

## **Title: LiDAR Data Processing for Fuel Applications**

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Workshop: The objectives of the workshop are to provide background on airborne LiDAR data collection, processing, and applications. LiDAR has been used to characterize pre-fire fuels, smoke plume emissions from active fires, and post-fire effects. This workshop will provide users with information describing tools available for general LiDAR data viewing and processing, along with some hands-on experience for the objective of fuels characterization in both forest and rangeland environments. Emphases will include classification of ground returns, calculation of canopy heights, and developing value-added raster products such as digital terrain models, canopy height models, and metrics of canopy height, density, and intensity. Hands-on instruction using freely available software will be provided to demonstrate these applications. This workshop is appropriate for new LiDAR users or experienced LiDAR users who would like to learn how to process their own data starting with LiDAR point cloud data contained in binary LAS files, the standard LiDAR deliverable.

The workshop will cover:

- Theoretical aspects of airborne LiDAR
- Height filtering LiDAR point cloud data
- Developing raster products
- Applications for fuels characterization

Participants are requested to bring their own Windows-based laptops. Sample datasets and free software will be made available to participants before the workshop with the intent they are ready to use at time of workshop.

Length: 4 hours

Minimum Number: 5

Maximum Number: 30

Special Needs: Bring own laptops and flash drive, download data/software prior to workshop

Costs: No additional cost