

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0997
CALIBRATION DATE: 23-Jan-10

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.88420499e-003
h = 6.82977431e-004
i = 2.86248357e-005
j = 2.39790121e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121415e-003
b = 6.00706534e-004
c = 1.50771181e-005
d = 2.39939220e-006
f0 = 6599.890

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	6599.890	-1.5001	-0.00004
0.9998	6979.846	0.9998	0.00004
4.4998	7537.921	4.4998	0.00004
7.9999	8127.242	7.9999	-0.00003
11.4998	8748.597	11.4998	-0.00001
14.9998	9402.799	14.9998	-0.00001
18.4998	10090.594	18.4998	-0.00002
21.9998	10812.714	21.9998	0.00001
25.4998	11569.842	25.4998	0.00000
28.9998	12362.666	28.9999	0.00006
32.4999	13191.791	32.4999	-0.00004

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 IPTS-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

