

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1423  
CALIBRATION DATE: 16-Dec-10

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 1.464409e-005  
a1 = 2.730046e-004  
a2 = -2.144056e-006  
a3 = 1.506186e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	732308.8	-1.5000	0.0000
1.0000	654058.7	1.0000	-0.0000
4.4999	559957.6	4.4999	-0.0000
8.0000	480958.3	7.9999	-0.0001
11.5000	414413.9	11.5000	0.0000
15.0000	358176.5	15.0001	0.0001
18.5000	310499.6	18.5000	0.0000
22.0000	269951.2	21.9999	-0.0001
25.5000	235360.4	25.5000	-0.0000
29.0000	205765.4	29.0000	-0.0000
32.5000	180371.9	32.5000	0.0000

Temperature ITS-90 =  $1/\{a0 + a1[\ln(n)] + a2[\ln^2(n)] + a3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

