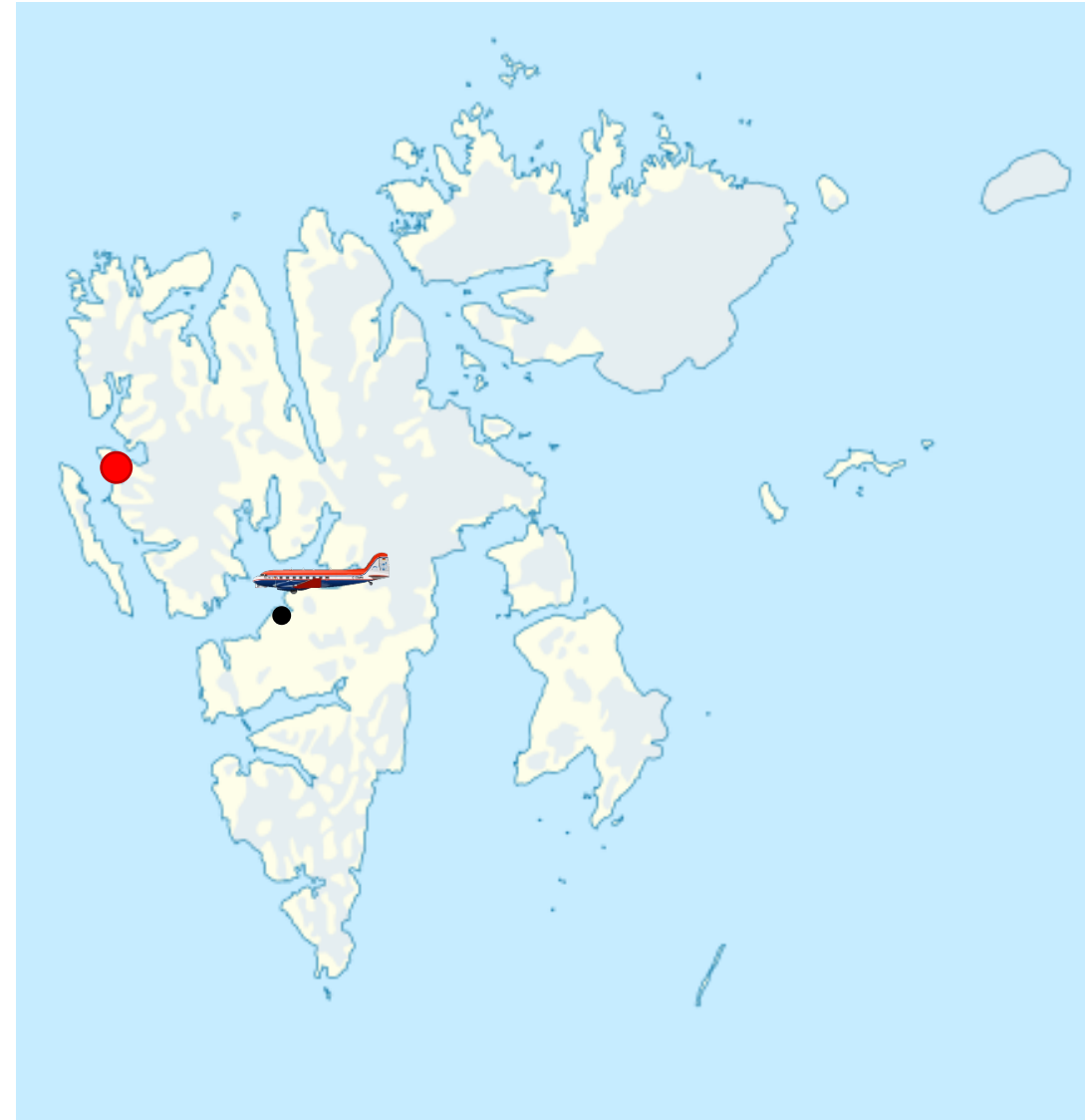


Ground-based activities in Ny-Ålesund

AWIPEV^{79°N}
Arctic Research Base Ny-Ålesund





- **surface radiation**
(net radiation components and more; BSRN)



- **surface meteorology**
(pressure, temperature, rel.humidity, wind speed and direction)



- **upper air meteorology**
(pressure, temperature, rel.humidity, wind speed and direction by radiosondes)

Additional Radiosondes

During aircraft campaign period [07 March – 17 April 2022]
we will have 6 hourly radiosonde launches.

05 – 11 – 17 – 23 UTC launch time

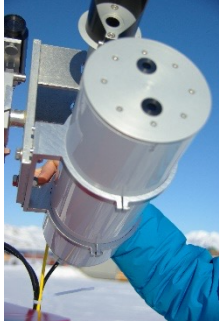
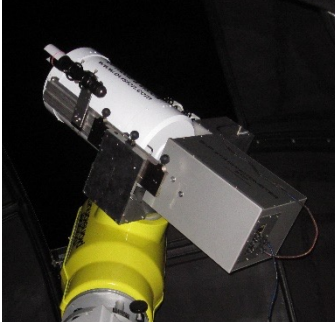
(activity will be operated by 2 PhD students)



- **upper air meteorology**
(pressure, temperature, rel.humidity, wind speed and direction by radiosondes)

→ PI: Marion.Maturilli@awi.de

Aerosols



- **Star photometer** until ~ end of March (around midnight)
- **Sun photometer** from ~ mid of March
(aerosol optical depth)



- **Raman Lidar**
(aerosol backscatter, extinction, depolarization)
→ extra person for operation on site during HALO-(AC)³ campaign

→ Please communicate flight schedule to allow for optimization of lidar operation!

→ PI: Christoph.Ritter@awi.de

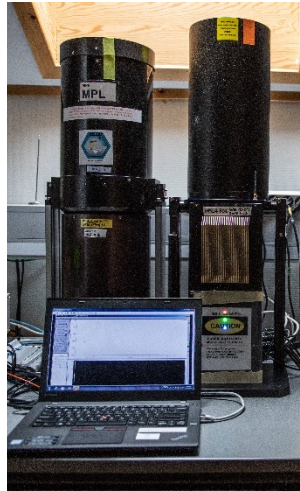
→ establish regular communication with **AWIPEV**^{79°N}
Arctic Research Base Ny-Ålesund



- **Ceilometer**

(continuous cloud base height)

(PI: Marion.Maturilli@awi.de)



- **Micro-Pulse Lidar (MPL)**

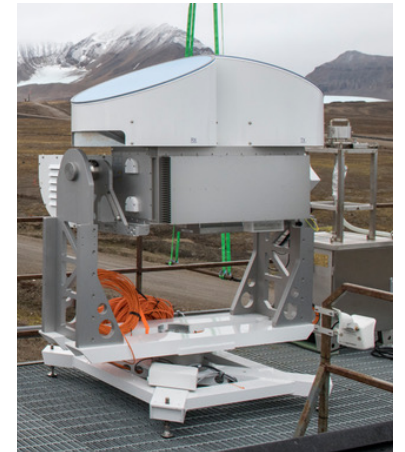
(aerosol & cloud vertical structure)

(PI: Christoph.Ritter@awi.de)



**94 GHz
cloud radar**

(PI: [Kerstin Ebell](mailto:Kerstin.Ebell@meteo.uni-koeln.de))



**35 GHz
cloud radar**

(PI: [Stefan Kneifel](mailto:Stefan.Kneifel@meteo.uni-koeln.de))

[kebell](mailto:kebell@meteo.uni-koeln.de)
[skneifel](mailto:skneifel@meteo.uni-koeln.de) @meteo.uni-koeln.de

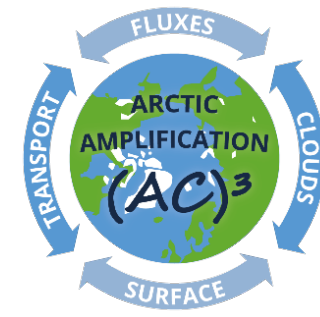


www.awipev.eu/awipev-observatories/atmosphere-observatory/

is embedded in the international Ny-Ålesund research community.

- International groups working in Ny-Ålesund are interested in HALO-(AC)³
- Please take the chance to exchange and cooperate !
- e.g. Ny-Ålesund Atmosphere Flagship
[<https://nyalesundresearch.no/research-and-monitoring/atmosphere/>]

contact for more information: Marion.Maturilli@awi.de

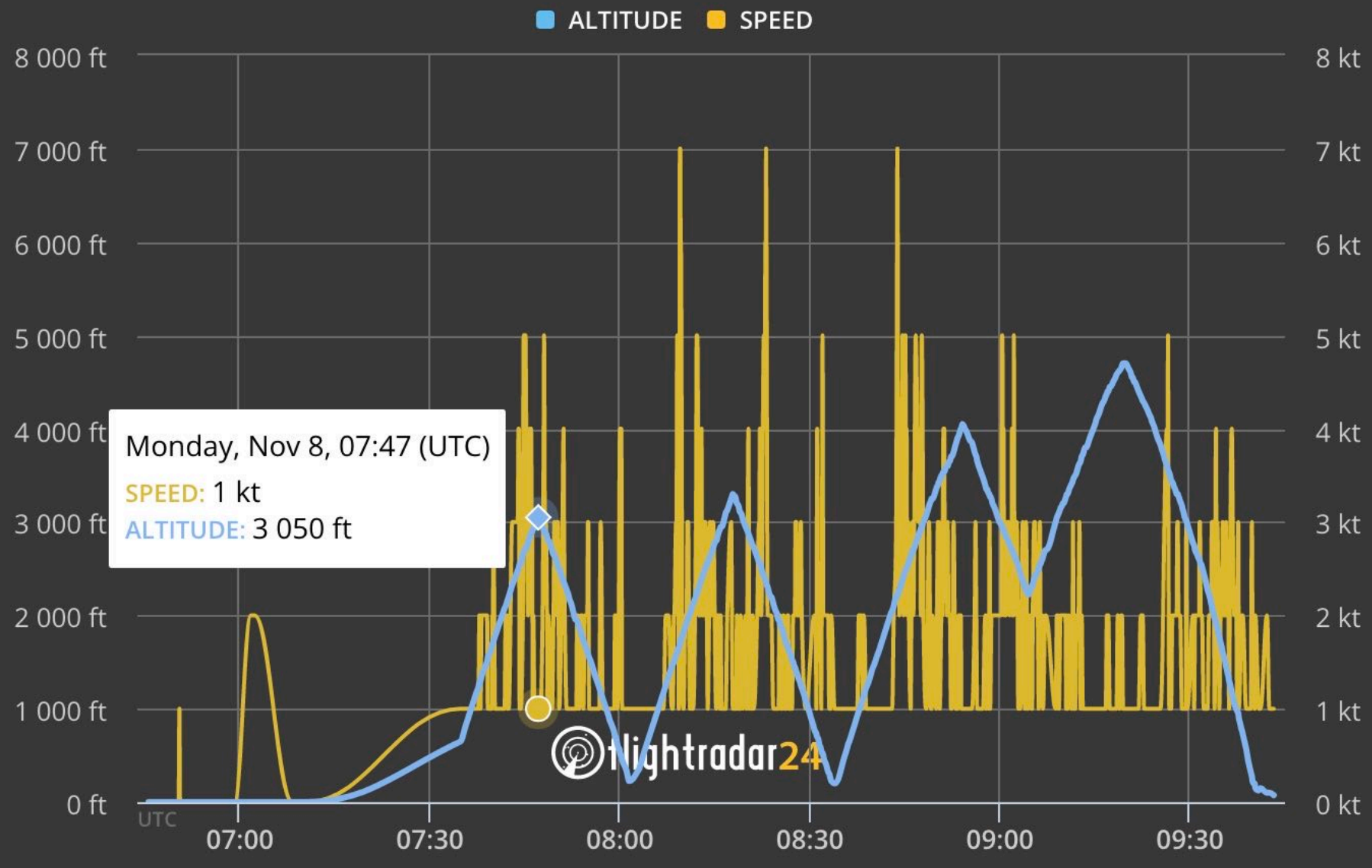


H.Siebert



Leibniz Institute for
Tropospheric Research

Speed & Altitude graph CAPTIVE

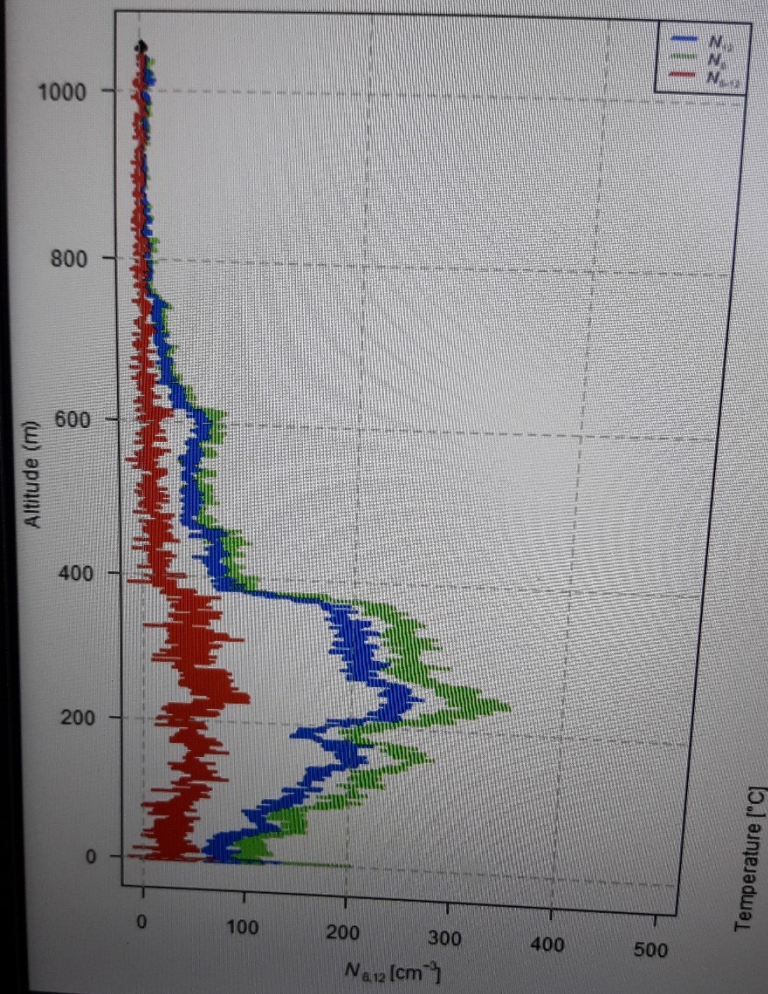


H.Siebert

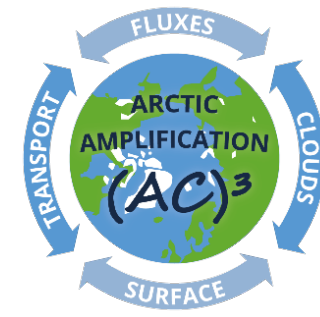


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CPC concentrations



Panasonic CF-54



H.Siebert



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