



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

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

SENSOR SERIAL NUMBER: 0378
 CALIBRATION DATE: 23-Sep-22

Glider APL TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.42301904e-003
 h = 6.42875322e-004
 i = 2.71293977e-005
 j = 3.38699579e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
0.9999	3535.297	0.9999	0.00001
4.5000	3822.116	4.5000	-0.00002
14.9999	4782.412	15.0000	0.00010
18.5000	5137.127	18.4999	-0.00012
23.9999	5730.941	23.9999	0.00001
29.0000	6310.344	29.0001	0.00006
32.5000	6738.825	32.5000	-0.00003

f = Instrument Output (Hz)

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

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

