

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 9324
CALIBRATION DATE: 08-Nov-15

Slocum Payload CTD CONDUCTIVITY CALIBRATION DATA
PSS 1978: C(35,15,0) = 4.2914 Siemens/meter

COEFFICIENTS:

g = -1.001473e+000
h = 1.358639e-001
i = -8.201787e-005
j = 2.340552e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 5.2164e-007

BATH TEMP (ITS-90)	BATH SAL (PSU)	BATH COND (Siemens/m)	INST FREQ (Hz)	INST COND (Siemens/m)	RESIDUAL (Siemens/m)
22.0000	0.0000	0.00000	2715.47	0.00000	0.00000
1.0001	34.7961	2.97441	5404.83	2.97443	0.00002
4.5000	34.7765	3.28134	5608.83	3.28132	-0.00002
15.0000	34.7341	4.26260	6215.63	4.26257	-0.00002
18.5000	34.7252	4.60759	6415.12	4.60760	0.00002
23.9999	34.7157	5.16530	6724.81	5.16532	0.00001
29.0001	34.7107	5.68698	7001.81	5.68697	-0.00001
32.4999	34.7083	6.05927	7192.76	6.05916	-0.00011

$$f = \text{INST FREQ} * \text{sqrt}(1.0 + \text{WBOTC} * t) / 1000.0$$

$$\text{Conductivity} = (g + h * f^2 + i * f^3 + j * f^4) / (1 + \delta * t + \epsilon * p) \text{ Siemens / meter}$$

t = temperature[°C]; p = pressure[decibars]; δ = CTcor; ϵ = CPcor;

Residual = instrument conductivity - bath conductivity

