

Sea-Bird Electronics, Inc.

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SENSOR SERIAL NUMBER: 0118
CALIBRATION DATE: 12-Jul-16

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

COEFFICIENTS:

g = -9.795007e-001
h = 1.574013e-001
i = -3.130611e-004
j = 4.886145e-005

CPcor = -9.5700e-008
CTcor = 3.2500e-006
WBOTC = 4.6695e-007

BATH TEMP (° C)	BATH SAL (PSU)	BATH COND (S/m)	INSTRUMENT OUTPUT (Hz)	INSTRUMENT COND (S/m)	RESIDUAL (S/m)
22.0000	0.0000	0.00000	2498.36	0.00000	0.00000
1.0000	34.6627	2.96408	5010.88	2.96408	-0.00000
4.4999	34.6421	3.26990	5200.98	3.26991	0.00001
15.0000	34.5985	4.24771	5766.16	4.24770	-0.00001
18.5000	34.5896	4.59153	5951.89	4.59152	-0.00001
24.0000	34.5802	5.14737	6240.19	5.14739	0.00002
29.0000	34.5755	5.66730	6497.95	5.66730	-0.00000
32.5000	34.5735	6.03842	6675.68	6.03842	-0.00000

$f = \text{Instrument Output(Hz)} * \text{sqrt}(1.0 + \text{WBOTC} * t) / 1000.0$

$t = \text{temperature (°C)}$; $p = \text{pressure (decibars)}$; $\delta = \text{CTcor}$; $\epsilon = \text{CPcor}$;

$\text{Conductivity (S/m)} = (g + h * f^2 + i * f^3 + j * f^4) / 10 (1 + \delta * t + \epsilon * p)$

$\text{Residual (Siemens/meter)} = \text{instrument conductivity} - \text{bath conductivity}$

