

**THE EUMETSAT AAPP DEVELOPMENT  
– STATUS AS OF JULY 2000**

This working paper discusses the status of the EUMETSAT ATOVS and AVHRR Processing Package (AAPP) Software Development for locally received direct readout HRPT data from the NOAA-K, L, M spacecraft. AAPP development is now completed in the frame of EUMETSAT's Numerical Weather Prediction Satellite Application Facility (NWP SAF). The AAPP V2.0 was released in February 2000. The current version includes bug-fixes and code improvements, with improved portability. It also includes the retrieval scheme Inversion Coupled with Imager (ICI) V2.0. Some incremental releases have been made to allow for instrument calibration changes and updates of the corrections for the AMSU-B interference problem. The release of AAPP V3.0 is foreseen for early 2001. Further information is available on the EUMETSAT Home Page: <http://www.eumetsat.de/en/area4>.

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The further development of the processing software for locally received HRPT based AVHRR and ATOVS data from the NOAA-K, L, M spacecraft AAPP has now been passed to EUMETSAT's Numerical Weather Prediction Satellite Application Facility (NWP SAF), hosted by the UK Met. Office. The electronic user forum for information exchange and feedback is now also handled by the NWP SAF.

After the launch of NOAA-K, now NOAA-15, subsequent versions of AAPP were issued. The current AAPP version 2.0 was released in February 2000 and includes for the first time a level 2 processing step, in form of the ICI V2.0 package, provided by Météo-France through the NWP SAF. AAPP V2.0 comprises in summary:

- Ingest code for HRPT, for TOVS and ATOVS instruments;
- Navigation code for TOVS and ATOVS instruments;
- Calibration code for TOVS and ATOVS instruments;
- Mapping code for the TOVS and ATOVS instruments;
- AVHRR cloud mask processing, including mapping to the HIRS FOV
- pre-processing code for TOVS and ATOVS instruments.
- AMSU-B interference correction code
- Retrieval processing for Temperature and humidity retrieval, in the form of the ICI V2.0 package.

It is planned to make one major release per year on CD-ROM. These releases are identified through the major release number combined with a zero intermediate release identifier (e.g. V2.0). On the EUMETSAT server, the list of known bugs and fixes is kept updated. All these bugs are sorted out in subsequent releases in between major releases. These releases are made via the EUMETSAT ftp-server and are identified through a combination of the major release number with the number of the subsequent release (e.g. V2.2). The current version AAPP V2.2 includes updates of the AMSU-B bias correction. To date, 124 users from 40 countries have obtained V2.0

The EUMETSAT AAPP Web-Pages on the EUMETSAT Web-Server (<http://www.eumetsat.de/en/area4>) provide more detailed information.