

# 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: 0118

CALIBRATION DATE: 09-Aug-16

Glider Payload CTD TEMPERATURE CALIBRATION DATA

ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

a0 = -4.032908e-005

a1 = 2.973758e-004

a2 = -3.898323e-006

a3 = 1.852557e-007

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (counts) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|-------------------------------|--------------------|-------------------|
| 1.0000             | 570403.3                      | 1.0000             | -0.0000           |
| 4.5000             | 487065.8                      | 4.5000             | 0.0000            |
| 15.0000            | 309333.9                      | 15.0000            | -0.0000           |
| 18.5000            | 267576.5                      | 18.4999            | -0.0001           |
| 24.0000            | 214337.1                      | 24.0002            | 0.0002            |
| 29.0000            | 176277.3                      | 28.9999            | -0.0001           |
| 32.5000            | 154249.0                      | 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

