

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1320
CALIBRATION DATE: 14-Jun-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.82704530e-003
h = 6.76899405e-004
i = 2.59915275e-005
j = 1.99226767e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68120939e-003
b = 6.02840195e-004
c = 1.52605427e-005
d = 1.99372216e-006
f0 = 6049.803

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4998	6049.803	-1.4998	0.00002
1.0002	6396.825	1.0002	-0.00001
4.5002	6906.422	4.5002	-0.00004
8.0001	7444.440	8.0001	0.00005
11.5002	8011.637	11.5002	-0.00000
15.0002	8608.720	15.0002	-0.00000
18.5002	9236.403	18.5002	0.00001
22.0002	9895.357	22.0002	-0.00002
25.5002	10586.250	25.5002	-0.00002
29.0002	11309.715	29.0002	0.00003
32.5002	12066.328	32.5002	-0.00001

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

