

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 4515
CALIBRATION DATE: 02-Feb-12

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.42225263e-003
h = 6.47748519e-004
i = 2.25024899e-005
j = 1.84202969e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121199e-003
b = 6.02217808e-004
c = 1.59632888e-005
d = 1.84351619e-006
f0 = 3281.552

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3281.552	-1.5000	0.00002
1.0000	3469.998	1.0000	-0.00001
4.5000	3746.798	4.5000	-0.00003
8.0000	4039.124	7.9999	-0.00006
11.5000	4347.414	11.5001	0.00008
15.0000	4672.052	15.0001	0.00008
18.5000	5013.438	18.5000	-0.00004
22.0000	5371.985	22.0000	-0.00003
25.5000	5748.057	25.5000	-0.00002
29.0000	6142.016	29.0000	0.00000
32.5000	6554.210	32.5000	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

