

The fourth round of requests for SAFOD Phase III core samples will begin 1 July 2013, hosted on this website.

SAFOD Registration

The online tools available here have been developed to make each request round easier to process and to allow more collaboration between PI groups. If not already registered as part of Round 3, new PI groups are required to register using the form linked above. Before you do that, please review the material on this page to familiarize yourself with the entire request process.

For the current round, we will use the two-step process used during prior rounds, in which initial sample requests must be made by a request closure date (14 June 2013). After that date, PI groups will have the opportunity to view all sample requests and revise the locations of their own requests. We encourage PI groups to communicate with each other to maximize the use of each section of the core.

Round 4 Sample Requests [OPEN]

I. History

Physical samples collected during the SAFOD Phase III drilling process, including samples recovered from the San Andreas Fault, are available through this round. This page provides a brief update on the prior rounds of Phase III sample distribution, and outlines the schedule and process for the current round.

SAFOD physical samples are curated at the Gulf Coast Repository (GCR) at Texas A&M University, under the supervision of John Firth. UNAVCO is the NSF awardee responsible for management of SAFOD and oversees SAFOD activities at GCR. At NSF's recommendation, UNAVCO established the SAFOD Core Sample Working Group (CoSWoG) to provide oversight of curation of SAFOD samples, methods used to take and distribute samples, etc. CoSWoG members include:

- John Logan (Chair), University of Oregon
- Brian Blackman, UNAVCO
- Wade Johnson, UNAVCO
- Judith Chester, Texas A&M University
- John Firth, Texas A&M University
- Steve Hickman, US Geological Survey
- Andreas Kronenberg, Texas A&M University
- Demian Saffer, Pennsylvania State University

These groups work together to ensure that all physical samples are properly curated and that samples are distributed as directed. For the prior rounds of sample distribution,

the SAFOD Sample Committee reviewed all requests and recommended a disposition for each sample. For Round 4, a similar independent group of experts will review all requests and make recommendations on their disposition in order to maximize the scientific return while preserving adequate samples for future study. As before, NSF will make the final determination on sample distribution. Once those decisions are made, the CoSWoG, GCR, and UNAVCO will work together to ensure the distribution goes forward properly.

Because of the unique nature of the SAFOD core, new procedures have been developed for both distribution decisions and sampling. The SAFOD Sample Committee began an effort, which continues under CoSWoG, to investigate and develop sampling procedures for particularly friable material, such as those in core runs G-2-7 and G-2-8. In the current round, PI groups can request friable material, but any samples that are recommended for distribution will only be distributed under terms of the sampling protocols under development. Please note that this may include requiring PI groups to travel to GCR to work with staff and/or other investigators to extract samples.

In addition, Chris Marone (Pennsylvania State University) and David Lockner (US Geological Survey, Menlo Park) are coordinating an inter-laboratory calibration effort for those investigators who are proposing measurements of physical properties, including measurements of permeability, fracture strength, electrical resistivity, and frictional strength. More information about the inter-laboratory calibration effort can be found at the request website <http://www.geosc.psu.edu/~cjm/safod>. Principal investigators who request samples for physical properties measurements will be expected to participate in the inter-laboratory calibration before being sent Phase III samples.

II. Current Request Round

The sample request submission process will begin 1 May 2013 and conclude 14 June 2013, at which time PI groups will only be allowed to modify existing requests with the added capability of view all PI group sample requests per core run section. All modifications must be complete by 19 July 2013.

Please bear in mind the following when planning your sample requests:

- Samples are available to any qualified investigator, but priority will be given to NSF-funded investigations
- All prior and prospective PIs must register either individually or as part of a PI group.
- PI groups that have previously received SAFOD samples must describe the progress made with previous samples, the need for additional samples, and the status of the previous samples. These reports will be used during the evaluation of Round 4 requests. Please note that approval of requests during a prior round of sampling does not ensure approval for subsequent access to SAFOD samples.

- PI groups that have received samples for thin sections are obligated to make two thin sections at each location and to send the second section to GCR for deposit in the thin section library. No new samples will be distributed to any PI group that has not provided all required thin sections to GCR.
- PI groups that request samples for physical properties measurements, including friction, permeability, and other mechanical and transport properties, are expected to take part in the inter-laboratory calibration procedure. No new samples will be distributed to any PI group that has not provided all required data for the inter-laboratory calibration effort.
- Requests for friable samples (such as those in core runs G-2-7 and G-2-8) will be considered in this round, subject to the terms of sampling protocols under development by the CoSWoG. Please note that this may include requiring PI groups to travel to GCR to work with staff and/or other investigators to extract samples.
- Additional questions or comments may be addressed to the NSF EarthScope Program Director, Dr. Greg Anderson at greander@nsf.gov.

Timeline:

1 May 2013: Registration of PI groups.

PI groups who registered during Round 3 need only to authenticate using the login dialog at the top right of the Core Viewer Tool. New PI groups must be registered using the form available at http://www.earthscope.org/samples/safod_registration. You must register before you will have access to the sample request form, and please note that each member of a PI group who wishes to have individualized access to this system must register.

Registration includes the option to request membership in an existing PI group. The submission form has entry points for a report of the current results obtained on the first and second round samples. The discussion does not need to be lengthy, but should give enough detail to indicate the state of your research. Members of the inter-laboratory calibration groups must also describe their activities. These responses will be considered during evaluation of Round 4 requests. Further guidance for filling out the sample request forms is given in the sample request pages.

1 July 2013: Core viewer with samples distributed ready for use

New and current PIs will access the Core Viewer Tool that shows the samples that have been distributed in the first three request rounds; the tool is available on the EarthScope Web site at http://www.earthscope.org/samples/safod_core_samples. The core image shows the position, type of sample, and PI group for all samples distributed in the first and second rounds. We encourage PI groups to consider the previous distributions

when they plan new sample requests, and to communicate with each other when appropriate, in order to maximize the scientific return on each sample.

1 July submission of Round 4 core sample requests

1 August 2013: Submission of new Round 4 core sample requests closed

All new requests for core samples to be taken in the fourth round must be submitted by this date. PI groups are still able to edit all existing Round 4 sample request submitted prior to this date.

1 August 2013: Core Viewer Tab displays all Round 4 sample requests and continues to allow location digitization for submitted sample requests

In addition to displaying samples taken in the first three rounds, the Core Viewer Tab available in the Core Sample Request Tool will also display data and the location of all Round 4 sample requests, along with the identity of the PI/PI group who submitted the request. Investigators will be allowed to change (redigitize) the position of their requests utilizing the 'Digitize Sample Request' option in the Core Viewer Tab. This capability maximizes the efficiency of sampling, improves and integrates the knowledge base, and aids in the development of new collaborations. No additional requests for core samples will be entertained at this time.

1 September 2013: Round 4 requests finalized

All modifications to submitted requests must be finalized by this date. All online editing functionality will be disabled. View-only capabilities will remain available in the Core Sample Request Tool indefinitely.

2 September 2013: Round 4 sample request review process begins

Sept 30 2013: PI groups informed of sample request status

All requestors are notified of the sample distribution by email. PI groups may contact John Firth at GCR to begin the distribution.

Note: Phase one and two core images are not located in the Core Viewer. Please use images that will be provided on the SAFOD data website to select samples from phase one and two core and submit request using form that will be provided on the SAFOD data website. This same form can be used for bulk cuttings sample request. **Further instructions will be provided on the SAFOD website.**