

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 3777  
CALIBRATION DATE: 29-Oct-13

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -1.216544e-004  
a1 = 3.036115e-004  
a2 = -4.462539e-006  
a3 = 2.120120e-007

| BATH TEMP<br>(ITS-90) | INSTRUMENT<br>OUTPUT | INST TEMP<br>(ITS-90) | RESIDUAL<br>(ITS-90) |
|-----------------------|----------------------|-----------------------|----------------------|
| 1.0000                | 642675.1             | 1.0001                | 0.0001               |
| 4.5000                | 550611.7             | 4.4999                | -0.0001              |
| 15.0000               | 352914.6             | 15.0000               | -0.0000              |
| 18.5000               | 306130.5             | 18.5002               | 0.0002               |
| 24.0000               | 246257.1             | 24.0000               | -0.0000              |
| 29.0000               | 203257.6             | 28.9997               | -0.0003              |
| 32.5000               | 178282.8             | 32.5002               | 0.0002               |

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

