

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: 1075
 CALIBRATION DATE: 28-Feb-08

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86370028e-003
 h = 6.80994186e-004
 i = 2.60733263e-005
 j = 1.88938788e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121396e-003
 b = 6.04072569e-004
 c = 1.56155286e-005
 d = 1.89085710e-006
 f0 = 6359.030

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	6359.030	-1.5001	-0.00002
0.9999	6723.046	0.9999	0.00002
4.4999	7257.556	4.4999	0.00002
7.9999	7821.838	7.9999	0.00000
11.4999	8416.684	11.4999	-0.00003
14.9999	9042.874	14.9999	-0.00001
18.4999	9701.144	18.4999	0.00000
21.9999	10392.213	21.9999	-0.00001
25.4999	11116.787	25.4999	0.00001
28.9999	11875.533	28.9999	0.00003
32.4999	12669.075	32.4999	-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 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

