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DISSOLVED OXYGEN SENSOR CALIBRATION: S/N 230531 13 March 2000

Sensor type:

YSI

Sensor Current

m = 1.0059 E-5

b = -1.6094 E-8

The use of these constants in a linear equation of the form

$$I = mV + b$$

will yield DO sensor membrane current as a function of sensor output voltage.

Sensor Compensation Temperature

k = 6.5121

c = -1.7991

The use of these constants in a linear equation of the form

$$T = kV + c$$

will yield membrane temperature as a function of temperature channel voltage with a maximum error of about 0.5 deg C. The correction to dissolved oxygen resulting from the use of this calibration should be sufficient to achieve the precision of which the sensor is capable.

SEASOFT Coefficients based on Oxfit Calibration Results

Soc	0.0609	
Boc	-0.0064	
teor	-0.033	(nominal)
pcor	1.50e-4	(nominal)
tau	2.0	(for profiling applications only)
tau	0.0	(for moored applications only)
wt	0.67	(for Beckman type sensors)
wt	0.85	(for YSI type sensors)

barometer	=	1013.211	mB
Twater	=	5.675	deg C
Tcomp	=	5.500	deg C
Isat	=	19.900	uA
Iair	=	25.936	uA
Izero	=	0.104	uA