

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2946
 CALIBRATION DATE: 05-Mar-08

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.34407434e-003
 h = 6.39246733e-004
 i = 2.14558230e-005
 j = 1.84832431e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121393e-003
 b = 5.99764552e-004
 c = 1.55391108e-005
 d = 1.84977325e-006
 f0 = 2921.082

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2921.082	-1.5001	-0.00002
0.9999	3089.533	0.9999	0.00001
4.4999	3337.009	4.4999	0.00002
7.9999	3598.423	7.9999	0.00001
11.4999	3874.158	11.4999	0.00002
14.9999	4164.581	14.9999	0.00000
18.4999	4470.049	18.4998	-0.00007
21.9999	4790.922	21.9998	-0.00007
25.4999	5127.546	25.5000	0.00008
28.9999	5480.220	29.0000	0.00009
32.4999	5849.251	32.4998	-0.00007

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

