

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0573
CALIBRATION DATE: 28-Oct-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.76069395e-003
h = 6.83472180e-004
i = 3.72822077e-005
j = 4.31103442e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121497e-003
b = 5.94020486e-004
c = 1.52322563e-005
d = 4.31278821e-006
f0 = 5512.295

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5003	5512.295	-1.5002	0.00010
0.9998	5833.331	0.9998	0.00003
4.4998	6305.192	4.4996	-0.00019
7.9997	6803.867	7.9995	-0.00022
11.4997	7330.038	11.4996	-0.00007
14.9997	7884.306	14.9999	0.00021
18.4998	8467.251	18.5003	0.00048
21.9998	9079.299	22.0001	0.00026
25.4997	9720.958	25.4993	-0.00038
28.9998	10392.856	28.9989	-0.00086
32.4998	11095.745	32.5004	0.00063

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

