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Real-time Global Satellite Mapping of Precipitation (GSMaP) product

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The Global Satellite Mapping of Precipitation (GSMaP) product is a global rainfall map using a number of microwave radiometer observation data through the development of rain rate retrieval algorithms based on reliable precipitation physical models. Output product of GSMaP algorithm is 0.1-degree grid for horizontal resolution and 1-hour for temporal resolution. The GSMaP product is one of the Japan Aerospace Exploration Agency (JAXA) products in the Global Precipitation Measurement (GPM). GSMaP Near-Real-Time (NRT) product has been provided in a latency of four hours after observation. Moreover, in order to reduce the latency from 4-hr to "now", we have developed GSMaP just now version (GSMaP_NOW) in the GEO Himawari region. At first, the GSMaP at 0.5-hr before is produced using data that is available within 0.5-hour (GMI, AMSR2 direct receiving data, AMSU direct receiving data and Himawari-IR). And then the GSMaP at current hour (just now) is produced by applying 0.5-hour forward extrapolation by cloud motion vector. Such faster latency product can be more useful for meteorological and hydrological users.