

Integrated Geoscience Observatory (InGeO)

A Community Software Platform for the
Geospace Community towards
reproducible science

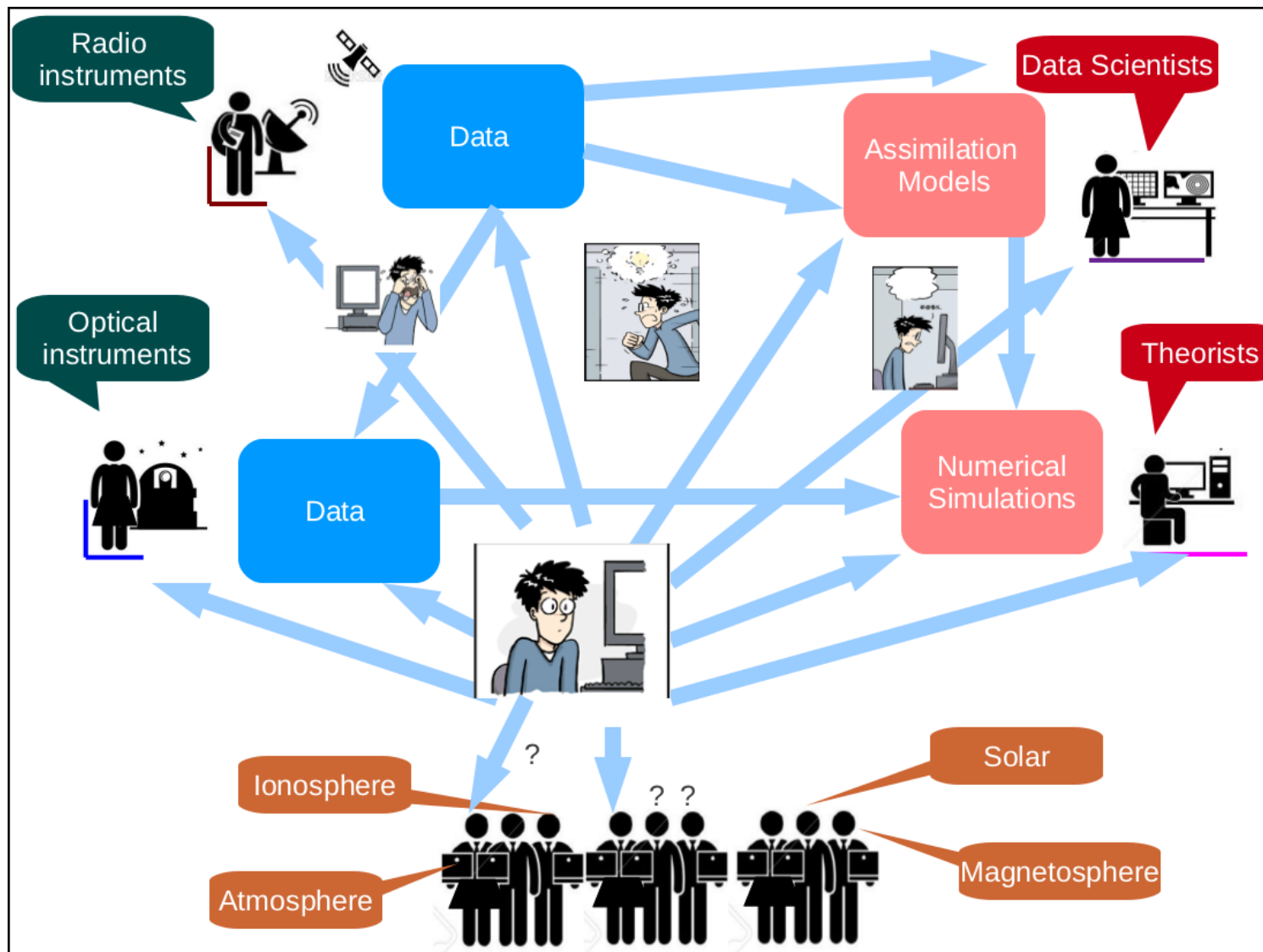
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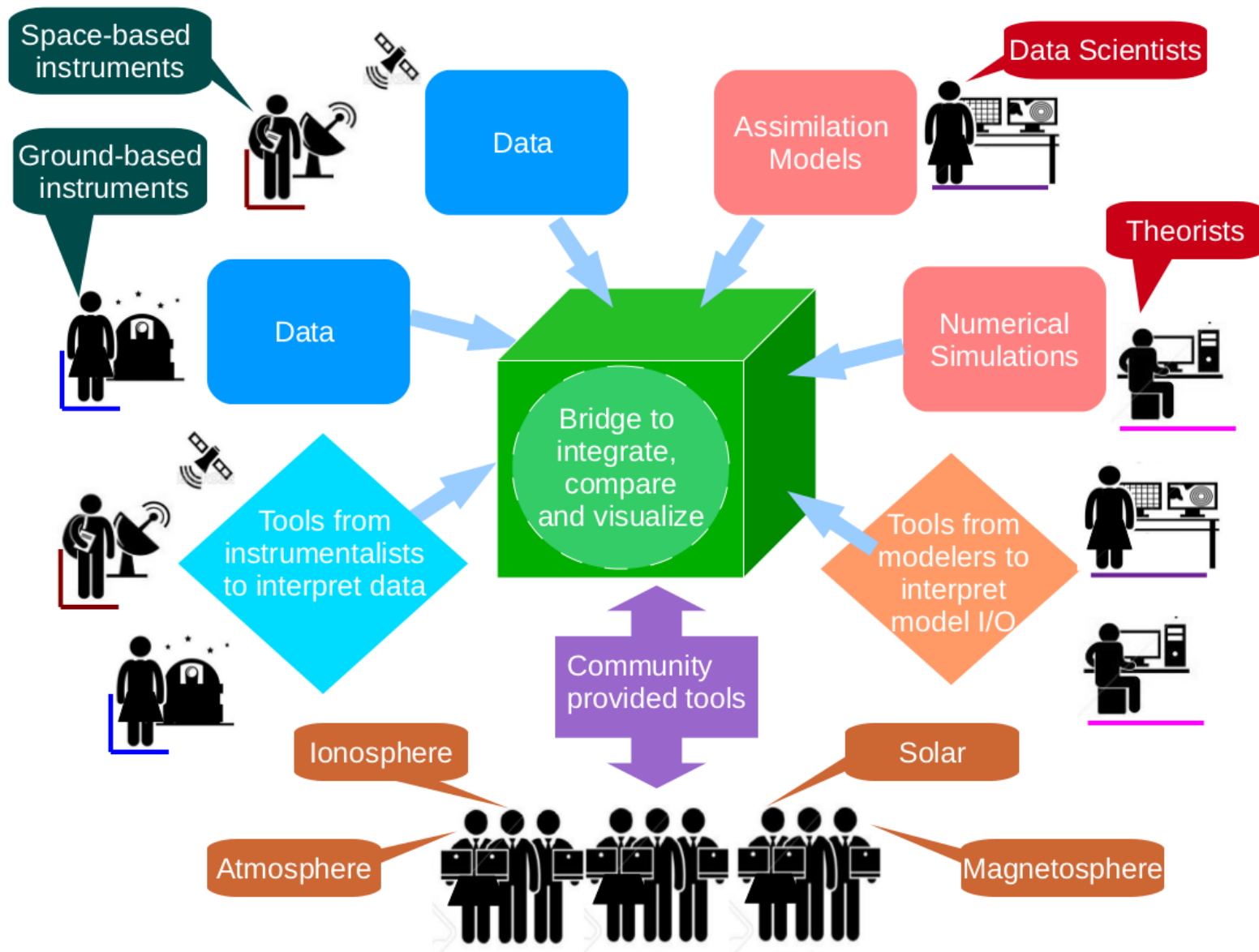
InGeO Project Motivations

- 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

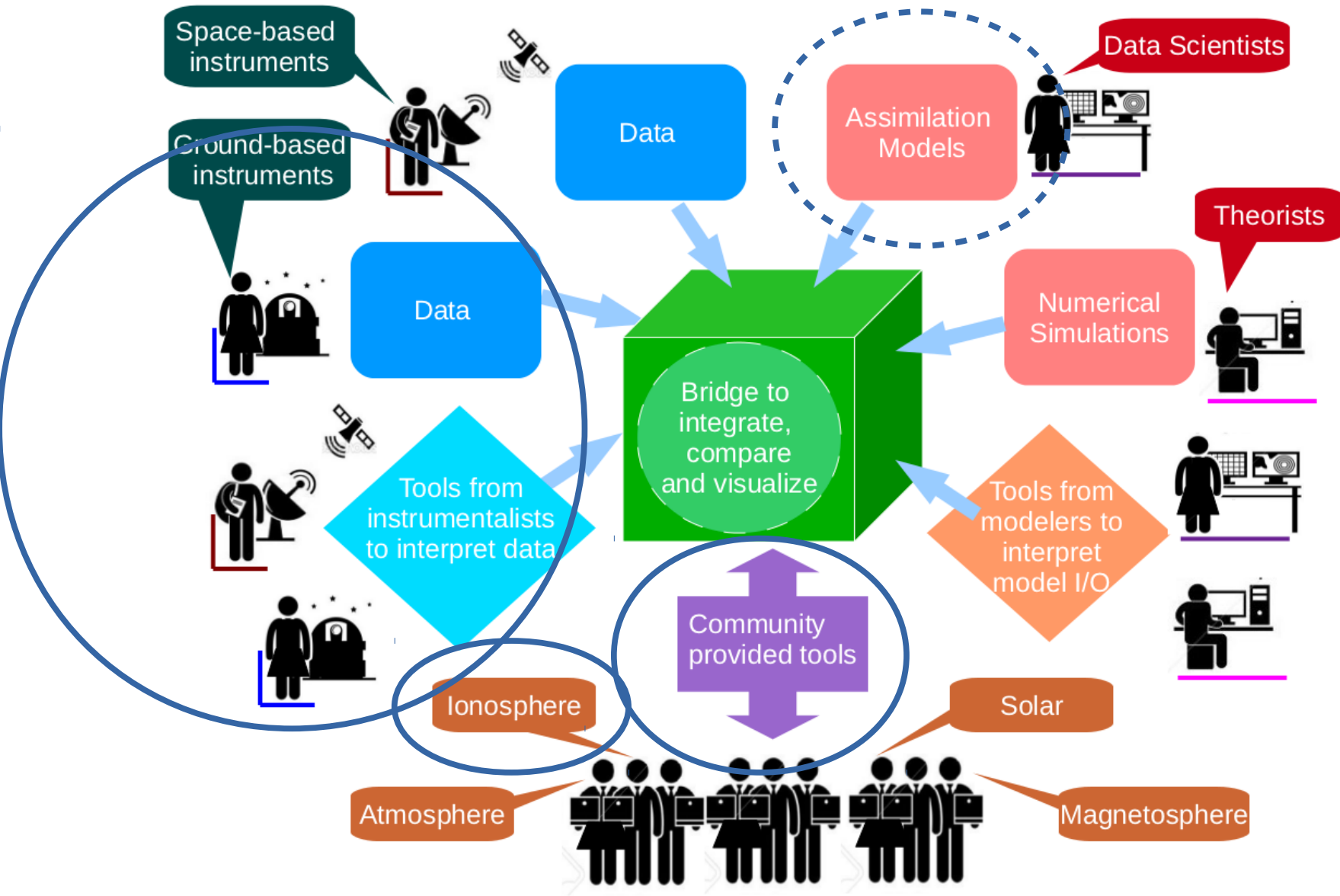
Current method of doing research...



...to this



InGeO current elements



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