

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0508  
CALIBRATION DATE: 13-Jan-12

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 1.018780e-005  
a1 = 2.786858e-004  
a2 = -2.580341e-006  
a3 = 1.664382e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	658877.0	-1.5001	0.0000
0.9999	588844.2	0.9999	-0.0000
4.4999	504552.4	4.4999	-0.0000
7.9999	433725.0	7.9999	-0.0000
11.4999	374011.1	11.4999	0.0000
14.9999	323502.8	14.9999	0.0000
18.4999	280645.7	18.4999	-0.0000
21.9999	244167.4	21.9999	0.0000
25.4999	213026.3	25.4999	-0.0000
28.9999	186362.9	28.9999	-0.0000
32.4999	163468.5	32.4999	0.0000

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

