EMS Annual Meeting Abstracts Vol. 13, EMS2016-223, 2016 16th EMS / 11th ECAC © Author(s) 2016. CC Attribution 3.0 License.



New heated humidity sensor in the operational network of DWD

Simone Griesel

Deutscher Wetterdienst (DWD), Hamburg, Germany (simone.griesel@dwd.de)

The German Meteorological Service (DWD) is currently modernizing its sensors of the ground based observing network.

For humidity measurement the analogue polymer sensor is replaced by a heated monolithic humidity transmitter consisting of separated humidity and temperature probes.

The new measuring principle with dual heating procedures should enable more precise continuous measurements even at permanent high humidity or chemical exposure.

This work evaluates the behavior of the new heated sensor under different weather conditions such as freezing and corrosive situations and the resultant measurement data.