Seminar über Microwave Physics and Atmospheric Physics

Referent/in: Eric Sauvageat, IAP, Universität Bern

Titel: GROSOM and MOPI 5 projects: towards an improved quality of ozone time series derived from passive ground based radiometers

Passive microwave ground based radiometry is an important tool for the monitoring of ozone and the estimation of long-term trends in the middle atmosphere. However, the derivation of accurate ozone profiles from radiometric measurements remains challenging and requires numerous processing steps which bring potential errors or uncertainties to the final products. While a lot of them have been identified and quantified, there are still some inconsistencies left in the ozone time series which call for further investigations.

During this talk, we will present two projects that aim towards a better understanding of error sources in the derivation of ozone profiles from microwave ground based radiometers. The GROSOM project is a collaboration with MeteoSwiss which aims at the harmonization of the times series derived from GROMOS (located in Bern) and SOMORA (in Payerne) by standardizing the data processing of these instruments (from the raw data to the ozone profiles). The MOPI 5 project aims at better characterizing the real-time spectrometers used in recent ozone profiling instruments. Despite their influence on the retrieved profiles, their exact contribution remains mostly unknown.

Zeit: Freitag, 30.10.2020, 10:15 Uhr

 Ort: Hörsaal B77, Gebäude Exakte Wissenschaften, Sidlerstrasse 5, Bern, Schweiz