

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 1701
CALIBRATION DATE: 14-Nov-00s

TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.78989231e-03$
 $h = 6.52911152e-04$
 $i = 1.80696806e-05$
 $j = 9.48206212e-07$
 $f_0 = 1000.000$

IPTS-68 COEFFICIENTS

$a = 3.68126991e-03$
 $b = 5.97812850e-04$
 $c = 1.30406428e-05$
 $d = 9.49338821e-07$
 $f_0 = 5913.505$

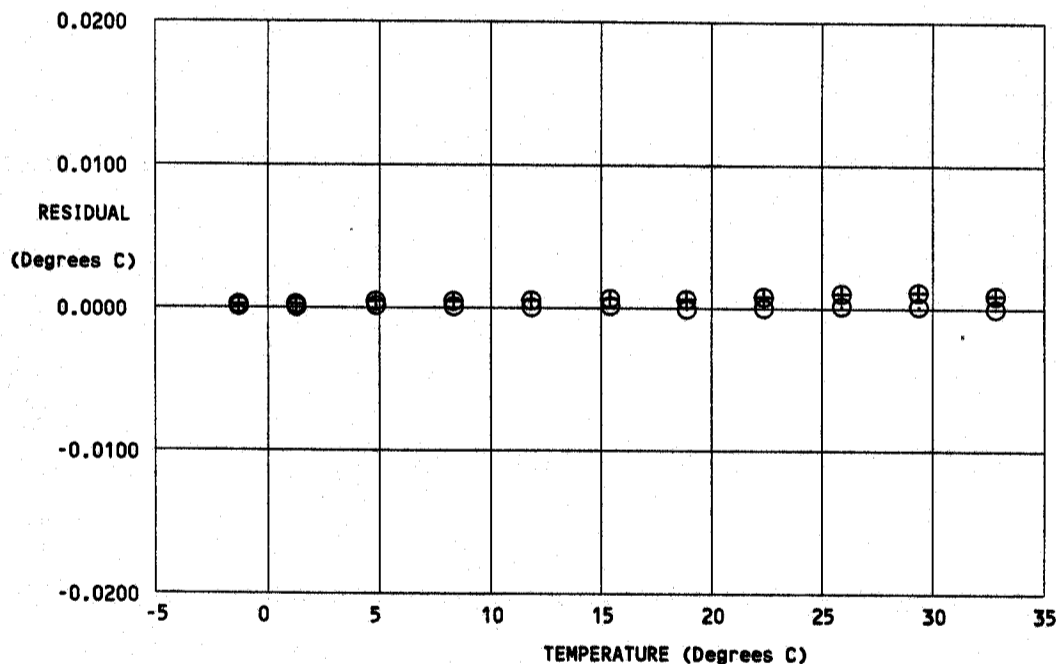
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.5043	5913.505	-1.5042	0.00000
1.0569	6264.135	1.0569	-0.00004
4.6315	6778.063	4.6315	0.00007
8.1382	7310.735	8.1382	0.00001
11.6405	7871.705	11.6405	-0.00002
15.2009	8472.413	15.2009	0.00007
18.6643	9086.861	18.6641	-0.00015
22.1645	9738.811	22.1644	-0.00005
25.6919	10427.979	25.6920	0.00011
29.1622	11138.107	29.1623	0.00009
32.6365	11881.565	32.6364	-0.00008

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]
⊕ 16-Nov-99s	0.58
○ 14-Nov-00s	-0.00

POST CRUISE
CALIBRATION