LAOF LOWER ATMOSPHERIC OBSERVING FACILITIES

Lower Atmospheric Observing Facilities (LAOF) in Support of Science & Education

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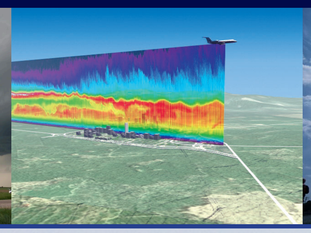
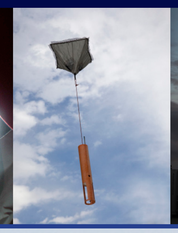







Available Facilities & Services

Facilities

The National Science Foundation (NSF) through its Lower Atmospheric Observing Facilities (LAOF) program sponsors a suite of multi-user, national facilities, instrumentation and services in support of geoscience research.

Five LAOF partner organizations, which include the National Center for Atmospheric Research (NCAR), the University of Wyoming (UW), Colorado State University (CSU), the Center for Severe Weather Research (CSWR) and the Center for Interdisciplinary Remotely-Piloted Aircraft Studies (CIRPAS), are tasked to provide the operational, technical, logistical and data support needed to carry out scientific field campaigns.

Research Aircraft

- NSF/NCAR Gulfstream V (GV)
- NSF/NCAR C-130
- UW King Air
- CIRPAS Twin Otter
- CIRPAS A-10

Ground-Based & Airborne Remote Sensing Platforms

- NCAR S-PolKa Radar
- NCAR HIAPER Cloud Radar (HCR)
- NCAR High Spectral Resolution Lidar (HSRL)
- CSWR Doppler on Wheels
- CSU CHILL Radar
- UW Cloud Radar (WCR)
- UW Cloud Lidar (WCL)

Surface and Sounding Systems

- NCAR Integrated Surface Flux System (ISFS)
- NCAR Integrated Sounding System (ISS)
- NCAR GPS Advanced Upper-air Sounding System (GAUS)
- NCAR Airborne Vertical Atmospheric Profiling System (AVAPS)

National facilities are available on a competitive basis to qualified researchers from US universities at no additional cost to their grants. Deployment allocations are driven by the scientific merit of the proposed use, the capabilities of a specific facility to carry out the proposed observations, and availability of the facility for the requested time period.

Services

The Earth Observing Laboratory (EOL) offers a variety of services to support field research, including:

Project Management
- Project planning and coordination
- Operations and logistics
- Post-project activities

Design and Fabrication Services
- Machine shop support
- Mechanical design
- Fluid dynamics and flow modeling

Computing, Data and Software Services
- Data acquisition and display
- Data management
- Data archival

Request Procedures

Facilities can be requested twice annually up to two years in advance of a scheduled campaign. All requests must be associated with one or more peer-reviewed NSF scientific proposal. The process for considering requests and setting priorities is determined on the basis of the complexity of a field campaign, which can fall under three distinct categories: 1) Large, 2) Small, and 3) Educational.

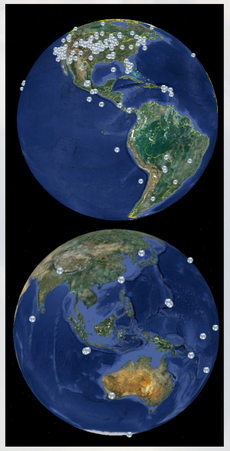
Determination of what category a campaign will fall into will be made by NSF in consultation with personnel from the relevant LAOF partner organizations.

Large:
Large program requests often display one or more of the following attributes: remote deployments, significant international and/or interagency collaboration, involvement of multiple facilities and especially aircraft that require coordination, difficult deployment logistics, and lengthy field activities.

Small:
Small programs generally involve a smaller number of facilities and investigators, do not require long-term planning, and cost less than $1.25 million in Deployment Pool funds, though this is not a hard target.

Educational:
NSF also reserves a portion of the Deployment Pool for use by educators wishing to gain access to observational facilities for classroom instruction and hands-on learning experiences. Instruments can be made accessible for graduate, undergraduate and K-12 education, including the deployment of a facility to a university for a limited period of time.

Global LAOF Deployments



Request LAOF

www.eol.ucar.edu/requestfacilities

www.facebook.com/ncareol

www.twitter.com/ncareol

www.youtube.com/ncareol

NCAR National Center for Atmospheric Research

University of Wyoming

Colorado State University

Center for Severe Weather Research

CIRPAS Center for Interdisciplinary Remotely-Piloted Aircraft Studies

Earth Observing Laboratory

Request Timelines

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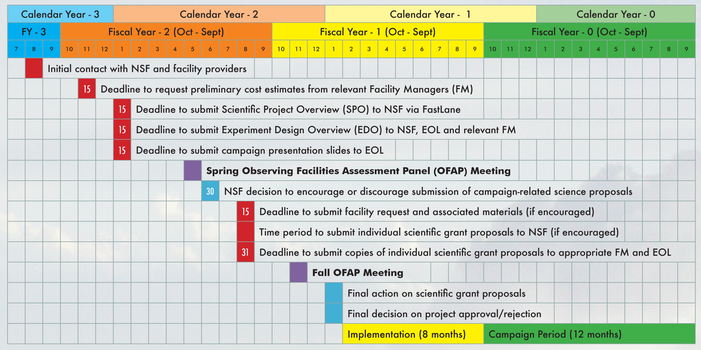
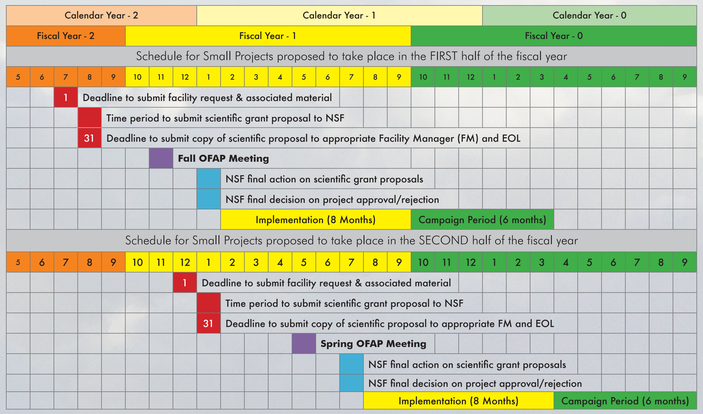
Action Required
Review Point
Decision Point

Large Project Timeline for LAOF Requests (>$1.25M)



Small Project Timeline for LAOF Requests (<$1.25M)



Educational Project Timeline for LAOF Requests (<$25K)