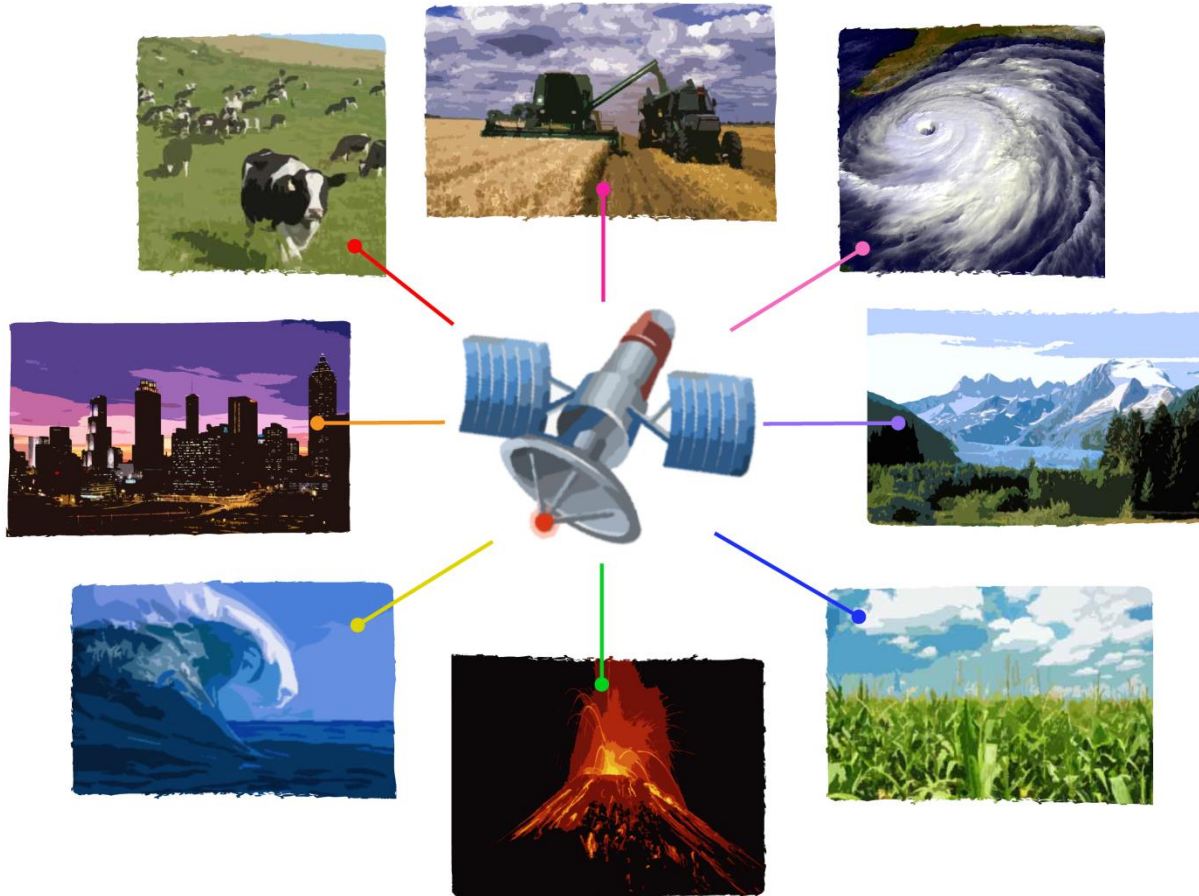


Spring 2012 - EAS 2550

The Next Generation of NASA Missions

Offered by Prof. Rowena Lohman



NRC Decadal Survey on Earth Sciences

- *How is the global Earth System changing?
How will it change in the future?*

- Atmospheric Composition
- Weather
- Climate Variability & Change
- Water & Energy Cycle
- Carbon Cycle & Ecosystems
- Earth Surface & Interior

Need students with:

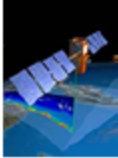
New backgrounds

New skill sets

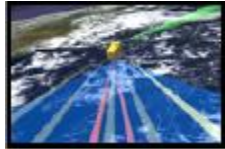
New motivations

17 Recommended New Missions: “Minimal Yet Robust”

3D-Winds



ACE



CLARREO



ASCENDS



DESDynI

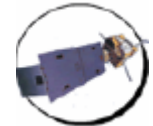
GACM



- NOAA & NASA missions launched from 2010-2020:

- Seven “small” (\$65M to \$300 million)
- Eight “medium” (\$350M to \$600M)
- Two “large” (\$700M & \$800M)

Geo-CAPE



GPSRO



HyspIRI



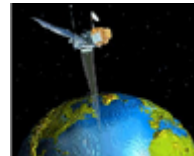
SMAP



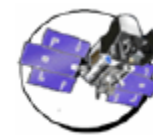
SCLP



PATH

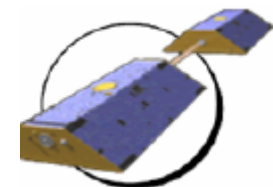


ICESat-II

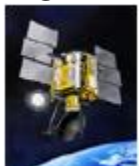


& LIST

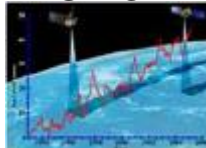
GRACE-II



XOVRM



SWOT



Slide from: Rick Anthes, DESDynI Workshop, July 2007