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SENSOR SERIAL NUMBER: 9406
CALIBRATION DATE: 16-Apr-26

Slocum Payload CTD PRESSURE CALIBRATION DATA
1450 psia S/N 10230816

COEFFICIENTS:

PA0 =	-6.321768e-03	PTCA0 =	5.245689e+05
PA1 =	4.509029e-03	PTCA1 =	-1.725670e+00
PA2 =	-1.654324e-11	PTCA2 =	6.847552e-02
PTEMPA0 =	-6.543280e+01	PTCB0 =	2.494612e+01
PTEMPA1 =	5.126952e-02	PTCB1 =	-7.769424e-04
PTEMPA2 =	-3.987837e-07	PTCB2 =	0.000000e+00

PRESSURE SPAN CALIBRATION

PRESSURE (PSIA)	INSTRUMENT OUTPUT (counts)	THERMISTOR OUTPUT (volts)	COMPUTED PRESSURE (PSIA)	RESIDUAL (%FSR)
14.62	527816.4	1734.6	14.67	0.00
301.58	591406.0	1738.0	301.52	-0.00
588.60	655073.2	1738.4	588.59	-0.00
875.68	718785.0	1738.8	875.73	0.00
1162.76	782508.0	1739.8	1162.78	0.00
1449.79	846241.2	1740.0	1449.75	-0.00
1162.80	782515.6	1740.0	1162.82	0.00
875.94	718838.4	1739.8	875.97	0.00
588.68	655090.2	1739.6	588.67	-0.00
301.54	591393.8	1739.6	301.47	-0.00
14.63	527814.6	1742.0	14.66	0.00

THERMAL CORRECTION

TEMP (°C)	THERMISTOR OUTPUT (volts)	INSTRUMENT OUTPUT (counts)
32.50	1939	527867.30
29.00	1869	527859.40
24.00	1769	527849.90
18.50	1658	527847.20
15.00	1589	527843.00
4.50	1379	527833.60
1.00	1309	527858.80

TEMPERATURE (°C)	SPAN
-5.00	24.95
34.90	24.92

y = thermistor output (counts)

$t = PTEMPA0 + PTEMPA1 * y + PTEMPA2 * y^2$

$x = \text{instrument output} - PTCA0 - PTCA1 * t - PTCA2 * t^2$

$n = x * PTCB0 / (PTCB0 + PTCB1 * t + PTCB2 * t^2)$

pressure (PSIA) = PA0 + PA1 * n + PA2 * n

Residual (%FSR) = (computed pressure - true pressure) * 100 / Full Scale Range

