

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: 2534
CALIBRATION DATE: 29-Jun-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.34833076e-003
h = 6.42571930e-004
i = 2.27687254e-005
j = 2.05854846e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121117e-003
b = 6.00895515e-004
c = 1.61562049e-005
d = 2.06007698e-006
f0 = 2930.551

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2930.551	-1.4999	0.00008
1.0000	3099.217	0.9999	-0.00007
4.5000	3347.024	4.4999	-0.00009
8.0000	3608.791	7.9999	-0.00008
11.4999	3884.905	11.5000	0.00014
14.9999	4175.722	15.0001	0.00019
18.5000	4481.588	18.4999	-0.00007
22.0000	4802.878	21.9999	-0.00012
25.5000	5139.935	25.5000	-0.00002
29.0000	5493.061	29.0000	-0.00000
32.5000	5862.577	32.5000	0.00004

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

