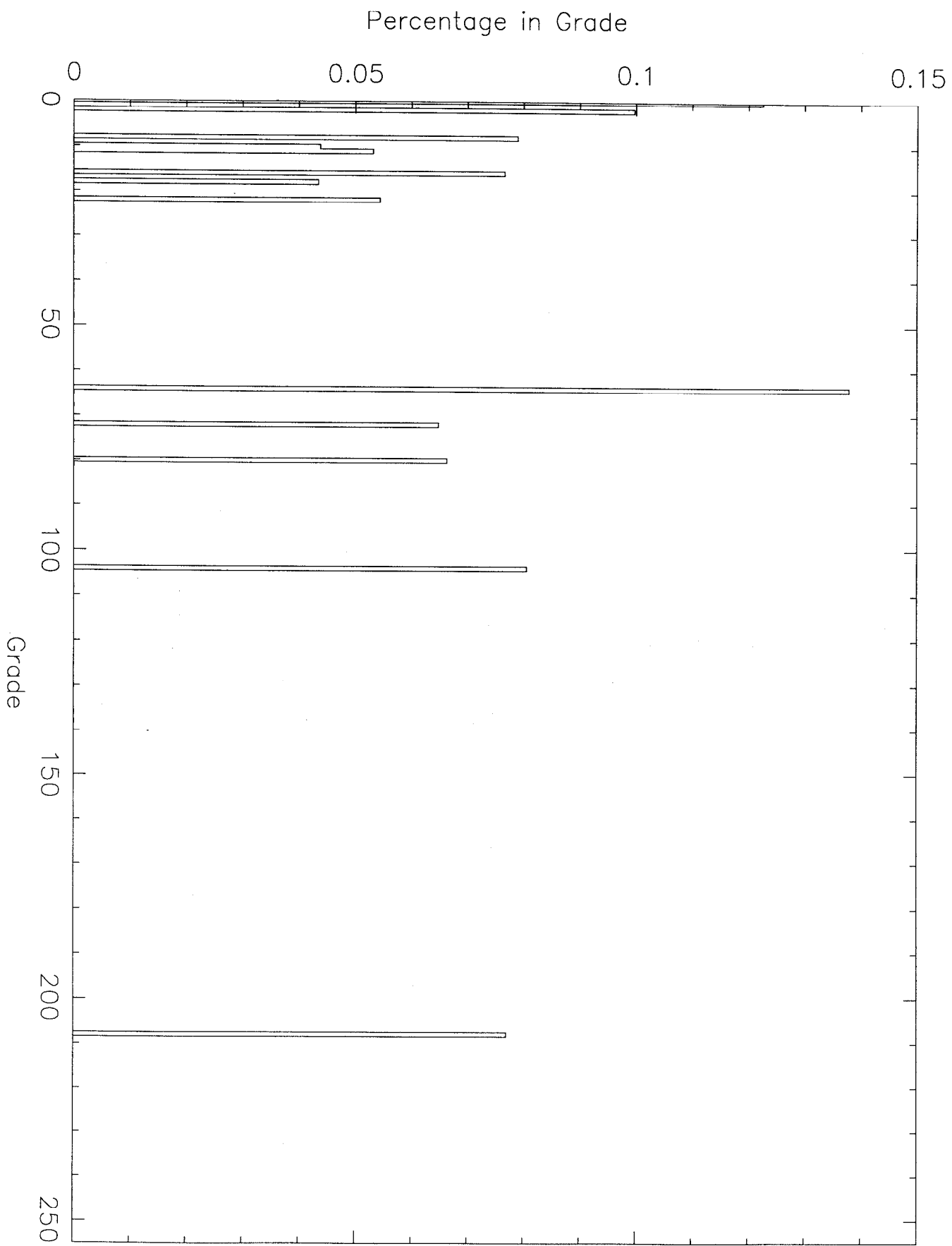
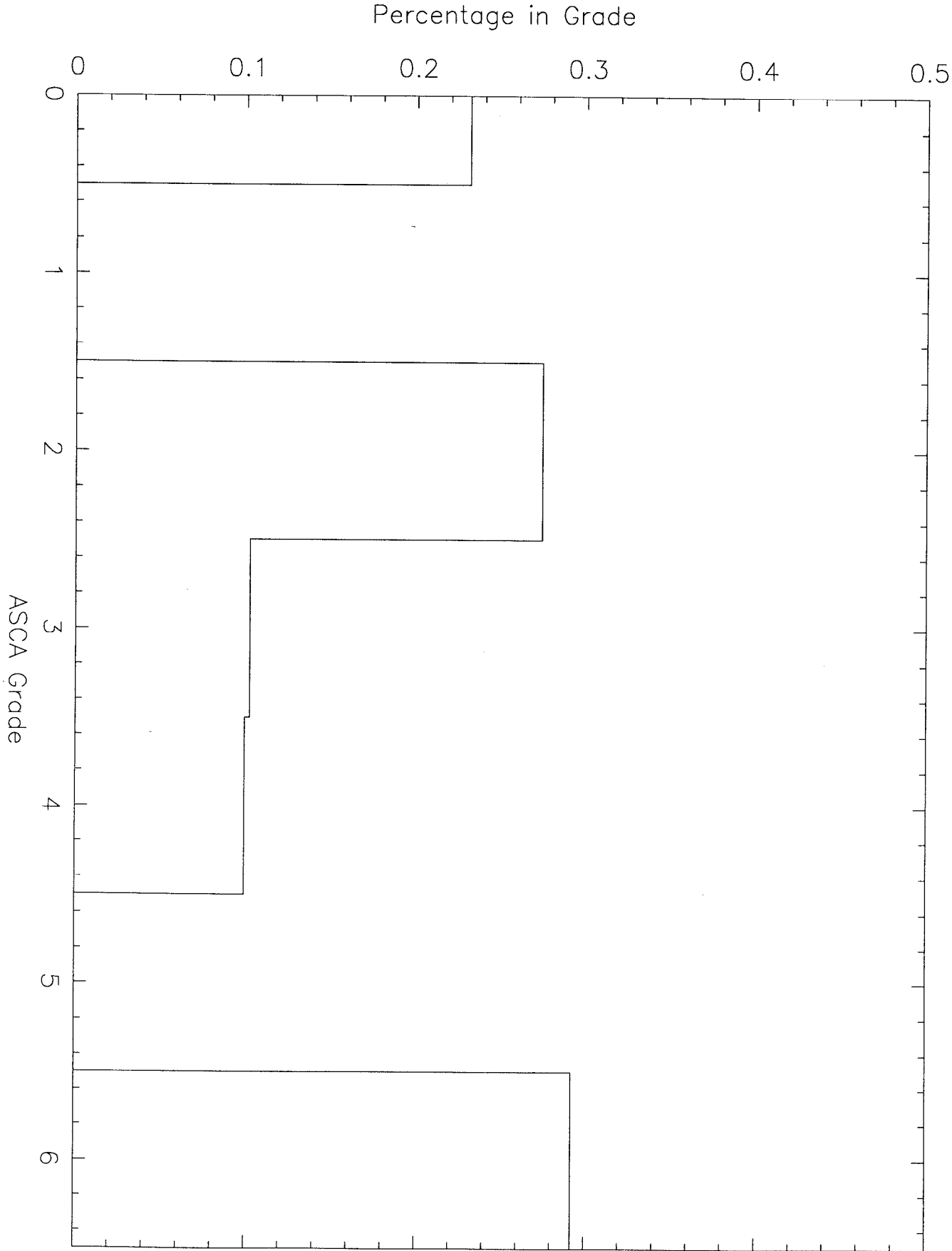




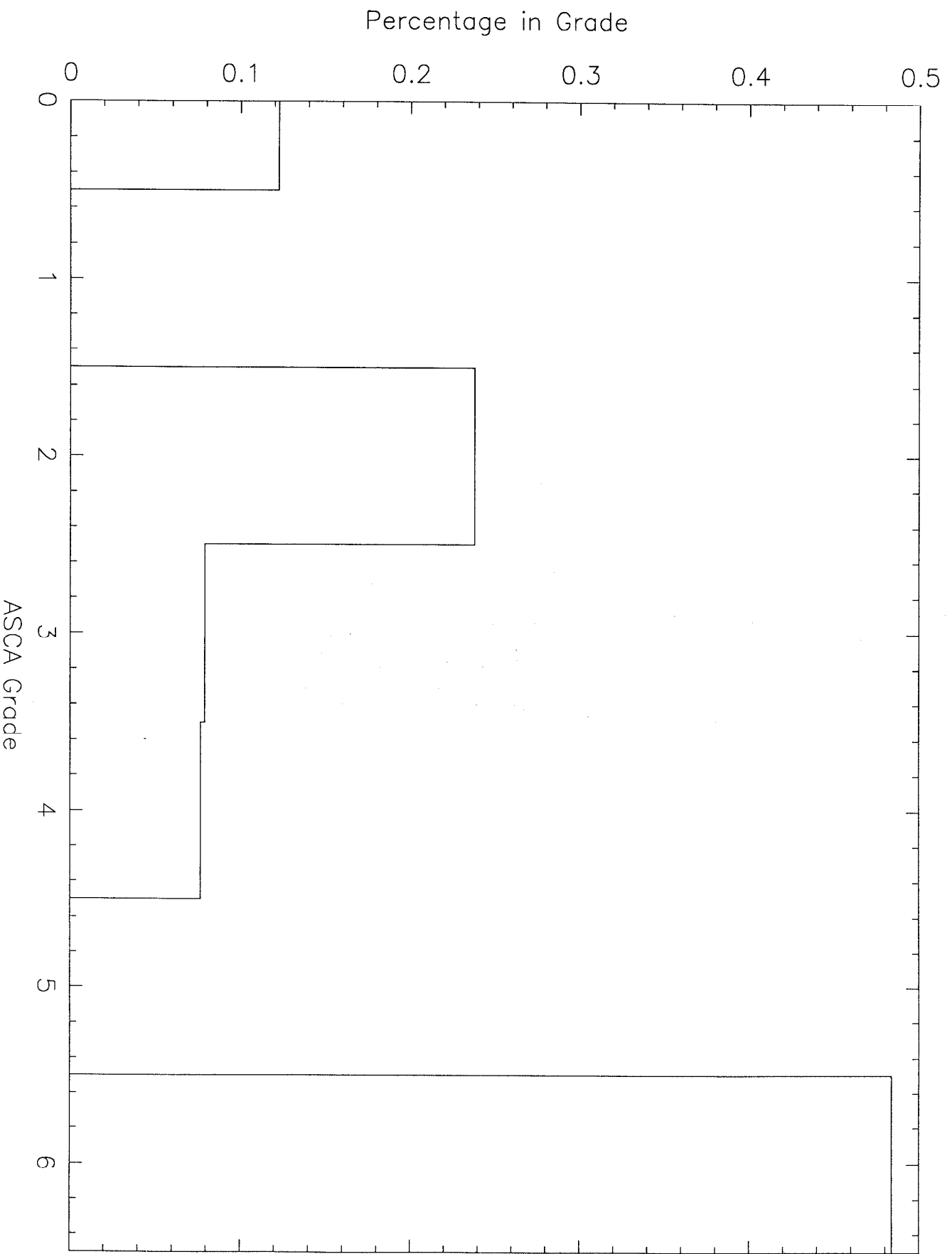
OBSID 922: High Background Grade Distribution g02346, $0.3 < E < 10.0$ keV



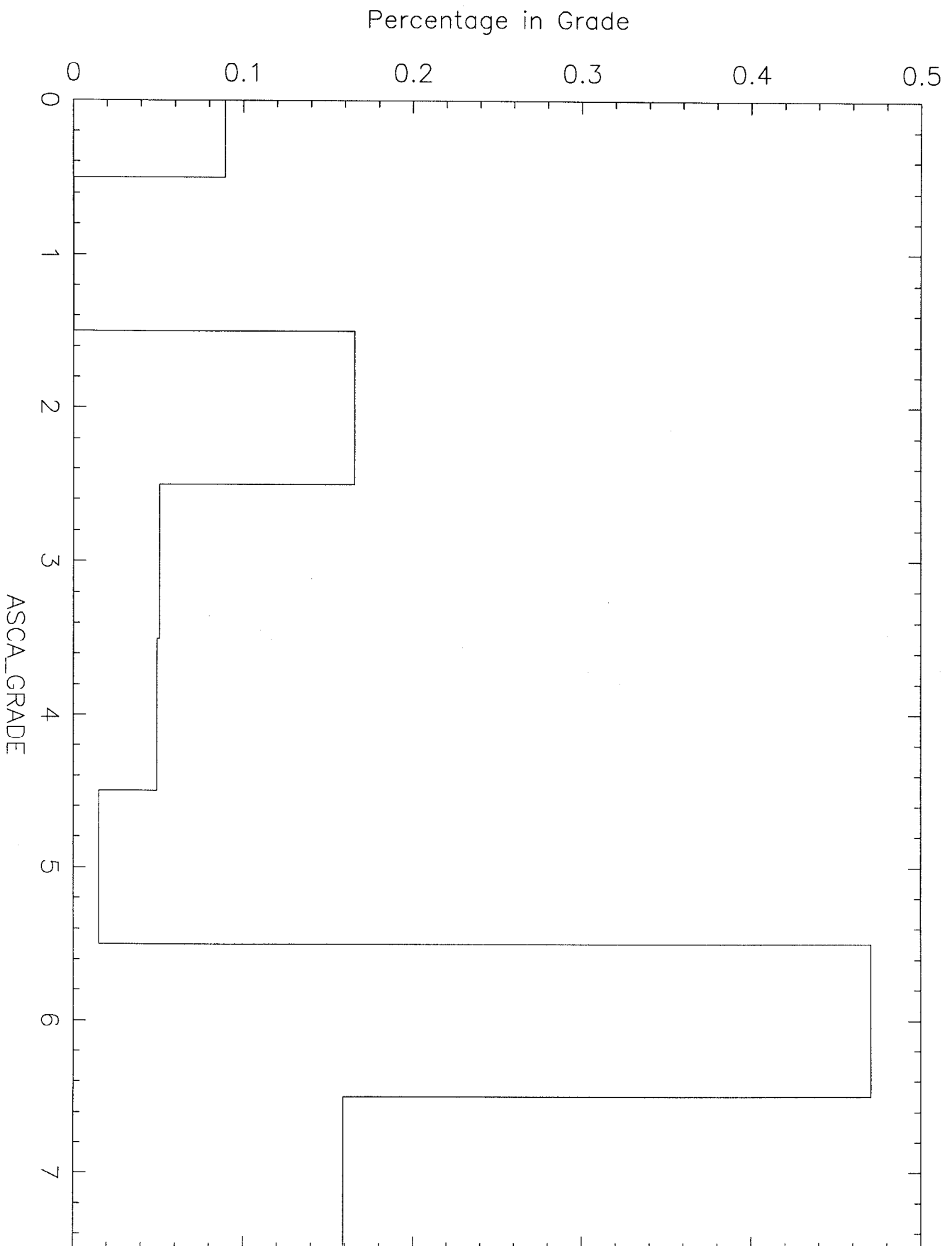
OBSID 922: Low Background Grade Distribution g02346, $0.3 < E < 10.0$ keV



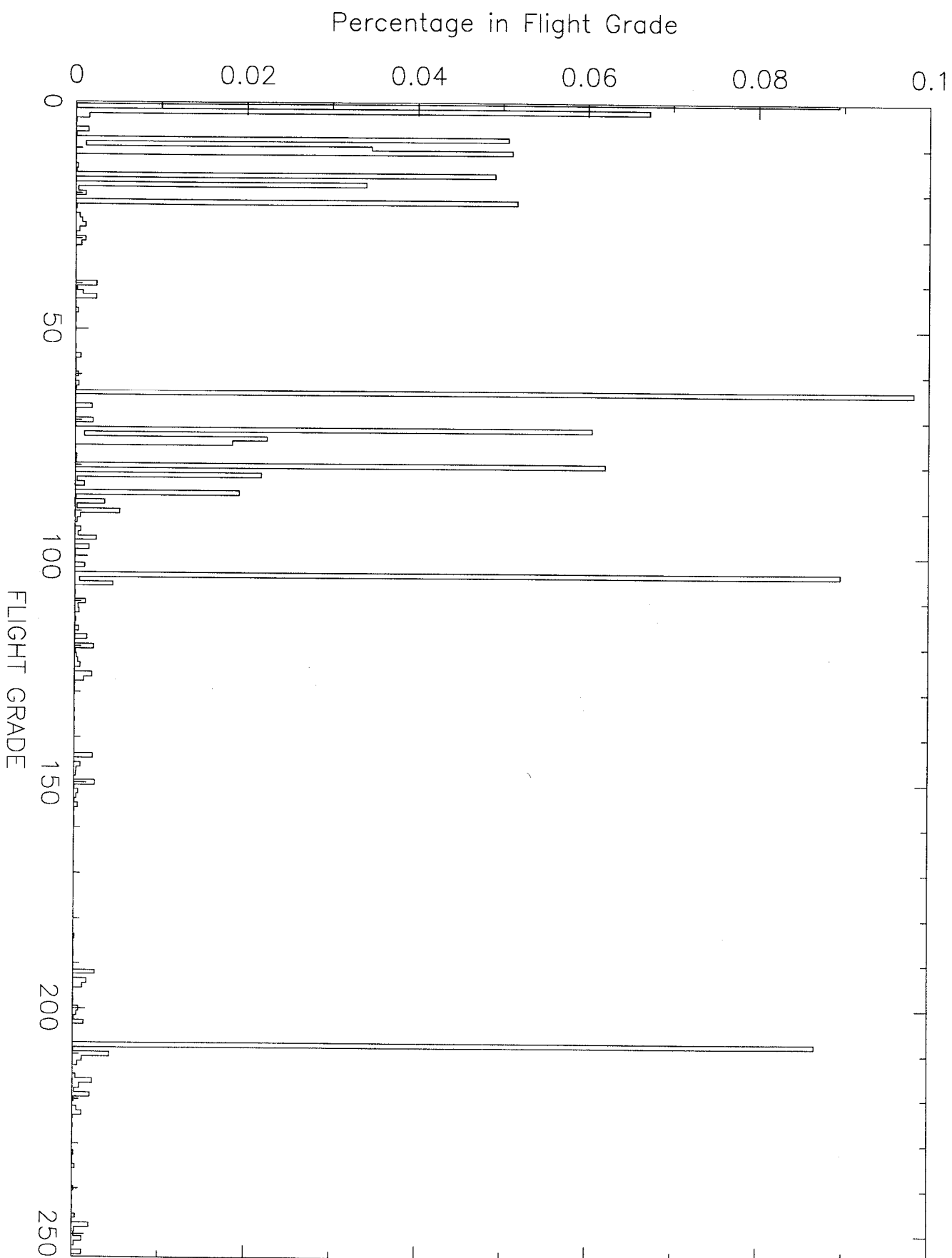
OBSID 922: High Background Grade Distribution g02346, $0.3 < E < 10.0$ keV



OBSID 922: S3 High Background Grade Distribution 11 < E < 15 keV
Plot of file obs922_s3_evt1_hibkg_pergrd.fits

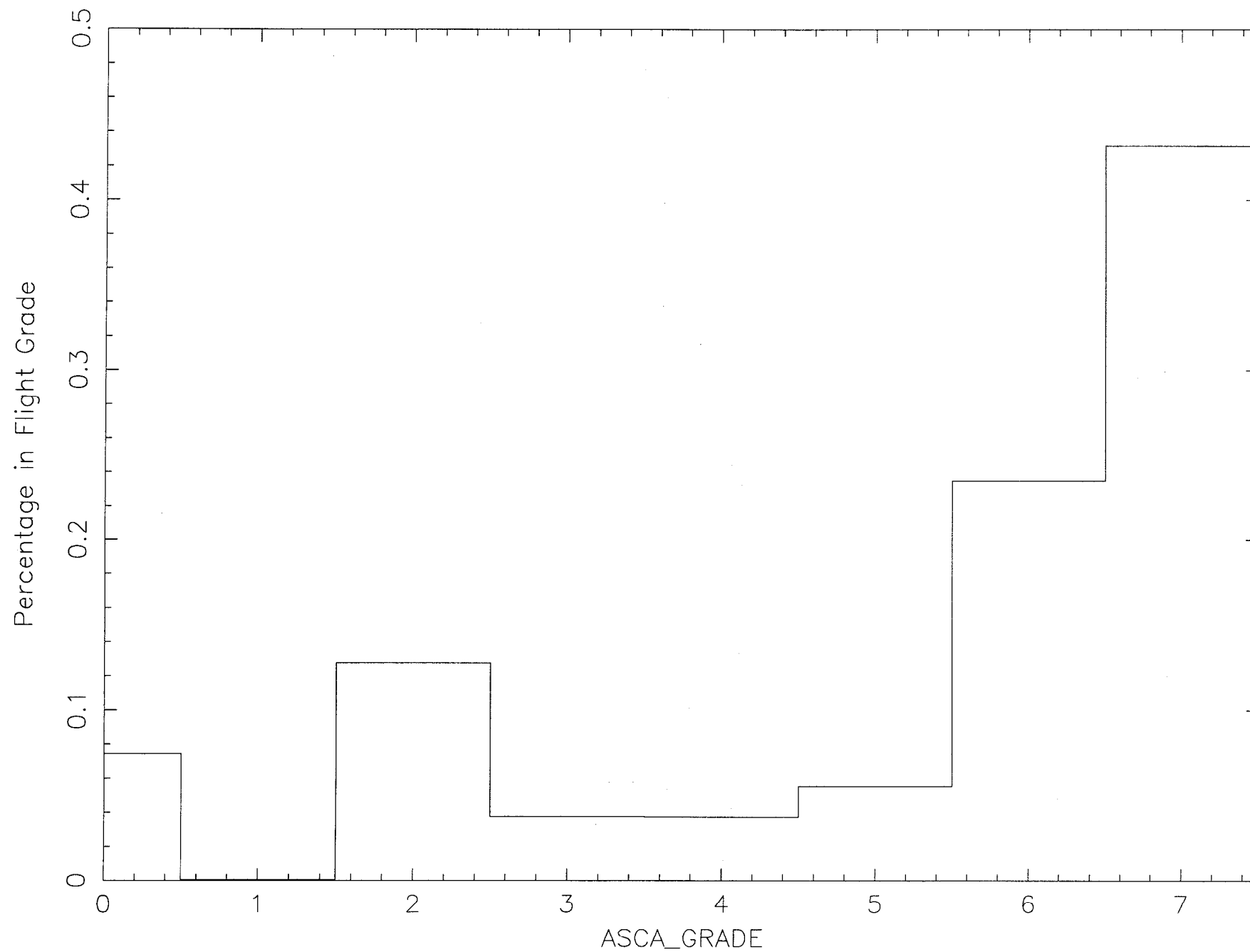


OBSID 922: S3 High Background Grade Distribution 11 < E < 15 keV
Plot of file obs922_s3_evt1_hibkg_perfitgrd.fits

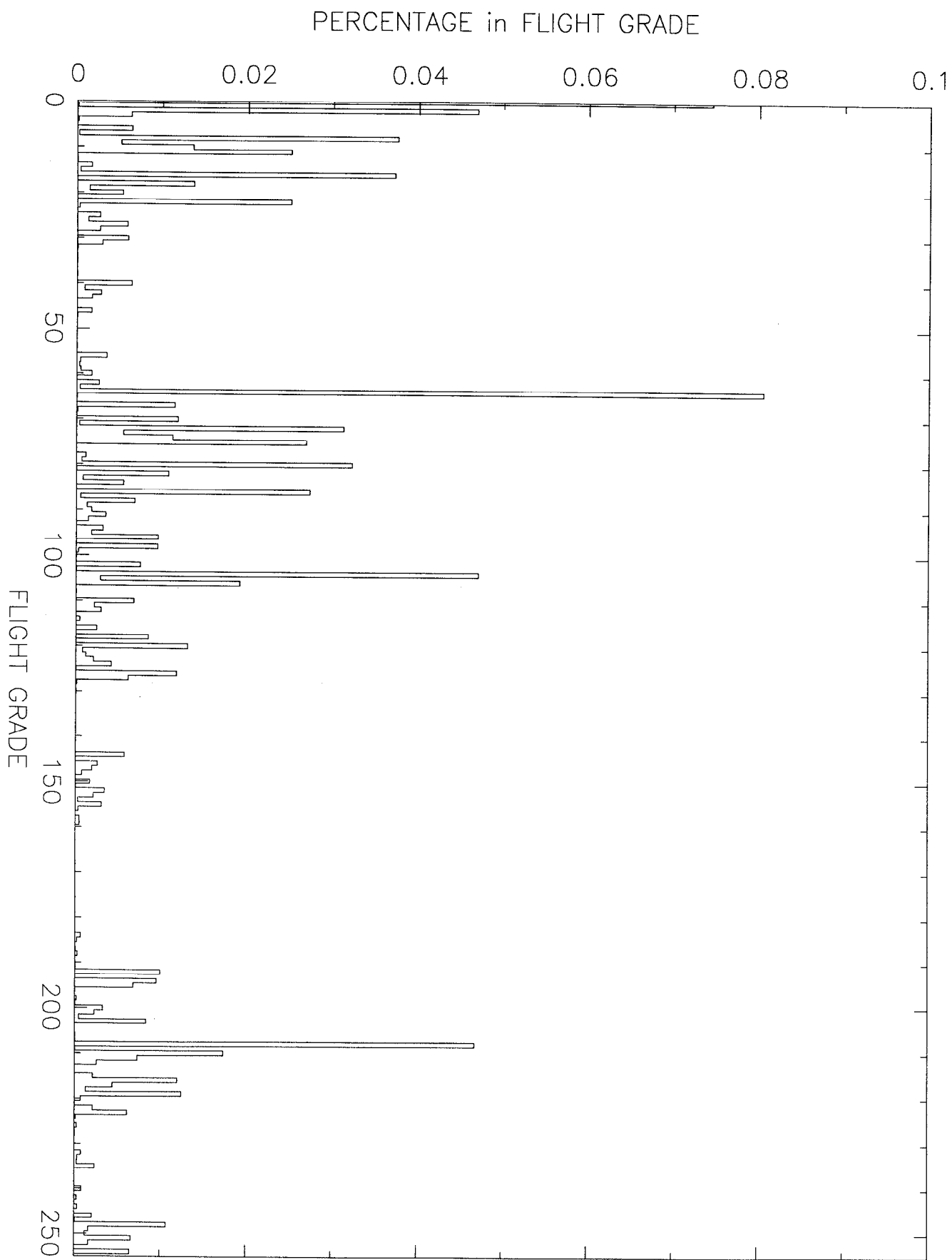


OBSID 922: S3 Low Background Grade Distribution $11 < E \leq 15$ keV

Plot of file obs922_s3_evt1_lobkg_pergrd.fits

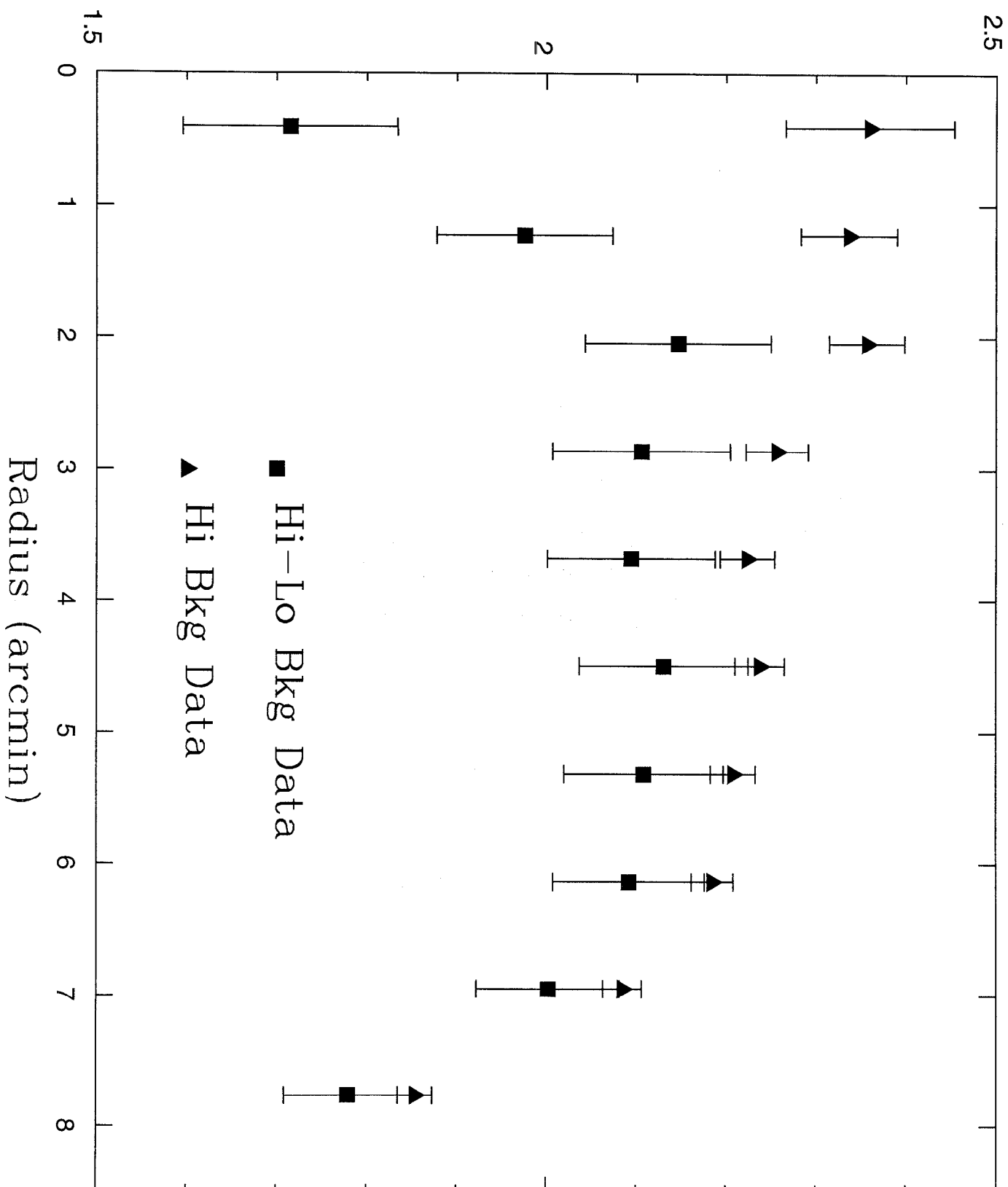


OBSID 922: S3 Low Background Grade Distribution 11 < E < 15 keV
Plot of file obs922_s3_evt1_lobkg_perfitgrd.fits

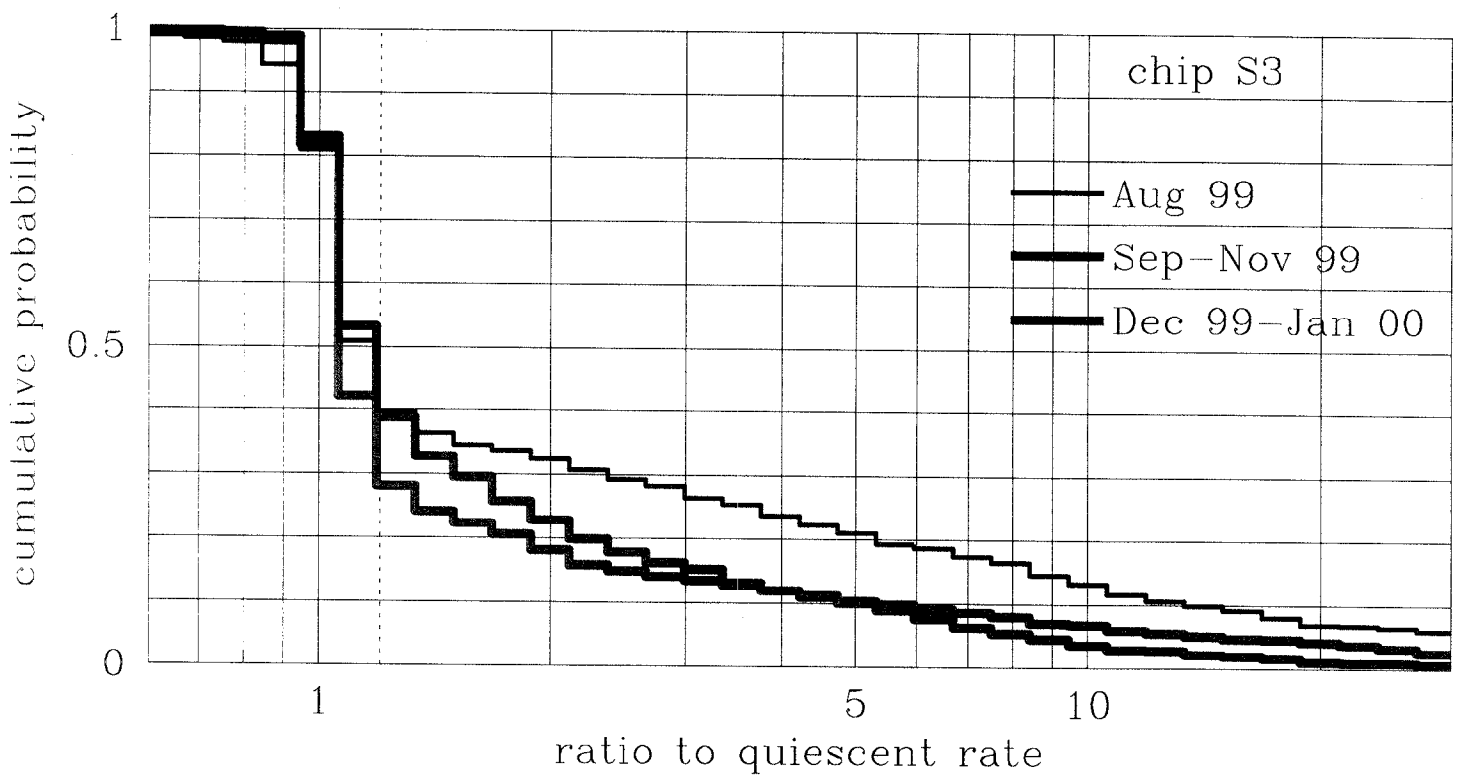
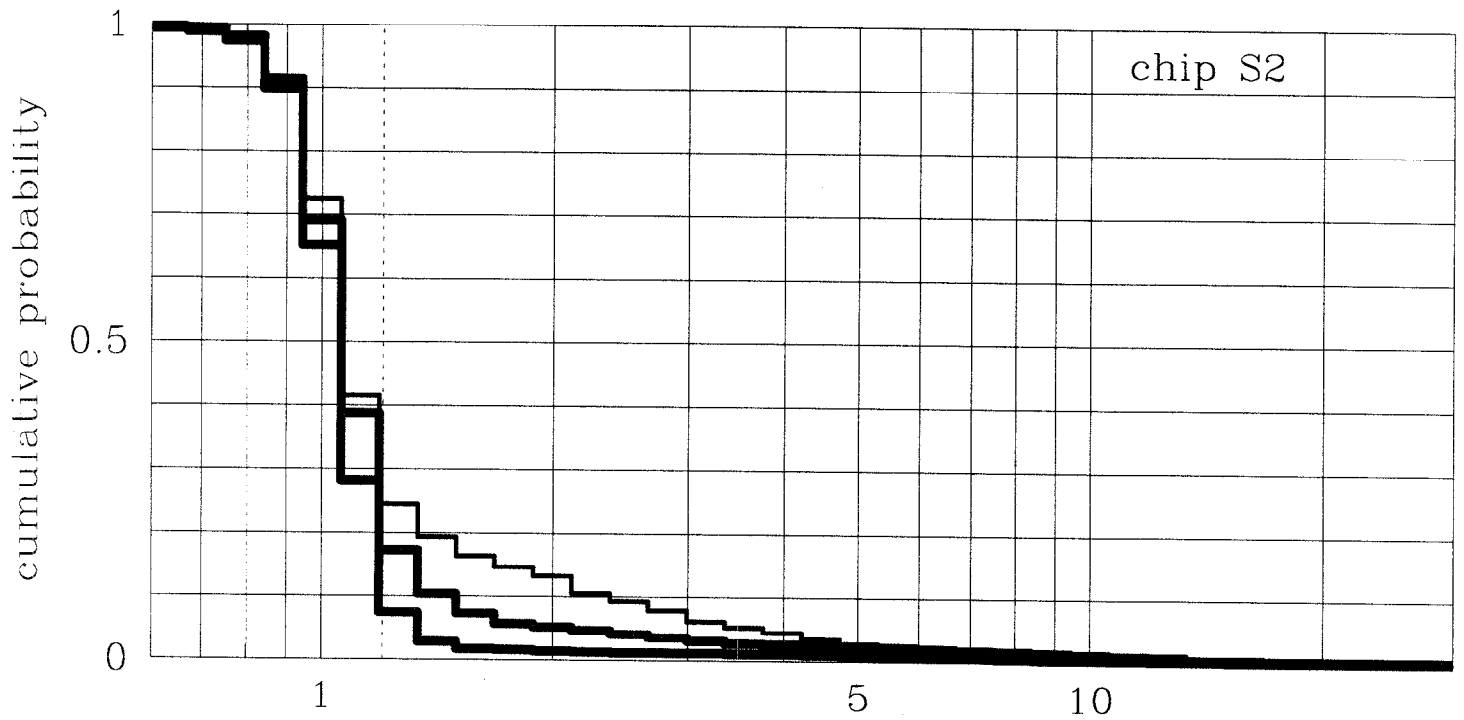


OSTRO 703: Radial Profile of X-ray Counts

ACIS I g02346 E<10.0 keV Rate (cts s⁻¹ arcmin⁻²)



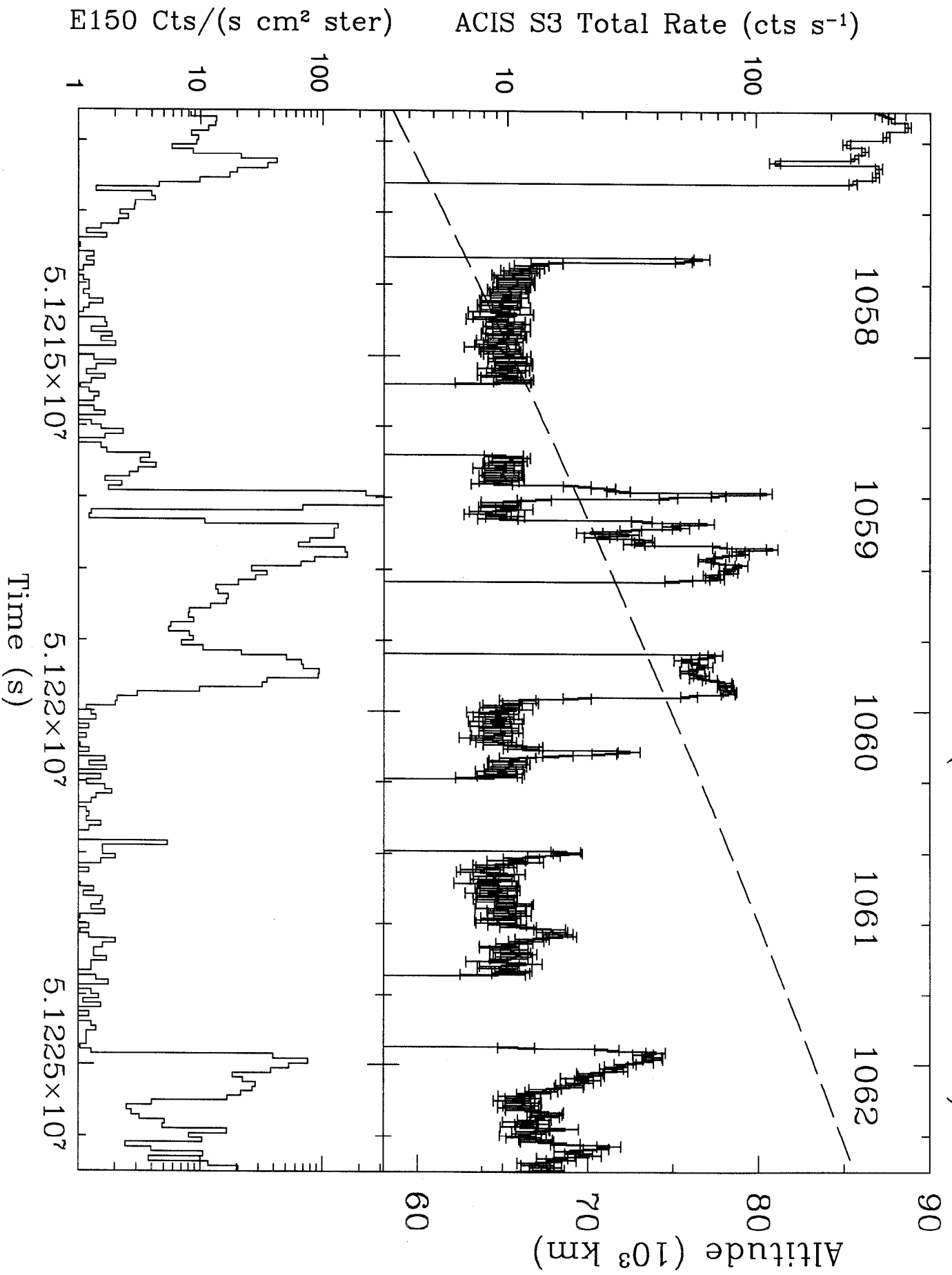
Harkovitch [2XC memo]



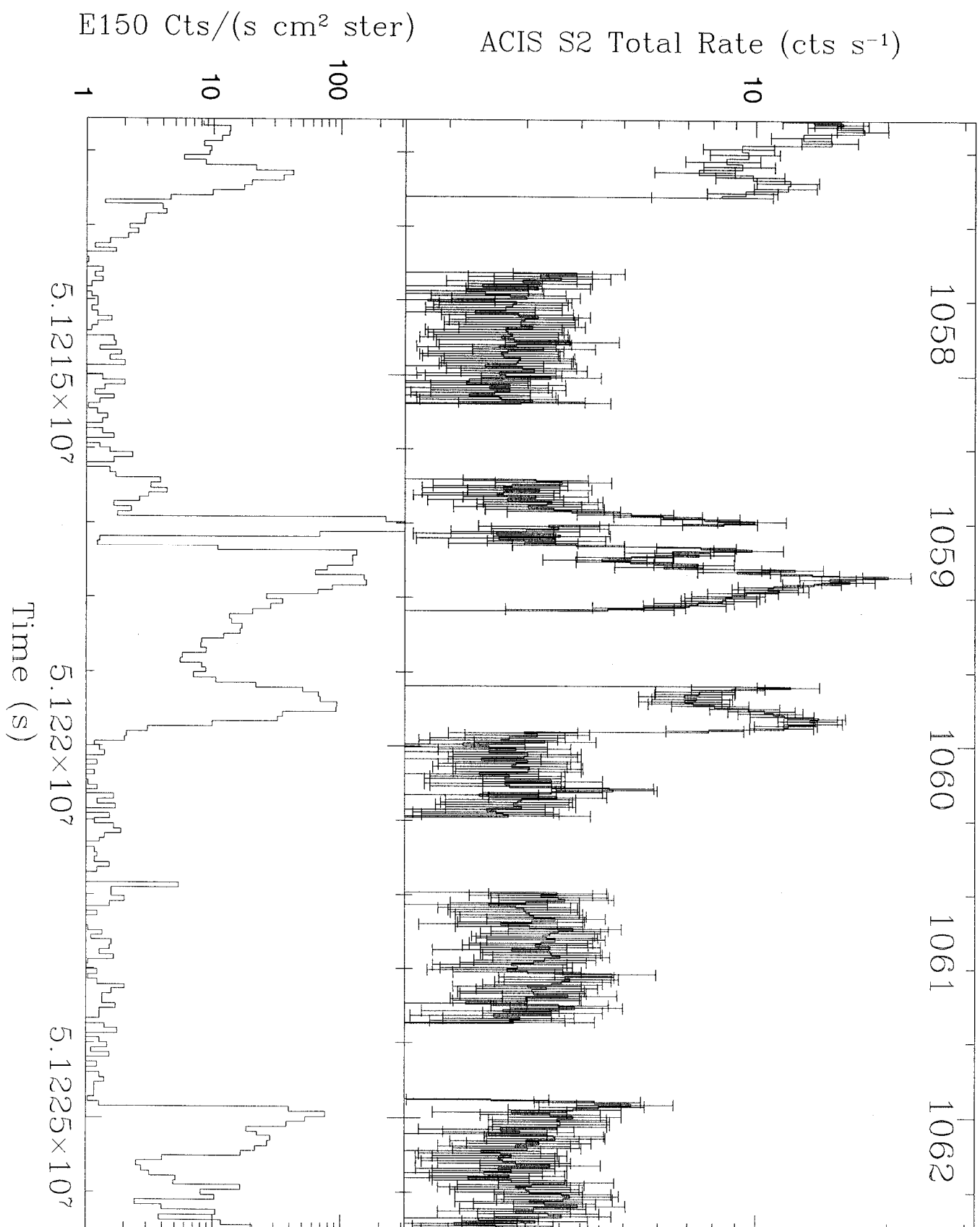
BACKGROUND FLARES

- ACIS frequently experiences periods of enhanced background, the duration of which is typically considered the calibration "flare" (see Flare Activity and Timing SPEC 700.471)
- Signal is always stronger in the FI CCDs, sometimes no signal in FI CCDs
- Best correlation is with the HEED HEID channel, but this is consistently poor
- ACIS HEED experiences a flare when the HEED is inserted
- Enhanced background occurs correlate with the amplitude of an X-ray flare > 10 keV for the BI CCDs but *not* for the FI CCDs
- Spectrum of excess counts is rather flat but begins to turn over over above 3 keV
- Grade distribution of the excess events looks like real X-rays
- Spatial distribution is different for ACIS-I and ACIS-S. ACIS-I distribution is depressed in the center and the S3 distribution is a broad band running the length of the CCD
- Frequency of these flares has decreased in the first year of the mission
- None of these observed characteristics is inconsistent with low energy protons

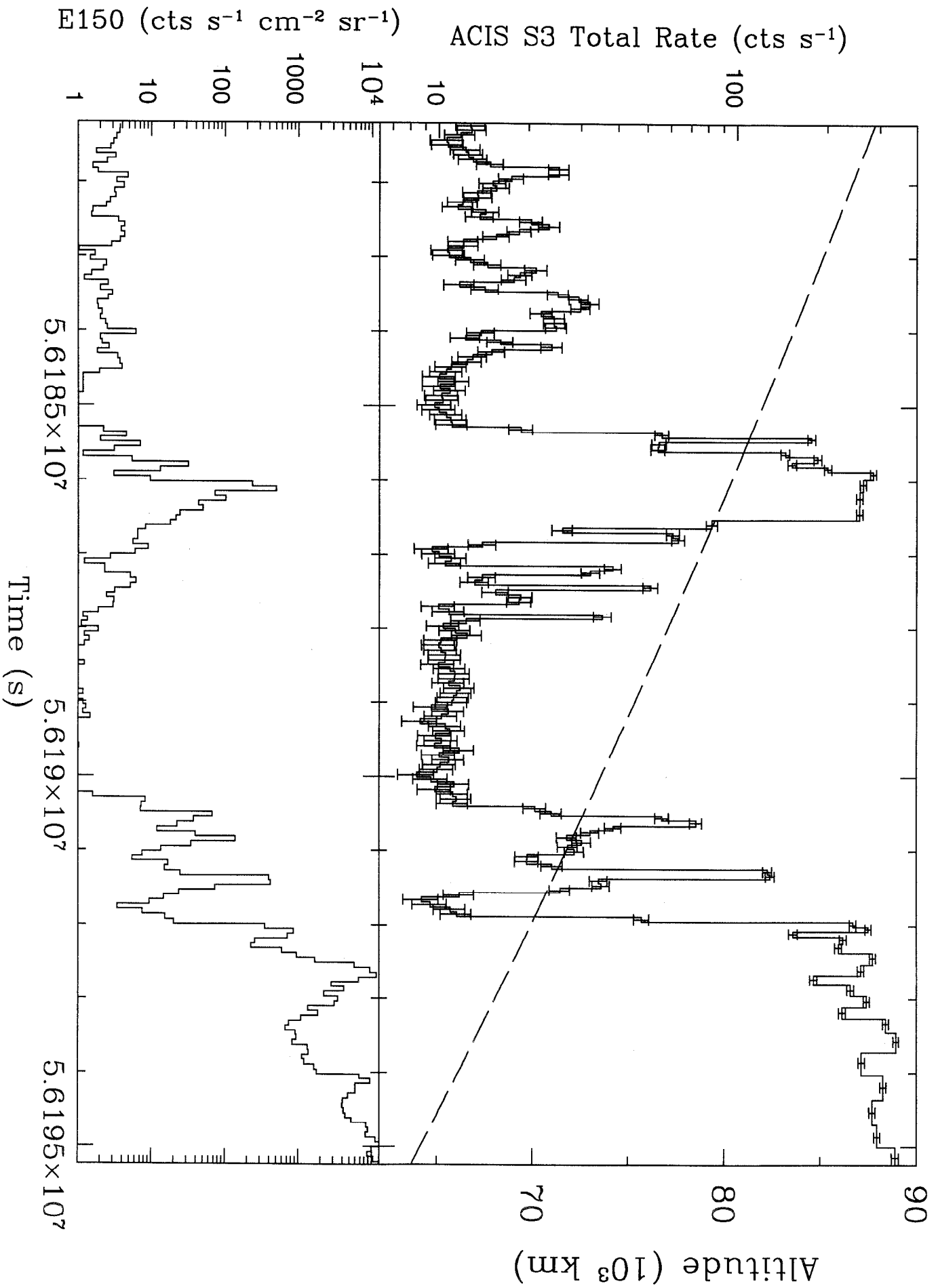
ACIS S3 Total Rate vs EPHIN E150 (OBSIDS 1057-1062)



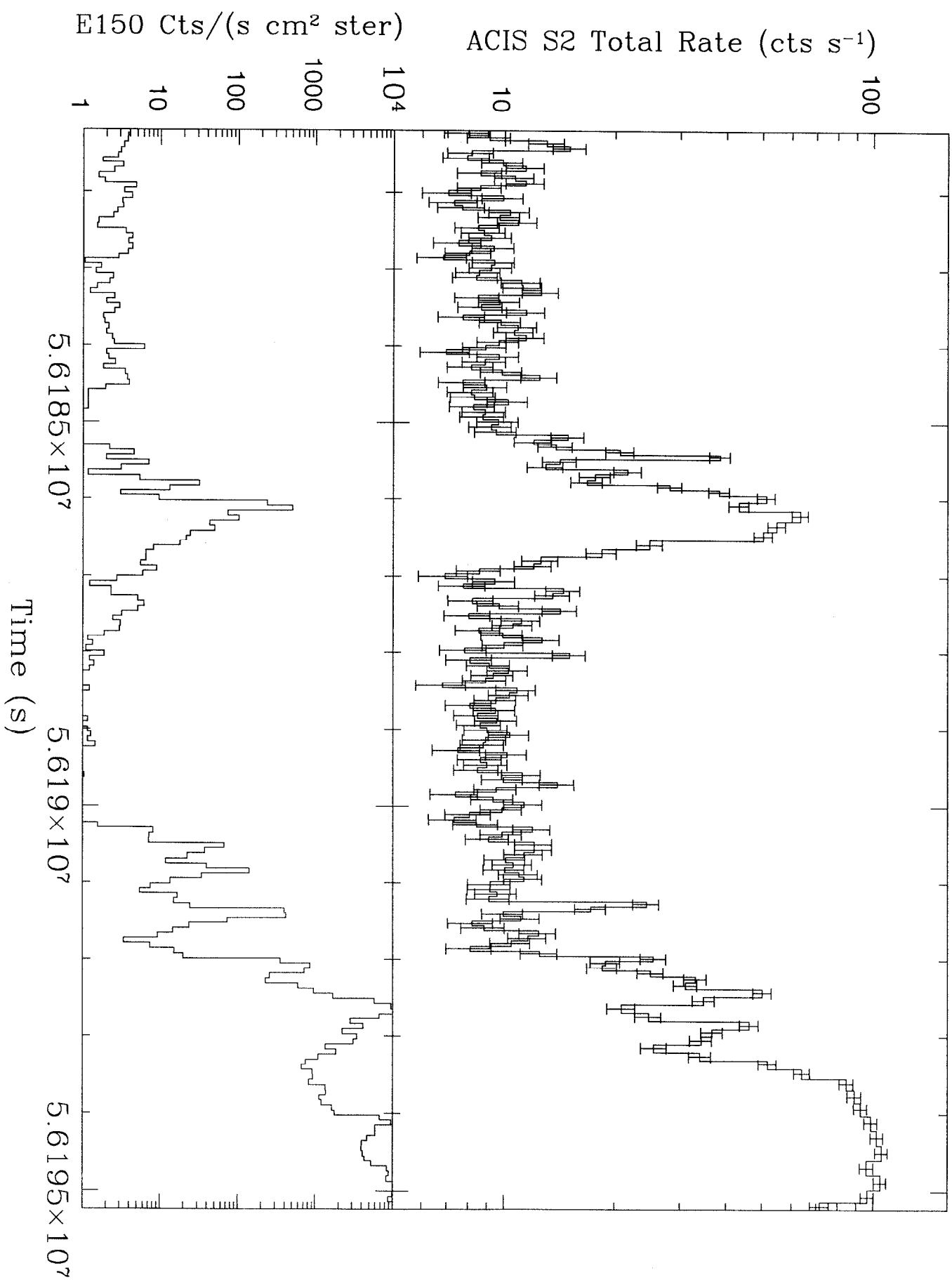
ACIS S2 Total Rate vs EPHIN E150 (OBSIDS 1057-1062)



12 Aug 99
ACIS S3 Total Rate vs EPHIN E150 (OBSID 303)

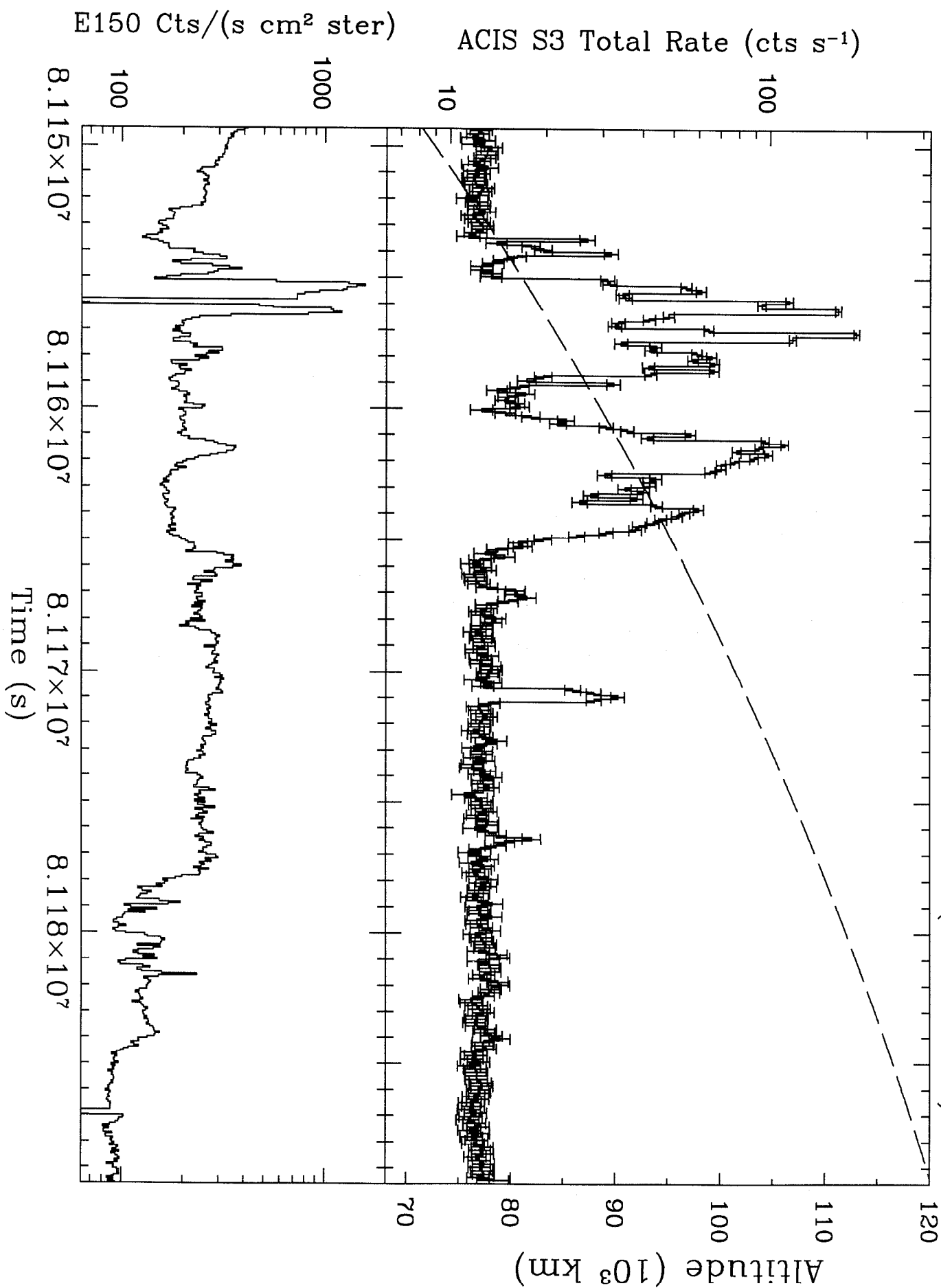


17 Oct 99
ACIS S2 Total Rate vs EPHIN E150 (OBSID 303)

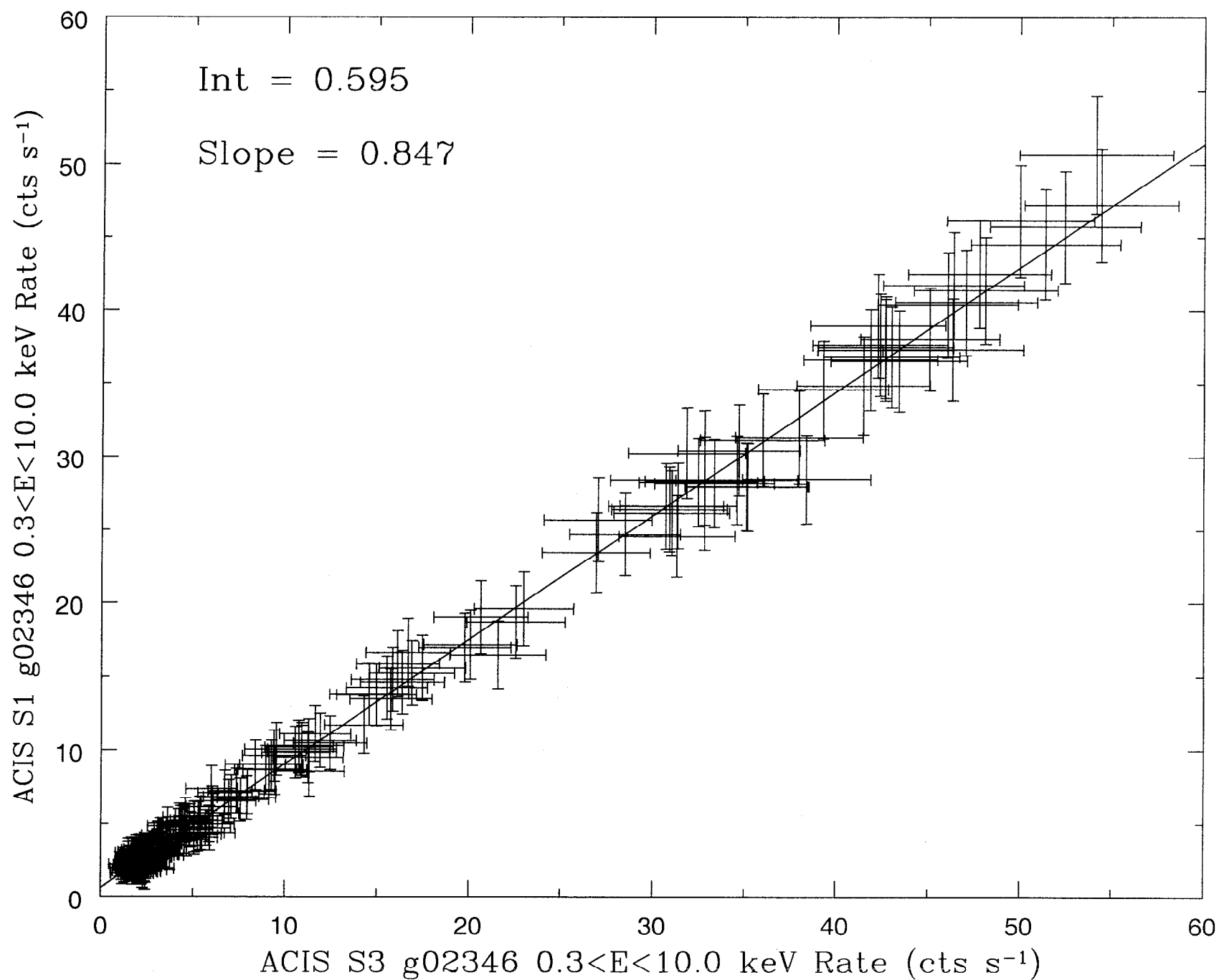


2871100

ACIS S3 Total Rate vs EPHIN E150 (OBSID 922)

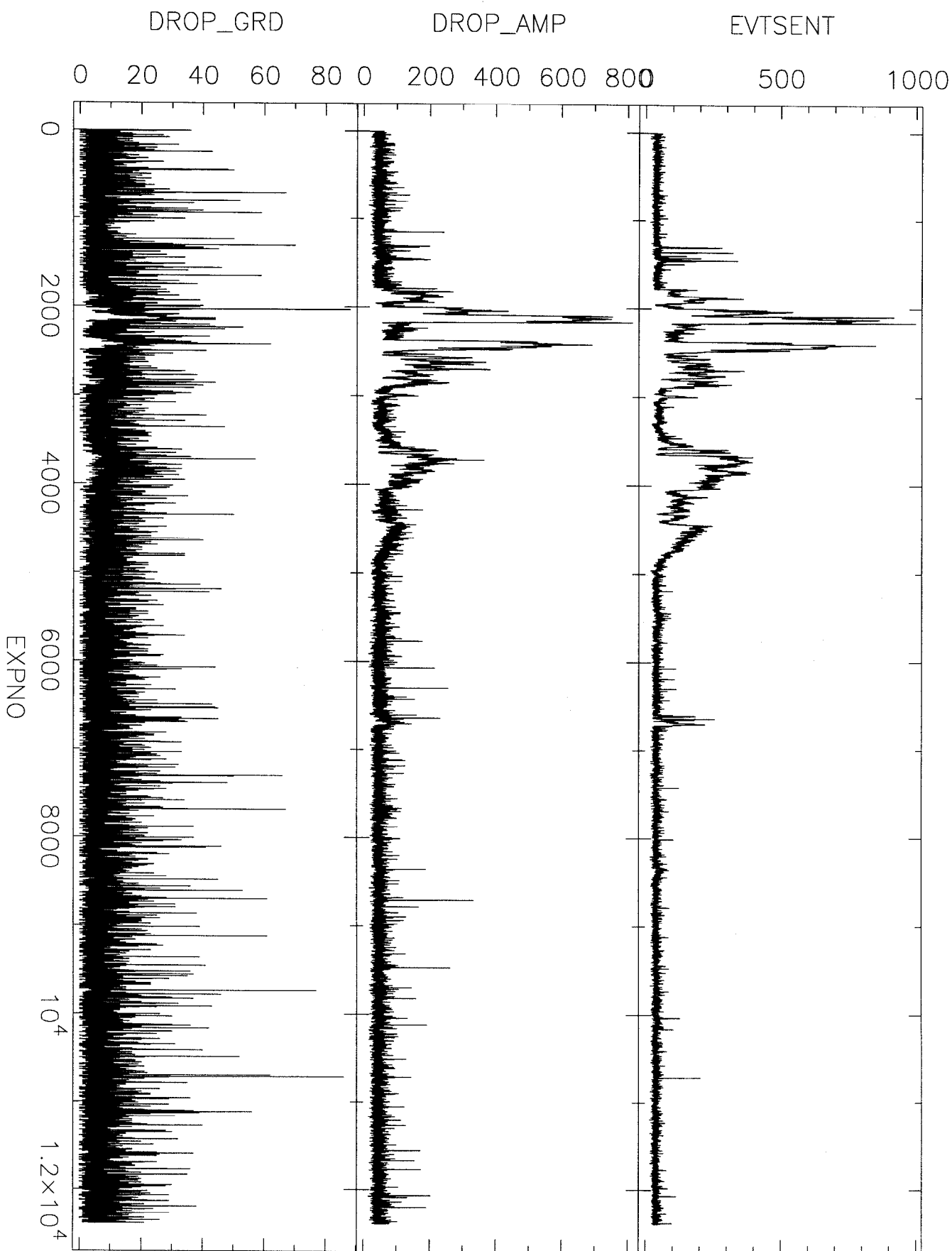


ACIS S3 vs S1 Rates (OBSIDs 1057-1062)

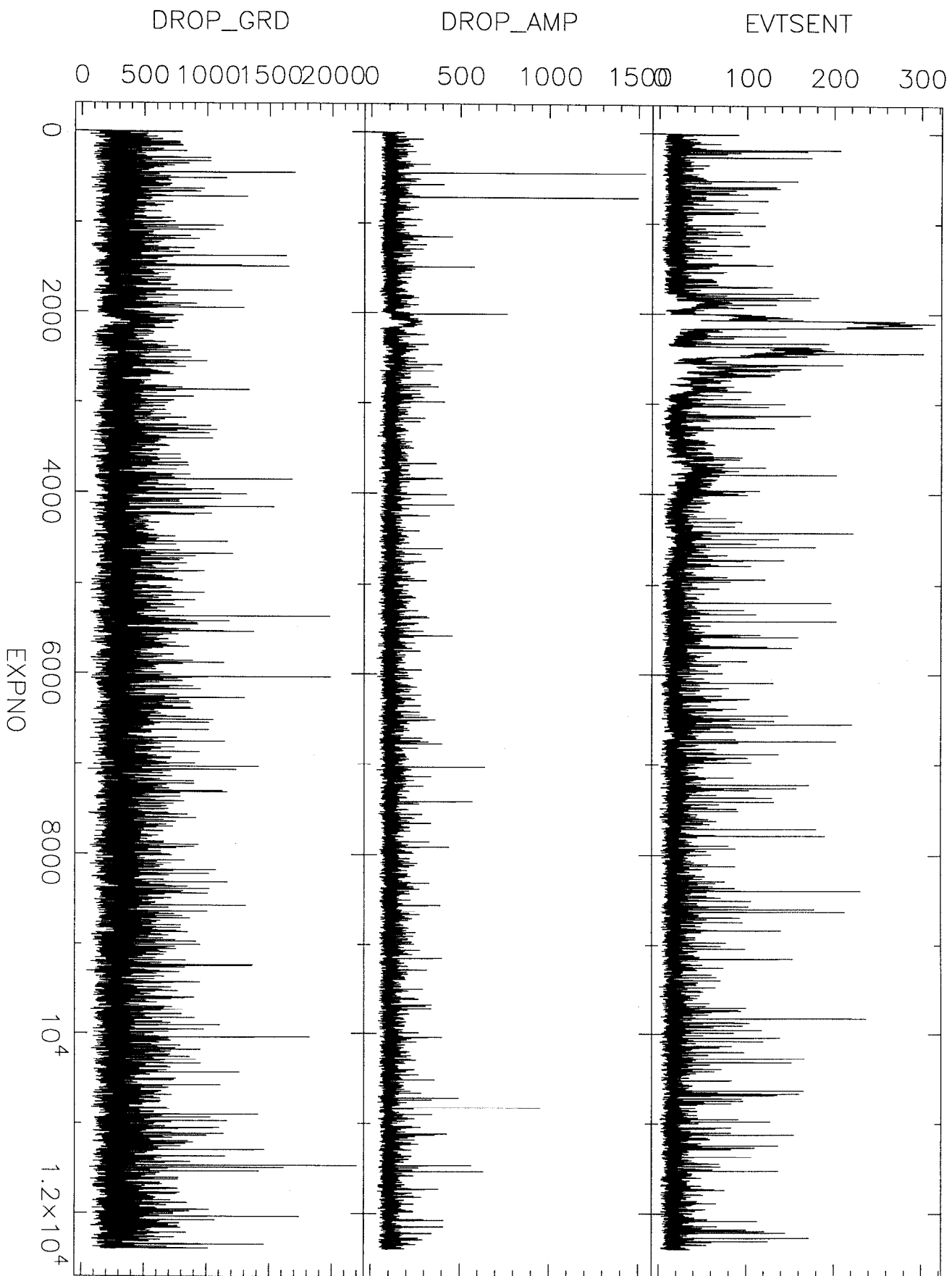


OBSID 922: S3 Event and Reject Rates
Plot of file s3_stat1.fits

2011-06-06



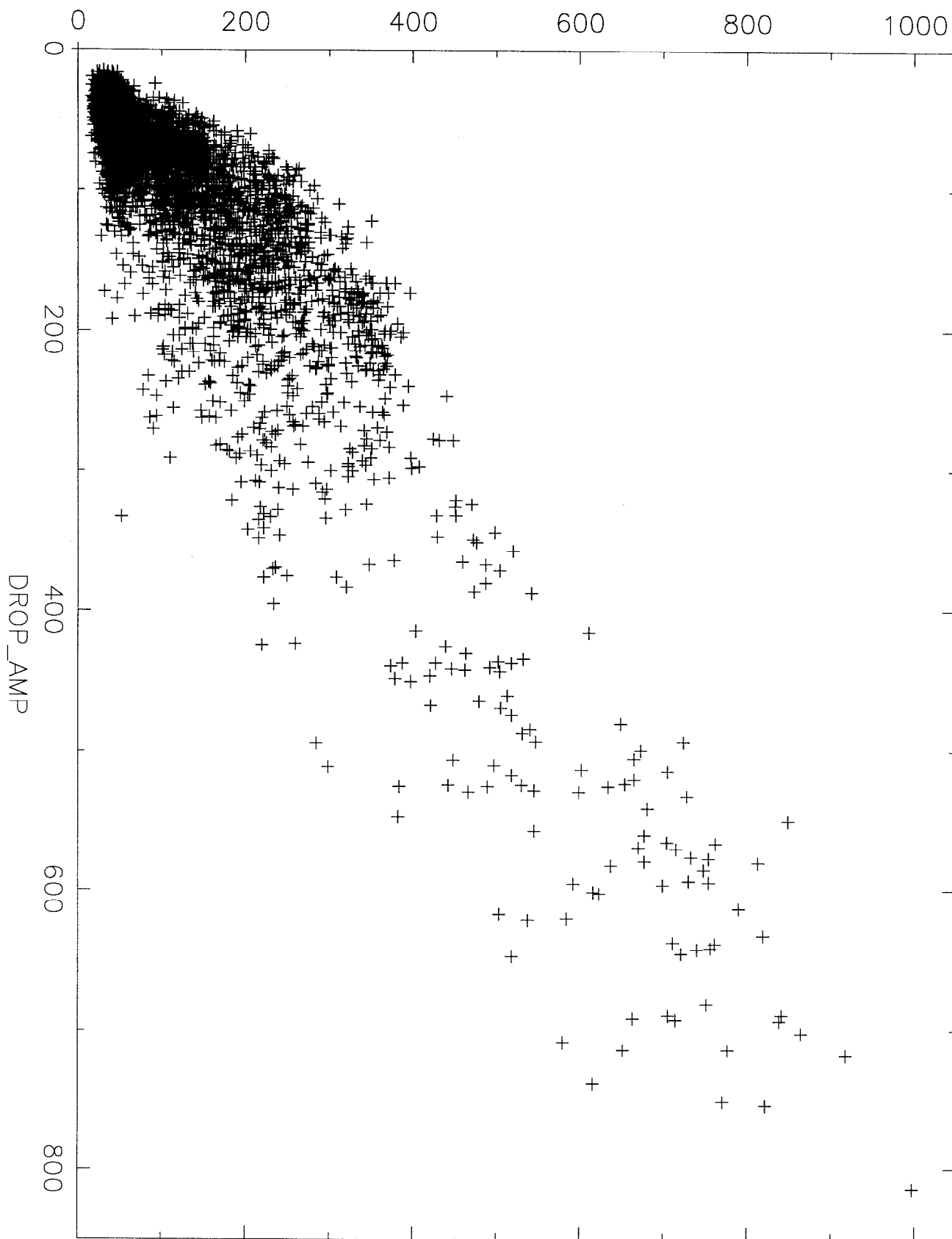
OBSID 922: S2 Event and Reject Rates
Plot of file s2_stat1.fits



OBSID 922: S3 Event Rates vs Reject Rates
Plot of file s3_stat1.fits

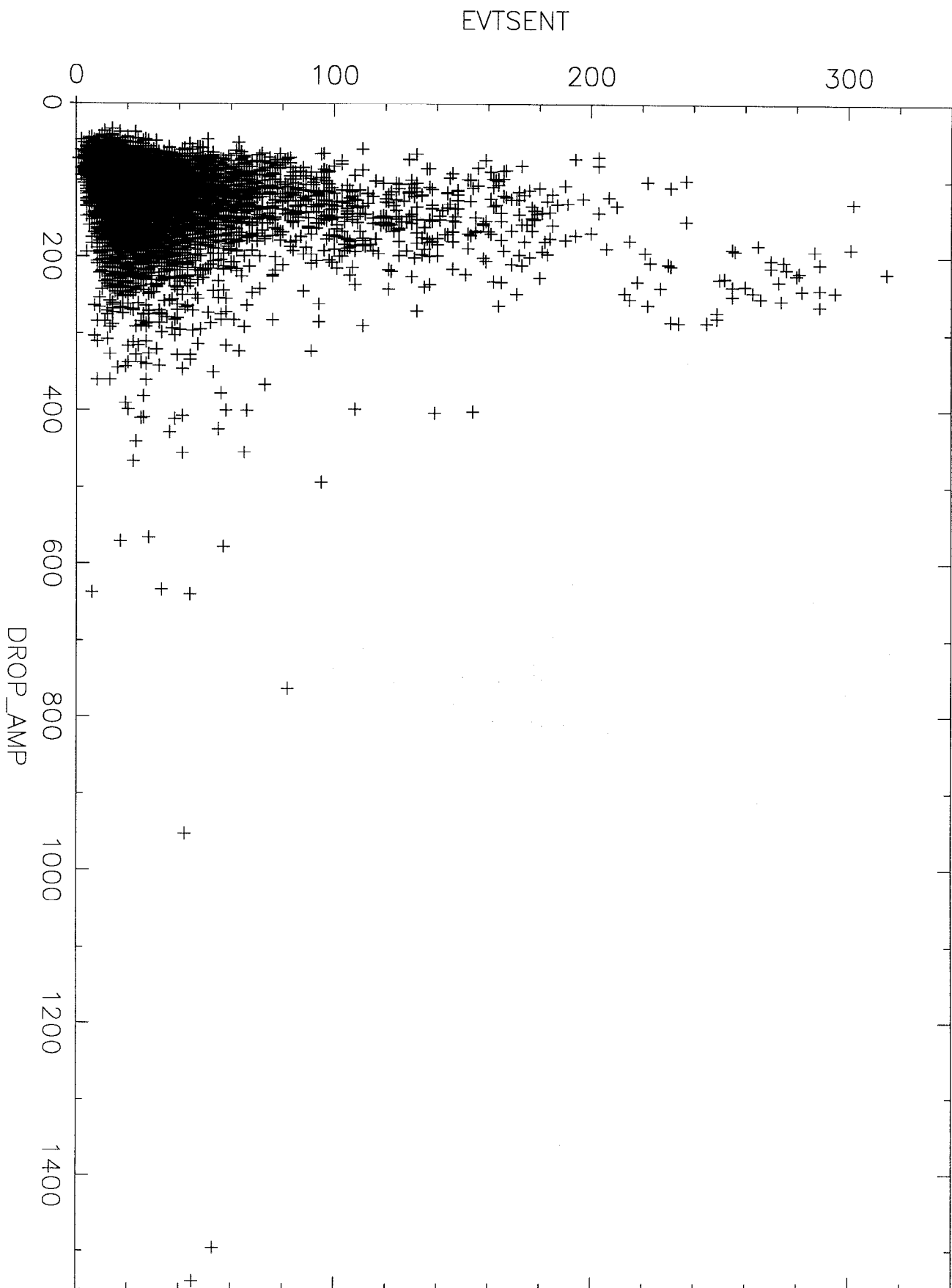
200000

EVTSENT



OBSID 922: S2 Event Rate vs Amp Reject
Plot of file s2_stat1.fits

FI CCD



OBSID 922: S3 (Quad D) High-Low Background Spectrum
obs922_s3_evt2_rmscregs_sig3_hibkg_c3_pi_gr.fits

