

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2327
CALIBRATION DATE: 31-Jul-09

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.35200444e-003
h = 6.43160522e-004
i = 2.35226500e-005
j = 2.31241071e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121340e-003
b = 6.00551149e-004
c = 1.60496863e-005
d = 2.31396368e-006
f0 = 2948.146

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2948.146	-1.5001	0.00002
0.9999	3117.931	0.9999	-0.00002
4.4999	3367.375	4.4999	-0.00001
7.9999	3630.864	7.9999	-0.00003
11.4998	3908.777	11.4999	0.00005
14.9999	4201.487	14.9999	0.00002
18.4999	4509.334	18.4999	-0.00001
21.9999	4832.666	21.9999	-0.00005
25.4999	5171.824	25.4999	0.00001
28.9999	5527.108	28.9999	0.00001
32.4999	5898.827	32.4999	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

