Sea-Bird Electronics, Inc.

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

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1692
CALIBRATION DATE: 15-Aug-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.80163861e-003
h = 6.71534623e-004
i = 2.53969191e-005
j = 1.98975248e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121245e-003
b = 6.00459119e-004
c = 1.48550097e-005
d = 1.99117060e-006
f0 = 5874.249

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	5874.249	-1.5000	-0.00001
1.0000	6212.572	1.0000	0.00000
4.5000	6709.489	4.5000	0.00002
8.0000	7234.225	8.0000	-0.00001
11.5000	7787.532	11.5000	0.00003
15.0000	8370.108	15.0000	0.00004
18.5000	8982.612	18.4998	-0.00015
22.0000	9625.817	22.0000	0.00003
25.5000	10300.269	25.5001	0.00005
29.0000	11006.608	29.0000	0.00005
32.5000	11745.412	32.5000	-0.00005

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