

OPUS-RS solution : 018773_14_245_A0.14O OP1410210125450

opus <opus@ngs.noaa.gov>

Mon 9/8/2014 3:06 PM

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

FILE: 018773_14_245_A0.14O OP1410210125450

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: 0187245x.14oDATE: September 08, 2014
TIME: 21:06:33 UTCSOFTWARE: rsgps 1.37 RS94.prl 1.99.2 START: 2014/09/02 23:51:05
EPHEMERIS: igr18082.eph [rapid] STOP: 2014/09/03 01:40:30
NAV FILE: brdc2450.14n OBS USED: 6432 / 7308 : 88%
ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 19.38/ 61.13
ARP HEIGHT: 1.800 NORMALIZED RMS: 0.272

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.67132)

X: -1354404.983(m) 0.006(m) -1354405.842(m) 0.006(m)
Y: -4290296.004(m) 0.010(m) -4290294.750(m) 0.010(m)
Z: 4507498.087(m) 0.012(m) 4507498.045(m) 0.012(m)LAT: 45 14 47.08085 0.007(m) 45 14 47.10145 0.007(m)
E LON: 252 28 46.54889 0.004(m) 252 28 46.49403 0.004(m)
W LON: 107 31 13.45111 0.004(m) 107 31 13.50597 0.004(m)
EL HGT: 1165.195(m) 0.014(m) 1164.505(m) 0.014(m)
ORTHO HGT: 1178.988(m) 0.017(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

UTM (Zone 13) SPC (2500 MT)

Northing (Y) [meters] 5013414.554 112710.743
Easting (X) [meters] 302207.439 755376.341
Convergence [degrees] -1.79042040 1.44808346
Point Scale 1.00008105 0.99986103
Combined Factor 0.99989839 0.99967841

US NATIONAL GRID DESIGNATOR: 13TCL0220713414(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DM7161	WYSH SHERIDAN CORS ARP	N444801.769	W1070035.715	63843.5
DI3062	BIL5 BILLINGS 5 CORS ARP	N455816.237	W1075947.298	88715.0
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	101066.1
DL7758	P722 YNPBASSRCHMT2005 CORS ARP	N452725.985	W1093415.586	162413.8
DI3425	P052 LRRNCHJRDNMT2006 CORS ARP	N472229.026	W1070107.185	239737.0
DI2260	P054 TEREKALAKAMT2006 CORS ARP	N455046.833	W1042629.062	249534.3

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.