

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 12-Aug-00

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.85776196e-003
h = 6.78894174e-004
i = 2.83757982e-005
j = 2.43374458e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68136355e-003
b = 5.98930530e-004
c = 1.48692220e-005
d = 2.43521961e-006
f0 = 6382.755

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5111	6382.755	-1.5112	-0.00003
1.0499	6760.552	1.0499	0.00000
4.6244	7314.441	4.6245	0.00007
8.1317	7888.768	8.1317	0.00002
11.6356	8493.869	11.6356	-0.00006
15.1955	9141.509	15.1955	-0.00007
18.6594	9804.208	18.6594	0.00000
22.1604	10507.323	22.1604	0.00004
25.6881	11250.333	25.6881	0.00005
29.1593	12015.931	29.1592	-0.00002
32.6342	12817.238	32.6342	-0.00002

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

