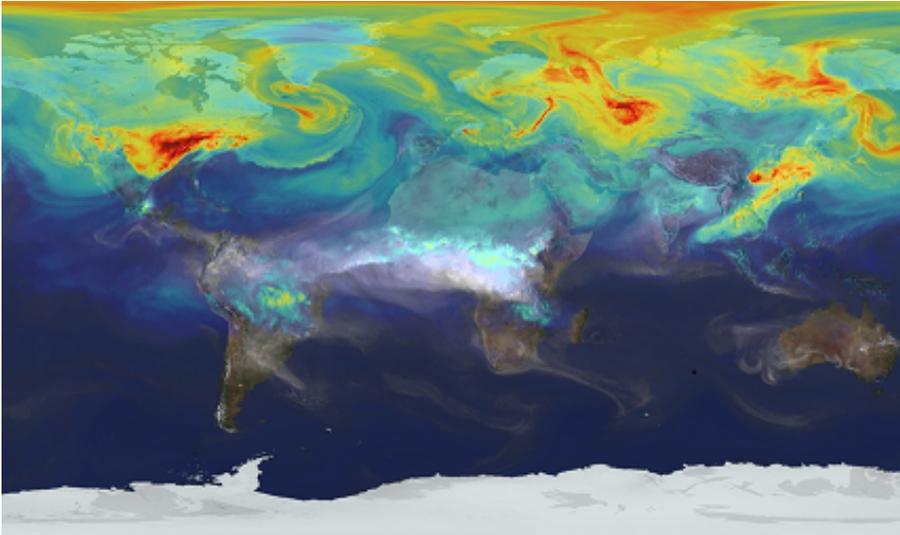


Newsletter



June 2022



It's already June, and it's time for an update on what has been happening in the world of ARSET since our first issue in March. April was a busy month for us with an advanced, bilingual training on using SAR data for crop mapping and an intermediate-to-advanced, trilingual training on using the newly updated [UN Biodiversity Lab](#). April 22nd also marked Earth Day, with ARSET contributing some online learning resources on remote sensing fundamentals for NASA's Virtual Earth Day Event.

May was filled with another two trainings, one on tracking emissions and removals of atmospheric carbon dioxide and methane to support the Global Stocktake, and another on measuring atmospheric carbon dioxide from space in support of climate studies. We also made some changes to our website, adding team member profiles, an [additional resources page](#), and auto-generated citations on each training webpage for use in scientific publications.

With May being heavily centered around carbon and climate, we will be going in some exciting new directions this month with a first-of-its-kind training on the use of Earth Observations (EO) for humanitarian applications, and next month with a training on using EO to monitor aquatic vegetation. We hope you will join us! And as always, if you would like to be featured in one of our newsletters or other materials, please feel free to send us a brief description of how you apply what you learn in ARSET trainings to your work or field of study.

Upcoming 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 with Remote Sensing](#)

August, 2022

Evaluating Ecosystem Services with Remote Sensing

August, 2022

Satellite Remote Sensing for Monitoring Urban Heat Islands and Constructing Heat Vulnerability Indices

Recent Trainings

12 April - 03 May, 2022

[Mapping Crops and their Biophysical Characteristics](#)

14 April - 04 May, 2022

[Using the UN Biodiversity Lab to Monitor the Pulse of the Planet](#)

11 - 25 May, 2022

[Atmospheric CO₂ and CH₄ Budgets to Support the Global Stocktake](#)

24 May - 02 June, 2022

[Measuring Atmospheric Carbon Dioxide from Space](#)

Participant Highlights

Abraham Coiman Venezuela, Academia

Abraham Coiman has used skills gained from ARSET trainings to create a Jupyter Notebook to estimate surface water balance and volume in South American basins. It can be found here: https://github.com/accoiman/swb/blob/main/surface_water_balance.ipynb. He also used information from ARSET Air Quality trainings to write a research proposal, which helped him receive a scholarship for his doctoral studies in Geomatics and Space Systems at the Mario Gulich Institute for Advanced Space Studies in Cordoba, Argentina. His Ph.D. thesis will focus on using remote sensing and machine learning for predicting respiratory diseases.



Aikaterini Karagianni, PhD Greece, Academia (Faculty)

Aikaterini Karagianni, PhD, earned her PhD from the School of Civil Engineering of the Aristotle University of Thessaloniki in 2019, after completing her dissertation on applying remote sensing to civil engineering issues. She has attended all of ARSET's 2021 trainings. Aikaterini is a regional coordinator for the International Society for Photogrammetry and Remote Sensing (ISPRS) Working Group V/7. Here, she applies Earth Observation-based problem solving to engineering issues and increases geospatial literacy in the civil engineering and architectural fields through development of educational materials and presentations at workshops and symposiums with her team. You can find Aikaterini's scientific publications here: <https://orcid.org/0000-0003-3423-5265>



Jyotirmoy Shankar Deb India, Academia (Faculty)

Jyotirmoy Shankar Deb works as Faculty in Zoology at Barasat College in Kolkata, India, where he has been teaching since 2004. He works with other scientists from the International Union for Conservation of Nature (IUCN) and the Society of Wetland Scientists (SWS), among others, to study habitats and identify if changes are occurring. Jyotirmoy has been attending ARSET trainings for the past 7 years, and uses them to increase his knowledge on remote sensing for monitoring the effects of disasters and wildlife management.



Additional Resources

Now Available:

The [Earth Science Applications Guidebook](#), a web-based, multimedia product synthesizing best practices and lessons learned on the use of Earth science information for decision-making, is now available for viewing.

16 May - 24 June

Apply to our sister program, [DEVELOP!](#) DEVELOP's Fall 2022 Application window is now open. DEVELOP accepts participants with skills in a variety of fields, as well as from different phases of their career, to participate in a 10-week group project under the guidance of mentors, partner organizations and science advisors. (Fall Term Dates: Sep 12 - Nov 18)

UNBL Microcourse

This UN Biodiversity Lab [Microcourse on Learning for Nature](#) is based on the first ARSET UN Biodiversity Lab training and was updated this year. This is a good alternative for those who missed our most recent UN Biodiversity Lab training.