



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 22-124

Dear Colleague Letter: Seafloor Geodesy 2022

September 19, 2022

Dear Colleagues:

NSF recognizes the unique contribution of offshore geodetic measurements and recently funded the construction of 48 seafloor geodetic transponders, their benchmarks, and 3 wave gliders. A community workshop and report <https://www.seafloorgeodesy.org/post/future-directions-in-seafloor-geodesy-2021-community-workshop> highlighted several recommendations for the application of seafloor geodetic techniques to constraining offshore geodetic measurements in different environments. A follow-on community workshop <https://www.seafloorgeodesy.org/post/workshop-on-the-alaska-and-cascadia-seafloor-geodetic-community-experiment> discussed the design of a community experiment to deploy a subset of this instrument pool in the Cascadia and Alaskan subduction zones.

The subduction community experiment will only use a subset of the instruments available which leaves enough instruments to address other science needs. Considering this, NSF invites proposals for field campaigns to deploy seafloor transponders from the existing instrument pool for 1-4 sites at tectonic settings consistent with priorities identified in the 2021 Community Workshop report. The geodetic instruments have a depth limit of 3000 m. A multi-year deployment is envisioned with requisite waveglider surveys. Of particular interest are proposals that target volcanic processes, transform processes, plate motions, or polar regions.

PROPOSAL PREPARATION AND SUBMISSION

Projects can be PI-driven or Community-driven. Proposers should contact program officers Gail Christeson gchriste@nsf.gov or Michael Jackson mejacks@nsf.gov early in the proposal development process for seafloor geodetic facility budget preparation guidance. Proposals should be submitted by **February 15, 2023**, for full consideration.

TO WHAT PROGRAM SHOULD I SUBMIT MY PROPOSAL?

While additional funds may be provided by other programs as appropriate, interested parties

should plan to submit all proposals for deployment of these seafloor geodetic instruments to the [Marine Geology and Geophysics \(MG&G\)](#) Program.

PEER REVIEW AND FUNDING

Proposals will be reviewed with and compete for funding with other proposals submitted to the MG&G Program. As such, the total budget should be commensurate with the proposed scope of activities.

Sincerely,

Alexandra R. Isern
Assistant Director
Directorate for Geoscience