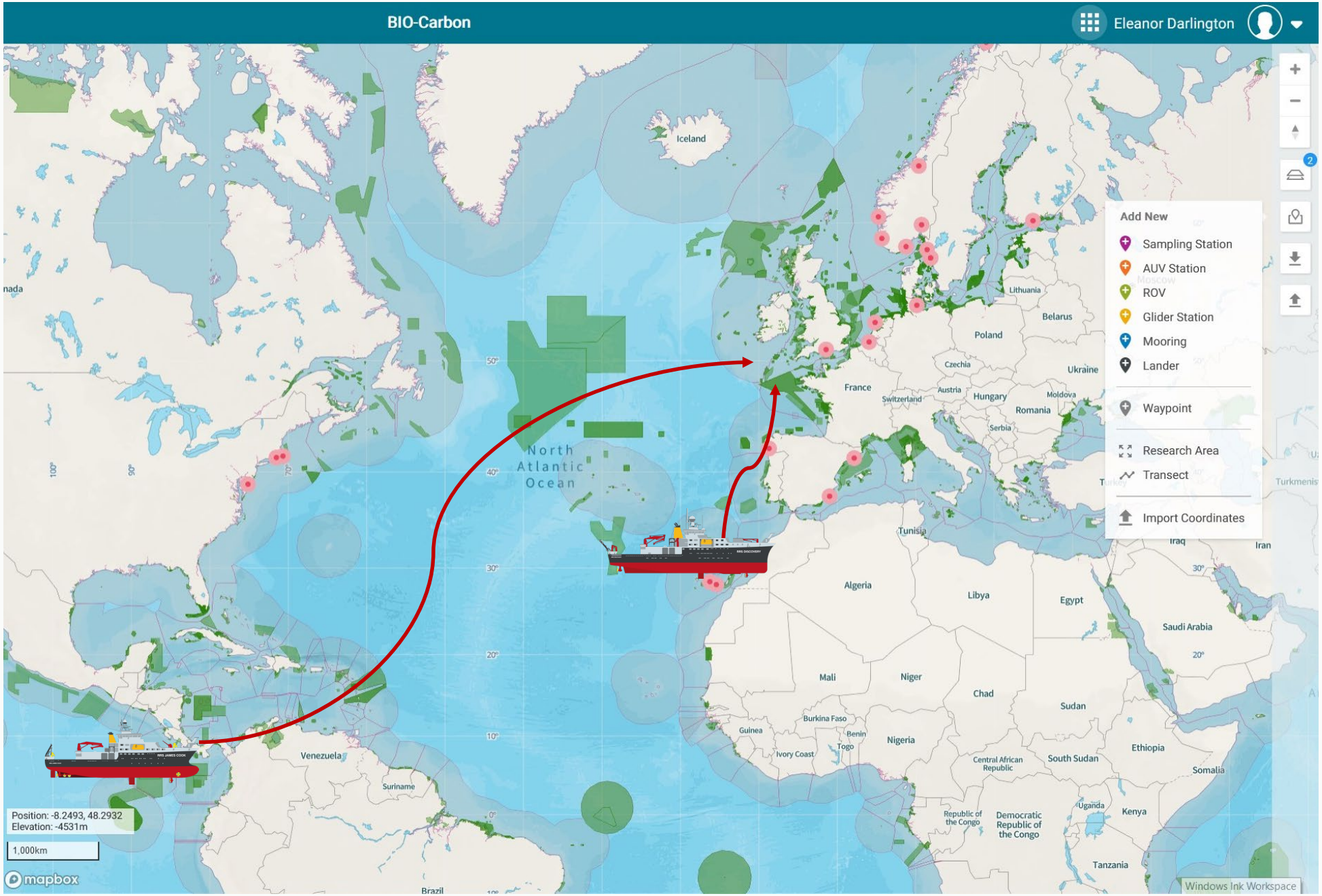
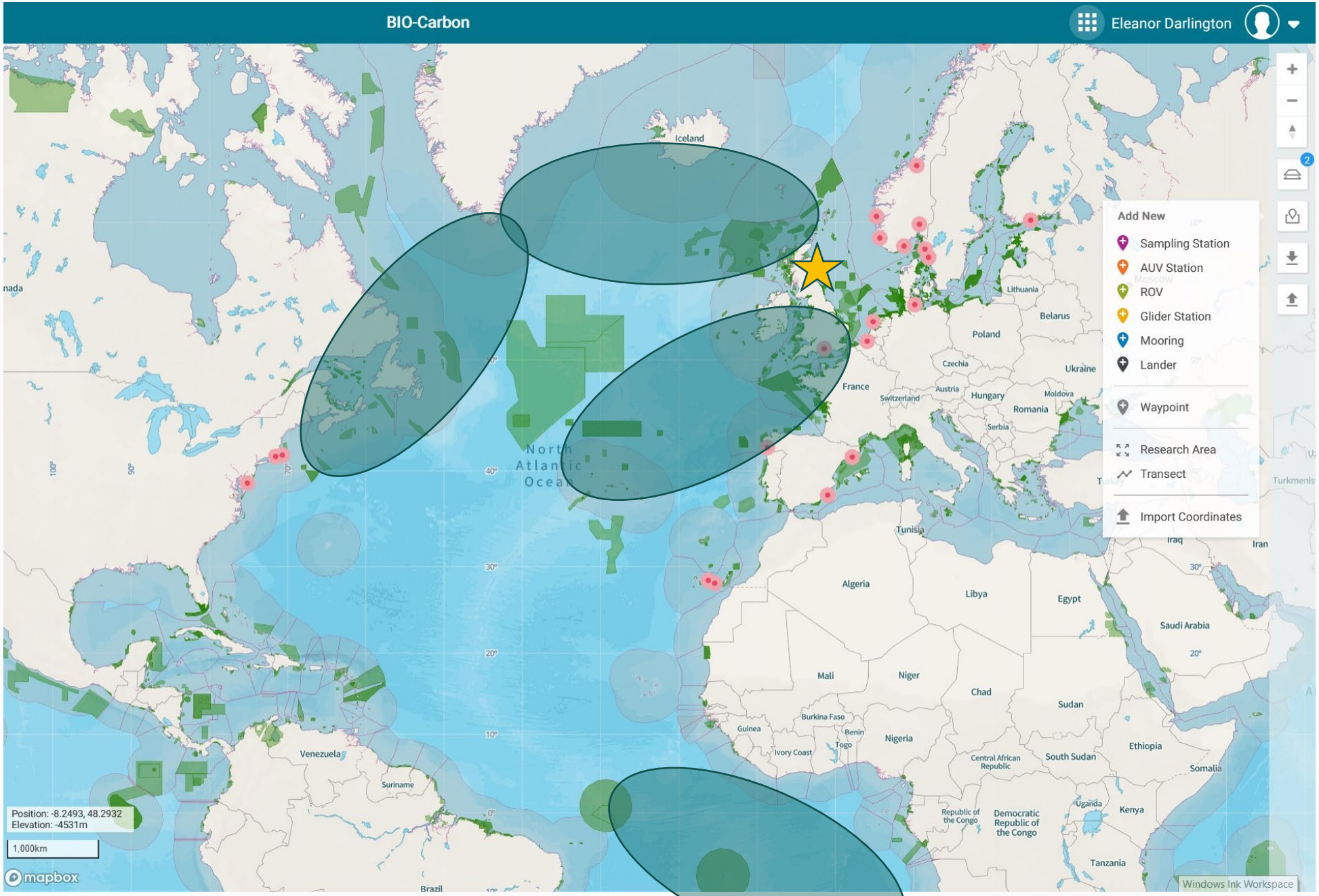
National Oceanography Centre
National Marine Facilities
NMF

BIO-Carbon
Ship Based Expeditions
2024

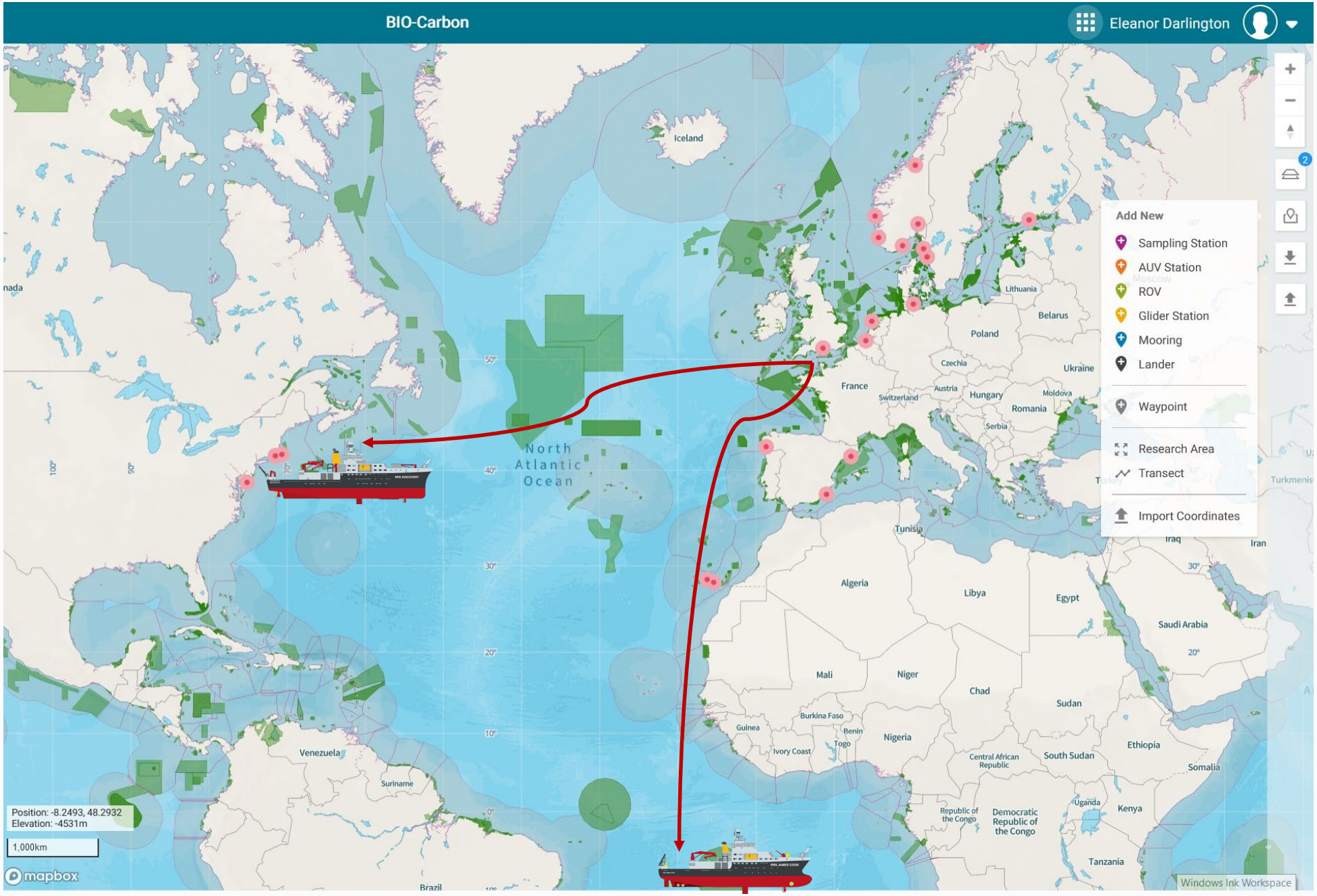
SPRING


BIO-Carbon
Eleanor Darlington
Add New
Sampling Station
AUV Station
ROV
Glider Station
Mooring
Lander
Waypoint
Research Area
Transect
Import Coordinates
Iceland
North Atlantic Ocean
France
Switzerland
Austria
Hungary
Romania
Serbia
Poland
Belarus
Lithuania
Czechia
Ukraine
Moldova
Tunisia
Algeria
Libya
Egypt
Saudi Arabia
Iraq
Iran
Mali
Niger
Chad
Sudan
Burkina Faso
Guinea
Benin
Togo
Ivory Coast
Nigeria
Central African Republic
South Sudan
Ethiopia
Somalia
Uganda
Kenya
Republic of the Congo
Democratic Republic of the Congo
Tanzania
Venezuela
Suriname
Brazil
Position: -8.2493, 48.2932
Elevation: -4531m
1,000km
mapbox
Windows Ink Workspace

COMMITMENTS



AUTUMN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EQUIPMENT

- Check the BIO-Carbon website for what is already requested from the NMEP
- We cannot support:
  - Mooring design, fabrication and deployment
  - Towed bodies
  - ROV's
- Autonomy
  - Autonomy can be deployed and recovered from NOC operated vessels
  - Standard sensor fit is included in the NERC superstructure cost
  - If NMF don't have the sensors, or it's not a standard fit, this needs to be accounted for in the science budget
  - Separate NZOC budget for additional autonomy for shore launched work

CONSTRAINTS

- NERC vessels available: Discovery and James Cook
- Barter vessels are not an option, due to timeframe of delivery
- Third Party Ships
  - Needs confirmed vessel time by July 2023
  - Cannot request SE-NMEP equipment / personnel to support
  - Autonomy?
  - Why? Scheduling constraints
- Two N. Atlantic expeditions
  - Spring = April / May
  - Autumn = Aug / Sept / Oct, depending on vessel and other funded activity
- Max duration 39 days per expedition
  - Why? Based on endurance of Discovery
- £1M available for NERC Superstructure Cost of vessels and NMEP/NMF kit

PROGRAMME CONSTRUCTION

- Integrated NERC Marine Facilities Programme
  - Three vessels, autonomy and NMEP
  - Outside of normal planning cycle
- Technicians, logistics, locations, seasonality…
- Efficient programming
  - Will require detailed expedition plans in the MFP
  - Carbon budget for the 2024 / 25 programme
- Cruise Programme Executive Board October 2023
  - Board reviews programme options
  - Ship operators are then instructed as to which is the preferred
  - Marine Programme on MFP website
  - Detailed planning starts with NMF project managers

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