

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4039
CALIBRATION DATE: 02-Nov-04

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.41246777e-003
h = 6.49006252e-004
i = 2.35804599e-005
j = 2.11665280e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121180e-003
b = 6.02623047e-004
c = 1.61700521e-005
d = 2.11819188e-006
f0 = 3226.342

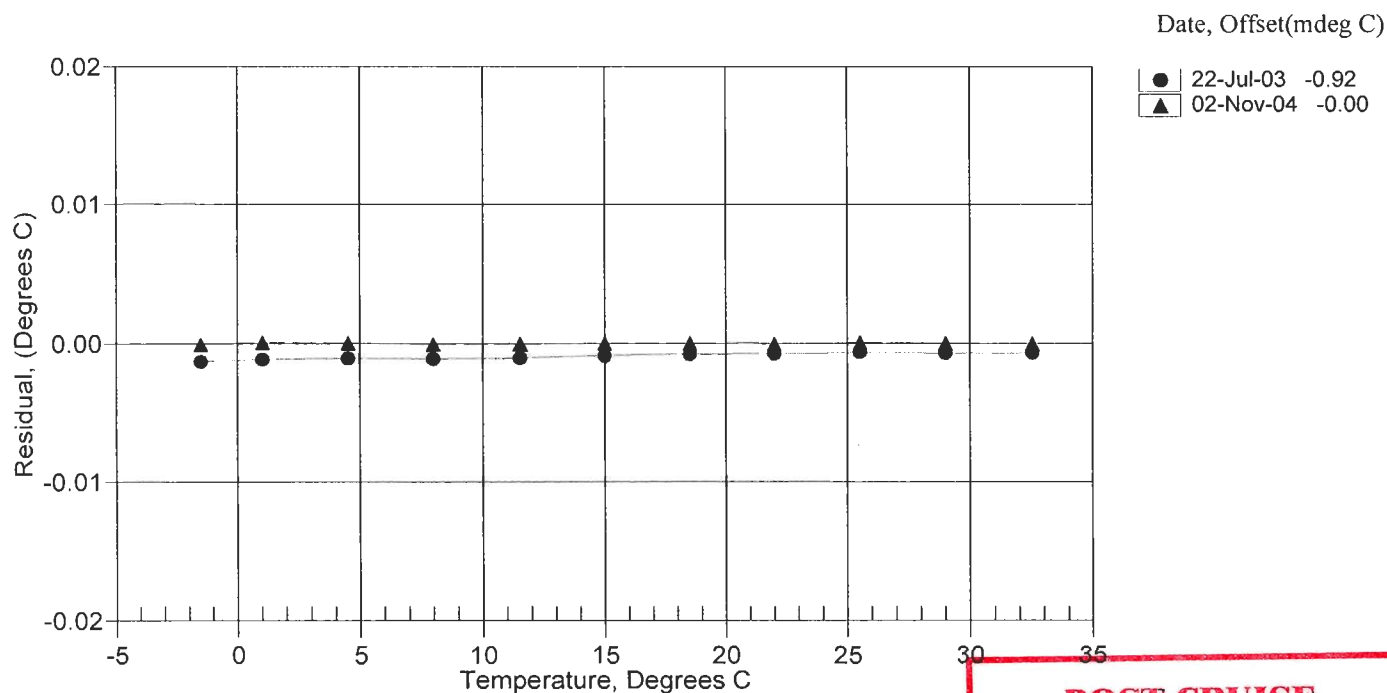
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	3226.342	-1.5000	-0.00006
1.0001	3411.506	1.0002	0.00008
4.5001	3683.461	4.5001	0.00004
8.0001	3970.659	8.0000	-0.00005
11.5001	4273.522	11.5001	-0.00004
15.0001	4592.444	15.0001	0.00000
18.5001	4927.806	18.5001	0.00002
22.0001	5279.976	22.0001	-0.00003
25.5001	5649.338	25.5002	0.00006
29.0001	6036.208	29.0001	0.00000
32.5001	6440.937	32.5001	-0.00002

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 ITS-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



**POST CRUISE
CALIBRATION**