

NSF SAGE-Facility Begins Procurement of Rapid Response Instrumentation

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Geohazards cause billions of dollars in U.S. economic losses, loss of life, injuries, and significant disruption to lives and livelihoods on an annual basis. The ability of the geoscience community to respond rapidly after a hazardous event, or at the start of precursors, allows for the collection of critical data to understand the physical processes responsible for these destructive events. The Seismological Facility for the Advancement of Geoscience (SAGE) is an NSF-funded facility operated by the Incorporated Research Institutions for Seismology (IRIS). As a part of the SAGE award, and after several years of gathering community input, IRIS is ready to begin procurement of a new suite of instrumentation specifically for rapidly responding to geohazard events. During the past year, staff at the IRIS/PASSCAL Instrument Center have conducted instrument testing and evaluation to inform the preferred mix of instrumentation for the new rapid response equipment pool—which is expected to include broadband and nodal seismometers, digitizers, and infrasound sensors. This effort has been guided by recommendations from a Rapid Response Community Whitepaper, with ongoing oversight from the PASSCAL Standing Committee. A copy of the whitepaper, as well as recordings and presentations from hosted gatherings have been posted to IRIS' Rapid Response to Geohazards webpage (www.iris.edu/rapid).

With testing and evaluation complete, IRIS is looking ahead to procuring instruments and associated equipment over the next year, followed by acceptance testing and integration at the IRIS/PASSCAL Instrument Center. Concurrently, IRIS is working with community governance to formalize new policies and procedures that will outline how this new community resource can most effectively and efficiently be used for geohazard-related observations. Beginning in 2023, PIs will be able to schedule and use this equipment from the IRIS/PASSCAL Instrument Center that is operated as part of NSF's SAGE facility.