

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4799
CALIBRATION DATE: 27-Oct-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36402402e-003
h = 6.37080523e-004
i = 2.09292929e-005
j = 1.76092472e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121218e-003
b = 5.97319945e-004
c = 1.51008924e-005
d = 1.76232414e-006
f0 = 3029.464

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3029.464	-1.5000	0.00001
1.0000	3204.891	1.0000	-0.00001
4.5000	3462.675	4.5000	0.00002
8.0000	3735.032	7.9999	-0.00006
11.4999	4022.378	11.4999	0.00005
14.9999	4325.096	14.9999	0.00004
18.5000	4643.569	18.5000	-0.00004
22.0000	4978.163	22.0000	-0.00002
25.5000	5329.238	25.5000	0.00001
29.0000	5697.132	29.0000	0.00001
32.5000	6082.181	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

