

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2327
CALIBRATION DATE: 29-Jul-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.35180794e-003
h = 6.42646079e-004
i = 2.31270366e-005
j = 2.21589288e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121431e-003
b = 6.00552717e-004
c = 1.59669122e-005
d = 2.21742560e-006
f0 = 2948.236

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2948.236	-1.5001	-0.00005
0.9999	3118.036	1.0000	0.00008
4.5000	3367.481	4.5000	-0.00003
7.9999	3630.964	7.9999	-0.00000
11.4999	3908.876	11.4999	0.00003
14.9999	4201.573	14.9999	0.00000
18.5000	4509.418	18.4999	-0.00008
22.0000	4832.755	22.0000	-0.00003
25.4999	5171.908	25.5000	0.00007
28.9999	5527.200	29.0000	0.00007
32.4999	5898.921	32.4998	-0.00006

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

