

# SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 436  
 CALIBRATION DATE: 03-23-90

## TEMPERATURE CALIBRATION DATA ITS-90 TEMPERATURE SCALE

### ITS-90 COEFFICIENTS

g = 4.19940548e-03  
 h = 6.11947212e-04  
 i = 1.01694065e-05  
 j = -1.00244080e-07  
 f<sub>0</sub> = 1000.000

### IPTS-68 COEFFICIENTS

a = 3.67474332e-03  
 b = 5.94167245e-04  
 c = 1.04567343e-05  
 d = -9.94413052e-08  
 f<sub>0</sub> = 2387.050

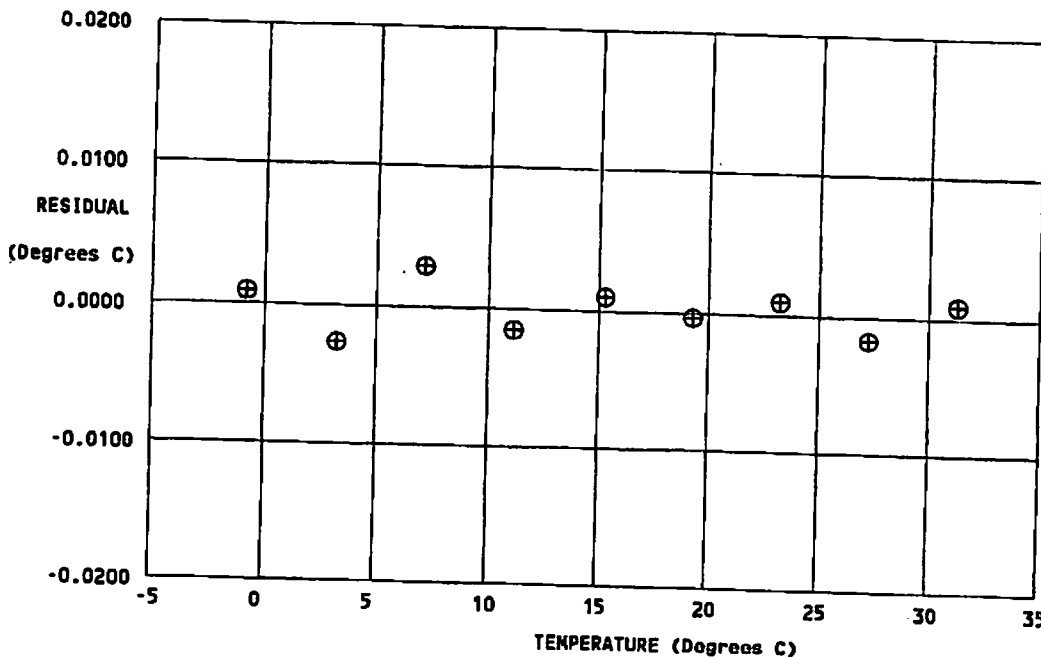
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
-1.0228	2387.050	-1.0219	0.00085
3.0204	2613.500	3.0177	-0.00267
6.9573	2848.780	6.9602	0.00283
10.9326	3100.460	10.9310	-0.00156
15.0671	3378.840	15.0680	0.00093
19.0924	3665.910	19.0921	-0.00035
23.0251	3962.500	23.0260	0.00089
27.0479	4282.310	27.0462	-0.00174
31.0866	4621.240	31.0875	0.00082

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<sub>68</sub> is assumed to be 1.00024 \* T<sub>90</sub> (-2 to 35 °C).

Residual = instrument temperature - bath temperature



calibration date    delta T  
 (mdeg C)  
 ⊕ 03-23-90    -0.00