



Sea-Bird Electronics, Inc.

*Advancing the Science of Ocean Measurement*

## SBE 56 ECO Temperature Logger

### Instrument Configuration

Instrument Serial Number: 56-04742  
Instrument Firmware Version: 0.96  
Communications Format: RS232

### Installed Devices/Sensors

<i>Data Format</i>	<i>Measurement</i>	<i>Sensor Type</i>	<i>Serial Number</i>	<i>Rating</i>
Count	Temperature	Internal	N/A	N/A

Maximum Depth: **1500m**

**CAUTION** - The maximum deployment depth will be limited by the measurement range of the pressure sensor, if installed, an attached sensor, if installed, or the housing.



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# Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 04742

CALIBRATION DATE: 09-Aug-14

SBE 56 TEMPERATURE CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.042667e-003

a1 = 3.116191e-004

a2 = -4.565620e-006

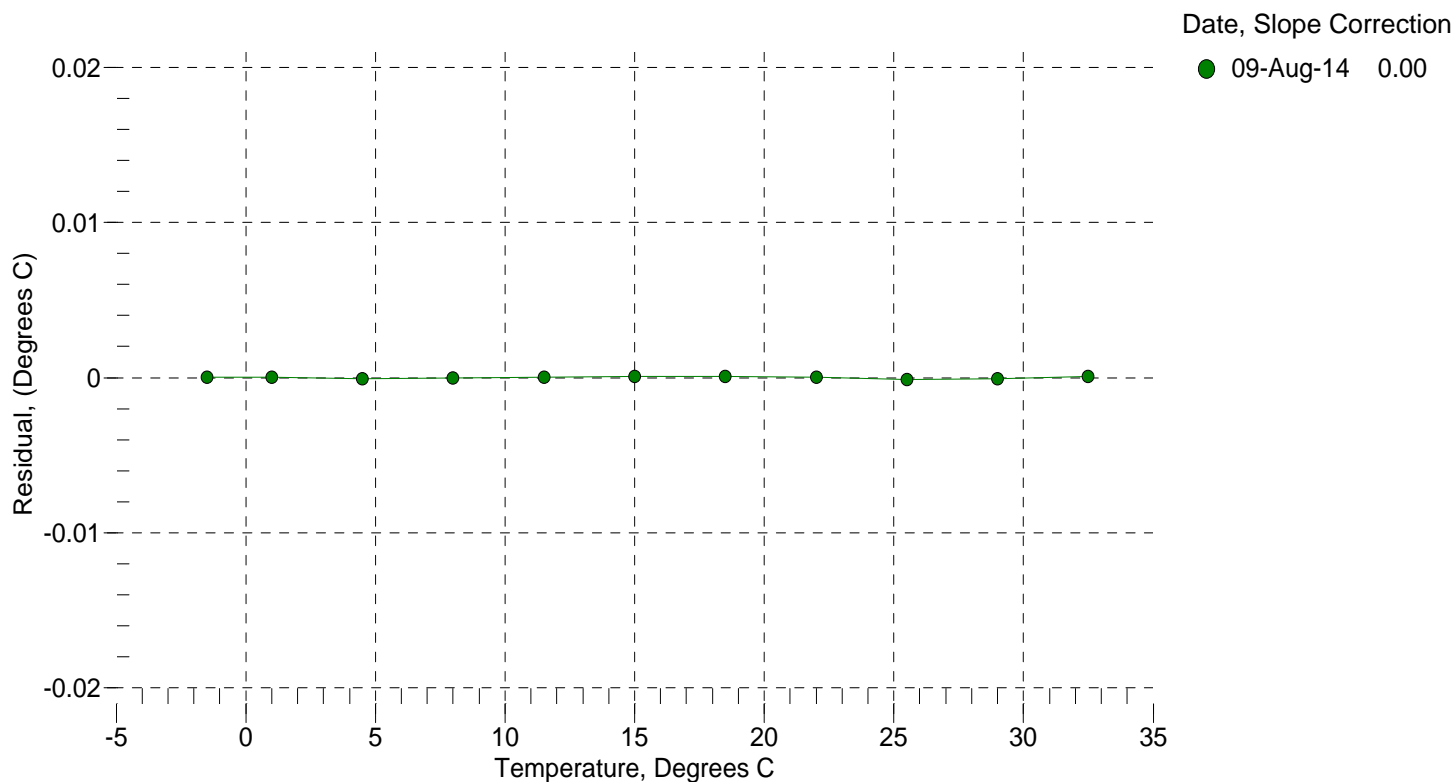
a3 = 1.610692e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	20706227.1	-1.5000	0.0000
1.0000	18475674.3	1.0000	0.0000
4.5000	15797127.2	4.4999	-0.0001
8.0000	13552055.4	8.0000	-0.0000
11.5000	11663847.1	11.5000	0.0000
15.0000	10070392.7	15.0001	0.0001
18.5000	8721309.4	18.5001	0.0001
22.0000	7575480.3	22.0000	0.0000
25.5000	6599240.9	25.4999	-0.0001
29.0000	5764949.3	28.9999	-0.0001
32.5000	5049867.5	32.5001	0.0001

Temperature ITS-90 =  $1/\{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$  (°C)

Residual = instrument temperature - bath temperature

n = instrument output





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## Pressure Test Certificate

Test Date: **08/04/14**

Description: **SBE-56 Temperature Sensor**

### Sensor Information:

Model Number: **56**

Serial Number: **04742**

### Pressure Test Protocol:

Low Pressure Test: **40** PSI Held For: **15** Minutes

High Pressure Test: **2300** PSI Held For: **15** Minutes

Passed Test: **Yes**

Tested By: **DC**

**High pressure is generally equal to the maximum depth rating of the instrument**

