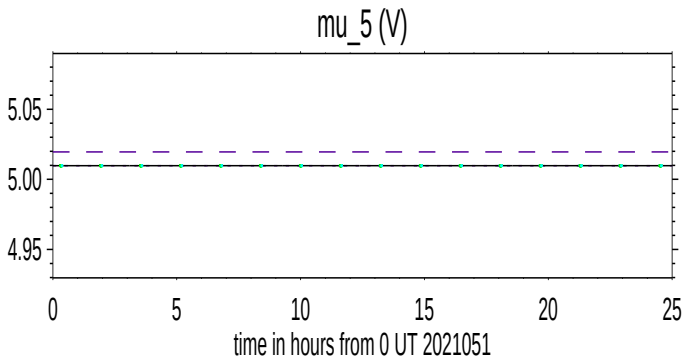
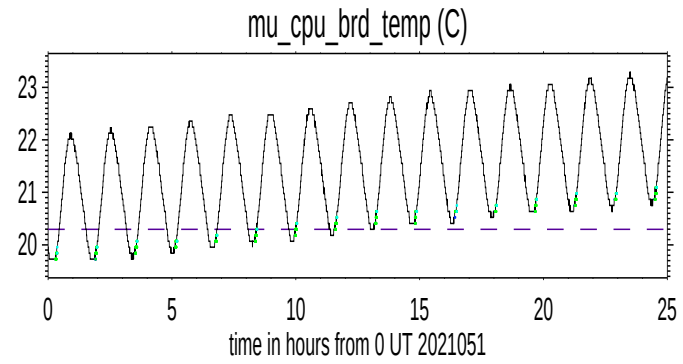
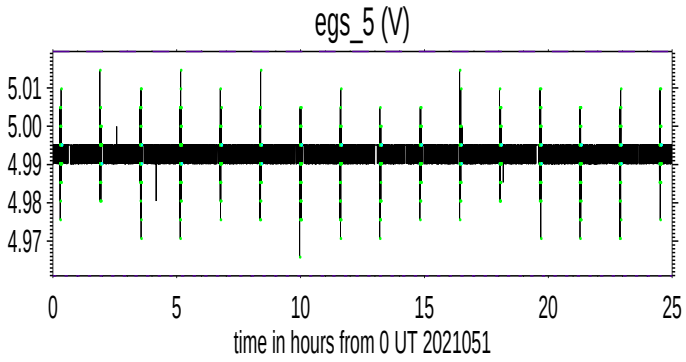
```
Information for      2021051
02:34:24.000: see_stat[1]: 13 internal error
16:31:37.001: see_stat[1]: 14 internal error
```

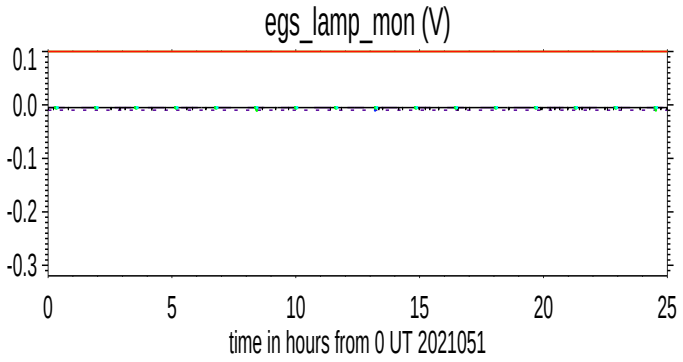
/export/timed/data/science_dp/tlm_limit/outoflimit_2021051_012.txt
Mon Mar 22 06:14:24 2021 1

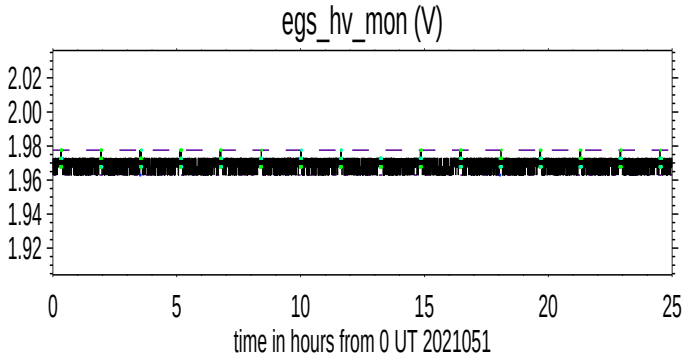
RH OutOfLimit 1297814422 1297904416 hk.mu_cmd_pkt_reject

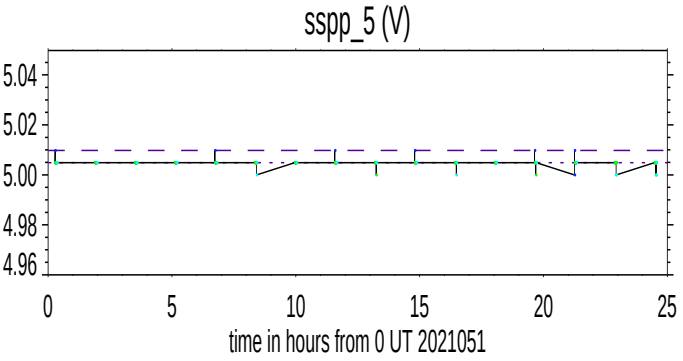

mu_5 (V)
5.05
5.00
4.95
0
5
10
15
20
25
time in hours from 0 UT 2021051

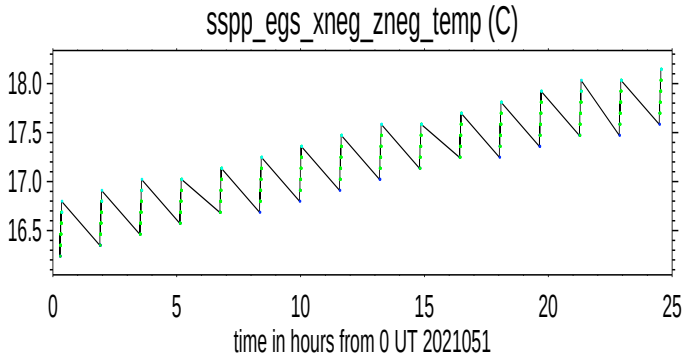

mu_cpu_brd_temp (C)
23
22
21
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

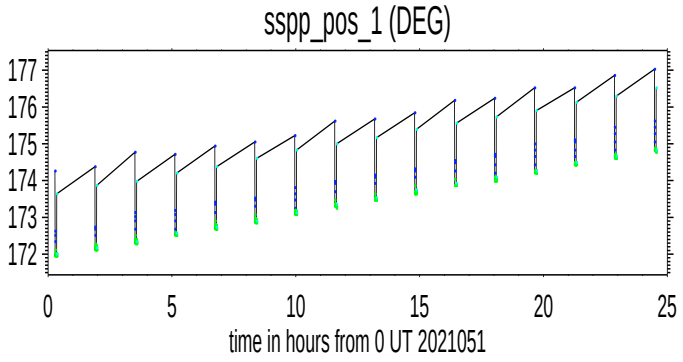

egs_5 (V)
5.01
5.00
4.99
4.98
4.97
0
5
10
15
20
25
time in hours from 0 UT 2021051

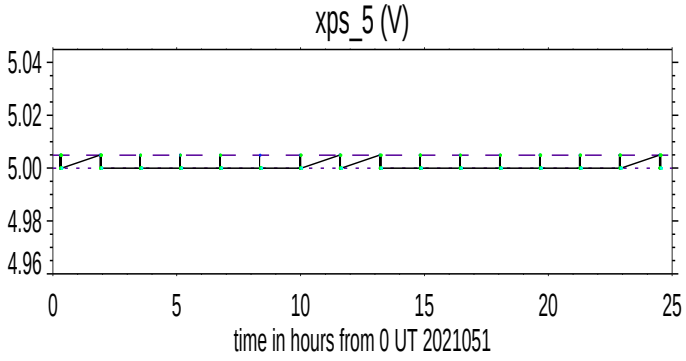

egs_lamp_mon (V)
0.1
0.0
-0.1
-0.2
-0.3
0
5
10
15
20
25
time in hours from 0 UT 2021051

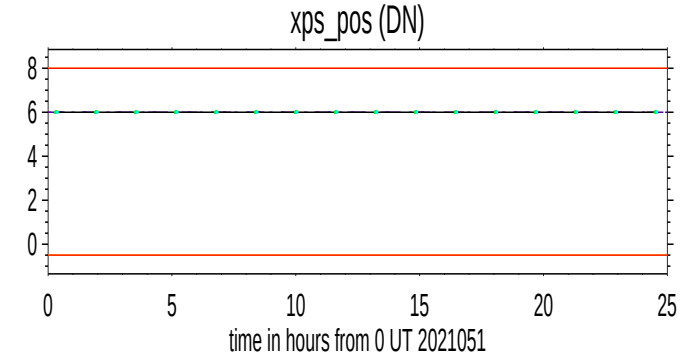

egs_hv_mon (V)
2.02
2.00
1.98
1.96
1.94
1.92
0
5
10
15
20
25
time in hours from 0 UT 2021051

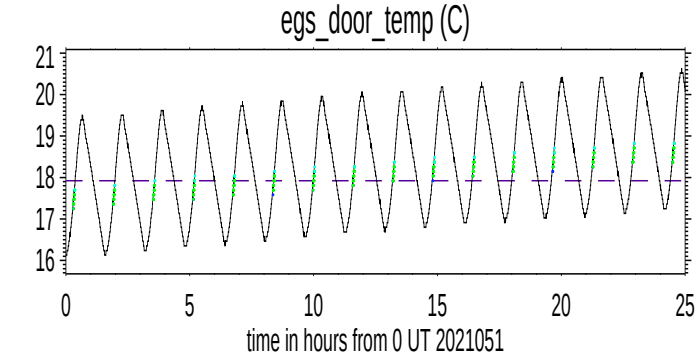

sspp_5 (V)
5.04
5.02
5.00
4.98
4.96
0
5
10
15
20
25
time in hours from 0 UT 2021051

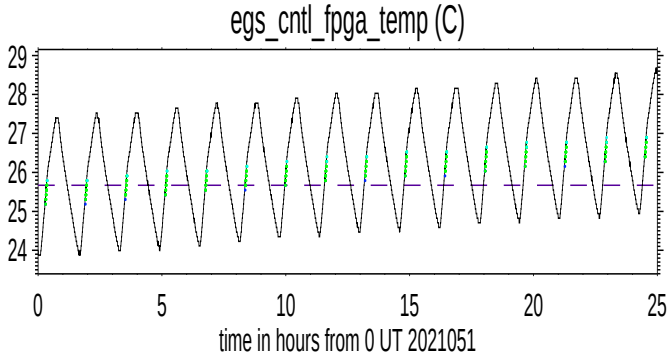

sspp_egs_xneg_zneg_temp (C)
18.0
17.5
17.0
16.5
0
5
10
15
20
25
time in hours from 0 UT 2021051

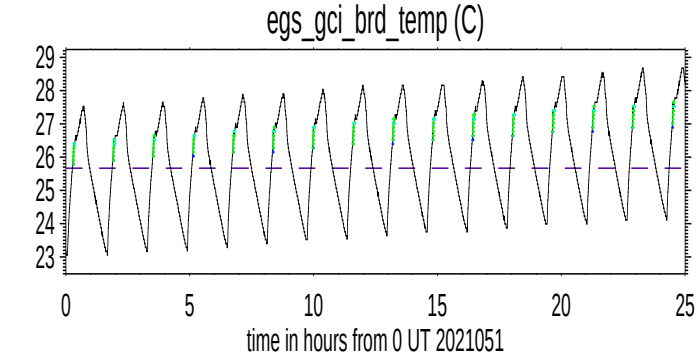

sspp_pos_1 (DEG)
177
176
175
174
173
172
0
5
10
15
20
25
time in hours from 0 UT 2021051

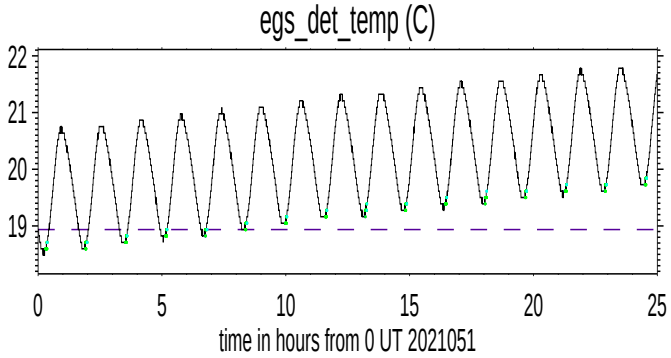

xps_5 (V)
5.04
5.02
5.00
4.98
4.96
0
5
10
15
20
25
time in hours from 0 UT 2021051

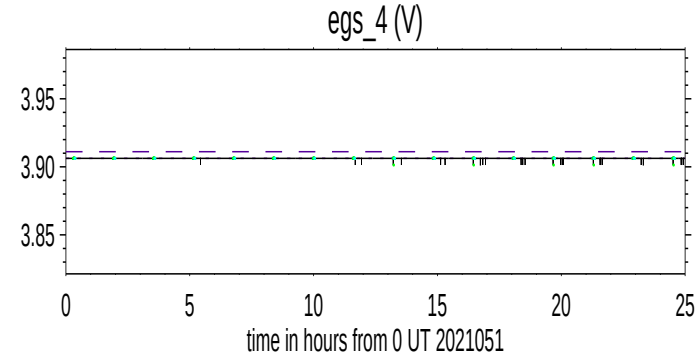

xps_pos (DN)
8
6
4
2
0
0
5
10
15
20
25
time in hours from 0 UT 2021051

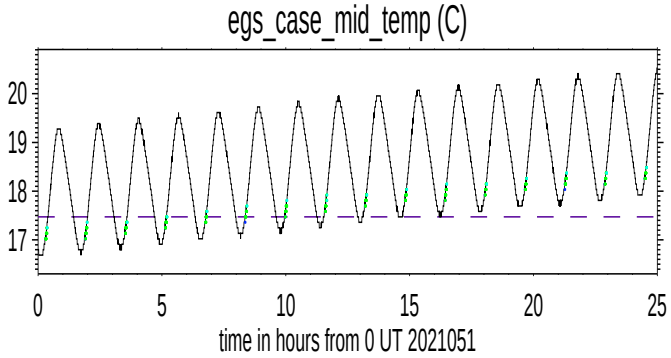

egs_door_temp (C)
21
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

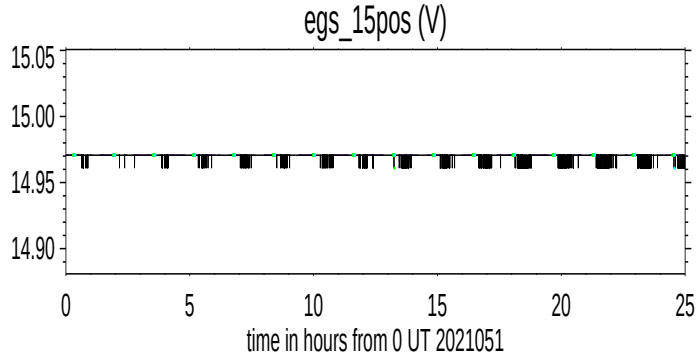

egs_cntl_fpga_temp (C)
29
28
27
26
25
24
0
5
10
15
20
25
time in hours from 0 UT 2021051

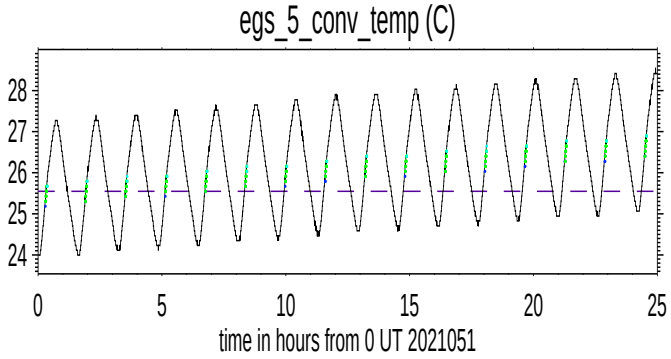

egs_gci_brd_temp (C)
29
28
27
26
25
24
23
0
5
10
15
20
25
time in hours from 0 UT 2021051

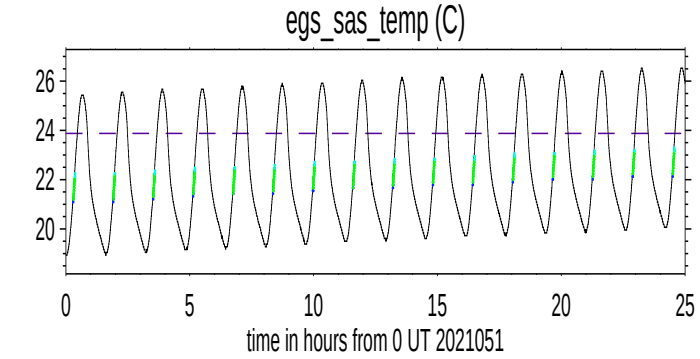

egs_det_temp (C)
22
21
20
19
0
5
10
15
20
25
time in hours from 0 UT 2021051

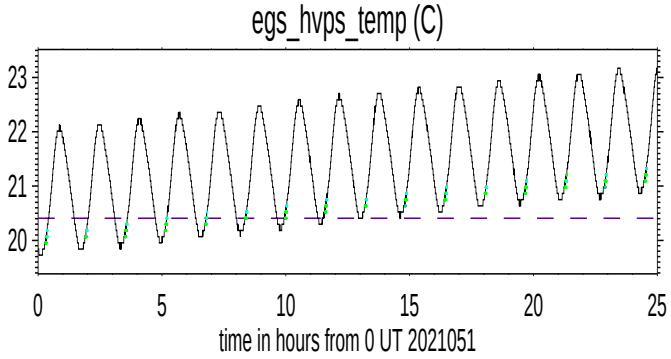

egs_4 (V)
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021051

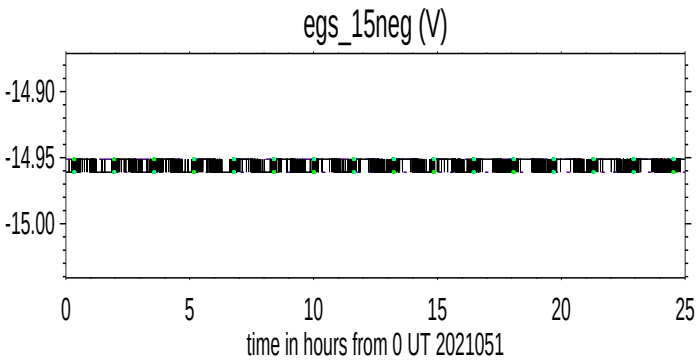

egs_case_mid_temp (C)
20
19
18
17
0
5
10
15
20
25
time in hours from 0 UT 2021051

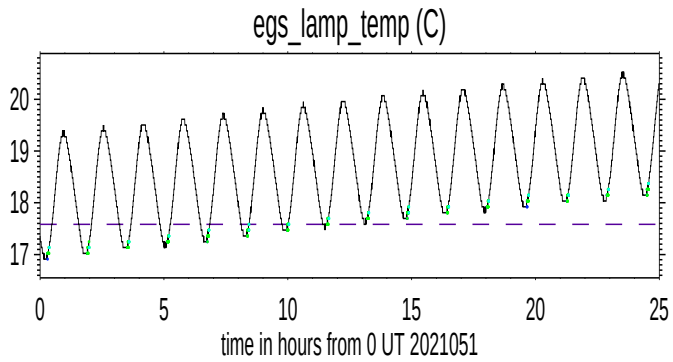

egs_15pos (V)
15.05
15.00
14.95
14.90
0
5
10
15
20
25
time in hours from 0 UT 2021051

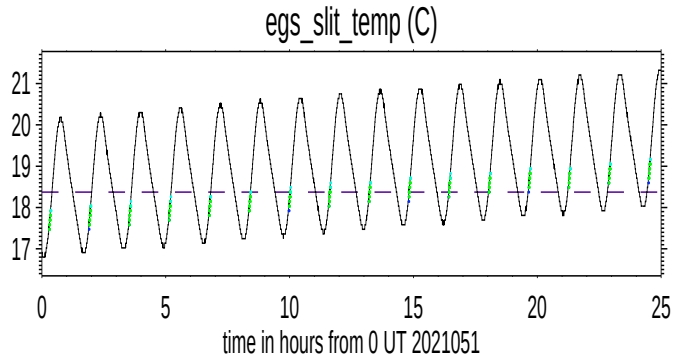

egs_5_conv_temp (C)
28
27
26
25
24
0
5
10
15
20
25
time in hours from 0 UT 2021051

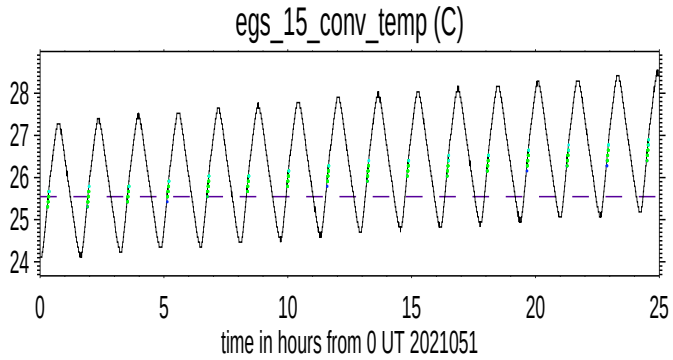

egs_sas_temp (C)
26
24
22
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

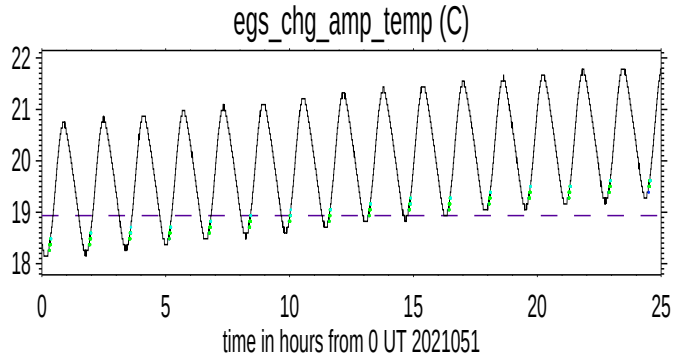

egs_hvps_temp (C)
23
22
21
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

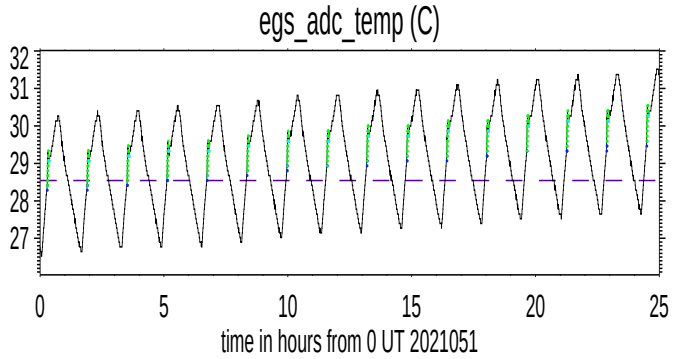

egs_15neg (V)
-14.90
-14.95
-15.00
0
5
10
15
20
25
time in hours from 0 UT 2021051

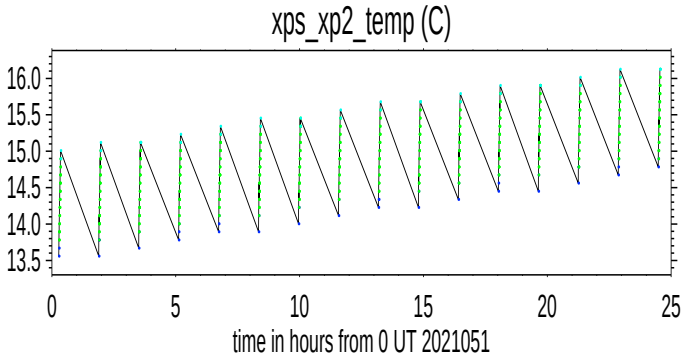

egs_lamp_temp (C)
20
19
18
17
0
5
10
15
20
25
time in hours from 0 UT 2021051

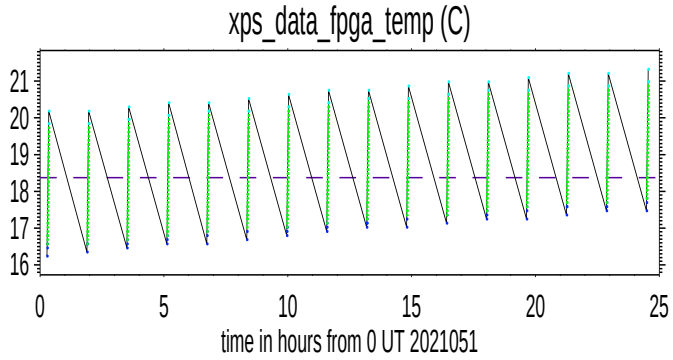

egs_slit_temp (C)
21
20
19
18
17
0
5
10
15
20
25
time in hours from 0 UT 2021051

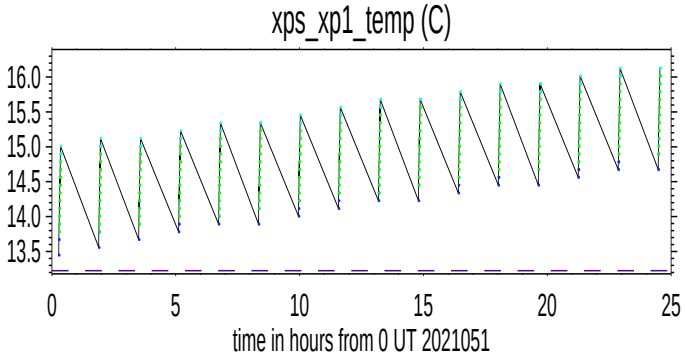

egs_15_conv_temp (C)
28
27
26
25
24
0
5
10
15
20
25
time in hours from 0 UT 2021051


egs_chg_amp_temp (C)
22
21
20
19
18
0
5
10
15
20
25
time in hours from 0 UT 2021051


egs_adc_temp (C)
32
31
30
29
28
27
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_xp2_temp (C)
16.0
15.5
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_data_fpga_temp (C)
21
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_xp1_temp (C)
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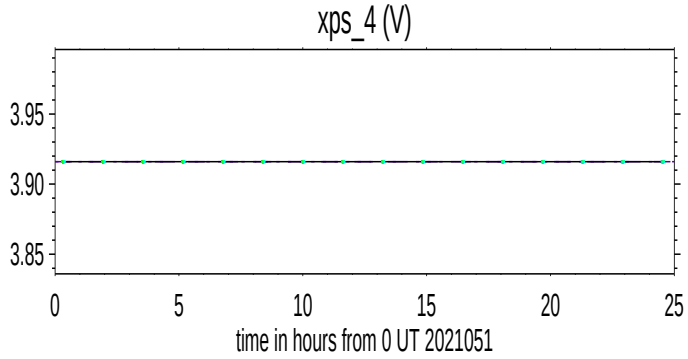
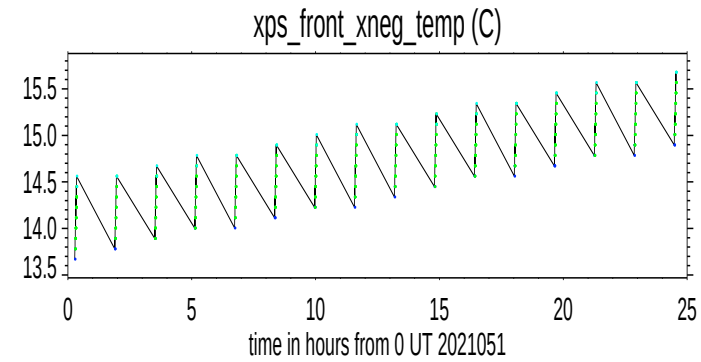
15.5
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_4 (V)
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_front_xneg_temp (C)
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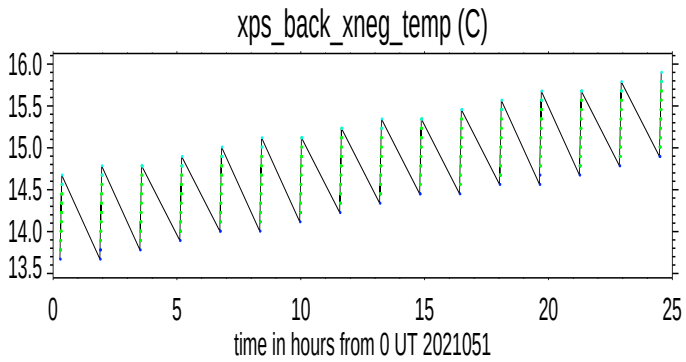
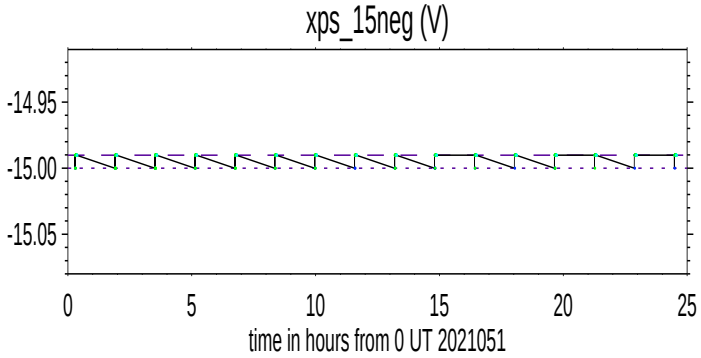
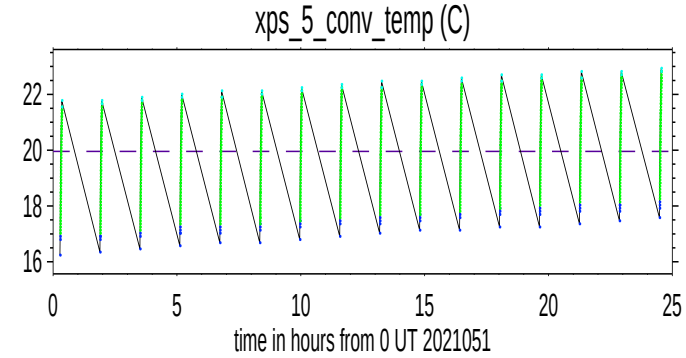
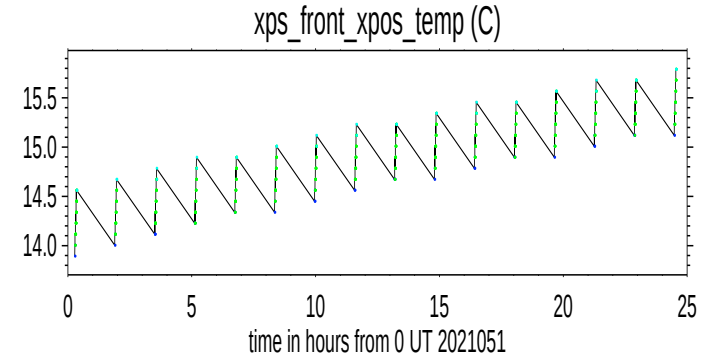
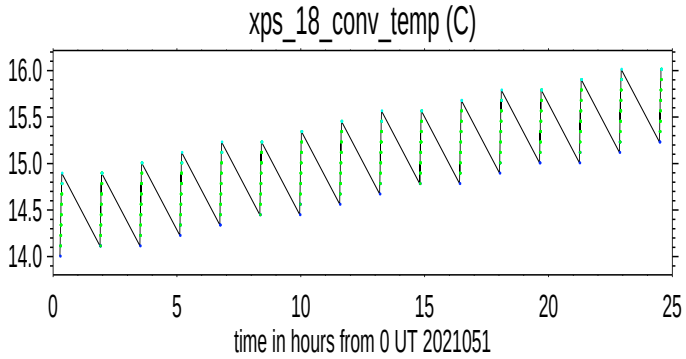
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_back_xneg_temp (C)
16.0
15.5
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_15neg (V)
-14.95
-15.00
-15.05
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_5_conv_temp (C)
22
20
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_front_xpos_temp (C)
15.5
15.0
14.5
14.0
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_18_conv_temp (C)
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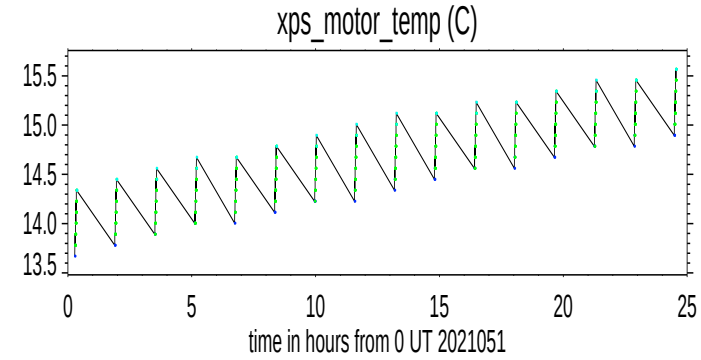
15.0
14.5
14.0
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_motor_temp (C)
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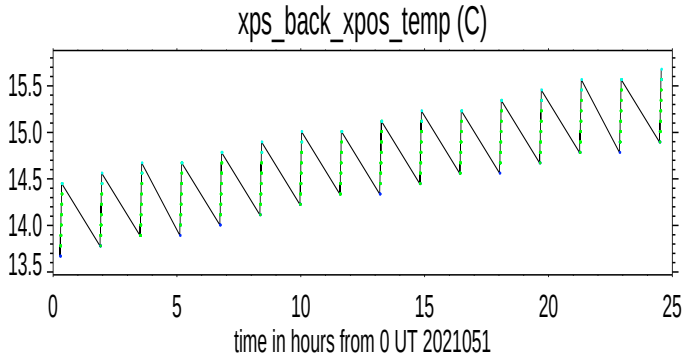
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051


xps_back_xpos_temp (C)
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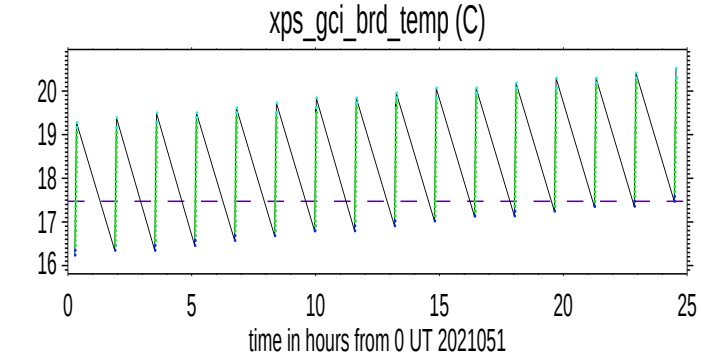
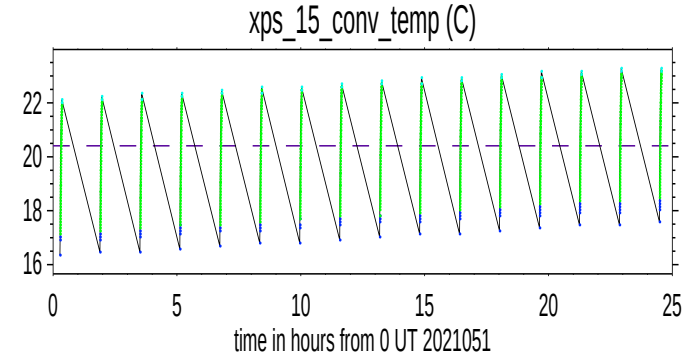
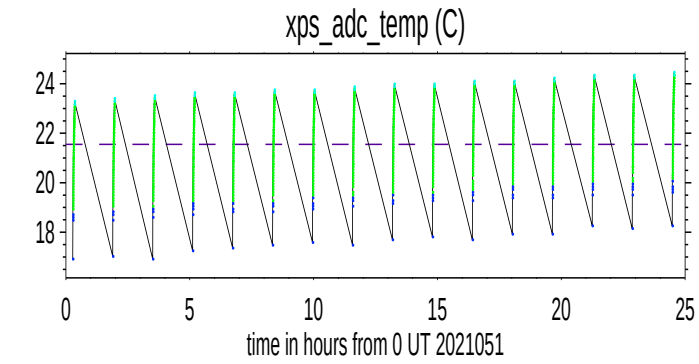
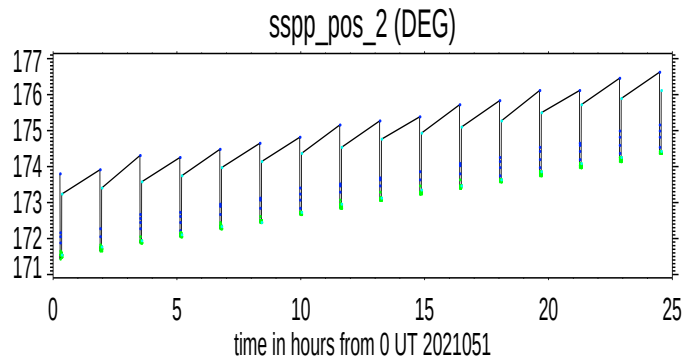
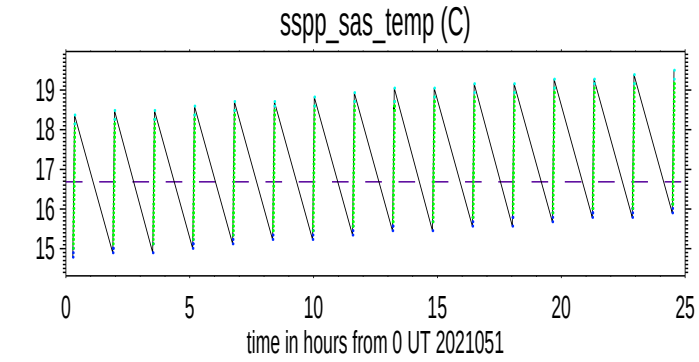
15.0
14.5
14.0
13.5
0
5
10
15
20
25
time in hours from 0 UT 2021051

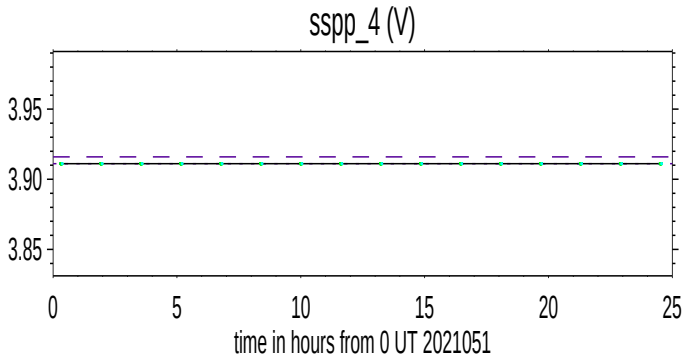

xps_gci_brd_temp (C)
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

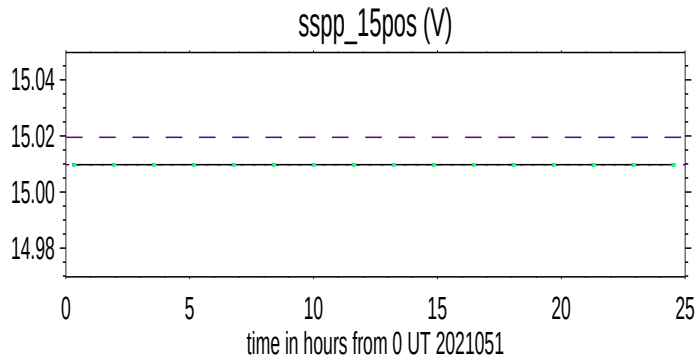

xps_15_conv_temp (C)
22
20
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

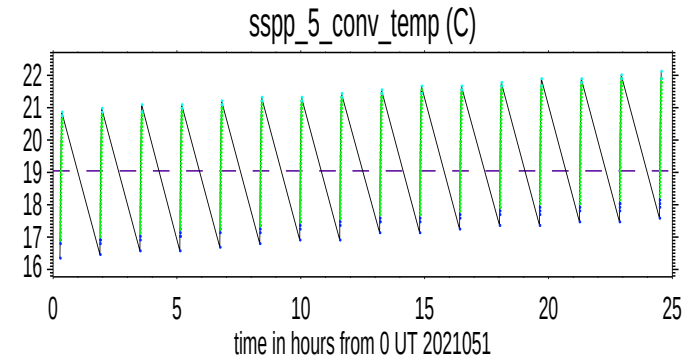

xps_adc_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021051

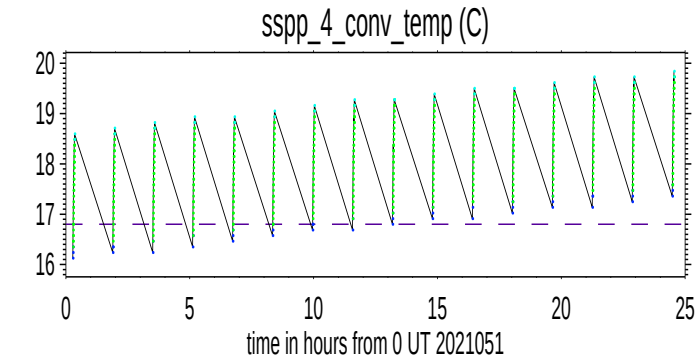

sspp_pos_2 (DEG)
177
176
175
174
173
172
171
0
5
10
15
20
25
time in hours from 0 UT 2021051

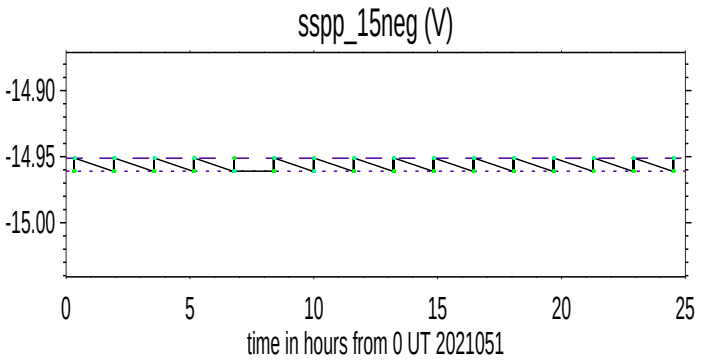

sspp_sas_temp (C)
19
18
17
16
15
0
5
10
15
20
25
time in hours from 0 UT 2021051

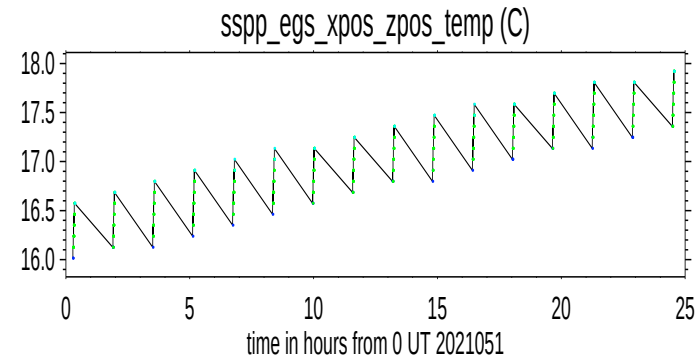

sspp_4 (V)
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021051

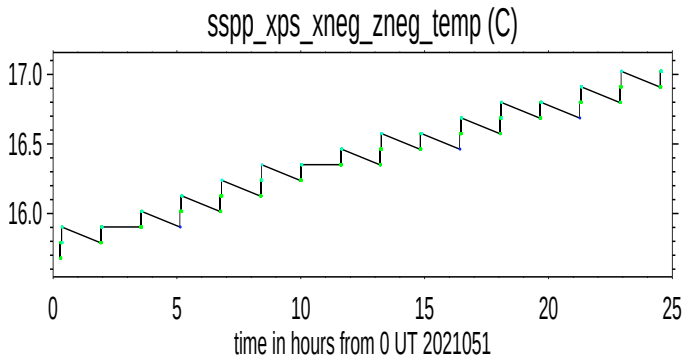

sspp_15pos (V)
15.04
15.02
15.00
14.98
0
5
10
15
20
25
time in hours from 0 UT 2021051

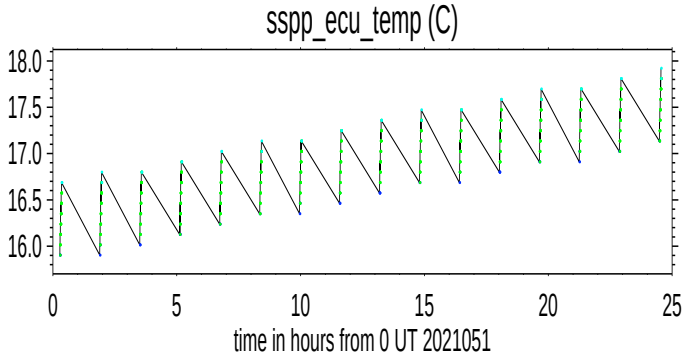

sspp_5_conv_temp (C)
22
21
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

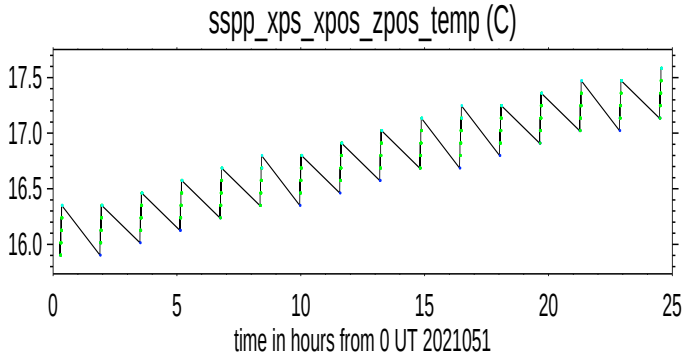

sspp_4_conv_temp (C)
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

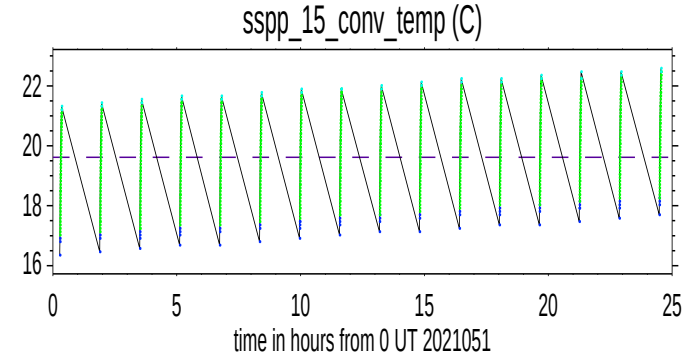

sspp_15neg (V)
-14.90
-14.95
-15.00
0
5
10
15
20
25
time in hours from 0 UT 2021051

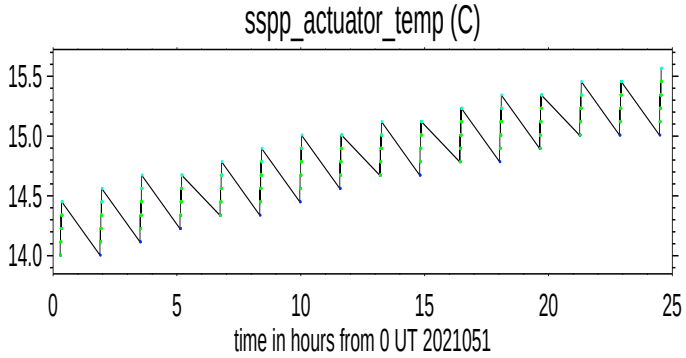

sspp_egs_xpos_zpos_temp (C)
18.0
17.5
17.0
16.5
16.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

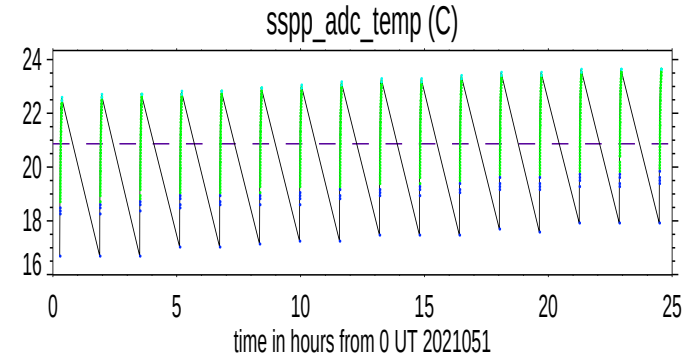

sspp_xps_xneg_zneg_temp (C)
17.0
16.5
16.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

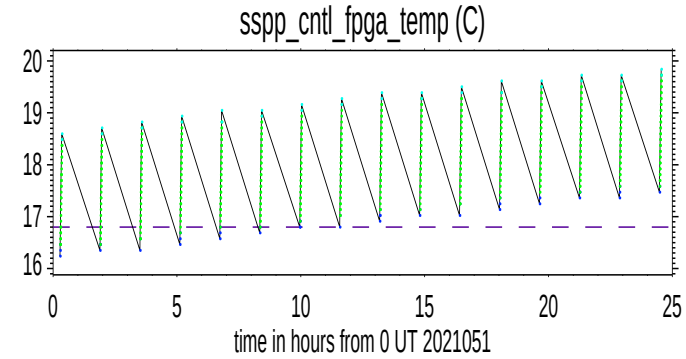

sspp_ecu_temp (C)
18.0
17.5
17.0
16.5
16.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

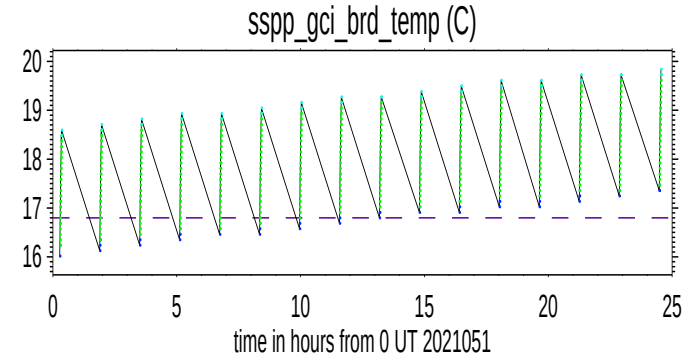

sspp_xps_xpos_zpos_temp (C)
17.5
17.0
16.5
16.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

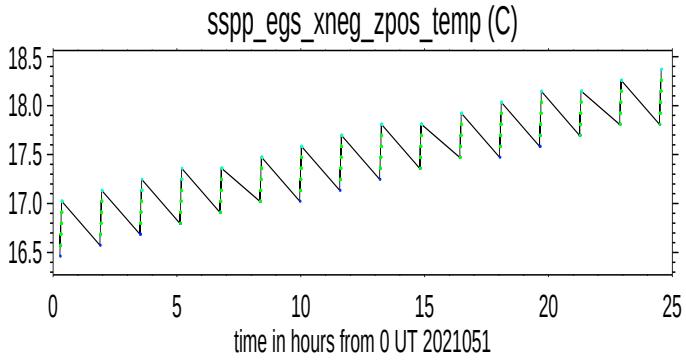

sspp_15_conv_temp (C)
22
20
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

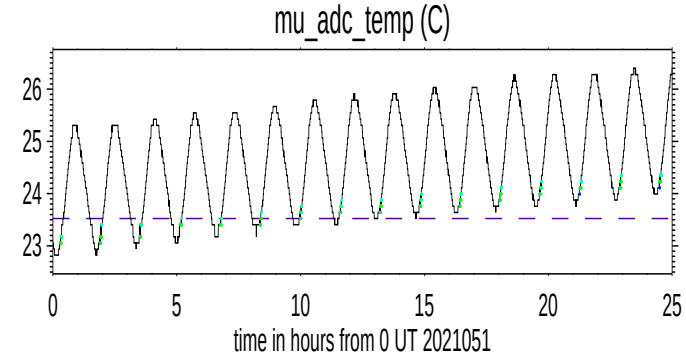

sspp_actuator_temp (C)
15.5
15.0
14.5
14.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

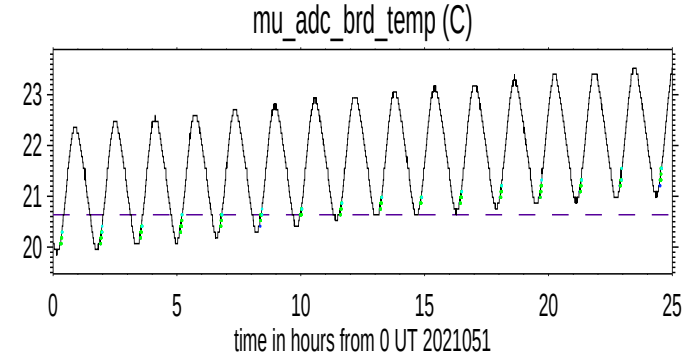

sspp_adc_temp (C)
24
22
20
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

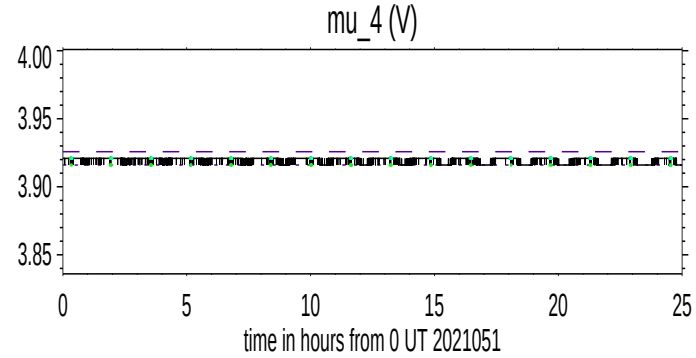

sspp_cntl_fpga_temp (C)
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

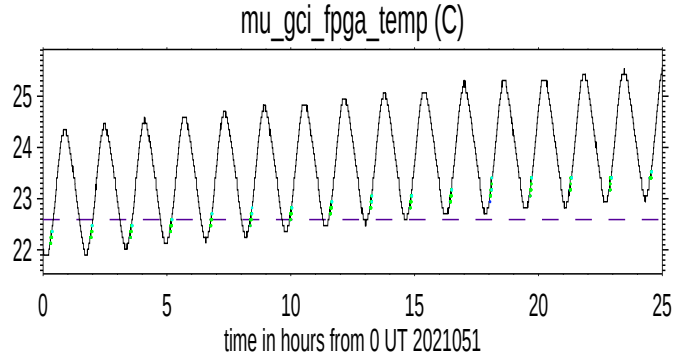

sspp_gci_brd_temp (C)
20
19
18
17
16
0
5
10
15
20
25
time in hours from 0 UT 2021051

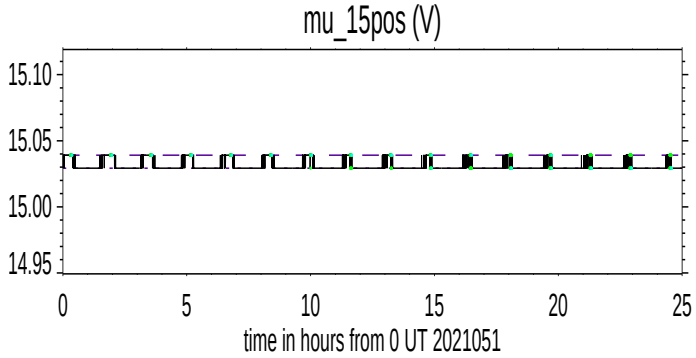

sspp_egs_xneg_zpos_temp (C)
18.5
18.0
17.5
17.0
16.5
0
5
10
15
20
25
time in hours from 0 UT 2021051

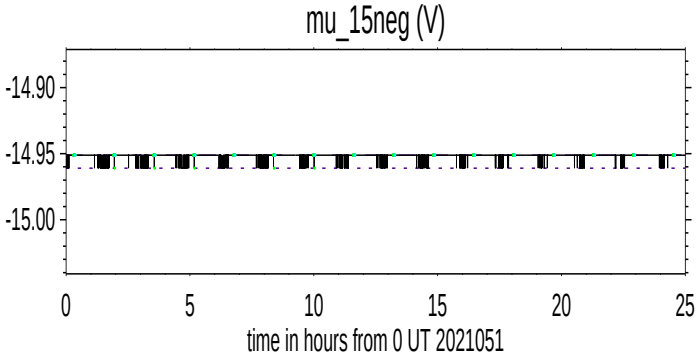

mu_adc_temp (C)
26
25
24
23
0
5
10
15
20
25
time in hours from 0 UT 2021051

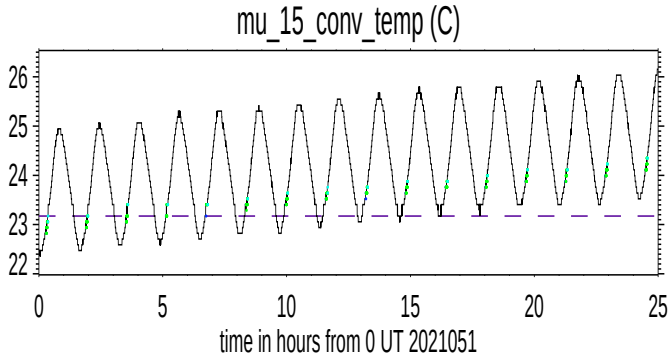

mu_adc_brd_temp (C)
23
22
21
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

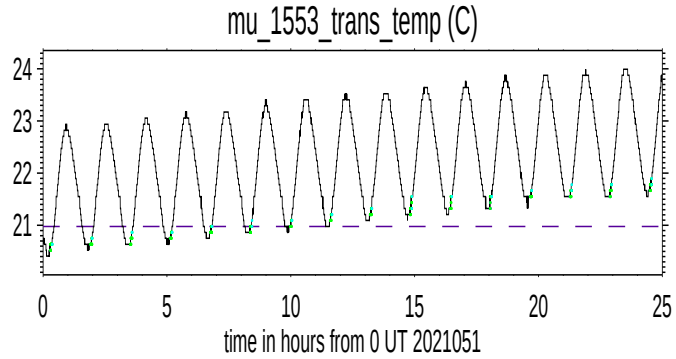

mu_4 (V)
4.00
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021051

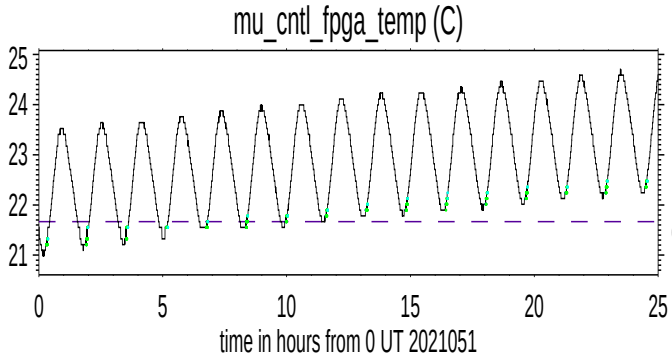

mu_gci_fpga_temp (C)
25
24
23
22
0
5
10
15
20
25
time in hours from 0 UT 2021051

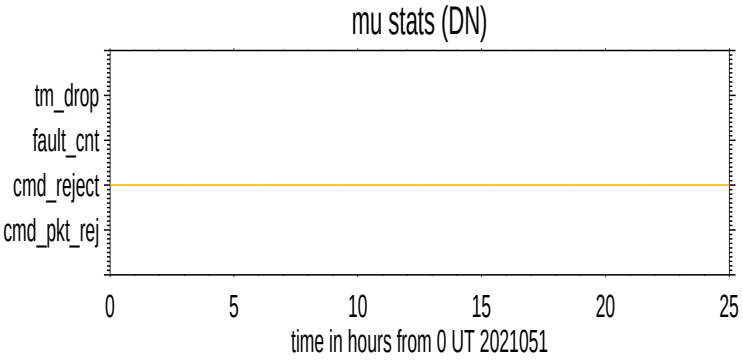

mu_15pos (V)
15.10
15.05
15.00
14.95
0
5
10
15
20
25
time in hours from 0 UT 2021051

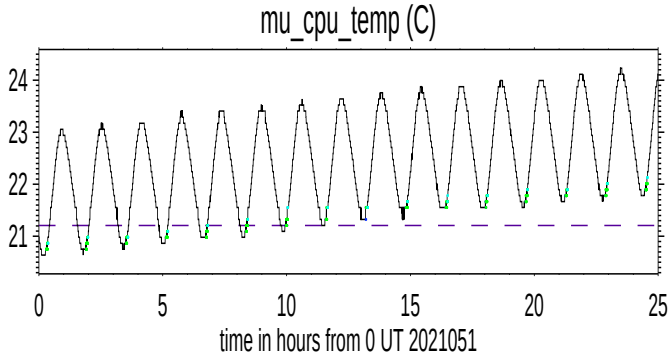

mu_15neg (V)
-14.90
-14.95
-15.00
0
5
10
15
20
25
time in hours from 0 UT 2021051

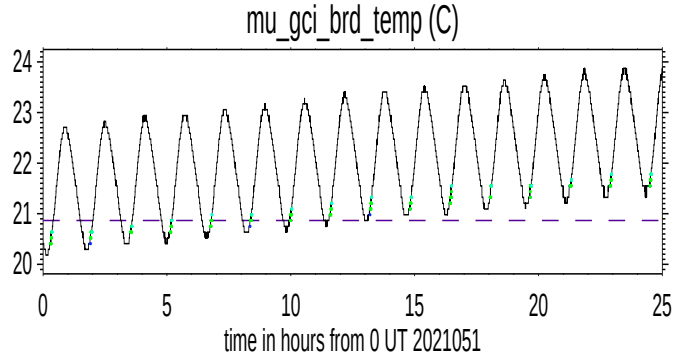

mu_15_conv_temp (C)
26
25
24
23
22
0
5
10
15
20
25
time in hours from 0 UT 2021051

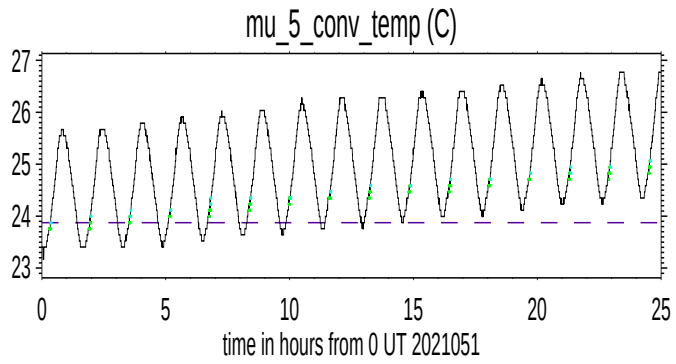

mu_1553_trans_temp (C)
24
23
22
21
0
5
10
15
20
25
time in hours from 0 UT 2021051

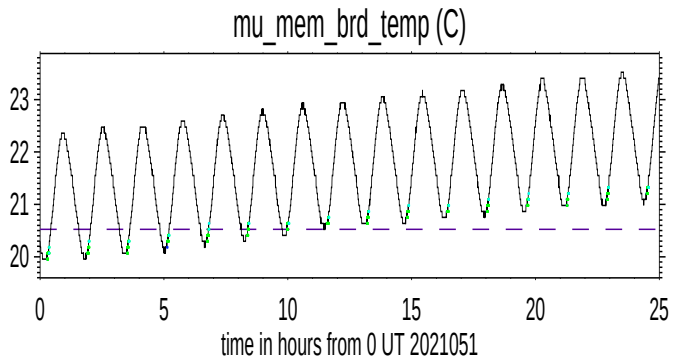

mu_cntl_fpga_temp (C)
25
24
23
22
21
0
5
10
15
20
25
time in hours from 0 UT 2021051

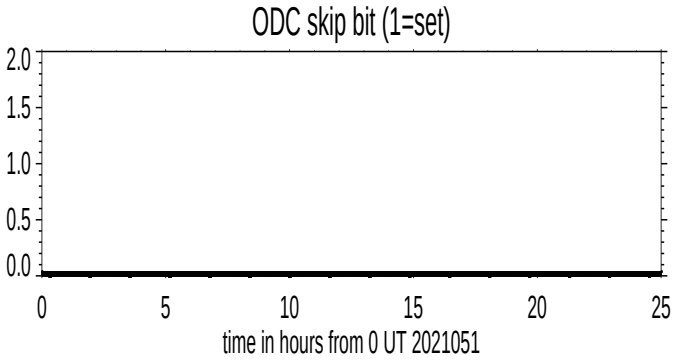

mu stats (DN)
tm_drop
fault_cnt
cmd_reject
cmd_pkt_rej
0
5
10
15
20
25
time in hours from 0 UT 2021051

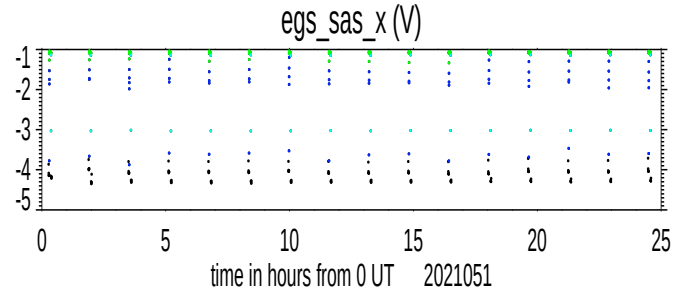

mu_cpu_temp (C)
24
23
22
21
0
5
10
15
20
25
time in hours from 0 UT 2021051

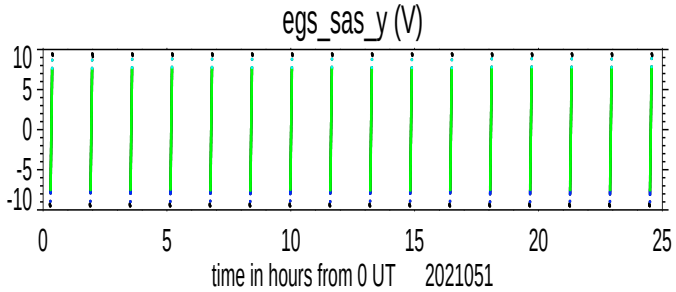

mu_gci_brd_temp (C)
24
23
22
21
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

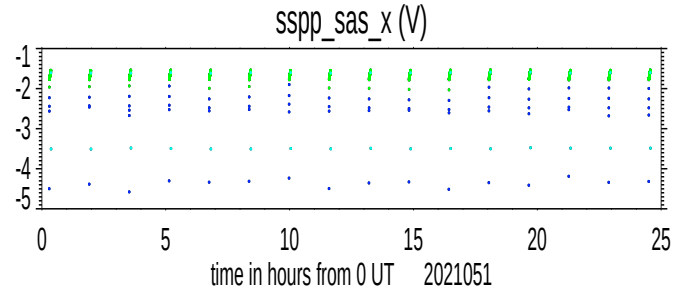

mu_5_conv_temp (C)
27
26
25
24
23
0
5
10
15
20
25
time in hours from 0 UT 2021051

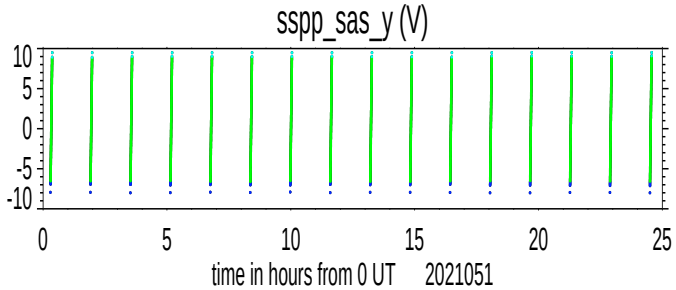

mu_mem_brd_temp (C)
23
22
21
20
0
5
10
15
20
25
time in hours from 0 UT 2021051

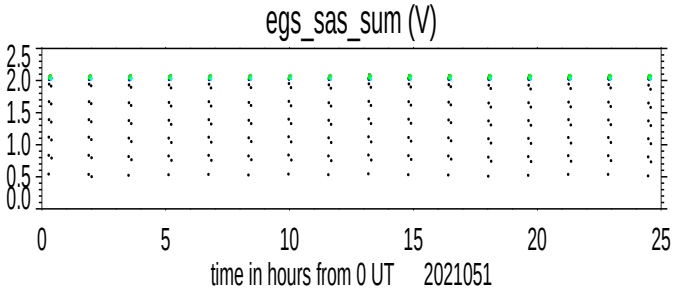

ODC skip bit (1=set)
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

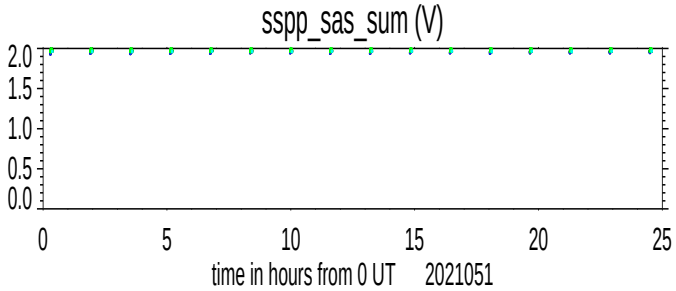

egs_sas_x (V)
-1
-2
-3
-4
-5
0
5
10
15
20
25
time in hours from 0 UT 2021051

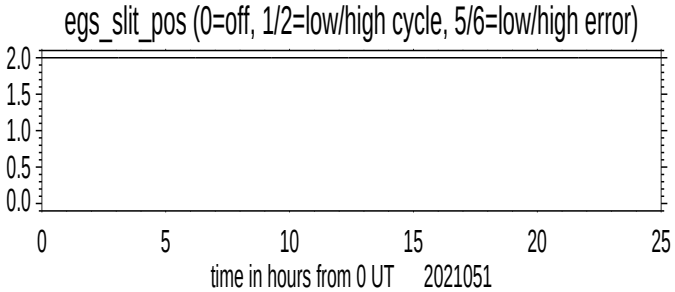

egs_sas_y (V)
10
5
0
-5
-10
0
5
10
15
20
25
time in hours from 0 UT 2021051

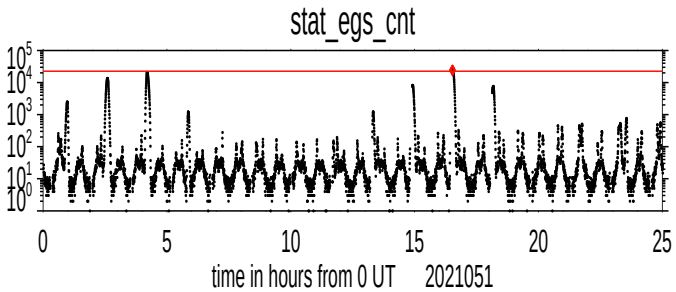

sspp_sas_x (V)
-1
-2
-3
-4
-5
0
5
10
15
20
25
time in hours from 0 UT 2021051

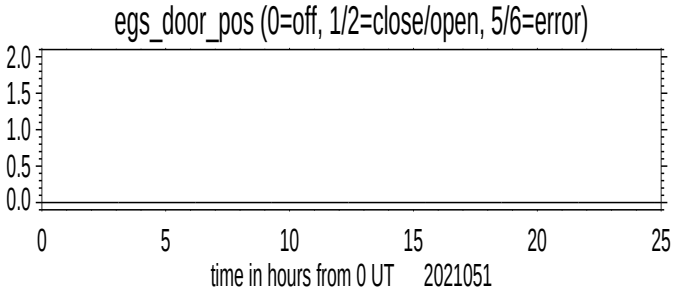

sspp_sas_y (V)
10
5
0
-5
-10
0
5
10
15
20
25
time in hours from 0 UT 2021051

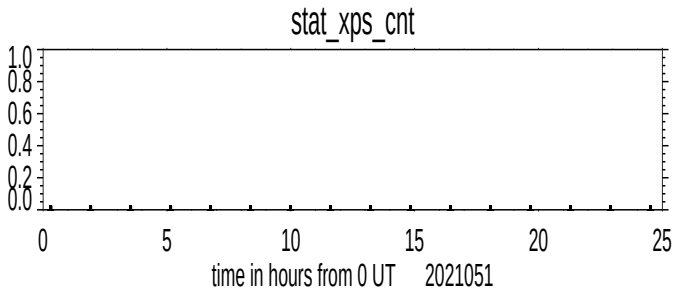

egs_sas_sum (V)
2.5
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

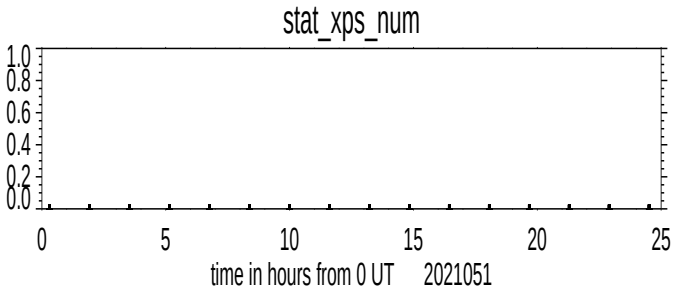

sspp_sas_sum (V)
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

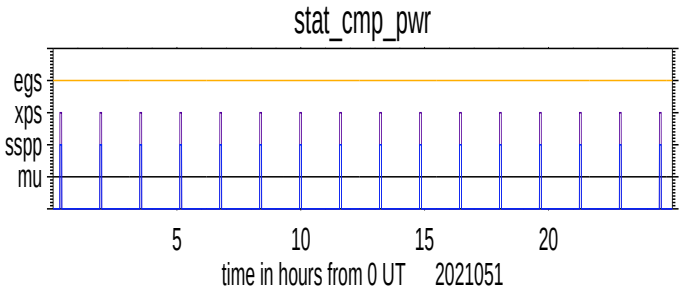

egs_slit_pos (0=off, 1/2=low/high cycle, 5/6=low/high error)
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051


stat_egs_cnt
10^5
10^4
10^3
10^2
10^1
10^0
0
5
10
15
20
25
time in hours from 0 UT 2021051

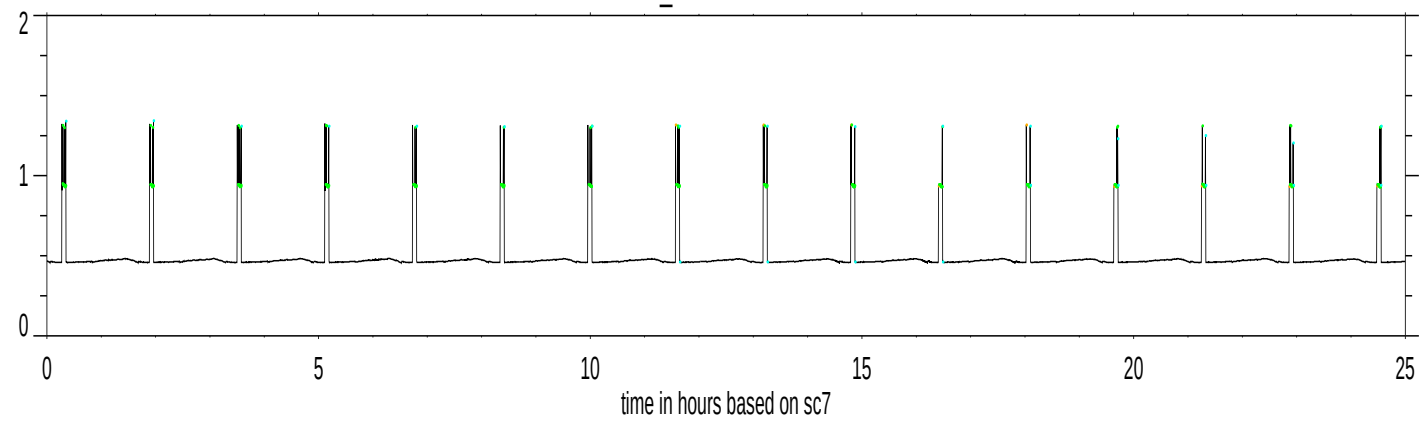

egs_door_pos (0=off, 1/2=close/open, 5/6=error)
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051


stat_xps_cnt
1.0
0.8
0.6
0.4
0.2
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051

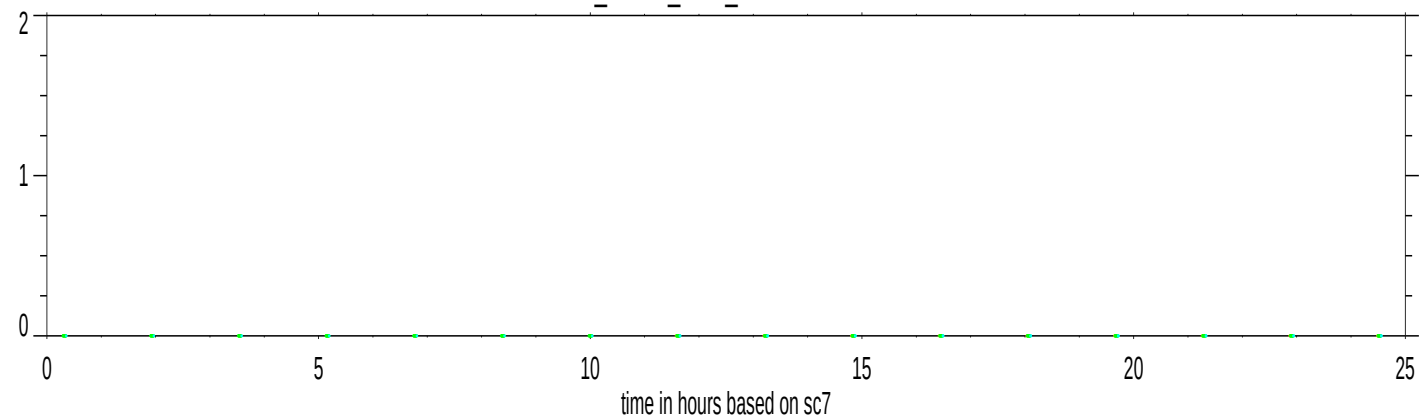

stat_xps_num
1.0
0.8
0.6
0.4
0.2
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021051


stat_cmp_pwr
egs
xps
sspp
mu
5
10
15
20
time in hours from 0 UT 2021051

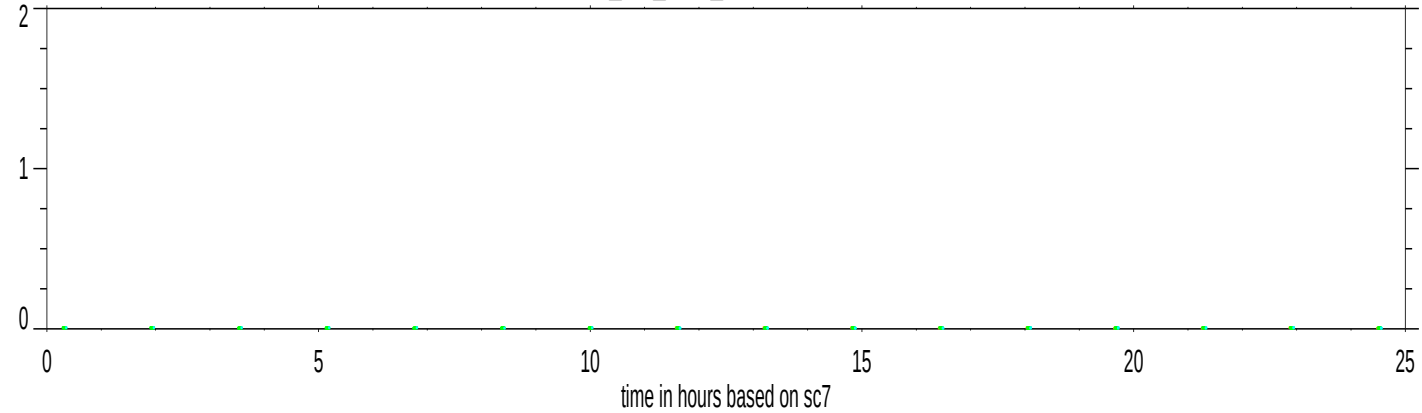
SEE_CUR 2021051



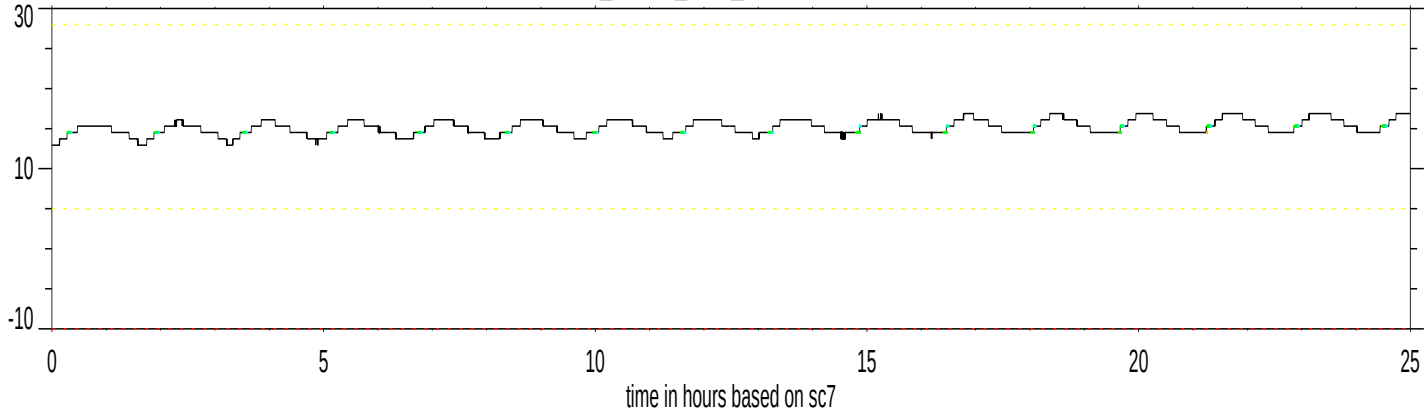
SEE_SURV_HTR_CUR 2021051



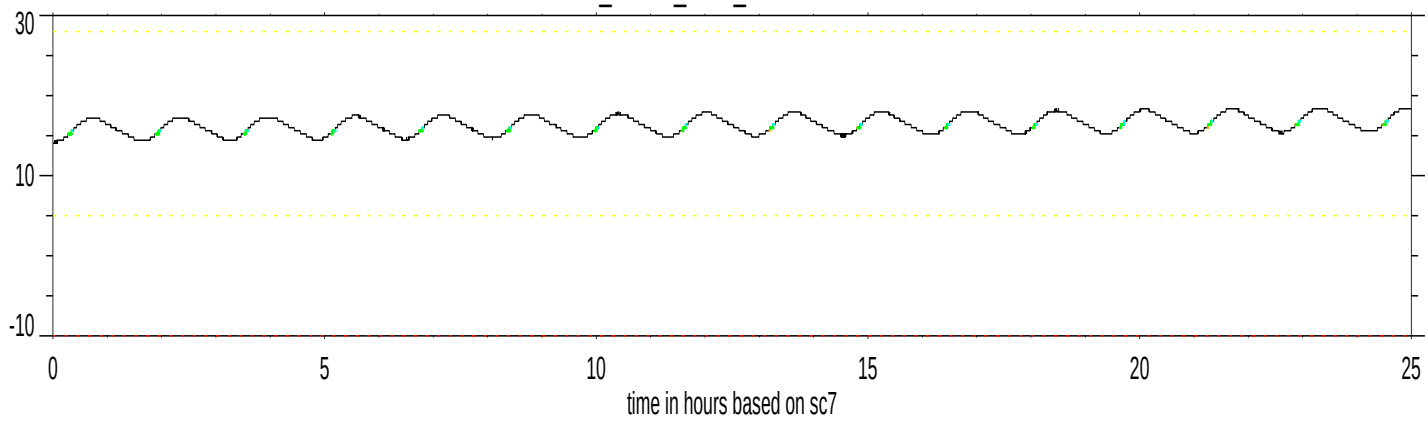
SEE_OP_HTR_CUR 2021051



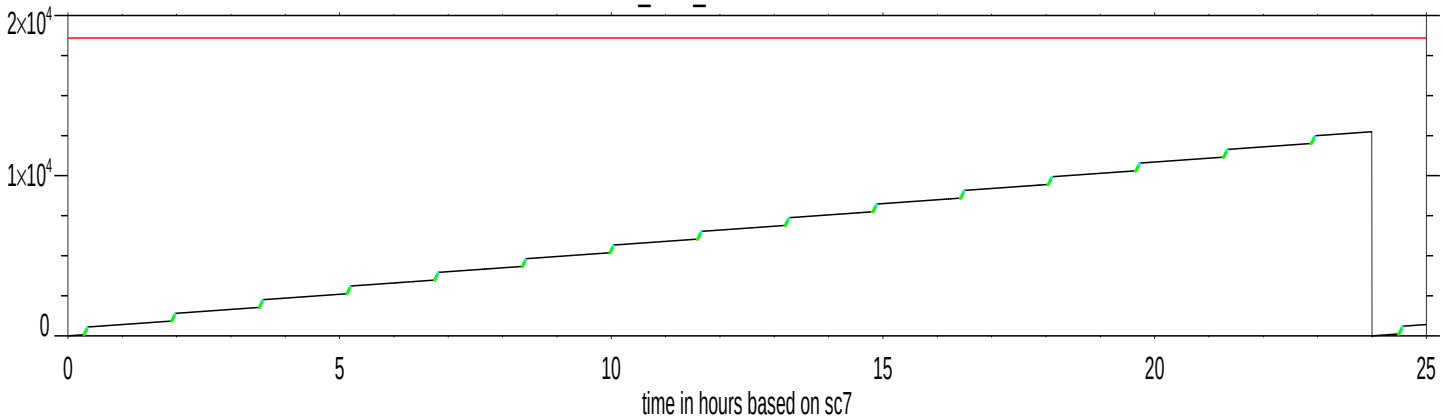
SSPP_BHND_XPS_TEMP 2021051



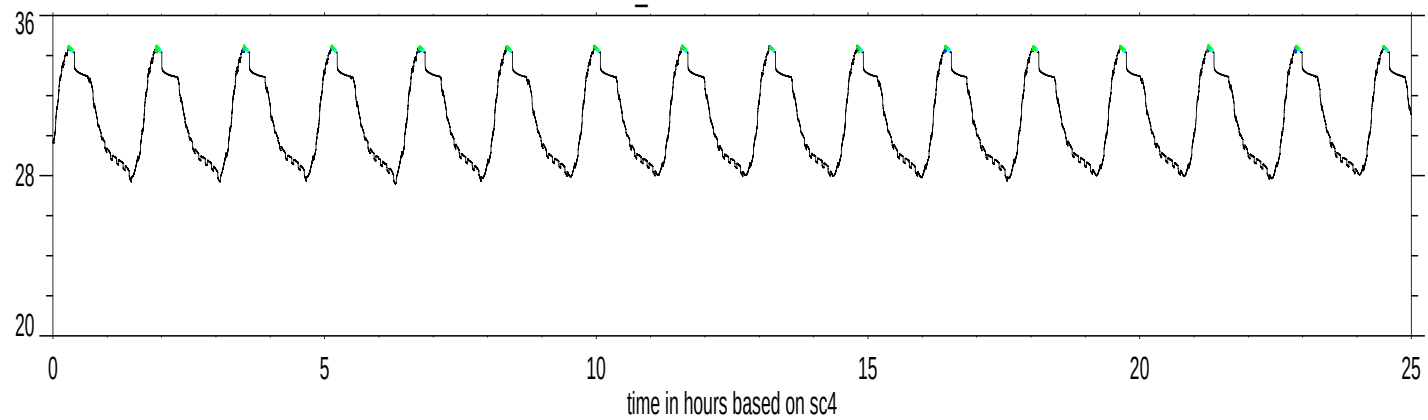
SSPP_BHND_MTR_TEMP 2021051



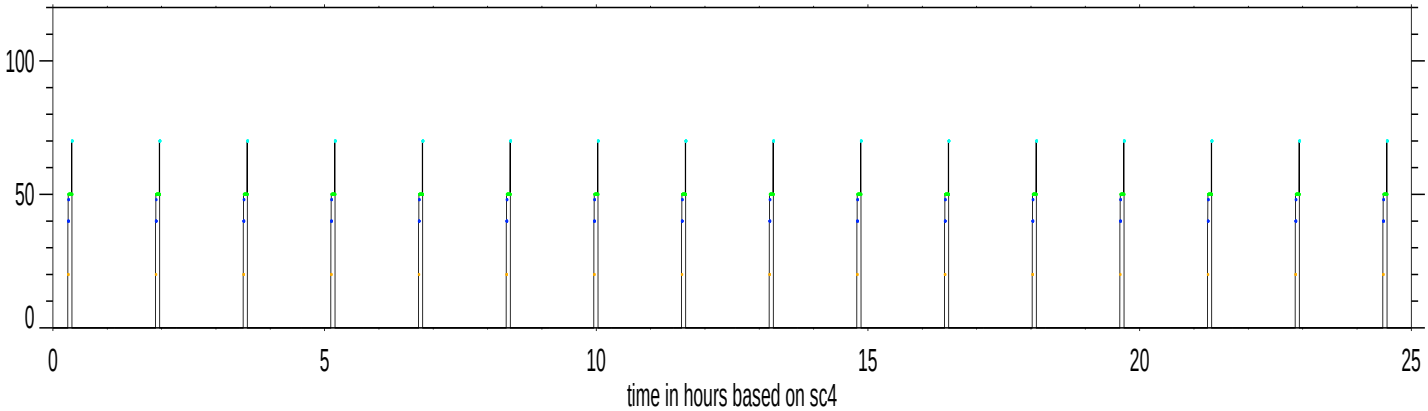
SEE_PKT_COUNT 2021051

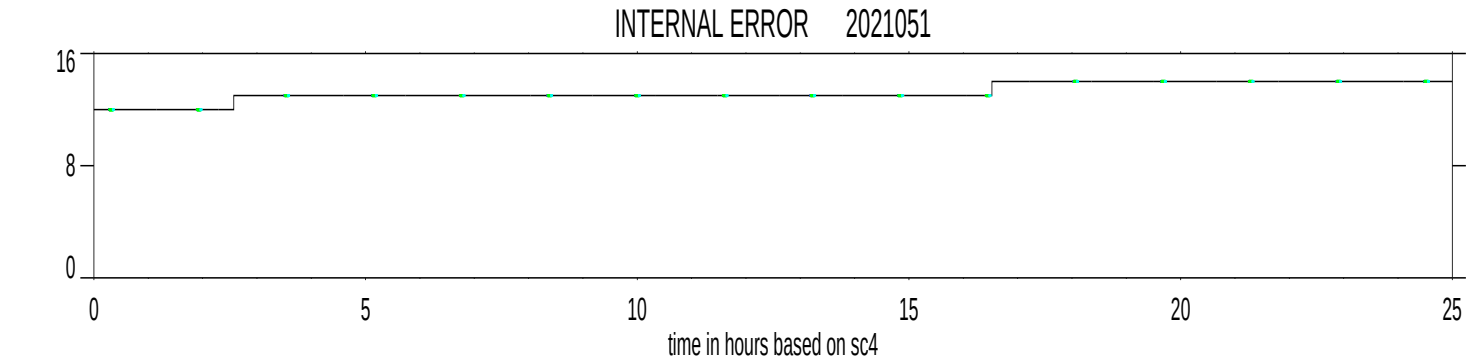


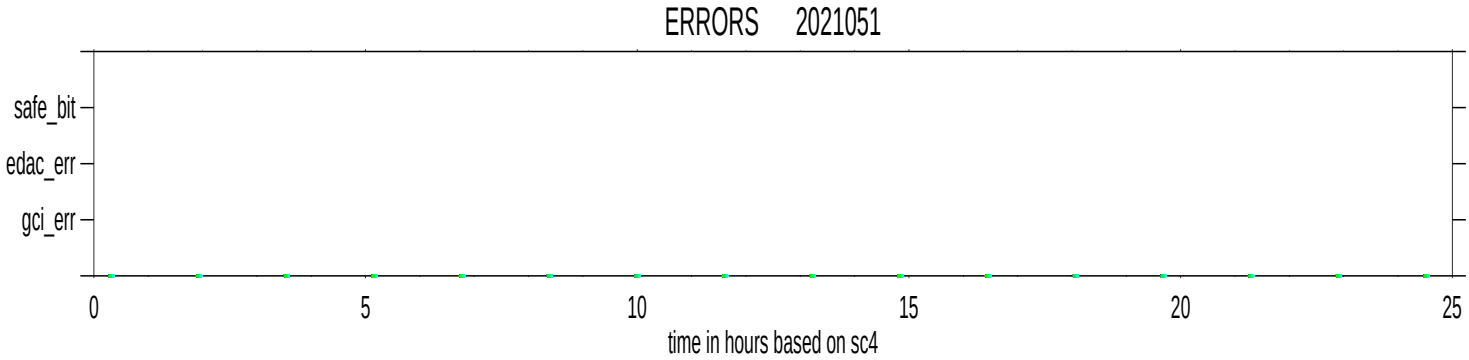
BUS_VOLTAGE 2021051

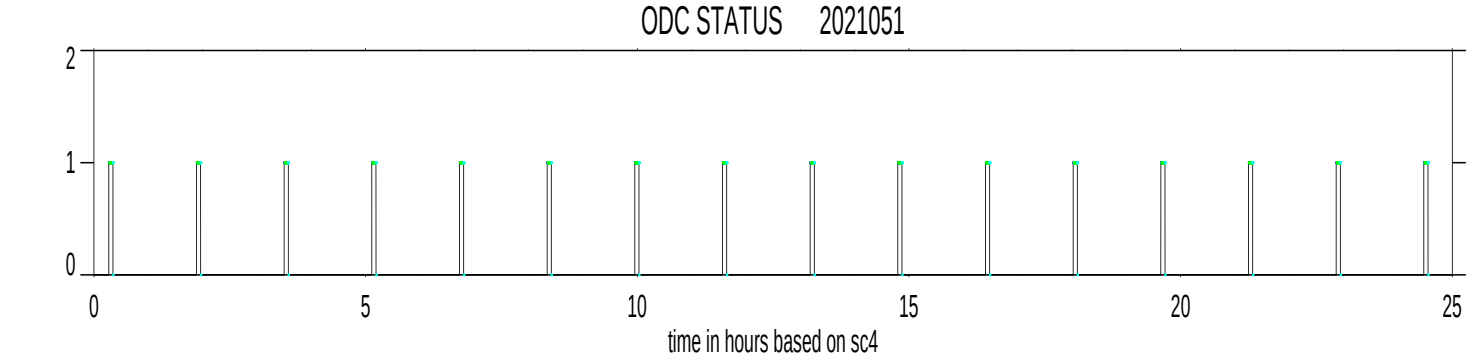


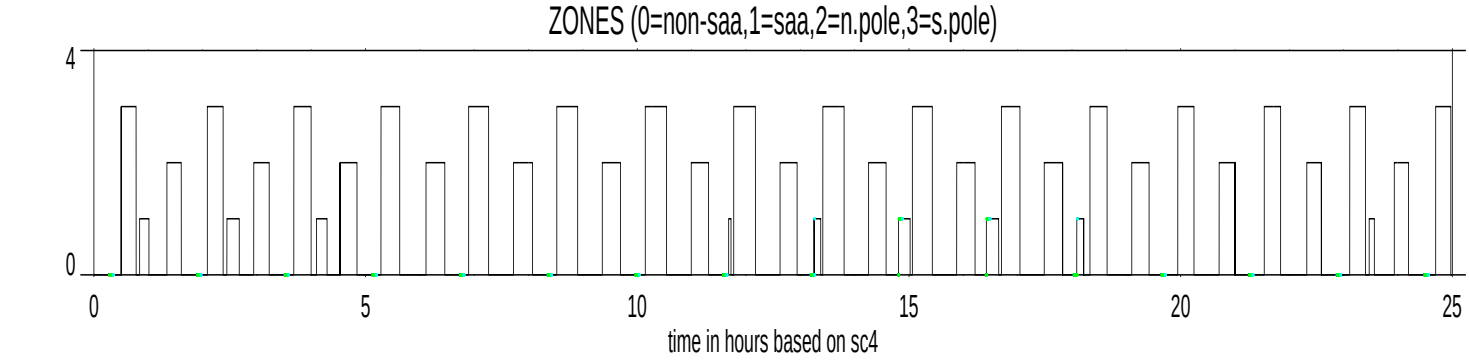
SEE_MU Operational Mode 2021051

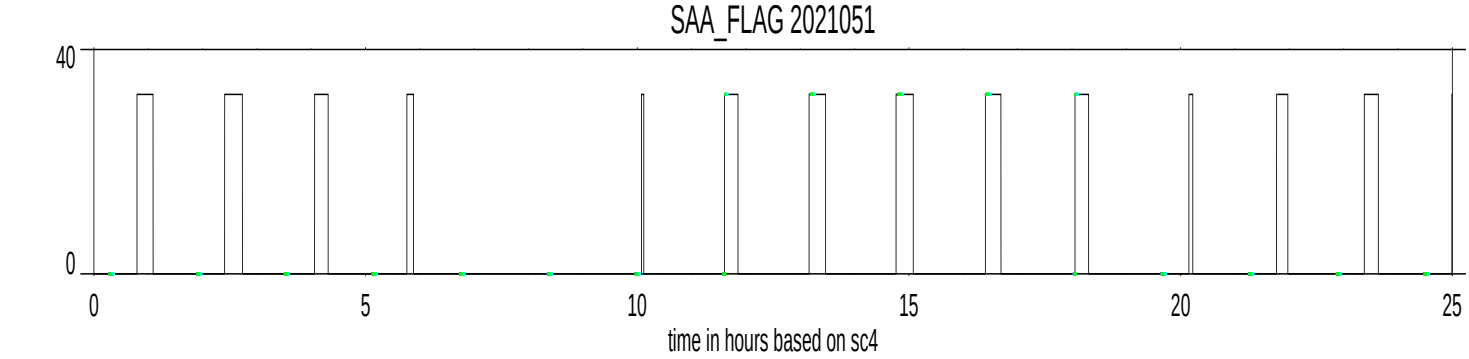


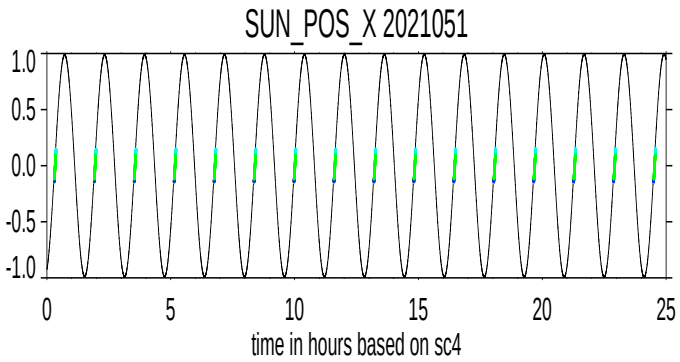

INTERNAL ERROR 2021051
16
8
0
0
5
10
15
20
25
time in hours based on sc4

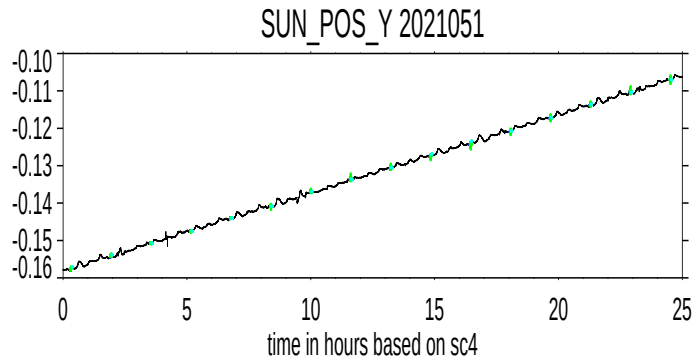

ERRORS 2021051
safe_bit
edac_err
gci_err
0
5
10
15
20
25
time in hours based on sc4

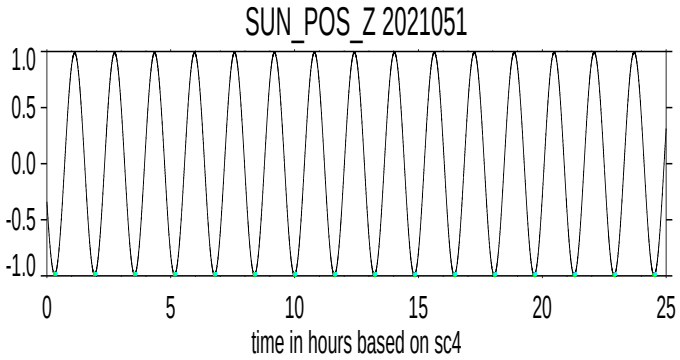

ODC STATUS 2021051
2
1
0
0
5
10
15
20
25
time in hours based on sc4

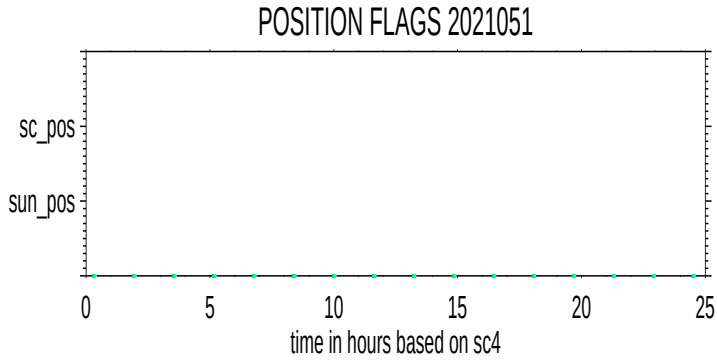

ZONES (0=non-saa,1=saa,2=n.pole,3=s.pole)
4
0
0
5
10
15
20
25
time in hours based on sc4

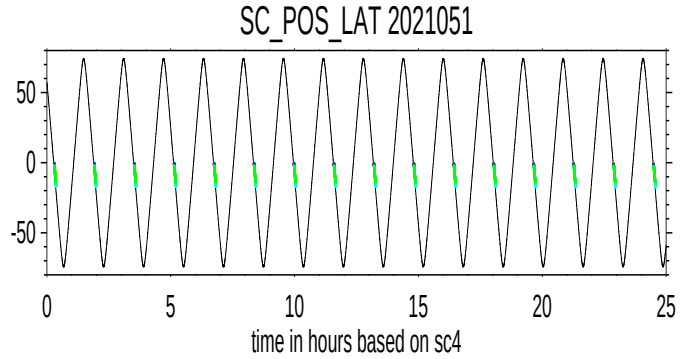

SAA_FLAG 2021051
40
0
0
5
10
15
20
25
time in hours based on sc4

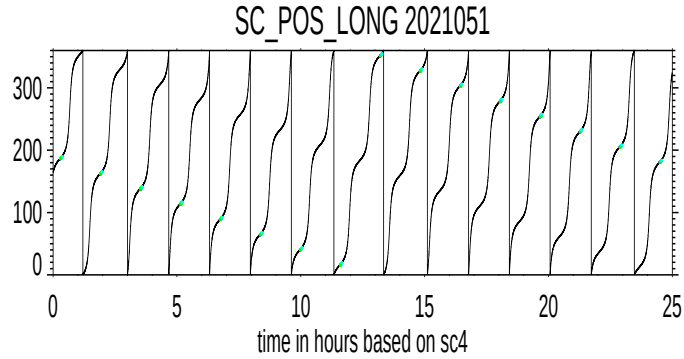

SUN_POS_X 2021051
1.0
0.5
0.0
-0.5
-1.0
0
5
10
15
20
25
time in hours based on sc4

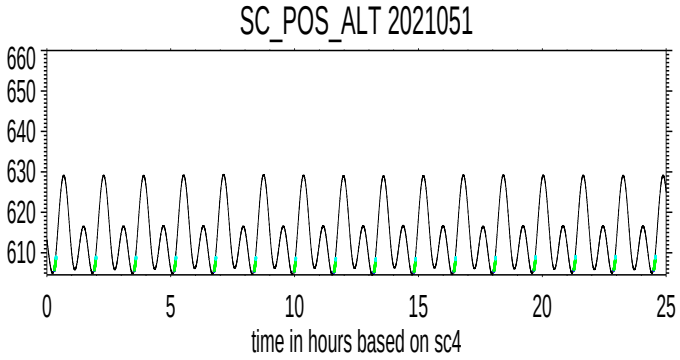

SUN_POS_Y 2021051
-0.10
-0.11
-0.12
-0.13
-0.14
-0.15
-0.16
0
5
10
15
20
25
time in hours based on sc4

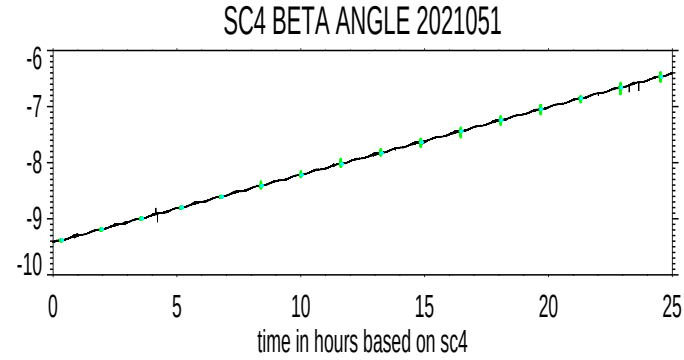

SUN_POS_Z 2021051
1.0
0.5
0.0
-0.5
-1.0
0
5
10
15
20
25
time in hours based on sc4


POSITION FLAGS 2021051
sc_pos
sun_pos
0
5
10
15
20
25
time in hours based on sc4


SC_POS_LAT 2021051
50
0
-50
0
5
10
15
20
25
time in hours based on sc4


SC_POS_LONG 2021051
300
200
100
0
0
5
10
15
20
25
time in hours based on sc4


SC_POS_ALT 2021051
660
650
640
630
620
610
0
5
10
15
20
25
time in hours based on sc4


SC4 BETA ANGLE 2021051
-6
-7
-8
-9
-10
0
5
10
15
20
25
time in hours based on sc4