

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4335
CALIBRATION DATE: 29-Mar-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.33671637e-003
h = 6.33433497e-004
i = 2.05312614e-005
j = 1.75570436e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121247e-003
b = 5.95716933e-004
c = 1.49302794e-005
d = 1.75708680e-006
f0 = 2910.930

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2910.930	-1.5000	-0.00001
1.0000	3079.962	1.0000	0.00002
4.5000	3328.378	4.5000	-0.00001
8.0000	3590.894	8.0000	-0.00002
11.5000	3867.905	11.5001	0.00005
15.0000	4159.775	15.0000	0.00001
18.5000	4466.879	18.4999	-0.00007
22.0000	4789.590	22.0000	-0.00002
25.5000	5128.247	25.5000	0.00005
29.0000	5483.175	29.0000	0.00003
32.5000	5854.699	32.5000	-0.00003

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

