

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0520  
CALIBRATION DATE: 17-Dec-10

SBE 39 RTC CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

rtca0 = 9.999764e-001

rtca1 = 1.595664e-006

rtca2 = -3.425642e-008

| BATH TEMP<br>(ITS-90) | RTC FREQO<br>(Hz) | COMPUTED FREQO<br>(Hz) | RESIDUAL<br>(PPM) |
|-----------------------|-------------------|------------------------|-------------------|
| -1.5000               | 0.9999740         | 0.9999740              | -0.0              |
| 0.9999                | 0.9999780         | 0.9999780              | 0.0               |
| 4.4999                | 0.9999830         | 0.9999829              | -0.1              |
| 8.0000                | 0.9999870         | 0.9999870              | 0.0               |
| 11.5000               | 0.9999900         | 0.9999903              | 0.3               |
| 15.0000               | 0.9999930         | 0.9999927              | -0.3              |
| 18.5000               | 0.9999940         | 0.9999942              | 0.2               |
| 22.0000               | 0.9999950         | 0.9999950              | -0.0              |
| 25.5000               | 0.9999950         | 0.9999949              | -0.1              |
| 29.0000               | 0.9999940         | 0.9999939              | -0.1              |
| 32.5000               | 0.9999920         | 0.9999921              | 0.1               |

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

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

Date, Delta F ppm

