

# 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: 0063  
CALIBRATION DATE: 11-Nov-14

SBE 45 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

### COEFFICIENTS:

a0 = -4.504001e-005  
a1 = 2.862235e-004  
a2 = -3.237152e-006  
a3 = 1.761384e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
0.9999	693872.6	0.9999	0.0000
4.5000	593455.2	4.4999	-0.0001
14.9999	378534.0	14.9999	-0.0000
18.4999	327850.0	18.5000	0.0001
23.9999	263109.1	23.9998	-0.0001
29.0000	216713.7	29.0000	-0.0000
32.5000	189819.0	32.5000	0.0000

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

Residual = instrument temperature - bath temperature

n = instrument output

