

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0607  
CALIBRATION DATE: 05-Feb-11

SBE 38 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 8.602448e-005  
a1 = 2.658859e-004  
a2 = -1.832350e-006  
a3 = 1.353920e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.50000	746057.8	-1.49999	0.00001
0.99990	664559.8	0.99989	-0.00001
4.49990	566867.6	4.49986	-0.00004
7.99990	485160.4	7.99994	0.00004
11.49990	416588.0	11.49991	0.00001
15.00000	358839.9	14.99998	-0.00002
18.50000	310049.3	18.50000	-0.00000
22.00000	268693.7	22.00002	0.00002
25.50000	233531.3	25.49998	-0.00002
29.00000	203543.1	29.00000	-0.00000
32.49990	177893.3	32.49991	0.00001

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

