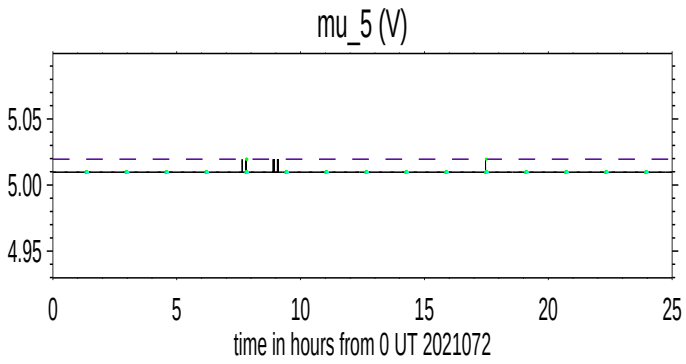
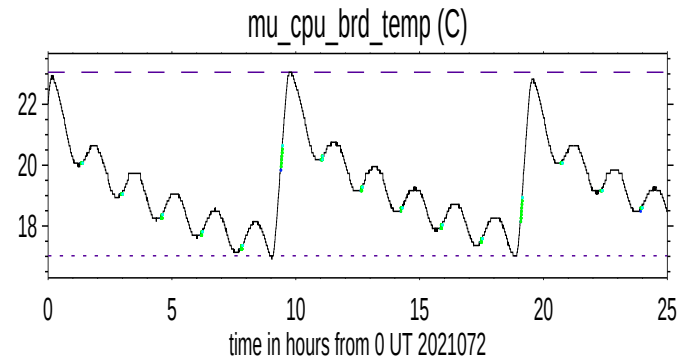
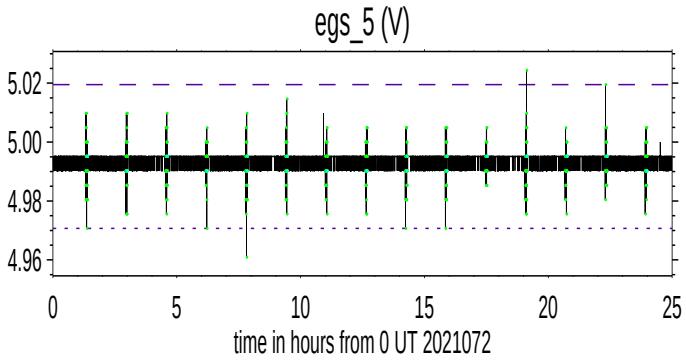
```
Information for      2021072
17:36:30.002: see_stat[1]: 14 internal error
```

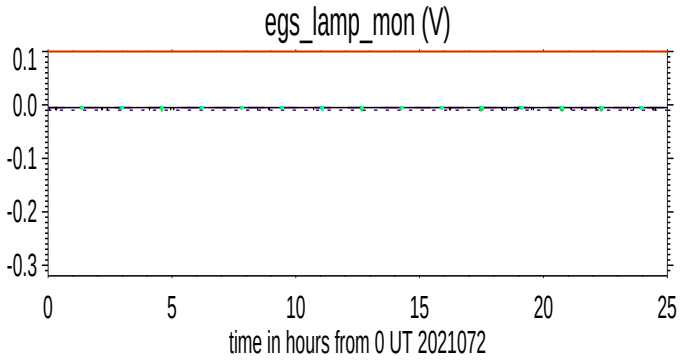
**/export/timed/data/science_dp/tlm_limit/outoflimit_2021072_012.txt**
**Wed Mar 17 05:58:39 2021 1**

RH OutOfLimit 1299628831 1299718813 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 2021072


mu_cpu_brd_temp (C)
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072


egs_5 (V)
5.02
5.00
4.98
4.96
0
5
10
15
20
25
time in hours from 0 UT 2021072


egs_lamp_mon (V)
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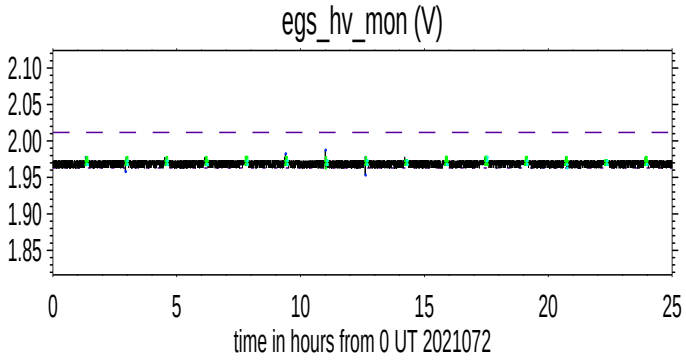
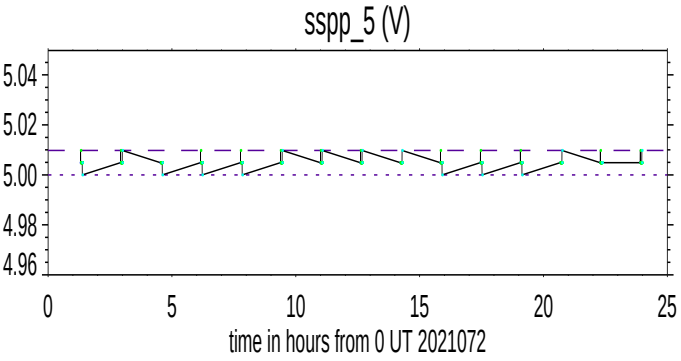
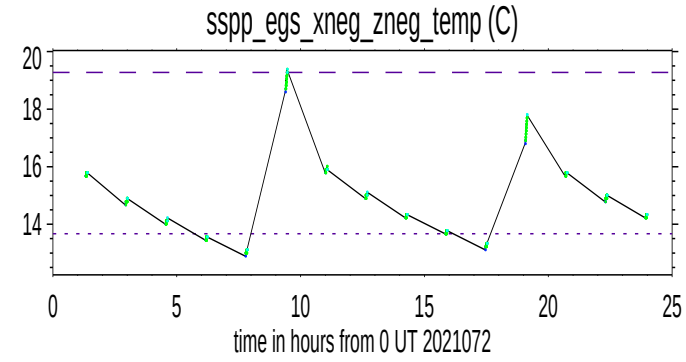
0.0
-0.1
-0.2
-0.3
0
5
10
15
20
25
time in hours from 0 UT 2021072


egs_hv_mon (V)
2.10
2.05
2.00
1.95
1.90
1.85
0
5
10
15
20
25
time in hours from 0 UT 2021072


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 2021072


sspp_egs_xneg_zneg_temp (C)
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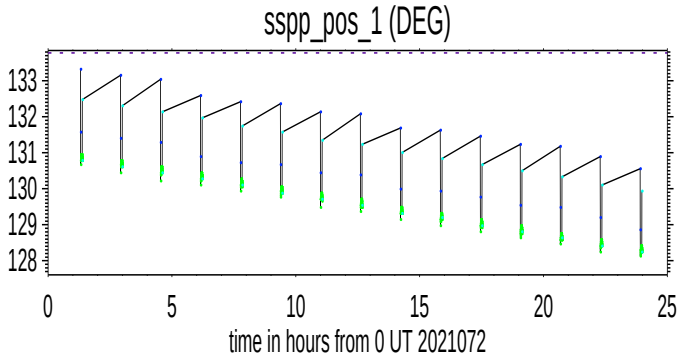
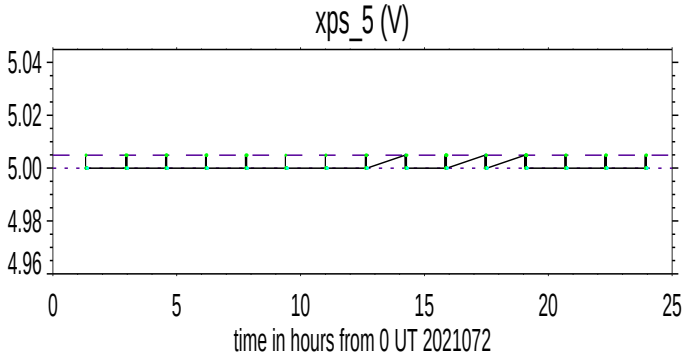
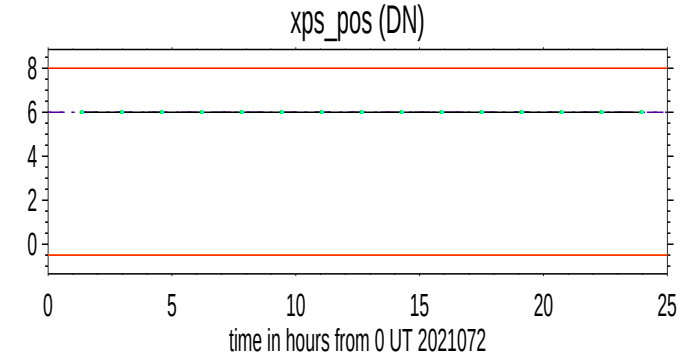
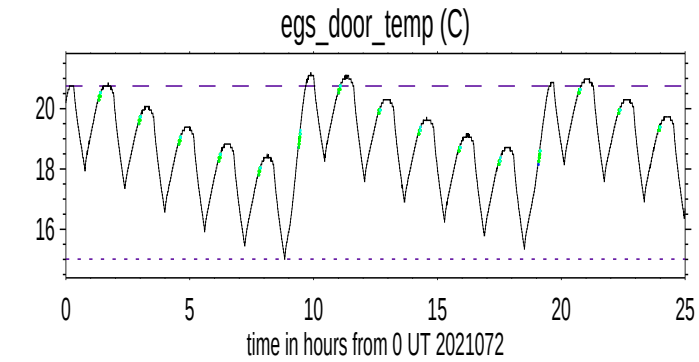
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072


sspp_pos_1 (DEG)
133
132
131
130
129
128
0
5
10
15
20
25
time in hours from 0 UT 2021072


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 2021072


xps_pos (DN)
8
6
4
2
0
0
5
10
15
20
25
time in hours from 0 UT 2021072


egs_door_temp (C)
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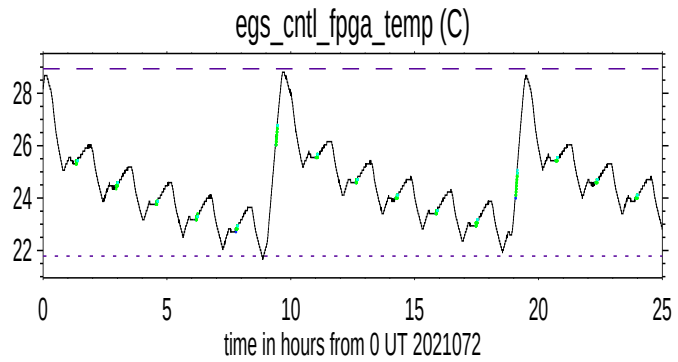
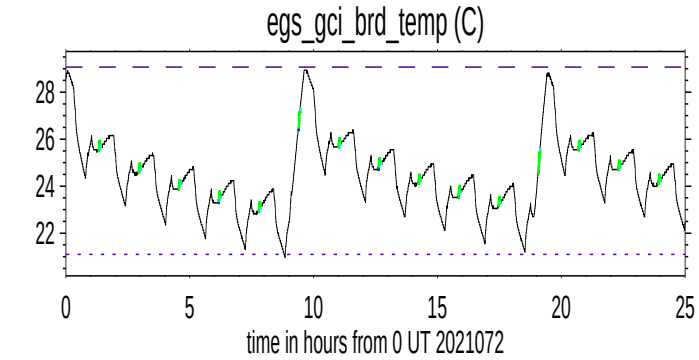
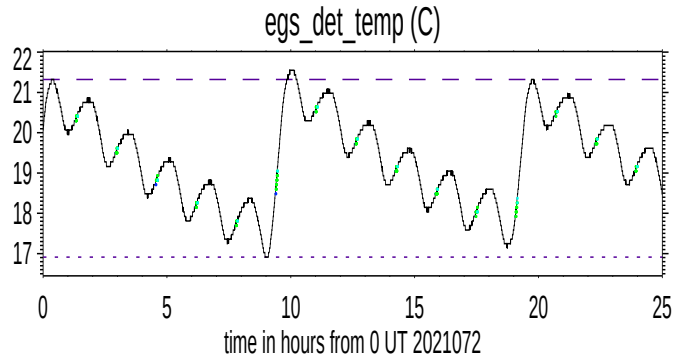
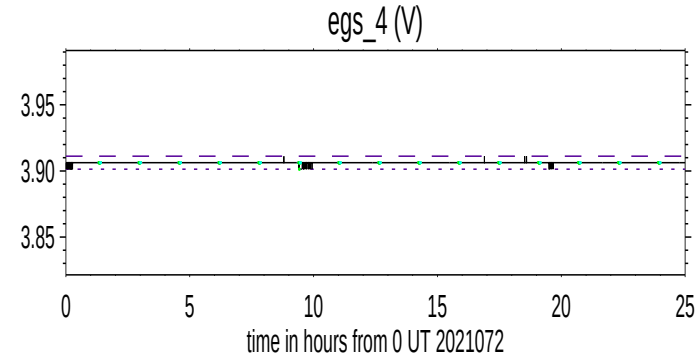
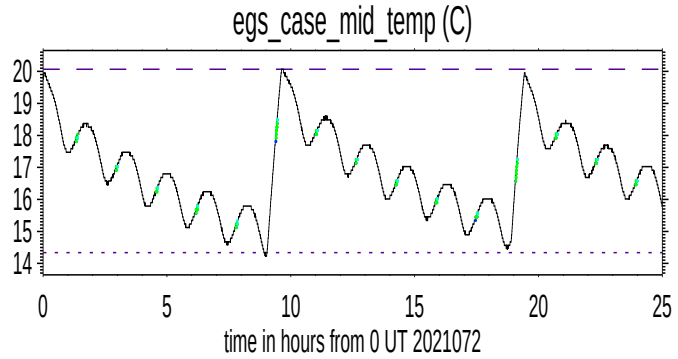
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021072

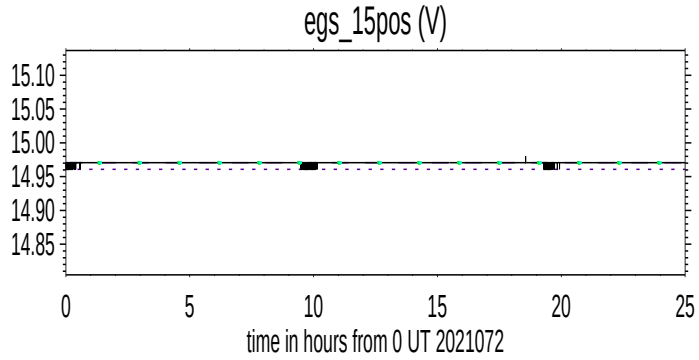

egs_cntl_fpga_temp (C)
28
26
24
22
0
5
10
15
20
25
time in hours from 0 UT 2021072

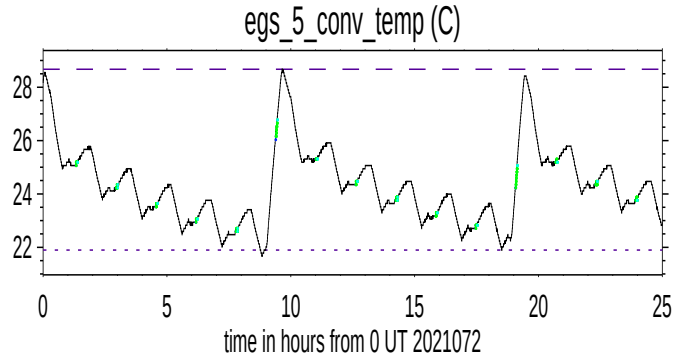

egs_gci_brd_temp (C)
28
26
24
22
0
5
10
15
20
25
time in hours from 0 UT 2021072

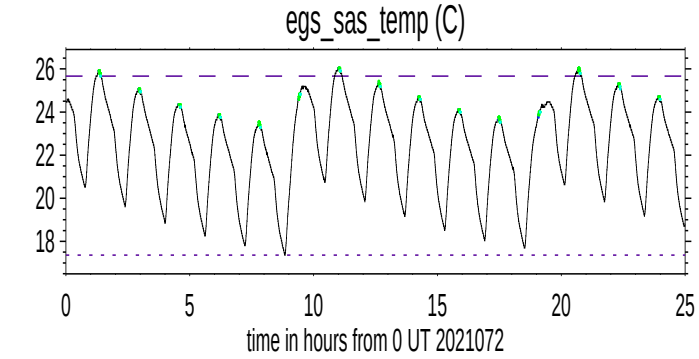

egs_det_temp (C)
22
21
20
19
18
17
0
5
10
15
20
25
time in hours from 0 UT 2021072

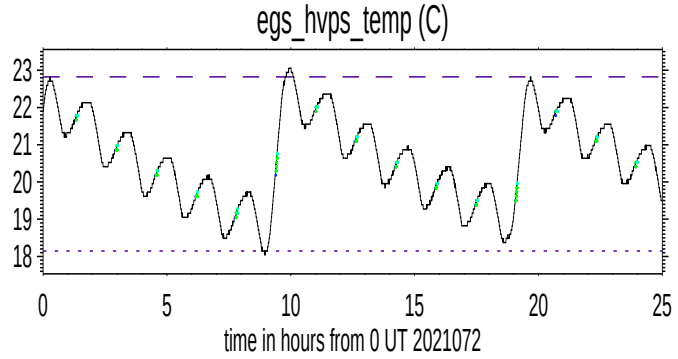

egs_4 (V)
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021072

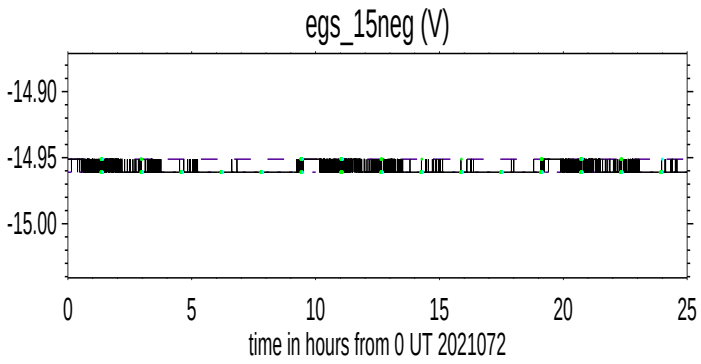

egs_case_mid_temp (C)
20
19
18
17
16
15
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

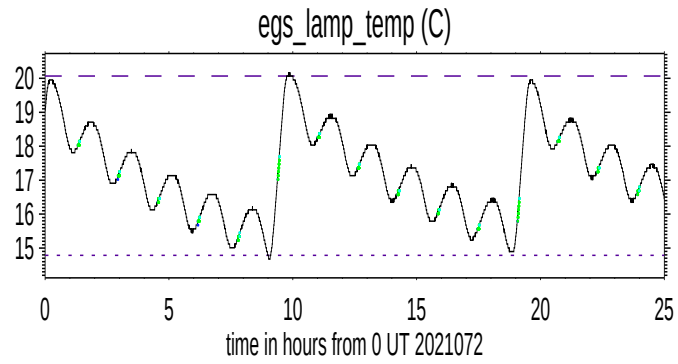

egs_15pos (V)
15.10
15.05
15.00
14.95
14.90
14.85
0
5
10
15
20
25
time in hours from 0 UT 2021072

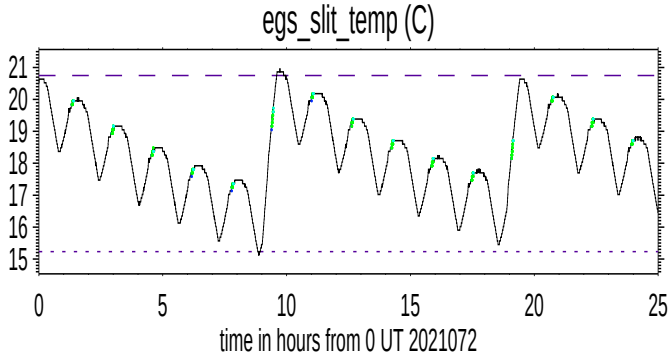

egs_5_conv_temp (C)
28
26
24
22
0
5
10
15
20
25
time in hours from 0 UT 2021072

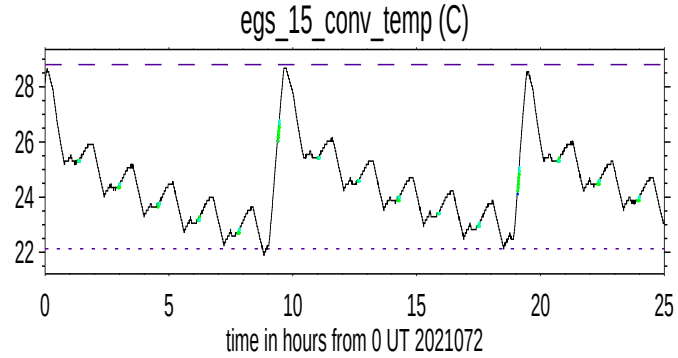

egs_sas_temp (C)
26
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

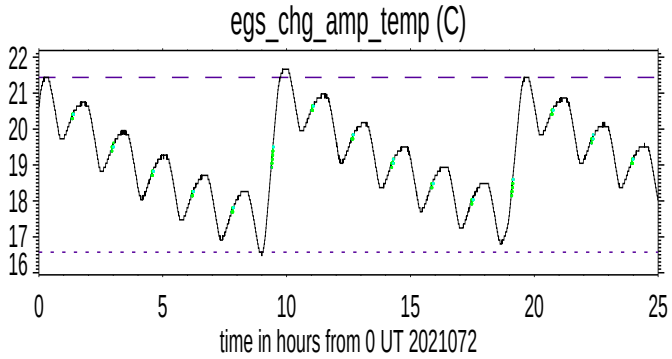

egs_hvps_temp (C)
23
22
21
20
19
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

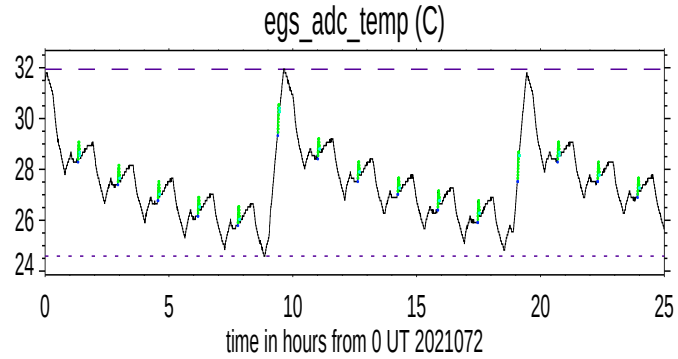

egs_15neg (V)
-14.90
-14.95
-15.00
0 5 10 15 20 25
time in hours from 0 UT 2021072

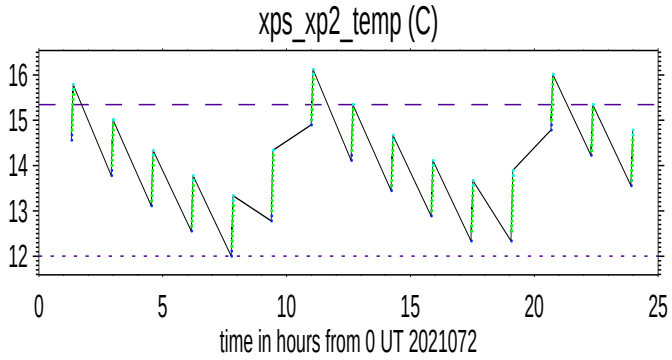

egs_lamp_temp (C)
20 19 18 17 16 15
0 5 10 15 20 25
time in hours from 0 UT 2021072

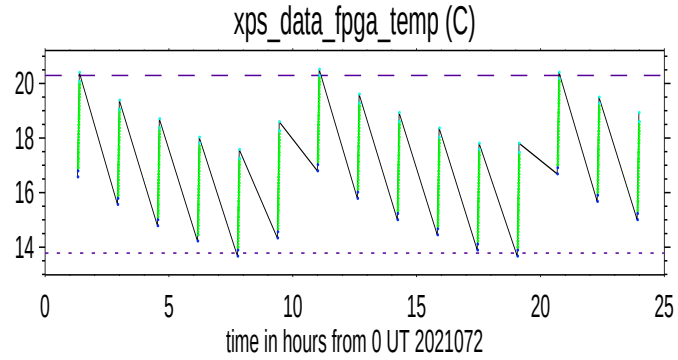

egs_slit_temp (C)
21 20 19 18 17 16 15
0 5 10 15 20 25
time in hours from 0 UT 2021072

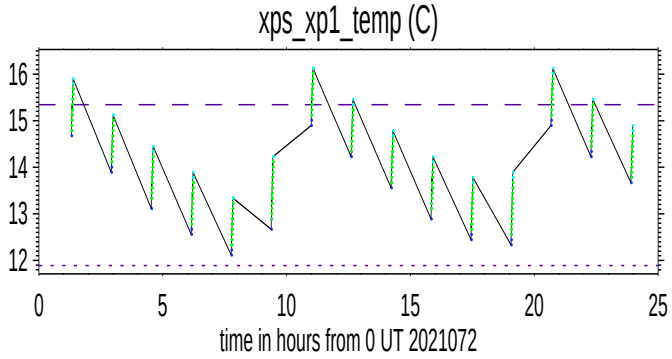

egs_15_conv_temp (C)
28 26 24 22
0 5 10 15 20 25
time in hours from 0 UT 2021072

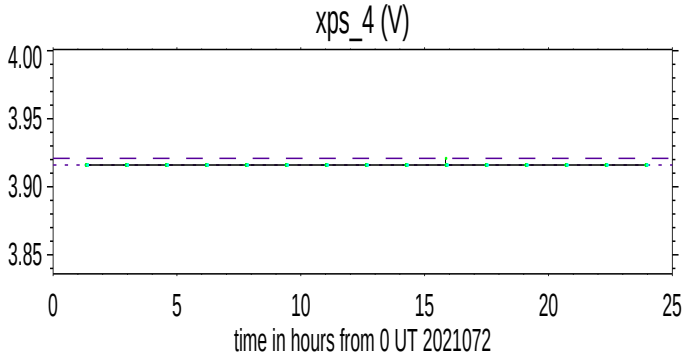

egs_chg_amp_temp (C)
22 21 20 19 18 17 16
0 5 10 15 20 25
time in hours from 0 UT 2021072

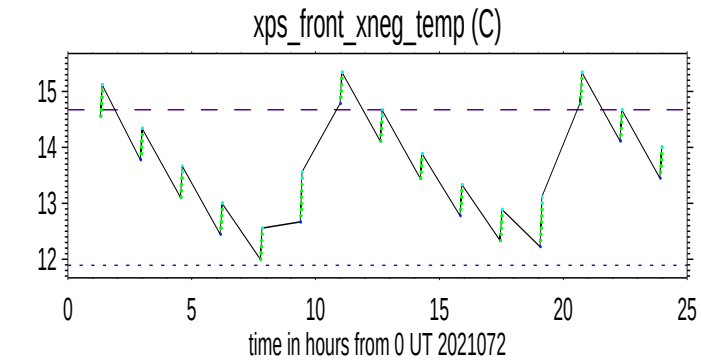

egs_adc_temp (C)
32 30 28 26 24
0 5 10 15 20 25
time in hours from 0 UT 2021072

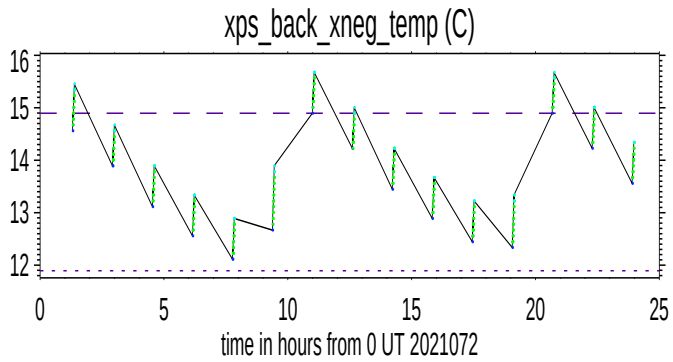

xps_xp2_temp (C)
16 15 14 13 12
0 5 10 15 20 25
time in hours from 0 UT 2021072

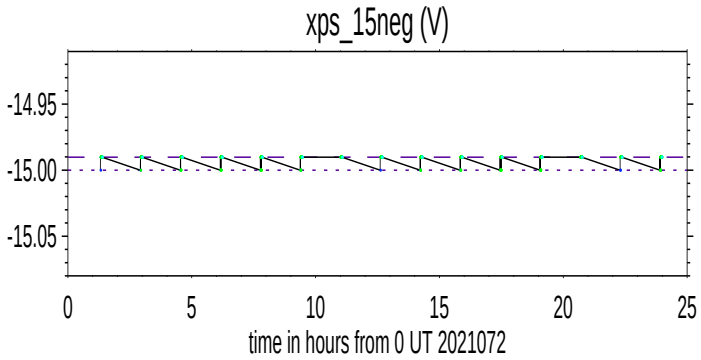

xps_data_fpga_temp (C)
20 18 16 14
0 5 10 15 20 25
time in hours from 0 UT 2021072


xps_xp1_temp (C)
16 15 14 13 12
0 5 10 15 20 25
time in hours from 0 UT 2021072


xps_4 (V)
4.00 3.95 3.90 3.85
0 5 10 15 20 25
time in hours from 0 UT 2021072


xps_front_xneg_temp (C)
15
14
13
12
0
5
10
15
20
25
time in hours from 0 UT 2021072


xps_back_xneg_temp (C)
16
15
14
13
12
0
5
10
15
20
25
time in hours from 0 UT 2021072


xps_15neg (V)
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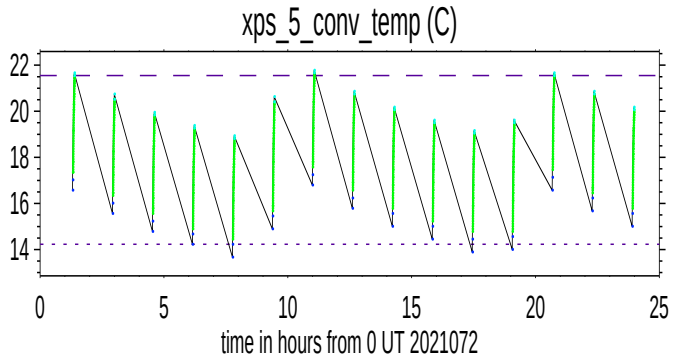
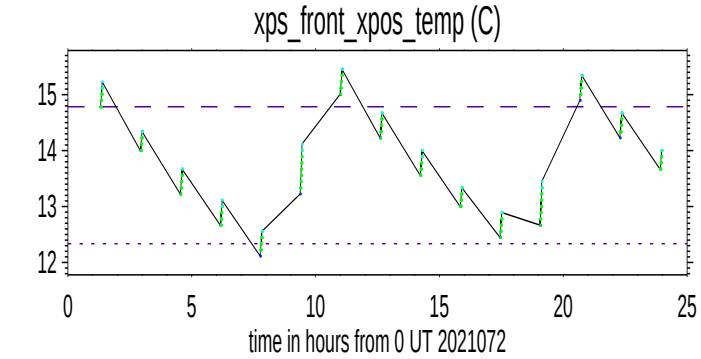
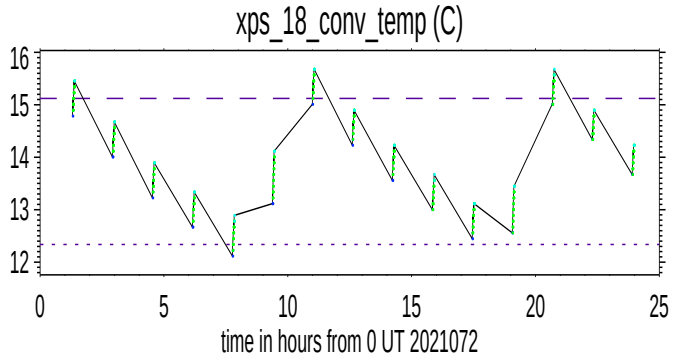
-15.00
-15.05
0
5
10
15
20
25
time in hours from 0 UT 2021072


xps_5_conv_temp (C)
22
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072


xps_front_xpos_temp (C)
15
14
13
12
0
5
10
15
20
25
time in hours from 0 UT 2021072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13
12
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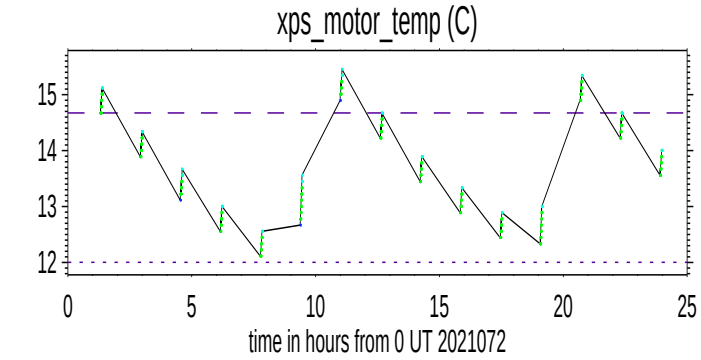
5
10
15
20
25
time in hours from 0 UT 2021072


xps_motor_temp (C)
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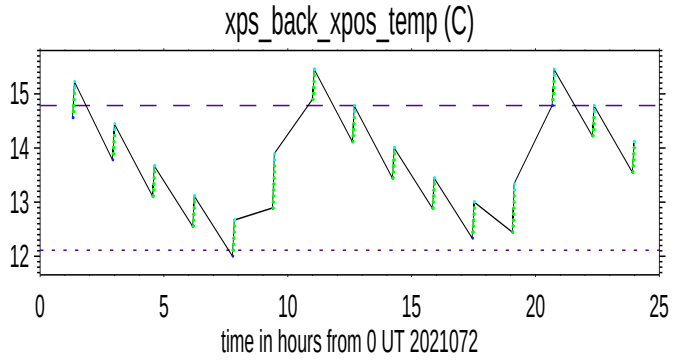
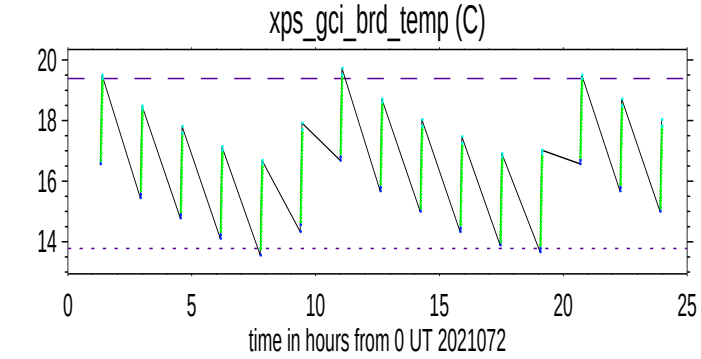
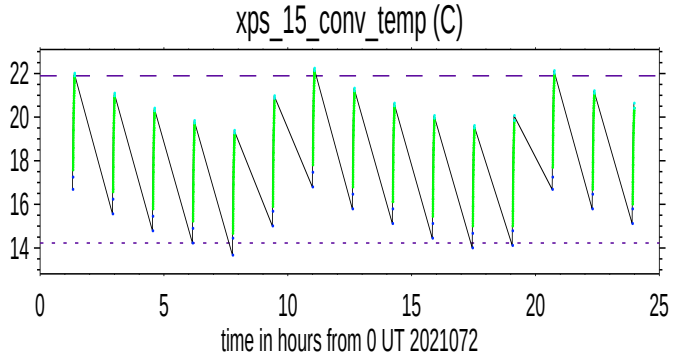
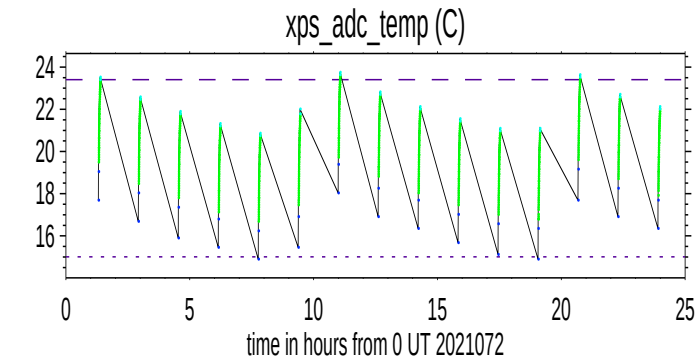
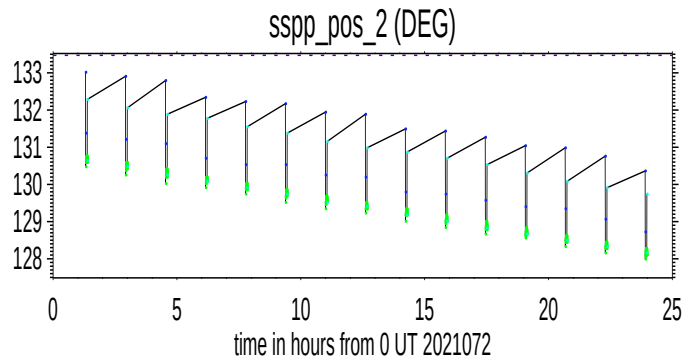
14
13
12
0
5
10
15
20
25
time in hours from 0 UT 2021072

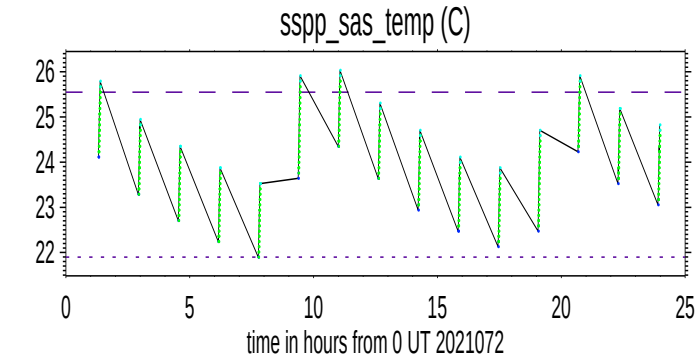

xps_back_xpos_temp (C)
15
14
13
12
0
5
10
15
20
25
time in hours from 0 UT 2021072

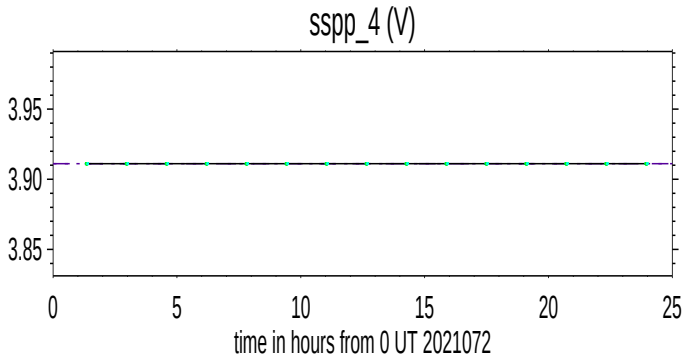

xps_gci_brd_temp (C)
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

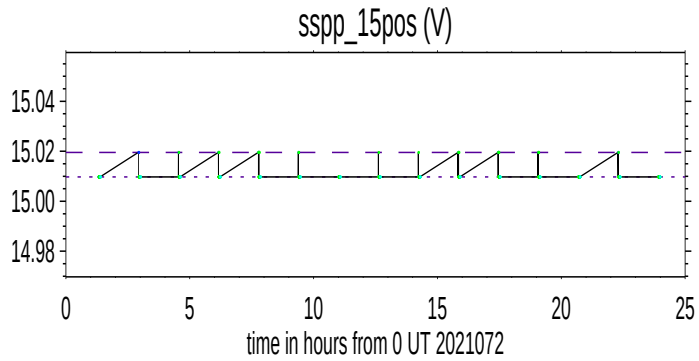

xps_15_conv_temp (C)
22
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

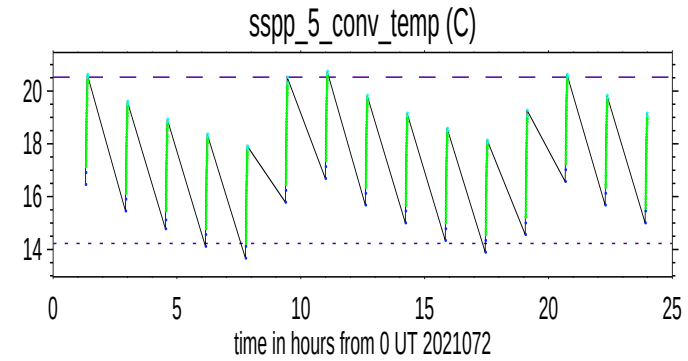

xps_adc_temp (C)
24
22
20
18
16
0
5
10
15
20
25
time in hours from 0 UT 2021072

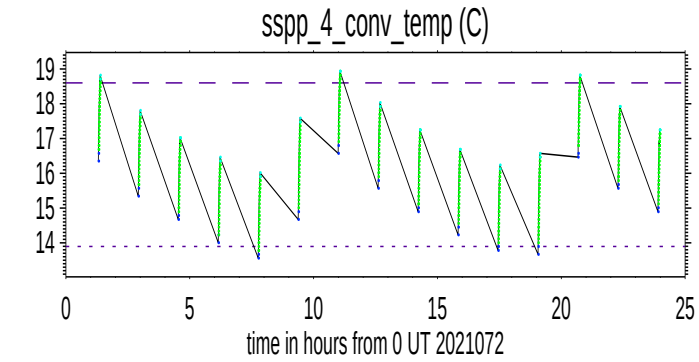

sspp_pos_2 (DEG)
133
132
131
130
129
128
0
5
10
15
20
25
time in hours from 0 UT 2021072

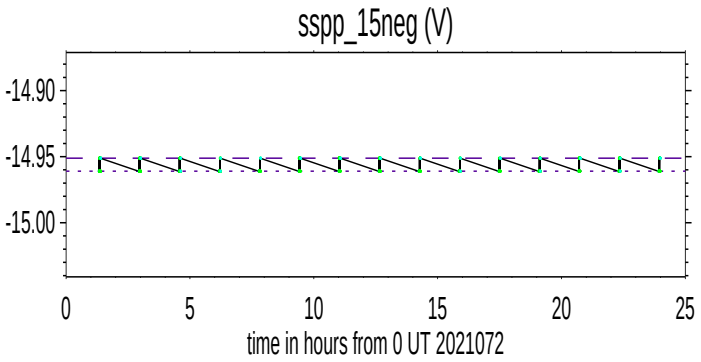

sspp_sas_temp (C)
26
25
24
23
22
0
5
10
15
20
25
time in hours from 0 UT 2021072

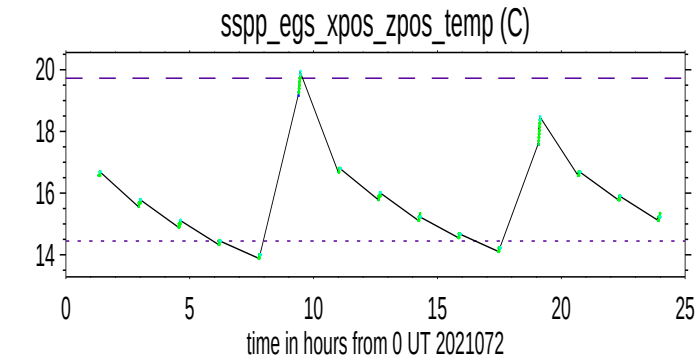

sspp_4 (V)
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021072

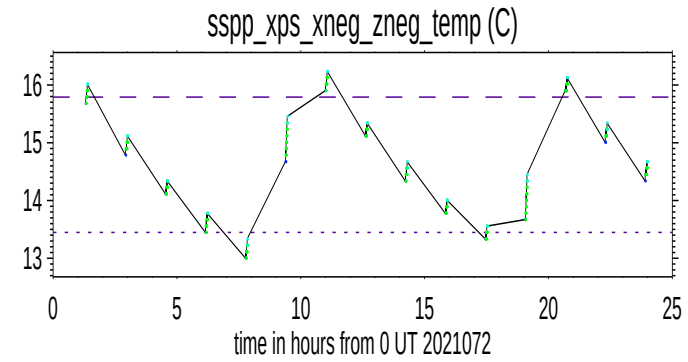

sspp_15pos (V)
15.04
15.02
15.00
14.98
0
5
10
15
20
25
time in hours from 0 UT 2021072

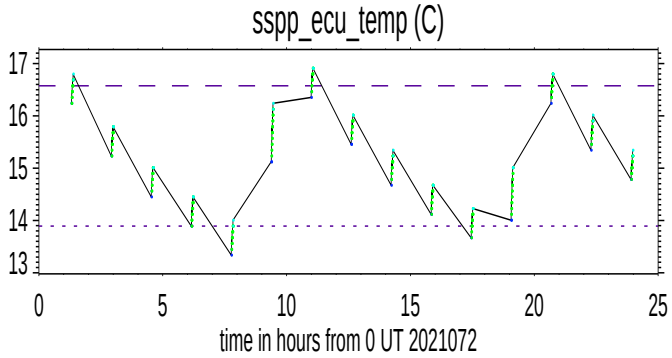

sspp_5_conv_temp (C)
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

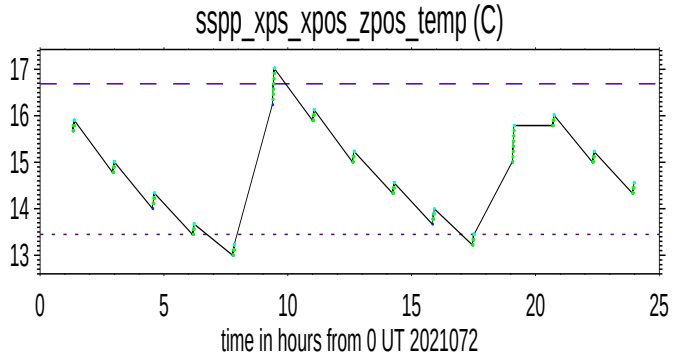

sspp_4_conv_temp (C)
19
18
17
16
15
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

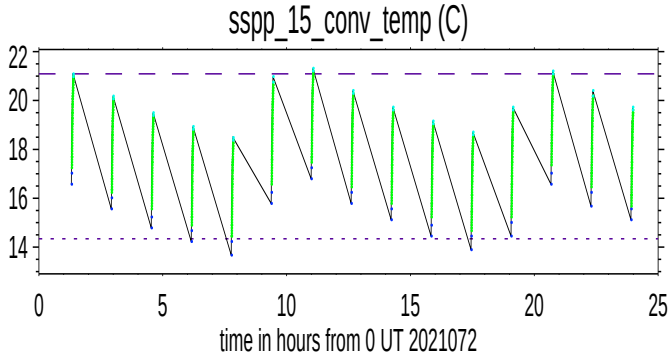

sspp_15neg (V)
-14.90
-14.95
-15.00
0
5
10
15
20
25
time in hours from 0 UT 2021072

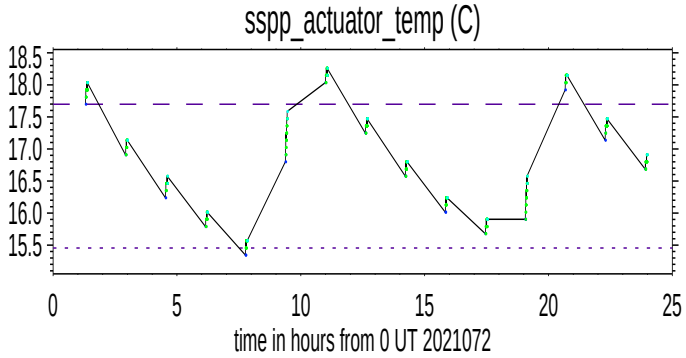

sspp_egs_xpos_zpos_temp (C)
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

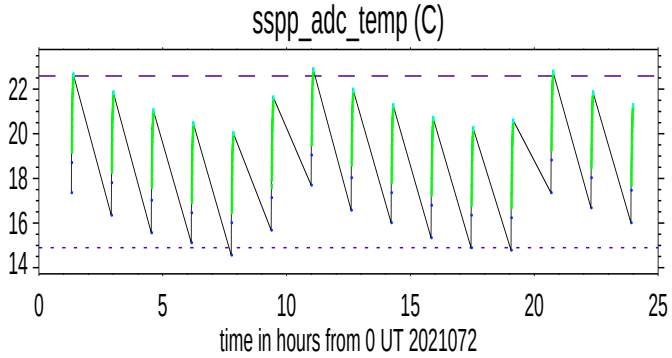

sspp_xps_xneg_zneg_temp (C)
16
15
14
13
0
5
10
15
20
25
time in hours from 0 UT 2021072

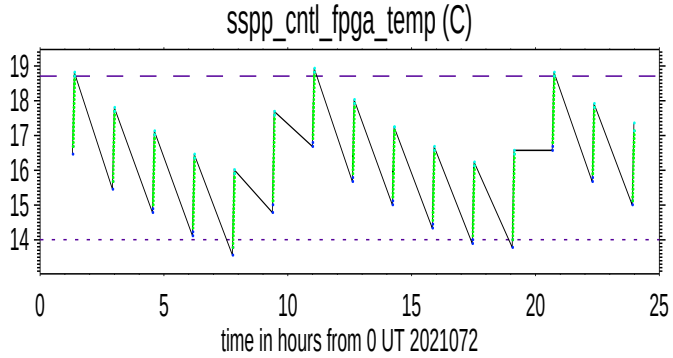

sspp_ecu_temp (C)
17
16
15
14
13
0
5
10
15
20
25
time in hours from 0 UT 2021072

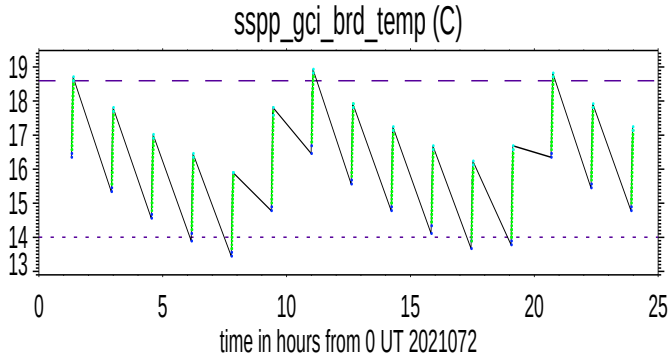

sspp_xps_xpos_zpos_temp (C)
17
16
15
14
13
0
5
10
15
20
25
time in hours from 0 UT 2021072

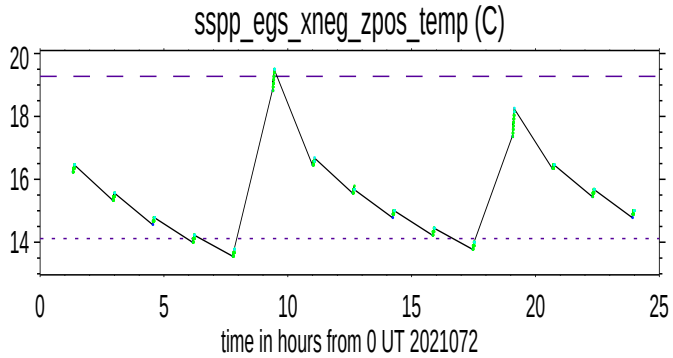

sspp_15_conv_temp (C)
22
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

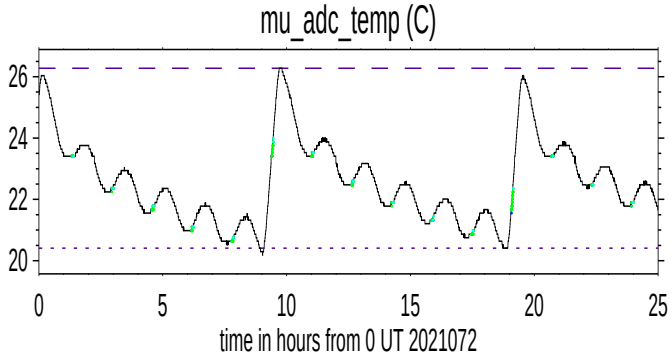

sspp_actuator_temp (C)
18.5
18.0
17.5
17.0
16.5
16.0
15.5
0
5
10
15
20
25
time in hours from 0 UT 2021072

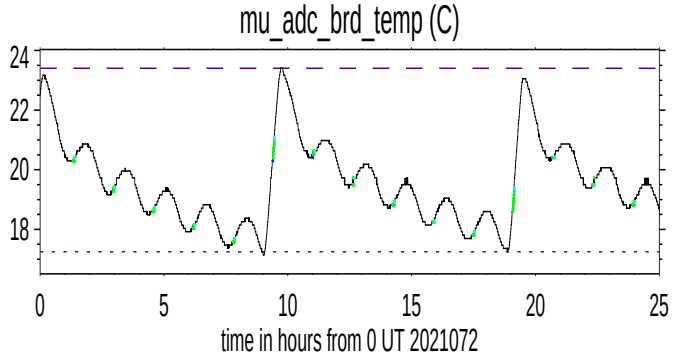

sspp_adc_temp (C)
22
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

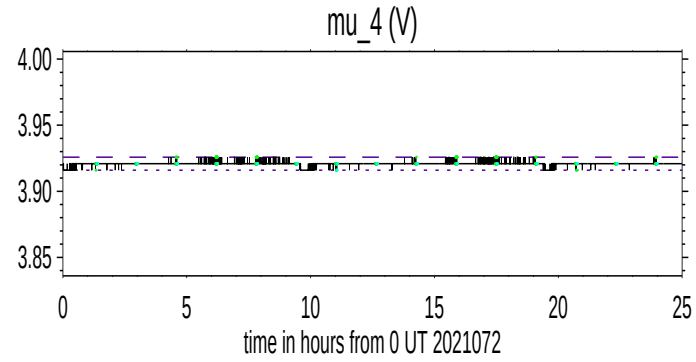

sspp_cntl_fpga_temp (C)
19
18
17
16
15
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

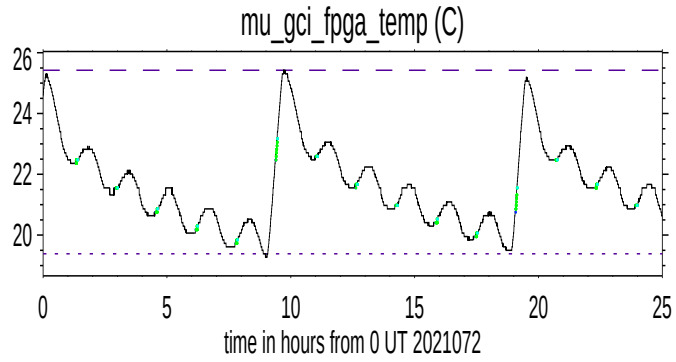

sspp_gci_brd_temp (C)
19
18
17
16
15
14
13
0
5
10
15
20
25
time in hours from 0 UT 2021072

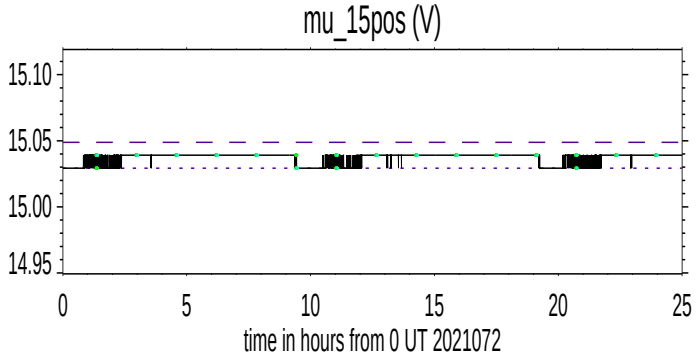

sspp_egs_xneg_zpos_temp (C)
20
18
16
14
0
5
10
15
20
25
time in hours from 0 UT 2021072

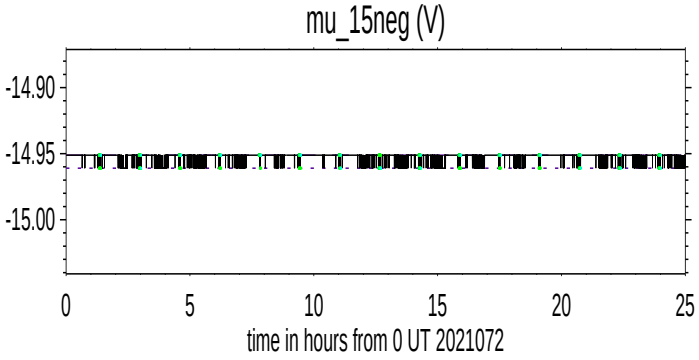

mu_adc_temp (C)
26
24
22
20
0
5
10
15
20
25
time in hours from 0 UT 2021072

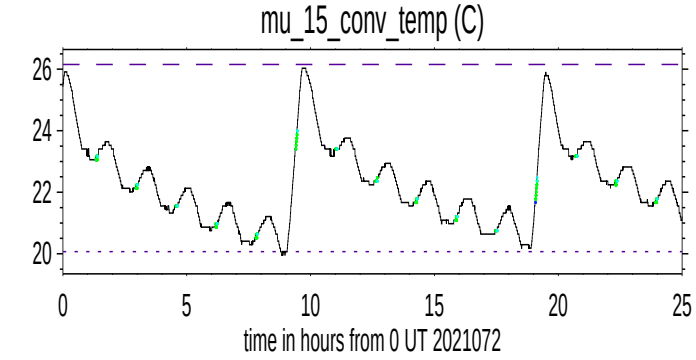

mu_adc_brd_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

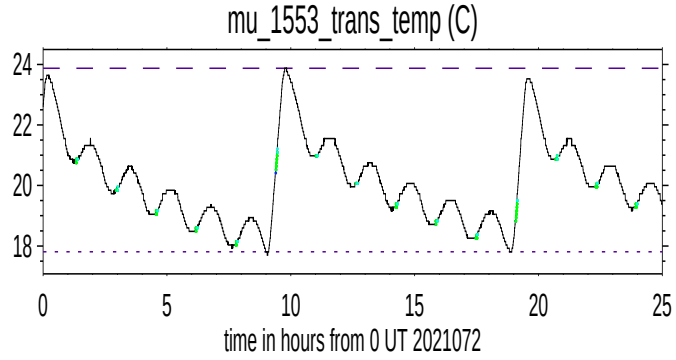

mu_4 (V)
4.00
3.95
3.90
3.85
0
5
10
15
20
25
time in hours from 0 UT 2021072

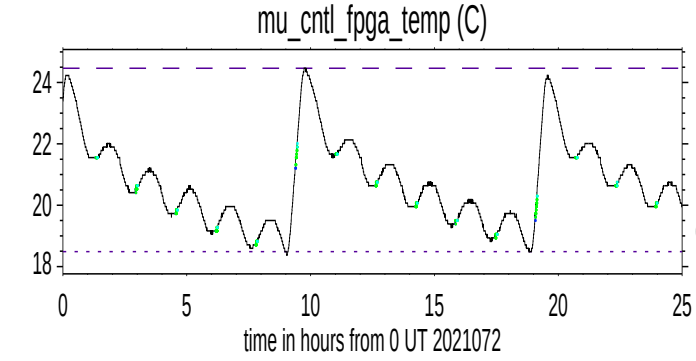

mu_gci_fpga_temp (C)
26
24
22
20
0
5
10
15
20
25
time in hours from 0 UT 2021072

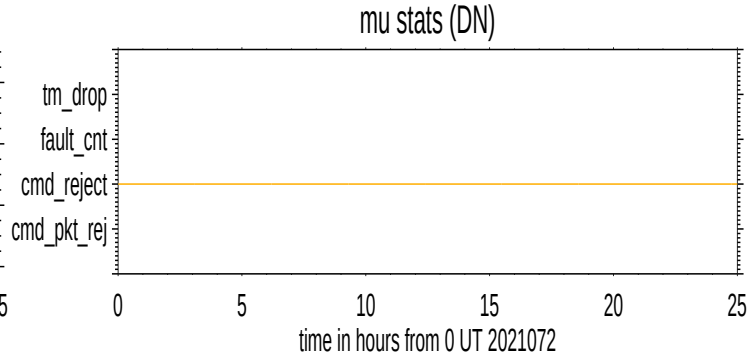

mu_15pos (V)
15.10
15.05
15.00
14.95
0
5
10
15
20
25
time in hours from 0 UT 2021072

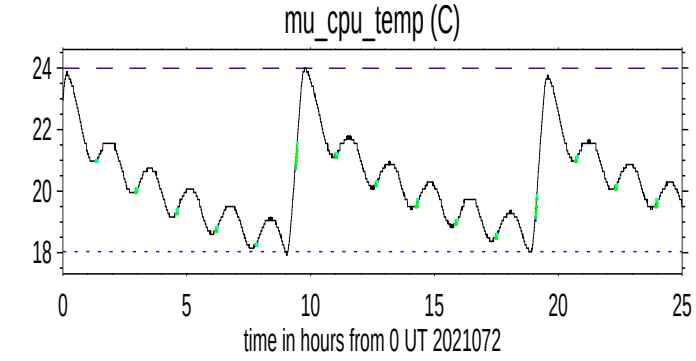

mu_15neg (V)
-14.90
-14.95
-15.00
0
5
10
15
20
25
time in hours from 0 UT 2021072

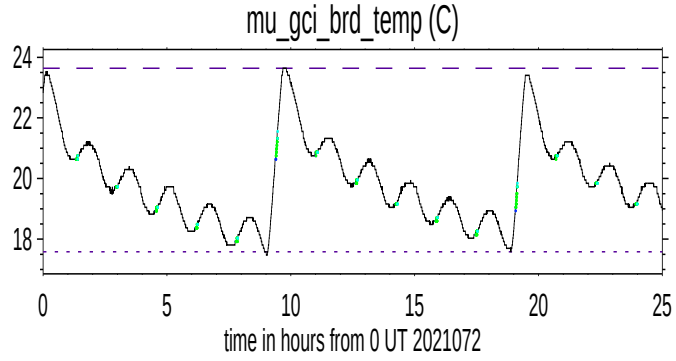

mu_15_conv_temp (C)
26
24
22
20
0
5
10
15
20
25
time in hours from 0 UT 2021072

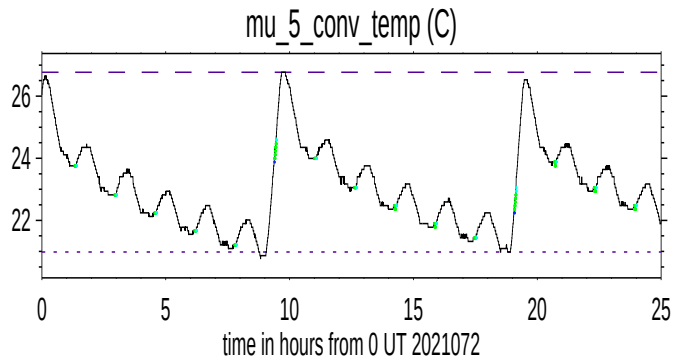

mu_1553_trans_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

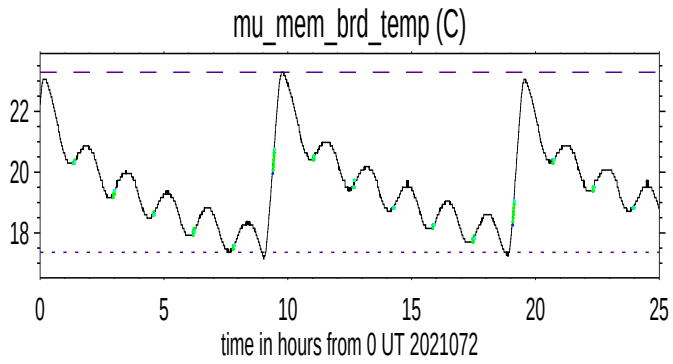

mu_cntl_fpga_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

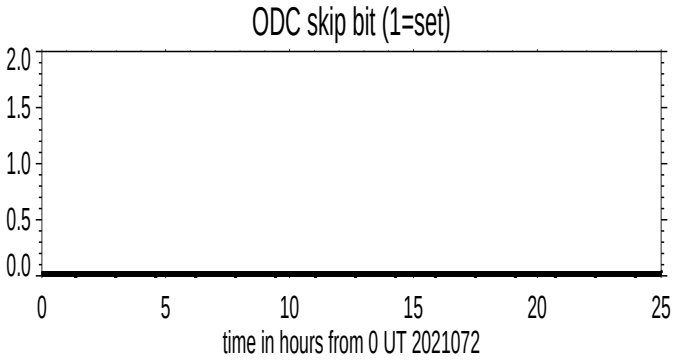

mu stats (DN)
tm_drop
fault_cnt
cmd_reject
cmd_pkt_rej
0
5
10
15
20
25
time in hours from 0 UT 2021072

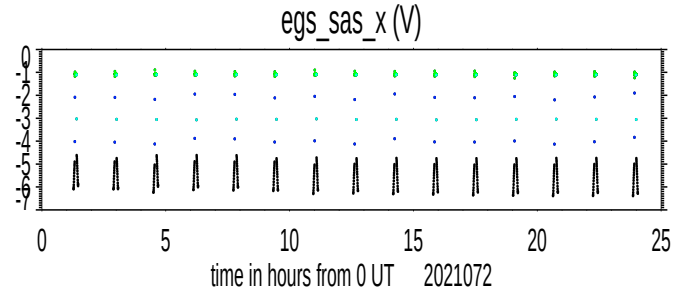

mu_cpu_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

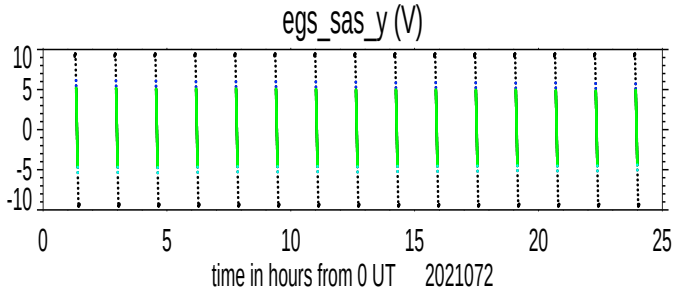

mu_gci_brd_temp (C)
24
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

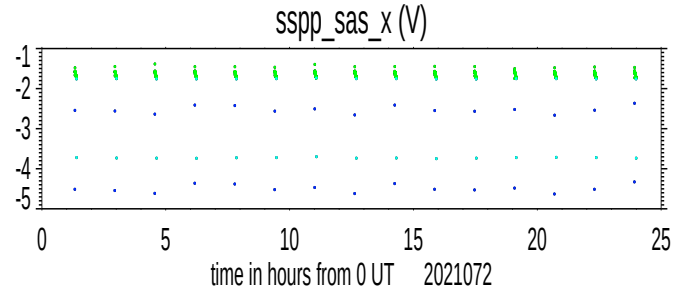

mu_5_conv_temp (C)
26
24
22
0
5
10
15
20
25
time in hours from 0 UT 2021072

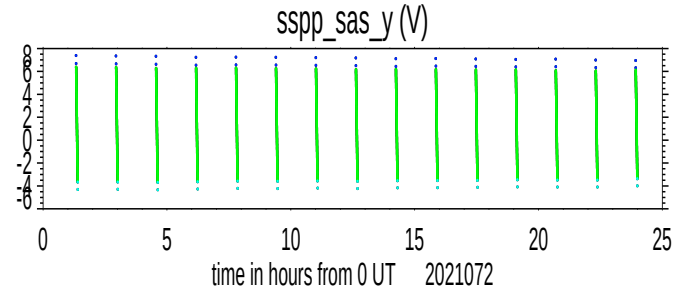

mu_mem_brd_temp (C)
22
20
18
0
5
10
15
20
25
time in hours from 0 UT 2021072

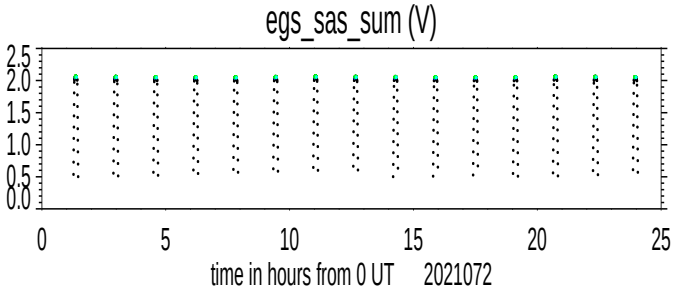

ODC skip bit (1=set)
2.0
1.5
1.0
0.5
0.0
0
5
10
15
20
25
time in hours from 0 UT 2021072

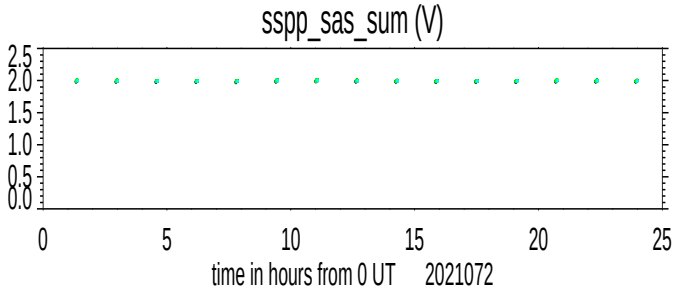

egs_sas_x (V)
time in hours from 0 UT 2021072

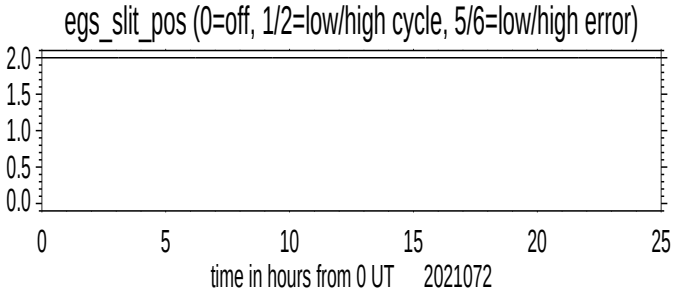

egs_sas_y (V)
time in hours from 0 UT 2021072

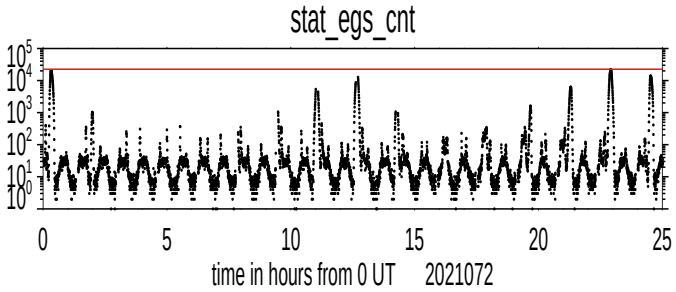

sspp_sas_x (V)
time in hours from 0 UT 2021072

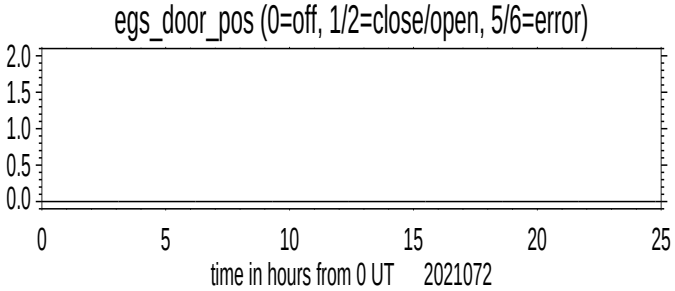

sspp_sas_y (V)
time in hours from 0 UT 2021072

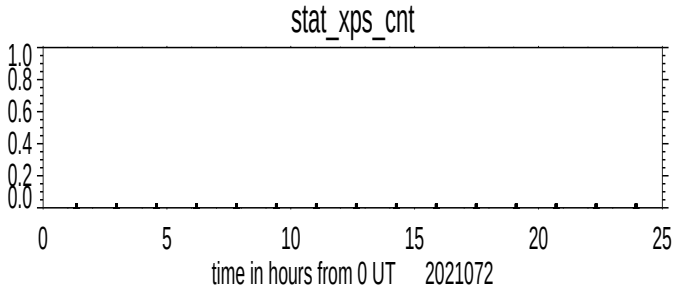

egs_sas_sum (V)
time in hours from 0 UT 2021072

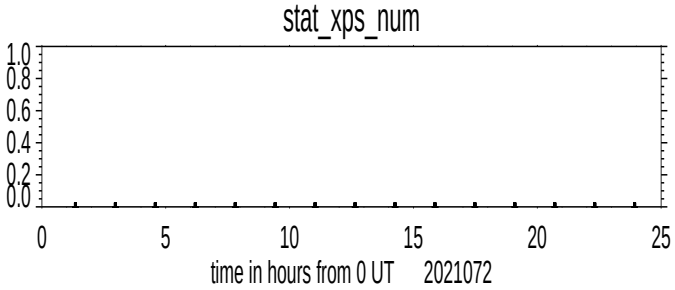

sspp_sas_sum (V)
time in hours from 0 UT 2021072

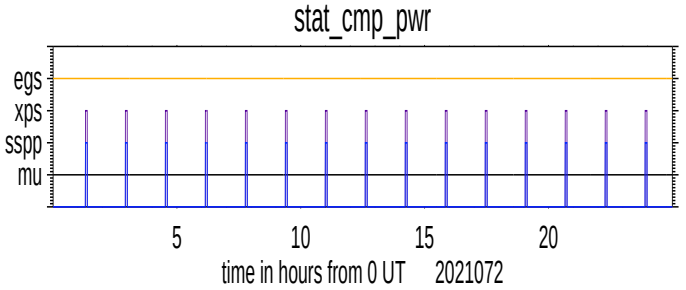

egs_slit_pos (0=off, 1/2=low/high cycle, 5/6=low/high error)
time in hours from 0 UT 2021072


stat_egs_cnt
time in hours from 0 UT 2021072

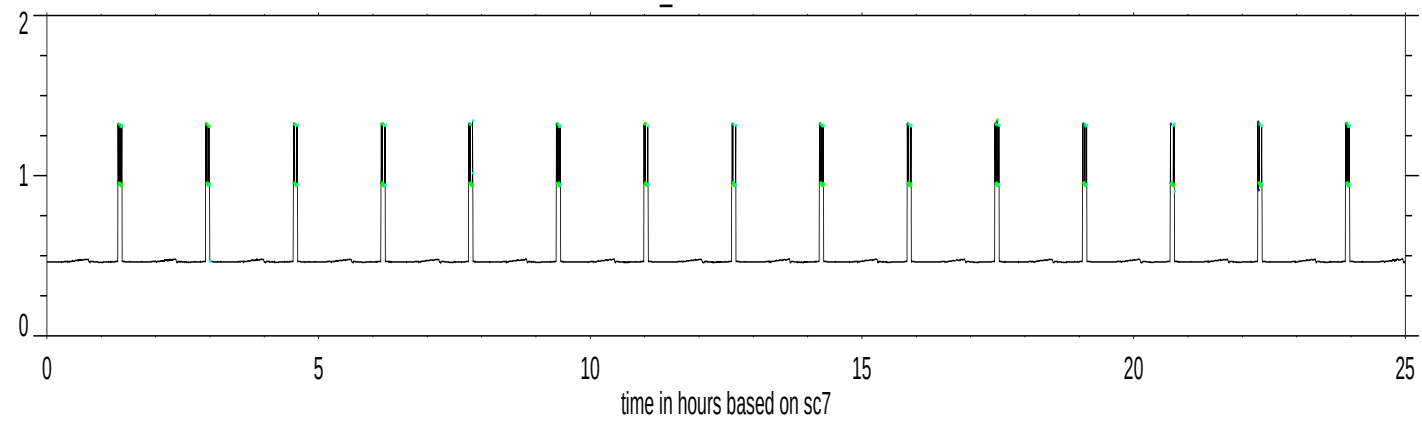

egs_door_pos (0=off, 1/2=close/open, 5/6=error)
time in hours from 0 UT 2021072


stat_xps_cnt
time in hours from 0 UT 2021072

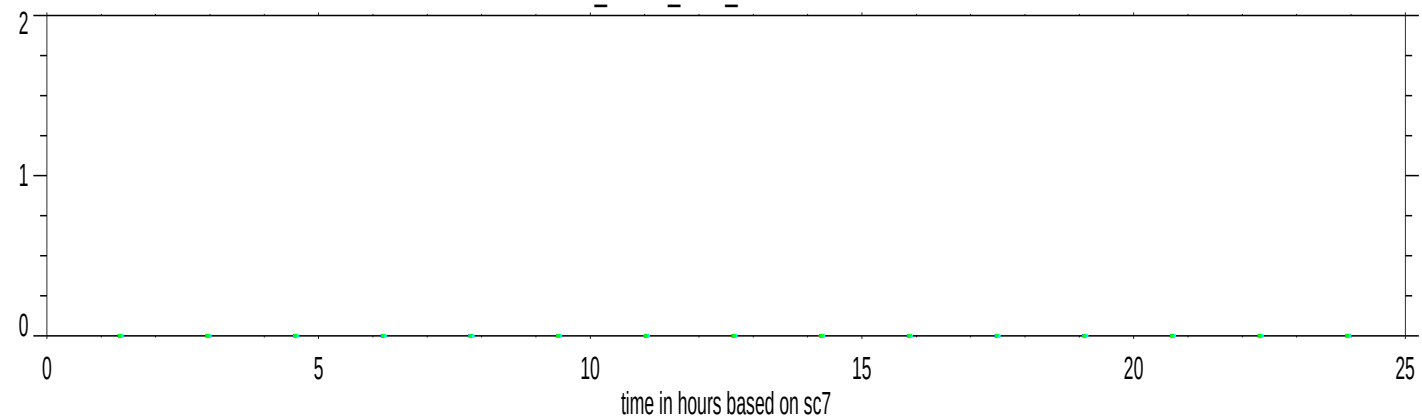

stat_xps_num
time in hours from 0 UT 2021072


stat_cmp_pwr
egs
xps
sspp
mu
time in hours from 0 UT 2021072

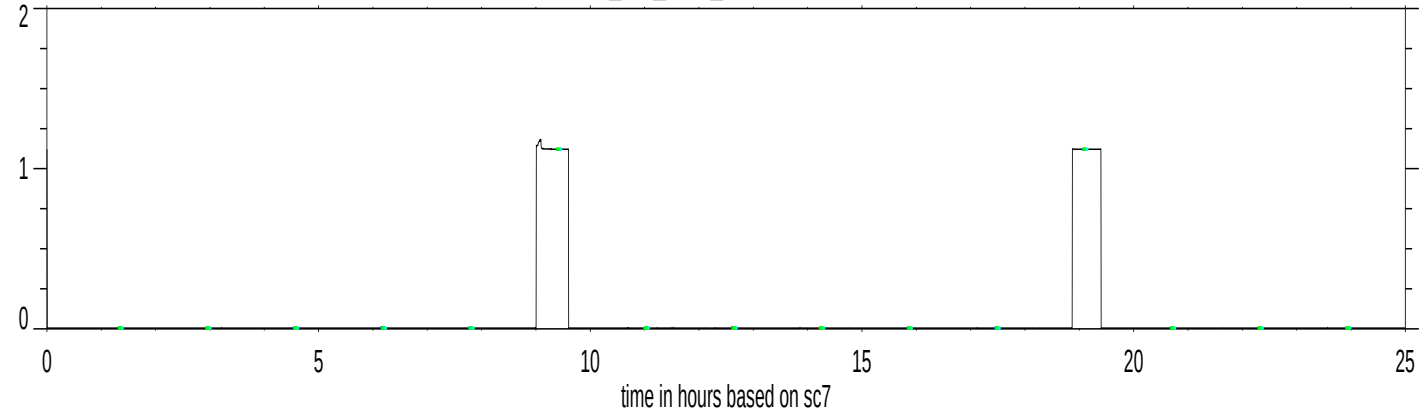
SEE_CUR 2021072



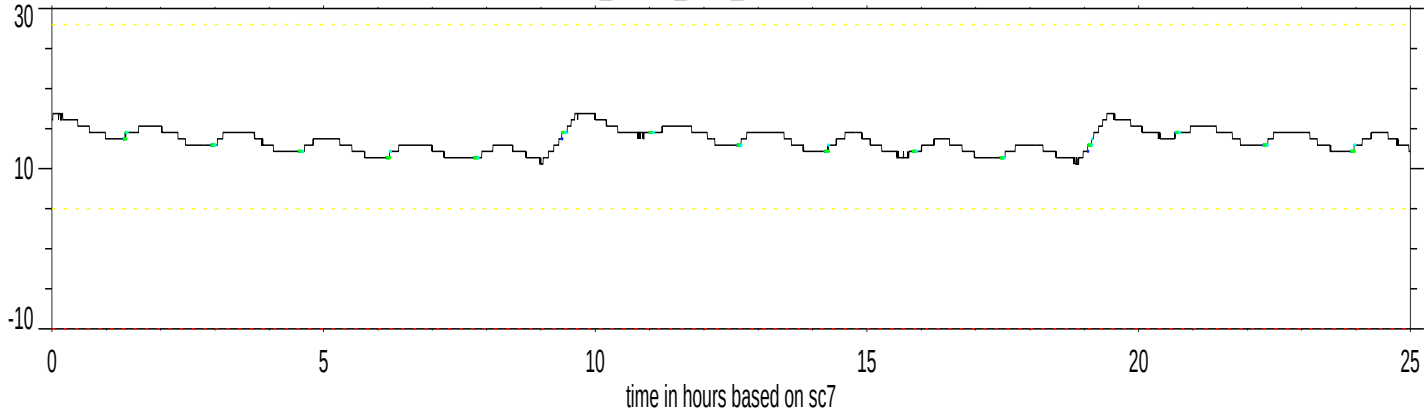

SEE_SURV_HTR_CUR 2021072



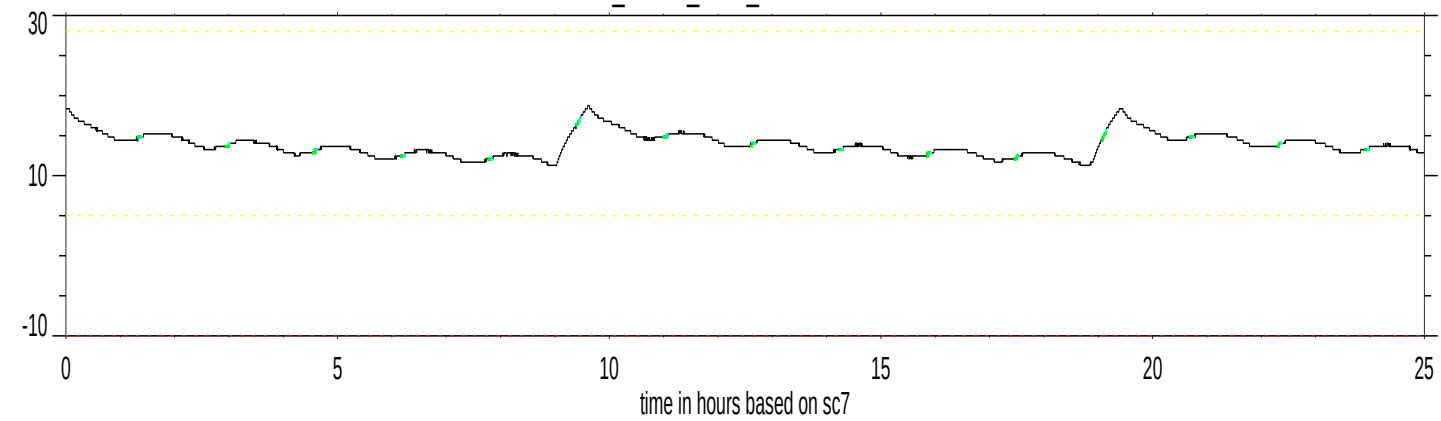

SEE_OP_HTR_CUR 2021072



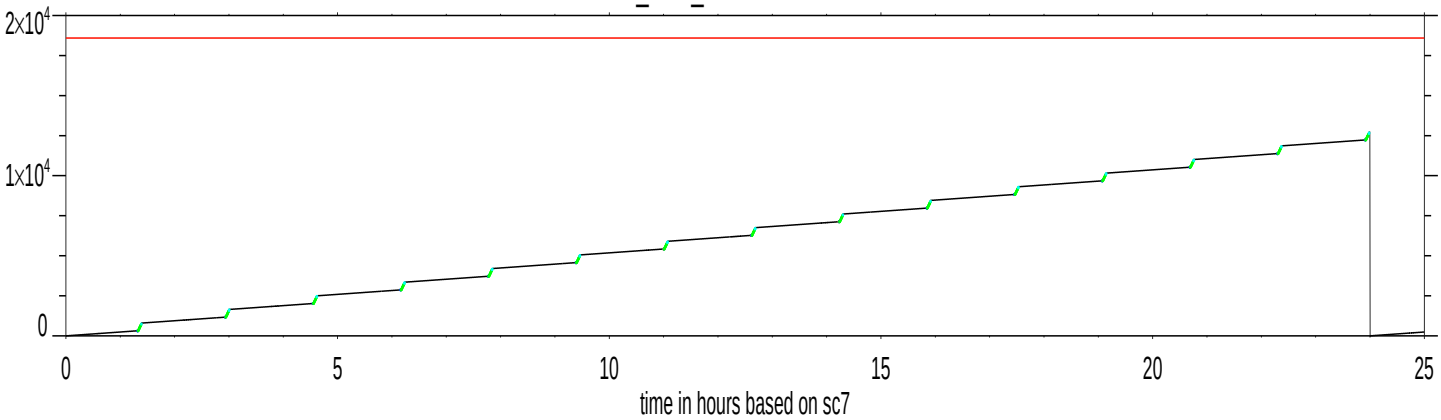

SSPP_BHND_XPS_TEMP 2021072



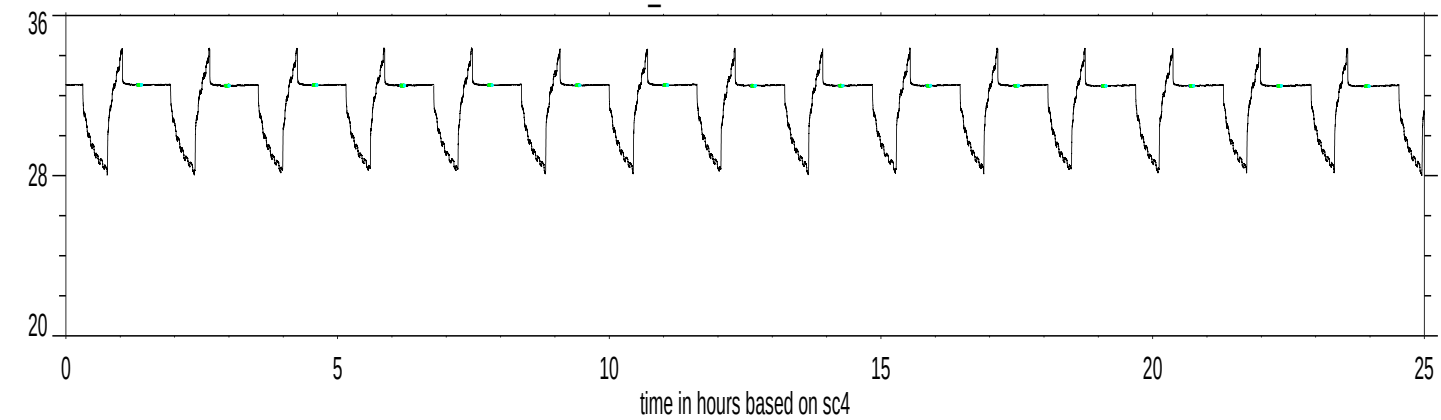
SSPP_BHND_MTR_TEMP 2021072



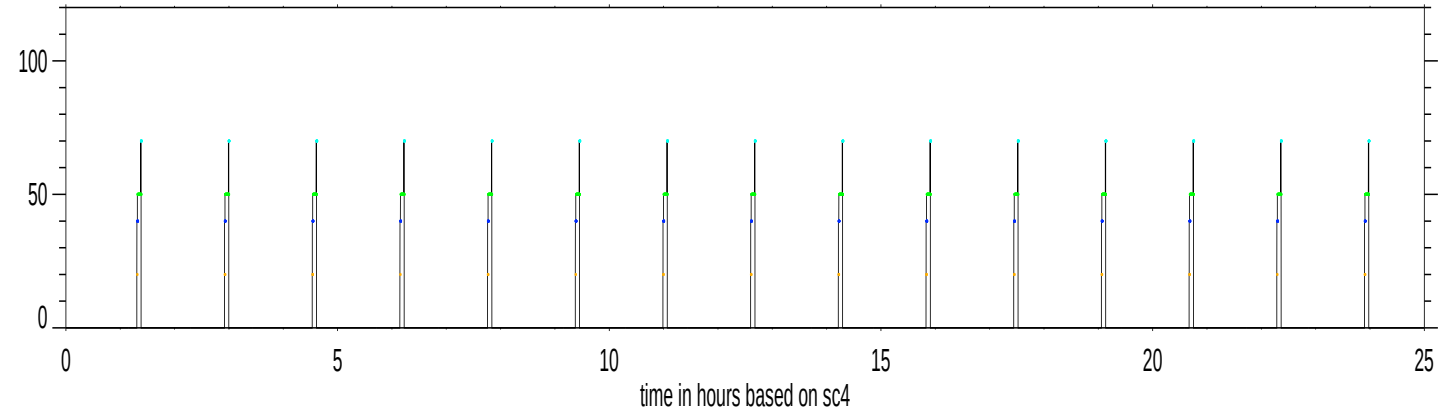

SEE_PKT_COUNT 2021072

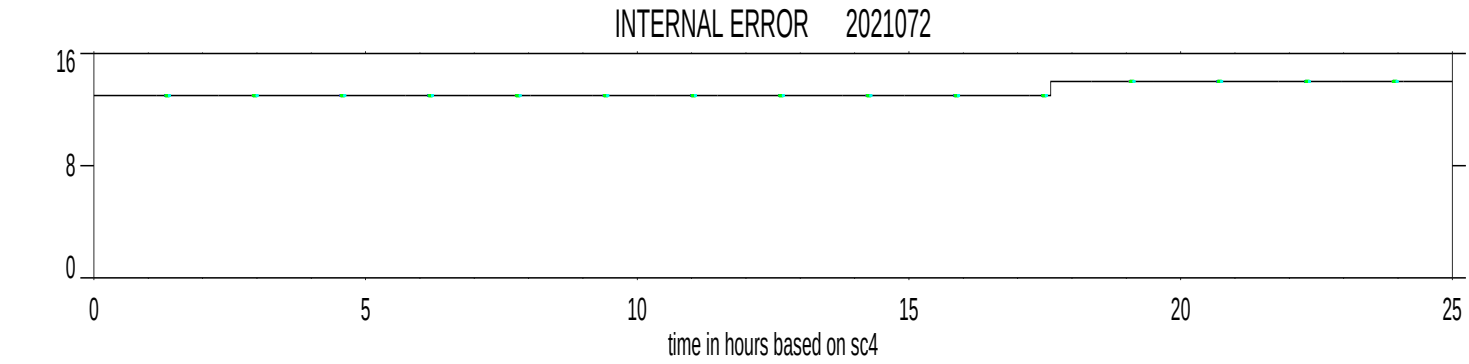


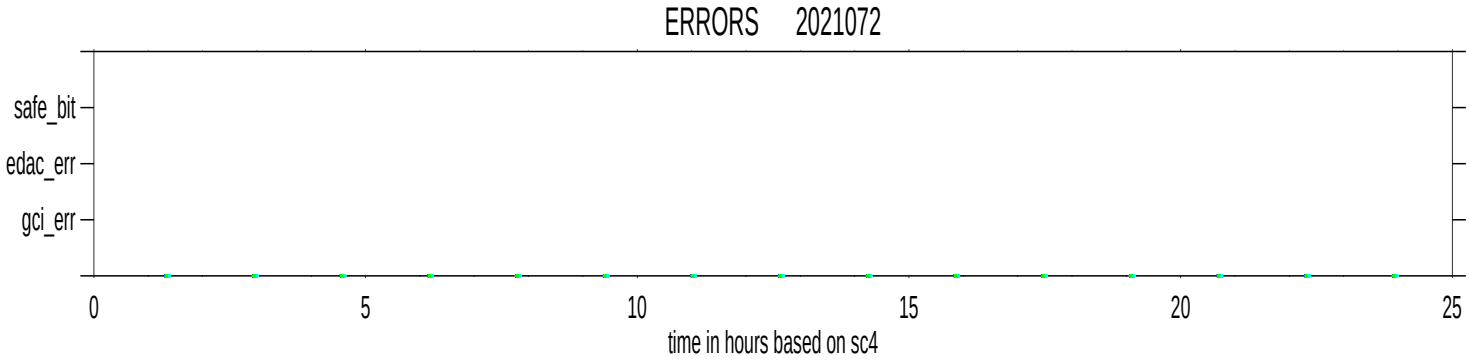

BUS_VOLTAGE 2021072

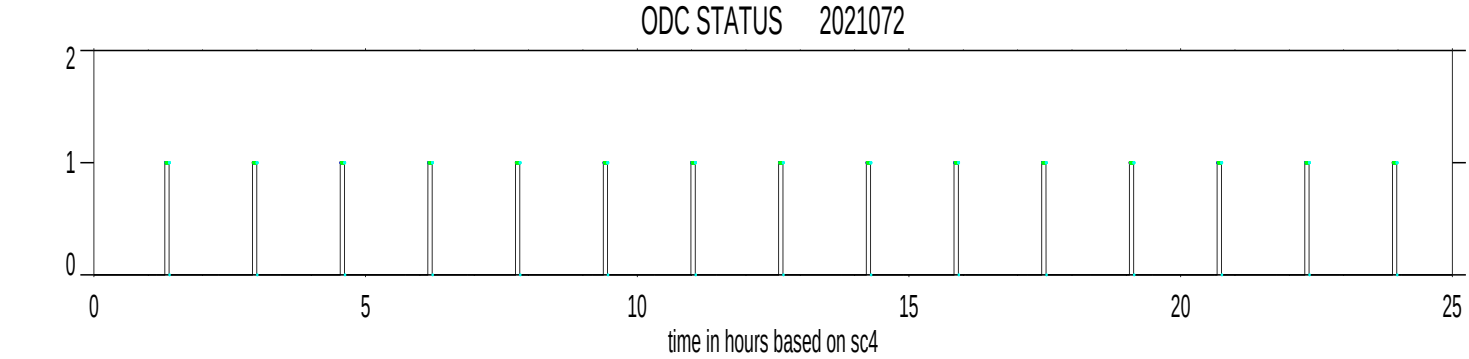


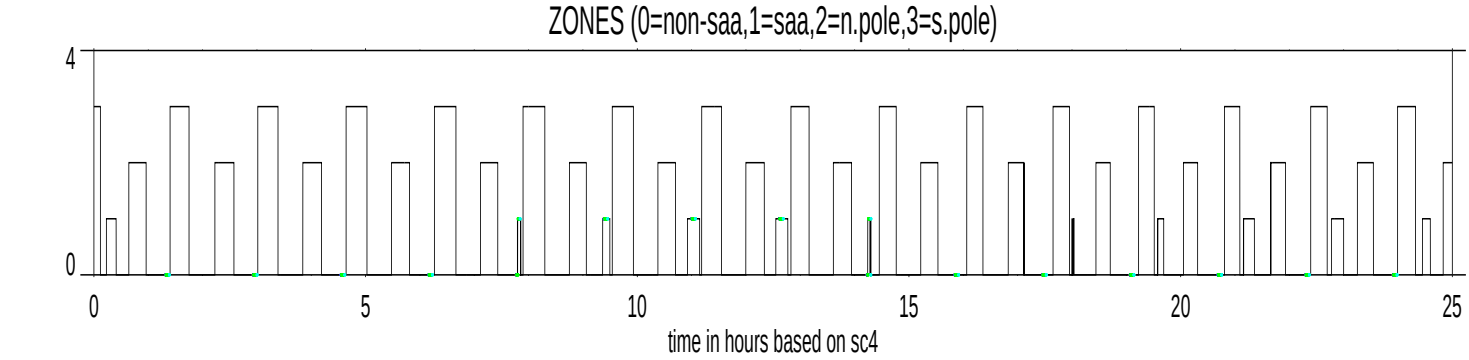

SEE_MU Operational Mode 2021072

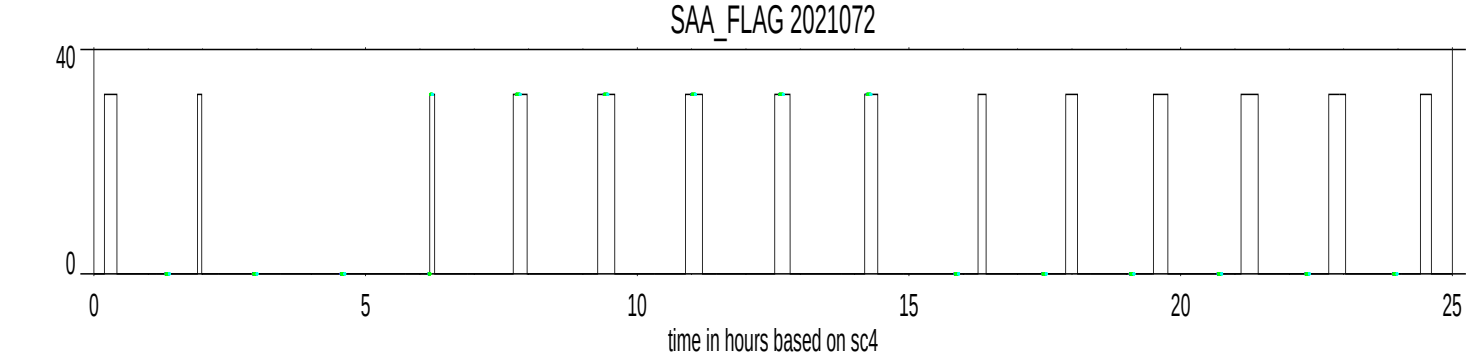


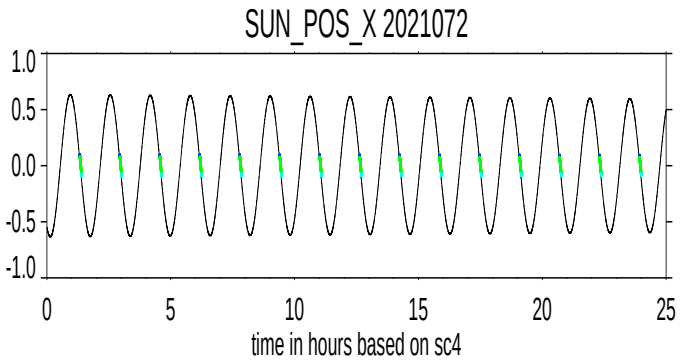

INTERNAL ERROR 2021072
16
8
0
0
5
10
15
20
25
time in hours based on sc4

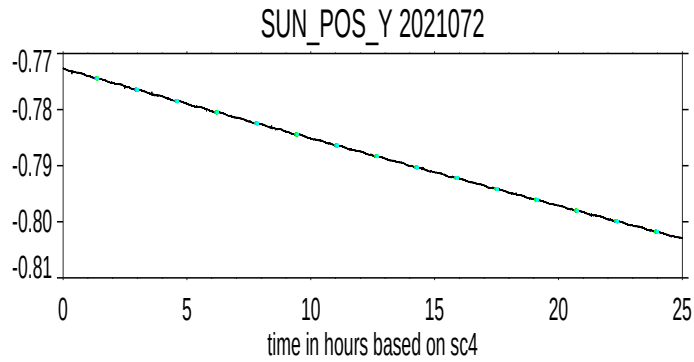

ERRORS 2021072
safe_bit
edac_err
gci_err
0
5
10
15
20
25
time in hours based on sc4

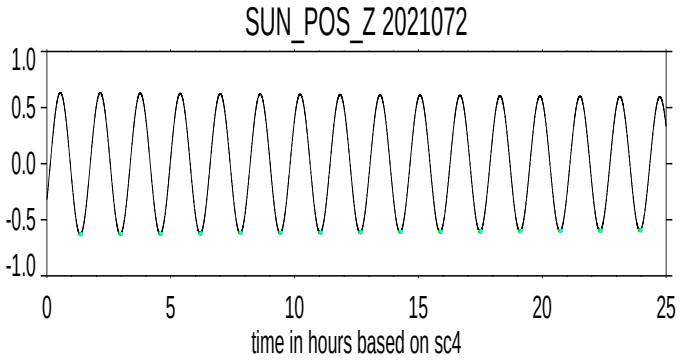

ODC STATUS 2021072
2
1
0
0
5
10
15
20
25
time in hours based on sc4

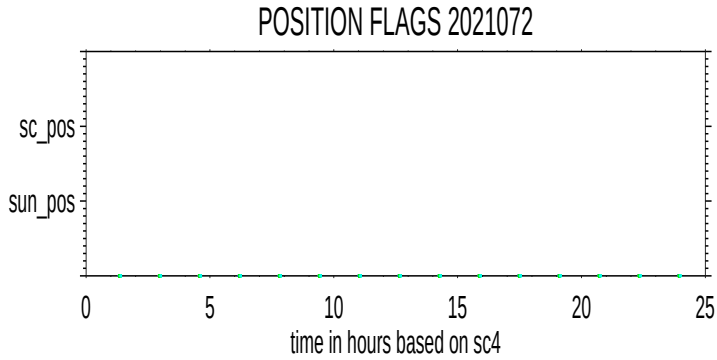

ZONES (0=non-saa,1=saa,2=n.pole,3=s.pole)
4
0
0
5
10
15
20
25
time in hours based on sc4

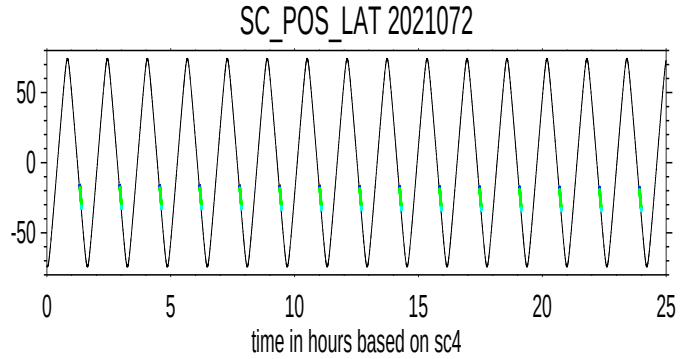

SAA_FLAG 2021072
40
0
0
5
10
15
20
25
time in hours based on sc4

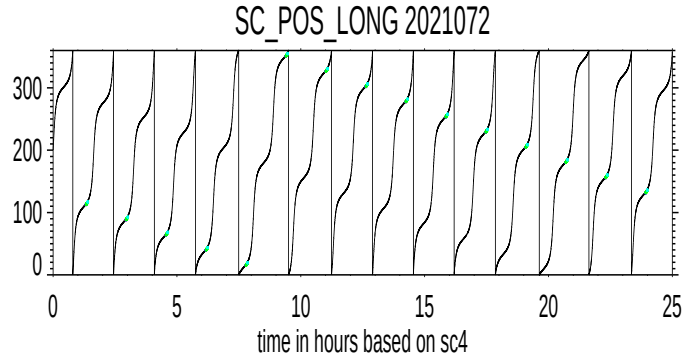

SUN_POS_X 2021072
1.0
0.5
0.0
-0.5
-1.0
0
5
10
15
20
25
time in hours based on sc4

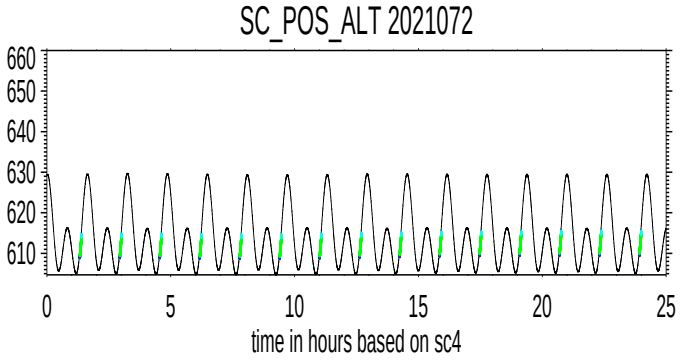

SUN_POS_Y 2021072
-0.77
-0.78
-0.79
-0.80
-0.81
0
5
10
15
20
25
time in hours based on sc4

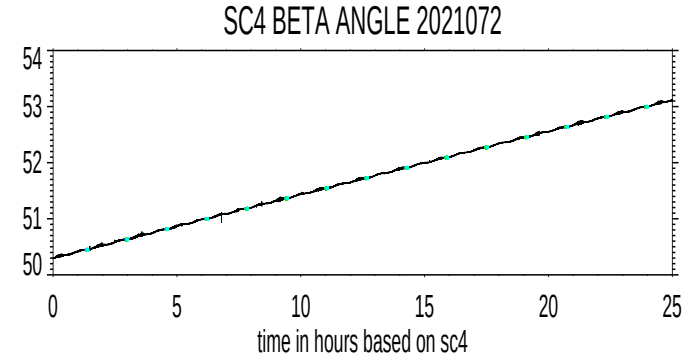

SUN_POS_Z 2021072
1.0
0.5
0.0
-0.5
-1.0
0
5
10
15
20
25
time in hours based on sc4


POSITION FLAGS 2021072
sc_pos
sun_pos
0
5
10
15
20
25
time in hours based on sc4


SC_POS_LAT 2021072
50
0
-50
0
5
10
15
20
25
time in hours based on sc4


SC_POS_LONG 2021072
300
200
100
0
0
5
10
15
20
25
time in hours based on sc4


SC_POS_ALT 2021072
660
650
640
630
620
610
0
5
10
15
20
25
time in hours based on sc4


SC4 BETA ANGLE 2021072
54
53
52
51
50
0
5
10
15
20
25
time in hours based on sc4