

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4799
CALIBRATION DATE: 15-Aug-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36404612e-003
h = 6.37109658e-004
i = 2.09497057e-005
j = 1.76655570e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121230e-003
b = 5.97324226e-004
c = 1.51025186e-005
d = 1.76795590e-006
f0 = 3029.500

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3029.500	-1.5000	0.00000
1.0000	3204.929	1.0000	-0.00001
4.5000	3462.713	4.5000	0.00001
8.0000	3735.076	8.0000	-0.00001
11.5000	4022.424	11.5000	0.00001
15.0000	4325.142	15.0000	0.00000
18.5000	4643.610	18.5000	-0.00003
22.0000	4978.205	22.0000	0.00000
25.5000	5329.276	25.5000	0.00001
29.0000	5697.168	29.0000	0.00002
32.5000	6082.210	32.5000	-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

