

OPUS-RS solution : 018773_14_248_A0.14O OP1410274258220

opus <opus@ngs.noaa.gov>

Tue 9/9/2014 9:02 AM

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

FILE: 018773_14_248_A0.14O OP1410274258220

6011 Warning - OPUS-RS was able to find a set of reference stations
 6011 with data suitable for use with your dataset. However, your
 6011 position does not fall within the polygon enclosing these reference
 6011 stations. This means that the geographic interpolation algorithms
 6011 performed within OPUS-RS must instead perform extrapolation.
 6011 Extrapolation, especially if your position is far from the
 6011 reference stations, is prone to error. Use this solution with
 6011 caution.

bi15
 mtei
 p033
 p722

Your station is 15.6 KM outside the polygon enclosing the reference stations

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
 RINEX FILE: 0187248b.14o

DATE: September 09, 2014
 TIME: 15:02:05 UTC

SOFTWARE: rsgps 1.37 RS93.prl 1.99.2 START: 2014/09/05 01:09:55
 EPHEMERIS: igr18085.eph [rapid] STOP: 2014/09/05 02:22:00
 NAV FILE: brdc2480.14n OBS USED: 2852 / 3376 : 84%
 ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 56.47/ 68.99
 ARP HEIGHT: 1.800 NORMALIZED RMS: 0.312

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.67691)

X: -1358666.632(m) 0.004(m) -1358667.491(m) 0.004(m)
 Y: -4298752.251(m) 0.024(m) -4298750.996(m) 0.024(m)
 Z: 4498515.662(m) 0.023(m) 4498515.619(m) 0.023(m)

LAT: 45 7 47.29583 0.005(m) 45 7 47.31637 0.005(m)
 E LON: 252 27 37.08701 0.007(m) 252 27 37.03224 0.007(m)
 W LON: 107 32 22.91299 0.007(m) 107 32 22.96776 0.007(m)
 EL HGT: 1380.552(m) 0.032(m) 1379.860(m) 0.032(m)
 ORTHO HGT: 1393.499(m) 0.033(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

	UTM (Zone 13)	SPC (2500 MT)
Northing (Y) [meters]	5000508.154	99718.939
Easting (X) [meters]	300285.627	754186.485
Convergence [degrees]	-1.80049437	1.43396912
Point Scale	1.00009046	0.99992457
Combined Factor	0.99987404	0.99970818

US NATIONAL GRID DESIGNATOR: 13TCL0028500508(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DI3062	BIL5 BILLINGS 5 CORS ARP	N455816.237	W1075947.298	100101.5
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	107634.9
DJ8992	P033 TENSLEEPTRWY2005 CORS ARP	N435710.415	W1072315.121	131365.6
DL7758	P722 YNPBASSRCHMT2005 CORS ARP	N452725.985	W1093415.586	163470.5

NEAREST NGS PUBLISHED CONTROL POINT

Information on nearest mark is not available due to database connectivity issues or has restrictions on when or how it can be published.

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.