



## GEOSCIENCE COMMUNITY ANALYSIS TOOLKIT (GEOCAT)

- Develop Python ecosystem packages for **analysis & visualization** of geosciences data
- Scalability
- Open development

### Geocat Computational Component (GeoCAT-comp)

- Geoscience data post-processing & analysis
- Current functions: CESM, climatology, meteorology, regridding, interpolation
- Xarray compatible
- Dask parallelization
- Continuously growing
- Community input of high importance for determining priorities

### Geocat Visualization Component (GeoCAT-examples)

- Strengths & weaknesses of Python's scientific visualization ecosystem for geosciences visualization
- GeoCAT-viz utility package
- Over 100 examples
  - From NCL and novel

### NCL Updates

- NCL, PyNIO, PyNGL in maintenance mode
- Continued support for conda installations

### Future

- Unstructured grids pre-processing and rendering
- AWS demonstration of GeoCAT-comp functionality

### Communication channels & contribution options

- Track GeoCAT projects on Github
  - Github Issues: Make user requests, report bugs, respond to others' issues
  - Contribute via Github forks and pull-requests
- Implement new functionality
- Fix bugs

GeoCAT  
Homepage



Github  
Repositories



Contributor's  
Guide



Blog



<https://geocat.ucar.edu/>