Advanced Webinar: Techniques for Wildfire Detection and Monitoring

July 12-19, 2018

Certain areas are experiencing longer fire seasons, with more frequent and severe droughts. Wildfire detection, monitoring, and mitigation is increasingly important in these regions. Satellite remote sensing data is useful for identifying active fires, evaluating burned areas, and assessing fire emissions. This advanced training will highlight tools useful for local fire managers. Presentations and exercises will introduce participants to tools to identify active fires, visualize fire emissions, and calculate burn severity.

Session One, July 12

This session will provide an overview of remote sensing for wildfire detection and mapping, as well as an overview of the QGIS Fire Mapping Tool (FMT). Attendees will go through a hands-on exercise using the FMT

QGIS FMT is freely-available and can detect active fires and burn scars using Landsat data. This tool can identify smaller fires that may not be in the Monitoring Trends in Burn Severity program.

Session Two, July 19

This session will provide an overview of the Global Wildfire Information System (GWIS) and a hands-on demonstration on the use of the GWIS viewer.

GWIS is an online web application that uses remotely sensed wildfire data. This data includes fire danger, wildfire locations, burned area extent, and burn severity. GWIS also focuses on sharing data and operational plans between researchers, managers, and agencies. Demonstrations and tools will introduce participants to applications of the GWIS tool, including:

- identifying active fire from MODIS and VIIRS data,
- evaluating burned areas with MODIS data, and
- assessing fire emissions such as black carbon and particulate matter.

ARSET empowers the global community through remote sensing training.

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