CGMS-XXX JPN-WP-10
Prepared by JAPAN
Agenda Item: II/7
Discussed in WG II

IMPROVEMENT OF CAL SYSTEMS IN JMA

This document describes the present status and plans for the improvement of the CAL systems of JMA and the utilization of the Satellite Animation and Interactive Diagnosis (SATAID) for training, electronic publications and operational use.

No action is required on this subject.

IMPROVEMENT OF CAL SYSTEMS IN JMA

1 INTRODUCTION

The Meteorological Satellite Center (MSC) of JMA has been developing and improving the Computer Aided Learning (CAL) system since 1994. The CAL system of MSC aims at providing the environment for practical and interactive training in satellite meteorology and its applications. The set of the MSC-CAL display program and the resources including the teaching materials was named the Satellite Animation and Interactive Diagnosis (SATAID). It provides various functions and materials for satellite image analyses, so that it is expanding its field of utilization in not only training but also electronic publication, monitoring, research and operational use.

This document describes the recent improvement of the SATAID system in JMA, and refers to some topics for the past year and some plans concerning its utilization.

2 Improvement of SATAID Software

The SATAID software has the various functions, which are useful to understand atmospheric conditions, and is being improved to add a lot of new functions. The improved or new major functions are as follows:
(1) outputting NWP data and imagery data so as to be used in spreadsheet software,
(2) simultaneously displaying satellite-derived winds and upper air observation etc on the image,
(3) displaying wind profiler data,
(4) displaying composite image of two channels,
(5) saving the result of tropical cyclone analysis (in version for Tropical Cyclone analysis).

3 Utilization of SATAID Software

SATAID is used in nephanalysis and tropical cyclone analysis training classes, for the trainees from other countries as well as for the domestic forecasters of JMA. It is usually distributed in a CD-ROM with some useful training materials, which would help trainees' better understanding.

The second Asia-Pacific Satellite Applications Training Seminar (APSATS 2002) was held in Melbourne in May 2002. SATAID was used as one of the essential tools in the seminar.

Through the training activities, the usefulness of SATAID was proved for operational use for monitoring and analysing meteorological data including satellite imagery.

The LRIT dissemination will start with the commencement of MTSAT-1R operation. LRIT data browser using SATAID will be provided to the NMHSs that are going to use LRIT data. Therefore the international seminars for SATAID and LRIT data utilization were planned and held since 2001.

JMA is preparing for utilizing SATAID at the local offices in order to improve the environment for monitoring and case studies. JMA is also preparing for operational typhoon analysis using SATAID to determine the position and intensity of typhoon by the Dvorak method.
For the sake of Korea Meteorological Administration (KMA), JMA conducted typhoon analysis training in 2001 and 2002 so that KMA could start operational typhoon analysis using SATAID.

4 SATAID for Virtual Laboratory

The Virtual Laboratory for Satellite Training and Data Utilization (VL) has started within the cooperative effort of CGMS members etc. JMA agreed to provide SATAID to the Virtual Resource Library (VRL) in 2001, and started its VRL in May 2002. SATAID and other related tools, and some training materials are available.

JMA is working on making SATAID compatible with RAMSDIS format that is approved to be the standard imagery format in VL. JMA has prepared the RAMSDIS to SATAID data format converter for METEOSAT besides GMS. JMA will prepare the one for GOES data as well.