Newsletter



September 2023



It's time for the September issue of ARSET's Quarterly Newsletter! This past summer marks an important milestone in our program's history. This July, we trained our 100,000th participant! We put together a <u>short video</u> and an <u>article</u> about the history of the program, and a <u>shareable social media card</u> for participants to share in the celebration. When ARSET started 14 years ago, this would have seemed like a far-off dream. Chances are if you are reading this, you are one of our first 100,000 participants and one of the people who helped get us off the ground. For this we thank you. We can't predict what the future holds for the program, but we hope we have given you enough reason to stick with us to find out.

We have offered three new online trainings since our last newsletter in June. You can find those on our <u>training page</u>, as always. We are also in the middle of <u>Satellite Data for Air Quality</u> <u>Environmental Justice and Equity Applications</u>. While other ARSET Trainings have included aspects of environmental justice, this is our first ever training structured entirely around the topic. Later this month, we have an online training on <u>Building Climate Risk</u> <u>Assessments from Local Vulnerability and Exposure</u>. There is still time to register, so we hope to see you there!

As we near the end of the fiscal year, we're starting to wind down on trainings until the New Year. Rest assured, we're working on another great lineup of trainings for 2024.

Upcoming Trainings

19 - 21 September 2023 Building Climate Risk Assessments from Local Vulnerability and Exposure

03 - 10 October 2023 <u>Transforming Earth Observation Data</u> <u>Into Building Infrastructure Data Sets</u> <u>for Disaster Risk Modeling</u> <u>(también en español)</u>

26 Oct. - 09 Nov. 2023 Spectral Indices for Land and Aquatic Applications

October 2023 Measuring Floods, Subsidence, and Sea Ice with SAR

November 2023 Developing Sustainable Earth Science Applications

Recent Trainings

06 - 13 July 2023 Assessing the Impacts of Fires on Watershed Health

18 - 25 July 2023 Monitoring Water Quality of Inland Lakes using Remote Sensing

23 August - 06 September 2023 Satellite Data for Air Quality Environmental Justice and Equity Applications



Participant Highlights

Lucas Gobatti

Switzerland, Academia (Student)

Lucas Gobatti, a current PhD candidate at the ETH Zürich and Eawag (Swiss Federal Institute of Aquatic Science and Technology), attended the August 2022 ARSET webinar "Satellite Remote Sensing for Measuring Urban Heat Islands and Constructing Heat Vulnerability Indices." After the training, he reached out to ARSET trainer Sean McCartney for assistance with technical aspects of the data and was provided with additional resources. In June 2023, Lucas and his colleagues Peter Marcus Bach, Andreas Scheidegger, and João Paulo Leitão published a scientific paper where they devise a method to estimate how long it takes for newly built urban vegetated area to reach their full cooling capacity. The resulting paper, "Using satellite imagery to investigate Blue-Green Infrastructure establishment time for urban cooling" was based on the code provided in the heat islands training.





Additional Resources

NASA Earthdata Air Quality Data Pathfinder

If you're attending <u>Satellite Data for Air Quality Environmental Justice and Equity Applications</u> and want to dive deeper into NASA air quality data, you might want to take a look at the <u>NASA</u> <u>Earthdata Air Quality Data Pathfinder</u>. It is designed to help guide you through the process of selecting and using datasets applicable to air quality, with guidance on spatial, temporal, and spectral resolutions, as well as direct links to the data sources.

NASA Earthdata Agriculture and Water Management Data Pathfinder

The updated <u>Agriculture and Water Management Data Pathfinder</u> helps you find the data you need for research and explorations into agriculture, water management, and food security.

Oct. 8: NASA Space Apps 2023 Project Submission Deadline

The deadline to submit your project to the <u>International Space Apps Challenge</u> is October 8. You can still organize or join a team before September 19. You can find this year's challenges here.

Aug. 24: NASA Shares First Images from US Pollution-Monitoring Instrument

NASA released the first data maps from its new instrument launched to space earlier this year, TEMPO, or Tropospheric Emissions: Monitoring of Pollution. <u>TEMPO</u> is now successfully transmitting information about major air pollutants over North America.

Cyanobacteria Assessment Network Application (CyAN app)

EPA's <u>Cyanobacteria Assessment Network mobile application</u> (CyAN app) is an app that provides access to cyanobacterial bloom satellite data for over 2,000 of the largest lakes and reservoirs across the United States. We featured this application in <u>Monitoring Water Quality of Inland Lakes</u> <u>using Remote Sensing</u>.

EPA's Environmental Justice Screening and Mapping Tool (EJSCREEN)

EJScreen is EPA's environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic socioeconomic indicators. It is based on nationally consistent data and an approach that combines environmental and demographic indicators in maps and reports.