Active fire observations from MODIS within the GOFC/GOLD-Fire program

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The Moderate Resolution Imaging Spectroradiometer (MODIS) aboard the polar orbiting Terra and Aqua satellites of the NASA (National Aeronautics and Space Administration) Earth Observing System (EOS) has channels specifically designed for active fire detection. The MODIS Fires and Thermal Anomalies product (MOD14) has been generated for use by the scientific community. Rigorous validation of this product is underway using coincident fire observations from higher spatial resolution sensors. The MODIS Land Rapid Response System (MLRRS) was created to provide a rapid response to Earth science events, particularly quick information turnaround for fire management. An integral part of MLRRS is the customized packaging and distribution of information for a wide range of users worldwide. A MODIS Web Fire Mapper has been developed as part of an outreach program to the fire applications community. Fire observations from MODIS are a NASA contribution to the objectives of the Fire Mapping and Monitoring theme of the international Global Observation of Forest Cover/ Global Observation of Landcover Dynamics (GOFC/GOLD) program. GOFC/GOLD, which is a project of the International Global Observing Systems (IGOS), has been established with the aim of providing the necessary coordination to improve data access and use, and to secure the long-term observing systems. The GOFC/GOLD-Fire implementation area addresses the needs of the fire management and research communities, covering such topics as fire danger rating, fire detection and characterization, fire affected area mapping, post fire recovery and fire emissions. The goals include summarising fire management and research information needs for the data providers, improving access to and use of fire data and information, standardizing satellite products and determining their accuracy, promoting research and development to improve information provision, and securing long term global operational monitoring of fires. GOFC/GOLD-Fire is achieving these goals through a series of topical international workshops and regional networks of data providers, data brokers and data users.