

OPUS-RS solution : 018772_14_266_A0.14O OP1411925753398

opus <opus@ngs.noaa.gov>

Sun 9/28/2014 11:40 AM

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

FILE: 018772_14_266_A0.14O OP1411925753398

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: 0187266v.14oDATE: September 28, 2014
TIME: 17:39:28 UTCSOFTWARE: rsgps 1.37 RS50.prl 1.99.2 START: 2014/09/23 21:55:00
EPHEMERIS: igr18112.eph [rapid] STOP: 2014/09/23 23:08:00
NAV FILE: brdc2660.14n OBS USED: 1959 / 2412 : 81%
ANT NAME: CHCX90D-OPUS NONE QUALITY IND. 13.75/ 45.89
ARP HEIGHT: 1.8000 NORMALIZED RMS: 0.367

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.72860)

X: -1318443.974(m) 0.004(m) -1318444.833(m) 0.004(m)
Y: -4306982.881(m) 0.013(m) -4306981.625(m) 0.013(m)
Z: 4502608.116(m) 0.010(m) 4502608.072(m) 0.010(m)LAT: 45 10 54.64637 0.014(m) 45 10 54.66718 0.014(m)
E LON: 252 58 46.99113 0.005(m) 252 58 46.93668 0.005(m)
W LON: 107 1 13.00887 0.005(m) 107 1 13.06332 0.005(m)
EL HGT: 1398.940(m) 0.008(m) 1398.240(m) 0.008(m)
ORTHO HGT: 1413.310(m) 0.012(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

UTM (Zone 13) SPC (2500 MT)

Northing (Y) [meters] 5005136.950 106657.093
Easting (X) [meters] 341275.647 794845.733
Convergence [degrees] -1.43337870 1.81392543
Point Scale 0.99990978 0.99989572
Combined Factor 0.99969052 0.99967646

US NATIONAL GRID DESIGNATOR: 13TCL4127505136(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	138600.5
DJ8992	P033 TENSLEEPTRWY2005 CORS ARP	N435710.415	W1072315.121	139673.9
DL7758	P722 YNPBASSRCHMT2005 CORS ARP	N452725.985	W1093415.586	202350.7

NEAREST NGS PUBLISHED CONTROL POINT

QV0445	SPRING	N450946.922	W1070400.886	4216.4
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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.