



A look at 10 years of MODIS active fire data and the prospects for VIIRS

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Over a decade of routine global active fire observations is now available from the MODIS instruments aboard the EOS Terra and Aqua satellites. MODIS represented a major advance in fire observations, allowing the production of 1km global fire detection product with fewer saturated pixels, improved geolocation and orbit stability compared to its predecessors (e.g., AVHRR). Production of routine fire characterization parameters, namely the fire radiative power, created new possibilities for direct application of the data towards biomass burning emissions and air quality studies. A major effort was designed to comprehensively assess and validate the quality of the data produced, which in turn allowed the continuous refinement of the Fire and Thermal Anomalies algorithm. As a result, the product has achieved maturity which is evidenced by the large number of data downloads and data applications found in the literature. Here we review this major accomplishment, emphasizing the key phases in the product development and validation leading to a robust fire data record. Looking into the future, we discuss the prospects for the continuation of the MODIS active fire data record, with emphasis on the active fire product using data from the upcoming JPSS/VIIRS sensor.