

Facility and Instrument Request Process (FIRP) NSF 23-602



Summary of Program Requirements

- The FIRP solicitation describes the mechanism by which the research community can propose projects that require access to instrumentation and facilities sponsored by the Facilities for Atmospheric Research and Education (FARE) Program in the Division of Atmospheric and Geospace Sciences (AGS).
- FIRP allows for parallel evaluation of intellectual merit and broader impacts along with the feasibility of the proposed project.
- Preference for funding will be given to AGS proposals. If you are going to submit a proposal to a program outside of AGS, please let us know as far in advance as possible.

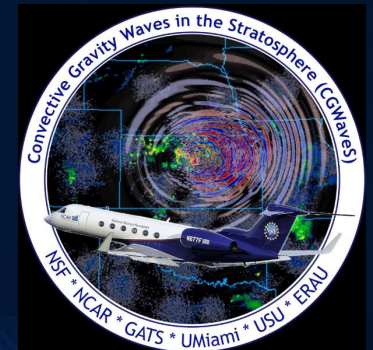


- Estimated number of awards: 5 to 15
- Anticipated Funding Amount: \$10M to \$20M
- No limits beyond the PAPPG on who may submit proposals and there are no limits on the number of proposals.
- Track 1 awardees have a 3-year cooling off period before another request of the same facility.



I. Introduction

- Motivation for FIRP
- Overview of Tracks
- Clarification that Track 2 and 3 proposals are scientific proposals that describe the use of FARE assets as part of the research plan.



II. Program Description



- Statement that institutions without significant observational capabilities, primarily undergraduate institutions, minority serving institutions, and community colleges are especially encouraged to apply to the FIRP.
- For all three Tracks, proposers are encouraged to explore innovative outreach efforts to include the participation of the full spectrum of diverse talent in STEM in experiential learning.
- EAGER, RAISE, and RAPID proposals will be considered according to facility availability. Advance notification is required per the PAPPG.



Track 1 (Education and Outreach)

- For educational activities in formal and/or informal settings aimed at providing hands-on student training, or
- Providing significant public outreach through coordinated events.
- Proposals with a substantial research component should be submitted as Track 2 or 3.
- Total proposal cost up to \$75k, up to \$50k of which could be for facility use.



Track 1 (Education and Outreach) – Aircraft Deployments

- Track 1 requests are allowed for aircraft-based educational deployments on the King Air.
- Track 1 requests are allowed for aircraft-based educational deployments on the G/V and C-130 only if there is an existing field campaign or test flight that could be piggybacked onto.
- The \$75k budget cap is waived for aircraft-based educational deployments.



Track 2 – Single Facility Request

- Deployment or use of a single CIF or single instrument/instrument system in the LAOF pool.
- Multi-year requests for laboratory-based projects only.
- Initial determination of Track is based on the Statement of Interest



Track 3 – Field Campaigns

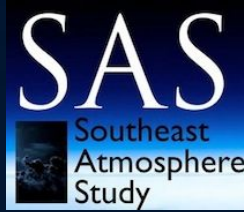
- Deployment or use of a major LAOF such as an aircraft or network, a combination of multiple CIFs, or a combination of CIF(s) and LAOF(s).
- Multi-year deployment of resources.



What is in a Statement of Interest (Sol)?

- Project title;
- Names and affiliations of PIs, Co-PIs, and Senior Personnel;
- Requested deployment schedule;
- Summary of the proposed activity and the scientific objectives;
- List of Facilities requested along with the anticipated deployment location;
- A rough order of magnitude total project budget estimate, exclusive of CIF and LAOF costs; (proposal cost without facilities)
- Expected involvement of other funding bodies, whether U.S. or international.





What is a Facility Request?

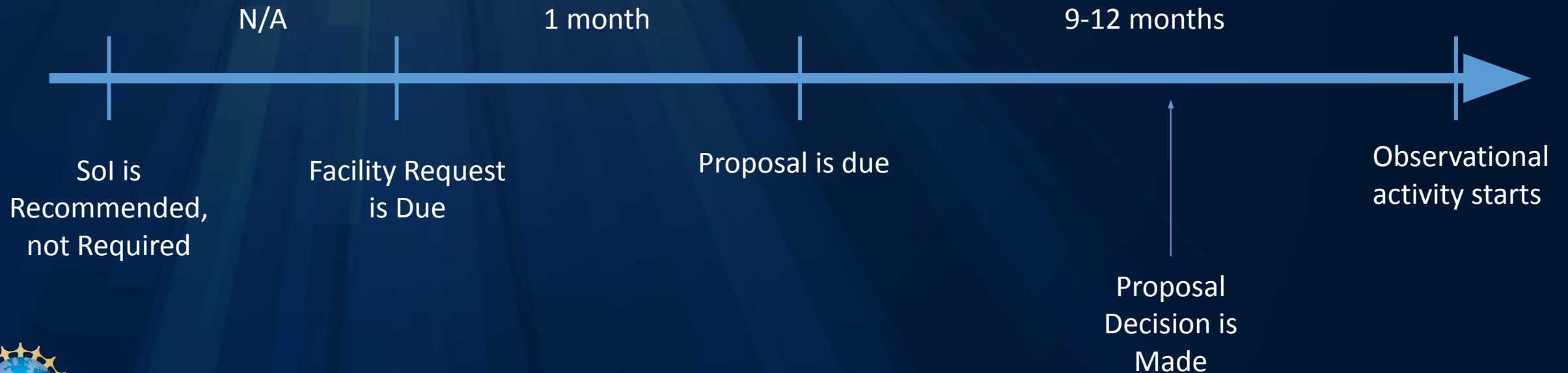
- Each facility has a set of forms that need to be filled out by the requesting PI.
- The forms are not standardized, but will often contain questions about the dates, location, how the facilities would be used, staffing needs, etc.
- The facility request helps the facility providers determine the feasibility of the project and further conversations will help to narrow down the cost estimate.

[Home](#) > Request

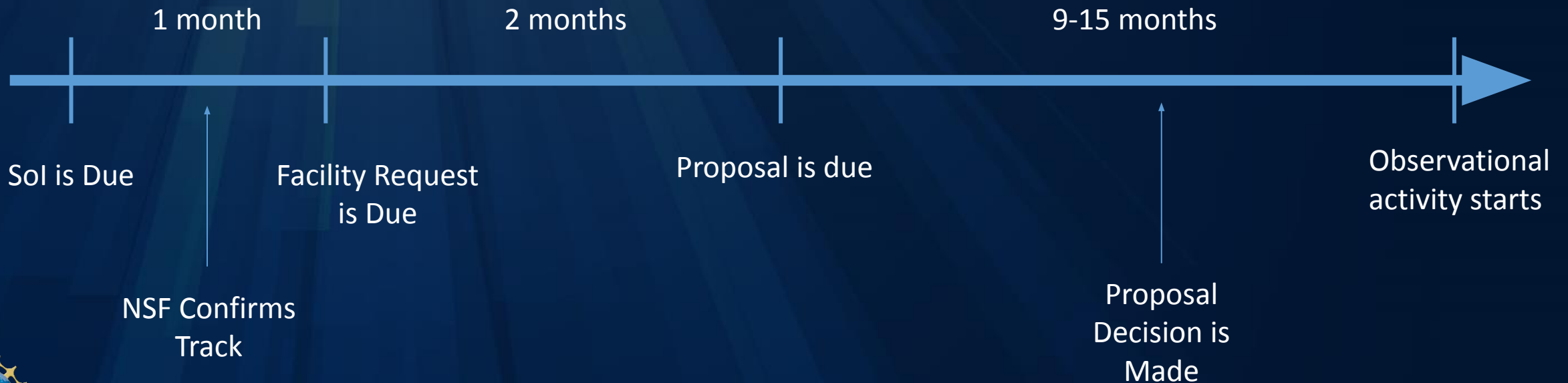
To request our facilities, please download [this form](#) and email the completed form to mapnet@uah.edu.



Proposal Timelines – Track 1



Proposal Timelines – Track 2

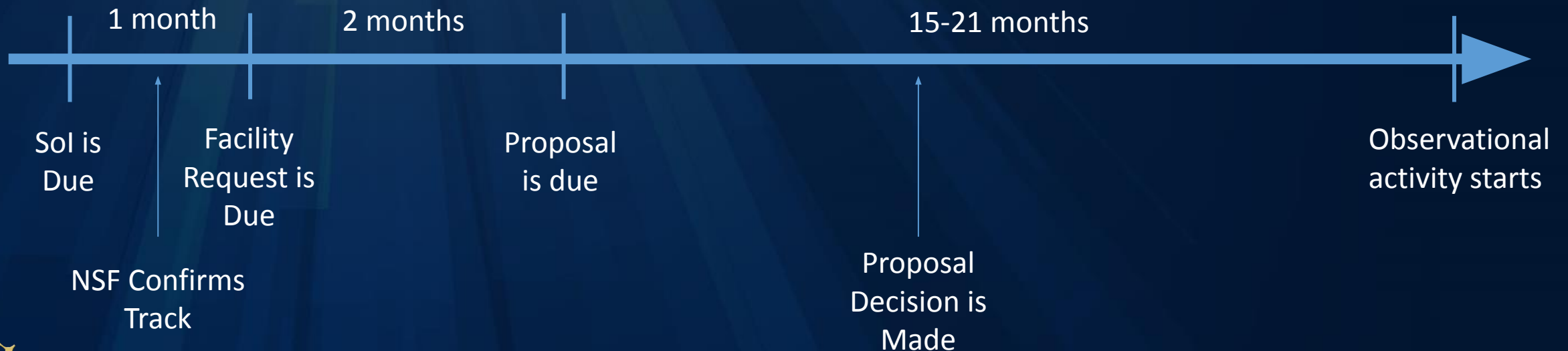
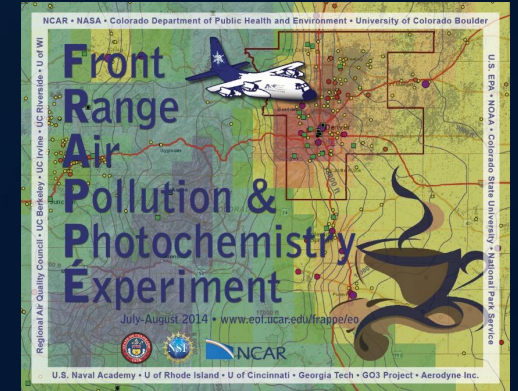


Why is Track 3 divided into Straightforward and Complex?

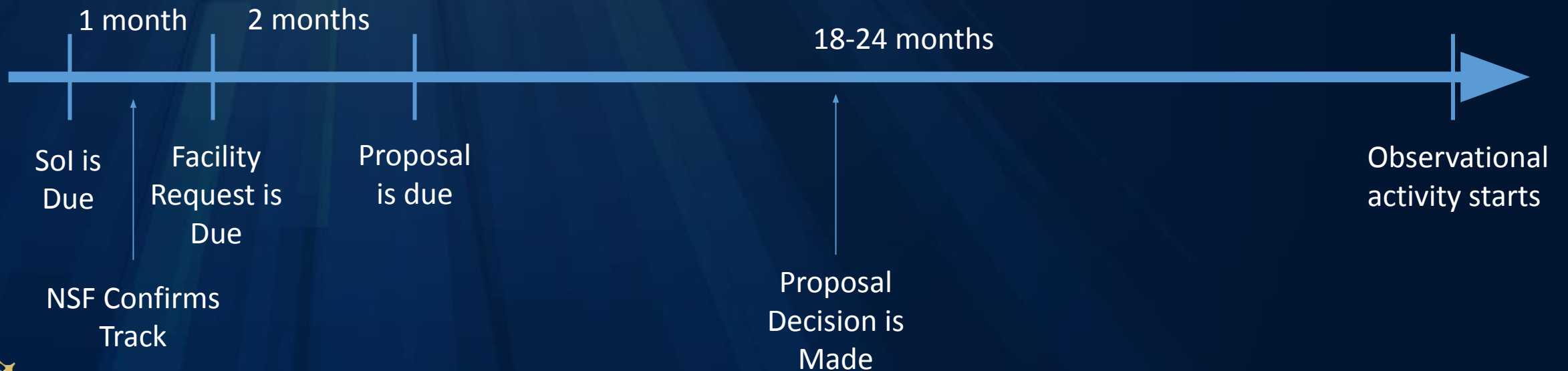
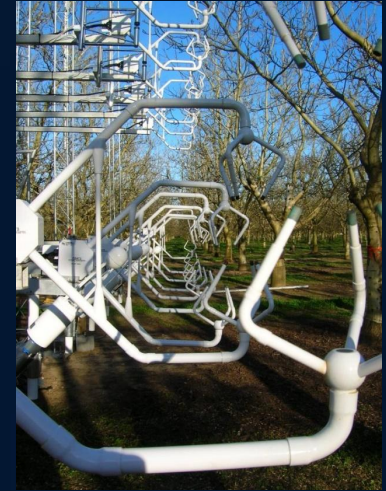
- NSF recognizes that some field campaign projects require significant lead time due to logistics and more, while others do not require as much work in advance. The two submission windows for Track 3 reflect that difference.
- The required lead time depends on the location of the project, the resource(s) required, the level of instrument integration needed, and the degree of interagency and/or international collaboration.
- NSF, in consultation with the facility provider(s), will determine the required proposal timeline. Earlier Sols help everyone involved.



Proposal Timelines – Track 3 Straightforward*



Proposal Timelines – Track 3 Complex*



III. Award and IV. Eligibility Information

- Repeated text from Summary

III. AWARD INFORMATION

Anticipated Type of Award: Standard Grant or Continuing Grant

Estimated Number of Awards: 5 to 15

The number of awards will vary depending on the number of proposals received, their scientific merit and programmatic considerations.

Anticipated Funding Amount: \$10,000,000 to \$20,000,000

Projects awarded under the FIRP solicitation will be funded by a combination of disciplinary science program and FARE program funding. Research proposal costs, such as PI salary, student support, travel and publications, materials and supplies will be funded by the relevant disciplinary science program(s). Field deployment and usage costs for LAOF and CIF will be funded by the FARE program.

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

IV. ELIGIBILITY INFORMATION

Who May Submit Proposals:

The categories of proposers eligible to submit proposals to the National Science Foundation are identified in the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)*, Chapter I.E. Unaffiliated individuals are not eligible to submit proposals in response to this solicitation.

Who May Serve as PI:

There are no restrictions or limits.

Limit on Number of Proposals per Organization:

There are no restrictions or limits.

Limit on Number of Proposals per PI or co-PI:

If a PI has had a Track 1 award with a particular facility, they may not submit another Track 1 proposal requesting the same facility within 3 years of the start date of the previous Track 1 award.



V. Proposal Preparation and Submission Instructions

- Research.gov or Grants.gov.
- Follow the PAPPG unless otherwise stated!
- Title must start with “AGS-FIRP Track x:”



Track 1 Proposals

- Project Description is limited to 5 pages (15 pages allowed for aircraft deployments).
- Proposal must include:
 - Description of the educational and/or outreach activity.
 - Scope and level of involvement of individuals.
 - Expected number of participants.
 - How the project will endeavor to include the participation of the full spectrum of diverse talent in STEM.



Track 2 Proposals

- Project Description is limited to 15 pages.
- Proposal must include:
 - The scientific objective(s) of the project.
 - How the proposed deployment will address the scientific objectives.
 - How the research will be conducted.
 - Education, outreach, and plans to include the participation of the full spectrum of diverse talent in STEM.



Track 3 Proposals

- Project Description is limited to 20 pages.
- Proposal must include:
 - The scientific objective(s) of the project.
 - How the proposed deployment will address the scientific objectives.
 - How the research will be conducted.
 - Education, outreach, and plans to include the participation of the full spectrum of diverse talent in STEM.
 - An appropriate level of detail about the experimental setup.
 - A section on results from prior campaigns that have focused on similar topics.
 - Results from Prior NSF Support (can be abbreviated).



Budget

- Track 1 proposals are limited to \$75k total, with the following restrictions:
 - Costs related to PI/Personnel time are limited to 25% of the total budget.
 - Facility costs may not exceed \$50k.
 - PIs may include “broader impacts” costs and travel for outreach efforts.
- The budget estimate from the facility provider should be uploaded as a supplemental document and not included on the budget sheet. However, the limits are inclusive of all costs.



Budget

- Track 2 & 3 proposals do not have funding limits. However, advance engagement with program directors related to the scope of the project is always a smart move.
- Facility use costs for the CIF are to be included as subawards.
- The budget estimate from LAOF providers should be uploaded as a supplemental document and not included on the budget sheet.



Special Information & Supplementary Documents

- Track 1
 - A copy of the Facility Request.
 - Facility budget.
 - (if necessary, for airborne Track 1s only) A plan for integration with the “target of opportunity” flight.



Special Information & Supplementary Documents

- Track 2
 - A copy of the Facility Request.
 - An estimated deployment budget for LAOF requests.
 - An estimated budget for NCAR/EOL services such as Field Catalogs, Data Management, or Project Management.
 - Program Director Concurrence Email
 - Experimental Design Plan**



Special Information & Supplementary Documents

• Track 3

- A copy of the Facility Request.
- An estimated deployment budget for LAOF requests.
- An estimated budget for NCAR/EOL services such as Field Catalogs, Data Management, or Project Management.
- Program Director Concurrence Email.
- Experimental Design Plan**.
- **Roles and Responsibilities Document***.**



Special Information & Supplementary Documents

Experimental Design Plan – 10-page limit

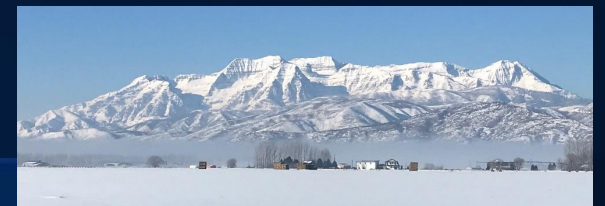
- Description of the experimental design, including deployment location, a catalog of all assets involved in the project, the integration between observations, and mode of operation.
- A justification of the optimal timeframe and whether there is timeline flexibility.
- A Campaign Management Plan (CMP) which should discuss the management structure, how deployment decisions will be made, and expected data and data availability.
- A Science Traceability Matrix (STM) which is a grid that traces the observations to the science hypotheses/questions.



Special Information & Supplementary Documents

Roles and Responsibilities Document

- Only for campaigns with multiple institutions. Provided at the institutional (not PI) level.
- A document up to 2 pages must be provided which details the specific role of each institution, who is involved, their contribution to the project, and what they expect to accomplish scientifically.
- Page limit caveat – if multiple distinct groups are involved from the same institution, the page limit may increase to 3.
- Facility providers who are not scientific collaborators are excluded.



Data Management Plan (DMP)

- The DMP must describe the data produced during the project, and how it will be quality controlled and made available, including exclusionary period rules and data access policies.
- FARE asset data must be submitted to NCAR's Geoscience Data Exchange (GDEX) no more than 1 year from the completion of the data-gathering activities.
- Data providers should be mindful of using standard file formats and standard vocabularies in their metadata.



VI. NSF Proposal Processing and Review Procedures

- NSF Program Directors will decide, based on the Track, type of project, and other pending requests, whether an ad-hoc mail review, a panel review, or a combination will be appropriate for the proposal.
- NSF will involve reviewers with observational expertise to supplement the review in the place of the prior OFAP procedures.
- NSF will iterate with the Facility Providers on the feasibility of the requested projects.



Additional Solicitation-Specific Review Criteria

Track 1 requests:

- To what extent does the project provide a unique learning experience?
- Does the proposed project significantly benefit the intended participants?
- Are the intended participants well integrated into the field campaign activities (e.g. field campaign or other scientifically relevant efforts related to the deployment)?
- Does the proposal present effective outreach efforts to include the participation of the full spectrum of diverse talent in STEM in experiential learning?



Additional Solicitation-Specific Review Criteria

Track 2 and Track 3 requests:

- Is the proposed facility use well-aligned with the science objectives?
- Is the integration of the various components of the deployment request well-conceived? This includes, but is not limited to, integration of efforts across platforms, institutions and PIs, and planning for joint data analyses.
- Are each of the instruments requested critical to achieving the objectives of the project?



Courtesy of Alec Chin (ARSV L.M. Gould)



Questions?

Facility and Instrumentation Request Process (FIRP)

[View guidelines](#)
23-602

	Track 1	Track 1 - Aircraft Request	Track 2	Track 3 - Straightforward	Track 3 - Complex
Statement of Interest (Sol)	Recommended	Recommended	Required	Required	Required
Sol Timeline	N/A	N/A	3 months prior to proposal submission	3 months prior to proposal submission	3 months prior to proposal submission
Facility Request Timeline	1 month prior to proposal submission	1 month prior to proposal submission	2 months prior to proposal submission	2 months prior to proposal submission	2 months prior to proposal submission
Proposal Timeline	9 to 12 months prior to start of facility use activity and at least 6 months before award start date.	At least 12 months prior to start of facility use activity and at least 6 months before award start date.	9 to 15 months prior to start of facility use activity and at least 6 months before award start date.	15 to 21 months in advance of start of facility use activity and at least 6 months before award start date.	18 to 24 months in advance of start of facility use activity and at least 6 months before award start date.
Project Description Length	5 pages	5 pages	15 pages	20 pages	20 pages
Proposal Budget	Total proposal including deployment not to exceed \$75,000.	No cap	No cap	No cap	No cap
	Track 1 facility costs are awarded directly to the facility provider.	Track 1 facility costs are awarded directly to the facility provider.	Subaward for CIF assets (if necessary)	Subaward for CIF assets (if necessary)	Subaward for CIF assets (if necessary)
	Subaward for partner institutions (if necessary)	Subaward for partner institutions (if necessary)	Subaward for partner institutions (if necessary)	Subaward for partner institutions (if necessary)	Subaward for partner institutions (if necessary)
Additional Supplementary Documents Required	Facility Request	Facility Request	Facility Request	Facility Request	Facility Request
		Description of integration with existing flight campaign (NCAR-operated aircraft only)	Experimental Design Plan (10 pages max)	Experimental Design Plan (10 pages max)	Experimental Design Plan (10 pages max)
				Roles and Responsibilities Document	Roles and Responsibilities Document
	Budget for FARE assets	Budget for FARE assets	Budget for NCAR or Wyoming assets (if necessary)	Budget for NCAR or Wyoming assets (if necessary)	Budget for NCAR or Wyoming assets (if necessary)
			Budget for NCAR/EOL Field Catalog, Project Management, and additional support (if necessary)	Budget for NCAR/EOL Field Catalog, Project Management, and additional support (if necessary)	Budget for NCAR/EOL Field Catalog, Project Management, and additional support (if necessary)
			Program Director email on proposal timeline	Program Director email on proposal timeline	Program Director email on proposal timeline



Revision Notes

- Separately submitted collaborative proposals are now allowed for all proposal Tracks.
- The funding cap for Track 1 proposals is now \$75,000, with up to \$50,000 allowed for facility use/deployment.
- Proposal target dates in January and July have been removed and are replaced by moving target windows.
- The Observing Facility Assessment Panel (OFAP) is discontinued. Assessment of the feasibility and suitability of the experimental design will be conducted by NSF and the facility providers through the traditional review process.

