

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1384
CALIBRATION DATE: 23-Jan-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.87005804e-003
h = 6.80706629e-004
i = 2.71477937e-005
j = 2.15936426e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121357e-003
b = 6.02136193e-004
c = 1.50961513e-005
d = 2.16082727e-006
f0 = 6453.256

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	6453.256	-1.5001	0.00001
0.9999	6823.861	0.9999	-0.00002
4.4999	7368.122	4.4999	0.00002
7.9999	7942.747	7.9999	0.00001
11.4999	8548.535	11.4999	0.00001
14.9999	9186.245	14.9999	-0.00004
18.4999	9856.647	18.4999	0.00002
21.9999	10560.422	21.9999	-0.00000
25.4999	11298.272	25.4999	-0.00002
28.9999	12070.869	28.9999	0.00003
32.4999	12878.804	32.4999	-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 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

