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CALIBRATION RESULTS FOR RAD SN 211. CAL DATE = 2014-10-10.

RUN TIME: 20141010,135832

setupfile: /Users/rmr/Dropbox/instruments/RAD/RAD_CALIBRATION/211_osu/141007/radcal_setup_211_141007

SN: 211

calpath: ~/Dropbox/instruments/RAD/RAD_CALIBRATION/211_osu/141007

caldate: 141007

Reference voltage = 4098.0 millivolts (TP16)

PSPCAL

-1.0,	-117.78
-0.5,	-58.77
-0.1,	-11.46
0.0,	0.47
0.1,	12.34
0.2,	24.26
0.5,	59.59
1.0,	118.79
2.0,	236.75
4.0,	473.44
8.0,	946.36

PIRCAL

-2.0,	-1664.16
-1.0,	-825.74
-0.8,	-656.66
-0.4,	-322.09
-0.2,	-154.65
0.0,	14.37
0.2,	181.73
0.4,	349.42
0.6,	516.66
1.0,	852.21

caseR

5600,	595.000
10000,	954.000
14974,	1315.000
20000,	1546.000
25000,	1789.000
30000,	1950.000

domeR

5600,	595.000
10000,	954.000
14974,	1316.000
20000,	1546.000
25000,	1790.000
30000,	1950.000

==== CASE TEMPERATURE =====

Case Rref = 31050, Rref based on measurements of v_t = 32657. Error = -5.2

Case fit : -6.648e-05 9.611e-02 -3.487e+01

CASE THERMISTOR MILLIVOLTS

Meas	ADC	ADC-Corrected
595.0	594.6	595.8
954.0	948.5	952.0
1315.0	1293.8	1315.6
1546.0	1506.0	1546.9
1789.0	1723.0	1789.6
1950.0	1862.5	1949.0

CASE THERMISTOR OHMS

CalR	Meas	ADC	ADC-corrected
5600	5274	5270	5283
10000	9422	9351	9396
14974	14671	14326	14682
20000	18810	18041	18828
25000	24057	22526	24073
30000	28188	25869	28160

CASE THERMISTOR DEG C

CalR	Meas	ADC	ADC-correc
39.96	41.58	41.60	41.54
25.00	26.48	26.67	26.55
15.24	15.72	16.29	15.71
8.58	9.98	10.92	9.95
3.60	4.45	5.90	4.43
-0.37	0.97	2.85	0.99

==== DOME TEMPERATURE =====

Dome Rref = 31030, Rref based on measurements of v_t = 32645. %Error = -5.2
 Dome fit : -3.696e-05, 6.112e-02, -2.521e+01

DOME THERMISTOR MILLIVOLTS

Meas	ADC	ADC-Corrected
595.0	595.3	597.2
954.0	948.2	948.7
1316.0	1309.3	1317.9
1546.0	1530.4	1548.7
1790.0	1758.4	1790.4
1950.0	1905.2	1948.1

DOME THERMISTOR OHMS

CalR	Meas	ADC	ADC-corrected
5600	5271	5274	5294
10000	9416	9341	9347
14974	14678	14569	14709
20000	18798	18495	18850
25000	24066	23322	24076
30000	28170	26960	28119

DOME THERMISTOR DEG C

CalR	Meas	ADC	ADC-correc
39.96	41.60	41.58	41.48
25.00	26.50	26.69	26.68
15.24	15.71	15.89	15.66
8.58	9.99	10.36	9.93
3.60	4.44	5.13	4.43
-0.37	0.98	1.94	1.02

==== PSP THERMOPILE CIRCUIT =====

PSP Calibration Gain (g) = 118.24, Offset (o) = 0.5 millivolts

==== PIR THERMOPILE CIRCUIT =====

PIR Calibration Gain (g) = 838.85, Offset (o) = 13.7 millivolts

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 RAD SETUP COMMANDS

L : 10
 k : 8e-6 (Eppley PSP cal)
 K : 4e-6 (Eppley PIR cal)

A : 02 (Experiment or SN, 2 digits)
V : 4098
C 0 : 32657
C 1 : -6.648e-05
C 2 : 9.611e-02
C 3 : -3.487e+01
D 0 : 32645
D 1 : -3.696e-05
D 2 : 6.112e-02
D 3 : -2.521e+01
g : 118.24
o : 0.46
G : 838.85
O : 13.66

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10/10/2014

