

# 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: 1635  
CALIBRATION DATE: 01-Dec-15

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -2.065006e-004  
a1 = 3.067977e-004  
a2 = -4.383676e-006  
a3 = 2.040228e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	841306.6	-1.5000	0.0000
1.0000	752431.3	1.0000	-0.0000
4.5000	645389.8	4.4999	-0.0001
8.0000	555371.4	8.0000	-0.0000
11.5000	479415.3	11.5001	0.0001
15.0000	415118.1	15.0001	0.0001
18.5000	360516.3	18.5000	0.0000
22.0000	314004.2	22.0000	-0.0000
25.5000	274263.9	25.4999	-0.0001
29.0000	240209.5	28.9999	-0.0001
32.5000	210943.1	32.5001	0.0001

n = Instrument Output (counts)

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

Residual (°C) = instrument temperature - bath temperature

