

# 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: 1638  
CALIBRATION DATE: 09-Dec-11

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -2.292260e-004

a1 = 3.072483e-004

a2 = -4.405910e-006

a3 = 2.033013e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	906789.8	-1.5001	0.0000
0.9999	811006.3	0.9999	-0.0000
4.4999	695643.1	4.4998	-0.0001
7.9999	598625.3	7.9999	0.0000
11.4999	516765.1	11.4999	0.0000
14.9999	447466.8	14.9999	0.0000
18.4999	388616.9	18.4999	0.0000
21.9999	338485.6	21.9999	0.0000
25.4999	295653.1	25.4998	-0.0001
28.9999	258947.6	28.9998	-0.0001
32.4999	227403.2	32.5000	0.0001

Temperature ITS-90 =  $1/\{a0 + a1[\ln(n)] + a2[\ln^2(n)] + a3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

