S4-01

Satellite analysis and nowcasting applications in KMA NMSC: present and future

1. Byunghyun SONG/*National Meteorological Satellite Center / KMA*
2. Jinho SHIN / *National Meteorological Satellite Center / KMA*
3. Okhee KIM/ *National Meteorological Satellite Center / KMA*
4. Jae-Young BYON / *National Meteorological Satellite Center / KMA*
5. Eun-Ha SOHN / *National Meteorological Satellite Center / KMA*
6. Jun Dong PARK/ *National Meteorological Satellite Center / KMA*

The image information obtained from geostationary meteorological satellites equipped with advanced meteorological imagers is particularly helpful for nowcasting as it can detect and warn of rapidly developing convective clouds in advance. Satellite images with high spatial and temporal resolutions are of great help in preventing typhoon damage by understanding the detailed typhoon structure and accurate track information. The satellite products obtained by combining image information and numerical model results has recently been able to provide more useful by applying artificial intelligence technologies. In such a case, Infrared images are trained using artificial intelligence technologies to create a night-time proxy visible image to clearly and distinctly obtain information about lower clouds and fog, which were difficult to detect at night.