

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2864
CALIBRATION DATE: 26-Jul-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38049454e-003
h = 6.48138249e-004
i = 2.37926283e-005
j = 2.26044827e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121318e-003
b = 6.03493460e-004
c = 1.62247462e-005
d = 2.26201379e-006
f0 = 3065.063

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3065.063	-1.5001	0.00004
1.0000	3240.701	1.0000	-0.00005
4.5000	3498.657	4.5000	-0.00003
8.0000	3771.044	8.0000	0.00001
11.5000	4058.244	11.5001	0.00006
15.0000	4360.620	15.0000	0.00000
18.5000	4678.543	18.5000	-0.00002
22.0000	5012.361	22.0000	-0.00002
25.5000	5362.406	25.5000	-0.00001
29.0000	5729.003	29.0000	0.00002
32.5000	6112.450	32.5000	-0.00000

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

