

# V&V Reference Report

## L2 ASCDS Version : 7.6.9

Observation 2388 - L2 Version 001  
Chandra X-Ray Center

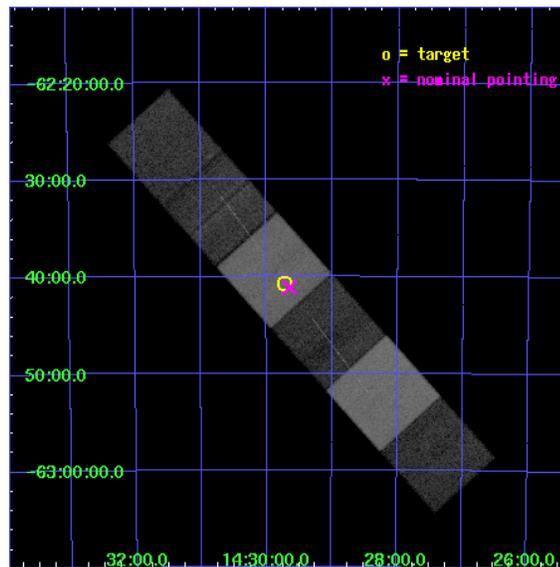
L2 Processing Date : Dec 31 2006

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# 1 Front

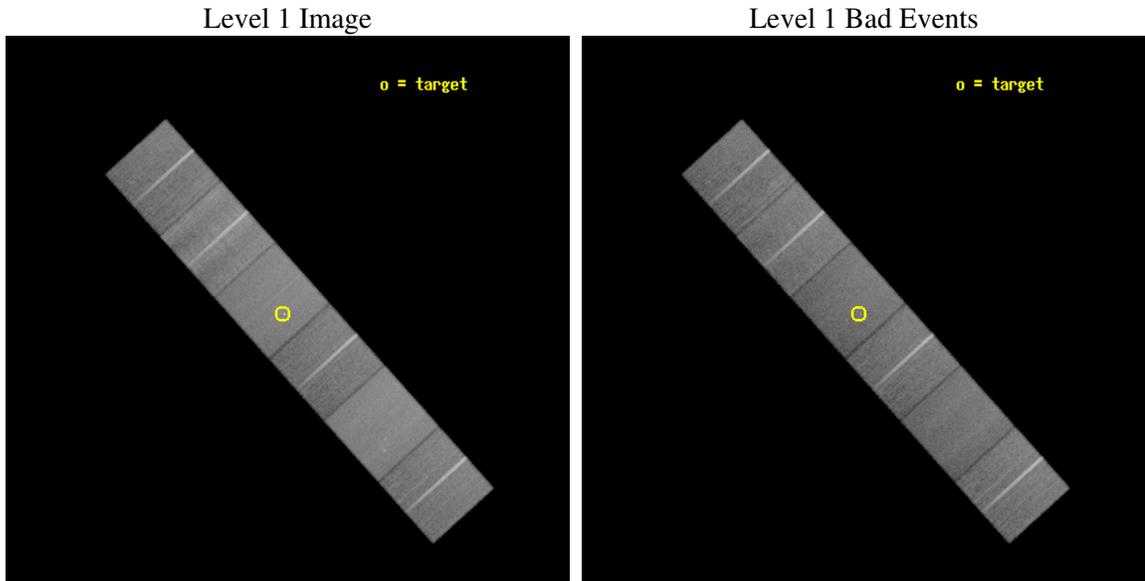
seq_num	200126
obs_id	2388
title	COORDINATED AXAF AND HST SPECTROSCOPY OF FLARES ON PROXIMA CENTAURI
observer	Dr. Jeffrey Linsky
object	PROXIMA CENTAURI
dtcycle	0
cycle	P
ra_targ	217.42875
dec_targ	-62.679472
ra_nom	217.41187434987
dec_nom	-62.6854720158
roll_nom	227.97871069595
revision	2
ontime	42937.600039989
livetime	42393.898294364
ontime4	42937.600039989
ontime5	42937.600039989
ontime6	42934.359049827
ontime7	42937.600039989
ontime8	42931.118119478
ontime9	42937.600039989
l2events	419525



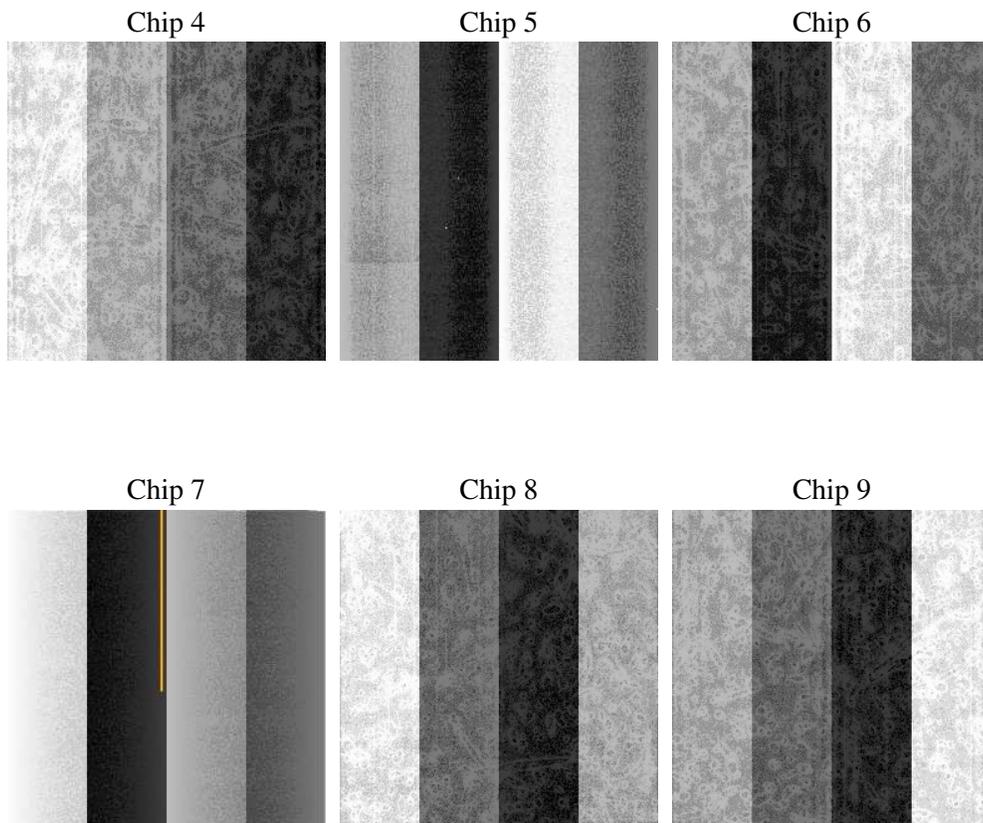
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.9
caldsver	3.2.4
date	2006-12-31T11:57:09
revision	2

sched_exp_time	43000.000000
ontime	42978.8783191
ontime4	42978.8783191
ontime5	42978.8783191
ontime6	42975.637328938
ontime7	42978.8783191
ontime8	42972.396368667
ontime9	42978.8783191
l1events	2027204

### 2.1.4 Events

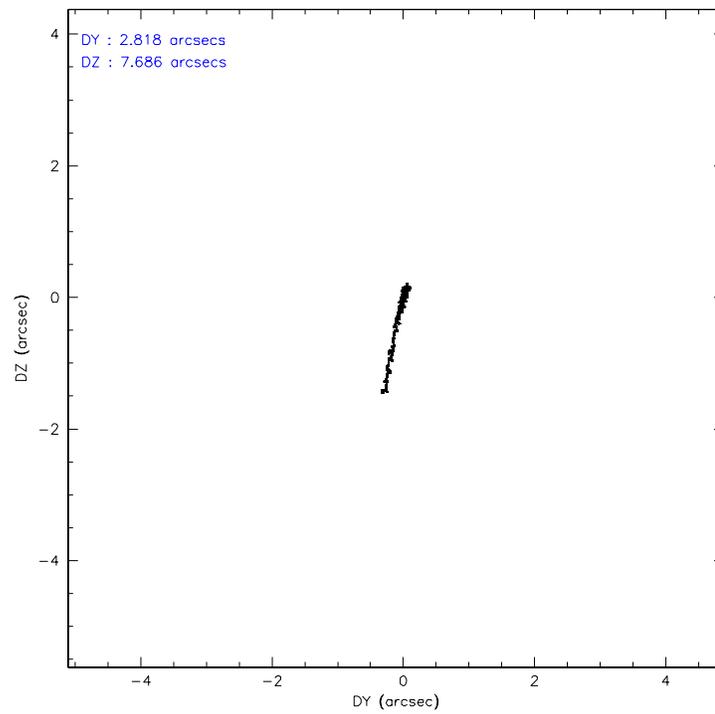
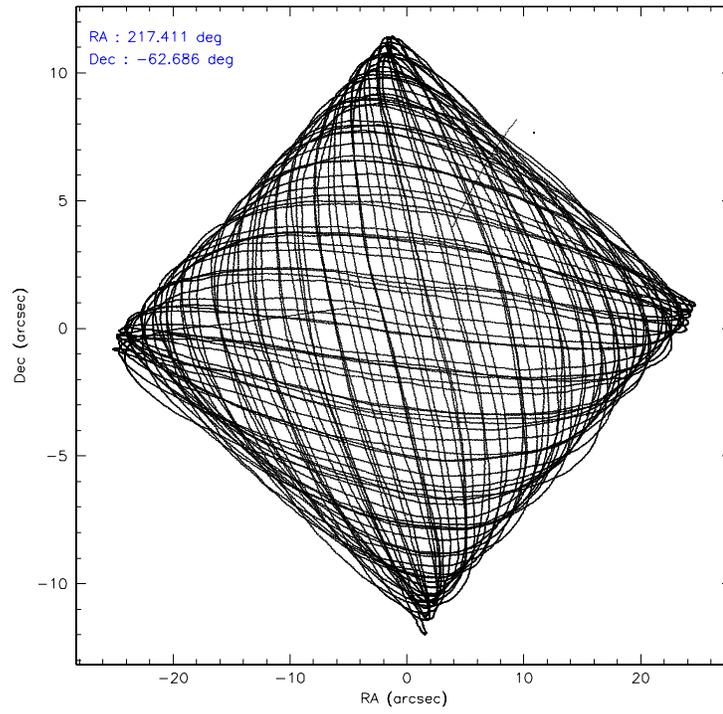
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	319113	388461	291227	361897	383840	282666
rejected events	282887	223769	257069	223845	291039	247809
rejected %	88%	57%	88%	61%	75%	87%

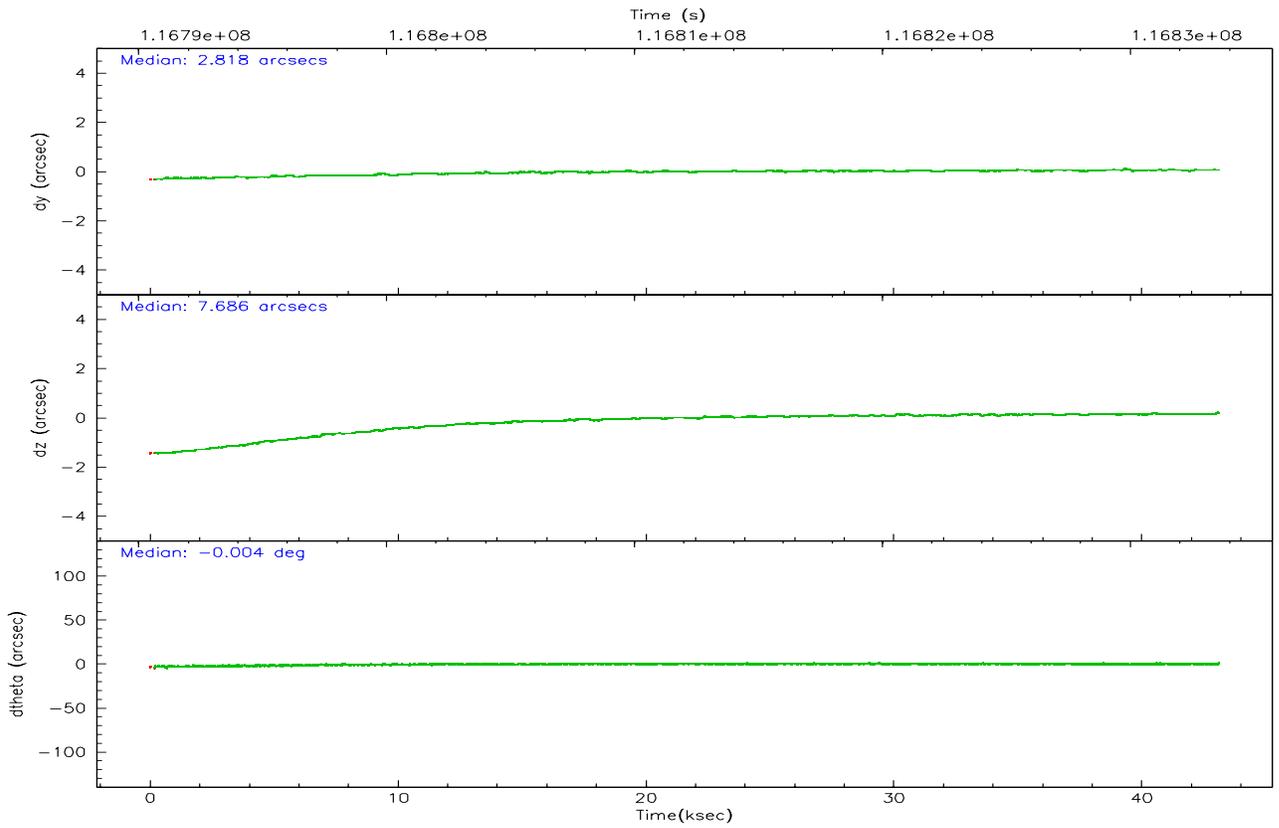
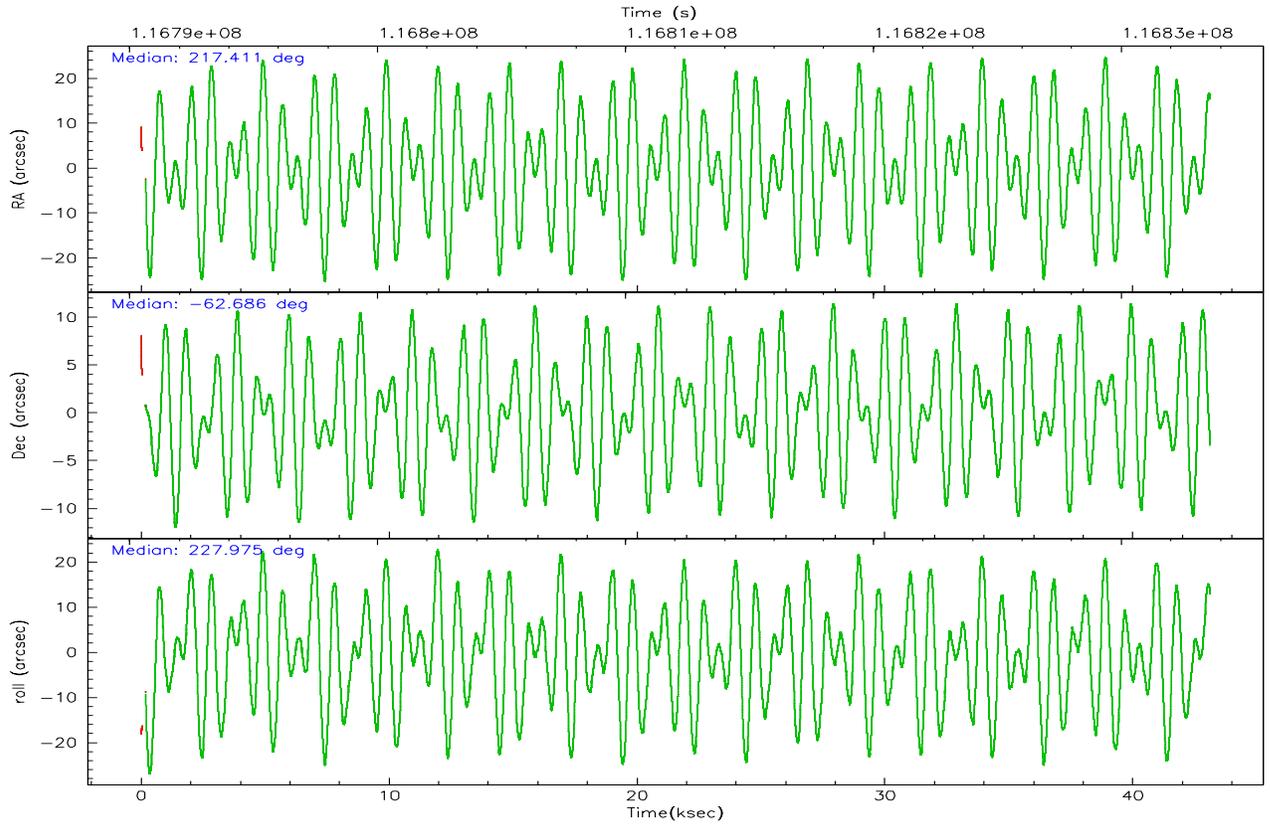
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	13868	6659	13620	8275	30972	13632
	4%	1%	4%	2%	8%	4%
grade 1 events	161	329	122	264	275	138
	0%	0%	0%	0%	0%	0%
grade 2 events	9593	51145	7380	33859	17425	7742
	3%	13%	2%	9%	4%	2%
grade 3 events	3158	4070	3245	7353	12425	3275
	0%	1%	1%	2%	3%	1%
grade 4 events	3044	3768	3174	7403	11213	3203
	0%	0%	1%	2%	2%	1%
grade 5 events	9502	18493	11791	24216	15131	12178
	2%	4%	4%	6%	3%	4%
grade 6 events	6598	99235	6778	81296	20872	7027
	2%	25%	2%	22%	5%	2%
grade 7 events	273189	204762	245117	199231	275527	235471
	85%	52%	84%	55%	71%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	HETG	HETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	217.423594	217.4118743498673	Subarray requested	NONE	NONE
Pointing Dec	-62.658738	-62.68547201579958	Alternating exposures requested	N	N
Pointing Roll	227.832503	227.978710695955	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	116790585.184000	116789644.44812			
Observation start date	2001-09-13T17:48:41	2001-09-13T17:34:04			
Observation end time	116833585.184000	116834231.94988			
Observation end date	2001-09-14T05:45:21	2001-09-14T05:57:11			
Read mode	TIMED	TIMED			

## 2.3 Aspect



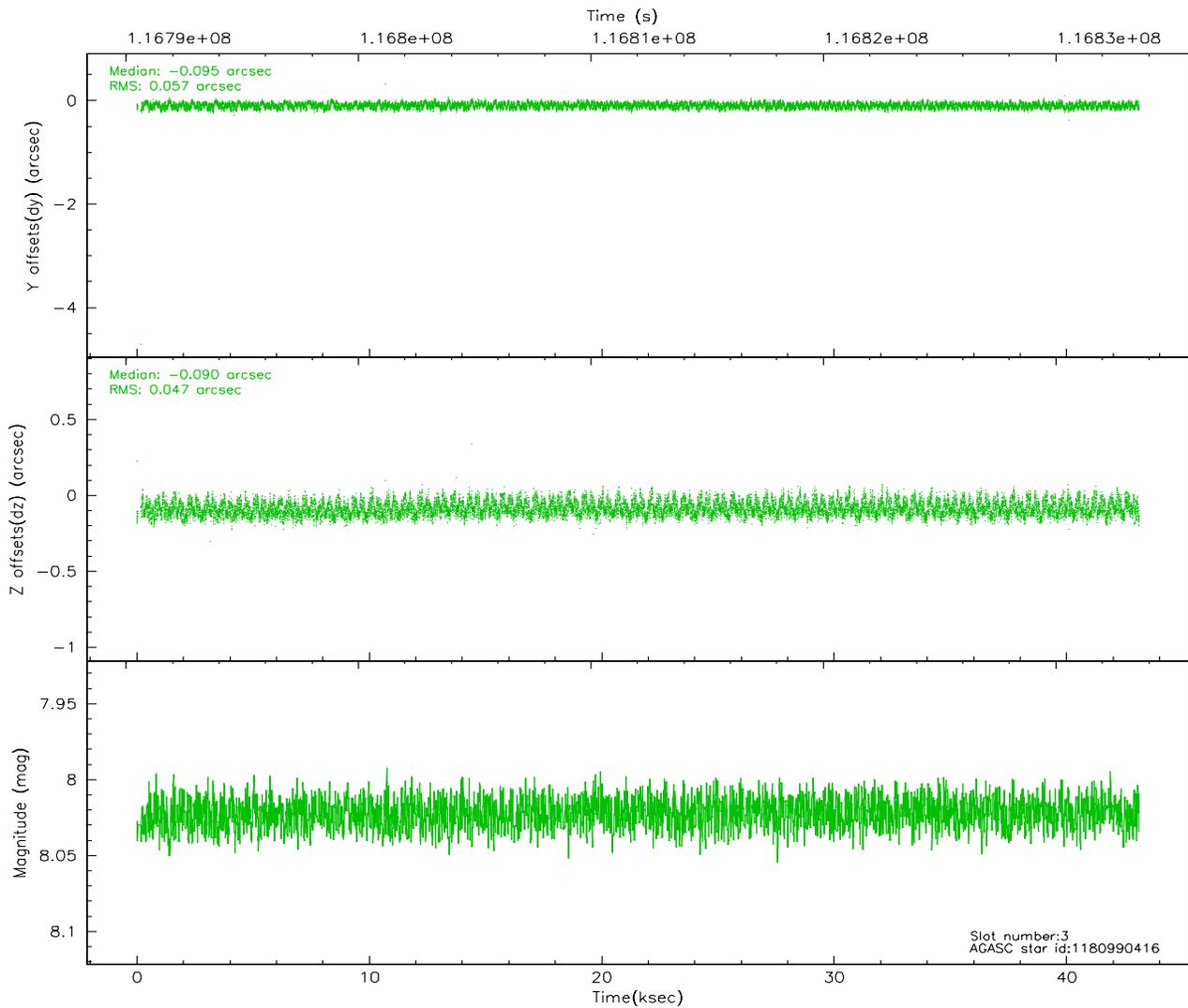
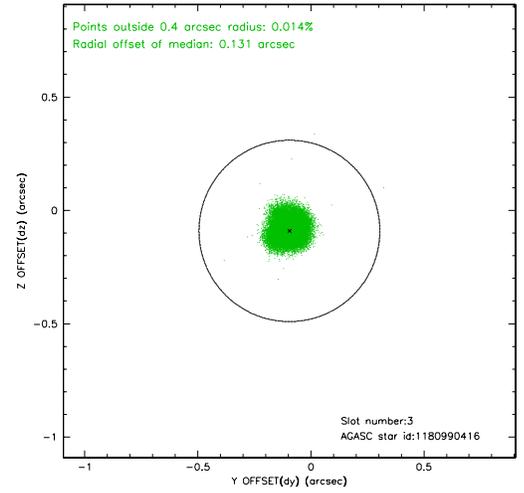
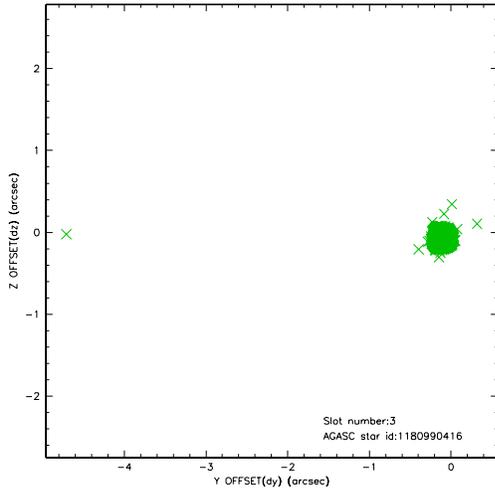


### Slot Statistics

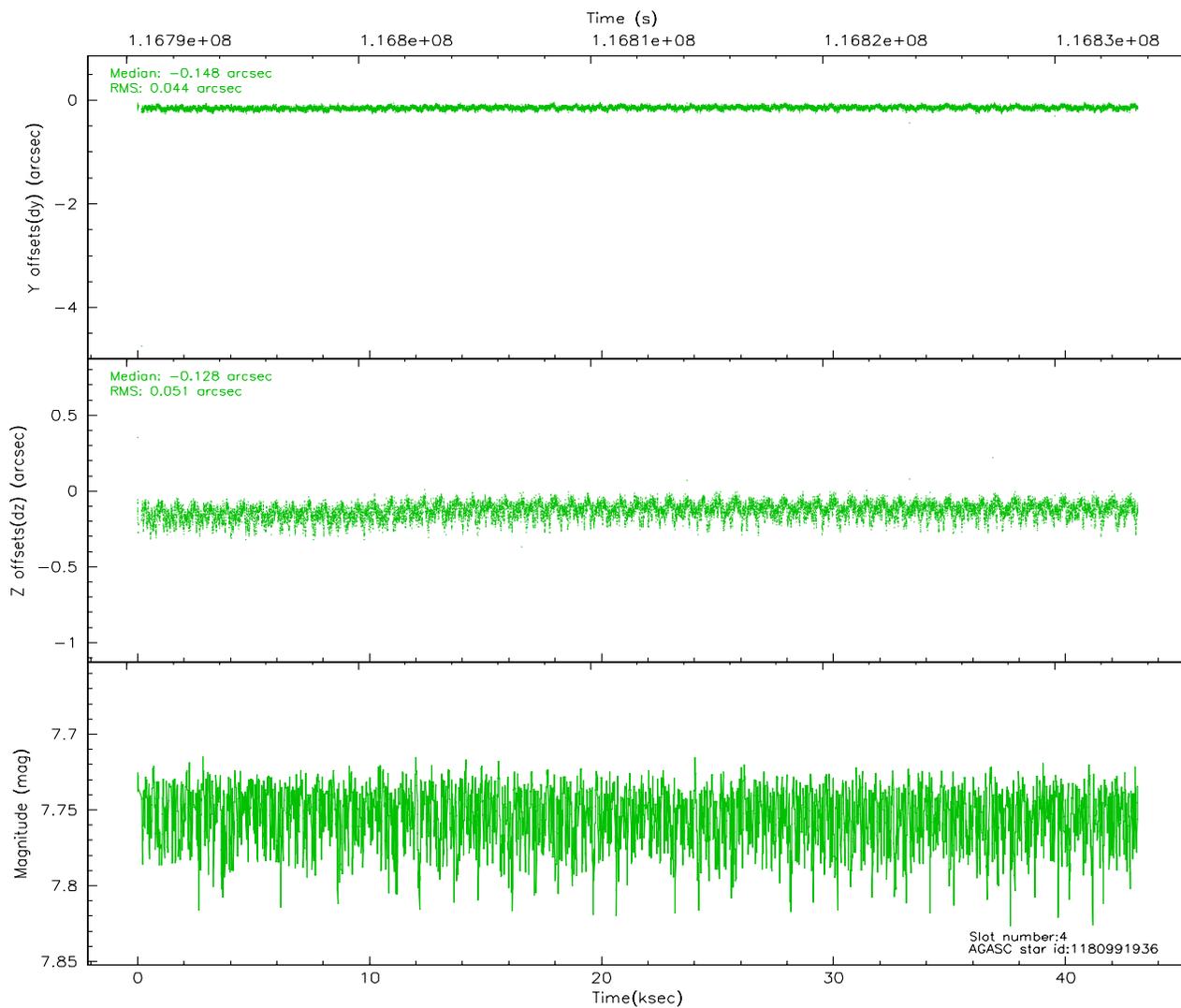
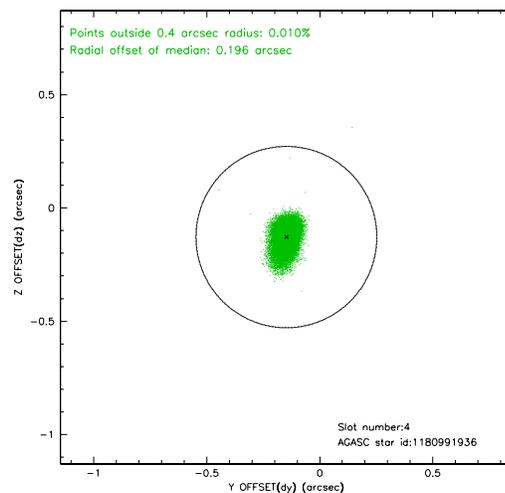
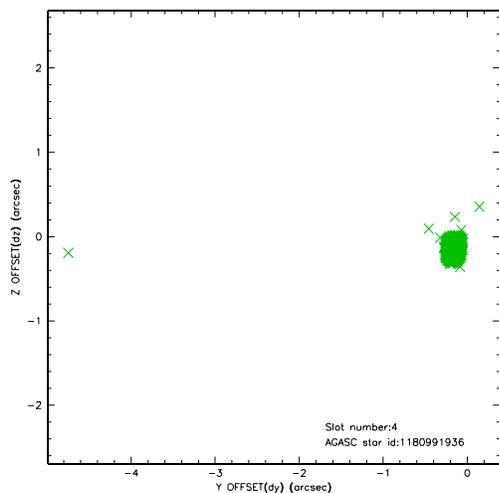
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	10481	0.044	0.051	0.012	0.054	0.000000	0.000000	-755.37	-1728.62
1	FID	ACIS-S-4	7.20	10481	-0.068	-0.017	0.011	0.027	0.000000	0.000000	2157.79	179.81
2	FID	ACIS-S-6	7.35	10481	-0.003	-0.025	0.013	0.034	0.000000	0.000000	406.57	817.20
3	GUIDE	1180990416	8.02	20961	-0.095	-0.090	0.073	0.109	217.597662	-62.154546	-1542.52	-1001.05
4	GUIDE	1180991936	7.75	20944	-0.148	-0.128	0.062	0.107	216.873169	-61.996737	-1139.91	-2286.61
5	GUIDE	1181107448	9.24	20952	-0.099	-0.059	0.086	0.138	219.084809	-62.741785	-1592.08	2254.47
6	GUIDE	1180997096	9.39	20937	0.342	0.277	0.090	0.148	217.536618	-63.566779	2300.68	2329.86
7	MONITOR		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

## 2.4 Star Slots

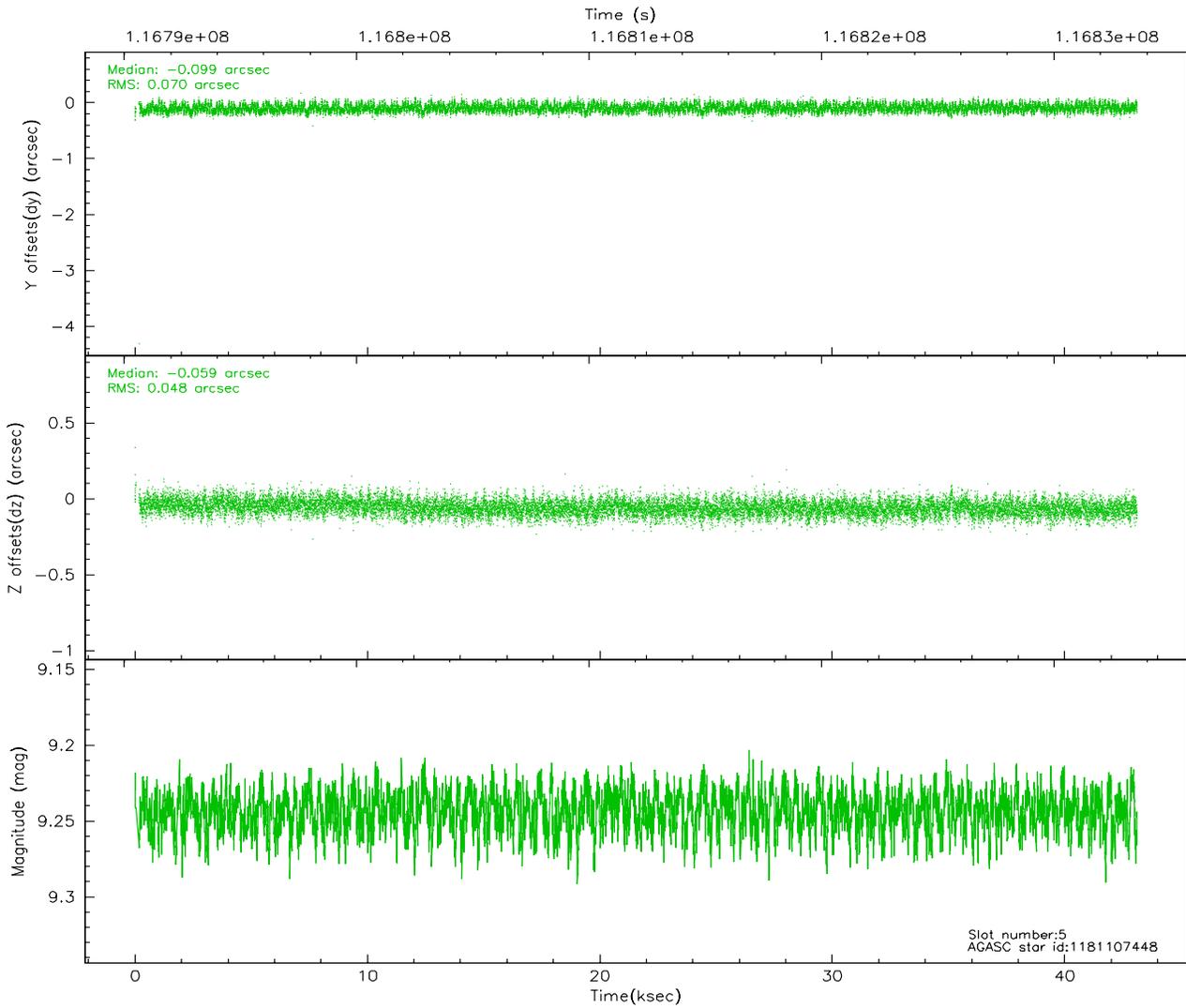
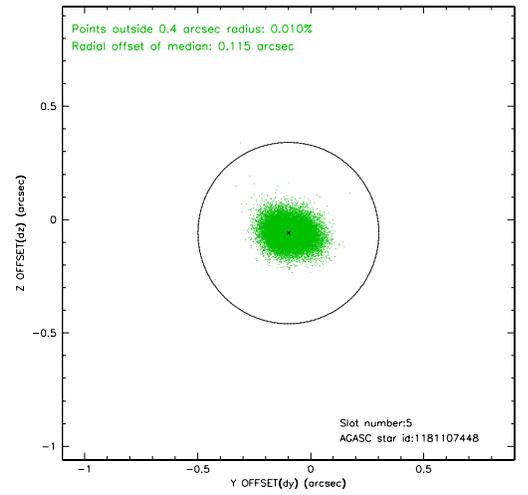
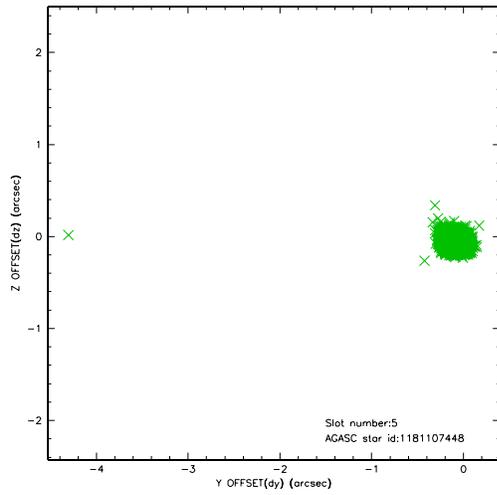
### 2.4.1 Slot 3



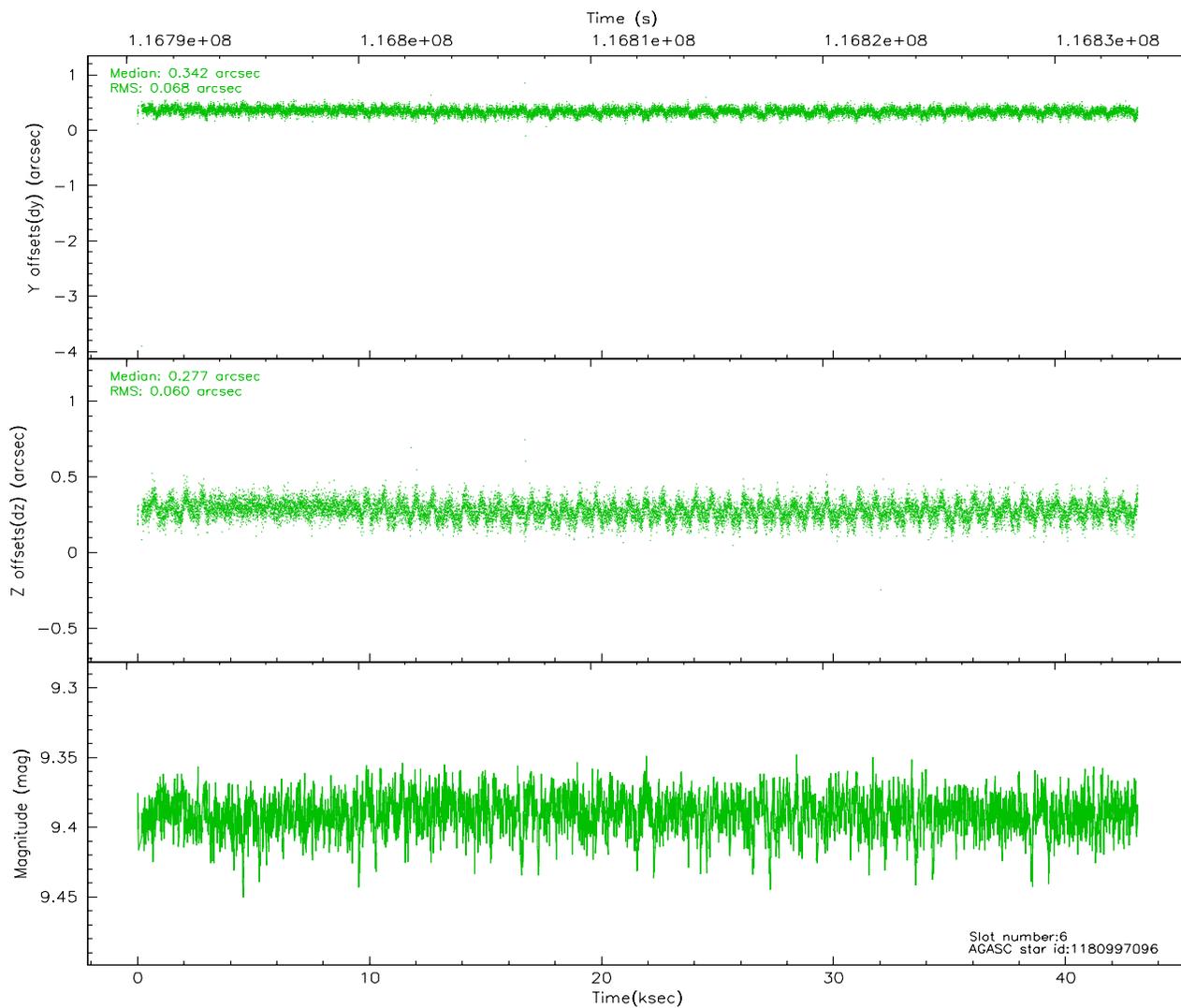
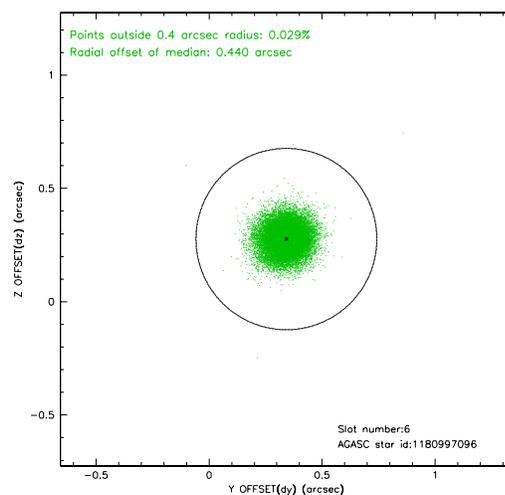
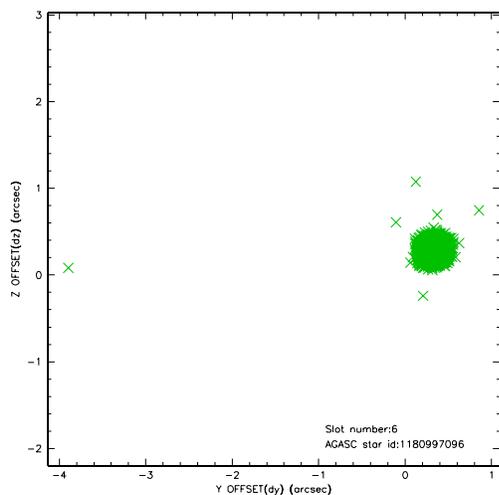
## 2.4.2 Slot 4



### 2.4.3 Slot 5

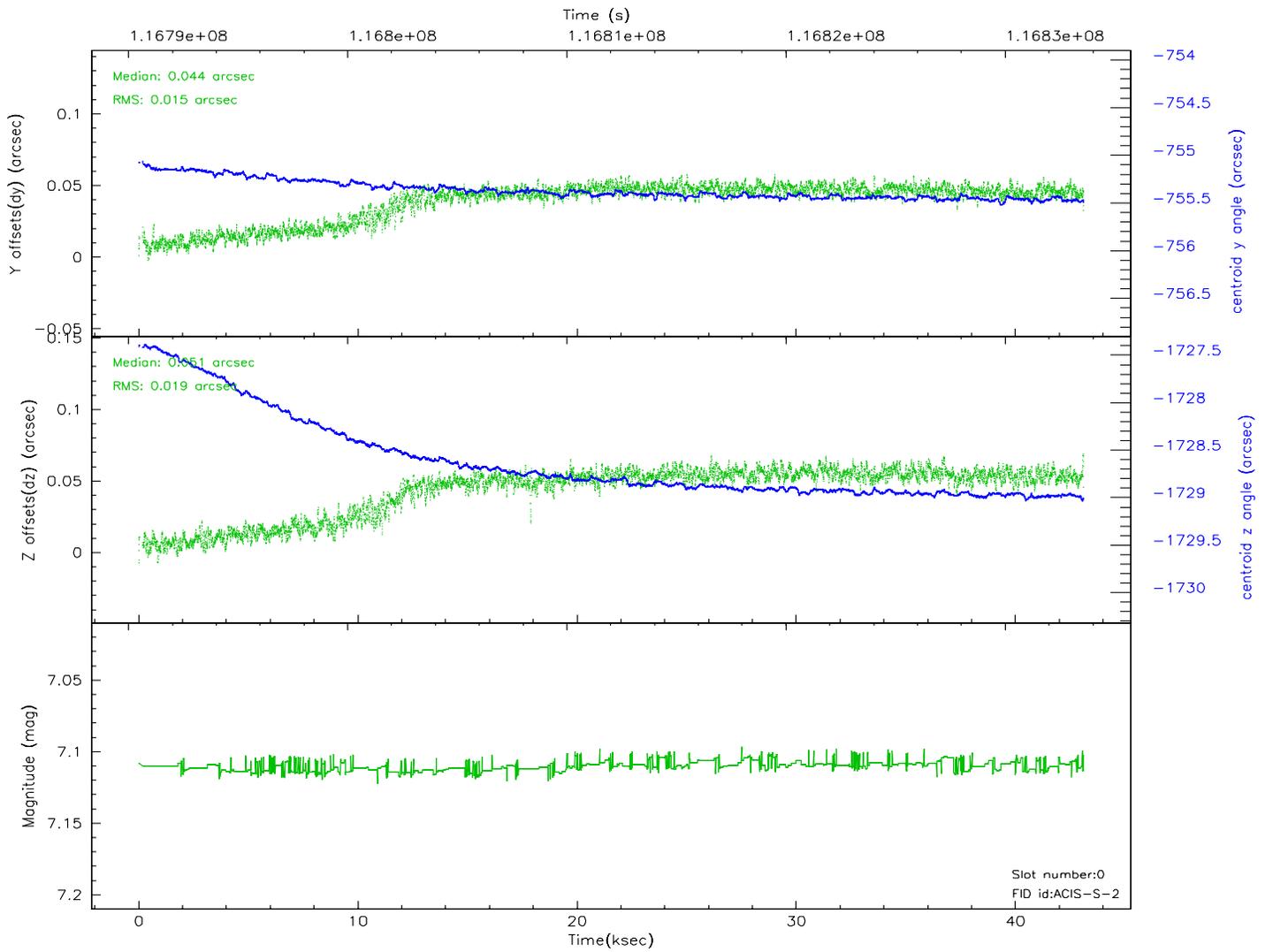
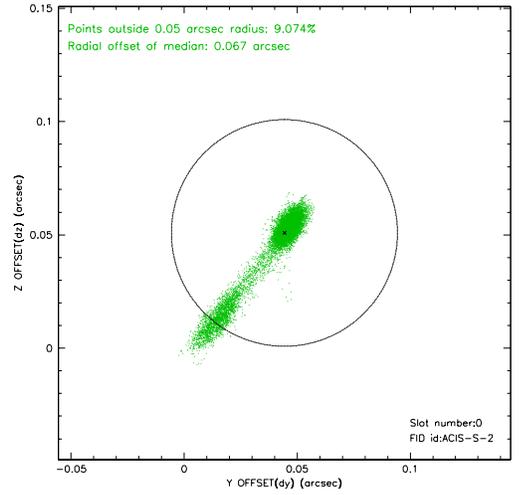
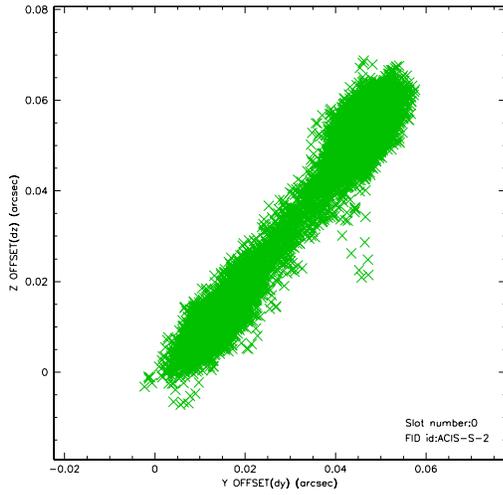


### 2.4.4 Slot 6

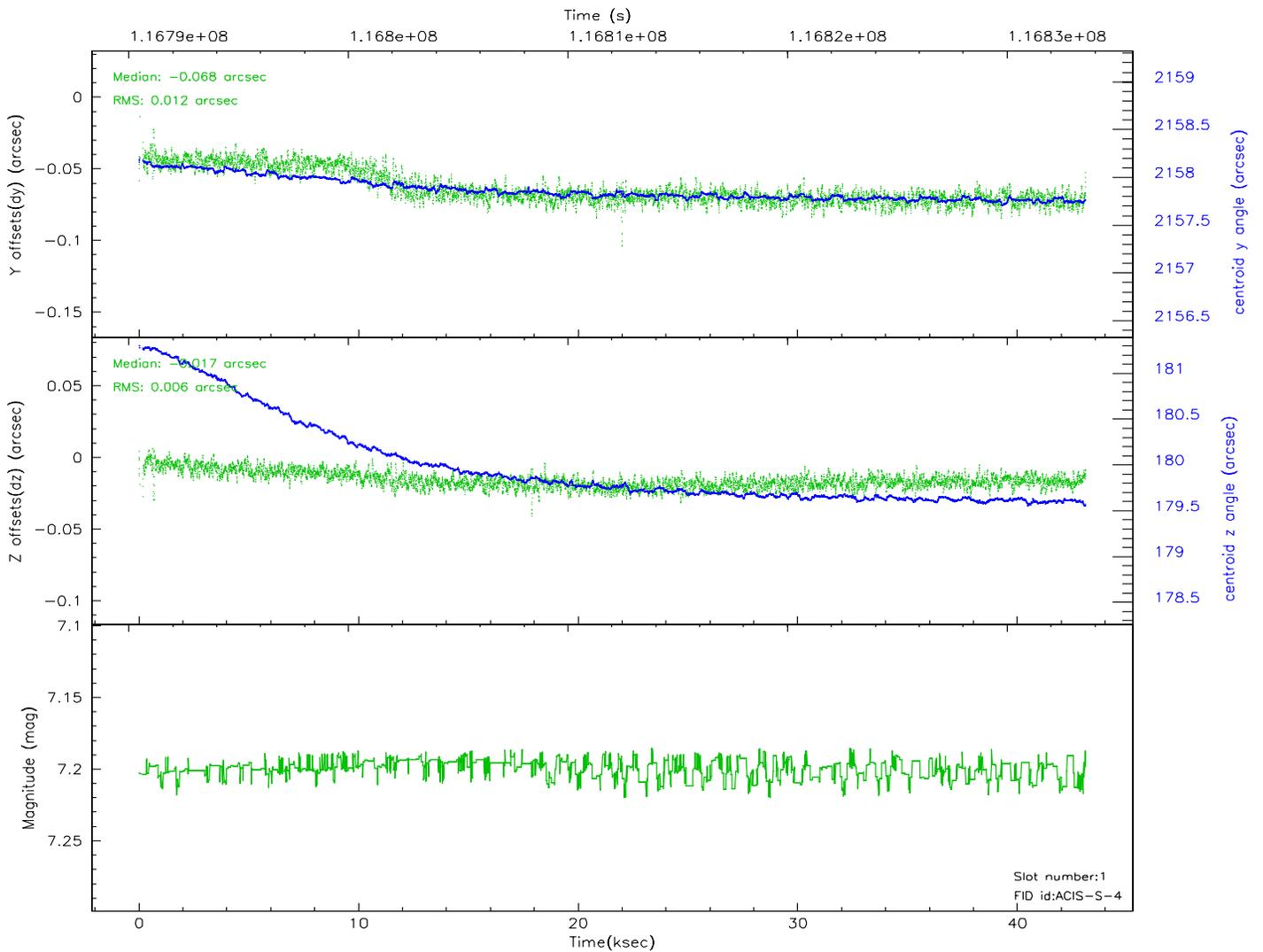
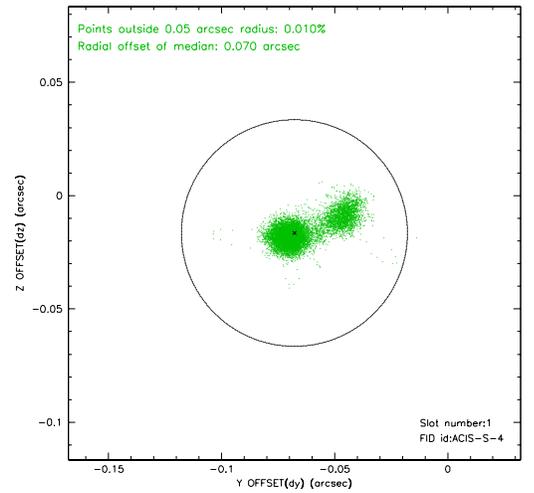
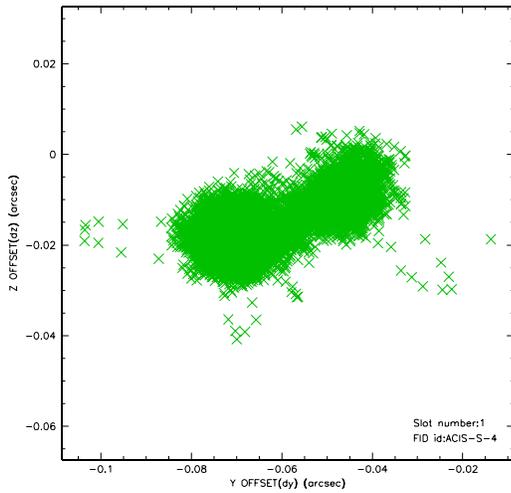


## 2.5 FID Slots

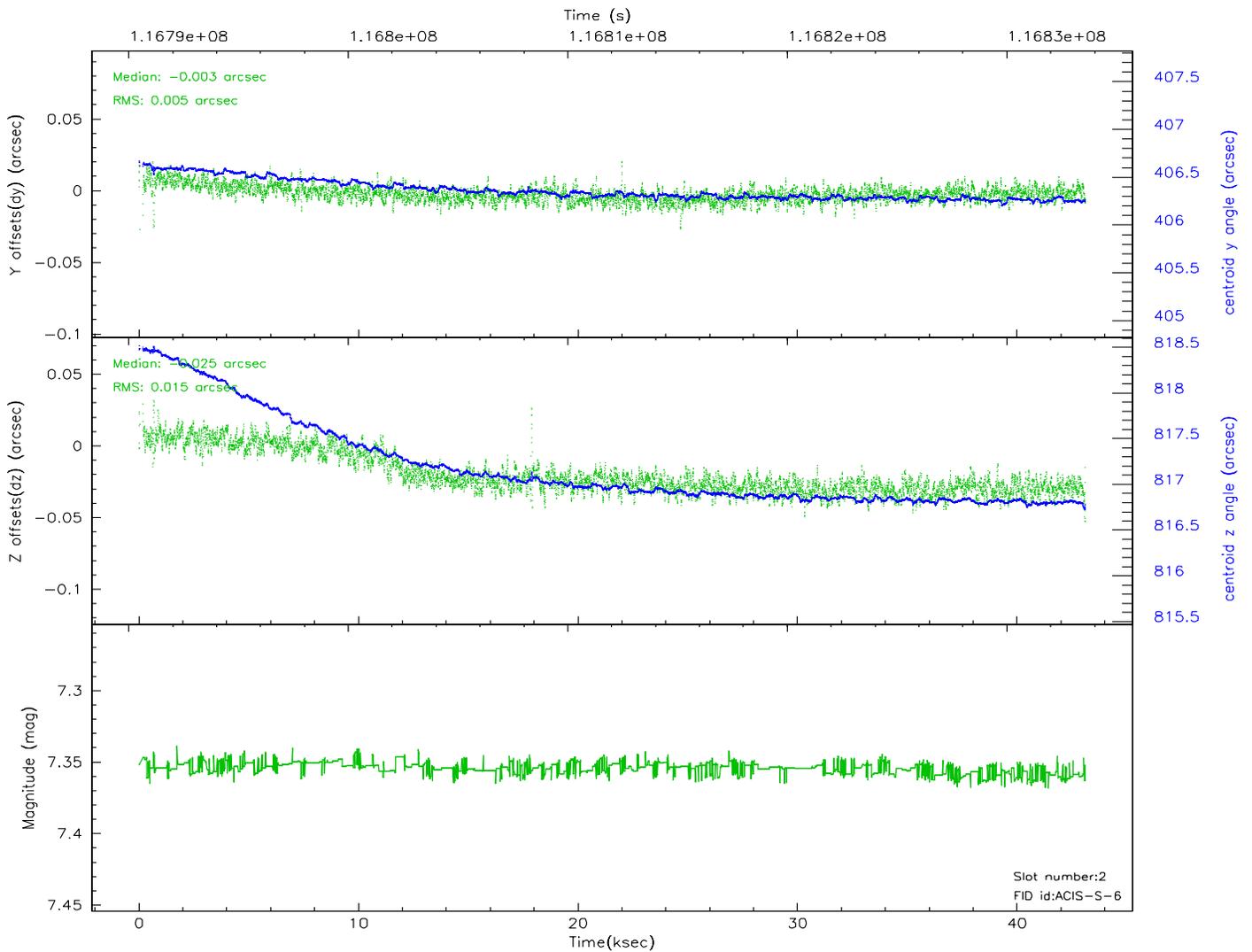
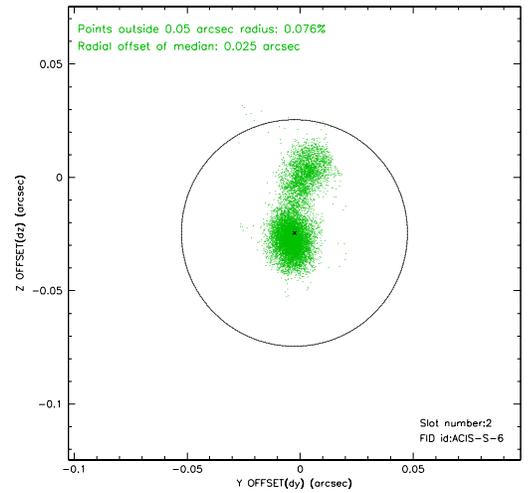
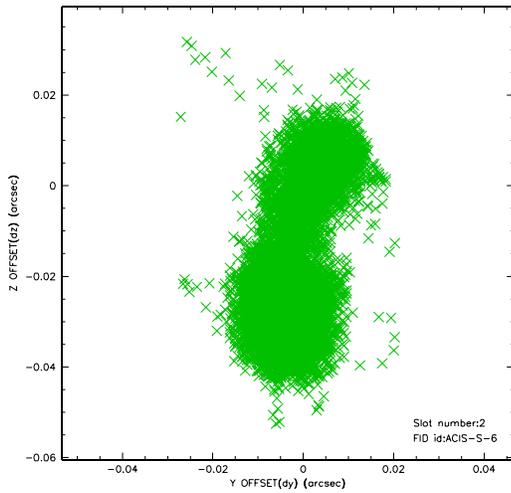
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

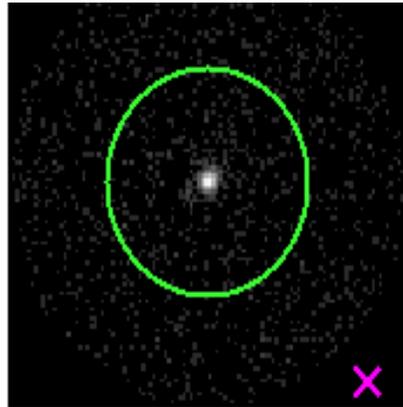


# 3 Gratings

## 3.1 HEG Arm



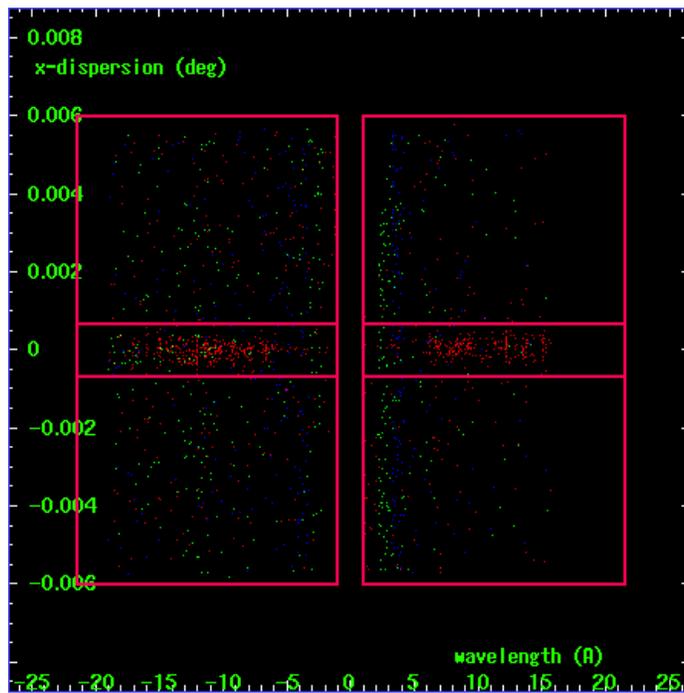
HEG Order Sort 123



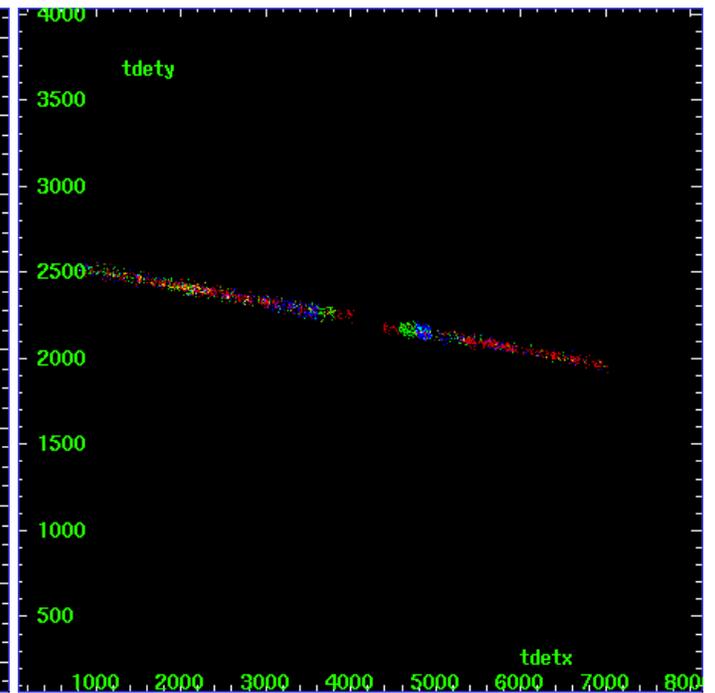
HEG Zero Order



HEG Order Sort ALL

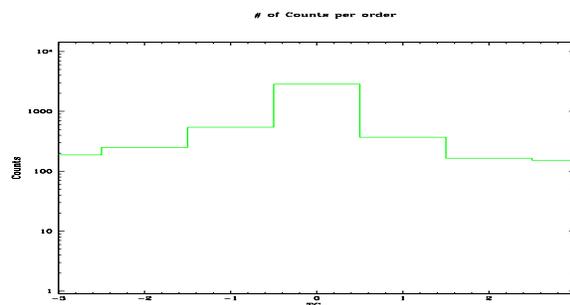


Spot Image HEG

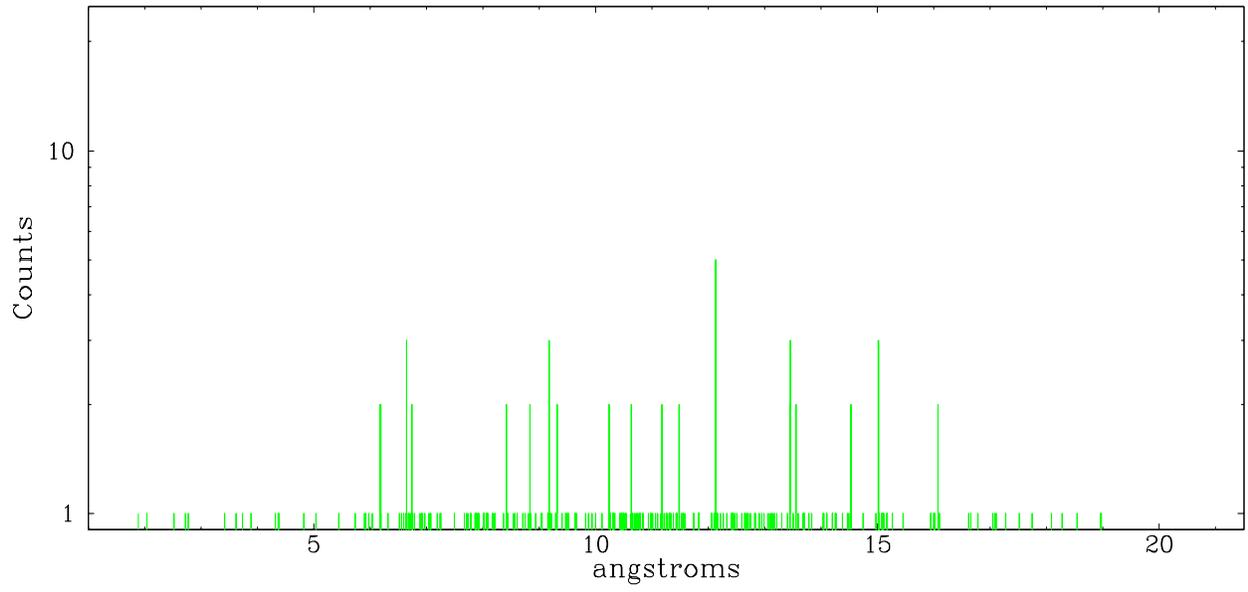


Full Detector HEG

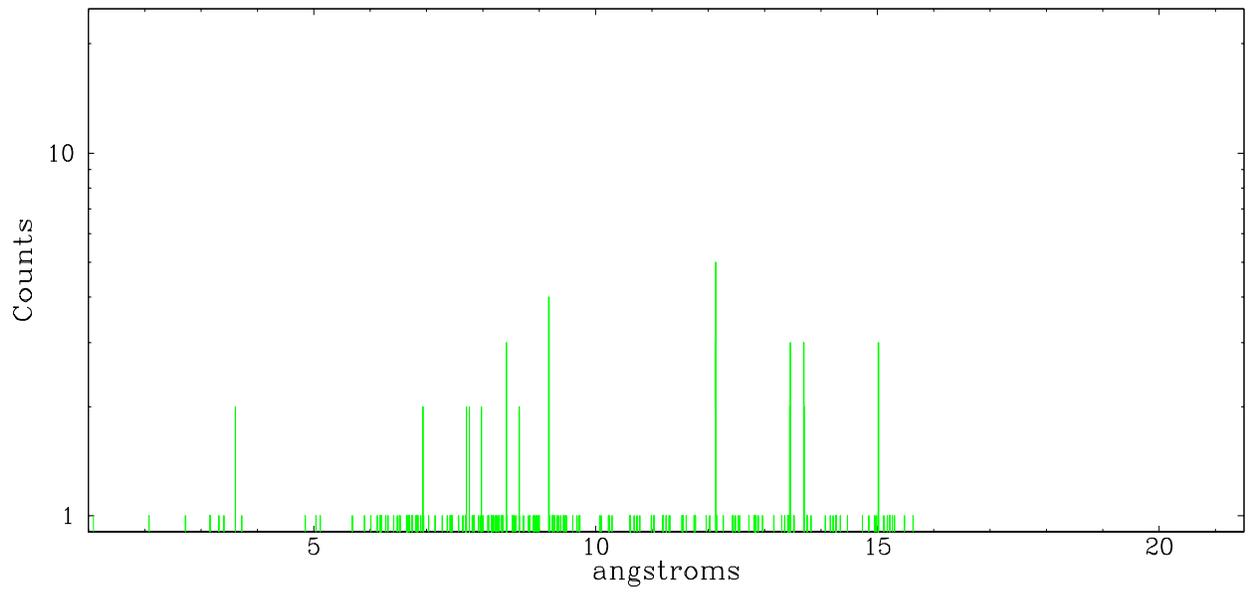
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	187	250	545	2838	370	165	153



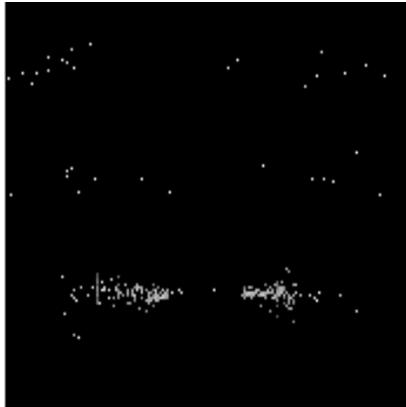
heg order -1



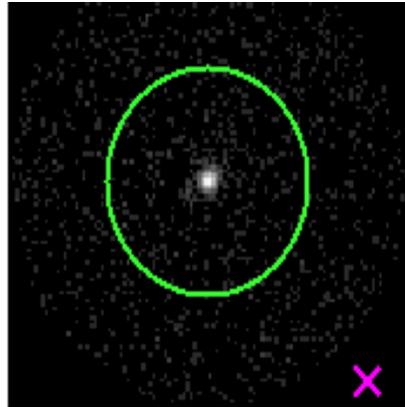
heg order +1



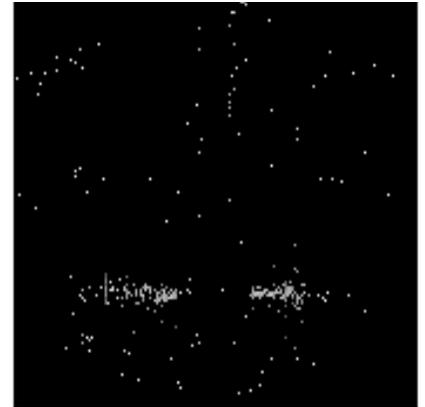
### 3.2 MEG Arm



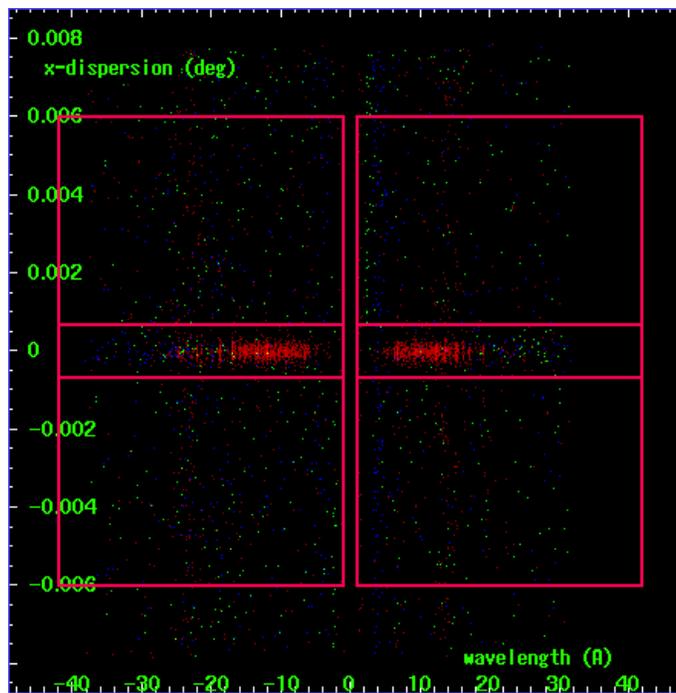
MEG Order Sort 123



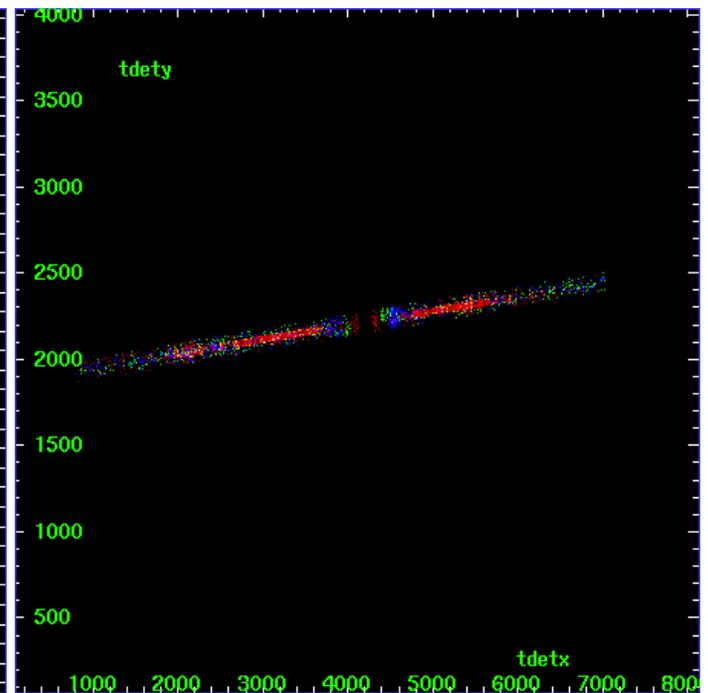
MEG Zero Order



MEG Order Sort ALL

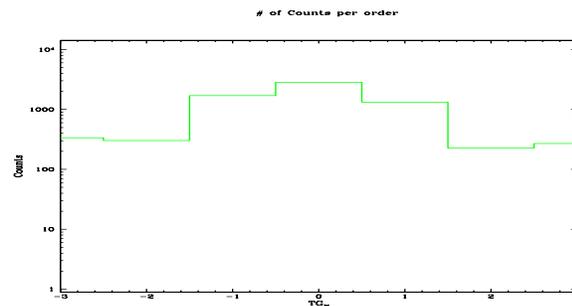


Spot Image MEG

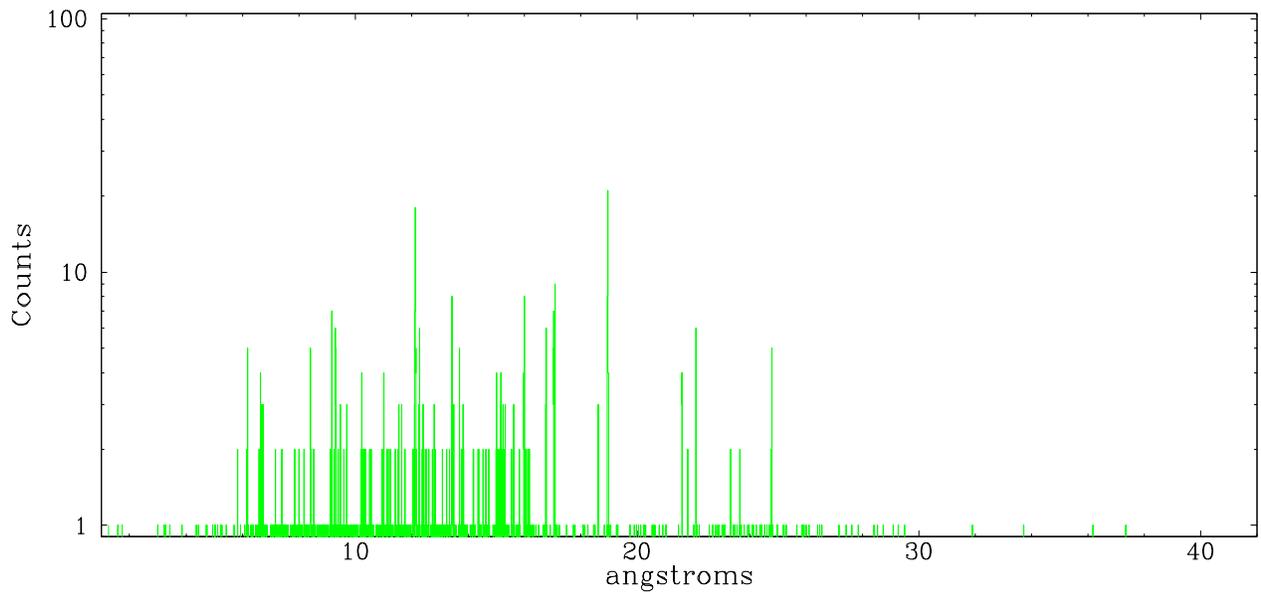


Full Detector MEG

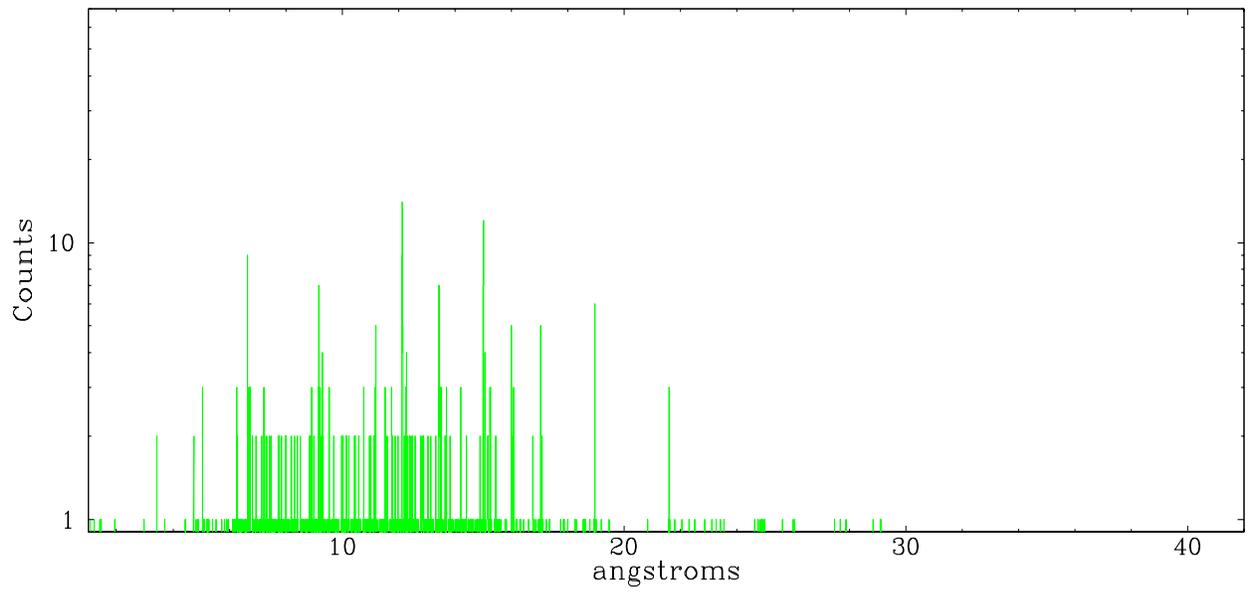
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	336	302	1694	2838	1321	226	269



meg order -1



meg order +1



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.01.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.937

## A.2 Comments

Photometry monitor method used.

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for approximately the first approximately 2 ksec of this observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.