

Project File Data		Coordinate System	
Name:		Name:	Default
Size:		Zone:	Default
Modified:	5/6/2022 5:37:22 PM (UTC:2)	Datum:	WGS 1984
Time zone:	Romance Standard Time	Global reference datum:	WGS 1984
Reference number:		Global reference epoch:	
Description:		Geoid:	GEOID18 (Conus)
Comment 1:		Vertical datum:	NAVD 88
Comment 2:		Calibrated site:	
Comment 3:			

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Network Adjustment Report

Adjustment Settings

Set-Up Errors

GNSS

Error in Height of Antenna: 0.000 m

Centering Error: 0.000 m

Covariance Display

Horizontal:

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.000

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.000

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 1.00

Chi Square Test (95%): Passed

Precision Confidence Level: DRMS

Degrees of Freedom: 47

Post Processed Vector Statistics

Reference Factor: 1.00

Redundancy Number: 47.00

A Priori Scalar: 0.63

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	Δ Northing (Meter)	Δ Easting (Meter)	Δ Elevation (Meter)	Δ Height (Meter)
NYBT	?	?	?	-0.003
NYPF	?	?	?	-0.056

Control Point Constraints

Point ID	Type	North σ (Meter)	East σ (Meter)	Height σ (Meter)	Elevation σ (Meter)
NYBT	Grid				Fixed
NYBT	Local	Fixed	Fixed		
NYDV	Local	Fixed	Fixed	Fixed	
NYPF	Grid				Fixed
NYPF	Local	Fixed	Fixed		
Fixed = 0.000001(Meter)					

Adjusted Grid Coordinates

Point ID	Northing (Meter)	Northing Error (Meter)	Easting (Meter)	Easting Error (Meter)	Elevation (Meter)	Elevation Error (Meter)	Constraint
NYBT	-20971.508	?	-26018.708	?	296.921	?	LLe
NYDV	-69828.522	?	8653.424	?	222.021	?	LLh
NYMC1	-1.528	0.001	0.798	0.000	186.978	0.003	
NYPF	-9333.247	?	22633.326	?	148.889	?	LLe

Adjusted Geodetic Coordinates

Point ID	Latitude	Longitude	Height (Meter)	Height Error (Meter)	Constraint
NYBT	N42°59'17.96047"	W78°07'20.37533"	262.242	?	LLe
NYDV	N42°32'56.09346"	W77°41'52.59565"	188.590	?	LLh
NYMC1	N43°10'39.09084"	W77°48'11.84267"	151.535	0.003	
NYPF	N43°05'35.48476"	W77°31'31.11257"	113.534	?	LLe

Adjusted ECEF Coordinates

Point ID	X (Meter)	X Error (Meter)	Y (Meter)	Y Error (Meter)	Z (Meter)	Z Error (Meter)	3D Error (Meter)	Constraint
NYBT	961816.421	?	-4572976.783	?	4326731.693	?	?	LLe
NYDV	1002712.211	?	-4598060.436	?	4290846.784	?	?	LLh
NYMC1	984214.376	0.001	-4553437.474	0.002	4342008.398	0.002	0.003	
NYPF	1007672.293	?	-4554836.600	?	4335145.167	?	?	LLe

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
NYMC1	0.001	0.001	173°

Adjusted GNSS Observations

Transformation Parameters

Deflection in Latitude:	0.100 sec (DRMS)	0.013 sec
Deflection in Longitude:	-0.176 sec (DRMS)	0.009 sec
Azimuth Rotation:	-0.014 sec (DRMS)	0.001 sec
Scale Factor:	1.00000006 (DRMS)	0.00000001

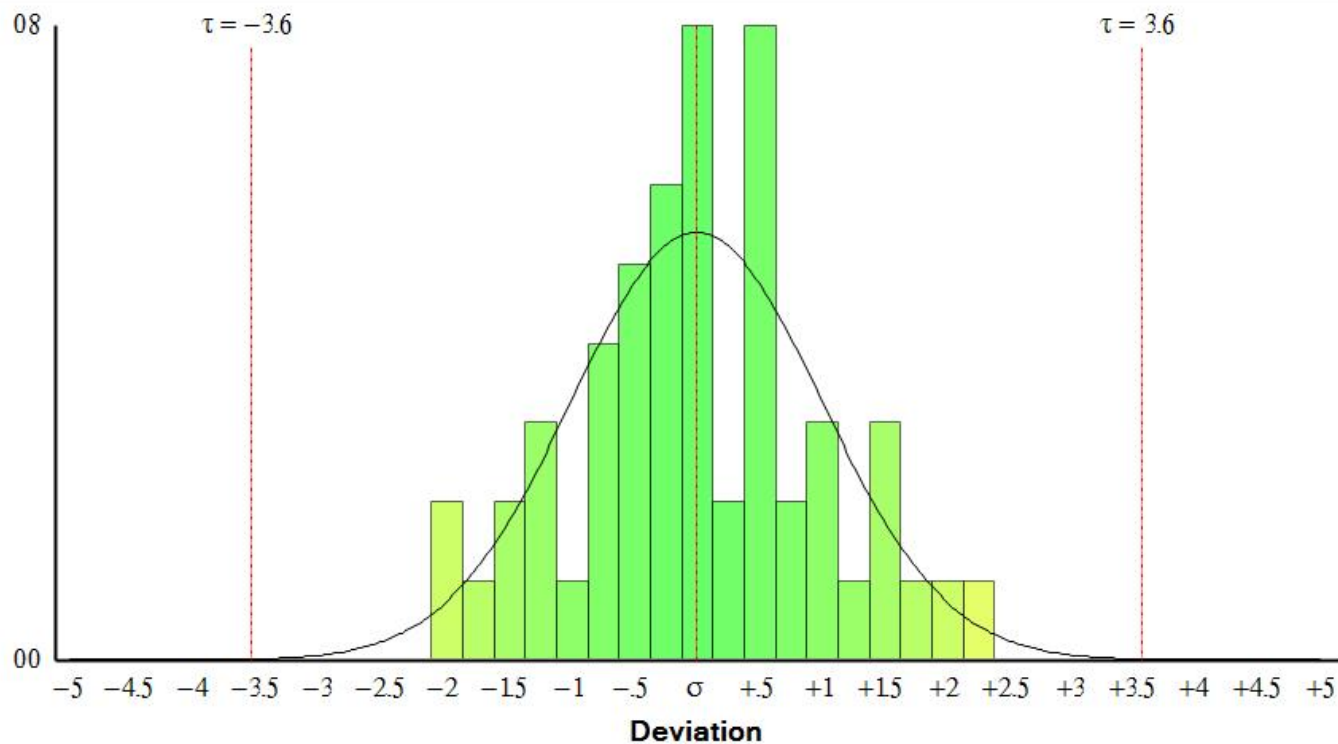
Observation ID		Observation	A-posteriori Error	Residual	Standardized Residual
NYBT --> NYDV (PV26)	Az.	144°25'15.5"	0.001 sec	0.010 sec	2.200
	ΔHt.	-73.657 m	0.003 m	-0.006 m	-0.777
	Ellip Dist.	59909.503 m	0.001 m	0.001 m	0.452
NYDV --> NYMC1 (PV12)	Az.	353°00'27.8"	0.001 sec	0.001 sec	0.370
	ΔHt.	-37.081 m	0.003 m	-0.003 m	-0.556
	Ellip Dist.	70361.021 m	0.001 m	0.004 m	2.055
NYPF --> NYMC1 (PV1)	Az.	292°35'49.5"	0.005 sec	0.005 sec	0.461
	ΔHt.	38.017 m	0.003 m	0.007 m	1.127
	Ellip Dist.	24480.802 m	0.000 m	-0.002 m	-2.032
NYPF --> NYMC1 (PV19)	Az.	292°35'49.5"	0.005 sec	-0.036 sec	-1.950
	ΔHt.	38.017 m	0.003 m	0.006 m	0.518
	Ellip Dist.	24480.802 m	0.000 m	0.000 m	-0.090
NYBT --> NYMC1 (PV9)	Az.	50°54'56.6"	0.003 sec	0.016 sec	1.730
	ΔHt.	-110.738 m	0.003 m	0.006 m	0.801
	Ellip Dist.	33417.787 m	0.001 m	0.001 m	1.071
NYDV --> NYMC1 (PV6)	Az.	353°00'27.8"	0.001 sec	-0.004 sec	-1.680
	ΔHt.	-37.081 m	0.003 m	-0.001 m	-0.124
	Ellip Dist.	70361.021 m	0.001 m	-0.003 m	-1.536
NYBT --> NYDV (PV29)	Az.	144°25'15.5"	0.001 sec	0.003 sec	0.976
	ΔHt.	-73.657 m	0.003 m	0.002 m	0.390
	Ellip Dist.	59909.503 m	0.001 m	-0.002 m	-1.586
NYPF --> NYMC1 (PV7)	Az.	292°35'49.5"	0.005 sec	0.015 sec	1.524
	ΔHt.	38.017 m	0.003 m	-0.001 m	-0.101
	Ellip Dist.	24480.802 m	0.000 m	0.001 m	0.928
NYDV --> NYMC1 (PV18)	Az.	353°00'27.8"	0.001 sec	0.001 sec	0.102

	ΔHt.	-37.081 m	0.003 m	-0.005 m	-0.513
	Ellip Dist.	70361.021 m	0.001 m	0.005 m	1.418
NYPF --> NYDV (PV27)	Az.	193°12'04.5"	0.001 sec	0.000 sec	0.060
	ΔHt.	75.098 m	0.003 m	-0.004 m	-0.606
	Ellip Dist.	62089.376 m	0.001 m	0.003 m	1.404
NYDV --> NYMCI (PV24)	Az.	353°00'27.8"	0.001 sec	0.002 sec	0.373
	ΔHt.	-37.081 m	0.003 m	0.001 m	0.112
	Ellip Dist.	70361.021 m	0.001 m	-0.004 m	-1.320
NYPF --> NYDV (PV30)	Az.	193°12'04.5"	0.001 sec	-0.003 sec	-1.305
	ΔHt.	75.098 m	0.003 m	0.001 m	0.417
	Ellip Dist.	62089.376 m	0.001 m	0.001 m	0.825
NYPF --> NYBT (PV28)	Az.	256°44'12.1"	0.001 sec	-0.006 sec	-1.277
	ΔHt.	148.755 m	0.003 m	-0.002 m	-0.354
	Ellip Dist.	50024.563 m	0.000 m	-0.001 m	-0.485
NYBT --> NYMCI (PV3)	Az.	50°54'56.6"	0.003 sec	-0.007 sec	-0.878
	ΔHt.	-110.738 m	0.003 m	-0.002 m	-0.262
	Ellip Dist.	33417.787 m	0.001 m	0.000 m	-0.247
NYBT --> NYMCI (PV15)	Az.	50°54'56.6"	0.003 sec	-0.012 sec	-0.815
	ΔHt.	-110.738 m	0.003 m	0.000 m	-0.003
	Ellip Dist.	33417.787 m	0.001 m	0.000 m	0.018
NYBT --> NYMCI (PV21)	Az.	50°54'56.6"	0.003 sec	0.006 sec	0.447
	ΔHt.	-110.738 m	0.003 m	-0.002 m	-0.235
	Ellip Dist.	33417.787 m	0.001 m	-0.001 m	-0.692
NYPF --> NYMCI (PV13)	Az.	292°35'49.5"	0.005 sec	-0.010 sec	-0.629
	ΔHt.	38.017 m	0.003 m	-0.005 m	-0.513
	Ellip Dist.	24480.802 m	0.000 m	0.001 m	0.456
NYPF --> NYBT (PV25)	Az.	256°44'12.1"	0.001 sec	-0.002 sec	-0.301
	ΔHt.	148.755 m	0.003 m	0.004 m	0.500
	Ellip Dist.	50024.563 m	0.000 m	0.000 m	-0.187

Histogram of Standardized Residuals

Critical Tau Value: 3.6

Observations Failing the Tau Test: 0



Covariance Terms

From Point	To Point		Components	A-posteriori Error	Horiz. Precision (Ratio)	3D Precision (Ratio)
NYBT	NYDV	Az.	144°25'15.5"	0.000 sec	1 : 0	1 : 0
		Δ Ht.	-73.652 m	0.000 m		
		Δ Elev.	-74.900 m	0.000 m		
		Ellip Dist.	59909.507 m	0.000 m		
NYMC1	NYBT	Az.	231°08'01.1"	0.003 sec	1 : 67995556	1 : 67920291
		Δ Ht.	110.706 m	0.003 m		
		Δ Elev.	109.943 m	0.003 m		
		Ellip Dist.	33417.789 m	0.000 m		
NYMC1	NYDV	Az.	172°56'09.8"	0.001 sec	1 : 116278905	1 : 116248494
		Δ Ht.	37.055 m	0.003 m		
		Δ Elev.	35.043 m	0.003 m		
		Ellip Dist.	70361.025 m	0.001 m		
NYMC1	NYPF	Az.	112°24'25.3"	0.005 sec	1 : 50351988	1 : 50388271
		Δ Ht.	-38.002 m	0.003 m		
		Δ Elev.	-38.089 m	0.003 m		
		Ellip Dist.	24480.804 m	0.000 m		
NYPF	NYBT	Az.	256°44'12.2"	0.000 sec	1 : 0	1 : 0
		Δ Ht.	148.708 m	0.000 m		
		Δ Elev.	148.032 m	0.000 m		
		Ellip Dist.	50024.566 m	0.000 m		

NYPE	NYDV	Az.	193°12'04.5"	0.000 sec	1 : 0	1 : 0
		ΔHt.	75.056 m	0.000 m		
		ΔElev.	73.132 m	0.000 m		
		Ellip Dist.	62089.380 m	0.000 m		

Date: 5/8/2023 12:01:07 PM	Project:	Trimble Business Center
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