

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1424  
CALIBRATION DATE: 17-Dec-10

SBE 39 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.375975e-005  
a1 = 2.746248e-004  
a2 = -2.331470e-006  
a3 = 1.530356e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	823580.2	-1.5000	0.0000
0.9999	735240.9	0.9999	0.0000
4.4999	629060.8	4.4999	0.0000
8.0000	539979.3	8.0000	-0.0000
11.5000	464990.3	11.5000	-0.0000
15.0000	401654.4	15.0000	0.0000
18.5000	347989.0	18.5000	0.0000
22.0000	302375.6	21.9999	-0.0001
25.5000	263485.5	25.5000	0.0000
29.0000	230231.5	29.0000	-0.0000
32.5000	201714.1	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

