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SENSOR SERIAL NUMBER: 2323 SBE 63 OXYGEN CALIBRATION DATA
CALIBRATION DATE: 28-Jan-22

COEFFICIENTS:

A0 = 1.0513e+000	B0 = -2.4871e-001	C0 = 1.0042e-001	E = 1.1000e-002
A1 = -1.5000e-003	B1 = 1.6497e+000	C1 = 4.2919e-003	
A2 = 4.1982e-001		C2 = 6.1177e-005	

BATH OXYGEN (ml/l)	BATH TEMPERATURE (° C)	BATH SALINITY (PSU)	INSTRUMENT OUTPUT (µsec)	INSTRUMENT OXYGEN (ml/l)	RESIDUAL (ml/l)
0.719	30.00	0.00	31.14	0.717	-0.002
0.753	26.00	0.00	31.75	0.752	-0.002
0.812	20.00	0.00	32.69	0.812	-0.000
0.897	12.00	0.00	34.09	0.899	0.002
1.005	6.00	0.00	35.01	1.010	0.005
1.099	2.00	0.00	35.62	1.106	0.008
2.213	30.00	0.00	22.79	2.210	-0.004
2.373	26.00	0.00	23.26	2.370	-0.003
2.524	20.00	0.00	24.41	2.521	-0.003
3.009	12.00	0.00	25.43	3.003	-0.005
3.410	6.00	0.00	26.44	3.403	-0.008
3.688	30.00	0.00	18.81	3.688	-0.001
3.759	2.00	0.00	27.09	3.751	-0.008
3.950	26.00	0.00	19.24	3.952	0.002
4.376	20.00	0.00	19.99	4.379	0.003
5.110	12.00	0.00	21.09	5.111	0.001
5.236	30.00	0.00	16.31	5.233	-0.003
5.676	26.00	0.00	16.61	5.679	0.003
5.834	6.00	0.00	21.98	5.834	0.001
6.279	20.00	0.00	17.29	6.284	0.005
6.440	2.00	0.00	22.60	6.441	0.001
7.318	12.00	0.00	18.30	7.316	-0.002
8.337	6.00	0.00	19.13	8.337	-0.000
8.842	2.00	0.00	20.01	8.846	0.004

T = temperature (°C) , P = pressure (dbar), U = Instrument output (µsec)

S_{corr} (salinity correction function) = 1.0 for calibration in DI water

See the user manual for more information on S_{corr} calculation

V = U / 39.457071

Oxygen (ml/l) = $\{((A0 + A1*T + A2 * V^2)/(B0 + B1 * V) - 1.0)/(C0 + C1 * T + C2 * T^2)\} * S_{corr} * \exp(E * P / (T + 273.15))$

Residual (ml/l) = instrument oxygen - bath oxygen