

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0573
CALIBRATION DATE: 26-Oct-07

SBE3 TEMPERATURE CALIBRATION DATA
IPTS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.76080911e-003
h = 6.83625916e-004
i = 3.73344219e-005
j = 4.31568149e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121181e-003
b = 5.94037364e-004
c = 1.52610097e-005
d = 4.31743781e-006
f0 = 5512.155

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	5512.155	-1.5000	0.00004
1.0000	5833.178	1.0001	0.00010
4.5000	6305.020	4.4999	-0.00010
8.0000	6803.669	7.9997	-0.00026
11.5000	7329.813	11.4998	-0.00016
15.0000	7884.076	15.0002	0.00020
18.5000	8466.987	18.5005	0.00046
22.0000	9079.039	22.0003	0.00033
25.5000	9720.695	25.4996	-0.00038
29.0000	10392.575	28.9992	-0.00083
32.5000	11095.449	32.5006	0.00059

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

