

# 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: 6042  
CALIBRATION DATE: 20-Dec-16

SBE 3 TEMPERATURE CALIBRATION DATA  
ITS-90 TEMPERATURE SCALE

## COEFFICIENTS:

g = 4.34166100e-003  
h = 6.28913112e-004  
i = 1.92914433e-005  
j = 1.33191218e-006  
f0 = 1000.0

| BATH TEMP<br>(° C) | INSTRUMENT<br>OUTPUT (Hz) | INST TEMP<br>(° C) | RESIDUAL<br>(° C) |
|--------------------|---------------------------|--------------------|-------------------|
| -1.5000            | 2954.898                  | -1.5001            | -0.00006          |
| 1.0000             | 3127.620                  | 1.0001             | 0.00007           |
| 4.5000             | 3381.578                  | 4.5000             | 0.00005           |
| 8.0000             | 3650.111                  | 8.0000             | 0.00000           |
| 11.5000            | 3933.641                  | 11.4999            | -0.00005          |
| 15.0000            | 4232.590                  | 15.0000            | -0.00003          |
| 18.5000            | 4547.355                  | 18.5000            | -0.00003          |
| 22.0000            | 4878.338                  | 22.0000            | 0.00002           |
| 25.5000            | 5225.919                  | 25.5000            | 0.00004           |
| 29.0000            | 5590.474                  | 29.0001            | 0.00006           |
| 32.5000            | 5972.352                  | 32.4999            | -0.00006          |

f = Instrument Output (Hz)

Temperature ITS-90 (°C) =  $1 / \{g + h[\ln(f_0 / f)] + i[\ln^2(f_0 / f)] + j[\ln^3(f_0 / f)]\} - 273.15$

Residual (°C) = instrument temperature - bath temperature

