

LSGI Distinguished Lecture Series

Monitoring Atmospheric Composition from Geostationary Earth Orbit Satellites

Prof. Jhoon Kim

Prof. Jhoon Kim is leading an international science team to monitor air quality in Asia-Pacific region from geostationary platform.



Prof. Jhoon Kim

All ARE WELCOME

Date: 22 February 2016 (Monday)
Time: 11:00 AM
Venue: ZN603

Abstract

Observation of global atmospheric composition, pollutants in particular is very important with their effects on air quality, public health, and climate change. Detecting atmospheric composition from space has been successful for the amount of aerosol and trace gases. However, most of the observations have been from low earth orbit (LEO) which allows 1 ~ 2 observation/day despite their noticeable diurnal variation. With the launch of Geostationary Ocean Color Imager (GOCI) and Meteorological Imager (MI) onboard the Communication, Oceanography, and Meteorology Satellite (COMS) in 2010, hourly monitoring of various aerosol properties has been realized. For the trace gas observations, it has not been realized from GEO to date. Together with the plan to launch Geostationary Environment Monitoring Spectrometer (GEMS) in 2019, monitoring of trace gas concentration will be possible in high temporal and spatial resolution. In this study, results and plan to monitor atmospheric composition from geostationary earth orbit (GEO) are presented.

Biography

Prof. Jhoon Kim has worked on the aerosol algorithm development in high temporal and spatial resolution to monitor the long range transport of pollutants and Asian dusts. This aerosol algorithm includes capability to classify black carbon, dust, and non-absorbing aerosols, in particular, and the algorithm for Geostationary Ocean Color Imager (GOCI) was the first one to show the hourly movement of transboundary aerosol plumes in a quantitative manner. He served as a Co-chair of WG8, Commission VIII of ISPRS and Co-chair of NIER-NASA Technical Group on Atmospheric Composition Measurements from Geostationary Satellite, from which he contributed to establish coordinated observation of air quality using the international constellation in GEO based on his expertise in satellite remote sensing of pollutants and aerosols. He is a member of CEOS Atmospheric Composition Constellation (ACC), and Satellite WG of NDACC.

All registered attendees will receive a Certificate of Attendance after the lecture.
If you have any questions, please contact: Kathy LAW Tel: 27664350