

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0454  
CALIBRATION DATE: 28-Apr-17

SBE 45 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = 3.789337e-005  
a1 = 2.714646e-004  
a2 = -2.217272e-006  
a3 = 1.446824e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	712296.9	1.0000	-0.0000
4.4999	607842.7	4.5000	0.0001
15.0000	385249.2	14.9999	-0.0001
18.5000	332998.1	18.5000	-0.0000
24.0000	266422.5	24.0001	0.0001
29.0000	218860.9	28.9999	-0.0001
32.5000	191351.1	32.5000	0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) =  $1 / \{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

