

Trace gas observations of the CRISTA-NF experiment during the SCOUT-O3 Tropical Aircraft Campaign

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The Cryogenic Infrared Spectrometers and Telescopes for the Atmosphere – New Frontiers (CRISTA-NF) experiment onboard the Russian research aircraft Geophysica measures about 10 trace gases in the Upper Troposphere – Lower Stratosphere (UTLS) region with unprecedented spatial resolution (for a remote sensing instrument). The first scientific flights of this newly developed instrument took place during the SCOUT-O3 Tropical Aircraft Campaign (EU, FP 6) in November and December 2005. This paper presents first results of trace gas observations during SCOUT-O3 (e. g. CFCs, water vapour) with emphasis on dynamical structures in the vicinity of the tropical and extra-tropical tropopause.