

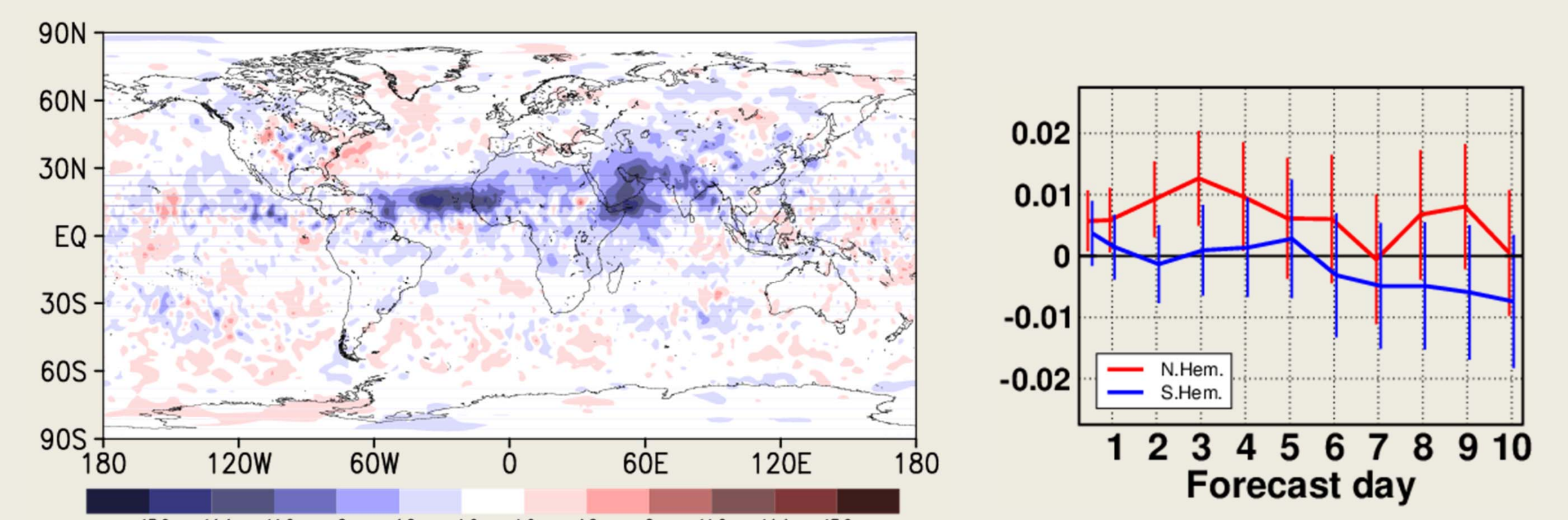
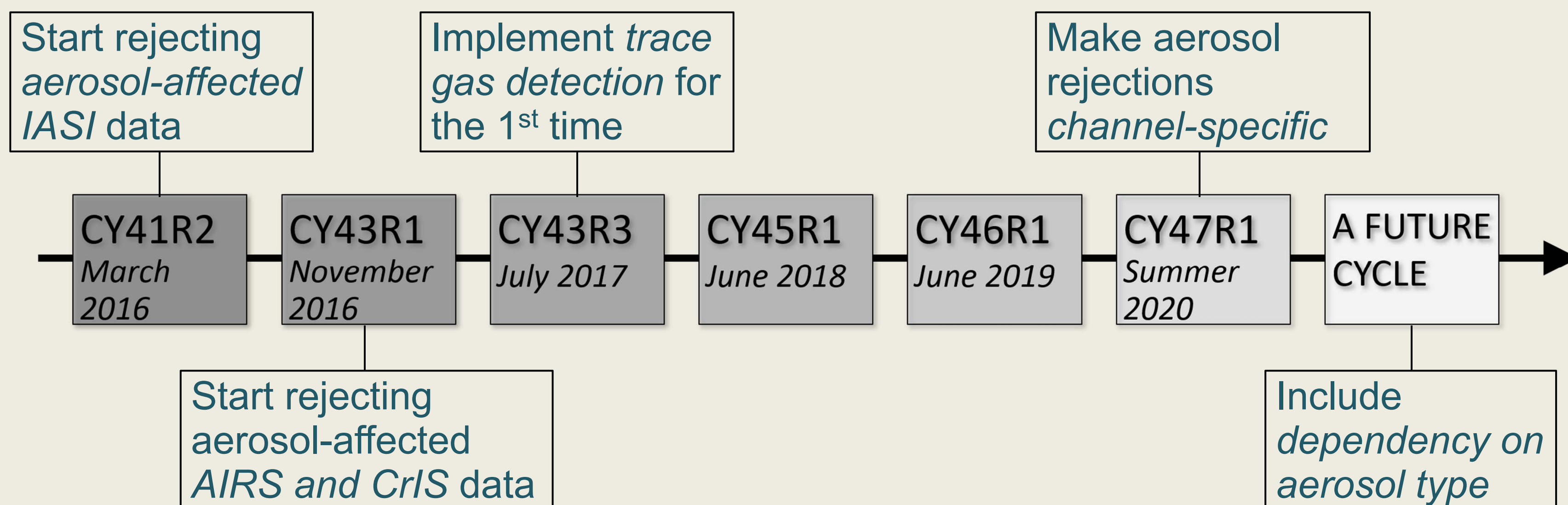
# Screening routines for aerosol- and trace-gas-affected infrared radiances



Reima Eresmaa, Julie Letertre-Danczak, Tony McNally

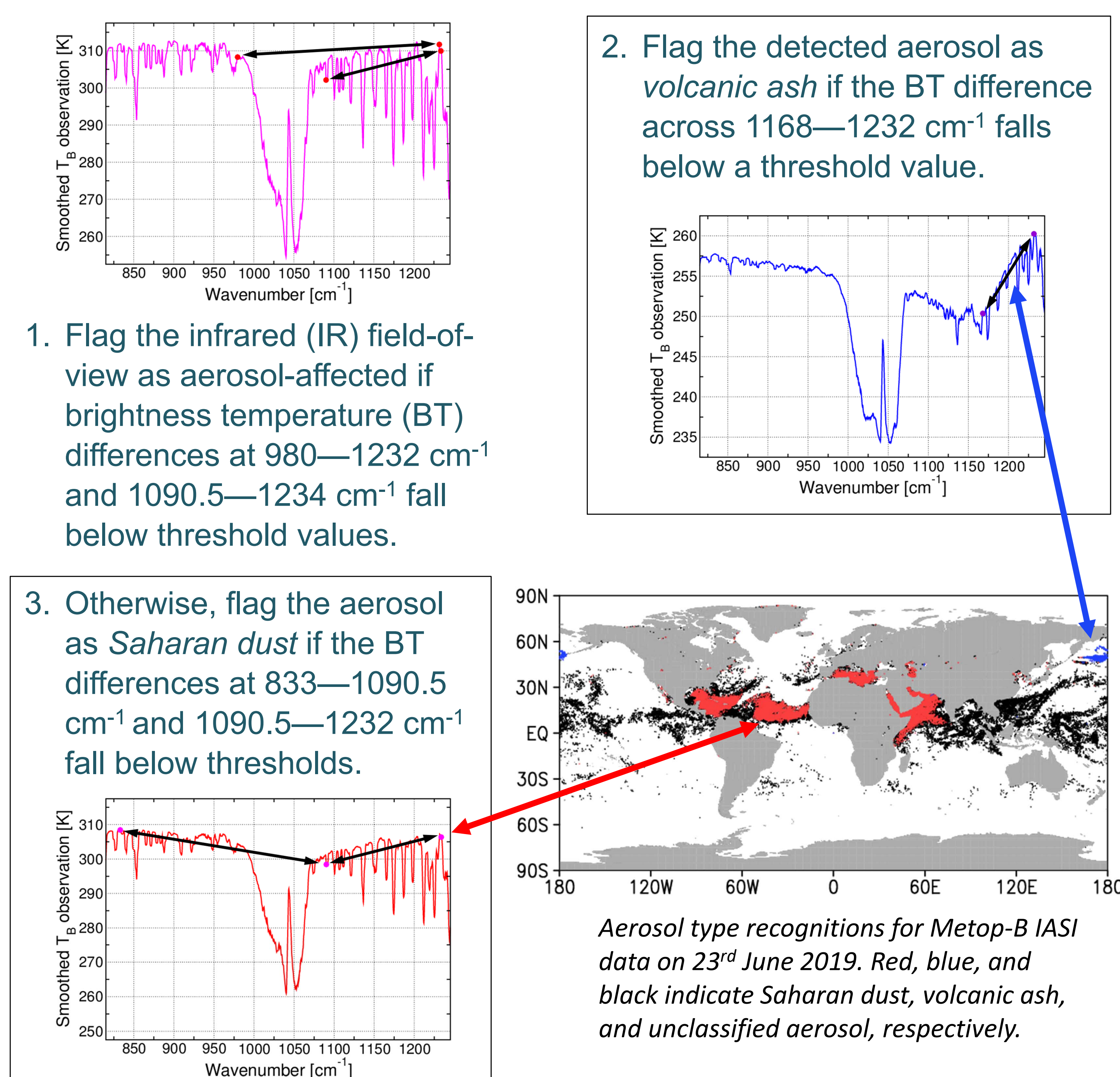
European Centre for Medium-range Weather Forecasts (ECMWF), United Kingdom

## Aerosol and trace-gas screening milestones at ECMWF

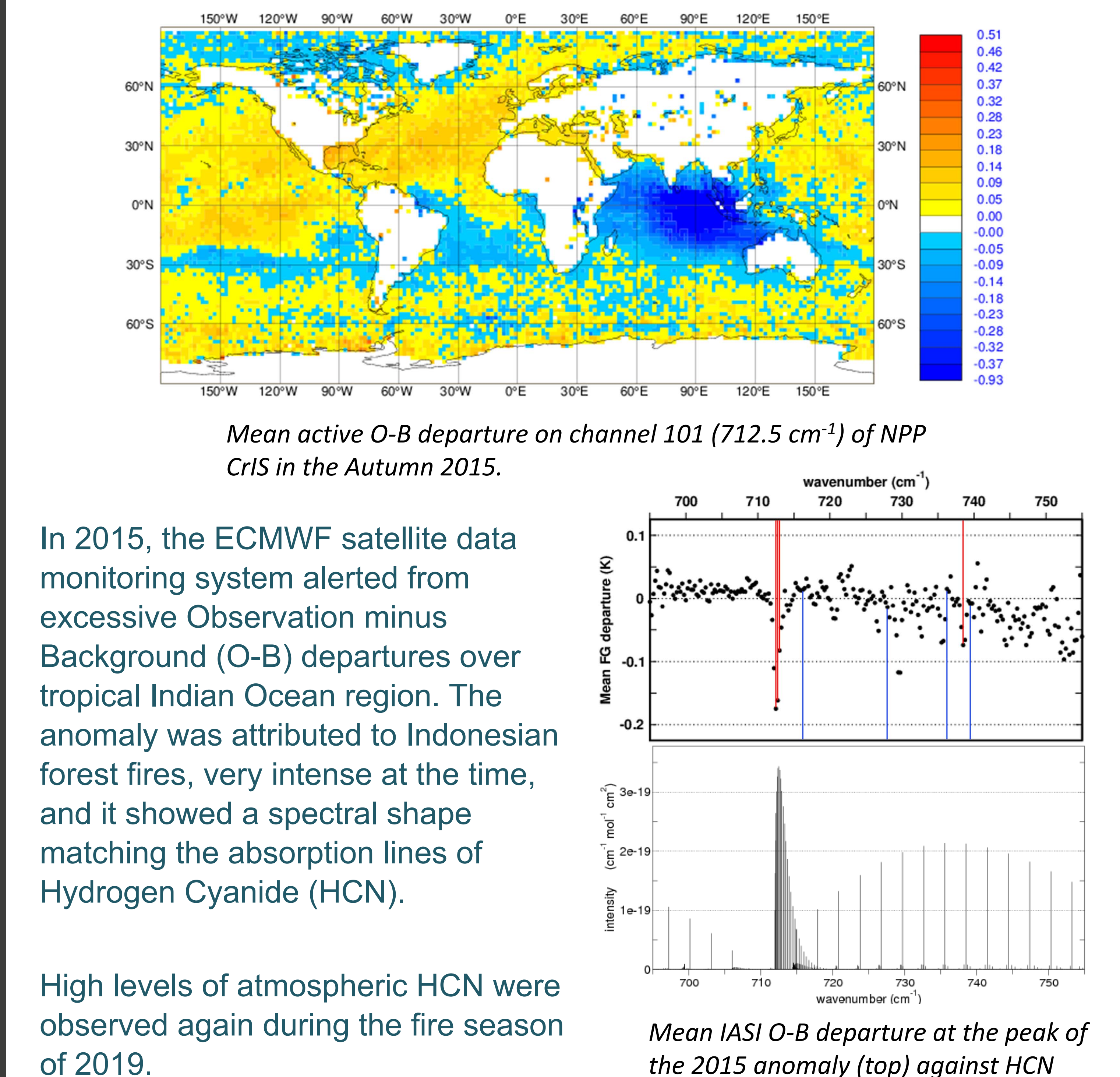


The undesirable impact of aerosol-affected IR radiances on 500 hPa geopotential mean analysis (left; unit  $m^2s^{-2}$ ; 21–30 June 2018) and control-normalized forecast RMSE (right; 1 May – 30 August 2019).

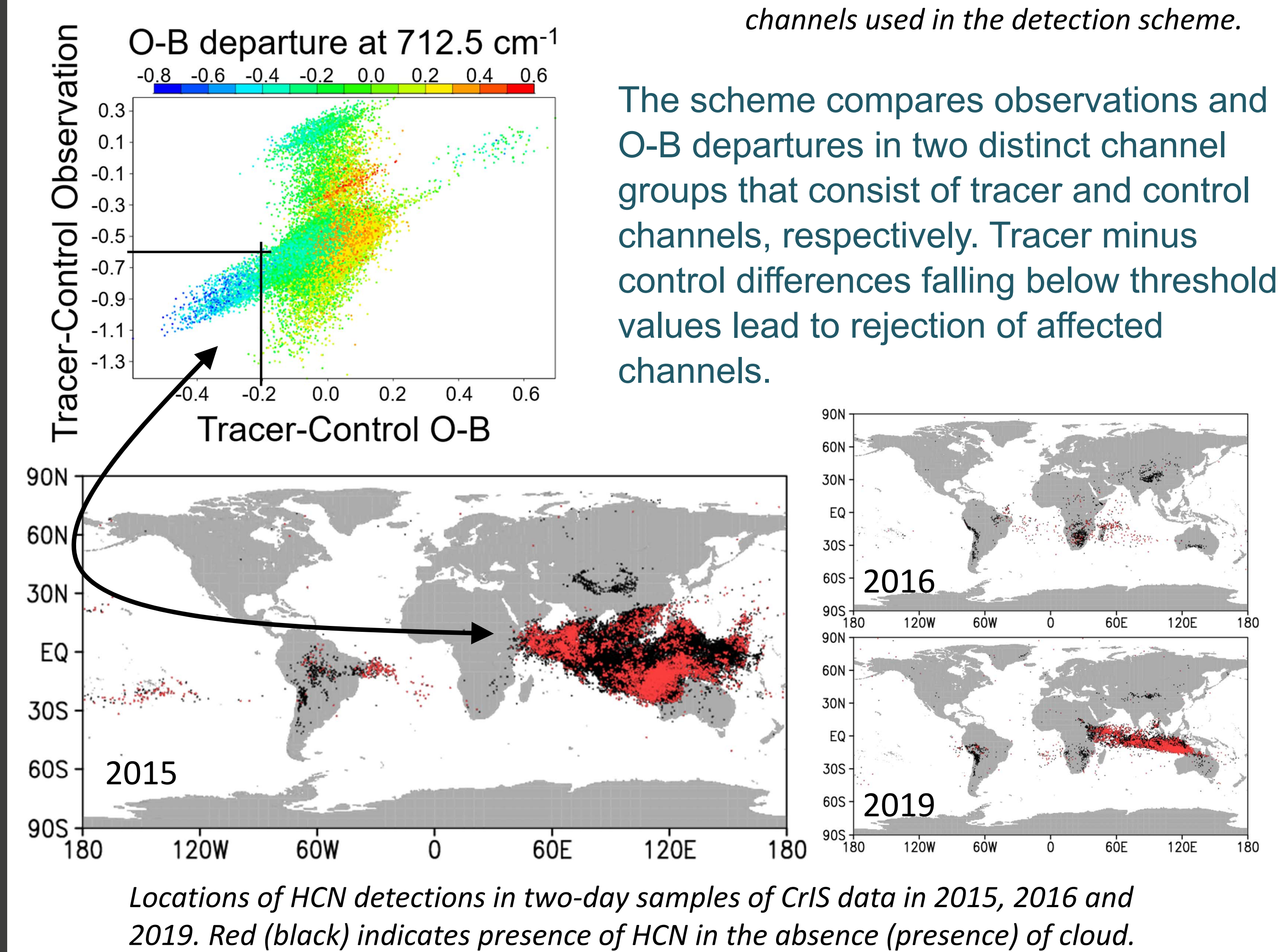
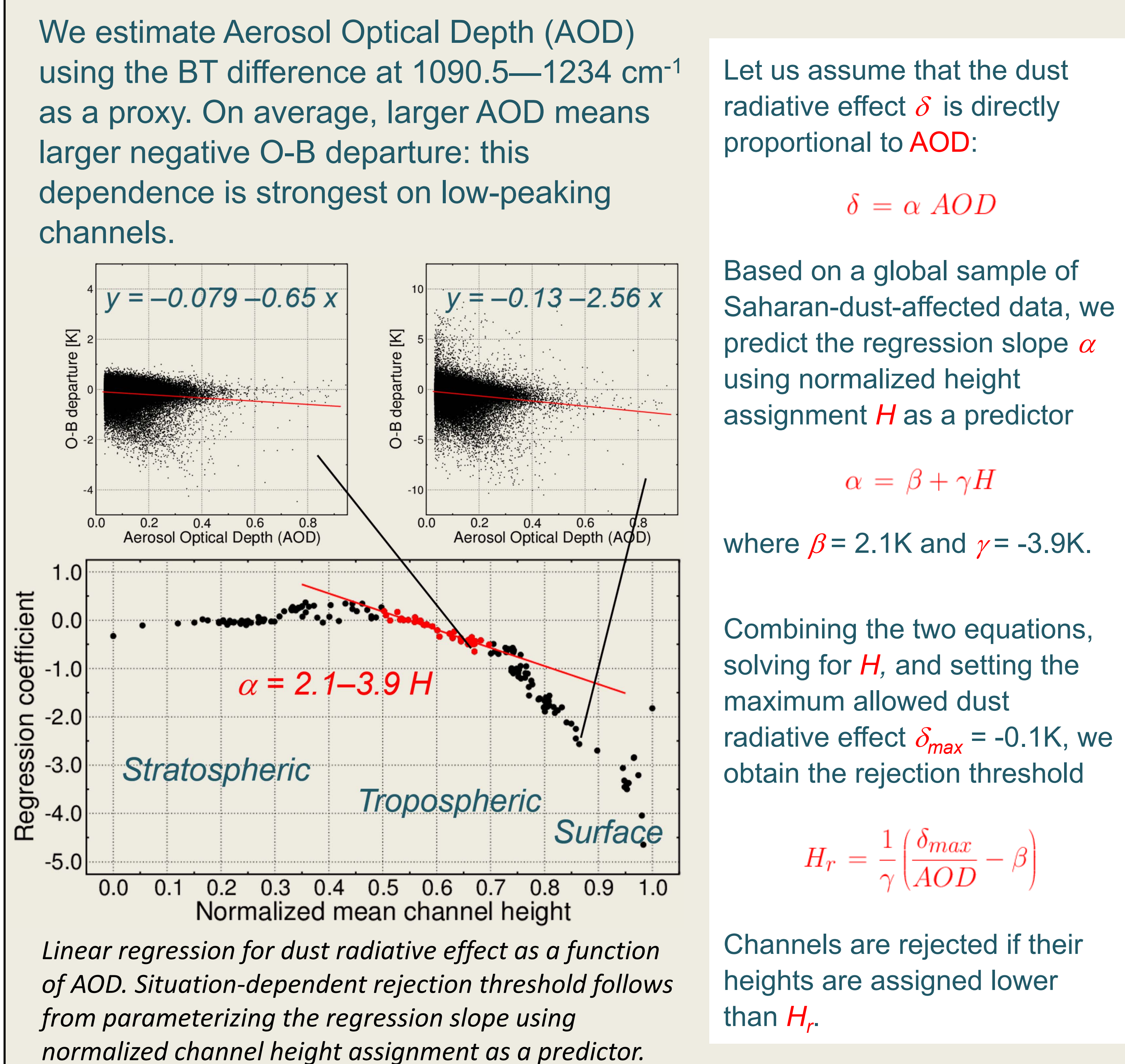
## Three-step aerosol type recognition



## The trace-gas detection scheme



## Channel-specific Saharan dust rejections



## Acknowledgements

We thank EUMETSAT NWP SAF CDOP-3 program for funding the work presented in this poster.