

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0817  
CALIBRATION DATE: 26-Nov-15

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = 5.697147e-006  
a1 = 2.707406e-004  
a2 = -2.141082e-006  
a3 = 1.511271e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	831812.0	-1.5000	0.0000
1.0000	742675.7	1.0000	-0.0000
4.5000	635515.2	4.5000	-0.0000
8.0000	545589.5	8.0000	-0.0000
11.5000	469870.5	11.5000	0.0000
15.0000	405905.5	15.0000	0.0000
18.5000	351695.9	18.5000	0.0000
22.0000	305610.6	22.0000	0.0000
25.5000	266314.7	25.4999	-0.0001
29.0000	232707.4	28.9999	-0.0001
32.5000	203882.7	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

