

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4130
CALIBRATION DATE: 13-Jan-09

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39545566e-003
h = 6.50516481e-004
i = 2.39803811e-005
j = 2.18648961e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121391e-003
b = 6.04480672e-004
c = 1.65240943e-005
d = 2.18806942e-006
f0 = 3129.788

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3129.788	-1.5001	-0.00002
0.9999	3308.838	0.9999	-0.00000
4.4999	3571.797	4.5000	0.00007
8.0000	3849.449	8.0000	-0.00002
11.4999	4142.179	11.4999	-0.00004
14.9999	4450.392	14.9999	-0.00001
18.5000	4774.453	18.5000	-0.00002
21.9999	5114.701	21.9999	0.00003
25.4999	5471.497	25.4999	0.00003
28.9999	5845.167	28.9999	-0.00000
32.4999	6236.033	32.4999	-0.00001

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

