JMA’S SERVICE USING McIDAS ADDE

This paper reports on the status of JMA’s ADDE (Abstract Data Distribution Environment) server.

JMA has operated a new service using an ADDE server to enable the provision of training environments using client viewer software since April 2010.
1 INTRODUCTION

The Japan Meteorological Agency (JMA) has begun operating a new service using an ADDE (Abstract Data Distribution Environment) server to enable the provision of training environments using client viewer software.

JMA supports MTSAT data users in NMHSs with a variety of training materials and tools such as SATAID (SATellite Animation and Interactive Diagnosis) through the Virtual Laboratory page of the Meteorological Satellite Center (MSC) website and other JMA websites. In addition to these provisions, the Agency has also offered this new service for training purposes via the Internet since April 2010.

2 OVERVIEW

The ADDE server software used was developed by SSEC (the Space Science and Engineering Center at the University of Wisconsin-Madison). Users can display image data from JMA’s ADDE server through client software by specifying the date, data type, projection and other information as necessary. Below is an overview of JMA’s ADDE service and an outline of the procedure to access the service.

2.1 Data provided by the ADDE server

JMA’s ADDE server provides past data for training and updates it as necessary, as the service is mainly intended to help users become familiar with the client software. The Agency plans to add data for case studies of phenomena such as tropical cyclones, developing depressions and volcanic ash appearance in the near future. The following data are available as of 1 August 2010:

Satellite: MTSAT-1R
Dates: 2 – 12 Aug. 2009 (T0908 MORAKOT)
Channels: VIS, IR1, IR2, IR3 and IR4

2.2 Client viewer software

A number of client software packages (namely McIDAS-V, VisAD and Unidata IDV) can be used on the ADDE server. These are available as free downloads from the following websites:

McIDAS-V: http://www.ssec.wisc.edu/mcidas/software/v/
VisAD: http://www.ssec.wisc.edu/~billh/visad.html
Unidata IDV: http://www.unidata.ucar.edu/software/idv/index.html
2.3 Installing client software

This document describes the procedure for using McIDAS-V as an example of client viewer software with JMA’s ADDE system.

For details of installation and setup for other client software, please consult the individual web pages of each provider. The above websites give detailed instructions for installing the software and troubleshooting tips.

2.4 Access to JMA’s ADDE server

Below is an outline of the procedure to access JMA’s ADDE server and display satellite image data using McIDAS-V.

(1) Install the McIDAS-V software on the target PC as instructed by the installer (Fig. 1).

(2) Open McIDAS-V and type “mscadde.kishou.go.jp” in the Server box and “SAMPLE” in the Dataset box, then click the Connect button (Fig. 2).
1. Type "mscadde.kishou.go.jp"
2. Type "SAMPLE"
3. Click the Connect button

Fig. 2 Data Explorer window of McIDAS-V

1. Select “AREA-TEST1”
2. Click the Absolute tab
3. Select Channel
4. Click the Add Source button

Fig. 3 Operation of the Data Explorer window in McIDAS-V
(3) Select “AREA-TEST1” from the Image Type pull-down menu. Click the Absolute tab in Times to see the list of satellite image data on JMA’s ADDE server. Choose one or more data sets to view in Times (the left or right panel) and a channel from the Channel pull-down menu. Click the Add Source button, and another window will be shown (Fig. 3).

(4) Click the Create Display button in the window to show the satellite image (Fig. 4).

![Image](image-url)

Fig. 4 Example of MTSAT image display

3 FUTURE PLANS

The system used to provide this service is independent of other JMA systems, and the service is limited to utilization for training purposes. Accordingly, it provides sample data from the past rather than real-time data. JMA is currently considering the feasibility of integrating the ADDE service into a future JMA data distribution mechanism.