

S06-8

**A new era: three-dimensional observation and service with fully high resolutions
on FY-4 platform are coming next year**

Qiang Guo, Feng Lu, Zhiqing Zhang, Caiying Wei and Jun Yang

CMA/NSMC

Fengyun-4 (FY-4) is the secondary generation geostationary satellite series in China, whose first experimental member (FY-4A) is scheduled to be launched at the end of 2016. As an outstanding feature, the complete three-dimensional observations with high temporal (1 minute for region with its size at the 103 Km² order), spatial (500m for visible band at nadir) and spectral (0.8cm⁻¹ for long-wave infrared band) resolutions between visible and thermal infrared spectrums are coming into reality next year, which is widely believed to be the new era of GEO observation at least for CMA. In this presentation, the main recent progresses of the space- and ground-segments of FY-4A are introduced briefly and some new capabilities, e.g. new spectral bands compared with FY-2 VISSR, new measurement results from lightning imager as well as interfering sounding, are also discussed in detail. Meanwhile, the latest data and product service plans, for example data broadcasting and sharing, product distributing and emergency observation support, are presented to benefit the user community especially for the East Asia area as expectations.