

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 2633
 CALIBRATION DATE: 14-Feb-14

SBE3 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36655623e-003
 h = 6.48141647e-004
 i = 2.39992521e-005
 j = 2.32420778e-006
 f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121238e-003
 b = 6.04016598e-004
 c = 1.63763134e-005
 d = 2.32579437e-006
 f0 = 2995.911

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	2995.911	-1.5000	-0.00000
1.0000	3167.434	1.0000	-0.00001
4.5000	3419.342	4.5000	0.00003
8.0000	3685.326	8.0000	-0.00000
11.5000	3965.766	11.5000	-0.00001
15.0000	4261.018	14.9999	-0.00006
18.5000	4571.449	18.5000	0.00003
22.0000	4897.378	22.0000	0.00004
25.5000	5239.132	25.5000	0.00000
29.0000	5597.028	29.0000	-0.00004
32.5000	5971.373	32.5000	0.00001

$$\text{Temperature ITS-90} = 1 / \{ g + h[\ln(f_0/f)] + i[\ln^2(f_0/f)] + j[\ln^3(f_0/f)] \} - 273.15 \text{ (}^\circ\text{C)}$$

$$\text{Temperature IPTS-68} = 1 / \{ a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)] \} - 273.15 \text{ (}^\circ\text{C)}$$

Following the recommendation of JPOTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

