

National Geodetic Survey – National CORS Network

Neil WESTON and Giovanni SELLA, United States of America

Key words: GPS, Positioning, Reference Stations, CORSS

SUMMARY

The National Geodetic Survey (NGS), an office of NOAA's National Ocean Service, coordinates and operates one of the largest continuously operating reference station (CORS) networks in the United States. Receivers at each CORS station use satellites from the Global Navigation Satellite System (GNSS) by providing carrier phase and code range measurements in support of 3-dimensional positioning activities throughout the United States and its territories. Engineers, surveyors, scientists, GIS/LIS professionals and others can easily access and process CORS data, with their own GNSS receiver data, to position points.

The CORS system also allows users to obtain horizontal and vertical accuracies to within a few centimeters relative to the National Spatial Reference System (NSRS). The National CORS system benefits from a multi-purpose cooperative endeavor involving many local, state and federal government agencies, academic institutions, and commercial and private organizations. Stations are routinely evaluated for inclusion into the National CORS Network by using established and published criteria. GNSS data from stations in the National CORS Network are available, free of charge, from NGS in their original sampling rate for the last 30 days. After that time, the data are decimated to a 30 second sampling rate. The data and additional information on the National CORS Network can be accessed at www.ngs.noaa.gov/CORS.

CONTACTS

Dr. Neil Weston, Research Physicist
NOAA
SSMC#3, Room 8113
1315 East West Hwy
20910 Silver Spring
Maryland
UNITED STATES
Tel.: 301-713-2847
Fax: 301-713-4475
Email: neil.d.weston@noaa.gov

Dr. Giovanni Sella
UNITED STATES
Email: Giovanni.Sella@noaa.gov