

# V&V Reference Report

## L2 ASCDS Version : 8.1.1

Observation 763 - L2 Version 4  
Chandra X-Ray Center

L2 Processing Date : Nov 21 2009

## Contents

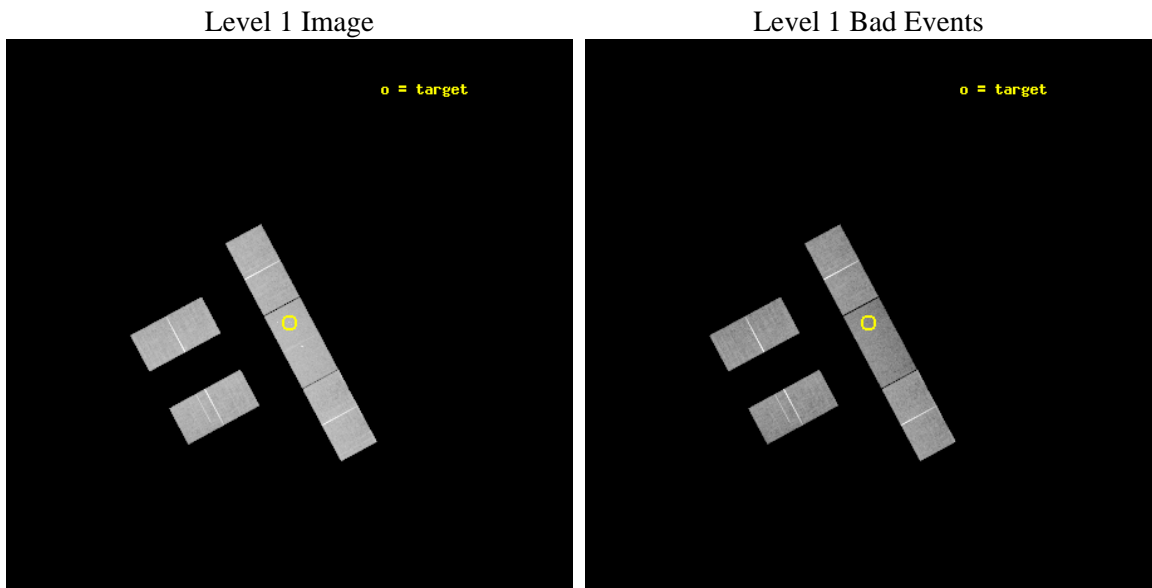
<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>3</b>	<b>Point Sources</b>	<b>17</b>
<b>A</b>	<b>Summary</b>	<b>18</b>
A.1	Status . . . . .	18
A.2	Comments . . . . .	18



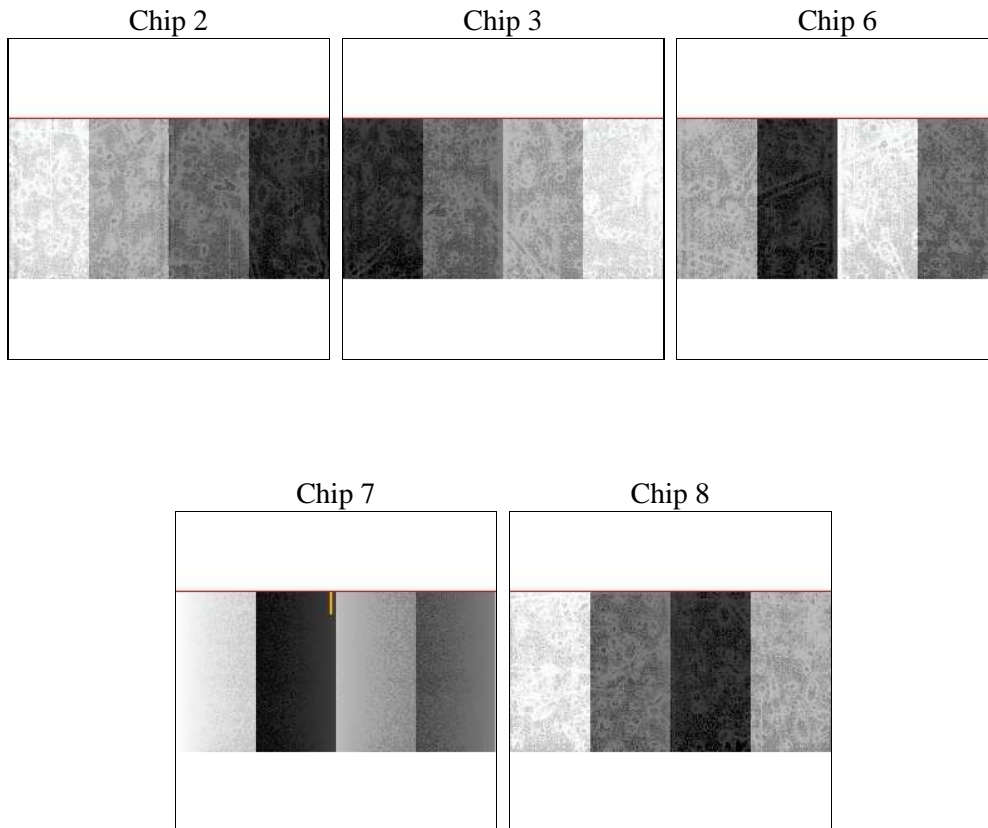
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30093.027000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	29654.269949876	Sum of GTIs [s]
caldbver	4.1.4	&#160	ontime2	29650.546859801	Sum of GTIs [s]
date	2009-11-21T10:41:20	Date and time of file creation	ontime3	29654.146829873	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	29654.187869877	Sum of GTIs [s]
			ontime7	29654.269949876	Sum of GTIs [s]
			ontime8	29654.105789877	Sum of GTIs [s]
			l1events	784422	Number of level 1 events

### 2.1.4 Events

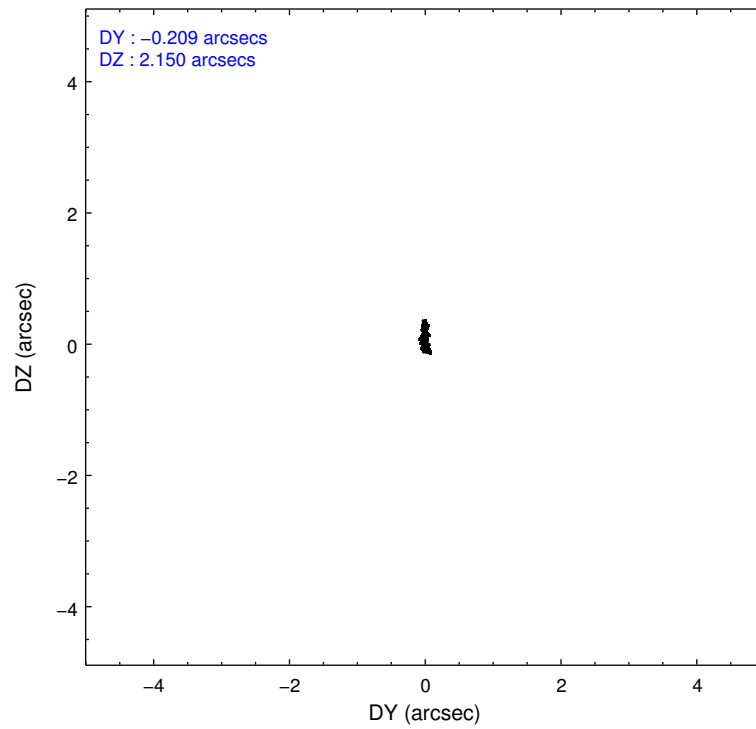
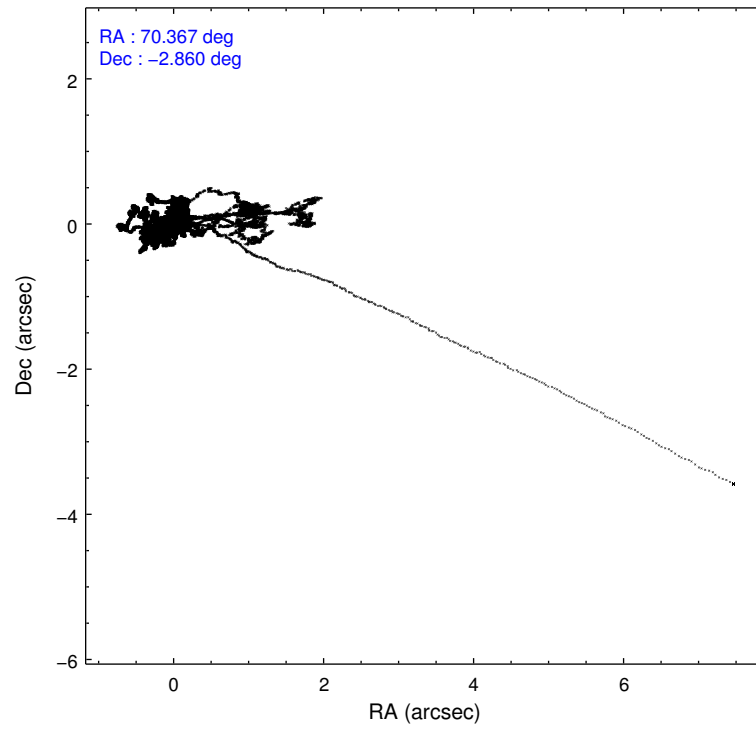
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	152914	145406	150335	158810	176957
rejected events	139340	131466	136413	88496	149124
rejected %	91%	90%	90%	55%	84%

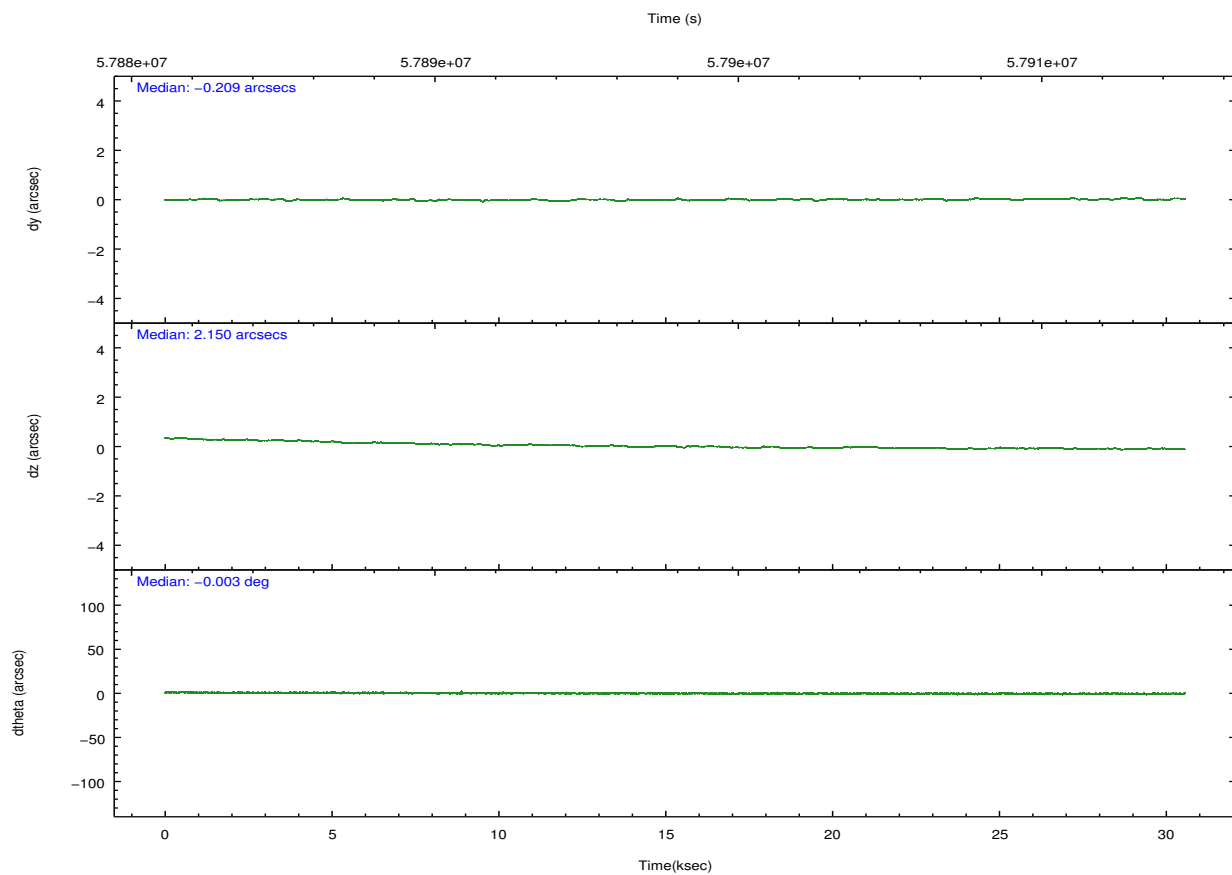
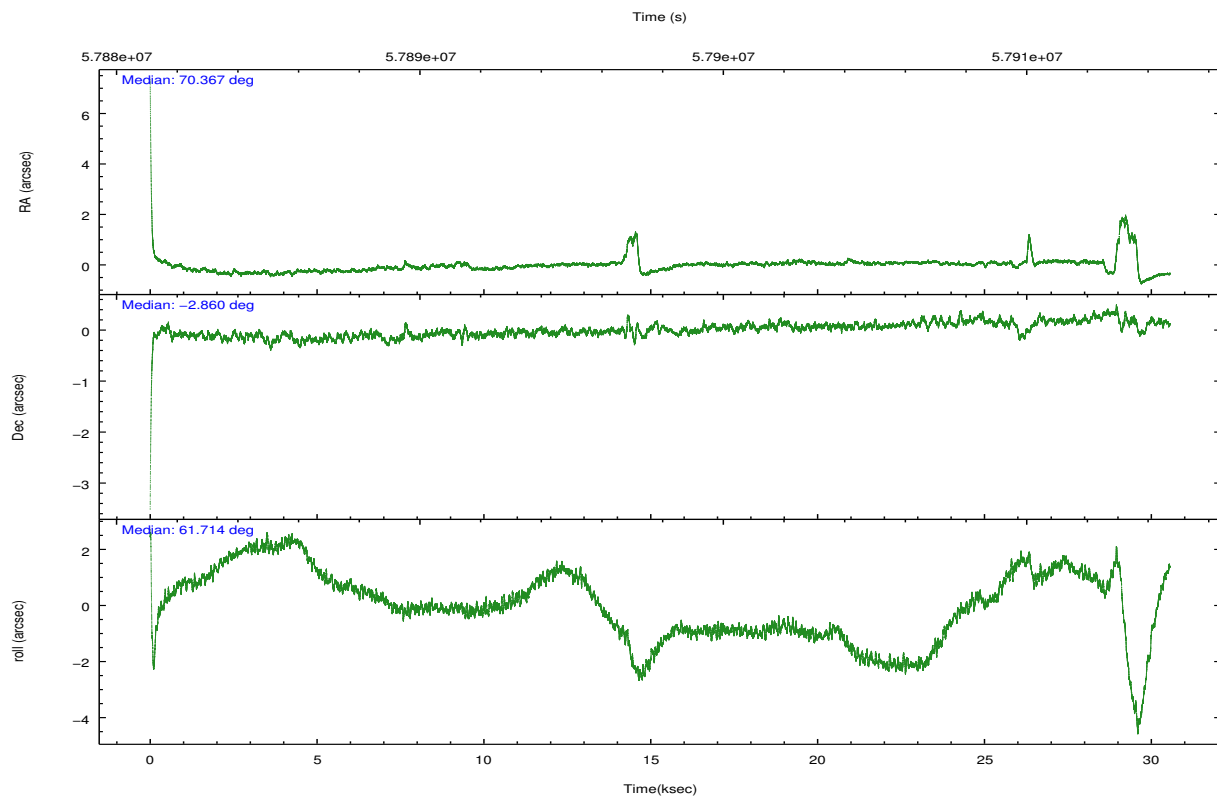
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2718	2614	2297	5935	5633
	1%	1%	1%	3%	3%
grade 1 events	15	18	18	65	42
	0%	0%	0%	0%	0%
grade 2 events	5394	5650	5479	15332	9093
	3%	3%	3%	9%	5%
grade 3 events	1149	1210	1257	4966	2436
	0%	0%	0%	3%	1%
grade 4 events	1091	1127	1197	4431	2320
	0%	0%	0%	2%	1%
grade 5 events	2116	2342	2559	8880	3371
	1%	1%	1%	5%	1%
grade 6 events	3224	3341	3693	39654	8352
	2%	2%	2%	24%	4%
grade 7 events	137207	129104	133835	79547	145710
	89%	88%	89%	50%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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
Pointing RA	70.367247	70.36654252500692	Subarray requested	CUSTOM	1/2
Pointing Dec	-2.887011	-2.859437529898947	Subarray start row	257	257
Pointing Roll	61.561195	61.71778728610058	Subarray row count	512	512
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	1.8
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	57883101.184000	57881658.072663			
Observation start date	1999-11-01T22:37:17	1999-11-01T22:14:18			
Observation end time	57913194.184000	57913863.061326			
Observation end date	1999-11-02T06:58:50	1999-11-02T07:11:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect



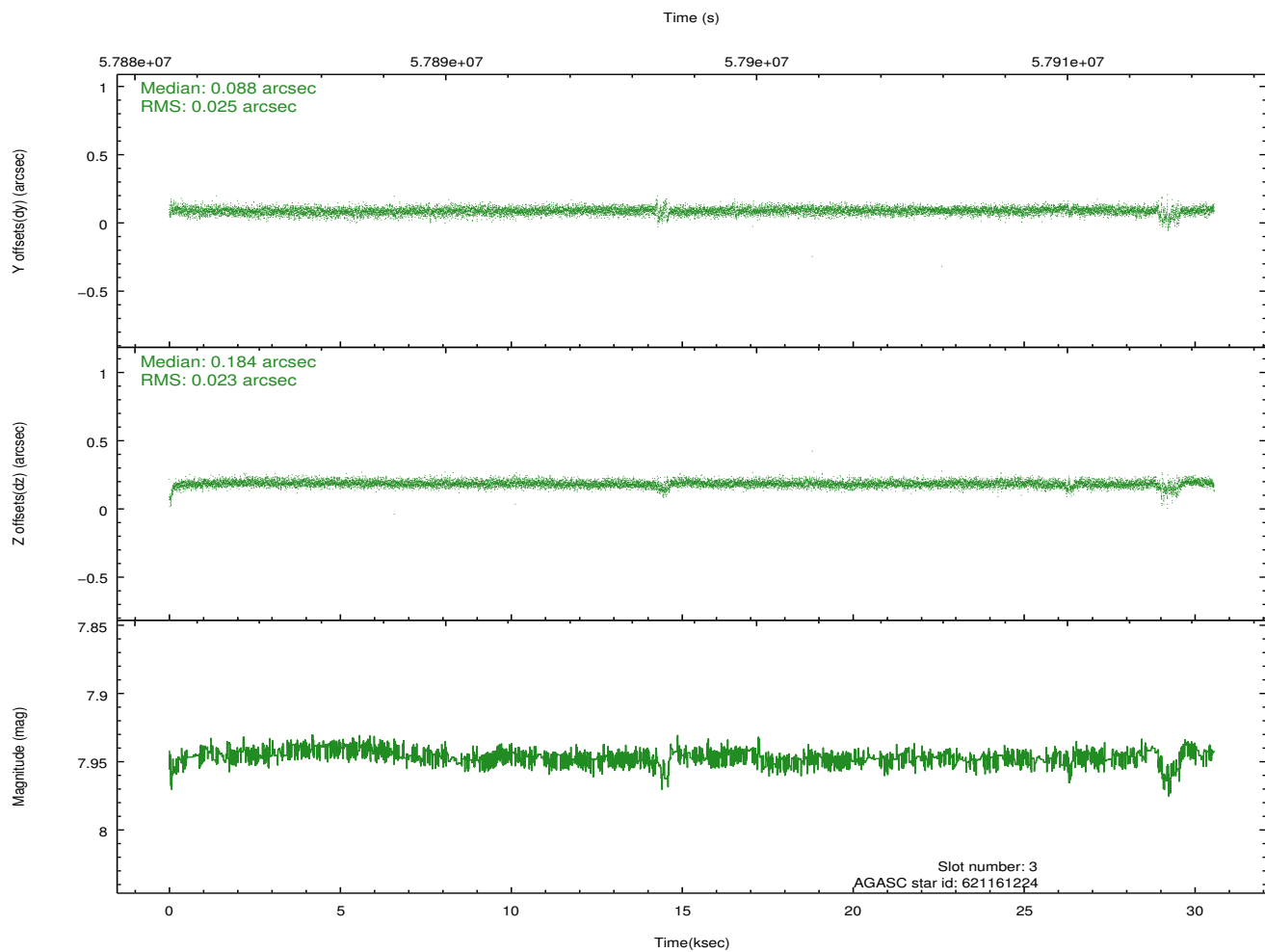
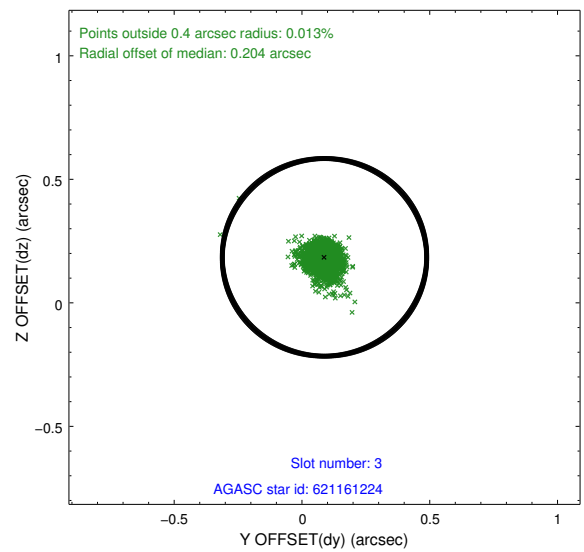
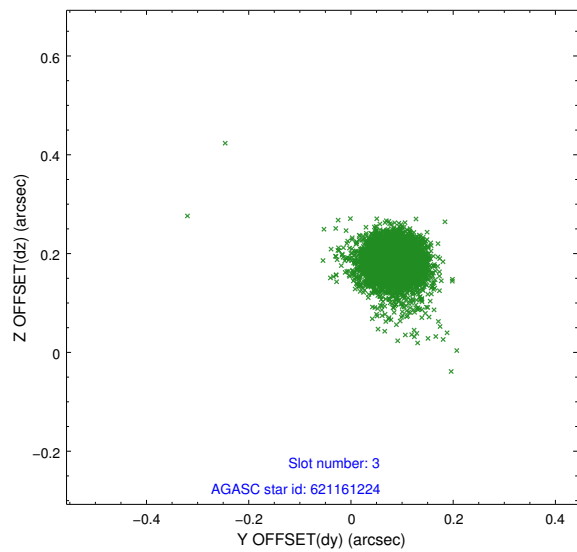


### Slot Statistics

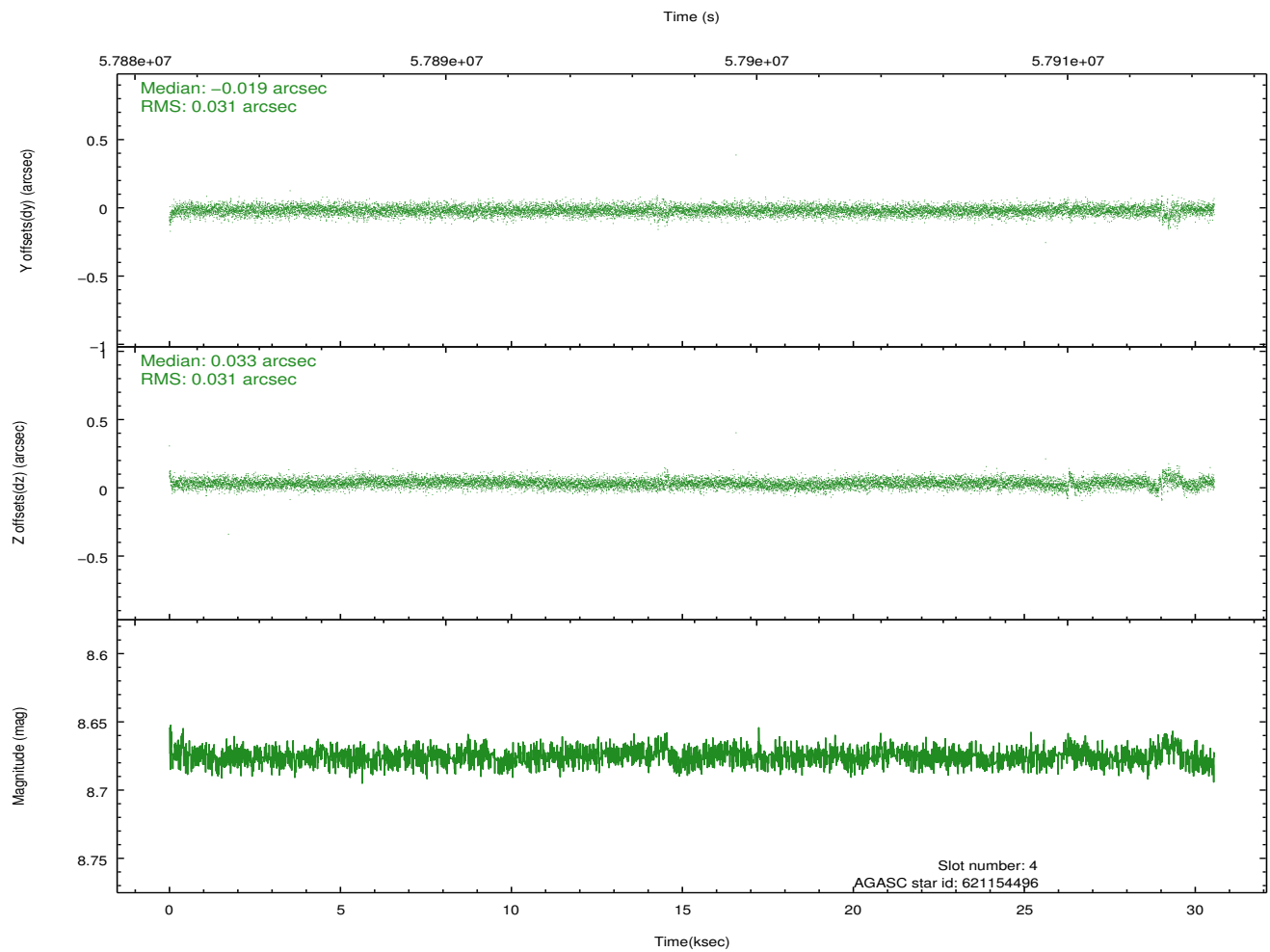
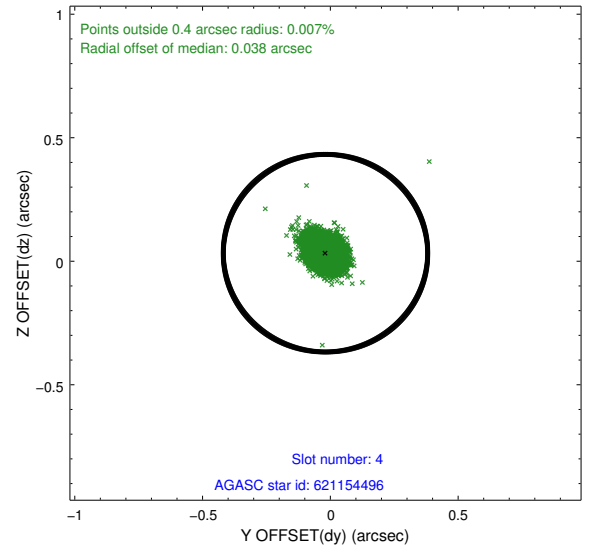
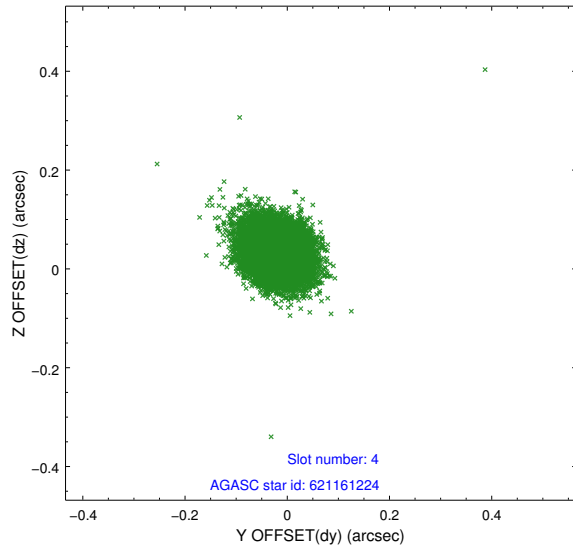
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	14905	0.000	0.001	0.007	0.012	0.000000	0.000000	-752.39	-1723.20
1	FID	ACIS-S-4	7.21	14900	0.054	-0.000	0.006	0.010	0.000000	0.000000	2161.01	185.25
2	FID	ACIS-S-5	7.24	14906	-0.086	0.008	0.007	0.012	0.000000	0.000000	-1805.33	178.98
3	GUIDE	621161224	7.95	14905	0.088	0.184	0.034	0.060	70.234546	-3.517454	-2222.22	-660.30
4	GUIDE	621154496	8.68	14897	-0.019	0.033	0.045	0.075	70.732100	-2.663664	1332.03	-769.61
5	GUIDE	621159736	9.41	14897	0.084	-0.054	0.066	0.114	69.932347	-3.381643	-2309.77	527.19
6	GUIDE	621153256	9.49	14890	0.017	0.045	0.067	0.113	70.961959	-2.598298	1932.45	-1384.56
7	GUIDE	621151232	9.68	14892	-0.168	-0.212	0.071	0.116	69.974686	-2.320330	1121.54	2214.12

## 2.4 Star Slots

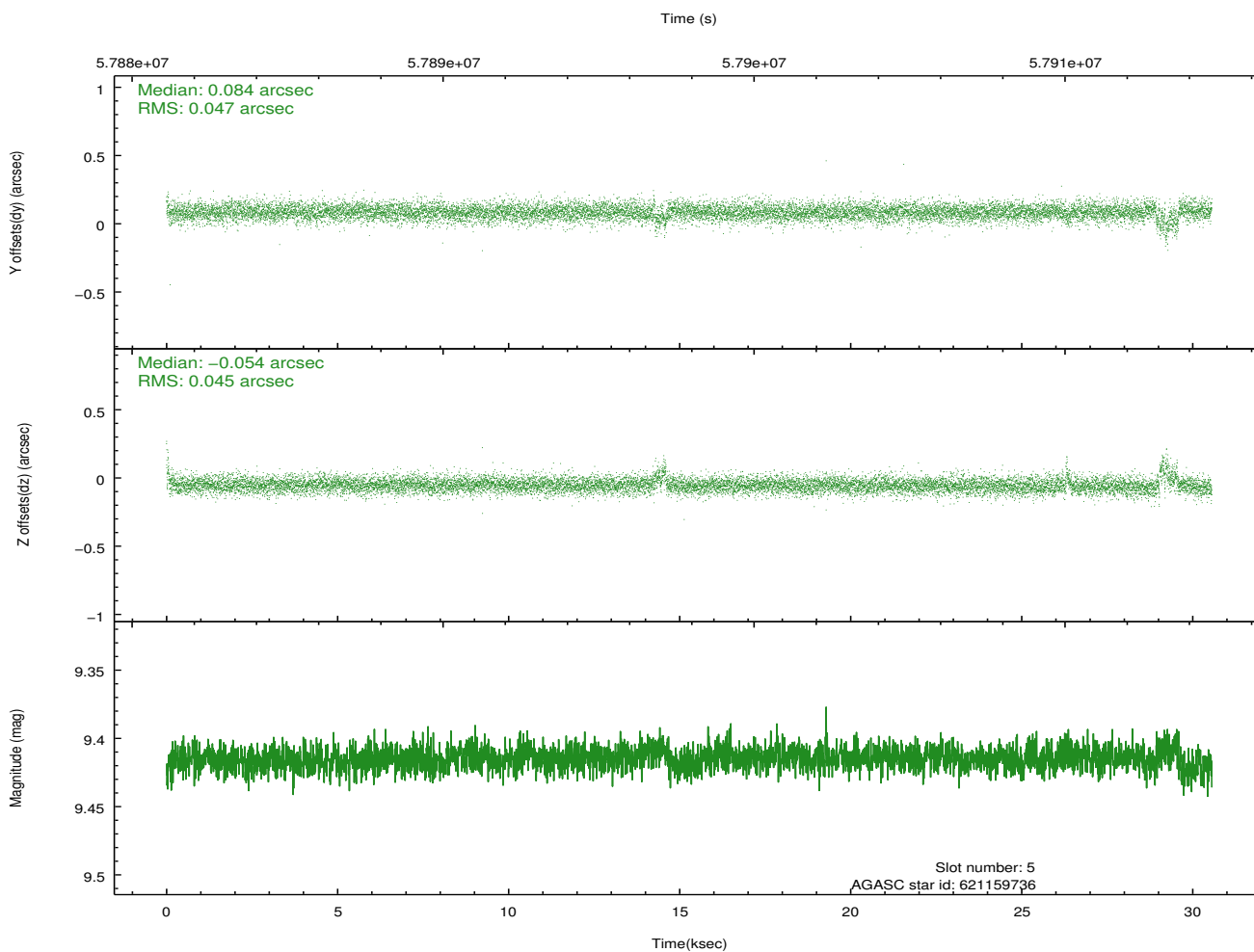
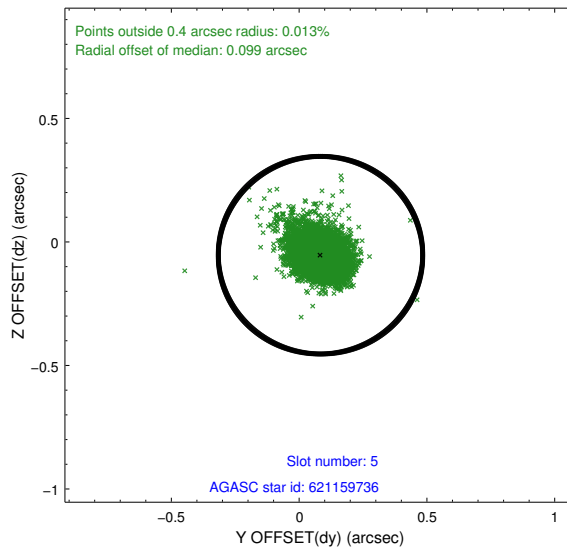
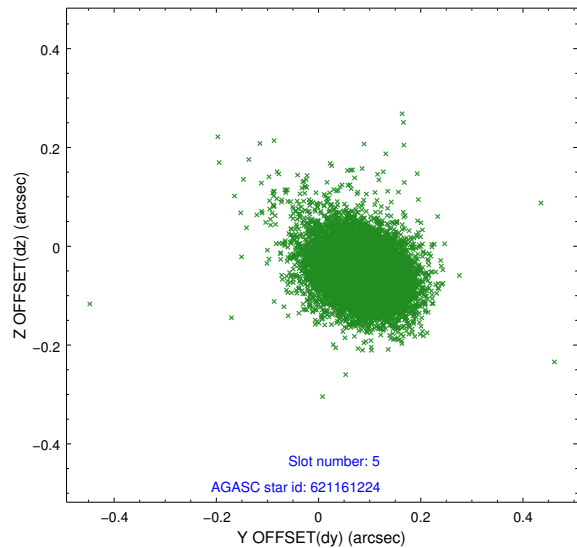
### 2.4.1 Slot 3



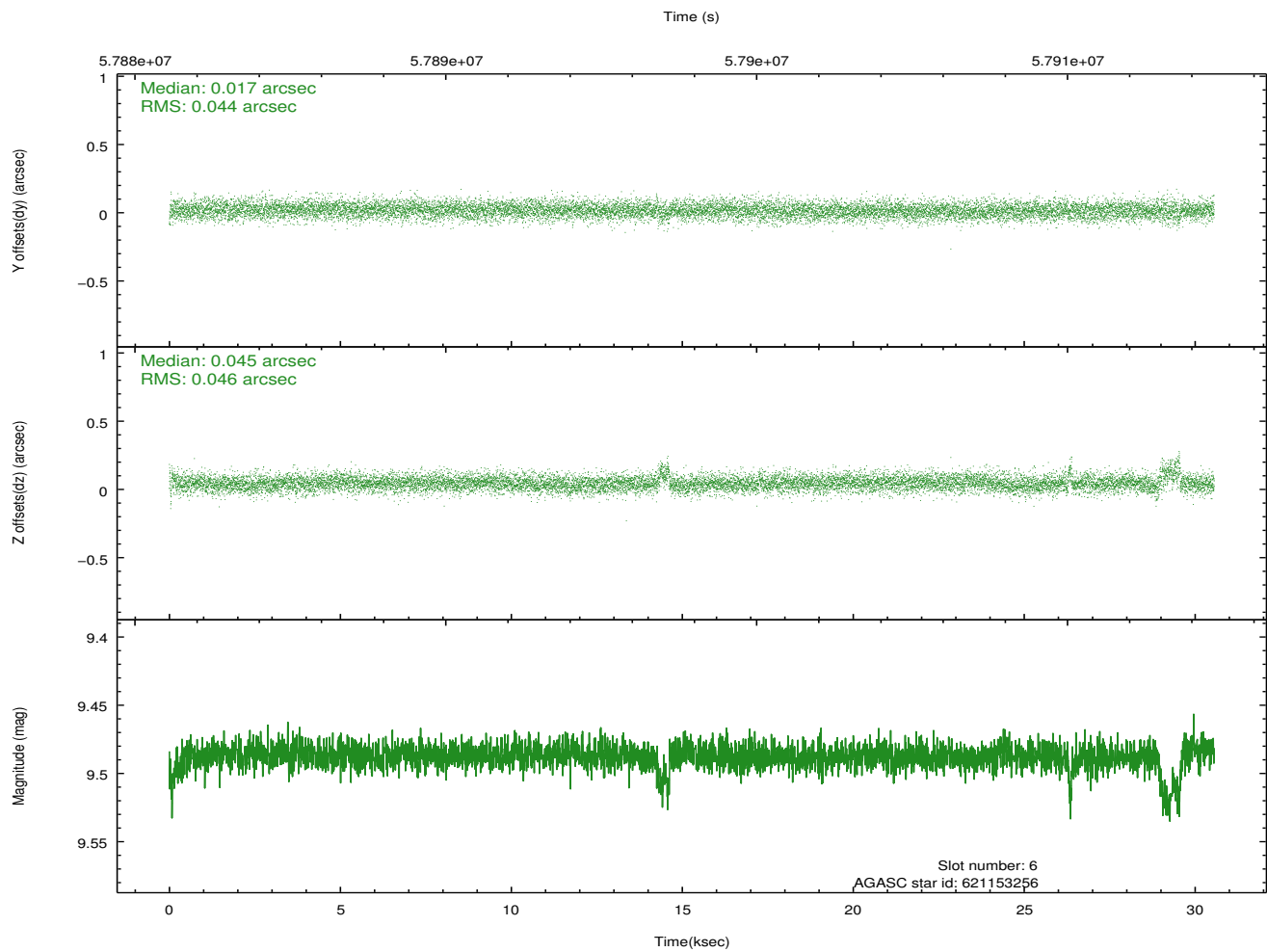
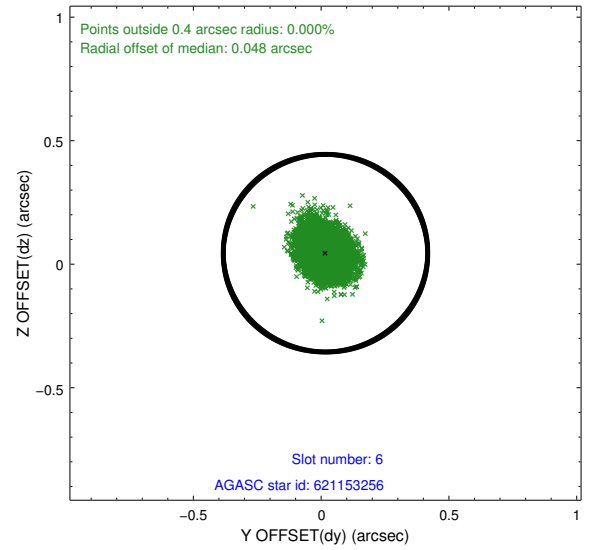
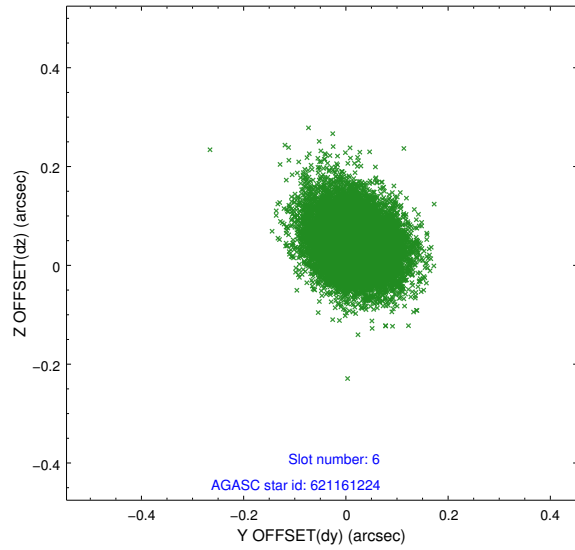
## 2.4.2 Slot 4



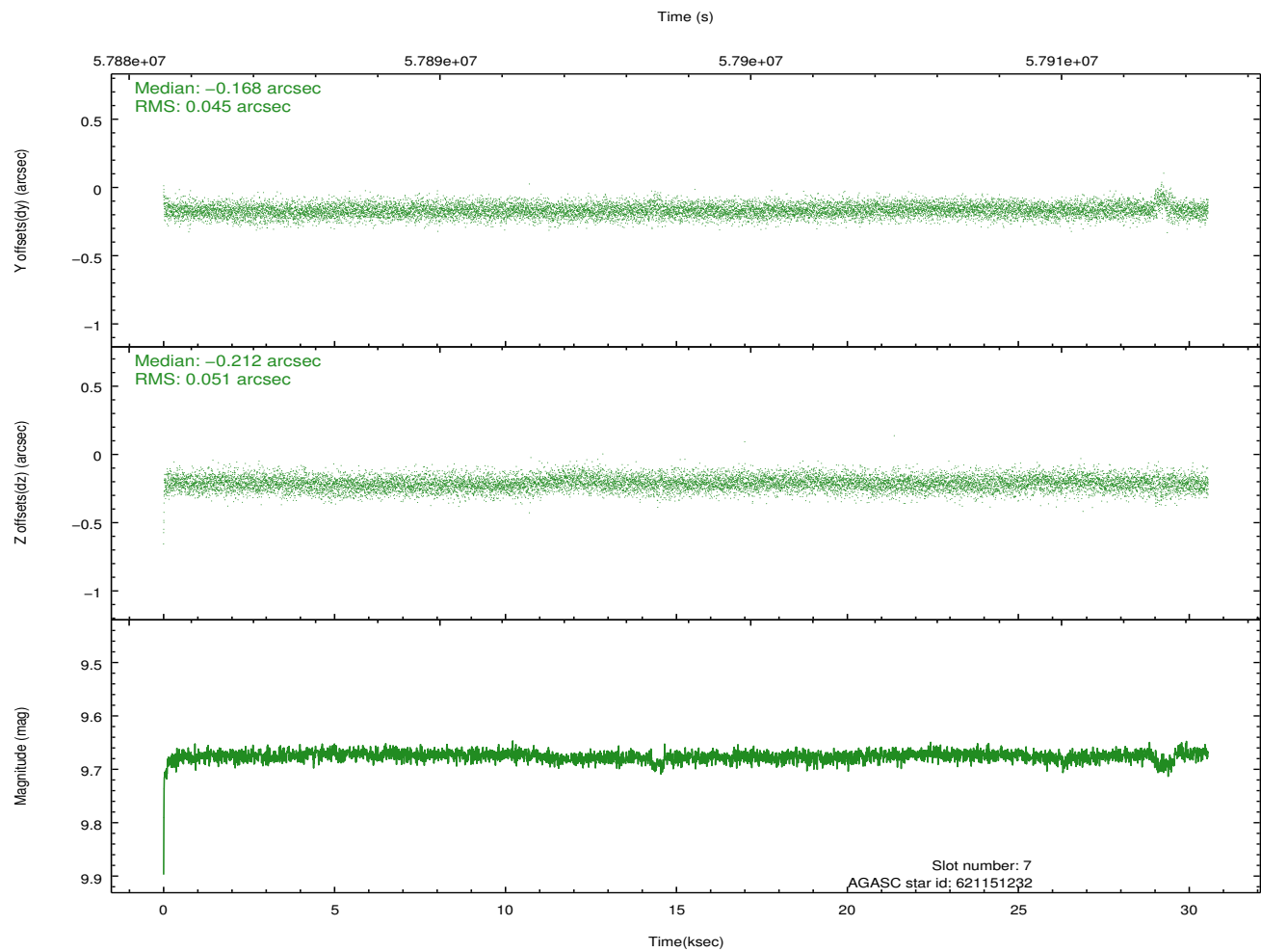
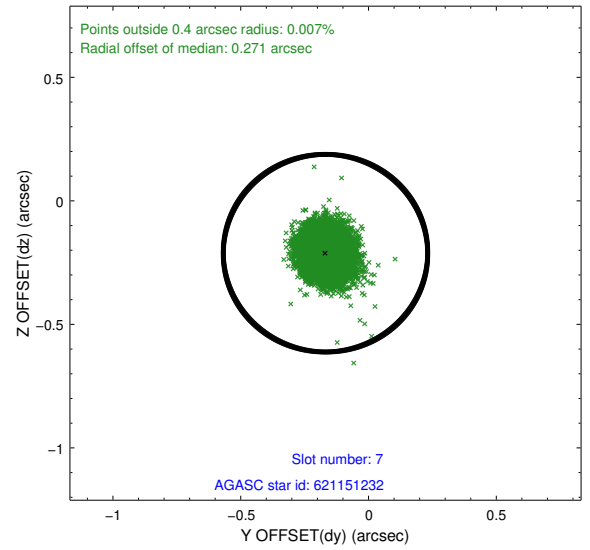
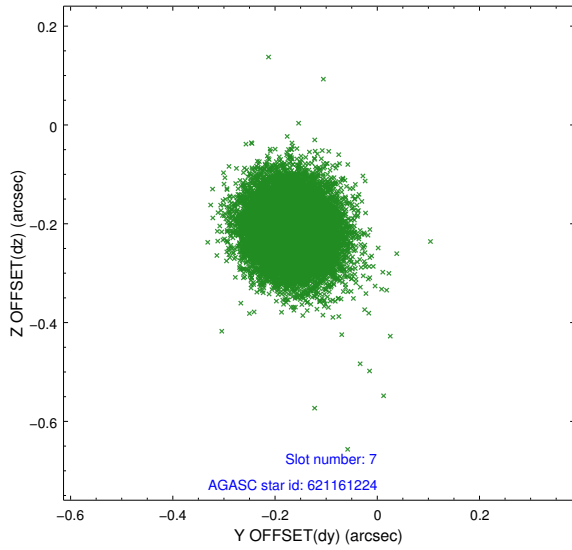
### 2.4.3 Slot 5



## 2.4.4 Slot 6

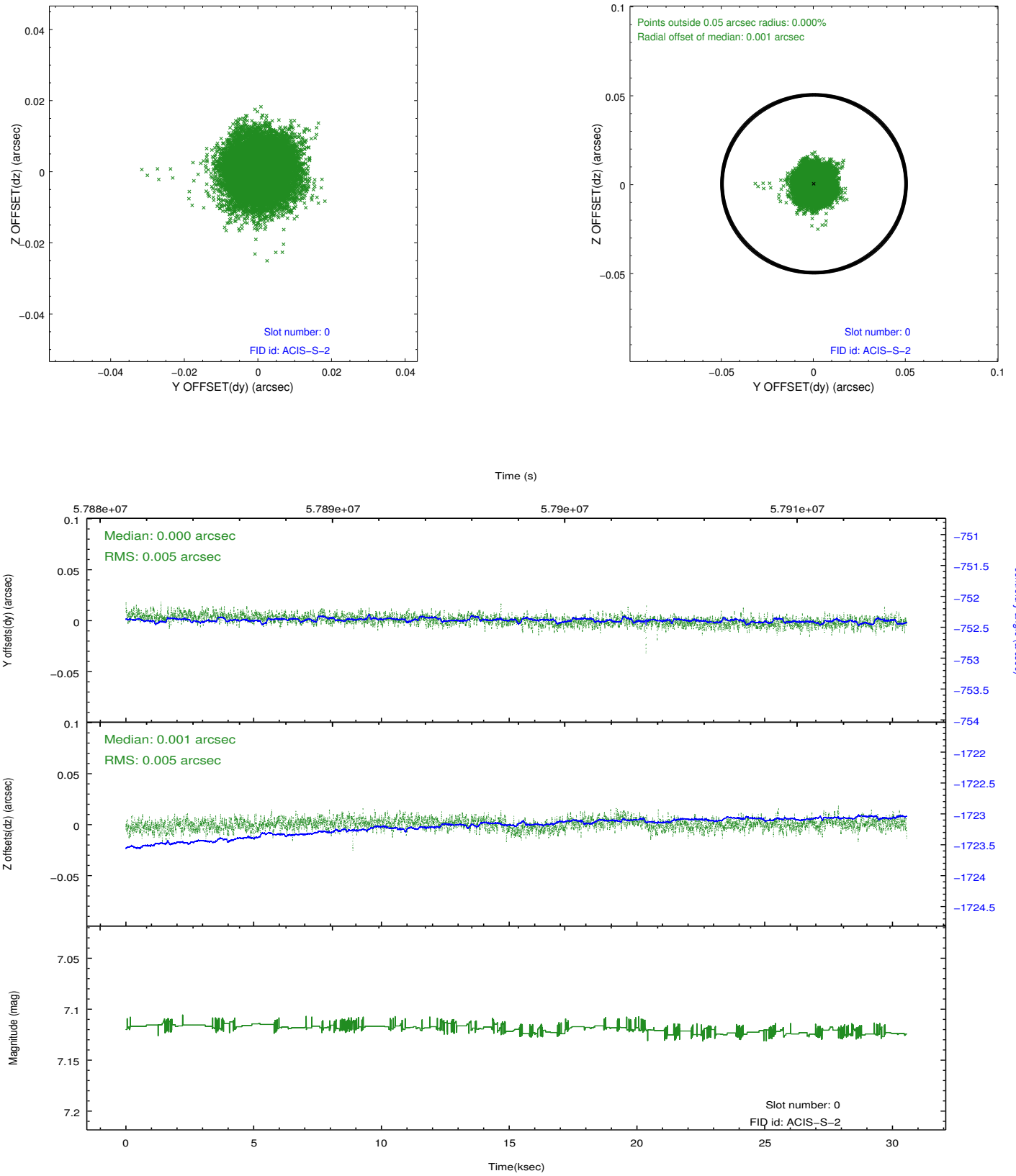


## 2.4.5 Slot 7

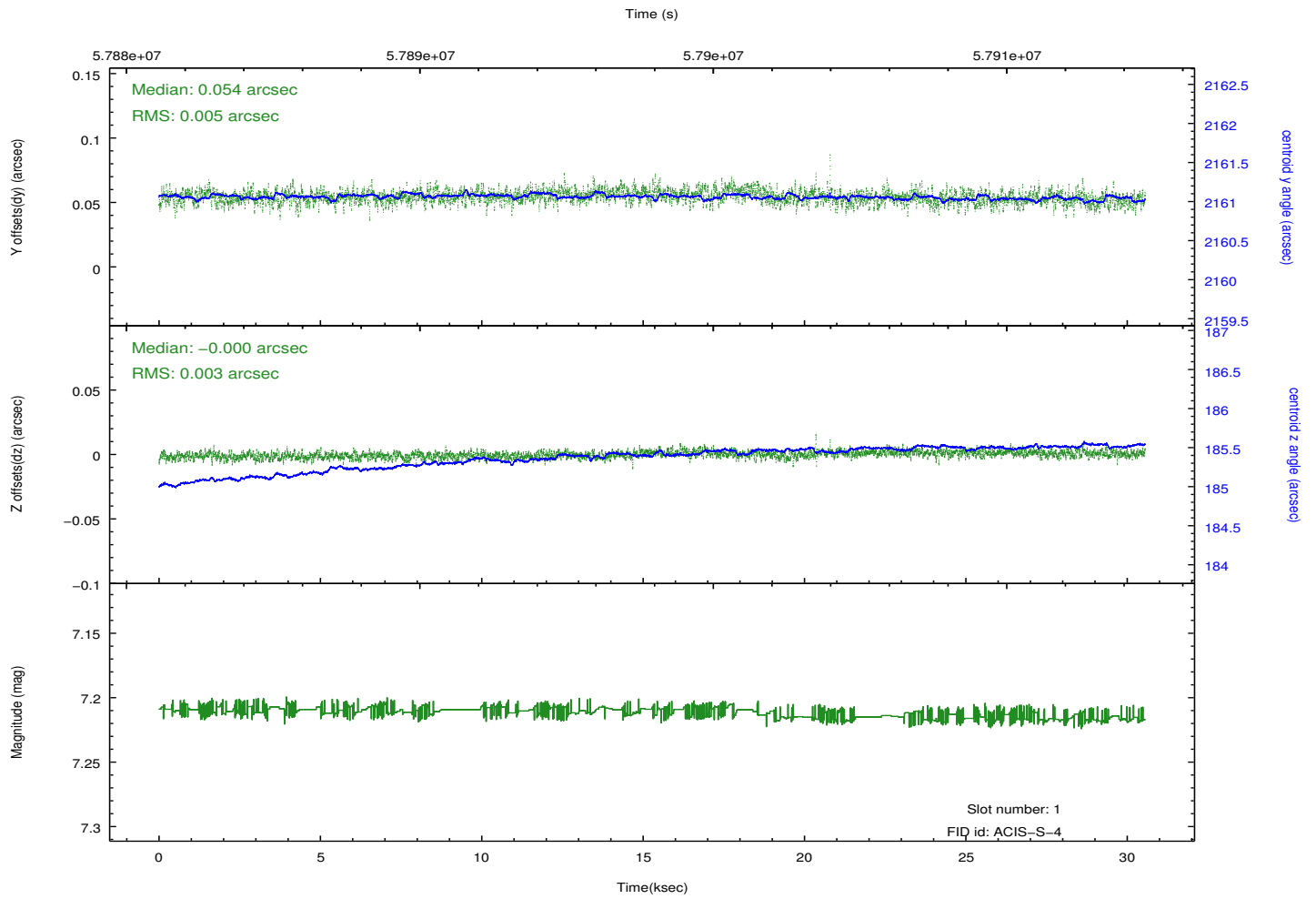
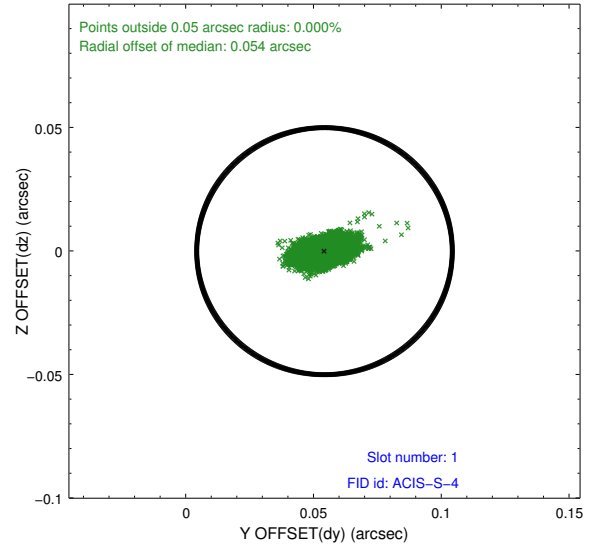
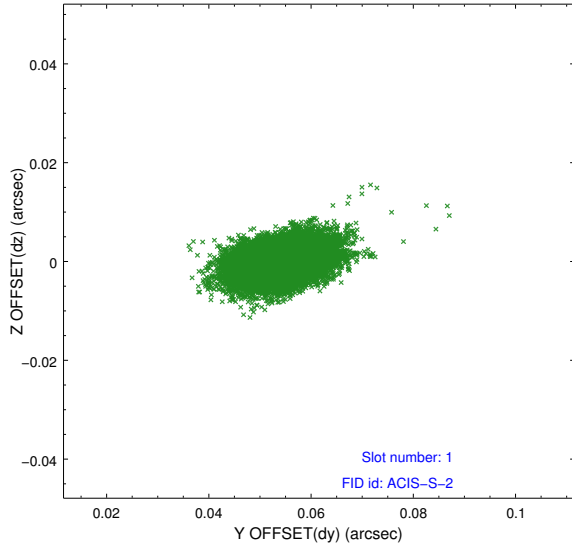


## 2.5 FID Slots

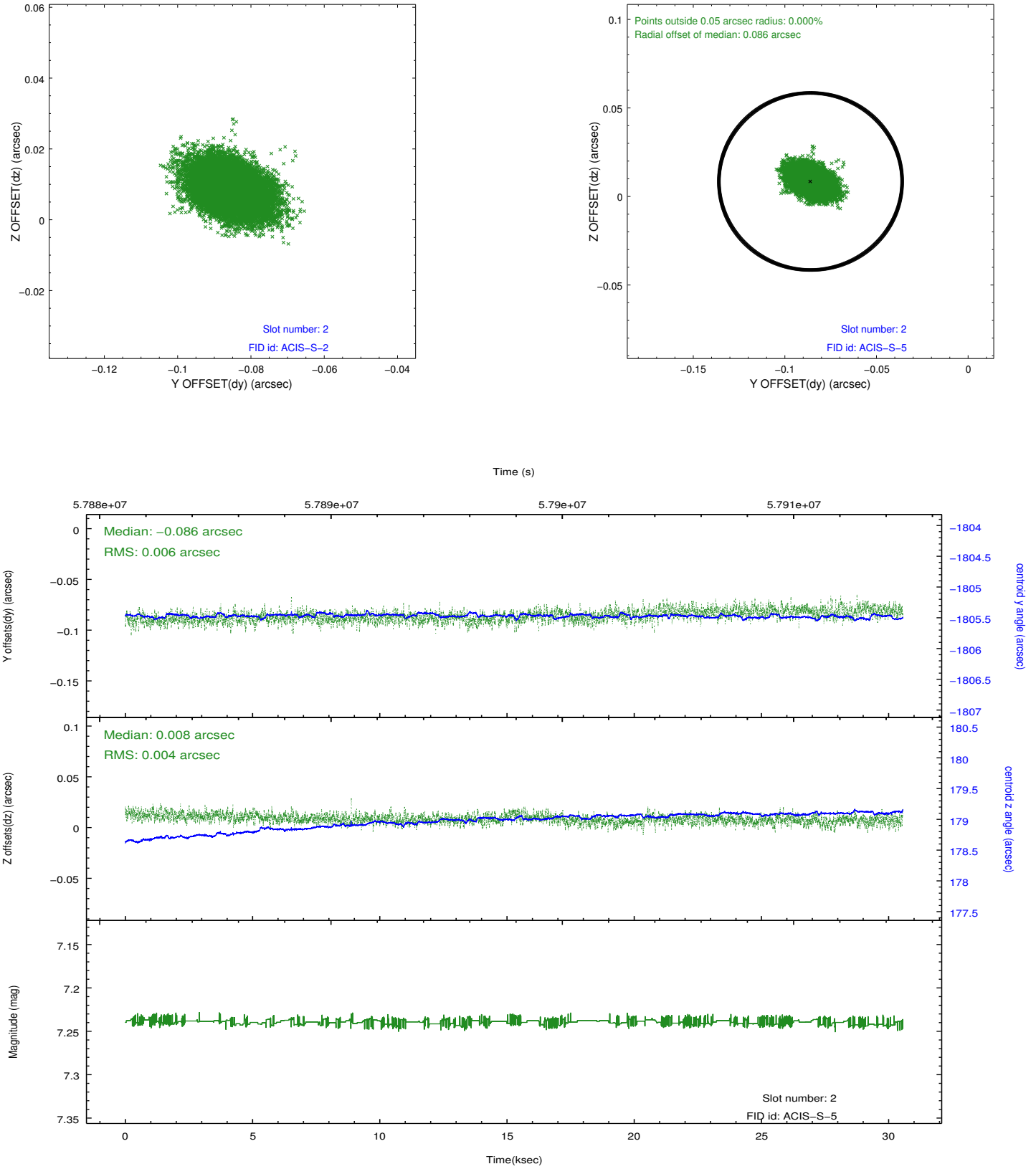
### 2.5.1 Slot 0



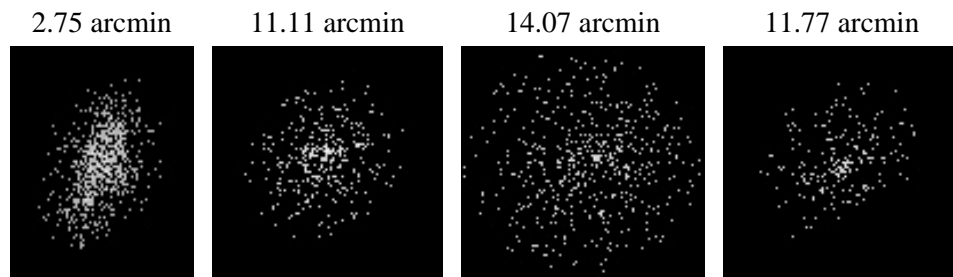
## 2.5.2 Slot 1



### 2.5.3 Slot 2



### 3 Point Sources



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.655

## A.2 Comments

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.