

UNAVCO Resources: Permanent GPS/GNSS Stations

634 Beth Bartel June 12, 2024 [GNSS Permanent Stations](#) 4772

UNAVCO Resources: Permanent GPS/GNSS Stations

The UNAVCO Facility acts as an information clearing house for the broader UNAVCO community with respect to permanent station installation, equipment, maintenance, and support issues. UNAVCO provides field engineer, budget, equipment purchase, design and development, infrastructure (communications and power), data retrieval, and archiving support. We install and operate GPS networks around the world in support of NSF and NASA initiatives, including direct support to stations that are a part of the International GPS Service for Geodynamics (IGS) network.

Working with UNAVCO



[Overview of Support Provided by UNAVCO](#)

Brief overview of UNAVCO support capabilities for project preparation and execution.



[Support Request Form](#)

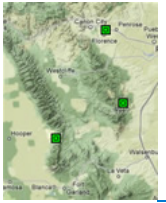
Use this online interface to request project support from UNAVCO.

Planning a Permanent Station Installation



[Permanent GPS/GNSS Station Planning: Technology, Equipment, Costs](#)

Primer on equipment, costs, and data management for permanent GPS/GNSS stations.



[Reconnaissance Guidelines and Security Considerations](#)

More detailed suggestions for site placement than given in the primer above.



[Sample Budget](#)

Example of various costs related to a general NSF-funded permanent station installation.

Station Documentation

A screenshot of a 'MONUMENT RECORD' form. The form is divided into several sections: 'GENERAL INFORMATION' at the top, followed by 'MARKER INFORMATION', 'MARKER DESCRIPTION', 'MARKER LOCATION', 'MARKER CONDITION', and 'MARKER HISTORY'. Each section contains various fields for data entry, such as 'Station Name', 'Marker Type', 'Material', 'Height', and 'Date Installed'. The form is designed to capture detailed information about a survey monument.

[UNAVCO Monument Record Form \(.pdf\)](#)

Document new or poorly documented survey monuments (information about the marker only).

A screenshot of a 'NEW PERMANENT STATION' form. The form is a grid-based data entry sheet with multiple rows and columns. It includes sections for 'STATION INFORMATION', 'EQUIPMENT INFORMATION', and 'INSTALLATION INFORMATION'. The form is used to collect essential data for new permanent stations, including station name, equipment type, and installation details.

[UNAVCO New Permanent Station Minimum Information Form](#)

Submit the information needed to UNAVCO to begin data archiving.

A screenshot of a 'CONTINUOUS SITE INSTALLATION REPORT' template. The document is a multi-page report with a header section, followed by several numbered sections: '1. GENERAL INFORMATION', '2. EQUIPMENT INFORMATION', '3. INSTALLATION INFORMATION', and '4. COMMENTS'. Each section contains a list of fields to be filled out, providing a structured format for documenting a permanent station installation.

[UNAVCO Continuous Site Installation Report Template \(2010, .doc\)](#)

Document a permanent station installation including marker information, equipment, communications, etc.

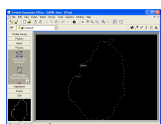
Equipment



[GNSS Equipment List with Vendor Information](#)

A list of equipment available on loan through UNAVCO and vendor information for scientists looking to buy their own components.

Data Processing



[UNAVCO Resources: Data Processing Software](#)

Different processing software is appropriate for different survey types. Outlines several data processing options.

Online URL: <https://kb.unavco.org/article/unavco-resources-permanent-gps-gnss-stations-634.html>