An XML Web Service System for the Solar-Terrestrial Physics Observation Meta-Data

Takeshi Murata[1]; Eizen Kimura[2]; Satoshi Ishikura[3]; Kazunori Yamamoto[3]

[1] CITE, Ehime University; [2] CITE, Ehime Univ.; [3] Ehime Univ

One of the problems for all of the Earth-scale observation fields is the circulation of the observation data. In the solar-terrestrial physics (STP), variety types of observations have been done, and, as a result, large amounts of data are stored. However, these observation mission have been conducted by different organizations, thus the observation data are stored, managed and publicized independently. For the easy use of these independently managed data, we have been developing a meta-database for the STP observation data. In the present study, we construct a system by which everyone is able to make use of the meta-data on the Internet. The XML Web Service (hereafter Web Service) is a kind of RPC (Remote Procedure Call) technique, which is recently proposed. The Web Service provides a so-called weak connection, thus seems to be most adequate for the use of the STP observation data. We herein propose a design of a Web Service system for the STP data. We then develop an application system to access to the meta-data in order to examine the performances of the Web Service.