



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

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

SENSOR SERIAL NUMBER: 0131
 CALIBRATION DATE: 18-Aug-24

Glider APL TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

g = 4.40722470e-003
 h = 6.39696842e-004
 i = 2.49562200e-005
 j = 2.97110995e-006
 f0 = 1000.0

BATH TEMP (° C)	INSTRUMENT OUTPUT (Hz)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	3450.192	1.0001	0.00007
4.5000	3729.580	4.4999	-0.00013
15.0000	4664.704	15.0002	0.00021
18.5001	5009.994	18.5000	-0.00006
23.9999	5587.907	23.9997	-0.00022
28.9999	6151.795	29.0001	0.00021
32.5001	6568.758	32.5000	-0.00007

f = Instrument Output (Hz)

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

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

