



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

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

SENSOR SERIAL NUMBER: 0580
CALIBRATION DATE: 08-May-24

SBE 39 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 2.689430e-005
a1 = 2.698176e-004
a2 = -2.399665e-006
a3 = 1.669233e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
-1.5000	830200.0	-1.5000	0.0000
1.0000	741456.6	0.9999	-0.0001
4.5000	634690.0	4.5002	0.0002
8.0000	545043.5	8.0000	0.0000
11.5000	469510.8	11.4999	-0.0001
15.0000	405666.1	14.9999	-0.0001
18.5000	351530.2	18.5000	-0.0000
22.0000	305486.6	22.0001	0.0001
25.5000	266214.1	25.5000	0.0000
29.0000	232616.0	29.0000	-0.0000
32.5000	203791.7	32.5000	-0.0000

n = Instrument Output (counts)

Temperature ITS-90 (°C) = $1/\{a_0 + a_1[\ln(n)] + a_2[\ln^2(n)] + a_3[\ln^3(n)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

