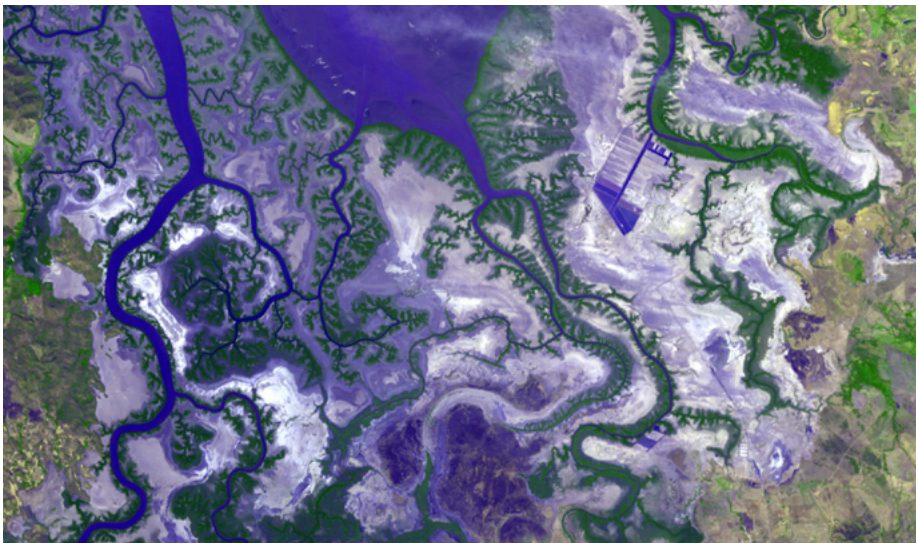
Newsletter

ARSET

September 2022



Summer is often the busiest time of year for the ARSET program, and with this summer coming to a close we have quite a few new training opportunities and other updates for you. Since our last newsletter, we have conducted five new online trainings with topics ranging from the use of remote sensing for mapping refugee camps to monitoring aquatic vegetation to measuring the urban heat island (UHI) effect. We have also updated our online resource guide in a downloadable and interactive PDF format so you can see all of our online training opportunities at a glance. These trainings are organized by theme to make it easy to find what you're looking for.

At ARSET, we are always striving to provide the best content and experience for our participants. To gather information and training feedback, we send two surveys to the participants who attend live trainings: one immediately following the training, and one about one year later. You might have seen one of these surveys in your inbox recently. Please fill out these surveys! Learning about the skills and knowledge you have gained, how you use them, the usefulness of each component of our trainings, and what topics you would like to see are critical to improving the program and helping us plan our trainings.

Last but not least, the surveys aren't the only way for you to let us know how ARSET training has helped you achieve your remote sensing goals. If you have a success story, you can email us at any time at nasa.arset@gmail.com. Please include your name, title, country of origin, your story, and a photo of you that we could potentially share with the community.

Upcoming Trainings

14 - 21 September 2022
Monitoring and Modeling Floods using Earth Observations

19 - 20 September 2022
Selecting Climate Change Projection Sets for Mitigation, Adaptation, & Risk Management

11 - 25 October 2022
Accessing and Analyzing Air Quality Data from Geostationary Satellites

19 - 27 October 2022
Disaster Assessment Using Synthetic Aperture Radar
(También en español)

Recent Trainings

01 - 15 June 2022
Applications of Remote Sensing-Based Evapotranspiration Data Products

14 - 23 June 2022
Humanitarian Applications Using NASA Earth Observations

12 - 19 July 2022
Monitoring Aquatic Vegetation
(También en español)

02 - 11 August 2022
Measuring Urban Heat Islands and Constructing Heat Vulnerability Indices

23 - 30 August 2022
Evaluating Ecosystem Services

Participant Highlights

Lita Verduga

Ecuador, Federal/Central Government

Lita Verduga works as an environmental management analyst for the PROMADEC program in the Ministerio del Ambiente, Agua y Transición Ecológica (Ministry of Environment, Water, and Ecological Transition) of Ecuador. Lita visits sites including water purification and waste treatment plants and landfills to anticipate and remediate potential environmental hazards with stakeholders before government intervention is necessary. She uses remote sensing techniques to assess impacts to the environment and sanitation after disasters, and to detect land cover change in areas with a lack of geographical information. Lita is also a professor at Pontificia Universidad Católica del Ecuador Sede Esmeraldas (PUCESE) and attends ARSET trainings to stay up to date on the latest applications of remote sensing.

James Varghese

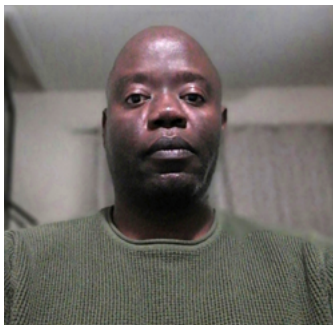
Canada, Private Sector/Nonprofit

James Varghese is a Remote Sensing Analyst with Ducks Unlimited Canada, where he is working on mapping wetlands in the boreal regions of Canada using Object Based Image Analysis (OBIA) with Sentinel 2, DEM, Sentinel 1, and derived data products as well as field validation using Helicopter Surveys. He also has personal interest in wetland research: he hopes to use ECOSTRESS data to assess time-series trends to understand how different wetland types respond to changes in hydrological, biogeochemical, climatic and environmental conditions, including those resulting from human activities. You can learn more about James' and Ducks Unlimited Canada's work and the benefits of boreal wetlands here: **https://boreal.ducks.ca/how-duc-maps-boreal-wetlands/**

Dr. Xolile Ncipha

South Africa, Federal/Central Government

Dr. Xolile Ncipha is an atmospheric scientist at the South African Weather Service and research fellow with the University of South Africa. He is interested in the link between atmospheric composition and climate. Xolile plans to use skills from the "Measuring Atmospheric Carbon Dioxide from Space in Support of Climate Related Studies" and "Atmospheric CO2 and CH4 Budgets to Support the Global Stocktake" ARSET trainings to update research he began on the distribution of carbon dioxide in South Africa and Southwest Indian Ocean islands using data from TES, or the Tropospheric Emission Spectrometer. He plans to use what he learned to establish greenhouse gas budgets to support the South African national government in meeting obligations to the Paris Agreement.



Please note: Participant highlights illustrate how ARSET participants use remote sensing data in their work and are not an endorsement by NASA or ARSET.

Additional Resources

Look for us at Pecora 22, HAQAST Wisconsin, and the UN Austria Symposium!

Sept. 14-15: PACE Applications Workshop
The PACE Applications Workshop will focus on future uses of PACE satellite data, research, and applications to benefit society and support decision-making in the context of water resources, air quality and health, climate, disasters, and ecological forecasting.

Sept. 16: GLIMR Applications Workshop
The NASA GLIMR Science & Applications team invites the research, applied sciences, resource management, and decision-making communities to the 1st GLIMR Applications Workshop that will be held virtually on September 16th, 2022, at 12pm-4pm ET.

Oct. 04-06: Geo for Good Summit
The Geo for Good Summit is an annual conference intended for nonprofits, scientists, and other changemakers who want to leverage technology and use mapping tools (such as Google Earth, Earth Engine, Environmental Insights Explorer, and My Maps) for positive impact in the world. Virtual registration is still open.

Nov. 21-23: Indigenous Mapping Workshop
The Indigenous Mapping Collective will be hosting their first hybrid event with programming both online and in-person. This year's Indigenous Mapping Workshop will be focused on building connections and reinstating relationships through in-person engagements.

Dec. 12-16: AGU Fall Meeting 2022
Registration for AGU opened on Aug. 17. This year's meeting will be hybrid, in Chicago, IL and online.

Earthdata Extreme Heat Toolkit
If you attended our Urban Heat Islands training and are interested in diving deeper, NASA Earthdata has a wealth of resources, data and data recipes, and webinars on the topic in the Extreme Heat Toolkit.