

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8985 - L2 Version 2  
Chandra X-Ray Center

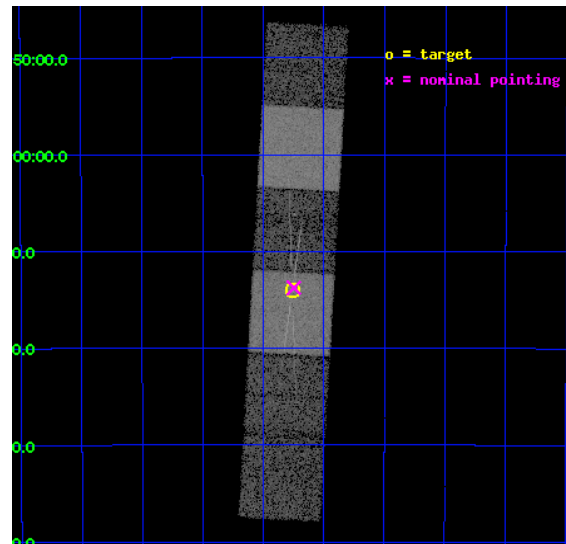
L2 Processing Date : May 9 2012

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# 1 Front

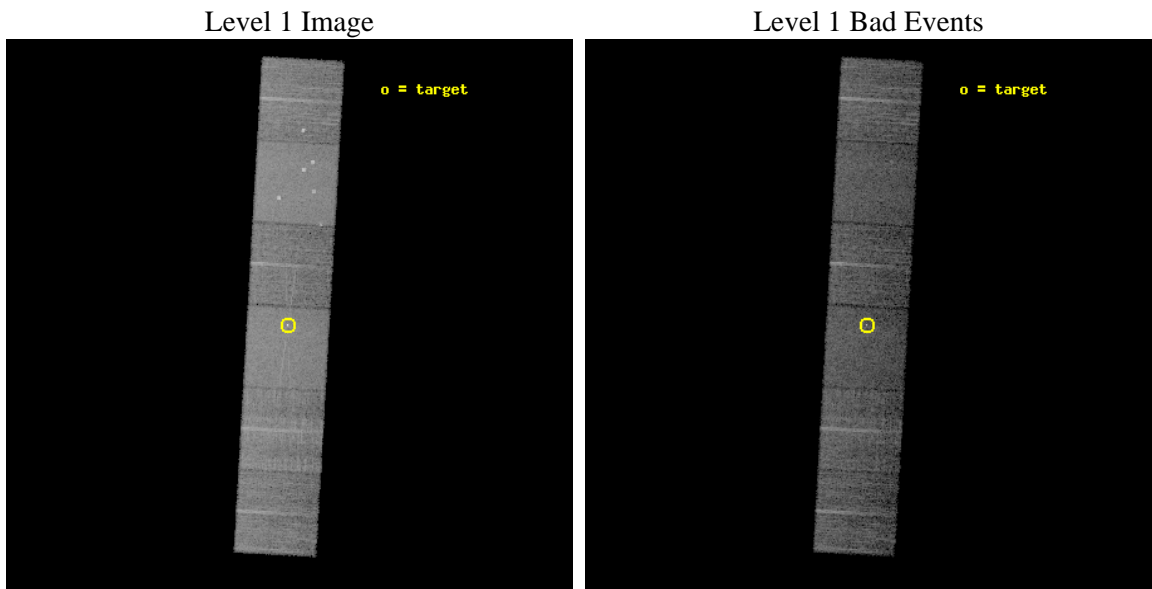
seq_num	400836	Sequence number
obs_id	8985	Observation id
title	Following a black hole candidate X-ray transient to quiescence	Pro
observer	dr Peter Jonker	Principal investigator
object	H 1743-322	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.565	Observer's specified target RA [deg]
dec_targ	-32.2333	Observer's specified target Dec [deg]
ra_nom	266.56171991064	Nominal RA [deg]
dec_nom	-32.229326206756	Nominal Dec [deg]
roll_nom	93.265893563838	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6451.199976027	Sum of GTIs [s]
livetime	6369.5109974843	Livetime [s]
ontime4	6451.199976027	Sum of GTIs [s]
ontime5	6451.199976027	Sum of GTIs [s]
ontime6	6451.199976027	Sum of GTIs [s]
ontime7	6451.199976027	Sum of GTIs [s]
ontime8	6451.199976027	Sum of GTIs [s]
ontime9	6451.199976027	Sum of GTIs [s]
l2events	109448	Number of level 2 events



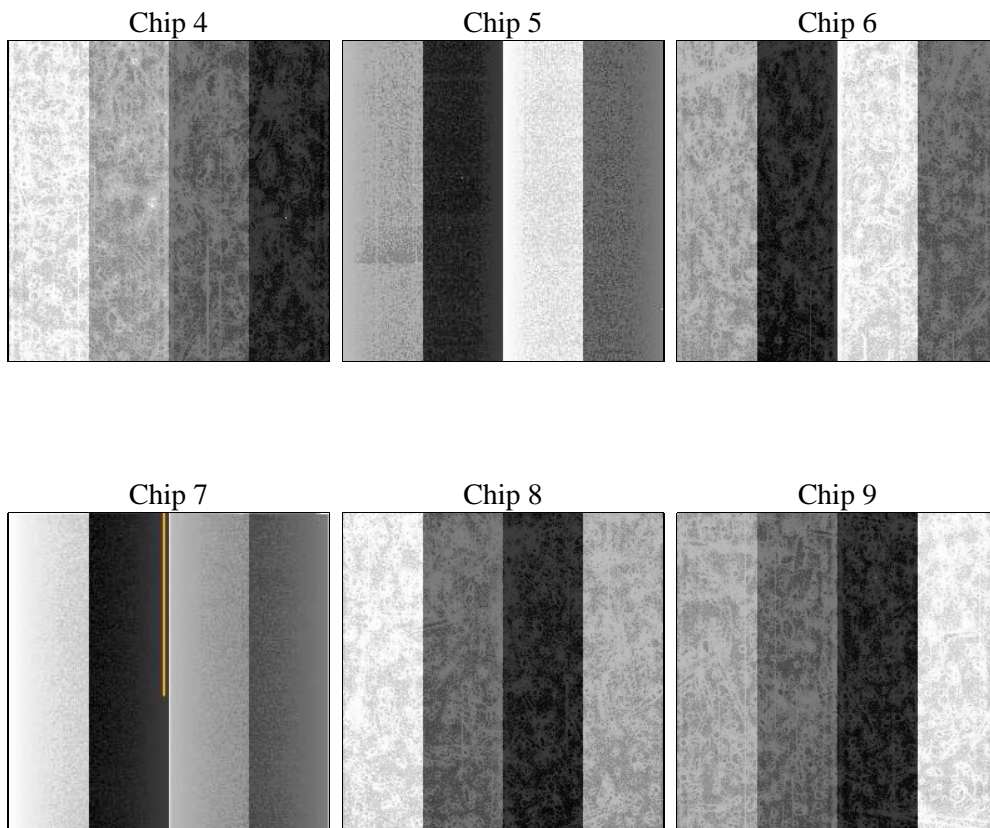
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	8400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	6451.199976027	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime4	6451.199976027	Sum of GTIs [s]
date	2012-05-09T19:27:36	Date and time of file creation	ontime5	6451.199976027	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6451.199976027	Sum of GTIs [s]
			ontime7	6451.199976027	Sum of GTIs [s]
			ontime8	6451.199976027	Sum of GTIs [s]
			ontime9	6451.199976027	Sum of GTIs [s]
			l1events	463607	Number of level 1 events

### 2.1.4 Events

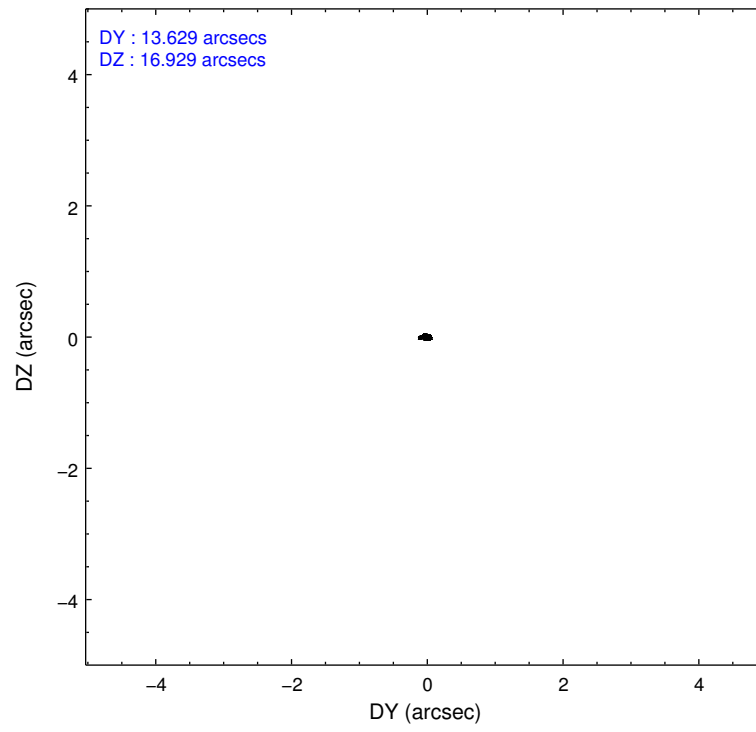
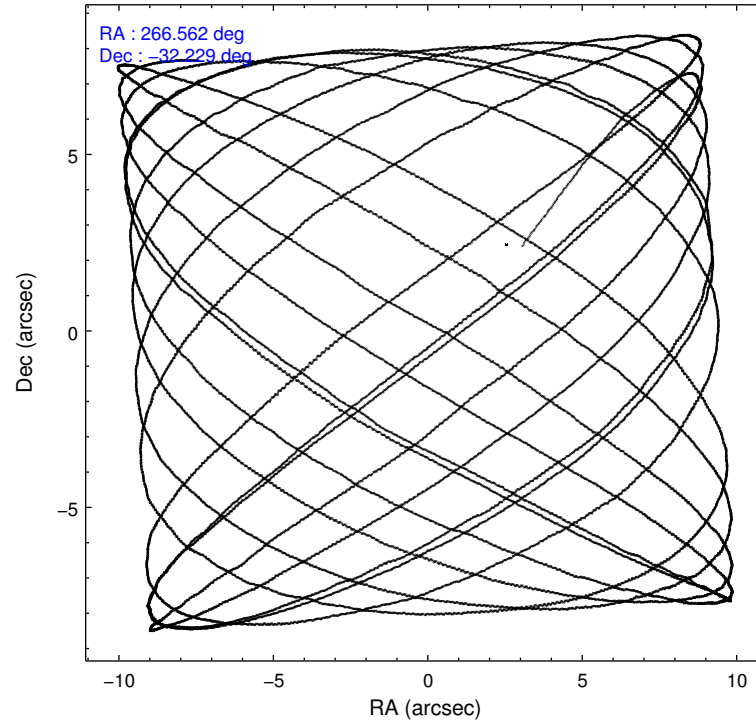
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	73440	97893	61074	88960	80751	61489	grade 0 events	4710	6507	4015	3600	6164	3388
rejected events	64252	51003	52143	50239	61817	53483		6%	6%	6%	4%	7%	5%
rejected %	87%	52%	85%	56%	76%	86%	grade 1 events	94	264	48	112	62	25
								0%	0%	0%	0%	0%	0%
							grade 2 events	1736	13675	1810	8111	4209	1639
								2%	13%	2%	9%	5%	2%
							grade 3 events	792	1691	772	3345	1826	730
								1%	1%	1%	3%	2%	1%
							grade 4 events	741	1627	759	3298	1762	750
								1%	1%	1%	3%	2%	1%
							grade 5 events	2909	6774	2966	8126	3977	3197
								3%	6%	4%	9%	4%	5%
							grade 6 events	1213	23422	1582	20380	4977	1500
								1%	23%	2%	22%	6%	2%
							grade 7 events	61245	43933	49122	41988	57774	50260
								83%	44%	80%	47%	71%	81%

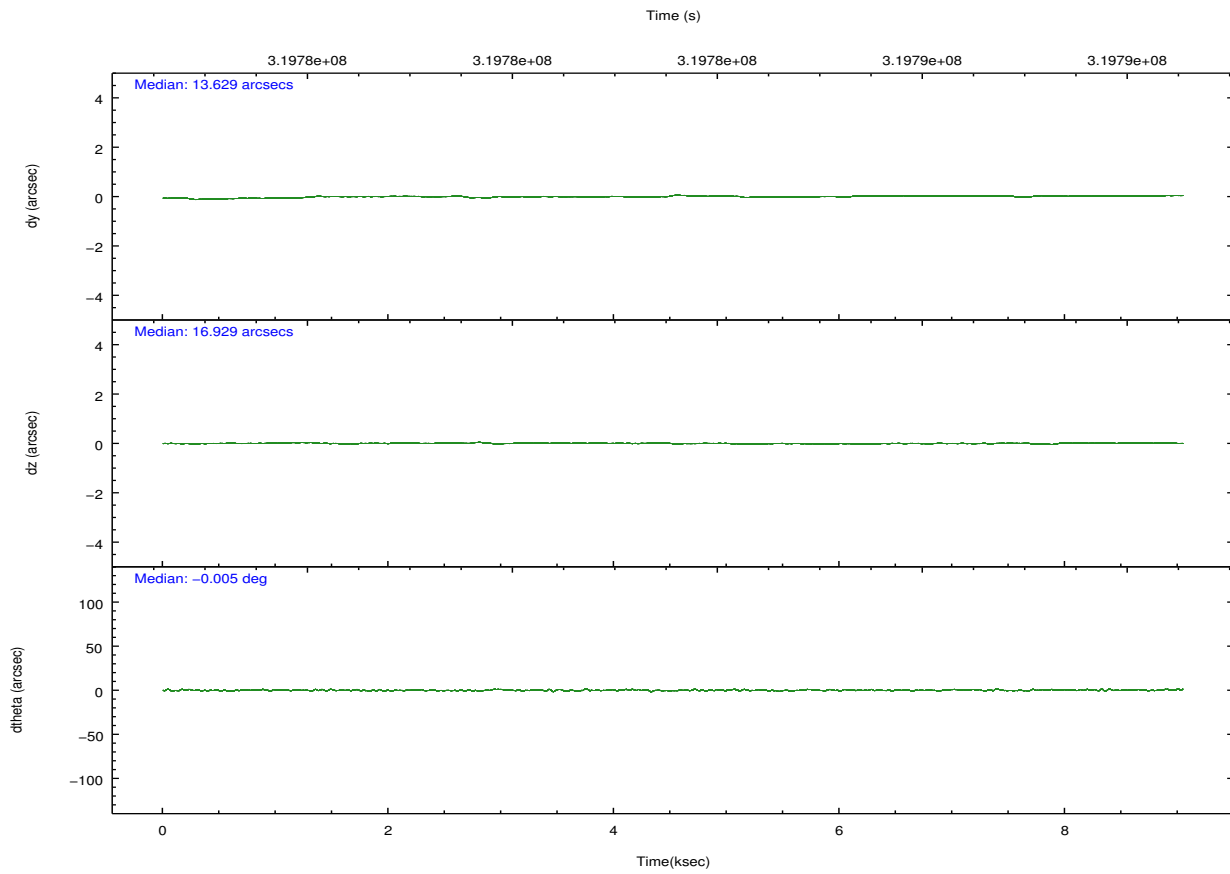
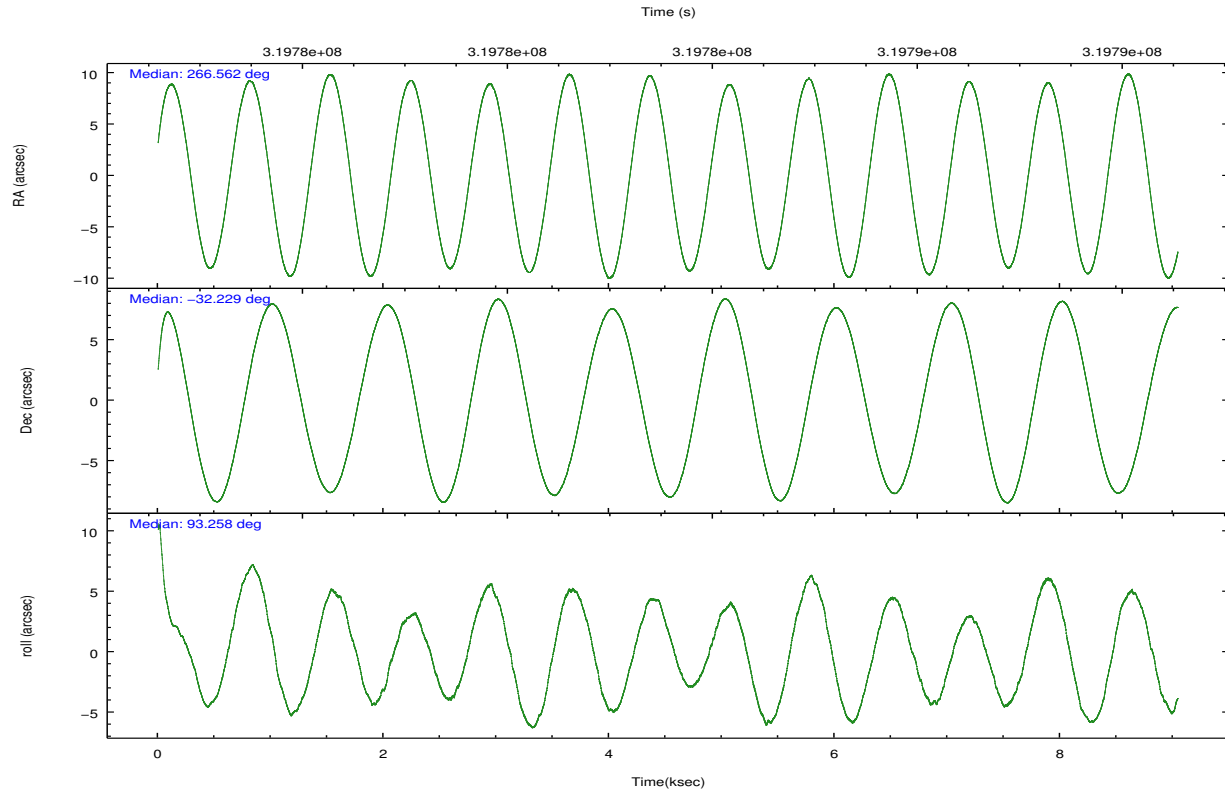


## 2.2 Compared Parameters

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	266.579817	266.5617199106351	Subarray requested	NONE	NONE
[deg] Pointing Dec	-32.251989	-32.22932620675607	Alternating exposures requested	N	N
[deg] Pointing Roll	93.118913	93.2658935638384	[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)	319779691.184000	319778498.94625			
Observation start date	2008-02-19T03:40:26	2008-02-19T03:21:38			
[s] Observation end time (MET)	319788091.184000	319788659.77174			
Observation end date	2008-02-19T06:00:26	2008-02-19T06:10:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



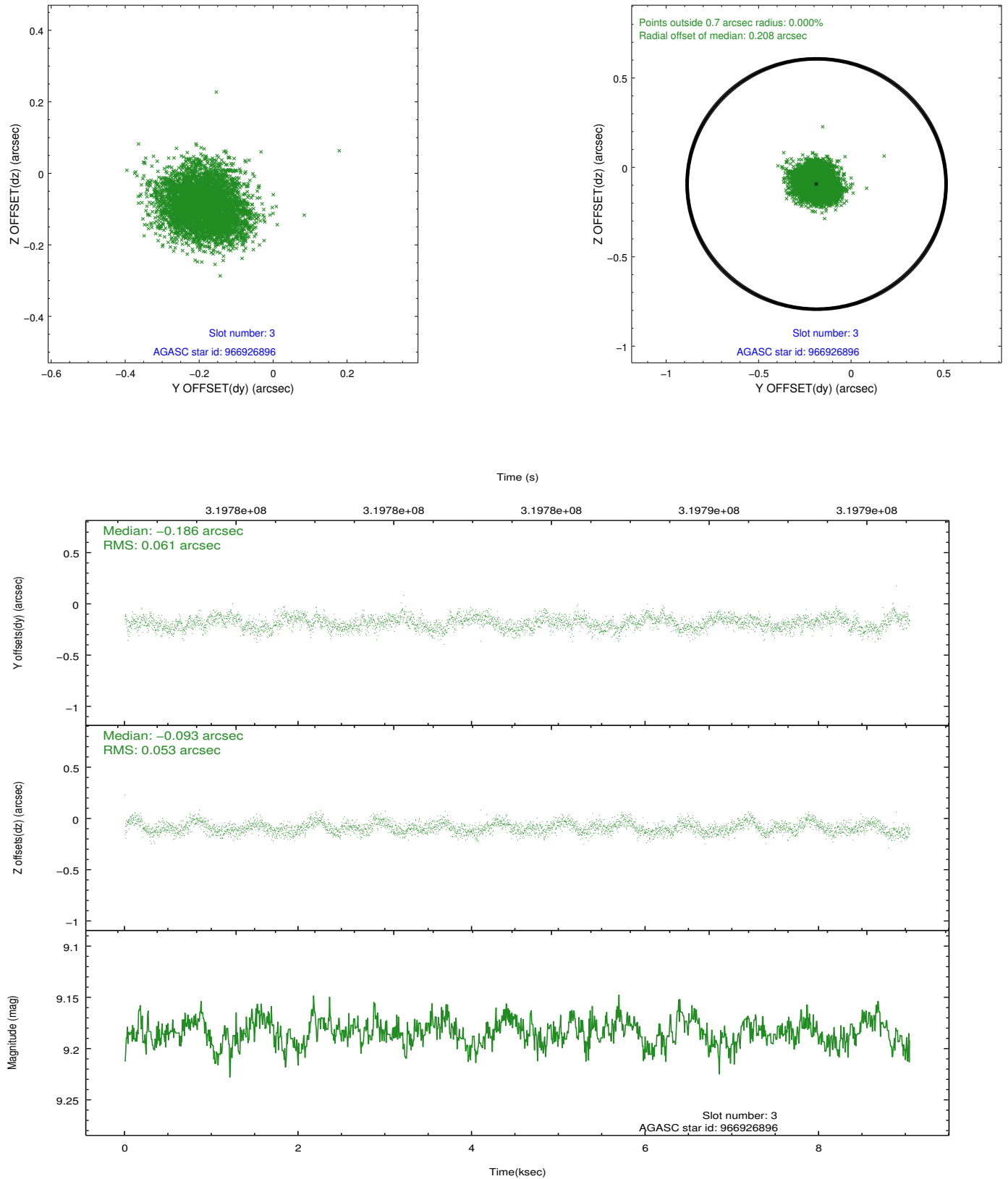


### Slot Statistics

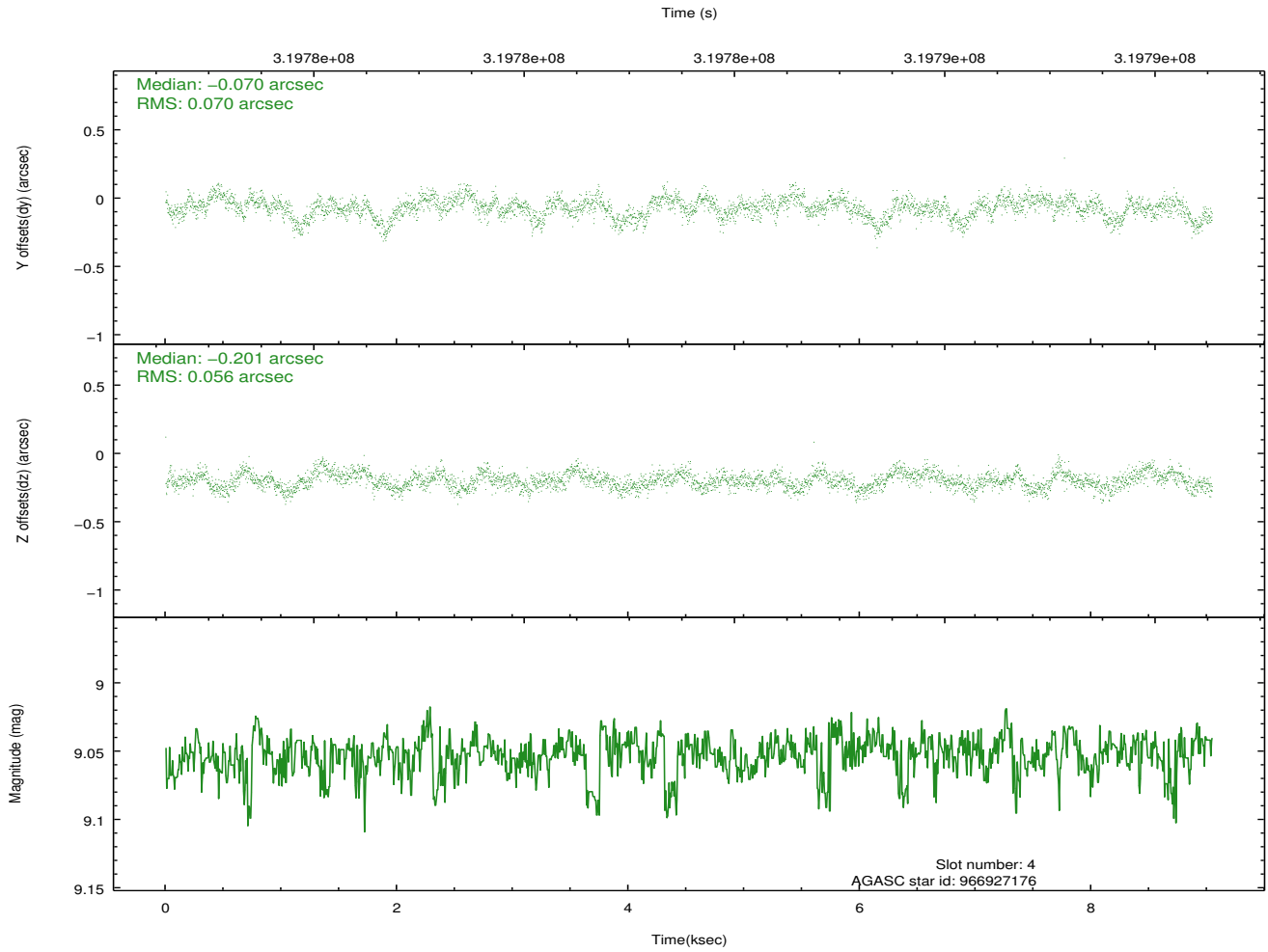
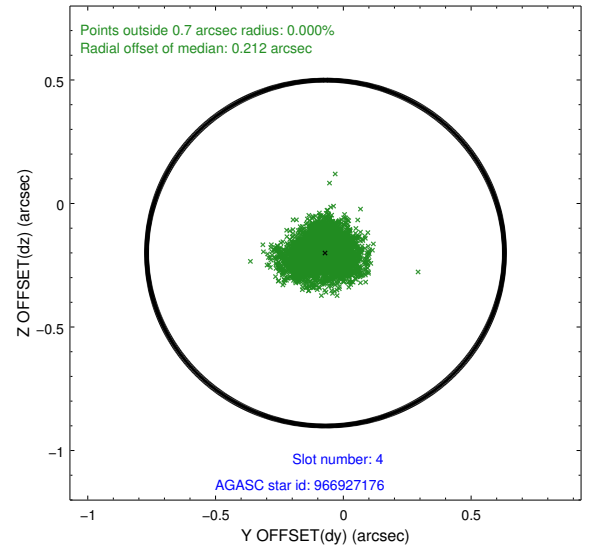
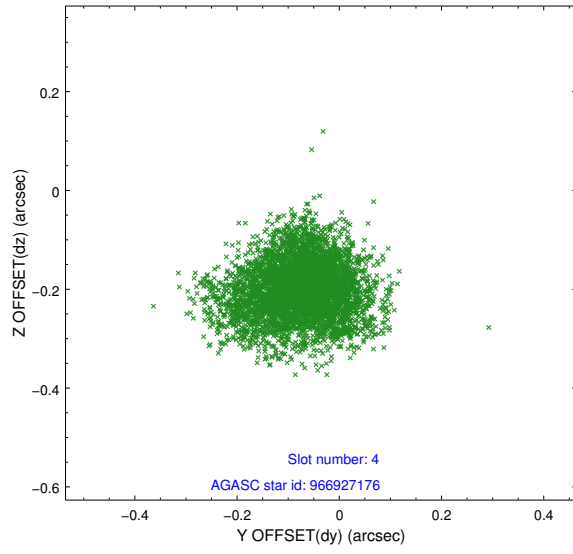
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	2206	-0.007	-0.069	0.006	0.011	0.000000	0.000000	929.47	-1734.06
1	FID	ACIS-S-4	7.18	2206	0.057	0.004	0.006	0.011	0.000000	0.000000	2147.27	169.55
2	FID	ACIS-S-6	7.32	2206	-0.074	0.076	0.006	0.011	0.000000	0.000000	396.11	807.66
3	GUIDE	966926896	9.18	4412	-0.186	-0.093	0.086	0.136	266.197771	-31.663459	2177.05	1054.07
4	GUIDE	966927176	9.05	4412	-0.070	-0.201	0.096	0.156	265.946853	-31.673679	2179.07	1823.93
5	GUIDE	967442688	8.38	4408	0.078	-0.180	0.062	0.101	266.096113	-32.373763	-360.50	1492.80
6	GUIDE	967446352	7.74	4412	0.184	0.170	0.065	0.108	267.069988	-32.671157	-1590.86	-1400.37
7	GUIDE	967451816	9.26	4408	0.000	0.307	0.095	0.158	267.266669	-31.901374	1139.21	-2164.25

## 2.4 Star Slots

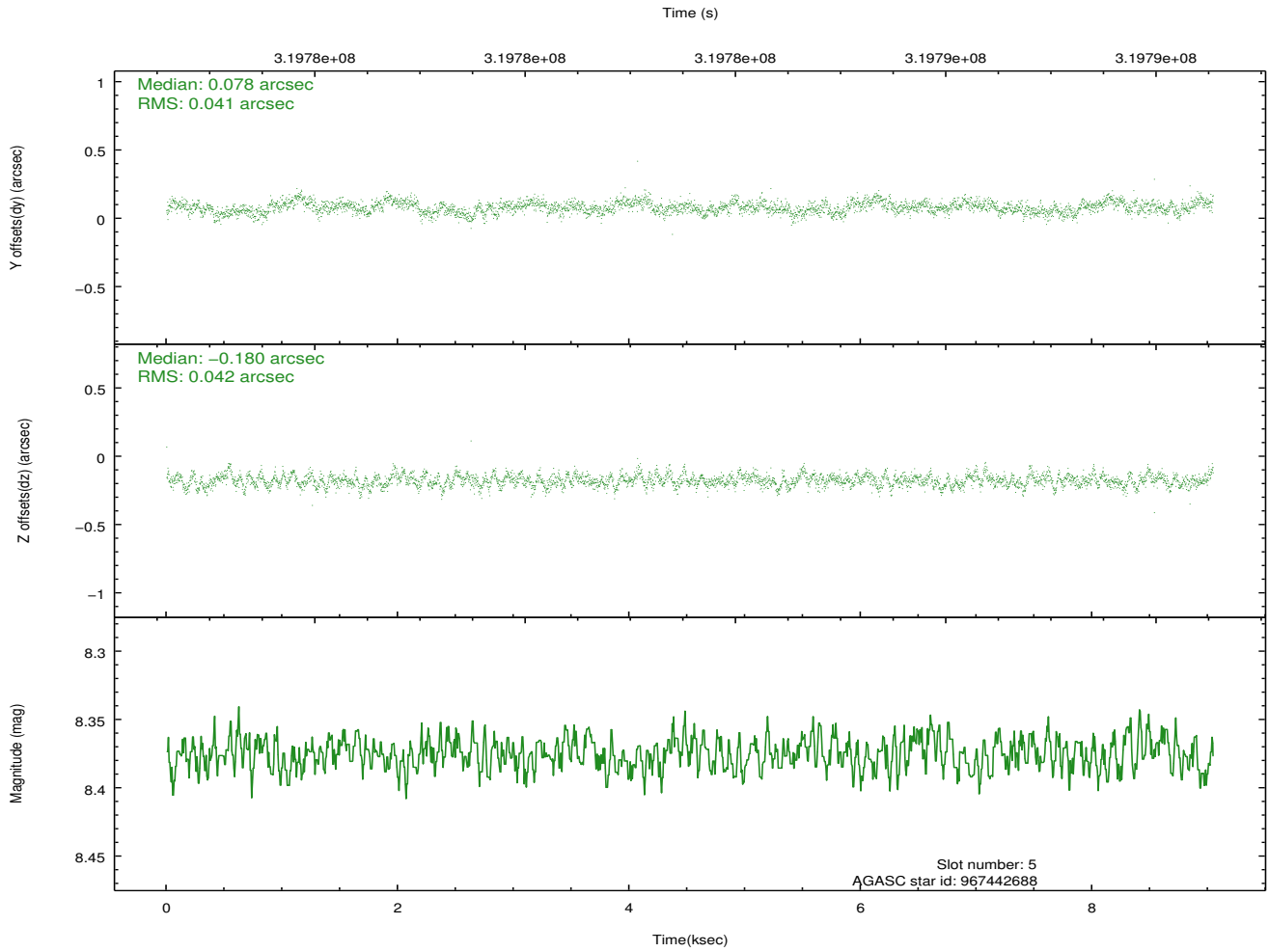
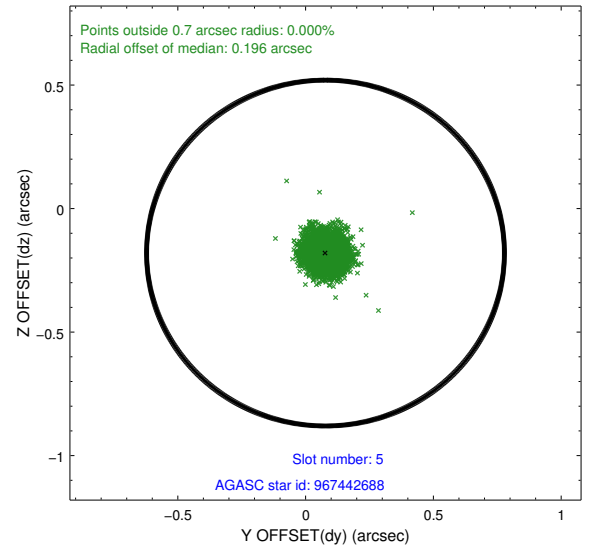
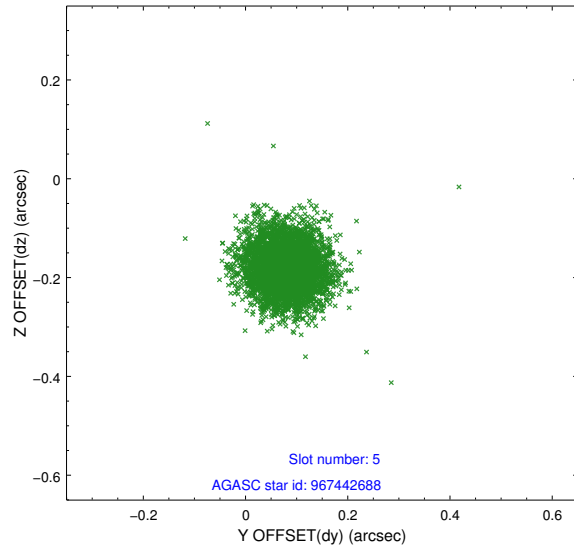
### 2.4.1 Slot 3



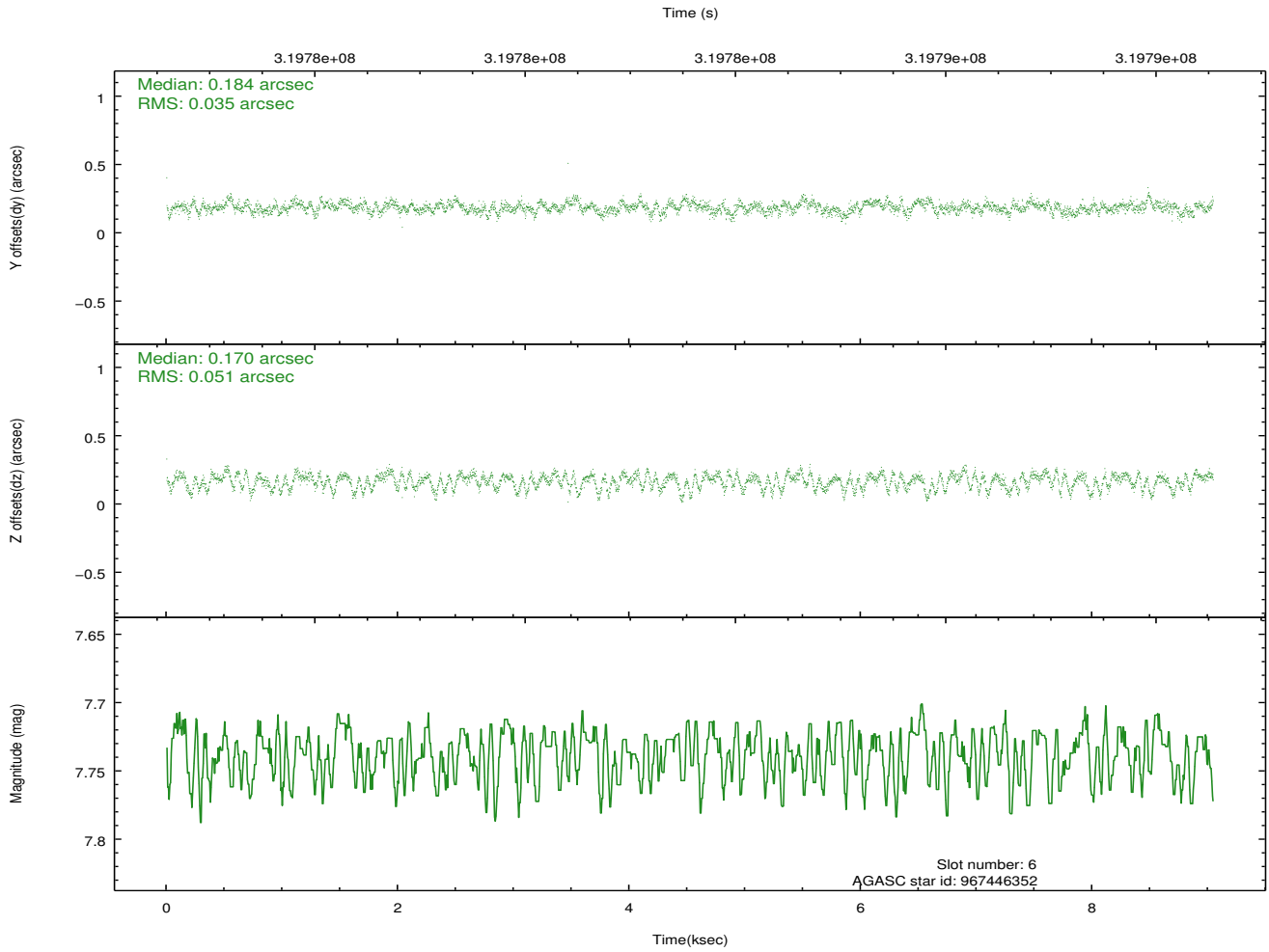
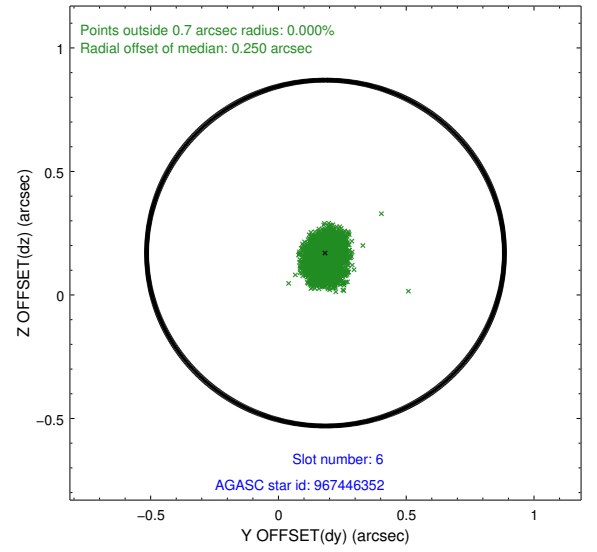
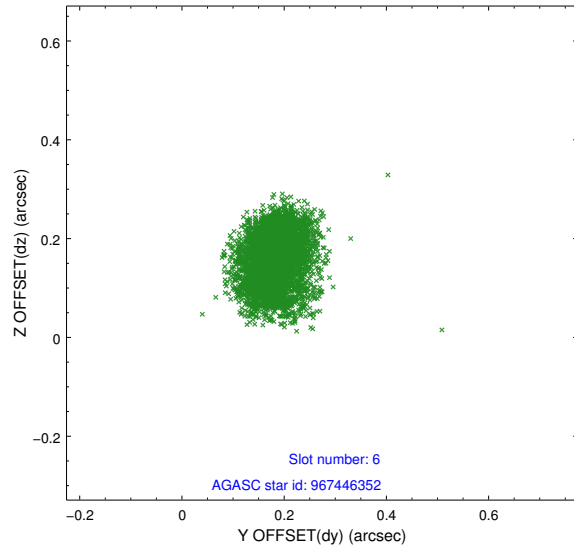
## 2.4.2 Slot 4



### 2.4.3 Slot 5

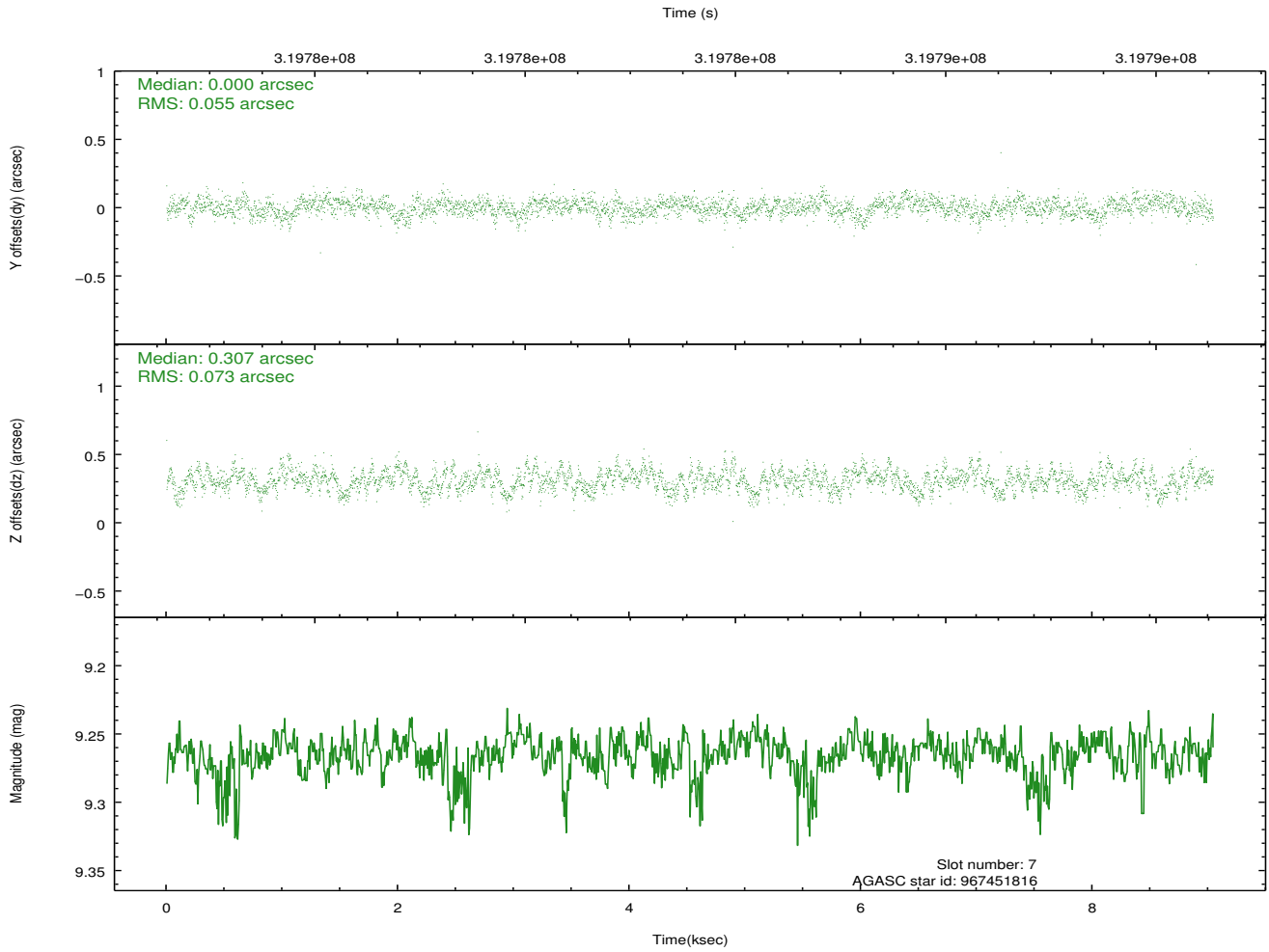
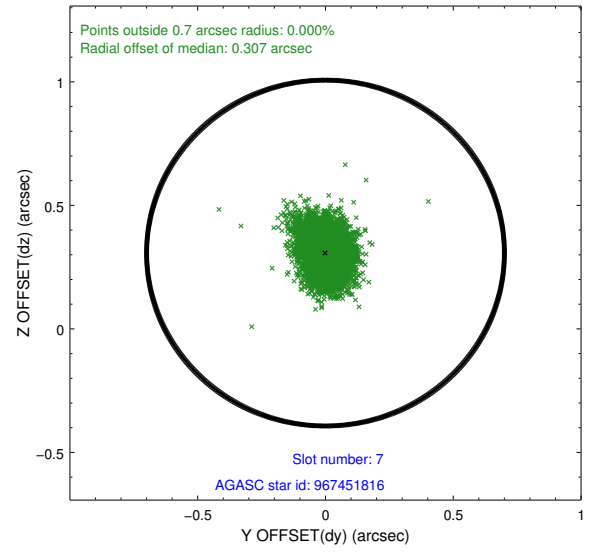
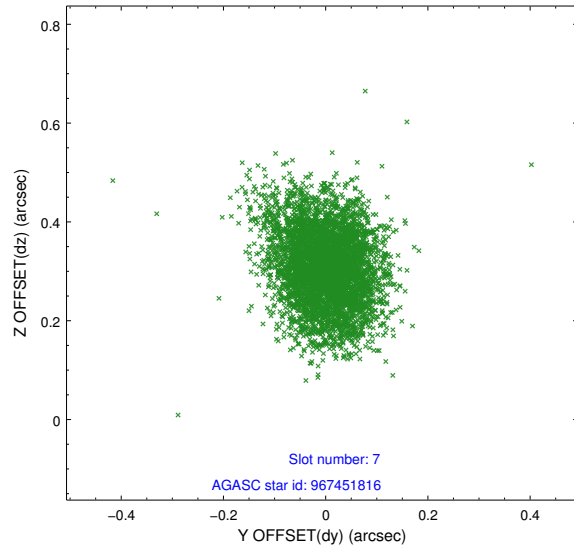


## 2.4.4 Slot 6



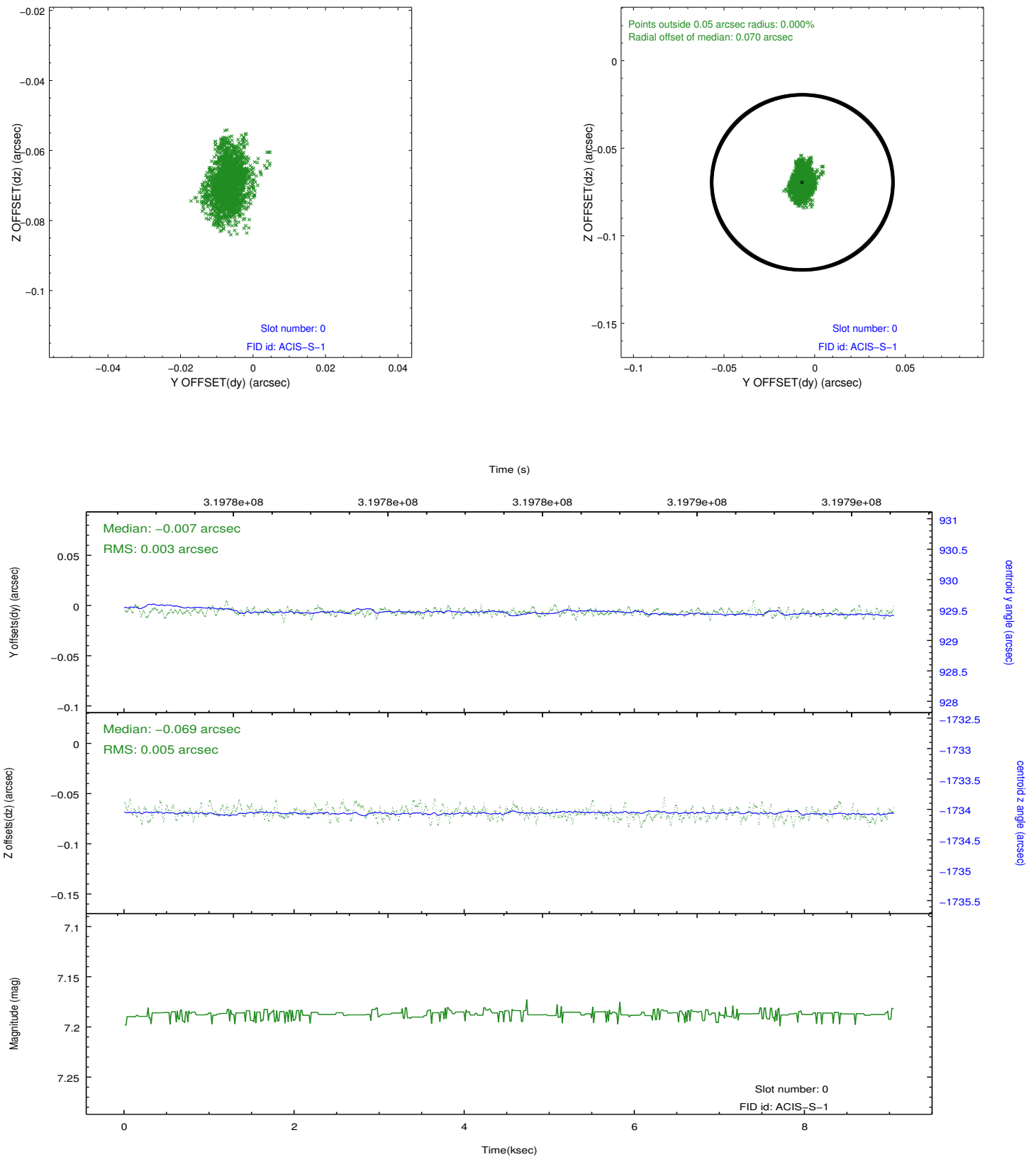


## 2.4.5 Slot 7

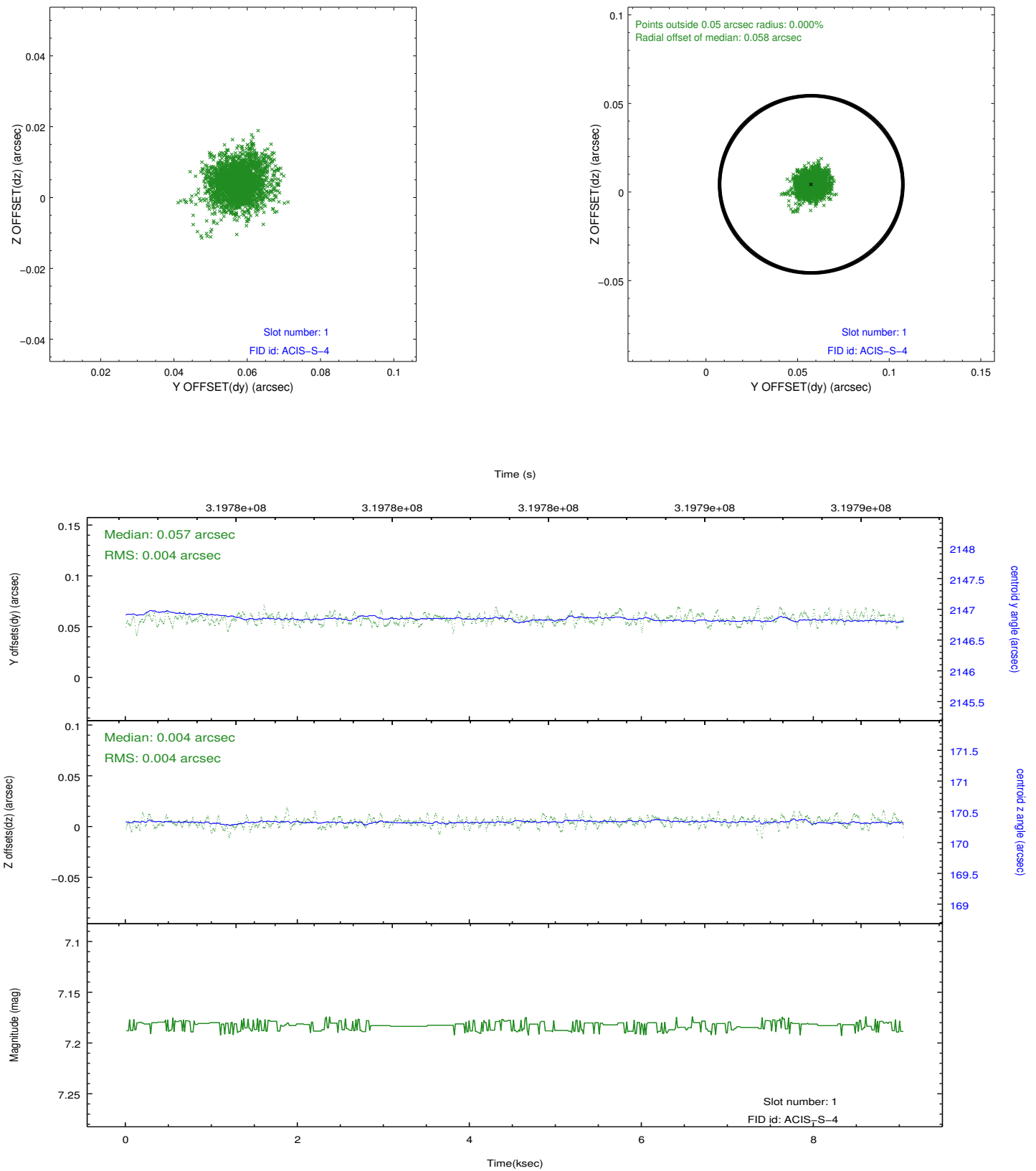


## 2.5 FID Slots

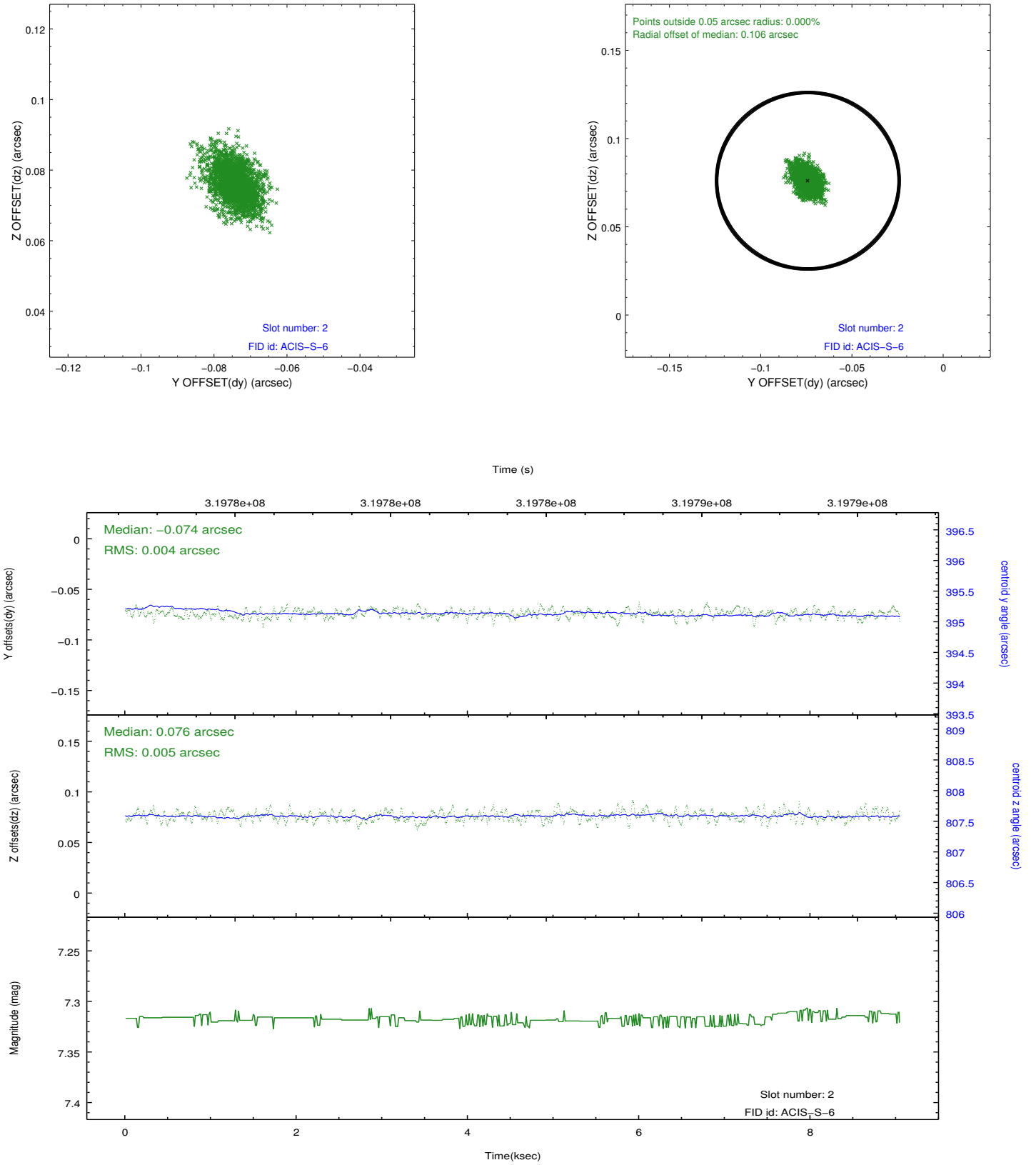
### 2.5.1 Slot 0



## 2.5.2 Slot 1

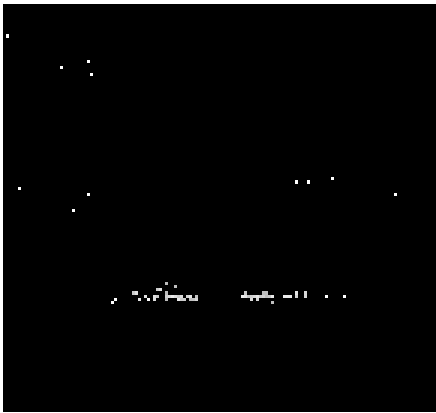


### 2.5.3 Slot 2

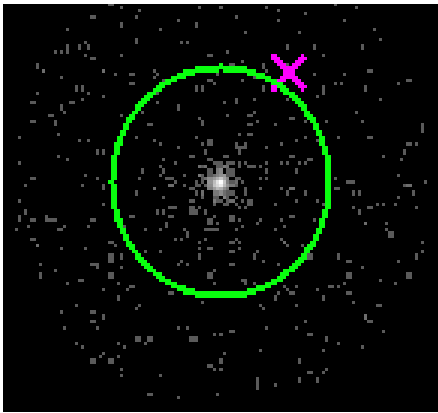


# 3 Gratings

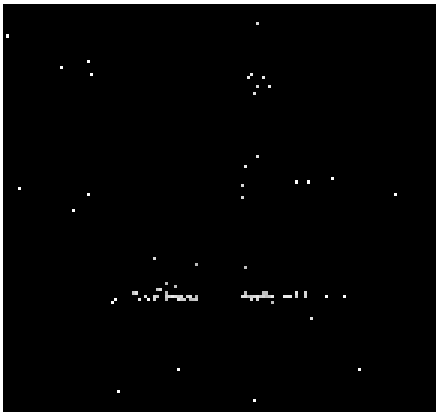
## 3.1 HEG Arm



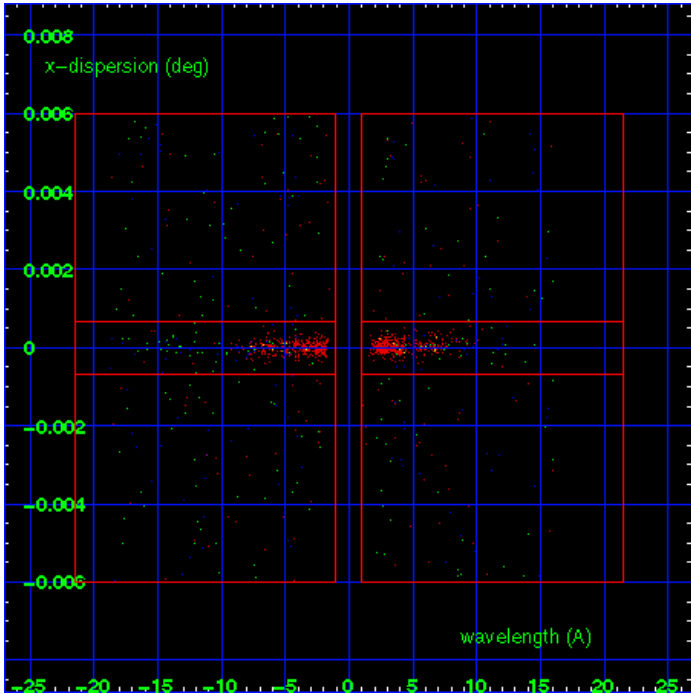
HEG Order Sort 123



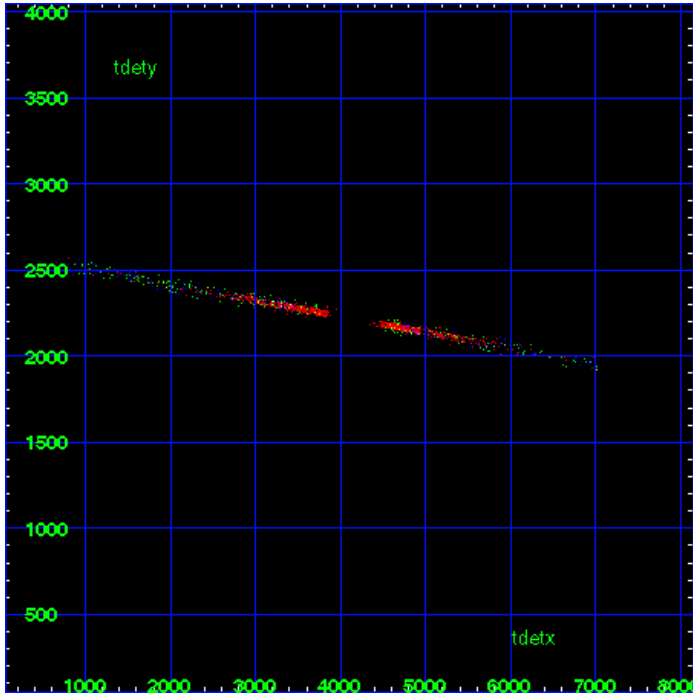
HEG Zero Order



HEG Order Sort ALL

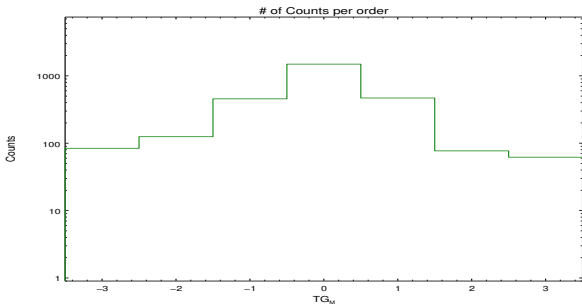


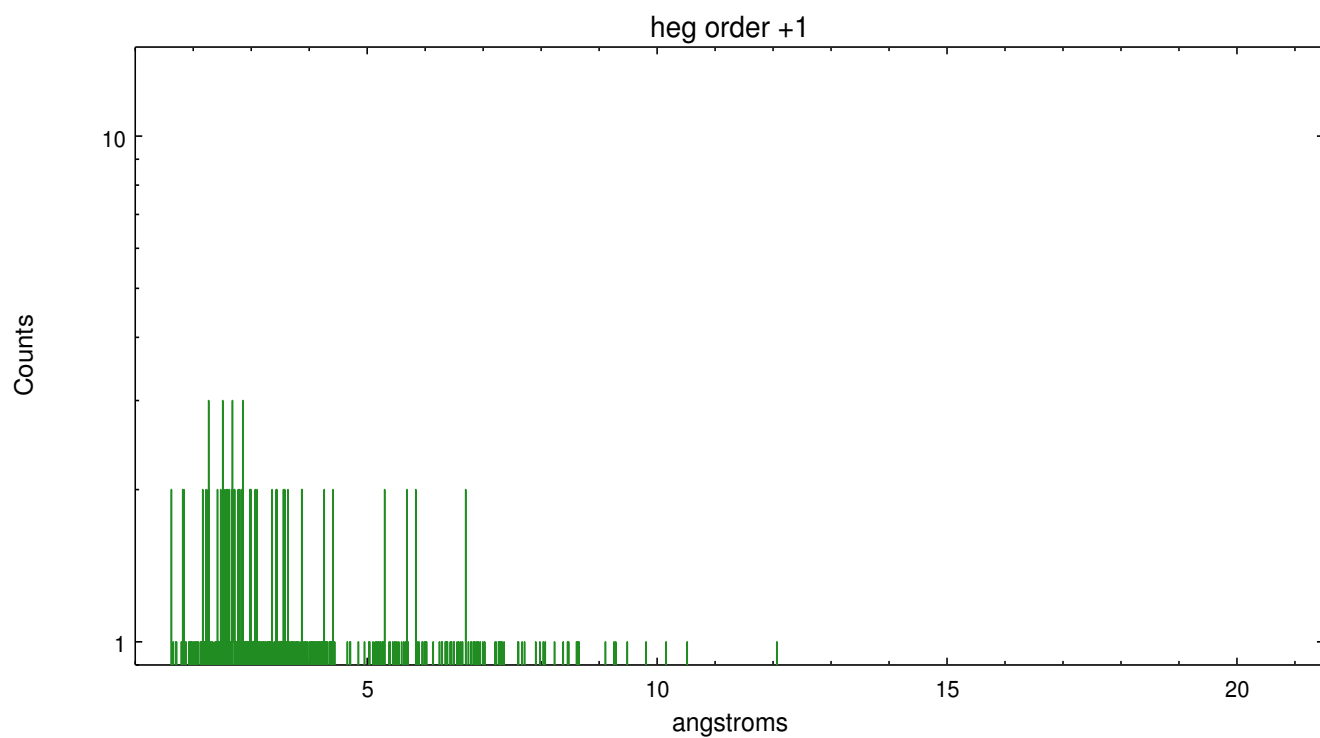
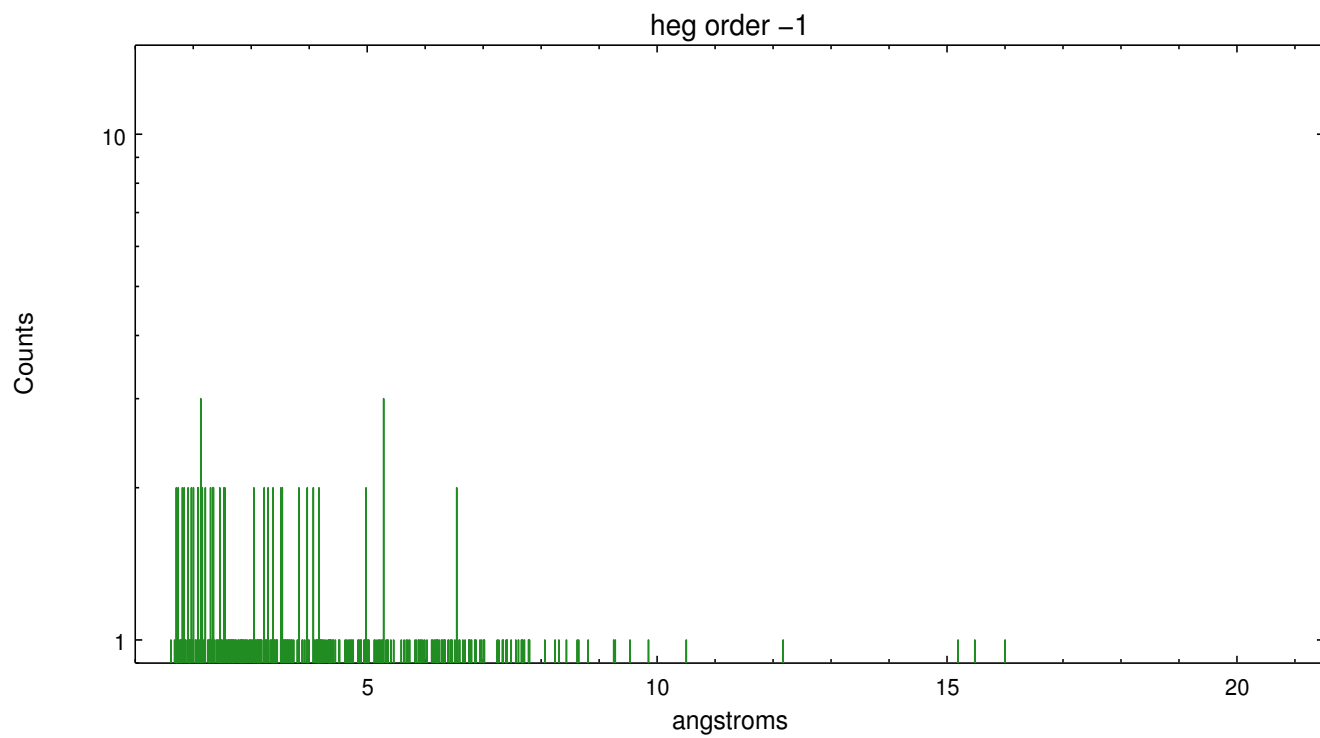
Spot Image HEG



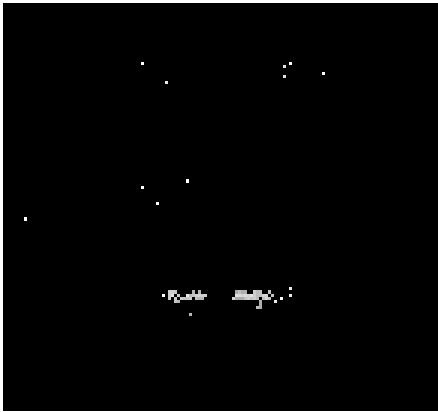
Full Detector HEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	84	125	456	1492	469	77	62

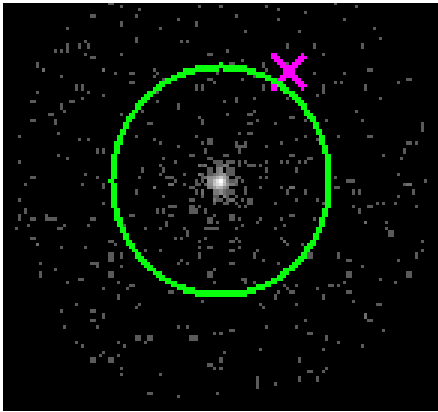




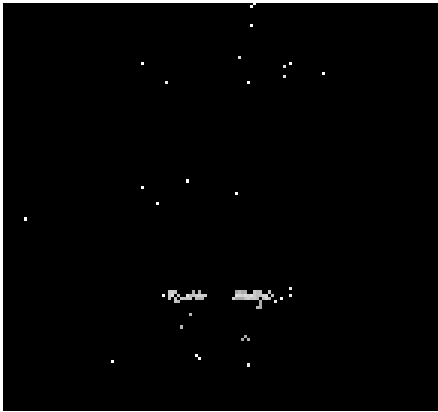
3.2 MEG Arm



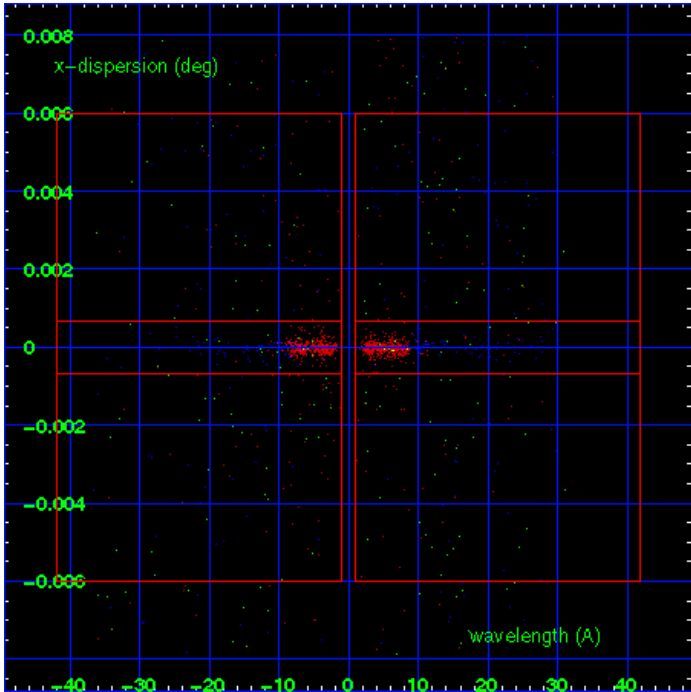
MEG Order Sort 123



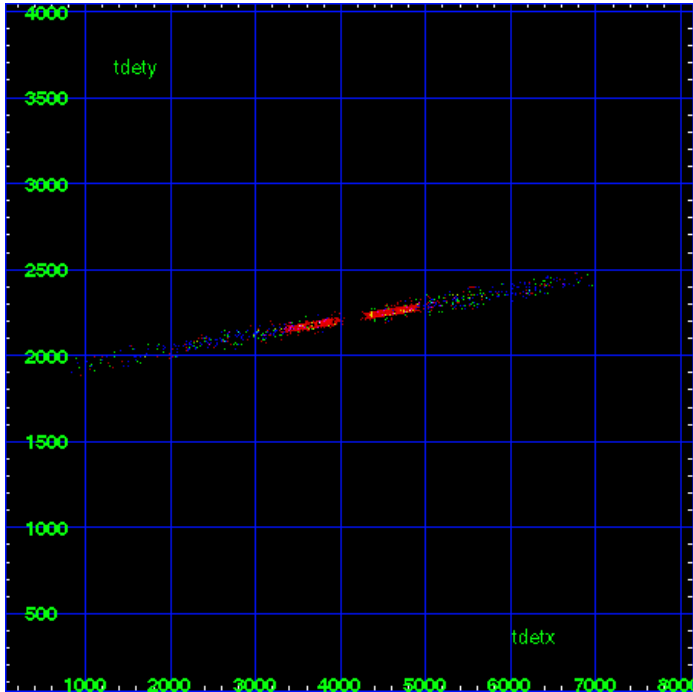
MEG Zero Order



MEG Order Sort ALL

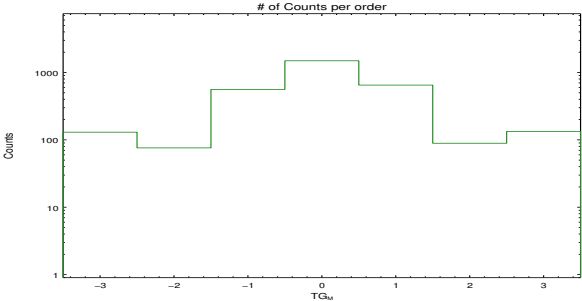


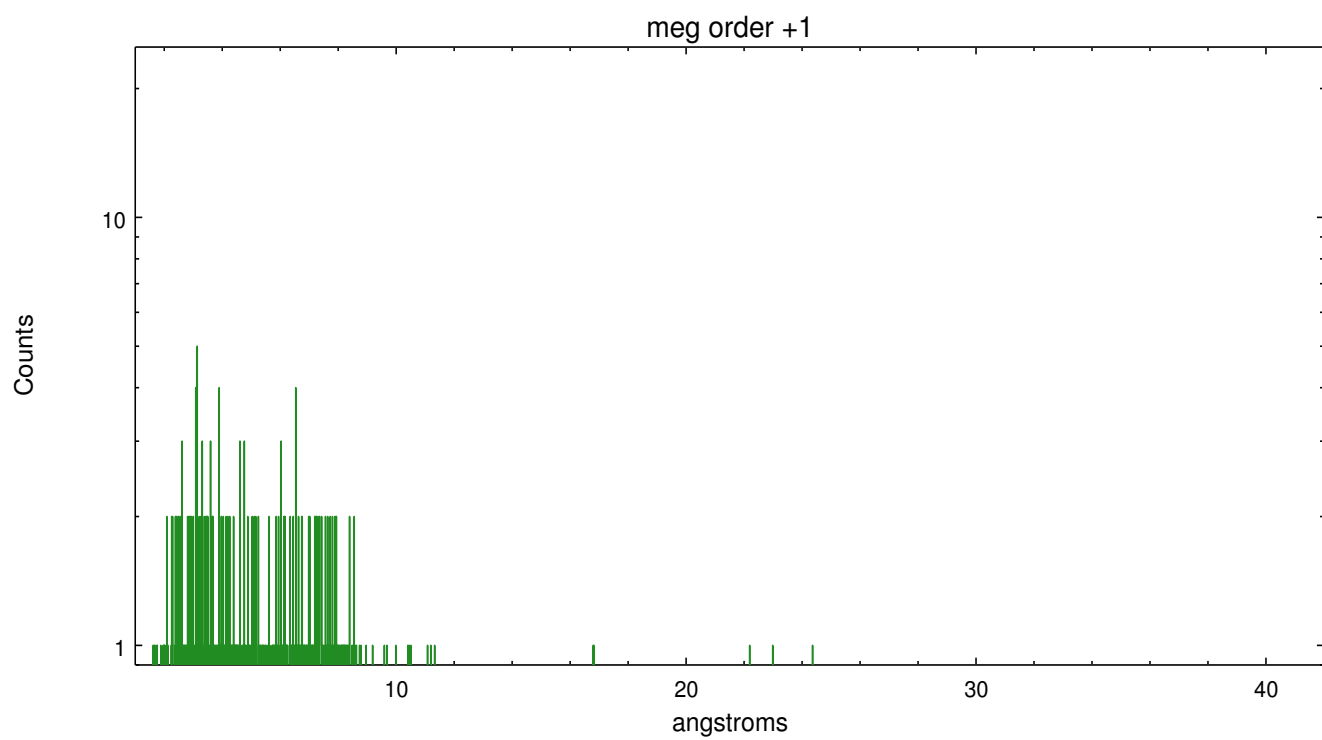
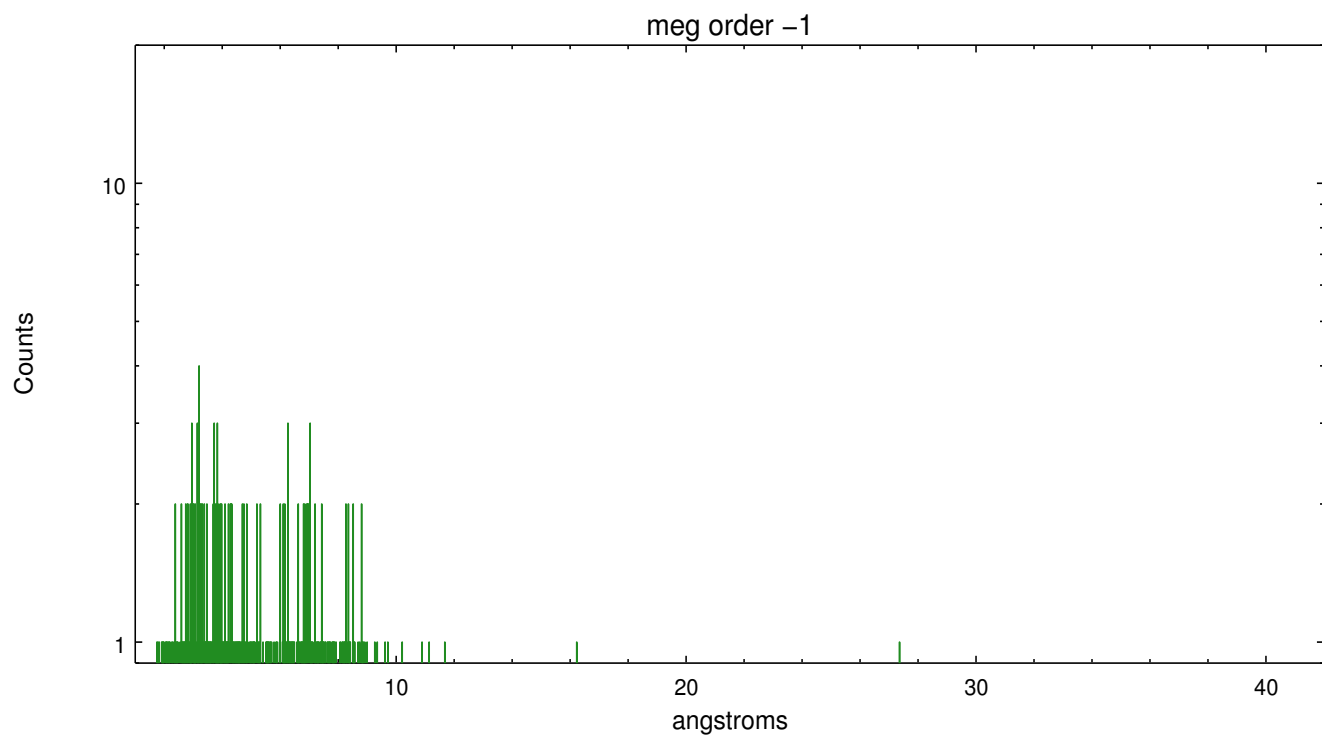
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	130	76	561	1492	650	89	133







## A Summary

### A.1 Status

V&V Scientist	Mike Nowak
V&V Date (YYYY-MM-DD)	2012.05.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.45119997

### A.2 Comments