

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 2958
CALIBRATION DATE: 17-Aug-06

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.39475717e-003
h = 6.72673117e-004
i = 2.98389780e-005
j = 2.74561199e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121229e-003
b = 6.16736024e-004
c = 2.07273417e-005
d = 2.74762177e-006
f0 = 3033.828

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3033.828	-1.5000	0.00000
1.0000	3203.897	1.0000	-0.00001
4.5000	3453.535	4.5001	0.00007
8.0000	3716.957	7.9999	-0.00011
11.5000	3994.574	11.5000	-0.00003
15.0000	4286.731	15.0001	0.00006
18.5000	4593.775	18.5001	0.00008
22.0000	4916.041	22.0000	-0.00001
25.5000	5253.873	25.4999	-0.00005
29.0000	5607.588	28.9999	-0.00006
32.5000	5977.500	32.5001	0.00005

Temperature ITS-90 = 1/{g + h[ln(f₀/f)] + i[ln²(f₀/f)] + j[ln³(f₀/f)]} - 273.15 (°C)

Temperature ITS-68 = 1/{a + b[ln(f₀/f)] + c[ln²(f₀/f)] + d[ln³(f₀/f)]} - 273.15 (°C)

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

Residual = instrument temperature - bath temperature

