

東北大地上観測にもとづく木星デカメータ電波データアーカイブ

熊本 篤志 [1]; 佐々木 悠朝 [2]; 加藤 雄人 [3]; 八木 学 [4]; 土屋 史紀 [5]; 三澤 浩昭 [6]

[1] 東北大・理・地球物理; [2] 東北大・理・地球物理; [3] 東北大・理・地球物理; [4] 東北大 PPARC; [5] 東北大・理・惑星
プラズマ大気; [6] 東北大・理・惑星プラズマ大気研究センター

Data archive of Jovian decametric radiation based on ground based observation at Tohoku University

Atsushi Kumamoto[1]; Yuasa Sasaki[2]; Yuto Katoh[3]; Manabu Yagi[4]; Fuminori Tsuchiya[5]; Hiroaki Misawa[6]
[1] Dept. Geophys, Tohoku Univ.; [2] Geophysics, Tohoku Univ.; [3] Dept. Geophys., Grad. Sch. Sci., Tohoku Univ.; [4]
PPARC, Tohoku Univ.; [5] Planet. Plasma Atmos. Res. Cent., Tohoku Univ.; [6] PPARC, Tohoku Univ.

We are developing integrated data archives for Jovian decametric radiation (DAM) datasets obtained at Nancay station of Paris Observatory and Iitate station of Tohoku University in order to provide data which covers >16 hours (~2 Jovian days) for the support of JUNO's initial observation. As a first step, we prepared metadata server at Tohoku University in July 2015 for integrated data access via Virtual Observatory (VO) with support of Paris Observatory team. This server with other VO's repository servers enable us to search and access Nancay and Iitate datasets using the same tools.

In addition to the integrated metadata repository, we are developing high-time-resolution (~1 msec) data archive of Jovian decametric radiation (DAM) obtained at the observatories of Tohoku University in order to provide them as open data for investigation of S-burst of Jovian DAM. High-time-resolution observation of Jovian DAM at Tohoku University has been performed since 1982 with updating receiver system. So the frequency range and time resolution of the data varied among different periods: 2 MHz in 20-40 MHz and 2 msec in 1982-2004 (Period-1), 3.2 MHz in 21-28 MHz and 0.51 msec in 2006-2009 (Period-2), 20-40MHz and 0.8 msec since 2012 (Period-3). Because the size of the entire dataset is too large to store in the storage of the data server, meta data and reduced-resolution data will be provided by the data server, and main body of data will be provided manually on request of the users. In the presentation, we are going to show the progress of the studies based on the high time resolution dataset of Jovian DAM.