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## Sounding the stratosphere and the mesosphere by GOMOS on board ENVISAT: overview of main scientific results

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GOMOS instrument, on board ENVISAT satellite launched in March 2002, is a stellar occultation spectrometer aimed to built a climatology of ozone and related species in the middle atmosphere (15 to 100 km) with a very high accuracy. GOMOS night time measurements are especially well adapted for this task due to their self-calibrating nature and the perfect knowledge of their altitude, a particularity of the star occultation technique. The spectral coverage from 250 to 950nm allows measuring ozone, NO<sub>2</sub>, NO<sub>3</sub>, H<sub>2</sub>O, aerosols and temperature. A global latitude coverage is obtained with up to 40 stellar occultations per orbit from south pole to north pole. Main scientific results acquired during the first three years of the mission will be presented.