

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4492
CALIBRATION DATE: 11-Jan-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.33908416e-003
h = 6.33315358e-004
i = 2.02119235e-005
j = 1.68731674e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121201e-003
b = 5.95937128e-004
c = 1.48113414e-005
d = 1.68868164e-006
f0 = 2921.763

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2921.763	-1.5000	0.00002
1.0000	3091.352	1.0000	-0.00002
4.5000	3340.584	4.5000	-0.00001
8.0000	3603.944	8.0000	-0.00002
11.5000	3881.830	11.5001	0.00005
15.0000	4174.609	15.0000	0.00004
18.5000	4482.652	18.5000	-0.00004
22.0000	4806.330	22.0000	-0.00004
25.5000	5145.993	25.5000	0.00003
29.0000	5501.960	29.0000	-0.00000
32.5000	5874.568	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

