

# 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: 6353  
CALIBRATION DATE: 12-Nov-16

SBE 19plus V2 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = 1.285204e-003  
a1 = 2.576773e-004  
a2 = 6.372598e-008  
a3 = 1.351407e-007

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	647459.627	1.0000	0.0000
4.4999	574640.932	4.4999	-0.0000
15.0000	393515.305	15.0000	-0.0000
18.4999	344866.949	18.5000	0.0001
24.0000	278881.881	23.9999	-0.0001
29.0000	228738.492	29.0000	0.0000
32.5000	198507.949	32.5000	-0.0000

n = Instrument Output (counts)

MV = (n - 524288) / 1.6e+007

R = (MV \* 2.900e+009 + 1.024e+008) / (2.048e+004 - MV \* 2.0e+005)

Temperature ITS-90 (°C) = 1 / {a0 + a1[ln(R)] + a2[ln<sup>2</sup>(R)] + a3[ln<sup>3</sup>(R)]} - 273.15

Residual (°C) = instrument temperature - bath temperature

