



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

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

SENSOR SERIAL NUMBER: 4254
CALIBRATION DATE: 22-Sep-22

SBE 37 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -3.187723e-005
a1 = 2.783200e-004
a2 = -2.443594e-006
a3 = 1.582690e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	677926.8	0.9998	-0.0002
4.5000	580888.1	4.5003	0.0003
15.0000	372532.1	14.9996	-0.0004
18.5000	323202.6	18.5001	0.0001
24.0000	260058.1	24.0003	0.0003
29.0000	214700.2	28.9999	-0.0001
32.5000	188350.9	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

