

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: 1049
CALIBRATION DATE: 25-Jun-96

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84694701e-003
h = 6.77279996e-004
i = 2.70025311e-005
j = 2.17974749e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68159817e-003
b = 6.00345448e-004
c = 1.50301699e-005
d = 2.18120304e-006
f0 = 6265.137

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5285	6265.137	-1.5285	0.00002
1.0321	6635.053	1.0321	-0.00004
4.6059	7177.309	4.6059	0.00003
8.1116	7739.369	8.1116	0.00001
11.6146	8331.591	11.6146	-0.00001
15.1749	8965.622	15.1748	-0.00002
18.6375	9614.062	18.6375	0.00001
22.1384	10302.252	22.1384	0.00003
25.6657	11029.428	25.6657	-0.00001
29.1370	11778.860	29.1370	-0.00002
32.6118	12563.198	32.6118	0.00001

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

