## Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0510 CALIBRATION DATE: 14-Oct-16

SBE 39 TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

## **COEFFICIENTS:**

a0 = -9.876792e-006 a1 = 2.800233e-004 a2 = -2.598052e-006 a3 = 1.679743e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	662452.7	-1.5000	0.0000
1.0000	592422.9	1.0000	-0.0000
4.5000	508072.7	4.4999	-0.0001
8.0000	437132.3	8.0000	-0.0000
11.5000	377270.4	11.5001	0.0001
15.0000	326595.3	15.0000	0.0000
18.5000	283560.3	18.5000	0.0000
22.0000	246901.8	22.0000	-0.0000
25.5000	215581.3	25.4999	-0.0001
29.0000	188743.3	28.9999	-0.0001
32.5000	165681.0	32.5001	0.0001

n = Instrument Output (counts)

Temperature ITS-90 (°C) =  $1/\{a0 + a1[ln(n)] + a2[ln^2(n)] + a3[ln^3(n)]\}$  - 273.15

Residual ( $^{\circ}$ C) = instrument temperature - bath temperature

