

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 06-Aug-98

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.85829329e-003
h = 6.79571195e-004
i = 2.86834452e-005
j = 2.48021271e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68153985e-003
b = 5.98952933e-004
c = 1.49202042e-005
d = 2.48169668e-006
f0 = 6381.276

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5241	6381.276	-1.5242	-0.00004
1.0361	6758.898	1.0362	0.00002
4.6110	7312.761	4.6111	0.00008
8.1176	7886.878	8.1176	0.00002
11.6215	8491.879	11.6214	-0.00006
15.1819	9139.521	15.1818	-0.00008
18.6457	9802.142	18.6457	0.00000
22.1466	10505.131	22.1466	0.00001
25.6743	11248.060	25.6743	0.00004
29.1457	12013.624	29.1458	0.00007
32.6206	12814.806	32.6206	-0.00007

Temperature ITS-90 = $1/\{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15$ (°C)

Temperature ITS-68 = $1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$ (°C)

Following the recommendation of JPOTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

