



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

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

SENSOR SERIAL NUMBER: 0080
 CALIBRATION DATE: 26-Feb-19

SBE 45 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 2.649720e-005
 a1 = 2.700126e-004
 a2 = -2.101720e-006
 a3 = 1.504988e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	702102.3	1.0000	0.0000
4.5000	600654.6	4.4999	-0.0001
15.0000	383372.1	15.0001	0.0001
18.5000	332097.9	18.5001	0.0001
23.9999	266576.5	23.9997	-0.0002
29.0000	219598.0	29.0002	0.0002
32.5000	192359.9	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

