

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 6894 - L2 Version 2  
Chandra X-Ray Center

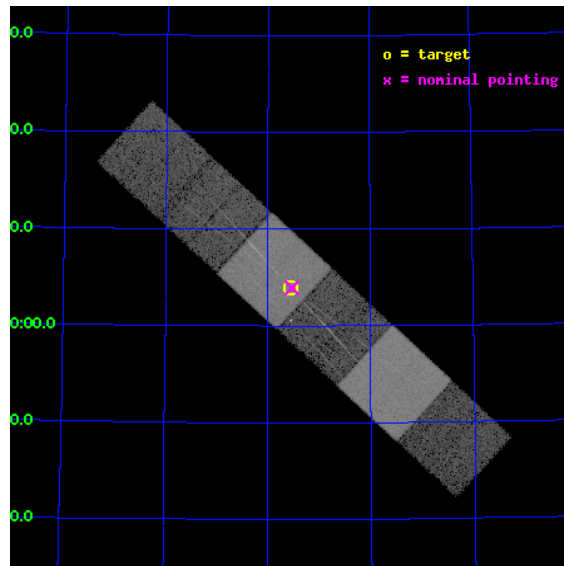
L2 Processing Date : Mar 29 2012

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# 1 Front

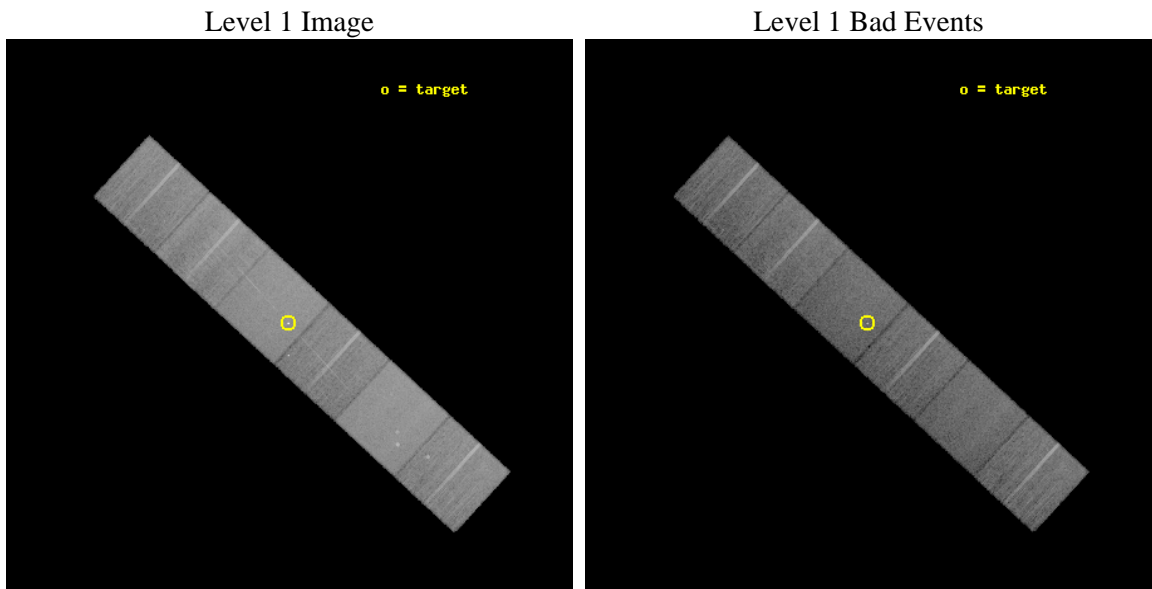
seq_num	701311	Sequence number
obs_id	6894	Observation id
title	Testing Broad-Band Jet-Powered Emission in the LLAGN M81*	Proposal
observer	Dr Jon Miller	Principal investigator
object	M81*	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	148.888333	Observer's specified target RA [deg]
dec_targ	69.065306	Observer's specified target Dec [deg]
ra_nom	148.88257999796	Nominal RA [deg]
dec_nom	69.065638901748	Nominal Dec [deg]
roll_nom	222.61651413358	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14952.907168001	Sum of GTIs [s]
liveltime	14763.56445388	Livetime [s]
ontime4	14949.707227707	Sum of GTIs [s]
ontime5	14952.866127998	Sum of GTIs [s]
ontime6	14952.825087994	Sum of GTIs [s]
ontime7	14952.907168001	Sum of GTIs [s]
ontime8	14952.784047991	Sum of GTIs [s]
ontime9	14952.743008018	Sum of GTIs [s]
l2events	225652	Number of level 2 events



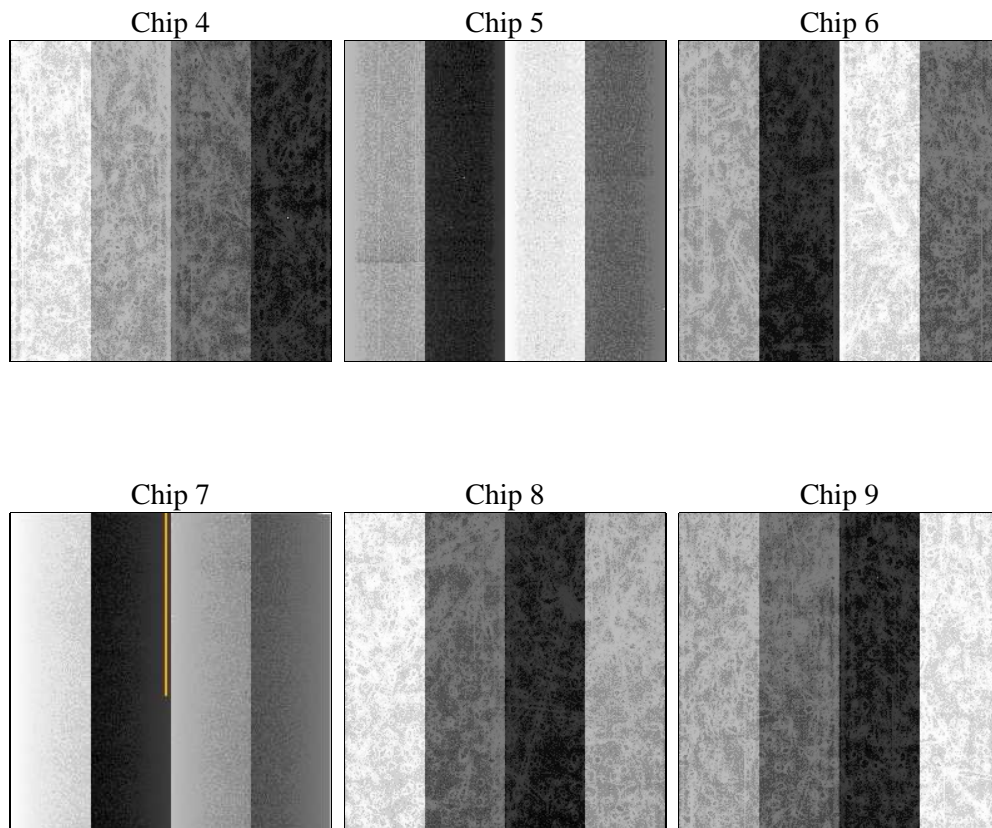
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	14952.907168001	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime4	14949.707227707	Sum of GTIs [s]
date	2012-03-29T12:17:42	Date and time of file creation	ontime5	14952.866127998	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14952.825087994	Sum of GTIs [s]
			ontime7	14952.907168001	Sum of GTIs [s]
			ontime8	14952.784047991	Sum of GTIs [s]
			ontime9	14952.743008018	Sum of GTIs [s]
			l1events	980384	Number of level 1 events

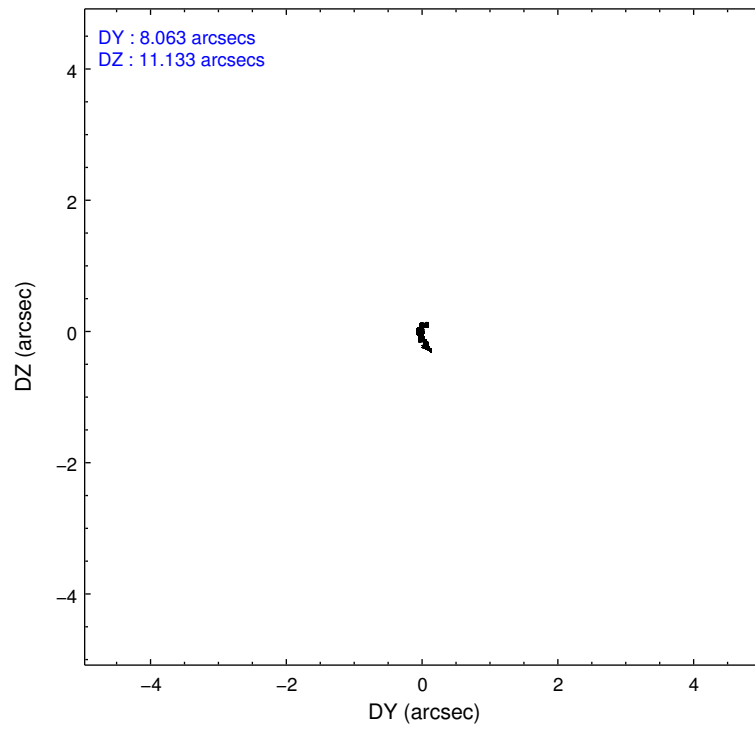
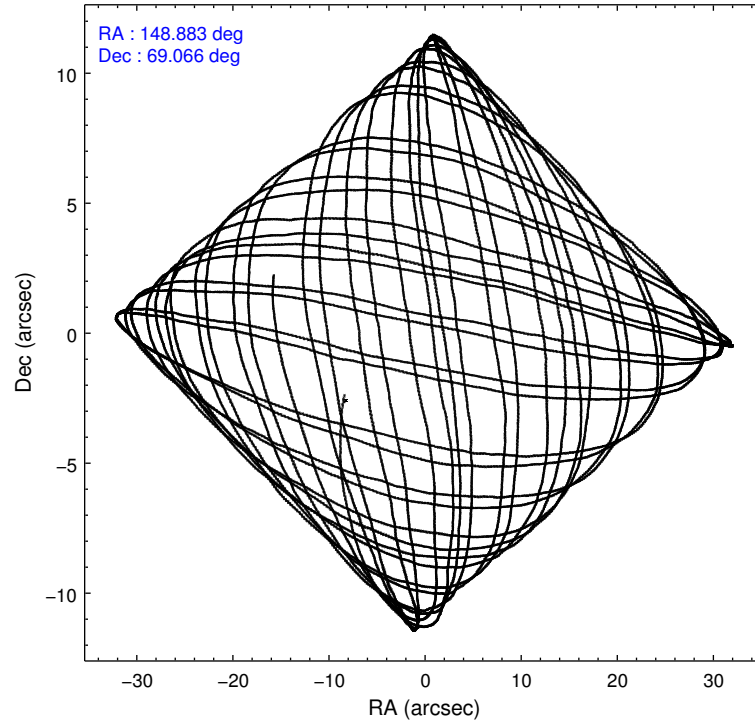
### 2.1.4 Events

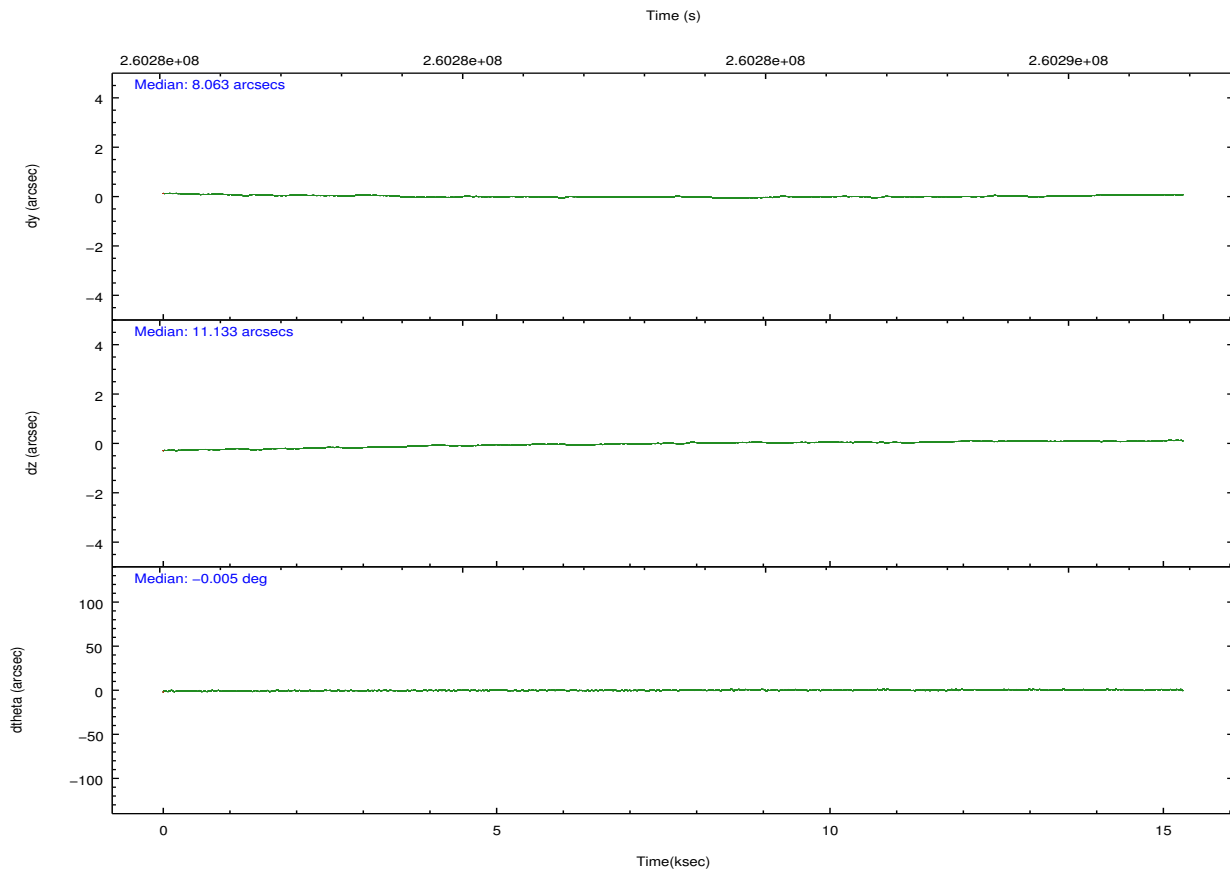
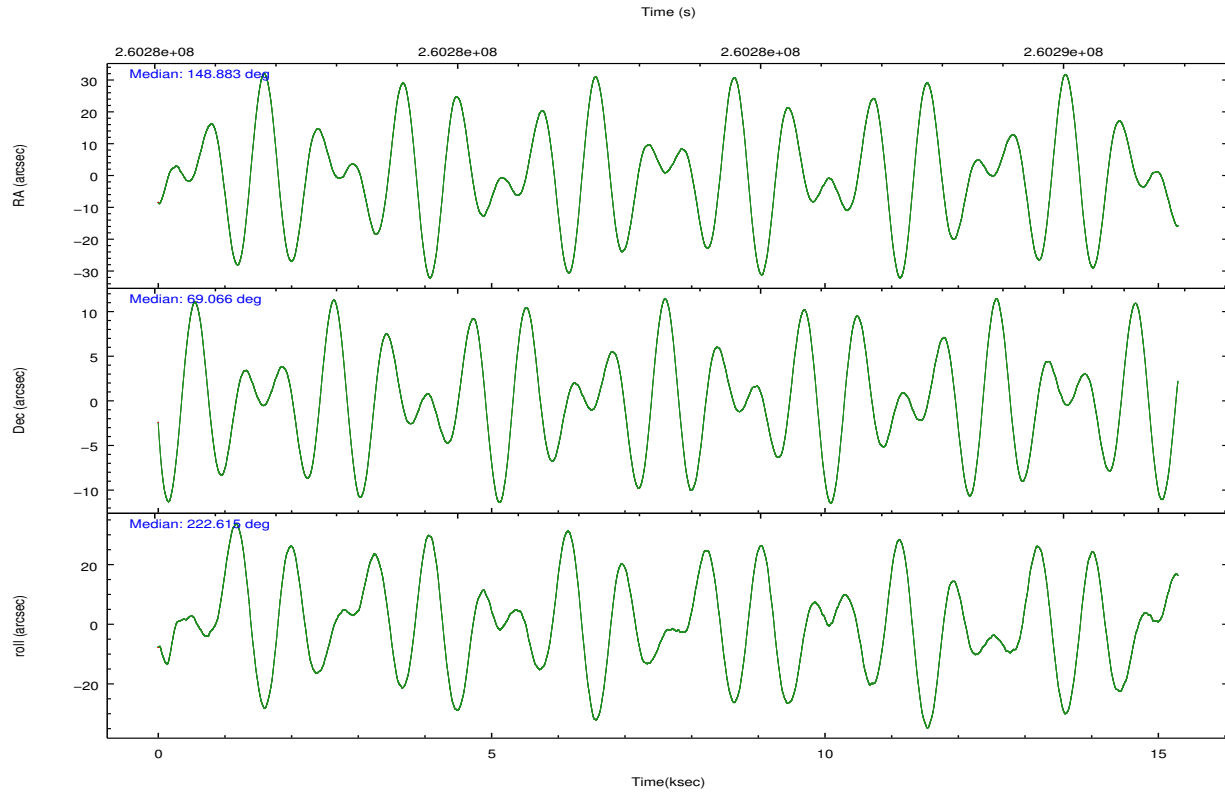
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	152019	198018	134199	186308	173173	136667	grade 0 events	7895	6591	8525	7390	12871	6677
rejected events	134798	107985	115515	106645	133918	120367		5%	3%	6%	3%	7%	4%
rejected %	88%	54%	86%	57%	77%	88%	grade 1 events	144	264	88	218	127	110
								0%	0%	0%	0%	0%	0%
							grade 2 events	3482	27537	3716	16036	8505	3246
								2%	13%	2%	8%	4%	2%
							grade 3 events	1677	3586	1652	7038	4156	1639
								1%	1%	1%	3%	2%	1%
							grade 4 events	1526	3535	1585	7120	3687	1609
								1%	1%	1%	3%	2%	1%
							grade 5 events	6021	14467	6290	17454	8317	6711
								3%	7%	4%	9%	4%	4%
							grade 6 events	2645	48799	3209	42099	10040	3134
								1%	24%	2%	22%	5%	2%
							grade 7 events	128629	93239	109134	88953	125470	113541
								84%	47%	81%	47%	72%	83%

## 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	148.904414	148.8825799979563	Subarray requested	NONE	NONE
[deg] Pointing Dec	69.091802	69.06563890174836	Alternating exposures requested	N	N
[deg] Pointing Roll	222.439495	222.6165141335817	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	260276117.184000	260275101.81633			
Observation start date	2006-04-01T10:54:12	2006-04-01T10:38:21			
[s] Observation end time (MET)	260291117.184000	260291782.15461			
Observation end date	2006-04-01T15:04:12	2006-04-01T15:16:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



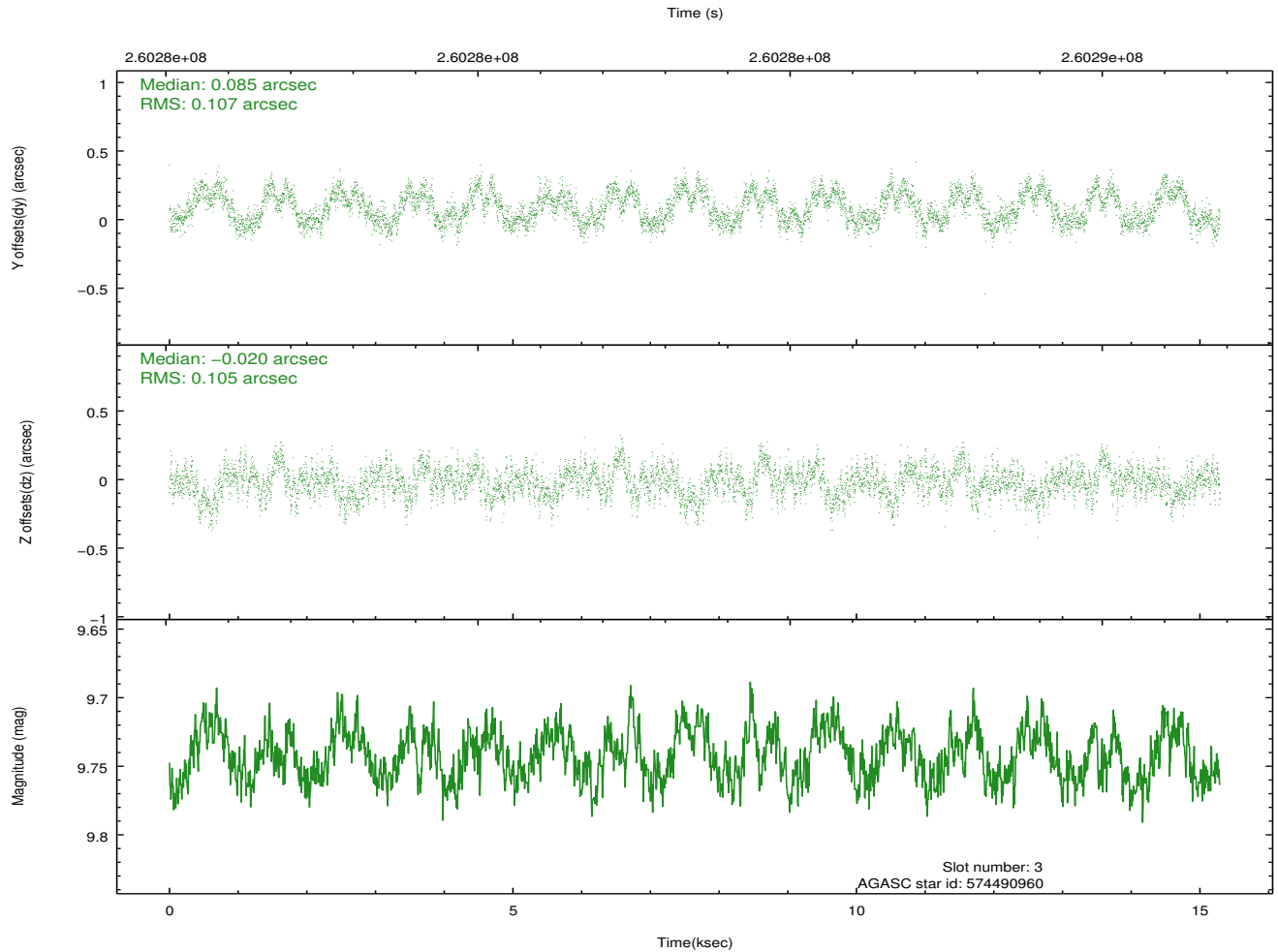
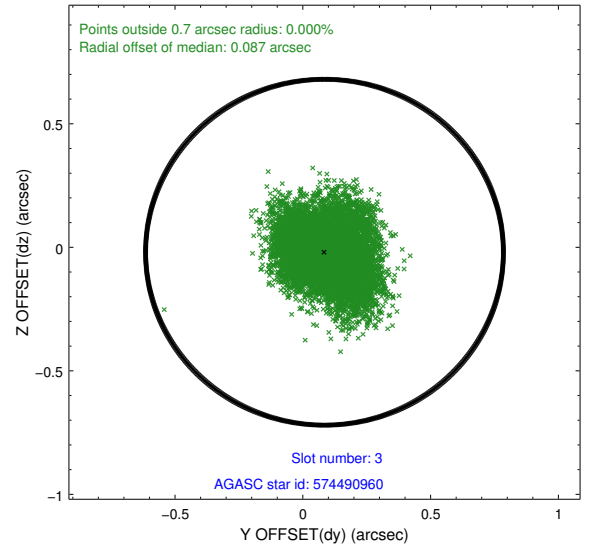
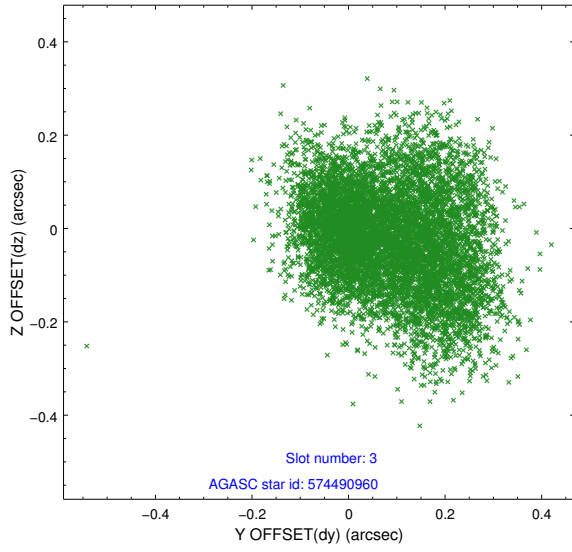


### Slot Statistics

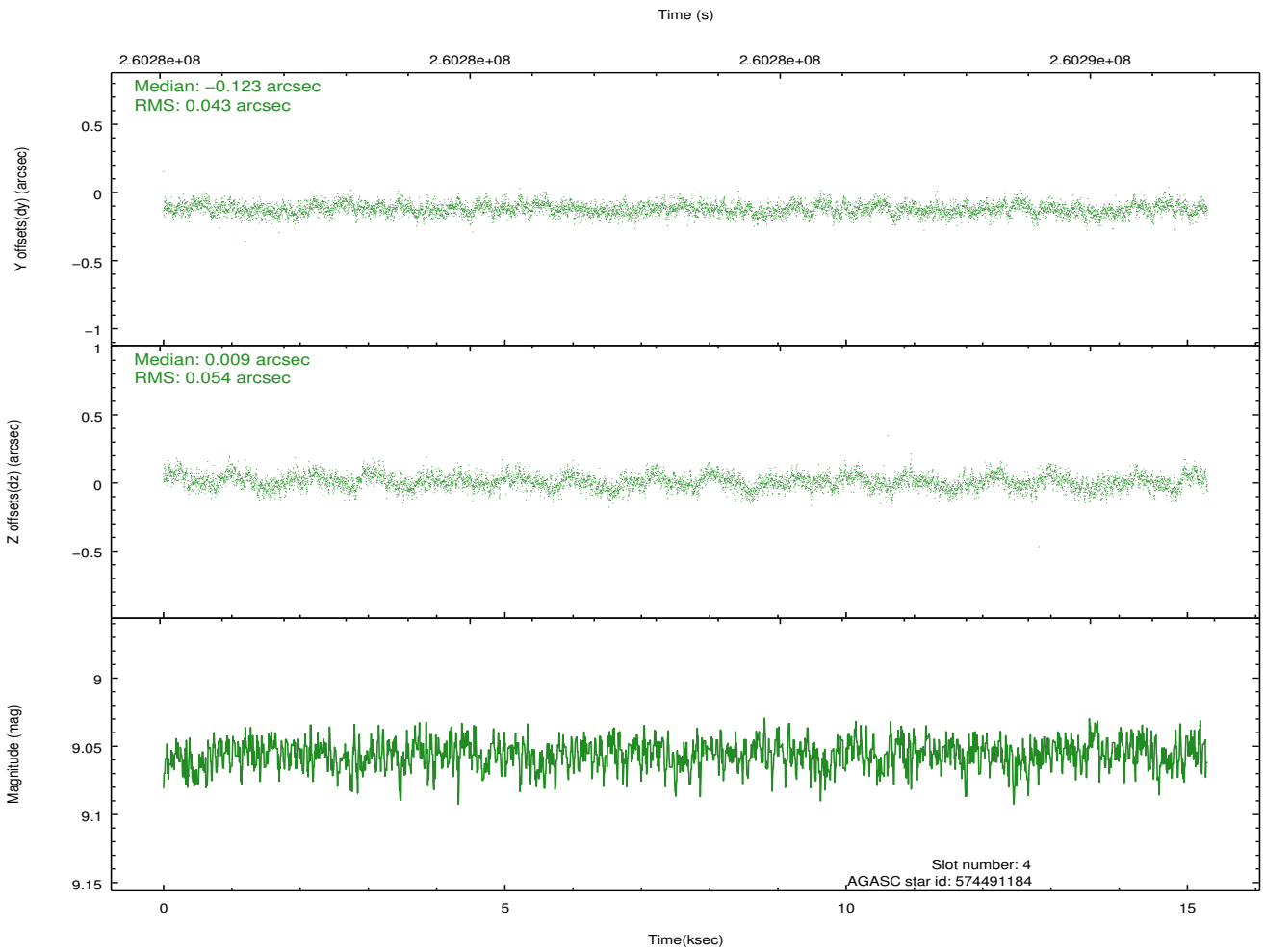
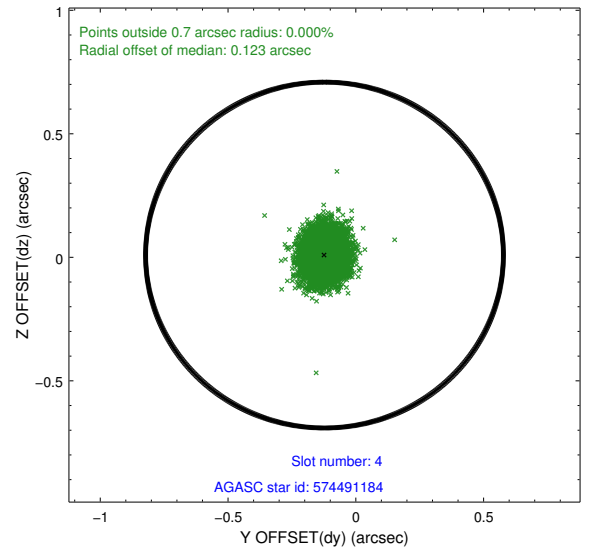
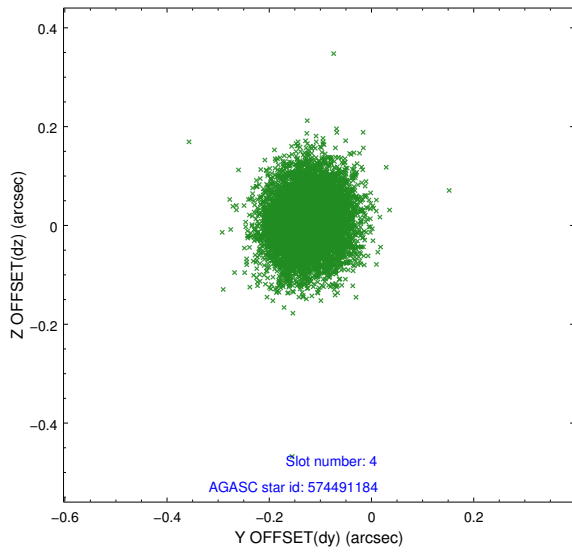
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	3729	-0.041	-0.023	0.007	0.011	0.000000	0.000000	-760.87	-1732.41
1	FID	ACIS-S-4	7.21	3731	0.133	0.026	0.006	0.011	0.000000	0.000000	2152.42	175.87
2	FID	ACIS-S-5	7.23	3731	-0.123	0.005	0.007	0.011	0.000000	0.000000	-1813.45	169.78
3	GUIDE	574490960	9.74	7452	0.085	-0.020	0.162	0.250	148.185918	69.658768	-716.52	-2116.73
4	GUIDE	574491184	9.06	7458	-0.123	0.009	0.073	0.119	148.582453	69.768699	-1349.03	-2069.76
5	GUIDE	574491280	9.34	7449	0.034	-0.081	0.129	0.199	148.611567	69.450135	-596.64	-1202.63
6	GUIDE	574493848	10.20	7442	0.113	0.028	0.125	0.208	147.355161	69.035593	1592.62	-1215.63
7	GUIDE	574489568	9.74	7423	-0.109	0.080	0.165	0.250	147.223974	69.438157	707.45	-2375.19

## 2.4 Star Slots

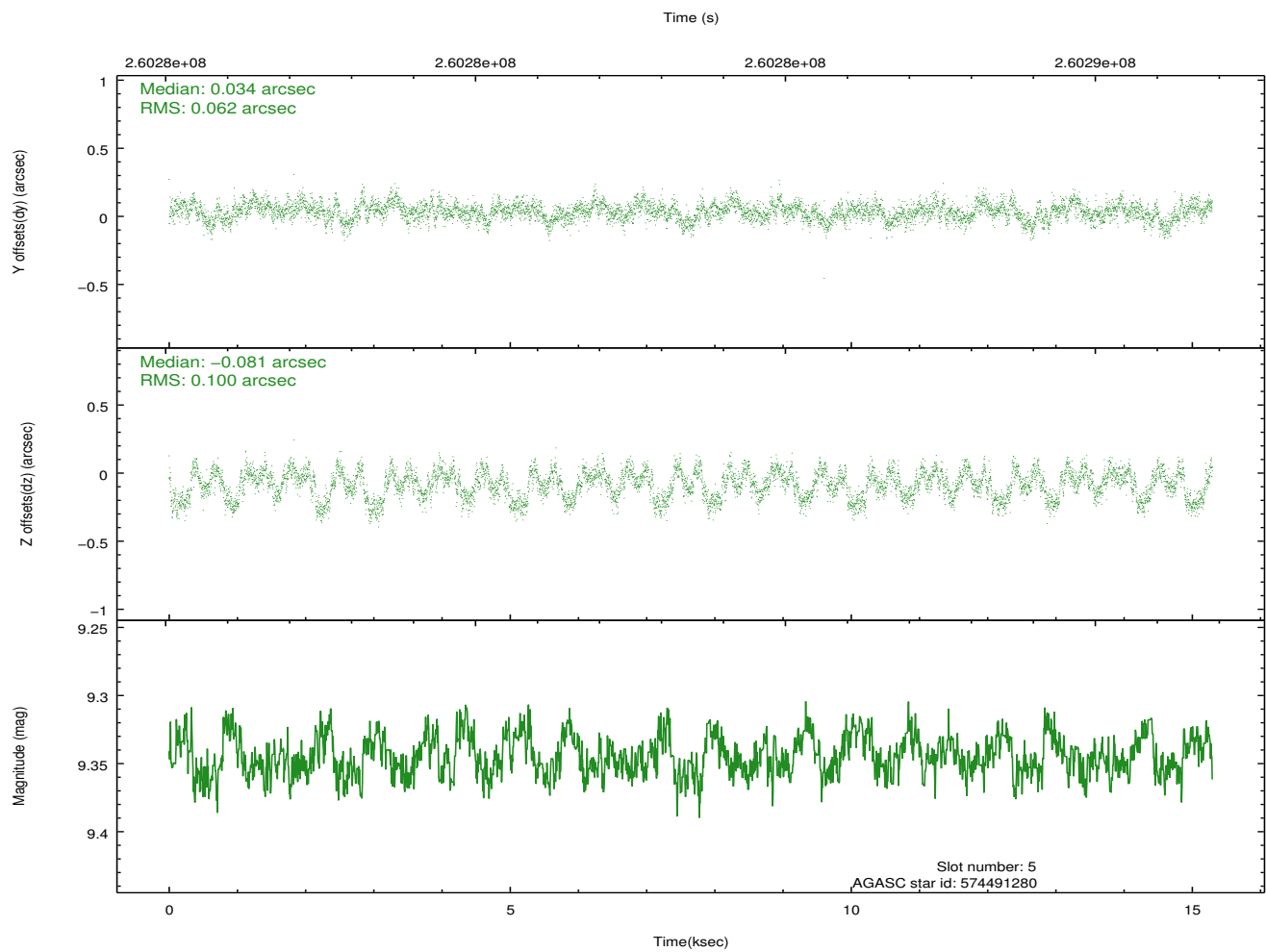
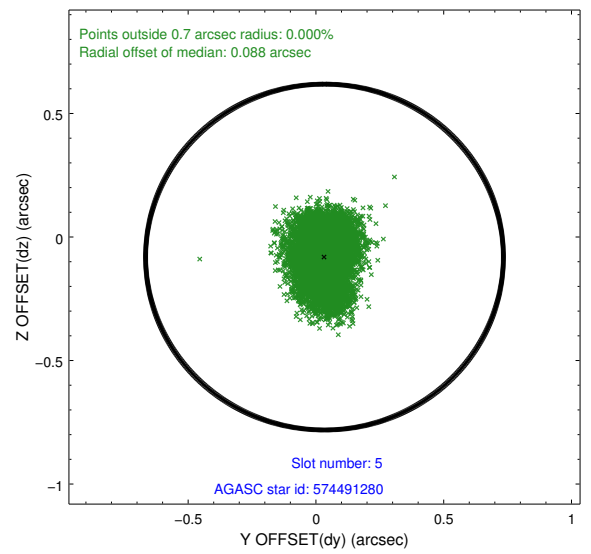
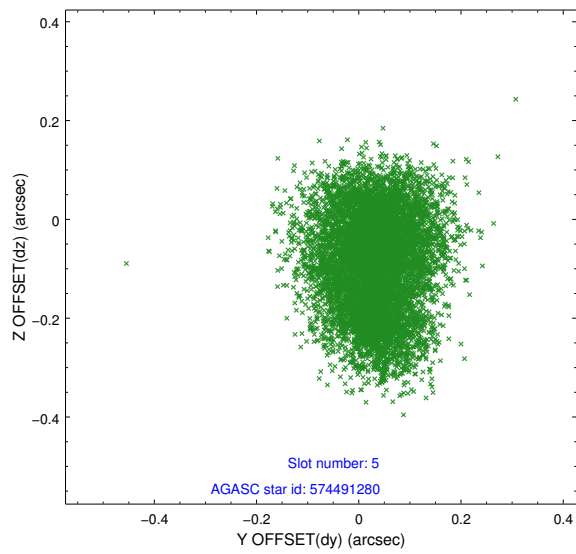
### 2.4.1 Slot 3



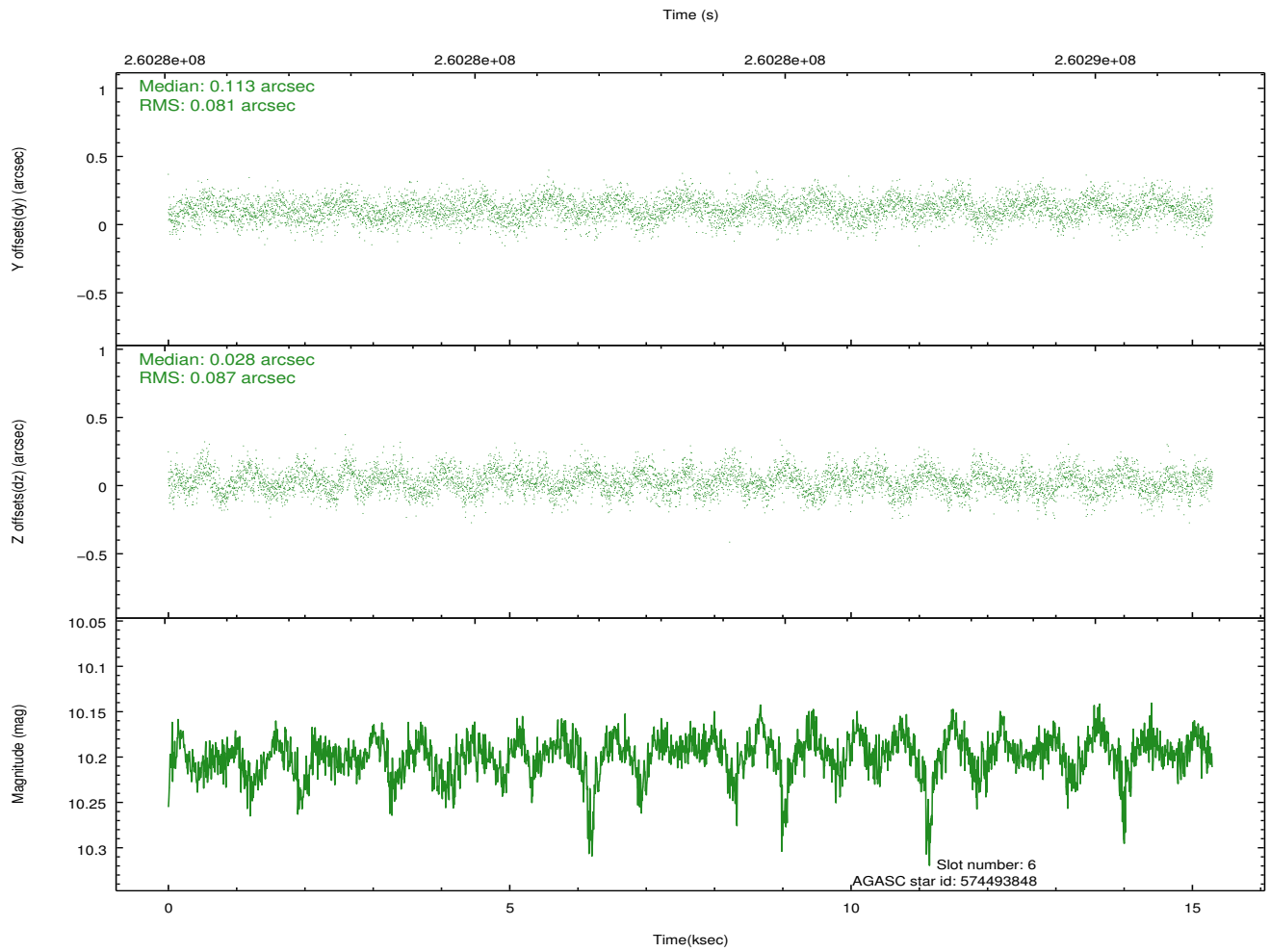
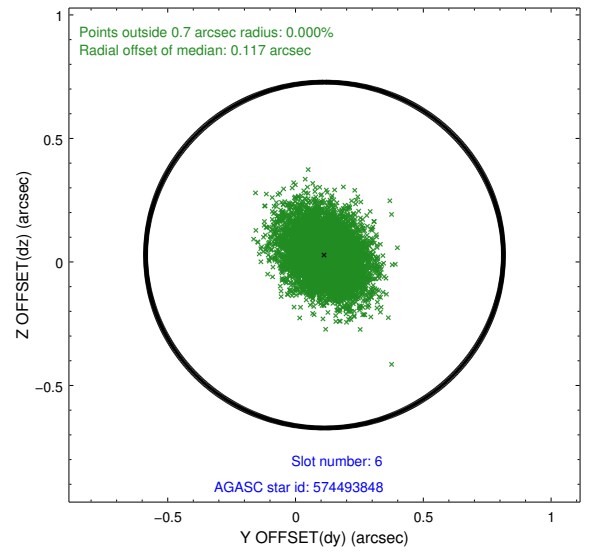
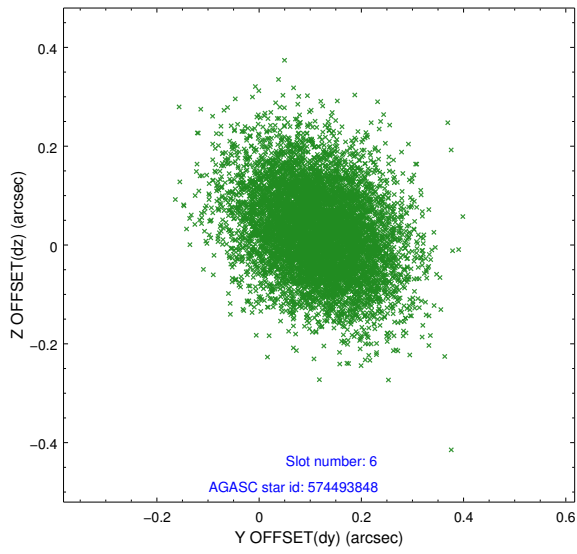
### 2.4.2 Slot 4



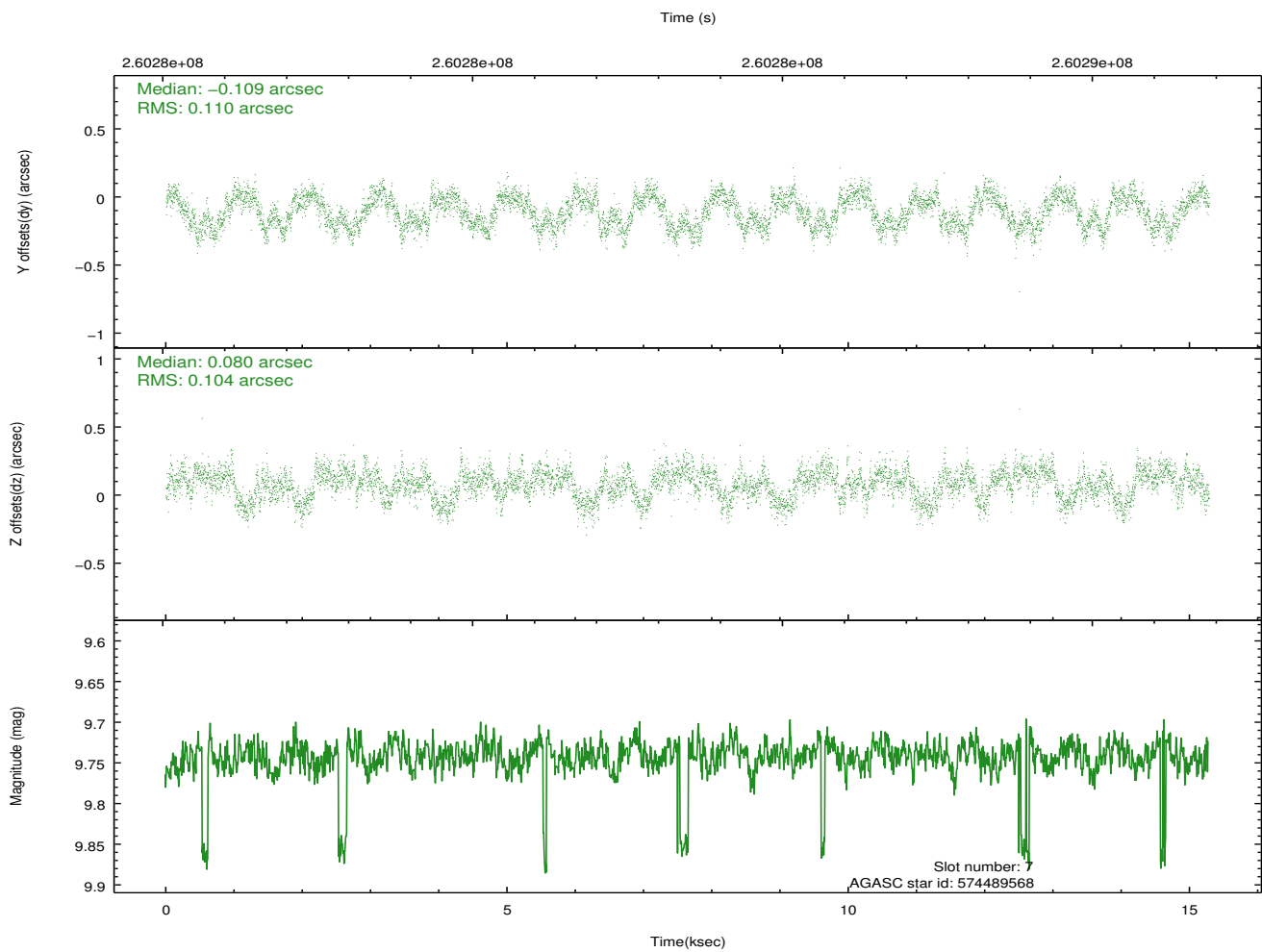
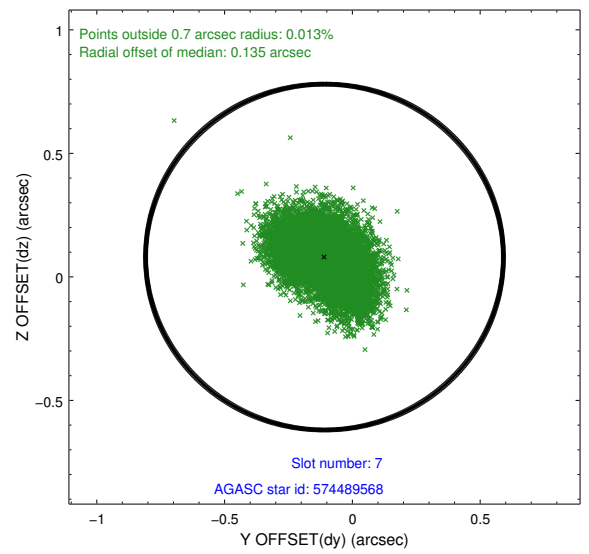
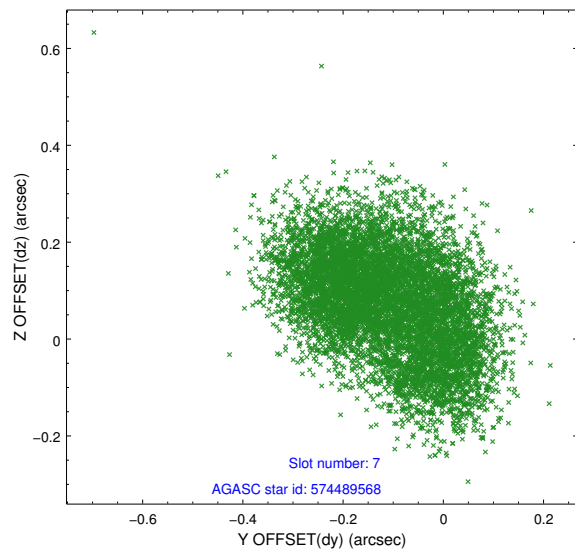
### 2.4.3 Slot 5



### 2.4.4 Slot 6

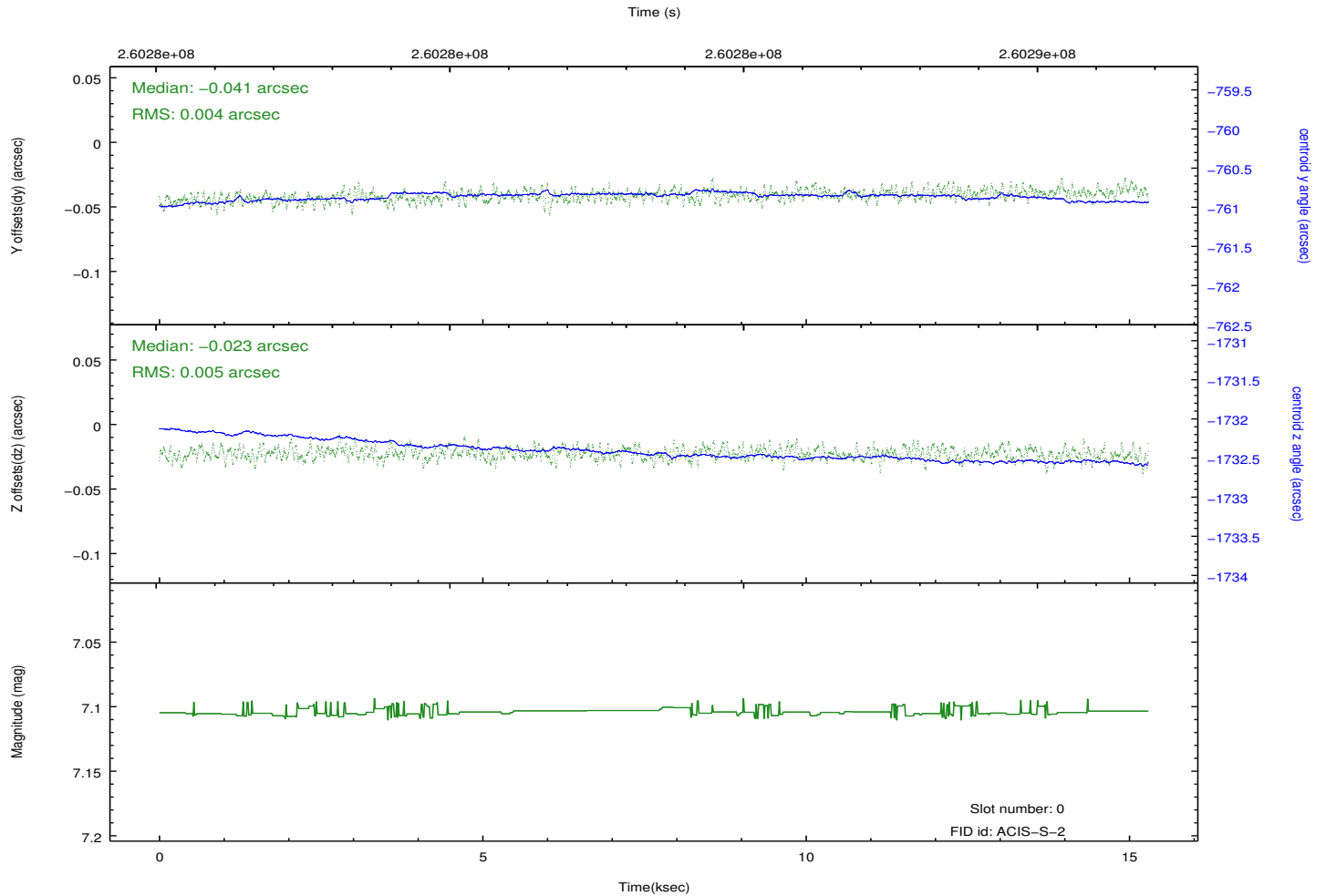
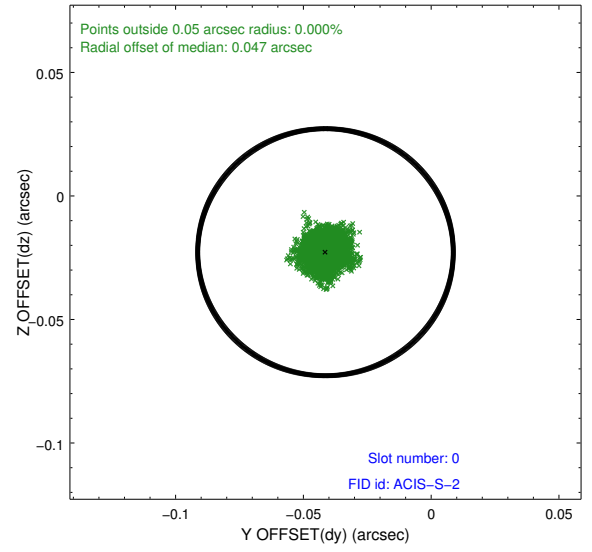
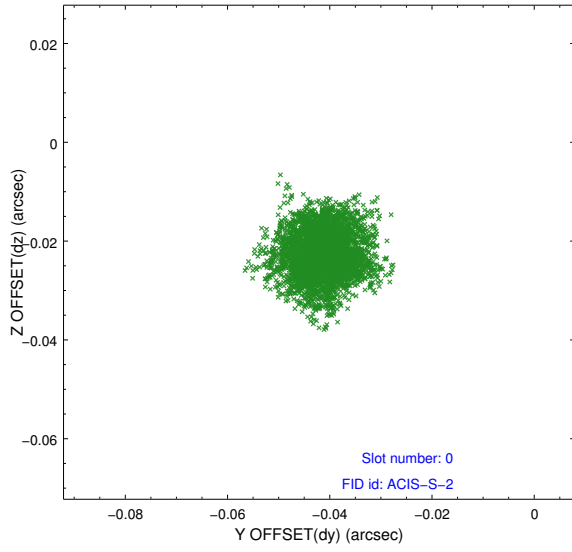


## 2.4.5 Slot 7

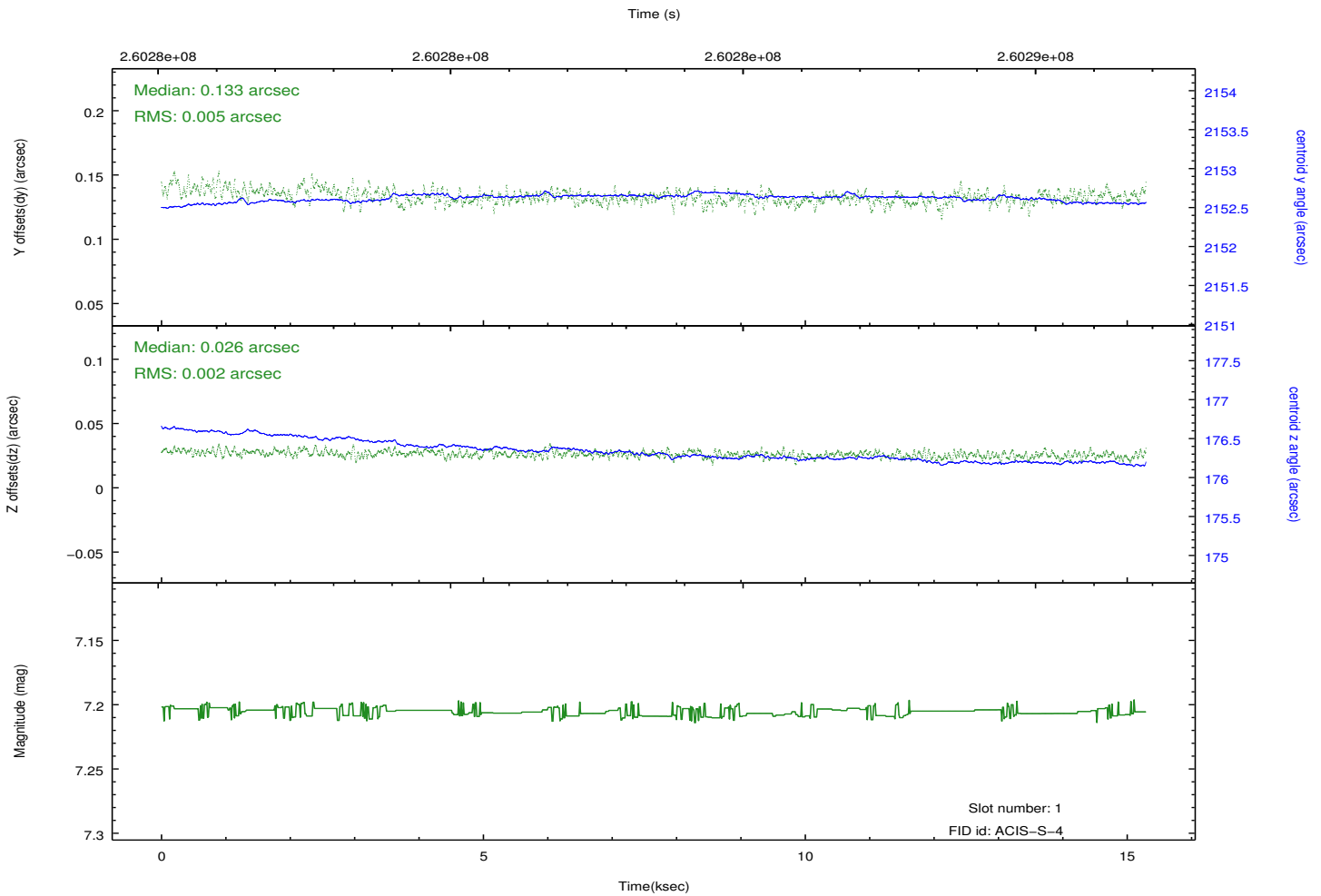
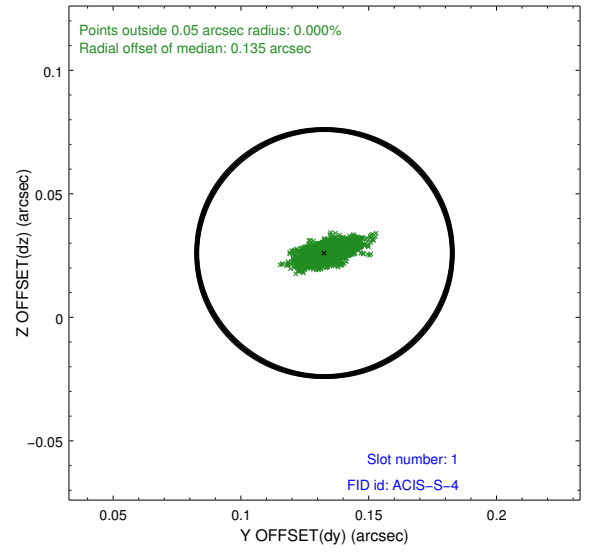
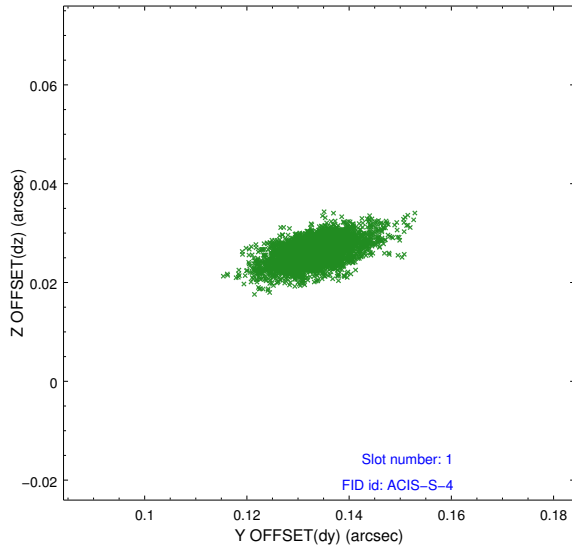


## 2.5 FID Slots

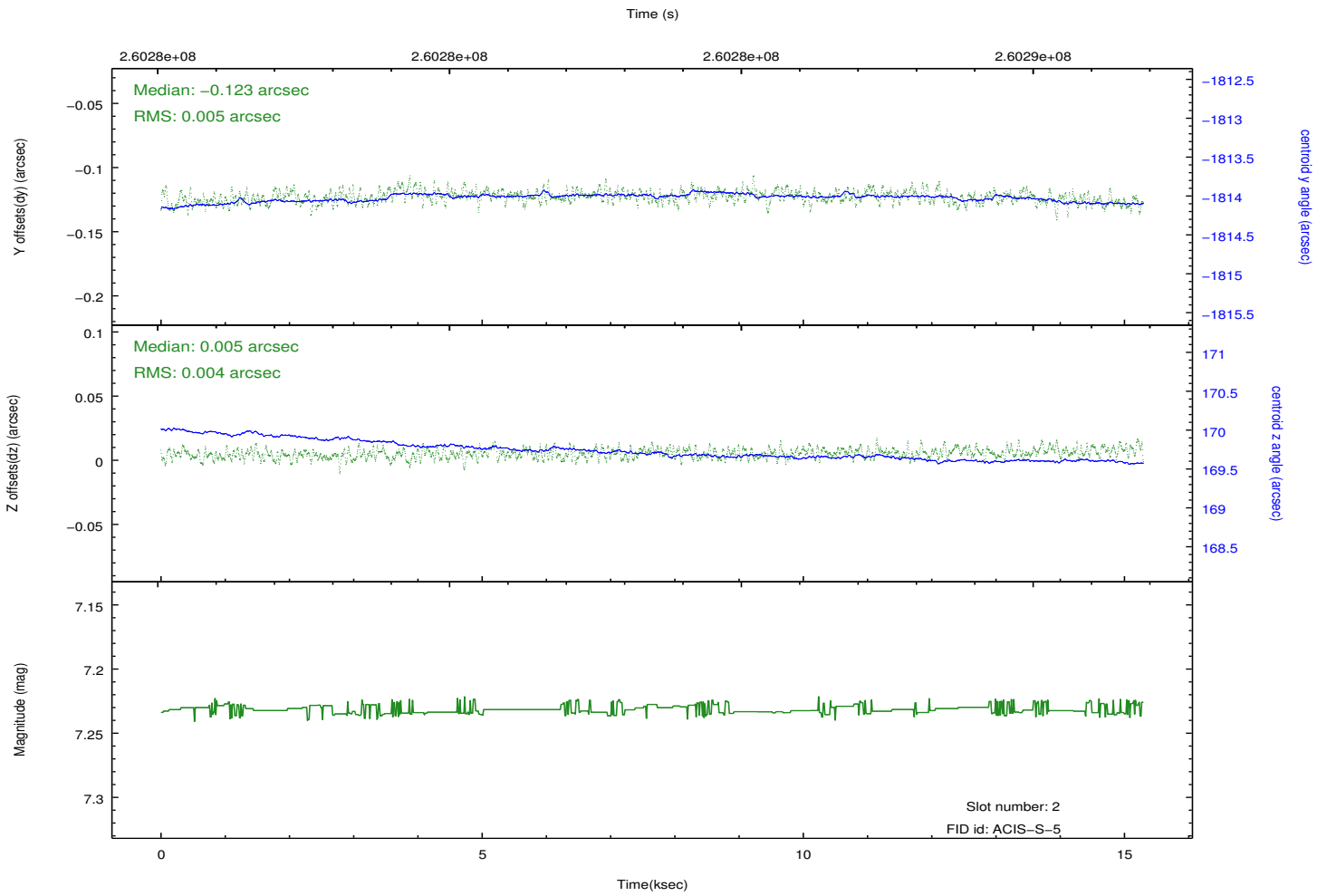
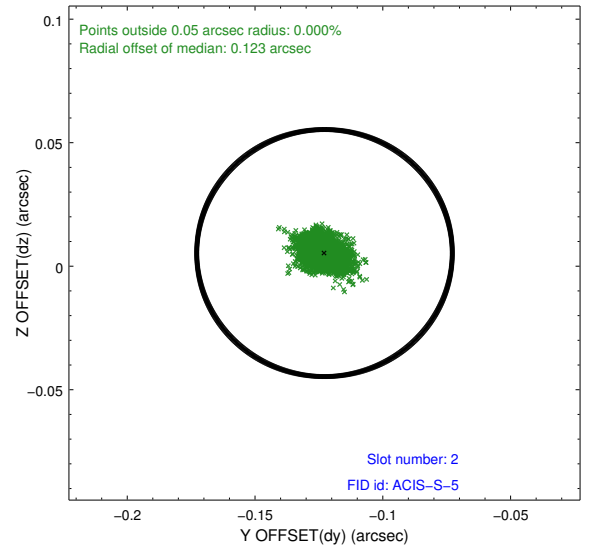
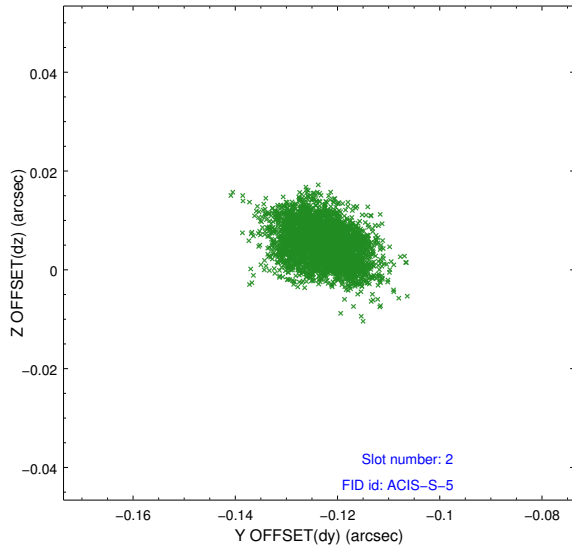
### 2.5.1 Slot 0



## 2.5.2 Slot 1

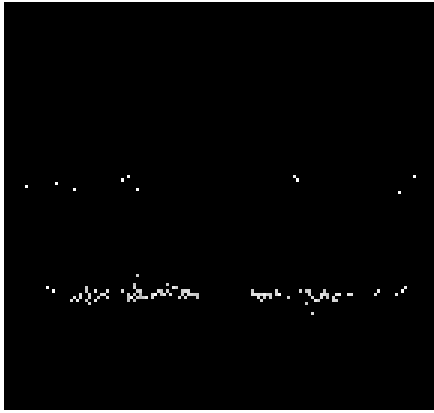


### 2.5.3 Slot 2

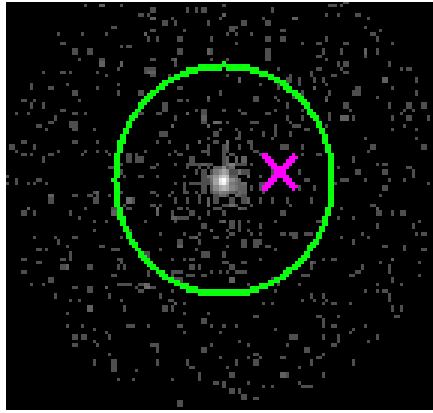


### 3 Gratings

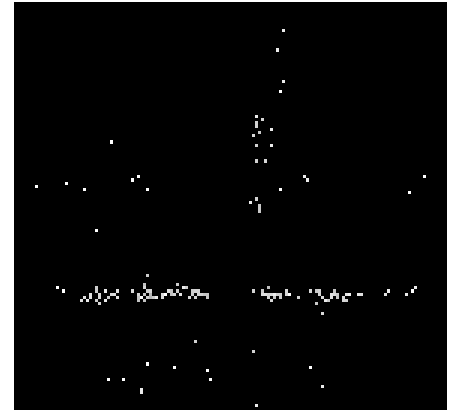
#### 3.1 HEG Arm



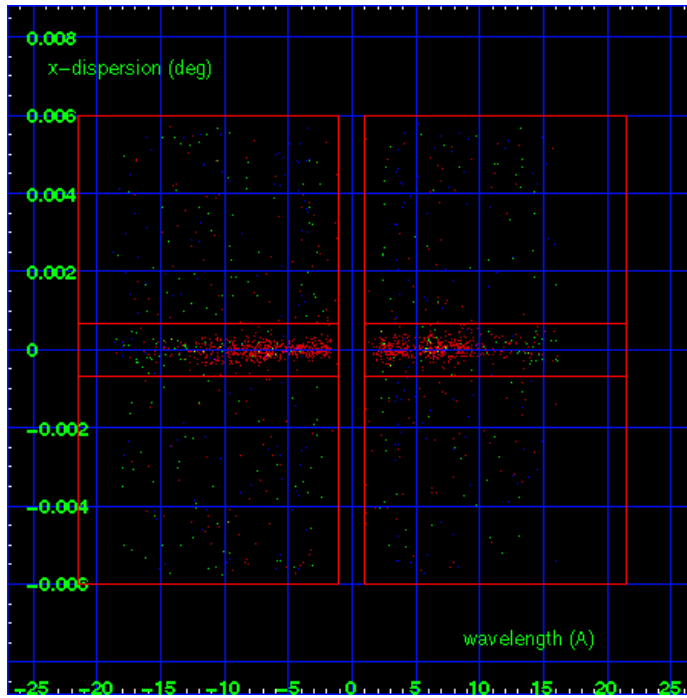
HEG Order Sort 123



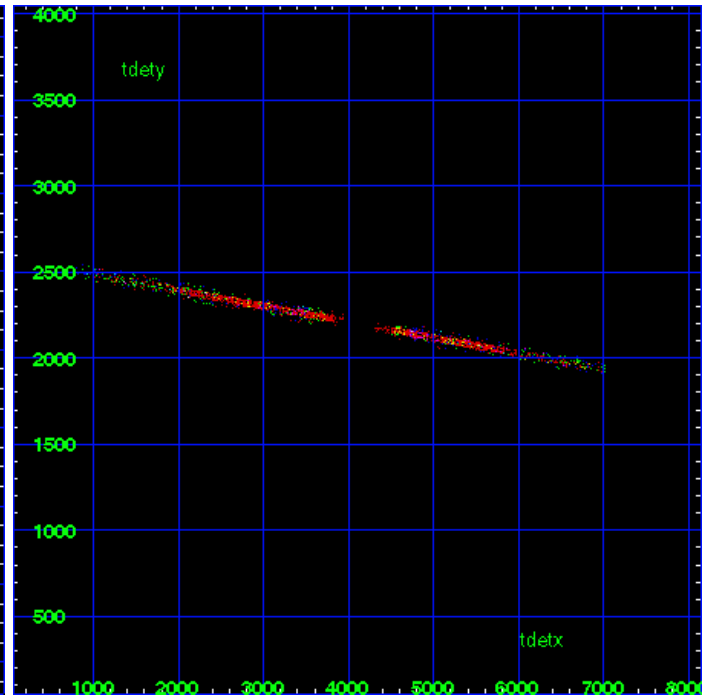
HEG Zero Order



HEG Order Sort ALL

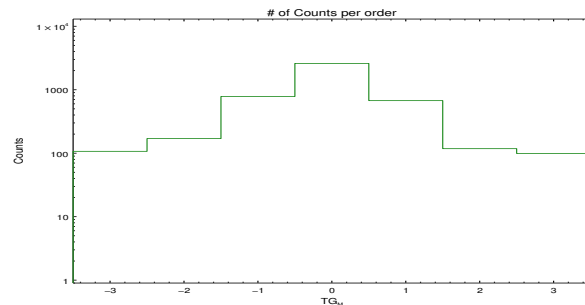


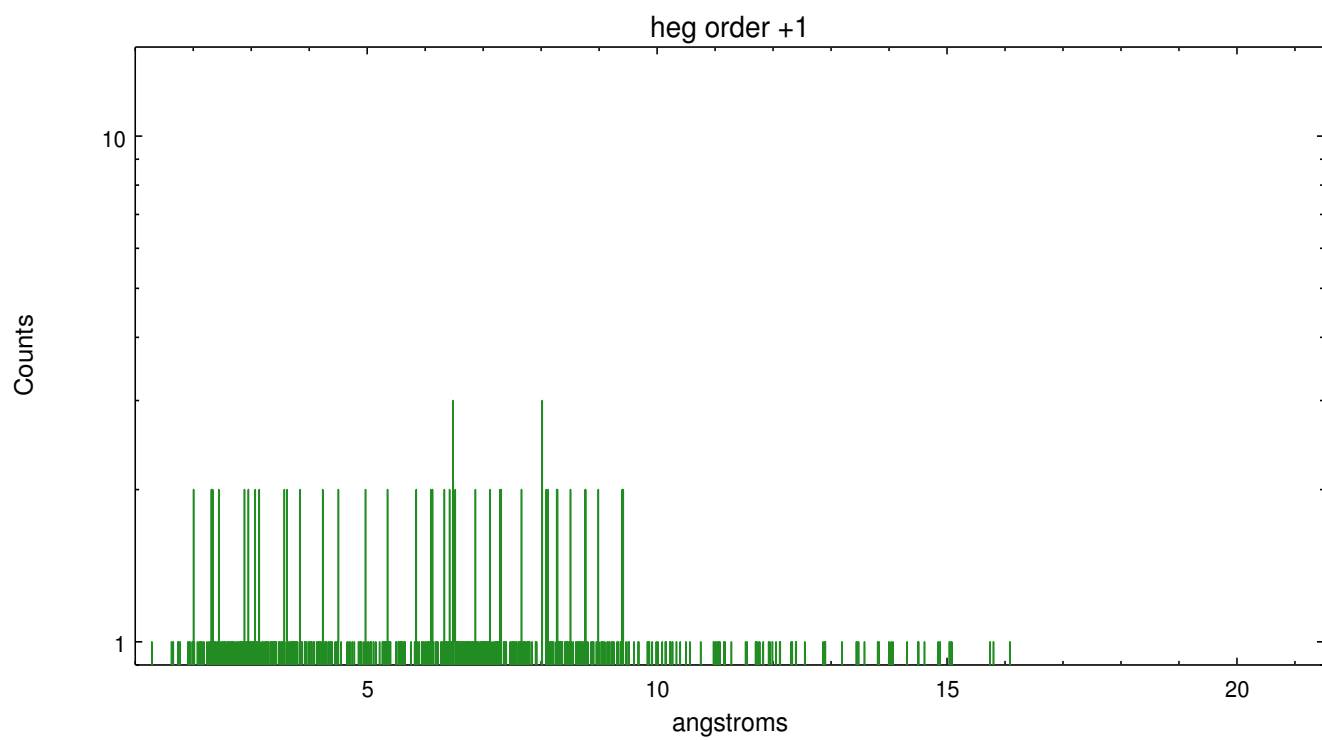
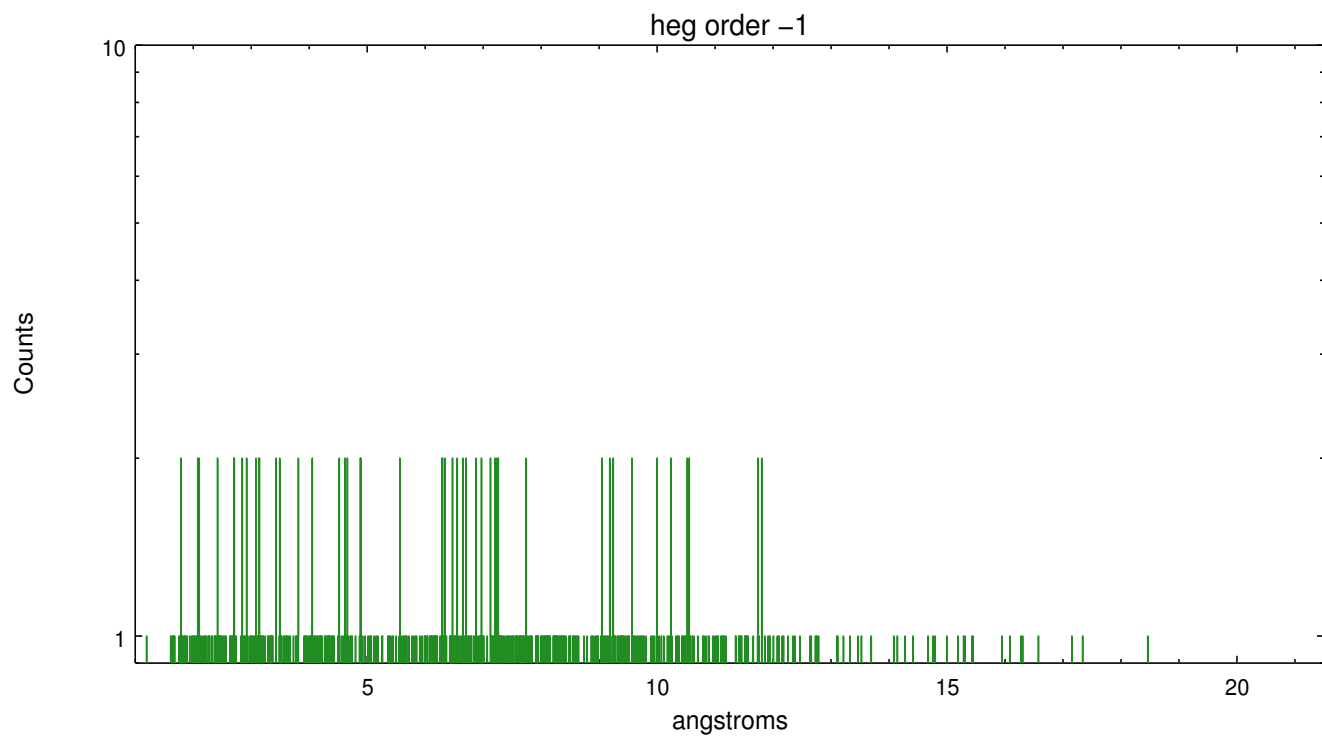
Spot Image HEG



Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	107	170	783	2600	674	118	99

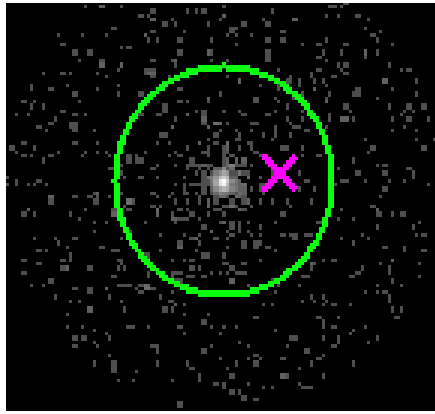




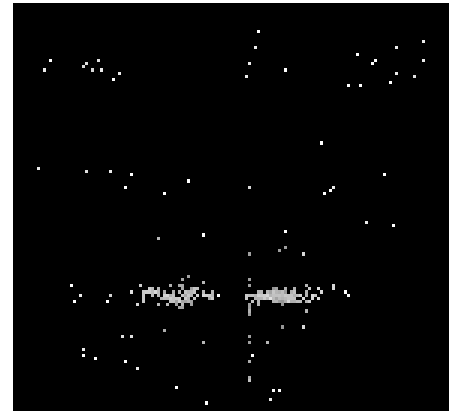
### 3.2 MEG Arm



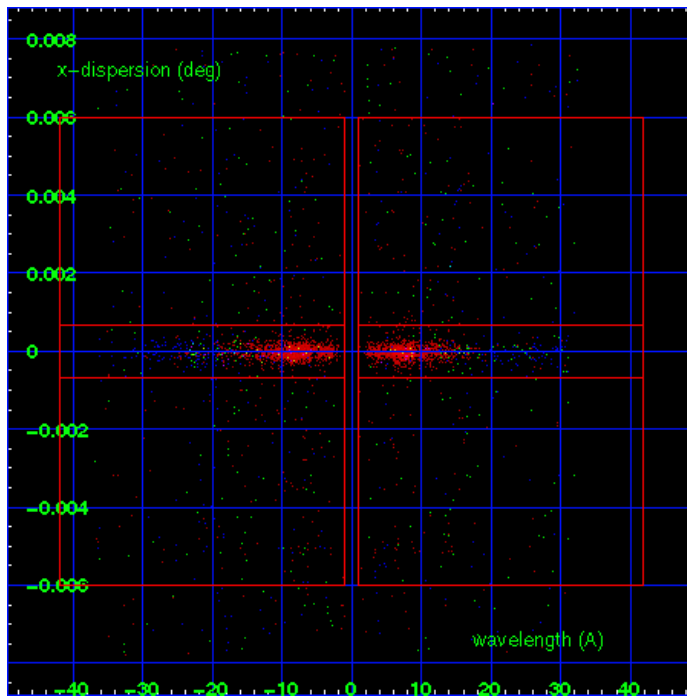
MEG Order Sort 123



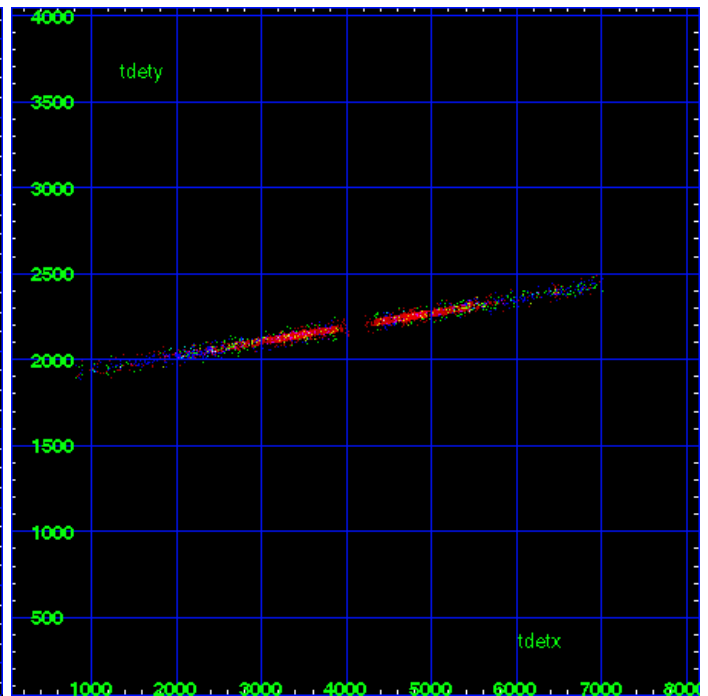
MEG Zero Order



MEG Order Sort ALL

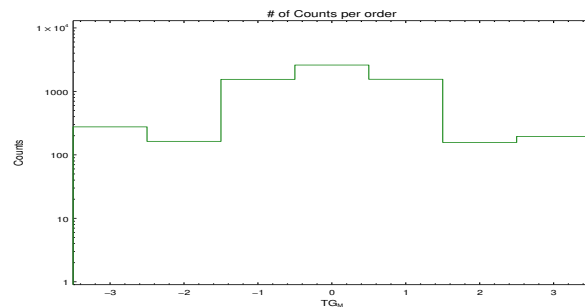


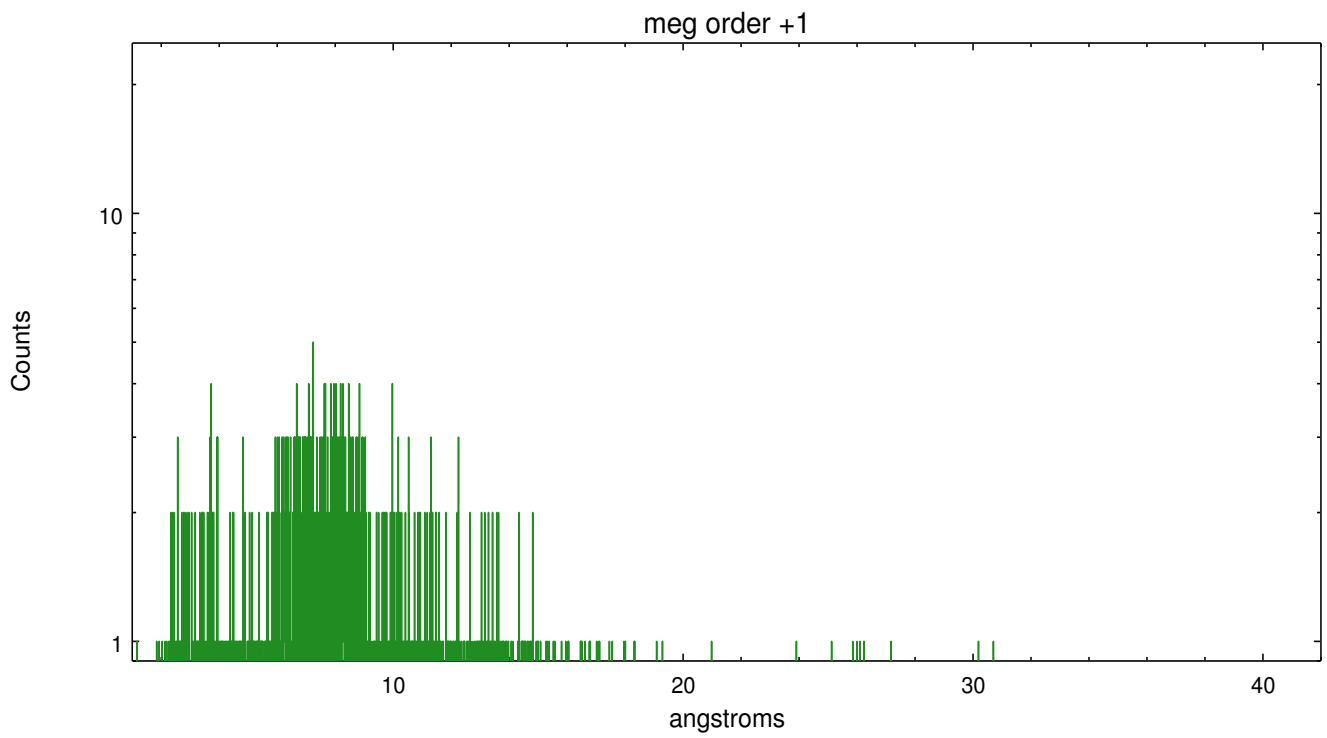
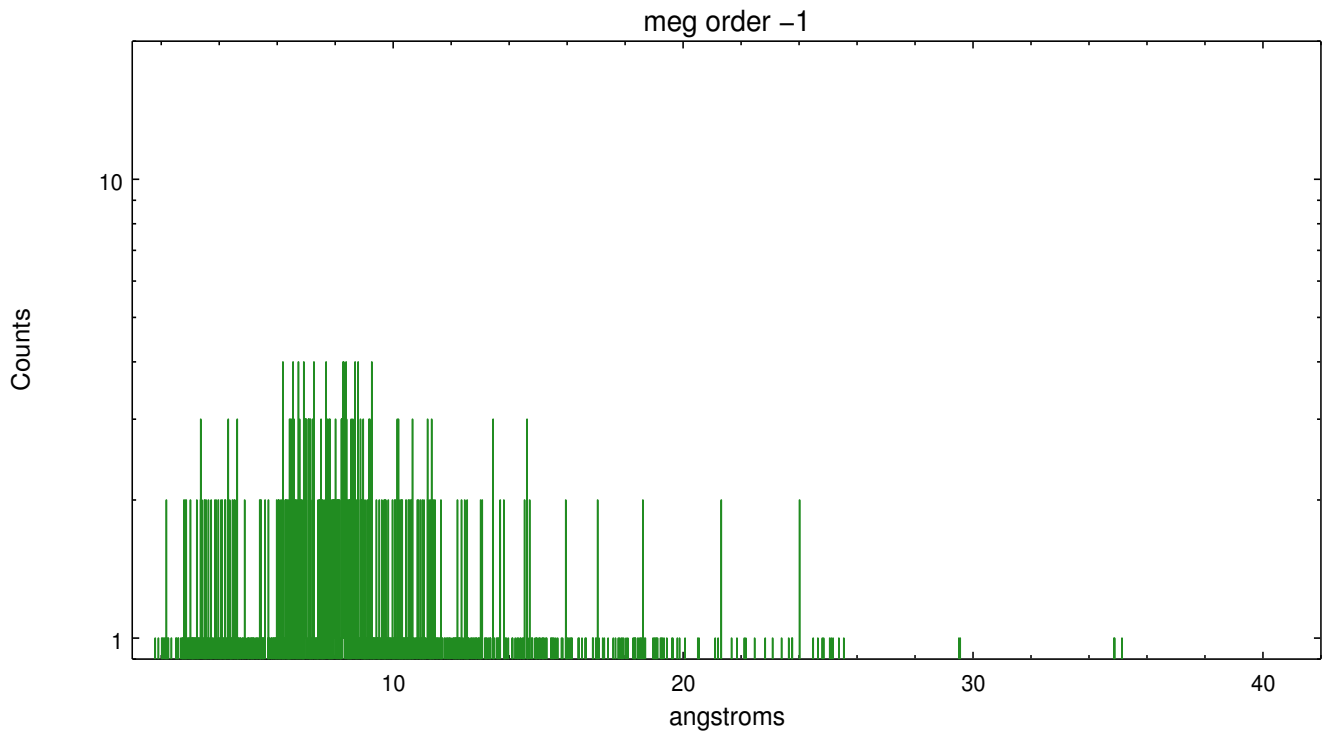
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	276	163	1546	2600	1551	157	195





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.03.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.9535999

## A.2 Comments