[750-13] Progress Report of Korean Solar Radio Burst Locator

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KASI is developing Korean Solar Radio Burst Locator (KSRBL) in collaboration with New Jersey Institute of Technology. KSRBL is a single dish radio spectrograph which records the spectra of microwave (0.5 – 18 GHz) bursts and locates their positions on the solar disk. Although the original plan was to develop two systems for dual polarity, the number of systems was reduced to one and the schedule was delayed by about one year, due to unstable funding. The system is currently installed at Owens Valley Radio Observatory (OVRO). Hardware manufacturing is almost completed, except for the digitizer/FPGA, for which commercial products are used. The antenna was installed in the October 2007 and functional test is underway. The initial test showed RMS tracking error of 22 arcsec. We also found that the weak signal problem in high frequency channels may have been caused by malfunctioning optical transmitter. After complete test of the operation, the system will be installed at KASI in 2009.

[750-14] The first results of E-CALLISTO in Korea

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E-CALLISTO (Earth-wide, Compact Astronomical Low-frequency, Low-cost Instrument for Spectroscopy in Transportable Observatories) is a global network of frequency-agile solar radio spectrometers that was constructed in a collaborating between Swiss Federal Institute of Technology Zurich (ETHZ) and local host institutes. One of E-CALLISTO spectrometer was installed in Korea Astronomy and Space Science Institute (KASI) in Oct. 2007. Using this spectrometer we obtained 2 type ll solar radio bursts in 31 Dec. 2007, and found that these bursts are associated with a CME occurred on the east limb. Mean drift rates of fundamental emission of the bursts are about -0.06 MHz/s and -0.07 MHz/s, respectively. And we also obtained type lll solar radio burst in 3 Feb. 2008. In this talk, we are going to introduce the E-CALLISTO system in KASI and report on the first observations of the E-CALLISTO at KASI.