



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

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

SENSOR SERIAL NUMBER: 0455
CALIBRATION DATE: 08-Mar-25

SBE 45 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 4.568758e-005
a1 = 2.708946e-004
a2 = -2.163317e-006
a3 = 1.450717e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	686237.4	1.0000	0.0000
4.5000	585865.4	4.5000	-0.0000
15.0000	371781.0	15.0000	0.0000
18.5000	321482.6	18.5000	-0.0000
24.0000	257359.6	24.0000	0.0000
29.0000	211521.1	28.9999	-0.0001
32.5000	184996.6	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

