

The Global Seismograph Network

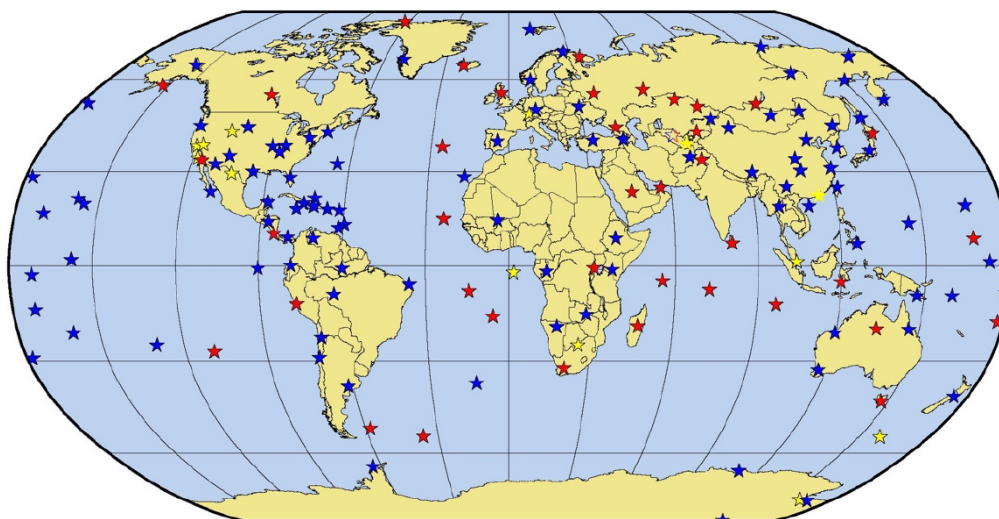
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The Global Seismograph Network (GSN) is a cooperative program to maintain a high quality, very broad band network of seismic stations with a worldwide distribution. It is supported by the USGS and the National Science Foundation (NSF), along with contributions from other Federal Agencies such as the Department of Energy and the Department of State. Operations are divided among the USGS Albuquerque Seismic Laboratory, with about 100 stations of the IU, CU, and IC networks, and the NSF SAGE facility, which includes a subaward to the University of California San Diego's (UCSD) Project IDA, with about 40 stations of the II network. With its beginnings in 1986 as a founding program of the Incorporated Research Institutions for Seismology (IRIS), the GSN has delivered unique value to research scientists and the monitoring mission of the USGS National Earthquake Information Center.

Over the last 3-4 years, efforts have focussed on upgrading the GSN network by replacing the original VBB sensors (Geotech KS54000 and Streckeisen STS-1) with new borehole seismometers and integrated vault sensors. This has improved performance in data quality (Ringler et al., Reviews of Geophysics, 2022) and calibrated waveforms. Ongoing development efforts include standardizing station communications and power. Recent concern by NSF and others about how often the GSN is used and properly cited in research journals was investigated (Staats et al., submitted to SRL, 2023). Over the past year, there have been changes in management with Bob Busby serving as Interim Program Manager, changes in governance from the IRIS GSN Standing Committee to the EarthScope GSN Advisory Committee, and a transition to EarthScope as the operator of the II stations beginning in October 2024, following the long, steady operation by UCSD's Project IDA. The GSN is expected to continue to record high quality data and facilitate research and monitoring for decades to come.



★ IRIS/IDA Stations ★ IRIS/USGS Stations ★ Affiliate Stations
☆ Planned Stations