

SEA-BIRD ELECTRONICS, INC.

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SENSOR SERIAL NUMBER: 4799

CALIBRATION DATE: 01-Jun-07

SBE3 TEMPERATURE CALIBRATION DATA

ITS-90 TEMPRATURE SCALE

ITS-90 COEFFICIENTS

g = 4.36389541e-003

h = 6.36789991e-004

i = 2.07405203e-005

j = 1.72090529e-006

f0 = 1000.0

ITS-68 COEFFICIENTS

a = 3.68121221e-003

b = 5.97299577e-004

c = 1.50450393e-005

d = 1.72229493e-006

f0 = 3029.545

BATH TEMP (ITS-90)	INSTRUMENT FREQ (Hz)	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
-1.5000	3029.545	-1.5000	0.00001
1.0000	3204.982	1.0000	-0.00002
4.5000	3462.778	4.5000	0.00001
8.0000	3735.149	8.0000	-0.00002
11.5000	4022.506	11.5000	0.00001
15.0000	4325.238	15.0001	0.00007
18.5000	4643.701	18.4999	-0.00009
22.0000	4978.309	22.0000	-0.00000
25.5000	5329.391	25.5000	0.00003
29.0000	5697.292	29.0000	0.00001
32.5000	6082.349	32.5000	-0.00001

Temperature ITS-90 = 1/{g + h[ln(f<sub>0</sub>/f)] + i[ln<sup>2</sup>(f<sub>0</sub>/f)] + j[ln<sup>3</sup>(f<sub>0</sub>/f)]} - 273.15 (°C)

Temperature ITS-68 = 1/{a + b[ln(f<sub>0</sub>/f)] + c[ln<sup>2</sup>(f<sub>0</sub>/f)] + d[ln<sup>3</sup>(f<sub>0</sub>/f)]} - 273.15 (°C)

Following the recommendation of JPOTS: T<sub>68</sub> is assumed to be 1.00024 \* T<sub>90</sub> (-2 to 35 °C)

Residual = instrument temperature - bath temperature

