

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0512  
CALIBRATION DATE: 13-Jan-12

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -4.146112e-005

a1 = 2.814450e-004

a2 = -2.772885e-006

a3 = 1.697071e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	756646.0	-1.5001	0.0000
0.9999	676344.8	0.9999	-0.0000
4.4999	579675.4	4.4999	-0.0000
7.9999	498426.5	7.9999	-0.0000
11.4999	429910.3	11.4999	0.0000
14.9999	371942.6	14.9999	0.0000
18.4999	322744.5	18.4999	0.0000
21.9999	280860.7	21.9999	-0.0000
25.4999	245096.3	25.4999	-0.0000
28.9999	214468.0	28.9998	-0.0001
32.4999	188163.0	32.5000	0.0001

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

