

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: 2548
CALIBRATION DATE: 20-Oct-07

SBE3 TEMPERATURE CALIBRATION DATA
IPTS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.27148101e-003
h = 6.18903735e-004
i = 1.97528415e-005
j = 1.55960628e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121254e-003
b = 5.84758690e-004
c = 1.51835971e-005
d = 1.56095900e-006
f0 = 2670.161

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2670.161	-1.5000	-0.00002
1.0000	2828.215	1.0000	0.00002
4.5000	3060.840	4.5000	0.00002
8.0000	3307.083	8.0000	-0.00001
11.5000	3567.356	11.5000	-0.00002
15.0000	3842.064	15.0000	0.00003
18.5000	4131.586	18.5000	-0.00004
22.0000	4436.322	22.0000	-0.00003
25.5000	4756.647	25.5000	0.00004
29.0000	5092.912	29.0000	0.00003
32.5000	5445.474	32.5000	-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

