

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1320
CALIBRATION DATE: 30-Jun-11

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.82727135e-003
h = 6.77223932e-004
i = 2.61453523e-005
j = 2.01650977e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68120961e-003
b = 6.02846651e-004
c = 1.52834759e-005
d = 2.01796906e-006
f0 = 6049.790

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4998	6049.790	-1.4998	-0.00000
1.0002	6396.813	1.0002	0.00001
4.5002	6906.409	4.5002	-0.00000
8.0002	7444.426	8.0002	-0.00001
11.5002	8011.618	11.5002	0.00002
15.0002	8608.695	15.0002	-0.00001
18.5002	9236.381	18.5002	0.00002
22.0002	9895.338	22.0002	0.00002
25.5002	10586.216	25.5002	-0.00003
29.0002	11309.669	29.0002	-0.00000
32.5002	12066.279	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

