



## **PADDY (Passiv Airflow Dewpoint Detection Assambly) a new, small and fast Frost- and Dew Point Hygrometer for Use in an Aircraft Wingpod**

**U. Bundke**(1) , A. Afchine (2), B. Bühner (1),M. Krämer (2) and T. Wetter(1) ,

(1) University of Frankfurt Institut für Atmosphäre und Umwelt, Germany  
(bundke@meteor.uni-frankfurt.de, (2) FZ Jülich, Germany

Within the collaborative Research group SFB 641 The troposheric Ice Phase - TROP-ICE, our group has developed a fast, small dewpoint sensor for use in our new ice nucleus (IN) counter, called the FINCH (Fast IN Chamber).

Because of its small dimensions, we now have setup a standalone version of this device for operation in an aircraft wingpod. Therefore a new passive airflow inlet has been designed. The new device has two channels, for total water (heated inlet towards forward direction) and water vapor (inlet facing backward direction).

The device was integrated and first measurements made during the CIRRUS III campaign onboard a *enviscope* Learjet operated from Hohen, Germany from November 17. - 29. 2006.

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