

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: 4663
CALIBRATION DATE: 28-Feb-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38626587e-003
h = 6.40565091e-004
i = 2.14035015e-005
j = 1.79782651e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121370e-003
b = 5.98921524e-004
c = 1.52823663e-005
d = 1.79924771e-006
f0 = 3126.587

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3126.587	-1.5001	-0.00000
0.9999	3307.144	0.9999	-0.00000
4.4999	3572.420	4.4999	0.00000
7.9999	3852.652	7.9999	0.00001
11.4999	4148.248	11.4999	0.00001
14.9999	4459.603	14.9999	-0.00001
18.4999	4787.107	18.4999	-0.00003
21.9999	5131.139	21.9999	0.00000
25.4999	5492.053	25.4999	-0.00001
28.9999	5870.211	29.0000	0.00005
32.4999	6265.927	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

