「あすか」 OPERATION REPORT Rev.5 Ver 3.1

2000 年 07 月 21 日 Y+ 2708 KSC 当番: K. Hayashida and K. Imanishi

Safe Hold / UVC

	PASS 1	PASS 2	PASS 3	PASS 4	PASS 5
Pass No.	000721–0515	000721–0618	000721–0722	000721–0825	
Operation	TMS-HIGH Latch-Retry Battery- Heater-On Reset-DP Latch-Retry Reset-DP Latch-Retry Reset-DP LOS	TMS-HIGH Latch-Retry Reset-DP Latch-Retry Battery- Heater-On Reset-DP Latch-Retry Latch-Retry Reset-DP Latch-Retry LOS	TMS-HIGH Latch-Retry Battery- Heater-On Reset-DP Battery- Heater-On Latch-Retry Reset-DP Latch-Retry LOS	TMS-HIGH Latch-Retry BCR1-OFF- ENA BCR1-OFF BCR2-OFF- ENA BCR2-OFF Battery- Heater-On Reset-DP Battery- Heater-On Latch-Retry	
Target	Safe Hold / UVC	Safe Hold / UVC	Safe Hold / UVC	Safe Hold / UVC	
AOS(UT) LOS(UT)	07:16:29 (07:23:12)	08:53:20 (09:04:06)	10:33:27 (10:43:36)	12:12:49 (12:23:00)	
Max-El Time	(3.92°) (07:19:56)	(22.9°) (08:58:41)	(65.35°) (10:37:46)	(86.40°) (12:17:05)	
Rep- band(stat.) Rep-start	( )	( )	( )	( )	( )
DP-mode	DP-HW	DP-HW	DP-HW	DP-HW	
ACS-mode SUN-pos θ_s/ϕ_s Attitude	[ ]	[ ]	[ ]	[ ]	[ ]
OP-start(CE)	—(—)	—(—)	—(—)	( )	( )
GIS HAM ERR					
ACS ERR					
SIS-mode S0/1-TECT S0/1-CCDT					
GIS-mode GIS LD Hit					

Battery Condition (min/max)

BAT_V–A	BAT_V–B	BAT_I–A	BAT_I–B	BAT_T–A	BAT_T–B
3.6/4.2	3.5/4.2			−24.1/ − 21.8	−24.1/ − 22.2

Comment: 本日の運用:

ASCA is still in the safe hold mode with under voltage control.

The satellite is rotating around the z-axis about 0.6RPM. Analysis of the GAS data suggets that the z-axis is neutating around the direction toward (α,δ)=(290°,-20°), 40° apart from the z-axis, 170° from the Sun.

The batteries are not charged up even in the sun-shine as yesterday. The battery temperature was -22°C - -24°C, about 7°C lower than yesterday. The battery heaters, we set both main and sub yesterday, were all off at the 1st contact today. It is likely that the HCE (heater control electronics) go down at sometime when the sattelite is in sun-shade. The effective time for the heater is thus very short. However, since the KSC contact pass is shifting from night-time to day-time, the time for heater-on would be longer day by day.

In the 4th pass, the Battery Charge Regulator (BCR) was turned off. We will turn it on once per day until the charge-up process starts to work.

We have started using the following command sequences. The same notation is used in this report.

- Latch-Retry (at 1st pass)
  GAS-OFF, NSAS-OFF, SSAS-OFF, ENA-LTCH-RTY, PCC-RST, GAS-ON, NSAS-ON, SSAS-ON
- Latch-Retry (after 2nd pass)
  GAS-OFF, NSAS-OFF, SSAS-OFF, S/X-REAL, S-MOD-OFF, S/X-REAL, ENA-LTCH-RTY, PCC-RST, GAS-ON, NSAS-ON, SSAS-ON
- DP-Reset
  GAS-OFF, NSAS-OFF, SSAS-OFF, RST-DP, DP-DBLC-EXEC, PWR-ON-RST, DP-DBLC-EXEC, GAS-ON, NSAS-ON, SSAS-ON
- Battery-Heater-On
  BAT-H-OF-ENA, BATA1-H-OFF, BATA1-H-AUTO, BAT-H-OF-ENA, BATB1-H-OFF, BATB1-H-AUTO, BAT-H-OF-ENA, BATA2-H-OFF, BATA2-H-AUTO, BAT-H-OF-ENA, BATB2-H-OFF, BATB2-H-AUTO, STT/XRT-H-OF
- LOS
  GAS-OFF, NSAS-OFF, SSAS-OFF, TMS-ON/LOW

★概要は上にかきましたし、詳しくは石田レポートにありますが、バッテリーの温度は昨日よりむしろ下がっています。 受信パスでヒーターオンをセットしても、衛星が日陰にはいるまでしかその設定が生きないと (推測) すると、ヒーターが実効的にはいっている時間はごくわずか。 無理もないのかもしれません。 これから受信パスが昼間に移行していくので、ヒーターが効く時間は徐々に長くなるはずです。 そこに期待します。
★DP を正しく動かしてテレメトリを得る手順、バッテリーのヒーターをオンする手順に関しては確立したので、上にあげたようなコマンドのセットを MS で用意して必要に応じて連続打ちをやっています。ある意味で長期戦に備えつつあります。

●あすかが入感してくるだけでとりあえずひと安心です。ここが本当に我慢のしどころですね。。。(今西)
●本日の裏ターゲットは KSC の天の川。 これだけきれいなのは久しぶり。 蠍座が見事で M8 だか M20 だかも見えた。 (林田)