# 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: 0701 CALIBRATION DATE: 10-Jan-12

#### SBE3 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

#### **ITS-90 COEFFICIENTS**

4.81933038e-003 6.82228463e-004 3.11770469e-005 j = 2.91509376e-006f0 = 1000.0

#### **IPTS-68 COEFFICIENTS**

a = 3.68121045e - 003b = 5.98774863e - 004c = 1.55484907e - 005d = 2.91668844e-006f0 = 5990.565

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	5990.565	-1.4999	0.00004
1.0001	6336.602	1.0001	0.00000
4.5001	6845.018	4.5001	-0.00005
8.0001	7382.087	8.0000	-0.00008
11.5001	7948.564	11.5001	-0.00002
15.0001	8545.154	15.0002	0.00008
18.5001	9172.531	18.5002	0.00014
22.0001	9831.341	22.0002	0.00011
25.5001	10522.185	25.5000	-0.00012
29.0068	11247.123	29.0065	-0.00029
32.5001	12002.604	32.5003	0.00021

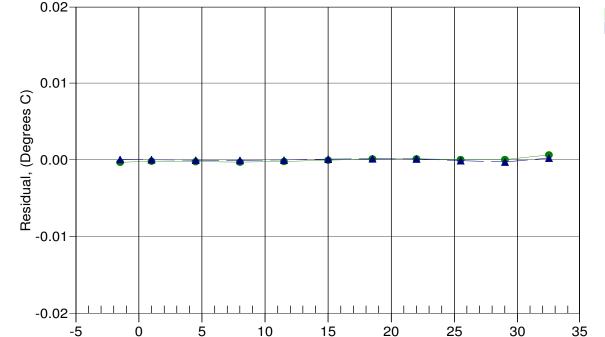
Temperature ITS-90 =  $1/\{g + h[ln(f_0/f)] + i[ln^2(f_0/f)] + j[ln^3(f_0/f)]\}$  - 273.15 (°C)

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

Date, Offset(mdeg C)



Temperature, Degrees C

● 30-Dec-10 -0.05 ▲ 10-Jan-12 0.00