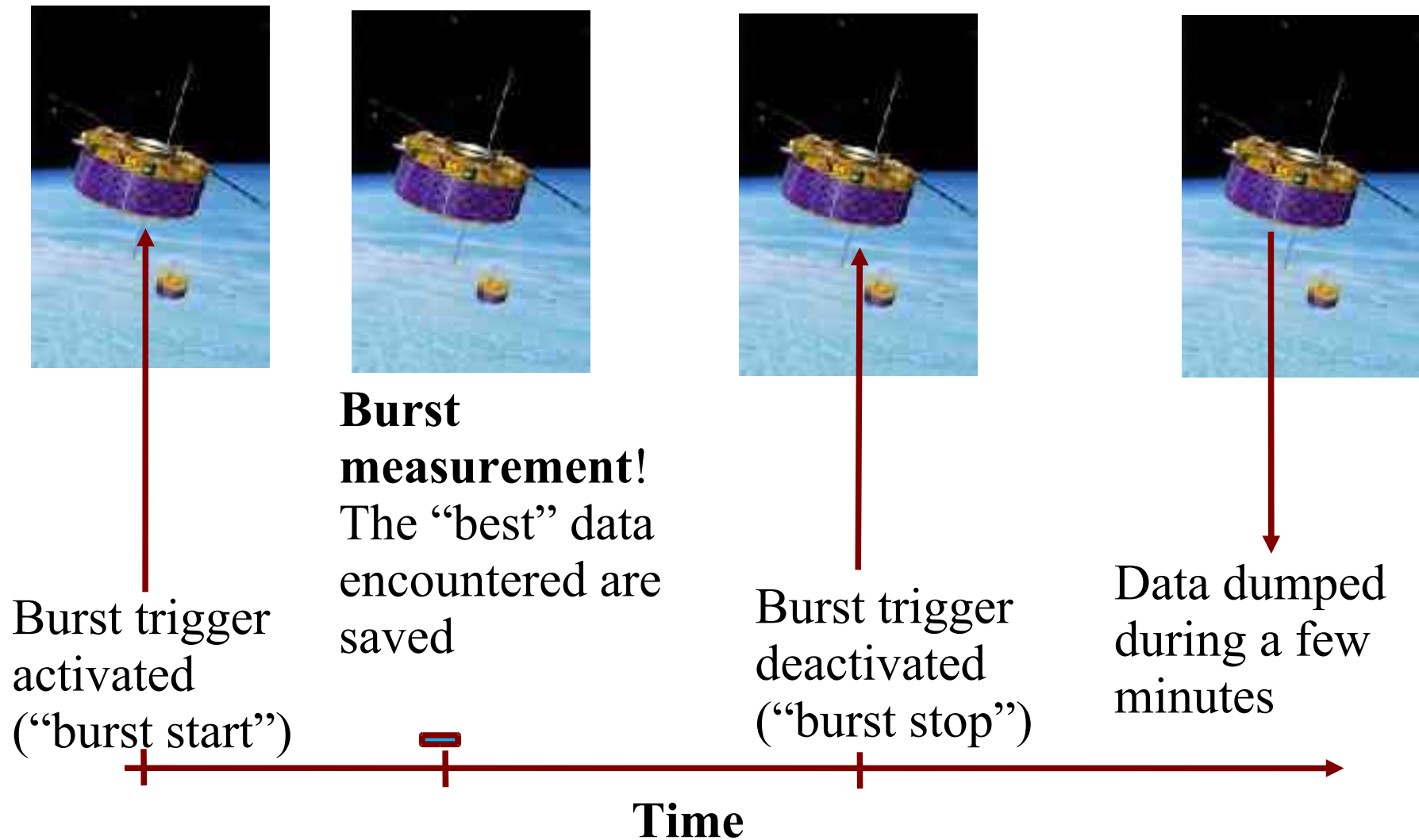


Statistics of EFW internal burst operations

Niklas Edberg & Anders Eriksson
Swedish Institute of Space Physics

EFW meeting
Uppsala, May 18-19

Operation outline



Statistical data

Total number of times
2002 – 2006 that were
obtained from the
command and burst logs:

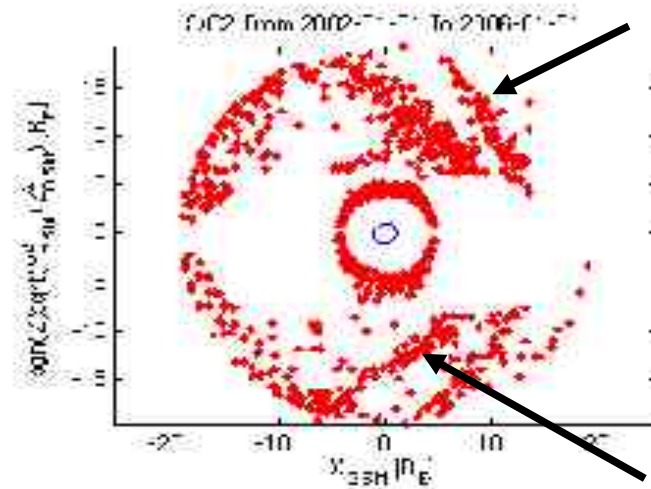
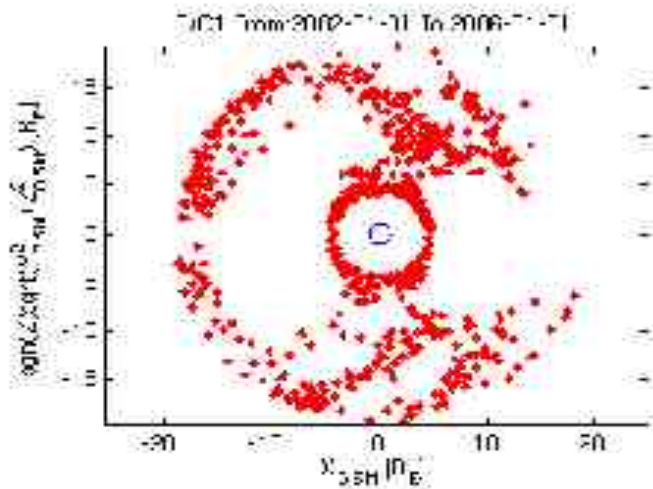
S/C	# Starts	# Bursts	# Stops
1	1170	799	1251
2	1173	1055	1247
3	1166	1049	1245
4	1170	821	1248

Total number of “good
times”, i.e. bursts that
could be matched to a
unique start and stop:

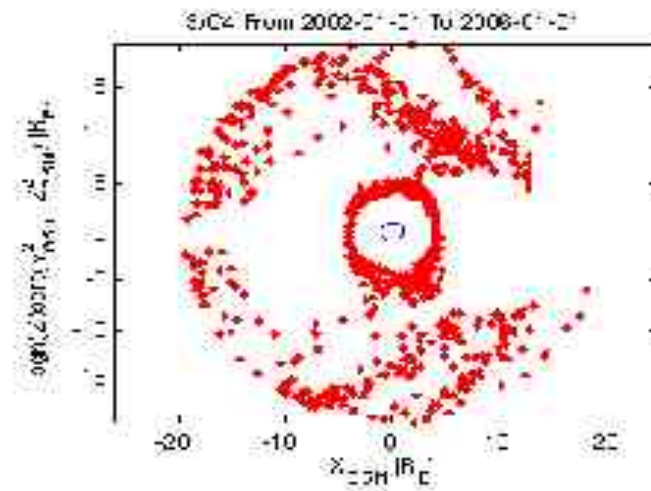
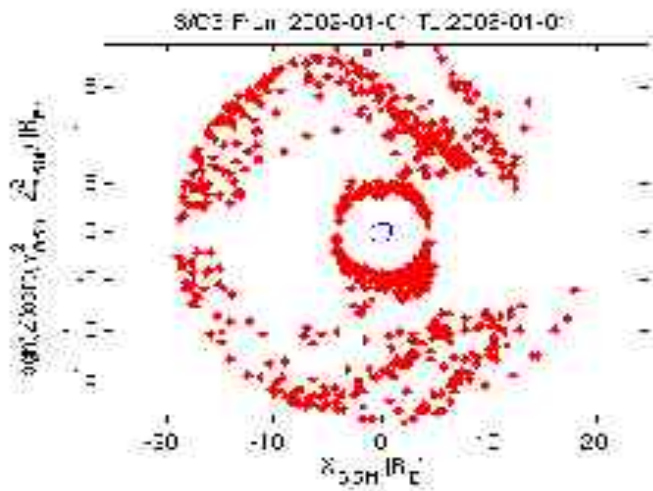
S/C	# Times
1	777
2	1024
3	798
4	784

Positions of bursts

Bow shock



Magnetopause

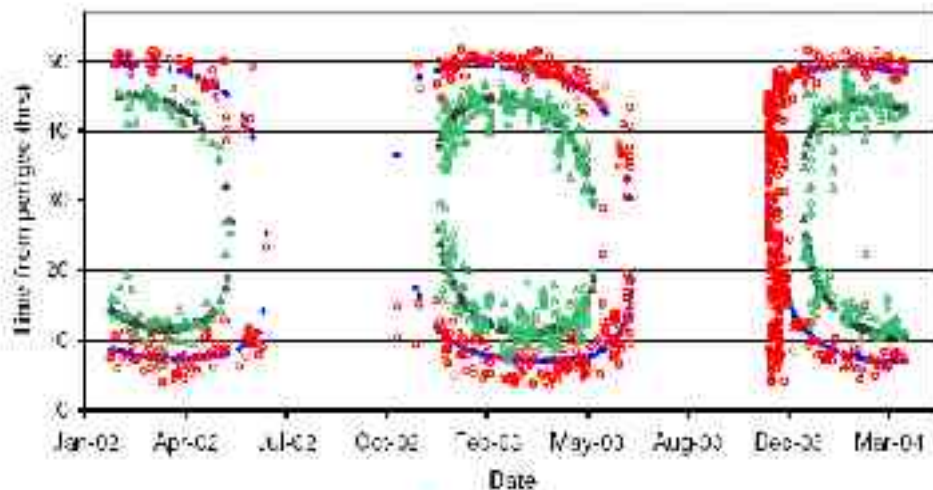


Direction to the Sun \longrightarrow

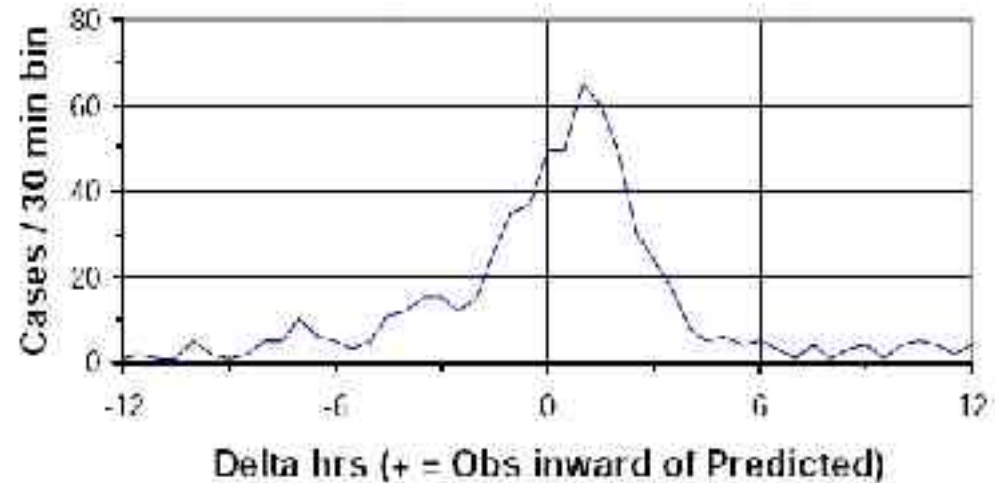
Observed vs. predicted events (MP/BS)

Study by M. Hapgood,
presented at Cluster WS,
autumn 2005

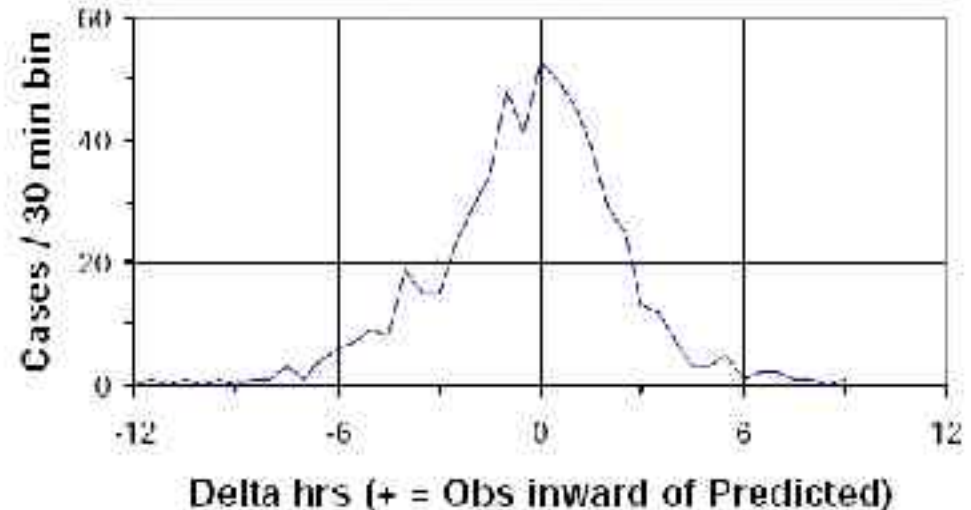
Cluster boundary crossings from JSCC monitoring



Cluster: Obs vs Pred Magnetopause
Jan 2002 to Mar 2004



Cluster: Obs vs Pred Bow shock,
Jan 02 - Mar 04



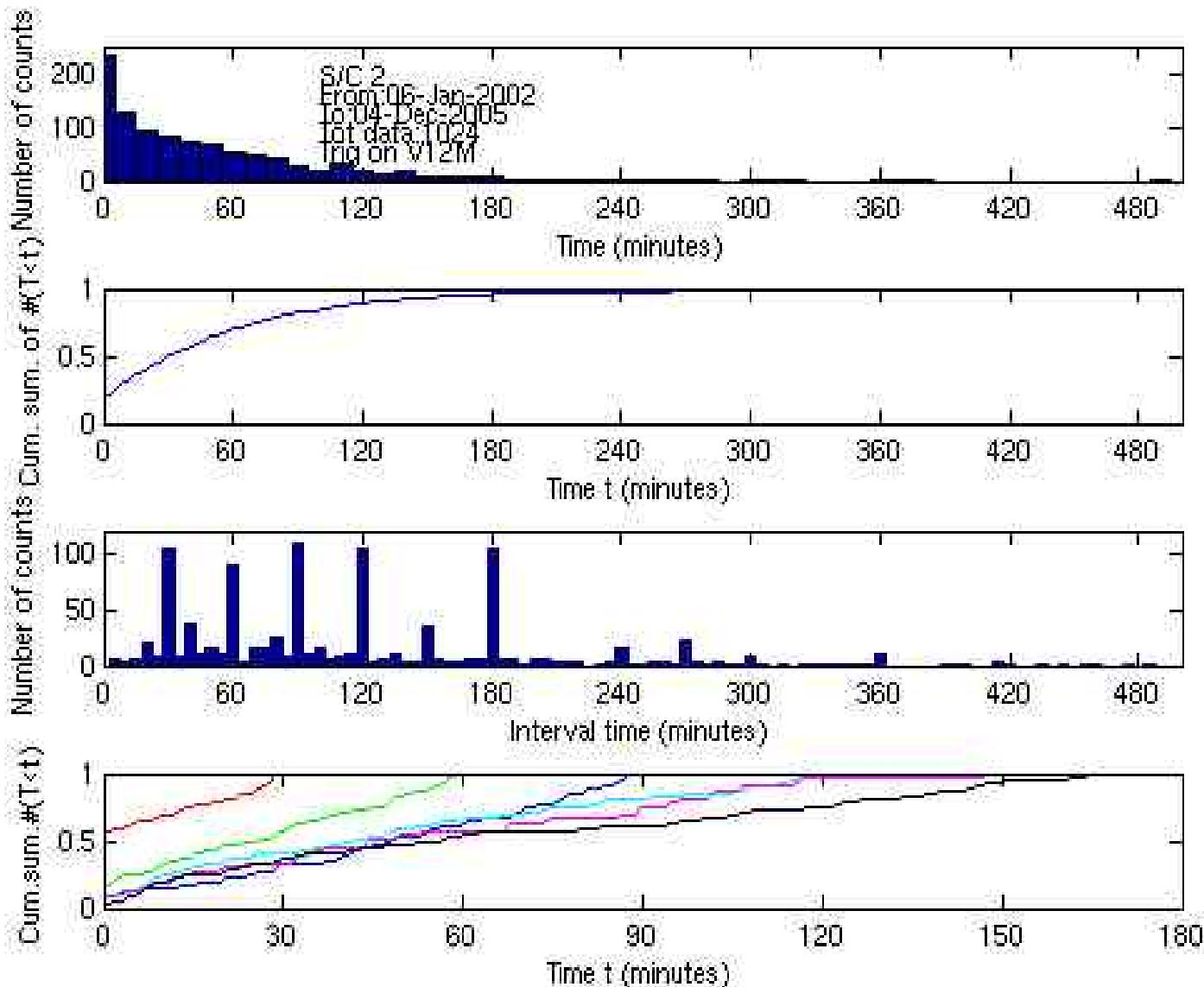
Burst statistics for S/C 2

Delay from activation to actual burst

Cumulative sum of the above plot

Duration of interval with trigger enabled

Cumulative sum of bursts, separated by trig interval

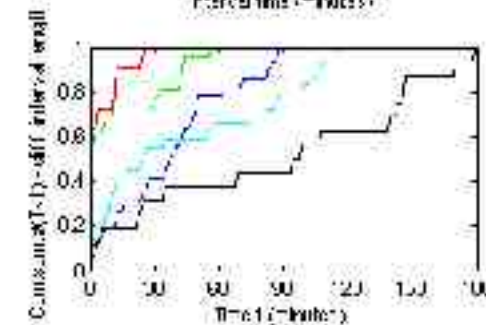
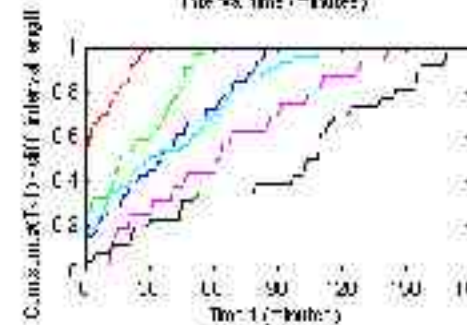
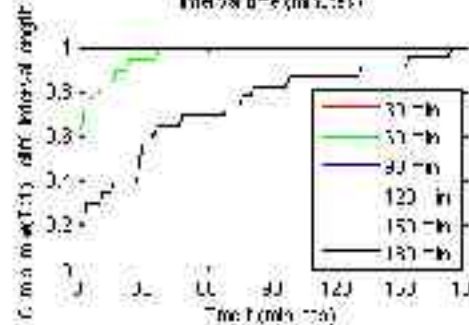
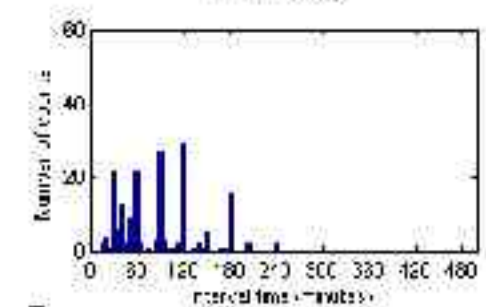
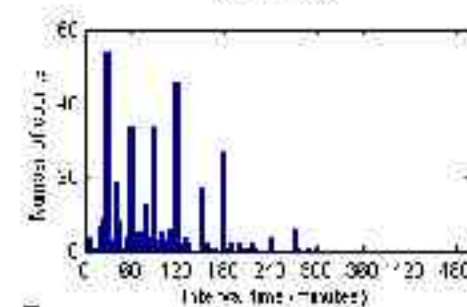
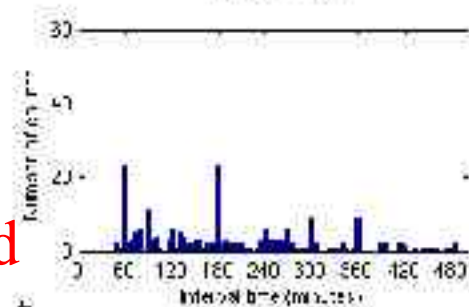
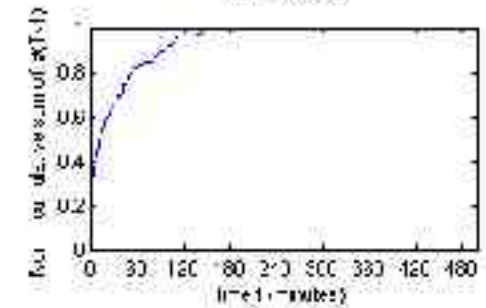
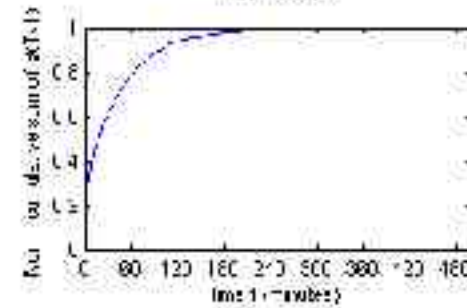
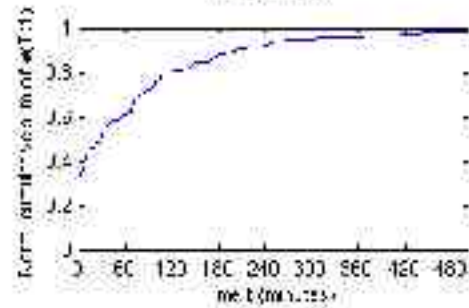
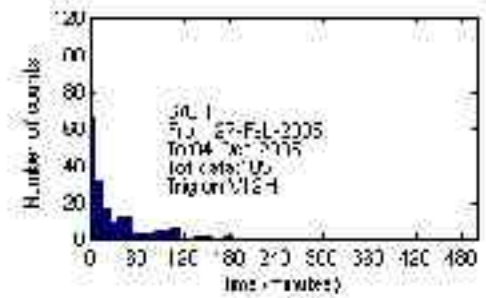
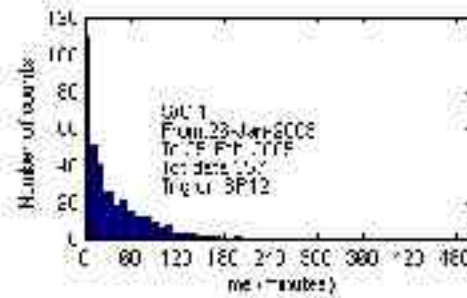
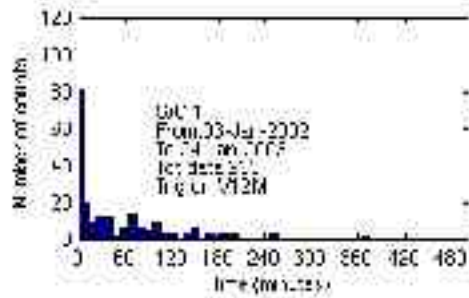


Burst statistics S/C 1

Trig on V12M

Trig on BP12

Trig on V12H



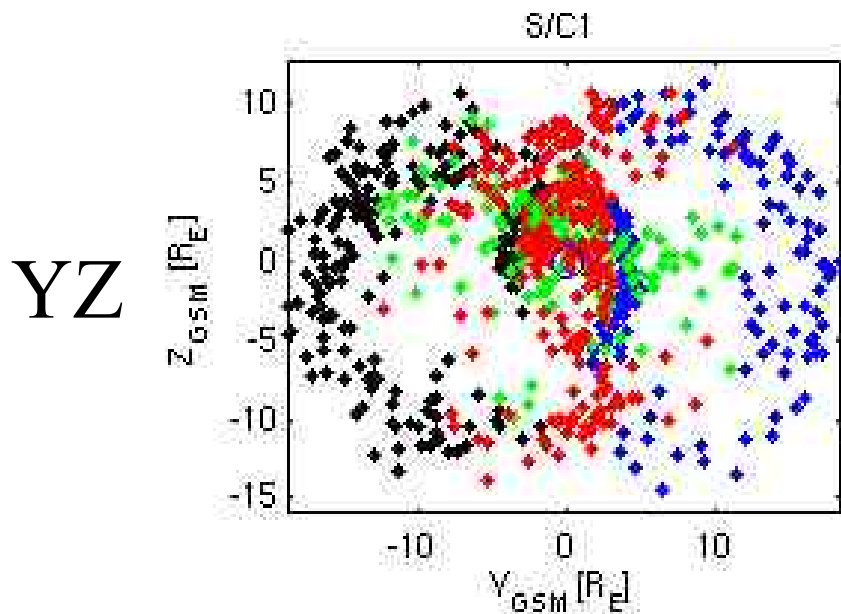
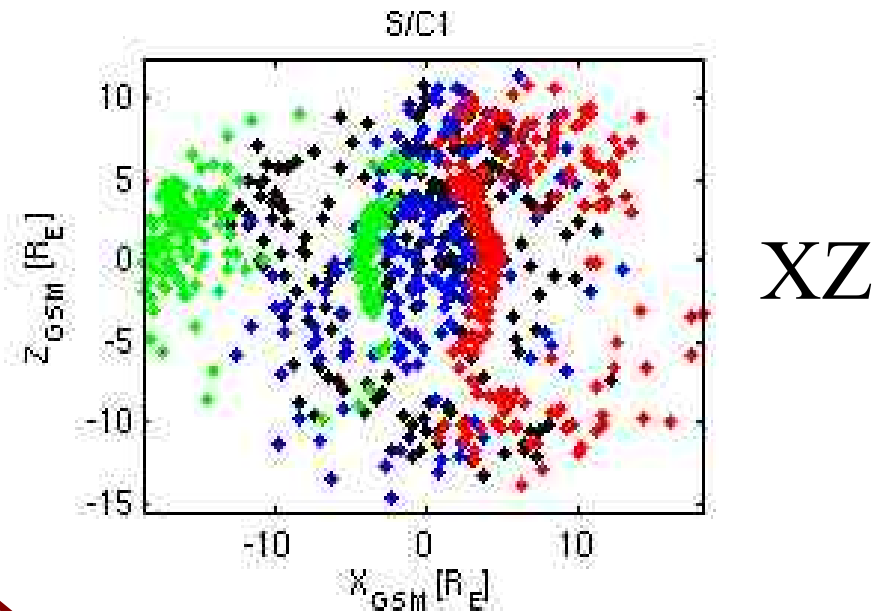
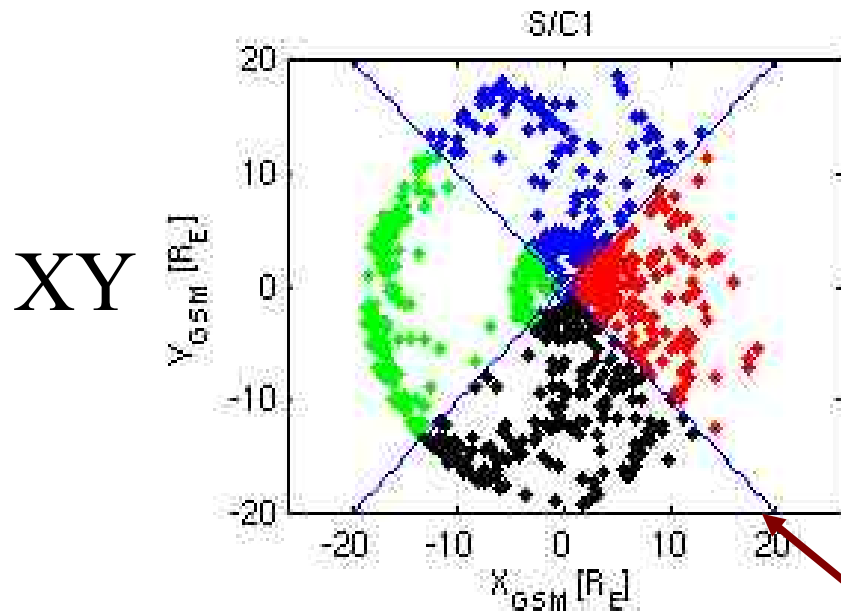
Delay from activation to actual burst

Cumulative sum of the above plot

Duration of interval with trigger enabled

Cumulative sum of bursts, sorted by trig interval

Burst positions, S/C 1, 3 planes



Colour coded by local time sector:

Red: day 09-15

Green: night 21 - 03

Blue: dusk 15-21

Black: dawn 03-09

Burst positions S/C 1

