

# V&V Reference Report

## L2 ASCDS Version : 8.3.3.1

Observation 960 - L2 Version 6  
Chandra X-Ray Center

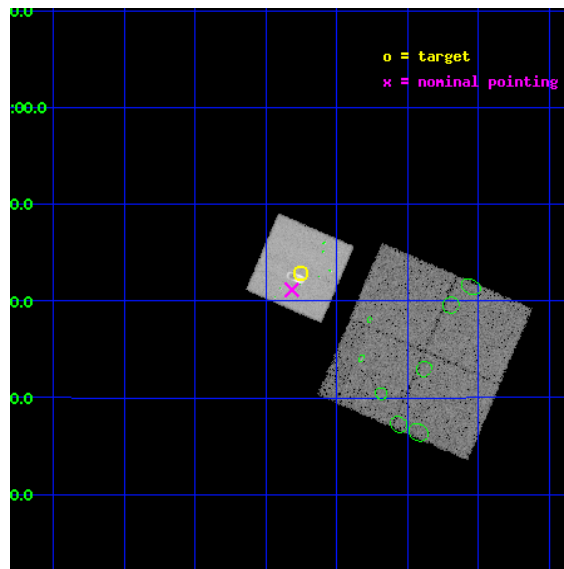
L2 Processing Date : Dec 7 2010

## 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

# 1 Front

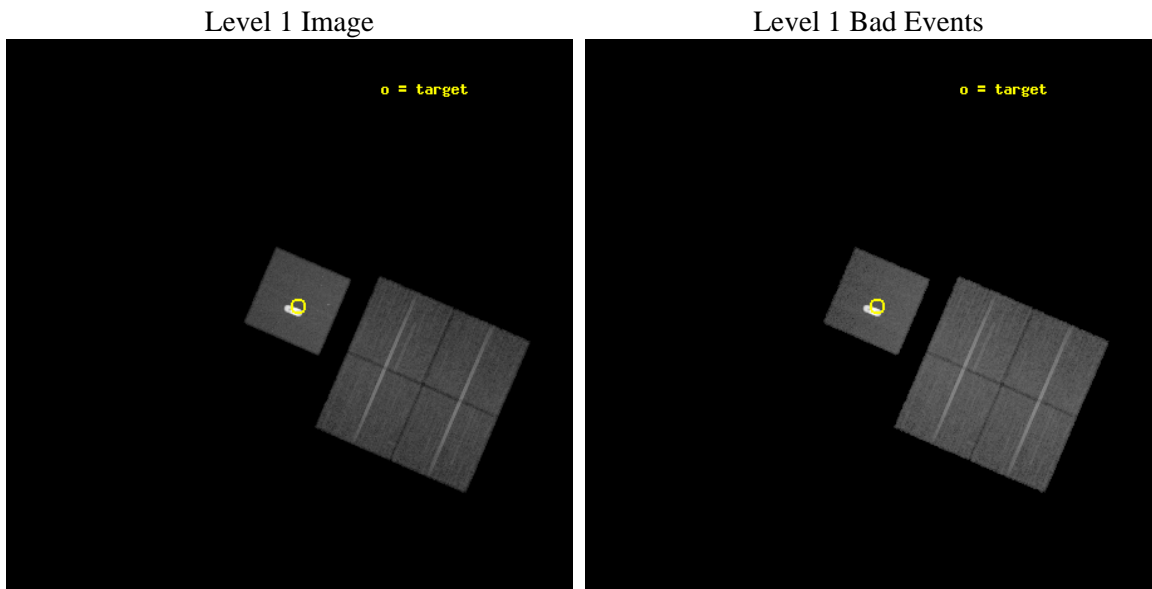
seq_num	100010	Sequence number
obs_id	960	Observation id
title	&#160	Proposal title
observer	DR. J WAITE	Principal investigator
object	JUPITER	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	24.68768	Observer's specified target RA
dec_targ	8.71405	Observer's specified target Dec
ra_nom	24.704185536774	Nominal RA
dec_nom	8.6859469135306	Nominal Dec
roll_nom	293.34148815001	Nominal Roll
revision	6	Processing version of data
ontime	22377.600020841	Sum of GTIs [s]
livetime	22094.241375204	Livetime [s]
ontime0	22377.600020841	Sum of GTIs [s]
ontime1	22377.600020841	Sum of GTIs [s]
ontime2	22377.600020841	Sum of GTIs [s]
ontime3	22377.600020841	Sum of GTIs [s]
ontime7	22377.600020841	Sum of GTIs [s]
l2events	152737	Number of level 2 events



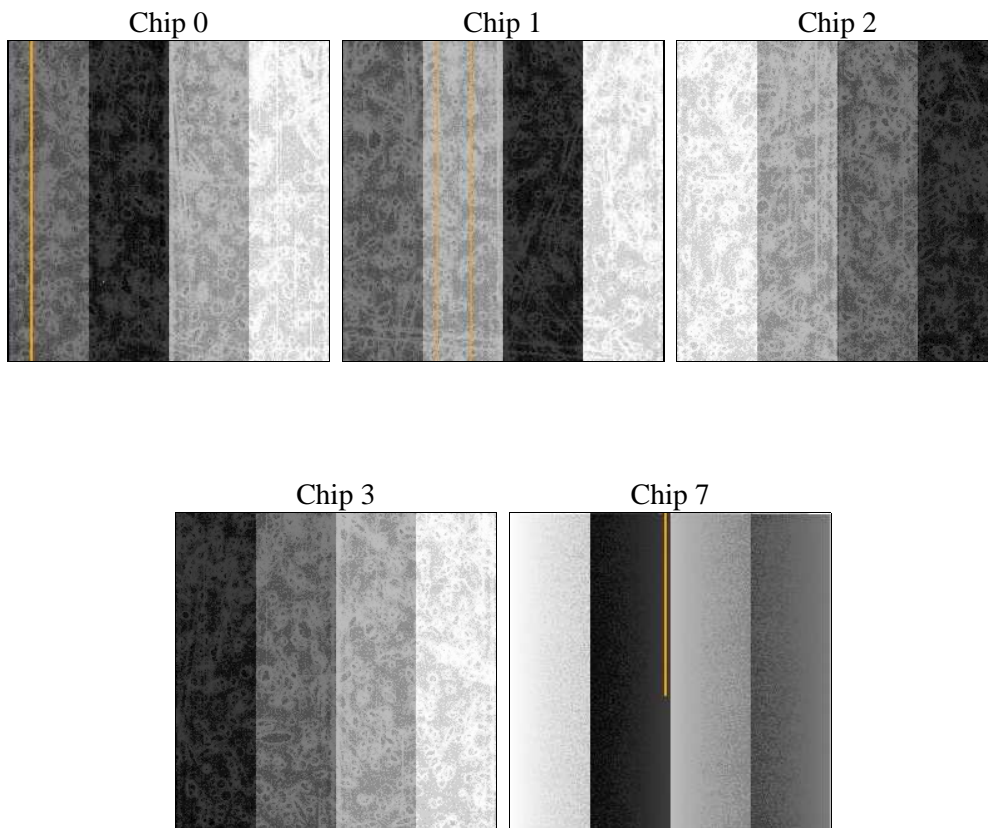
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22600.000000	Scheduled observation exposure time
ascdsver	8.3.3.1	ASCDS version number	ontime	22377.600020841	Sum of GTIs [s]
caldbver	4.4.0	&#160	ontime0	22377.600020841	Sum of GTIs [s]
date	2010-12-07T23:42:58	Date and time of file creation	ontime1	22377.600020841	Sum of GTIs [s]
revision	4	Processing version of data	ontime2	22377.600020841	Sum of GTIs [s]
			ontime3	22377.600020841	Sum of GTIs [s]
			ontime7	22377.600020841	Sum of GTIs [s]
			l1events	1945170	Number of level 1 events

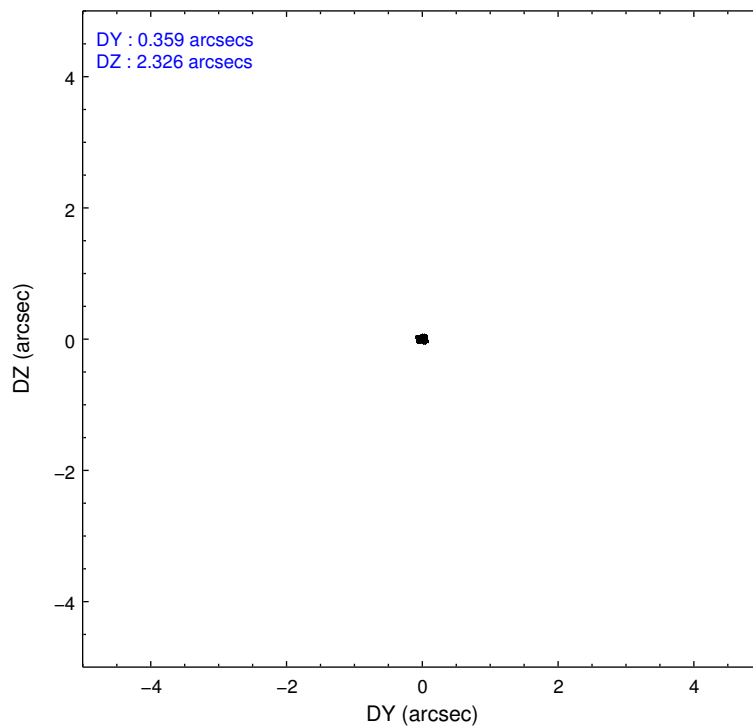
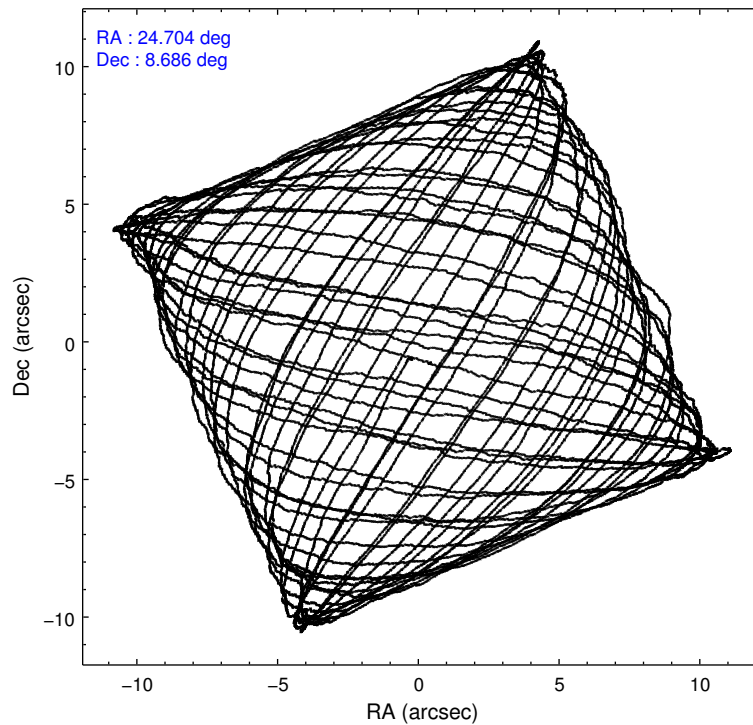
### 2.1.4 Events

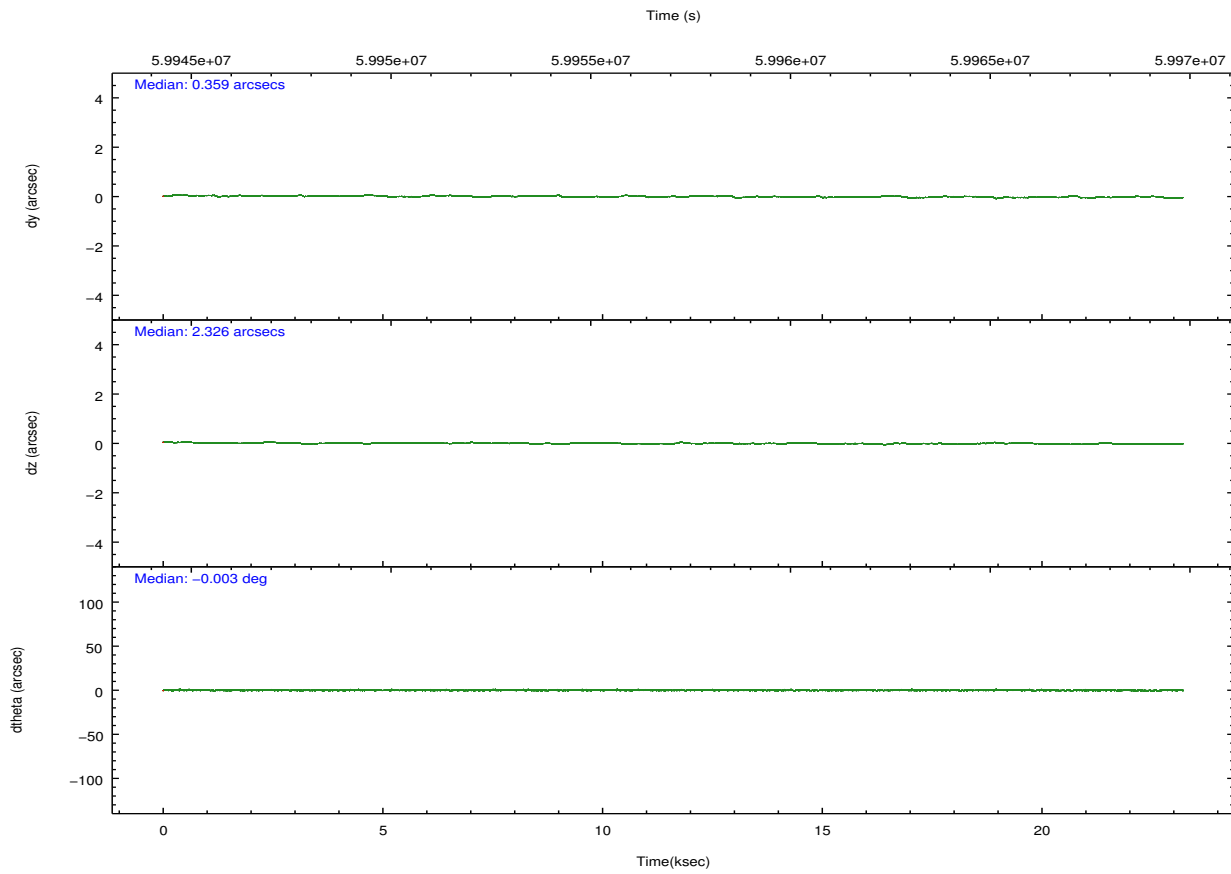
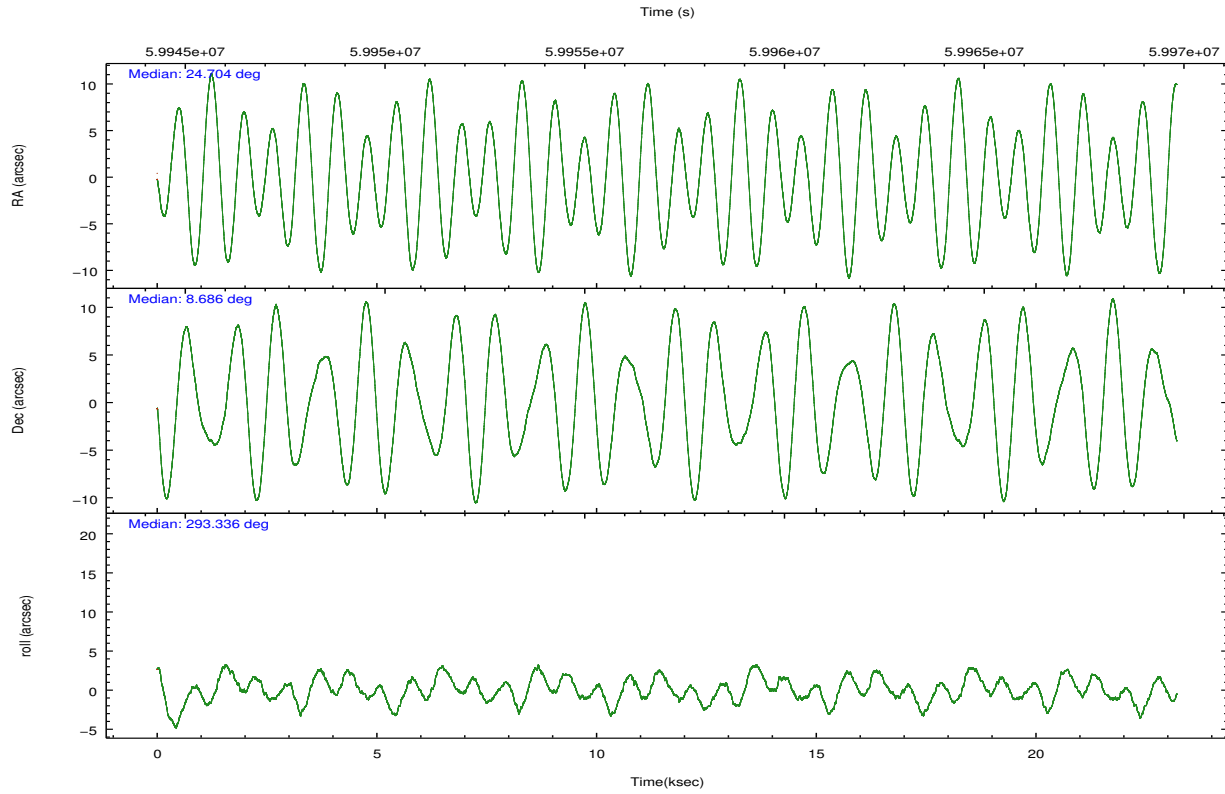
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	181357	178356	192774	191648	1201035	grade 0 events	4331	4303	3749	3873	6443
rejected events	162775	158577	175368	173547	1110525		2%	2%	1%	2%	0%
rejected %	89%	88%	90%	90%	92%	grade 1 events	35	40	38	28	4456
							0%	0%	0%	0%	0%
						grade 2 events	7110	7360	6904	7200	19218
							3%	4%	3%	3%	1%
						grade 3 events	1366	1678	1175	1210	5915
							0%	0%	0%	0%	0%
						grade 4 events	1301	1494	1160	1133	5421
							0%	0%	0%	0%	0%
						grade 5 events	3859	3868	3183	3589	21637
							2%	2%	1%	1%	1%
						grade 6 events	4475	4945	4421	4686	53537
							2%	2%	2%	2%	4%
						grade 7 events	158880	154668	172144	169929	1084408
							87%	86%	89%	88%	90%

## 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	24.681870	24.70418553677363	Subarray requested	NONE	NONE
Pointing Dec	8.702503	8.685946913530639	Alternating exposures requested	N	N
Pointing Roll	293.188234	293.341488150015	Primary exposure time	0.000000	3.2
Window start time	59945944.184000	59945944.184000			
Window stop time	59968564.184000	59968564.184000			
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	59945944.184000	59945277.834707			
Observation start date	1999-11-25T19:38:00	1999-11-25T19:27:57			
Observation end time	59968544.184000	59968797.485557			
Observation end date	1999-11-26T01:54:40	1999-11-26T01:59:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



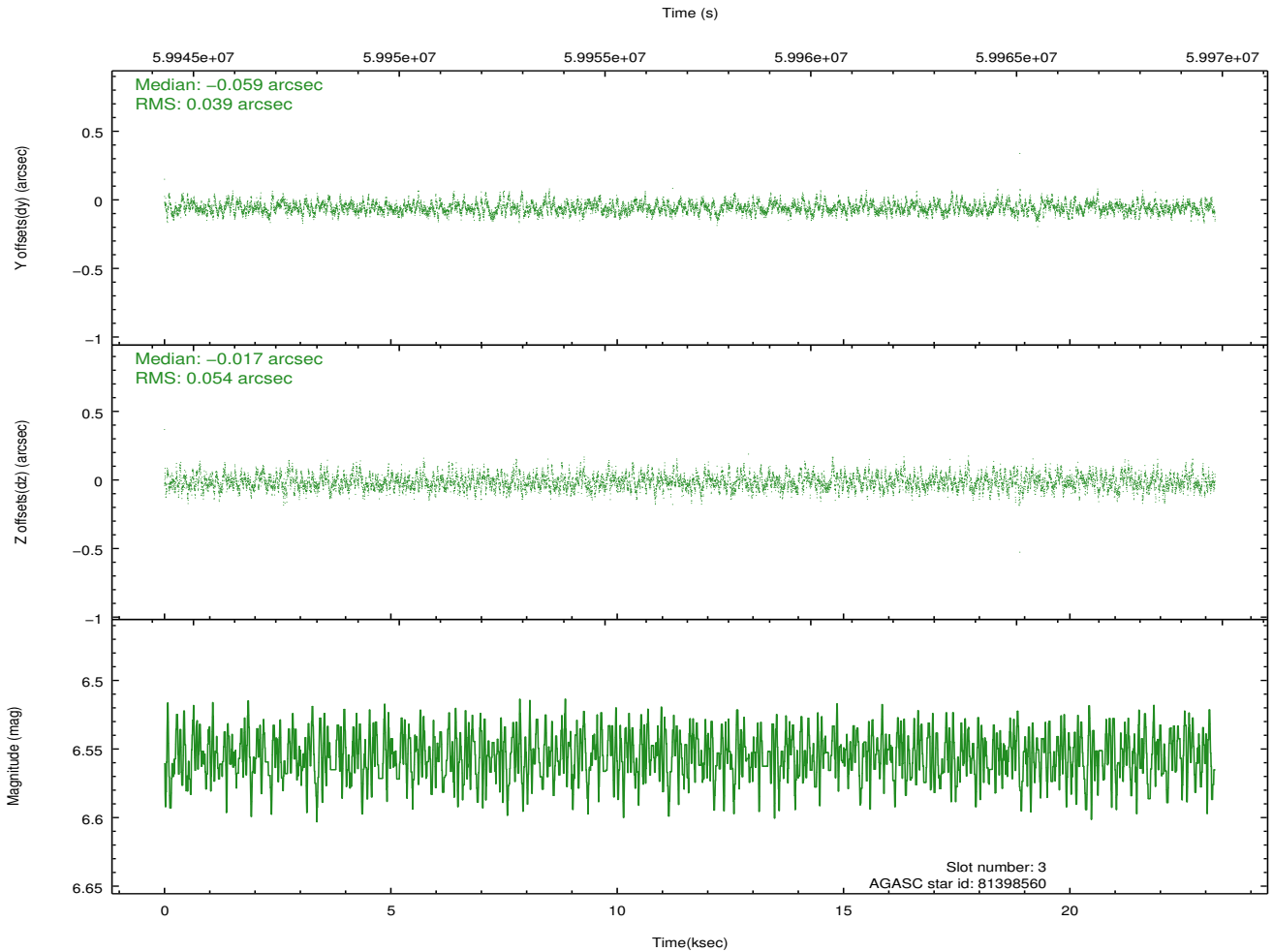
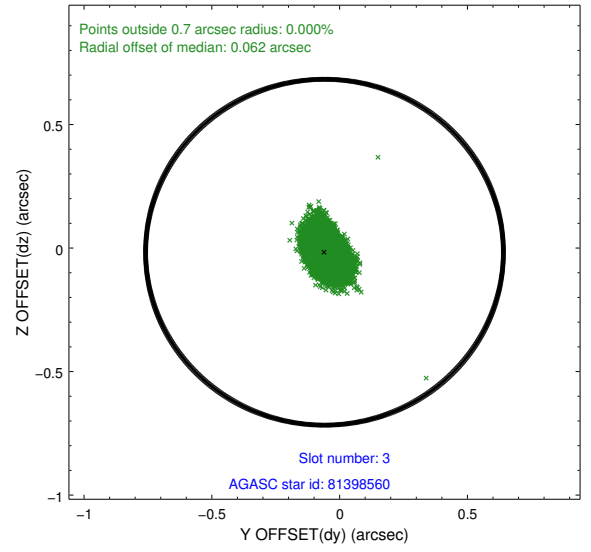
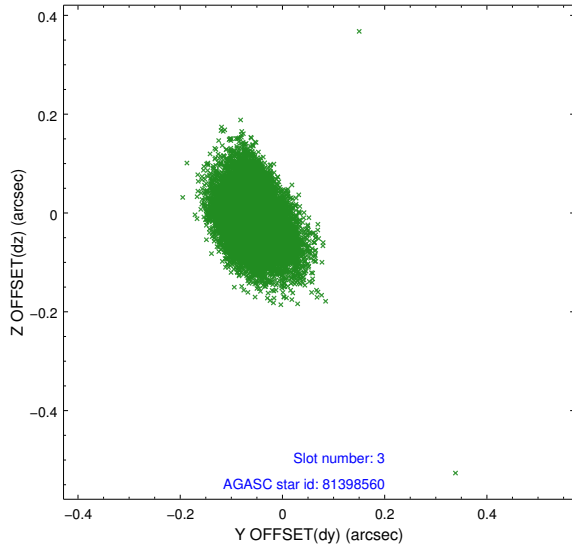


### Slot Statistics

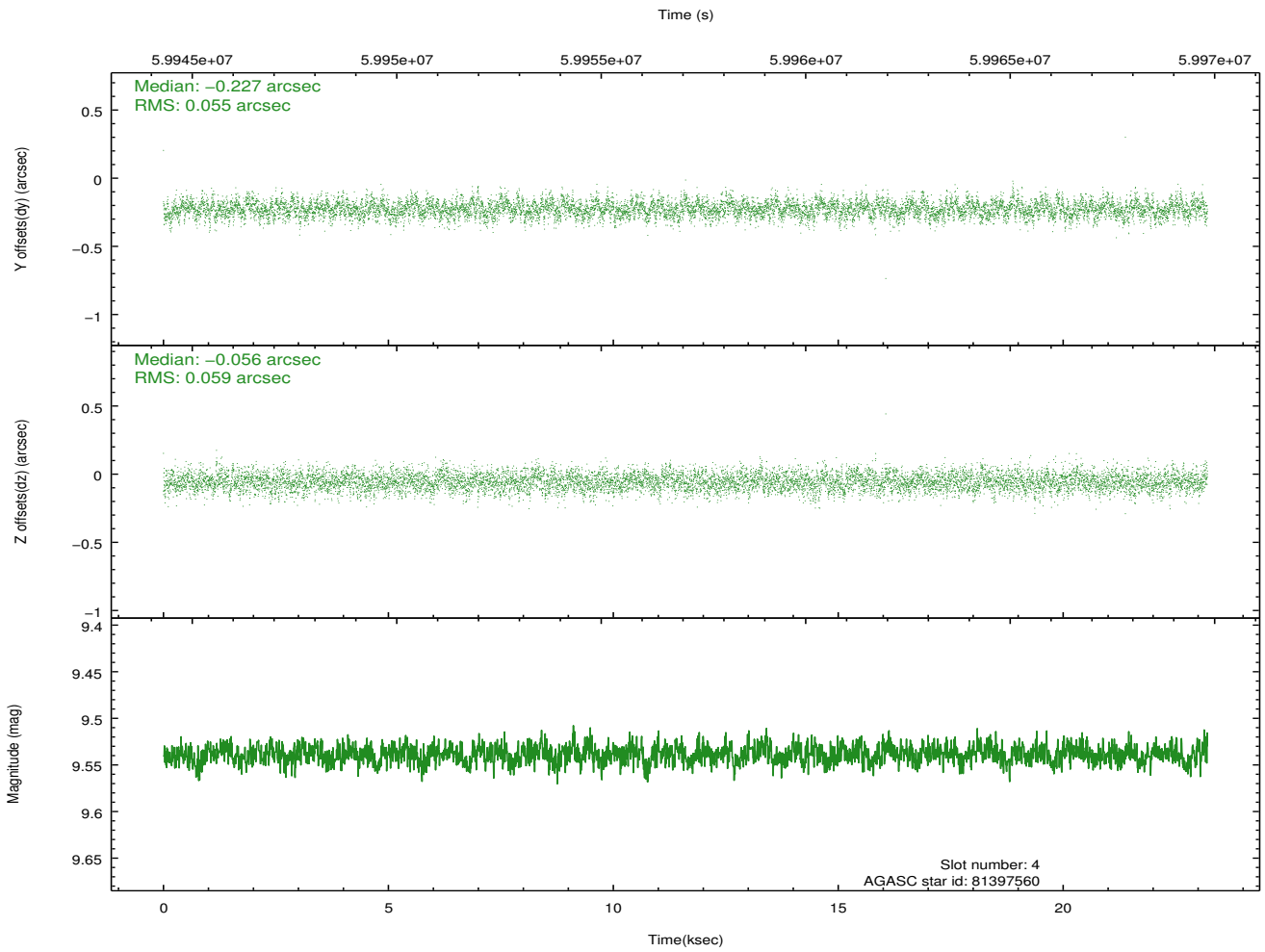
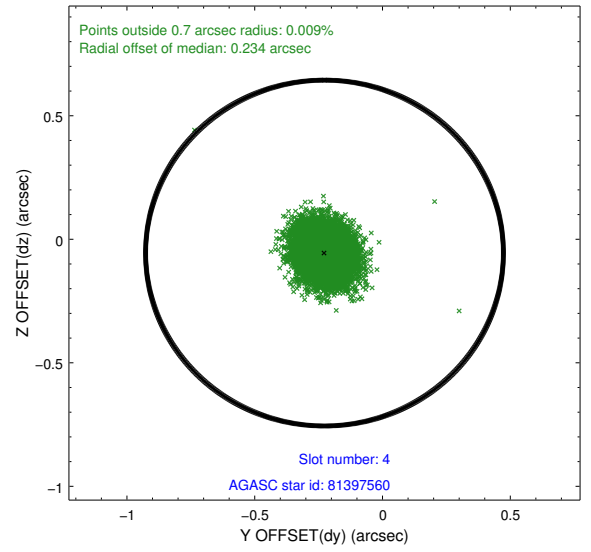
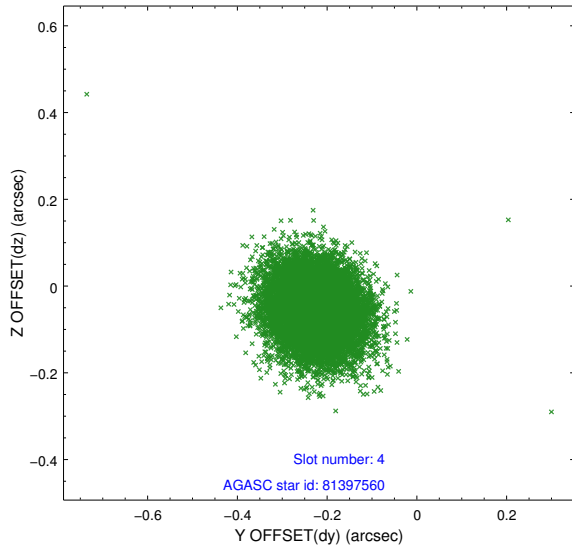
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	11322	-0.011	-0.014	0.006	0.011	0.000000	0.000000	-752.98	-1723.36
1	FID	ACIS-S-4	7.22	11322	0.057	0.009	0.005	0.010	0.000000	0.000000	2160.41	185.09
2	FID	ACIS-S-5	7.24	11321	-0.077	0.013	0.006	0.011	0.000000	0.000000	-1805.85	178.85
3	GUIDE	81398560	6.56	11322	-0.059	-0.017	0.069	0.116	25.145528	8.760778	455.51	1599.17
4	GUIDE	81397560	9.54	11315	-0.227	-0.056	0.085	0.137	24.004098	8.965422	-1821.18	-1842.36
5	GUIDE	81398056	9.19	11318	0.077	0.099	0.092	0.151	25.259975	8.764958	601.42	1979.58
6	GUIDE	81401848	9.56	11306	-0.009	-0.076	0.087	0.143	24.221068	8.860999	-1170.73	-1281.93
7	GUIDE	81403240	9.61	11311	0.224	0.047	0.101	0.161	24.738374	8.119294	2009.34	-641.76

## 2.4 Star Slots

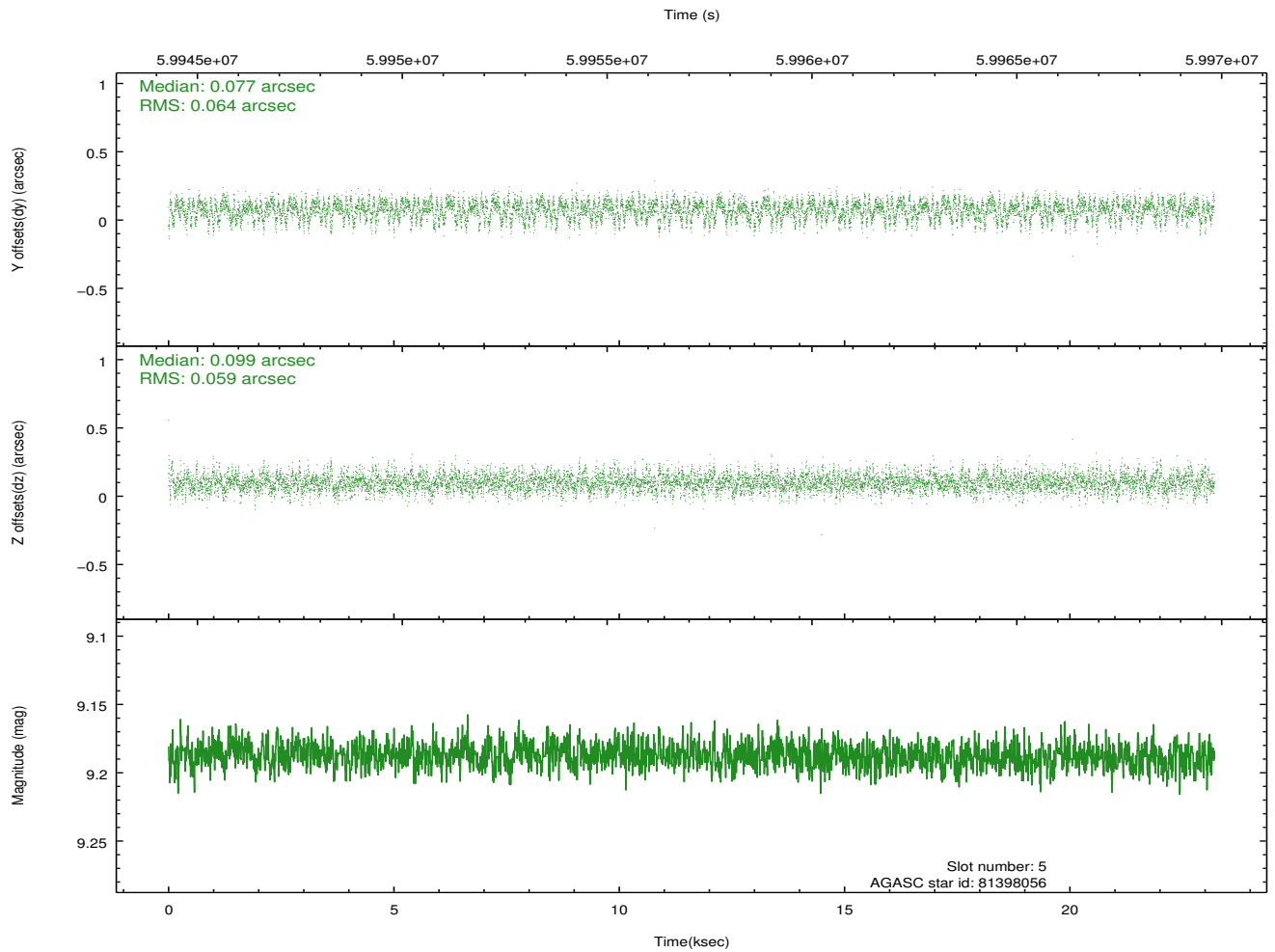
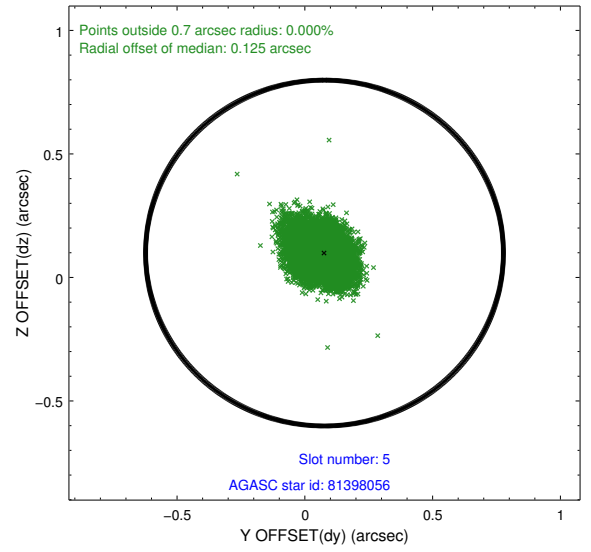
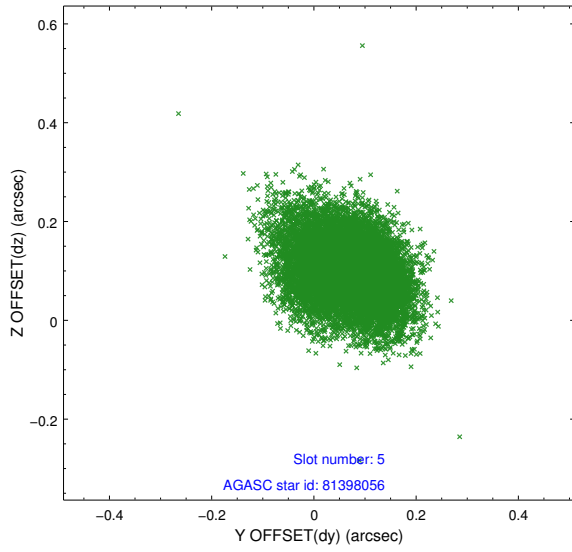
### 2.4.1 Slot 3



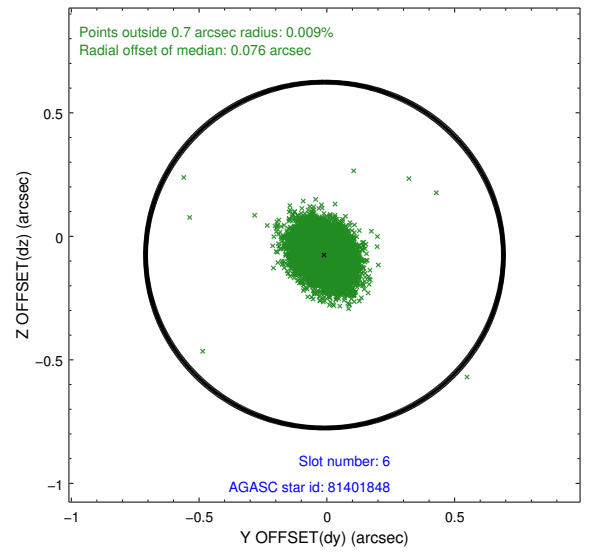
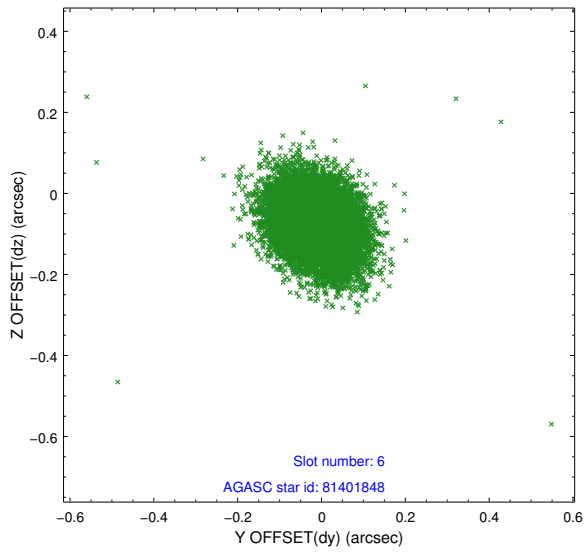
## 2.4.2 Slot 4



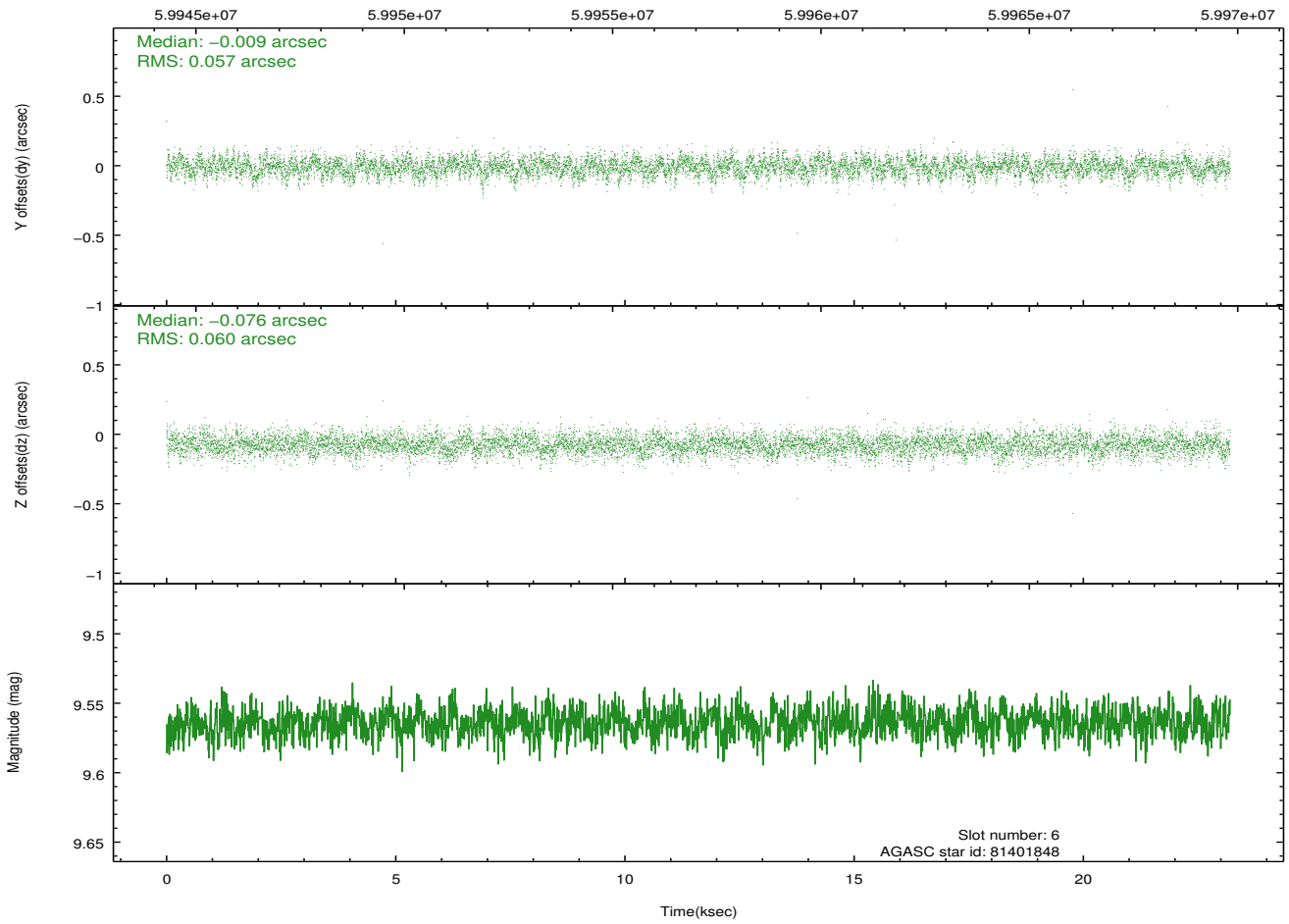
### 2.4.3 Slot 5



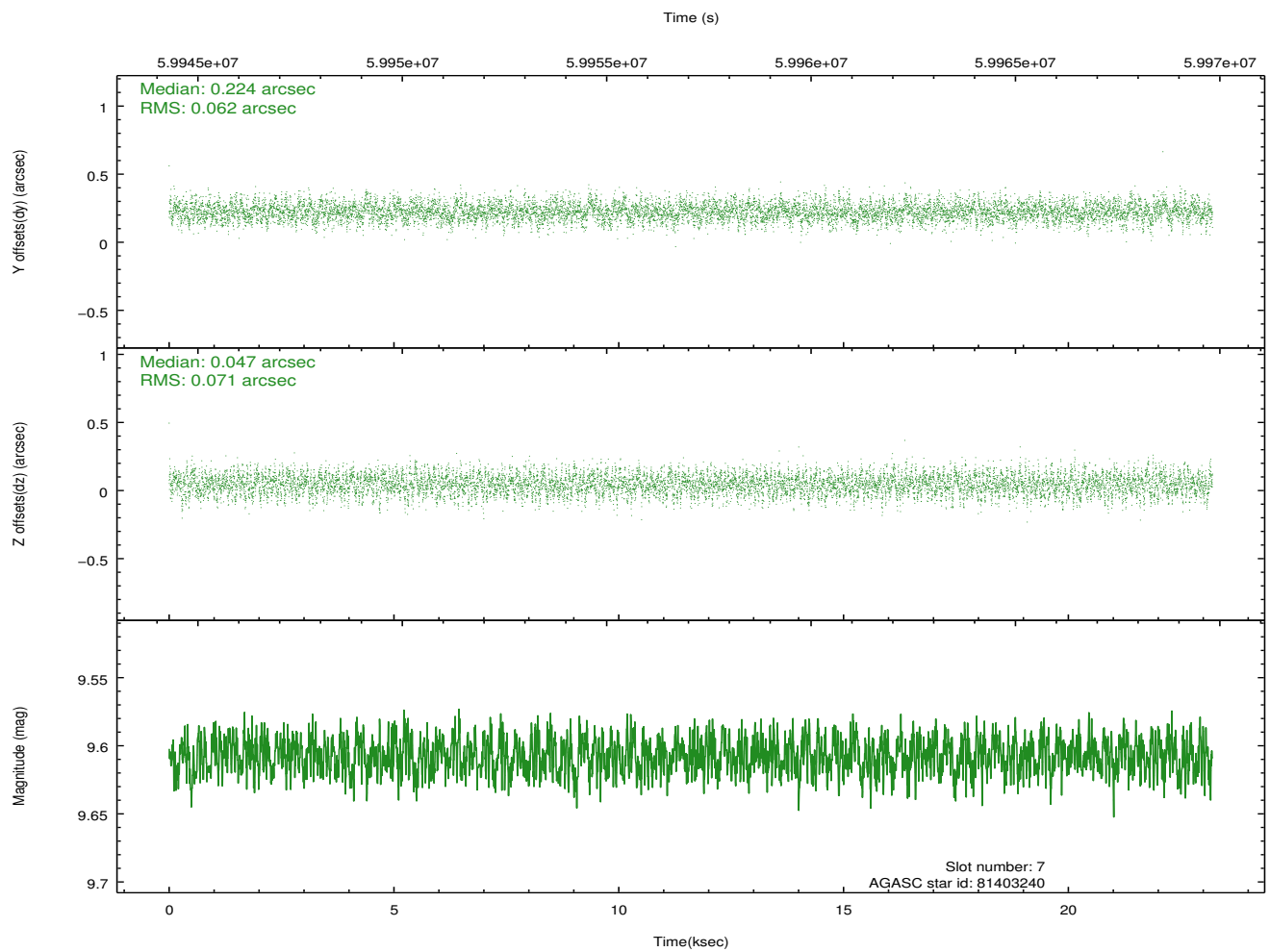
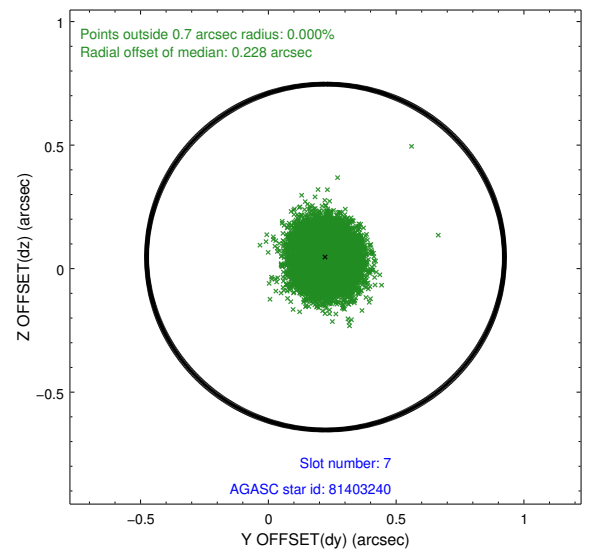
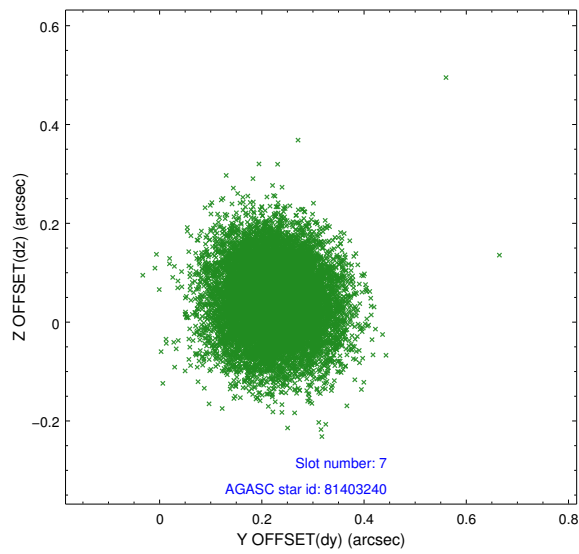
### 2.4.4 Slot 6



Time (s)

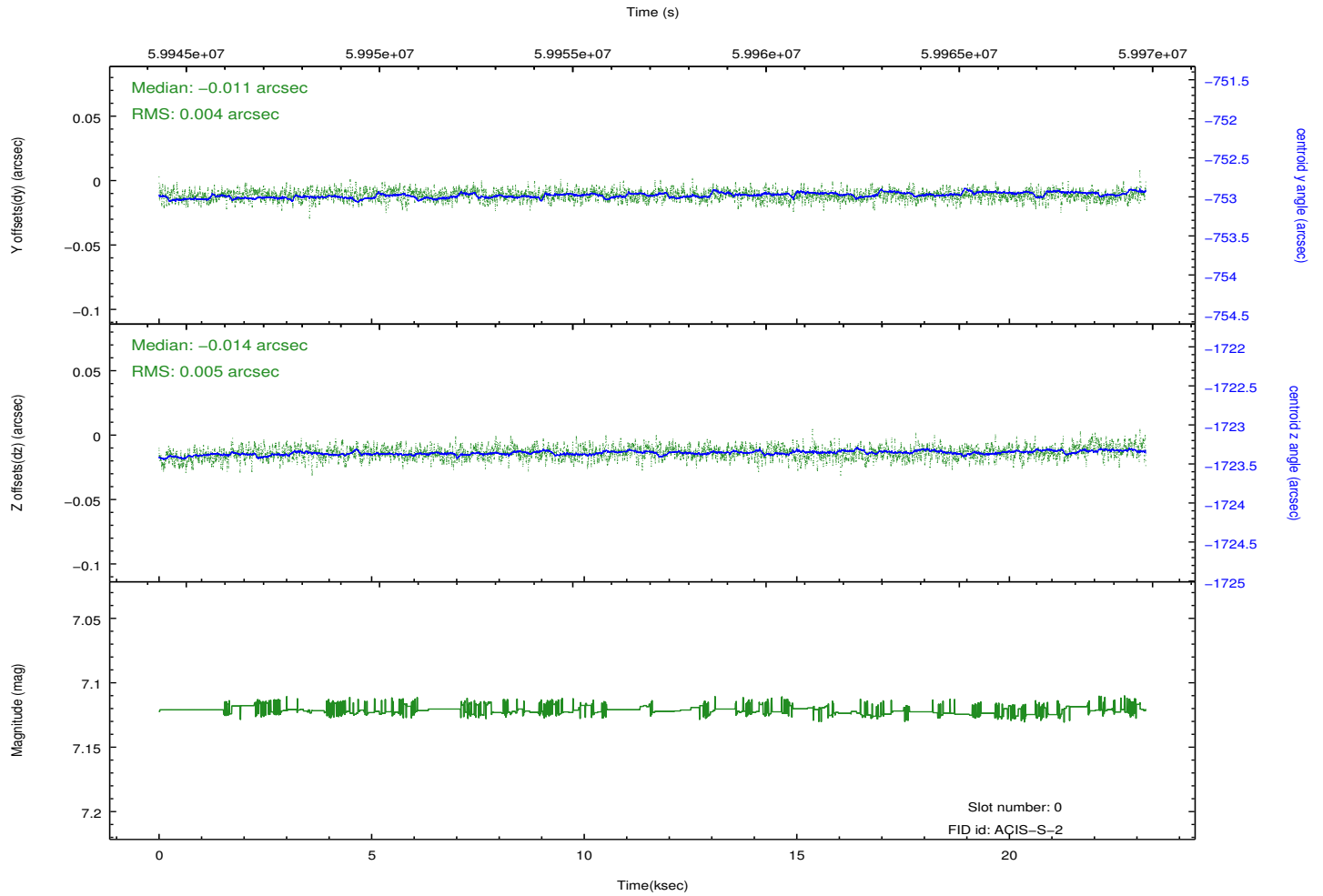
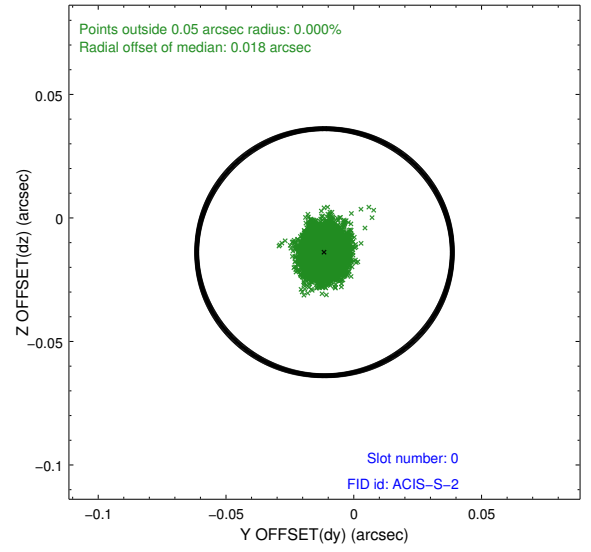
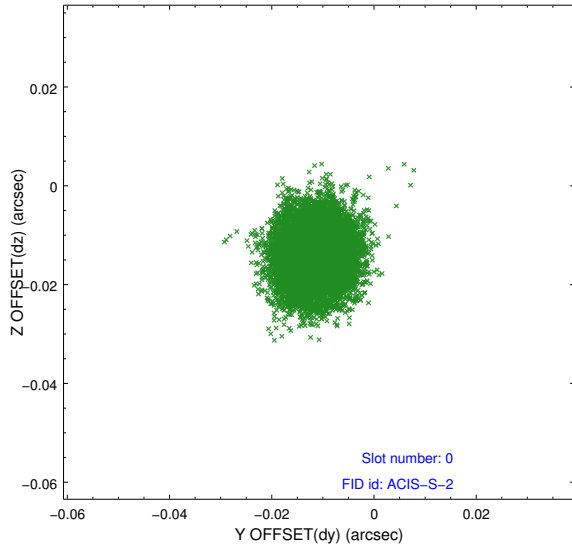


## 2.4.5 Slot 7

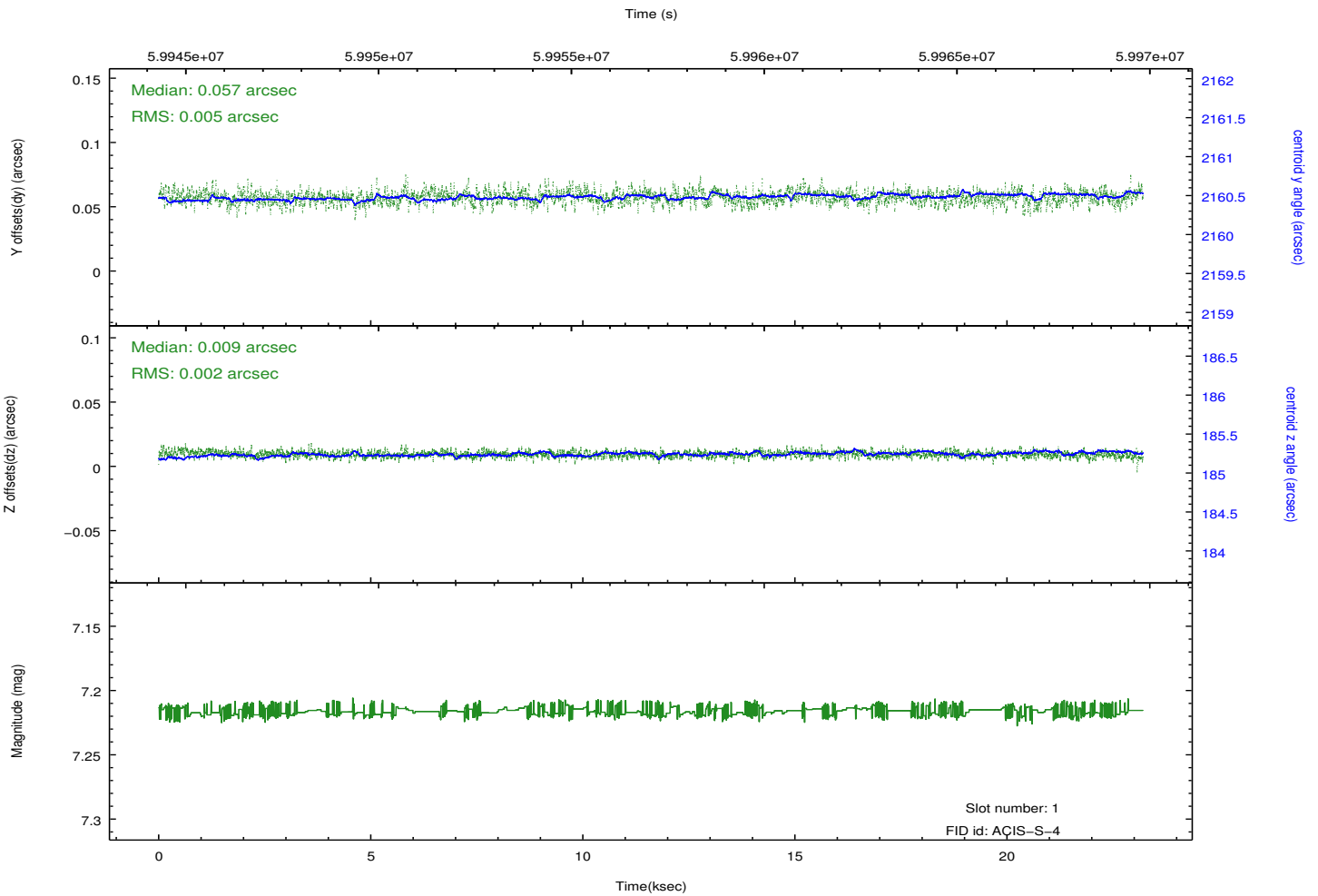
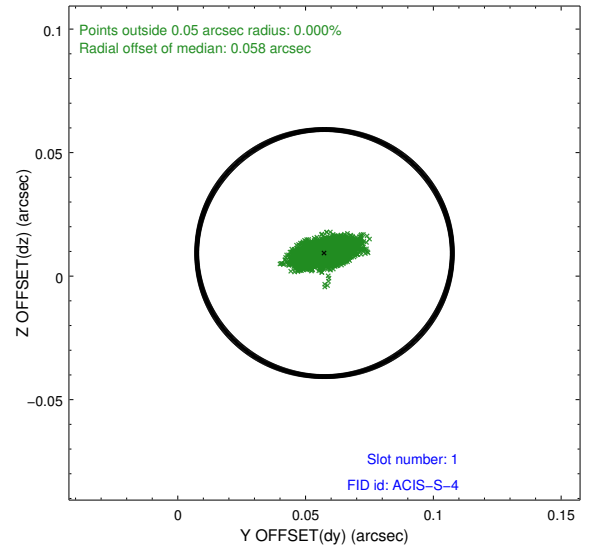
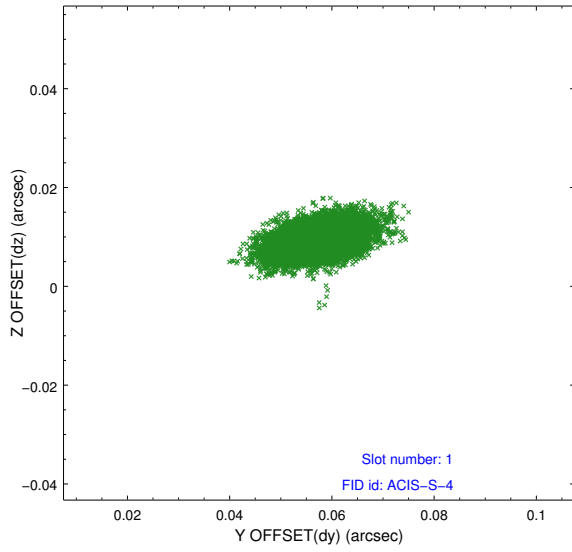


## 2.5 FID Slots

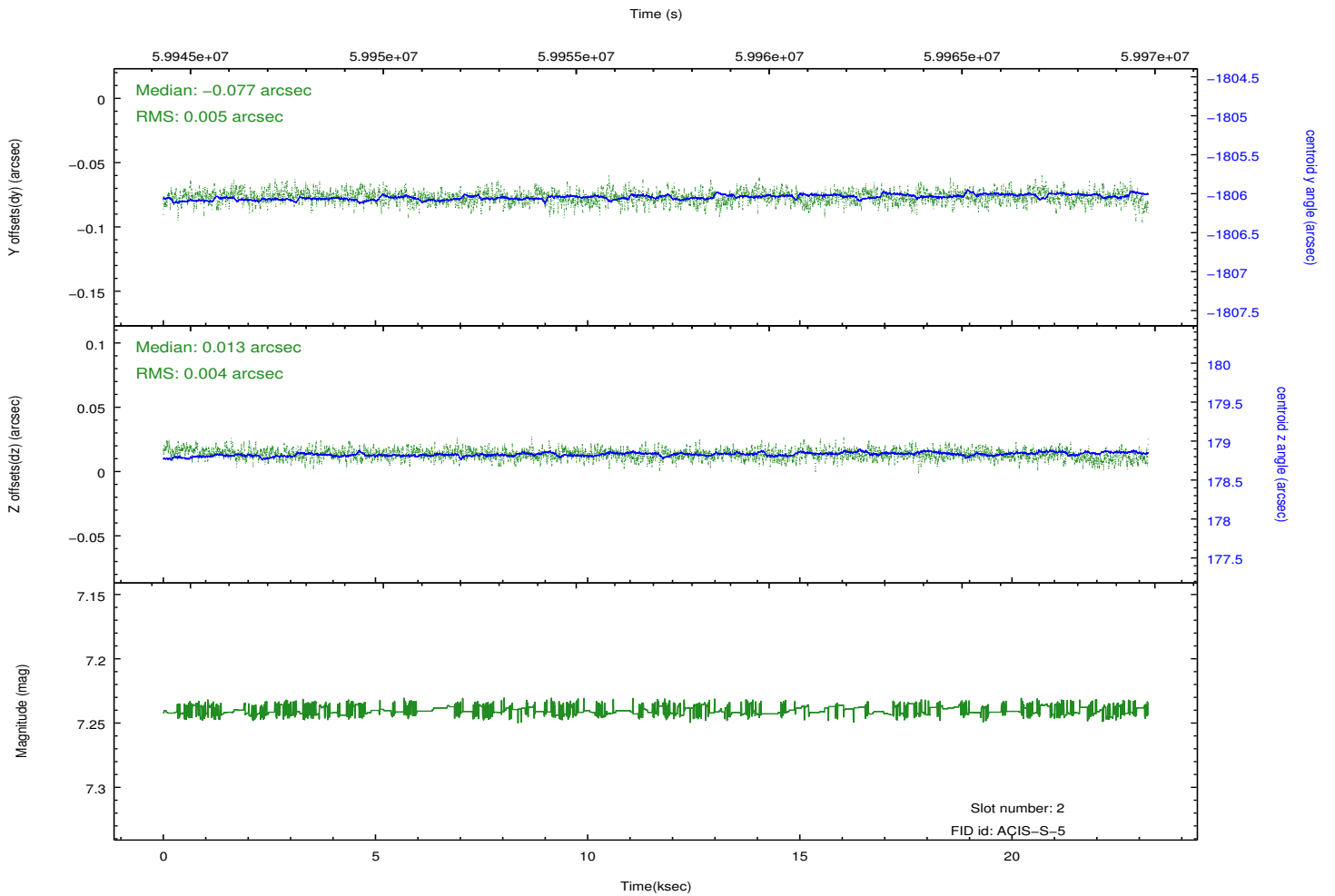
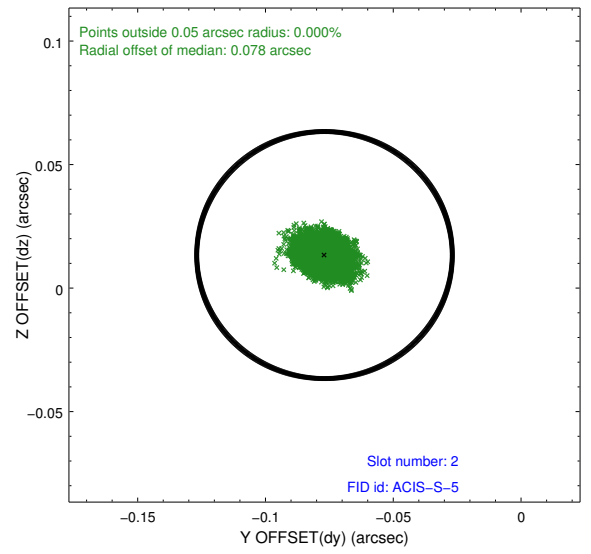
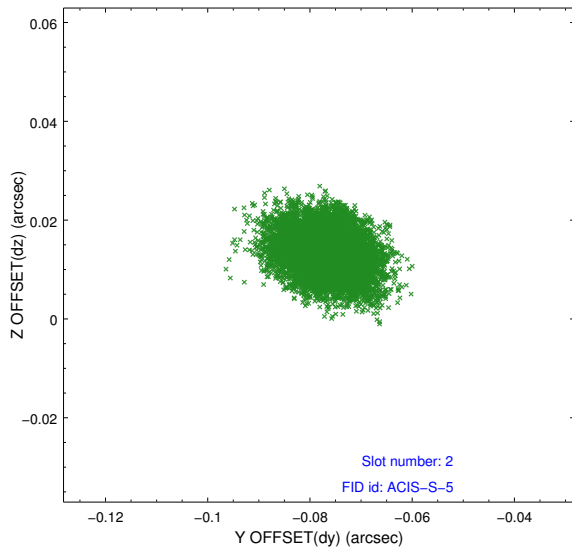
### 2.5.1 Slot 0



## 2.5.2 Slot 1

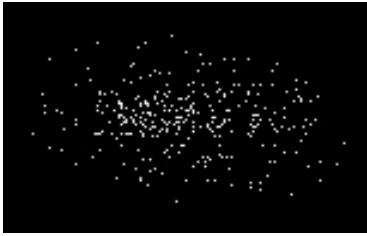


### 2.5.3 Slot 2

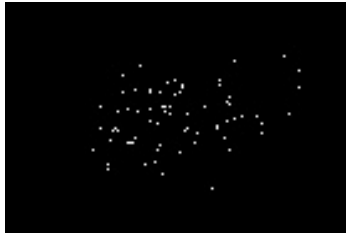


### 3 Point Sources

4.49 arcmin



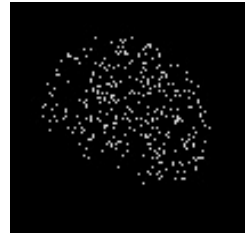
2.73 arcmin



19.90 arcmin



17.94 arcmin



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2010.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.38

## A.2 Comments

An image of Jupiter was inadvertently superposed on the bias map for chip 7. The region of that bias map containing the anomalous values due to the image of Jupiter was replaced with scaled values from another bias map for this chip taken near in time. The affected pixels are bounded by sky coords: (24.73717, 8.70554), (24.72320, 8.73749), (24.64969, 8.70608), (24.66366, 8.67413).

==

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 chip (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.