

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10185 - L2 Version 2  
Chandra X-Ray Center

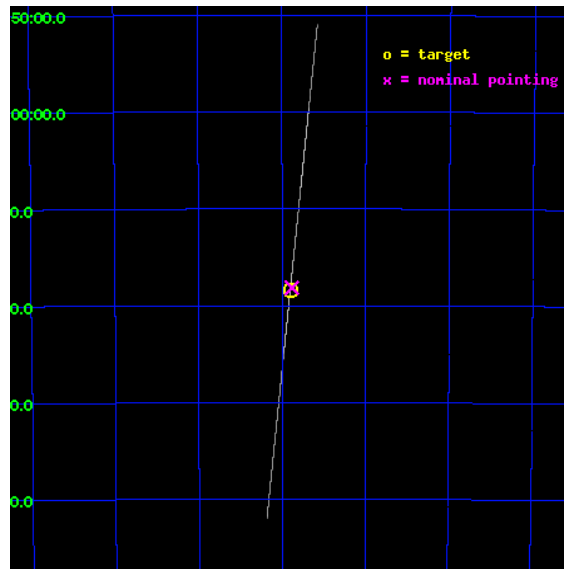
L2 Processing Date : May 30 2012

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# 1 Front

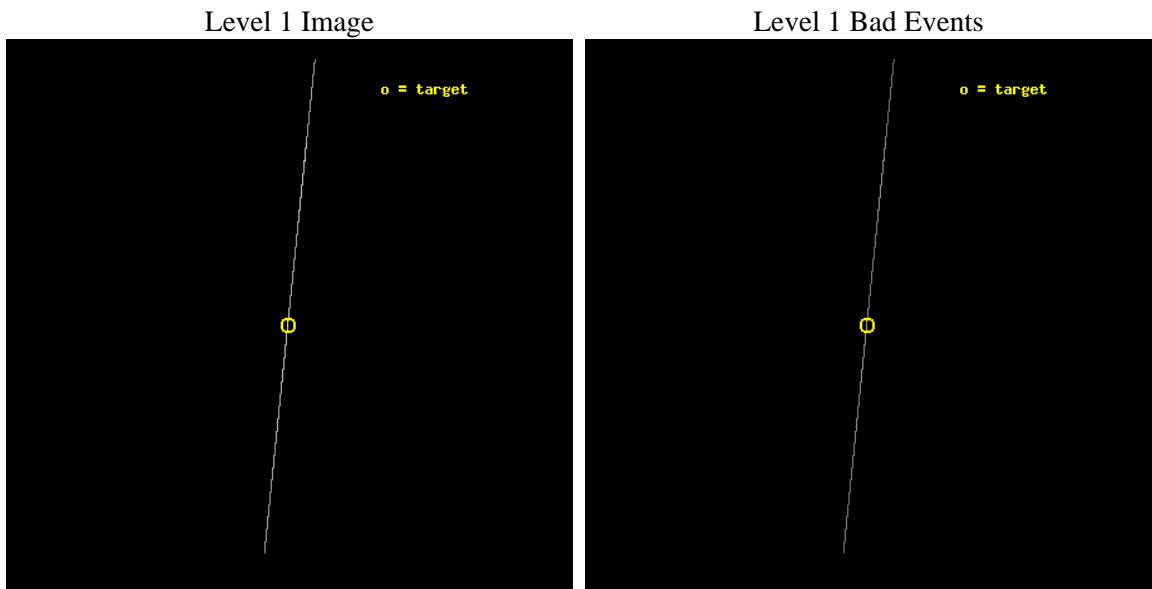
seq_num	501112	Sequence number
obs_id	10185	Observation id
title	Prompt Study of Burst-Selected Outbursts from AXPs	Proposal title
observer	Dr. Gianluca Israel	Principal investigator
object	1E1547.0-5408	Source name
ra_targ	237.725417	Observer's specified target RA [deg]
dec_targ	-54.306611	Observer's specified target Dec [deg]
ra_nom	237.72032978936	Nominal RA [deg]
dec_nom	-54.302752768711	Nominal Dec [deg]
roll_nom	95.873249412832	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10152.0	Sum of GTIs [s]
livetime	10112.34375	Livetime [s]
ontime4	10152.0	Sum of GTIs [s]
ontime5	10152.0	Sum of GTIs [s]
ontime6	10152.0	Sum of GTIs [s]
ontime7	10152.0	Sum of GTIs [s]
ontime8	10152.0	Sum of GTIs [s]
ontime9	10152.0	Sum of GTIs [s]
l2events	232631	Number of level 2 events



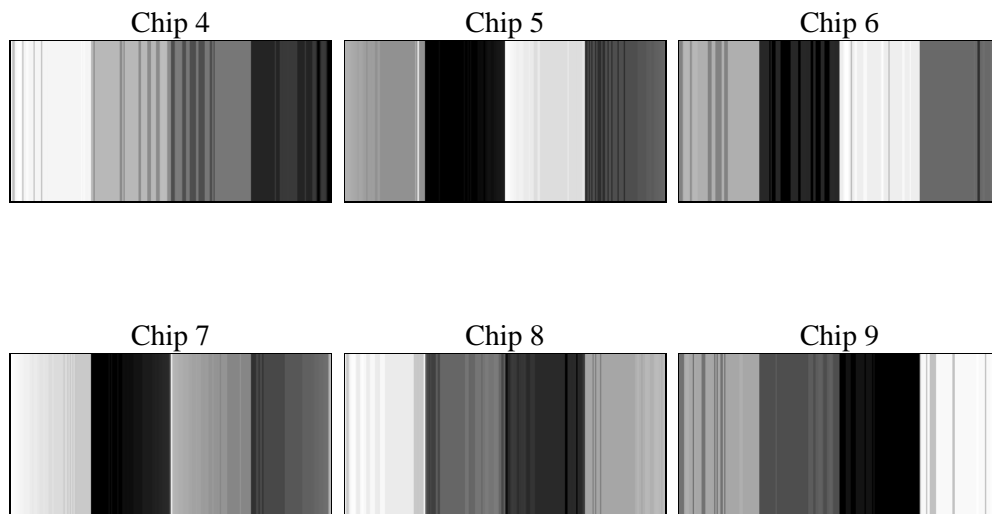
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	10152.0	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime4	10152.0	Sum of GTIs [s]
date	2012-05-30T05:41:41	Date and time of file creation	ontime5	10152.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	10152.0	Sum of GTIs [s]
			ontime7	10152.0	Sum of GTIs [s]
			ontime8	10152.0	Sum of GTIs [s]
			ontime9	10152.0	Sum of GTIs [s]
			l1events	351782	Number of level 1 events

### 2.1.4 Events

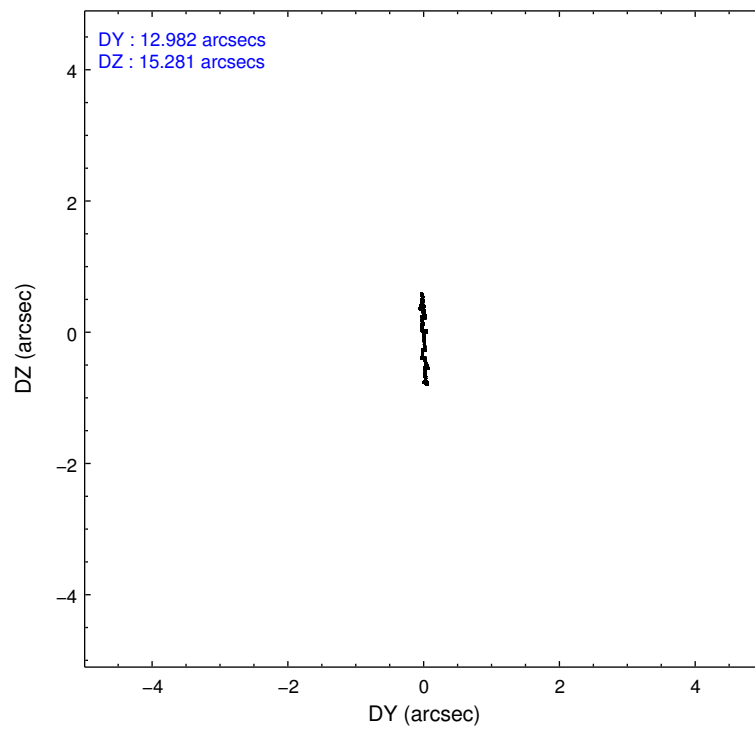
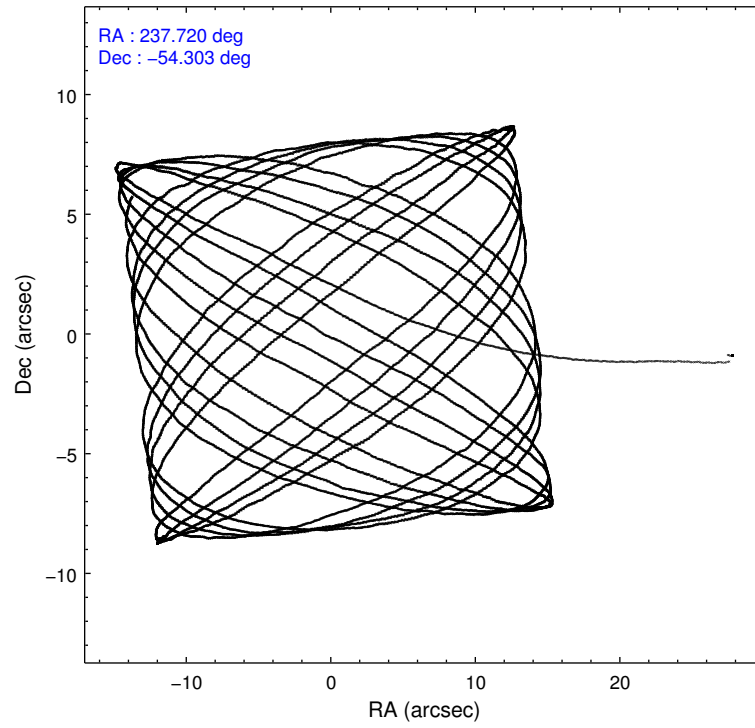
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	24971	108405	33683	102958	55725	26040
rejected events	5734	16400	6583	16547	10455	6754
rejected %	22%	15%	19%	16%	18%	25%

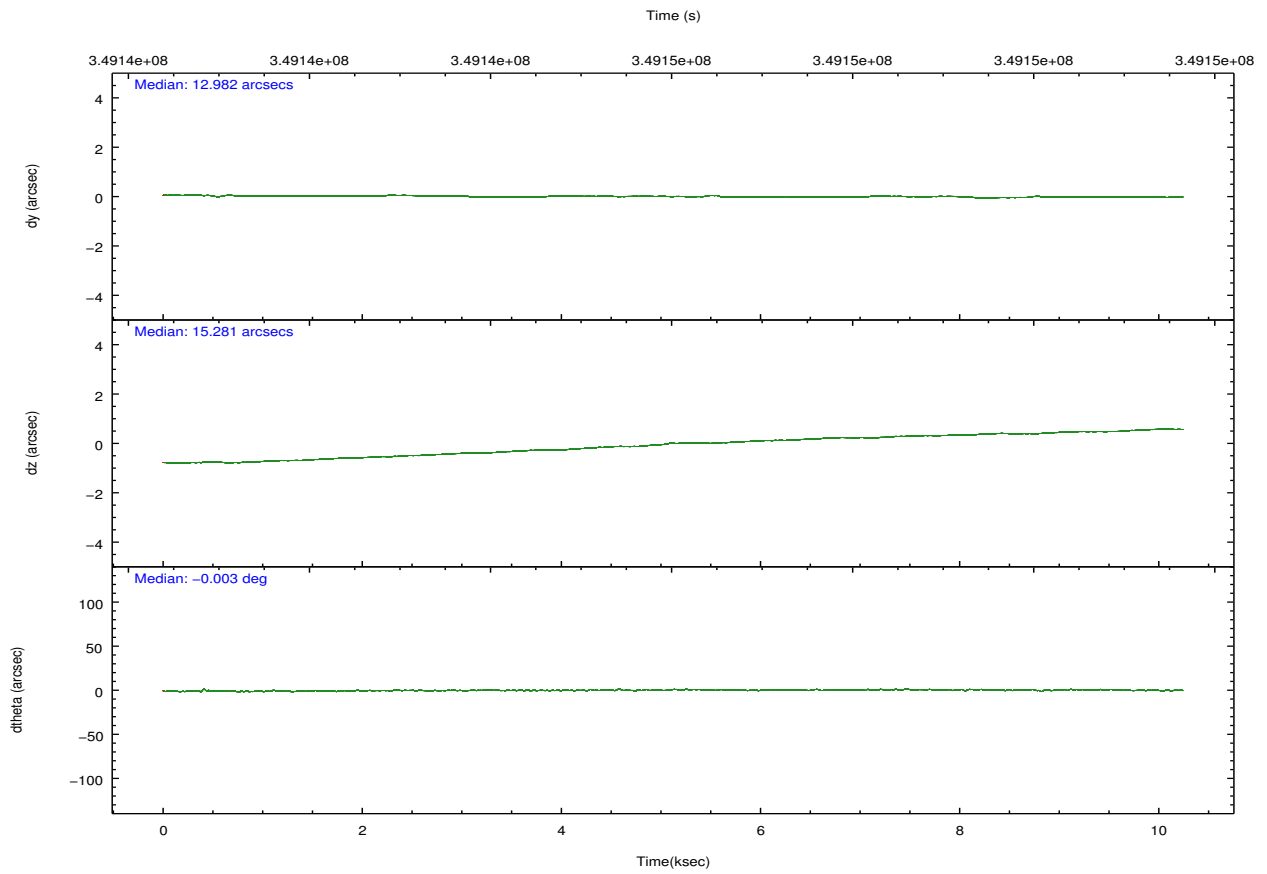
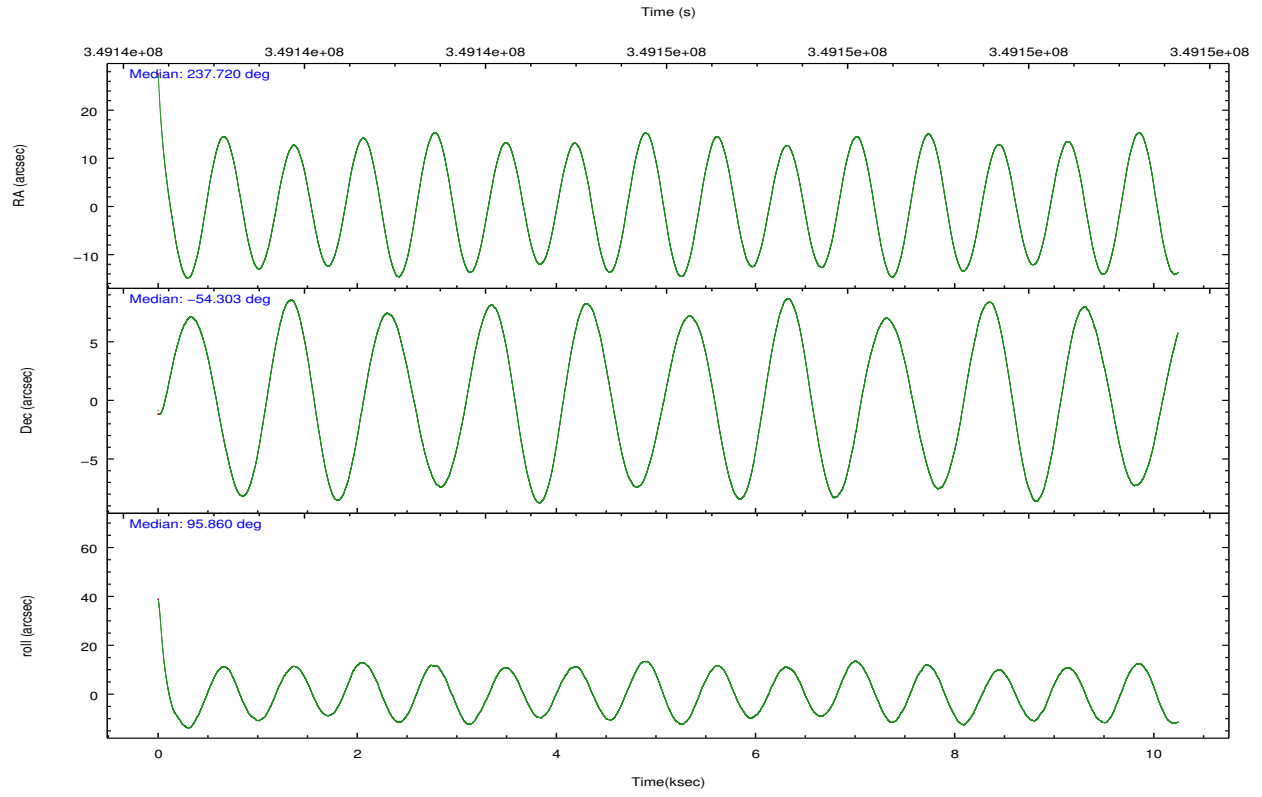
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	2751	17597	3669	9556	10203	2828
	11%	16%	10%	9%	18%	10%
grade 1 events	109	159	84	189	209	99
	0%	0%	0%	0%	0%	0%
grade 2 events	8300	29552	14058	24170	15732	7831
	33%	27%	41%	23%	28%	30%
grade 3 events	2509	1815	2543	6330	4897	2264
	10%	1%	7%	6%	8%	8%
grade 4 events	2571	1669	2406	6079	4754	2401
	10%	1%	7%	5%	8%	9%
grade 5 events	4372	9839	5057	12104	7118	5326
	17%	9%	15%	11%	12%	20%
grade 6 events	4359	47774	5866	44530	12812	5291
	17%	44%	17%	43%	22%	20%
grade 7 events	0	0	0	0	0	0
	0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	237.748344	237.7203297893552	Subarray requested	NONE	NONE
[deg] Pointing Dec	-54.324702	-54.30275276871147	Alternating exposures requested	N	N
[deg] Pointing Roll	95.739360	95.87324941283204	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-183.992523	-183.985022191653			
[mm] SIM translation stage offset	-6.14	-6.147500391354811			
[s] Observation start time (MET)	349141055.184000	349139842.97085			
Observation start date	2009-01-23T23:36:29	2009-01-23T23:17:22			
[s] Observation end time (MET)	349151055.184000	349151329.63392			
Observation end date	2009-01-24T02:23:09	2009-01-24T02:28:49			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect





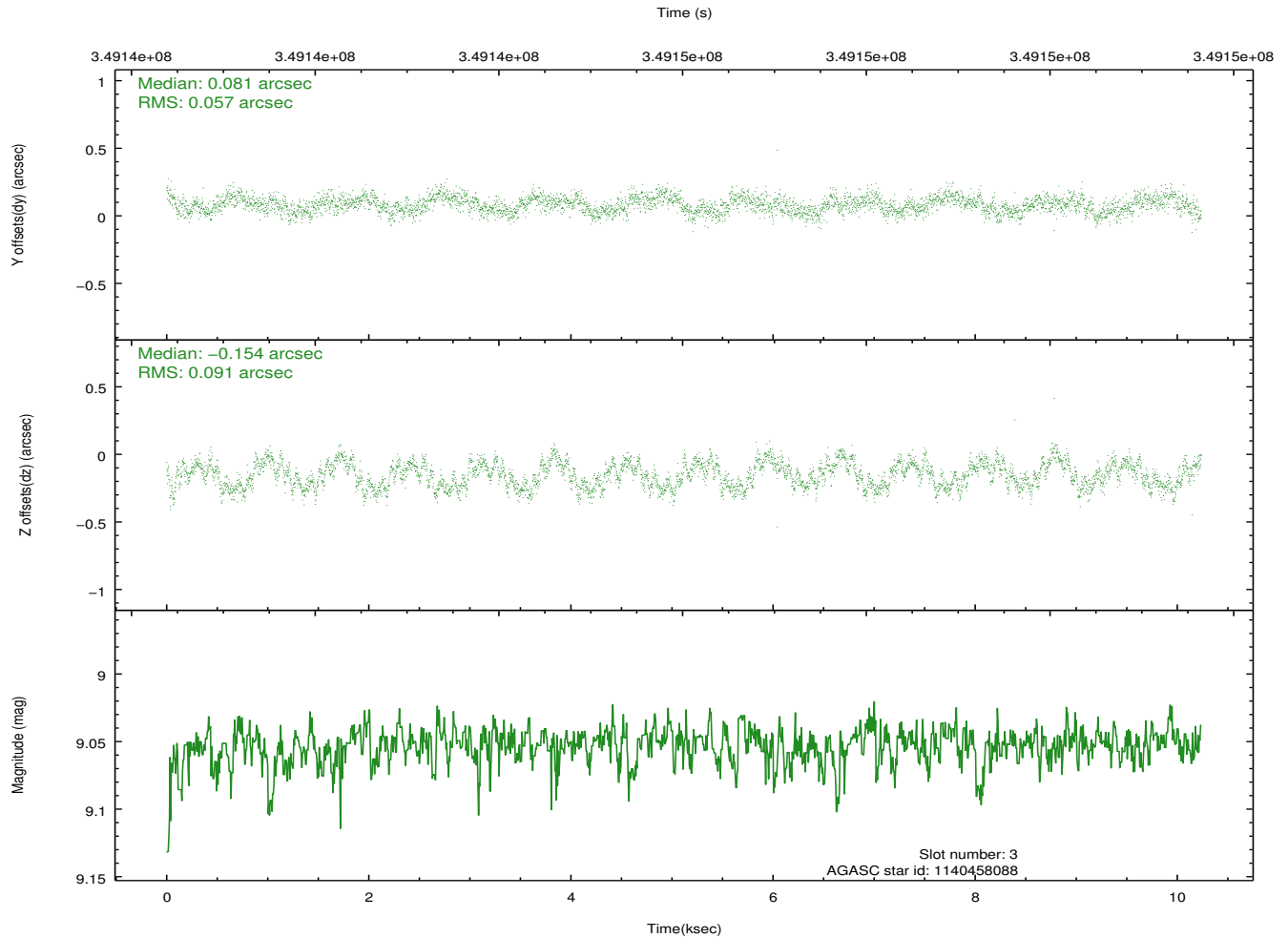
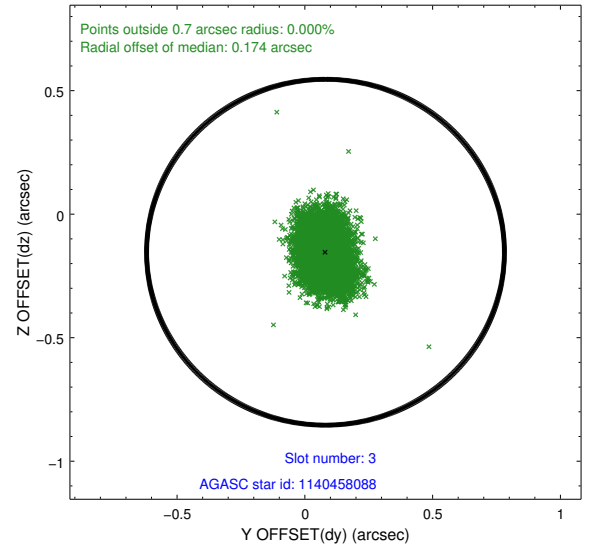
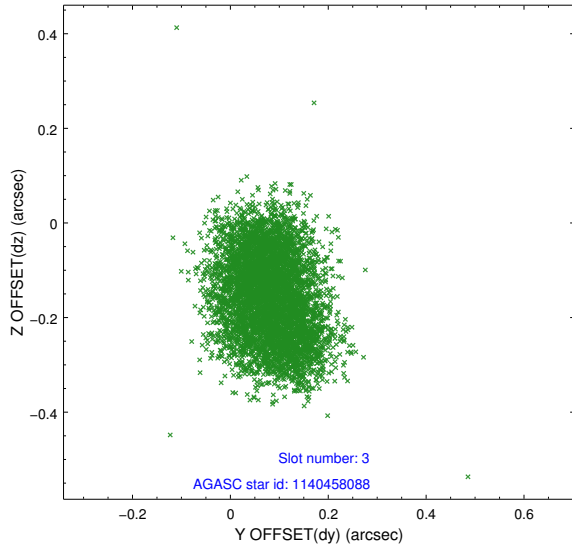
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	2498	-0.069	-0.129	0.019	0.035	0.000000	0.000000	-765.58	-1863.39
1	FID	ACIS-S-4	6.95	2498	0.166	0.066	0.010	0.018	0.000000	0.000000	2147.74	44.61
2	FID	ACIS-S-5	7.00	2498	-0.127	0.068	0.016	0.026	0.000000	0.000000	-1817.77	38.97
3	GUIDE	1140458088	9.05	4992	0.081	-0.154	0.117	0.178	237.318795	-54.593632	-876.36	988.49
4	GUIDE	1140458608	8.43	4996	0.034	-0.106	0.074	0.119	237.337107	-54.507511	-571.50	921.57
5	GUIDE	1139945912	9.15	4995	0.016	0.026	0.092	0.151	238.361289	-54.201826	305.91	-1327.32
6	GUIDE	1139941688	9.14	4928	0.007	0.091	0.115	0.203	238.371800	-54.158507	458.20	-1366.52
7	GUIDE	1139943608	9.20	4991	-0.134	0.160	0.087	0.143	238.761095	-54.002426	925.52	-2246.18

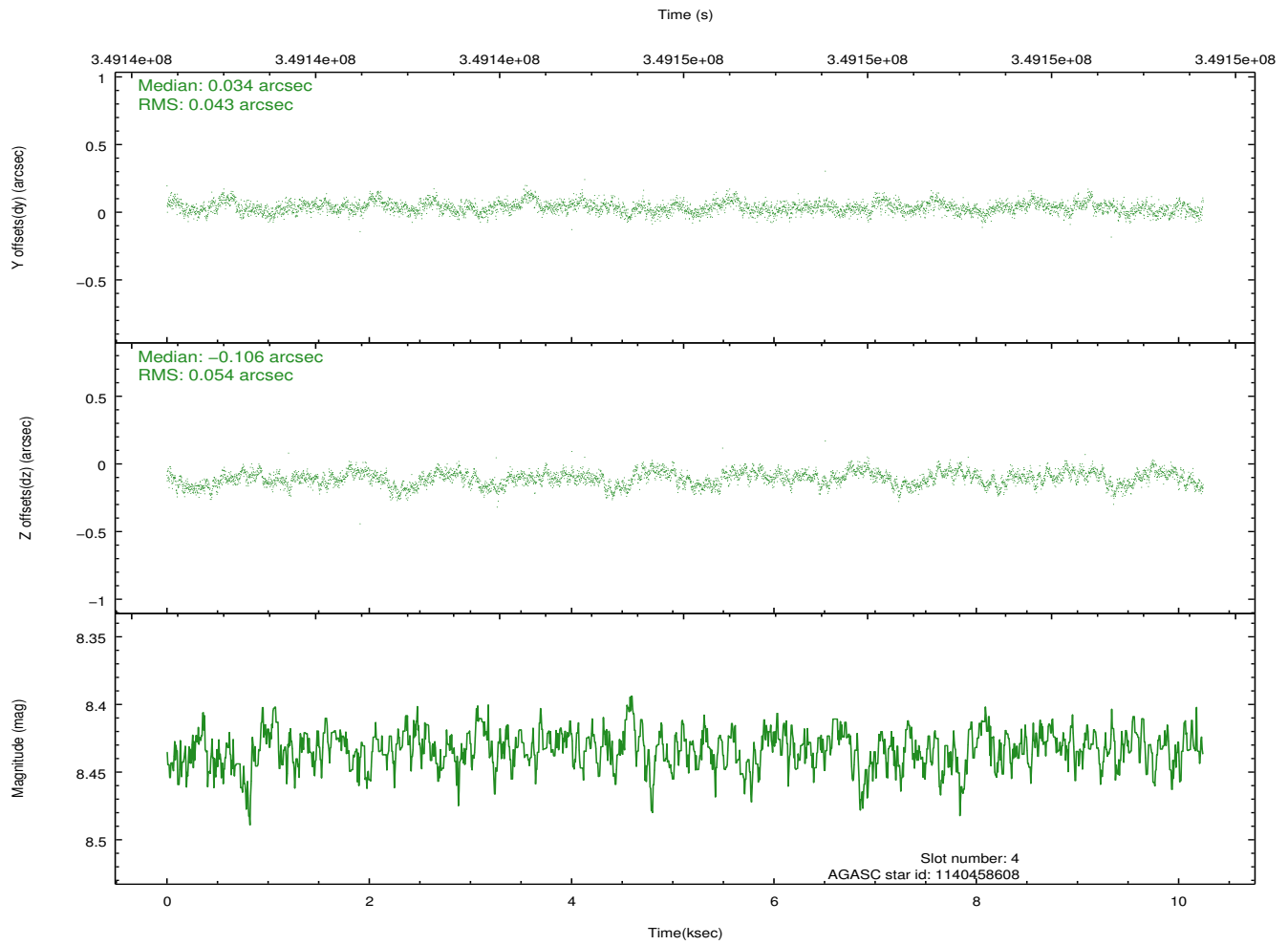
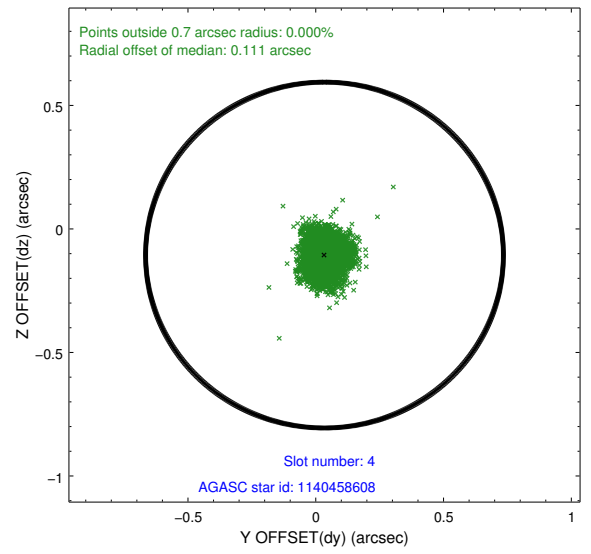
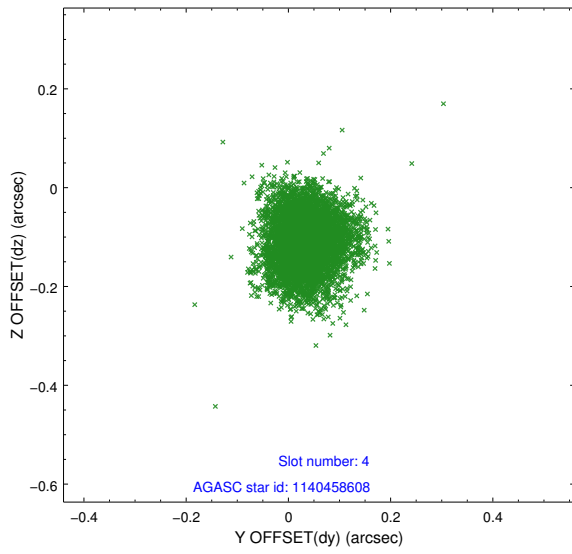
∞

## 2.4 Star Slots

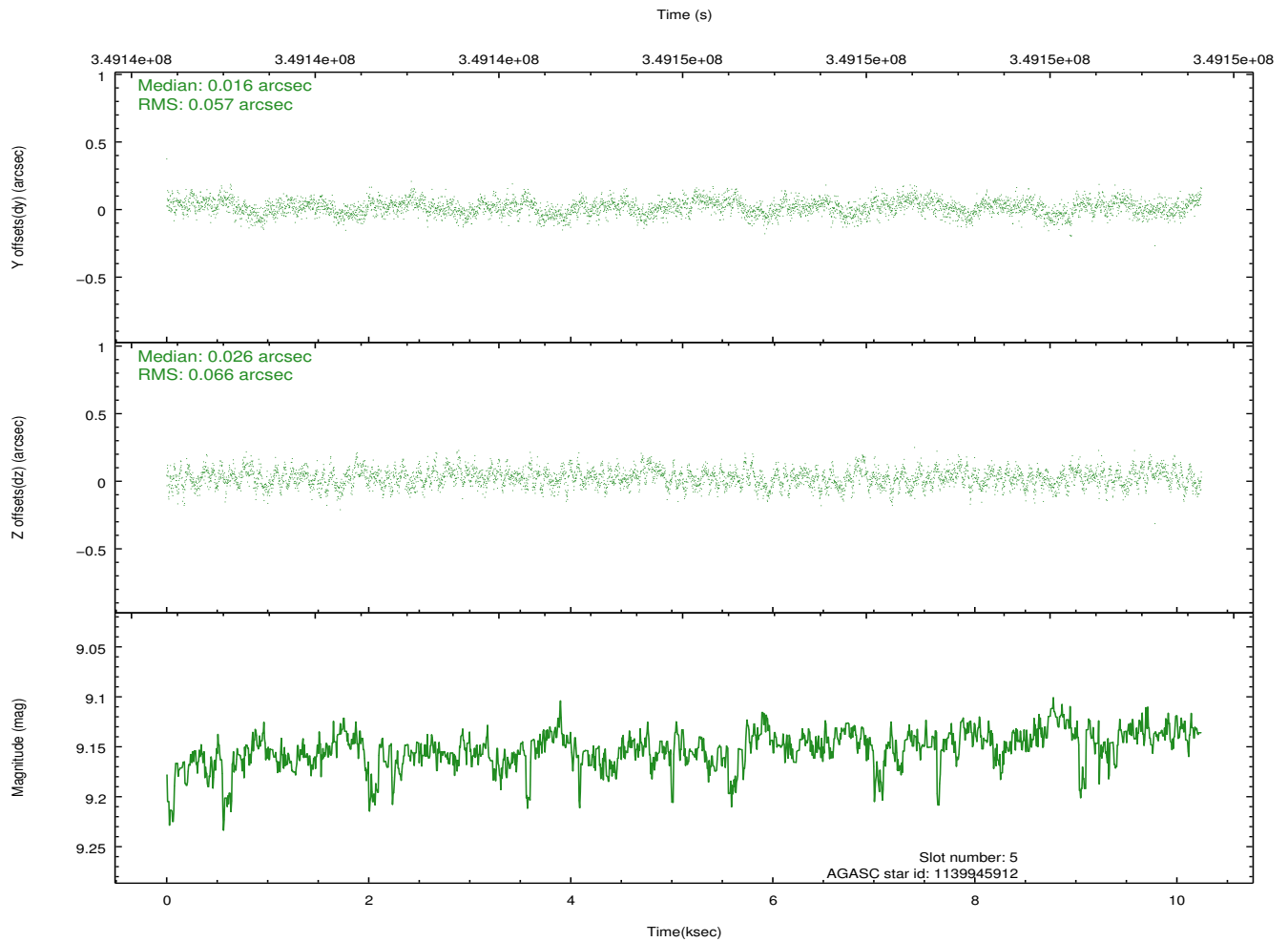
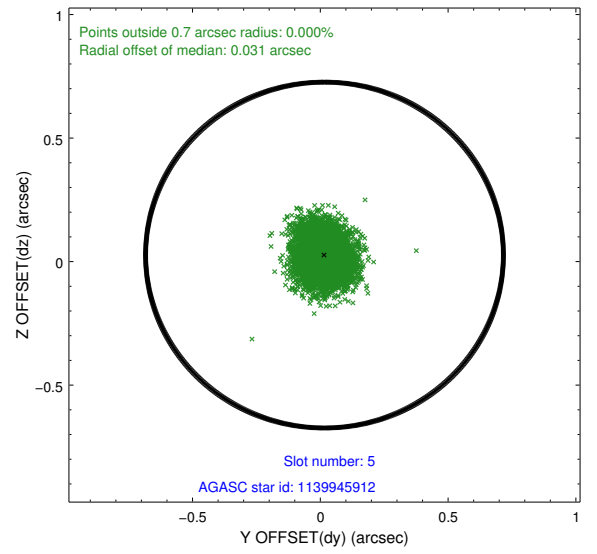
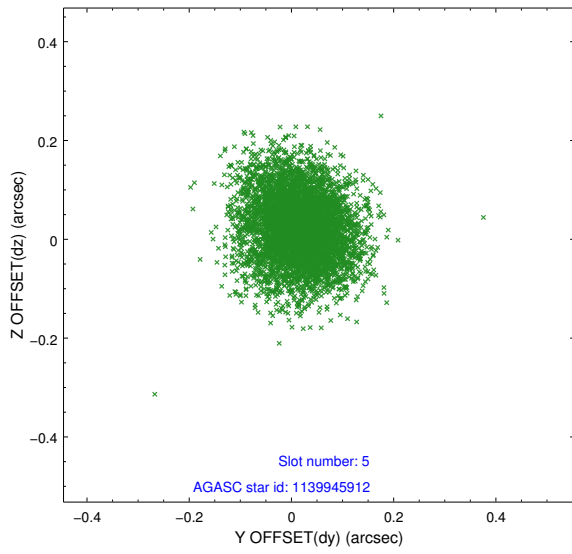
### 2.4.1 Slot 3



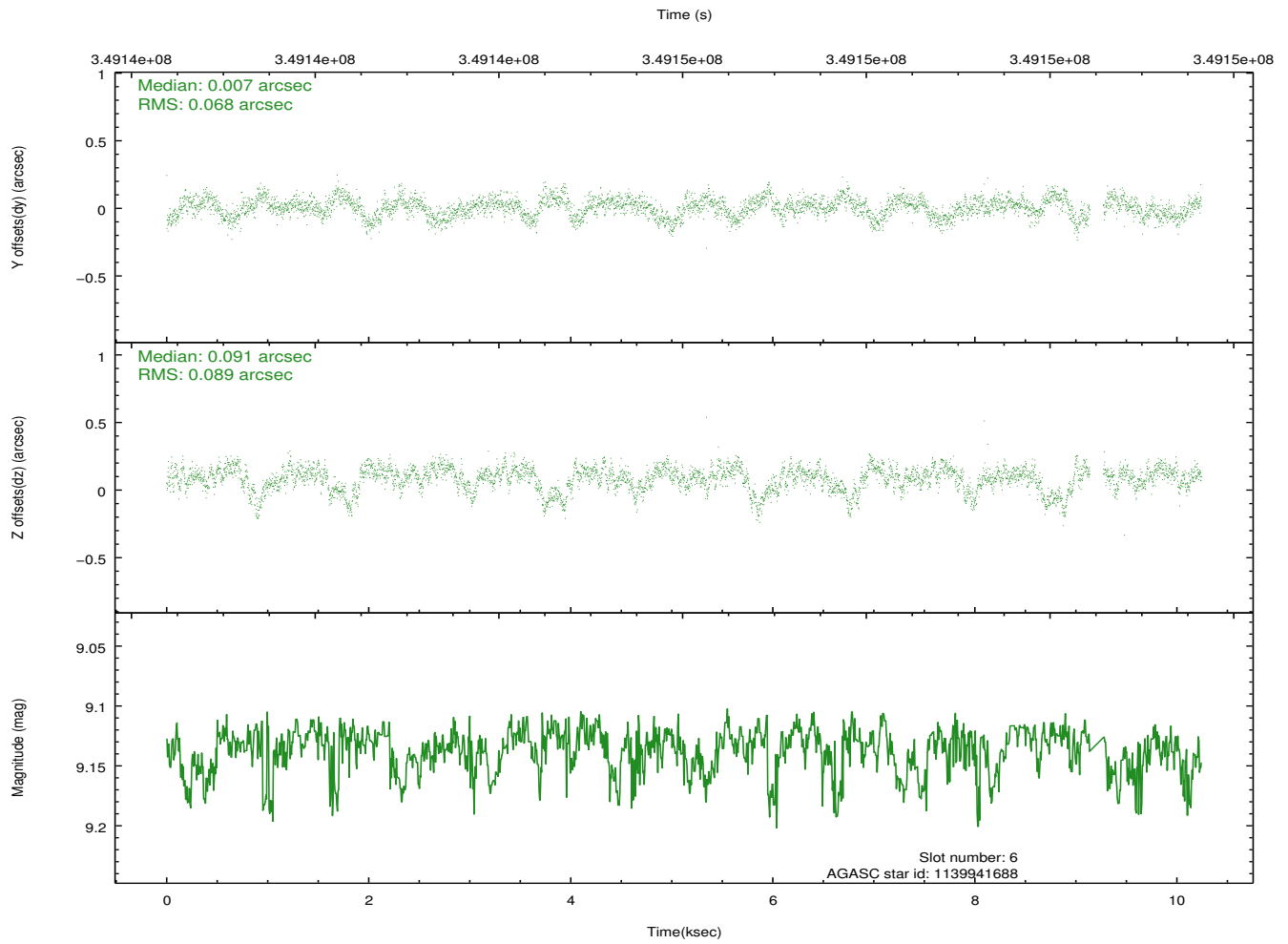
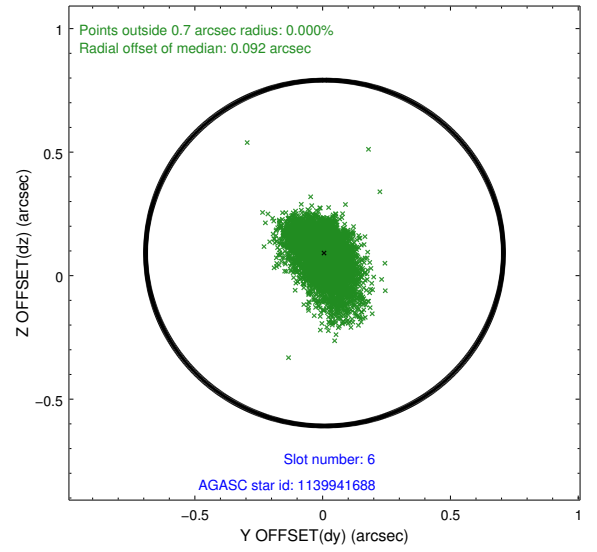
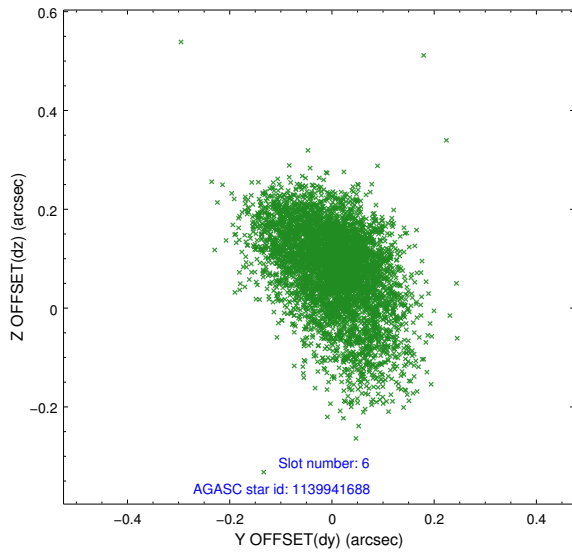
## 2.4.2 Slot 4



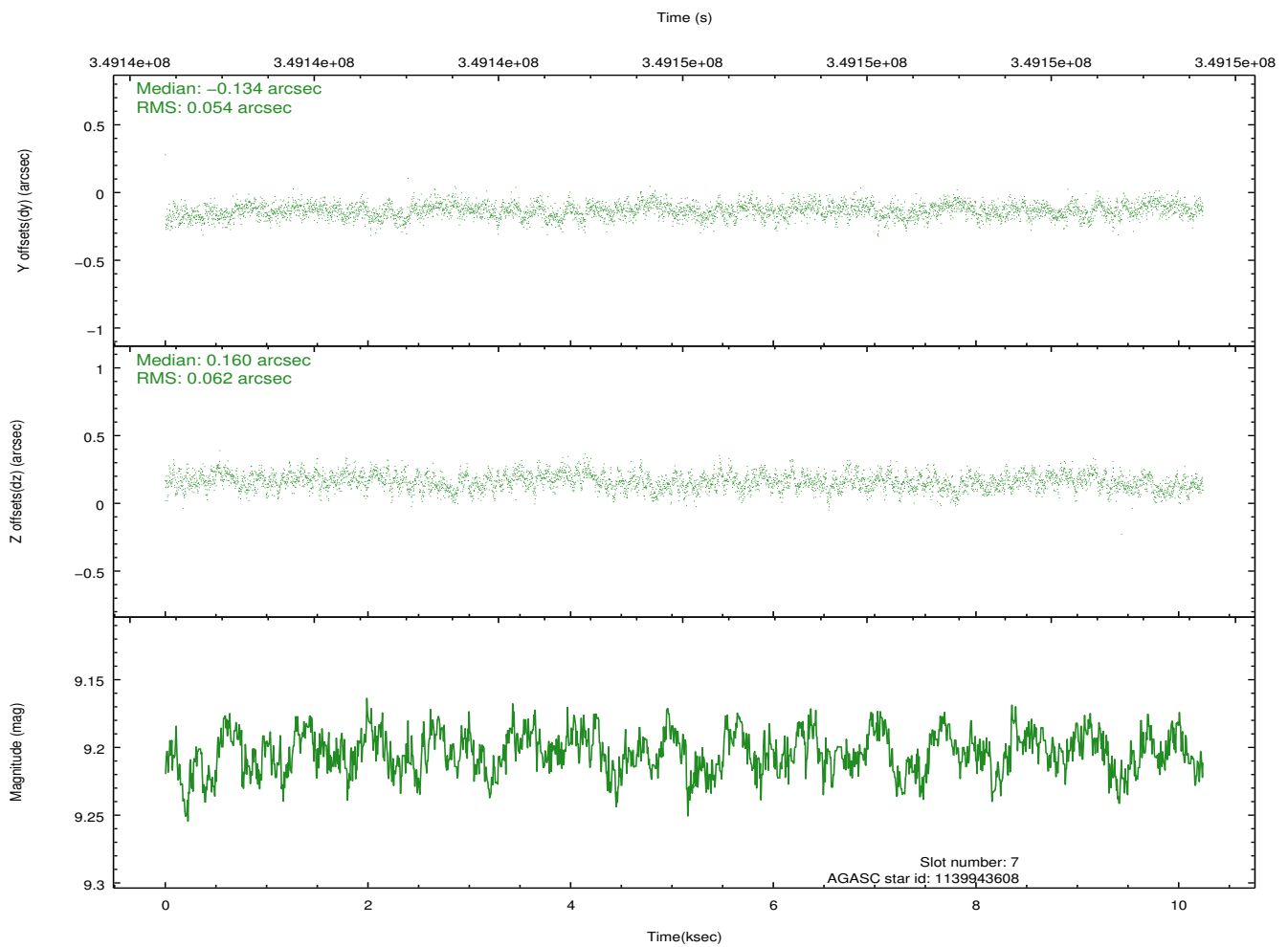
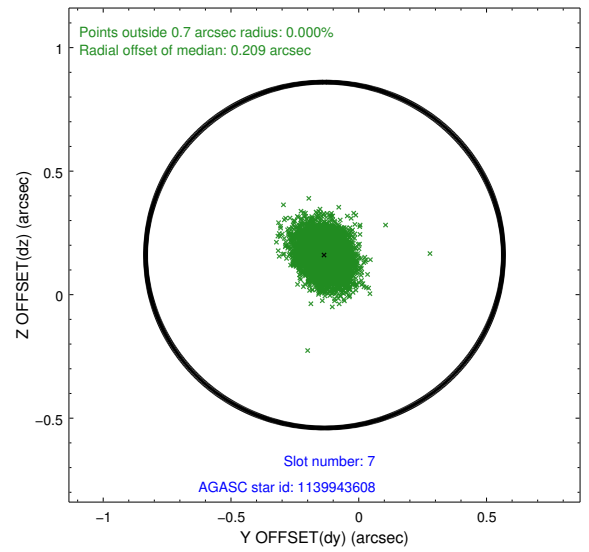
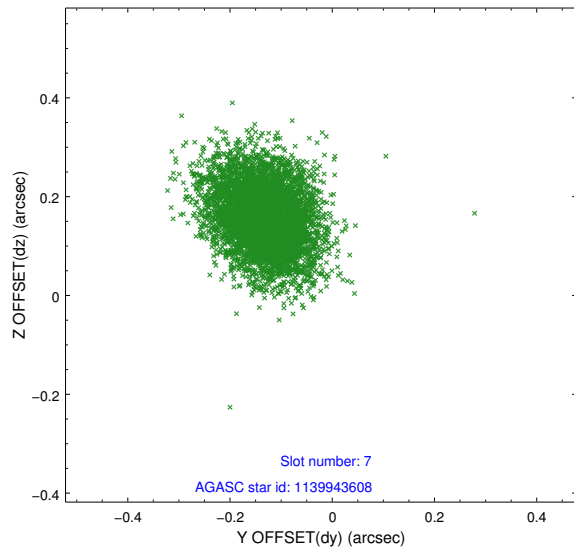
### 2.4.3 Slot 5



## 2.4.4 Slot 6

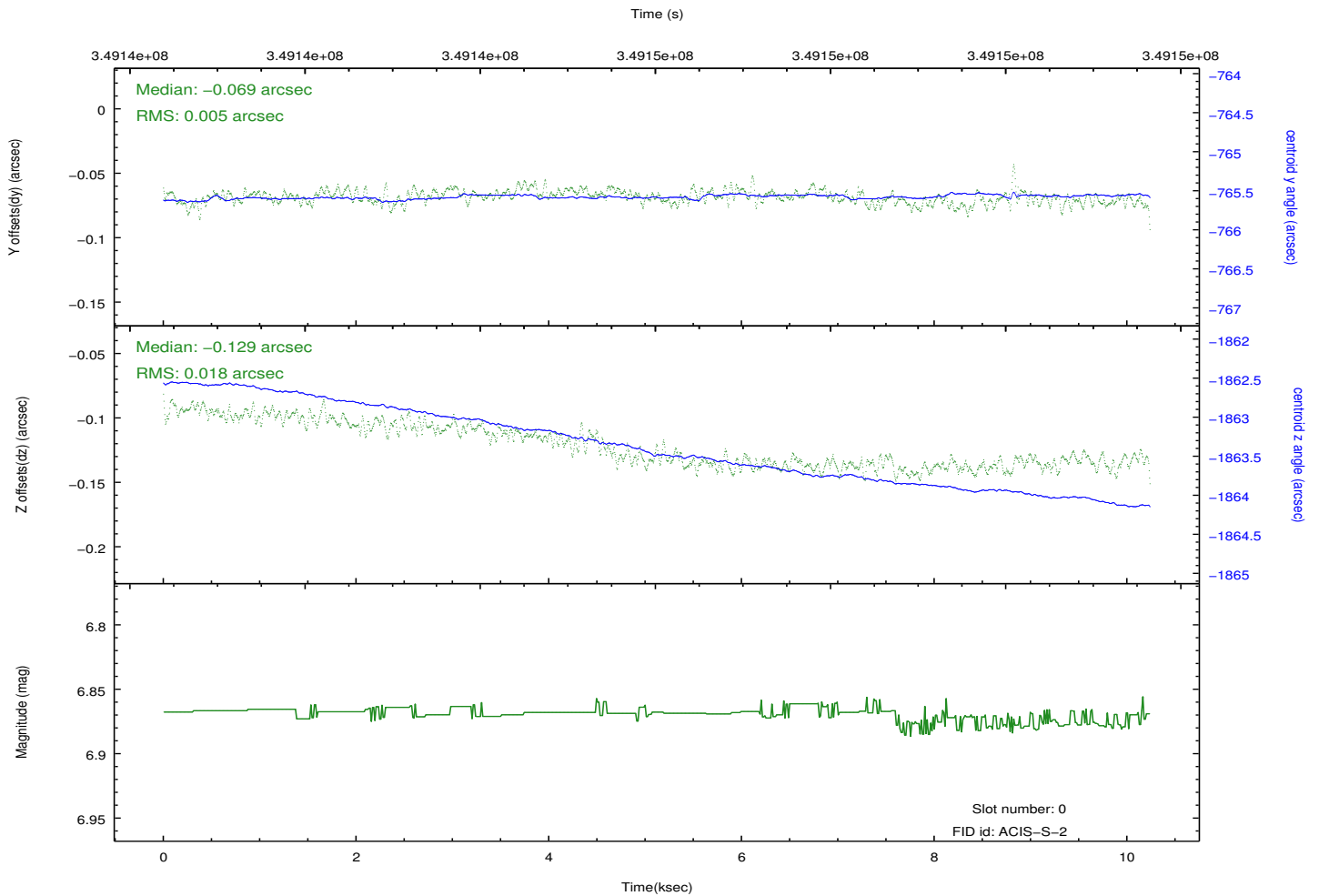
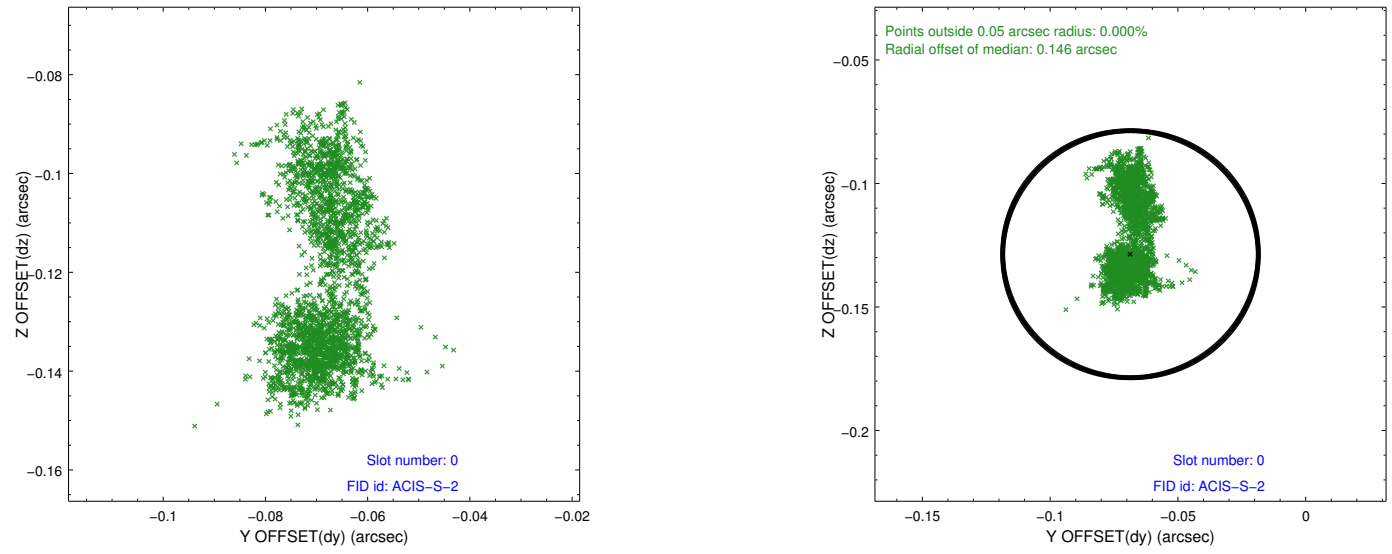


## 2.4.5 Slot 7

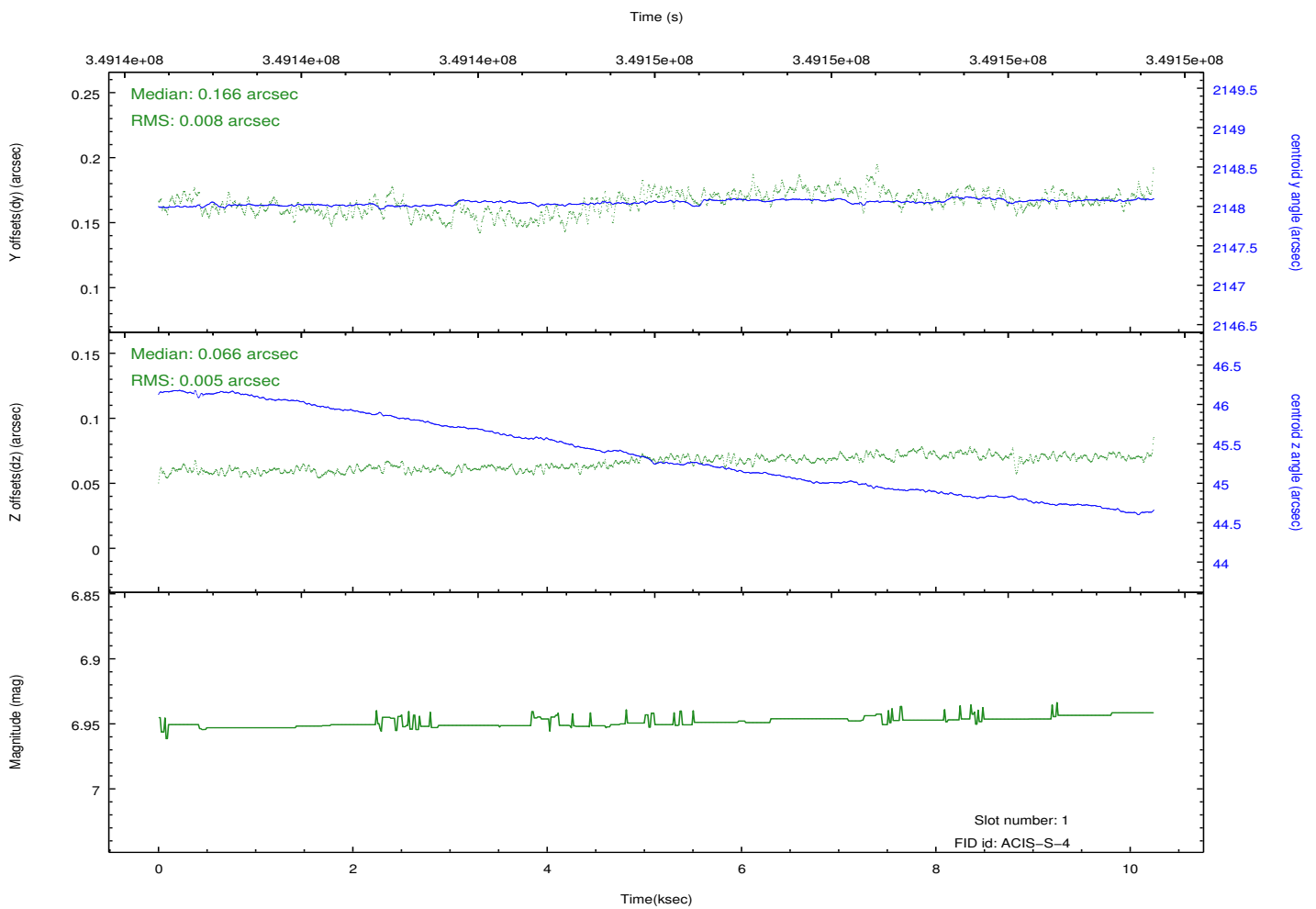
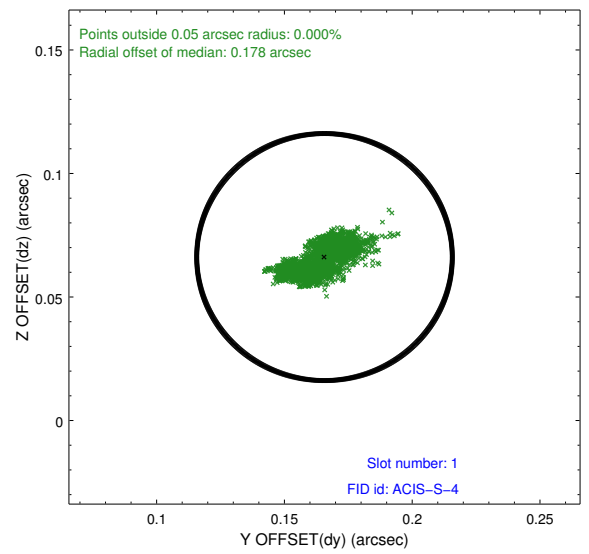
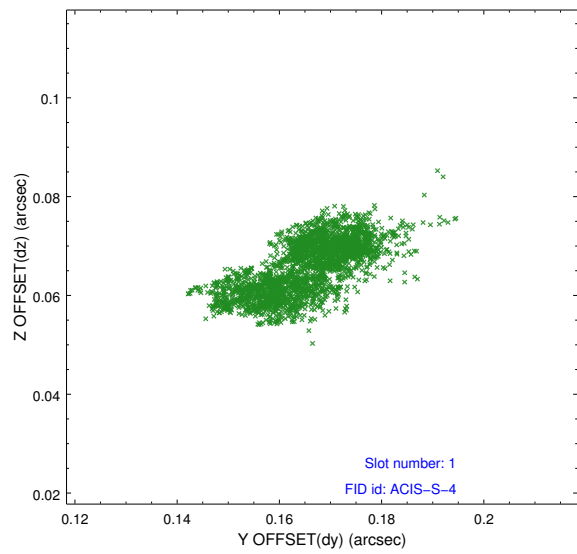


## 2.5 FID Slots

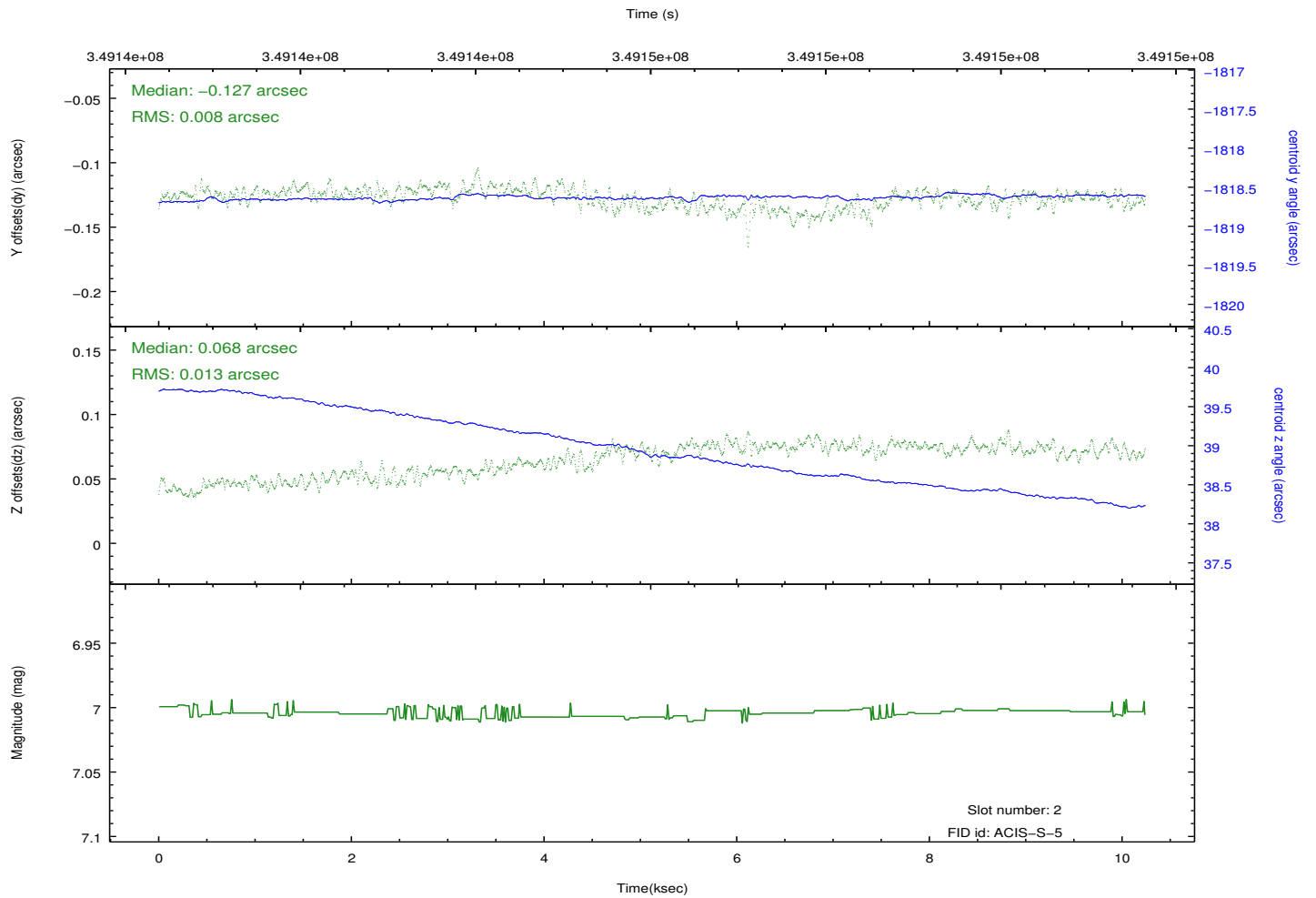
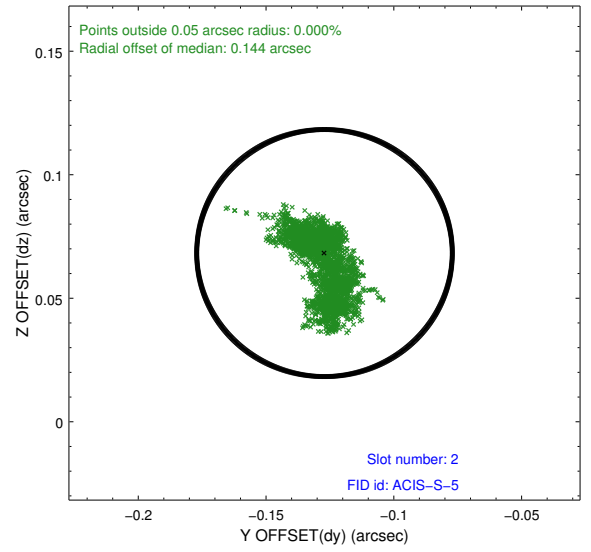
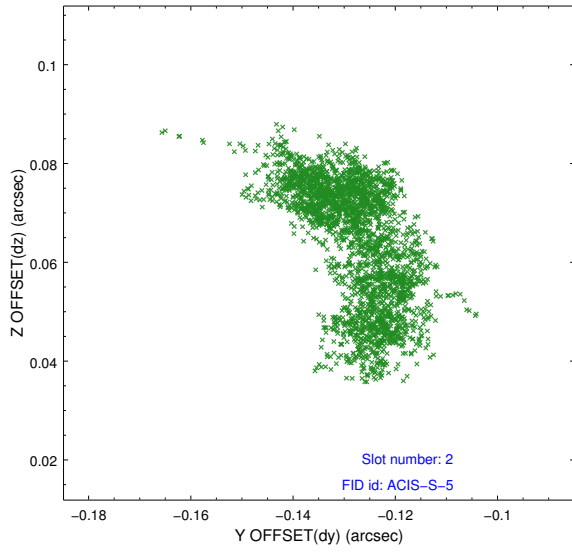
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# 3 Gratings

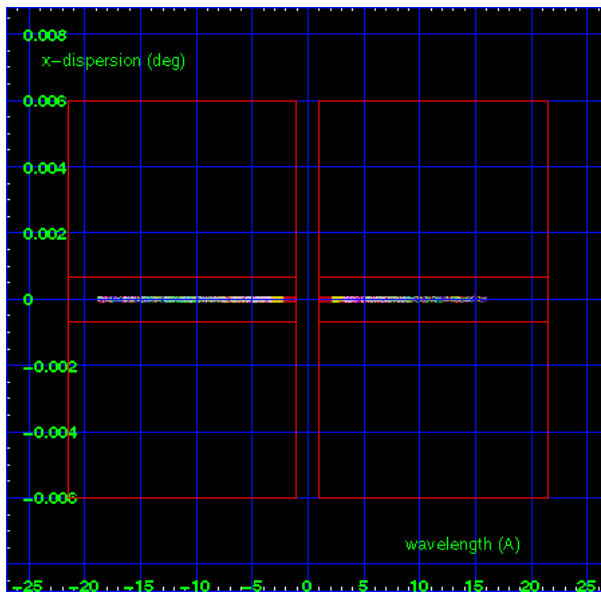
## 3.1 HEG Arm



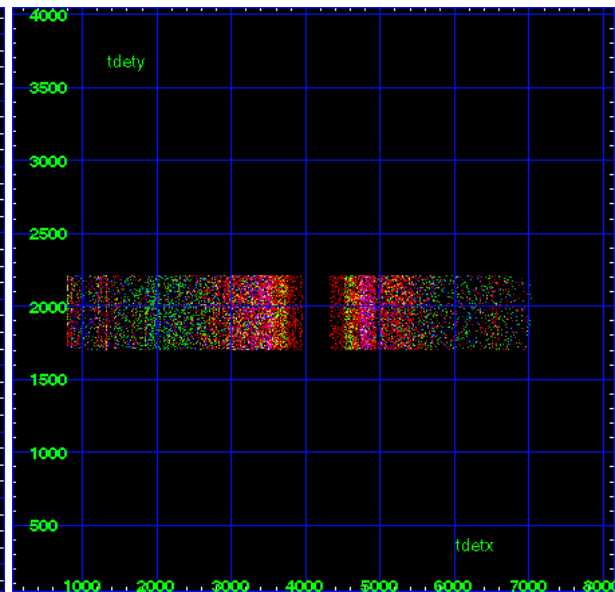
HEG Order Sort 123



HEG Order Sort ALL

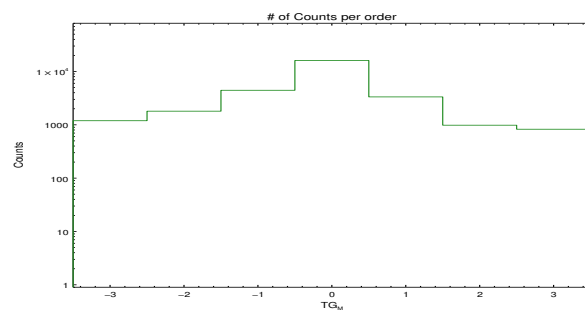


Spot Image HEG

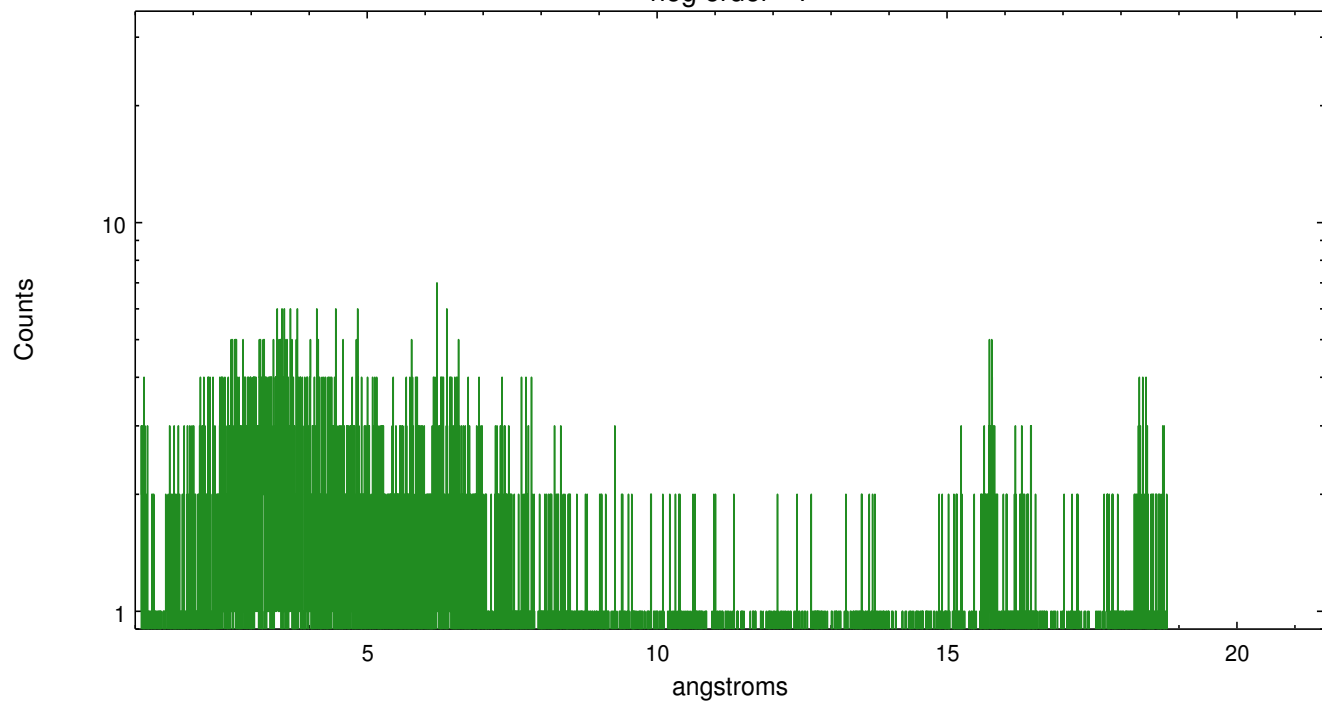


Full Detector HEG

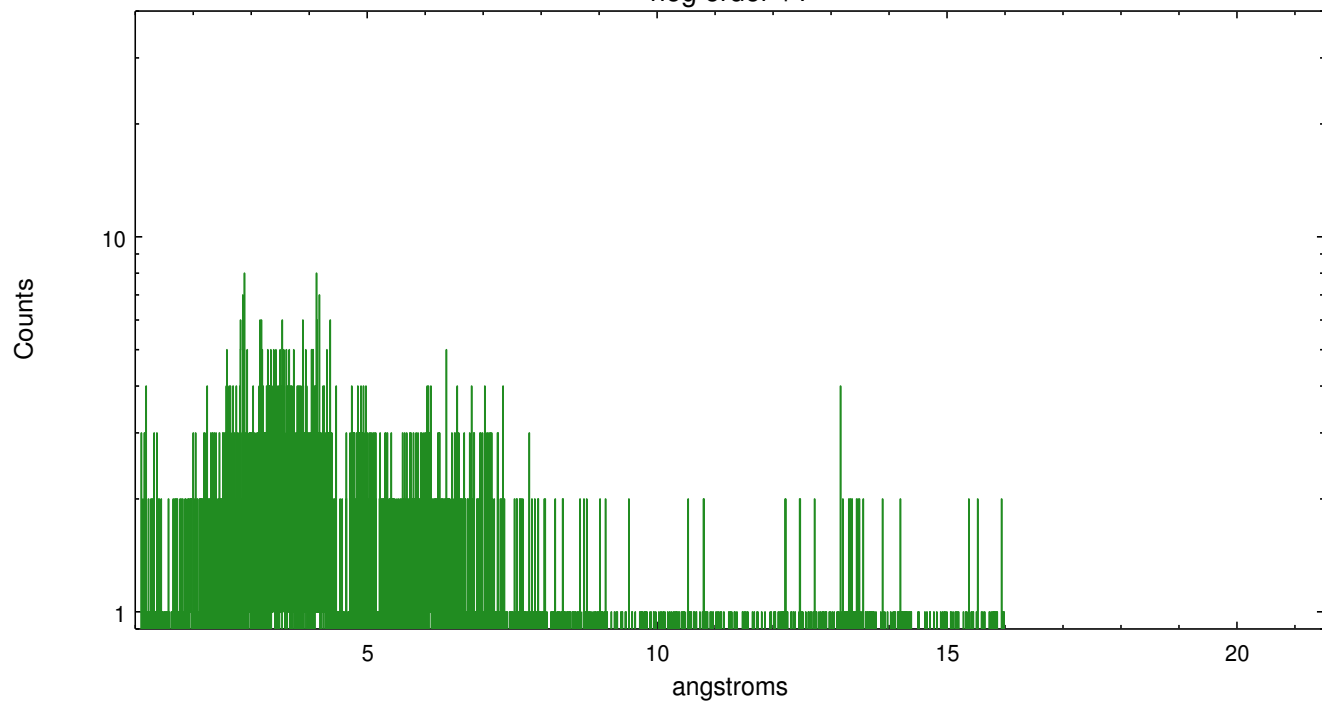
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1194	1801	4439	16051	3338	983	826



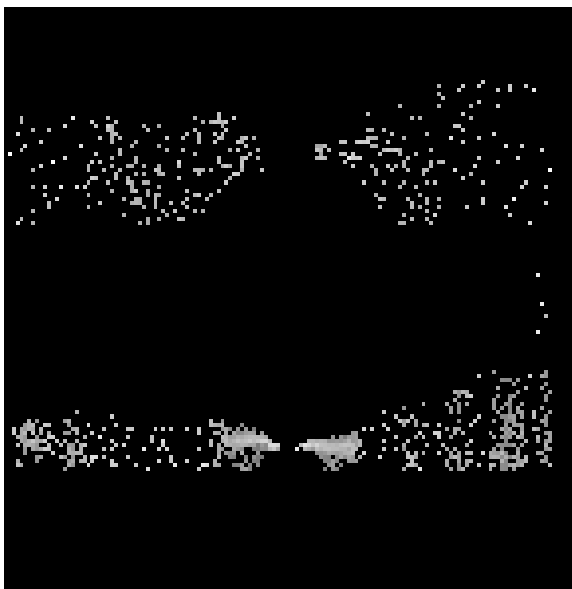
heg order -1



heg order +1



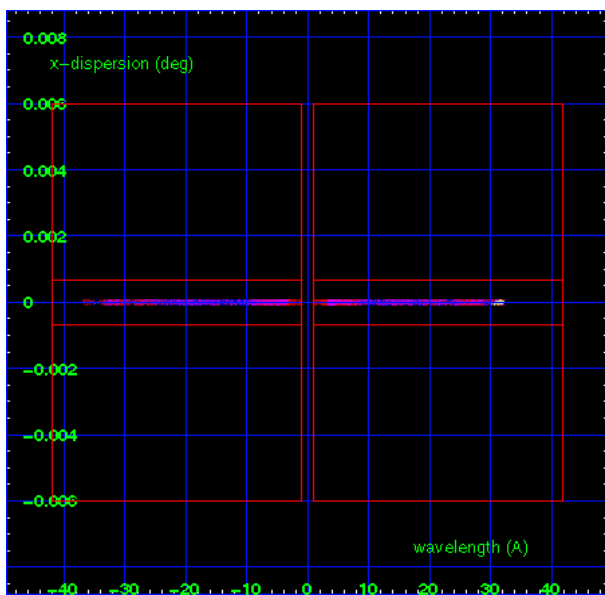
### 3.2 MEG Arm



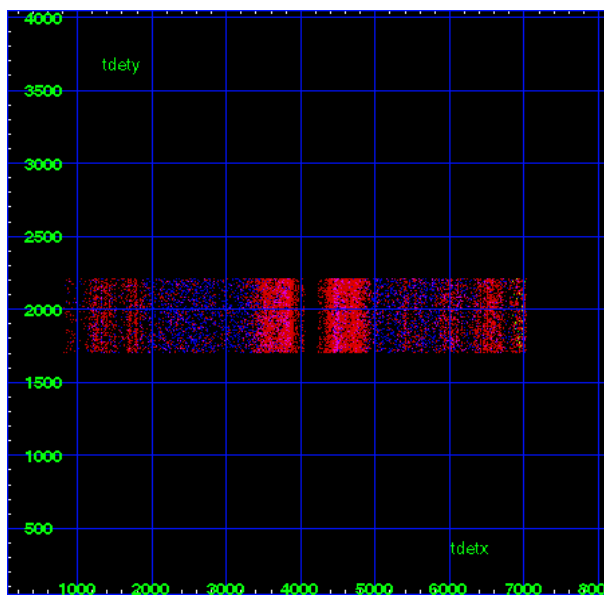
MEG Order Sort 123



MEG Order Sort ALL

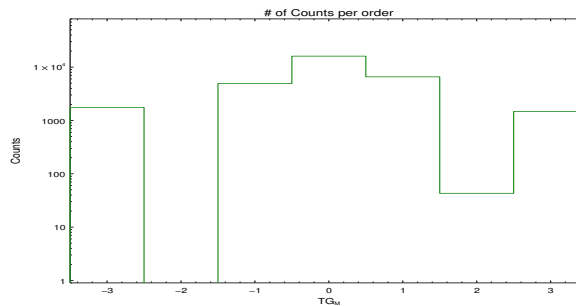


Spot Image MEG

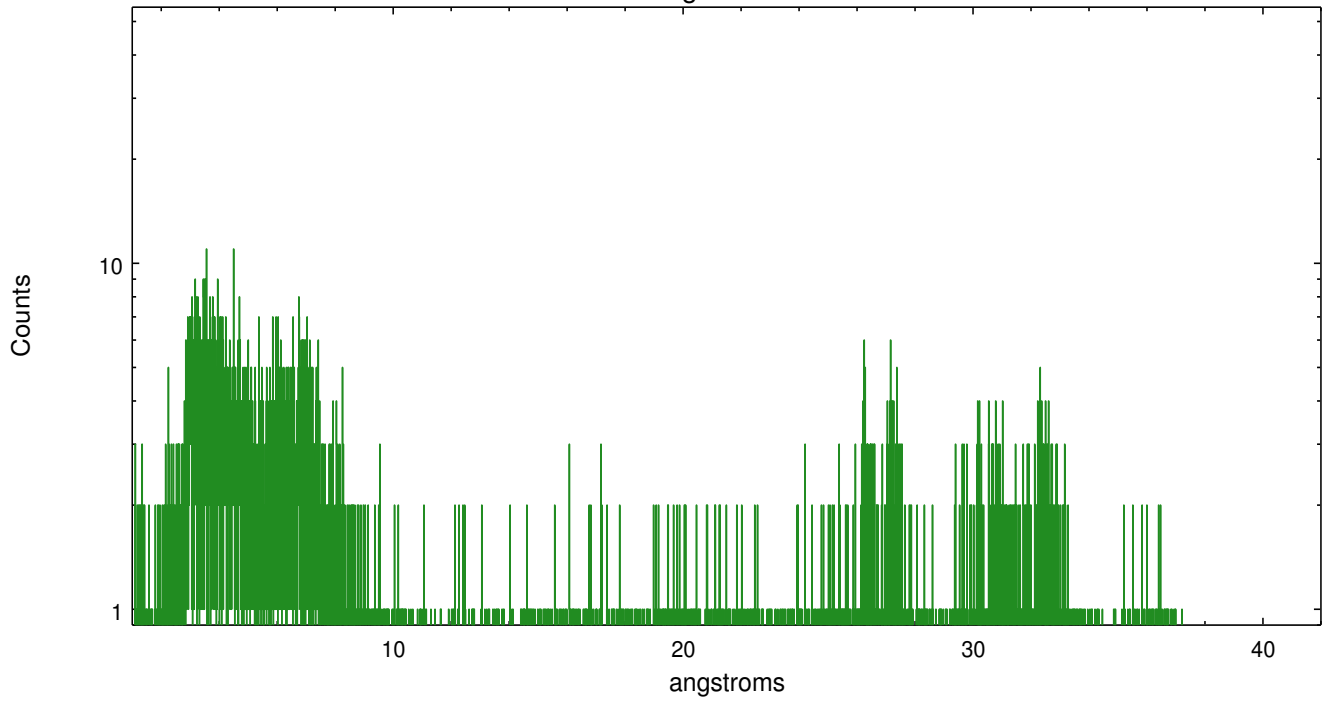


Full Detector MEG

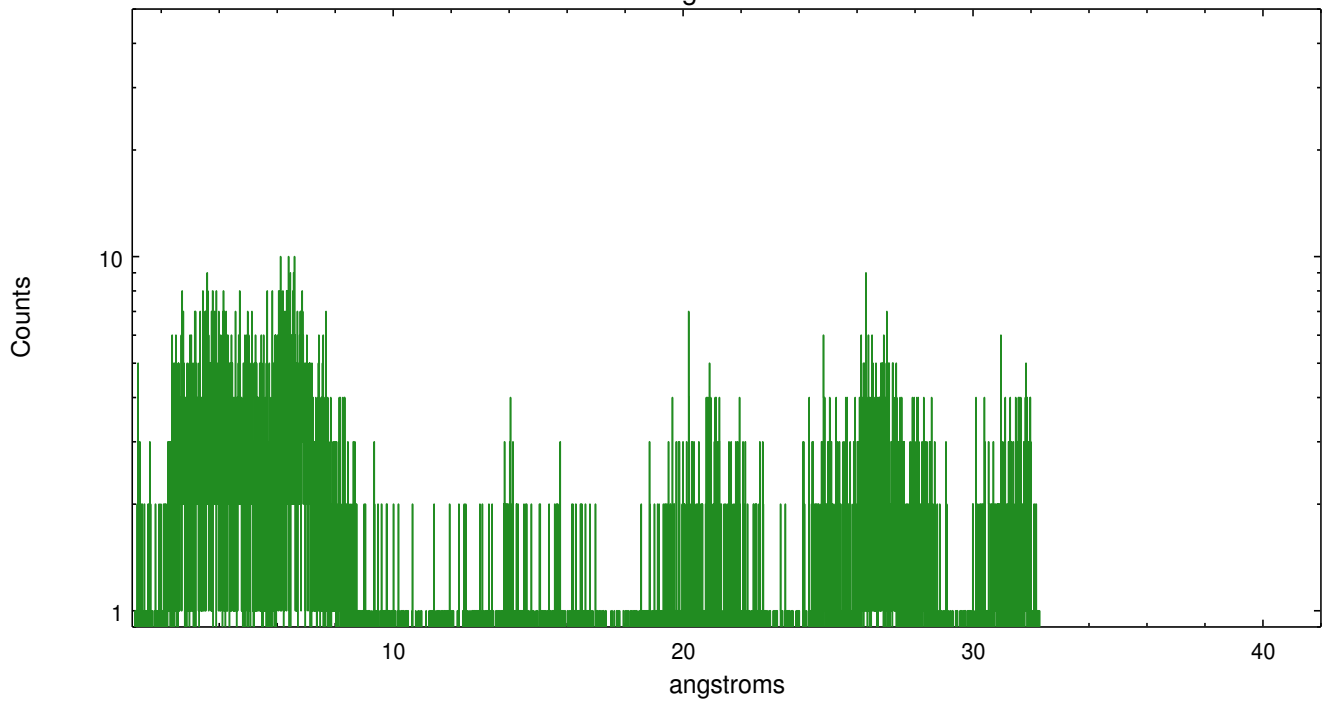
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1757	0	4925	16051	6575	43	1469



meg order -1



meg order +1



## A Summary

### A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2012.05.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.152

### A.2 Comments