

[7SE-13] Recent International Activity of KASI for Space Weather Research

Kyung-Suk Cho, Young-Deuk Park, Jae Jin Lee, Su-Chan Bong, Yeon-Han Kim, Jung-A Hwang, and Seonghwan Choi

Korea Astronomy and Space Science Institute

KASI's Solar and Space Weather Research Group (SSWRG) is actively involved in solar and space weather research. Since its inception, the SSWRG has been utilizing ground-based assets for its research, such as the Solar Flare Telescope, Solar Imaging Spectrograph, and Sunspot Telescope. In 2007 SSWRG initiated the Korean Space Weather Prediction Center (KSWPC). The goal of KSWPC is to extend the current ground observation capabilities, construct space weather database and networking, develop prediction models, and expand space weather research. Beginning in 2010, SSWRG plans to expand its research activities by collaborating with new international partners, continuing the development of space weather prediction models and forecast system, and phasing into developing and launching space-based assets. In this talk, we will report on KASI's recent activities of international collaborations with NASA for STEREO (Solar Terrestrial Relations Observatory), SDO (Solar Dynamic Observatory), and Radiation Belt Storm Probe (RBSP).

[7SE-14] Current Status of the Korean Solar Radio Burst Locator

Su-Chan Bong¹, Jung-Eun Hwangbo^{1,2}, Chang Hoon Lee¹, Kyung-Suk Cho¹,
Young-Deuk Park¹, Dale E. Gary³, Dae-Young Lee²

¹*Korea Astronomy and Space Science Institute,*

²*Department of Astronomy and Space Science, Chungbuk National University,*

³*New Jersey Institute of Technology*

The Korean Solar Radio Burst Locator (KSRLB) is a single dish radio spectrograph, which is designed to record the spectra of microwave (0.5 - 18 GHz) bursts with 1 MHz spectral resolution and 1 s time cadence, and locate their positions on the solar disk within 2 arcmin. It was installed at KASI in 2009 August, and operational thereafter. The antenna pointing coefficients were initially determined during the installation and refined later using a series of antenna pointing calibrations. The filter to prevent the radio frequency interference around 2 GHz was designed and is to be installed. After the installation, the full frequency coverage will be recovered from the temporarily restricted frequency coverage (5 - 14 GHz). Also an effort to solve a couple of minor problems for the full performance of the system is in progress.