

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2533
CALIBRATION DATE: 23-May-02

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36960346e-003
h = 6.46992501e-004
i = 2.34182150e-005
j = 2.16061025e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121004e-003
b = 6.03344868e-004
c = 1.62926146e-005
d = 2.16216718e-006
f0 = 3014.976

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4998	3014.976	-1.4998	-0.00003
1.0002	3187.796	1.0003	0.00009
4.5003	3441.609	4.5003	-0.00004
8.0003	3709.632	8.0002	-0.00008
11.5003	3992.257	11.5003	0.00000
15.0003	4289.845	15.0004	0.00009
18.5003	4602.743	18.5004	0.00006
22.0003	4931.299	22.0002	-0.00007
25.5003	5275.873	25.5003	-0.00002
29.0003	5636.767	29.0003	-0.00001
32.5003	6014.296	32.5003	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 ITS-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

