

# GOES-R ABI Deep-Dive Active Fire Product Validation

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The future GOES-R ABI fire detection and characterization algorithm builds on the Wildfire Automated Biomass Burning Algorithm (WF\_ABBA) which originated from GOES VAS data applications. The WF\_ABBA product provides routine near real-time detection and characterization of sub-pixel active fires, serving the fire management community as well as the scientific community. Consequently, WF\_ABBA must deliver quality data with well characterized sources of errors. Assessment of satellite active fire detection and characterization products requires simultaneous observations in order to reduce the effects of short term variations in fire conditions. Previous studies have used higher spatial resolution satellite data to validate moderate-to-coarse resolution fire products derived from sensors aboard the same orbital platform (e.g., MODIS and ASTER) as well as on separate platforms by limiting the time difference between acquisitions (e.g, GOES and Landsat ETM+). Building upon the validation methods developed for GOES and MODIS fire products, this GOES-R Algorithm Working Group project utilizes higher spatial resolution fire reference data to assess and validate the ABI fire detection and characterization algorithm. We discuss the status of the *deep-dive* fire validation tool and present the preliminary results derived from a 2011 field campaign at Henry Coe State Park/CA, which utilized airborne multi-spectral data to look at fire characterization parameters coincidentally derived by WF\_ABBA using near-coincident GOES-11 and -13 data.

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