



Overview of the CIRRUS-III midlatitude frontal cirrus field experiment

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The CIRRUS-III field experiment took place in November 2006 near Rendsburg in Northern Germany. The objective of the campaign was to investigate midlatitude frontal cirrus clouds and the environment in which they form in order to better understand their formation mechanisms, i.e. homogeneous or heterogeneous, H₂O partitioning, supersaturation, lifecycles and HNO₃ partitioning in cirrus. Measurements were made with the *enviscope* Learjet with instrumentation for aerosol particle characterization, major gas phase species as well as cloud microphysics. Six flights were conducted from November 17-29, 2006, over the altitude range from 7–12km and covering latitudes from 45 to 70 degree North. Cirrus clouds and contrails embedded in the cirrus were detected in the temperature range 210-245K, representing thin cirrus as well as glaciated mixed phase clouds. Here we present an overview of the preliminary results.