



Sea-Bird Scientific  
13431 NE 20<sup>th</sup> Street  
Bellevue, WA 98005  
USA

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

SENSOR SERIAL NUMBER: 2341  
CALIBRATION DATE: 09-Apr-23

SBE 37 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = -3.292319e-004  
a1 = 3.625484e-004  
a2 = -1.004267e-005  
a3 = 3.739016e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
0.9999	711885.9	0.9999	-0.0000
4.5000	609071.8	4.5000	0.0000
15.0000	388509.9	15.0000	0.0000
18.5000	336407.9	18.4999	-0.0001
24.0000	269810.7	24.0001	0.0001
29.0000	222077.8	29.0000	-0.0000
32.5000	194406.2	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

