STATUS REPORT ON EARS

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

CGMS is invited to take note.

STATUS REPORT ON EARS

1. INTRODUCTION

A satellite data service to provide the Meteorological Community with satellite datasets from the NOAA polar-orbiting satellites, covering data-sparse areas around Europe, was established in June 2001. This service, the 'EUMETSAT ATOVS Retransmission Service' (EARS), aimed to provide ATOVS level 1a and 1c data, and a limited set of AVHRR data, with a timeliness of 30 minutes, to cover the needs of EUMETSAT Member States' Regional NWP operators for this type of data. The original service is now significantly enhanced and is even called the EUMETSAT Advanced Retransmission Service (EARS). Furthermore, the EUMETSAT Council has approved an extension of the EARS Service until the end of 2008. Services currently provided and planned are:

- ATOVS Retransmission Service (EARS ATOVS)
- Pilot AVHRR Retransmission Service (EARS AVHRR)
- Pilot ASCAT Retransmission Service (EARS ASCAT)

The ATOVS Retransmission Service (EARS ATOVS) will broadcast data originating from the NOAA-KLM, NOAA-N, N' and (in due course) the Metop satellites. Instruments used are HIRS, AMSU-A, AMSU-B, and MHS, with a data rate for around 10 kb/s

The Pilot AVHRR Retransmission Service (EARS AVHRR) broadcasts AVHRR data from the NOAA- K,L,M, NOAA- N, N' and (in due course) the Metop satellites, with a data Rate of 622 kb/s.

The Pilot ASCAT Retransmission Service (EARS ASCAT) will broadcast ASCAT data from the Metop satellite at a data rate of 60 kb/s.

2. COVERAGE AND STATUS OF THE EARS SERVICE

2.1 Coverage

The Figure below provides a plot of the current EARS geographical coverage
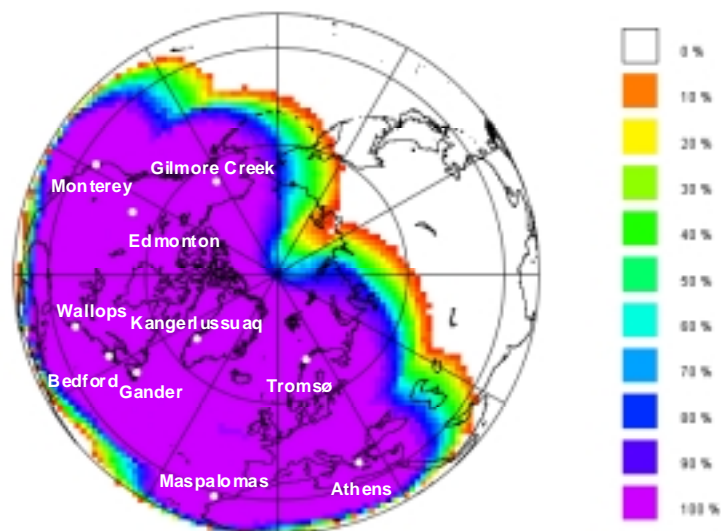
2.2   Current Status

Since NOAA-N was launched on 20 May, the UK Met Office (as host of the NWP-SAF) tested an updated version of AAPP to process its ATOVS data, which was made available to the user community at the end of July. EUMETSAT has been making preparations for the introduction of this new version and expect to begin providing NOAA-18 data to users soon.

Preparatory work for the provision of Metop data into the EARS has been taking place. Work is ongoing to establish contracts/agreements with the various HRPT Data Providers to update their reception equipment to be ready for Metop. In addition, discussions have been taking place with KNMI (The Netherlands) in preparation for them establishing a Level 2 processing system for EARS data.

2.3   Telecommunications

Although there was a major outage during 2/3/4 July with the communications link to NOAA causing outage of data from Gilmore Creek, Monterey and Wallops Island, which remains under investigation, generally, the operational performance of the telecommunication network has been good during the period.

It will be recalled that the EARS service utilises the EUMETCast DVB satellite multicast system for the dissemination of EARS products to users, and this continues to perform well (see EUM-WP-20).

2.4   Routine Products

EARS products are:
   • AMSU-A - AAPP level 1a and 1c on AMSU-A grid.
   • AMSU-B - AAPP level 1a and 1c on AMSU-B grid.
   • HIRS/3 - AAPP level 1a and 1c on HIRS/3 grid.
   • Cloud information - Modified AAPP level 1d containing only AVHRR derived cloud information on HIRS/3 grid,

continue to be also distributed by the RMDCN and are retrievable at the DWD (Offenbach, Germany) RTH. The AAPP processing software is operating well.

2.5   Special Distribution of AVHRR Data

Test transfers of selected AVHRR data to DWD began in July following the request by the Climate SAF (hosted by DWD). This activity will become part of the new pilot AVHRR Retransmission Service. Following a volcanic eruption in Iceland during November and a request from the Canadian Meteorological Centre (CMC), AVHRR data acquired at Tromsø is being transferred to the CMC to support their Volcanic Ash Advisory Centre activity that provides warnings to aviation authorities.