

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0504  
CALIBRATION DATE: 13-Jan-12

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 3.197312e-006

a1 = 2.698299e-004

a2 = -2.104904e-006

a3 = 1.494652e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	867414.5	-1.5001	0.0000
0.9999	774311.6	0.9999	-0.0000
4.4999	662406.0	4.4999	-0.0000
7.9999	568524.3	7.9999	-0.0000
11.4999	489495.3	11.4999	0.0000
14.9999	422750.3	14.9999	0.0000
18.4999	366198.9	18.4999	0.0000
21.9999	318135.9	21.9999	-0.0000
25.4999	277161.9	25.4999	-0.0000
28.9999	242128.2	28.9999	-0.0000
32.4999	212087.3	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

