

# 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: 0040  
CALIBRATION DATE: 15-Dec-12

SBE 48 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## ITS-90 COEFFICIENTS

a0 = 5.044685e-005  
a1 = 2.676354e-004  
a2 = -1.944175e-006  
a3 = 1.376164e-007

BATH TEMP (ITS-90)	INSTRUMENT OUTPUT	INST TEMP (ITS-90)	RESIDUAL (ITS-90)
1.0000	729039.2	1.0001	0.0001
4.5000	622084.8	4.4999	-0.0001
15.0000	394175.3	15.0001	0.0001
18.5000	340688.7	18.5000	0.0000
24.0001	272541.8	24.0000	-0.0001
29.0000	223859.8	28.9999	-0.0001
32.5000	195704.9	32.5001	0.0001

Temperature ITS-90 =  $1/[a0 + a1[\ln(n)] + a2[\ln^2(n)] + a3[\ln^3(n)]] - 273.15$  (°C)

Residual = instrument temperature - bath temperature

Date, Delta T (mdeg C)

