

Network Adjustment Report

Project : Auxillary Base

User name	Andrew Balsler	Date & Time	6:37:26 PM 7/1/2007
Coordinate System	UTM	Zone	6 North
Project Datum	NAD 1983 (Conus)		
	CORS96		
Vertical Datum	NAVD88	Geoid Model	Not selected
Coordinate Units	Meters		
Distance Units	Meters		
Height Units	Meters		

Adjustment Style Settings - 95% Confidence Limits

Residual Tolerances

To End Iterations : 0.000010m
Final Convergence Cutoff : 0.005000m

Covariance Display

Horizontal

Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000m
Scale on Linear Error [S] : 1.96

Three-Dimensional

Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000m
Scale on Linear Error [S] : 1.96
Elevation Errors were used in the calculations.

Adjustment Controls

Compute Correlations for Geoid : False
Horizontal and Vertical adjustment performed

Set-up Errors

GPS
Error in Height of Antenna : 0.000m
Centering Error : 0.000m

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Statistical Summary

Successful Adjustment in 1 iteration(s)

Network Reference Factor : 3.80

Chi Square Test (a=95%) : FAIL

Degrees of Freedom : 102.00

GPS Observation Statistics

Reference Factor : 3.80

Redundancy Number (r) : 102.00

Individual GPS Observation Statistics

Observation ID	Reference Factor	Redundancy Number
B36	2.26	2.97
B37	4.09	2.93
B38	5.82	2.92
B39	3.20	2.89
B40	5.18	2.87
B41	3.89	2.90
B42	4.76	2.89
B43	3.19	2.93
B44	4.42	2.88
B45	2.61	2.88
B46	4.83	2.91
B47	3.00	2.92
B48	3.31	2.93
B49	2.85	2.92
B50	3.31	2.93
B51	2.17	2.89
B52	3.63	2.90
B53	3.11	2.92
B54	1.60	2.91
B55	0.51	2.90
B56	2.61	2.92
B57	3.52	2.90
B58	4.00	2.91
B59	3.66	2.93
B60	1.50	2.93
B61	1.14	2.93
B62	0.76	2.93

B63	4.65	2.90
B64	4.73	2.92
B65	4.69	2.90
B66	5.45	2.90
B67	6.86	2.93
B68	3.23	2.93
B69	6.19	2.89
B70	1.78	2.99

Weighting Strategies

GPS Observations

Default Scalar Applied to All Observations

Scalar : 1.00

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Adjusted Coordinates

Adjustment performed in **WGS-84**

Number of Points : 2

Number of Constrained Points : 1

Horizontal and Height Only : 1

Adjusted Grid Coordinates

Errors are reported using 1.96s.

Point Name	Easting	E error	Northing	N error	Elevation	e error	Fix
TOOL2845	394376.897m	0.000m	7615061.725m	0.000m	N/A	N/A	N E h
TFS1	394470.860m	0.000m	7615182.883m	0.000m	N/A	N/A	

Adjusted Geodetic Coordinates

Errors are reported using 1.96s.

Point Name	Latitude	E error	Longitude	N error	Height	h error	Fix
TOOL2845	68° 37'39.12884"N	0.000m	149° 35'51.91926"W	0.000m	740.016m	0.000m	Lat Long h
TFS1	68° 37'43.16467"N	0.000m	149° 35'44.06274"W	0.000m	720.726m	0.001m	

Coordinate Deltas

Point Name	DEasting	DNorthing	DElevation	DHeight	DGeoid Separation
TOOL2845	0.000m	0.000m	N/A	0.000m	N/A
TFS1	0.000m	0.000m	N/A	-0.003m	N/A

Control Coordinate Comparisons

Values shown are control coord minus adjusted coord.

Point Name	DEasting	DNorthing	DElevation	DHeight
TOOL2845	N/A	N/A	N/A	N/A

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Adjusted Observations

Adjustment performed in **WGS-84**

GPS Observations

Number of Observations : 35

Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.41). Any outliers are in **red**.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96s)	Residual	Stand. Residual
B67	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.2279"	0.13
			DHt.	-19.290m	0.001m	0.008m	2.13
			Dist.	153.365m	0.000m	-0.002m	-1.09
B65	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.1476"	0.12
			DHt.	-19.290m	0.001m	0.006m	2.01
			Dist.	153.365m	0.000m	0.001m	0.67
B69	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'02.3815"	1.96
			DHt.	-19.290m	0.001m	0.004m	1.36
			Dist.	153.365m	0.000m	0.000m	-0.34
B42	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.0775"	-0.77
			DHt.	-19.290m	0.001m	-0.005m	-1.96
			Dist.	153.365m	0.000m	0.000m	-0.30
B66	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.4065"	0.96
			DHt.	-19.290m	0.001m	0.004m	1.76

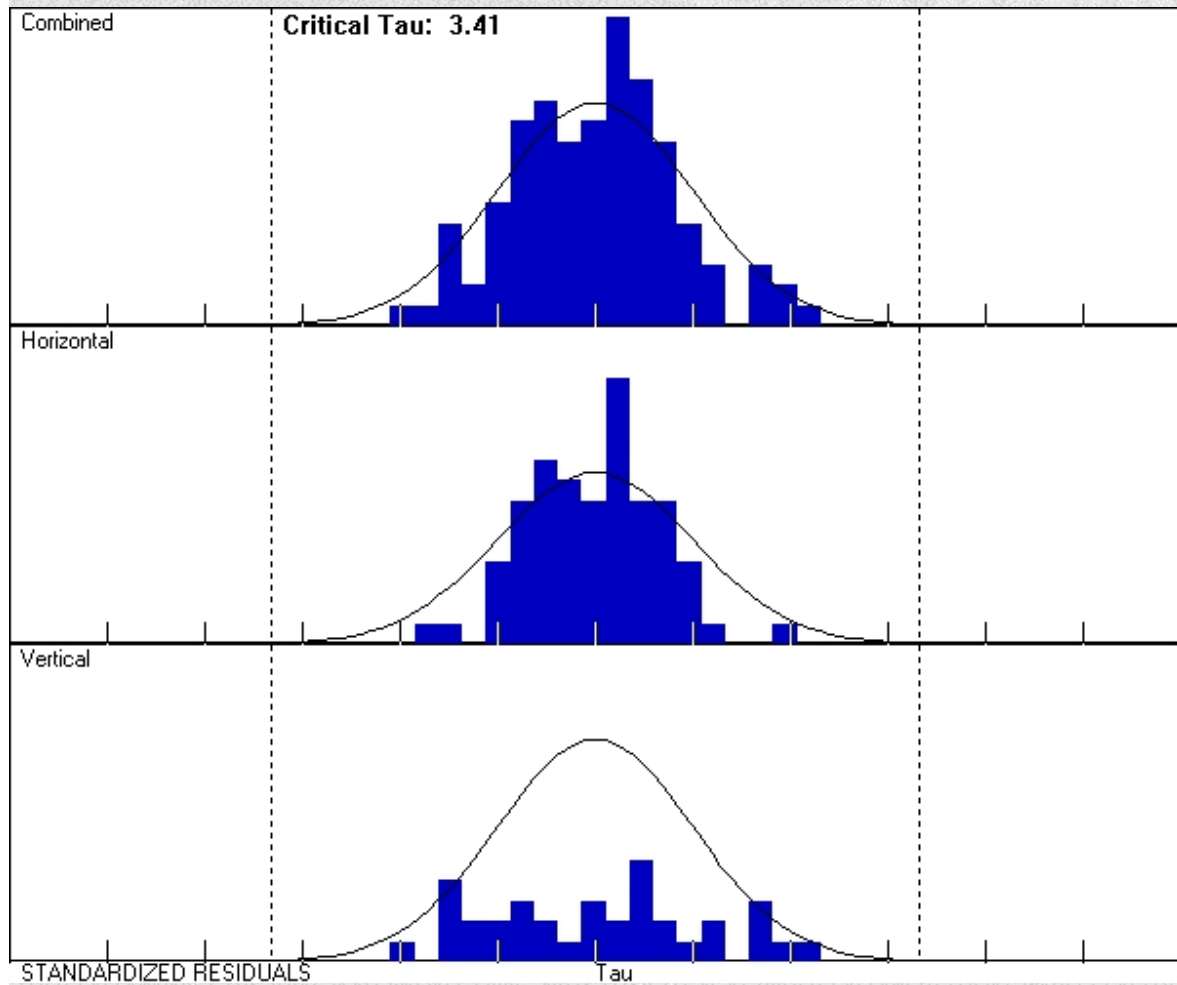
			Dist.	153.365m	0.000m	-0.001m	-0.58
B63	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.9629"	0.71
			DHt.	-19.290m	0.001m	0.005m	1.73
			Dist.	153.365m	0.000m	0.000m	0.07
B64	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.5049"	0.31
			DHt.	-19.290m	0.001m	0.005m	1.71
			Dist.	153.365m	0.000m	0.000m	0.25
B52	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'03.2587"	-1.63
			DHt.	-19.290m	0.001m	0.004m	0.99
			Dist.	153.365m	0.000m	0.001m	0.87
B46	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'02.1078"	-1.60
			DHt.	-19.290m	0.001m	0.000m	-0.06
			Dist.	153.365m	0.000m	-0.001m	-0.95
B38	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.7584"	-0.91
			DHt.	-19.290m	0.001m	-0.006m	-1.54
			Dist.	153.365m	0.000m	0.000m	0.29
B44	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.4820"	-0.39
			DHt.	-19.290m	0.001m	-0.004m	-1.51
			Dist.	153.365m	0.000m	0.000m	0.15
B40	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.2544"	-0.21
			DHt.	-19.290m	0.001m	-0.004m	-1.44
			Dist.	153.365m	0.000m	0.001m	0.81
B37	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.9856"	-0.55
			DHt.	-19.290m	0.001m	-0.004m	-1.41
			Dist.	153.365m	0.000m	0.000m	0.23
B58	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.3513"	1.03
			DHt.	-19.290m	0.001m	0.004m	1.34
			Dist.	153.365m	0.000m	0.000m	0.17
B43	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.2680"	0.15
			DHt.	-19.290m	0.001m	-0.004m	-1.30
			Dist.	153.365m	0.000m	-0.001m	-0.78
B53	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.1073"	0.07
			DHt.	-19.290m	0.001m	0.003m	0.87
			Dist.	153.365m	0.000m	0.002m	1.29
B48	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.6305"	-0.38
			DHt.	-19.290m	0.001m	-0.004m	-1.15
			Dist.	153.365m	0.000m	0.001m	0.53
B49	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.4354"	-0.29
			DHt.	-19.290m	0.001m	-0.004m	-1.11
			Dist.	153.365m	0.000m	0.000m	0.29

B45	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.1055"	0.09
			DHt.	-19.290m	0.001m	-0.003m	-1.09
			Dist.	153.365m	0.000m	0.000m	0.06
B59	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.6808"	1.05
			DHt.	-19.290m	0.001m	0.002m	0.55
			Dist.	153.365m	0.000m	-0.001m	-0.47
B68	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.6529"	1.03
			DHt.	-19.290m	0.001m	0.002m	0.40
			Dist.	153.365m	0.000m	-0.001m	-0.65
B41	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.3361"	-1.01
			DHt.	-19.290m	0.001m	-0.003m	-0.77
			Dist.	153.365m	0.000m	0.001m	0.86
B56	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.2327"	0.80
			DHt.	-19.290m	0.001m	0.001m	0.21
			Dist.	153.365m	0.000m	0.001m	0.41
B39	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.8731"	-0.70
			DHt.	-19.290m	0.001m	-0.002m	-0.79
			Dist.	153.365m	0.000m	0.001m	0.47
B36	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.9519"	-0.43
			DHt.	-19.290m	0.001m	-0.006m	-0.77
			Dist.	153.365m	0.000m	0.001m	0.42
B47	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.3074"	-0.76
			DHt.	-19.290m	0.001m	-0.002m	-0.53
			Dist.	153.365m	0.000m	-0.001m	-0.60
B70	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.2771"	-0.33
			DHt.	-19.290m	0.001m	0.007m	0.74
			Dist.	153.365m	0.000m	0.000m	0.00
B57	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'01.1940"	0.74
			DHt.	-19.290m	0.001m	0.001m	0.52
			Dist.	153.365m	0.000m	0.001m	0.57
B50	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'01.2302"	-0.72
			DHt.	-19.290m	0.001m	-0.003m	-0.60
			Dist.	153.365m	0.000m	-0.001m	-0.63
B51	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.7231"	-0.45
			DHt.	-19.290m	0.001m	0.001m	0.42
			Dist.	153.365m	0.000m	0.000m	-0.47
B60	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.3723"	0.24
			DHt.	-19.290m	0.001m	0.002m	0.45
			Dist.	153.365m	0.000m	0.000m	-0.35
B54	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.5153"	0.30

			DHt.	-19.290m	0.001m	-0.001m	-0.37
			Dist.	153.365m	0.000m	0.001m	0.43
B61	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.7369"	0.38
			DHt.	-19.290m	0.001m	0.001m	0.19
			Dist.	153.365m	0.000m	0.000m	-0.26
B62	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	0°00'00.4516"	0.25
			DHt.	-19.290m	0.001m	0.000m	0.00
			Dist.	153.365m	0.000m	0.000m	-0.25
B55	TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	-0°00'00.2063"	-0.12
			DHt.	-19.290m	0.001m	0.000m	0.08
			Dist.	153.365m	0.000m	0.000m	0.22

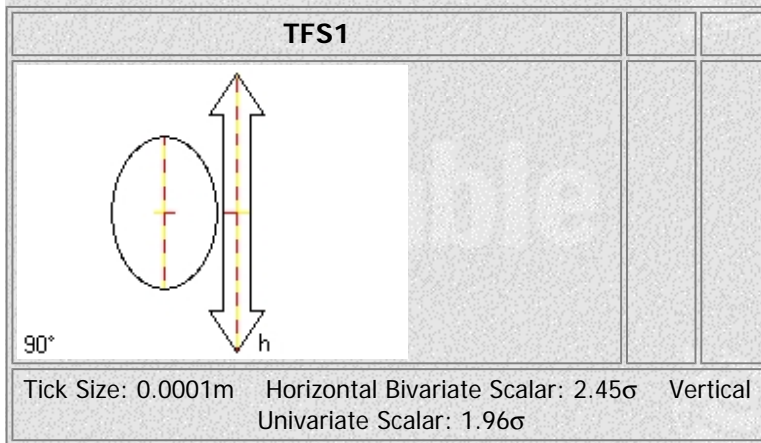
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Histograms of Standardized Residuals



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Point Error Ellipses



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Covariant Terms

Adjustment performed in **WGS-84**

From Point	To Point		Components	A-posteriori Error (1.96s)	Horiz. Precision (Ratio)	3D Precision (Ratio)
TOOL2845	TFS1	Az.	35°22'32.2246"	0°00'00.5023"	1:365354	1:365354
		DHt.	-19.290m	0.001m		
		DElev.	?	?		
		Dist.	153.365m	0.000m		

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