

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: 4195
CALIBRATION DATE: 11-Oct-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.37157395e-003
h = 6.44649362e-004
i = 2.28880376e-005
j = 1.96120418e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121327e-003
b = 6.01215380e-004
c = 1.63816233e-005
d = 1.96273529e-006
f0 = 3035.989

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3035.989	-1.5001	-0.00007
0.9999	3210.647	1.0000	0.00009
4.5000	3467.245	4.5000	0.00003
8.0000	3738.298	8.0000	-0.00002
11.5000	4024.212	11.5000	-0.00003
15.0000	4325.371	14.9999	-0.00006
18.5000	4642.164	18.5000	0.00003
22.0000	4974.935	22.0000	-0.00001
25.5000	5324.054	25.5000	-0.00000
28.9999	5689.858	29.0000	0.00010
32.5000	6072.670	32.4999	-0.00007

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

