

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 809 - L2 Version 4  
Chandra X-Ray Center

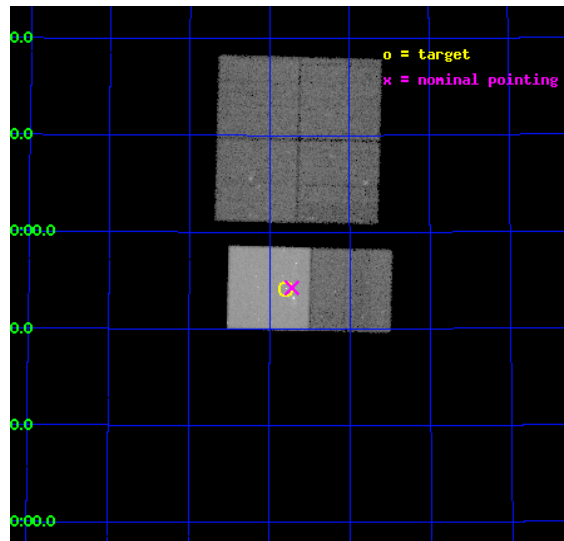
L2 Processing Date : Aug 25 2012

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# 1 Front

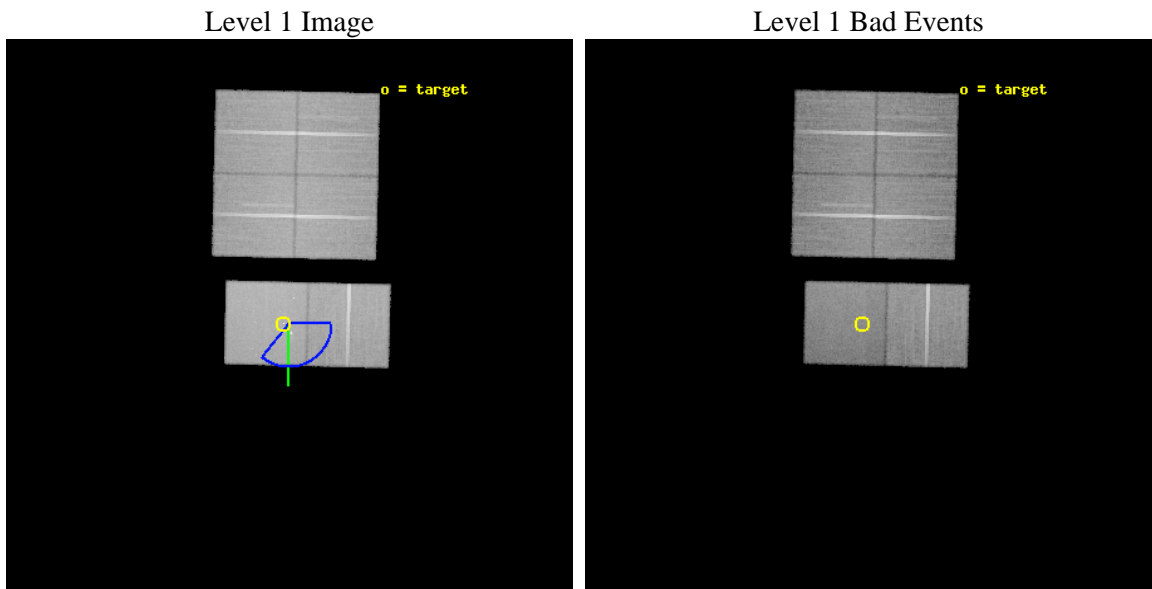
seq_num	700114	Sequence number
obs_id	809	Observation id
title	ACIS-I OBSERVATIONS OF THE MOST X-RAY LUMINOUS DWARF SEYFERT GALAXY MRK 273X	Proposal title
observer	PROFESSOR XIAOYANG XIA	Principal investigator
object	MRK 273X	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.197917	Observer's specified target RA [deg]
dec_targ	55.902778	Observer's specified target Dec [deg]
ra_nom	206.18023626305	Nominal RA [deg]
dec_nom	55.904402279903	Nominal Dec [deg]
roll_nom	181.34434259671	Nominal Roll [deg]
revision	4	Processing version of data
ontime	44760.183486298	Sum of GTIs [s]
livetime	44193.403091647	Livetime [s]
ontime0	44763.26028654	Sum of GTIs [s]
ontime1	44756.819426	Sum of GTIs [s]
ontime2	44756.860426068	Sum of GTIs [s]
ontime3	44763.383406535	Sum of GTIs [s]
ontime6	44760.224496394	Sum of GTIs [s]
ontime7	44760.183486298	Sum of GTIs [s]
l2events	305981	Number of level 2 events



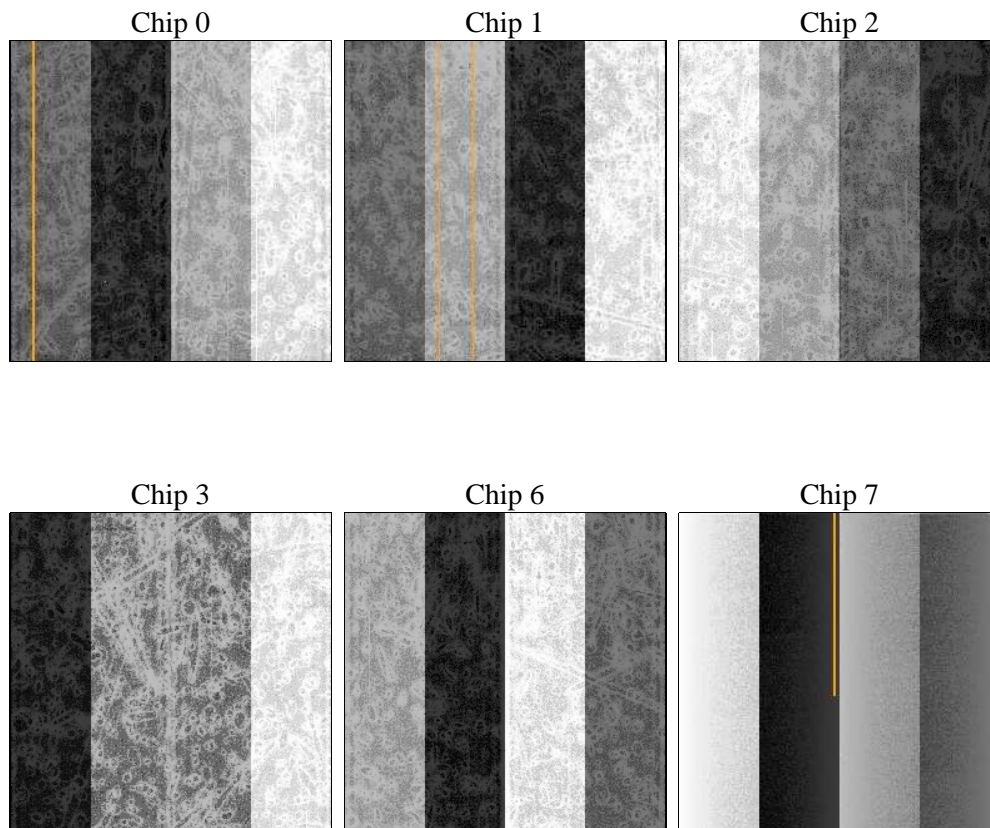
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	44760.183486298	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	44763.26028654	Sum of GTIs [s]
date	2012-08-25T22:17:41	Date and time of file creation	ontime1	44756.819426	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	44756.860426068	Sum of GTIs [s]
			ontime3	44763.383406535	Sum of GTIs [s]
			ontime6	44760.224496394	Sum of GTIs [s]
			ontime7	44760.183486298	Sum of GTIs [s]
			l1events	1970840	Number of level 1 events

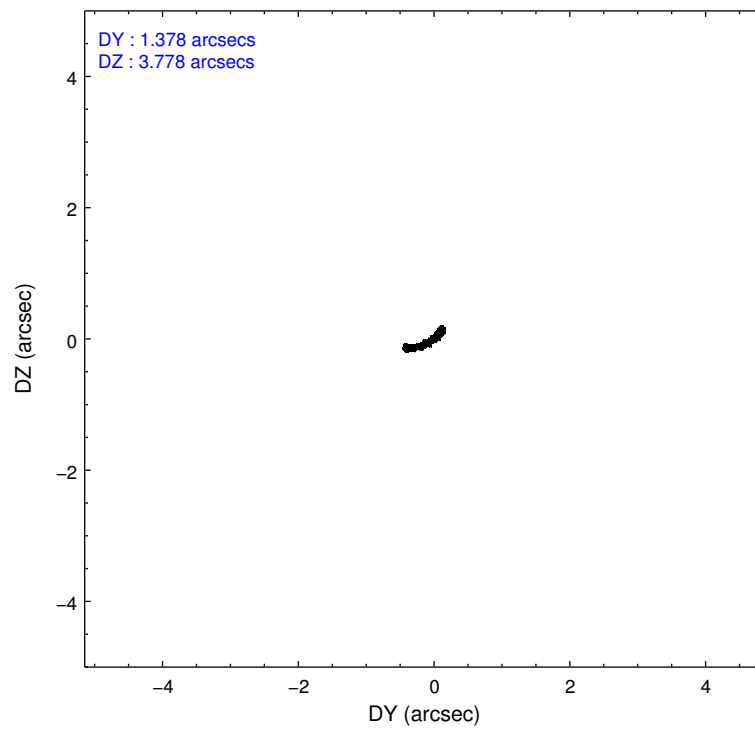
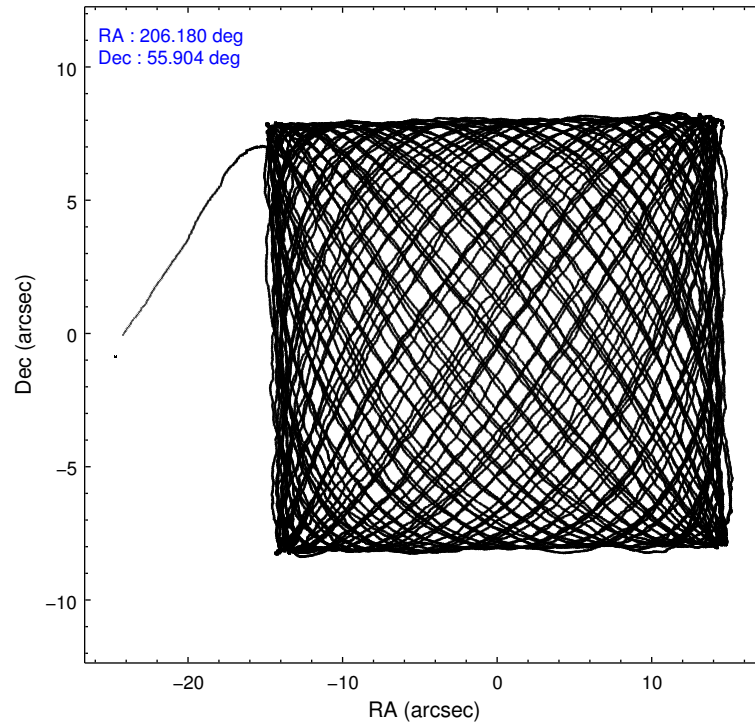
### 2.1.4 Events

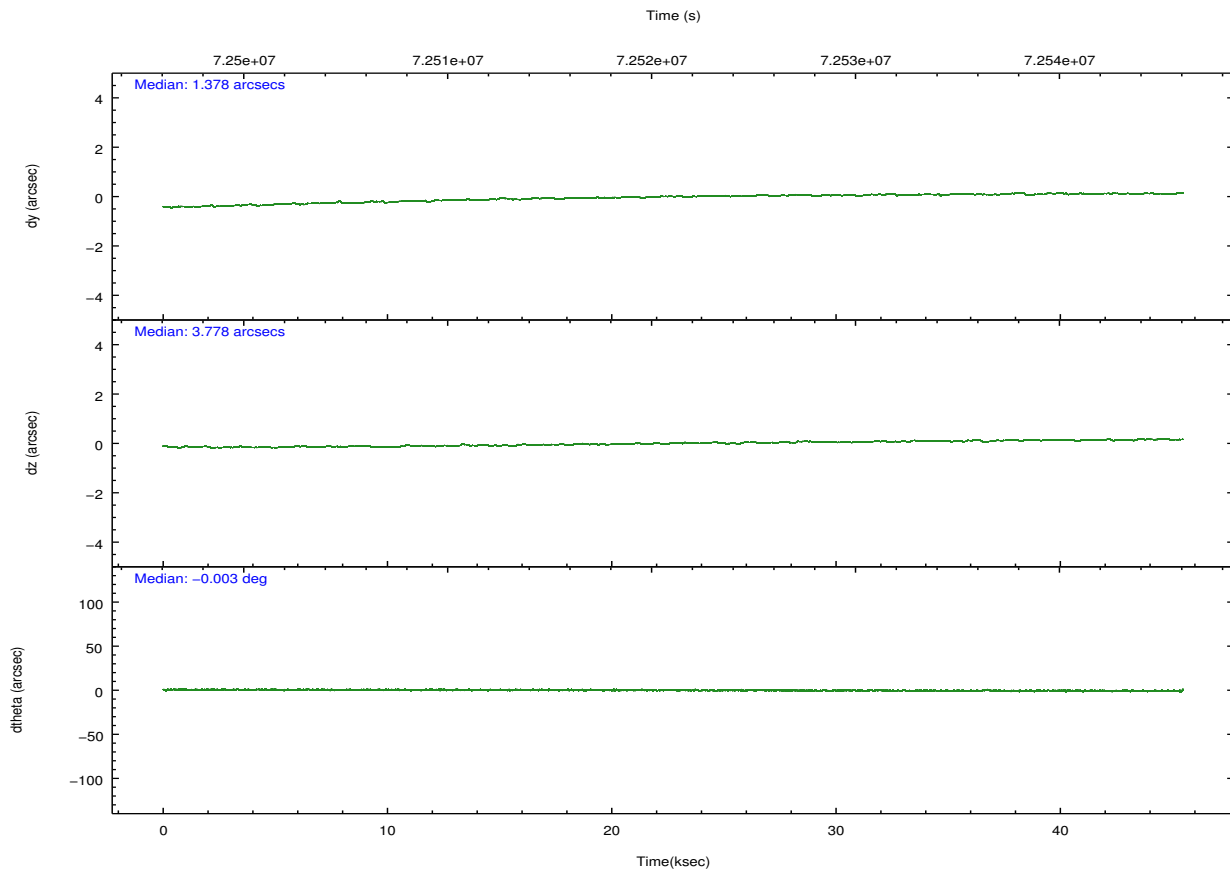
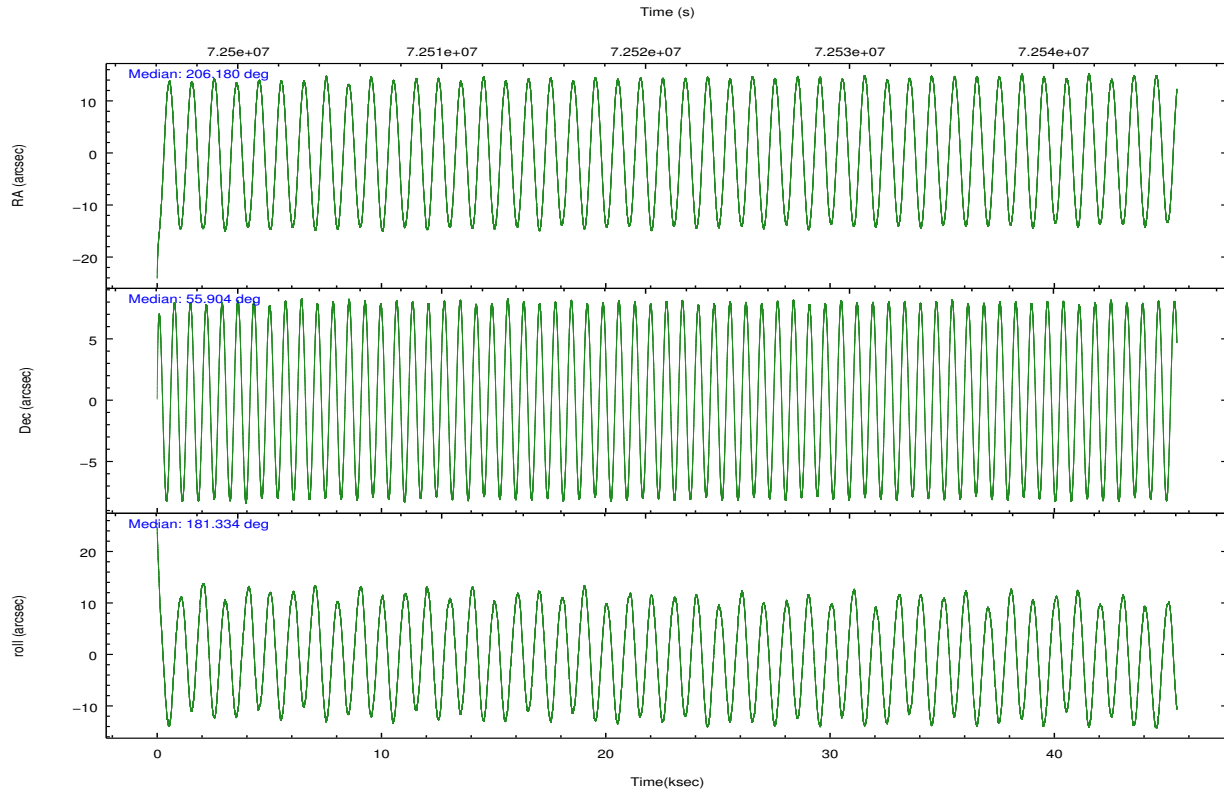
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	296656	299243	324776	326984	339107	384074	grade 0 events	14576	14439	13520	14730	14002	18422
rejected events	262432	263682	292286	293635	304708	217221		4%	4%	4%	4%	4%	4%
rejected %	88%	88%	89%	89%	89%	56%	grade 1 events	169	143	121	147	124	364
								0%	0%	0%	0%	0%	0%
							grade 2 events	7042	6861	6820	6369	6637	33394
								2%	2%	2%	1%	1%	8%
							grade 3 events	3591	3872	3306	3324	3586	15354
								1%	1%	1%	1%	1%	3%
							grade 4 events	3360	3934	3242	3276	3510	15385
								1%	1%	0%	1%	1%	4%
							grade 5 events	9916	10659	9549	10794	12416	36229
								3%	3%	2%	3%	3%	9%
							grade 6 events	5662	6455	5607	5654	6664	84309
								1%	2%	1%	1%	1%	21%
							grade 7 events	252340	252880	282611	282690	292168	180617
								85%	84%	87%	86%	86%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	206.222036	206.1802362630545	Subarray requested	NONE	NONE
[deg] Pointing Dec	55.918714	55.90440227990307	Alternating exposures requested	N	N
[deg] Pointing Roll	181.153096	181.3443425967093	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	155.000000	155.000000			
[deg] Roll tolerance	65.000000	65.000000			
Roll constraint allows 180D rotation	N	N			
[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)	72498786.184000	72497757.883104			
Observation start date	2000-04-19T02:32:02	2000-04-19T02:15:57			
[s] Observation end time (MET)	72543786.184000	72544483.53481799			
Observation end date	2000-04-19T15:02:02	2000-04-19T15:14:43			
Read mode	TIMED	TIMED			

## 2.3 Aspect



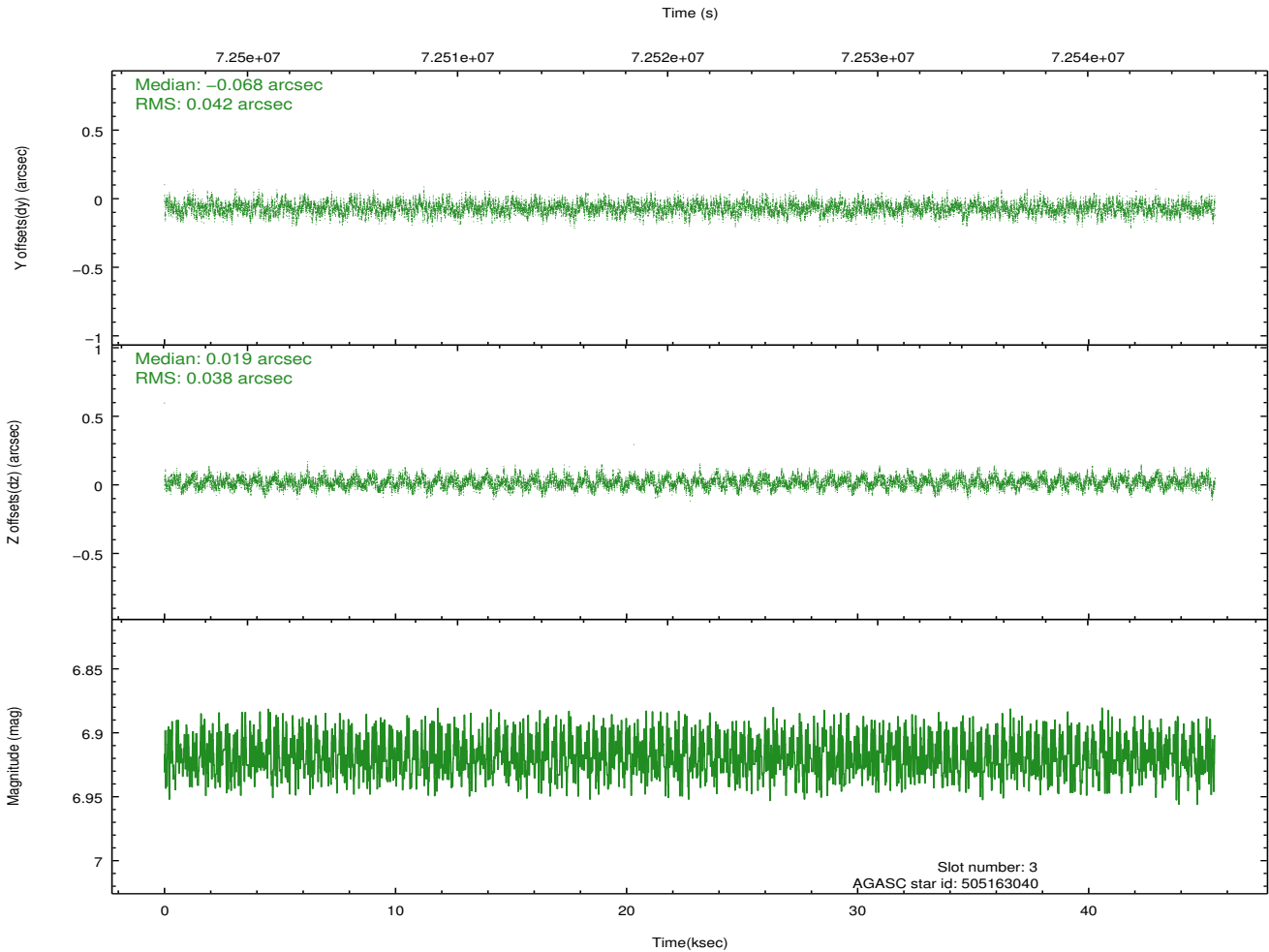
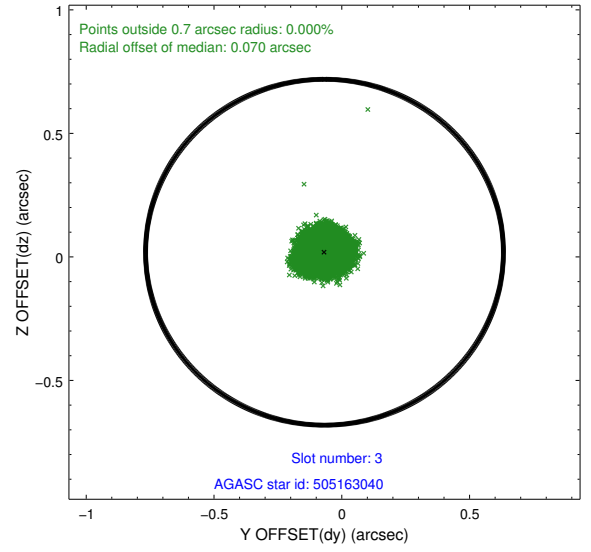
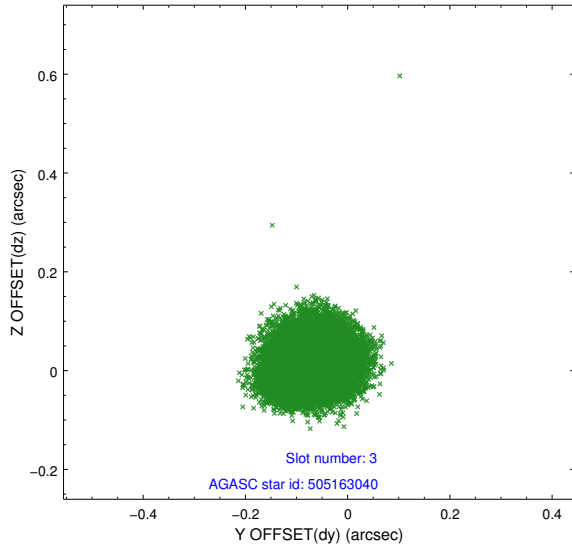


### Slot Statistics

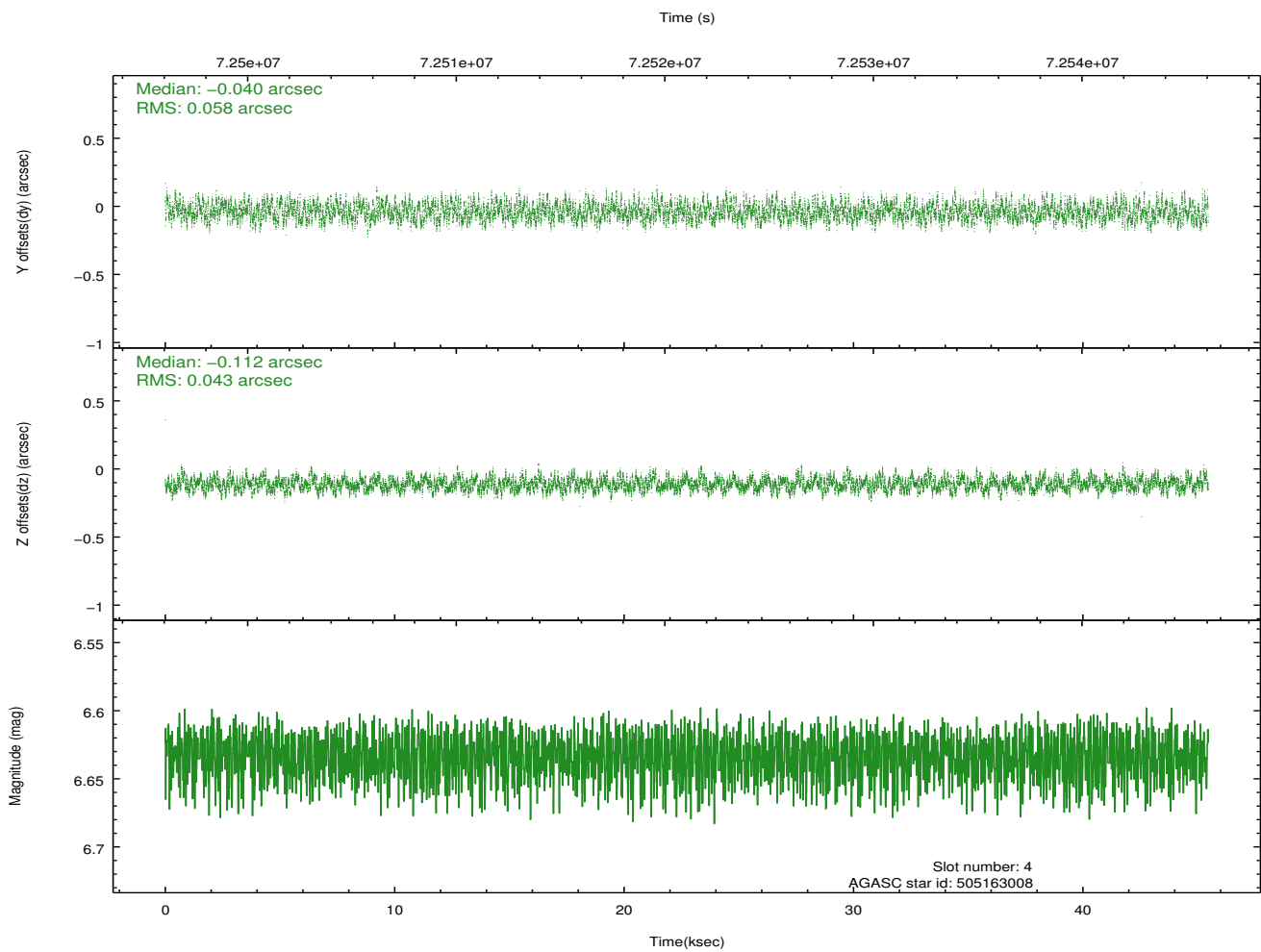
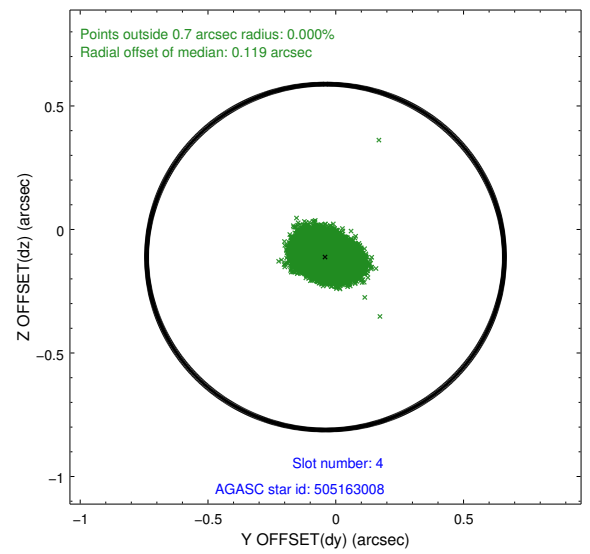
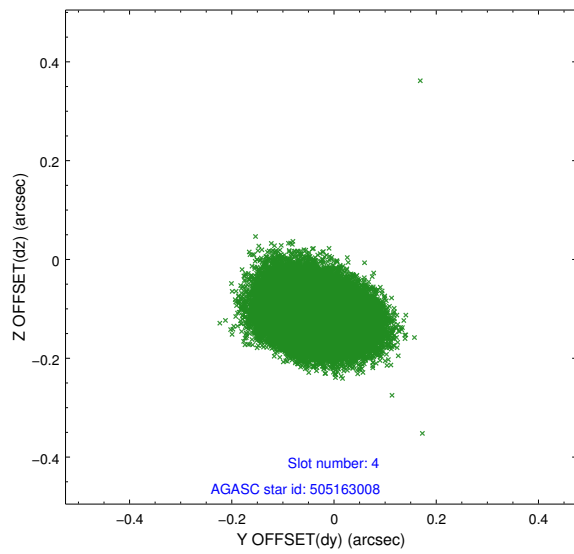
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	11088	-0.009	-0.015	0.007	0.013	0.000000	0.000000	-753.96	-1724.85
1	FID	ACIS-S-4	7.21	11085	-0.003	0.008	0.006	0.011	0.000000	0.000000	2159.36	183.60
2	FID	ACIS-S-5	7.23	11087	-0.019	0.015	0.007	0.011	0.000000	0.000000	-1806.78	177.36
3	GUIDE	505163040	6.92	22177	-0.068	0.019	0.061	0.097	206.025637	55.634983	418.97	1012.62
4	GUIDE	505163008	6.63	22179	-0.040	-0.112	0.078	0.121	206.305054	55.879347	-165.18	144.87
5	GUIDE	505157336	9.12	22169	0.075	-0.046	0.099	0.156	205.257839	56.581262	1863.31	-2436.39
6	GUIDE	505152736	9.46	22161	0.001	0.057	0.084	0.138	206.650172	55.777454	-856.83	522.88
7	GUIDE	505160968	9.63	22166	0.030	0.081	0.092	0.153	206.688279	55.414175	-916.80	1831.79

## 2.4 Star Slots

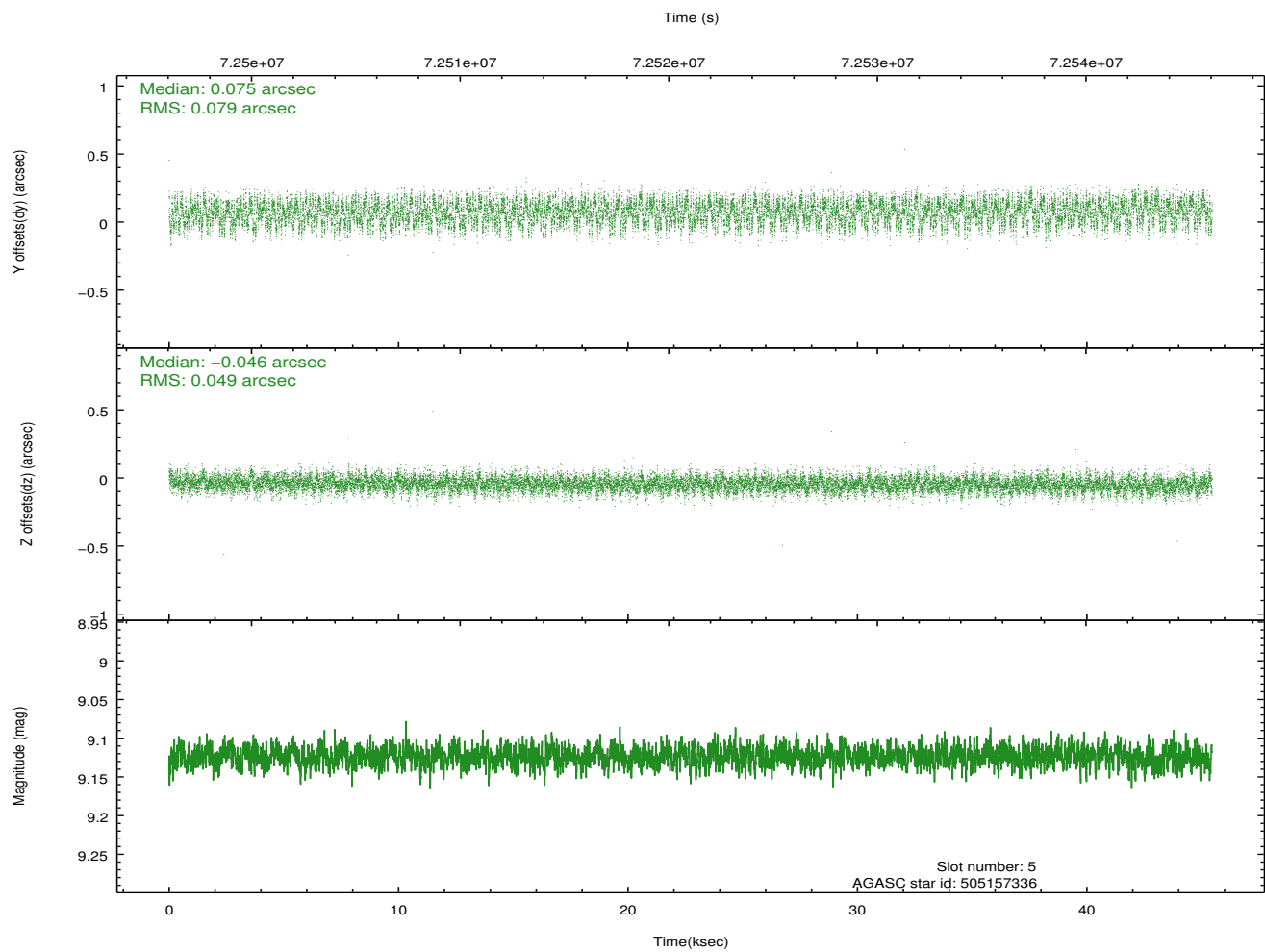
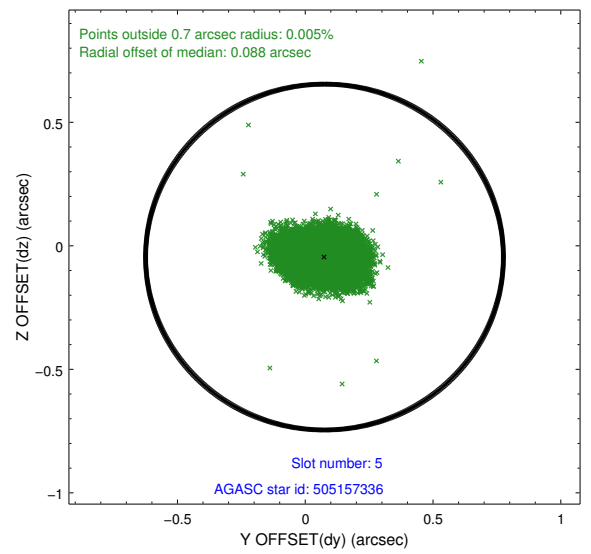
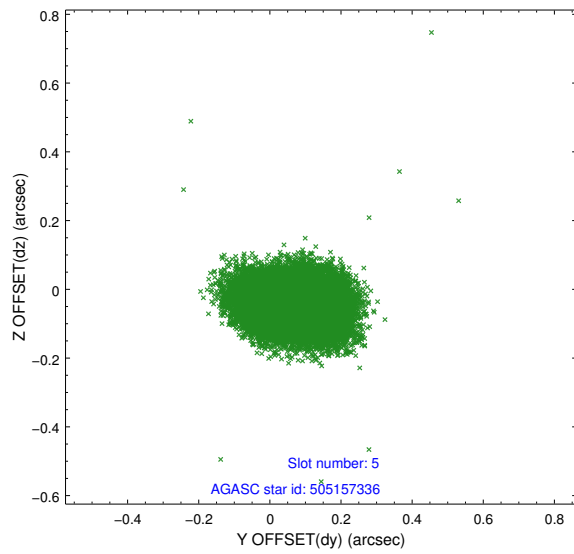
### 2.4.1 Slot 3



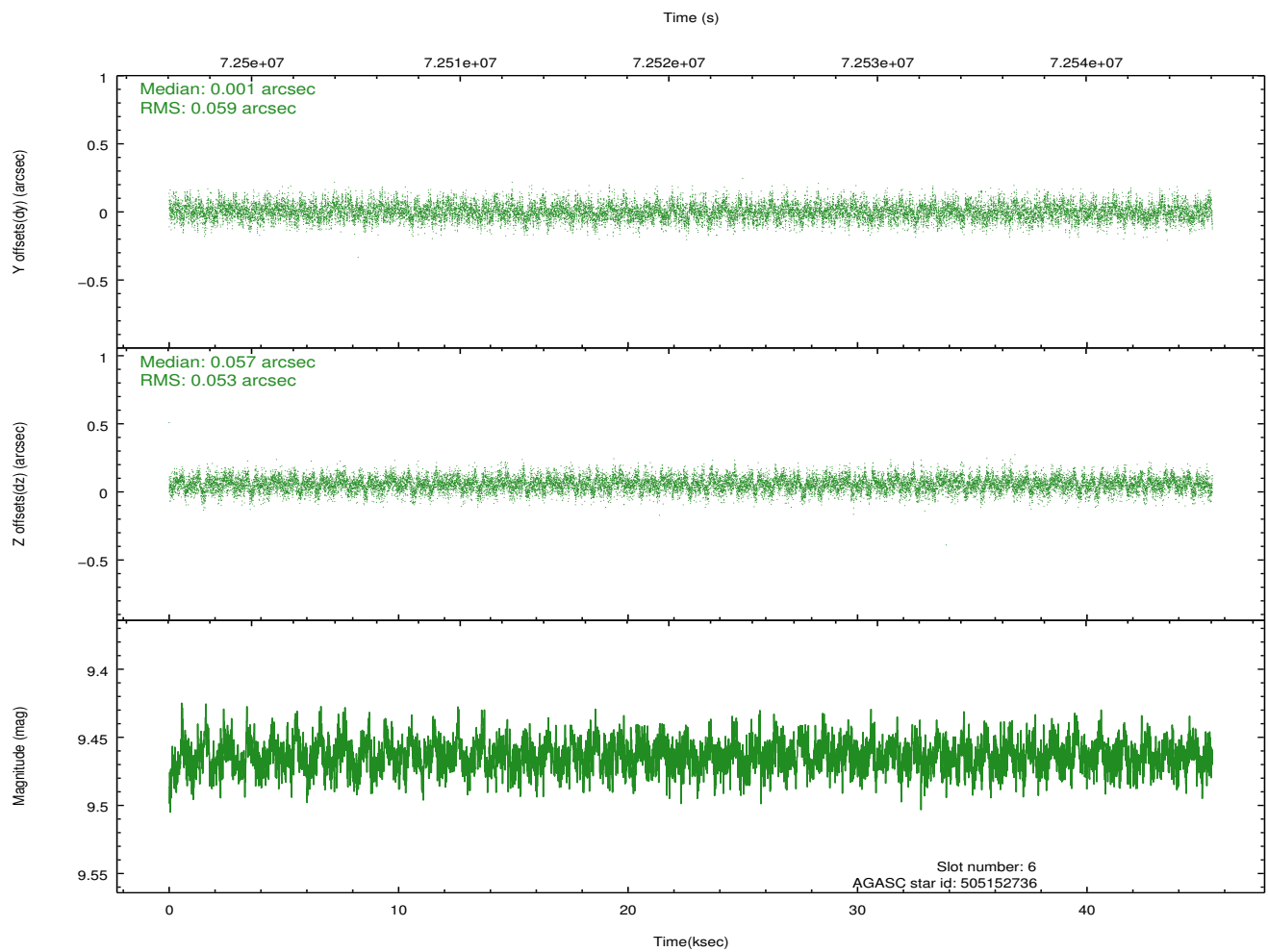
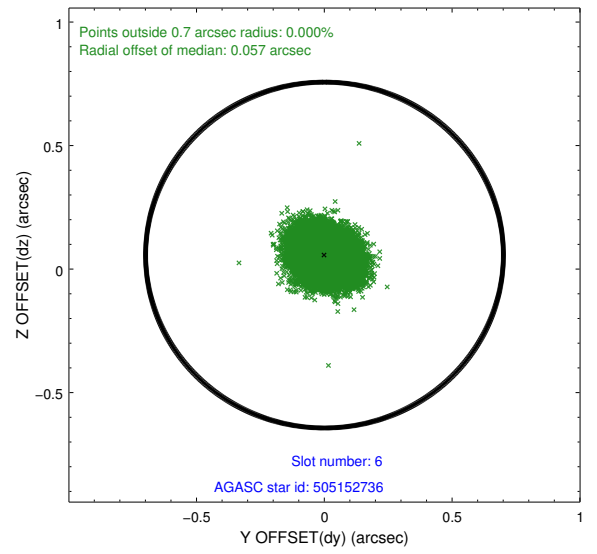
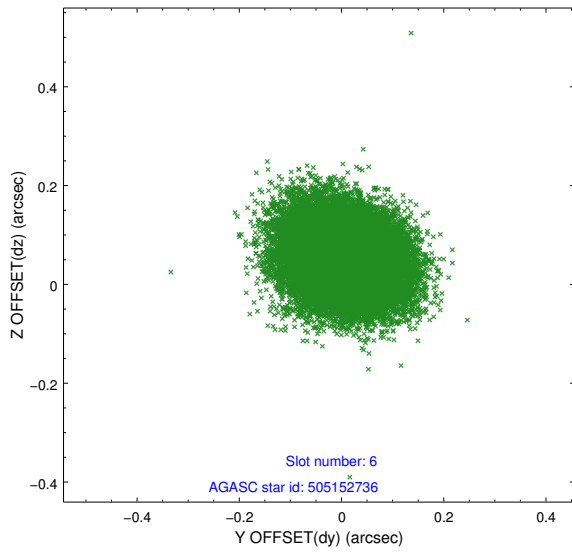
## 2.4.2 Slot 4



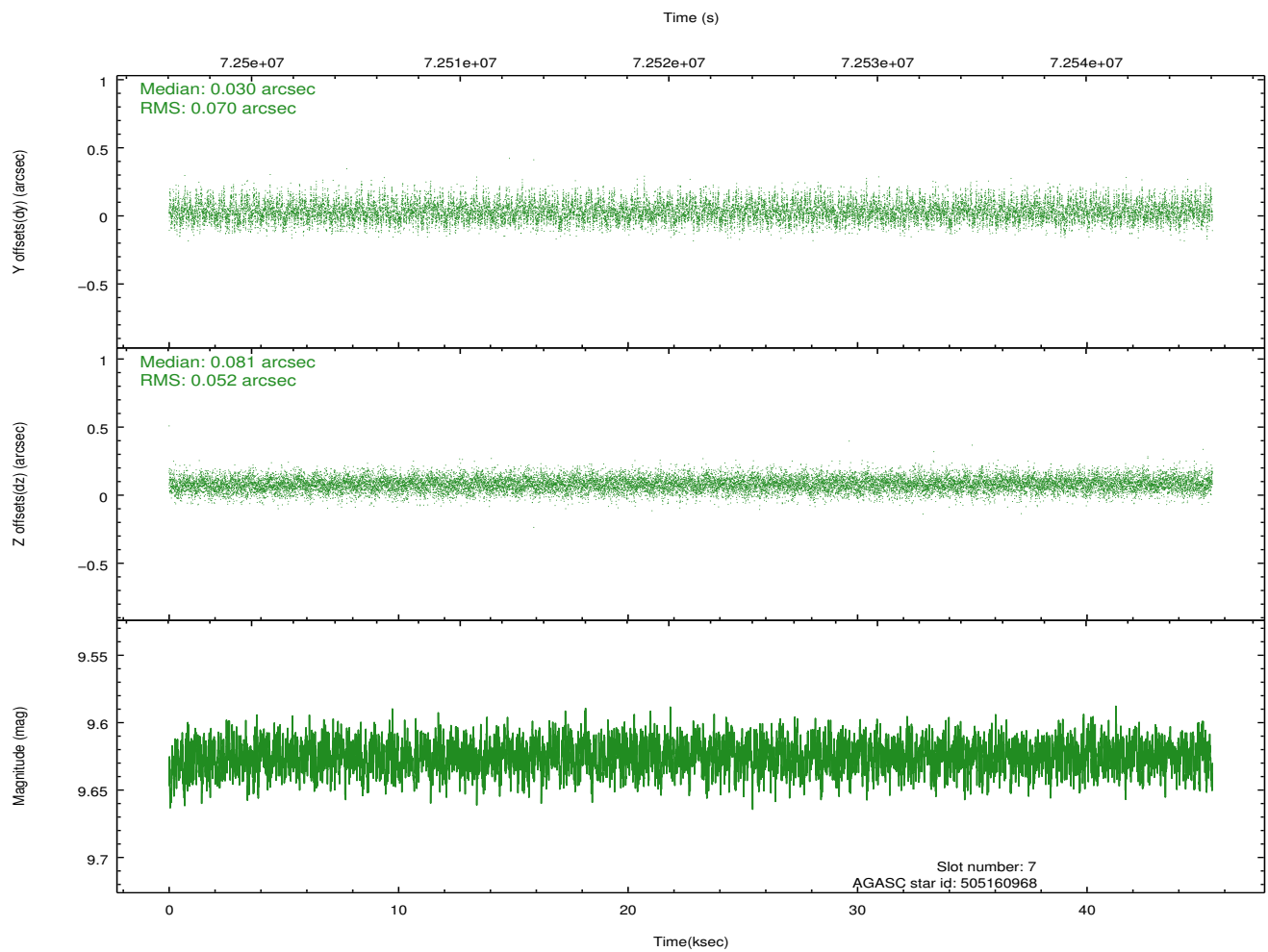
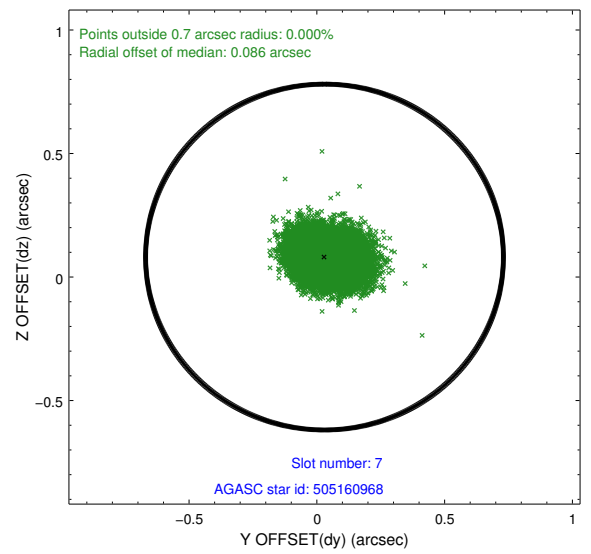
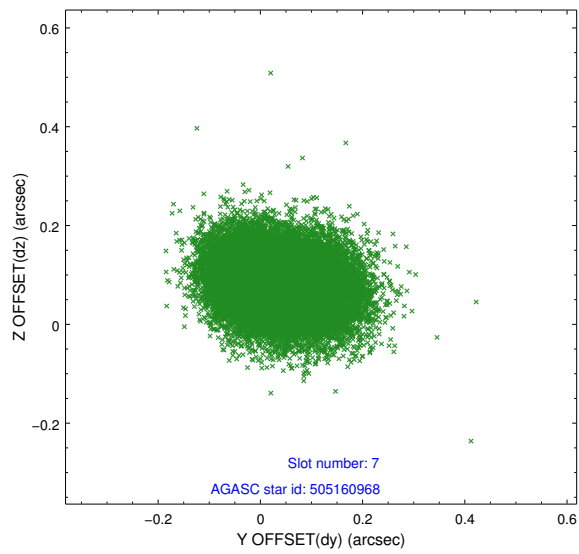
### 2.4.3 Slot 5



### 2.4.4 Slot 6

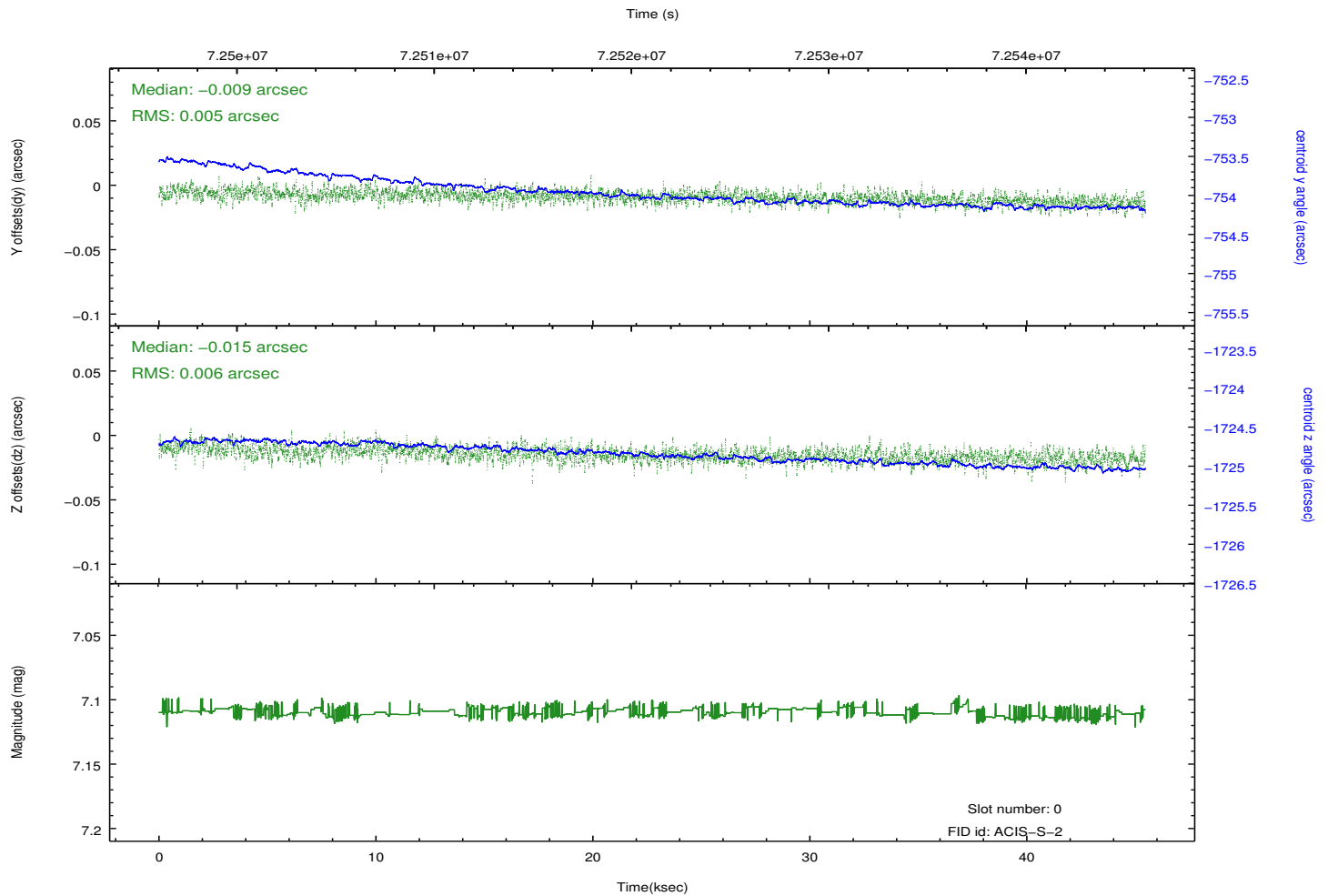
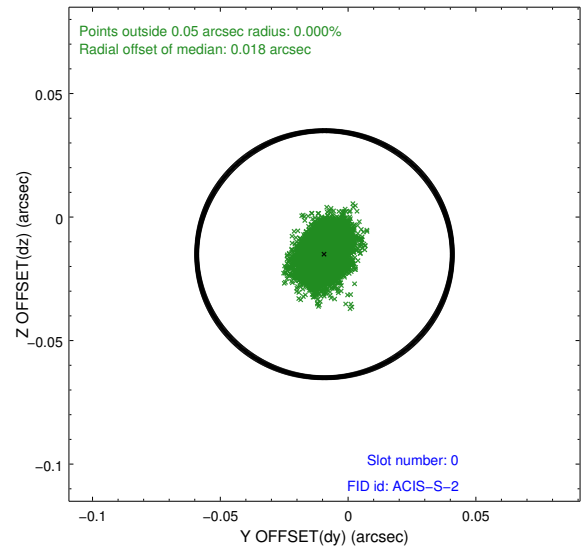
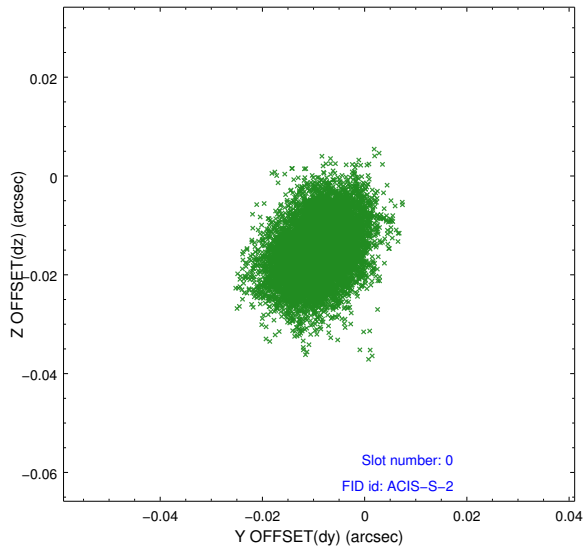


### 2.4.5 Slot 7

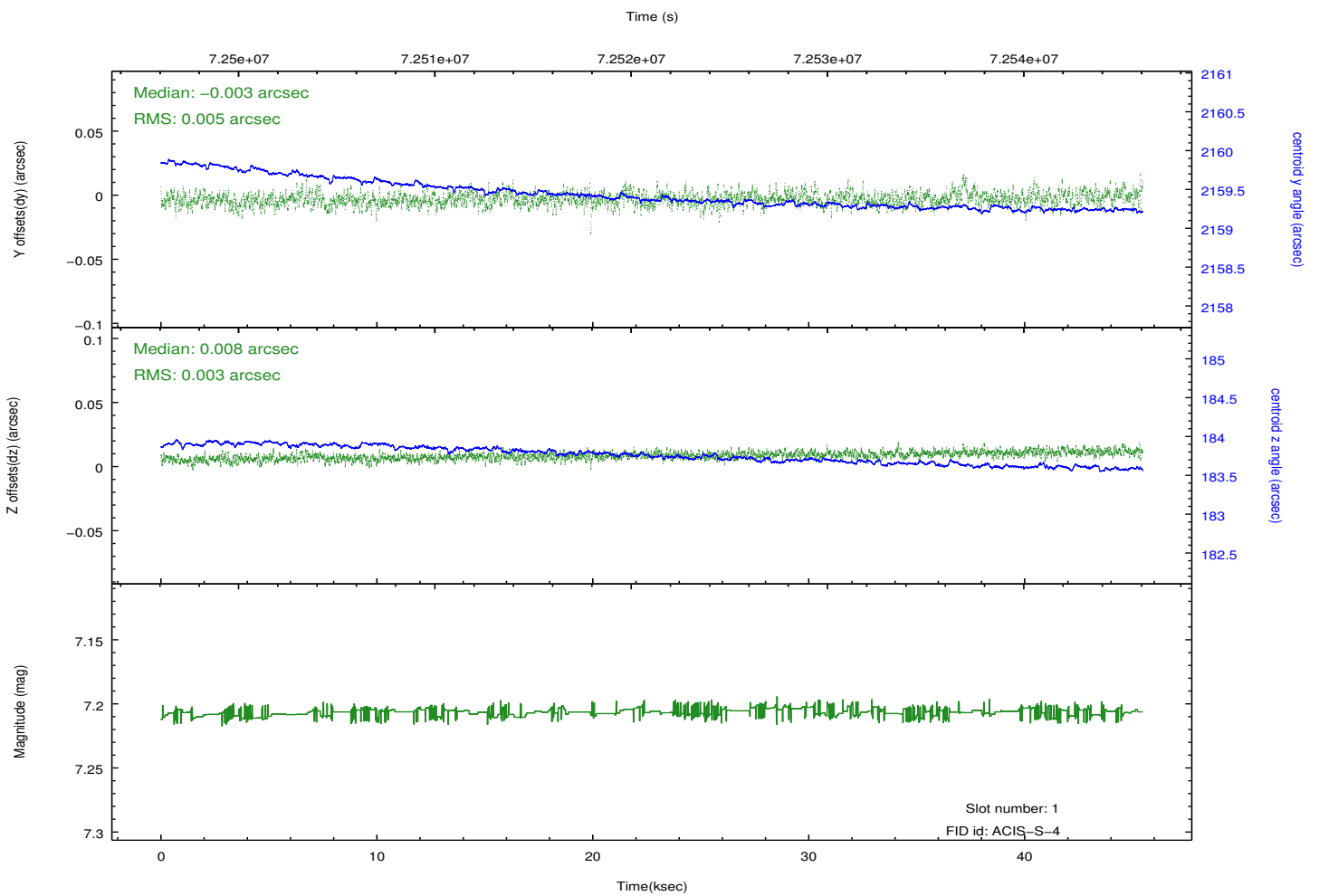
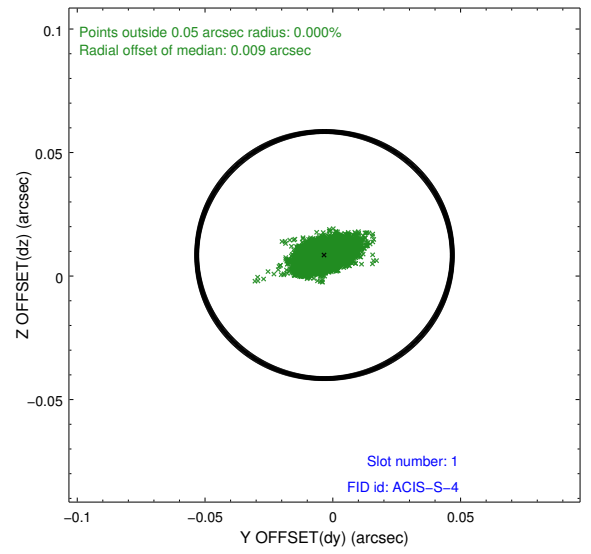
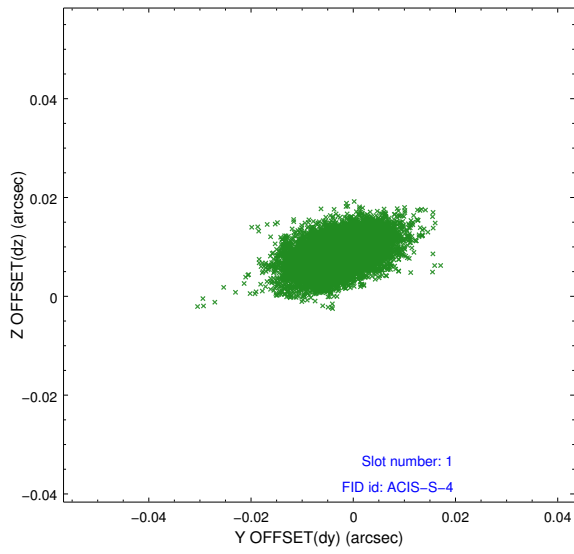


## 2.5 FID Slots

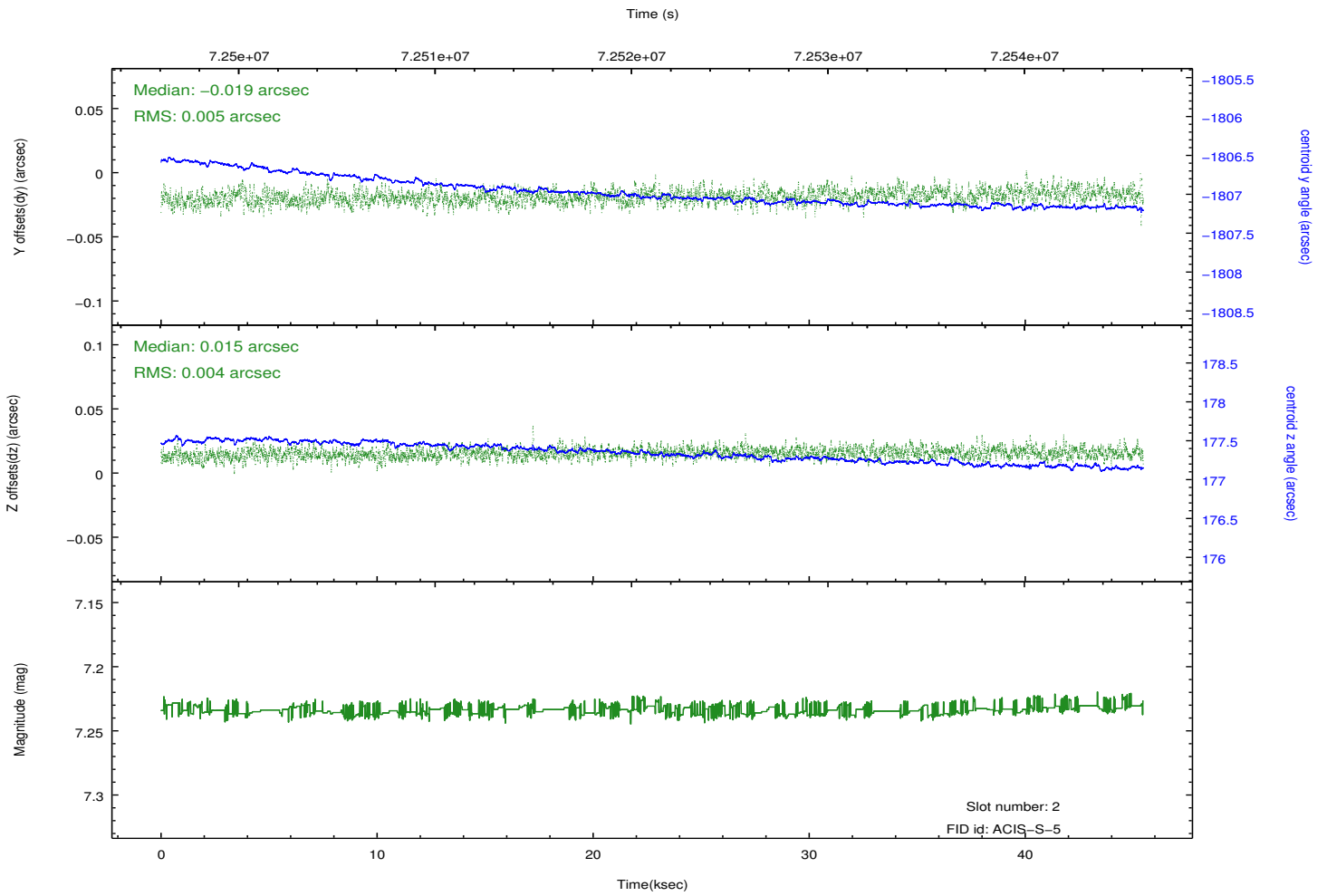
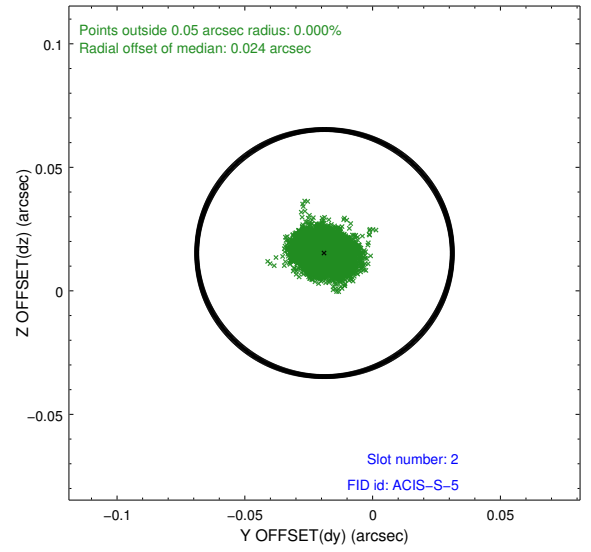
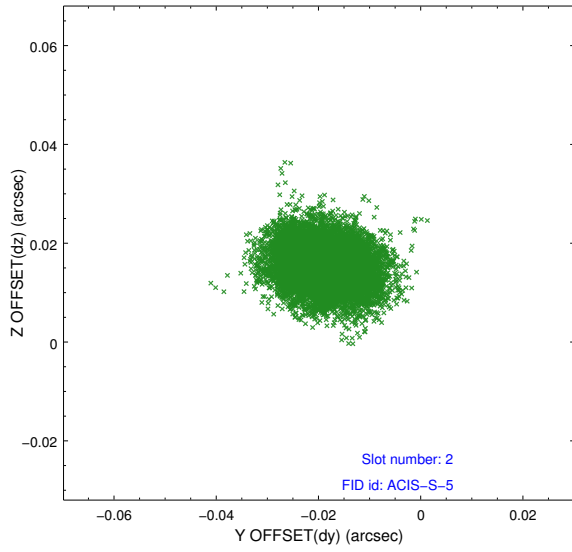
### 2.5.1 Slot 0



## 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)	2012.08.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	44.758

## A.2 Comments

Roll constraint met.