



Sea-Bird Scientific
 13431 NE 20th Street
 Bellevue, WA 98005
 USA

+1 425-643-9866
 seabird@seabird.com
 www.seabird.com

SENSOR SERIAL NUMBER: 0073
 CALIBRATION DATE: 15-Feb-24

Glider APL TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.29414025e-003
 h = 6.28410222e-004
 i = 2.31850237e-005
 j = 2.39235301e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	2904.064	1.0000	-0.00000
4.5000	3141.145	4.5000	0.00000
15.0000	3936.493	15.0000	-0.00001
18.5000	4230.923	18.5000	0.00001
24.0000	4724.577	24.0000	-0.00000
29.0000	5207.193	29.0000	-0.00000
32.5000	5564.730	32.5000	0.00000

f = Instrument Output (Hz)

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

$$\text{Residual (°C)} = \text{instrument temperature} - \text{bath temperature}$$

