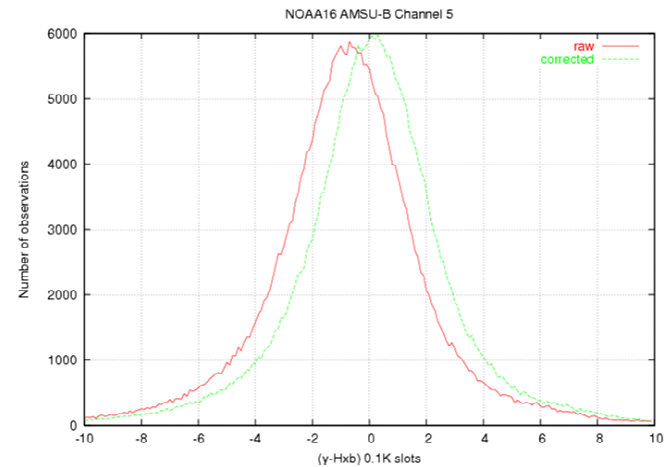


AMSU-B over sea

- A large dataset has been collected via EARS
- Quality control algorithms from AAPP to screen out observations contaminated by scattering processes from rain and cirrus clouds.
- RTTOV-7 is used to calculate innovation vectors, i.e. differences between observations and an NWP field.
- The bias is reduced by linear regression with predictors from the NWP model and the observations, as it is done at most other centers.
- Coding to get AMSU-B into HIRVDA started
- Observation error covariances needs to be tuned, it is going on at the moment



ACTIONS

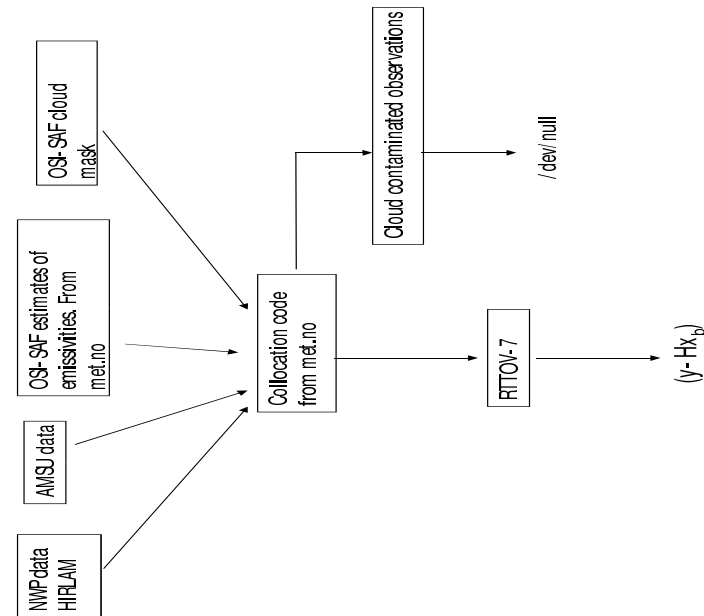
- Test runs with HIRVDA.
- Possible problems: Observations where the atmosphere is very dry and the surface contributes a lot to the measured radiance.
- T_{skin} may need to be included in the control vector and adjusted during the analysis
- Alternatively this can be done separately before the analysis with our 1DVAR.

AMSU-B over ice

- The algorithms from AAPP can not be used over ice.
- The OSI-SAF cloud mask will be used instead, we have data from spring 2004.
- Met.no has provided code that collocates:
 - NWP fields
 - AMSU data
 - Surface emissivities estimated from OSI-SAF data
- This will make it possible to calculate innovation vectors and study the biases and how to correct them

ACTIONS

- Get AMSU data for the same time and location as the OSI-SAF cloud mask.
- Calculate innovation vectors
- Study how to do bias correction
- Assimilation experiments with 1DVAR



Surface Fluxes

- HIRLAM has been setup for experiments at the ECMWF computer facilities.
- New formulations of the surface fluxes will be implemented.
- Three test runs are planned with 1 month data
 1. Use modified surface fluxes
 2. 1+ the whole turbulence scheme (CBR) modified
 3. 2+OSI-SAF ice information.

