

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0811  
CALIBRATION DATE: 09-Nov-06

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -9.347550e-006  
a1 = 2.832795e-004  
a2 = -3.015998e-006  
a3 = 1.708606e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 1.0000                | 641184.3             | 1.0000                | -0.0000              |
| 4.5000                | 548254.5             | 4.5000                | 0.0000               |
| 15.0000               | 349459.1             | 15.0001               | 0.0001               |
| 18.5000               | 302605.8             | 18.4999               | -0.0001              |
| 23.9999               | 242767.2             | 23.9999               | -0.0000              |
| 28.9999               | 199900.9             | 29.0001               | 0.0002               |
| 32.5000               | 175059.5             | 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

