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A DEPTH TO BEDROCK MODEL OF THE HELLGATE CANYON AND
BANDMANN FLATS AREA, EAST MISSOULA, MONTANA USING
CONSTRAINED INVERSION OF GRAVITY DATA

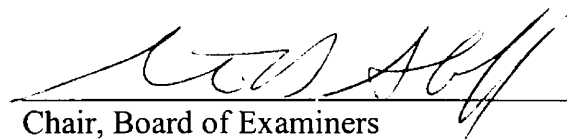
by
David L. Nyquest

B.A., University of Montana

Presented in Partial Fulfillment of the
Requirements for the Degree of
Master of Science

5th June, 2001

Approved By:


Chair, Board of Examiners


Dean, Graduate School

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To my father Ted
and
the memory of my mother Gloria

“...for the knowledge gained through a lifetime.”
James McNeill Whistler

ABSTRACT

Nyquest, David L., M.S., Spring 2001

Geology

A Depth to Bedrock Model of the Hellgate Canyon and Bandmann Flats area, Western Montana using Constrained Inversion of Gravity Data.

Director: Dr. Steven Sheriff 

In 1981 arsenic was discovered in ground water beneath Milltown, Montana (Woessner et al., 1982). Subsequent researchers have attempted to determine the source, delineate the extent, and predict the future configuration and concentration of the ground water contamination in the valley. Of particular interest to the residents of Missoula, Montana is the degree of hydraulic connectedness of the Hellgate Valley Aquifer/Milltown Reservoir Sediments Superfund Site with the Missoula Valley Aquifer and the probability that ground water contamination from the Milltown Reservoir Sediments Superfund Site may migrate into the Missoula Valley Aquifer.

I collected 397 gravity stations distributed about the valley in an attempt to build a model of the 3-D configuration of bedrock in the Hellgate Canyon and Bandmann Flats area to use as the lower boundary of the Hellgate Valley Aquifer in a future ground water flow model. The final 3-D model is most likely accurate to ± 5 meters. Where we can accurately determine the correlation, the standard error of the depth estimate from the final model is 5 meters.

My final result, a 3-D model of the bedrock clearly shows a bedrock shelf or protuberance toward the north end of valley where the Gestring's (1994) model shows a smooth U-shaped bedrock profile. Gestring's (1994) depth to bedrock model has a larger cross sectional area across the northern portion of the basin than my new 3-D model shows. A reduction in the aquifer cross-section in this area may cause ground water gradients to increase locally to accommodate ground water through-flow. The new bedrock model should reduce errors in any future ground water model by providing a better 3-D characterization of the lower aquifer boundary and improving estimates of aquifer transmissivities.

The Lewis and Clark fault only crops out at two places in the area; geologists have long wondered about its form and kinetics (e.g, Nelson and Dobell, 1961). The residual gravity and the 3-D model confirm that the fault strikes from one outcrop to the next with no discernable offsets or splays and shows offset across the fault with the down-dropped block to the south.

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INTRODUCTION

The Hellgate valley and Bandmann Flats area (Figure 1), located between Missoula and Milltown, Montana, contains the Hellgate Valley Aquifer. The Hellgate Valley Aquifer hydraulically connects the Milltown Reservoir Sediments Superfund Site with the sole drinking water supply of the inhabitants of Missoula. Bedrock in the Hellgate Valley and Bandmann Flats area is considered impermeable and serves as the base of the Hellgate Valley Aquifer. Ground water flow through the Hellgate Valley Aquifer may thus be controlled in part by the three dimensional configuration of bedrock. Since 1981, the date arsenic was discovered in ground water beneath the community of Milltown, (Woessner et al., 1982, 1984) the bedrock structure of the Hellgate valley and Bandmann Flats area has gained surprisingly little attention (Woessner et al. (1984), Harding Lawson Associates, (1987), Camp Dresser McKee, (1989), ENSR Consulting (1991, 1992, 1993), Gestring (1994), Schombel (1997, 2001)). Gestring (1994) mapped the bedrock configuration using all available information including bedrock outcrops, drill holes and seismic data. Gestring's (1994) study contained large areas with no data but nevertheless was used as input to his ground water flow model (Gestring, 1994). This study was initiated primarily to aid in future ground water modeling efforts by refining our understanding of the three dimensional configuration of bedrock beneath the Hellgate Valley Aquifer.

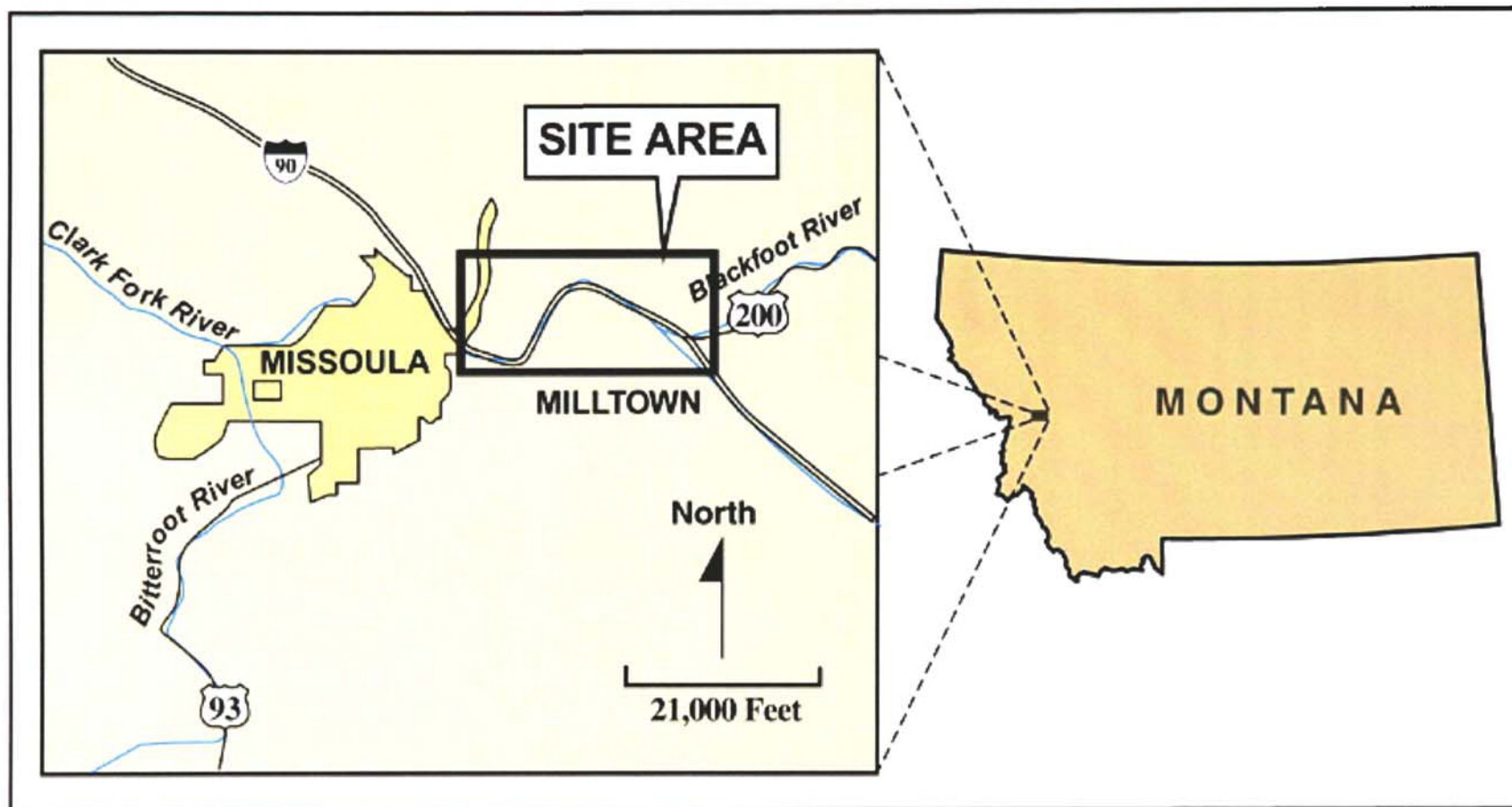


Figure 1. Location map

Purpose and Scope

My objective was to map the bedrock structure of the Hellgate valley and Bandmann Flats area through collection and analysis of gravity data and to constrain the gravity model with all available depth to bedrock data such as bedrock outcrops, seismic data, and drill holes completed to bedrock. Gestring (1994) produced a bedrock model (Figure 2) of the Hellgate Canyon and Bandmann Flats area that was derived directly from drill holes and seismic data. The spatial distribution of depth to bedrock confirmation points in Gestring's model was not of sufficient density to support the desired grid size of 91.4 meters used in his ground water flow model. As a result some suspect features were mapped and trouble was encountered while calibrating the ground water flow model (Gestring, 1994, pers. comm. 2001; Schombel, 1997, pers. comm. 2001).

Catherine Evans (1997) compiled density information on bedrock in the vicinity of the study area. Evans gathered density information from a wide variety of sources including direct calculation from drill core and surface samples. Given Evans' density data and the apparent deficiencies in Gestring's bedrock map, gravity seemed the obvious method to refine our understanding of the three dimensional structure of bedrock in the Hellgate Canyon and Bandmann Flats area and provide an updated configuration of the aquifer base for future models of ground water flow.

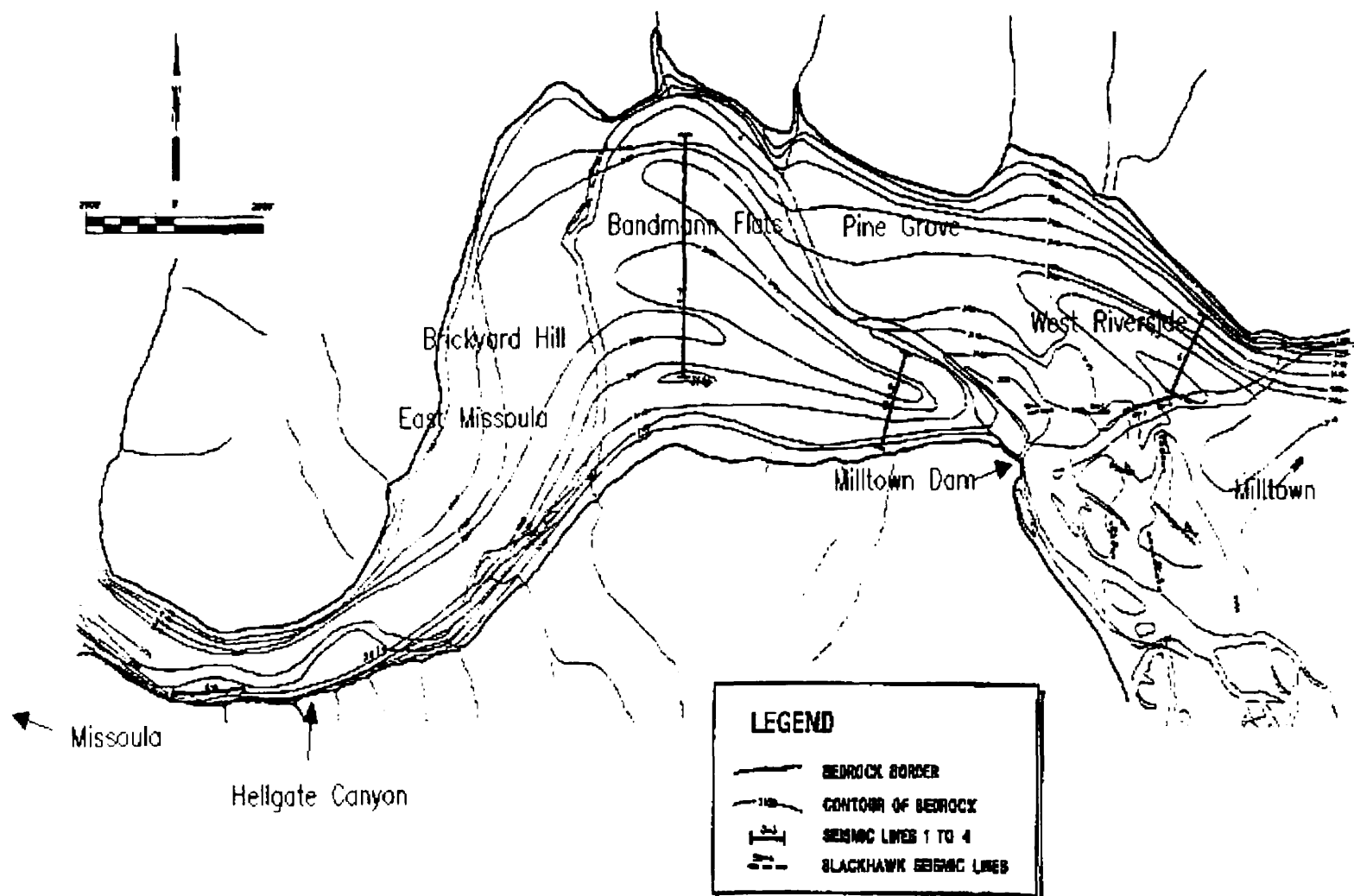


Figure 2. Gestring's (1994) bedrock model.

The study area is located between Missoula and Milltown, Montana and extends eastward approximately ten kilometers from the mouth of the Hellgate Canyon to just east of the Milltown dam (Figure 1). The area comprises approximately 24 Km² and includes the communities of East Missoula, Pine Grove, West Riverside and Milltown, Montana. Near the eastern edge of the study area, at the confluence of the Blackfoot and Clark Fork rivers, is the Milltown reservoir and the designated contaminated site: Milltown Reservoir Sediments EPA Superfund Site. The site has been the focus of intense investigations since the discovery of arsenic contaminated sediments in the reservoir (Woessner et al., 1984). The study area is a narrow, asymmetric valley with the long axis trending east to west. The basin is flanked to the north and south by mountains rising about 600 m above the valley floor. The average elevation in the valley is approximately 1006 m above mean sea level. The basin is typical of many intermontane river bottoms in the Rocky Mountain Cordillera with rolling, terraced banks of Tertiary and Quaternary aged alluvium and colluvium deposits. The Clark Fork River winds its way along the valley bottom in a typical meandering fashion from the outlet of the Milltown Dam westward through the narrow Hellgate Canyon and into the city of Missoula. Numerous small gulches and valleys open to the Hellgate Canyon and Bandmann Flats area and contain intermittent streams that flow into the Clark Fork River.

The study area is situated in an intermontane basin within the basin and range province of the Rocky Mountain Cordillera (Figure 3). Among the first to map the area were Nelson and Dobell (1961). Bedrock in the area consists of steeply dipping, faulted

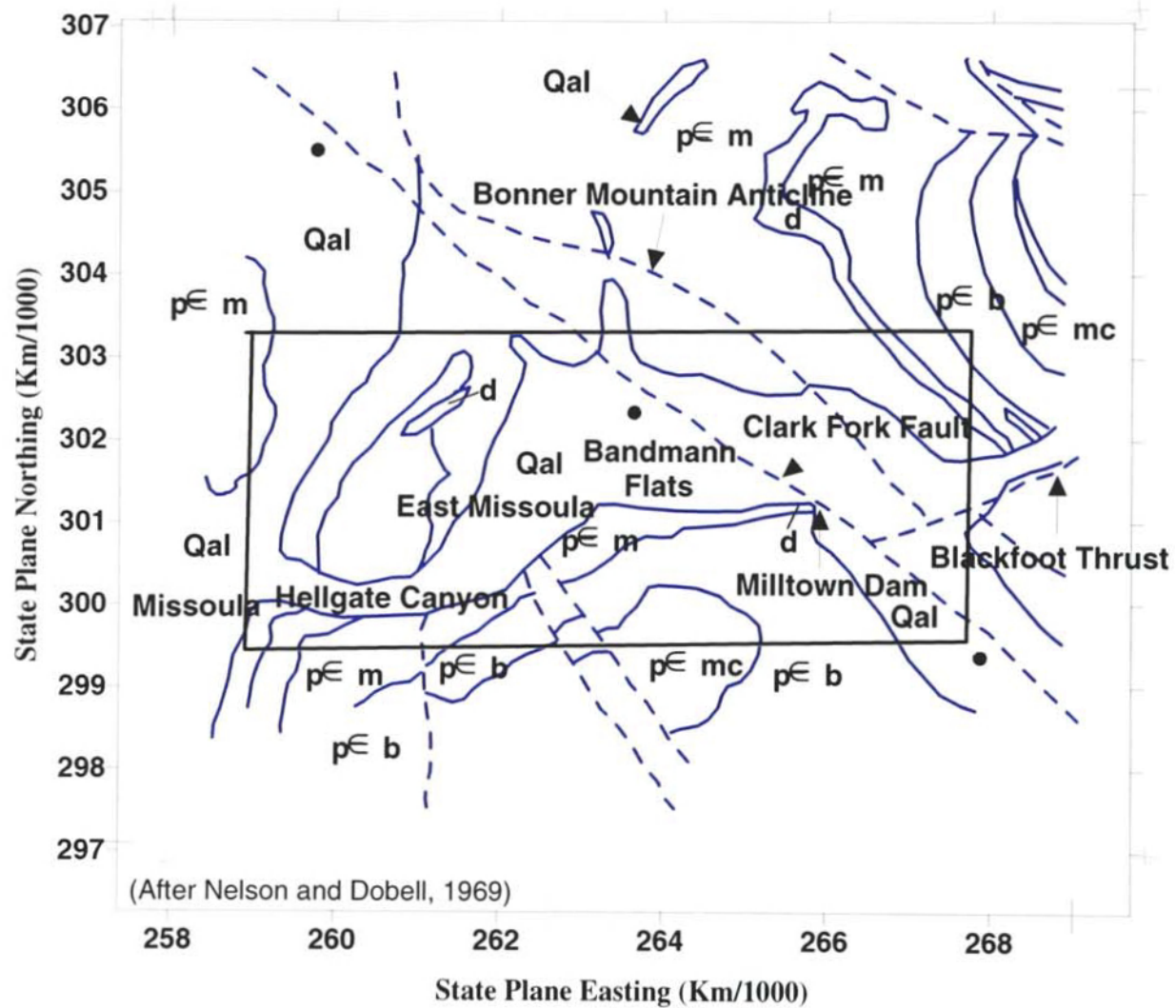


Figure 3. Site geology

and folded beds of Middle Proterozoic age argillite, quartzite and limestone metasediments of the Proterozoic Belt Supergroup with late Precambrian diabase intrusives outcropping in the southeastern portion of the study area (Gestring, 1994, Ertel, 1991, Popoff, 1985, Nelson and Dobell, 1961). The Clark Fork-Nine Mile Shear Zone (e.g. Ertel, 1991) roughly parallels the Clark Fork River and trends across the study area southeast to northwest. The fault zone has been described as a normal fault with the down-dropped block to the south (Ertel, 1991) and as a right lateral transverse fault (Evans, 1997). The Blackfoot thrust crops out on Bonner Mountain to the east of the study area and is believed to parallel the Blackfoot Valley.

METHODS

The bedrock model proposed by Gestring (1994) and used in his ground water model is based on sporadic known depths to bedrock from seismic data and wells drilled to bedrock. Most of the data used by Gestring are concentrated in the area around the Milltown dam (Figure 2). West of the dam the bedrock control becomes very sporadic. Schombel (1997) noted that an area of exposed bedrock just west of the dam was not included in Gestring's final model of the bedrock topography. Thus, Gestring's interpretation of bedrock in the areas west of the dam can be improved upon. I designed my survey to use the existing bedrock control to calibrate a gravity survey. Once I calibrated my model using gravity observations in the regions with good bedrock control I was able to use gravity observations to determine depth to bedrock in areas where little previous bedrock control existed.

To characterize the bedrock topography of the Hellgate and Milltown valleys, I used a Worden gravimeter to establish 397 new gravity stations in an area of about 24 km² (Figure 4). Sixty-one measurements were established along three profiles oriented perpendicular to the long axis of the valley. The remaining 336 stations were distributed about the study area to provide regional control among the profiles. The mean nearest neighbor distance between stations is about 64 m with a standard deviation of about 55 m. Additional gravity data compiled by the National Geophysical Data Center and the

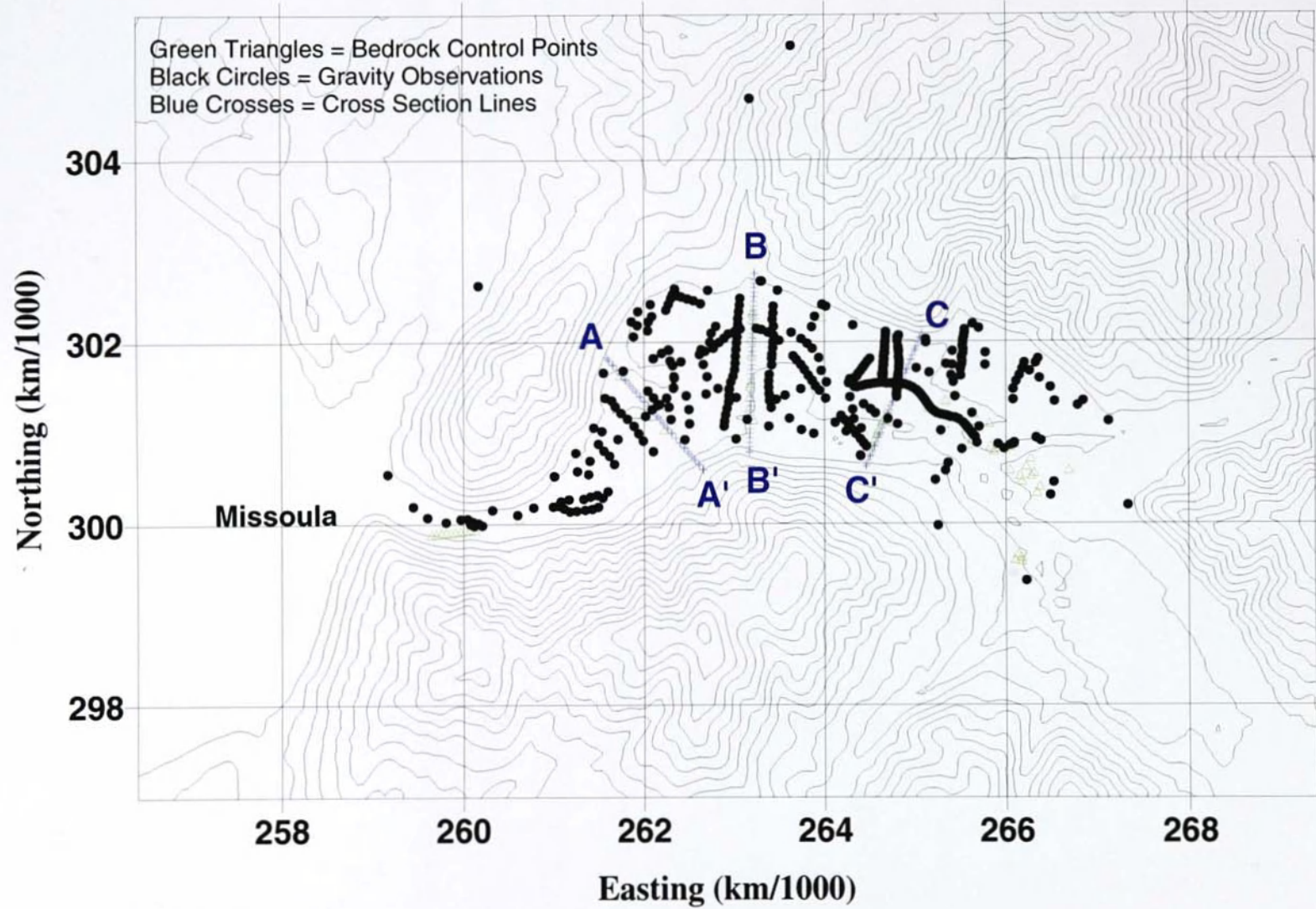


Figure 4. Locations of gravity observations/cross sections.

U.S. Defense Mapping Agency supplemented the new data and aided in the development of a regional gravity profile (Appendix A).

Development of a reliable gravity model for shallow crustal features requires accurate and precise measurements of horizontal and vertical station locations. To determine the level of vertical position accuracy needed to improve on the current resolution of three dimensional bedrock features, I analyzed several cross sections based on known depths to bedrock. Forward calculated Bouguer anomalies from the deepest known portions of the study area ranged from 1.40 to 1.80 mGal. The deepest known depth to bedrock from a well is 55 meters and is located northeast of the Milltown dam. The deepest inferred depth to bedrock from seismic data is 82.3 meters near the southern border of Bandmann Flats. Judging from the cross sections, there are bedrock features with amplitudes as small as 10 meters. Using standard Free Air and Bouguer correction values, an elevation error of plus or minus 1 meter (3.28 ft) could change the Bouguer Anomaly by approximately 0.2 mGal. Given a density contrast of -725 kg/m^3 , a 0.2 mGal error would change the modeled depth to bedrock by approximately 10 meters. Thus the error in vertical station locations must be less than one meter to adequately resolve known bedrock features.

GPS Methods and Results

The error in elevation associated with the GPS study is an important consideration when developing a gravity model. Small changes in elevation affect the value of the Bouguer anomaly. To achieve the accuracy needed to resolve bedrock features of amplitude 10 meters I used GPS, the satellite-based global positioning system developed and operated by the U.S. Department of Defense (DoD). For my survey I used a 6-channel Trimble GeoExplorer GPS unit capable of collecting data in either Coarse/Acquisition (C/A) code mode or Carrier Phase mode to calculate positions. Experiments in the area using multiple observations of various recording periods indicate that a 10-minute recording of carrier-phase data yields a vertical position with a standard deviation of approximately 0.3 meters (Evans, 1997). My fellow graduate student Catherine Evans and I conducted 45 static GPS surveys among eight National Geodetic Survey (NGS) benchmarks in the Missoula area. The average precision of each measurement, based on a 95% confidence level, is 0.38m, with a standard deviation of 0.34m. The error measurement accounts for satellite geometry, precision of elevation ties (benchmarks), and baseline solution strength, but does not account for monument instability. GPS rover configuration specifications are provided in Appendix B.

Obtaining geographical locations from post-processing carrier phase data requires using Trimble's Pathfinder Office software. Post processing involves correcting errors common to both the base station and the roving receivers such as ionospheric and

atmospheric delays, and selective availability, the purposeful introduction of error by the DoD. The DoD removed selective availability in May of 2000. Base stations are stationary receivers that continuously record satellite data. The rover files are corrected with data collected simultaneously by the base station. There are two base stations located in Missoula that I used for post processing: the United States Forest Service (USFS) Missoula base station, and the Missoula County base station. The USFS base station files are collected with a 12-channel Trimble Maxwell Chip receiver and are available for download via the Internet at www.fs.fed.us/database/gps/missoula.htm. The Missoula County Surveyor's Office files were collected with a 12-channel Trimble Community Base Station and were available by modem access to the Missoula County Bulletin Board Service, which is no longer available.

Differential corrections were made using either the Missoula County base station or the USFS base station. Our GPS elevations were closest to the recorded NGS benchmark elevations when the Missoula County GPS base station files (updated 1997 reference coordinates) were used for the differential corrections. For those corrected to the Missoula County base station the mean difference between the NGS benchmark elevations and the GPS elevations is +0.39 m and +1.27 m for those corrected using the USFS base station (Evans, 1997). For this reason the majority of the differential corrections were made using the Missoula County base station files. In the few cases that the Missoula County base station was not recording during the field survey, I used the files from the USFS base station as a substitute. Interestingly, elevations calculated with

the local USFS base station files were consistently lower by an average of +1.16 meters than those calculated using the Missoula County base station files. To neutralize the offset I added +1.16 m to elevations calculated using the USFS base station. Appendix C contains the assessment of GPS position accuracy using the local USFS base station for phase-processing corrections. After this adjustment, the combined mean difference for the 45 benchmark observations is +0.31 m. A 0.31 m error in elevation would change the combined Free Air and Bouguer correction by 0.12 mGal. A 0.12 mGal error would change the final depth to bedrock by approximately 5 meters.

GPS receivers give height above the reference ellipsoid, a theoretical equipotential surface. A gravity study requires height above the Geoid or actual equipotential surface. To convert my elevation measurements from height above the ellipsoid to height above the Geoid I used the computer program Geoid96 (NGS, 1997). The reference ellipsoid over my field area is, on average, approximately 14 meters below the Geoid.

After acquiring the raw gravity data a series of standard corrections must be applied to determine the Bouguer Anomaly. The standard corrections remove effects from the earth's imperfect shape and rotation, location on the spheroid, elevation above sea level, overall gravitational attraction from rocks between the observation point and sea level, and surrounding topography. The remaining gravity signal is directly related to density variations in the crust and upper mantle and is useful in modeling depths to known density contrasts. In this case the known contrast is between bedrock and valley fill.

Prior to applying the corrections, I linearly adjusted the raw gravity values for temporal and instrumental drift and converted the data from instrument units to absolute observed gravity values in mGal. I used the laboratory base station ($9.8043221 \text{ m/sec}^2$), located on a concrete pier in the Geophysics Lab of the Science Complex at the University of Montana, to perform conversions from instrument units to absolute gravity and to calibrate two field base stations (Base #1 and Base #2) to absolute gravity. The laboratory base station was calibrated to Mopobase, a National Geodetic Survey (NGS) gravity base station located on the grounds of the Federal Building, Missoula, Montana. Mopobase is tied to an International Gravity Standardization Net 1971 (IGSN71) site.

Following time-honored field methods, I reoccupied a base station every two to three hours to linearly adjust for drift caused by earth-tide and instrumental fluctuations. Although drift is non-linear it is linearly correctable over short periods of two to three hours (Burger, 1992). I found that the drift over the two to three hour period was consistently below 0.03 mGals/hour : this is very near the resolution value of the Worden gravimeter. To determine the precision I could attain with the gravimeter, I reoccupied base station #2 five times over the course of the field survey. I found the standard deviation of instrument readings to be less than 0.04 mGal (Appendix D).

The Bouguer Anomaly

To isolate the gravitational effect of crustal and upper mantle density variations I subjected the data to a series of standard corrections. First I calculated the Theoretical Gravity or Latitude Correction using the most recent constants and series truncations. The formula was developed by the World Geodetic System 1984; it is expressed in closed form by

$$g_{th} = 9.7803267714 \times \frac{1 + 0.00193185138639 \sin^2 \lambda}{\sqrt{1 - 0.00669437999013 \sin^2 \lambda}} \times m/sec^2$$

where λ is the latitude of the observation (Blakely, 1995). Subtracting the Theoretical Gravity from the Observed Gravity removes the gravitational attraction of a hypothetical earth containing no lateral density variations.

The second operation, the Free Air Correction, accounts for the regular decrease in gravitational attraction with increasing distance from the center of the earth. The last term in the Taylor's series expansion of the formula for the attraction of gravity a small distance above the geoid, with a value supplied for the attraction of gravity on the geoid and 'h' as the height of the measurement above the geoid, is

$$g_{fa}(mGal / m) = -0.3086 \times 10^{-5} h.$$

Adding the absolute value of the Free Air Correction to the Observed Gravity yields the Free Air Anomaly. The Free Air Anomaly accounts for the variation in elevation of the gravity measurement but does not compensate for the mass under foot.

The third operation, the Simple Bouguer Correction, approximates the mass between the elevation of the observation and sea level by modeling it with a homogeneous, infinitely extended slab having a typical crustal density of 2670 kg/m^3 and of thickness equal to the height of the observation above sea level. The slab formula reduces to 0.04193 mGal/m . Removal of the simple Bouguer Correction from the Free Air anomaly produces the Simple Bouguer anomaly: the gravitational signature from rocks above or below the average crustal density of 2670 kg/m^3 . The Simple Bouguer anomaly neglects the additional gravitational effect of topographic features such as valleys and mountains near the observation point.

The fourth operation, the Terrain Correction, accounts for the gravitational effect from mass excesses and deficiencies relative to an infinite slab created by local topography. Adding the Terrain Correction gives the complete Bouguer anomaly (Appendix G). I used HAMXYZ2 (Gradient Geophysics, 1997) to calculate terrain correction values out to 28 km from the study area. HAMXYZ2 employs the chart and sector method of Hammer (1939) modified to include extended elevation ranges (Douglas and Prah, 1972). I used the typical 2670 kg/m^3 for terrain density. I used USGS 30 meter digital elevation models (DEM) for topographic input to the program. I restricted the use of the high density 30 meter 7.5 minute elevation data to areas that contained my

gravity data out to 5 Km. One hundred meter DEMs supplied terrain data for the remaining area out to 28 Km. I obtained the DEMs from the Montana Department of Natural Resources (<http://www.ngs.usgs.mt.gov>). These DEMs need to be converted to ASCII xyz files and re-projected in State Plane coordinates for use in modeling. I converted the DEMs to xyz format using Golden Software's Surfer program. I gridded the topography at 30m spacing out to 5 km from the center of the study area, 100m spacing from 5 to 10 km and 250 meter spacing from 10 to 28 km out. Figure 5 displays the terrain correction zones in relation to topography of the area. Terrain corrections need to be calculated out to sufficient distance such that at any further distance the corrections uniformly affect the observations in the study area. A plot of the difference in terrain correction data for three gravity locations spread across the valley (Figure 6) shows that at distances greater than 10km changes in terrain correction values with respect to the entire field area become increasingly uniform. At 28km out terrain corrections behave uniformly over the entire field area. This indicates that terrain correction values calculated out to 28km may be applied to the gravity data with confidence; any additional distance would not significantly improve the modeling process. The Complete Bouguer Anomaly contains information directly related to density variations in the crust and upper mantle. Figure 7 compares local topography and the associated terrain corrections in the study area to demonstrate their correlation and appropriateness. The terrain corrections ranged from 3.5 mGal near the center of the widest part of the valley to almost 9 mGal at the westernmost edge where 600-meter bedrock peaks flank the narrow valley. The

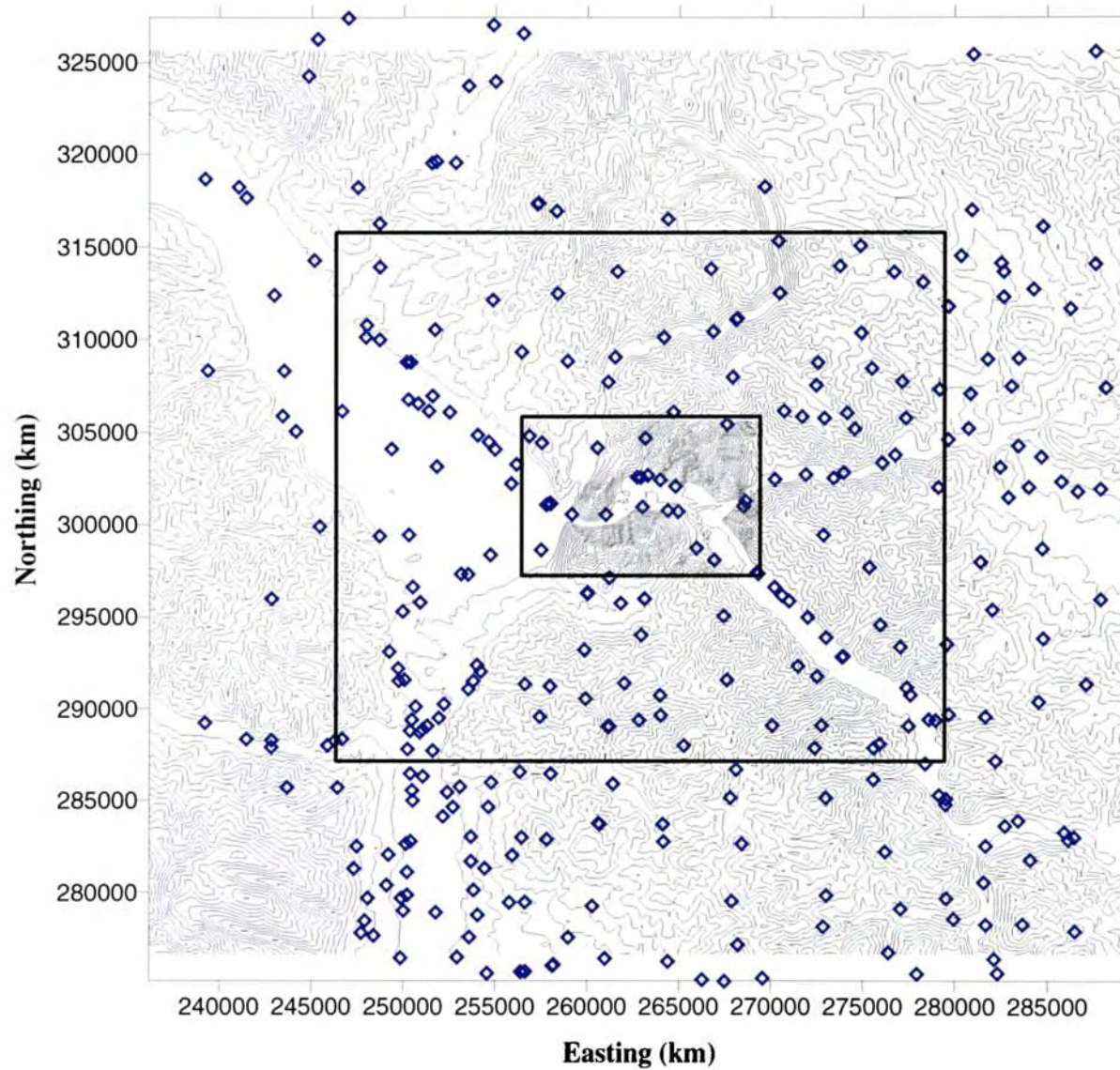


Figure 5. Terrain Correction Zones: 30, 100 and 250 meter spacing with NGS and DMA regional data shown in blue diamonds.

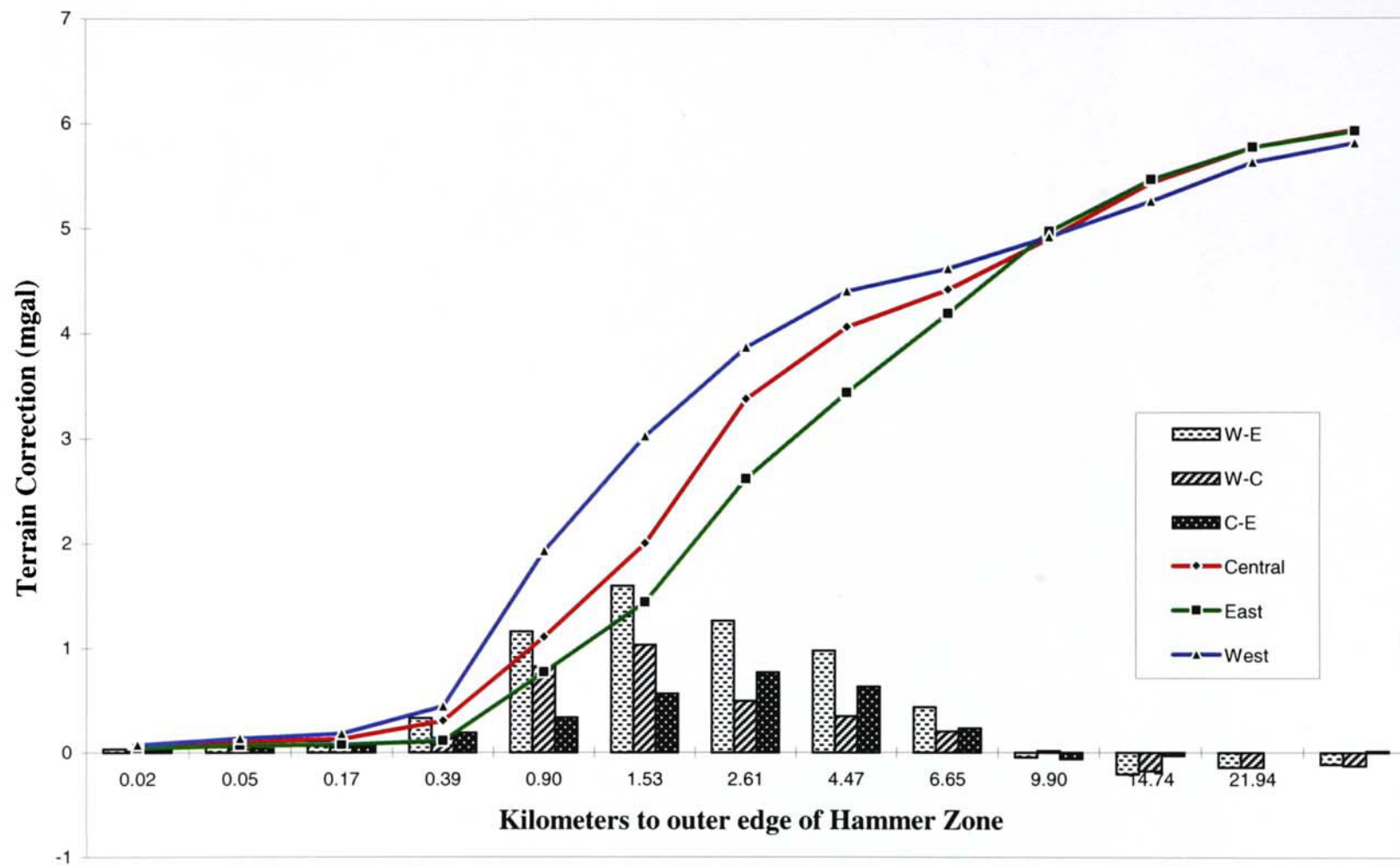


Figure 6. Terrain corrections for the three points become increasingly similar with distance.

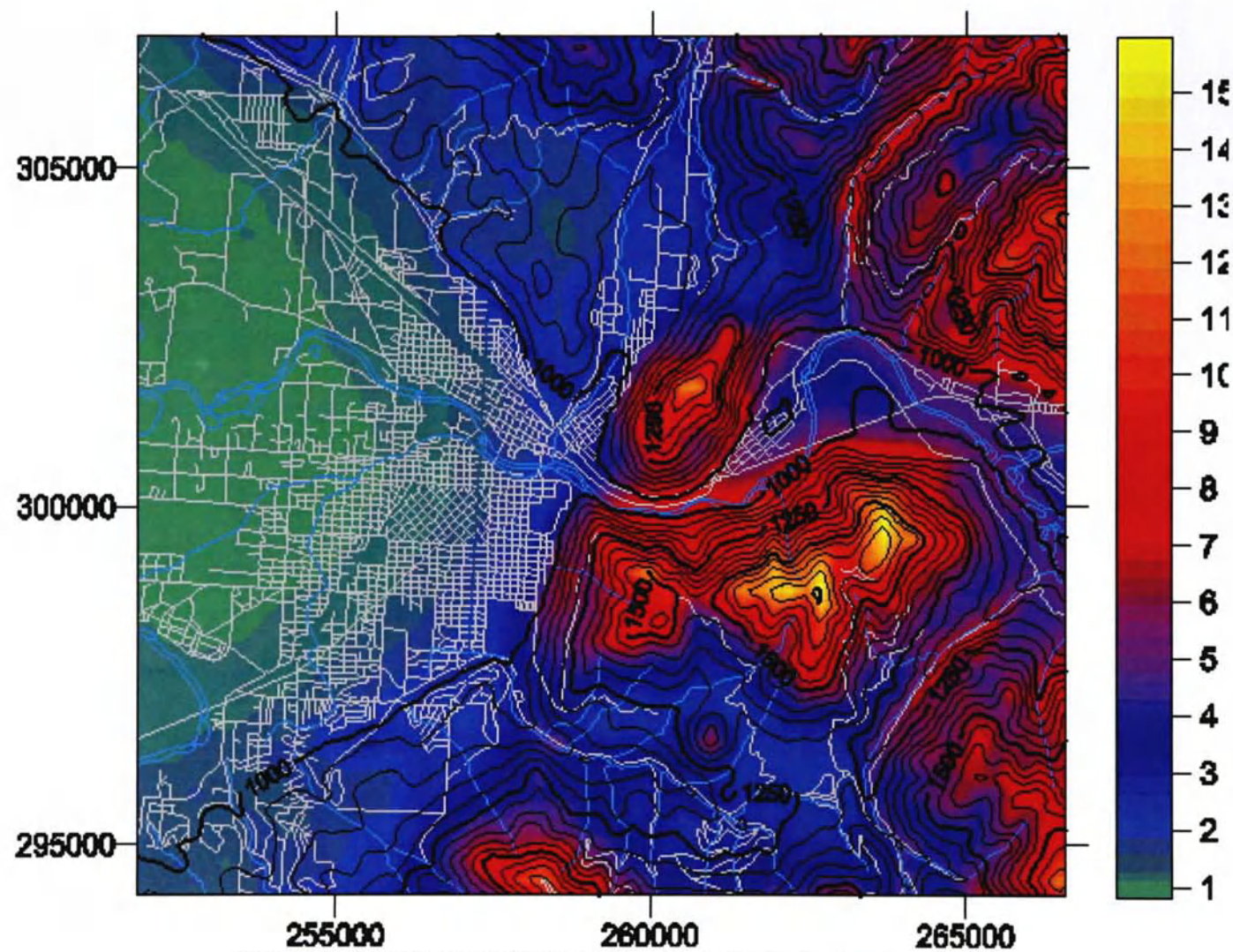


Figure 7. Terrain corrections and topography (color bar in mGals).

gradient of the terrain correction from the center of the widest part of the valley to the flanks is about 2.5 mGal/km.

My gravity data were collected at irregularly spaced intervals. Contouring and modeling requires that those irregularly spaced data be interpolated onto a regular grid. One concern in this operation is to choose the proper spacing between grid nodes. The optimal grid node spacing should closely approximate the actual spatial distribution of points. I used Crimestat (Levine, 1998) to calculate a mean nearest neighbor distance between my gravity stations of about 64m with a standard deviation of about 55m. I gridded all of my Bouguer anomaly data on 50 meter grid centers using the minimum curvature algorithm (Golden Software, 1995). To control trends outside the basin area I added data from the NGS/DMA data set. The NGS/DMA data were collected on bedrock in the surrounding mountains. These data were needed to help constrain the regional gravity signature over a wide area since regional gravity trends cannot be determined with only localized gravity data. I contoured the gridded data at 0.5 mGal to show the total Bouguer anomaly (Figure 8) on a regional scale.

Figure 8 presents the total Bouguer anomaly using my data and those collected by the NGS and DMA. The cumulative error introduced from inaccurate elevation determinations, instrument drift, base station inaccuracies and density variations is less than ± 0.2 mGal. Error from GPS elevation determinations is ± 0.31 meters. A ± 0.31 elevation error amounts to 0.12 mGal of error in the modeled depth to bedrock (Appendix C). Error from base station inaccuracies was determined by calculating a mean error from

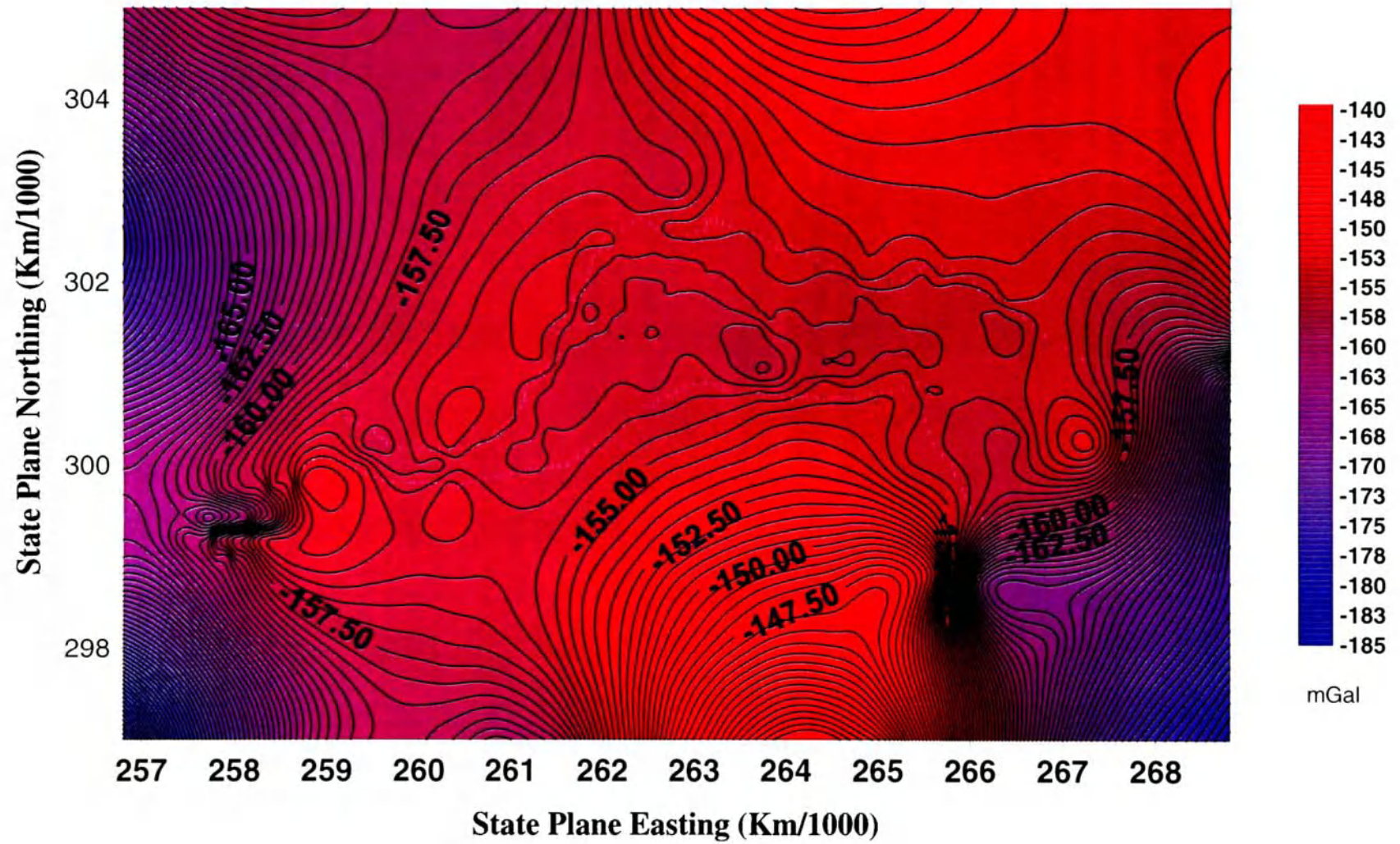


Figure 8. Complete Bouguer anomaly with basin boundary in white crosses and local bedrock gravity points in green.

repeat gravity measurements at a base station. The mean base station error for my survey was 0.03 mGal. Error from instrument drift was assumed to be less than 0.01 mGal due to the linear drift correction. Density was also assumed to be constant over the study area. Total error, calculated by summing the errors introduced from each of the above sources, amounts to 0.15 mGal, which translates to an uncertainty of ± 5 meters in the modeled depth to bedrock.

DATA INTERPRETATION

Development of the Regional Gravity Field

Accurate determination of the regional gravity signature over the basin is of critical importance. Given the total Bouguer anomaly field (Figure 8), the goal becomes isolation of the gravity signal caused by the density contrast between the alluvium/colluvium and Precambrian bedrock in the Hellgate Canyon and Bandmann Flats area. The total Bouguer anomaly of the basin contains long wavelength components from deep regional-scale sources in the crust and upper mantle. The long wavelength components must be subtracted from the total Bouguer anomaly to isolate the shorter wavelength components from the shallow sedimentary fill of the valley. The regional gravity field is subtracted from the total field to yield the residual Bouguer gravity field. The residual field can then be modeled.

I established 357 new gravity stations in the valley and 40 stations on bedrock in the surrounding area. In addition to my own gravity data I used 339 stations compiled by the DMA. I gridded all of my gravity locations collected on bedrock in addition to selected NGS/DMA data at a spacing of one kilometer to determine the regional Bouguer gravity (Figure 9). This spacing provided a broad wavelength yet preserved the asymmetrical shape of the basin. The best defined regional gravity signature over a basin includes gravity stations collected near the basin edge as well as those distal stations which help to constrain overall trends. Gravity stations near the basin edge are useful

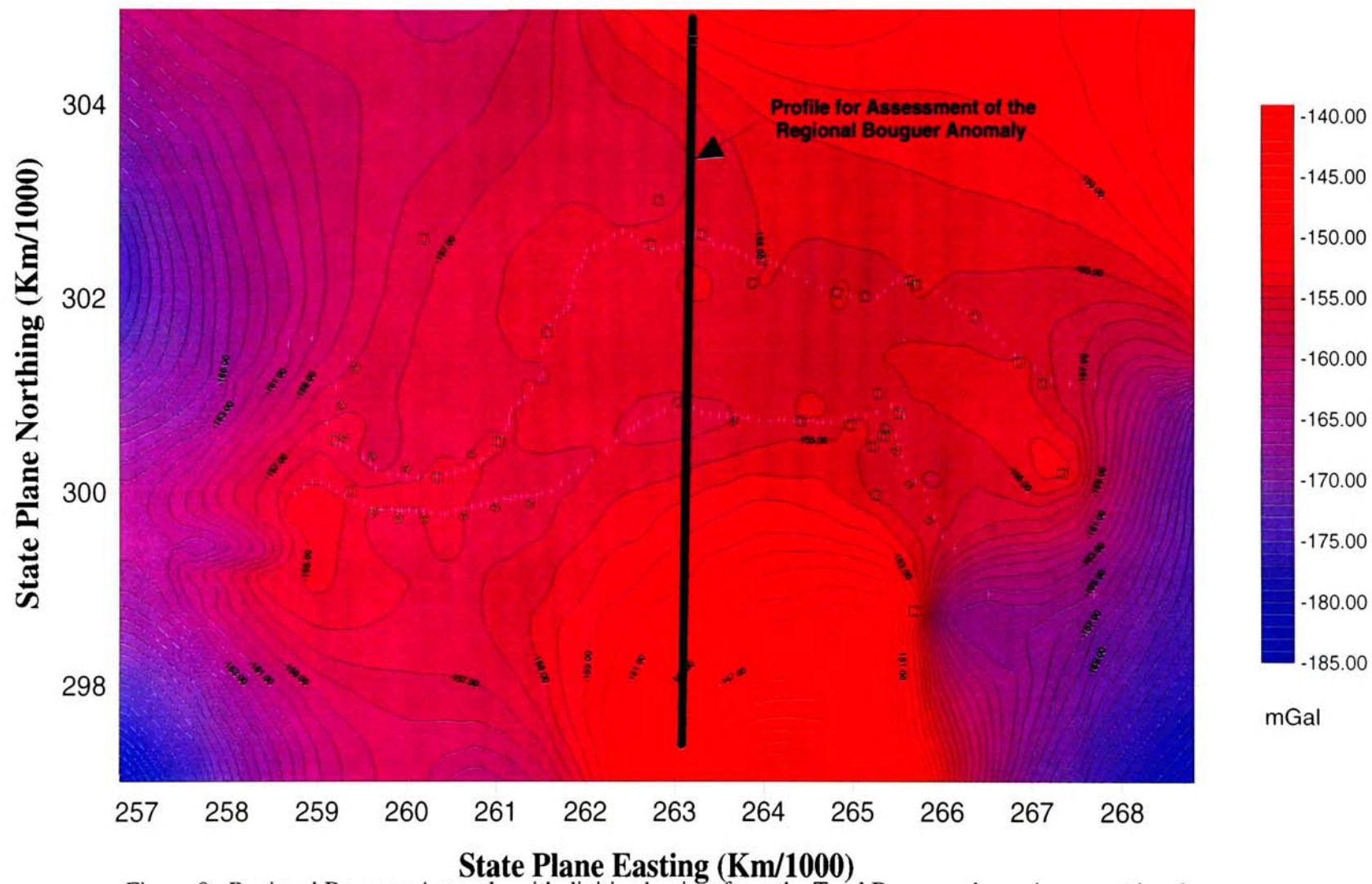


Figure 9. Regional Bouguer Anomaly with digitized points from the Total Bouguer shown in green triangles and regional gravity stations taken on bedrock in green squares.

because we know the residual gravity of the basin fill must approach zero at the basin's edge. My gravity observations do not include complete coverage around the edges of the basin. As a result some portions of the regional signature were not as well constrained as others. Where regional control was poor (Figure 9) I supplemented the regional data with data taken from the total Bouguer anomaly (Figure 8). Thus, when the regional is subtracted from the total the anomaly at the edge goes to zero. To do this I digitized the locations of the areas where regional control was poor and then added the value of the total Bouguer anomaly at that location to the regional data set. I then re-gridded the regional data set to produce the regional gravity map.

A profile across the regional Bouguer anomaly (Figure 10) shows a high over the center of the basin. In contrast, the total field anomaly dips toward a low in the center of the basin due to the effect of the valley sediments. From the profiles over the total and regional gravity it is apparent that the regional field is well approximated by all of the gravity data collected on bedrock as well as the NGS/DMA data. Data that were digitized from the total to supplement the regional helped control the regional near the basin edges where observations were lacking. I subtracted the regional from the total grid to produce the residual Bouguer Anomaly (Figure 11).

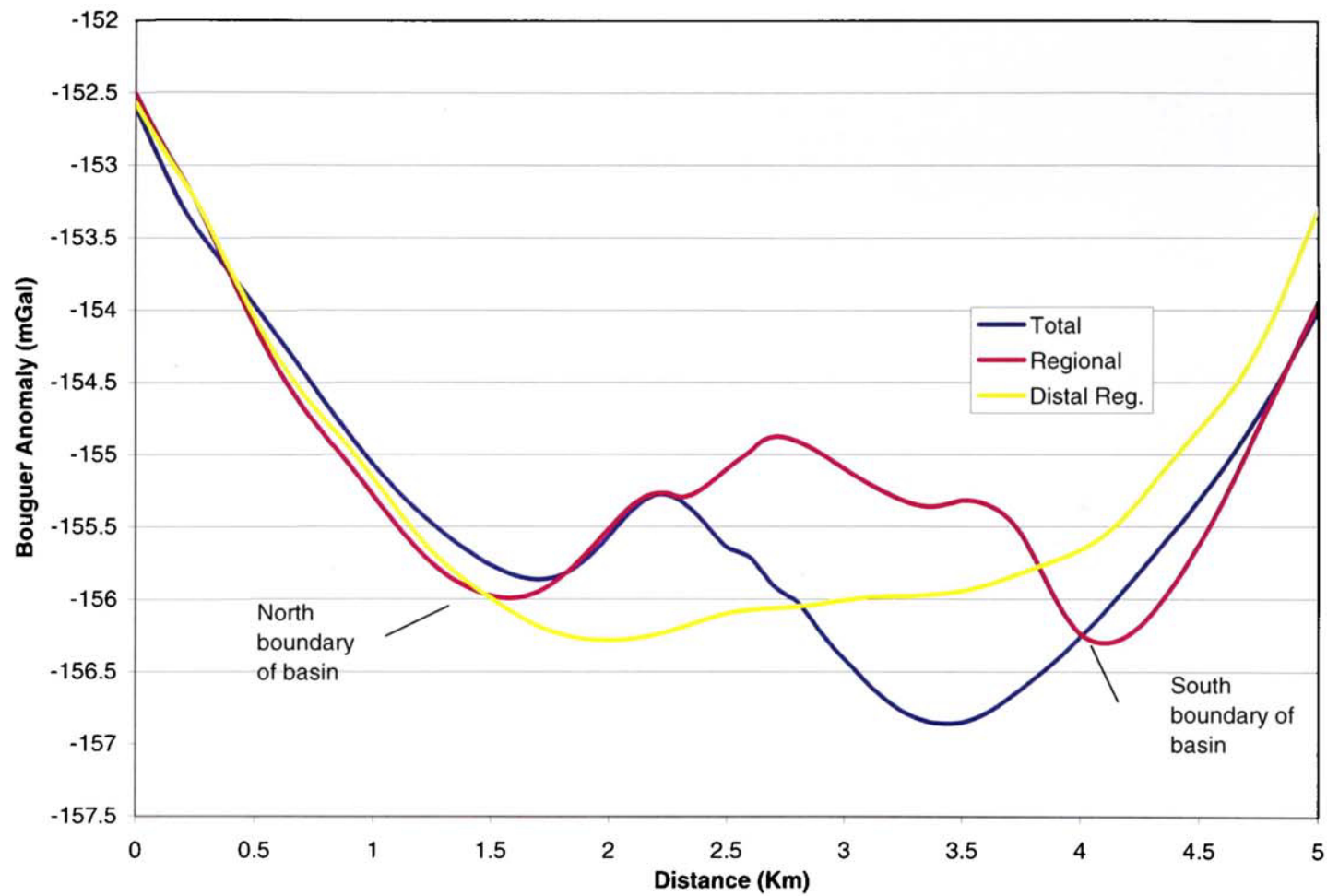


Figure 10. Assessment of the Regional Bouguer Anomaly

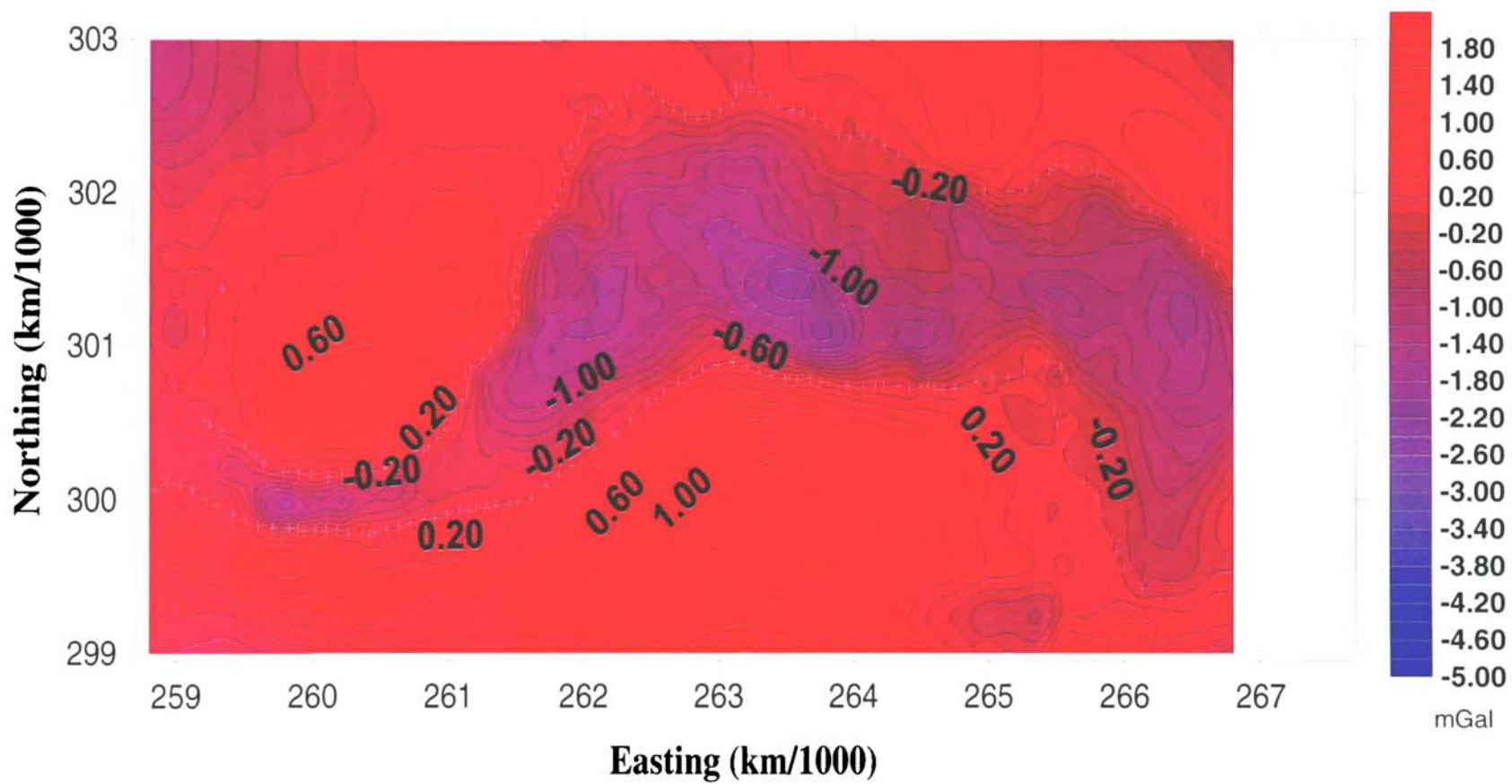


Figure 11. Residual Bouguer Anomaly. White crosses represent basin boundary.

Density Determination

Estimating depth to bedrock using residual gravity requires knowledge of the density contrast between bedrock and valley fill. Accurate knowledge of density contrast dramatically increases the reliability of the model being constructed. Evans (1997) compiled density information on Precambrian bedrock and Tertiary valley fill in the eastern portion of the Missoula valley (Biehler, and Bonini, 1983, Constenius, 1988, Crosby, 1984, Fountain and McDonough, 1984, Hall, 1969, Harris, 1997, Kulik, 1982, McMurtrey, Donezeski and Brietgrietz 1965, Ruppel 1991, Smith, 1992, and Webring, 1991). To verify the compiled density values, Evans calculated the Bouguer density value that minimizes the correlation between the gravity anomaly and topography in the local area (Nettleton 1939, Seigert 1942, Legge 1944, Parasnis 1973, Seguin and Frydecki 1984). This method involves plotting profiles of the elevations and of the Bouguer anomaly curves along the profile made with different densities in order to find the density value for the curve that has the minimum correlation with topography. Evans' density contrasts between valley fill (Quaternary alluvium) and bedrock ranged from -240 kg/m^3 to -740 kg/m^3 .

To assess the density values adopted from Evans' study I ran the inverse model using a range of density values and selected the density which produced the greatest positive correlation between known depths to bedrock and modeled depths to bedrock. As the density contrast becomes too small (Figure 12) the model produces results too

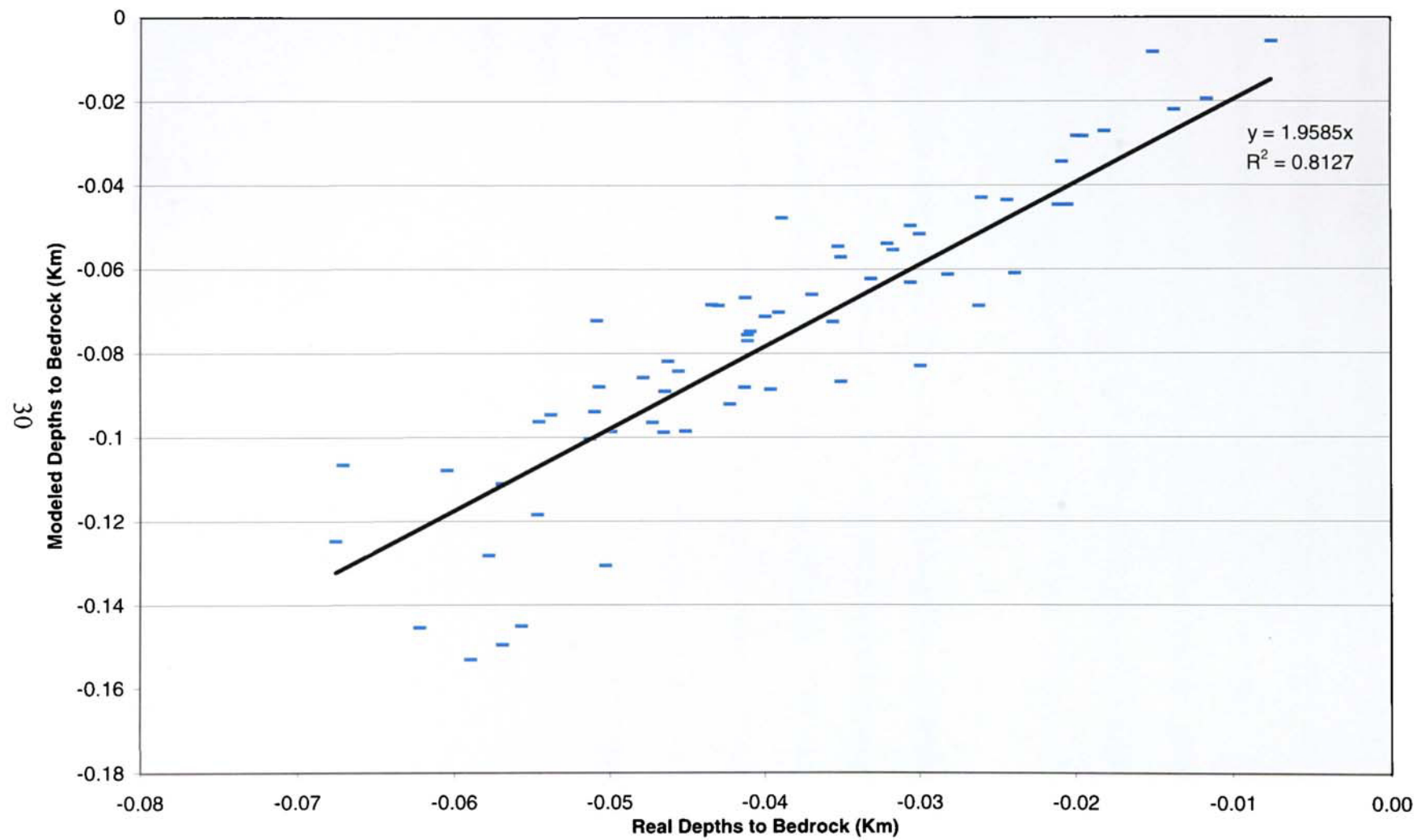


Figure 12. High Density Contrast (-0.40 g/cm³) Plot of Real Depths vs Model Depths

deep (steep gradients fit poorly) and the slope of the regression line is greater than one. Using an overly large density contrast (Figure 13) reduces the depth to bedrock. Combining the figures (Figure 14a,b) and locating the tangent line whose slope is zero shows that the optimal density contrast is -725 kg/m^3 , well within the range of possible density contrasts between Precambrian bedrock and valley fill in the Missoula area (Evans, 1997). The standard error of the depth estimate using a density contrast of -725 kg/m^3 is 0.0053 km or approximately ± 5 meters. Thus I used -725 kg/m^3 in my gravity modeling.

Density of the valley fill may vary with depth. Nevertheless, I chose to assume a uniform density contrast for the study area. This is most likely reasonable because density variations owing to sediment compaction in a shallow basin (<100 meters) are probably negligible (Blakely, 1992). The 2-D forward models and the 3-D inverse models support this expectation by matching the calculated Bouguer amplitude with that of the observed and by correctly matching known depths to bedrock. If the density contrast varied over the field area then the error in the model predicted depths to bedrock would also vary.

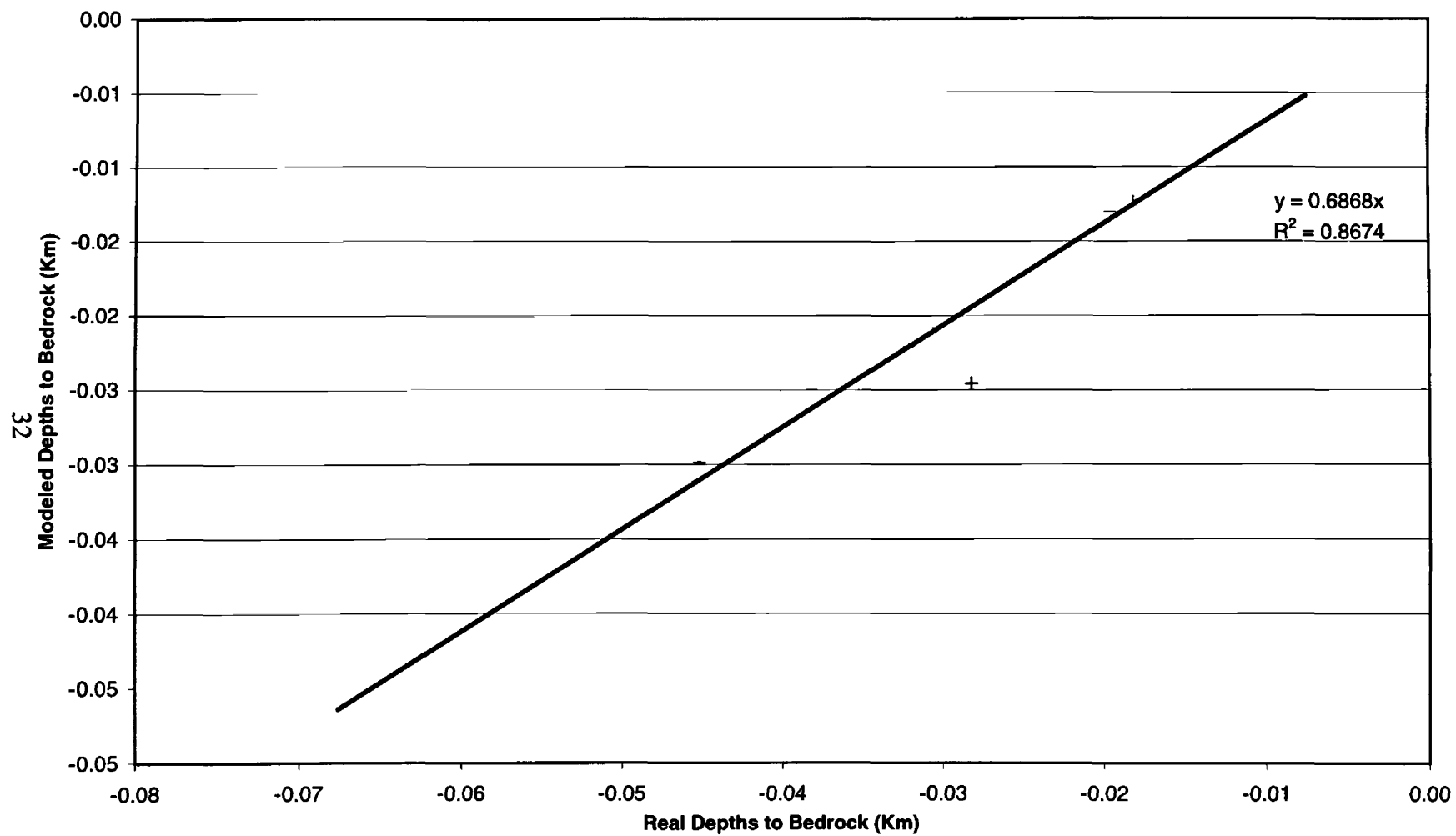


Figure 13. High Density Contrast (-1.00 g/cm³) Plot of Real Depth vs Modeled Depths

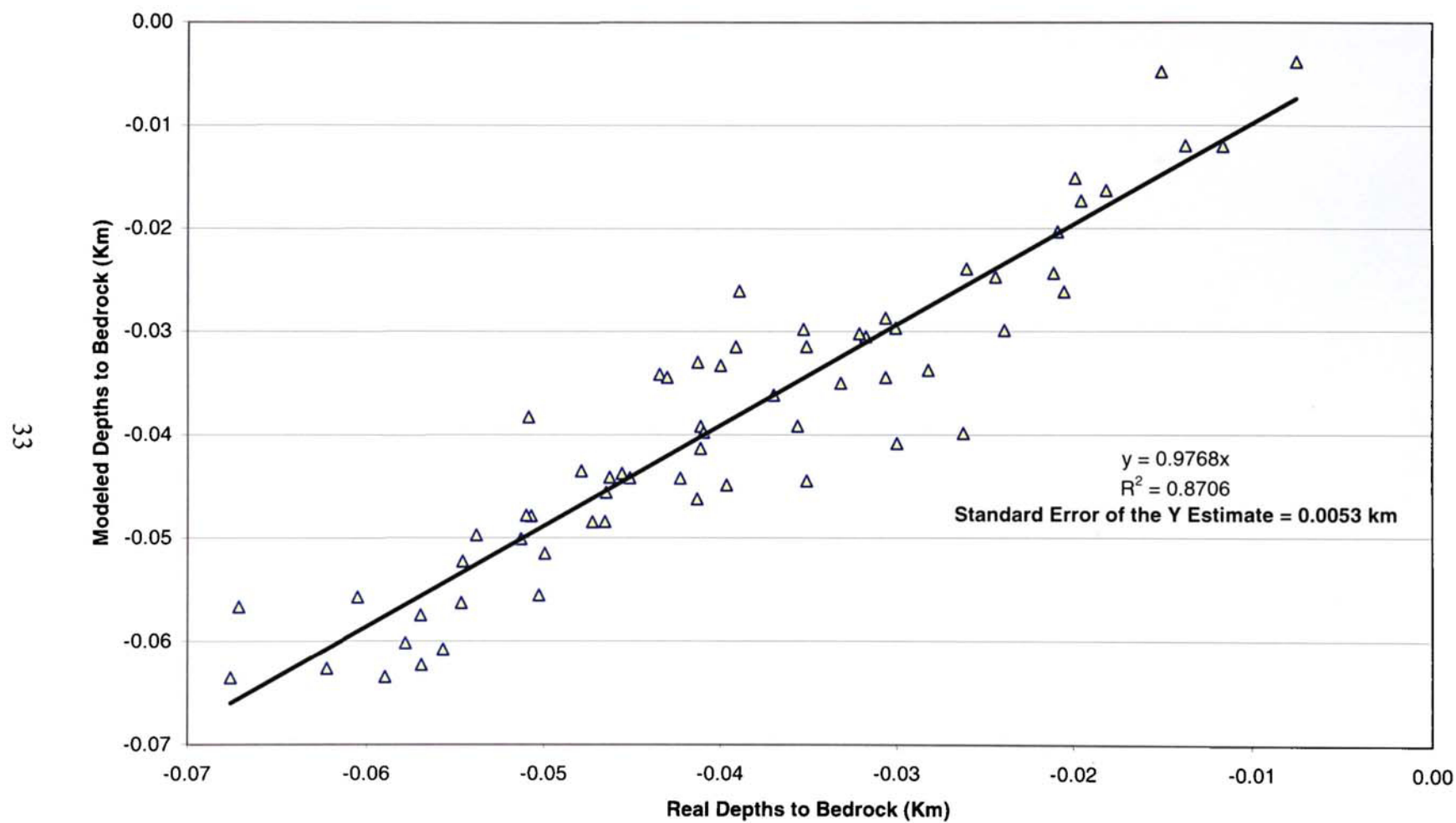


Figure 14a. Real depths to bedrock vs. modeled depths. Density contrast -725 kg/m³.

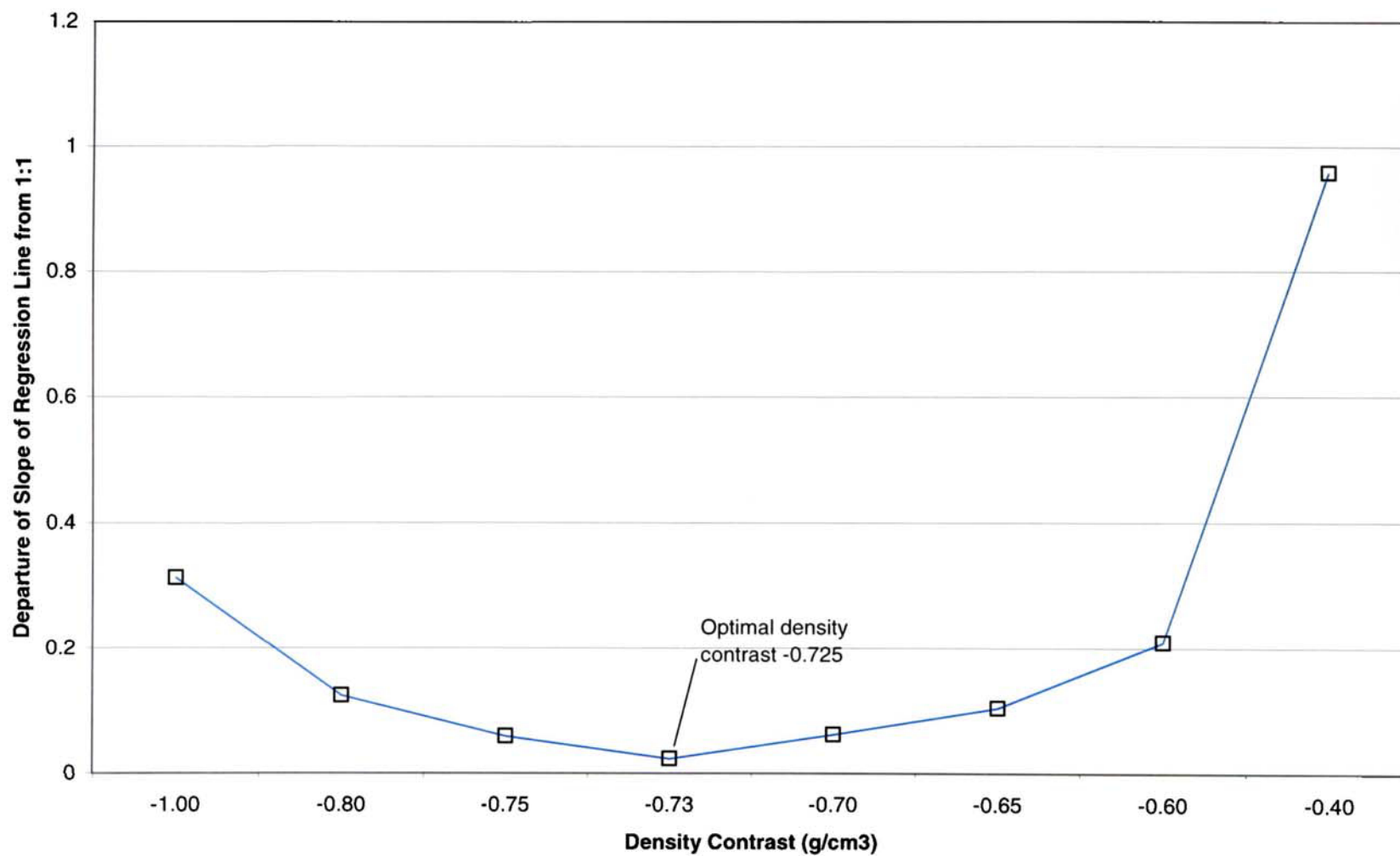


Figure 14b. Density Contrast vs Departure of Slope of Regression Line from 1:1

INTERPRETATION OF THE RESIDUAL ANOMALY

The residual Bouguer anomaly (Figure 11) shows that the basin structure is complex with troughs and closed highs and lows. The largest anomalies are located over the Bandmann Flats area. Thus the residual anomaly indicates that the deepest parts of the basin occur in the Bandmann Flats area. However, the steepest gradients are located in the Hellgate Canyon where high bedrock peaks flank the narrow valley. In general, steeper gradients exist at the valley edges where the terrain corrections are highest. This suggests that bedrock dips steeply along the valley flanks toward the center of the valley. Gentle sloping gradients occur in the northwest and southwest portions of the basin. A positive correlation exists between the gradient of the terrain corrections and the gradient of the basin residual along the northwest edge of the basin. The correlation in this area is supported by numerous gravity observations. The gentle gradient suggests that bedrock in this area is shallow and dips gently toward the center of the basin. Surface topography in this area also dips gently suggesting a continuation beneath the surface. Alternatively, the correlation is poorest where no gravity observations exist such as along the edges of the Hellgate canyon.

A general geologic map of the valley (Figure 3) shows the presumed surface trace of the Clark Fork fault trending southeast to northwest across the basin. To show the relationship of gravity gradients and geologic structure I overlaid a map of geologic structures onto the residual map (Figure 15). A low trough in the residual anomaly exists

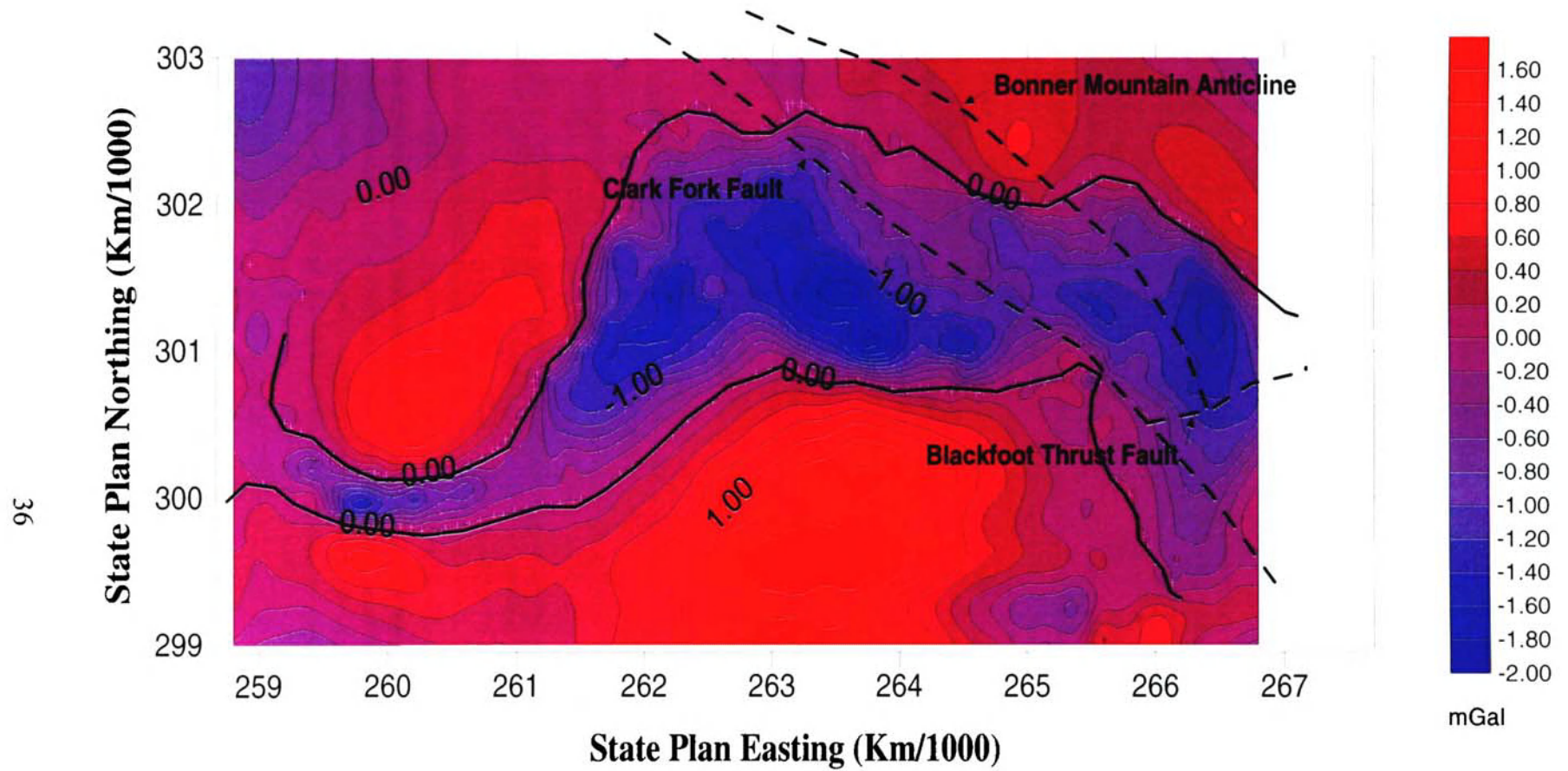


Figure 15. Residual gravity and geology.

just to the south of the presumed surface trace of the Clark Fork fault. The trough is roughly parallel to the trace but is offset to the south by approximately one kilometer. The relatively high concentration of gravity data in this area provides excellent definition of the feature which is also well constrained by seismic data.

Gestring (1994) produced a bedrock map (Figure 2) in order to aid in the development of a ground water flow model. His map is based only on wells drilled to bedrock and seismic data. Thus the resulting map (Gestring, 1994) is very interpretive and subject to large uncertainties. For example, little data control west of the Milltown dam (Figure 2) in Gestring's (1994) bedrock contouring resulted in a west plunging low that turns into an east plunging high surrounded by a low (Schombel, pers. comm. 2001). Unfortunately, outcrops near the dam were not used to help guide the contouring. Schombel also points out a narrow, low trough in the northeast portion of the basin (Figure 2) that seems geologically unrealistic and could be a result of over simplification of the bedrock structure.

The over-generalizations in the bedrock model caused by incomplete depth to bedrock coverage may have caused some problems in Gestring's (1994) ground water model. According to Gestring, (pers. comm. 2001) the ground water model did not calibrate well in areas that were lacking depth to bedrock control. One endeavor in ground water modeling is to "calibrate" one's model. A calibration involves changing model input parameters until the modeled water level elevations match measured elevations. Areas that did not calibrate well included the northeast portion of East

Missoula at Brickyard Hill and in the community of West Riverside; two areas that did not have adequate depth to bedrock data (Gestring, pers. comm. 2001).

The complexity of the residual anomaly (Figure 16) indicates that 3-D modeling is required to accurately characterize the entire basin. As a first step toward a 3-D model I constructed some preliminary 2-D models of the residual Bouguer anomaly. Two-dimensional models characterize the gross basin structure and lead to a better understanding of structural relationships. They also confirmed that, given the known depths of the wells, the residual anomaly must be close to zero at the basin's edge. The 2-D profiles also allow the modeler to rapidly check the general relationships between parameters of the 3-D model, such as density contrast, and known depths to bedrock. I extracted three 2-D profiles of the residual anomaly (Figure 16) and used them to model the depth to bedrock with GravcadW (Sheriff, 1997). GravcadW's inverse and forward modeling options are based on the Talwani (1959) method of gravity modeling utilizing the line integral technique established by Hubbert (1948). GravcadW represents a 2-D cross-section with an n-sided polygon. GravcadW includes an optimization feature, which uses a Levenburg-Marquadt nonlinear least-squares algorithm to fine-tune the fit by adjusting selected parameters. I used the results from the 2-D models to verify gradients and density contrasts. The 2-D models also helped to constrain the regional/residual separation by locating the edges of the residual anomaly.

The three depth-to-bedrock profiles (Figures 17, 18 and 19) using GravcadW's basin inversion option aided in examining cross-sectional structures, testing depth-to-

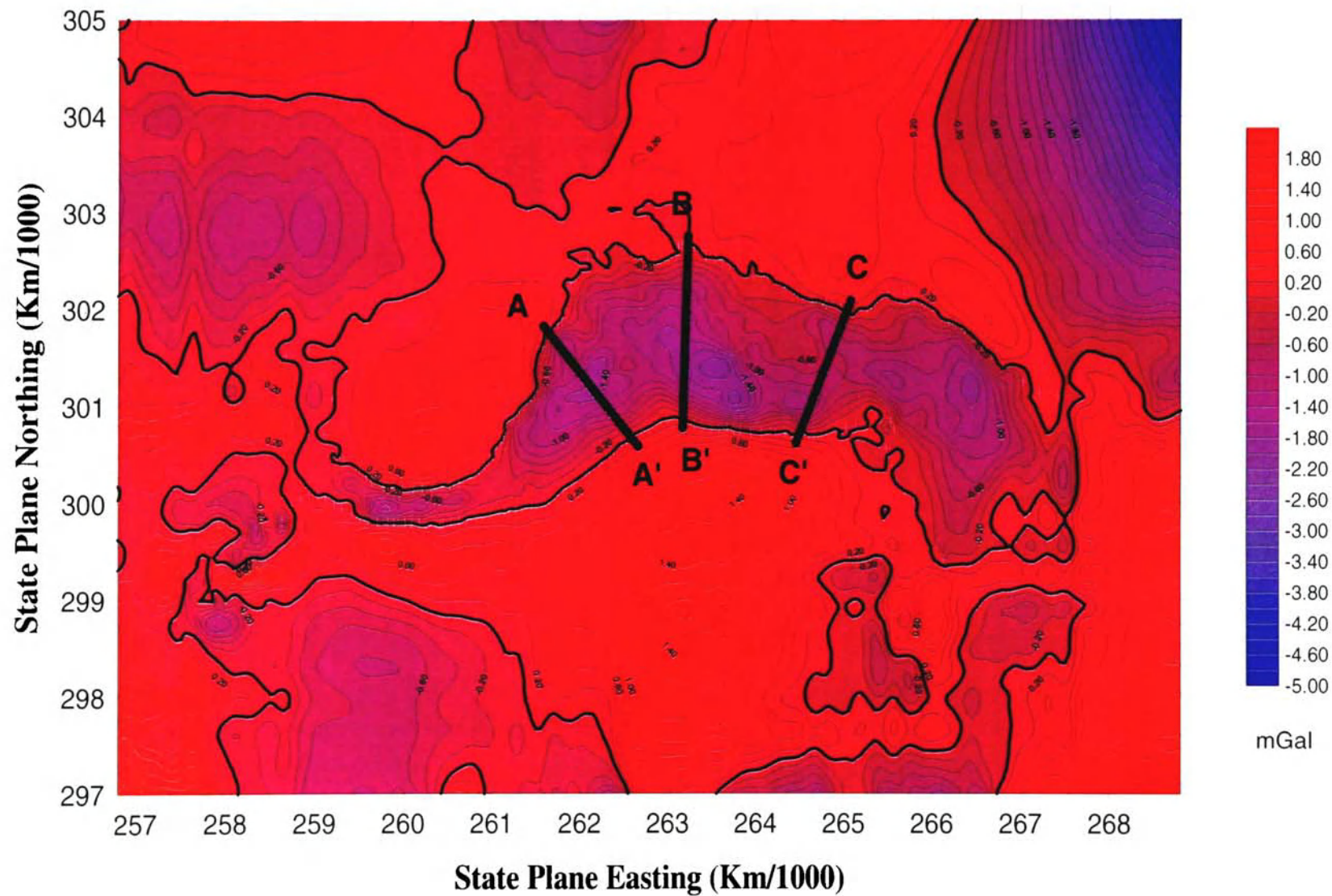


Figure 16. Residual Bouguer anomaly with locations of cross sections and outline of valley (white crosses).

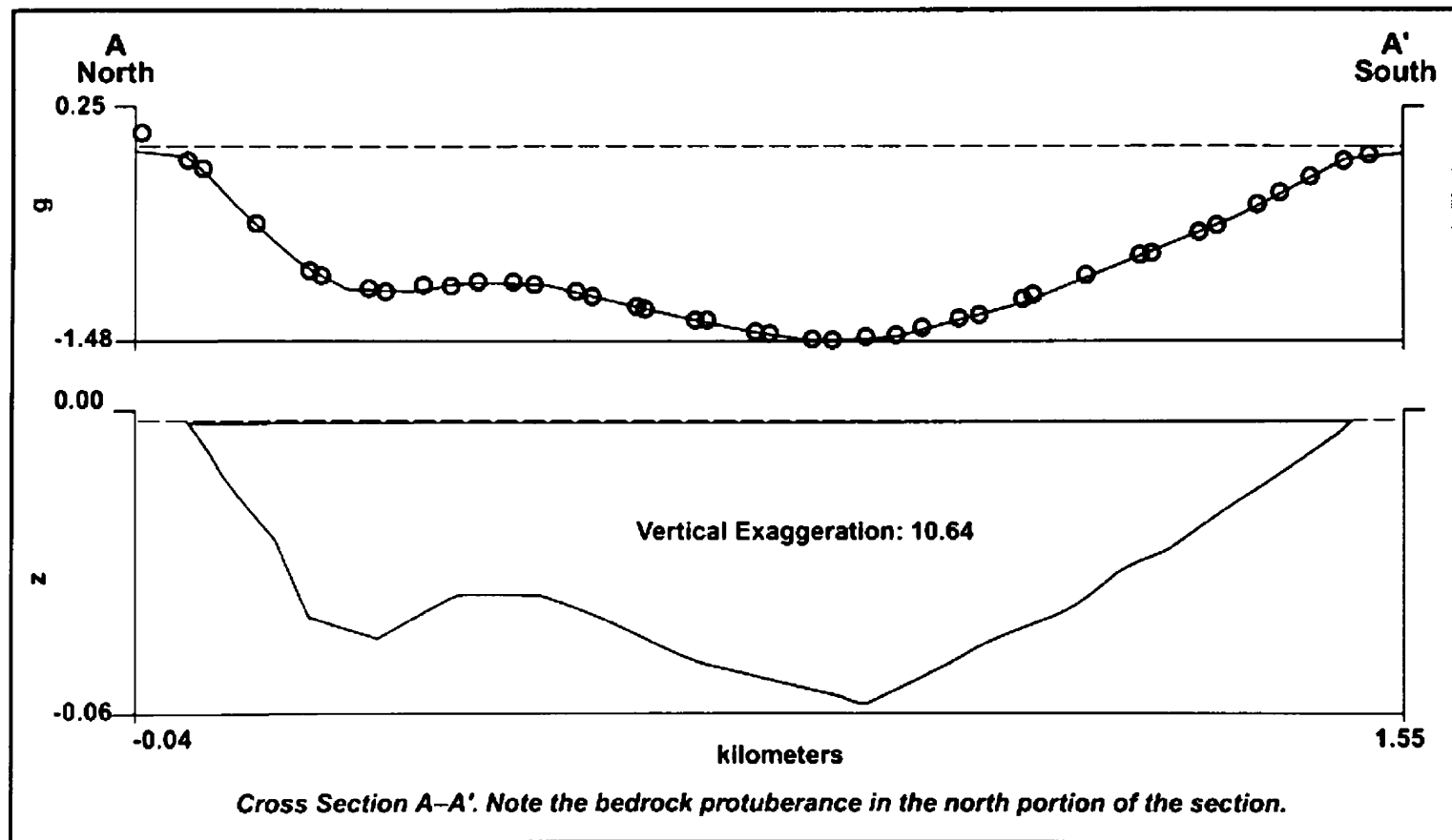


Figure 17. Note the bedrock high in the north portion of the section.

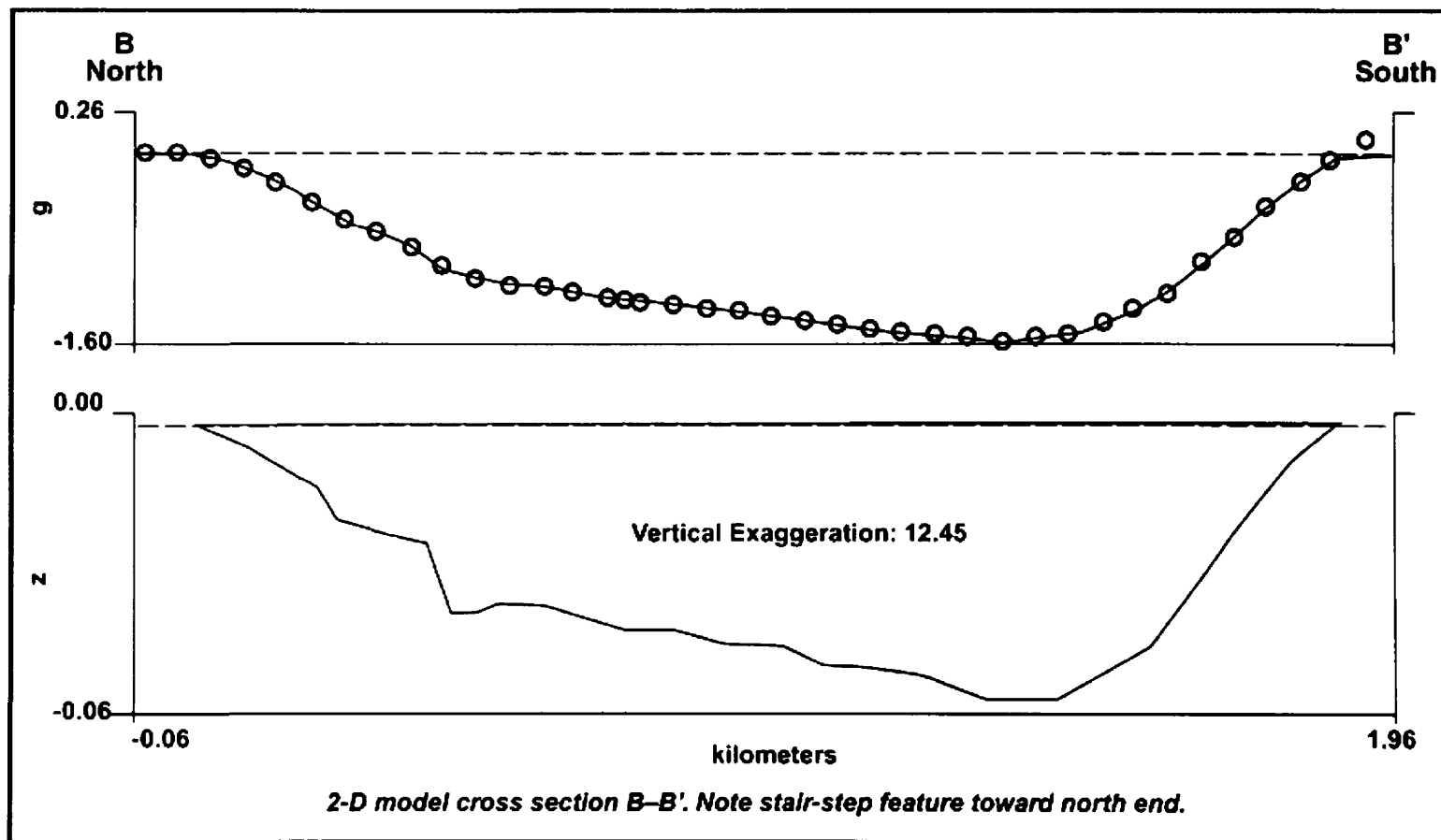


Figure 18. Note stair step feature is approximately 10 meters high.

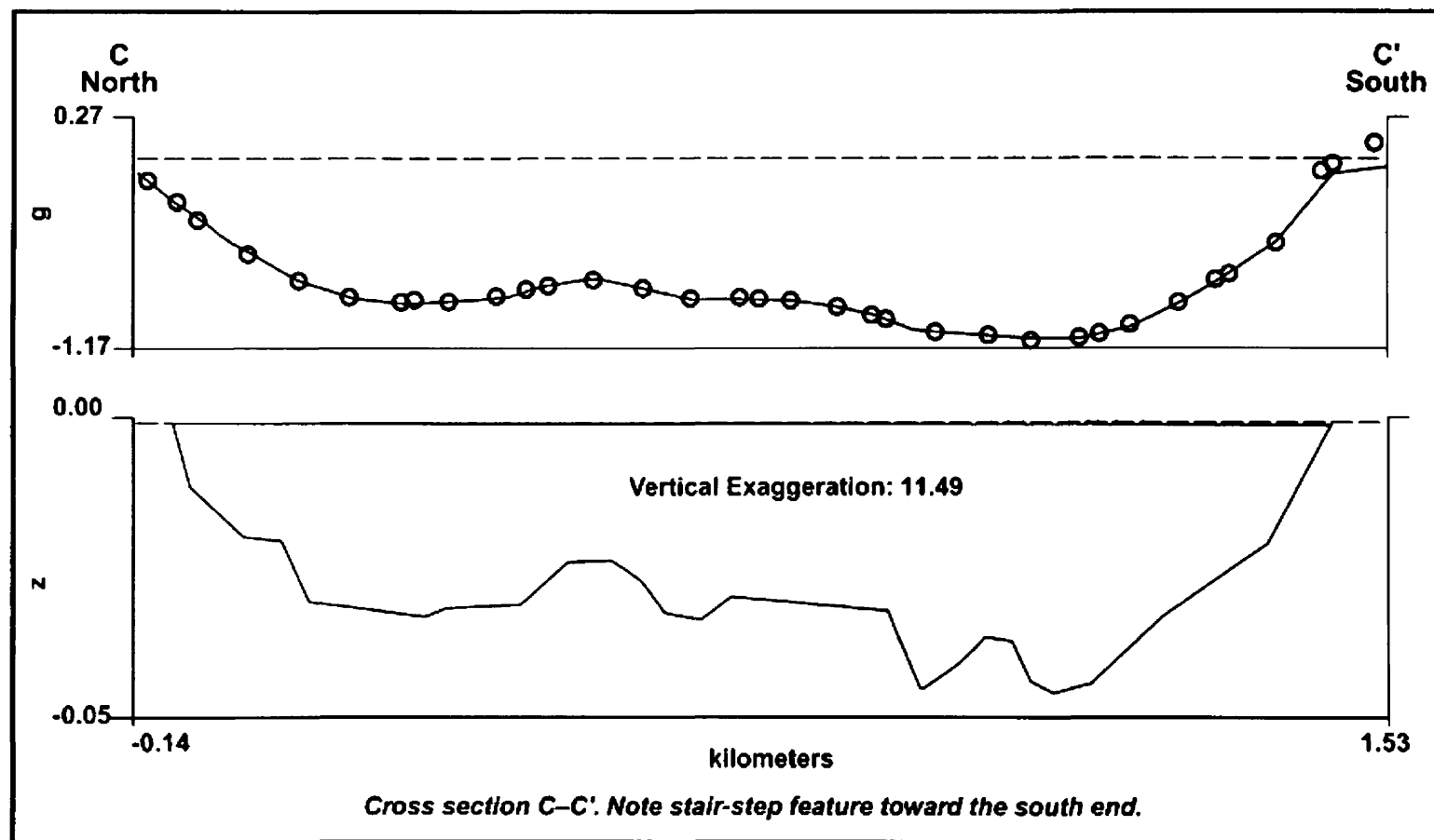


Figure 19. Amplitude in bedrock is approximately ± 5 meters.

bedrock control and helped in the development of the residual Bouguer anomaly. Each polygon was assigned a density contrast of -725 kg/m^3 . All profiles cross the valley roughly north to south and are perpendicular to the strike of the basin. The locations of the profiles are shown on Figure 16. The model profiles confirm the complexity of the basin. Significant variation in the profiles shows that the models do not meet the 2-D modeling requirement that the source body be infinite along strike (e.g., West, 1965). Thus, although accurate depth to bedrock determinations cannot be determined from the 2-D models, they do characterize the general shape of the subsurface contact. The 2-D models also confirm that reproducible changes in the gradient of gravity require significant changes in basin shape.

Profile A – A' (Figure 17) shows that bedrock dips steeply from both edges toward a low trough on each end with a maximum depth of 48.8 meters (160 feet) below ground surface and then approaches a high near the center of the basin. Profiles B through C (Figures 18 and 19) clearly show what appears to be the same low trough. Interestingly, the trough lies to the south and is roughly parallel to the inferred surface trace of the Clark Fork fault. Profile C shows that bedrock dips steeply at the southern edge and then slopes gently until dipping steeply again at the north edge. The 2-D models verified the validity of the input density contrast for the 3-D models and their complexity indicates that further refinement of the depth to bedrock was needed. To accomplish this and to examine the 3-D structure of the Hellgate valley, I used the USGS program G13. G13 is a 3-D gravity inversion program that uses an iterative technique developed by

Cordell and Henderson (1968). GI3 initiates the inversion process by using the infinite slab formula to calculate the thickness of a rectangular prism over a discrete grid cell. Input to the initial slab estimate comes from the residual anomaly. Subsequent iterations revise the prism thickness by equating the ratios of new and old thickness values to original and calculated residual anomalies. For my modeling, I defined the upper surface as the actual topography of the basin and set the grid cell dimensions equal to 50 by 50 meters thus approximating the actual data spacing.

The goal of any gravity modeling program is to characterize the spatial distribution of gravity sources. GI3 allows the user to choose between forward and inverse modeling options. The forward modeling option calculates a gravity anomaly based on known geologic data. The forward calculated gravity signature can then be compared with the observed gravity of the basin. Adjustments are made to the initial model and the process continues until a reasonable similarity between the forward calculated gravity and observed gravity is obtained. I used the forward modeling mode in GI3 to produce a first order estimate of what the basin residual should be and to verify trends and magnitudes in the observed residual anomaly.

An initial estimate of basin thickness is required as input to the forward model. I constructed a preliminary basin model (Figure 20) based on existing seismic data, wells drilled to bedrock and mapped bedrock outcrops (Gestring, 1994, Schombel 2001). The initial forward model represents the calculated residual gravity anomaly that would exist from the configuration of the preliminary basin thickness model. The initial 3-D forward

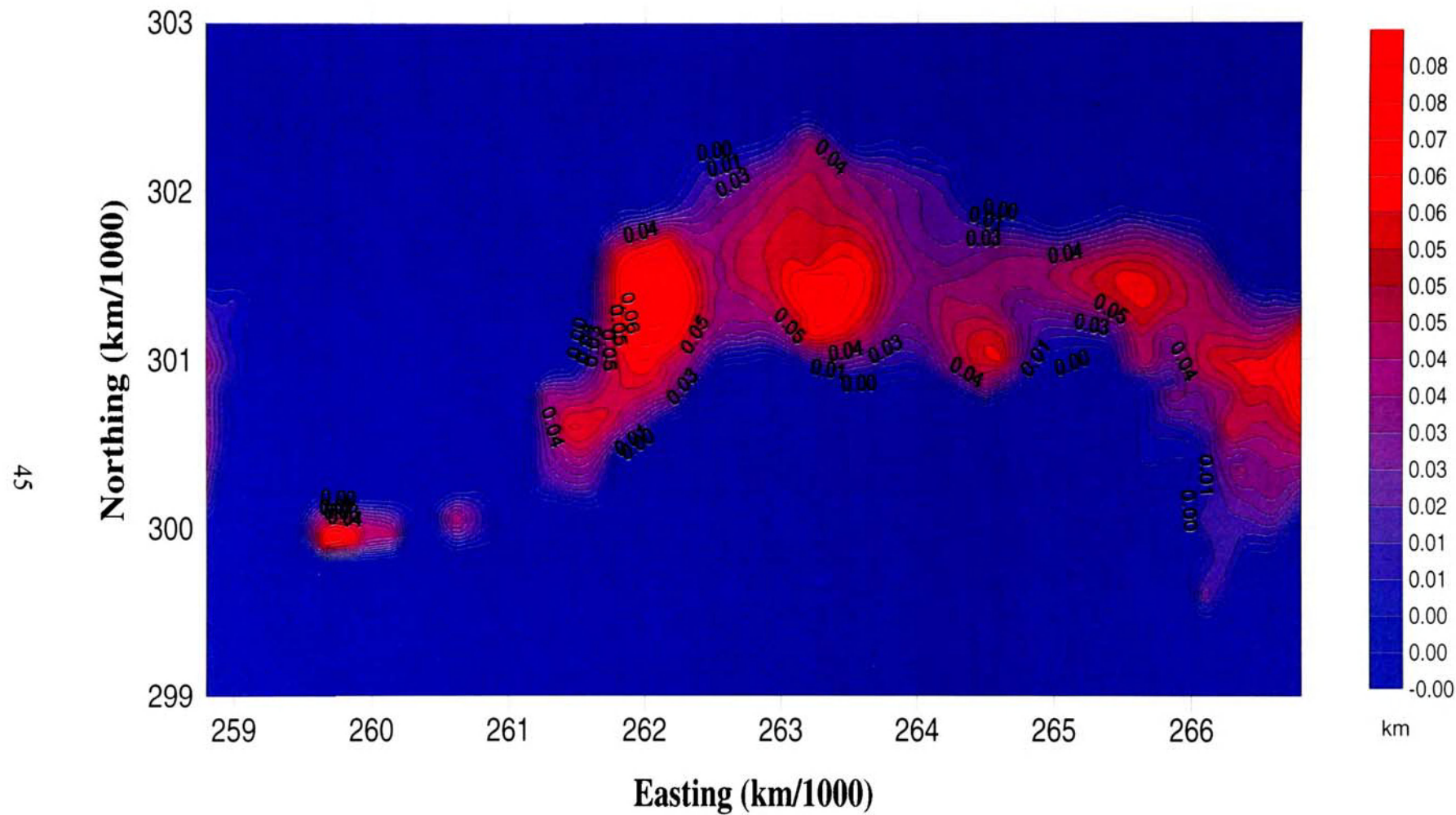
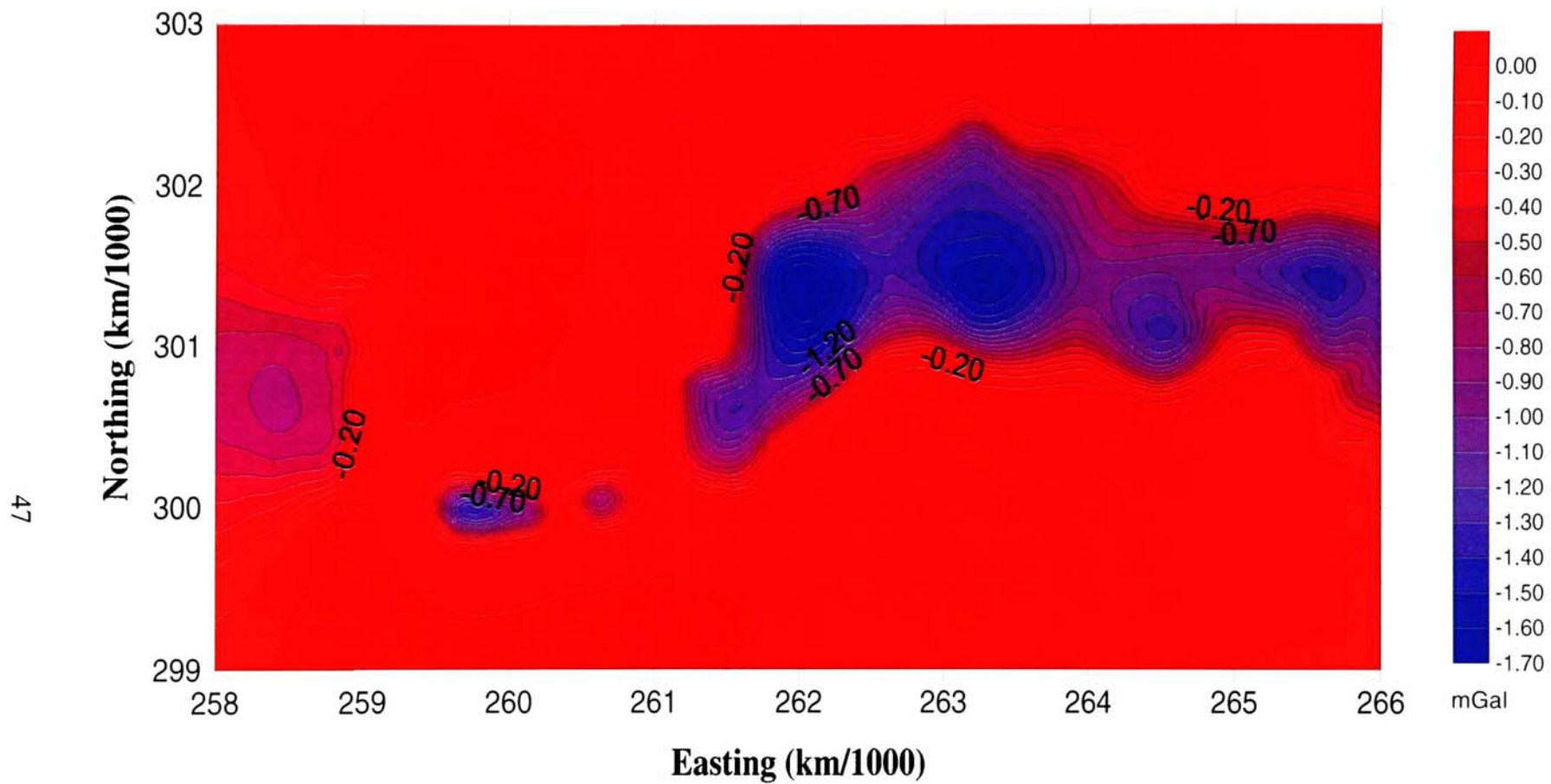


Figure 20. Preliminary basin thickness model (Gestring 1994).

model is limited by spatial clustering of known data and contains significant data gaps over wide areas of the basin.

The forward model (Figure 21) represents the calculated gravity anomaly after five iterations. The residual error (Figure 22) is the difference between the calculated gravity of the forward model and the observed residual anomaly. Over areas of known basin depth the greatest error between the forward calculated anomaly and observed residual anomaly is less than ± 0.1 mGal which would change the final depth to bedrock by approximately ± 5 meters. In areas where no confirmation of bedrock depth exists the difference between the forward calculated gravity and the observed gravity is predictably high. Nevertheless, the similarity between the forward calculated residual and the observed residual is evident in areas where control exists. The forward model gives insight into the 3-D configuration of bedrock in the Hellgate Canyon and Bandmann Flats area. The forward model shows that the general shape of the basin is trough-like with the deepest portions of the basin occurring in the middle at approximately 61 meters deep. The forward model also indicates that the steepest gradients occur near the basin boundaries. The potential exists that a fraction of this gradient results from the terrain corrections.

Following my forward models, I used the inverse modeling capabilities of GI3 to calculate the basin depth directly from the observed anomaly. Applying the inverse modeling method requires making the simplifying assumption that density is constant. This means that the residual anomaly must be due to undulations in the shape and size of



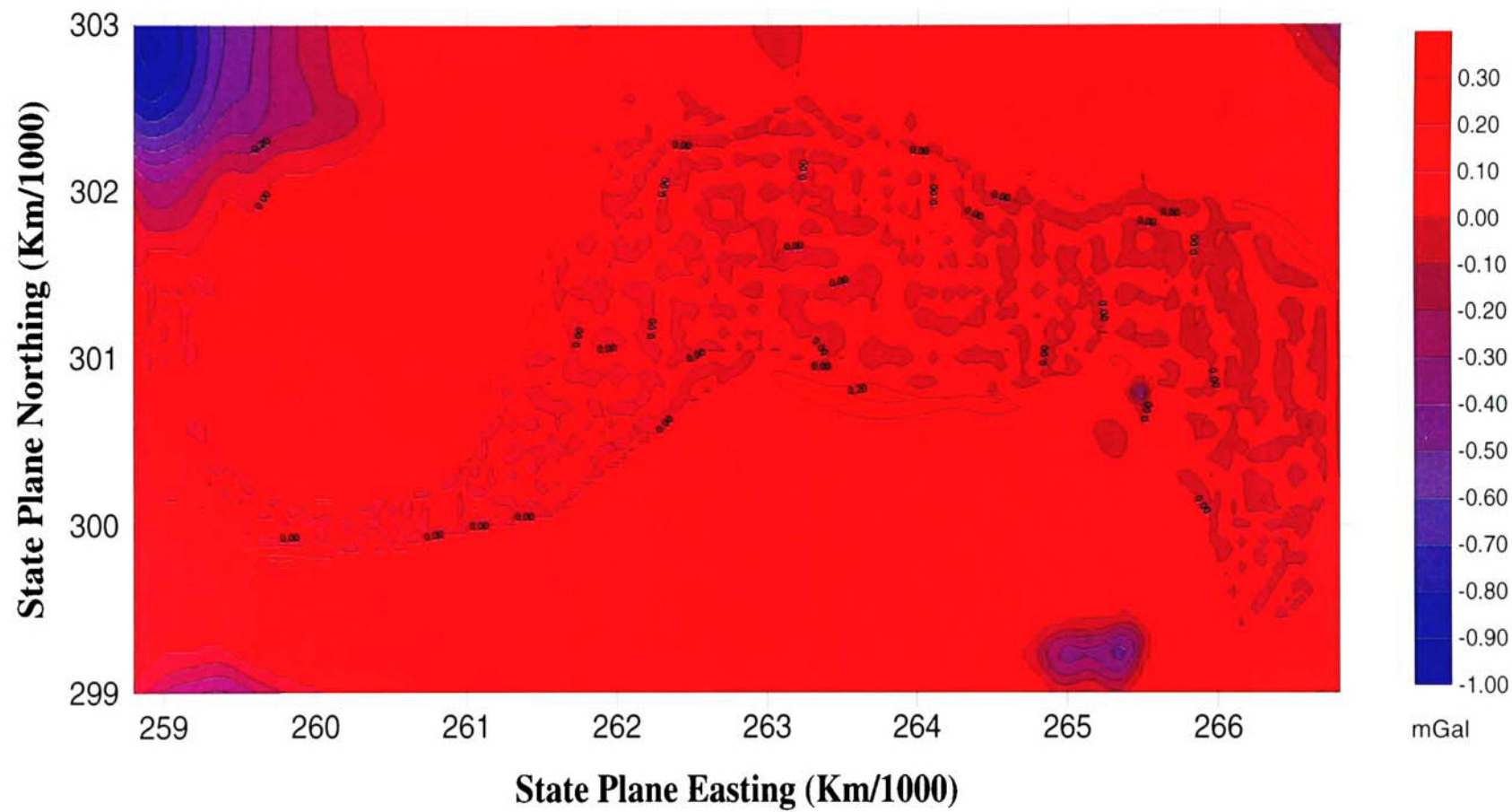


Figure 22. Difference between forward calculated gravity from final model and input residual field.

the source body. GI3 allows the input of a preliminary thickness model and a non-horizontal reference surface. The program adjusts the initial thickness model according to the observed residual. Each iteration in GI3 adjusts the previous thickness model until either a user specified error or maximum number of iterations is reached.

The output from the inverse model (Figure 23a) is the calculated basin thickness from the surface to bedrock after ten iterations. Figure 23b is a wire-frame diagram of the basin bedrock topography with surface topography contours overlain to show the relationship. The residual error (Figure 24) represents the difference between the calculated and the observed anomaly. I specified a minimum model error of ± 0.1 mGal, which would change the modeled depth to bedrock by less than ± 5 meters. I chose a model error of 0.1 mGal because a 0.1 mGal error is below the cumulative error introduced by all other combined sources of error. A smaller model error would increase the model run time but would not add any confidence to the results.

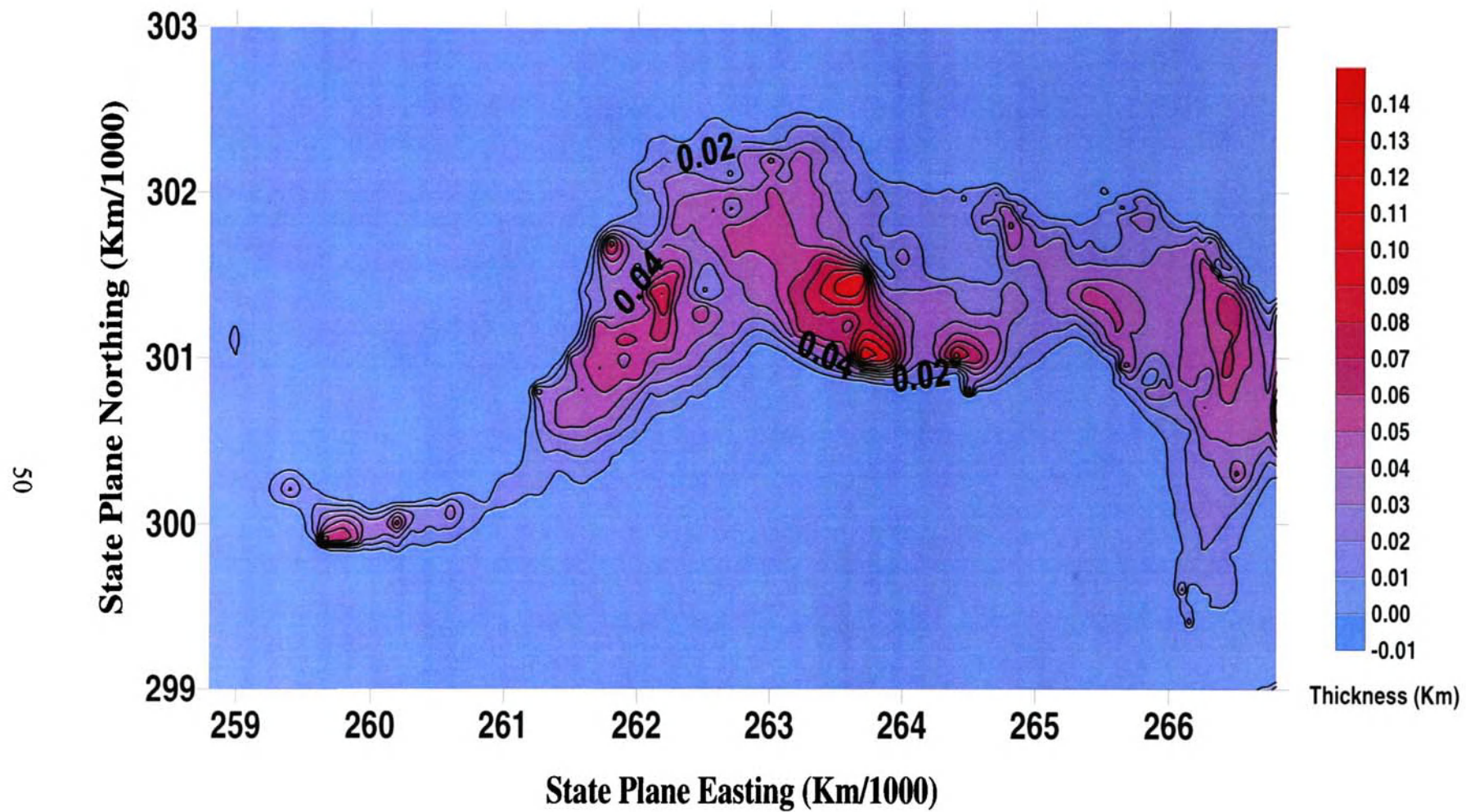


Figure 23a . Final GI3 inverse thickness model.

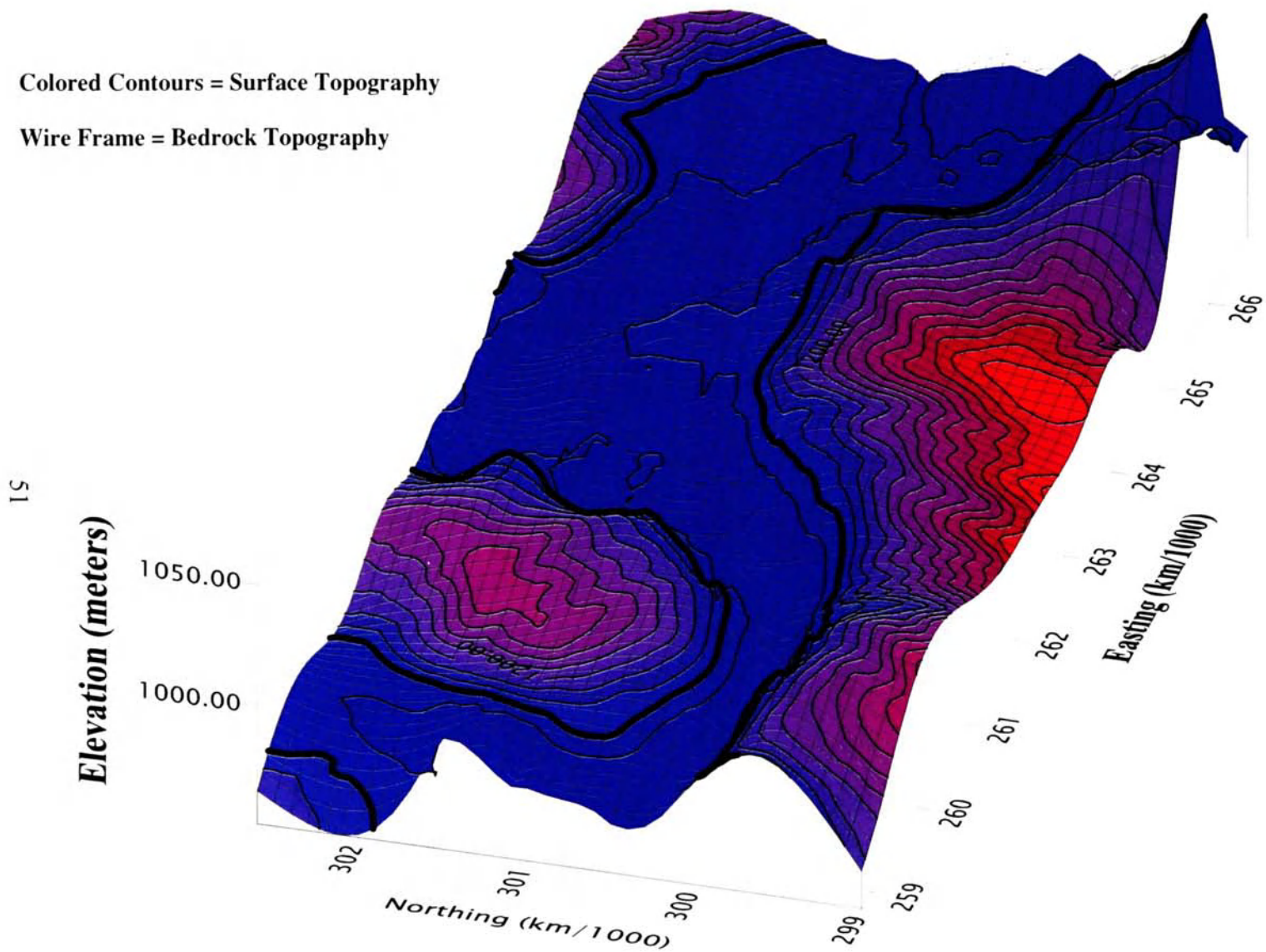


Figure 23b . Final basin structure and surface topography.

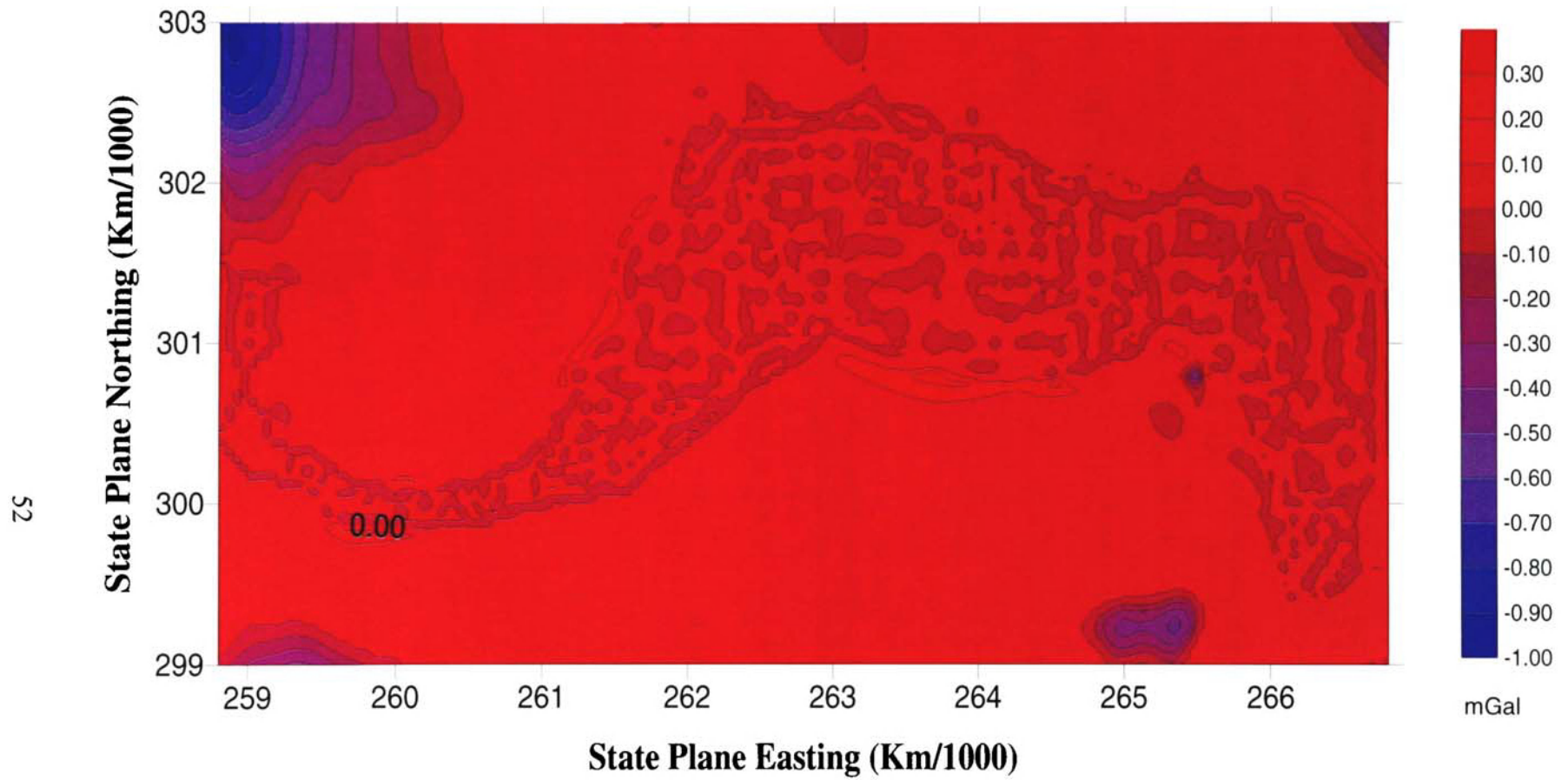


Figure 24. Difference between Gi3 inverse model calculated gravity and input gravity residual.

DISCUSSION

The final basin configuration model (Figure 23a,b) is the combined best estimate from all of the models. That is, the density contrast used in the final GI3 model was tested and verified by using the 2-D models in GravcadW and the inverse models in GI3. The final basin thickness model meets the constraints set by known depths to bedrock from wells, seismic data and bedrock outcrops to within ten meters. A graph of modeled depths to bedrock versus real depths to bedrock (Figure 14a) shows that, with a density contrast of -725kg/m^3 , the model closely approximates the known depths to bedrock over the study domain; the correlation coefficient is 0.87 and the standard error of the depth estimate is 0.0053 km or ± 5 meters.

The final model (Figures 23a,b) shows that the valley sediments are thickest in the southeastern portion of the Bandmann Flats area where they range from 40 to 100 meters thick. The Bandmann Flats area (Figure 2) occupies the highest topographic region within the valley bottom. Interestingly, the shallowest portion of the basin occurs not far from the deepest. The Milltown dam (Figure 2) area is approximately one and a half kilometers east of the Bandmann Flats area and records the shallowest depths to bedrock ranging from less than five to ten meters. Of course, this observation was not lost on the dam builders, the northern portion of the dam is footed in bedrock.

Three cross sections (A through C) (Figures 25, 26 and 27) were extracted from the final model for comparison to the known depths to bedrock. Profiles A through C were extracted from the final GI3 inverse model and from the Gestring's (1994) model to

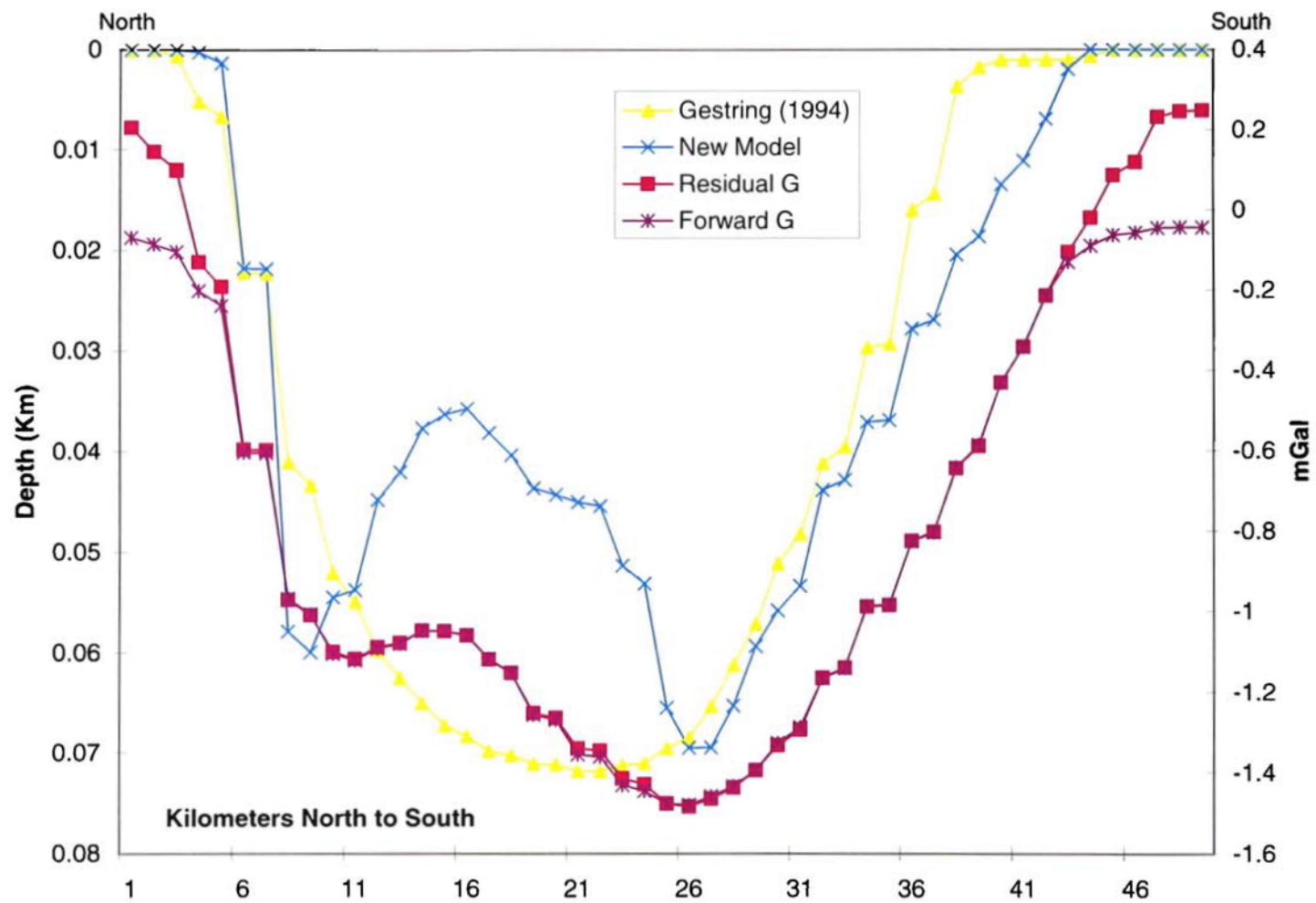


Figure 25. Profile A - A' plot of model derived depths to bedrock vs. Gestring (1994) with residual and forward gravity.

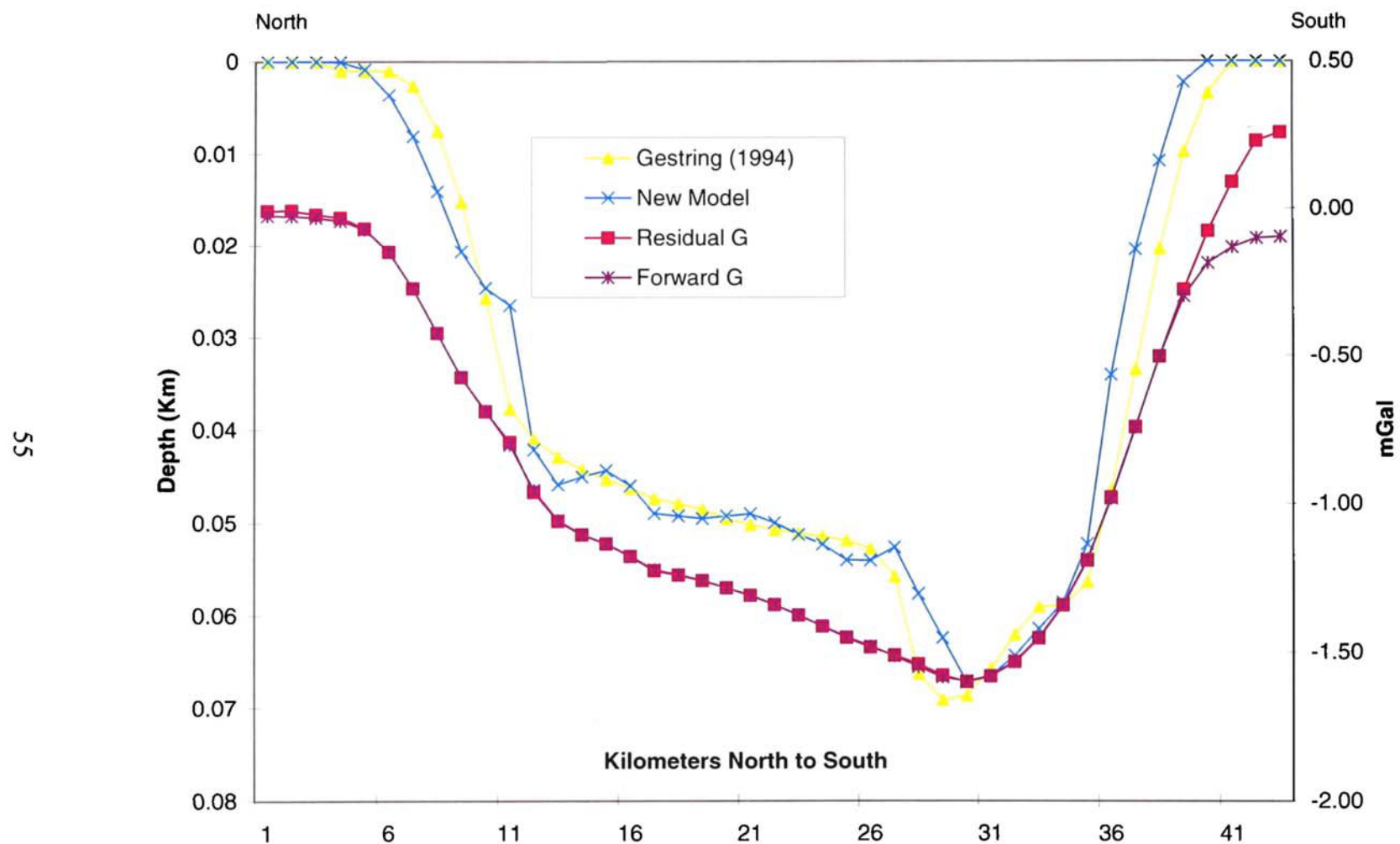


Figure 26. Profile B - B' plot of model derived depths to bedrock vs. Gestring (1994) with residual and forward gravity.

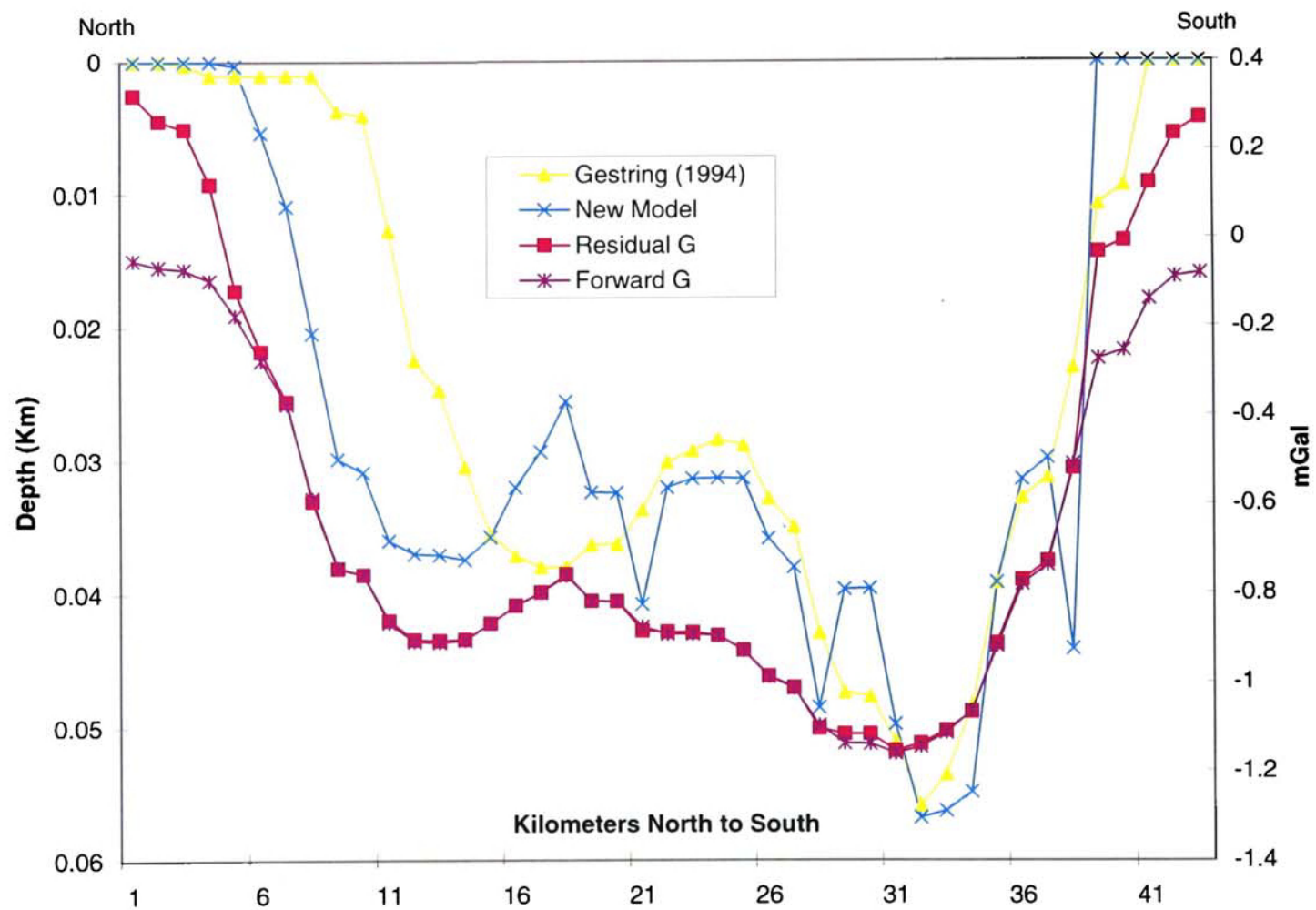


Figure 27. Profile C - C' plot of model derived depths to bedrock vs. Gestring (1994) with residual and forward gravity.

test the accuracy. The locations of the cross sections are shown on Figure 16. All but one (A – A') of the three final model cross sections are very similar to the Gestring's (1994) basin model. Cross section A – A' (Figure 25) shows a bedrock high near the center of the basin where none is predicted in the Gestring's (1994) model (Figure 2). The Gestring's (1994) model in that area was based solely on a limited number of wells and shows a smooth "U" shaped bedrock contour; the high in the new model is constrained by about 23 gravity observations. The high saddle near 261, 300 (easting and northing) may be an artifact of the gridding routine, however, and may represent a lack of data near the basin edges. Basin edge gradients are not well established in the Hellgate Canyon. In these areas poor regional control prevented the accurate characterization of the gravity field just outside the basin. A bedrock high or similar stair-step feature is exhibited in both of the other cross sections B and C (Figures, 26 and 27). The highest gradients in the center of the valley occur roughly parallel to the surface trace of the Clark Fork-Nine Mile Fault and dip to the south. The modeled bedrock structures, down-dropped south of the fault's trace, agree with the accepted interpretations of the geometry of the Clark Fork Fault (Nelson and Dobell, 1961). Offset across the Clark Fork Fault is not well imaged but some may be indicated in cross sections A and B (Figures 25, and 26). The down-dropped block can be seen clearly in cross section B and C (Figures 26 and 27). The new bedrock configuration may improve future ground water modeling efforts.

Gestring's (1994) bedrock model was based on a small, highly clustered number of observed depths to bedrock. The limited distribution of control left large areas of

uncertainty. A goal of ground water modeling is to obtain predicted results equal to real observations where they exist – this is known in the trades as “calibration.” Gestring’s model of ground water flow did not calibrate well in areas where bedrock control was lacking (Gestring 1994, pers. comm. 2001). Areas where control was lacking included the area northeast of East Missoula near Brickyard Hill (Figure 3) and in the West Riverside area (Figure 1) (Gestring , 1994, pers. comm. 2001). The new 3-D model shows structures not previously known. My final result, a 3-D model of the bedrock (Figure 23) clearly shows a bedrock high toward the north end of cross section A – A’ (Figure 25) where Gestring’s model shows a smooth U-shaped valley. Gestring’s (1994) ground water model would have a larger cross sectional area across the profile than my new 3-D model shows. The bedrock high near the east entrance to the Hellgate Canyon may cause ground water gradients to increase. As the cross sectional area decreases local ground water gradients must increase to accommodate ground water through-flow. This new bedrock model will increase the resolution of a future model of ground water flow in the Hellgate Canyon and Bandmann Flats area and improve its function as a predictive tool.

CONCLUSIONS

The 3-D model of the valley (figure 23a,b) supported by 411 gravity stations, 12 seismic lines, and 38 drill holes is most likely accurate to ± 5 meters. A least-squares best-fit line between my modeled depths and drill hole depths to bedrock has a correlation coefficient of 0.87 and slope of 0.98. The standard error of the depth estimate from figure 23a is 5 meters. The accuracy of the model is high because the basin is shallow, the density contrast is uniform and well constrained, and there are many locations of known depth to bedrock.

A previous model of ground water flow (Gestring, 1994) had problems in areas of the valley where no depth to bedrock control existed. Errors in aquifer thickness may have caused difficulties with calibration of his model. My 3-D model of the valley shows a bedrock high where none was mapped earlier. A reduction in the aquifer's cross section in this area may cause ground water gradients to increase locally to accommodate ground water through-flow. The new bedrock model should reduce errors in a future ground water model by providing a better 3-D characterization of the lower aquifer boundary and improving estimates of aquifer transmissivities.

One interesting concern to residents of the area is an arsenic plume in their aquifer. The plume emanates from heavy metals contaminated sediments that were deposited in the Milltown reservoir. The plume extends north of the reservoir halfway across the valley and to the west toward the Bandmann Flats area (Figure 2).

Concentrations of arsenic in ground water range from zero to approximately 1500 micrograms per liter ($\mu\text{g/l}$) (Gestring, 1994) and pose a health risk to residents.

Gestring's (1994) model of ground water flow predicts movement of ground water toward the west with hydraulic conductivities approaching 18,000 feet/day and gradients of 0.031. With positive gradients and high hydraulic conductivities it appears that ground water in the Hellgate Canyon and Bandmann Flats area should move quickly toward the Missoula Valley aquifer. Despite this, measured concentrations of arsenic in ground water show a regular decrease down gradient of the reservoir (Woessner et al., 1984). The reason for the drop in concentration is, as yet, unknown. The greatest errors in Gestring's ground water flow model occur down-stream from the plume. My 3-D model indicates there is substantially less aquifer in the path of the plume than previously thought. Consequently, if the plume moves its front will progress toward the Missoula Valley aquifer at a much faster rate than we previously thought.

The Lewis and Clark fault only crops out at two places in the area; geologists have long wondered about its form and kinetics (Nelson and Dobell, 1961). The residual gravity and the 3-D model confirm that the fault strikes directly from one outcrop to the next with no discernable offsets or splays and shows offset across the fault with the down-dropped block to the south.

Recommendations for Future Investigation

An attempt was made to provide evenly spaced coverage of gravity data for this thesis. Nevertheless, the data are somewhat clustered. Future work in the valley should involve acquiring additional gravity stations in areas where clustering has left pockets of no data. Additionally, a number of gravity stations collected outside of the valley where no data exist would refine the regional gravity signature and improve the reliability at the edges of the model. Future studies in the area should test the model by using any new depth to bedrock information such as new wells or seismic data. A new model of ground water flow in the valley is required.

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APPENDICES

Appendix A

NGS/DMA Gravity Data

ID	CBA	St. Pl. X	St. Pl. Y
Steve's Class Data			
BrianN1	-155.60	258.43	299.15
BrianN2	-155.90	258.33	299.15
BrianN3	-156.60	258.23	299.16
BrianN4	-157.90	258.04	299.17
BrianN5	-158.70	257.92	299.17
BrianN6	-159.40	257.79	299.18
BrianN7	-161.00	257.67	299.19
BrianN8	-161.10	257.55	299.19
BrianP1	-161.20	257.57	299.74
BrianP2	-160.70	257.68	299.75
BrianP3	-160.20	257.80	299.75
BrianP4	-159.60	257.93	299.74
BrianP5	-158.80	258.05	299.73
BrianP6	-158.00	258.26	299.76
BrianP7	-156.70	258.37	299.76
BrianP8	-156.20	258.57	299.79
BrianP9	-154.60	258.67	299.78
Jeff1	-158.40	258.44	299.37
Jeff2	-159.40	258.35	299.37
Jeff3	-160.40	258.22	299.40
Jeff4	-161.70	258.06	299.40
Jeff5	-162.60	257.91	299.41
Jeff6	-163.30	257.79	299.40
Jeff7	-163.70	257.66	299.42
John1	-162.60	257.45	299.01
John2	-161.40	257.56	299.02
John3	-160.90	257.72	299.01
John4	-160.10	257.80	298.99
John5	-160.20	257.87	299.00
John6	-158.80	257.98	298.98
John7	-158.40	258.06	298.99
John8	-157.50	258.18	298.98
NOAA/DMA			
	-166.30	239.20	289.24
	-164.20	239.23	318.69
	-159.50	239.36	308.33
	-159.50	239.36	308.33
	-163.40	241.03	318.26
	-165.40	241.44	288.35

ID	CBA	St. Pl. X	St. Pl. Y
	-165.40	241.44	288.35
	-162.20	241.45	317.70
	-167.50	242.79	287.90
	-165.90	242.82	288.29
	-171.90	242.82	295.97
	-161.60	242.96	312.42
	-161.60	242.96	312.42
	-160.30	243.41	305.87
	-158.20	243.48	308.32
	-158.20	243.48	308.32
	-174.80	243.66	285.72
	-174.10	243.66	285.74
	-160.70	244.12	305.04
	-160.70	244.12	305.04
	-155.40	244.82	324.31
	-163.10	245.13	314.30
	-148.90	245.32	326.32
	-161.70	245.42	299.88
	-161.70	245.42	299.88
	-164.00	245.86	288.02
	-165.40	246.26	288.26
	-165.10	246.41	285.70
	-161.30	246.63	306.13
	-161.30	246.63	306.13
	-163.80	246.65	288.36
	-163.80	246.65	288.36
	-144.60	246.98	327.46
	-173.40	247.30	281.31
	-172.30	247.45	282.52
	-163.90	247.50	318.24
	-173.20	247.71	277.84
	-170.50	247.90	278.49
	-167.50	247.93	310.15
	-167.50	247.93	310.15
	-167.10	247.97	310.80
	-169.40	248.05	279.71
	-173.10	248.39	277.68
	-163.90	248.67	299.36
	-157.00	248.68	316.29
	-167.90	248.69	310.02
	-164.50	248.69	313.95
	-164.50	248.69	313.95

ID	CBA	St. Pl. X	St. Pl. Y
	-166.20	249.09	280.42
	-176.10	249.18	282.09
	-164.60	249.22	293.10
	-169.20	249.33	304.08
	-169.20	249.33	304.08
	-169.00	249.33	304.09
	-162.40	249.70	292.19
	-163.30	249.74	291.52
	-163.30	249.74	291.52
	-180.50	249.85	276.48
	-170.40	249.89	279.71
	-163.60	249.96	295.29
	-176.40	250.00	279.04
	-159.30	250.05	291.57
	-177.90	250.14	282.66
	-169.30	250.14	308.81
	-174.90	250.20	281.14
	-174.30	250.20	279.88
	-163.70	250.21	287.82
	-171.50	250.25	306.77
	-163.90	250.28	299.42
	-163.90	250.28	299.42
	-163.60	250.34	288.81
	-163.60	250.34	288.81
	-163.20	250.34	288.81
	-165.60	250.36	286.47
	-169.40	250.37	308.80
	-168.90	250.37	308.80
	-177.70	250.37	282.80
	-162.90	250.45	289.40
	-170.70	250.46	285.56
	-163.70	250.49	296.61
	-163.70	250.49	296.61
	-171.10	250.50	285.02
	-161.00	250.65	290.13
	-171.00	250.77	306.55
	-164.20	250.87	288.73
	-164.70	250.90	295.78
	-159.60	251.04	288.88
	-166.80	251.04	286.32
	-163.80	251.28	289.08
	-171.20	251.36	306.15

ID	CBA	St. Pl. X	St. Pl. Y
	-153.50	251.54	319.57
	-172.10	251.56	306.97
	-172.10	251.56	306.97
	-163.40	251.58	287.74
	-164.20	251.69	310.56
	-164.20	251.69	310.56
	-176.80	251.76	278.93
	-154.70	251.77	319.65
	-171.50	251.79	303.14
	-171.50	251.79	303.14
	-162.40	251.91	289.50
	-169.80	252.14	284.14
	-163.80	252.19	290.26
	-166.60	252.37	285.46
	-172.10	252.50	306.08
	-170.70	252.50	306.08
	-167.20	252.70	284.66
	-154.80	252.83	319.59
	-178.30	252.92	276.53
	-166.10	253.07	285.76
	-168.70	253.13	297.32
	-169.30	253.51	297.29
	-169.30	253.51	297.29
	-157.90	253.53	323.75
	-162.30	253.53	291.07
	-172.90	253.59	277.60
	-167.80	253.68	281.71
	-169.70	253.68	283.05
	-161.90	253.79	291.50
	-170.80	253.82	280.15
	-161.60	253.99	292.38
	-169.00	254.03	304.84
	-169.00	254.03	304.84
	-169.30	254.05	278.80
	-164.30	254.20	292.02
	-164.30	254.20	292.02
	-166.40	254.42	281.34
	-178.60	254.56	275.65
	-166.50	254.62	284.67
	-169.90	254.62	304.48
	-171.10	254.72	298.34
	-165.90	254.77	285.99

ID	CBA	St. Pl. X	St. Pl. Y
	-160.10	254.83	312.16
	-160.10	254.83	312.16
	-155.80	254.86	327.07
	-170.20	254.98	304.08
	-157.00	254.99	324.00
	-169.00	255.77	279.48
	-172.60	255.86	302.21
	-172.60	255.86	302.21
	-165.20	255.92	282.03
	-169.50	256.15	303.25
	-167.70	256.33	286.57
	-176.80	256.40	275.73
	-157.20	256.42	309.34
	-157.20	256.42	309.34
	-165.80	256.43	283.00
	-158.60	256.51	326.61
	-166.00	256.61	291.34
	-167.40	256.62	279.51
	-176.30	256.63	275.76
	-162.80	256.85	304.79
	-163.20	257.27	317.38
	-164.10	257.35	317.40
	-171.00	257.42	289.57
	-164.20	257.48	298.62
	-161.90	257.51	304.42
	-165.50	257.78	301.06
	-178.10	257.81	282.91
	-164.90	257.93	301.13
	-166.00	257.98	291.22
	-166.00	257.98	291.24
	-163.70	258.01	301.13
	-168.30	258.01	286.47
	-174.70	258.10	276.06
	-172.00	258.18	276.11
	-156.50	258.31	316.97
	-156.20	258.36	312.51
	-155.30	258.91	308.85
	-169.70	258.96	277.59
	-173.60	259.85	293.19
	-166.40	259.93	290.56
	-160.70	260.02	296.24
	-163.00	260.02	296.31

ID	CBA	St. Pl. X	St. Pl. Y
	-168.80	260.28	279.30
	-158.50	260.55	304.15
	-171.80	260.61	283.78
	-171.80	260.69	283.74
	-171.20	260.96	276.46
	-157.20	261.13	307.72
	-168.00	261.14	289.06
	-159.40	261.22	297.12
	-167.90	261.22	289.05
	-167.80	261.42	285.93
	-167.60	261.42	285.93
	-157.00	261.51	309.07
	-168.90	261.63	313.70
	-160.70	261.83	295.73
	-166.40	262.04	291.40
	-169.00	262.84	289.39
	-169.10	262.95	294.00
	-160.50	263.14	295.97
	-160.60	263.14	295.99
	-170.70	263.99	290.73
	-169.00	264.00	289.66
	-170.30	264.13	283.73
	-169.70	264.15	282.79
	-162.10	264.17	310.14
	-167.10	264.38	316.55
	-176.70	264.40	276.28
	-158.40	264.70	306.09
	-179.30	265.29	288.01
	-162.20	265.96	298.71
	-176.60	266.26	275.31
	-155.60	266.74	313.84
	-166.70	266.85	310.45
	-164.30	266.92	298.06
	-179.40	267.44	295.03
	-178.00	267.48	275.22
	-171.20	267.63	291.57
	-163.50	267.64	305.42
	-169.90	267.81	285.18
	-179.80	267.88	279.56
	-168.10	267.93	307.98
	-168.50	268.11	311.11
	-171.50	268.12	286.70

ID	CBA	St. Pl. X	St. Pl. Y
	-168.60	268.19	311.18
	-172.30	268.20	277.18
	-177.60	268.43	282.66
	-164.40	268.53	300.98
	-160.20	268.62	301.26
	-164.60	269.25	297.39
	-164.60	269.32	297.33
	-180.90	269.56	275.38
	-160.20	269.65	318.30
	-173.00	270.09	289.11
	-164.10	270.20	296.60
	-168.60	270.22	302.44
	-163.20	270.40	315.36
	-164.50	270.47	312.53
	-159.50	270.63	296.15
	-167.10	270.73	306.14
	-164.20	271.00	295.85
	-169.10	271.49	292.32
	-165.00	271.70	305.83
	-169.50	271.91	302.68
	-166.60	272.02	294.96
	-177.70	272.39	287.87
	-164.30	272.48	307.53
	-170.40	272.53	291.76
	-178.80	272.55	308.77
	-176.10	272.77	289.11
	-174.20	272.85	278.17
	-174.20	272.87	299.42
	-162.60	272.92	305.76
	-176.90	273.01	285.15
	-173.40	273.02	279.87
	-165.50	273.03	293.87
	-169.10	273.42	302.51
	-155.10	273.75	314.00
	-164.90	273.89	292.82
	-164.80	273.96	292.85
	-170.30	273.97	302.82
	-160.90	274.15	306.04
	-175.90	274.56	305.17
	-155.60	274.87	315.09
	-158.70	274.92	310.38
	-162.10	275.37	297.67

ID	CBA	St. Pl. X	St. Pl. Y
	-160.00	275.50	308.46
	-175.10	275.59	286.15
	-175.10	275.59	286.16
	-171.00	275.60	287.88
	-174.60	275.92	288.09
	-166.30	275.97	294.54
	-169.40	276.06	303.32
	-179.60	276.21	282.23
	-182.80	276.38	276.77
	-156.60	276.70	313.66
	-165.70	276.77	303.75
	-178.20	277.04	279.15
	-172.40	277.05	293.35
	-157.20	277.14	307.74
	-159.20	277.34	305.76
	-162.90	277.39	291.14
	-168.90	277.50	289.08
	-167.60	277.59	290.76
	-181.10	277.92	275.61
	-154.70	278.27	313.11
	-169.60	278.39	287.01
	-168.00	278.59	289.41
	-167.80	278.59	289.43
	-167.00	278.97	289.38
	-166.90	279.12	301.99
	-173.30	279.13	285.29
	-159.60	279.17	307.31
	-174.00	279.49	284.78
	-173.80	279.51	285.10
	-174.80	279.52	279.70
	-168.70	279.57	293.49
	-161.60	279.64	304.58
	-154.80	279.64	311.79
	-169.30	279.68	289.69
	-180.60	279.92	278.58
	-157.20	280.32	314.54
	-168.00	280.74	305.18
	-160.30	280.84	307.07
	-156.80	280.91	317.02
	-154.00	280.99	325.47
	-165.80	281.42	297.94
	-176.30	281.56	280.57

ID	CBA	St. Pl. X	St. Pl. Y
	-171.90	281.66	289.58
	-173.00	281.67	282.55
	-179.00	281.67	278.27
	-161.00	281.78	308.93
	-168.60	282.04	295.36
	-180.10	282.10	276.42
	-173.90	282.22	287.16
	-178.50	282.29	275.66
	-161.70	282.45	303.09
	-157.30	282.51	314.14
	-157.00	282.64	313.67
	-156.70	282.64	312.32
	-174.30	282.72	283.63
	-163.60	282.90	301.44
	-158.70	283.07	307.47
	-175.30	283.42	283.90
	-160.10	283.43	304.25
	-155.60	283.45	308.99
	-182.90	283.66	278.29
	-164.50	284.00	301.99
	-182.90	284.07	281.77
	-155.80	284.26	312.73
	-175.00	284.53	290.37
	-163.00	284.69	303.64
	-163.70	284.74	298.67
	-153.50	284.75	316.12
	-171.30	284.78	293.79
	-167.30	285.77	302.29
	-175.60	285.91	283.27
	-174.20	286.12	282.88
	-155.00	286.26	311.68
	-177.00	286.43	283.02
	-183.30	286.47	277.92
	-169.20	286.65	301.76
	-174.00	287.10	291.31
	-156.20	287.61	325.61
	-154.90	287.61	314.09
	-163.70	287.87	295.93
	-170.50	287.88	301.89
	-158.10	288.17	307.39
my bedrock data			

ID	CBA	St. Pl. X	St. Pl. Y
R032921A	-155.50	261.86	302.23
R090721A	-154.99	264.01	302.39
R052921A	-155.22	265.54	302.13
deschcliff	-155.36	262.71	302.57
upperdes	-156.74	262.79	303.02
marshdup	-153.27	263.17	304.67
uppermar	-153.13	263.63	305.25
brigidup	-155.09	263.29	302.67
milodup	-154.93	263.97	302.41
pinebed	-154.76	264.82	302.06
pinrangbd	-155.46	265.11	302.02
Drck	-156.12	265.22	300.47
damover	-156.24	265.33	300.58
damover	-156.25	265.36	300.66
Drckwest	-156.39	265.25	299.98
Drckwest	-151.89	265.69	298.78
Bonnermtn	-153.91	267.33	300.20
millover	-155.50	267.12	301.12
9th str	-154.64	266.84	301.34
lionbed	-154.99	266.35	301.81
greenlnd	-154.78	265.70	302.14
greenbed	-154.83	265.63	302.19
dam	-155.47	265.51	300.81
westcrtbd	-155.52	261.55	301.66
hellmidnrth	-155.47	260.32	300.15
Rattlesnak	-157.46	260.17	302.62
hellsouth	-155.55	259.35	300.01
milorivbed	-155.09	263.86	302.16
dambd	-155.46	265.28	301.02
dn10	-155.04	264.40	300.74
dn11	-158.91	264.96	300.69
dn12	-156.18	263.02	300.93
dn13	-155.92	261.01	300.53
dn08	-156.27	259.17	300.55

Appendix B

GPS Rover Configurations

Rover Configurations:

Pos Mode = 3D	Elev Mask = 15°	SNR Mask = 6
PDOP Mask = 6	Antenna Ht = 1.3m	
Log DOPs = off	Not in Feature, Rate = 15 sec	Dynamics = land
High Accuracy Recording = on		

Appendix C

GPS Accuracy and Precision

Assessment of GPS Position Accuracy using USFS base station for phase processing corrections

Benchmark Designation	NGS Coordinates*			GPS Determined Coordinates			Elevation	Elev diff (m)
	Latitude	Longitude	Elevation	Latitude	Longitude	Elevation		
G14	46 55 45 N 114 5 49 W	965.493	46 55 47.4265 N	114 5 51.4883 W	964.746	0.747		
			46 55 47.434 N	114 5 51.4719 W	965.068	0.425		
			46 55 47.4398 N	114 5 51.5104 W	964.671	0.822		
			46 55 47.4397 N	114 5 51.4542 W	965.168	0.325		
			46 55 47.4412 N	114 5 51.4919 W	964.889	0.604		
			46 55 47.437 N	114 5 51.5006 W	964.835	0.658		
			46 55 47.4394 N	114 5 51.464 W	965.107	0.386		
			46 55 47.4456 N	114 5 51.4939 W	965.038	0.455		
			46 55 47.436 N	114 5 51.4762 W	965.038	0.455		
			46 55 47.4408 N	114 5 51.5329 W	965.067	0.426		
			46 55 47.4454 N	114 5 51.4891 W	965.164	0.329		
			46 55 47.4385 N	114 5 51.4919 W	965.15	0.343		
			46 55 47.4782 N	114 5 51.4265 W	964.722	0.771		
			46 55 47.4843 N	114 5 51.4376 W	964.919	0.574		
			46 55 47.4839 N	114 5 51.4069 W	964.994	0.499		
			46 55 47.4475 N	114 5 51.5229 W	964.713	0.78		
			46 55 47.4356 N	114 5 51.2159 W	966.038	-0.545		
			46 55 47.4453 N	114 5 51.4849 W	964.801	0.692		
			46 55 47.434 N	114 5 51.516 W	964.833	0.66		
			46 55 47.4435 N	114 5 51.4635 W	964.975	0.518		
			46 55 47.4497 N	114 5 51.4838 W	964.66	0.833		
			46 55 47.2781 N	114 5 51.5317 W	964.611	0.882		
			46 55 47.4312 N	114 5 51.475 W	965.09	0.403		
			46 55 47.4205 N	114 5 51.4649 W	965.556	-0.063		
			46 55 47.4204 N	114 5 51.4566 W	965.755	-0.262		
			46 55 47.4295 N	114 5 51.4847 W	965.038	0.455		
C447	46 51 5 N 113 51 9 W	987.249	46 51 7.5555 N	113 51 10.8031 W	987.172	0.077		
			46 51 7.5504 N	113 51 10.7762 W	987.441	-0.192		
			46 51 7.5529 N	113 51 10.7909 W	987.264	-0.015		
J310	46 51 39 N 113 51 45 W	990.14	46 51 39.8117 N	113 51 45.6727 W	989.928	0.212		
			46 51 39.8092 N	113 51 45.675 W	990.077	0.063		
			46 51 39.8107 N	113 51 45.6567 W	990.082	0.058		
Average						0.387		
Std. Dev.						0.34886		

* NGS horizontal coordinates were scaled from a topographic map and have an estimated accuracy of +/- 6 seconds. Including the Elevation Differences from the County corrected files and the adjusted USFS files, the standard deviation from the benchmark value is 0.34 m.

Assessment of GPS Position Accuracy using USFS base station for phase processing corrections

Benchmark Designation	NGS Coordinates*			GPS Determined Coordinates			Lat diff (s)	Long diff (s)	Elev diff (m)	Elev diff (m) with adjustment of 1.16 m
	Latitude	Longitude	Elevation	Latitude	Longitude	Elevation				
E101	46 51 55 N	113 57 5	971.458	46 51 56.159 N	113 57 5 6525 W	970.267	-1.159	-0.6525	1.191	0.031
Q507	46 52 29 N	113 55 12	991.162	46 51 56.1594 N	113 57 5 6627 W	970.286	-1.1594	-0.6627	1.172	0.012
				46 52 28.475 N	113 55 16.103 W	990.168	0.525	-4.103	0.994	-0.166
A447	46 52 38 N	113 54 40	980.582	46 52 28.4729 N	113 55 16.0833 W	989.867	0.5271	-4.0833	1.295	0.135
				46 52 38.58 N	113 54 40.8431 W	979.687	-0.58	-0.8431	0.895	-0.265
B447	46 52 37 N	113 53 23	987.632	46 52 38.5796 N	113 54 40.8291 W	979.429	-0.5796	-0.8291	1.153	-0.007
				46 52 37.7045 N	113 53 23.0207 W	986.426	-0.7045	-0.0207	1.206	0.046
V446	46 53 21 N	114 1 45	953.965	46 52 37.7036 N	113 53 23.0174 W	986.366	-0.7036	-0.0174	1.266	0.106
				46 53 27.0608 N	114 1 48.4139 W	952.636	-6.0608	-3.4139	1.329	0.169
G14	46 55 45 N	114 5 49	965.493	46 53 27.0627 N	114 1 48.4281 W	952.563	-6.0627	-3.4281	1.402	0.242
				46 55 47.432 N	114 5 51.4581 W	963.739	-2.432	-2.4581	1.754	0.594
				46 55 47.4361 N	114 5 51.458 W	963.975	-2.4361	-2.458	1.518	0.358
Average							-1.73545	-1.91416	1.265	0.105
Std. Dev.							2.21769	1.57522	0.22711	0.22711

* NGS horizontal coordinates were scaled from a topographic map and have an estimated accuracy of +/- 6 seconds.

Appendix D

Gravimeter Statistics

Benchmark	Date	Gravity
G14	4/6/1996	980431.2
G14	4/7/1996	980431.2
G14	4/7/1996	980431.1
G14	4/16/1996	980431.2
G14	4/16/1996	980431.2
G14	4/16/1996	980431.2
G14	4/26/1996	980431.1
G14	5/7/1996	980431.2
G14	5/7/1996	980431.2
G14	5/7/1996	980431.2
G14	5/22/1996	980431.2
G14	5/22/1996	980431.2
G14	6/22/1996	980431.2
	Standard Deviation =	0.03 mGal
	Variance =	0.00098

After Evans (1997)

Appendix E

Missoula County Base Station and USFS Base Station Differences

46 57	8 0493 N	114 11	40 3095 W	917 653	46 57	8 0416 N	114 11	40 3317 W	918 874	0 0035	-0 0226	-1 249
46 55	47 442 N	114 5	51 4693 W	963 901	46 55	47 4385 N	114 5	51 4919 W	965 15			
									Average	0 005087	-0 0206107	-1 1574206
									Std. Dev.	0 005367	0 00618673	0 40189401

Missoula County GPS base station files were used for all phase processing except when files were unavailable.

In the cases where reductions were made with USES base station files, I added 1.16 m to the elevation.

I did not change the latitude or longitude values because the difference is insignificant.

FOREST SERVICE BASE REDUCTION

Latitude	Longitude	Elevation
46 55 55 4804 N	114 10 58 1344 W	919 29
46 55 58 0454 N	114 10 57 7275 W	919 173
46 55 45 1883 N	114 10 57 6771 W	918 764
46 55 43 2906 N	114 11 1 5609 W	918 018
46 55 16 9425 N	114 11 14 5423 W	917 66
46 55 42 8971 N	114 11 51 8672 W	917 737
46 56 2 3215 N	114 12 5 2146 W	916 270
46 55 53 8613 N	114 12 15 2754 W	916 337
46 55 47 2625 N	114 10 27 1186 W	919 677
46 54 31 1055 N	114 11 9 2323 W	919 964
46 54 10 6562 N	114 11 9 9596 W	920 327
46 56 10 5611 N	114 11 6 6801 W	918 862
46 58 42 9894 N	114 11 27 8651 W	917 204
46 56 35 1728 N	114 11 51 2037 W	918 851
46 56 35 2898 N	114 11 40 2248 W	917 489
46 56 35 3893 N	114 11 22 5381 W	917 853
46 56 24 4701 N	114 11 18 8778 W	918 275
46 55 32 5093 N	114 9 51 8333 W	921 088
46 56 4 8031 N	114 8 44 7721 W	948 464
46 56 3 9547 N	114 8 51 0487 W	943 515
46 56 3 3013 N	114 8 56 0151 W	949 575
46 56 4 3409 N	114 8 56 7831 W	950 775
46 56 1 8765 N	114 9 18 9846 W	945 364
46 56 7 2227 N	114 9 44 2856 W	943 907
46 56 12 2768 N	114 9 56 9678 W	954 477
46 56 20 9071 N	114 10 6 158 W	957 709
46 53 57 7014 N	114 9 53 8083 W	923 815
46 53 51 4698 N	114 10 8 3667 W	922 606
46 54 5 2631 N	114 9 39 7515 W	923 445
46 54 25 3833 N	114 9 0 6607 W	923 235
46 54 49 6275 N	114 8 47 7864 W	923 864
46 54 51 8945 N	114 8 41 8434 W	923 622
46 53 57 7023 N	114 9 53 7844 W	923 886
46 53 51 4546 N	114 10 8 3478 W	922 972
46 54 5 2609 N	114 9 39 7549 W	923 204
46 54 25 3577 N	114 9 0 6551 W	923 3
46 54 49 6295 N	114 8 47 7872 W	923 884
46 54 51 8943 N	114 8 41 8359 W	923 613
46 55 47 4468 N	114 5 51 5138 W	963 851
46 57 53 1118 N	114 9 7 2321 W	946 699
46 59 9 2675 N	114 8 45 254 W	1069 423
46 58 46 3403 N	114 9 0 5977 W	1013 205
46 58 25 9455 N	114 10 2 8935 W	950 111
46 57 55 5461 N	114 8 42 3888 W	943 407
46 58 31 1592 N	114 8 24 5147 W	964 983
46 58 43 3373 N	114 8 12 5177 W	970 579
46 55 47 4519 N	114 5 51 4549 W	963 89
46 58 14 1714 N	114 10 2 5397 W	948 071
46 57 28 2758 N	114 10 10 2678 W	939 625
46 57 11 1226 N	114 10 18 4999 W	947 248
46 57 7 8784 N	114 10 7 5955 W	942 41
46 57 26 6194 N	114 10 26 9009 W	946 405
46 57 54 3451 N	114 10 27 5046 W	945 515
46 57 27 9819 N	114 11 14 9252 W	921 389
46 57 40 8552 N	114 10 56 2996 W	925 181

MISSOULA COUNTY BASE REDUCTION

Latitude	Longitude	Elevation
46 55 55 4754 N	114 10 58 1541 W	920 415
46 55 58 0384 N	114 10 57 7439 W	920 367
46 55 45 183 N	114 10 57 6966 W	920 024
46 55 43 2841 N	114 11 1 5838 W	919 255
46 55 16 9392 N	114 11 14 56 W	918 799
46 55 42 7298 N	114 11 51 8813 W	915 992
46 56 2 3168 N	114 12 5 2361 W	917 591
46 55 53 8559 N	114 12 15 3044 W	917 543
46 55 47 2544 N	114 10 27 1207 W	921 125
46 54 31 1004 N	114 11 9 2689 W	921 108
46 54 10 648 N	114 11 9 965 W	921 687
46 56 10 5566 N	114 11 6 6989 W	919 994
46 58 42 9832 N	114 11 27 895 W	918 415
46 56 35 1666 N	114 11 51 2324 W	917 834
46 58 35 2651 N	114 11 40 2356 W	918 709
46 58 35 384 N	114 11 22 552 W	919 126
46 56 24 4652 N	114 11 18 8961 W	919 379
46 55 32 5022 N	114 9 51 8504 W	922 116
46 56 4 7963 N	114 8 44 7939 W	949 636
46 56 3 9502 N	114 8 51 0677 W	944 837
46 56 3 2949 N	114 8 56 0349 W	950 707
46 56 4 3391 N	114 8 56 7999 W	951 868
46 56 1 8701 N	114 9 18 9737 W	946 714
46 56 7 2164 N	114 9 44 3003 W	945 12
46 58 12 2726 N	114 9 56 9922 W	955 673
46 56 20 9029 N	114 10 6 1811 W	958 842
46 53 57 6975 N	114 9 53 8301 W	924 945
46 53 51 4643 N	114 10 8 3881 W	923 838
46 54 5 2562 N	114 9 39 7683 W	924 759
46 54 25 3578 N	114 9 0 8862 W	924 42
46 54 49 619 N	114 8 47 8068 W	925 09
46 54 51 8875 N	114 8 41 8702 W	924 879
46 53 57 6994 N	114 9 53 808 W	924 973
46 53 51 4499 N	114 10 8 3694 W	924 17
46 54 5 2538 N	114 9 39 7714 W	924 523
46 54 25 3522 N	114 9 0 6808 W	924 483
46 54 49 6209 N	114 8 47 808 W	925 121
46 54 51 8873 N	114 8 41 8631 W	924 862
46 55 47 4408 N	114 5 51 5329 W	965 067
46 57 53 1139 N	114 9 7 2405 W	948 026
46 59 9 2814 N	114 8 45 2755 W	1070 553
46 58 46 3361 N	114 9 0 6226 W	1014 42
46 58 25 9409 N	114 10 2 913 W	951 331
46 57 55 5414 N	114 8 42 4071 W	944 591
46 58 31 1554 N	114 8 24 5388 W	966 193
46 58 43 3331 N	114 8 12 5391 W	971 850
46 55 47 4454 N	114 5 51 4891 W	965 164
46 58 14 1651 N	114 10 2 5606 W	950 225
46 57 28 2663 N	114 10 10 285 W	940 917
46 57 11 1178 N	114 10 18 5207 W	948 455
46 57 7 8722 N	114 10 7 6233 W	943 606
46 57 26 6122 N	114 10 26 9215 W	947 596
46 57 54 3372 N	114 10 27 53 W	946 749
46 57 27 9754 N	114 11 14 9459 W	922 547
46 57 40 8482 N	114 10 56 3181 W	926 406

Lat diff (s) Long diff (s) Elev diff (m)

0 007	-0 0164	-1 194
0 0053	-0 0195	-1 26
0 0065	-0 0229	-1 237
0 0033	-0 0177	-1 139
-0 0327	-0 0141	1 745
0 0047	-0 0215	-1 313
0 0054	-0 029	-1 206
0 0081	-0 0021	-1 448
0 0051	-0 0366	-1 144
0 0062	-0 0054	-1 36
0 0045	-0 0188	-1 132
0 0062	-0 0299	-1 211
0 0062	-0 0287	-1 183
0 0045	-0 0108	-1 22
0 0053	-0 0139	-1 173
0 0049	-0 0183	-1 104
0 0071	-0 0171	-1 028
0 0068	-0 0218	-1 172
0 0045	-0 021	-1 122
0 0064	-0 0198	-1 132
0 0018	-0 0158	-1 093
0 0064	-0 0091	-1 35
0 0063	-0 0207	-1 213
0 0042	-0 0244	-1 198
0 0042	-0 0231	-1 133
0 0039	-0 0218	-1 131
0 0055	-0 0214	-1 232
0 0069	-0 0168	-1 314
0 0055	-0 0255	-1 185
0 0085	-0 0204	-1 226
0 007	-0 0268	-1 257
0 0029	-0 0236	-1 087
0 0047	-0 0216	-1 198
0 0071	-0 0165	-1 319
0 0055	-0 0257	-1 183
0 0086	-0 0208	-1 237
0 007	-0 0272	-1 249
0 006	-0 0191	-1 216
0 0051	-0 0084	-1 327
0 0061	-0 0215	-1 13
0 0042	-0 0249	-1 215
0 0046	-0 0195	-1 22
0 0047	-0 0183	-1 184
0 0038	-0 0239	-1 21
0 0042	-0 0214	-1 277
0 0065	-0 0342	-1 274
0 0063	-0 0209	-1 154
0 0093	-0 0172	-1 292
0 0048	-0 0208	-1 207
0 0082	-0 0278	-1 196
0 0072	-0 0206	-1 191
0 0079	-0 0252	-1 234
0 0065	-0 0207	-1 158
0 007	-0 0185	-1 225
0 0077	-0 0222	-1 221

Appendix F

MOPO Base Tie-in for the University of Montana Geophysics Lab

USGS Gravity Base Station Tie-in for the Geophysics Lab
Base

Site Name	Gravimeter reading	ΔT	Drift slope	Drift corr.	mGal divisions	Diff. from base	Observed gravity
Mopobase	1170.9	0	0.00435	1170.9	102.688	0.000	980431.87
Geophysics lab	1175	11	0.00435	1175.0	103.043	-0.355	980432.23
Mopobase	1171	23	0.00435	1170.9	102.688	0.000	980431.87
Mopobase	1189.1	0	0.00714	1189.1	104.284	0.000	980431.87
Geophysics lab	1193	14	0.00714	1192.9	104.617	-0.333	980432.20
Mopobase	1189.3	28	0.00714	1189.1	104.284	0.000	980431.87
Average =							980432.21
Std. Deviation =							0.02

Appendix G

Table of Collected Gravity Data

Montana State Plane Coordinates: North American Datum 1983 (NAD83), National Geodetic Vertical Datum 1929 (NGVD29).

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
050297DN001	265.6774	300.8839	997.351	980432.67	980789.40	-308.13	-48.60	111.78	-160.38	4.48	-155.892
050297DN002	265.6600	300.9450	996.032	980432.55	980789.40	-307.72	-49.13	111.63	-160.76	4.77	-155.985
050297DN003	265.6369	300.9679	997.766	980432.45	980789.40	-308.25	-48.70	111.82	-160.53	4.65	-155.876
050297DN004	265.6159	300.9969	997.710	980432.59	980789.50	-308.24	-48.67	111.82	-160.49	4.64	-155.848
050297DN005	265.5888	301.0304	997.743	980432.58	980789.50	-308.25	-48.67	111.82	-160.49	4.74	-155.751
050297DN006	265.5693	301.0549	997.589	980432.59	980789.50	-308.20	-48.71	111.80	-160.52	4.48	-156.033
050497DN007	265.5552	301.0721	997.296	980432.70	980789.60	-308.11	-48.79	111.77	-160.57	4.45	-156.120
050497DN008	265.5282	301.1038	997.416	980432.70	980789.60	-308.15	-48.75	111.78	-160.54	4.55	-155.985
050497DN009	265.4764	301.1423	996.367	980432.78	980789.60	-307.82	-49.00	111.67	-160.67	4.50	-156.168
050497DN010	265.4386	301.1602	996.868	980432.76	980789.60	-307.98	-48.86	111.72	-160.58	4.49	-156.095
050497DN011	265.3894	301.1668	995.701	980433.02	980789.60	-307.62	-48.96	111.59	-160.55	4.47	-156.079
050497DN012	265.3570	301.1789	996.733	980432.86	980789.60	-307.94	-48.80	111.71	-160.51	4.48	-156.029
050497DN013	265.3202	301.1874	996.644	980432.92	980789.60	-307.91	-48.77	111.70	-160.47	4.52	-155.946
050497DN014	265.2809	301.1962	997.371	980432.87	980789.60	-308.13	-48.60	111.78	-160.38	4.53	-155.848
050497DN015	265.2385	301.2095	997.364	980432.81	980789.60	-308.13	-48.66	111.78	-160.44	4.55	-155.894
050497DN016	265.2090	301.2283	997.459	980432.78	980789.60	-308.16	-48.66	111.79	-160.45	4.55	-155.895
050497DN017	265.1862	301.2469	997.726	980432.74	980789.70	-308.24	-48.72	111.82	-160.54	4.53	-156.015
050497DN018	265.1587	301.2784	997.709	980432.69	980789.70	-308.24	-48.77	111.82	-160.59	4.51	-156.078
050497DN019	265.1373	301.3057	997.662	980432.74	980789.70	-308.22	-48.74	111.81	-160.56	4.52	-156.040
050497DN020	265.1184	301.3328	997.570	980432.85	980789.80	-308.19	-48.76	111.80	-160.57	4.52	-156.042
050497DN021	265.0979	301.3618	998.032	980432.82	980789.80	-308.34	-48.64	111.85	-160.50	4.50	-155.992
050497DN022	265.0780	301.3880	997.734	980432.75	980789.80	-308.25	-48.80	111.82	-160.62	4.52	-156.108
050497DN023	265.0579	301.4154	998.079	980432.72	980789.80	-308.35	-48.73	111.86	-160.59	4.52	-156.071
050497DN024	265.0358	301.4396	998.198	980432.71	980789.80	-308.39	-48.70	111.87	-160.57	4.57	-156.004
050497DN025	265.0115	301.4624	998.176	980432.68	980789.80	-308.38	-48.74	111.87	-160.61	4.56	-156.050
050497DN026	264.9692	301.4905	998.313	980432.83	980789.90	-308.42	-48.65	111.89	-160.54	4.58	-155.961
050597DN027	264.9708	301.4900	998.427	980432.67	980789.90	-308.46	-48.77	111.90	-160.67	4.58	-156.089
050597DN028	264.9292	301.5096	998.364	980432.80	980789.90	-308.44	-48.66	111.89	-160.55	4.62	-155.935

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
050597DN029	264.8863	301.5228	997.726	980432.86	980789.90	-308.24	-48.80	111.82	-160.62	4.61	-156.012
050597DN030	264.8490	301.5288	997.597	980432.94	980789.90	-308.20	-48.76	111.81	-160.56	4.58	-155.984
050597DN031	264.7927	301.5346	997.036	980432.92	980789.90	-308.03	-48.95	111.74	-160.69	4.60	-156.097
050597DN032	264.7521	301.5374	997.035	980433.01	980789.90	-308.03	-48.86	111.74	-160.60	4.58	-156.023
050897DN033	264.8567	301.5279	997.700	980432.75	980789.90	-308.23	-48.92	111.82	-160.73	4.61	-156.126
050897DN034	264.7914	301.5349	997.142	980432.98	980789.90	-308.06	-48.86	111.75	-160.62	4.59	-156.030
050897DN035	264.7333	301.5386	996.654	980433.09	980789.90	-307.91	-48.90	111.70	-160.60	4.57	-156.034
050897DN036	264.6851	301.5385	996.245	980433.17	980789.90	-307.79	-48.94	111.65	-160.60	4.57	-156.024
050897DN037	264.6441	301.5456	995.999	980433.13	980789.90	-307.71	-49.06	111.63	-160.69	4.54	-156.151
050897DN038	264.6018	301.5428	995.781	980433.26	980789.90	-307.64	-49.00	111.60	-160.60	4.56	-156.047
050897DN039	264.5539	301.5379	995.655	980433.41	980789.90	-307.60	-48.89	111.59	-160.47	4.52	-155.948
050897DN040	264.5016	301.5293	994.262	980433.58	980789.90	-307.17	-49.15	111.43	-160.58	4.56	-156.024
050897DN041	264.4583	301.5208	992.308	980433.92	980789.90	-306.57	-49.41	111.21	-160.62	4.55	-156.068
050897DN042	264.4116	301.5091	989.665	980434.34	980789.80	-305.75	-49.71	110.92	-160.63	4.58	-156.049
050897DN043	264.3611	301.4973	986.091	980434.90	980789.80	-304.65	-50.25	110.52	-160.77	4.67	-156.098
050897DN044	264.3286	301.5001	985.178	980435.07	980789.80	-304.37	-50.36	110.41	-160.77	4.70	-156.073
050897DN045	264.2645	301.5421	985.228	980435.31	980789.90	-304.39	-50.20	110.42	-160.62	4.67	-155.951
050897DN046	264.2801	301.5851	986.933	980435.16	980789.90	-304.91	-49.83	110.61	-160.44	4.61	-155.832
050897DN047	264.3252	301.5903	988.813	980434.72	980789.90	-305.49	-49.69	110.82	-160.51	4.57	-155.934
050997DN048	264.3507	301.6122	990.876	980434.40	980789.90	-306.13	-49.37	111.05	-160.42	4.55	-155.872
050997DN049	264.3717	301.6406	992.228	980434.02	980789.90	-306.55	-49.33	111.20	-160.54	4.54	-155.997
050997DN050	264.3968	301.6749	994.294	980433.75	980790.00	-307.18	-49.07	111.44	-160.50	4.55	-155.956
050997DN051	264.4201	301.7081	995.675	980433.51	980790.00	-307.61	-48.88	111.59	-160.47	4.58	-155.890
050997DN052	264.4434	301.7392	996.909	980433.19	980790.00	-307.99	-48.82	111.73	-160.55	4.69	-155.864
050997DN053	264.4722	301.7786	998.117	980432.97	980790.10	-308.36	-48.77	111.86	-160.64	4.78	-155.857
050997DN054	264.5003	301.8070	998.618	980432.75	980790.10	-308.52	-48.83	111.92	-160.75	4.89	-155.861
050997DN055	264.6534	301.7390	998.795	980432.76	980790.10	-308.57	-48.77	111.94	-160.71	4.90	-155.814
050997DN056	264.6461	301.7721	998.603	980432.55	980790.10	-308.51	-49.04	111.92	-160.95	4.97	-155.988
050997DN057	264.6573	301.8043	998.126	980432.61	980790.10	-308.37	-49.12	111.86	-160.98	5.06	-155.922
050997DN058	264.6501	301.8288	997.629	980432.58	980790.10	-308.21	-49.31	111.81	-161.12	5.14	-155.980
050997DN059	264.6654	301.8704	998.279	980432.41	980790.10	-308.41	-49.28	111.88	-161.16	5.27	-155.890

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
050997DN060	264.6643	301.9260	997.776	980432.35	980790.20	-308.26	-49.59	111.83	-161.41	5.54	-155.869
050997DN061	264.6661	301.9663	997.812	980432.42	980790.30	-308.27	-49.61	111.83	-161.44	5.80	-155.637
050997DN062	264.6680	302.0036	997.690	980432.13	980790.30	-308.23	-49.94	111.82	-161.76	6.13	-155.626
050997DN063	264.6715	302.0537	995.817	980431.97	980790.30	-307.65	-50.68	111.61	-162.29	6.78	-155.509
050997DN064	264.6748	302.1017	994.271	980431.53	980790.30	-307.18	-51.59	111.43	-163.03	8.15	-154.874
051297DN065	264.7997	302.0420	997.743	980431.53	980790.30	-308.25	-50.52	111.82	-162.34	7.41	-154.936
051297DN066	264.8006	302.0049	996.313	980431.87	980790.30	-307.81	-50.62	111.66	-162.28	6.86	-155.420
051297DN068	264.8117	301.9368	998.871	980431.90	980790.20	-308.60	-49.70	111.95	-161.65	5.95	-155.698
051297DN069	264.8136	301.9092	998.228	980432.07	980790.20	-308.40	-49.73	111.88	-161.61	5.75	-155.853
051297DN070	264.8157	301.8850	998.625	980432.16	980790.20	-308.52	-49.52	111.92	-161.44	5.62	-155.820
051597DN071	264.8166	301.8283	997.616	980432.20	980790.10	-308.21	-49.69	111.81	-161.49	5.34	-156.156
051597DN072	264.8221	301.7882	998.164	980432.39	980790.10	-308.38	-49.33	111.87	-161.20	5.17	-156.027
051597DN073	264.8224	301.7473	998.252	980432.45	980790.10	-308.41	-49.24	111.88	-161.12	5.04	-156.083
051597DN074	264.8198	301.7053	998.060	980432.37	980790.00	-308.35	-49.28	111.86	-161.13	4.93	-156.208
051597DN075	264.8136	301.6462	998.219	980432.50	980790.00	-308.40	-49.10	111.87	-160.98	4.77	-156.207
051597DN076	264.8099	301.6220	998.030	980432.58	980789.90	-308.34	-48.98	111.85	-160.84	4.71	-156.128
051597DN077	264.8071	301.5842	996.229	980432.98	980789.90	-307.78	-49.14	111.65	-160.79	4.66	-156.134
051597DN078	264.8027	301.5210	995.506	980433.16	980789.90	-307.56	-49.18	111.57	-160.75	4.59	-156.154
051597DN079	264.8073	301.4963	994.905	980433.19	980789.90	-307.37	-49.34	111.50	-160.85	4.57	-156.276
051597DN080	264.7980	301.4706	994.381	980433.12	980789.80	-307.21	-49.47	111.45	-160.92	4.56	-156.361
051597DN081	264.7958	301.4447	993.956	980433.19	980789.80	-307.08	-49.53	111.40	-160.92	4.55	-156.369
051597DN082	264.7933	301.4171	994.538	980433.22	980789.80	-307.26	-49.32	111.46	-160.78	4.54	-156.248
051597DN083	264.7950	301.3889	993.872	980433.14	980789.80	-307.05	-49.61	111.39	-160.99	4.55	-156.443
052897DN084	264.6454	301.7128	998.556	980432.81	980790.00	-308.50	-48.69	111.91	-160.60	4.82	-155.781
052897DN085	264.6444	301.6855	998.152	980432.92	980790.00	-308.37	-48.71	111.87	-160.58	4.75	-155.833
052897DN086	264.6457	301.6565	997.438	980433.10	980790.00	-308.15	-48.75	111.79	-160.53	4.67	-155.863
052897DN087	264.6481	301.6326	996.107	980433.31	980789.90	-307.74	-48.85	111.64	-160.49	4.65	-155.834
052897DN088	264.6424	301.5906	995.705	980433.20	980789.90	-307.62	-49.08	111.59	-160.67	4.59	-156.080
052997DN089	265.5427	302.1269	1004.871	980428.69	980790.40	-310.45	-51.26	112.62	-163.88	8.66	-155.223
052997DN090	265.5423	302.0973	1002.080	980429.12	980790.40	-309.59	-51.69	112.31	-163.99	8.41	-155.582
052997DN091	265.5365	302.0707	1002.627	980429.54	980790.40	-309.76	-51.10	112.37	-163.46	7.95	-155.514

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
052997DN092	265.5336	302.0435	1001.079	980429.92	980790.30	-309.28	-51.10	112.19	-163.29	7.75	-155.547
052997DN093	265.5254	302.0166	1000.982	980430.24	980790.30	-309.25	-50.81	112.18	-163.00	7.43	-155.569
052997DN094	265.5243	301.9825	1000.398	980430.59	980790.30	-309.07	-50.64	112.12	-162.75	7.14	-155.615
052997DN095	265.5203	301.9458	999.881	980431.00	980790.30	-308.91	-50.39	112.06	-162.45	6.86	-155.581
052997DN096	265.5273	301.9083	1000.216	980431.07	980790.20	-309.01	-50.12	112.10	-162.22	6.58	-155.642
060797DN097	265.5243	301.8634	1000.155	980431.44	980790.20	-308.99	-49.77	112.09	-161.86	6.29	-155.576
060797DN098	265.5112	301.8245	1001.260	980431.37	980790.10	-309.33	-49.40	112.22	-161.61	5.98	-155.633
060797DN099	265.5141	301.7816	1001.417	980431.55	980790.10	-309.38	-49.17	112.23	-161.40	5.75	-155.655
060797DN100	265.5130	301.7429	1000.953	980431.80	980790.10	-309.24	-49.06	112.18	-161.24	5.61	-155.628
060797DN101	265.4970	301.6914	1001.351	980431.98	980790.10	-309.36	-48.76	112.23	-160.98	5.35	-155.627
060797DN102	265.5016	301.6202	1001.852	980431.87	980790.00	-309.52	-48.61	112.28	-160.89	5.10	-155.792
063097DN103	264.2999	301.0388	995.732	980430.98	980789.40	-307.63	-50.79	111.60	-162.38	5.94	-156.447
063097DN104	264.2639	301.0830	995.466	980431.33	980789.50	-307.55	-50.62	111.57	-162.19	5.67	-156.517
063097DN105	264.2213	301.1339	996.370	980431.18	980789.50	-307.82	-50.50	111.67	-162.16	5.34	-156.825
063097DN106	264.3448	300.9870	996.036	980431.31	980789.40	-307.72	-50.37	111.63	-162.00	5.91	-156.084
063097DN107	264.4317	300.8817	996.748	980431.43	980789.30	-307.94	-49.93	111.71	-161.64	6.40	-155.248
063097DN108	264.3945	300.9270	996.367	980431.69	980789.40	-307.82	-49.89	111.67	-161.56	6.17	-155.389
063097DN109	264.4612	300.8460	996.943	980431.77	980789.30	-308.00	-49.53	111.73	-161.26	6.72	-154.545
063097DN110	264.1798	301.1835	996.968	980431.94	980789.60	-308.01	-49.65	111.73	-161.39	4.93	-156.463
070297DN111	264.0116	301.3744	993.688	980433.03	980789.70	-307.00	-49.67	111.37	-161.04	4.59	-156.449
070297DN112	263.9430	301.4600	991.860	980433.71	980789.80	-306.43	-49.66	111.16	-160.82	4.58	-156.240
070297DN113	263.9010	301.5085	991.643	980433.97	980789.80	-306.37	-49.46	111.14	-160.59	4.48	-156.118
070297DN114	263.8628	301.5684	991.684	980434.18	980789.90	-306.38	-49.34	111.14	-160.49	4.34	-156.147
070297DN115	263.8191	301.6269	991.410	980434.45	980789.90	-306.29	-49.16	111.11	-160.27	4.32	-155.952
070297DN116	263.7763	301.6916	991.297	980434.51	980789.90	-306.26	-49.13	111.10	-160.23	4.25	-155.986
070297DN117	263.7374	301.7434	992.257	980434.56	980790.00	-306.55	-48.89	111.21	-160.09	4.15	-155.938
070297DN118	263.6879	301.7997	991.916	980434.74	980790.10	-306.45	-48.91	111.17	-160.08	4.15	-155.935
070297DN119	263.6517	301.8410	991.755	980434.92	980790.10	-306.40	-48.78	111.15	-159.94	4.09	-155.847
070397DN120	263.4952	302.0133	990.572	980435.33	980790.20	-306.03	-48.84	111.02	-159.86	4.03	-155.831
070397DN121	263.4342	302.0658	989.761	980435.57	980790.30	-305.78	-48.95	110.93	-159.87	4.04	-155.837
070397DN122	263.3736	302.1028	989.629	980435.64	980790.30	-305.74	-48.92	110.91	-159.83	4.01	-155.822

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
070397DN123	263.2982	302.1327	989.192	980435.62	980790.30	-305.61	-49.07	110.86	-159.93	3.98	-155.954
070397DN124	263.2438	302.1465	989.232	980435.61	980790.30	-305.62	-49.07	110.87	-159.94	3.95	-155.994
070497DN125	263.0668	302.1389	988.877	980435.81	980790.30	-305.51	-48.98	110.83	-159.81	3.81	-155.999
070497DN126	263.0082	302.1121	988.863	980435.74	980790.30	-305.51	-49.05	110.83	-159.88	3.76	-156.120
070497DN127	262.9353	302.0839	989.592	980435.62	980790.30	-305.73	-48.95	110.91	-159.86	3.70	-156.156
070497DN128	262.8858	302.0381	988.911	980435.51	980790.20	-305.52	-49.17	110.83	-160.00	3.69	-156.313
070497DN129	262.8331	301.9927	989.043	980435.46	980790.20	-305.56	-49.18	110.85	-160.03	3.65	-156.379
070497DN130	262.7690	301.9286	988.500	980435.39	980790.10	-305.40	-49.31	110.79	-160.09	3.63	-156.467
070497DN131	262.6789	301.8965	988.834	980435.41	980790.10	-305.50	-49.19	110.82	-160.01	3.60	-156.408
070597DN132	266.3301	300.9361	995.493	980432.92	980789.40	-307.55	-48.93	111.57	-160.50	4.86	-155.632
070597DN133	266.3811	300.9058	996.982	980432.84	980789.40	-308.01	-48.55	111.74	-160.28	4.58	-155.704
070597DN134	266.0884	300.8828	996.727	980433.00	980789.40	-307.93	-48.47	111.71	-160.18	4.39	-155.789
070697DN135	263.0659	302.4771	982.221	980437.24	980790.60	-303.46	-49.90	110.08	-159.99	4.52	-155.469
070697DN136	263.0591	302.4027	982.227	980437.18	980790.50	-303.46	-49.86	110.08	-159.95	4.31	-155.637
070697DN137	263.0502	302.3296	982.226	980437.15	980790.40	-303.46	-49.79	110.08	-159.87	4.20	-155.672
070697DN138	263.0412	302.2542	981.562	980437.28	980790.40	-303.25	-49.87	110.01	-159.88	4.13	-155.753
070697DN139	263.0400	302.1887	987.819	980435.82	980790.30	-305.18	-49.30	110.71	-160.01	3.86	-156.155
070697DN140	263.0320	302.0514	991.448	980435.11	980790.20	-306.30	-48.79	111.12	-159.90	3.69	-156.215
070697DN141	263.0247	301.9867	992.401	980434.78	980790.20	-306.60	-48.82	111.22	-160.04	3.64	-156.395
070697DN142	263.0197	301.9126	993.455	980434.41	980790.10	-306.92	-48.77	111.34	-160.12	3.62	-156.495
070697DN143	263.0155	301.8376	994.675	980434.05	980790.10	-307.30	-48.75	111.48	-160.23	3.62	-156.616
070697DN144	263.0090	301.7628	994.032	980433.91	980790.00	-307.10	-48.99	111.41	-160.39	3.66	-156.737
070697DN145	263.0049	301.6896	995.668	980433.39	980789.90	-307.61	-48.90	111.59	-160.49	3.70	-156.784
070697DN146	262.9856	301.6188	995.809	980433.25	980789.90	-307.65	-49.00	111.60	-160.61	3.78	-156.825
070697DN147	262.9628	301.5536	992.792	980433.61	980789.80	-306.72	-49.47	111.27	-160.74	3.97	-156.765
070697DN148	262.9453	301.4772	988.884	980434.31	980789.80	-305.51	-49.98	110.83	-160.81	4.10	-156.705
071497DN150	262.6167	301.8573	988.447	980435.18	980790.10	-305.38	-49.54	110.78	-160.32	3.61	-156.702
071497DN151	262.9432	301.4764	988.254	980434.39	980789.80	-305.32	-50.09	110.76	-160.85	4.11	-156.742
071497DN152	262.9418	301.4050	988.299	980434.09	980789.70	-305.33	-50.28	110.76	-161.04	4.27	-156.773
071497DN153	262.9361	301.3385	986.923	980434.08	980789.60	-304.91	-50.61	110.61	-161.22	4.46	-156.767
071497DN154	262.9181	301.2674	987.308	980433.93	980789.60	-305.03	-50.64	110.65	-161.29	4.70	-156.592

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
071497DN155	262.9044	301.1969	986.117	980433.78	980789.50	-304.66	-51.06	110.52	-161.58	5.09	-156.491
071497DN156	262.8926	301.1267	986.225	980433.44	980789.40	-304.69	-51.27	110.53	-161.80	5.47	-156.324
071497DN157	262.8867	301.0728	988.493	980432.67	980789.40	-305.39	-51.34	110.79	-162.13	5.77	-156.362
073097DN158	264.6742	302.1013	993.610	980431.50	980790.30	-306.97	-51.83	111.36	-163.19	8.16	-155.033
073097DN159	264.6715	302.0524	996.096	980431.92	980790.30	-307.74	-50.64	111.64	-162.28	6.76	-155.517
073097DN160	264.6664	301.9916	997.289	980432.13	980790.30	-308.11	-50.06	111.77	-161.83	5.99	-155.834
073097DN161	264.6635	301.9255	997.694	980432.32	980790.20	-308.23	-49.65	111.82	-161.46	5.54	-155.919
073097DN162	264.6558	301.8741	998.218	980432.41	980790.10	-308.39	-49.30	111.87	-161.18	5.27	-155.910
073097DN163	264.6566	301.7963	998.512	980432.65	980790.10	-308.49	-48.96	111.91	-160.87	5.04	-155.829
073097DN164	264.6525	301.7389	998.782	980432.61	980790.10	-308.57	-48.92	111.94	-160.86	4.90	-155.957
073097DN165	264.6449	301.6728	998.086	980432.76	980790.00	-308.35	-48.89	111.86	-160.75	4.71	-156.047
073097DN166	264.6341	301.6317	996.363	980433.15	980789.90	-307.82	-48.93	111.67	-160.59	4.63	-155.961
080297DN167	262.3399	302.5835	987.489	980435.13	980790.60	-305.08	-50.39	110.67	-161.06	5.21	-155.852
080297DN168	262.3174	302.5208	984.484	980436.03	980790.60	-304.16	-50.41	110.34	-160.75	5.01	-155.737
080297DN169	262.3669	302.5117	983.472	980436.30	980790.60	-303.84	-50.46	110.22	-160.68	4.88	-155.807
080297DN170	262.4132	302.4968	982.901	980436.59	980790.60	-303.67	-50.34	110.16	-160.50	4.75	-155.748
080297DN171	262.4797	302.4752	982.531	980436.63	980790.50	-303.55	-50.32	110.12	-160.43	4.59	-155.842
080297DN172	262.5478	302.4536	982.378	980436.80	980790.50	-303.51	-50.19	110.10	-160.29	4.45	-155.839
080297DN173	262.6268	302.4202	983.339	980436.77	980790.50	-303.80	-49.93	110.21	-160.14	4.26	-155.879
080297DN174	262.2986	302.4793	982.938	980436.43	980790.50	-303.68	-50.39	110.16	-160.55	4.96	-155.593
080297DN175	262.2723	302.4144	982.312	980436.73	980790.50	-303.48	-50.29	110.09	-160.39	4.75	-155.642
080297DN176	262.2445	302.3510	981.819	980436.70	980790.40	-303.33	-50.37	110.04	-160.41	4.63	-155.778
080697DN177	263.4812	302.5632	992.926	980433.96	980790.60	-306.76	-49.88	111.28	-161.16	5.73	-155.430
080697DN178	263.4329	302.3896	981.527	980436.60	980790.50	-303.24	-50.66	110.01	-160.67	4.88	-155.788
080697DN179	263.4286	302.3167	982.744	980436.51	980790.40	-303.62	-50.27	110.14	-160.41	4.59	-155.817
080697DN180	263.4222	302.2454	984.543	980436.42	980790.40	-304.17	-49.81	110.34	-160.15	4.40	-155.757
080697DN181	263.4366	302.1652	987.508	980435.71	980790.30	-305.09	-49.50	110.68	-160.18	4.20	-155.980
080697DN182	263.4302	301.9931	990.071	980435.26	980790.20	-305.88	-49.06	110.96	-160.02	4.00	-156.023
080697DN183	263.4270	301.9311	993.933	980434.45	980790.10	-307.07	-48.58	111.39	-159.98	3.87	-156.105
080697DN184	263.4154	301.8603	996.645	980433.85	980790.10	-307.91	-48.34	111.70	-160.04	3.85	-156.192
080697DN185	263.4145	301.8130	997.409	980433.71	980790.10	-308.14	-48.25	111.78	-160.03	3.80	-156.239

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
080697DN186	263.4139	301.7417	1000.927	980432.70	980790.00	-309.23	-48.07	112.18	-160.25	3.79	-156.458
083197DN187	263.3867	301.6381	1008.173	980430.84	980789.90	-311.47	-47.59	112.99	-160.58	3.80	-156.780
083197DN188	263.3809	301.5662	1009.457	980430.37	980789.80	-311.86	-47.57	113.13	-160.70	3.77	-156.933
083197DN189	263.3815	301.4957	1011.019	980429.88	980789.80	-312.35	-47.57	113.31	-160.87	3.82	-157.053
083197DN190	263.3853	301.4234	1011.494	980429.60	980789.80	-312.49	-47.71	113.36	-161.07	3.91	-157.158
083197DN191	263.3904	301.3529	1012.048	980429.21	980789.70	-312.66	-47.83	113.42	-161.26	4.07	-157.184
083197DN192	263.4086	301.2756	1010.491	980429.24	980789.60	-312.18	-48.18	113.25	-161.43	4.31	-157.118
090597DN193	260.7755	300.1803	978.582	980432.43	980788.60	-302.34	-53.83	109.68	-163.51	7.40	-156.112
090797DN194	264.0142	302.3858	996.704	980433.14	980790.50	-307.93	-49.43	111.71	-161.13	6.15	-154.986
090797DN195	265.7035	301.0563	998.011	980432.40	980789.50	-308.33	-48.77	111.85	-160.62	4.71	-155.902
090797DN196	265.6259	301.2083	998.331	980432.46	980789.60	-308.43	-48.71	111.89	-160.60	4.50	-156.101
090897DN197	266.0490	300.8600	996.427	980432.84	980789.40	-307.84	-48.72	111.67	-160.39	4.29	-156.097
090997DN198	261.9406	300.9954	994.055	980432.35	980789.30	-307.11	-49.84	111.41	-161.24	4.47	-156.777
090997DN199	261.2429	300.7803	996.005	980430.33	980789.10	-307.71	-51.06	111.63	-162.69	6.36	-156.334
090997DN200	261.7711	301.6798	998.306	980431.89	980789.90	-308.42	-49.59	111.88	-161.48	4.86	-156.617
090997DN201	266.0850	300.8697	994.745	980433.25	980789.40	-307.32	-48.83	111.49	-160.31	4.42	-155.892
090997DN202	265.9766	300.8188	993.737	980433.44	980789.40	-307.01	-48.95	111.37	-160.32	4.44	-155.881
090997DN203	265.9114	300.8687	995.980	980433.02	980789.40	-307.70	-48.68	111.62	-160.31	4.67	-155.636
090997DN204	266.4867	300.3078	1006.433	980430.18	980788.90	-310.93	-47.79	112.79	-160.58	4.00	-156.579
090997DN205	263.1433	301.1463	997.685	980431.34	980789.50	-308.23	-49.93	111.81	-161.74	5.26	-156.487
091197DN207	266.5217	300.4471	1005.814	980430.78	980789.10	-310.74	-47.58	112.72	-160.31	4.07	-156.238
091197DN208	266.2004	301.7608	1004.018	980429.21	980790.10	-310.18	-50.71	112.52	-163.23	7.47	-155.760
091197DN209	266.1743	301.6909	1002.165	980430.07	980790.10	-309.61	-50.42	112.32	-162.73	6.78	-155.952
091197DN210	266.1468	301.6208	1003.417	980430.34	980790.00	-310.00	-49.66	112.46	-162.12	6.19	-155.924
091197DN211	266.1103	301.5541	1004.412	980430.37	980789.90	-310.31	-49.22	112.57	-161.79	5.70	-156.087
091197DN212	266.0762	301.4684	1004.338	980430.93	980789.90	-310.28	-48.69	112.56	-161.25	5.29	-155.955
091197DN213	266.5321	301.3398	1006.301	980429.81	980789.80	-310.89	-49.10	112.78	-161.88	5.77	-156.110
091197DN214	266.0764	301.3555	1003.521	980431.37	980789.80	-310.03	-48.40	112.47	-160.86	4.94	-155.923
091897DN215	259.4446	300.1918	975.871	980433.77	980788.60	-301.50	-53.33	109.37	-162.70	5.62	-157.080
091897DN216	259.6023	300.0735	976.135	980432.80	980788.40	-301.58	-54.02	109.40	-163.43	6.47	-156.956
091897DN217	259.8064	300.0201	976.612	980432.12	980788.40	-301.73	-54.55	109.46	-164.00	7.25	-156.747

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
091897DN218	259.9703	300.0538	976.620	980432.04	980788.40	-301.73	-54.63	109.46	-164.09	7.75	-156.341
091897DN219	260.0479	300.0562	976.694	980431.89	980788.40	-301.75	-54.76	109.46	-164.22	7.93	-156.288
091897DN220	260.1015	300.0267	976.648	980431.67	980788.40	-301.74	-54.99	109.46	-164.45	7.76	-156.688
091897DN221	260.0807	299.9979	973.069	980432.09	980788.40	-300.63	-55.68	109.06	-164.74	8.19	-156.557
091897DN222	260.1225	299.9828	973.007	980431.97	980788.40	-300.61	-55.82	109.05	-164.87	8.24	-156.634
091897DN223	260.1635	300.0081	974.403	980431.90	980788.40	-301.04	-55.46	109.21	-164.67	8.06	-156.613
091897DN224	260.2108	299.9842	974.650	980431.58	980788.40	-301.12	-55.70	109.24	-164.94	8.01	-156.926
091897DN225	260.9945	300.1901	979.148	980432.33	980788.60	-302.51	-53.76	109.74	-163.50	6.98	-156.523
091897DN226	261.0519	300.1995	978.846	980432.33	980788.60	-302.42	-53.85	109.71	-163.55	7.00	-156.548
091897DN227	261.1158	300.1683	979.199	980431.96	980788.60	-302.53	-54.11	109.75	-163.86	7.19	-156.664
092197DN228	261.1801	300.1355	979.733	980431.61	980788.60	-302.69	-54.30	109.81	-164.11	7.52	-156.589
092197DN229	261.2551	300.1403	979.411	980431.49	980788.60	-302.59	-54.52	109.77	-164.28	7.69	-156.595
092197DN230	261.3510	300.1518	979.608	980431.40	980788.60	-302.65	-54.55	109.79	-164.34	7.90	-156.440
092197DN231	261.4285	300.1614	979.062	980431.37	980788.60	-302.48	-54.75	109.73	-164.48	8.08	-156.397
092197DN232	261.4933	300.1842	979.591	980431.23	980788.60	-302.65	-54.72	109.79	-164.51	8.07	-156.444
092197DN233	261.5426	300.2857	979.633	980432.02	980788.70	-302.66	-54.02	109.79	-163.81	7.40	-156.411
092197DN234	261.6005	300.3543	980.195	980432.38	980788.80	-302.83	-53.59	109.86	-163.45	6.90	-156.548
092197DN235	261.4820	300.3153	979.005	980432.47	980788.80	-302.47	-53.86	109.72	-163.58	7.12	-156.460
092197DN236	261.4069	300.2976	978.966	980432.58	980788.80	-302.45	-53.77	109.72	-163.49	7.07	-156.416
092197DN237	261.3311	300.2736	978.723	980432.46	980788.70	-302.38	-53.86	109.69	-163.56	6.99	-156.570
091997DN238	261.1691	300.2665	978.401	980432.64	980788.70	-302.28	-53.78	109.66	-163.44	6.94	-156.496
091997DN239	261.0803	300.2470	978.673	980432.62	980788.70	-302.36	-53.72	109.69	-163.41	6.92	-156.489
091997DN240	261.2625	300.5769	991.609	980431.24	980788.90	-306.36	-51.30	111.13	-162.43	5.84	-156.598
091997DN241	261.3991	300.6912	991.995	980431.63	980789.10	-306.47	-51.00	111.18	-162.17	5.52	-156.652
091997DN242	261.5525	300.8047	993.192	980431.79	980789.10	-306.84	-50.47	111.31	-161.78	5.03	-156.755
091997DN243	261.7109	300.9319	993.971	980432.04	980789.30	-307.08	-50.18	111.40	-161.58	4.64	-156.936
091997DN244	261.8876	301.0763	995.041	980432.32	980789.40	-307.41	-49.67	111.52	-161.19	4.29	-156.896
091997DN245	262.0182	301.1851	996.041	980432.30	980789.40	-307.72	-49.38	111.63	-161.01	4.27	-156.747
091997DN246	262.1745	301.3132	996.754	980432.58	980789.60	-307.94	-49.08	111.71	-160.79	3.90	-156.896
092297DN247	262.1032	300.7953	987.602	980432.59	980789.10	-305.12	-51.39	110.69	-162.08	5.74	-156.344
092297DN248	261.9915	300.9147	992.164	980432.49	980789.30	-306.53	-50.28	111.20	-161.48	4.70	-156.784

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
092297DN249	261.8166	301.1528	994.795	980432.35	980789.40	-307.34	-49.71	111.49	-161.20	4.44	-156.765
092297DN250	261.7423	301.2183	993.411	980432.29	980789.50	-306.91	-50.30	111.34	-161.63	4.75	-156.886
092297DN251	261.6807	301.2889	992.634	980432.56	980789.50	-306.67	-50.27	111.25	-161.52	5.01	-156.507
092297DN252	261.6421	301.3577	993.530	980432.33	980789.60	-306.95	-50.32	111.35	-161.67	5.17	-156.493
092297DN253	261.5694	301.3831	992.757	980432.00	980789.60	-306.71	-50.89	111.26	-162.15	6.04	-156.117
092297DN254	261.4435	301.0579	991.559	980431.65	980789.30	-306.34	-51.31	111.13	-162.44	6.72	-155.723
092297DN255	261.5328	301.0167	992.727	980431.88	980789.30	-306.70	-50.72	111.26	-161.98	5.32	-156.662
092897DN256	266.3298	300.9361	996.710	980432.75	980789.40	-307.93	-48.72	111.71	-160.42	4.79	-155.632
092897DN257	266.3806	300.9064	995.898	980432.89	980789.40	-307.68	-48.83	111.61	-160.44	4.59	-155.847
092897DN259	266.0887	300.8830	996.455	980432.96	980789.40	-307.85	-48.59	111.68	-160.27	4.40	-155.868
092897DN261	266.0483	300.8603	996.225	980432.88	980789.40	-307.78	-48.74	111.65	-160.39	4.30	-156.088
092897DN263	260.7755	300.1803	978.564	980432.37	980788.60	-302.33	-53.90	109.67	-163.58	7.40	-156.178
092897DN265	261.7713	301.6801	998.421	980431.81	980789.90	-308.46	-49.63	111.90	-161.53	4.86	-156.667
092997DN267	261.4938	300.8789	993.036	980431.80	980789.20	-306.80	-50.60	111.29	-161.89	5.21	-156.680
092997DN268	261.6168	300.7459	992.472	980431.93	980789.10	-306.62	-50.55	111.23	-161.78	4.98	-156.799
092997DN269	261.6700	300.6552	991.477	980431.81	980789.00	-306.31	-50.88	111.12	-162.00	5.19	-156.811
092997DN270	261.3851	300.5442	991.038	980431.54	980788.90	-306.18	-51.18	111.07	-162.25	5.69	-156.566
092997DN271	264.4014	301.0456	997.364	980431.23	980789.40	-308.13	-50.04	111.78	-161.82	5.54	-156.274
092997DN273	264.5588	301.2128	992.851	980432.89	980789.60	-306.74	-49.97	111.27	-161.24	4.75	-156.492
092997DN274	264.6991	301.1485	992.550	980432.79	980789.60	-306.65	-50.16	111.24	-161.40	4.89	-156.505
092997DN275	264.8052	301.0896	992.677	980432.74	980789.50	-306.68	-50.08	111.25	-161.33	5.13	-156.201
093097DN276	264.5073	301.2573	992.202	980433.19	980789.60	-306.54	-49.87	111.20	-161.08	4.71	-156.362
093097DN277	264.4291	301.3096	992.941	980433.14	980789.70	-306.77	-49.79	111.28	-161.08	4.69	-156.385
093097DN278	264.2793	301.3883	992.682	980433.35	980789.80	-306.69	-49.76	111.25	-161.01	4.61	-156.398
093097DN279	264.3102	301.2523	995.694	980432.48	980789.60	-307.62	-49.50	111.59	-161.10	4.70	-156.394
093097DN280	264.3208	301.1480	996.873	980431.91	980789.60	-307.98	-49.71	111.72	-161.43	5.15	-156.281
093097DN281	264.2372	301.0116	996.565	980431.10	980789.40	-307.88	-50.42	111.69	-162.11	5.90	-156.208
093097DN282	264.1170	301.1073	996.408	980431.45	980789.50	-307.84	-50.21	111.67	-161.88	5.38	-156.501
100197DN283	264.0202	301.5519	992.982	980433.80	980789.90	-306.78	-49.32	111.29	-160.60	4.37	-156.232
100197DN284	263.9645	301.6770	991.293	980434.38	980789.90	-306.26	-49.26	111.10	-160.36	4.33	-156.037
100197DN285	263.9361	301.8195	986.937	980435.67	980790.10	-304.91	-49.52	110.61	-160.14	4.42	-155.716

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
100197DN286	263.8641	301.9219	985.636	980435.92	980790.10	-304.51	-49.67	110.47	-160.14	4.46	-155.681
100197DN287	263.8063	301.9802	985.128	980436.09	980790.20	-304.35	-49.76	110.41	-160.16	4.46	-155.701
100197DN288	263.7396	302.0324	985.149	980436.24	980790.30	-304.36	-49.70	110.41	-160.11	4.45	-155.654
100197DN289	263.6312	302.1011	984.977	980436.19	980790.30	-304.31	-49.80	110.39	-160.19	4.43	-155.765
100197DN290	262.6588	301.7519	987.989	980435.02	980789.90	-305.24	-49.64	110.73	-160.37	3.66	-156.709
100197DN291	262.7005	301.6161	987.882	980434.92	980789.90	-305.20	-49.78	110.72	-160.50	3.78	-156.725
100197DN292	262.6872	301.4265	983.872	980435.26	980789.70	-303.97	-50.47	110.27	-160.74	4.14	-156.601
100197DN293	262.8216	301.4862	987.117	980434.76	980789.80	-304.97	-50.07	110.63	-160.70	4.02	-156.684
100197DN294	263.0226	301.3854	993.575	980433.13	980789.70	-306.96	-49.61	111.35	-160.97	4.21	-156.762
100197DN295	263.4658	301.3639	1012.579	980429.04	980789.70	-312.83	-47.83	113.48	-161.32	4.03	-157.285
100197DN296	263.5620	301.4118	1012.349	980429.22	980789.80	-312.76	-47.82	113.46	-161.27	3.98	-157.296
100197DN297	263.7357	301.4779	1008.294	980430.22	980789.80	-311.50	-48.08	113.00	-161.08	4.06	-157.018
032898DN304	262.3179	301.7410	985.270	980435.50	980789.90	-304.40	-50.00	110.42	-160.42	3.93	-156.497
032898DN305	262.2906	301.7887	985.100	980435.55	980790.00	-304.35	-50.10	110.41	-160.50	3.88	-156.623
032898DN306	262.2708	301.9133	980.460	980436.45	980790.10	-302.91	-50.74	109.89	-160.63	4.00	-156.621
032898DN307	262.1965	301.8743	978.630	980436.67	980790.00	-302.35	-50.98	109.68	-160.66	4.22	-156.440
032898DN308	262.1027	301.8186	977.770	980436.73	980790.00	-302.08	-51.19	109.59	-160.77	4.59	-156.184
032898DN309	262.3344	301.6011	989.070	980434.41	980789.80	-305.57	-49.82	110.85	-160.68	3.88	-156.794
032898DN310	262.3267	301.4912	990.950	980433.97	980789.80	-306.15	-49.68	111.06	-160.74	3.84	-156.901
032898DN311	262.2493	301.3840	996.460	980432.56	980789.60	-307.85	-49.19	111.68	-160.87	3.81	-157.053
032898DN312	262.1549	301.3063	997.290	980432.37	980789.60	-308.11	-49.12	111.77	-160.89	3.86	-157.031
032898DN313	262.0922	301.2549	997.290	980432.32	980789.50	-308.11	-49.07	111.77	-160.84	4.06	-156.784
032898DN314	262.1051	301.3856	995.810	980432.79	980789.60	-307.65	-49.16	111.60	-160.76	3.85	-156.917
032998DN315	262.0727	302.4150	986.710	980435.13	980790.50	-304.84	-50.53	110.59	-161.12	5.59	-155.528
032998DN316	261.9342	302.3355	988.740	980433.19	980790.40	-305.47	-51.74	110.81	-162.55	6.95	-155.601
032998DN317	261.8598	302.2258	989.310	980432.63	980790.30	-305.64	-52.03	110.88	-162.90	7.40	-155.503
032998DN319	261.9272	302.1823	981.960	980435.10	980790.30	-303.38	-51.82	110.05	-161.88	5.93	-155.950
032998DN320	262.0416	302.1236	979.790	980436.19	980790.30	-302.71	-51.40	109.81	-161.21	4.95	-156.259
032998DN321	261.8859	302.0574	980.230	980435.35	980790.20	-302.84	-52.01	109.86	-161.87	5.91	-155.960
032998DN322	262.0860	302.2813	981.340	980436.17	980790.40	-303.18	-51.05	109.98	-161.04	5.10	-155.943
032998DN323	262.0486	302.2218	979.860	980436.32	980790.30	-302.73	-51.25	109.82	-161.07	5.19	-155.882

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
033098DN324	262.2781	301.2831	993.780	980433.20	980789.60	-307.03	-49.37	111.38	-160.74	4.01	-156.732
033098DN325	262.3010	301.1483	987.570	980433.86	980789.40	-305.11	-50.43	110.68	-161.11	4.47	-156.640
033098DN326	262.4658	301.4056	985.050	980435.23	980789.70	-304.33	-50.14	110.40	-160.54	4.12	-156.421
033098DN327	262.4527	300.9245	980.270	980433.89	980789.30	-302.85	-52.56	109.87	-162.42	5.76	-156.663
033098DN328	262.5038	301.0981	981.930	980434.39	980789.40	-303.37	-51.64	110.05	-161.69	4.93	-156.754
033098DN329	262.4983	301.2565	980.410	980435.12	980789.60	-302.90	-51.58	109.88	-161.46	4.54	-156.921
033098DN330	262.6325	301.9143	988.750	980435.21	980790.10	-305.47	-49.42	110.81	-160.23	3.61	-156.628
033098DN331	262.7300	301.9954	987.440	980435.68	980790.20	-305.07	-49.45	110.67	-160.12	3.66	-156.463
033098DN332	262.7444	302.0960	981.480	980437.07	980790.30	-303.23	-50.00	110.00	-160.00	3.90	-156.108
033098DN333	262.7964	302.1689	981.260	980436.99	980790.30	-303.16	-50.15	109.98	-160.13	3.94	-156.189
041298DN334	262.4104	301.7796	983.130	980435.98	980790.00	-303.74	-50.28	110.19	-160.46	3.80	-156.663
041298DN335	262.3198	301.7396	985.630	980435.30	980789.90	-304.51	-50.09	110.46	-160.55	3.91	-156.643
041298DN336	262.2887	301.7906	985.130	980435.43	980790.00	-304.36	-50.21	110.41	-160.61	3.88	-156.736
041298DN337	262.2792	301.9077	980.360	980436.39	980790.10	-302.88	-50.83	109.88	-160.71	4.00	-156.705
041298DN338	262.2004	301.8768	978.550	980436.59	980790.00	-302.33	-51.08	109.67	-160.75	4.27	-156.476
041298DN339	262.1039	301.8189	977.620	980436.78	980790.00	-302.04	-51.18	109.57	-160.75	4.60	-156.147
041298DN340	262.3330	301.6192	989.100	980434.53	980789.80	-305.58	-49.69	110.85	-160.55	3.91	-156.636
041298DN341	262.3285	301.4989	990.550	980434.08	980789.80	-306.03	-49.69	111.02	-160.71	3.85	-156.863
041298DN342	262.2489	301.3832	996.210	980432.67	980789.60	-307.77	-49.16	111.65	-160.81	3.82	-156.985
041298DN343	262.1501	301.3034	997.520	980432.42	980789.60	-308.18	-49.00	111.80	-160.79	3.88	-156.912
041998DN345	266.4859	301.4918	1005.850	980429.22	980789.90	-310.75	-49.93	112.73	-162.66	6.54	-156.121
041998DN346	266.3666	301.5918	1004.010	980429.50	980790.00	-310.18	-50.32	112.52	-162.84	6.85	-155.995
041998DN347	266.2591	301.6697	1002.990	980429.69	980790.10	-309.87	-50.54	112.41	-162.94	7.01	-155.937
041998DN348	265.7740	301.8722	1000.690	980430.52	980790.20	-309.16	-50.52	112.15	-162.67	6.81	-155.858
041998DN349	265.7700	301.7366	1001.620	980431.17	980790.10	-309.44	-49.49	112.26	-161.75	5.92	-155.826
042098DN350	265.4098	301.8899	999.850	980431.48	980790.20	-308.90	-49.82	112.06	-161.88	6.28	-155.597
042098DN351	265.3403	301.7487	1000.380	980431.98	980790.10	-309.06	-49.06	112.12	-161.17	5.47	-155.703
042098DN352	265.4060	301.7393	1000.940	980431.82	980790.10	-309.24	-49.04	112.18	-161.22	5.48	-155.737
042098DN353	265.3946	301.6253	1000.410	980432.14	980790.00	-309.07	-48.79	112.12	-160.91	5.07	-155.842
042098DN354	265.4197	301.5483	1000.750	980432.08	980789.90	-309.18	-48.64	112.16	-160.80	4.86	-155.939
042098DN355	265.4368	301.3921	1000.650	980432.07	980789.80	-309.14	-48.59	112.15	-160.74	4.57	-156.167

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
042098DN356	265.1522	301.6542	999.800	980432.24	980790.00	-308.88	-48.88	112.05	-160.93	4.98	-155.954
042098DN357	265.0136	301.7033	999.160	980432.29	980790.00	-308.69	-49.02	111.98	-161.00	5.02	-155.974
042098DN358	263.8772	300.9878	1007.120	980427.96	980789.40	-311.14	-50.30	112.87	-163.18	5.91	-157.265
042098DN359	263.7417	301.0309	1009.110	980427.54	980789.40	-311.76	-50.10	113.09	-163.19	5.70	-157.490
042098DN360	263.6095	301.1590	1009.700	980428.40	980789.50	-311.94	-49.16	113.16	-162.32	5.11	-157.218
042098DN361	263.3826	301.0686	1007.530	980428.39	980789.40	-311.27	-49.74	112.92	-162.66	5.61	-157.053
052898DN362	259.3806	296.2653	1081.367	980409.44	980785.40	-334.06	-41.90	121.18	-163.08	6.40	-156.680
052898DN363	259.0335	295.8044	1159.333	980394.19	980784.90	-358.12	-32.59	129.91	-162.50	3.62	-158.883
052898DN364	259.2740	295.7350	1180.028	980389.91	980784.90	-364.51	-30.48	132.23	-162.71	3.43	-159.277
052898DN365	260.3039	295.9823	1125.525	980400.96	980785.20	-347.69	-36.55	126.13	-162.68	4.45	-158.234
052898DN366	261.8036	295.2205	1210.278	980383.29	980784.60	-373.85	-27.46	135.62	-163.08	3.59	-159.489
052898DN367	261.3707	294.5918	1292.446	980365.57	980784.10	-399.21	-19.32	144.82	-164.14	3.41	-160.729
053198DN368	261.7296	295.8022	1204.554	980387.20	980785.10	-372.08	-25.82	134.98	-160.80	2.79	-158.017
053198DN369	262.9629	295.5955	1272.259	980373.16	980785.00	-392.98	-18.86	142.56	-161.42	2.34	-159.084
053198DN370	263.9512	294.9711	1280.812	980368.69	980784.50	-395.62	-20.19	143.52	-163.71	6.08	-157.629
053198DN371	266.1959	298.9066	1020.531	980423.75	980787.80	-315.28	-48.77	114.37	-163.14	5.52	-157.616
053198DN372	265.3122	300.0255	1081.246	980413.86	980788.70	-334.02	-40.82	121.17	-161.99	5.64	-156.346
120200DN373	262.7085	302.5670	1011.143	980430.99	980790.60	-312.38	-47.23	113.32	-160.55	4.59	-155.966
120200DN375	263.1710	304.6741	1098.100	980416.33	980792.40	-339.22	-36.85	123.06	-159.91	9.08	-150.825
120200DN376	263.3016	302.6670	1001.906	980435.16	980790.80	-309.53	-46.11	112.29	-158.40	5.42	-152.979
120200DN377	263.9735	302.4065	1009.134	980433.27	980790.60	-311.76	-45.57	113.10	-158.67	5.89	-152.774
120200DN378	264.8163	302.0630	997.484	980432.00	980790.30	-308.17	-50.13	111.79	-161.93	8.23	-153.694
120200DN380	264.3984	300.7401	1001.335	980427.73	980789.20	-309.36	-52.11	112.22	-164.33	9.29	-155.043
120200DN382	263.0204	300.9325	994.021	980429.17	980789.30	-307.10	-53.03	111.40	-164.44	8.26	-156.179
120200DN383	261.0055	300.5260	990.978	980429.69	980788.90	-306.16	-53.05	111.06	-164.11	8.19	-155.921
120200DN384	259.1673	300.5463	984.955	980433.64	980788.80	-304.30	-50.86	110.39	-161.25	3.98	-157.267
120700DN385	262.7085	302.5670	1011.143	980431.63	980790.60	-312.31	-46.66	113.29	-159.95	4.59	-155.361
120700DN387	263.1745	304.6735	1097.649	980413.96	980792.40	-339.08	-39.36	123.01	-162.37	9.11	-153.265
120700DN388	263.6277	305.2544	1131.833	980407.35	980792.80	-349.63	-35.82	126.83	-162.65	9.52	-153.131
120700DN389	263.2897	302.6688	1001.085	980433.24	980790.80	-309.28	-48.28	112.20	-160.47	5.38	-155.091
120700DN390	263.9723	302.4083	1006.422	980431.65	980790.60	-310.93	-48.02	112.79	-160.81	5.88	-154.929

ID	Easting	Northing	Elevation	Gobserved	Gtheoretical	FAC	FAA	BC	BA	TC	CBA
120700DN391	263.8904	302.2738	992.017	980434.44	980790.40	-306.48	-49.48	111.18	-160.66	5.36	-155.305
120700DN392	264.3125	302.1789	991.345	980433.27	980790.40	-306.27	-50.86	111.11	-161.97	6.66	-155.311
120700DN393	264.8173	302.0638	997.153	980430.87	980790.30	-308.07	-51.36	111.76	-163.12	8.36	-154.758
120700DN394	265.1142	302.0227	1004.733	980428.85	980790.30	-310.41	-51.04	112.60	-163.64	8.18	-155.463
120700DN395	265.1183	301.9841	998.135	980431.07	980790.30	-308.37	-50.86	111.87	-162.72	7.64	-155.086
120700DN396	264.3947	300.7453	1002.629	980428.62	980789.30	-309.76	-50.92	112.37	-163.29	9.00	-154.287
120700DN398	265.2193	300.4739	1066.036	980417.96	980789.00	-329.32	-41.72	119.47	-161.19	5.07	-156.120
120700DN399	265.3328	300.5801	1046.257	980421.93	980789.10	-323.22	-43.95	117.25	-161.20	4.96	-156.241
120700DN400	265.3628	300.6616	1046.974	980421.25	980789.20	-323.44	-44.51	117.33	-161.84	5.59	-156.247
120700DN401	265.2514	299.9755	1095.242	980410.52	980788.60	-338.34	-39.74	122.74	-162.48	6.09	-156.393
120700DN402	266.2219	299.3680	999.401	980428.35	980788.20	-308.76	-51.09	112.01	-163.10	5.47	-157.626
120700DN404	267.3330	300.1950	1021.800	980427.82	980788.90	-315.67	-45.41	114.51	-159.93	6.02	-153.912
120700DN405	267.1226	301.1217	1043.451	980423.01	980789.60	-322.35	-44.24	116.94	-161.18	5.69	-155.496
120700DN406	266.8439	301.3424	1010.038	980428.55	980789.80	-312.04	-49.21	113.20	-162.41	7.77	-154.642
120700DN407	266.7840	301.2944	1007.061	980429.27	980789.80	-311.12	-49.41	112.86	-162.27	6.64	-155.639
120700DN408	266.3503	301.8063	1019.407	980425.46	980790.20	-314.93	-49.81	114.25	-164.05	9.06	-154.991
120700DN409	266.3234	301.7571	1006.118	980428.24	980790.10	-310.83	-51.03	112.76	-163.79	8.47	-155.319
120700DN410	265.7009	302.1419	1004.280	980427.72	980790.40	-310.27	-52.41	112.55	-164.96	####	-154.784
120700DN411	265.6307	302.1914	1022.879	980424.49	980790.40	-316.01	-49.90	114.64	-164.53	9.70	-154.833
120700DN412	265.5129	300.8119	986.600	980434.04	980789.30	-304.81	-50.45	110.57	-161.02	5.07	-155.954
120700DN413	261.5512	301.6590	1001.598	980429.42	980789.80	-309.44	-50.94	112.25	-163.20	7.68	-155.517
120700DN414	262.0421	301.4610	995.761	980433.18	980789.70	-307.64	-48.88	111.60	-160.48	4.04	-156.432
120700DN415	260.6000	300.0974	976.968	980431.88	980788.50	-301.84	-54.78	109.50	-164.28	7.93	-156.347
120700DN416	261.0083	300.5244	990.174	980430.06	980788.90	-305.91	-52.93	110.97	-163.90	7.95	-155.955
120700DN417	260.3207	300.1546	977.015	980430.93	980788.60	-301.85	-55.82	109.50	-165.32	9.86	-155.468
120700DN418	260.1683	302.6226	1022.933	980427.59	980790.60	-316.02	-46.99	114.64	-161.63	4.17	-157.464
120900DN420	263.8578	302.1628	990.017	980435.26	980790.30	-305.86	-49.18	110.96	-160.14	5.04	-155.093
120900DN421	265.2799	301.0187	984.599	980435.01	980789.50	-304.19	-50.30	110.35	-160.65	5.19	-155.464

Appendix H

Table of Depth to Bedrock Data

Montana State Plane Coordinates (Kilometers/1000): North American Datum of 1983 (NAD83), National Geodetic Vertical Datum of 1929 (NGVD29).

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.70	301.00	0.104	1.0145
263.70	301.05	0.101	1.0130
263.75	301.05	0.100	1.0122
263.75	301.00	0.099	1.0143
263.80	301.00	0.098	1.0139
263.60	301.45	0.097	1.0115
263.80	301.05	0.097	1.0116
263.65	301.45	0.096	1.0116
263.60	301.40	0.096	1.0125
263.55	301.45	0.095	1.0119
263.65	301.50	0.094	1.0104
263.85	301.00	0.094	1.0123
263.55	301.40	0.094	1.0131
263.65	301.40	0.092	1.0118
263.75	301.10	0.092	1.0099
263.70	301.10	0.091	1.0128
263.50	301.40	0.091	1.0130
263.60	301.50	0.091	1.0107
263.50	301.45	0.091	1.0123
263.70	301.50	0.091	1.0096
263.70	301.45	0.090	1.0109
263.85	301.05	0.090	1.0099
263.90	301.00	0.089	1.0103
263.80	301.10	0.088	1.0091
263.55	301.50	0.088	1.0106
263.60	301.35	0.086	1.0125
263.45	301.40	0.086	1.0123
263.55	301.35	0.086	1.0127
263.65	301.05	0.086	1.0140
263.45	301.45	0.086	1.0123
263.65	301.35	0.085	1.0120
263.50	301.50	0.085	1.0112
263.70	301.40	0.085	1.0113
263.50	301.35	0.084	1.0125
263.90	301.05	0.084	1.0073
263.65	301.00	0.083	1.0145
263.40	301.40	0.082	1.0119
263.75	301.15	0.082	1.0068
264.40	301.00	0.082	1.0050
263.85	301.10	0.082	1.0075
263.70	301.15	0.082	1.0098
263.45	301.50	0.081	1.0114
263.45	301.35	0.081	1.0123
263.40	301.45	0.080	1.0120
263.65	301.10	0.080	1.0150

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.70	301.35	0.080	1.0116
263.80	301.15	0.079	1.0052
262.20	301.40	0.079	0.9982
262.20	301.35	0.078	0.9997
262.15	301.40	0.078	0.9977
262.20	301.30	0.078	0.9992
263.40	301.35	0.078	1.0114
263.35	301.40	0.077	1.0106
263.65	301.30	0.077	1.0107
263.50	301.30	0.076	1.0123
263.70	301.30	0.076	1.0095
263.90	301.10	0.076	1.0046
266.80	300.70	0.076	1.0030
263.55	301.30	0.076	1.0119
262.15	301.35	0.076	0.9990
263.60	301.30	0.075	1.0115
263.35	301.45	0.075	1.0103
263.40	301.50	0.075	1.0114
263.50	301.55	0.075	1.0098
263.35	301.35	0.075	1.0093
263.75	301.20	0.075	1.0043
263.45	301.55	0.075	1.0099
263.70	301.20	0.075	1.0075
264.40	301.05	0.074	1.0042
266.80	300.65	0.074	1.0042
263.45	301.30	0.074	1.0115
263.55	301.55	0.074	1.0091
263.85	300.95	0.073	1.0134
263.70	301.25	0.073	1.0072
263.65	301.15	0.073	1.0130
263.80	300.95	0.073	1.0150
263.85	301.15	0.073	1.0036
262.10	301.40	0.073	0.9966
263.30	301.40	0.073	1.0081
259.65	299.90	0.073	0.9921
263.60	301.55	0.073	1.0090
263.40	301.55	0.072	1.0098
263.30	301.35	0.072	1.0074
261.80	301.70	0.072	0.9993
263.80	301.20	0.071	1.0017
264.45	301.00	0.071	1.0054
263.35	301.30	0.071	1.0079
263.40	301.30	0.071	1.0104
263.75	301.25	0.071	1.0044
263.35	301.50	0.071	1.0099
264.45	301.05	0.071	1.0062
263.65	301.55	0.071	1.0088
263.30	301.45	0.070	1.0070
263.30	301.30	0.070	1.0053

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.35	301.25	0.070	1.0060
263.65	301.25	0.070	1.0094
262.20	301.45	0.070	0.9979
263.45	301.25	0.070	1.0109
266.80	300.75	0.070	1.0021
263.40	301.25	0.069	1.0089
263.95	301.00	0.069	1.0075
263.95	301.05	0.069	1.0047
263.25	301.40	0.069	1.0047
266.45	301.30	0.069	1.0024
262.20	301.25	0.069	1.0008
263.25	301.35	0.069	1.0047
263.75	301.30	0.069	1.0076
263.50	301.25	0.069	1.0122
262.15	301.30	0.069	0.9996
263.30	301.25	0.069	1.0035
264.50	301.00	0.069	1.0059
266.50	301.30	0.068	1.0024
263.60	301.05	0.068	1.0150
263.75	300.95	0.068	1.0160
263.75	301.35	0.068	1.0109
266.80	300.60	0.068	1.0052
263.45	301.20	0.068	1.0132
263.40	301.20	0.068	1.0115
262.15	301.45	0.068	0.9965
263.35	301.20	0.068	1.0099
263.40	301.60	0.067	1.0075
263.90	301.15	0.067	1.0010
263.25	301.30	0.067	1.0020
263.35	301.55	0.067	1.0083
263.70	300.95	0.067	1.0160
263.30	301.20	0.067	1.0089
266.45	301.35	0.067	1.0033
263.65	301.20	0.067	1.0103
263.60	301.10	0.067	1.0165
262.25	301.40	0.067	0.9975
263.75	301.40	0.067	1.0101
263.25	301.45	0.067	1.0032
266.45	301.25	0.067	1.0023
261.80	301.65	0.067	0.9950
262.20	301.20	0.066	1.0005
264.50	301.05	0.066	1.0071
263.25	301.25	0.066	1.0010
263.45	301.15	0.066	1.0166
263.90	300.95	0.066	1.0118
263.55	301.25	0.066	1.0115
263.30	301.50	0.066	1.0061
266.40	301.30	0.066	1.0024
263.20	301.40	0.066	0.9997

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.85	301.20	0.066	1.0000
266.50	301.25	0.066	1.0023
263.45	301.60	0.066	1.0077
264.55	301.00	0.066	1.0060
259.70	299.90	0.065	0.9906
263.80	301.25	0.065	1.0010
263.20	301.35	0.065	0.9991
262.15	301.15	0.065	0.9998
263.25	301.20	0.065	1.0058
262.25	301.45	0.065	0.9972
262.15	301.20	0.065	1.0020
263.50	301.20	0.065	1.0141
263.60	301.25	0.065	1.0110
262.15	301.25	0.065	1.0019
263.75	301.45	0.065	1.0084
263.95	301.10	0.065	1.0023
264.35	301.00	0.065	1.0032
263.40	301.15	0.065	1.0163
266.40	301.25	0.064	1.0023
266.40	301.35	0.064	1.0031
264.35	301.05	0.064	1.0061
261.90	301.10	0.064	0.9969
263.50	301.15	0.064	1.0170
262.25	301.35	0.064	0.9991
262.20	301.15	0.064	0.9982
260.20	300.00	0.064	0.9794
263.20	301.30	0.063	0.9982
262.10	301.35	0.063	0.9980
263.20	301.45	0.063	0.9994
266.50	301.20	0.063	1.0020
263.35	301.15	0.063	1.0153
266.45	301.20	0.063	1.0018
263.35	301.60	0.063	1.0060
259.80	299.95	0.063	0.9787
263.25	301.50	0.062	1.0019
259.75	299.90	0.062	0.9879
262.25	301.50	0.062	0.9998
263.30	301.15	0.062	1.0122
263.15	301.40	0.062	0.9978
263.50	301.60	0.062	1.0076
263.60	301.15	0.062	1.0154
259.75	299.95	0.062	0.9786
263.30	301.55	0.062	1.0056
266.45	300.95	0.062	1.0032
263.60	301.00	0.062	1.0143
264.55	301.05	0.061	1.0069
263.20	301.25	0.061	0.9991
266.45	301.00	0.061	1.0107
259.80	299.90	0.061	0.9849

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
261.95	301.10	0.061	0.9971
266.80	300.80	0.061	1.0013
266.40	301.20	0.061	1.0017
266.50	301.15	0.061	1.0014
266.80	300.55	0.061	1.0059
262.30	301.50	0.061	0.9971
266.40	300.90	0.061	0.9954
263.55	301.10	0.061	1.0174
262.20	301.50	0.061	1.0000
263.90	301.20	0.061	0.9976
266.45	300.90	0.061	0.9959
261.85	301.10	0.061	0.9967
262.25	301.30	0.060	0.9981
263.15	301.35	0.060	0.9972
263.55	301.15	0.060	1.0166
262.10	301.15	0.060	1.0003
266.45	301.05	0.060	1.0016
263.50	301.10	0.060	1.0181
266.50	301.35	0.060	1.0033
263.20	301.20	0.060	1.0025
266.40	300.95	0.060	1.0033
264.40	301.10	0.060	1.0056
266.45	301.10	0.060	1.0010
261.70	300.95	0.060	0.9952
262.15	301.10	0.060	0.9962
264.45	301.10	0.060	1.0054
261.75	301.10	0.060	0.9967
262.00	301.10	0.060	0.9976
263.55	301.20	0.060	1.0139
263.80	301.30	0.060	1.0040
263.25	301.15	0.060	1.0083
259.70	299.95	0.060	0.9798
266.50	301.10	0.060	1.0008
262.10	301.45	0.060	0.9956
263.15	301.45	0.060	0.9979
266.45	301.15	0.060	1.0011
266.40	301.00	0.059	1.0108
261.70	301.00	0.059	0.9953
263.20	301.50	0.059	0.9993
266.35	301.30	0.059	1.0023
263.45	301.10	0.059	1.0178
261.90	301.15	0.059	0.9991
261.80	301.10	0.059	0.9967
261.75	301.05	0.059	0.9954
263.95	301.15	0.059	0.9994
261.70	300.90	0.059	0.9954
264.60	301.00	0.059	1.0056
262.20	301.10	0.059	0.9949
266.50	301.05	0.059	1.0012

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.85	301.25	0.059	0.9987
266.40	301.40	0.059	1.0035
261.95	301.15	0.059	0.9994
261.75	300.95	0.059	0.9954
262.10	301.10	0.059	0.9971
266.40	301.05	0.059	1.0015
262.05	301.10	0.058	0.9977
266.35	301.25	0.058	1.0021
262.25	301.25	0.058	0.9994
261.75	300.90	0.058	0.9960
266.40	301.10	0.058	1.0009
266.40	301.15	0.058	1.0011
263.30	301.60	0.058	1.0039
266.50	301.00	0.058	1.0093
266.35	301.35	0.058	1.0029
261.75	301.15	0.058	0.9985
261.75	301.00	0.058	0.9953
263.70	301.55	0.058	1.0080
262.00	301.15	0.058	0.9993
262.10	301.20	0.058	1.0024
262.00	300.90	0.058	0.9959
262.05	301.15	0.058	1.0001
261.70	301.05	0.058	0.9957
259.85	299.95	0.058	0.9791
263.65	300.95	0.058	1.0153
262.25	301.20	0.058	0.9984
263.00	301.75	0.058	0.9942
261.70	301.10	0.058	0.9974
263.55	301.60	0.058	1.0074
263.40	301.10	0.058	1.0154
261.80	301.05	0.057	0.9958
261.85	301.65	0.057	0.9962
261.70	301.15	0.057	0.9989
262.30	301.45	0.057	0.9946
263.15	301.30	0.057	0.9969
266.55	301.25	0.057	1.0023
266.50	300.95	0.057	0.9997
263.60	301.20	0.057	1.0122
259.85	299.90	0.057	0.9827
263.55	301.05	0.057	1.0158
263.00	301.70	0.057	0.9942
266.45	300.85	0.057	0.9969
266.55	301.20	0.057	1.0020
263.00	301.80	0.057	0.9942
263.25	301.55	0.057	1.0014
266.55	301.15	0.057	1.0014
261.70	301.20	0.057	0.9999
266.80	300.85	0.057	0.9973
266.45	301.40	0.057	1.0039

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.35	301.20	0.057	1.0015
261.85	301.15	0.057	0.9986
264.50	301.10	0.056	1.0049
262.95	301.75	0.056	0.9929
262.00	301.05	0.056	0.9975
266.35	301.40	0.056	1.0033
263.15	301.50	0.056	0.9992
263.05	301.75	0.056	0.9950
261.85	301.05	0.056	0.9963
262.25	301.15	0.056	0.9957
266.55	301.30	0.056	1.0024
263.05	301.70	0.056	0.9955
261.80	300.90	0.056	0.9966
263.10	301.40	0.056	0.9961
264.30	301.00	0.056	1.0034
261.85	301.70	0.056	1.0003
261.95	301.05	0.056	0.9973
262.00	300.95	0.056	0.9967
261.80	301.15	0.056	0.9984
261.75	301.65	0.056	0.9947
262.15	301.50	0.056	0.9974
264.55	300.95	0.056	1.0045
261.65	300.95	0.056	0.9953
262.95	301.80	0.056	0.9931
266.30	301.50	0.056	1.0041
262.95	301.70	0.056	0.9927
266.40	300.85	0.055	0.9961
263.20	301.15	0.055	1.0044
266.55	301.10	0.055	1.0007
266.50	300.90	0.055	0.9941
262.05	301.05	0.055	0.9964
262.25	301.55	0.055	1.0054
263.05	301.80	0.055	0.9951
266.35	301.15	0.055	1.0011
263.75	301.50	0.055	1.0072
263.10	301.45	0.055	0.9962
266.35	301.45	0.055	1.0039
261.90	301.05	0.055	0.9966
264.60	301.05	0.055	1.0061
261.65	301.00	0.055	0.9953
266.55	301.05	0.055	1.0009
265.40	301.40	0.055	0.9997
261.80	300.95	0.055	0.9962
262.10	301.25	0.055	1.0021
261.75	300.85	0.055	0.9967
263.40	301.65	0.055	1.0049
262.05	301.20	0.055	1.0021
266.30	301.30	0.055	1.0023
263.25	301.60	0.055	1.0014

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.80	301.35	0.054	1.0076
263.05	301.65	0.054	0.9954
266.30	301.35	0.054	1.0026
263.00	301.65	0.054	0.9941
262.90	301.75	0.054	0.9919
263.10	301.70	0.054	0.9964
263.95	300.95	0.054	1.0093
262.50	301.30	0.054	0.9793
259.80	300.00	0.054	0.9779
266.35	301.10	0.054	1.0007
264.00	301.05	0.054	1.0030
266.45	300.80	0.054	1.0048
263.00	302.00	0.054	0.9921
261.80	301.60	0.054	0.9939
261.95	300.90	0.054	0.9971
261.80	301.00	0.054	0.9961
262.05	301.40	0.054	0.9955
263.10	301.75	0.054	0.9962
262.10	301.05	0.054	0.9947
263.10	301.35	0.054	0.9961
263.35	301.65	0.054	1.0034
262.30	301.55	0.054	1.0010
263.95	301.20	0.054	0.9965
262.30	301.40	0.054	0.9945
266.30	301.40	0.054	1.0032
262.00	301.00	0.054	0.9983
266.25	301.55	0.054	1.0042
265.40	301.35	0.054	0.9979
263.10	301.65	0.054	0.9970
266.55	301.00	0.054	1.0089
262.90	301.80	0.054	0.9921
264.30	301.05	0.054	1.0045
266.30	301.25	0.054	1.0019
263.10	301.50	0.054	0.9960
264.35	301.10	0.054	1.0071
262.25	301.10	0.054	0.9926
262.90	301.70	0.053	0.9910
262.15	301.05	0.053	0.9929
266.35	301.05	0.053	1.0016
262.85	301.75	0.053	0.9911
262.50	301.25	0.053	0.9855
261.70	300.85	0.053	0.9959
263.90	301.25	0.053	0.9962
266.30	301.45	0.053	1.0035
261.80	300.85	0.053	0.9972
263.00	301.85	0.053	0.9939
261.65	300.90	0.053	0.9953
261.85	300.90	0.053	0.9975
265.45	301.35	0.053	0.9986

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.75	301.75	0.053	0.9901
263.15	301.25	0.053	0.9977
263.35	301.10	0.053	1.0126
262.80	301.75	0.053	0.9904
266.40	300.80	0.053	1.0033
262.20	301.05	0.053	0.9912
261.95	300.95	0.053	0.9978
262.00	301.20	0.053	1.0010
263.05	301.85	0.053	0.9949
263.10	301.80	0.053	0.9959
263.45	301.65	0.053	1.0055
262.70	301.75	0.053	0.9897
263.30	301.65	0.053	1.0019
262.75	301.70	0.053	0.9896
264.00	301.10	0.053	1.0019
266.50	300.85	0.053	0.9984
266.25	301.50	0.053	1.0037
263.10	301.60	0.053	0.9963
264.55	301.10	0.053	1.0042
263.50	301.05	0.053	1.0162
262.95	301.65	0.053	0.9922
265.50	301.35	0.053	0.9996
262.85	301.80	0.053	0.9912
263.10	301.55	0.052	0.9967
262.85	301.70	0.052	0.9903
266.55	300.95	0.052	0.9980
264.00	301.00	0.052	1.0045
262.20	301.55	0.052	1.0053
263.15	301.65	0.052	0.9992
263.15	301.55	0.052	0.9994
263.05	301.60	0.052	0.9948
262.10	301.30	0.052	0.9995
266.40	301.45	0.052	1.0041
262.95	301.85	0.052	0.9932
263.00	301.95	0.052	0.9929
263.15	301.70	0.052	0.9978
262.05	301.00	0.052	0.9967
262.70	301.70	0.052	0.9894
262.80	301.70	0.052	0.9897
261.95	301.20	0.052	1.0018
266.30	301.20	0.052	1.0014
263.15	301.60	0.052	0.9982
263.00	302.20	0.052	0.9865
266.30	301.55	0.052	1.0042
263.25	301.65	0.052	1.0009
262.80	301.80	0.052	0.9905
263.85	301.30	0.052	0.9998
262.05	301.35	0.052	0.9969
259.65	299.95	0.052	0.9812

Eastling (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.45	301.40	0.052	1.0001
266.50	300.30	0.052	1.0128
263.15	301.75	0.052	0.9972
264.50	300.95	0.052	1.0044
262.45	301.25	0.052	0.9887
261.85	300.95	0.052	0.9974
266.35	301.00	0.052	1.0102
259.75	300.00	0.052	0.9766
266.35	301.50	0.052	1.0042
266.80	300.90	0.052	0.9955
263.60	301.60	0.052	1.0068
262.25	301.05	0.052	0.9895
266.50	301.40	0.052	1.0041
266.45	300.75	0.052	1.0103
261.90	300.90	0.051	0.9979
263.10	301.85	0.051	0.9956
263.05	301.95	0.051	0.9938
263.20	301.60	0.051	0.9997
264.80	301.80	0.051	0.9971
263.20	301.55	0.051	0.9993
263.20	301.65	0.051	0.9997
263.00	301.60	0.051	0.9934
261.75	301.20	0.051	0.9995
263.05	301.90	0.051	0.9945
262.75	301.65	0.051	0.9882
263.10	301.30	0.051	0.9960
265.55	301.30	0.051	0.9986
266.30	301.15	0.051	1.0010
261.95	301.00	0.051	0.9981
261.90	301.20	0.051	1.0020
263.05	301.55	0.051	0.9937
262.05	300.95	0.051	0.9953
265.35	301.35	0.051	0.9977
261.85	300.85	0.051	0.9976
262.90	301.65	0.051	0.9888
265.60	301.25	0.051	0.9981
262.90	301.85	0.051	0.9919
263.05	301.45	0.051	0.9943
264.00	301.15	0.051	0.9991
262.70	301.80	0.051	0.9896
263.15	301.80	0.051	0.9966
266.60	301.00	0.051	1.0100
261.85	301.00	0.051	0.9973
261.85	301.60	0.051	0.9948
261.75	300.80	0.051	0.9968
264.60	300.95	0.051	1.0045
265.55	301.35	0.051	0.9998
265.50	301.30	0.051	0.9982
262.80	301.65	0.051	0.9886

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.05	301.50	0.050	0.9931
263.00	301.90	0.050	0.9936
259.85	300.00	0.050	0.9793
262.45	301.30	0.050	0.9827
266.60	301.05	0.050	1.0008
266.40	300.75	0.050	1.0091
261.65	301.05	0.050	0.9957
262.05	301.25	0.050	1.0013
263.05	301.40	0.050	0.9948
265.60	301.20	0.050	0.9952
262.75	301.80	0.050	0.9899
263.05	302.00	0.050	0.9928
263.10	301.90	0.050	0.9950
266.30	301.10	0.050	1.0006
262.85	301.65	0.050	0.9890
262.70	301.65	0.050	0.9877
266.25	301.60	0.050	1.0042
262.65	301.75	0.050	0.9891
266.80	300.50	0.050	1.0066
263.20	301.70	0.050	0.9997
265.35	301.40	0.050	0.9993
266.50	300.80	0.050	1.0082
266.60	300.95	0.050	0.9979
265.60	301.30	0.050	0.9994
263.15	301.20	0.050	1.0001
262.55	301.90	0.050	0.9873
265.65	301.20	0.050	0.9956
262.30	301.35	0.050	0.9956
263.50	301.65	0.050	1.0059
262.35	301.50	0.050	0.9921
265.70	300.95	0.050	1.0075
265.60	301.15	0.050	0.9915
261.60	300.70	0.050	0.9934
264.40	301.15	0.050	0.9999
266.25	300.70	0.050	1.0073
266.55	300.90	0.050	0.9931
259.90	299.95	0.050	0.9789
265.55	301.25	0.050	0.9970
262.75	301.60	0.050	0.9881
266.60	301.10	0.050	1.0007
266.60	301.15	0.050	1.0015
263.15	301.85	0.050	0.9959
261.60	300.95	0.050	0.9953
262.60	301.80	0.050	0.9884
263.10	301.95	0.049	0.9942
265.50	301.40	0.049	1.0002
266.35	300.95	0.049	1.0029
265.65	301.25	0.049	0.9981
262.95	301.90	0.049	0.9924

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.65	301.80	0.049	0.9891
266.25	301.45	0.049	1.0034
264.45	301.15	0.049	0.9990
261.80	300.80	0.049	0.9971
259.90	299.90	0.049	0.9809
265.45	301.30	0.049	0.9974
266.25	301.35	0.049	1.0024
262.30	301.20	0.049	0.9957
262.40	301.25	0.049	0.9908
263.20	301.75	0.049	0.9990
266.30	301.05	0.049	1.0017
262.70	301.60	0.049	0.9873
261.90	300.95	0.049	0.9981
262.95	301.60	0.049	0.9915
266.25	301.30	0.049	1.0022
261.70	300.80	0.049	0.9963
261.65	300.85	0.049	0.9955
262.85	301.85	0.049	0.9908
263.30	301.10	0.049	1.0095
266.25	301.40	0.049	1.0031
263.15	301.90	0.049	0.9952
263.25	301.70	0.049	0.9996
266.50	300.75	0.049	1.0100
266.65	300.60	0.049	1.0120
262.30	301.15	0.049	0.9924
263.05	301.35	0.049	0.9943
266.30	300.70	0.049	1.0090
262.55	301.85	0.049	0.9872
265.60	301.35	0.049	1.0002
263.00	301.55	0.049	0.9914
266.25	301.25	0.049	1.0017
266.45	300.70	0.049	1.0103
262.95	301.95	0.049	0.9917
262.45	301.20	0.049	0.9904
262.65	301.70	0.049	0.9887
263.45	301.05	0.049	1.0158
265.65	301.30	0.049	0.9996
261.60	301.00	0.048	0.9953
266.70	300.60	0.048	1.0120
262.10	301.00	0.048	0.9936
263.55	301.00	0.048	1.0141
263.80	301.40	0.048	1.0071
262.60	301.85	0.048	0.9885
265.65	300.95	0.048	1.0051
261.75	301.70	0.048	0.9991
261.90	300.85	0.048	0.9980
262.80	301.60	0.048	0.9883
263.20	301.80	0.048	0.9974
266.55	301.35	0.048	1.0033

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.40	301.30	0.048	0.9862
263.95	301.25	0.048	0.9948
262.60	301.90	0.048	0.9880
265.60	301.10	0.048	0.9915
266.65	300.65	0.048	1.0109
262.50	301.20	0.048	0.9886
262.25	301.60	0.048	1.0113
266.60	301.20	0.048	1.0021
263.15	301.95	0.048	0.9943
261.85	301.20	0.048	1.0012
266.40	300.70	0.048	1.0099
266.25	301.10	0.048	1.0005
262.05	301.30	0.048	0.9985
264.00	301.20	0.048	0.9957
262.60	301.75	0.048	0.9879
266.25	301.05	0.048	1.0019
266.25	301.20	0.048	1.0013
262.05	300.90	0.048	0.9949
264.70	301.10	0.048	0.9987
262.35	301.55	0.048	0.9936
266.70	300.65	0.048	1.0106
264.60	301.10	0.048	1.0031
261.55	300.70	0.048	0.9941
262.10	301.50	0.048	0.9959
262.00	301.25	0.048	1.0005
262.90	301.90	0.048	0.9913
266.50	300.70	0.048	1.0105
262.40	301.20	0.048	0.9909
262.30	301.25	0.048	0.9969
263.20	301.90	0.048	0.9966
262.90	301.60	0.048	0.9884
263.20	301.85	0.048	0.9964
264.50	301.15	0.048	0.9983
261.65	300.70	0.047	0.9933
266.30	300.65	0.047	1.0105
262.55	301.80	0.047	0.9865
263.20	301.95	0.047	0.9961
261.95	300.85	0.047	0.9970
262.15	301.55	0.047	1.0023
261.75	300.75	0.047	0.9943
265.65	301.15	0.047	0.9919
262.90	301.40	0.047	0.9856
265.55	301.40	0.047	1.0004
262.55	301.25	0.047	0.9812
262.95	302.00	0.047	0.9909
262.85	301.60	0.047	0.9884
265.55	301.20	0.047	0.9948
266.60	300.60	0.047	1.0121
262.30	301.60	0.047	1.0032

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.00	301.45	0.047	0.9916
266.55	300.85	0.047	0.9976
261.70	300.75	0.047	0.9946
266.25	301.15	0.047	1.0008
265.40	301.30	0.047	0.9968
263.30	301.70	0.047	0.9998
262.30	301.80	0.047	0.9851
266.35	300.70	0.047	1.0096
266.60	300.65	0.047	1.0113
263.25	301.75	0.047	0.9984
265.50	301.25	0.047	0.9965
263.00	301.50	0.047	0.9913
262.50	301.90	0.047	0.9858
263.10	302.00	0.047	0.9929
262.35	301.20	0.047	0.9925
262.75	301.55	0.047	0.9881
264.65	301.00	0.047	1.0045
266.80	300.95	0.047	0.9985
262.35	301.45	0.047	0.9904
266.35	300.75	0.047	1.0081
266.55	300.65	0.047	1.0116
262.30	301.10	0.047	0.9895
260.20	300.05	0.047	0.9836
259.70	300.00	0.047	0.9760
262.35	301.25	0.047	0.9928
266.25	301.00	0.047	1.0085
266.35	300.90	0.047	0.9958
262.80	301.85	0.047	0.9901
264.80	301.75	0.047	0.9968
263.00	301.40	0.047	0.9915
261.60	300.65	0.047	0.9939
263.20	302.00	0.047	0.9932
263.10	301.25	0.047	0.9969
261.65	300.75	0.047	0.9938
266.45	300.65	0.046	1.0110
265.65	301.35	0.046	1.0004
266.30	301.00	0.046	1.0093
262.20	301.60	0.046	1.0115
262.95	301.40	0.046	0.9874
262.50	301.85	0.046	0.9850
266.75	300.65	0.046	1.0096
264.65	301.05	0.046	1.0045
266.75	300.70	0.046	1.0071
266.60	300.90	0.046	0.9923
263.25	301.80	0.046	0.9969
266.50	300.65	0.046	1.0112
266.60	301.25	0.046	1.0023
266.20	301.10	0.046	1.0006
262.65	301.65	0.046	0.9864

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.25	301.90	0.046	0.9955
266.20	301.05	0.046	1.0021
262.35	301.35	0.046	0.9911
264.35	301.15	0.046	1.0022
261.65	301.10	0.046	0.9974
266.35	300.80	0.046	0.9991
261.95	301.25	0.046	1.0019
266.55	300.70	0.046	1.0103
261.75	301.60	0.046	0.9935
263.00	302.15	0.046	0.9879
263.90	301.30	0.046	0.9970
264.65	301.15	0.046	0.9933
261.85	300.80	0.046	0.9971
263.15	302.00	0.046	0.9931
262.70	301.55	0.046	0.9869
261.55	300.65	0.046	0.9947
265.65	301.10	0.046	0.9926
261.50	300.70	0.046	0.9953
264.85	301.80	0.046	0.9973
266.65	300.95	0.046	0.9985
262.35	301.15	0.046	0.9894
263.25	301.95	0.046	0.9942
266.20	301.15	0.046	1.0007
264.80	301.85	0.046	0.9974
266.25	300.65	0.046	1.0093
265.70	301.30	0.046	1.0000
266.20	301.20	0.046	1.0011
261.90	301.00	0.046	0.9980
266.55	300.60	0.046	1.0120
263.25	301.85	0.046	0.9963
262.55	301.95	0.046	0.9865
265.70	301.25	0.046	0.9989
266.40	300.65	0.046	1.0109
262.85	301.90	0.046	0.9901
266.35	300.65	0.046	1.0108
266.20	301.00	0.046	1.0077
262.30	301.05	0.046	0.9870
266.65	301.00	0.046	1.0113
266.70	300.70	0.046	1.0079
261.60	300.90	0.046	0.9953
266.35	300.85	0.046	0.9956
261.65	300.80	0.046	0.9955
263.35	301.70	0.046	1.0007
262.95	301.55	0.046	0.9893
261.90	301.65	0.046	0.9981
266.55	300.75	0.046	1.0088
262.00	300.85	0.046	0.9961
266.55	300.80	0.046	1.0070
261.70	300.70	0.046	0.9934

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.00	302.05	0.046	0.9908
266.20	301.25	0.045	1.0015
260.15	300.00	0.045	0.9795
262.55	301.75	0.045	0.9848
262.95	301.45	0.045	0.9879
263.25	302.00	0.045	0.9925
265.60	301.40	0.045	1.0008
266.80	301.00	0.045	1.0028
262.90	301.95	0.045	0.9901
262.05	301.45	0.045	0.9948
261.55	300.95	0.045	0.9951
265.70	301.00	0.045	1.0098
261.80	300.75	0.045	0.9942
262.35	301.30	0.045	0.9901
261.50	300.65	0.045	0.9960
266.65	300.55	0.045	1.0124
262.25	301.00	0.045	0.9867
266.30	300.60	0.045	1.0114
262.60	301.70	0.045	0.9866
264.75	301.90	0.045	0.9971
263.40	301.05	0.045	1.0131
263.05	301.30	0.045	0.9943
266.20	301.30	0.045	1.0020
266.60	300.70	0.045	1.0093
266.65	300.70	0.045	1.0085
262.60	301.95	0.045	0.9873
263.00	301.35	0.045	0.9909
266.75	300.60	0.045	1.0111
262.20	301.00	0.045	0.9883
262.15	301.00	0.045	0.9906
261.80	301.55	0.045	0.9932
262.35	301.40	0.045	0.9902
264.55	301.15	0.045	0.9974
264.30	301.10	0.045	1.0053
261.60	300.75	0.045	0.9939
266.45	301.45	0.045	1.0042
262.40	301.15	0.045	0.9884
266.60	300.55	0.045	1.0124
266.65	301.05	0.045	1.0006
261.45	300.65	0.045	0.9976
262.10	300.95	0.045	0.9927
262.70	302.00	0.045	0.9868
264.85	301.75	0.045	0.9970
266.30	300.75	0.045	1.0067
261.80	301.20	0.045	0.9995
266.50	300.60	0.045	1.0118
262.30	301.85	0.045	0.9832
265.55	301.15	0.045	0.9927
262.50	301.80	0.045	0.9841

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.80	301.55	0.045	0.9881
263.25	301.10	0.045	1.0063
261.90	301.25	0.045	1.0025
263.55	301.65	0.045	1.0052
263.30	301.95	0.045	0.9937
261.55	300.75	0.045	0.9944
265.70	301.35	0.044	1.0006
259.90	300.00	0.044	0.9800
263.30	301.75	0.044	0.9984
264.80	301.70	0.044	0.9967
263.65	301.60	0.044	1.0065
261.65	300.65	0.044	0.9937
262.30	301.30	0.044	0.9948
265.30	301.40	0.044	0.9989
263.30	301.90	0.044	0.9945
265.40	301.45	0.044	1.0004
261.55	301.00	0.044	0.9951
266.80	301.20	0.044	1.0027
263.85	301.35	0.044	1.0018
266.15	301.10	0.044	1.0006
262.55	301.20	0.044	0.9842
262.45	301.90	0.044	0.9841
263.20	302.05	0.044	0.9913
266.15	301.05	0.044	1.0021
261.45	300.70	0.044	0.9964
262.50	301.95	0.044	0.9855
265.70	301.20	0.044	0.9966
262.00	301.30	0.044	0.9971
262.45	301.15	0.044	0.9880
262.90	301.45	0.044	0.9862
262.35	301.10	0.044	0.9870
262.95	301.50	0.044	0.9884
264.60	301.15	0.044	0.9957
261.75	300.70	0.044	0.9927
264.70	301.05	0.044	1.0020
266.50	300.35	0.044	1.0139
266.80	301.05	0.044	1.0059
266.20	301.55	0.044	1.0037
265.30	301.35	0.044	0.9974
266.60	300.85	0.044	0.9973
262.00	301.35	0.044	0.9956
266.75	300.75	0.044	1.0057
262.35	301.60	0.044	0.9928
266.15	301.00	0.044	1.0072
263.30	302.00	0.044	0.9922
264.00	301.25	0.044	0.9937
266.55	300.55	0.044	1.0124
262.55	301.30	0.044	0.9761
262.45	301.85	0.044	0.9832

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.05	302.05	0.044	0.9913
265.45	301.45	0.044	1.0006
266.70	300.75	0.044	1.0066
261.50	300.75	0.044	0.9948
262.35	301.85	0.044	0.9826
266.35	300.60	0.044	1.0118
266.45	300.60	0.044	1.0116
266.80	301.15	0.044	1.0034
263.25	302.05	0.044	0.9912
266.20	301.35	0.044	1.0022
262.65	301.60	0.044	0.9848
263.30	301.85	0.044	0.9956
266.65	301.10	0.044	1.0007
266.60	300.75	0.044	1.0079
264.25	301.05	0.044	1.0047
266.15	301.15	0.043	1.0006
263.05	302.20	0.043	0.9869
266.20	300.95	0.043	1.0051
262.85	301.55	0.043	0.9879
260.25	300.00	0.043	0.9790
266.70	300.55	0.043	1.0125
262.85	301.95	0.043	0.9891
265.45	301.25	0.043	0.9961
264.70	301.15	0.043	0.9924
262.35	301.80	0.043	0.9839
263.30	301.80	0.043	0.9969
262.65	301.85	0.043	0.9887
265.65	301.40	0.043	1.0011
262.95	301.35	0.043	0.9869
266.20	301.50	0.043	1.0034
261.85	301.55	0.043	0.9939
265.50	301.45	0.043	1.0010
264.45	300.95	0.043	1.0042
261.25	300.80	0.043	1.0036
262.95	302.20	0.043	0.9856
264.85	301.70	0.043	0.9966
266.65	300.90	0.043	0.9923
262.85	301.40	0.043	0.9855
266.60	301.30	0.043	1.0026
264.05	301.05	0.043	1.0023
266.15	300.95	0.043	1.0048
263.50	301.00	0.043	1.0141
261.45	300.60	0.043	0.9978
266.15	301.20	0.043	1.0010
266.30	300.55	0.043	1.0133
266.40	300.60	0.043	1.0117
266.55	300.30	0.043	1.0140
263.20	302.20	0.043	0.9874
263.60	300.95	0.043	1.0142

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.25	300.95	0.043	1.0054
263.20	302.15	0.043	0.9885
265.75	301.25	0.043	0.9993
263.15	301.15	0.043	1.0015
264.05	301.15	0.043	0.9994
266.80	301.10	0.043	1.0048
262.30	301.90	0.043	0.9823
265.75	301.30	0.043	1.0002
261.65	301.15	0.043	0.9989
264.40	301.20	0.043	0.9956
262.55	301.70	0.043	0.9807
266.65	300.75	0.043	1.0072
263.25	302.15	0.043	0.9886
263.25	302.10	0.043	0.9898
265.35	301.30	0.043	0.9964
266.20	301.60	0.043	1.0042
265.35	301.45	0.043	1.0001
264.00	300.95	0.043	1.0059
264.05	301.10	0.043	1.0025
263.40	301.70	0.043	1.0014
262.50	301.75	0.043	0.9824
262.90	301.55	0.043	0.9876
263.20	302.10	0.043	0.9898
262.40	301.90	0.043	0.9830
262.80	301.90	0.043	0.9893
262.75	301.50	0.043	0.9873
262.00	301.40	0.043	0.9945
266.20	301.40	0.043	1.0028
261.90	301.60	0.043	0.9963
266.25	300.60	0.043	1.0108
266.60	300.80	0.043	1.0062
263.05	302.15	0.043	0.9885
261.90	301.70	0.043	1.0008
262.45	301.95	0.043	0.9842
261.60	300.85	0.043	0.9954
263.45	301.70	0.043	1.0032
266.50	300.55	0.043	1.0125
265.70	301.05	0.043	1.0082
262.15	301.60	0.042	1.0089
262.40	301.85	0.042	0.9823
264.05	301.20	0.042	0.9959
263.15	302.05	0.042	0.9913
266.65	301.15	0.042	1.0017
264.65	301.10	0.042	1.0008
266.10	300.90	0.042	1.0001
266.15	300.90	0.042	0.9996
265.55	301.45	0.042	1.0010
262.25	301.65	0.042	1.0126
263.25	302.20	0.042	0.9874

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.25	300.75	0.042	1.0039
261.90	300.80	0.042	0.9971
262.75	301.85	0.042	0.9895
266.20	300.70	0.042	1.0050
262.80	301.95	0.042	0.9883
262.50	301.15	0.042	0.9869
261.60	300.60	0.042	0.9934
262.35	301.05	0.042	0.9860
266.10	300.95	0.042	1.0044
266.20	301.45	0.042	1.0032
262.60	301.65	0.042	0.9830
262.60	301.25	0.042	0.9776
263.35	301.95	0.042	0.9933
261.95	301.30	0.042	0.9985
262.90	301.35	0.042	0.9849
264.50	300.80	0.042	1.0078
263.95	301.30	0.042	0.9953
261.55	300.60	0.042	0.9939
262.85	301.45	0.042	0.9867
266.15	301.25	0.042	1.0014
266.35	300.55	0.042	1.0138
262.95	302.15	0.042	0.9867
262.30	301.00	0.042	0.9857
261.50	300.60	0.042	0.9955
262.90	302.00	0.042	0.9893
264.30	301.15	0.042	1.0022
261.85	301.25	0.042	1.0016
261.55	300.90	0.042	0.9951
263.80	301.45	0.042	1.0057
265.75	301.20	0.042	0.9978
261.45	300.75	0.042	0.9950
263.35	301.90	0.042	0.9942
261.70	300.65	0.042	0.9938
262.40	301.10	0.042	0.9859
266.30	300.95	0.042	1.0033
261.85	300.75	0.042	0.9942
266.45	300.55	0.042	1.0127
262.80	302.00	0.042	0.9872
262.45	301.80	0.042	0.9827
263.35	301.75	0.042	0.9987
263.10	301.20	0.042	0.9993
262.60	302.00	0.042	0.9859
265.65	301.05	0.042	1.0088
264.80	301.90	0.042	0.9981
262.95	302.05	0.042	0.9897
264.05	301.00	0.042	1.0022
264.45	301.20	0.042	0.9948
262.20	301.65	0.042	1.0136
266.10	301.00	0.042	1.0065

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.50	301.20	0.042	0.9949
262.40	301.95	0.042	0.9833
261.40	300.65	0.042	0.9988
266.70	300.80	0.042	1.0054
265.70	301.10	0.042	0.9930
262.40	301.35	0.042	0.9870
266.65	300.80	0.041	1.0058
262.75	302.00	0.041	0.9869
266.80	301.25	0.041	1.0028
265.70	301.40	0.041	1.0012
261.40	300.60	0.041	0.9982
265.75	301.35	0.041	1.0008
266.70	300.95	0.041	0.9992
266.65	300.85	0.041	0.9969
266.25	301.65	0.041	1.0042
263.30	302.05	0.041	0.9910
266.40	300.55	0.041	1.0133
262.80	301.50	0.041	0.9876
262.30	301.65	0.041	1.0009
262.10	301.55	0.041	0.9987
263.10	302.05	0.041	0.9913
266.55	300.50	0.041	1.0132
260.20	299.95	0.041	0.9779
266.50	300.50	0.041	1.0137
261.80	300.70	0.041	0.9925
266.20	300.90	0.041	0.9989
262.65	302.00	0.041	0.9865
266.70	300.90	0.041	0.9923
266.15	301.30	0.041	1.0019
261.40	300.70	0.041	0.9967
262.85	301.50	0.041	0.9874
266.70	300.85	0.041	0.9968
266.10	301.10	0.041	1.0006
264.25	301.00	0.041	1.0034
266.45	300.50	0.041	1.0149
263.00	301.30	0.041	0.9909
266.30	301.70	0.041	1.0045
264.25	301.10	0.041	1.0040
262.70	301.50	0.041	0.9857
262.85	301.35	0.041	0.9841
266.15	300.85	0.041	0.9950
262.30	301.75	0.041	0.9898
264.35	301.20	0.041	0.9977
262.55	302.00	0.041	0.9853
263.35	302.00	0.041	0.9919
262.85	302.00	0.041	0.9883
265.60	301.45	0.041	1.0012
261.90	301.30	0.041	0.9989
266.10	301.05	0.041	1.0019

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.35	301.95	0.041	0.9829
265.25	301.40	0.041	0.9983
266.55	300.35	0.041	1.0145
261.55	300.85	0.041	0.9951
265.80	301.25	0.041	0.9997
264.70	301.00	0.041	1.0018
266.75	300.80	0.041	1.0046
266.20	300.75	0.041	0.9983
266.10	301.20	0.041	1.0009
262.90	301.50	0.041	0.9868
263.35	301.85	0.041	0.9957
262.35	301.90	0.041	0.9823
266.30	300.80	0.041	0.9967
262.50	301.70	0.041	0.9797
261.55	300.80	0.041	0.9947
266.75	300.55	0.041	1.0118
263.00	302.10	0.040	0.9891
261.75	300.65	0.040	0.9936
262.65	301.95	0.040	0.9876
263.15	302.15	0.040	0.9888
266.20	301.65	0.040	1.0042
266.60	300.50	0.040	1.0133
262.80	301.45	0.040	0.9864
262.45	301.75	0.040	0.9819
266.70	301.00	0.040	1.0110
263.50	301.70	0.040	1.0046
265.70	301.15	0.040	0.9934
265.80	301.30	0.040	1.0003
261.60	300.80	0.040	0.9952
266.50	300.25	0.040	1.0112
263.05	301.25	0.040	0.9955
264.75	301.85	0.040	0.9966
265.30	301.45	0.040	0.9999
264.55	300.90	0.040	1.0034
266.10	301.15	0.040	1.0003
261.95	301.35	0.040	0.9946
263.30	302.10	0.040	0.9897
265.80	301.20	0.040	0.9986
263.35	301.05	0.040	1.0105
265.55	301.10	0.040	0.9938
266.40	300.50	0.040	1.0165
262.40	301.55	0.040	0.9868
263.30	302.20	0.040	0.9874
266.20	300.85	0.040	0.9940
264.65	300.95	0.040	1.0039
264.25	301.15	0.040	1.0012
265.75	301.15	0.040	0.9954
263.30	302.15	0.040	0.9886
261.60	301.05	0.040	0.9954

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.35	301.80	0.040	0.9971
262.10	300.90	0.040	0.9934
265.25	301.35	0.040	0.9968
262.80	301.40	0.040	0.9849
261.40	300.75	0.040	0.9958
262.60	301.30	0.040	0.9745
266.65	301.20	0.040	1.0022
262.60	301.20	0.040	0.9818
262.40	301.80	0.040	0.9826
266.10	300.85	0.040	0.9959
262.35	301.00	0.040	0.9860
261.50	300.80	0.040	0.9945
264.05	301.25	0.040	0.9937
263.15	302.20	0.040	0.9874
266.65	300.50	0.040	1.0134
265.65	301.00	0.040	1.0077
263.85	300.90	0.040	1.0148
262.35	301.65	0.040	0.9910
266.10	301.25	0.040	1.0013
261.80	301.50	0.040	0.9932
262.50	302.00	0.040	0.9840
264.50	301.20	0.040	0.9940
261.80	301.75	0.040	1.0055
262.40	301.50	0.040	0.9874
261.50	301.00	0.040	0.9953
262.55	301.15	0.040	0.9835
266.55	301.40	0.040	1.0041
261.95	300.80	0.040	0.9969
262.15	300.95	0.039	0.9895
262.45	301.10	0.039	0.9853
265.65	301.45	0.039	1.0016
262.40	301.60	0.039	0.9858
262.30	301.95	0.039	0.9827
263.15	302.10	0.039	0.9901
266.75	300.85	0.039	0.9964
262.65	301.55	0.039	0.9836
263.05	302.10	0.039	0.9898
262.35	301.75	0.039	0.9858
259.80	300.05	0.039	0.9796
262.45	302.00	0.039	0.9836
265.75	301.00	0.039	1.0079
262.65	301.25	0.039	0.9819
264.85	301.65	0.039	0.9969
262.75	301.95	0.039	0.9879
264.80	301.65	0.039	0.9966
261.65	300.60	0.039	0.9933
261.75	301.55	0.039	0.9932
262.70	301.85	0.039	0.9891
266.80	300.45	0.039	1.0076

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.90	301.35	0.039	0.9991
263.20	302.25	0.039	0.9861
266.20	300.80	0.039	0.9935
263.40	301.90	0.039	0.9942
263.90	300.90	0.039	1.0131
262.55	301.65	0.039	0.9767
265.75	301.05	0.039	1.0050
266.35	300.50	0.039	1.0167
262.40	301.05	0.039	0.9852
266.15	301.35	0.039	1.0022
264.30	301.40	0.039	0.9902
263.10	302.20	0.039	0.9873
264.90	301.75	0.039	0.9969
261.75	301.25	0.039	0.9980
266.45	300.45	0.039	1.0175
263.10	302.15	0.039	0.9887
262.95	301.30	0.039	0.9871
262.25	301.80	0.039	0.9865
264.80	301.40	0.039	0.9933
266.50	300.45	0.039	1.0150
265.75	301.40	0.039	1.0013
265.80	301.35	0.039	1.0008
261.80	301.25	0.039	1.0001
266.15	300.80	0.039	0.9928
261.50	300.95	0.039	0.9951
261.85	301.50	0.039	0.9934
262.25	301.70	0.039	1.0121
266.55	300.45	0.039	1.0144
266.70	301.05	0.039	1.0004
263.20	301.10	0.039	1.0032
262.40	302.00	0.039	0.9833
262.75	301.45	0.039	0.9857
259.65	300.00	0.039	0.9768
265.40	301.25	0.039	0.9959
261.90	301.35	0.039	0.9936
262.45	301.70	0.039	0.9813
263.80	300.90	0.039	1.0160
265.75	301.10	0.039	0.9943
265.25	301.45	0.039	0.9994
262.20	300.95	0.039	0.9871
264.20	301.15	0.039	1.0006
263.40	301.95	0.039	0.9930
262.90	301.30	0.039	0.9853
262.40	301.75	0.039	0.9836
260.25	300.05	0.039	0.9834
266.50	300.40	0.039	1.0148
264.30	301.20	0.039	0.9984
262.80	301.35	0.039	0.9827
264.75	301.80	0.038	0.9963

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.20	301.70	0.038	1.0137
263.40	301.75	0.038	0.9998
266.45	300.35	0.038	1.0129
261.95	301.40	0.038	0.9944
265.85	301.25	0.038	1.0001
264.10	301.20	0.038	0.9967
264.00	301.30	0.038	0.9937
261.65	301.20	0.038	0.9997
265.85	301.30	0.038	1.0004
262.25	300.95	0.038	0.9856
260.00	299.95	0.038	0.9794
262.80	302.20	0.038	0.9833
259.85	300.05	0.038	0.9813
262.90	302.20	0.038	0.9846
261.45	300.80	0.038	0.9946
262.40	301.65	0.038	0.9844
263.25	302.25	0.038	0.9861
266.50	301.45	0.038	1.0043
266.10	301.30	0.038	1.0015
261.85	301.30	0.038	0.9981
262.65	301.90	0.038	0.9883
262.35	302.00	0.038	0.9832
259.75	300.05	0.038	0.9782
266.30	300.85	0.038	0.9932
262.95	302.10	0.038	0.9882
262.25	301.75	0.038	0.9963
263.60	301.65	0.038	1.0049
266.30	300.50	0.038	1.0153
265.20	301.40	0.038	0.9978
262.60	301.60	0.038	0.9800
266.45	300.30	0.038	1.0102
265.80	301.15	0.038	0.9970
264.90	301.70	0.038	0.9963
265.75	300.95	0.038	1.0080
261.90	301.40	0.038	0.9935
264.65	301.20	0.038	0.9895
266.15	301.55	0.038	1.0033
264.25	301.20	0.038	0.9981
259.95	299.95	0.038	0.9789
261.90	301.55	0.038	0.9951
266.45	300.40	0.038	1.0161
266.60	301.35	0.038	1.0033
264.20	301.20	0.038	0.9976
266.25	300.90	0.038	0.9977
262.65	301.20	0.038	0.9858
265.85	301.20	0.038	0.9996
262.15	301.65	0.038	1.0123
266.05	300.95	0.038	1.0046
263.45	301.00	0.038	1.0137

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.25	300.85	0.038	0.9932
265.70	301.45	0.038	1.0018
266.15	300.75	0.038	0.9933
266.20	300.65	0.038	1.0080
264.85	301.85	0.038	0.9978
262.50	301.65	0.038	0.9764
266.05	301.00	0.038	1.0064
262.65	301.30	0.038	0.9755
266.60	300.45	0.038	1.0149
266.15	301.40	0.038	1.0022
266.55	300.40	0.038	1.0147
261.80	300.65	0.038	0.9929
261.50	300.85	0.038	0.9944
266.75	300.90	0.038	0.9927
265.20	301.35	0.037	0.9964
264.55	301.20	0.037	0.9930
261.85	300.70	0.037	0.9925
262.45	301.65	0.037	0.9796
266.15	301.60	0.037	1.0035
261.35	300.70	0.037	0.9979
262.40	301.70	0.037	0.9843
262.10	301.60	0.037	1.0053
264.10	301.15	0.037	0.9999
262.30	301.70	0.037	0.9976
261.90	300.75	0.037	0.9942
266.05	300.90	0.037	1.0007
263.40	301.85	0.037	0.9959
263.40	302.00	0.037	0.9919
261.35	300.75	0.037	0.9978
266.15	301.50	0.037	1.0032
262.05	300.85	0.037	0.9964
263.85	301.40	0.037	1.0021
262.70	301.95	0.037	0.9877
266.05	301.20	0.037	1.0006
262.85	301.30	0.037	0.9832
262.85	302.20	0.037	0.9836
265.20	301.45	0.037	0.9986
266.05	301.25	0.037	1.0012
264.10	301.25	0.037	0.9947
265.85	301.35	0.037	1.0008
261.85	301.45	0.037	0.9933
262.90	302.05	0.037	0.9884
262.70	301.25	0.037	0.9842
263.45	301.75	0.037	1.0005
265.30	301.30	0.037	0.9960
266.40	300.45	0.037	1.0197
264.15	301.20	0.037	0.9970
261.95	301.65	0.037	1.0006
265.90	301.25	0.037	1.0003

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
261.85	301.40	0.037	0.9928
262.45	301.35	0.037	0.9831
265.90	301.30	0.037	1.0006
261.70	301.25	0.037	0.9987
265.80	301.40	0.037	1.0016
266.05	300.85	0.037	0.9960
261.80	301.45	0.037	0.9930
265.70	300.90	0.037	1.0045
266.70	301.10	0.037	1.0009
260.05	299.95	0.037	0.9798
262.90	302.15	0.037	0.9858
266.05	301.10	0.037	1.0005
261.70	300.60	0.037	0.9935
266.15	301.45	0.037	1.0030
266.70	300.50	0.037	1.0134
262.25	301.85	0.037	0.9829
264.20	301.10	0.037	1.0042
266.05	301.05	0.037	1.0020
266.30	301.60	0.037	1.0042
266.25	300.55	0.037	1.0124
261.40	300.80	0.037	0.9957
261.85	301.35	0.037	0.9927
261.85	301.75	0.037	1.0067
261.35	300.65	0.037	0.9989
259.95	300.00	0.037	0.9800
265.80	301.85	0.037	1.0044
262.30	300.95	0.037	0.9853
262.75	301.40	0.037	0.9830
260.10	300.00	0.037	0.9800
262.40	301.45	0.037	0.9869
263.35	302.05	0.037	0.9908
262.30	302.00	0.037	0.9832
263.30	302.25	0.037	0.9859
264.10	301.05	0.037	1.0027
264.80	301.60	0.037	0.9957
264.60	301.20	0.037	0.9917
263.95	301.35	0.037	0.9971
262.50	301.10	0.037	0.9841
262.80	301.30	0.037	0.9815
262.70	301.20	0.036	0.9887
262.40	301.00	0.036	0.9852
266.00	301.25	0.036	1.0010
264.60	300.90	0.036	1.0036
262.15	300.90	0.036	0.9904
264.20	301.05	0.036	1.0047
262.35	301.70	0.036	0.9890
265.90	301.20	0.036	1.0001
266.05	301.30	0.036	1.0013
263.35	302.20	0.036	0.9870

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.25	300.80	0.036	0.9954
266.05	301.15	0.036	1.0003
265.50	301.15	0.036	0.9937
260.15	300.05	0.036	0.9833
264.15	301.15	0.036	1.0006
265.45	301.20	0.036	0.9952
265.55	301.50	0.036	1.0015
264.75	301.10	0.036	0.9976
265.85	300.80	0.036	1.0068
265.50	301.50	0.036	1.0014
262.85	302.05	0.036	0.9869
264.40	301.25	0.036	0.9938
262.70	301.30	0.036	0.9772
263.55	301.70	0.036	1.0035
264.05	301.30	0.036	0.9938
264.70	301.20	0.036	0.9890
262.45	301.05	0.036	0.9838
266.00	301.20	0.036	1.0003
266.55	300.25	0.036	1.0133
263.40	301.80	0.036	0.9978
262.75	301.90	0.036	0.9887
265.95	301.25	0.036	1.0004
261.55	300.55	0.036	0.9917
261.50	300.90	0.036	0.9946
262.75	301.30	0.036	0.9794
262.45	301.60	0.036	0.9804
265.85	301.15	0.036	0.9986
266.65	301.25	0.036	1.0026
265.20	301.50	0.036	0.9998
264.10	301.00	0.036	1.0014
262.05	301.50	0.036	0.9958
266.15	300.70	0.036	1.0005
261.30	300.80	0.036	1.0017
264.20	301.35	0.036	0.9962
264.15	301.25	0.036	0.9956
266.75	300.95	0.036	0.9981
264.40	300.95	0.036	1.0028
265.95	301.30	0.036	1.0012
262.60	301.15	0.036	0.9834
265.45	301.50	0.036	1.0012
261.90	301.45	0.036	0.9937
264.90	301.65	0.036	0.9962
265.75	301.45	0.036	1.0021
266.00	301.30	0.036	1.0013
266.65	300.45	0.036	1.0155
265.90	301.35	0.036	1.0012
262.80	302.05	0.036	0.9858
262.40	301.40	0.036	0.9867
266.10	301.35	0.036	1.0022

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.70	301.15	0.036	1.0019
264.90	301.80	0.036	0.9974
261.50	300.55	0.036	0.9933
265.25	301.50	0.036	1.0000
262.70	301.45	0.036	0.9841
263.10	302.10	0.036	0.9899
262.35	300.95	0.036	0.9856
265.60	301.50	0.036	1.0017
262.85	302.15	0.036	0.9845
265.95	301.20	0.036	1.0003
261.75	300.60	0.036	0.9938
264.10	301.10	0.036	1.0025
266.35	301.65	0.036	1.0046
266.30	300.90	0.036	0.9975
264.35	301.25	0.036	0.9954
264.20	301.25	0.036	0.9963
265.25	301.30	0.036	0.9959
262.75	301.35	0.036	0.9802
261.95	301.60	0.035	0.9982
265.85	301.40	0.035	1.0016
263.50	301.75	0.035	1.0012
261.60	300.55	0.035	0.9915
263.00	301.25	0.035	0.9924
264.30	301.35	0.035	0.9928
265.15	301.45	0.035	0.9984
264.50	300.90	0.035	1.0030
264.25	301.35	0.035	0.9951
265.15	301.40	0.035	0.9971
262.40	302.05	0.035	0.9832
261.45	300.55	0.035	0.9950
266.00	301.15	0.035	1.0003
261.80	301.40	0.035	0.9924
262.75	301.25	0.035	0.9837
260.15	299.95	0.035	0.9787
259.70	300.05	0.035	0.9775
264.80	301.35	0.035	0.9892
266.35	300.45	0.035	1.0188
262.35	302.05	0.035	0.9832
262.00	300.80	0.035	0.9966
261.75	301.50	0.035	0.9932
265.20	301.30	0.035	0.9960
265.35	301.50	0.035	1.0004
260.60	300.05	0.035	0.9801
262.25	301.90	0.035	0.9823
262.45	302.05	0.035	0.9833
265.65	301.50	0.035	1.0021
266.15	301.65	0.035	1.0042
264.10	301.30	0.035	0.9951
262.65	301.50	0.035	0.9829

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.15	301.50	0.035	0.9990
261.90	301.50	0.035	0.9941
262.00	301.45	0.035	0.9944
264.85	301.60	0.035	0.9963
263.95	300.90	0.035	1.0112
261.80	300.60	0.035	0.9931
265.15	301.35	0.035	0.9966
261.35	300.60	0.035	0.9985
265.80	301.10	0.035	0.9967
266.60	300.40	0.035	1.0154
260.00	300.00	0.035	0.9803
265.90	301.15	0.035	0.9996
260.05	300.00	0.035	0.9801
265.30	301.50	0.035	1.0002
265.95	301.15	0.035	0.9999
264.05	300.95	0.035	1.0025
264.75	301.15	0.035	0.9914
263.35	302.15	0.035	0.9886
266.75	301.00	0.035	1.0076
263.10	301.15	0.035	1.0008
264.15	301.10	0.035	1.0038
266.10	300.80	0.035	0.9925
265.20	301.55	0.035	1.0002
264.45	301.25	0.035	0.9929
263.30	301.05	0.035	1.0082
264.25	301.25	0.035	0.9969
266.05	301.35	0.035	1.0020
266.00	301.10	0.035	1.0002
264.15	301.30	0.035	0.9959
266.40	300.40	0.035	1.0164
265.95	301.35	0.035	1.0014
265.15	301.55	0.035	0.9996
264.25	301.40	0.035	0.9923
263.45	301.80	0.035	0.9981
265.80	301.05	0.035	1.0032
262.55	301.60	0.035	0.9758
262.20	300.90	0.035	0.9875
264.20	301.30	0.035	0.9966
264.50	300.85	0.035	1.0030
262.70	301.15	0.035	0.9897
265.40	301.50	0.034	1.0009
264.75	301.05	0.034	1.0010
266.60	300.35	0.034	1.0153
261.30	300.75	0.034	0.9991
263.75	301.55	0.034	1.0061
261.95	301.70	0.034	1.0006
261.80	301.30	0.034	0.9968
265.80	301.45	0.034	1.0021
261.35	300.80	0.034	0.9994

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.30	300.45	0.034	1.0157
266.00	301.35	0.034	1.0016
265.95	300.80	0.034	0.9994
266.10	301.60	0.034	1.0033
264.75	301.75	0.034	0.9962
263.05	301.20	0.034	0.9982
262.50	302.05	0.034	0.9837
263.75	300.90	0.034	1.0172
265.70	301.50	0.034	1.0022
265.60	301.05	0.034	1.0034
265.85	301.10	0.034	0.9986
262.55	301.10	0.034	0.9812
265.90	301.40	0.034	1.0019
263.45	301.85	0.034	0.9963
264.85	301.40	0.034	0.9942
264.85	301.35	0.034	0.9913
262.15	301.70	0.034	1.0118
266.20	301.70	0.034	1.0042
264.30	301.25	0.034	0.9966
266.75	300.50	0.034	1.0128
265.90	300.80	0.034	1.0053
264.15	301.05	0.034	1.0037
265.85	301.85	0.034	1.0042
262.45	301.55	0.034	0.9815
264.00	301.35	0.034	0.9952
262.50	301.60	0.034	0.9765
262.25	301.95	0.034	0.9825
263.15	302.25	0.034	0.9861
264.95	301.75	0.034	0.9974
266.00	301.05	0.034	1.0027
262.65	301.15	0.034	0.9874
265.75	301.85	0.034	1.0042
262.30	302.05	0.034	0.9832
266.40	300.35	0.034	1.0108
261.95	301.45	0.034	0.9944
261.80	301.35	0.034	0.9922
262.80	302.15	0.034	0.9838
264.70	300.95	0.034	1.0019
266.10	301.55	0.034	1.0031
262.65	301.35	0.034	0.9756
265.20	301.60	0.034	0.9999
265.15	301.60	0.034	0.9993
264.95	301.70	0.034	0.9970
262.05	301.55	0.034	0.9976
265.95	301.10	0.034	1.0001
263.35	302.25	0.034	0.9857
262.60	301.55	0.033	0.9785
261.40	300.55	0.033	0.9960
261.45	300.85	0.033	0.9945

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.45	300.25	0.033	1.0079
264.15	301.35	0.033	0.9962
264.00	301.60	0.033	0.9910
262.70	301.40	0.033	0.9804
263.35	302.10	0.033	0.9895
265.35	301.25	0.033	0.9953
262.55	302.05	0.033	0.9840
265.85	301.45	0.033	1.0021
266.60	300.30	0.033	1.0152
266.25	300.50	0.033	1.0131
261.85	300.65	0.033	0.9924
262.70	301.35	0.033	0.9775
263.55	300.95	0.033	1.0131
262.80	301.25	0.033	0.9838
265.90	301.10	0.033	1.0001
265.95	301.40	0.033	1.0021
261.65	300.55	0.033	0.9919
263.45	301.90	0.033	0.9946
262.20	301.75	0.033	0.9989
265.80	301.80	0.033	1.0040
261.95	300.75	0.033	0.9942
264.20	301.00	0.033	1.0028
259.90	300.05	0.033	0.9828
262.45	301.00	0.033	0.9837
264.70	301.90	0.033	0.9965
266.75	301.05	0.033	1.0009
266.10	301.40	0.033	1.0022
264.25	301.30	0.033	0.9966
265.15	301.65	0.033	0.9988
262.75	301.20	0.033	0.9910
264.10	301.35	0.033	0.9960
265.10	301.55	0.033	0.9986
262.85	302.10	0.033	0.9857
264.35	301.35	0.033	0.9906
263.50	301.80	0.033	0.9984
262.75	302.05	0.033	0.9853
262.90	302.10	0.033	0.9872
260.10	299.95	0.033	0.9792
265.95	300.85	0.033	1.0016
262.25	302.00	0.033	0.9832
264.75	301.20	0.033	0.9882
265.75	301.50	0.033	1.0022
266.00	301.00	0.033	1.0069
265.10	301.50	0.033	0.9983
261.90	300.70	0.033	0.9923
262.50	301.05	0.033	0.9814
265.15	301.30	0.033	0.9959
265.25	301.55	0.033	1.0002
264.35	301.40	0.033	0.9881

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.40	301.00	0.033	1.0114
266.10	300.75	0.033	0.9926
265.20	301.65	0.033	0.9995
262.05	301.60	0.033	1.0021
264.80	301.30	0.033	0.9873
264.20	301.40	0.033	0.9942
266.00	301.40	0.033	1.0022
262.95	301.25	0.033	0.9885
264.05	301.35	0.033	0.9955
263.70	301.60	0.033	1.0062
262.25	300.90	0.033	0.9855
264.70	301.85	0.033	0.9964
261.75	301.45	0.033	0.9929
264.95	301.65	0.033	0.9963
261.30	300.70	0.033	0.9982
266.35	301.70	0.033	1.0050
262.60	302.05	0.033	0.9846
264.35	300.95	0.033	1.0021
262.10	301.65	0.033	1.0103
263.40	302.20	0.033	0.9868
266.20	300.60	0.033	1.0104
265.50	301.10	0.033	0.9932
266.05	301.60	0.033	1.0032
263.00	302.25	0.033	0.9847
265.90	301.45	0.033	1.0022
265.80	301.00	0.033	1.0059
260.30	300.05	0.032	0.9833
262.50	301.35	0.032	0.9794
265.10	301.60	0.032	0.9985
266.05	301.40	0.032	1.0022
262.60	301.35	0.032	0.9753
266.70	301.20	0.032	1.0027
266.10	301.65	0.032	1.0039
264.50	301.25	0.032	0.9921
265.85	301.05	0.032	1.0046
262.40	300.95	0.032	0.9853
265.10	301.45	0.032	0.9977
266.10	301.45	0.032	1.0024
263.55	301.75	0.032	1.0007
265.95	301.45	0.032	1.0023
265.95	301.05	0.032	1.0041
265.80	301.50	0.032	1.0022
266.40	300.30	0.032	1.0067
264.35	301.30	0.032	0.9935
264.85	301.30	0.032	0.9881
263.90	301.40	0.032	0.9994
266.70	300.45	0.032	1.0158
262.00	301.65	0.032	1.0039
265.20	301.70	0.032	0.9994

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.45	301.95	0.032	0.9931
265.10	301.65	0.032	0.9982
266.00	301.60	0.032	1.0032
265.15	301.70	0.032	0.9987
266.10	301.50	0.032	1.0029
264.90	301.60	0.032	0.9962
265.10	301.40	0.032	0.9971
262.25	302.05	0.032	0.9832
265.85	301.50	0.032	1.0022
264.40	301.30	0.032	0.9921
261.95	301.55	0.032	0.9966
262.85	301.25	0.032	0.9850
264.15	301.00	0.032	1.0026
262.00	301.60	0.032	1.0006
266.05	301.55	0.032	1.0030
260.25	299.95	0.032	0.9771
265.85	301.80	0.032	1.0040
262.35	302.10	0.032	0.9832
265.95	301.50	0.032	1.0022
266.00	301.55	0.032	1.0027
266.00	301.45	0.032	1.0023
262.90	301.25	0.032	0.9859
261.55	301.05	0.032	0.9953
266.25	300.45	0.032	1.0119
266.65	300.40	0.032	1.0163
264.75	301.00	0.032	0.9999
265.90	301.50	0.032	1.0022
265.10	301.35	0.032	0.9961
266.75	301.10	0.032	1.0016
262.65	301.45	0.032	0.9805
265.95	301.60	0.032	1.0032
259.65	300.05	0.032	0.9771
265.95	301.55	0.032	1.0025
263.05	302.25	0.032	0.9851
261.75	301.40	0.032	0.9923
260.60	300.10	0.031	0.9839
264.55	301.25	0.031	0.9915
264.65	301.25	0.031	0.9885
266.00	301.50	0.031	1.0023
266.45	301.55	0.031	1.0045
262.60	301.10	0.031	0.9819
265.05	301.60	0.031	0.9976
265.90	301.05	0.031	1.0057
263.50	301.85	0.031	0.9961
265.45	301.55	0.031	1.0015
262.40	302.10	0.031	0.9832
264.60	301.25	0.031	0.9901
266.05	301.45	0.031	1.0023
266.10	299.60	0.031	1.0140

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.05	301.65	0.031	1.0035
264.65	301.85	0.031	0.9969
265.40	301.55	0.031	1.0012
262.65	302.05	0.031	0.9851
264.00	301.40	0.031	0.9982
264.90	301.35	0.031	0.9930
261.60	301.10	0.031	0.9963
264.75	301.40	0.031	0.9913
264.80	301.25	0.031	0.9875
265.05	301.55	0.031	0.9976
266.00	300.95	0.031	1.0053
265.90	301.55	0.031	1.0025
262.80	302.10	0.031	0.9845
265.50	301.55	0.031	1.0018
266.50	300.20	0.031	1.0091
263.80	301.50	0.031	1.0038
263.65	301.65	0.031	1.0051
263.60	301.70	0.031	1.0028
265.75	300.90	0.031	1.0066
266.10	300.70	0.031	0.9968
262.45	301.50	0.031	0.9824
265.30	301.55	0.031	1.0002
264.15	301.40	0.031	0.9956
262.95	302.25	0.031	0.9844
265.35	301.55	0.031	1.0008
266.00	300.80	0.031	0.9951
260.30	300.00	0.031	0.9789
259.95	299.90	0.031	0.9808
262.10	300.85	0.031	0.9957
261.70	300.55	0.031	0.9921
262.70	302.05	0.031	0.9853
263.95	301.40	0.031	0.9980
264.30	300.95	0.031	1.0024
265.05	301.65	0.031	0.9976
266.05	301.50	0.031	1.0025
265.60	301.55	0.031	1.0022
261.30	300.65	0.031	0.9982
266.15	300.65	0.031	1.0060
266.40	301.55	0.031	1.0042
263.10	302.25	0.031	0.9858
262.65	301.40	0.031	0.9777
264.75	301.25	0.031	0.9878
266.35	300.40	0.031	1.0143
266.65	301.30	0.031	1.0030
266.30	300.40	0.031	1.0106
263.55	301.80	0.031	0.9983
265.55	301.55	0.031	1.0020
266.75	301.15	0.031	1.0024
264.10	301.40	0.031	0.9967

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.75	301.70	0.031	0.9959
263.40	302.05	0.031	0.9904
259.40	300.20	0.031	0.9809
262.45	302.10	0.031	0.9832
264.90	301.30	0.031	0.9895
262.30	300.90	0.031	0.9855
265.65	301.55	0.031	1.0022
265.85	301.55	0.031	1.0024
264.95	301.60	0.031	0.9963
264.05	301.40	0.031	0.9978
265.90	301.60	0.031	1.0030
264.75	301.30	0.031	0.9873
266.00	301.65	0.031	1.0032
261.75	301.30	0.031	0.9957
265.00	301.60	0.031	0.9970
265.70	301.55	0.031	1.0022
264.30	301.30	0.031	0.9953
265.10	301.30	0.031	0.9949
265.95	301.65	0.031	1.0032
264.65	300.90	0.031	1.0035
264.80	301.45	0.031	0.9946
266.05	300.80	0.031	0.9930
265.00	301.65	0.031	0.9972
262.20	302.05	0.031	0.9832
264.00	301.65	0.030	0.9900
264.60	301.85	0.030	0.9957
266.80	301.30	0.030	1.0033
264.75	301.35	0.030	0.9876
262.90	302.25	0.030	0.9835
266.30	301.65	0.030	1.0042
265.05	301.50	0.030	0.9975
265.20	301.25	0.030	0.9955
264.85	301.25	0.030	0.9873
266.35	301.60	0.030	1.0042
265.90	300.75	0.030	0.9954
266.35	300.35	0.030	1.0077
262.80	302.25	0.030	0.9832
262.05	301.65	0.030	1.0075
265.75	301.55	0.030	1.0022
261.70	301.65	0.030	0.9951
263.70	300.90	0.030	1.0172
262.30	302.10	0.030	0.9832
266.40	301.60	0.030	1.0045
263.25	302.30	0.030	0.9849
265.40	301.20	0.030	0.9949
265.10	301.70	0.030	0.9982
264.80	301.20	0.030	0.9881
262.85	302.25	0.030	0.9833
261.30	300.60	0.030	0.9974

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.95	300.75	0.030	0.9936
265.80	301.55	0.030	1.0024
261.35	300.55	0.030	0.9965
263.30	302.30	0.030	0.9847
263.95	301.60	0.030	0.9916
264.70	301.25	0.030	0.9880
265.75	301.80	0.030	1.0040
263.15	301.10	0.030	1.0010
266.25	301.70	0.030	1.0042
266.15	301.70	0.030	1.0042
261.90	301.75	0.030	1.0053
261.55	300.50	0.030	0.9881
265.25	301.60	0.030	1.0002
262.15	300.85	0.030	0.9937
265.90	301.65	0.030	1.0032
265.95	301.00	0.030	1.0077
261.95	301.50	0.030	0.9951
261.75	301.35	0.030	0.9922
262.55	301.35	0.030	0.9762
264.40	301.35	0.030	0.9894
263.40	302.25	0.030	0.9855
262.60	301.50	0.030	0.9769
266.25	300.40	0.030	1.0066
262.55	301.05	0.030	0.9781
263.45	302.00	0.030	0.9916
262.45	300.95	0.030	0.9837
264.45	301.30	0.030	0.9906
261.70	301.60	0.030	0.9937
264.60	301.80	0.030	0.9957
263.85	301.45	0.030	1.0010
262.75	302.20	0.030	0.9832
261.60	300.50	0.030	0.9883
265.85	301.60	0.029	1.0029
262.50	301.00	0.029	0.9810
263.50	301.90	0.029	0.9935
262.25	302.10	0.029	0.9832
264.55	300.85	0.029	1.0033
263.25	301.05	0.029	1.0060
265.15	301.25	0.029	0.9950
264.10	300.95	0.029	1.0000
264.95	301.30	0.029	0.9915
262.75	301.15	0.029	0.9913
264.90	301.25	0.029	0.9875
265.85	301.75	0.029	1.0036
266.00	300.75	0.029	0.9926
265.00	301.55	0.029	0.9968
261.25	300.75	0.029	1.0001
264.90	301.40	0.029	0.9942
264.95	301.35	0.029	0.9938

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.40	300.25	0.029	1.0045
264.05	301.60	0.029	0.9898
265.00	301.70	0.029	0.9972
263.55	301.85	0.029	0.9957
264.70	302.00	0.029	0.9967
265.70	301.85	0.029	1.0042
264.40	301.40	0.029	0.9876
261.50	300.50	0.029	0.9889
262.00	301.70	0.029	1.0049
261.45	300.90	0.029	0.9946
265.05	301.70	0.029	0.9978
263.50	300.95	0.029	1.0123
266.00	300.90	0.029	1.0015
265.90	301.70	0.029	1.0032
265.95	301.70	0.029	1.0035
262.65	301.10	0.029	0.9861
262.70	301.90	0.029	0.9885
266.05	300.75	0.029	0.9924
262.50	301.55	0.029	0.9772
263.40	302.15	0.029	0.9881
265.05	301.45	0.029	0.9974
261.40	300.85	0.029	0.9956
265.45	301.15	0.029	0.9938
265.25	301.25	0.029	0.9950
265.85	300.75	0.029	0.9956
263.60	301.80	0.029	0.9981
263.60	301.75	0.029	1.0005
266.45	300.20	0.029	1.0060
262.50	302.10	0.029	0.9833
264.85	301.45	0.029	0.9948
264.80	301.55	0.029	0.9958
266.60	300.25	0.029	1.0148
261.75	300.55	0.029	0.9926
262.20	300.85	0.029	0.9897
260.00	299.90	0.029	0.9819
264.00	300.90	0.029	1.0080
264.80	301.15	0.029	0.9912
265.05	301.30	0.029	0.9940
264.00	301.55	0.029	0.9925
266.35	300.30	0.029	1.0037
261.90	300.65	0.029	0.9918
265.30	301.25	0.029	0.9949
262.35	300.90	0.029	0.9856
262.80	301.20	0.029	0.9895
264.70	301.30	0.029	0.9875
262.20	301.80	0.029	0.9868
263.95	301.65	0.029	0.9906
265.05	301.35	0.029	0.9949
262.00	301.55	0.029	0.9987

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.85	301.55	0.029	0.9963
261.95	300.70	0.029	0.9916
262.20	302.00	0.029	0.9831
264.85	301.20	0.029	0.9878
266.30	300.35	0.029	1.0043
265.85	301.65	0.029	1.0032
265.85	301.00	0.029	1.0065
261.85	300.60	0.029	0.9915
266.05	301.70	0.029	1.0042
266.65	300.35	0.029	1.0161
264.70	301.95	0.029	0.9967
266.75	300.45	0.029	1.0151
265.80	300.95	0.029	1.0071
263.00	301.20	0.029	0.9956
260.55	300.05	0.028	0.9813
265.00	301.75	0.028	0.9977
265.40	301.60	0.028	1.0014
265.00	301.30	0.028	0.9934
266.10	301.70	0.028	1.0042
265.90	301.75	0.028	1.0037
265.80	301.75	0.028	1.0036
265.80	301.60	0.028	1.0028
265.85	301.70	0.028	1.0032
262.00	300.75	0.028	0.9946
263.35	302.30	0.028	0.9845
264.65	301.30	0.028	0.9876
264.75	301.65	0.028	0.9954
266.55	300.20	0.028	1.0118
265.05	301.40	0.028	0.9965
266.00	301.70	0.028	1.0039
266.80	300.40	0.028	1.0084
262.55	301.55	0.028	0.9755
265.75	301.60	0.028	1.0026
265.10	301.25	0.028	0.9938
264.95	301.25	0.028	0.9885
260.10	300.05	0.028	0.9836
261.70	301.55	0.028	0.9932
265.00	301.50	0.028	0.9968
266.60	301.40	0.028	1.0041
266.75	301.20	0.028	1.0030
261.45	300.50	0.028	0.9906
261.65	301.25	0.028	0.9988
264.70	301.35	0.028	0.9872
266.20	300.45	0.028	1.0086
264.95	301.80	0.028	0.9979
266.20	300.55	0.028	1.0113
262.05	300.80	0.028	0.9980
264.05	301.55	0.028	0.9918
263.35	301.00	0.028	1.0091

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.70	301.60	0.028	1.0023
265.90	301.00	0.028	1.0076
263.20	302.30	0.028	0.9849
262.45	301.45	0.028	0.9831
266.45	301.50	0.028	1.0042
264.05	301.65	0.028	0.9884
264.95	301.55	0.028	0.9967
259.60	299.95	0.028	0.9827
265.00	301.25	0.028	0.9895
261.65	300.50	0.027	0.9893
264.45	301.35	0.027	0.9883
262.55	302.10	0.027	0.9834
264.90	301.20	0.027	0.9874
263.60	301.85	0.027	0.9945
265.00	301.35	0.027	0.9944
260.20	299.90	0.027	0.9803
266.70	301.25	0.027	1.0033
262.20	302.10	0.027	0.9832
265.90	301.80	0.027	1.0041
265.90	301.85	0.027	1.0045
266.50	301.50	0.027	1.0045
265.05	301.25	0.027	0.9923
261.70	301.40	0.027	0.9925
266.35	300.25	0.027	1.0026
266.80	299.00	0.027	0.9930
266.05	300.70	0.027	0.9947
264.05	301.45	0.027	0.9958
261.70	301.50	0.027	0.9932
266.20	300.50	0.027	1.0107
266.25	300.35	0.027	1.0014
261.70	301.45	0.027	0.9930
262.45	301.40	0.027	0.9832
263.45	302.20	0.027	0.9866
266.20	301.75	0.027	1.0049
262.40	300.90	0.027	0.9850
264.60	301.30	0.027	0.9882
262.60	301.05	0.027	0.9791
265.35	301.60	0.027	1.0010
262.60	301.45	0.027	0.9758
264.25	300.95	0.027	1.0020
263.55	301.90	0.027	0.9931
265.55	301.05	0.027	0.9992
263.50	301.95	0.027	0.9923
265.95	300.95	0.027	1.0063
263.90	301.60	0.027	0.9920
266.20	300.40	0.027	1.0036
266.70	300.40	0.027	1.0170
262.75	302.15	0.027	0.9833
259.95	300.05	0.027	0.9824

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.00	301.45	0.027	0.9969
262.75	302.25	0.027	0.9832
262.40	302.15	0.027	0.9832
262.60	301.40	0.027	0.9755
262.35	302.15	0.027	0.9832
266.00	300.85	0.027	0.9981
265.45	301.60	0.027	1.0019
265.90	301.90	0.027	1.0050
265.65	301.60	0.027	1.0022
266.30	300.30	0.027	1.0013
266.35	301.55	0.027	1.0042
262.25	300.85	0.027	0.9865
260.35	300.05	0.027	0.9833
264.10	301.45	0.027	0.9952
261.75	301.75	0.027	1.0048
265.15	301.75	0.027	0.9987
262.70	301.10	0.027	0.9884
265.95	301.75	0.027	1.0040
264.65	301.95	0.027	0.9968
265.30	301.60	0.027	1.0002
259.60	300.00	0.027	0.9783
264.55	301.30	0.027	0.9891
265.80	301.65	0.027	1.0032
266.10	300.65	0.027	1.0037
265.05	301.75	0.027	0.9981
264.85	301.15	0.027	0.9918
262.20	301.95	0.027	0.9823
263.65	301.80	0.027	0.9961
265.70	300.85	0.027	1.0014
262.45	302.15	0.027	0.9832
264.90	301.55	0.027	0.9966
264.75	301.60	0.026	0.9952
262.30	302.15	0.026	0.9832
263.65	300.90	0.026	1.0162
263.05	301.15	0.026	1.0000
263.45	302.05	0.026	0.9904
264.75	300.95	0.026	1.0002
262.00	301.50	0.026	0.9962
265.10	301.75	0.026	0.9982
260.05	299.90	0.026	0.9828
264.80	301.10	0.026	0.9977
264.00	301.70	0.026	0.9886
262.20	301.85	0.026	0.9826
265.25	301.65	0.026	1.0002
264.50	301.30	0.026	0.9899
265.60	301.60	0.026	1.0022
264.95	301.40	0.026	0.9949
265.70	301.80	0.026	1.0039
262.50	300.95	0.026	0.9814

Eastling (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
261.40	300.50	0.026	0.9928
264.05	301.50	0.026	0.9938
261.80	300.55	0.026	0.9917
265.95	300.90	0.026	1.0044
265.80	300.80	0.026	1.0029
266.40	300.20	0.026	1.0042
265.75	301.75	0.026	1.0036
264.80	301.05	0.026	1.0016
264.65	301.80	0.026	0.9971
262.10	301.70	0.026	1.0104
261.30	300.55	0.026	0.9954
265.00	301.45	0.026	0.9964
262.45	300.90	0.026	0.9832
265.80	301.70	0.026	1.0032
261.60	301.15	0.026	0.9979
264.65	301.35	0.026	0.9872
264.70	300.90	0.026	1.0024
264.15	301.45	0.026	0.9934
263.45	302.25	0.026	0.9851
263.45	302.15	0.026	0.9878
265.80	301.95	0.026	1.0053
264.80	301.50	0.026	0.9957
265.75	301.65	0.026	1.0032
263.90	301.65	0.026	0.9910
263.65	301.85	0.026	0.9929
262.75	302.10	0.026	0.9840
264.95	301.20	0.026	0.9873
264.70	301.40	0.026	0.9886
265.50	301.60	0.026	1.0023
264.00	301.50	0.026	0.9943
262.85	301.20	0.026	0.9899
264.45	301.40	0.026	0.9874
266.30	300.25	0.026	1.0011
264.75	301.45	0.026	0.9937
262.50	302.15	0.026	0.9832
266.35	300.20	0.026	1.0028
260.65	300.05	0.025	0.9789
266.00	300.70	0.025	0.9935
266.25	300.30	0.025	0.9990
259.60	300.05	0.025	0.9779
262.15	301.75	0.025	0.9975
262.55	301.00	0.025	0.9774
262.50	301.50	0.025	0.9781
263.60	301.90	0.025	0.9922
264.20	301.45	0.025	0.9913
262.60	302.10	0.025	0.9837
261.25	300.70	0.025	0.9979
263.40	302.10	0.025	0.9896
266.20	300.35	0.025	0.9975

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.85	301.50	0.025	0.9956
260.50	300.05	0.025	0.9820
264.90	301.45	0.025	0.9951
265.55	301.60	0.025	1.0022
265.20	301.20	0.025	0.9940
265.00	301.20	0.025	0.9876
266.45	300.15	0.025	1.0053
264.05	300.90	0.025	1.0040
264.15	300.95	0.025	1.0007
261.70	300.50	0.025	0.9895
262.05	301.70	0.025	1.0086
266.65	300.30	0.025	1.0158
260.60	300.00	0.025	0.9792
262.95	301.20	0.025	0.9906
263.95	301.45	0.025	0.9969
263.95	301.70	0.025	0.9897
264.20	300.95	0.025	1.0019
264.70	301.80	0.025	0.9962
265.65	300.90	0.025	1.0031
261.95	301.75	0.025	0.9988
261.35	300.50	0.025	0.9929
263.40	302.30	0.025	0.9841
265.00	301.40	0.025	0.9953
264.30	301.45	0.025	0.9876
263.70	301.80	0.025	0.9936
262.55	301.50	0.025	0.9755
263.45	300.95	0.025	1.0119
261.70	301.35	0.025	0.9923
260.55	300.10	0.025	0.9854
260.45	300.05	0.025	0.9826
263.65	301.75	0.025	1.0002
266.50	300.15	0.025	1.0070
264.50	301.35	0.025	0.9878
264.95	301.45	0.025	0.9962
266.40	301.50	0.025	1.0042
264.60	300.85	0.025	1.0040
265.75	301.70	0.025	1.0032
263.30	302.35	0.025	0.9837
265.70	301.65	0.025	1.0029
263.25	302.35	0.025	0.9839
264.90	301.15	0.025	0.9914
264.25	301.45	0.025	0.9894
265.05	301.20	0.025	0.9885
263.95	301.55	0.025	0.9930
263.65	301.70	0.025	1.0027
261.95	300.65	0.025	0.9909
261.70	301.30	0.025	0.9949
265.15	301.20	0.025	0.9931
263.80	301.70	0.025	0.9927

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.95	301.50	0.025	0.9968
266.15	300.60	0.025	1.0088
263.15	302.30	0.025	0.9849
262.25	302.15	0.025	0.9832
264.55	301.85	0.025	0.9951
264.60	301.35	0.025	0.9872
265.80	301.90	0.025	1.0047
262.20	301.90	0.025	0.9822
265.20	301.75	0.025	0.9993
266.30	300.20	0.025	1.0016
261.55	300.45	0.025	0.9841
266.35	300.15	0.025	1.0027
266.40	301.65	0.024	1.0051
262.30	300.85	0.024	0.9864
259.40	300.25	0.024	0.9826
266.20	300.30	0.024	0.9971
263.55	301.95	0.024	0.9916
265.65	301.85	0.024	1.0041
261.60	300.45	0.024	0.9852
264.10	301.60	0.024	0.9882
262.15	302.10	0.024	0.9832
265.35	301.20	0.024	0.9950
262.55	302.15	0.024	0.9832
266.25	300.25	0.024	0.9997
263.45	302.10	0.024	0.9890
266.40	300.15	0.024	1.0038
264.35	301.45	0.024	0.9873
265.10	301.20	0.024	0.9912
263.20	301.05	0.024	1.0037
264.85	301.10	0.024	0.9985
264.55	301.35	0.024	0.9875
266.65	301.35	0.024	1.0037
264.10	301.50	0.024	0.9931
264.60	301.90	0.024	0.9955
265.75	300.85	0.024	1.0041
260.05	300.05	0.024	0.9836
266.15	300.45	0.024	1.0046
261.35	300.85	0.024	0.9993
262.15	300.80	0.024	0.9967
264.80	301.00	0.024	0.9996
264.05	301.70	0.024	0.9875
260.65	300.10	0.024	0.9818
262.65	301.05	0.024	0.9841
266.00	301.75	0.024	1.0042
261.45	300.95	0.024	0.9960
263.35	302.35	0.024	0.9834
265.95	300.70	0.024	0.9927
260.40	300.05	0.024	0.9832
265.70	301.75	0.024	1.0034

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.70	301.85	0.024	0.9916
266.30	300.15	0.024	1.0019
260.20	300.10	0.024	0.9892
262.10	302.10	0.024	0.9832
266.35	300.10	0.024	1.0021
264.10	301.55	0.024	0.9905
263.90	301.45	0.024	0.9980
262.70	302.20	0.024	0.9832
263.50	302.00	0.024	0.9912
261.90	300.60	0.024	0.9902
260.55	300.00	0.024	0.9795
262.60	301.00	0.024	0.9779
266.30	300.10	0.024	1.0018
262.90	301.20	0.024	0.9887
266.50	301.55	0.024	1.0049
265.40	301.65	0.024	1.0013
264.75	301.95	0.024	0.9977
265.70	301.70	0.024	1.0032
266.15	301.75	0.024	1.0046
266.25	300.10	0.024	1.0011
266.25	300.15	0.024	1.0013
262.00	300.70	0.024	0.9915
263.90	301.70	0.024	0.9904
264.40	301.45	0.024	0.9874
266.25	300.20	0.024	1.0006
262.70	302.25	0.024	0.9832
262.15	302.00	0.024	0.9831
260.15	299.90	0.024	0.9819
261.50	300.45	0.024	0.9838
260.35	300.00	0.024	0.9791
262.55	301.45	0.024	0.9758
263.65	301.90	0.024	0.9912
262.10	302.05	0.024	0.9832
264.50	301.40	0.024	0.9873
266.20	300.25	0.023	0.9987
261.65	301.40	0.023	0.9933
263.20	302.35	0.023	0.9840
264.65	301.40	0.023	0.9877
264.10	301.65	0.023	0.9873
266.15	299.40	0.023	1.0284
262.20	300.80	0.023	0.9936
261.25	300.65	0.023	0.9966
262.80	301.15	0.023	0.9930
265.85	301.90	0.023	1.0045
261.70	301.70	0.023	1.0015
263.50	302.20	0.023	0.9859
260.50	300.00	0.023	0.9798
265.95	301.80	0.023	1.0044
259.70	300.10	0.023	0.9805

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.55	301.40	0.023	0.9760
266.40	300.10	0.023	1.0026
263.50	302.15	0.023	0.9872
263.50	302.05	0.023	0.9900
266.05	301.75	0.023	1.0042
264.60	301.40	0.023	0.9873
265.65	301.65	0.023	1.0024
263.60	302.10	0.023	0.9874
264.85	301.90	0.023	0.9984
259.45	300.20	0.023	0.9809
266.15	300.40	0.023	0.9984
262.60	302.15	0.023	0.9832
266.75	301.25	0.023	1.0036
263.75	301.80	0.023	0.9916
260.45	300.00	0.023	0.9798
264.75	301.55	0.023	0.9959
266.30	300.05	0.023	0.9997
263.60	301.95	0.023	0.9907
262.45	302.20	0.023	0.9832
262.35	300.85	0.023	0.9858
263.80	301.90	0.023	0.9883
264.55	301.40	0.023	0.9872
261.30	300.50	0.023	0.9928
263.75	301.85	0.023	0.9903
266.75	300.40	0.023	1.0165
266.35	300.05	0.023	1.0011
266.20	300.20	0.023	0.9997
261.85	300.55	0.023	0.9893
263.10	301.10	0.023	0.9995
262.40	302.20	0.023	0.9832
265.85	300.95	0.023	1.0078
264.85	301.05	0.023	1.0028
266.05	300.65	0.023	1.0025
263.50	302.10	0.023	0.9886
262.65	302.10	0.023	0.9841
264.90	301.10	0.023	0.9994
265.80	300.90	0.023	1.0077
262.50	302.20	0.023	0.9832
263.55	302.10	0.023	0.9881
259.85	300.10	0.023	0.9845
261.65	300.45	0.023	0.9859
263.45	302.30	0.023	0.9837
266.45	301.60	0.023	1.0049
262.15	302.05	0.023	0.9832
266.45	300.10	0.023	1.0036
260.00	300.05	0.023	0.9830
263.80	301.75	0.023	0.9915
259.80	300.10	0.023	0.9827
259.65	300.10	0.023	0.9803

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.90	300.95	0.023	1.0081
266.70	300.35	0.023	1.0166
263.70	301.65	0.023	1.0047
265.65	301.80	0.023	1.0035
263.80	301.95	0.023	0.9870
260.25	300.10	0.023	0.9889
263.55	302.00	0.023	0.9904
266.20	300.15	0.022	1.0003
261.75	300.50	0.022	0.9891
262.75	301.10	0.022	0.9899
264.55	301.80	0.022	0.9954
262.05	302.10	0.022	0.9832
262.35	302.20	0.022	0.9832
259.75	300.10	0.022	0.9813
264.55	301.90	0.022	0.9948
263.85	301.70	0.022	0.9912
264.65	301.90	0.022	0.9969
264.90	301.90	0.022	0.9983
266.30	300.00	0.022	0.9936
259.35	300.20	0.022	0.9805
265.90	300.70	0.022	0.9927
262.55	302.20	0.022	0.9832
264.65	302.00	0.022	0.9960
265.75	301.95	0.022	1.0053
263.75	301.90	0.022	0.9892
261.25	300.60	0.022	0.9952
266.10	301.75	0.022	1.0042
266.55	300.15	0.022	1.0096
263.55	302.05	0.022	0.9893
265.00	301.15	0.022	0.9894
260.10	299.90	0.022	0.9825
265.35	301.65	0.022	1.0006
262.05	300.75	0.022	0.9963
262.50	301.45	0.022	0.9788
262.60	302.20	0.022	0.9832
262.65	302.20	0.022	0.9832
264.90	301.50	0.022	0.9963
262.15	302.15	0.022	0.9832
262.05	302.05	0.022	0.9832
263.70	301.90	0.022	0.9903
263.30	301.00	0.022	1.0069
263.80	302.00	0.022	0.9857
266.20	300.10	0.022	0.9995
266.25	300.05	0.022	0.9964
263.55	302.15	0.022	0.9869
265.25	301.70	0.022	0.9996
266.35	300.00	0.022	0.9962
264.45	301.45	0.022	0.9875
263.50	302.25	0.022	0.9847

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.15	301.50	0.022	0.9906
265.45	301.10	0.022	0.9934
266.15	300.35	0.022	0.9961
263.40	302.35	0.022	0.9833
264.95	301.15	0.022	0.9904
266.60	300.20	0.022	1.0143
265.90	300.85	0.022	1.0070
261.40	300.90	0.022	0.9960
264.70	301.75	0.022	0.9959
262.65	302.15	0.022	0.9835
261.45	300.45	0.022	0.9853
259.60	300.10	0.022	0.9796
263.60	302.05	0.022	0.9886
264.10	300.90	0.022	1.0005
262.40	300.85	0.022	0.9842
266.40	300.05	0.022	1.0017
261.65	301.45	0.022	0.9934
262.30	302.20	0.022	0.9832
265.25	301.20	0.022	0.9937
263.95	301.50	0.022	0.9951
266.25	300.00	0.022	0.9935
266.25	301.75	0.022	1.0047
264.60	301.95	0.022	0.9951
266.10	300.60	0.022	1.0072
263.80	301.85	0.022	0.9894
262.55	300.95	0.022	0.9786
262.00	302.10	0.022	0.9833
262.70	302.15	0.022	0.9833
263.60	300.90	0.021	1.0142
260.40	300.00	0.021	0.9796
263.80	301.80	0.021	0.9904
263.75	301.75	0.021	0.9932
262.70	301.05	0.021	0.9872
265.60	301.65	0.021	1.0022
263.60	302.00	0.021	0.9897
263.70	301.75	0.021	0.9970
265.30	301.65	0.021	1.0002
262.10	300.80	0.021	0.9985
265.45	301.65	0.021	1.0020
266.30	301.75	0.021	1.0048
264.00	301.75	0.021	0.9877
265.65	300.85	0.021	0.9998
265.60	301.00	0.021	1.0040
262.15	301.95	0.021	0.9823
266.15	300.30	0.021	0.9975
266.30	299.95	0.021	0.9936
265.65	301.70	0.021	1.0030
263.15	302.35	0.021	0.9838
262.00	301.75	0.021	0.9949

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.80	300.75	0.021	0.9947
263.85	301.50	0.021	0.9988
266.15	300.50	0.021	1.0073
261.95	300.60	0.021	0.9889
266.50	300.10	0.021	1.0053
264.75	301.50	0.021	0.9950
265.05	301.15	0.021	0.9883
264.10	301.70	0.021	0.9873
265.75	300.80	0.021	0.9997
261.65	301.30	0.021	0.9956
260.45	300.10	0.021	0.9879
261.35	300.45	0.021	0.9890
261.65	301.35	0.021	0.9927
265.40	301.15	0.021	0.9943
264.65	300.85	0.021	1.0040
263.65	301.95	0.021	0.9898
262.20	302.15	0.021	0.9832
262.65	302.25	0.021	0.9832
260.30	300.10	0.021	0.9887
260.35	299.95	0.021	0.9773
265.40	301.70	0.021	1.0013
261.50	301.05	0.021	0.9958
263.00	301.15	0.021	0.9966
260.65	300.00	0.021	0.9786
266.65	300.25	0.021	1.0154
263.75	301.95	0.021	0.9881
266.15	300.25	0.021	0.9991
266.25	299.95	0.021	0.9975
266.30	299.90	0.021	0.9968
264.95	301.10	0.021	0.9981
265.65	301.75	0.021	1.0032
262.65	301.00	0.021	0.9827
262.55	302.25	0.021	0.9832
262.25	300.80	0.021	0.9881
263.10	302.30	0.021	0.9847
266.20	300.05	0.021	0.9940
265.60	300.95	0.021	1.0041
264.05	301.75	0.021	0.9873
261.40	300.45	0.021	0.9884
263.40	300.95	0.021	1.0103
266.35	299.95	0.021	0.9923
263.85	301.90	0.021	0.9874
262.85	302.30	0.021	0.9833
263.55	302.20	0.021	0.9853
266.40	300.00	0.021	0.9982
264.85	301.00	0.021	1.0000
260.40	300.10	0.021	0.9884
264.50	301.45	0.021	0.9879
260.50	300.10	0.021	0.9864

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.60	302.25	0.021	0.9832
264.60	301.75	0.021	0.9954
263.90	301.55	0.021	0.9936
266.70	301.30	0.021	1.0038
261.25	300.55	0.021	0.9941
261.30	300.45	0.021	0.9903
263.85	301.95	0.021	0.9862
262.50	300.90	0.020	0.9819
262.80	302.30	0.020	0.9832
263.60	302.15	0.020	0.9860
260.35	300.10	0.020	0.9886
264.15	301.55	0.020	0.9881
266.45	300.05	0.020	1.0025
264.55	301.45	0.020	0.9885
266.25	299.90	0.020	0.9986
266.00	300.65	0.020	1.0008
264.70	301.45	0.020	0.9919
261.70	300.45	0.020	0.9849
264.60	301.45	0.020	0.9894
266.25	299.85	0.020	0.9958
262.20	302.20	0.020	0.9832
264.80	300.95	0.020	0.9995
264.45	300.90	0.020	1.0021
262.00	300.65	0.020	0.9898
266.15	300.20	0.020	0.9993
259.45	300.25	0.020	0.9836
265.50	301.05	0.020	0.9971
260.30	299.95	0.020	0.9768
262.50	302.25	0.020	0.9832
263.05	302.30	0.020	0.9841
263.75	301.60	0.020	1.0044
264.65	301.75	0.020	0.9971
265.85	301.95	0.020	1.0052
265.00	301.80	0.020	0.9981
261.30	300.85	0.020	1.0030
262.90	302.30	0.020	0.9833
264.90	301.05	0.020	1.0035
264.15	301.60	0.020	0.9873
263.75	301.70	0.020	0.9960
261.60	300.40	0.020	0.9840
261.60	301.20	0.020	0.9988
263.80	301.55	0.020	1.0013
265.85	300.70	0.020	0.9927
263.25	302.40	0.020	0.9833
263.95	301.75	0.020	0.9888
265.10	301.15	0.020	0.9869
260.40	299.95	0.020	0.9782
266.15	300.15	0.020	0.9988
262.10	302.15	0.020	0.9832

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.20	302.40	0.020	0.9834
266.20	300.00	0.020	0.9967
263.85	301.75	0.020	0.9905
262.50	301.40	0.020	0.9792
264.80	301.95	0.020	0.9984
259.60	299.90	0.020	0.9936
266.10	299.65	0.020	1.0097
261.55	300.40	0.020	0.9838
266.80	300.35	0.020	1.0082
261.60	301.40	0.020	0.9945
262.85	301.15	0.020	0.9935
264.75	300.90	0.020	1.0017
263.30	302.40	0.020	0.9832
263.90	301.90	0.020	0.9863
263.70	301.95	0.019	0.9889
264.65	301.45	0.019	0.9907
260.25	299.90	0.019	0.9789
261.80	300.50	0.019	0.9877
265.30	301.20	0.019	0.9948
265.80	300.85	0.019	1.0070
262.70	302.10	0.019	0.9841
260.50	299.95	0.019	0.9804
266.30	299.85	0.019	0.9956
266.35	299.90	0.019	0.9936
265.00	301.10	0.019	0.9949
266.55	301.50	0.019	1.0048
261.30	300.40	0.019	0.9875
264.15	301.65	0.019	0.9872
262.45	302.25	0.019	0.9832
261.90	300.55	0.019	0.9867
262.75	302.30	0.019	0.9832
263.35	302.40	0.019	0.9832
261.65	301.50	0.019	0.9933
265.75	301.90	0.019	1.0047
265.55	301.65	0.019	1.0022
266.15	300.10	0.019	0.9943
262.00	302.05	0.019	0.9832
259.35	300.25	0.019	0.9819
263.85	301.65	0.019	0.9920
266.40	299.95	0.019	0.9932
263.75	302.00	0.019	0.9866
266.15	300.55	0.019	1.0089
264.90	301.85	0.019	0.9980
259.85	299.85	0.019	0.9937
266.00	301.80	0.019	1.0046
263.55	302.25	0.019	0.9837
264.10	301.75	0.019	0.9872
259.90	300.10	0.019	0.9860
264.70	301.60	0.019	0.9954

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.85	301.95	0.019	0.9987
261.85	301.80	0.019	1.0081
264.20	301.50	0.019	0.9886
264.50	301.85	0.019	0.9952
263.65	302.00	0.019	0.9888
263.65	302.10	0.019	0.9864
261.25	300.50	0.019	0.9930
262.30	300.80	0.019	0.9878
263.65	302.05	0.019	0.9876
260.70	300.05	0.019	0.9779
262.95	302.30	0.019	0.9834
264.70	301.65	0.019	0.9954
265.60	301.85	0.019	1.0035
262.15	302.20	0.019	0.9832
265.95	301.85	0.019	1.0049
264.40	301.70	0.019	0.9933
263.10	302.35	0.019	0.9836
261.50	300.40	0.019	0.9835
263.85	301.85	0.019	0.9887
262.15	301.80	0.019	0.9872
265.15	301.80	0.019	0.9987
266.45	300.00	0.019	1.0005
263.50	302.30	0.019	0.9834
263.90	301.95	0.019	0.9844
262.60	300.95	0.019	0.9801
262.05	300.70	0.019	0.9917
261.55	301.10	0.019	0.9961
265.15	301.15	0.018	0.9891
262.05	302.00	0.018	0.9832
265.50	301.65	0.018	1.0023
264.55	301.75	0.018	0.9945
263.85	302.00	0.018	0.9843
266.05	300.60	0.018	1.0054
266.15	300.05	0.018	0.9954
262.10	302.00	0.018	0.9831
264.45	301.50	0.018	0.9892
263.90	301.75	0.018	0.9897
260.70	300.10	0.018	0.9799
262.15	300.75	0.018	0.9964
260.55	299.95	0.018	0.9806
266.70	300.30	0.018	1.0153
266.30	299.80	0.018	0.9994
263.15	302.40	0.018	0.9834
264.55	301.50	0.018	0.9920
266.20	299.95	0.018	0.9988
266.50	300.05	0.018	1.0040
265.95	300.65	0.018	0.9986
264.40	301.50	0.018	0.9884
261.65	300.40	0.018	0.9829

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.15	301.85	0.018	0.9825
265.60	301.80	0.018	1.0032
262.95	301.15	0.018	0.9925
265.60	301.70	0.018	1.0026
264.60	301.50	0.018	0.9929
263.15	301.05	0.018	1.0012
260.60	299.95	0.018	0.9806
266.55	301.45	0.018	1.0044
260.15	300.10	0.018	0.9894
262.10	300.75	0.018	0.9975
265.25	301.75	0.018	0.9994
266.55	300.10	0.018	1.0077
261.35	300.40	0.018	0.9869
264.15	301.70	0.018	0.9872
264.05	301.80	0.018	0.9871
262.40	302.25	0.018	0.9832
259.55	300.05	0.018	0.9789
262.25	302.20	0.018	0.9832
262.20	302.25	0.018	0.9832
263.60	302.20	0.018	0.9843
263.70	301.70	0.018	1.0016
266.25	299.80	0.018	0.9975
261.90	301.80	0.018	0.9968
261.25	300.45	0.018	0.9912
262.70	301.00	0.018	0.9859
262.05	301.75	0.018	0.9950
264.70	301.70	0.018	0.9954
259.75	299.85	0.018	1.0056
262.15	301.90	0.018	0.9822
266.10	300.25	0.018	0.9994
262.80	301.10	0.018	0.9917
266.10	300.30	0.018	0.9995
263.75	301.65	0.018	1.0018
261.25	300.40	0.018	0.9887
260.20	299.85	0.018	0.9880
262.10	301.75	0.018	0.9954
264.00	301.80	0.018	0.9872
259.40	300.15	0.018	0.9804
260.60	300.15	0.018	0.9896
266.20	301.80	0.018	1.0056
265.20	301.80	0.018	0.9992
259.45	300.15	0.018	0.9807
266.30	299.70	0.018	0.9938
266.40	299.90	0.018	0.9923
264.75	302.00	0.018	0.9980
266.10	300.35	0.018	0.9972
262.90	301.15	0.018	0.9912
263.10	302.40	0.018	0.9834
262.20	300.75	0.018	0.9931

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.75	301.05	0.018	0.9892
262.00	300.60	0.018	0.9872
266.75	300.35	0.018	1.0159
263.95	301.90	0.018	0.9851
261.30	300.35	0.018	0.9859
266.20	299.90	0.018	0.9972
266.35	299.85	0.018	0.9939
264.95	301.85	0.018	0.9982
265.90	300.90	0.018	1.0072
263.25	301.00	0.018	1.0049
266.10	300.45	0.018	1.0019
266.30	299.75	0.018	0.9970
264.70	300.85	0.017	1.0037
263.85	301.55	0.017	0.9957
259.80	299.85	0.017	0.9999
264.95	301.05	0.017	1.0025
264.50	301.50	0.017	0.9906
259.55	300.10	0.017	0.9799
263.85	301.80	0.017	0.9896
261.65	301.55	0.017	0.9932
263.90	301.50	0.017	0.9955
265.05	301.10	0.017	0.9920
264.50	301.90	0.017	0.9943
264.90	301.00	0.017	1.0003
261.85	300.50	0.017	0.9852
265.20	301.15	0.017	0.9916
261.30	300.30	0.017	0.9846
262.35	302.25	0.017	0.9832
263.00	302.30	0.017	0.9836
265.35	301.70	0.017	1.0006
262.10	301.95	0.017	0.9826
264.60	301.55	0.017	0.9945
264.60	301.60	0.017	0.9945
264.15	300.90	0.017	0.9997
264.40	301.75	0.017	0.9934
266.10	300.55	0.017	1.0066
264.55	301.55	0.017	0.9943
264.45	301.85	0.017	0.9942
263.05	301.10	0.017	0.9985
265.60	301.75	0.017	1.0031
262.15	302.25	0.017	0.9832
266.35	299.80	0.017	0.9975
259.55	300.00	0.017	0.9799
262.45	300.85	0.017	0.9825
266.10	300.50	0.017	1.0050
266.10	300.40	0.017	0.9958
259.70	299.85	0.017	1.0093
264.70	301.55	0.017	0.9953
265.70	300.80	0.017	0.9979

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.40	301.90	0.017	0.9941
264.45	301.90	0.017	0.9940
266.25	299.75	0.017	0.9948
266.45	299.95	0.017	0.9963
266.20	299.85	0.017	0.9938
266.10	300.20	0.017	0.9992
266.15	300.00	0.017	0.9987
264.00	301.85	0.017	0.9863
263.55	300.90	0.017	1.0120
259.50	300.20	0.017	0.9816
264.45	301.70	0.017	0.9937
263.95	301.95	0.017	0.9838
264.10	301.80	0.017	0.9873
265.70	301.95	0.017	1.0052
261.75	300.45	0.017	0.9820
266.60	300.15	0.017	1.0128
266.35	299.75	0.017	0.9977
262.55	300.90	0.017	0.9809
261.80	301.80	0.017	1.0099
265.10	301.80	0.017	0.9982
261.45	300.40	0.017	0.9841
264.45	301.55	0.017	0.9918
263.35	300.95	0.017	1.0085
259.90	299.85	0.017	0.9887
264.65	301.60	0.017	0.9954
262.25	302.25	0.017	0.9832
264.00	301.90	0.017	0.9853
265.35	301.15	0.017	0.9945
264.60	302.00	0.017	0.9948
264.40	301.65	0.017	0.9933
261.95	301.80	0.017	0.9919
264.55	301.60	0.017	0.9942
266.25	299.70	0.017	0.9958
264.45	301.75	0.017	0.9946
260.65	300.15	0.017	0.9868
264.55	301.95	0.017	0.9943
261.20	300.80	0.017	1.0082
264.05	301.85	0.017	0.9869
264.15	301.75	0.017	0.9876
263.65	302.15	0.017	0.9850
264.40	301.80	0.017	0.9938
263.95	301.85	0.016	0.9868
264.50	301.80	0.016	0.9944
264.50	301.55	0.016	0.9936
264.45	301.60	0.016	0.9933
259.60	300.15	0.016	0.9813
265.45	301.70	0.016	1.0019
264.25	301.50	0.016	0.9874
266.15	299.70	0.016	1.0010

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.30	299.65	0.016	0.9955
264.45	301.80	0.016	0.9950
264.45	301.65	0.016	0.9940
264.95	301.90	0.016	0.9985
263.90	301.85	0.016	0.9878
263.70	302.00	0.016	0.9876
262.35	300.80	0.016	0.9861
264.85	300.95	0.016	0.9994
261.25	300.35	0.016	0.9869
264.20	301.55	0.016	0.9873
263.05	302.35	0.016	0.9836
264.40	301.85	0.016	0.9942
264.35	301.50	0.016	0.9875
264.50	301.75	0.016	0.9949
266.20	299.80	0.016	0.9926
263.85	301.60	0.016	0.9931
259.55	300.15	0.016	0.9809
265.90	300.65	0.016	0.9960
264.45	300.85	0.016	1.0027
261.95	300.55	0.016	0.9850
262.05	302.15	0.016	0.9832
264.65	301.50	0.016	0.9936
264.65	301.55	0.016	0.9950
264.40	301.60	0.016	0.9915
260.45	299.95	0.016	0.9796
263.80	301.65	0.016	0.9943
261.40	300.40	0.016	0.9855
265.85	300.90	0.016	1.0090
264.50	301.60	0.016	0.9941
261.70	300.40	0.016	0.9805
264.20	301.60	0.016	0.9872
263.70	302.05	0.016	0.9865
266.20	299.75	0.016	0.9935
266.50	300.00	0.016	1.0029
263.60	302.25	0.016	0.9833
262.60	302.35	0.016	0.9832
260.70	300.00	0.016	0.9781
262.10	301.90	0.016	0.9824
266.10	300.15	0.016	0.9971
266.15	299.45	0.016	1.0196
262.00	302.00	0.016	0.9833
266.15	299.75	0.016	0.9971
263.95	301.80	0.016	0.9879
264.65	301.65	0.016	0.9966
262.50	300.85	0.016	0.9814
259.55	299.95	0.016	0.9854
262.25	300.75	0.016	0.9896
263.75	302.05	0.016	0.9850
265.00	301.05	0.016	0.9995

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.40	301.55	0.016	0.9900
264.65	301.70	0.016	0.9965
266.35	299.70	0.016	0.9943
266.40	299.80	0.016	0.9943
264.00	301.95	0.016	0.9849
266.75	299.00	0.016	0.9919
266.05	301.80	0.016	1.0048
262.60	302.30	0.016	0.9832
266.10	299.70	0.016	1.0055
264.20	301.65	0.016	0.9875
264.10	301.85	0.016	0.9876
266.00	300.60	0.016	1.0022
264.05	301.90	0.016	0.9869
261.25	300.30	0.016	0.9854
263.90	302.00	0.016	0.9835
261.60	300.35	0.016	0.9841
263.80	302.05	0.016	0.9841
266.65	300.20	0.016	1.0154
264.35	301.70	0.016	0.9910
261.55	300.35	0.015	0.9850
261.60	301.35	0.015	0.9933
266.10	300.10	0.015	0.9941
261.65	301.60	0.015	0.9939
266.40	299.60	0.015	0.9982
264.50	301.65	0.015	0.9942
262.40	300.80	0.015	0.9834
261.60	301.45	0.015	0.9945
264.55	301.65	0.015	0.9943
264.35	301.75	0.015	0.9918
266.15	299.95	0.015	0.9994
264.55	301.70	0.015	0.9944
262.65	302.30	0.015	0.9832
265.40	301.75	0.015	1.0015
266.75	301.30	0.015	1.0041
261.60	301.25	0.015	0.9982
262.10	302.20	0.015	0.9832
261.45	301.00	0.015	0.9984
262.05	300.65	0.015	0.9884
264.60	301.65	0.015	0.9950
259.50	300.15	0.015	0.9807
266.40	299.85	0.015	0.9925
266.65	301.40	0.015	1.0044
264.15	301.80	0.015	0.9881
264.35	301.80	0.015	0.9928
264.50	301.70	0.015	0.9940
264.20	301.70	0.015	0.9873
265.05	301.80	0.015	0.9982
265.60	300.85	0.015	0.9978
266.45	299.90	0.015	0.9923

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.30	300.20	0.015	0.9798
264.70	301.50	0.015	0.9944
262.55	302.30	0.015	0.9832
262.00	301.80	0.015	0.9873
260.65	299.95	0.015	0.9805
261.35	300.35	0.015	0.9857
266.20	299.70	0.015	0.9988
262.60	300.90	0.015	0.9837
262.65	302.35	0.015	0.9832
262.55	302.35	0.015	0.9832
265.10	301.10	0.015	0.9871
264.35	301.85	0.015	0.9936
266.10	300.05	0.015	0.9987
262.10	300.70	0.015	0.9916
262.65	300.95	0.015	0.9831
259.35	300.15	0.015	0.9798
266.05	300.55	0.015	1.0038
266.55	300.05	0.015	1.0062
265.75	300.75	0.015	0.9939
263.70	302.10	0.015	0.9853
264.60	301.70	0.015	0.9952
264.20	300.90	0.015	1.0003
266.40	299.65	0.015	0.9942
265.55	301.85	0.015	1.0033
262.30	300.75	0.015	0.9888
266.15	299.80	0.015	0.9930
266.15	301.80	0.015	1.0050
262.70	302.30	0.015	0.9832
266.15	299.90	0.015	0.9967
263.50	300.90	0.015	1.0111
264.20	301.75	0.015	0.9880
265.55	301.00	0.015	1.0013
266.15	299.65	0.015	1.0034
265.55	301.80	0.015	1.0032
266.25	299.65	0.015	0.9960
263.90	300.85	0.015	1.0162
265.30	301.70	0.015	1.0002
264.95	301.00	0.015	0.9999
261.50	300.35	0.015	0.9856
265.60	300.90	0.015	1.0013
264.10	301.90	0.015	0.9882
261.25	300.85	0.015	1.0084
261.90	300.50	0.015	0.9824
264.40	301.95	0.014	0.9933
261.65	300.35	0.014	0.9823
265.55	301.70	0.014	1.0022
265.25	301.15	0.014	0.9918
266.05	300.25	0.014	1.0000
263.45	302.35	0.014	0.9832

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.65	300.15	0.014	0.9821
264.80	300.90	0.014	1.0011
260.30	299.90	0.014	0.9781
260.40	299.90	0.014	0.9801
264.90	301.95	0.014	0.9989
266.35	301.75	0.014	1.0055
265.00	301.85	0.014	0.9983
262.75	301.00	0.014	0.9884
264.35	301.90	0.014	0.9940
260.75	300.05	0.014	0.9775
261.20	300.55	0.014	0.9940
261.20	300.60	0.014	0.9954
261.25	300.25	0.014	0.9840
265.80	300.70	0.014	0.9926
261.35	300.90	0.014	1.0003
266.05	300.30	0.014	1.0003
263.95	302.00	0.014	0.9842
262.20	302.30	0.014	0.9832
266.15	299.85	0.014	0.9932
259.50	300.25	0.014	0.9847
262.30	302.25	0.014	0.9832
262.70	302.35	0.014	0.9832
261.40	300.95	0.014	0.9984
262.55	300.85	0.014	0.9830
263.65	302.20	0.014	0.9836
264.15	301.85	0.014	0.9887
260.35	299.90	0.014	0.9782
264.55	300.80	0.014	1.0074
264.05	301.95	0.014	0.9870
262.60	302.40	0.014	0.9835
261.80	300.45	0.014	0.9795
264.20	301.80	0.014	0.9889
261.60	301.30	0.014	0.9956
262.15	302.30	0.014	0.9832
265.80	302.00	0.014	1.0060
260.75	300.10	0.014	0.9784
266.50	299.95	0.014	0.9989
262.50	302.30	0.014	0.9832
265.45	301.75	0.014	1.0023
262.05	301.90	0.014	0.9827
264.35	301.65	0.014	0.9914
262.10	302.25	0.014	0.9833
261.00	300.20	0.014	0.9808
263.20	301.00	0.014	1.0031
263.20	302.45	0.014	0.9832
265.55	301.75	0.014	1.0029
262.85	301.10	0.014	0.9927
259.40	300.30	0.014	0.9848
265.70	301.90	0.014	1.0044

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.05	300.50	0.014	1.0016
261.20	300.50	0.014	0.9928
266.70	300.25	0.014	1.0140
264.30	301.85	0.014	0.9922
264.30	301.75	0.014	0.9896
264.55	302.00	0.014	0.9943
264.30	301.80	0.014	0.9910
266.05	300.35	0.014	0.9992
265.25	301.80	0.014	0.9993
264.30	301.50	0.014	0.9872
261.20	300.45	0.014	0.9915
265.40	301.10	0.014	0.9936
265.30	301.15	0.014	0.9940
265.95	300.60	0.014	1.0002
266.40	301.70	0.014	1.0057
263.40	302.40	0.014	0.9832
259.30	300.25	0.014	0.9807
263.25	302.45	0.014	0.9832
263.45	302.40	0.014	0.9832
260.70	300.15	0.014	0.9841
264.25	300.90	0.014	1.0014
265.35	301.75	0.014	1.0006
266.10	299.75	0.014	1.0019
261.20	300.40	0.014	0.9899
263.90	301.80	0.014	0.9889
261.05	300.20	0.014	0.9807
263.05	302.40	0.014	0.9832
262.80	301.05	0.014	0.9915
259.50	300.10	0.014	0.9799
266.10	299.55	0.014	1.0200
264.25	301.55	0.014	0.9872
264.25	301.75	0.014	0.9888
263.00	302.35	0.014	0.9833
264.25	301.70	0.013	0.9879
263.00	301.10	0.013	0.9957
261.05	300.25	0.013	0.9827
266.10	299.50	0.013	1.0252
266.70	299.00	0.013	0.9939
266.45	299.65	0.013	0.9933
266.45	299.60	0.013	0.9947
262.15	300.70	0.013	0.9907
265.65	301.95	0.013	1.0050
264.35	301.55	0.013	0.9886
265.85	300.65	0.013	0.9929
265.85	300.85	0.013	1.0098
264.20	301.85	0.013	0.9897
263.50	302.35	0.013	0.9832
264.30	301.70	0.013	0.9893
266.10	300.00	0.013	1.0013

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
262.75	302.35	0.013	0.9832
263.55	302.30	0.013	0.9833
264.00	302.00	0.013	0.9860
264.25	301.80	0.013	0.9896
261.45	300.35	0.013	0.9851
266.45	299.70	0.013	0.9941
266.10	301.80	0.013	1.0049
262.50	302.35	0.013	0.9832
266.05	300.20	0.013	0.9989
266.40	299.70	0.013	0.9945
265.05	301.05	0.013	0.9965
264.45	300.80	0.013	1.0082
260.45	299.90	0.013	0.9823
261.75	300.40	0.013	0.9764
260.15	299.85	0.013	0.9907
265.30	301.75	0.013	1.0002
266.60	300.10	0.013	1.0114
261.30	300.25	0.013	0.9837
262.10	301.85	0.013	0.9826
266.75	300.30	0.013	1.0135
261.20	300.65	0.013	0.9967
265.15	301.10	0.013	0.9846
261.85	300.45	0.013	0.9773
262.35	300.75	0.013	0.9862
262.70	300.95	0.013	0.9860
260.00	299.85	0.013	0.9902
263.30	302.45	0.013	0.9832
264.10	301.95	0.013	0.9886
264.25	301.65	0.013	0.9881
266.35	299.60	0.013	0.9972
264.15	301.90	0.013	0.9893
264.25	301.85	0.013	0.9908
261.70	300.35	0.013	0.9791
266.40	299.55	0.013	0.9992
264.30	301.90	0.013	0.9930
261.20	300.35	0.013	0.9879
265.90	301.95	0.013	1.0052
264.50	301.95	0.013	0.9941
262.45	302.30	0.013	0.9832
262.80	302.35	0.013	0.9832
261.40	300.35	0.013	0.9859
266.05	300.45	0.013	0.9981
264.35	301.95	0.013	0.9937
266.80	301.35	0.013	1.0041
266.00	301.85	0.013	1.0052
264.35	301.60	0.013	0.9902
262.00	300.55	0.013	0.9837
261.10	300.25	0.013	0.9824
262.20	300.70	0.013	0.9892

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
260.55	299.90	0.013	0.9856
263.85	302.05	0.013	0.9834
265.50	301.80	0.013	1.0030
263.10	301.05	0.013	0.9991
266.00	300.55	0.013	1.0012
264.90	300.95	0.013	0.9994
262.55	302.40	0.013	0.9835
264.25	301.60	0.013	0.9877
266.80	300.30	0.013	1.0068
262.95	302.35	0.013	0.9832
263.85	300.85	0.013	1.0176
262.10	302.30	0.013	0.9834
265.95	301.90	0.013	1.0052
261.20	300.25	0.013	0.9832
265.00	301.00	0.013	0.9993
263.75	302.10	0.013	0.9837
263.70	302.15	0.013	0.9840
262.05	301.80	0.013	0.9856
266.05	299.60	0.013	1.0311
260.75	300.00	0.013	0.9781
266.70	301.35	0.013	1.0044
261.10	300.20	0.013	0.9809
264.20	301.90	0.012	0.9905
262.00	302.15	0.012	0.9832
263.65	302.25	0.012	0.9832
265.55	301.90	0.012	1.0035
261.60	300.30	0.012	0.9850
266.50	299.90	0.012	0.9938
263.55	302.35	0.012	0.9832
261.35	300.30	0.012	0.9843
260.60	299.90	0.012	0.9868
262.05	301.85	0.012	0.9825
262.00	301.85	0.012	0.9844
262.45	300.80	0.012	0.9814
263.30	300.95	0.012	1.0071
266.45	299.75	0.012	0.9948
265.50	301.75	0.012	1.0024
260.55	300.15	0.012	0.9921
261.55	300.30	0.012	0.9863
263.95	300.85	0.012	1.0143
266.55	300.00	0.012	1.0050
262.05	301.95	0.012	0.9831
264.10	300.85	0.012	1.0045
265.45	301.80	0.012	1.0021
262.25	300.70	0.012	0.9884
263.15	302.45	0.012	0.9832
259.70	300.15	0.012	0.9831
262.05	300.60	0.012	0.9860
266.55	301.55	0.012	1.0053

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.50	302.00	0.012	0.9941
259.45	300.30	0.012	0.9866
264.30	300.90	0.012	1.0015
264.25	301.90	0.012	0.9917
265.75	302.00	0.012	1.0064
262.65	300.90	0.012	0.9858
261.20	300.30	0.012	0.9861
264.75	300.85	0.012	1.0041
261.15	300.25	0.012	0.9824
262.90	302.35	0.012	0.9832
261.00	300.15	0.012	0.9797
262.60	300.85	0.012	0.9872
266.35	299.55	0.012	0.9966
259.35	300.30	0.012	0.9834
266.10	299.80	0.012	0.9976
261.00	300.25	0.012	0.9827
266.20	299.65	0.012	1.0004
264.30	301.95	0.012	0.9932
266.50	301.60	0.012	1.0054
266.45	299.85	0.012	0.9923
259.55	300.20	0.012	0.9822
266.45	299.55	0.012	0.9960
264.05	302.00	0.012	0.9882
263.80	300.85	0.012	1.0185
264.30	301.65	0.012	0.9893
262.25	302.30	0.012	0.9832
265.50	301.70	0.012	1.0022
262.65	302.40	0.012	0.9835
266.05	300.40	0.012	0.9955
260.50	299.90	0.012	0.9840
262.50	300.80	0.012	0.9822
259.95	299.85	0.012	0.9880
265.60	301.90	0.012	1.0042
260.05	299.85	0.012	0.9924
265.40	301.80	0.012	1.0015
259.30	300.15	0.012	0.9793
266.45	301.65	0.012	1.0054
263.45	300.90	0.012	1.0105
261.05	300.15	0.012	0.9797
261.25	300.20	0.012	0.9823
261.20	300.70	0.012	0.9994
265.45	301.05	0.012	0.9961
262.10	300.65	0.012	0.9864
261.95	301.85	0.012	0.9865
263.50	302.40	0.012	0.9835
262.40	302.30	0.012	0.9832
261.65	301.65	0.012	0.9968
266.10	299.95	0.012	0.9990
261.95	302.05	0.012	0.9832

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
260.10	300.10	0.012	0.9894
260.70	299.95	0.012	0.9806
266.05	300.15	0.012	0.9954
264.15	301.95	0.012	0.9903
265.50	301.85	0.012	1.0034
260.80	300.10	0.012	0.9783
262.85	302.35	0.012	0.9832
260.80	300.05	0.012	0.9775
261.95	300.50	0.012	0.9803
261.15	300.20	0.011	0.9811
262.30	300.70	0.011	0.9878
260.95	300.20	0.011	0.9809
262.95	301.10	0.011	0.9926
264.30	301.55	0.011	0.9876
261.15	300.30	0.011	0.9854
266.30	299.60	0.011	0.9936
265.50	301.90	0.011	1.0036
266.40	299.75	0.011	0.9964
261.65	300.30	0.011	0.9832
266.65	300.15	0.011	1.0153
261.20	300.75	0.011	1.0030
265.90	300.60	0.011	0.9974
261.95	302.10	0.011	0.9834
266.00	300.50	0.011	0.9984
262.90	301.10	0.011	0.9912
261.20	300.20	0.011	0.9818
261.75	300.35	0.011	0.9769
264.20	301.95	0.011	0.9915
259.95	300.10	0.011	0.9874
264.70	302.05	0.011	0.9971
261.50	300.30	0.011	0.9854
262.00	301.95	0.011	0.9835
264.25	301.95	0.011	0.9924
266.15	299.50	0.011	1.0103
261.10	300.30	0.011	0.9858
265.05	301.85	0.011	0.9984
264.10	302.00	0.011	0.9901
260.95	300.15	0.011	0.9797
262.10	301.80	0.011	0.9859
266.05	299.65	0.011	1.0220
261.15	300.35	0.011	0.9885
266.25	299.60	0.011	0.9940
263.90	302.05	0.011	0.9836
260.75	300.15	0.011	0.9813
261.60	301.50	0.011	0.9941
262.45	302.35	0.011	0.9832
263.80	301.60	0.011	0.9982
266.50	299.85	0.011	0.9923
264.85	300.90	0.011	1.0008

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.50	302.00	0.011	1.0042
265.95	300.55	0.011	0.9989
265.85	302.00	0.011	1.0052
266.40	299.50	0.011	0.9997
264.35	302.00	0.011	0.9933
261.70	301.75	0.011	1.0077
259.50	300.05	0.011	0.9794
266.00	300.45	0.011	0.9951
266.10	299.45	0.011	1.0313
266.00	300.30	0.011	1.0006
261.15	300.40	0.011	0.9903
263.60	302.30	0.011	0.9832
262.50	302.40	0.011	0.9835
266.00	300.35	0.011	1.0005
260.25	299.85	0.011	0.9856
266.05	300.10	0.011	0.9942
265.10	301.05	0.011	0.9905
266.05	300.05	0.011	0.9999
261.10	300.15	0.011	0.9797
259.45	300.10	0.011	0.9797
266.10	299.90	0.011	0.9942
262.00	301.90	0.011	0.9831
265.20	301.10	0.011	0.9862
266.35	299.65	0.011	0.9953
261.95	302.00	0.011	0.9833
263.95	302.05	0.011	0.9850
266.60	300.05	0.011	1.0099
259.60	300.20	0.011	0.9837
262.05	302.20	0.011	0.9833
264.30	301.60	0.011	0.9886
264.00	302.05	0.011	0.9874
259.00	301.10	0.011	0.9790
266.00	300.40	0.011	0.9970
262.80	301.00	0.011	0.9915
264.45	302.00	0.010	0.9939
263.40	302.45	0.010	0.9833
265.35	301.80	0.010	1.0005
261.60	300.25	0.010	0.9859
265.30	301.80	0.010	1.0000
262.35	302.30	0.010	0.9832
263.80	302.10	0.010	0.9833
265.60	301.95	0.010	1.0047
262.30	302.30	0.010	0.9832
261.80	300.40	0.010	0.9746
266.35	299.50	0.010	1.0002
263.10	302.45	0.010	0.9833
262.75	300.95	0.010	0.9888
261.90	301.85	0.010	0.9889
260.85	300.10	0.010	0.9784

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.50	299.65	0.010	0.9970
263.70	302.20	0.010	0.9832
266.00	300.25	0.010	1.0001
259.00	301.15	0.010	0.9812
264.05	300.85	0.010	1.0082
260.90	300.10	0.010	0.9783
264.30	302.00	0.010	0.9937
260.95	300.25	0.010	0.9836
264.95	300.95	0.010	0.9993
266.45	299.80	0.010	0.9929
260.90	300.15	0.010	0.9794
259.25	300.20	0.010	0.9782
261.70	300.30	0.010	0.9809
266.50	299.60	0.010	0.9974
261.55	300.25	0.010	0.9853
266.55	299.95	0.010	1.0027
261.30	300.20	0.010	0.9823
260.95	300.10	0.010	0.9784
260.80	300.00	0.010	0.9781
259.00	301.05	0.010	0.9823
260.45	300.15	0.010	0.9941
264.15	302.00	0.010	0.9918
263.60	302.35	0.010	0.9835
261.00	300.10	0.010	0.9785
263.00	302.40	0.010	0.9832
266.05	299.70	0.010	1.0146
261.15	300.45	0.010	0.9907
263.35	302.45	0.010	0.9832
259.65	299.85	0.010	1.0112
265.45	301.85	0.010	1.0024
266.10	299.85	0.010	0.9933
258.95	301.10	0.010	0.9790
260.85	300.05	0.010	0.9775
261.05	300.30	0.010	0.9861
264.20	302.00	0.010	0.9927
265.00	301.90	0.010	0.9986
262.85	301.05	0.010	0.9944
265.70	300.75	0.010	0.9932
262.70	302.40	0.010	0.9834
259.00	301.20	0.010	0.9850
264.60	300.80	0.010	1.0069
265.65	300.80	0.010	0.9967
266.30	299.50	0.010	0.9984
265.50	301.00	0.010	0.9991
260.10	299.85	0.010	0.9929
263.65	302.30	0.010	0.9835
264.25	302.00	0.010	0.9932
261.45	300.30	0.010	0.9857
262.60	302.45	0.010	0.9846

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.00	301.00	0.010	0.9846
263.55	302.40	0.010	0.9840
258.95	301.15	0.010	0.9812
264.40	302.00	0.010	0.9934
264.05	302.05	0.010	0.9893
266.50	299.70	0.010	0.9956
265.65	301.90	0.010	1.0043
265.55	302.00	0.010	1.0042
262.45	300.75	0.010	0.9809
261.80	300.35	0.010	0.9760
264.35	300.90	0.010	1.0016
266.05	299.75	0.010	1.0087
262.55	302.45	0.010	0.9844
261.15	300.15	0.009	0.9798
266.60	301.50	0.009	1.0053
259.25	300.25	0.009	0.9795
263.05	301.05	0.009	0.9972
265.05	301.00	0.009	0.9989
266.60	301.45	0.009	1.0047
259.30	300.30	0.009	0.9818
258.95	301.05	0.009	0.9823
260.90	300.05	0.009	0.9775
266.30	299.55	0.009	0.9940
261.50	300.25	0.009	0.9849
266.70	300.20	0.009	1.0138
262.05	300.55	0.009	0.9839
261.15	300.50	0.009	0.9922
263.40	300.90	0.009	1.0096
259.75	300.15	0.009	0.9847
265.80	300.65	0.009	0.9927
262.70	300.90	0.009	0.9879
260.80	300.15	0.009	0.9796
261.35	300.25	0.009	0.9832
260.85	300.15	0.009	0.9791
266.50	299.55	0.009	0.9981
261.10	300.35	0.009	0.9895
264.45	301.95	0.009	0.9938
262.15	300.65	0.009	0.9844
261.00	300.30	0.009	0.9864
264.15	300.85	0.009	1.0025
266.50	299.75	0.009	0.9925
265.95	300.50	0.009	0.9958
260.90	300.20	0.009	0.9814
264.65	300.80	0.009	1.0071
261.05	300.10	0.009	0.9786
266.05	300.00	0.009	1.0005
263.75	302.15	0.009	0.9832
263.75	300.85	0.009	1.0194
261.85	300.40	0.009	0.9743

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.00	300.20	0.009	0.9978
261.55	301.15	0.009	0.9979
260.65	299.90	0.009	0.9874
258.95	301.20	0.009	0.9850
266.45	299.50	0.009	0.9960
264.10	302.05	0.009	0.9917
265.10	301.85	0.009	0.9984
262.55	300.80	0.009	0.9862
263.15	301.00	0.009	1.0008
261.15	300.55	0.009	0.9954
261.65	300.25	0.009	0.9850
263.70	302.25	0.009	0.9834
261.90	300.45	0.009	0.9759
265.75	300.70	0.009	0.9924
264.65	302.05	0.009	0.9955
261.25	300.15	0.009	0.9807
266.25	301.80	0.009	1.0057
261.40	300.30	0.009	0.9848
260.95	300.05	0.009	0.9777
265.85	300.60	0.009	0.9934
261.75	300.30	0.009	0.9805
259.00	301.25	0.009	0.9880
260.75	299.95	0.009	0.9807
265.35	301.10	0.009	0.9944
265.90	300.55	0.009	0.9962
265.50	302.05	0.009	1.0060
259.05	301.10	0.009	0.9790
265.95	300.45	0.009	0.9935
266.65	299.00	0.009	0.9924
262.00	300.50	0.009	0.9803
266.75	300.25	0.009	1.0109
262.65	300.85	0.009	0.9900
262.20	302.35	0.009	0.9838
259.05	301.15	0.009	0.9812
259.55	300.25	0.009	0.9865
263.25	300.95	0.009	1.0061
262.35	300.70	0.009	0.9865
261.20	300.15	0.009	0.9803
261.10	300.10	0.009	0.9784
261.90	300.40	0.009	0.9751
262.10	300.60	0.009	0.9839
266.05	299.80	0.009	1.0037
262.75	302.40	0.009	0.9832
262.50	302.45	0.009	0.9844
265.70	302.00	0.009	1.0063
265.95	300.40	0.009	0.9977
261.75	301.80	0.009	1.0097
266.55	299.90	0.009	0.9973
259.05	301.05	0.008	0.9827

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
260.40	299.85	0.008	0.9844
264.35	302.05	0.008	0.9940
262.05	302.25	0.008	0.9834
265.40	301.85	0.008	1.0011
261.30	300.15	0.008	0.9808
260.85	300.00	0.008	0.9786
262.20	300.65	0.008	0.9831
265.45	301.90	0.008	1.0024
265.15	301.85	0.008	0.9990
259.25	300.15	0.008	0.9775
262.25	300.65	0.008	0.9838
265.60	302.00	0.008	1.0053
263.05	302.45	0.008	0.9835
258.95	301.00	0.008	0.9844
266.65	300.10	0.008	1.0150
264.20	302.05	0.008	0.9938
259.40	300.10	0.008	0.9795
261.95	301.90	0.008	0.9840
262.40	302.35	0.008	0.9832
265.55	301.95	0.008	1.0038
261.00	300.05	0.008	0.9780
266.05	299.95	0.008	0.9959
264.30	302.05	0.008	0.9940
263.45	302.45	0.008	0.9839
265.95	300.35	0.008	0.9990
264.15	302.05	0.008	0.9932
266.80	299.05	0.008	0.9928
265.25	301.85	0.008	0.9993
258.95	301.25	0.008	0.9878
264.80	302.00	0.008	0.9987
261.55	300.20	0.008	0.9840
266.25	299.55	0.008	0.9934
260.90	300.00	0.008	0.9794
262.45	302.40	0.008	0.9835
259.05	301.20	0.008	0.9851
262.50	300.75	0.008	0.9843
262.80	302.40	0.008	0.9834
265.15	301.05	0.008	0.9858
264.25	302.05	0.008	0.9941
261.85	300.35	0.008	0.9770
265.00	300.95	0.008	0.9992
264.80	300.85	0.008	1.0047
261.50	300.20	0.008	0.9828
258.90	301.10	0.008	0.9790
261.95	301.95	0.008	0.9835
261.55	301.40	0.008	0.9968
259.00	301.30	0.008	0.9892
265.95	300.30	0.008	1.0000
266.00	300.15	0.008	0.9939

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.65	302.00	0.008	1.0059
263.20	302.50	0.008	0.9836
262.40	300.75	0.008	0.9826
261.95	300.45	0.008	0.9767
262.65	302.45	0.008	0.9846
261.30	300.10	0.008	0.9797
259.50	300.00	0.008	0.9811
261.60	300.20	0.008	0.9857
260.95	300.30	0.008	0.9876
261.70	300.25	0.008	0.9843
261.85	301.85	0.008	0.9989
263.25	302.50	0.008	0.9836
265.95	301.95	0.008	1.0055
266.60	300.00	0.008	1.0077
261.15	300.10	0.008	0.9784
265.25	301.10	0.008	0.9906
258.90	301.15	0.008	0.9806
259.05	301.00	0.008	0.9852
261.45	300.25	0.008	0.9842
258.90	301.05	0.008	0.9823
266.50	299.80	0.007	0.9923
264.90	300.90	0.007	1.0006
262.85	302.40	0.007	0.9835
266.05	301.85	0.007	1.0053
260.50	300.15	0.007	0.9937
264.45	302.05	0.007	0.9942
261.05	300.35	0.007	0.9893
265.30	301.85	0.007	0.9998
260.90	300.25	0.007	0.9853
262.15	302.35	0.007	0.9847
263.60	302.40	0.007	0.9852
260.05	300.10	0.007	0.9893
265.55	300.95	0.007	1.0011
264.95	301.95	0.007	0.9992
260.70	300.20	0.007	0.9912
260.45	299.85	0.007	0.9882
263.85	302.10	0.007	0.9833
261.60	301.55	0.007	0.9945
265.45	302.00	0.007	1.0027
264.70	300.80	0.007	1.0070
262.90	301.05	0.007	0.9931
261.10	300.40	0.007	0.9900
265.35	301.85	0.007	1.0002
260.95	300.00	0.007	0.9803
264.20	300.85	0.007	1.0018
260.85	300.20	0.007	0.9823
263.65	302.35	0.007	0.9845
260.40	300.15	0.007	0.9946
261.25	300.10	0.007	0.9793

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.00	301.05	0.007	0.9953
263.70	302.30	0.007	0.9843
265.95	300.25	0.007	0.9979
263.50	302.45	0.007	0.9846
262.90	302.40	0.007	0.9833
260.35	299.85	0.007	0.9832
259.05	301.25	0.007	0.9884
264.50	302.05	0.007	0.9942
266.05	299.90	0.007	0.9930
266.50	299.50	0.007	0.9981
259.20	300.20	0.007	0.9767
265.90	300.50	0.007	0.9940
264.00	302.10	0.007	0.9882
258.95	301.30	0.007	0.9888
264.40	300.90	0.007	1.0015
262.60	300.80	0.007	0.9925
259.35	300.10	0.007	0.9793
262.50	302.50	0.007	0.9857
259.55	299.90	0.007	0.9983
266.55	299.85	0.007	0.9924
264.60	302.05	0.007	0.9947
258.90	301.20	0.007	0.9842
261.80	300.30	0.007	0.9815
259.00	300.95	0.007	0.9822
261.90	300.35	0.007	0.9797
259.25	300.30	0.007	0.9806
260.80	299.95	0.007	0.9812
264.00	300.85	0.007	1.0119
264.05	302.10	0.007	0.9903
262.05	302.30	0.007	0.9841
265.10	301.00	0.007	0.9968
260.75	300.20	0.007	0.9871
263.75	302.20	0.007	0.9834
264.85	302.00	0.007	0.9990
263.35	300.90	0.007	1.0089
261.55	301.35	0.007	0.9958
259.20	300.25	0.007	0.9780
266.30	299.45	0.007	0.9958
261.20	300.10	0.007	0.9789
261.00	300.00	0.007	0.9815
266.00	300.10	0.007	0.9935
261.95	302.15	0.007	0.9834
259.50	300.30	0.007	0.9898
259.80	300.15	0.007	0.9870
262.95	302.40	0.007	0.9832
261.35	300.20	0.007	0.9823
259.85	300.15	0.007	0.9898
261.10	300.05	0.007	0.9783
261.15	300.60	0.007	0.9993

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
261.40	300.25	0.007	0.9837
261.05	300.05	0.007	0.9783
264.10	302.10	0.007	0.9929
260.30	299.85	0.007	0.9839
264.40	302.05	0.007	0.9942
266.55	299.65	0.007	1.0001
258.90	301.00	0.007	0.9844
265.50	301.95	0.007	1.0037
259.50	299.95	0.007	0.9883
261.95	300.40	0.007	0.9775
265.90	300.45	0.007	0.9927
265.30	301.10	0.007	0.9935
261.35	300.95	0.007	1.0052
266.75	301.35	0.007	1.0049
266.20	299.55	0.007	0.9955
262.55	302.50	0.007	0.9859
261.65	300.20	0.007	0.9869
260.65	300.20	0.007	0.9953
264.55	302.05	0.007	0.9942
259.05	301.30	0.007	0.9899
266.80	300.25	0.007	1.0056
265.20	301.85	0.006	0.9992
266.55	299.60	0.006	1.0014
259.30	300.10	0.006	0.9793
264.20	302.10	0.006	0.9942
263.30	302.50	0.006	0.9837
266.70	300.15	0.006	1.0150
265.90	302.00	0.006	1.0058
259.10	301.10	0.006	0.9796
265.90	300.40	0.006	0.9940
262.95	301.05	0.006	0.9938
266.20	299.50	0.006	0.9980
261.00	300.35	0.006	0.9903
262.75	300.90	0.006	0.9913
262.85	301.00	0.006	0.9950
266.25	299.50	0.006	0.9963
266.40	299.45	0.006	0.9997
262.00	300.45	0.006	0.9794
265.90	300.35	0.006	0.9970
266.25	299.45	0.006	0.9955
263.15	302.50	0.006	0.9836
259.10	301.05	0.006	0.9828
262.45	302.45	0.006	0.9844
259.40	300.35	0.006	0.9867
265.85	300.55	0.006	0.9945
263.95	302.10	0.006	0.9866
261.15	300.05	0.006	0.9783
261.90	301.90	0.006	0.9852
262.25	302.35	0.006	0.9832

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
264.15	302.10	0.006	0.9940
265.15	301.90	0.006	0.9992
259.10	301.15	0.006	0.9821
260.50	299.85	0.006	0.9917
259.00	301.35	0.006	0.9882
261.75	300.25	0.006	0.9861
266.15	299.55	0.006	1.0067
264.25	302.10	0.006	0.9942
265.45	302.05	0.006	1.0059
264.30	302.10	0.006	0.9942
266.00	300.05	0.006	0.9977
266.55	299.55	0.006	1.0020
258.95	300.95	0.006	0.9820
265.20	301.90	0.006	0.9992
266.20	299.60	0.006	0.9981
263.80	302.15	0.006	0.9834
259.20	300.15	0.006	0.9779
262.05	300.50	0.006	0.9825
261.35	300.15	0.006	0.9807
263.55	302.45	0.006	0.9860
258.90	301.25	0.006	0.9870
265.95	300.20	0.006	0.9956
260.80	300.20	0.006	0.9841
265.90	300.30	0.006	0.9955
266.35	299.45	0.006	0.9991
264.25	300.85	0.006	1.0021
261.65	301.70	0.006	1.0064
261.55	300.15	0.006	0.9824
263.75	302.25	0.006	0.9840
259.10	301.20	0.006	0.9864
262.30	300.65	0.006	0.9855
261.50	301.10	0.006	0.9989
266.55	299.70	0.006	0.9967
264.35	302.10	0.006	0.9943
261.05	300.00	0.006	0.9829
259.35	300.35	0.006	0.9847
263.90	302.10	0.006	0.9842
266.00	301.90	0.006	1.0054
262.70	300.85	0.006	0.9933
263.35	302.50	0.006	0.9839
261.30	300.05	0.006	0.9799
265.50	302.10	0.006	1.0078
266.65	300.05	0.006	1.0137
261.85	300.30	0.006	0.9843
266.20	299.45	0.006	1.0087
259.00	300.50	0.006	0.9782
262.10	300.55	0.006	0.9830
265.05	300.95	0.006	0.9998
261.50	300.15	0.006	0.9811

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.70	300.85	0.006	1.0197
259.10	301.00	0.006	0.9855
259.05	300.95	0.006	0.9832
260.85	299.95	0.006	0.9828
261.45	300.20	0.006	0.9825
266.00	300.00	0.006	0.9951
259.00	300.45	0.006	0.9781
265.40	301.90	0.006	1.0011
261.10	300.45	0.006	0.9885
262.35	302.35	0.005	0.9832
262.70	302.45	0.005	0.9844
261.55	301.45	0.005	0.9981
266.55	299.75	0.005	0.9925
265.80	300.60	0.005	0.9945
266.60	299.95	0.005	1.0063
258.95	301.35	0.005	0.9878
259.20	300.30	0.005	0.9793
259.65	300.20	0.005	0.9852
262.60	302.50	0.005	0.9862
260.90	299.95	0.005	0.9859
265.40	301.05	0.005	0.9976
265.55	302.05	0.005	1.0052
262.20	300.60	0.005	0.9794
266.45	299.45	0.005	0.9958
262.15	300.55	0.005	0.9811
266.00	299.95	0.005	0.9941
263.20	300.95	0.005	1.0053
266.00	299.80	0.005	1.0128
258.90	301.30	0.005	0.9880
261.60	300.15	0.005	0.9850
261.35	300.10	0.005	0.9803
261.45	301.05	0.005	1.0003
265.05	301.90	0.005	0.9988
264.75	302.05	0.005	0.9988
259.15	300.20	0.005	0.9764
262.25	300.60	0.005	0.9815
262.00	302.20	0.005	0.9835
259.00	300.40	0.005	0.9759
264.95	300.90	0.005	1.0006
263.65	300.85	0.005	1.0183
261.70	300.20	0.005	0.9880
260.70	299.90	0.005	0.9878
259.10	301.25	0.005	0.9896
262.20	302.40	0.005	0.9853
262.40	300.70	0.005	0.9855
266.75	300.20	0.005	1.0092
259.00	300.55	0.005	0.9782
261.10	300.00	0.005	0.9836
265.70	300.70	0.005	0.9923

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.75	300.65	0.005	0.9929
262.10	300.50	0.005	0.9837
260.85	300.25	0.005	0.9878
262.80	300.95	0.005	0.9925
261.20	300.05	0.005	0.9786
259.15	300.25	0.005	0.9764
265.90	300.25	0.005	0.9931
260.90	300.30	0.005	0.9910
262.45	302.50	0.005	0.9857
266.00	299.90	0.005	0.9991
261.25	300.05	0.005	0.9791
260.00	300.10	0.005	0.9887
258.95	300.50	0.005	0.9770
259.05	300.50	0.005	0.9787
261.95	300.35	0.005	0.9838
262.20	300.55	0.005	0.9807
265.45	301.95	0.005	1.0020
258.80	301.55	0.005	1.0003
259.15	300.55	0.005	0.9811
262.05	300.45	0.005	0.9833
262.15	300.60	0.005	0.9807
261.05	300.40	0.005	0.9891
266.00	299.75	0.005	1.0199
264.40	300.85	0.005	1.0027
263.65	302.40	0.005	0.9871
261.10	300.50	0.005	0.9913
262.00	300.40	0.005	0.9826
263.10	301.00	0.005	0.9983
259.05	301.35	0.005	0.9899
259.25	300.10	0.005	0.9811
263.60	300.85	0.005	1.0160
262.40	302.40	0.005	0.9835
266.00	299.85	0.005	1.0059
259.90	300.15	0.005	0.9927
261.30	300.90	0.005	1.0064
259.05	300.45	0.005	0.9790
261.55	301.30	0.005	0.9985
264.40	302.10	0.005	0.9948
263.95	302.25	0.005	0.9912
258.95	300.45	0.005	0.9759
265.20	301.05	0.005	0.9846
265.85	300.50	0.005	0.9964
266.65	301.45	0.005	1.0054
261.90	302.00	0.005	0.9840
264.85	300.85	0.005	1.0051
263.75	302.30	0.005	0.9861
263.00	302.45	0.005	0.9836
264.30	300.85	0.005	1.0028
259.45	300.05	0.005	0.9797

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.15	300.30	0.005	0.9780
259.30	300.35	0.005	0.9832
261.40	301.00	0.005	1.0042
262.10	302.35	0.005	0.9853
266.05	299.85	0.005	0.9980
259.00	300.90	0.005	0.9789
262.55	300.75	0.005	0.9944
265.65	300.75	0.005	0.9927
259.10	301.30	0.005	0.9912
265.95	300.15	0.005	0.9928
266.70	301.40	0.005	1.0049
261.15	300.00	0.005	0.9837
260.95	300.35	0.005	0.9934
259.05	300.55	0.005	0.9783
263.90	302.30	0.004	0.9926
266.55	299.80	0.004	0.9923
259.05	300.40	0.004	0.9781
264.10	302.15	0.004	0.9934
258.95	300.55	0.004	0.9776
264.05	302.15	0.004	0.9911
263.70	302.35	0.004	0.9864
259.10	300.55	0.004	0.9787
266.00	299.70	0.004	1.0292
265.15	301.00	0.004	0.9905
262.30	302.35	0.004	0.9832
258.90	300.95	0.004	0.9822
261.65	300.15	0.004	0.9885
263.60	302.45	0.004	0.9882
258.95	300.40	0.004	0.9742
261.10	300.55	0.004	0.9986
263.10	302.50	0.004	0.9837
261.45	300.15	0.004	0.9807
259.45	300.35	0.004	0.9906
265.80	302.05	0.004	1.0074
261.90	302.05	0.004	0.9840
264.15	302.15	0.004	0.9939
260.55	299.85	0.004	0.9958
265.85	300.45	0.004	0.9967
260.60	299.85	0.004	0.9993
260.35	300.15	0.004	0.9952
262.30	300.60	0.004	0.9880
265.85	300.40	0.004	0.9943
264.30	302.15	0.004	0.9942
264.25	302.15	0.004	0.9941
260.95	299.95	0.004	0.9902
259.05	300.35	0.004	0.9755
259.10	300.20	0.004	0.9763
258.85	301.10	0.004	0.9790
264.20	302.15	0.004	0.9940

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.85	300.35	0.004	0.9950
261.90	300.30	0.004	0.9888
259.00	300.35	0.004	0.9731
258.90	300.50	0.004	0.9743
263.30	300.90	0.004	1.0090
262.15	300.50	0.004	0.9842
266.60	299.90	0.004	1.0031
259.10	300.25	0.004	0.9750
265.10	301.90	0.004	0.9991
262.00	302.25	0.004	0.9840
259.10	300.30	0.004	0.9759
261.40	300.20	0.004	0.9826
259.10	300.95	0.004	0.9845
266.70	300.10	0.004	1.0157
261.35	300.05	0.004	0.9811
259.10	300.35	0.004	0.9779
261.55	301.20	0.004	1.0003
266.05	299.55	0.004	1.0365
261.80	301.85	0.004	1.0103
261.55	300.10	0.004	0.9828
264.90	302.00	0.004	0.9993
258.90	300.45	0.004	0.9732
261.40	300.15	0.004	0.9806
264.00	302.15	0.004	0.9891
258.85	301.05	0.004	0.9820
259.15	301.05	0.004	0.9836
265.25	301.90	0.004	0.9993
262.50	302.55	0.004	0.9872
259.15	300.15	0.004	0.9800
259.15	300.35	0.004	0.9793
258.95	300.90	0.004	0.9787
265.00	300.90	0.004	1.0008
258.90	301.35	0.004	0.9874
265.85	300.30	0.004	0.9938
265.40	302.00	0.004	1.0012
259.00	300.60	0.004	0.9781
261.90	301.95	0.004	0.9840
265.50	300.95	0.004	0.9984
262.25	300.55	0.004	0.9852
265.45	301.00	0.004	0.9973
263.55	300.85	0.004	1.0139
261.60	301.60	0.004	0.9971
263.25	302.55	0.004	0.9854
262.35	300.65	0.004	0.9913
259.25	300.35	0.004	0.9819
265.10	300.95	0.004	0.9995
261.50	300.10	0.004	0.9809
259.15	301.10	0.004	0.9808
264.00	302.25	0.004	0.9925

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.10	300.40	0.004	0.9795
262.45	300.70	0.004	0.9872
259.10	300.50	0.004	0.9795
264.35	300.85	0.004	1.0029
265.35	301.90	0.004	1.0000
265.90	300.20	0.004	0.9923
264.00	300.80	0.004	1.0190
266.15	299.60	0.004	1.0053
266.55	299.50	0.004	1.0017
263.40	302.50	0.004	0.9845
258.90	300.55	0.004	0.9761
263.80	302.20	0.004	0.9840
258.85	301.15	0.004	0.9806
259.20	300.35	0.004	0.9807
266.75	299.05	0.004	0.9919
259.15	301.00	0.004	0.9873
262.95	302.45	0.003	0.9840
266.10	301.85	0.003	1.0055
262.45	302.55	0.003	0.9871
259.10	300.45	0.003	0.9798
262.80	300.90	0.003	0.9963
259.10	301.35	0.003	0.9917
259.05	300.15	0.003	0.9844
264.45	302.10	0.003	0.9945
258.95	300.35	0.003	0.9724
261.00	300.40	0.003	0.9916
263.80	302.25	0.003	0.9857
261.20	300.85	0.003	1.0161
266.20	299.40	0.003	1.0180
261.25	300.00	0.003	0.9845
265.95	300.10	0.003	0.9924
258.95	300.60	0.003	0.9780
261.80	300.25	0.003	0.9895
264.35	302.15	0.003	0.9943
262.65	300.80	0.003	0.9976
261.00	299.95	0.003	0.9938
259.05	300.30	0.003	0.9737
262.90	301.00	0.003	0.9957
258.90	300.40	0.003	0.9730
261.40	300.10	0.003	0.9803
262.10	300.45	0.003	0.9863
259.15	301.15	0.003	0.9837
263.95	302.30	0.003	0.9944
265.40	301.95	0.003	1.0006
263.05	301.00	0.003	0.9961
266.60	299.60	0.003	1.0025
265.45	302.10	0.003	1.0095
258.95	301.40	0.003	0.9861
259.00	300.30	0.003	0.9722

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.05	299.50	0.003	1.0389
263.30	302.55	0.003	0.9856
261.55	301.25	0.003	1.0005
259.05	300.90	0.003	0.9796
262.75	302.45	0.003	0.9848
262.00	302.30	0.003	0.9856
265.80	300.55	0.003	0.9979
259.00	301.40	0.003	0.9867
259.05	300.20	0.003	0.9763
259.15	301.20	0.003	0.9879
266.65	300.00	0.003	1.0113
260.60	300.20	0.003	0.9996
264.05	300.80	0.003	1.0165
262.65	302.50	0.003	0.9867
264.10	302.20	0.003	0.9932
260.75	299.90	0.003	0.9881
261.75	300.20	0.003	0.9922
264.05	302.20	0.003	0.9920
263.20	302.55	0.003	0.9850
265.75	302.05	0.003	1.0081
266.00	301.95	0.003	1.0064
264.75	300.80	0.003	1.0082
262.40	302.45	0.003	0.9844
259.05	300.60	0.003	0.9777
263.95	300.80	0.003	1.0208
260.80	300.25	0.003	0.9912
261.15	300.65	0.003	1.0021
261.60	300.10	0.003	0.9865
263.80	302.30	0.003	0.9886
261.45	300.10	0.003	0.9803
266.15	301.85	0.003	1.0061
261.30	300.00	0.003	0.9858
259.60	300.25	0.003	0.9889
262.75	300.85	0.003	0.9988
262.05	300.40	0.003	0.9877
266.60	299.65	0.003	0.9999
265.85	300.25	0.003	0.9926
258.85	301.00	0.003	0.9838
260.30	300.15	0.003	0.9960
265.20	301.95	0.003	0.9994
261.20	300.00	0.003	0.9837
259.05	300.25	0.003	0.9737
261.95	302.20	0.003	0.9838
266.80	300.20	0.003	1.0055
263.50	300.85	0.003	1.0133
265.30	301.90	0.003	0.9994
266.75	300.15	0.003	1.0106
266.60	301.55	0.003	1.0054
263.45	302.50	0.003	0.9857

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
263.85	302.15	0.003	0.9839
262.20	300.50	0.003	0.9871
259.10	300.15	0.003	0.9826
265.60	302.05	0.003	1.0060
266.00	299.65	0.003	1.0386
259.15	301.25	0.003	0.9902
264.05	302.25	0.003	0.9931
264.40	300.80	0.003	1.0086
258.90	301.40	0.003	0.9861
259.15	300.40	0.003	0.9810
266.65	301.50	0.003	1.0059
265.95	302.00	0.003	1.0066
258.85	301.20	0.003	0.9835
261.70	300.15	0.003	0.9917
264.00	302.20	0.003	0.9904
259.05	301.40	0.003	0.9892
263.05	302.50	0.003	0.9844
261.05	300.45	0.003	0.9877
263.95	302.15	0.003	0.9876
258.90	300.60	0.003	0.9776
262.00	300.35	0.003	0.9896
265.80	300.35	0.003	0.9959
266.60	299.85	0.003	0.9971
262.05	302.35	0.003	0.9861
265.40	302.05	0.003	1.0061
265.95	299.95	0.003	1.0007
259.15	300.60	0.003	0.9827
259.15	301.30	0.002	0.9911
261.90	302.10	0.002	0.9858
266.50	299.45	0.002	0.9975
264.15	302.20	0.002	0.9936
261.55	301.50	0.002	1.0003
266.60	299.70	0.002	0.9936
265.95	300.05	0.002	0.9928
265.60	300.80	0.002	0.9947
258.95	300.30	0.002	0.9725
258.90	300.35	0.002	0.9726
265.80	300.30	0.002	0.9936
259.10	300.60	0.002	0.9782
263.70	302.40	0.002	0.9903
258.85	300.45	0.002	0.9722
262.90	302.45	0.002	0.9843
265.70	300.65	0.002	0.9928
262.40	302.50	0.002	0.9857
265.85	302.05	0.002	1.0067
262.15	302.40	0.002	0.9861
261.50	300.05	0.002	0.9853
261.85	300.25	0.002	0.9951
262.85	300.95	0.002	0.9971

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
266.30	301.80	0.002	1.0064
266.60	299.55	0.002	1.0032
262.80	302.45	0.002	0.9850
263.00	301.00	0.002	0.9948
259.00	300.85	0.002	0.9767
258.85	300.50	0.002	0.9713
265.95	299.90	0.002	1.0080
262.95	301.00	0.002	0.9946
263.85	302.30	0.002	0.9907
259.10	301.40	0.002	0.9918
259.00	300.25	0.002	0.9733
261.85	301.90	0.002	0.9936
258.90	300.90	0.002	0.9790
259.00	300.20	0.002	0.9768
265.95	300.00	0.002	0.9952
261.40	300.05	0.002	0.9821
265.75	300.60	0.002	0.9958
263.15	300.95	0.002	1.0045
262.55	302.55	0.002	0.9878
265.80	300.40	0.002	0.9976
264.90	300.85	0.002	1.0052
265.80	300.50	0.002	0.9996
264.10	302.25	0.002	0.9933
263.90	300.80	0.002	1.0226
265.05	300.90	0.002	1.0016
265.35	301.05	0.002	0.9996
266.25	299.40	0.002	1.0068
263.50	302.50	0.002	0.9873
259.15	300.95	0.002	0.9884
265.25	301.05	0.002	0.9854
266.60	299.75	0.002	0.9923
265.35	301.95	0.002	1.0001
263.65	302.45	0.002	0.9914
264.00	302.30	0.002	0.9956
262.70	302.50	0.002	0.9887
260.75	300.25	0.002	0.9963
265.90	300.15	0.002	0.9923
266.55	301.60	0.002	1.0061
265.95	299.85	0.002	1.0166
264.50	302.10	0.002	0.9943
264.20	302.20	0.002	0.9938
263.90	302.25	0.002	0.9896
264.30	302.20	0.002	0.9943
261.55	300.05	0.002	0.9884
264.25	302.20	0.002	0.9939
263.75	302.35	0.002	0.9890
262.50	300.70	0.002	0.9953
261.45	300.05	0.002	0.9840
266.30	299.40	0.002	0.9974

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
259.15	301.35	0.002	0.9919
265.80	300.45	0.002	0.9997
258.80	301.50	0.002	0.9937
265.85	300.20	0.002	0.9923
266.50	301.65	0.002	1.0069
258.95	300.85	0.002	0.9766
266.20	301.85	0.002	1.0070
259.20	300.10	0.002	0.9868
258.95	300.65	0.002	0.9782
264.40	302.15	0.002	0.9956
261.65	300.10	0.002	0.9915
265.80	300.25	0.002	0.9924
259.00	300.65	0.002	0.9779
259.10	300.90	0.002	0.9815
265.15	301.95	0.002	0.9994
262.85	302.45	0.002	0.9847
264.10	300.80	0.002	1.0135
266.60	299.00	0.002	0.9937
266.70	299.05	0.002	0.9975
258.85	300.40	0.002	0.9734
262.45	302.60	0.002	0.9909
263.85	302.25	0.002	0.9878
259.55	300.30	0.002	0.9940
262.25	302.40	0.002	0.9843
262.40	302.55	0.002	0.9871
266.70	300.05	0.002	1.0150
265.15	300.95	0.002	0.9929
266.45	301.70	0.002	1.0077
262.35	300.60	0.002	1.0016
259.00	300.15	0.002	0.9849
263.45	300.85	0.002	1.0134
260.85	300.30	0.002	0.9956
261.95	302.25	0.002	0.9859
265.50	300.90	0.002	0.9926
265.65	300.70	0.002	0.9923
259.15	300.45	0.002	0.9815
262.15	300.45	0.002	0.9894
262.30	300.55	0.002	0.9985
258.90	300.30	0.002	0.9738
263.15	302.55	0.002	0.9850
258.85	300.55	0.002	0.9736
265.00	301.95	0.002	0.9992
258.95	300.25	0.002	0.9745
261.95	300.30	0.002	0.9952
259.50	299.90	0.002	1.0048
263.25	300.90	0.002	1.0099
260.80	299.90	0.002	0.9894
261.05	299.95	0.002	0.9979
258.85	301.25	0.002	0.9862

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
265.25	301.95	0.002	0.9994
259.15	300.50	0.002	0.9814
266.60	299.80	0.002	0.9924
266.40	299.40	0.002	0.9987
265.30	301.95	0.002	0.9994
259.15	301.40	0.001	0.9929
265.55	300.90	0.001	0.9974
265.65	302.05	0.001	1.0065
262.40	300.65	0.001	1.0007
260.25	300.15	0.001	0.9971
263.25	302.60	0.001	0.9885
260.90	300.35	0.001	0.9989
259.25	301.40	0.001	0.9908
263.95	302.20	0.001	0.9890
264.05	302.30	0.001	0.9950
262.35	302.40	0.001	0.9837
263.55	302.50	0.001	0.9898
263.90	302.15	0.001	0.9860
259.20	301.40	0.001	0.9923
261.10	300.60	0.001	1.0080
265.20	301.00	0.001	0.9870
265.75	300.35	0.001	0.9940
265.95	299.80	0.001	1.0259
266.05	301.90	0.001	1.0060
264.15	300.80	0.001	1.0107
258.85	300.35	0.001	0.9742
260.25	299.80	0.001	1.0023
265.35	302.00	0.001	1.0007
266.65	299.95	0.001	1.0087
259.20	301.35	0.001	0.9904
266.40	301.75	0.001	1.0080
258.90	300.65	0.001	0.9783
258.90	301.45	0.001	0.9795
264.25	300.80	0.001	1.0082
261.65	301.75	0.001	1.0141
263.85	300.80	0.001	1.0239
262.40	302.60	0.001	0.9909
264.80	302.05	0.001	1.0000
265.10	300.90	0.001	1.0018
259.70	300.20	0.001	0.9879
263.60	302.50	0.001	0.9929
263.00	302.50	0.001	0.9854
265.70	302.05	0.001	1.0074
265.75	300.30	0.001	0.9924
264.80	300.80	0.001	1.0103
263.30	302.60	0.001	0.9896
265.30	301.05	0.001	0.9969
265.80	300.20	0.001	0.9923
266.35	299.40	0.001	0.9980

Easting (km/1000)	Northing (km/1000)	Depth (km)	Elevation (km)
258.95	301.45	0.001	0.9807
260.65	299.85	0.001	1.0018
263.40	300.85	0.001	1.0137
261.90	302.15	0.001	0.9885
266.75	300.10	0.001	1.0114
263.35	302.55	0.001	0.9863
260.95	300.40	0.001	0.9981
264.95	300.85	0.001	1.0053
259.20	300.40	0.001	0.9828
266.00	299.60	0.001	1.0445
266.65	299.60	0.001	1.0019
265.85	300.15	0.001	0.9925
264.10	302.30	0.001	0.9942
261.35	300.00	0.001	0.9880
265.75	300.25	0.001	0.9923
265.90	300.10	0.001	0.9930