Newsletter

ARSET

December 2022

Welcome to ARSET's fourth and final newsletter of the year! Since our last newsletter in September, we have delivered five new trainings, one of which was our first in-person training since 2019. Topics ranged from mapping floods and other disasters using SAR to climate change to the use of geostationary data for air quality.

As 2022 comes to a close, we are gearing up for a whole new lineup of remote sensing trainings for 2023. Some of these will feature often-requested, exciting new topics such as airborne imaging, citizen science, and machine learning; along with some more advanced offerings on already visited topics such as wildfires and agriculture. As always, you can find all of our past training materials and upcoming trainings on the ARSET website by clicking the '**Find a Training**' button.

A couple final notes: first, ARSET is growing! We have welcomed three new team members since September who are sure to amplify our ability to deliver top-notch remote sensing training. Also, keep an eye out for our 2022 Annual Report, which will give a detailed overview of our impacts throughout the year, including stats, figures, maps, and a full list of trainings. With that, we hope you all have a wonderful and restful holiday season and are ready to hit the ground running with us in 2023.

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Participant Highlights

Adina Renner
Switzerland, Private Sector
Adina Renner is a visual journalist who specializes in data visualization. Adina has done work for Neue Zürcher Zeitung where she creates maps and uses satellite imagery to accompany investigative news articles. She also occasionally gives presentations at conferences and within Neue Zürcher Zeitung about how journalists can use satellite imagery in their work. Adina found and attended "Disaster Assessment Using Synthetic Aperture Radar" in October 2022 after learning about it from fellow remote sensing enthusiast Rafaela Tiengo's **newsletter.** Adina sought to improve her foundational knowledge of SAR imagery after realizing she had gaps in their understanding of how the images were created. You can find some of Adina's work here: **www.adinarenner.com**

Steve Hinton
USA, Tribal/Indigenous Organization
Steve Hinton is a Conservation Scientist with the Tulalip Tribes, who are looking to implement a portion of their climate adaptation strategy that involves documenting current natural capital assets in the Snohomish River Basin in Washington State. Steve notes that they hope that using the current environmental conditions as a baseline, they can advocate for changes to local land use laws and management strategies that help to conserve, restore and adapt under changing climate conditions. Steve attended the ARSET Training "Evaluating Ecosystem Services with Remote Sensing" to gain insight into available resources and review case study projects on the topic while the Tulalip Tribes seek funding for this initiative.

Elena Pilch, Michael Pazmino, Katera Lee, Lauren Webster, and Kathleen Lange
USA, NASA's DEVELOP Program
Lauren Webster, Elena Pilch, Michael Pazmino, & node fellow Kathleen Lange were members of the fall 2022 West Tennessee Water Resources DEVELOP project at JPL. They developed a code tutorial to share with their partner organization, Protect Our Aquifer, in collaboration with the University of Memphis Center for Applied Earth Science and Engineering Research (CAESER). The team used ECOSTRESS ET data, GPM IMERG precipitation data, and runoff data from NLDAS to highlight areas that may be water stressed within west Tennessee. The team processed their evapotranspiration data and developed the tutorial using instruction and scripts from ARSET's June 2022 Evapotranspiration training.

Additional Resources

Dec. 12: SWOT Launch
The Surface Water and Ocean Topography **(SWOT) mission** will be NASA's first global survey of Earth's surface water. Launch is targeted for Dec. 12 2022.

Dec. 12 - 16: American Geophysical Union Fall Meeting
Today, Dec. 1 is the **last day** to **register** for this year's AGU meeting.

Jan. 8 - 12: American Meterological Society Annual Meeting
This year's meeting will offer sessions both in-person in Denver, Colorado, and virtually. The theme is "Data: Driving Science. Informing Decisions. Enriching Humanity." Registration is available **here**.

Jan. 16 - Feb. 24: DEVELOP 2023 Summer Term Application Window
Applications for **DEVELOP**'s Summer 2023 term (Jun. 5 - Aug. 11) open in January. Anyone with an interest in Earth science is welcome to apply. DEVELOP accepts participants with skills in a variety of fields, as well as from different phases of their career.