

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0815  
CALIBRATION DATE: 06-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -8.165057e-005  
a1 = 3.053556e-004  
a2 = -5.574325e-006  
a3 = 2.569237e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	792016.7	-1.5000	-0.0000
1.0000	706981.8	1.0000	0.0000
4.5000	604713.2	4.5000	-0.0000
8.0001	518860.3	8.0001	-0.0000
11.5000	446560.8	11.5000	0.0000
15.0000	385481.0	15.0000	0.0000
18.5000	333722.8	18.5000	-0.0000
22.0000	289732.1	22.0000	0.0000
25.5000	252235.1	25.5000	-0.0000
29.0000	220181.9	29.0000	-0.0000
32.5000	192706.3	32.5000	0.0000

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

