

# Reflectance



#### **Quick Updates**

- Several new papers were published by Earth Lab researchers and affiliates. Check out: "Reimagine fire science for the anthropocene," by Jennifer Balch, Natasha Stavros, Nayani Ilangakoon, Chelsea Nagy, Philip Higuera; "Recent droughts in the United States are among the fastest-developing of the last seven decades," by Virginia Iglesias, William Travis, Jennifer Balch; and "Experiments in ranching: Rain-index insurance and investment in production and drought risk management," by Trisha Shrum, William Travis.
- Save the date! ESIIL (the new Environmental Data Science Innovation & Inclusion Lab) is hosting the first Innovation Summit from May 23rd-25th, 2023 in the SEEC Building at the University of Colorado in Boulder. Join us and our growing network of environmental data scientists for plenaries. breakout sessions and networking opportunities! Applications to attend the Summit will open in the coming months, so stay tuned for further details.

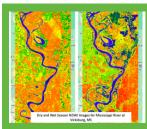






## Earth Data Analytics Professional Graduate **Certificate Student Projects**

Each year, students in our **Earth Data Analytics** Professional Graduate Certificate program (taught by Professor Elsa Culler) complete a data-intensive group project that is based on a real-world issue. They work on a project with one of Earth Lab's industry partners or on a topic related to their current work, graduate thesis, or dissertation. Our 2022 graduates completed their projects and wrote blogs for our website. Check them out below!



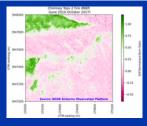
How Much Water Makes a Flood? By Avra Saslow and Kristen Tortorelli



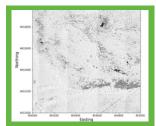
Infrastructure By Jensen Widtfeldt



Integrating Synthetic Aperture Radar



After the Burn: Vegetation Regrowth By Heidi Yoon



Sensors and Sunlight: How We Can



How Do We Decide What Land to Protect? By Christy Sandberg, Eric Nutt, Lana Kurakina



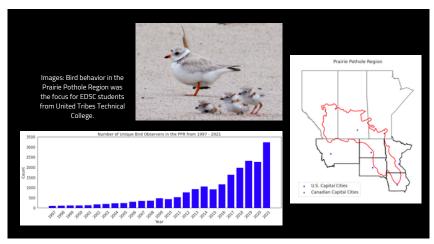
Soil Moisture and Rainfall During

#### **Climate Futures Toolbox Update**

We've updated the Climate Futures Toolbox (CFT)! Now on CRAN, our open-source software package helps bridge the gap between big data and meaningful climate insights. Read the blog post.

### **EDSC 2022: Explore the Students' Projects**

The 2022 cohort of our Earth Data Science Corps completed real-world Earth data science projects as part of their summer internships. CU Boulder students explored how to predict streamflow from snowpack, United Tribes Technical College students examined bird behaviors within the Prairie Pothole Region, and Metro State University students looked at the correlation between snowfall, precipitation, and reservoir levels in Denver's water supply. While this was the last cohort for EDSC, it will be replaced by the **ESIIL STARS** program beginning in summer 2023.



#### **Environmental Data Science Seminar Series**

Join us for our weekly Environmental Data Science (EDS) Seminar Series! Happening every Tuesday at 11am MT, we bring speakers from around the world to showcase their work, discuss new innovations in EDS, tell stories from the field, and tickle the imagination of other scientists. Learn more about the seminar series, view the schedule of upcoming speakers, and sign up for the listserv.