



## ACTRIS non-methane hydrocarbon intercomparison experiment in Europe to support WMO GAW and EMEP observation networks

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Received: 17 September 2014 – Published in Atmos. Meas. Tech. Discuss.: 13 October 2014

Revised: 06 May 2015 – Accepted: 23 May 2015 – Published: 08 July 2015

**Abstract.** The performance of 18 European institutions involved in long-term non-methane hydrocarbon (NMHC) measurements in ambient air within the framework of the Global Atmosphere Watch (GAW) and the European Monitoring and Evaluation Programme (EMEP) was assessed with respect to data quality objectives (DQOs) of ACTRIS (Aerosols, Clouds, and Trace gases Research InfraStructure

Network) and GAW. Compared to previous intercomparison studies the DQOs define a novel approach to assess and ensure a high quality of the measurements. Having already been adopted by GAW, the ACTRIS DQOs are demanding with deviations to a reference value of less than 5 % and a repeatability of better than 2 % for NMHC mole fractions above 0.1 nmol mol<sup>-1</sup>.