

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4799
CALIBRATION DATE: 21-Aug-09

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36410651e-003
h = 6.37254013e-004
i = 2.10612107e-005
j = 1.79386309e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121348e-003
b = 5.97322091e-004
c = 1.51232338e-005
d = 1.79526861e-006
f0 = 3029.495

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3029.495	-1.5001	0.00001
0.9999	3204.923	0.9999	-0.00002
4.4999	3462.709	4.4999	-0.00000
7.9999	3735.075	7.9999	-0.00002
11.4998	4022.422	11.4998	0.00004
14.9999	4325.153	14.9999	0.00003
18.4999	4643.623	18.4999	-0.00003
21.9999	4978.217	21.9999	-0.00004
25.4999	5329.292	25.4999	-0.00001
28.9998	5697.180	28.9999	0.00006
32.4999	6082.224	32.4999	-0.00002

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

