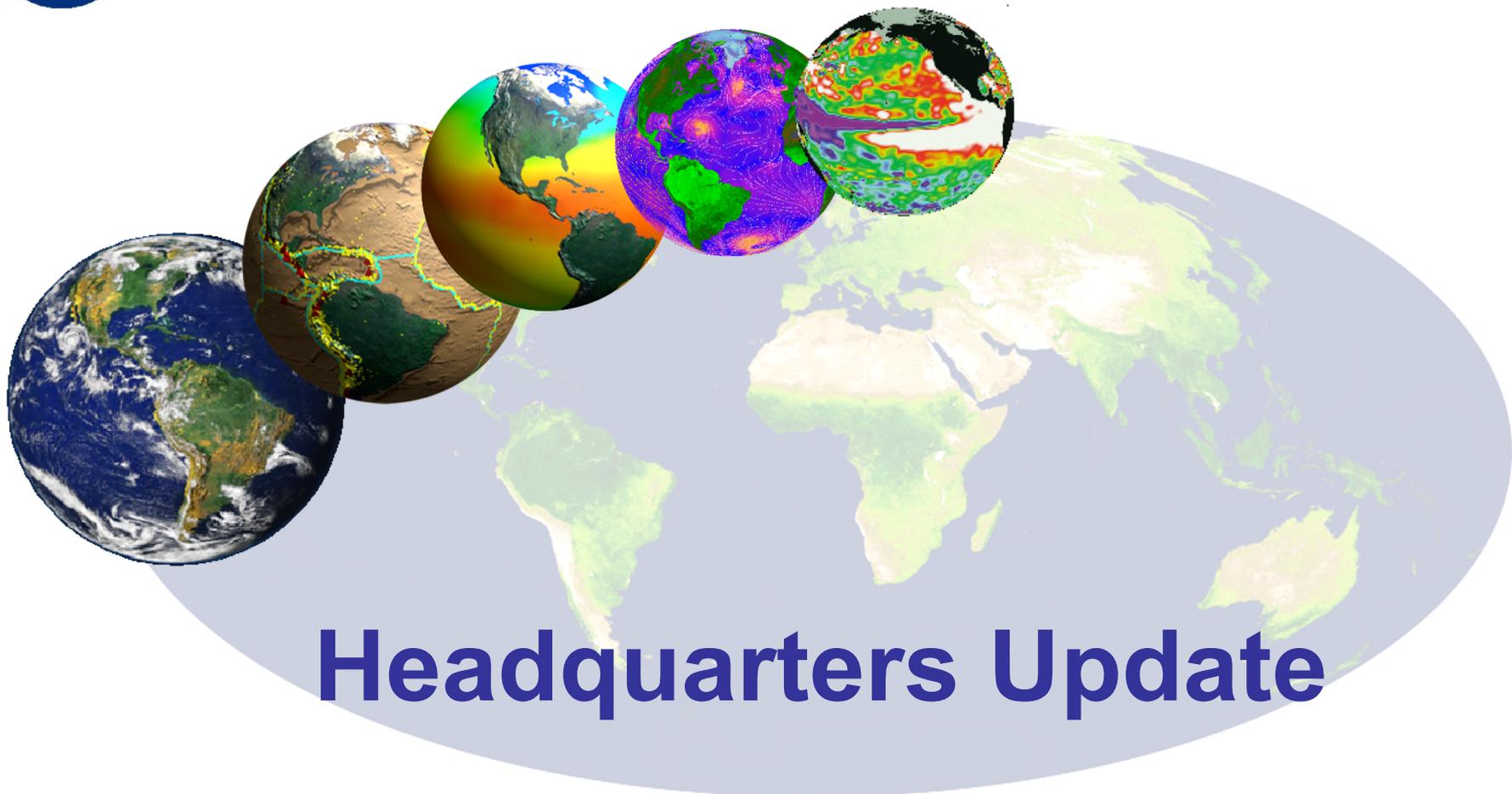




**ECOSTRESS Workshop**  
**Beckman Institute Auditorium, Caltech, Pasadena, CA**



# Headquarters Update

**Woody Turner**  
**Earth Science Division**  
**NASA Headquarters**

**March 21, 2019**

(From Launch Day 6/29/2018)

## Commitment

- Congratulations!
- Things are different now. Historic day.
- July 2014: ECOSTRESS EV-I selection
- June 2018: ECOSTRESS in orbit
- Cost = ~\$30M instrument + ~\$30M ISS
- ECOSTRESS earned the “STRESS” in its acronym
- Lessons learned must be shared with HQ, JPL, other Centers
- A mission at 1/10 the cost → 10x the science

# What Nine Months Have Taught Us

- Space missions are humbling
  - Mass Storage Unit and other challenges
- ECOSTRESS is productive!
  - > 16,000 scenes as of early March (400km x 400km!)
  - > 100 scenes per day
  - Need to tell these good stories as well as problems
- “Early Adopter” program key for use and understanding
  - ~200 Early Adopters to date—feedback has been vital
  - Energized by desire to get early data and prepare for solicitation
  - A good website helps—Data Coverage Tool
- Thank you LP DAAC for great support and participation!
  - Enabling Early Adopters
  - Level 1B data publicly available next week (3/27)

# ECOSTRESS Science & Applications Team Solicitation

- A.7 in ROSES 2018
- Government shutdown resulted in two delays in proposal due dates adding a total of 5 weeks to match length of shutdown, because lack of NOAA NCEP data led to no L3 and L4 products during that time
  - March 19 → March 29 → April 23
- February 27: 108 NOIs received
  - Alert posted
  - Projects ranging from ~\$73,000 to \$157,000 per year for three years

# Decadal Survey: SBG

- Participate in Surface Biology and Geology Working Groups!: Algorithms (Townsend, Cawse-Nicholson); Applications (Luvall, Lee, Glenn); Cal/Val (Turpie, Kokaly), Modeling (Poulter, Serbin, Wang)
- Currently in “casting a wide net” phase of SBG study
- Developing Science & Applications Traceability Matrices
- Architecture study in parallel (Team A in late February)
- Will begin to narrow options in FY2020
- June 12-14: SBG All Hands Meeting in Washington, DC
- Please join us!
- Descope Options: “In the event costs exceed maximum cost level recommended here, relaxed instrument requirements and/or eliminating the TIR instrument are advised.” page 3-64

**Thank You**

# ECOSTRESS Science & Applications Team Solicitation – Part 2

- Proposals should focus on use of L2, L3, and L4 products
- Open to production of alternative L3 and L4 products
- Efforts that advance the three ECOSTRESS science objectives
- Evaluation and improvement of ECOSTRESS data products
- New research and innovative analyses using ECOSTRESS data products alone or in combination with data products from other sensors (e.g., NASA, other U.S. agencies, international) that advance the understanding of the climate system, the water cycle, the carbon cycle, ecosystems and their biodiversity, and/or extreme weather events
- Applications of ECOSTRESS products for agriculture, water management, disaster response and mitigation, managing ecosystems for conservation and more sustainable resource use, and the forecasting of weather and extreme events
- Enhanced validation strategies, techniques, and data products