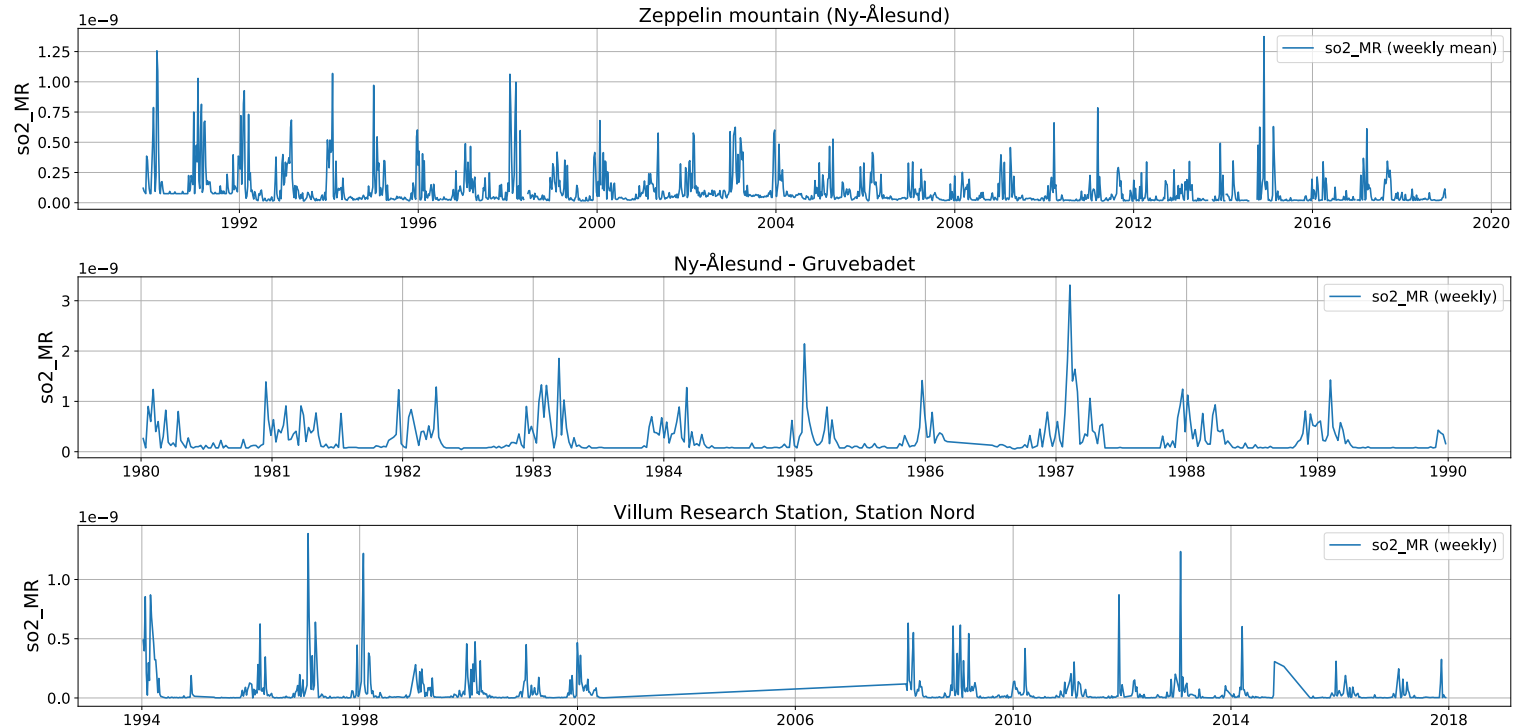


Marit: Arctic haze

- Measurements and model results of SO₂ at Zeppelin, Gruvebadet and Villum
- Models: **UKESM1-0-LL, CNRM-ESM2-1, GFDL-CM4, GFDL-ESM4, NorESM2-LM**
- **Results so far:**
 - Higher measured SO₂ values aloft (Zeppelin)
 - Discrepancy between models and measurements (by a factor of 10²)
- **Later work:**
 - Find other variables to determine arctic haze events (BC?)

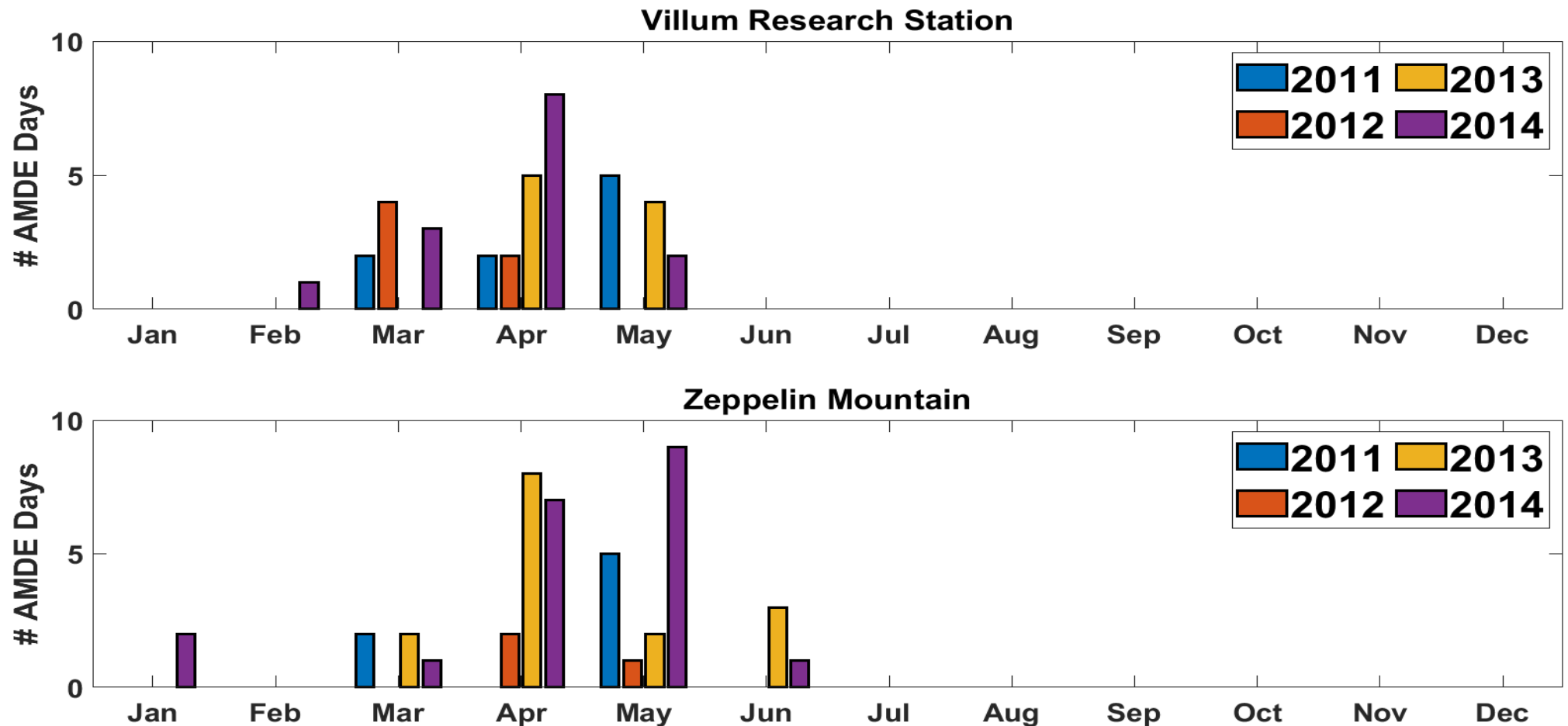


Comparison of AMDEs between Villum and Zeppelin

Jakob Boyd Pernov

Goal – Compare AMDEs between the two High Arctic sites

Research Question – What are the differences in depletion events with regards to occurrence, sea ice, insolation, RH in the period 2011-2014





Sea Ice Activity and halogen emission

Xu-Cheng He

Motivation:

Atmospheric iodine tripled in the past 70 year
Sea ice activities contributed to the increase

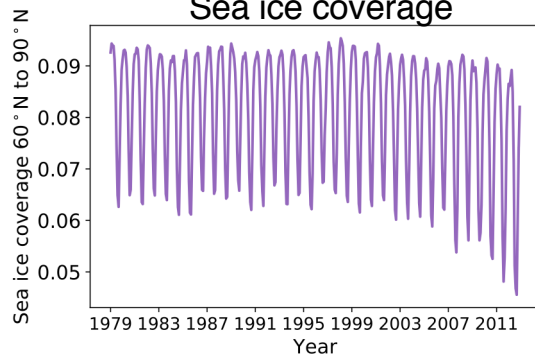
Preliminary results:

Arctic sea ice coverage in the summer is decreasing
Arctic sea ice in the winter seems not largely affected

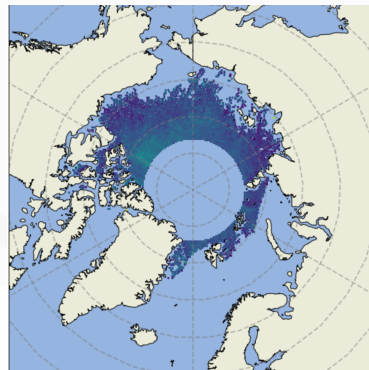
Next step:

Find data with better coverage
Consider the Arctic spring solar radiation change

Sea ice coverage



Institute for Atmospheric and Earth System Research (INAR)



Winter sea ice thickness

