

National Aeronautics and Space Administration

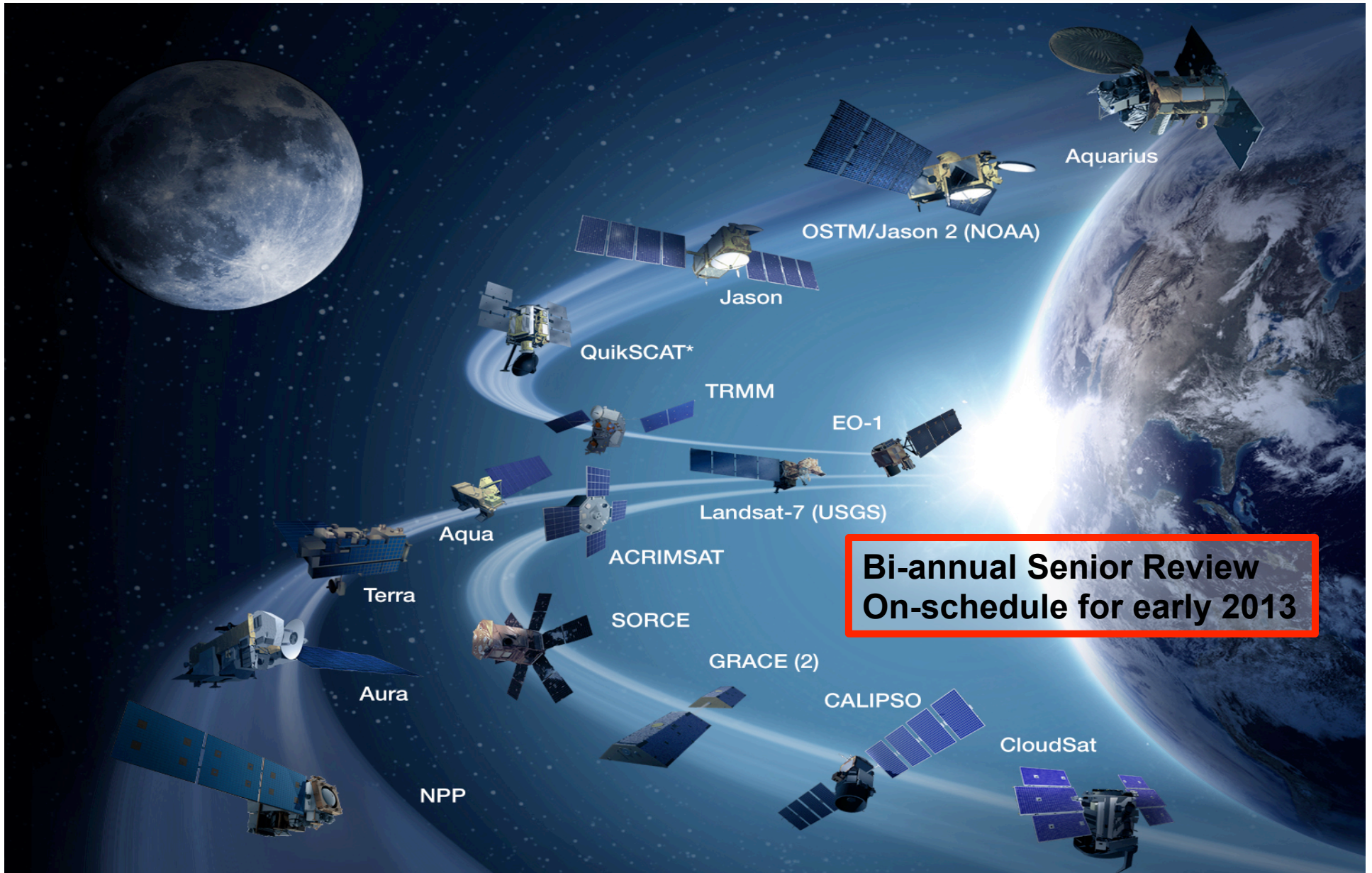


NASA Earth Science Division  
Physical Oceanography Program Update  
Eric J. Lindstrom

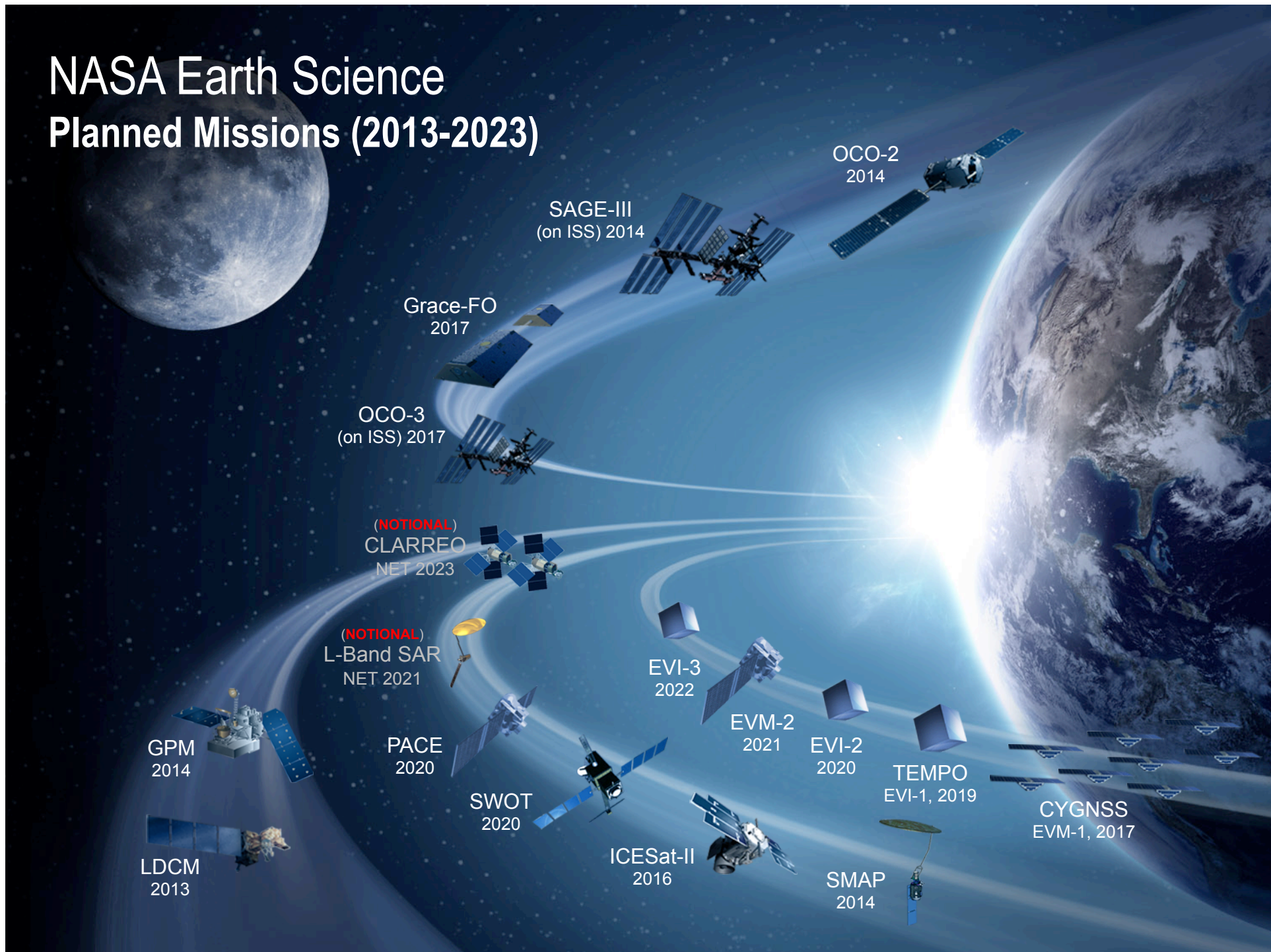
15 April 2013



# ESD Operating Missions



# NASA Earth Science Planned Missions (2013-2023)



# NASA Physical Oceanography Program

**Support missions on orbit:** Jason, Jason-2 (Altimetry), QuikSCAT (Winds), Aquarius (Sea Surface Salinity),

**Support missions in development:** Surface Water and Ocean Topography (SWOT), Jason-3 (Altimetry), RapidSCAT (Winds)

**Support “virtual missions”:** Next Generation SST (GHRSSST), Atlantic Meridional Overturning Circulation (AMOC)

**Support Climate Focus Area/Ocean Observing:** US CLIVAR, USGCRP, GOOS, GCOS, OOPC, GODAE OceanView,, NOAA COSC, IOOC, CEOS, ....



# Funding for NASA PO – ROSES 13

- Ocean Surface Topography Science Team
- SWOT Science Definition Team  
*(completed - new starts first quarter 2013)*
  
- Sea Level Change (May)
- Terra and Aqua (May)
- Physical Oceanography R&A (June)
- Sea Surface Salinity Science Team (July)
- Ocean Vector Winds Science Team (October)
- SPURS Analysis and Synthesis (November)

Total standing stock of ~160 projects. On average review ~250 proposals/year, selecting ~50.



# Outlook

NASA Earth Science has fared well compared to many federal agencies in recent appropriations. We have had modest growth for two years and work under the assumption of near level funding in next few years.

Sequestration cuts in March 2013 were about 8% for Physical Oceanography Program. This is being absorbed by re-phasing of funding.

Budget stress likely to continue for foreseeable future. Major impacts to PO Program include;

- delay of SPURS 2
- delayed building of SST Science Team
- more “incremental funding”
- more pressure on PI for cost and billing control



# Science Teams 2013

- Ocean Salinity (2013) [April 15-17 & Nov 12-14]
- Ocean Vector Winds (2014) [May 5-8]
- SWOT Science Definition Team (2016) [June 17-19]
- Atlantic MOC (Rolling) [July 16-18]
- Ocean Surface Topography (2016) [Oct 7-11]
- Sea Surface Temperature (Rolling) [Oct 28-31]

Foreign travel to conferences is now strictly limited. Most science teams fit the definition of “operational meetings” but also meet criteria for definition as a “conference” and will likely be treated as such.



## Interagency/International (chair/co-chair)

- GOOS Steering Committee (2<sup>nd</sup> meeting March 2013)
- GODAE OceanView Patrons Group (Review and Symposium, Nov 2013)
- Interagency Ocean Observation Committee (IOOC)
- CEOS Ocean Surface Topography Virtual Constellation

*(A potential CEOS Proposal on NRT Oceanography – Under development summer 2013).*



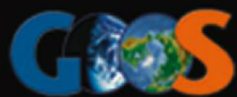


## Interagency/International (other)

- Ocean Observation Panel for Climate
- CEOS Climate Working Group
- NOAA Climate Observing System Council
- Task Force on Ocean Exploration and Undersea Research Technology and Infrastructure (TFORT)
- Interagency Ocean Partnership Committee
- Oceans and Coasts Indicators Technical Team for the USGCRP National Climate Assessment



Thank you



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The oceans are the basis of the life support system. GOOS measures ocean warming and provides an opportunity for the human system to respond.

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