

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0810

CALIBRATION DATE: 03-Mar-15

SBE 39 RTC CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

rtca0 = 9.999814e-001

rtca1 = 1.636058e-006

rtca2 = -3.635789e-008

| BATH TEMP<br>(ITS-90) | RTC FREQ<br>(Hz) | COMPUTED FREQ<br>(Hz) | RESIDUAL<br>(PPM) |
|-----------------------|------------------|-----------------------|-------------------|
| -1.5000               | 0.9999790        | 0.9999789             | -0.1              |
| 0.9999                | 0.9999830        | 0.9999830             | -0.0              |
| 4.4999                | 0.9999880        | 0.9999880             | 0.0               |
| 8.0000                | 0.9999920        | 0.9999921             | 0.1               |
| 11.4999               | 0.9999950        | 0.9999954             | 0.4               |
| 15.0000               | 0.9999980        | 0.9999977             | -0.3              |
| 18.4999               | 0.9999990        | 0.9999992             | 0.2               |
| 21.9999               | 1.0000000        | 0.9999998             | -0.2              |
| 25.4999               | 1.0000000        | 0.9999995             | -0.5              |
| 28.9999               | 0.9999980        | 0.9999983             | 0.3               |
| 32.4999               | 0.9999960        | 0.9999962             | 0.2               |

$$\text{RTC frequency} = \text{rtca0} + \text{rtca1} * t + \text{rtca2} * t^2$$

$$\text{Residual} = (\text{Computed RTC frequency} - \text{Measured RTC frequency}) * 1e6$$

