

SEA-BIRD ELECTRONICS, INC.

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

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1652
CALIBRATION DATE: 18-Mar-05

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.83651129e-003
h = 6.76829465e-004
i = 2.53797264e-005
j = 1.89263156e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121122e-003
b = 6.03594219e-004
c = 1.51097896e-005
d = 1.89406368e-006
f0 = 6132.431

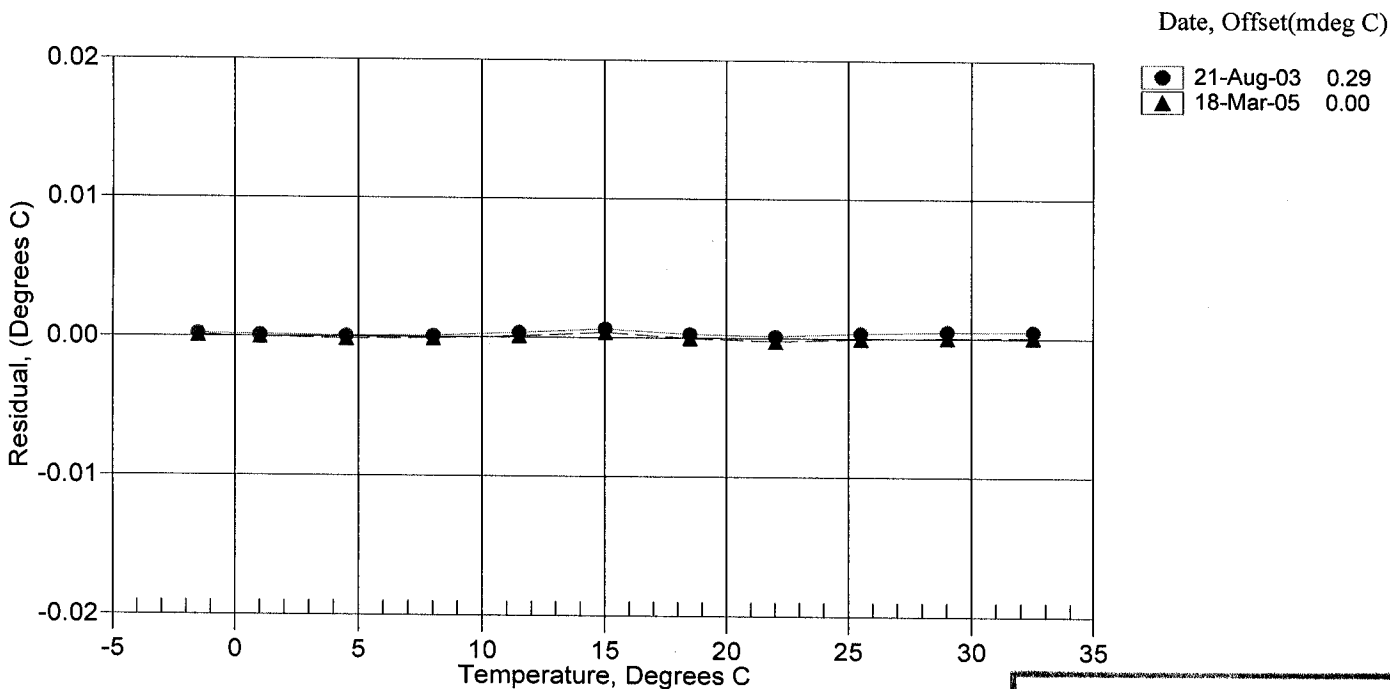
BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6132.431	-1.4999	0.00008
1.0000	6483.724	1.0000	-0.00002
4.5000	6999.531	4.4999	-0.00015
8.0000	7544.053	7.9999	-0.00011
11.5000	8118.045	11.5001	0.00008
15.0000	8722.233	15.0004	0.00036
18.5000	9357.184	18.5000	-0.00003
22.0000	10023.733	21.9998	-0.00024
25.5000	10722.589	25.4999	-0.00006
29.0000	11454.292	29.0000	0.00004
32.5000	12219.449	32.5000	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 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