

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER = 436
 CALIBRATION DATE: 16-Nov-02

TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.19924244e-03
 h = 6.07540788e-04
 i = 3.94935565e-06
 j = -2.22692642e-06
 f₀ = 1000.000

IPTS-68 COEFFICIENTS

a = 3.64763542e-03
 b = 5.94837595e-04
 c = 1.00959957e-05
 d = -2.22645488e-06
 f₀ = 2499.785

BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
1.0000	2499.785	1.0000	-0.00003
4.4999	2701.016	4.5000	0.00010
14.9998	3373.053	14.9993	-0.00053
18.5000	3621.072	18.5005	0.00054
23.9998	4036.020	24.0001	0.00028
28.9999	4441.057	28.9992	-0.00066
32.5001	4741.042	32.5004	0.00031

$$\text{Temperature ITS-90} = 1/\{g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)]\} - 273.15 \text{ (}^\circ\text{C)}$$

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

Following the recommendation of JPOTS: T₆₈ is assumed to be 1.00024 * T₉₀ (-2 to 35 °C).

Residual = instrument temperature - bath temperature

