```
[47B]: Transitioning from INIT to ENTERING_KEEP ALIVE
 Received at SCET 2022-09-29T15:00:56.066Z:
 [32B]: Auto. disabling batt. (BEO+LBu)
 Received at SCET 2022-09-29T15:00:56.300Z
 Received at SCET 2022-09-29T15:00:56.409Z:
 [38B]: Reason for last reset: Brownout (BOR)
 Received at SCET 2022-09-29T15:00:56.472Z:
 [23B]: Watchdog in Init state
 Received at SCET 2022-09-29T15:00:56.550Z:
 [53B]: Transitioning from ENTERING KEEP ALIVE to KEEP ALIVE
 Received at SCET 2022-09-29T15:00:56.644Z:
 Received at SCET 2022-09-29T15:01:02.269Z
#0 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                       CHARGER: OFF
                                                        BATTERIES: DISCONNECTED
                                                                                         Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
##0 [MS_RELF_ARIVE + NO_DEPENDED] CHARGEN. STI DATTER
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 0.00V VL: 0.00V Vcc28: 0.00V VSA: 0.00V
HEATER [268K | 274K | 273K] is HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                5V0: BAD
                                                                                                 24V: 0.00
                                                                 ISA: 0.0mA
                                                                 @ 0.000W / 0.000W
                                                                                         Period: 1.2ms
      2V5
0
             2V8 24V VBm
                                    VL
                                        Vcc28
                                                 VSA
                                                         ISA
                                                                   Tbatt
                                                                             Tchrg
    0.00V 0.00V 0.00V 0.00V 0.00V 0.00V 0.00V 0.0mA 428.1±0.0K

HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN

0 (2=HiZ) 1 0 2 0 0 2 2 0 0 2 0
                                                                         0.0±0.0K
                                                           \hbox{VSAE} \quad \hbox{3V3\_EN} \quad \hbox{H\_ON} \quad \hbox{R\_ON} \quad \hbox{F\_ON} \quad \hbox{M\_ON} \quad \hbox{H\_RST} \quad \hbox{H\_N\_PRST} \quad \hbox{F\_N\_RST} \quad \hbox{CAMSEL} \quad \hbox{BMSB} 
GPIO (2=HiZ)
#1 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 26.55V Vcc28: 27.8
HEATER [268K | 274K | 273K] is NOT_HEA
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                       CHARGER: OFF
                                                                                        Herc-UART0: OFF
                                                       BATTERIES: DISCONNECTED
                                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
                                                                3V3: BAD
ISA: 7.4mA
                                                                                5V0: BAD
                                                                                                 24V: 0.41
                                                                        @ 0.000W / 0.836W
                                                                                                 Period: 1.2ms
                                                                               Tchrg
       2V5
             2V8 24V VBm
0 64 264
                                          Vcc28
                                                                     Tbatt
                                   3424
ADC
                                           3136
                                                   128
                                         27.80V
                                                        7.4mA 428.1±0.0K
           0.00V 0.41V 1.77V 26.55V
                                                 0.99V
val
    0.00V
                                                                           0.0±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE
                                                          VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:01:15.003Z:
                         [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:01:15.581Z:
#2 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                                       BATTERIES: DISCONNECTED
                                       CHARGER: OFF
                                                                                        Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
3V3: BAD
ISA: 7.4mA
                                                2V8: 0.0
                                                                                5V0: BAD
                                                                                                 24V: 0.41
                                Vcc28: 27.80V VSA: 0.99V
                                is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                         @ 0.000W / 0.786W
                                                                                                 Period: 1.2ms
            2V8 24V VBm
0 64 264
                                     VL
      2V5
0
                                          Vcc28
                                                   VSA
                                                          ISA
                                                                     Thatt
                                                                               Tchrg
                                  3264 3136
25.31V 27.80V
                                                   128
val 0.00V 0.00V 0.41V 1.77V 25.31V
                                                 0.99V
                                                        7.4mA 428.1±0.0K
             HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
#3 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                       CHARGER: OFF
                                                       BATTERIES: DISCONNECTED
                                                                                         Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
                                UJ CHARGER. OFF BATTERES.

2V5: 0.0 2V8: 0.0 IS

Vcc28: 27.80V VSA: 0.99V IS

is NOT_HEATING, Control: ENABLED

0.0K ± 0.0K Tblimp: 0.0K
1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 1.77V VL: 25.31V Vcc28: 27.8

HEATER [268K | 274K | 273K] is NOT_HEATER 268K | 200K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                 5V0: BAD
                                                                 3V3: BAD
                                                                                                 24V: 0.41
                                                                 ISA: 3.7mA
                                                                        @ 0.000W / 0.786W
                                                                                                 Period: 1.2ms
             2V8 24V VBm
0 64 264
                                          Vcc28
      2V5
```

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Received at SCET 2022-09-29T15:01:28.706Z
 #4 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1/2: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3V: 0.0 3V: 0.0 1/8: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3V: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/8: 0.0 1/
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                              3V3: BAD
                                                                                                                       5V0: BAD
                                                                                                                                                  24V: 0.21
                                                                                                  ISA: 7.4mA
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                  Period: 1.2ms
       2V5 2V8 24V VBm
0 0 32 264
                                                                 Vcc28
                                                                                                        Tbatt
                                                                                                                       Tchrg
                                                      3264
                                                                  3136
                                                                              128
  Received at SCET 2022-09-29T15:01:34.894Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Herc-UART0: OFF
                                                                                                                                                                          Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                 24V: 0.41
                                                                                                                                                  Period: 1.2ms
       2V5 2V8 24V VBm
0 0 64 264
 3296
                                                              3136
 Received at SCET 2022-09-29T15:01:42.347Z:
#6 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNE
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 6
                                                                                    BATTERIES: DISCONNECTED
                                                                                                                                     Herc-UARTO: OFF
                                                                                                                                                                          Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                24V: 0.41
                                                                                                                     5V0: BAD
                                               is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                  Period: 1.2ms
 VL
           2V5 2V8 24V VBm
0 0 64 264
                                                                              VSA
                                                                Vcc28
                                                                                                        Tbatt
       0 0 64 264 3264 3136 128 2 1 0 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
 Received at SCET 2022-09-29T15:01:48.003Z:
 #7 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1/2: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3/3 VBm: 1.77V VL: 25.31V Vcc28: 27.80V V5A: 0.99V I5A HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                    BATTERIES: DISCONNECTED H.0 3V3: BAD 5V0: BAD
                                                                                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                           3V3: BAD
ISA: 3.7mA
                                                                                                                                                  24V: 0.41
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                  Period: 1.2ms
 [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:01:55.675Z:

#8 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                                                     Herc-UART0: OFF
                                                                                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                     5V0: BAD
                                                                                                                                                 24V: 0.21
                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                  Period: 1.2ms
 Received at SCET 2022-09-29T15:02:00.894Z:
#9 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3
VBm: 1.77V VL: 25.55V Vcc28: 27.80V VSA: 0.99V ISA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
TDatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA
2 64 264 3296 3136 128 2
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                     Herc-UART0: OFF
                                                                                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                   5V0: BAD
                                                                                           3V3: BAD
ISA: 7.4mA
                                                                                                            @ 0.000W / 0.796W
                                                                                                                                                  Period: 1.2ms
                                                                                                        Tbatt
                                                                                                                       Tchrg
```

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GPIO (2=HiZ)
Reset/Flag Events: []
 Received at SCET 2022-09-29T15:02:08.362Z
#10 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: WBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/ HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                              BATTERIES: DISCONNECTED
                                                                          Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                   3V3: BAD
ISA: 3.7mA
                                                                  5V0: BAD
                                                            @ 0.000W / 0.786W
                                                                                 Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 264
                               VL
                                   Vcc28
                                                         Tbatt
                                                                  Tchrg
3264
                                   3136
                                           128
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:02:13.894Z:
#11 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/ HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                              BATTERIES: DISCONNECTED H.0 3V3: BAD 5V0: BAD
                                                                          Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                   3V3: BAD
ISA: 7.4mA
                                                                                 24V: 0.21
                                                            @ 0.000W / 0.786W
                                                                                 Period: 1.2ms
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:02:21.191Z:
Received at SCET 2022-09-29T15:02:21.191Z:
#12 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED He
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
VBm: 1.77V VL: 25.55V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W / 0.796W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA Tbatt Tchrg
ADC 0 0 64 264 3296 3136 128 2 1 0
ADC 0 0 0 64 264 3296 3136 128 2 1 0
ADC 0 0 0 040V 0.41V 1.77V 25.55V 27.80V 0.99V 7.4m4 428.1+0.0K 0.0+0.0K
                                                                         Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                 24V: 0.41
                                                            @ 0.000W / 0.796W
                                                                                 Period: 1.2ms
BATTERIES: DISCONNECTED
                                                                          Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                                  5V0: BAD
                                                                                 24V: 0.21
                                                      ISA: 3.7mA
                                                           @ 0.000W / 0.786W
                                                                                 Period: 1.2ms
     2V5 2V8 24V VBm
0 0 32 264
#14 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                           ED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                               BATTERIES: DISCONNECTED
                                                                          Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                    3V3: BAD
                                                                 5V0: BAD
                                                                                24V: 0.41
VBm: 1.77V VL: 25.55V
HEATER [268K |274K |273K]
                                                      ISA: 7.4mA
                           is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                            @ 0.000W / 0.796W
                                                                                 Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0MA 0MAh
           2V8 24V VBm
0 64 264
                              VL
                                  Vcc28
                                                         Tbatt
                                                                  Tchrg
                              3296
                                    3136
                                           128
                                  27.80V
val 0.00V 0.00V 0.41V 1.77V 25.55V
                                        0.99V
                                              7.4mA 428.1±0.0K
                                                              0.0±0.0K
           HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:02:34.581Z:
                     [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:02:40.675Z:
#15 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BA
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
                                              BATTERIES: DISCONNECTED
                                                                          Herc-UART0: OFF
                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                                  5V0: BAD
```

```
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
VBm: 1.77V VL: 25.31V Vcc28: 27.86
HEATER [268K |274K |273K] is NOT_HEAT
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
2V8 24V VBm
0 64 264
RESECTIFIED TO THE PROPERTY OF THE PROPERTY OF
#16 [RS_KEEP_ALIVE + NOT_DEPLOYED] C+
1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 1.77V VL: 25.31V Vcc28: 27.

HEATER [268K | 274K | 273K] is NOT_HE
                                                            CHARGER: OFF
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED_&_ACTIVE
                                                2V5: 0.0 2V8: 0.0 3V

Vcc28: 27.80V VSA: 0.99V IS.

is NOT_HEATING, Control: ENABLED

0.0K + 0.0K
                                                                                              3V3: BAD
                                                                                                                        5V0: BAD
                                                                                                  ISA: 7.4mA
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                          Tblimp: 0.0K
                2V8 24V VBm VL VCc28
0 64 264 3264 3136
0.00V 0.41V 1.77V 25.31V 27.80V
HEAT DEP BSTAT RE LB 16.80
                                                                                                        Tbatt
                                                                                                                       Tchrg
                                                                              128
                                                                         0.99V 7.4mA 428.1±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                                                        VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 2 0 0 0 0 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:02:47.675Z:
#17 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                           CHARGER: OFF BATTERIES: DISCONNECTED H.0 2V8: 0.0 3V3: BAD 5V0: BAD
                                                                                                                                     Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                                3V3: BAD
                                                                                                                                                   24V: 0.41
                                                                                                  ISA: 3.7mA
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
                  2V8 24V VBm
0 64 264
        2V5
                                                                Vcc28
                                                                              VSA
                                                                                         ISA
                                                     3264
                                                              3136
                                                                              128
Received at SCET 2022-09-29T15:02:54.144Z:
[HEAT]: OFF
                                    [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:02:54.316Z:
#18 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5 VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                                                     Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                        5V0: BAD
                                                                                                                                                  24V: 0.41
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
        2V5 2V8 24V VBm
0 0 64 264
                                                    VL
3264
                                                                Vcc28
3136
                                                                                                                       Tchrg
                                                                              VSA
                                                                                         ISA
                                                                                                        Tbatt
                                                                              128
       0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
                    Received at SCET 2022-09-29T15:03:00.206Z:
#19 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                       Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                             3V3: BAD
                                                                                                                        5V0: BAD
                                                                                                                                                   24V: 0.41
                                                                                                  ISA: 7.4mA
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
                 2V8 24V VBm
                                                        VL
                                                                              VSA
                                                                                                        Tbatt
                      0
                                64
                                          264
                                                      3264
                                                              3136
                                                                              128
Received at SCET 2022-09-29T15:03:07.769Z:
Received at SCET 2022-09-29T15:03:07.769Z:
#20 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARG
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 25.31V Vcc28: 27.80V
HEATER [268K | 274K | 273K] is NOT_HEATI
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc
ADC 0 0 32 264 3264 31
                                                          CHARGER: OFF
                                                                                    BATTERIES: DISCONNECTED
                                                                                                                                     Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                            3V3: BAD
ISA: 3.7mA
                                                                                                                        5V0: BAD
                                                                                                                                                   24V: 0.21
                                                 is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
                                                  VL Vcc28
3264 3136
25.31V 27.80V
                                                                              VSA
                                                                                                                       Tchrg
                                                                                        ISA
                                                                                                        Tbatt
                                                                              128
Val 0.00V 0.00V 0.21V 1.77V 25.31V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
```

```
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 [HEAT]: OFF
 Received at SCET 2022-09-29T15:03:13.534Z
#21 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 1.77V VL: 25.55V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                      BATTERIES: DISCONNECTED
                                                                                      Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
                                                            3V3: BAD
                                                                             5V0: BAD
                                                                                              24V: 0.41
                                                              ISA: 7.4mA
                                                                      @ 0.000W / 0.796W
                                                                                              Period: 1.2ms
      2V5 2V8 24V VBm
0 0 64 264
                                   VL
                                         Vcc28
ADC 0 0 64 264 3296 3136 128 2 1 0 val 0.00V 0.00V 0.41V 1.77V 25.55V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
             GPIO (2=HiZ)
 Reset/Flag Events: []
  Received at SCET 2022-09-29T15:03:20.800Z:
 #22 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                      CHARGER: OFF
                                                      BATTERIES: DISCONNECTED
                                                                                     Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED & ACTIVE
#22 [RS_REEF_ALIVE + NO_DEFLOYED] CHAR

1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 1.77V VL: 25.31V Vcc28: 27.8¢

HEATER [268K | 274K | 273K] is NOT_HEAT

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                             3V3: BAD
ISA: 7.4mA
                                              2V8: 0.0
                                                                             5V0: BAD
                                                                                              24V: 0.41
                               Vcc28: 27.80V VSA: 0.99V
                               is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                      @ 0.000W / 0.786W
                                                                                              Period: 1.2ms
 2V5 2V8 24V VBm VL Vcc28
ADC 0 0 64 264 3264 3136
val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V
                                                        ISA
                                                                  Tbatt
                                                                            Tchrg
                                                  128
                                               0.99V
                                                            428.1±0.0K
             HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST
                                                                                                             F_N_RST R_N_RST CAMSEL
#23 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                     CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                     Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
                                                            3V3: BAD
                                                                             5V0: BAD
                                                                                             24V: 0.41
                                                              ISA: 7.4mA
                                                                      @ 0.000W / 0.786W
                                                                                              Period: 1.2ms
             2V8 24V VBm
0 64 264
                                         Vcc28
                                                         ISA
                                                                            Tchrg
                                 3264
                                       3136
ADC
                                                  128
VBM: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VRM
#24 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
                                                      BATTERIES: DISCONNECTED
                                                                                     Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
                                                            3V3: BAD
                                                                            5V0: BAD
                                                               ISA: 7.4mA
                                                                     @ 0.000W / 0.786W
                                                                                              Period: 1.2ms
                                                                            Tchrg
                                                                  Tbatt
                     64
                           264
                                  3264
                                          3136
                                                  128
     0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
             GPIO (2=HiZ)
Received at SCET 2022-09-29T15:03:33.050Z:
[HEAT]: OFF
                        [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 1VB: 1.77V VL: 25.31V Vc28: 27.80V VSA: 0.99V ISA: 3.7mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh 2V5 2V8 24V VBm V/ADC 0
                                                                                     Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                                                                             5V0: BAD
                                                                                             24V: 0.41
                                                                      @ 0.000W / 0.786W
                                                                                              Period: 1.2ms
            2V8 24V VBm
0 64 264
                                                                            Tchrg
    GPIO (2=HiZ)
Received at SCET 2022-09-29T15:03:46.003Z:
#26 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                     CHARGER: OFF
                                                     BATTERIES: DISCONNECTED
                                                                                     Herc-UART0: OFF
                                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                               EUJ CHARGER: UFF BATTERIES:
2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                            3V3: BAD
                                                                             5V0: BAD
                                                                                             24V: 0.41
VBm: 1.77V VL: 25.31V
HEATER [268K | 274K | 273K]
                                                              ISA: 3.7mA
                                                                     @ 0.000W / 0.786W
                                                                                              Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
       2V5 2V8 24V VBm VL
0 0 64 264 3264
                                                                            Tchrg
                                        Vcc28
                                                  VSA
                                                        ISA
                                                                  Tbatt
                                                     1 1 0
3.7mA 428.1±0.0K 0.0±0.0K
                                          3136
                                                  128
           0.00V 0.41V 1.77V
                               25.31V
                                       27.80V
                                               0.99V
```

```
GPIO (2=HiZ)
Reset/Flag Events: []
D5 00 08 18 00 1A 00 00 00 38 00 00 00 00 00 66 00 21 40 08 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ...
Received at SCET 2022-09-29T15:03:52.1752:
#27 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARG
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 25.31V Vcc28: 27.80V
HEATER [268K | 274K | 273K] is NOT_HEATI
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
PATTERY MONITOR: 0.0K 0.0K 0.0M 0.0M 0.0M
                                                   CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                 Herc-UART0: OFF
                                                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
                                         2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                 3V3: BAD
ISA: 7.4mA
                                                                                                       5V0: BAD
                                                                                                                             24V: 0.41
                                          is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                                             @ 0.000W / 0.786W
                                                                                                                             Period: 1.2ms
BATTERY MONITOR: 0.00V 0.0mA 0mAh
      2V5 2V8 24V VBm
0 0 64 264
                                              VL
                                                                                                     Tchrg
                                                      Vcc28
                                                                  VSA
                                                                           ISA
                                                                                        Tbatt
                                                    3136
27.80V
                                             3264
                                                                  128
                                                                            2
val 0.00V 0.00V 0.41V 1.77V 25.31V
                                                               0.99V
                                                                        7.4mA 428.1±0.0K
                 HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
                                               0
Received at SCET 2022-09-29T15:03:52.534Z:
                               [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:03:59.159Z:
#28 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                                   CHARGER: OFF
                                                                       BATTERIES: DISCONNECTED
                                                                                                                  Herc-UART0: OFF
                                                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
                                         2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                3V3: BAD
                                                                                                      5V0: BAD
                                                                                                                             24V: 0.41
VBm: 1.77V VL: 25.31V
HEATER [268K |274K |273K]
                                                                                   ISA: 7.4mA
                                          is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                                            @ 0.000W / 0.786W
                                                                                                                             Period: 1.2ms
ADC 0 0 64 264 3264 3136 128

val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7

HEAT DEP BSTAT BE LB LS LR CE REGE
GPIO (2=HiZ) 0 0 2 0 0 2 2 0 0
                                                                                        Thatt
                                                                                                     Tchrg
                                                                             2
                                                              0.99V 7.4mA 428.1±0.0K 0.0±0.0K
                                                                          VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL
Received at SCET 2022-09-29T15:04:05.394Z:
#29 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                                                       BATTERIES: DISCONNECTED
                                                                                                                 Herc-UART0: OFF
                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                3V3: BAD
                                                                                                       5V0: BAD
                                                                                                                             24V: 0.41
                                                                                   ISA: 7.4mA
                                                                                             @ 0.000W / 0.786W
                                                                                                                             Period: 1.2ms
BATTERY MONITOR: 0.00V 0.0mA
                                        0mAh
      2V5 2V8 24V VBm
0 0 64 264
                                               VL
                                                      Vcc28
ADC 0 0 64 264 3264 3136 128 2 1 0 val 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K

        HEAT
        DEP
        BSTAT
        BE
        LB
        LS
        LR
        CE
        REGE
        VSAE
        3V3_EN
        H_ON
        R_ON
        F_ON
        M_ON
        H_RST
        H_N_PRST
        F_N_RST
        R_N_RST
        CAMSEL
        BMSB

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GPIO (2=HiZ)
Reset/Flag Events: []
 Received at SCET 2022-09-29T15:04:12.175Z:
[HEAT]: OFF
                               [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:04:12.409Z:
#30 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                       BATTERIES: DISCONNECTED
                                                                                                                 Herc-UART0: OFF
                                                                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                                                                                  5V0: BAD
                                                                                3V3: BAD
ISA: 3.7mA
                                                                                                                            24V: 0.41
                                                                                            @ 0.000W / 0.786W
                                                                                                                             Period: 1.2ms
         2V5
0
                 2V8 24V VBm
0 64 264
                                                      Vcc28
                                                                                         Tbatt
                                                                                                     Tchrg
                                                    3136
ADC
                                             3264
                                                                  128
              0.00V 0.41V 1.77V 25.31V 27.80V
                                                               0.99V
                                                                        3.7mA 428.1±0.0K 0.0±0.0K
val 0.00V
                  HEAT DEP BSTAT BE LB LS LR CE REGE
                                                                          VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:04:19.269Z:
                                                                       BATTERIES: DISCONNECTED F
CHARGER: OFF
                                                                                                                  Herc-UART0: OFF
                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
#31 [RS_REP_ALIVE + NOI_DEPLOYED] CHARGER: OFF BAITERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOI_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA
ADC 0 0 64 264 3264 3136 128 2
2V3 0.0V 0.00V 0.00V 0.01 777V 32 31V 37 20V 0.09V 7.4mA 438
                                                                                   ISA: 7.4mA
                                                                                             @ 0.000W / 0.786W
                                                                                                                             Period: 1.2ms
                                                                                        Tbatt
                                                                                                     Tchrg
      GPIO (2=HiZ)
Received at SCET 2022-09-29T15:04:25.800Z:
#32 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF 1V2: BAD 1V8: BAD 2V5: 0.0 2V8:
                                                                       BATTERIES: DISCONNECTED
                                                                                                                 Herc-UART0: OFF
                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                         2V5: 0.0 2V8: 0.0 Vcc28: 27.80V VSA: 0.99V
                                                                                   3V3: BAD
                                                                                                        5V0: BAD
                                                                                                                             24V: 0.41
                                                                                   ISA: 7.4mA
                                                                                             @ 0.000W / 0.786W
```

```
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                        Thlimp: 0.0K
           2V8 24V
     2V5
                                                                Tchrg
                                                        Tbatt
                  64
                                   3136
                                          128
   0.00V 0.00V 0.41V
                    1.77V 25.31V 27.80V
                                       0.99V 7.4mA 428.1±0.0K 0.0±0.0K
           GPIO (2=HiZ)
Received at SCET 2022-09-29T15:04:31.894Z:
#33 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                             BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                                 5V0: BAD
                                                  3V3: BAD
ISA: 7.4mA
                                                                               24V: 0.41
                                                          @ 0.000W / 0.786W
                                                                               Period: 1.2ms
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                Tchrg
0
     2V5
0
          2V8 24V VBm
0 64 264
                            VL
3264
                                  Vcc28
3136
                                                        Tbatt
ADC
                                          128
                                                2
val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
           [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:04:37.894Z:
#35 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHAF
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 25.31V Vcc28: 27.86
HEATER [268K | 274K | 273K] is NOT_HEAT
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vc
ADC 0 0 64 264 3264 3
                         /ED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                             BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                            Lander-UART1: INITIALIZED & ACTIVE
                                                  3V3: BAD
ISA: 7.4mA
                                                                 5V0: BAD
                                                                               24V: 0.41
                          is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                          @ 0.000W / 0.786W
                                                                               Period: 1.2ms
                                  Vcc28
                                          VSA
                                                ISA
                                                        Tbatt
ADC 0 0 64 264 3264 3136 128 2 1 val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K
                                                             0.0±0.0K
           GPIO (2=HiZ)
#34 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: WBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/ HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                             BATTERIES: DISCONNECTED HE
0 3V3: BAD 5V0: BAD
                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                                        Herc-UART0: OFF
                                                  3V3: BAD
                                                                               24V: 0.41
                                                    ISA: 3.7mA
                                                          @ 0.000W / 0.786W
                                                                               Period: 1.2ms
          2V8 24V VBm
0 64 264
                              VL
                       264
                            3264
                                 3136
                                          128
Received at SCET 2022-09-29T15:04:45.191Z:
                                             BATTERIES: DISCONNECTED H
CHARGER: OFF
                                                                        Herc-UART0: OFF
                                                                                            Lander-UART1: INITIALIZED & ACTIVE
                          2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                               24V: 0.41
                                                     ISA: 7.4mA
                          is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                           @ 0.000W / 0.786W
                                                                               Period: 1.2ms
                                  Vcc28
                                          VSA
                                                        Tbatt
                                                                Tchrg
0
                                   3136
                                          128
    0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
           GPIO (2=HiZ)
Received at SCET 2022-09-29T15:04:51.206Z:
#37 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V:
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                             BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                   3V3: BAD
                                                                 5V0: BAD
                                                                               24V: 0.41
                                                     ISA: 3.7mA
                                                          @ 0.000W / 0.786W
                                                                               Period: 1.2ms
         2V8 24V VBm
0 64 264
     2V5
                                  Vcc28
                                          VSA
                                                ISA
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
```

```
#38 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                            BATTERIES: DISCONNECTED
                                                                      Herc-UART0: OFF
                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                  3V3: BAD
                                                              5V0: BAD
                                                   ISA: 7.4mA
                                                         @ 0.000W / 0.786W
                                                                             Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 264
                                                      Tbatt
                            3264
                                  3136
                                         128
GPIO (2=HiZ)
Lander-UART1: INITIALIZED & ACTIVE
Received at SCET 2022-09-29T15:05:11.003Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#40 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V HEATER [268K | 274K | 273K] is NOT_HEATING, Control: EThatt: 428.1K + 0.0V Tables 2007.
                                            BATTERIES: DISCONNECTED
                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                                      Herc-UART0: OFF
                                                3V3: BAD
ISA: 7.4mA
                                                             5V0: BAD
                                                                           24V: 0.41
                        is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                        @ 0.000W / 0.786W
                                                                             Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
     2V5 2V8 24V VBm
0 0 64 264
                             VL
                                         VSA
                                 Vcc28
                                                      Tbatt
   0 0 64 264 3264 3136 128 2 1 0 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
           #41 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1/2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3 VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                            BATTERIES: DISCONNECTED H
0 3V3: BAD 5V0: BAD
                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                3V3: BAD
ISA: 3.7mA
                                                                             24V: 0.41
                                                         @ 0.000W / 0.786W
                                                                             Period: 1.2ms
Received at SCET 2022-09-29T15:05:24.222Z:
#42 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHAR
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 25.31V Vcc28: 27.86
HEATER [268K | 274K | 273K] is NOT_HEAT
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vc
ADC 0 0 0 64 264 3264 3
                         ED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                            BATTERIES: DISCONNECTED
                                                                      Herc-UART0: OFF
                                                                                          Lander-UART1: INITIALIZED & ACTIVE
                                                 3V3: BAD
ISA: 3.7mA
                                                              5V0: BAD
                                                                            24V: 0.41
                          is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                         @ 0.000W / 0.786W
                                                                             Period: 1.2ms
                                 Vcc28
                                         VSA
                                              ISA
                                                      Thatt
                                                              Tchrg
ADC 0 0 64 264 3264 3136 val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V
                                         128
                                      0.99V 3.7mA 428.1±0.0K 0.0±0.0K
          BATTERIES: DISCONNECTED HE
Herc-UART0: OFF
                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                 3V3: BAD
                                                                            24V: 0.21
                                                   ISA: 3.7mA
                                                         @ 0.000W / 0.786W
                                                                             Period: 1.2ms
```

Reset/Flag Events: []

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Received at SCET 2022-09-29T15:05:31.675Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#44 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V5 WBm: 1.77V VL: 25.55V Vcc28: 27.80V VSA: 0.99V IS/HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
Received at SCET 2022-09-29T15:05:37.191Z:
                              CHARGER: OFF BATTERIES: DISCONNECTED
                                                                   Herc-UART0: OFF
                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                              3V3: BAD
ISA: 3.7mA
                                                            5V0: BAD
                                                                          24V: 0.41
                                                       @ 0.000W / 0.796W
                                                                          Period: 1.2ms
   2V5 2V8 24V VBm
                            VL
                                Vcc28
                                             ISA
                                                            Tchrg
                                                    Tbatt
                          3296
                                 3136
                                       128
ADC 0 0 64 264 3296 3136 128 1 1 0
val 0.00V 0.00V 0.41V 1.77V 25.55V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
          HEAT DEP BSTAT BE LB LS LR CE REGE
                                            VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
            0
                0
                     2
                         0 0
Received at SCET 2022-09-29T15:05:44.222Z:
Received at SCET 2022-09-29T15:05:44.2227;
#45 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                          BATTERIES: DISCONNECTED
                                                                   Herc-UART0: OFF
                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                               3V3: BAD
                                                           5V0: BAD
                                                                          24V: 0.41
                                                 ISA: 3.7mA
                                                       @ 0.000W / 0.786W
                                                                          Period: 1.2ms
   ADC
Received at SCET 2022-09-29T15:05:50.081Z:
                  [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:05:50.472Z:
#46 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 9.0 1V8: BAD 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
                                                                   Herc-UART0: OFF
                                                                                      Lander-UART1: INITIALIZED & ACTIVE
24V: 0.41
                                                            5V0: BAD
                         is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                       @ 0.000W / 0.786W
                                                                          Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 264
                           VL
                                       VSA
                                                            Tchrg
                                Vcc28
                                             ISA
                                                    Tbatt
   #47 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                              CHARGER: OFF
                                          BATTERIES: DISCONNECTED
                                                                    Herc-UART0: OFF
                                                                                       Lander-UART1: INITIALIZED & ACTIVE
5V0: BAD
                                                                          24V: 0.41
                                                       @ 0.000W / 0.786W
                                                                          Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 264
                            VL
                                Vcc28
                           3264
                                3136
                                       128
#48 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                              CHARGER: OFF
                                          BATTERIES: DISCONNECTED
                                                                    Herc-UART0: OFF
                                                                                       Lander-UART1: INITIALIZED & ACTIVE
                                               3V3: BAD
                        2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                            5V0: BAD
                                                                          24V: 0.21
VBm: 1.77V VL: 25.31V
HEATER [268K |274K |273K]
                                                 ISA: 3.7mA
                         is NOT_HEATING, Control: ENABLED
                                                       @ 0.000W / 0.786W
                                                                          Period: 1.2ms
Tblimp: 0.0K
                               Vcc28
3136
27.80V
          2V8 24V VBm
                            VL
                                                    Thatt
                                                            Tchrg
ADC
                32
                     264
                           3264
                                       128
val 0.00V 0.00V 0.21V 1.77V 25.31V
                                     0.99V 3.7mA 428.1±0.0K
                                                         0.0±0.0K
          HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:06:10.441Z:
[HEAT]: OFF
                   [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#49 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                             CHARGER: OFF BATTERIES: DISCONNECTED
                                                                    Herc-UART0: OFF
                                                                                       Lander-UART1: INITIALIZED_&_ACTIVE
```

```
Vcc28: 27.80V VSA: 0.99V IS is NOT_HEATING, Control: ENABLED
VBM: 1.//V VL: 25.55V VCC28: 27.88
HEATER [268K | 274K | 273K] is NOT_HEAT
Tbatt: 428.1K ± 0.6K Tchrg: 0.6K ± 0.6K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                              @ 0.000W / 0.796W
                                                                                                                                                     Period: 1.2ms
                     2V8 24V VBm
0 64 264
                                                        VL
                                                                 Vcc28
RESECTIFIED TO THE PROPERTY OF THE PROPERTY OF
BATTERIES: DISCONNECTED
                                                                                                                                        Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                               3V3: BAD
                                                                                                                         5V0: BAD
                                                                                                   ISA: 7.4mA
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                 2V8 24V VBm VL Vcc28
0 64 264 3264 3136
0.00V 0.41V 1.77V 25.31V 27.80V
HEAT DEP BSTAT BE LB 16.80
                                                                                                         Tbatt
                                                                                                                         Tchrg
                                                                           0.99V 7.4mA 428.1±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                                                         GPIO (2=HiZ)
Received at SCET 2022-09-29T15:06:23.800Z:
#51 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                            CHARGER: OFF BATTERIES: DISCONNECTED H.0 2V8: 0.0 3V3: BAD 5V0: BAD
                                                                                                                                       Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                                                                 3V3: BAD
                                                                                                                                                     24V: 0.41
                                                                                                   ISA: 3.7mA
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                  2V8 24V VBm
0 64 264
        2V5
                                                                 Vcc28
                                                                               VSA
                                                                                          ISA
                                                                                                                         Tchrg
RESECT/Flag Events: []
D5 00 08 18 00 03 00 00 03 8 00 00 00 00 06 60 02 1 40 08 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....3...8.
  Received at SCET 2022-09-29T15:06:28.878Z:
 [HEAT]: OFF
                                    [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:06:29.769Z:
#52 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1/2: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3/3: BAD 5/8: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                                                       Herc-UART0: OFF
                                                                                                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                          5V0: BAD
                                                                                                                                                    24V: 0.41
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
        2V5 2V8 24V VBm
0 0 64 264
                                                     VL
3264
                                                                 Vcc28
3136
                                                                                                                         Tchrg
                                                                               VSA
                                                                                          ISA
                                                                                                         Tbatt
                                                                               128
       0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V
                                                                                     7.4mA 428.1±0.0K 0.0±0.0K
                     Received at SCET 2022-09-29T15:06:30.066Z:
#53 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: VBm: 1.77V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS: HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.00V Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh 2V5 2V8 24V VBm VL Vcc28 VSA ISA ADC 0 0 64 264 3264 3136 128 1
                                                                                      BATTERIES: DISCONNECTED
                                                                                                                                        Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                                                               3V3: BAD
                                                                                                                          5V0: BAD
                                                                                                                                                     24V: 0.41
                                                                                                   ISA: 3.7mA
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                                                                                                          Tbatt
                       0
                                 64
                                           264
                                                      3264
                                                               3136
                                                                               128
Received at SCET 2022-09-29T15:06:35.941Z:
Received at SCET 2022-09-29T15:06:35.941Z:
#54 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARC
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 1.77V VL: 25.31V Vcc28: 27.80
HEATER [268K | 274K | 273K] is NOT_HEATI
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                           CHARGER: OFF
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                       Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                 2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                              3V3: BAD
ISA: 3.7mA
                                                                                                                                                     24V: 0.41
                                                                                                                          5V0: BAD
                                                  is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
         2V5 2V8 24V VBm
_0 _0 64 264
                                                   VL Vcc28
3264 3136
25.31V 27.80V
                                                                               VSA
                                                                                                                         Tchrg
                                                                                          ISA
                                                                                                         Tbatt
                                                                               128
Val 0.00V 0.00V 0.41V 1.77V 25.31V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
 GPIO (2=HiZ)
                                                        0
 Reset/Flag Events: []
D5 00 08 18 00 36 00 00 00 38 00 00 00 00 66 00 21 40 08 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 ....6...8.
```

```
CHARGER: OFF BATTERIES: DISCONNECTED 3V3: BAD
 #55 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                                                 3V3: BAD
ISA: 7.4mA
                                                                                    5V0: BAD
                                                                                                     24V: 0.41
1V2: BAD
                                  Vcc28: 27.80V VSA: 0.99V
VBm: 1.77V VL: 25.31V
HEATER [268K |274K |273K]
                                   is NOT_HEATING, Control: ENABLED
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
Tblimp: 0.0K
                                      VL
              2V8 24V VBm
0 64 264
       2V5
                                           Vcc28
                                                             ISA
                                                                        Tbatt
                                                                                  Tchrg
ADC
                                     3264
                                             3136
                                                     128
            0.00V 0.41V 1.77V 25.31V 27.80V
                                                   0.99V
                                                          7.4mA 428.1±0.0K
                                                                               0.0±0.0K
val
              HEAT DEP BSTAT BE LB LS LR CE REGE
                                                            VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                0 0
Received at SCET 2022-09-29T15:06:49.128Z:
                          [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:06:49.566Z
 #56 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                         CHARGER: OFF
                                                          BATTERIES: DISCONNECTED
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
#30 [RS_REEP_ALIVE + NOT_DEPLOYED] CHAR

1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 1.82V VL: 25.31V Vcc28: 27.8¢

HEATER [268K | 274K | 273K] is NOT_HEAT

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                 2V5: 0.0 2V8: 0.0 Vcc28: 27.80V VSA: 0.99V
                                                                 3V3: BAD
ISA: 7.4mA
                                                                                   5V0: BAD
                                                                                                     24V: 0.41
                                  is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
#57 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1/2: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3/3: BAD 5/8 1.82 VL: 25.31 Vcc28: 27.80 VSA: 0.99 ISA: 3.7mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                    5V0: BAD
                                                                                                     24V: 0.41
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
              2V8 24V VBm
0 64 272
                                            Vcc28
                                                             ISA
                                                                                  Tchrg
VBM: 1.82V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VRM
#58 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
                                                          BATTERIES: DISCONNECTED
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                3V3: BAD
                                                                                  5V0: BAD
                                                                    ISA: 3.7mA
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
                                                                        Tbatt
                                                                                  Tchrg
                       64
                             272
                                     3264
                                             3136
                                                      128
     0 0 64 272 3264 3136 128 1 1 0 0.00V 0.00V 0.41V 1.82V 25.31V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:07:09.269Z:
VBm: 1.82V VL: 25.31V Vc.28: 27.80V VSA: 0.99V ISA: 7.4mA

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA

ADC

0 0 64

0.00V 0 0 64

VB. 675Z:

CHARGER: OFF BATTERIES: DISCONNECTED He
2VS: 0.0 2VS: 0.0 3V3: BAD 5V0: BAD
2VS: 0.0 3V3: BAD 5V0: BAD
40.09V 0.00K TSA: 7.4mA

EATHERY MONITOR: 0.00V 0.0mA 0mAh
2VS 2V8 24V VBm

VI

Val 0.00V 0 0 64
[HEAT]: OFF
                          [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
                                                                                            Herc-UART0: OFF
                                                                                                                     Lander-UART1: INITIALIZED & ACTIVE
                                                                                                     24V: 0.41
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
     GPIO (2=HiZ)
Reset/Flag Events: []
D5 00 08 18 00 3B 00 00 00 38 00 00 00 00 66 00 41 80 08 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....;...8.
 Received at SCET 2022-09-29T15:07:15.097Z:
#60 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                        CHARGER: OFF
                                                         BATTERIES: DISCONNECTED
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                 EUJ CHARGER: UFF BATTERIES:
2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                 3V3: BAD
                                                                                    5V0: BAD
                                                                                                     24V: 0.41
VBm: 1.82V VL: 25.31V
HEATER [268K | 274K | 273K]
                                                                   ISA: 7.4mA
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
       2V5 2V8 24V VBm VL Vcc28

0 0 64 272 3264 3136
                                                     VSA
                                                             ISA
                                                                        Tbatt
                                                                                  Tchrg
                                                     128
            0.00V 0.41V 1.82V 25.31V 27.80V
                                                   0.99V 7.4mA 428.1±0.0K 0.0±0.0K
                                                             VSAE
```

```
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:07:21.8162:
#61 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARC
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V
HEATER [268K | 274K | 273K] is NOT_HEATI
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                         CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                                   Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED & ACTIVE
                                               2V5: 0.0 2V8: 0.0 Vcc28: 27.80V VSA: 0.99V
                                                                                               3V3: BAD
ISA: 3.7mA
                                                                                                                       5V0: BAD
                                                                                                                                                24V: 0.41
                                                 is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                Period: 1.2ms
       2V5 2V8 24V VBm
0 0 64 488
                                                      VL
                                                                                                                     Tchrg
                                                              Vcc28
                                                                            VSA
                                                                                       ISA
                                                                                                      Tbatt
                                                            3136
27.80V
                                                  3264
                                                                            128
val 0.00V 0.00V 0.41V 3.26V 25.31V
                                                                        0.99V
                                                                                   3.7mA 428.1±0.0K
                    HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                                                      0
Received at SCET 2022-09-29T15:07:28.722Z:
                                    [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:07:28.737Z:
#62 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3,26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
                                                                                  BATTERIES: DISCONNECTED
                                                                                                                                    Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED & ACTIVE
                                                                                             3V3: BAD
                                                                                                                       5V0: BAD
                                                                                                                                                24V: 0.41
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                                                                                                ISA: 3.7mA
                                                 is NOT_HEATING, Control: ENABLED
                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                Period: 1.2ms
Tblimp: 0.0K
       ERY MONITOR: 0.00V 0.000A 0.000A

2V5 2V8 24V VBm VL Vcc28 VSA

0 0 64 488 3264 3136 128

0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 3

HEAT DEP BSTAT BE LB LS LR CE REGE

0 2 0 0 2 2 0 0
                                                                                                      Thatt
                                                                                                                     Tchrg
                                                                        0.99V 3.7mA 428.1±0.0K 0.0±0.0K
                                                                                      VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:07:35.737Z
#63 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                  BATTERIES: DISCONNECTED
                                                                                                                                   Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                             3V3: BAD
                                                                                                                       5V0: BAD
                                                                                                                                                24V: 0.41
                                                                                                ISA: 7.4mA
                                                                                                            @ 0.000W / 0.786W
                                                                                                                                                Period: 1.2ms
                 2V8 24V VBm
0 64 496
        2V5
                                                      VL
                                                               Vcc28
ADC 0 0 64 496 3264 3136 128 2 1 0 val 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K

        HEAT DEP BSTAT BE
        LB
        LS
        LR
        CE
        REGE
        VSAE
        3V3_EN
        H_ON
        R_ON
        F_ON
        M_ON
        H_RST
        H_N_PRST
        F_N_RST
        CAMSEL
        BMSB

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GPIO (2=HiZ)
Received at SCET 2022-09-29T15:07:41.534Z:
                                                ED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
#64 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                                                                  BATTERIES: DISCONNECTED
                                                                                                                                    Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED & ACTIVE
#64 [KS_KEEP_ALIVE + NOT_DEPLOTED] CHARM!
1/2: BAD 1/8: BAD 2/5: 0.0

VBm: 3.26V VL: 25.31V Vcc28: 27.80V

HEATER [268K |274K |273K] is NOT_HEATIN

Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                               3V3: BAD
                                                                                                                       5V0: BAD
                                                                                                                                                24V: 0.41
                                                                                                ISA: 3.7mA
                                                is NOT_HEATING, Control: ENABLED
128.1K ± 0.0K Tblimp: 0.0K
                                                                                                            @ 0.000W / 0.786W
                                                                                                                                                Period: 1.2ms
                   2V8 24V VBm
0 64 488
                                                       VL
                                                                            VSA
          2V5
                                                               Vcc28
                                                                                       ISA
                                                                                                                        Tchrg
104
                                                                                                      Tbatt
                                                   3264
                                                              3136
                                                                            128
                0 64 488 3264 3136
0.00V 0.41V 3.26V 25.31V 27.80V
                                                                        0.99V
                                                                                   3.7mA 428.1±0.0K
                                                                                                               428.1±0.0K

        HEAT
        DEP
        BSTAT
        BE
        LB
        LS
        LR
        CE
        REGE
        VSAE
        3V3_EN
        H_ON
        R_ON
        F_ON
        M_ON
        H_RST
        H_N_PRST
        F_N_RST
        R_N_RST
        CAMSEL
        BMSB

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GPIO (2=HiZ)
Received at SCET 2022-09-29T15:07:48.441Z:
#65 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1/2: BAD 1/8: BAD 2/5: 0.0 2/8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                 BATTERIES: DISCONNECTED
                                                                                                                                   Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                            3V3: BAD
                                                                                                                        5V0: BAD
                                                                                                                                                24V: 0.41
                                                                                                ISA: 7.4mA
                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                Period: 1.2ms
          2V5
0
                   2V8 24V VBm
0 64 496
                                                               Vcc28
                                                                            VSA
                                                                                       ISA
ADC
                                                    3264
                                                                3136
                                                                            128
Received at SCET 2022-09-29T15:07:48.550Z:
                                     [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:07:54.191Z:
#66 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF 1V2: BAD 1V8: BAD 2V5: 0.0 2V8:
                                                                                  BATTERIES: DISCONNECTED
                                                                                                                                   Herc-UART0: OFF
                                                                                                                                                                        Lander-UART1: INITIALIZED_&_ACTIVE
                                               2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                                3V3: BAD
                                                                                                                        5V0: BAD
                                                                                                                                                24V: 0.41
                                                                                                           @ 0.000W / 0.786W
```

file:///C:/Users/OSIRIS/Documents/GitHub/CubeRoverPackage/Apps/GroundSoftware/packet_prints/out.htm

```
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                    Thlimp: 0.0K
                                                                                                              Tchrg
0
                   2V8 24V
         2V5
                                                                                                Tbatt
                              64
                                        488
                                                             3136
                                                                        128
      0.00V 0.00V 0.41V
                                    3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
                   GPIO (2=HiZ)
Received at SCET 2022-09-29T15:08:00.847Z:
#67 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                                                              BATTERIES: DISCONNECTED F
SVØ: BAD 5VØ: BAD
                                                                                                                            Herc-UART0: OFF
                                                                                                                                                               Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                       3V3: BAD
ISA: 3.7mA
                                                                                                                                        24V: 0.41
                                                                                                    @ 0.000W / 0.786W
                                                                                                                                        Period: 1.2ms
BATTERY MONITOR: 0.00V 0.0mA 0mAh
        2V5 2V8 24V VBm
0 0 64 488
                                                VL
3264
                                                           Vcc28
3136
                                                                                                Tbatt
                                                                                                              Tchrg
0
ADC
                                                                        128
Received at SCET 2022-09-29T15:08:07.862Z
Received at SCET 2022-09-29T15:08:07.862Z:
#68 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V:
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA
ADC 0 0 64 496 3264 3136 128 2
2V3 00V 0.00V 0.41V 3 32V 25 31V 27.80V 0.99V 7.4mA 428
                                                                              BATTERIES: DISCONNECTED He
                                                                                                                            Herc-UART0: OFF
                                                                                                                                                               Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                        3V3: BAD
                                                                                           ISA: 7.4mA
                                                                                                     @ 0.000W / 0.786W
                                                                                                                                        Period: 1.2ms
                                                                                                              Tchrg
                                                         3136
                                                                                                Tbatt
Received at SCET 2022-09-29T15:08:08.112Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
#69 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: WBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/ HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                              BATTERIES: DISCONNECTED He
0 3V3: BAD 5V0: BAD
99V ISA: 7.4mA
                                                                                                                                                               Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                            Herc-UART0: OFF
                                                                                                                                        24V: 0.21
                                                                                                     @ 0.000W / 0.786W
                                                                                                                                        Period: 1.2ms
                  2V8 24V VBm
0 32 496
                                                   VL
                                                         Vcc28
3136
                                                 3264
                                                                        128
Received at SCET 2022-09-29T15:08:20.862Z:
                                                                              BATTERIES: DISCONNECTED HE
CHARGER: OFF
                                                                                                                            Herc-UART0: OFF
                                                                                                                                                               Lander-UART1: INITIALIZED & ACTIVE
                                             2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                                                                        24V: 0.41
                                                                                           ISA: 7.4mA
                                              is NOT_HEATING, Control: ENABLED
92.7K ± 0.0K Tblimp: 0.0K
                                                                                                     @ 0.000W / 0.796W
                                                                                                                                        Period: 1.2ms
       GPIO (2=HiZ)
Received at SCET 2022-09-29T15:08:20.878Z:
#71 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V:
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                              BATTERIES: DISCONNECTED
                                                                                                                            Herc-UART0: OFF
                                                                                                                                                               Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                      3V3: BAD
                                                                                                                5V0: BAD
                                                                                                                                        24V: 0.41
                                                                                          ISA: 7.4mA
                                                                                                     @ 0.000W / 0.786W
                                                                                                                                        Period: 1.2ms
BATTERY MONITOR: 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.0000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
```

```
#72 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                          BATTERIES: DISCONNECTED
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                 3V3: BAD
                                                                                  5V0: BAD
                                                                   ISA: 7.4mA
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 496
                                                                        Tbatt
                                     3264
                                             3136
                                                      128
Lander-UART1: INITIALIZED & ACTIVE
Reset/Flag Events: []
D5 00 08 18 00 49 00 00 00 38 00 00 00 00 66 00 41 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....I...8.
Received at SCET 2022-09-29T15:08:39.987Z:

#74 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED HE
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER[ 268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W / 0.786W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
                                          Vcc28
3136
27.80V
     2V5 2V8 24V VBm
0 0 64 488
                                       VL
                                                                                  Tchrg
                                                                        Tbatt
                                   3264
                                                      128
Received at SCET 2022-09-29T15:08:46.894Z:
#75 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED He
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
1V8: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA

HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W / 0.786W

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                                                                                    24V: 0.41
                                                                                                     Period: 1.2ms
Received at SCET 2022-09-29T15:08:47.050Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
Received at SCET 2022-09-29T15:08:53.003Z:

#76 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENT
15att: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0N
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA IS
ADC 0 0 64 488 3264 3136 128
VAL 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.90V 3.70
                                                          BATTERIES: DISCONNECTED
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                                                3V3: BAD 5V0: BAD ISA: 3.7mA
                                                                                                    24V: 0.41
                                  is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                           @ 0.000W / 0.786W
                                                             ISA
                                                                        Thatt
                                                                                  Tchrg
ADC 0 0 64 488 3264 3136 val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                                   0.99V 3.7mA 428.1±0.0K 0.0±0.0K
              #77 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V5 VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISAN HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                          BATTERIES: DISCONNECTED He
                                                                                            Herc-UART0: OFF
                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                3V3: BAD
ISA: 7.4mA
                                                                                                     24V: 0.41
                                                                           @ 0.000W / 0.786W
                                                                                                     Period: 1.2ms
Reset/Flag Events: []
```

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Received at SCET 2022-09-29T15:09:06.503Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:09:06.581Z:
#78 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                               CHARGER: OFF BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
3V3: BAD
ISA: 7.4mA
                                                                5V0: BAD
                                                                               24V: 0.41
                                                           @ 0.000W / 0.786W
                                                                                Period: 1.2ms
          2V8 24V VBm
0 64 488
    2V5
                              VL
                                  Vcc28
                                                ISA
                                                                Tchrg
                                                        Tbatt
                            3264
                                   3136
                                          128
   0 0 64 488 3264 3136 128 2 1 0 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
           HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                               VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:09:13.300Z:
#79 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                             BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                                                                5V0: BAD
                                                   3V3: BAD
                                                                               24V: 0.21
                                                     ISA: 3.7mA
                                                           @ 0.000W / 0.786W
                                                                                Period: 1.2ms
Received at SCET 2022-09-29T15:09:19.237Z:
#80 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.55V Vcc28: 27.80V VSA: 0.9 3V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VRm
                                CHARGER: OFF
                                             BATTERIES: DISCONNECTED
                                                                         Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                                                   3V3: BAD
                                                                 5V0: BAD
                                                     ISA: 7.4mA
                                                           @ 0.000W / 0.796W
                                                                                Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 488
                                                        Tbatt
                                                                Tchrg
                            3296
                                 3136
                                          128
GPIO (2=HiZ)
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
          SCET 2022-09-29T15:09:25.972Z
CHARGER: OFF BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
                                                                5V0: BAD
                                                                                24V: 0.41
                                                     ISA: 7.4mA
                                                           @ 0.000W / 0.786W
                                                                                Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 496
                                  Vcc28
                            3264
                                  3136
                                          128
Grid (2-112)

Reset/Flag Events: []

D5 00 08 18 00 51 00 00 00 03 8 00 00 00 00 66 00 41 80 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....Q...8.
#82 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                CHARGER: OFF
                                             BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                          2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                  3V3: BAD
                                                                  5V0: BAD
                                                                                24V: 0.21
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                                                     ISA: 3.7mA
                           is NOT_HEATING, Control: ENABLED 28.1K ± 0.0K Tblimp: 0.0K
                                                           @ 0.000W / 0.786W
                                                                                Period: 1.2ms
2V8 24V VBm
                              VL
                                 Vcc28
                                          VSA
     2V5
                                                ISA
                                                        Thatt
                                                                  Tchrg
   0 0 32 488 3264 3136
0.00V 0.00V 0.21V 3.26V 25.31V 27.80V
ADC
                                   3136
                                          128
                                        0.99V 3.7mA 428.1±0.0K 428.1±0.0K
val
           HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:09:39.550Z:
#83 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.55V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchg: 0.0K ± 0.0K Tblimp: 0.0K
                                CHARGER: OFF BATTERIES: DISCONNECTED
                                                                        Herc-UART0: OFF
                                                                                             Lander-UART1: INITIALIZED_&_ACTIVE
                                                    3V3: BAD
                                                                  5V0: BAD
                                                                                24V: 0.41
                                                     ISA: 7.4mA
                                                            @ 0.000W / 0.796W
                                                                                Period: 1.2ms
```

```
3136
                                                128
                          496
                                 3296
val 0.00V 0.00V 0.41V 3.32V
                              25.55V
                                      27.80V
                                             0.99V
                                                    7.4mA 428.1±0.0K 0.0±0.0K
                                                      VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:09:46.081Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
                                                    BATTERIES: DISCONNECTED H
#84 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.
HEATER [268K | 274K | 273K] is NOT_HE
                              ED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                          3V3: BAD
                                                            ISA: 3.7mA
                               is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                   @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                     Vcc28
3136
27.80V
           2V8 24V VBm
                                  VL
                                                                Tbatt
                                                                         Tchrg
                    64
                          488
                                 3264
                                                128
    0.00V 0.00V 0.41V 3.26V 25.31V
                                             0.99V 3.7mA 428.1±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:09:52.003Z:
Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                          24V: 0.21
                                                                   @ 0.000W / 0.796W
                                                                                          Period: 1.2ms
Received at SCET 2022-09-29T15:09:59.675Z
#86 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V5 VBm: 3.26V VL: 25.55V Vcc28: 27.80V VSA: 0.99V ISAN HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 393.7K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                    BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                             2V5: 0.0 2V8: 0.0 3V3: BAD Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
                                                                           5V0: BAD
                                                                                          24V: 0.41
                                                                   @ 0.000W / 0.796W
                                                                                          Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 488
                                  VL
                                       Vcc28
                                 3296
                                       3136
                                                128
val 0.00V 0.00V 0.41V 3.26V 25.55V 27.80V 0.99V 7.4mA 428.1±0.0K 393.7±0.0K
             GPIO (2=HiZ)
Received at SCET 2022-09-29T15:10:04.925Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:10:05.534Z:

#87 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:

1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3

VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA

HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh

2V5 2V8 24V VBm VL Vcc28 VSA ISA

ADC 0 0 64 488 3264 3136 128 1
                                                    BATTERIES: DISCONNECTED
                                                                                   Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                                                          3V3: BAD
                                                                          5V0: BAD
                                                                                         24V: 0.41
                                                            ISA: 3.7mA
                                                                   @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
                    64
                         488
                                 3264
                                      3136
                                                128
Received at SCET 2022-09-29T15:10:12.675Z:

#89 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:

1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3

VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA

HEATER [268K |274K |273K] is NOT_HEATING, Control: ENABLED

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh

2V5 2V8 24V VBm VL Vcc28 VSA ISA

ADC 0 0 64 488 3264 3136 128 2

ADC 0 0 64 488 3264 3136 128 2

ADC 0 0 0 64 488 3264 3136 128 2

ADC 0 0 0 64 488 3264 3136 128 2
                                                    BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                         3V3: BAD
ISA: 7.4mA
                                                                         5V0: BAD
                                                                                          24V: 0.41
                                                                   @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
                               mAh
VL VCC20
3264 3136
35 31V 27.80V
C LR
                                                                         Tchrg
                                                                Tbatt
val 0.00V 0.00V 0.41V 3.26V 25.31V
                                             0.99V
                                                    7.4mA 428.1±0.0K
                                                                      0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
```

```
#88 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                  CHARGER: OFF BATTERIES: DISCONNECTED
                                                                            Herc-UART0: OFF
                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                         2V8: 0.0
                                                                     5V0: BAD
                                                                                   24V: 0.41
1V2: BAD
                                                       3V3: BAD
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
VBm: 3.26V
                            Vcc28: 27.80V VSA: 0.99V
                                                        ISA: 3.7mA
                             is {\tt NOT\_HEATING}, {\tt Control}: {\tt ENABLED}
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
Tblimp: 0.0K
                               VL
                24V VBm
64 488
      2V5
            2V8
                                    Vcc28
                                            VSA
                                                  ISA
                                                           Tbatt
                                                                   Tchrg
ADC
                              3264
                                            128
                                     3136
          0.00V 0.41V 3.26V 25.31V
                                   27.80V
                                          0.99V
                                                3.7mA 428.1±0.0K
                                                                 0.0±0.0K
val
            HEAT DEP BSTAT BE LB LS LR CE REGE
                                                  VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
              0
CHARGER: OFF BATTERIES: DISCONNECTED
                                                                            Herc-UART0: OFF
                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
3V3: BAD
                                                                    5V0: BAD
                                                                                   24V: 0.41
                                                       ISA: 7.4mA
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
          2V8 24V VBm
0 64 488
      2V5
                                VL
                                    Vcc28
                                            VSA
                                                           Tbatt
                                                                    Tchrg
                              3264
                                    3136
                                            128
    GPIO (2=HiZ)
Received at SCET 2022-09-29T15:10:24.941Z:
BATTERIES: DISCONNECTED
                                                                            Herc-UARTO: OFF
                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                                    3V3: BAD
                                                                     5V0: BAD
                                                                                   24V: 0.41
                                                       ISA: 3.7mA
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
      2V5
0
                                                           Thatt
                                                                     Tchrg
                  64
                        488
                              3264
                                     3136
                                            128
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                          0.99V
                                                3.7mA 428.1±0.0K
                                                                428.1±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                  VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Reset/Flag Events: []
 Received at SCET 2022-09-29T15:10:24.956Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 74.6°K]
Received at SCET 2022-09-29T15:10:31.159Z:
VBM: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0V Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VRM
#92 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
                                                BATTERIES: DISCONNECTED
                                                                            Herc-UART0: OFF
                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
                                                      3V3: BAD
                                                                    5V0: BAD
                                                                                   24V: 0.41
                                                        ISA: 7.4mA
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
                                                           Tbatt
                                                                    Tchrg
                   64
                        496
                              3264
                                     3136
                                            128
         0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE
0 0 2 0 0 2 2 0 0 2
                                                      3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Reset/Flag Events: []
D5 00 08 18 00 5C 00 00 00 03 80 00 00 00 66 00 41 80 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....\...8.
Received at SCET 2022-09-29T15:10:38.253Z:
#93 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V HEATER [268K | 274K | 273K] is NOT_HEATING, Control: E Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.6 BATTERY MONITOR: 0.00V 0.0ma 0mAh
                                  CHARGER: OFF BATTERIES: DISCONNECTED
                                                                            Herc-UART0: OFF
                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                                       3V3: BAD
                                                                     5V0: BAD
                                                                                   24V: 0.41
                                                       ISA: 3.7mA
                            is NOT_HEATING, Control: ENABLED
.0K ± 0.0K
Tblimp: 0.0K
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
          2V8 24V VBm
0 64 488
     2V5
0
                                    Vcc28
                                            VS A
                                                  ISA
                                                                   Tchrg
                             3264
                                   3136
                                            128
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                          0.99V
                                                3.7mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Reset/Flag Events: []
D5 00 08 18 00 5D 00 00 00 38 00 00 00 00 66 00 21 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....]...8.
Received at SCET 2022-09-29T15:10:44.722Z
#94 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                  CHARGER: OFF BATTERIES: DISCONNECTED
                                                                            Herc-UART0: OFF
                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
3V3: BAD
                                                                     5V0: BAD
                                                                                   24V: 0.41
                                                       ISA: 7.4mA
                                                              @ 0.000W / 0.786W
                                                                                   Period: 1.2ms
           2V8 24V VBm
     2V5
0
                                VL
                                    Vcc28
                                                           Tbatt
                                                                   Tchrg
                              3264
                                    3136
                                            128
    0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON
                                                  VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                  0
             0
                            0
                               0
```

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Received at SCET 2022-09-29T15:10:45.612Z:
  [HEAT]: OFF
                                        [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:10:51.112Z:
#95 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER:
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V
HEATER [265K | 274K | 273K] is NOT_HEATING,
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28
ADC 0 0 64 488 3264 3136
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                                   YED] CHARGER: OFF BATTERIES: DISCONNECTED H
2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA
                                                                                                                                           Herc-UART0: OFF
                                                                                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                           24V: 0.41
                                                     is NOT_HEATING, Control: ENABLED

0.0K ± 0.0K Tblimp: 0.0K
                                                                                                                    @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
                                                                                                                              Tchrg
                                                                                   VSA
                                                                                              ISA
                                                                                                               Tbatt
                                                                                   128
 Reset/Flag Events: []
D5 00 08 18 00 5F 00 00 00 38 00 00 00 00 66 00 21 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ...._...8
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W BATTERY MONITOR: 0.00V 0.0mA 0mAh 2V5 2V8 24V VBm 44
                                                                                                                                                                                      Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                              5V0: BAD
                                                                                                                                                           24V: 0.41
                                                                                                                    @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
        2V5 2V8 24V VBm
0 0 64 496
                                                                                                                               Tchrg
 3264
                                                                  3136
                                                                                   128
 #97 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNE 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
                                                                                          BATTERIES: DISCONNECTED
                                                                                                                                              Herc-UARTO: OFF
                                                                                                                                                                                     Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                              5V0: BAD
                                                                                                                                                           24V: 0.41
 VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                                                    is NOT_HEATING, Control: ENABLED 3.0K ± 0.0K Tblimp: 0.0K
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
 2V5 2V8 24V VBm
0 0 64 488
                                                           VL
                                                                                   VSA
                                                                                                                               Tchrg
                                                                   Vcc28
                                                                                                               Tbatt
        0 0 64 488 3264 3136 128 2 1 0 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
                       Received at SCET 2022-09-29T15:11:04.378Z:
                                        [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
  Received at SCET 2022-09-29T15:11:11.300Z:
 #98 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
                                                                                          BATTERIES: DISCONNECTED

.0 3V3: BAD
                                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                                     Lander-UART1: INITIALIZED & ACTIVE
 #96 [RS_REEP_ALIVE + NOI_DEPLOYED] CHARC
1V2: BAD 2V5: 0.0
VBm: 3.32V VL: 25.31V Vcc28: 27.80
HEATER [268K |274K |273K] is NOI_HEAT]
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                                               5V0: BAD
                                                                                                                                                           24V: 0.41
                                                                                                        ISA: 7.4mA
                                                  is NOT_HEATING, Control: ENABLED 0.0K ± 0.0K Tblimp: 0.0K
                                                                                                                    @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
        2V5 2V8 24V VBm
0 0 64 496
                                                            VL
                                                                                   VSA
                                                                    Vcc28
                                                                                              ISA
                                                                                                               Tbatt
                                                                                                                               Tchrg
         0 0 64 496 3264 3136
0.00V 0.00V 0.41V 3.32V 25.31V 27.80V
                                                                                   128
                                                                                                2
                                                                               0.99V
                                                                                          7.4mA 428.1±0.0K
                                                                                                                         0.0±0.0K
 MSSECTIFIED TO THE PROPERTY OF THE PROPERTY OF
 #99 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V.2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V5 VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                        BATTERIES: DISCONNECTED
                                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                  3V3: BAD
                                                                                                                               5V0: BAD
                                                                                                                                                            24V: 0.41
                                                                                                        ISA: 7.4mA
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
         2V5 2V8 24V VBm
0 0 64 496
                                                                    Vcc28
 Received at SCET 2022-09-29T15:11:23.8162.
#100 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES.
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3
VBm: 3.26V VL: 25.31V Vcc28: 27.80V V5A: 0.99V ISA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA
2V5 2V8 24V VBm VL Vcc28 VSA ISA
3264 3136 128 1
                                                                                           BATTERIES: DISCONNECTED
                                                                                                                                               Herc-UART0: OFF
                                                                                                                                                                                      Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                3V3: BAD
ISA: 3.7mA
                                                                                                                           5V0: BAD
                                                                                                                                                           24V: 0.41
                                                                                                                   @ 0.000W / 0.786W
                                                                                                                                                            Period: 1.2ms
                                                                                                               Tbatt
                                                                                                                               Tchrg
```

```
0.41V
                                                                                     3.7mA 428.1±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
 GPIO (2=HiZ)
 Reset/Flag Events: []
   Received at SCET 2022-09-29T15:11:24.706Z:
                                    [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:11:30.362Z:
#101 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED He
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W / 0.786W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                                                  24V: 0.41
                                                                                                            @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
 BATTERY MONITOR: 0.00V 0.0mA 0mAh
        2V5 2V8 24V VBm
0 0 64 496
                                                     VL
3264
                                                                Vcc28
3136
                                                                                                        Tbatt
                                                                                                                       Tchrg
0
 ADC
                                                                              128
                                                                                          2
 BATTERIES: DISCONNECTED HO
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                            Lander-UART1: INITIALIZED & ACTIVE
                                                                                                  ISA: 3.7mA
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
                                                                                                                       Tchrg
                                                                                                        Tbatt
 Received at SCET 2022-09-29T15:11:43.253Z:
Received at SCET 2022-09-29T15:11:43.253Z:
#103 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA Tbatt Tch
ADC 0 0 64 488 3264 3136 128 1 1
ADC 0 0 0 64 488 3264 3136 128 1 1
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                            Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                         5V0: BAD
                                                                                                                                                   24V: 0.41
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
 2V5 2V8 24V VBm VL Vcc28 VSA
ADC 0 0 64 488 3264 3136 128
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V
                                                                                    3.7mA 428.1±0.0K 0.0±0.0K
                    Reset/Flag Events: []
D5 00 08 18 00 67 00 00 00 38 00 00 00 00 66 00 21 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....g...8.
 Received at SCET 2022-09-29T15:11:43.675Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:11:50.644Z:
 #104 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, CONTON: E
                                                                                    BATTERIES: DISCONNECTED He
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                  24V: 0.41
                                                                                                   ISA: 3.7mA
                                                  is NOT_HEATING, Control: ENABLED 3.0K ± 0.0K Tblimp: 0.0K
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
 Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
        GPIO (2=HiZ)
 Received at SCET 2022-09-29T15:11:55.878Z:
#105 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V5 VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                    BATTERIES: DISCONNECTED
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                           Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                             3V3: BAD
                                                                                                                         5V0: BAD
                                                                                                                                                   24V: 0.41
                                                                                                  ISA: 7.4mA
                                                                                                             @ 0.000W / 0.786W
                                                                                                                                                   Period: 1.2ms
BATTERY MONITOR: 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.0000 0.0000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.
 Reset/Flag Events: []
D5 00 08 18 00 00 00 08 00 00 00 00 00 66 00 41 80 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 ....i...8.
 Received at SCET 2022-09-29T15:12:02.566Z:
#106 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BA
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
                                                                                    BATTERIES: DISCONNECTED
                                                                                                                                      Herc-UART0: OFF
                                                                                                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                 3V3: BAD
                                                                                                                         5V0: BAD
```

 $file: ///C:/Users/OSIRIS/Documents/GitHub/CubeRoverPackage/Apps/GroundSoftware/packet_prints/out.htm$

```
VBm: 3.32V VL: 25.31V Vcc28: 27.80
HEATER [268K |274K |273K] is NOT_HEAT
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                               is NOT_HEATING, Control: ENABLED
                                                                    @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
2V5 2V8 24V VBm
0 0 64 496
Received at SCET 2022-09-29T15:12:02.737Z:
> Command[#246: WatchDogInterface_RequestStatusReport] -> NO_ERROR[0x0]
BATTERIES: DISCONNECTED
                                                                                    Herc-UART0: OFF
                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                          5V0: BAD
                                                                                            24V: 0.41
                                                                    @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#107 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
                                                     BATTERIES: DISCONNECTED
                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                    Herc-UART0: OFF
                                                         3V3: BAD
ISA: 7.4mA
                                                                                          24V: 0.41
                                                                          5V0: BAD
VBm: 3.32V VL: 25.31V
HEATER [268K |274K |273K]
                               is NOT_HEATING, Control: ENABLED 3.0K ± 0.0K Tblimp: 0.0K
                                                                    @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
2V8 24V VBm
0 64 496
                                   VL
                                                 VSA
       2V5
                                       Vcc28
                                                                 Tbatt
    0 0 64 496 3264 3136 128 2 1 0 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
ADC
             Received at SCET 2022-09-29T15:12:03.
#109 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTER...
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA
VBATEP_[268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tabor: 0.0K ± 0.0K Tblimp: 0.0K
                                                     BATTERIES: DISCONNECTED
                                                                                    Herc-UART0: OFF
                                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
#109 [RS_REEP_ALIVE + NOI_DEPLOYED] CHARGE
1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 3.26V VL: 25.31V Vcc28: 27.80V

HEATER [268K | 274K | 273K] is NOT_HEATI

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                          3V3: BAD
ISA: 7.4mA
                                                                            5V0: BAD
                                                                                            24V: 0.41
                                                                    @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
2V5 2V8 24V VBm
0 0 64 488
                                        Vcc28
Received at SCET 2022-09-29T15:12:15.987Z:
Received at SCET 2022-09-29T15:12:15.9877:
#110 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENT
15att: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0H
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA 1SADC 0 0 64 488 3264 3136 128
                                                     BATTERIES: DISCONNECTED
                                                                                    Herc-UART0: OFF
                                                                                                            Lander-UART1: INITIALIZED & ACTIVE
                                                          3V3: BAD
ISA: 3.7mA
                                                                           5V0: BAD
                                                                                            24V: 0.41
                               is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                     @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
                                                       ISA
                                                                 Thatt
                                                                           Tchrg
ADC 0 0 64 488 3264 3136 val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                              0.99V
                                                     3.7mA 428.1±0.0K 0.0±0.0K
             HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Reset/Flag Events: []
D5 00 08 18 00 0
                               0
                                   0
 Received at SCET 2022-09-29T15:12:23.456Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 69.4°K]
#111 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGEI 1V2: BAD 1V8: BAD 2V5: 0.0 VBm: 3.32V VL: 25.31V Vcc28: 27.89V HEATER [268K | 274K | 273K] is NOT_HEATIN Tbatt: 428.1K ± 0.0K Tchrg: 405.7K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                      CHARGER: OFF
                                                     BATTERIES: DISCONNECTED
                                                                                    Herc-UART0: OFF
                                                                                                            Lander-UART1: INITIALIZED_&_ACTIVE
                                                          3V3: BAD
                              YED] CHARGER: OFF BATTERIES:
2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS.
is NOT_HEATING, Control: ENABLED
405.7K ± 0.0K Tblimp: 0.0K
                                                                         5V0: BAD
                                                                                            24V: 0.41
                                                             ISA: 7.4mA
                                                                    @ 0.000W / 0.786W
                                                                                            Period: 1.2ms
                   24V VBm
                                       Vcc28
                                                 VSA
                                                       ISA
                                                                 Tbatt
                                                                             Tchrg
                          496
```

```
val 0.00V 0.00V
                                                    7.4mA 428.1±0.0K
                 0.41V
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL
GPIO (2=HiZ)
Reset/Flag Events: []
 Received at SCET 2022-09-29T15:12:29.284Z
#112 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                   BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                                                          3V3: BAD
ISA: 7.4mA
                                                                          5V0: BAD
                                                                                          24V: 0.41
                                                                   @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
     2V5
0
            2V8 24V VBm
                                  VL
                                       Vcc28
                                                               Tbatt
                                                                         Tchrg
                                3264
                                        3136
                                                128
val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                       \hbox{VSAE} \quad \hbox{3V3\_EN} \quad \hbox{H\_ON} \quad \hbox{R\_ON} \quad \hbox{F\_ON} \quad \hbox{M\_ON} \quad \hbox{H\_RST} \quad \hbox{H\_N\_PRST} \quad \hbox{F\_N\_RST} \quad \hbox{CAMSEL} \quad \hbox{BMSB} 
GPIO (2=HiZ)
#113 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                   BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                         3V3: BAD
ISA: 7.4mA
                                                                         5V0: BAD
                                                                                          24V: 0.41
                                                                  @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
      2V5
0
            2V8 24V VBm
0 64 496
                                       Vcc28
                                                VSA
                                                      ISA
   ADC
Received at SCET 2022-09-29T15:12:41.878Z:
Received at SCET 2022-09-29T15:12:41.8782.
#114 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                    BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                                                         3V3: BAD
                                                                          5V0: BAD
                                                            ISA: 7.4mA
                                                                   @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 488
                                  VL
                                       Vcc28
                                                               Tbatt
                                                                         Tchrg
                                 3264
                                        3136
                                                128
   GPIO (2=HiZ)
[BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
           SCET 2022-09-29T15:12:49.628Z
#115 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                    CHARGER: OFF
                                                   BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V: VBm: 3.26V VL: 25.31V Vc28: 27.80V VSA: 0.99V IS/ HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                        3V3: BAD
                                                                         5V0: BAD
                                                                                         24V: 0.41
                                                            ISA: 7.4mA
                                                                  @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
      2V5 2V8 24V VBm
0 0 64 488
                                  VL
                                       Vcc28
                                3264
                                       3136
                                                128
CHARGER: OFF
                                                    BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                              2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                          3V3: BAD
                                                                         5V0: BAD
                                                                                          24V: 0.41
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                                                            ISA: 3.7mA
                               is NOT_HEATING, Control: ENABLED
                                                                  @ 0.000W / 0.786W
                                                                                          Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
                                             Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0MA 0MAh
            2V8 24V VBm
                                  VL
                                      Vcc28
                                                VSA
                                                               Tbatt
                                                                         Tchrg
                    64
ADC
                          488
                                 3264
                                        3136
                                                128
                                     27.80V
    0.00V 0.00V 0.41V 3.26V 25.31V
                                             0.99V
                                                   3.7mA 428.1±0.0K
                                                                     0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
              0
Reset/Flag Events: []
D5 00 08 18 00 74 00 00 00 38 00 00 00 00 66 00 21 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 ....t...8.
Received at SCET 2022-09-29T15:13:02.722Z:
[HEAT]: OFF
                       [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#117 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                    CHARGER: OFF
                                                    BATTERIES: DISCONNECTED
                                                                                  Herc-UART0: OFF
                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
```

file:///C:/Users/OSIRIS/Documents/GitHub/CubeRoverPackage/Apps/GroundSoftware/packet prints/out.htm

```
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
VBm: 3.32V VL: 25.31V Vcc28: 27.80
HEATER [268K |274K |273K] is NOT_HEAT
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                              @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                    2V8 24V
0 64
VBm
496
 RESECTIFIED TO THE PROPERTY OF THE PROPERTY OF
BATTERIES: DISCONNECTED
                                                                                                                                        Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                3V3: BAD
                                                                                                                          5V0: BAD
                                                                                                   ISA: 7.4mA
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                                                                                                         Tbatt
                                                                                                                         Tchrg
                 0.00V 0.41V 3.26V 25.31V 27.80V
                                                                           0.99V 7.4mA 428.1±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                                                         VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 2 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
#119 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTLEN.

#129 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTLEN.

1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V.

VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.

UEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED

Tabog: 0.0K ± 0.0K Tblimp: 0.0K
                                                          CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                                       Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED & ACTIVE
5V0: BAD
                                                                                                  3V3: BAD
                                                                                                                                                     24V: 0.41
                                                                                                   ISA: 7.4mA
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                  2V8 24V VBm
0 64 488
         2V5
                                                                 Vcc28
                                                                               VSA
                                                                                                                         Tchrg
                                                                                          ISA
                                                      3264
                                                               3136
                                                                               128
                                                                                            2
Received at SCET 2022-09-29T15:13:21.534Z
#120 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                      BATTERIES: DISCONNECTED
                                                                                                                                        Herc-UART0: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                             3V3: BAD
ISA: 3.7mA
                                                                                                                            5V0: BAD
                                                                                                                                                     24V: 0.41
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
          2V5 2V8 24V VBm
0 0 64 488
                                                         VL
                                                                 Vcc28
                                                                                          ISA
                                                                                                         Tbatt
                                                                                                                         Tchrg
                                                      3264
                                                                  3136
                                                                               128
 val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 3.7mA 428.1±0.0K 0.0±0.0K

HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON

GPIO (2=HiZ) 0 0 2 0 0 2 2 0 0 2 0 0 0
                                                                                           \hbox{VSAE} \quad \hbox{3V3\_EN} \quad \hbox{H\_ON} \quad \hbox{R\_ON} \quad \hbox{F\_ON} \quad \hbox{M\_ON} \quad \hbox{H\_RST} \quad \hbox{H\_N\_PRST} \quad \hbox{F\_N\_RST} \quad \hbox{CAMSEL} \quad \hbox{BMSB} 
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:13:21.800Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:13:28.003Z:
#121 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 387.2K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                      BATTERIES: DISCONNECTED
                                                                                                                                         Herc-UART0: OFF
                                                                                                                                                                             Lander-UART1: INITIALIZED & ACTIVE
                                                                                                 3V3: BAD
                                                                                                                           5V0: BAD
                                                                                                                                                     24V: 0.41
                                                                                                   ISA: 7.4mA
                                                                                                               @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
                  2V8 24V VBm
                                                         VL
                                                                 Vcc28
                                                                               VSA
                                                                                                          Tbatt
                       0
                                 64
                                          488
                                                      3264
                                                                 3136
                                                                               128
       GPIO (2=HiZ)
Received at SCET 2022-09-29T15:13:34.628Z:
#122 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V HEATER [268K | 274K | 273K] is NOT_HEATING, Control: E Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0 BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                     BATTERIES: DISCONNECTED
                                                                                                                                       Herc-UARTO: OFF
                                                                                                                                                                              Lander-UART1: INITIALIZED & ACTIVE
                                                                                                3V3: BAD
ISA: 7.4mA
                                                                                                                           5V0: BAD
                                                                                                                                                     24V: 0.41
                                                  is NOT_HEATING, Control: ENABLED

O.OK ± 0.0K Tblimp: 0.0K
                                                                                                                @ 0.000W / 0.786W
                                                                                                                                                     Period: 1.2ms
         2V5 2V8 24V VBm
0 0 64 488
                                                   VL Vcc28
3264 3136
25.31V 27.80V
                                                                               VSA
                                                                                                                         Tchrg
                                                                                          ISA
                                                                                                         Tbatt
                                                                               128
                                                                                           2
 val 0.00V 0.00V 0.41V 3.26V 25.31V
                                                                           0.99V
                                                                                      7.4mA 428.1±0.0K
                                                                                                                    0.0±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
 GPIO (2=HiZ)
                                                        0
 Reset/Flag Events: []
D5 00 08 18 00 7A 00 00 00 38 00 00 00 00 66 00 41 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 ....z...8.
```

```
#123 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                          CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                               Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                                    3V3: BAD
ISA: 7.4mA
                                                   2V8: 0.0
                                                                                      5V0: BAD
                                                                                                        24V: 0.41
1V2: BAD
                                   Vcc28: 27.80V VSA: 0.99V
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                                    is {\tt NOT\_HEATING}, {\tt Control}: {\tt ENABLED}
                                                                              @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
Tblimp: 0.0K
                                       VL
                    24V VBm
64 488
       2V5
               2V8
                                            Vcc28
                                                       VSA
                                                              ISA
                                                                          Tbatt
                                                                                    Tchrg
ADC
                                     3264
                                              3136
                                                       128
                                                                2
            0.00V 0.41V 3.26V 25.31V 27.80V
                                                    0.99V
                                                           7.4mA 428.1±0.0K
                                                                                 0.0±0.0K
val
               HEAT DEP BSTAT BE LB LS LR CE REGE
                                                              VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                 0
Reset/Flag Events: []
D5 00 08 18 00 7B 00 00 00 38 00 00 00 00 66 00 41 40 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 00 .....{...8.
Received at SCET 2022-09-29T15:13:41.566Z:
[HEAT]: OFF
                           [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:13:48.566Z:
#124 [RS_KEEP_ALIVE + NOT_DEPLOYED] CF
1V2: BAD 1V8: BAD 2V5: 0.0
                                          CHARGER: OFF
                                                           BATTERIES: DISCONNECTED
                                                                                               Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
#124 [RS_REEP_ALIVE + NOT_DEPLOYED] CHAR

1V2: BAD 1V8: BAD 2V5: 0.0

VBm: 3.26V VL: 25.31V Vcc28: 27.8¢

HEATER [268K | 274K | 273K] is NOT_HEAT

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                  2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                    3V3: BAD
ISA: 7.4mA
                                                                                      5V0: BAD
                                                                                                        24V: 0.41
                                   is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                              @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
2V5 2V8 24V VBm VL Vcc28
ADC 0 0 64 488 3264 3136
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                                       VSA
                                                               ISA
                                                                          Tbatt
                                                                                    Tchrg
                                                       128
                                                    0.99V
                                                                   428.1±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL
GPIO (2=HiZ)
                 a
                       0
                                   0
                                       0
#125 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                                                                              Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
1V2: BAD 1V8: BAD 2V5: 0.0 VBm: 3.26V VL: 25.31V Vcc28: 27.8 VEATER [268K | 274K | 273K] is NOT_HEA Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                      5V0: BAD
                                                                                                        24V: 0.41
                                                                             @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
              2V8 24V VBm
0 64 488
                                             Vcc28
                                                               ISA
                                                                          Tbatt
                                                                                    Tchrg
ADC
                                     3264
                                            3136
                                                       128
Received at SCET 2022-09-29T15:13:54.581Z:
#126 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
                                          CHARGER: OFF
                                                            BATTERIES: DISCONNECTED
                                                                                               Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED_&_ACTIVE
                                  YEDJ CHARGER: OFF BATTERIES:
2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
387.2K ± 0.0K Tblimp: 0.0K
1V2: BAD 1V8: BAD VBm: 3.32V VL: 25.31V HEATER [268K | 274K | 273K]
                                                                   3V3: BAD
                                                                                     5V0: BAD
                                                                     ISA: 7.4mA
                                                                             @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
2V5
              2V8 24V
                              VBm
                                             Vcc28
                                                       VSA
                                                                          Tbatt
                                                                                       Tchrg
384
                       64
                             496
                                      3264
                                              3136
                                                       128
     0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 387.2±0.0K
               GPIO (2=HiZ)
Reset/Flag Events: []
D5 00 08 18 00 7E 00 00 00 03 80 00 00 00 66 18 41 80 0F 41 00 C4 F4 01 34 21 FD 0C 56 0E 18 0D 10 27 00 00 00 00 00 00 00 00 00 00 00 ....~...8.
Received at SCET 2022-09-29T15:14:01.050Z:
#127 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V HEATER [268K | 274K | 273K] is NOT_HEATING, Control: E Tbatt: 428.1K ± 0.0K Tchrg: 387.2K ± 0.0K Tblimp: 0.6 BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                          CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                              Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                                                   3V3: BAD
                                                                                      5V0: BAD
                                                                                                        24V: 0.41
                                                                     ISA: 7.4mA
                                   is NOT_HEATING, Control: ENABLED
87.2K ± 0.0K Tblimp: 0.0K
                                                                              @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 496
                                             Vcc28
                                                       VS A
                                                               TSΔ
                                   3264
                                            3136
                                                       128
                                                                2
                                                                                         384
val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V
                                                           7.4mA 428.1±0.0K
                                                                                387.2±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:14:01.425Z:
                          [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 66.0°K]
Received at SCET 2022-09-29T15:14:06.972Z:
#128 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD !
                                                                                               Herc-UART0: OFF
                                                                                                                         Lander-UART1: INITIALIZED & ACTIVE
                                  YEU] CHARGER: OFF BATTERIES:
2V5: 0.0 2V8: 0.0 3V
Vcc28: 27.80V VSA: 0.99V IS
is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                 1V8: BAD
                                                                   3V3: BAD
                                                                                      5V0: BAD
                                                                                                        24V: 0.41
VBm: 3.26V VL: 25.31V
HEATER [268K | 274K | 273K]
                                                                     ISA: 3.7mA
                                                                             @ 0.000W / 0.786W
                                                                                                        Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
       2V5 2V8 24V VBm VL
0 0 64 488 3264
                                             Vcc28
                                                       VSA
                                                               ISA
                                                                          Tbatt
                                                                                    Tchrg
                                              3136
                                                       128
            0.00V 0.41V 3.26V 25.31V
                                           27.80V
                                                    0.99V
                                                           3.7mA 428.1±0.0K 0.0±0.0K
                                                                                                                          F_N_RST R_N_RST CAMSEL BMSB
```

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GPIO (2=HiZ)
Received at SCET 2022-09-29T15:14:13.925Z:
#129 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: E
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                      CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
                                                                                          3V3: BAD
ISA: 3.7mA
                                                                                                                   5V0: BAD
                                                                                                                                           24V: 0.41
                                               is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                                                       @ 0.000W / 0.786W
                                                                                                                                           Period: 1.2ms
      2V5 2V8 24V VBm
0 0 64 488
                                                    VL
                                                                                                                 Tchrg
                                                           Vcc28
                                                                          VSA
                                                                                    ISA
                                                                                                  Tbatt
                                                3264 3136
25.31V 27.80V
                                                                         128
val 0.00V 0.00V 0.41V 3.26V 25.31V
                                                                      0.99V
                                                                                3.7mA 428.1±0.0K
                   HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                                                    0
SCET 2022-09-29T15:14:20.628Z
#130 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                                        CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
3V3: BAD
                                                                                                                 5V0: BAD
                                                                                                                                          24V: 0.41
                                                                                            ISA: 7.4mA
                                                                                                       @ 0.000W / 0.786W
                                                                                                                                           Period: 1.2ms
       2V5 2V8 24V VBm
0 0 64 488
                                                            Vcc28
                                                                                                  Tbatt
                                                                                                                 Tchrg
                                                  3264
                                                          3136
                                                                          128
Val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K

HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:14:20.722Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
 Received at SCET 2022-09-29T15:14:27.659Z:
#131 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 400.5K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                               BATTERIES: DISCONNECTED
                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                         3V3: BAD
                                                                                                                   5V0: BAD
                                                                                                                                           24V: 0.41
                                                                                            ISA: 7.4mA
                                                                                                       @ 0.000W / 0.786W
                                                                                                                                           Period: 1.2ms
       2V5 2V8 24V VBm
0 0 64 496
                                                    VL
                                                            Vcc28
ADC 0 0 64 496 3264 3136 128 2 1 280 val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 400.5±0.0K

        HEAT
        DEP
        BSTAT
        BE
        LB
        LS
        LR
        CE
        REGE
        VSAE
        3V3_EN
        H_ON
        R_ON
        F_ON
        M_ON
        H_RST
        H_N_PRST
        F_N_RST
        R_N_RST
        CAMSEL
        BMSB

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GPIO (2=HiZ)
Received at SCET 2022-09-29T15:14:33.253Z:
#132 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
                                                                               BATTERIES: DISCONNECTED
                                                                                                                               Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
3V3: BAD
                                                                                                                  5V0: BAD
                                                                                                                                           24V: 0.41
                                                                                             ISA: 3.7mA
                                              is NOT_HEATING, Control: ENABLED
0.0K ± 0.0K Tblimp: 0.0K
                                                                                                       @ 0.000W / 0.786W
                                                                                                                                           Period: 1.2ms
                  2V8 24V VBm
0 64 488
                                                     VL
                                                                          VSA
         2V5
                                                            Vcc28
                                                                                   ISA
                                                                                                  Tbatt
                                                                                                                 Tchrg
                0 64 488 3264 3136
0.00V 0.41V 3.26V 25.31V 27.80V
                                                                          128
                                                                     0.99V
                                                                                3.7mA 428.1±0.0K
                                                                                                           0.0±0.0K

        HEAT
        DEP
        BSTAT
        BE
        LB
        LS
        LR
        CE
        REGE
        VSAE
        3V3_EN
        H_ON
        R_ON
        F_ON
        M_ON
        H_RST
        H_N_PRST
        F_N_RST
        R_N_RST
        CAMSEL
        BMSB

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GPIO (2=HiZ)
Received at SCET 2022-09-29T15:14:39.816Z:
#133 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                              BATTERIES: DISCONNECTED
                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                        3V3: BAD
                                                                                                                   5V0: BAD
                                                                                                                                           24V: 0.41
                                                                                            ISA: 7.4mA
                                                                                                       @ 0.000W / 0.786W
                                                                                                                                           Period: 1.2ms
         2V5
0
                 2V8 24V VBm
0 64 488
                                                            Vcc28
                                                                          VSA
                                                                                    ISA
ADC
                                                 3264
                                                             3136
                                                                          128
Received at SCET 2022-09-29T15:14:39.925Z:
                                   [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
 Received at SCET 2022-09-29T15:14:46.581Z:
#134 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
                                                                               BATTERIES: DISCONNECTED
                                                                                                                              Herc-UART0: OFF
                                                                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                            3V3: BAD
                                                                                                                   5V0: BAD
                                                                                                                                           24V: 0.41
                                                                                                       @ 0.000W / 0.786W
```

```
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                          Tblimp: 0.0K
      2V5
            2V8 24V
                                                            Tbatt
                                                                     Tchrg
                                             128
                   64
                        488
                                      3136
          0.00V 0.41V
                      3.26V 25.31V 27.80V
                                          0.99V 7.4mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                                0
             0
                            0
Received at SCET 2022-09-29T15:14:52.847Z:
#135 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                               BATTERIES: DISCONNECTED
                                                                             Herc-UART0: OFF
                                                                                                   Lander-UART1: INITIALIZED & ACTIVE
                                                      3V3: BAD
                                                                      5V0: BAD
                                                                                     24V: 0.41
                                                        ISA: 7.4mA
                                                              @ 0.000W / 0.786W
                                                                                     Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 496
                              VL
3264
                                                                     Tchrg
                                     Vcc28
                                                            Tbatt
ADC
                                     3136
                                             128
                                                    2
val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V
                                                7.4mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:14:59.534Z:
                     [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:14:59.753Z:
#136 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.32V VL: 25.31V Vcc28: 27.80V V5A: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: EN
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 V5A IS
ADC 0 0 6 64 496 3264 3136 128
Received at SCET 2022-09-29T15:14:59.753Z:
                                                BATTERIES: DISCONNECTED
                                                                             Herc-UART0: OFF
                                                                                                   Lander-UART1: INITIALIZED & ACTIVE
                                                     3V3: BAD
                                                                      5V0: BAD
                                                                                    24V: 0.41
                                                        ISA: 7.4mA
                             is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                               @ 0.000W / 0.786W
                                                                                     Period: 1.2ms
                                                                     Tchrg
                                                   ISA
                                                            Thatt
val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V
                                          0.99V
                                                7.4mA 428.1±0.0K 0.0±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                  VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Reset/Flag Events: []
 Received at SCET 2022-09-29T15:15:06.612Z
#137 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHAI
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.32V VL: 25.31V Vcc28: 27.8I
HEATER [268K | 274K | 273K] is NOT_HEA'
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                  CHARGER: OFF
                                                BATTERIES: DISCONNECTED
                                                                             Herc-UART0: OFF
                                                                                                   Lander-UART1: INITIALIZED_&_ACTIVE
                         5V0: BAD
                                                     3V3: BAD
ISA: 7.4mA
                                                                                     24V: 0.41
                                                               @ 0.000W / 0.786W
                                                                                     Period: 1.2ms
           2V8 24V VBm
0 64 496
                                VL
                                   Vcc28
3136
                              3264
                                             128
Received at SCET 2022-09-29T15:15:12.878Z:
CHARGER: OFF
                                                BATTERIES: DISCONNECTED
                                                                             Herc-UART0: OFF
                                                                                                   Lander-UART1: INITIALIZED & ACTIVE
1V2: BAD 1V8: BAD
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                            2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                       3V3: BAD
                                                                     5V0: BAD
                                                                                    24V: 0.41
                                                        ISA: 7.4mA
                            is NOT_HEATING, Control: ENABLED
                                                               @ 0.000W / 0.786W
                                                                                     Period: 1.2ms
Tblimp: 0.0K
           2V8 24V VBm
                                VL
                                     Vcc28
                                             VSA
     2V5
                                                            Tbatt
                                                                     Tchrg
                   64
                        488
                              3264
                                      3136
                                             128
                                                    2
         0 64 488 3264 3136 128 2 1 0 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
            GPIO (2=HiZ)
Received at SCET 2022-09-29T15:15:19.362Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 72.8°K]
Received at SCET 2022-09-29T15:15:19.519Z:
#139 [RS_KEEP_ALIVE + NOT_DEPLOYED]
                                  CHARGER: OFF BATTERIES: DISCONNECTED
                                                                             Herc-UART0: OFF
                                                                                                   Lander-UART1: INITIALIZED_&_ACTIVE
                            2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
              1V8: BAD
                                                       3V3: BAD
                                                                      5V0: BAD
                                                                                    24V: 0.41
ISA: 7.4mA
                                                               @ 0.000W / 0.786W
                                                                                     Period: 1.2ms
           2V8 24V VBm
     2V5
0
                                VL
                                     Vcc28
                                                            Tbatt
                              3264
                                    3136
                                             128
   0.00V 0.00V 0.41V 3.26V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 428.1±0.0K
            HEAT DEP BSTAT BE LB LS LR CE REGE
                                                    \hbox{VSAE} \quad \hbox{3V3\_EN} \quad \hbox{H\_ON} \quad \hbox{R\_ON} \quad \hbox{F\_ON} \quad \hbox{M\_ON} \quad \hbox{H\_RST} \quad \hbox{H\_N\_PRST} \quad \hbox{F\_N\_RST} \quad \hbox{CAMSEL} \quad \hbox{BMSB} 
GPIO (2=HiZ)
                  0
                            0
                                0
             0
                         2
                                           0
```

```
#140 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1/2: BAD 1/8: BAD 2/5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                             BATTERIES: DISCONNECTED
                                                                                                                                                                            Herc-UART0: OFF
                                                                                                                                                                                                                           Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                         3V3: BAD
                                                                                                                                                        5V0: BAD
                                                                                                                             ISA: 3.7mA
                                                                                                                                            @ 0.000W / 0.786W
                                                                                                                                                                                            Period: 1.2ms
         2V5 2V8 24V VBm
0 0 64 488
                                                                                                                                     Tbatt
                                                                     3264
                                                                                    3136
                                                                                                    128
  GPIO (2=HiZ)
 Lander-UART1: INITIALIZED & ACTIVE
 Received at SCET 2022-09-29T15:15:39.394Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 65.3°K]
 #142 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNE
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD
VBm: 3.26V VL: 25.55V Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 6
                                                                                                            BATTERIES: DISCONNECTED
                                                                                                                                                                                                                          Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                                           Herc-UART0: OFF
                                                                                                                                                     5V0: BAD
                                                                                                                                                                                        24V: 0.41
                                                               is NOT_HEATING, Control: ENABLED
383.1K ± 0.0K Tblimp: 0.0K
                                                                                                                                          @ 0.000W / 0.796W
                                                                                                                                                                                            Period: 1.2ms
 2V5 2V8 24V VBm
0 0 64 488
                                                                                                    VSA
                                                                                  Vcc28
                                                                                                                                     Tbatt
                                                                              3136 128 1 1 424
27.80V 0.99V 3.7mA 428.1±0.0K 383.1±0.0K
        0 0 64 488 3296
0.00V 0.00V 0.41V 3.26V 25.55V
HEAT DER RETAT
                           Received at SCET 2022-09-29T15:15:45.347Z:
#143 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                            BATTERIES: DISCONNECTED H
0 3V3: BAD 5V0: BAD
                                                                                                                                                                                                                           Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                      3V3: BAD
ISA: 3.7mA
                                                                                                                                                                                           24V: 0.41
                                                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                                                            Period: 1.2ms
 Received at SCET 2022-09-29T15:15:45.456Z:
#144 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BAT
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENTIRE (168K | 168K | 
                                                                                                            BATTERIES: DISCONNECTED
                                                                                                                                                                           Herc-UART0: OFF
                                                                                                                                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                                                                                                                                       5V0: BAD
                                                                                                                       3V3: BAD
ISA: 3.7mA
                                                                                                                                                                                          24V: 0.41
                                                                is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                                                                                           @ 0.000W / 0.786W
                                                                                                                                                                                            Period: 1.2ms
                                                                                                                 ISA
                                                                                                                                     Thatt
                                                                                                                                                        Tchrg
 ADC 0 0 64 488 3264 3136 val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                                                                              0.99V 3.7mA 428.1±0.0K 0.0±0.0K
                          BATTERIES: DISCONNECTED
                                                                                                                                                                           Herc-UART0: OFF
                                                                                                                                                                                                                           Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                        3V3: BAD
ISA: 3.7mA
                                                                                                                                                          5V0: BAD
                                                                                                                                                                                           24V: 0.41
                                                                                                                                          @ 0.000W / 0.786W
                                                                                                                                                                                            Period: 1.2ms
BATTERY MONITOR: 0.00V 0.00A 0
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Received at SCET 2022-09-29T15:15:57.909Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:15:58.612Z
#146 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                        Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED_&_ACTIVE
                                                                               5V0: BAD
                                                                                                 24V: 0.41
                                                                         @ 0.000W / 0.786W
                                                                                                  Period: 1.2ms
    2V5 2V8 24V VBm
0 0 64 496
                                     VL
                                          Vcc28
                                                           ISA
                                                                               Tchrg
                                                                     Tbatt
ADC 0 0 64 496 3264 3136 128 2 1 0 val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V 7.4mA 428.1±0.0K 0.0±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                          VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:16:05.019Z:
#147 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNE 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 6 Thatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                        BATTERIES: DISCONNECTED
                                                                                        Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                                                             5V0: BAD
                                                                                                 24V: 0.41
                                                                        @ 0.000W / 0.786W
                                                                                                  Period: 1.2ms
Received at SCET 2022-09-29T15:16:11.472Z:
#148 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VRm
                                       CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                         Herc-UART0: OFF
                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
                                                              3V3: BAD
                                                                               5V0: BAD
                                                                                                  24V: 0.41
                                                                 ISA: 3.7mA
                                                                         @ 0.000W / 0.786W
                                                                                                  Period: 1.2ms
     2V5 2V8 24V VBm
0 0 64 488
                                                                     Tbatt
                                                                               Tchrg
Received at SCET 2022-09-29T15:16:17.831Z:
#149 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5
VBm: 3.32V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA Tbatt Tch
ADC 0 0 64 496 3264 3136 128 2 1
                                                                                        Herc-UART0: OFF
                                                                                                                  Lander-UART1: INITIALIZED & ACTIVE
                                                                                 5V0: BAD
                                                                                                  24V: 0.41
                                                                         @ 0.000W / 0.786W
                                                                                                  Period: 1.2ms
2V5 2V8 24V VBm VL Vcc28 VSA
ADC 0 0 64 496 3264 3136 128
val 0.00V 0.00V 0.41V 3.32V 25.31V 27.80V 0.99V
                                                                               Tchrg
                                                        7.4mA 428.1±0.0K 0.0±0.0K
             HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
GPIO (2=HiZ)
                                 0
                                     0
ceived at SCET 2022-09-29T15:16:18.362Z
                        [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
#150 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHA
1V2: BAD 1V8: BAD 2V5: 0.0
                                       CHARGER: OFF
                                                        BATTERIES: DISCONNECTED
                                                                                         Herc-UART0: OFF
                                                                                                                 Lander-UART1: INITIALIZED & ACTIVE
                                                              3V3: BAD
                                2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                               5V0: BAD
                                                                                                 24V: 0.41
VBm: 3.26V VL: 25.55V
HEATER [268K |274K |273K]
                                                                 ISA: 3.7mA
                                 is NOT_HEATING, Control: ENABLED
                                                                        @ 0.000W / 0.796W
                                                                                                  Period: 1.2ms
Tblimp: 0.0K
                                   VL Vcc28
3296 3136
5.55V 27.80V
             2V8 24V VBm
0 64 488
                                                    VSA
       2V5
                                                                     Thatt
                                                                               Tchrg
ADC
                                                    128
val 0.00V 0.00V 0.41V 3.26V 25.55V
                                                 0.99V 3.7mA 428.1±0.0K 0.0±0.0K
              HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:16:31.097Z:
#151 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V.
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS/
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
                                       CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                                                  Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                        Herc-UART0: OFF
                                                                3V3: BAD
                                                                                 5V0: BAD
                                                                                                  24V: 0.41
                                                                 ISA: 3.7mA
                                                                         @ 0.000W / 0.786W
                                                                                                  Period: 1.2ms
```

```
64
                                             488
                                                        3264
                                                                    3136
                                                                                  128
 val 0.00V 0.00V 0.41V 3.26V 25.31V
                                                                27.80V
                                                                             0.99V
                                                                                         3.7mA 428.1±0.0K 0.0±0.0K
                      HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
 GPIO (2=HiZ)
Received at SCET 2022-09-29T15:16:38.050Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
                                                                                         BATTERIES: DISCONNECTED H
#152 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
VBm: 3.26V VL: 25.31V Vcc28: 27.
HEATER [268K | 274K | 273K] is NOT_HE
                                                   YED] CHARGER: OFF BAT
2V5: 0.0 2V8: 0.0
Vcc28: 27.80V VSA: 0.99V
                                                                                                                                             Herc-UART0: OFF
                                                                                                                                                                                    Lander-UART1: INITIALIZED & ACTIVE
                                                                                                   3V3: BAD
                                                                                                       ISA: 7.4mA
                                                     is NOT_HEATING, Control: ENABLED
.0K ± 0.0K Tblimp: 0.0K
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                          Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
        2V5 2V8 24V VBm VL Vcc28
0 0 64 488 3264 3136
0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                   2V8 24V VBm
                                                                                                             Tbatt
                                                                                                                             Tchrg
                                                                                  128
                                                                             0.99V 7.4mA 428.1±0.0K 0.0±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE 0 0 2 0 0 2 2 0 0
                                                                                            VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 2 0 0 0 0 0 0 0 0
GPIO (2=HiZ)
Received at SCET 2022-09-29T15:16:44.362Z:
#153 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED H
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5V0: BAD
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W / 0.786W
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                                                                            Herc-UART0: OFF
                                                                                                                                                                                    Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                                                          24V: 0.41
                                                                                                                   @ 0.000W / 0.786W
                                                                                                                                                          Period: 1.2ms
BATTERY MONITOR: 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.41V 3.26V 25.31V 27.80V 0.99V 3.700 428.1±0.0K 0.0±0.0K 0.0±0.
Received at SCET 2022-09-29T15:16:51.066Z
Received at SCET 2022-09-29T15:16:51.066Z:
#154 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNE
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 7.4mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                         BATTERIES: DISCONNECTED
                                                                                                                                             Herc-UART0: OFF
                                                                                                                                                                                    Lander-UART1: INITIALIZED_&_ACTIVE
                                                                                                                              5V0: BAD
                                                                                                                                                          24V: 0.41
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                          Period: 1.2ms
        2V5 2V8 24V VBm
0 0 64 488
                                                           VL
                                                                   Vcc28
                                                                                                             Tbatt
                                                        3264
                                                                    3136
                                                                                  128
 GPIO (2=HiZ)
Received at SCET 2022-09-29T15:16:57.316Z:
#155 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS.
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                                        BATTERIES: DISCONNECTED H
                                                                                                                                            Herc-UART0: OFF
                                                                                                                                                                                    Lander-UART1: INITIALIZED & ACTIVE
                                                                                                  3V3: BAD
ISA: 3.7mA
                                                                                                                                                          24V: 0.41
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                          Period: 1.2ms
          2V5
0
                    2V8 24V VBm
0 64 488
                                                       VL
3264
                                                                Vcc28
3136
ADC
                                                                                  128
val 0.00V 0.00V 0.41V 3.26V 25.31V 27.80V
                                                                             0.99V
                                                                                         3.7mA 428.1±0.0K 0.0±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB 0 0 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0
Received at SCET 2022-09-29T15:16:57.800Z:
                                       [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
Received at SCET 2022-09-29T15:17:03.847Z:
#156 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES:
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V:
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS:
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
2V5 2V8 24V VBm VL Vcc28 VSA ISA
ADC 0 0 64 488 3264 3136 128 2
                                                                                        BATTERIES: DISCONNECTED
                                                                                                                                            Herc-UART0: OFF
                                                                                                                                                                                    Lander-UART1: INITIALIZED & ACTIVE
                                                                                                   3V3: BAD
ISA: 7.4mA
                                                                                                                             5V0: BAD
                                                                                                                                                          24V: 0.41
                                                                                                                  @ 0.000W / 0.786W
                                                                                                                                                          Period: 1.2ms
                                                     VL Vcc28
3264 3136
25.31V 27.80V
                                                                                                                             Tchrg
                                                                                                             Tbatt
 val 0.00V 0.00V 0.41V 3.26V 25.31V
                                                                             0.99V
                                                                                        7.4mA 428.1±0.0K
                                                                                                                        0.0±0.0K
                     HEAT DEP BSTAT BE LB LS LR CE REGE VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL BMSB
                                                          0
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#157 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
                                     CHARGER: OFF
                                                     BATTERIES: DISCONNECTED
                                                                                    Herc-UART0: OFF
                                                                                                           Lander-UART1: INITIALIZED & ACTIVE
                                             2V8: 0.0
                                                            3V3: BAD
                                                                            5V0: BAD
                                                                                           24V: 0.41
1V2: BAD
VBm: 3.26V VL: 25.31V
HEATER [268K |274K |273K]
                              Vcc28: 27.80V
                                             VSA: 0.99V
                                                             ISA: 7.4mA
                               is NOT_HEATING, Control: ENABLED
                                                                    @ 0.000W / 0.786W
                                                                                           Period: 1.2ms
Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K
BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                              Tblimp: 0.0K
                  24V VBm
64 488
                                  VL
      2V5
             2V8
                                       Vcc28
                                                VSA
                                                       ISA
                                                                Tbatt
                                                                          Tchrg
                                 3264
ADC
                                        3136
                                                128
           0.00V 0.41V 3.26V 25.31V
                                      27.80V
                                              0.99V
                                                    7.4mA 428.1±0.0K
val
             HEAT DEP BSTAT BE LB LS LR CE REGE
                                                      VSAE 3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST
                                                                                                          F_N_RST R_N_RST CAMSEL
GPIO (2=HiZ)
               0
#158 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: 1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS. HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED 1.0K
                                     CHARGER: OFF BATTERIES: DISCONNECTED
                                                                                   Herc-UART0: OFF
                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
3V3: BAD
                                                                            5V0: BAD
                                                                                           24V: 0.41
                                                             ISA: 7.4mA
                                                                    @ 0.000W / 0.786W
                                                                                           Period: 1.2ms
                                              Tblimp: 0.0K
           2V8 24V VBm
0 64 488
                                   VL
                                                VSA
                                                                 Tbatt
                                 3264
                                       3136
                                                128
    GPIO (2=HiZ)
Received at SCET 2022-09-29T15:17:17.550Z:
[HEAT]: OFF [BATT]: Voltage: BAD, Charge: 29mAh = 0.8%, Temp: 75.0°K]
[HEAT]: OFF
Received at SCET 2022-09-29T15:17:22.956Z:
#159 [RS_KEEP_ALIVE + NOT_DEPLOYED] CHARGER: OFF BATTERIES: DISCONNECTED
1V2: BAD 1V8: BAD 2V5: 0.0 2V8: 0.0 3V3: BAD 5
VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V ISA: 3.7mA
HEATER [268K | 274K | 273K] is NOT_HEATING, Control: ENABLED @ 0.000W
Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K Tblimp: 0.0K
                                                                                   Herc-UART0: OFF
                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                                            5V0: BAD
                                                                                           24V: 0.41
TVB: BAD 1V8: BAD 2V5: 8.0 VBm: 3.26V VL: 25.31V Vcc28: 27.80V HEATER [268K | 274K | 273K] is NOT_HEATI Tbatt: 428.1K ± 0.0K Tchrg: 428.1K ± 0.0K BATTERY MONITOR: 0.00V 0.0mA 0mAh
                                                                    @ 0.000W / 0.786W
                                                                                           Period: 1.2ms
2V5
0
            2V8 24V VBm
0 64 488
                                                                                                          F_N_RST R_N_RST CAMSEL BMSB
Received at SCET 2022-09-29T15:17:30.097Z:
#160 [RS_KEEP_ALIVE + NOT_DEPLOYED] CH
1V2: BAD 1V8: BAD 2V5: 0.0
TV8: BAD 2V5: 0.0 2V8: 0.0 3V

VBm: 3.26V VL: 25.31V Vcc28: 27.80V VSA: 0.99V IS

HEATER [268K | 278K] is NOT_HEATING, Control: ENABLED

Tbatt: 428.1K ± 0.0K Tchrg: 0.0K ± 0.0K Tblimp: 0.0K

BATTERY MONITOR: 0.00V 0.0mA 0mAh

2V5 2V8 24V VRm
                                     CHARGER: OFF
                                                     BATTERIES: DISCONNECTED
                                                                                   Herc-UART0: OFF
                                                                                                          Lander-UART1: INITIALIZED_&_ACTIVE
                                                            3V3: BAD
                                                                           5V0: BAD
                                                             ISA: 7.4mA
                                                                    @ 0.000W / 0.786W
                                                                                           Period: 1.2ms
                                                                 Tbatt
                                                                          Tchrg
                    64
                          488
                                 3264
                                         3136
                                                128
           0.00V 0.41V 3.26V 25.31V
                                      27.80V
                                             0.99V 7.4mA 428.1±0.0K 0.0±0.0K
             HEAT DEP BSTAT BE LB LS LR CE REGE
0 0 2 0 0 2 2 0 0
                                                      VSAE
2
                                                            3V3_EN H_ON R_ON F_ON M_ON H_RST H_N_PRST F_N_RST R_N_RST CAMSEL
                                                                                                                                    BMSB
GPIO (2=HiZ)
```