

# Network Adjustment Report

*Project : Auxillary Base*

<b>User name</b>	Andrew Balser	<b>Date &amp; Time</b>	4:03:48 PM 7/1/2007
<b>Coordinate System</b>	UTM	<b>Zone</b>	6 North
<b>Project Datum</b>	NAD 1983 (Conus)		
	CORS96		
<b>Vertical Datum</b>	NAVD88	<b>Geoid Model</b>	Not selected
<b>Coordinate Units</b>	Meters		
<b>Distance Units</b>	Meters		
<b>Height Units</b>	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 : 2.36  
 Chi Square Test (a=95%) : FAIL  
 Degrees of Freedom : 6.00

### GPS Observation Statistics

Reference Factor : 2.36  
 Redundancy Number (r) : 6.00

### Individual GPS Observation Statistics

Observation ID	Reference Factor	Redundancy Number
B24	2.60	2.62
B25	1.81	1.88
B26	2.54	1.50

### 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
N153	412143.609m	0.002m	7620224.431m	0.003m	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
N153	68° 40'47.87731"N	0.002m	149° 09'56.48738"W	0.003m	800.799m	0.005m	

### Coordinate Deltas

Point Name	DEasting	DNorthing	DElevation	DHeight	DGeoid Separation
TOOL2845	0.000m	0.000m	N/A	0.000m	N/A
N153	0.000m	0.000m	N/A	-0.005m	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 : 3

Number of Outliers : 0

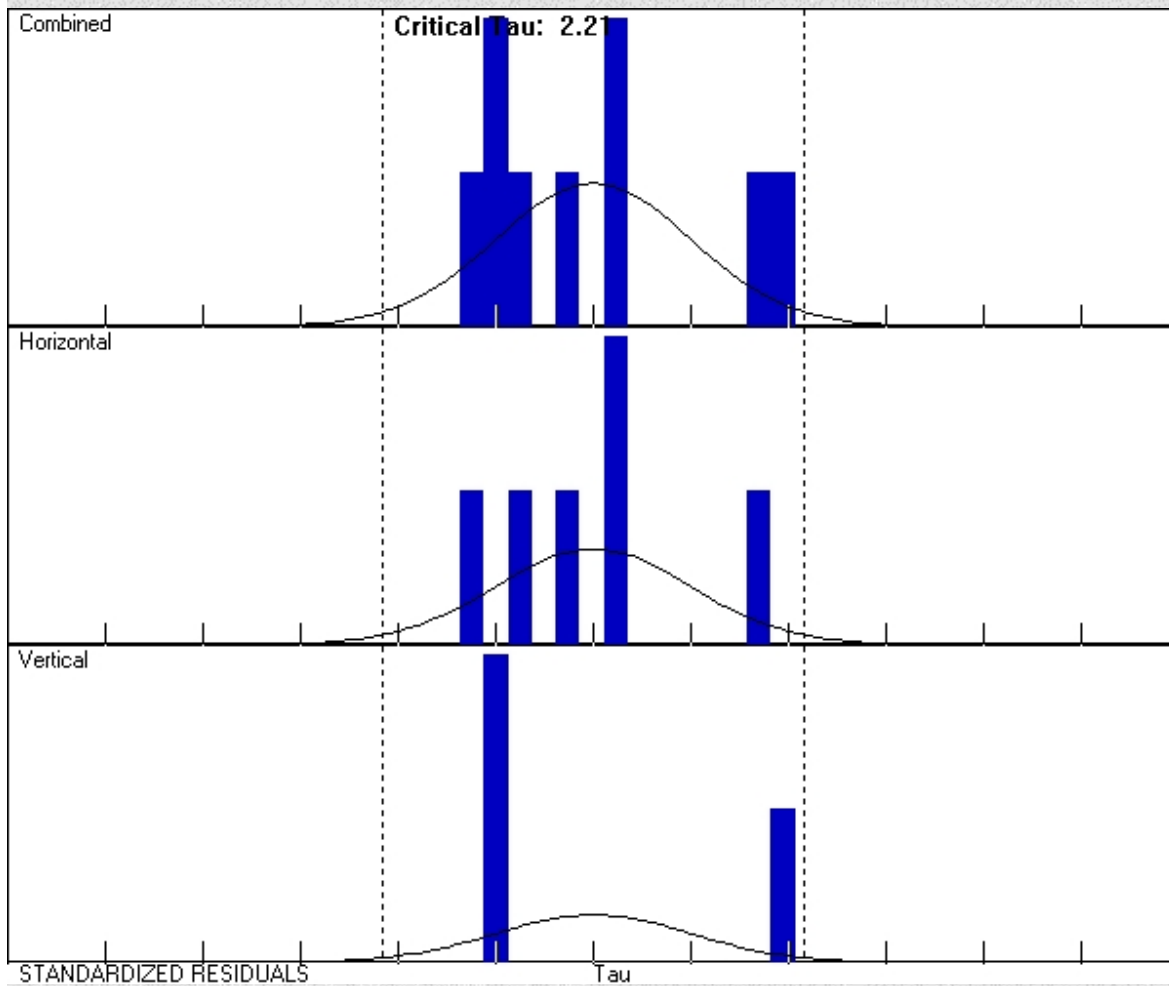
Observation Adjustment (Critical Tau = 2.21). Any outliers are in **red**.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96s)	Residual	Stand. Residual
B26	TOOL2845	N153	<b>Az.</b>	71°22'38.4190"	0°00'00.0288"	-0° 00'00.0230"	-1.30
			<b>DHt.</b>	60.784m	0.005m	0.004m	2.01
			<b>Dist.</b>	18506.887m	0.002m	0.000m	-0.24
B24	TOOL2845	N153	<b>Az.</b>	71°22'38.4190"	0°00'00.0288"	0°00'00.0625"	1.76
			<b>DHt.</b>	60.784m	0.005m	-0.009m	-1.07
			<b>Dist.</b>	18506.887m	0.002m	-0.001m	-0.63

B25	TOOL2845	N153	<b>Az.</b>	71°22'38.4190"	0°00'00.0288"	0°00'00.0043"	0.25
			<b>DHt.</b>	60.784m	0.005m	-0.005m	-1.07
			<b>Dist.</b>	18506.887m	0.002m	0.000m	0.27

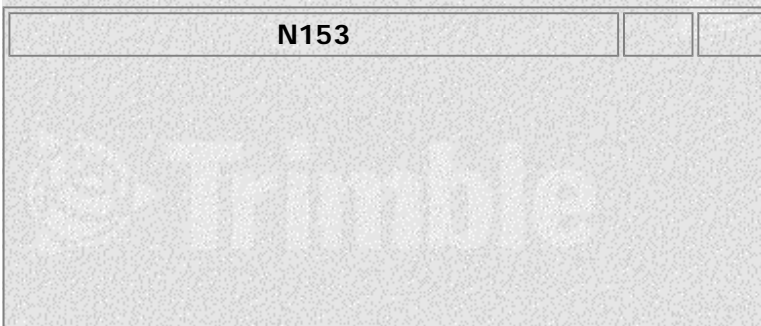
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### Histograms of Standardized Residuals

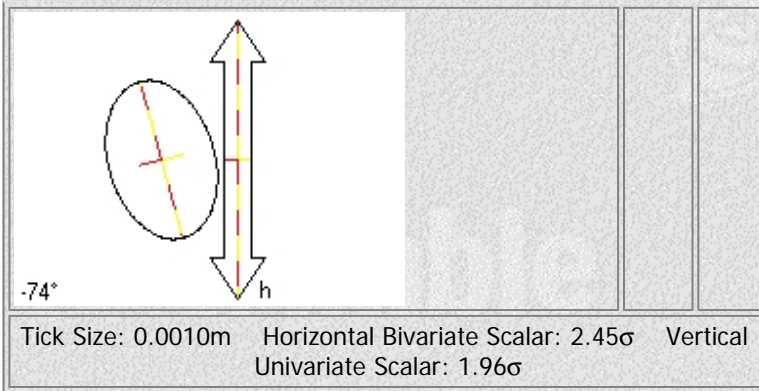


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### Point Error Ellipses







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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	N153	<b>Az.</b>	71°22'38.4190"	0°00'00.0288"	1:10786189	1:10786189
		<b>DHt.</b>	60.784m	0.005m		
		<b>DElev.</b>	?	?		
		<b>Dist.</b>	18506.887m	0.002m		

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