Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 5102
CALIBRATION DATE: 13-Dec-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39400605e-003
h = 6.43771747e-004
i = 2.26480849e-005
j = 2.09891950e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121201e-003
b = 6.00194202e-004
c = 1.54422283e-005
d = 2.10039678e-006
f0 = 3154.097

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3154.097	-1.5000	0.00002
1.0000	3335.843	1.0000	-0.00003
4.5000	3602.836	4.5000	-0.00002
8.0000	3884.837	8.0000	0.00001
11.5000	4182.244	11.5000	0.00002
15.0001	4495.458	15.0001	0.00004
18.5000	4824.818	18.4999	-0.00006
22.0000	5170.743	22.0000	0.00000
25.5000	5533.557	25.5000	0.00003
29.0001	5913.602	29.0001	-0.00004
32.5000	6311.193	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