

Cape Verde Atmospheric Observatory

VOC submission

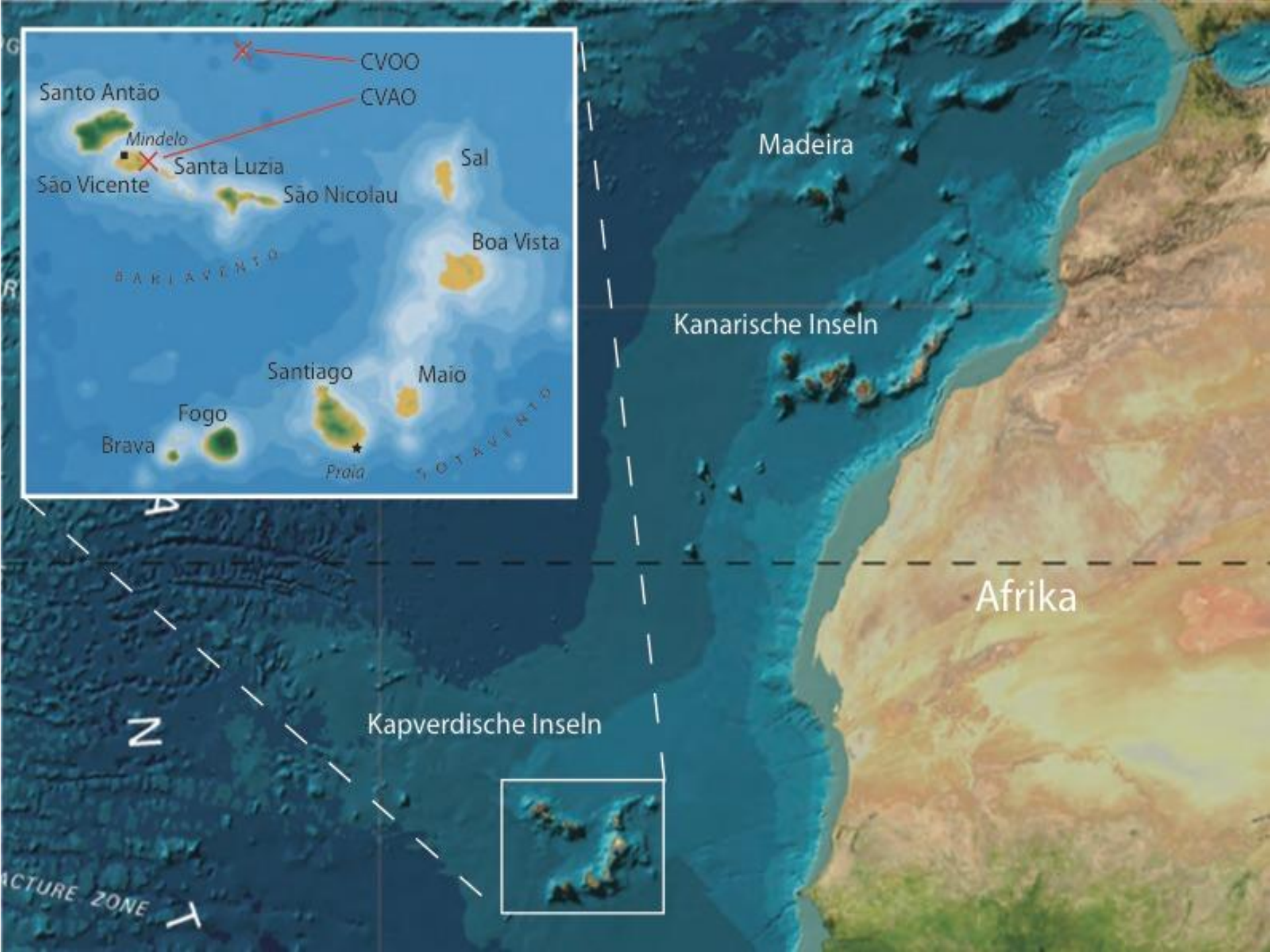
Beth Nelson

7th April 2025

Where are the Cape Verde Islands?

(16° 51' 49 N, 24° 52' 02 W)





Site Specifications

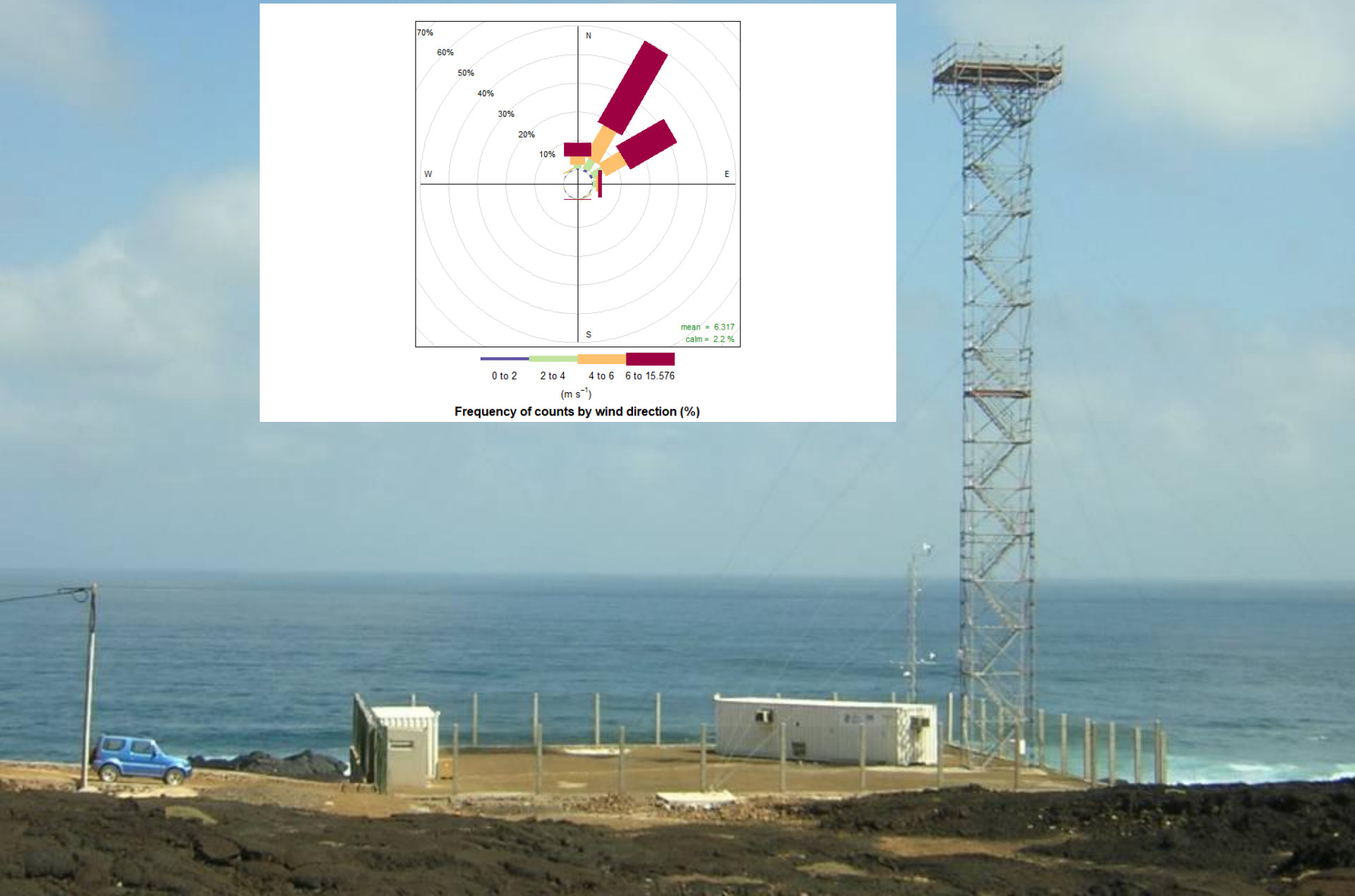
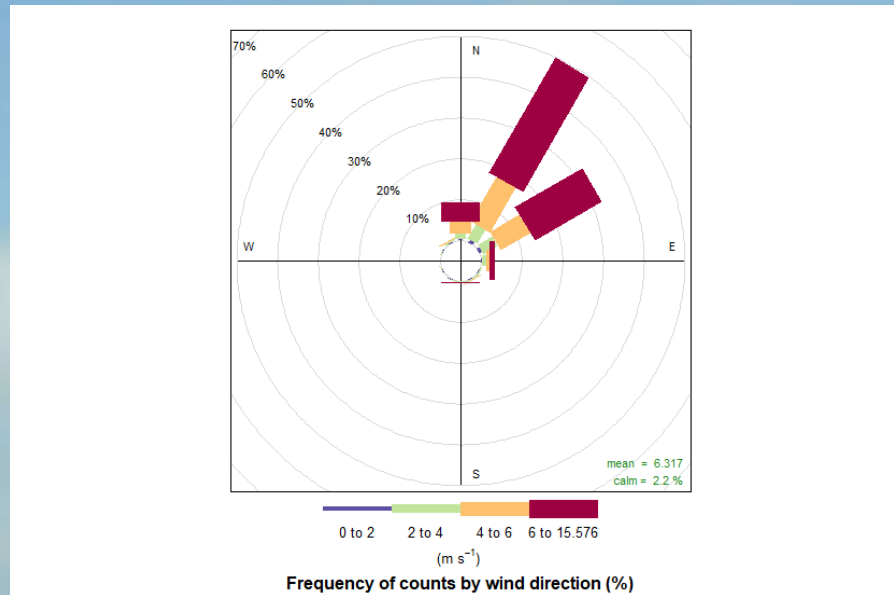
- 50m from coastline
- 10m above sea level
- Archipelago is volcanic in origin
- Such a site offers a rare opportunity for ground-based studies of clean marine air

CVAO

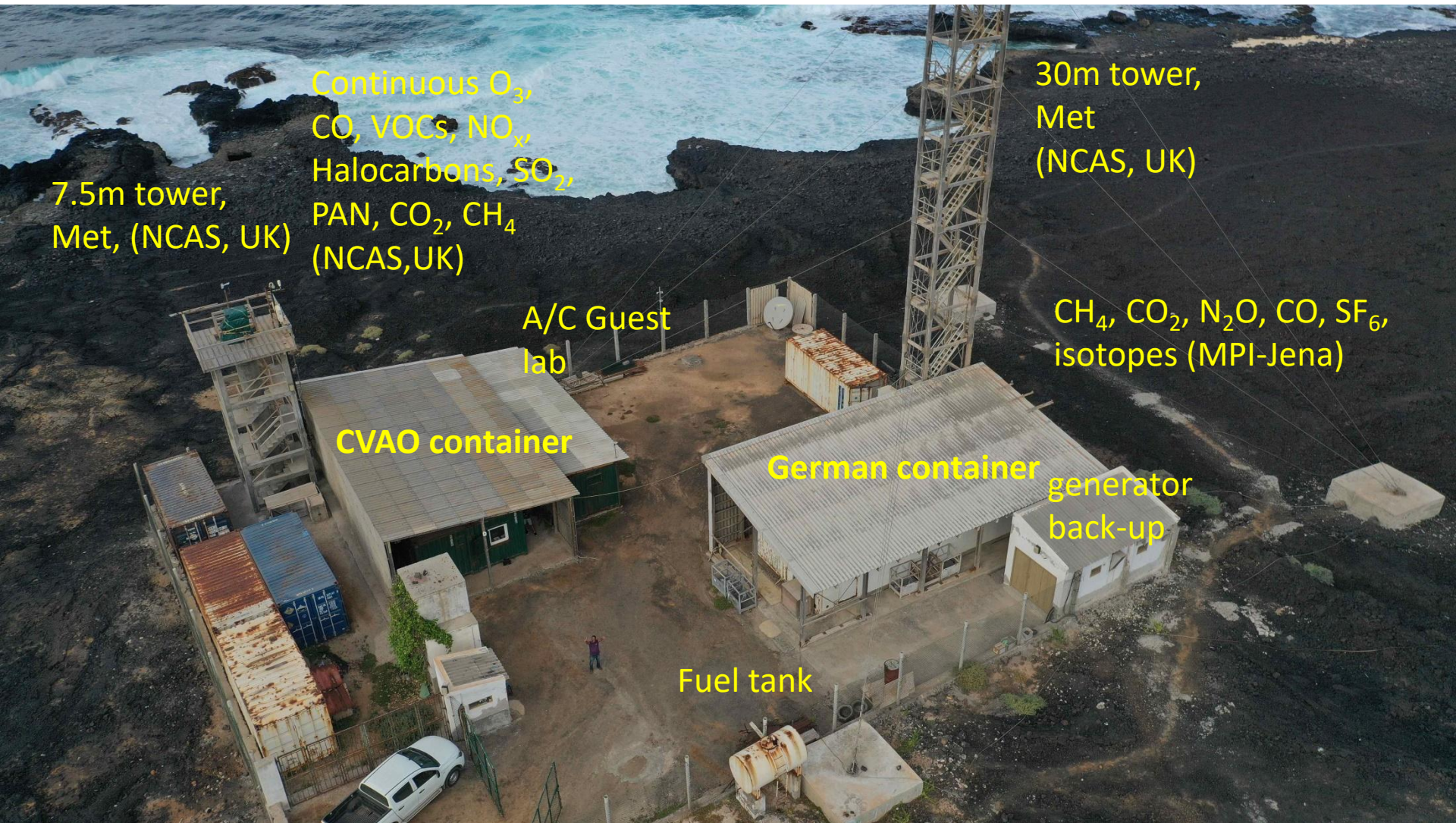


Oct 2006

Measurement began



site expansion over years



Continuous O_3 ,
 CO , VOCs, NO_x ,
Halocarbons, SO_2 ,
 PAN , CO_2 , CH_4
(NCAS, UK)

7.5m tower,
Met, (NCAS, UK)

30m tower,
Met
(NCAS, UK)

A/C Guest
lab

CVAO container

CH_4 , CO_2 , N_2O , CO , SF_6 ,
isotopes (MPI-Jena)

German container

generator
back-up

Fuel tank

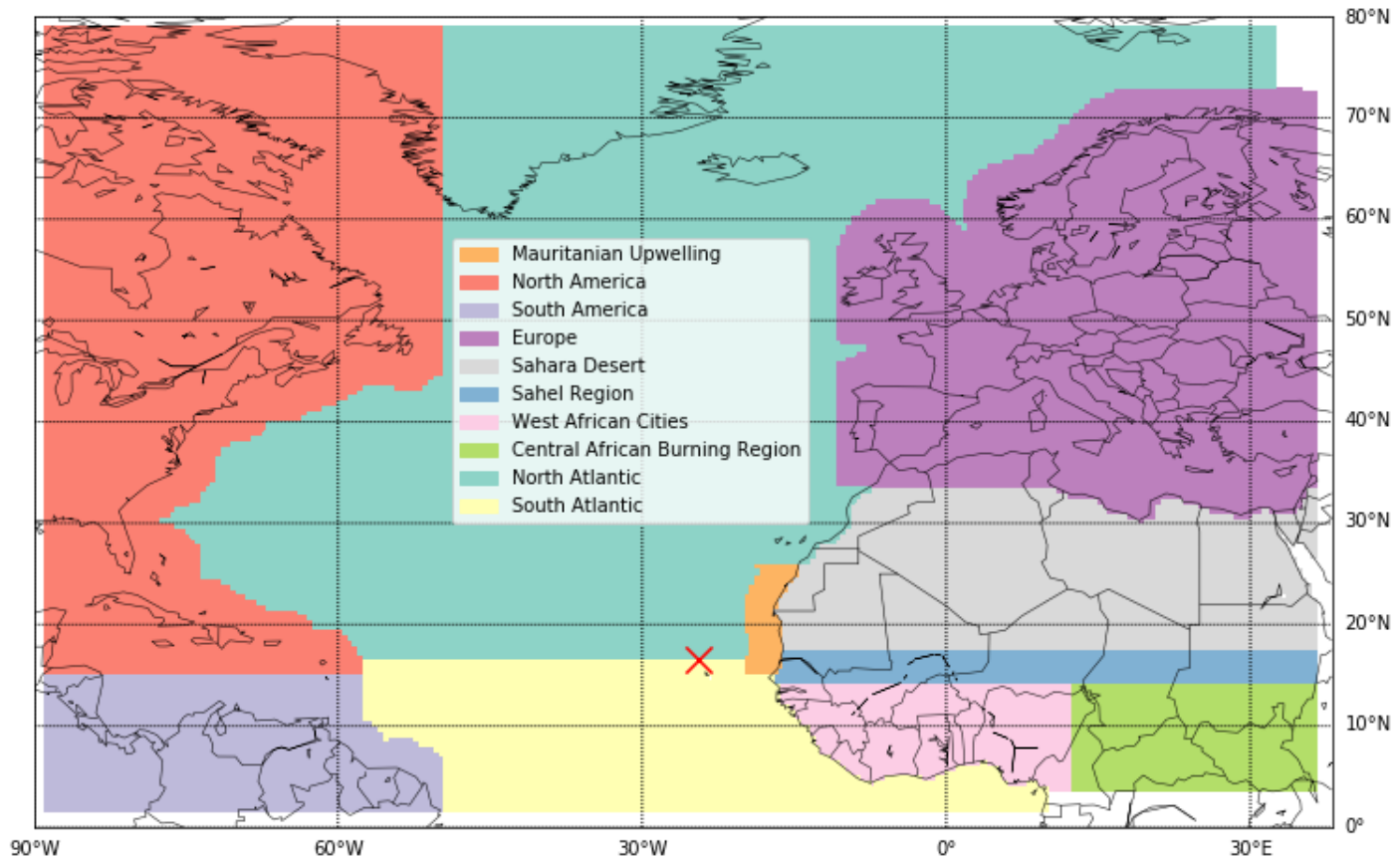
CVAO laboratory



Luis Neves, Site manager

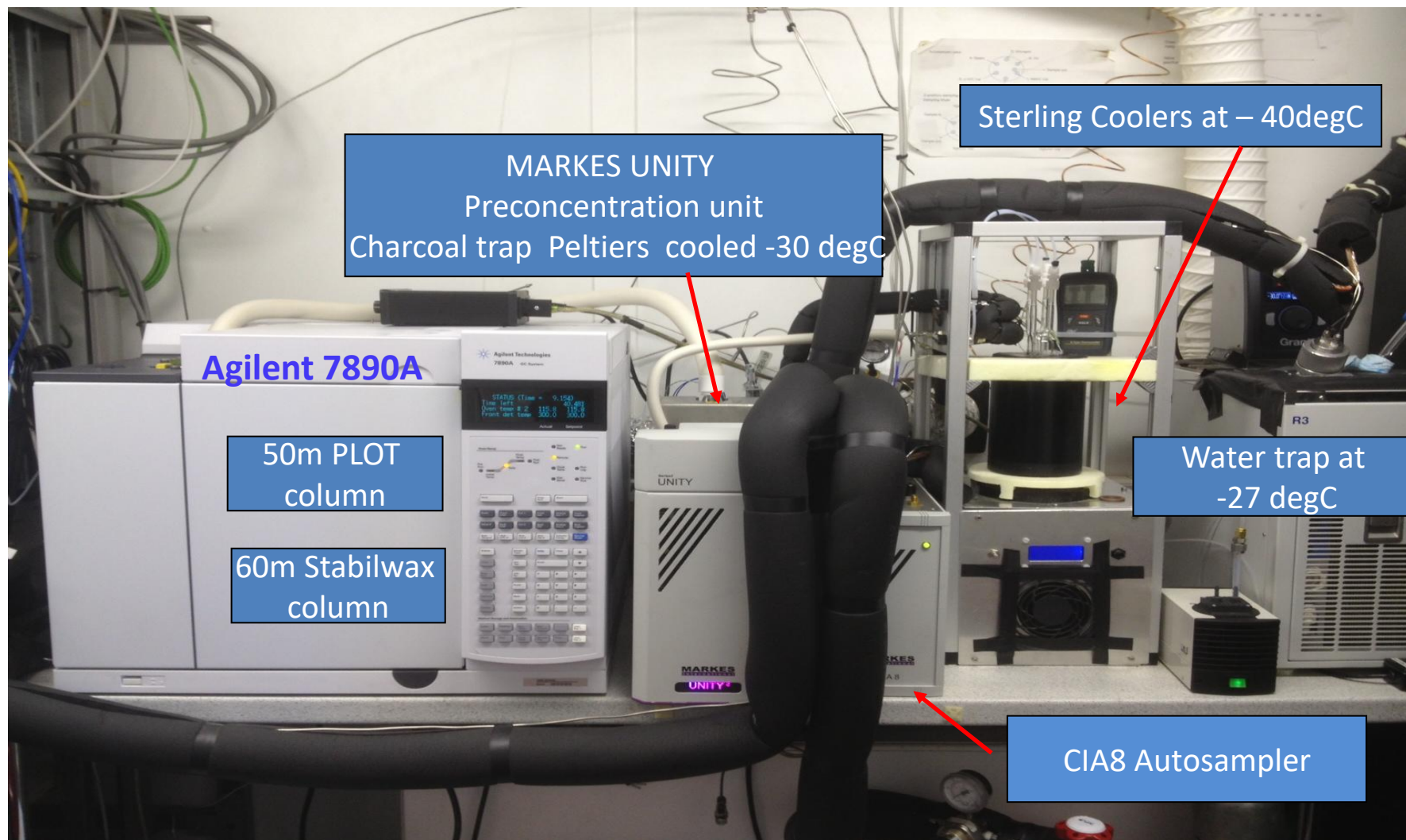


Classification of airmasses



We receive a variety of airmasses at the site

Since June 2013 instrument upgrade



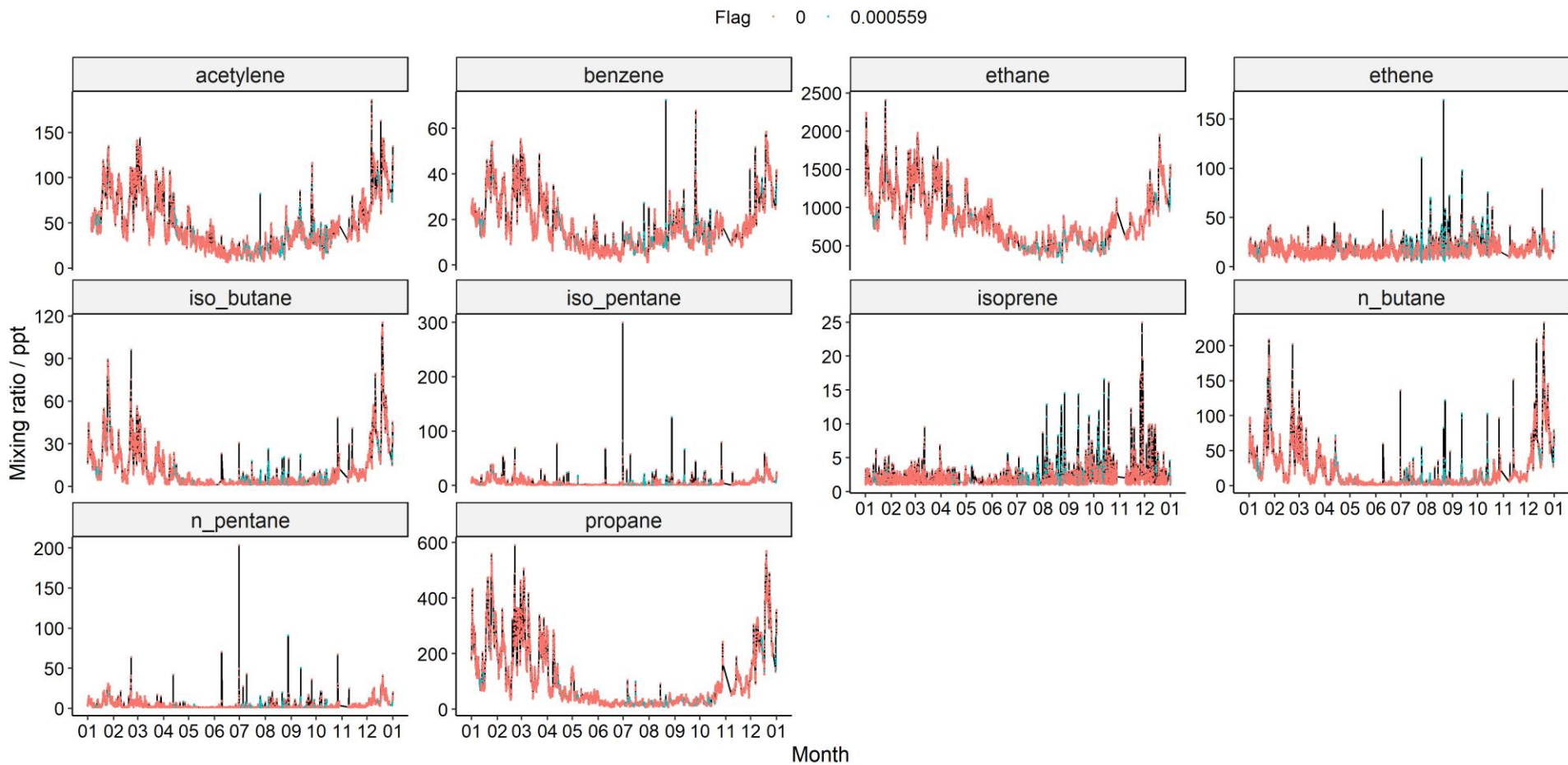
Commercial preconcentration and autosampler system : MARKES Thermal Desorption unit (TDU)

Hopkins, J.R., Lewis, A.C. & Read, K.A. (2003) , J. Environ. Monit., 5 (1), pp. 8-13.

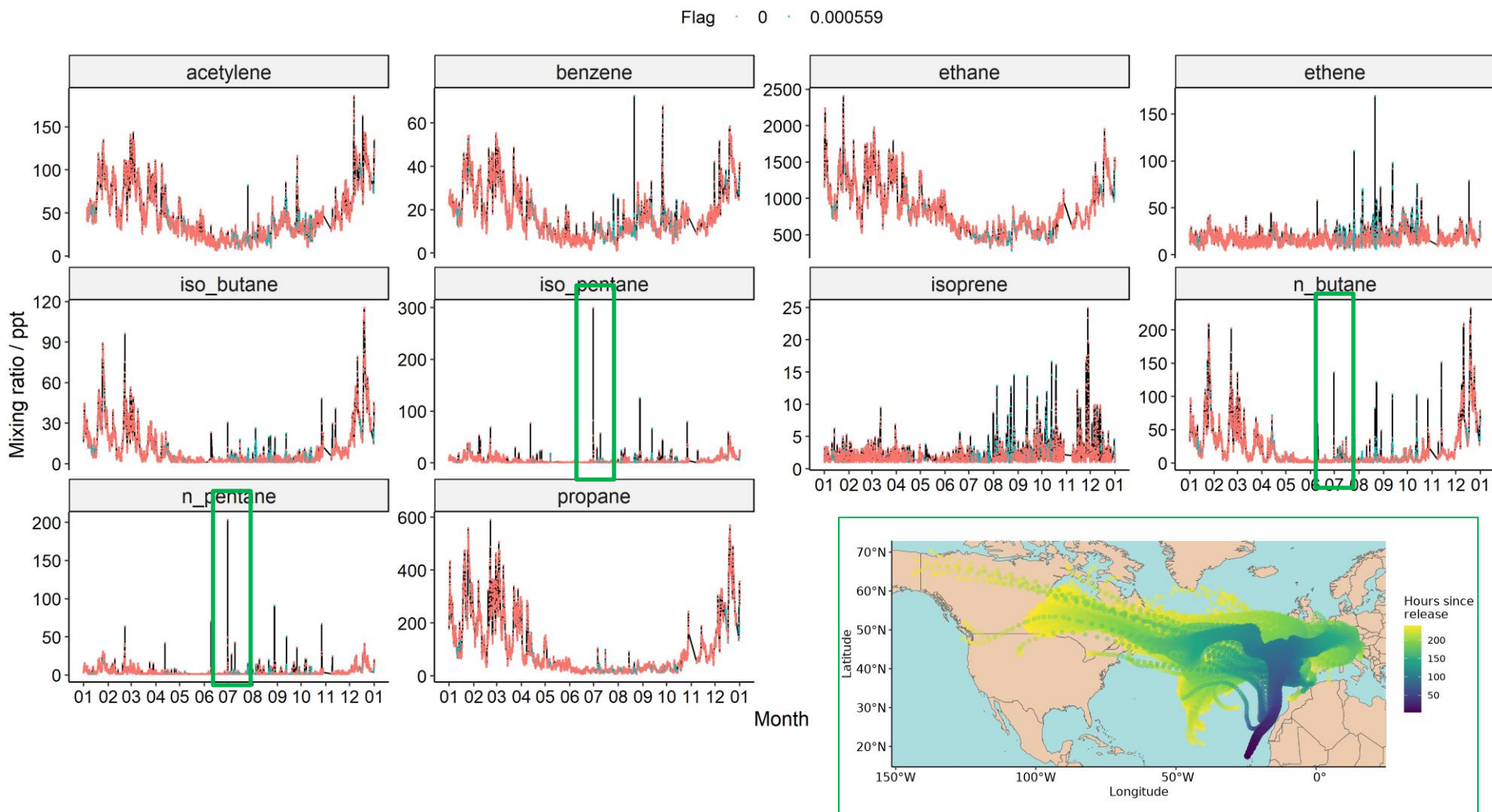
VOC 2024 submission

- Ethane
- Propane
- *n*-Butane
- *iso*-butane
- *n*-pentane
- *iso*-pentane
- Ethene
- Acetylene
- Isoprene
- Benzene

VOC 2024 submission



VOC 2024 submission



VOC 2024 submission

