Integrated Geoscience Observatory (InGeO)

A Community Software Platform for the Geospace Community towards reproducible science

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InGeO Project Motivations

- Remove barriers to seamless access of diverse geospace data from disparate instruments needed to address complex geospace science
- Create a platform for sharing community-created open-source software
- Provide a framework to generate reproducible results
- Encourage good data and software stewardship in the geospace community
Current method of doing research...
...to this
InGeO Features

- Resen tool
- Community software packages
- Geospatial data visualization
- Digital scholarship resources for the geospace community

https://ingeo.datatransport.org/home/
Future plan

• Bring in more community software packages including assimilative or first-principles modeling as feasible

• Interface with wider geospace data providers to make available data and open-source software with proper licensing

• Shareable, containerized results for research reproducibility
What made this possible

- Pilot project supported through NSF EarthCube program to improve collaboration between geoscientists
- Follow-on work supported by NSF Cyberinfrastructure for Sustained Scientific Innovation (CSSI) program to build a community platform