GEO Profile

Office of the Assistant Director

Atmospheric & Geospace Sciences
- Lower & Upper Atmosphere Research
- Lower Atmosphere & Geospace Facilities
- NCAR

Earth Sciences
- Deep Earth Processes
- Surface Earth Processes
- Infrastructure & Facilities

Ocean Sciences
- Biological, Chemical & Physical Oceanography
- Marine Geology & Geophysics
- Ocean Observational Infrastructure

Polar Programs
- Antarctic & Arctic Research
- Antarctic Logistics
- Polar Infrastructure

Integrative & Collaborative Education & Research
- SEES, CIF21 & Cross-Foundation Programs
- Education & Diversity
- International Collaborations & Partnerships
- Develop community-driven cyber-infrastructure: EarthCube
- Harness the power of computing and computational infrastructure
- Invest in infrastructure for observing systems and sensor arrays
- Use distributed instrumentation and facilities in support of research and education

BIG DATA
- GEO Observations and Facilities
- Main Challenge is Complexity
  - system-level science
  - data and computation not or
- Data Heterogeneity and New Sources
OPPORTUNITIES

- GEO Level
  - EarthCube Solicitation
    - NSF 16-514
    - Earthcube.org
  - Participation in CISE/ACI programs
- Earth Sciences
  - Geoinformatics: NSF 11-581
- Polar Programs
  - Arctic Research: NSF 14-584
  - Antarctic Research: NSF 16-541
- Atmospheric and Geospace Sciences
  - NCAR section
  - Talk to Programs
- Ocean Sciences
  - Organized by Sections