

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0804
CALIBRATION DATE: 26-Nov-15

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 3.003745e-005
a1 = 2.715628e-004
a2 = -2.163531e-006
a3 = 1.533421e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	734584.4	-1.5000	0.0000
1.0000	655974.2	1.0000	-0.0000
4.5000	561450.8	4.5000	-0.0000
8.0000	482112.8	8.0000	-0.0000
11.5000	415293.5	11.5000	0.0000
15.0000	358835.0	15.0000	0.0000
18.5000	310976.8	18.5000	0.0000
22.0000	270283.4	22.0000	0.0000
25.5000	235577.4	25.5000	-0.0000
29.0000	205890.2	28.9999	-0.0001
32.5000	180422.8	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

