

SEA-BIRD ELECTRONICS, INC.
 1808 136th Place N.E., Bellevue, Washington, 98005 USA
 Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 3311
 CALIBRATION DATE: 20-Jan-08

SBE21 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.14343864e-003$
 $h = 6.11585921e-004$
 $i = 1.74861862e-005$
 $j = 1.06365253e-006$
 $f0 = 1000.0$

IPTS-68 COEFFICIENTS

$a = 3.64763386e-003$
 $b = 5.84915535e-004$
 $c = 1.48656567e-005$
 $d = 1.06492287e-006$
 $f0 = 2291.842$

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	2291.842	1.0001	0.00010
4.4999	2479.695	4.4997	-0.00020
15.0000	3110.358	15.0003	0.00033
18.5000	3343.953	18.4997	-0.00025
24.0000	3735.977	24.0000	0.00003
29.0000	4119.579	28.9999	-0.00008
32.5000	4404.041	32.5001	0.00006

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_{90} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

