SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 5140
CALIBRATION DATE: 10-Sep-09

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36465389e-003
h = 6.40962773e-004
i = 2.22912766e-005
j = 2.07846363e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121197e-003
b = 5.99478759e-004
c = 1.54325511e-005
d = 2.07993634e-006
f0 = 3017.194

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3017.194	-1.5000	0.00003
1.0000	3191.265	1.0000	-0.00003
4.5000	3447.006	4.5000	-0.00001
8.0000	3717.146	8.0000	-0.00002
11.5000	4002.079	11.5000	0.00003
15.0000	4302.173	15.0000	0.00004
18.5000	4617.790	18.5000	-0.00001
22.0000	4949.294	22.0000	-0.00001
25.5000	5297.021	25.5000	-0.00001
29.0001	5661.305	29.0001	-0.00003
32.5000	6042.438	32.5000	0.00002

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