

## **Activities of JMA on Virtual Laboratory**

This document reports on the status of the activities of JMA on Virtual Laboratory.

## **Activity of JMA on Virtual Laboratory**

### **1. Operation of Virtual Laboratory and related activities in JMA**

CGMS XXVIII discussed the WMO Virtual Laboratory (VL) to provide high quality and timely training resources on the utilization of meteorological satellites and earth observing satellites for the first time in CGMS. JMA supports the concept of VL and has been working on the implementation of it. JMA reviewed its training resources, then it started to provide appropriate resources to so called “centre of excellences” and WMO members through its Virtual Resource Library (VRL) in May 2002 (<http://mscweb.kishou.go.jp/VRL/>: user ID and password are provided at the meeting).

The resources provided are SATAID, a Computer Aided Learning (CAL) software developed in JMA, a number of accessory software programs that enhance the use of SATAID, related documents, and training materials based on SATAID system. Those resources are reviewed and updated periodically. Users of the VRL are restricted to those in National Meteorological and Hydrological Services (NMHSs).

JMA has been collaborating with its VL partner, the Australian Commonwealth Bureau of Meteorology (CBoM), to provide near real time satellite data for use on the SATAID system. A SATAID data server was established in CBoM near the end of 2003 (<http://www.bom.gov.au:50005/MS>). VL users can download the satellite images of GOES-9 near real time by a general internet web browser. They can also get and use the data on SATAID using the SATAID auxiliary software LRITAPL to access the data seamlessly via the Internet.

JMA has been following the implementation plans set by CGMS VL focus group, which include establishing and operating VRL, addition of SATAID to VRL, review and update of resources, and collaboration with “centre of excellence”. It is also addressing notification of VL by using promotional opportunities in some training events delivered by JMA such as the Group Training course in Meteorology of Japan International Cooperation Agency (JICA) and MTSAT utilization seminar.

JMA has been developing functionality of SATAID, the main contents of the VRL continuously. It made SATAID compatible with many of satellite data of other satellite operators such as GOES, METEOSAT and NOAA Polar-orbiting Operational Environmental Satellites (POES) with the help of the member of VL community such as NOAA, EUMETSAT and CBoM. JMA expresses gratitude to NOAA and EUMETSAT for their kind help.

### **2. To the progress of Virtual Laboratory**

JMA understands that the requirement for near real time and archived data is strong for the training purposes. There are quite a few requests from users who are out of the coverage of the JMA operational satellite for their being able to investigate satellite imagery they operationally receive with SATAID. It is desirable for VL as a whole that every VL user can utilize near real time data with the standard tools such as SATAID.

JMA successfully developed the system to get and use near real time data with SATAID in collaboration with CBoM and get the technical knowledge. SATAID has become compatible with most of meteorological satellite data through RAMSDIS/McIDAS data format, which is the common platform in VL. JMA has procured the technique of the provision and utilization of near real time data and is willing to provide the technique to other VRL operators if they request.