Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2786 CALIBRATION DATE: 06-Feb-14

SBE3 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.37640299e-0036.44334663e-004 2.29547445e-005 j = 2.14213547e - 006f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121153e - 003b = 6.01158471e-004c = 1.57917753e-005d = 2.14364785e - 006f0 = 3061.421

25

30

35

BATH TEMP (ITS-90)	INSTRUMENT FREO (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3061.421	-1.4999	0.00006
1.0000	3237.538	1.0000	-0.00003
4.5000	3496.251	4.4999	-0.00009
8.0000	3769.502	7.9999	-0.00005
11.5000	4057.683	11.5001	0.00010
15.0000	4361.152	15.0001	0.00013
18.5000	4680.269	18.5000	-0.00002
22.0000	5015.410	21.9999	-0.00010
25.5000	5366.926	25.5000	-0.00004
29.0000	5735.129	29.0000	0.00001
32.5000	6120.334	32.5000	0.00004
22.0000 25.5000 29.0000	5015.410 5366.926 5735.129	21.9999 25.5000 29.0000	-0.00010 -0.00004 0.00001

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

0.02

-0.02

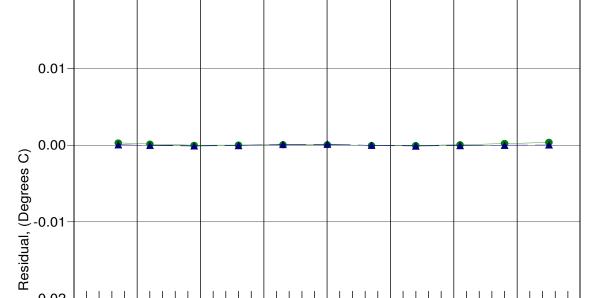
-5

0

5

10

Date, Offset(mdeg C)



15

Temperature, Degrees C

● 11-Dec-12 0.11 ▲ 06-Feb-14 0.00