



NOAA's Online Positioning User Service (OPUS)

NOAA's National Geodetic Survey (NGS) provides simplified access to high-accuracy **National Spatial Reference System (NSRS)** coordinates via a Web service called the **Online Positioning User Service (OPUS)**. A user may upload to OPUS a GPS data file collected with a survey-grade receiver and obtain an NSRS position via email.

OPUS is one of the most popular of the NGS suite of geodetic tools. Every month, users voluntarily upload tens of thousands of GPS data files; each is automatically processed using standard NGS data and models to compute an accurate position.

OPUS requires minimal user input and uses software which computes coordinates for NGS' **Continuously Operating Reference Station (CORS)** network. The resulting positions are accurate and consistent with other National Spatial Reference System users.

OPUS provides several report formats, including a streamlined option for sharing reports on monumented survey control, such as tidal bench marks and other survey disks. The features provided by OPUS processing, storage, and formatting make the user's survey results more consistent, reliable, and accessible.

For more information, contact NGS:

- **On the Web**
geodesy.noaa.gov/OPUS
- **By email**
ngs.OPUS@noaa.gov



NGS OPUS SOLUTION REPORT

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USER: jia_rjia@noaa.gov          DATE: April 21, 2008
INDEX FILE: 8052104.D00        TIME: 14:12:02 ZTC

LAT: 33 41 45.77890  0.008(m)  33 41 45.79938  0.008(m)
E LONG: 266 23 59.54833  0.003(m)  266 23 59.51168  0.003(m)
N LONG: 33 56 11.92747  0.003(m)  33 56 11.92822  0.003(m)
ELEV: 75.487(m)  0.021(m)  74.627(m)  0.021(m)
ORIG DATE: 20080420  0.000(m)  (SOLVED) 8052104.D00

UTM COORDINATES      STATE PLANE COORDINATES
UTM (Zone 18)        SPC (3002 AR 5)
Easting (m) (meters): 372647.224      214261.184
Northing (m) (meters): 444343.243      251623.109
Convergence (degrees): -0.00301647     -0.003020489
Point Scale:         0.999983123      0.999983850
Combined Factor:     0.999983428      0.999983939
US NATIONAL GRID DESIGNATOR: 18PTW49442617 (Zone 18)
    
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BASE STATION USED

ID	DESIGNATION	LATITUDE	SOUTHING	DISTANCE (m)
AP0978	COLE BRIDGE CORS ASP	N304051.243	N0394723.416	78312.9
DP0794	DRIFTWOOD CORS ASP	N322333.451	N0394216.464	141002.9
DP0710	ARCH CAWDER CORS ASP	N332322.433	N0392427.804	69788.9

DESIGNATOR: 8052104.PUBLISHED CONTROL POINT: 805454778 N0393401.937 0.0

NOTE CORS ASP

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedure used.



130 feet northwesterly of PERCUY (see marker 362) and approximately 5 feet west of a low ridgepole. Mark is not the power pole.

Overall: 2008-04-11T13:53:02Z
Source: OPUS, 1000000.00

UNIT	UNIT ID	UNIT CODE
LAT: 33 41 32.59607	0.001 m	UTM 18
LONG: 70 29 42.60137	0.001 m	SPC 14080
ELEV: 76.000	0.001 m	NORTHING: 428464.541m 14080 7600
X: 113773.692	0.000 m	EASTING: 367980.081m 41010.000m
Y: 485322.099	0.000 m	CONVERGENCE: 1.16344457 0.07030007
Z: 396020.290	0.000 m	POINT SCALE: 0.99999136 0.99999464
ORIG DATE: 09.982	0.000 m	COMBINED FACTOR: 0.99998382 0.99998489

CONTRIBUTED BY: [jia_rjia](#), [MacKenzie](#)

FILE NAME: 8052104.P00

Map: [Map](#) | [Satellite](#) | [3D View](#)

Map data ©2008 The Terra Group, Inc.

The horizontal values for this position solution have satisfied the quality control criteria of the National Geodetic Survey. The contributor has verified that the information submitted is accurate and complete.

NSRS Coordinates