

Sea-Bird GmbH

Postfach 1167, 87401 Kempten, Germany

Phone: +49 831 960994 701 Fax: +49 831 960994 709 Email: seabird.eu@seabird.com

SENSOR SERIAL NUMBER: 5144
CALIBRATION DATE: 28-Mar-13

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.42342429e-003
h = 6.49502546e-004
i = 2.41073793e-005
j = 2.28906933e-006
f0 = 1000.0

IPTS-68 COEFFICIENTS

a = 3.68121229e-003
b = 6.02019387e-004
c = 1.59675876e-005
d = 2.29061625e-006
f0 = 3284.842

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3284.842	-1.5000	0.00000
1.0000	3473.544	1.0000	0.00001
4.5000	3750.716	4.5000	-0.00002
8.0000	4043.435	8.0000	0.00000
11.5000	4352.106	11.5000	-0.00000
15.0000	4677.136	15.0000	0.00003
18.5000	5018.904	18.5000	0.00000
22.0000	5377.791	22.0000	-0.00001
25.5000	5754.157	25.5000	0.00000
29.0000	6148.341	29.0000	-0.00003
32.5000	6560.687	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

Date, Offset(mdeg C)

