

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1049
CALIBRATION DATE: 25-May-02

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84669633e-003
h = 6.76946920e-004
i = 2.68208598e-005
j = 2.14931465e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68120926e-003
b = 6.00355393e-004
c = 1.50125313e-005
d = 2.15076571e-006
f0 = 6268.537

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4997	6268.537	-1.4998	-0.00007
1.0002	6629.650	1.0003	0.00012
4.5003	7160.042	4.5003	0.00001
8.0003	7720.146	8.0002	-0.00007
11.5003	8310.770	11.5002	-0.00006
15.0003	8932.671	15.0003	0.00002
18.5003	9586.564	18.5004	0.00005
22.0003	10273.146	22.0003	-0.00000
25.5003	10993.125	25.5003	-0.00000
29.0003	11747.139	29.0003	-0.00002
32.5003	12535.824	32.5003	0.00000

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

