

Open third generation geostationary satellites accelerate environmental studies: Case studies of CEReS, Chiba University, Japan

*Atsushi Higuchi^{1,3}, Koichi Toyoshima¹, Hitoshi Hirose¹, Hideaki Takenaka^{2,1}

1. Center for Environmental Remote Sensing (CEReS), Chiba University, Japan, 2. EORC, JAXA, 3. NICT

Geostationary satellites, such as well-known Himawari and GOES series, have advantages to capture the surface and the atmospheric status by relatively high-frequent scanning. Himawari-8/9 (Bessho et al., 2016) and GOES-R (Schmit et al., 2017) and GOES-S called as the third- generation geostationary satellites (3rd GEO) of which have capabilities of more-highly temporal scanning intervals (10 min. or 15min. in Full-Disk scan mode, 2.5 min. or 1 min. over target regions) with improved multiple spectral bands (16 bands). We will demonstrate possibility and capabilities by the utilizations of 3rd GEO data through our research and outreach activities, and we will show several research results through the open data policy of 3rd GEO. In addition, we will discuss potential and limitations for the acceleration of open science and contributions for the society.

References: Bessho et al., (2016): JMSJ, 94 (2), 151-183; Schmit et al., (2017): BAMS, 98, 681-698.

Keywords: Geostationary meteorological satellites, Environmental studies