

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0046  
CALIBRATION DATE: 22-Feb-14

SBE 48 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.008339e-005  
a1 = 2.775028e-004  
a2 = -2.695032e-006  
a3 = 1.568150e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	772759.3	1.0000	0.0000
4.5000	659570.2	4.5000	-0.0000
15.0000	418256.8	15.0000	0.0000
18.5000	361588.0	18.5001	0.0001
24.0000	289370.6	23.9999	-0.0001
28.9999	237761.5	28.9999	0.0000
32.5000	207906.4	32.5000	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

