

SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

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

SENSOR SERIAL NUMBER: 4663
CALIBRATION DATE: 17-Feb-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38628753e-003
h = 6.40580354e-004
i = 2.13935781e-005
j = 1.79166652e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121056e-003
b = 5.98935215e-004
c = 1.52934808e-005
d = 1.79308824e-006
f0 = 3126.606

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	3126.606	-1.4999	0.00003
1.0002	3307.161	1.0001	-0.00005
4.5001	3572.430	4.5001	0.00002
8.0001	3852.653	8.0001	-0.00003
11.5001	4148.252	11.5002	0.00005
15.0001	4459.604	15.0001	0.00003
18.5001	4787.102	18.5001	-0.00003
22.0001	5131.128	22.0000	-0.00005
25.5001	5492.051	25.5001	0.00001
29.0001	5870.209	29.0001	0.00004
32.5001	6265.933	32.5001	-0.00002

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

