

# 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: 0809  
CALIBRATION DATE: 11-Feb-14

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 2.478143e-005  
a1 = 2.747724e-004  
a2 = -2.167877e-006  
a3 = 1.545917e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	642146.7	-1.5000	0.0000
1.0000	574013.2	1.0000	-0.0000
4.5000	491992.9	4.5000	-0.0000
8.0000	423058.6	8.0000	-0.0000
11.5000	364927.3	11.5000	0.0000
15.0000	315745.7	15.0000	0.0000
18.5000	274003.4	18.5000	0.0000
22.0000	238465.7	22.0000	-0.0000
25.5000	208118.8	25.4999	-0.0001
29.0000	182127.5	29.0000	0.0000
32.5000	159805.2	32.5000	0.0000

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

