

Applications of Remote Sensing-Based Evapotranspiration Data Products for Agricultural and Water Resources Management

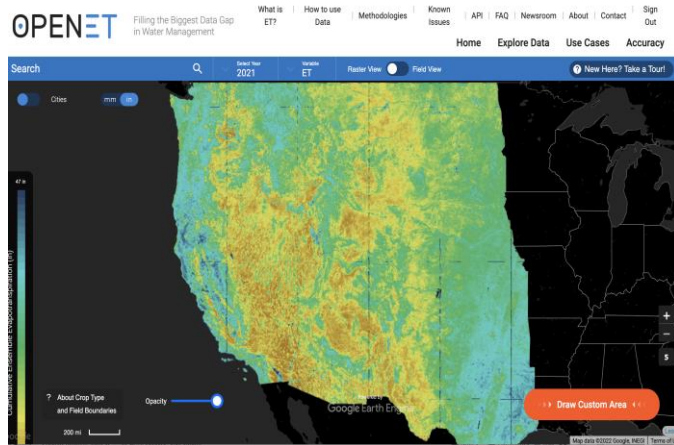
Amita Mehta, Gregory Halverson (JPL)

June 8, 2022

Training Outline

Three 1.5-hour sessions offered in English with materials available in Spanish

Part 1: June 1, 2022



<https://explore.etdata.org/#5/39.665/-110.396>

OpenET

Speaker: Forrest Melton
NASA Ames Research Center

Part 2: June 8, 2022

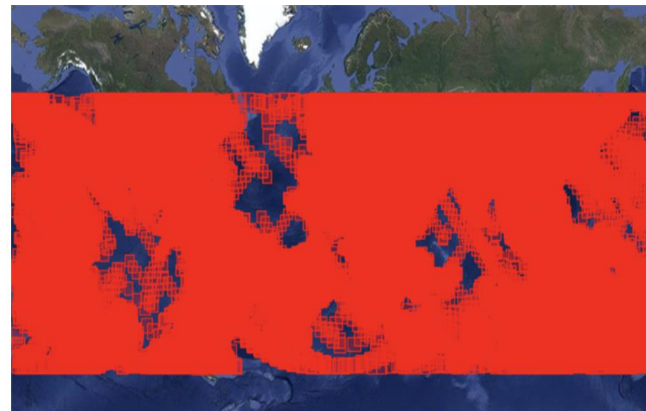


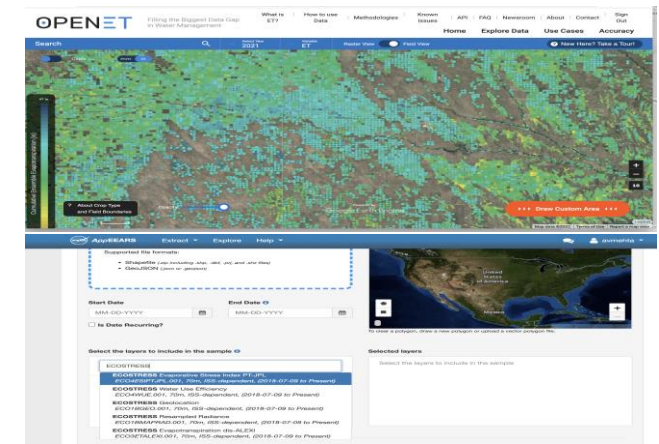
Figure 2. Represent the actual coverage area acquisition as of 19 March 2020.

<https://ecostress.jpl.nasa.gov/science>

ECOSTRESS ET

Speaker: Gregory Halverson
NASA JPL

Part 3: June 15, 2022

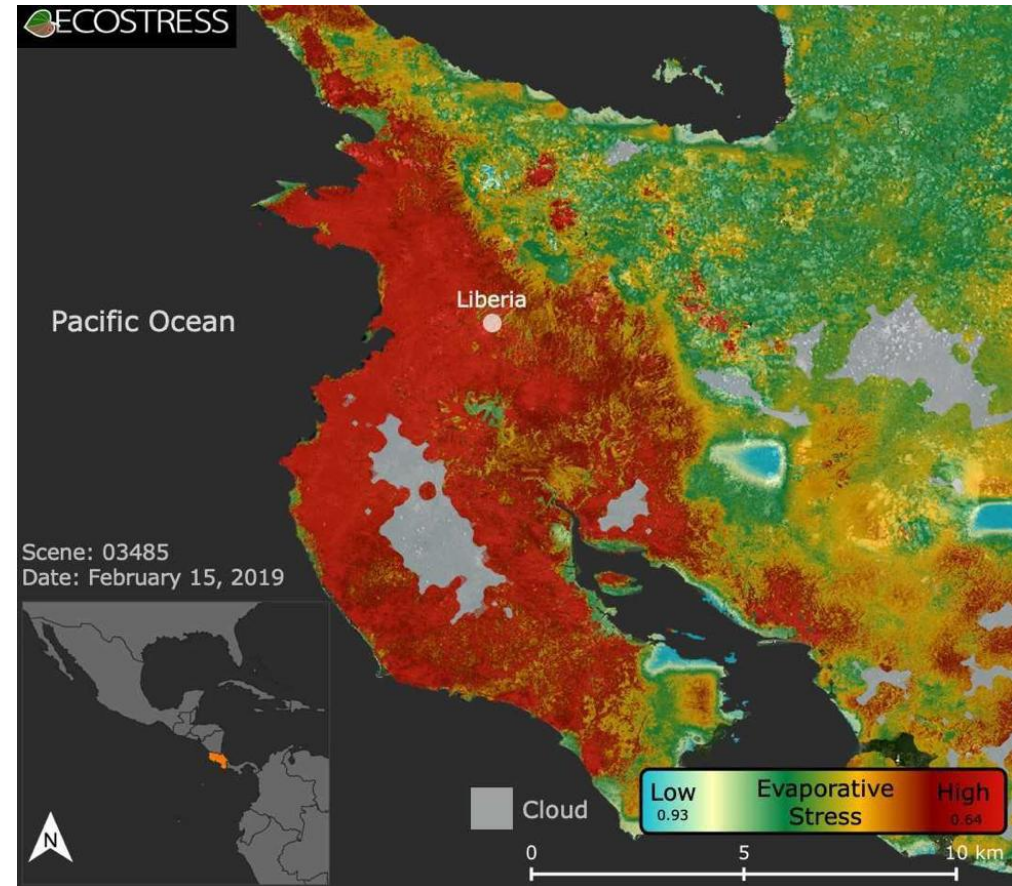


Exercises: Access and
Analysis of OpenET and
ECOSTRESS ET Data



Outline for Session 2

- About ECOSTRESS
- ECOSTRESS Evapotranspiration (ET)
 - Data products
 - Data access
 - Data analysis



<https://www.jpl.nasa.gov/images/pia22839-ecostress-focuses-on-costa-rican-drought>



ECOSTRESS ET

Demonstration: Data products, Data Access, and Analysis

If you wish to replicate the Part 2 demonstration to access and display ECOSTRESS data, please:

- Create a NASA EarthData Login: <https://urs.earthdata.nasa.gov/users/new>
- Download and install the latest version of QGIS: <https://qgis.org/en/site/forusers/download.html>
- Download and install Anaconda: www.anaconda.com
- Download and install Visual Studio Code: <https://code.visualstudio.com/>



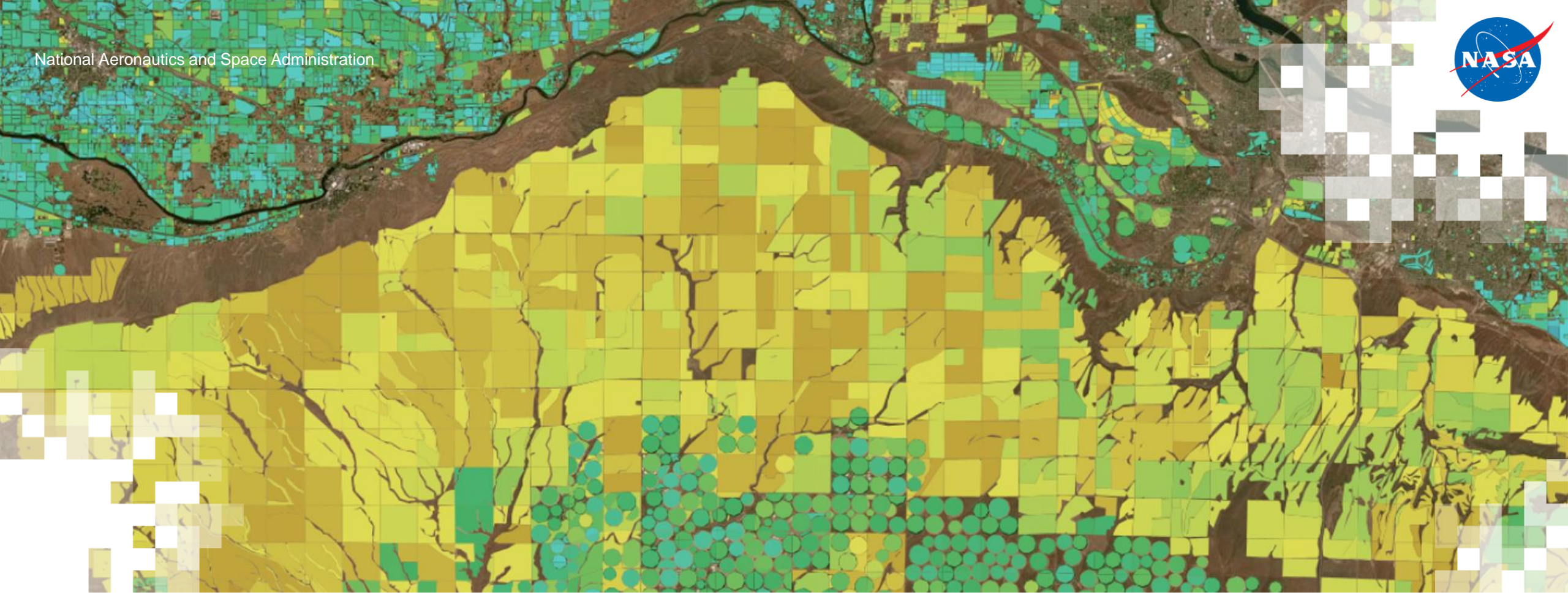
We will have the recording of this demonstration available within 48 hours after the presentation for you to go through at your own pace.



Homework and Certificate

- One homework assignment:
 - Answers must be submitted via Google Form accessed from the ARSET [website](#)
 - Homework will be made available on June 15, 2022.
 - Due date for homework: June 29, 2022.
- A certificate of completion will be awarded to those who:
 - Attend all live webinars
 - Complete the homework assignment by the deadline
 - You will receive a certificate approximately two months after the completion of the course from: marines.martins@ssaihq.com





About ECOSTRESS

ARSET “Introduction to ECOSTRESS”

<https://appliedsciences.nasa.gov/join-mission/training/english/arset-new-sensor-highlight-ecostress>

• ECOSTRESS at a glance



Figure 2 . Represent the actual coverage area acquisition as of 19 March 2020.

- Selected July 30, 2014
- Launched June 29, 2018, to the ISS
- Began operations August 20, 2018
- 30 M (USD) cost capped, on schedule, on budget

- Global Coverage
- First use of Wi-Fi for a science mission
- Delivers L1-L4 products
- More information at:
<https://ecostress.jpl.nasa.gov>



ECOSTRESS Leverages the Variable Overpass of the ISS to Study How ET Varies at Different Times of Day

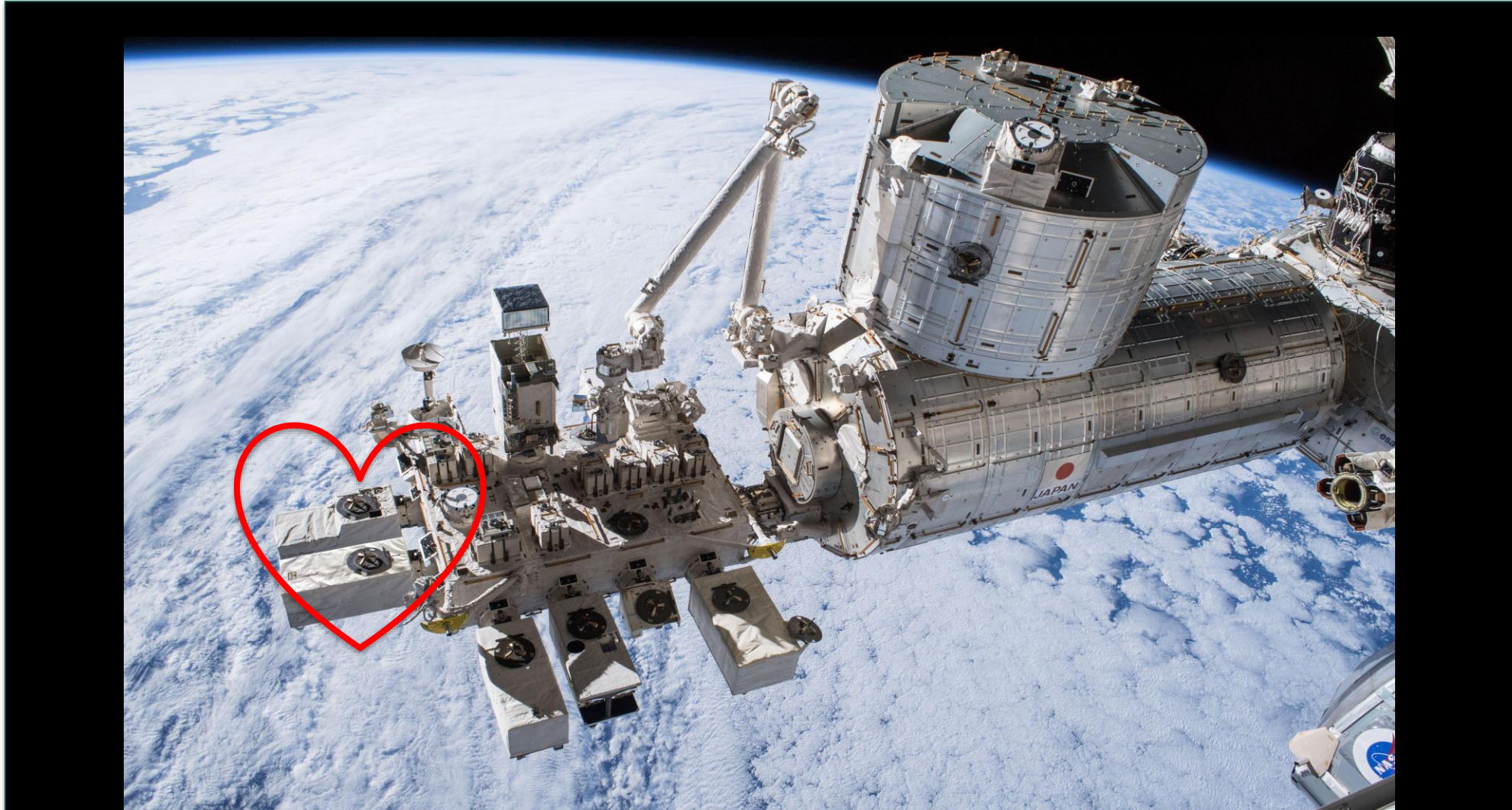


Image Credit: NASA



USDA is Using ECOSTRESS to Bridge Temporal Gaps in ET Assessments in Support of Agricultural Applications

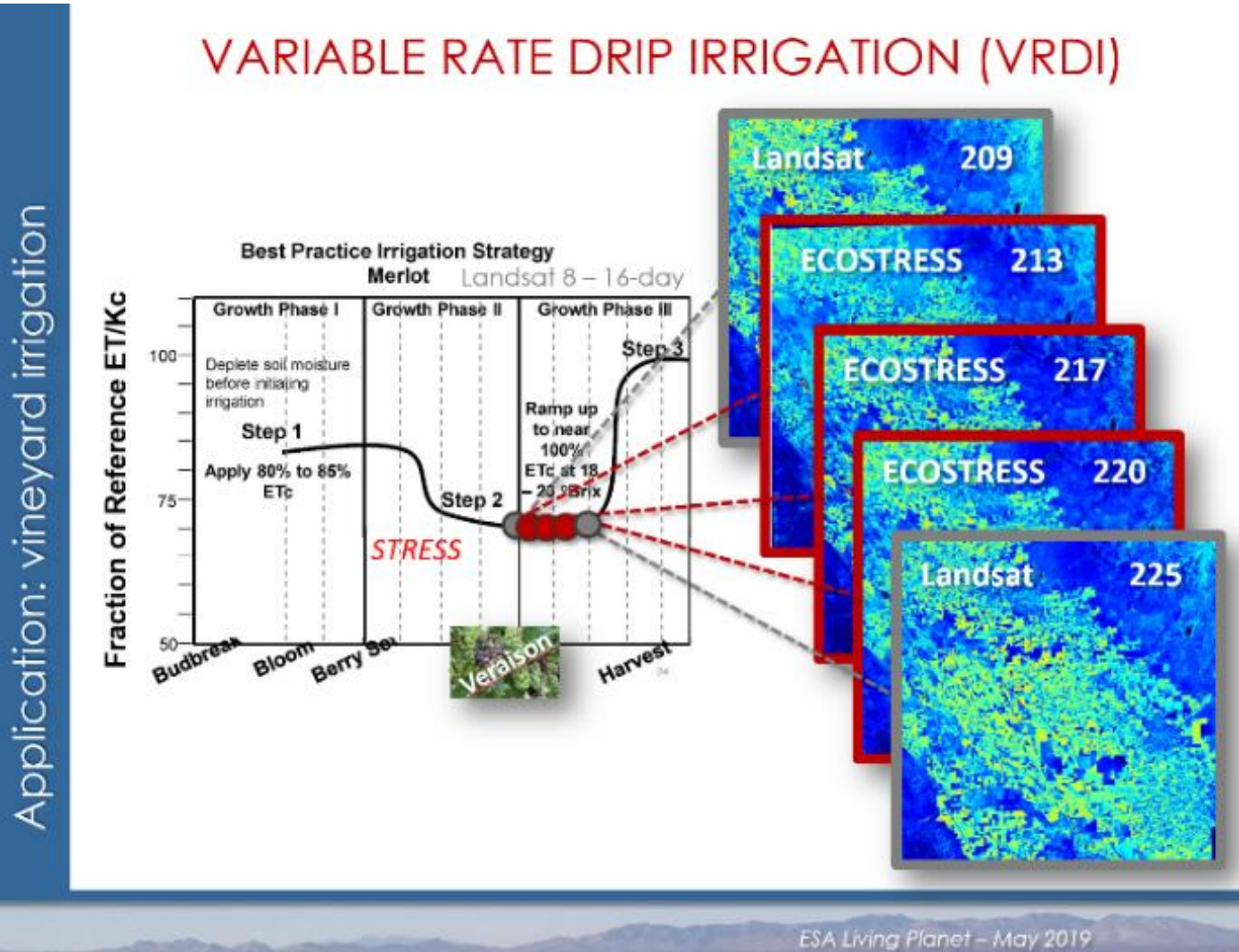
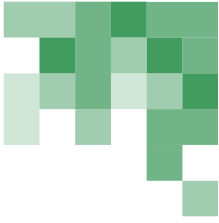
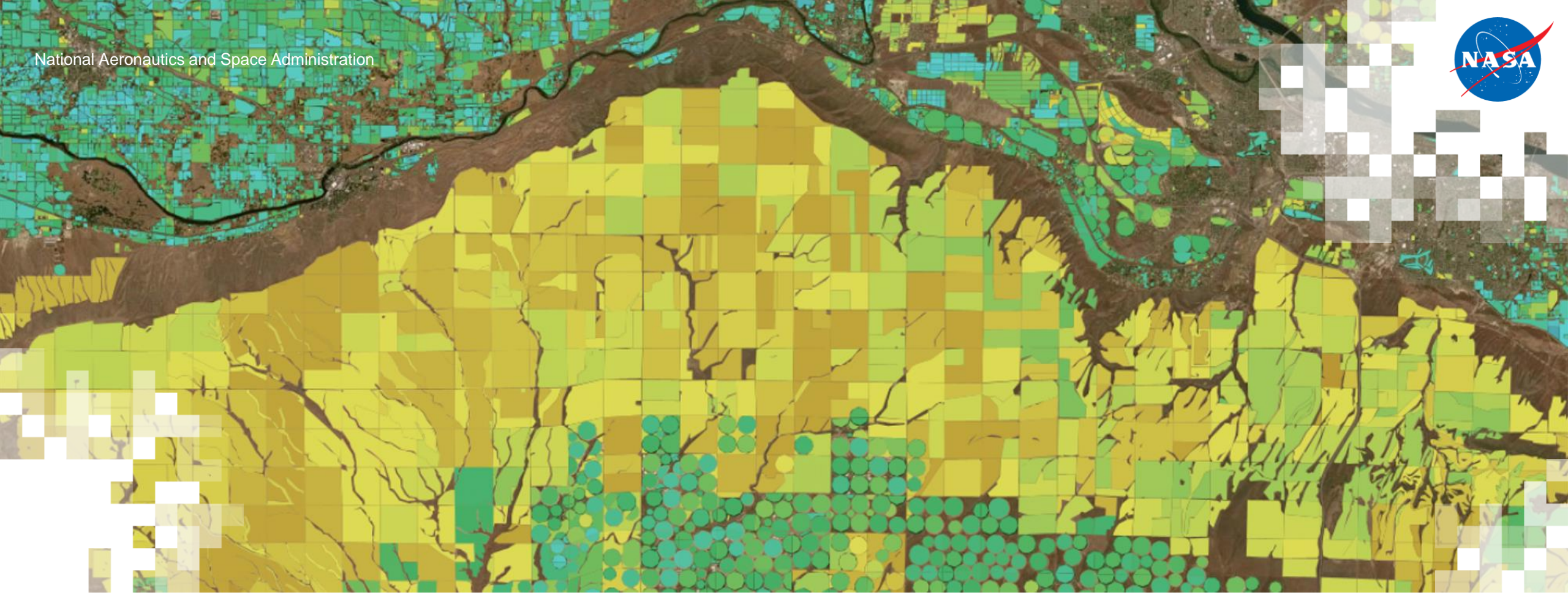


Image Credit: Dr. Martha Anderson





ECOSTRESS ET

Demonstration: Data products, Data Access, and Analysis

Gregory Halverson (JPL)

Questions?

- Please enter your questions in the Q&A box. We will answer them in the order they were received.
- We will post the Q&A to the training website following the conclusion of the webinar.



<https://earthobservatory.nasa.gov/features/WaterWatchers/page1.php>



Contacts

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 - Gregory Halverson: gregory.h.halvesron@jpl.nasa.gov
 - Amita Mehta: amita.v.mehta@nasa.gov
- Training Webpage:
 - <https://appliedsciences.nasa.gov/join-mission/training/english/arset-applications-remote-sensing-based-evapotranspiration-data>
- ARSET Website:
 - <https://appliedsciences.nasa.gov/arset>
- Twitter: [@NASAARSET](https://twitter.com/NASAARSET)

Check out our sister programs:





Thank You!

