

CGMS-XXXI JMA

-WP-11

—Prepared by
JMAJAPAN

—Agenda Item:
V/1.1

—Discussed in Working
Group V

Backup Dissemination of High-resolution Data for NMHSs
~~dissemination of high-resolution data for NMHSs~~

This paper reports on JMA introduces the Internet dissemination of high-resolution image data for NMHSs as an alternative measure to the GMS-5 direct dissemination.
~~the backup dissemination of high-resolution data for NMHSs users via the Internet in case of malfunction of GMS-5.~~

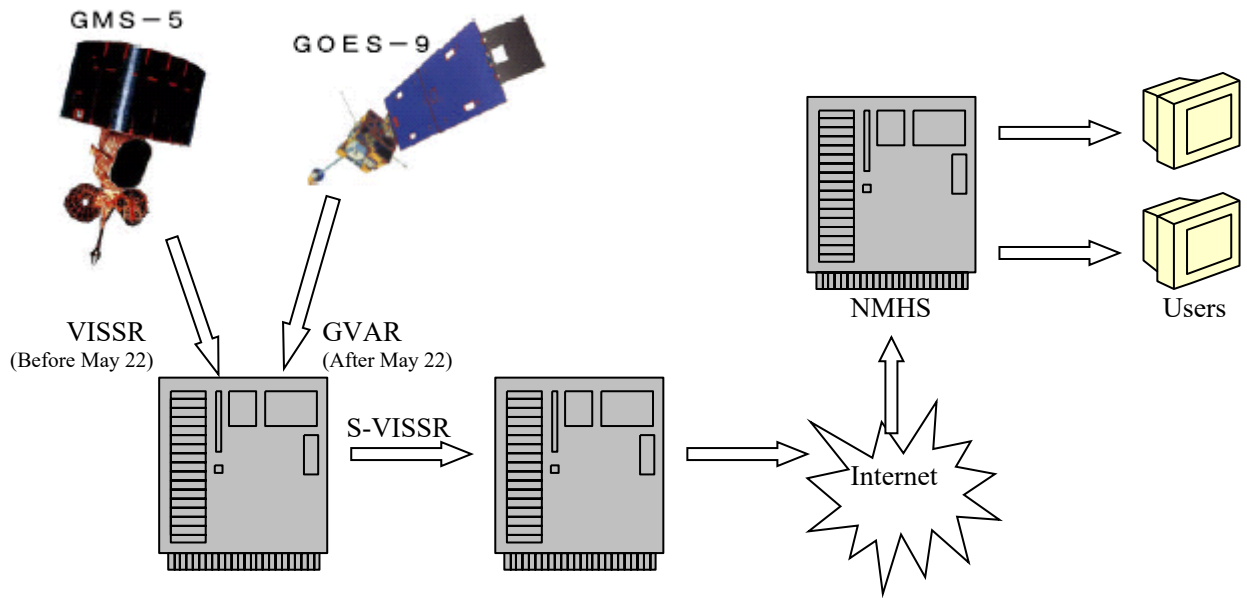
Backup Dissemination of High-resolution Data for NMHSs

JMA had ~~broadeasted~~disseminated ~~high~~ high-resolution satellite observation data of Stretched-VISSR (S-VISSR) to Medium-scale Data Utilization Station (MDUS) using the relay function of GMS-5. Since GMS-5 ~~has had~~ been operated beyond its designed lifetime and its fuel for the ~~North-South~~ maneuvering ~~of north-southward movement~~ has run short, the maneuvering ~~has been~~was stopped ~~from~~discontinued in October 2001. ~~After then~~As the result, the ~~North-South~~ inclination of the satellite orbit has continuously increased and the reception of S-VISSR signals at MDUSs that didn't equip antenna-tracking function has become gradually difficult ~~because of the increasing of the north-south inclination of a satellite orbit, the difficulty in receiving S-VISSR signal has arisen sometimes at MDUSs without antenna tracking function.~~

In ~~considering such a~~the circumstance, JMA started S-VISSR data dissemination service with Internet/FTP server for the National Meteorological and Hydrological Services (NMHS) via the Internet on 2 December 2, 2002 in addition to the GMS-5 direct dissemination. On 22 May 2003 ~~it had been operated parallel with S-VISSR data dissemination via GMS-5.~~ After, the backup of GMS-5 by with GOES-9 started ~~on May 22, 2003,~~ and S-VISSR data dissemination via GMS-5 was terminated. At the same time, the S-VISSR data on the server was switched to that generated from GVAR data observed by GOES-9, and S-VISSR data dissemination service through the Internet has been taken over. The Internet dissemination of S-VISSR data will ~~it~~ be continued until the initiation of the MTSAT-1R normal operation.

In ~~this the~~ service, ~~VISSR data observed by GMS-5 or GVAR data observed by GOES-9,~~ previously VISSR data observed by GMS-5, received at Meteorological Satellite Center (MSC) has ~~been~~ processed and converted into S-VISSR data format and at first. Then the data in S-VISSR data format has been posted on the Regional Specialized Meteorological Center (RSMC) ~~data~~FTP server of JMA. Due to the limitation of the Internet traffic capacity ~~In order to keep sufficient performance of the server, only the IR-1* channel data has been provided~~is made available, namely, the value of 0. ~~The other channels (IR-2, IR-3** and Visible channels) data have not been handled and '0' is has been put filled in those~~ the part of IR-2, IR-3** and VIS of the S-VISSR data, and the data is compressed into a smaller file before posted on the server. For the same reason, users are limited to only NMHSs registered by JMA. this service has been limited to ~~for only one station for the NMHS of individual country among MDUS users. Each~~The registered NMHSs are able to ~~can~~ access the S-VISSR data on the server through the Internet using a ~~the~~ password and User Identification (UID) ~~which were assigned by JMA to the registered NHMSs beforehand.~~ The following figure below shows the concept of the S-VISSR data dissemination via the Internet.

** IR-1: 10.5-11.5, IR-2: 11.5-12.5, IR-3: 6.5-7.0 (unit: micrometer)



~~Figure.1~~ Figure.1 A conceptual figure of S-VISSR data dissemination via the Internet