ECOsystem Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS)

**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

**Salient Features:**
- Cost-Capped Cat 3/Risk class D per NPR 7120.5E/ NPR 8705.4
- 8–12.5 μm 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

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- Project Manager: Dana Freeborn (JPL)
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