

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0816  
CALIBRATION DATE: 17-Apr-12

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -3.193442e-004

a1 = 3.348178e-004

a2 = -6.353630e-006

a3 = 2.593978e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 1.0000                | 653832.8             | 1.0000                | 0.0000               |
| 4.5000                | 561940.7             | 4.4999                | -0.0001              |
| 15.0000               | 363515.5             | 15.0000               | 0.0000               |
| 18.5000               | 316278.2             | 18.5001               | 0.0001               |
| 24.0000               | 255606.3             | 23.9999               | -0.0001              |
| 29.0000               | 211853.1             | 29.0000               | -0.0000              |
| 32.5000               | 186361.7             | 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

