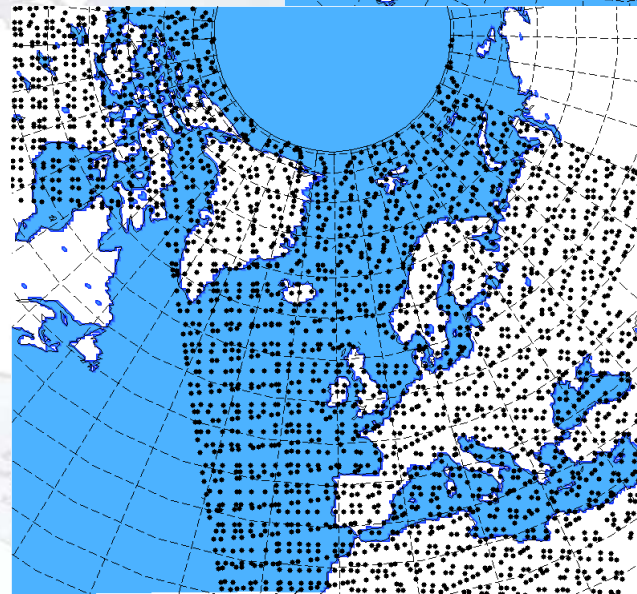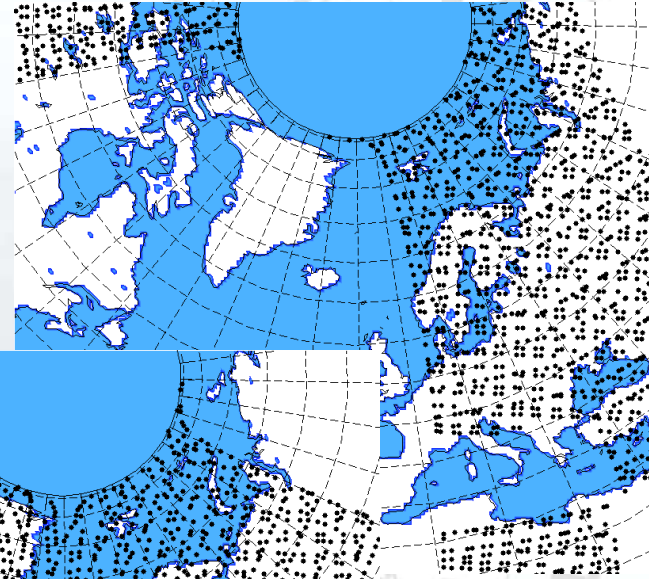# WP 2.2 - Humidity assimilation

- **Visit the Met Office.**

- **Stand alone 1D-Var**

- **T-skin and emissivity in 1D-Var and 3D--Var.**

- **Bias correction scheme.**

- **New humidity variable.**

- **Emissivity, first guess.**

- **AMSU-B cloud mask.**

- **AMSU-B into HIRVDA.**

NOAA-16
00 UTC

NOAA-16
12 UTC

# WP 2.2 – Quality Control

- **We have a clear picture of how to get AMSU-B over sea**

- **Neither MetOffice nor ECMWF use AMSU-B over ice though**

- **Our approach: put Ts and $\varepsilon$ in the control vector and let VarQC decide what to accept**

- **This can be tested in the 1DVAR**

- **Before this can be done AMSU-B needs bias correction**

- **We need a cloud cleared sample to calculate the coefficients**

- **Get a cloud cleared sample by using NWC-SAF cloud mask**
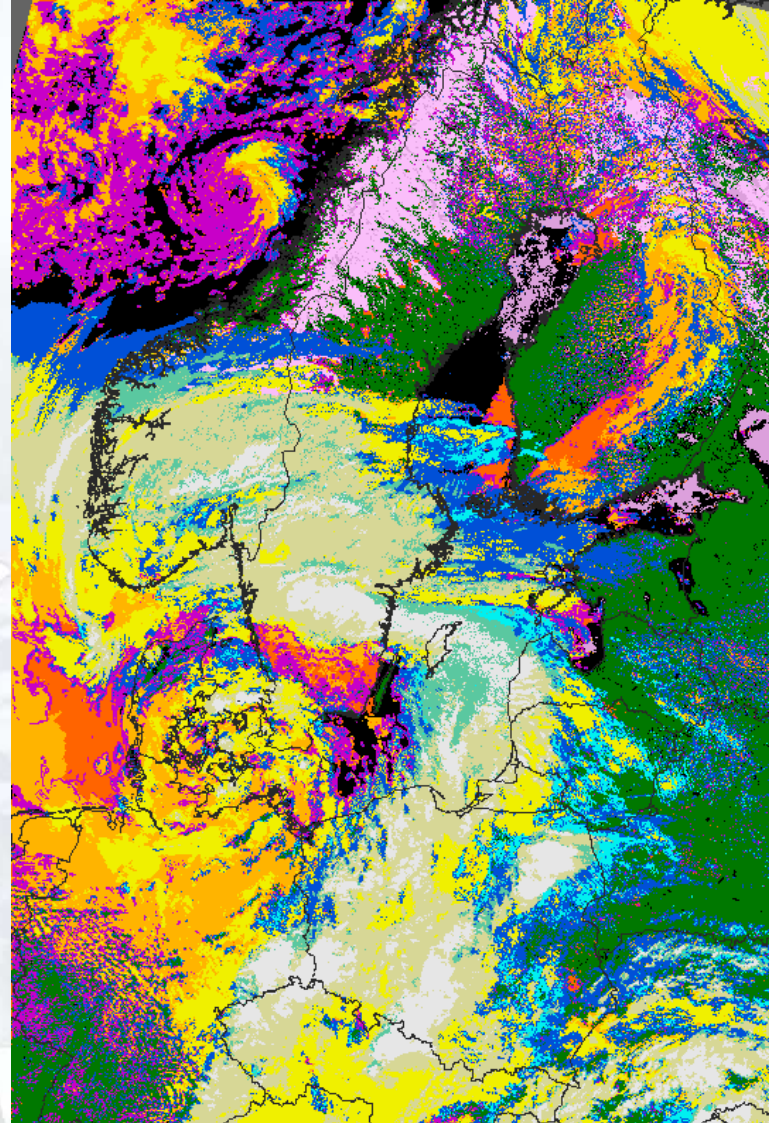
# WP 2.2 - Surface heat flux
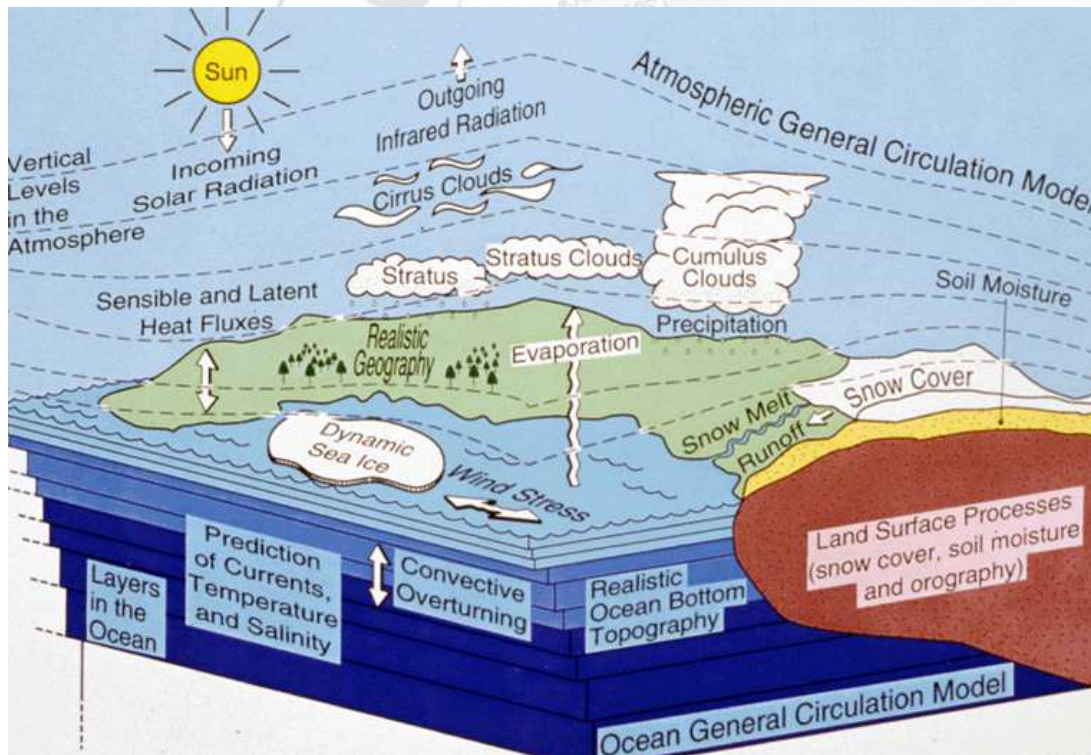


- 🟩 **HIRLAM snow scheme.**

- 🟩 **HIRLAM ice scheme.**

- 🟩 **Flux formulation for stable conditions.**

- 🟦 **Flux implementaton.**

- 🟥 **Validation of new flux and snow.**

- 🟥 **Validation of new ice.**