EMS Annual Meeting Abstracts Vol. 12, EMS2015-317, 2015 15th EMS / 12th ECAM © Author(s) 2015. CC Attribution 3.0 License.



## Assimilation of MODE-S EHS observations in HARMONIE

Cisco de Bruijn and Siebren de Haan

Royal Netherlands Meteorological Institute (KNMI), Observations and Data Technology, De Bilt, Netherlands (cisco.de.bruijn@knmi.nl)

In the framework of SESAR WP11.2 the HARMONIE system has been adopted to run a three-hourly cycle with the assimilation of MODE-S EHS wind and temperature observations. The tracking and ranging radars from Air Traffic Control provide useful wind- and temperature information of the upper air. These high density (space and time) observations need to be pre-processed, prior to be ingested in the 3D VAR assimilation scheme of the HARMONIE system. We present a case study where the impact of MODE-S EHS observations on the timing of a moving occlusion front becomes clear. Further we show statistics of a November-December period in 2013 where the 10m-wind bias improves.