

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0992
CALIBRATION DATE: 01-Dec-15

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 5.747298e-005
a1 = 2.686513e-004
a2 = -2.064612e-006
a3 = 1.407888e-007

| BATH TEMP (° C) | INSTRUMENT OUTPUT (counts) | INST TEMP (° C) | RESIDUAL (° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| -1.5000 | 800045.6 | -1.5000 | 0.0000 |
| 1.0000 | 712635.1 | 1.0000 | -0.0000 |
| 4.5000 | 607858.7 | 4.5000 | -0.0000 |
| 8.0000 | 520229.4 | 8.0000 | -0.0000 |
| 11.5000 | 446685.6 | 11.5000 | 0.0000 |
| 15.0000 | 384754.2 | 15.0000 | 0.0000 |
| 18.5000 | 332429.9 | 18.5001 | 0.0001 |
| 22.0000 | 288081.3 | 22.0000 | -0.0000 |
| 25.5000 | 250374.1 | 25.5000 | -0.0000 |
| 29.0000 | 218216.9 | 28.9999 | -0.0001 |
| 32.5000 | 190710.9 | 32.5001 | 0.0001 |

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

