

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0566  
CALIBRATION DATE: 05-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.903115e-005  
a1 = 2.785013e-004  
a2 = -2.474191e-006  
a3 = 1.628170e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	707432.2	-1.5000	0.0000
1.0000	632543.9	1.0000	-0.0000
4.5000	542362.6	4.4999	-0.0001
8.0000	466536.6	8.0000	-0.0000
11.5000	402566.8	11.5001	0.0001
14.9999	348428.5	15.0000	0.0001
18.5000	302461.2	18.5000	-0.0000
22.0000	263312.5	22.0000	-0.0000
25.5000	229871.3	25.4999	-0.0001
29.0000	201221.5	29.0000	-0.0000
32.5000	176607.4	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

