

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4695
 CALIBRATION DATE: 18-Jan-08

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39672136e-003
 h = 6.43422139e-004
 i = 2.14294326e-005
 j = 1.75102654e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121371e-003
 b = 6.01163258e-004
 c = 1.54047541e-005
 d = 1.75245465e-006
 f0 = 3164.791

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3164.791	-1.5001	-0.00000
0.9999	3346.852	0.9999	-0.00002
4.4999	3614.279	4.4999	0.00004
7.9999	3896.699	7.9999	0.00001
11.4999	4194.527	11.4999	0.00003
14.9999	4508.155	14.9999	0.00003
18.5000	4837.962	18.4999	-0.00014
21.9999	5184.335	21.9999	-0.00004
25.4999	5547.640	25.5000	0.00009
28.9999	5928.204	29.0000	0.00011
32.4999	6326.346	32.4998	-0.00009

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

