

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

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SENSOR SERIAL NUMBER: 4303
CALIBRATION DATE: 25-Sep-08

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.38528621e-003
h = 6.48020952e-004
i = 2.22661253e-005
j = 1.71921109e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121500e-003
b = 6.04553679e-004
c = 1.64849447e-005
d = 1.72072474e-006
f0 = 3084.221

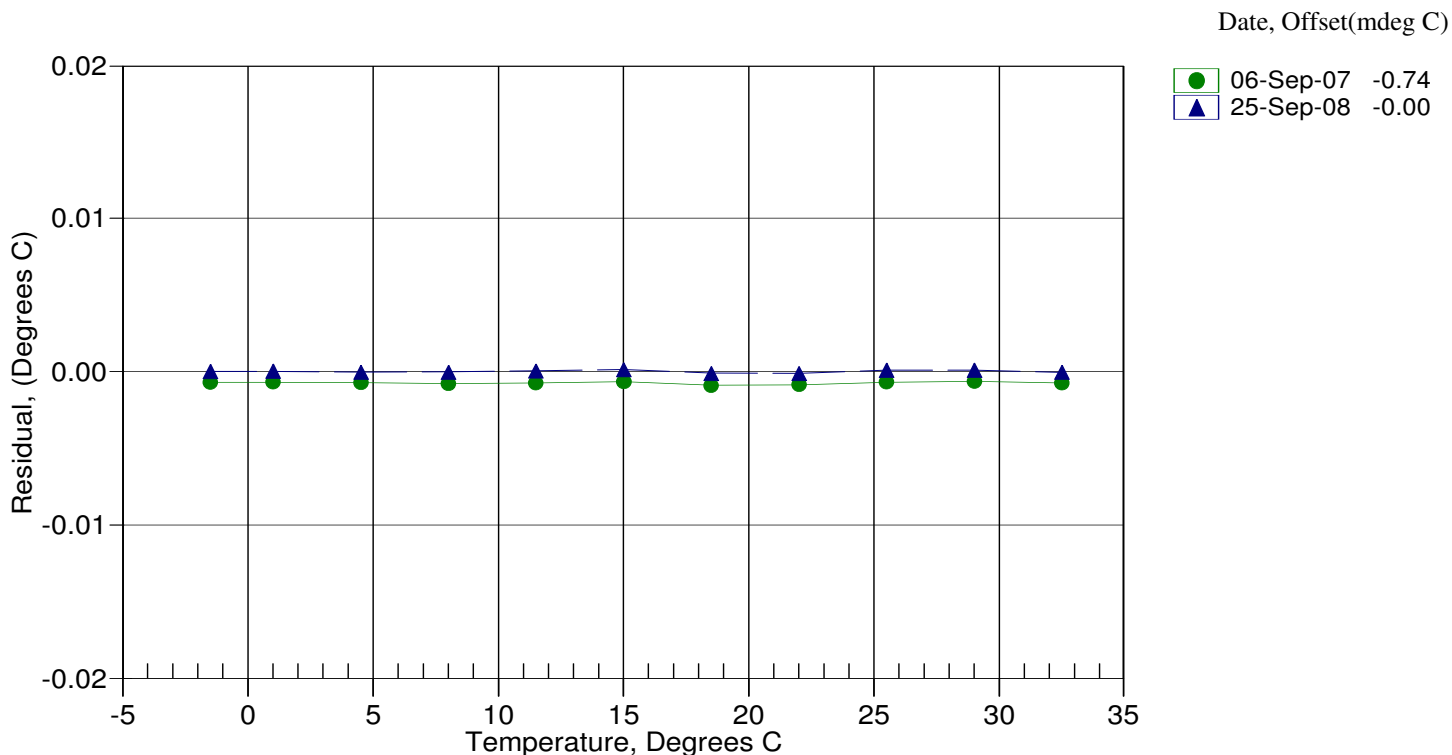
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5002	3084.221	-1.5002	0.00000
0.9998	3260.642	0.9998	0.00002
4.4998	3519.731	4.4998	-0.00004
7.9998	3793.315	7.9998	-0.00002
11.4998	4081.787	11.4998	0.00004
14.9998	4385.534	14.9999	0.00012
18.4998	4704.903	18.4997	-0.00010
21.9999	5040.315	21.9998	-0.00013
25.4998	5392.103	25.4999	0.00008
28.9998	5760.597	28.9999	0.00008
32.4998	6146.123	32.4997	-0.00005

Temperature ITS-90 = $1/\{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15$ (°C)

Temperature IPTS-68 = $1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$ (°C)

Following the recommendation of JPOTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature





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Temperature Calibration Report

Customer:	Woods Hole Oceangraphic Institution		
Job Number:	51761	Date of Report:	9/25/2008
Model Number	SBE 03Plus	Serial Number:	03P4303

Temperature sensors are normally calibrated 'as received', without adjustments, allowing a determination sensor drift. If the calibration identifies a problem, then a second calibration is performed after work is completed. The 'as received' calibration is not performed if the sensor is damaged or non-functional, or by customer request.

An 'as received' calibration certificate is provided, listing coefficients to convert sensor frequency to temperature. Users must choose whether the 'as received' calibration or the previous calibration better represents the sensor condition during deployment. In SEASOFT enter the chosen coefficients using the program SEACON. The coefficient 'offset' allows a small correction for drift between calibrations (consult the SEASOFT manual). Calibration coefficients obtained after a repair apply only to subsequent data.

'AS RECEIVED CALIBRATION'

☒ Performed ☐ Not Performed

Date: 9/25/2008

Drift since last cal: +0.00071 Degrees Celsius/year

Comments:

'CALIBRATION AFTER REPAIR'

☐ Performed ☒ Not Performed

Date:

Drift since Last cal: Degrees Celsius/year

Comments: