

# ICOS Atmospheric measurements in Finland

Finnish Meteorological Institute

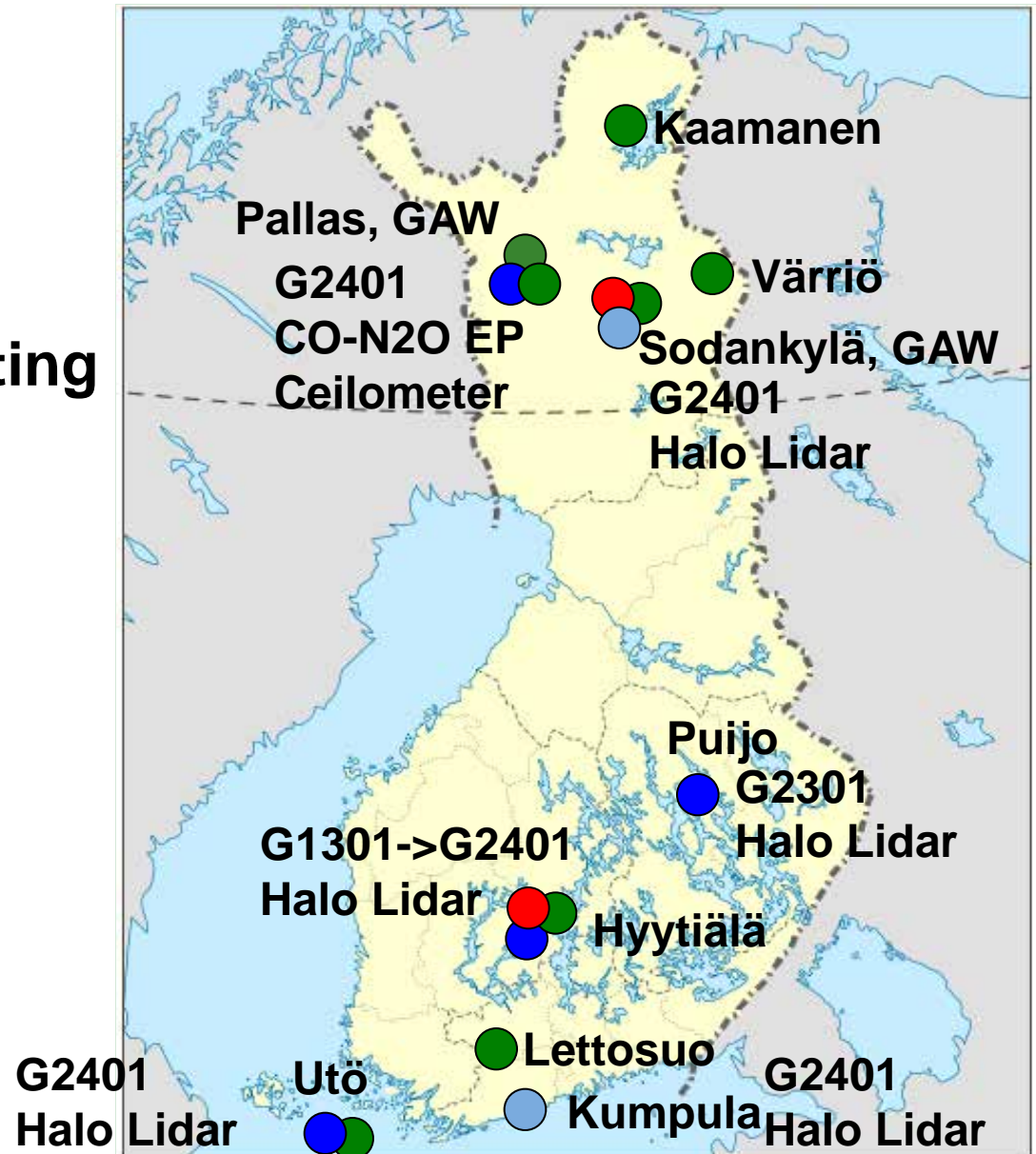
University of Helsinki

University of Eastern Finland



- Atmospheric
- Ecosystem, main
- Ecosystem, supporting

At Sodankylä  
 FTIR for column  
 Observations (TCCON)  
 AirCore





# Utö, CO<sub>2</sub>, CH<sub>4</sub>, CO concentrations 57 m tower

G2401  
Halo Lidar  
Ceilometer

fluxes on the coast



# Hyytiälä

- Levels 125, 67, 16 m
- Buffer volumes
- CO<sub>2</sub> CH<sub>4</sub> measurements running
- Picarro G1301 → G2401
- wet measurements
- Forest, wetland fluxes



# The ICOS Atmospheric Demo Network

**Puijo started in July 2011**



<https://icos-atc-demo.lsce.ipsl.fr/demo-experiment-network>



# Puijo, Atmospheric observations



**316 m a.s.l.**  
**85 m a.g.l.**

**230 m a**  
**Lake**  
**Kallavesi**



# Pallas, G2401; CO-N<sub>2</sub>O EP running since July 2013





# **GAW-node Sodankylä**

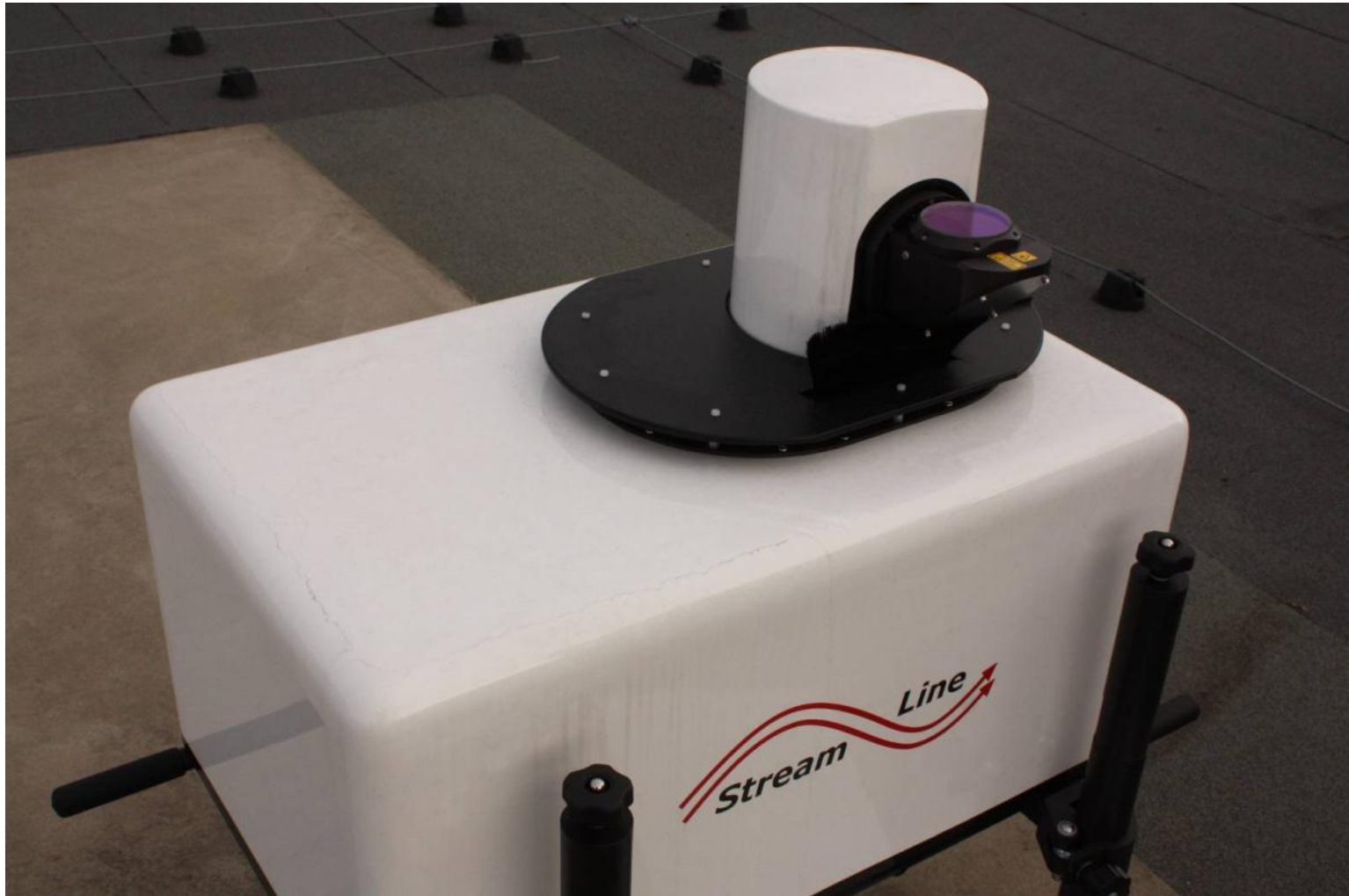
- Container for calibration gas cylinder filling**
- Ambient CO<sub>2</sub>, CH<sub>4</sub>, CO concentrations at 50m tower**
- AirCore started in September 2013**





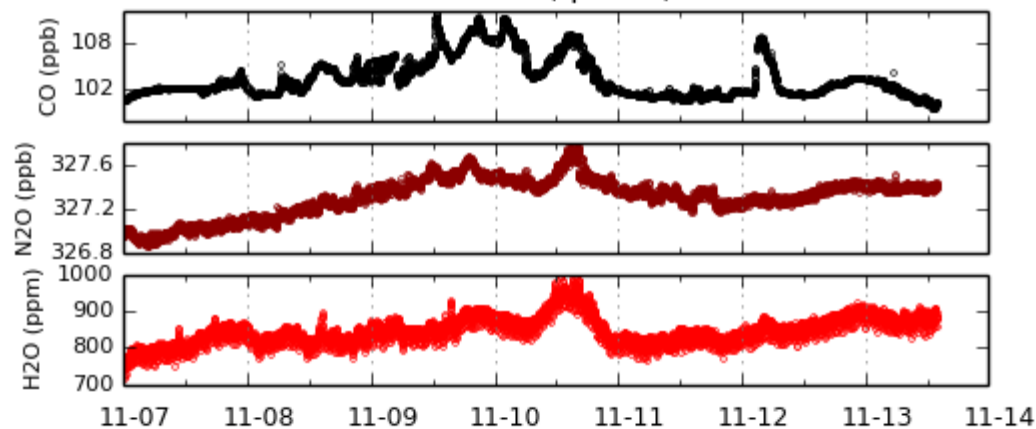


## LIDAR for Boundary layer height observations

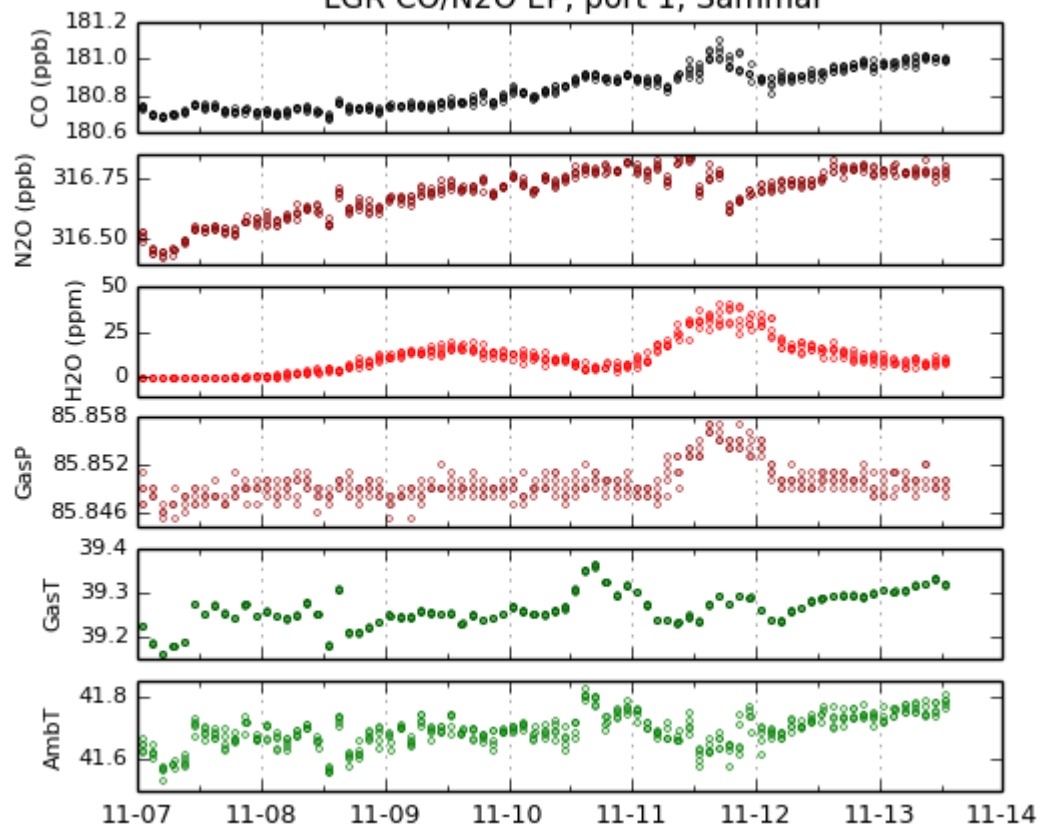


# LGR-EP at Pallas

LGR CO/N<sub>2</sub>O EP, port 0, Sammal



LGR CO/N<sub>2</sub>O EP, port 1, Sammal



LGR CO/N<sub>2</sub>O EP, port 2, Sammal

