



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

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

SENSOR SERIAL NUMBER: 0810
CALIBRATION DATE: 14-Jan-25

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -2.639934e-005
a1 = 2.806820e-004
a2 = -2.612870e-006
a3 = 1.650756e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	701882.2	-1.5000	0.0000
1.0000	627492.6	1.0000	-0.0000
4.5000	537926.9	4.5000	-0.0000
8.0000	462637.7	8.0000	-0.0000
11.5000	399135.2	11.5000	0.0000
15.0000	345401.7	15.0000	0.0000
18.5000	299788.8	18.5000	0.0000
22.0000	260949.1	22.0000	0.0000
25.5000	227779.0	25.4999	-0.0001
29.0001	199365.3	29.0000	-0.0001
32.5000	174958.2	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

