



# ECOsystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS)

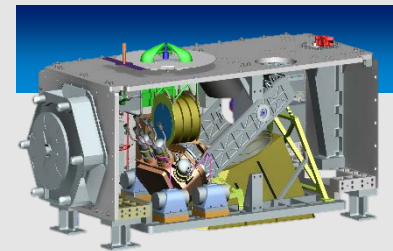


## Salient Features:

- Cost-Capped Cat 3/Risk class D per NPR 7120.5E/ NPR 8705.4
- 8–12.5  $\mu\text{m}$  Radiometer with a 400km swath, 69 x 38 m resolution
- Measure brightness temperatures of Earth at selected location
- Launched: June 29, 2018
- Deployed on the ISS on JEM-EFU 10
- Operational life: 1 year after 30 days on-orbit checkout



- Principal Investigator: Simon Hook (JPL)
- Project Manager: Dana Freeborn (JPL)
- ESSP Program Director: Greg Stover
- Mission Manager: Brooke Thornton
- Program Executive: Charles Webb
- Program Scientist: Woody Turner



## Primary Science Objectives:

- Identify critical thresholds of water use and water stress in key climate-sensitive biomes
- Detect the timing, location, and predictive factors leading to plant water uptake decline and cessation over the diurnal cycle
- Determine agricultural water consumptive use over the contiguous United States (CONUS) at spatiotemporal scales applicable to improve drought estimation accuracy