

AN OVERVIEW ON THE OPERATIONAL PROCEDURES AT THE SATELLITE APPLICATION FACILITY ON CLIMATE MONITORING

Petra Fuchs¹, Nathalie Selbach¹, Bart de Paepe², Frank Kaspar¹, Christian Koziar¹, Theo Steenbergen¹, Diana Stein¹, Britta Thies¹

(1) Deutscher Wetterdienst, (2) Institut Royal Meteorologique de Belgique

ABSTRACT

The Satellite Application Facility on Climate Monitoring (CM-SAF) generates, archives and distributes widely recognized high-quality satellite-derived products and services relevant for climate monitoring in an operational mode. Products covering surface albedo, radiation fluxes at top of the atmosphere and at the surface, atmospheric temperature and water vapour profiles as well as vertically integrated water vapour (total, layered integrated) are derived from different sensor types on geostationary (GERB, SEVIRI) and polar-orbiting (AVHRR, ATOVS) operational meteorological satellites.

The products are available at a spatial resolution in the range of $(15 \text{ km})^2$ to $(90 \text{ km})^2$ on equal area grids and for temporal averages ranging from daily to monthly means. Depending on the used sensors, the CM-SAF products cover different areas. Products from the SEVIRI instrument on-board the geostationary Meteosat Second Generation satellites cover the full visible Earth disk. This area extends from South America to the Middle East, with Africa fully included and Europe in the North. Products derived from the AVHRR-sensor on-board the polar-orbiting satellites cover Europe, the East Atlantic and the Inner Arctic. Products based on ATOVS data are available with a global coverage. The products are processed with a maximum time delay of two to four months depending on the product type.

This presentation will give an overview on the operational procedures at the CM-SAF. It will cover the processing and dependencies as well as the user access to products and user support.

The processing of the CM-SAF products is done at two processing centres at DWD and RMIB, respectively. The DWD processing centre also makes use of computing resources at the ECMWF. The generation of the CM-SAF products is done in separate processing environments depending on the different satellite instruments required as input. All products are archived in a central database located at DWD. The CM-SAF offers various user services, such as access to the products via a web-based interface, detailed information on products and a User Help Desk.