

# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0990  
CALIBRATION DATE: 01-Dec-15

SBE 39 RTC CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

rtca0 = 1.000001e+000  
rtca1 = 1.568336e-006  
rtca2 = -3.457149e-008

BATH TEMPERATURE (° C)	RTC FREQUENCY (Hz)	COMPUTED FREQUENCY (Hz)	RESIDUAL (PPM)
-1.5000	0.9999980	0.9999981	0.1
1.0000	1.0000020	1.0000020	0.0
4.5000	1.0000070	1.0000069	-0.1
8.0000	1.0000110	1.0000108	-0.2
11.5000	1.0000140	1.0000140	-0.0
15.0000	1.0000160	1.0000163	0.3
18.5000	1.0000180	1.0000177	-0.3
22.0000	1.0000180	1.0000183	0.3
25.5000	1.0000180	1.0000180	0.0
29.0000	1.0000170	1.0000169	-0.1
32.5000	1.0000150	1.0000150	-0.0

t = temperature (°C)

RTC frequency =  $rtca0 + rtca1 * t + rtca2 * t^2$

Residual (PPM) = (Computed RTC frequency - Measured RTC frequency) \* 1e6

