

File Name	Parameter	Definition	Units
in all files	FLOAT_WMO	World Meteorological Organization float identification number	-
	CYCLE	Float cycle	-
	PROFILE	Cast number	-
	DATE	Date of the cast (format: dd/mm/yyyy)	-
	LATITUDE	Latitude	degrees North
	LONGITUDE	Longitude	degrees Est
	FLOAT_PI	PI of the project	-
	PROJECT	Project funding	-
	BASIN	Zone of sampling	-
SALINITY.txt	PRES	Pressure associated to recorded data	dbar
	SAL	Salinity	PSU
TEMPERATURE.txt	TEMP	Temperature	°C
ED380.txt	ED380	Downwelling irradiance at 380 nm	$\mu\text{Wcm}^2.\text{nm}^{-1}$
ED412.txt	ED412	Downwelling irradiance at 412 nm	$\mu\text{Wcm}^2.\text{nm}^{-1}$
ED490.txt	ED490	Downwelling irradiance at 490 nm	$\mu\text{Wcm}^2.\text{nm}^{-1}$
PAR.txt	PAR	Photosynthetically Available Radiation	$\mu\text{mdquantum}^2.\text{s}^{-1}$
CHLA.txt	CHLA	Numerical counts converted with manufacturer calibration to give Chlorophyll-a concentration	$\text{mg.m}^3$
CHLA.txt	CHLA_CALIBRATED	Chlorophyll a concentration with a quenching correction (based on the Xing et al. (2012) method), re-calibration at depth, despiking (based on Schmechtig et al. (2014). procedures), influence of FDOM (based on the Xing et al. (2016) method) and corrected by a factor 2 (suggested by Roesler et al., (2017)).	$\text{mg.m}^3$
CDOM.txt	FDOM	Fluorescent dissolved organic matter despiked by a median filter (5 points window) and an average filter (7 points window)	ppb
BBP700.txt	BBP700	Particle light backscattering at 700 nm processed following Schmechtig et al. (2016) recommendations	$\text{m}^{-1}$
BBP700.txt	BBP700_DESPIKED	Particle light backscattering at 700 nm despiked by a median filtering (5 points window)	$\text{m}^{-1}$

#### References

- Roesler, C. S. et al. (2017), Challenges of and recommendations for absolute calibration of in situ fluorometers for assessing global phytoplankton distributions, *Limnol. Oceanogr. Methods*.
- Schmechtig C., Claustre H., Poteau A., D'Ortenzio F. (2014). Bio-Argo quality control manual for the Chlorophyll-A concentration. <http://doi.org/10.13155/35385>.
- Schmechtig C., Poteau A., Claustre H., D'Ortenzio F., Dall'Olmo G., Boss E. (2016). Processing Bio-Argo particle backscattering at the DAC level. <http://dx.doi.org/10.13155/39459>
- Xing, X., H. Claustre, S. Blain, F. D'Ortenzio, D. Antoine, J. Ras, and C. Guinet (2012), Quenching correction for in vivo chlorophyll fluorescence acquired by autonomous platforms: A case study with instrumented elephant seals in the Kerguelen region (Southern Ocean), *Limnol. Oceanogr.*, 10, 483–495, doi:10.4319/lom.2012.10.483.
- Xing, X., H. Claustre, E. Boss, C. Roesler, E. Organelli, A. Poteau, M. Barbieux, and F. D'Ortenzio (2016), Correction of profiles of in-situ chlorophyll fluorometry for the contribution of fluorescence originating from non-algal matter, *Limnol. Oceanogr. Methods*, 15(1), 80–93, doi:10.1002/lom3.10144.