

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0631
CALIBRATION DATE: 09-Dec-15

SBE 38 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 3.516366e-005
a1 = 2.735862e-004
a2 = -2.420472e-006
a3 = 1.504546e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	791044.3	-1.5000	0.0000
1.0000	704766.2	1.0000	-0.0000
4.5000	601320.7	4.4999	-0.0001
8.0000	514777.6	8.0000	-0.0000
11.5000	442124.5	11.5000	0.0000
15.0000	380927.5	15.0000	0.0000
18.5000	329210.0	18.5000	0.0000
22.0000	285363.5	22.0000	-0.0000
25.5000	248074.3	25.5000	-0.0000
29.0000	216266.5	28.9999	-0.0001
32.5000	189052.6	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

