

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0819  
 CALIBRATION DATE: 12-Jun-09

SBE 37 TEMPERATURE CALIBRATION DATA  
 ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.535797e-004  
 a1 = 2.972965e-004  
 a2 = -3.425425e-006  
 a3 = 1.802573e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 0.9999                | 657385.4             | 0.9999                | -0.0000              |
| 4.4999                | 564536.8             | 4.4999                | 0.0000               |
| 15.0001               | 364400.9             | 15.0001               | -0.0000              |
| 18.5000               | 316838.4             | 18.5000               | -0.0000              |
| 24.0001               | 255797.0             | 24.0001               | -0.0000              |
| 29.0000               | 211822.4             | 29.0001               | 0.0001               |
| 32.5000               | 186221.1             | 32.4999               | -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

