EarthScope Data and Sample Policies

General Data Policy Information

NSF Program Solicitation 06-562 states that:

"The intent is that all data from the EarthScope Facility will be openly available in near-real-time to maximize participation from the scientific community and to provide on-going educational outreach to students and the public."

The solicitation also states that:

"Principal investigators are required to adhere to the EAR Data Policy available on the NSF website."

The EAR data policy may be found at: <u>http://www.nsf.gov/geo/ear/EAR_data_policy_204.pdf</u> and it states:

"For those programs in which selected principle investigators have initial periods of exclusive data use, data should be made openly available as soon as possible, but no later than two (2) years after the data were collected. This period may be extended under exceptional circumstances, but only by agreement between the Principal Investigator and the National Science Foundation.

For continuing observations or for long-term (multi-year) projects, data are to be made public annually."

EarthScope Specific Information

Digital data

All data and corresponding metadata from all permanent, continuously operating EarthScope instruments will be made freely and openly available without unnecessary delay. In the majority of cases, this means in near-real time.

Data collected using EarthScope portable, campaign equipment are subject to the following, in addition to the EAR policy specified above:

USArray/FlexibleArray

Raw data and corresponding metadata from all FlexArray instruments will be archived and made publicly available as soon as they can be moved from the station to the IRIS DMC. Investigators requesting use of Flexible Array instruments who wish to take advantage of the proprietary period of exclusive data use (up to 2 years) should state this explicitly in their proposals. If an exclusivity period is granted, the data must still be immediately placed in the IRIS DMC.

<u>PBO</u>

Raw data and corresponding metadata from all PBO survey-mode instruments will be archived and made publicly available as soon as they can be moved from the station to the PBO archives. Project principal investigators may request a period of exclusive use, not to exceed two years from the date of initial data collection. Such a request must be made in the proposal requesting EarthScope funding or otherwise explicitly granted by NSF. If an exclusivity period is granted, the data must still be immediately placed in the UNAVCO archive.

All raw data and corresponding metadata from EarthScope purchased imagery will be archived and made publicly available as soon as practical.

Geochronology information provided to EarthScope funded Principal Investigators will be archived and made publicly available as soon as practical.

SAFOD Physical Samples (Core, Fluids, Gas, etc.)

While digital data can be archived, reproduced and distributed in a straightforward manner, the distribution of physical samples (core cuttings, fluid samples, and gas samples) is more complex.

- A. All SAFOD core, cutting, and fluid samples remain the property of the National Science Foundation.
- B. A SAFOD Sample Committee (SSC) will be named by the SAFOD Advisory Board, subject to approval by the NSF EarthScope Program Director(s). The members of SSC are experts in microstructures, mineralogy/geochemistry, rock mechanics and core handling and curation who are not personally involved in SAFOD research.
- C. Samples are available to any qualified investigator, but priority will be given to NSF-funded investigations. Researchers seeking NSF support may request SAFOD core, cuttings and fluid samples yearly through proposals to the NSF EarthScope Program Announcement (06-562). All researchers requesting samples should submit a SAFOD Sample Request Form (available at the EarthScope and ICDP web sites) to the SAFOD Data Manager (SDM). Each request must contain a complete and concise description of the samples being requested, the study(ies) for which samples are needed, the methods and procedures to be used, the specific problem or objective of the study(ies), the names and affiliations of

collaborating investigators, the date which the samples will be returned, and the date data derived from these samples will be archived and made available online.

- D. Requests for samples will be entertained every six months according to established target dates posted annually on the EarthScope and ICDP websites. The SDM will organize and collate all requests received by these dates and forward them to the NSF and SSC for detailed review and approval. The SSC recommends how the SAFOD samples will be used, who gets which samples and in what order (i.e., for sequential measurements on the same samples) in a manner that maximizes the scientific return from the available samples while preserving adequate samples for future study. The SSC will forward their recommendation on sample dispensation to the NSF EarthScope Program Director(s).
- E. Once a sample request has been approved, the NSF EarthScope Program Director(s) will notify the requesting investigators, the SSC the SDM and the IODP Gulf Coast Repository (GCR; where all SAFOD samples are stored). The GCR will then prepare samples and distribute them to the requesting investigators. If difficulties arise during sampling that require external input related to sample preparation or dispensation, the GCR will contact the SSC for additional advice and input. The GCR will maintain full records on sample distribution, which are regularly submitted to the NSF and entered into the EarthScope/SAFOD web site by the SDM.
- F. Researchers are responsible for annually reporting on the disposition of samples given to them and progress with research conducted on these samples. The disposition documentation should include photographs and describe the methods of cutting or coring, the fluids and/or abrasives used, the size and shape of each sub-sample, the geometric relation of each sample to the original material, the date of sampling and the storage methods used for the remaining material. An annual progress report describing the status of tests and observations, along with the disposition documentation, will be submitted to the SDM.
- G. All data derived from measurement and analysis of SAFOD core, cuttings, and fluid samples must be archived by the requesting investigator and made available to the scientific community via the EarthScope and ICDP websites within the time period specified in the proposal or request.
- H. In addition to their role in sample allocation, the SSC makes recommendations to NSF and SAFOD Management on sample preparation and testing procedures, policies and procedures for long-term sample curation, archiving and documentation and other related matters as they arise.

- Subsequent sample requests for an ongoing investigation must be submitted to the SDM and include a statement that describes the progress of the study, the need for additional samples, and the status of the previous samples. These requests will then be passed on to the SSC and NSF for evaluation, following the procedure described above. Approval of an initial request does not constitute approval for subsequent access to the SAFOD sample collection.
- J. Recipients of samples must not allow research projects that differ substantially from projects originally proposed in sample requests to be undertaken by themselves or others without first obtaining approval from the NSF EarthScope Program Director(s). Samples must not be transferred to other investigators without prior approval.
- K. Any unused samples or portions of cores must be returned to the GCR for rearchiving and possible allocation to other investigators. At the conclusion of each investigation, all core, cuttings, and fluid samples must be returned to the GCR along with a complete description of the sample preparation and testing procedures used on those samples. This includes thin sections (and associated billets), SEM mounts, XRD powders and other prepared sample materials. All material given to each research team should be accounted for by weight and volume.
- L. Investigators who simply wish to make a brief non-destructive examination of specific cores or cuttings at the GCR (i.e., without sampling or conducting analyses) may send an informal request to the GCR, but must also send a copy of that request to the NSF EarthScope Program Director(s) and the SDM.

For more information, contact the NSF EarthScope Program Director(s), http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501035&org=EAR