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## Inter-university Upper atmosphere Global Observation NETwork (IUGONET) project

HORI, Tomoaki<sup>1\*</sup>, HAYASHI, Hiroo<sup>2</sup>, KOYAMA, Yukinobu<sup>3</sup>, TANAKA, Yoshimasa<sup>4</sup>, SHINBORI, Atsuki<sup>2</sup>, ABE, Shuji<sup>5</sup>, UENO, Satoru<sup>6</sup>, YONEDA, Mizuki<sup>7</sup>, KANEDA, Naoki<sup>6</sup>, UMEMURA, Norio<sup>1</sup>, KONO, Takahisa<sup>8</sup>, YOSHIDA, Daiki<sup>9</sup>, KAGI-TANI, Masato<sup>10</sup>, TADOKORO, Hiroyasu<sup>7</sup>, MOTOBA, Tetsuo<sup>4</sup>

<sup>1</sup>STE lab., Nagoya Univ., <sup>2</sup>RISH, Kyoto Univ., <sup>3</sup>WDC for Geomag, Kyoto, Kyoto Univ., <sup>4</sup>NIPR, <sup>5</sup>SERC, Kyushu Univ., <sup>6</sup>Kwasan and Hida Obs, Kyoto Univ., <sup>7</sup>Dep. Of Geophys., Tohoku Univ., <sup>8</sup>Institute for Solid State Physics, The University of Tokyo, <sup>9</sup>Weather Information & Communications Service LTD., <sup>10</sup>PPARC, Tohoku Univ.

The Inter-university Upper atmosphere Global Observation NETwork (IUGONET) project (2009-2014) is an inter-university program by the National Institute of Polar Research (NIPR), Tohoku University, Nagoya University, Kyoto University, and Kyushu University to build a database of metadata (data of data such as observation period, type of instrument, location of data, and so on) for ground-based observations of the upper atmosphere since the IGY in 1950s. The IUGONET metadata database (MDDB), which archives the information on a variety of observations by radars, magnetometers, optical sensors, helioscopes, etc. in different locations all over the world and in various altitude layers from the troposphere up to the heliosphere, will be of great help to researchers in efficiently ?nding and obtaining observational data they need. This should also facilitate synthetic analyses of multi-disciplinary data, leading to new types of research in the upper atmosphere. Last year we finally released the MDDB which we had developed by modifying a repository software DSpace as well as the integrated data analysis software called UDAS based on the THEMIS Data Analysis Software (TDAS) written in IDL. Both of them are freely available to all researchers. The IUGONET project is just starting its fourth year, that is, the first year of the latter half of the six-year project. We continue to add newly-coming metadata to our MDDB so that it provides more extensive coverage for the data search. Our effort is also made to have more IUGONET data supported by UDAS and to develop new functions for data processing/visualization on the UDAS platform. The achievements of the project for the first three years with some scientific results as well as the road map for the latter half of the project period are presented in the talk.

Keywords: upper atmosphere, metadata, repository, ground observation, database