## Recent developments in satellite data assimilation at JMA

## 1. Outline of NWP systems at JMA

- Global Spectral Model & Analysis (GSM, GA)
- Meso-scale Model & Analysis (MSM, MA)
- Local Forecast Model & Analysis (LFM, LA)

## 2. List of Upgrades

- Introduction of Aqua/AIRS and Metop-A, B/IASI (GA, Sep. 2014)
- Introduction of new NWP model "ASUCA" into LFM and LA, introduction of AMVs (LA, Jan. 2015)
- Introduction of Megha-Tropiques/SAPHIR (GA, Jun. 2015) (presented in 1p.04 by M. Kazumori)
- Improvement of ASCAT utilization (GA, Oct. 2015)

## 3. Future plans

- Use of Suomi-NPP/ATMS, CrIS, Himawari-8/CSR, AMV, GPM-core/GMI, FY-3B/MWHS, FY-3C/MWHS2, DMSP-F19/SSMIS, and so on
- Assimilation of cloud/rain affected radiances
- Use of GNSS-RO data in MA
- Use of radiance data in LA



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