

Scott County Iowa

Countywide G.P.S. Survey Control Network

2005

Dan Corbin, Inc.
28 River Ridge Lane
Cedar Falls, IA 50613



Cell: (319) 231-7047
Fax: (319) 266-3398
E-Mail: dcorbin@cfu.net

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INTRODUCTION

In 2005, Scott County, Iowa contracted with DC Inc. to complete a high accuracy GPS control survey in Scott County, Iowa for the purpose of establishing a county-wide survey control system and for future use in a county-wide GIS system. Existing City of Davenport and City of Bettendorf control monuments were also incorporated with the county-wide survey control system.

Forty three (43) new control stations were added within the County along with, eighteen (18) existing Davenport GPS control points, twenty two (22) existing Bettendorf GPS control points, one (1) Clinton, Iowa GPS control point, one (1) Whiteside County, Illinois GPS control point, and seven (7) Muscatine County GPS control points were recovered and tied into the GPS network. An additional six (6) control stations consisting of three (3) NGS first and second order benchmarks, were included in the network along with three (3) existing HARN positions. A total of ninety eight (98) points were measured. Two of the bench marks could not be directly occupied and were measured using a temporary bench mark near the existing bench mark with a short level run to tie to the network.

PROJECT REQUIREMENTS

The purpose of this survey was to establish new state plane control throughout the project area, using a new horizontal and vertical control network with GPS survey equipment and techniques. This network was horizontally referenced to the Iowa High Accuracy Reference Network (HARN) of 1996. Vertically the network was referenced to the North American Vertical Datum of 1988 (NAVD88). Because this control would be utilized for many different purposes, it was important that the network geometry be ideal for a strong GPS survey. All new point locations for control were selected with the needs of future multiple uses and GPS survey requirements in mind. In some instances, it was necessary to adjust locations because of physical obstructions or existing land features. In these instances, the network was constructed with the coverage of the county held as primary and the GPS survey needs satisfied secondly. Because both of these philosophies support good geometry the network structure was not compromised.

MONUMENTATION

To perpetuate the GPS control measurements, 43 new permanent monuments were set for Scott County. BERNTSEN driven aluminum rod monuments were selected for the permanent monuments. Each BERNTSEN station monument consists of one three-foot smooth rod section and one three-foot top security fluted rod section with a stamped cap fastened to the top, all constructed of aluminum material. There is a permanent magnet mounted on the underside of the monument cap for future recovery with a magnetic locator. These monuments were driven to approximately 6" below the existing ground surface. For easy access and protection, a 24" long 5" diameter PVC pipe was placed over each rod monument along with a pre-cast aluminum access cover and backfilled with sand to facilitate drainage and to minimize frost movement. A steel fence post with a plastic sleeve was placed as a witness point at each new permanent monument position. A rebar or railroad spike was set for the temporary bench mark tie points.

DC Inc. handled the creation of the One Call data with the County Engineer's office handling the One Call coordination for marking the various underground utility locations for each new permanent monument site.

RECONNAISSANCE

The most important criterion for GPS observations at any given location is a clear view to the sky. In terms of network design, it is desirable that the horizontal control be located near the perimeter and also throughout the project site if possible. With this in mind, existing HARN horizontal stations were recovered in and/or near Scott County along with other control that has been adjusted to the HARN. All positions in and near the county were chosen to be included in the network.

Vertical control was selected to provide as much coverage as possible, both at the periphery and in the interior of the project area. Existing Davenport control was initially measured and adjusted to NAD83 non Harn coordinates and the vertical was tied to the existing Davenport vertical datum. It is not possible to convert the existing NAD83 coordinate data to the HARN accurately, so new HARN coordinates are being published on the points that were tied to our network. The existing Davenport vertical datum was able to be accurately converted to NAVD88 with this elevation data being used in the adjustment. Existing Bettendorf control was measured on the NAD83/1996 HARN system along with the vertical datum being NAVD88. The points that were tied to the network were successfully used for control in the network.

FIELD SURVEY

Two Trimble 24 channel and two Trimble 18 channel dual frequency Geodetic GPS receivers with Everest multi-path mitigation and high performance low elevation satellite tracking were used in this survey. GPS observations began Monday, August 29, 2005. GPS observations were made during daylight and evening hours from Monday, August 29, 2005, through Thursday, September 1, 2005. Additional vectors were measured on Tuesday, September 13, 2005.

Rapid static GPS techniques were utilized to minimize the time and cost of the survey. The satellite "window", where at least six satellites were observable, was open for much of the day with only a few short periods of unacceptable coverage because of the number of satellites or bad geometry. Each measurement period during which all receivers observe satellites simultaneously lasted from 10 minutes to 100 minutes, depending on the distance being measured and the geometry of the satellite constellation.

DATA ADJUSTMENT

A total number of 300 vectors were observed and processed. Based on statistical indicators from the Trimble Geomatics Office processing software, there were 26 vectors removed as questionable. After the re-measuring of these vectors and the removal of trivial vectors the final network is comprised of 98 stations and 173 baselines. All data adjustment was performed using the Trimble Geomatics Office least squares adjustment software. An initial free adjustment was performed in NAD83/1996 HARN to check the overall quality of the GPS data and the nature of the control. The initial unconstrained (free) adjustment yielded baseline precisions which ranged from 1:77,415 to 1:1,775,711 for vectors ranging in length from 2000' to 51,000' with the 3 mile baselines falling in

the 1:500,000 range or better. Once the horizontal and vertical control was verified, subsequent adjustments were performed to arrive at the optimal solutions for each datum.

NAD83 (1996)

The initial free adjustment was performed holding HARN point G 70 fixed horizontally with the vertical adjustment disabled. Coordinate values on the other HARN control stations were then checked against the published values. The network fit the published HARN values within a few hundredths of a foot. Because all of the horizontal data fit so well, the HARN-referenced stations from other cities and counties were added to the network and a new adjustment performed. After each adjustment a comparison of adjusted coordinates vs. published values was made. By holding all of the existing HARN stations fixed, and the control that was adjusted to the HARN, the precision of the adjustment degraded very little as compared to the unconstrained adjustment.

Once we were satisfied with the horizontal adjustment, we locked the horizontal positions and concentrated on the vertical adjustment. The Geoid 03 Conus was utilized to provide a model of the height of the Geoid. Adjustments were then performed locking on to the orthometric vertical control stations one at a time beginning with G 70. Vertical control was added station by station with the elevations on the benchmarks being then checked against the published values.

Muscatine point (105) 2000-105 and Davenport point (422) GPS 22 were visually damaged by nearby construction and accordingly were not used in the adjustment, but new coordinates and elevations were published for these points. It should be noted that these points along with temporary bench mark positions should not be used for future control purposes because of the instability of these points.

A final adjustment of both horizontal and vertical was then performed. All of the horizontal control points were held fixed in x and y and all vertical control were held fixed in z. This fully constrained adjustment solved for scale and rotation. In the final adjusted network, 100% of the adjusted vectors have an estimated error of x, y and z baseline precision between 1:58,791 to 1:1,707,147 with the 3 mile baselines again falling in the 1:500,000 range or better. All of the processed data and error factors were computed using a 95% confidence level factor.

CONCLUSION

The results are well in excess of Order C class 1 (first-order precision) on short baselines (less than 3 miles) and between Order C class 1 and Order B on longer baselines (3 to 4 miles in length). On long baselines (over 6 miles) the precision is better than Order B. The control point locations are within ± 0.04 ft horizontal position and within ± 0.08 ft. vertically for benchmark use.

Network Adjustment Report

Project : ScottCo

User name	Gary Brown	Date & Time	4:27:48 PM 10/20/2005
Coordinate System	US State Plane 1983/1996 HARN	Zone	Iowa South 1402
Project Datum	NAD 1983 (Conus)		
Vertical Datum	NAVD88	Geoid Model	Geoid 03 (Conus)
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Adjustment Style Settings - 95% Confidence Limits

Residual Tolerances

To End Iterations : 0.000033sft
Final Convergence Cutoff : 0.016404sft

Covariance Display

Horizontal

Propagated Linear Error [E] : U.S.

Constant Term [C] : 0.00000000sft

Scale on Linear Error [S] : 1.96

Three-Dimensional

Propagated Linear Error [E] : U.S.

Constant Term [C] : 0.00000000sft

Scale on Linear Error [S] : 1.96

Elevation Errors were used in the calculations.

Adjustment Controls

Compute Correlations for Geoid : True

Horizontal and Vertical adjustment performed

Set-up Errors

GPS

Error in Height of Antenna : 0.015sft

Centering Error : 0.015sft

Statistical Summary

Successful Adjustment in 1 iteration(s)

Network Reference Factor : 1.00

Chi Square Test ($\alpha=95\%$) : PASS

Degrees of Freedom : 340.00

GPS Observation Statistics

Reference Factor : 1.00

Redundancy Number (r) : 299.08

Geoid Model Statistics

Reference Factor : 1.00

Redundancy Number (r) : 40.92

Weighting Strategies

GPS Observations

User-defined Scalar Applied to All Observations

Scalar : 2.82

Geoid Observations

User-defined Scalar Applied to All Observations

Scalar : 1.16

Adjusted Coordinates

Adjustment performed in **NAD 1983/1996 HARN (Conus)**

Number of Points : 98
 Number of Constrained Points : 53
 Horizontal Only : 2
 Elevation Only : 19
 Horizontal and Elevation Only : 32

Adjusted Grid Coordinates

Errors are reported using 1.96σ .

Point Name	Northing	N error	Easting	E error	Elevation	e error	Fix
602	656550.881sft	0.033sft	2365341.016sft	0.029sft	706.443sft	0.177sft	
6	684581.460sft	0.000sft	2321835.440sft	0.000sft	828.320sft	0.000sft	N E e
603	651441.171sft	0.037sft	2379851.715sft	0.034sft	742.583sft	0.119sft	
610	648973.850sft	0.042sft	2448749.458sft	0.037sft	673.746sft	0.238sft	
609	649119.574sft	0.041sft	2427115.951sft	0.037sft	681.770sft	0.242sft	
613	643214.783sft	0.026sft	2498277.138sft	0.025sft	592.454sft	0.206sft	
13	669439.160sft	0.000sft	2497826.200sft	0.000sft	650.090sft	0.000sft	N E e
622	629074.793sft	0.030sft	2478187.568sft	0.029sft	746.497sft	0.160sft	
510	646526.940sft	0.042sft	2382463.324sft	0.039sft	670.320sft	0.000sft	e
606	640901.786sft	0.036sft	2381796.162sft	0.033sft	719.850sft	0.122sft	
5	677383.919sft	0.051sft	2367418.193sft	0.039sft	673.910sft	0.000sft	e
643	664846.417sft	0.048sft	2430549.588sft	0.042sft	661.434sft	0.276sft	
611	649122.245sft	0.043sft	2461574.338sft	0.038sft	613.344sft	0.228sft	
548	642606.750sft	0.000sft	2525716.030sft	0.000sft	580.227sft	0.291sft	N E
607	640045.244sft	0.040sft	2397113.996sft	0.036sft	645.267sft	0.183sft	
604	639982.968sft	0.032sft	2350413.123sft	0.030sft	797.778sft	0.226sft	
621	627489.308sft	0.034sft	2462336.021sft	0.031sft	745.156sft	0.157sft	
619	623959.598sft	0.033sft	2430616.069sft	0.030sft	774.250sft	0.176sft	
618	623374.800sft	0.036sft	2413792.664sft	0.032sft	757.870sft	0.199sft	
601	656037.806sft	0.032sft	2348166.412sft	0.030sft	757.560sft	0.214sft	

642	655956.014sft	0.039sft	2408149.673sft	0.035sft	640.804sft	0.228sft	
612	644598.066sft	0.033sft	2480567.906sft	0.031sft	609.087sft	0.201sft	
623	626206.767sft	0.029sft	2499459.031sft	0.027sft	697.380sft	0.205sft	
620	627491.602sft	0.041sft	2446800.083sft	0.037sft	794.067sft	0.172sft	
608	642630.883sft	0.041sft	2413999.707sft	0.037sft	710.283sft	0.223sft	
625	608773.136sft	0.045sft	2367077.708sft	0.041sft	745.693sft	0.187sft	
626	609177.427sft	0.035sft	2383248.786sft	0.031sft	753.839sft	0.175sft	
631	592947.066sft	0.036sft	2367473.385sft	0.033sft	718.555sft	0.151sft	
103	591444.140sft	0.000sft	2351592.110sft	0.000sft	684.640sft	0.000sft	N E e
628	610660.648sft	0.034sft	2413586.700sft	0.030sft	737.816sft	0.173sft	
1211	617450.710sft	0.000sft	2467953.280sft	0.000sft	749.580sft	0.000sft	N E e
1213	610255.260sft	0.000sft	2483660.050sft	0.000sft	731.750sft	0.000sft	N E e
1206	605529.020sft	0.000sft	2481565.980sft	0.000sft	761.860sft	0.000sft	N E e
403	602883.973sft	0.024sft	2436403.487sft	0.023sft	746.310sft	0.000sft	e
404	600531.558sft	0.025sft	2447062.592sft	0.024sft	742.980sft	0.000sft	e
512	591743.980sft	0.000sft	2409696.590sft	0.000sft	760.222sft	0.119sft	N E
409	590456.697sft	0.037sft	2414963.029sft	0.036sft	744.130sft	0.000sft	e
105	582700.863sft	0.029sft	2383441.290sft	0.028sft	731.821sft	0.125sft	
106	572074.460sft	0.000sft	2383698.650sft	0.000sft	777.780sft	0.000sft	N E e
616	622437.540sft	0.035sft	2382657.938sft	0.032sft	670.250sft	0.191sft	
605	641219.924sft	0.042sft	2366253.218sft	0.040sft	775.512sft	0.189sft	
627	612844.355sft	0.045sft	2397370.232sft	0.041sft	737.698sft	0.193sft	
104	593210.440sft	0.000sft	2382825.090sft	0.000sft	733.820sft	0.000sft	N E e
1210	616787.160sft	0.000sft	2452063.540sft	0.000sft	785.400sft	0.000sft	N E e
1212	618004.050sft	0.000sft	2478352.750sft	0.000sft	733.470sft	0.000sft	N E e
1204	606869.470sft	0.000sft	2465630.030sft	0.000sft	774.020sft	0.000sft	N E e
1207	603670.980sft	0.000sft	2488282.510sft	0.000sft	745.180sft	0.000sft	N E e
615	624717.419sft	0.045sft	2367917.134sft	0.042sft	783.089sft	0.205sft	
624	606504.922sft	0.039sft	2351205.651sft	0.035sft	726.411sft	0.184sft	
632	593661.405sft	0.041sft	2398477.891sft	0.038sft	744.444sft	0.157sft	
402	599539.907sft	0.038sft	2423779.442sft	0.037sft	733.950sft	0.000sft	e
410	586386.776sft	0.036sft	2420354.857sft	0.035sft	722.560sft	0.000sft	e

635	577685.960sft	0.039sft	2415327.618sft	0.037sft	706.408sft	0.125sft	
636	599369.312sft	0.037sft	2407314.496sft	0.034sft	726.942sft	0.155sft	
629	610658.498sft	0.028sft	2430426.383sft	0.026sft	744.477sft	0.121sft	
1203	606486.780sft	0.000sft	2457708.330sft	0.000sft	764.600sft	0.000sft	N E e
633	593776.739sft	0.028sft	2420534.897sft	0.027sft	742.908sft	0.097sft	
634	577396.910sft	0.035sft	2399446.033sft	0.032sft	748.450sft	0.155sft	
614	624252.485sft	0.040sft	2352408.279sft	0.037sft	776.120sft	0.223sft	
617	622907.288sft	0.046sft	2398325.228sft	0.042sft	737.972sft	0.200sft	
630	610731.120sft	0.025sft	2496088.599sft	0.023sft	734.962sft	0.154sft	
640	547046.281sft	0.037sft	2400238.528sft	0.033sft	711.013sft	0.167sft	
127	543037.810sft	0.000sft	2384055.240sft	0.000sft	555.780sft	0.000sft	N E e
639	563786.369sft	0.047sft	2433514.572sft	0.043sft	562.160sft	0.109sft	
419	568252.517sft	0.045sft	2443658.596sft	0.041sft	560.780sft	0.000sft	e
408	589502.901sft	0.028sft	2433619.995sft	0.026sft	733.830sft	0.000sft	e
1008	597025.700sft	0.000sft	2479113.280sft	0.000sft	716.640sft	0.000sft	N E e
415	574806.100sft	0.000sft	2455348.170sft	0.000sft	674.870sft	0.000sft	N E e
1028	572623.030sft	0.000sft	2456393.360sft	0.000sft	632.070sft	0.000sft	N E e
414	579353.013sft	0.025sft	2447241.017sft	0.024sft	635.030sft	0.000sft	e
417	570549.215sft	0.042sft	2420861.314sft	0.038sft	740.510sft	0.000sft	e
114	550060.120sft	0.000sft	2384223.580sft	0.000sft	690.920sft	0.000sft	N E e
422	547673.684sft	0.055sft	2418569.691sft	0.049sft	556.454sft	0.159sft	
641	547252.180sft	0.053sft	2413467.802sft	0.047sft	652.777sft	0.172sft	
513	569099.167sft	0.042sft	2441802.777sft	0.039sft	598.710sft	0.000sft	e
1201	594374.960sft	0.000sft	2450083.930sft	0.000sft	739.770sft	0.000sft	N E e
1001	601286.090sft	0.000sft	2459881.270sft	0.000sft	736.880sft	0.000sft	N E e
1009	591327.970sft	0.000sft	2456859.830sft	0.000sft	722.930sft	0.000sft	N E e
413	585228.978sft	0.024sft	2458522.048sft	0.023sft	700.110sft	0.000sft	e
1033	569227.530sft	0.000sft	2466087.120sft	0.000sft	565.020sft	0.000sft	N E e
637	562484.505sft	0.043sft	2399738.054sft	0.040sft	784.715sft	0.161sft	
638	562447.683sft	0.044sft	2413529.654sft	0.041sft	752.058sft	0.131sft	
420	557647.932sft	0.050sft	2431643.700sft	0.047sft	555.720sft	0.000sft	e
407	587092.284sft	0.036sft	2441358.098sft	0.032sft	712.370sft	0.000sft	e

1006	596668.050sft	0.000sft	2465589.410sft	0.000sft	743.670sft	0.000sft	N E e
1016	587172.580sft	0.000sft	2478940.590sft	0.000sft	686.670sft	0.000sft	N E e
1209	591629.640sft	0.000sft	2493480.140sft	0.000sft	585.810sft	0.000sft	N E e
107	561417.440sft	0.000sft	2383719.760sft	0.000sft	784.240sft	0.000sft	N E e
421	556796.263sft	0.043sft	2421257.584sft	0.040sft	613.710sft	0.000sft	e
416	573757.191sft	0.030sft	2433861.806sft	0.027sft	718.280sft	0.000sft	e
406	589365.552sft	0.026sft	2449601.321sft	0.024sft	715.700sft	0.000sft	e
1208	597213.620sft	0.000sft	2490397.940sft	0.000sft	730.770sft	0.000sft	N E e
1015	586854.700sft	0.000sft	2470997.350sft	0.000sft	699.490sft	0.000sft	N E e
1025	577861.630sft	0.000sft	2456074.870sft	0.000sft	621.580sft	0.000sft	N E e
405	595901.076sft	0.028sft	2460211.255sft	0.026sft	732.540sft	0.000sft	e
1023	580948.940sft	0.000sft	2478786.910sft	0.000sft	579.120sft	0.000sft	N E e
1200	573374.300sft	0.000sft	2469194.940sft	0.000sft	584.520sft	0.000sft	N E e
1000	612990.750sft	0.000sft	2438115.670sft	0.000sft	780.100sft	0.000sft	N E e

Adjusted Geodetic Coordinates

Errors are reported using 1.96σ .

Point Name	Latitude	N error	Longitude	E error	Height	h error	Fix
602	41°46'17.80046"N	0.033sft	90°50'31.66740"W	0.029sft	599.490sft	0.464sft	
6	41°51'07.34243"N	0.000sft	90°59'54.93794"W	0.000sft	721.696sft	0.570sft	Lat Long e
603	41°45'22.92085"N	0.037sft	90°47'22.36323"W	0.034sft	635.594sft	0.445sft	
610	41°44'36.36575"N	0.042sft	90°32'14.96534"W	0.037sft	566.270sft	0.455sft	
609	41°44'44.98513"N	0.041sft	90°37'00.11933"W	0.037sft	574.466sft	0.437sft	
613	41°43'22.33487"N	0.026sft	90°21'24.80067"W	0.025sft	484.467sft	0.534sft	
13	41°47'41.40672"N	0.000sft	90°21'18.24254"W	0.000sft	542.003sft	0.556sft	Lat Long e
622	41°41'09.81163"N	0.030sft	90°25'56.13516"W	0.029sft	638.832sft	0.488sft	
510	41°44'33.58969"N	0.042sft	90°46'49.94946"W	0.039sft	563.325sft	0.440sft	e
606	41°43'38.24936"N	0.036sft	90°47'01.06267"W	0.033sft	612.817sft	0.437sft	
5	41°49'42.89003"N	0.051sft	90°49'55.83665"W	0.039sft	566.937sft	0.489sft	e
643	41°47'19.14300"N	0.048sft	90°36'07.93828"W	0.042sft	554.121sft	0.460sft	
611	41°44'33.48228"N	0.043sft	90°29'25.82183"W	0.038sft	505.743sft	0.472sft	

548	41°43'06.38221"N	0.000sft	90°15'23.51017"W	0.000sft	471.976sft	0.601sft	Lat Long
607	41°43'25.01756"N	0.040sft	90°43'39.51292"W	0.036sft	538.135sft	0.428sft	
604	41°43'38.65211"N	0.032sft	90°53'55.12107"W	0.030sft	690.816sft	0.476sft	
621	41°40'59.62698"N	0.034sft	90°29'25.65173"W	0.031sft	637.626sft	0.462sft	
619	41°40'35.40570"N	0.033sft	90°36'25.00913"W	0.030sft	666.911sft	0.429sft	
618	41°40'35.09950"N	0.036sft	90°40'06.83757"W	0.032sft	650.620sft	0.422sft	
601	41°46'17.85630"N	0.032sft	90°54'18.42220"W	0.030sft	650.674sft	0.489sft	
642	41°45'58.62467"N	0.039sft	90°41'07.26997"W	0.035sft	533.645sft	0.437sft	
612	41°43'42.24795"N	0.033sft	90°25'17.54332"W	0.031sft	501.298sft	0.498sft	
623	41°40'33.99097"N	0.029sft	90°21'17.33320"W	0.027sft	589.485sft	0.532sft	
620	41°41'04.90904"N	0.041sft	90°32'50.28301"W	0.037sft	686.633sft	0.443sft	
608	41°43'45.17337"N	0.041sft	90°39'55.84318"W	0.037sft	603.062sft	0.427sft	
625	41°38'25.47469"N	0.045sft	90°50'28.02969"W	0.041sft	638.460sft	0.459sft	
626	41°38'24.52981"N	0.035sft	90°46'54.98631"W	0.031sft	646.582sft	0.440sft	
631	41°35'49.06971"N	0.036sft	90°50'29.19057"W	0.033sft	611.199sft	0.473sft	
103	41°35'38.97022"N	0.000sft	90°53'58.71340"W	0.000sft	577.307sft	0.497sft	Lat Long e
628	41°38'29.62035"N	0.034sft	90°40'14.99878"W	0.030sft	630.555sft	0.427sft	
1211	41°39'18.58294"N	0.000sft	90°28'16.27185"W	0.000sft	642.035sft	0.473sft	Lat Long e
1213	41°38'02.08501"N	0.000sft	90°24'52.85089"W	0.000sft	624.058sft	0.502sft	Lat Long e
1206	41°37'16.15279"N	0.000sft	90°25'22.61214"W	0.000sft	654.221sft	0.502sft	Lat Long e
403	41°37'05.39278"N	0.024sft	90°35'18.08147"W	0.023sft	638.960sft	0.442sft	e
404	41°36'38.61668"N	0.025sft	90°32'58.87474"W	0.024sft	635.640sft	0.453sft	e
512	41°35'24.07162"N	0.000sft	90°41'14.26260"W	0.000sft	652.884sft	0.445sft	Lat Long
409	41°35'09.67215"N	0.037sft	90°40'05.54271"W	0.036sft	636.778sft	0.448sft	e
105	41°34'03.01347"N	0.029sft	90°47'03.33760"W	0.028sft	624.392sft	0.469sft	
106	41°32'17.99641"N	0.000sft	90°47'04.31706"W	0.000sft	670.283sft	0.486sft	Lat Long e
616	41°40'35.65401"N	0.035sft	90°46'57.30920"W	0.032sft	563.075sft	0.434sft	
605	41°43'46.13530"N	0.042sft	90°50'25.81971"W	0.040sft	668.521sft	0.454sft	
627	41°38'56.33940"N	0.045sft	90°43'47.55726"W	0.041sft	630.440sft	0.430sft	
104	41°35'46.98663"N	0.000sft	90°47'07.12589"W	0.000sft	626.443sft	0.455sft	Lat Long e
1210	41°39'17.44394"N	0.000sft	90°31'45.77122"W	0.000sft	677.950sft	0.451sft	Lat Long e
1212	41°39'20.44704"N	0.000sft	90°25'59.10297"W	0.000sft	625.867sft	0.490sft	Lat Long e

1204	41°37'34.90397"N	0.000sft	90°28'51.69565"W	0.000sft	666.465sft	0.473sft	Lat Long e
1207	41°36'55.45107"N	0.000sft	90°23'55.10655"W	0.000sft	637.498sft	0.515sft	Lat Long e
615	41°41'02.67161"N	0.045sft	90°50'10.54944"W	0.042sft	675.977sft	0.451sft	
624	41°38'07.81568"N	0.039sft	90°53'57.87201"W	0.035sft	619.193sft	0.483sft	
632	41°35'46.56335"N	0.041sft	90°43'41.02534"W	0.038sft	637.103sft	0.446sft	
402	41°36'36.51304"N	0.038sft	90°38'05.64944"W	0.037sft	626.732sft	0.439sft	e
410	41°34'27.74326"N	0.036sft	90°38'56.38210"W	0.035sft	615.151sft	0.453sft	e
635	41°33'03.44747"N	0.039sft	90°40'06.21732"W	0.037sft	599.052sft	0.465sft	
636	41°36'40.12941"N	0.037sft	90°41'42.35999"W	0.034sft	619.640sft	0.437sft	
629	41°38'24.12989"N	0.028sft	90°36'33.33144"W	0.026sft	637.146sft	0.433sft	
1203	41°37'33.82812"N	0.000sft	90°30'36.11741"W	0.000sft	657.105sft	0.462sft	Lat Long e
633	41°35'40.65788"N	0.028sft	90°38'50.82650"W	0.027sft	635.598sft	0.443sft	
634	41°33'05.64790"N	0.035sft	90°43'35.11421"W	0.032sft	641.044sft	0.468sft	
614	41°41'02.72182"N	0.040sft	90°53'35.03724"W	0.037sft	669.044sft	0.472sft	
617	41°40'35.40673"N	0.046sft	90°43'30.75653"W	0.042sft	630.760sft	0.425sft	
630	41°38'02.39677"N	0.025sft	90°22'09.05764"W	0.023sft	627.174sft	0.526sft	
640	41°28'05.68302"N	0.037sft	90°43'37.41978"W	0.033sft	603.449sft	0.528sft	
127	41°27'31.13986"N	0.000sft	90°47'11.53957"W	0.000sft	448.128sft	0.543sft	Lat Long e
639	41°30'40.27785"N	0.047sft	90°36'13.23291"W	0.043sft	454.773sft	0.495sft	
419	41°31'21.02081"N	0.045sft	90°33'57.99135"W	0.041sft	453.430sft	0.494sft	e
408	41°34'54.18188"N	0.028sft	90°36'00.58080"W	0.026sft	626.474sft	0.453sft	e
1008	41°35'53.04942"N	0.000sft	90°25'58.83264"W	0.000sft	609.057sft	0.504sft	Lat Long e
415	41°32'21.80957"N	0.000sft	90°31'21.45311"W	0.000sft	567.312sft	0.493sft	Lat Long e
1028	41°31'59.89978"N	0.000sft	90°31'08.70042"W	0.000sft	524.532sft	0.498sft	Lat Long e
414	41°33'09.43493"N	0.025sft	90°33'05.97566"W	0.024sft	527.728sft	0.478sft	e
417	41°31'51.18824"N	0.042sft	90°38'56.55071"W	0.038sft	633.220sft	0.478sft	e
114	41°28'40.43619"N	0.000sft	90°47'06.45150"W	0.000sft	583.263sft	0.529sft	Lat Long e
422	41°28'06.03620"N	0.055sft	90°39'36.48405"W	0.049sft	448.979sft	0.525sft	
641	41°28'03.51389"N	0.053sft	90°40'43.64599"W	0.047sft	545.281sft	0.526sft	
513	41°31'29.99867"N	0.042sft	90°34'22.00099"W	0.039sft	491.306sft	0.490sft	e
1201	41°35'36.81144"N	0.000sft	90°32'21.88145"W	0.000sft	632.387sft	0.462sft	Lat Long e
1001	41°36'41.73802"N	0.000sft	90°30'09.88124"W	0.000sft	629.383sft	0.470sft	Lat Long e

1009	41°35'04.43757"N	0.000sft	90°30'54.13196"W	0.000sft	615.486sft	0.474sft	Lat Long e
413	41°34'03.65151"N	0.024sft	90°30'35.02992"W	0.023sft	592.705sft	0.483sft	e
1033	41°31'23.07114"N	0.000sft	90°29'02.86239"W	0.000sft	457.520sft	0.515sft	Lat Long e
637	41°30'38.29538"N	0.043sft	90°43'37.52686"W	0.040sft	677.248sft	0.496sft	
638	41°30'33.54922"N	0.044sft	90°40'36.35649"W	0.041sft	644.682sft	0.492sft	
420	41°29'40.27737"N	0.050sft	90°36'40.49010"W	0.047sft	448.303sft	0.506sft	e
407	41°34'27.81795"N	0.036sft	90°34'19.88298"W	0.032sft	604.919sft	0.463sft	e
1006	41°35'54.19029"N	0.000sft	90°28'56.88927"W	0.000sft	636.174sft	0.481sft	Lat Long e
1016	41°34'15.82209"N	0.000sft	90°26'05.67308"W	0.000sft	579.114sft	0.511sft	Lat Long e
1209	41°34'54.72456"N	0.000sft	90°22'52.40430"W	0.000sft	478.098sft	0.532sft	Lat Long e
107	41°30'32.74899"N	0.000sft	90°47'08.41197"W	0.000sft	676.672sft	0.506sft	Lat Long e
421	41°29'35.25225"N	0.043sft	90°38'57.26859"W	0.040sft	506.314sft	0.504sft	e
416	41°32'18.62141"N	0.030sft	90°36'04.30430"W	0.027sft	610.930sft	0.476sft	e
406	41°34'47.50981"N	0.026sft	90°32'30.47115"W	0.024sft	608.331sft	0.467sft	e
1208	41°35'50.94813"N	0.000sft	90°23'30.31100"W	0.000sft	623.075sft	0.524sft	Lat Long e
1015	41°34'15.43513"N	0.000sft	90°27'50.26064"W	0.000sft	591.989sft	0.500sft	Lat Long e
1025	41°32'51.73474"N	0.000sft	90°31'10.52603"W	0.000sft	514.030sft	0.490sft	Lat Long e
405	41°35'48.45414"N	0.028sft	90°30'07.98241"W	0.026sft	625.112sft	0.474sft	e
1023	41°33'14.42434"N	0.000sft	90°26'10.57716"W	0.000sft	471.556sft	0.517sft	Lat Long e
1200	41°32'02.95027"N	0.000sft	90°28'20.13185"W	0.000sft	476.995sft	0.513sft	Lat Long e
1000	41°38'44.62247"N	0.000sft	90°34'51.08673"W	0.000sft	672.678sft	0.438sft	Lat Long e

Control Coordinate Comparisons

Values shown are control coord minus adjusted coord.

Point Name	ΔNorthing	ΔEasting	ΔElevation	ΔHeight
510	0.140sft	-0.024sft	N/A	N/A
548	N/A	N/A	0.263sft	N/A
512	N/A	N/A	0.148sft	N/A
105	0.027sft	0.220sft	0.109sft	N/A
422	N/A	N/A	0.096sft	N/A
513	0.103sft	0.113sft	N/A	N/A

Adjusted Observations

Adjustment performed in **NAD 1983/1996 HARN (Conus)**

GPS Observations

GPS Transformation Group: <GPS Default>

Deflection in Longitude : 0°00'00.1391" (1.96σ) : 0°00'00.7644"

Deflection in Latitude : 0°00'00.0255" (1.96σ) : 0°00'00.8236"

Azimuth Rotation : -0°00'00.0241" (1.96σ) : 0°00'00.0549"

Network Scale : 0.99999960 (1.96σ) : 0.00000026

Number of Observations : 173

Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.90). Any outliers are in **red**.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96σ)	Residual	Stand. Residual
B298	1210	1000	Az.	256°43'50.3933"	0°00'00.0549"	-0°00'01.1407"	-3.51
			ΔHt.	-5.263sft	0.050sft	0.031sft	1.69
			Dist.	14455.600sft	0.004sft	0.000sft	0.00
B99	605	604	Az.	267°17'12.5838"	0°00'00.4839"	0°00'00.0908"	0.55
			ΔHt.	22.307sft	0.045sft	-0.045sft	-2.97
			Dist.	15888.460sft	0.036sft	-0.005sft	-0.43
B80	606	605	Az.	272°57'43.3863"	0°00'00.4871"	0°00'00.0848"	0.53
			ΔHt.	55.714sft	0.043sft	-0.037sft	-2.96
			Dist.	15546.338sft	0.036sft	-0.003sft	-0.27
B208	1028	1033	Az.	111°16'03.4625"	0°00'00.0549"	0°00'01.4549"	2.93
			ΔHt.	-67.019sft	0.053sft	-0.013sft	-0.87
			Dist.	10271.600sft	0.003sft	0.062sft	2.68
B242	1028	419	Az.	253°01'17.9004"	0°00'00.6693"	-0°00'00.9778"	-2.90
			ΔHt.	-71.094sft	0.067sft	0.099sft	2.50
			Dist.	13464.333sft	0.042sft	0.033sft	1.46
B152	1203	403	Az.	262°22'16.9314"	0°00'00.2342"	-0°00'00.5655"	-2.21
			ΔHt.	-18.130sft	0.053sft	-0.151sft	-2.83
			Dist.	21607.850sft	0.024sft	-0.002sft	-0.08
B197	513	419	Az.	116°27'04.5640"	0°00'03.8125"	-0°00'02.1189"	-1.26
			ΔHt.	-37.877sft	0.045sft	-0.082sft	-2.80
			Dist.	2039.896sft	0.035sft	-0.014sft	-0.84

B256	1015	1016	Az.	89°42'29.0575"	0°00'00.0549"	0°00'00.0474"	0.07
			ΔHt.	-12.880sft	0.068sft	0.000sft	0.00
			Dist.	7949.840sft	0.002sft	0.075sft	2.75
B134	633	512	Az.	261°15'23.3071"	0°00'00.5305"	-0°00'00.0432"	-0.13
			ΔHt.	17.293sft	0.043sft	0.018sft	1.25
			Dist.	11027.593sft	0.027sft	0.045sft	2.58
B19	604	6	Az.	329°03'47.0511"	0°00'00.1234"	-0°00'00.0272"	-0.37
			ΔHt.	30.904sft	0.048sft	-0.080sft	-2.53
			Dist.	52968.855sft	0.032sft	0.004sft	0.18
B300	1203	1210	Az.	333°14'45.6867"	0°00'00.0549"	0°00'00.9683"	2.52
			ΔHt.	20.851sft	0.048sft	0.039sft	2.12
			Dist.	11745.957sft	0.003sft	0.049sft	2.20
B113	1207	1213	Az.	326°58'20.3836"	0°00'00.0549"	0°00'01.7436"	2.51
			ΔHt.	-13.437sft	0.054sft	0.020sft	0.61
			Dist.	8045.059sft	0.002sft	-0.031sft	-1.27
B90	611	610	Az.	271°19'10.5115"	0°00'00.6120"	0°00'00.1486"	0.37
			ΔHt.	60.535sft	0.060sft	-0.008sft	-0.22
			Dist.	12825.822sft	0.033sft	-0.052sft	-2.38
B112	1213	1204	Az.	261°23'49.1434"	0°00'00.0549"	-0°00'00.0678"	-0.24
			ΔHt.	42.419sft	0.061sft	0.005sft	0.14
			Dist.	18345.594sft	0.005sft	0.057sft	2.37
B74	403	404	Az.	104°21'47.5356"	0°00'00.5945"	-0°00'00.5516"	-1.23
			ΔHt.	-3.327sft	0.053sft	0.094sft	2.36
			Dist.	10915.878sft	0.029sft	0.025sft	1.17
B294	406	407	Az.	256°31'52.1591"	0°00'00.8730"	-0°00'00.7608"	-1.33
			ΔHt.	-3.406sft	0.054sft	0.115sft	2.31
			Dist.	8551.189sft	0.033sft	0.002sft	0.08
B117	410	635	Az.	211°53'48.7182"	0°00'00.7541"	-0°00'00.2719"	-0.94
			ΔHt.	-16.096sft	0.051sft	-0.021sft	-1.39
			Dist.	10049.062sft	0.038sft	-0.032sft	-2.28
B238	1208	1207	Az.	343°54'31.0685"	0°00'00.0549"	0°00'00.2665"	0.30
			ΔHt.	14.426sft	0.066sft	0.019sft	0.42
			Dist.	6795.216sft	0.002sft	0.064sft	2.23
B252	405	1009	Az.	218°12'38.5023"	0°00'00.9603"	0°00'00.8310"	1.20
			ΔHt.	-9.624sft	0.055sft	0.067sft	2.16
			Dist.	5669.846sft	0.028sft	-0.022sft	-1.07
B186	1008	1206	Az.	18°06'35.5989"	0°00'00.0549"	-0°00'01.5072"	-2.14
			ΔHt.	45.164sft	0.065sft	0.023sft	0.43
			Dist.	8850.211sft	0.002sft	0.013sft	0.32
B195	114	127	Az.	183°09'41.4991"	0°00'00.0549"	-0°00'01.6973"	-2.13

			ΔHt.	-135.135sft	0.068sft	0.004sft	0.11
			Dist.	7024.611sft	0.002sft	0.057sft	1.78
B150	630	1213	Az.	269°52'11.0757"	0°00'00.4075"	0°00'00.3191"	0.71
			ΔHt.	-3.107sft	0.062sft	0.030sft	0.64
			Dist.	12437.938sft	0.023sft	-0.053sft	-2.06
B66	631	103	Az.	266°20'42.8853"	0°00'00.4674"	0°00'00.4615"	2.05
			ΔHt.	-33.881sft	0.053sft	0.008sft	0.57
			Dist.	15952.671sft	0.033sft	0.004sft	0.22
B85	104	631	Az.	270°48'19.5732"	0°00'00.4872"	0°00'00.5160"	2.01
			ΔHt.	-15.234sft	0.053sft	0.005sft	0.33
			Dist.	15354.385sft	0.033sft	0.008sft	0.48
B240	1015	1006	Az.	333°08'29.7775"	0°00'00.0549"	-0°00'00.0153"	-0.04
			ΔHt.	44.190sft	0.054sft	0.013sft	0.66
			Dist.	11205.128sft	0.003sft	-0.045sft	-1.98
B229	107	106	Az.	1°40'27.9425"	0°00'00.0549"	-0°00'00.8238"	-1.92
			ΔHt.	-6.388sft	0.049sft	0.019sft	1.46
			Dist.	10657.418sft	0.003sft	-0.011sft	-0.48
B288	1200	1023	Az.	53°41'47.9372"	0°00'00.0549"	-0°00'00.0694"	-0.16
			ΔHt.	-5.444sft	0.056sft	-0.023sft	-1.30
			Dist.	12222.562sft	0.003sft	0.045sft	1.91
B73	1213	1206	Az.	205°55'44.9942"	0°00'00.0549"	0°00'01.7644"	1.91
			ΔHt.	30.165sft	0.051sft	-0.019sft	-0.63
			Dist.	5169.500sft	0.001sft	0.017sft	0.67
B2	602	603	Az.	111°08'57.9794"	0°00'00.4392"	0°00'00.1155"	0.54
			ΔHt.	36.094sft	0.042sft	-0.032sft	-1.87
			Dist.	15384.113sft	0.031sft	-0.014sft	-0.84
B202	1203	1001	Az.	159°17'36.3676"	0°00'00.0549"	-0°00'00.9802"	-1.04
			ΔHt.	-27.724sft	0.064sft	0.082sft	1.87
			Dist.	5636.525sft	0.001sft	-0.034sft	-1.22
B27	619	618	Az.	269°54'53.9541"	0°00'00.4583"	0°00'00.0738"	0.28
			ΔHt.	-16.279sft	0.062sft	-0.063sft	-1.84
			Dist.	16833.849sft	0.034sft	-0.029sft	-1.43
B295	403	1000	Az.	11°31'58.8968"	0°00'00.4557"	0°00'00.3201"	0.81
			ΔHt.	33.718sft	0.040sft	-0.004sft	-0.20
			Dist.	10251.017sft	0.024sft	-0.037sft	-1.84
B224	1016	1209	Az.	74°58'33.8166"	0°00'00.0549"	0°00'00.5947"	1.77
			ΔHt.	-101.025sft	0.071sft	-0.016sft	-0.52
			Dist.	15207.816sft	0.004sft	0.010sft	0.41
B191	415	1028	Az.	156°22'38.8201"	0°00'00.0549"	-0°00'00.0984"	-0.05
			ΔHt.	-42.781sft	0.044sft	0.004sft	0.20

			Dist.	2420.458sft	0.001sft	-0.040sft	-1.73
B234	416	417	Az.	258°02'53.7156"	0°00'00.6564"	0°00'00.6724"	1.71
			ΔHt.	22.299sft	0.060sft	0.031sft	0.91
			Dist.	13390.900sft	0.040sft	-0.020sft	-0.84
B133	1203	404	Az.	242°44'49.0645"	0°00'00.4131"	-0°00'00.5543"	-1.65
			ΔHt.	-21.457sft	0.050sft	-0.036sft	-1.45
			Dist.	12198.515sft	0.025sft	-0.010sft	-0.50
B275	633	416	Az.	148°13'38.4837"	0°00'00.2930"	-0°00'00.4804"	-1.61
			ΔHt.	-24.680sft	0.053sft	-0.022sft	-0.38
			Dist.	24050.457sft	0.036sft	0.015sft	0.33
B24	548	13	Az.	316°01'47.3081"	0°00'00.0549"	-0°00'00.1490"	-0.87
			ΔHt.	70.049sft	0.064sft	0.065sft	1.60
			Dist.	38701.851sft	0.010sft	-0.015sft	-0.57
B76	512	409	Az.	105°35'17.6736"	0°00'01.4168"	-0°00'00.4793"	-0.91
			ΔHt.	-16.110sft	0.050sft	0.005sft	0.26
			Dist.	5421.637sft	0.036sft	0.022sft	1.59
B217	407	408	Az.	289°13'54.3499"	0°00'00.9686"	-0°00'01.0744"	-1.36
			ΔHt.	21.560sft	0.050sft	0.005sft	0.14
			Dist.	8105.134sft	0.033sft	-0.033sft	-1.55
B167	636	512	Az.	164°29'56.9961"	0°00'00.9002"	0°00'00.7675"	1.54
			ΔHt.	33.242sft	0.058sft	-0.020sft	-0.95
			Dist.	7988.961sft	0.036sft	-0.006sft	-0.31
B155	106	634	Az.	73°06'49.7980"	0°00'00.4237"	0°00'00.1739"	0.63
			ΔHt.	-29.249sft	0.053sft	0.016sft	0.44
			Dist.	16623.083sft	0.033sft	-0.033sft	-1.52
B114	403	402	Az.	257°04'52.8100"	0°00'00.5819"	0°00'00.3276"	1.45
			ΔHt.	-12.220sft	0.052sft	-0.031sft	-1.52
			Dist.	13059.782sft	0.036sft	0.006sft	0.42
B163	1212	630	Az.	114°19'01.2781"	0°00'00.2730"	-0°00'00.1536"	-0.50
			ΔHt.	1.294sft	0.062sft	0.049sft	1.50
			Dist.	19169.545sft	0.023sft	-0.009sft	-0.36
B13	610	611	Az.	91°17'17.8973"	0°00'00.6120"	0°00'00.1574"	0.39
			ΔHt.	-60.535sft	0.060sft	-0.010sft	-0.27
			Dist.	12825.822sft	0.033sft	0.032sft	1.50
B116	409	410	Az.	128°54'42.8464"	0°00'01.1268"	-0°00'00.6282"	-1.49
			ΔHt.	-21.630sft	0.047sft	0.002sft	0.11
			Dist.	6755.645sft	0.037sft	0.015sft	1.05
B193	417	635	Az.	324°05'19.1382"	0°00'01.0209"	-0°00'00.7407"	-1.42
			ΔHt.	-34.163sft	0.067sft	0.060sft	1.48
			Dist.	9031.080sft	0.043sft	-0.006sft	-0.28

B91	1211	1212	Az.	88°56'57.1676"	0°00'00.0549"	0°00'00.8199"	1.46
			ΔHt.	-16.175sft	0.057sft	0.033sft	1.18
			Dist.	10414.387sft	0.003sft	0.021sft	0.80
B178	640	127	Az.	257°54'53.6985"	0°00'00.4605"	-0°00'00.6533"	-1.45
			ΔHt.	-155.310sft	0.076sft	0.044sft	0.76
			Dist.	16673.011sft	0.033sft	-0.030sft	-1.16
B231	421	422	Az.	198°17'41.9662"	0°00'00.9162"	-0°00'00.2235"	-0.88
			ΔHt.	-57.334sft	0.064sft	0.023sft	1.44
			Dist.	9510.695sft	0.046sft	0.003sft	0.22
B93	1207	1206	Az.	287°30'22.8094"	0°00'00.0549"	0°00'00.1846"	0.21
			ΔHt.	16.728sft	0.056sft	0.020sft	0.49
			Dist.	6968.966sft	0.002sft	-0.037sft	-1.43
B196	422	641	Az.	267°08'51.9120"	0°00'01.8899"	-0°00'00.2517"	-0.48
			ΔHt.	96.306sft	0.062sft	0.022sft	1.42
			Dist.	5119.477sft	0.041sft	-0.008sft	-0.71
B159	402	633	Az.	211°15'57.1661"	0°00'01.1249"	0°00'00.6101"	1.41
			ΔHt.	8.868sft	0.051sft	0.003sft	0.18
			Dist.	6613.888sft	0.036sft	-0.007sft	-0.53
B277	421	420	Az.	87°11'23.6681"	0°00'00.7913"	-0°00'00.2914"	-1.41
			ΔHt.	-58.017sft	0.049sft	-0.007sft	-0.54
			Dist.	10421.374sft	0.038sft	0.000sft	-0.03
B212	641	640	Az.	270°58'00.2578"	0°00'00.7207"	-0°00'00.0692"	-0.35
			ΔHt.	58.177sft	0.060sft	0.020sft	1.40
			Dist.	13231.411sft	0.041sft	-0.008sft	-0.70
B52	642	643	Az.	70°12'21.0131"	0°00'00.3245"	-0°00'00.1132"	-0.56
			ΔHt.	20.462sft	0.086sft	0.105sft	1.40
			Dist.	24099.713sft	0.034sft	0.004sft	0.21
B192	415	414	Az.	301°14'50.0331"	0°00'00.5528"	-0°00'00.1512"	-0.36
			ΔHt.	-39.578sft	0.038sft	-0.026sft	-1.40
			Dist.	9295.486sft	0.024sft	0.000sft	0.01
B211	638	417	Az.	44°00'13.7466"	0°00'00.7160"	0°00'00.2389"	0.60
			ΔHt.	-11.466sft	0.061sft	-0.007sft	-0.16
			Dist.	10926.875sft	0.041sft	-0.035sft	-1.38
B154	635	634	Az.	270°49'21.4312"	0°00'00.5073"	0°00'00.1491"	0.77
			ΔHt.	42.002sft	0.054sft	-0.006sft	-0.35
			Dist.	15884.733sft	0.037sft	-0.020sft	-1.37
B92	1206	1204	Az.	276°50'06.4268"	0°00'00.0549"	-0°00'00.4829"	-1.36
			ΔHt.	12.254sft	0.064sft	-0.009sft	-0.19
			Dist.	15992.611sft	0.004sft	0.021sft	0.82
B210	637	638	Az.	91°58'45.7761"	0°00'00.6027"	0°00'00.2455"	1.33

			ΔHt.	-32.576sft	0.058sft	-0.012sft	-0.81
			Dist.	13792.155sft	0.038sft	-0.004sft	-0.30
B200	404	1201	Az.	155°48'14.1807"	0°00'00.7310"	-0°00'00.8444"	-1.33
			ΔHt.	-3.256sft	0.047sft	0.025sft	0.75
			Dist.	6858.185sft	0.024sft	0.022sft	1.05
B122	616	626	Az.	179°14'19.0973"	0°00'00.5104"	-0°00'00.2064"	-0.89
			ΔHt.	83.505sft	0.046sft	-0.022sft	-1.30
			Dist.	13273.528sft	0.035sft	-0.003sft	-0.20
B215	639	420	Az.	198°51'28.7550"	0°00'01.2640"	-0°00'00.2214"	-0.60
			ΔHt.	-6.469sft	0.059sft	0.014sft	0.78
			Dist.	6417.449sft	0.043sft	0.016sft	1.29
B162	630	1207	Az.	229°56'05.6127"	0°00'00.4506"	0°00'00.5430"	1.29
			ΔHt.	10.330sft	0.061sft	0.010sft	0.29
			Dist.	10525.488sft	0.025sft	0.010sft	0.43
B166	629	403	Az.	144°21'02.7251"	0°00'00.5394"	-0°00'00.2724"	-0.63
			ΔHt.	1.809sft	0.037sft	0.058sft	1.27
			Dist.	9806.810sft	0.025sft	0.007sft	0.32
B1	602	6	Az.	304°32'41.8909"	0°00'00.1327"	0°00'00.0434"	0.53
			ΔHt.	122.239sft	0.046sft	0.033sft	1.27
			Dist.	51753.436sft	0.031sft	-0.016sft	-0.82
B126	628	636	Az.	210°54'55.0594"	0°00'00.5804"	0°00'00.3499"	1.26
			ΔHt.	-10.912sft	0.060sft	0.005sft	0.20
			Dist.	12916.762sft	0.041sft	0.023sft	1.18
B292	1201	408	Az.	255°27'56.1130"	0°00'00.3334"	0°00'00.2808"	1.26
			ΔHt.	-5.902sft	0.043sft	-0.004sft	-0.22
			Dist.	17170.175sft	0.027sft	0.020sft	1.07
B101	618	616	Az.	270°08'28.1082"	0°00'00.2211"	0°00'00.1495"	1.01
			ΔHt.	-87.524sft	0.045sft	-0.041sft	-1.26
			Dist.	31149.355sft	0.030sft	-0.014sft	-0.71
B181	639	419	Az.	68°08'42.3417"	0°00'00.7770"	-0°00'00.3388"	-0.70
			ΔHt.	-1.349sft	0.061sft	-0.056sft	-1.25
			Dist.	11084.068sft	0.038sft	0.001sft	0.05
B29	607	606	Az.	275°01'36.7333"	0°00'00.4280"	0°00'00.0809"	0.33
			ΔHt.	74.693sft	0.041sft	-0.029sft	-1.25
			Dist.	15341.906sft	0.030sft	-0.004sft	-0.25
B269	413	1015	Az.	84°32'41.6497"	0°00'00.4038"	-0°00'00.0666"	-0.17
			ΔHt.	-0.724sft	0.064sft	0.050sft	1.24
			Dist.	12581.170sft	0.024sft	-0.023sft	-0.98
B264	107	637	Az.	87°58'35.9644"	0°00'00.5542"	0°00'00.2461"	1.22
			ΔHt.	0.566sft	0.071sft	-0.023sft	-0.79

			Dist.	16054.386sft	0.040sft	-0.005sft	-0.34
B172	642	607	Az.	216°35'57.3138"	0°00'00.3202"	0°00'00.1362"	0.58
			ΔHt.	4.497sft	0.045sft	-0.040sft	-1.21
			Dist.	19363.455sft	0.033sft	-0.014sft	-0.53
B143	636	632	Az.	238°59'15.6529"	0°00'00.7845"	-0°00'00.1167"	-0.37
			ΔHt.	17.469sft	0.060sft	0.025sft	1.20
			Dist.	10520.060sft	0.041sft	0.001sft	0.08
B107	632	104	Az.	270°10'32.7205"	0°00'00.5468"	-0°00'00.0652"	-0.31
			ΔHt.	-10.649sft	0.053sft	0.018sft	1.20
			Dist.	15659.726sft	0.038sft	-0.002sft	-0.14
B161	1211	1204	Az.	194°22'43.1205"	0°00'00.0549"	-0°00'00.2117"	-0.45
			ΔHt.	24.430sft	0.065sft	-0.054sft	-1.18
			Dist.	10833.524sft	0.003sft	0.032sft	1.18
B276	416	513	Az.	122°18'16.0597"	0°00'00.8583"	-0°00'00.3393"	-1.11
			ΔHt.	-119.629sft	0.052sft	-0.027sft	-1.18
			Dist.	9206.632sft	0.037sft	-0.010sft	-0.66
B278	414	416	Az.	249°14'42.6645"	0°00'00.4178"	0°00'00.2621"	1.18
			ΔHt.	83.210sft	0.036sft	0.003sft	0.19
			Dist.	14502.774sft	0.029sft	0.014sft	0.85
B136	614	604	Az.	354°29'19.5239"	0°00'00.4606"	-0°00'00.2016"	-1.18
			ΔHt.	21.776sft	0.047sft	0.001sft	0.09
			Dist.	15856.702sft	0.037sft	0.003sft	0.27
B97	105	104	Az.	358°25'59.9429"	0°00'00.5467"	-0°00'00.4113"	-1.17
			ΔHt.	2.053sft	0.051sft	0.008sft	0.59
			Dist.	10527.932sft	0.029sft	-0.020sft	-1.07
B145	629	619	Az.	2°43'16.1682"	0°00'00.4626"	0°00'00.3034"	0.99
			ΔHt.	29.766sft	0.064sft	-0.054sft	-1.17
			Dist.	13302.711sft	0.034sft	0.002sft	0.07
B30	602	601	Az.	270°02'23.3568"	0°00'00.4437"	-0°00'00.0500"	-0.21
			ΔHt.	51.196sft	0.047sft	0.031sft	1.15
			Dist.	17182.295sft	0.033sft	-0.013sft	-0.75
B31	602	642	Az.	92°32'46.6114"	0°00'00.1845"	-0°00'00.0705"	-0.54
			ΔHt.	-65.874sft	0.056sft	-0.050sft	-1.14
			Dist.	42812.881sft	0.035sft	-0.007sft	-0.28
B271	1209	1208	Az.	333°09'24.8330"	0°00'00.0549"	-0°00'00.8631"	-0.88
			ΔHt.	144.980sft	0.069sft	0.007sft	0.14
			Dist.	6378.330sft	0.002sft	-0.031sft	-1.14
B53	612	611	Az.	285°25'33.3926"	0°00'00.4759"	0°00'00.1647"	0.79
			ΔHt.	4.459sft	0.067sft	-0.013sft	-0.58
			Dist.	19525.105sft	0.039sft	-0.018sft	-1.11

B261	1006	405	Az.	263°52'17.4504"	0°00'01.0688"	0°00'00.8745"	1.11
			ΔHt.	-11.058sft	0.049sft	-0.004sft	-0.19
			Dist.	5432.717sft	0.026sft	0.013sft	0.65
B48	606	603	Az.	351°20'10.1041"	0°00'00.5651"	0°00'00.1650"	0.50
			ΔHt.	22.780sft	0.038sft	0.023sft	1.10
			Dist.	10717.325sft	0.031sft	0.004sft	0.25
B22	609	643	Az.	14°12'54.9972"	0°00'00.3940"	-0°00'00.1497"	-0.71
			ΔHt.	-20.345sft	0.079sft	-0.037sft	-1.08
			Dist.	16097.350sft	0.036sft	-0.002sft	-0.13
B55	548	623	Az.	240°08'53.2013"	0°00'00.1880"	-0°00'00.0034"	-0.03
			ΔHt.	117.526sft	0.064sft	-0.037sft	-1.08
			Dist.	30958.290sft	0.030sft	0.010sft	0.47
B105	624	103	Az.	180°14'35.2397"	0°00'00.4833"	-0°00'00.1644"	-0.72
			ΔHt.	-41.888sft	0.057sft	-0.012sft	-0.73
			Dist.	15066.119sft	0.039sft	-0.020sft	-1.04
B43	13	612	Az.	216°51'40.9167"	0°00'00.2130"	-0°00'00.0382"	-0.35
			ΔHt.	-40.695sft	0.047sft	0.001sft	0.09
			Dist.	30247.888sft	0.034sft	-0.017sft	-1.04
B297	629	1000	Az.	75°01'51.1428"	0°00'00.7088"	0°00'00.5100"	1.03
			ΔHt.	35.527sft	0.043sft	-0.011sft	-0.51
			Dist.	8035.379sft	0.027sft	-0.010sft	-0.53
B120	608	642	Az.	338°09'52.4906"	0°00'00.4172"	-0°00'00.1007"	-0.40
			ΔHt.	-69.411sft	0.043sft	0.021sft	1.02
			Dist.	14552.815sft	0.031sft	0.003sft	0.18
B127	629	628	Az.	271°54'41.8316"	0°00'00.4450"	0°00'00.1005"	0.34
			ΔHt.	-6.580sft	0.069sft	-0.015sft	-0.25
			Dist.	16840.049sft	0.032sft	0.021sft	1.02
B279	1016	1023	Az.	183°26'00.5606"	0°00'00.0549"	-0°00'00.3816"	-0.49
			ΔHt.	-107.558sft	0.059sft	0.032sft	1.01
			Dist.	6225.732sft	0.002sft	0.011sft	0.36
B258	1025	415	Az.	195°20'28.9413"	0°00'00.0549"	0°00'00.7411"	0.50
			ΔHt.	53.283sft	0.037sft	0.003sft	0.16
			Dist.	3140.862sft	0.001sft	-0.023sft	-0.99
B78	105	106	Az.	180°24'05.3437"	0°00'00.5396"	-0°00'00.3264"	-0.99
			ΔHt.	45.890sft	0.044sft	-0.002sft	-0.17
			Dist.	10629.864sft	0.029sft	-0.014sft	-0.80
B69	619	628	Az.	233°55'05.0524"	0°00'00.3192"	0°00'00.2152"	0.97
			ΔHt.	-36.346sft	0.064sft	0.027sft	0.55
			Dist.	21607.394sft	0.035sft	0.014sft	0.51
B289	414	406	Az.	15°12'23.3559"	0°00'00.5501"	0°00'00.0802"	0.23

			ΔHt.	80.602sft	0.042sft	-0.020sft	-0.94
			Dist.	10287.299sft	0.029sft	0.001sft	0.06
B253	1009	406	Az.	256°50'14.6596"	0°00'00.7031"	0°00'00.0930"	0.13
			ΔHt.	-7.150sft	0.051sft	0.044sft	0.93
			Dist.	7519.330sft	0.025sft	-0.008sft	-0.35
B243	414	1025	Az.	101°31'28.7127"	0°00'00.5757"	0°00'00.3082"	0.60
			ΔHt.	-13.705sft	0.042sft	0.024sft	0.91
			Dist.	8959.153sft	0.024sft	0.011sft	0.54
B221	1008	1006	Az.	270°30'19.6938"	0°00'00.0549"	0°00'00.5566"	0.91
			ΔHt.	27.127sft	0.076sft	-0.053sft	-0.89
			Dist.	13528.967sft	0.003sft	-0.001sft	-0.03
B266	413	1025	Az.	200°20'39.8712"	0°00'00.6208"	-0°00'00.4634"	-0.89
			ΔHt.	-78.674sft	0.042sft	0.010sft	0.40
			Dist.	7763.397sft	0.025sft	0.013sft	0.58
B108	619	403	Az.	166°33'01.8816"	0°00'00.2915"	-0°00'00.0749"	-0.38
			ΔHt.	-27.956sft	0.063sft	0.045sft	0.88
			Dist.	21856.261sft	0.033sft	-0.005sft	-0.21
B81	608	607	Az.	263°09'41.2022"	0°00'00.4134"	0°00'00.0073"	0.03
			ΔHt.	-64.915sft	0.046sft	-0.024sft	-0.87
			Dist.	17082.686sft	0.031sft	-0.009sft	-0.49
B213	640	114	Az.	282°29'03.9329"	0°00'00.4588"	0°00'00.1022"	0.58
			ΔHt.	-20.175sft	0.049sft	0.008sft	0.61
			Dist.	16296.718sft	0.034sft	0.012sft	0.84
B44	622	623	Az.	99°41'57.6222"	0°00'00.3191"	0°00'00.0166"	0.09
			ΔHt.	-49.361sft	0.057sft	0.011sft	0.35
			Dist.	21464.287sft	0.031sft	0.015sft	0.84
B84	626	627	Az.	77°14'01.2466"	0°00'00.5584"	0°00'00.1615"	0.82
			ΔHt.	-16.150sft	0.055sft	-0.014sft	-0.78
			Dist.	14590.087sft	0.037sft	0.007sft	0.54
B103	627	628	Az.	99°29'37.7169"	0°00'00.5119"	0°00'00.1033"	0.55
			ΔHt.	0.103sft	0.056sft	-0.015sft	-0.77
			Dist.	16363.184sft	0.037sft	0.011sft	0.82
B265	417	421	Az.	180°13'38.9645"	0°00'00.5405"	-0°00'00.0393"	-0.14
			ΔHt.	-126.908sft	0.056sft	0.017sft	0.51
			Dist.	13759.162sft	0.039sft	-0.016sft	-0.82
B63	608	609	Az.	65°32'42.0032"	0°00'00.4456"	0°00'00.0232"	0.10
			ΔHt.	-28.604sft	0.044sft	-0.013sft	-0.81
			Dist.	14633.596sft	0.030sft	0.002sft	0.14
B183	404	408	Az.	232°34'37.7532"	0°00'00.3845"	-0°00'00.1012"	-0.31
			ΔHt.	-9.158sft	0.049sft	0.007sft	0.13

			Dist.	17388.252sft	0.033sft	-0.024sft	-0.81
B299	629	403	Az.	144°21'02.7251"	0°00'00.5394"	0°00'00.0131"	0.03
			ΔHt.	1.809sft	0.037sft	0.006sft	0.33
			Dist.	9806.810sft	0.025sft	-0.015sft	-0.81
B104	624	625	Az.	83°34'47.9586"	0°00'00.5132"	0°00'00.1371"	0.80
			ΔHt.	19.257sft	0.052sft	-0.001sft	-0.07
			Dist.	16033.664sft	0.037sft	0.001sft	0.06
B239	623	630	Az.	194°21'29.9714"	0°00'00.4016"	-0°00'00.1814"	-0.80
			ΔHt.	37.690sft	0.068sft	-0.009sft	-0.31
			Dist.	15838.731sft	0.033sft	0.010sft	0.54
B235	404	406	Az.	169°08'03.1162"	0°00'00.5293"	0°00'00.0636"	0.19
			ΔHt.	-27.312sft	0.047sft	0.020sft	0.80
			Dist.	11451.291sft	0.031sft	0.012sft	0.62
B270	630	1209	Az.	189°50'18.2214"	0°00'00.2519"	-0°00'00.0232"	-0.11
			ΔHt.	-149.076sft	0.072sft	0.020sft	0.58
			Dist.	19279.262sft	0.025sft	0.017sft	0.79
B65	625	626	Az.	90°19'08.7009"	0°00'00.4985"	0°00'00.1248"	0.79
			ΔHt.	8.110sft	0.048sft	-0.001sft	-0.11
			Dist.	16176.485sft	0.037sft	0.002sft	0.16
B293	1033	1200	Az.	38°50'11.2391"	0°00'00.0549"	-0°00'00.5041"	-0.58
			ΔHt.	19.474sft	0.041sft	-0.008sft	-0.79
			Dist.	5182.289sft	0.001sft	0.011sft	0.50
B169	624	614	Az.	5°35'22.5416"	0°00'00.4440"	-0°00'00.1481"	-0.78
			ΔHt.	49.852sft	0.059sft	0.013sft	0.60
			Dist.	17788.604sft	0.043sft	-0.007sft	-0.36
B168	626	104	Az.	183°18'37.5199"	0°00'00.4091"	-0°00'00.0910"	-0.37
			ΔHt.	-20.139sft	0.050sft	-0.015sft	-0.78
			Dist.	15973.002sft	0.035sft	-0.005sft	-0.20
B281	407	416	Az.	211°16'15.7224"	0°00'00.4453"	0°00'00.2348"	0.78
			ΔHt.	6.014sft	0.051sft	-0.002sft	-0.05
			Dist.	15298.172sft	0.035sft	-0.009sft	-0.38
B62	608	618	Az.	182°28'59.1902"	0°00'00.3862"	0°00'00.0423"	0.22
			ΔHt.	47.557sft	0.059sft	0.024sft	0.77
			Dist.	19257.443sft	0.040sft	0.002sft	0.09
B102	609	607	Az.	255°04'16.5248"	0°00'00.2343"	0°00'00.1075"	0.54
			ΔHt.	-36.311sft	0.053sft	-0.019sft	-0.42
			Dist.	31344.476sft	0.032sft	-0.018sft	-0.76
B42	642	609	Az.	111°40'32.0587"	0°00'00.3158"	-0°00'00.0804"	-0.37
			ΔHt.	40.808sft	0.051sft	0.017sft	0.35
			Dist.	20160.856sft	0.028sft	-0.014sft	-0.75

B284	414	407	Az.	324°42'08.0842"	0°00'00.6984"	-0°00'00.0118"	-0.02
			ΔHt.	77.196sft	0.051sft	0.035sft	0.75
			Dist.	9721.675sft	0.034sft	-0.007sft	-0.31
B218	408	633	Az.	289°59'53.6864"	0°00'00.5132"	-0°00'00.2572"	-0.75
			ΔHt.	9.134sft	0.049sft	0.011sft	0.44
			Dist.	13765.763sft	0.031sft	0.000sft	0.00
B157	633	410	Az.	183°16'28.4990"	0°00'00.9524"	-0°00'00.0679"	-0.17
			ΔHt.	-20.447sft	0.044sft	-0.001sft	-0.05
			Dist.	7392.369sft	0.036sft	-0.011sft	-0.74
B46	620	619	Az.	259°38'02.0905"	0°00'00.5224"	0°00'00.1788"	0.71
			ΔHt.	-19.711sft	0.072sft	0.018sft	0.56
			Dist.	16565.212sft	0.039sft	0.011sft	0.59
B79	616	606	Az.	359°07'03.9109"	0°00'00.3780"	0°00'00.0224"	0.12
			ΔHt.	49.745sft	0.051sft	0.017sft	0.71
			Dist.	18484.586sft	0.036sft	-0.001sft	-0.06
B12	610	643	Az.	313°02'38.9101"	0°00'00.3234"	0°00'00.0525"	0.32
			ΔHt.	-12.134sft	0.091sft	-0.005sft	-0.09
			Dist.	24149.051sft	0.036sft	-0.013sft	-0.71
B49	604	601	Az.	353°44'50.2913"	0°00'00.4118"	-0°00'00.1326"	-0.71
			ΔHt.	-40.138sft	0.044sft	-0.008sft	-0.45
			Dist.	16211.366sft	0.034sft	0.009sft	0.61
B137	615	614	Az.	270°02'15.5196"	0°00'00.5103"	0°00'00.0886"	0.55
			ΔHt.	-6.923sft	0.047sft	-0.009sft	-0.67
			Dist.	15516.066sft	0.037sft	0.004sft	0.34
B100	616	615	Az.	280°34'55.5011"	0°00'00.5416"	0°00'00.0918"	0.50
			ΔHt.	112.912sft	0.050sft	-0.011sft	-0.67
			Dist.	14916.312sft	0.038sft	0.005sft	0.42
B220	1009	1201	Az.	296°10'43.5825"	0°00'00.0549"	0°00'00.2807"	0.41
			ΔHt.	16.906sft	0.049sft	-0.014sft	-0.52
			Dist.	7429.677sft	0.002sft	-0.015sft	-0.66
B140	618	628	Az.	182°47'35.3595"	0°00'00.5216"	-0°00'00.0527"	-0.19
			ΔHt.	-20.066sft	0.053sft	0.017sft	0.65
			Dist.	12716.066sft	0.036sft	0.012sft	0.64
B5	613	13	Az.	1°05'06.8385"	0°00'00.2005"	0°00'00.0026"	0.01
			ΔHt.	57.539sft	0.051sft	-0.021sft	-0.65
			Dist.	26228.353sft	0.027sft	0.004sft	0.16
B263	107	114	Az.	179°14'52.4466"	0°00'00.0549"	0°00'00.1522"	0.38
			ΔHt.	-93.411sft	0.047sft	-0.007sft	-0.65
			Dist.	11368.924sft	0.003sft	0.002sft	0.11
B18	510	607	Az.	115°39'23.3948"	0°00'00.4316"	0°00'00.1284"	0.60

			ΔHt.	-25.200sft	0.041sft	0.013sft	0.64
			Dist.	16020.572sft	0.031sft	-0.008sft	-0.49
B40	601	6	Az.	319°01'07.2065"	0°00'00.1679"	0°00'00.0137"	0.16
			ΔHt.	71.043sft	0.041sft	0.011sft	0.64
			Dist.	38833.531sft	0.032sft	0.005sft	0.28
B41	603	642	Az.	82°43'12.1692"	0°00'00.2491"	-0°00'00.0787"	-0.49
			ΔHt.	-101.968sft	0.049sft	-0.021sft	-0.64
			Dist.	28655.957sft	0.032sft	0.003sft	0.12
B273	1201	406	Az.	187°27'11.0203"	0°00'00.9790"	0°00'00.3191"	0.38
			ΔHt.	-24.056sft	0.046sft	0.028sft	0.64
			Dist.	5032.745sft	0.026sft	0.006sft	0.28
B39	510	603	Az.	333°48'12.4670"	0°00'01.1879"	0°00'00.3771"	0.63
			ΔHt.	72.272sft	0.040sft	0.006sft	0.31
			Dist.	5565.115sft	0.032sft	0.000sft	-0.03
B216	513	639	Az.	239°16'05.0333"	0°00'00.7159"	-0°00'00.0814"	-0.20
			ΔHt.	-36.528sft	0.054sft	-0.017sft	-0.58
			Dist.	9845.158sft	0.033sft	0.012sft	0.63
B11	602	5	Az.	7°26'40.5856"	0°00'00.3571"	-0°00'00.0830"	-0.45
			ΔHt.	-32.551sft	0.056sft	0.016sft	0.61
			Dist.	20936.263sft	0.046sft	0.001sft	0.04
B6	613	622	Az.	236°55'51.3083"	0°00'00.2531"	-0°00'00.0021"	-0.01
			ΔHt.	154.377sft	0.056sft	0.016sft	0.61
			Dist.	24567.161sft	0.032sft	-0.001sft	-0.03
B207	1009	413	Az.	166°43'15.8264"	0°00'00.7779"	0°00'00.2316"	0.36
			ΔHt.	-22.783sft	0.047sft	0.005sft	0.23
			Dist.	6321.634sft	0.024sft	0.012sft	0.60
B15	613	548	Az.	93°20'22.0611"	0°00'00.2034"	-0°00'00.0918"	-0.59
			ΔHt.	-12.510sft	0.055sft	0.007sft	0.28
			Dist.	27445.906sft	0.026sft	-0.003sft	-0.17
B254	1208	1008	Az.	271°05'36.4738"	0°00'00.0549"	-0°00'00.2829"	-0.58
			ΔHt.	-14.010sft	0.066sft	-0.005sft	-0.18
			Dist.	11286.532sft	0.003sft	0.001sft	0.04
B70	621	1211	Az.	152°45'08.7371"	0°00'00.5850"	0°00'00.0791"	0.19
			ΔHt.	4.405sft	0.067sft	-0.017sft	-0.46
			Dist.	11503.555sft	0.032sft	0.014sft	0.57
B71	621	611	Az.	359°57'57.1074"	0°00'00.3797"	-0°00'00.0425"	-0.17
			ΔHt.	-131.880sft	0.074sft	0.032sft	0.54
			Dist.	21646.586sft	0.045sft	0.005sft	0.17
B160	1204	1203	Az.	269°13'22.5084"	0°00'00.0549"	0°00'00.1432"	0.24
			ΔHt.	-9.354sft	0.052sft	-0.003sft	-0.13

			Dist.	7931.126sft	0.002sft	0.012sft	0.54
B272	405	1001	Az.	358°28'04.9023"	0°00'00.9947"	-0°00'00.3306"	-0.47
			ΔHt.	4.272sft	0.058sft	-0.016sft	-0.53
			Dist.	5395.258sft	0.028sft	-0.003sft	-0.17
B89	1210	1211	Az.	89°33'55.1082"	0°00'00.0549"	0°00'00.2546"	0.50
			ΔHt.	-35.926sft	0.072sft	-0.008sft	-0.13
			Dist.	15903.905sft	0.004sft	0.011sft	0.36
B9	510	606	Az.	188°33'18.6672"	0°00'01.0964"	-0°00'00.0753"	-0.13
			ΔHt.	49.492sft	0.038sft	-0.010sft	-0.50
			Dist.	5664.624sft	0.032sft	-0.002sft	-0.14
B280	416	408	Az.	1°01'46.5613"	0°00'00.3773"	-0°00'00.0893"	-0.40
			ΔHt.	15.546sft	0.039sft	0.003sft	0.15
			Dist.	15748.064sft	0.031sft	-0.008sft	-0.48
B35	612	613	Az.	96°29'38.0739"	0°00'00.4139"	-0°00'00.0555"	-0.25
			ΔHt.	-16.843sft	0.050sft	0.011sft	0.46
			Dist.	17763.340sft	0.033sft	-0.003sft	-0.15
B164	620	610	Az.	7°07'47.7398"	0°00'00.3907"	0°00'00.0737"	0.33
			ΔHt.	-120.363sft	0.075sft	-0.014sft	-0.33
			Dist.	21570.754sft	0.048sft	-0.014sft	-0.45
B111	1212	622	Az.	1°09'55.2440"	0°00'00.5389"	0°00'00.2060"	0.43
			ΔHt.	12.966sft	0.065sft	0.003sft	0.07
			Dist.	11072.170sft	0.030sft	-0.008sft	-0.26
B214	513	639	Az.	239°16'05.0333"	0°00'00.7159"	0°00'00.0164"	0.03
			ΔHt.	-36.528sft	0.054sft	0.005sft	0.07
			Dist.	9845.158sft	0.033sft	-0.012sft	-0.42
B135	634	105	Az.	290°09'44.0161"	0°00'00.4421"	-0°00'00.0659"	-0.34
			ΔHt.	-16.640sft	0.047sft	0.007sft	0.41
			Dist.	16861.249sft	0.033sft	0.000sft	0.01
B36	613	623	Az.	178°05'42.8698"	0°00'00.3657"	-0°00'00.0365"	-0.15
			ΔHt.	105.015sft	0.056sft	0.014sft	0.39
			Dist.	17049.260sft	0.031sft	0.004sft	0.22
B26	622	621	Az.	266°18'32.8617"	0°00'00.4527"	-0°00'00.0083"	-0.04
			ΔHt.	-1.195sft	0.054sft	0.006sft	0.35
			Dist.	15930.889sft	0.034sft	0.006sft	0.37
B20	5	6	Az.	280°43'51.3569"	0°00'00.2317"	-0°00'00.0018"	-0.01
			ΔHt.	154.791sft	0.063sft	0.008sft	0.15
			Dist.	46146.994sft	0.040sft	0.010sft	0.35
B3	610	609	Az.	272°20'15.4385"	0°00'00.3383"	0°00'00.0277"	0.17
			ΔHt.	8.211sft	0.073sft	-0.013sft	-0.35
			Dist.	21634.133sft	0.032sft	-0.004sft	-0.26

B56	621	620	Az.	271°59'27.6645"	0°00'00.4975"	0°00'00.0168"	0.10
			ΔHt.	49.018sft	0.058sft	0.003sft	0.14
			Dist.	15536.183sft	0.036sft	0.004sft	0.32
B245	638	421	Az.	128°02'15.1362"	0°00'00.7660"	-0°00'00.0691"	-0.26
			ΔHt.	-138.374sft	0.042sft	-0.003sft	-0.31
			Dist.	9574.254sft	0.034sft	0.002sft	0.13
B174	617	616	Az.	270°06'38.0201"	0°00'00.4856"	-0°00'00.0511"	-0.28
			ΔHt.	-67.674sft	0.044sft	0.000sft	-0.02
			Dist.	15674.595sft	0.034sft	0.001sft	0.11
B138	618	617	Az.	270°08'02.2764"	0°00'00.5030"	-0°00'00.0569"	-0.27
			ΔHt.	-19.849sft	0.047sft	0.000sft	-0.02
			Dist.	15474.760sft	0.035sft	0.002sft	0.11
B21	5	603	Az.	156°09'00.8138"	0°00'00.3025"	-0°00'00.0090"	-0.05
			ΔHt.	68.646sft	0.062sft	-0.013sft	-0.27
			Dist.	28768.301sft	0.046sft	-0.006sft	-0.25
B225	415	413	Az.	18°53'49.9761"	0°00'00.4434"	0°00'00.0241"	0.06
			ΔHt.	25.391sft	0.042sft	-0.005sft	-0.21
			Dist.	10895.758sft	0.025sft	-0.004sft	-0.17

Geoid Observations

Number of Observations : 98

Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.90). Any outliers are in red.

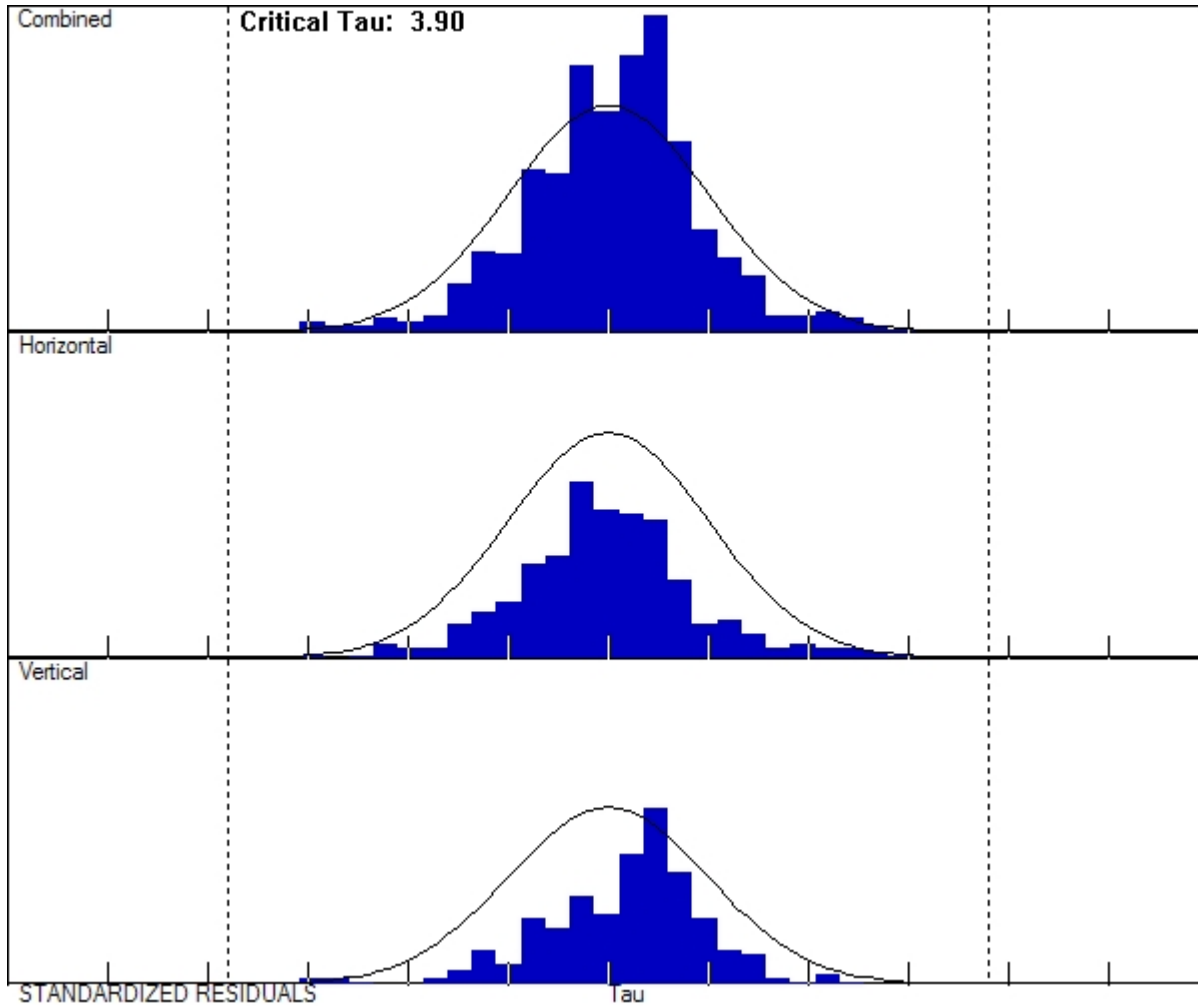
Observation ID	Point Name	Separation	A-posteriori Error (1.96σ)	Residual	Standardized Residual
G292	6	-106.624sft	0.570sft	0.100sft	1.52
G366	414	-107.302sft	0.478sft	0.232sft	1.36
G357	419	-107.350sft	0.494sft	0.183sft	1.15
G368	114	-107.657sft	0.529sft	-0.137sft	-1.08
G375	413	-107.405sft	0.483sft	0.180sft	1.07
G362	1016	-107.556sft	0.511sft	0.152sft	1.05
G382	405	-107.428sft	0.474sft	0.176sft	1.01
G339	1212	-107.603sft	0.490sft	0.164sft	1.01
G384	1015	-107.501sft	0.500sft	0.156sft	1.01
G359	417	-107.290sft	0.478sft	0.172sft	1.00
G343	402	-107.218sft	0.439sft	0.197sft	1.00

G327	404	-107.340sft	0.453sft	0.186sft	0.99
G386	1023	-107.564sft	0.517sft	0.134sft	0.97
G381	406	-107.369sft	0.467sft	0.170sft	0.95
G356	639	-107.387sft	0.504sft	0.142sft	0.94
G361	1008	-107.583sft	0.504sft	0.140sft	0.93
G298	622	-107.666sft	0.513sft	0.124sft	0.87
G372	1201	-107.383sft	0.462sft	0.159sft	0.87
G374	1209	-107.712sft	0.532sft	0.106sft	0.86
G379	107	-107.568sft	0.506sft	-0.128sft	-0.86
G380	416	-107.350sft	0.476sft	0.147sft	0.85
G341	1207	-107.682sft	0.515sft	0.120sft	0.85
G363	1006	-107.496sft	0.481sft	0.143sft	0.85
G371	420	-107.417sft	0.506sft	0.125sft	0.84
G383	1208	-107.695sft	0.524sft	0.109sft	0.83
G323	1211	-107.545sft	0.473sft	0.142sft	0.81
G348	630	-107.788sft	0.533sft	0.098sft	0.80
G378	421	-107.396sft	0.504sft	0.120sft	0.80
G313	623	-107.895sft	0.546sft	0.083sft	0.78
G360	1009	-107.444sft	0.474sft	0.136sft	0.78
G325	1206	-107.639sft	0.502sft	0.119sft	0.78
G370	513	-107.404sft	0.490sft	0.125sft	0.77
G354	127	-107.652sft	0.543sft	-0.080sft	-0.73
G307	621	-107.530sft	0.488sft	0.118sft	0.72
G332	106	-107.497sft	0.486sft	-0.117sft	-0.71
G387	1200	-107.525sft	0.513sft	0.095sft	0.66
G376	1033	-107.500sft	0.515sft	0.094sft	0.66
G373	1001	-107.497sft	0.470sft	0.112sft	0.63
G352	638	-107.377sft	0.508sft	0.091sft	0.62
G312	612	-107.788sft	0.539sft	0.070sft	0.62
G299	510	-106.995sft	0.440sft	0.121sft	0.62
G338	1210	-107.450sft	0.451sft	0.116sft	0.61
G324	1213	-107.692sft	0.502sft	0.093sft	0.61
G355	422	-107.475sft	0.529sft	0.077sft	0.61
G340	1204	-107.555sft	0.473sft	0.103sft	0.59
G326	403	-107.350sft	0.442sft	0.115sft	0.59
G358	408	-107.356sft	0.453sft	0.111sft	0.59

G349	1203	-107.495sft	0.462sft	0.105sft	0.58
G318	628	-107.261sft	0.459sft	0.105sft	0.57
G300	606	-107.033sft	0.455sft	0.105sft	0.56
G347	629	-107.331sft	0.449sft	0.105sft	0.55
G296	613	-107.987sft	0.556sft	0.050sft	0.55
G350	633	-107.309sft	0.452sft	0.103sft	0.55
G331	105	-107.429sft	0.484sft	-0.091sft	-0.54
G306	607	-107.132sft	0.466sft	0.095sft	0.53
G309	618	-107.250sft	0.467sft	0.093sft	0.52
G314	620	-107.434sft	0.472sft	0.091sft	0.52
G304	611	-107.601sft	0.523sft	0.068sft	0.51
G293	603	-106.988sft	0.461sft	0.089sft	0.49
G316	608	-107.221sft	0.481sft	0.082sft	0.48
G294	610	-107.476sft	0.511sft	0.067sft	0.47
G302	5	-106.973sft	0.489sft	-0.075sft	-0.46
G308	619	-107.339sft	0.462sft	0.082sft	0.45
G369	641	-107.496sft	0.533sft	0.054sft	0.44
G320	631	-107.356sft	0.496sft	-0.069sft	-0.44
G305	548	-108.251sft	0.570sft	0.028sft	0.43
G295	609	-107.304sft	0.495sft	0.068sft	0.43
G345	617	-107.212sft	0.469sft	0.076sft	0.43
G330	635	-107.355sft	0.479sft	0.071sft	0.42
G311	642	-107.159sft	0.488sft	0.066sft	0.40
G337	104	-107.377sft	0.455sft	-0.074sft	-0.40
G334	605	-106.992sft	0.494sft	0.059sft	0.37
G321	103	-107.333sft	0.497sft	-0.056sft	-0.36
G346	636	-107.303sft	0.461sft	0.058sft	0.32
G303	643	-107.312sft	0.515sft	0.045sft	0.32
G333	616	-107.175sft	0.477sft	0.051sft	0.30
G388	1000	-107.422sft	0.438sft	0.058sft	0.30
G336	627	-107.257sft	0.469sft	0.052sft	0.30
G297	13	-108.087sft	0.556sft	-0.027sft	-0.29
G377	407	-107.451sft	0.463sft	0.051sft	0.28
G301	604	-106.962sft	0.526sft	0.033sft	0.26
G329	409	-107.352sft	0.448sft	0.044sft	0.23
G310	601	-106.886sft	0.537sft	0.026sft	0.22

G315	615	-107.112sft	0.495sft	0.035sft	0.22
G328	512	-107.338sft	0.459sft	0.038sft	0.21
G353	640	-107.564sft	0.541sft	-0.022sft	-0.20
G365	1028	-107.538sft	0.498sft	0.030sft	0.19
G291	602	-106.953sft	0.502sft	0.029sft	0.19
G367	637	-107.467sft	0.518sft	-0.023sft	-0.17
G335	624	-107.218sft	0.511sft	-0.023sft	-0.16
G351	634	-107.406sft	0.492sft	-0.022sft	-0.14
G385	1025	-107.550sft	0.490sft	0.020sft	0.13
G344	614	-107.076sft	0.518sft	0.017sft	0.12
G319	625	-107.233sft	0.495sft	-0.016sft	-0.10
G342	410	-107.409sft	0.453sft	0.016sft	0.08
G364	415	-107.558sft	0.493sft	0.009sft	0.05
G317	626	-107.258sft	0.475sft	0.003sft	0.02
G322	632	-107.341sft	0.470sft	-0.002sft	-0.01

Histograms of Standardized Residuals



Point Error Ellipses

602	6	603
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
610	609	613
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
13	622	510
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
606	5	643
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

611	548	607
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
604	621	619
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
618	601	642
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
612	623	620
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

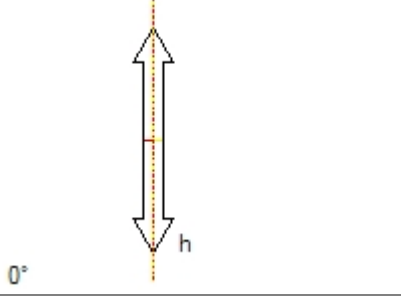
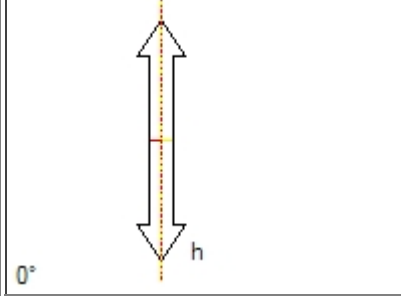
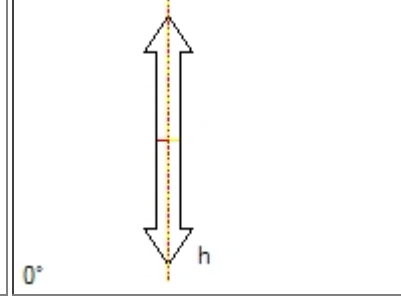
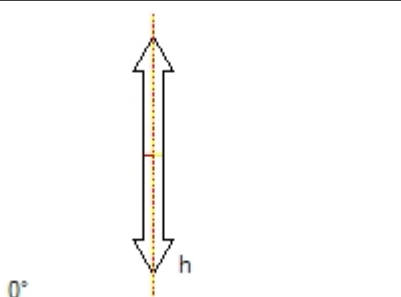
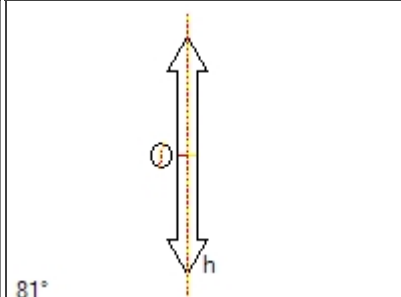
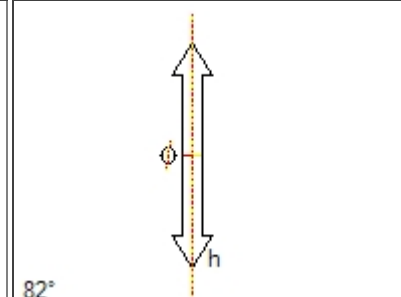
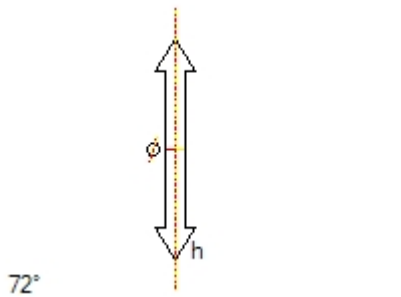
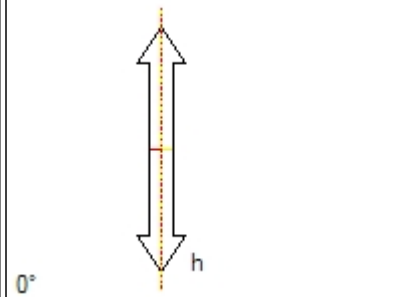
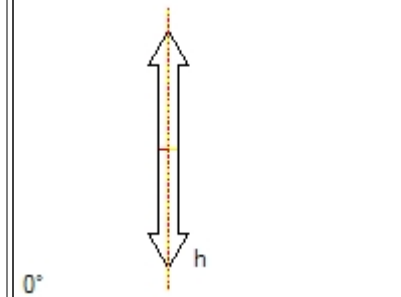
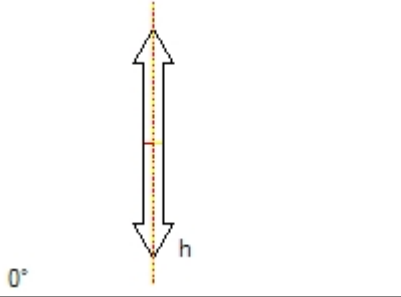
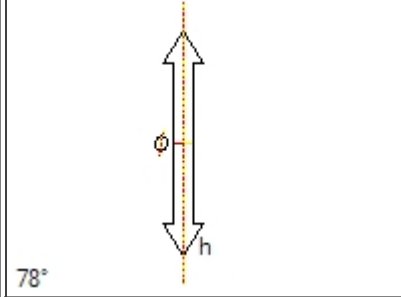
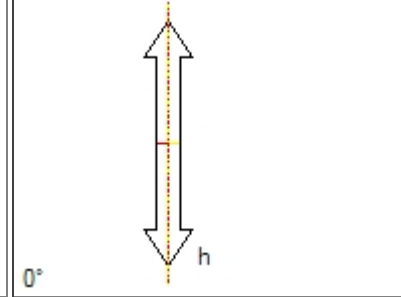
608	625	626
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
631	103	628
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
1211	1213	1206
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
403	404	512
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

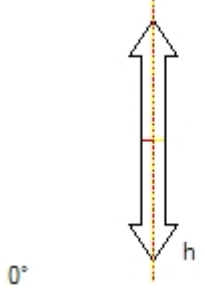
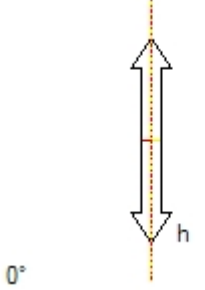
409	105	106
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616	605	627
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
104	1210	1212
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
1204	1207	615
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

624	632	402
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
410	635	636
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
629	1203	633
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
634	614	617
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

630	640	127
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
639	419	408
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
1008	415	1028
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
414	417	114
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

422	641	513
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
1201	1001	1009
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
413	1033	637
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
638	420	407
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

1006	1016	1209
		
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
107	421	416
		
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
406	1208	1015
		
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
1025	405	1023
		
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

1200	1000	
		
<p>Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ</p>		

Covariant Terms

Adjustment performed in **NAD 1983 (Conus)**

From Point	To Point		Components	A-posteriori Error (1.96 σ)	Horiz. Precision (Ratio)
602	6	Az.	304°32'41.9148"	0°00'00.1288"	1:1707147
		ΔHt.	122.206sft	0.195sft	
		ΔElev.	121.877sft	0.177sft	
		Dist.	51753.456sft	0.030sft	
602	603	Az.	111°08'58.0035"	0°00'00.4343"	1:509637
		ΔHt.	36.104sft	0.069sft	
		ΔElev.	36.140sft	0.178sft	
		Dist.	15384.119sft	0.030sft	
602	5	Az.	7°26'40.6096"	0°00'00.3602"	1:451723
		ΔHt.	-32.552sft	0.100sft	
		ΔElev.	-32.533sft	0.177sft	
		Dist.	20936.271sft	0.046sft	
602	601	Az.	270°02'23.3809"	0°00'00.4421"	1:516172
		ΔHt.	51.185sft	0.078sft	
		ΔElev.	51.118sft	0.199sft	
		Dist.	17182.302sft	0.033sft	
602	642	Az.	92°32'46.6355"	0°00'00.1802"	1:1252277
		ΔHt.	-65.845sft	0.166sft	
		ΔElev.	-65.639sft	0.292sft	
		Dist.	42812.898sft	0.034sft	
6	5	Az.	100°37'11.7462"	0°00'00.2292"	1:1178333
		ΔHt.	-154.759sft	0.179sft	
		ΔElev.	-154.410sft	0.000sft	
		Dist.	46147.012sft	0.039sft	
6	604	Az.	148°59'47.2934"	0°00'00.1206"	1:1676655
		ΔHt.	-30.880sft	0.206sft	
		ΔElev.	-30.542sft	0.226sft	
		Dist.	52968.877sft	0.032sft	
6	601	Az.	138°57'22.8799"	0°00'00.1671"	1:1236833
		ΔHt.	-71.022sft	0.151sft	
		ΔElev.	-70.760sft	0.214sft	
		Dist.	38833.547sft	0.031sft	
603	510	Az.	153°47'50.9075"	0°00'01.1859"	1:173316
		ΔHt.	-72.269sft	0.045sft	
		ΔElev.	-72.263sft	0.119sft	

		Dist.	5565.117sft	0.032sft	
603	606	Az.	171°19'55.9468"	0°00'00.5637"	1:350832
		ΔHt.	-22.777sft	0.056sft	
		ΔElev.	-22.733sft	0.164sft	
		Dist.	10717.329sft	0.031sft	
603	5	Az.	336°10'43.1179"	0°00'00.3004"	1:631825
		ΔHt.	-68.657sft	0.125sft	
		ΔElev.	-68.673sft	0.119sft	
		Dist.	28768.313sft	0.046sft	
603	642	Az.	82°43'12.1933"	0°00'00.2486"	1:886130
		ΔHt.	-101.950sft	0.117sft	
		ΔElev.	-101.779sft	0.246sft	
		Dist.	28655.968sft	0.032sft	
610	609	Az.	272°20'15.4626"	0°00'00.3328"	1:690284
		ΔHt.	8.196sft	0.105sft	
		ΔElev.	8.024sft	0.227sft	
		Dist.	21634.142sft	0.031sft	
610	643	Az.	313°02'38.9341"	0°00'00.3216"	1:675511
		ΔHt.	-12.148sft	0.126sft	
		ΔElev.	-12.312sft	0.247sft	
		Dist.	24149.061sft	0.036sft	
610	611	Az.	91°17'17.9214"	0°00'00.6044"	1:393094
		ΔHt.	-60.526sft	0.075sft	
		ΔElev.	-60.402sft	0.185sft	
		Dist.	12825.827sft	0.033sft	
610	620	Az.	187°08'11.2646"	0°00'00.3905"	1:451347
		ΔHt.	120.364sft	0.113sft	
		ΔElev.	120.321sft	0.226sft	
		Dist.	21570.763sft	0.048sft	
609	643	Az.	14°12'55.0212"	0°00'00.3972"	1:449629
		ΔHt.	-20.345sft	0.102sft	
		ΔElev.	-20.337sft	0.214sft	
		Dist.	16097.357sft	0.036sft	
609	607	Az.	255°04'16.5489"	0°00'00.2346"	1:966640
		ΔHt.	-36.331sft	0.129sft	
		ΔElev.	-36.503sft	0.247sft	
		Dist.	31344.489sft	0.032sft	
609	642	Az.	291°43'16.6754"	0°00'00.3141"	1:730304
		ΔHt.	-40.821sft	0.089sft	
		ΔElev.	-40.967sft	0.213sft	
		Dist.	20160.864sft	0.028sft	
609	608	Az.	245°34'39.0100"	0°00'00.4458"	1:485358

		ΔHt.	28.596sft	0.071sft	
		ΔElev.	28.513sft	0.192sft	
		Dist.	14633.602sft	0.030sft	
613	13	Az.	1°05'06.8625"	0°00'00.1942"	1:1008174
		ΔHt.	57.536sft	0.115sft	
		ΔElev.	57.636sft	0.206sft	
		Dist.	26228.364sft	0.026sft	
613	622	Az.	236°55'51.3324"	0°00'00.2500"	1:782149
		ΔHt.	154.364sft	0.109sft	
		ΔElev.	154.043sft	0.216sft	
		Dist.	24567.171sft	0.031sft	
613	548	Az.	93°20'22.0851"	0°00'00.1962"	1:1114101
		ΔHt.	-12.492sft	0.115sft	
		ΔElev.	-12.227sft	0.278sft	
		Dist.	27445.917sft	0.025sft	
613	612	Az.	276°32'13.0032"	0°00'00.4115"	1:540948
		ΔHt.	16.831sft	0.082sft	
		ΔElev.	16.633sft	0.214sft	
		Dist.	17763.347sft	0.033sft	
613	623	Az.	178°05'42.8939"	0°00'00.3636"	1:546877
		ΔHt.	105.018sft	0.087sft	
		ΔElev.	104.926sft	0.195sft	
		Dist.	17049.266sft	0.031sft	
13	548	Az.	135°57'51.0916"	0°00'00.0000"	1:0
		ΔHt.	-70.027sft	0.158sft	
		ΔElev.	-69.863sft	0.291sft	
		Dist.	38701.867sft	0.000sft	
13	612	Az.	216°51'40.9408"	0°00'00.2107"	1:900952
		ΔHt.	-40.705sft	0.128sft	
		ΔElev.	-41.003sft	0.201sft	
		Dist.	30247.900sft	0.034sft	
622	621	Az.	266°18'32.8858"	0°00'00.4467"	1:480793
		ΔHt.	-1.206sft	0.079sft	
		ΔElev.	-1.342sft	0.181sft	
		Dist.	15930.895sft	0.033sft	
622	623	Az.	99°41'57.6462"	0°00'00.3174"	1:695062
		ΔHt.	-49.347sft	0.097sft	
		ΔElev.	-49.118sft	0.220sft	
		Dist.	21464.296sft	0.031sft	
622	1212	Az.	181°09'57.2412"	0°00'00.5344"	1:365870
		ΔHt.	-12.965sft	0.077sft	
		ΔElev.	-13.027sft	0.160sft	

		Dist.	11072.175sft	0.030sft	
510	606	Az.	188°33'18.6913"	0°00'01.0965"	1:179567
		ΔHt.	49.492sft	0.044sft	
		ΔElev.	49.530sft	0.122sft	
		Dist.	5664.626sft	0.032sft	
510	607	Az.	115°39'23.4189"	0°00'00.4315"	1:511184
		ΔHt.	-25.190sft	0.072sft	
		ΔElev.	-25.053sft	0.183sft	
		Dist.	16020.579sft	0.031sft	
606	607	Az.	94°59'22.6136"	0°00'00.4275"	1:517016
		ΔHt.	-74.682sft	0.069sft	
		ΔElev.	-74.583sft	0.192sft	
		Dist.	15341.913sft	0.030sft	
606	616	Az.	179°07'01.4379"	0°00'00.3743"	1:512294
		ΔHt.	-49.742sft	0.088sft	
		ΔElev.	-49.600sft	0.185sft	
		Dist.	18484.593sft	0.036sft	
606	605	Az.	272°57'43.4104"	0°00'00.4851"	1:436465
		ΔHt.	55.703sft	0.071sft	
		ΔElev.	55.662sft	0.190sft	
		Dist.	15546.344sft	0.036sft	
643	642	Az.	250°15'40.4637"	0°00'00.3235"	1:704291
		ΔHt.	-20.477sft	0.125sft	
		ΔElev.	-20.630sft	0.244sft	
		Dist.	24099.723sft	0.034sft	
611	621	Az.	179°57'57.0183"	0°00'00.3785"	1:479837
		ΔHt.	131.883sft	0.113sft	
		ΔElev.	131.811sft	0.221sft	
		Dist.	21646.595sft	0.045sft	
611	612	Az.	105°22'48.1393"	0°00'00.4679"	1:513053
		ΔHt.	-4.445sft	0.096sft	
		ΔElev.	-4.258sft	0.221sft	
		Dist.	19525.113sft	0.038sft	
548	623	Az.	240°08'53.2255"	0°00'00.1817"	1:1078307
		ΔHt.	117.509sft	0.135sft	
		ΔElev.	117.153sft	0.276sft	
		Dist.	30958.303sft	0.029sft	
607	642	Az.	36°34'15.9721"	0°00'00.3231"	1:586995
		ΔHt.	-4.490sft	0.090sft	
		ΔElev.	-4.463sft	0.217sft	
		Dist.	19363.463sft	0.033sft	
607	608	Az.	83°07'12.3575"	0°00'00.4133"	1:556154

		ΔHt.	64.927sft	0.078sft	
		ΔElev.	65.016sft	0.198sft	
		Dist.	17082.693sft	0.031sft	
604	601	Az.	353°44'50.3153"	0°00'00.4106"	1:482403
		ΔHt.	-40.142sft	0.077sft	
		ΔElev.	-40.218sft	0.196sft	
		Dist.	16211.372sft	0.034sft	
604	605	Az.	87°14'53.2967"	0°00'00.4820"	1:440302
		ΔHt.	-22.296sft	0.074sft	
		ΔElev.	-22.266sft	0.194sft	
		Dist.	15888.467sft	0.036sft	
604	614	Az.	174°29'06.1860"	0°00'00.4539"	1:436001
		ΔHt.	-21.773sft	0.077sft	
		ΔElev.	-21.659sft	0.194sft	
		Dist.	15856.709sft	0.036sft	
621	620	Az.	271°59'27.6886"	0°00'00.4929"	1:441789
		ΔHt.	49.007sft	0.081sft	
		ΔElev.	48.912sft	0.181sft	
		Dist.	15536.189sft	0.035sft	
621	1211	Az.	152°45'08.7612"	0°00'00.5817"	1:356711
		ΔHt.	4.409sft	0.080sft	
		ΔElev.	4.424sft	0.157sft	
		Dist.	11503.560sft	0.032sft	
619	618	Az.	269°54'53.9782"	0°00'00.4517"	1:504123
		ΔHt.	-16.291sft	0.087sft	
		ΔElev.	-16.380sft	0.194sft	
		Dist.	16833.856sft	0.033sft	
619	620	Az.	79°35'39.3265"	0°00'00.5174"	1:430504
		ΔHt.	19.722sft	0.093sft	
		ΔElev.	19.817sft	0.192sft	
		Dist.	16565.219sft	0.038sft	
619	628	Az.	233°55'05.0766"	0°00'00.3178"	1:612162
		ΔHt.	-36.356sft	0.105sft	
		ΔElev.	-36.434sft	0.205sft	
		Dist.	21607.403sft	0.035sft	
619	403	Az.	166°33'01.9058"	0°00'00.2909"	1:662978
		ΔHt.	-27.951sft	0.105sft	
		ΔElev.	-27.940sft	0.176sft	
		Dist.	21856.270sft	0.033sft	
619	629	Az.	182°43'21.7239"	0°00'00.4634"	1:393083
		ΔHt.	-29.765sft	0.083sft	
		ΔElev.	-29.773sft	0.181sft	

		Dist.	13302.716sft	0.034sft	
618	608	Az.	2°28'51.9001"	0°00'00.3835"	1:484403
		ΔHt.	-47.558sft	0.096sft	
		ΔElev.	-47.587sft	0.213sft	
		Dist.	19257.451sft	0.040sft	
618	628	Az.	182°47'35.3837"	0°00'00.5193"	1:358710
		ΔHt.	-20.065sft	0.073sft	
		ΔElev.	-20.054sft	0.177sft	
		Dist.	12716.071sft	0.035sft	
618	616	Az.	270°08'28.1323"	0°00'00.2211"	1:1024226
		ΔHt.	-87.545sft	0.123sft	
		ΔElev.	-87.620sft	0.239sft	
		Dist.	31149.367sft	0.030sft	
618	617	Az.	270°08'02.3005"	0°00'00.5028"	1:443158
		ΔHt.	-19.860sft	0.074sft	
		ΔElev.	-19.898sft	0.189sft	
		Dist.	15474.767sft	0.035sft	
642	608	Az.	158°09'04.9550"	0°00'00.4170"	1:466470
		ΔHt.	69.417sft	0.070sft	
		ΔElev.	69.479sft	0.190sft	
		Dist.	14552.821sft	0.031sft	
623	630	Az.	194°21'29.9955"	0°00'00.3942"	1:483638
		ΔHt.	37.689sft	0.091sft	
		ΔElev.	37.582sft	0.192sft	
		Dist.	15838.737sft	0.033sft	
625	626	Az.	90°19'08.7249"	0°00'00.4978"	1:442669
		ΔHt.	8.121sft	0.076sft	
		ΔElev.	8.146sft	0.192sft	
		Dist.	16176.492sft	0.037sft	
625	624	Az.	263°37'07.4064"	0°00'00.5123"	1:430860
		ΔHt.	-19.267sft	0.079sft	
		ΔElev.	-19.283sft	0.192sft	
		Dist.	16033.670sft	0.037sft	
626	616	Az.	359°14'20.6654"	0°00'00.5060"	1:381980
		ΔHt.	-83.506sft	0.069sft	
		ΔElev.	-83.589sft	0.171sft	
		Dist.	13273.533sft	0.035sft	
626	627	Az.	77°14'01.2707"	0°00'00.5568"	1:391734
		ΔHt.	-16.141sft	0.077sft	
		ΔElev.	-16.142sft	0.186sft	
		Dist.	14590.093sft	0.037sft	
626	104	Az.	183°18'37.5440"	0°00'00.4031"	1:458588

		ΔHt.	-20.138sft	0.080sft	
		ΔElev.	-20.019sft	0.175sft	
		Dist.	15973.009sft	0.035sft	
631	103	Az.	266°20'42.9094"	0°00'00.4646"	1:485151
		ΔHt.	-33.892sft	0.079sft	
		ΔElev.	-33.915sft	0.151sft	
		Dist.	15952.677sft	0.033sft	
631	104	Az.	90°46'05.4500"	0°00'00.4837"	1:468143
		ΔHt.	15.245sft	0.077sft	
		ΔElev.	15.265sft	0.151sft	
		Dist.	15354.391sft	0.033sft	
103	624	Az.	0°14'34.7050"	0°00'00.4768"	1:386701
		ΔHt.	41.887sft	0.081sft	
		ΔElev.	41.771sft	0.184sft	
		Dist.	15066.125sft	0.039sft	
628	627	Az.	279°31'58.9897"	0°00'00.5104"	1:443954
		ΔHt.	-0.114sft	0.082sft	
		ΔElev.	-0.118sft	0.189sft	
		Dist.	16363.190sft	0.037sft	
628	636	Az.	210°54'55.0835"	0°00'00.5772"	1:316521
		ΔHt.	-10.915sft	0.078sft	
		ΔElev.	-10.874sft	0.175sft	
		Dist.	12916.767sft	0.041sft	
628	629	Az.	91°52'14.5669"	0°00'00.4391"	1:532110
		ΔHt.	6.592sft	0.092sft	
		ΔElev.	6.661sft	0.183sft	
		Dist.	16840.056sft	0.032sft	
1211	1210	Az.	269°36'14.3747"	0°00'00.0000"	1:0
		ΔHt.	35.915sft	0.092sft	
		ΔElev.	35.820sft	0.000sft	
		Dist.	15903.911sft	0.000sft	
1211	1212	Az.	88°56'57.1917"	0°00'00.0000"	1:0
		ΔHt.	-16.168sft	0.068sft	
		ΔElev.	-16.110sft	0.000sft	
		Dist.	10414.391sft	0.000sft	
1211	1204	Az.	194°22'43.1446"	0°00'00.0000"	1:0
		ΔHt.	24.430sft	0.077sft	
		ΔElev.	24.440sft	0.000sft	
		Dist.	10833.529sft	0.000sft	
1213	1206	Az.	205°55'45.0183"	0°00'00.0000"	1:0
		ΔHt.	30.164sft	0.055sft	
		ΔElev.	30.110sft	0.000sft	

		Dist.	5169.502sft	0.000sft	
1213	1204	Az.	261°23'49.1675"	0°00'00.0000"	1:0
		ΔHt.	42.407sft	0.091sft	
		ΔElev.	42.270sft	0.000sft	
		Dist.	18345.601sft	0.000sft	
1213	1207	Az.	146°57'42.0511"	0°00'00.0000"	1:0
		ΔHt.	13.441sft	0.062sft	
		ΔElev.	13.430sft	0.000sft	
		Dist.	8045.062sft	0.000sft	
1213	630	Az.	89°50'22.2805"	0°00'00.4076"	1:532640
		ΔHt.	3.116sft	0.076sft	
		ΔElev.	3.212sft	0.154sft	
		Dist.	12437.943sft	0.023sft	
1206	1204	Az.	276°50'06.4509"	0°00'00.0000"	1:0
		ΔHt.	12.243sft	0.086sft	
		ΔElev.	12.160sft	0.000sft	
		Dist.	15992.617sft	0.000sft	
1206	1207	Az.	107°29'24.7153"	0°00'00.0000"	1:0
		ΔHt.	-16.723sft	0.062sft	
		ΔElev.	-16.680sft	0.000sft	
		Dist.	6968.969sft	0.000sft	
1206	1008	Az.	198°06'59.6752"	0°00'00.0000"	1:0
		ΔHt.	-45.165sft	0.074sft	
		ΔElev.	-45.220sft	0.000sft	
		Dist.	8850.214sft	0.000sft	
403	404	Az.	104°21'47.5596"	0°00'00.5903"	1:373625
		ΔHt.	-3.320sft	0.066sft	
		ΔElev.	-3.330sft	0.000sft	
		Dist.	10915.882sft	0.029sft	
403	402	Az.	257°04'52.8341"	0°00'00.5810"	1:359875
		ΔHt.	-12.229sft	0.071sft	
		ΔElev.	-12.360sft	0.000sft	
		Dist.	13059.788sft	0.036sft	
403	629	Az.	324°21'52.7382"	0°00'00.5385"	1:392009
		ΔHt.	-1.814sft	0.052sft	
		ΔElev.	-1.833sft	0.121sft	
		Dist.	9806.814sft	0.025sft	
403	1203	Az.	82°19'09.6707"	0°00'00.2278"	1:941959
		ΔHt.	18.144sft	0.096sft	
		ΔElev.	18.290sft	0.000sft	
		Dist.	21607.859sft	0.023sft	
403	1000	Az.	11°31'58.9208"	0°00'00.4562"	1:425177

		ΔHt.	33.718sft	0.057sft	
		ΔElev.	33.790sft	0.000sft	
		Dist.	10251.021sft	0.024sft	
404	1203	Az.	62°43'14.2740"	0°00'00.4094"	1:500591
		ΔHt.	21.464sft	0.068sft	
		ΔElev.	21.620sft	0.000sft	
		Dist.	12198.520sft	0.024sft	
404	408	Az.	232°34'37.7773"	0°00'00.3837"	1:520671
		ΔHt.	-9.167sft	0.084sft	
		ΔElev.	-9.150sft	0.000sft	
		Dist.	17388.259sft	0.033sft	
404	1201	Az.	155°48'14.2048"	0°00'00.7302"	1:282126
		ΔHt.	-3.254sft	0.053sft	
		ΔElev.	-3.210sft	0.000sft	
		Dist.	6858.187sft	0.024sft	
404	406	Az.	169°08'03.1403"	0°00'00.5282"	1:375251
		ΔHt.	-27.310sft	0.065sft	
		ΔElev.	-27.280sft	0.000sft	
		Dist.	11451.295sft	0.031sft	
512	409	Az.	105°35'17.6977"	0°00'01.4170"	1:148872
		ΔHt.	-16.106sft	0.054sft	
		ΔElev.	-16.092sft	0.119sft	
		Dist.	5421.640sft	0.036sft	
512	636	Az.	344°30'15.6750"	0°00'00.8969"	1:221774
		ΔHt.	-33.244sft	0.066sft	
		ΔElev.	-33.280sft	0.145sft	
		Dist.	7988.964sft	0.036sft	
512	633	Az.	81°13'48.1145"	0°00'00.5269"	1:415043
		ΔHt.	-17.286sft	0.059sft	
		ΔElev.	-17.315sft	0.147sft	
		Dist.	11027.597sft	0.027sft	
409	410	Az.	128°54'42.8704"	0°00'01.1271"	1:182419
		ΔHt.	-21.626sft	0.053sft	
		ΔElev.	-21.570sft	0.000sft	
		Dist.	6755.648sft	0.037sft	
105	106	Az.	180°24'05.3678"	0°00'00.5376"	1:368064
		ΔHt.	45.891sft	0.060sft	
		ΔElev.	45.959sft	0.125sft	
		Dist.	10629.868sft	0.029sft	
105	104	Az.	358°25'59.9670"	0°00'00.5430"	1:364952
		ΔHt.	2.051sft	0.065sft	
		ΔElev.	1.999sft	0.125sft	

		Dist.	10527.937sft	0.029sft	
105	634	Az.	110°07'25.9052"	0°00'00.4430"	1:504899
		ΔHt.	16.652sft	0.077sft	
		ΔElev.	16.630sft	0.180sft	
		Dist.	16861.256sft	0.033sft	
106	634	Az.	73°06'49.8220"	0°00'00.4228"	1:497500
		ΔHt.	-29.239sft	0.082sft	
		ΔElev.	-29.330sft	0.155sft	
		Dist.	16623.090sft	0.033sft	
106	107	Az.	181°40'30.6811"	0°00'00.0000"	1:0
		ΔHt.	6.389sft	0.063sft	
		ΔElev.	6.460sft	0.000sft	
		Dist.	10657.422sft	0.000sft	
616	615	Az.	280°34'55.5252"	0°00'00.5399"	1:397674
		ΔHt.	112.902sft	0.074sft	
		ΔElev.	112.839sft	0.195sft	
		Dist.	14916.318sft	0.038sft	
616	617	Az.	90°04'20.7023"	0°00'00.4858"	1:455116
		ΔHt.	67.685sft	0.073sft	
		ΔElev.	67.722sft	0.195sft	
		Dist.	15674.601sft	0.034sft	
104	632	Az.	90°08'15.9189"	0°00'00.5460"	1:414953
		ΔHt.	10.660sft	0.078sft	
		ΔElev.	10.624sft	0.157sft	
		Dist.	15659.732sft	0.038sft	
1210	1203	Az.	153°13'59.4290"	0°00'00.0000"	1:0
		ΔHt.	-20.846sft	0.065sft	
		ΔElev.	-20.800sft	0.000sft	
		Dist.	11745.962sft	0.000sft	
1210	1000	Az.	256°43'50.4174"	0°00'00.0000"	1:0
		ΔHt.	-5.272sft	0.073sft	
		ΔElev.	-5.300sft	0.000sft	
		Dist.	14455.606sft	0.000sft	
1212	630	Az.	114°19'01.3022"	0°00'00.2710"	1:844635
		ΔHt.	1.307sft	0.093sft	
		ΔElev.	1.492sft	0.154sft	
		Dist.	19169.553sft	0.023sft	
1204	1203	Az.	269°13'22.5325"	0°00'00.0000"	1:0
		ΔHt.	-9.360sft	0.059sft	
		ΔElev.	-9.420sft	0.000sft	
		Dist.	7931.130sft	0.000sft	
1207	630	Az.	49°54'55.1939"	0°00'00.4500"	1:421995

		ΔHt.	-10.325sft	0.073sft	
		ΔElev.	-10.218sft	0.154sft	
		Dist.	10525.493sft	0.025sft	
1207	1208	Az.	163°54'14.6280"	0°00'00.0000"	1:0
		ΔHt.	-14.423sft	0.071sft	
		ΔElev.	-14.410sft	0.000sft	
		Dist.	6795.219sft	0.000sft	
615	614	Az.	270°02'15.5437"	0°00'00.5092"	1:422607
		ΔHt.	-6.933sft	0.074sft	
		ΔElev.	-6.969sft	0.197sft	
		Dist.	15516.072sft	0.037sft	
624	614	Az.	5°35'22.5656"	0°00'00.4382"	1:422316
		ΔHt.	49.850sft	0.091sft	
		ΔElev.	49.709sft	0.199sft	
		Dist.	17788.611sft	0.042sft	
632	636	Az.	58°57'56.8862"	0°00'00.7823"	1:258582
		ΔHt.	-17.463sft	0.072sft	
		ΔElev.	-17.502sft	0.159sft	
		Dist.	10520.064sft	0.041sft	
402	633	Az.	211°15'57.1902"	0°00'01.1219"	1:181616
		ΔHt.	8.866sft	0.057sft	
		ΔElev.	8.958sft	0.097sft	
		Dist.	6613.890sft	0.036sft	
410	635	Az.	211°53'48.7423"	0°00'00.7525"	1:263620
		ΔHt.	-16.099sft	0.064sft	
		ΔElev.	-16.152sft	0.125sft	
		Dist.	10049.066sft	0.038sft	
410	633	Az.	3°16'24.8357"	0°00'00.9519"	1:207047
		ΔHt.	20.447sft	0.053sft	
		ΔElev.	20.348sft	0.097sft	
		Dist.	7392.372sft	0.036sft	
635	634	Az.	270°49'21.4553"	0°00'00.5052"	1:432261
		ΔHt.	41.991sft	0.079sft	
		ΔElev.	42.043sft	0.168sft	
		Dist.	15884.739sft	0.037sft	
635	417	Az.	144°04'32.9625"	0°00'01.0195"	1:212015
		ΔHt.	34.168sft	0.075sft	
		ΔElev.	34.102sft	0.125sft	
		Dist.	9031.084sft	0.043sft	
629	1000	Az.	75°01'51.1668"	0°00'00.7067"	1:301193
		ΔHt.	35.532sft	0.053sft	
		ΔElev.	35.623sft	0.121sft	

		Dist.	8035.382sft	0.027sft	
1203	1001	Az.	159°17'36.3916"	0°00'00.0000"	1:0
		ΔHt.	-27.722sft	0.067sft	
		ΔElev.	-27.720sft	0.000sft	
		Dist.	5636.527sft	0.000sft	
633	408	Az.	109°58'00.7062"	0°00'00.5085"	1:446292
		ΔHt.	-9.124sft	0.070sft	
		ΔElev.	-9.078sft	0.097sft	
		Dist.	13765.769sft	0.031sft	
633	416	Az.	148°13'38.5078"	0°00'00.2915"	1:676757
		ΔHt.	-24.669sft	0.105sft	
		ΔElev.	-24.628sft	0.097sft	
		Dist.	24050.466sft	0.036sft	
630	1209	Az.	189°50'18.2455"	0°00'00.2462"	1:773929
		ΔHt.	-149.076sft	0.104sft	
		ΔElev.	-149.152sft	0.154sft	
		Dist.	19279.270sft	0.025sft	
640	127	Az.	257°54'53.7226"	0°00'00.4610"	1:503401
		ΔHt.	-155.321sft	0.097sft	
		ΔElev.	-155.233sft	0.167sft	
		Dist.	16673.018sft	0.033sft	
640	114	Az.	282°29'03.9569"	0°00'00.4603"	1:478024
		ΔHt.	-20.186sft	0.077sft	
		ΔElev.	-20.093sft	0.167sft	
		Dist.	16296.724sft	0.034sft	
640	641	Az.	90°56'05.2087"	0°00'00.7204"	1:323927
		ΔHt.	-58.168sft	0.077sft	
		ΔElev.	-58.236sft	0.169sft	
		Dist.	13231.416sft	0.041sft	
127	114	Az.	3°09'38.1539"	0°00'00.0000"	1:0
		ΔHt.	135.135sft	0.071sft	
		ΔElev.	135.140sft	0.000sft	
		Dist.	7024.614sft	0.000sft	
639	419	Az.	68°08'42.3657"	0°00'00.7761"	1:289877
		ΔHt.	-1.343sft	0.074sft	
		ΔElev.	-1.380sft	0.109sft	
		Dist.	11084.073sft	0.038sft	
639	513	Az.	59°14'51.3266"	0°00'00.7158"	1:300003
		ΔHt.	36.533sft	0.065sft	
		ΔElev.	36.550sft	0.109sft	
		Dist.	9845.162sft	0.033sft	
639	420	Az.	198°51'28.7791"	0°00'01.2631"	1:150315

		ΔHt.	-6.470sft	0.063sft	
		ΔElev.	-6.440sft	0.109sft	
		Dist.	6417.451sft	0.043sft	
419	1028	Az.	72°59'25.6872"	0°00'00.6672"	1:320226
		ΔHt.	71.102sft	0.084sft	
		ΔElev.	71.290sft	0.000sft	
		Dist.	13464.339sft	0.042sft	
419	513	Az.	296°27'20.5048"	0°00'03.8110"	1:58791
		ΔHt.	37.876sft	0.046sft	
		ΔElev.	37.930sft	0.000sft	
		Dist.	2039.897sft	0.035sft	
408	1201	Az.	75°25'30.9721"	0°00'00.3327"	1:643478
		ΔHt.	5.913sft	0.077sft	
		ΔElev.	5.940sft	0.000sft	
		Dist.	17170.182sft	0.027sft	
408	407	Az.	109°12'47.5469"	0°00'00.9683"	1:245765
		ΔHt.	-21.554sft	0.058sft	
		ΔElev.	-21.460sft	0.000sft	
		Dist.	8105.138sft	0.033sft	
408	416	Az.	181°01'49.0555"	0°00'00.3783"	1:503566
		ΔHt.	-15.544sft	0.073sft	
		ΔElev.	-15.550sft	0.000sft	
		Dist.	15748.070sft	0.031sft	
1008	1006	Az.	270°30'19.7178"	0°00'00.0000"	1:0
		ΔHt.	27.117sft	0.090sft	
		ΔElev.	27.030sft	0.000sft	
		Dist.	13528.972sft	0.000sft	
1008	1208	Az.	91°03'57.8947"	0°00'00.0000"	1:0
		ΔHt.	14.018sft	0.077sft	
		ΔElev.	14.130sft	0.000sft	
		Dist.	11286.537sft	0.000sft	
415	1028	Az.	156°22'38.8442"	0°00'00.0000"	1:0
		ΔHt.	-42.781sft	0.044sft	
		ΔElev.	-42.800sft	0.000sft	
		Dist.	2420.459sft	0.000sft	
415	414	Az.	301°14'50.0572"	0°00'00.5499"	1:392277
		ΔHt.	-39.584sft	0.051sft	
		ΔElev.	-39.840sft	0.000sft	
		Dist.	9295.490sft	0.024sft	
415	413	Az.	18°53'50.0002"	0°00'00.4416"	1:442099
		ΔHt.	25.392sft	0.060sft	
		ΔElev.	25.240sft	0.000sft	

		Dist.	10895.763sft	0.025sft	
415	1025	Az.	15°20'21.7187"	0°00'00.0000"	1:0
		ΔHt.	-53.283sft	0.039sft	
		ΔElev.	-53.290sft	0.000sft	
		Dist.	3140.863sft	0.000sft	
1028	1033	Az.	111°16'03.4866"	0°00'00.0000"	1:0
		ΔHt.	-67.012sft	0.064sft	
		ΔElev.	-67.050sft	0.000sft	
		Dist.	10271.605sft	0.000sft	
414	407	Az.	324°42'08.1082"	0°00'00.6981"	1:288181
		ΔHt.	77.191sft	0.063sft	
		ΔElev.	77.340sft	0.000sft	
		Dist.	9721.679sft	0.034sft	
414	416	Az.	249°14'42.6886"	0°00'00.4172"	1:509360
		ΔHt.	83.201sft	0.066sft	
		ΔElev.	83.250sft	0.000sft	
		Dist.	14502.780sft	0.028sft	
414	406	Az.	15°12'23.3799"	0°00'00.5486"	1:355217
		ΔHt.	80.602sft	0.059sft	
		ΔElev.	80.670sft	0.000sft	
		Dist.	10287.303sft	0.029sft	
414	1025	Az.	101°31'28.7368"	0°00'00.5736"	1:380333
		ΔHt.	-13.699sft	0.053sft	
		ΔElev.	-13.450sft	0.000sft	
		Dist.	8959.157sft	0.024sft	
417	638	Az.	224°01'19.9302"	0°00'00.7149"	1:266520
		ΔHt.	11.462sft	0.074sft	
		ΔElev.	11.548sft	0.131sft	
		Dist.	10926.879sft	0.041sft	
417	421	Az.	180°13'38.9886"	0°00'00.5413"	1:350905
		ΔHt.	-126.906sft	0.077sft	
		ΔElev.	-126.800sft	0.000sft	
		Dist.	13759.168sft	0.039sft	
417	416	Az.	78°00'59.5277"	0°00'00.6502"	1:340509
		ΔHt.	-22.291sft	0.078sft	
		ΔElev.	-22.230sft	0.000sft	
		Dist.	13390.905sft	0.039sft	
114	107	Az.	359°14'53.7696"	0°00'00.0000"	1:0
		ΔHt.	93.409sft	0.064sft	
		ΔElev.	93.320sft	0.000sft	
		Dist.	11368.928sft	0.000sft	
422	641	Az.	267°08'51.9361"	0°00'01.8881"	1:125119

		ΔHt.	96.302sft	0.065sft	
		ΔElev.	96.323sft	0.128sft	
		Dist.	5119.480sft	0.041sft	
422	421	Az.	18°17'16.0153"	0°00'00.9143"	1:207931
		ΔHt.	57.335sft	0.074sft	
		ΔElev.	57.256sft	0.159sft	
		Dist.	9510.699sft	0.046sft	
513	416	Az.	302°19'23.9144"	0°00'00.8596"	1:248462
		ΔHt.	119.623sft	0.062sft	
		ΔElev.	119.570sft	0.000sft	
		Dist.	9206.636sft	0.037sft	
1201	1009	Az.	116°09'45.3599"	0°00'00.0000"	1:0
		ΔHt.	-16.900sft	0.056sft	
		ΔElev.	-16.840sft	0.000sft	
		Dist.	7429.680sft	0.000sft	
1201	406	Az.	187°27'11.0444"	0°00'00.9785"	1:192732
		ΔHt.	-24.056sft	0.050sft	
		ΔElev.	-24.070sft	0.000sft	
		Dist.	5032.747sft	0.026sft	
1001	405	Az.	178°28'03.6655"	0°00'00.9937"	1:191139
		ΔHt.	-4.271sft	0.062sft	
		ΔElev.	-4.340sft	0.000sft	
		Dist.	5395.261sft	0.028sft	
1009	413	Az.	166°43'15.8505"	0°00'00.7742"	1:260587
		ΔHt.	-22.782sft	0.053sft	
		ΔElev.	-22.820sft	0.000sft	
		Dist.	6321.637sft	0.024sft	
1009	406	Az.	256°50'14.6837"	0°00'00.7013"	1:307420
		ΔHt.	-7.155sft	0.059sft	
		ΔElev.	-7.230sft	0.000sft	
		Dist.	7519.333sft	0.024sft	
1009	405	Az.	38°12'07.8921"	0°00'00.9582"	1:203189
		ΔHt.	9.626sft	0.059sft	
		ΔElev.	9.610sft	0.000sft	
		Dist.	5669.848sft	0.028sft	
413	1015	Az.	84°32'41.6737"	0°00'00.4002"	1:533713
		ΔHt.	-0.716sft	0.079sft	
		ΔElev.	-0.620sft	0.000sft	
		Dist.	12581.175sft	0.024sft	
413	1025	Az.	200°20'39.8953"	0°00'00.6199"	1:314999
		ΔHt.	-78.675sft	0.052sft	
		ΔElev.	-78.530sft	0.000sft	

		Dist.	7763.400sft	0.025sft	
1033	1200	Az.	38°50'11.2632"	0°00'00.0000"	1:0
		ΔHt.	19.475sft	0.046sft	
		ΔElev.	19.500sft	0.000sft	
		Dist.	5182.291sft	0.000sft	
637	638	Az.	91°58'45.8002"	0°00'00.6014"	1:361113
		ΔHt.	-32.566sft	0.077sft	
		ΔElev.	-32.657sft	0.163sft	
		Dist.	13792.161sft	0.038sft	
637	107	Az.	268°00'55.7523"	0°00'00.5522"	1:401716
		ΔHt.	-0.576sft	0.092sft	
		ΔElev.	-0.475sft	0.161sft	
		Dist.	16054.392sft	0.040sft	
638	421	Az.	128°02'15.1602"	0°00'00.7665"	1:278445
		ΔHt.	-138.368sft	0.055sft	
		ΔElev.	-138.348sft	0.131sft	
		Dist.	9574.257sft	0.034sft	
420	421	Az.	267°12'54.3133"	0°00'00.7898"	1:273445
		ΔHt.	58.011sft	0.062sft	
		ΔElev.	57.990sft	0.000sft	
		Dist.	10421.378sft	0.038sft	
407	416	Az.	211°16'15.7465"	0°00'00.4464"	1:432264
		ΔHt.	6.010sft	0.079sft	
		ΔElev.	5.910sft	0.000sft	
		Dist.	15298.178sft	0.035sft	
407	406	Az.	76°30'39.5745"	0°00'00.8724"	1:257855
		ΔHt.	3.411sft	0.063sft	
		ΔElev.	3.330sft	0.000sft	
		Dist.	8551.192sft	0.033sft	
1006	1015	Az.	153°07'45.5784"	0°00'00.0000"	1:0
		ΔHt.	-44.185sft	0.069sft	
		ΔElev.	-44.180sft	0.000sft	
		Dist.	11205.132sft	0.000sft	
1006	405	Az.	263°52'17.4745"	0°00'01.0677"	1:208106
		ΔHt.	-11.062sft	0.052sft	
		ΔElev.	-11.130sft	0.000sft	
		Dist.	5432.719sft	0.026sft	
1016	1209	Az.	74°58'33.8407"	0°00'00.0000"	1:0
		ΔHt.	-101.016sft	0.090sft	
		ΔElev.	-100.860sft	0.000sft	
		Dist.	15207.822sft	0.000sft	
1016	1015	Az.	269°43'38.4804"	0°00'00.0000"	1:0

		ΔHt.	12.875sft	0.073sft	
		ΔElev.	12.820sft	0.000sft	
		Dist.	7949.843sft	0.000sft	
1016	1023	Az.	183°26'00.5847"	0°00'00.0000"	1:0
		ΔHt.	-107.558sft	0.064sft	
		ΔElev.	-107.550sft	0.000sft	
		Dist.	6225.735sft	0.000sft	
1209	1208	Az.	333°09'24.8570"	0°00'00.0000"	1:0
		ΔHt.	144.977sft	0.073sft	
		ΔElev.	144.960sft	0.000sft	
		Dist.	6378.332sft	0.000sft	
1023	1200	Az.	233°43'13.8814"	0°00'00.0000"	1:0
		ΔHt.	5.439sft	0.073sft	
		ΔElev.	5.400sft	0.000sft	
		Dist.	12222.567sft	0.000sft	