



Near-real-time global precipitation map using multi-satellite data

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Algorithms for precipitation retrieval and rainfall mapping using multi-satellite data, including microwave radiometers, have been developed under the Global Satellite Mapping of Precipitation (GSMaP) project since 2002, sponsored by Japan Science and Technology Agency. Recent increasing needs of near-real-time flood information required from many countries especially in Asia will strongly support operational and near-real-time rainfall product. To meet those requirements, near-real-time processing system using GSMaP algorithms is developed and operating at JAXA/EORC. The system uses real-time products of brightness temperature from TMI, AMSR-E and SSM/Is, and IR information obtained by Geostationary Satellites. Through this near-real-time system, we can process global precipitation map in 0.1 degree grid-box and hourly, in approximately four hours after the observation. Further enhancement of applicability of satellite rainfall products for flood forecasting system is required to contribute reducing flood disaster risks in Asian countries, usually whose ground rainfall observation system is not sufficient both in coverage and resolution.