

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 0436
CALIBRATION DATE: 06-Apr-06

SBE19 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.20169673e-003
h = 6.13639921e-004
i = 8.84912610e-006
j = -9.56462521e-007
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.64763258e-003
b = 5.95157620e-004
c = 1.15040858e-005
d = -9.55704598e-007
f0 = 2499.806

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	2499.806	1.0002	0.00018
4.4999	2700.922	4.4996	-0.00035
15.0000	3373.136	15.0006	0.00060
18.5000	3621.076	18.4996	-0.00045
24.0000	4036.240	24.0000	0.00004
29.0000	4441.432	28.9999	-0.00011
32.5001	4741.357	32.5002	0.00009

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

Date, Offset(mdeg C)

06-Apr-06 0.00

