

# 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: 1420  
CALIBRATION DATE: 09-Dec-11

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 2.953369e-005  
a1 = 2.707318e-004  
a2 = -2.017733e-006  
a3 = 1.460261e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	742455.8	-1.5001	0.0000
0.9999	662801.9	0.9999	-0.0000
4.4999	567066.9	4.4998	-0.0001
7.9999	486751.5	7.9999	-0.0000
11.4999	419143.5	11.4999	0.0000
14.9999	362043.5	15.0000	0.0001
18.4999	313663.8	18.4999	0.0000
21.9999	272543.0	21.9999	-0.0000
25.4999	237484.8	25.4999	-0.0000
28.9999	207507.3	28.9999	-0.0000
32.4999	181799.7	32.4999	0.0000

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

Residual = instrument temperature - bath temperature

