

STATUS REPORT ON EARS

This Working Paper summarises the status of the EUMETSAT ATOVS Retransmission Service (EARS), highlighting the main activities since the last meeting of CGMS.

CGMS is invited to take note.

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1 INTRODUCTION

It will be recalled that in June 2001, the EUMETSAT Council decided to establish a satellite data service to provide the Meteorological Community with satellite datasets from the US National Oceanic and Atmospheric Administration (NOAA) polar-orbiting satellites covering data-sparse areas around Europe. This service has been named the 'EUMETSAT ATOVS Retransmission Service' (EARS), and its aim is to provide ATOVS level 1a and 1c data with a timeliness of 30 minutes, to cover the needs of EUMETSAT Member States' Regional NWP operators for NOAA sounder data.

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2 COVERAGE AND STATUS OF THE EARS SERVICE

2.1 Coverage

Figure 1 below provides a plot of the EARS geographical coverage established by the beginning of 2004, including the Wallops and Gilmore Creek stations that came online in December 2003.

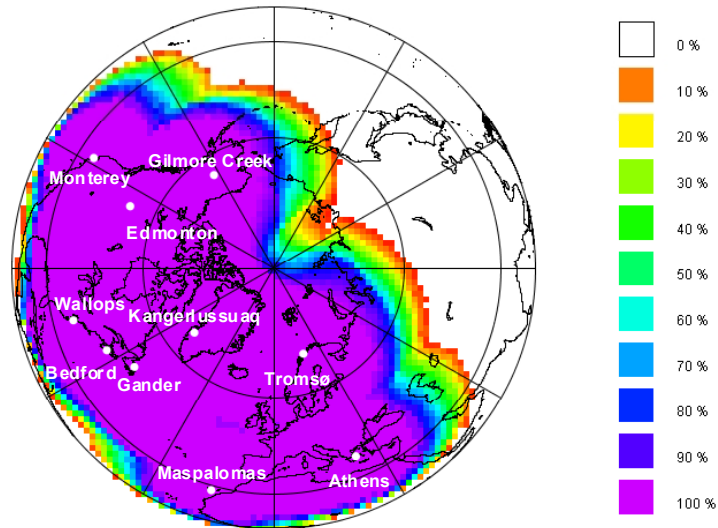


Figure 1: EARS Geographical Coverage early 2004

2.2 Current Status

2.2.1 HRPT Stations and AAPP processing

The EARS Routine Operations Phase has now been running for more than a year and a half, involving the 3 initial HRPT data providers, namely, Tromsø Satellite Station in Norway, INTA in Maspalomas, Spain, and DMI in Kangerlussuaq, Greenland. These were joined in

June 2003 by the Canadian Meteorological Centre (CMC) in Dorval, providing data from three HRPT stations that it operates, at Edmonton in West Canada, and Bedford and Gander in East Canada.

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

In December 2003 the initial target of 10 EARS HRPT stations was achieved with the addition of data from Gilmore Creek in Alaska and Wallops Island on the US East Coast.

2.2.2 Telecommunication Net

The IP VPN has resulted in good operational performance.

2.2.3 EARS Service Dissemination

The EARS service utilises the EUMETCast DVB satellite multicast system for the dissemination of data to users, and this continues to perform well.

EARS products also 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.

2.2.4 Product Quality Control

The AAPP processing software is operating well, and the tuning of the EUMETSAT monitoring systems to help achieve the maximum integrity of the products continues. A proposal for how the NWP SAF can identify product quality degradation and how EUMETSAT can act to remedy it is being discussed.

3 EUMETSAT EARS OPERATIONS

EARS routine operations at EUMETSAT continue to run smoothly. A tool for EARS end-to-end monitoring is now in operation use for supporting scheduling and monitoring activities. Information on scheduled satellite passes is now being received routinely for most EARS stations.

4 USERS

At the end of 2003, 97 users were registered to receive EARS data via EUMETCast. Several NMSs are continuing to establish reception and processing systems and many already use the data in their Numerical Weather Prediction (NWP) schemes. It should be noted that the EARS Service is available to all EUMETCast Users.

5 PLANNING

Investigations continue with regard to the retransmission of AVHRR data, as requested by the Climate SAF.

Additionally, a proposal to extend EARS beyond the current Pilot Phase was presented to EUMETSAT Delegate Body Working Groups recently, for further consideration by the Delegate Bodies themselves in May 2004. In addition to the continuation and extension of the current ATOVS Retransmission Service, the proposal also contains new pilot AVHRR and ASCAT Retransmission Services.

6 CONCLUSION

CGMS is invited to take note of the status and ongoing enhancements of the EUMETSAT ATOVS Retransmission Service.