



Results from the Fire_cci project: Global analysis of burned area

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Biomass burnings (including forest, grassland, peatland and agricultural fires) have important impacts on global terrestrial and atmospheric systems, affecting land cover, surface albedo, and the atmospheric concentration of greenhouse gases and aerosols. Several products have been generated in the last years to estimate total burned area, but uncertainties remain, particularly those associated to small and low intensity fires. The Fire_CCI project of the European Space Agency's Climate Change Initiative has generated consistent time series of burned area products to assess the extents of biomass burnings, as well as their spatial and temporal characteristics. Two global burned area products have been generated based on the MERIS and MODIS sensors, both at the highest resolution available (300 and 250 m resolution, respectively), covering the full time series of these sensors. A prototype product based on AVHRR-LTDR data covering from 1982 to 2017 has also been developed. These global products are complemented with a small-fire database for Subsaharian Africa, generated from Sentinel-2 images at 20 m spatial resolution for 2016. Validation of the global products was based on a statistical sampling design of Landsat frames including time and space variation.