

# V&V Reference Report

## L2 ASCDS Version : 7.6.7.1

Observation 5476 - L2 Version 002  
Chandra X-Ray Center

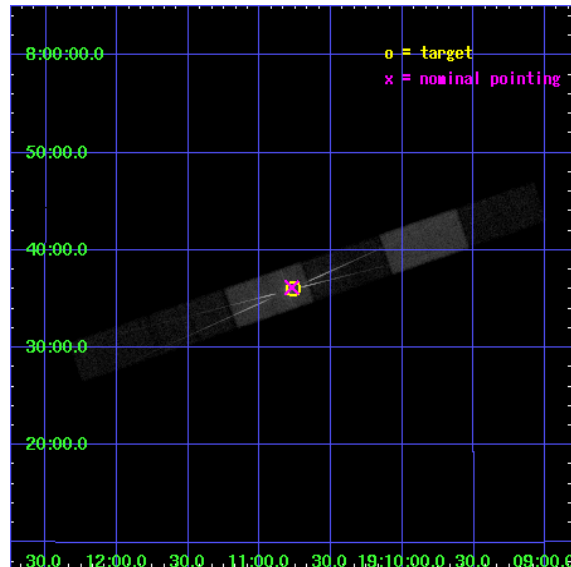
L2 Processing Date : Mar 11 2006

## 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

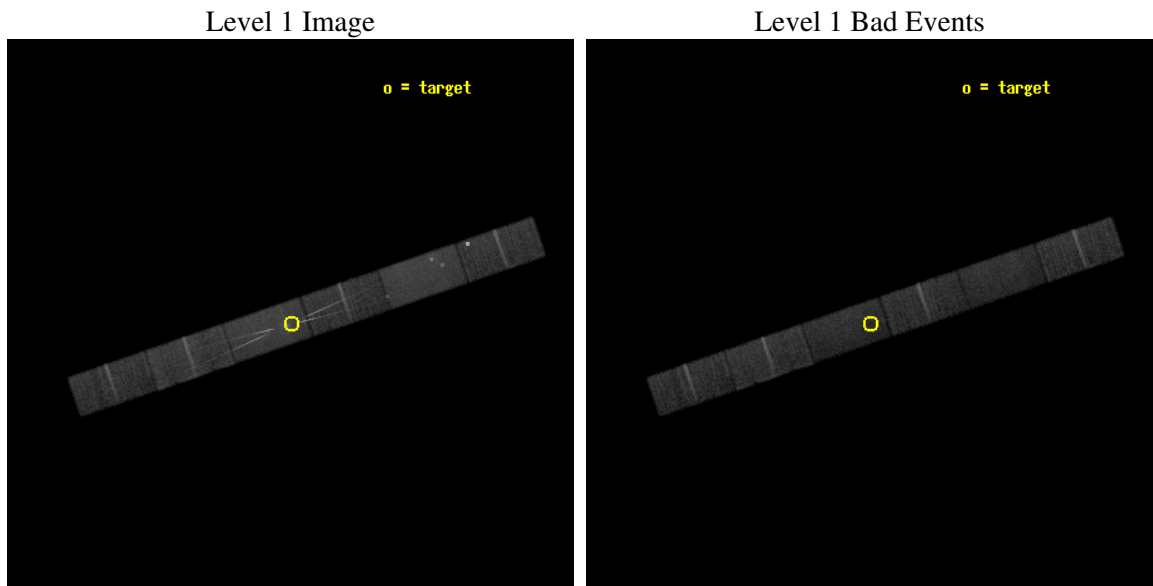
seq_num	400406
obs_id	5476
title	X-RAY DIAGNOSTICS OF THE WIND OF HMXB X1908+075: POSSIBLE PROGENITOR BH-NS SYSTEM
observer	Prof. Saul Rappaport
object	X1908+075: Low N <sub>H</sub>
dtcycle	0
cycle	P
ra_targ	287.691667
dec_targ	7.601944
ra_nom	287.69365286492
dec_nom	7.6030297917015
roll_nom	161.10356972598
revision	2
ontime	19177.69986552
livetime	18725.640864876
ontime4	19177.69986552
ontime5	19177.69986552
ontime6	19177.69986552
ontime7	19177.69986552
ontime8	19177.69986552
ontime9	19177.69986552
l2events	163077



## 2 OBI

### 2.1 OBI

#### 2.1.1 Images

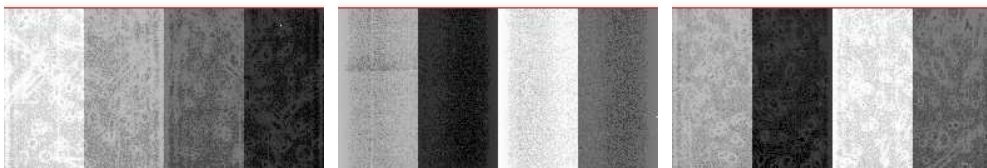


#### 2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



### 2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldsver	3.2.1
date	2006-03-11T20:04:35
revision	2

sched_exp_time	19000.000000
ontime	19318.41031301
ontime4	19318.41031301
ontime5	19318.41031301
ontime6	19318.41031301
ontime7	19318.41031301
ontime8	19320.151333123
ontime9	19320.151333123
l1events	636346

### 2.1.4 Events

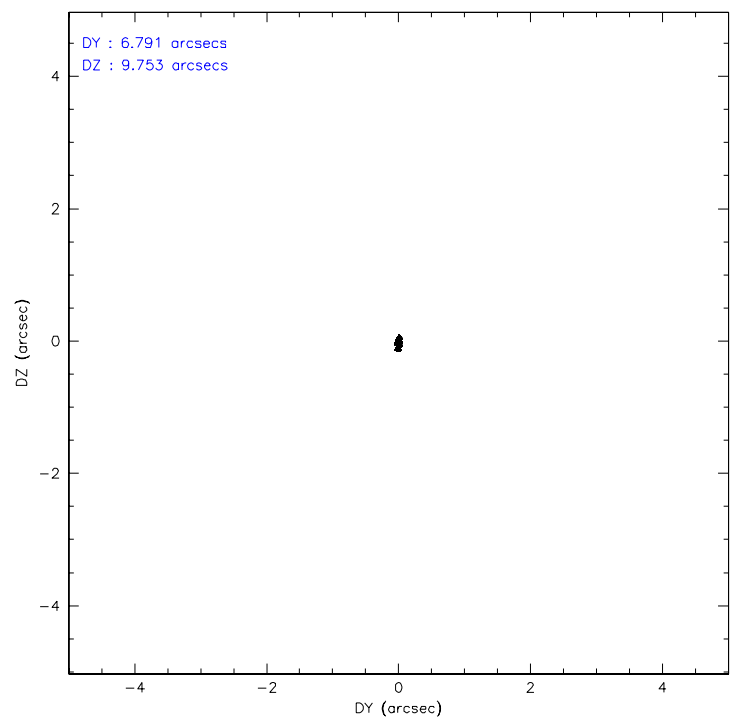
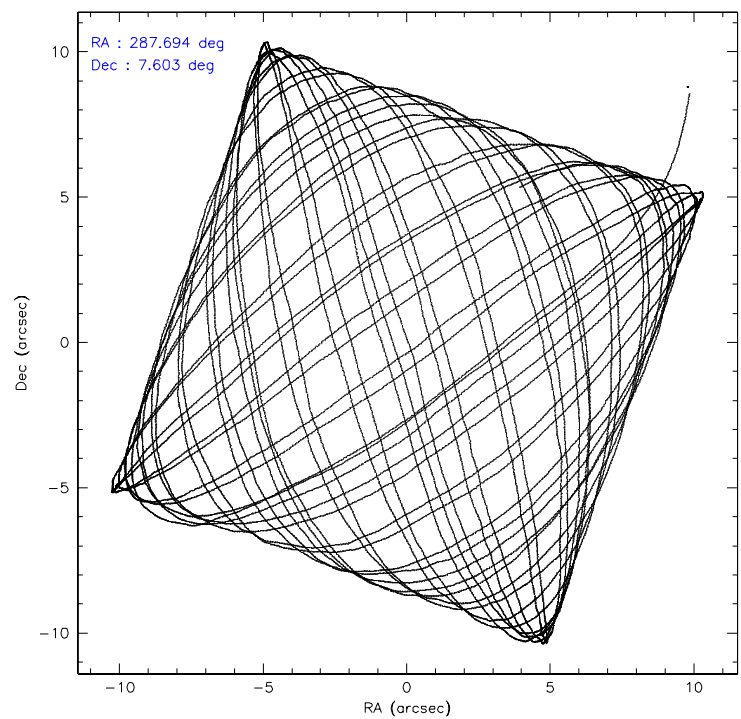
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	99534	116898	95185	138772	105732	80225
rejected events	78617	65050	74662	68450	82517	70273
rejected %	78%	55%	78%	49%	78%	87%

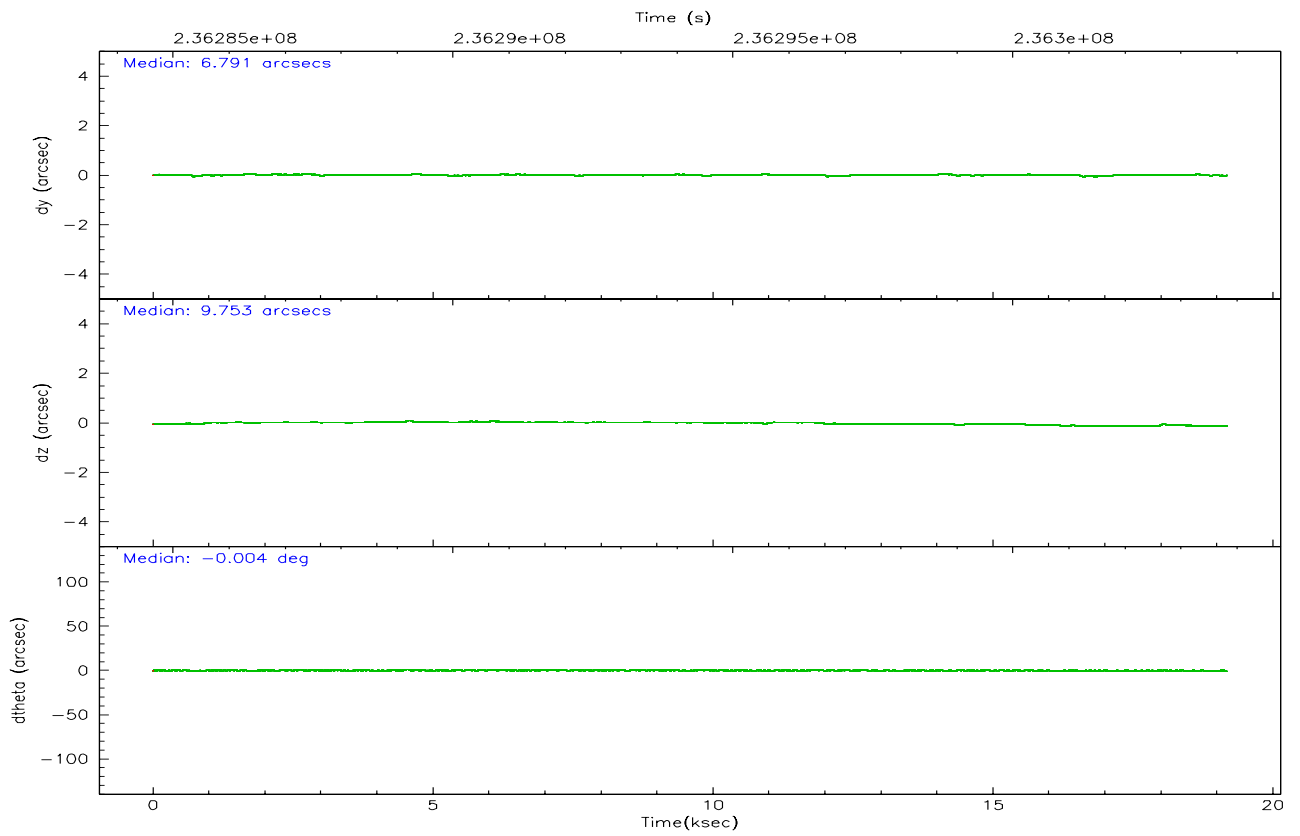
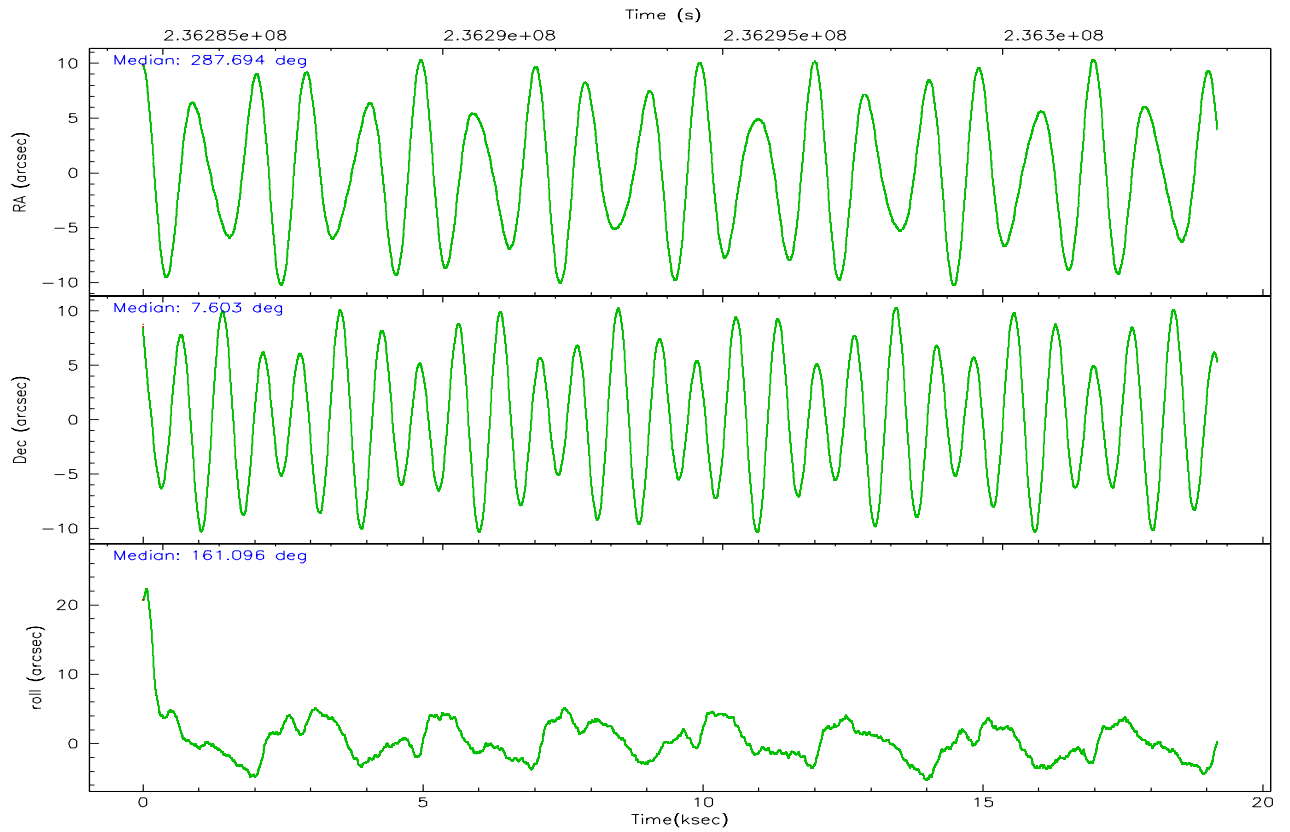
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	14870	5060	10895	7250	7815	3908
	14%	4%	11%	5%	7%	4%
grade 1 events	88	186	63	266	59	40
	0%	0%	0%	0%	0%	0%
grade 2 events	2148	14740	3518	16894	4806	1834
	2%	12%	3%	12%	4%	2%
grade 3 events	1235	1680	1693	5226	2521	1156
	1%	1%	1%	3%	2%	1%
grade 4 events	1164	1506	1655	5064	2416	1154
	1%	1%	1%	3%	2%	1%
grade 5 events	3174	5915	3375	8812	4503	3539
	3%	5%	3%	6%	4%	4%
grade 6 events	1658	29350	2898	36470	5793	1977
	1%	25%	3%	26%	5%	2%
grade 7 events	75197	58461	71088	58790	77819	66617
	75%	50%	74%	42%	73%	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	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/2
Pointing RA	287.720510	287.6936528649154	Subarray start row	1	1
Pointing Dec	7.608647	7.603029791701461	Subarray row count	512	512
Pointing Roll	160.943396	161.1035697259805	Alternating exposures requested	N	N
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Primary exposure time	0.000000	1.7
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-183.992523	-183.985022191653			
SIM translation stage offset (mm)	-6.14	-6.147500391354811			
Phase constraints	Y	Y			
Phase period	4.400700	4.400700			
Phase epoch	52631.383000	52631.383000			
Phase start	0.434200	0.434200			
Phase end	0.565800	0.565800			
Phase start error	0.134200	0.134200			
Phase end error	0.134200	0.134200			
Observation start time	236284825.184000	236283852.30919			
Observation start date	2005-06-27T18:39:21	2005-06-27T18:24:12			
Observation end time	236303825.184000	236304906.32265			
Observation end date	2005-06-27T23:56:01	2005-06-28T00:15:06			
Read mode	TIMED	TIMED			

## 2.3 Aspect





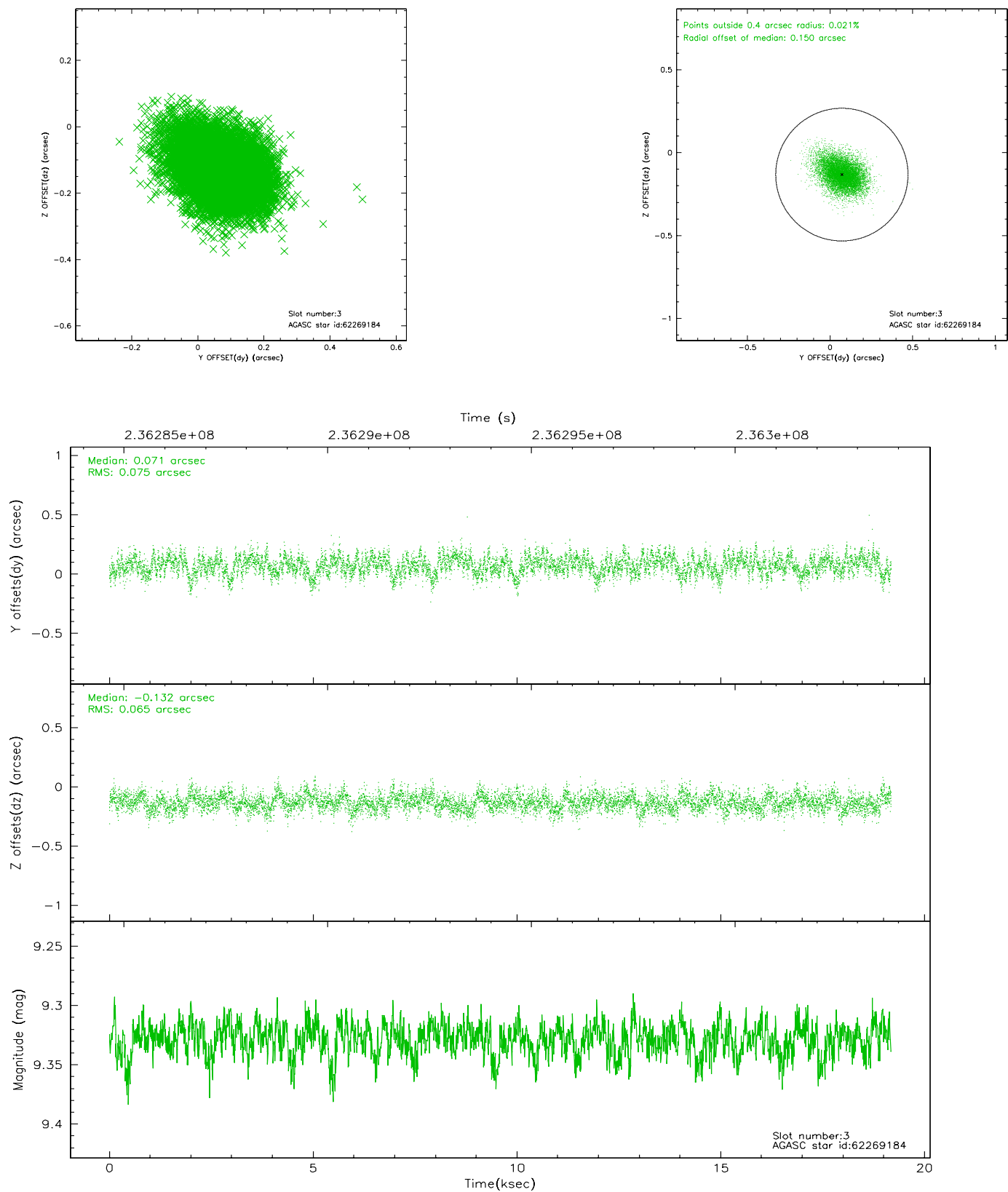
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.08	4679	-0.054	-0.093	0.007	0.011	0.000000	0.000000	-759.16	-1857.77
1	FID	ACIS-S-4	7.18	4678	0.071	0.051	0.005	0.008	0.000000	0.000000	2154.15	50.60
2	FID	ACIS-S-5	7.23	4678	-0.049	0.050	0.006	0.010	0.000000	0.000000	-1811.73	44.52
3	GUIDE	62269184	9.33	9354	0.071	-0.132	0.104	0.173	288.138932	6.932418	-2207.83	1812.51
4	GUIDE	136318600	9.18	9347	0.037	0.178	0.098	0.163	287.193672	7.971966	2203.08	-623.20
5	GUIDE	136450656	10.09	9355	-0.306	0.096	0.134	0.215	287.814143	8.235606	422.27	-2241.99
6	GUIDE	136451568	9.68	9346	0.135	0.040	0.104	0.171	287.608270	8.059160	908.49	-1402.23
7	GUIDE	136446056	9.36	9337	0.067	-0.187	0.089	0.145	287.496360	7.664883	822.59	69.53

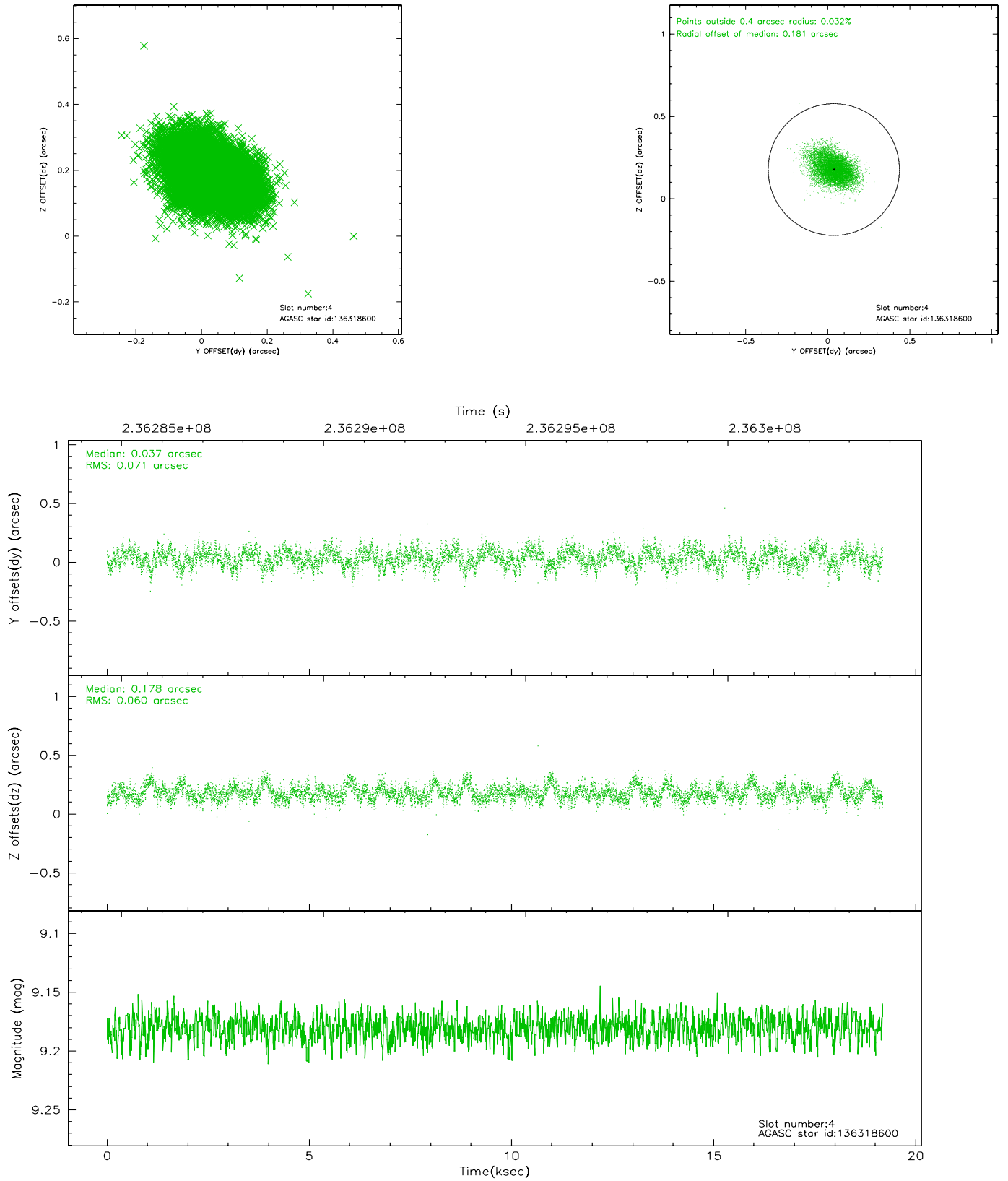


## 2.4 Star Slots

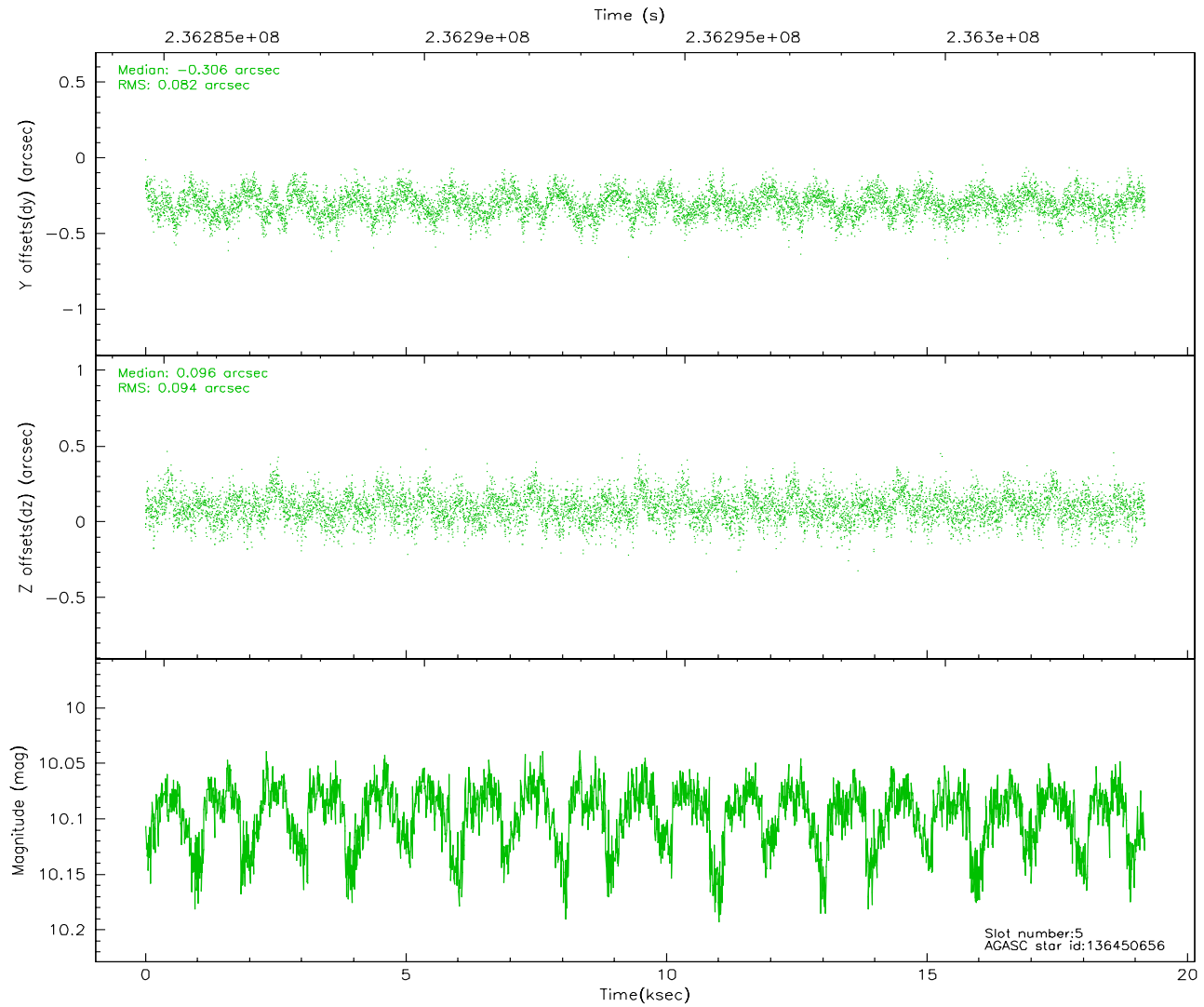
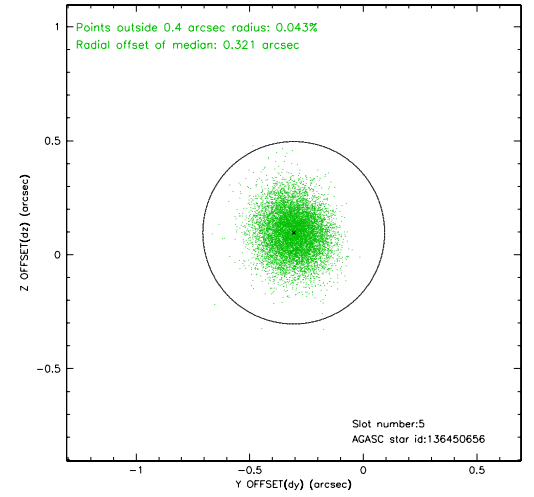
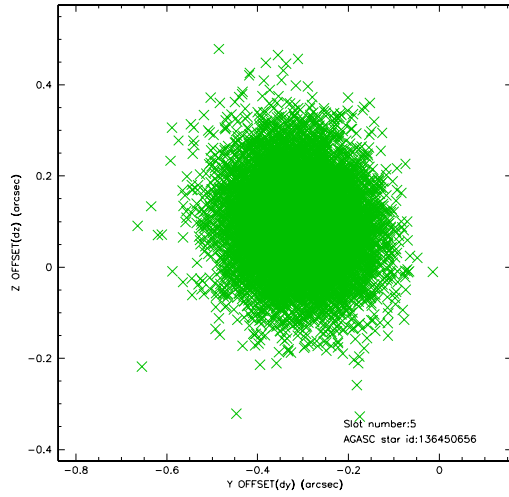
### 2.4.1 Slot 3



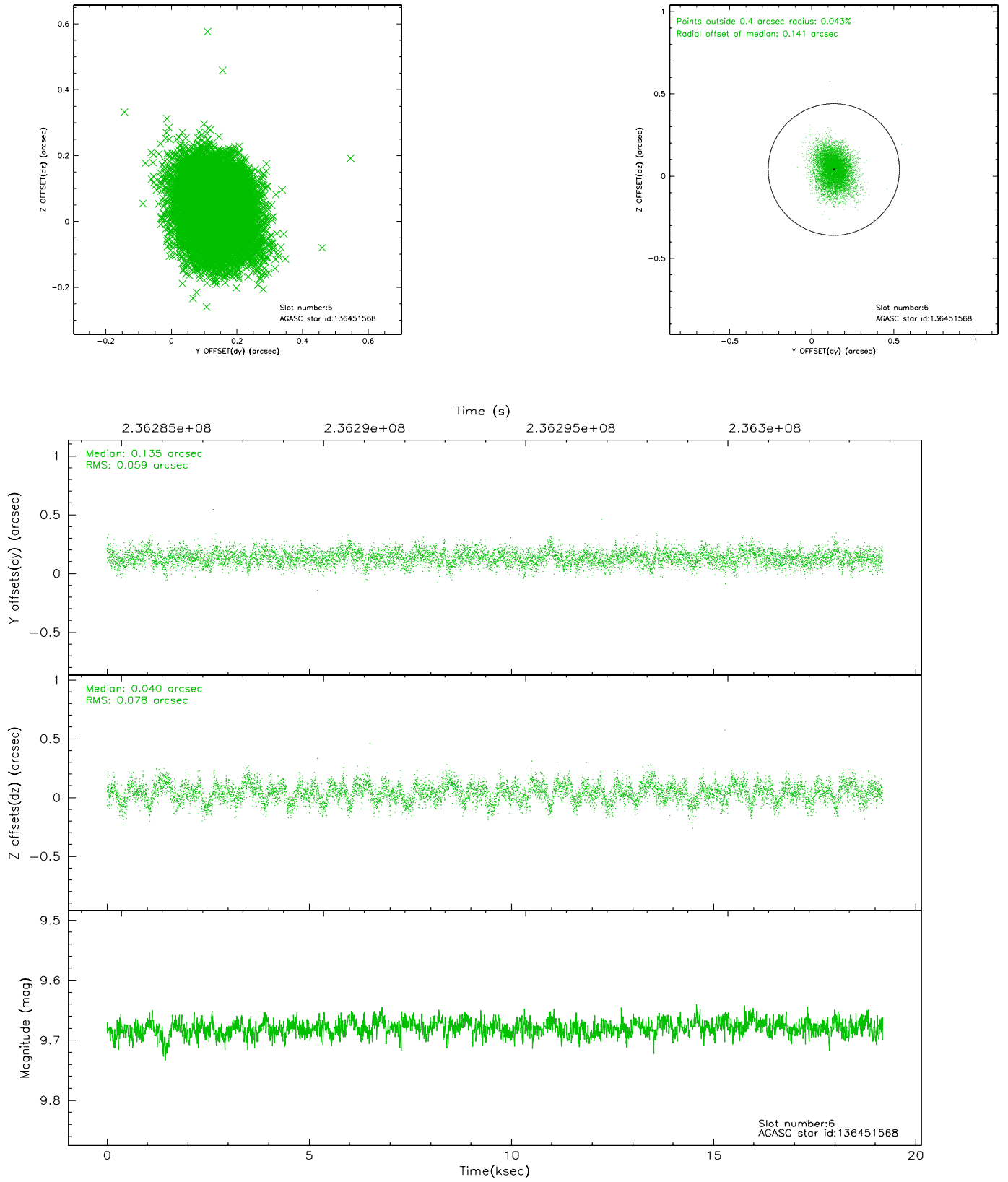
## 2.4.2 Slot 4



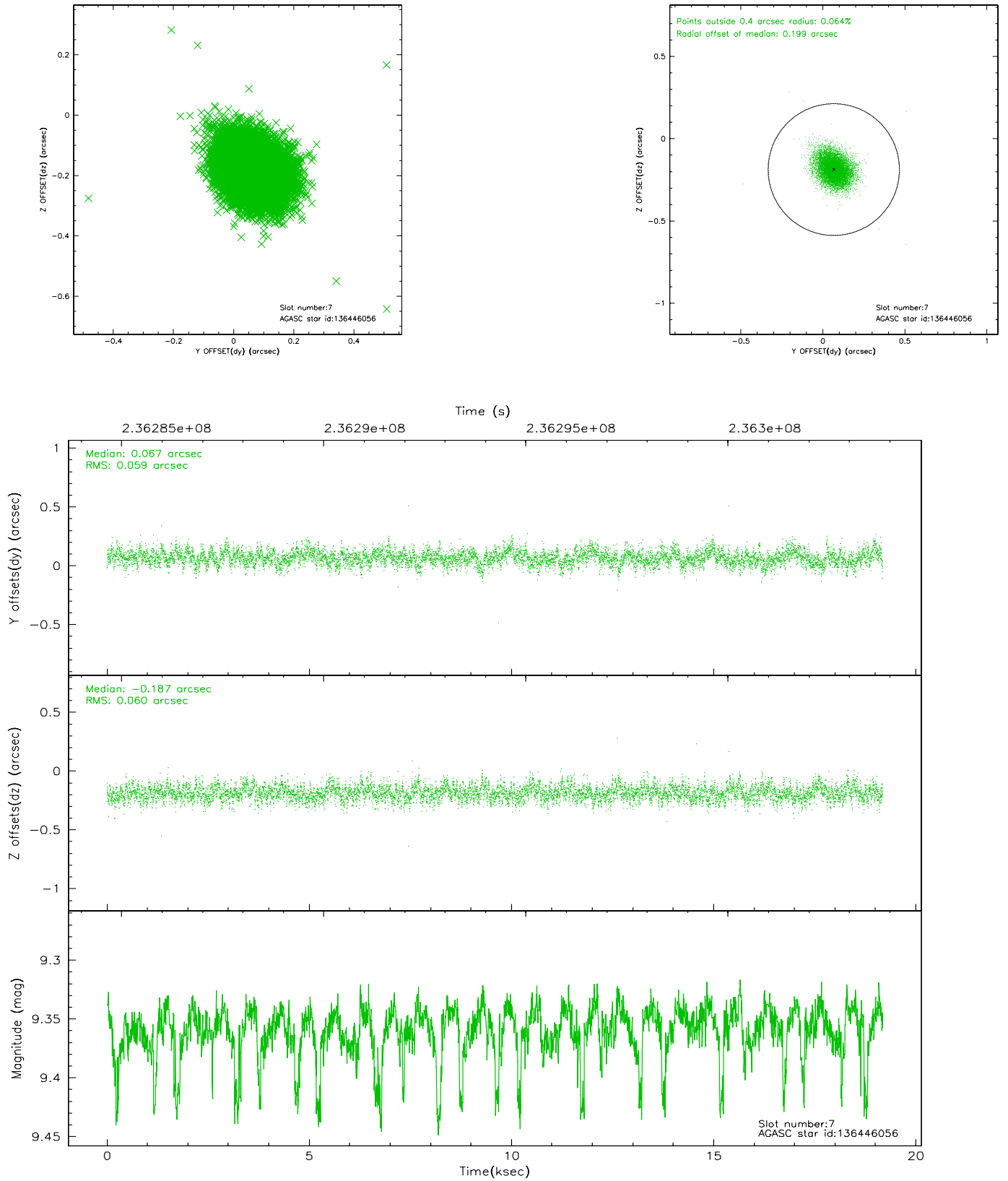
### 2.4.3 Slot 5



## 2.4.4 Slot 6

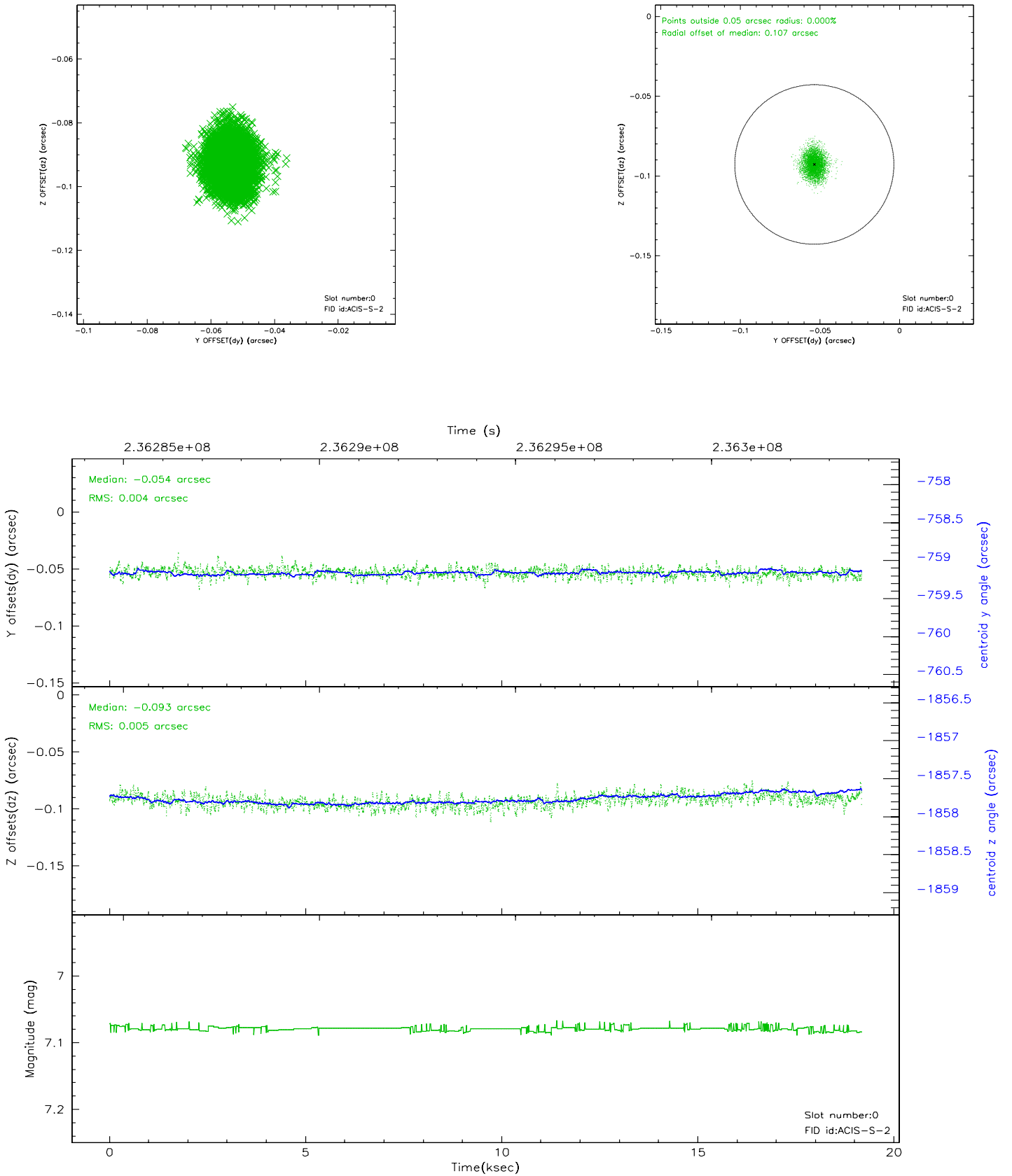


## 2.4.5 Slot 7

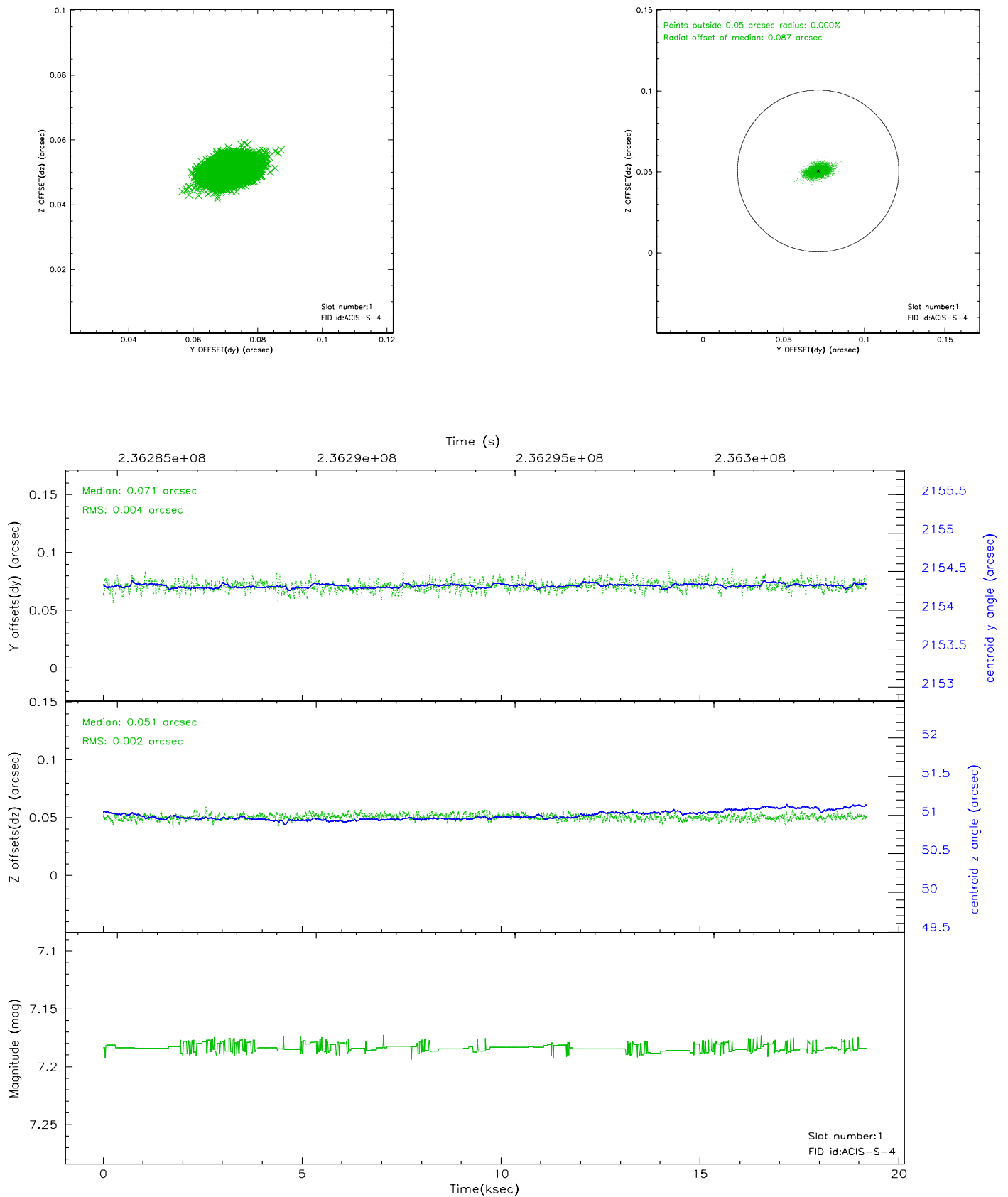


## 2.5 FID Slots

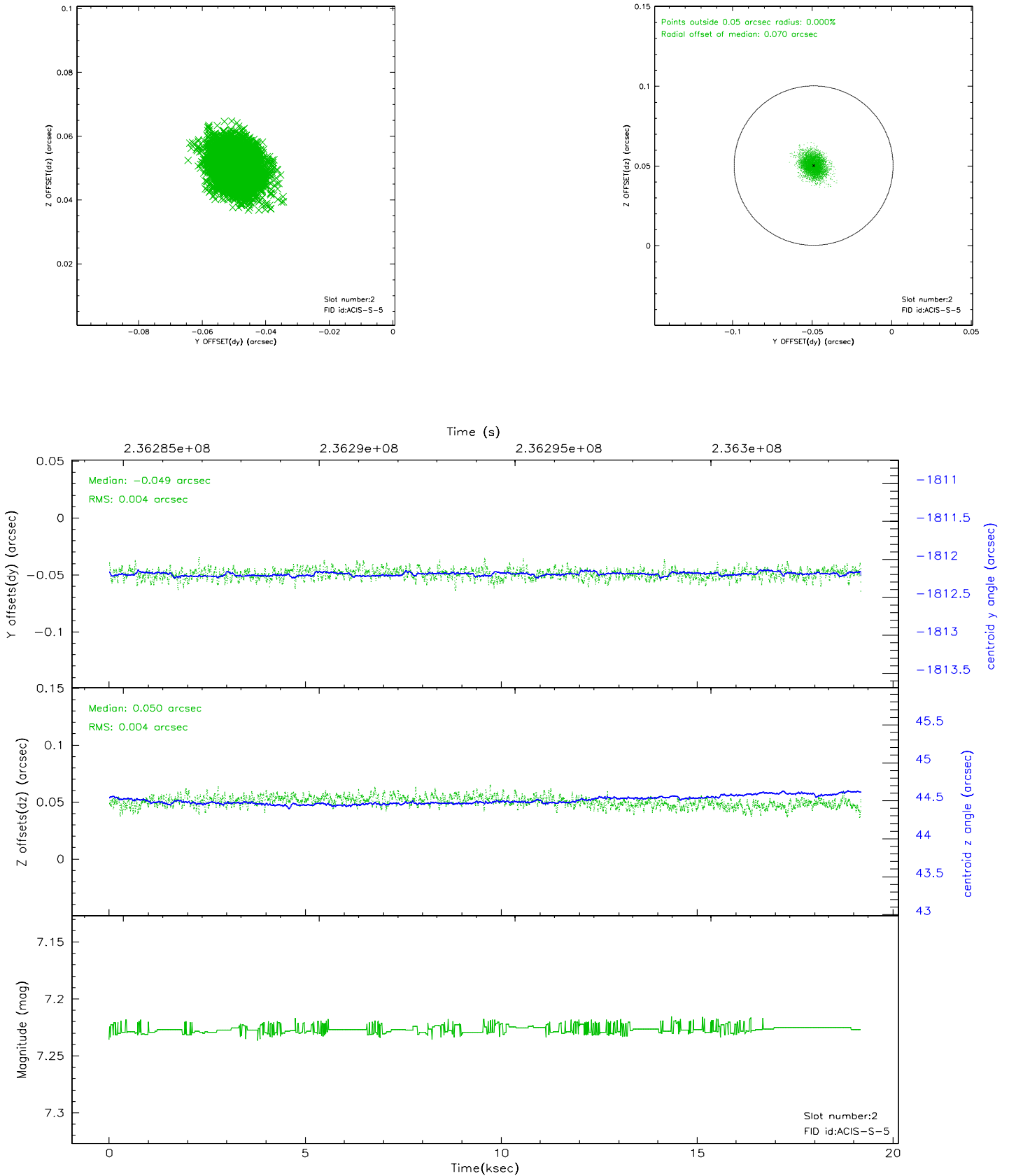
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



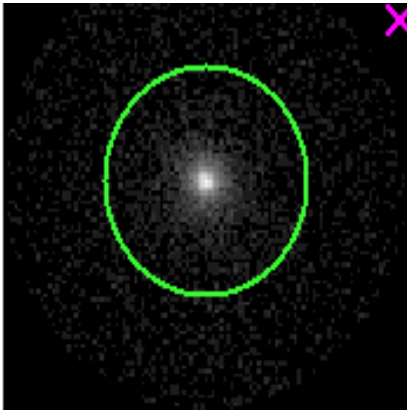


# 3 Gratings

## 3.1 HEG Arm



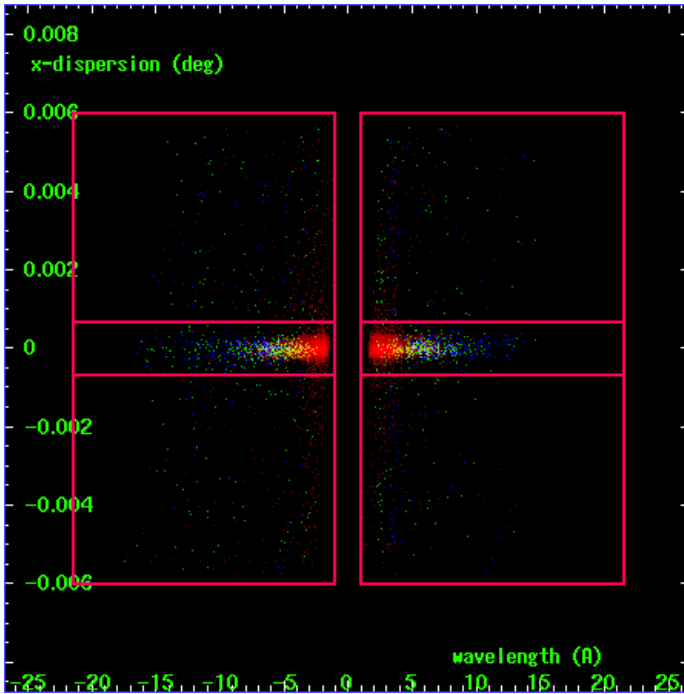
HEG Order Sort 123



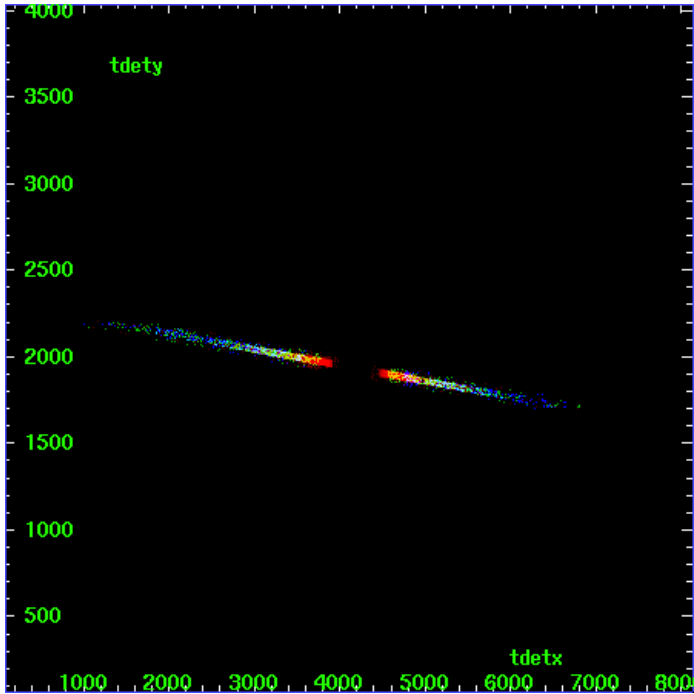
HEG Zero Order



HEG Order Sort ALL

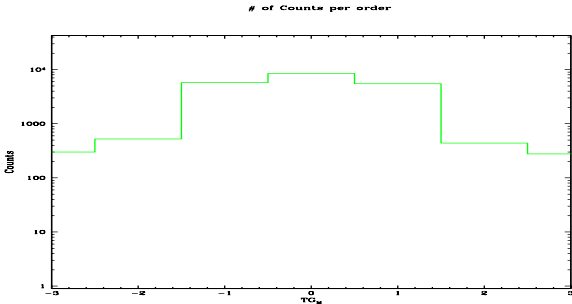


Spot Image HEG

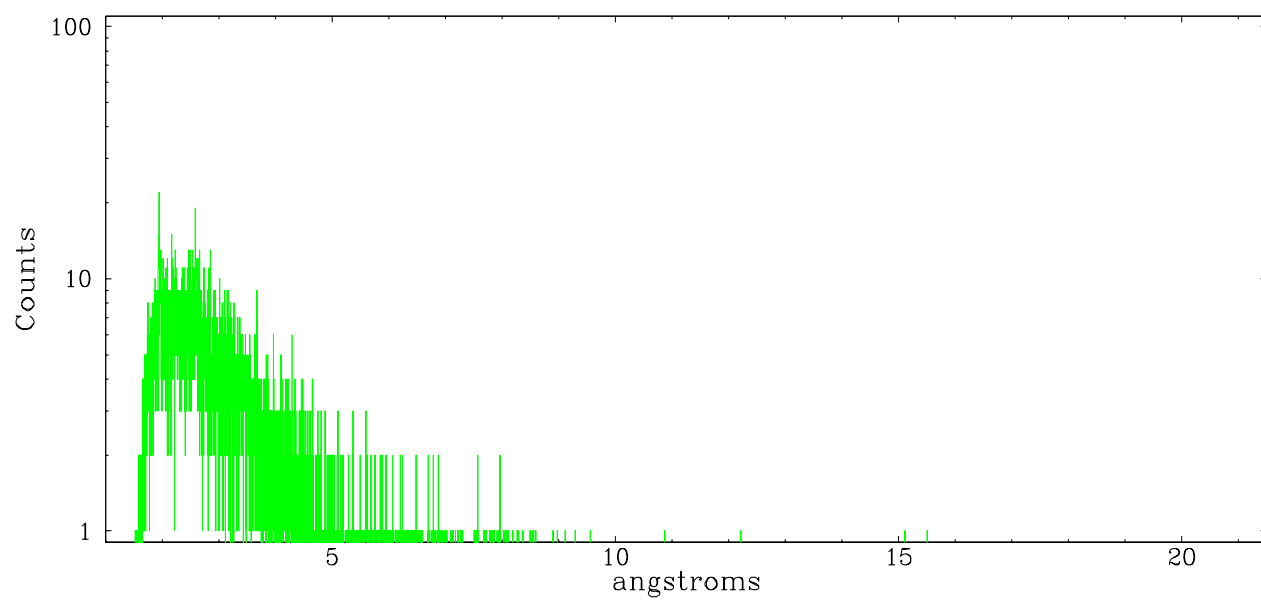


Full Detector HEG

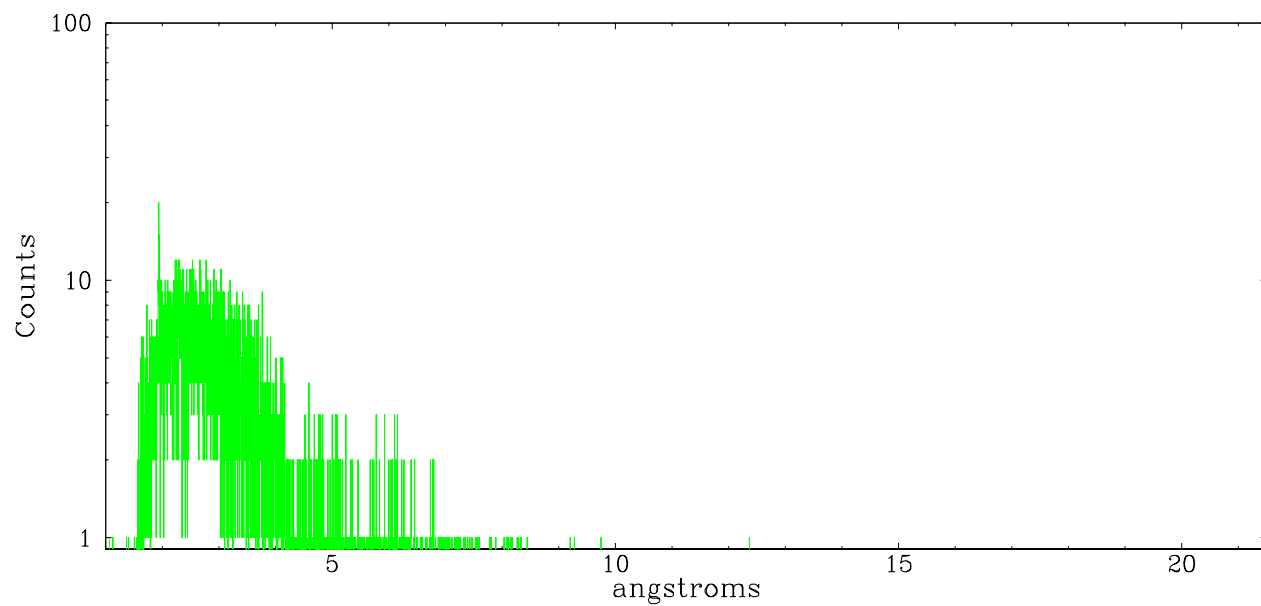
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	299	521	5752	8469	5473	438	277



heg order -1



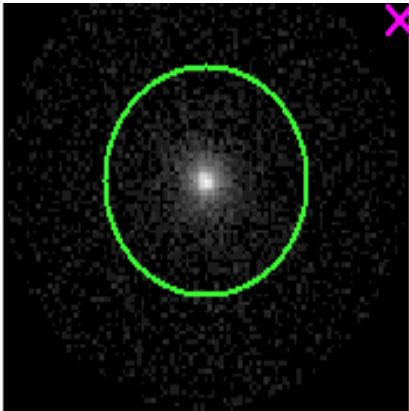
heg order +1



3.2 MEG Arm



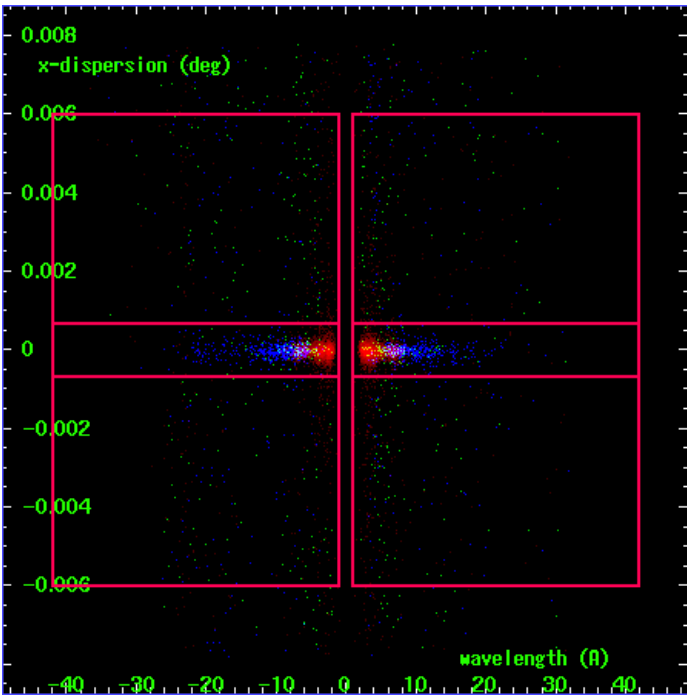
MEG Order Sort 123



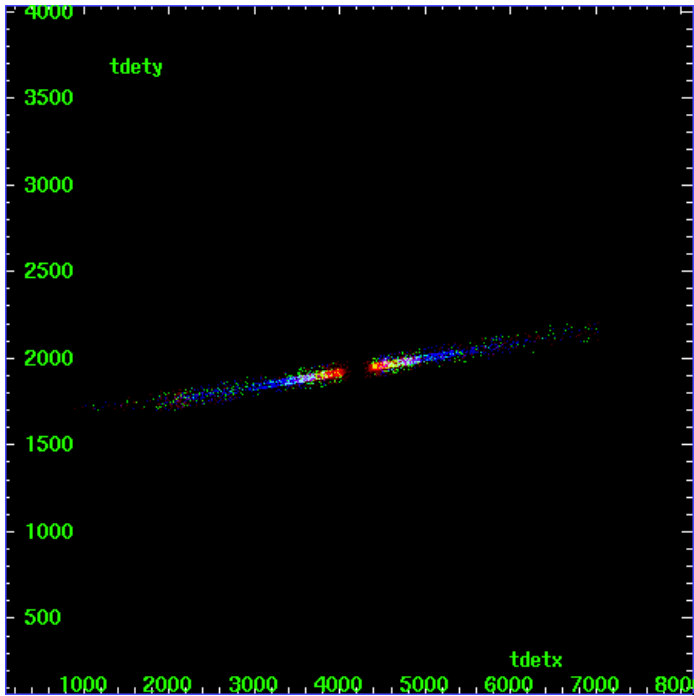
MEG Zero Order



MEG Order Sort ALL

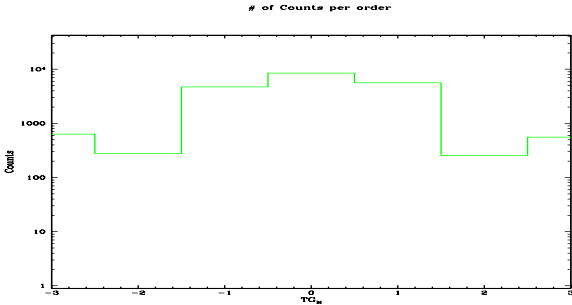


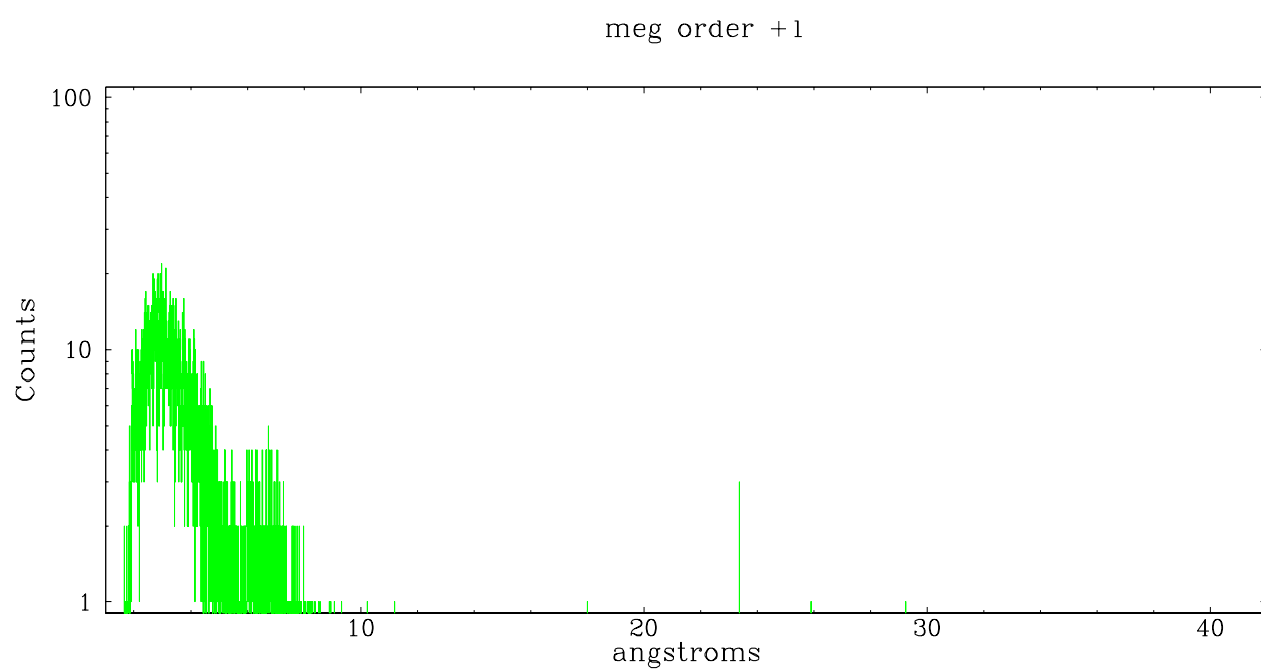
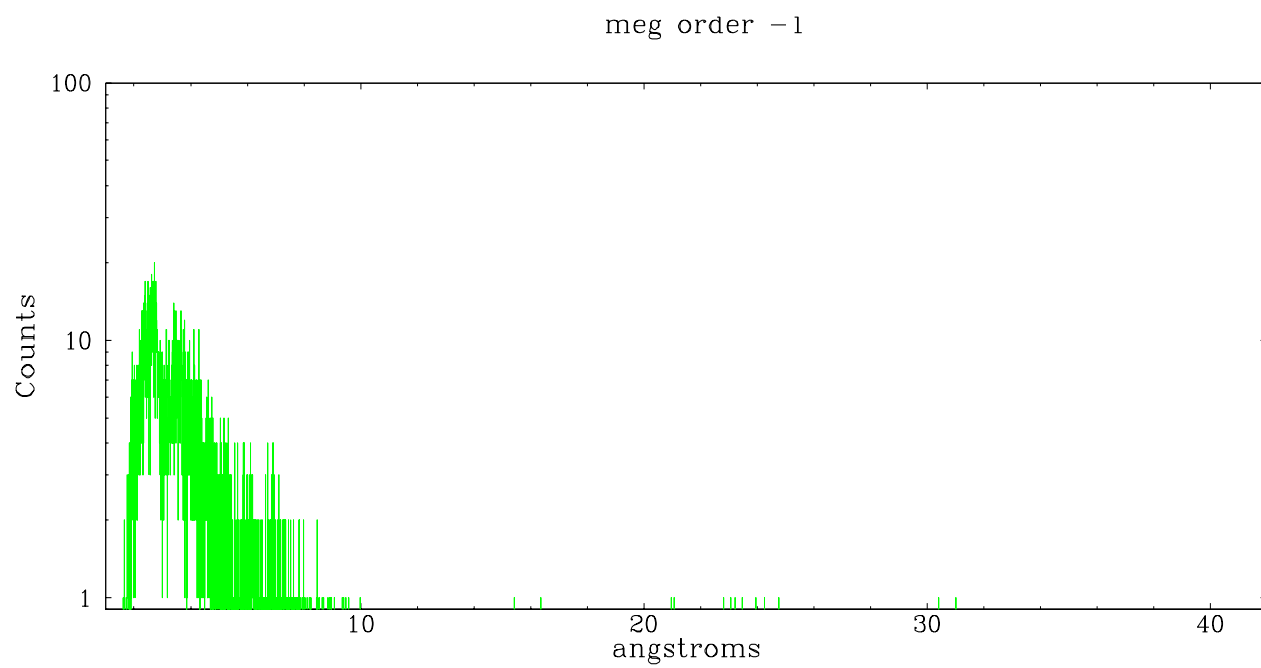
Spot Image MEG



Full Detector MEG

	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	631	278	4729	8469	5606	255	559





## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2006.03.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.17769

### A.2 Comments

Focal plane temperature is elevated during the entire observation.  
Calibration may be affected.