

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0807  
CALIBRATION DATE: 25-Nov-15

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -2.286457e-005  
a1 = 2.761493e-004  
a2 = -2.436762e-006  
a3 = 1.601905e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	795919.9	-1.5000	0.0000
1.0000	711180.6	1.0000	-0.0000
4.5000	609213.0	4.4999	-0.0001
8.0000	523554.4	8.0000	-0.0000
11.5000	451353.8	11.5001	0.0001
15.0000	390301.2	15.0001	0.0001
18.5000	338509.3	18.5000	0.0000
22.0000	294436.9	22.0000	0.0000
25.5000	256821.6	25.4999	-0.0001
29.0000	224622.2	28.9999	-0.0001
32.5000	196979.7	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

