Overview and status of the JAXA Himawari Monitor

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In October 2014, new geostationary meteorological satellite "Himawari-8" operated by the Japan Meteorological Agency (JMA) was launched from the JAXA Tanegashima Space Center. Himawari-8 has started its operation at 02 UTC on 7 July 2015, replacing the geostationary meteorological satellite "MTSAT-2". Since there are many commonalities and synergies between the Himawari-8 and JAXA's upcoming Earth observation satellites, such as the Global Change Observation Mission -Climate (GCOM-C) to be launched in Japanese Fiscal Year (JFY) of 2016, Greenhouse gasses Observing SATellite-2 (GOSAT-2), and EarthCARE mission to be launched in JFY2017, JAXA cooperates with JMA in algorithm development, calibration and validation activities on the Himawari-8 satellite. JAXA also exchanged agreements with JMA to promote the Himawari-8 data in research and education community. To this purpose, we received the Himawari data from JMA in near-real-time basis, and distribute its images and data through the JAXA Himawari Monitor (http://www.eorc.jaxa.jp/ptree/). We developed algorithms, which will be consistent with those for the GCOM-C, GOSAT-2 and EarthCARE missions, to retrieve geophysical parameters from the Himawari-8 data with collaboration of external institutions. As of February 2016, aerosol properties and sea surface temperature (SST) products are provided through the JAXA Himawari Monitor along with the Himawari Standard Data provided by JMA. The Himawari geophysical parameters are produced in NetCDF4 format and provided to registered users by FTP in near-real-time basis. Currently, we are developing new geophysical parameters to be distributed through the system. Ocean color (suspended substances and chlorophyll-a), Photosynthetic Active Radiation (PAR), and cloud properties (cloud top temperature, optical thickness, and effective particle radius) data are planned to release to public in 2016.

Keywords: Himawari-8, Sea surface temperature, aerosol property, ocean color, cloud property