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Validation of GOMOS water vapour data with balloon sondes and satellites during the HIBISCUS campaign

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The GOMOS instrument launched the first March 2002 aboard the satellite ENVISAT, exploiting stellar occultation, allows to obtain the density of some atmospheric constituents. This study discusses the validation of water vapour data from GOMOS in the upper troposphere and the stratosphere. Two different types of spectral inversion permitting to obtain from the spectral transmissions the water vapour densities are tested: the nominal inversion and the DOAS inversion. The GOMOS water vapour profiles are compared with other profiles from HALOE and ODIN satellites data. A comparison is also made with SDLA sondes and SAOZ-MIR balloons data during the HIBISCUS campaign in February 2004. Preliminary results indicate that DOAS inversion gives a better agreement with validation data.