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CALIBRATION RESULTS FOR RAD SN 222AL DATE = 2015-07-30.

RUN TIME: 20150730,173611

setupfile: ~/Dropbox/instruments/RAD/RAD_CALIBRATION/223_who/1507/radcal_setup_223_1507.txt

SN: 222

calpath: ~/Dropbox/instruments/RAD/RAD_CALIBRATION/223_who/1507

caldate: 150717

Reference voltage = 4093.0 millivolts (TP16)

PSPCAL

-1.0,	-119.26
-0.5,	-59.66
-0.1,	-12.31
0.0,	0.27
0.1,	12.42
0.2,	24.07
0.5,	59.94
1.0,	119.09
2.0,	237.66
4.0,	474.98
8.0,	949.63

PIRCAL

-2.0,	-1676.48
-1.0,	-837.72
-0.8,	-668.85
-0.4,	-334.28
-0.2,	-167.74
0.0,	0.69
0.2,	163.59
0.4,	329.78
0.6,	497.62
1.0,	833.09

caseR

5600,	595.000
10000,	953.300
15600,	1314.000
20000,	1545.000
25600,	1788.000
30000,	1949.000

domeR

5600,	594.000
10000,	952.000
15600,	1314.000
20000,	1544.000
25600,	1787.000
30000,	1948.000

==== CASE TEMPERATURE =====

Case Rref = 30860, Rref based on measurements of v_t = 32972. Error = -6.8

Case fit : -6.680e-05 9.574e-02 -3.389e+01

CASE THERMISTOR MILLIVOLTS

Meas	ADC	ADC-Corrected
595.0	595.1	595.7
953.3	948.5	951.7
1314.0	1292.8	1314.6
1545.0	1504.5	1545.6
1788.0	1721.7	1788.8
1949.0	1861.0	1948.1

CASE THERMISTOR OHMS

CalR	Meas	ADC	ADC-corrected
5600	5249	5250	5256
10000	9370	9309	9349
15600	14592	14247	14601
20000	18712	17937	18723
25600	23938	22406	23956
30000	28053	25730	28028

CASE THERMISTOR DEG C

CalR	Meas	ADC	ADC-correc
39.96	41.71	41.70	41.67
25.00	26.62	26.78	26.67
14.28	15.85	16.41	15.84
8.58	10.09	11.06	10.08
3.08	4.55	6.02	4.54
-0.37	1.07	2.97	1.09

===== DOME TEMPERATURE =====

Dome Rref = 30950, Rref based on measurements of v_t = 33010. %Error = -6.7

Dome fit : -4.201e-05, 7.104e-02, -2.730e+01

DOME THERMISTOR MILLIVOLTS

Meas	ADC	ADC-Corrected
594.0	594.8	594.7
952.0	952.8	950.6
1314.0	1307.3	1313.5
1544.0	1528.8	1545.7
1787.0	1755.5	1787.6
1948.0	1902.7	1946.9

DOME THERMISTOR OHMS

CalR	Meas	ADC	ADC-corrected
5600	5254	5262	5262
10000	9381	9391	9362
15600	14634	14525	14627
20000	18747	18453	18780
25600	23984	23244	23998
30000	28108	26886	28078

DOME THERMISTOR DEG C

CalR	Meas	ADC	ADC-correc
39.96	41.68	41.64	41.65
25.00	26.59	26.56	26.64

14.28	15.78	15.96	15.80
8.58	10.05	10.41	10.01
3.08	4.51	5.21	4.50
-0.37	1.03	2.00	1.06

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

PSP Calibration Gain (g) = 118.72, Offset (o) = 0.1 millivolts

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

PIR Calibration Gain (g) = 835.75, Offset (o) = -2.2 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 : 4093

C 0 : 32972

C 1 : -6.680e-05

C 2 : 9.574e-02

C 3 : -3.389e+01

D 0 : 33010

D 1 : -4.201e-05

D 2 : 7.104e-02

D 3 : -2.730e+01

g : 118.72

o : 0.09

G : 835.75

O : -2.17

