

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington, 98005 USA

Phone: (425) 643 - 9866 Fax (425) 643 - 9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 1364
CALIBRATION DATE: 26-Oct-07

SBE3 TEMPERATURE CALIBRATION DATA
IPTS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84770027e-003
h = 6.77494181e-004
i = 2.47439456e-005
j = 1.78358704e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121052e-003
b = 6.05065796e-004
c = 1.49918454e-005
d = 1.78499896e-006
f0 = 6219.625

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	6219.625	-1.4999	0.00013
1.0000	6574.997	0.9999	-0.00010
4.5000	7096.726	4.4999	-0.00015
8.0000	7647.364	7.9999	-0.00011
11.5000	8227.683	11.5001	0.00011
15.0000	8838.398	15.0004	0.00040
18.5000	9480.075	18.5000	-0.00002
22.0000	10153.545	21.9997	-0.00032
25.5000	10859.562	25.4999	-0.00006
29.0000	11598.625	29.0001	0.00006
32.5000	12371.346	32.5001	0.00005

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

