

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: 1652
CALIBRATION DATE: 21-Aug-03

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.83655430e-003
h = 6.76895551e-004
i = 2.54129825e-005
j = 1.89779600e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68120596e-003
b = 6.03590287e-004
c = 1.51148821e-005
d = 1.89922930e-006
f0 = 6132.502

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4996	6132.502	-1.4995	0.00007
1.0004	6483.803	1.0004	-0.00002
4.5004	6999.623	4.5003	-0.00011
8.0004	7544.146	8.0003	-0.00013
11.5004	8118.157	11.5005	0.00010
15.0004	8722.350	15.0007	0.00034
18.5004	9357.313	18.5003	-0.00006
22.0004	10023.885	22.0002	-0.00022
25.5004	10722.754	25.5004	-0.00004
29.0004	11454.473	29.0005	0.00006
32.5004	12219.638	32.5004	0.00003

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 ITS-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)

