

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 1049
CALIBRATION DATE: 11-Dec-96

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.84681409e-003
h = 6.77015135e-004
i = 2.68527073e-005
j = 2.15361593e-006
f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68024290e-003
b = 6.00298168e-004
c = 1.50094965e-005
d = 2.15506612e-006
f0 = 6279.402

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.4284	6279.402	-1.4285	-0.00002
1.0811	6642.385	1.0811	0.00004
4.5727	7172.217	4.5727	0.00001
8.1713	7749.268	8.1713	-0.00003
11.6044	8329.883	11.6044	-0.00002
15.1622	8963.364	15.1622	0.00001
18.6653	9619.441	18.6653	0.00002
22.1645	10307.541	22.1646	0.00001
25.7246	11041.890	25.7246	-0.00001
29.1383	11779.176	29.1383	-0.00001
32.6722	12577.168	32.6722	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

