

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0604  
CALIBRATION DATE: 17-Jul-13

SBE 38 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 2.437783e-005  
a1 = 2.702310e-004  
a2 = -2.247161e-006  
a3 = 1.443589e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.50000	907146.0	-1.49999	0.00001
1.00000	807875.5	0.99999	-0.00001
4.50020	688901.3	4.50025	0.00005
7.99960	589451.0	7.99946	-0.00014
11.50000	505972.4	11.50010	0.00010
15.00000	435707.2	15.00002	0.00002
18.50000	376355.1	18.49998	-0.00002
22.00000	326060.1	21.99999	-0.00001
25.50000	283307.5	25.50006	0.00006
29.00000	246858.9	28.99988	-0.00012
32.50000	215687.9	32.50005	0.00005

Temperature ITS-90 =  $1/\{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

