

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 25-May-00

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.85815569e-003
h = 6.79466276e-004
i = 2.86618606e-005
j = 2.48170358e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68134217e-003
b = 5.98934885e-004
c = 1.48881982e-005
d = 2.48318702e-006
f0 = 6383.097

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5096	6383.097	-1.5096	-0.00001
1.0504	6760.746	1.0504	-0.00001
4.6250	7314.661	4.6251	0.00005
8.1316	7888.885	8.1316	0.00001
11.6354	8493.967	11.6353	-0.00005
15.1957	9141.675	15.1956	-0.00006
18.6596	9804.395	18.6596	0.00007
22.1598	10507.318	22.1598	0.00003
25.6872	11250.239	25.6872	-0.00001
29.1584	12015.787	29.1584	-0.00003
32.6337	12817.120	32.6337	0.00001

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

