



"Global" Operational Geostationary Fire Radiative Power Data for Supporting NRT Atmospheric Modelling

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Vegetation fires are a major source of atmospheric trace gases and aerosols in many regions worldwide, and thus global/regional operational atmospheric monitoring and forecasting applications require access to repetitive, frequent and well-characterized information on vegetation fire smoke emissions source strengths. Geostationary imagers offer important temporal advantages for such applications, and a Meteosat "Fire Detection and Fire Radiative Power" product is now available operationally from the EUMETSAT LandSAF (<http://landsaf.meteo.pt/>). Building on this work, we present an overview of the algorithms and approaches now being used for detecting and characterising active fires from the GOES satellites over the Americas, and from the FY2 and MTSAT systems over Asia. We provide examples of the high temporal resolution fire emissions datasets derived from such systems, and an evaluation of the data quality in comparison to both the Meteosat-derived data and to contemporaneous polar-orbiting measurements. Finally, a demonstration of the use of these new geostationary datasets within the European MACC (Monitoring Atmospheric Composition and Climate) project that is developing a prototype operational GMES Atmospheric Service will be provided.