

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0517  
CALIBRATION DATE: 13-Jan-12

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 6.652041e-005  
a1 = 2.676388e-004  
a2 = -1.962541e-006  
a3 = 1.466470e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	725544.8	-1.5001	0.0000
0.9999	647341.6	0.9999	-0.0000
4.4999	553403.8	4.4999	-0.0000
7.9999	474650.7	7.9999	-0.0000
11.4999	408401.2	11.4999	0.0000
14.9999	352487.9	14.9999	0.0000
18.4999	305144.3	18.4999	0.0000
21.9999	264931.7	21.9999	0.0000
25.4999	230672.4	25.4998	-0.0001
28.9999	201397.2	28.9999	-0.0000
32.4999	176309.2	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

