

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0360  
CALIBRATION DATE: 15-Dec-12

SBE 45 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 2.820003e-005  
a1 = 2.778881e-004  
a2 = -2.752011e-006  
a3 = 1.593898e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	674683.0	1.0000	0.0001
4.4999	575629.0	4.4998	-0.0001
15.0000	364597.6	15.0000	0.0000
18.5000	315081.9	18.5001	0.0001
24.0000	252009.7	24.0000	0.0000
29.0000	206962.5	28.9998	-0.0002
32.5000	180912.1	32.5001	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

