

OPUS-RS solution : 018506_14_258_A0.14O OP1410882033005

opus <opus@ngs.noaa.gov>

Tue 9/16/2014 9:50 AM

To: John Freetly <John.Freetly@neciusa.com>;

FILE: 018506_14_258_A0.14O OP1410882033005

2005 NOTE: The IGS precise and IGS rapid orbits were not available
 2005 at processing time. The IGS ultra-rapid orbit was/will be used to
 2005 process the data.

2005

6030 ***** WARNING *****

6030 One or both of the standard deviations associated with
 6030 horizontal coordinates is greater than 5 cm, and/or the
 6030 standard deviation associated with the vertical coordinate
 6030 is greater than 10 cm. This means that the vectors used to
 6030 determine your position did not agree as well as expected.
 6030 Often this is the result of problems with the adopted coordinates
 6030 at one or more of the reference stations selected by OPUS-RS.
 6030 If a problem reference station can be identified, it can
 6030 be excluded with the Exclude feature on the OPUS Options
 6030 page.
 6030

NGS OPUS-RS SOLUTION REPORT

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All computed coordinate accuracies are listed as 1-sigma RMS values.

For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: john.freetly@neciusa.com DATE: September 16, 2014
 RINEX FILE: 0185258p.14o TIME: 15:49:26 UTC

SOFTWARE: rsgps 1.37 RS91.prl 1.99.2 START: 2014/09/15 15:05:30
 EPHEMERIS: igu18101.eph [ultra-rapid] STOP: 2014/09/15 16:04:30
 NAV FILE: brdc2580.14n OBS USED: 4890 / 5130 : 95%
 ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 8.33/ 9.25
 ARP HEIGHT: 1.8000 NORMALIZED RMS: 0.326

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.70589)

X: -1310193.723(m) 0.089(m) -1310194.586(m) 0.089(m)
 Y: -4238757.658(m) 0.102(m) -4238756.410(m) 0.102(m)
 Z: 4568184.285(m) 0.074(m) 4568184.251(m) 0.074(m)

LAT: 46 1 45.46444 0.020(m) 46 1 45.48553 0.020(m)
 E LON: 252 49 25.31384 0.100(m) 252 49 25.25837 0.100(m)
 W LON: 107 10 34.68616 0.100(m) 107 10 34.74163 0.100(m)
 EL HGT: 938.389(m) 0.116(m) 937.714(m) 0.116(m)
 ORTHO HGT: 953.261(m) 0.117(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

	UTM (Zone 13)	SPC (2500 MT)
Northing (Y) [meters]	5099605.093	200400.020
Easting (X) [meters]	331574.281	779796.908
Convergence [degrees]	-1.56663991	1.69979507
Point Scale	0.99994874	0.99953848
Combined Factor	0.99980166	0.99939146

US NATIONAL GRID DESIGNATOR: 13TCL3157499605(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DI3062	BIL5 BILLINGS 5 CORS ARP	N455816.237	W1075947.298	63868.9
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	114922.5
DM7161	WYSH SHERIDAN CORS ARP	N444801.769	W1070035.715	137209.5
DI3425	P052 LRRNCHJRDNMT2006 CORS ARP	N472229.026	W1070107.185	150067.9
DL7758	P722 YNPBASSRCHMT2005 CORS ARP	N452725.985	W1093415.586	196925.9
DI2260	P054 TEREKALAKAMT2006 CORS ARP	N455046.833	W1042629.062	213077.2

NEAREST NGS PUBLISHED CONTROL POINT

RU0594	AGATE	N460027.890	W1071437.488	5739.1
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This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.