SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0701
CALIBRATION DATE: 30-Dec-10

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.81906800e-003
h = 6.81849011e-004
i = 3.09890495e-005
j = 2.88347956e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121124e-003
b = 5.98764820e-004
c = 1.55303477e-005
d = 2.88506858e-006
f0 = 5990.515

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	5990.515	-1.4999	-0.00002
1.0001	6336.574	1.0002	0.00008
4.5001	6844.987	4.5001	-0.00002
8.0001	7382.052	8.0000	-0.00010
11.5001	7948.529	11.5000	-0.00006
15.0001	8545.130	15.0002	0.00006
18.5001	9172.524	18.5003	0.00016
22.0001	9831.345	22.0002	0.00010
25.5001	10522.214	25.5000	-0.00011
29.0002	11245.794	29.0000	-0.00025
32.5001	12002.694	32.5003	0.00017

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