



SEA-BIRD
SCIENTIFIC

SBE Sea-Bird
Electronics

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SBE 38 Digital Oceanographic Thermometer

Instrument Configuration

Instrument Serial Number: 38-0827
Instrument Firmware Version: 1.4
Communications Format: RS232
Communications Settings: 9600 baud, 8 Data Bits, No Parity

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: **10500m**

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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SENSOR SERIAL NUMBER: 0827
CALIBRATION DATE: 29-Apr-15

SBE 38 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

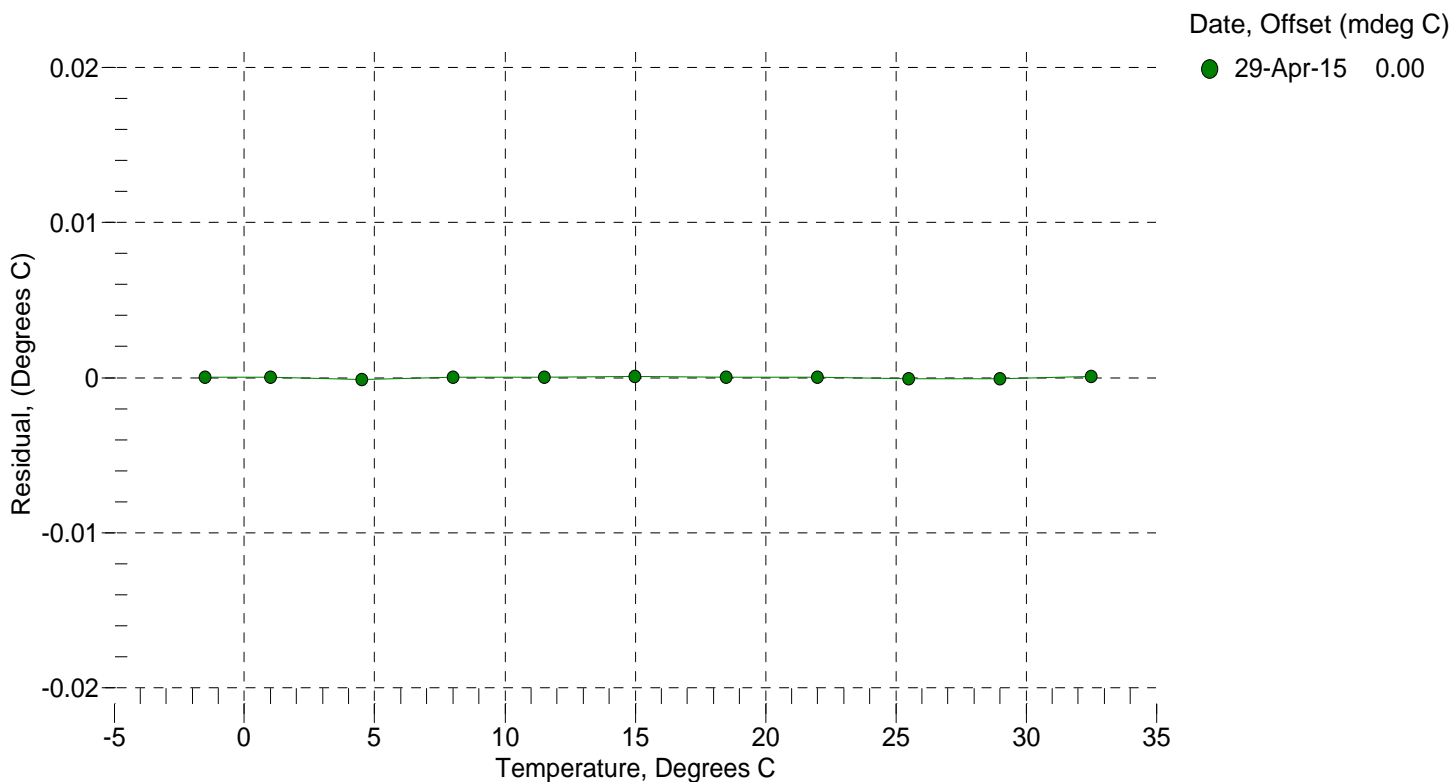
a0 = 5.983638e-005
a1 = 2.676231e-004
a2 = -1.975681e-006
a3 = 1.385677e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	802139.8	-1.5000	0.0000
0.9999	714552.8	0.9999	0.0000
4.5000	609554.5	4.4999	-0.0001
7.9999	521731.1	7.9999	0.0000
11.4999	448017.7	11.4999	0.0000
14.9999	385937.1	15.0000	0.0001
18.5000	333482.0	18.5000	0.0000
22.0000	289017.9	22.0000	0.0000
25.5000	251210.2	25.4999	-0.0001
29.0000	218964.1	28.9999	-0.0001
32.4999	191380.3	32.5000	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: 10/27/14

Description: SBE-38 Digital Thermometer

Sensor Information:

Model Number: 38

Serial Number: 0827

Pressure Test Protocol:

Low Pressure Test: 40 PSI Held For: 15 Minutes

High Pressure Test: 10000 PSI Held For: 15 Minutes

Passed Test: Yes

Tested By: ap

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

