

# 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: 13247  
CALIBRATION DATE: 09-Dec-16

SBE 37 V2 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -1.117541e-004  
a1 = 3.091531e-004  
a2 = -4.648905e-006  
a3 = 2.063349e-007

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (counts) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| 1.0000             | 566741.0                      | 1.0000             | 0.0000            |
| 4.5000             | 484704.0                      | 4.5000             | -0.0000           |
| 15.0000            | 309232.0                      | 15.0000            | -0.0000           |
| 18.5000            | 267875.0                      | 18.5000            | 0.0000            |
| 24.0000            | 215057.0                      | 24.0000            | 0.0000            |
| 28.9999            | 177217.0                      | 28.9998            | -0.0001           |
| 32.5000            | 155281.0                      | 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

