

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1008
CALIBRATION DATE: 26-Oct-07

SBE3 TEMPERATURE CALIBRATION DATA
IPTS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.80407835e-003
h = 6.74076332e-004
i = 2.67783310e-005
j = 2.16354833e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121233e-003
b = 5.99676824e-004
c = 1.52991683e-005
d = 2.16502198e-006
f0 = 5887.054

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	5887.054	-1.5000	-0.00000
1.0000	6226.583	1.0000	-0.00000
4.5000	6725.370	4.5000	0.00001
8.0000	7252.200	8.0000	-0.00001
11.5000	7807.825	11.5000	-0.00001
15.0000	8392.973	15.0000	0.00002
18.5000	9008.330	18.5000	-0.00001
22.0000	9654.587	22.0000	-0.00003
25.5000	10332.406	25.5000	0.00002
29.0000	11042.391	29.0000	0.00002
32.5000	11785.145	32.5000	-0.00001

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

