

OPUS-RS solution : 018697_14_252_A0.14O OP1410738783845

opus <opus@ngs.noaa.gov>

Sun 9/14/2014 5:56 PM

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

FILE: 018697_14_252_A0.14O OP1410738783845

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.

wysh

bil6

bil5

mtei

Your station is 2.8 KM outside the polygon enclosing the reference stations

NGS OPUS-RS SOLUTION REPORT

=====

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: 0186252q.14o

DATE: September 14, 2014
TIME: 23:56:23 UTC

SOFTWARE: rsgps 1.37 RS94.prl 1.99.2 START: 2014/09/09 16:09:35
EPHEMERIS: igr18092.eph [rapid] STOP: 2014/09/09 17:08:40
NAV FILE: brdc2520.14n OBS USED: 2776 / 3096 : 90%
ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 12.85/ 43.20
ARP HEIGHT: 1.800 NORMALIZED RMS: 0.289

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.68957)

X: -1357197.193(m) 0.008(m) -1357198.051(m) 0.008(m)
Y: -4305111.543(m) 0.010(m) -4305110.288(m) 0.010(m)
Z: 4492697.100(m) 0.006(m) 4492697.056(m) 0.006(m)

LAT: 45 3 25.30357 0.004(m) 45 3 25.32408 0.004(m)
 E LON: 252 30 8.68382 0.007(m) 252 30 8.62919 0.007(m)
 W LON: 107 29 51.31618 0.007(m) 107 29 51.37081 0.007(m)
 EL HGT: 1228.385(m) 0.012(m) 1227.690(m) 0.012(m)
 ORTHO HGT: 1240.922(m) 0.015(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

	UTM (Zone 13)	SPC (2500 MT)
Northing (Y) [meters]	4992320.357	91717.992
Easting (X) [meters]	303347.284	757704.660
Convergence [degrees]	-1.76838275	1.46477292
Point Scale	1.00007554	0.99996625
Combined Factor	0.99988297	0.99977370

US NATIONAL GRID DESIGNATOR: 13TCK0334792320(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DM7161	WYSH SHERIDAN CORS ARP	N444801.769	W1070035.715	47914.2
DI3064	BIL6 BILLINGS 6 CORS ARP	N455816.251	W1075948.499	108848.1
DI3062	BIL5 BILLINGS 5 CORS ARP	N455816.237	W1075947.298	108838.4
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	115440.1

NEAREST NGS PUBLISHED CONTROL POINT

QV0323	POWER	N450320.820	W1072550.446	5263.3
--------	-------	-------------	--------------	--------

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.