

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0442  
CALIBRATION DATE: 12-Sep-12

SBE 38 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 6.060758e-005

a1 = 2.736237e-004

a2 = -2.403908e-006

a3 = 1.520483e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.50000	706522.6	-1.50001	-0.00001
0.99990	629591.8	0.99994	0.00004
4.50000	537329.2	4.49993	-0.00007
7.99990	460120.7	7.99994	0.00004
11.50000	395285.5	11.49999	-0.00001
15.00000	340658.1	14.99999	-0.00001
18.50000	294479.8	18.50001	0.00001
21.99990	255320.2	21.99995	0.00005
25.50000	222008.2	25.49996	-0.00004
29.00000	193585.8	28.99996	-0.00004
32.50000	169263.5	32.50003	0.00003

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

Residual = instrument temperature - bath temperature

