



Sea-Bird Scientific
13431 NE 20th Street
Bellevue, WA 98005
USA

+1 425-643-9866
seabird@seabird.com
www.seabird.com

SENSOR SERIAL NUMBER: 0814
CALIBRATION DATE: 14-Jan-25

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -5.734530e-004
a1 = 4.353791e-004
a2 = -1.701847e-005
a3 = 5.939870e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	772376.0	-1.5000	0.0000
1.0000	690779.3	1.0000	0.0000
4.5000	592262.7	4.5000	-0.0000
8.0000	509220.4	8.0000	-0.0000
11.5000	439030.0	11.5000	0.0000
15.0000	379543.0	15.0000	0.0000
18.5000	328993.1	18.5000	0.0000
22.0000	285924.4	22.0001	0.0001
25.5000	249136.7	25.5000	-0.0000
29.0001	217632.4	29.0000	-0.0001
32.5000	190585.4	32.5001	0.0001

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/\{a0 + a1[\ln(n)] + a2[\ln^2(n)] + a3[\ln^3(n)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

