



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

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

SENSOR SERIAL NUMBER: 0122
CALIBRATION DATE: 08-Mar-18

SBE 45 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -1.930067e-004
a1 = 3.008733e-004
a2 = -3.907139e-006
a3 = 1.900331e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	788616.0	1.0000	0.0000
4.5000	676309.8	4.4999	-0.0001
15.0000	434802.2	15.0001	0.0001
18.5000	377558.6	18.5001	0.0001
24.0167	304018.6	24.0165	-0.0002
29.0001	251465.4	29.0003	0.0002
32.5000	220805.3	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

