

**STATUS REPORT ON THE
EUMETSAT ATOVS RETRANSMISSION SERVICE (EARS)**

This paper describes the status of implementation of the EUMETSAT ATOVS Retransmission Service (EARS) and provides an updated plot of geographical coverage.

CGMS Members are invited to take note.

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I BACKGROUND

In June 2001, the EUMETSAT Council decided to establish a satellite data service which would provide the Meteorological Community with satellite data sets from the US NOAA polar orbiting satellites covering data-sparse sea areas around Europe. This service is called the EUMETSAT ATOVS Retransmission Service (EARS). The aim is to provide ATOVS level 1a and 1c data with a timeliness of 30 minutes to cover the needs of EUMETSAT Member State Regional NWP operators for NOAA sounder data.

CGMS-XXIX EUM-WP-26 'THE ATOVS RETRANSMISSION SERVICE' described the specification for the EARS service. This paper describes the current status of implementation of the service.

Figures 1 and 2, at the end of this document, provide a system overview and a plot of EARS geographical coverage.

2 CURRENT STATUS

2.1 HRPT Stations and AAPP processing

The EARS Routine Operations Phase has now been running for 9 months, involving 3 initial HRPT data providers, namely, Tromsø Satellite Station in Norway, INTA in Maspalomas, Spain, and DMI in Kangerlussuaq, Greenland.

In June 2003, retransmission of data from the Canadian Meteorological Centre (CMC) in Dorval commenced. CMC operates three HRPT stations, Edmonton (West Canada), Bedford (East Canada) and Gander (East Canada).

In July 2003, retransmission of data from NOAA in Suitland commenced. Initially data is being provided from the HRPT station in Monterey (California). It is expected that data from Gilmore Creek (Alaska) and Wallops Island (East Coast) will be added this autumn following an internal NOAA system update.

In August 2003, retransmission of data from the HRPT station operated by the Hellenic National Meteorological Service (HNMS) in Athens, Greece, commenced.

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Whilst some work remains outstanding with all three new partners, CMC, NOAA and HNMS, data sets from all three are being disseminated routinely via EUMETCast.

2.2 Telecommunication Net

Overall, the established part of the IP VPN has resulted in good operational performance, with all lines completed and operational. Improvements to the monitoring and reporting have been achieved.

3 BROADCAST SERVICE

The EARS service is utilising the EUMETCast DVB satellite multicast system for the dissemination of data to users.

EARS products continue to be distributed by the RMDCN and are retrievable at the DWD (Offenbach, Germany) RTH. It should be noted that because of the very significant volume of data, the potential for meeting the 30-minute timeliness on the GTS depends entirely on bandwidth constraints.

4 PRODUCT QUALITY CONTROL

Activities by the UK Met Office and EUMETSAT to reach a routine set-up are in progress.

5 EUMETSAT OPERATIONS

EARS routine operations at EUMETSAT are now running smoothly. Basic facilities to monitor the individual elements of EARS, including the remote AAPP Processing Nodes have been set up, based upon EUMETSAT GEMS (Generic Events Monitoring System) and the EFTS (Enhanced File Transfer System). The tool for EARS end-to-end monitoring is available in a first version and is being adapted to support operations.

6 USERS

77 users are currently registered to receive EARS data via EUMETCast. Several NMS have set up their reception and processing systems and are performing off-line runs of the new data in their Numerical Weather Prediction (NWP) systems. The Danish Met Institute (DMI) started assimilating EARS data operationally into its NWP system (HIRLAM) in early September 2003.

An EARS User Workshop took place at the 2003 EUMETSAT Meteorological Satellite Conference at Weimar (29 September – 3 October). DMI, UKMO, NMI and others presented papers on their first experiences with the use of EARS data.

7 PLANNING

Effort continues to be directed towards achieving an operational set-up for the NWP SAF product quality control in the near future.

Two additional NOAA HRPT stations, Gilmore Creek and Wallops Island, are expected to be added in autumn 2003, depending upon the completion of network activities by NOAA. Furthermore, contact with Russia has been initiated with a view to adding additional HRPT Stations to the overall network.

Additionally, investigations are ongoing regarding the retransmission of AVHRR data as requested by the Climate SAF.

A proposal to extend EARS beyond the current Pilot Phase will be prepared for discussion by EUMETSAT Delegate Bodies in the Spring of 2004. It will include service enhancements and the evolution of the service to support the dissemination of EPS sounder and ASCAT data sets.

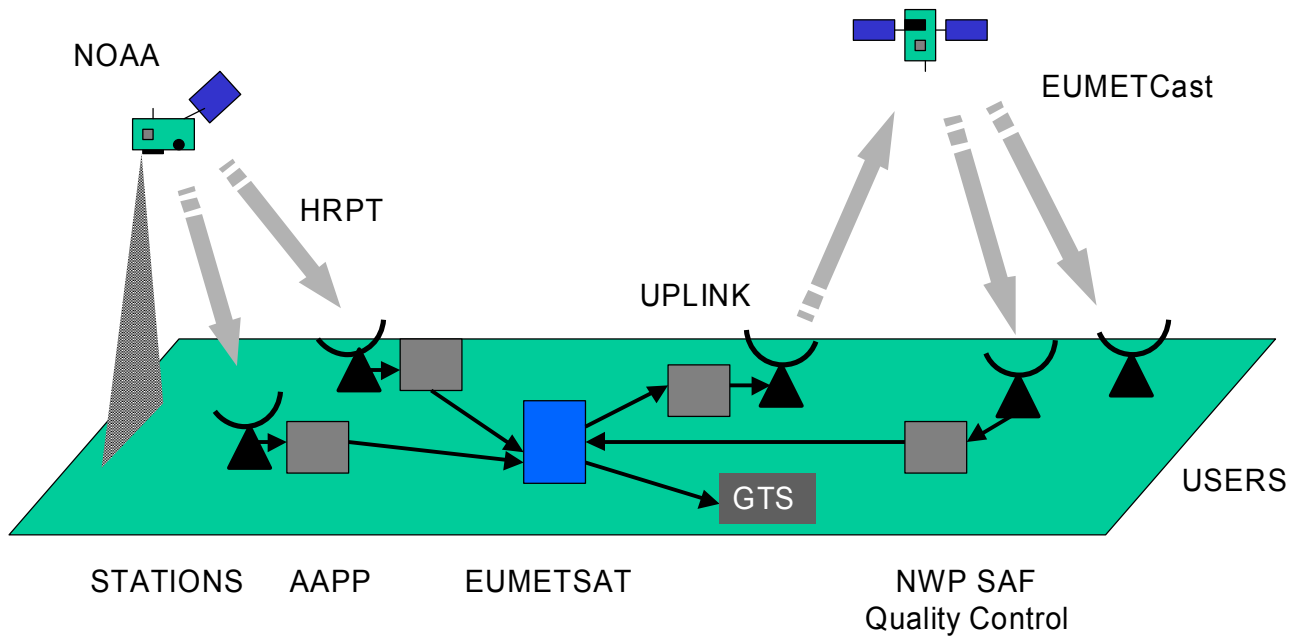


Figure 1. EARS System Overview

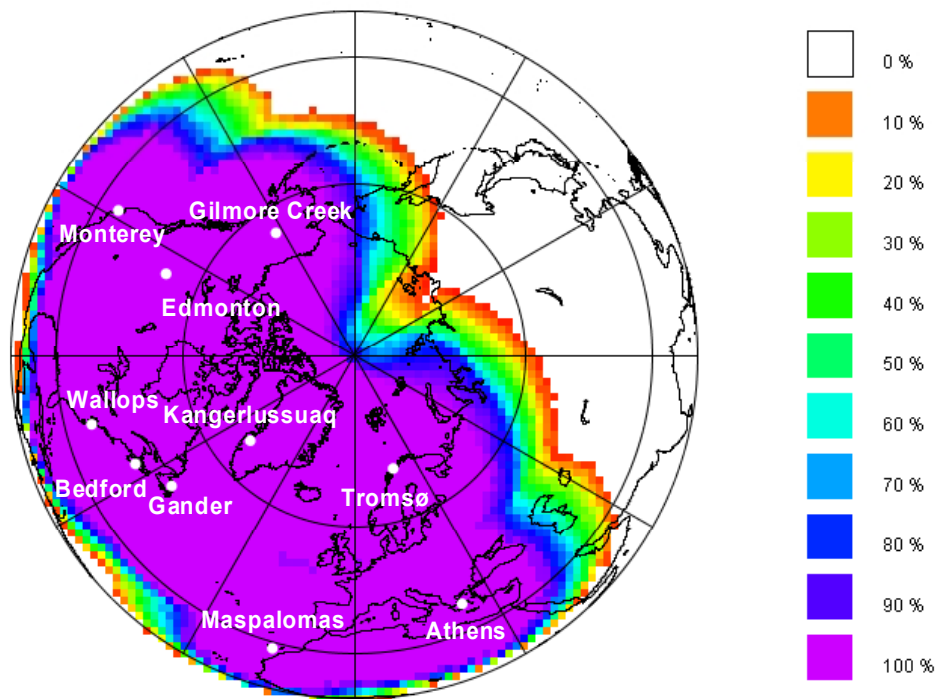


Figure 2. Geographical coverage of data collection.