

# 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: 0122  
CALIBRATION DATE: 27-Jun-13

SBE 45 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = -3.024695e-004  
a1 = 3.264740e-004  
a2 = -5.901685e-006  
a3 = 2.417991e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	788594.4	1.0001	0.0001
4.5000	676310.2	4.4999	-0.0001
15.0000	434807.0	15.0000	0.0000
18.5000	377558.9	18.5001	0.0001
24.0000	304211.2	23.9999	-0.0001
28.9999	251467.4	28.9998	-0.0001
32.5000	220804.6	32.5001	0.0001

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

