



Sea-Bird GmbH
 Postfach 1167
 87401 Kempten
 Germany

+49 831 9 60994 701
 seabird.eu@seabird.com
 www.seabird.com

SENSOR SERIAL NUMBER: 6244
 CALIBRATION DATE: 26-Jan-23

SBE 19plus V2 TEMPERATURE CALIBRATION DATA
 ITS-90 TEMPERATURE SCALE

COEFFICIENTS:

a0 = 1.322746e-003
 a1 = 2.489467e-004
 a2 = 1.077575e-006
 a3 = 9.571370e-008

BATH TEMP (° C)	INSTRUMENT OUTPUT (counts)	INST TEMP (° C)	RESIDUAL (° C)
1.0000	627455.254	1.0000	-0.0000
4.4999	555833.915	4.5000	0.0001
15.0000	378597.254	14.9999	-0.0001
18.4999	331211.576	18.5000	0.0001
24.0000	267087.576	23.9999	-0.0001
29.0000	218472.153	29.0002	0.0002
32.5000	189213.983	32.4999	-0.0001

n = Instrument Output (counts)

$$MV = (n - 524288) / 1.6e+007$$

$$R = (MV * 2.900e+009 + 1.024e+008) / (2.048e+004 - MV * 2.0e+005)$$

$$\text{Temperature ITS-90 (°C)} = 1 / \{a_0 + a_1[\ln(R)] + a_2[\ln^2(R)] + a_3[\ln^3(R)]\} - 273.15$$

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

