

# V&V Reference Report

## L2 ASCDS Version : 8.4.3.1

Observation 7320 - L2 Version 2  
Chandra X-Ray Center

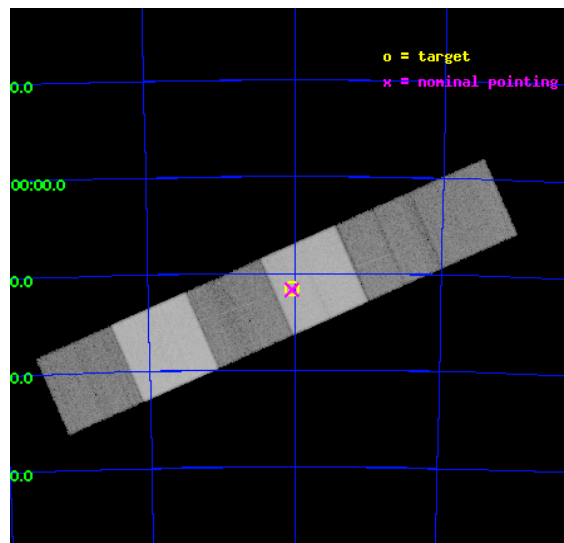
L2 Processing Date : Mar 30 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>3</b>	<b>Gratings</b>	<b>17</b>
3.1	HEG Arm . . . . .	17
3.2	MEG Arm . . . . .	19
<b>A</b>	<b>Summary</b>	<b>21</b>
A.1	Status . . . . .	21
A.2	Comments . . . . .	21

# 1 Front

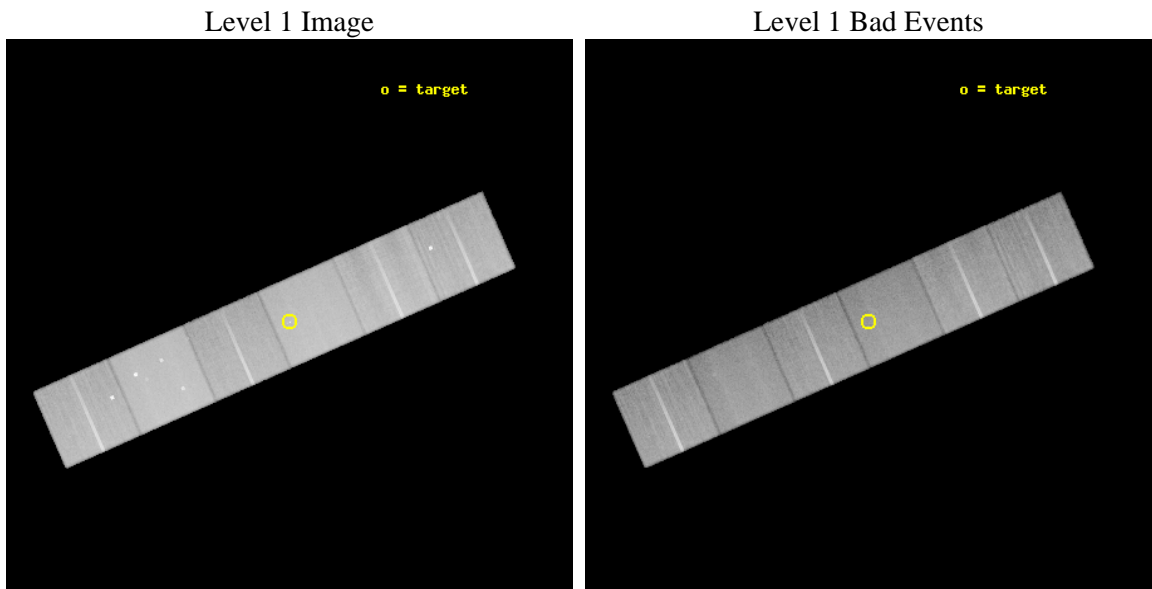
seq_num	200418	Sequence number
obs_id	7320	Observation id
title	Young Stellar Objects in the epsilon Chamaeleontis Group: Probing Proto-planetary Disk Systems in the HD 102437 Field.	Proposal title
observer	Prof Claude Canizares	Principal investigator
object	HD104237A (DX Cha)	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.02125	Observer's specified target RA [deg]
dec_targ	-78.192944	Observer's specified target Dec [deg]
ra_nom	180.02357092275	Nominal RA [deg]
dec_nom	-78.194972750007	Nominal Dec [deg]
roll_nom	336.15889417393	Nominal Roll [deg]
revision	2	Processing version of data
ontime	44398.621858478	Sum of GTIs [s]
livetime	43836.419774865	Livetime [s]
ontime4	44398.662898481	Sum of GTIs [s]
ontime5	44398.580818474	Sum of GTIs [s]
ontime6	44392.057847589	Sum of GTIs [s]
ontime7	44398.621858478	Sum of GTIs [s]
ontime8	44395.257768154	Sum of GTIs [s]
ontime9	44379.011697143	Sum of GTIs [s]
l2events	614959	Number of level 2 events



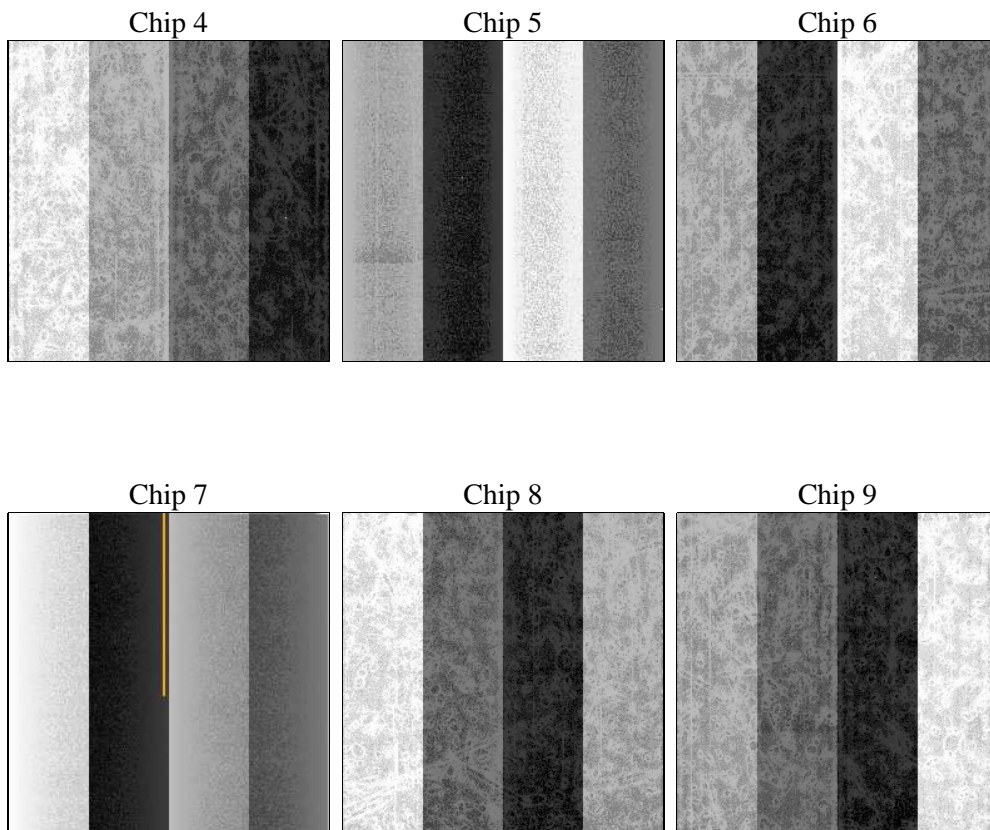
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	44446.862000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	44398.621858478	Sum of GTIs [s]
caldbver	4.4.8	&#160	ontime4	44398.662898481	Sum of GTIs [s]
date	2012-03-30T06:37:49	Date and time of file creation	ontime5	44398.580818474	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	44392.057847589	Sum of GTIs [s]
			ontime7	44398.621858478	Sum of GTIs [s]
			ontime8	44395.257768154	Sum of GTIs [s]
			ontime9	44379.011697143	Sum of GTIs [s]
			l1events	2780577	Number of level 1 events

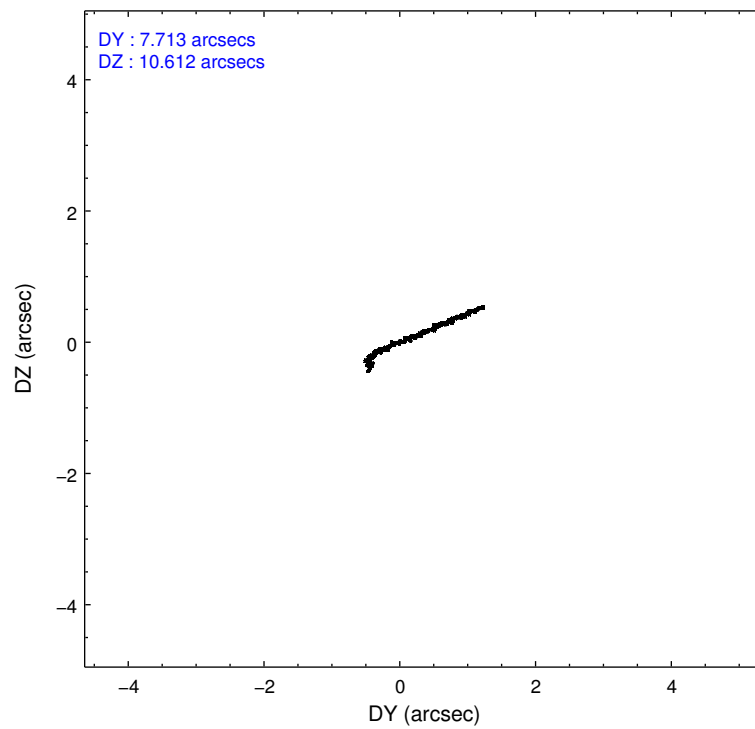
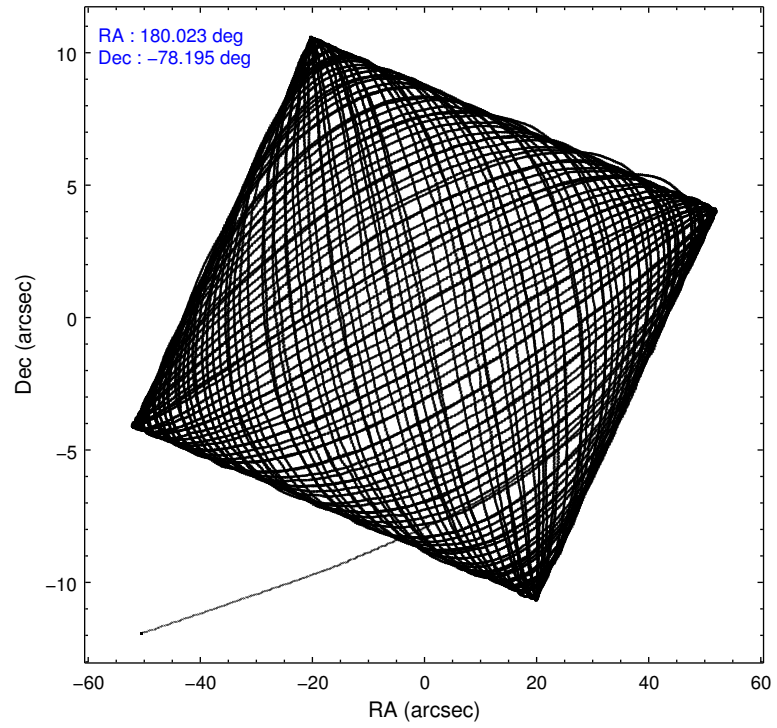
### 2.1.4 Events

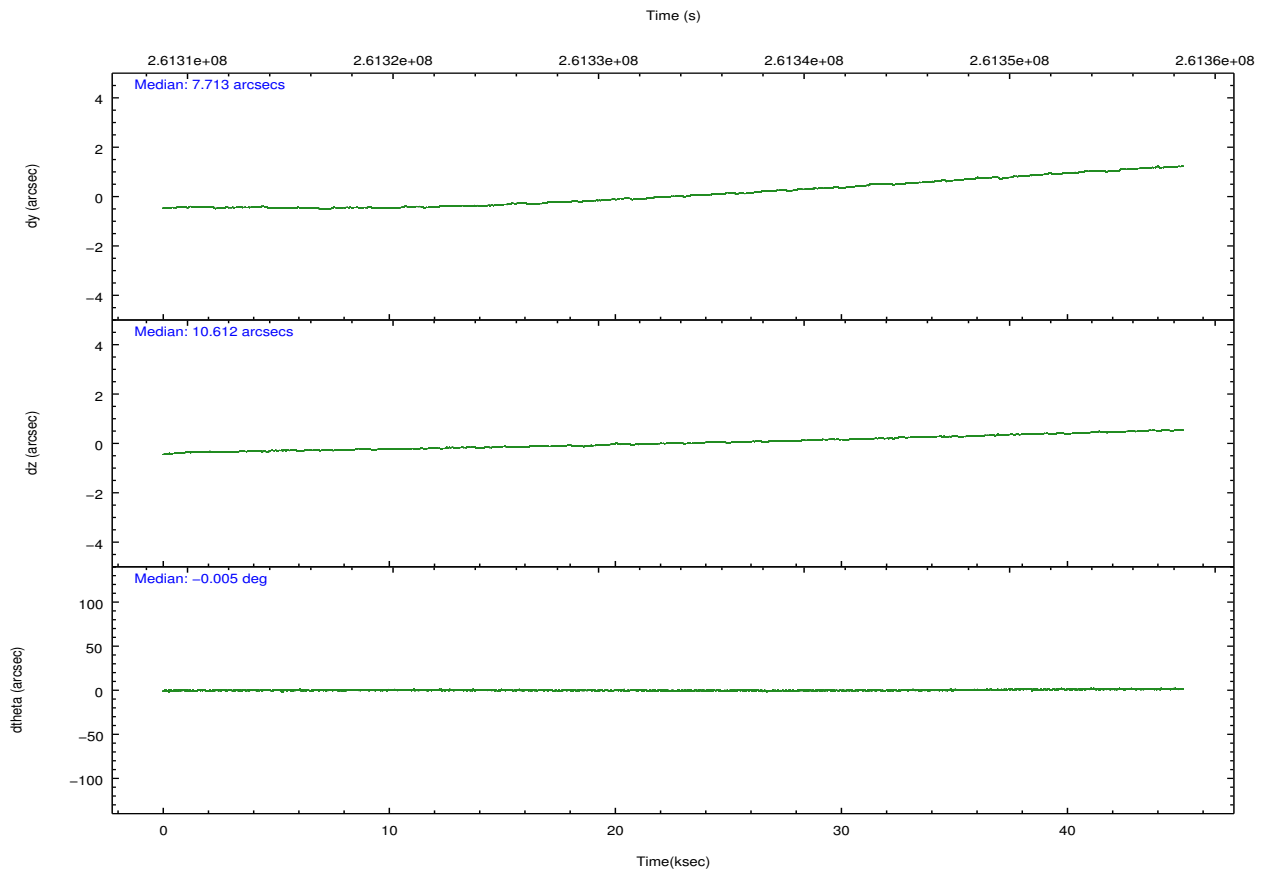
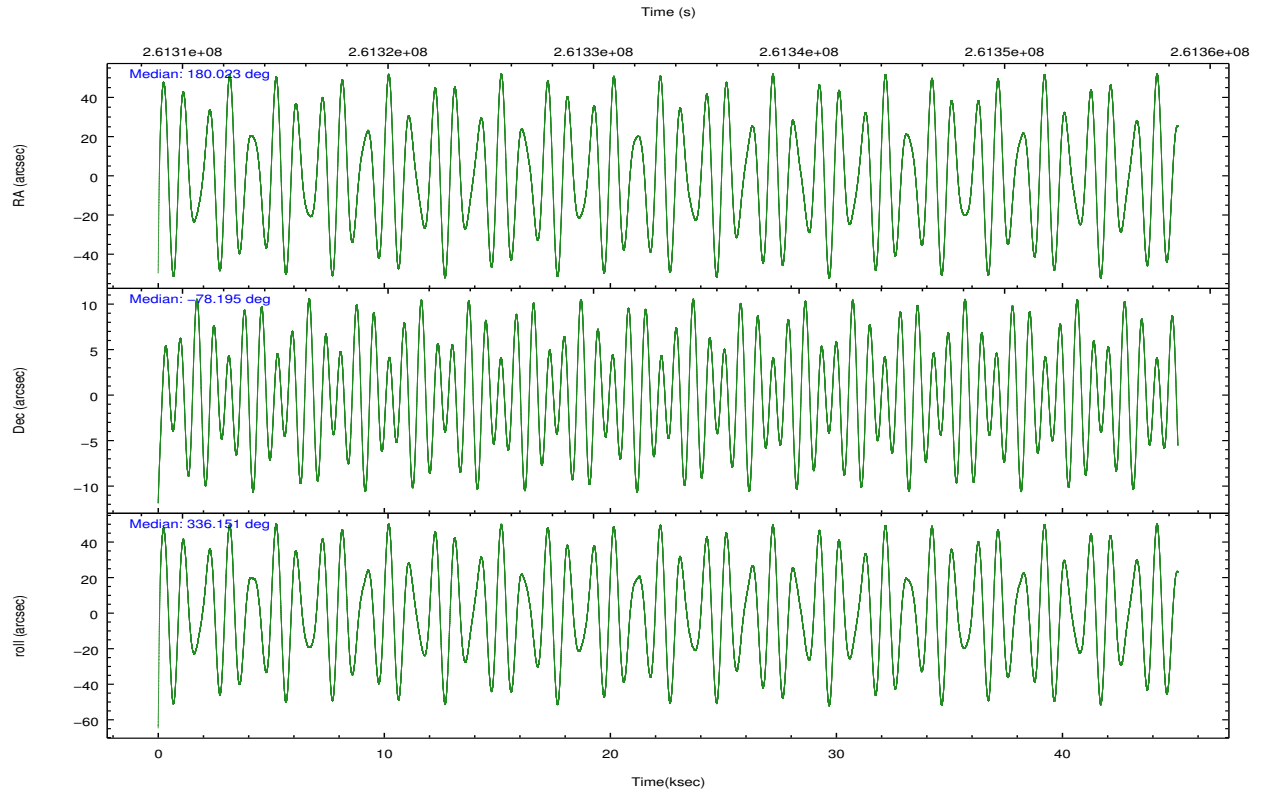
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	433060	572850	382511	517192	488048	386916	grade 0 events	26933	23754	17306	18365	32402	24597
rejected events	379138	311777	337666	302880	382916	334699		6%	4%	4%	3%	6%	6%
rejected %	87%	54%	88%	58%	78%	86%	grade 1 events	513	1076	185	523	346	247
								0%	0%	0%	0%	0%	0%
							grade 2 events	10010	79203	9734	43007	23474	9256
								2%	13%	2%	8%	4%	2%
							grade 3 events	4834	9562	4420	18596	10936	4757
								1%	1%	1%	3%	2%	1%
							grade 4 events	4612	9319	4268	18517	10092	4608
								1%	1%	1%	3%	2%	1%
							grade 5 events	17129	41133	17830	49555	23276	19112
								3%	7%	4%	9%	4%	4%
							grade 6 events	7540	139267	9123	115851	28237	9003
								1%	24%	2%	22%	5%	2%
							grade 7 events	361489	269536	319645	252778	359285	315336
								83%	47%	83%	48%	73%	81%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
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
[deg] Pointing RA	179.891363	180.0235709227538	Subarray requested	NONE	NONE
[deg] Pointing Dec	-78.198264	-78.19497275000651	Alternating exposures requested	N	N
[deg] Pointing Roll	335.872861	336.1588941739291	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	261311733.184000	261310386.71456			
Observation start date	2006-04-13T10:34:28	2006-04-13T10:13:06			
[s] Observation end time (MET)	261356180.184000	261356403.5792			
Observation end date	2006-04-13T22:55:15	2006-04-13T23:00:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



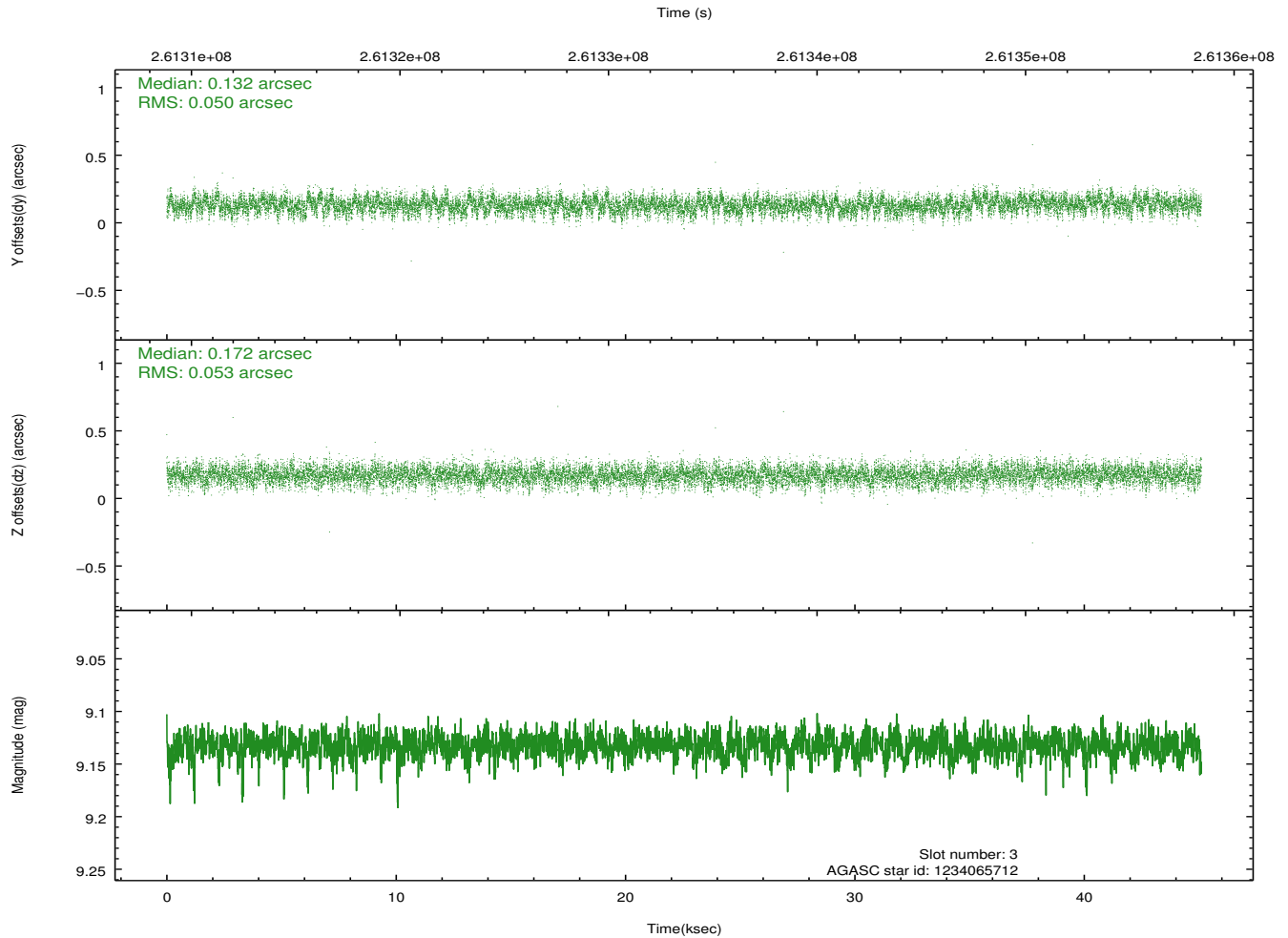
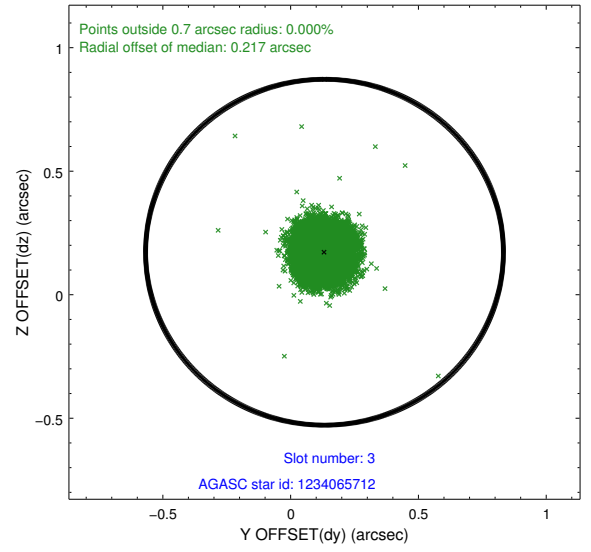
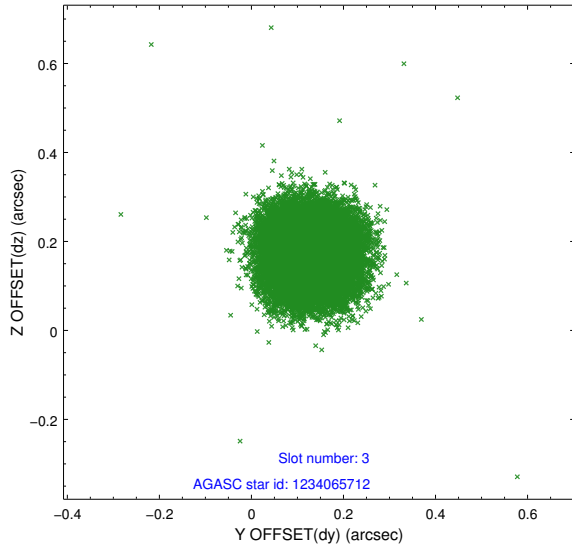


### Slot Statistics

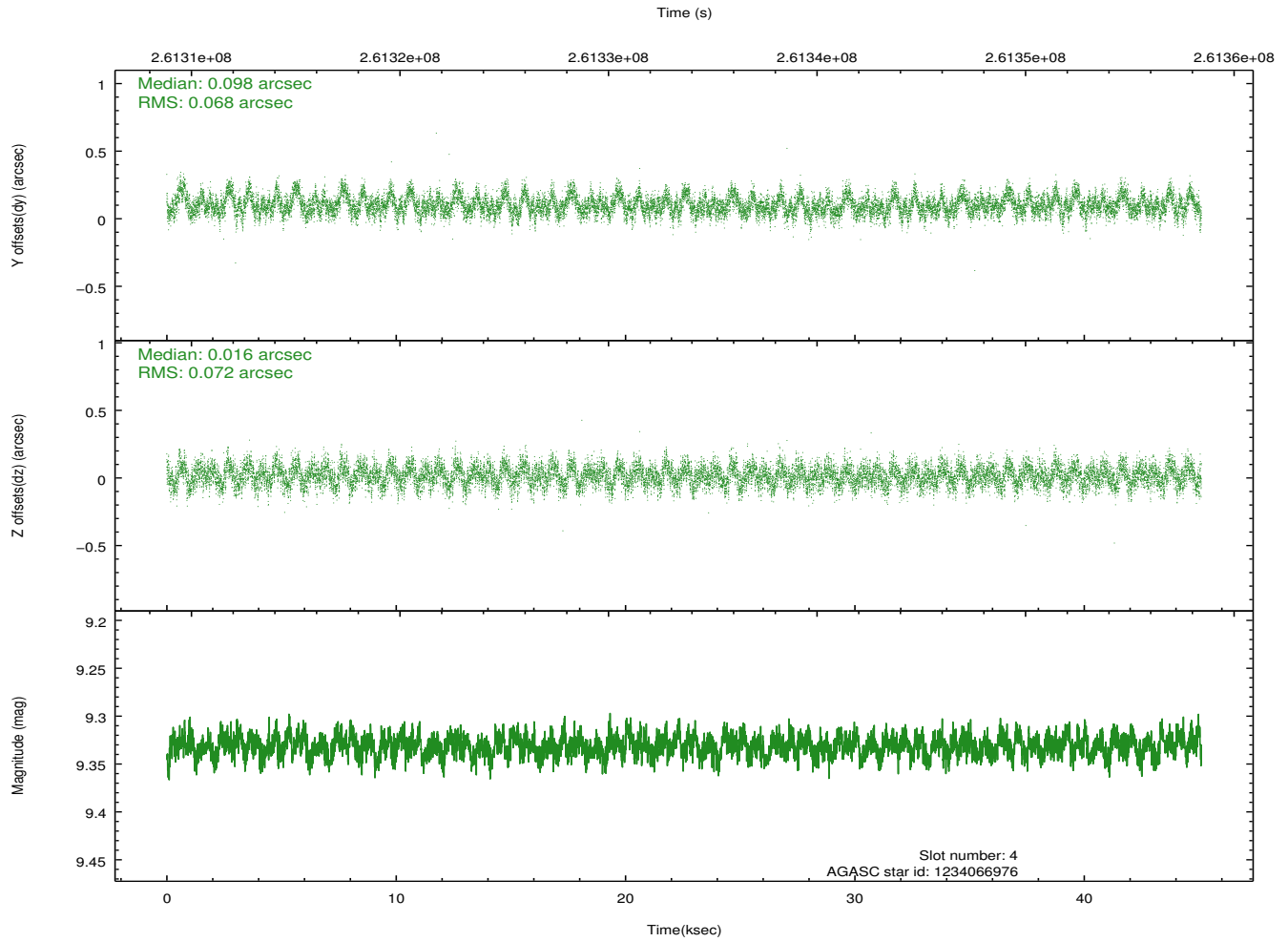
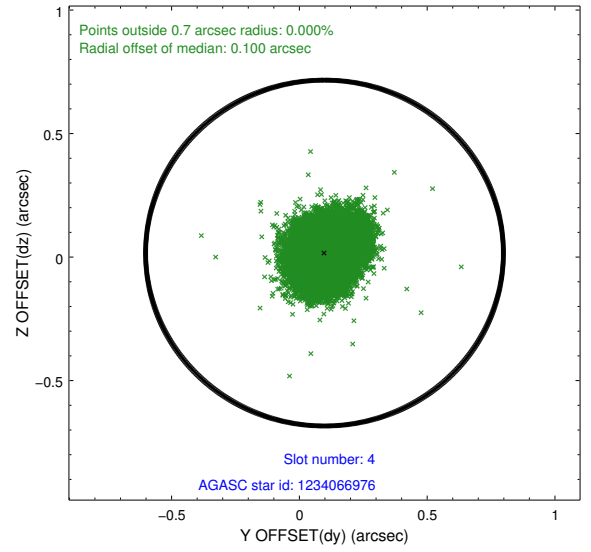
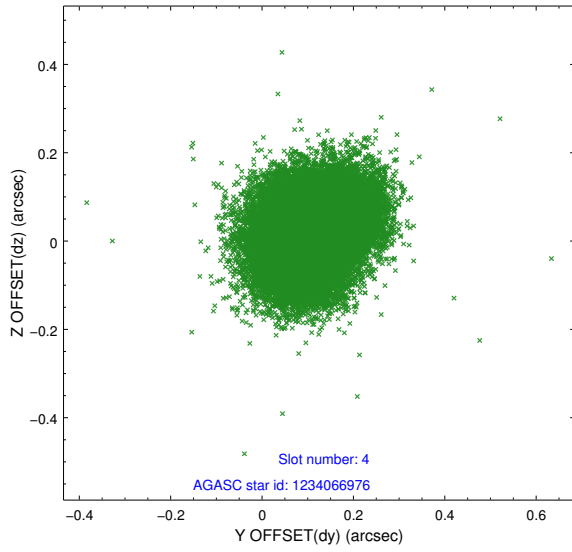
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	11004	-0.050	-0.024	0.011	0.020	0.000000	0.000000	-760.62	-1731.90
1	FID	ACIS-S-4	7.21	11003	0.120	0.031	0.020	0.030	0.000000	0.000000	2152.78	176.71
2	FID	ACIS-S-5	7.23	11004	-0.101	0.003	0.026	0.041	0.000000	0.000000	-1813.57	170.26
3	GUIDE	1234065712	9.13	21993	0.132	0.172	0.078	0.125	176.768042	-78.442733	-1669.84	-1778.57
4	GUIDE	1234066976	9.33	21985	0.098	0.016	0.106	0.168	177.744129	-78.286175	-1290.23	-956.75
5	GUIDE	1234181360	7.80	22001	-0.104	0.046	0.070	0.112	181.773022	-78.741114	2014.63	-1262.40
6	GUIDE	1234188184	9.07	21994	-0.080	-0.316	0.105	0.161	182.228918	-77.688140	901.27	2376.21
7	GUIDE	1234704160	7.22	22003	-0.055	0.087	0.083	0.133	182.282049	-78.781313	2400.11	-1262.34

## 2.4 Star Slots

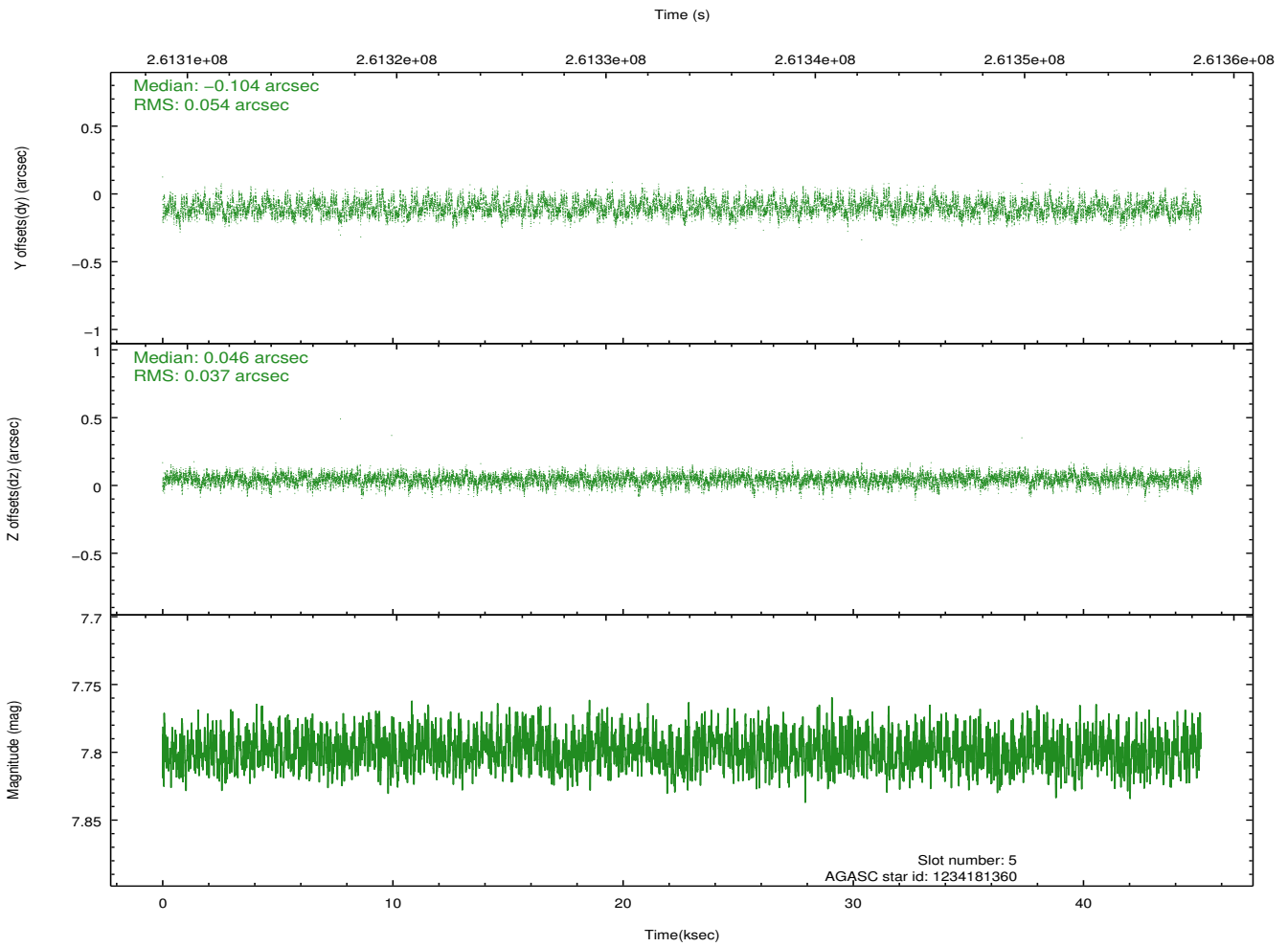
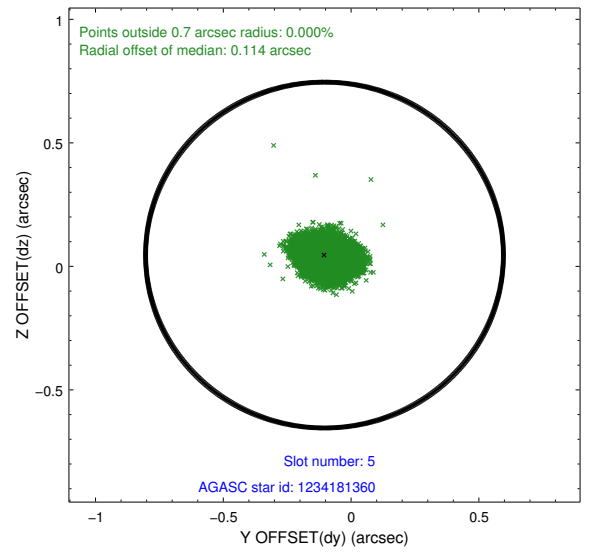
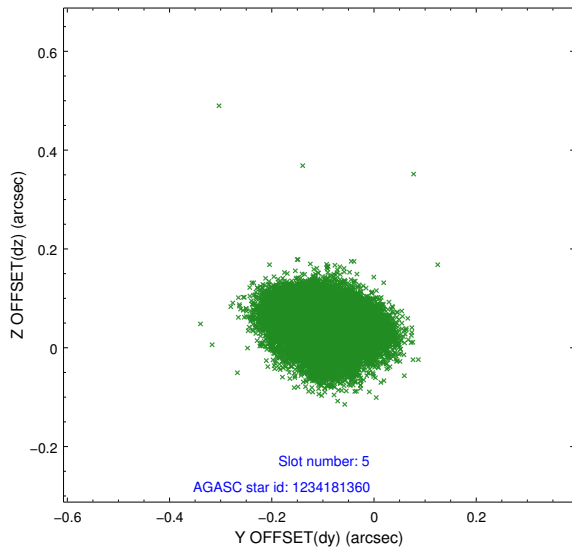
### 2.4.1 Slot 3



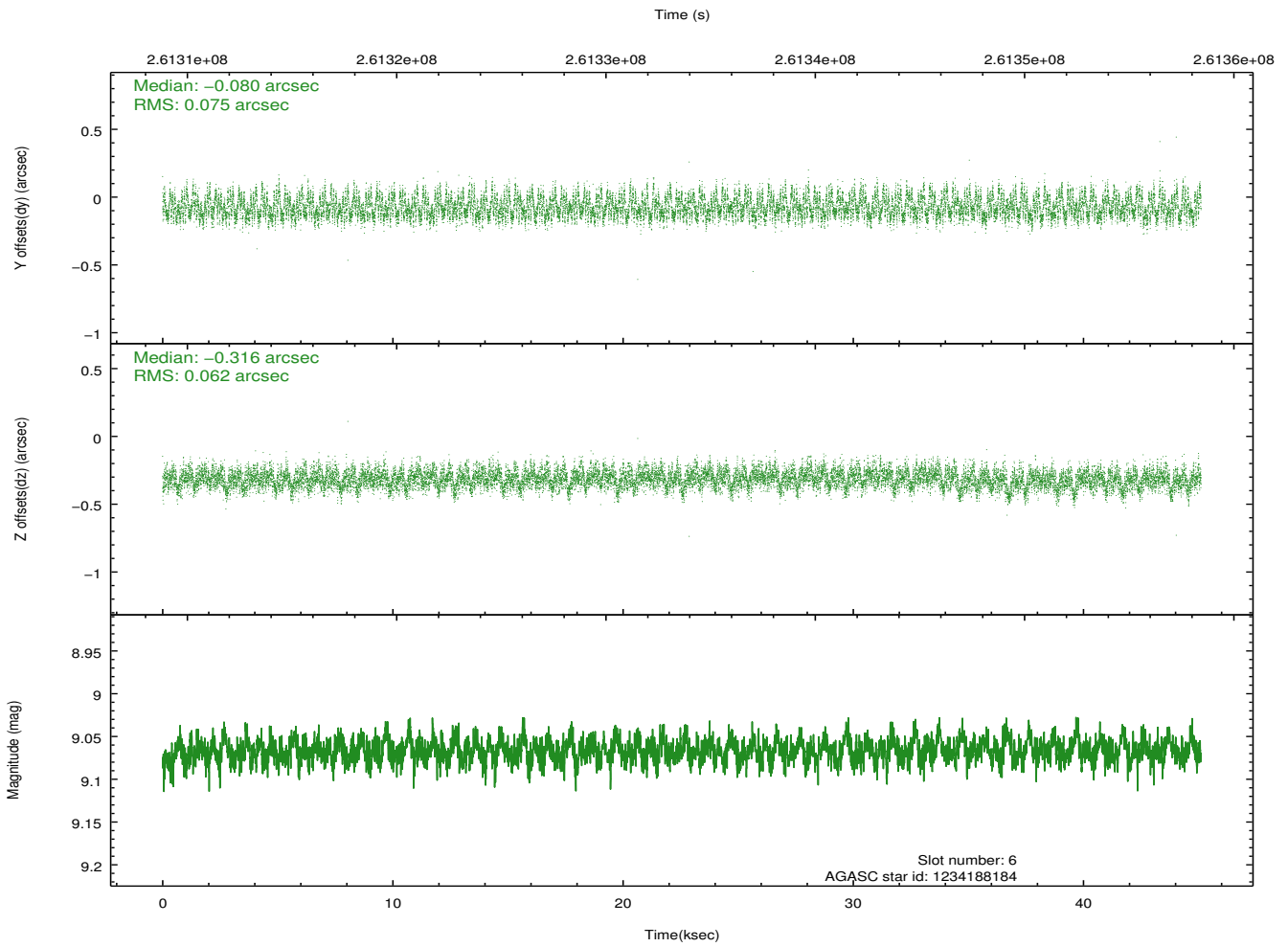
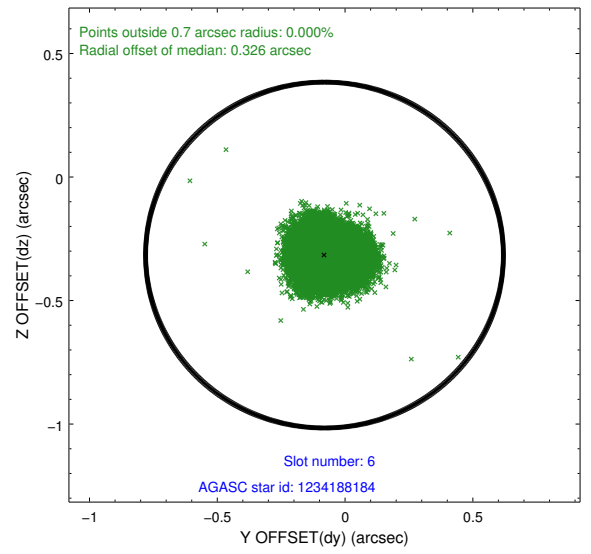
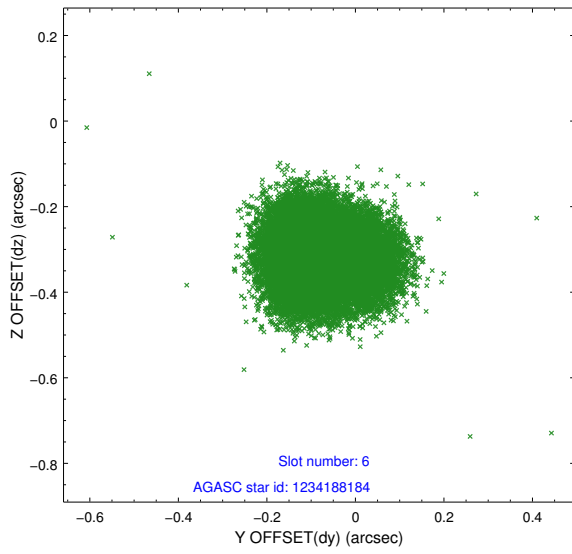
### 2.4.2 Slot 4



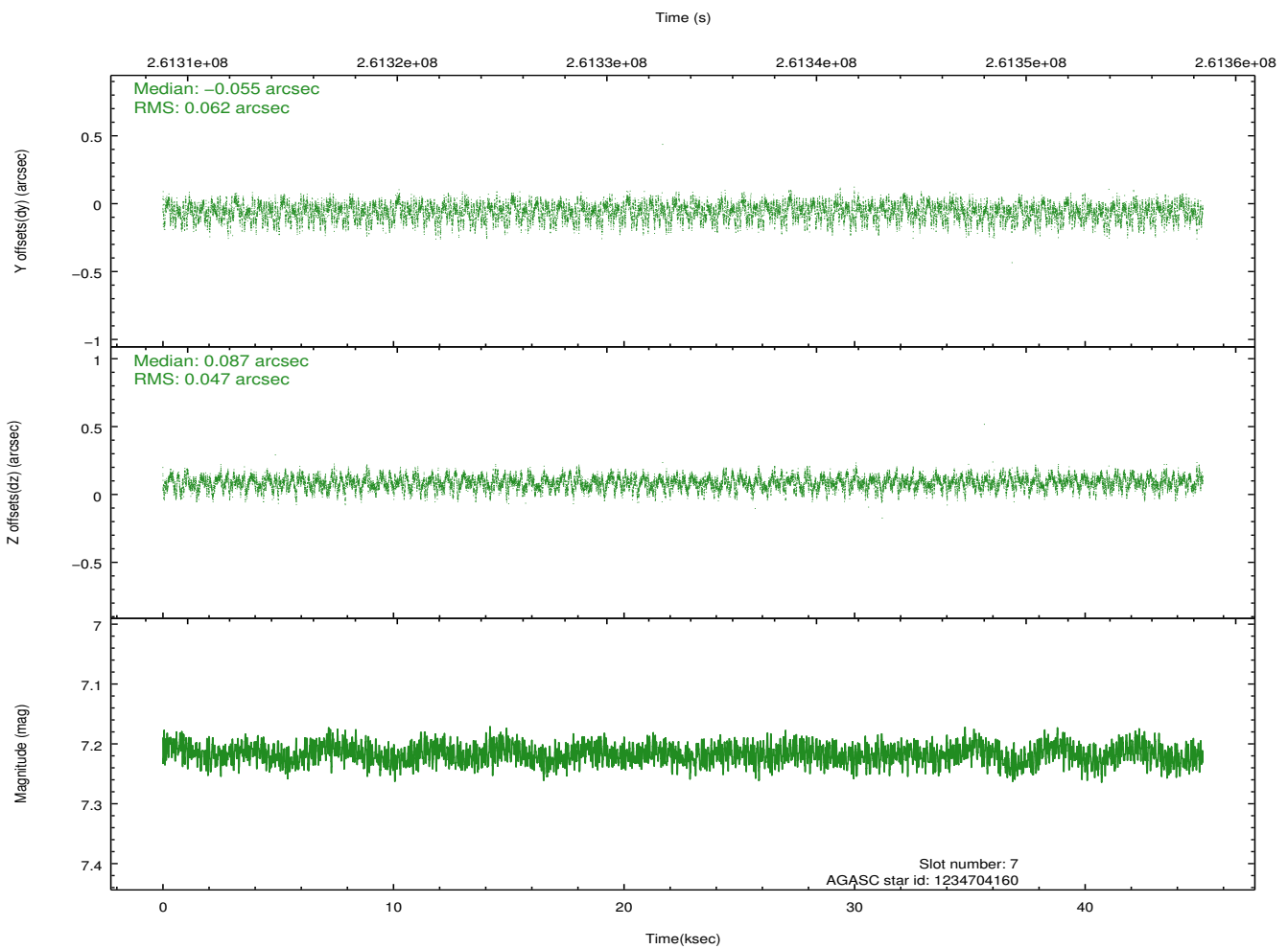
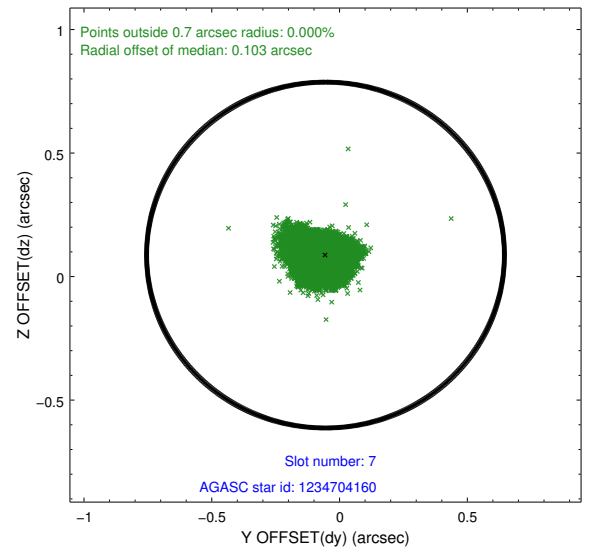
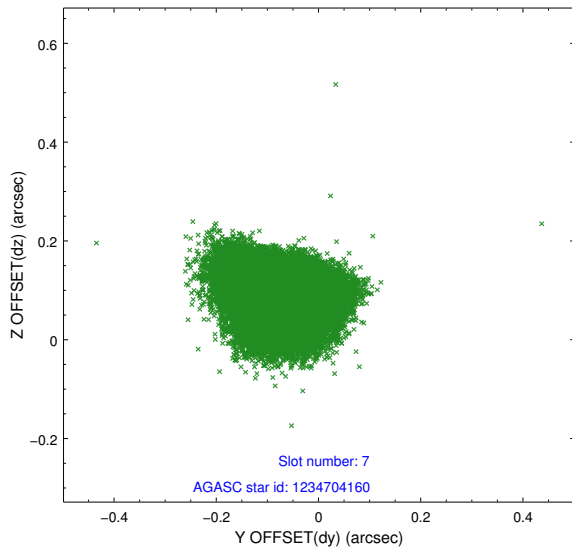
### 2.4.3 Slot 5



### 2.4.4 Slot 6

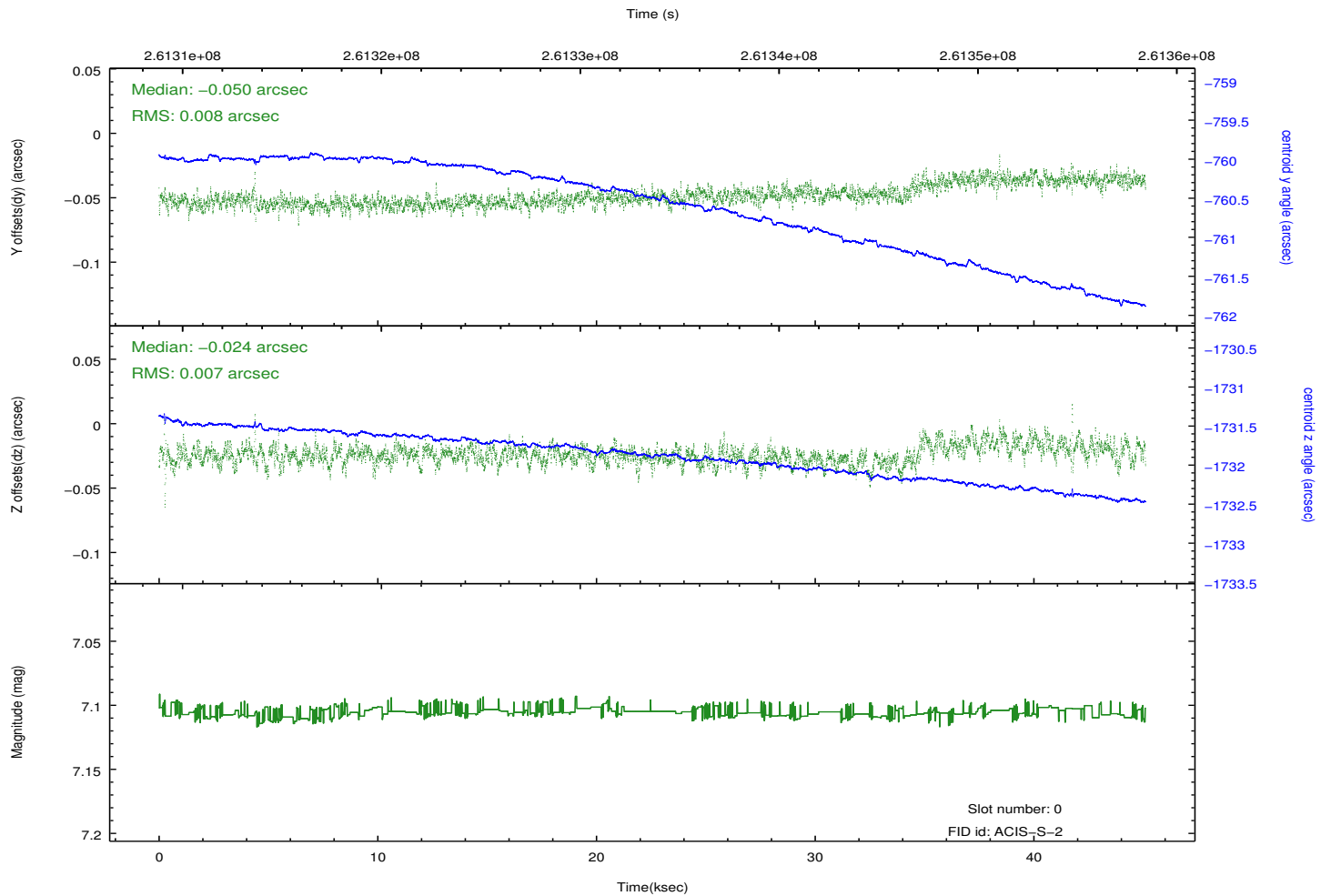
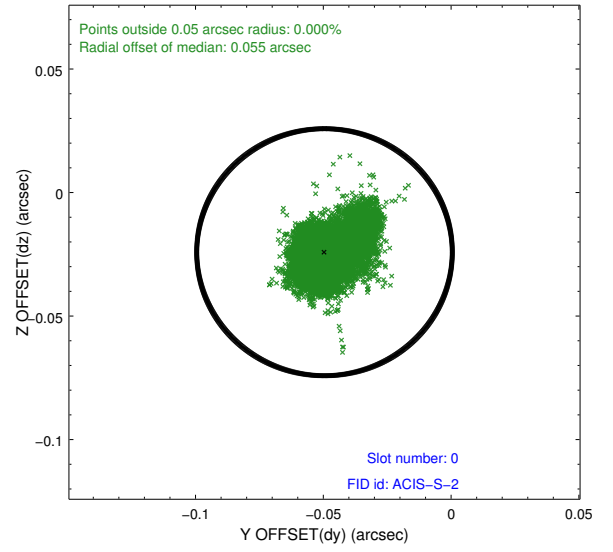
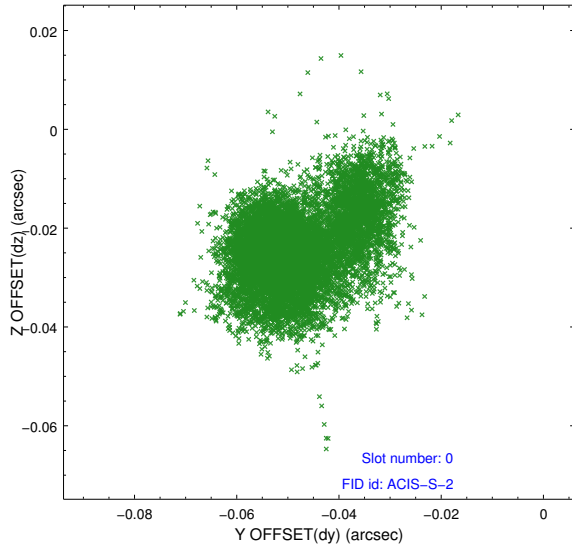


## 2.4.5 Slot 7

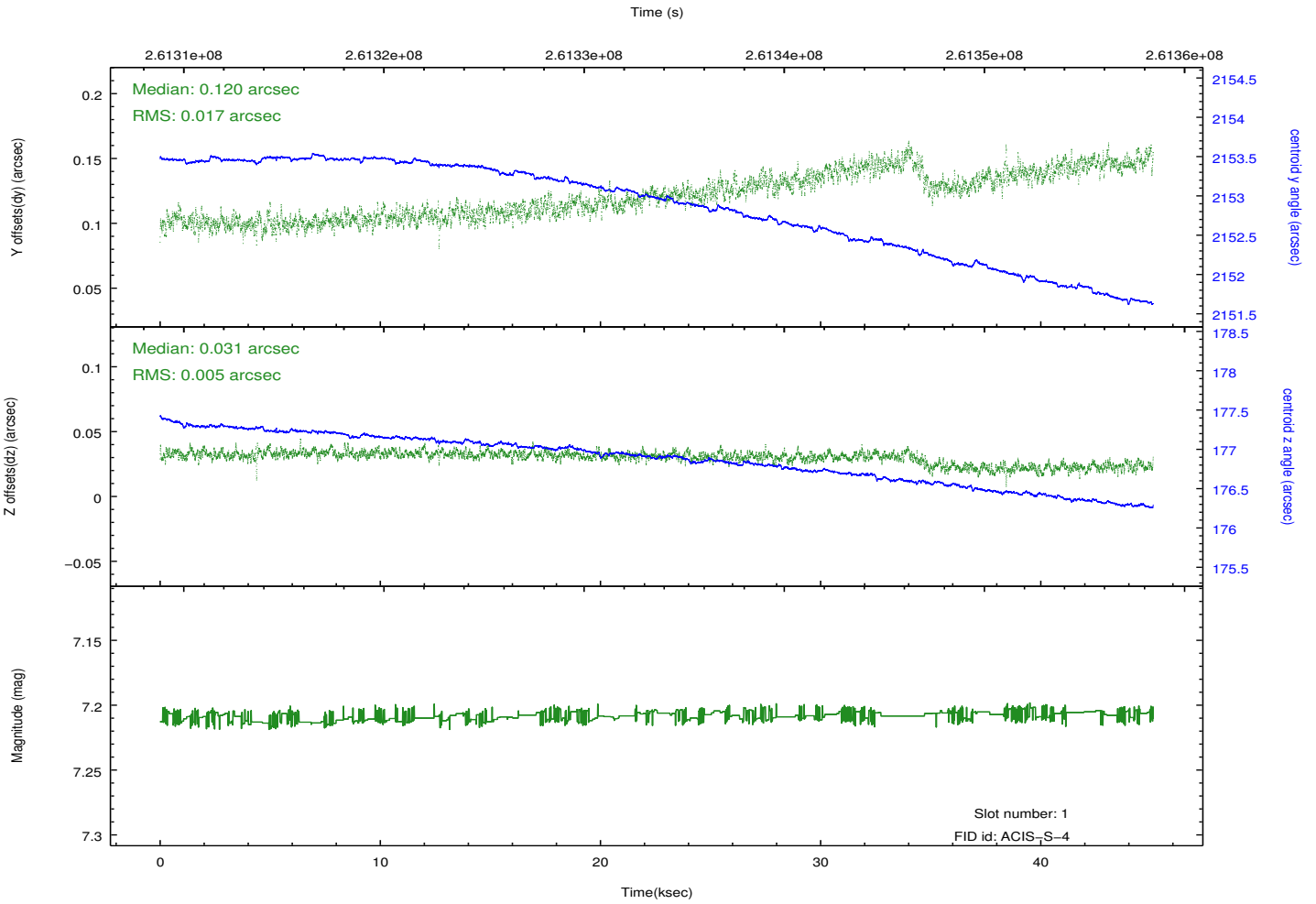
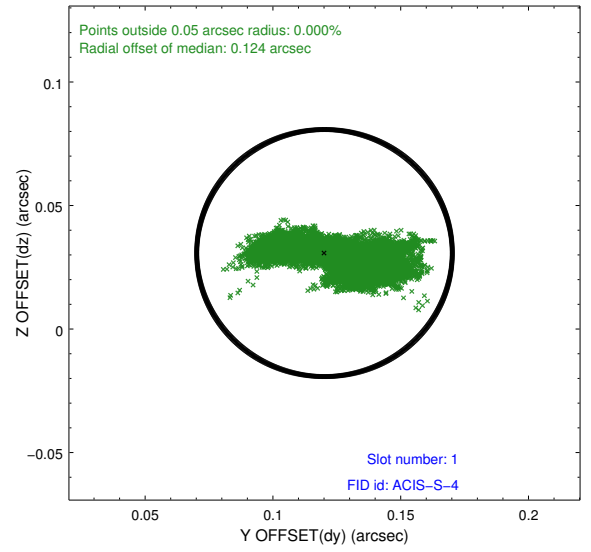
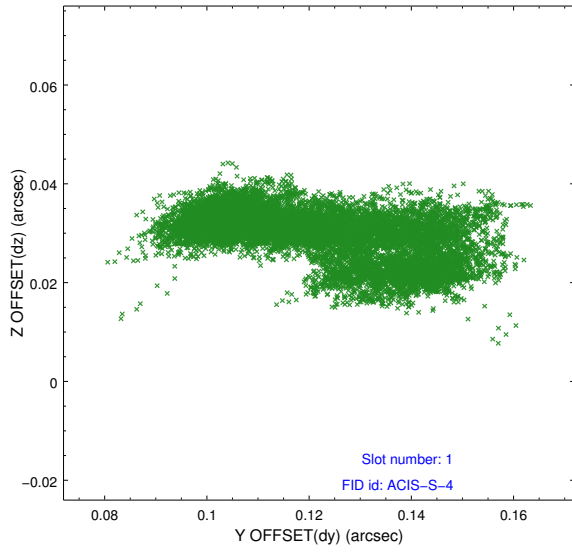


## 2.5 FID Slots

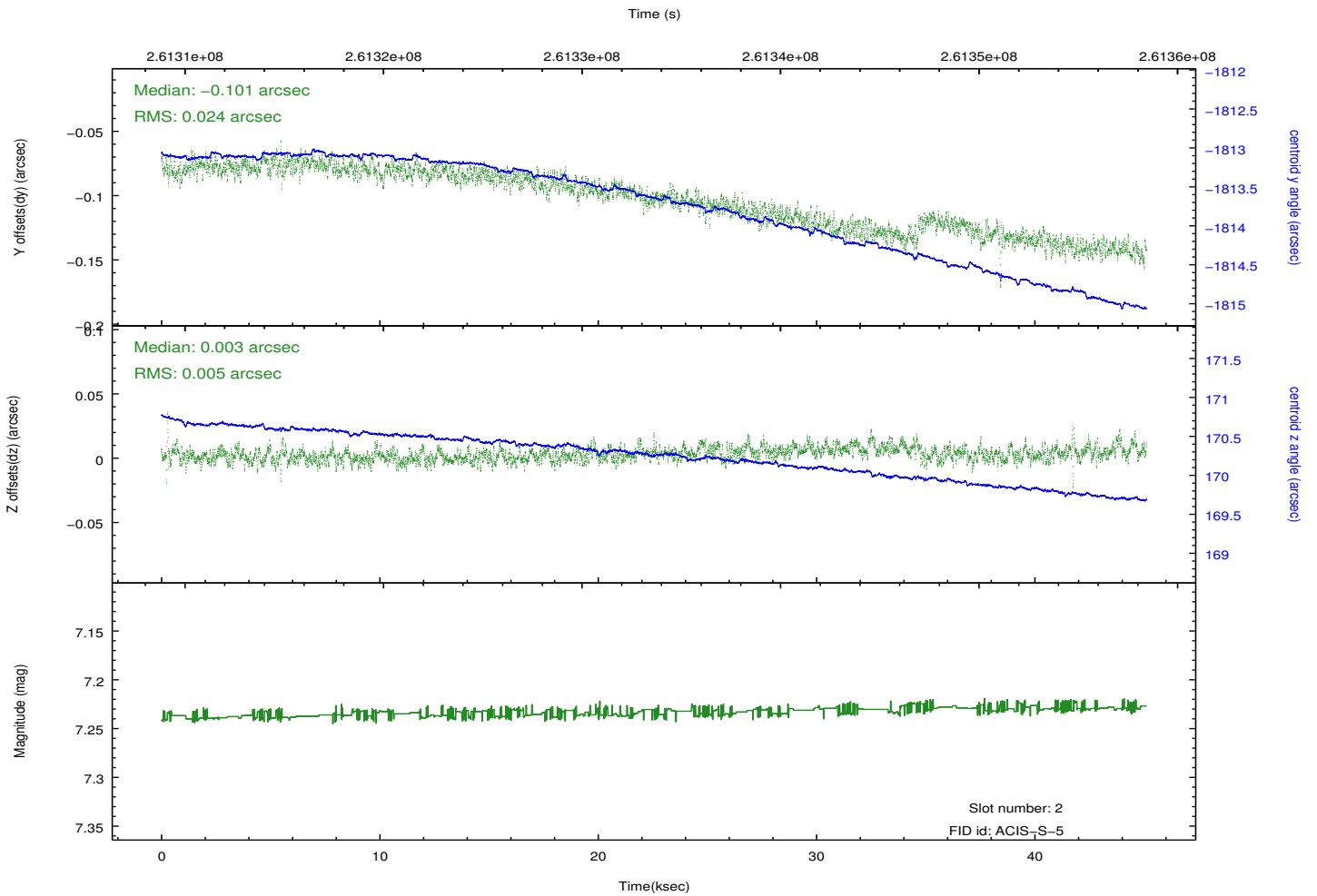
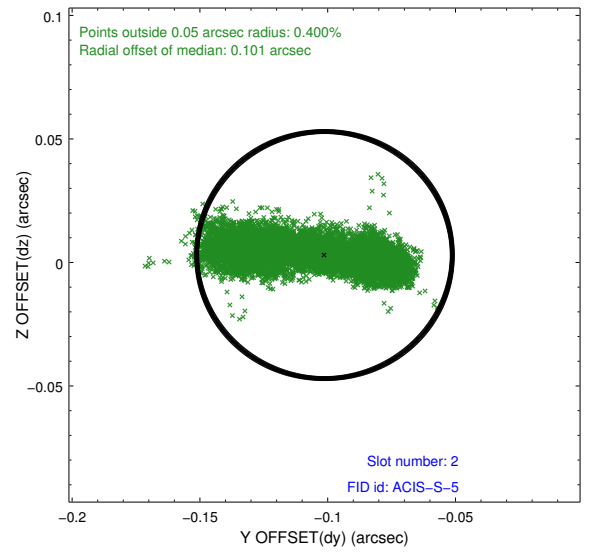
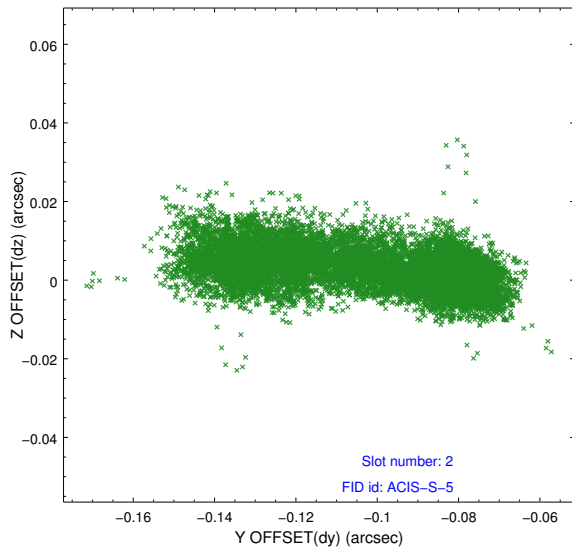
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2

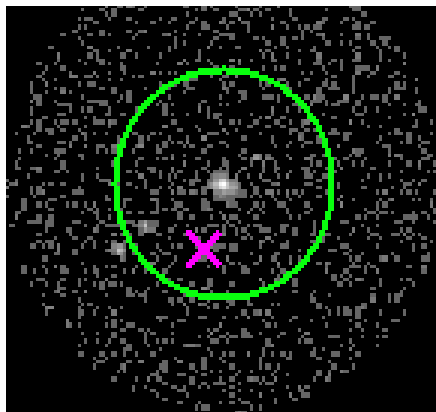


### 3 Gratings

#### 3.1 HEG Arm



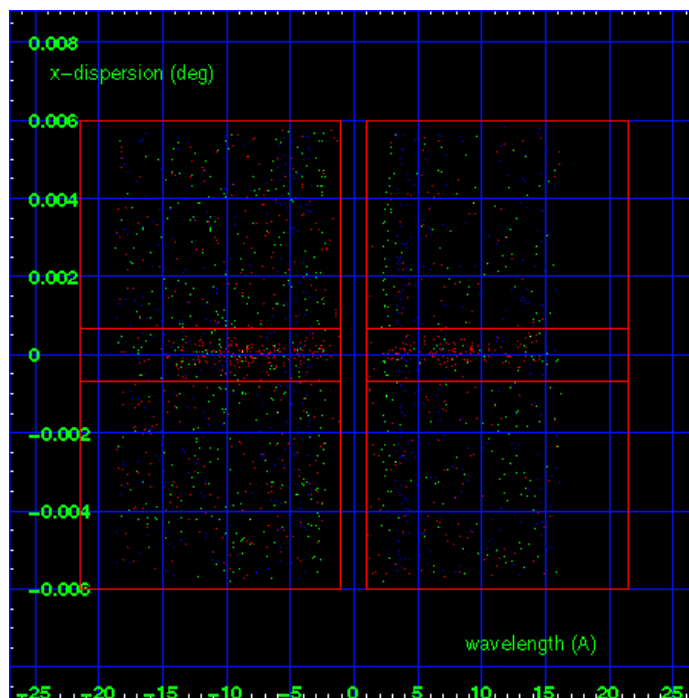
HEG Order Sort 123



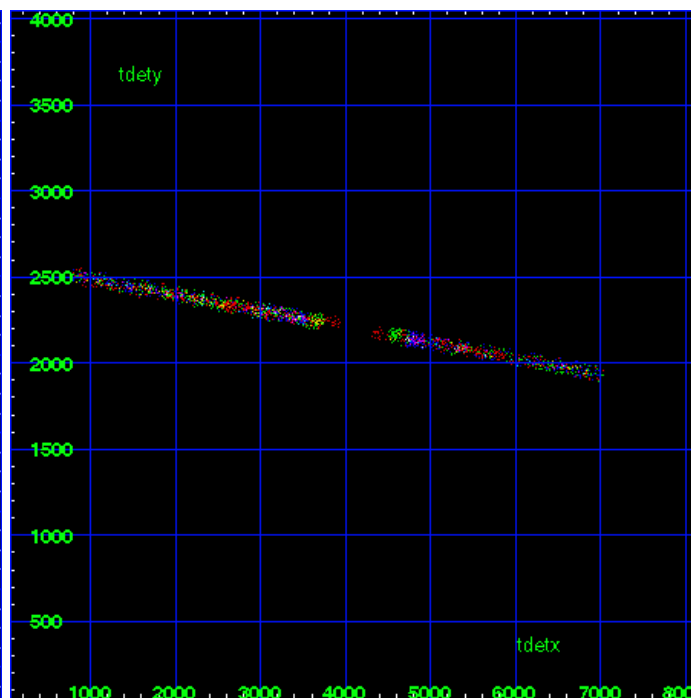
HEG Zero Order



HEG Order Sort ALL

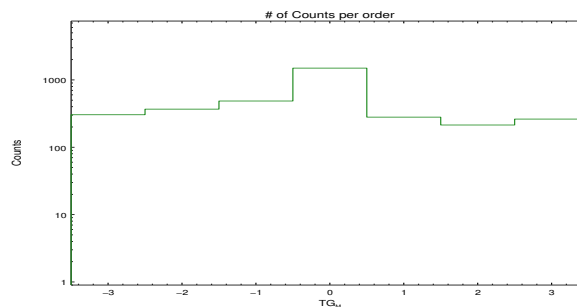


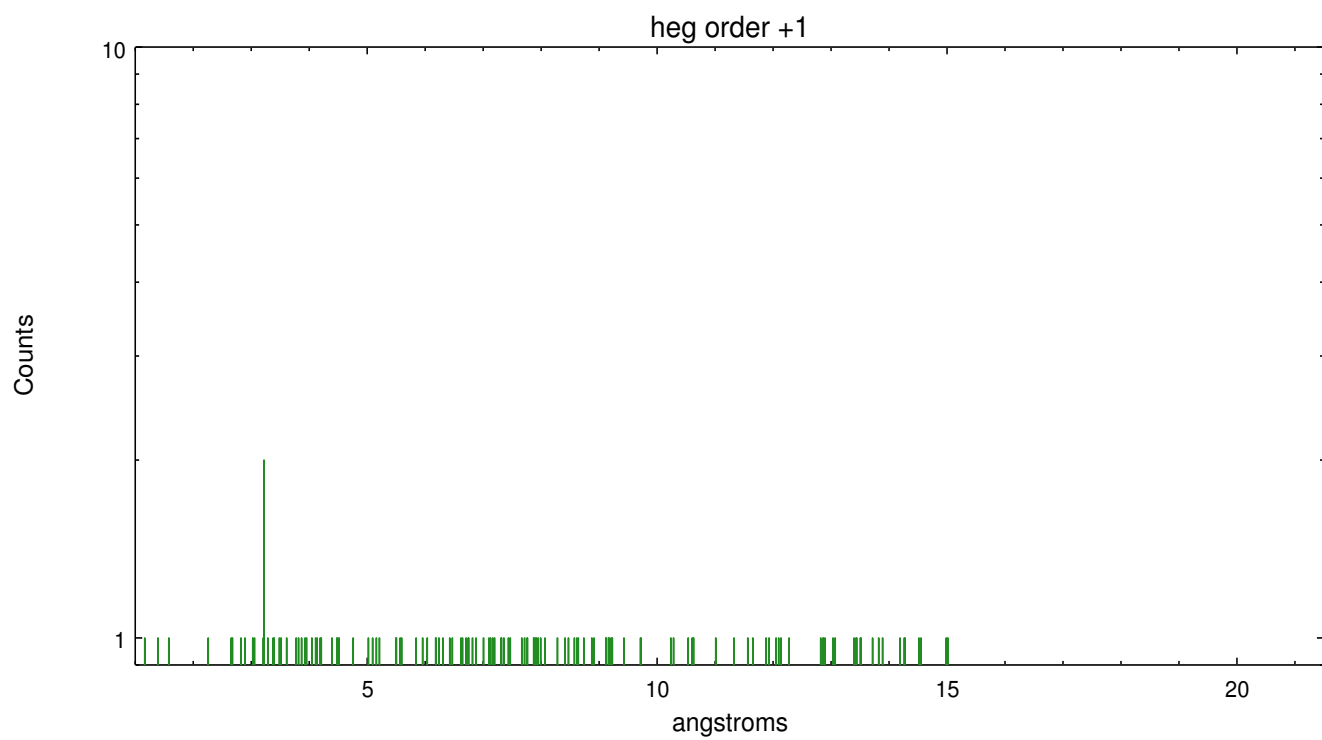
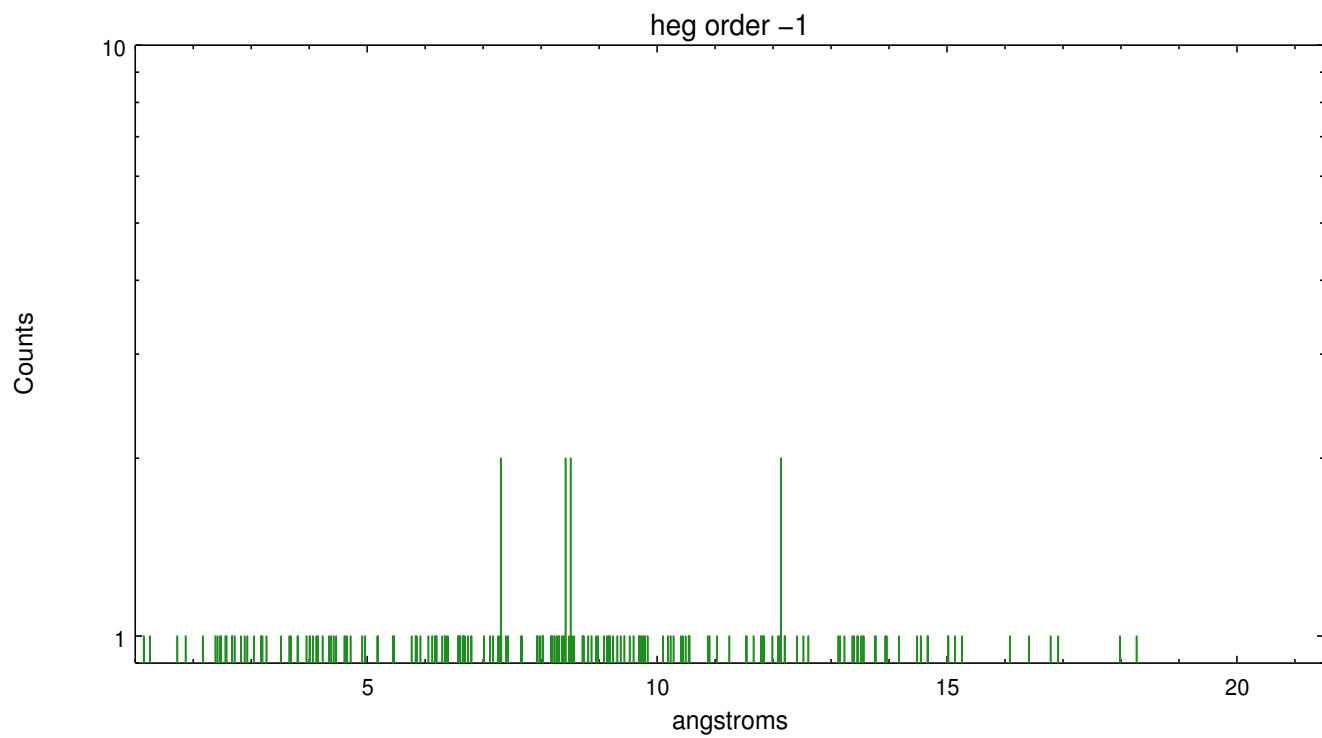
Spot Image HEG



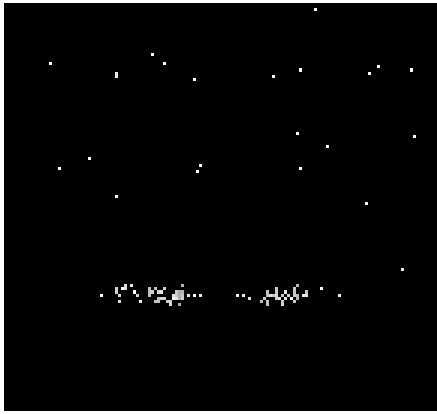
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	304	368	486	1496	280	214	262

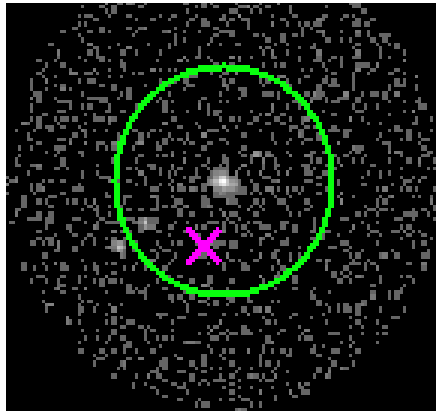




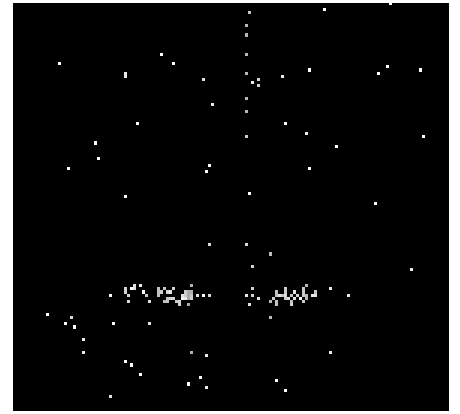
### 3.2 MEG Arm



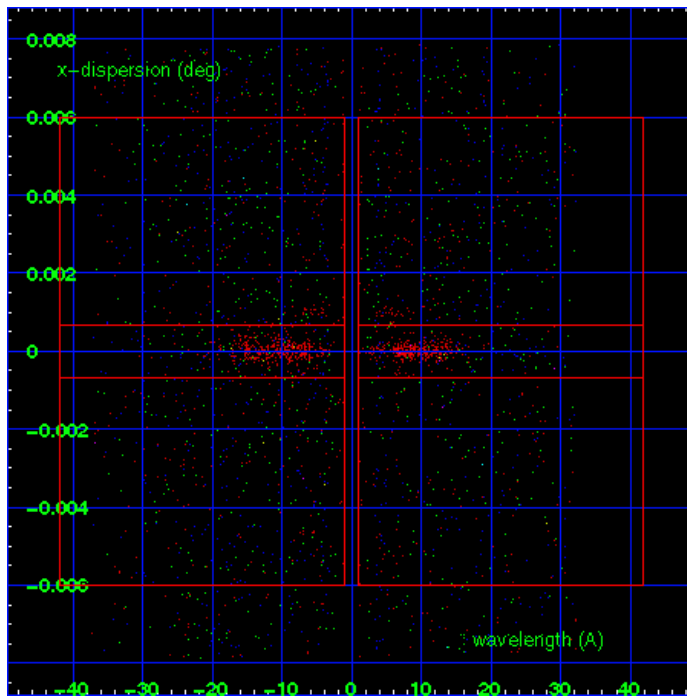
MEG Order Sort 123



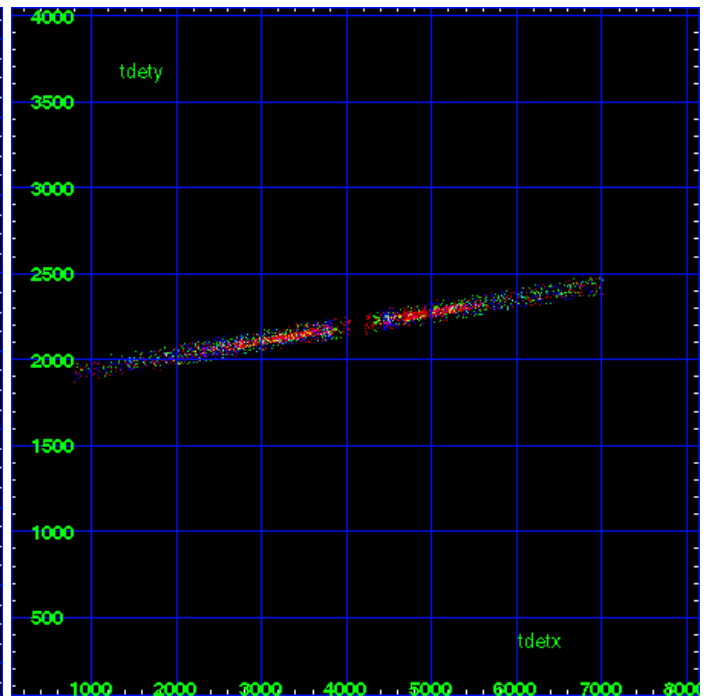
MEG Zero Order



MEG Order Sort ALL

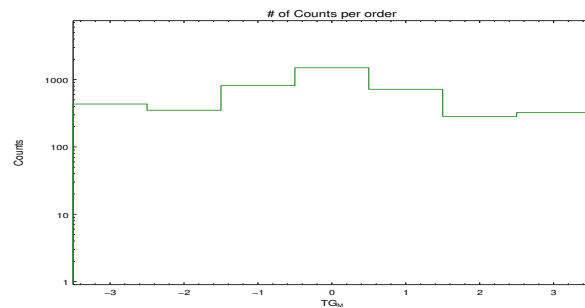


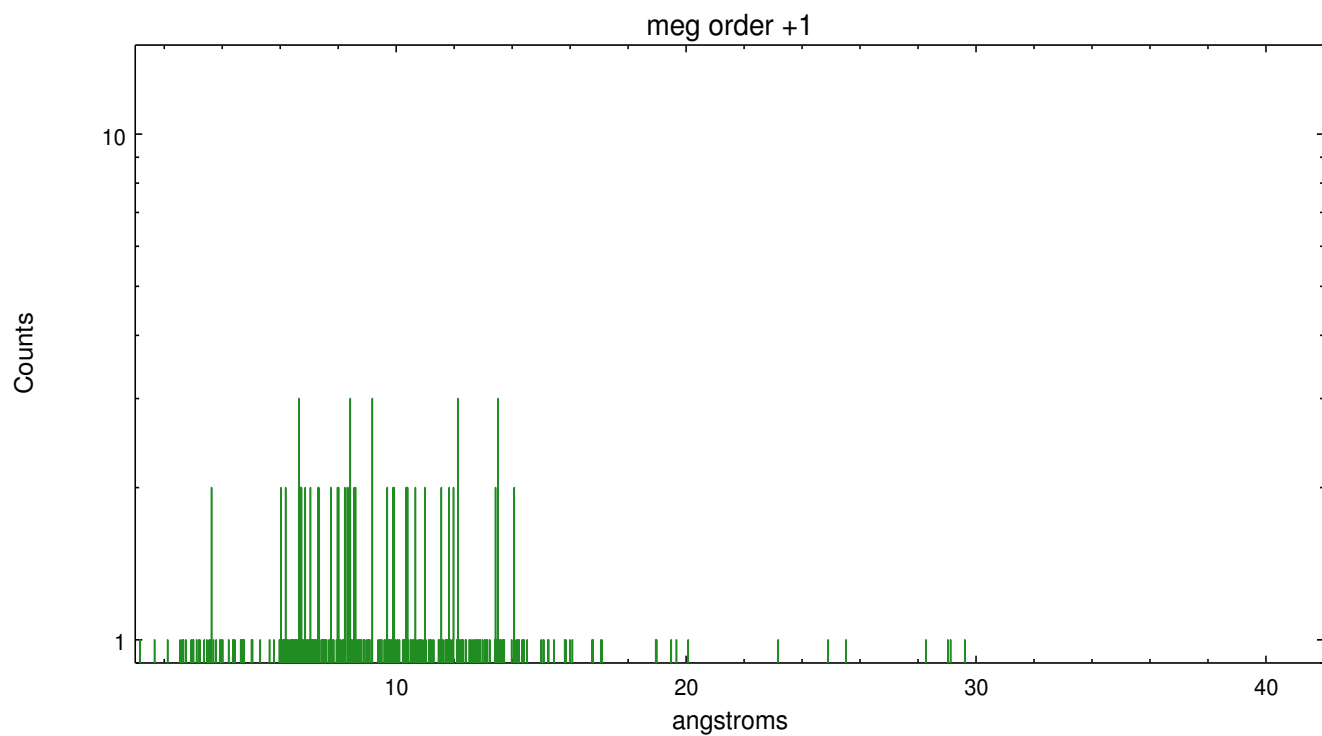
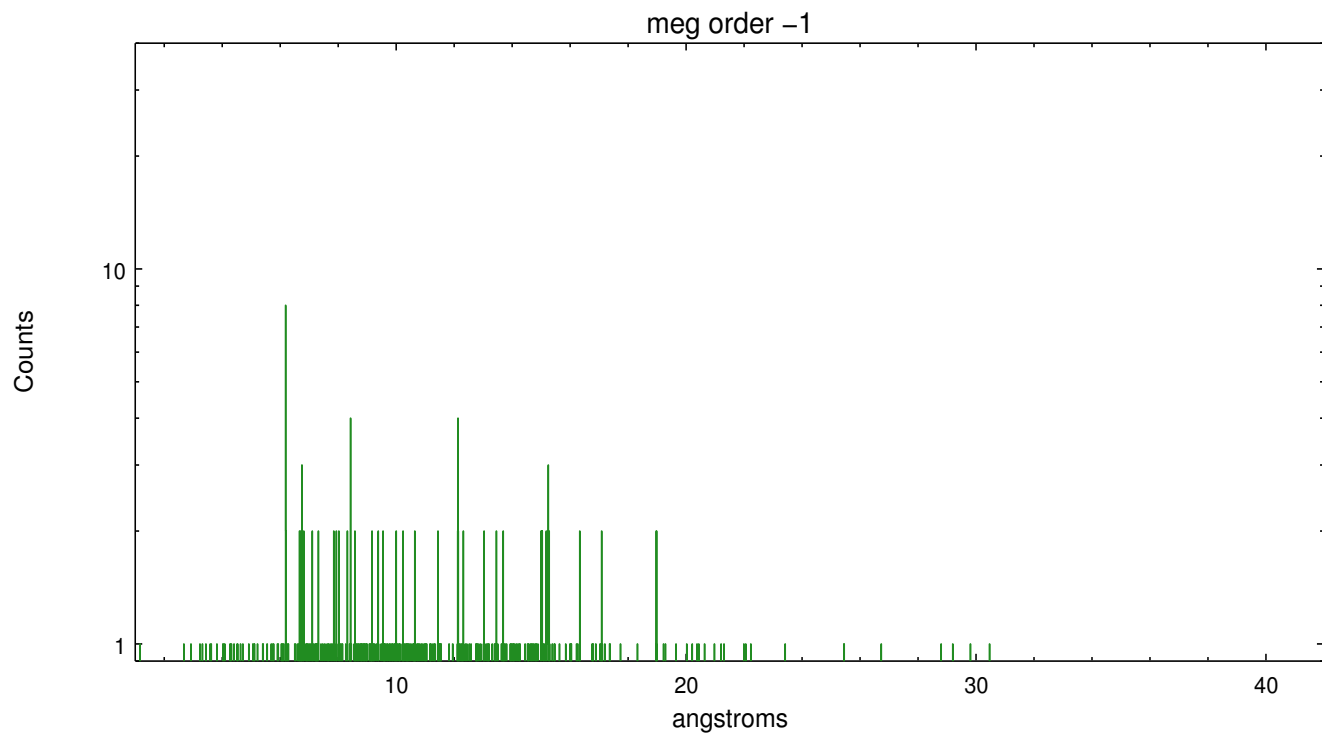
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	433	350	812	1496	717	284	324





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.04.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.3999998

## A.2 Comments

HD104237A and E are aligned along the dispersion direction of HEG.