

Resource Summary Report

Generated by SPARC SAWG on Sep 14, 2026

UNAVCO

RRID:SCR_006706

Type: Tool

Proper Citation

UNAVCO (RRID:SCR_006706)

Resource Information

URL: <http://www.unavco.org/>

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Description: A non-profit university-governed consortium that facilitates geoscience research and education using geodesy. It provides access to and submission of Geodetic GPS / GNSS Data, Geodetic Imaging Data, Strain and Seismic Borehole Data, and Meteorological Data. Data access web services/API provides the ability to use a command line interface to query metadata and obtain URLs to data and products. UNAVCO also provides a variety of software, including web applications, and desktop utilities for scientists, instructors, students, and others. Web-based data visualization and mapping tools provide users with the ability to view postprocessed data while web-based geodetic utilities provide ancillary information. Downloadable stand-alone software utilities include applications for configuring instruments, managing data collection, download and transfer, and performing computations on the raw data, e.g., data pre-processing or processing. The UNAVCO Facility in Boulder, Colorado is the primary operational activity of UNAVCO and exists to support university and other research investigators in their use of geophysical sensor technology for Earth sciences research. The Facility performs this task in part by archiving GNSS/GPS data and data products for current and future applications. Other data types that scientists use for Earth deformation studies are also held in the UNAVCO Archive collections. UNAVCO operates a community Archive, which provides long-term secure storage and easy retrieval of GNSS data, strain data, various derived products and related metadata. The Archive primarily stores high-precision geodetic data used for research purposes, collected under National Science Foundation and NASA sponsored projects. UNAVCO provides many learning opportunities including: Short Courses and Workshops, Educational Resources, RESESS Research Student Internships, and Technical Training.

Abbreviations: UNAVCO

Synonyms: University NAVSTAR Consortium

Resource Type: consortium, data or information resource, organization portal, portal

Keywords: gps, geodesy, motion, rock, ice, water, earth surface, gnss, geoscience, geophysical survey, geophysical observatory, geophysical instrument, earth sciences, global positioning system, data archive, geology, geological mapping

Funding: NSF ;
NASA

Availability: The community can contribute to this resource

Resource Name: UNAVCO

Resource ID: SCR_006706

Alternate IDs: ISNI: 0000 0004 0505 9642, Wikidata: Q7865191, grid.239102.b, nlx_154719

Alternate URLs: <https://ror.org/02n9tn974>

Record Creation Time: 20220129T080237+0000

Record Last Update: 20260912T195644+0000

Ratings and Alerts

No rating or validation information has been found for UNAVCO.

No alerts have been found for UNAVCO.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 32 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Turco MJ, et al. (2025) A Century (1906-2024) of Groundwater and Land Subsidence Studies in Greater Houston Region: A Review. Ground water, 63(4), 459.

Nigusie A, et al. (2024) Machine learning based storm time modeling of ionospheric vertical total electron content over Ethiopia. Scientific reports, 14(1), 19293.

Dandabathula G, et al. (2024) Physical features of Adam's Bridge interpreted from ICESat-2 based high-resolution digital bathymetric elevation model. Scientific reports, 14(1), 14896.

Kassa Y, et al. (2024) Nighttime ionospheric irregularity during intense geomagnetic storm events over the Europe-African longitudinal sector. *Heliyon*, 10(19), e38138.

Sulungu ED, et al. (2024) Performance of IRI 2016 model in predicting total electron content (TEC) compared with GPS-TEC over East Africa during 2019-2021. *Scientific reports*, 14(1), 10010.

Dandabathula G, et al. (2024) A High-Resolution Digital Bathymetric Elevation Model Derived from ICESat-2 for Adam's Bridge. *Scientific data*, 11(1), 705.

Bai Y, et al. (2023) Fast and slow intraplate ruptures during the 19 October 2020 magnitude 7.6 Shumagin earthquake. *Nature communications*, 14(1), 2015.

Martire L, et al. (2023) The GUARDIAN system-a GNSS upper atmospheric real-time disaster information and alert network. *GPS solutions*, 27(1), 32.

Sheng Y, et al. (2022) Monitoring Seismic Velocity Changes Across the San Jacinto Fault Using Train-Generated Seismic Tremors. *Geophysical research letters*, 49(19), e2022GL098509.

Premus J, et al. (2022) Bridging time scales of faulting: From coseismic to postseismic slip of the Mw 6.0 2014 South Napa, California earthquake. *Science advances*, 8(38), eabq2536.

Churchill RM, et al. (2022) Afterslip Moment Scaling and Variability From a Global Compilation of Estimates. *Journal of geophysical research. Solid earth*, 127(4), e2021JB023897.

Troia G, et al. (2022) GPS data from 2019 and 2020 campaigns in the Chesapeake Bay region towards quantifying vertical land motions. *Scientific data*, 9(1), 744.

Elliott JL, et al. (2022) Cascading rupture of a megathrust. *Science advances*, 8(18), eabm4131.

Kim J, et al. (2021) Crustal Strain Patterns Associated With Normal, Drought, and Heavy Precipitation Years in California. *Journal of geophysical research. Solid earth*, 126(1), e2020JB019560.

Bell AF, et al. (2021) Caldera resurgence during the 2018 eruption of Sierra Negra volcano, Galapagos Islands. *Nature communications*, 12(1), 1397.

Luo Y, et al. (2020) Analysis of Ionospheric Disturbances Caused by the 2018 Bering Sea Meteor Explosion Based on GPS Observations. *Sensors (Basel, Switzerland)*, 20(11).

Bontemps N, et al. (2020) Rain and small earthquakes maintain a slow-moving landslide in a persistent critical state. *Nature communications*, 11(1), 780.

Bletery Q, et al. (2020) Slip bursts during coalescence of slow slip events in Cascadia. *Nature communications*, 11(1), 2159.

Stamps DS, et al. (2020) Author Correction: A Geodetic Strain Rate Model for the East African Rift System. *Scientific reports*, 10(1), 155.

Barbot S, et al. (2020) Mantle flow distribution beneath the California margin. *Nature communications*, 11(1), 4456.