

**R005-46**

**Zoom meeting C : 11/2 PM2 (15:45-18:15)**

**16:15~16:30**

## **Detection of polar mesospheric clouds utilizing Himawari-8/AHI full-disk images**

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To advance polar mesospheric cloud (PMC) observations by Advanced Himawari Imager (AHI) onboard the Japanese geostationary-Earth-orbit (GEO) meteorological satellite Himawari-8, we have developed a PMC detection method for application to the Himawari-8/AHI full-disk images. The PMC detection method consists of two steps, which are for detection in stronger PMC signals by the first step and for detection in weaker PMC signals by the second step. By using this two-step detection, we eliminate false detections as much as possible, and enhance detection sensitivity. As the results, the PMC detection sensitivity by Himawari-8/AHI is well comparable to that by Cloud Imaging and Particle Size (CIPS) onboard Aeronomy of Ice in the Mesosphere (AIM). This suggests that new PMC dataset from Himawari-8/AHI would be of benefit for research on various PMC science in the future.