



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

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

SENSOR SERIAL NUMBER: 3766
CALIBRATION DATE: 05-Jan-25

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 5.348289e-005
a1 = 2.666492e-004
a2 = -1.529151e-006
a3 = 1.364600e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	591559.2	1.0001	0.0001
4.5000	506905.0	4.4999	-0.0001
15.0000	325082.0	15.0001	0.0001
18.5000	282044.7	18.5000	0.0000
24.0000	226943.3	24.0000	0.0000
29.0000	187358.4	28.9998	-0.0002
32.5000	164360.5	32.5001	0.0001

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

