



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: 17-Sep-19

SBE 45 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 7.198293e-005
 a1 = 2.646095e-004
 a2 = -1.662652e-006
 a3 = 1.317763e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	686275.7	1.0000	0.0000
4.5000	585891.1	4.4999	-0.0001
15.0000	371789.0	15.0001	0.0001
18.5000	321490.7	18.4999	-0.0001
24.0000	257366.7	23.9999	-0.0001
29.0000	211524.7	29.0001	0.0001
32.5000	185000.5	32.5000	-0.0000

n = Instrument Output (counts)

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

Residual (°C) = instrument temperature - bath temperature

