

## KCC opens Space Weather Center, a protector against space weather

- Will protect broadcasting and telecommunications facilities from damage caused by space-born incidents -

On November 16, together with Chairman Choi See Joong of the Korea Communications Commission (KCC), Governor Wu Geun Min of the Jeju Special Autonomous Province, and officials from related organizations, the Korea Communications Commission (KCC) National Radio Research Agency (President Lim Cha Shik) held an opening ceremony for a Space Weather Center that was recently built in Guideok-ri, Hannim-eup of Jeju-si to warn and help protect against space-born weather incidents such as solar flares and coronal mass ejections (CMEs), etc.

The Space Weather Center was established as part of the reorganization of the KCC that was carried-out in August this year. The mission of the Space Weather Center is to monitor changes to the space weather environment caused primarily solar by activity such as sunspots. Monitoring will be carried out 24 hours a day and will focus on minimizing damages to broadcasting and telecommunications infrastructures caused by space weather incidents.

Solar flares, a byproduct of sunspots, often disturb the Earth's magnetic field (or ionospheric layer) that surrounds the planet and

protects life from a variety of cosmic radiation. Due to their excessive power, solar flares often have the potential to overwhelm huge swaths of electric power grids causing blackouts that can cover broad regions of a nation as happened in North America in 2003. Solar flares, and a similar phenomenon known as a CME (coronal mass ejections), also strike terrestrial and satellite communication systems rendering them useless, usually temporarily, but some have the potential to knockout systems permanently.

Attending the opening ceremony, KCC Chairman Choi See Joong asked the Space Weather Center staff to "continuously exert themselves with confidence and a sense of mission that they are at the vanguard of protecting the nation's precious national broadcasting and telecommunications infrastructure from the ever-changing solar activity."

Construction of the Space Weather Center had been promoted since early 2009 and was finally completed at the end of last year. A 3-story building (with one underground level) covering 3,810m<sup>2</sup> was constructed on a site spanning 58,711m<sup>2</sup> at a total cost of KRW 18.6 billion.