

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1364
CALIBRATION DATE: 17-Feb-09

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84840050e-003
h = 6.78484025e-004
i = 2.52206119e-005
j = 1.85964998e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121163e-003
b = 6.05074608e-004
c = 1.50512969e-005
d = 1.86107829e-006
f0 = 6219.809

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	6219.809	-1.4999	0.00015
0.9999	6575.187	0.9998	-0.00009
4.4999	7096.925	4.4997	-0.00018
7.9999	7647.583	7.9998	-0.00015
11.4999	8227.918	11.4999	0.00003
14.9999	8838.694	15.0004	0.00052
18.4999	9480.399	18.5000	0.00012
21.9999	10153.852	21.9995	-0.00037
25.4999	10859.867	25.4997	-0.00017
28.9999	11598.940	28.9999	0.00000
32.4999	12371.674	32.5000	0.00013

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

