

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7836 - L2 Version 2  
Chandra X-Ray Center

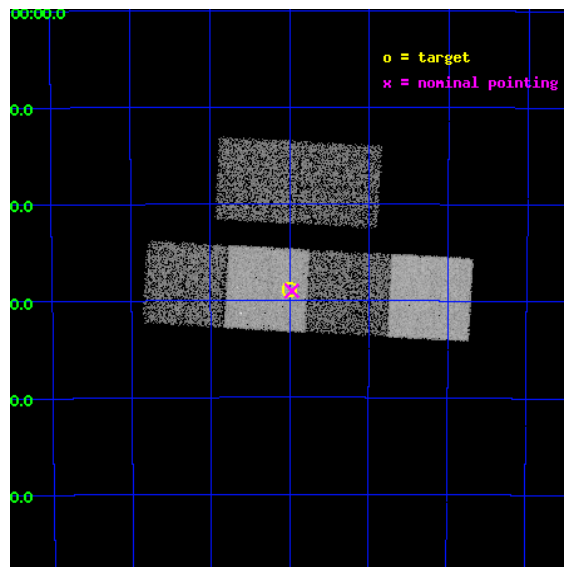
L2 Processing Date : Apr 25 2012

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# 1 Front

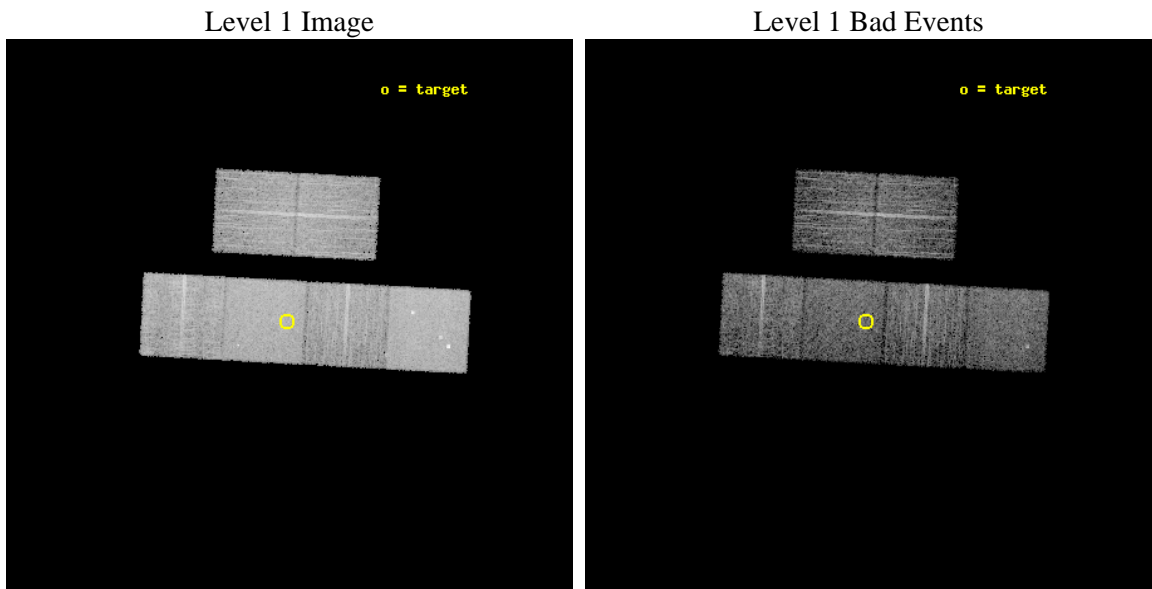
seq_num	701500	Sequence number
obs_id	7836	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 1536	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	62.749583	Observer's specified target RA [deg]
dec_targ	-56.480444	Observer's specified target Dec [deg]
ra_nom	62.742516290747	Nominal RA [deg]
dec_nom	-56.483138040315	Nominal Dec [deg]
roll_nom	183.10337941317	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5074.5096530914	Sum of GTIs [s]
liveltime	5010.2531563611	Livetime [s]
ontime2	5074.5506930947	Sum of GTIs [s]
ontime3	5074.3865330815	Sum of GTIs [s]
ontime5	5074.4686130881	Sum of GTIs [s]
ontime6	5074.4275730848	Sum of GTIs [s]
ontime7	5074.5096530914	Sum of GTIs [s]
ontime8	5074.3454930782	Sum of GTIs [s]
l2events	76804	Number of level 2 events



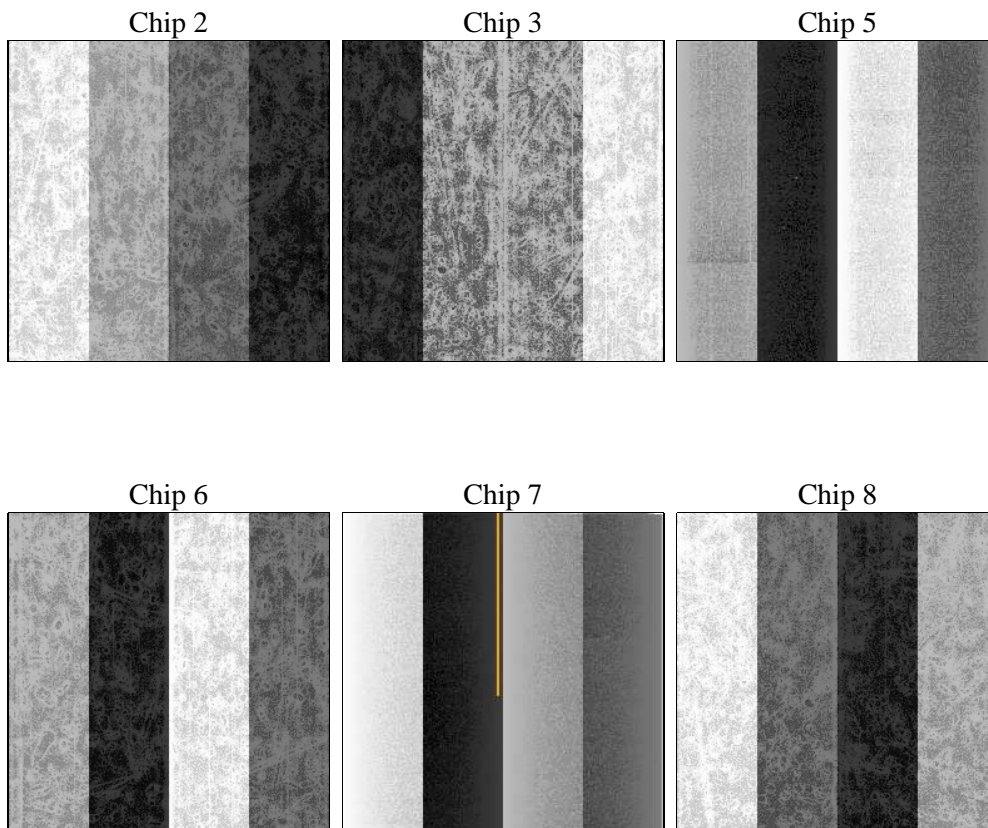
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5005.423000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5074.5096530914	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	5074.5506930947	Sum of GTIs [s]
date	2012-04-25T08:59:41	Date and time of file creation	ontime3	5074.3865330815	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5074.4686130881	Sum of GTIs [s]
			ontime6	5074.4275730848	Sum of GTIs [s]
			ontime7	5074.5096530914	Sum of GTIs [s]
			ontime8	5074.3454930782	Sum of GTIs [s]
			l1events	337898	Number of level 1 events

### 2.1.4 Events

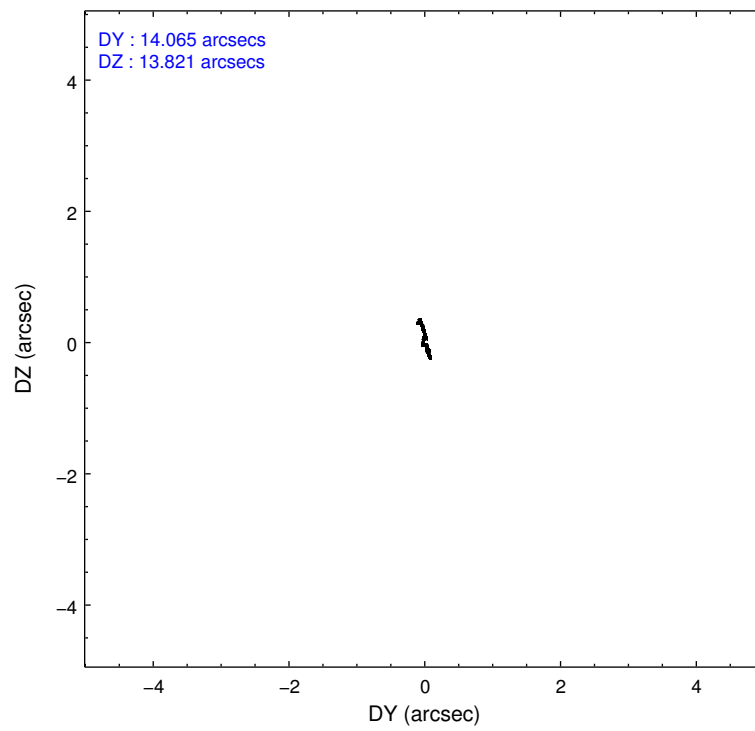
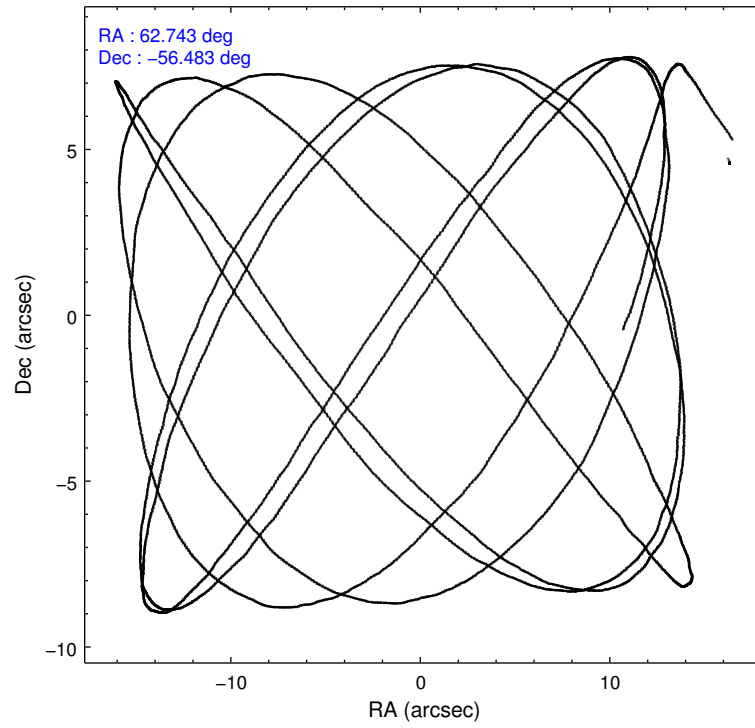
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	48498	46434	72280	47968	64789	57929
rejected events	42980	41017	39052	42450	37983	44860
rejected %	88%	88%	54%	88%	58%	77%

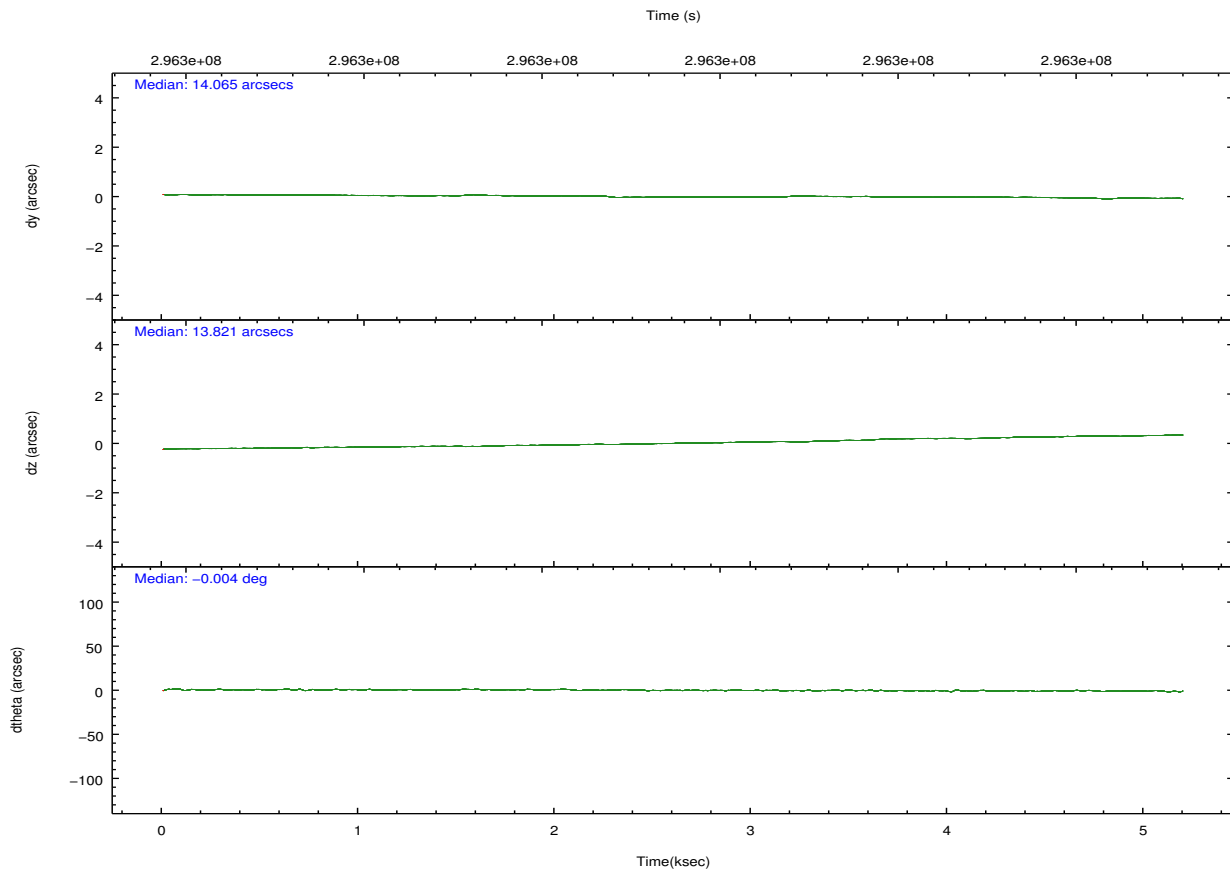
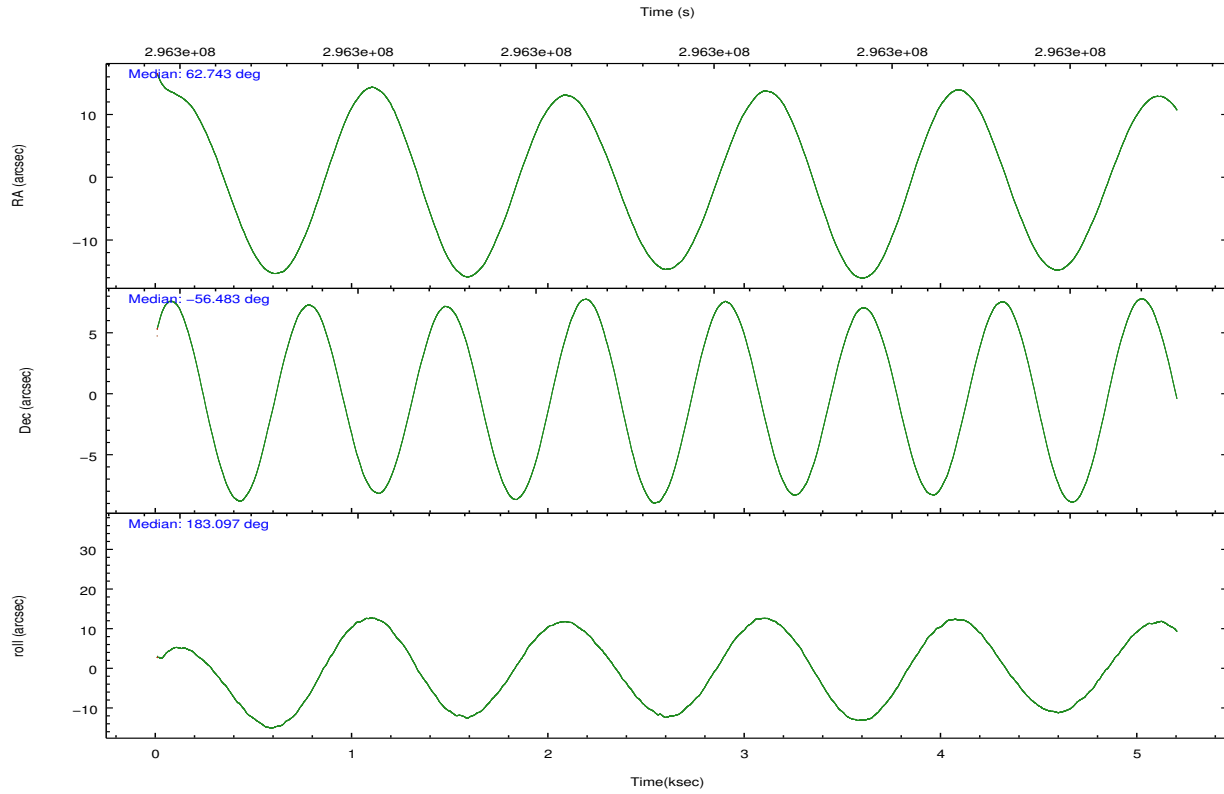
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2372	2336	3356	2095	2499	4173
	4%	5%	4%	4%	3%	7%
grade 1 events	34	31	302	21	48	40
	0%	0%	0%	0%	0%	0%
grade 2 events	1124	1121	10068	1249	5490	2919
	2%	2%	13%	2%	8%	5%
grade 3 events	526	493	1182	548	2220	1366
	1%	1%	1%	1%	3%	2%
grade 4 events	522	524	1118	493	2171	1241
	1%	1%	1%	1%	3%	2%
grade 5 events	1857	2106	5119	2285	6043	2814
	3%	4%	7%	4%	9%	4%
grade 6 events	977	946	17527	1135	14439	3377
	2%	2%	24%	2%	22%	5%
grade 7 events	41086	38877	33608	40142	31879	41999
	84%	83%	46%	83%	49%	72%

## 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	62.783459	62.74251629074749	Subarray requested	NONE	NONE
[deg] Pointing Dec	-56.467951	-56.48313804031456	Alternating exposures requested	N	N
[deg] Pointing Roll	182.980894	183.1033794131679	[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)	296300328.184000	296299163.11528			
Observation start date	2007-05-23T09:37:43	2007-05-23T09:19:23			
[s] Observation end time (MET)	296305333.184000	296305549.89059			
Observation end date	2007-05-23T11:01:08	2007-05-23T11:05:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



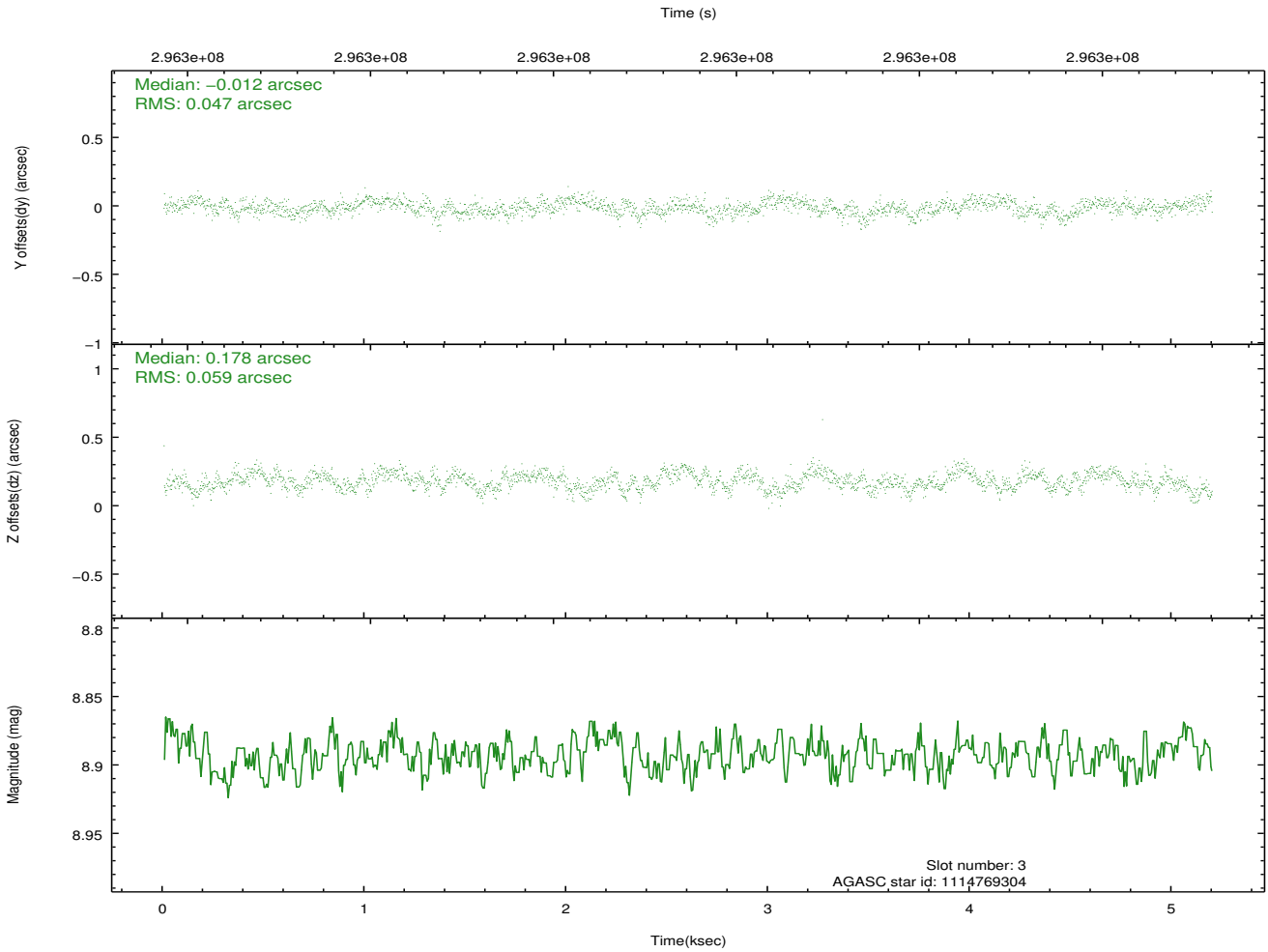
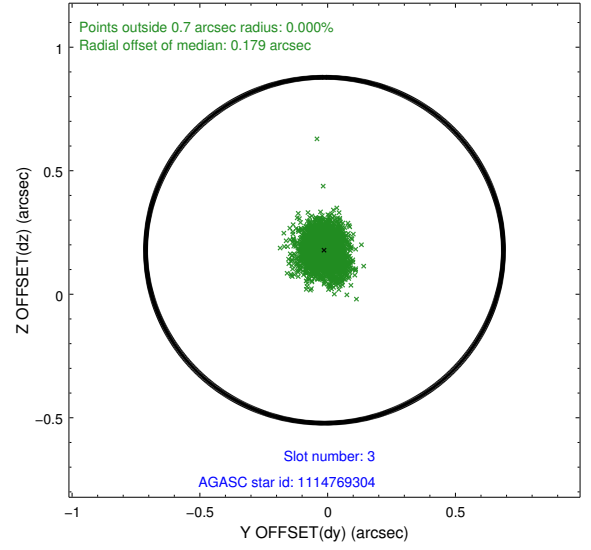
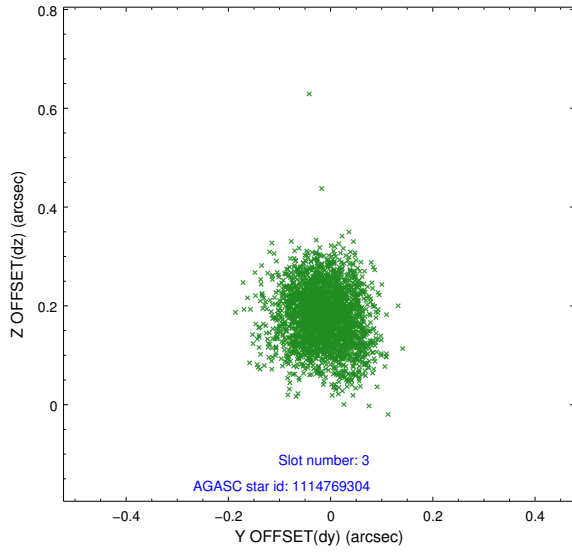


### Slot Statistics

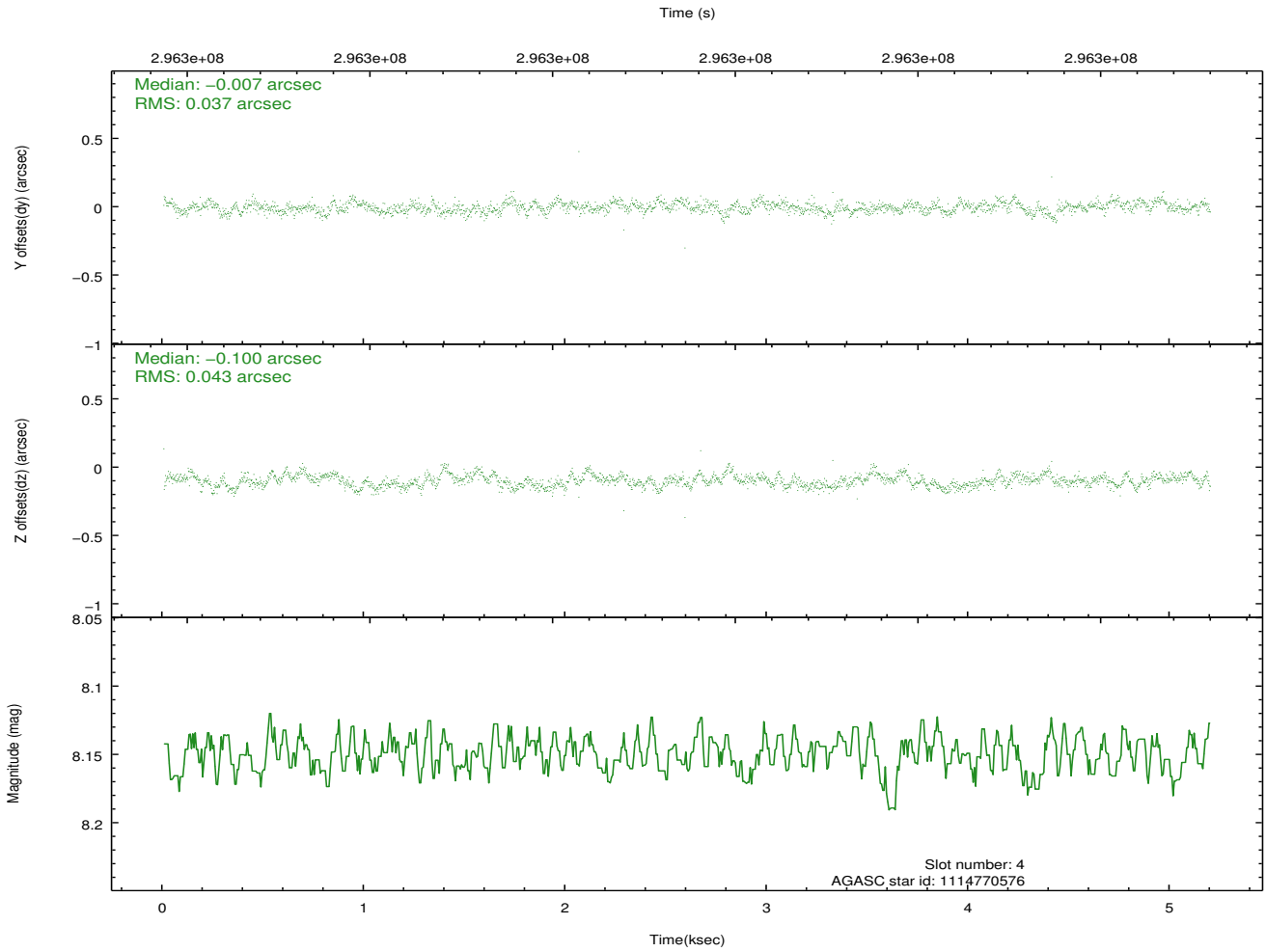
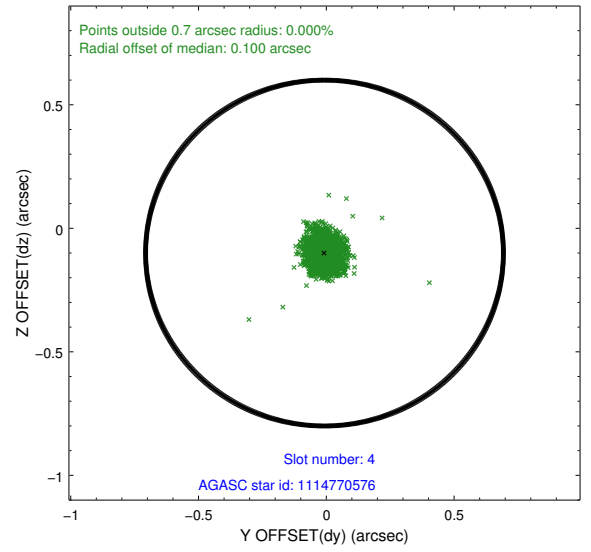
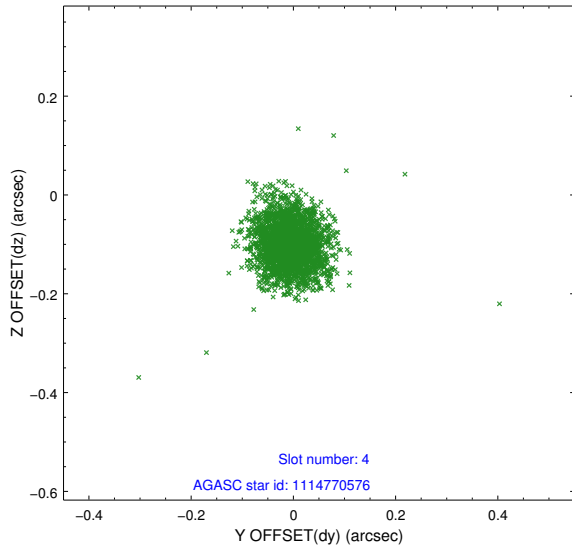
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1268	-0.060	-0.060	0.008	0.013	0.000000	0.000000	-767.08	-1735.25
1	FID	ACIS-S-4	7.19	1268	0.197	0.045	0.007	0.012	0.000000	0.000000	2145.93	172.12
2	FID	ACIS-S-5	7.23	1268	-0.168	0.024	0.008	0.013	0.000000	0.000000	-1818.53	167.11
3	GUIDE	1114769304	8.89	2531	-0.012	0.178	0.080	0.131	62.892675	-56.947703	-124.10	1736.86
4	GUIDE	1114770576	8.15	2534	-0.007	-0.100	0.059	0.097	63.279997	-56.828740	-908.82	1352.42
5	GUIDE	1114772200	9.07	2534	0.050	-0.075	0.068	0.115	63.438409	-56.914220	-1201.81	1678.32
6	GUIDE	1114773584	8.75	2535	0.102	-0.084	0.091	0.140	63.922281	-56.522594	-2247.05	334.45
7	GUIDE	1114775824	7.71	2534	-0.137	0.082	0.057	0.087	63.546841	-56.176767	-1582.33	-958.62

## 2.4 Star Slots

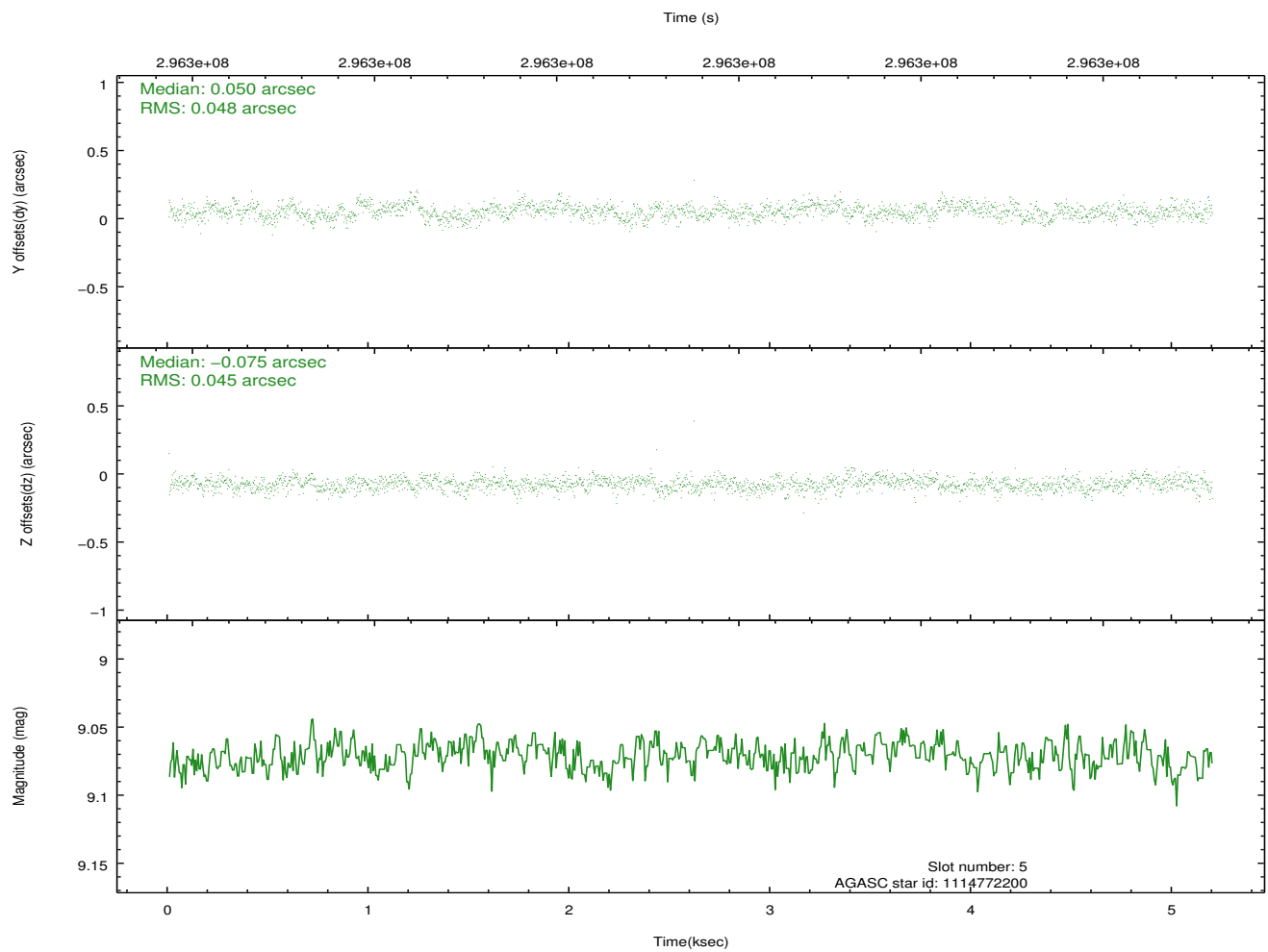
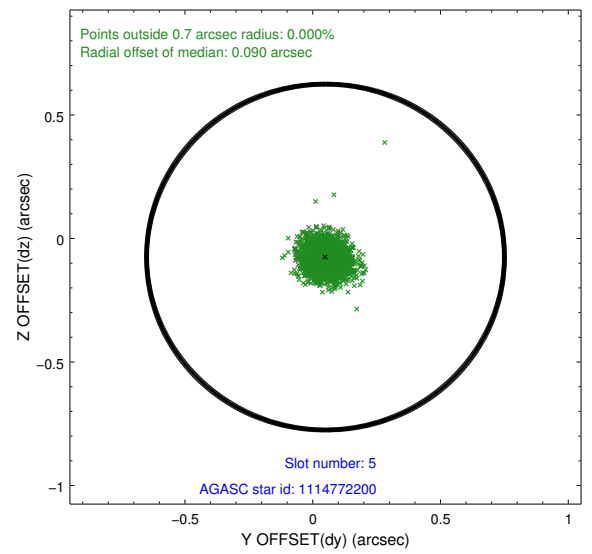
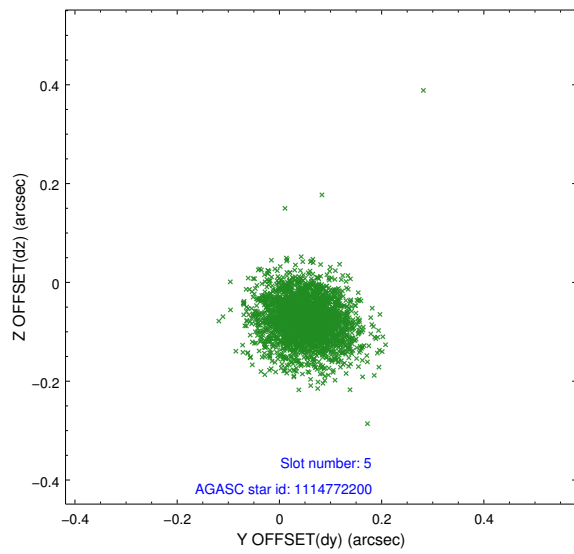
### 2.4.1 Slot 3



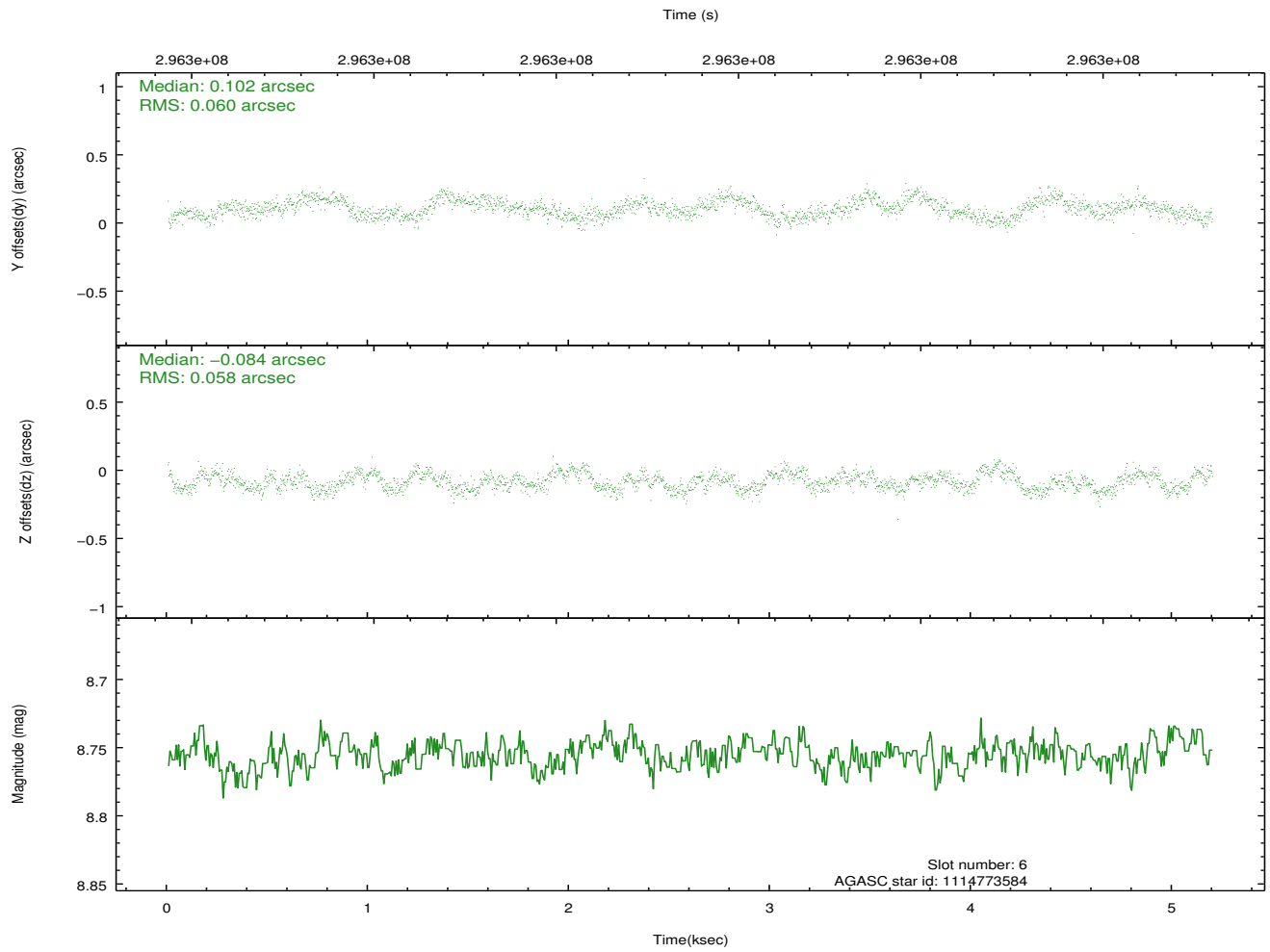
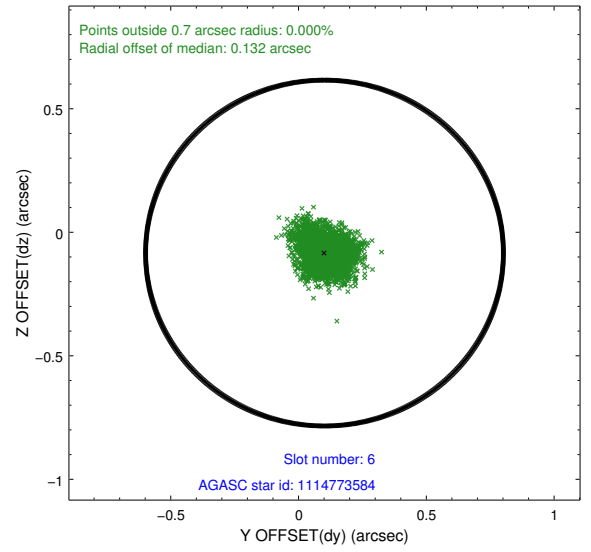
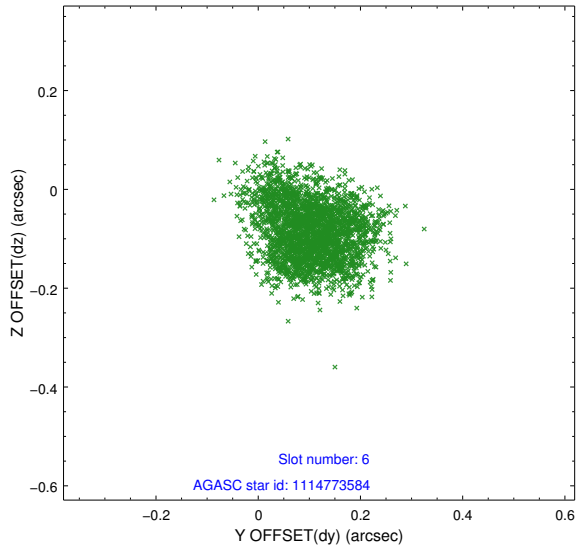
## 2.4.2 Slot 4



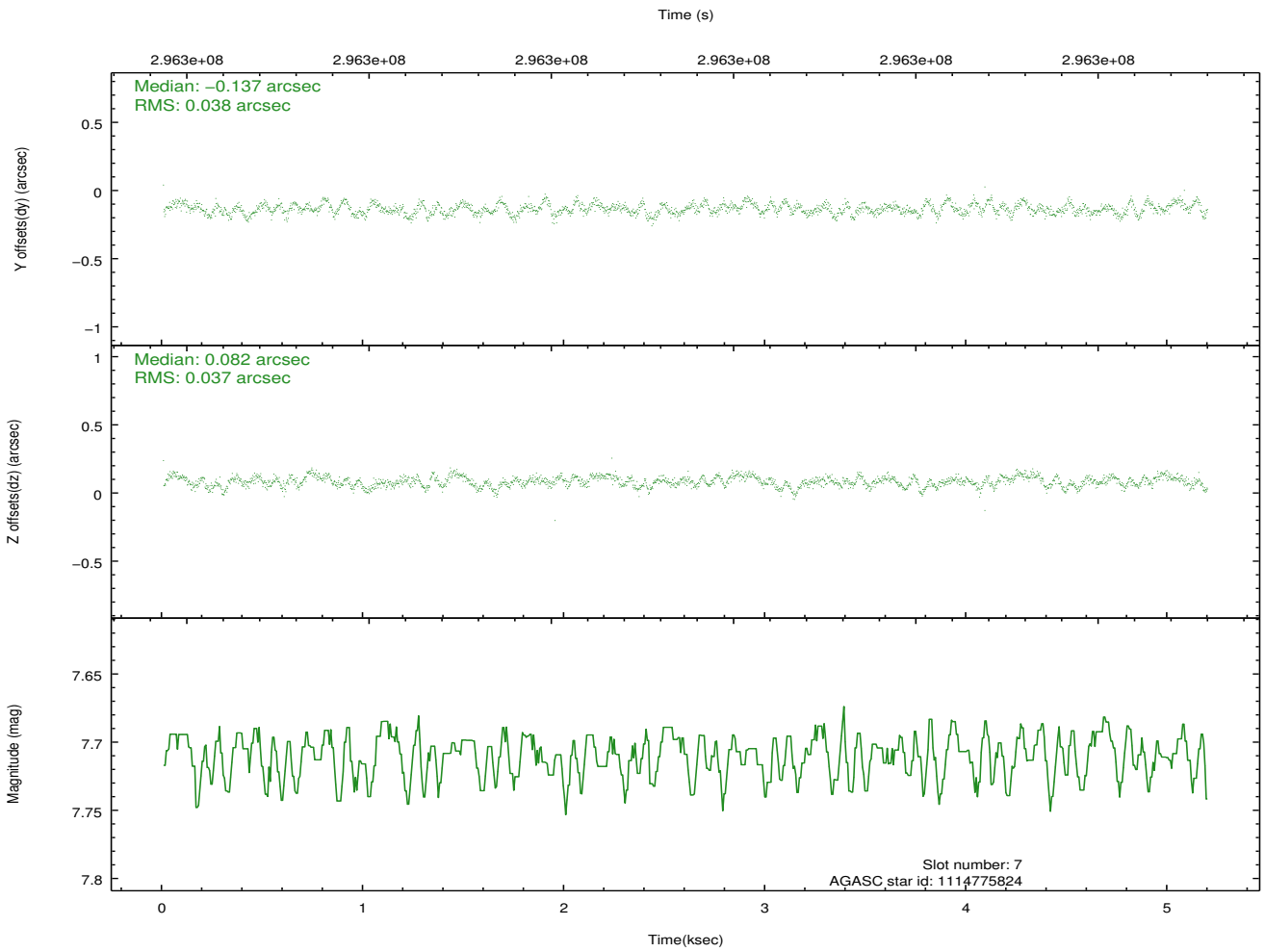
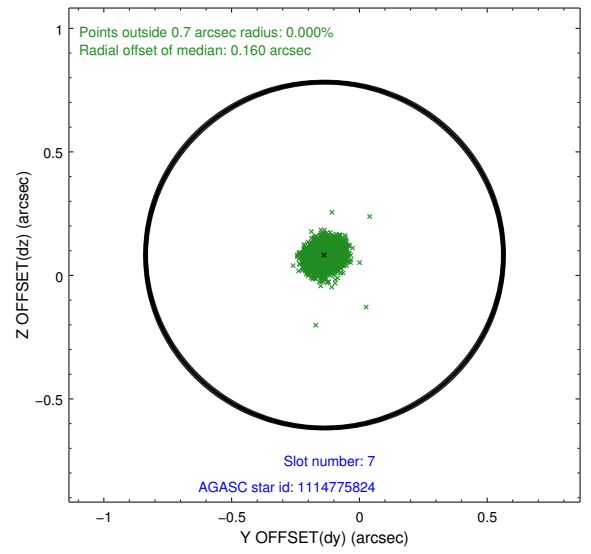
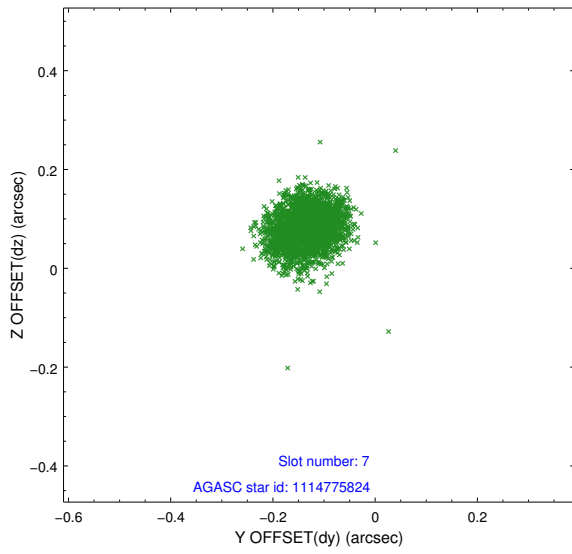
### 2.4.3 Slot 5



## 2.4.4 Slot 6

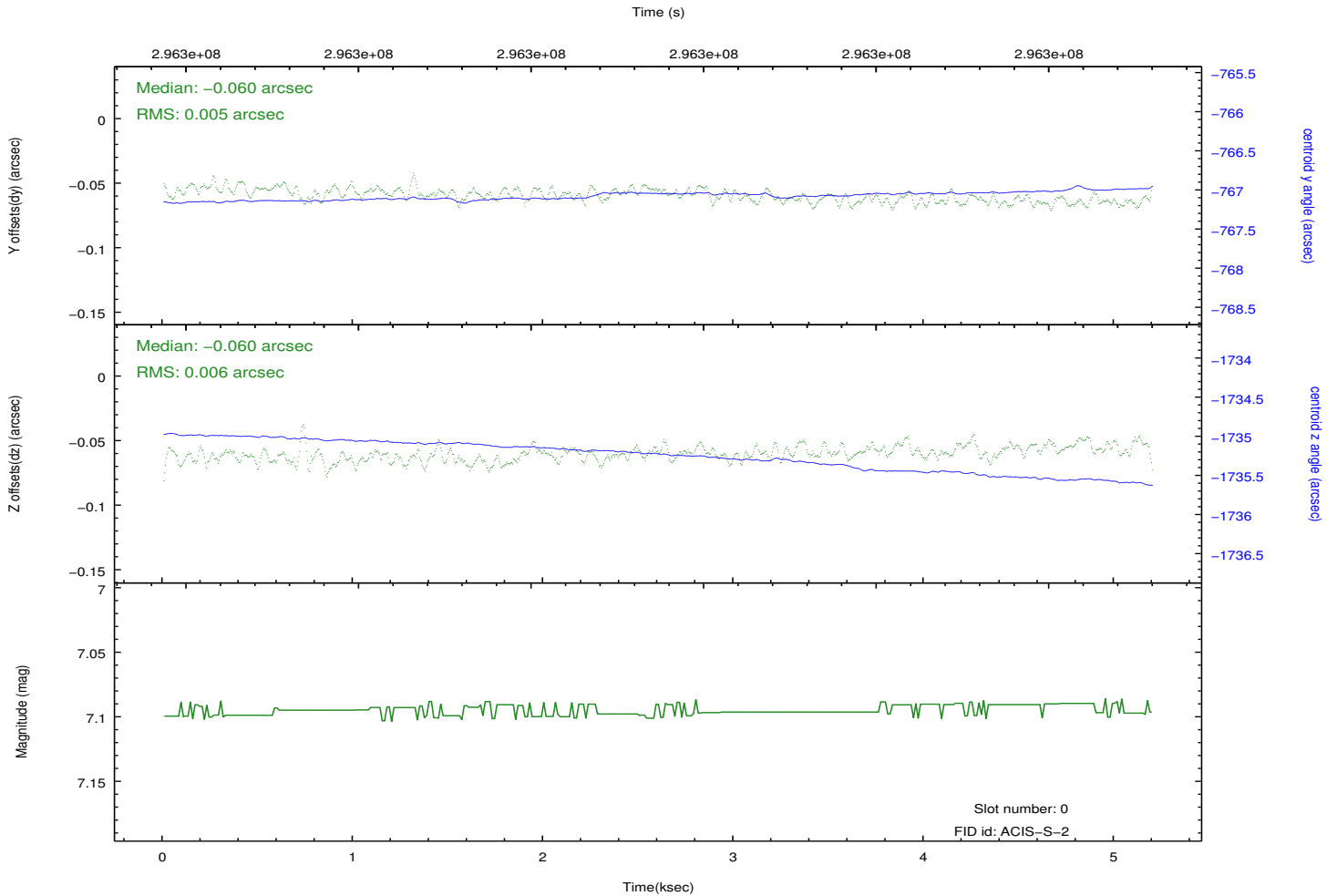
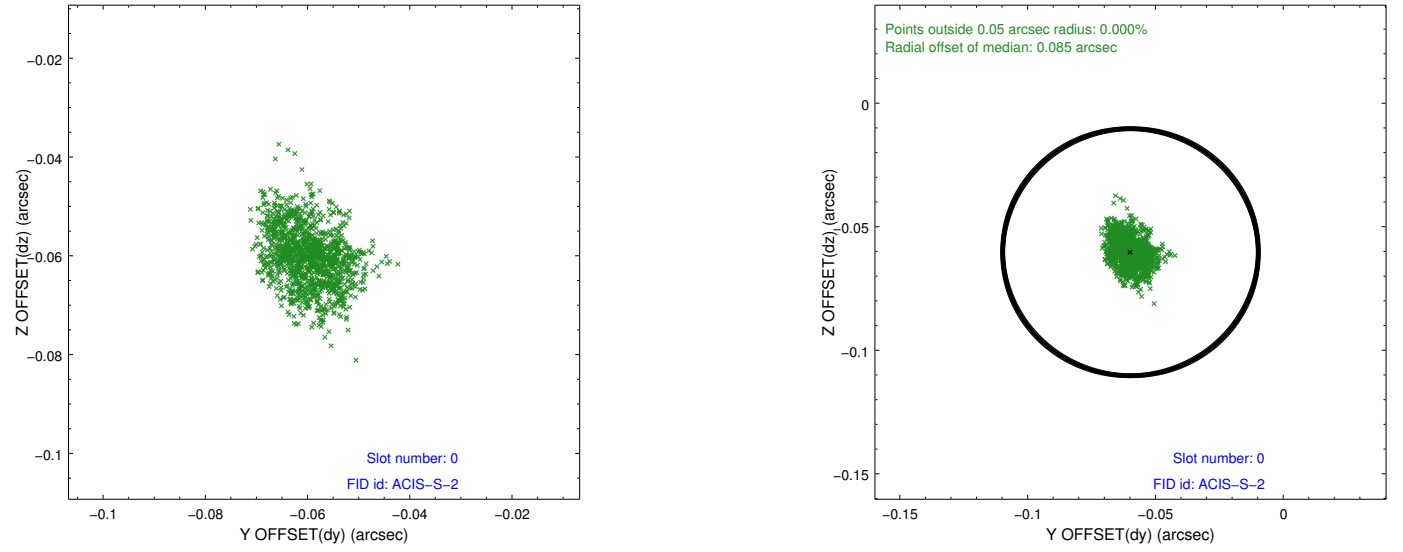


## 2.4.5 Slot 7

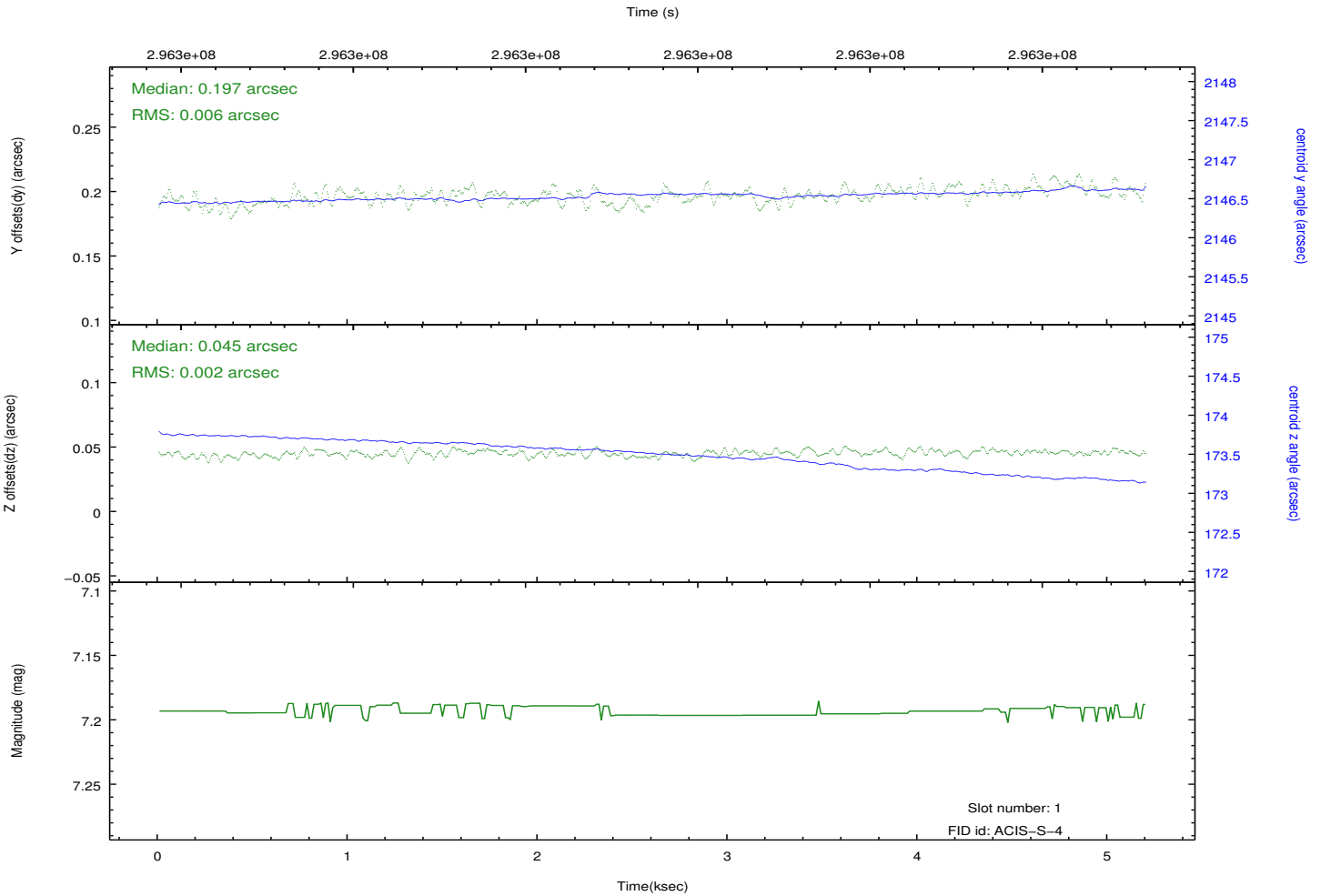
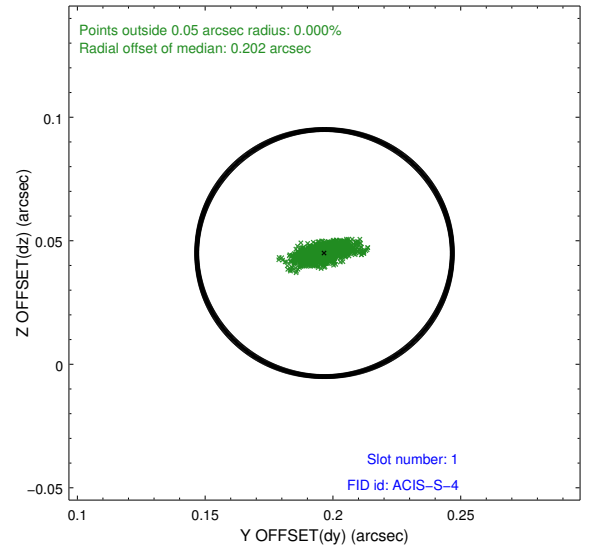
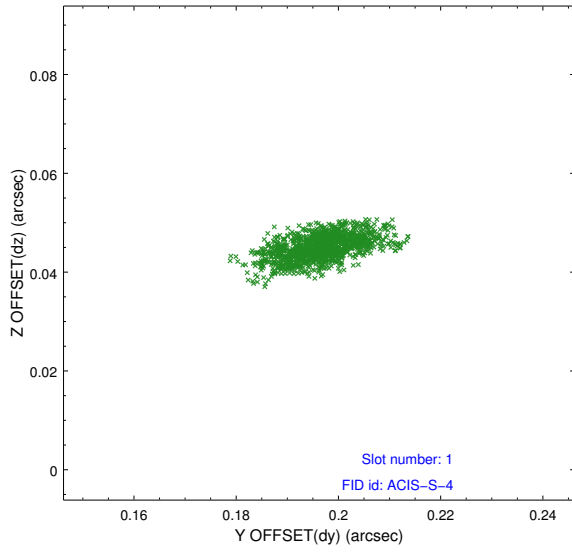


## 2.5 FID Slots

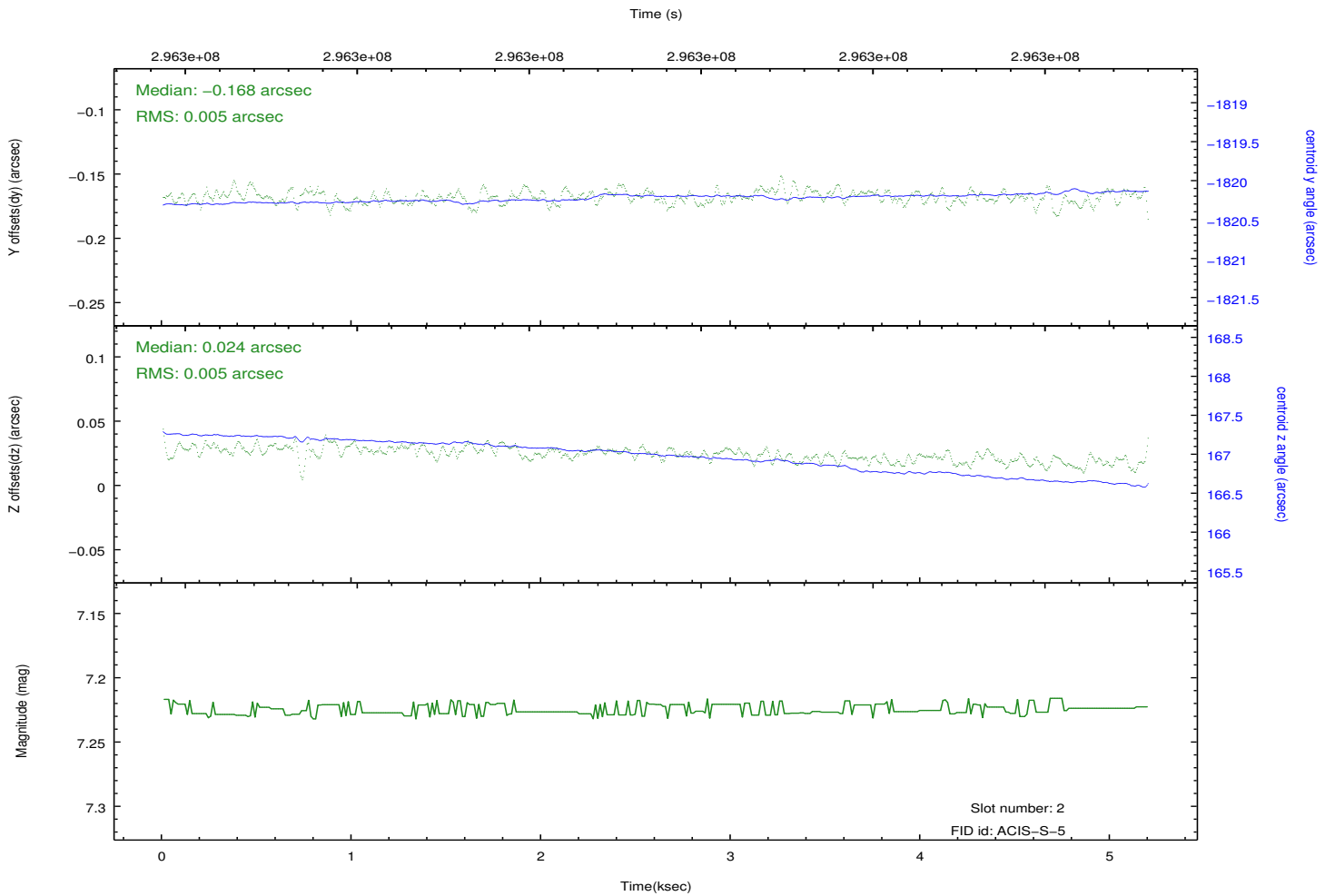
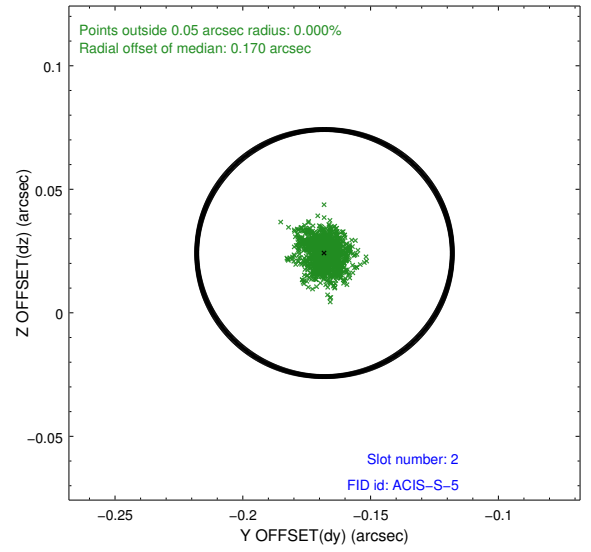
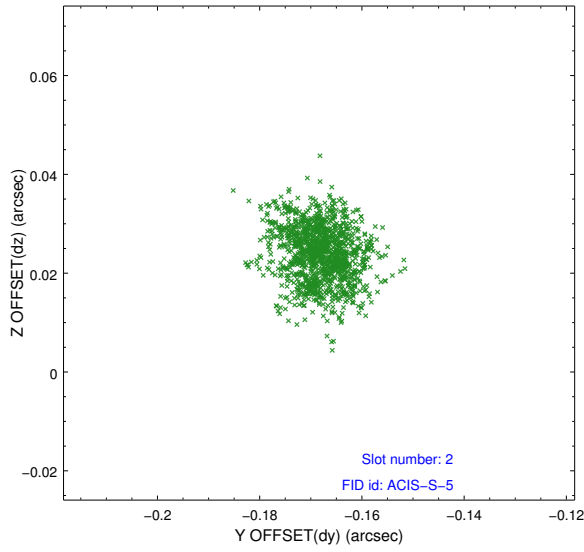
### 2.5.1 Slot 0



## 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)	2012.04.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.07519998

## A.2 Comments