

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 652 - L2 Version 4  
Chandra X-Ray Center

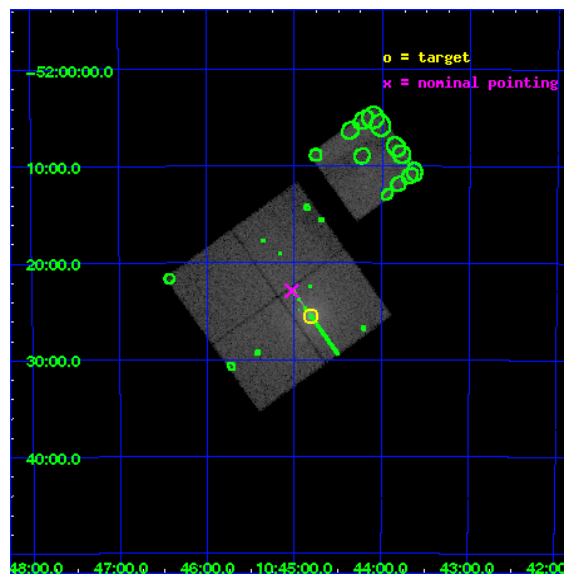
L2 Processing Date : Nov 29 2009

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# 1 Front

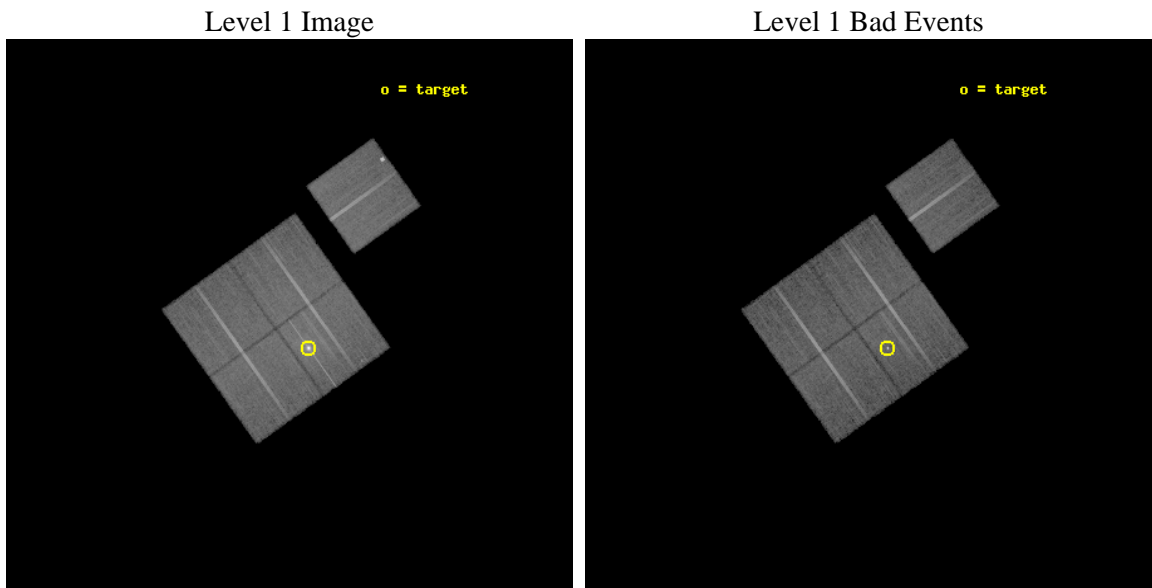
seq_num	300021	Sequence number
obs_id	652	Observation id
title	MULTIWAVELENGTH TOO OBSERVATIONS OF BRIGHT NOVAE IN OUTBURST	Propo
observer	Professor Sumner Starrfield	Principal investigator
object	V382 Velorum 1999	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.20154	Observer's specified target RA
dec_targ	-52.42517	Observer's specified target Dec
ra_nom	161.25677982252	Nominal RA
dec_nom	-52.381903623663	Nominal Dec
roll_nom	54.439730948109	Nominal Roll
revision	4	Processing version of data
ontime	18172.759086631	Sum of GTIs [s]
livetime	17942.644668754	Livetime [s]
ontime0	18172.759056717	Sum of GTIs [s]
ontime1	18176.000016928	Sum of GTIs [s]
ontime2	18169.518156342	Sum of GTIs [s]
ontime3	18172.759086631	Sum of GTIs [s]
ontime6	18172.759086631	Sum of GTIs [s]
l2events	180532	Number of level 2 events



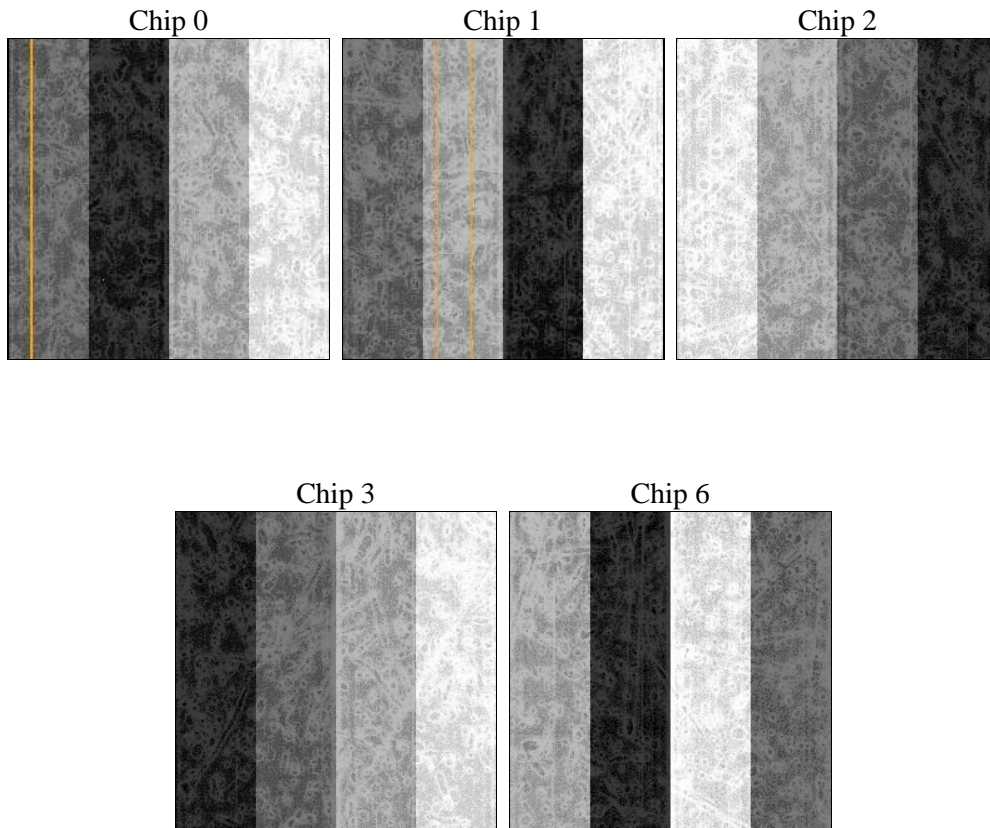
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	18172.759086631	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime0	18172.759056717	Sum of GTIs [s]
date	2009-11-29T20:26:24	Date and time of file creation	ontime1	18176.000016928	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	18169.518156342	Sum of GTIs [s]
			ontime3	18172.759086631	Sum of GTIs [s]
			ontime6	18172.759086631	Sum of GTIs [s]
			l1events	890240	Number of level 1 events

### 2.1.4 Events

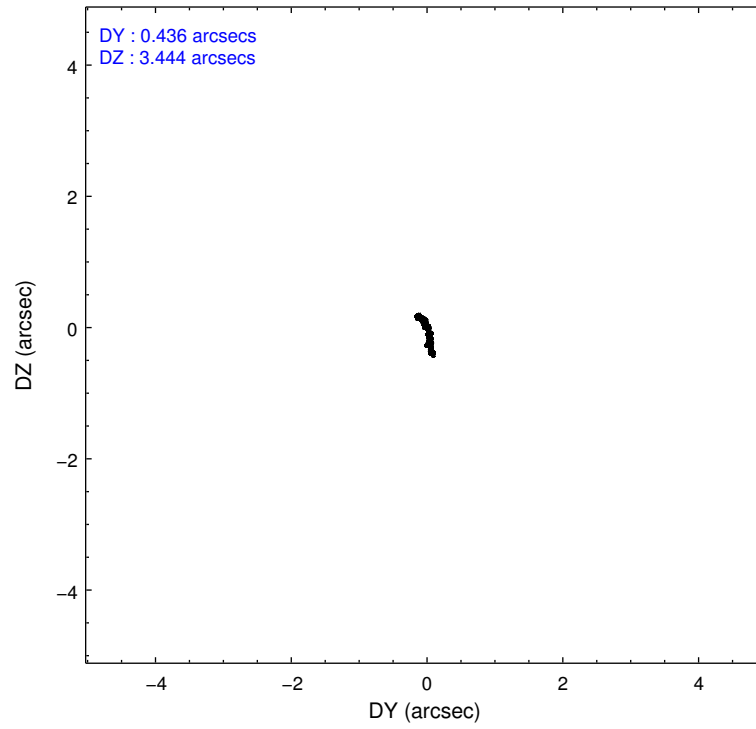
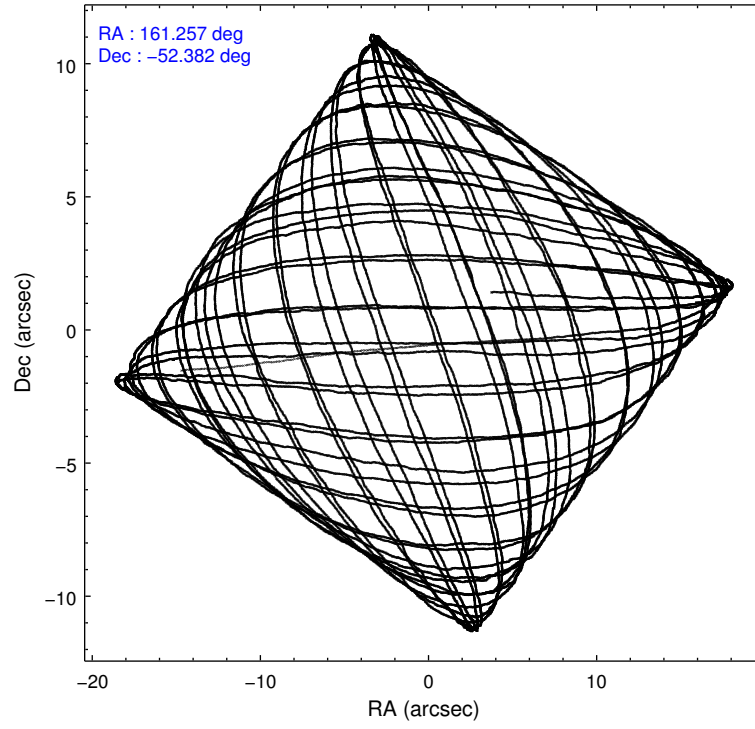
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	159987	164913	168753	214120	182467
rejected events	133034	132273	140943	143810	146164
rejected %	83%	80%	83%	67%	80%

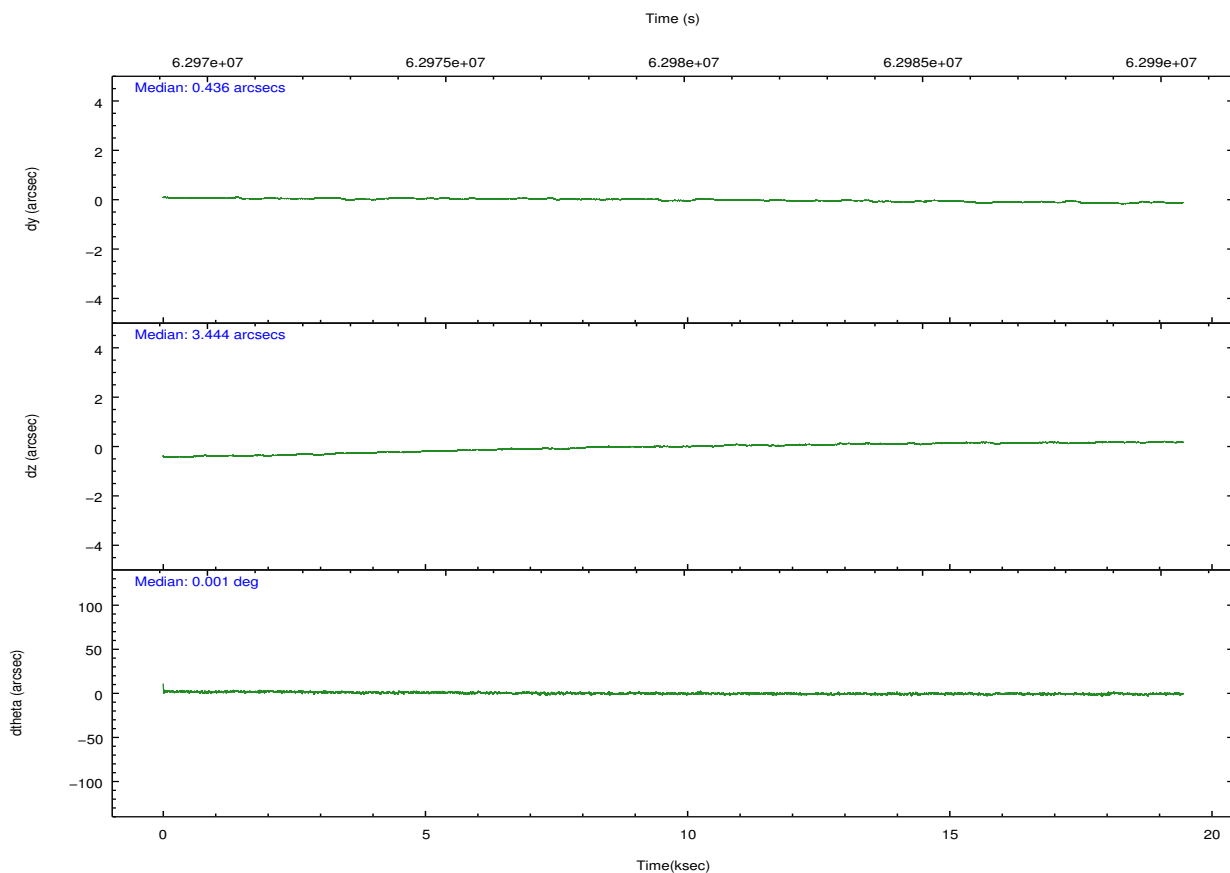
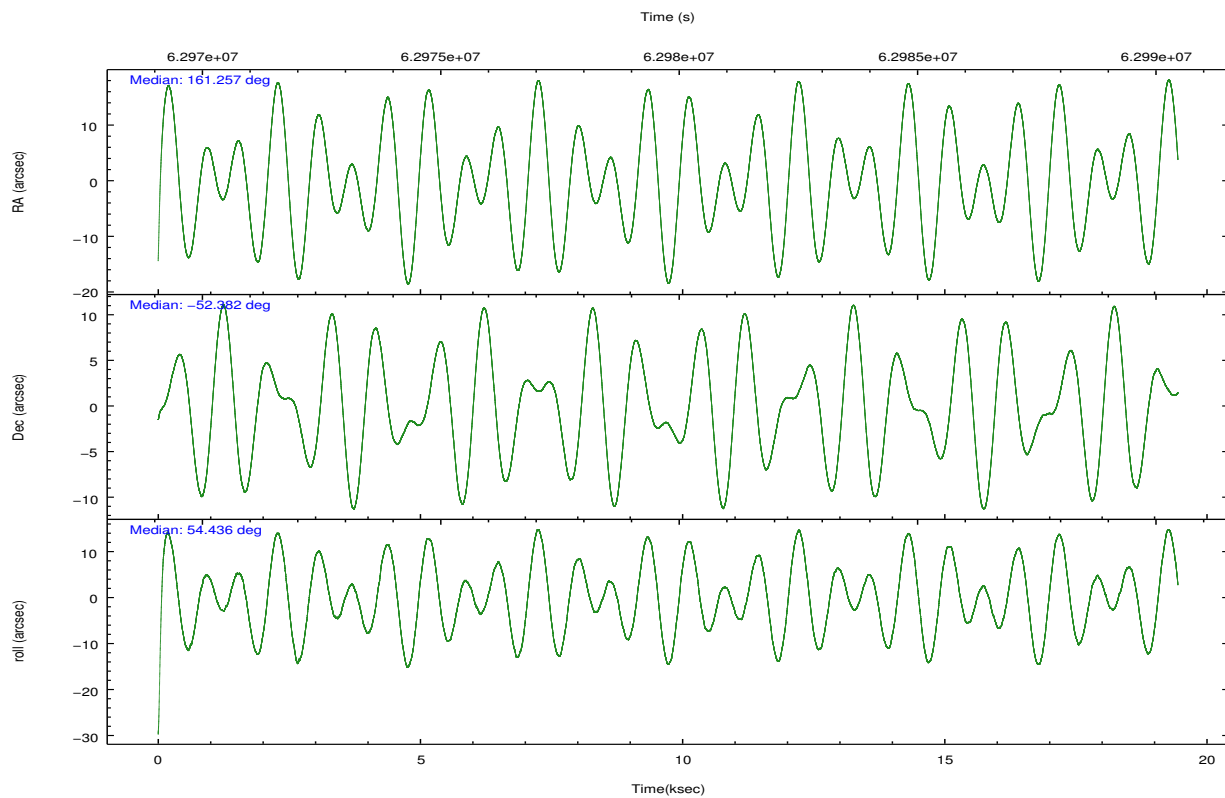
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10050	14211	10997	48523	9246
	6%	8%	6%	22%	5%
grade 1 events	58	59	62	1468	45
	0%	0%	0%	0%	0%
grade 2 events	10871	11357	11069	14752	14974
	6%	6%	6%	6%	8%
grade 3 events	1130	1378	957	1387	1034
	0%	0%	0%	0%	0%
grade 4 events	1059	1335	968	1289	6434
	0%	0%	0%	0%	3%
grade 5 events	3110	3308	2653	3825	3234
	1%	2%	1%	1%	1%
grade 6 events	3843	4359	3821	4380	4618
	2%	2%	2%	2%	2%
grade 7 events	129866	128906	138226	138496	142882
	81%	78%	81%	64%	78%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	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
Pointing RA	161.251782	161.2567798225223	Subarray requested	NONE	NONE
Pointing Dec	-52.409454	-52.38190362366326	Alternating exposures requested	N	N
Pointing Roll	54.227101	54.43973094810887	Primary exposure time	0.000000	3.2
Window start time	61603264.184000	61603264.184000			
Window stop time	62985664.184000	62985664.184000			
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-230.662463	-230.6708287110191			
SIM translation stage offset (mm)	-2.93	-2.921624291910604			
Observation start time	62970490.184000	62969110.969157			
Observation start date	1999-12-30T19:47:06	1999-12-30T19:25:10			
Observation end time	62989490.184000	62990213.157422			
Observation end date	1999-12-31T01:03:46	1999-12-31T01:16:53			
Read mode	TIMED	TIMED			

## 2.3 Aspect



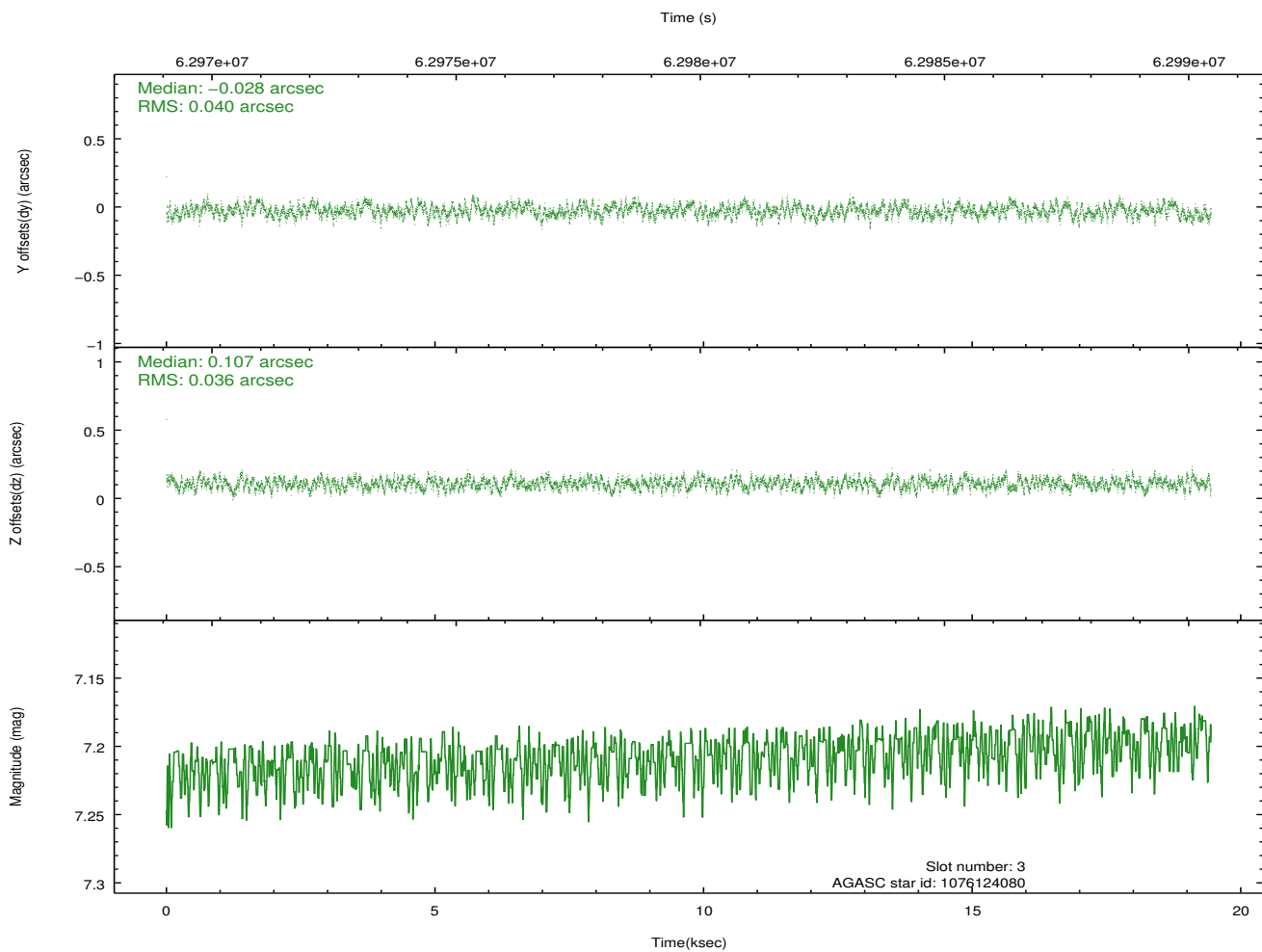
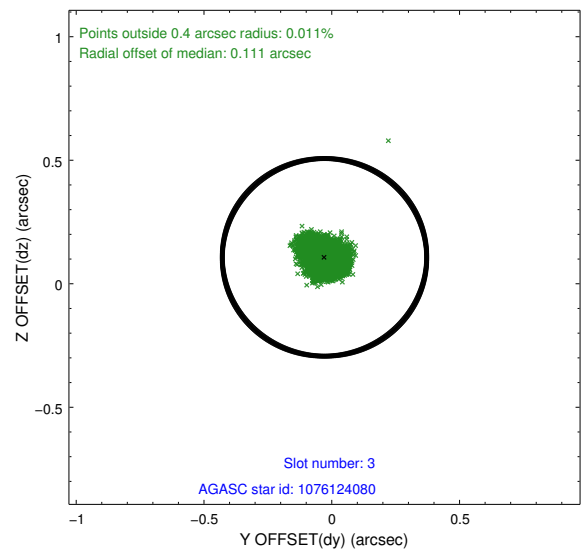
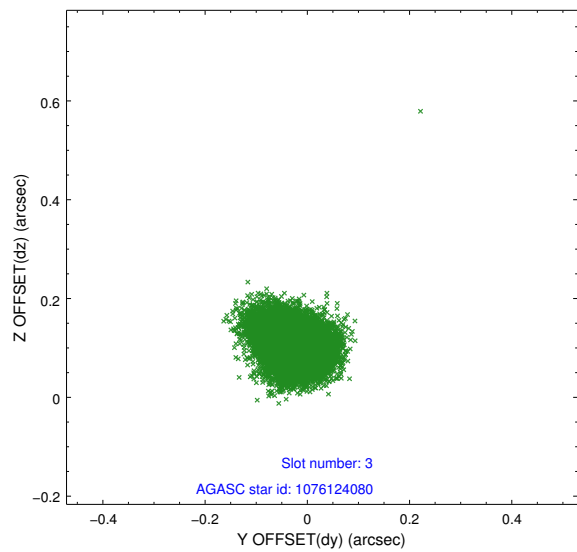


### Slot Statistics

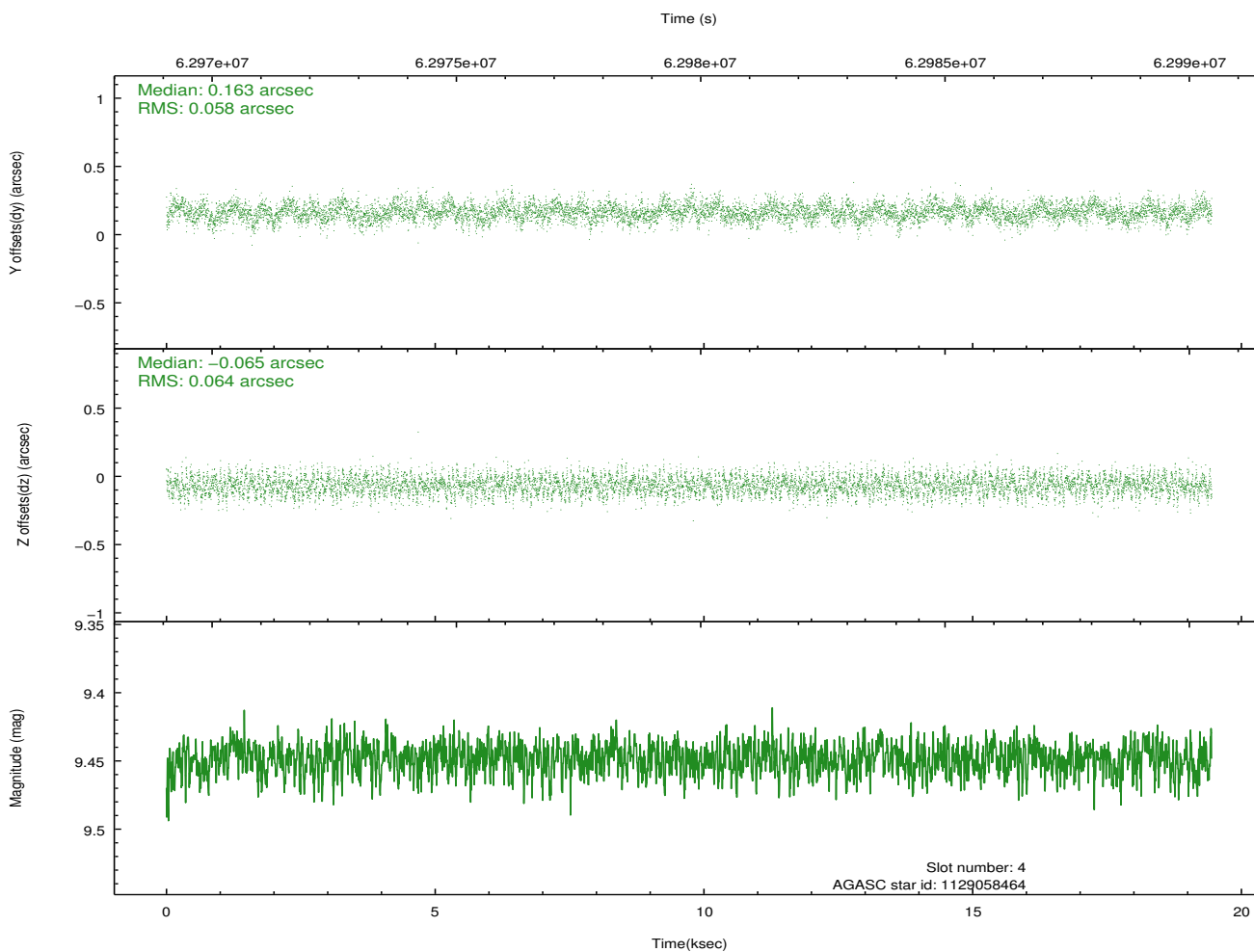
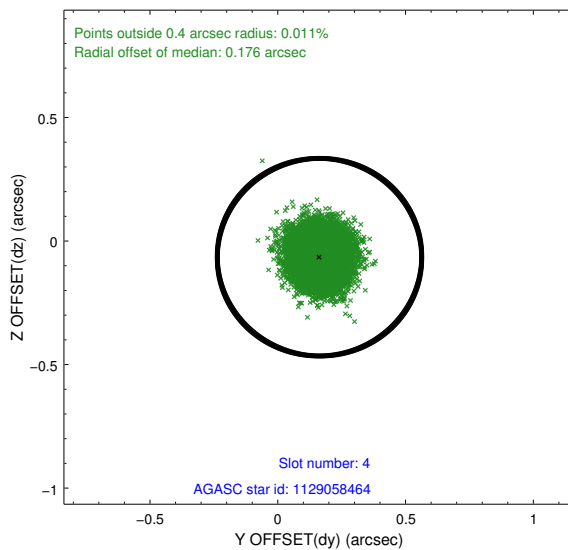
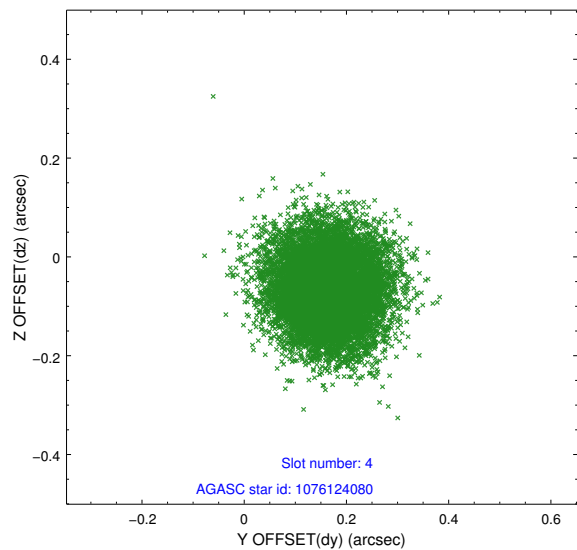
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.20	9487	-0.045	0.093	0.009	0.015	0.000000	0.000000	-755.04	-892.44
1	FID	ACIS-I-4	7.25	9485	0.043	0.009	0.006	0.011	0.000000	0.000000	2159.20	1013.43
2	FID	ACIS-I-5	7.23	9485	-0.099	-0.033	0.009	0.015	0.000000	0.000000	-1808.62	1011.14
3	GUIDE	1076124080	7.21	9482	-0.028	0.107	0.058	0.089	161.981077	-52.246099	1409.97	-964.46
4	GUIDE	1129058464	9.45	9481	0.163	-0.065	0.093	0.148	160.320561	-52.798094	-2330.72	819.18
5	GUIDE	1076110184	9.24	9481	-0.125	0.094	0.080	0.132	162.111018	-52.477622	892.58	-1677.80
6	GUIDE	1076112824	9.07	9482	-0.133	-0.046	0.068	0.113	161.569162	-51.921862	1834.45	453.92
7	GUIDE	1129055456	9.80	9470	0.120	-0.087	0.105	0.165	160.362432	-52.593027	-1682.94	1184.99

## 2.4 Star Slots

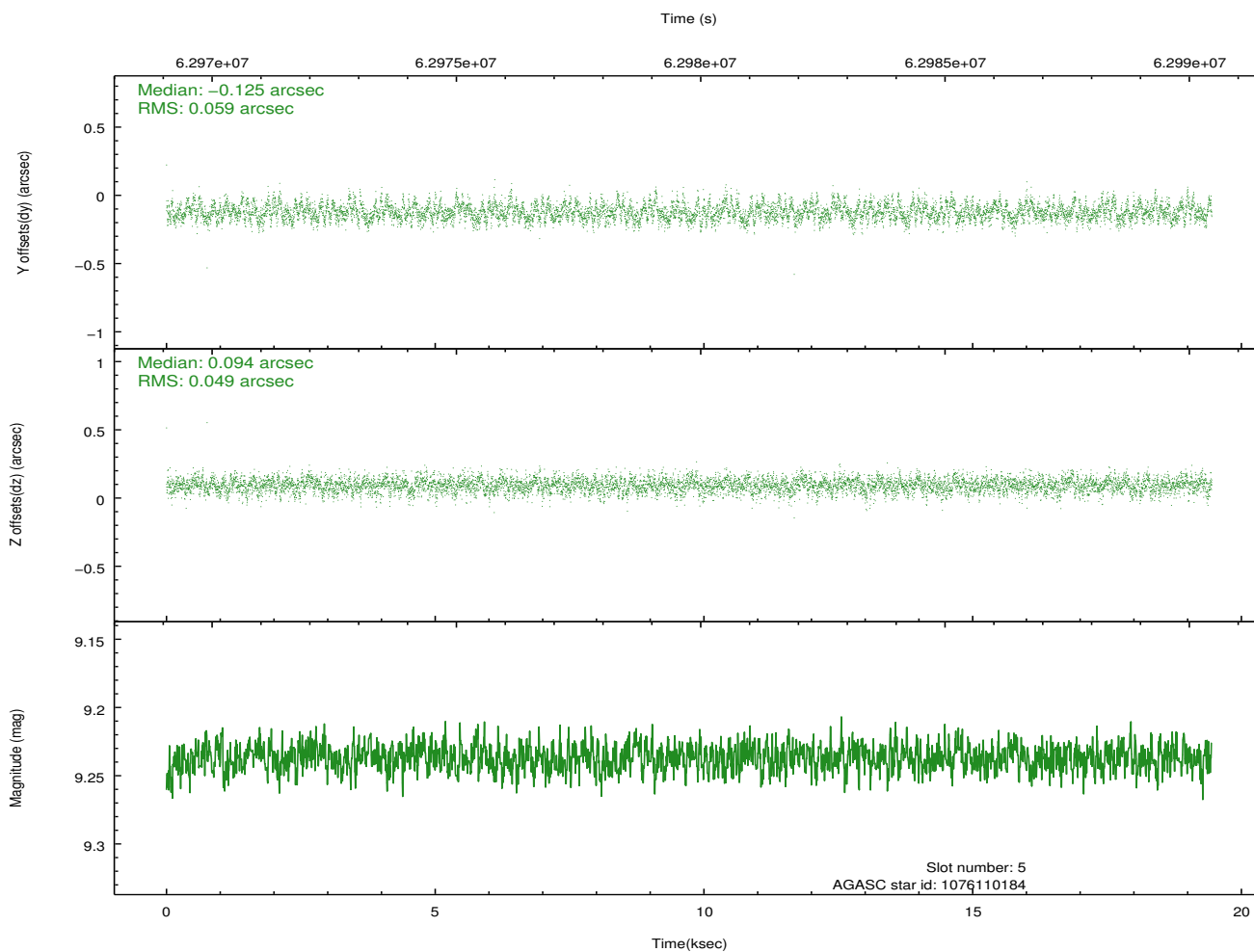
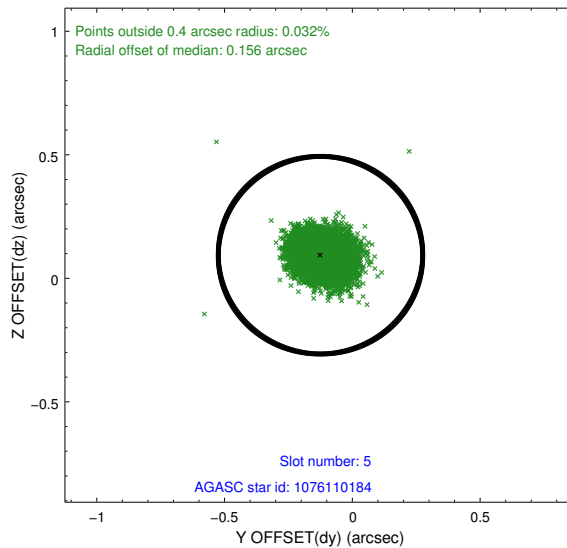
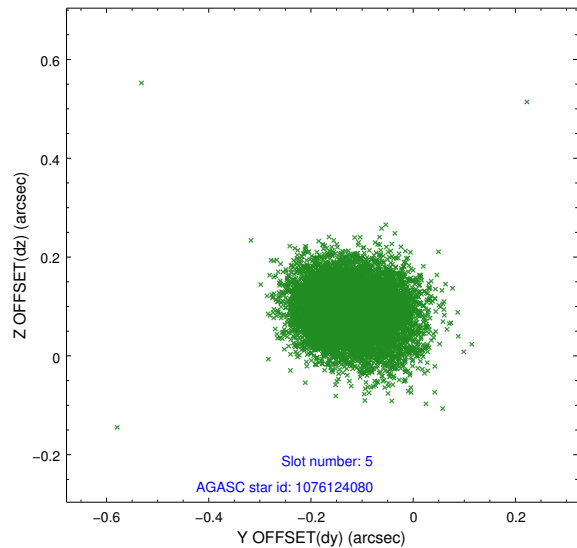
### 2.4.1 Slot 3



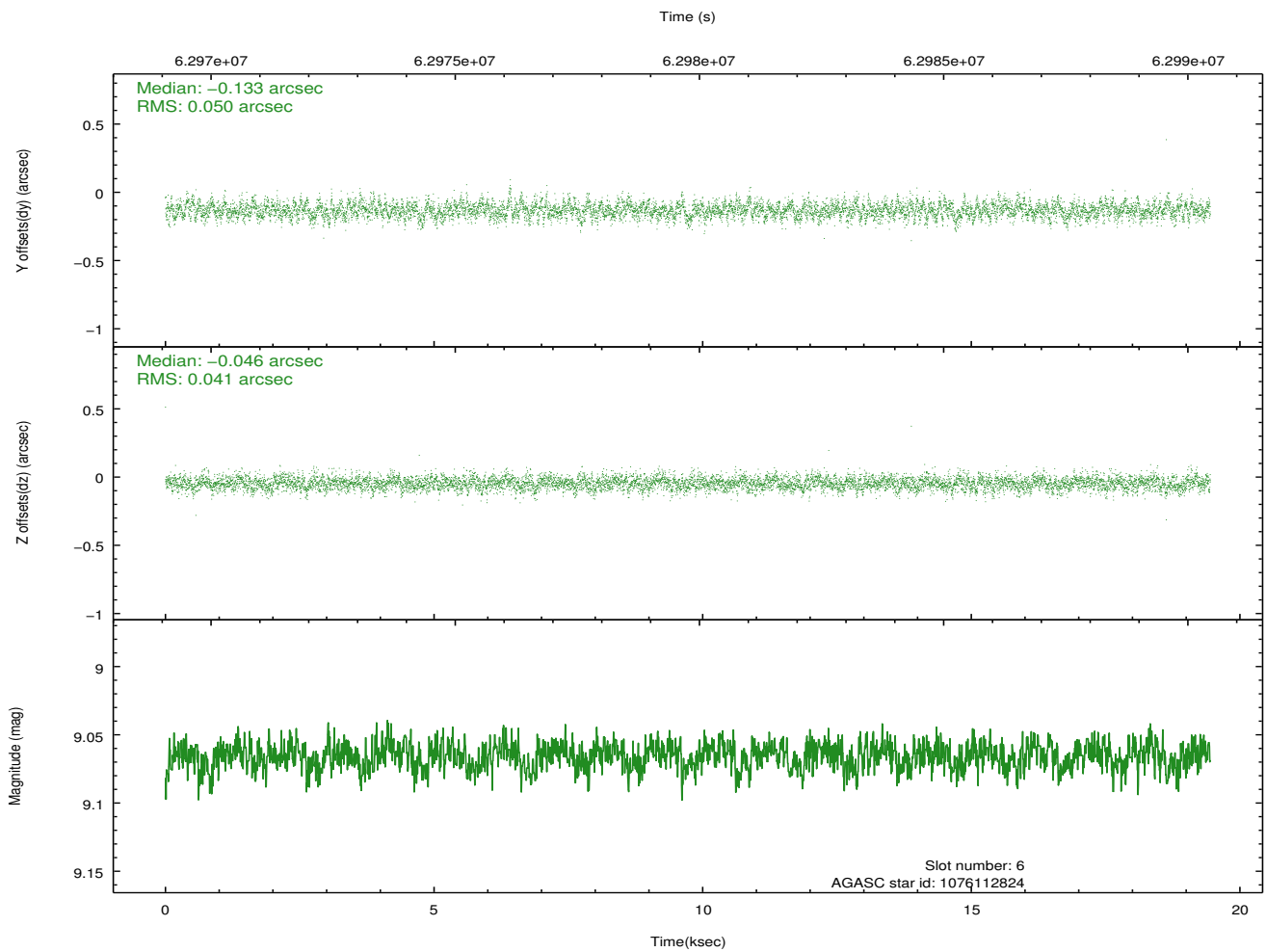
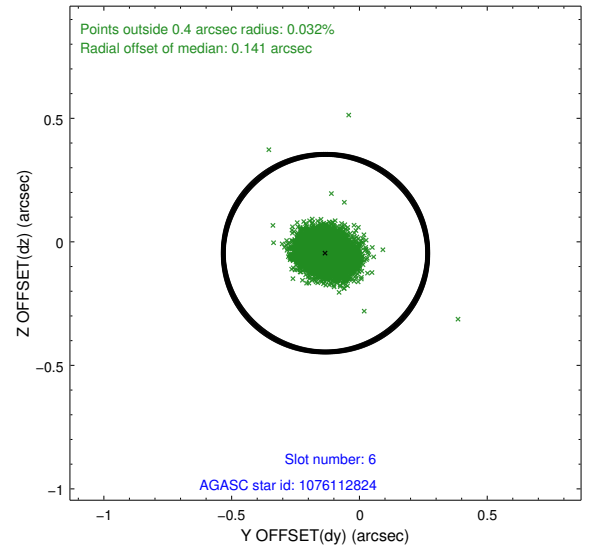
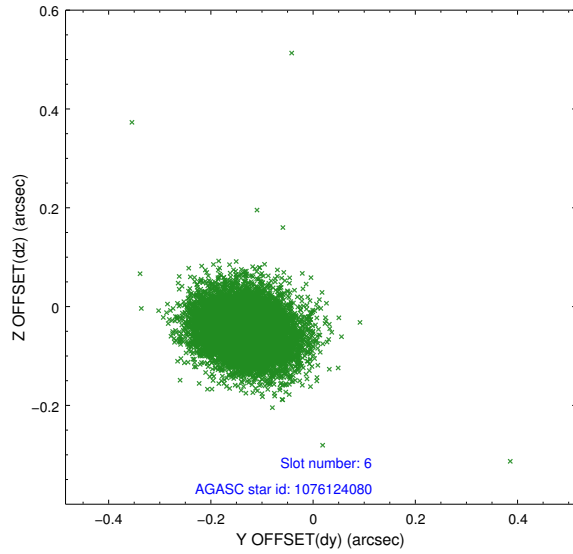
## 2.4.2 Slot 4



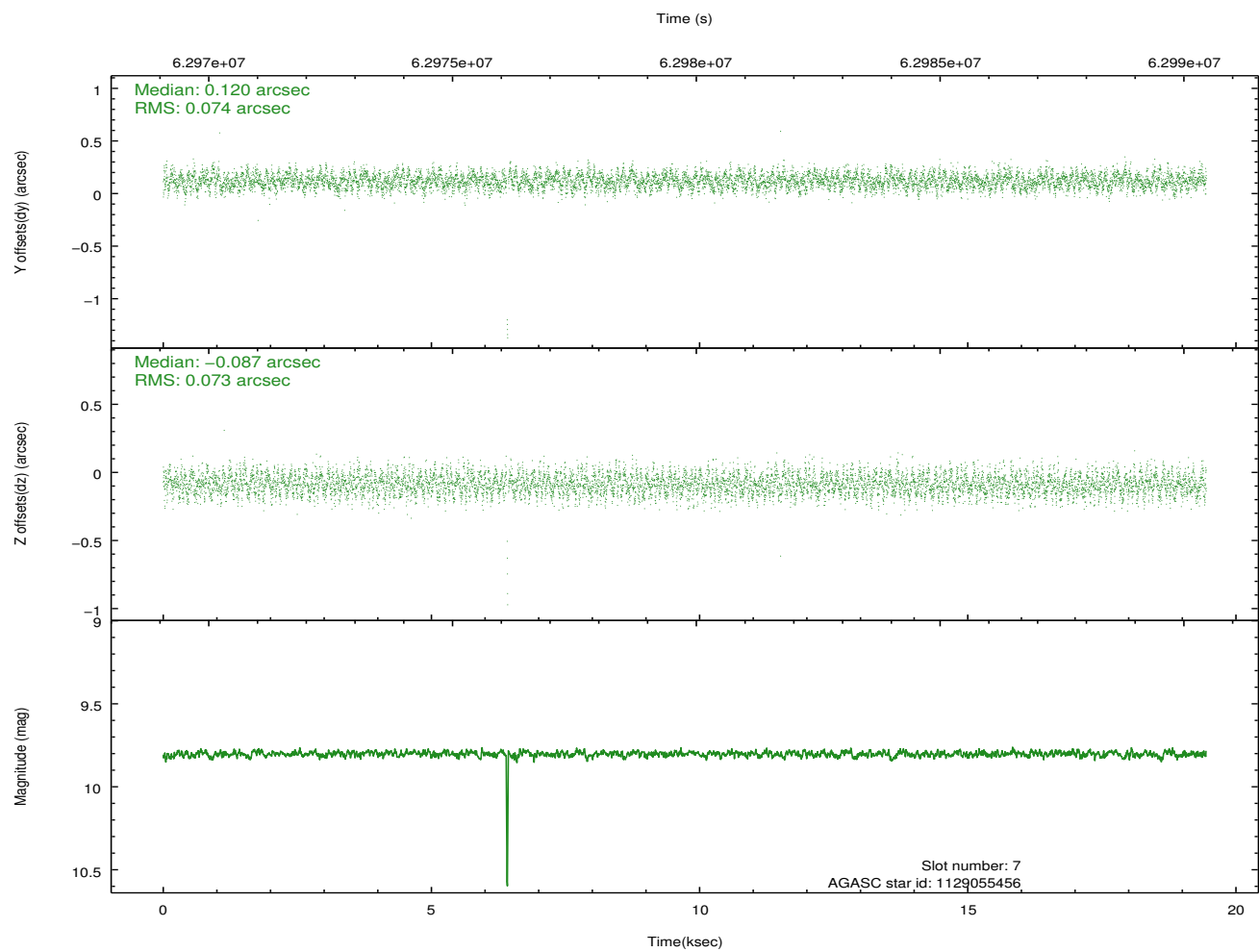
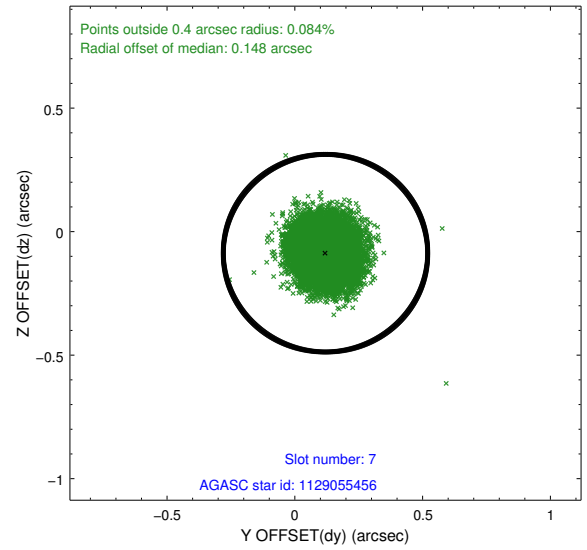
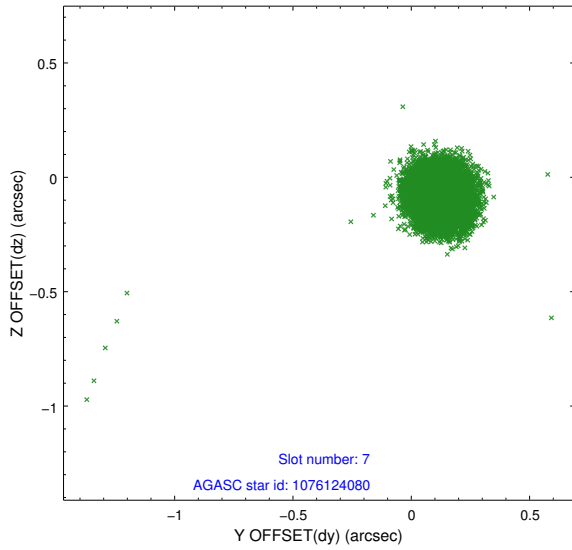
### 2.4.3 Slot 5



## 2.4.4 Slot 6

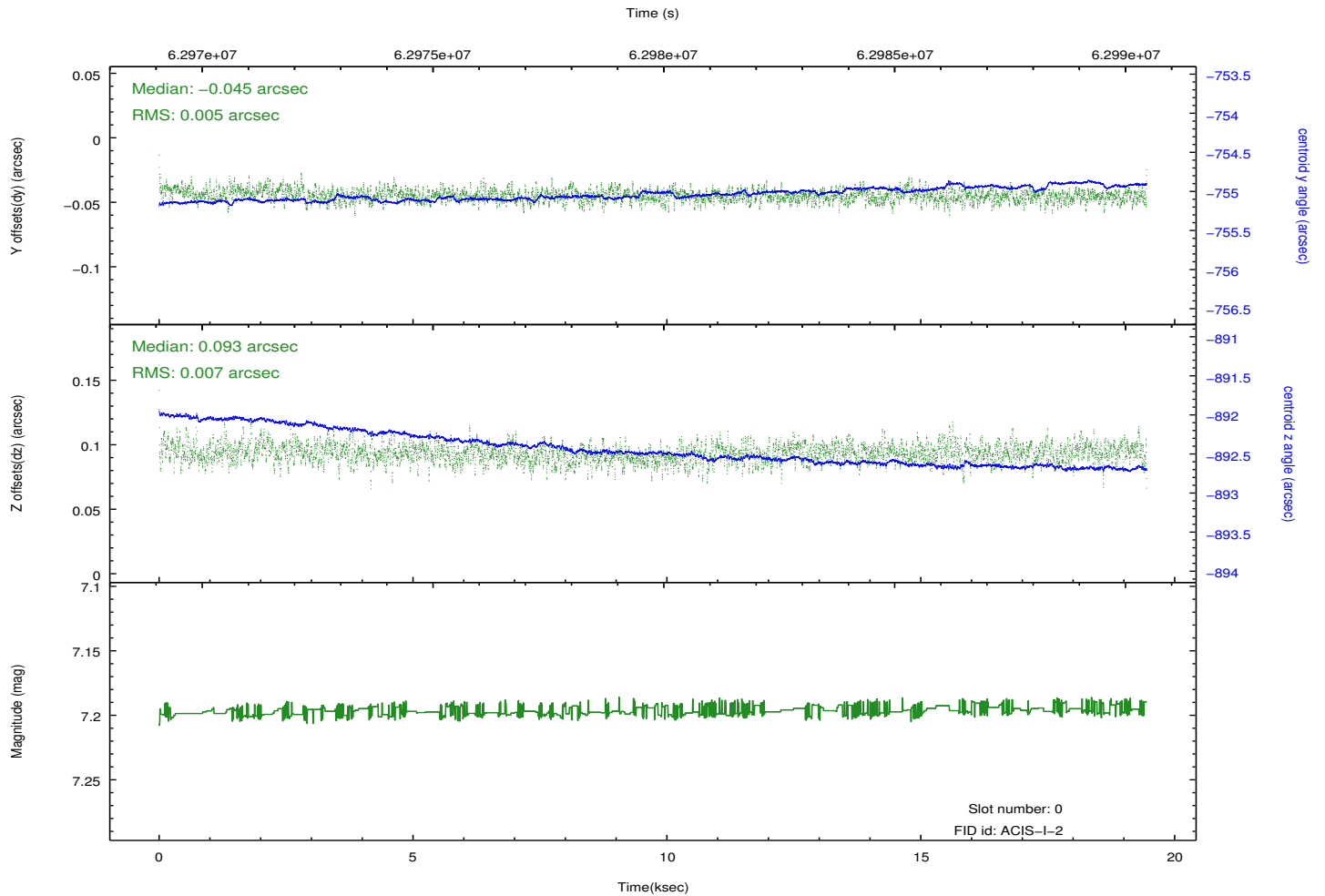
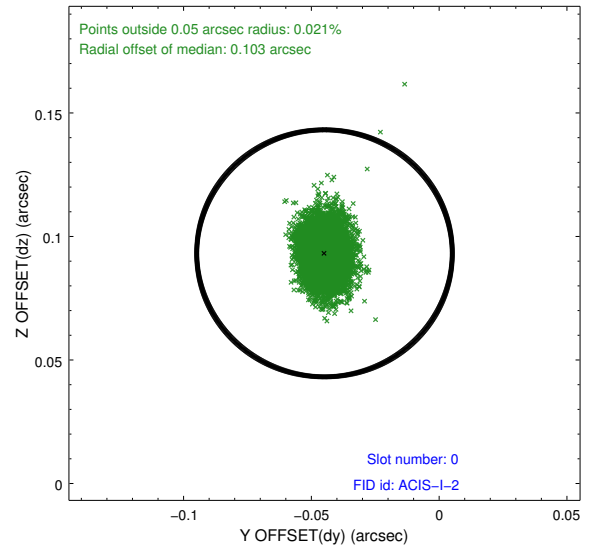
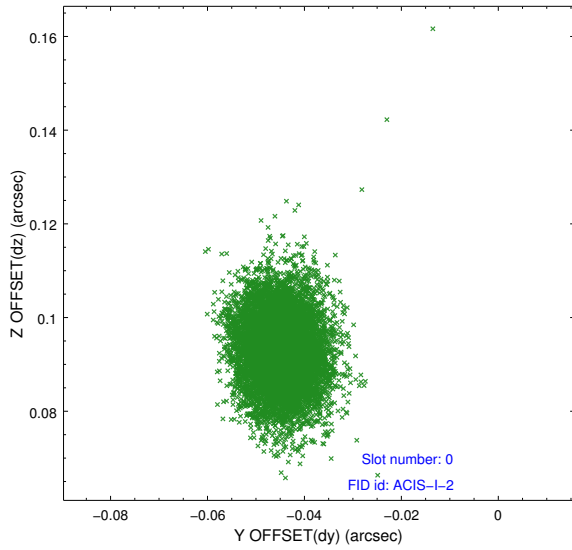


## 2.4.5 Slot 7

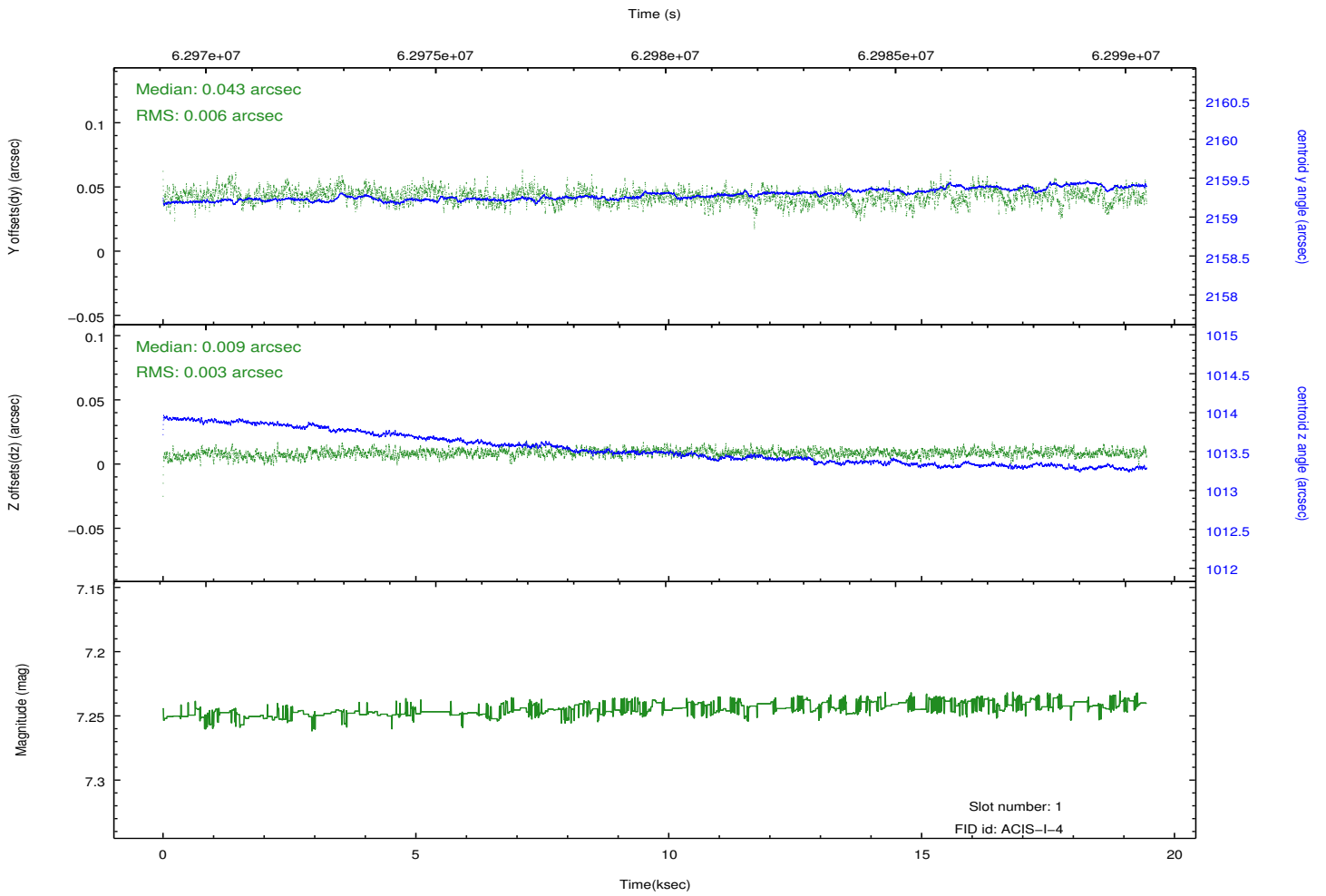
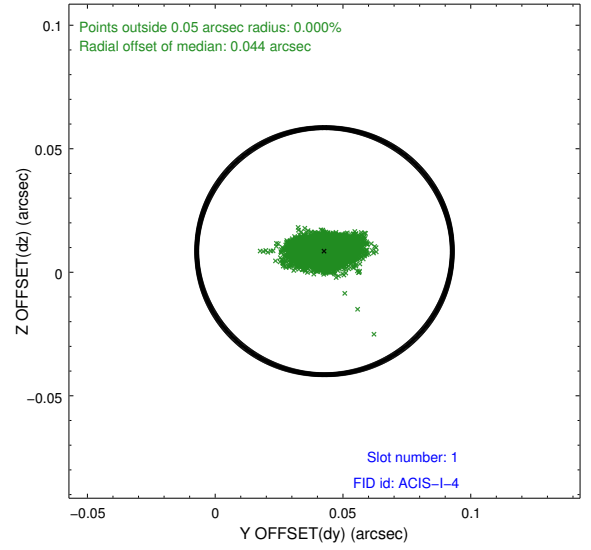
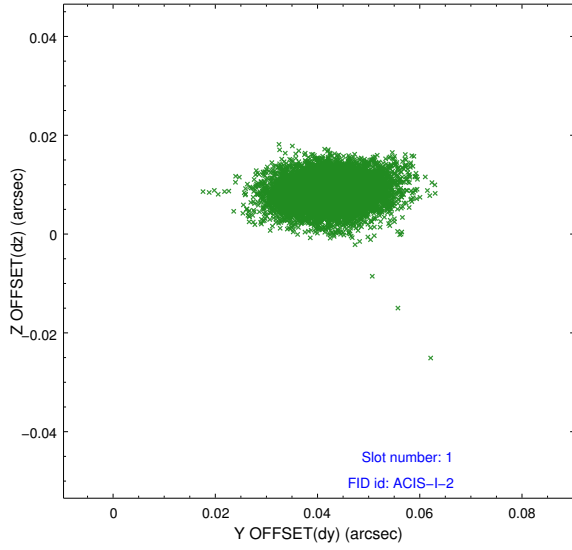


## 2.5 FID Slots

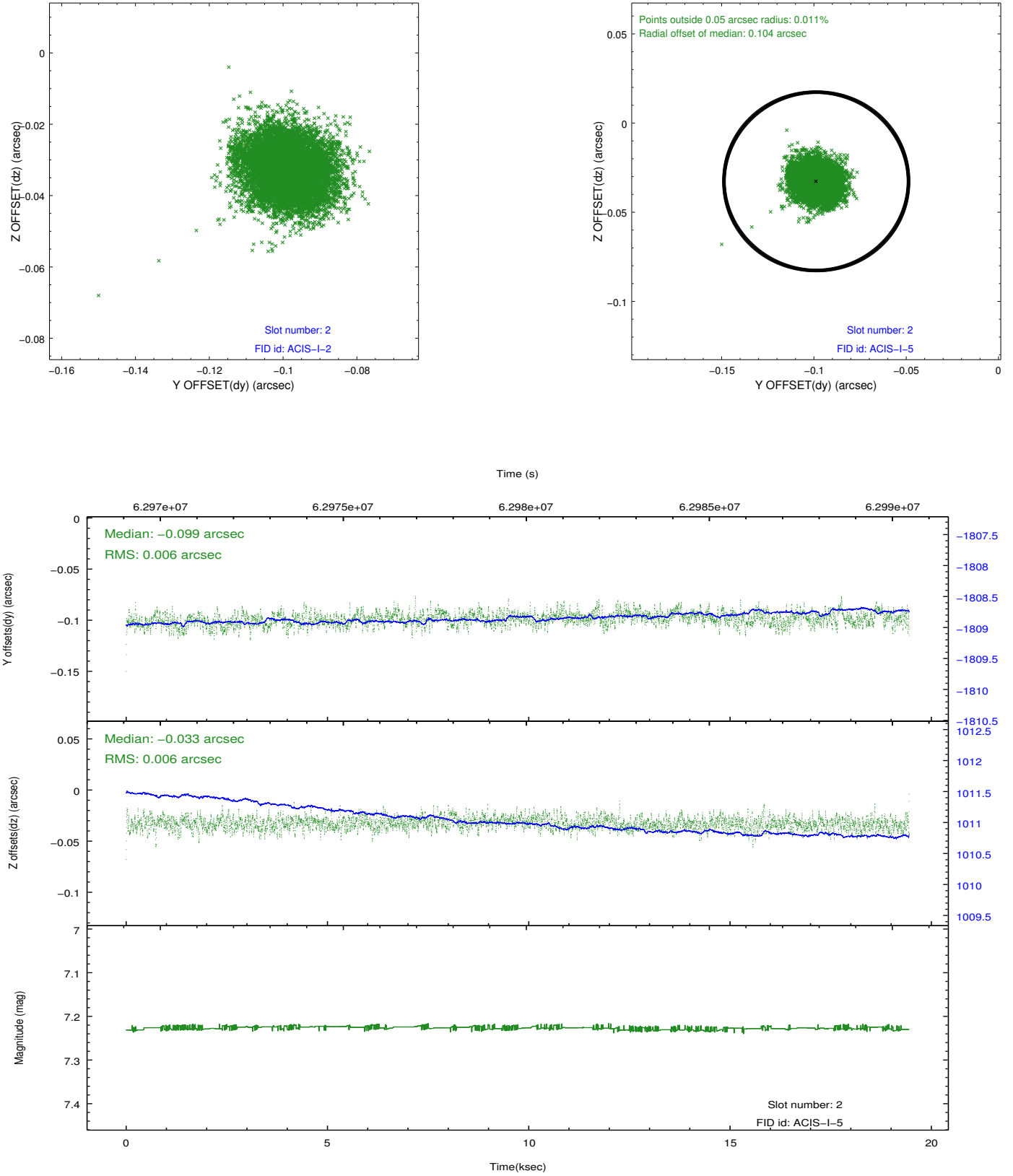
### 2.5.1 Slot 0



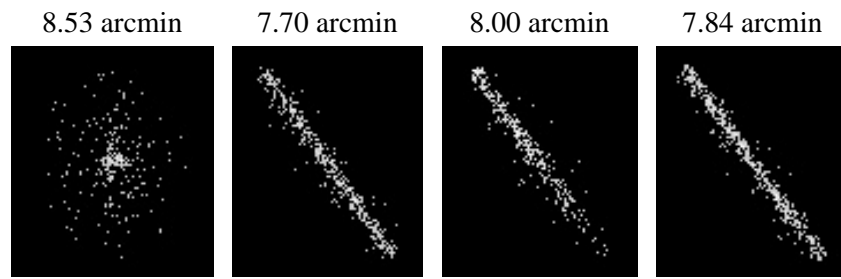
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.176

## A.2 Comments

Observation begins within the specified window, but extends beyond it.

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The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T\_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.