

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2958
 CALIBRATION DATE: 21-May-09

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39516435e-003
 h = 6.73640206e-004
 i = 3.05358661e-005
 j = 2.90847362e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121220e-003
 b = 6.16760114e-004
 c = 2.08824482e-005
 d = 2.91051924e-006
 f0 = 3033.679

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3033.679	-1.5000	0.00011
0.9999	3203.720	0.9998	-0.00012
4.4999	3453.341	4.4998	-0.00009
7.9999	3716.779	7.9999	0.00005
11.4999	3994.382	11.4999	-0.00001
14.9999	4286.539	15.0000	0.00009
18.4999	4593.581	18.5000	0.00011
21.9999	4915.838	21.9999	-0.00003
25.4999	5253.652	25.4997	-0.00015
28.9999	5607.358	28.9998	-0.00006
32.4999	5977.242	32.5000	0.00010

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

