

**P08**

**Visible channel calibration of JMA's geostationary satellites using the Moon images**

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The Moon is one of the invariant calibration targets without atmosphere and has been captured by historical geostationary meteorological satellites such as GMS-5 and MTSAT-2 by chance. A new generation geostationary meteorological satellite, Himawari-8 can observe the Moon as much as possible using super rapid-scanning mode performed every 30 seconds. Radiometric calibration system using lunar observation is based on the GSICS Implementation of the ROLO model (GIRO), which provides reference lunar irradiances. These lunar observation data are very useful for estimating long term instrument degradation due to its small uncertainty. A total of 62 and 2979 lunar images derived from MTSAT-2/Imager and Himawari-8/AHI observation are used in this study. A 2.71% annual drift of MTSAT-2/Imager visible channel with a 0.15% uncertainty shows good agreements with other post-launch calibration using deep convective clouds and radiative transfer simulation. Frequent lunar observations by AHI are expected be of help not only to enhance its calibration capability but also to improve the reference model. A preliminary result of Himawari-8/AHI visible and near-infrared bands will also be presented.