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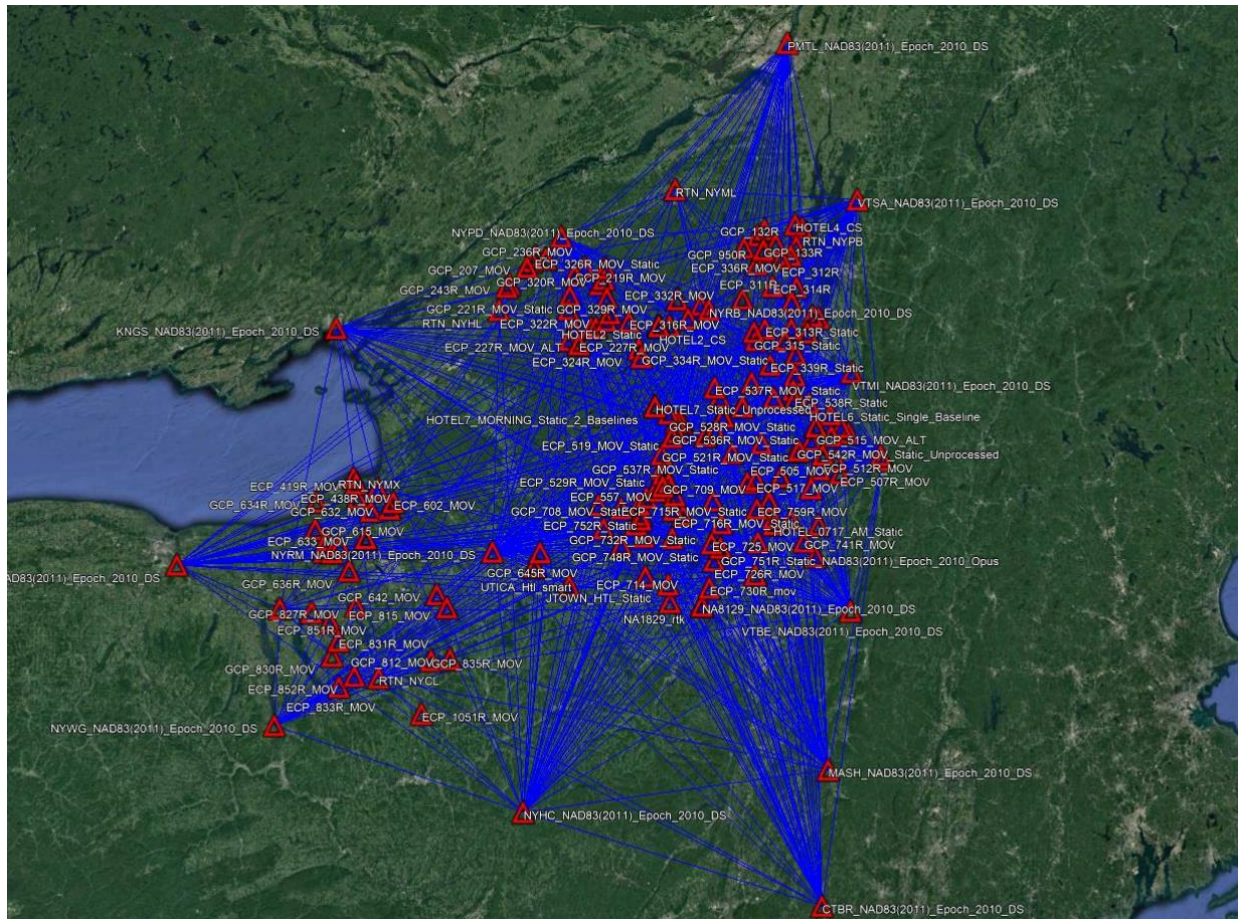
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Project File Data

Name: 5977_Harris_Upstate_NewYork_1_v7.vce
Size: 2 MB
Modified: 8/28/2019 11:26:42 AM (UTC:-6)

Coordinate System

Name: World wide/UTM
Datum: ITRF
Zone: 18 North
Geoid: GEOID12B (Conus)



Network Adjustment Report

Adjustment Settings

Set-Up Errors

GNSS

Error in Height of Antenna: 0.006 m

Centering Error: 0.006 m

Covariance Display

Horizontal:

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 1.00

Chi Square Test (95%): Passed

Precision Confidence Level: 95%

Degrees of Freedom: 2483

Post Processed Vector Statistics

Reference Factor: 1.00

Redundancy Number: 2033.00

A Priori Scalar: 1.37

RTK Vector Statistics

Reference Factor: 0.99

Redundancy Number: 450.00

A Priori Scalar: 0.48

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	Δ Easting (Meter)	Δ Northing (Meter)	Δ Height (Meter)
NYRM NAD83(2011) Epoch 2010_DS	0.009	-0.008	-0.003

Control Point Constraints

Point ID	Type	East σ (Meter)	North σ (Meter)	Height σ (Meter)
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CTBR NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
KNGS NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
MASH NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYHC NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYPD NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYPF NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYRB NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYST NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYWG NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
PMTL NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTBE NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTMI NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTRU NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
V TSA NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
Fixed = 0.000001(Meter)				

Adjusted Grid Coordinates

Point ID	Easting Error (Meter)	Northing Error (Meter)	Elevation Error (Meter)
ECP_0139R	0.009	0.012	0.014

ECP 1051R MOV	0.008	0.009	0.013
ECP 117R	0.007	0.008	0.011
ECP 208 MOV	0.009	0.010	0.015
ECP 225R MOV	0.009	0.011	0.014
ECP 227R MOV	0.007	0.007	0.010
ECP 227R MOV ALT	0.009	0.010	0.013
ECP 228R MOV	0.010	0.012	0.017
ECP 233R MOV	0.007	0.008	0.012
ECP 311R	0.009	0.010	0.014
ECP 312R	0.010	0.014	0.018
ECP 313R	0.007	0.007	0.010
ECP 314R	0.009	0.011	0.013
ECP 316R MOV	0.007	0.008	0.014
ECP 317	0.006	0.007	0.010
ECP 318	0.005	0.006	0.010
ECP 320R MOV	0.007	0.008	0.014
ECP 321R MOV	0.007	0.013	0.015
ECP 322R MOV	0.006	0.008	0.013
ECP 324R MOV	0.009	0.010	0.018
ECP 325R MOV	0.005	0.007	0.010
ECP 326R MOV	0.009	0.010	0.011

ECP 332R MOV	0.007	0.007	0.014
ECP 334R MOV	0.010	0.010	0.015
ECP 335R 2 MOV	0.005	0.007	0.014
ECP 336R MOV	0.011	0.015	0.018
ECP 337R	0.011	0.016	0.019
ECP 338R	0.009	0.009	0.015
ECP 339R	0.010	0.012	0.016
ECP 419R MOV	0.009	0.010	0.014
ECP 438R MOV	0.010	0.010	0.015
ECP 503 MOV	0.007	0.007	0.008
ECP 505 MOV	0.008	0.008	0.012
ECP 506 MOV	0.008	0.009	0.015
ECP 507R MOV	0.007	0.007	0.012
ECP 508R	0.007	0.008	0.009
ECP 510R	0.009	0.011	0.012
ECP 511R MOV	0.027	0.021	0.031
ECP 512R MOV	0.007	0.008	0.014
ECP 512R MOV ALT	0.007	0.008	0.015
ECP 513R MOV	0.006	0.007	0.012
ECP 514R MOV	0.010	0.013	0.012
ECP 517 MOV	0.009	0.010	0.017

ECP 519 MOV	0.012	0.013	0.016
ECP 529R MOV	0.013	0.017	0.030
ECP 530R MOV	0.010	0.010	0.019
ECP 532R MOV	0.007	0.008	0.010
ECP 534R MOV	0.008	0.008	0.010
ECP 536R	0.013	0.014	0.015
ECP 537R MOV	0.009	0.010	0.016
ECP 538R	0.007	0.008	0.008
ECP 557 MOV	0.009	0.010	0.015
ECP 602 MOV	0.009	0.009	0.012
ECP 604 MOV	0.008	0.010	0.013
ECP 606 MOV	0.009	0.010	0.012
ECP 609 MOV	0.009	0.010	0.014
ECP 632R MOV	0.009	0.009	0.014
ECP 633 MOV	0.009	0.009	0.012
ECP 654 MOV	0.009	0.010	0.015
ECP 704 MOV	0.010	0.011	0.020
ECP 709 MOV	0.009	0.011	0.018
ECP 714 MOV	0.010	0.011	0.018
ECP 715R MOV	0.008	0.009	0.010
ECP 716R MOV	0.024	0.021	0.029

ECP 717R MOV	0.008	0.008	0.012
ECP 718R MOV	0.007	0.007	0.009
ECP 725 MOV	0.007	0.009	0.015
ECP 726R MOV	0.008	0.011	0.017
ECP 727R MOV	0.009	0.010	0.013
ECP 730R MOV	0.009	0.009	0.012
ECP 752R	0.009	0.009	0.014
ECP 755R MOV	0.007	0.007	0.008
ECP 756R MOV	0.013	0.017	0.084
ECP 757R MOV	0.006	0.007	0.008
ECP 758R MOV	0.007	0.008	0.015
ECP 759R MOV	0.009	0.011	0.016
ECP 760R MOV	0.009	0.009	0.015
ECP 761R MOV	0.011	0.010	0.014
ECP 764R MOV	0.009	0.011	0.015
ECP 765R MOV	0.012	0.012	0.022
ECP 815 MOV	0.009	0.010	0.015
ECP 831R MOV	0.009	0.010	0.013
ECP 833R MOV	0.009	0.009	0.015
ECP 851R MOV	0.009	0.010	0.012
ECP 852R MOV	0.009	0.009	0.014

GCP 132R	0.007	0.008	0.011
GCP 133R	0.009	0.009	0.014
GCP 144R	0.008	0.009	0.011
GCP 207 MOV	0.009	0.010	0.015
GCP 219R MOV	0.006	0.007	0.013
GCP 220R MOV	0.009	0.009	0.015
GCP 221R MOV	0.008	0.009	0.011
GCP 236R MOV	0.010	0.011	0.014
GCP 243R MOV	0.009	0.010	0.016
GCP 303 MOV	0.010	0.010	0.014
GCP 304 MOV	0.005	0.008	0.012
GCP 311	0.007	0.008	0.010
GCP 315	0.009	0.010	0.012
GCP 319R MOV	0.004	0.004	0.010
GCP 320R MOV	0.007	0.010	0.014
GCP 323R	0.009	0.009	0.013
GCP 324R	0.007	0.007	0.011
GCP 329R MOV	0.005	0.007	0.012
GCP 333R	0.007	0.012	0.018
GCP 334R MOV	0.008	0.007	0.010
GCP 507 MOV	0.010	0.010	0.011

GCP 514 MOV	0.007	0.009	0.015
GCP 515 MOV	0.007	0.007	0.010
GCP 515 MOV ALT	0.007	0.008	0.011
GCP 517 MOV	0.009	0.010	0.014
GCP 521R MOV	0.008	0.009	0.011
GCP 525R MOV	0.013	0.013	0.017
GCP 526R MOV	0.008	0.008	0.010
GCP 528R MOV	0.011	0.010	0.014
GCP 530R	0.009	0.010	0.012
GCP 531R MOV	0.004	0.004	0.009
GCP 532R MOV	0.006	0.007	0.011
GCP 543R MOV	0.022	0.023	0.046
GCP 534R MOV	0.011	0.011	0.015
GCP 535R MOV	0.044	0.074	0.291
GCP 536R MOV	0.010	0.011	0.014
GCP 537R MOV	0.011	0.010	0.013
GCP 615 MOV	0.009	0.011	0.016
GCP 632 MOV	0.009	0.009	0.013
GCP 633R MOV	0.010	0.012	0.015
GCP 634R MOV	0.009	0.010	0.014
GCP 635R MOV	0.009	0.009	0.011

GCP 636R MOV	0.012	0.009	0.016
GCP 642 MOV	0.009	0.010	0.017
GCP 645R MOV	0.008	0.009	0.013
GCP 708 MOV	0.007	0.007	0.017
GCP 709 MOV	0.010	0.010	0.018
GCP 732R MOV	0.023	0.015	0.018
GCP 734R MOV	0.010	0.011	0.016
GCP 741R MOV	0.009	0.010	0.012
GCP 745R MOV	0.011	0.011	0.015
GCP 748R MOV	0.008	0.008	0.009
GCP 751R	0.016	0.017	0.022
GCP 812 MOV	0.009	0.010	0.015
GCP 827R MOV	0.009	0.010	0.012
GCP 829R MOV	0.009	0.011	0.015
GCP 830R MOV	0.009	0.010	0.015
GCP 835R MOV	0.009	0.009	0.012
GCP 950R	0.008	0.011	0.011
HOTEL 0715 PM	0.008	0.008	0.009
HOTEL 0716 AM	0.012	0.011	0.012
HOTEL 0717 AM	0.010	0.009	0.014
HOTEL 0718 AM	0.014	0.014	0.023

HOTEL_AM	0.007	0.007	0.012
HOTEL_pm	0.010	0.012	0.014
HOTEL_VT	0.007	0.007	0.008
HOTEL1_CS	0.007	0.007	0.012
HOTEL1_MORNING	0.007	0.007	0.009
HOTEL2_CS2	0.007	0.007	0.013
HOTEL2_MORNING	0.007	0.007	0.008
HOTEL2	0.008	0.008	0.009
HOTEL4_CS	0.006	0.007	0.011
HOTEL5_MORNING	0.011	0.011	0.013
HOTEL5	0.008	0.008	0.010
HOTEL6	0.024	0.024	0.037
HOTEL7_MORNING	0.041	0.028	0.046
JTOWN_HTL	0.009	0.008	0.010
NA1829_RTK	0.009	0.010	0.012
NA1829	0.011	0.012	0.013
NYRM_NAD83(2011)_Epoch_2010_DS	0.003	0.003	0.004
RTN_NYCL	0.006	0.006	0.006
RTN_NYET	0.006	0.006	0.006
RTN_NYFV	0.006	0.006	0.006
RTN_NYHF	0.006	0.006	0.006

RTN_NYHL	0.006	0.006	0.006
RTN_NYHM	0.006	0.006	0.006
RTN_NYIL	0.006	0.006	0.006
RTN_NYML	0.006	0.006	0.006
RTN_NYMX	0.006	0.006	0.006
RTN_NYPB	0.006	0.006	0.006
RTN_NYWL	0.006	0.006	0.006
UTICA_HOTEL	0.008	0.008	0.010
UTICA_HTL	0.011	0.012	0.025
UTICA_Htl_smart	0.007	0.008	0.012

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
ECP_0139R	0.016	0.010	156°
ECP_1051R_MOV	0.011	0.010	32°
ECP_117R	0.010	0.008	160°
ECP_208_MOV	0.013	0.012	171°
ECP_225R_MOV	0.013	0.012	163°
ECP_227R_MOV	0.009	0.008	149°
ECP_227R_MOV_ALT	0.013	0.010	162°
ECP_228R_MOV	0.015	0.013	178°

ECP 233R MOV	0.010	0.009	177°
ECP 311R	0.013	0.011	168°
ECP 312R	0.018	0.013	176°
ECP 313R	0.009	0.008	151°
ECP 314R	0.014	0.011	9°
ECP 316R MOV	0.011	0.008	150°
ECP 317	0.009	0.008	161°
ECP 318	0.007	0.006	150°
ECP 320R MOV	0.010	0.009	163°
ECP 321R MOV	0.016	0.008	12°
ECP 322R MOV	0.009	0.007	179°
ECP 324R MOV	0.012	0.011	150°
ECP 325R MOV	0.008	0.006	175°
ECP 326R MOV	0.012	0.011	150°
ECP 332R MOV	0.010	0.009	153°
ECP 334R MOV	0.014	0.012	49°
ECP 335R 2 MOV	0.009	0.006	28°
ECP 336R MOV	0.019	0.013	158°
ECP 337R	0.020	0.013	169°
ECP 338R	0.012	0.011	1°
ECP 339R	0.014	0.013	170°

ECP 419R MOV	0.013	0.012	154°
ECP 438R MOV	0.013	0.012	143°
ECP 503 MOV	0.009	0.009	162°
ECP 505 MOV	0.011	0.009	151°
ECP 506 MOV	0.012	0.010	150°
ECP 507R MOV	0.009	0.008	157°
ECP 508R	0.010	0.009	0°
ECP 510R	0.013	0.012	6°
ECP 511R MOV	0.034	0.025	80°
ECP 512R MOV	0.010	0.008	170°
ECP 512R MOV ALT	0.010	0.008	170°
ECP 513R MOV	0.009	0.008	180°
ECP 514R MOV	0.017	0.010	27°
ECP 517 MOV	0.012	0.012	159°
ECP 519 MOV	0.016	0.015	164°
ECP 529R MOV	0.022	0.016	20°
ECP 530R MOV	0.013	0.012	135°
ECP 532R MOV	0.011	0.009	171°
ECP 534R MOV	0.010	0.009	6°
ECP 536R	0.018	0.015	156°
ECP 537R MOV	0.012	0.011	29°

ECP 538R	0.010	0.009	162°
ECP 557 MOV	0.012	0.011	168°
ECP 602 MOV	0.011	0.011	178°
ECP 604 MOV	0.012	0.010	8°
ECP 606 MOV	0.012	0.011	159°
ECP 609 MOV	0.012	0.010	163°
ECP 632R MOV	0.012	0.011	158°
ECP 633 MOV	0.011	0.011	21°
ECP 654 MOV	0.012	0.011	34°
ECP 704 MOV	0.014	0.012	3°
ECP 709 MOV	0.013	0.011	10°
ECP 714 MOV	0.013	0.012	164°
ECP 715R MOV	0.011	0.010	4°
ECP 716R MOV	0.031	0.026	72°
ECP 717R MOV	0.010	0.009	143°
ECP 718R MOV	0.009	0.009	166°
ECP 725 MOV	0.011	0.008	18°
ECP 726R MOV	0.014	0.009	17°
ECP 727R MOV	0.012	0.011	161°
ECP 730R MOV	0.012	0.011	171°
ECP 752R	0.012	0.011	4°

ECP 755R MOV	0.009	0.008	8°
ECP 756R MOV	0.021	0.016	164°
ECP 757R MOV	0.008	0.008	173°
ECP 758R MOV	0.010	0.009	18°
ECP 759R MOV	0.013	0.012	175°
ECP 760R MOV	0.012	0.011	18°
ECP 761R MOV	0.014	0.012	59°
ECP 764R MOV	0.014	0.011	15°
ECP 765R MOV	0.017	0.013	44°
ECP 815 MOV	0.012	0.011	167°
ECP 831R MOV	0.012	0.011	4°
ECP 833R MOV	0.012	0.011	13°
ECP 851R MOV	0.013	0.011	165°
ECP 852R MOV	0.012	0.011	3°
GCP 132R	0.010	0.008	157°
GCP 133R	0.011	0.011	16°
GCP 144R	0.012	0.009	10°
GCP 207 MOV	0.013	0.012	164°
GCP 219R MOV	0.009	0.008	176°
GCP 220R MOV	0.012	0.011	24°
GCP 221R MOV	0.011	0.010	4°

GCP 236R MOV	0.014	0.012	164°
GCP 243R MOV	0.013	0.012	176°
GCP 303 MOV	0.014	0.011	40°
GCP 304 MOV	0.010	0.006	173°
GCP 311	0.010	0.009	149°
GCP 315	0.012	0.011	166°
GCP 319R MOV	0.005	0.004	4°
GCP 320R MOV	0.012	0.008	168°
GCP 323R	0.011	0.011	163°
GCP 324R	0.009	0.008	155°
GCP 329R MOV	0.009	0.006	19°
GCP 333R	0.015	0.009	11°
GCP 334R MOV	0.009	0.009	106°
GCP 507 MOV	0.012	0.012	43°
GCP 514 MOV	0.012	0.009	175°
GCP 515 MOV	0.009	0.008	2°
GCP 515 MOV ALT	0.010	0.008	29°
GCP 517 MOV	0.012	0.011	164°
GCP 521R MOV	0.011	0.010	8°
GCP 525R MOV	0.017	0.016	46°
GCP 526R MOV	0.010	0.010	176°

GCP 528R MOV	0.014	0.013	69°
GCP 530R	0.013	0.011	11°
GCP 531R MOV	0.005	0.005	6°
GCP 532R MOV	0.009	0.008	21°
GCP 543R MOV	0.029	0.027	40°
GCP 534R MOV	0.014	0.013	168°
GCP 535R MOV	0.093	0.053	7°
GCP 536R MOV	0.014	0.012	177°
GCP 537R MOV	0.014	0.012	81°
GCP 615 MOV	0.014	0.011	14°
GCP 632 MOV	0.012	0.011	11°
GCP 633R MOV	0.015	0.012	172°
GCP 634R MOV	0.012	0.012	170°
GCP 635R MOV	0.012	0.011	160°
GCP 636R MOV	0.015	0.012	79°
GCP 642 MOV	0.012	0.011	147°
GCP 645R MOV	0.011	0.009	168°
GCP 708 MOV	0.009	0.008	150°
GCP 709 MOV	0.013	0.012	123°
GCP 732R MOV	0.030	0.016	115°
GCP 734R MOV	0.014	0.012	33°

GCP 741R MOV	0.012	0.011	167°
GCP 745R MOV	0.014	0.013	114°
GCP 748R MOV	0.010	0.010	174°
GCP 751R	0.021	0.020	153°
GCP 812 MOV	0.012	0.011	159°
GCP 827R MOV	0.012	0.011	162°
GCP 829R MOV	0.014	0.011	12°
GCP 830R MOV	0.013	0.011	26°
GCP 835R MOV	0.012	0.011	156°
GCP 950R	0.014	0.010	3°
HOTEL 0715 PM	0.010	0.009	176°
HOTEL 0716 AM	0.015	0.013	95°
HOTEL 0717 AM	0.013	0.011	51°
HOTEL 0718 AM	0.017	0.017	145°
HOTEL AM	0.009	0.008	62°
HOTEL pm	0.015	0.013	168°
HOTEL VT	0.009	0.009	118°
HOTEL1 CS	0.009	0.009	35°
HOTEL1 MORNING	0.009	0.008	20°
HOTEL2 CS2	0.009	0.008	32°
HOTEL2 MORNING	0.009	0.009	54°

HOTEL2	0.010	0.010	173°
HOTEL4_CS	0.008	0.008	0°
HOTEL5_MORNING	0.013	0.013	36°
HOTEL5	0.011	0.010	179°
HOTEL6	0.031	0.029	140°
HOTEL7_MORNING	0.051	0.035	90°
JTOWN_HTL	0.012	0.011	92°
NA1829_RTK	0.012	0.011	168°
NA1829	0.015	0.014	176°
NYRM_NAD83(2011)_Epoch_2010_DS	0.004	0.004	19°
RTN_NYCL	0.007	0.007	7°
RTN_NYET	0.007	0.007	3°
RTN_NYFV	0.007	0.007	179°
RTN_NYHF	0.007	0.007	178°
RTN_NYHL	0.007	0.007	175°
RTN_NYHM	0.007	0.007	0°
RTN_NYIL	0.007	0.007	179°
RTN_NYML	0.007	0.007	178°
RTN_NYMX	0.007	0.007	178°
RTN_NYPB	0.007	0.007	5°
RTN_NYWL	0.008	0.008	6°

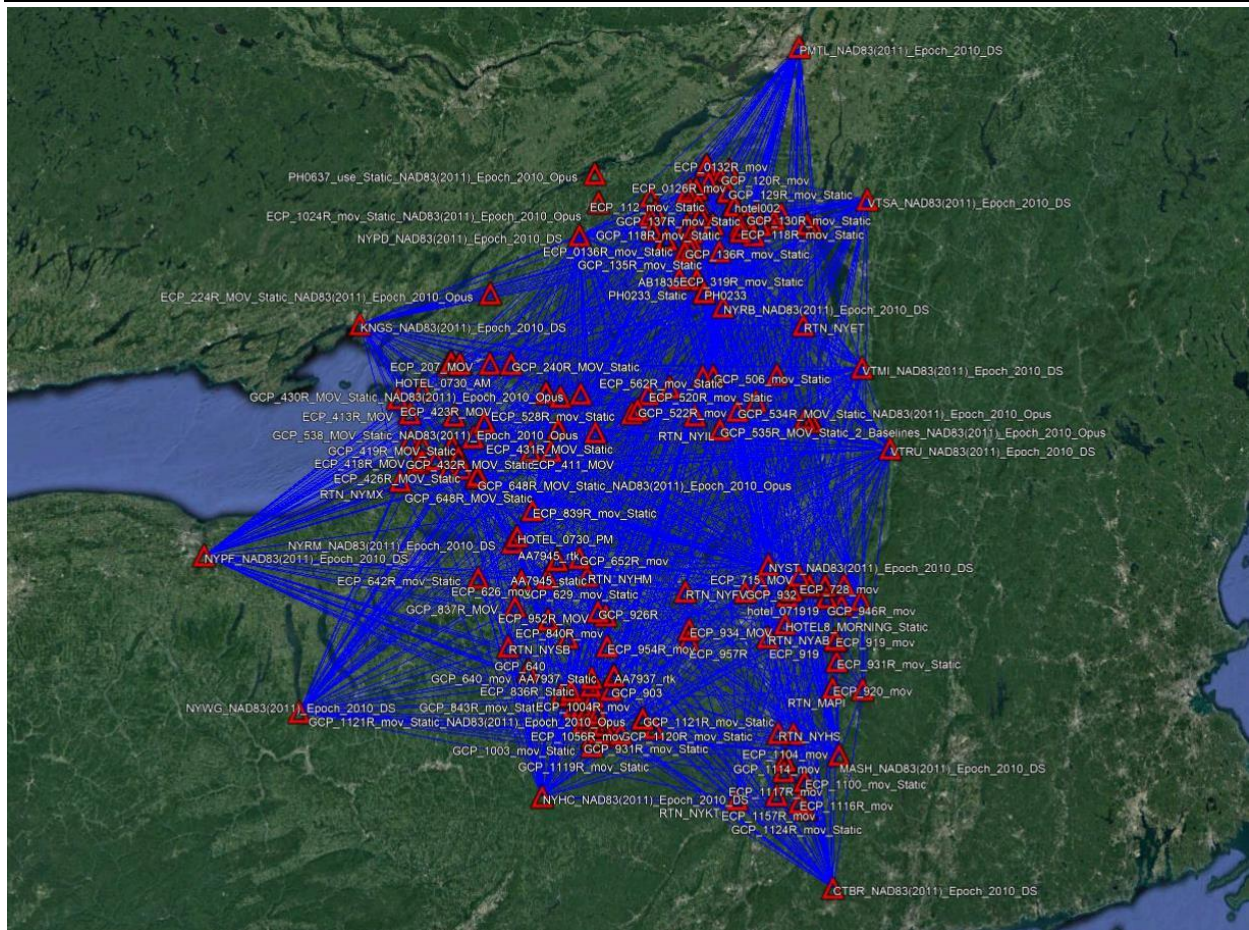
UTICA HOTEL	0.010	0.010	128°
UTICA HTL	0.015	0.014	163°
UTICA Htl smart	0.010	0.009	155°

Compass Data Inc

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Centennial, Colorado 80112
USA

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solutions@compassdatainc.com

Project File Data	Coordinate System
Name: 5977_Harris_Upstate_NewYork_2__v9.vce	Name: World wide/UTM
Size: 2 MB	Datum: ITRF
Modified: 8/29/2019 2:07:23 PM (UTC:-6)	Zone: 18 North
	Geoid: GEOID12B (Conus)



Network Adjustment Report

Adjustment Settings

Set-Up Errors

GNSS

Error in Height of Antenna: 0.007 m

Centering Error: 0.007 m

Covariance Display

Horizontal:

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 1.00

Chi Square Test (95%): Passed

Precision Confidence Level: 95%

Degrees of Freedom: 2291

Post Processed Vector Statistics

Reference Factor: 0.99

Redundancy Number: 2033.00

A Priori Scalar: 1.29

RTK Vector Statistics

Reference Factor: 1.01

Redundancy Number: 258.00

A Priori Scalar: 0.36

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	Δ Easting (Meter)	Δ Northing (Meter)	Δ Height (Meter)
NYRM NAD83(2011) Epoch 2010_DS	0.007	-0.010	0.000

Control Point Constraints

Point ID	Type	East σ (Meter)	North σ (Meter)	Height σ (Meter)
CTBR NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
KNGS NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed

MASH NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYHC NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYPD NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYPF NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYRB NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYST NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
NYWG NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
PMTL NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTBE NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTMI NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
VTRU NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
V TSA NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
Fixed = 0.000001(Meter)				

Adjusted Grid Coordinates

Point ID	Easting Error (Meter)	Northing Error (Meter)	Elevation Error (Meter)
AA7906	0.011	0.013	0.031
AA7937 RTK	0.009	0.009	0.014
AA7937	0.013	0.013	0.016

AA7945 RTK	0.010	0.011	0.015
AA7945	0.008	0.009	0.010
AB1835	0.006	0.006	0.012
AB3862 dot	0.008	0.009	0.011
AB3862 RTK	0.009	0.010	0.012
AB3865	0.012	0.010	0.016
AB38662	0.012	0.016	0.018
DE7081 RTK	0.008	0.009	0.009
DE7081	0.008	0.008	0.009
ECP 0105 MOV	0.010	0.011	0.014
ECP 0126R MOV	0.008	0.009	0.010
ECP 0131R	0.009	0.009	0.010
ECP 0132R MOV	0.009	0.010	0.014
ECP 0132R MOV ALT	0.009	0.010	0.015
ECP 0133R MOV	0.009	0.009	0.013
ECP 0136R MOV	0.007	0.007	0.008
ECP 0138R	0.009	0.011	0.013
ECP 0140R MOV	0.015	0.015	0.017
ECP 1003R MOV	0.009	0.009	0.010
ECP 1004R MOV	0.009	0.010	0.014
ECP 1052R MOV	0.008	0.008	0.009

ECP_1053R MOV	0.007	0.007	0.008
ECP_1054R MOV	0.008	0.009	0.010
ECP_1056R MOV	0.009	0.010	0.015
ECP_1057R MOV	0.009	0.010	0.012
ECP_1110 MOV	0.011	0.014	0.017
ECP_1104 MOV	0.009	0.009	0.013
ECP_1111R MOV	0.010	0.011	0.013
ECP_1112R MOV	0.009	0.010	0.011
ECP_1113R MOV	0.015	0.017	0.020
ECP_1116R MOV	0.008	0.010	0.012
ECP_1117R MOV	0.009	0.009	0.010
ECP_112 MOV	0.012	0.014	0.017
ECP_114R	0.009	0.009	0.012
ECP_1151R MOV	0.007	0.007	0.008
ECP_1152R MOV	0.009	0.009	0.013
ECP_1154R MOV	0.012	0.013	0.017
ECP_1157R MOV	0.009	0.010	0.013
ECP_116 MOV	0.019	0.020	0.024
ECP_118R MOV	0.009	0.009	0.012
ECP_0130R MOV	0.007	0.008	0.008
GCP_131R MOV	0.009	0.010	0.013

ECP 207 MOV	0.008	0.009	0.011
ECP 319R MOV	0.008	0.008	0.011
ECP 404 MOV	0.009	0.009	0.012
ECP 411 MOV	0.008	0.008	0.012
ECP 417R MOV	0.009	0.009	0.012
ECP 418R MOV	0.009	0.009	0.013
ECP 421R MOV	0.007	0.008	0.008
ECP 423R MOV	0.008	0.009	0.011
ECP 424R MOV	0.008	0.009	0.010
ECP 426R MOV	0.014	0.013	0.019
ECP 427R MOV	0.013	0.014	0.016
ECP 431R MOV	0.023	0.027	0.033
ECP 509R MOV REC	0.009	0.010	0.015
ECP 520R MOV	0.008	0.010	0.013
ECP 528R MOV	0.015	0.013	0.020
ECP 531R MOV	0.008	0.008	0.010
ECP 539R MOV REC	0.006	0.006	0.011
ECP 526R MOV	0.013	0.014	0.019
ECP 626 MOV	0.009	0.009	0.014
ECP 642R MOV	0.007	0.007	0.009
ECP 715 MOV	0.006	0.006	0.009

ECP 728 MOV	0.006	0.006	0.009
ECP 762R MOV	0.005	0.006	0.009
ECP 762R MOV ALT	0.005	0.006	0.008
ECP 763R MOV	0.006	0.006	0.009
ECP 836R	0.008	0.009	0.010
ECP 839R MOV	0.011	0.011	0.016
ECP 840R MOV	0.009	0.009	0.013
ECP 855R	0.009	0.012	0.015
ECP 917 MOV	0.007	0.007	0.012
ECP 919	0.006	0.006	0.008
ECP 919 MOV	0.006	0.006	0.008
ECP 920 MOV	0.009	0.009	0.012
ECP 931R MOV	0.011	0.011	0.017
ECP 934 MOV	0.008	0.008	0.012
ECP 952R MOV	0.009	0.009	0.011
ECP 954R MOV	0.009	0.010	0.013
ECP 957R	0.009	0.009	0.012
GCP 1003 MOV	0.015	0.013	0.017
GCP 1005 MOV	0.008	0.009	0.010
GCP 1009R MOV	0.009	0.009	0.012
GCP 1010R MOV	0.009	0.009	0.012

GCP 110 MOV	0.013	0.014	0.017
GCP 1114 MOV	0.009	0.010	0.012
GCP 1114 MOV smar	0.010	0.010	0.013
GCP 1114 MOV	0.011	0.010	0.015
GCP 1119R MOV	0.010	0.009	0.012
GCP 1120R MOV	0.012	0.011	0.027
GCP 1121R MOV	0.028	0.029	0.035
GCP 1124R MOV	0.016	0.017	0.020
GCP 117R MOV	0.008	0.009	0.012
GCP 118R MOV	0.012	0.013	0.016
GCP 119R MOV	0.009	0.010	0.014
GCP 119R MOV	0.010	0.010	0.014
GCP 120R MOV	0.009	0.011	0.015
GCP 121R MOV	0.013	0.018	0.023
GCP 129R MOV	0.018	0.019	0.020
GCP 130R MOV	0.019	0.019	0.023
GCP 135R MOV	0.011	0.012	0.014
GCP 136R MOV	0.009	0.009	0.010
GCP 137R MOV	0.011	0.012	0.016
GCP 138R MOV	0.016	0.016	0.019
GCP 140 MOV	0.009	0.010	0.015

GCP 146R MOV	0.009	0.010	0.013
GCP 240R MOV	0.015	0.013	0.016
GCP 410 MOV	0.008	0.008	0.010
GCP 419R MOV	0.010	0.010	0.012
GCP 432R MOV	0.015	0.014	0.027
GCP 440R MOV	0.009	0.009	0.013
GCP 441R MOV	0.009	0.010	0.013
GCP 506 MOV	0.007	0.007	0.008
GCP 516 MOV REC	0.005	0.005	0.010
GCP 516 MOV	0.008	0.008	0.010
GCP 522R MOV	0.009	0.009	0.015
GCP 629 MOV	0.007	0.007	0.008
GCP 640	0.009	0.009	0.012
GCP 640 MOV	0.009	0.009	0.012
GCP 648R MOV	0.020	0.020	0.024
GCP 652R MOV	0.010	0.010	0.014
GCP 819 MOV	0.020	0.021	0.024
GCP 837R MOV	0.008	0.009	0.011
GCP 843R MOV	0.012	0.012	0.017
GCP 903	0.009	0.010	0.013
GCP 917 MOV	0.009	0.009	0.015

GCP 926R	0.009	0.010	0.012
GCP 931R MOV	0.008	0.008	0.010
GCP 932	0.006	0.007	0.011
GCP 944R MOV	0.005	0.006	0.008
GCP 944R MOV ALT	0.005	0.006	0.008
GCP 946R MOV	0.005	0.006	0.008
GCP 946R MOV ALT	0.005	0.006	0.008
GCP 948R MOV	0.026	0.028	0.034
hotel 071919	0.007	0.007	0.008
hotel 071919 RTK	0.006	0.006	0.011
HOTEL 0728 PM	0.007	0.007	0.012
HOTEL 0729 AM	0.013	0.013	0.017
HOTEL 0729 PM	0.010	0.010	0.015
HOTEL 0730 AM	0.007	0.007	0.008
hotel001	0.008	0.009	0.011
hotel001	0.017	0.017	0.021
hotel002	0.009	0.010	0.011
hotel002	0.031	0.028	0.038
HOTEL8 MORNING	0.007	0.007	0.009
NYRM NAD83(2011) Epoch 2010 DS	0.003	0.003	0.004
PH0014 Needs Opus	0.028	0.031	0.089

PH0233	0.007	0.007	0.012
PH0233	0.015	0.014	0.020
RTN_MAPI	0.006	0.007	0.007
RTN_NYAB	0.006	0.006	0.007
RTN_NYET	0.006	0.006	0.007
RTN_NYFV	0.006	0.006	0.007
RTN_NYHM	0.006	0.006	0.007
RTN_NYHS	0.006	0.007	0.007
RTN_NYIL	0.006	0.006	0.007
RTN_NYKT	0.007	0.007	0.007
RTN_NYML	0.007	0.007	0.007
RTN_NYMX	0.006	0.007	0.007
RTN_NYON	0.006	0.006	0.007
RTN_NYPB	0.007	0.007	0.007
RTN_NYSB	0.006	0.006	0.007
RTN_NYWT	0.006	0.007	0.007

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
AA7906	0.017	0.014	21°
AA7937 RTK	0.012	0.011	175°

AA7937	0.016	0.016	1°
AA7945 RTK	0.014	0.012	159°
AA7945	0.011	0.010	6°
AB1835	0.008	0.008	29°
AB3862 dot	0.011	0.011	9°
AB3862 RTK	0.012	0.011	3°
AB3865	0.015	0.013	82°
AB38662	0.021	0.015	18°
DE7081 RTK	0.011	0.010	7°
DE7081	0.011	0.010	11°
ECP 0105 MOV	0.014	0.012	159°
ECP 0126R MOV	0.011	0.010	159°
ECP 0131R	0.011	0.011	167°
ECP 0132R MOV	0.013	0.011	174°
ECP 0132R MOV ALT	0.012	0.011	173°
ECP 0133R MOV	0.011	0.011	168°
ECP 0136R MOV	0.008	0.008	163°
ECP 0138R	0.014	0.011	157°
ECP 0140R MOV	0.019	0.019	95°
ECP 1003R MOV	0.011	0.011	158°
ECP 1004R MOV	0.012	0.011	173°

ECP 1052R MOV	0.010	0.010	176°
ECP 1053R MOV	0.009	0.009	171°
ECP 1054R MOV	0.011	0.011	2°
ECP 1056R MOV	0.013	0.011	162°
ECP 1057R MOV	0.012	0.011	161°
ECP 1110 MOV	0.017	0.014	167°
ECP 1104 MOV	0.011	0.011	14°
ECP 1111R MOV	0.013	0.012	166°
ECP 1112R MOV	0.012	0.012	7°
ECP 1113R MOV	0.021	0.019	11°
ECP 1116R MOV	0.012	0.010	14°
ECP 1117R MOV	0.011	0.011	163°
ECP 112 MOV	0.017	0.015	13°
ECP 114R	0.012	0.011	13°
ECP 1151R MOV	0.009	0.009	37°
ECP 1152R MOV	0.012	0.011	159°
ECP 1154R MOV	0.016	0.015	6°
ECP 1157R MOV	0.013	0.011	153°
ECP 116 MOV	0.025	0.023	165°
ECP 118R MOV	0.012	0.012	61°
ECP 0130R MOV	0.010	0.009	167°

GCP 131R MOV	0.013	0.011	168°
ECP 207 MOV	0.011	0.011	171°
ECP 319R MOV	0.010	0.010	14°
ECP 404 MOV	0.011	0.011	8°
ECP 411 MOV	0.011	0.010	150°
ECP 417R MOV	0.011	0.011	159°
ECP 418R MOV	0.011	0.011	36°
ECP 421R MOV	0.010	0.009	168°
ECP 423R MOV	0.011	0.010	163°
ECP 424R MOV	0.011	0.010	174°
ECP 426R MOV	0.018	0.016	65°
ECP 427R MOV	0.018	0.016	176°
ECP 431R MOV	0.034	0.029	12°
ECP 509R MOV REC	0.013	0.011	169°
ECP 520R MOV	0.013	0.010	18°
ECP 528R MOV	0.019	0.016	111°
ECP 531R MOV	0.010	0.010	161°
ECP 539R MOV REC	0.007	0.007	18°
ECP 526R MOV	0.018	0.017	154°
ECP 626 MOV	0.012	0.011	172°
ECP 642R MOV	0.009	0.009	175°

ECP 715 MOV	0.008	0.007	160°
ECP 728 MOV	0.008	0.007	56°
ECP 762R MOV	0.007	0.007	160°
ECP 762R MOV ALT	0.007	0.007	161°
ECP 763R MOV	0.008	0.007	20°
ECP 836R	0.011	0.010	14°
ECP 839R MOV	0.014	0.013	129°
ECP 840R MOV	0.012	0.011	150°
ECP 855R	0.014	0.011	0°
ECP 917 MOV	0.009	0.008	38°
ECP 919	0.008	0.007	1°
ECP 919 MOV	0.007	0.007	178°
ECP 920 MOV	0.011	0.011	4°
ECP 931R MOV	0.014	0.013	51°
ECP 934 MOV	0.011	0.010	29°
ECP 952R MOV	0.011	0.011	3°
ECP 954R MOV	0.013	0.011	164°
ECP 957R	0.011	0.011	39°
GCP 1003 MOV	0.019	0.016	117°
GCP 1005 MOV	0.011	0.010	160°
GCP 1009R MOV	0.012	0.011	159°

GCP 1010R MOV	0.011	0.011	165°
GCP 110 MOV	0.017	0.017	166°
GCP 1114 MOV	0.012	0.011	180°
GCP 1114 MOV smar	0.013	0.012	15°
GCP 1114 MOV	0.014	0.013	69°
GCP 1119R MOV	0.013	0.011	92°
GCP 1120R MOV	0.015	0.014	100°
GCP 1121R MOV	0.037	0.034	156°
GCP 1124R MOV	0.021	0.020	23°
GCP 117R MOV	0.012	0.010	159°
GCP 118R MOV	0.016	0.015	24°
GCP 119R MOV	0.013	0.011	170°
GCP 119R MOV	0.013	0.012	4°
GCP 120R MOV	0.014	0.012	169°
GCP 121R MOV	0.022	0.015	14°
GCP 129R MOV	0.023	0.022	163°
GCP 130R MOV	0.023	0.023	142°
GCP 135R MOV	0.015	0.013	166°
GCP 136R MOV	0.011	0.011	152°
GCP 137R MOV	0.016	0.014	180°
GCP 138R MOV	0.020	0.020	82°

GCP 140 MOV	0.013	0.012	174°
GCP 146R MOV	0.013	0.011	19°
GCP 240R MOV	0.018	0.016	106°
GCP 410 MOV	0.010	0.010	175°
GCP 419R MOV	0.013	0.012	15°
GCP 432R MOV	0.021	0.014	47°
GCP 440R MOV	0.011	0.011	4°
GCP 441R MOV	0.013	0.011	27°
GCP 506 MOV	0.009	0.009	174°
GCP 516 MOV REC	0.006	0.006	175°
GCP 516 MOV	0.010	0.010	95°
GCP 522R MOV	0.012	0.011	147°
GCP 629 MOV	0.009	0.009	157°
GCP 640	0.011	0.011	157°
GCP 640 MOV	0.011	0.011	157°
GCP 648R MOV	0.026	0.024	144°
GCP 652R MOV	0.013	0.012	147°
GCP 819 MOV	0.027	0.025	167°
GCP 837R MOV	0.011	0.010	10°
GCP 843R MOV	0.015	0.014	20°
GCP 903	0.012	0.011	162°

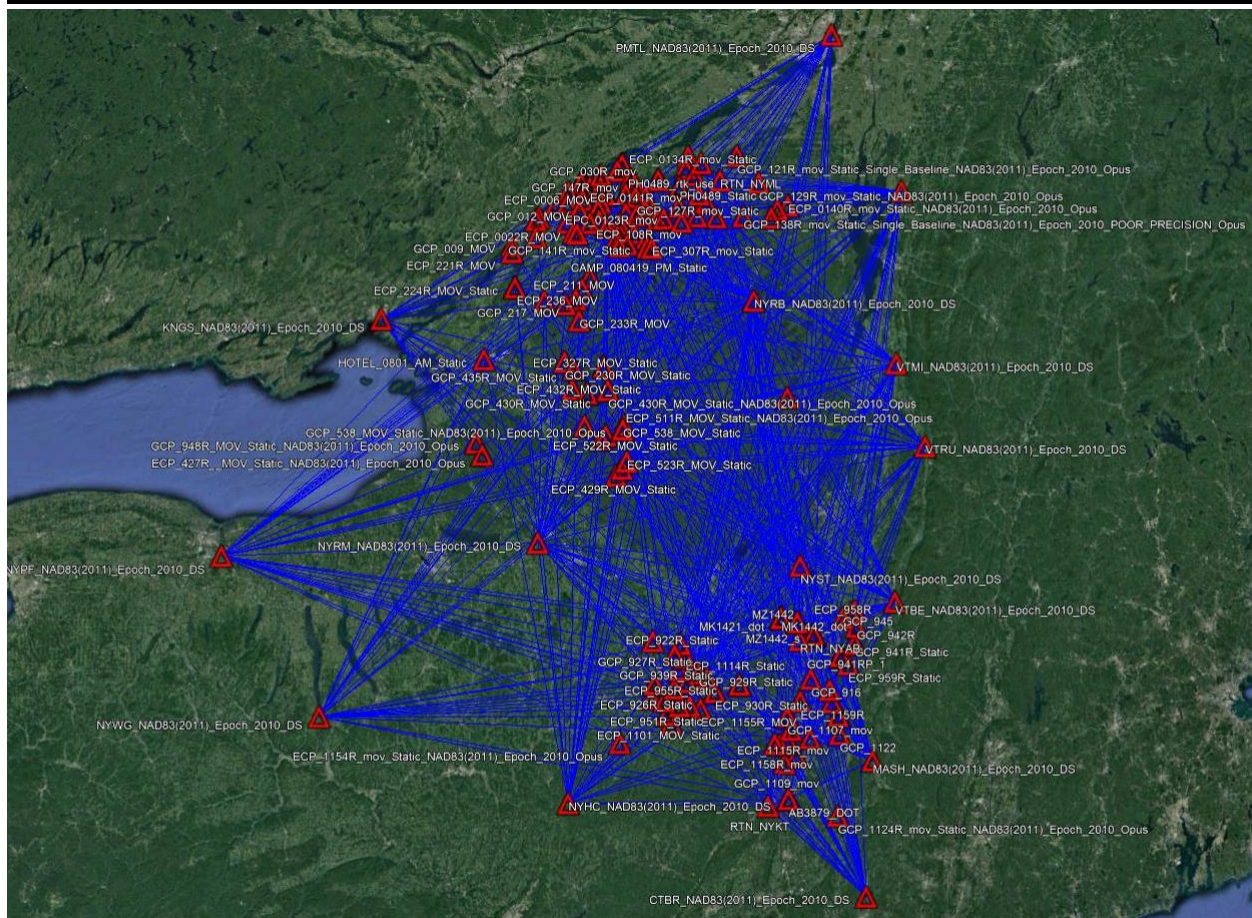
GCP 917 MOV	0.012	0.011	171°
GCP 926R	0.012	0.011	5°
GCP 931R MOV	0.011	0.010	101°
GCP 932	0.009	0.007	173°
GCP 944R MOV	0.008	0.007	162°
GCP 944R MOV ALT	0.008	0.007	163°
GCP 946R MOV	0.007	0.007	168°
GCP 946R MOV ALT	0.008	0.007	172°
GCP 948R MOV	0.035	0.032	168°
hotel 071919	0.009	0.009	29°
hotel 071919 RTK	0.008	0.008	51°
HOTEL 0728 PM	0.009	0.009	168°
HOTEL 0729 AM	0.017	0.016	72°
HOTEL 0729 PM	0.013	0.013	92°
HOTEL 0730 AM	0.009	0.009	69°
hotel001	0.011	0.011	172°
hotel001	0.022	0.021	169°
hotel002	0.012	0.011	11°
hotel002	0.039	0.034	109°
HOTEL8 MORNING	0.009	0.009	176°
NYRM NAD83(2011) Epoch 2010 DS	0.004	0.004	7°

PH0014 Needs Opus	0.042	0.030	145°
PH0233	0.009	0.009	14°
PH0233	0.020	0.017	116°
RTN_MAPI	0.008	0.008	176°
RTN_NYAB	0.008	0.008	178°
RTN_NYET	0.008	0.008	0°
RTN_NYFV	0.008	0.008	179°
RTN_NYHM	0.008	0.008	0°
RTN_NYHS	0.008	0.008	177°
RTN_NYIL	0.008	0.008	0°
RTN_NYKT	0.008	0.008	176°
RTN_NYML	0.008	0.008	178°
RTN_NYMX	0.008	0.008	0°
RTN_NYON	0.008	0.008	1°
RTN_NYPB	0.008	0.008	1°
RTN_NYSB	0.008	0.008	2°
RTN_NYWT	0.008	0.008	177°

Compass Data Inc
 7074 S. Revere Parkway
 Centennial, Colorado 80112
 USA

www.compassdatainc.com
 solutions@compassdatainc.com

Project File Data	Coordinate System
Name: 5977_Harris_Upstate_NewYork_3_v4.vce	Name: World wide/UTM
Size: 2 MB	Datum: ITRF
Modified: 8/29/2019 1:37:56 PM (UTC:-6)	Zone: 18 North
	Geoid: GEOID12B (Conus)



Network Adjustment Report

Adjustment Settings

Set-Up Errors

GNSS

Error in Height of Antenna: 0.007 m

Centering Error: 0.007 m

Covariance Display

Horizontal:

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 0.99

Chi Square Test (95%): Passed

Precision Confidence Level: 95%

Degrees of Freedom: 1610

Post Processed Vector Statistics

Reference Factor: 0.96

Redundancy Number: 1349.00

A Priori Scalar: 1.21

RTK Vector Statistics

Reference Factor: 1.11

Redundancy Number: 261.00

A Priori Scalar: 0.35

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	Δ Easting (Meter)	Δ Northing (Meter)	Δ Height (Meter)
NYRM NAD83(2011) Epoch 2010_DS	0.009	-0.012	-0.002

Control Point Constraints

Point ID	Type	East σ (Meter)	North σ (Meter)	Height σ (Meter)
CTBR NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
KNGS NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed

MASH NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYHC NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYPD NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYPF NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYRB NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYST NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYWG NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
PMTL NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTBE NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTMI NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTRU NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
V TSA NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
Fixed = 0.000001(Meter)				

Adjusted Grid Coordinates

Point ID	Easting Error (Meter)	Northing Error (Meter)	Elevation Error (Meter)
AA7903 DOT	0.008	0.009	0.013
AA7903	0.008	0.010	0.011
AB3879 DOT	0.009	0.010	0.014

AB3879	0.007	0.008	0.008
CAMP_080419_PM	0.009	0.009	0.010
ECP_0002_MOV	0.009	0.009	0.012
ECP_0006_MOV	0.004	0.006	0.008
ECP_0012_MOV	0.006	0.007	0.010
ECP_0018R_MOV	0.006	0.006	0.011
ECP_0022R_MOV	0.005	0.005	0.008
ECP_0025R_MOV	0.006	0.006	0.010
ECP_0026R_MOV	0.005	0.005	0.008
ECP_0026R_MOV_ALT	0.006	0.006	0.010
ECP_0027R_MOV	0.006	0.006	0.009
ECP_0028R_MOV	0.006	0.007	0.010
ECP_0029R_MOV	0.006	0.006	0.011
ECP_0030R_MOV	0.005	0.006	0.008
ECP_0032R_MOV	0.006	0.006	0.009
ECP_0051R_MOV	0.006	0.007	0.010
ECP_0053R_MOV	0.008	0.009	0.011
ECP_0054R_MOV	0.006	0.006	0.009
ECP_0104_MOV	0.009	0.010	0.017
ECP_0120R_MOV	0.006	0.009	0.013
ECP_0122R_MOV	0.006	0.007	0.009

ECP 0125R MOV	0.010	0.011	0.012
ECP 0128R MOV	0.013	0.013	0.017
ECP 0134R MOV	0.009	0.010	0.011
ECP 0141R MOV	0.009	0.010	0.015
ECP 0124R MOV	0.011	0.012	0.015
ECP 107R MOV	0.009	0.010	0.013
ECP 108R MOV	0.006	0.007	0.010
ECP 1101 MOV	0.018	0.020	0.025
ECP 1105 MOV	0.009	0.009	0.013
ECP 1105 MOV ALT	0.009	0.009	0.013
ECP 1107 MOV	0.008	0.008	0.010
ECP 110R MOV	0.006	0.006	0.011
ECP 1114R	0.014	0.013	0.017
ECP 1115R MOV	0.008	0.009	0.011
ECP 111R MOV	0.009	0.009	0.010
ECP 113R MOV	0.006	0.007	0.012
ECP 1155R MOV	0.007	0.008	0.010
ECP 1156R MOV	0.017	0.015	0.026
ECP 1158R MOV	0.008	0.009	0.011
ECP 1159R	0.008	0.009	0.011
ECP 0129R MOV	0.006	0.007	0.008

ECP 211 MOV	0.008	0.009	0.010
ECP 221R MOV	0.007	0.008	0.010
ECP 224R MOV	0.011	0.012	0.013
ECP 236 MOV	0.008	0.009	0.010
ECP 307R MOV	0.010	0.010	0.013
ECP 327R MOV ALT	0.013	0.013	0.016
ECP 327R MOV	0.012	0.013	0.020
ECP 429R MOV	0.007	0.008	0.009
ECP 432R MOV	0.047	0.019	0.038
ECP 437R MOV	0.009	0.008	0.013
ECP 522R MOV	0.008	0.010	0.011
ECP 523R MOV	0.007	0.008	0.011
ECP 653R MOV	0.010	0.012	0.023
ECP 906	0.028	0.033	0.049
ECP 921	0.009	0.009	0.011
ECP 922R	0.010	0.011	0.013
ECP 925R	0.007	0.007	0.008
ECP 926R	0.009	0.009	0.013
ECP 929	0.016	0.017	0.024
ECP 930R	0.023	0.023	0.036
ECP 951R	0.010	0.010	0.018

ECP 955R	0.016	0.015	0.018
ECP 956R MOV	0.012	0.012	0.013
ECP 958R	0.006	0.007	0.012
ECP 959R	0.012	0.010	0.015
ECP 960R MOV	0.008	0.008	0.010
ECP 961R MOV	0.007	0.007	0.009
ECP 962R MOV	0.006	0.006	0.011
EPC 0123R MOV	0.006	0.006	0.009
GCP 009 MOV	0.008	0.008	0.011
GCP 012 MOV	0.006	0.007	0.010
GCP 018 MOV	0.005	0.006	0.008
GCP 023R MOV	0.006	0.008	0.011
GCP 024R MOV	0.006	0.006	0.009
GCP 027R MOV	0.006	0.006	0.010
GCP 028R MOV	0.006	0.006	0.009
GCP 029R MOV	0.009	0.010	0.010
GCP 030R MOV	0.006	0.008	0.011
GCP 032R MOV	0.006	0.006	0.009
GCP 107 MOV	0.006	0.007	0.011
GCP 108 MOV	0.007	0.007	0.012
GCP 1107 MOV	0.012	0.012	0.019

GCP 1109 MOV	0.009	0.009	0.011
GCP 1122	0.008	0.008	0.010
GCP 1126R MOV	0.009	0.009	0.015
GCP 122R MOV	0.008	0.010	0.014
GCP 123R MOV	0.005	0.006	0.007
GCP 124R MOV	0.005	0.006	0.007
GCP 124R MOV	0.009	0.009	0.010
GCP 127R MOV	0.007	0.008	0.009
GCP 128R MOV	0.008	0.009	0.011
GCP 140 MOV ALT	0.008	0.008	0.011
GCP 141R MOV	0.009	0.009	0.011
GCP 142R MOV	0.005	0.006	0.009
GCP 147R MOV	0.005	0.006	0.008
GCP 217 MOV	0.008	0.008	0.009
GCP 226R MOV	0.005	0.006	0.008
GCP 230R MOV	0.009	0.009	0.015
GCP 233R MOV	0.008	0.009	0.013
GCP 247R MOV	0.008	0.008	0.010
GCP 428 MOV	0.007	0.007	0.010
GCP 435R MOV	0.016	0.016	0.053
GCP 538 MOV	0.017	0.017	0.021

GCP 916	0.008	0.008	0.012
GCP 920	0.006	0.006	0.011
GCP 920 ALT	0.006	0.006	0.010
GCP 927R	0.011	0.011	0.022
GCP 928R	0.016	0.014	0.020
GCP 929R	0.109	0.037	0.127
GCP 933	0.008	0.009	0.011
GCP 933 ALT	0.008	0.008	0.011
GCP 937R MOV	0.008	0.008	0.013
GCP 939R	0.008	0.010	0.012
GCP 941R	0.012	0.013	0.014
GCP 942R	0.005	0.007	0.010
GCP 945	0.007	0.007	0.012
HOTEL 0801 AM	0.009	0.009	0.010
hotel RTK	0.006	0.006	0.012
hotel use	0.008	0.008	0.009
MK1421 dot	0.008	0.008	0.010
MK1421 dot 2	0.009	0.012	0.017
MK1421	0.015	0.015	0.017
MK1442 dot	0.008	0.009	0.011
MZ1442 s	0.005	0.006	0.008

MZ1442	0.009	0.009	0.013
NYRM NAD83(2011) Epoch 2010 DS	0.004	0.004	0.005
PH0489 RTK use	0.008	0.009	0.011
PH0489	0.026	0.023	0.038
PH0637 RTK	0.006	0.009	0.013
PH0637 use	0.014	0.015	0.018
PH1042	0.014	0.015	0.016
PH1046 RTK	0.006	0.006	0.010
PH1046	0.024	0.024	0.027
PH2313 RTK	0.005	0.006	0.008
PH2313	0.012	0.012	0.014
RTN NYAB	0.006	0.006	0.007
RTN NYHL	0.006	0.006	0.006
RTN NYHS	0.006	0.006	0.007
RTN NYKT	0.006	0.006	0.007
RTN NYML	0.006	0.006	0.006

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
AA7903 DOT	0.011	0.010	2°
AA7903	0.013	0.009	18°

AB3879 DOT	0.012	0.011	138°
AB3879	0.009	0.009	3°
CAMP 080419 PM	0.012	0.011	173°
ECP 0002 MOV	0.012	0.011	163°
ECP 0006 MOV	0.007	0.005	164°
ECP 0012 MOV	0.009	0.007	167°
ECP 0018R MOV	0.008	0.007	171°
ECP 0022R MOV	0.007	0.007	6°
ECP 0025R MOV	0.008	0.007	160°
ECP 0026R MOV	0.007	0.006	152°
ECP 0026R MOV ALT	0.008	0.007	153°
ECP 0027R MOV	0.007	0.007	149°
ECP 0028R MOV	0.008	0.007	178°
ECP 0029R MOV	0.008	0.007	155°
ECP 0030R MOV	0.008	0.007	159°
ECP 0032R MOV	0.008	0.007	168°
ECP 0051R MOV	0.009	0.007	159°
ECP 0053R MOV	0.011	0.010	171°
ECP 0054R MOV	0.008	0.007	159°
ECP 0104 MOV	0.013	0.011	160°
ECP 0120R MOV	0.011	0.007	14°

ECP 0122R MOV	0.009	0.008	11°
ECP 0125R MOV	0.014	0.012	172°
ECP 0128R MOV	0.017	0.016	173°
ECP 0134R MOV	0.012	0.011	178°
ECP 0141R MOV	0.013	0.011	155°
ECP 0124R MOV	0.015	0.014	15°
ECP 107R MOV	0.012	0.012	6°
ECP 108R MOV	0.009	0.007	174°
ECP 1101 MOV	0.025	0.022	1°
ECP 1105 MOV	0.012	0.010	157°
ECP 1105 MOV ALT	0.012	0.010	156°
ECP 1107 MOV	0.010	0.010	160°
ECP 110R MOV	0.008	0.007	36°
ECP 1114R	0.017	0.017	89°
ECP 1115R MOV	0.011	0.010	161°
ECP 111R MOV	0.011	0.011	165°
ECP 113R MOV	0.009	0.007	166°
ECP 1155R MOV	0.010	0.009	158°
ECP 1156R MOV	0.022	0.017	124°
ECP 1158R MOV	0.011	0.010	31°
ECP 1159R	0.011	0.010	165°

ECP 0129R MOV	0.008	0.008	163°
ECP 211 MOV	0.011	0.010	179°
ECP 221R MOV	0.010	0.009	11°
ECP 224R MOV	0.015	0.013	8°
ECP 236 MOV	0.011	0.010	29°
ECP 307R MOV	0.013	0.012	163°
ECP 327R MOV ALT	0.016	0.016	166°
ECP 327R MOV	0.017	0.015	16°
ECP 429R MOV	0.010	0.009	152°
ECP 432R MOV	0.059	0.023	97°
ECP 437R MOV	0.011	0.010	73°
ECP 522R MOV	0.012	0.010	5°
ECP 523R MOV	0.010	0.008	16°
ECP 653R MOV	0.015	0.012	173°
ECP 906	0.041	0.034	165°
ECP 921	0.011	0.011	165°
ECP 922R	0.014	0.013	14°
ECP 925R	0.009	0.009	169°
ECP 926R	0.011	0.010	125°
ECP 929	0.021	0.020	25°
ECP 930R	0.034	0.022	46°

ECP 951R	0.013	0.012	63°
ECP 955R	0.020	0.018	86°
ECP 956R MOV	0.015	0.015	99°
ECP 958R	0.008	0.007	163°
ECP 959R	0.015	0.012	65°
ECP 960R MOV	0.010	0.009	139°
ECP 961R MOV	0.009	0.009	2°
ECP 962R MOV	0.008	0.007	22°
EPC 0123R MOV	0.008	0.007	177°
GCP 009 MOV	0.010	0.009	6°
GCP 012 MOV	0.008	0.007	165°
GCP 018 MOV	0.008	0.007	3°
GCP 023R MOV	0.010	0.008	169°
GCP 024R MOV	0.008	0.007	171°
GCP 027R MOV	0.008	0.007	151°
GCP 028R MOV	0.008	0.007	158°
GCP 029R MOV	0.012	0.012	149°
GCP 030R MOV	0.010	0.008	179°
GCP 032R MOV	0.008	0.007	159°
GCP 107 MOV	0.008	0.008	162°
GCP 108 MOV	0.009	0.008	49°

GCP 1107 MOV	0.016	0.014	40°
GCP 1109 MOV	0.011	0.011	12°
GCP 1122	0.011	0.010	159°
GCP 1126R MOV	0.011	0.010	27°
GCP 122R MOV	0.013	0.010	10°
GCP 123R MOV	0.007	0.006	160°
GCP 124R MOV	0.007	0.007	171°
GCP 124R MOV	0.011	0.010	29°
GCP 127R MOV	0.010	0.009	179°
GCP 128R MOV	0.011	0.010	13°
GCP 140 MOV ALT	0.011	0.010	169°
GCP 141R MOV	0.011	0.011	34°
GCP 142R MOV	0.007	0.007	6°
GCP 147R MOV	0.007	0.007	164°
GCP 217 MOV	0.010	0.010	18°
GCP 226R MOV	0.007	0.007	169°
GCP 230R MOV	0.012	0.011	146°
GCP 233R MOV	0.012	0.011	174°
GCP 247R MOV	0.011	0.010	152°
GCP 428 MOV	0.009	0.008	134°
GCP 435R MOV	0.023	0.016	42°

GCP 538 MOV	0.022	0.021	173°
GCP 916	0.011	0.010	43°
GCP 920	0.008	0.007	106°
GCP 920 ALT	0.008	0.007	117°
GCP 927R	0.014	0.012	39°
GCP 928R	0.020	0.017	90°
GCP 929R	0.139	0.037	102°
GCP 933	0.011	0.010	155°
GCP 933 ALT	0.011	0.010	152°
GCP 937R MOV	0.010	0.010	21°
GCP 939R	0.012	0.010	1°
GCP 941R	0.016	0.015	155°
GCP 942R	0.009	0.007	8°
GCP 945	0.009	0.008	129°
HOTEL 0801 AM	0.011	0.011	81°
hotel RTK	0.008	0.007	20°
hotel use	0.010	0.010	169°
MK1421 dot	0.010	0.010	4°
MK1421 dot 2	0.015	0.011	24°
MK1421	0.019	0.019	18°
MK1442 dot	0.011	0.010	6°

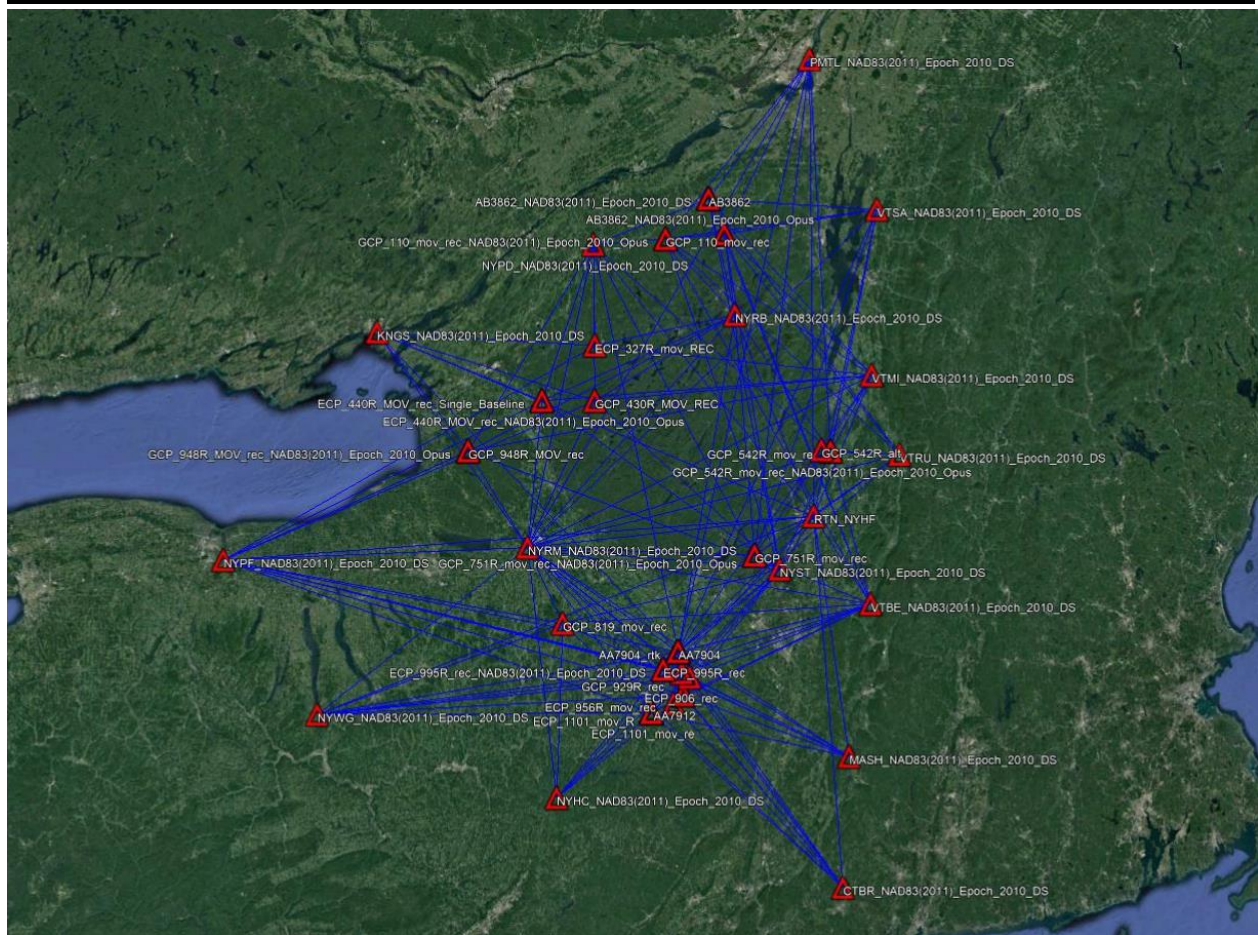
MZ1442_s	0.007	0.007	10°
MZ1442	0.012	0.011	82°
NYRM_NAD83(2011)_Epoch_2010_DS	0.005	0.005	35°
PH0489_RTK_use	0.011	0.010	164°
PH0489	0.035	0.026	118°
PH0637_RTK	0.012	0.007	14°
PH0637_use	0.019	0.017	7°
PH1042	0.019	0.017	6°
PH1046_RTK	0.008	0.007	151°
PH1046	0.030	0.030	146°
PH2313_RTK	0.008	0.006	19°
PH2313	0.015	0.015	4°
RTN_NYAB	0.008	0.008	180°
RTN_NYHL	0.008	0.008	176°
RTN_NYHS	0.008	0.008	179°
RTN_NYKT	0.008	0.008	1°
RTN_NYML	0.008	0.008	179°

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Project File Data	Coordinate System
Name: 5977_Harris_Upstate_NewYork_4_v3.vce	Name: World wide/UTM
Size: 476 KB	Datum: ITRF
Modified: 8/30/2019 1:26:49 PM (UTC:-6)	Zone: 18 North
	Geoid: GEOID12B (Conus)



Network Adjustment Report

Adjustment Settings

Set-Up Errors

GNSS

Error in Height of Antenna: 0.005 m

Centering Error: 0.005 m

Covariance Display

Horizontal:

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Three-Dimensional

Propagated Linear Error [E]: U.S.

Constant Term [C]: 0.000 m

Scale on Linear Error [S]: 1.960

Adjustment Statistics

Number of Iterations for Successful Adjustment: 2

Network Reference Factor: 1.00

Chi Square Test (95%): Passed

Precision Confidence Level: 95%

Degrees of Freedom: 368

Post Processed Vector Statistics

Reference Factor: 1.00

Redundancy Number: 350.00

A Priori Scalar: 1.31

RTK Vector Statistics

Reference Factor: 1.01

Redundancy Number: 18.00

A Priori Scalar: 0.34

Control Coordinate Comparisons

Values shown are control coordinates minus adjusted coordinates.

Point ID	Δ Easting (Meter)	Δ Northing (Meter)	Δ Height (Meter)
NYRM NAD83(2011) Epoch 2010_DS	0.006	-0.010	-0.010

Control Point Constraints

Point ID	Type	East σ (Meter)	North σ (Meter)	Height σ (Meter)
CTBR NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed
KNGS NAD83(2011) Epoch 2010_DS	Global	Fixed	Fixed	Fixed

MASH NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYHC NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYPD NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYPF NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYRB NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYST NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
NYWG NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
PMTL NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTBE NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTMI NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
VTRU NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
V TSA NAD83(2011) Epoch 2010 DS	Global	Fixed	Fixed	Fixed
Fixed = 0.000001(Meter)				

Adjusted Grid Coordinates

Point ID	Easting Error (Meter)	Northing Error (Meter)	Elevation Error (Meter)
AA7904	0.010	0.011	0.014
AA7904 RTK	0.006	0.006	0.007
AA7912	0.008	0.008	0.010

AA7912 RTK	0.006	0.007	0.009
AB3862	0.009	0.009	0.011
ECP 1101 MOV REC	0.007	0.007	0.012
ECP 1101 MOV REC	0.007	0.007	0.011
ECP 327R MOV REC	0.015	0.010	0.038
ECP 440R MOV REC	0.019	0.019	0.023
ECP 906 REC	0.012	0.011	0.042
ECP 956R MOV REC	0.007	0.009	0.014
ECP 955R ALT	0.009	0.010	0.011
GCP 110 MOV REC	0.008	0.009	0.022
GCP 138R MOV REC	0.014	0.020	0.054
GCP 430R MOV REC	0.008	0.009	0.020
GCP 542R ALT	0.005	0.005	0.010
GCP 542R MOV REC	0.007	0.008	0.009
GCP 751R MOV REC	0.009	0.009	0.013
GCP 819 MOV REC	0.007	0.007	0.023
GCP 929R REC	0.007	0.007	0.017
GCP 948R MOV REC	0.013	0.013	0.050
NYRM NAD83(2011) Epoch 2010 DS	0.004	0.004	0.005
RTN NYCS	0.005	0.005	0.006
RTN NYHF	0.005	0.005	0.006

Error Ellipse Components

Point ID	Semi-major axis (Meter)	Semi-minor axis (Meter)	Azimuth
AA7904	0.014	0.012	155°
AA7904_RTK	0.008	0.007	1°
AA7912	0.010	0.010	173°
AA7912_RTK	0.009	0.008	169°
AB3862	0.012	0.011	165°
ECP_1101_MOV_REC	0.009	0.008	143°
ECP_1101_MOV_REC	0.009	0.009	151°
ECP_327R_MOV_REC	0.019	0.013	89°
ECP_440R_MOV_REC	0.024	0.024	138°
ECP_906_REC	0.015	0.013	63°
ECP_956R_MOV_REC	0.012	0.009	14°
ECP_955R_ALT	0.012	0.012	172°
GCP_110_MOV_REC	0.012	0.010	168°
GCP_138R_MOV_REC	0.026	0.016	163°
GCP_430R_MOV_REC	0.011	0.010	168°
GCP_542R_ALT	0.007	0.006	127°
GCP_542R_MOV_REC	0.010	0.009	178°
GCP_751R_MOV_REC	0.012	0.011	127°

GCP_819_MOV_REC	0.009	0.009	86°
GCP_929R_REC	0.009	0.009	136°
GCP_948R_MOV_REC	0.018	0.014	137°
NYRM_NAD83(2011)_Epoch_2010_DS	0.005	0.005	152°
RTN_NYCS	0.006	0.006	10°
RTN_NYHF	0.006	0.006	174°