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: 1609
CALIBRATION DATE: 14-May-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.86616718e-003
h = 6.80226179e-004
i = 2.63390016e-005
j = 2.04340646e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121025e-003
b = 6.03712862e-004
c = 1.49874264e-005
d = 2.04485119e-006
f0 = 6399.456

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6399.456	-1.4998	0.00015
1.0000	6765.946	0.9999	-0.00009
4.5000	7304.066	4.4998	-0.00023
8.0000	7872.115	7.9999	-0.00014
11.5000	8470.879	11.5002	0.00020
15.0000	9101.071	15.0005	0.00055
18.5000	9763.196	18.4998	-0.00023
22.0000	10458.309	21.9998	-0.00024
25.5000	11186.975	25.4999	-0.00008
29.0000	11949.799	29.0000	0.00004
32.4999	12747.363	32.5000	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