

Sea-Bird Electronics, Inc.

13431 NE 20th Street, Bellevue, WA 98005-2010 USA

Phone: (+1) 425-643-9866 Fax (+1) 425-643-9954 Email: seabird@seabird.com

SENSOR SERIAL NUMBER: 0399
CALIBRATION DATE: 15-Dec-15

SBE 45 TEMPERATURE CALIBRATION DATA
ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 5.139802e-005
a1 = 2.753200e-004
a2 = -2.546079e-006
a3 = 1.543547e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	643675.4	1.0001	0.0001
4.5000	549144.1	4.4998	-0.0002
15.0000	347769.0	15.0002	0.0002
18.5000	300528.1	18.5000	0.0000
24.0000	240353.8	23.9998	-0.0002
28.9999	197375.3	29.0000	0.0001
32.5000	172526.9	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

