Advanced Webinar: Radar Remote Sensing Applications for Land, Water, & Disasters Applications

August 7, 9, 14, and 16, 2018

10:00-12:00 or 18:00-20:00 EDT (UTC-4)

A limitation of optical satellite remote sensing is that it depends on cloudless, well-illuminated areas to produce quality data. This is especially problematic for collecting data during nighttime or when there is cloud cover. Radar is an ideal sensor to study the surface of the Earth because of its ability to "see" through clouds regardless of day or night conditions.

This webinar series builds on ARSET's previous webinar: Introduction to Synthetic Aperture Radar. The training will focus on different radar approaches and techniques including amplitude, time-series, polarimetry, and interferometry for mapping and monitoring disasters and land cover. Attendees will apply these techniques to map land cover and land use change, deforestation, flooding, crop monitoring, and surface deformation for earthquake monitoring.

Session One, August 7

This session will cover synthetic aperture radar (SAR) applications for mapping land cover and land cover change, including over forested and agricultural areas. We will address the challenges encountered when mapping these types of applications, and how to best address them.

Session Two, August 9

This session will cover using SAR for mapping flooded areas and flood dynamics in natural and urban environments.

Session Three, August 14

This session will cover using interferometric SAR to map surface deformation related to volcanic activity and earthquakes.

Session Four, August 16

This session will cover interferometric SAR data.

ARSET empowers the global community through remote sensing training.

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