

# SEA-BIRD ELECTRONICS, INC.

13431 NE 20th Street, Bellevue, Washington, 98005-2010 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1640  
CALIBRATION DATE: 21-Jan-11

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -2.395918e-005  
a1 = 2.757934e-004  
a2 = -2.264260e-006  
a3 = 1.539229e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	769272.8	-1.5000	0.0000
1.0000	687526.3	1.0000	-0.0000
4.4999	589144.3	4.4999	-0.0000
7.9999	506476.7	7.9999	0.0000
11.5000	436783.0	11.5000	-0.0000
15.0000	377833.8	15.0001	0.0001
18.5000	327815.4	18.5000	-0.0000
21.9999	285240.2	21.9999	0.0000
25.5000	248891.8	25.5000	-0.0000
29.0000	217768.7	28.9999	-0.0001
32.4999	191043.3	32.5000	0.0001

Temperature ITS-90 =  $1 / \{ a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)] \} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

