

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1324
CALIBRATION DATE: 24-Feb-04

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.35196677e-003
h = 6.39508506e-004
i = 2.14649788e-005
j = 1.80243746e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121413e-003
b = 5.99447944e-004
c = 1.56265718e-005
d = 1.80388627e-006
f0 = 2958.737

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2958.737	-1.5001	-0.00003
1.0000	3129.464	1.0000	0.00004
4.5000	3380.285	4.5000	0.00005
8.0000	3645.245	7.9999	-0.00006
11.5000	3924.751	11.5000	-0.00004
15.0000	4219.175	15.0000	0.00002
18.5000	4528.878	18.5000	0.00002
22.0000	4854.222	22.0000	0.00001
25.5000	5195.552	25.5000	-0.00001
29.0000	5553.206	29.0000	-0.00001
32.5000	5927.506	32.5000	0.00000

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

