

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2537 - L2 Version 3  
Chandra X-Ray Center

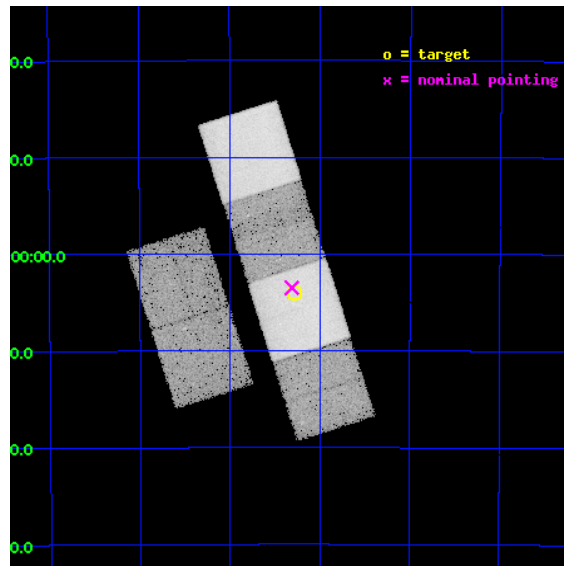
L2 Processing Date : Oct 15 2012

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# 1 Front

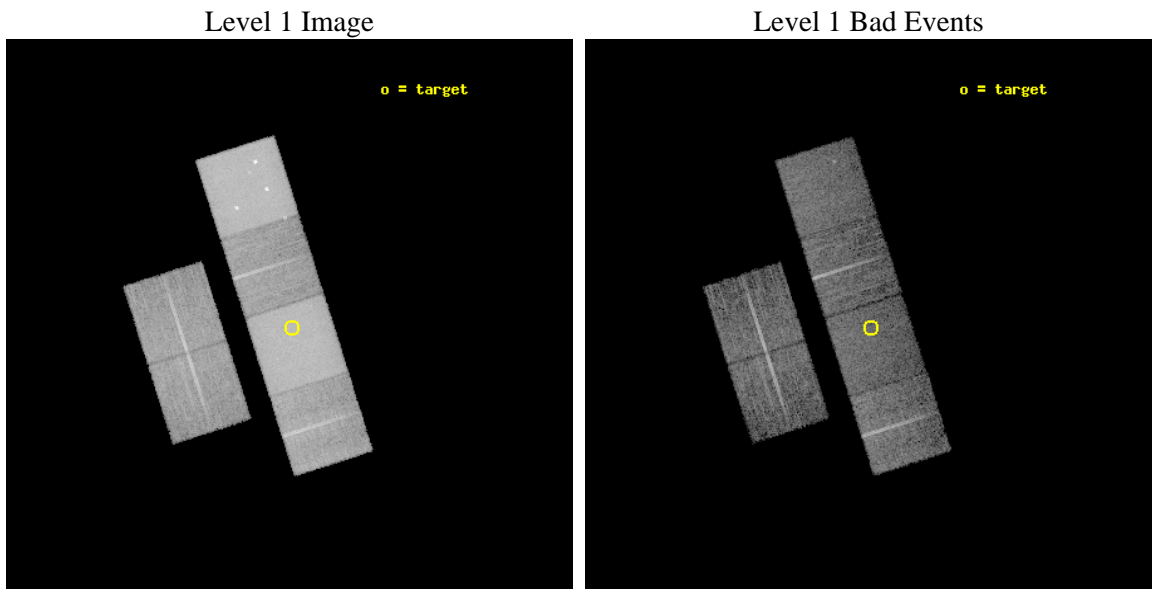
seq_num	200145	Sequence number
obs_id	2537	Observation id
title	AN X-RAY STUDY OF X-RAYS FROM THE BETA PIC SYSTEM	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	BETA PIC	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	86.820833	Observer's specified target RA [deg]
dec_targ	-51.0665	Observer's specified target Dec [deg]
ra_nom	86.827780245408	Nominal RA [deg]
dec_nom	-51.058478714125	Nominal Dec [deg]
roll_nom	72.362429099987	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10015.999962687	Sum of GTIs [s]
livetime	9889.1713402488	Livetime [s]
ontime2	10015.999962687	Sum of GTIs [s]
ontime3	10015.999962687	Sum of GTIs [s]
ontime5	10015.999962687	Sum of GTIs [s]
ontime6	10015.999962687	Sum of GTIs [s]
ontime7	10015.999962687	Sum of GTIs [s]
ontime8	10012.74399218	Sum of GTIs [s]
l2events	294172	Number of level 2 events



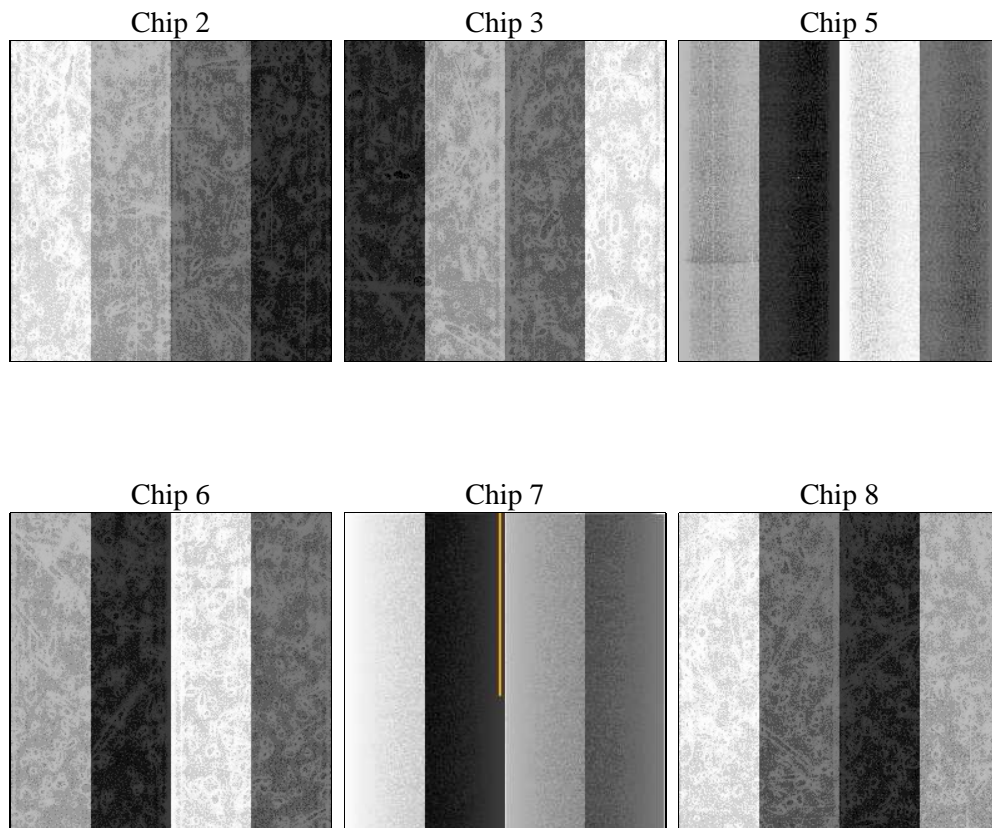
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10259.613000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10015.999962687	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	10015.999962687	Sum of GTIs [s]
date	2012-10-15T13:03:30	Date and time of file creation	ontime3	10015.999962687	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	10015.999962687	Sum of GTIs [s]
			ontime6	10015.999962687	Sum of GTIs [s]
			ontime7	10015.999962687	Sum of GTIs [s]
			ontime8	10012.74399218	Sum of GTIs [s]
			l1events	676032	Number of level 1 events

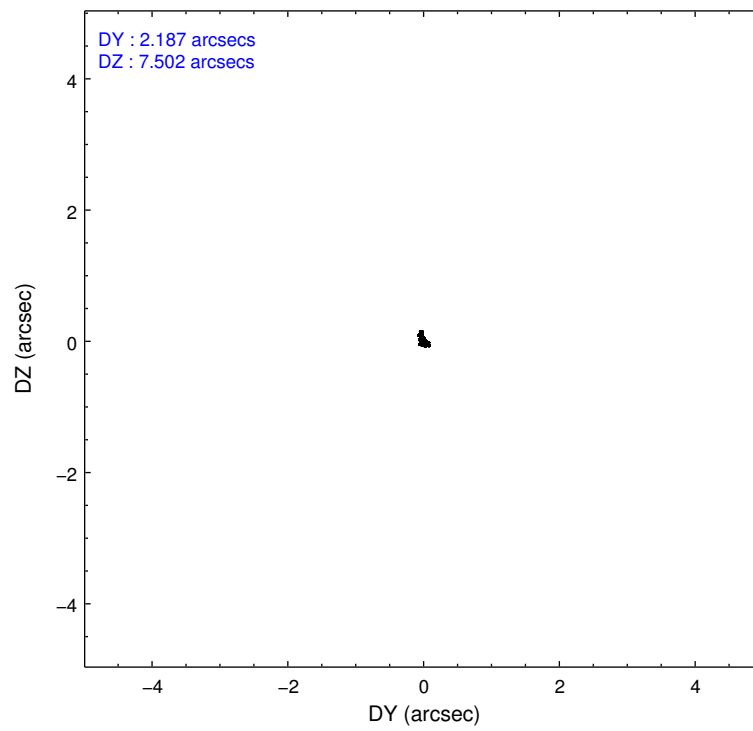
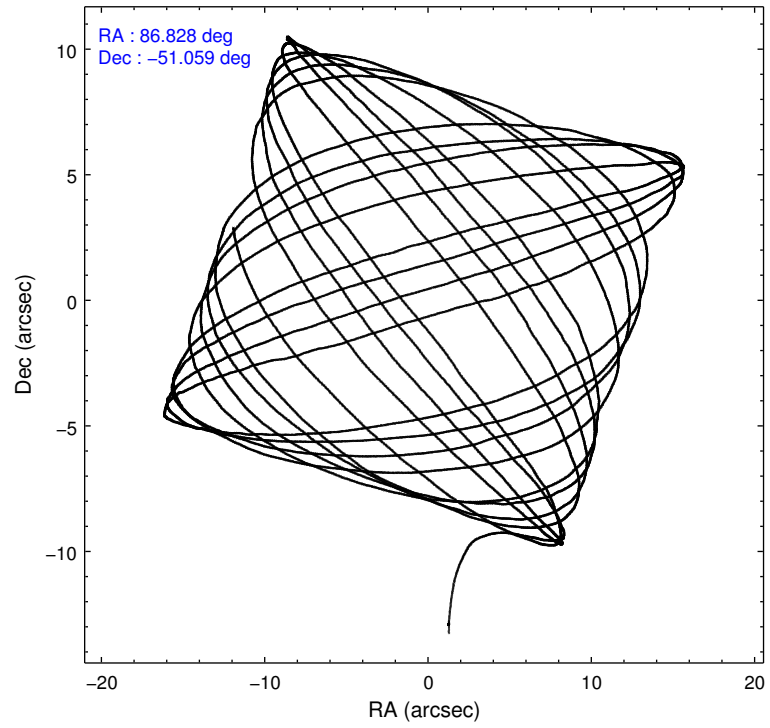
### 2.1.4 Events

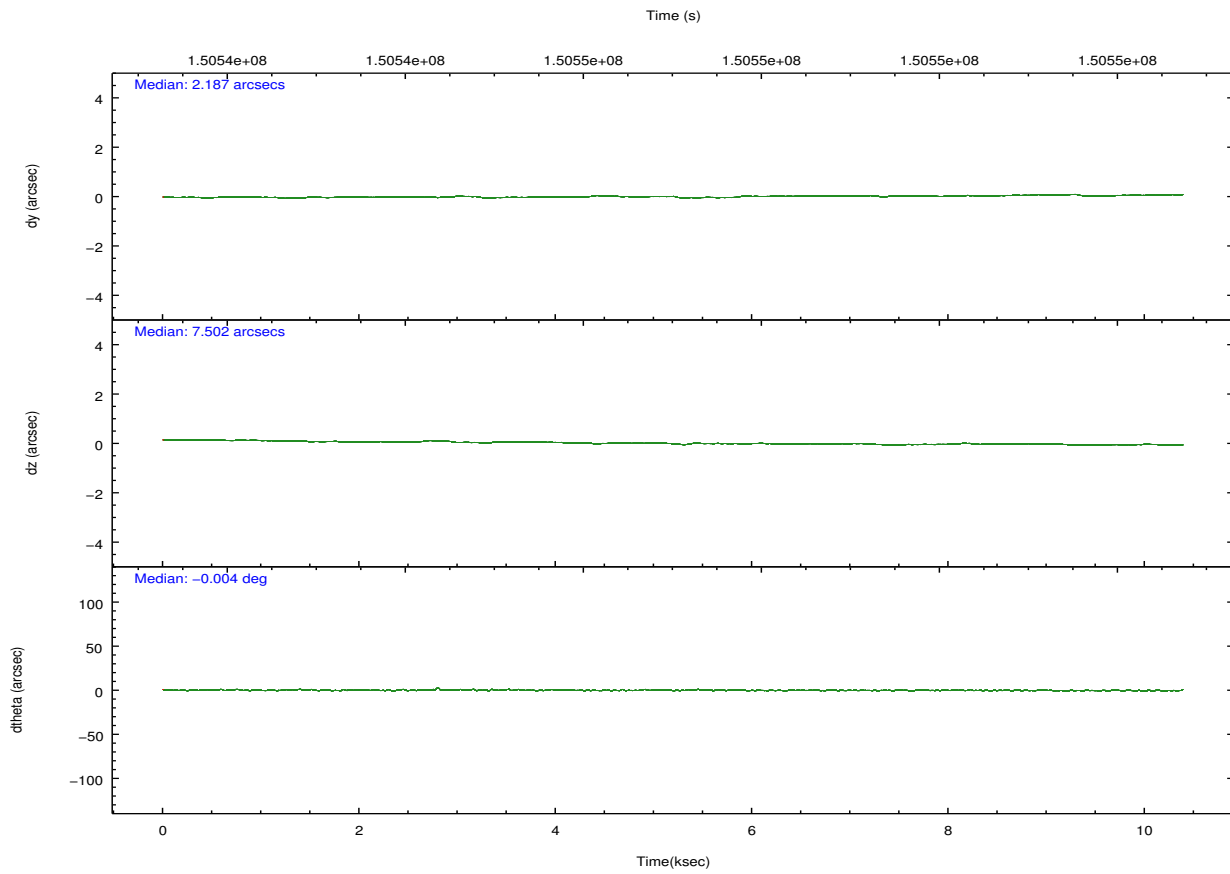
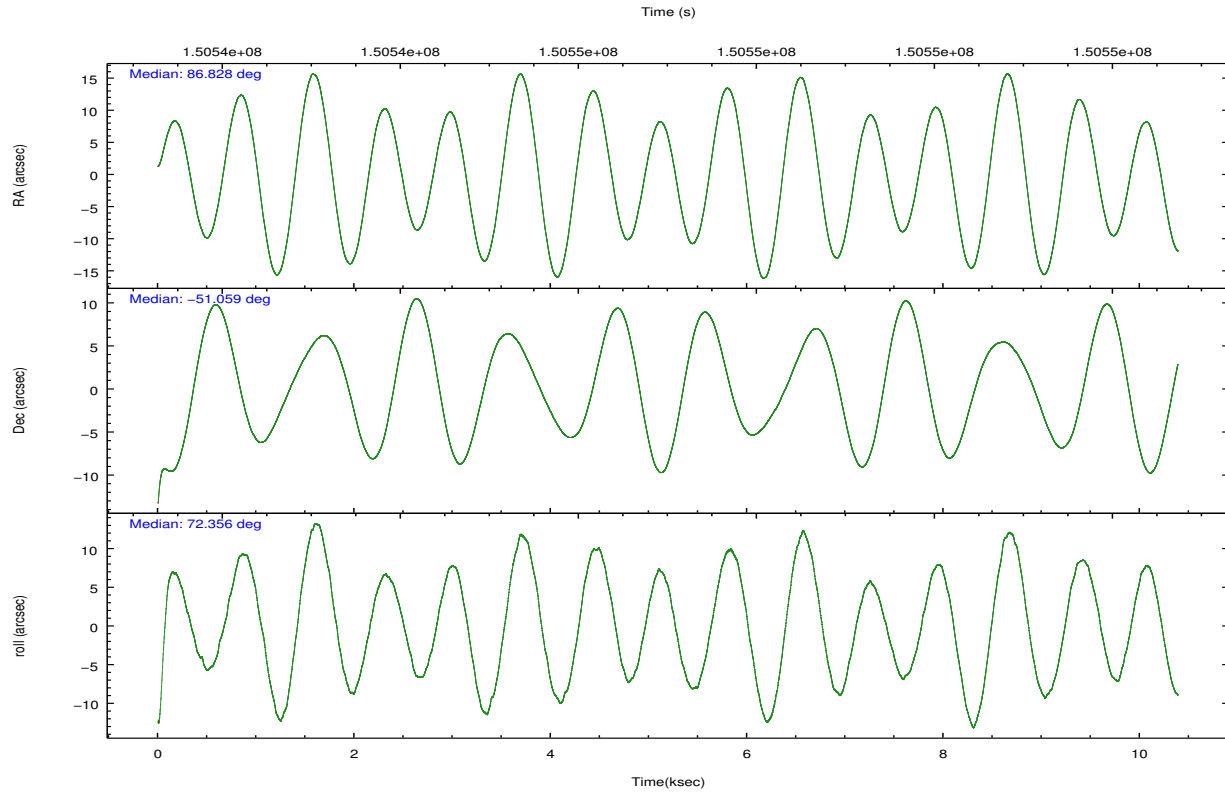
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	77287	74377	181576	78648	166247	97897	grade 0 events	10541	10447	20473	13620	12096	15677
rejected events	60876	57982	59244	58021	52904	68687		13%	14%	11%	17%	7%	16%
rejected %	78%	77%	32%	73%	31%	70%	grade 1 events	85	73	349	59	85	128
								0%	0%	0%	0%	0%	0%
							grade 2 events	2362	2256	34031	3015	20203	4779
								3%	3%	18%	3%	12%	4%
							grade 3 events	985	1061	6497	1059	8879	2073
								1%	1%	3%	1%	5%	2%
							grade 4 events	979	1042	6523	1031	8601	1897
								1%	1%	3%	1%	5%	1%
							grade 5 events	2505	2818	8246	2851	8617	3813
								3%	3%	4%	3%	5%	3%
							grade 6 events	1557	1610	54860	1941	63608	4822
								2%	2%	30%	2%	38%	4%
							grade 7 events	58273	55070	50597	55072	44158	64708
								75%	74%	27%	70%	26%	66%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	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	86.837606	86.82778024540799	Subarray requested	NONE	NONE
[deg] Pointing Dec	-51.084924	-51.05847871412451	Alternating exposures requested	N	N
[deg] Pointing Roll	72.213458	72.36242909998664	[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)	150541942.184000	150540480.91644			
Observation start date	2002-10-09T09:11:18	2002-10-09T08:48:00			
[s] Observation end time (MET)	150552202.184000	150552516.46694			
Observation end date	2002-10-09T12:02:18	2002-10-09T12:08:36			
Read mode	TIMED	TIMED			

## 2.3 Aspect



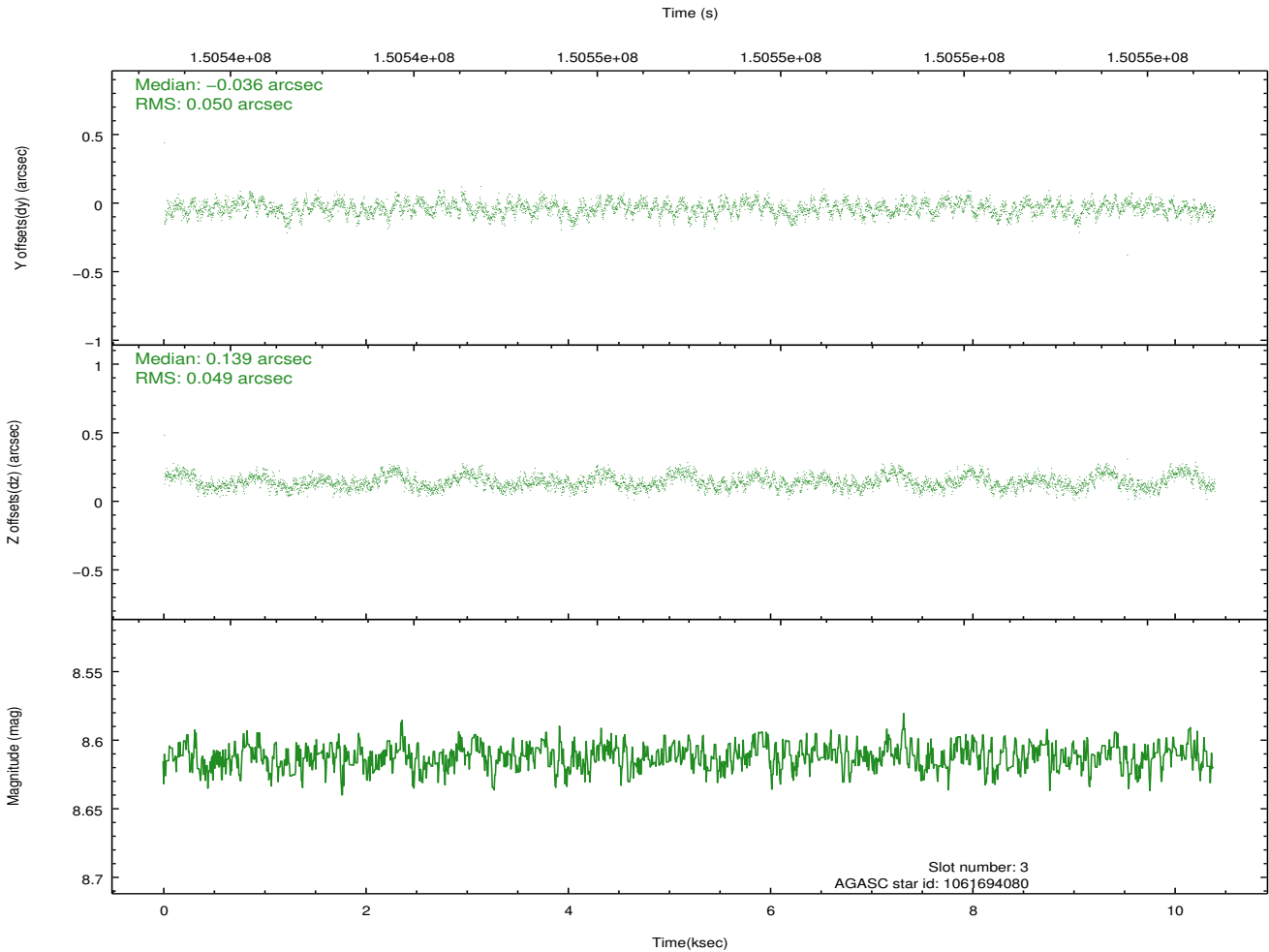
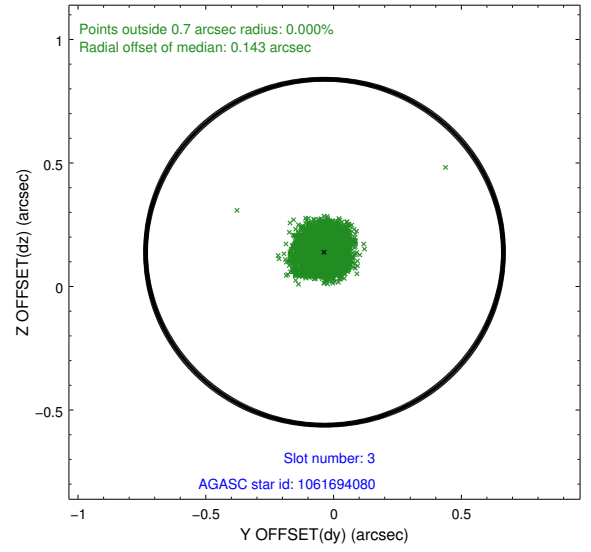
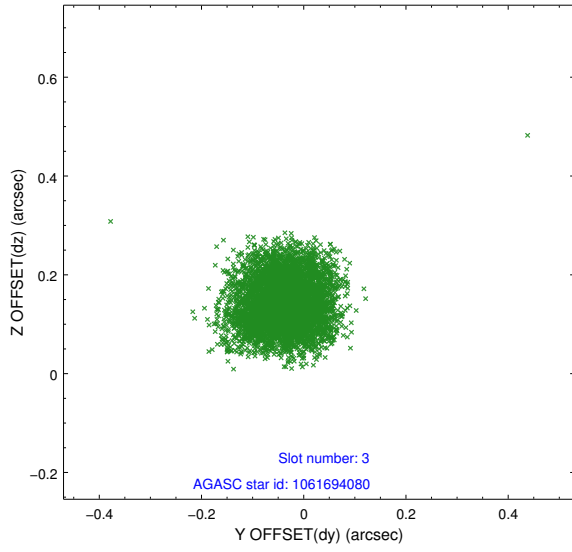


### Slot Statistics

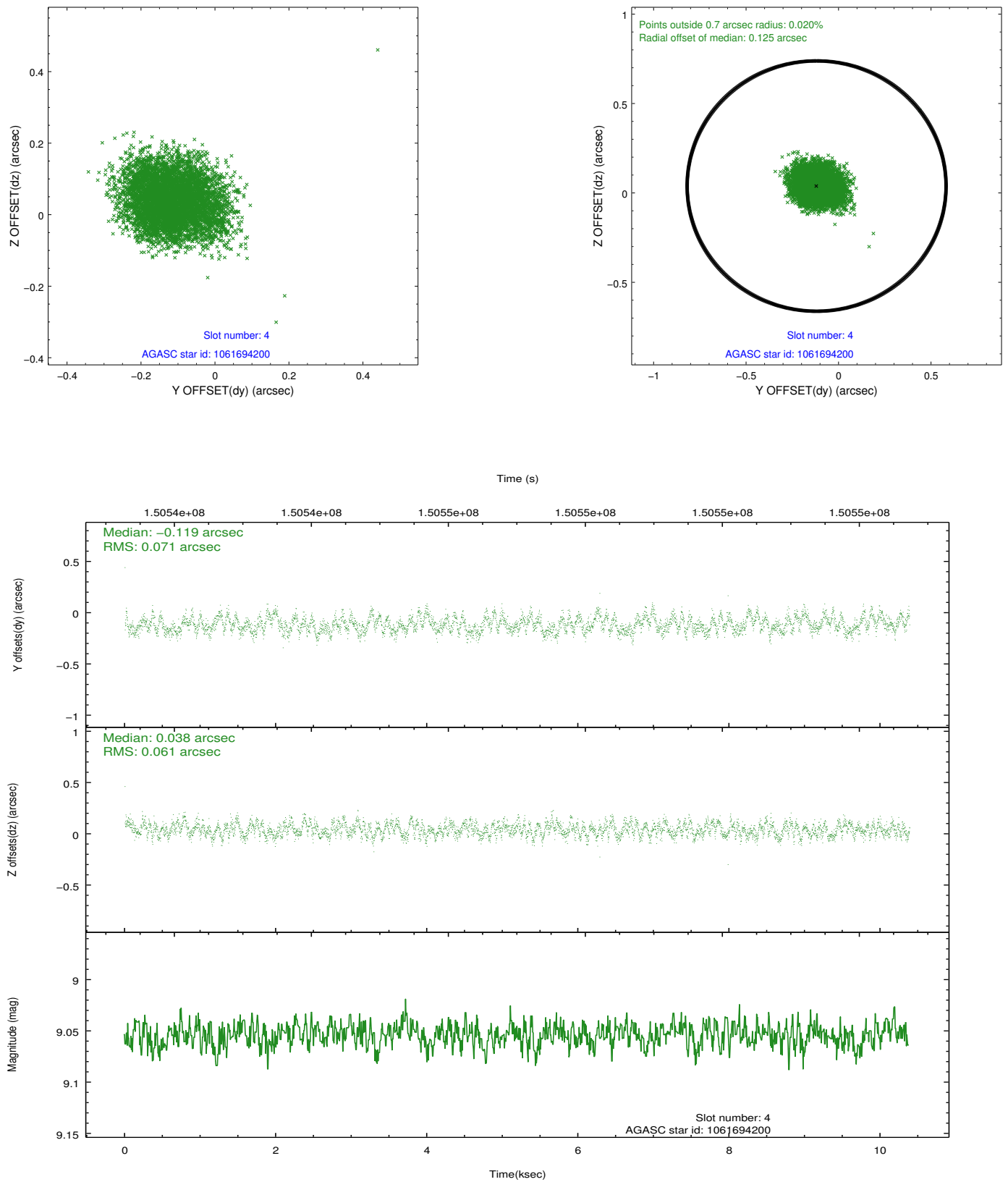
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2534	-0.016	0.008	0.007	0.012	0.000000	0.000000	-754.84	-1728.68
1	FID	ACIS-S-4	7.20	2534	-0.037	0.006	0.006	0.011	0.000000	0.000000	2158.21	179.25
2	FID	ACIS-S-5	7.24	2534	0.022	-0.005	0.007	0.012	0.000000	0.000000	-1806.98	173.52
3	GUIDE	1061694080	8.61	5066	-0.036	0.139	0.075	0.117	87.723050	-50.708573	1896.16	-1511.33
4	GUIDE	1061694200	9.05	5065	-0.119	0.038	0.101	0.155	87.744756	-50.641601	2141.62	-1488.08
5	GUIDE	1061687656	9.03	5067	-0.040	0.122	0.100	0.154	87.359157	-51.690185	-1721.75	-1775.30
6	GUIDE	1061557344	9.49	5062	0.163	0.090	0.089	0.144	86.834993	-51.719625	-2176.75	-692.70
7	GUIDE	1061555984	9.62	5060	0.027	-0.391	0.112	0.177	85.711815	-51.072582	-753.95	2432.04

## 2.4 Star Slots

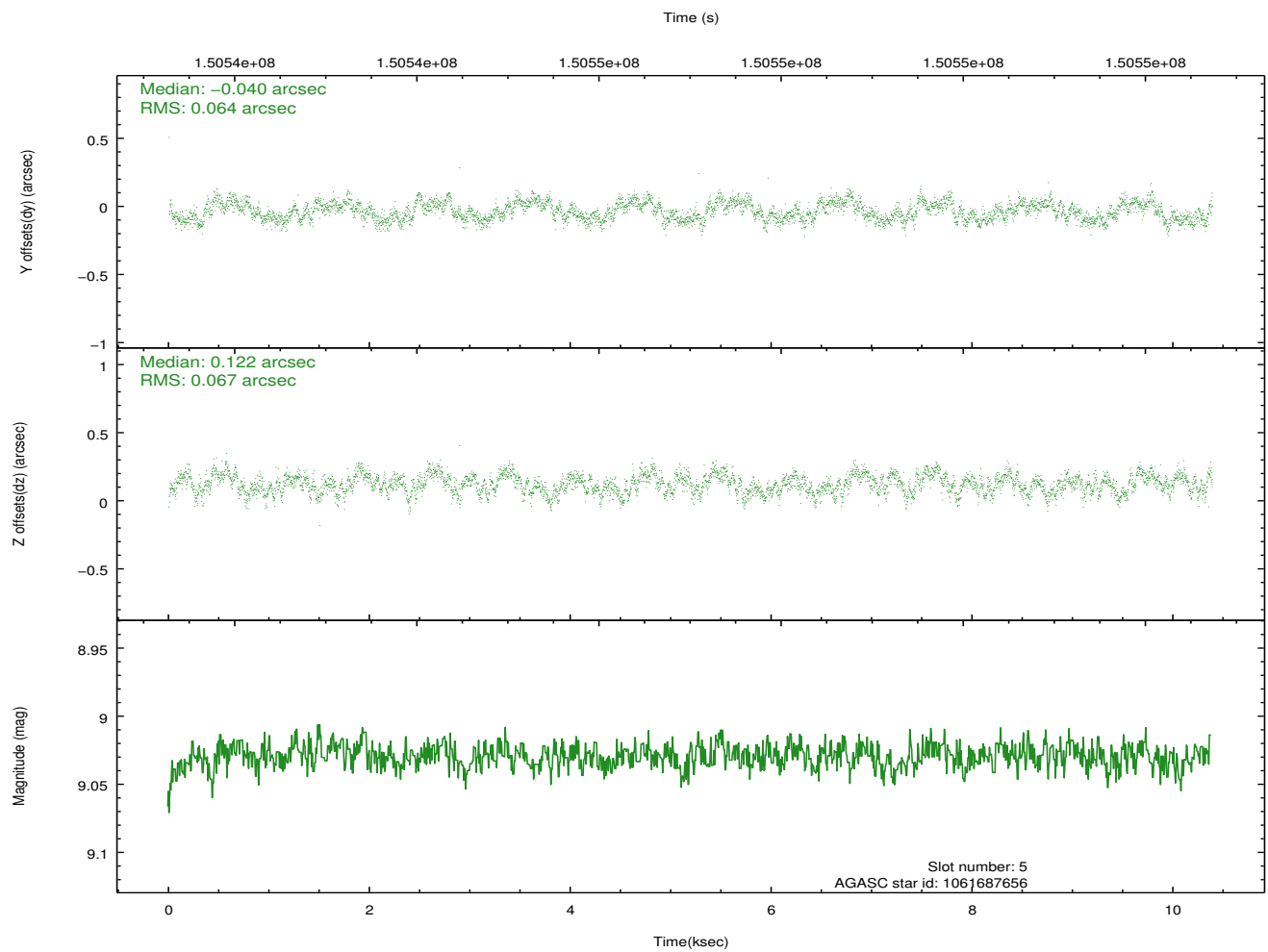
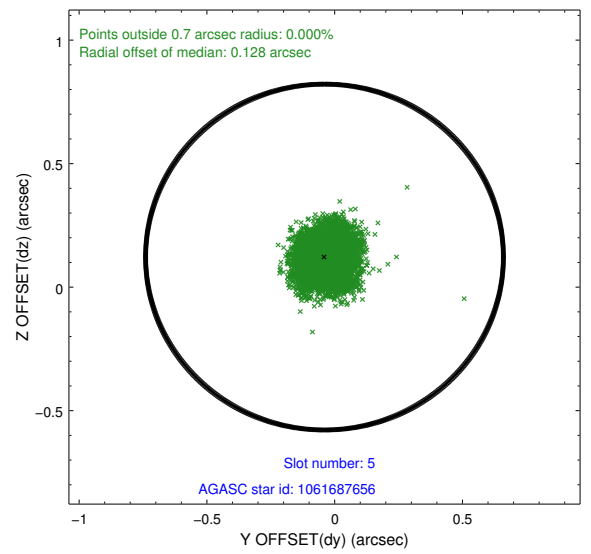
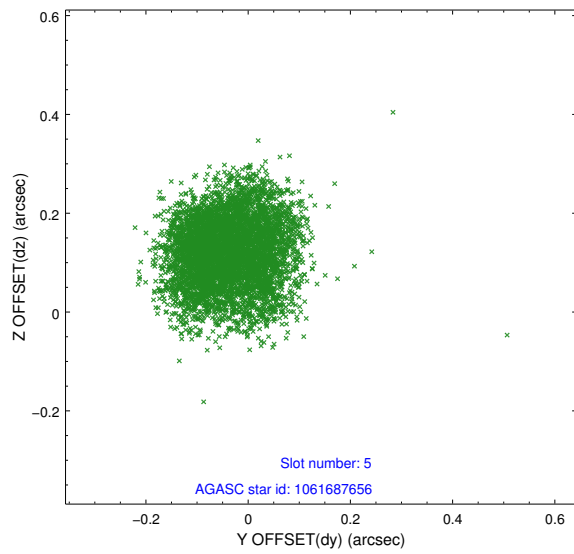
### 2.4.1 Slot 3



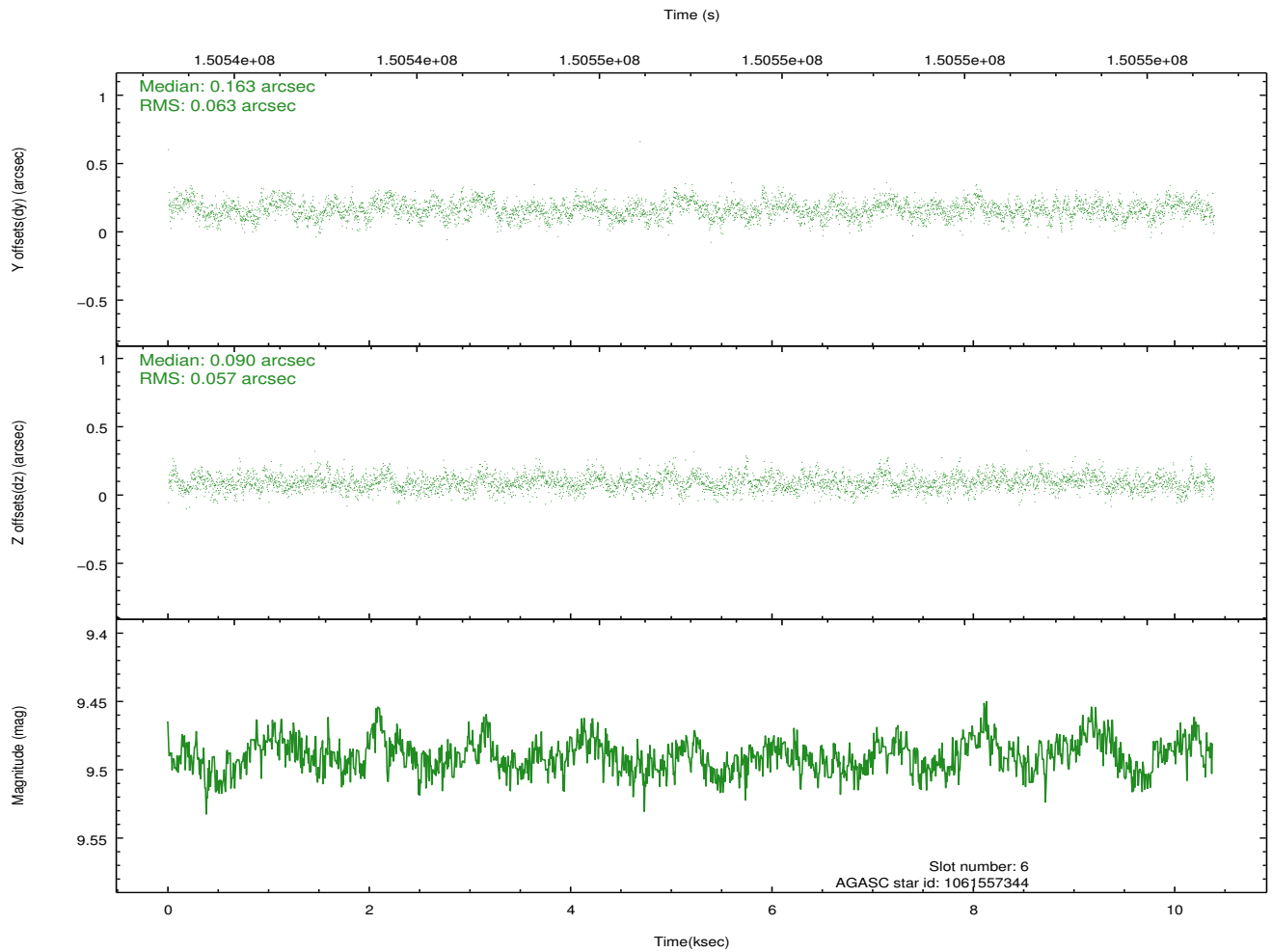
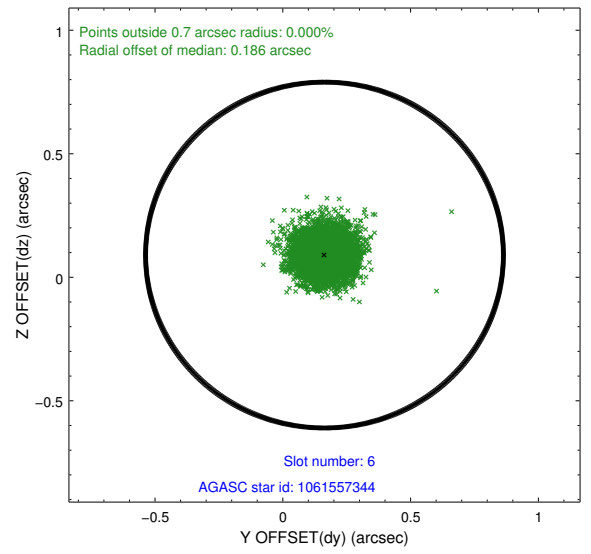
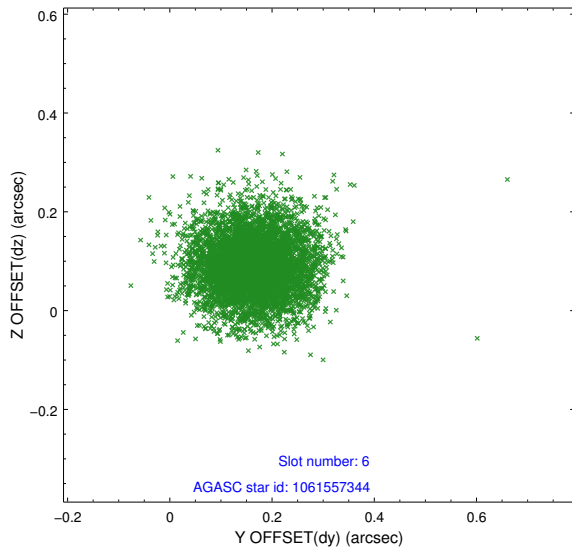
## 2.4.2 Slot 4



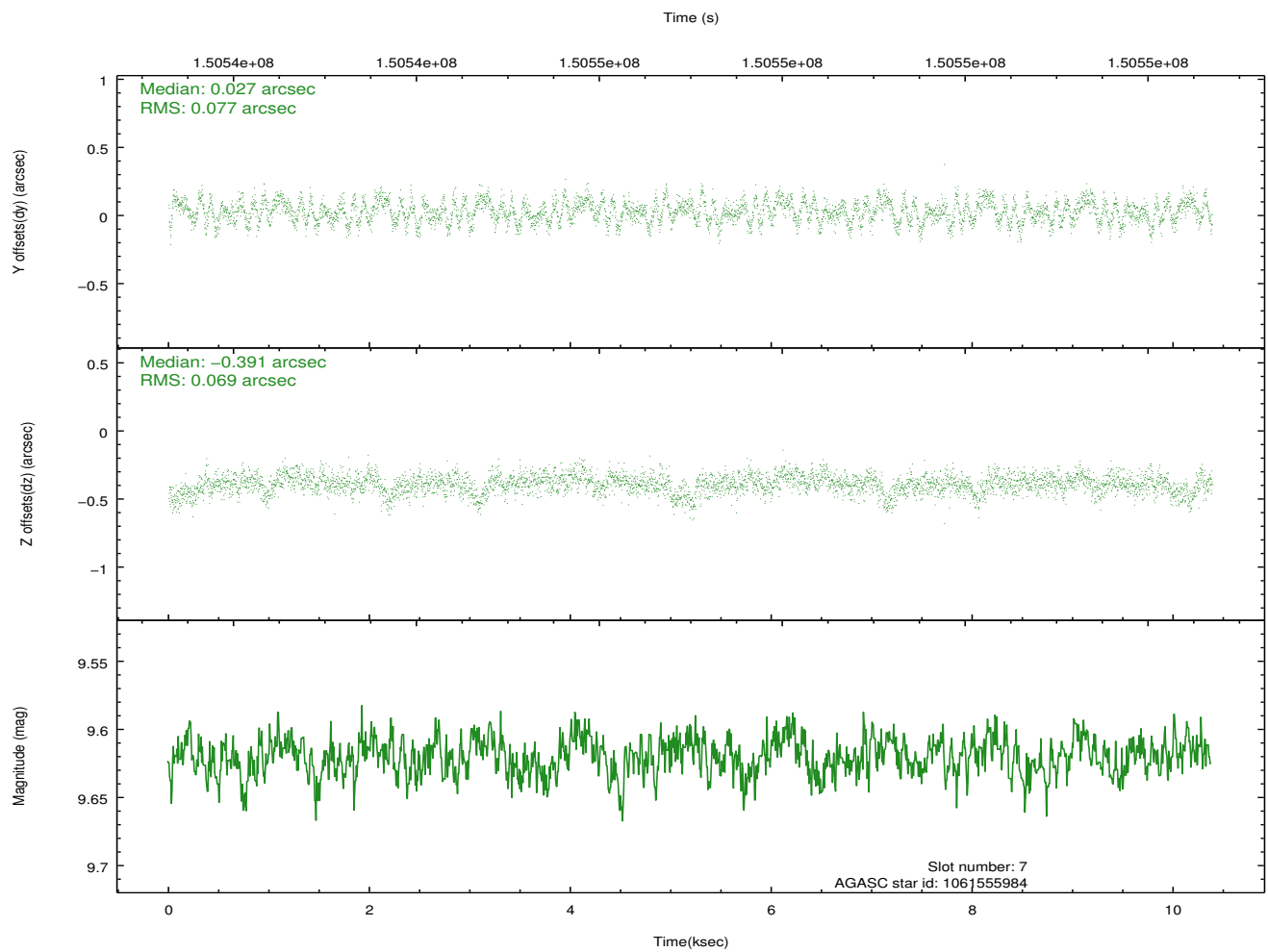
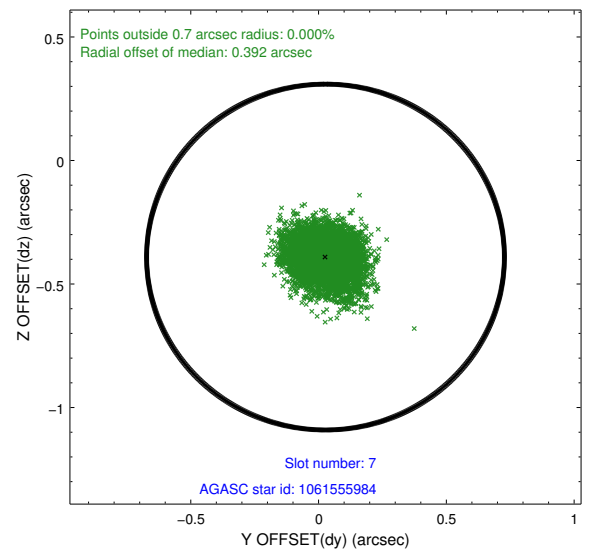
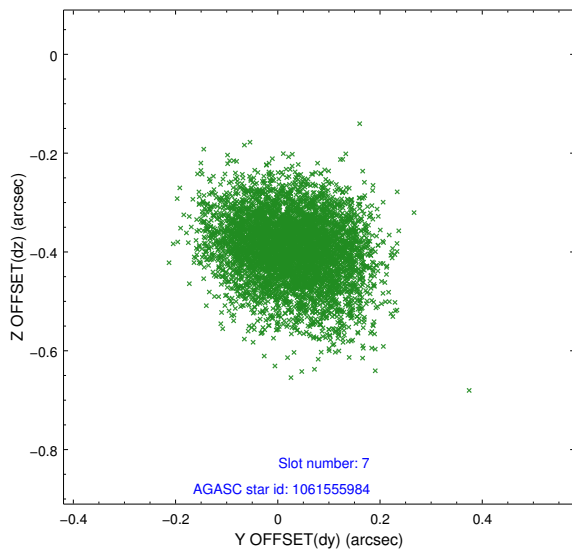
### 2.4.3 Slot 5



### 2.4.4 Slot 6

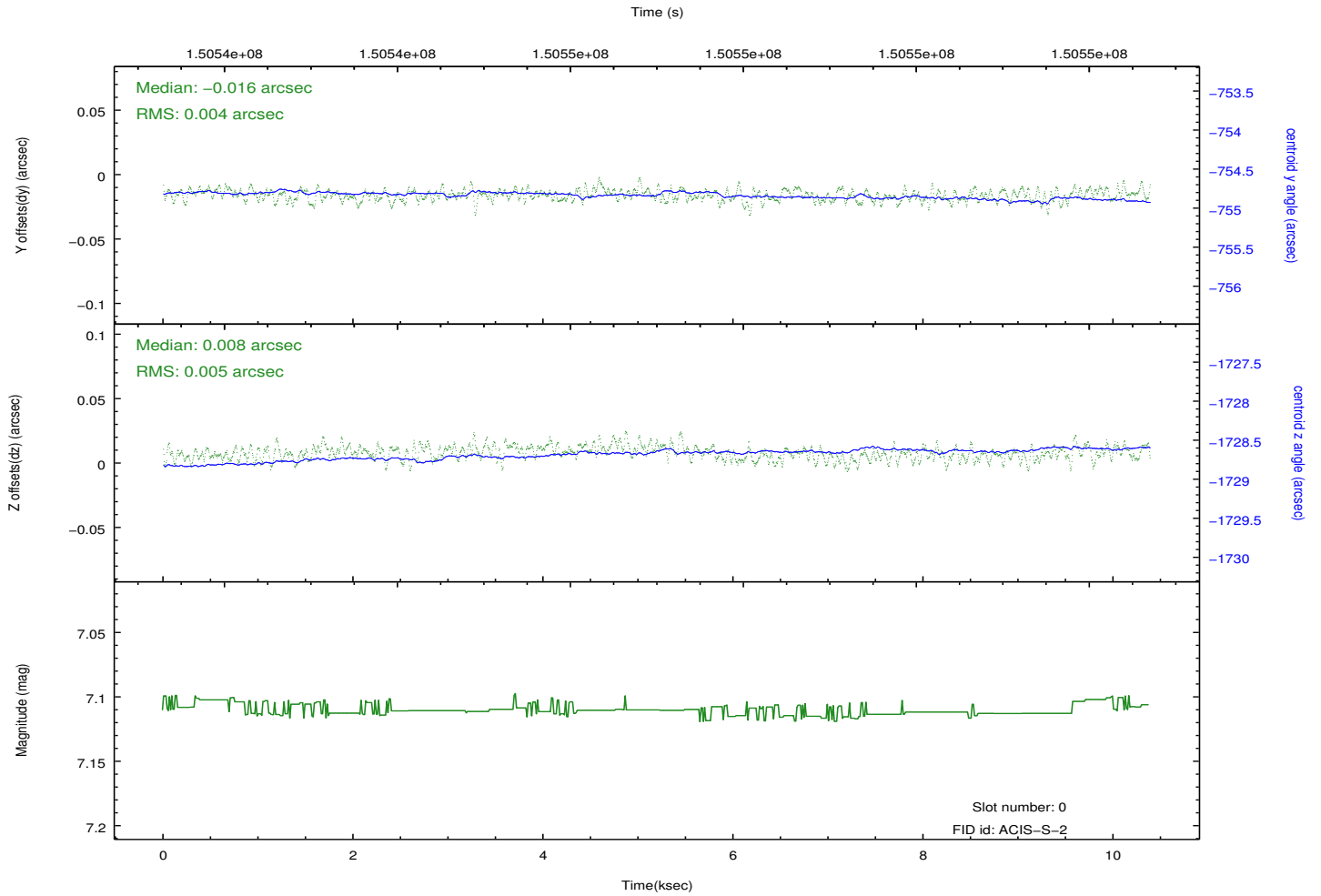
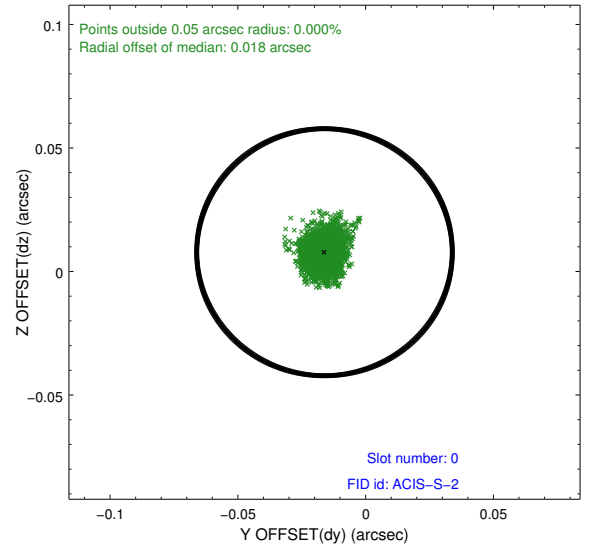
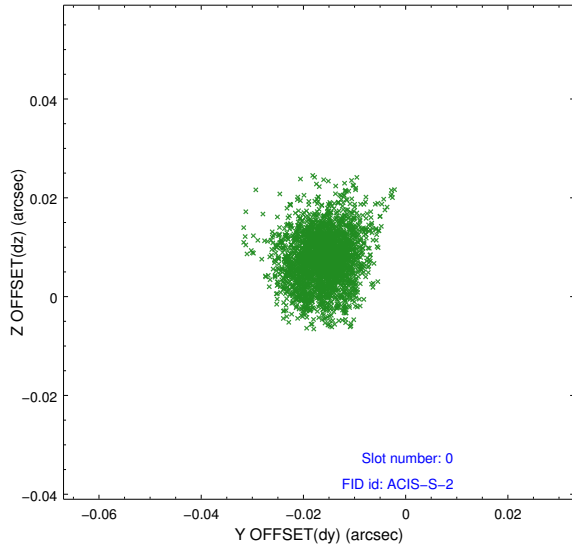


## 2.4.5 Slot 7

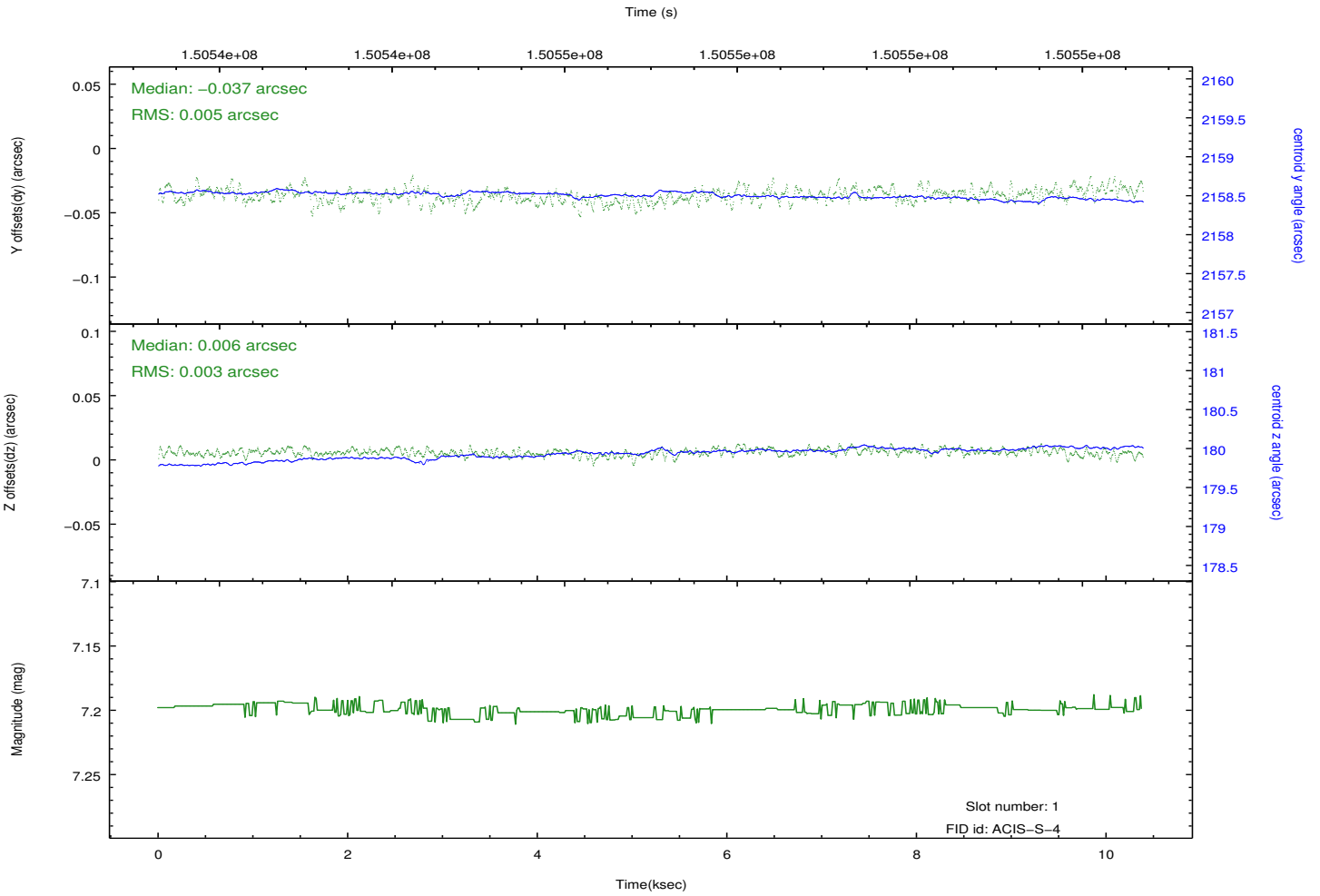
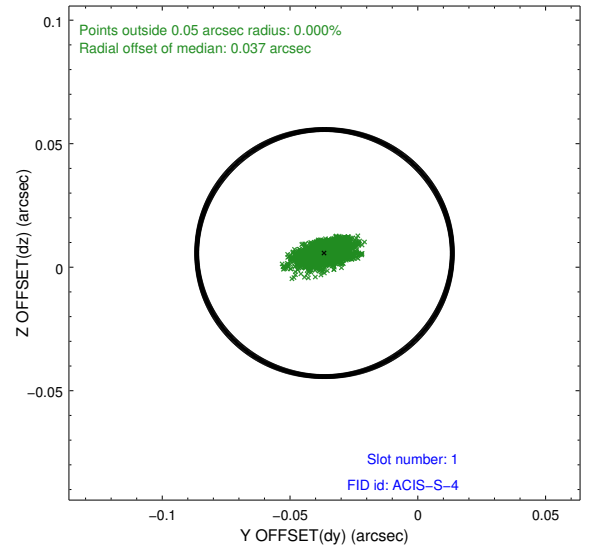
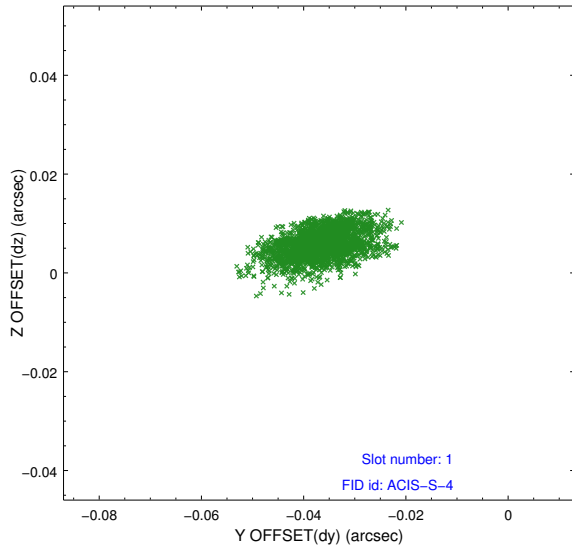


## 2.5 FID Slots

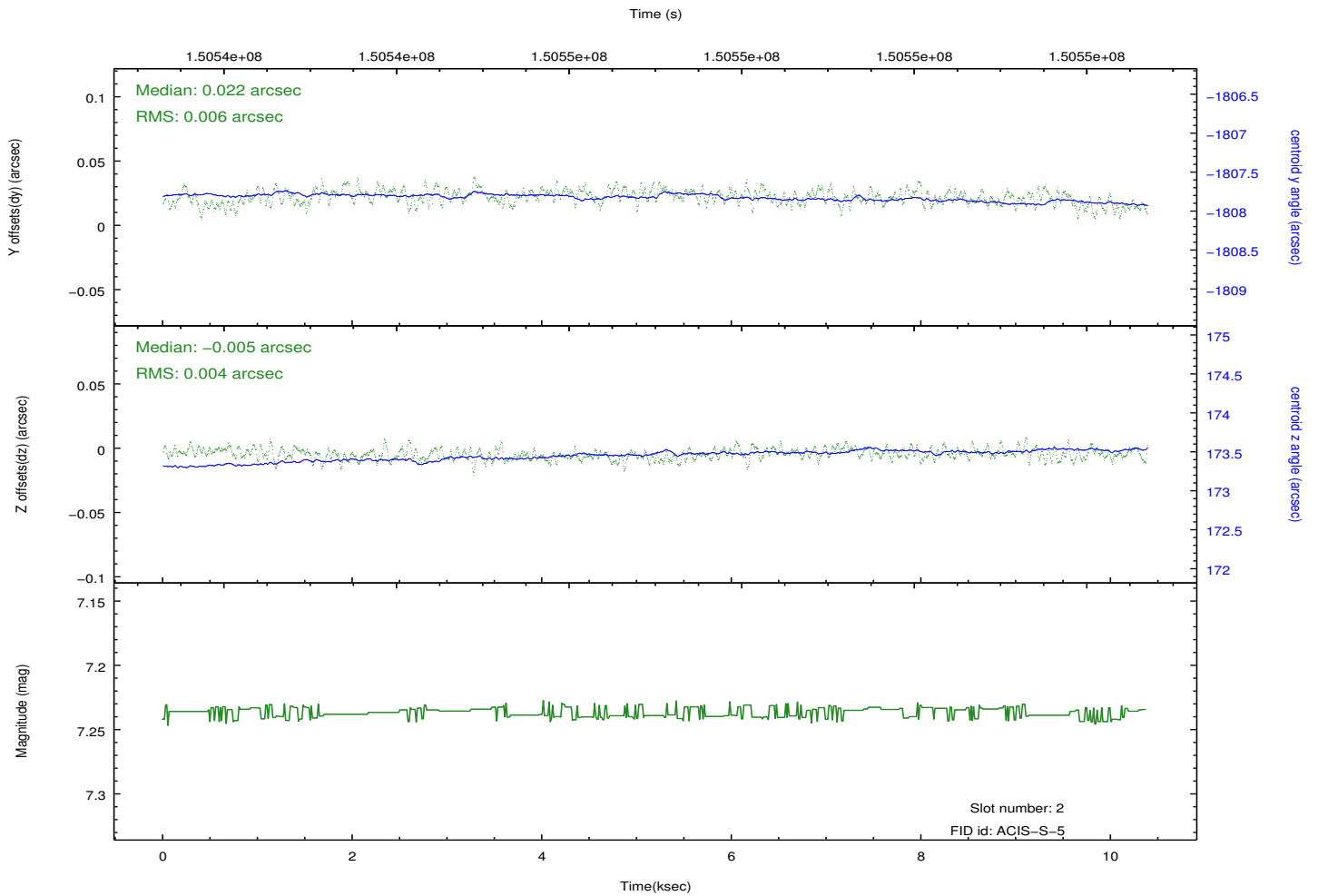
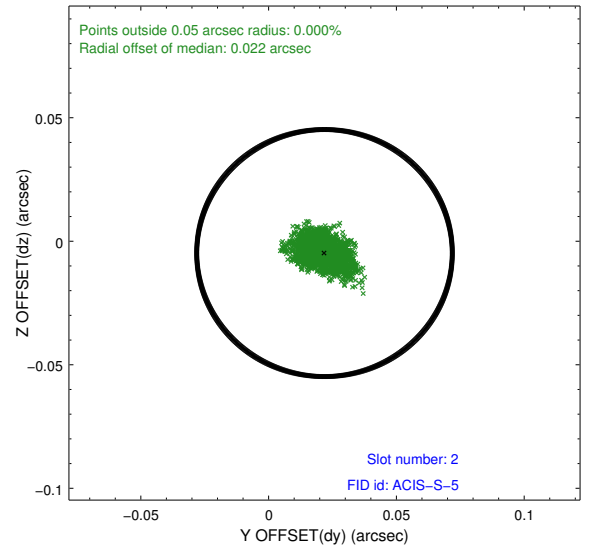
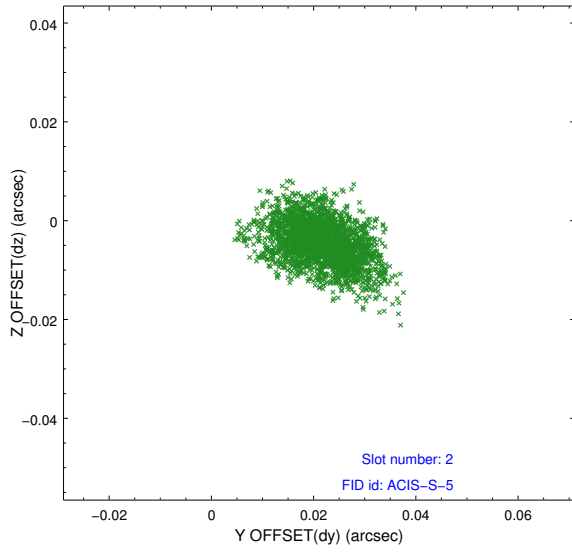
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.10.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.019

## A.2 Comments