

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1371
CALIBRATION DATE: 15-Feb-07

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.83412913e-003
h = 6.79018653e-004
i = 2.68897480e-005
j = 2.14277053e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121262e-003
b = 6.02920002e-004
c = 1.52895482e-005
d = 2.14424666e-006
f0 = 6103.204

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6103.204	-1.5000	-0.00002
1.0000	6453.253	1.0000	0.00002
4.5000	6967.278	4.5000	0.00001
8.0000	7509.963	8.0000	0.00002
11.5000	8082.042	11.5000	-0.00003
15.0000	8684.262	15.0000	-0.00001
18.5000	9317.311	18.5000	-0.00001
22.0000	9981.868	22.0000	-0.00002
25.5000	10678.594	25.5000	0.00002
29.0000	11408.105	29.0001	0.00007
32.5000	12170.960	32.5000	-0.00005

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

