

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0990  
CALIBRATION DATE: 01-Dec-15

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.608986e-004  
a1 = 3.094293e-004  
a2 = -4.756940e-006  
a3 = 2.065446e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	790296.7	-1.4999	0.0001
1.0000	705047.7	1.0000	-0.0000
4.5000	602686.9	4.4999	-0.0001
8.0000	516907.3	8.0000	-0.0000
11.5000	444776.8	11.5001	0.0001
15.0000	383922.3	15.0001	0.0001
18.5000	332411.7	18.5001	0.0001
22.0000	288673.2	22.0000	-0.0000
25.5000	251417.2	25.4999	-0.0001
29.0000	219587.7	28.9999	-0.0001
32.5000	192314.0	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

