

Final Report: Groundwater Availability Model of the Seymour Aquifer in Haskell, Knox, and Baylor Counties

By Marius Jigmond,
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Texas Water Development Board
February 14, 2014



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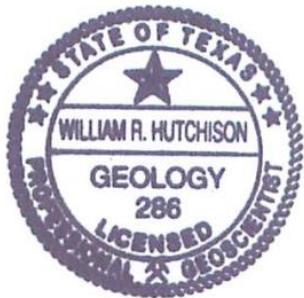
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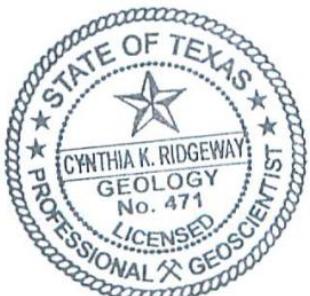
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EXECUTIVE SUMMARY

ES 1.0 Introduction and Purpose of the Refined Groundwater Availability Model
The Texas Water Development Board (TWDB) contracted a modeling study and released a Groundwater Availability Model (GAM) of the Seymour and Blaine aquifers in 2004 (Ewing and others, 2004). That GAM used a single model to represent the entire Seymour Aquifer, which consists of isolated “pods” that are not hydraulically connected. The Seymour Aquifer pod located in Haskell, southern Knox, and western Baylor counties was identified as a prime candidate for a refined model due to the large quantities of groundwater pumping when compared to the other portions of the Seymour Aquifer. To accomplish this, the TWDB contracted a conceptual model study for the Seymour Aquifer in those three counties (Jones and others, 2012). The TWDB used this refined conceptual model, the previous modeling study (Ewing and others, 2004), and additional data from the Rolling Plains Groundwater Conservation District (GCD) to develop a refined numerical groundwater availability model covering these three counties.

The refined GAM has finer spatial and temporal resolutions. In addition, the refined GAM was well calibrated to the measured water levels in the Seymour Aquifer and the flow along the Brazos River. This refined GAM provides an effective tool to assess the water management strategies for the Seymour Aquifer in the selected counties that will benefit a variety of people, including the TWDB, Regional Water Planning Groups (B and G), the Rolling Plains Groundwater Conservation district, and Groundwater Management Area 6. Specifically, the refined GAM and information from the refined conceptual model (Jones and others, 2012) can help the Rolling Plains GCD to develop the desired future conditions and to evaluate the groundwater availability in this portion of the Seymour Aquifer.

ES 2.0 Model Overview

This refined GAM covers the Seymour Aquifer in Haskell, southern Knox, western Baylor, and a small portion of eastern Stonewall counties. The Seymour Aquifer consists of unconsolidated alluvium deposits of Quaternary age underlain by shale strata of the Clear Fork Group of Permian age that acts as an aquitard. The conceptual model report (Jones and others, 2012) describes the physical features, occurrence of groundwater, groundwater flow conditions, and groundwater usage in the Seymour Aquifer in the model area.

The GAM was developed using the U.S. Geological Survey (U.S.G.S.) MODFLOW-2000 code (Harbaugh and others, 2000). The MODFLOW-2000 flow model contains one numerical layer representing the Seymour Aquifer. The model contains one steady-state stress period (stress period 1) that was intended to provide starting water levels for the transient simulation, and 342 transient stress periods. The transient stress periods cover the years 1950 through 2005 with 30 annual stress periods from 1950 through 1979 and 312 monthly stress periods from 1980 through 2005.

ES 3.0 Model Calibration and Results

This groundwater flow model was calibrated by adjusting certain model parameters, within a reasonable range, to match the simulated values to the measured values of groundwater elevation and groundwater-surface water interaction. A calibrated groundwater flow model is a tool that can be used to test hypothesis and future conditions. This process is also called prediction. A well-calibrated model can improve the reliability of the prediction.

The refined flow model was calibrated to 2,949 water levels measured at wells and one (1) flux value measured on the Brazos River (Preston, 1978). The model was also qualitatively calibrated to the regional groundwater flow patterns documented by R.W. Harden and Associates (1978). The model calibration was performed using the parameter estimation code BeoPEST (Schreuder, 2009) and by the trial-and-error method. The model calibration was expedited by incorporating pre- and post-processors developed by the TWDB. Calibration of the model was considered acceptable given the purpose of the effort to assist the Rolling Plains GCD to develop the desired future conditions and to evaluate the groundwater availability in this portion of the Seymour Aquifer.

ES 4.0 Model Sensitivity Analysis

After the calibration, the model was tested for sensitivity of major parameters on calibrated water levels. The sensitivity analysis indicated that the model is very sensitive to recharge and pumping and only slightly sensitive to changes in other parameters.

ES 5.0 Model Limitations

Numerical models require some assumptions and have some limitations. Several input parameters for this refined numerical flow model are based on limited information. These include groundwater recharge, historic pumping, hydraulic conductivity, drain conductance, and specific storage. During the model sensitivity analysis, it was concluded that water levels were greatly affected by changes to recharge and pumping. As a result, uncertainty related to the model prediction should be investigated during the model application.

1. INTRODUCTION AND PURPOSE OF THE GROUNDWATER AVAILABILITY MODEL

The Seymour Aquifer in Haskell, southern Knox, and western Baylor counties (Figure 1) is classified as a major aquifer in Texas. It consists of unconsolidated alluvium deposits of Quaternary age that are underlain by shale strata of the Clear Fork Group of Permian age that acts as an aquitard. The conceptual model report (Jones and others, 2012) describes the physical features, occurrence of groundwater, groundwater flow conditions, and groundwater usage in the Seymour Aquifer in the model area.

The 2004 regional groundwater availability model of the Seymour and Blaine aquifers identified some areas of improvement for a future model of the Seymour Aquifer (Ewing and others, 2004). Specifically, the report identified the aquifer “pod” in Haskell, southern Knox, and western Baylor counties as a prime candidate for a refined model due to the large groundwater pumping when compared to the other “pods” of the Seymour Aquifer. As a result, the TWDB contracted the development of a refined conceptual model for the focused area (Jones and others, 2012) to precede the construction of a refined numerical groundwater flow model. This refined conceptual model, the previous modeling study (Ewing and others, 2004), and additional data from the Rolling Plains GCD were then used to develop this refined groundwater availability model.

This refined GAM was developed using the U.S. Geological Survey 3-dimensional numerical code MODFLOW-2000 (Version 1.19.01) (Harbaugh and others, 2000). The model has finer model grids (660 by 660 feet in the refined GAM versus 5280 by 5280 feet in the previous model) and finer temporal scale (monthly stress periods from 1980 to 2005). The finer temporal scale allows the Rolling Plains GCD to evaluate the aquifer response to seasonal changes of groundwater recharge and pumping. The Rolling Plains GCD can use the refined conceptual model and the refined GAM to develop the desired future conditions and to evaluate the groundwater availability in this portion of the Seymour Aquifer.

This technical report summarizes the development, construction, calibration, and sensitivity analysis of the refined GAM.

2. MODEL OVERVIEW

The refined GAM for the Seymour Aquifer in Haskell, southern Knox, and western Baylor counties (Figure 1) was based on the refined conceptual model (Jones and others, 2012), the previous modeling study (Ewing and others, 2004) and additional data from the Rolling Plains GCD. The report for the regional GAM (Ewing and others, 2004) describes the main elements of the regional groundwater availability model and the following paragraphs identify those features that were revised or modified in this refined model to account for additional data and changes in the calibration of the model.

During the development of the refined GAM, the refined conceptual model by Jones and others (2012) (Figure 2) was further revised with regards to no-flow boundaries and interaction with the Brazos River (Figure 3). In comparison with the 2004 GAM, the no-flow boundary for the refined GAM was moved outward to cover most of the Seymour Aquifer in those three counties. The refined GAM also applied drains to simulate groundwater seeps from the Seymour Aquifer to the Brazos River where the river is not in direct contact with the aquifer.

The refined GAM was calibrated to measured water levels at wells and flux value along a segment of the Brazos River in Baylor County. In addition, the model was qualitatively calibrated to regional groundwater flow pattern documented in the conceptual model report (Jones and others, 2012). During the model calibration, hydraulic conductivity, anisotropy, recharge, drain conductance, and pumping were adjusted using BeoPEST (Schreuder, 2009) and by the trial-and-error method. The model calibration was expedited by incorporating pre- and post-processors in the model batch file and by parallelizing model runs on a computer cluster running ROCKS Linux (San Diego Supercomputing Center, 2010). BeoPEST is a special version of the parameter estimate program PEST (Watermark Numerical Computing, 2005). Post-processing programs were also developed to further process the model-generated results to produce hydrographs. The flow budget was calculated using the U.S.G.S. code ZONEBUDGET (Version 3.01) (Harbaugh, 1990).

The groundwater availability model input and output packages, conforming to the MODFLOW-2000 code, are listed in Tables 1 and 2. These files are contained in a MODFLOW name file with unique integer identifiers. To run the model, MODFLOW calls the name file, symr_hkb.nam. The packages are discussed in detail in the following paragraphs.

2.1 Basic (BAS6) Package

The Basic package specifies the status of each cell (active or inactive), the assigned head for inactive cells (-9999), and specifications of starting heads for the active cells. Active cells are those cells within the aquifer boundary and, consequently, the cells outside the aquifer boundary were labeled as inactive (Figure 4).

2.2 Discretization (DIS) Package

The Discretization package defines the spatial and temporal discretization of the model, including the numbers of layers, rows, columns, stress periods, time and length units,

horizontal dimensions of model cells, the top and bottom elevations of model layer, and length of each stress period.

The MODFLOW-2000 model contains one numerical layer with 249 uniform rows and 470 uniform columns, with a row and column spacing of 660 feet (0.125 miles). The numerical layer represents the Seymour Aquifer in Haskell, southern Knox, and western Baylor counties. The model domain covers an area of approximately 31 miles by 59 miles (Figure 4). The grid was rotated clockwise by 47 degrees so that the rows and columns are consistent with the dominant groundwater flow directions described in the conceptual model. The layer top (Figure 5) was defined by averaging a digital elevation model (U.S. Geological Survey, 2012), and the layer bottom (Figure 6) was defined by kriging interpolation of datasets from the TWDB groundwater database and Rolling Plains GCD.

The temporal discretization includes one steady-state stress period (stress period 1) and 342 transient stress periods (stress periods 2 through 343). Stress periods 2 through 31 are one year (365 days) long with one time step and represent the timeframe of 1950 through 1979. The simulation period begins in 1950 due to a significant number of water level measurements from that period through 1980. Approximately two-thirds of all water-level measurements used in the calibration were collected prior to 1980. Stress periods 32 through 343 are one month long (30 days) with one time step and represent the timeframe of 1980 through 2005. The longer calibration time will enhance the reliability of the model predictions, especially when the calibrated model is used for 50- or 60-year predictive simulations. The steady state period is used to produce initial heads (water levels) for the transient stress periods, and is not intended to represent actual “pre-development” conditions.

2.3 Layer-Property Flow (LPF) Package

The Layer-Property Flow package contains the assignment of layer type, flags for cell-by-cell flow output, and data for hydraulic conductivity, anisotropy, and storativity/specific storage.

Thin portions of the Seymour aquifer may become dry during model runs and cause numerical instability. To minimize this numerical instability, the model layer type was set to zero, which assumes a constant transmissivity condition throughout the simulation to prevent cells converting to dry. As a result, the only storage value required is the specific storage (S_s).

In this model, hydraulic conductivity (K_x), S_s, and horizontal anisotropy (ANI) values are assigned on a cell-by-cell basis. K_x and ANI values are used to estimate the aquifer transmissivity values along model rows and columns.

The K_x values were estimated using 825 pilot points and ANI values were estimated using 226 pilot points. The pilot points were distributed throughout the active model domain with higher density around locations of head targets and areas of interests. Estimating parameters using pilot points has recently seen wider adoption in groundwater modeling (Doherty and others, 2010). Research by Jones and others (2012) suggests high K_x values and high spatial variability based on county reports data. The use of pilot points helped the model to catch the spatial variation of the aquifer properties. The S_s values were estimated assuming a constant storativity of 0.13 and a fully saturated aquifer. During the calibration, the parameter upper and lower bounds were set based on assumed ranges of values. Estimates of

these parameters were then refined through calibration with PEST. Specific details about the calibration are provided in the **Model Calibration and Results** section below. The distribution of horizontal hydraulic conductivity in the calibrated model is presented in Figure 7. The geometric mean of K_x is approximately 57 feet per day. Figure 8 represents the anisotropy values of the aquifer (the hydraulic conductivity along model columns to hydraulic conductivity along model rows). Figure 9 shows the distribution of specific storage. Both hydraulic conductivity and storativity values are consistent with the aquifer materials (gravels with sand, silt, and clay) and aquifer type (water table or unconfined aquifer). The aquifer anisotropy values are also consistent with the deposition environment and soil texture.

2.4 Well (WEL) Package

The Well package contains groundwater pumping information from the aquifer. The pumping data were based on TWDB Water Use Survey database and TWDB estimates of irrigation use. For this portion of the Seymour Aquifer, pumping is primarily for irrigation purposes.

Irrigation pumping estimates prior to 1984 were issued every five to six years and yearly from 1984 on. Because irrigation pumping estimates are generally sparse and contain considerable uncertainty, the pumping was adjusted during the model calibration using PEST. For monthly stress periods 32 through 343, pumping follows a crop development curve, with rates increasing in spring and through the summer, and then decreasing into winter. Annual simulated pumping rates for the model area are presented in Table 3.

2.5 Drain (DRN) Package

The Drain package was used to simulate groundwater discharge at springs, seeps, wetlands, and creeks. Due to the quasi dome-like appearance of the aquifer overlying the less permeable Clear Fork Formation, it was assumed water seeps out on the perimeter of the aquifer and lowland areas. The locations of drains are shown in Figure 10.

The head of drain cells was set as the minimum elevation from the digital elevation model (DEM). The conductance of the drain cells was adjusted during the model calibration but remained constant through all stress periods. The calibration result and drain flow budget through time are presented in the **Model Calibration and Results** section below.

2.6 River (RIV) Package

The River package was used to simulate the interaction of the aquifer with the Brazos River. The river bottom was set as the minimum DEM value in the model cell, but not below the bottom of the aquifer, and the river levels were set two feet above the river bottoms based on river gauge data. During the model calibration, the conductance of river cells was adjusted to quantitatively match the simulated to the measured river flux (Preston, 1978). The locations of the river cells in the model are shown in Figure 10. The calibration result and river flow budget through time are presented in the **Model Calibration and Results** section below.

2.7 Recharge (RCH) Package

The Recharge package is used to simulate inflow to the aquifer due to precipitation and return flow from irrigation. The groundwater recharge due to precipitation was based on a revised algorithm developed by Maxey and Eakin (1949). The procedure includes calculating adjusted annual precipitation, annual recharge, and monthly recharge using equations 2.1, 2.2, and 2.3, respectively.

$$\text{Rainfall} = \text{damp} * \text{AAP} + (1 - \text{damp}) * \text{Prcp} \quad (2.1)$$

where:

Rainfall = Adjusted annual precipitation

AAP = Average annual precipitation

Prcp = Actual measured annual precipitation (PRISM Climate Group, 2005)

damp = Overall dampening factor

$$\text{Annual Recharge} = \text{Rainfall} * \text{rfact} \quad (2.2)$$

$$\text{Monthly Recharge} = \text{Rainfall} * \frac{\text{MoPrcp}}{\text{Prcp}} * \text{rfact} \quad (2.3)$$

where:

Annual Recharge = Recharge for annual stress periods expressed in feet per day

Monthly Recharge = Recharge for monthly stress periods expressed in feet per day

MoPrcp = Actual measured monthly precipitation (PRISM Climate Group, 2005)

rfact = Recharge factor as a percentage.

The dampening factor controls the effect of precipitation on recharge. A dampening factor of one (1) causes no recharge variation due to annual precipitation change. Conversely, a dampening factor of zero (0) results in recharge variation that matches annual precipitation change. In calibration, the dampening factor was very small suggesting the aquifer responds relatively quickly to precipitation. This is consistent with the nature of the Seymour Aquifer which is shallow, permeable, and unconfined.

Initially, the recharge distribution was based on surface geology zoning. After an initial calibration phase, the water level target response was evaluated and targets were grouped into zones of similar response. The latter zones were intersected with the former zones for a better control of the recharge distribution.

A pre-processor written in FORTRAN was used to calculate the groundwater recharge due to precipitation and return flow related to irrigation. The pre-processor reads in data from four files representing recharge zones, irrigation zones, annual and monthly precipitation (PRISM Climate Group, 2005), pumping, and recharge factors. The recharge parameters and their bounds were all user-defined and adjusted during the model calibration. Where monthly

precipitation was less than half an inch recharge from precipitation was considered to be zero; however, recharge due to irrigation pumping return flow was allowed to occur. Also, the total recharge rates were capped at five inches per year in irrigation areas. Model cells that have been identified as irrigation cells contribute a percentage of pumping to the above recharge values ranging from five to twenty percent.

The calibrated recharge rates (Figure 11) vary spatially and temporally, with an overall average of approximately 3.2 inches per year across the entire model domain which is within the range of values documented by Jones and others (2012). These values range in average from 0.7 inches per year from the chloride mass balance method to 3.5 inches per year based on long-term, water-table fluctuation method. The recharge budget and calibration result are presented in the **Model Calibration and Results** section below.

2.8 Output Control (OC) Package

The Output Control package specifies when and what model outputs to be stored in files during the model run. It is a standard package required for all MODFLOW models. The output control file for this model was set up to output head, drawdown, and budget information at the end of each stress period.

2.9 Geometric Multigrid (GMG) Solver Package

MODFLOW requires the use of a solver to solve the finite difference equations that govern groundwater flow. This MODFLOW-2000 model uses the Geometric Multigrid (GMG) solver developed by Wilson and Naff (2004). The solver uses 0.01 feet residual convergence and 0.01 feet head change convergence criteria. In addition, through experimentation, it was found that the model runs faster and produces the same results when no coarsening is applied (ISC = 4 in the solver). This effectively turns the GMG solver into a PCG2 solver (Wilson and Naff, 2004). Evaluation of mass balance for each stress period and cumulative discrepancy between total inflows and outflows indicated negligible numerical errors with this solver setup.

3. MODEL CALIBRATION AND RESULTS

3.1 Calibration Procedure

The calibration of a groundwater flow model involves adjusting certain model parameters, within a reasonable range, to match the simulated to measured values or observed patterns. A calibrated groundwater flow model is an effective tool that can be used to test hypothesis and future conditions.

The primary targets for the calibration included 2,949 water levels measured at 864 wells and one flux measurement at the Brazos River in Baylor County (Preston, 1978). Artificial water levels were also used in areas where the aquifer is very thin with little or no pumping. The control points were used to make sure the model reflect the realistic water level in the area. These artificial targets received a smaller weight during the calibration process compared to actual measured water levels.

During the model calibration, the following parameters were adjusted: hydraulic conductivity, anisotropy, drain conductance, river conductance, recharge, and pumping. Initially, trial-and-error method was employed to obtain some reasonable parameter bounds based on published literature. After initial runs were completed and the model was stable, PEST (Watermark Numerical Computing, 2005; Schreuder, 2009) was used to expedite the calibration process on a computer cluster. At times, based on parameter behavior and model results, bounds were adjusted and/or pre-processor algorithms were revised. This process was repeated until the model matched the measured values and generated flow patterns consistent with the conceptual understanding of groundwater flows (Jones and others, 2012).

3.2 Model Simulated versus Measured Heads

The primary calibration target was measured water levels. Figure 12 shows the spatial distribution and average magnitude of residuals. Figure 13 shows the model simulated versus measured heads and related statistical analysis summary. Figure 14 shows the residuals versus measured heads. Overall, the plots suggest a good agreement between the simulated heads and measured heads. That agreement is reinforced by Figure 15, which shows an approximately normal distribution of the residuals. Table A-1 of Appendix A includes details of measured and simulated water levels for wells used in the calibration process.

The ratio of standard deviation of residuals over the range of measured heads is 0.2 percent, well within the 10 percent maximum required by the Groundwater Availability Modeling Program. The calibrated model also reasonably replicated the regional groundwater flow pattern (Figure 16 versus Figure 17) and the seasonal water level changes at state well 2135702, state well 2142201, and state well 2142409 (Appendix B).

3.3 Model Simulated versus Measured River Flux

Based on one round of measurements in February 1970, the Brazos River gained groundwater at a rate of approximately 3,000 acre-feet per year from a portion of the Seymour Aquifer in Baylor County (Preston, 1978). This river flux value received relatively low weight during the model calibration. The calibration results indicated that the model was also well calibrated to

the measured river flux (Table 4); however, no conclusion should be drawn with respect to the model's ability to accurately simulate aquifer interaction with the river due to insufficient data.

3.4 Model Simulated Water Budgets

The simulated water budget was also used to verify if the model simulates regional groundwater flow consistent with our conceptual understanding of the regional geology, hydrogeology, and surface water hydrology. Simulated water budgets also help identify various anomalies not immediately apparent when analyzing only water levels. Further, zoning of the water budget can highlight any area that may be suffering of high model error. Model errors represent discrepancies between inflows and outflows to and from the aquifer system. A balanced water budget will have minimal errors, less than one percent.

Groundwater budgets are developed by quantifying all inflows and outflows to and from an aquifer system, and the system's storage change over a specified period of time. The water budget can be subdivided and further used in various planning processes.

The overall water budget for this groundwater flow model includes the following components: river leakage, recharge, springs, seeps, wetlands, pumping, and storage change. Inflow and outflow components represent those contributing groundwater to or taking groundwater away from the aquifer in the model domain, respectively. As shown in Table 4, the groundwater inflow is from recharge due to precipitation and return flow in irrigation areas. The outflow components are primarily dominated by groundwater pumping and flow to springs, seeps, and wetlands where groundwater table intercepts the ground surface. The majority of the groundwater reaching the ground surface is expected to be lost due to evapotranspiration which leaves only minor discharge to the Brazos River. Please note the small differences between tables 4 and 5 are due to the slivers of the aquifer located in Stonewall County excluded in Table 5. Table 5 summarizes the water budget for the portion of the aquifer located in the current boundaries of the Rolling Plains GCD, excluding the island located in the northern portion of Knox County, which was not included in this model.

4. SENSITIVITY ANALYSIS

Following the model calibration a sensitivity analysis was performed to evaluate the model behavior as a result of altering the parameters. This process helps determine if reasonable variations of the estimated parameters result in behavior consistent with the conceptual and calibrated model.

4.1 Procedure of Sensitivity Analysis

During the sensitivity analysis the following parameters: hydraulic conductivity along rows, horizontal anisotropy, drain conductance, recharge, and pumping were adjusted by the following factors: 0.5, 0.8, 1.0, 1.5, and 2.0. While varying one parameter, all others were kept at their calibrated values except recharge due to irrigation return flow which was adjusted when pumping was varied. Section 2.7 discusses implementation of recharge and irrigation return flow as recharge. Thus, whenever pumping is varied, the recharge due to irrigation return flow is similarly varied.

4.2 Results of Sensitivity Analysis

Figure 18 summarizes the sensitivity analysis results. As shown in Figure 18, the model is very sensitive to recharge and pumping and only slightly sensitive to the other parameters. For example, doubling the recharge increases the simulated water levels by an average of approximately 40 feet. Reducing the recharge by half decreases the simulated water levels by an average of over 70 feet. Doubling the pumping would also decrease the simulated water levels by an average of about 80 feet.

4.3 Correlation between Pumping, Precipitation, and Recharge

The results of the sensitivity analysis revealed that the model is highly sensitive to recharge and pumping. Because recharge and pumping, specifically the irrigation pumping, are thought to be correlated, further analysis of this potential correlation was conducted.

Because groundwater withdrawal is largely related to agriculture, pumping is expected to negatively correlate to precipitation and, consequently, to recharge to the aquifer. As a result, groundwater pumping is usually higher in dry years than in wet years. The correlation between groundwater pumping and precipitation is presented in Figure 19. Figure 19 suggests two different clusters of correlation: (1) one where estimated pumping is generally lower than the average pumping and (2) the other where estimated pumping is generally higher than the average pumping but within the same precipitation range as the first cluster. One may conclude that for years in the second cluster, precipitation occurred largely outside the growing season or that crop rotation introduced additional water requirements.

The overall correlation between simulated pumping, groundwater recharge, and precipitation is presented in Table 6. Table 6 shows a strong and positive correlation between the groundwater recharge and precipitation, and a moderate but negative correlation between the groundwater pumping and groundwater recharge or precipitation.

5. MODEL LIMITATIONS

Numerical groundwater flow models are approximations of aquifer systems (Anderson and Woessner, 2002). Similar to analytical models, numerical models require some assumptions and have some limitations. These limitations are usually associated with the purpose for the groundwater flow models, our extent of understanding the aquifer(s), the quantity and quality of data needed to constrain parameters in the groundwater flow models, and assumptions made during model development. Models are best viewed as tools to help form decisions rather than as machines to generate truth or make decisions. The National Research Council (2007) concluded that scientific advances will never make it possible to build a perfect model that accounts for every aspect of reality or be able to prove that a given model is correct in all respects for a particular application.

The nature of regional groundwater flow models affects the scale of application of the model. This model is most accurate in assessing larger regional-scale groundwater issues, such as predicting aquifer-wide water-level changes and trends over the next 50 years that may result from different proposed water management strategies. Accuracy and applicability of the model decreases when using it to address more local-scale issues because of limitations of the information used in model construction and the model cell size that determines spatial resolution of the model. Consequently, this model is not likely to accurately predict water-level declines associated with a single well or spring because (1) these water-level declines depend on site-specific hydrologic properties not included in detail in regional-scale models, and (2) the cell size used in the model is too large to resolve changes in water levels that occur over relatively short distances. Addressing local-scale issues requires a more detailed model, with local estimates of hydrologic properties, or an analytical model. This model is more useful in determining the impacts of groups of wells distributed over many square miles. The model predicts changes in ambient water levels rather than actual water level changes at specific locations, such as an individual well.

Several input parameters for the model are based on limited information. These include groundwater recharge, pumping estimates, drain and river conductance, river level, hydraulic conductivity, and storativity. The sensitivity analysis revealed the model is very sensitive to recharge and pumping. As such, uncertainty in the magnitude and distribution of these two driving parameters may have been carried over and quite possibly magnified during the model calibration. This becomes important as models become tools for prediction. As pointed out by Moore and Doherty (2006) and Doherty and others (2010), “model predictions made based on the calibrated parameter set are [not] necessarily “right” or even “likely;” only that their potential for wrongness has been minimized.”

6. FUTURE IMPROVEMENTS

To use models to predict future conditions requires a commitment to improve the model as new data becomes available or when modeling assumptions or implementation issues change. All models developed for the Groundwater Availability Modeling Program have this commitment. Through the modeling process and sensitivity analysis, the modeler generally learns what can be done to improve the model's performance or what data would help better constrain the model calibration. Future improvements to the model are discussed below.

6.1 Additional Supporting Data

Several types of data could be collected to better support future enhancement of the model. These include recharge studies, irrigation return-flow studies, pumping schedules per month, and monitoring of spring discharge.

6.2 Future Model Implementation Improvements

The ground topography suggests two potential areas of improvement. Firstly, the aquifer boundary could be refined to better approximate the drop-off occurring at the edge of the aquifer. This is considered to be important due to the magnitude of flow that seeps out on the perimeter of the aquifer. Secondly, the model water budget suggests that the groundwater in the Seymour Aquifer directly interacts with and discharges to the Brazos River in Baylor County and eastern Knox County. In the rest of the modeled area, the Brazos River is not in direct contact with the aquifer. However, the river still receives water from the Seymour Aquifer by seepage. As a result, the whole Brazos River in the modeled area may be better simulated using MODFLOW drain boundary. The disadvantage to use MODFLOW river boundary is that it may act as an unrealistic water source to pumping in the aquifer during predictive simulation.

Another potential improvement would be to identify areas where the Seymour Aquifer does not produce much groundwater. These areas could be either eliminated from the aquifer delineation or inactivated in the numerical model.

7. SUMMARY AND CONCLUSIONS

This report documents a three-dimensional MODFLOW-2000 groundwater flow model developed for a portion of the Seymour Aquifer according to the groundwater availability model standards defined by the TWDB. Specifically, this refined model is for the Seymour Aquifer in Haskell, southern Knox, and western Baylor counties. The refined model addresses a key recommendation of the original regional groundwater availability model for the Seymour and Blaine aquifers (Ewing and others, 2004).

The purpose of this modeling activity is to provide a calibrated numerical model that can be used to evaluate the regional groundwater availability and the effects of water management strategies of the Seymour Aquifer in selected counties. This modeling tool will benefit a variety of people interested in groundwater management, including the TWDB, Regional Water Planning Groups (B and G), the Rolling Plains Groundwater Conservation district, and Groundwater Management Area 6.

The Seymour Aquifer GAM in those selected counties was developed using a modeling protocol that is standard to the groundwater model industry. This protocol includes: (1) development of a refined conceptual model for groundwater flow in the aquifer (previous study by Jones and others (2012)), (2) model design, (3) model calibration, (4) sensitivity analysis, and (5) reporting.

This groundwater availability model covers an area of approximately 1,800 square miles in Haskell, Knox, and Baylor counties. The transient model was calibrated from 1950 to 2005 to the water levels collected at wells using a combination of annual and monthly stress periods. The well hydrographs and calibration statistics suggest a reasonable match between measured and simulated water levels. The calibrated model also replicated the groundwater discharge from the Seymour Aquifer to the Brazos River over a small portion in Baylor County.

After the calibration, several model parameters were independently varied to assess model sensitivity to these parameters. The sensitivity analysis indicated the model being most sensitive to variations in pumping and recharge. Consequently, future revisions or new models of the Seymour Aquifer should focus on better estimates of recharge and pumping.

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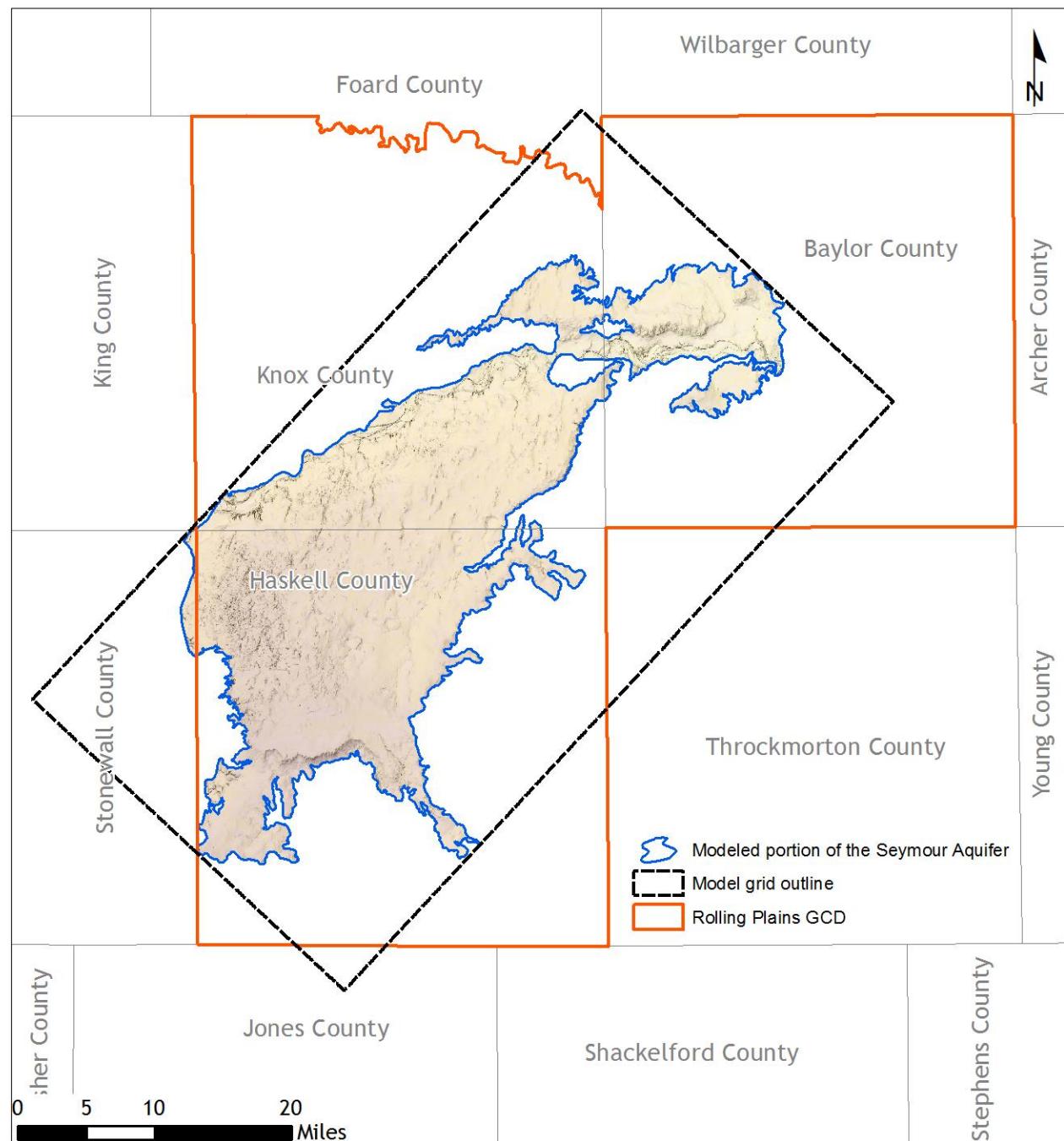


Figure 1. Distribution of the Seymour Aquifer "pod" in Haskell, southern Knox, and western Baylor counties, Rolling Plains Groundwater Conservation District, and the model grid outline.

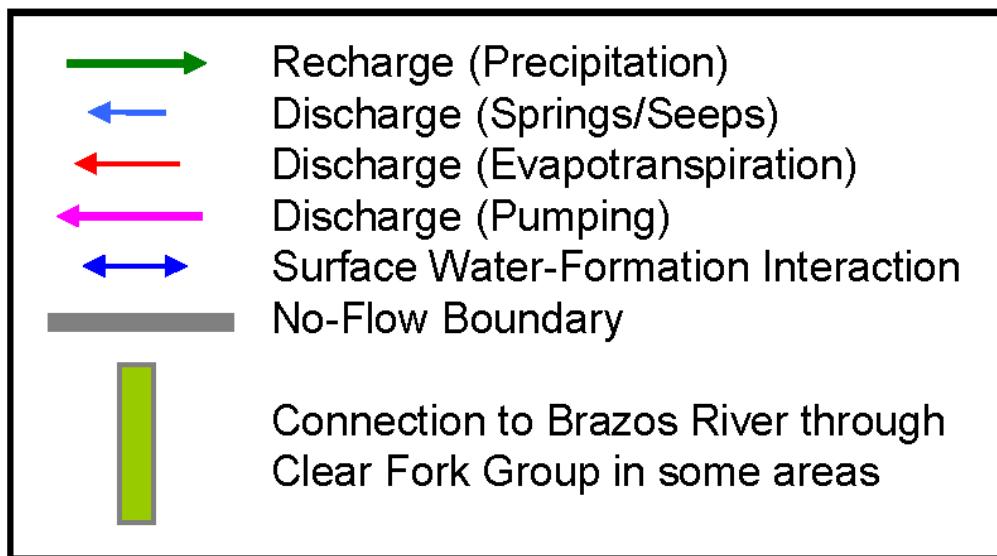
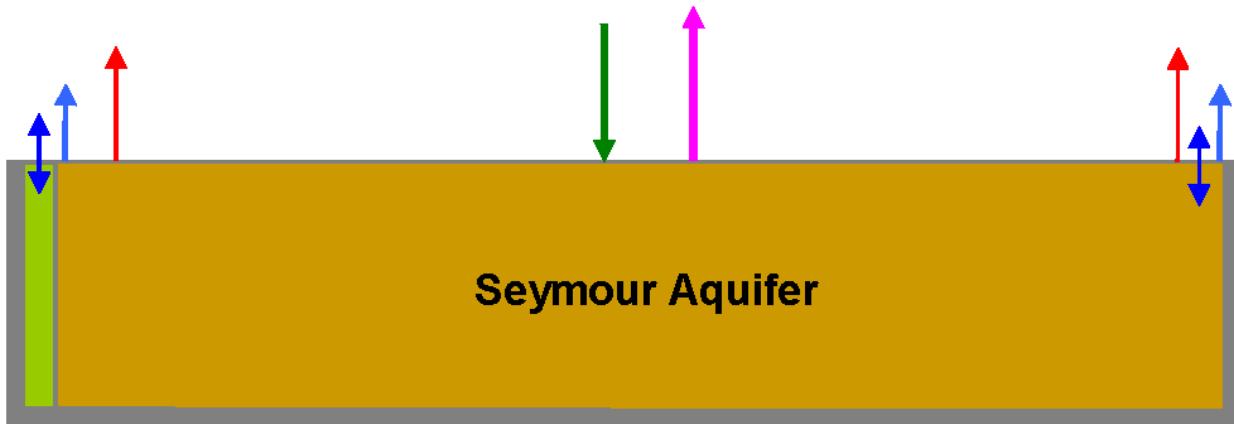


Figure 2. Conceptual groundwater flow model (after Jones and others, 2012).

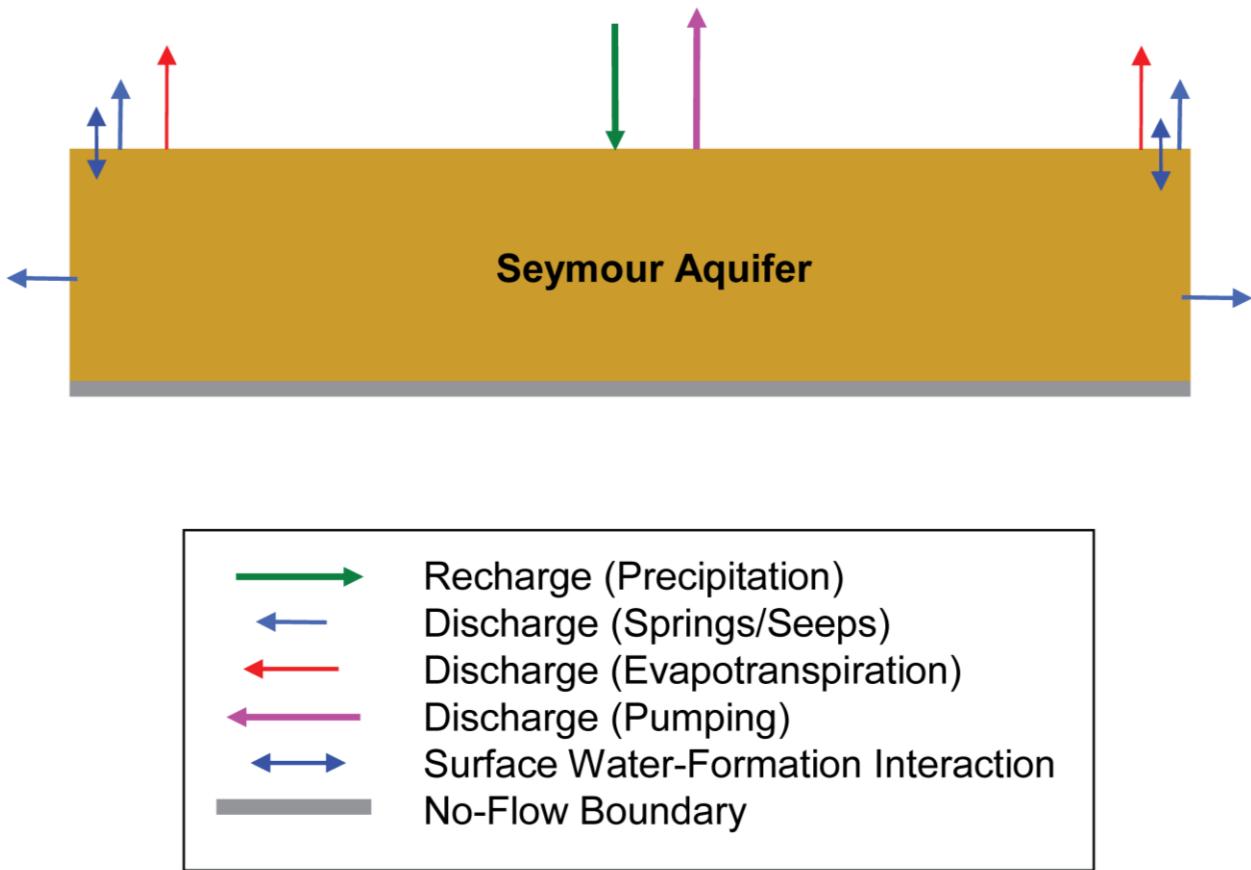


Figure 3. Modified conceptual groundwater flow model.

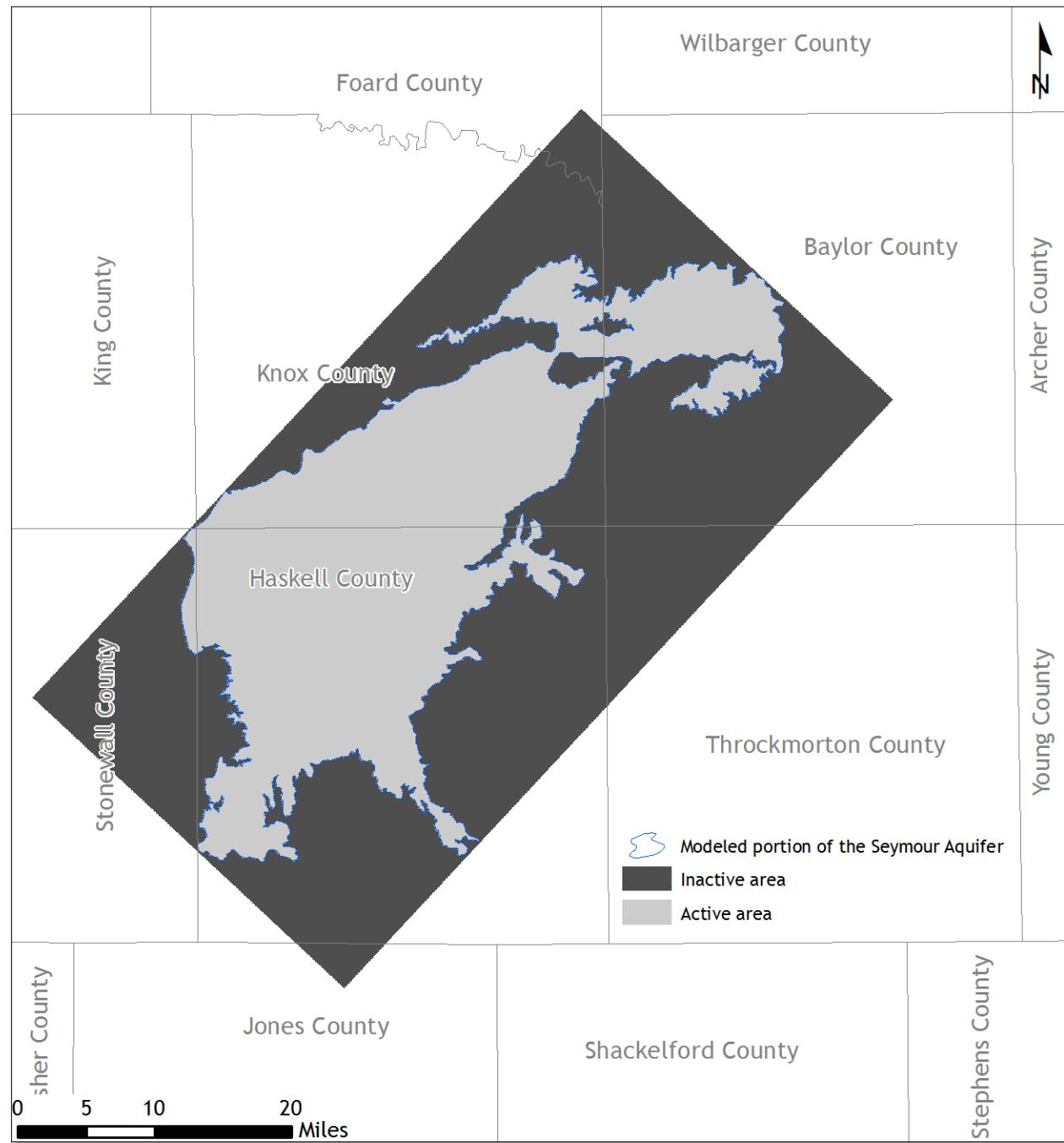


Figure 4. Active and inactive areas of the numerical model.

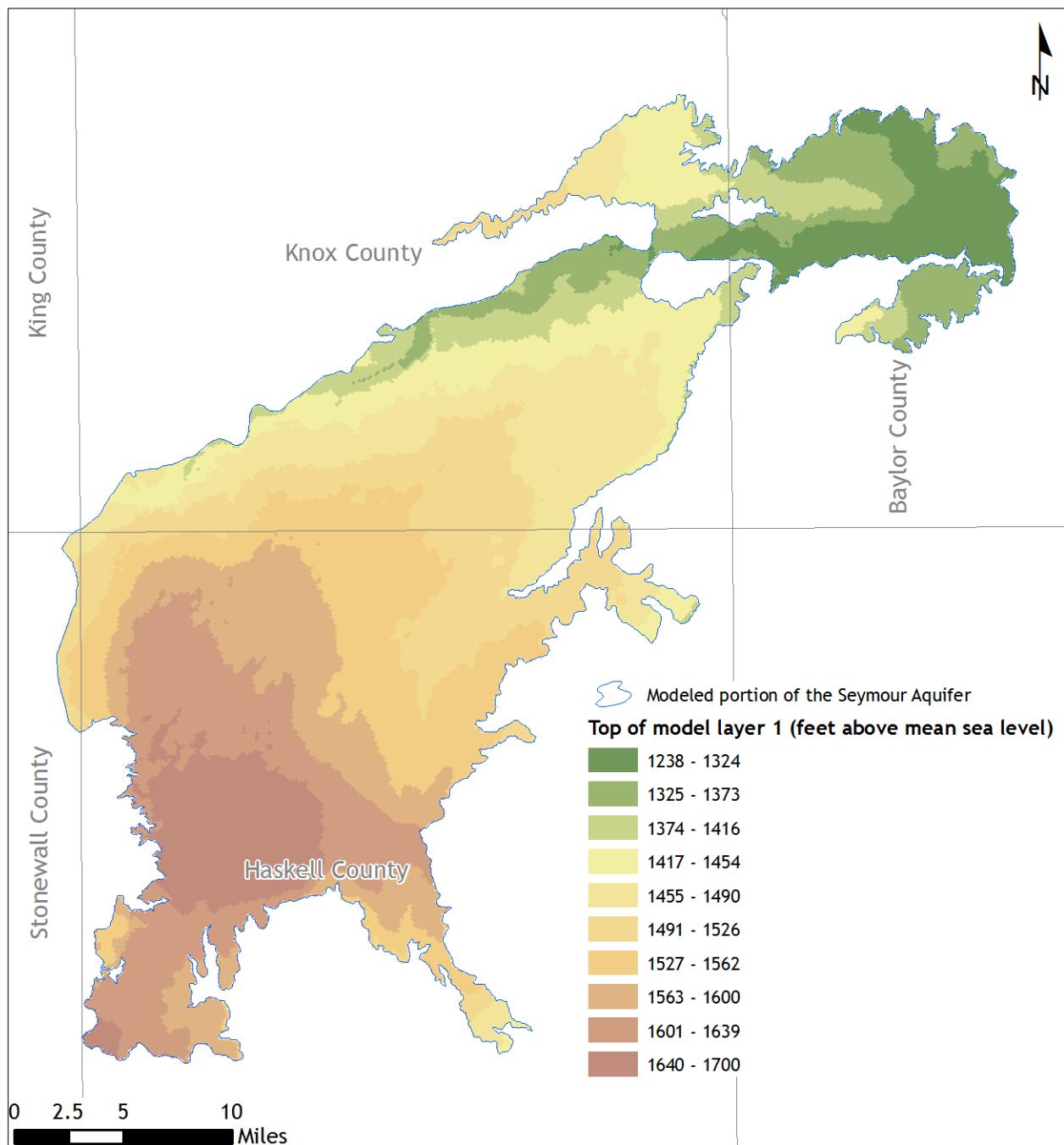


Figure 5. Top elevation of model layer 1.

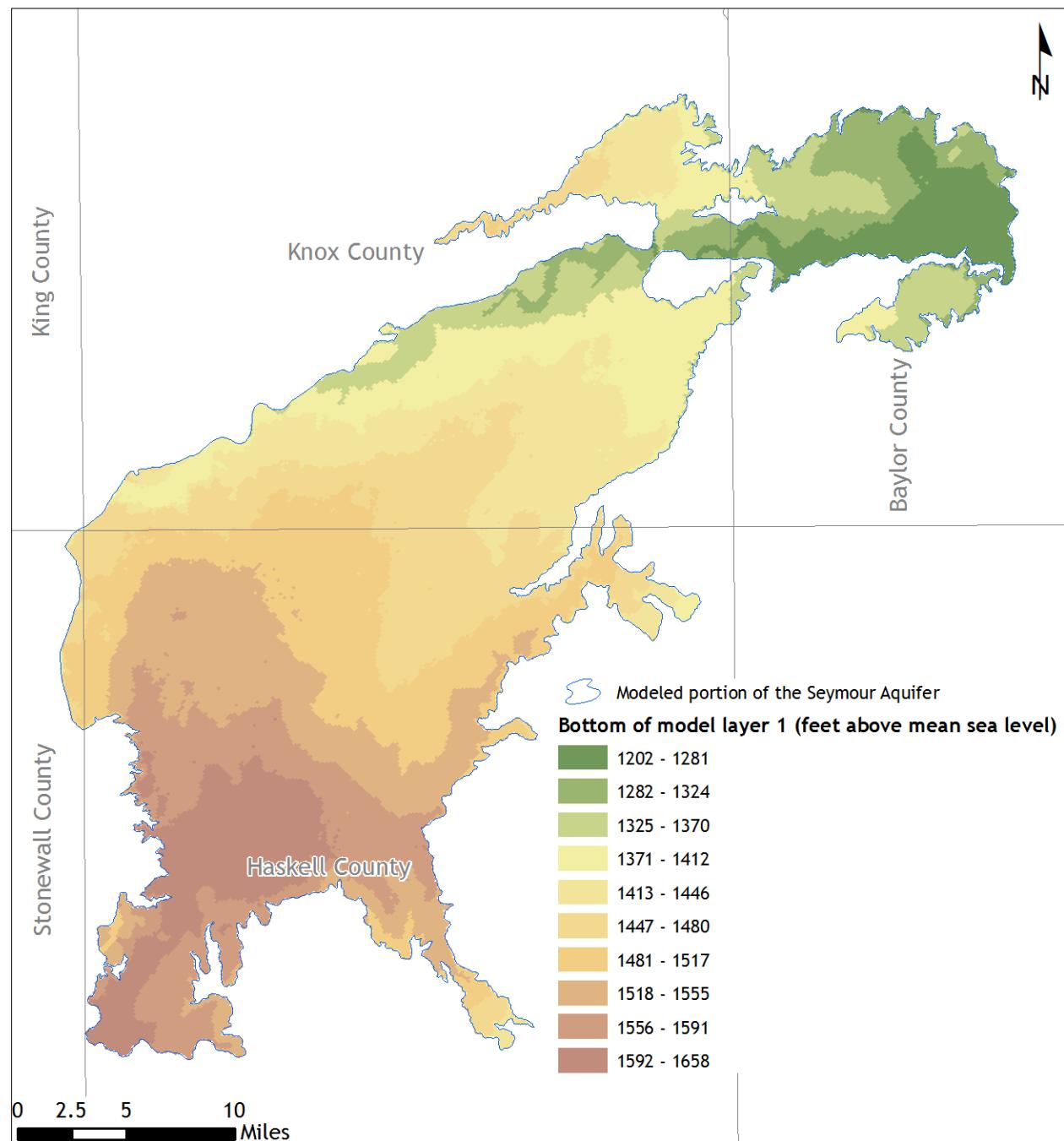


Figure 6. Bottom elevation of model layer 1.

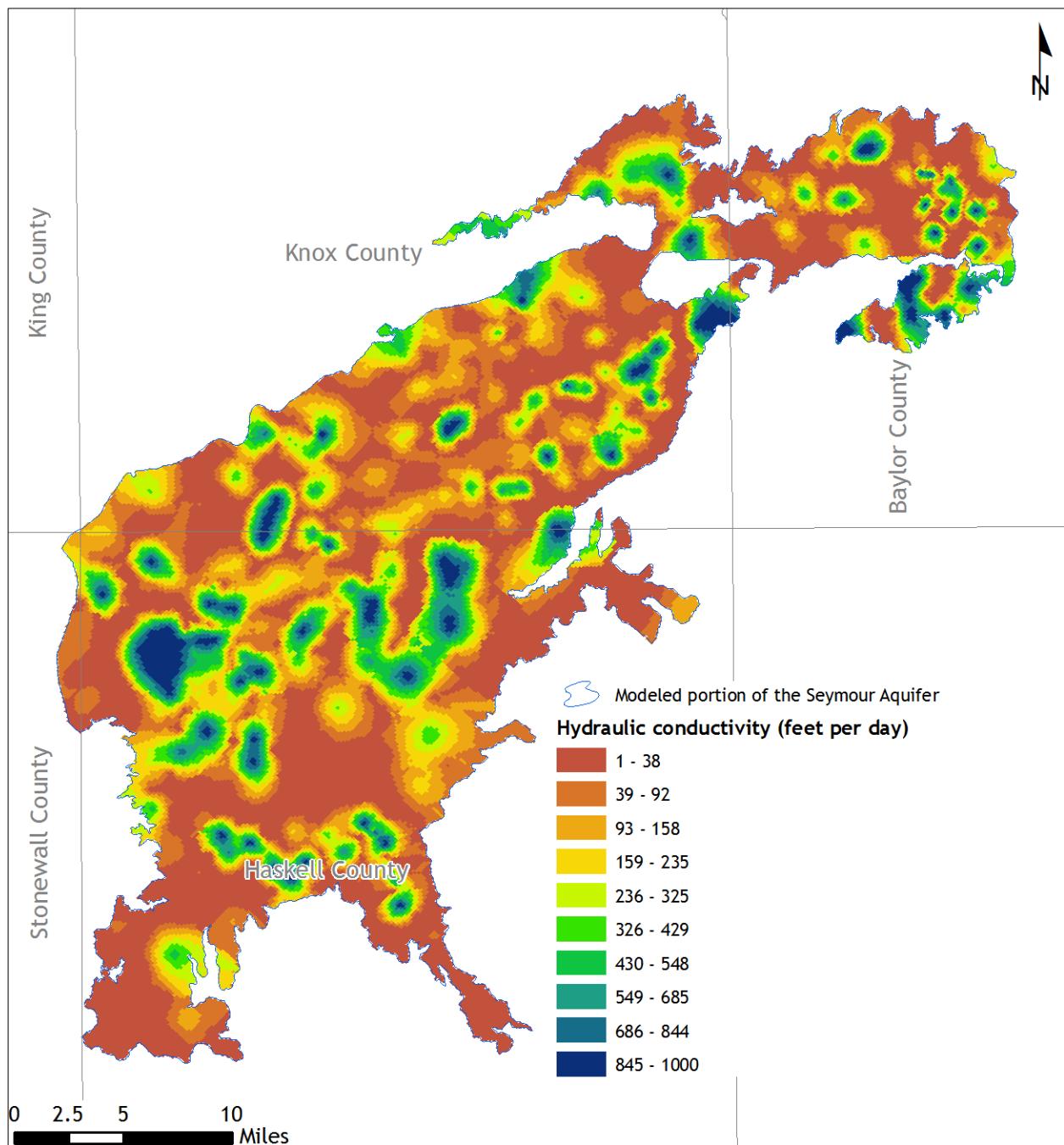


Figure 7. Distribution of calibrated horizontal hydraulic conductivity.

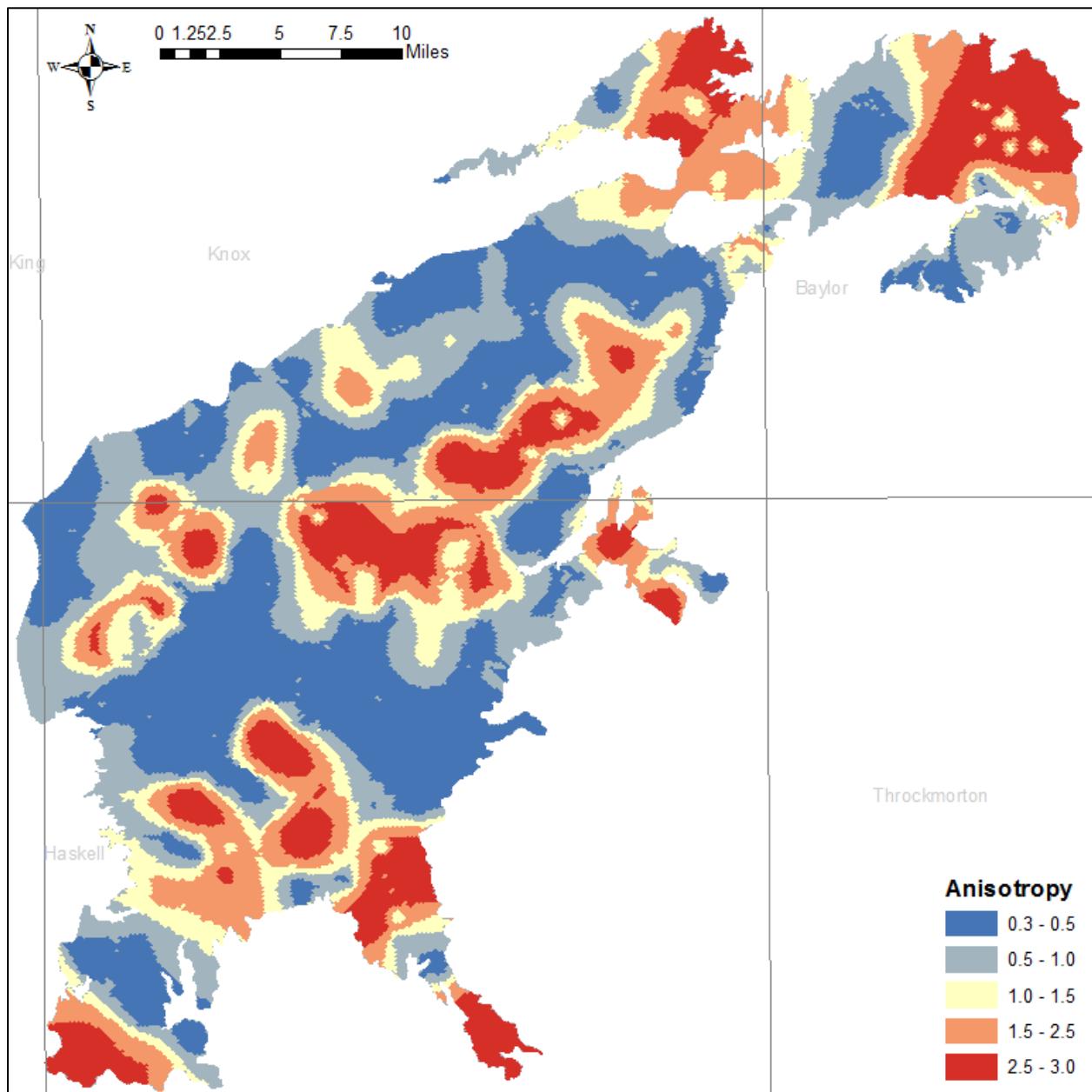


Figure 8. Distribution of calibrated anisotropy.

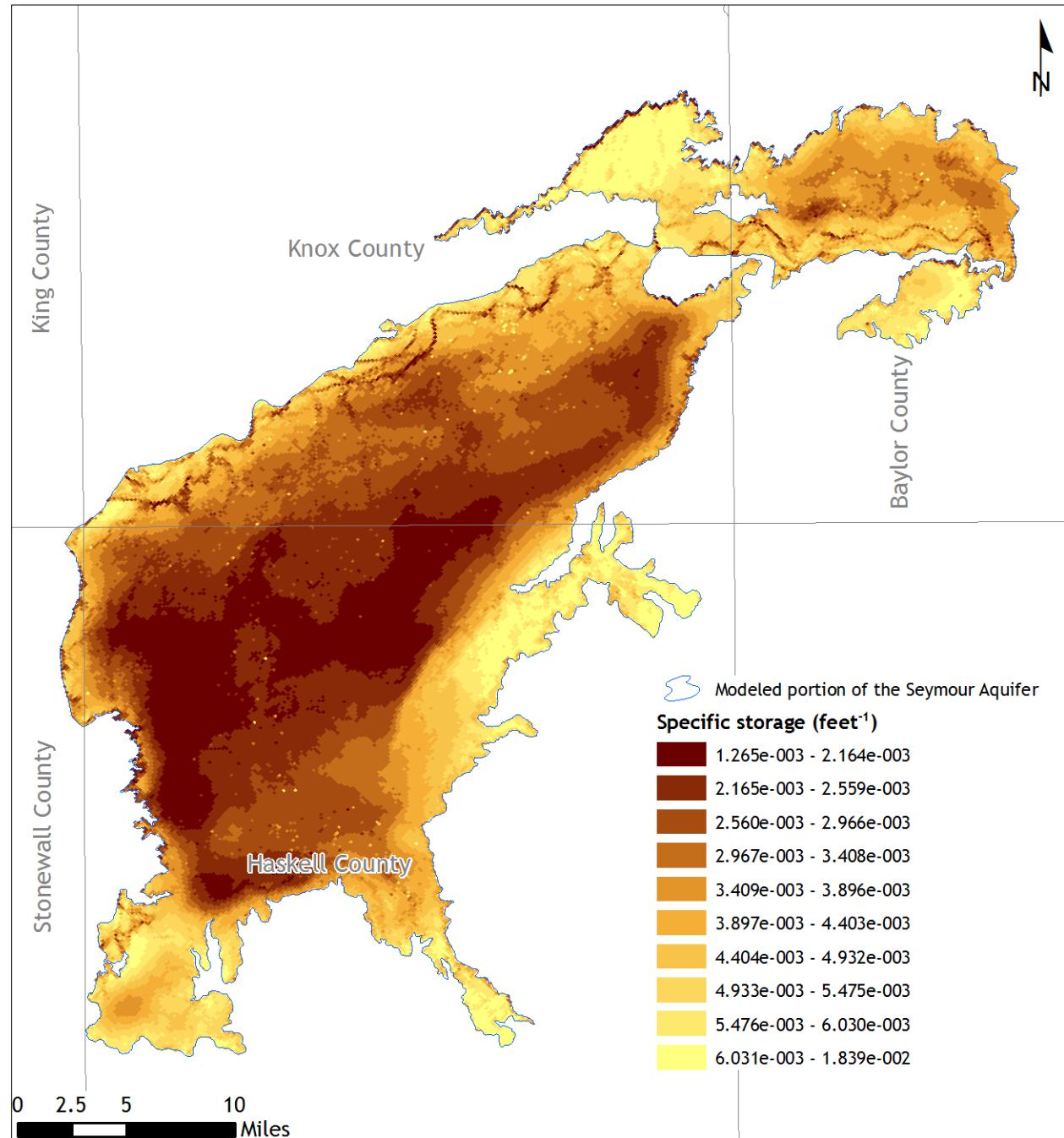


Figure 9. Distribution of calibrated specific storage. Smaller numbers represent thicker aquifer.

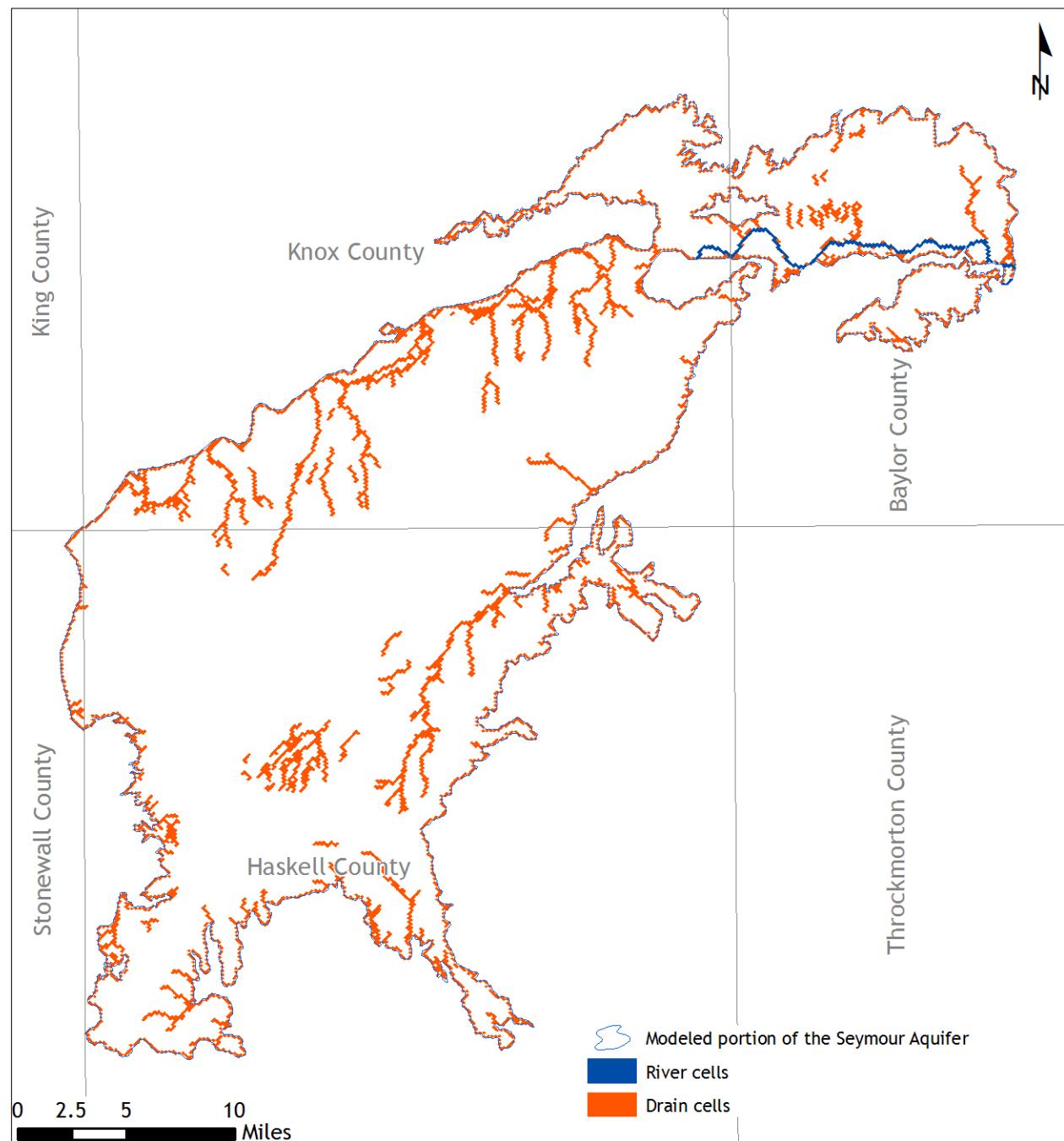


Figure 10. Distribution of drain and river cells.

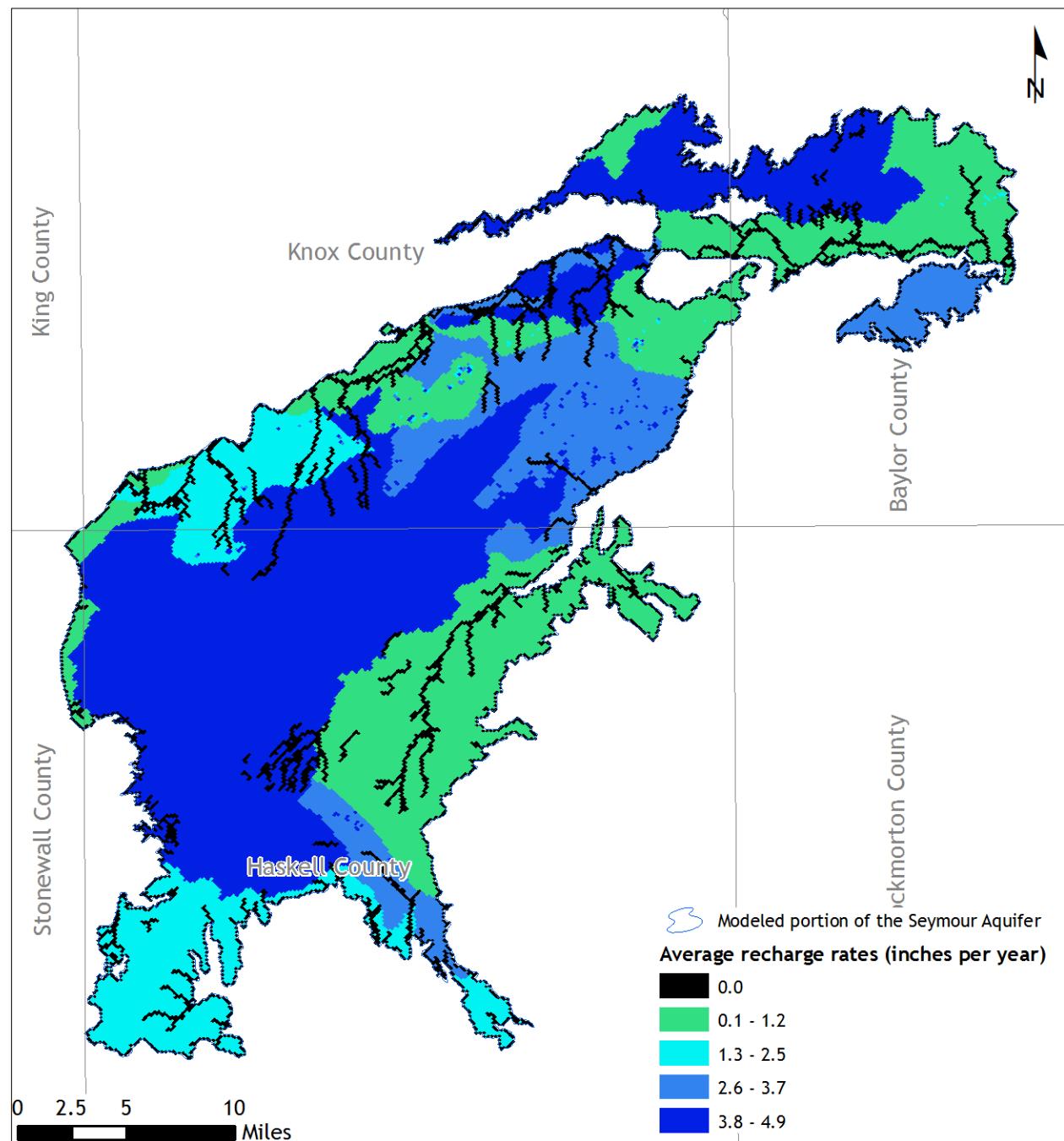


Figure 11. Spatial distribution of calibrated average recharge.

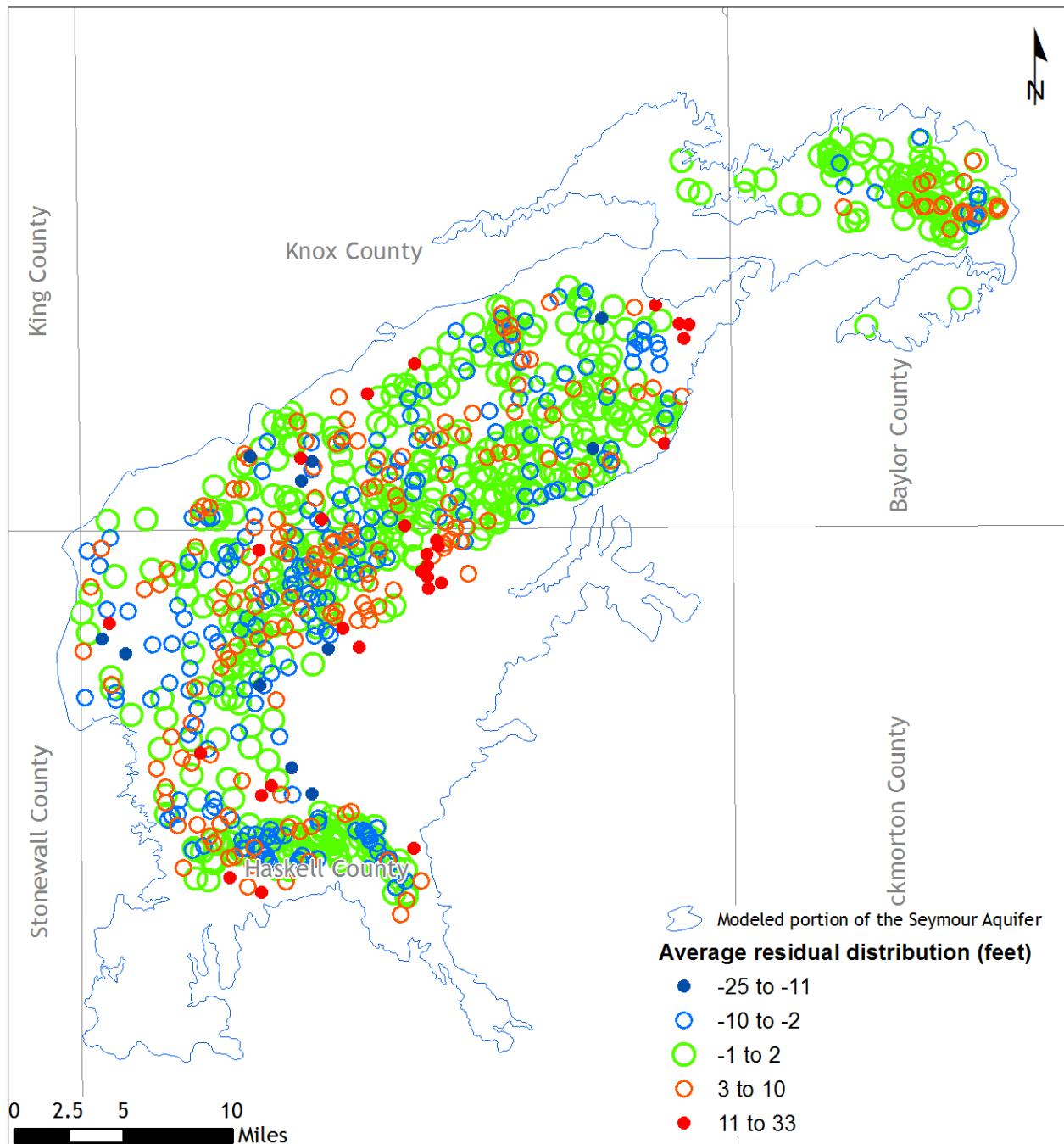


Figure 12. Spatial distribution of average water-level residuals. Residuals were calculated as observed value minus simulated value.

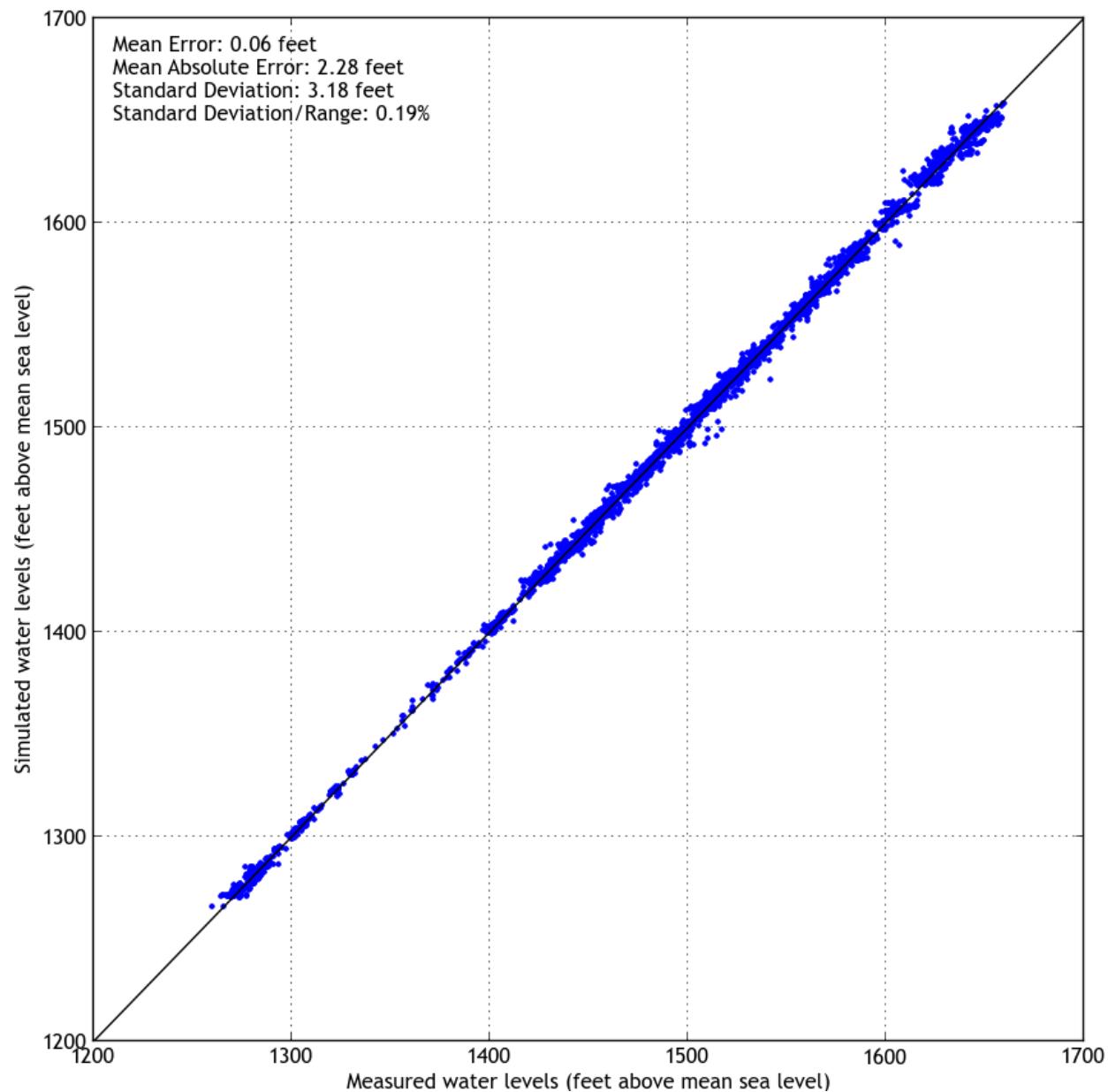


Figure 13. Simulated versus measured water levels along the perfect match line.

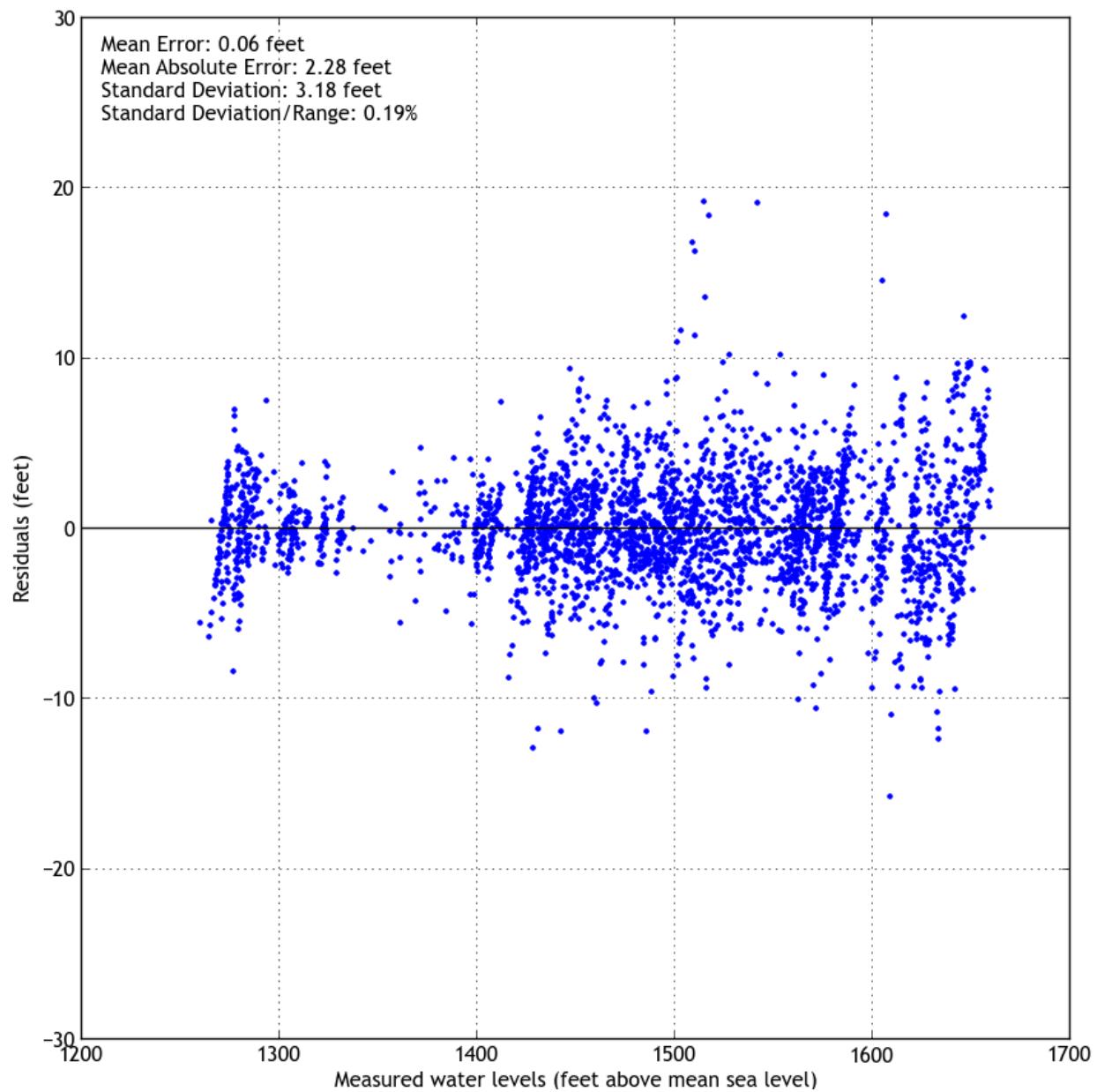


Figure 14. Water-level residuals versus measured water levels.

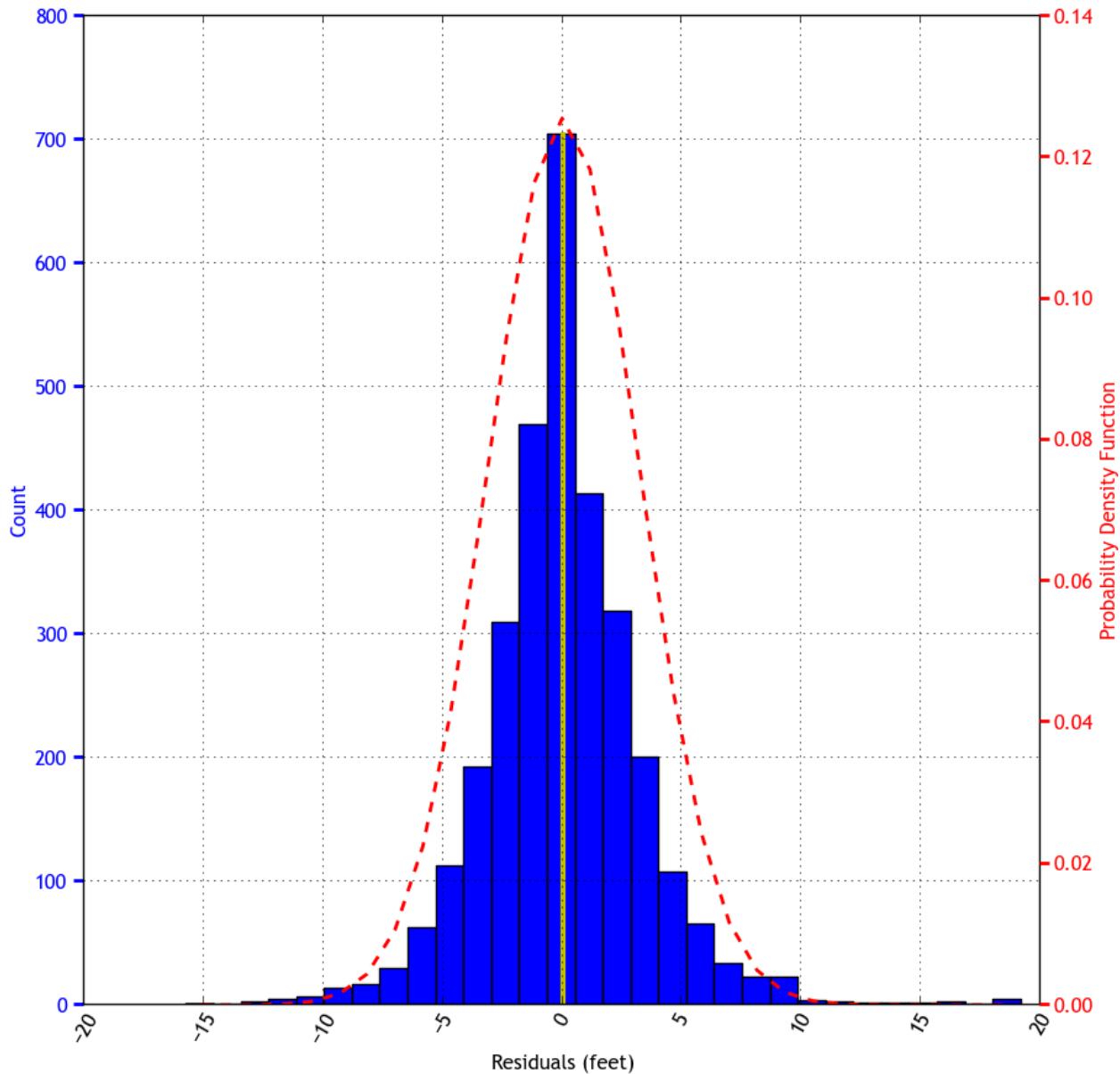


Figure 15. Histogram of water-level residuals (bars) and normal distribution (dashed line).

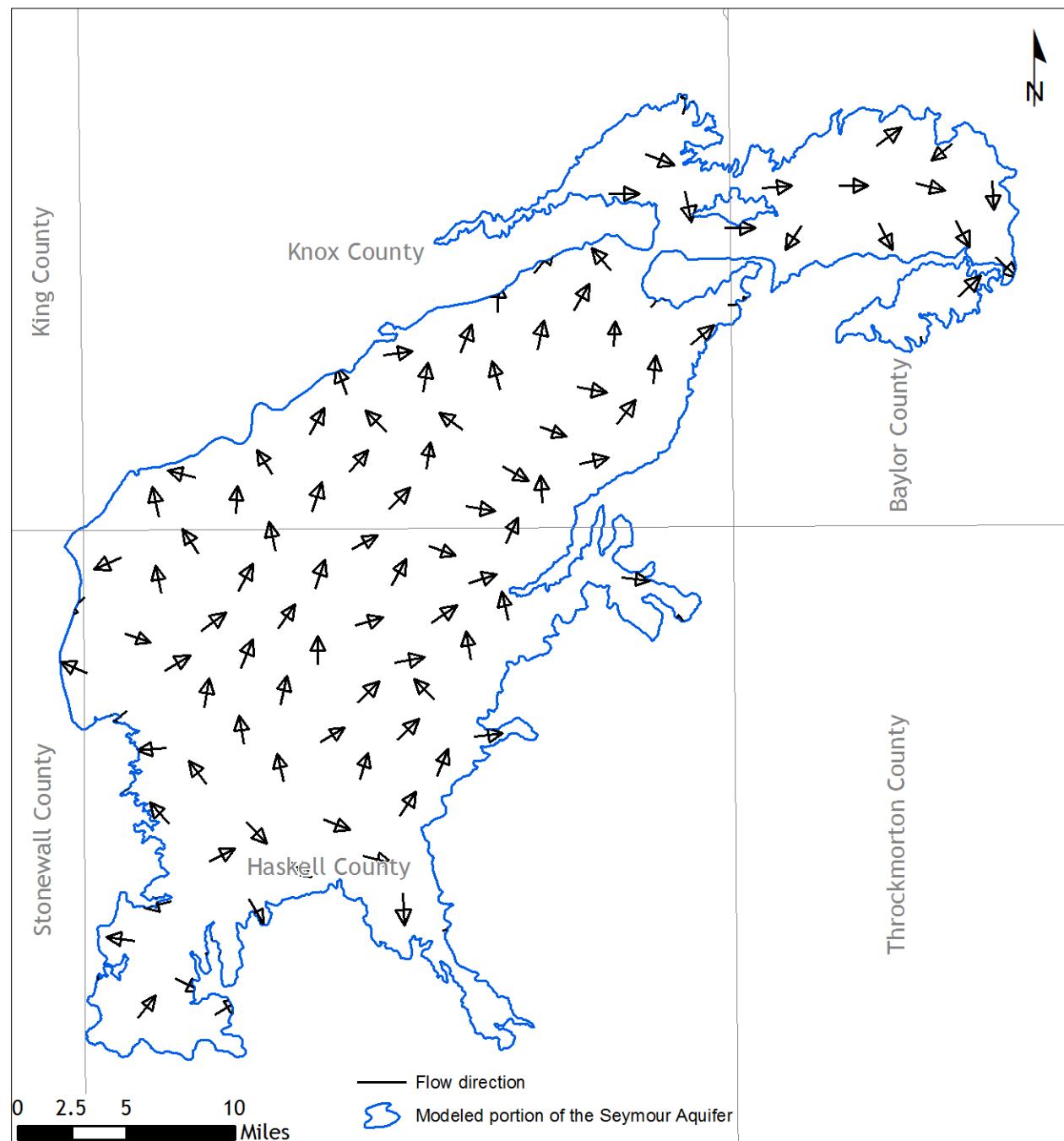


Figure 16. Simulated general groundwater flow direction in 1979.

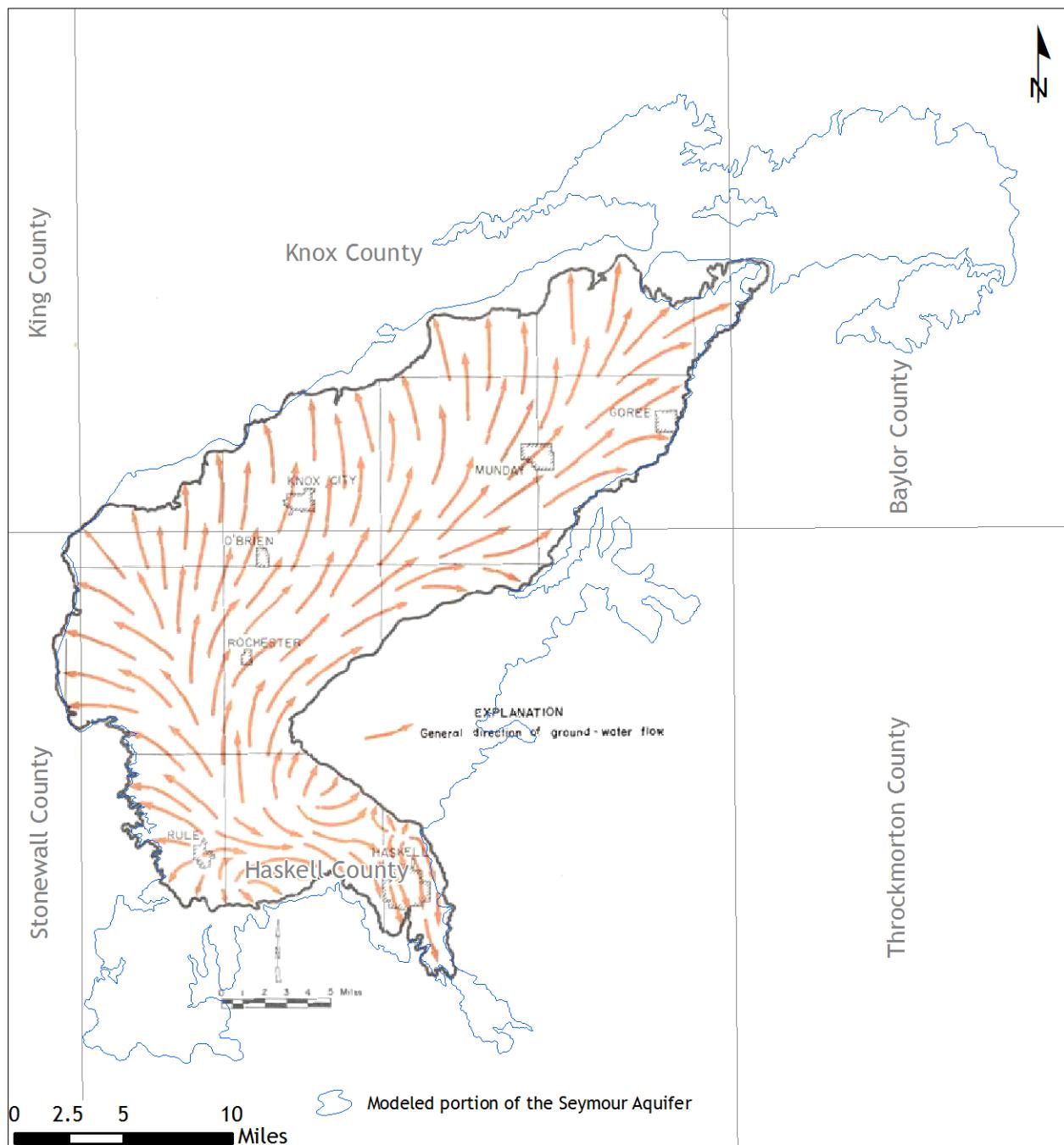


Figure 17. General direction of groundwater flow (modified from R.W. Harden and Associates, 1978).

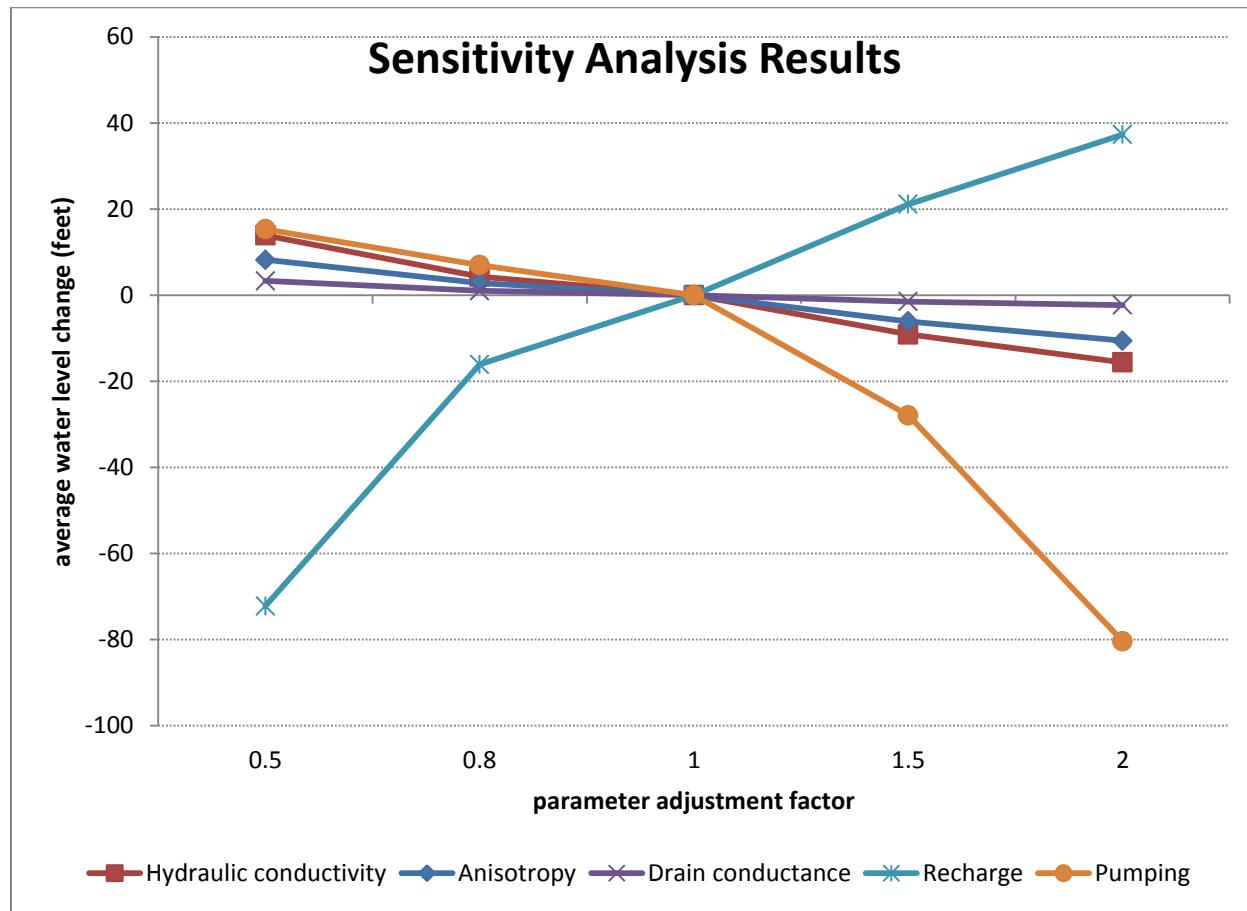


Figure 18. Change in water levels as a result of varying different parameters during the sensitivity analysis.

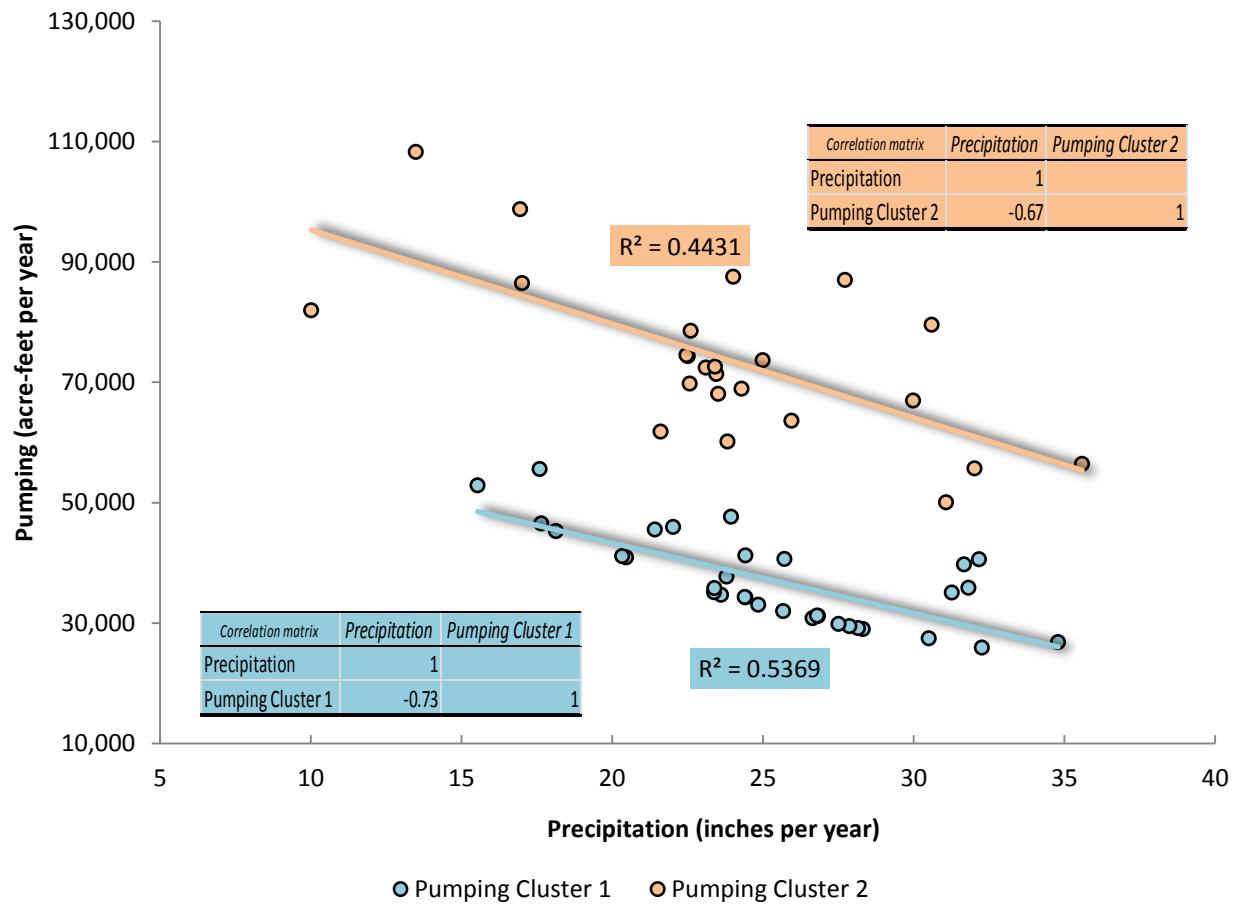


Figure 19. Correlation between pumping and precipitation. Each point represents a pumping year and corresponding precipitation for that year.

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Table 1. Summary of MODFLOW-2000 model input packages.

Packages	Input Files
Basic (BAS6)	symr_hkb.bas
Discretization (DIS)	symr_hkb.dis
Layer-Property Flow (LPF)	symr_hkb.lpf
Well (WEL)	symr_hkb.wel
Drain (DRN)	symr_hkb.drn
River (RIV)	symr_hkb.riv
Recharge (RCH)	symr_hkb.rch
Output Control (OC)	symr_hkb.oc
Geometric Multigrid Solver (GMG)	symr_hkb.gmg

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Table 2. Summary of MODFLOW-2000 model output packages.

Packages	Output Files
GLOBAL (GLO)	symr_hkb.glo
LIST (LST)	symr_hkb.lst
Cell-by-Cell Budget (CBB)	symr_hkb.cbb
Heads (HDS)	symr_hkb.hds
Drawdown (DDN)	symr_hkb.ddn

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Table 3. Summary of simulated pumping rates in acre-feet per year.

Year	Pumping Rate	Year	Pumping Rate	Year	Pumping Rate	Year	Pumping Rate
Steady State	34,677	1964	72,612	1979	78,561	1994	74,367
1950	86,990	1965	68,078	1980	34,305	1995	66,994
1951	46,530	1966	31,997	1981	35,788	1996	71,386
1952	108,280	1967	45,555	1982	27,445	1997	50,056
1953	60,149	1968	29,174	1983	34,270	1998	98,779
1954	55,566	1969	35,068	1984	40,907	1999	74,500
1955	69,779	1970	52,866	1985	31,234	2000	68,909
1956	81,975	1971	29,476	1986	25,942	2001	72,462
1957	39,742	1972	29,862	1987	31,197	2002	55,704
1958	35,140	1973	33,054	1988	41,155	2003	86,490
1959	87,566	1974	47,654	1989	45,978	2004	56,445
1960	63,634	1975	30,819	1990	26,851	2005	73,671
1961	29,005	1976	37,712	1991	40,584	Average (1950 to 2005)	52,798
1962	79,562	1977	45,293	1992	35,887		
1963	61,800	1978	40,655	1993	41,235		

Table 4. Summary of overall average groundwater budget for the model in acre-feet per year.

Flow Components		1950 - 1979	1980 - 2005	1950 - 2005
Inflow	Recharge	103,573	106,951	105,141
	Total Inflow	103,573	106,951	105,141
Outflow	Wells	53,805	50,929	52,470
	Drains	57,646	59,195	58,365
	River Leakage	3,169	3,198	3,183
	Total Outflow	114,620	113,322	114,018
Inflow - Outflow		-11,047	-6,371	-8,877
Storage Change		-11,048	-6,369	-8,875
Model Error		1	-2	-2
Model Error (percent)		0.00%	0.00%	0.00%

Table 5. Summary of average groundwater budget by county in acre-feet per year.

Flow Components		1950 - 1979			1980 - 2005			1950 - 2005		
		Baylor	Haskell	Knox	Baylor	Haskell	Knox	Baylor	Haskell	Knox
Inflow	Recharge	9,841	58,598	34,615	10,604	59,897	35,903	10,195	59,201	35,213
	Lateral Flow	1,318	882	7,437	1,272	950	7,486	1,297	913	7,460
	Total Inflow	11,159	59,480	42,052	11,876	60,847	43,389	11,492	60,114	42,673
Outflow	Wells	1,134	32,291	20,183	1,054	30,753	18,939	1,096	31,577	19,605
	Drains	7,933	22,495	24,094	8,316	23,163	24,498	8,111	22,806	24,282
	River Leakage	2,114	0	1,055	2,144	0	1,053	2,128	0	1,054
	Lateral Flow	59	10,208	2,140	63	10,324	2,162	61	10,261	2,150
	Total Outflow	11,240	64,994	47,472	11,577	64,240	46,652	11,396	64,644	47,091
Inflow - Outflow		-81	-5,514	-5,420	299	-3,393	-3,263	96	-4,530	-4,418
Storage Change		-81	-5,514	-5,420	299	-3,391	-3,263	95	-4,528	-4,418
Model Error		0	0	0	0	-2	0	1	-2	0
Model Error (percent)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%	0.00%

Table 6. Correlation between simulated pumping, recharge and precipitation.

Components	Recharge	Precipitation	Pumping
Recharge	--	0.99	-0.45
Precipitation	0.99	--	-0.46
Pumping	-0.45	-0.46	--

Appendix A:

Measured and Simulated Water Levels

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Table A - 1. water level targets, simulated water levels and residuals.

State Well Number	Stress Period	Measured Water Level	Simulated Water Level	Residual	Calibration Weight
2120901	14	1405.75	1407.26	-1.51	1
2120901	15	1404.8	1407.04	-2.24	1
2120901	20	1405.87	1407.41	-1.54	1
2120901	21	1407.16	1408.13	-0.97	1
2120901	23	1405.61	1407.66	-2.05	1
2120901	24	1406.29	1408	-1.71	1
2120901	25	1407.61	1408.05	-0.44	1
2120901	26	1406.73	1408.01	-1.28	1
2120901	27	1407.3	1408.23	-0.93	1
2120901	28	1406.47	1408.16	-1.69	1
2120901	29	1407.01	1407.56	-0.55	1
2120901	30	1407.34	1407.73	-0.39	1
2120901	42	1407.71	1407.71	0	1
2120901	54	1408.34	1407.79	0.55	1
2120901	65	1407.59	1408.35	-0.76	1
2120901	77	1407.62	1408.32	-0.7	1
2120901	93	1408.47	1407.67	0.8	1
2120901	101	1408.9	1408.42	0.48	1
2120901	113	1409.88	1408.9	0.98	1
2120901	125	1410.92	1409.25	1.67	1
2120901	149	1409.97	1408.6	1.37	1
2120901	161	1410.89	1409.34	1.55	1
2120901	174	1411.08	1409.64	1.44	1
2120901	187	1411.84	1410.48	1.36	1
2120901	198	1410.65	1410.38	0.27	1
2120901	211	1411.9	1409.85	2.05	1
2120901	224	1412.47	1410.17	2.3	1
2120901	236	1410.02	1409.86	0.16	1
2120901	248	1412.82	1410.44	2.38	1
2120901	259	1410.8	1409.58	1.22	1
2120901	270	1407.1	1409.46	-2.36	1

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State Well Number	Stress Period	Measured Water Level	Simulated Water Level	Residual	Calibration Weight
2120901	283	1408.93	1409.13	-0.2	1
2120901	295	1409.45	1408.91	0.54	1
2120901	319	1405.85	1408.82	-2.97	1
2121701	21	1384.1	1384.51	-0.41	1
2121803	21	1378.7	1377.51	1.19	1
2121901	12	1332.5	1330.71	1.79	1
2121901	21	1333.2	1333.67	-0.47	1
2121905	20	1330.5	1331.17	-0.67	1
2121906	20	1330.7	1331.09	-0.39	1
2121906	21	1331	1331.89	-0.89	1
2121908	7	1331.2	1329.73	1.47	1
2121908	20	1331.5	1331.74	-0.24	1
2121908	21	1332	1332.58	-0.58	1
2121909	20	1330.2	1329.69	0.51	1
2121909	21	1330.2	1330.48	-0.28	1
2121910	20	1329.4	1330.12	-0.72	1
2121910	21	1329.6	1330.91	-1.31	1
2121912	20	1329.1	1330.99	-1.89	1
2121912	21	1329.2	1331.83	-2.63	1
2121917	21	1326.6	1325.33	1.27	1
2121921	21	1330.9	1330.2	0.7	1
2121922	21	1331	1330.28	0.72	1
2121923	21	1356	1356.18	-0.18	1
2121939	21	1331.5	1330.6	0.9	1
2121940	21	1331.3	1330.6	0.7	1
2121941	21	1331.6	1330.6	1	1
2122701	7	1324.57	1320.92	3.65	1
2122701	8	1323.49	1319.6	3.89	1
2122701	9	1323.66	1320.65	3.01	1
2122701	12	1322.78	1321.07	1.71	1
2122701	14	1321.35	1322.21	-0.86	1
2122701	15	1322.69	1321.89	0.8	1

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State Well Number	Stress Period	Measured Water Level	Simulated Water Level	Residual	Calibration Weight
2122701	16	1321.79	1321.77	0.02	1
2122701	17	1321.21	1321.69	-0.48	1
2122701	18	1319.88	1321.92	-2.04	1
2122701	19	1320.39	1321.7	-1.31	1
2122701	20	1322.18	1322.21	-0.03	1
2122701	21	1322.82	1322.95	-0.13	1
2122701	22	1319.96	1322.02	-2.06	1
2122701	25	1323.27	1322.95	0.32	1
2122701	26	1323.05	1322.91	0.14	1
2122701	27	1323.7	1323.18	0.52	1
2122701	28	1323.25	1323.14	0.11	1
2122701	29	1323.7	1322.53	1.17	1
2122701	42	1322.95	1322.67	0.28	1
2122701	54	1322.85	1322.71	0.14	1
2122701	65	1322.69	1323.27	-0.58	1
2122701	77	1321.25	1323.37	-2.12	1
2122701	93	1321.61	1322.69	-1.08	1
2122701	100	1321.64	1323.28	-1.64	1
2122701	113	1322.58	1324.13	-1.55	1
2122701	125	1324.15	1324.23	-0.08	1
2122701	137	1323.55	1323.83	-0.28	1
2122703	7	1307.64	1305.71	1.93	1
2122703	8	1306.49	1304.51	1.98	1
2122703	9	1307.38	1305.25	2.13	1
2122703	15	1306.84	1305.95	0.89	1
2122703	16	1305.78	1305.84	-0.06	1
2122703	17	1306.09	1305.75	0.34	1
2122703	18	1306.82	1305.93	0.89	1
2122703	19	1306.37	1305.74	0.63	1
2122703	20	1307.46	1306.17	1.29	1
2122703	21	1306.74	1306.77	-0.03	1
2122703	22	1305.8	1306.07	-0.27	1

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2122703	23	1304.75	1306.51	-1.76	1
2122703	24	1304.57	1306.87	-2.3	1
2122703	25	1305.47	1307.01	-1.54	1
2122703	26	1304.41	1307.04	-2.63	1
2122703	27	1306.78	1307.31	-0.53	1
2122703	28	1306.02	1307.33	-1.31	1
2122703	29	1306.75	1306.88	-0.13	1
2122703	30	1306.39	1307.1	-0.71	1
2122703	54	1305.6	1306.94	-1.34	1
2122703	65	1306.06	1307.33	-1.27	1
2122703	77	1306.55	1307.51	-0.96	1
2122703	93	1305.74	1307.05	-1.31	1
2122703	100	1305.67	1307.51	-1.84	1
2122703	113	1306.73	1308.26	-1.53	1
2122703	125	1308.68	1308.29	0.39	1
2122703	137	1307.93	1308.08	-0.15	1
2122703	149	1307.88	1307.97	-0.09	1
2122703	161	1308.34	1308.61	-0.27	1
2122703	174	1309.21	1308.82	0.39	1
2122703	187	1310.56	1309.54	1.02	1
2122703	198	1310.55	1309.54	1.01	1
2122703	211	1310.2	1309.18	1.02	1
2122711	21	1319.5	1320.03	-0.53	1
2122712	21	1311.7	1313.47	-1.77	1
2122714	21	1353.6	1352.46	1.14	1
2122715	21	1342.6	1343.93	-1.33	1
2122728	12	1308.8	1307.92	0.88	1
2122730	21	1322.5	1321.8	0.7	1
2122801	21	1294.5	1295.07	-0.57	1
2122802	8	1281.35	1283.31	-1.96	1
2122802	14	1284.77	1283.82	0.95	1
2122802	15	1283.11	1283.7	-0.59	1

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2122802	16	1279.43	1283.54	-4.11	1
2122802	17	1279.57	1283.42	-3.85	1
2122802	18	1280.74	1283.69	-2.95	1
2122802	19	1279.83	1283.74	-3.91	1
2122802	20	1283.25	1284.12	-0.87	1
2122802	21	1284.07	1284.54	-0.47	1
2122802	22	1281.27	1284.32	-3.05	1
2122802	23	1280.63	1284.64	-4.01	1
2122802	24	1276.57	1284.95	-8.38	1
2122802	25	1280.62	1285.14	-4.52	1
2122802	26	1279.71	1285.16	-5.45	1
2122802	27	1283.96	1285.38	-1.42	1
2122802	28	1283.76	1285.46	-1.7	1
2122802	29	1284.85	1285.29	-0.44	1
2122802	30	1283.67	1285.37	-1.7	1
2122802	54	1283.9	1285.18	-1.28	1
2122802	65	1284.29	1285.48	-1.19	1
2122802	77	1284.32	1285.66	-1.34	1
2122802	93	1283.66	1285.59	-1.93	1
2122802	114	1285.23	1286.16	-0.93	1
2122802	137	1287.06	1286.31	0.75	1
2122802	149	1286.9	1286.22	0.68	1
2122802	174	1288.45	1286.68	1.77	1
2122802	187	1289.47	1287.06	2.41	1
2122802	198	1289.25	1287.09	2.16	1
2122802	211	1284.5	1286.71	-2.21	1
2122802	224	1289.84	1286.57	3.27	1
2122802	236	1293.77	1286.24	7.53	1
2122802	248	1290.67	1286.38	4.29	1
2122802	259	1287.45	1285.7	1.75	1
2122802	307	1288.5	1285.05	3.45	1
2122802	318	1284.98	1284.6	0.38	1

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2122802	334	1286.5	1284.84	1.66	1
2122805	8	1289.05	1289.55	-0.5	1
2122805	9	1290.76	1289.85	0.91	1
2122805	11	1289.84	1289.74	0.1	1
2122806	11	1303.03	1302.73	0.3	1
2122806	12	1303.01	1302.87	0.14	1
2122806	14	1304.13	1303.64	0.49	1
2122806	15	1303.34	1303.37	-0.03	1
2122806	17	1301.68	1303.17	-1.49	1
2122806	18	1301.24	1303.36	-2.12	1
2122806	19	1303.07	1303.19	-0.12	1
2122806	20	1303.3	1303.62	-0.32	1
2122806	21	1304.88	1304.21	0.67	1
2122806	22	1302.9	1303.54	-0.64	1
2122806	23	1301.69	1303.98	-2.29	1
2122807	6	1295.78	1294.18	1.6	1
2122807	7	1297.3	1293.99	3.31	1
2122808	7	1293.81	1290.98	2.83	1
2122809	20	1284.1	1283.26	0.84	1
2122809	21	1284.8	1283.68	1.12	1
2122810	20	1289.2	1288.35	0.85	1
2122811	20	1291.3	1292.47	-1.17	1
2122811	21	1293	1292.9	0.1	1
2122813	20	1292.1	1290.74	1.36	0
2122814	21	1291.8	1293.68	-1.88	1
2122815	21	1291.9	1293.68	-1.78	1
2122816	20	1300	1298.87	1.13	1
2122817	20	1292.3	1293.76	-1.46	1
2122817	21	1293.8	1294.22	-0.42	1
2122820	20	1291.7	1293.15	-1.45	1
2122820	21	1293.3	1293.61	-0.31	1
2122822	20	1300.9	1298.87	2.03	1

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2122822	21	1301.9	1299.44	2.46	1
2122823	20	1301.6	1302.35	-0.75	1
2122824	20	1302.6	1302.35	0.25	1
2122838	11	1283.8	1282.55	1.25	1
2122839	11	1305	1302.73	2.27	1
2122839	12	1305	1302.87	2.13	1
2122847	21	1299.2	1299.55	-0.35	1
2122848	21	1298.2	1300.35	-2.15	1
2122901	12	1305.5	1307.32	-1.82	1
2122903	20	1284.7	1282.3	2.4	1
2122904	21	1311.9	1308.07	3.83	1
2127601	14	1360.8	1361.05	-0.25	1
2127602	15	1361.3	1363.04	-1.74	1
2127603	15	1361.5	1361.26	0.24	1
2127603	28	1361.1	1361.4	-0.3	1
2127701	28	1400.3	1400.64	-0.34	1
2127703	28	1398.8	1373.48	25.32	0
2127801	8	1423.11	1424.24	-1.13	1
2127801	9	1427.63	1425.24	2.39	1
2127801	11	1425.09	1424.1	0.99	1
2127801	12	1428.06	1424.13	3.93	1
2127801	14	1428.85	1424.17	4.68	1
2127801	15	1424.99	1424.03	0.96	1
2127801	16	1422.75	1423.44	-0.69	1
2127801	17	1420.78	1423.15	-2.37	1
2127801	18	1421.43	1424.05	-2.62	1
2127801	20	1425.04	1424.5	0.54	1
2127801	21	1426.37	1424.84	1.53	1
2127801	22	1423.65	1424.08	-0.43	1
2127801	23	1426.14	1424.67	1.47	1
2127801	24	1428.31	1425.01	3.3	1
2127801	25	1426.15	1425.09	1.06	1

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2127801	26	1423.67	1424.7	-1.03	1
2127801	27	1425.63	1425.12	0.51	1
2127801	28	1423.85	1425.06	-1.21	1
2127801	29	1425	1424.6	0.4	1
2127801	30	1423.27	1424.64	-1.37	1
2127801	42	1418.95	1424.21	-5.26	1
2127801	54	1416.98	1424.39	-7.41	1
2127801	65	1416.01	1424.77	-8.76	1
2127801	77	1417.92	1424.83	-6.91	1
2127801	101	1420.52	1424.9	-4.38	1
2127801	113	1424.22	1425.36	-1.14	1
2127801	125	1428.94	1425.55	3.39	1
2127801	137	1426.15	1425.2	0.95	1
2127801	149	1426.45	1424.89	1.56	1
2127801	161	1427.11	1425.61	1.5	1
2127801	174	1428.37	1425.65	2.72	1
2127801	187	1428.61	1426.26	2.35	1
2127801	198	1430.8	1426.1	4.7	1
2127801	211	1429.75	1425.09	4.66	1
2127801	224	1427.14	1425.08	2.06	1
2127801	236	1426.45	1424.58	1.87	1
2127801	248	1427.91	1424.99	2.92	1
2127807	8	1423.1	1425.74	-2.64	1
2127809	28	1399	1399.33	-0.33	1
2127810	28	1400.7	1404.6	-3.9	0
2127812	28	1386.7	1387.17	-0.47	1
2127813	28	1418.5	1419.01	-0.51	1
2127814	28	1412.3	1412.14	0.16	1
2127815	8	1427.5	1426.65	0.85	1
2127815	28	1428.6	1426.61	1.99	1
2127818	28	1388.9	1393.12	-4.22	0
2127902	8	1389.5	1388.18	1.32	1

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2127902	28	1387.6	1389.38	-1.78	1
2127904	28	1392.3	1394.25	-1.95	1
2127904	249	1398	1394.86	3.14	1
2127904	261	1395	1394.23	0.77	1
2127904	274	1392.08	1393.8	-1.72	1
2127904	287	1393.75	1393.37	0.38	1
2127904	298	1393.58	1393.41	0.17	1
2127904	310	1394.58	1393.41	1.17	1
2127904	321	1394.17	1393.31	0.86	1
2127905	8	1402	1400.5	1.5	1
2127905	15	1403.5	1400.89	2.61	1
2127905	28	1399.8	1401.9	-2.1	1
2127906	8	1401.5	1398.94	2.56	1
2127906	15	1402.5	1399.45	3.05	1
2127906	28	1396.8	1400.7	-3.9	1
2127911	8	1399.4	1399.43	-0.03	1
2127911	15	1401.2	1399.59	1.61	1
2127911	28	1399.2	1399.96	-0.76	1
2127913	8	1389.9	1390.56	-0.66	1
2127913	15	1391.7	1390.9	0.8	1
2127913	28	1390.4	1391.26	-0.86	1
2127914	5	1388.7	1389.02	-0.32	1
2127916	15	1447.2	1447.58	-0.38	1
2127916	28	1447.7	1446.17	1.53	1
2127917	15	1371.4	1368.66	2.74	1
2127917	23	1370.7	1368.65	2.05	1
2127923	15	1371.6	1374.12	-2.52	1
2127925	15	1380	1381.15	-1.15	1
2127926	15	1380.6	1381.55	-0.95	1
2127927	15	1383.6	1380.86	2.74	1
2127929	15	1380.4	1381.67	-1.27	1
2127930	15	1388.7	1384.57	4.13	1

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2127931	15	1387.5	1386.64	0.86	1
2127932	15	1385.1	1386.14	-1.04	1
2127933	15	1384.6	1389.49	-4.89	1
2127934	15	1396.6	1392.56	4.04	1
2127935	15	1387.8	1389.36	-1.56	1
2127936	15	1390.3	1389.32	0.98	1
2127937	15	1400.7	1403.23	-2.53	1
2127938	15	1434.5	1438.06	-3.56	1
2127939	11	1435.8	1434.64	1.16	1
2127940	15	1437.8	1434.65	3.15	1
2127941	15	1398.5	1402.42	-3.92	1
2127944	15	1455.7	1454.12	1.58	1
2127946	15	1453.2	1454.52	-1.32	1
2127947	11	1369.2	1373.46	-4.26	1
2127949	28	1438.3	1433.18	5.12	0
2128301	7	1402.27	1400.3	1.97	1
2128301	8	1399.33	1399.1	0.23	1
2128301	9	1401.29	1400.17	1.12	1
2128301	11	1400.91	1400.39	0.52	1
2128301	12	1401	1400.7	0.3	1
2128301	14	1403.4	1401.89	1.51	1
2128401	8	1376.9	1375.95	0.95	1
2128401	9	1380.1	1377.29	2.81	1
2128401	28	1378.7	1379.86	-1.16	1
2128403	8	1373.6	1371.49	2.11	1
2128405	28	1373.4	1373.78	-0.38	1
2128406	8	1370.5	1369.64	0.86	0
2128410	28	1371	1372.9	-1.9	1
2128411	28	1366.4	1366.76	-0.36	1
2128413	28	1371.9	1367.18	4.72	1
2128415	42	1361	1366.52	-5.52	1
2128502	28	1403.5	1404.36	-0.86	1

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2128504	28	1413.5	1404.4	9.1	0
2128604	28	1412.4	1394.46	17.94	0
2128703	8	1439.2	1440.2	-1	1
2128703	28	1433.5	1436.35	-2.85	1
2128704	28	1444.9	1446.34	-1.44	1
2128709	8	1383.7	1385.04	-1.34	1
2128711	28	1397.4	1403.06	-5.66	1
2128711	293	1406.1	1402.05	4.05	1
2128713	28	1431.6	1430.53	1.07	1
2128715	28	1432.5	1433.39	-0.89	1
2128719	8	1441.8	1443.35	-1.55	1
2128719	28	1436.1	1439.95	-3.85	1
2128725	28	1426.5	1426.11	0.39	0
2128726	28	1382.9	1390.62	-7.72	0
2128801	8	1424.7	1428.33	-3.63	1
2128801	28	1420.7	1424.39	-3.69	1
2128802	8	1423.7	1428.68	-4.98	1
2128805	8	1422.7	1427.41	-4.71	1
2128808	8	1417.5	1421.8	-4.3	1
2128813	8	1436.3	1435.45	0.85	1
2128813	28	1429.9	1431.68	-1.78	1
2128814	8	1435.3	1436.35	-1.05	1
2128814	28	1433	1432.96	0.04	1
2128817	8	1427.7	1427.52	0.18	1
2128817	28	1428.5	1427.29	1.21	1
2128822	8	1415.7	1415.77	-0.07	1
2128822	28	1421.1	1418.54	2.56	1
2128827	28	1420.3	1425.7	-5.4	0
2128831	8	1437.5	1436.56	0.94	1
2128833	28	1420.8	1426.98	-6.18	0
2128835	19	1425	1425.5	-0.5	1
2128837	28	1401.3	1416.28	-14.98	0

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2128901	8	1412.3	1412.37	-0.07	1
2128901	28	1411.8	1409.26	2.54	1
2128903	8	1423.1	1428.66	-5.56	1
2128903	28	1420.1	1424	-3.9	1
2128907	28	1421.3	1423.64	-2.34	1
2128910	28	1407.7	1396.58	11.12	0
2128911	28	1420.9	1425.48	-4.58	1
2128912	28	1405	1372.26	32.74	0
2128913	28	1412	1392.3	19.7	0
2128914	28	1415.2	1415.55	-0.35	1
2129102	8	1399.3	1399.27	0.03	1
2129102	9	1399.73	1401.04	-1.31	1
2129102	11	1399.47	1400.93	-1.46	1
2129102	12	1399.66	1401.4	-1.74	1
2129102	14	1401.84	1402.62	-0.78	1
2129102	15	1401.33	1402.35	-1.02	1
2129102	16	1400.35	1402.11	-1.76	1
2129102	17	1399.8	1402.07	-2.27	1
2129102	18	1401.71	1402.82	-1.11	1
2129102	19	1401.22	1402.54	-1.32	1
2129102	20	1403.51	1403.27	0.24	1
2129102	21	1404.15	1404.01	0.14	1
2129102	22	1402.77	1402.73	0.04	1
2129102	23	1402.2	1403.42	-1.22	1
2129102	24	1402.46	1403.85	-1.39	1
2129102	25	1403.98	1403.85	0.13	1
2129102	26	1402.3	1403.54	-1.24	1
2129102	27	1403.33	1403.93	-0.6	1
2129102	28	1402.1	1403.78	-1.68	1
2129102	29	1403.77	1402.97	0.8	1
2129102	30	1403.4	1403.22	0.18	1
2129102	42	1403.36	1403.3	0.06	1

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2129102	54	1402.95	1403.5	-0.55	1
2129102	65	1402.81	1404.23	-1.42	1
2129102	93	1402.71	1403.55	-0.84	1
2129102	113	1404.1	1404.99	-0.89	1
2129102	125	1406.57	1405.1	1.47	1
2129102	137	1404.8	1404.34	0.46	1
2129102	149	1404.77	1403.97	0.8	1
2129102	161	1406.23	1405.11	1.12	1
2129102	174	1406.1	1405.25	0.85	1
2129102	187	1406.78	1406.22	0.56	1
2129102	198	1407.05	1405.82	1.23	1
2129102	211	1406.2	1404.73	1.47	1
2129102	224	1406.02	1405.16	0.86	1
2129102	236	1406.59	1404.71	1.88	1
2129102	248	1407.83	1405.62	2.21	1
2129102	270	1405.2	1403.75	1.45	1
2129102	283	1404.53	1403.75	0.78	1
2129102	295	1404.8	1403.53	1.27	1
2129102	307	1405.05	1404.71	0.34	1
2129102	319	1404.15	1403.3	0.85	1
2129104	21	1390.9	1391.21	-0.31	1
2129203	21	1373.9	1372.5	1.4	1
2129304	21	1356.9	1358.86	-1.96	1
2129305	21	1371.5	1370.94	0.56	1
2129306	21	1357.2	1353.92	3.28	1
2129316	21	1305.3	1303.39	1.91	1
2130101	7	1314.52	1314.15	0.37	1
2130101	8	1313.63	1312.69	0.94	1
2130101	9	1314.27	1313.7	0.57	1
2130101	11	1314.69	1313.77	0.92	1
2130101	12	1314.57	1314	0.57	1
2130101	14	1315.72	1315.13	0.59	1

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2130104	20	1313.4	1313.23	0.17	1
2130105	20	1312.8	1312.51	0.29	1
2130105	21	1312.4	1313.29	-0.89	1
2130106	20	1308.9	1309.53	-0.63	1
2130106	21	1309.3	1310.22	-0.92	1
2130107	20	1309.5	1310.66	-1.16	1
2130109	21	1293.7	1294.55	-0.85	1
2130110	21	1351.3	1350.05	1.25	1
2130116	21	1355.9	1358.73	-2.83	1
2130126	21	1346.3	1347.07	-0.77	1
2130127	21	1300.3	1301.28	-0.98	1
2130128	21	1299.9	1301.28	-1.38	1
2130129	21	1301.1	1301.28	-0.18	1
2130130	21	1300.9	1301.28	-0.38	1
2130202	11	1281.16	1279.15	2.01	1
2130202	12	1281.21	1279.14	2.07	1
2130202	14	1283.56	1279.5	4.06	1
2130202	15	1282.2	1279.39	2.81	1
2130202	16	1279.9	1279.2	0.7	1
2130202	17	1277.71	1279.08	-1.37	1
2130202	18	1279.71	1279.49	0.22	1
2130202	19	1279.31	1279.54	-0.23	1
2130202	20	1281.75	1279.97	1.78	1
2130202	21	1281.7	1280.38	1.32	1
2130202	22	1278.21	1280.09	-1.88	1
2130202	23	1278.47	1280.45	-1.98	1
2130202	24	1278.74	1280.77	-2.03	1
2130202	25	1280.06	1280.94	-0.88	1
2130202	26	1278.86	1280.9	-2.04	1
2130202	27	1280.4	1281.15	-0.75	1
2130202	29	1281.37	1281.01	0.36	1
2130202	30	1279.85	1281.09	-1.24	1

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2130202	42	1279.18	1280.81	-1.63	1
2130202	54	1278.92	1280.95	-2.03	1
2130202	65	1278.89	1281.27	-2.38	1
2130202	77	1277.2	1281.42	-4.22	1
2130202	93	1278.14	1281.4	-3.26	1
2130202	100	1277.56	1281.48	-3.92	1
2130202	113	1279	1281.92	-2.92	1
2130202	125	1279.62	1282.1	-2.48	1
2130202	137	1280.55	1281.98	-1.43	1
2130202	149	1280.61	1281.85	-1.24	1
2130202	161	1280.95	1282.24	-1.29	1
2130202	174	1283.3	1282.35	0.95	1
2130202	187	1283.38	1282.73	0.65	1
2130202	198	1283.75	1282.7	1.05	1
2130202	211	1282	1282.21	-0.21	1
2130202	248	1283.48	1281.97	1.51	1
2130202	259	1281.43	1281.11	0.32	1
2130202	270	1279.9	1280.82	-0.92	1
2130202	284	1278.29	1280.72	-2.43	1
2130202	295	1279.32	1280.42	-1.1	1
2130202	307	1279.85	1280.68	-0.83	1
2130202	318	1276.6	1280.1	-3.5	1
2130202	334	1279.17	1280.53	-1.36	1
2130203	8	1275.19	1275.29	-0.1	1
2130204	6	1265.4	1271.1	-5.7	1
2130204	7	1266.05	1271.01	-4.96	1
2130204	8	1264.23	1270.6	-6.37	1
2130204	9	1267.47	1270.82	-3.35	1
2130204	11	1267.74	1270.75	-3.01	1
2130204	12	1268.08	1270.77	-2.69	1
2130204	14	1269.8	1270.99	-1.19	1
2130204	15	1267.58	1270.9	-3.32	1

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2130204	16	1269.05	1270.83	-1.78	1
2130204	19	1270.71	1270.83	-0.12	1
2130204	20	1271.99	1271.01	0.98	1
2130204	21	1273.2	1271.23	1.97	1
2130204	22	1270.29	1271.03	-0.74	1
2130204	23	1267.08	1271.21	-4.13	1
2130204	24	1268.24	1271.35	-3.11	1
2130204	25	1270.75	1271.42	-0.67	1
2130204	26	1270	1271.43	-1.43	1
2130204	27	1272.2	1271.55	0.65	1
2130204	28	1270.16	1271.57	-1.41	1
2130204	29	1270.95	1271.45	-0.5	1
2130204	30	1272.47	1271.52	0.95	1
2130204	42	1277.27	1271.47	5.8	1
2130204	54	1269	1271.5	-2.5	1
2130204	65	1269.56	1271.66	-2.1	1
2130204	77	1270	1271.73	-1.73	1
2130204	93	1270.18	1271.62	-1.44	1
2130204	100	1269.13	1271.76	-2.63	1
2130204	113	1273.43	1272.02	1.41	1
2130204	137	1272.23	1272.01	0.22	1
2130204	149	1272.49	1271.98	0.51	1
2130204	161	1273.02	1272.19	0.83	1
2130204	174	1273.84	1272.26	1.58	1
2130204	187	1274.67	1272.48	2.19	1
2130204	198	1272.9	1272.47	0.43	1
2130204	211	1271.8	1272.31	-0.51	1
2130204	224	1272.9	1272.32	0.58	1
2130205	7	1267.3	1270.41	-3.11	0
2130205	8	1267.34	1270.03	-2.69	0
2130205	11	1269.75	1270.18	-0.43	1
2130206	6	1272.25	1271.1	1.15	1

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2130206	7	1272.79	1271.01	1.78	1
2130206	8	1270.91	1270.6	0.31	1
2130206	9	1273.26	1270.82	2.44	1
2130206	11	1273.53	1270.75	2.78	1
2130206	12	1274.01	1270.77	3.24	1
2130206	14	1277.56	1270.99	6.57	1
2130206	20	1274.1	1271.01	3.09	1
2130206	21	1273.4	1271.23	2.17	1
2130207	11	1271.11	1270.89	0.22	1
2130212	21	1280.1	1276.43	3.67	1
2130213	11	1273.7	1270.18	3.52	1
2130213	12	1274.1	1270.19	3.91	1
2130213	20	1274.1	1270.4	3.7	1
2130213	21	1277.6	1270.61	6.99	1
2130216	20	1283.6	1284.96	-1.36	1
2130216	21	1284.1	1285.36	-1.26	1
2130217	20	1288	1285.04	2.96	1
2130217	21	1288.8	1285.43	3.37	1
2130218	20	1286	1284.97	1.03	1
2130219	20	1287	1288.6	-1.6	1
2130219	21	1288	1289.1	-1.1	1
2130220	20	1300	1300.53	-0.53	1
2130221	20	1303.1	1300.53	2.57	1
2130222	20	1307.7	1304.92	2.78	1
2130228	20	1284.3	1284.74	-0.44	1
2130228	21	1284.7	1285.14	-0.44	1
2130229	20	1286	1284.8	1.2	1
2130229	21	1286.4	1285.19	1.21	1
2130230	20	1287.3	1284.89	2.41	1
2130230	21	1287.8	1285.29	2.51	1
2130231	20	1287.9	1284.92	2.98	1
2130231	21	1288.5	1285.31	3.19	1

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2130232	20	1279.1	1285.04	-5.94	1
2130234	20	1279.4	1280.07	-0.67	1
2130239	21	1275.8	1273.91	1.89	1
2130240	21	1266.1	1265.67	0.43	1
2130246	21	1276.4	1273.98	2.42	1
2130252	21	1269.2	1270.89	-1.69	1
2130267	6	1285.11	1282.98	2.13	1
2130267	7	1286.21	1282.73	3.48	1
2130267	8	1282.46	1281.99	0.47	1
2130267	9	1283.6	1282.34	1.26	1
2130267	11	1282.67	1282.2	0.47	1
2130267	12	1282.27	1282.16	0.11	1
2130268	6	1284.65	1281.4	3.25	1
2130268	7	1284.94	1281.14	3.8	1
2130268	8	1282.86	1280.41	2.45	1
2130268	9	1284.64	1280.82	3.82	1
2130269	9	1284	1280.82	3.18	1
2130270	9	1284.49	1280.44	4.05	1
2130301	20	1270.7	1276.03	-5.33	1
2130303	8	1274.5	1274.36	0.14	1
2130303	9	1274.59	1274.92	-0.33	1
2130307	12	1259.82	1265.35	-5.53	1
2130308	20	1277.6	1275.27	2.33	1
2130317	20	1271.9	1275.41	-3.51	1
2130317	21	1271.4	1275.82	-4.42	1
2130318	20	1273.2	1274.82	-1.62	1
2130318	21	1273.8	1275.22	-1.42	1
2130319	20	1274.5	1276.03	-1.53	1
2130319	21	1279	1276.44	2.56	1
2130322	20	1283	1278.61	4.39	1
2130322	21	1281.7	1278.99	2.71	1
2130323	20	1282	1278.86	3.14	1

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2130323	21	1281	1279.23	1.77	1
2130324	20	1280.4	1278.53	1.87	1
2130324	21	1280	1278.91	1.09	1
2130325	20	1281.2	1276.66	4.54	1
2130325	21	1281.5	1277	4.5	1
2130327	20	1274.1	1276.71	-2.61	1
2130327	21	1274	1277.16	-3.16	1
2130328	20	1278.2	1277.67	0.53	1
2130330	20	1273.7	1276	-2.3	1
2130330	21	1273.4	1276.45	-3.05	1
2130369	21	1273.9	1274.85	-0.95	1
2130372	21	1276.3	1275.54	0.76	1
2130373	21	1279.4	1275.97	3.43	1
2130374	21	1275.3	1275.54	-0.24	1
2130376	21	1275	1275.54	-0.54	1
2130377	21	1278.6	1274.01	4.59	1
2130378	21	1275.1	1273.57	1.53	1
2130380	21	1279.3	1274.51	4.79	1
2130389	35	1271	1274.16	-3.16	1
2130390	35	1270	1273.83	-3.83	1
2130391	35	1274	1273.5	0.5	1
2130392	35	1275	1273.5	1.5	1
2130607	21	1335.8	1336.98	-1.18	1
2130607	250	1337.5	1337.52	-0.02	1
2130701	21	1400.2	1400.07	0.13	1
2133604	8	1452.8	1452.88	-0.08	1
2133604	28	1453.3	1455.63	-2.33	1
2133702	8	1491.1	1485.68	5.42	1
2133702	28	1489.1	1488.98	0.12	1
2133704	28	1486.1	1488.48	-2.38	0
2133712	28	1469.1	1468.78	0.32	1
2133718	28	1474	1481.85	-7.85	1

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2133808	28	1477.92	1479.05	-1.13	1
2133901	8	1471.87	1472.63	-0.76	1
2133901	9	1471.77	1474.49	-2.72	1
2133901	11	1471.05	1472.88	-1.83	1
2133901	12	1470.42	1472.88	-2.46	1
2133901	14	1472	1473.08	-1.08	1
2133901	15	1471.71	1472.89	-1.18	1
2133901	16	1471.82	1471.98	-0.16	1
2133901	17	1473.01	1471.6	1.41	1
2133901	18	1473.12	1473.56	-0.44	1
2133901	19	1473.32	1473.7	-0.38	1
2133901	20	1474.66	1475.12	-0.46	1
2133901	21	1470.11	1475.85	-5.74	1
2133901	22	1475.62	1474.88	0.74	1
2133901	23	1476.55	1476.19	0.36	1
2133901	24	1478.07	1477.03	1.04	1
2133901	25	1480.07	1477.41	2.66	1
2133901	26	1478.7	1476.85	1.85	1
2133901	27	1480.13	1477.75	2.38	1
2133901	28	1479.64	1477.83	1.81	1
2133901	29	1481.65	1477.3	4.35	1
2133901	30	1481.1	1477.52	3.58	1
2133901	54	1477.93	1477.47	0.46	1
2133901	65	1478.38	1478.37	0.01	1
2133901	77	1478.06	1478.61	-0.55	1
2133901	101	1479	1479.09	-0.09	1
2133901	113	1478.81	1480.04	-1.23	1
2133901	125	1479.16	1480.28	-1.12	1
2133901	137	1476.75	1479.79	-3.04	1
2133901	211	1480.5	1478.92	1.58	1
2133902	8	1543.1	1544.57	-1.47	1
2133903	8	1543.8	1549.22	-5.42	1

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2133903	28	1548.9	1549.2	-0.3	1
2133905	8	1539.6	1539.33	0.27	1
2133911	8	1533.5	1532.98	0.52	1
2133911	28	1541.6	1541.86	-0.26	1
2133912	8	1534.5	1532.98	1.52	1
2133913	8	1533.8	1534.21	-0.41	1
2133914	8	1531.9	1530.58	1.32	1
2133917	8	1473.9	1478.26	-4.36	1
2133920	8	1472	1475.29	-3.29	1
2133920	28	1480.9	1479.48	1.42	1
2133922	8	1466.8	1471.27	-4.47	1
2133923	8	1467.9	1470.78	-2.88	1
2133926	8	1470	1466.59	3.41	1
2133927	8	1469.6	1467.58	2.02	1
2133929	8	1475.5	1470.19	5.31	1
2133930	28	1476.1	1474.67	1.43	1
2133931	8	1468.9	1470.5	-1.6	1
2133937	8	1472.5	1466.9	5.6	1
2133939	28	1542.3	1532.04	10.26	0
2133940	137	1479.25	1478.2	1.05	1
2133940	149	1477.75	1477.83	-0.08	1
2133940	161	1475.84	1478.83	-2.99	1
2133940	174	1479.08	1478.87	0.21	1
2133940	187	1479.93	1479.55	0.38	1
2133940	198	1481.45	1479.28	2.17	1
2133940	211	1480.5	1477.68	2.82	1
2133940	224	1478.55	1477.34	1.21	1
2134101	28	1437.1	1437.35	-0.25	1
2134201	8	1433.7	1430.77	2.93	1
2134202	8	1434.36	1433.82	0.54	1
2134202	9	1435.15	1434.3	0.85	1
2134202	11	1434.88	1434.15	0.73	1

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2134202	14	1435.68	1434.45	1.23	1
2134202	15	1434.95	1434.27	0.68	1
2134202	16	1434.69	1434.08	0.61	1
2134202	17	1433.32	1433.96	-0.64	1
2134202	19	1430.81	1434.17	-3.36	1
2134202	20	1435.68	1434.46	1.22	1
2134202	21	1433.24	1434.74	-1.5	1
2134202	22	1435.71	1434.34	1.37	1
2134202	23	1435.98	1434.59	1.39	1
2134202	24	1437.73	1434.79	2.94	1
2134202	25	1437.06	1434.85	2.21	1
2134202	27	1435.8	1434.92	0.88	1
2134202	28	1435.07	1434.91	0.16	1
2134202	29	1435.2	1434.67	0.53	1
2134202	30	1434.64	1434.75	-0.11	1
2134202	42	1434.58	1434.56	0.02	1
2134202	54	1433.1	1434.68	-1.58	1
2134202	65	1431.93	1434.96	-3.03	1
2134202	77	1431.2	1434.99	-3.79	1
2134202	101	1434.76	1435.1	-0.34	1
2134202	113	1434.86	1435.37	-0.51	1
2134202	125	1434.27	1435.45	-1.18	1
2134202	137	1434.2	1435.26	-1.06	1
2134202	149	1434.33	1435.14	-0.81	1
2134202	161	1433.56	1435.5	-1.94	1
2134202	174	1434.63	1435.56	-0.93	1
2134202	187	1434.66	1435.82	-1.16	1
2134202	198	1437.95	1435.73	2.22	1
2134202	211	1437.35	1435.3	2.05	1
2134202	224	1437.8	1435.29	2.51	1
2134205	9	1434.1	1434.3	-0.2	1
2134213	8	1434.6	1434.73	-0.13	1

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2134213	28	1435.2	1436.5	-1.3	1
2134215	8	1432.7	1433.19	-0.49	1
2134216	8	1416.8	1418.43	-1.63	1
2134216	28	1417.7	1419.17	-1.47	1
2134217	8	1437.3	1437.46	-0.16	1
2134218	8	1437.9	1437.77	0.13	1
2134218	28	1437.8	1439.65	-1.85	1
2134304	8	1439.5	1436.62	2.88	1
2134304	28	1436.7	1437.97	-1.27	1
2134305	8	1436.4	1436.62	-0.22	1
2134306	8	1440.8	1440.18	0.62	1
2134310	8	1442.3	1440.13	2.17	1
2134312	28	1412.3	1404.87	7.43	1
2134319	28	1427.3	1427.05	0.25	1
2134322	28	1434.4	1430.73	3.67	0
2134324	28	1422.7	1393.29	29.41	0
2134325	28	1449.7	1449.14	0.56	0
2134402	8	1456.56	1456.88	-0.32	1
2134402	9	1458.45	1457.47	0.98	1
2134402	11	1457.8	1456.98	0.82	1
2134402	12	1458.67	1457.08	1.59	1
2134402	14	1459.66	1457.35	2.31	1
2134402	15	1459.05	1457.25	1.8	1
2134402	16	1458.04	1457	1.04	1
2134402	17	1457.48	1456.86	0.62	1
2134402	18	1458.51	1457.26	1.25	1
2134402	19	1457.84	1457.1	0.74	1
2134402	20	1459.45	1457.48	1.97	1
2134402	21	1459.68	1457.8	1.88	1
2134402	22	1458.73	1457.31	1.42	1
2134402	23	1459.32	1457.71	1.61	1
2134402	24	1459.64	1457.96	1.68	1

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2134402	25	1460.37	1458.05	2.32	1
2134402	26	1458.56	1457.94	0.62	1
2134402	27	1459.58	1458.23	1.35	1
2134402	28	1458.4	1458.23	0.17	1
2134402	29	1458.85	1457.95	0.9	1
2134402	30	1457.52	1458.06	-0.54	1
2134402	42	1456.32	1458.01	-1.69	1
2134402	54	1456.52	1458.08	-1.56	1
2134402	65	1456.56	1458.38	-1.82	1
2134402	93	1456.35	1458.41	-2.06	1
2134402	113	1457.1	1458.96	-1.86	1
2134402	125	1459.12	1459.12	0	1
2134402	137	1458.5	1458.99	-0.49	1
2134402	149	1457.64	1458.89	-1.25	1
2134402	161	1456.96	1459.33	-2.37	1
2134402	174	1459.1	1459.44	-0.34	1
2134402	187	1459.83	1459.9	-0.07	1
2134402	198	1461.15	1459.86	1.29	1
2134402	211	1459.05	1459.44	-0.39	1
2134402	224	1459.68	1459.48	0.2	1
2134402	236	1457.56	1459.16	-1.6	1
2134402	248	1457.46	1459.35	-1.89	1
2134402	259	1456.9	1458.47	-1.57	1
2134402	270	1453.75	1458.19	-4.44	1
2134402	283	1455.38	1457.95	-2.57	1
2134402	295	1455.33	1457.6	-2.27	1
2134402	307	1455.56	1457.81	-2.25	1
2134402	319	1455.25	1457.06	-1.81	1
2134403	8	1459.6	1456.88	2.72	1
2134403	9	1460.25	1457.47	2.78	1
2134403	12	1460.44	1457.08	3.36	1
2134407	28	1428.3	1441.22	-12.92	1

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2134410	8	1446.3	1440.62	5.68	1
2134414	8	1434.8	1436.68	-1.88	1
2134415	8	1439.8	1436.68	3.12	1
2134417	8	1446.2	1446.78	-0.58	1
2134421	8	1468.4	1466.91	1.49	1
2134422	8	1469.7	1470.61	-0.91	1
2134422	28	1473.2	1472.41	0.79	1
2134423	28	1510.5	1510.78	-0.28	1
2134428	28	1450.3	1449.53	0.77	0
2134430	8	1465.8	1469.27	-3.47	1
2134430	28	1468.2	1472.05	-3.85	1
2134432	28	1434.5	1438.29	-3.79	0
2134440	8	1446.9	1437.51	9.39	1
2134442	8	1468.2	1463.88	4.32	1
2134446	28	1471.1	1461.59	9.51	0
2134501	4	1503.87	1510.1	-6.23	1
2134501	5	1501.97	1509.96	-7.99	1
2134501	6	1506.57	1509.35	-2.78	1
2134501	7	1502.69	1509.12	-6.43	1
2134501	8	1499.16	1507.84	-8.68	1
2134501	9	1500.97	1508.49	-7.52	1
2134501	12	1504.16	1508.25	-4.09	1
2134501	20	1507.95	1507.9	0.05	1
2134501	21	1507.76	1508.47	-0.71	1
2134501	23	1508.88	1508.23	0.65	1
2134501	24	1509.5	1508.62	0.88	1
2134501	25	1509.2	1508.79	0.41	1
2134501	26	1509.13	1508.82	0.31	1
2134501	28	1507.11	1509.17	-2.06	1
2134501	29	1504.55	1508.77	-4.22	1
2134501	30	1509.27	1509.02	0.25	1
2134501	42	1510.02	1508.76	1.26	1

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2134501	54	1510	1508.76	1.24	1
2134501	65	1511.26	1509.14	2.12	1
2134501	93	1512.05	1508.9	3.15	1
2134501	113	1512.81	1510.12	2.69	1
2134501	125	1513.58	1510.11	3.47	1
2134501	137	1513.24	1509.86	3.38	1
2134501	149	1512.18	1509.72	2.46	1
2134501	161	1512.95	1510.32	2.63	1
2134501	174	1513.72	1510.44	3.28	1
2134501	187	1516.14	1510.97	5.17	1
2134501	211	1513	1510.33	2.67	1
2134501	224	1514.25	1510.2	4.05	1
2134501	236	1511.46	1509.65	1.81	1
2134501	248	1511.61	1509.89	1.72	1
2134501	259	1510.32	1508.82	1.5	1
2134501	283	1508.65	1507.79	0.86	1
2134501	319	1509.55	1506.48	3.07	1
2134504	8	1438.1	1444.41	-6.31	1
2134504	28	1446.2	1445.62	0.58	1
2134511	8	1451.7	1444.2	7.5	1
2134525	28	1472.7	1485.58	-12.88	0
2134527	8	1442.3	1454.22	-11.92	1
2134528	28	1511.1	1510.25	0.85	1
2134535	8	1446.4	1444.59	1.81	1
2134536	28	1447.3	1446.48	0.82	0
2134544	28	1506.4	1496.45	9.95	0
2134545	28	1462.9	1465.6	-2.7	0
2134546	28	1463.8	1451.05	12.75	0
2134547	73	1470	1464.02	5.98	1
2134601	9	1494.23	1491.88	2.35	1
2134601	11	1492.95	1491.22	1.73	1
2134601	12	1493.38	1491.12	2.26	1

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2134601	14	1492.8	1491.49	1.31	1
2134601	15	1491.24	1490.94	0.3	1
2134601	16	1490.29	1490.49	-0.2	1
2134601	18	1490.01	1490.12	-0.11	1
2134601	19	1489.86	1489.66	0.2	1
2134601	20	1492.06	1490.01	2.05	1
2134601	21	1492.55	1490.58	1.97	1
2134601	22	1491.94	1489.64	2.3	1
2134601	24	1493.35	1490.6	2.75	1
2134601	25	1492.77	1490.81	1.96	1
2134601	26	1489.73	1490.86	-1.13	1
2134601	27	1491.62	1491.3	0.32	1
2134601	28	1489.97	1491.41	-1.44	1
2134601	29	1490.77	1490.95	-0.18	1
2134601	30	1489.75	1491.3	-1.55	1
2134601	42	1488.6	1491.1	-2.5	1
2134601	54	1489.86	1491.1	-1.24	1
2134601	65	1490.96	1491.48	-0.52	1
2134601	77	1491.05	1491.68	-0.63	1
2134601	101	1491.31	1491.89	-0.58	1
2134601	113	1491.93	1492.61	-0.68	1
2134601	125	1492.2	1492.73	-0.53	1
2134601	137	1490.2	1492.51	-2.31	1
2134601	149	1490.3	1492.4	-2.1	1
2134601	161	1490.66	1493.22	-2.56	1
2134601	174	1491.62	1493.47	-1.85	1
2134601	187	1492.04	1494.36	-2.32	1
2134601	198	1495.3	1494.38	0.92	1
2134601	211	1493.15	1493.85	-0.7	1
2134601	224	1493.9	1493.87	0.03	1
2134602	6	1505.43	1506.26	-0.83	1
2134602	8	1500.52	1501.4	-0.88	1

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2134602	9	1500.98	1501.79	-0.81	1
2134602	11	1498.96	1500.13	-1.17	1
2134602	12	1498.1	1499.26	-1.16	1
2134602	28	1497.6	1502.03	-4.43	1
2134603	6	1503.74	1502.59	1.15	1
2134603	8	1497.86	1497.25	0.61	1
2134603	9	1498.6	1498.59	0.01	1
2134603	11	1496.53	1496.13	0.4	1
2134603	12	1496.07	1495.56	0.51	1
2134603	14	1497.86	1495.33	2.53	1
2134606	8	1447.9	1453.25	-5.35	1
2134606	28	1453.9	1454.32	-0.42	1
2134609	8	1444.4	1443.75	0.65	1
2134610	28	1449.9	1446.06	3.84	1
2134613	8	1439	1441.56	-2.56	1
2134613	28	1445.6	1443.26	2.34	1
2134614	8	1455.2	1454.06	1.14	1
2134616	8	1494.4	1491.29	3.11	1
2134616	9	1495.2	1491.88	3.32	1
2134618	8	1486.2	1480.93	5.27	1
2134618	28	1485.7	1480.65	5.05	1
2134619	8	1483.6	1486.58	-2.98	1
2134620	8	1480.1	1481.51	-1.41	1
2134629	8	1499.4	1496.69	2.71	1
2134630	8	1500.1	1496.69	3.41	1
2134631	8	1500.7	1495	5.7	1
2134633	8	1491.2	1491.93	-0.73	1
2134633	28	1490.3	1490.6	-0.3	1
2134637	28	1503.9	1507.98	-4.08	1
2134638	8	1476.5	1476.77	-0.27	1
2134642	8	1446	1442.63	3.37	1
2134643	8	1435.9	1442.11	-6.21	1

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2134644	28	1501.2	1508.07	-6.87	0
2134645	28	1499.3	1497.69	1.61	0
2134701	4	1516.97	1521.22	-4.25	1
2134701	5	1517.24	1521.03	-3.79	1
2134701	6	1516.85	1520.38	-3.53	1
2134701	7	1518.23	1520.07	-1.84	1
2134701	8	1513.34	1518.37	-5.03	1
2134701	9	1516.09	1519.35	-3.26	1
2134701	11	1514.17	1519.11	-4.94	1
2134702	9	1533.49	1534.59	-1.1	1
2134702	11	1531.67	1531.79	-0.12	1
2134702	14	1534.85	1532.46	2.39	1
2134702	15	1532.96	1532.37	0.59	1
2134702	16	1532.27	1530.93	1.34	1
2134702	17	1530.91	1530.39	0.52	1
2134702	18	1533.68	1533.43	0.25	1
2134702	19	1533.56	1533.2	0.36	1
2134702	20	1534.37	1535.12	-0.75	1
2134702	21	1533.75	1535.92	-2.17	1
2134702	22	1535.91	1534.02	1.89	1
2134702	23	1534.65	1535.94	-1.29	1
2134702	26	1530.42	1536.25	-5.83	1
2134702	27	1535.49	1537.62	-2.13	1
2134702	28	1536.32	1537.55	-1.23	1
2134702	29	1533.35	1536.54	-3.19	1
2134702	42	1532.07	1536.53	-4.46	1
2134702	54	1535.79	1537.16	-1.37	1
2134702	64	1537.63	1537.76	-0.13	1
2134702	77	1538.09	1538.14	-0.05	1
2134702	101	1540.52	1538.51	2.01	1
2134702	113	1540.64	1539.57	1.07	1
2134702	125	1541.74	1539.87	1.87	1

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2134702	137	1540.88	1538.87	2.01	1
2134702	149	1539.35	1538.12	1.23	1
2134702	161	1541.42	1539.96	1.46	1
2134702	173	1541.29	1539.66	1.63	1
2134702	185	1541.71	1540.36	1.35	1
2134702	199	1541.67	1540.59	1.08	1
2134702	213	1539.06	1538.63	0.43	1
2134702	224	1536.15	1537.87	-1.72	1
2134705	28	1510.5	1514.99	-4.49	0
2134706	8	1519.6	1515.53	4.07	1
2134706	28	1527.8	1517.61	10.19	1
2134707	8	1531.3	1533.46	-2.16	1
2134708	8	1541.6	1543.6	-2	1
2134710	28	1540.1	1522.45	17.65	0
2134711	8	1534.3	1529.97	4.33	1
2134718	8	1472.3	1473.26	-0.96	1
2134718	28	1479.9	1482.14	-2.24	1
2134722	8	1532.8	1536.46	-3.66	1
2134723	8	1533.6	1536.46	-2.86	1
2134801	5	1503.57	1504.16	-0.59	1
2134801	6	1502.86	1503	-0.14	1
2134801	7	1503.03	1502.32	0.71	1
2134801	8	1501.8	1500.27	1.53	1
2134801	9	1501.92	1500.69	1.23	1
2134801	11	1499.8	1500.06	-0.26	1
2134802	4	1510.56	1511.79	-1.23	1
2134802	5	1510.25	1511.67	-1.42	1
2134802	7	1509.69	1510.87	-1.18	1
2134802	8	1507.06	1509.62	-2.56	1
2134802	9	1508.93	1510.27	-1.34	1
2134802	11	1508.41	1510.1	-1.69	1
2134802	12	1508.82	1510.07	-1.25	1

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2134803	8	1514.6	1520.04	-5.44	1
2134803	28	1515.9	1524.72	-8.82	1
2134804	8	1516.9	1520.26	-3.36	1
2134806	28	1507.7	1510.04	-2.34	0
2134808	28	1516.3	1525.7	-9.4	1
2134810	8	1523.2	1520.69	2.51	1
2134811	8	1526.6	1524.11	2.49	1
2134813	8	1529.9	1532.75	-2.85	1
2134814	8	1531	1529.2	1.8	1
2134814	28	1538.4	1535.82	2.58	1
2134815	8	1536.3	1536.39	-0.09	1
2134816	8	1519.9	1515.57	4.33	1
2134819	7	1520	1525.12	-5.12	1
2134819	28	1520.5	1526.42	-5.92	1
2134821	8	1521.9	1522.06	-0.16	1
2134822	8	1522.6	1522.8	-0.2	1
2134823	8	1521.5	1522.36	-0.86	1
2134825	8	1526.6	1523.01	3.59	1
2134826	8	1522.9	1521.32	1.58	1
2134826	28	1524.5	1526.76	-2.26	1
2134837	8	1519	1513.2	5.8	1
2134837	28	1524.8	1515.04	9.76	1
2134838	8	1520.8	1519.93	0.87	1
2134841	8	1525	1525.79	-0.79	1
2134841	28	1528.6	1533.68	-5.08	1
2134842	8	1527.8	1526.91	0.89	1
2134844	8	1527.4	1521.42	5.98	1
2134846	28	1515	1513.55	1.45	0
2134851	28	1527.5	1518.94	8.56	0
2134852	28	1531	1532.15	-1.15	0
2134853	48	1542	1522.89	19.11	1
2134901	8	1513	1515.26	-2.26	1

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2134902	6	1526.4	1524.31	2.09	1
2134902	7	1525.17	1522.05	3.12	1
2134902	8	1519.83	1517.65	2.18	1
2134902	9	1519.93	1520.31	-0.38	1
2134902	11	1516.9	1517.08	-0.18	1
2134902	12	1517	1517.01	-0.01	1
2134902	14	1514.08	1516.89	-2.81	1
2134902	15	1512.94	1516.35	-3.41	1
2134902	16	1511.31	1514.49	-3.18	1
2134902	17	1509.15	1513.5	-4.35	1
2134902	18	1511.84	1516.38	-4.54	1
2134902	19	1511.67	1516.21	-4.54	1
2134902	20	1517.52	1518.64	-1.12	1
2134902	21	1518.24	1520.06	-1.82	1
2134902	22	1516.69	1518.24	-1.55	1
2134902	23	1525.88	1520.69	5.19	1
2134902	24	1526.68	1522.3	4.38	1
2134902	25	1530.09	1523.28	6.81	1
2134902	26	1526.78	1522.68	4.1	1
2134902	27	1529.32	1524.49	4.83	1
2134902	28	1525.85	1524.8	1.05	1
2134902	29	1525.34	1523.84	1.5	1
2134902	30	1524.84	1524.43	0.41	1
2134902	42	1520.75	1522.25	-1.5	1
2134902	54	1521.42	1522.48	-1.06	1
2134902	64	1524.35	1522.9	1.45	1
2134902	77	1524.5	1524.01	0.49	1
2134902	101	1529	1524.57	4.43	1
2134902	113	1527.45	1526.15	1.3	1
2134902	125	1533.47	1526.66	6.81	1
2134902	137	1530.52	1525.78	4.74	1
2134902	149	1529	1524.76	4.24	1

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2134902	161	1530.51	1526.7	3.81	1
2134902	173	1528.29	1526.62	1.67	1
2134902	185	1529.69	1527.38	2.31	1
2134902	199	1529.88	1527.81	2.07	1
2134902	213	1527.59	1525.01	2.58	1
2134902	224	1522.32	1523.09	-0.77	1
2134902	236	1519.7	1520.72	-1.02	1
2134902	248	1520.12	1520.93	-0.81	1
2134902	259	1515.43	1514.8	0.63	1
2134902	270	1509.8	1512.57	-2.77	1
2134902	284	1508.59	1512.29	-3.7	1
2134902	295	1504.26	1509.72	-5.46	1
2134902	307	1508.8	1510.46	-1.66	1
2134902	319	1502.45	1506.28	-3.83	1
2134903	4	1525.78	1525.99	-0.21	1
2134903	5	1524.06	1525.5	-1.44	1
2134903	6	1523.62	1524.22	-0.6	1
2134903	7	1521.95	1522.19	-0.24	1
2134903	8	1516.2	1518.01	-1.81	1
2134903	9	1517.37	1519.9	-2.53	1
2134903	11	1514.12	1517.47	-3.35	1
2134903	12	1512.58	1517.02	-4.44	1
2134903	14	1509.42	1517.06	-7.64	1
2134904	4	1528.38	1525.27	3.11	1
2134904	5	1526.7	1525	1.7	1
2134904	6	1525.97	1523.75	2.22	1
2134904	7	1524.47	1521.64	2.83	1
2134904	8	1518.95	1517.39	1.56	1
2134904	9	1519.05	1519.47	-0.42	1
2134904	11	1516.1	1516.81	-0.71	1
2134904	14	1513.58	1516.43	-2.85	1
2134905	4	1526.06	1518.04	8.02	1

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2134905	5	1524.7	1518.1	6.6	1
2134905	6	1523.41	1516.92	6.49	1
2134905	7	1522.06	1514.48	7.58	1
2134905	8	1516.34	1509.86	6.48	1
2134905	9	1516.95	1512.38	4.57	1
2134905	11	1513.78	1508.99	4.79	1
2134905	12	1513.69	1508.72	4.97	1
2134905	14	1511.45	1508.51	2.94	1
2134905	15	1509.64	1507.88	1.76	1
2134905	16	1508.27	1505.9	2.37	1
2134905	17	1505.33	1504.78	0.55	0
2134905	18	1508.78	1507.79	0.99	1
2134905	19	1508.89	1507.72	1.17	1
2134905	20	1506.82	1510.22	-3.4	0
2134905	21	1507.29	1511.69	-4.4	1
2134905	22	1507.55	1509.92	-2.37	1
2134905	23	1508.2	1512.38	-4.18	1
2134905	24	1506.38	1514.11	-7.73	0
2134907	8	1511.1	1509.72	1.38	1
2134907	28	1516.4	1516.51	-0.11	1
2134908	8	1514.4	1513	1.4	1
2134910	8	1519.1	1515.24	3.86	1
2134912	8	1505.1	1503.47	1.63	1
2134912	28	1510	1511.6	-1.6	1
2134913	8	1505.2	1506.61	-1.41	1
2134914	8	1506.1	1505.06	1.04	1
2134917	8	1506.6	1506.74	-0.14	1
2134917	28	1506.8	1511.13	-4.33	1
2134921	28	1509	1515.92	-6.92	1
2134923	8	1513.3	1515.14	-1.84	1
2134925	28	1518.1	1519.28	-1.18	1
2134928	8	1514.9	1510.88	4.02	1

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2134929	8	1515.4	1512.39	3.01	1
2134930	8	1515.2	1510.88	4.32	1
2134931	8	1515.7	1510.59	5.11	1
2134934	8	1517.9	1519.69	-1.79	1
2134937	8	1521.7	1519.43	2.27	1
2134939	8	1519.5	1518.68	0.82	1
2134939	28	1524.1	1525.51	-1.41	1
2134941	8	1522.9	1520.49	2.41	1
2134943	8	1518.6	1519.15	-0.55	1
2134945	7	1519.1	1522.14	-3.04	0
2134945	28	1522.6	1524.31	-1.71	0
2134950	8	1519.4	1521.95	-2.55	1
2134950	28	1529.6	1529.14	0.46	1
2134951	8	1505.3	1507.59	-2.29	1
2134952	8	1522.9	1519.81	3.09	1
2135101	8	1427.73	1428.66	-0.93	1
2135101	11	1426.15	1428.45	-2.3	1
2135102	6	1450.79	1450.69	0.1	1
2135102	7	1450.37	1449.99	0.38	1
2135102	8	1445.03	1448.51	-3.48	1
2135102	9	1447.5	1449.21	-1.71	1
2135102	11	1444.25	1448.23	-3.98	1
2135102	12	1447.64	1448.07	-0.43	1
2135102	14	1449.98	1448.16	1.82	1
2135102	15	1446.51	1447.86	-1.35	1
2135102	16	1445.34	1447.24	-1.9	1
2135102	17	1442.26	1446.82	-4.56	1
2135102	18	1444.02	1447.48	-3.46	1
2135102	19	1447.43	1447.33	0.1	1
2135102	20	1448.1	1447.91	0.19	1
2135102	21	1450.6	1448.36	2.24	1
2135102	22	1447.65	1447.67	-0.02	1

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2135102	23	1453.5	1448.2	5.3	1
2135102	24	1456.32	1448.6	7.72	1
2135102	25	1453.46	1448.78	4.68	1
2135102	26	1448.33	1448.51	-0.18	1
2135102	27	1450.62	1448.91	1.71	1
2135102	28	1447.49	1448.93	-1.44	1
2135102	29	1446.87	1448.5	-1.63	1
2135102	30	1446.93	1448.56	-1.63	1
2135102	42	1449.21	1447.94	1.27	1
2135103	6	1434.72	1430.2	4.52	1
2135103	7	1432.09	1429.66	2.43	1
2135103	8	1426.59	1428.47	-1.88	1
2135103	9	1428.63	1429.01	-0.38	1
2135103	11	1426.52	1428.27	-1.75	1
2135104	6	1452	1450.69	1.31	1
2135104	7	1452.03	1449.99	2.04	1
2135104	9	1449.33	1449.21	0.12	1
2135104	11	1446.3	1448.23	-1.93	1
2135104	12	1448.88	1448.07	0.81	1
2135107	8	1425.7	1427.91	-2.21	1
2135108	8	1429.6	1431.92	-2.32	1
2135110	28	1424.2	1425.97	-1.77	0
2135112	8	1445.3	1448.08	-2.78	1
2135113	8	1448.5	1448.79	-0.29	1
2135113	28	1451.9	1449.12	2.78	1
2135115	28	1431.6	1431.8	-0.2	1
2135116	28	1422.3	1420.06	2.24	1
2135118	8	1420.4	1420.23	0.17	1
2135122	8	1458.5	1460.36	-1.86	1
2135123	28	1465.2	1462.67	2.53	1
2135129	8	1421.1	1422.43	-1.33	1
2135129	28	1422.9	1422.57	0.33	1

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2135144	8	1454.8	1452.84	1.96	1
2135201	8	1475.64	1475.36	0.28	1
2135201	9	1477.96	1475.91	2.05	1
2135201	11	1476.17	1474.41	1.76	1
2135201	12	1476.74	1474.02	2.72	1
2135201	14	1476.28	1473.71	2.57	1
2135201	15	1475.12	1473.02	2.1	1
2135201	17	1472.19	1471.42	0.77	1
2135201	20	1474.1	1471.39	2.71	1
2135201	21	1470.3	1471.72	-1.42	1
2135201	22	1474.94	1470.6	4.34	1
2135201	23	1475.3	1471.01	4.29	1
2135201	24	1475.95	1471.28	4.67	1
2135201	25	1475.57	1471.31	4.26	1
2135201	26	1471.8	1470.98	0.82	1
2135201	27	1475.76	1471.33	4.43	1
2135201	28	1474.1	1471.26	2.84	1
2135201	29	1475.1	1470.66	4.44	1
2135201	30	1472.3	1470.77	1.53	1
2135201	42	1474.01	1470.07	3.94	1
2135201	54	1467.65	1470.1	-2.45	1
2135201	65	1462.51	1470.43	-7.92	1
2135201	93	1464.52	1470.24	-5.72	1
2135201	114	1464.48	1471.18	-6.7	1
2135201	125	1465.73	1471.37	-5.64	1
2135201	137	1460.8	1471.08	-10.28	1
2135201	149	1463.09	1470.86	-7.77	1
2135201	161	1467.57	1471.65	-4.08	1
2135201	174	1469.23	1471.84	-2.61	1
2135201	187	1469.52	1472.66	-3.14	1
2135201	198	1469.9	1472.69	-2.79	1
2135201	211	1466.9	1471.93	-5.03	1

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2135201	224	1468.15	1471.85	-3.7	1
2135201	236	1471.55	1471.23	0.32	1
2135201	248	1472.13	1471.58	0.55	1
2135201	259	1469.3	1469.92	-0.62	1
2135201	270	1467.8	1469.25	-1.45	1
2135201	283	1469.09	1468.59	0.5	1
2135201	295	1468.78	1467.81	0.97	1
2135201	307	1469.9	1467.91	1.99	1
2135201	319	1469.15	1466.27	2.88	1
2135202	8	1475.35	1475.08	0.27	1
2135202	9	1477.3	1475.69	1.61	1
2135206	28	1472.2	1469.85	2.35	1
2135209	28	1479.2	1472.11	7.09	1
2135215	28	1474.6	1469.8	4.8	1
2135216	8	1431.8	1430.48	1.32	1
2135216	28	1429.2	1430.56	-1.36	1
2135221	8	1432.1	1430.7	1.4	1
2135301	5	1465.8	1465.58	0.22	1
2135301	6	1463.07	1464.42	-1.35	1
2135301	7	1461.03	1462.64	-1.61	1
2135301	8	1455.2	1459.26	-4.06	1
2135301	9	1460.14	1460.36	-0.22	1
2135301	11	1455.81	1457.56	-1.75	1
2135301	12	1458.85	1456.86	1.99	1
2135301	14	1456.22	1456.12	0.1	1
2135301	15	1455.07	1455.09	-0.02	1
2135301	16	1451.85	1453.4	-1.55	1
2135301	17	1450.59	1452.14	-1.55	1
2135301	18	1450.22	1453.21	-2.99	1
2135301	19	1451.68	1452.57	-0.89	1
2135301	20	1455.91	1453.54	2.37	1
2135301	21	1456.6	1454.18	2.42	1

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2135301	22	1453.41	1452.57	0.84	1
2135301	23	1453.82	1453.63	0.19	1
2135301	24	1456.26	1454.37	1.89	1
2135301	25	1455	1454.7	0.3	1
2135301	26	1451	1454.1	-3.1	1
2135301	27	1455.09	1454.94	0.15	1
2135301	28	1450.96	1454.96	-4	1
2135301	54	1448.36	1452.22	-3.86	1
2135301	77	1451.8	1452.77	-0.97	1
2135301	101	1452.55	1452.89	-0.34	1
2135301	113	1453.06	1453.89	-0.83	1
2135301	125	1454.62	1454.32	0.3	1
2135301	137	1453.81	1453.61	0.2	1
2135301	149	1454.22	1452.91	1.31	1
2135301	161	1454.81	1454.4	0.41	1
2135301	174	1455.75	1454.47	1.28	1
2135301	187	1456.12	1455.69	0.43	1
2135301	224	1453.85	1452.48	1.37	1
2135301	236	1456.17	1450.83	5.34	1
2135301	248	1452.95	1451.17	1.78	1
2135301	270	1447.2	1445.18	2.02	1
2135301	283	1444.83	1444.14	0.69	1
2135301	295	1445.62	1442.55	3.07	1
2135301	307	1445.9	1442.77	3.13	1
2135301	319	1445.06	1439.48	5.58	1
2135305	11	1458.5	1457.62	0.88	1
2135307	8	1456	1457.73	-1.73	1
2135307	28	1465.9	1460.12	5.78	1
2135318	8	1474.2	1468.17	6.03	1
2135318	28	1462.4	1462.48	-0.08	1
2135326	8	1462.2	1464.41	-2.21	1
2135327	8	1467.9	1466.5	1.4	1

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2135329	8	1465.7	1465.96	-0.26	1
2135332	8	1465.1	1468.08	-2.98	1
2135332	28	1465	1462.71	2.29	1
2135338	8	1467.5	1471.23	-3.73	1
2135338	28	1467	1467.6	-0.6	1
2135342	28	1465	1472.04	-7.04	0
2135343	28	1457.7	1455.62	2.08	0
2135362	11	1459.2	1456.68	2.52	1
2135368	28	1453.2	1456.96	-3.76	0
2135372	11	1458.2	1464.07	-5.87	1
2135373	8	1466.9	1467.26	-0.36	1
2135401	4	1499.49	1499.18	0.31	1
2135401	5	1500	1498.94	1.06	1
2135401	6	1498.96	1497.96	1	1
2135401	7	1497.42	1496.12	1.3	1
2135401	8	1484.66	1492.71	-8.05	1
2135401	9	1493.78	1494.13	-0.35	1
2135401	11	1491.35	1491.35	0	1
2135401	12	1491.08	1490.84	0.24	1
2135402	6	1506.75	1502.83	3.92	1
2135402	7	1505.61	1500.73	4.88	1
2135402	8	1492.87	1496.62	-3.76	1
2135402	9	1500.51	1498.28	2.23	1
2135402	11	1498.79	1495.4	3.39	1
2135402	12	1498.51	1494.72	3.79	1
2135402	14	1497.71	1494.49	3.22	1
2135402	16	1493.88	1491.76	2.12	1
2135402	17	1492.67	1490.57	2.1	1
2135402	19	1494.01	1492.59	1.42	1
2135402	20	1495.6	1494.54	1.06	1
2135402	21	1495.65	1495.87	-0.22	1
2135402	22	1495.33	1494.36	0.97	1

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2135402	23	1497.21	1496.21	1	1
2135402	24	1497.84	1497.66	0.18	1
2135402	25	1499.87	1498.57	1.3	1
2135402	26	1496.62	1498.17	-1.55	1
2135402	27	1498.42	1499.63	-1.21	1
2135402	28	1497.1	1500.03	-2.93	1
2135402	29	1497.43	1499.3	-1.87	1
2135402	30	1498.58	1499.76	-1.18	1
2135402	42	1497.3	1497.85	-0.55	1
2135402	54	1496.56	1498.34	-1.78	1
2135402	65	1499.57	1499.28	0.29	1
2135402	77	1500.35	1499.77	0.58	1
2135402	101	1500.21	1500.3	-0.09	1
2135402	113	1499.51	1501.72	-2.21	1
2135402	125	1500.3	1502.29	-1.99	1
2135402	137	1499.95	1501.76	-1.81	1
2135402	149	1500.23	1500.95	-0.72	1
2135402	161	1500.7	1502.48	-1.78	1
2135402	174	1502.02	1502.59	-0.57	1
2135402	187	1502.45	1503.81	-1.36	1
2135402	198	1506.45	1503.6	2.85	1
2135405	8	1472.1	1474.83	-2.73	1
2135407	8	1475.3	1475.67	-0.37	1
2135409	8	1462.1	1465.02	-2.92	1
2135411	8	1472	1471.39	0.61	1
2135411	28	1475.9	1470.76	5.14	1
2135412	8	1473.3	1476.6	-3.3	1
2135414	8	1484.2	1490.95	-6.75	1
2135418	8	1499.6	1497.17	2.43	1
2135422	8	1496.4	1497.39	-0.99	1
2135425	28	1490.2	1491.9	-1.7	1
2135427	8	1494.1	1495.52	-1.42	1

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2135429	8	1491.8	1496.93	-5.13	1
2135429	28	1497.8	1499.88	-2.08	1
2135431	8	1493.3	1497.9	-4.6	1
2135432	8	1493.35	1495.57	-2.22	1
2135439	8	1488.1	1487.7	0.4	1
2135440	8	1487.4	1488.95	-1.55	1
2135440	28	1484.3	1484.03	0.27	1
2135448	8	1494.2	1494.18	0.02	1
2135457	28	1492.6	1490.19	2.41	0
2135501	6	1492.63	1494.57	-1.94	1
2135501	7	1491.39	1492.82	-1.43	1
2135501	8	1489.72	1489.25	0.47	1
2135501	9	1488.32	1489.82	-1.5	1
2135501	11	1486.2	1487.44	-1.24	1
2135501	12	1485.95	1486.7	-0.75	1
2135501	14	1485.54	1486.13	-0.59	1
2135501	15	1485.09	1485.01	0.08	1
2135501	16	1483.6	1483.51	0.09	1
2135501	17	1482.65	1482.26	0.39	1
2135501	19	1486.63	1482.07	4.56	1
2135501	20	1484.6	1482.97	1.63	1
2135501	21	1484.79	1483.87	0.92	1
2135501	22	1487.9	1482.52	5.38	1
2135501	23	1483.85	1483.58	0.27	1
2135501	24	1485.17	1484.47	0.7	1
2135501	25	1482.6	1485.03	-2.43	1
2135501	26	1484.78	1484.91	-0.13	1
2135501	27	1485.04	1485.82	-0.78	1
2135501	28	1484.45	1486.05	-1.6	1
2135501	29	1484.75	1485.36	-0.61	1
2135501	30	1483.83	1485.75	-1.92	1
2135501	42	1482.9	1484.51	-1.61	1

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2135501	54	1482.55	1484.48	-1.93	1
2135501	65	1482.83	1485.16	-2.33	1
2135501	77	1483.93	1485.35	-1.42	1
2135501	101	1484.26	1485.8	-1.54	1
2135501	113	1484.86	1486.68	-1.82	1
2135501	125	1485.52	1487.46	-1.94	1
2135501	137	1486.4	1487.06	-0.66	1
2135501	149	1486.33	1486.76	-0.43	1
2135501	161	1486.62	1487.87	-1.25	1
2135501	174	1487.34	1488.2	-0.86	1
2135501	187	1487.56	1489.42	-1.86	1
2135501	198	1487.3	1489.36	-2.06	1
2135501	211	1488.2	1487.97	0.23	1
2135501	224	1485.93	1487.36	-1.43	1
2135501	270	1486.3	1480.83	5.47	1
2135501	283	1486.29	1478.97	7.32	1
2135502	6	1487.15	1489.91	-2.76	1
2135502	7	1486.5	1488.18	-1.68	1
2135502	8	1481.1	1484.58	-3.48	1
2135502	9	1484.7	1484.72	-0.02	1
2135502	12	1481.95	1481.54	0.41	1
2135502	14	1482.56	1480.95	1.61	1
2135502	15	1481.51	1479.59	1.92	1
2135502	16	1480.27	1478.04	2.23	1
2135502	17	1478.7	1476.61	2.09	1
2135502	18	1479.45	1476.69	2.76	1
2135502	19	1481.57	1476.09	5.48	1
2135502	20	1481.27	1476.82	4.45	1
2135502	21	1481.43	1477.77	3.66	1
2135502	22	1480.63	1476.53	4.1	1
2135502	24	1480.61	1478.23	2.38	1
2135502	26	1479.78	1478.76	1.02	1

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2135502	27	1481.09	1479.49	1.6	1
2135502	28	1478.97	1479.76	-0.79	1
2135502	29	1479.24	1479.1	0.14	1
2135502	30	1477.81	1479.4	-1.59	1
2135502	113	1477.5	1479.88	-2.38	1
2135502	125	1480.38	1480.87	-0.49	1
2135502	137	1478.3	1480.47	-2.17	1
2135502	149	1478.31	1480.17	-1.86	1
2135502	161	1479.56	1481.23	-1.67	1
2135502	174	1479.89	1481.66	-1.77	1
2135502	187	1480.31	1482.86	-2.55	1
2135502	198	1482.38	1482.83	-0.45	1
2135502	224	1480.79	1480.6	0.19	1
2135503	9	1482.7	1484.92	-2.22	1
2135503	11	1480.57	1482.74	-2.17	1
2135503	12	1480.82	1481.7	-0.88	1
2135505	28	1483.2	1484.3	-1.1	1
2135507	28	1476.3	1471.43	4.87	1
2135508	8	1487.6	1485.61	1.99	1
2135508	28	1483.1	1482.85	0.25	1
2135512	8	1493.7	1488.39	5.31	1
2135515	8	1485.1	1488.36	-3.26	1
2135518	8	1494.8	1493.07	1.73	1
2135518	28	1491.5	1493.64	-2.14	1
2135520	28	1480.6	1482.17	-1.57	1
2135522	8	1481	1481.94	-0.94	1
2135531	8	1481.8	1482.41	-0.61	1
2135532	8	1484.1	1480.32	3.78	1
2135534	8	1478.2	1479.7	-1.5	1
2135535	8	1482.5	1479.38	3.12	1
2135535	28	1477.8	1477.39	0.41	1
2135537	8	1484.5	1484.92	-0.42	1

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2135543	28	1484.1	1486.41	-2.31	1
2135601	6	1473.34	1469.63	3.71	1
2135601	7	1468.62	1467.75	0.87	1
2135601	8	1460.78	1464.27	-3.49	1
2135602	5	1472.95	1471.17	1.78	1
2135602	6	1469.63	1469.63	0	1
2135602	7	1462.23	1467.75	-5.52	1
2135602	8	1461.18	1464.27	-3.09	1
2135602	12	1462.14	1460.92	1.22	1
2135602	14	1466.67	1460.21	6.46	1
2135602	15	1463.42	1458.81	4.61	1
2135602	18	1459.28	1456.08	3.2	1
2135602	19	1462.26	1455.81	6.45	1
2135602	20	1461.66	1456.83	4.83	1
2135602	21	1464.89	1457.8	7.09	1
2135602	22	1460.05	1456.67	3.38	1
2135602	23	1459.4	1457.54	1.86	1
2135602	24	1466	1458.49	7.51	1
2135602	25	1460.51	1459.09	1.42	1
2135602	27	1458.66	1459.53	-0.87	1
2135602	29	1456.63	1459.14	-2.51	1
2135602	42	1456.66	1456.93	-0.27	1
2135602	54	1456.21	1457.2	-0.99	1
2135602	65	1456.93	1457.95	-1.02	1
2135602	93	1456.31	1458.35	-2.04	1
2135602	113	1456.56	1459.77	-3.21	1
2135602	125	1458.78	1460.48	-1.7	1
2135602	137	1456.66	1460.17	-3.51	1
2135602	149	1456.3	1459.61	-3.31	1
2135602	161	1458.72	1460.63	-1.91	1
2135602	174	1458.43	1460.95	-2.52	1
2135602	187	1458.69	1461.92	-3.23	1

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2135602	198	1461.65	1461.84	-0.19	1
2135602	211	1458.9	1459.8	-0.9	1
2135602	224	1459.45	1458.54	0.91	1
2135602	236	1458.78	1456.6	2.18	1
2135602	248	1457.04	1456.5	0.54	1
2135602	259	1456.6	1452.78	3.82	1
2135602	270	1455.8	1450.72	5.08	1
2135602	283	1450.07	1449.01	1.06	1
2135602	307	1453.85	1446.98	6.87	1
2135602	319	1452.8	1444.06	8.74	1
2135603	4	1470.69	1471.72	-1.03	1
2135603	5	1471.77	1470.17	1.6	1
2135603	6	1468.5	1468.64	-0.14	1
2135603	8	1458.48	1463.3	-4.82	1
2135603	11	1461.12	1461.23	-0.11	1
2135613	28	1458.6	1460.32	-1.72	1
2135614	8	1464.4	1465.61	-1.21	1
2135615	28	1470	1465.77	4.23	0
2135618	8	1471.4	1471.12	0.28	1
2135619	8	1479.2	1474.56	4.64	1
2135619	28	1474	1470.73	3.27	1
2135620	8	1475.4	1476.56	-1.16	1
2135638	28	1461.9	1463.93	-2.03	1
2135646	28	1472.9	1471.5	1.4	0
2135648	8	1477.4	1475.79	1.61	1
2135649	28	1468.9	1469.76	-0.86	0
2135651	8	1476.7	1476.31	0.39	1
2135653	8	1474.4	1472.97	1.43	1
2135653	28	1470.3	1472.17	-1.87	1
2135658	8	1477.7	1478.5	-0.8	1
2135660	8	1468.6	1469.14	-0.54	1
2135662	8	1465.5	1470.18	-4.68	1

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2135662	28	1459.5	1469.46	-9.96	1
2135663	8	1470.3	1469.79	0.51	1
2135665	8	1472.5	1470.76	1.74	1
2135666	8	1471.2	1471.27	-0.07	1
2135667	8	1469.3	1470.28	-0.98	1
2135669	8	1468.2	1466.89	1.31	1
2135701	8	1501.56	1492.67	8.89	1
2135702	4	1519.14	1516.25	2.89	1
2135702	5	1518.02	1515.55	2.47	1
2135702	6	1517.1	1514.17	2.93	1
2135702	8	1508.43	1507.38	1.05	1
2135702	9	1511.28	1509.19	2.09	1
2135702	11	1507.98	1506.42	1.56	1
2135702	12	1507.98	1505.76	2.22	1
2135702	14	1505.89	1505.66	0.23	1
2135702	15	1503.97	1504.77	-0.8	1
2135702	16	1502.52	1502.89	-0.37	1
2135702	17	1500.53	1501.67	-1.14	1
2135702	18	1503.22	1504.07	-0.85	1
2135702	19	1502.98	1504.17	-1.19	1
2135702	20	1503.8	1506.42	-2.62	1
2135702	21	1504.86	1507.98	-3.12	1
2135702	22	1503.22	1506.49	-3.27	1
2135702	23	1506.71	1508.62	-1.91	1
2135702	24	1505.4	1510.35	-4.95	1
2135702	25	1508.42	1511.5	-3.08	1
2135702	27	1511.78	1512.76	-0.98	1
2135702	28	1508.8	1513.26	-4.46	1
2135702	29	1509.35	1512.46	-3.11	1
2135702	30	1509.1	1512.97	-3.87	1
2135702	42	1506.26	1510.26	-4	1
2135702	54	1506.88	1510.61	-3.73	1

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2135702	64	1511.25	1511.31	-0.06	1
2135702	93	1511.82	1512.59	-0.77	1
2135702	113	1511.21	1514.13	-2.92	1
2135702	125	1518.26	1515.02	3.24	1
2135702	137	1513.23	1514.23	-1	1
2135702	149	1513.02	1513.26	-0.24	1
2135702	161	1514.33	1515.03	-0.7	1
2135702	173	1513.56	1515.08	-1.52	1
2135702	185	1516.8	1515.86	0.94	1
2135702	199	1515.34	1516.4	-1.06	1
2135702	213	1513.19	1513.43	-0.24	1
2135702	224	1512.82	1511.37	1.45	1
2135702	236	1510.55	1508.77	1.78	1
2135702	248	1509.34	1508.96	0.38	1
2135702	259	1503.86	1503.02	0.84	1
2135702	270	1501.9	1500.5	1.4	1
2135702	284	1499.99	1499.59	0.4	1
2135702	295	1498.81	1497.06	1.75	1
2135702	304	1493.25	1495.8	-2.55	1
2135702	307	1497.7	1497.48	0.22	1
2135702	310	1494.58	1494.79	-0.21	1
2135702	319	1495.4	1493.4	2	1
2135702	321	1495.25	1494.62	0.63	1
2135702	334	1496.17	1492.6	3.57	1
2135703	6	1514.13	1513.76	0.37	1
2135703	7	1513.18	1511.62	1.56	1
2135703	8	1507.83	1507.21	0.62	1
2135703	9	1509.2	1508.64	0.56	1
2135703	11	1505.98	1506.31	-0.33	1
2135703	12	1506.14	1505.44	0.7	1
2135704	8	1501.8	1498.39	3.41	1
2135704	28	1497.9	1503.31	-5.41	1

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2135705	8	1499	1498.76	0.24	1
2135706	8	1496.5	1495.09	1.41	1
2135711	8	1499.8	1500.89	-1.09	1
2135712	8	1491.7	1494.56	-2.86	1
2135718	8	1504.2	1504.53	-0.33	1
2135718	28	1502.7	1509.45	-6.75	1
2135720	8	1515.8	1502.22	13.58	1
2135721	8	1501.4	1495.71	5.69	1
2135721	28	1498.4	1501.69	-3.29	1
2135726	8	1508.9	1492.1	16.8	1
2135726	28	1510.4	1499.05	11.35	1
2135727	8	1513	1512.88	0.12	1
2135727	28	1515	1516.15	-1.15	1
2135728	8	1511.1	1510.09	1.01	1
2135730	8	1513	1516.49	-3.49	1
2135731	8	1517.3	1517.07	0.23	1
2135731	28	1521	1522.92	-1.92	1
2135733	8	1513.4	1512.7	0.7	1
2135734	28	1508	1508.39	-0.39	1
2135736	8	1498.7	1498.16	0.54	1
2135737	8	1503.2	1501.16	2.04	1
2135738	8	1501.3	1498.35	2.95	1
2135739	8	1498.3	1496.78	1.52	1
2135740	8	1499.7	1497.71	1.99	1
2135741	8	1504.1	1504.59	-0.49	1
2135742	8	1503.7	1504.53	-0.83	1
2135746	28	1500.8	1498.68	2.12	1
2135801	8	1496.1	1487.48	8.62	1
2135801	9	1497.6	1491.43	6.17	1
2135801	11	1493.6	1488.65	4.95	1
2135801	12	1494.87	1489.35	5.52	1
2135801	15	1493.53	1489.57	3.96	1

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2135801	16	1491.72	1488.01	3.71	1
2135801	17	1489.42	1487.56	1.86	1
2135801	19	1484.56	1491.01	-6.45	1
2135801	20	1492.55	1493.4	-0.85	1
2135801	21	1493.83	1494.3	-0.47	1
2135801	22	1492.34	1492.1	0.24	1
2135801	23	1492.91	1494.44	-1.53	1
2135801	24	1496.78	1495.6	1.18	1
2135801	25	1498.87	1496.02	2.85	1
2135801	26	1493.6	1494.76	-1.16	1
2135801	27	1496.69	1496.32	0.37	1
2135801	28	1494.3	1496.15	-1.85	1
2135801	29	1493.9	1494.88	-0.98	1
2135801	30	1493.56	1495.25	-1.69	1
2135801	42	1489.9	1494.31	-4.41	1
2135801	64	1492.7	1495.66	-2.96	1
2135801	77	1493	1496.23	-3.23	1
2135801	113	1488.15	1497.76	-9.61	1
2135801	125	1496.47	1498.26	-1.79	1
2135801	137	1490.54	1496.98	-6.44	1
2135801	149	1490.81	1495.97	-5.16	1
2135801	161	1494.42	1497.81	-3.39	1
2135801	173	1495.5	1497.5	-2	1
2135801	185	1495.57	1498.11	-2.54	1
2135801	199	1495.92	1498.25	-2.33	1
2135801	213	1492.85	1495.69	-2.84	1
2135801	224	1493.43	1494.34	-0.91	1
2135804	8	1492.8	1490.52	2.28	1
2135806	8	1490.6	1485.48	5.12	1
2135808	8	1486.5	1485.87	0.63	1
2135809	8	1486.7	1486.09	0.61	1
2135810	28	1485.2	1487.39	-2.19	1

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2135811	8	1486.3	1486.92	-0.62	1
2135813	8	1487.1	1481.32	5.78	1
2135813	28	1478.3	1481.49	-3.19	1
2135814	8	1503	1491.39	11.61	1
2135815	8	1501.5	1490.53	10.97	1
2135816	8	1496	1491.13	4.87	1
2135817	8	1500.4	1491.64	8.76	1
2135817	28	1497.8	1498.6	-0.8	1
2135819	8	1495.5	1492.8	2.7	1
2135819	28	1490.5	1497.03	-6.53	1
2135822	8	1496.2	1488.36	7.84	1
2135823	8	1493.1	1488.4	4.7	1
2135824	8	1495.5	1490.81	4.69	1
2135825	8	1494.4	1491.38	3.02	1
2135826	8	1486.9	1486.13	0.77	1
2135827	8	1487.1	1491.24	-4.14	1
2135827	28	1486.1	1498.01	-11.91	1
2135829	28	1482.8	1482.27	0.53	1
2135903	8	1479.1	1479.41	-0.31	1
2135903	28	1477.1	1478.37	-1.27	1
2135905	8	1475.9	1476.66	-0.76	1
2135906	8	1474.6	1475.52	-0.92	1
2135906	28	1475.3	1475.61	-0.31	1
2135907	8	1474.5	1472.57	1.93	1
2135909	8	1479.9	1479.86	0.04	1
2135910	8	1480.2	1479.93	0.27	1
2135910	28	1478.4	1479.12	-0.72	1
2135913	8	1483.8	1480.21	3.59	1
2135916	28	1477.3	1480.72	-3.42	1
2136103	27	1449.22	1447.06	2.16	1
2136103	28	1448.36	1447.21	1.15	1
2136103	29	1446.96	1446.75	0.21	1

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2136103	30	1446.37	1446.84	-0.47	1
2136103	42	1446.33	1445.24	1.09	1
2136103	54	1445.92	1445.11	0.81	1
2136103	65	1446.35	1445.59	0.76	1
2136103	93	1445.66	1445.52	0.14	1
2136103	113	1446.1	1446.89	-0.79	1
2136104	8	1448.7	1444.3	4.4	1
2136104	28	1440.4	1440.35	0.05	1
2136109	8	1454.6	1455.21	-0.61	1
2136112	8	1454.9	1454.42	0.48	1
2136120	8	1444.9	1443.45	1.45	1
2136120	28	1439.5	1439.64	-0.14	1
2136121	8	1443.2	1442.85	0.35	1
2136122	8	1438	1439.17	-1.17	1
2136122	28	1442	1438.19	3.81	1
2136123	8	1453.4	1457.88	-4.48	1
2136123	28	1449.6	1453.6	-4	1
2136124	28	1445.3	1445.01	0.29	1
2136128	28	1449	1447.85	1.15	0
2136129	28	1447.2	1445.37	1.83	0
2136131	28	1452	1449.68	2.32	1
2136133	28	1440.6	1441.12	-0.52	1
2136145	28	1453.5	1451.97	1.53	0
2136201	4	1437.12	1437.55	-0.43	1
2136201	5	1435.4	1436.66	-1.26	1
2136201	6	1434.93	1435.61	-0.68	1
2136201	8	1431.84	1431.91	-0.07	1
2136201	9	1430.22	1432.29	-2.07	1
2136201	11	1431.98	1430.54	1.44	1
2136201	12	1433.37	1429.7	3.67	1
2136201	14	1433.28	1429.16	4.12	1
2136201	15	1432.46	1428.18	4.28	1

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2136201	16	1430.41	1426.91	3.5	1
2136201	17	1429.2	1425.82	3.38	1
2136201	18	1429.72	1426.22	3.5	1
2136201	19	1432.39	1425.89	6.5	1
2136201	20	1429.92	1426.54	3.38	1
2136201	21	1429.49	1427.13	2.36	1
2136201	22	1427.57	1426.17	1.4	1
2136201	23	1426.46	1426.78	-0.32	1
2136201	24	1427.94	1427.35	0.59	1
2136201	25	1428.04	1427.64	0.4	1
2136201	26	1426.6	1427.33	-0.73	1
2136201	27	1428.23	1427.8	0.43	1
2136201	28	1426.75	1427.85	-1.1	1
2136201	29	1427.55	1427.31	0.24	1
2136201	30	1427.46	1427.36	0.1	1
2136201	42	1425.71	1425.79	-0.08	1
2136201	54	1424.68	1425.91	-1.23	1
2136201	65	1422.72	1426.42	-3.7	1
2136201	77	1424.09	1426.64	-2.55	1
2136201	101	1424.85	1426.9	-2.05	1
2136201	113	1425.04	1427.62	-2.58	1
2136201	125	1427.6	1428.01	-0.41	1
2136201	137	1425.35	1427.75	-2.4	1
2136201	149	1425.22	1427.38	-2.16	1
2136201	161	1426.73	1428.17	-1.44	1
2136201	174	1426.82	1428.34	-1.52	1
2136201	187	1427.37	1429.05	-1.68	1
2136201	198	1429.6	1428.95	0.65	1
2136201	211	1427.25	1427.54	-0.29	1
2136201	224	1427.48	1426.74	0.74	1
2136201	236	1431.03	1425.45	5.58	1
2136201	248	1427.94	1425.47	2.47	1

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2136201	259	1425.8	1422.82	2.98	1
2136201	283	1420.86	1420.36	0.5	1
2136201	307	1421.55	1419.03	2.52	1
2136201	319	1420.1	1416.88	3.22	1
2136203	8	1443.2	1442.4	0.8	1
2136205	28	1439.4	1440.44	-1.04	1
2136206	28	1439.9	1439.52	0.38	1
2136208	8	1438.8	1440.95	-2.15	1
2136209	28	1432.4	1433.88	-1.48	1
2136210	8	1439.8	1437.12	2.68	1
2136212	28	1437.9	1438.29	-0.39	0
2136214	8	1439.3	1437.8	1.5	1
2136214	28	1434.1	1433.78	0.32	1
2136216	8	1441.8	1442.4	-0.6	1
2136226	8	1446.4	1444.8	1.6	1
2136227	28	1438.8	1438.28	0.52	1
2136229	8	1434.5	1432.22	2.28	1
2136230	8	1441.7	1443.21	-1.51	1
2136231	8	1442.1	1442.38	-0.28	1
2136240	28	1436.4	1438.04	-1.64	0
2136242	28	1433.3	1431.23	2.07	0
2136301	8	1425.96	1431.4	-5.44	1
2136301	9	1430.84	1431.41	-0.57	1
2136302	4	1435.28	1435.92	-0.64	1
2136302	5	1434.36	1434.91	-0.55	1
2136302	6	1434.11	1433.71	0.4	1
2136302	7	1433.14	1432.81	0.33	1
2136302	8	1429.1	1430.83	-1.73	1
2136302	9	1431.89	1430.89	1	1
2136302	11	1431.27	1429.95	1.32	1
2136302	12	1432.04	1429.36	2.68	1
2136302	14	1432.8	1429.23	3.57	1

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2136303	4	1429.4	1432.39	-2.99	1
2136303	5	1429.49	1431.71	-2.22	1
2136303	6	1431.32	1430.65	0.67	1
2136303	7	1430.2	1429.97	0.23	1
2136303	8	1424.6	1428.35	-3.75	1
2136303	9	1428.14	1428.4	-0.26	1
2136303	11	1427.63	1427.64	-0.01	1
2136303	12	1429.28	1427.3	1.98	1
2136303	14	1429.98	1427.3	2.68	1
2136303	15	1428.01	1426.65	1.36	1
2136303	16	1426.35	1426.05	0.3	1
2136303	17	1423.96	1425.41	-1.45	1
2136303	18	1426.24	1425.08	1.16	1
2136303	19	1425.99	1424.58	1.41	1
2136303	20	1426.9	1424.72	2.18	1
2136303	22	1425.45	1424.48	0.97	1
2136303	23	1425.22	1424.73	0.49	1
2136303	24	1426.57	1425.01	1.56	1
2136303	25	1428.12	1425.13	2.99	1
2136303	26	1425.38	1425.15	0.23	1
2136303	27	1427.07	1425.36	1.71	1
2136303	28	1425.59	1425.37	0.22	1
2136303	29	1425.51	1424.95	0.56	1
2136303	42	1424.38	1424.57	-0.19	1
2136303	54	1424.24	1424.38	-0.14	1
2136303	93	1423.28	1424.35	-1.07	1
2136303	113	1422.76	1425.39	-2.63	1
2136303	125	1423.98	1425.72	-1.74	1
2136303	137	1422.63	1425.62	-2.99	1
2136307	8	1436.4	1436.36	0.04	1
2136311	28	1425.5	1428.07	-2.57	1
2136313	8	1433.5	1431.42	2.08	1

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2136313	28	1430.6	1427.71	2.89	1
2136314	8	1433.5	1431.48	2.02	1
2136314	28	1429.6	1428.19	1.41	1
2136319	8	1428.9	1429.98	-1.08	1
2136322	8	1427.6	1428.35	-0.75	1
2136322	28	1429	1427.09	1.91	1
2136323	8	1427.9	1427.53	0.37	1
2136328	8	1427.5	1427.45	0.05	1
2136329	28	1409.8	1404.42	5.38	0
2136330	28	1435.4	1426.19	9.21	0
2136401	4	1464.86	1469.68	-4.82	1
2136401	5	1465.86	1468.26	-2.4	1
2136401	6	1465.86	1466.77	-0.91	1
2136401	7	1468.14	1464.86	3.28	1
2136401	9	1465.52	1461.78	3.74	1
2136401	11	1462.39	1459.31	3.08	1
2136401	12	1464.79	1458.09	6.7	1
2136401	16	1452.1	1454.17	-2.07	1
2136401	17	1451.92	1452.65	-0.73	1
2136401	18	1452.71	1453.32	-0.61	1
2136401	20	1453.72	1454	-0.28	1
2136401	21	1457.4	1454.9	2.5	1
2136401	22	1452.38	1453.74	-1.36	1
2136401	23	1451.18	1454.66	-3.48	1
2136401	24	1454.18	1455.57	-1.39	1
2136401	25	1455.2	1456.12	-0.92	1
2136401	26	1452.45	1455.79	-3.34	1
2136401	27	1452.01	1456.55	-4.54	1
2136401	28	1451.4	1456.75	-5.35	1
2136401	42	1449.95	1454.04	-4.09	1
2136401	54	1449.54	1454.29	-4.75	1
2136401	65	1449.85	1454.98	-5.13	1

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2136402	8	1463.3	1461.1	2.2	1
2136409	28	1452.3	1454.42	-2.12	0
2136410	28	1443.6	1445.24	-1.64	1
2136415	8	1458.7	1459.08	-0.38	1
2136415	28	1453.7	1455.26	-1.56	1
2136416	28	1449.4	1457.29	-7.89	0
2136417	8	1462.3	1460.66	1.64	1
2136419	8	1461.5	1458.93	2.57	1
2136419	28	1454.5	1454.96	-0.46	1
2136420	8	1461.4	1459.82	1.58	1
2136421	28	1451.6	1457.04	-5.44	0
2136428	8	1458.9	1459.4	-0.5	1
2136429	8	1463	1465.61	-2.61	1
2136430	8	1464.7	1462.53	2.17	1
2136430	28	1459.3	1459.55	-0.25	1
2136431	8	1454.7	1455.33	-0.63	1
2136431	28	1448.9	1450.91	-2.01	1
2136434	28	1446.4	1444.67	1.73	0
2136438	28	1445.9	1446.78	-0.88	1
2136440	8	1454.8	1452.05	2.75	1
2136442	28	1454.7	1456.45	-1.75	0
2136443	28	1457.3	1459.68	-2.38	0
2136444	28	1451.9	1454.85	-2.95	0
2136501	5	1456.61	1452.82	3.79	1
2136501	6	1454.2	1451.64	2.56	1
2136501	7	1452.62	1449.9	2.72	1
2136501	8	1445.46	1446.76	-1.3	1
2136501	9	1450.2	1447.65	2.55	1
2136501	11	1449.39	1444.98	4.41	1
2136501	12	1450.27	1444.16	6.11	1
2136501	14	1451.36	1443.36	8	1
2136501	15	1447.65	1442.29	5.36	1

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2136501	16	1445.79	1440.62	5.17	1
2136501	17	1443.16	1439.33	3.83	1
2136501	18	1442.94	1440.22	2.72	1
2136501	19	1442.58	1439.68	2.9	1
2136501	20	1444.16	1440.63	3.53	1
2136501	21	1444.94	1441.3	3.64	1
2136501	22	1441.57	1439.93	1.64	1
2136501	23	1441.82	1440.91	0.91	1
2136501	24	1445.22	1441.65	3.57	1
2136501	25	1444.61	1441.99	2.62	1
2136501	26	1440.15	1441.47	-1.32	1
2136501	27	1444.27	1442.24	2.03	1
2136501	28	1440.58	1442.28	-1.7	1
2136501	29	1441.72	1441.54	0.18	1
2136501	30	1439.4	1441.67	-2.27	1
2136501	42	1438.16	1440.04	-1.88	1
2136501	54	1437.21	1440.26	-3.05	1
2136501	65	1437	1440.84	-3.84	1
2136501	77	1438.83	1441.05	-2.22	1
2136501	101	1435.76	1441.48	-5.72	1
2136501	113	1436.45	1442.34	-5.89	1
2136501	125	1437.81	1442.88	-5.07	1
2136501	137	1435.1	1442.48	-7.38	1
2136501	149	1436.37	1442.01	-5.64	1
2136501	161	1437.91	1443.16	-5.25	1
2136501	174	1438.36	1443.31	-4.95	1
2136501	187	1438.83	1444.28	-5.45	1
2136501	198	1444.3	1444.13	0.17	1
2136501	211	1439.9	1442.3	-2.4	1
2136502	8	1447.94	1446.69	1.25	1
2136502	11	1449.75	1444.91	4.84	1
2136502	14	1451.5	1443.3	8.2	1

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2136502	15	1448.64	1442.26	6.38	1
2136505	28	1438.1	1442.47	-4.37	1
2136508	8	1444.7	1447.19	-2.49	1
2136508	28	1442.9	1442.68	0.22	1
2136509	8	1441.8	1446.76	-4.96	1
2136509	28	1438.9	1442.46	-3.56	1
2136510	8	1445.5	1447.03	-1.53	1
2136512	8	1449	1449.59	-0.59	1
2136513	8	1449.5	1447.16	2.34	1
2136513	28	1443.5	1442.45	1.05	1
2136518	28	1444.3	1442.68	1.62	1
2136519	25	1439	1442.19	-3.19	1
2136522	8	1449.6	1449.59	0.01	1
2136522	28	1445	1445.75	-0.75	1
2136523	25	1431	1442.79	-11.79	1
2136525	8	1448.8	1449.8	-1	1
2136527	28	1442.5	1442.43	0.07	0
2136528	57	1438	1440.35	-2.35	1
2136603	28	1428.8	1409.84	18.96	0
2141104	8	1498	1493.68	4.32	1
2141105	8	1500	1501.43	-1.43	1
2141107	8	1496.8	1495.5	1.3	1
2141107	28	1500.6	1501.39	-0.79	1
2141117	28	1506.1	1509.73	-3.63	0
2141120	28	1491.9	1491.47	0.43	0
2141123	28	1494.2	1498.7	-4.5	1
2141138	28	1510.2	1497.45	12.75	0
2141201	28	1563.3	1552.88	10.42	0
2141206	28	1546.4	1547.66	-1.26	0
2141207	28	1560.9	1554.93	5.97	0
2141208	28	1556.8	1563.72	-6.92	0
2141214	28	1552.3	1549.33	2.97	1

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2141302	8	1547.7	1550.62	-2.92	1
2141303	8	1545.8	1550.62	-4.82	1
2141304	8	1553.1	1559.09	-5.99	1
2141304	28	1560.5	1561.21	-0.71	1
2141305	8	1559.2	1559.09	0.11	1
2141310	28	1569.1	1566.1	3	1
2141312	28	1571.7	1569.68	2.02	0
2141314	8	1566.3	1566.71	-0.41	1
2141317	8	1558.5	1559	-0.5	1
2141318	8	1556.7	1557.31	-0.61	1
2141318	28	1561.8	1557.09	4.71	1
2141320	28	1577.5	1584.95	-7.45	0
2141321	8	1554.5	1552.71	1.79	1
2141322	28	1568.4	1577.41	-9.01	0
2141323	28	1566.7	1567.42	-0.72	0
2141330	28	1572.5	1569.3	3.2	0
2141401	8	1558.8	1560.53	-1.73	1
2141402	28	1510.4	1510.57	-0.17	1
2141414	28	1511.4	1536	-24.6	0
2141418	28	1513.6	1510.57	3.03	0
2141433	8	1558.7	1554.76	3.94	1
2141433	28	1564.9	1558.89	6.01	1
2141434	8	1555.2	1554.76	0.44	1
2141435	8	1553.1	1553.1	0	1
2141501	28	1579.1	1585.52	-6.42	0
2141504	28	1578.6	1586.34	-7.74	1
2141509	28	1563.4	1587.21	-23.81	0
2141514	28	1580.5	1586.92	-6.42	0
2141601	8	1582	1586.88	-4.88	1
2141602	8	1581	1581.89	-0.89	1
2141602	28	1590.9	1586.66	4.24	1
2141606	28	1576.3	1580.71	-4.41	1

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2141609	28	1581.9	1585.04	-3.14	0
2141612	28	1583.5	1584.28	-0.78	0
2141615	8	1587.4	1584.59	2.81	1
2141616	28	1582.5	1587.32	-4.82	0
2141617	8	1587.2	1585.06	2.14	1
2141617	28	1589.6	1588.04	1.56	1
2141618	8	1587.8	1586.88	0.92	1
2141621	28	1584.9	1581.26	3.64	1
2141623	8	1576.9	1579.1	-2.2	1
2141624	8	1582.9	1579.56	3.34	1
2141626	28	1580	1583.89	-3.89	0
2141702	28	1519.4	1525.71	-6.31	1
2141707	8	1554.9	1557.93	-3.03	1
2141708	28	1558.3	1560.74	-2.44	1
2141801	6	1581.73	1583.91	-2.18	1
2141801	7	1581.6	1583.13	-1.53	1
2141801	8	1580.54	1580.44	0.1	1
2141801	9	1580.69	1582.59	-1.9	1
2141801	11	1581.18	1581.24	-0.06	1
2141801	12	1581.06	1581.2	-0.14	1
2141801	14	1582.27	1582.01	0.26	1
2141801	15	1582.46	1581.33	1.13	1
2141801	16	1582.13	1580.33	1.8	1
2141801	17	1580.68	1579.76	0.92	1
2141801	18	1582.76	1581.22	1.54	1
2141801	19	1581.58	1580.92	0.66	1
2141801	20	1582.43	1582.13	0.3	1
2141801	21	1583.08	1583.06	0.02	1
2141801	22	1582.55	1581.26	1.29	1
2141801	23	1582.39	1582.34	0.05	1
2141801	24	1582.58	1583.1	-0.52	1
2141801	25	1583.73	1583.28	0.45	1

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2141801	26	1583.1	1582.65	0.45	1
2141801	27	1583.46	1583.42	0.04	1
2141801	28	1583.28	1583.37	-0.09	1
2141801	29	1582.05	1582.36	-0.31	1
2141801	30	1582.74	1582.65	0.09	1
2141801	42	1581.93	1582	-0.07	1
2141801	54	1582.32	1582.62	-0.3	1
2141801	64	1582.79	1583.74	-0.95	1
2141801	77	1582.33	1583.9	-1.57	1
2141801	93	1583.37	1583.49	-0.12	1
2141801	113	1585.45	1585.2	0.25	1
2141802	8	1580.9	1580.44	0.46	1
2141803	8	1580.4	1580.44	-0.04	1
2141808	8	1584.5	1588.41	-3.91	1
2141809	8	1587.3	1587.64	-0.34	1
2141809	28	1585.1	1587.96	-2.86	1
2141810	8	1591.3	1591.65	-0.35	1
2141810	28	1595.3	1592.34	2.96	1
2141815	28	1606	1599.98	6.02	1
2141816	28	1600.5	1598.88	1.62	0
2141904	28	1593.8	1593.97	-0.17	1
2141907	28	1593.6	1597.23	-3.63	0
2141908	8	1586.6	1587.38	-0.78	1
2141912	8	1600.9	1604.45	-3.55	1
2141913	8	1598.7	1600.53	-1.83	1
2141913	9	1599.7	1601.53	-1.83	1
2141913	28	1601.5	1602.37	-0.87	1
2141915	8	1596.5	1599.33	-2.83	1
2141917	28	1605.6	1605.77	-0.17	1
2141918	8	1595.7	1598.74	-3.04	1
2141919	8	1598.4	1597.52	0.88	1
2141919	28	1603.9	1599.95	3.95	1

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2142101	8	1563.5	1564.04	-0.54	1
2142102	4	1565.68	1570.05	-4.37	1
2142102	5	1564.97	1569.25	-4.28	1
2142102	6	1563.89	1568.06	-4.17	1
2142102	7	1566.28	1566.76	-0.48	1
2142102	8	1564.5	1563.51	0.99	1
2142102	9	1564.64	1564.57	0.07	1
2142102	11	1563	1563.2	-0.2	1
2142102	12	1563.53	1562.61	0.92	1
2142102	14	1563.96	1562.97	0.99	1
2142102	15	1562.37	1562.05	0.32	1
2142102	16	1561.37	1560.85	0.52	1
2142102	17	1559.4	1559.91	-0.51	1
2142102	18	1561.96	1560.97	0.99	1
2142102	19	1562.22	1560.92	1.3	1
2142102	20	1561.9	1562.26	-0.36	1
2142102	21	1562.11	1563.51	-1.4	1
2142102	22	1564.2	1562.31	1.89	1
2142103	4	1570.15	1568.84	1.31	1
2142103	5	1569.37	1568.86	0.51	1
2142103	6	1568.12	1568.01	0.11	1
2142103	7	1570.3	1565.91	4.39	1
2142103	8	1564.26	1561.48	2.78	1
2142103	9	1565.29	1564.17	1.12	1
2142103	11	1564.04	1561.34	2.7	1
2142104	7	1566.41	1565.17	1.24	1
2142104	8	1560.45	1560.75	-0.3	1
2142104	9	1561.49	1563.33	-1.84	1
2142104	11	1560.37	1560.59	-0.22	1
2142104	12	1554.08	1560.19	-6.11	1
2142104	14	1557.95	1560.41	-2.46	1
2142104	15	1557.58	1559.68	-2.1	1

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2142104	16	1556.61	1557.81	-1.2	1
2142104	17	1554.05	1556.72	-2.67	1
2142104	18	1556.44	1559.64	-3.2	1
2142104	19	1558.7	1559.77	-1.07	1
2142104	20	1561.22	1562.23	-1.01	1
2142104	21	1561.21	1563.78	-2.57	1
2142104	22	1560.6	1561.95	-1.35	1
2142104	23	1560.16	1564.18	-4.02	1
2142104	24	1565.48	1565.83	-0.35	1
2142104	25	1568.86	1566.78	2.08	1
2142104	26	1567.51	1566.05	1.46	1
2142104	27	1570.9	1567.65	3.25	1
2142104	28	1568.7	1567.94	0.76	1
2142104	29	1569.08	1566.88	2.2	1
2142104	30	1569.57	1567.29	2.28	1
2142104	42	1566.73	1564.33	2.4	1
2142104	54	1566.64	1564.95	1.69	1
2142104	64	1571.5	1565.88	5.62	1
2142104	93	1570.78	1567.44	3.34	1
2142104	113	1569.12	1569.18	-0.06	1
2142104	125	1576.16	1569.91	6.25	1
2142104	137	1571.87	1568.86	3.01	1
2142104	149	1570.5	1567.71	2.79	1
2142104	161	1573.22	1569.85	3.37	1
2142104	173	1573.31	1569.81	3.5	1
2142104	185	1572.89	1570.71	2.18	1
2142104	199	1572.31	1571.27	1.04	1
2142104	213	1567.2	1568	-0.8	1
2142104	224	1568.28	1566.02	2.26	1
2142104	236	1565.35	1563.67	1.68	1
2142104	248	1566.89	1564.5	2.39	1
2142104	259	1561.08	1557.97	3.11	1

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2142104	270	1559.15	1555.86	3.29	1
2142104	284	1554.33	1555.98	-1.65	1
2142104	295	1552.82	1553.65	-0.83	1
2142104	307	1551.77	1554.78	-3.01	1
2142104	319	1549.48	1550.53	-1.05	1
2142105	22	1561	1562.89	-1.89	1
2142106	22	1559.2	1559.45	-0.25	0
2142107	28	1572.2	1572.32	-0.12	1
2142110	8	1558.4	1560.67	-2.27	1
2142110	28	1567.4	1565.68	1.72	1
2142111	8	1549	1548.61	0.39	1
2142111	28	1556.5	1552.59	3.91	1
2142112	28	1551.7	1553.33	-1.63	0
2142116	8	1544.5	1546.56	-2.06	1
2142119	8	1560.3	1563.06	-2.76	1
2142120	8	1564.1	1567.76	-3.66	1
2142120	28	1572.1	1571.5	0.6	1
2142121	8	1559.45	1556.66	2.79	1
2142122	28	1563.1	1559.73	3.37	1
2142123	8	1549	1550.96	-1.96	1
2142124	8	1543.1	1548.75	-5.65	1
2142125	8	1543	1542.14	0.86	1
2142127	8	1545.3	1543.72	1.58	1
2142127	28	1551	1549.82	1.18	1
2142128	8	1542.7	1543.39	-0.69	1
2142129	8	1558	1557.31	0.69	1
2142134	28	1574.2	1567.34	6.86	0
2142201	6	1537.9	1539.71	-1.81	1
2142201	7	1538.09	1537.63	0.46	1
2142201	8	1538.96	1533.14	5.82	1
2142201	9	1533.52	1535.45	-1.93	1
2142201	11	1531.72	1533.1	-1.38	1

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2142201	12	1530.91	1532.4	-1.49	1
2142201	14	1528.55	1532.9	-4.35	1
2142201	15	1528.18	1531.92	-3.74	1
2142201	16	1527.7	1530.07	-2.37	1
2142201	17	1526.56	1528.9	-2.34	1
2142201	18	1528.98	1531.68	-2.7	1
2142201	19	1528.12	1532.06	-3.94	1
2142201	20	1532.37	1534.57	-2.2	1
2142201	21	1532.58	1536.35	-3.77	1
2142201	22	1535.18	1534.69	0.49	1
2142201	23	1536.68	1536.88	-0.2	1
2142201	24	1539	1538.72	0.28	1
2142201	25	1544.18	1539.83	4.35	1
2142201	26	1541.5	1539.26	2.24	1
2142201	27	1544.57	1540.84	3.73	1
2142201	28	1541.18	1541.29	-0.11	1
2142201	29	1543.49	1540.31	3.18	1
2142201	30	1540.75	1540.73	0.02	1
2142201	42	1540.65	1537.77	2.88	1
2142201	54	1541.28	1538.54	2.74	1
2142201	64	1543.11	1539.62	3.49	1
2142201	93	1543.32	1540.95	2.37	1
2142201	113	1546.11	1542.77	3.34	1
2142201	125	1553.74	1543.55	10.19	1
2142201	137	1547.7	1542.48	5.22	1
2142201	149	1546.55	1541.31	5.24	1
2142201	161	1547.14	1543.46	3.68	1
2142201	173	1546.8	1543.41	3.39	1
2142201	185	1548.12	1544.26	3.86	1
2142201	199	1547.56	1544.81	2.75	1
2142201	213	1540.35	1541.25	-0.9	1
2142201	224	1541.55	1539.13	2.42	1

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2142201	298	1527.67	1526.66	1.01	1
2142201	304	1527	1524.52	2.48	1
2142201	310	1529.18	1526.73	2.45	1
2142201	321	1526.58	1523.5	3.08	1
2142201	334	1527.58	1524.54	3.04	1
2142202	4	1538.8	1534.68	4.12	1
2142202	5	1536.3	1535.29	1.01	1
2142202	6	1533.59	1534.47	-0.88	1
2142202	8	1527.96	1527.53	0.43	1
2142202	9	1527.48	1530.8	-3.32	1
2142202	11	1526.01	1527.34	-1.33	1
2142202	12	1525.11	1527.28	-2.17	1
2142202	14	1521.7	1527.37	-5.67	1
2142202	15	1522.4	1526.86	-4.46	1
2142202	16	1518.8	1524.84	-6.04	1
2142202	17	1520.81	1523.84	-3.03	1
2142202	18	1523.82	1527.38	-3.56	1
2142202	19	1523.02	1527.35	-4.33	1
2142202	20	1526.9	1530.11	-3.21	1
2142202	21	1527.32	1531.63	-4.31	1
2142202	22	1530.98	1529.57	1.41	1
2142202	23	1531.89	1532.23	-0.34	1
2142202	24	1535.42	1533.97	1.45	1
2142202	25	1538.74	1534.94	3.8	1
2142202	26	1535.68	1534.04	1.64	1
2142202	27	1540.98	1535.97	5.01	1
2142202	28	1534.91	1536.24	-1.33	1
2142202	29	1538.8	1535.11	3.69	1
2142202	30	1538.63	1535.65	2.98	1
2142202	42	1533.08	1533.38	-0.3	1
2142202	54	1535.21	1534.01	1.2	1
2142202	64	1536.76	1534.95	1.81	1

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2142202	77	1539.42	1535.88	3.54	1
2142202	101	1540.68	1536.54	4.14	1
2142202	113	1540.2	1538.2	2	1
2142202	125	1547.33	1538.87	8.46	1
2142202	137	1538.14	1537.73	0.41	1
2142202	149	1537.25	1536.56	0.69	1
2142202	161	1537.96	1538.86	-0.9	1
2142202	173	1537.38	1538.64	-1.26	1
2142202	185	1538.05	1539.51	-1.46	1
2142202	199	1538.87	1539.9	-1.03	1
2142202	213	1536.45	1536.6	-0.15	1
2142202	224	1532.78	1534.6	-1.82	1
2142202	236	1530	1532.16	-2.16	1
2142202	248	1532.61	1532.81	-0.2	1
2142202	259	1523.07	1525.7	-2.63	1
2142202	284	1520.11	1523.89	-3.78	1
2142202	295	1522.81	1521.19	1.62	1
2142202	307	1523.01	1522.33	0.68	1
2142203	7	1539.5	1541.43	-1.93	1
2142204	28	1565.5	1562.02	3.48	0
2142205	8	1546.3	1548.32	-2.02	1
2142209	8	1548	1547.56	0.44	1
2142210	8	1550.4	1551.95	-1.55	1
2142213	28	1556.8	1554.31	2.49	1
2142219	8	1540.6	1540.64	-0.04	1
2142220	8	1545	1539.52	5.48	1
2142221	8	1543.3	1541.37	1.93	1
2142223	8	1537.1	1537.26	-0.16	1
2142224	8	1527.5	1535.52	-8.02	1
2142226	8	1533.3	1538.96	-5.66	1
2142226	28	1544.9	1546.72	-1.82	1
2142231	8	1538	1541.56	-3.56	1

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2142232	8	1534.3	1537.38	-3.08	1
2142234	8	1541.5	1542.38	-0.88	1
2142235	8	1541.3	1538.97	2.33	1
2142235	28	1553.2	1547.43	5.77	1
2142236	8	1538.4	1539.53	-1.13	1
2142237	8	1535.5	1536.66	-1.16	1
2142237	28	1545.1	1544.76	0.34	1
2142238	8	1533.1	1536.1	-3	1
2142239	8	1531.7	1535.36	-3.66	1
2142241	8	1534.3	1536.76	-2.46	1
2142241	28	1542.5	1543.54	-1.04	1
2142242	8	1528.2	1530.67	-2.47	1
2142244	7	1533.8	1539.74	-5.94	1
2142246	8	1529.8	1529.29	0.51	1
2142247	7	1527.9	1533.24	-5.34	1
2142249	8	1526.7	1528.13	-1.43	1
2142249	28	1532.4	1536.79	-4.39	1
2142250	8	1530.8	1528.59	2.21	1
2142251	8	1527.5	1524.92	2.58	1
2142252	8	1525.9	1524.09	1.81	1
2142253	8	1529.9	1524.14	5.76	1
2142254	8	1528.4	1528.38	0.02	1
2142256	4	1554.28	1557.88	-3.6	1
2142256	5	1553.34	1557.16	-3.82	1
2142256	6	1552.94	1555.87	-2.93	1
2142256	7	1552.6	1553.81	-1.21	1
2142256	8	1547.93	1549.51	-1.58	1
2142256	9	1551.35	1551.35	0	1
2142256	11	1547.48	1549.01	-1.53	1
2142301	8	1538.5	1535.96	2.54	1
2142301	28	1545.5	1543.13	2.37	1
2142302	8	1528.6	1526.85	1.75	1

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2142302	28	1536.4	1531.84	4.56	1
2142305	28	1539.5	1532.81	6.69	0
2142306	8	1535	1529.23	5.77	1
2142307	28	1541.6	1532.52	9.08	1
2142308	8	1529.8	1527.01	2.79	1
2142310	8	1541.5	1538.69	2.81	1
2142313	8	1527.6	1527.62	-0.02	1
2142313	28	1537.5	1534.48	3.02	1
2142315	8	1525.8	1524.43	1.37	1
2142316	8	1524	1523.45	0.55	1
2142317	8	1522	1523.94	-1.94	1
2142319	8	1520.6	1524.21	-3.61	1
2142319	28	1534.9	1531	3.9	1
2142320	8	1518.8	1522.26	-3.46	1
2142320	28	1528.9	1529.44	-0.54	1
2142320	321	1509.5	1513.55	-4.05	1
2142320	334	1509.58	1512.4	-2.82	1
2142321	8	1518.3	1523.82	-5.52	1
2142324	8	1522.8	1524.23	-1.43	1
2142325	28	1532.4	1529.12	3.28	1
2142326	7	1520.3	1525.32	-5.02	1
2142327	8	1528.4	1524.74	3.66	1
2142327	28	1535.9	1530.52	5.38	1
2142401	4	1578.31	1583.59	-5.28	1
2142401	7	1579.1	1580.31	-1.21	1
2142401	8	1574.06	1576.26	-2.2	1
2142401	9	1575.47	1578.29	-2.82	1
2142401	14	1575.46	1576.1	-0.64	1
2142401	15	1571.8	1575.11	-3.31	1
2142401	16	1574.18	1573.5	0.68	1
2142401	17	1575.57	1572.44	3.13	1
2142401	18	1580.45	1574.7	5.75	1

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2142401	21	1572	1578.52	-6.52	1
2142401	23	1582.94	1578.62	4.32	1
2142401	25	1586.54	1580.97	5.57	1
2142401	26	1582.23	1580.43	1.8	1
2142401	27	1585.83	1581.73	4.1	1
2142401	28	1581.17	1582.04	-0.87	1
2142401	64	1583.5	1580.88	2.62	1
2142401	77	1584.13	1581.59	2.54	1
2142401	101	1587.26	1582.06	5.2	1
2142401	113	1587.43	1583.7	3.73	1
2142401	125	1588.25	1584.22	4.03	1
2142401	137	1588.12	1583.42	4.7	1
2142401	149	1581.27	1582.43	-1.16	1
2142401	161	1584.5	1584.26	0.24	1
2142401	173	1582.92	1584.49	-1.57	1
2142401	185	1584.23	1585.25	-1.02	1
2142401	202	1591.2	1585.66	5.54	1
2142401	213	1577	1582.82	-5.82	1
2142401	224	1578.46	1581.31	-2.85	1
2142402	5	1563.97	1569.01	-5.04	1
2142402	6	1563.32	1568.07	-4.75	1
2142402	7	1563.54	1565.91	-2.37	1
2142402	8	1561.2	1561.38	-0.18	1
2142402	9	1561.37	1563.95	-2.58	1
2142402	11	1558.25	1561.25	-3	1
2142402	12	1558.55	1560.7	-2.15	1
2142402	14	1557.91	1561.07	-3.16	1
2142402	15	1557.57	1560.21	-2.64	1
2142402	16	1556.63	1558.28	-1.65	1
2142402	17	1556.38	1557.13	-0.75	1
2142402	18	1560.06	1560.14	-0.08	1
2142402	19	1562.06	1560.42	1.64	1

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2142402	20	1560.1	1563	-2.9	1
2142402	21	1562.77	1564.7	-1.93	1
2142402	22	1562.19	1562.88	-0.69	1
2142402	23	1563.55	1565.14	-1.59	1
2142402	24	1564.24	1566.9	-2.66	1
2142402	25	1569.95	1567.91	2.04	1
2142402	26	1568.84	1567.19	1.65	1
2142402	27	1570.27	1568.81	1.46	1
2142402	28	1568.01	1569.16	-1.15	1
2142402	29	1570.85	1568.1	2.75	1
2142402	30	1567.84	1568.48	-0.64	1
2142402	42	1565.28	1565.74	-0.46	1
2142402	54	1566.55	1566.41	0.14	1
2142402	64	1567.01	1567.49	-0.48	1
2142402	93	1570.58	1568.89	1.69	1
2142402	113	1572.78	1570.7	2.08	1
2142402	125	1574.7	1571.48	3.22	1
2142402	137	1572.96	1570.48	2.48	1
2142404	8	1569.7	1568.75	0.95	1
2142404	28	1577	1575.88	1.12	1
2142405	8	1570.4	1570.56	-0.16	1
2142405	22	1573.6	1572.01	1.59	1
2142405	28	1579	1577.69	1.31	1
2142407	22	1569.3	1566.18	3.12	1
2142409	27	1586.74	1582.47	4.27	1
2142409	28	1583.09	1582.83	0.26	1
2142409	29	1581.51	1582.01	-0.5	1
2142409	30	1582.45	1582.36	0.09	1
2142409	31	1580.23	1579.84	0.39	1
2142409	32	1580.1	1579.74	0.36	1
2142409	33	1579.89	1579.8	0.09	1
2142409	34	1579.87	1579.74	0.13	1

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2142409	40	1575.08	1579.79	-4.71	1
2142409	41	1576.32	1579.83	-3.51	1
2142409	43	1576.9	1580.17	-3.27	1
2142409	44	1579.25	1580.18	-0.93	1
2142409	45	1577.43	1580.45	-3.02	1
2142409	46	1577.59	1580.52	-2.93	1
2142409	47	1577.41	1580.65	-3.24	1
2142409	48	1578.03	1580.63	-2.6	1
2142409	49	1578.73	1580.38	-1.65	1
2142409	50	1579.33	1580.06	-0.73	1
2142409	51	1576.73	1580.08	-3.35	1
2142409	52	1577.97	1580.09	-2.12	1
2142409	53	1577.12	1580.66	-3.54	1
2142409	54	1577.34	1580.59	-3.25	1
2142409	55	1577.32	1580.55	-3.23	1
2142409	56	1577	1580.72	-3.72	1
2142409	57	1577.05	1580.82	-3.77	1
2142409	58	1576.98	1580.84	-3.86	1
2142409	59	1576.68	1580.78	-4.1	1
2142409	60	1576.77	1581.56	-4.79	1
2142409	61	1579.82	1581.9	-2.08	1
2142409	62	1583.32	1581.59	1.73	1
2142409	63	1584.79	1581.58	3.21	1
2142409	64	1584.35	1581.64	2.71	1
2142409	65	1584.36	1581.7	2.66	1
2142409	66	1583.69	1581.92	1.77	1
2142409	67	1583.51	1582.08	1.43	1
2142409	68	1583.18	1582.34	0.84	1
2142409	69	1583.87	1582.45	1.42	1
2142409	70	1584.43	1582.57	1.86	1
2142409	71	1584.49	1582.46	2.03	1
2142409	72	1584.71	1582.55	2.16	1

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2142409	73	1588.34	1582.31	6.03	1
2142409	74	1588.62	1581.97	6.65	1
2142409	75	1587.35	1581.7	5.65	1
2142409	76	1585.63	1581.68	3.95	1
2142409	77	1584.5	1582.33	2.17	1
2142409	78	1585.9	1582.48	3.42	1
2142409	79	1585.97	1582.52	3.45	1
2142409	80	1585.68	1582.49	3.19	1
2142409	81	1585.57	1582.62	2.95	1
2142409	82	1585.37	1582.57	2.8	1
2142409	83	1585.17	1582.23	2.94	1
2142409	84	1584.24	1581.79	2.45	1
2142409	85	1582.48	1581.32	1.16	1
2142409	86	1582.4	1580.98	1.42	1
2142409	87	1580.86	1580.93	-0.07	1
2142409	88	1580.62	1580.99	-0.37	1
2142409	89	1580.62	1581.4	-0.78	1
2142409	90	1580.82	1581.66	-0.84	1
2142409	91	1581.23	1582.05	-0.82	1
2142409	92	1581.88	1582	-0.12	1
2142409	94	1585.37	1582.48	2.89	1
2142409	95	1586.28	1582.69	3.59	1
2142409	96	1588.16	1582.58	5.58	1
2142409	97	1590.95	1582.58	8.37	1
2142409	98	1589.45	1582.38	7.07	1
2142409	99	1586.53	1582.24	4.29	1
2142409	100	1585.43	1582.46	2.97	1
2142409	101	1585.03	1582.81	2.22	1
2142409	102	1585.47	1582.83	2.64	1
2142409	103	1585.22	1582.79	2.43	1
2142409	104	1585.01	1582.77	2.24	1
2142409	105	1584.84	1582.89	1.95	1

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2142409	106	1584.57	1582.91	1.66	1
2142410	8	1583.3	1584.83	-1.53	1
2142412	8	1576.5	1580.58	-4.08	1
2142413	28	1578.8	1583.59	-4.79	1
2142414	28	1586.3	1585.28	1.02	0
2142415	8	1576.4	1578.82	-2.42	1
2142415	28	1585.7	1584.2	1.5	1
2142417	8	1578.6	1579.21	-0.61	1
2142418	8	1577.3	1577.79	-0.49	1
2142418	28	1587.7	1583.98	3.72	1
2142422	28	1582.1	1579.34	2.76	1
2142426	28	1575.5	1578.36	-2.86	0
2142430	8	1574.1	1582.65	-8.55	1
2142430	28	1585.9	1586.66	-0.76	1
2142431	8	1571.4	1581.95	-10.55	1
2142432	8	1576.3	1574.62	1.68	1
2142433	8	1572.9	1573.99	-1.09	1
2142433	28	1579.8	1577.39	2.41	1
2142434	8	1563.2	1569.06	-5.86	1
2142435	8	1560.5	1558.08	2.42	1
2142435	28	1575.2	1566.17	9.03	1
2142454	8	1576.1	1575.07	1.03	1
2142454	28	1585.6	1581.03	4.57	1
2142455	8	1564.4	1564.51	-0.11	1
2142459	236	1570	1579.21	-9.21	1
2142459	270	1566.9	1572.84	-5.94	1
2142459	284	1562.38	1572.44	-10.06	1
2142459	295	1563.17	1570.52	-7.35	1
2142502	9	1551.12	1551.31	-0.19	1
2142502	11	1548.45	1548.83	-0.38	1
2142502	14	1549.63	1548.44	1.19	1
2142502	15	1547.3	1547.64	-0.34	1

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2142502	16	1547.35	1545.88	1.47	1
2142502	17	1545.43	1544.76	0.67	1
2142502	18	1547.66	1547.17	0.49	1
2142502	19	1547.04	1547.29	-0.25	1
2142502	20	1552.6	1549.54	3.06	1
2142502	21	1552.77	1551.11	1.66	1
2142502	22	1553.12	1549.61	3.51	1
2142502	23	1560.77	1551.68	9.09	1
2142502	24	1560.53	1553.34	7.19	1
2142502	25	1560.19	1554.41	5.78	1
2142502	26	1555.63	1553.98	1.65	1
2142502	27	1561.13	1555.52	5.61	1
2142502	28	1555.9	1555.94	-0.04	1
2142502	29	1554.93	1555.06	-0.13	1
2142502	30	1557.66	1555.52	2.14	1
2142502	42	1551.75	1553.11	-1.36	1
2142502	54	1552.25	1553.65	-1.4	1
2142502	64	1557.09	1554.51	2.58	1
2142502	93	1559.32	1555.72	3.6	1
2142502	113	1557.84	1557.39	0.45	1
2142502	125	1560.13	1558.35	1.78	1
2142502	137	1556.77	1557.63	-0.86	1
2142502	149	1554.3	1556.73	-2.43	1
2142502	161	1555.75	1558.36	-2.61	1
2142502	173	1555.67	1558.56	-2.89	1
2142502	185	1558.44	1559.39	-0.95	1
2142502	199	1556.83	1559.91	-3.08	1
2142502	213	1555.27	1557.06	-1.79	1
2142502	224	1549.58	1555.21	-5.63	1
2142504	8	1564.8	1569.49	-4.69	1
2142504	28	1573.7	1573.63	0.07	1
2142506	28	1572	1572.06	-0.06	1

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2142508	28	1572.8	1573.28	-0.48	0
2142510	28	1568	1562.7	5.3	0
2142513	28	1557.7	1572.26	-14.56	0
2142521	8	1546.3	1548.2	-1.9	1
2142522	8	1546.4	1550.1	-3.7	1
2142524	8	1550.1	1553.12	-3.02	1
2142602	28	1551.1	1531.4	19.7	0
2142603	28	1545.6	1534.36	11.24	0
2142701	4	1615	1623.23	-8.23	1
2142701	5	1614.68	1622.85	-8.17	1
2142701	6	1612.6	1621.89	-9.29	1
2142701	7	1613.72	1621.44	-7.72	1
2142701	8	1611.66	1619.54	-7.88	1
2142701	9	1615.09	1620.2	-5.11	1
2142701	11	1616.66	1619.71	-3.05	1
2142701	12	1617.94	1619.56	-1.62	1
2142701	15	1618.43	1619.51	-1.08	1
2142701	16	1618.51	1619.02	-0.51	1
2142701	17	1616.56	1618.54	-1.98	1
2142701	18	1623.2	1618.53	4.67	1
2142701	19	1620	1618.11	1.89	1
2142701	20	1620.52	1618.56	1.96	1
2142701	21	1620.56	1619.34	1.22	1
2142701	22	1619.88	1618.33	1.55	1
2142701	23	1626.47	1618.81	7.66	1
2142701	24	1627.86	1619.3	8.56	1
2142701	25	1625.18	1619.51	5.67	1
2142701	26	1623.75	1619.55	4.2	1
2142701	27	1626.43	1619.94	6.49	1
2142701	28	1624.1	1620.02	4.08	1
2142701	29	1620.23	1619.45	0.78	1
2142701	30	1622.7	1619.74	2.96	1

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2142701	42	1623.5	1619.41	4.09	1
2142701	64	1622.55	1620.15	2.4	1
2142701	101	1622.9	1620.36	2.54	1
2142701	113	1626.91	1621.14	5.77	1
2142701	125	1625.25	1621.39	3.86	1
2142701	137	1621.26	1621.12	0.14	1
2142701	149	1618.68	1620.96	-2.28	1
2142701	161	1621.58	1621.79	-0.21	1
2142701	173	1621.12	1622.4	-1.28	1
2142701	185	1622.67	1622.93	-0.26	1
2142701	199	1619.99	1622.88	-2.89	1
2142701	213	1620.95	1622.03	-1.08	1
2142701	224	1617.16	1622.37	-5.21	1
2142701	236	1614.25	1621.69	-7.44	1
2142701	248	1615.81	1622.06	-6.25	1
2142701	259	1609.75	1620.7	-10.95	1
2142702	28	1624.4	1625.31	-0.91	1
2142705	28	1609.6	1615.68	-6.08	0
2142708	28	1597.6	1596.96	0.64	1
2142710	8	1585.1	1589.55	-4.45	1
2142710	28	1595.5	1593.64	1.86	1
2142711	8	1580.5	1585.54	-5.04	1
2142711	28	1589.6	1589.99	-0.39	1
2142713	28	1610.1	1607.53	2.57	1
2142716	8	1595	1599.69	-4.69	1
2142717	8	1613	1618.15	-5.15	1
2142717	28	1624.8	1618.52	6.28	1
2142804	28	1617.7	1619.6	-1.9	1
2143103	8	1517.4	1498.99	18.41	1
2143104	8	1514.9	1495.69	19.21	1
2143105	8	1510.4	1494.13	16.27	1
2143106	8	1526.1	1527.01	-0.91	1

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2143107	8	1522.1	1524.96	-2.86	1
2143107	28	1531	1530.7	0.3	1
2143109	28	1532.1	1528.72	3.38	0
2143111	28	1518.2	1494.4	23.8	0
2143202	28	1519.3	1500.68	18.62	0
2143204	28	1502.7	1499.46	3.24	1
2149201	6	1606.15	1604.71	1.44	1
2149201	7	1606.26	1604.53	1.73	1
2149201	9	1605.26	1604.12	1.14	1
2149205	28	1609	1604.33	4.67	0
2149206	28	1601	1598.36	2.64	1
2149208	28	1608.2	1605.62	2.58	0
2149210	6	1604.92	1605.66	-0.74	1
2149210	7	1603.79	1605.41	-1.62	1
2149210	9	1600.89	1605.27	-4.38	1
2149210	12	1597.78	1605.13	-7.35	1
2149211	8	1604.85	1603.96	0.89	1
2149211	9	1604.19	1605.27	-1.08	1
2149211	11	1602.68	1604.96	-2.28	1
2149211	12	1600.96	1605.13	-4.17	1
2149211	14	1601.87	1605.93	-4.06	1
2149211	15	1601.22	1605.62	-4.4	1
2149211	18	1603.52	1605.77	-2.25	1
2149211	19	1602.66	1605.64	-2.98	1
2149211	20	1603.05	1606.36	-3.31	1
2149211	21	1603.62	1607.01	-3.39	1
2149211	22	1604.69	1606.02	-1.33	1
2149211	25	1603.94	1607.23	-3.29	1
2149211	27	1606.68	1607.37	-0.69	1
2149211	28	1606.97	1607.32	-0.35	1
2149211	29	1606.31	1606.7	-0.39	1
2149211	42	1605.9	1606.55	-0.65	1

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2149211	54	1605.65	1606.76	-1.11	1
2149211	64	1606.17	1607.34	-1.17	1
2149211	93	1610.03	1607.09	2.94	1
2149211	113	1612.21	1608.2	4.01	1
2149211	125	1615.35	1608.28	7.07	1
2149211	137	1614.92	1607.76	7.16	1
2149211	149	1614.97	1607.39	7.58	1
2149211	161	1616.07	1608.26	7.81	1
2149211	173	1614.86	1608.49	6.37	1
2149211	185	1614.9	1608.86	6.04	1
2149211	199	1614.98	1608.81	6.17	1
2149211	213	1614.06	1607.75	6.31	1
2149211	224	1615.56	1607.79	7.77	1
2149211	259	1612.33	1606.14	6.19	1
2149211	270	1610.85	1605.8	5.05	1
2149211	284	1609.3	1605.81	3.49	1
2149211	295	1608.48	1605.34	3.14	1
2149211	307	1608.5	1606.15	2.35	1
2149211	319	1607.68	1604.84	2.84	1
2149301	6	1633.6	1645.95	-12.35	1
2149301	7	1633.62	1645.43	-11.81	1
2149301	9	1633.2	1644.03	-10.83	1
2149301	12	1634.05	1643.66	-9.61	1
2149301	14	1639.51	1644.75	-5.24	1
2149301	15	1640.4	1644.23	-3.83	1
2149301	16	1640.36	1643.87	-3.51	1
2149301	17	1640.17	1643.54	-3.37	1
2149301	18	1640.98	1643.76	-2.78	1
2149301	19	1640.26	1643.53	-3.27	1
2149301	20	1643.31	1644.22	-0.91	1
2149301	21	1644.46	1645.26	-0.8	1
2149301	22	1644.65	1644.29	0.36	1

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2149301	23	1644.67	1644.91	-0.24	1
2149301	24	1645.33	1645.55	-0.22	1
2149301	25	1646.63	1645.87	0.76	1
2149301	26	1647.55	1645.96	1.59	1
2149301	27	1649.89	1646.44	3.45	1
2149301	28	1644.55	1646.57	-2.02	1
2149301	29	1649.35	1645.95	3.4	1
2149301	30	1648.44	1646.23	2.21	1
2149301	42	1647.76	1645.77	1.99	1
2149301	54	1649.05	1645.79	3.26	1
2149301	64	1649.22	1646.61	2.61	1
2149301	93	1650.76	1645.88	4.88	1
2149301	113	1653.89	1647.56	6.33	1
2149301	125	1657.26	1647.98	9.28	1
2149301	137	1657.03	1647.67	9.36	1
2149301	149	1653.25	1647.44	5.81	1
2149301	161	1654.34	1648.3	6.04	1
2149301	173	1653.97	1649.01	4.96	1
2149301	185	1655.52	1649.74	5.78	1
2149301	199	1654.29	1649.84	4.45	1
2149301	213	1652.38	1648.91	3.47	1
2149302	28	1610.5	1611.13	-0.63	0
2149304	28	1616.8	1605.41	11.39	0
2149306	8	1633.3	1636.52	-3.22	1
2149309	8	1634.3	1640.77	-6.47	1
2149310	8	1603.4	1601.79	1.61	1
2149310	28	1612.2	1603.32	8.88	1
2149311	8	1608.4	1605.01	3.39	1
2149312	8	1633.5	1637.21	-3.71	1
2149313	28	1621.3	1629.45	-8.15	0
2149316	28	1616	1607.94	8.06	0
2149317	187	1625	1628.12	-3.12	1

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2149503	6	1609.44	1610.33	-0.89	1
2149503	8	1603.9	1608.14	-4.24	1
2149503	9	1603.65	1609.89	-6.24	1
2149503	11	1601.53	1609.16	-7.63	1
2149506	8	1604.9	1607.22	-2.32	1
2149509	6	1609.08	1610.33	-1.25	1
2149509	7	1606.89	1609.85	-2.96	1
2149509	8	1604.41	1608.14	-3.73	1
2149509	11	1601.9	1609.16	-7.26	1
2149509	12	1600.04	1609.44	-9.4	1
2149601	7	1640.88	1646.73	-5.85	1
2149601	8	1639.02	1644.64	-5.62	1
2149601	9	1639.9	1645.73	-5.83	1
2149601	12	1638.73	1645.58	-6.85	1
2149601	15	1641.28	1646.4	-5.12	1
2149601	16	1640.36	1646.05	-5.69	1
2149601	17	1641.54	1645.79	-4.25	1
2149601	18	1643.4	1646.39	-2.99	1
2149601	19	1642.29	1646.28	-3.99	1
2149601	20	1643.03	1647.17	-4.14	1
2149601	21	1647.06	1648.25	-1.19	1
2149601	22	1644.58	1647.22	-2.64	1
2149601	23	1645.89	1647.98	-2.09	1
2149601	24	1645.65	1648.69	-3.04	1
2149601	25	1648.27	1649.03	-0.76	1
2149601	27	1645.69	1649.54	-3.85	1
2149601	28	1649.47	1649.64	-0.17	1
2149601	29	1649.48	1648.95	0.53	1
2149601	30	1649.87	1649.21	0.66	1
2149601	42	1649.45	1648.61	0.84	1
2149601	64	1650.43	1649.51	0.92	1
2149601	77	1650.96	1649.62	1.34	1

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2149601	101	1652.93	1649.77	3.16	1
2149601	113	1655.86	1650.63	5.23	1
2149601	125	1658.65	1650.98	7.67	1
2149601	137	1658.67	1650.57	8.1	1
2149601	149	1655.38	1650.22	5.16	1
2149601	161	1656.66	1651.16	5.5	1
2149601	173	1655.84	1651.76	4.08	1
2149601	185	1656.35	1652.44	3.91	1
2149601	199	1656.12	1652.56	3.56	1
2149601	213	1652.87	1651.42	1.45	1
2149601	224	1642.17	1651.6	-9.43	1
2149601	248	1650.32	1651.42	-1.1	1
2149601	259	1656.69	1649.67	7.02	1
2149601	270	1648.5	1649.04	-0.54	1
2149601	284	1651.77	1648.42	3.35	1
2149601	295	1650.54	1647.76	2.78	1
2149601	307	1650.9	1648.52	2.38	1
2149601	319	1643.18	1646.94	-3.76	1
2149602	5	1642.26	1644.09	-1.83	1
2149602	7	1641.52	1642.76	-1.24	1
2149602	8	1635.8	1640.6	-4.8	1
2149602	9	1641.4	1641.76	-0.36	1
2149602	12	1639.11	1641.56	-2.45	1
2149603	4	1640.73	1646.83	-6.1	1
2149603	5	1640.48	1647.04	-6.56	1
2149603	17	1638.81	1645.08	-6.27	1
2149603	18	1640.08	1646.25	-6.17	1
2149603	19	1639.62	1646.15	-6.53	1
2149603	25	1645.36	1648.94	-3.58	1
2149603	29	1646.61	1648.61	-2	1
2149603	54	1648.12	1648.38	-0.26	1
2149603	64	1648.67	1649.05	-0.38	1

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2149603	77	1650.58	1649.24	1.34	1
2149603	113	1654.68	1650.28	4.4	1
2149603	125	1657.16	1650.55	6.61	1
2149603	137	1655.95	1649.93	6.02	1
2149603	149	1654.24	1649.42	4.82	1
2149603	161	1654.78	1650.67	4.11	1
2149603	173	1654.61	1651.02	3.59	1
2149603	185	1656.02	1651.75	4.27	1
2149603	199	1655.89	1652.08	3.81	1
2149603	202	1655.1	1651.74	3.36	1
2149603	213	1653.26	1650.73	2.53	1
2149603	224	1651.88	1650.7	1.18	1
2149603	259	1648.48	1648.36	0.12	1
2149603	270	1646.4	1647.85	-1.45	1
2149603	284	1644.6	1647.79	-3.19	1
2149603	307	1645.05	1647.96	-2.91	1
2149603	319	1643.08	1646.02	-2.94	1
2149604	6	1639.72	1643.28	-3.56	1
2149604	9	1640.14	1641.76	-1.62	1
2149605	8	1642	1643.73	-1.73	1
2149606	28	1656.9	1653.44	3.46	1
2149608	8	1641	1642.06	-1.06	1
2149610	8	1639.3	1641.47	-2.17	1
2149611	28	1637.8	1632.57	5.23	1
2149612	8	1636.8	1638.93	-2.13	1
2149612	28	1647.8	1644.3	3.5	1
2149613	8	1640.9	1639.37	1.53	1
2149614	8	1642.2	1639.38	2.82	1
2149614	28	1651.8	1644.81	6.99	1
2149615	8	1640.4	1639.13	1.27	1
2149617	28	1651.4	1644.73	6.67	1
2149618	28	1653.5	1646.85	6.65	1

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2149620	8	1641.8	1642.02	-0.22	1
2149620	28	1647.2	1647.11	0.09	1
2149621	8	1642.4	1641.68	0.72	1
2149623	28	1650.2	1645.32	4.88	1
2149903	28	1658.4	1656.83	1.57	1
2149906	28	1659.3	1658.04	1.26	1
2149907	28	1656.3	1656.83	-0.53	1
2150101	8	1621.4	1630.72	-9.32	1
2150101	28	1638.9	1631.38	7.52	1
2150102	28	1651	1650.32	0.68	1
2150104	28	1649.7	1634.98	14.72	0
2150105	8	1631.6	1632.41	-0.81	1
2150106	28	1640.8	1630.47	10.33	0
2150110	28	1628.5	1627.09	1.41	0
2150113	28	1657.8	1637.96	19.84	0
2150201	28	1650.8	1654.41	-3.61	1
2150202	28	1654.5	1651.69	2.81	1
2150204	8	1609.3	1625.04	-15.74	1
2150205	8	1600.3	1605.82	-5.52	1
2150205	28	1616.7	1613.55	3.15	1
2150206	28	1614.2	1638.55	-24.35	0
2150306	8	1598.7	1596.24	2.46	1
2150307	28	1603.4	1598.47	4.93	1
2150401	5	1634.95	1635.51	-0.56	1
2150401	6	1633.79	1634.81	-1.02	1
2150401	7	1631.85	1634.34	-2.49	1
2150401	8	1627.8	1632.29	-4.49	1
2150401	9	1626.93	1633.6	-6.67	1
2150401	11	1624.36	1633.28	-8.92	1
2150401	12	1624.59	1633.45	-8.86	1
2150401	14	1625.18	1634.58	-9.4	1
2150401	15	1627.4	1634.24	-6.84	1

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2150401	16	1627.4	1633.84	-6.44	1
2150401	17	1629.03	1633.6	-4.57	1
2150401	18	1629.79	1634.42	-4.63	1
2150401	19	1628.98	1634.3	-5.32	1
2150401	20	1628.42	1635.25	-6.83	1
2150401	21	1628.68	1636.25	-7.57	1
2150401	22	1632.46	1635.17	-2.71	1
2150401	23	1632.77	1636.02	-3.25	1
2150401	24	1633.84	1636.73	-2.89	1
2150401	25	1636.08	1637.05	-0.97	1
2150401	26	1635.25	1636.93	-1.68	1
2150401	27	1637.06	1637.5	-0.44	1
2150401	28	1636.6	1637.56	-0.96	1
2150401	29	1638.08	1636.84	1.24	1
2150401	30	1637.63	1637.1	0.53	1
2150401	42	1637.4	1636.43	0.97	1
2150401	54	1638.4	1636.59	1.81	1
2150401	64	1639.79	1637.3	2.49	1
2150401	93	1641.83	1636.97	4.86	1
2150401	113	1644.22	1638.44	5.78	1
2150401	125	1648.47	1638.8	9.67	1
2150401	137	1646.09	1638.28	7.81	1
2150401	149	1646.35	1637.89	8.46	1
2150401	161	1648.33	1638.9	9.43	1
2150401	173	1648.2	1639.35	8.85	1
2150401	185	1649.64	1640.02	9.62	1
2150401	199	1649.88	1640.14	9.74	1
2150401	213	1647.67	1638.92	8.75	1
2150402	6	1628.67	1629.42	-0.75	1
2150402	9	1624.14	1628.47	-4.33	1
2150402	11	1622.84	1627.86	-5.02	1
2150402	12	1622.59	1628.15	-5.56	1

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2150402	14	1624.29	1629.25	-4.96	1
2150402	15	1625.26	1628.99	-3.73	1
2150402	16	1625.01	1628.5	-3.49	1
2150402	17	1626.09	1628.29	-2.2	1
2150402	18	1626.96	1629.49	-2.53	1
2150402	19	1626.32	1629.35	-3.03	1
2150402	20	1628.2	1630.46	-2.26	1
2150402	21	1629.05	1631.42	-2.37	1
2150402	22	1628.71	1630.16	-1.45	1
2150402	23	1628.93	1631.2	-2.27	1
2150402	24	1629.77	1631.94	-2.17	1
2150402	25	1632.04	1632.23	-0.19	1
2150402	26	1631.16	1631.93	-0.77	1
2150402	27	1633.44	1632.62	0.82	1
2150402	28	1632.93	1632.63	0.3	1
2150402	29	1628.93	1631.82	-2.89	1
2150402	30	1632.97	1632.09	0.88	1
2150402	42	1632.62	1631.5	1.12	1
2150402	64	1637.34	1632.43	4.91	1
2150402	77	1637.78	1632.65	5.13	1
2150402	101	1640.96	1632.84	8.12	1
2150402	113	1642.5	1633.69	8.81	1
2150402	125	1646.49	1634.01	12.48	1
2150402	137	1643	1633.34	9.66	1
2150402	149	1641.97	1632.86	9.11	1
2150402	161	1642.84	1634.06	8.78	1
2150402	173	1642.72	1634.38	8.34	1
2150402	185	1644.19	1635.07	9.12	1
2150402	199	1643.11	1635.23	7.88	1
2150402	213	1641.56	1633.85	7.71	1
2150402	224	1640.63	1633.81	6.82	1
2150402	236	1638.18	1632.98	5.2	1

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2150402	248	1637.78	1633.8	3.98	1
2150402	259	1632.48	1631.35	1.13	1
2150402	284	1633.45	1630.69	2.76	1
2150403	5	1630.69	1628.27	2.42	1
2150403	6	1629.33	1628.05	1.28	1
2150403	8	1623.55	1624.73	-1.18	1
2150403	9	1624.82	1627.25	-2.43	1
2150403	11	1623.53	1625.8	-2.27	1
2150403	12	1623.42	1626.43	-3.01	1
2150404	6	1628.52	1630.33	-1.81	1
2150404	9	1623.99	1629.31	-5.32	1
2150404	11	1622.7	1628.9	-6.2	1
2150404	12	1622.58	1629.12	-6.54	1
2150405	8	1622.36	1623.6	-1.24	1
2150405	11	1622.02	1624.67	-2.65	1
2150405	12	1621.01	1625.3	-4.29	1
2150406	8	1628.8	1635.43	-6.63	1
2150409	8	1638.3	1637.85	0.45	1
2150410	8	1627.6	1632.02	-4.42	1
2150411	202	1645.2	1645.12	0.08	1
2150412	8	1624.9	1627.53	-2.63	1
2150412	28	1634.6	1634.37	0.23	1
2150413	8	1626.5	1631.05	-4.55	1
2150414	8	1619.3	1622.3	-3	1
2150414	28	1630.3	1626.65	3.65	1
2150415	28	1660.2	1648.87	11.33	0
2150416	8	1622.9	1627.83	-4.93	1
2150417	8	1634.4	1632.95	1.45	1
2150417	28	1641.5	1638.47	3.03	1
2150419	8	1619.6	1626.2	-6.6	1
2150420	8	1619.7	1625.16	-5.46	1
2150421	8	1619.3	1624.29	-4.99	1

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2150422	8	1618	1622.3	-4.3	1
2150423	8	1629.9	1634.68	-4.78	1
2150423	28	1639.1	1640.03	-0.93	1
2150424	8	1632.3	1635.9	-3.6	1
2150424	28	1642.7	1641.24	1.46	1
2150425	7	1625.6	1627.03	-1.43	1
2150426	28	1651.2	1644.72	6.48	1
2150427	8	1637.1	1639.01	-1.91	1
2150428	8	1636.8	1638.52	-1.72	1
2150429	8	1637.2	1637.89	-0.69	1
2150429	28	1646.2	1643.28	2.92	1
2150430	8	1636	1636.76	-0.76	1
2150430	28	1644.6	1642.2	2.4	1
2150431	8	1636.4	1635.86	0.54	1
2150432	8	1634.1	1636.19	-2.09	1
2150433	8	1632.6	1635.27	-2.67	1
2150434	8	1633.4	1634.92	-1.52	1
2150435	8	1631.6	1636.12	-4.52	1
2150436	8	1631.4	1633.64	-2.24	1
2150436	249	1645	1640.38	4.62	1
2150436	261	1643	1638.36	4.64	1
2150436	274	1641.42	1637.51	3.91	1
2150436	287	1639.17	1636.96	2.21	1
2150436	298	1638.79	1636.63	2.16	1
2150436	310	1639.42	1636.85	2.57	1
2150436	321	1638.33	1636.12	2.21	1
2150436	334	1639.08	1636.88	2.2	1
2150437	8	1630	1633.98	-3.98	1
2150438	8	1625.7	1628.29	-2.59	1
2150439	8	1625.2	1631.62	-6.42	1
2150440	8	1641.5	1638.97	2.53	1
2150441	28	1647	1643.59	3.41	1

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2150443	28	1644.4	1642.46	1.94	0
2150445	5	1631.96	1628.85	3.11	1
2150445	6	1630.34	1628.43	1.91	1
2150445	7	1628.73	1627.81	0.92	1
2150445	8	1624.75	1625.54	-0.79	1
2150445	9	1625.65	1627.37	-1.72	1
2150445	11	1624.38	1626.77	-2.39	1
2150445	12	1624.31	1627.01	-2.7	1
2150506	5	1623.24	1620.93	2.31	0
2150506	6	1622.42	1620.28	2.14	0
2150506	7	1620.25	1619.94	0.31	0
2150506	11	1617.94	1619.24	-1.3	0
2150506	12	1617.63	1619.42	-1.79	0
2150506	14	1619.07	1620.61	-1.54	0
2150506	15	1619.79	1620.23	-0.44	0
2150506	16	1620.6	1619.87	0.73	0
2150506	17	1620.17	1619.64	0.53	0
2150506	18	1620.86	1620.32	0.54	0
2150506	19	1619.62	1620.21	-0.59	0
2150506	20	1622	1621.09	0.91	0
2150506	21	1623.55	1622.08	1.47	0
2150506	22	1622.52	1621.04	1.48	0
2150506	23	1622.92	1621.82	1.1	0
2150506	24	1623.7	1622.47	1.23	0
2150506	25	1626.75	1622.74	4.01	0
2150506	26	1625	1622.63	2.37	0
2150506	27	1626.96	1623.12	3.84	0
2150506	28	1626.03	1623.15	2.88	0
2150506	29	1625.92	1622.45	3.47	0
2150506	30	1625.34	1622.7	2.64	0
2150506	42	1624.73	1622.13	2.6	0
2150506	54	1626.17	1622.28	3.89	0

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2150506	64	1626.87	1623.06	3.81	0
2150506	93	1628.65	1622.64	6.01	0
2150506	113	1629.27	1624.18	5.09	0
2150506	125	1638.9	1624.5	14.4	0
2150506	137	1634.02	1623.98	10.04	0
2150506	149	1633.7	1623.61	10.09	0
2150506	161	1633.93	1624.57	9.36	0
2150506	173	1638.78	1625.05	13.73	0
2150506	185	1638.49	1625.65	12.84	0
2150506	199	1636.62	1625.65	10.97	0
2150506	213	1634.61	1624.42	10.19	0
2150506	224	1629.46	1624.53	4.93	0
2150507	5	1627.9	1623.03	4.87	1
2150507	8	1619.39	1620.12	-0.73	1
2150507	11	1619.24	1621.31	-2.07	1
2150507	12	1619.01	1621.5	-2.49	1
2150507	14	1620.69	1622.7	-2.01	1
2150508	5	1626.43	1622.62	3.81	1
2150508	8	1620.76	1619.79	0.97	1
2150508	12	1619.34	1621.16	-1.82	1
2150511	28	1623	1627.65	-4.65	1
2150513	8	1605.9	1607.66	-1.76	1
2150514	28	1620.6	1615.57	5.03	0
2150517	8	1606	1608.57	-2.57	1
2150517	28	1613.6	1613.45	0.15	1
2150518	8	1609.8	1609.35	0.45	1
2150520	8	1604.2	1606.98	-2.78	1
2150521	8	1604.2	1606.55	-2.35	1
2150522	8	1603.4	1605.8	-2.4	1
2150522	28	1616	1610.54	5.46	1
2150523	8	1604.9	1606.1	-1.2	1
2150525	8	1624.4	1620.92	3.48	1

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2150525	28	1628.1	1625.42	2.68	1
2150526	8	1620.5	1620.92	-0.42	1
2150527	8	1617	1618.29	-1.29	1
2150527	28	1623.8	1622.65	1.15	1
2150528	8	1615.9	1618.38	-2.48	1
2150529	8	1616.2	1617.91	-1.71	1
2150529	28	1623.2	1622.2	1	1
2150537	28	1626.6	1622.2	4.4	1
2150540	8	1617.2	1619.69	-2.49	1
2150541	8	1616.1	1619.79	-3.69	1
2150541	28	1626.9	1623.91	2.99	1
2150543	8	1621.8	1620.94	0.86	1
2150544	8	1622.6	1620.93	1.67	1
2150544	28	1630.6	1626.32	4.28	1
2150545	8	1621.8	1620.08	1.72	1
2150546	8	1602.6	1603.82	-1.22	1
2150548	8	1620.9	1620.76	0.14	1
2150548	28	1628.8	1625.71	3.09	1
2150551	8	1620.5	1619.37	1.13	1
2150552	8	1616.8	1618.83	-2.03	1
2150553	8	1616.1	1618.65	-2.55	1
2150554	8	1616.9	1618.04	-1.14	1
2150559	28	1618	1620.92	-2.92	0
2150601	8	1585.47	1588.77	-3.3	1
2150601	28	1596.4	1591.89	4.51	1
2150604	8	1580.1	1581.37	-1.27	1
2150605	8	1584.8	1588.59	-3.79	1
2150606	8	1582.8	1587.68	-4.88	1
2150607	8	1582.9	1586.82	-3.92	1
2150607	28	1592.8	1589.75	3.05	1
2150608	8	1581	1585.54	-4.54	1
2150609	8	1579.9	1580.3	-0.4	1

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2150613	8	1576.9	1580.39	-3.49	1
2150616	8	1580.3	1582.51	-2.21	1
2150616	28	1589.6	1585.21	4.39	1
2150617	8	1588	1589.9	-1.9	1
2150618	8	1587.9	1590.72	-2.82	1
2150619	8	1587.5	1589.14	-1.64	1
2150620	8	1602.5	1602.42	0.08	1
2150620	28	1607.6	1606.41	1.19	1
2150621	8	1602.3	1602.11	0.19	1
2150621	28	1606.8	1605.88	0.92	1
2150622	8	1591.1	1592.78	-1.68	1
2150623	8	1604.3	1603.74	0.56	1
2150623	28	1610.6	1608.09	2.51	1
2150624	8	1591.3	1595.01	-3.71	1
2150624	28	1599.6	1598.73	0.87	1
2150625	28	1603.2	1604.39	-1.19	1
2150627	8	1583.8	1587.41	-3.61	1
2150627	28	1594.4	1590.44	3.96	1
2150629	8	1602.3	1602.42	-0.12	1
2150630	8	1602.4	1602.47	-0.07	1
2150631	8	1605	1603.46	1.54	1
2150632	8	1605.6	1603.64	1.96	1
2150633	8	1592.5	1593.28	-0.78	1
2150634	8	1592.8	1593.27	-0.47	1
2150635	8	1592.1	1592.76	-0.66	1
2150635	28	1600	1596.45	3.55	1
2150636	8	1603.6	1603.24	0.36	1
2150637	8	1601.5	1602.33	-0.83	1
2150638	8	1602.4	1602.33	0.07	1
2150640	8	1591.1	1594.36	-3.26	1
2150641	8	1591.2	1592.18	-0.98	1
2150642	8	1589.4	1591.52	-2.12	1

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2150643	8	1584.8	1589.29	-4.49	1
2150644	8	1589.4	1590.15	-0.75	1
2150646	8	1586.8	1589.61	-2.81	1
2150647	8	1587.8	1587.93	-0.13	1
2150648	28	1605.9	1604.88	1.02	1
2150654	28	1602.8	1601.67	1.13	0
2150701	28	1660.1	1657.89	2.21	1
2150703	28	1657.5	1637.55	19.95	0
2150807	28	1628.7	1622.54	6.16	1
2151401	6	1572.54	1573.14	-0.6	1
2151401	7	1571.73	1573.05	-1.32	1
2151402	4	1579.2	1575.93	3.27	1
2151402	6	1578.68	1575.69	2.99	1
2151402	7	1578.31	1575.58	2.73	1
2151402	8	1573.76	1574.74	-0.98	1
2151402	9	1575.05	1575.41	-0.36	1
2151412	28	1607.3	1588.87	18.43	1
2151412	202	1605	1590.42	14.58	1
2151413	28	1583.8	1584.84	-1.04	0
2151414	28	1578.9	1577.73	1.17	1
2151415	8	1576.8	1579.51	-2.71	1
2151416	28	1585.6	1581.45	4.15	1
2151417	8	1578.1	1580.31	-2.21	1
2151422	4	1570.09	1573.64	-3.55	1
2151422	5	1573.66	1573.67	-0.01	1
2151422	6	1572.64	1573.4	-0.76	1
2151422	7	1572.17	1573.31	-1.14	1
2151422	8	1570.15	1572.54	-2.39	1
2151422	9	1569.52	1573.15	-3.63	1
2151422	11	1569.82	1573.09	-3.27	1
2151422	12	1569.86	1573.16	-3.3	1
2151422	14	1573.09	1573.66	-0.57	1

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2151702	4	1562.66	1564.47	-1.81	1
2151702	5	1562.59	1564.53	-1.94	1
2151702	6	1564.92	1564.33	0.59	1
2151702	9	1561.22	1564.28	-3.06	1
2151702	11	1560.23	1564.27	-4.04	1
2151702	12	1560.03	1564.32	-4.29	1
2151702	14	1565.01	1564.67	0.34	1
2151702	15	1563.9	1564.48	-0.58	1
2151702	16	1565.16	1564.4	0.76	1
2151702	17	1564.01	1564.34	-0.33	1
2151702	18	1564.22	1564.44	-0.22	1
2151702	20	1563.68	1564.59	-0.91	1
2151702	21	1563.44	1564.86	-1.42	1
2151702	22	1563.82	1564.48	-0.66	1
2151702	23	1565.18	1564.7	0.48	1
2151702	24	1566.5	1564.86	1.64	1
2151702	25	1566.5	1564.89	1.61	1
2151702	26	1561.82	1564.86	-3.04	1
2151702	27	1563.83	1564.98	-1.15	1
2151702	29	1561.95	1564.73	-2.78	1
2151702	30	1561.7	1564.85	-3.15	1
2151702	42	1566.74	1564.83	1.91	1
2151702	54	1566.1	1564.84	1.26	1
2151702	64	1567.74	1565.14	2.6	1
2151702	93	1568.95	1564.86	4.09	1
2151702	125	1567.35	1565.38	1.97	1
2151702	137	1567.4	1565.22	2.18	1
2151702	149	1566.59	1565.15	1.44	1
2151702	161	1567.45	1565.49	1.96	1
2151702	173	1568.02	1565.65	2.37	1
2151702	185	1569.21	1565.71	3.5	1
2151702	213	1567.21	1565.25	1.96	1

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2151702	224	1566.65	1565.42	1.23	1
2151702	236	1566.4	1565.22	1.18	1
2151702	248	1566.76	1565.46	1.3	1
2151702	259	1565.73	1564.94	0.79	1
2151702	270	1565.2	1564.85	0.35	1
2151702	284	1565.9	1564.8	1.1	1
2151702	295	1565.73	1564.67	1.06	1
2151702	307	1566.34	1565.02	1.32	1
2151702	319	1565.65	1564.48	1.17	1
2151703	5	1562.6	1560.21	2.39	1
2151703	7	1565.48	1560.08	5.4	1
2151703	8	1559.86	1559.71	0.15	1
2151703	9	1562.63	1560.07	2.56	1
2151703	11	1560.25	1560.07	0.18	1
2151703	12	1563.69	1560.11	3.58	1
2151703	14	1563.82	1560.37	3.45	1
2151704	5	1561.81	1562.32	-0.51	1
2151704	6	1562.78	1562.15	0.63	1
2151704	7	1564.33	1562.15	2.18	1
2151704	8	1565.02	1561.71	3.31	1
2151704	9	1561.46	1562.13	-0.67	1
2151704	12	1562.83	1562.17	0.66	1
2151705	4	1562.97	1561.97	1	1
2151705	6	1562.86	1561.87	0.99	1
2151705	7	1562.82	1561.89	0.93	1
2151705	8	1558.99	1561.38	-2.39	1
2151705	9	1559.91	1561.89	-1.98	1
2151705	11	1559.5	1561.88	-2.38	1
2151705	12	1558.99	1561.95	-2.96	1
2151707	4	1562.1	1564.47	-2.37	1
2151707	5	1563.66	1564.53	-0.87	1
2151707	6	1563.13	1564.33	-1.2	1

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State Well Number	Stress Period	Measured Water Level	Simulated Water Level	Residual	Calibration Weight
2151707	9	1560.47	1564.28	-3.81	1
2151707	11	1559.77	1564.27	-4.5	1
2151707	12	1559.8	1564.32	-4.52	1
2151709	8	1565.95	1567.92	-1.97	1
2151709	9	1566.19	1568.45	-2.26	1
2151710	4	1570.04	1572.31	-2.27	1
2151710	5	1570.29	1572.34	-2.05	1
2151710	15	1570.88	1572.14	-1.26	1
2151710	16	1570.24	1572.01	-1.77	1
2151710	18	1571.4	1572.12	-0.72	1
2151710	19	1570.86	1572.03	-1.17	1
2151710	20	1571.02	1572.36	-1.34	1
2151710	21	1572.52	1572.76	-0.24	1
2151710	23	1572.14	1572.59	-0.45	1
2151710	25	1572.38	1572.9	-0.52	1
2151710	26	1571.86	1572.86	-1	1
2151710	27	1572.31	1573.04	-0.73	1
2151710	28	1572.17	1573.04	-0.87	1
2151710	29	1571.8	1572.74	-0.94	1
2151710	30	1572.57	1572.88	-0.31	1
2151710	42	1573.34	1572.76	0.58	1
2151710	64	1575.99	1573.18	2.81	1
2151710	77	1575.32	1573.19	2.13	1
2151710	101	1576.15	1573.29	2.86	1
2151710	113	1577.24	1573.69	3.55	1
2151710	125	1576.9	1573.65	3.25	1
2151710	137	1575.76	1573.42	2.34	1
2151710	149	1574.25	1573.31	0.94	1
2151710	161	1575.52	1573.76	1.76	1
2151710	173	1576.12	1573.97	2.15	1
2151710	185	1576.97	1574.14	2.83	1
2151710	199	1575.76	1574.05	1.71	1

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State Well Number	Stress Period	Measured Water Level	Simulated Water Level	Residual	Calibration Weight
2151710	213	1574.74	1573.57	1.17	1
2151710	224	1575.98	1573.72	2.26	1
2151713	5	1569.45	1570.82	-1.37	1
2151713	6	1567.64	1570.56	-2.92	1
2151713	7	1567.25	1570.51	-3.26	1
2151713	11	1565.3	1570.34	-5.04	1
2151713	12	1565.98	1570.4	-4.42	1
2151713	14	1569.41	1570.84	-1.43	1
2151733	28	1563.2	1556.67	6.53	0
2151738	28	1578.2	1572.4	5.8	0

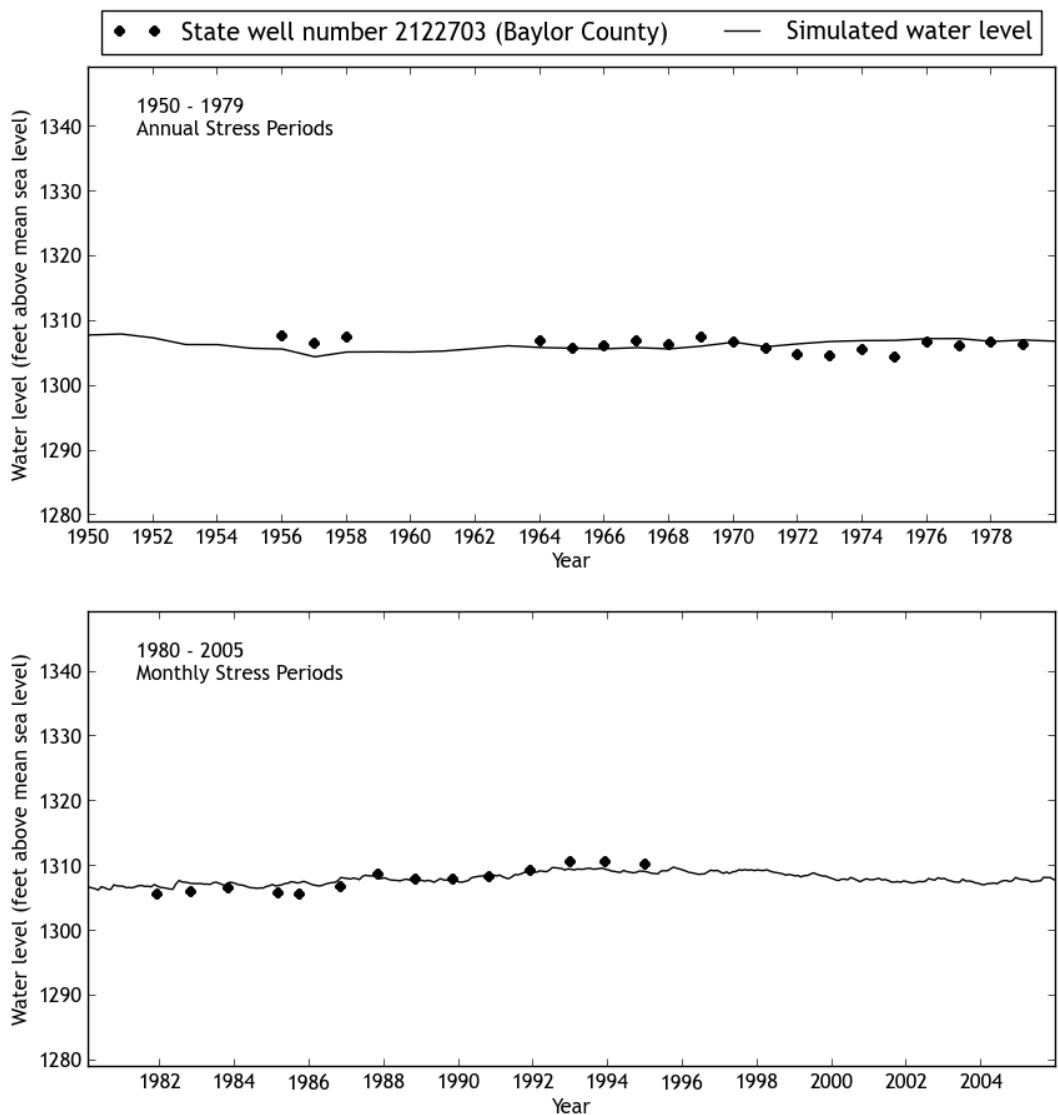
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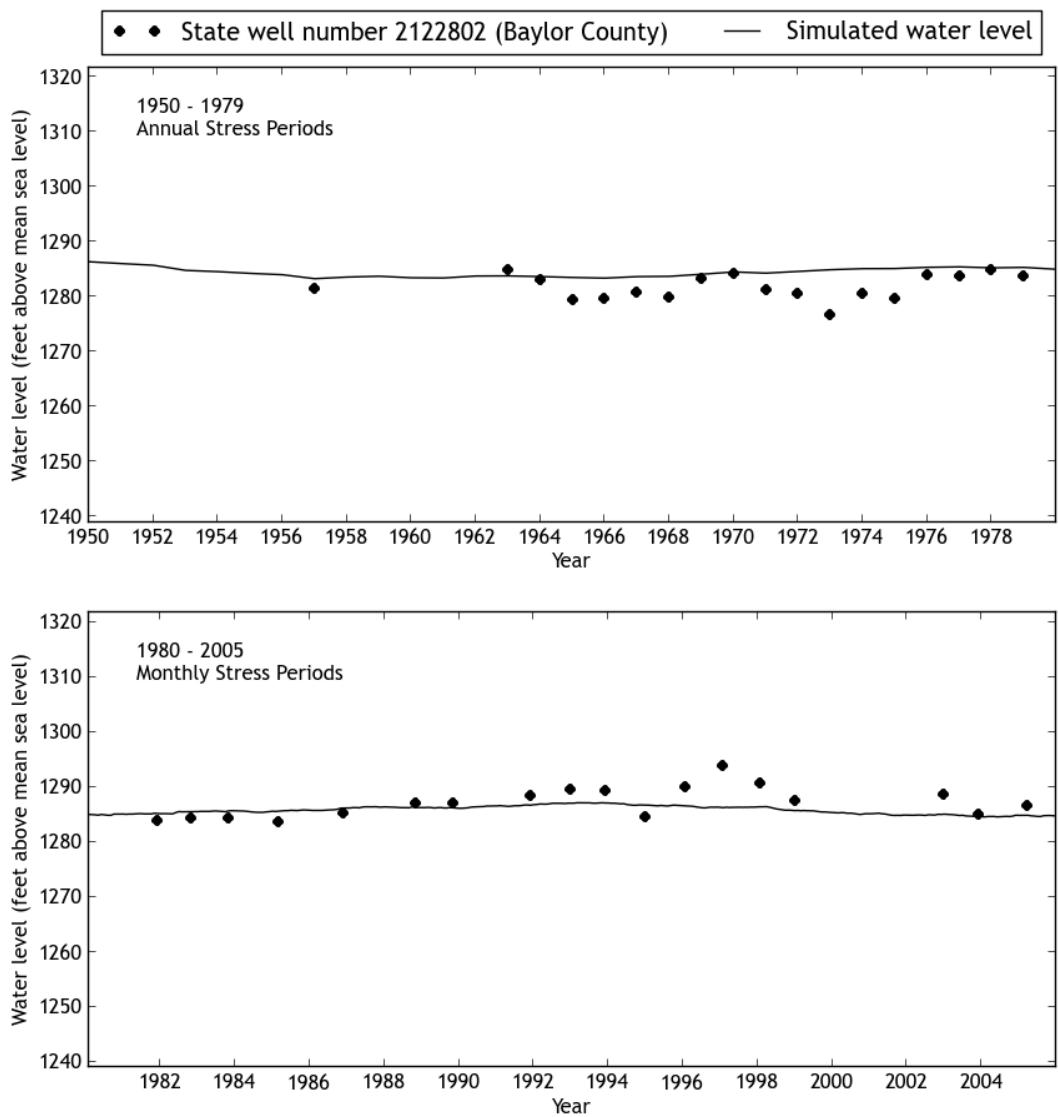
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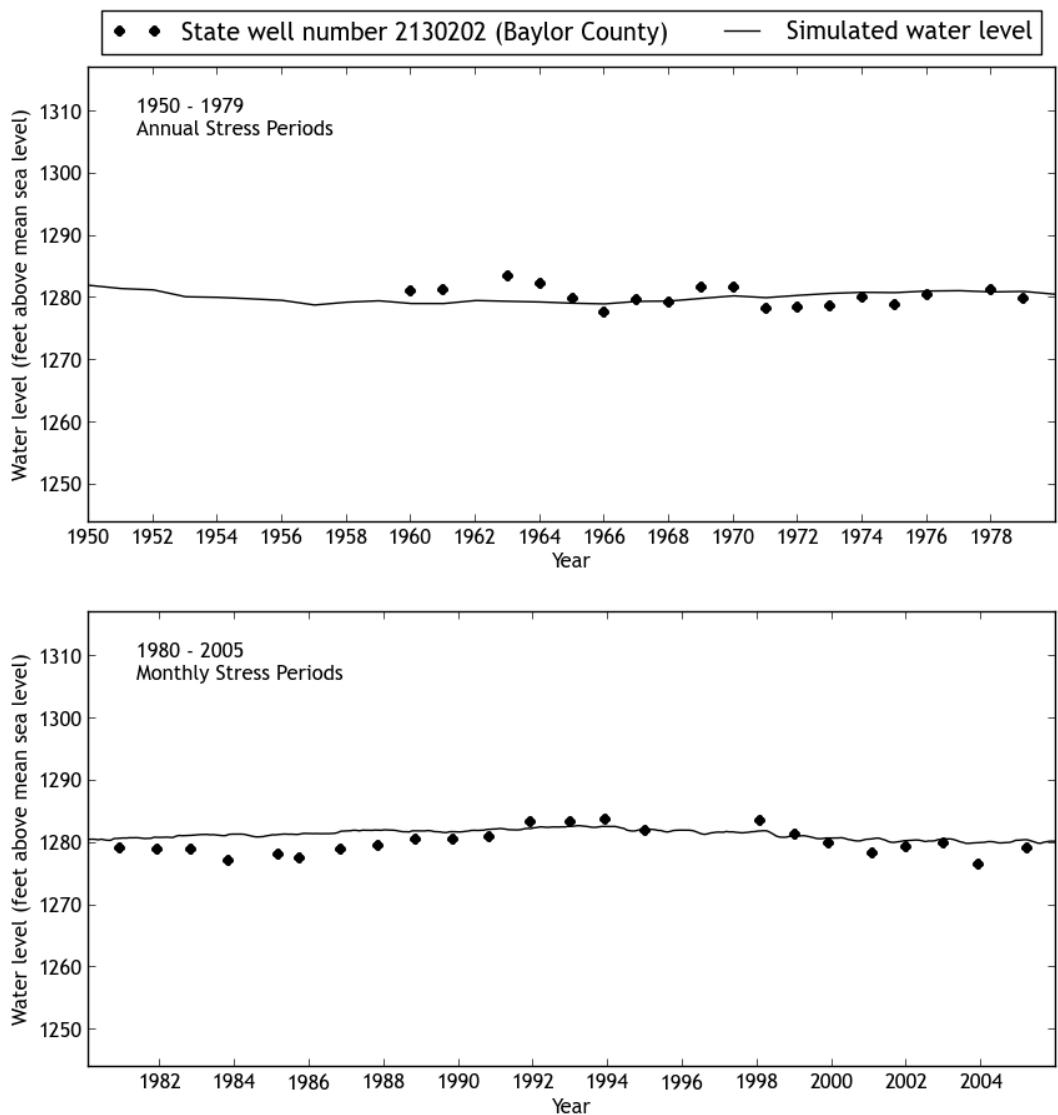
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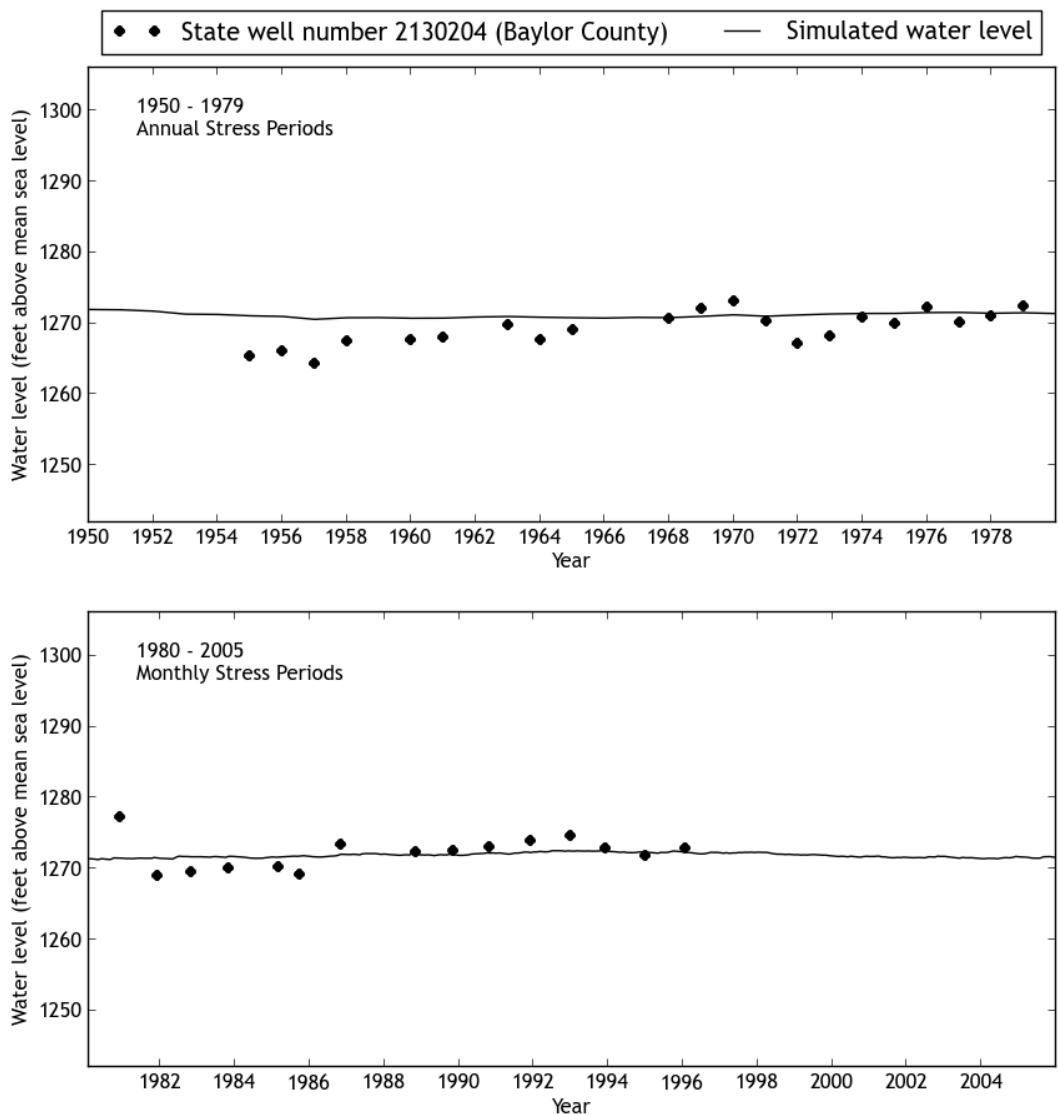
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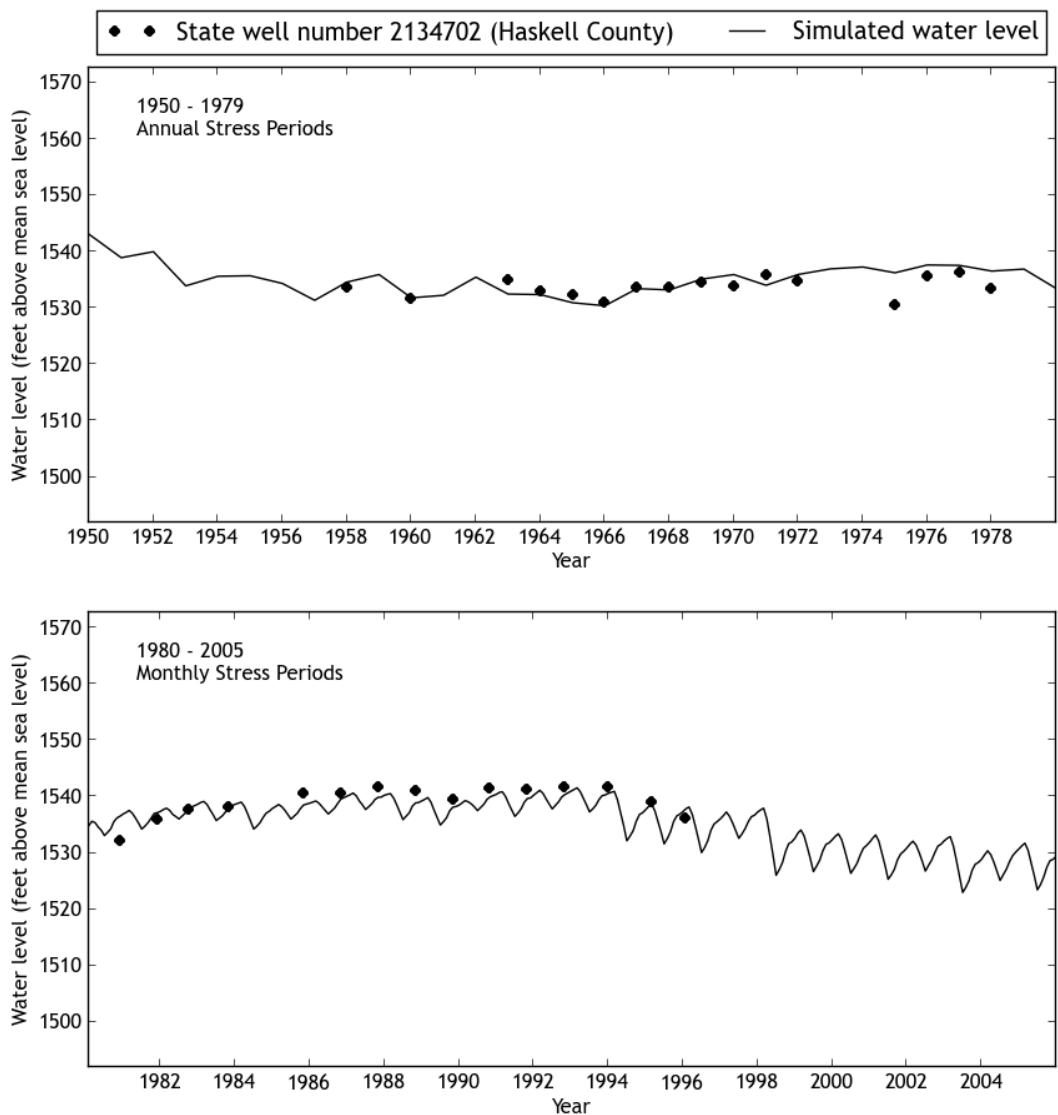
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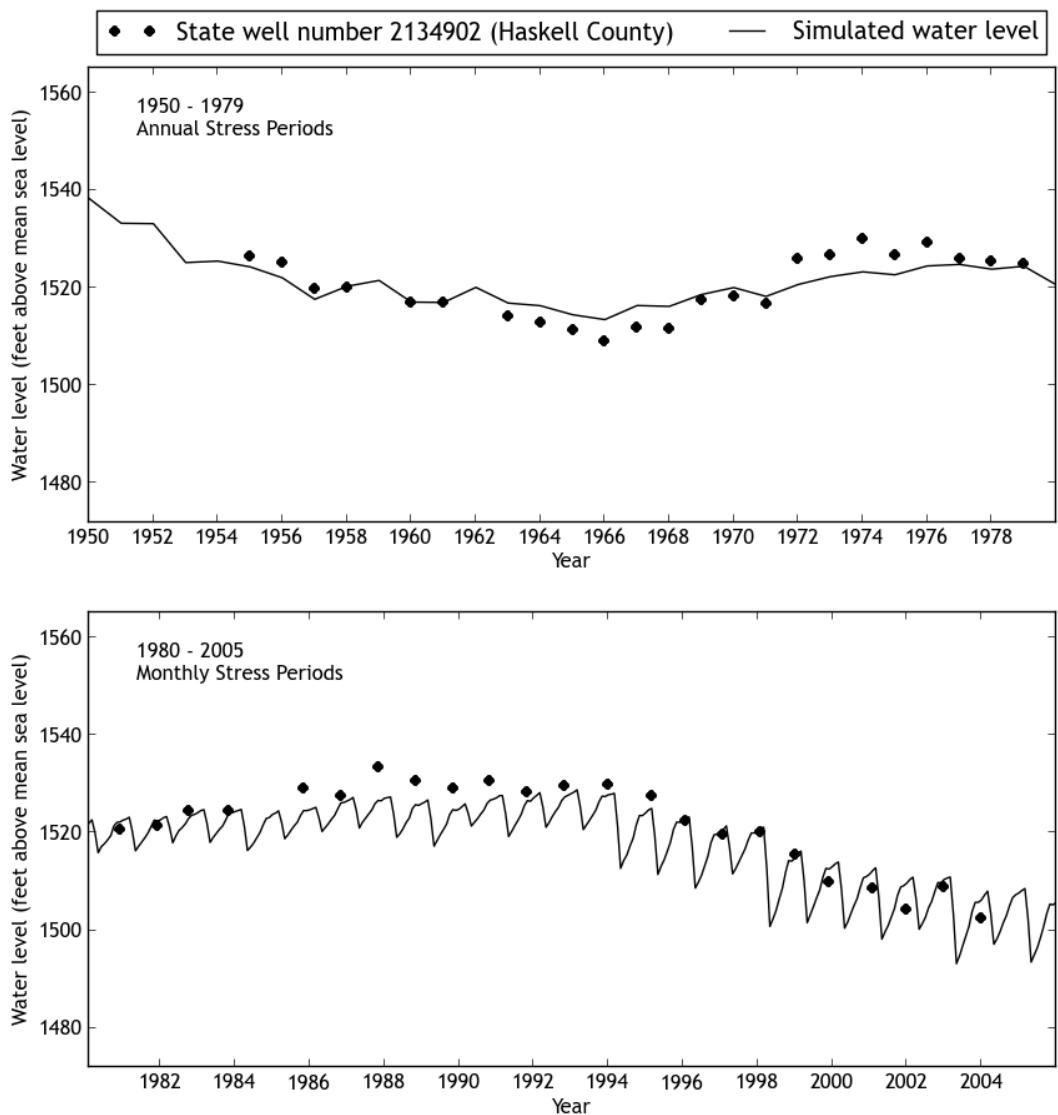


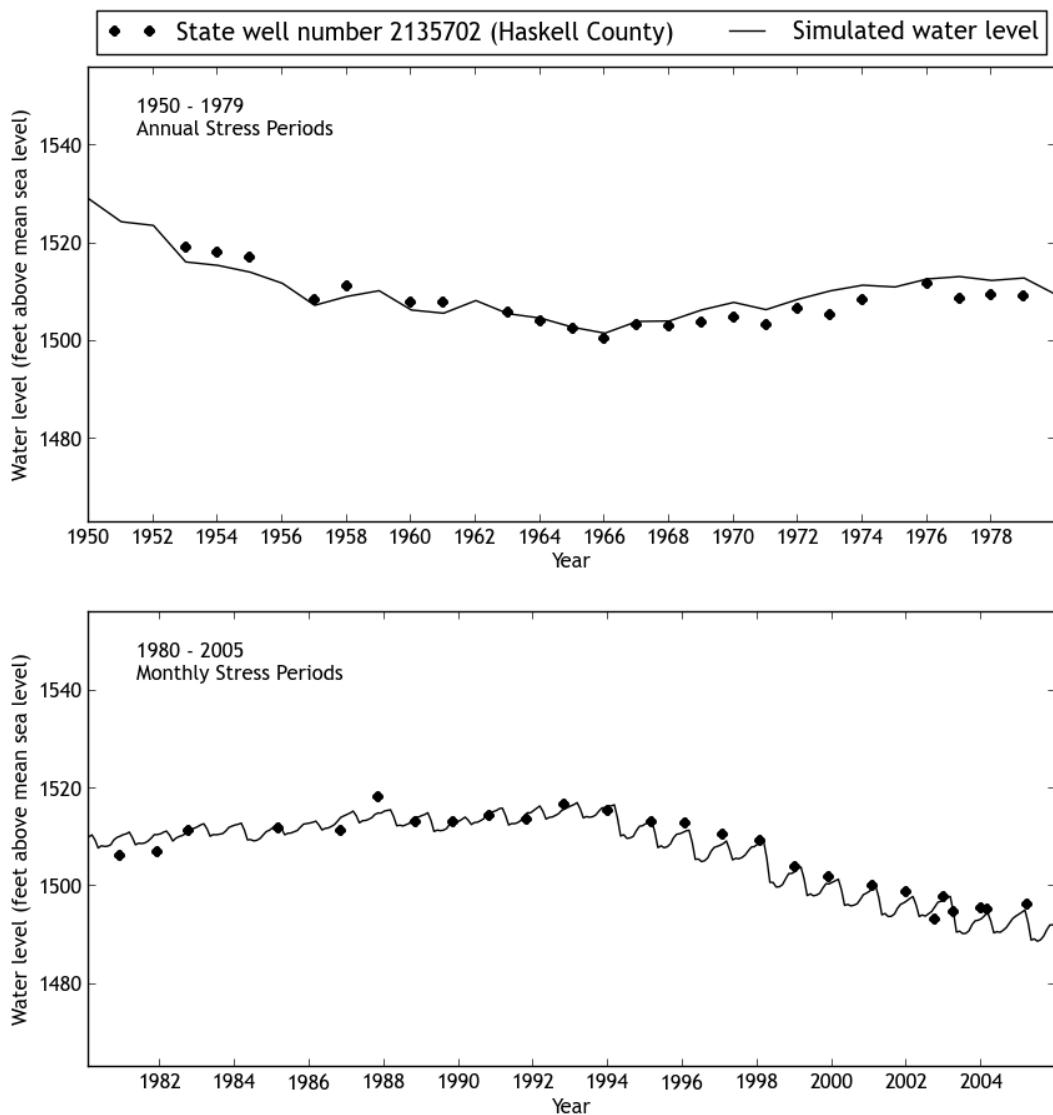


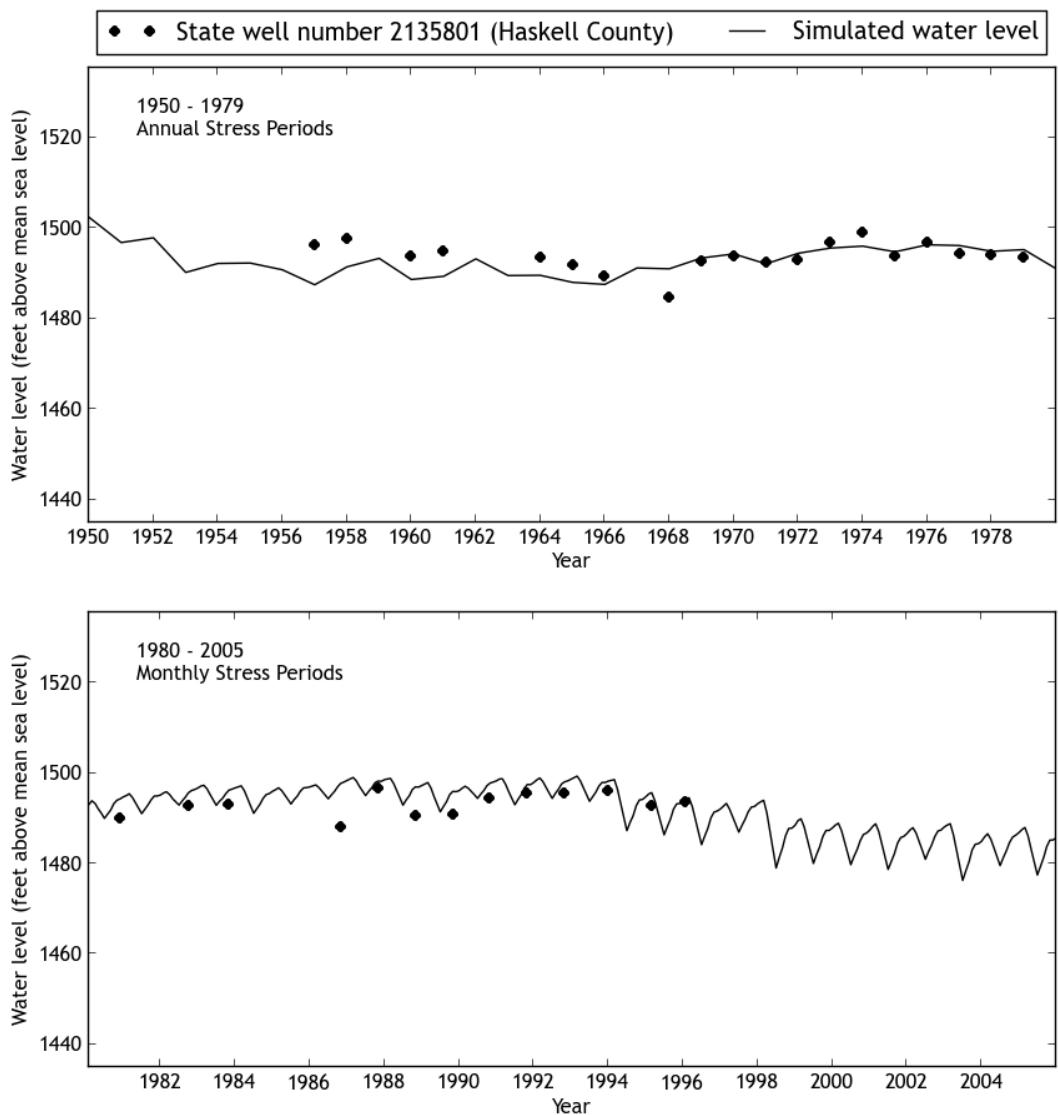


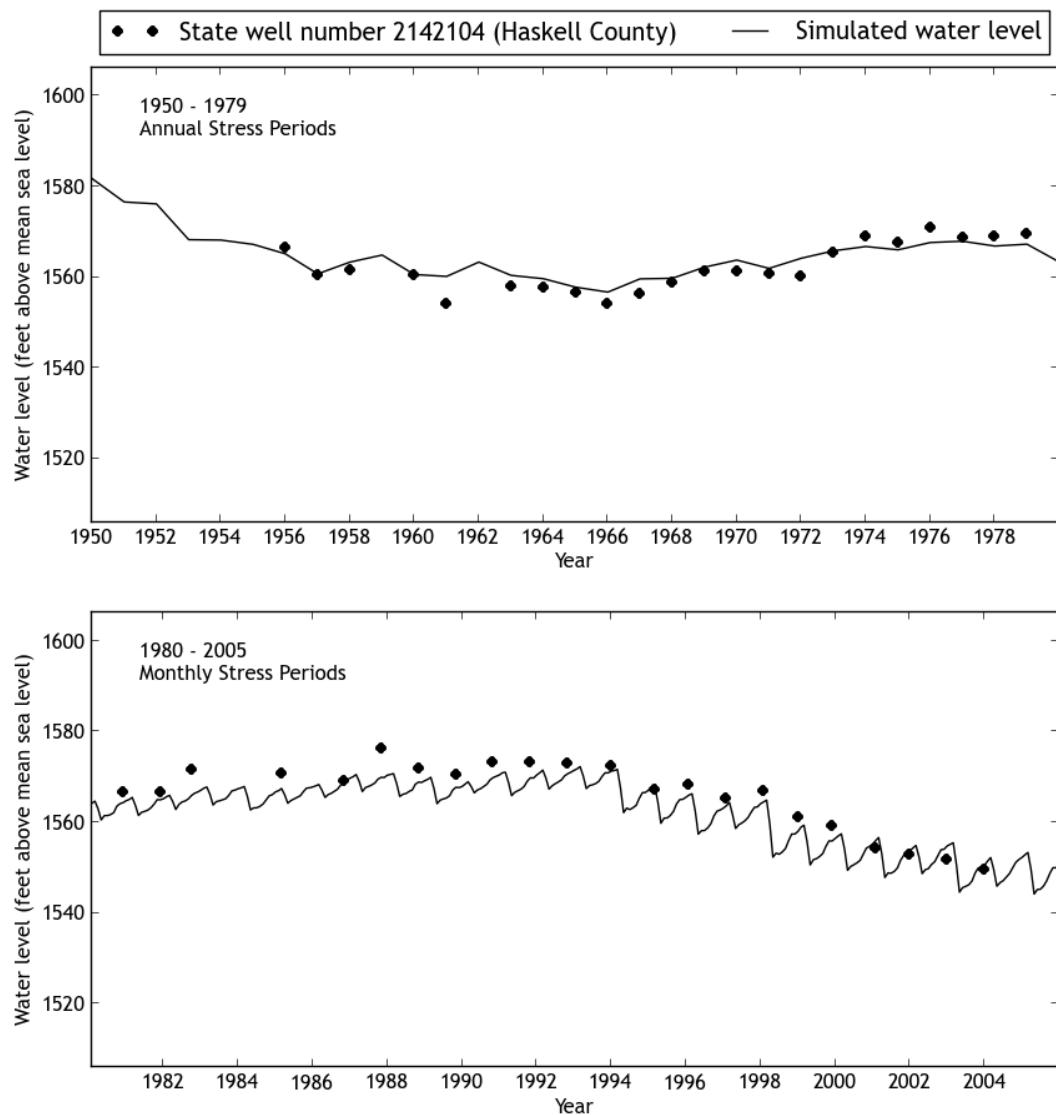


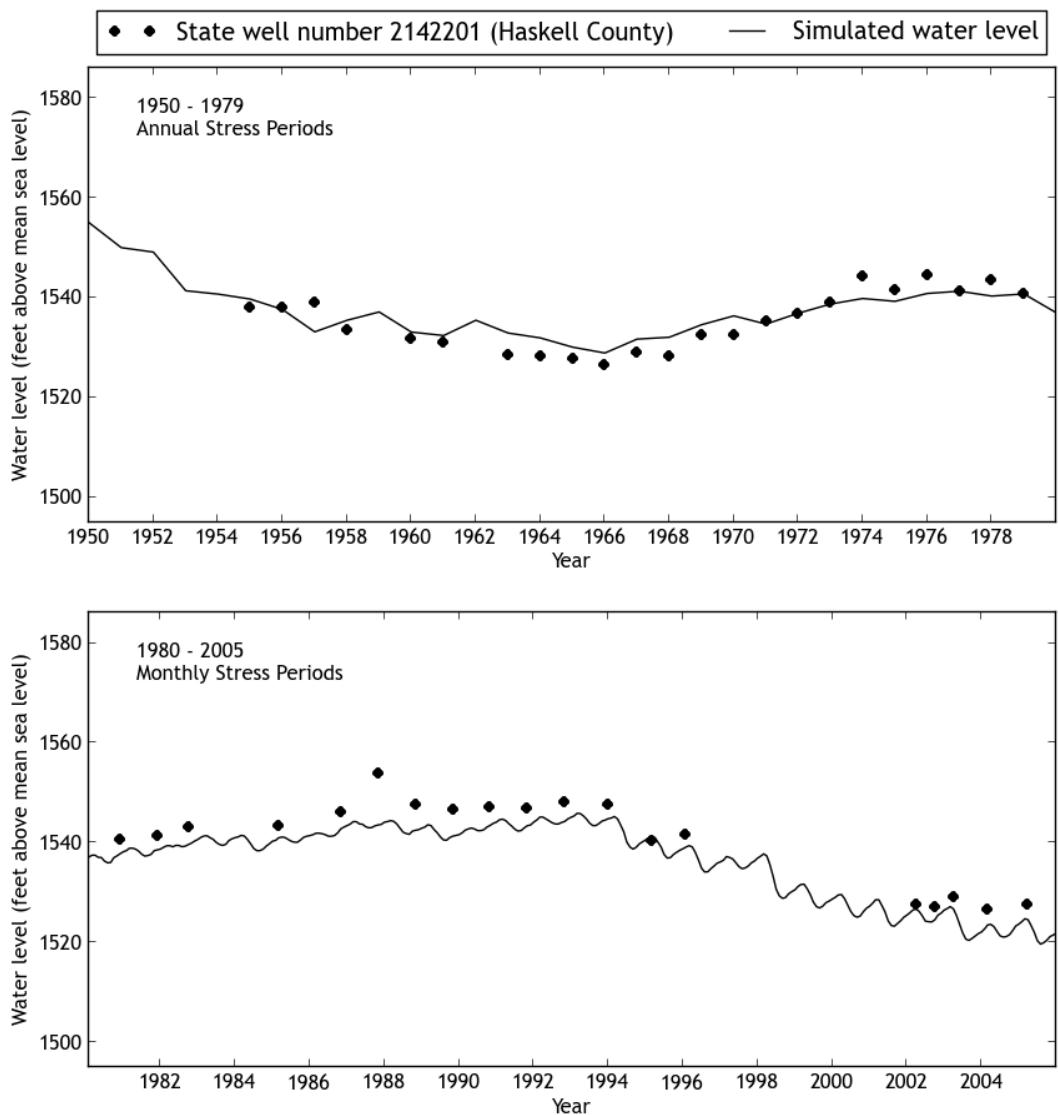


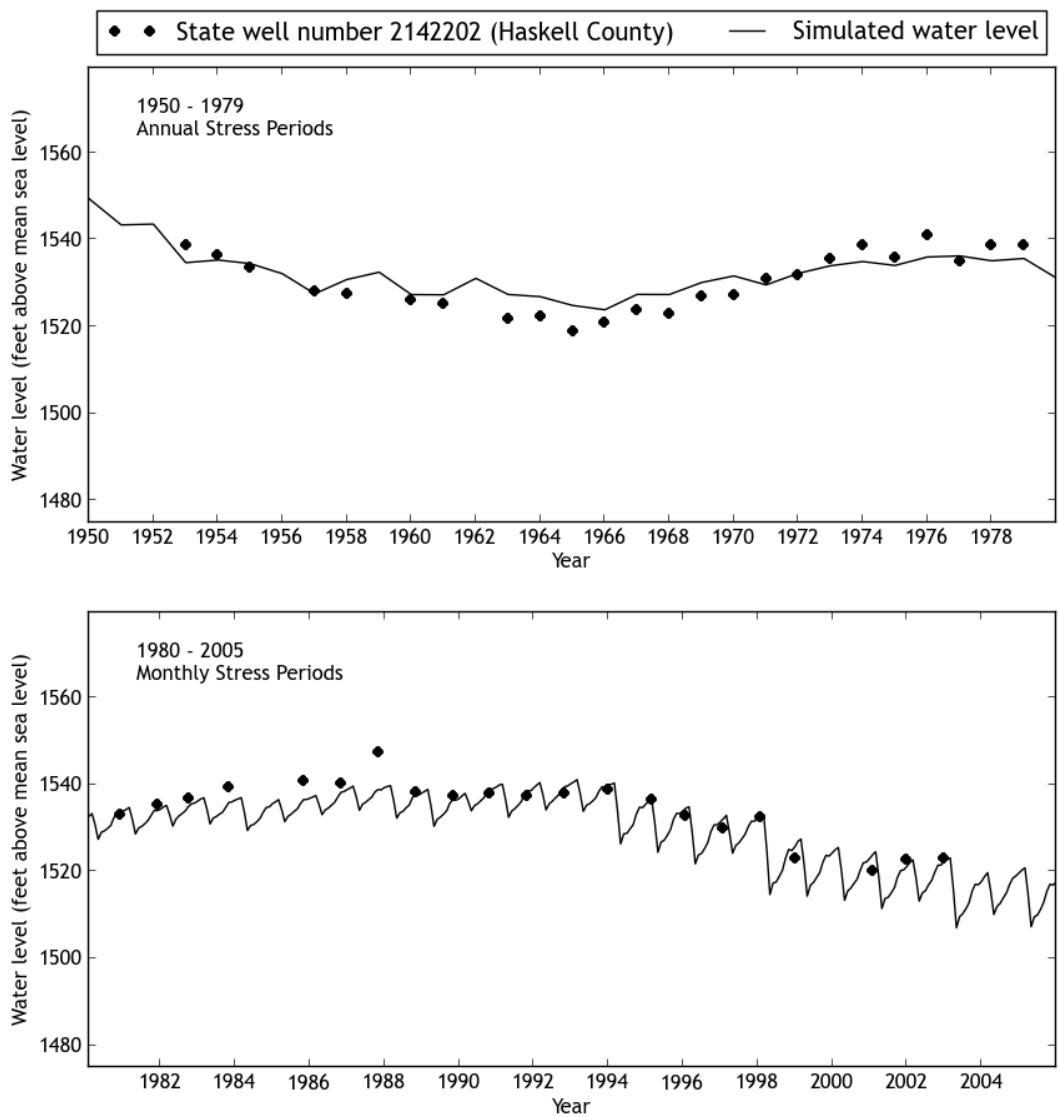


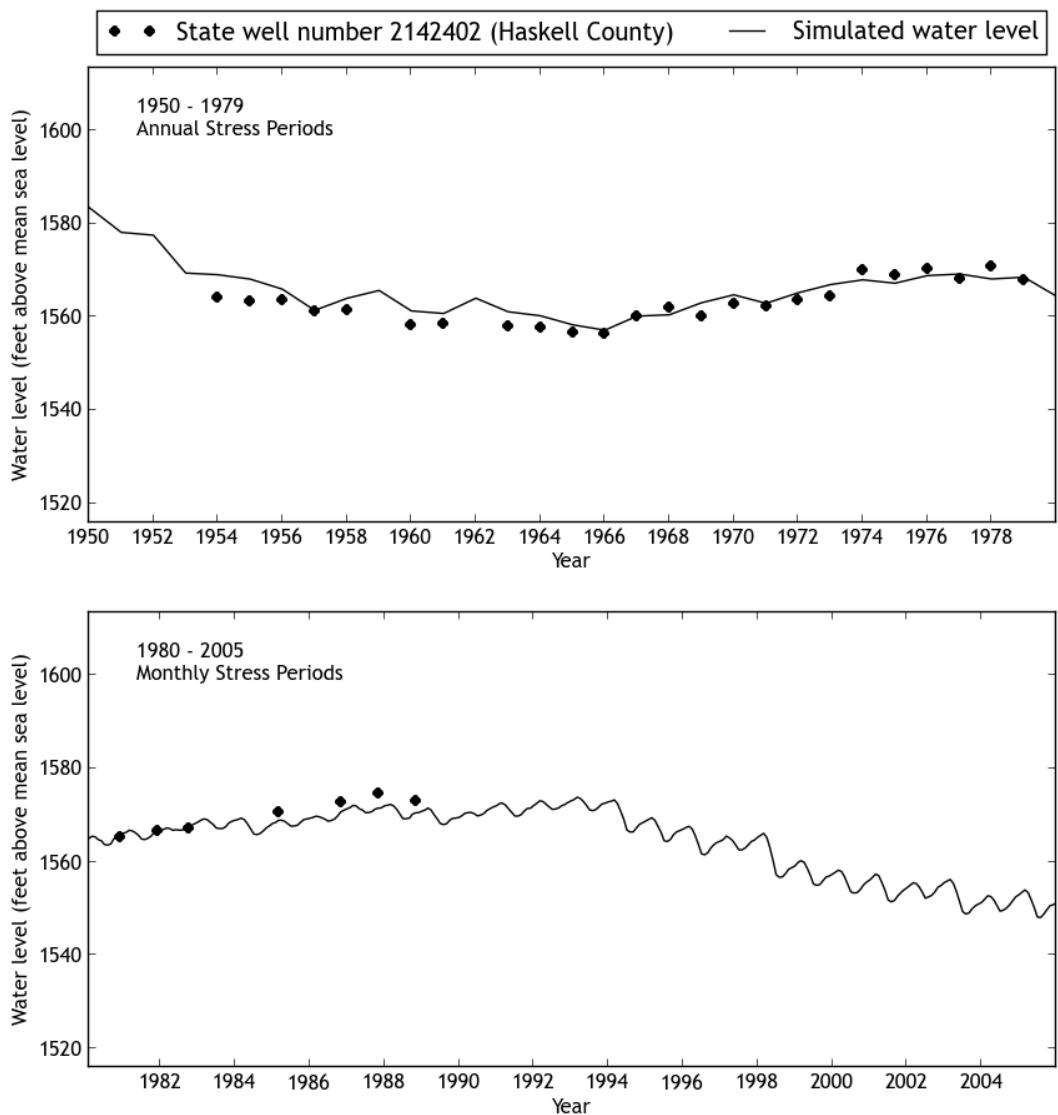


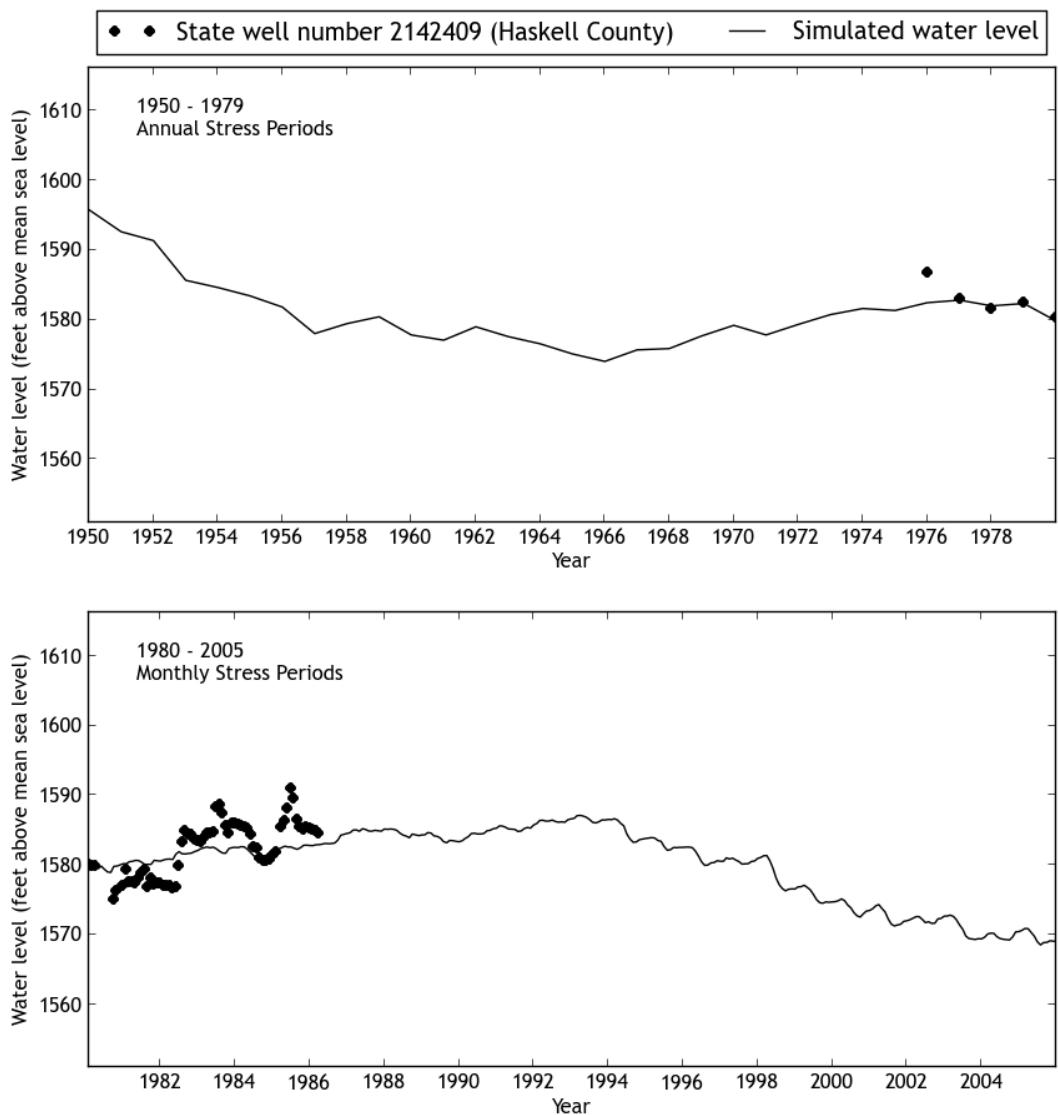


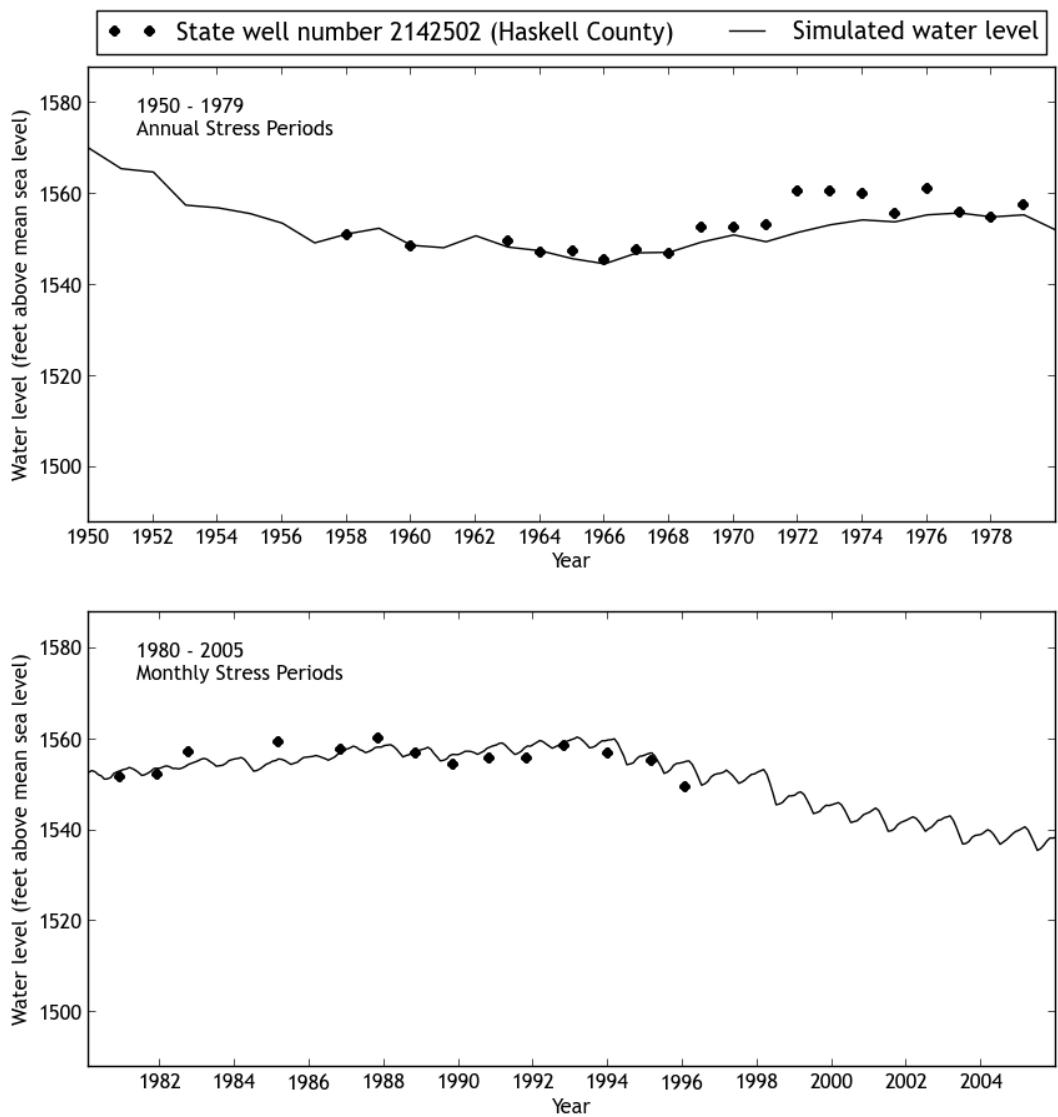


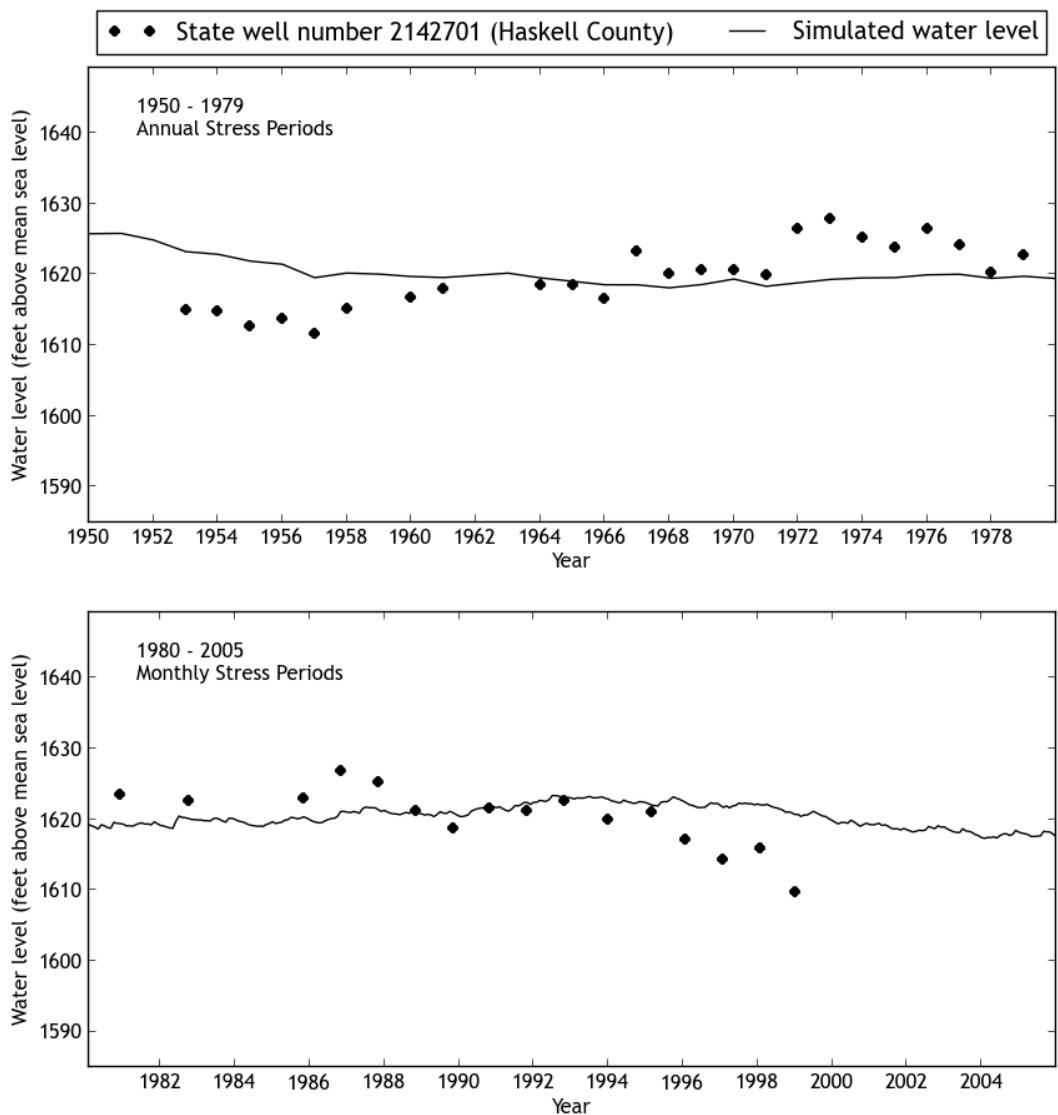


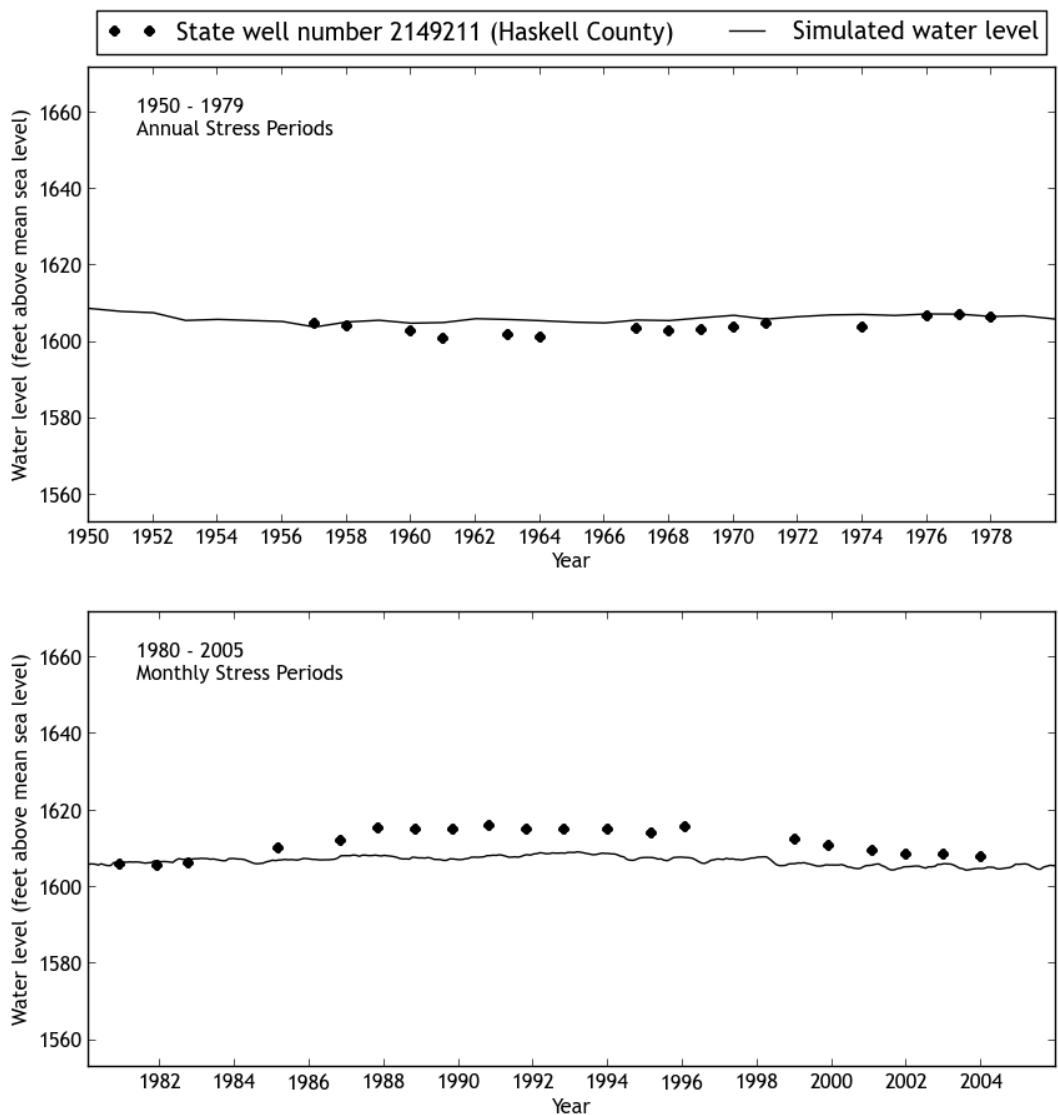


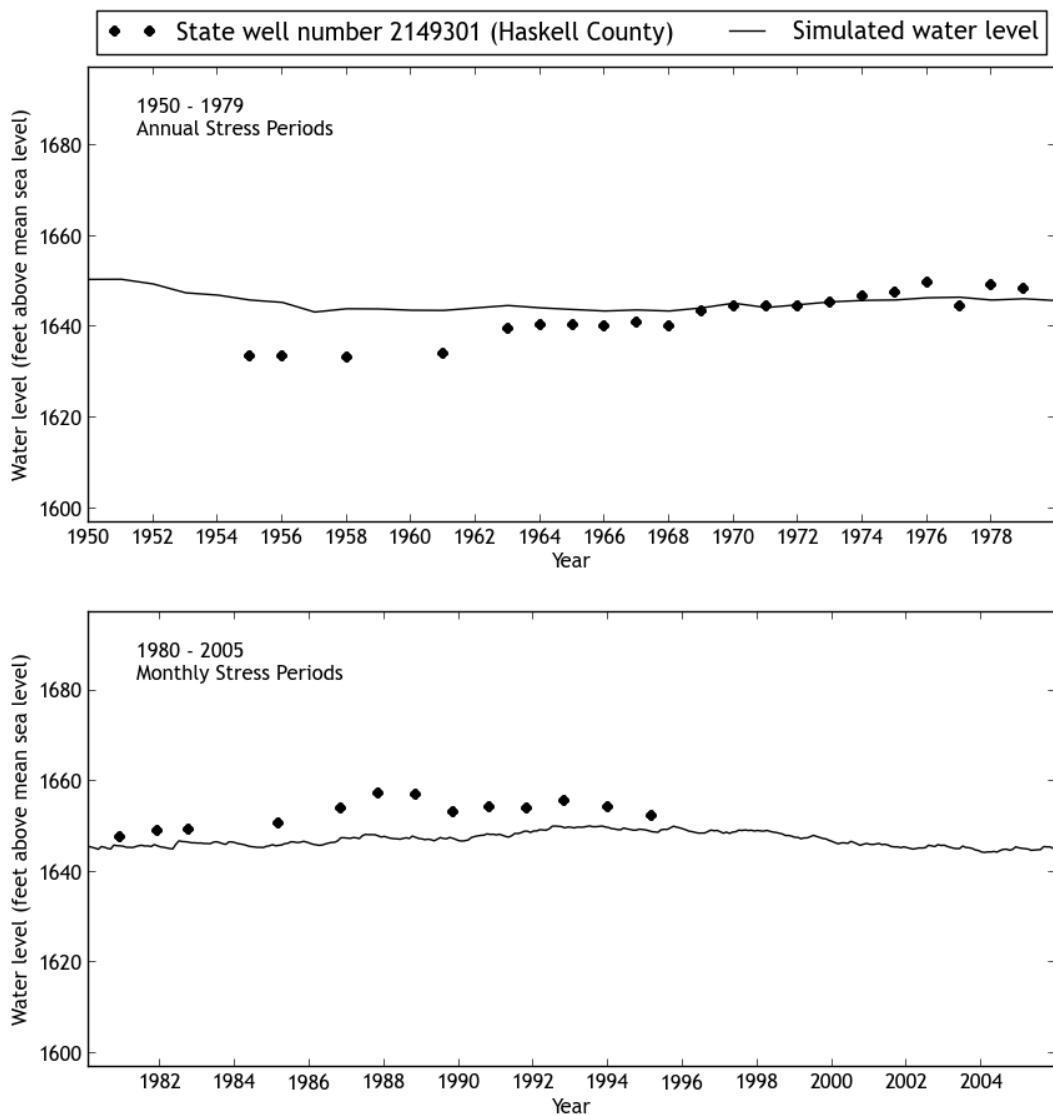


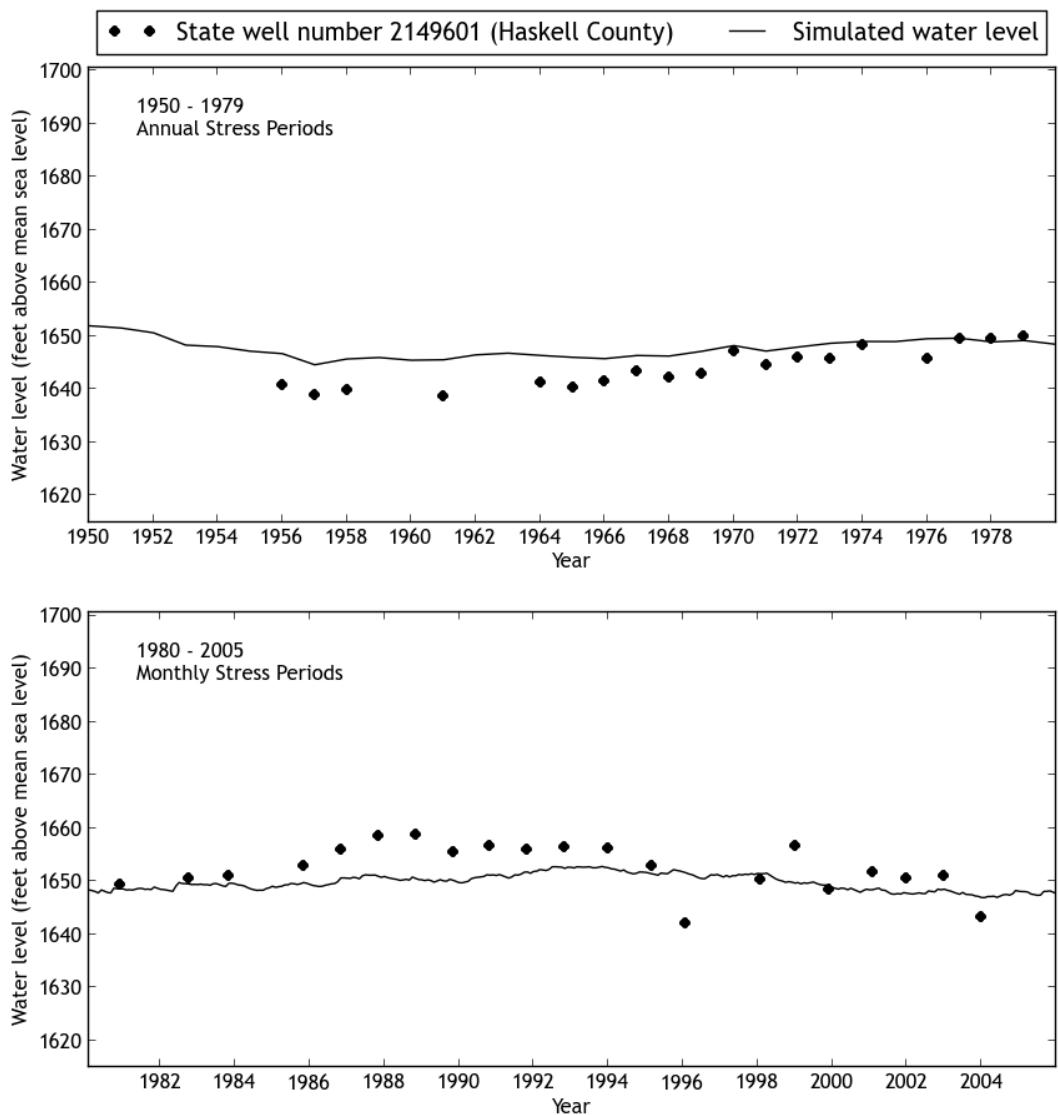


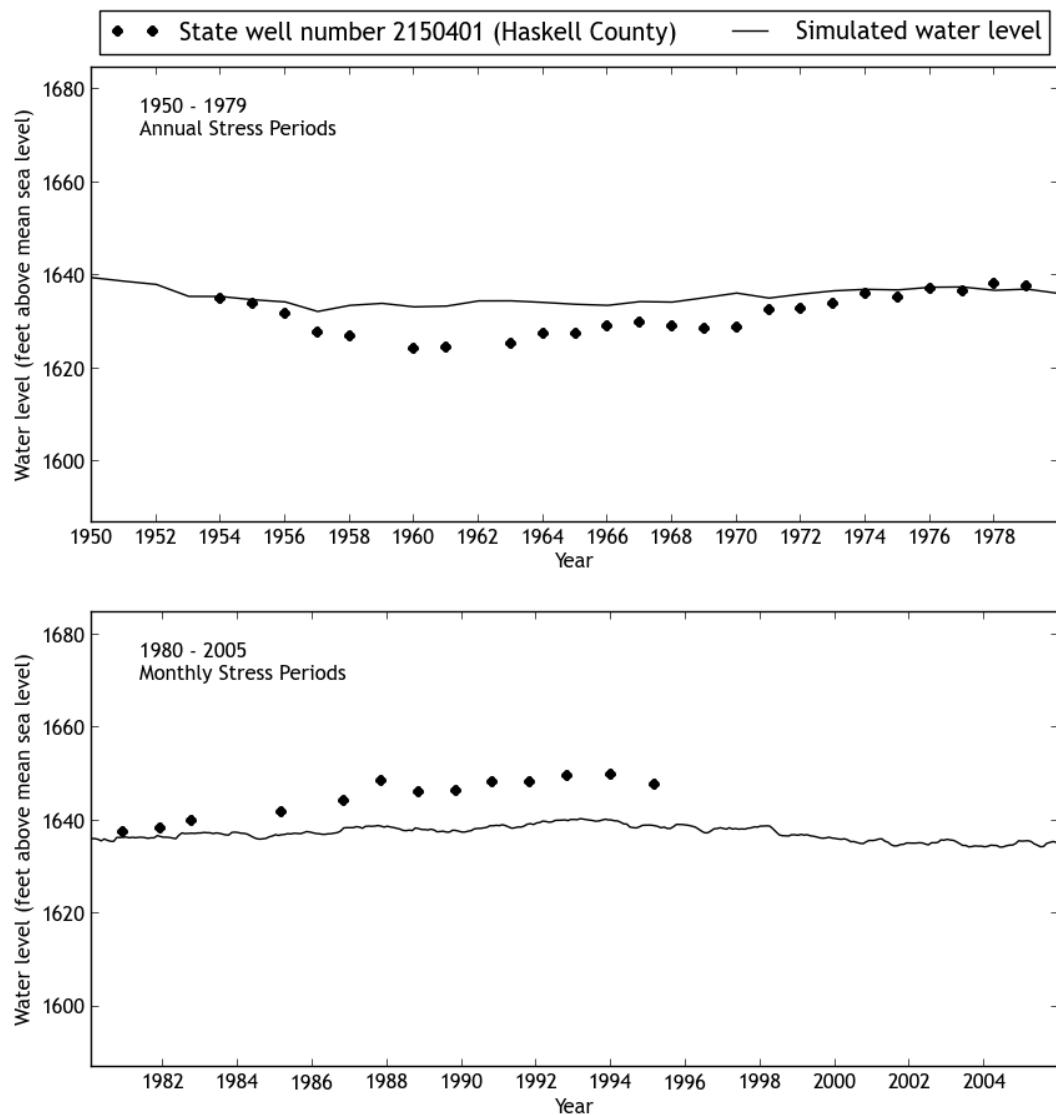


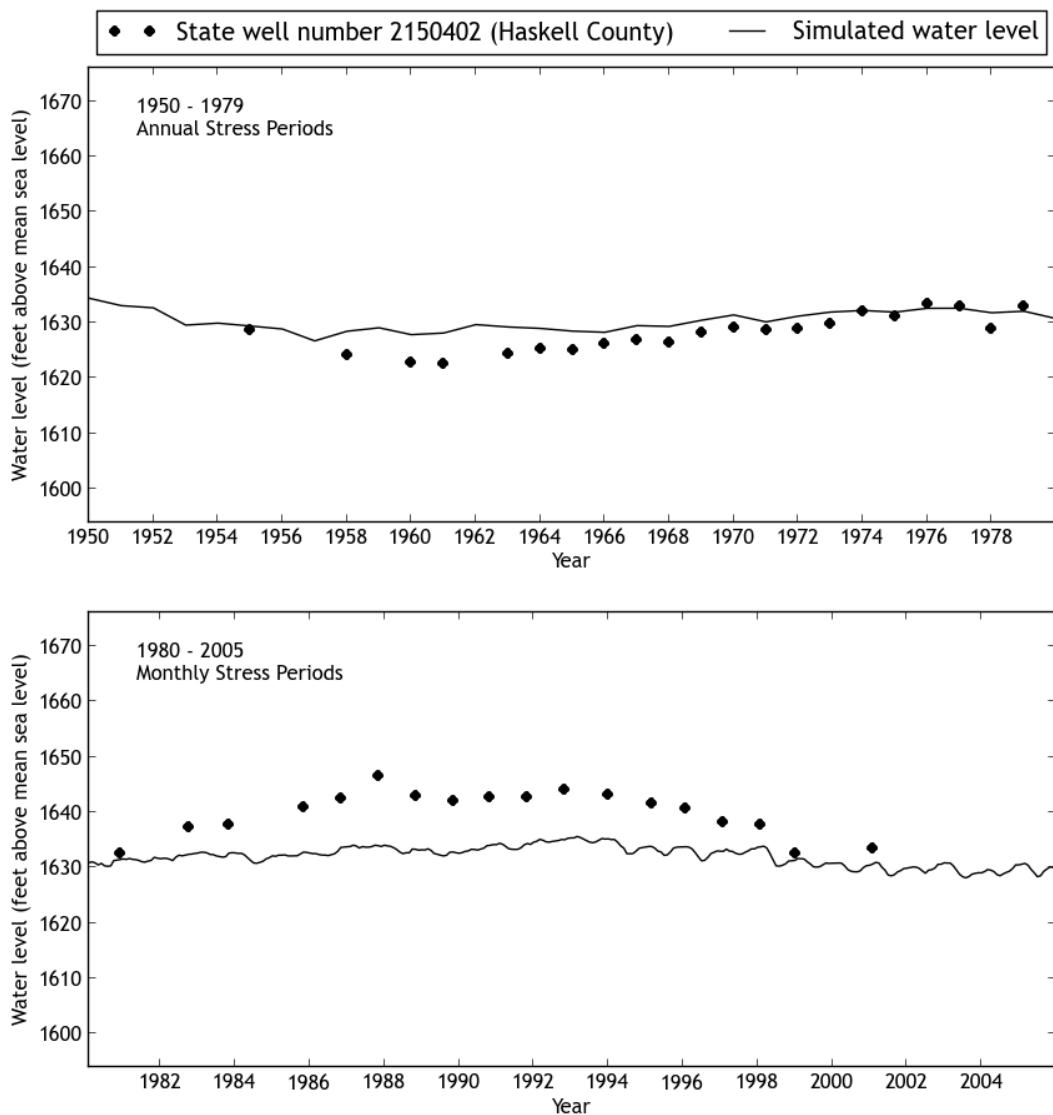


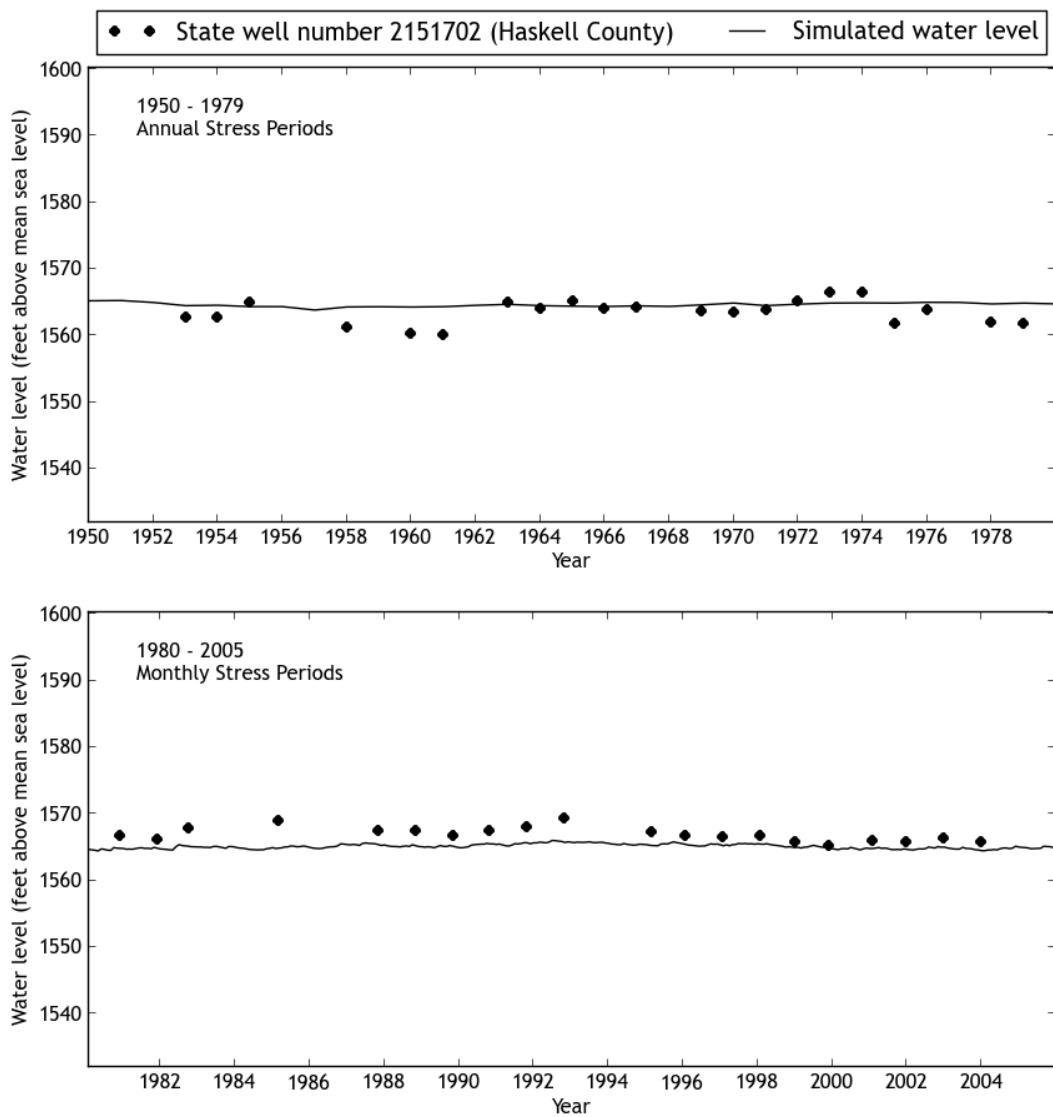


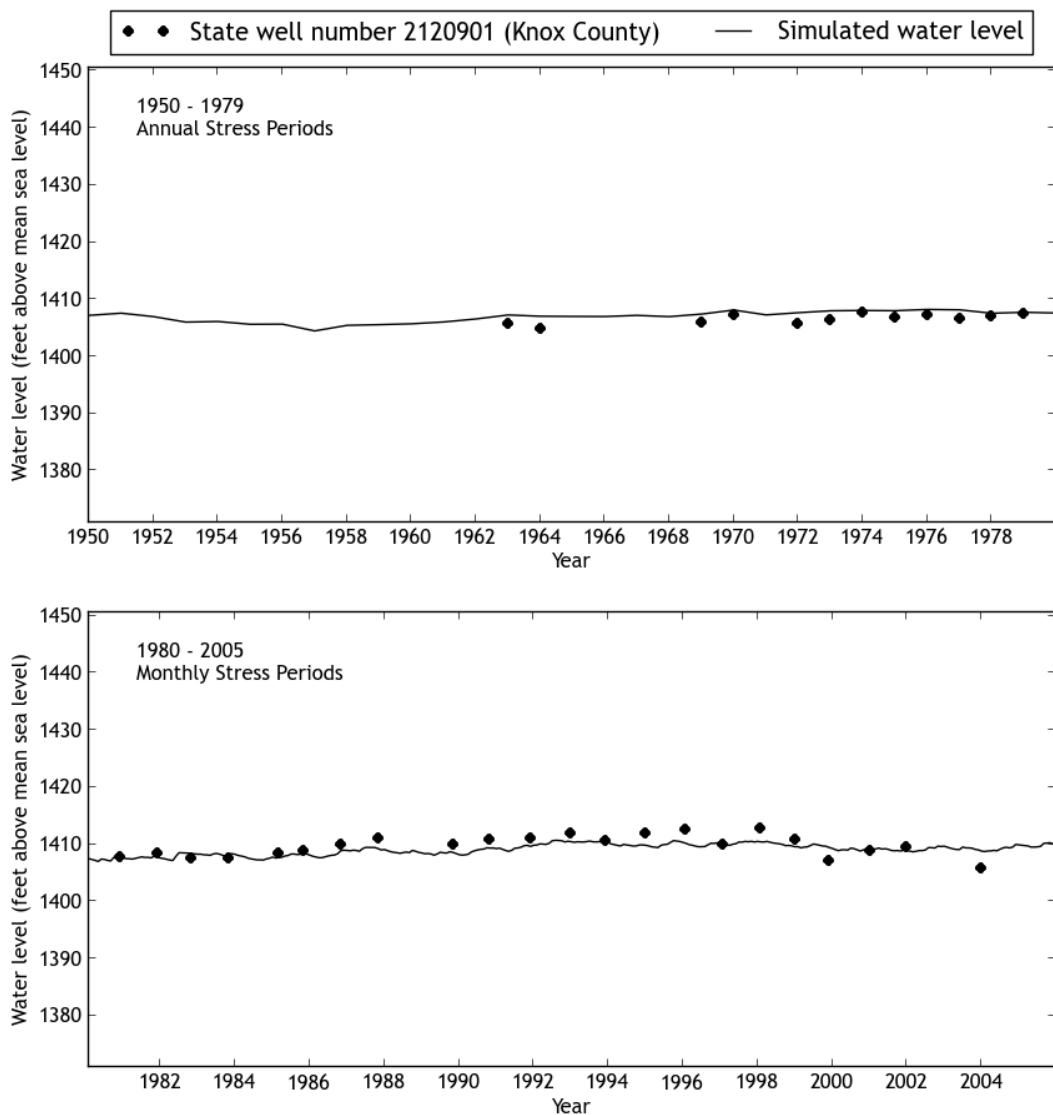


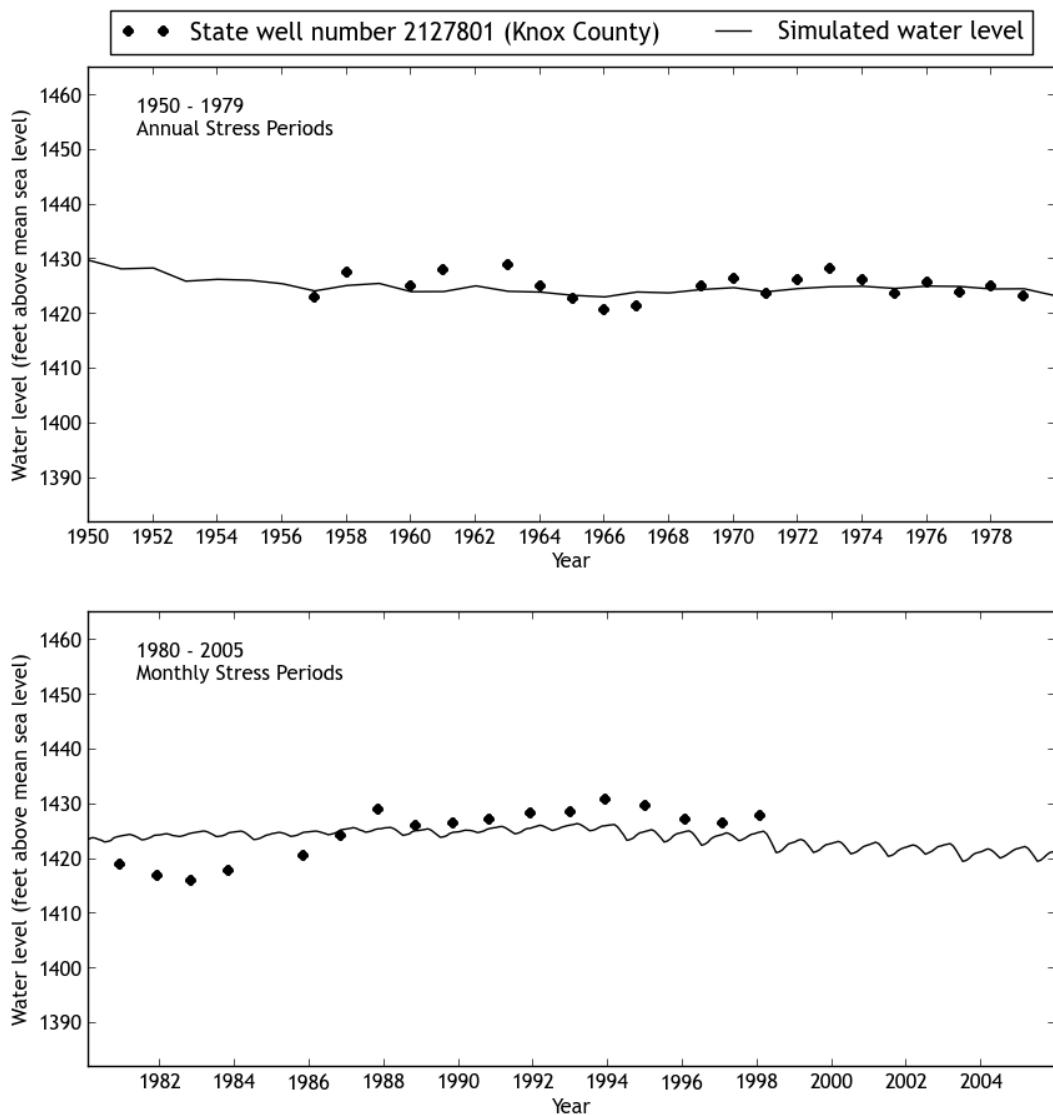


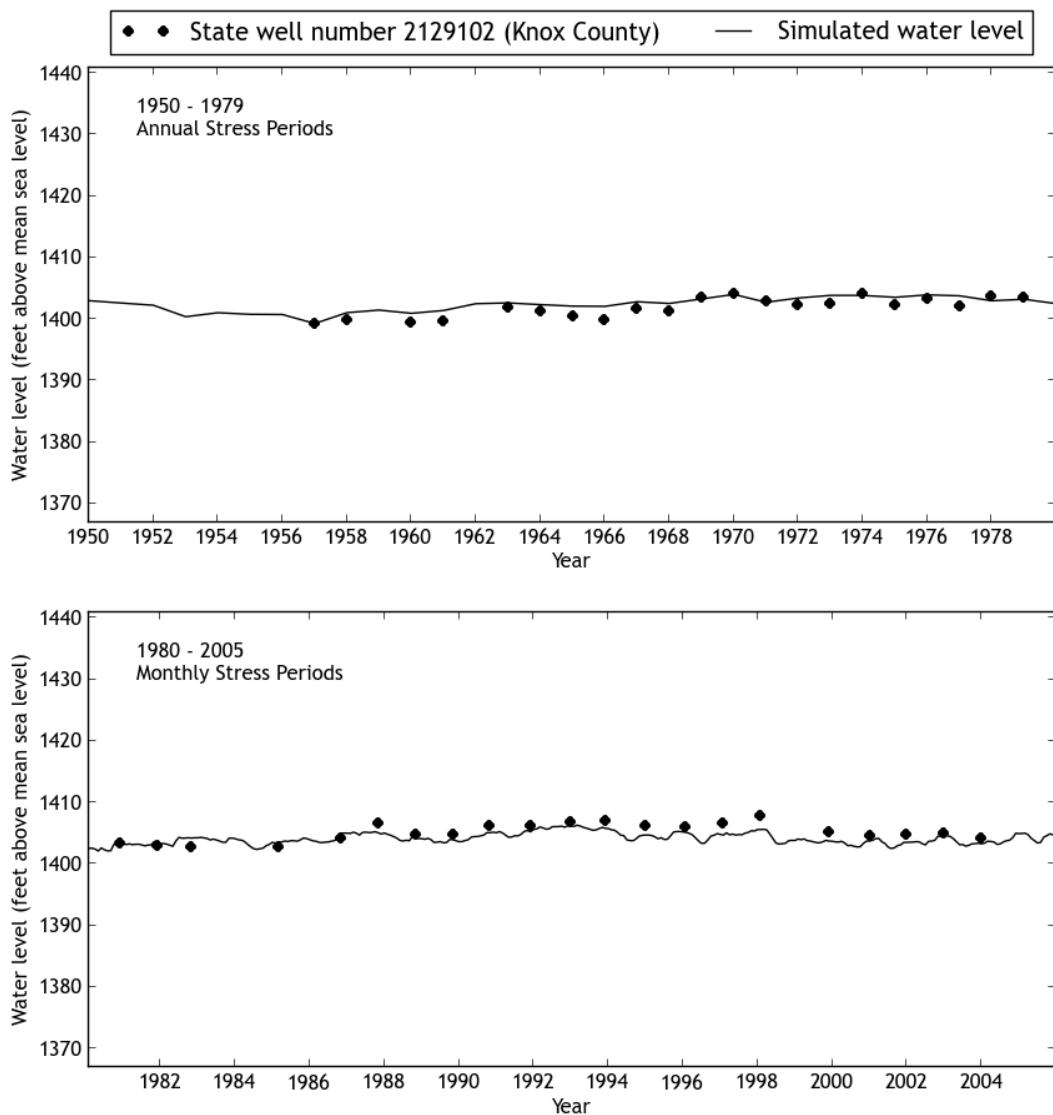


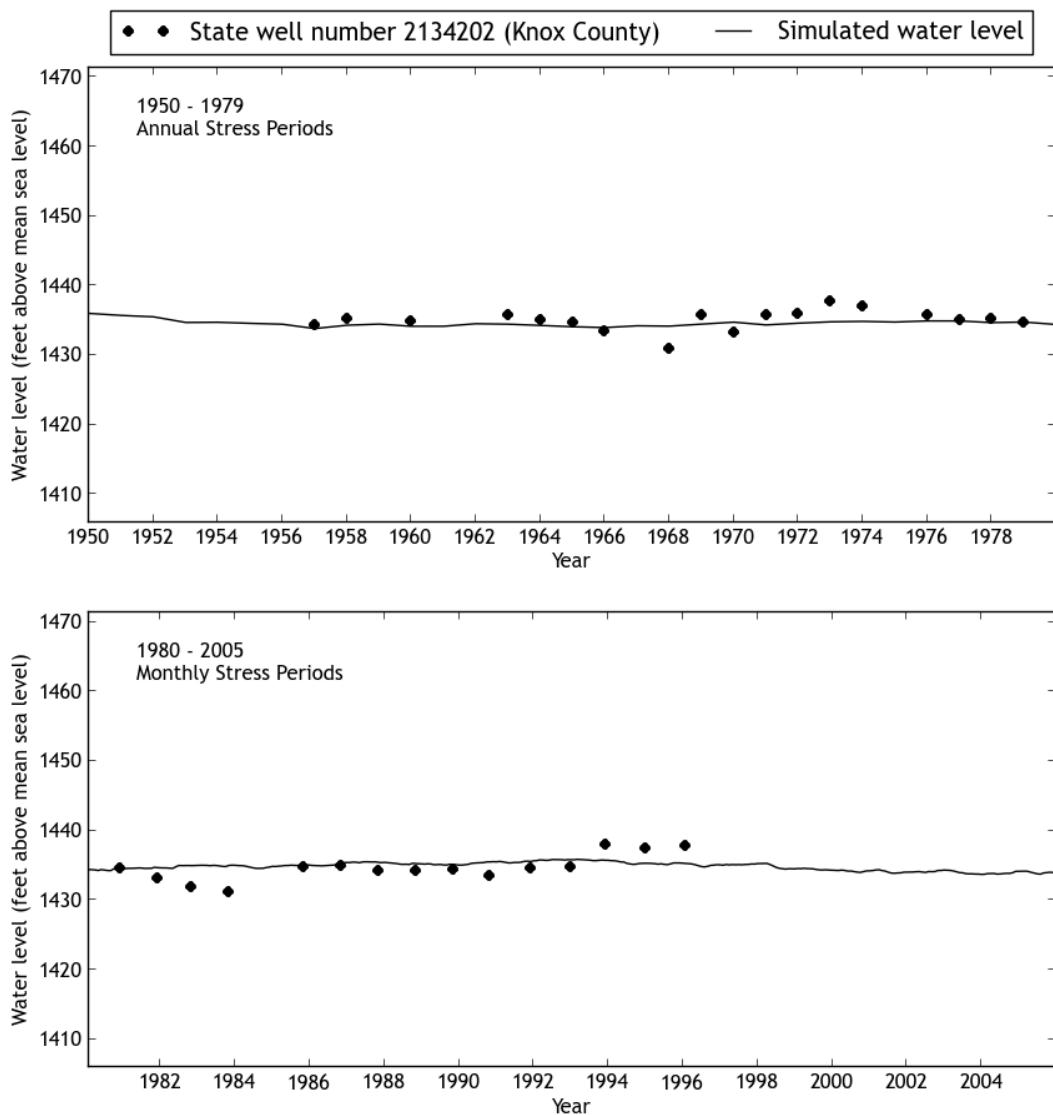


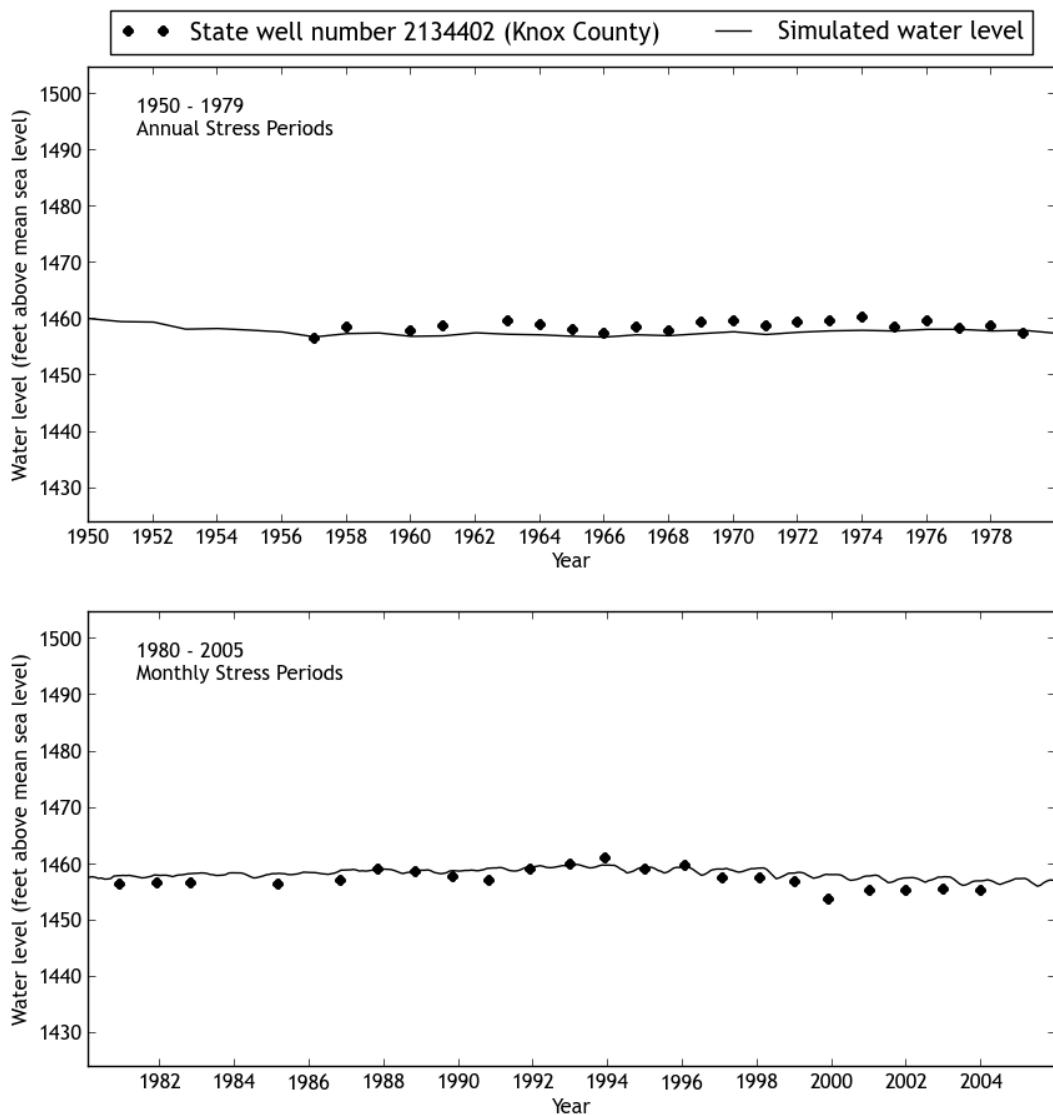


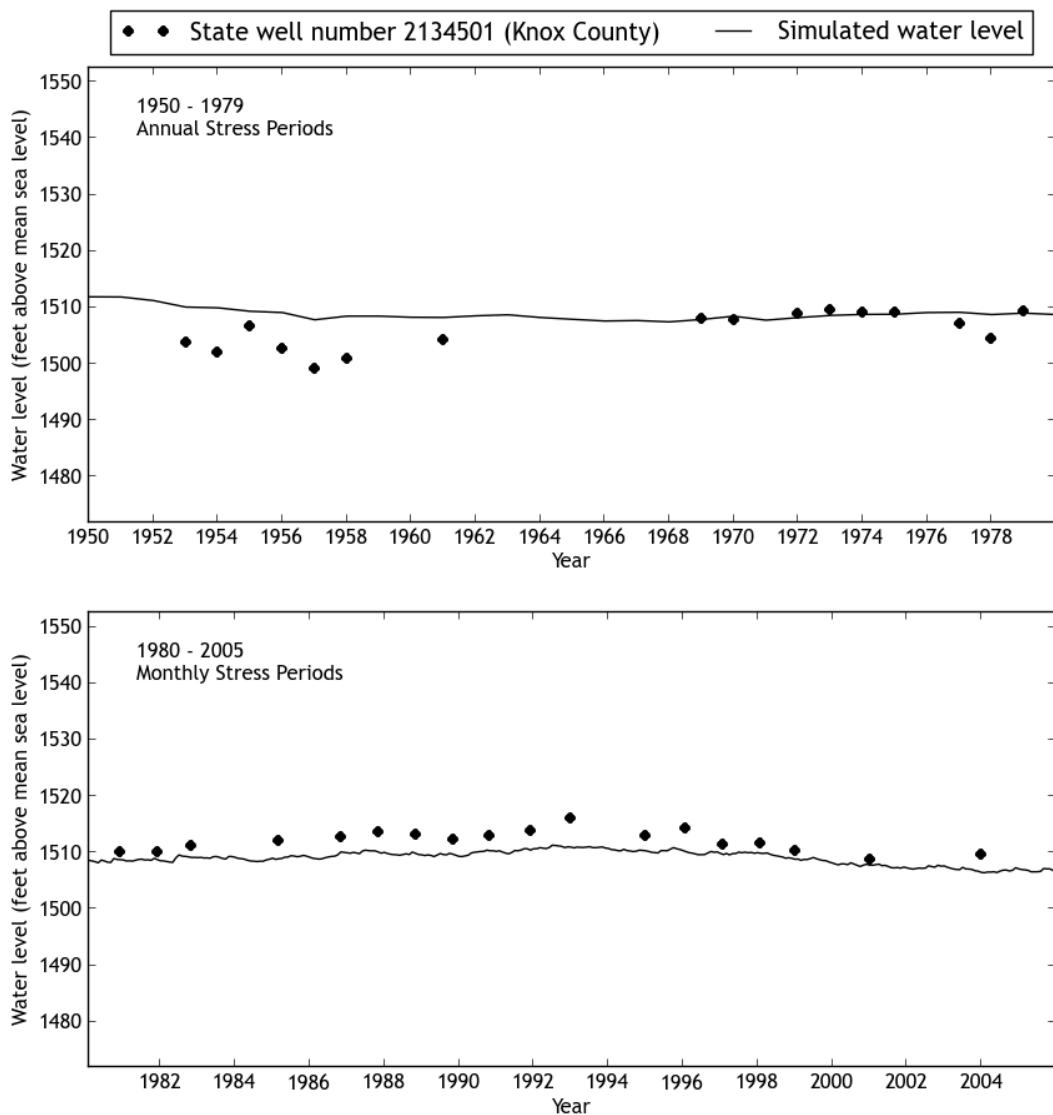


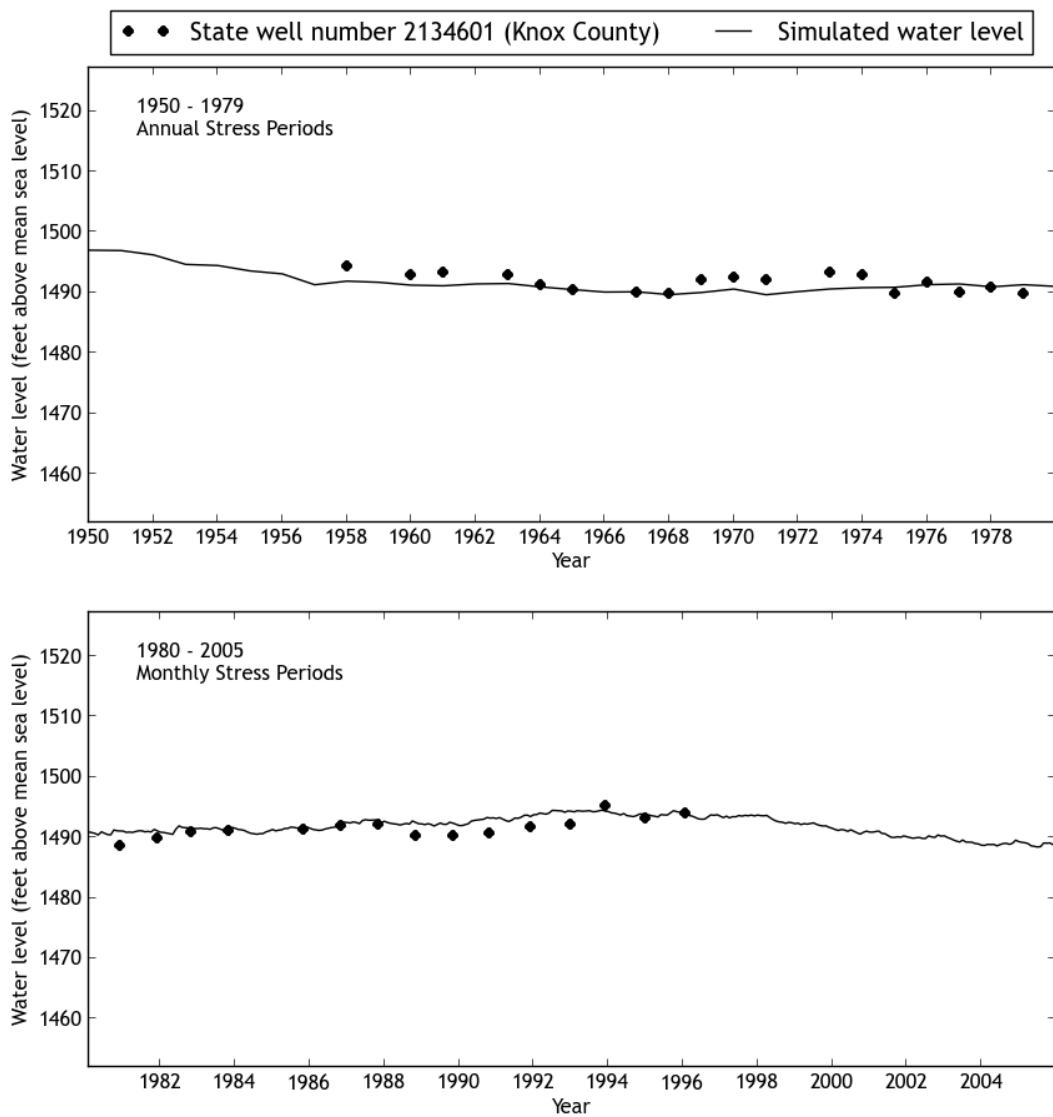


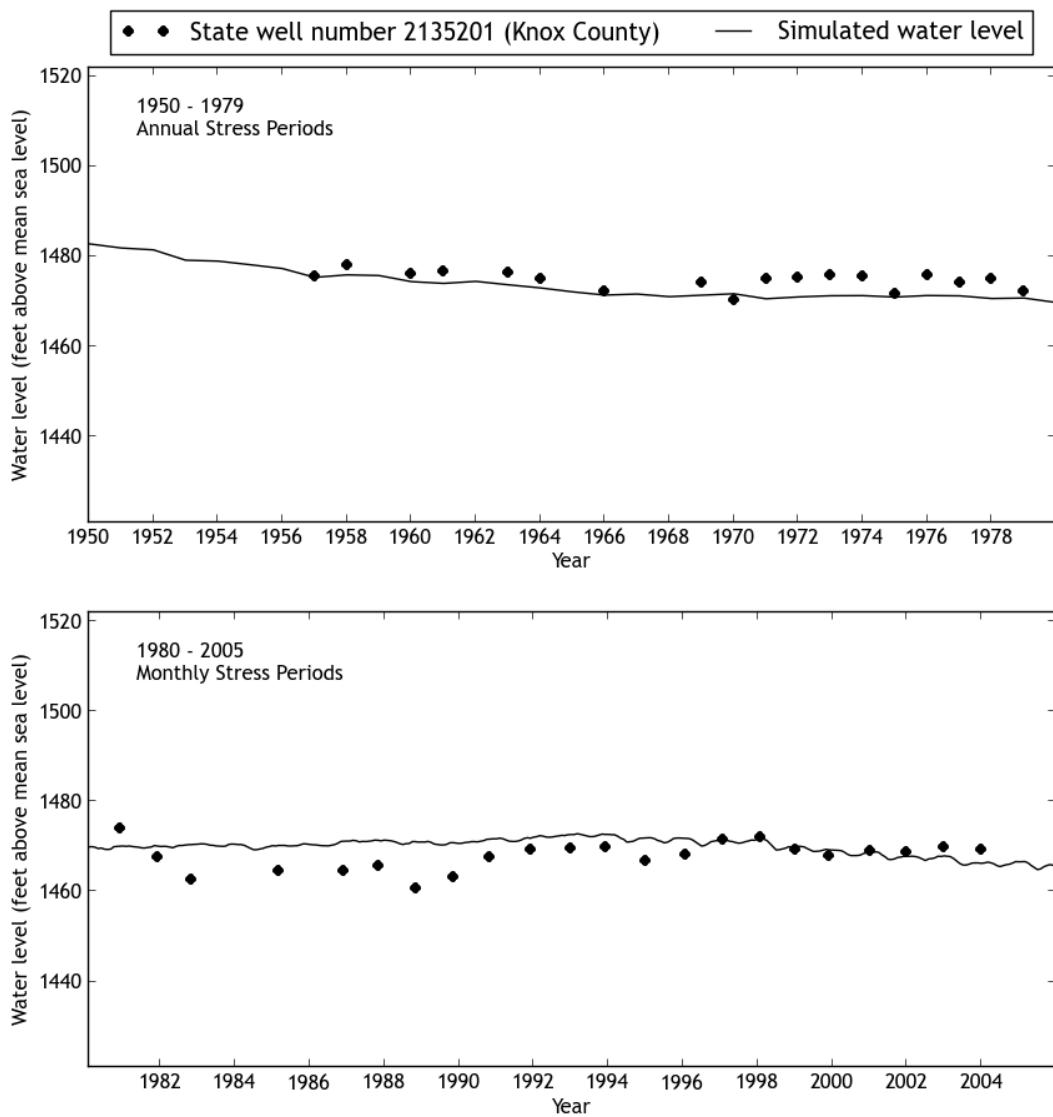


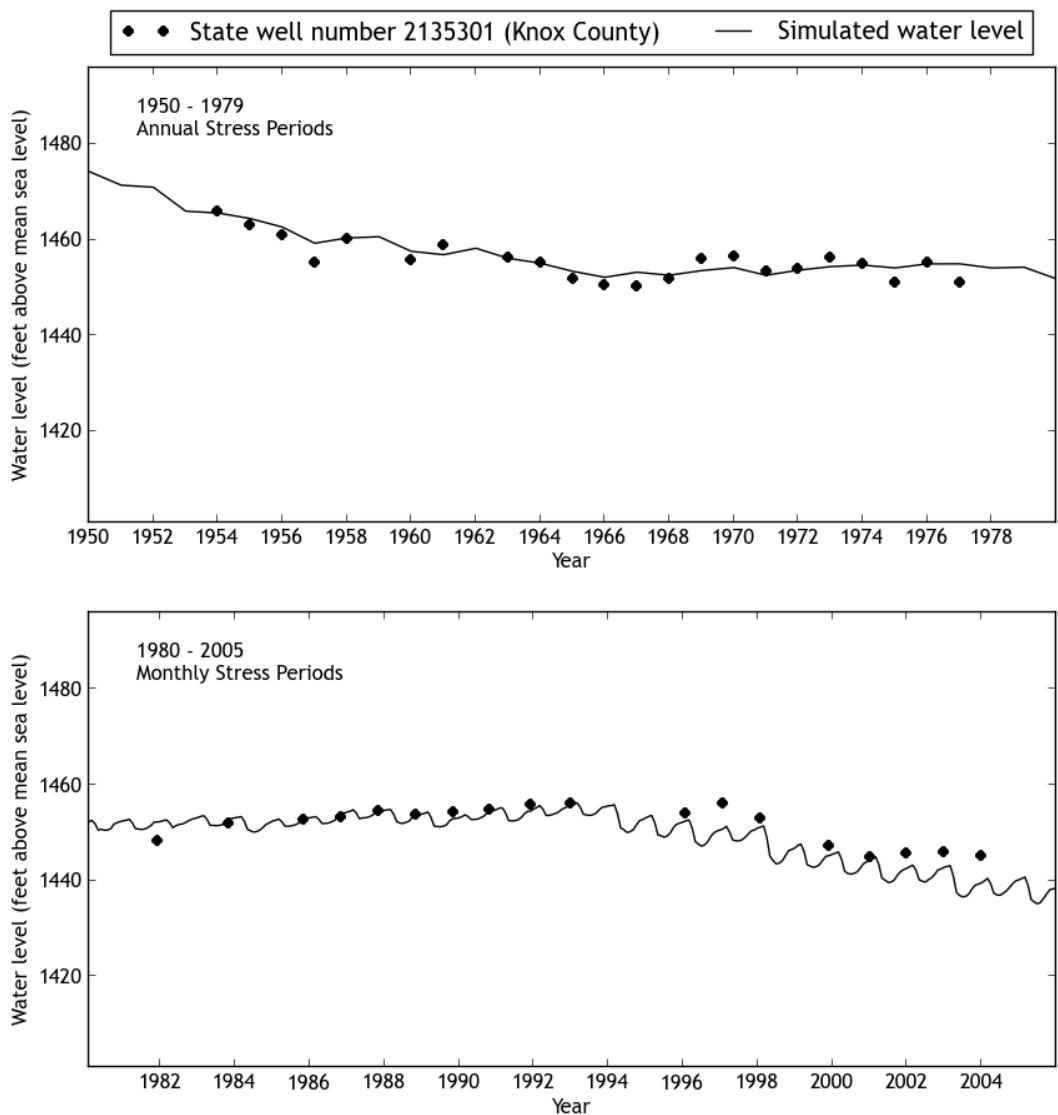












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