

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0267  
 CALIBRATION DATE: 15-Feb-12

SBE 45 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

### ITS-90 COEFFICIENTS

a0 = 1.165724e-005  
 a1 = 2.787757e-004  
 a2 = -2.793804e-006  
 a3 = 1.603706e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	697794.3	1.0000	-0.0000
4.5000	595517.7	4.5000	0.0000
15.0000	377520.8	15.0000	0.0000
18.5000	326342.0	18.4999	-0.0001
23.9940	261183.8	23.9941	0.0001
29.0000	214523.6	29.0000	-0.0000
32.5000	187571.0	32.5000	-0.0000

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

Residual = instrument temperature - bath temperature

