

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: 24-Aug-06

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38630183e-003
h = 6.40624466e-004
i = 2.14374335e-005
j = 1.80392738e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121302e-003
b = 5.98927118e-004
c = 1.52954012e-005
d = 1.80535030e-006
f0 = 3126.608

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3126.608	-1.5001	-0.00005
1.0000	3307.174	1.0001	0.00008
4.5000	3572.447	4.5000	0.00003
8.0000	3852.673	8.0000	-0.00005
11.5000	4148.268	11.4999	-0.00007
15.0000	4459.636	15.0000	0.00003
18.5000	4787.143	18.5000	0.00001
22.0000	5131.179	22.0000	0.00005
25.5000	5492.091	25.5000	-0.00003
29.0000	5870.249	29.0000	-0.00001
32.5000	6265.981	32.5000	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

