The NOAA CORS Network (NCN) Services

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Continuously Operating Reference Station (CORS); GNSS; Multi-Year

Coordinates Solution (MYCS); Online Positioning User Service (OPUS); Reference

frames

**SUMMARY** 

NOAA's National Geodetic Survey (NGS) defines, manages, and provides access to the

National Spatial Reference System (NSRS), which includes a network of permanently

marked points, an accurate national shoreline, a network of Continuously Operating

Reference Stations (CORS) called the NOAA CORS Network (NCN), and a set of models

describing dynamic geophysical processes that affect spatial measurements. The NCN is a

cooperation of more than 240 federal, state, academic, and private organizations that own and

operate nearly 1700 CORS. 99% of these stations are partner-owned and operated in the U.S.,

its territories and areas of national interest. The partners are responsible for maintenance and

equipment upgrades. The contributing partners freely share their GNSS measurements and

station information with NGS in accordance with NGS's guidelines. NGS analyzes the NCN

data, distributes it free of charge, and uses it to support the Online Positioning User Service

(OPUS) and define and modernize the NSRS. This presentation addresses services that

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are

provided to the NCN users and partners: NCN data curation, the Multi-Year CORS Solution

campaigns that compute coordinates and velocities of NCN stations from data spanning from

1996, recent improvements in daily station monitoring, satellite orbit solutions contribution to

IGS, and strengthening the NCN connection to global/international frames through

Foundation CORS.

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