



LSA-SAF ET&SF – version 2: monitoring evapotranspiration & surface heat fluxes over entire continents at kilometer scale in near-real time thanks to satellite data

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Monitoring evapotranspiration in near-real time over large continental areas has been requested by organizations needing a valuable indicator of loss of soil water to feed several applications and services related to hydrology and agriculture. In the same time, surface heat fluxes, the latent and sensible heat fluxes, may be valuable to better understand the evolution of the partitioning of the energy at the surface. In the EUMETSAT's Satellite Application Facility of the Land Surface Analysis (LSA-SAF), evapotranspiration has been monitored daily and half-hourly for 7 years continuously in near-real time over Europe, Africa, South America and Middle East at a resolution of 3 to 5 km, making use of short-term weather forecasts and some satellite information. This year, LSA-SAF has implemented an enhanced algorithm to provide the version 2 products of evapotranspiration and surface heat fluxes. Among other, the enhanced algorithm assimilates more satellite data, especially in the thermal infrared spectrum, for a closer and even more realistic monitoring of those variables especially in semi-arid areas. In this contribution, we will present our methodology, results from the new products released, and an illustration of the performances when compared to other similar products and to ground observation.