

SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington 98005 USA
 Phone: (206) 643 - 9866 Fax: (206) 643 - 9954 Internet: seabird@seabird.com

SENSOR SERIAL NUMBER = 2326
 CALIBRATION DATE: 10aug05

TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

ITS-90 COEFFICIENTS

g = 4.17488482e-03
 h = 5.99950082e-04
 i = -2.44082078e-06
 j = -3.55917682e-06
 f₀ = 1000.000

IPTS-68 COEFFICIENTS

a = 3.64820300e-03
 b = 5.96136600e-04
 c = 6.96716059e-06
 d = -3.55918453e-06
 f₀ = 2407.900

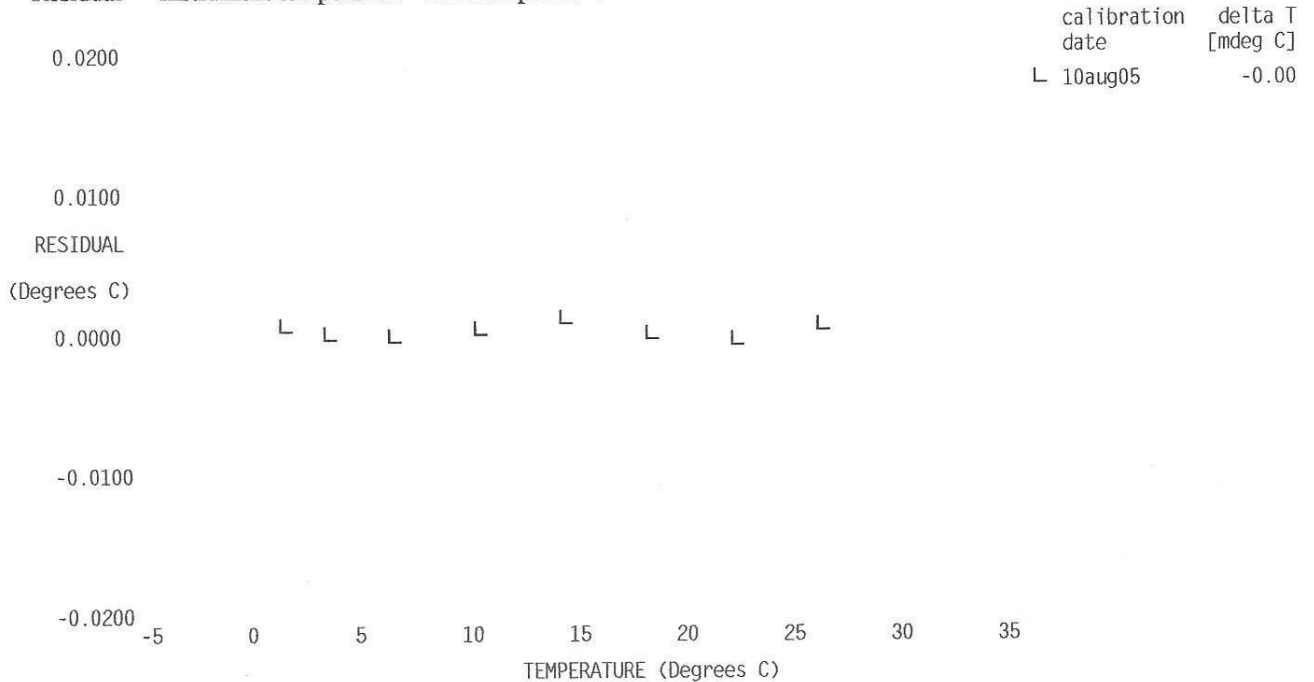
BATH TEMP (ITS-90 °C)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90 °C)	RESIDUAL (ITS-90 °C)
0.9570	2407.900	0.9573	0.00032
3.0040	2519.700	3.0037	-0.00028
6.0290	2691.500	6.0286	-0.00043
10.0370	2931.500	10.0371	0.00008
14.0160	3184.100	14.0169	0.00085
18.0400	3454.400	18.0398	-0.00025
22.0180	3736.900	22.0173	-0.00066
26.0230	4037.200	26.0234	0.00036

Temperature ITS-90 = $1/\{g + h[Mn(f_0/f)] + i[Mn^2(f_0/f)] + j[Mn^3(f_0/f)]\} - 273.15$ (°C)

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

Following the recommendation of JPOTS: T₆₈ is assumed to be 1.00024 * T₉₀ (-2 to 35 °C).

Residual = instrument temperature - bath temperature



SEA-BIRD ELECTRONICS, INC.

1808 136th Place N.E., Bellevue, Washington 98005 USA
 Phone: (206) 643 - 9866 Fax: (206) 643 - 9954 Internet: seabird@seabird.com

SENSOR SERIAL NUMBER = 2326
 CALIBRATION DATE: 10aug05

CONDUCTIVITY CALIBRATION DATA
 PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

GHIJ COEFFICIENTS

g = -4.06434577e+00
 h = 4.83699844e-01
 i = 1.70241957e-03
 j = -4.81092408e-05
 CPcor = -9.57e-08 (nominal)
 CTcor = 3.25e-06 (nominal)

ABCDM COEFFICIENTS

a = 6.08251998e-02
 b = 4.19232265e-01
 c = -4.05444887e+00
 d = -2.25144449e-04
 m = 2.1
 CPcor = -9.57e-08 (nominal)

BATH TEMP (ITS-90 °C)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (kHz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
0.0000	0.0000	0.00000	2.88530	-0.00000	-0.00000
0.9570	38.5460	3.25822	8.60610	3.25820	-0.00002
3.0040	38.5480	3.45409	8.83150	3.45417	0.00008
6.0290	38.5490	3.75081	9.16200	3.75081	-0.00000
10.0370	38.5500	4.15674	9.59550	4.15665	-0.00009
14.0160	38.5510	4.57309	10.02060	4.57309	0.00000
18.0400	38.5510	5.00641	10.44430	5.00634	-0.00007
22.0180	38.5490	5.44560	10.85700	5.44579	0.00019
26.0230	38.5430	5.89721	11.26500	5.89712	-0.00009

Conductivity = $(g + hf^2 + if^3 + jf^4) / [10(1 + dt + ep)]$ Siemens/meter

Conductivity = $(af^m + bf^2 + c + dt) / [10(1 + ep)]$ Siemens/meter

t = temperaure [deg C]; p = pressure [decibars]; d = CTcor; e = CPcor;

Residual = (instrument conductivity - bath conductivity) using g, h, i, j coefficients

