

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0889
CALIBRATION DATE: 23-Oct-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84921108e-003
h = 6.72163233e-004
i = 2.71895801e-005
j = 2.19047953e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121428e-003
b = 5.94010261e-004
c = 1.50182805e-005
d = 2.19192354e-006
f0 = 6399.418

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6399.418	-1.5001	-0.00015
1.0000	6772.172	1.0002	0.00020
4.5000	7320.023	4.5001	0.00010
8.0000	7899.079	7.9999	-0.00010
11.5000	8510.230	11.4998	-0.00016
15.0000	9154.311	14.9999	-0.00009
18.5000	9832.130	18.5001	0.00013
22.0000	10544.405	22.0002	0.00020
25.5000	11291.851	25.5000	-0.00003
29.0000	12075.258	28.9998	-0.00019
32.5000	12895.404	32.5001	0.00008

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

