

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 1075
CALIBRATION DATE: 30-Apr-02s

TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.81125134e-03$
 $h = 6.69474229e-04$
 $i = 2.53838021e-05$
 $j = 2.02418679e-06$
 $f_0 = 1000.000$

IPTS-68 COEFFICIENTS

$a = 3.68120998e-03$
 $b = 5.98133979e-04$
 $c = 1.45264632e-05$
 $d = 2.02558017e-06$
 $f_0 = 6003.593$

BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)
-1.4998	6003.593
1.0002	6350.749
4.5002	6860.725
8.0002	7399.373
11.5003	7967.483
15.0002	8565.767
18.5003	9194.940
22.0003	9855.676
25.5002	10548.644
29.0002	11274.506
32.5003	12033.896

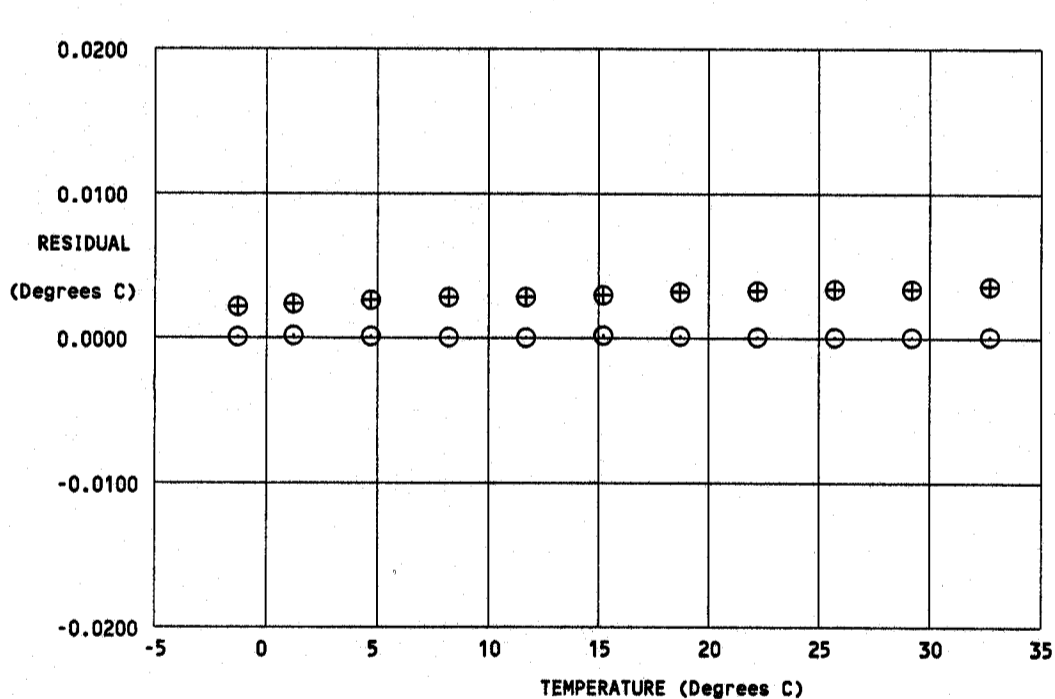
INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.4998	-0.00003
1.0002	0.00005
4.5002	0.00002
8.0001	-0.00005
11.5002	-0.00007
15.0003	0.00009
18.5003	0.00003
22.0003	-0.00002
25.5002	-0.00001
29.0002	-0.00003
32.5003	0.00002

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 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



calibration date	delta T [mdeg C]
⊕ 19-Jun-01s	2.87
○ 30-Apr-02s	0.00

POST CRUISE
CALIBRATION