

R010-P05

ポスター 3 : 9/26 AM1/AM2 (9:00-12:30)

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New open database of high-resolution solar radio bursts observed by the spectro-polarimeter AMATERAS

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We have performed daily observation of solar radio bursts since 2010 using the high-resolution spectro-polarimeter named AMATERAS (the Assembly of Metric band Aperture TElescope) installed on IPRT (Iitate Planetary Radio Telescope) for the purposes of investigating acceleration processes of solar energetic particles and plasma environment of the solar corona. The AMATERAS system has a real time FFT function which provides continuous solar radio bursts data with the temporal resolution of 10msec and spectral resolution of 61KHz ('high-resolution') for both right and left handed circular polarized waves in 150-500MHz. Since the start of solar radio bursts observation with AMATERAS, we have made the 'low-resolution' database with the temporal resolution of 1sec and spectral resolution of 1MHz in the FITS format and have opened to the public via the internet. On the other hand, we have provided the high-resolution data only on request because the data are stored in a proprietary format and the individual data sizes are too large for online data transfer. Recently we have converted the data format to FITS and have created a database by reducing a single file size by shortening its duration with the aid of the IUGONET (Inter-university Upper atmosphere Global Observation NETwork) project. Now, the new database is just ready for public release via internet. In the presentation, we will introduce this new high-resolution solar radio bursts database with some examples of highly resolved solar radio bursts, and will also mention the on-going project of updated AMATERAS with a wider wave length range and more sensitivity.

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