

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0509  
CALIBRATION DATE: 13-Jan-12

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -3.255629e-005

a1 = 2.795901e-004

a2 = -2.616181e-006

a3 = 1.663695e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	746052.7	-1.5001	0.0000
0.9999	666984.4	0.9999	-0.0000
4.4999	571780.4	4.4999	-0.0000
7.9999	491745.6	7.9999	-0.0000
11.4999	424237.6	11.4999	0.0000
14.9999	367110.9	14.9999	0.0000
18.4999	318616.1	18.4999	0.0000
21.9999	277322.1	21.9999	-0.0000
25.4999	242054.1	25.4999	-0.0000
28.9999	211844.5	28.9999	-0.0000
32.4999	185894.8	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

