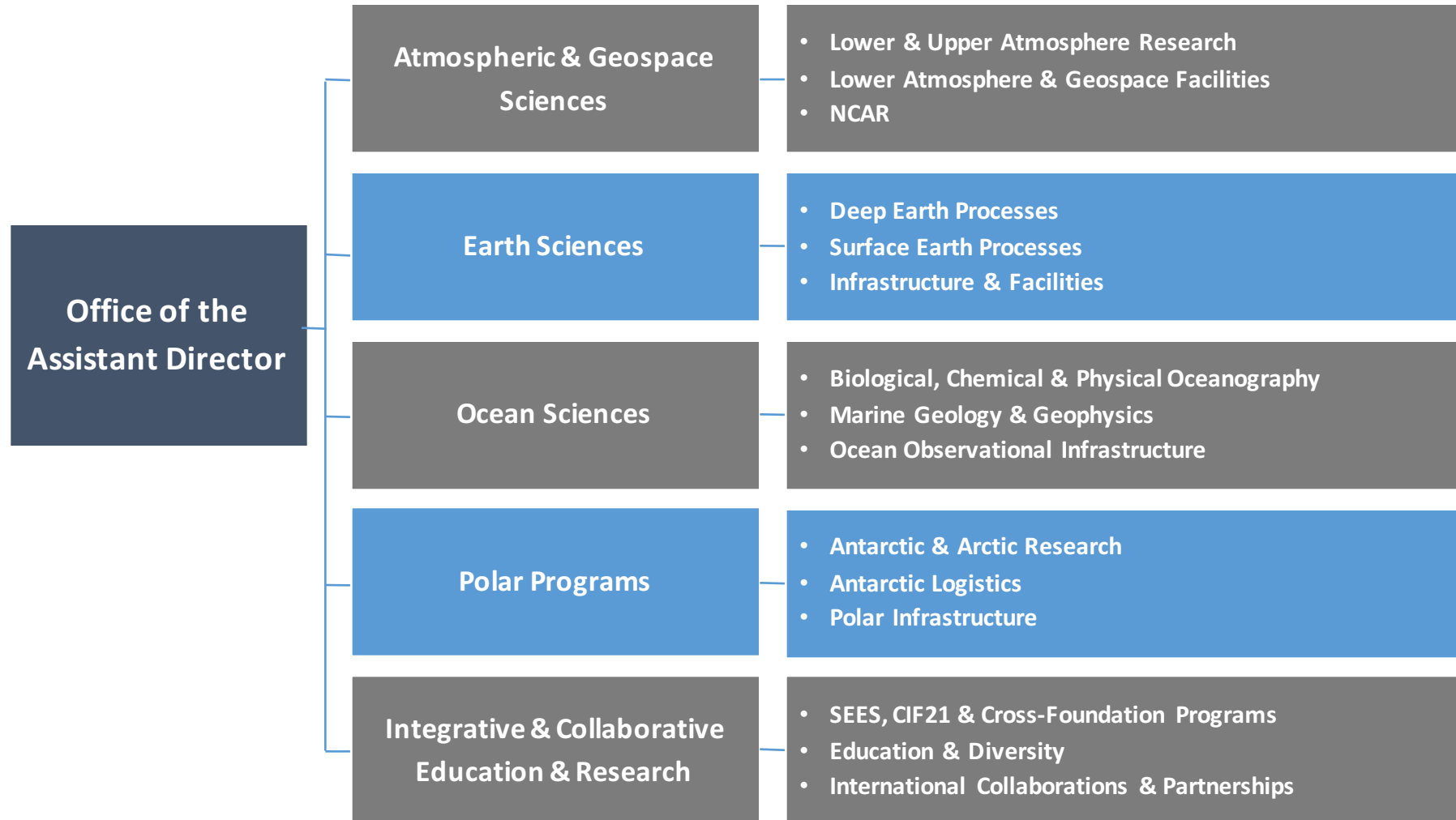


# GEO Profile



# GEO IMPERATIVES AND FRONTIERS 2015-2020

On-line at [www.nsf.gov/geo/advisory.jsp](http://www.nsf.gov/geo/advisory.jsp).

Click on the top link “AC GEO Reports”



- 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](http://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**