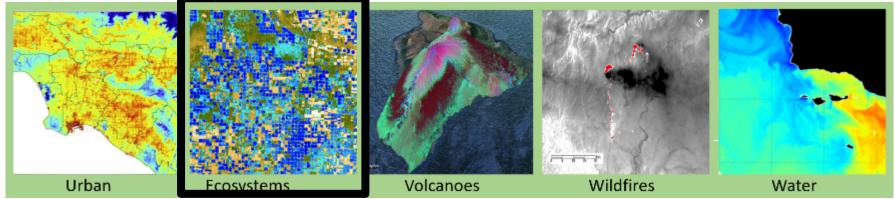
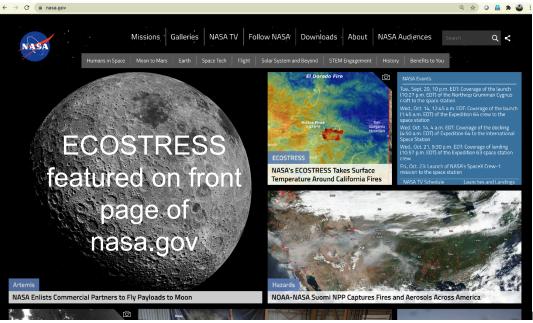


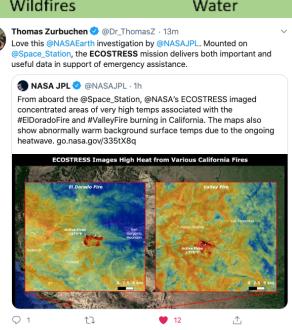
ECOSTRESS Status Update



Simon J. Hook









Science Assessment Key Accomplishments and Results



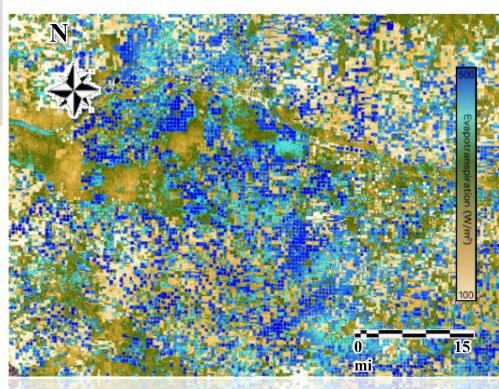


"The ECOSTRESS team is doing critical work to better understand how plants react to heat and water stress by measuring the temperature of Earth's vegetation This mission will help water managers better optimize water usage for agriculture throughout the world."

NASA Administrator Jim Bridenstine
 August 27, 2018 and August 8, 2019



- Launched June 29, 2018 to the ISS
- Acquired 145,008 x 400x400 km scenes as of 11/30/20
- Delivers L1-L4 products
- Instrument working well, far exceeding expectations
- More info at: https://ecostress.jpl.nasa.gov



ECOSTRESS evapotranspiration image over Garden City, Kansas USA | Center pivot irrigation dominates the landscape with circular patterns distributed across this Kansas community. Blue circles and squares indicate recently irrigated fields.



ECOSTRESS Facts and Figures



- ECOSTRESS was proposed to have an average operating daily acquisition rate of 72 scenes. It has had an operating daily acquisition rate of 203 scenes (as of 11/30/20).
- ECOSTRESS has acquired data on 714 days (as of 11/39/20).
- ECOSTRESS has acquired 145,008 400 km x 400 km scenes (as of 9/15/20).
- ECOSTRESS had the largest early adopter program ever.
- ECOSTRESS L1 data were publicly released on schedule and ECOSTRESS L2-L4 data were released ahead of schedule.
- The NASA ECOSTRESS science team call was heavily oversubscribed with about 120 Notice of Intents and 70+ proposals submitted. Selected projects funded for 2020 2023. Demand is high.
- Validation work indicates the instrument is well calibrated with high quality data products.
- There are now 200+ peer reviewed articles and over 20 press releases and numerous articles in the media.
- The ECOSTRESS instrument is healthy and NASA has selected the ECOSTRESS team for 3 more years of funding through the Senior Review.
- ISS is the <u>only</u> platform suitable for high resolution diurnal sampling.
- ECOSTRESS is the highest spatial resolution multispectral thermal infrared radiometer NASA has <u>ever</u> built. It is the only spaceborne instrument capable of providing data suitable for evaluating data for the Decadal Survey SBG TIR mission.