

BGC-Argo_Global_Profiles

Sebastian Mieruch-Schnülle and Reiner Schlitzer, Alfred Wegener Institute, Bremerhaven, GERMANY
(sebastian.mieruch@awi.de)

This ODV data collection contains the complete set of biogeochemical Argo profiles for the global ocean. The collection is updated every night, taking into account all data additions and updates as published on the <ftp://ftp.ifremer.fr/ifremer/argo/dac/> site. The data cover the period from September 2002 until the current date.

The BGC-Argo synthetic-profile netCDF files are downloaded from <ftp://ftp.ifremer.fr/ifremer/argo/dac/>, and are imported using the ODV Argo netCDF profile importer. The list of data variables follows below.

A number of prepared views can be loaded using the *View > Load Views* option in ODV or webODV. Typically, views take a few seconds to load, however, some views involve very large numbers of stations and may take longer. Some example views are shown below. The figures were produced in December 2023; data availability and spatial/temporal coverage will be higher at the time of reading.

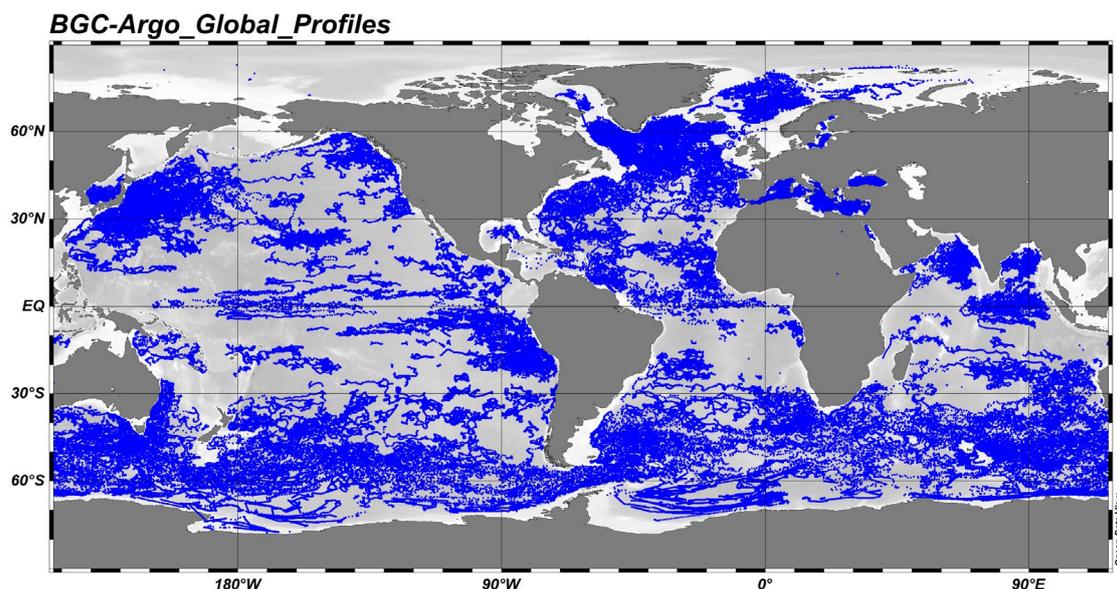
When using these data please acknowledge Argo as described [here](#).

Variables:

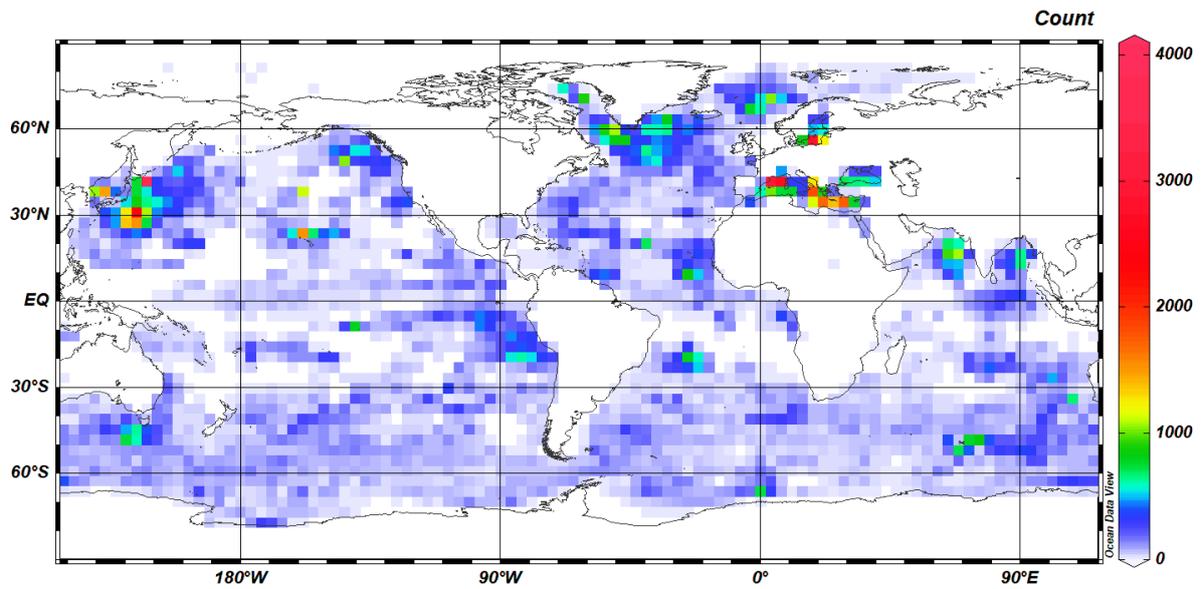
01: Pressure (original) [decibar]	PRES Sea water pressure, equals 0 at sea-level
02: Pressure (adjusted) [decibar]	PRES_ADJUSTED Sea water pressure, equals 0 at sea-level
03: Temperature (original) [degrees_Celsius]	TEMP Sea temperature in-situ ITS-90 scale
04: Temperature (adjusted) [degrees_Celsius]	TEMP_ADJUSTED Sea temperature in-situ ITS-90 scale
05: Practical Salinity (original) [psu]	PSAL Practical salinity
06: Practical Salinity (adjusted) [psu]	PSAL_ADJUSTED Practical salinity
07: Dissolved Oxygen (original) [$\mu\text{mol kg}^{-1}$]	DOXY
08: Dissolved Oxygen (adjusted) [$\mu\text{mol kg}^{-1}$]	DOXY_ADJUSTED
09: Turbidity (original) [ntu]	TURBIDITY sea_water_turbidity
10: Turbidity (adjusted) [ntu]	TURBIDITY_ADJUSTED sea_water_turbidity
11: Chlorophyll-A (original) [mg / m^3]	CHLA mass_concentration_of_chlorophyll_a_in_sea_water
12: Chlorophyll-A (adjusted) [mg / m^3]	CHLA_ADJUSTED mass_concentration_of_chlorophyll_a_in_sea_water
13: CDOM (original) [ppb]	CDOM
14: CDOM (adjusted) [ppb]	CDOM_ADJUSTED
15: Nitrate (original) [$\mu\text{mol kg}^{-1}$]	NITRATE
16: Nitrate (adjusted) [$\mu\text{mol kg}^{-1}$]	NITRATE_ADJUSTED
17: Bisulfide (original) [$\mu\text{mol kg}^{-1}$]	BISULFIDE
18: Bisulfide (adjusted) [$\mu\text{mol kg}^{-1}$]	BISULFIDE_ADJUSTED
19: Downwelling PAR (original) [$\mu\text{mol Quanta m}^{-2} \text{s}^{-1}$]	DOWNWELLING_PAR
20: Downwelling PAR (adjusted) [$\mu\text{mol Quanta m}^{-2} \text{s}^{-1}$]	DOWNWELLING_PAR_ADJUSTED
21: Pressure displacement Temperature [decibar]	TEMP_dPRES TEMP pressure displacement from original sampled value
22: Pressure displacement Practical Salinity [decibar]	PSAL_dPRES PSAL pressure displacement from original sampled value
23: Pressure displacement Dissolved Oxygen [decibar]	DOXY_dPRES DOXY pressure displacement from original sampled value
24: Pressure displacement Turbidity [decibar]	TURBIDITY_dPRES TURBIDITY pressure displacement from original sampled value
25: Pressure displacement Chlorophyll-A [decibar]	CHLA_dPRES CHLA pressure displacement from original sampled value
26: Pressure displacement CDOM [decibar]	CDOM_dPRES CDOM pressure displacement from original sampled value
27: Pressure displacement Nitrate [decibar]	NITRATE_dPRES NITRATE pressure displacement from original sampled value

28: Pressure displacement Bisulfide [decibar]	BISULFIDE_dPRES BISULFIDE pressure displacement from original sampled value
29: Pressure displacement in-situ pH on total scale [decibar]	PH_IN_SITU_TOTAL_dPRES PH_IN_SITU_TOTAL pressure displacement from original sampled value
30: Pressure displacement Downwelling PAR [decibar]	DOWNWELLING_PAR_dPRES DOWNWELLING_PAR pressure displacement from original sampled value
31: Particle backscattering at 700 nm (original) [m^{-1}]	BBP700
32: Particle backscattering at 700 nm (adjusted) [m^{-1}]	BBP700_ADJUSTED
33: in-situ pH on total scale (original)	PH_IN_SITU_TOTAL
34: in-situ pH on total scale (adjusted)	PH_IN_SITU_TOTAL_ADJUSTED
35: Pressure displacement Particle backscattering at 700 nm [decibar]	BBP700_dPRES BBP700 pressure displacement from original sampled value
36: Downwelling irradiance at 380 nm (original) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE380
37: Downwelling irradiance at 380 nm (adjusted) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE380_ADJUSTED
38: Downwelling irradiance at 412 nm (original) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE412
39: Downwelling irradiance at 412 nm (adjusted) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE412_ADJUSTED
40: Downwelling irradiance at 490 nm (original) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE490
41: Downwelling irradiance at 490 nm (adjusted) [$W m^{-2} nm^{-1}$]	DOWN_IRRADIANCE490_ADJUSTED
42: Pressure displacement Downwelling irradiance at 380 nm [decibar]	DOWN_IRRADIANCE380_dPRES DOWN_IRRADIANCE380 pressure displacement from original sampled value
43: Pressure displacement Downwelling irradiance at 412 nm [decibar]	DOWN_IRRADIANCE412_dPRES DOWN_IRRADIANCE412 pressure displacement from original sampled value
44: Pressure displacement Downwelling irradiance at 490 nm [decibar]	DOWN_IRRADIANCE490_dPRES DOWN_IRRADIANCE490 pressure displacement from original sampled value
45: Particle backscattering at 532 nm (original) [m^{-1}]	BBP532
46: Particle backscattering at 532 nm (adjusted) [m^{-1}]	BBP532_ADJUSTED
47: Pressure displacement Particle backscattering at 532 nm [decibar]	BBP532_dPRES BBP532 pressure displacement from original sampled value
48: Particle beam attenuation at 660 nanometers	CP660

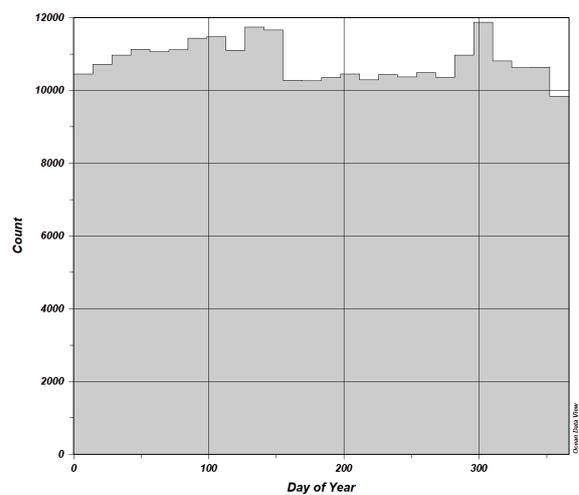
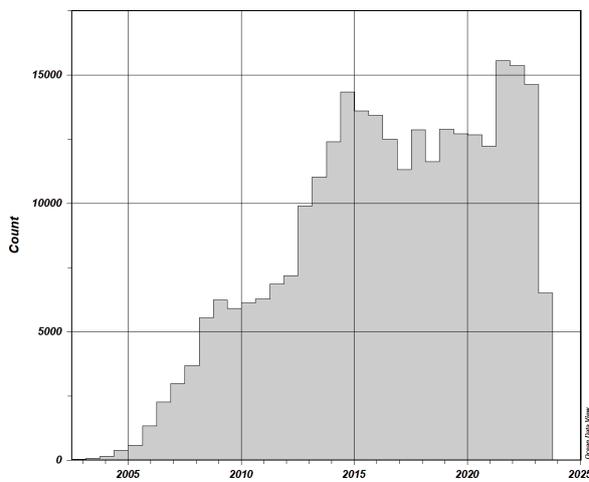
Station Map (as of Dec 2023):



Spatial Coverage (as of Dec 2023):

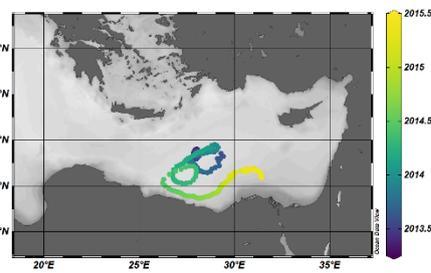
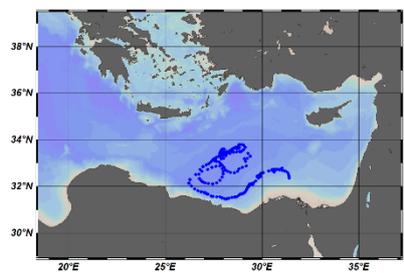
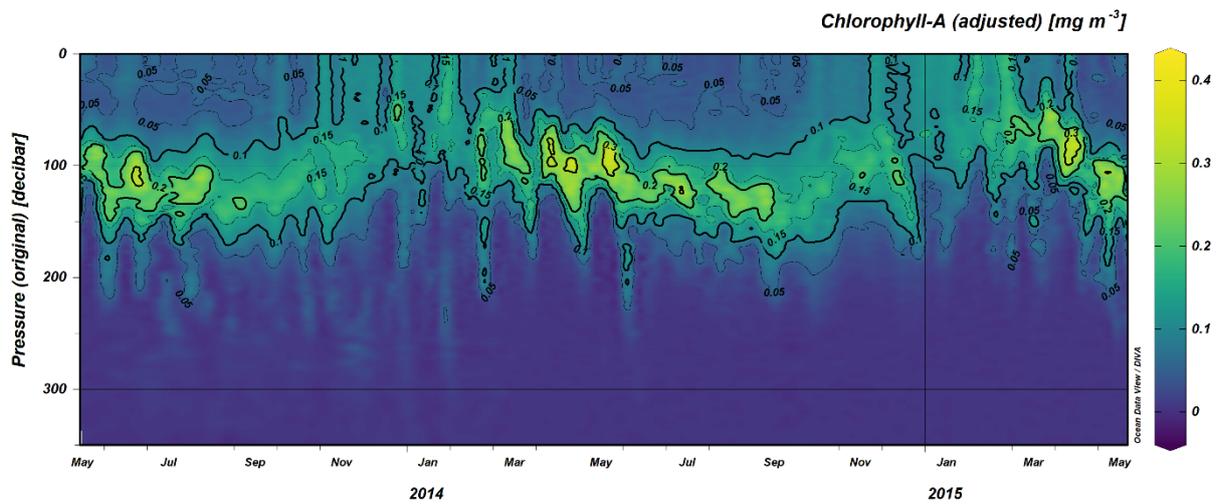


Temporal Coverage (as of Dec 2023):

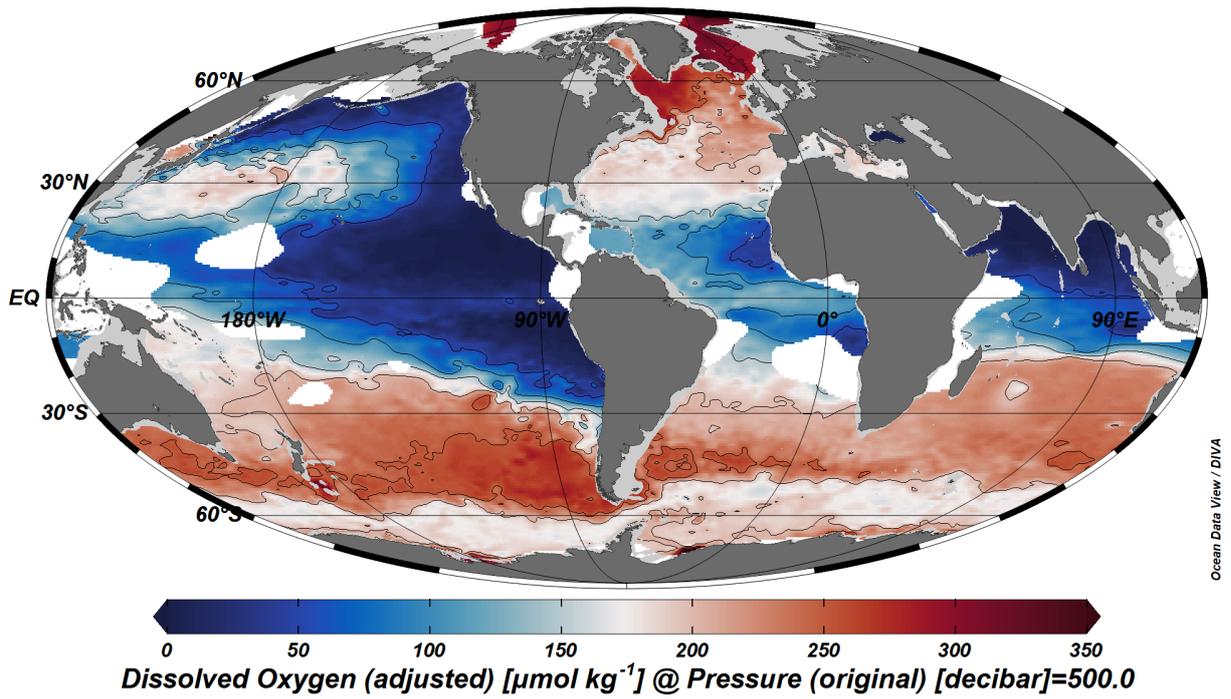


Example Views:

Chl-A_from_Float_6901528: Chlorophyll-A concentrations in the upper 350 db along the track of float 6901528.

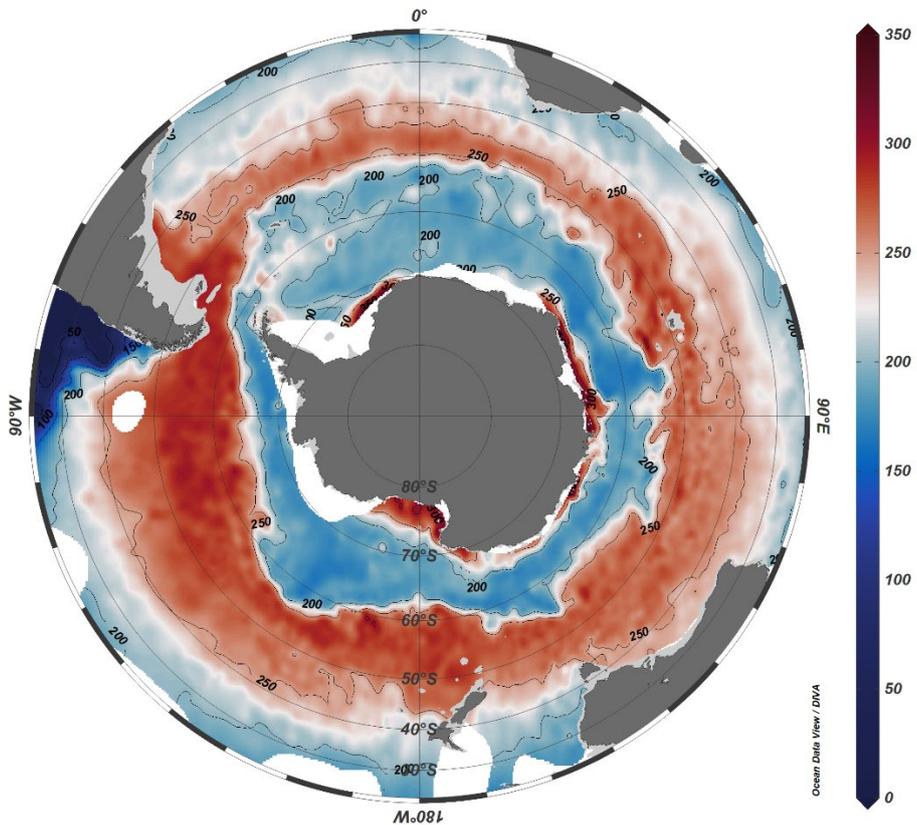


Oxygen_at_500db: Annual average dissolved oxygen concentrations at 500 db.

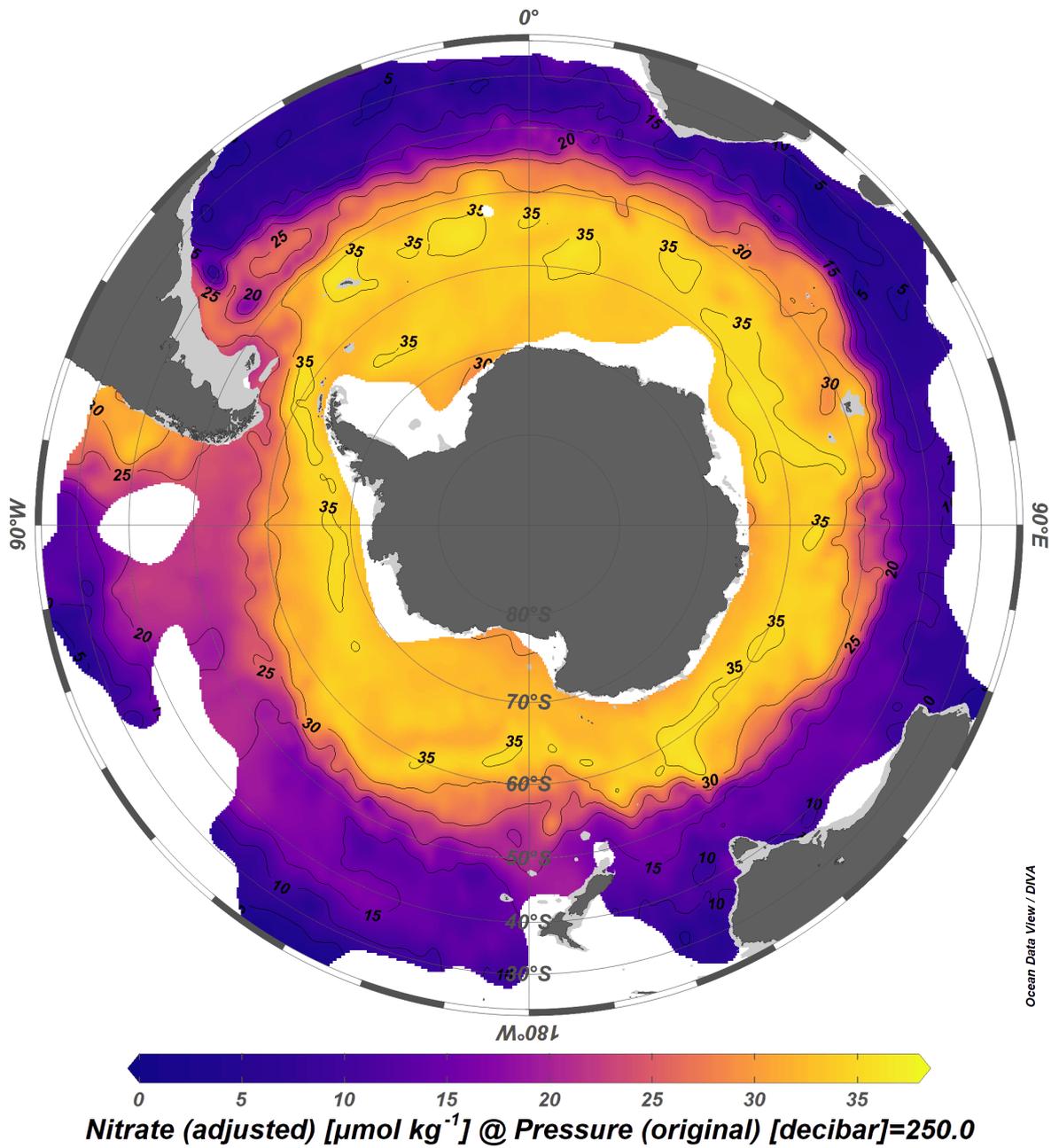


Oxygen_at_250db_SouthernOcean: Annual average dissolved oxygen concentrations at 250 db in the Southern Ocean.

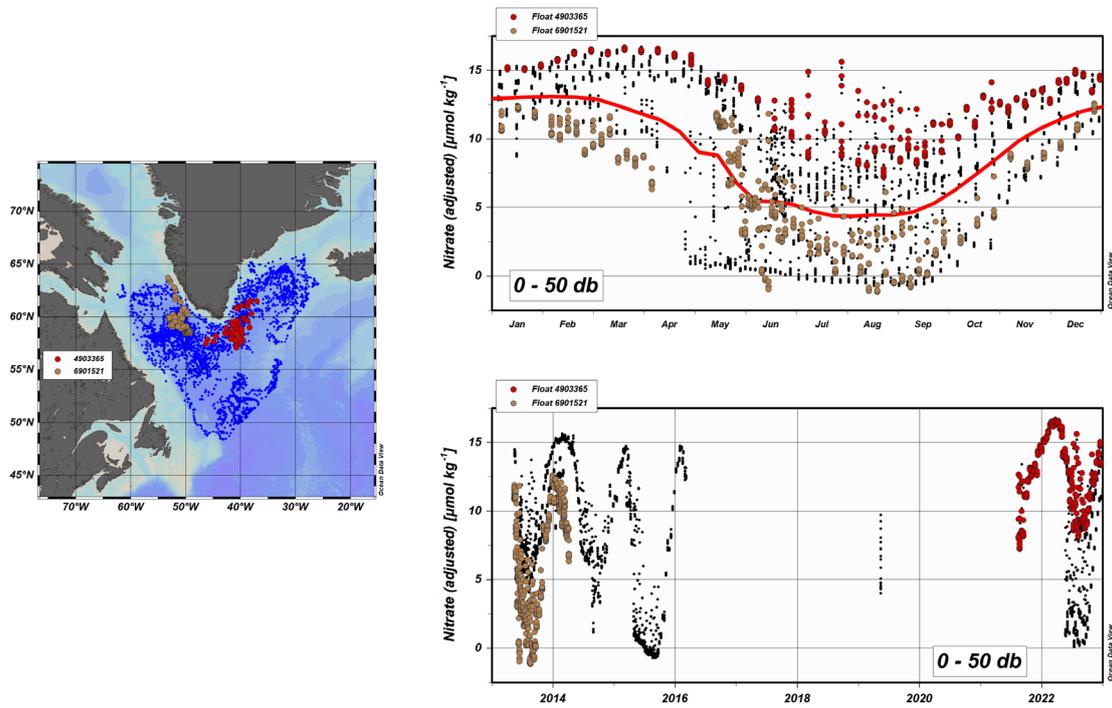
Dissolved Oxygen (adjusted) [$\mu\text{mol kg}^{-1}$] @ Pressure (original) [decibar]=250.0



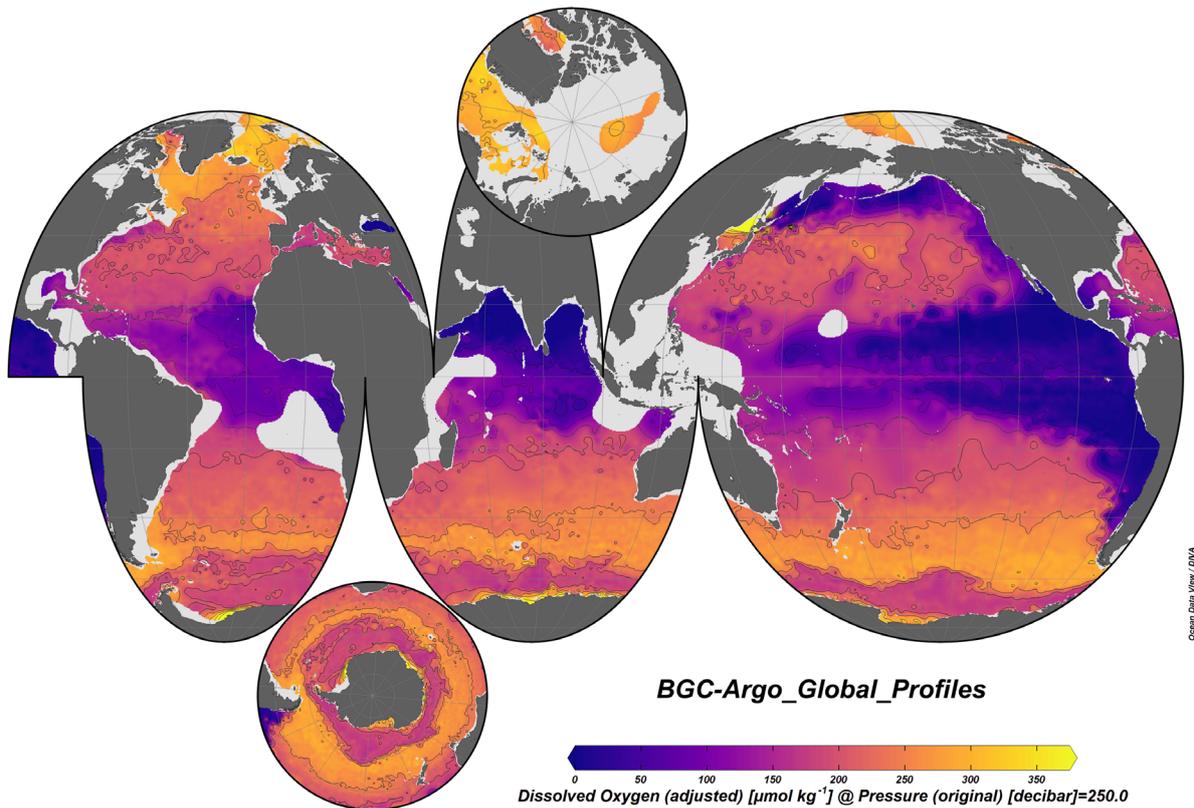
Nitrate_at_250db_SouthernOcean: Annual average nitrate concentrations at 250 db in the Southern Ocean.



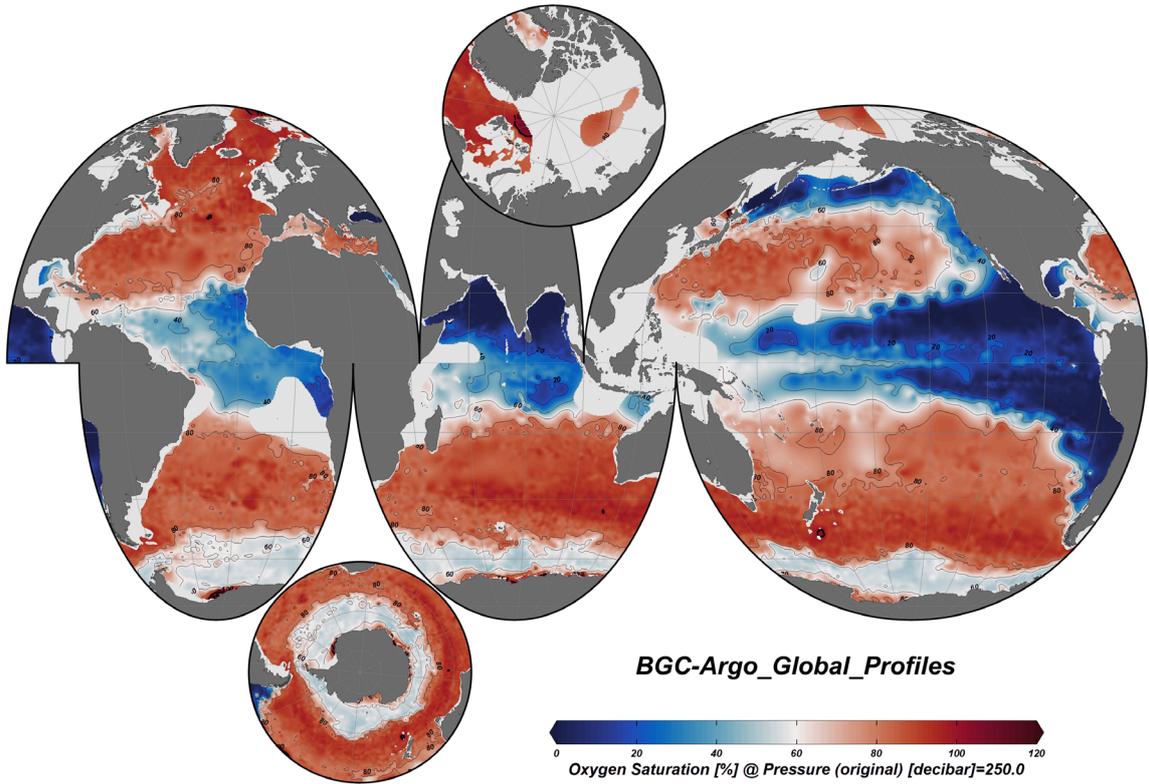
Nitrate_0-50db_vs_time_Labrador_and_Irminger_Seas: Upper ocean (0 – 50 db) nitrate concentrations in the Labrador and Irminger Seas versus time and season.



Oxygen_at_250db: Annual average dissolved oxygen concentrations at 250 db shown as interrupted map.



Oxygen-saturation_at_250db: Annual average dissolved oxygen saturation at 250 db shown as interrupted map.



AOU_at_250db: Annual average apparent oxygen utilization (AOU) at 250 db shown as interrupted map.

