

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0514
CALIBRATION DATE: 26-Nov-15

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -2.314054e-005
a1 = 2.807825e-004
a2 = -2.644646e-006
a3 = 1.647854e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	706245.5	-1.5000	0.0000
1.0000	631189.1	1.0000	-0.0000
4.5000	540857.1	4.5000	-0.0000
8.0000	464958.5	8.0000	-0.0000
11.5000	400970.6	11.5000	0.0000
15.0000	346849.7	15.0000	0.0000
18.5000	300926.8	18.5000	0.0000
22.0000	261839.2	22.0000	0.0000
25.5000	228470.2	25.5000	-0.0000
29.0000	199898.2	29.0000	-0.0000
32.5000	175364.1	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

