

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4491
CALIBRATION DATE: 31-Mar-06

SBE3 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

$g = 4.42655411e-003$
 $h = 6.46511736e-004$
 $i = 2.26565201e-005$
 $j = 1.95478000e-006$
 $f_0 = 1000.0$

ITS-68 COEFFICIENTS

$a = 3.68121329e-003$
 $b = 6.00789994e-004$
 $c = 1.56585827e-005$
 $d = 1.95625577e-006$
 $f_0 = 3313.375$

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5001	3313.375	-1.5001	0.00003
1.0000	3504.115	1.0000	-0.00003
4.4999	3784.298	4.4999	-0.00003
7.9999	4080.239	7.9999	0.00002
11.4999	4392.347	11.4999	0.00001
15.0000	4721.048	15.0000	-0.00002
18.4999	5066.728	18.4999	0.00004
21.9999	5429.787	21.9999	0.00002
25.5000	5810.603	25.4999	-0.00007
28.9999	6209.530	28.9999	-0.00001
32.4999	6626.930	32.4999	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)

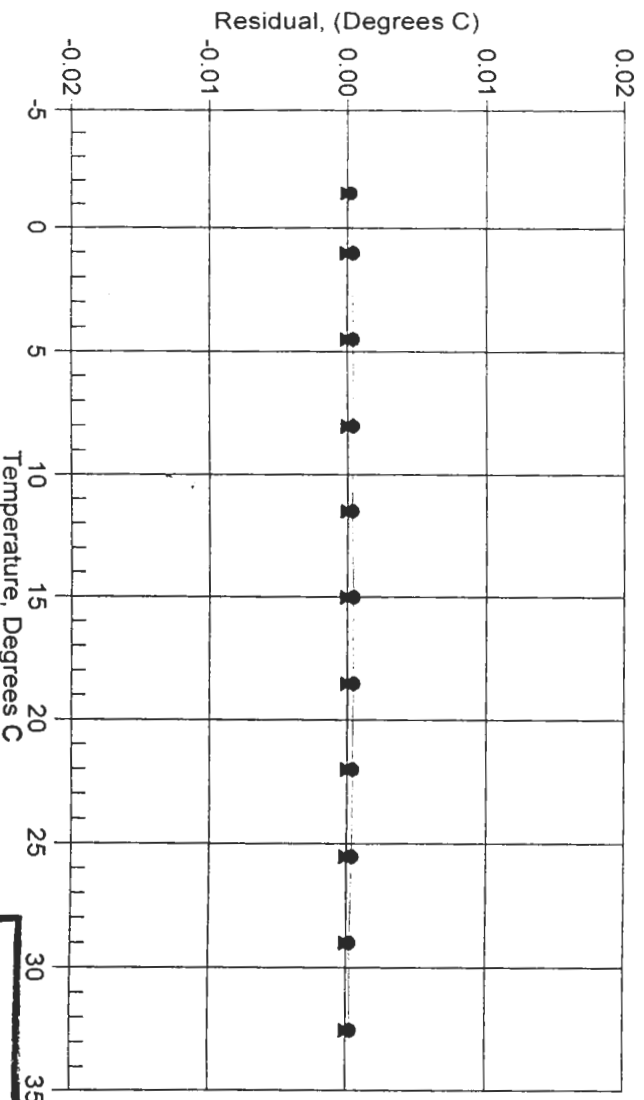
Temperature ITS-68 = $1/\{a + b[\ln(f_0/f)] + c[\ln^2(f_0/f)] + d[\ln^3(f_0/f)]\} - 273.15$ (°C)

Following the recommendation of JPTS: T_{68} is assumed to be $1.00024 * T_{90}$ (-2 to 35 °C)

Residual = instrument temperature - bath temperature

Date, Offset(mdeg C)

● 22-Apr-05 0.35
▲ 31-Mar-06 0.00



**POST CRUISE
CALIBRATION**