

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2490
CALIBRATION DATE: 04-Jul-06

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.32792359e-003
h = 6.32925941e-004
i = 2.11441482e-005
j = 1.69738013e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121359e-003
b = 5.94096028e-004
c = 1.57943610e-005
d = 1.69881666e-006
f0 = 2874.485

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	2874.485	-1.5001	0.00001
0.9999	3041.882	0.9999	-0.00000
4.4999	3288.004	4.4999	0.00000
7.9999	3548.221	7.9999	-0.00003
11.4999	3822.946	11.4999	0.00001
14.9999	4112.568	15.0000	0.00005
18.4999	4417.465	18.4999	-0.00001
22.0000	4738.031	21.9999	-0.00006
25.4999	5074.616	25.4999	0.00003
28.9999	5427.580	28.9999	0.00000
32.4999	5797.268	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 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

