

# Clouds, Water Vapour and FCDRs: Splinter Group Report

Karl-Göran Karlsson, SMHI  
Marc Schröder, DWD  
Lizzie Good, Met Office

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## Presentations

### **Relevant scales of water vapour for climate analysis**

Helene Brogniez, University of Versailles, France

### **Quantifying the uncertainty and ensuing spurious trends in level-3 AVHRR-based cloud climate data records**

Jed Bojanowski, Remote Sensing Centre, Poland

### **On the use of CM SAF FCDRs to retrieve LST and other ECVs**

Carlos Jimenez, Estellus, France (presented by Samuel Favrichon)

## **FCDRs: Recommendations and suggestions**

- **The CM SAF (MW imager) FCDR a very important input to C3S/ECMWF Reanalyses → this work must continue in CDOP-4 ("Reanalysis ready data", i.e. with bias correction assessment)!**
- **General support for current CM SAF ideas/plans for CDOP-4 (improved uncertainty estimates, adding MWI and AMSR3, etc.)**

## **Clouds: Recommendations and suggestions**

- **General support for current CM SAF ideas/plans for CDOP-4 (i.e., extension of CLARA- and CLAAS-type CDRs with AVHRR- and SEVIRI-heritage channels + potentially additional WV and CO<sub>2</sub> channels)**
- **However, concern raised whether CM SAF should continue this work in parallel with the new ISCCP-3/NG initiative (planning multispectral approach mixing geo- and polar data).  
Is it better to join ISCCP initiative? Too early to make clear recommendations more than that we must follow this closely!**

## **Clouds: Recommendations and suggestions**

- **Better (i.e., higher spatial resolution) information on fog and convective cloud occurrence over Europe needed  
→ European AVHRR LAC FCDR should be utilised**
- **Near realtime availability of global datasets desirable (ICDRs)**
- **Realisation of orbital drift corrections**
- **L1-L2-L3 error propagation estimates needed**

## **Water Vapour: Recommendations and suggestions**

- **Include all MW moisture sounders in FCDRs**
- **Investigate and try utilise the mix of MW and IR data for water vapour profiling (i.e., support of current plans)**
- **Complete comprehensive uncertainty information including assumptions & uncertainty of uncertainties**
- **Compare retrieved temperature and humidity profiles from sounders with GPS-RO refractive profiles**