BGC-Argo_Global_Profiles_v2023.2

Reiner Schlitzer, Alfred Wegener Institute, Bremerhaven, GERMANY (Reiner.Schlitzer@awi.de)

This ODV data collection contains 280,907 biogeochemical Argo profiles for the global ocean covering the period from September 2002 until May 2023.

The BGC-Argo synthetic-profile netCDF files were downloaded from <u>ftp://ftp.ifremer.fr/ifremer/argo/dac/</u> on May 30 2023, and were 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.

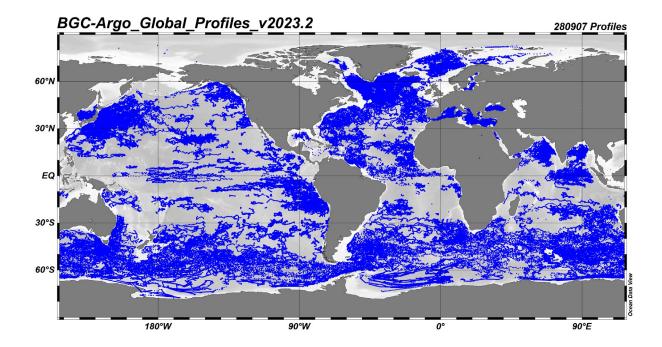
When using these data please acknowledge Argo as described here.

Variables:

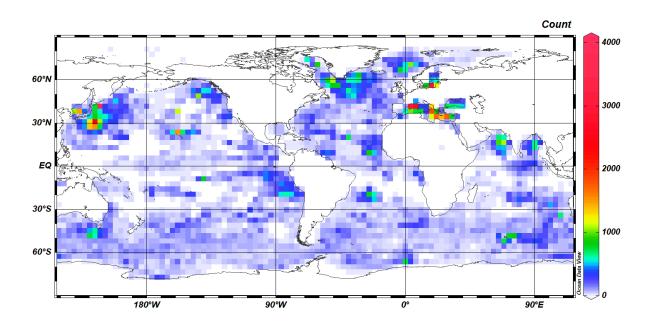
PRES | Sea water pressure, equals 0 at sea-level 01: Pressure (original) [decibar] 02: Pressure (adjusted) [decibar] PRES ADJUSTED | Sea water pressure, equals 0 at sea-level 03: Temperature (original) [degrees Celsius] TEMP | Sea temperature in-situ ITS-90 scale 04: Temperature (adjusted) [degrees Celsius] 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) [µmol kg⁻¹] DOXY 08: Dissolved Oxygen (adjusted) [µmol kg⁻¹] DOXY ADJUSTED TURBIDITY | sea_water_turbidity 09: Turbidity (original) [ntu] 10: Turbidity (adjusted) [ntu] TURBIDITY_ADJUSTED | sea_water_turbidity 11: Chlorophyll-A (original) [mg / m³] CHLA | mass_concentration_of_chlorophyll_a_in_sea_water 12: Chlorophyll-A (adjusted) [mg / m³] CHLA_ADJUSTED | mass_concentration_of_chlorophyll_a_in_sea_water 13: CDOM (original) [ppb] CDOM 14: CDOM (adjusted) [ppb] CDOM ADJUSTED 15: Nitrate (original) [µmol kg⁻¹] NITRATE 16: Nitrate (adjusted) [µmol kg⁻¹] NITRATE ADJUSTED 17: Bisulfide (original) [μmol kg⁻¹] BISULFIDE 18: Bisulfide (adjusted) [µmol kg⁻¹] BISULFIDE ADJUSTED 19: Downwelling PAR (original) [μ mol Quanta m⁻² s⁻¹] DOWNWELLING PAR 20: Downwelling PAR (adjusted) [μ mol Quanta m⁻² 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 41	2 nm [decibar] DOWN_IRRADIANCE412_dPRES
	DOWN_IRRADIANCE412 pressure
	displacement from original sampled value
44: Pressure displacement Downwelling irradiance at 49	
	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

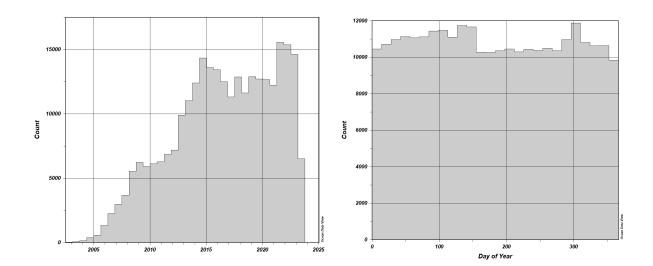
Station Map:



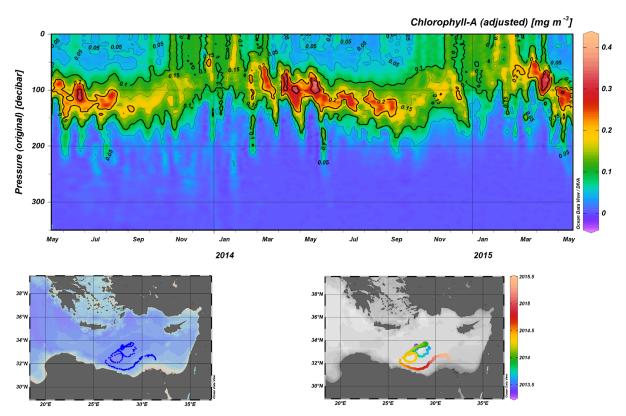
Spatial Coverage:



Temporal Coverage:

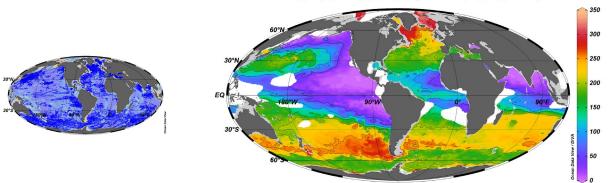


Example Views:

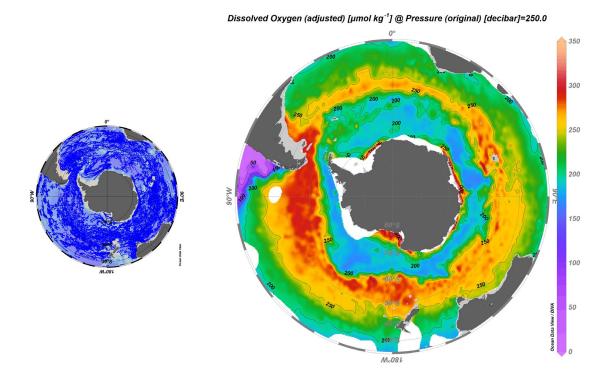


Chl-A_from_Float_6901528: Chlorophyll-A concentrations in the upper 350 db along the track of float 6901528.

Oxygen_at_500db: Annual average dissolved oxygen concentrations at 500 db.

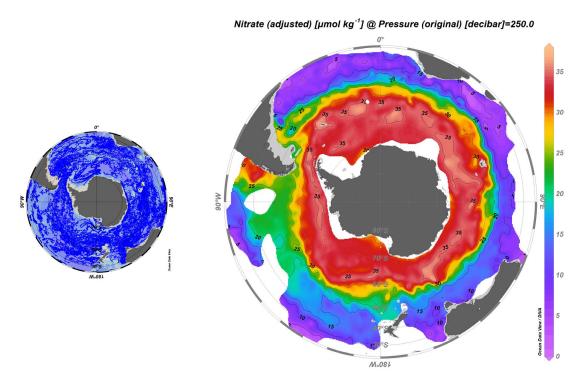


Dissolved Oxygen (adjusted) [µmol kg⁻¹] @ Pressure (original) [decibar]=500.0

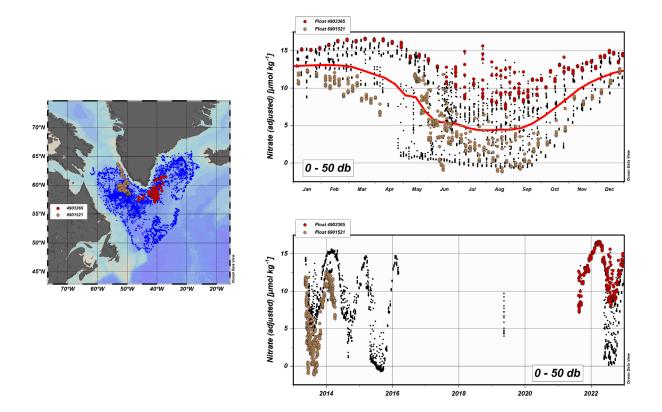


Oxygen_at_250db_SouthernOcean: Annual average dissolved oxygen concentrations at 250 db in the Southern Ocean.

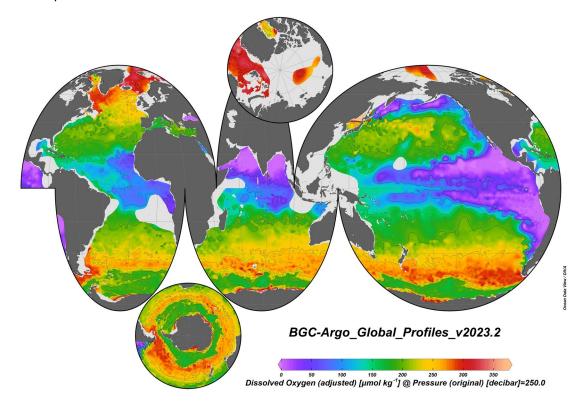
Nitrate_at_250db_SouthernOcean: Annual average nitrate concentrations at 250 db in the Southern Ocean.



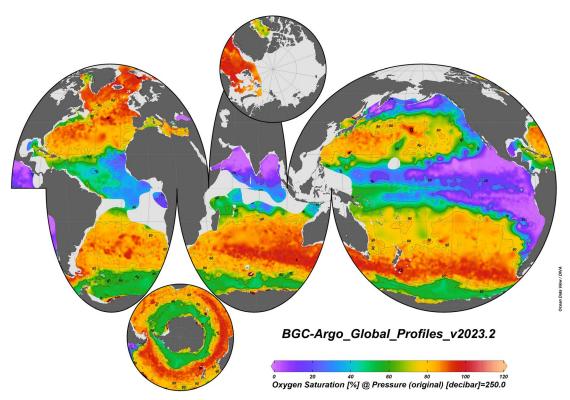




Oxygen_at_250db: Annual average dissolved oxygen concentrations at 250 db shown as interrupted map.



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.

