

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 1805  
CALIBRATION DATE: 21-Nov-15

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -6.765519e-005  
a1 = 2.918390e-004  
a2 = -3.854320e-006  
a3 = 1.966334e-007

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (counts) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| 1.0000             | 715044.2                      | 1.0000             | -0.0000           |
| 4.5000             | 611674.6                      | 4.5000             | 0.0000            |
| 15.0000            | 390287.1                      | 15.0001            | 0.0001            |
| 18.5001            | 338050.8                      | 18.4999            | -0.0002           |
| 24.0000            | 271299.5                      | 24.0001            | 0.0001            |
| 29.0000            | 223458.5                      | 29.0000            | -0.0000           |
| 32.5000            | 195719.7                      | 32.5000            | -0.0000           |

n = Instrument Output (counts)

Temperature ITS-90 (°C) =  $1/\{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

