

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 5285  
CALIBRATION DATE: 04-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.034960e-004  
a1 = 3.060766e-004  
a2 = -4.345273e-006  
a3 = 1.959123e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	642630.1	-1.5000	0.0000
1.0000	573415.8	1.0000	-0.0000
4.5000	490302.5	4.5000	-0.0000
8.0000	420644.8	7.9999	-0.0001
11.5000	362060.1	11.5000	0.0000
14.9999	312625.5	15.0000	0.0001
18.5000	270772.9	18.5000	0.0000
22.0000	235226.4	22.0000	-0.0000
25.5000	204942.3	25.4999	-0.0001
29.0000	179062.1	29.0000	-0.0000
32.5000	156881.1	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

