

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0581  
CALIBRATION DATE: 08-Dec-11

SBE 39 RTC CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

rtca0 = 9.999703e-001

rtca1 = 1.511543e-006

rtca2 = -3.348028e-008

| BATH TEMP<br>(ITS-90) | RTC FREQO<br>(Hz) | COMPUTED FREQO<br>(Hz) | RESIDUAL<br>(PPM) |
|-----------------------|-------------------|------------------------|-------------------|
| -1.5001               | 0.9999680         | 0.9999679              | -0.1              |
| 0.9999                | 0.9999720         | 0.9999717              | -0.3              |
| 4.4999                | 0.9999760         | 0.9999764              | 0.4               |
| 7.9999                | 0.9999800         | 0.9999802              | 0.2               |
| 11.4999               | 0.9999830         | 0.9999832              | 0.2               |
| 14.9999               | 0.9999860         | 0.9999854              | -0.6              |
| 18.4999               | 0.9999870         | 0.9999868              | -0.2              |
| 21.9999               | 0.9999870         | 0.9999873              | 0.3               |
| 25.4999               | 0.9999870         | 0.9999870              | 0.0               |
| 28.9999               | 0.9999860         | 0.9999859              | -0.1              |
| 32.4999               | 0.9999840         | 0.9999840              | 0.0               |

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

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

Date, Delta F ppm

