

**R011-14**

**C 会場 : 11/24 PM2 (16:05-18:05)**

**17:50~18:05:00**

## **COMPASS: 130 万点の歴史的地磁気記録のための IIF 準拠ポータル**

#今城 峻<sup>1)</sup>, 松岡 彩子<sup>1)</sup>, 藤 浩明<sup>1)</sup>, 小谷 翼<sup>1)</sup>, 家森 俊彦<sup>2)</sup>, 能勢 正仁<sup>3)</sup>, 早川 尚志<sup>4)</sup>, 小田木 洋子<sup>1)</sup>

(<sup>1)</sup> 京大地磁気センター, (<sup>2)</sup> 京都大学, (<sup>3)</sup> 名古屋市立大学, (<sup>4)</sup> 名古屋大学宇宙地球環境研究所

## **COMPASS: An IIF-based Portal for Over 1.3 Million Historical Magnetogram Records**

#Shun IMAJO<sup>1)</sup>, Ayako MATSUOKA<sup>1)</sup>, Hiroaki TOH<sup>1)</sup>, Tsubasa KOTANI<sup>1)</sup>, Toshihiko IYEMORI<sup>2)</sup>, Masahito NOSE<sup>3)</sup>, Hisashi HAYAKAWA<sup>4)</sup>, Yoko ODAGI<sup>1)</sup>

(<sup>1)</sup>Kyoto University, (<sup>2</sup>Kyoto University, (<sup>3</sup>Nagoya City University, (<sup>4</sup>Institute for Space – Earth Environmental Research, Nagoya University

Historical magnetograms are vitally important for research for space weather, space climate, and geomagnetism. However, these invaluable records have rarely been published in searchable or viewable formats, posing a significant barrier for the scientific community in terms of their accessibility. To overcome this difficulty, we developed COMPASS (Comprehensive Magnetogram Portal and Archive Service System), a web portal leveraging the International Image Interoperability Framework (IIF) for unified discovery and interactive visualization of digital magnetogram images. The IIF image server and manifests in our system allow researchers to search, download, and compare over 1.3 million high-resolution images from our archive—representing over 100 years of data from more than 100 observatories—on a single and interactive screen. The adoption of the IIF standard transforms this vast dataset into a powerful, interoperable resource, significantly enhancing its utility for the research community. This framework is expected to accelerate cross-disciplinary collaborative studies on historical geomagnetic variability.