“[My first image] of Mt. Taranaki, New Zealand! Really cool to see the abrupt temperature gradient at the transition of the national park (circular area of forest) to farmland; in addition, to urban heat island effects of nearby towns. Thanks team!” – ECOSTRESS Early Adopter
ECOsystem Spaceborne Thermal Radiometer Experiment on Space Station

Applications and Early Adopters

ECOSTRESS Science and Applications Team
February 12, 2020

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ECOSTRESS Applications

- ISS as a platform for innovative science and applications
- Foundation for applications / applied science set in mission science objectives – focusing on agriculture and drought
- Provision of standard L2 – L4 products enables a primary mission applied science objective, and also for a wide variety of other science / applications themes
Guiding Tenets

• Build a diverse and agile community of practice towards improving mission goals and outcomes and increase societal benefit

• Reduce mission risk – for ECOSTRESS and future missions like SBG by adapting EAs

• Develop a framework to demonstrate uses, benefits of ECOSTRESS data and provide feedback to project and data systems teams
Early Adopters

- Early Adopters (EA) initiated in September 2018, after launch

- 35 Adopters granted access initially through NASA Earth data

- 206 EAs at the release of L1B data (March 2019), 249 at L2-L4 release (June 2019)

- After L2-L4, EAs became Community of Practice (COP)
Early Adopters

- 33-35% of Early Adopters self-identified as Applied (about 90 projects)
Partnership with LP.DAAC

• Unique collaboration and implementation of Early Adopters

• Close collaboration on trainings (ecostress swath2grid.py → AppEEARS)

• Co-presenting NASA Earthdata webinar, ARSET trainings – the latter which drew 412 participants online from 62 countries, from over 200 unique orgs.
Early Adopter Highlights and Decadal Survey

ECOSTRESS Early Adopters have helped demonstrate the necessity of ECOSTRESS data to address critical SBG Most Important, Very Important, and Important questions from the 2017 Decadal Survey, across all TO-18 areas:

- **Cryosphere and Hydrology**
- **Surface Geology**
- **Ecosystems (Terrestrial)**
- **Ecosystems (Aquatic)**
- **Weather and Public Health**
Early Adopter Highlights and Decadal Survey

ECOSTRESS Early Adopters have helped demonstrate the necessity of ECOSTRESS data to address critical SBG Most Important, Very Important, and Important questions from the 2017 Decadal Survey, across all TO-18 areas.

THANK YOU TO OUR EARLY ADOPTERS!
Join the Community of Practice and Slack Channel

https://ecostress.jpl.nasa.gov/early-adopters
“Thank you for your help accessing ECOSTRESS data last spring. I am very pleased with the preliminary results. This imagery shows the bathymetry of the shallow mudbanks very nicely! I am [working to improve] the Seagrass Integrated Mapping and Monitoring for the State of Florida.” – ECOSTRESS Early Adopter