

Introductory Webinar: Understanding Phenology with Remote Sensing

June 30, July 7, and July 14, 2020

11:00 AM - 12:00 PM EDT (UTC-4)

This training will focus on the use of remote sensing to understand phenology: the study of life-cycle events. Phenological patterns and processes can vary greatly across a range of spatial and temporal scales, and can provide insights about ecological processes like invasive species encroachment, drought, wildlife habitat, and wildfire potential. This training will highlight NASA-funded tools to observe and study phenology across a range of scales. Attendees will be exposed to the latest in phenological observatory networks and science, and how these observations relate to ecosystem services, the carbon cycle, biodiversity, and conservation.

Part 1: Overview of Phenology and Remote Sensing

- Introduction to NASA data and Phenology
- Land Surface Phenology from MODIS and VIIRS

Part 2: Scales of Phenology

- Resolving challenges associated with variability in space, time, and resolution for phenology research and applications
- USA-National Phenology Network (NPN) and The National Ecological Observatory Network (NEON)
- Phenocam: Near-surface phenology
- Conservation Science Partners

Part 3: Utility and Advantage of Multi-Scale Analysis

• Field based phenology and gridded products

Case-study examples:

- Integration of PhenoCam near-surface remote sensing and satellite phenological data
- Greenwave modeling
- Urbanization and plant phenology



ARSET empowers the global community through remote sensing training.

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