

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 5147
CALIBRATION DATE: 02-Sep-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.40605171e-003
h = 6.44320281e-004
i = 2.31924325e-005
j = 2.21016306e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121134e-003
b = 5.99313130e-004
c = 1.54708025e-005
d = 2.21165545e-006
f0 = 3217.687

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	3217.687	-1.4999	-0.00003
1.0000	3403.382	1.0001	0.00007
4.5001	3676.200	4.5001	-0.00005
8.0000	3964.383	8.0000	0.00000
11.5001	4268.356	11.5001	-0.00002
15.0000	4588.499	15.0001	0.00006
18.5001	4925.211	18.5001	-0.00002
22.0001	5278.857	22.0001	-0.00004
25.5001	5649.807	25.5001	0.00001
29.0001	6038.397	29.0001	0.00003
32.5001	6444.950	32.5001	-0.00002

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

