

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4799
CALIBRATION DATE: 29-Feb-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36387750e-003
h = 6.36761170e-004
i = 2.07226875e-005
j = 1.71706246e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121370e-003
b = 5.97296332e-004
c = 1.50400192e-005
d = 1.71845113e-006
f0 = 3029.524

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3029.524	-1.5001	-0.00000
0.9999	3204.962	0.9999	-0.00001
4.4999	3462.758	4.4999	0.00002
7.9999	3735.129	7.9999	-0.00001
11.4999	4022.484	11.4999	0.00001
14.9999	4325.209	14.9999	0.00000
18.4999	4643.683	18.4999	-0.00003
21.9999	4978.283	21.9999	-0.00002
25.4999	5329.364	25.4999	0.00001
28.9999	5697.272	29.0000	0.00006
32.4999	6082.320	32.4999	-0.00004

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

