



## **Determination of the top altitude of high level clouds in the tropics with GOMOS/ENVISAT**

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GOMOS instrument on board ENVISAT is a stellar occultation spectrometer dedicated to the monitoring of ozone and minor species in the stratosphere and mesosphere. The stellar occultation allows by principle a very accurate registration of the tangent altitude of the measurement. Two fast photometers (1kHz sampling rate) are used to monitor the vertical structure of the atmosphere with a very high vertical resolution and to correct spectrometer data from star scintillation effects. The observation of the loss of signal in photometer data is an indication of the presence of a cloud along the light ray pass and can be used to determine the top altitude of this cloud with accuracy better than 100m. Due to the tangent geometry of the observation, this method is sensitive to sub-visible clouds (vertical optical thickness  $> 0.01$ ). In the tropics sub-visible clouds are very frequent around the tropopause. We will present preliminary results of the distribution and to altitude of high levels clouds in the tropics as a function of longitude and seasons.