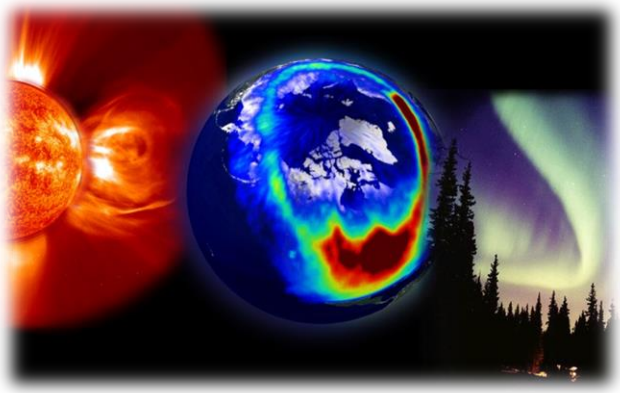
Master's thesis project in atmospheric science:

# Investigating the solar influence on climate, based on satellite measurement analysis



## Solar influence on climate

The Sun emits a continuous, but highly variable, flow of energetic particles towards the Earth. The interaction between these particles and gases, high up in the atmosphere, leads to chemical changes of the atmospheric composition. These changes, combined with the impact of atmospheric dynamics, can influence the natural variability of the climate system. Getting a better understanding of these phenomena is necessary in order to decrease the uncertainties in climate forecasts and to assess the impact of anthropogenic activities more accurately.

## The Odin satellite

Odin is an Earth observation satellite mission, jointly funded by the Swedish national space agency and by the European space agency. We, at the department of space, earth and environment, are responsible for the data processing for the sub-millimetre radiometer, one of the instruments on board this spacecraft. Measurements made by this instrument provide us with global information on the atmospheric composition.

## Your job

We are looking for a student who is interested in helping us in our quest for a better understanding of the upper and middle atmosphere. Your work will mainly consist of learning about relevant physical and chemical mechanisms, analysing measurements from the Odin satellite, and interpreting the results. You will be working in a stimulating environment, where you will have the opportunity to learn about both environmental and space sciences.

## Prerequisites

- Background in physics or chemistry,
- Good programming skills,
- Interest for environmental sciences.

## Contact

Kristell Pérot
Department of Space, Earth and Environment, Division of Optical and Microwave Remote Sensing.
kristell.perot@chalmers.se, 031 772 15 74