

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 419 - L2 Version 4  
Chandra X-Ray Center

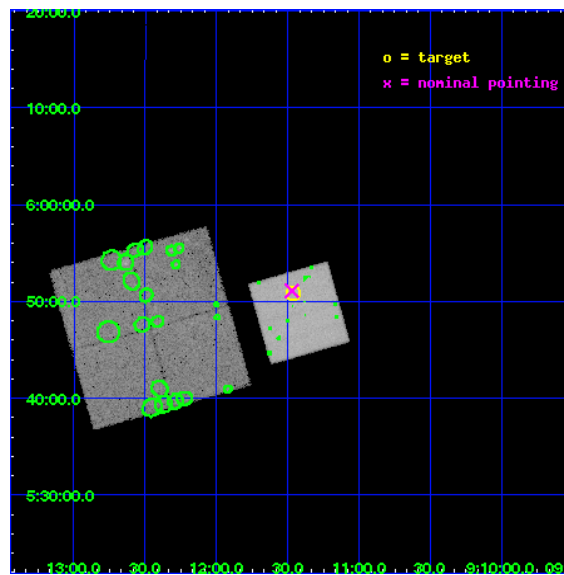
L2 Processing Date : Nov 21 2009

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# 1 Front

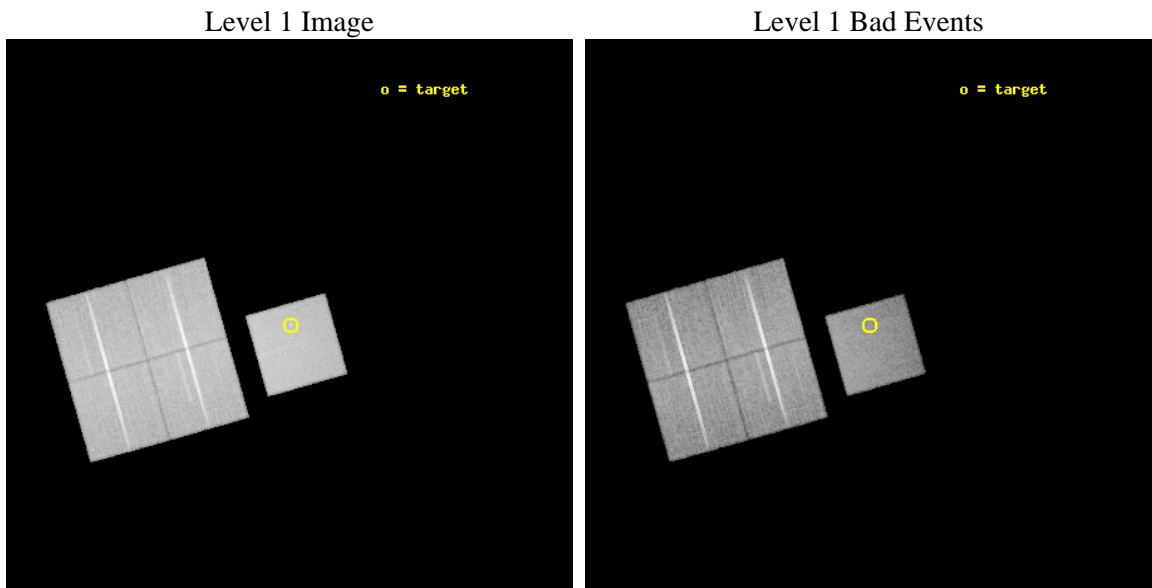
seq_num	700091	Sequence number
obs_id	419	Observation id
title	A SURVEY OF GRAVITATIONALLY LENSED QUASARS	Proposal title
observer	Prof Gordon Garmire	Principal investigator
object	RX J0911.4+0551	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.864583	Observer's specified target RA
dec_targ	5.847778	Observer's specified target Dec
ra_nom	137.8677099173	Nominal RA
dec_nom	5.8516845372778	Nominal Dec
roll_nom	74.197663676153	Nominal Roll
revision	4	Processing version of data
ontime	29163.992664188	Sum of GTIs [s]
livetime	28794.700628626	Livetime [s]
ontime0	29163.951624185	Sum of GTIs [s]
ontime1	29160.66963397	Sum of GTIs [s]
ontime2	29160.628583975	Sum of GTIs [s]
ontime3	29160.587514043	Sum of GTIs [s]
ontime7	29163.992664188	Sum of GTIs [s]
l2events	197309	Number of level 2 events



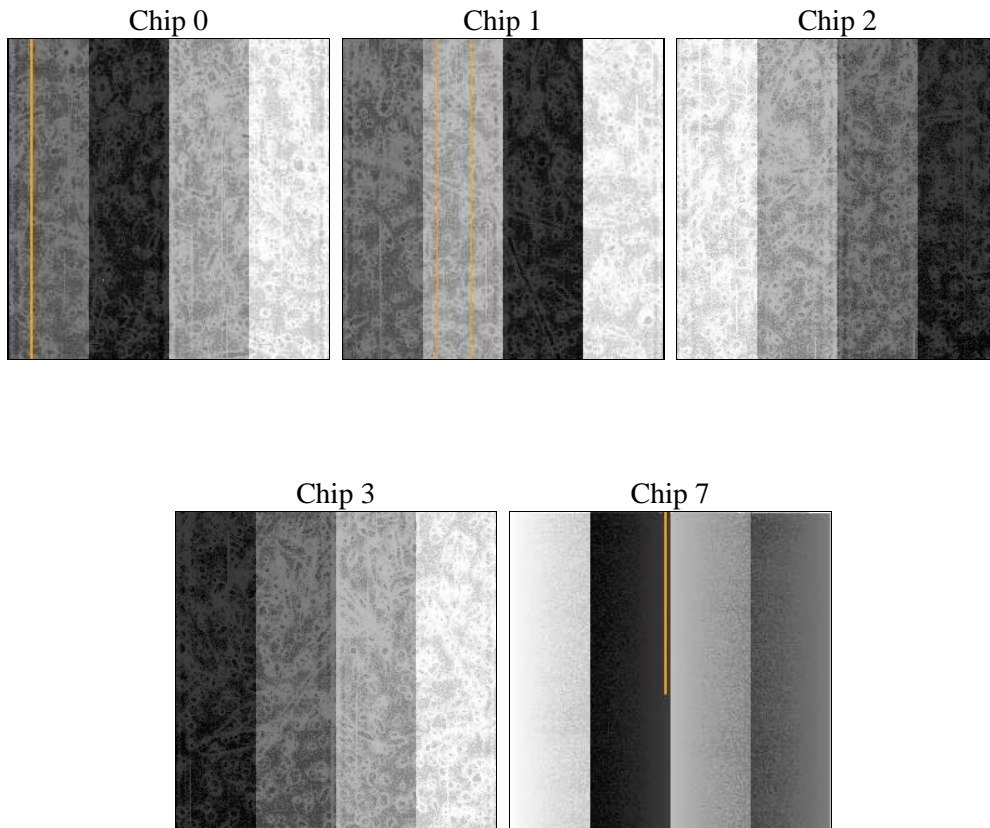
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	30000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	29163.992664188	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime0	29163.951624185	Sum of GTIs [s]
date	2009-11-21T10:34:57	Date and time of file creation	ontime1	29160.66963397	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	29160.628583975	Sum of GTIs [s]
			ontime3	29160.587514043	Sum of GTIs [s]
			ontime7	29163.992664188	Sum of GTIs [s]
			l1events	1287507	Number of level 1 events

### 2.1.4 Events

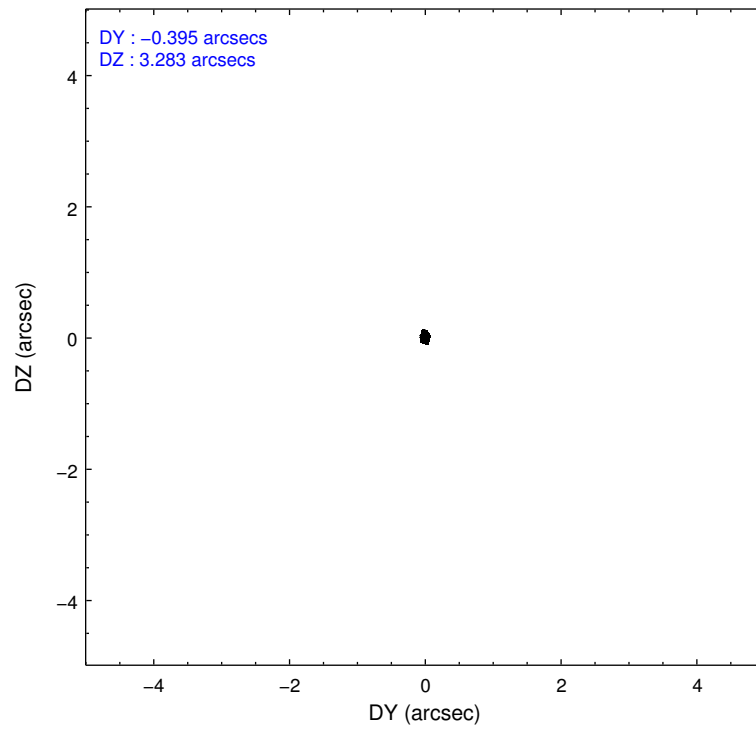
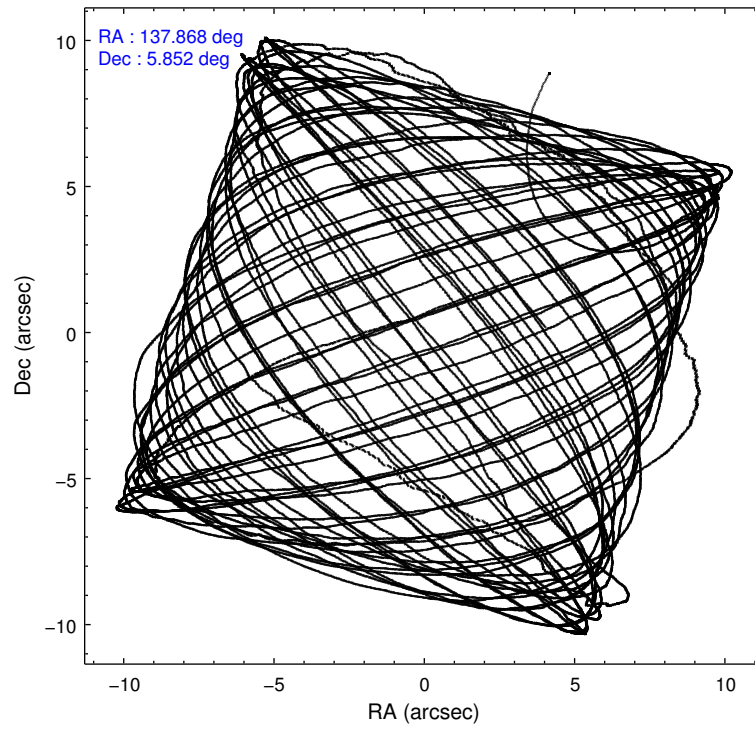
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	242504	239918	262627	261528	280930
rejected events	217000	214010	239005	237096	170061
rejected %	89%	89%	91%	90%	60%

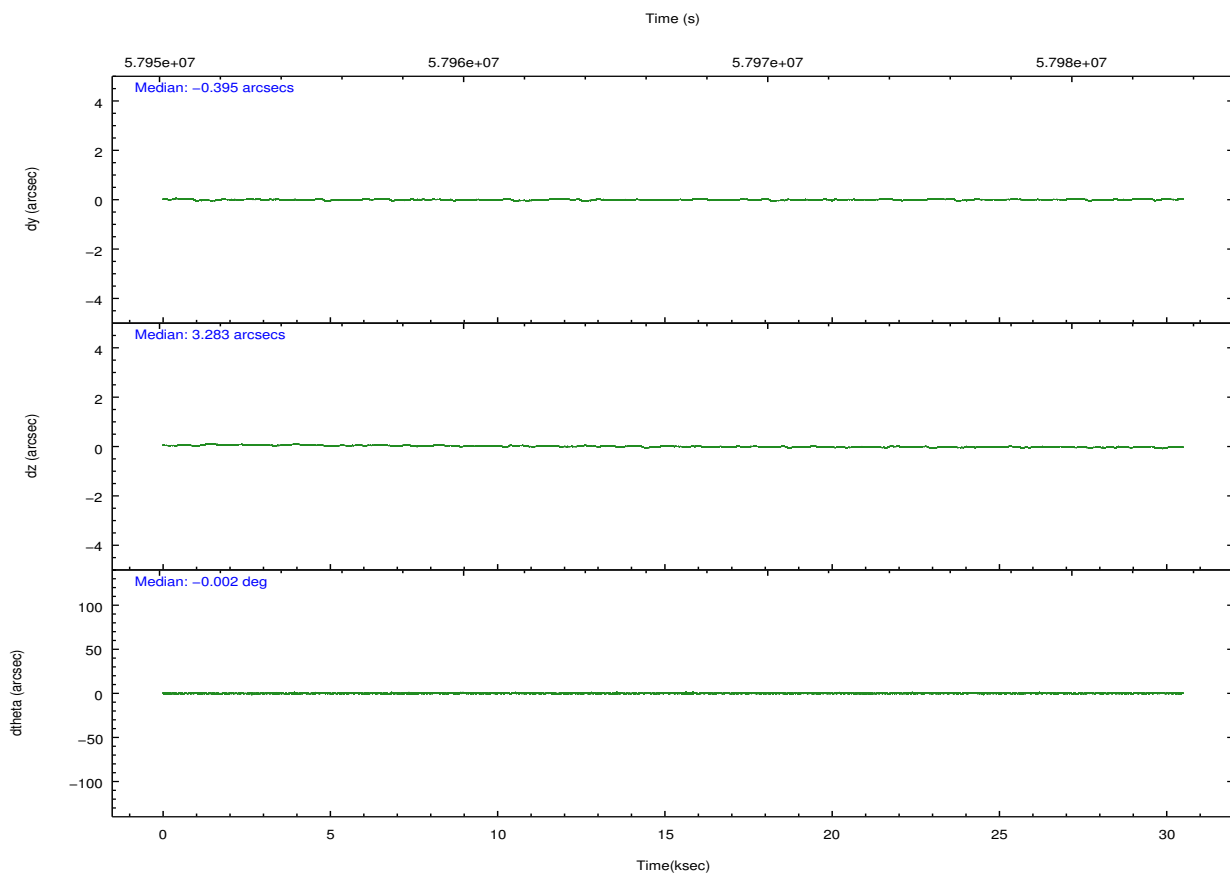
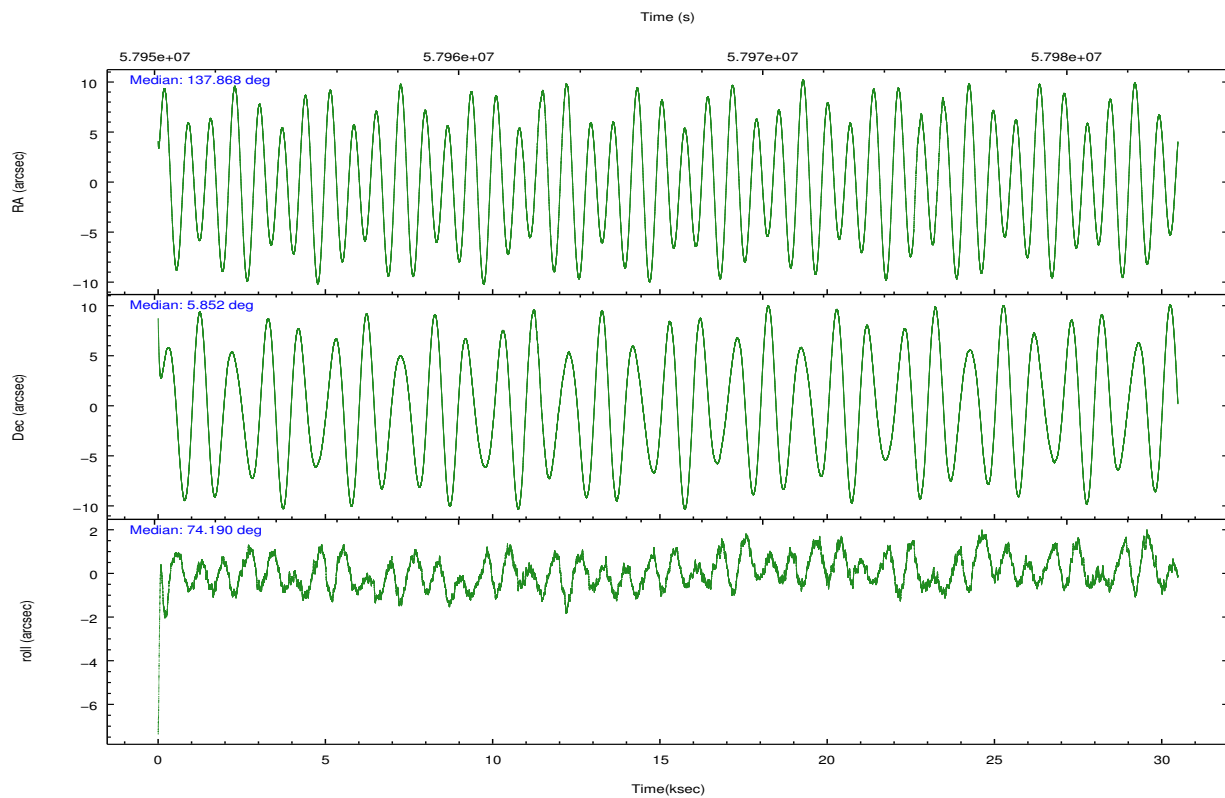
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	6374	5633	5612	5263	7960
	2%	2%	2%	2%	2%
grade 1 events	66	73	37	53	152
	0%	0%	0%	0%	0%
grade 2 events	9535	9604	9139	9860	23833
	3%	4%	3%	3%	8%
grade 3 events	1906	2176	1595	1597	6826
	0%	0%	0%	0%	2%
grade 4 events	1699	2045	1592	1608	6110
	0%	0%	0%	0%	2%
grade 5 events	4996	5084	4426	4916	16881
	2%	2%	1%	1%	6%
grade 6 events	5995	6453	5695	6111	66158
	2%	2%	2%	2%	23%
grade 7 events	211933	208850	234531	232120	153010
	87%	87%	89%	88%	54%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01237	ACIS-01237	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	137.874378	137.8677099172968	Subarray requested	NONE	NONE
Pointing Dec	5.824885	5.851684537277777	Alternating exposures requested	N	N
Pointing Roll	74.040361	74.19766367615291	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	57952128.184000	57951167.425172			
Observation start date	1999-11-02T17:47:44	1999-11-02T17:32:47			
Observation end time	57982128.184000	57982703.60131			
Observation end date	1999-11-03T02:07:44	1999-11-03T02:18:23			
Read mode	TIMED	TIMED			

## 2.3 Aspect



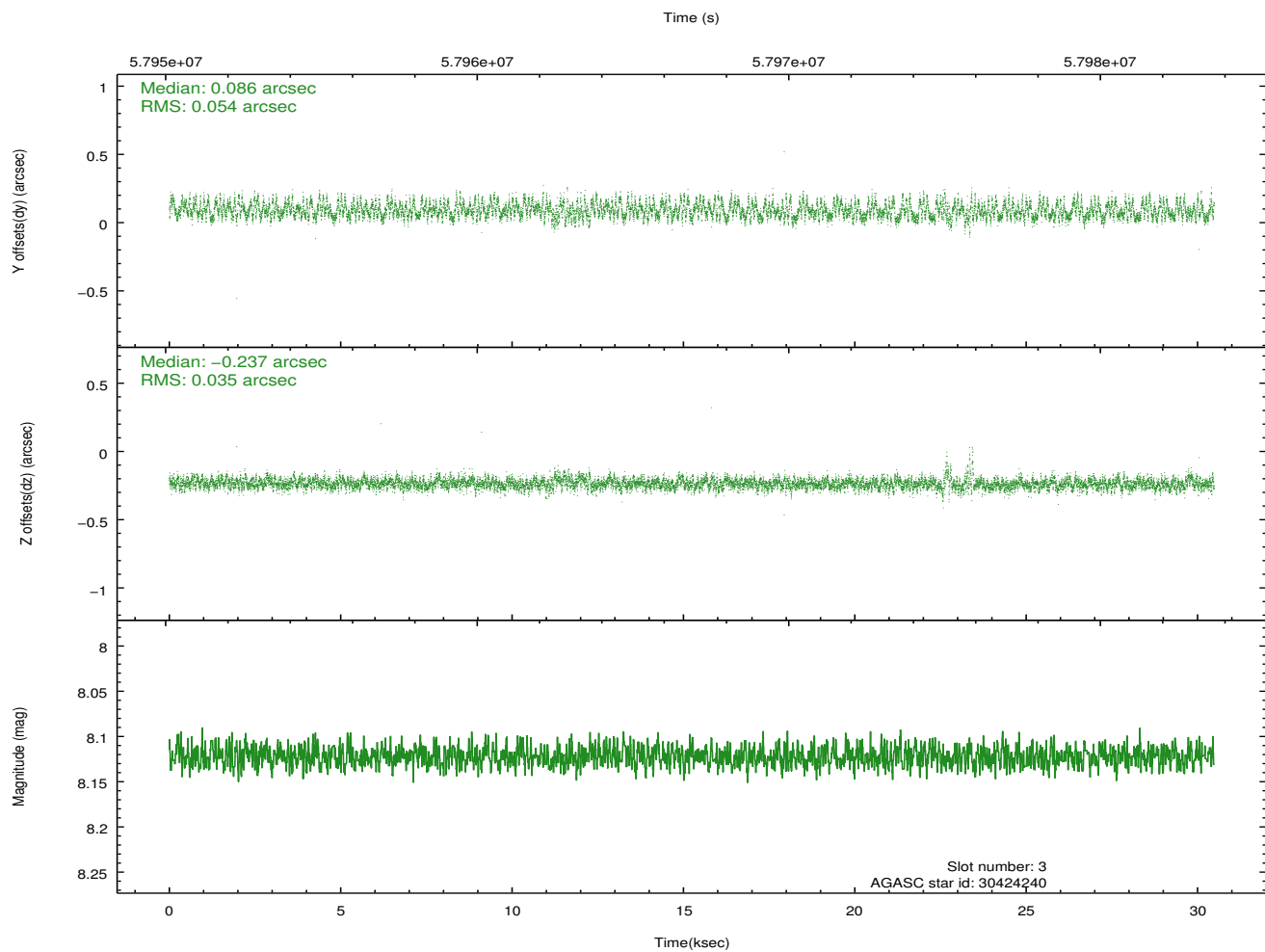
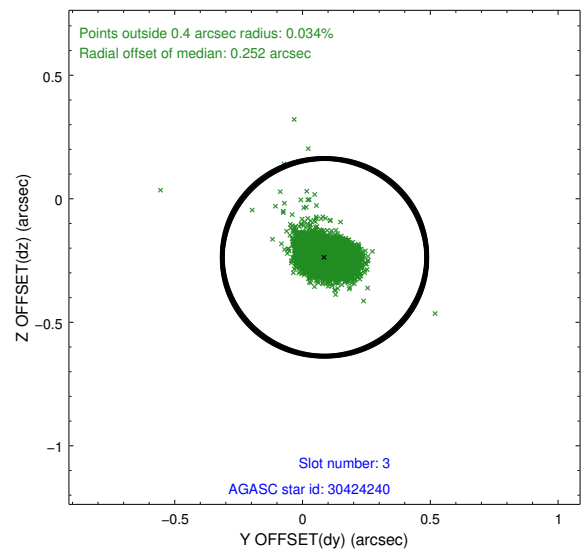
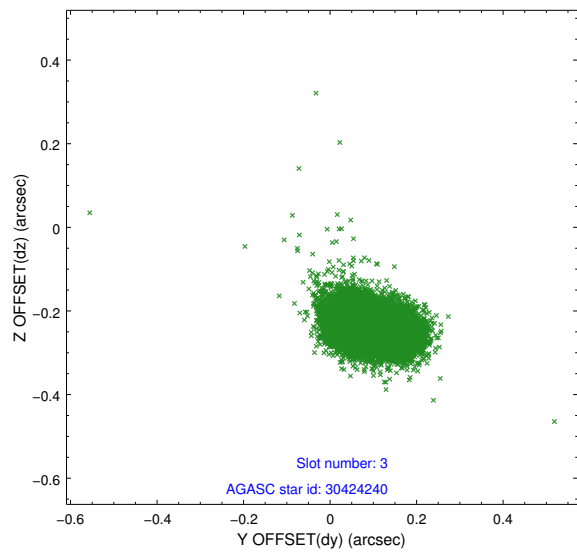


### Slot Statistics

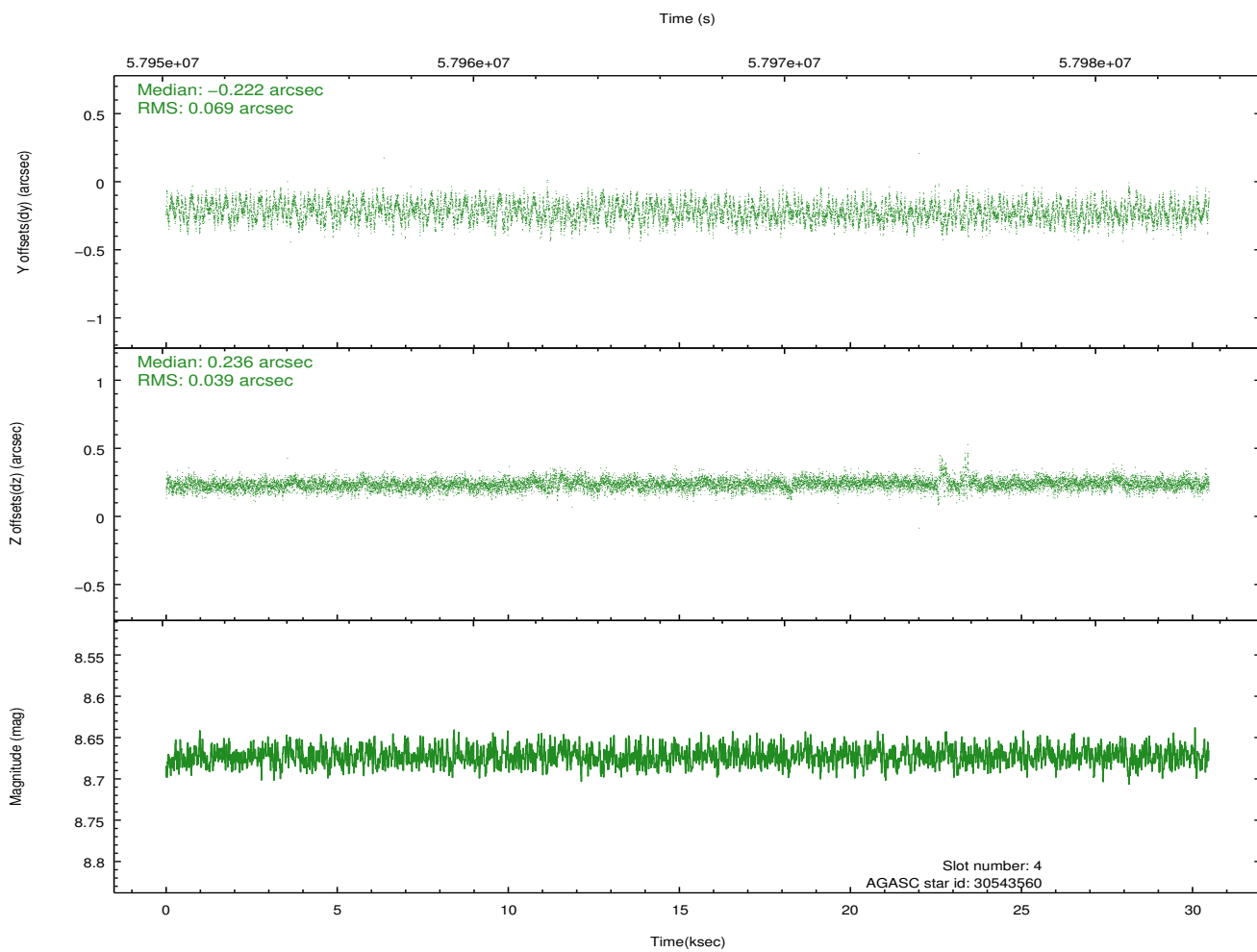
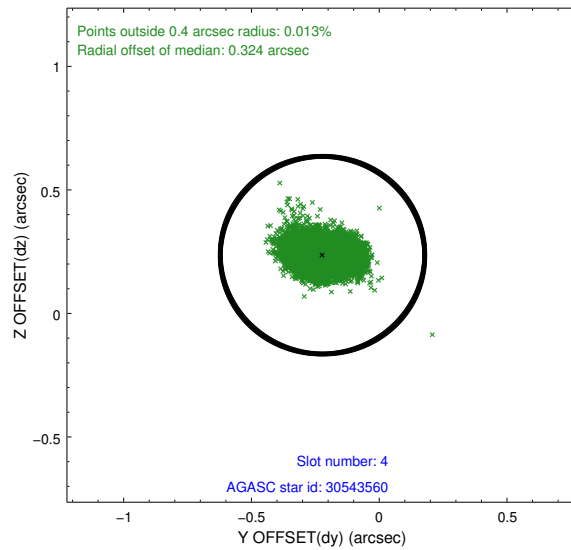
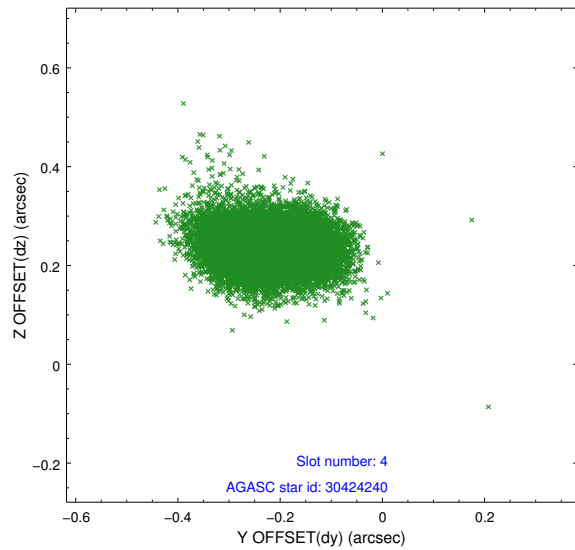
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	14870	0.001	-0.028	0.007	0.012	0.000000	0.000000	60.97	-1853.45
1	FID	ACIS-S-4	7.21	14868	0.048	0.014	0.006	0.010	0.000000	0.000000	2161.25	184.09
2	FID	ACIS-S-5	7.24	14870	-0.077	0.024	0.006	0.011	0.000000	0.000000	-1805.12	177.90
3	GUIDE	30424240	8.12	14867	0.086	-0.237	0.067	0.109	137.258897	5.607489	-1357.86	1905.33
4	GUIDE	30543560	8.67	14867	-0.222	0.236	0.084	0.137	138.679994	6.170219	1990.19	-2428.91
5	GUIDE	30545336	9.25	14862	0.062	-0.069	0.079	0.129	137.659672	5.633634	-873.23	550.38
6	GUIDE	30552432	9.47	14862	-0.032	-0.070	0.099	0.164	137.688606	6.352959	1644.89	1162.44
7	GUIDE	30553808	9.53	14857	0.101	0.141	0.075	0.124	138.122602	5.435572	-1102.39	-1240.12

## 2.4 Star Slots

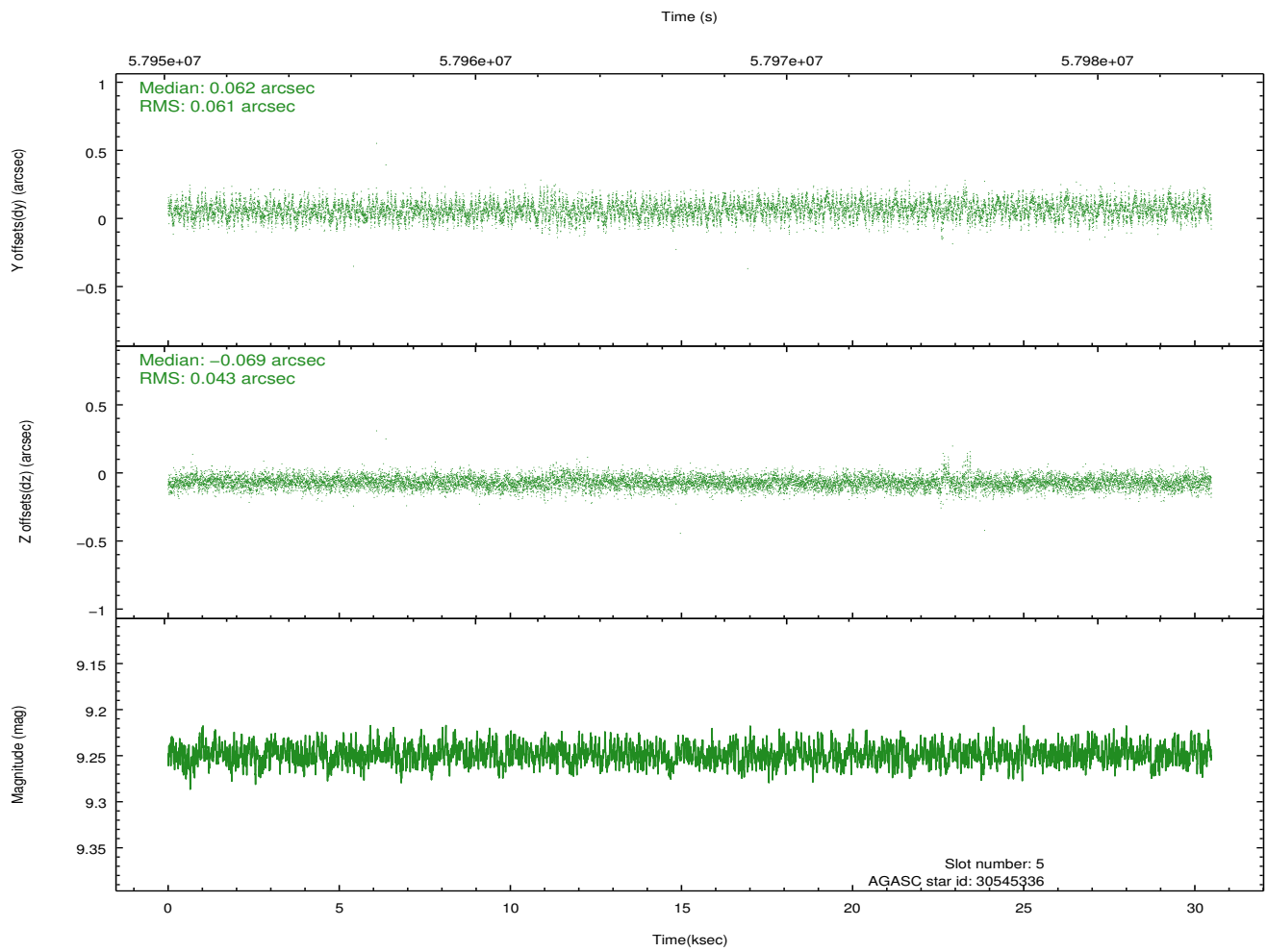
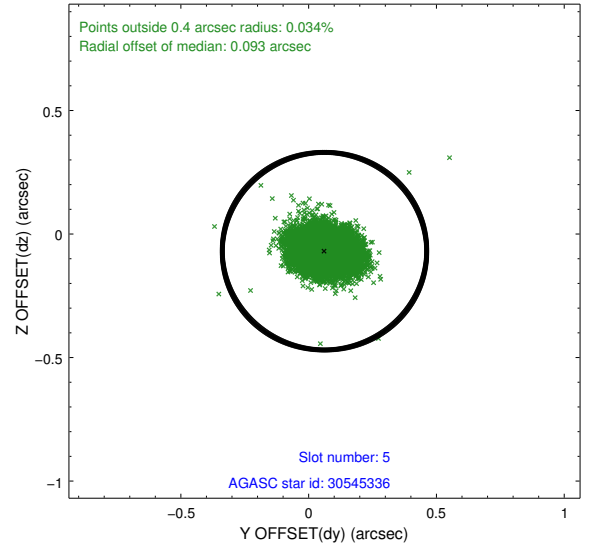
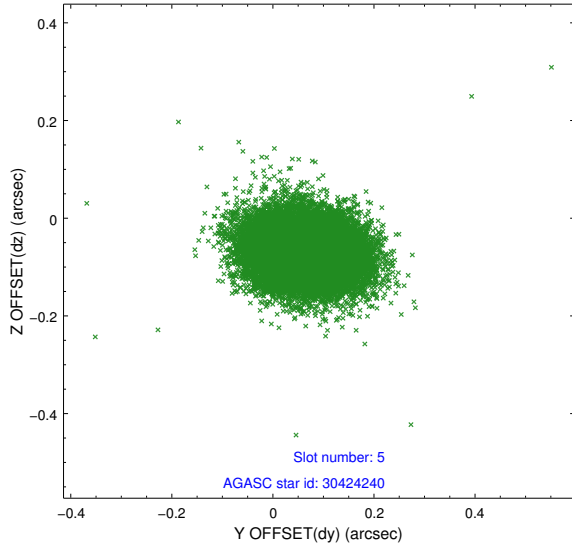
### 2.4.1 Slot 3



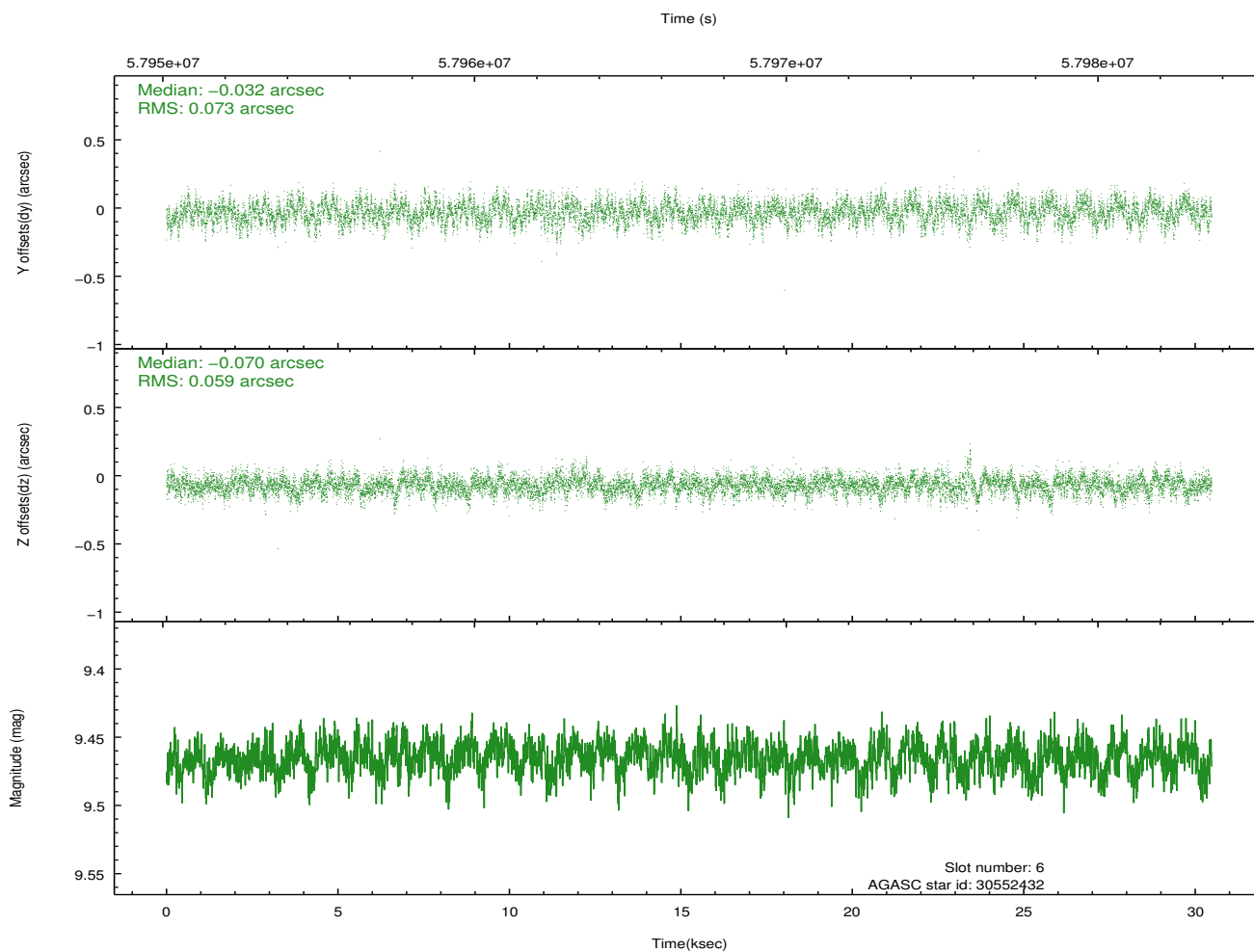
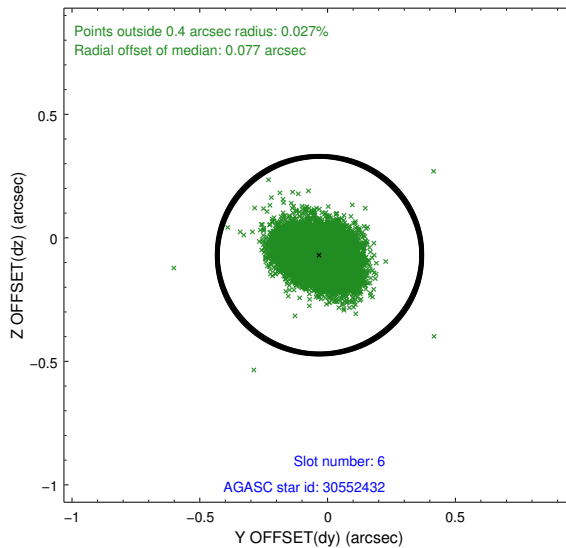
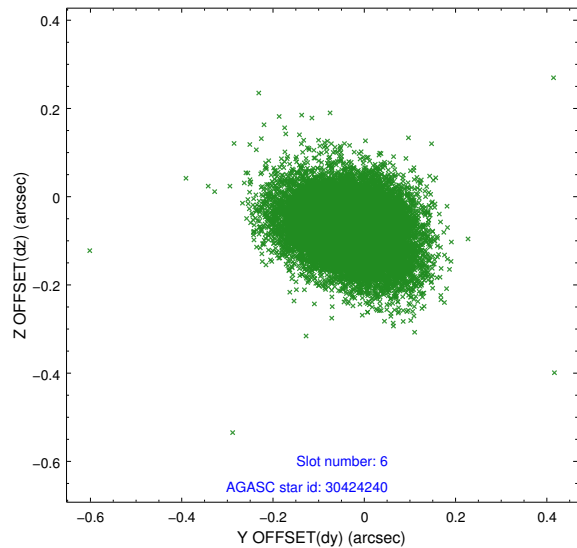
## 2.4.2 Slot 4



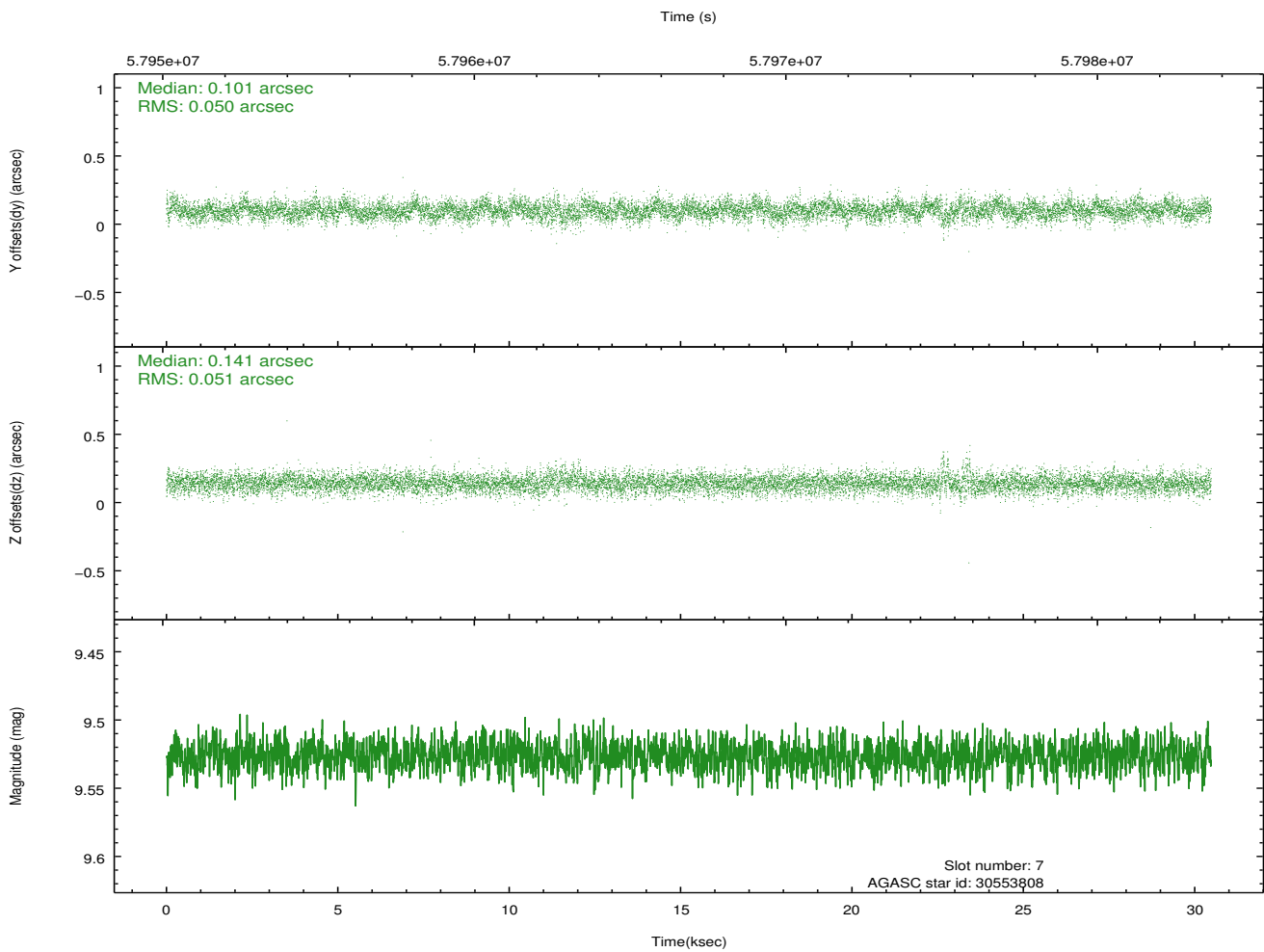
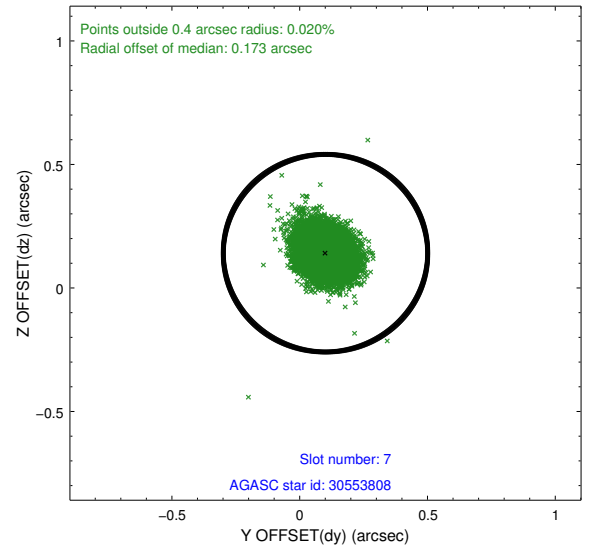
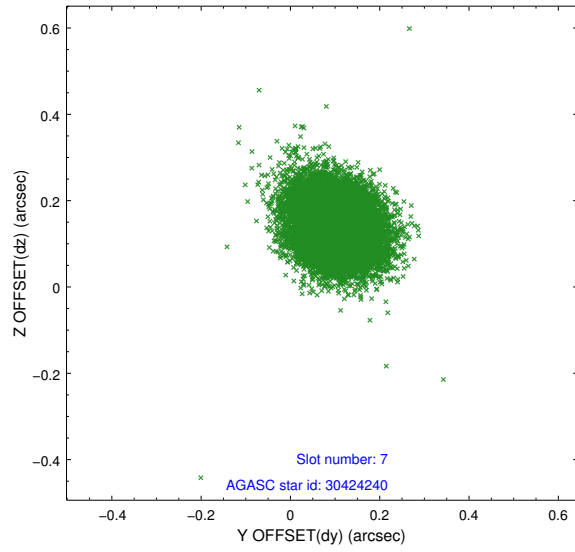
### 2.4.3 Slot 5



## 2.4.4 Slot 6

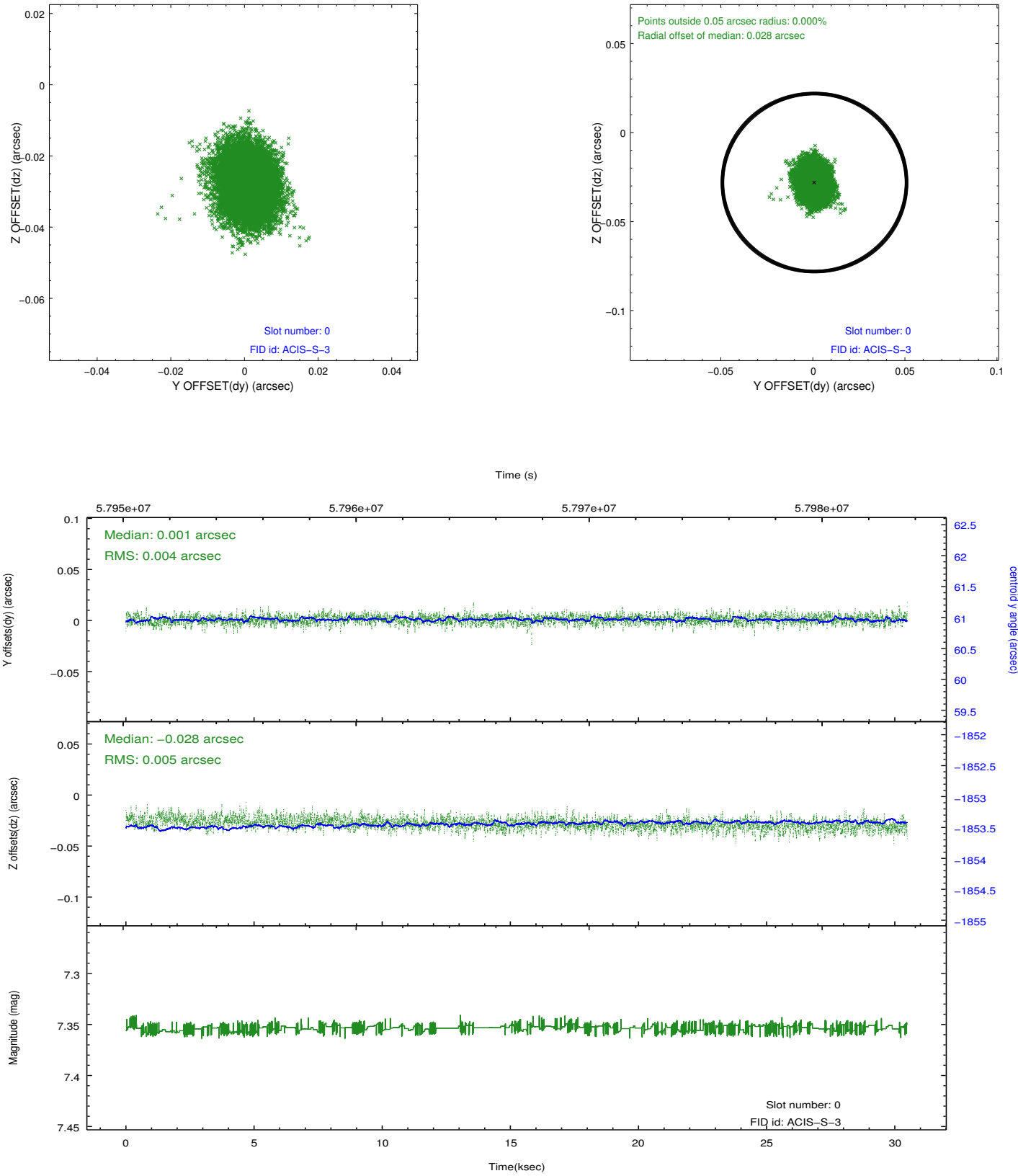


## 2.4.5 Slot 7

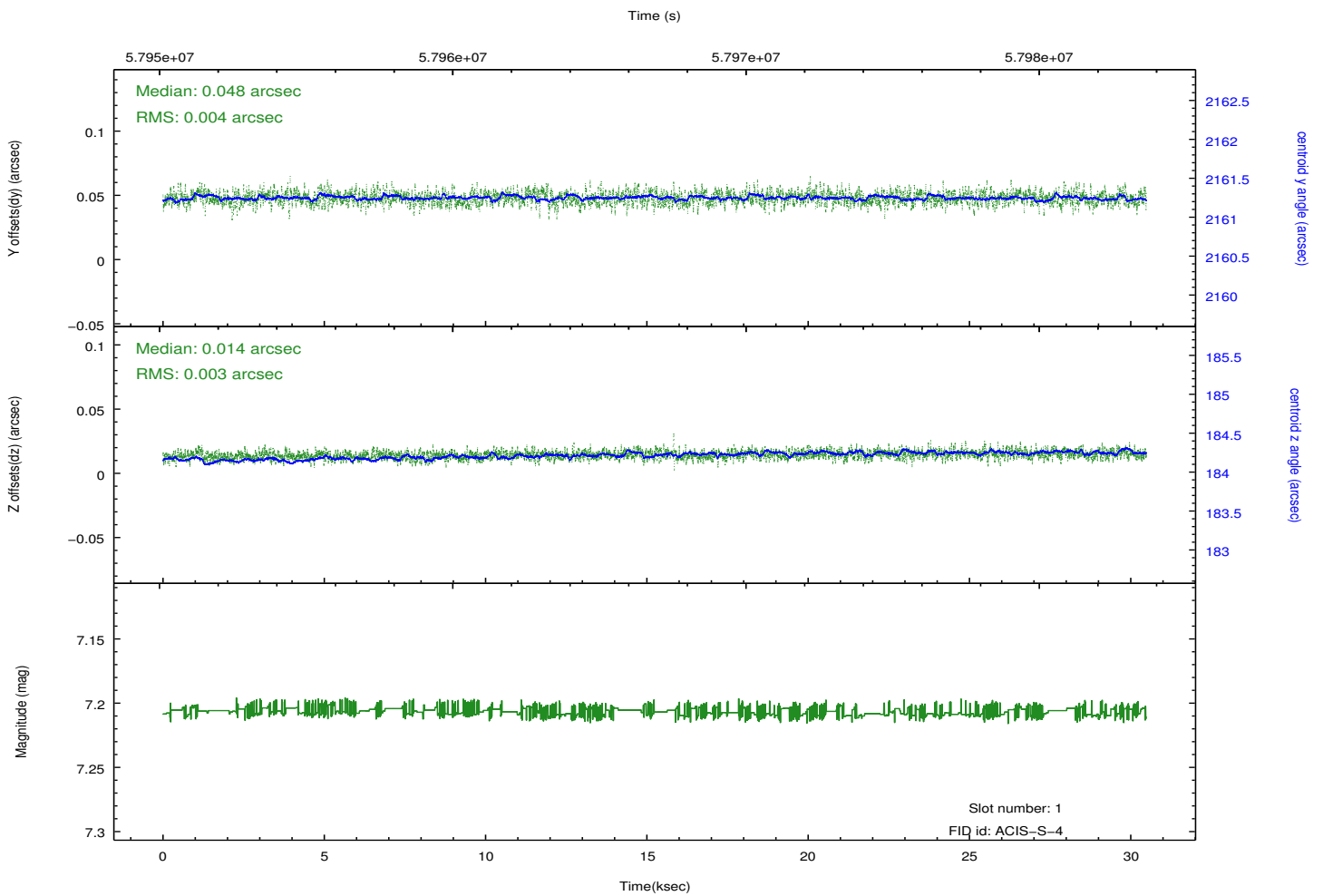
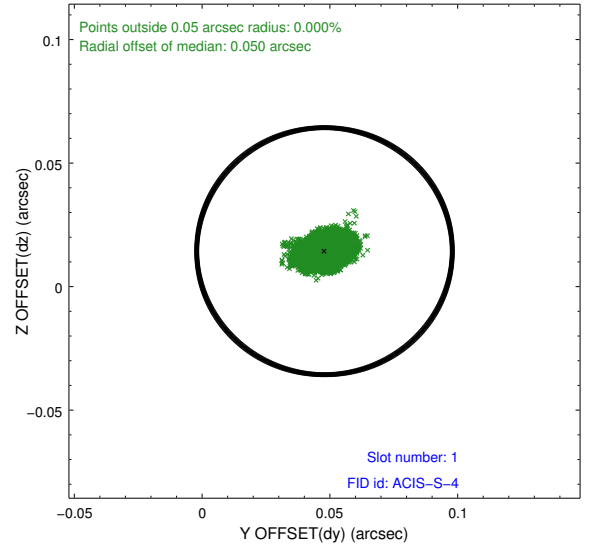
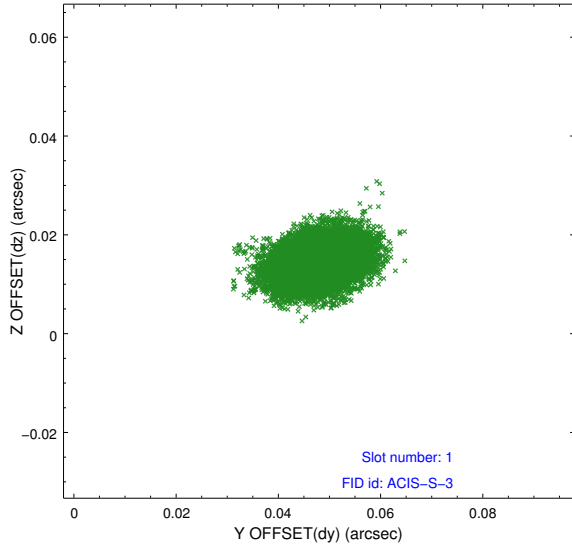


## 2.5 FID Slots

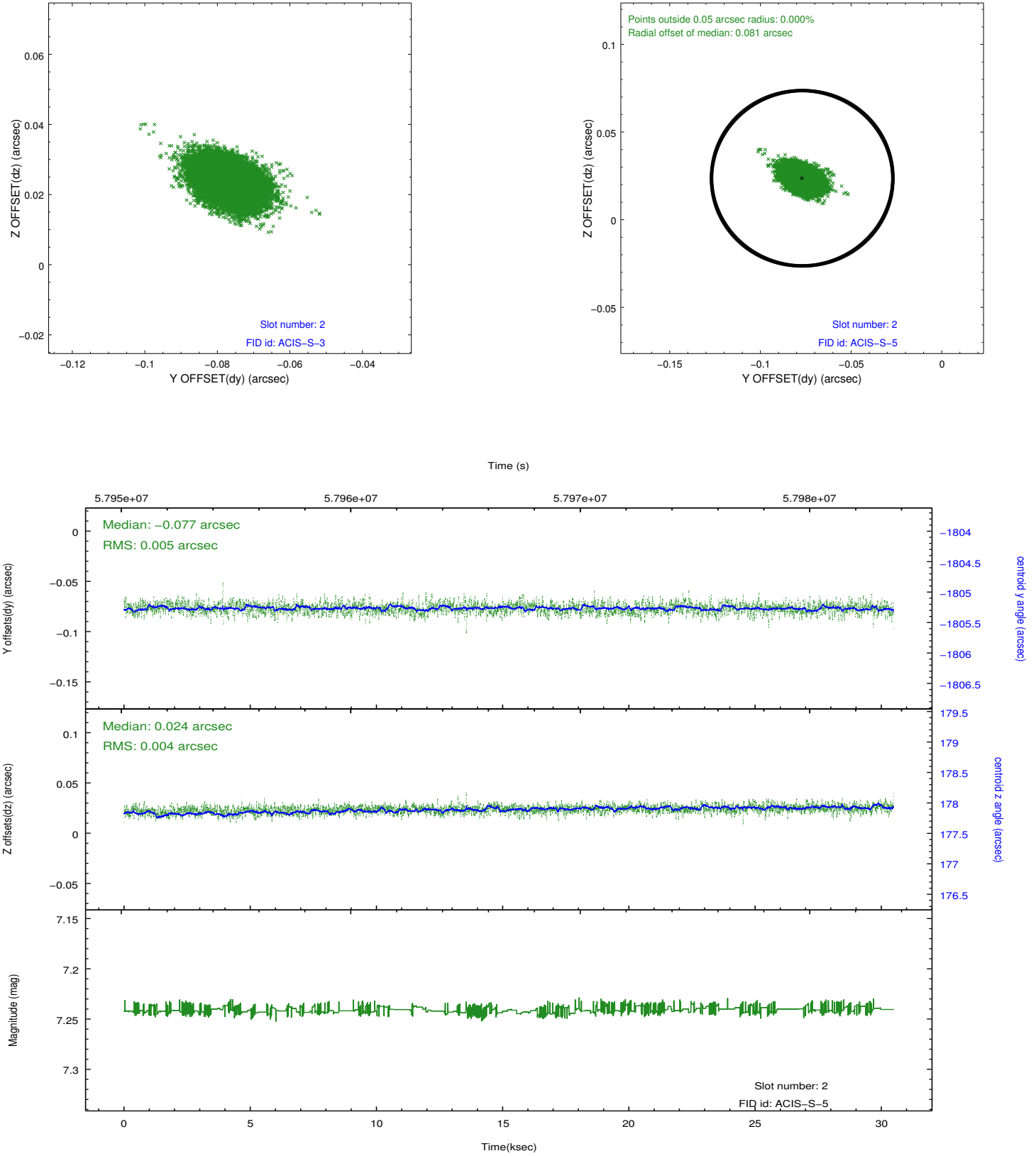
### 2.5.1 Slot 0



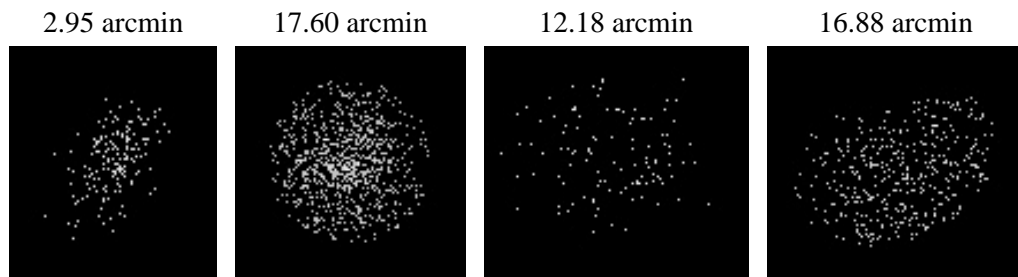
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2009.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.164

## A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is warmer than -116.7 degrees C for the entire observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. 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. This reprocessing of the data applies no CTI correction because none is available for that temperature.