

# SEA-BIRD ELECTRONICS, INC.

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SEC.

SENSOR SERIAL NUMBER: 2500  
CALIBRATION DATE: 06-Jan-05

SBE3 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

g = 4.33736745e-003  
h = 6.53915278e-004  
i = 2.35484672e-005  
j = 2.10645206e-006  
f0 = 1000.0

## ITS-68 COEFFICIENTS

a = 3.68121092e-003  
b = 6.11962884e-004  
c = 1.70132624e-005  
d = 2.10807608e-006  
f0 = 2825.474

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4999	2825.474	-1.4999	0.00000
1.0002	2985.091	1.0002	0.00002
4.5002	3219.310	4.5002	-0.00001
8.0002	3466.399	8.0001	-0.00006
11.5002	3726.702	11.5002	-0.00000
15.0002	4000.544	15.0004	0.00016
18.5002	4288.203	18.5002	-0.00003
22.0002	4590.020	22.0001	-0.00011
25.5002	4906.297	25.5002	0.00002
29.0002	5237.288	29.0002	0.00003
32.5002	5583.268	32.5002	-0.00001

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)

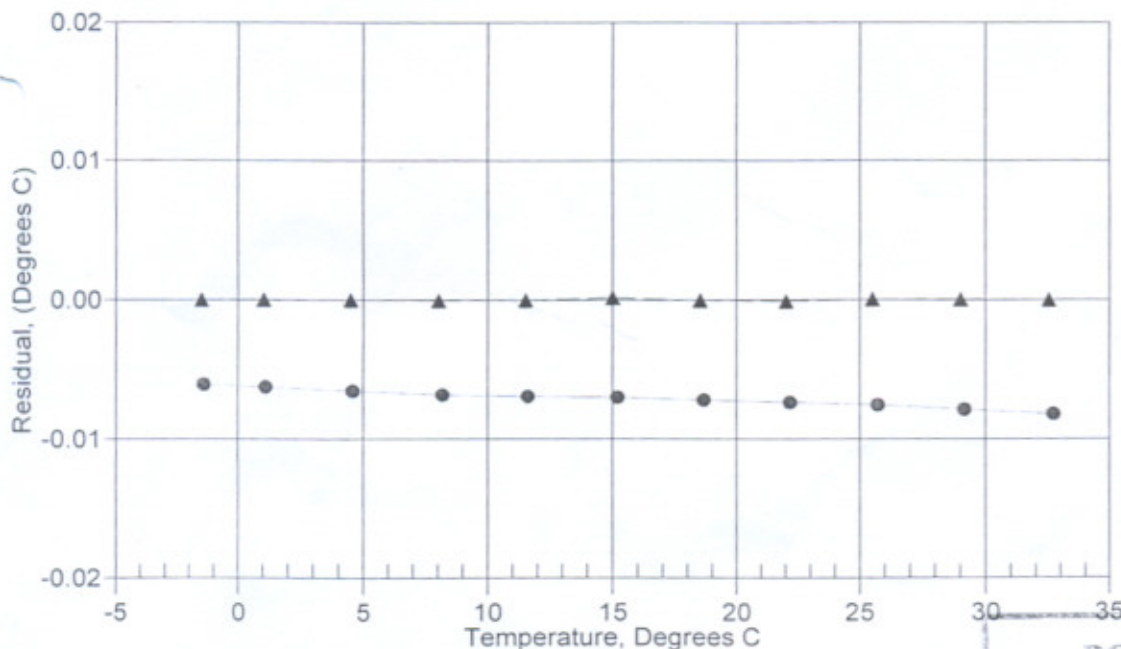
Temperature ITS-68 =  $1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$  (°C)

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

Residual = instrument temperature - bath temperature

Date, Offset(mdeg C)

● 17-Jun-98 -7.08  
▲ 06-Jan-05 0.00



POST CRUISE  
CALIBRATION