**P11**

## Atmospheric Motion Vectors derived from Himawari-8

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The Japan Meteorological Agency (JMA) launched Himawari8 satellite in 2014 and started its operation in July 2015. It is the next generation Japanese geostationary meteorological satellites following to previous operational satellite MTSAT2 (Himawari7).

The agency also plans to launch Himawari9 in 2016 as a backup for Himawari8.

Himawari8 and 9 carry Advanced Himawari Imager (AHI) units comparable to the Advanced Baseline Imager (ABI) on board GOESR of the National Ocean and Atmosphere Administration / the National Environmental Satellite, Data, and Information Service (NOAA/NESDIS) in the United States. The observing functions of AHI were significantly enhanced from those of MTSAT2: multispectral capacity (16 bands), high spatial resolution (0.5 – 1.0 km for visible and 1 – 2 km for infrared), fast imaging (within 10 minutes for full disk), and rapid scanning with flexible area selection and scheduling. These upgrades of imager enable to retrieve more Atmospheric Motion Vectors (AMVs) with more accuracy than before. AMVs are satellitederived wind vectors obtained from consecutive satellites images by tracing cloud features and estimating its clouds height.

AMVs are computed and disseminated by satellite operation centers and assimilated by numerical weather prediction centers for computing analysis field. JMA have started to dissemination of Himawari8 AMVs since 7th July 2015 via Global Telecommunication System (GTS). In this presentation, Himawari8 AMV tracking algorithm using three or more consecutive images for finding timely consistent motion vector, cloud height estimation technique using multiple bands simultaneously for one targeted cloud and statistical validation result will be shown.