

Network Adjustment Report

Project : Auxillary Base

User name	Andrew Balsler	Date & Time	3:55:26 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 : 4.21
 Chi Square Test (a=95%) : FAIL
 Degrees of Freedom : 48.00

GPS Observation Statistics

Reference Factor : 4.21
 Redundancy Number (r) : 48.00

Individual GPS Observation Statistics

Observation ID	Reference Factor	Redundancy Number
B5	4.04	2.93
B6	7.59	2.87
B7	2.67	2.86
B8	3.88	2.76
B9	2.74	2.78
B10	4.09	2.78
B11	1.90	2.75
B12	3.48	2.86
B13	2.18	2.85
B14	0.94	2.81
B16	1.89	2.86
B17	3.71	2.82
B18	6.26	2.81
B19	6.31	2.83
B20	5.72	2.79
B21	4.18	2.82
B22	3.60	2.82

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	394376.896m	0.000m	7615061.725m	0.000m	N/A	N/A	N E h
G153	403521.907m	0.001m	7616603.599m	0.002m	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° 35'51.91927"W	0.000m	740.016m	0.000m	Lat Long h
G153	68° 38'40.79261"N	0.001m	149° 22'28.39748"W	0.002m	800.681m	0.004m	

Coordinate Deltas

Point Name	DEasting	DNorthing	DElevation	DHeight	DGeoid Separation
TOOL2845	0.000m	0.000m	N/A	0.000m	N/A
G153	0.000m	0.001m	N/A	-0.004m	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 : 17

Number of Outliers : 0

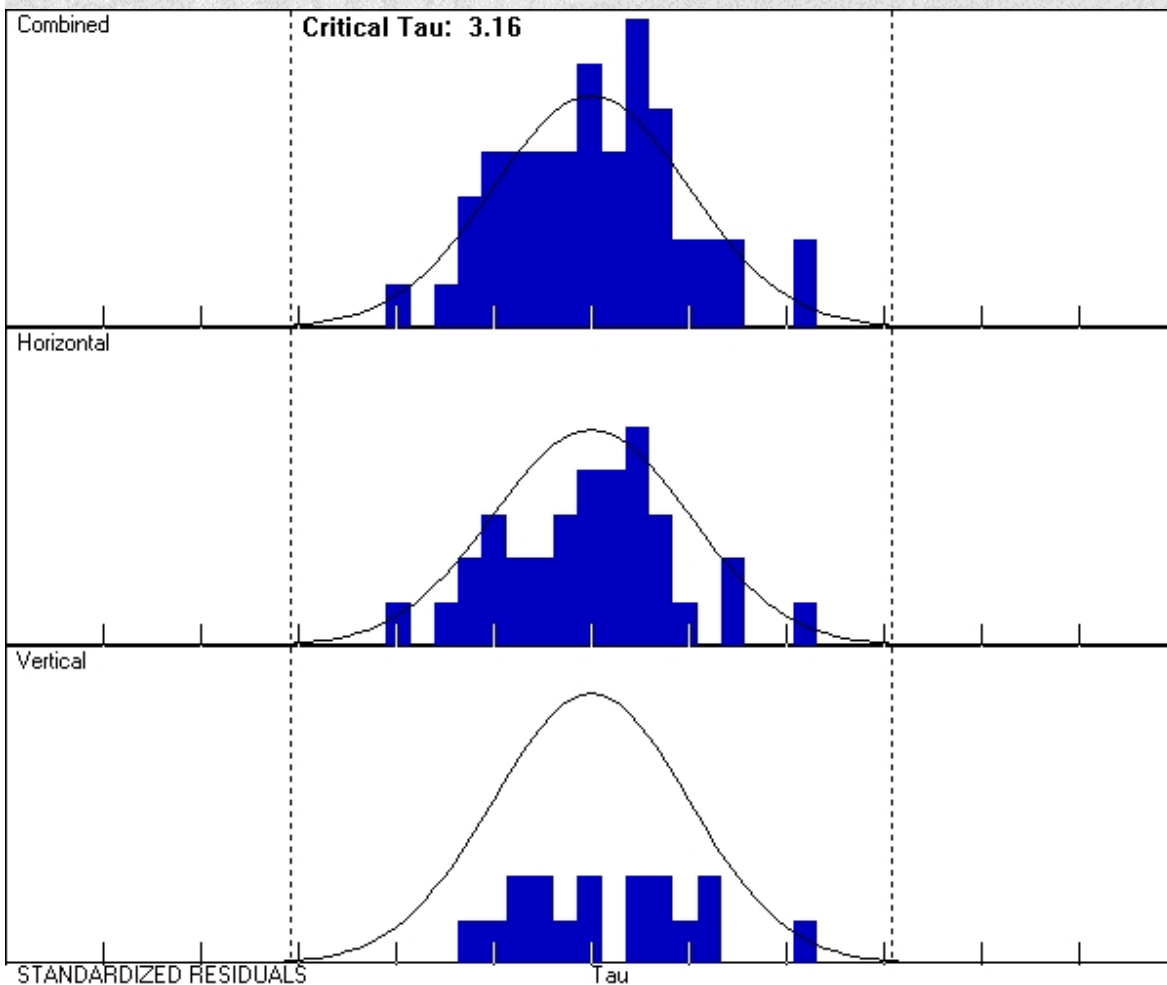
Observation Adjustment (Critical Tau = 3.16). Any outliers are in red.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96s)	Residual	Stand. Residual
B6	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.1485"	1.42
			DHt.	60.666m	0.004m	-0.006m	-0.81
			Dist.	9276.632m	0.001m	0.006m	2.35
B18	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0216"	0.34
			DHt.	60.666m	0.004m	0.016m	2.24
			Dist.	9276.632m	0.001m	-0.002m	-0.99
B19	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.1507"	-2.10
			DHt.	60.666m	0.004m	0.011m	1.13
			Dist.	9276.632m	0.001m	-0.003m	-1.53
B20	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0997"	1.39
			DHt.	60.666m	0.004m	0.006m	1.13
			Dist.	9276.632m	0.001m	0.000m	-0.09
B17	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0476"	0.74
			DHt.	60.666m	0.004m	0.000m	-0.04
			Dist.	9276.632m	0.001m	-0.003m	-1.34
B22	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0170"	0.24
			DHt.	60.666m	0.004m	-0.009m	-1.23
			Dist.	9276.632m	0.001m	0.001m	0.35
B21	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0869"	-1.04
			DHt.	60.666m	0.004m	0.000m	0.01
			Dist.	9276.632m	0.001m	-0.002m	-1.15
B5	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0587"	0.64
			DHt.	60.666m	0.004m	0.017m	1.12
			Dist.	9276.632m	0.001m	0.002m	0.51
B10	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0426"	-0.76
			DHt.	60.666m	0.004m	-0.007m	-1.02
			Dist.	9276.632m	0.001m	0.001m	0.54
B12	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0648"	-0.83
			DHt.	60.666m	0.004m	0.007m	0.84
			Dist.	9276.632m	0.001m	-0.003m	-0.99

B7	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0016"	0.02
			DHt.	60.666m	0.004m	-0.004m	-0.42
			Dist.	9276.632m	0.001m	0.002m	0.99
B8	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0023"	-0.04
			DHt.	60.666m	0.004m	-0.005m	-0.85
			Dist.	9276.632m	0.001m	0.002m	0.82
B13	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0015"	-0.02
			DHt.	60.666m	0.004m	0.006m	0.70
			Dist.	9276.632m	0.001m	-0.001m	-0.25
B9	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0379"	-0.54
			DHt.	60.666m	0.004m	-0.003m	-0.49
			Dist.	9276.632m	0.001m	0.001m	0.43
B16	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	-0°00'00.0182"	-0.22
			DHt.	60.666m	0.004m	0.005m	0.52
			Dist.	9276.632m	0.001m	-0.001m	-0.51
B11	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0228"	0.42
			DHt.	60.666m	0.004m	0.002m	0.43
			Dist.	9276.632m	0.001m	0.001m	0.41
B14	TOOL2845	G153	Az.	78°00'37.2208"	0°00'00.0336"	0°00'00.0191"	0.32
			DHt.	60.666m	0.004m	-0.002m	-0.26
			Dist.	9276.632m	0.001m	0.000m	-0.20

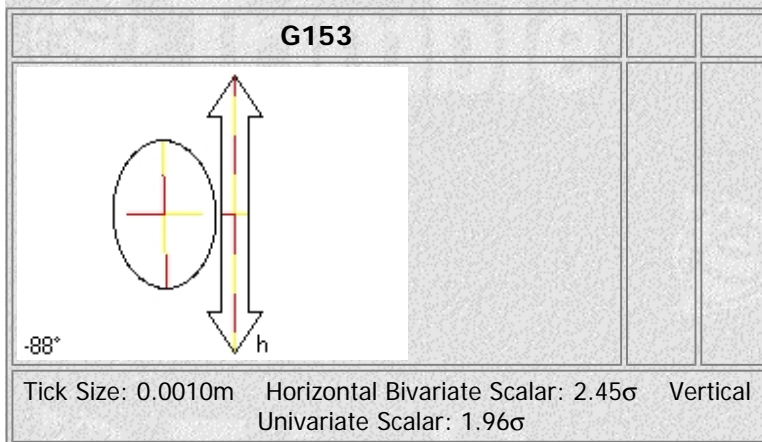
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Histograms of Standardized Residuals



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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	G153	Az.	78°00'37.2208"	0°00'00.0336"	1:8608582	1:8608582
		DHt.	60.666m	0.004m		
		DElev.	?	?		
		Dist.	9276.632m	0.001m		

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