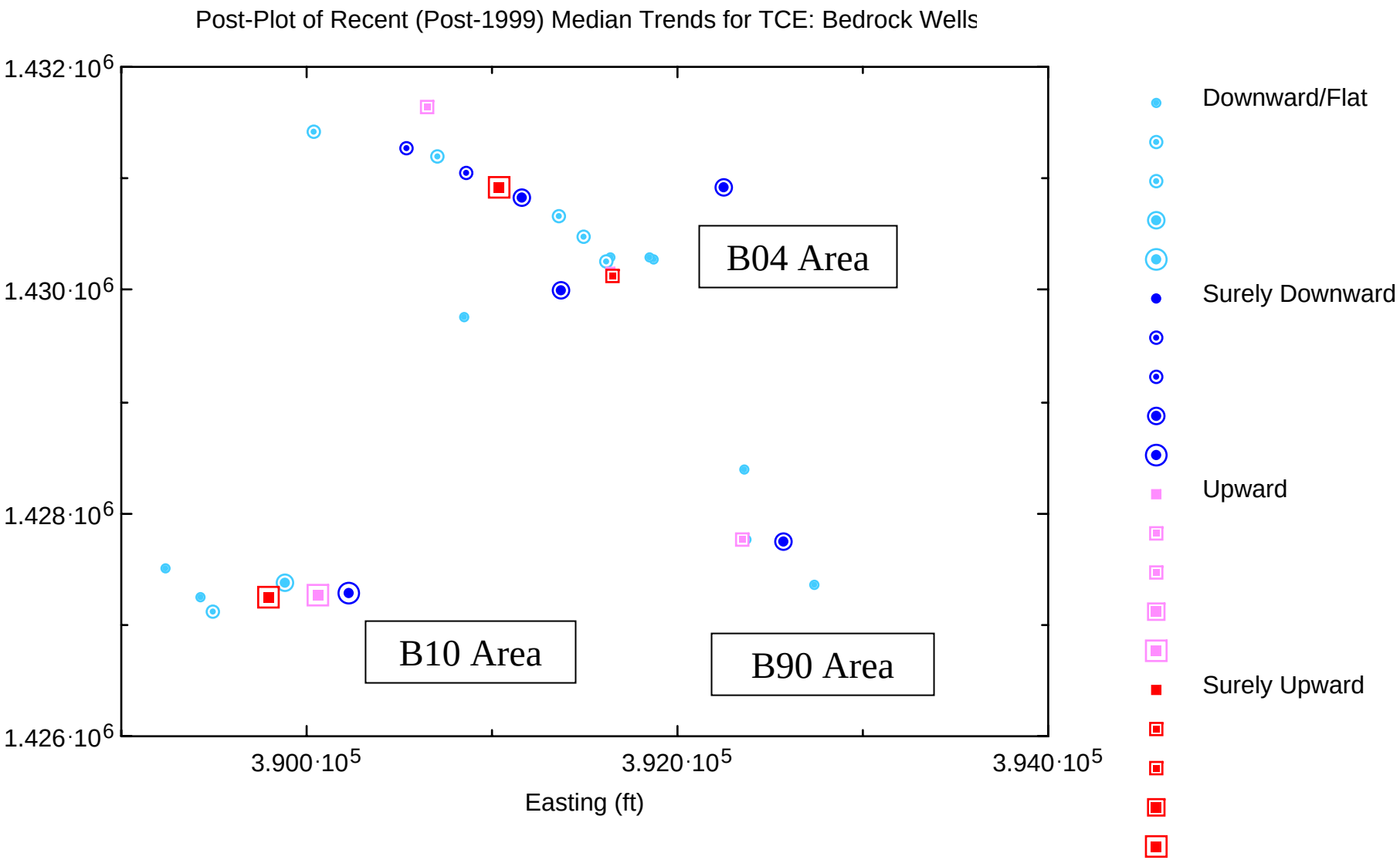

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCE
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

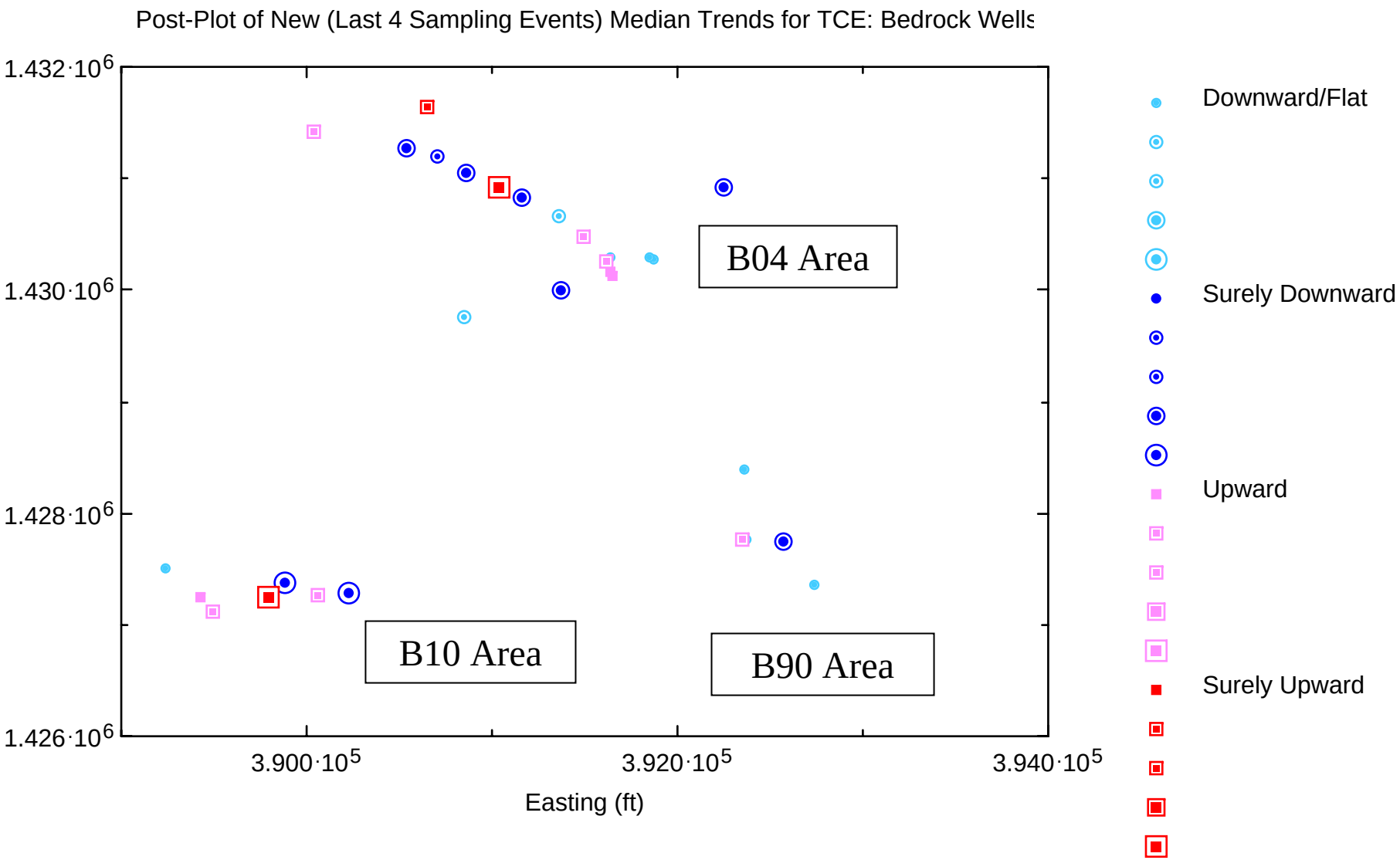

Post-Plot of Historical Median Trends for TCE: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

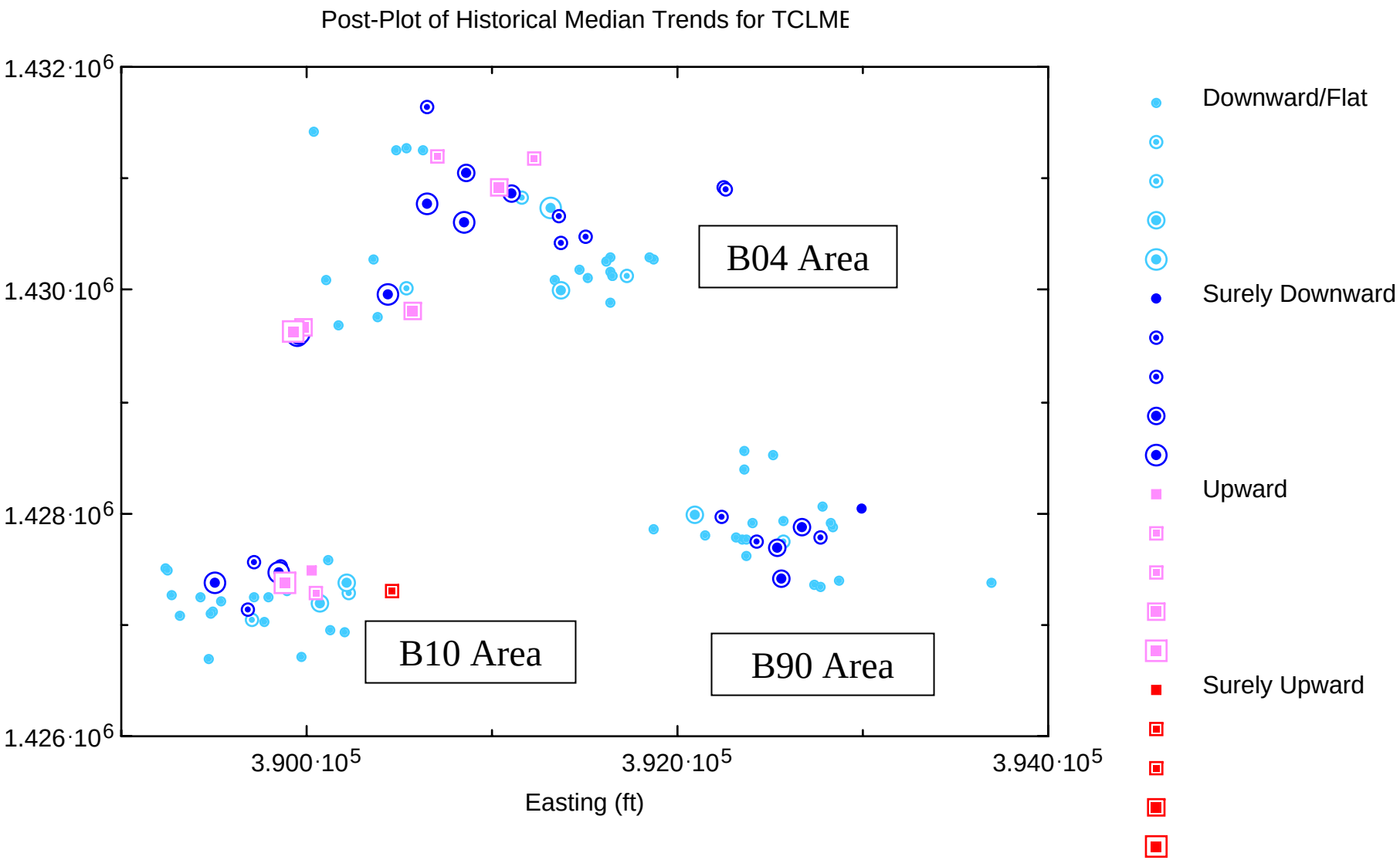

Post-Plot of Recent (Post-1999) Median Trends for TCE: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

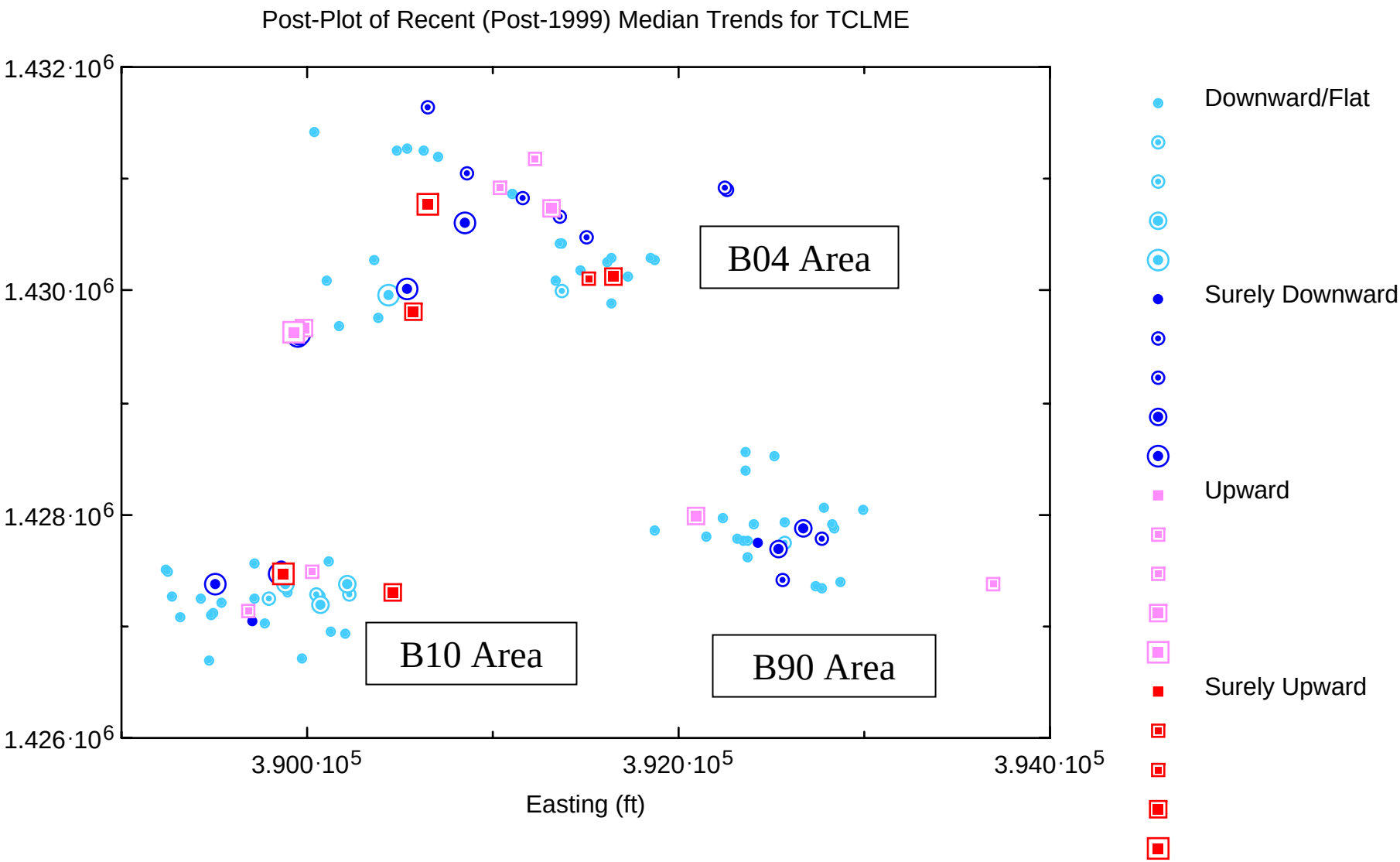

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCE: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

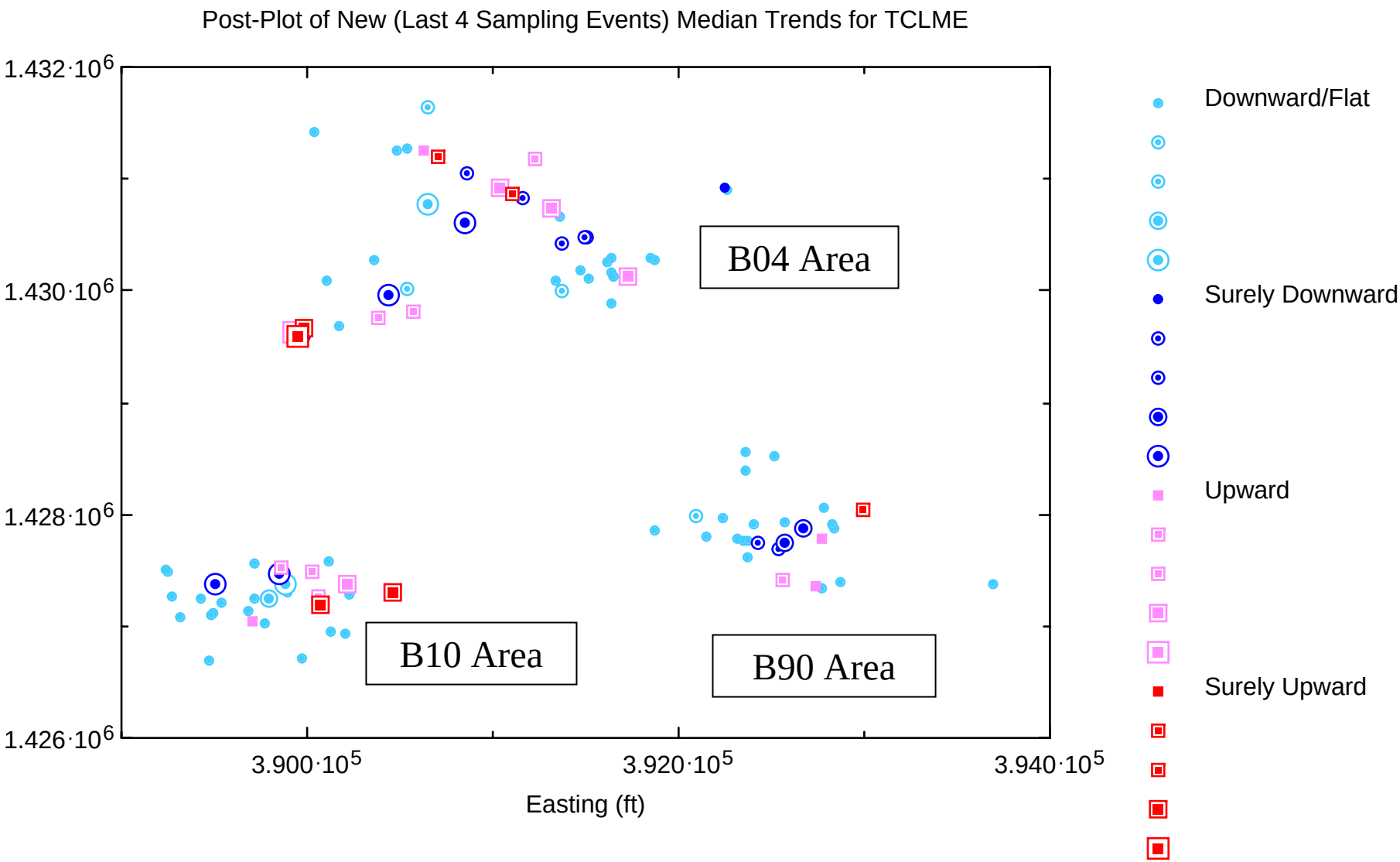

Post-Plot of Historical Median Trends for TCE: Bedrock Well
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

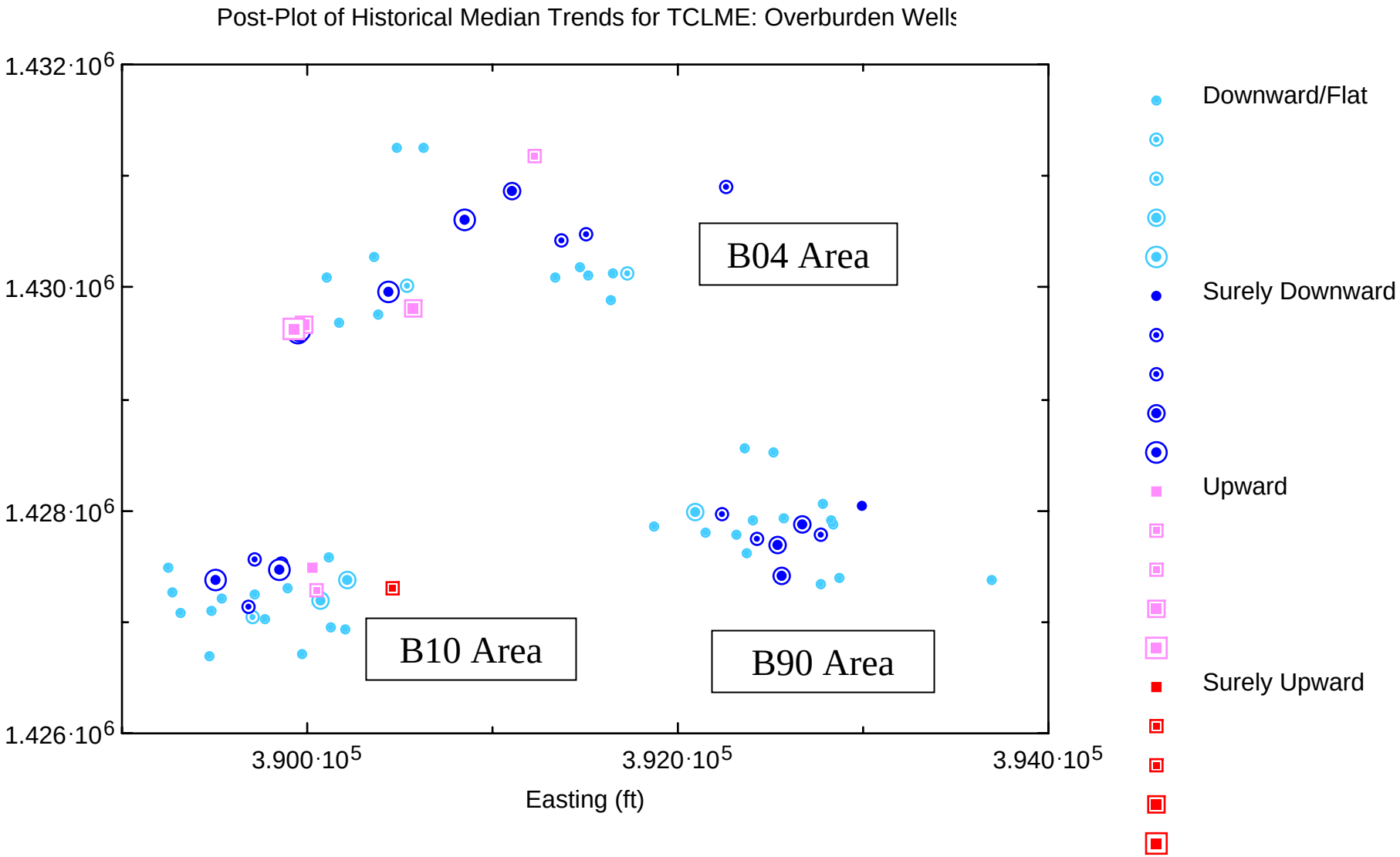

Post-Plot of Recent (Post-1999) Median Trends for TCE: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

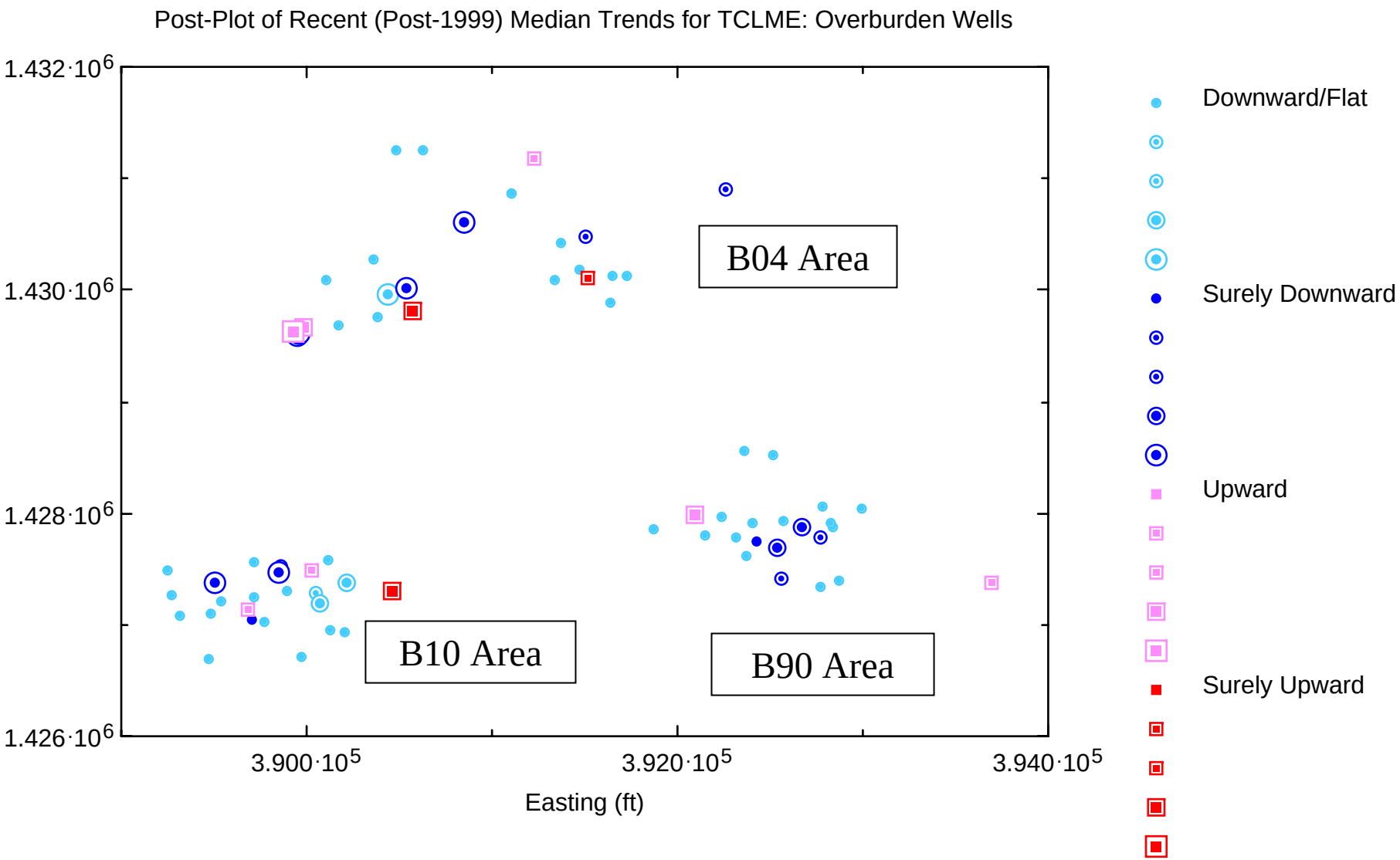

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCE: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward


Post-Plot of Historical Median Trends for TCLME
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

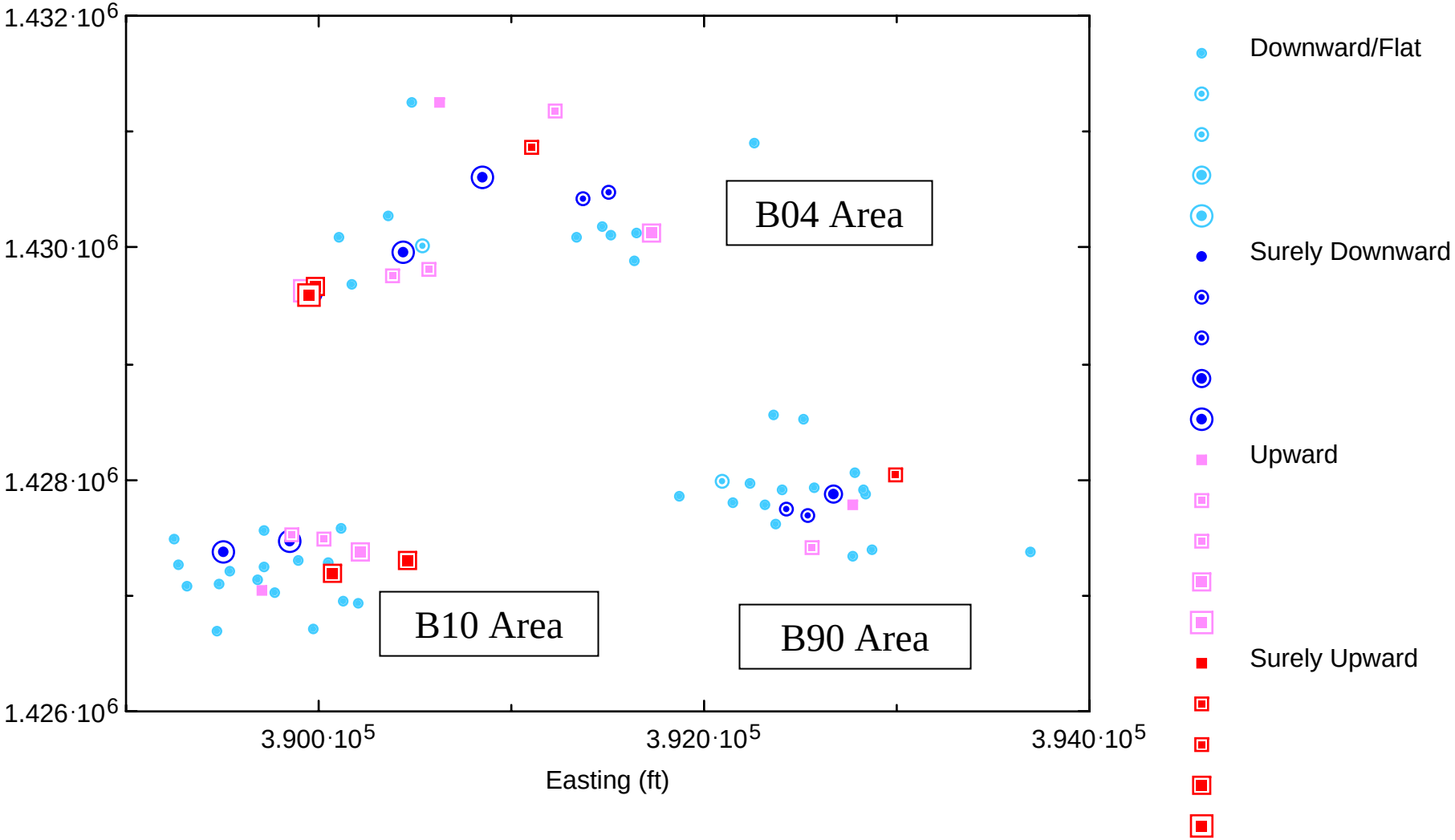

Post-Plot of Recent (Post-1999) Median Trends for TCLME
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

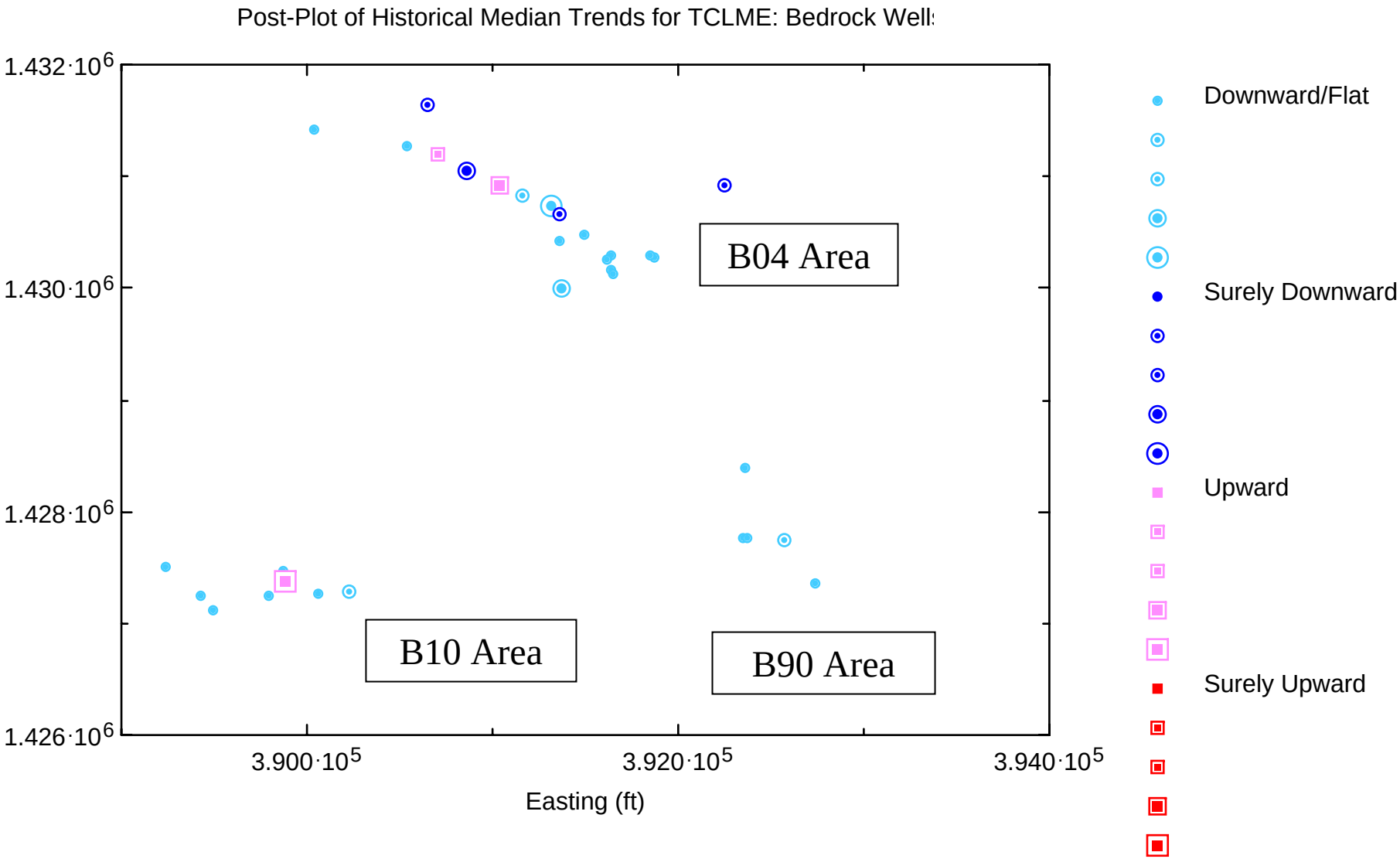

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCLME
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

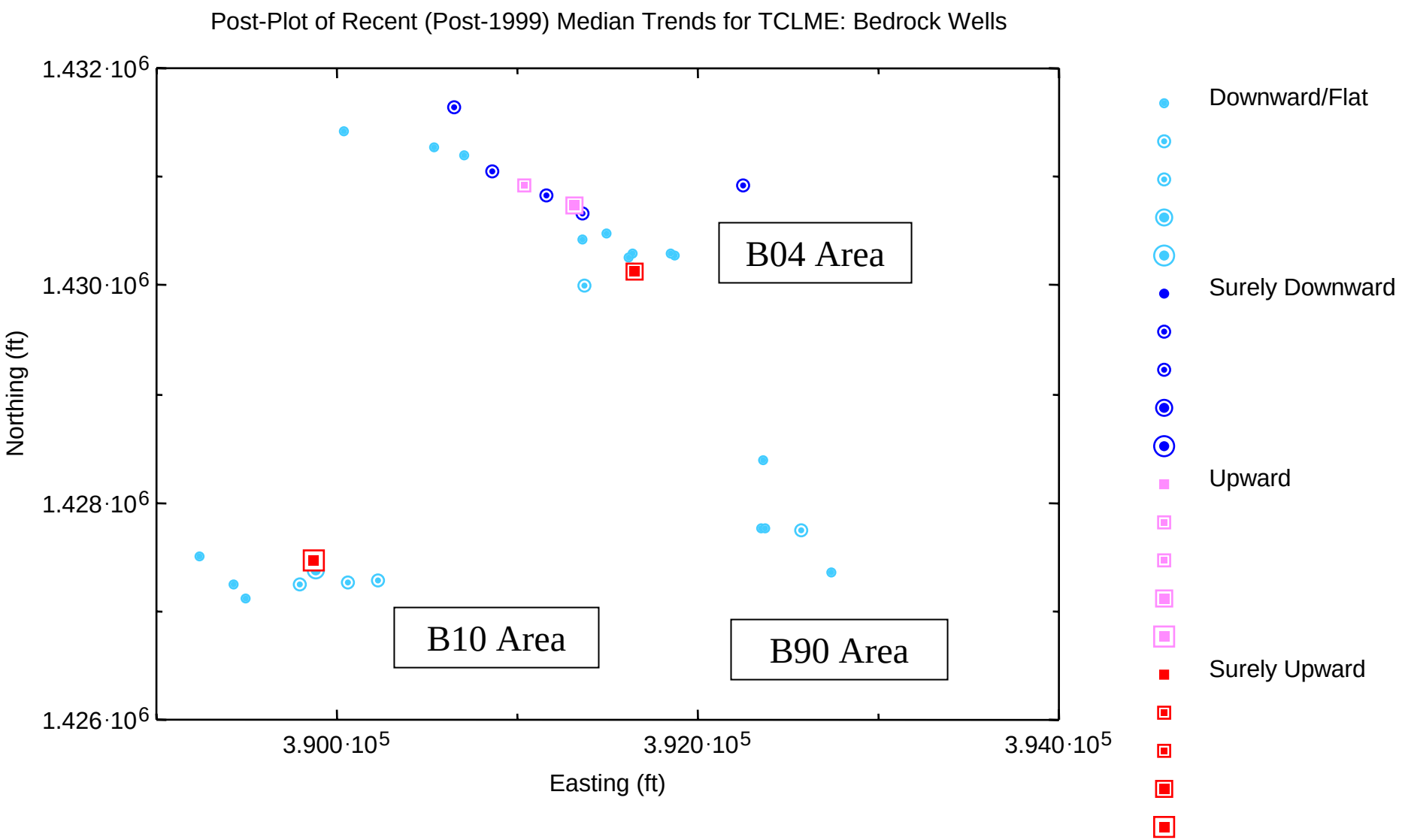

Post-Plot of Historical Median Trends for TCLME: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

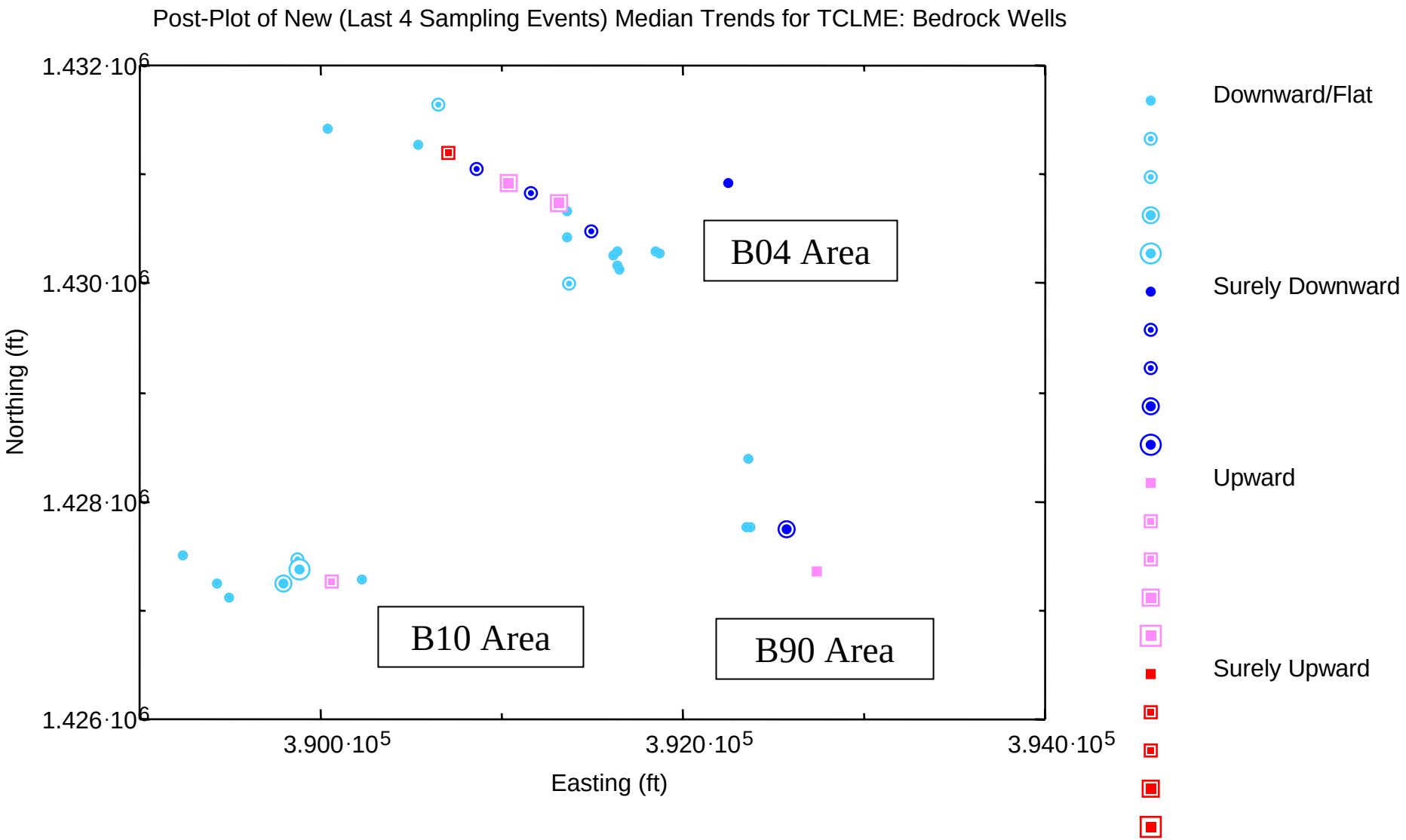

Post-Plot of Recent (Post-1999) Median Trends for TCLME: Overburden Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCLME: Overburden Wells

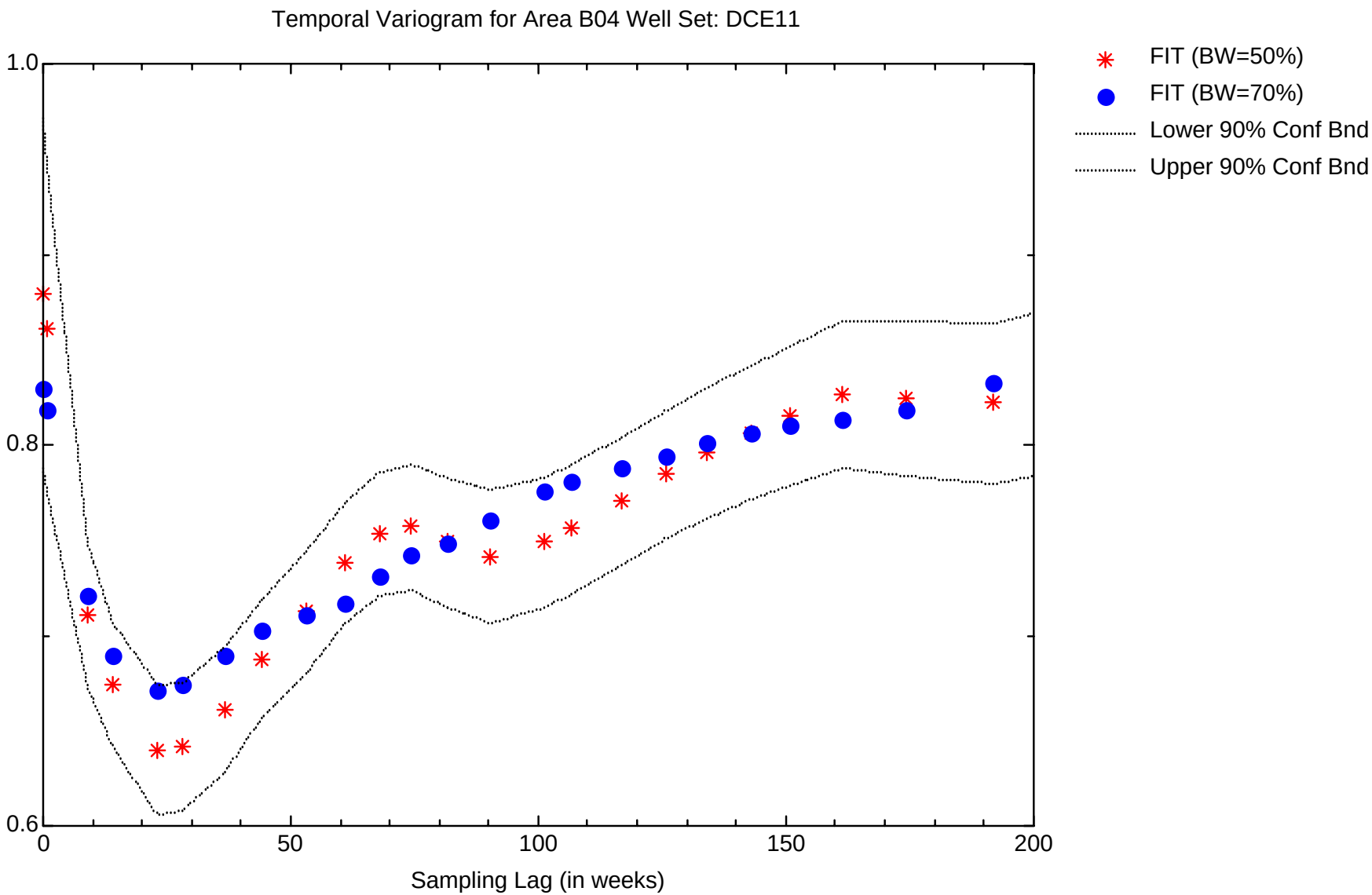


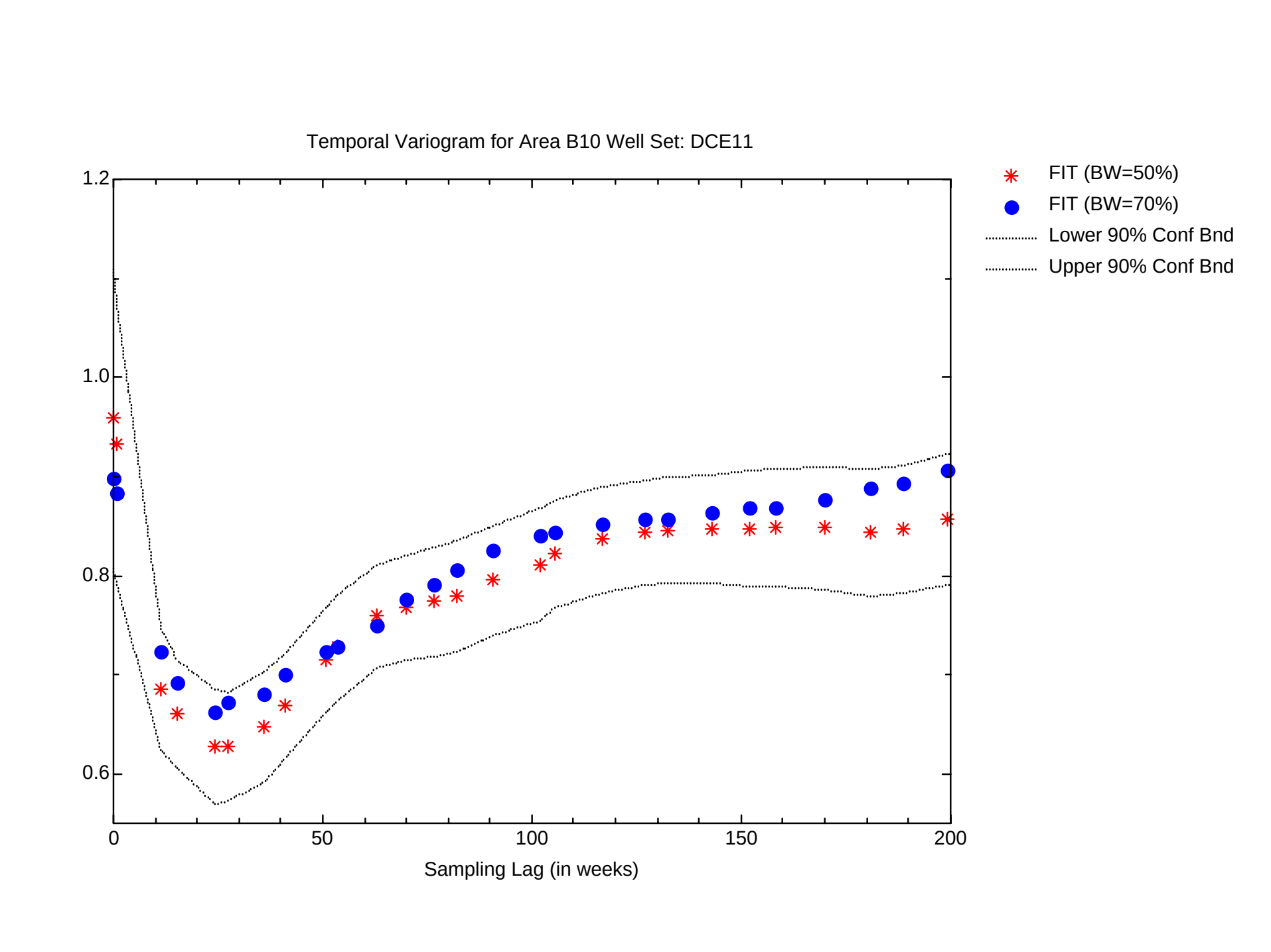

Post-Plot of Historical Median Trends for TCLME: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

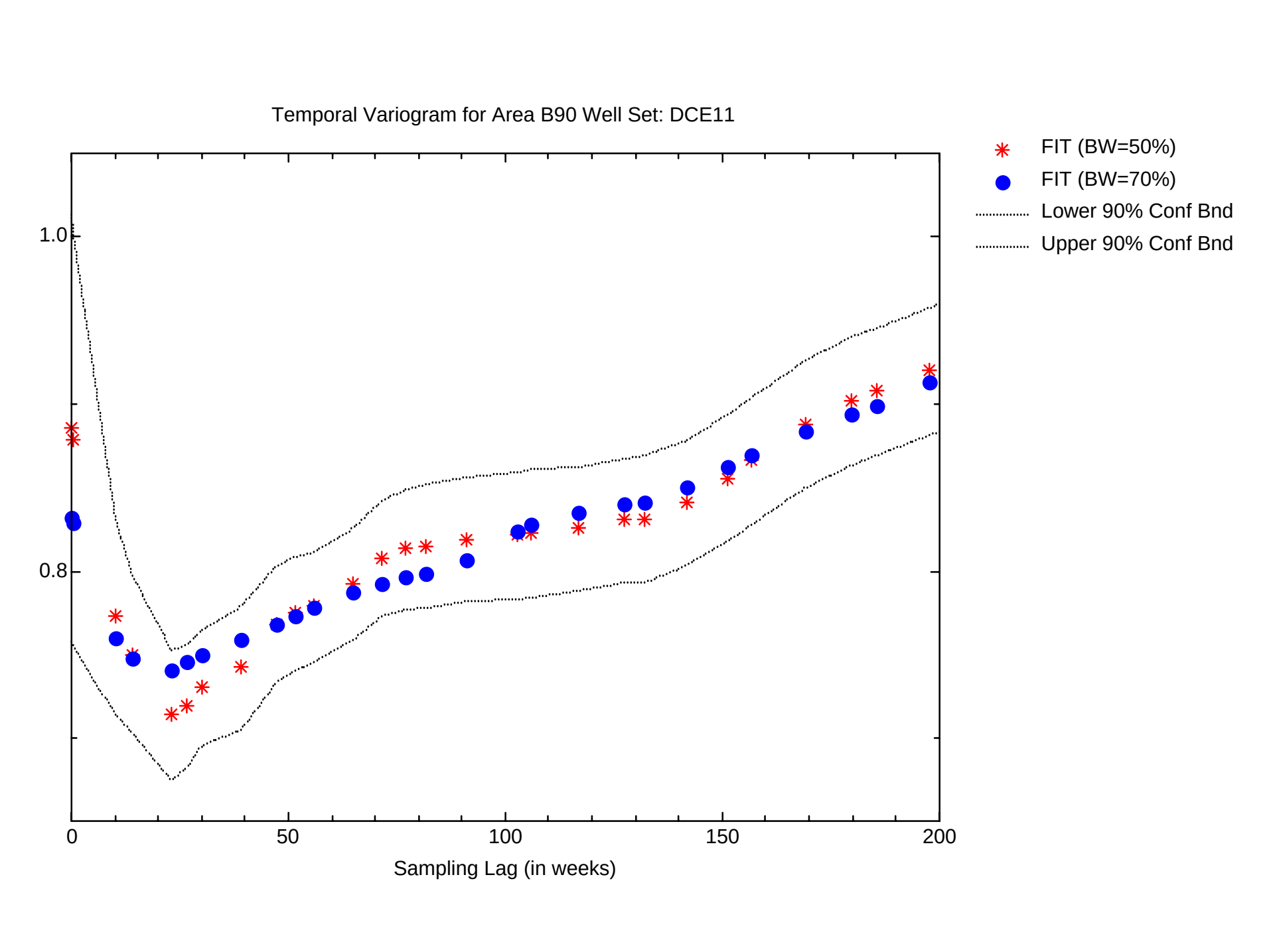

Post-Plot of Recent (Post-1999) Median Trends for TCLME: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

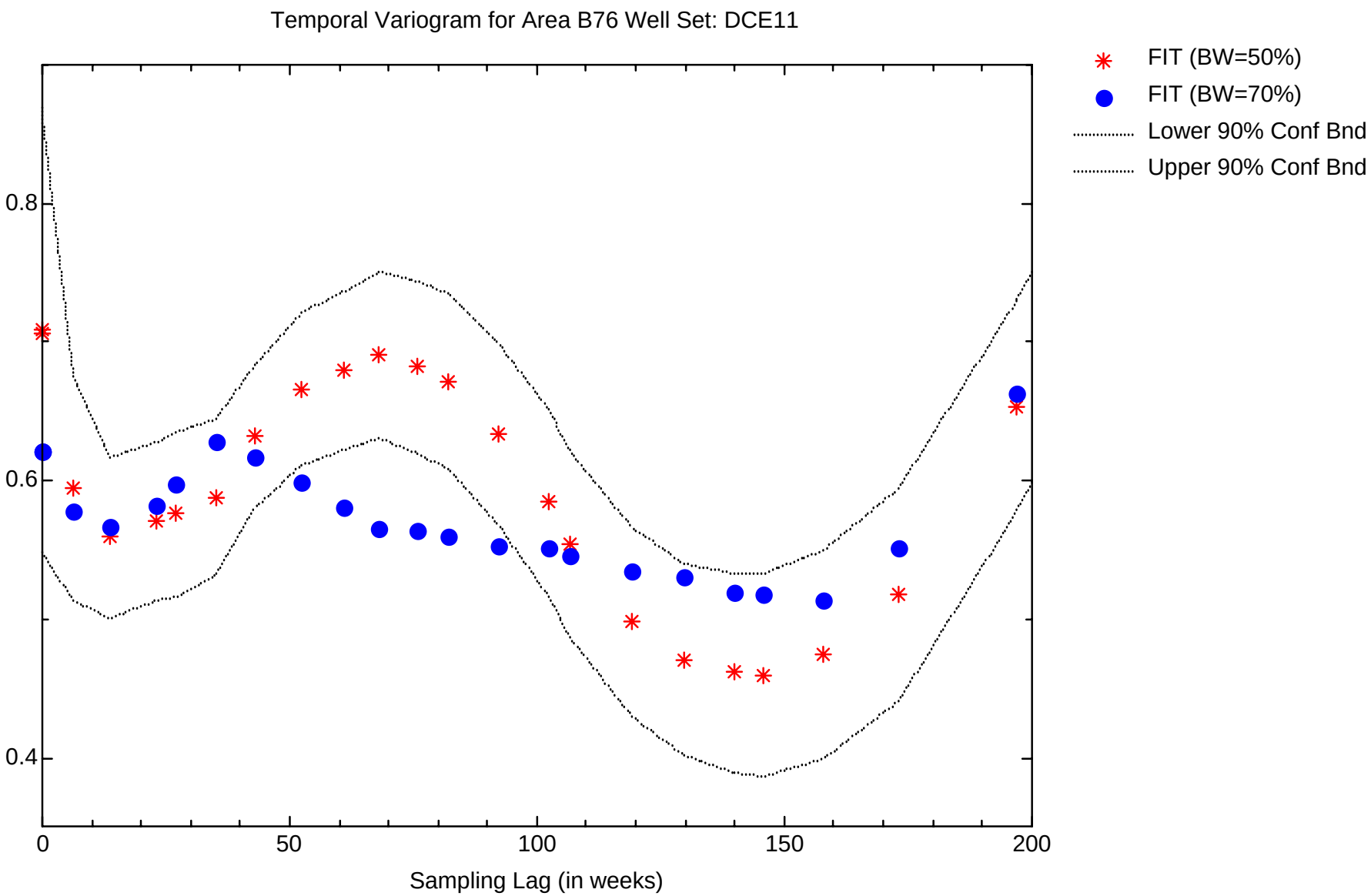

Post-Plot of New (Last 4 Sampling Events) Median Trends for TCLME: Bedrock Wells
1.432·10^6
1.430·10^6
1.428·10^6
1.426·10^6
Northing (ft)
3.900·10^5
3.920·10^5
3.940·10^5
Easting (ft)
B04 Area
B10 Area
B90 Area
Downward/Flat
Surely Downward
Upward
Surely Upward

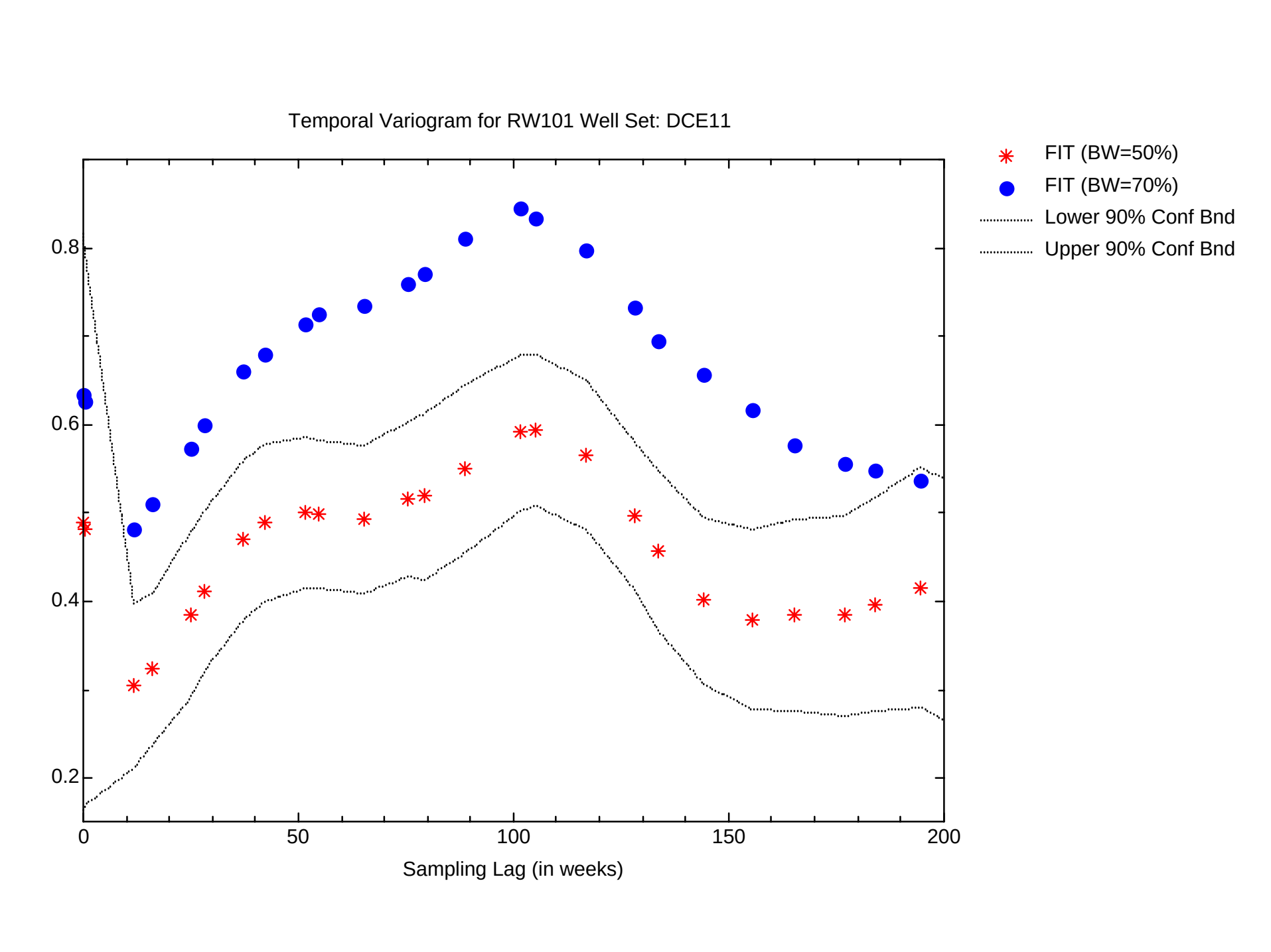
Temporal Analysis Appendix D

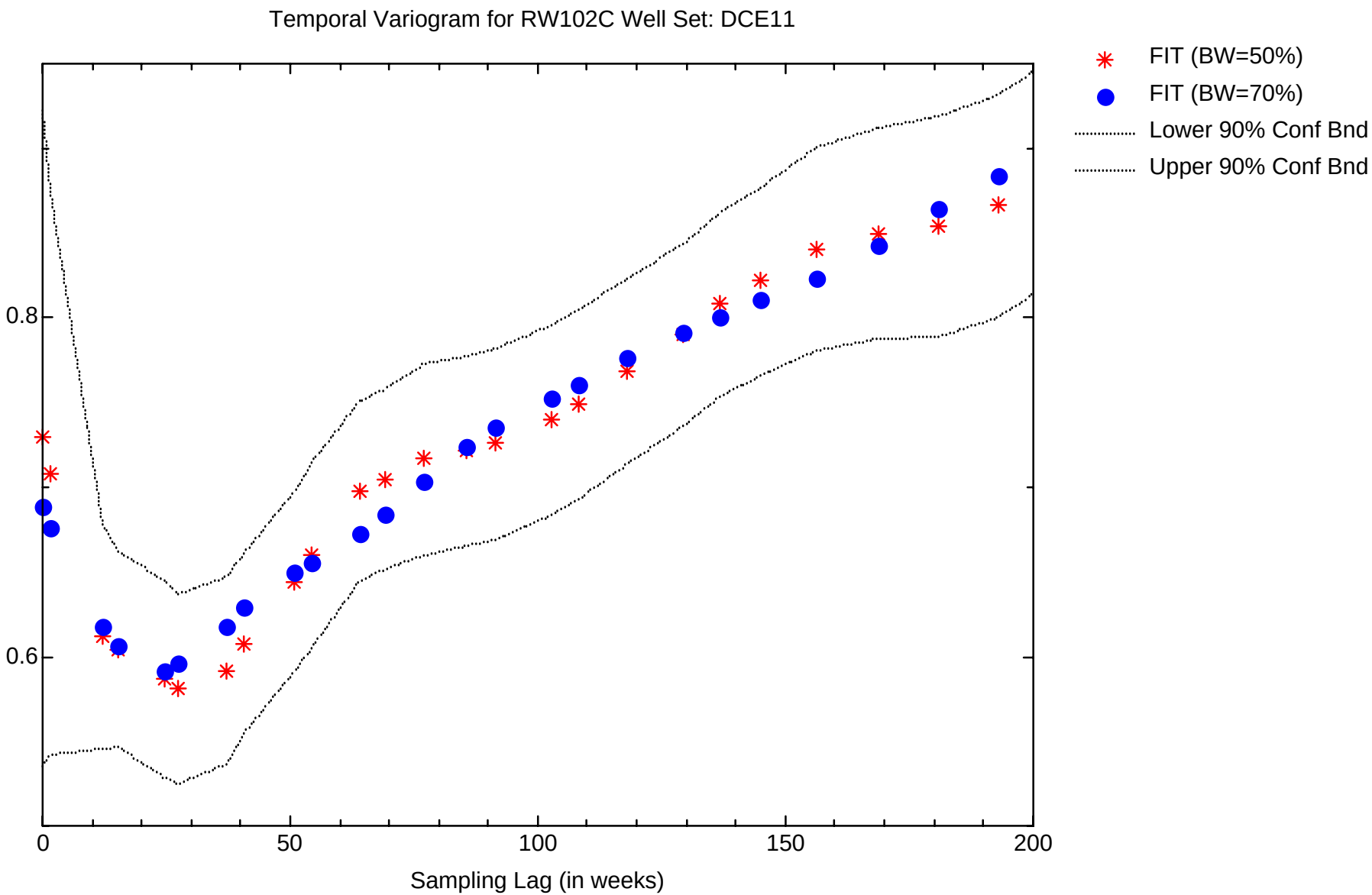

Temporal Variogram for Area B04 Well Set: DCE11
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

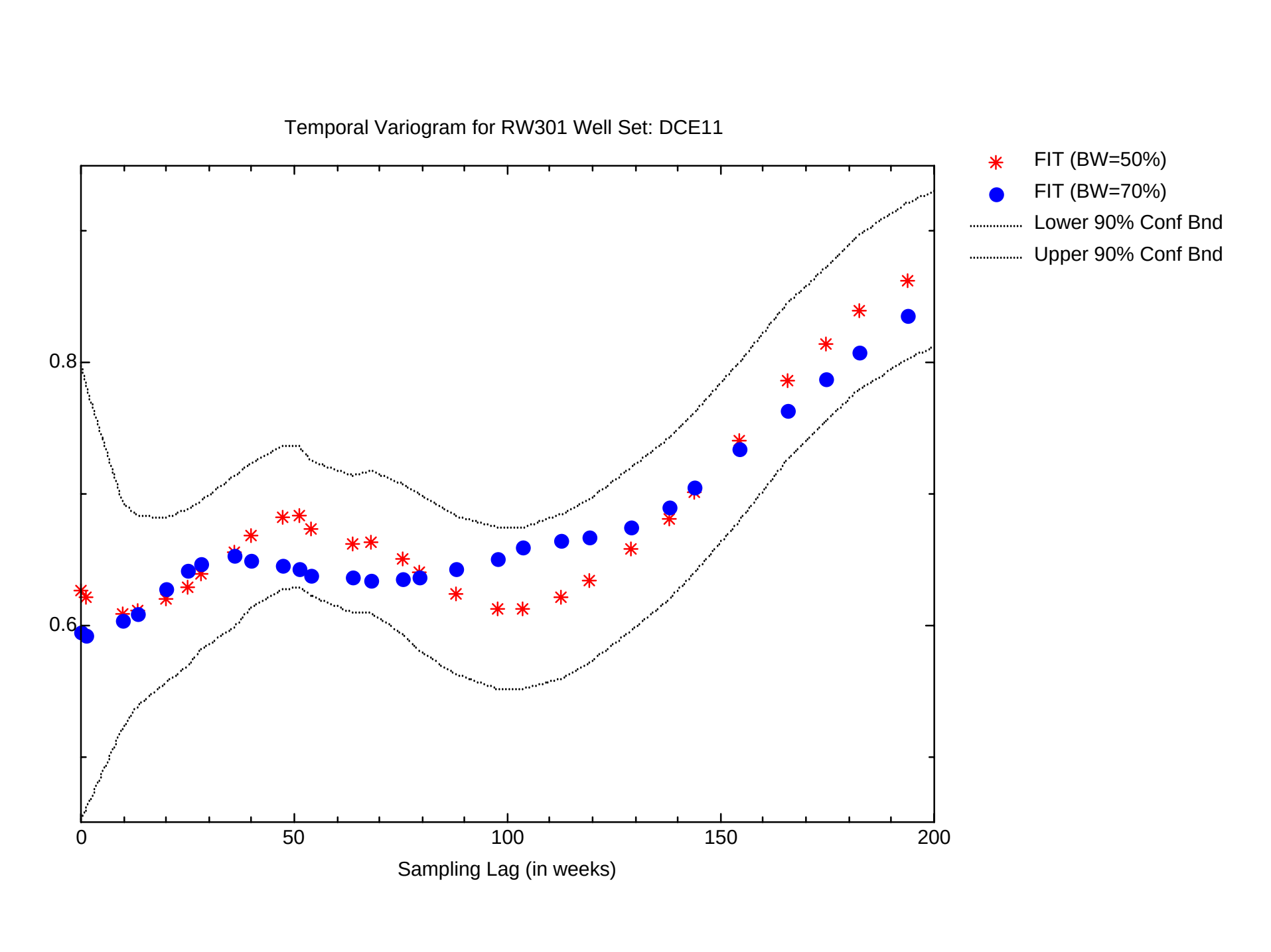

Temporal Variogram for Area B10 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.2
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

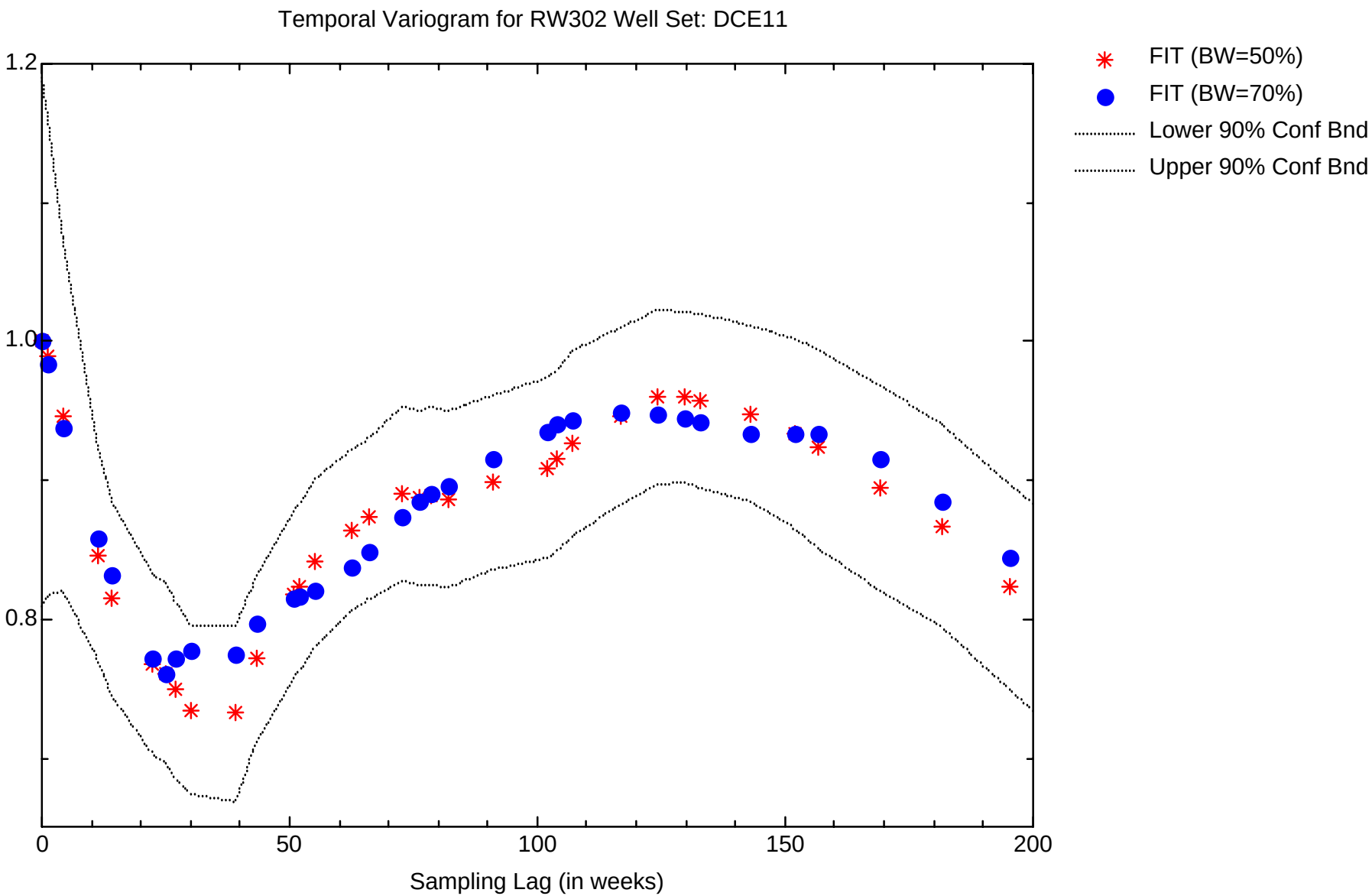

Temporal Variogram for Area B90 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)

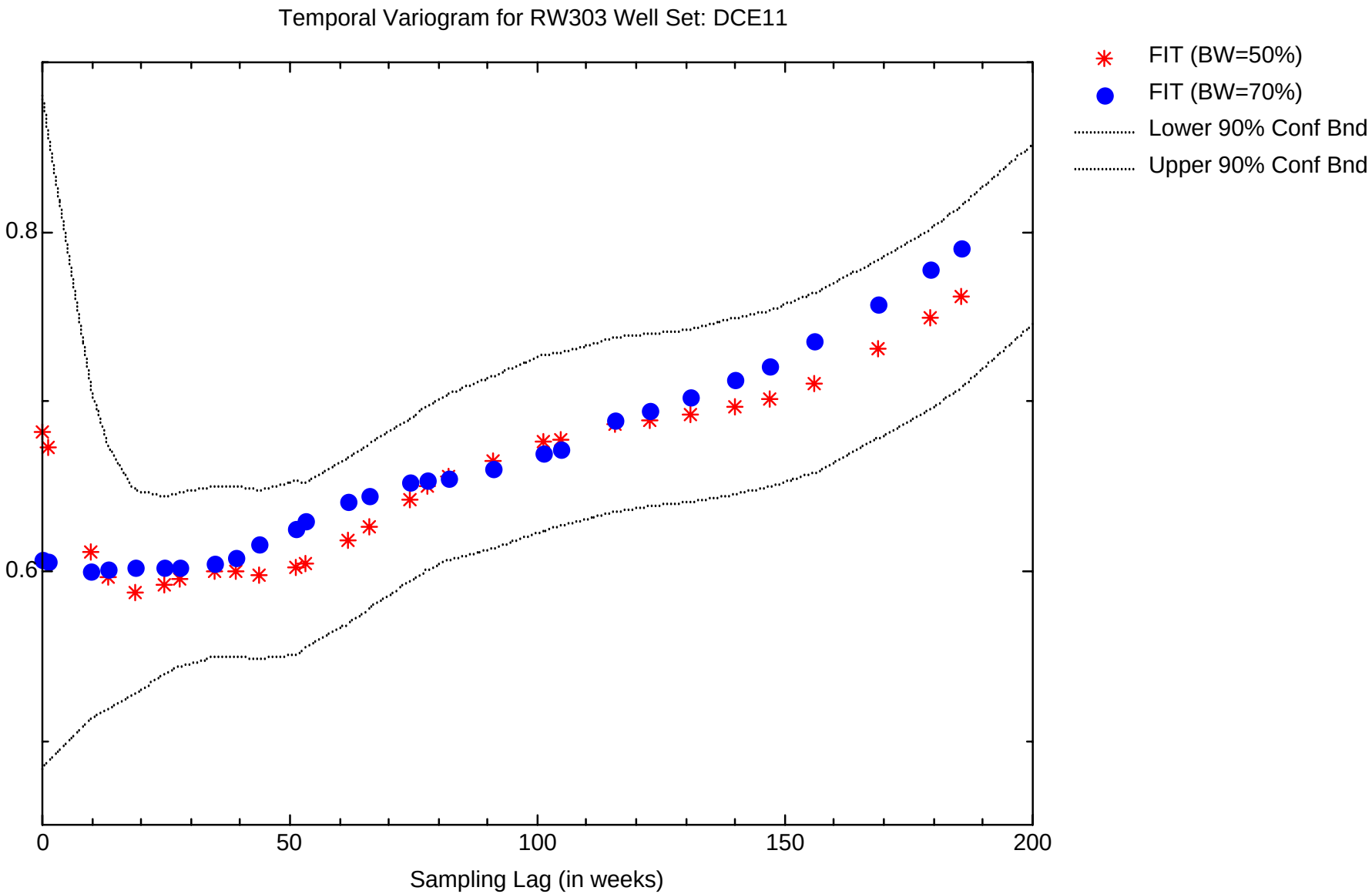

Temporal Variogram for Area B76 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0.4
0
50
100
150
200
Sampling Lag (in weeks)

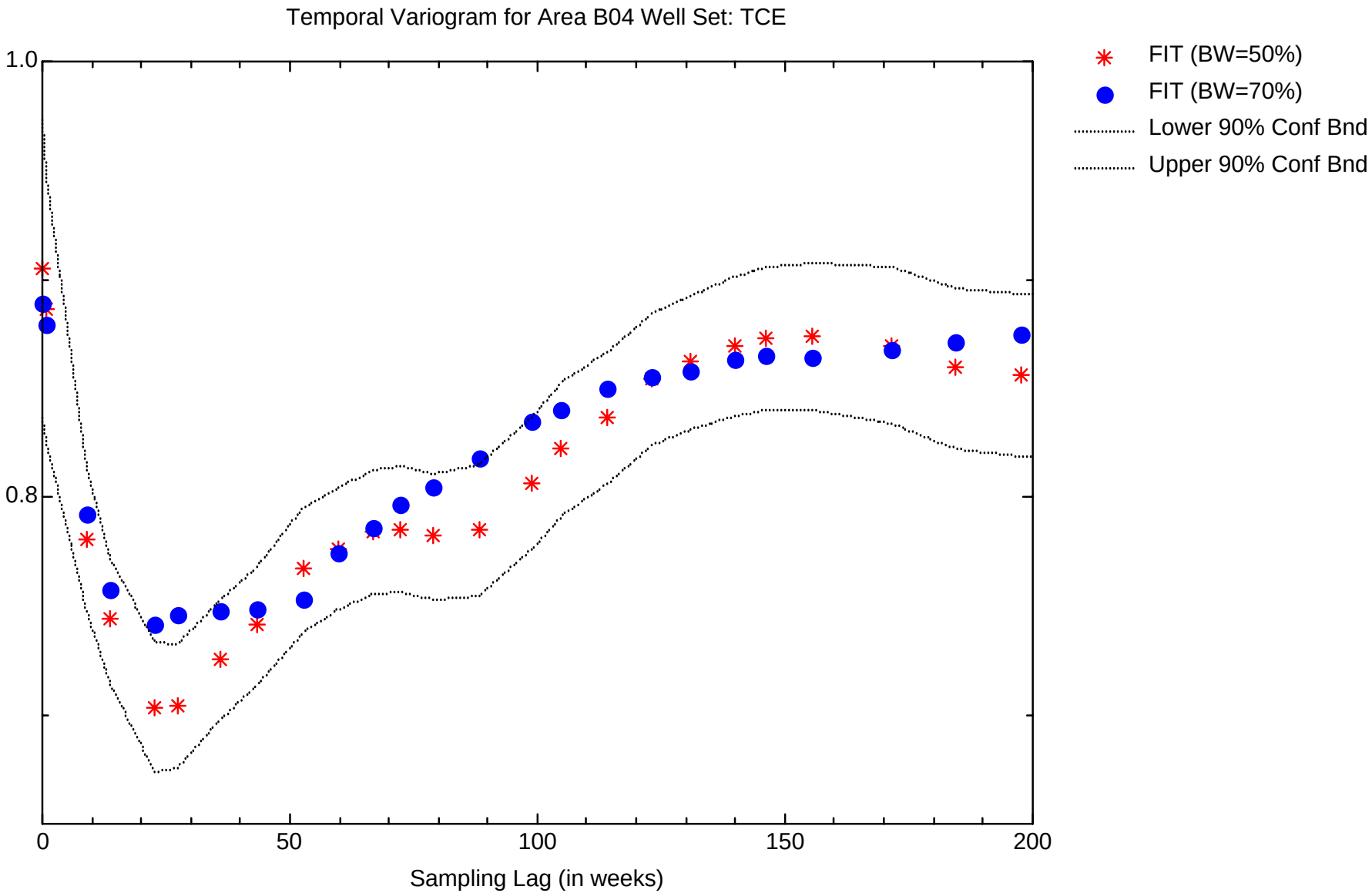

Temporal Variogram for RW101 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0.4
0.2
0
50
100
150
200
Sampling Lag (in weeks)

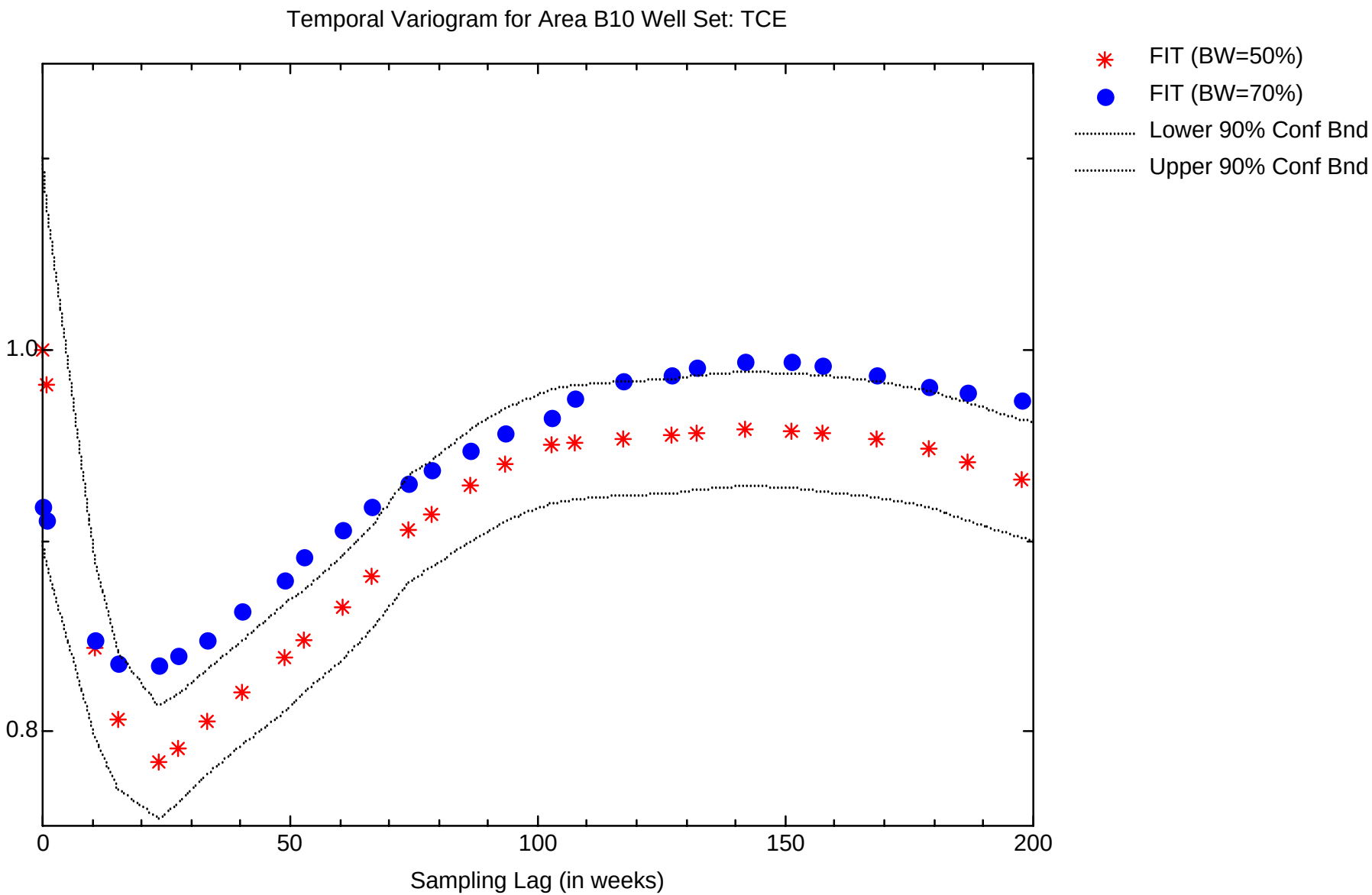

Temporal Variogram for RW102C Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

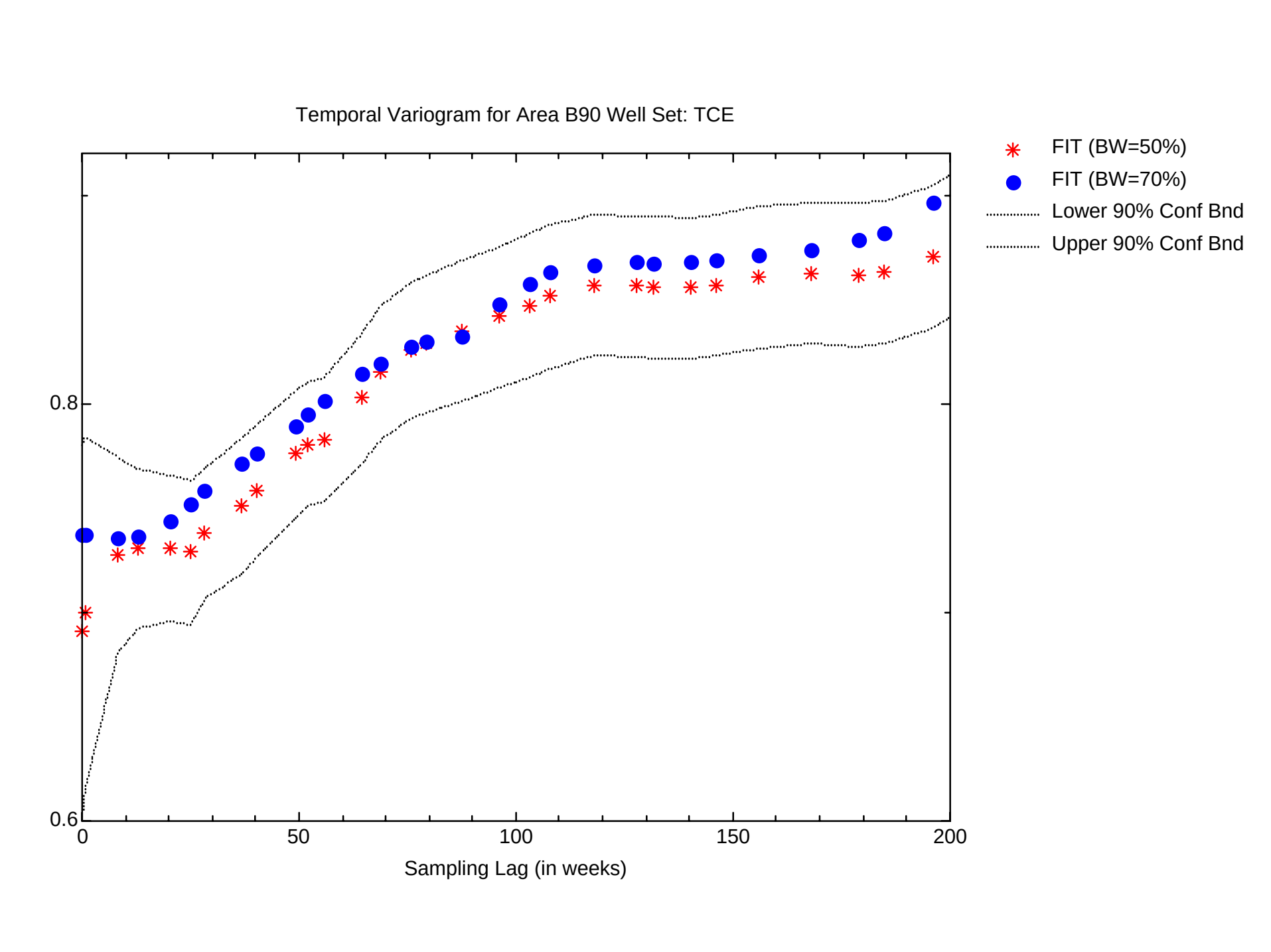

Temporal Variogram for RW301 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

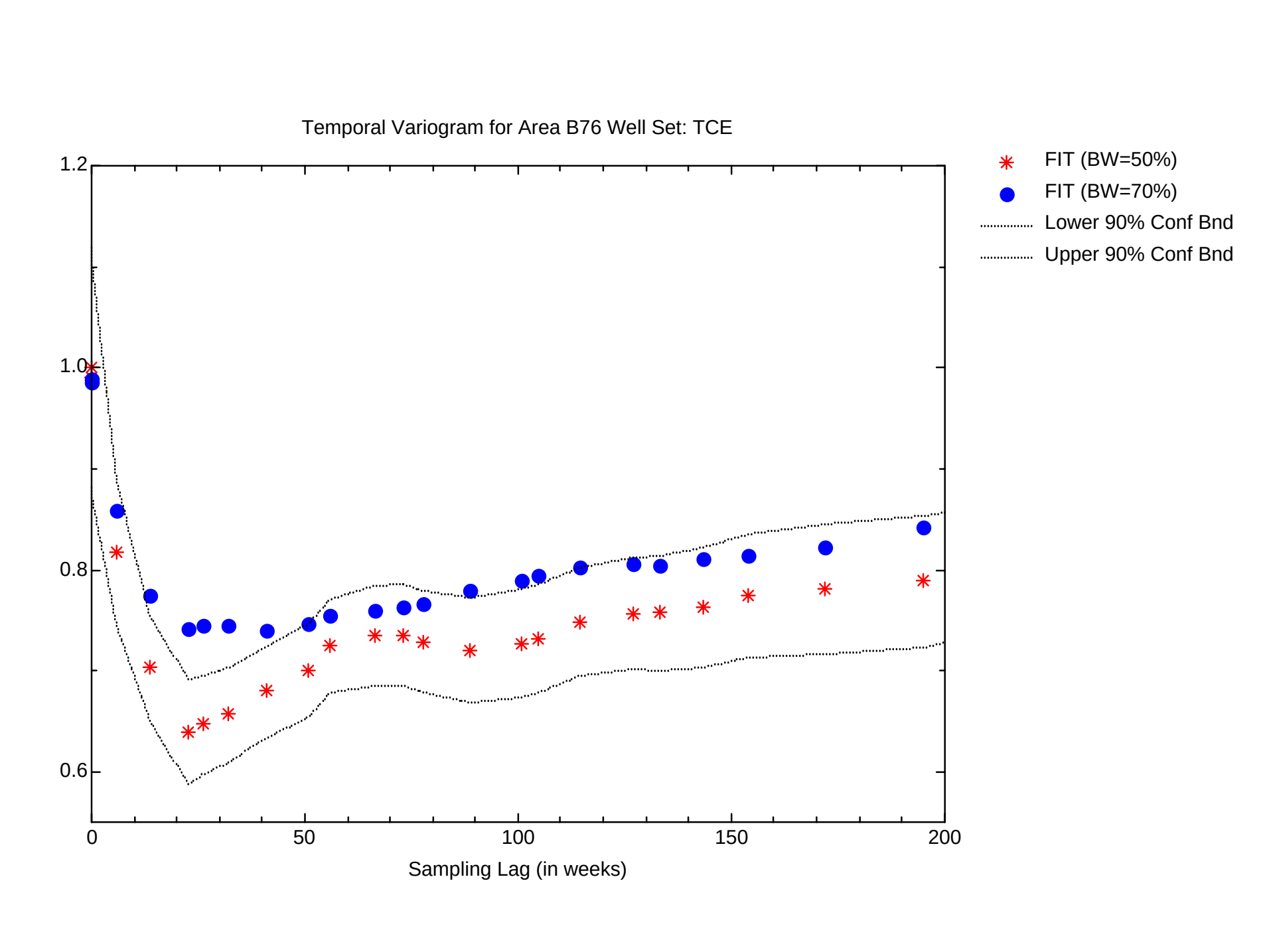

Temporal Variogram for RW302 Well Set: DCE11
1.2
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

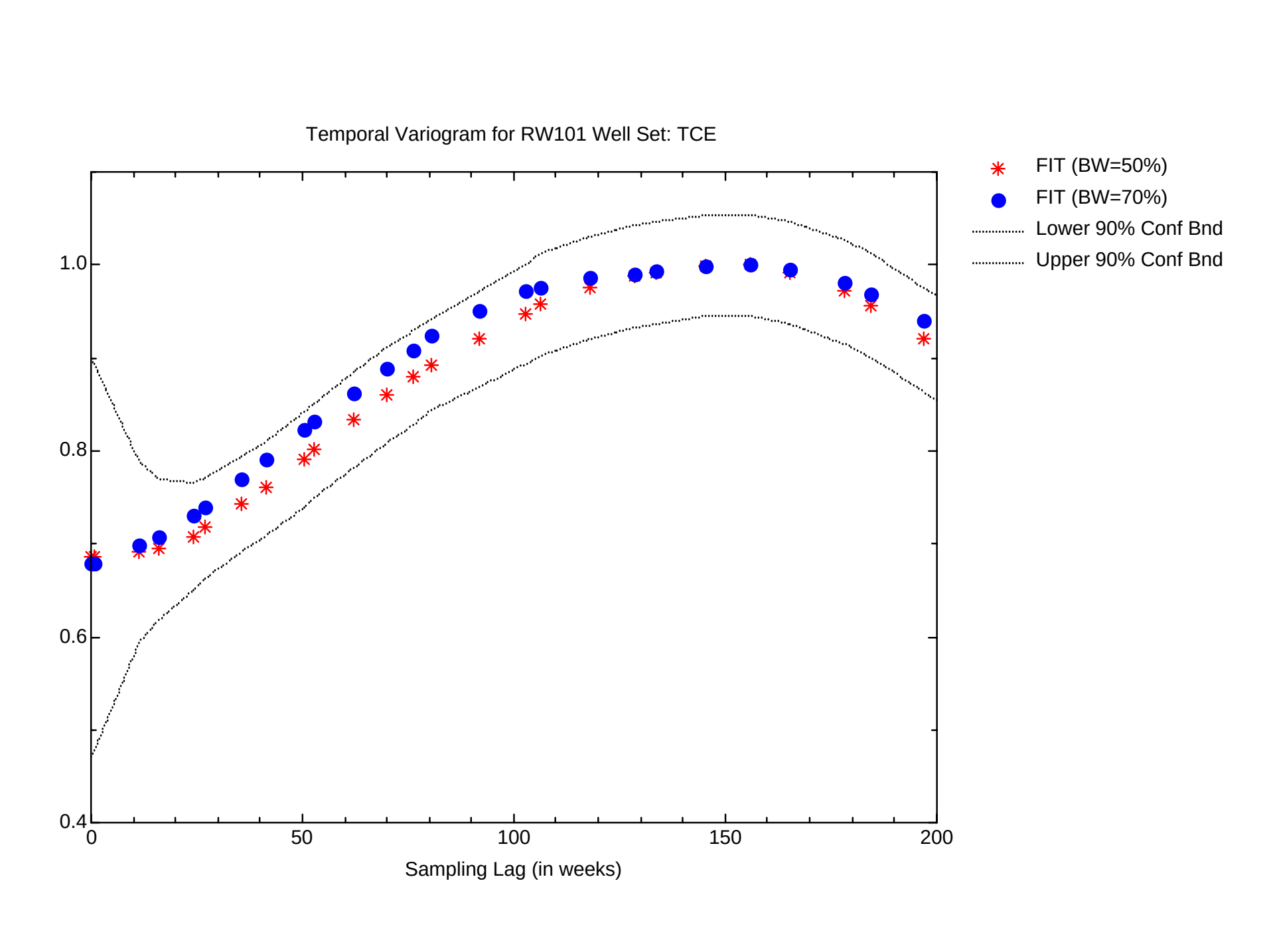

Temporal Variogram for RW303 Well Set: DCE11
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

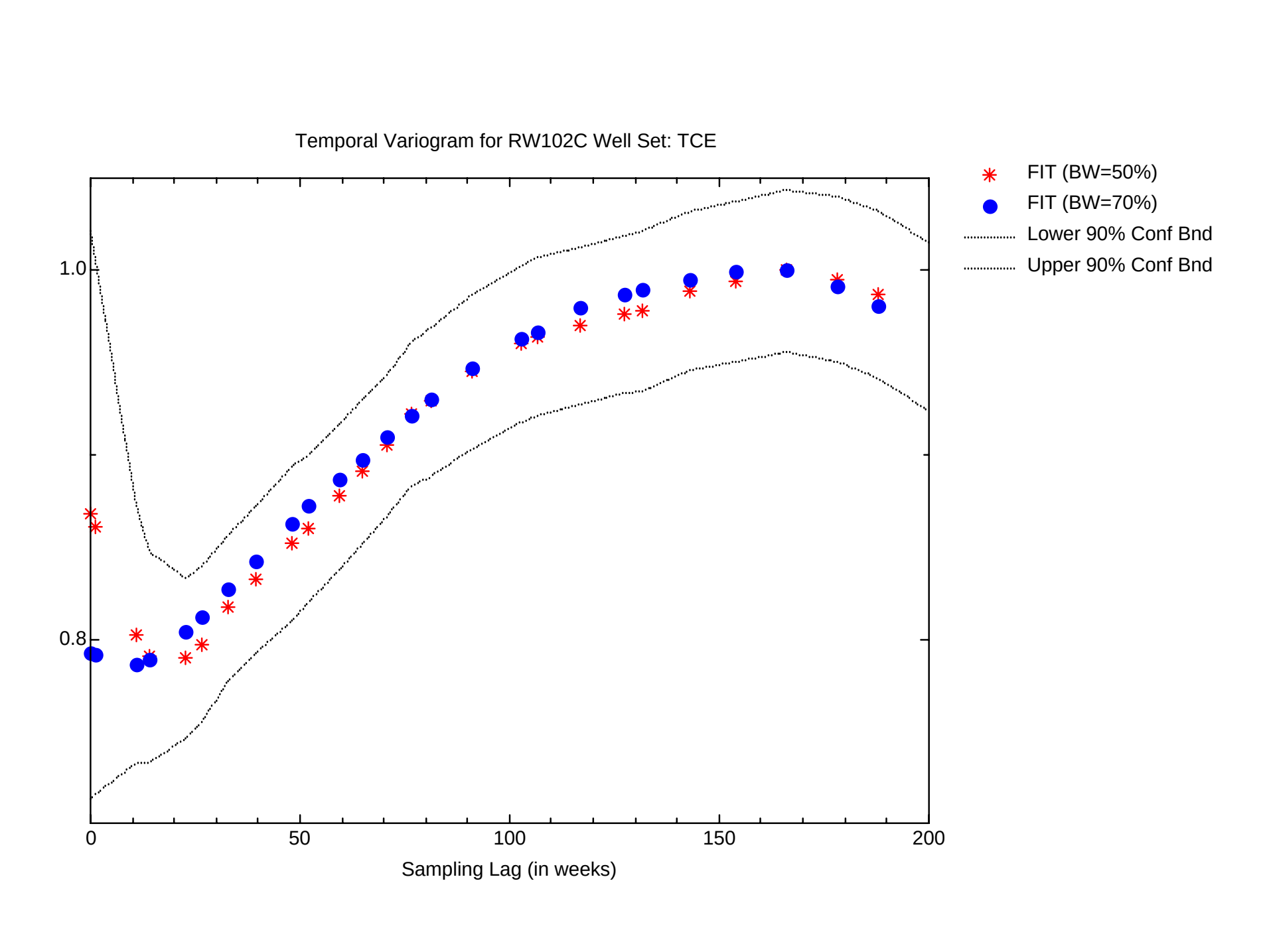

Temporal Variogram for Area B04 Well Set: TCE
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

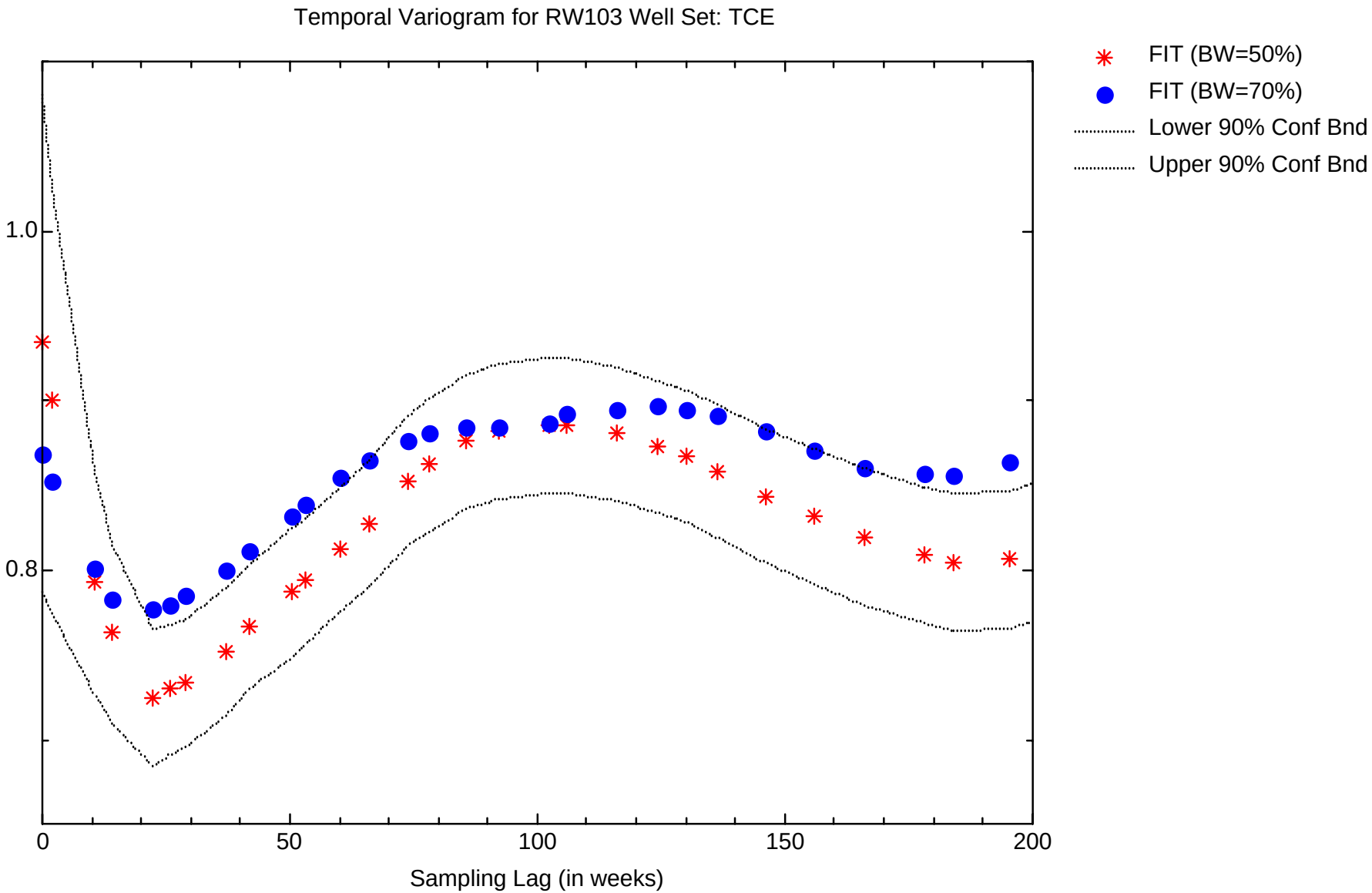

Temporal Variogram for Area B10 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)

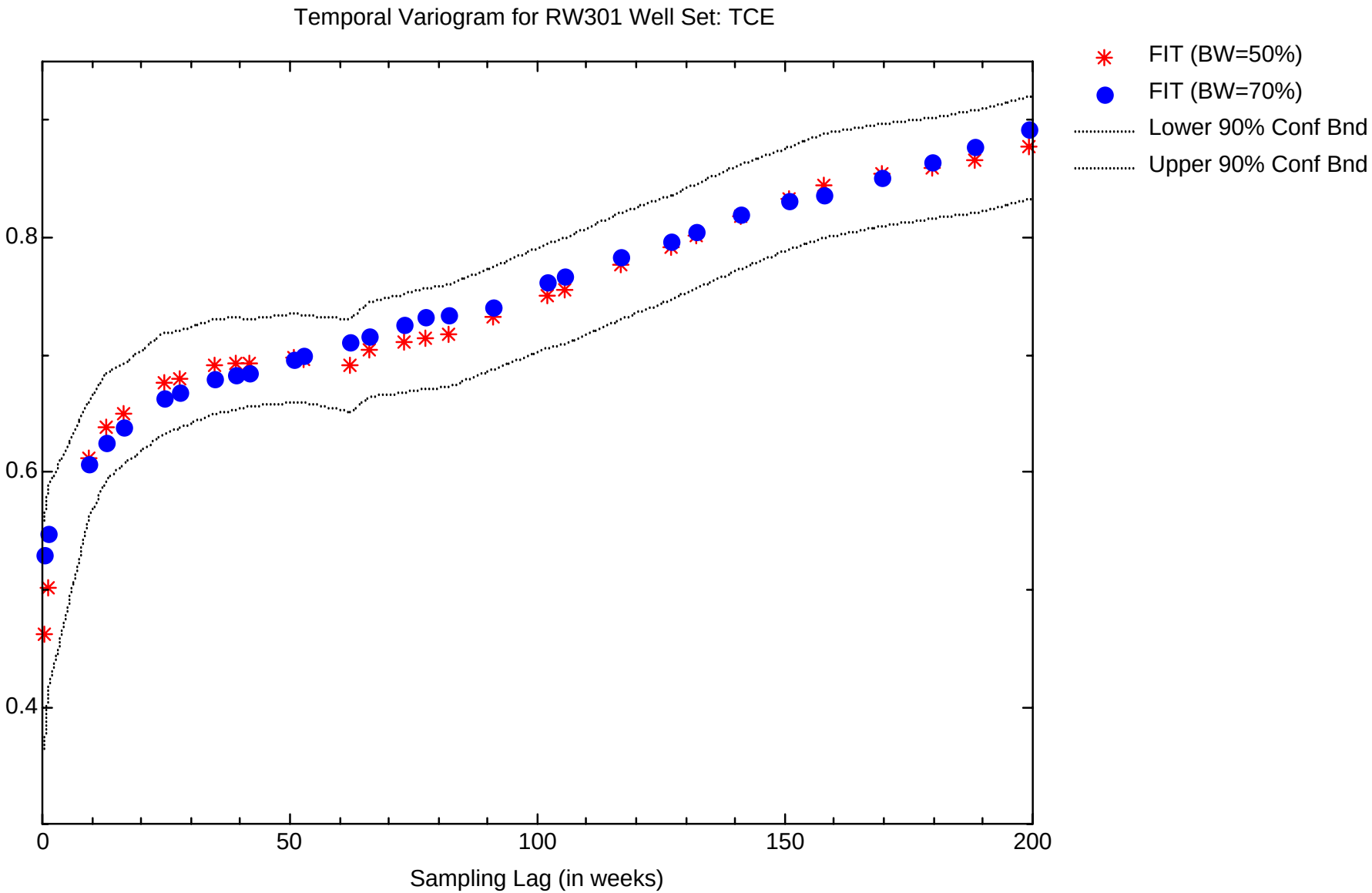

Temporal Variogram for Area B90 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

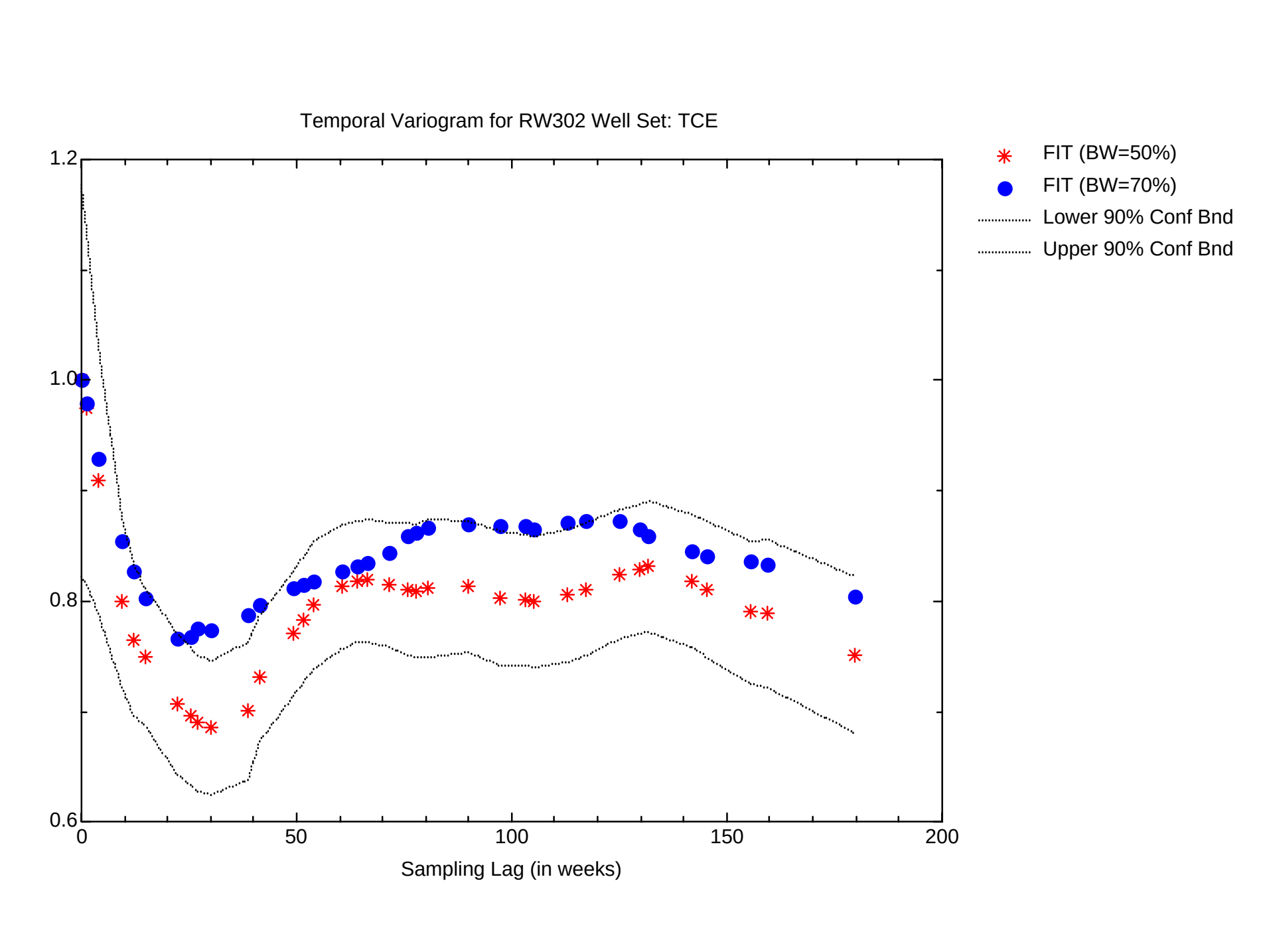

Temporal Variogram for Area B76 Well Set: TCE
1.2
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

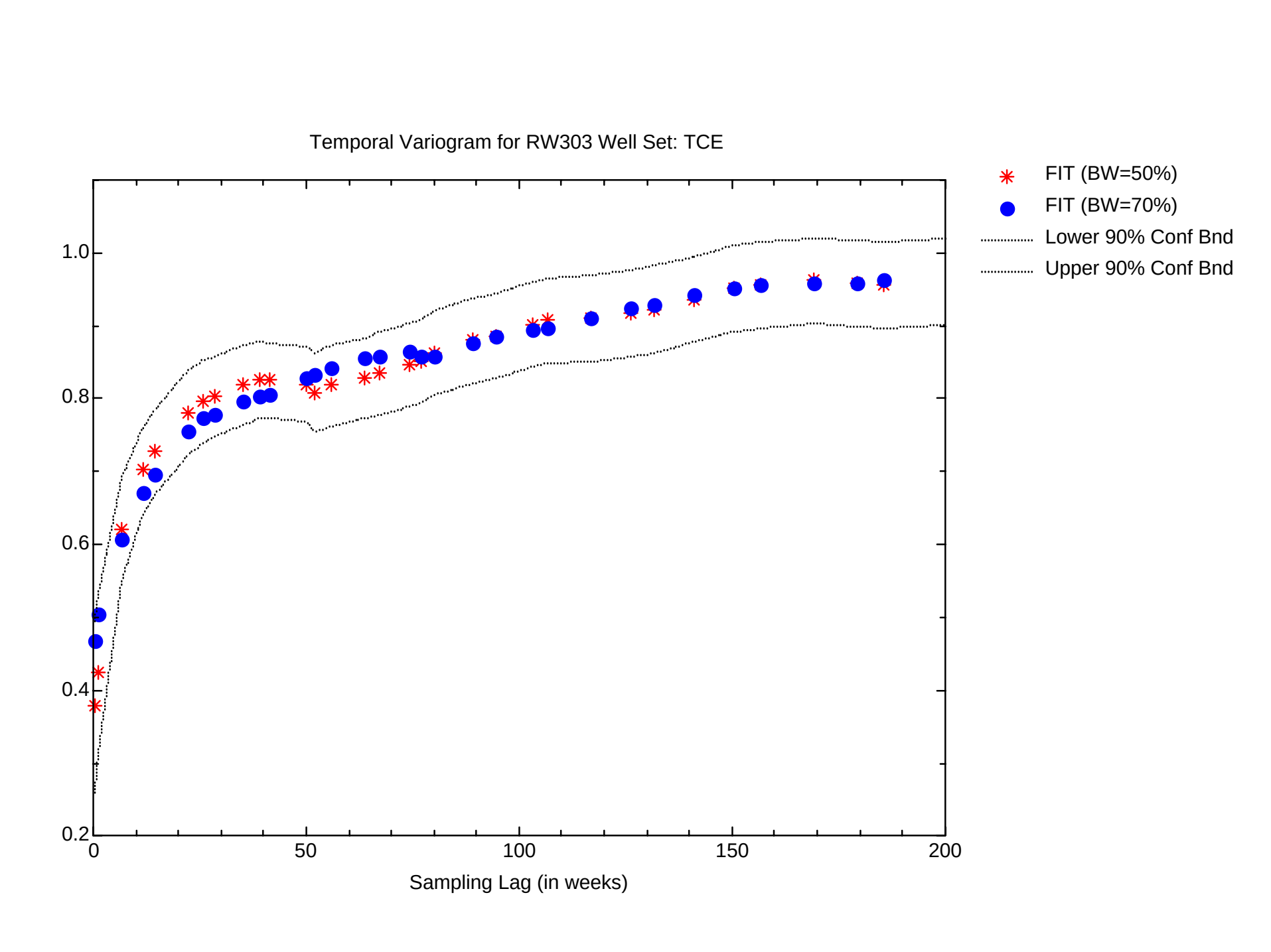

Temporal Variogram for RW101 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0.6
0.4
0
50
100
150
200
Sampling Lag (in weeks)

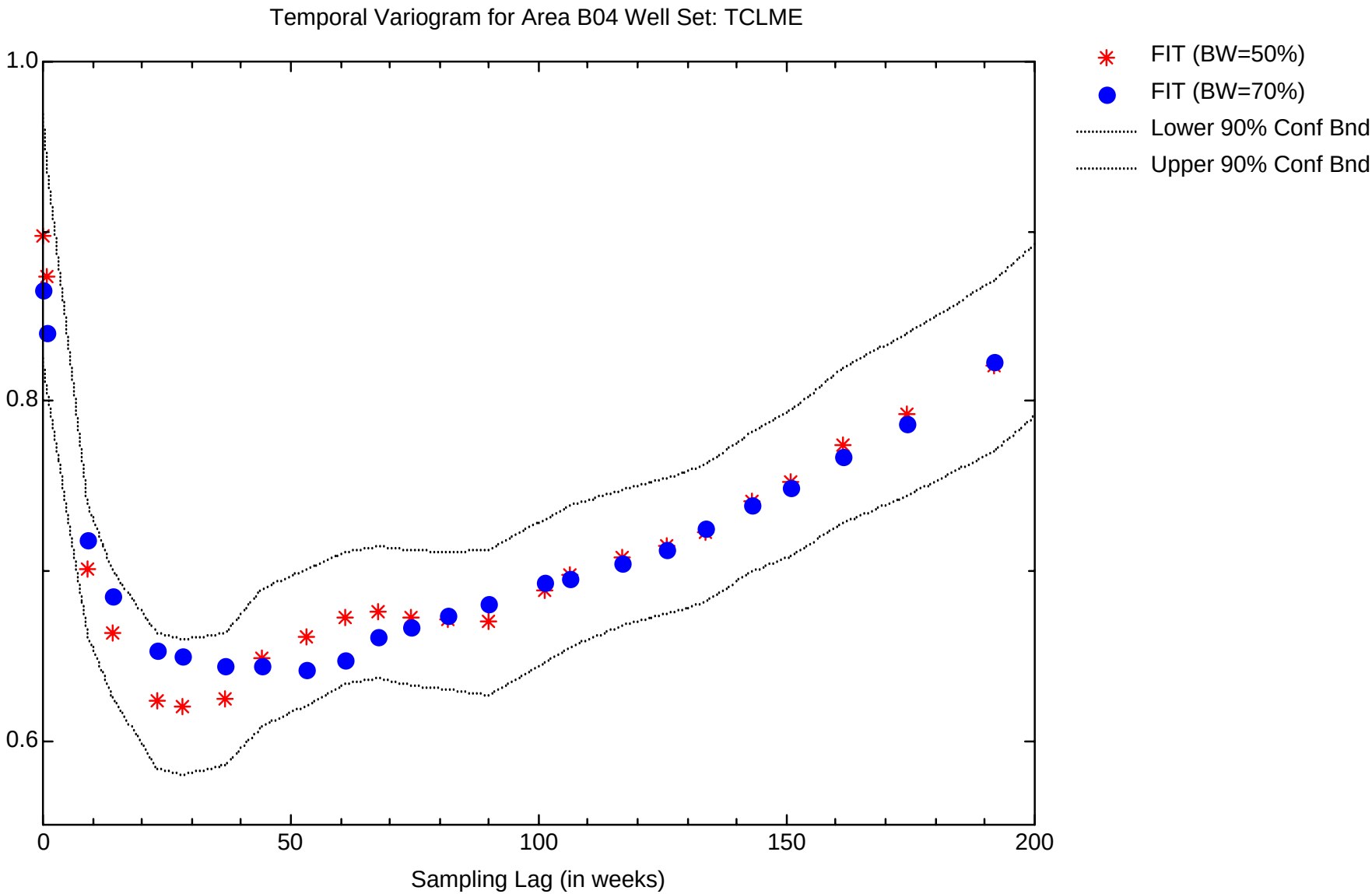

Temporal Variogram for RW102C Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)

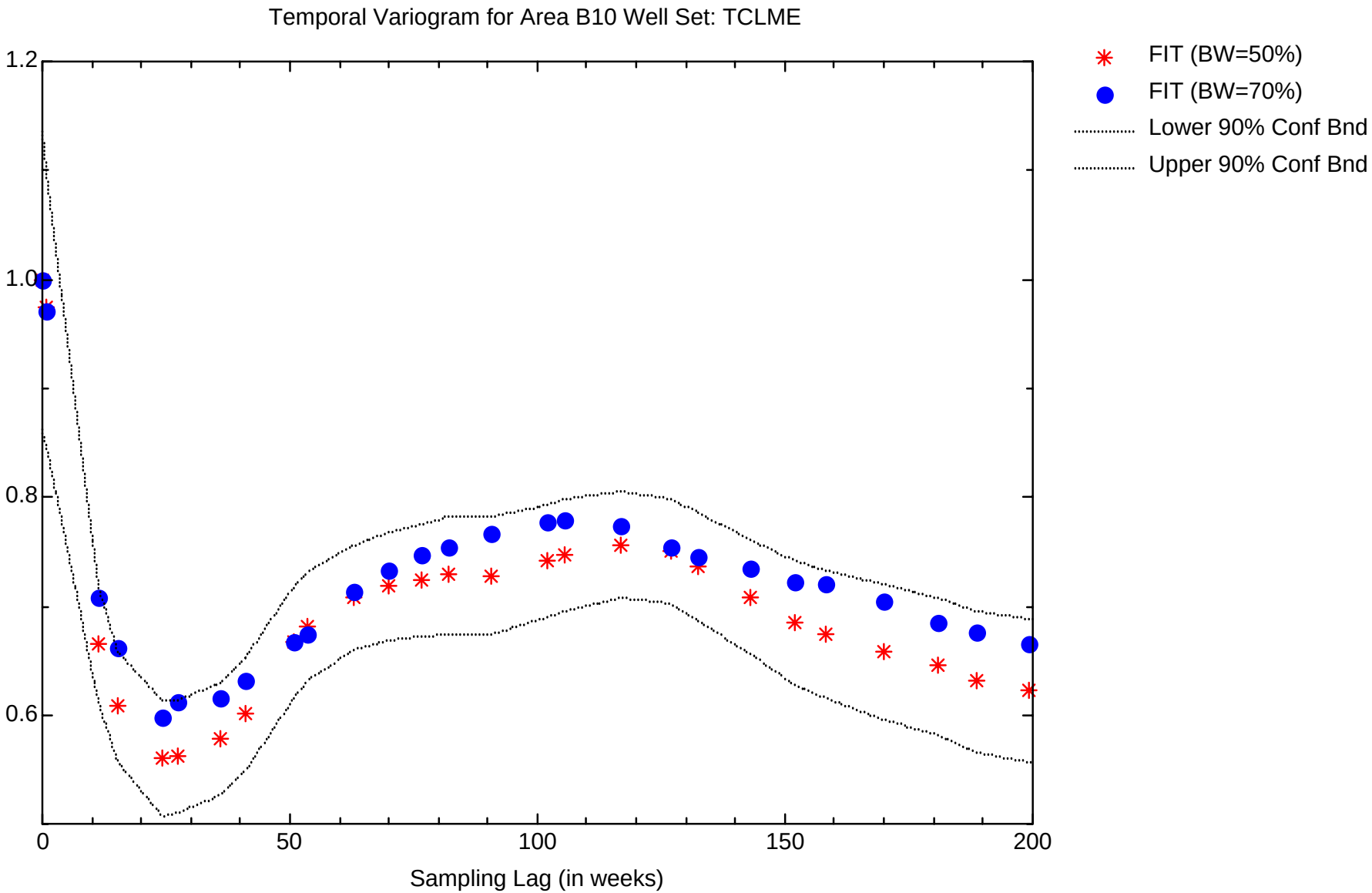

Temporal Variogram for RW103 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0
50
100
150
200
Sampling Lag (in weeks)

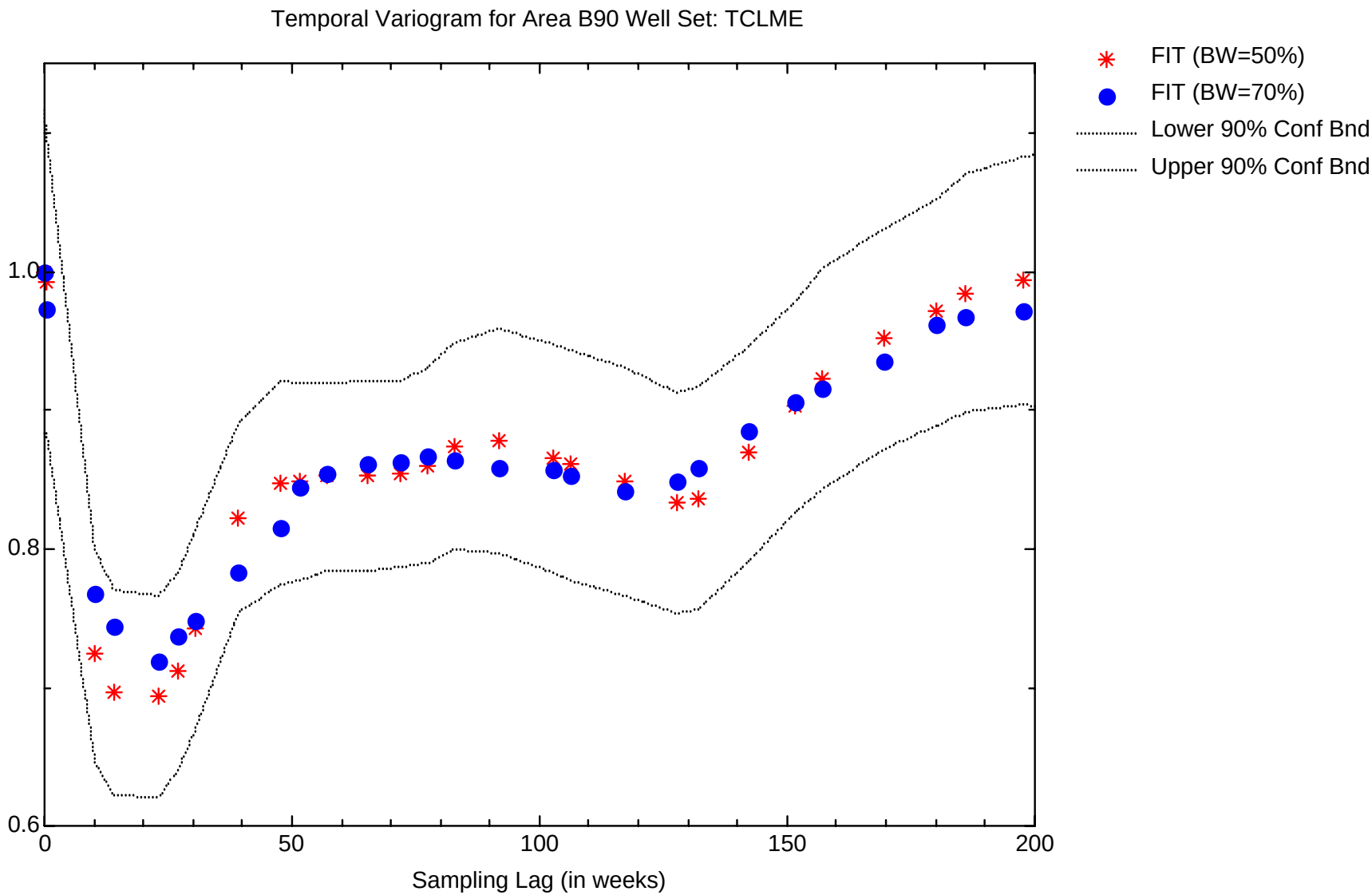

Temporal Variogram for RW301 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
0.8
0.6
0.4
0
50
100
150
200
Sampling Lag (in weeks)

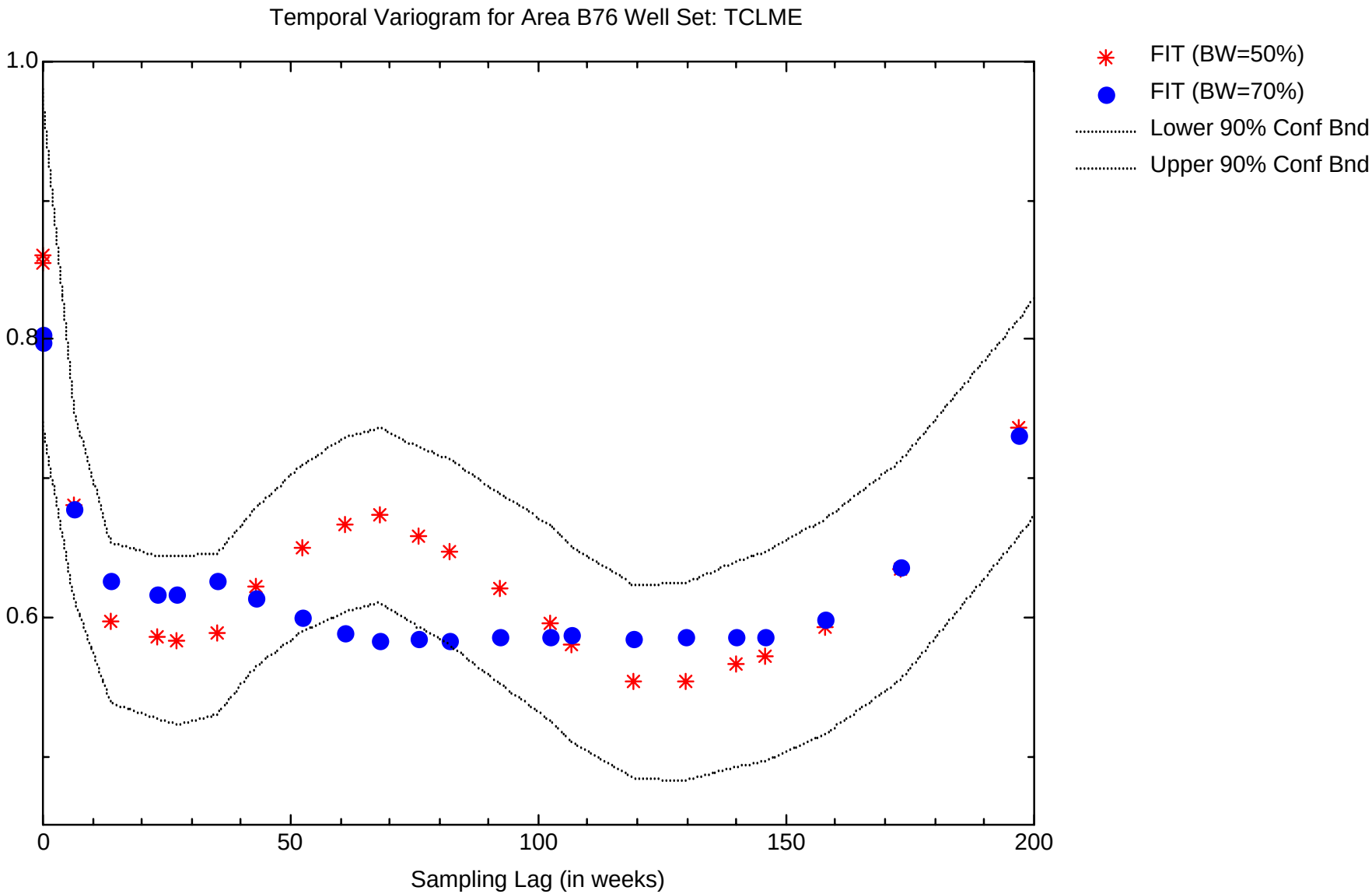

Temporal Variogram for RW302 Well Set: TCE
1.2
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

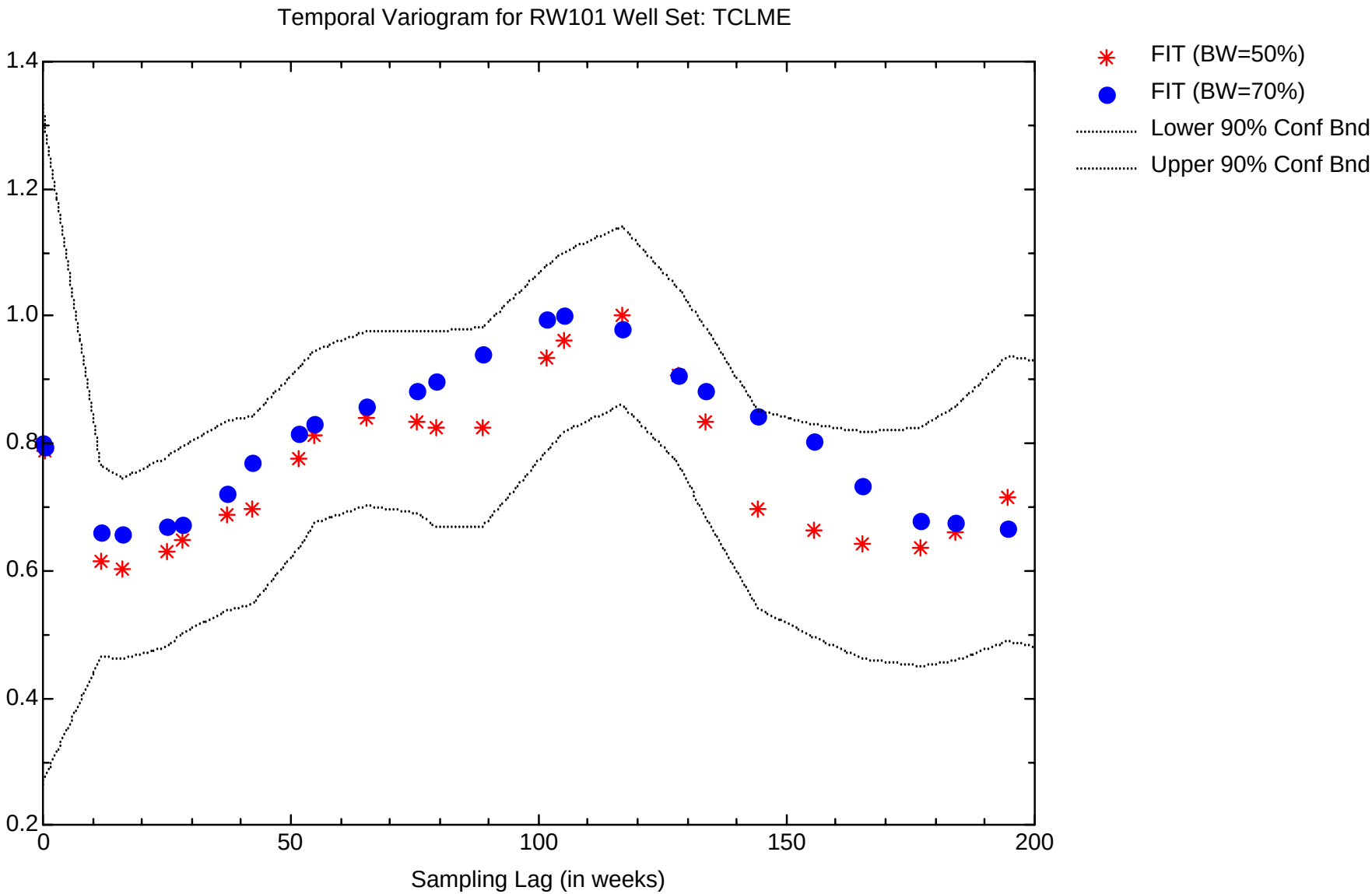

Temporal Variogram for RW303 Well Set: TCE
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0.6
0.4
0.2
0
50
100
150
200
Sampling Lag (in weeks)

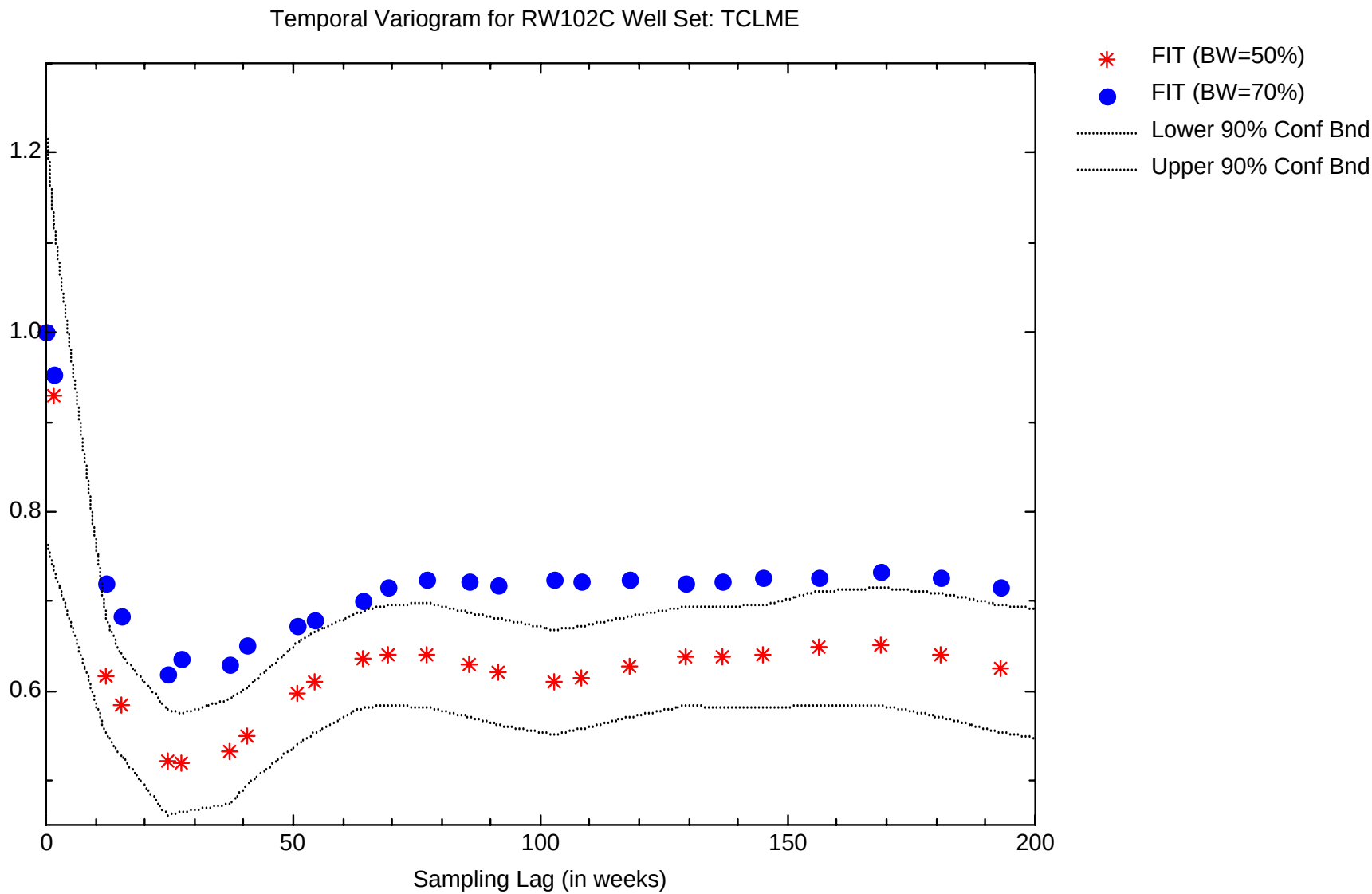

Temporal Variogram for Area B04 Well Set: TCLME
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

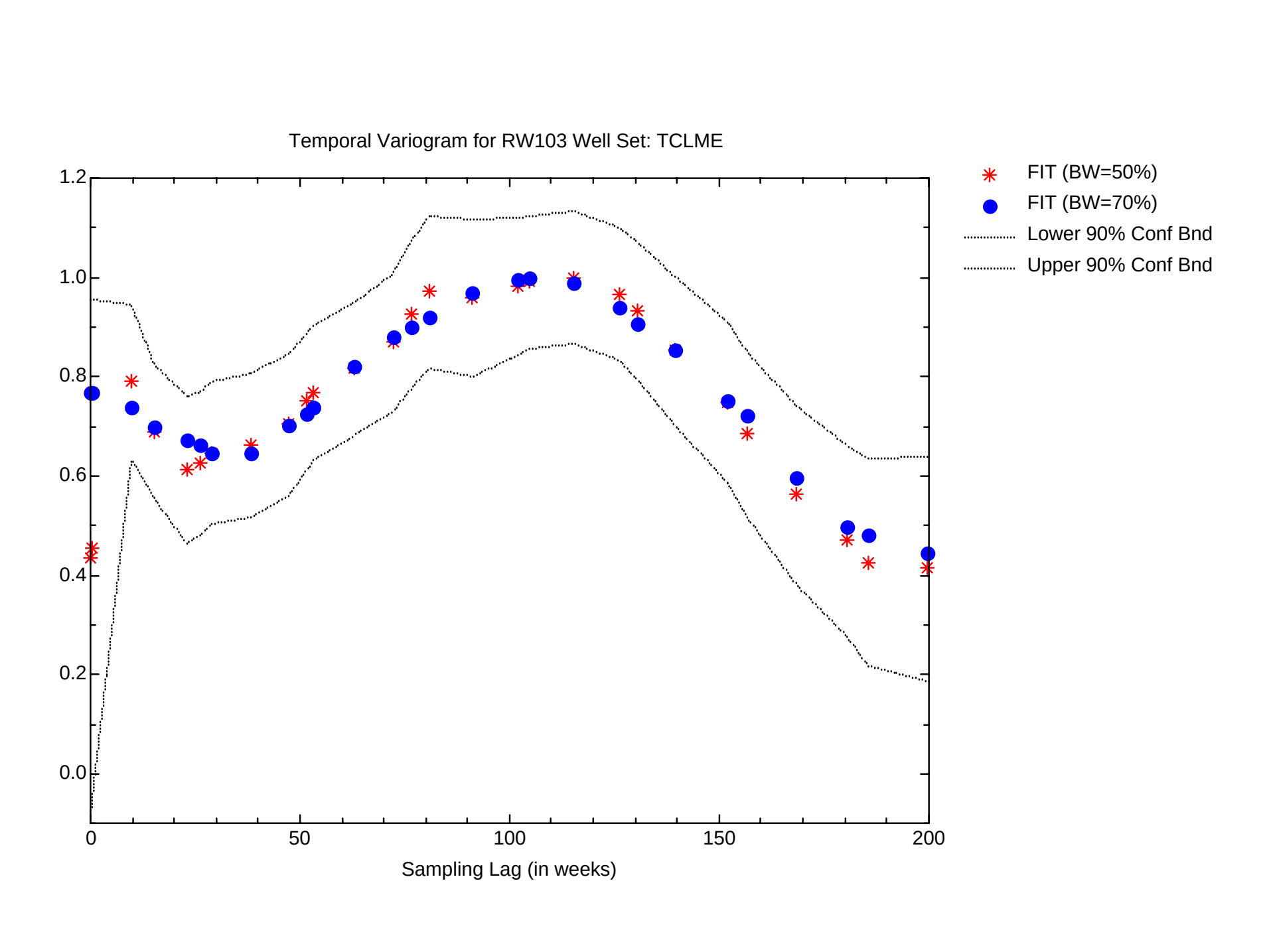

Temporal Variogram for Area B10 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.2
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

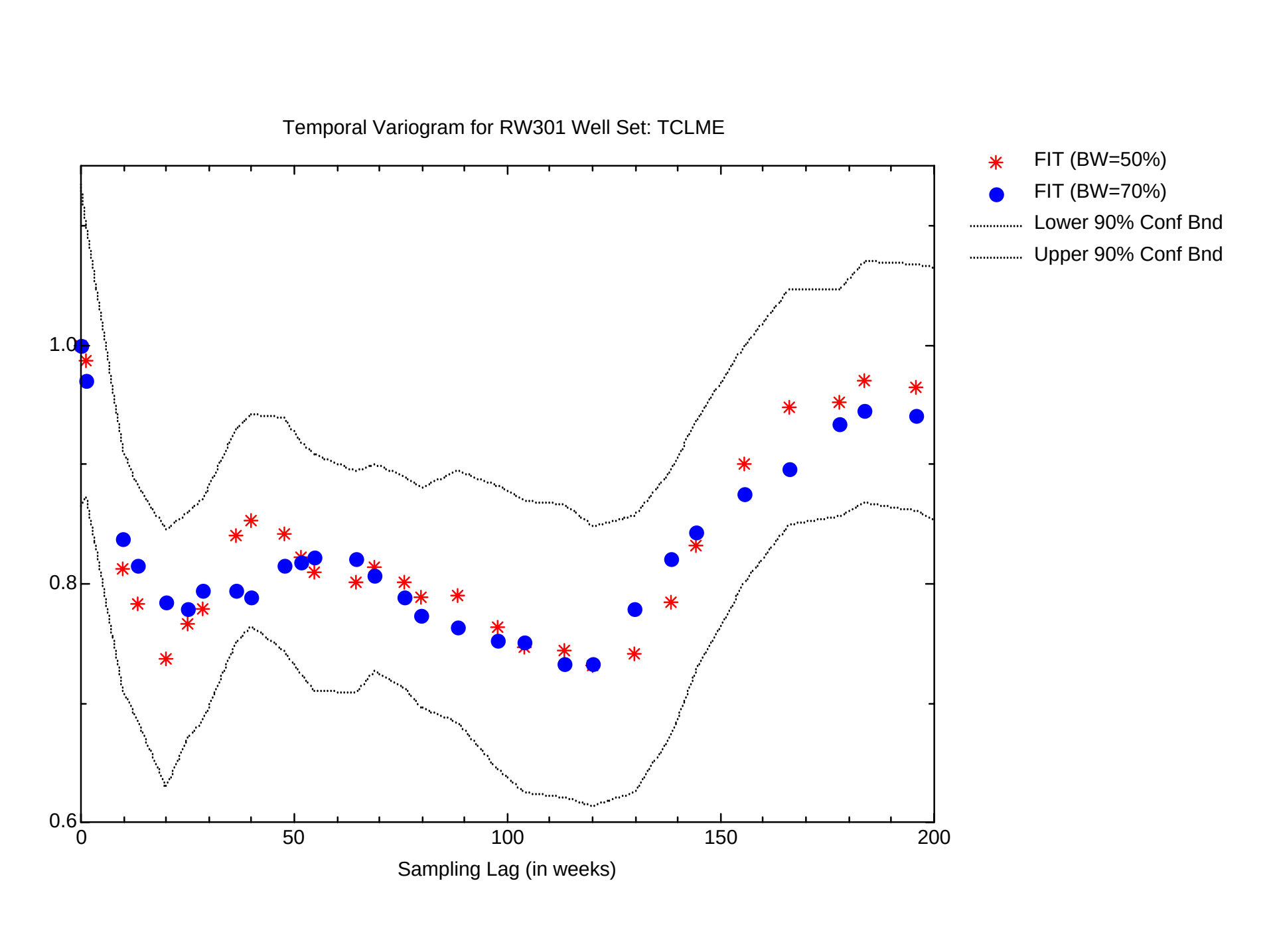

Temporal Variogram for Area B90 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)

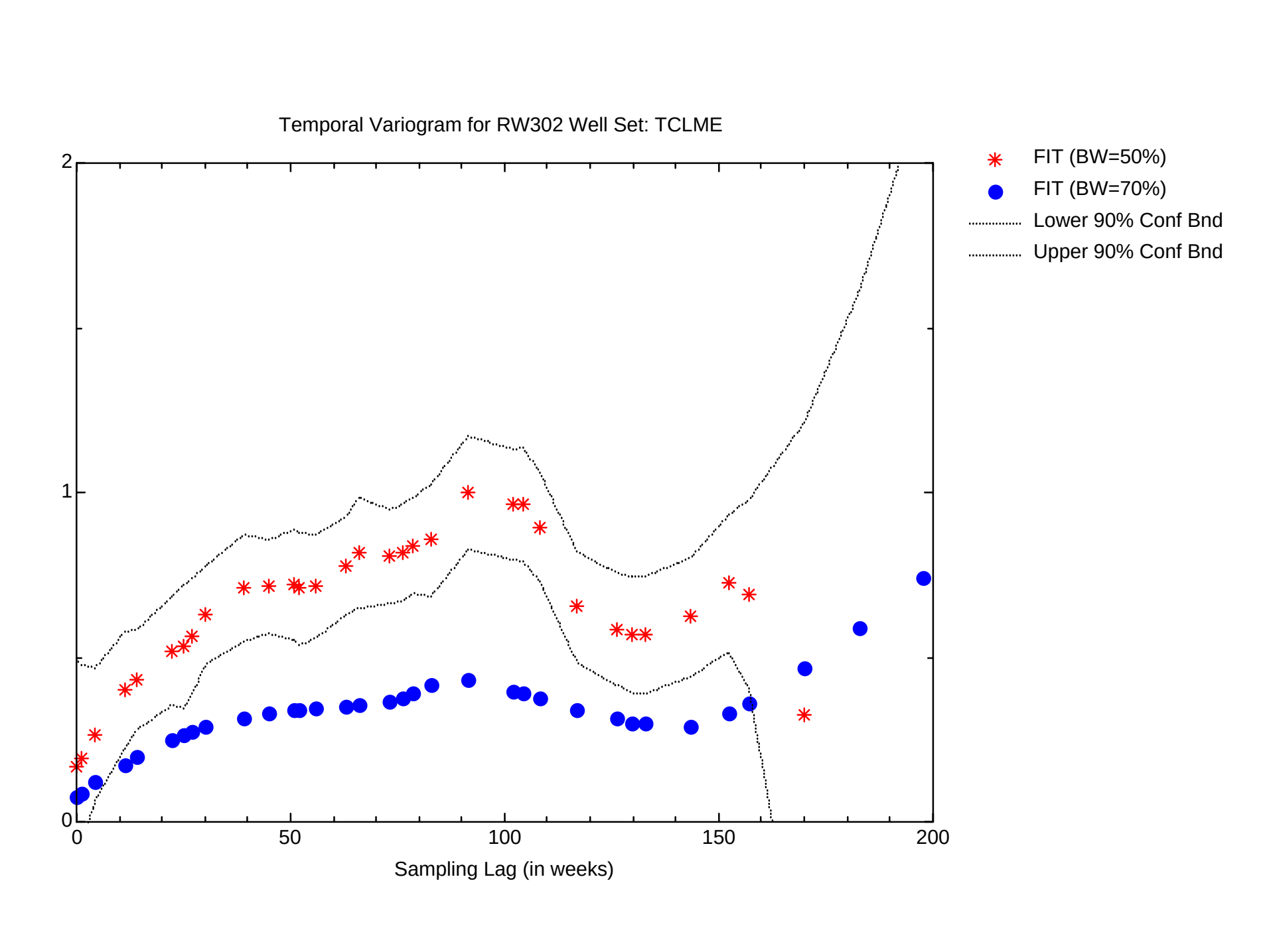

Temporal Variogram for Area B76 Well Set: TCLME
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd

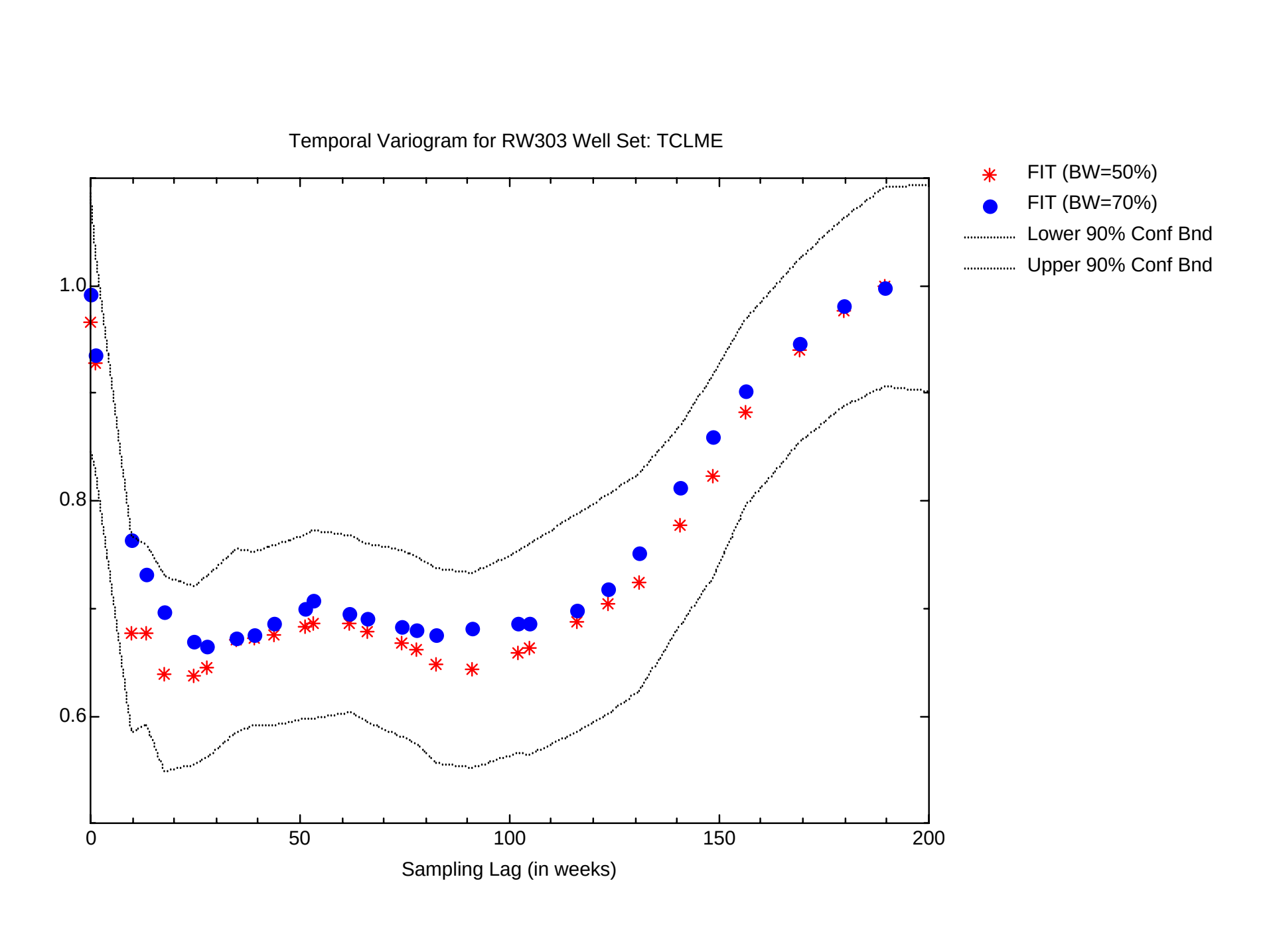

Temporal Variogram for RW101 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
50
100
150
200
Sampling Lag (in weeks)


Temporal Variogram for RW102C Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.2
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)


Temporal Variogram for RW103 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
50
100
150
200
Sampling Lag (in weeks)


Temporal Variogram for RW301 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)


Temporal Variogram for RW302 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
2
1
0
0
50
100
150
200
Sampling Lag (in weeks)


Temporal Variogram for RW303 Well Set: TCLME
FIT (BW=50%)
FIT (BW=70%)
Lower 90% Conf Bnd
Upper 90% Conf Bnd
1.0
0.8
0.6
0
50
100
150
200
Sampling Lag (in weeks)