SPI Status Report (brief)

June 2008, for IUG

by Jean-Pierre Roques (& RD)

- Annealing
- Onboard Software Operations

11th Annealing Sequence of Events

- January 12th: Heaters switched on
- January 13th: GeD are at 106 C – 106 C maintained for 195 h
- January 21th: Heaters switched off
- January 24th: Cryo-coolers switched on
- January 28th: Camera switched on at 100K

SPI Resolution History up to 11th Annealing



Annealing #11: Summary

- Recovery is good esp. when considering:
 - the high level of radiation (the highest observed)
 - the long duration of the period between annealings
- SPI energy resolution is under control

Plans for 12th Annealing

Next annealing: ~Aug 2008 (7 months)
Start AO6 with next SPI Annealing

IASW 4.3.4

- New Functionality:
 - SINGLE-EVENT TELEMETRY COMPRESSION (LOSSLESS!)
- Upload during Rev. 646
- Test on Jan 28-29th

IASW 4.3.4 Performance

- Average SE tlm space saving: 28.92 %
- Average telemetry saving: 15.26 Pkts/8s
- CPU load: 3-4 %
- This is a very good result:
 - Allows to terminate the previous ME filtering/reduction
 - Shows that there is room for ME lossless compression