

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11564 - L2 Version 3  
Chandra X-Ray Center

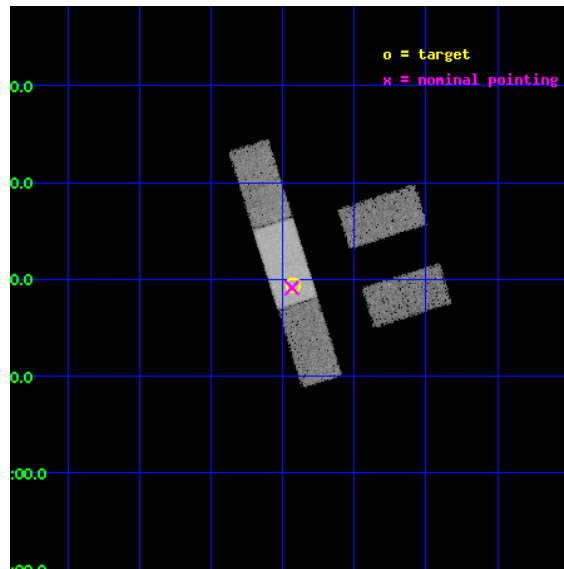
L2 Processing Date : Jun 25 2012

## 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>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

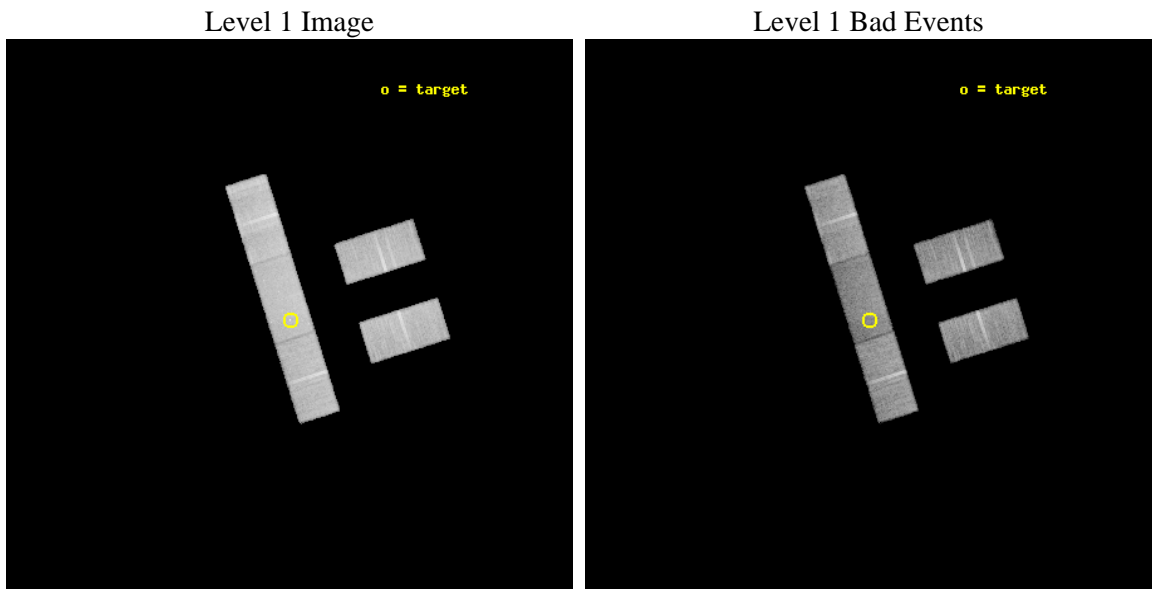
seq_num	702150	Sequence number
obs_id	11564	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS0924+0219	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	141.232917	Observer's specified target RA [deg]
dec_targ	2.323583	Observer's specified target Dec [deg]
ra_nom	141.23411281604	Nominal RA [deg]
dec_nom	2.3188907326004	Nominal Dec [deg]
roll_nom	252.43579132366	Nominal Roll [deg]
revision	3	Processing version of data
ontime	22164.599844635	Sum of GTIs [s]
livetime	21642.133285782	Livetime [s]
ontime2	22164.599844635	Sum of GTIs [s]
ontime3	22162.858844399	Sum of GTIs [s]
ontime6	22162.858814418	Sum of GTIs [s]
ontime7	22164.599844635	Sum of GTIs [s]
ontime8	22164.599844635	Sum of GTIs [s]
l2events	83373	Number of level 2 events



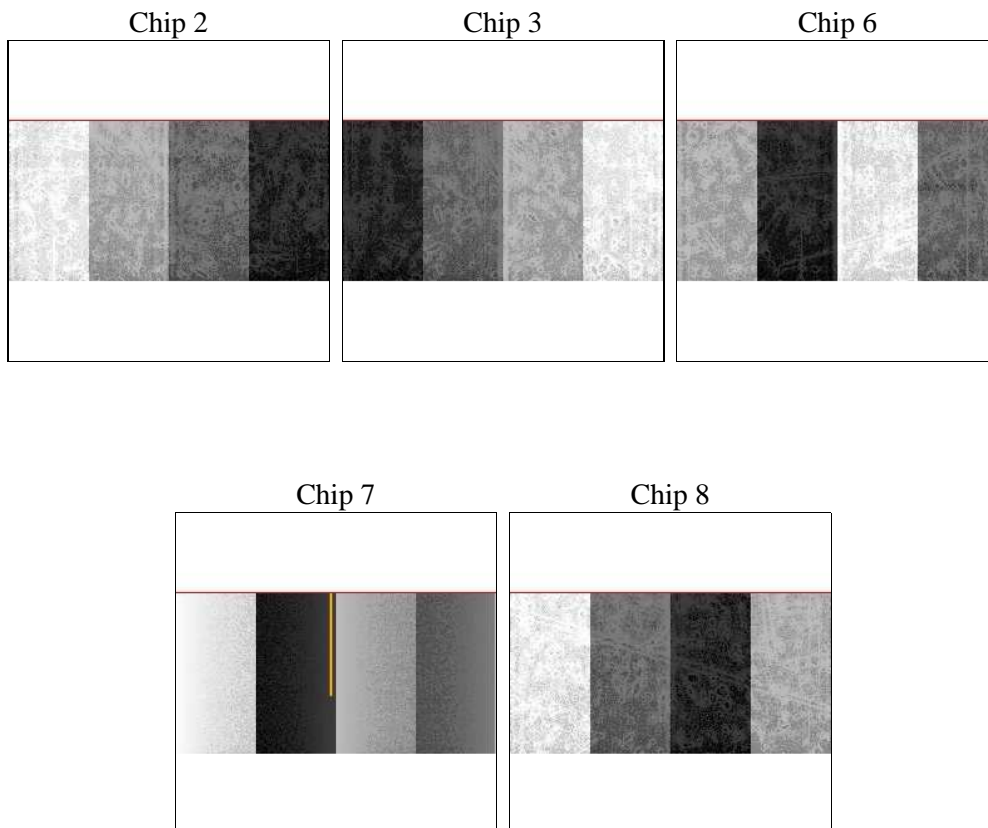
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	22164.599844635	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime2	22164.599844635	Sum of GTIs [s]
date	2012-06-25T10:43:56	Date and time of file creation	ontime3	22162.858844399	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	22162.858814418	Sum of GTIs [s]
			ontime7	22164.599844635	Sum of GTIs [s]
			ontime8	22164.599844635	Sum of GTIs [s]
			l1events	508061	Number of level 1 events

### 2.1.4 Events

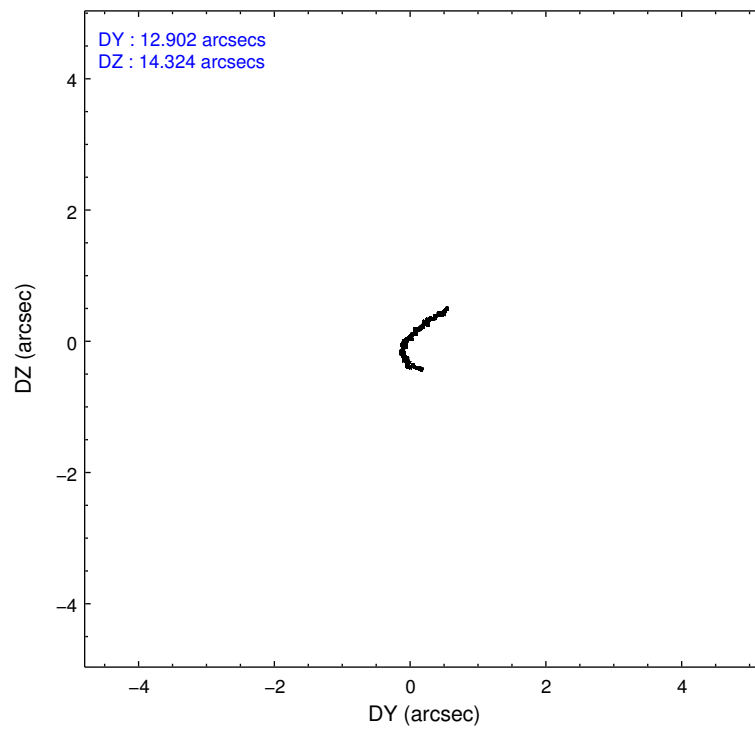
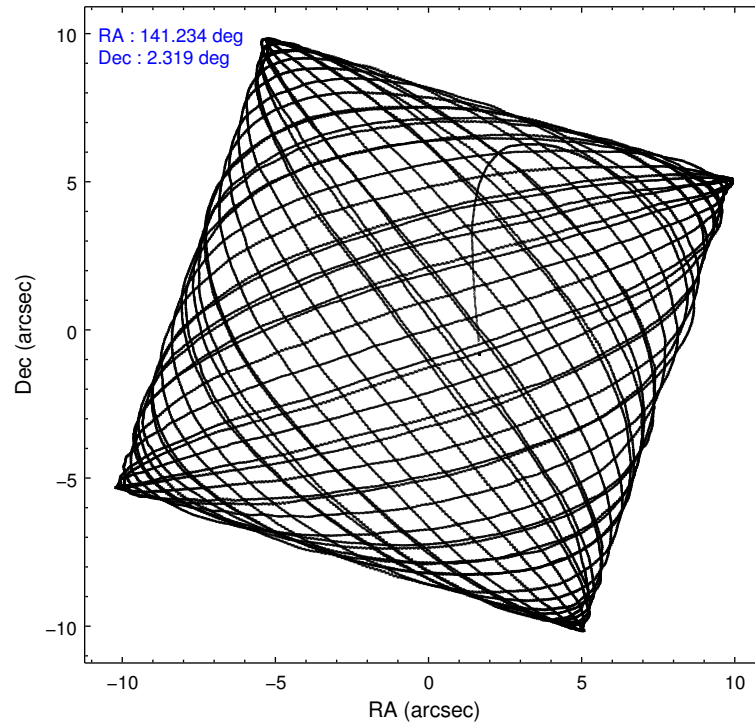
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	91490	88975	93881	109168	124547
rejected events	82158	79786	83484	58955	93958
rejected %	89%	89%	88%	54%	75%

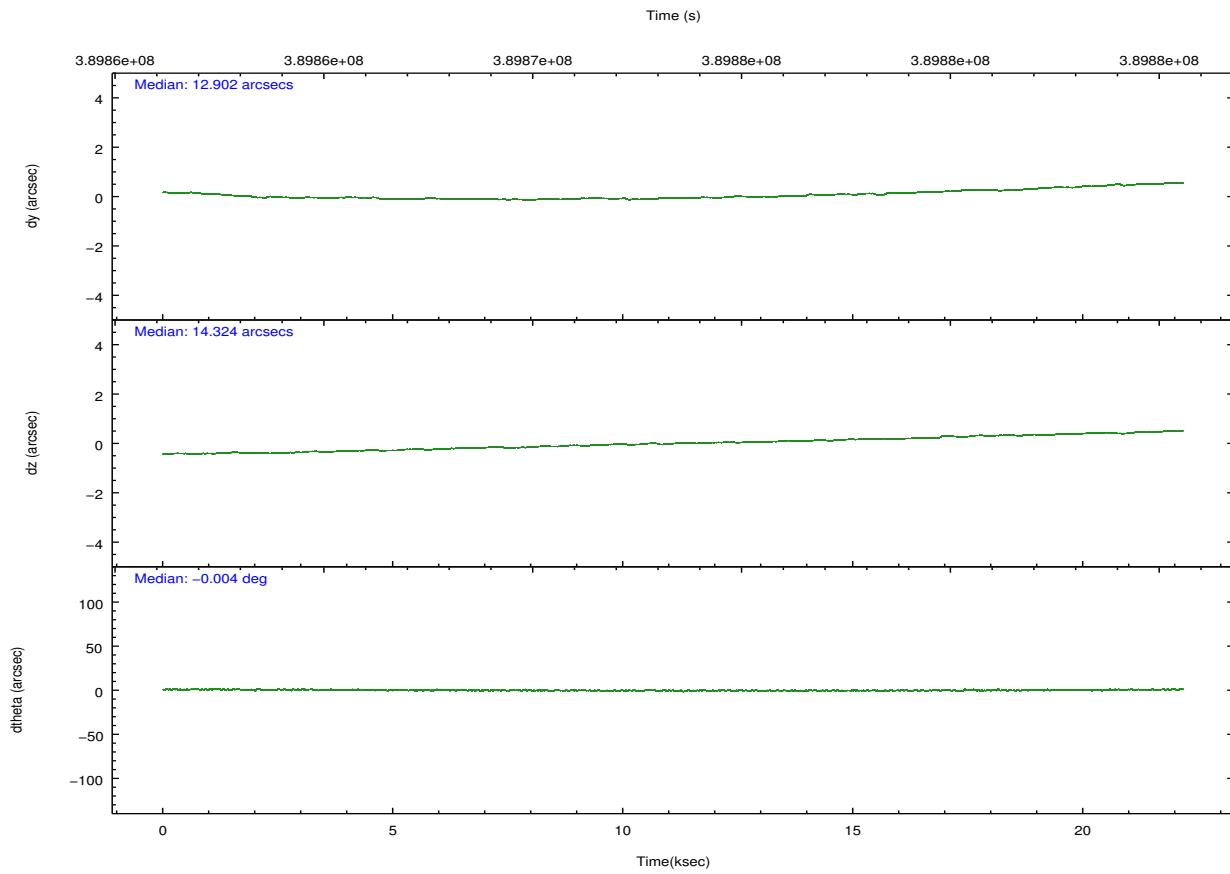
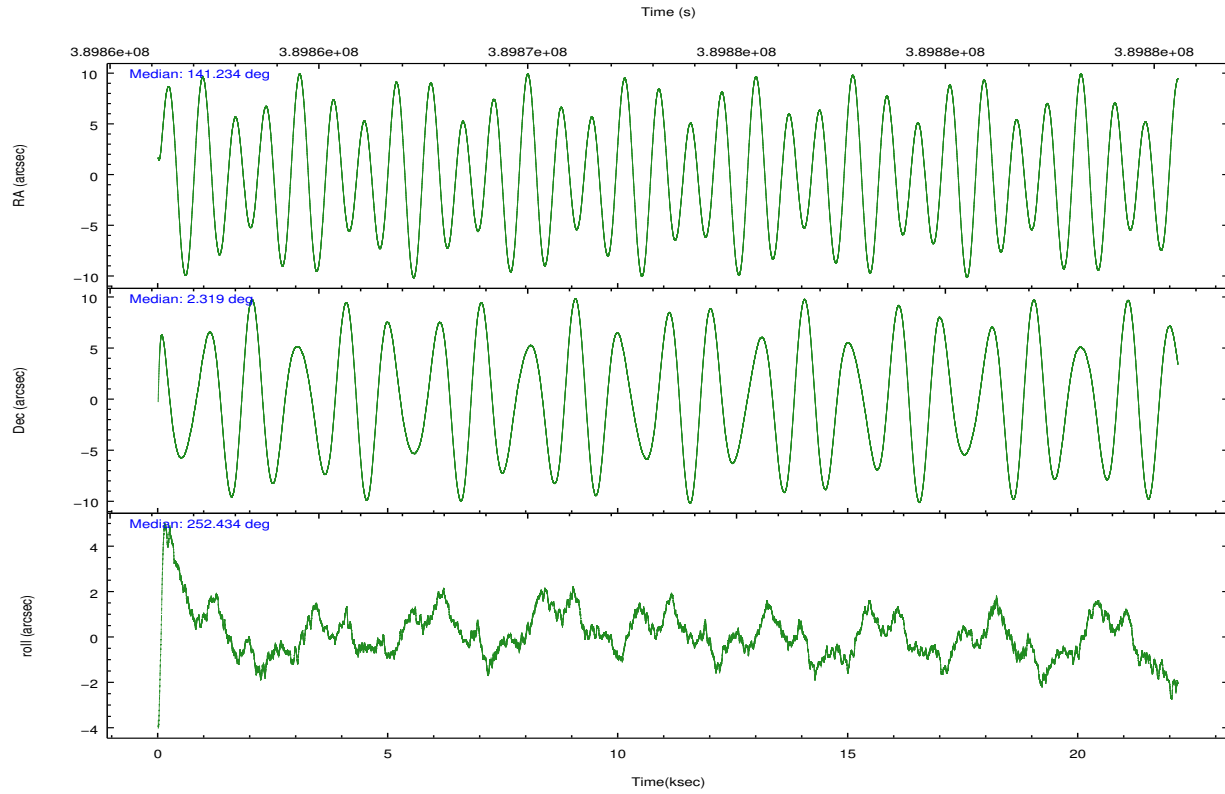
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3056	3043	3378	5276	8643
	3%	3%	3%	4%	6%
grade 1 events	39	41	43	136	74
	0%	0%	0%	0%	0%
grade 2 events	2312	2047	2312	10620	7219
	2%	2%	2%	9%	5%
grade 3 events	1223	1235	1320	5164	3308
	1%	1%	1%	4%	2%
grade 4 events	1223	1202	1298	4980	3103
	1%	1%	1%	4%	2%
grade 5 events	3253	3871	3984	11454	5738
	3%	4%	4%	10%	4%
grade 6 events	1666	1806	2256	25052	8735
	1%	2%	2%	22%	7%
grade 7 events	78718	75730	79290	46486	87727
	86%	85%	84%	42%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	141.227840	141.2341128160404	CCD I2 on	O4	Y
[deg] Pointing Dec	2.345497	2.318890732600412	CCD I3 on	O3	Y
[deg] Pointing Roll	252.279421	252.4357913236632	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	389862450.184000	389861463.72835	CCD S5 on	N	N
Observation start date	2010-05-10T07:06:24	2010-05-10T06:51:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	389884450.184000	389885277.04206	On-chip summing requested	N	N
Observation end date	2010-05-10T13:13:04	2010-05-10T13:27:57	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

## 2.3 Aspect



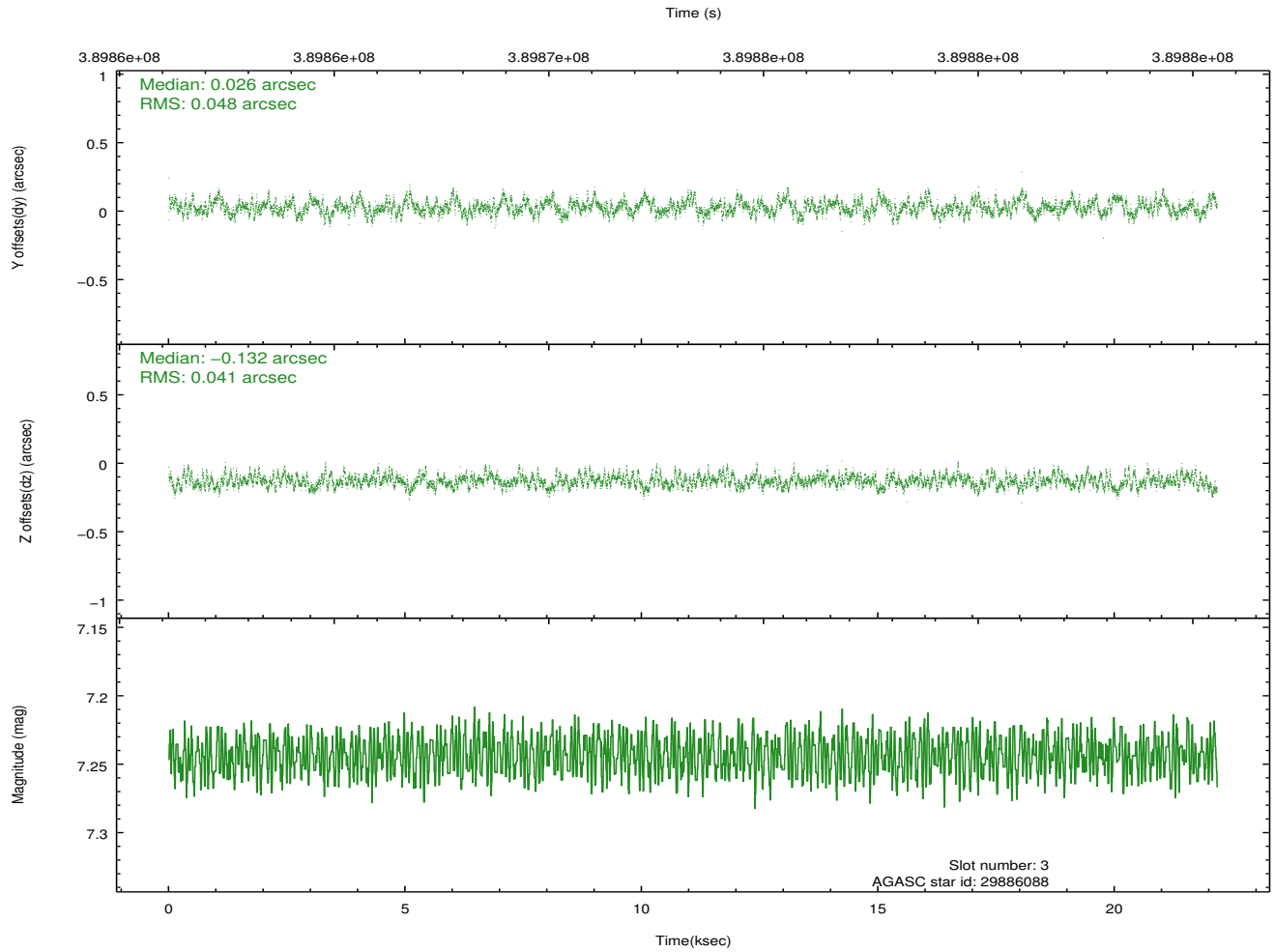
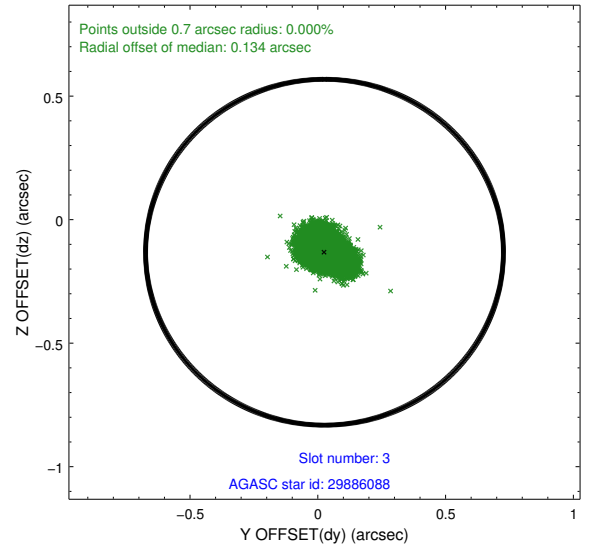
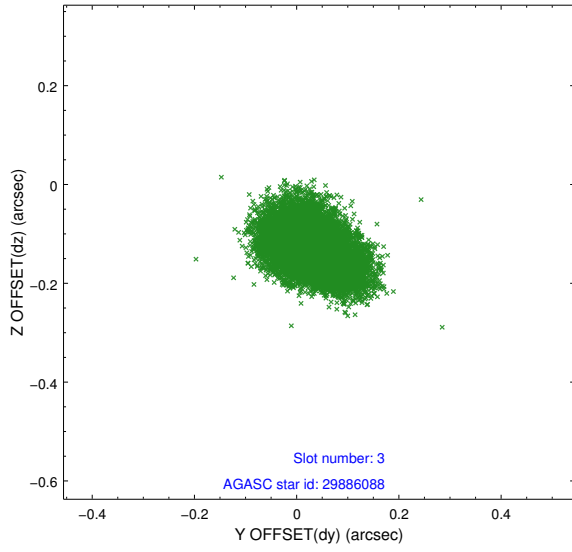


### Slot Statistics

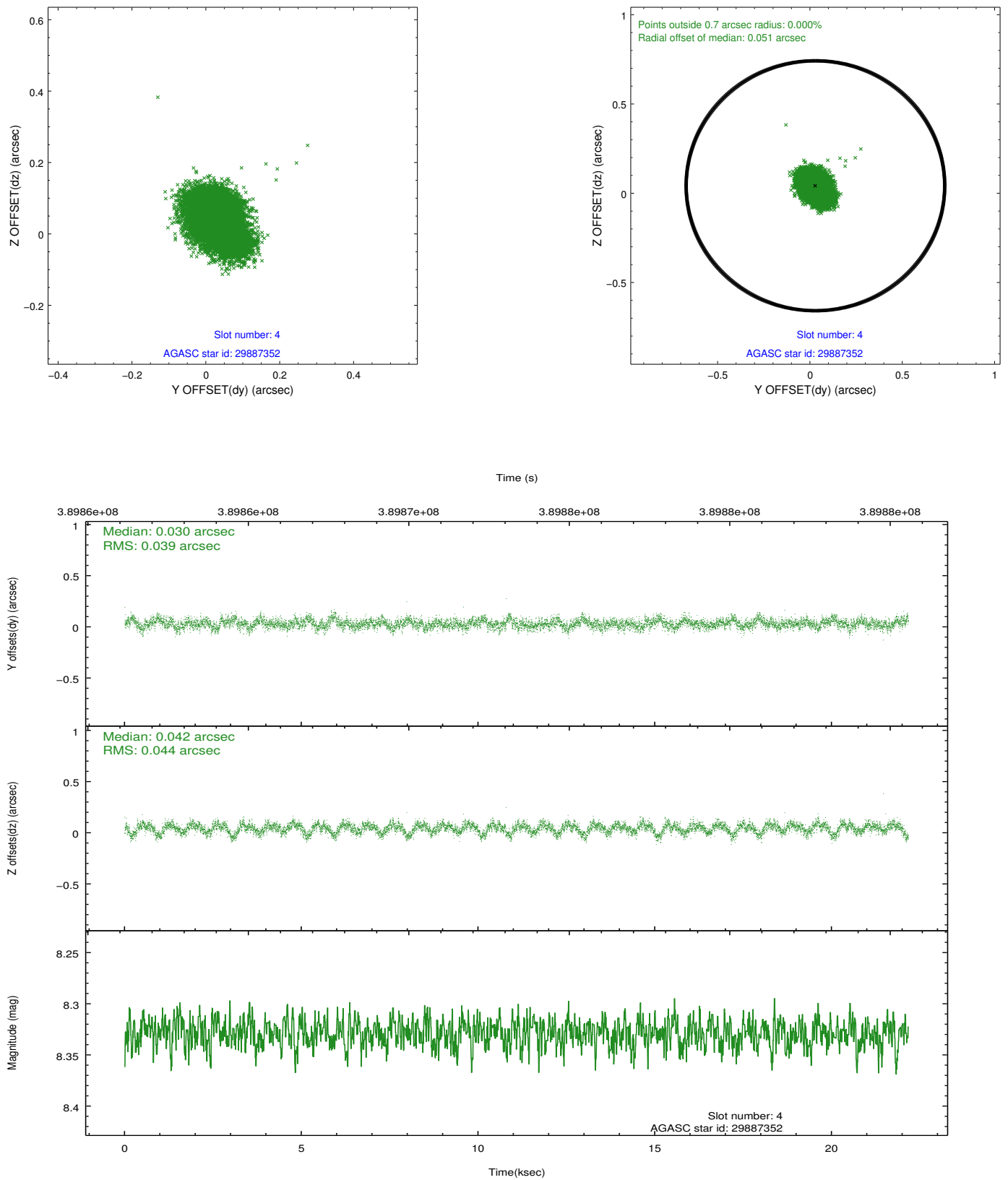
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	5407	-0.096	-0.064	0.010	0.023	0.000000	0.000000	-765.99	-1735.70
1	FID	ACIS-S-4	7.04	5407	0.105	0.048	0.008	0.016	0.000000	0.000000	2147.42	172.74
2	FID	ACIS-S-6	7.18	5407	-0.036	0.024	0.008	0.012	0.000000	0.000000	396.25	810.28
3	GUIDE	29886088	7.24	10815	0.026	-0.132	0.067	0.110	140.911389	2.409953	125.59	-1154.76
4	GUIDE	29887352	8.33	10812	0.030	0.042	0.060	0.104	141.532384	1.680922	1945.62	1772.25
5	GUIDE	30288600	9.05	10802	-0.005	0.018	0.104	0.163	141.552019	2.678221	-1495.39	746.52
6	GUIDE	30292744	8.53	10811	-0.158	0.060	0.070	0.118	141.614493	2.506173	-974.30	1148.31
7	GUIDE	29892168	9.53	10798	0.105	0.019	0.109	0.171	141.475378	1.649111	2117.02	1611.98

## 2.4 Star Slots

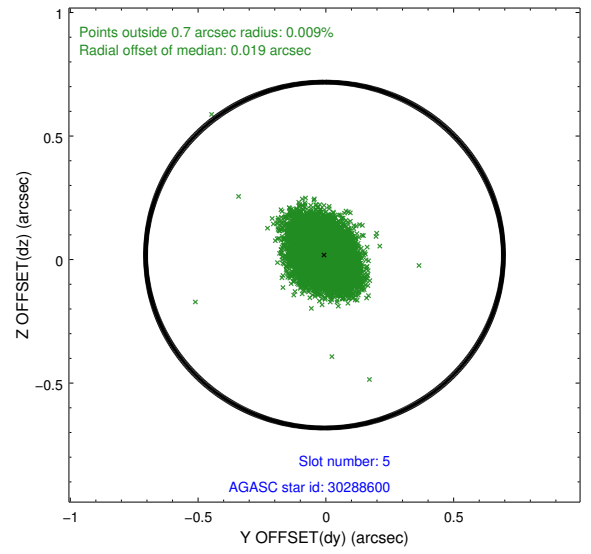
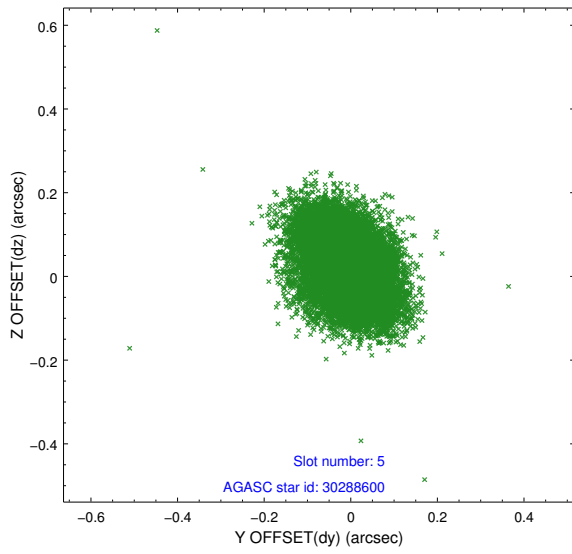
### 2.4.1 Slot 3



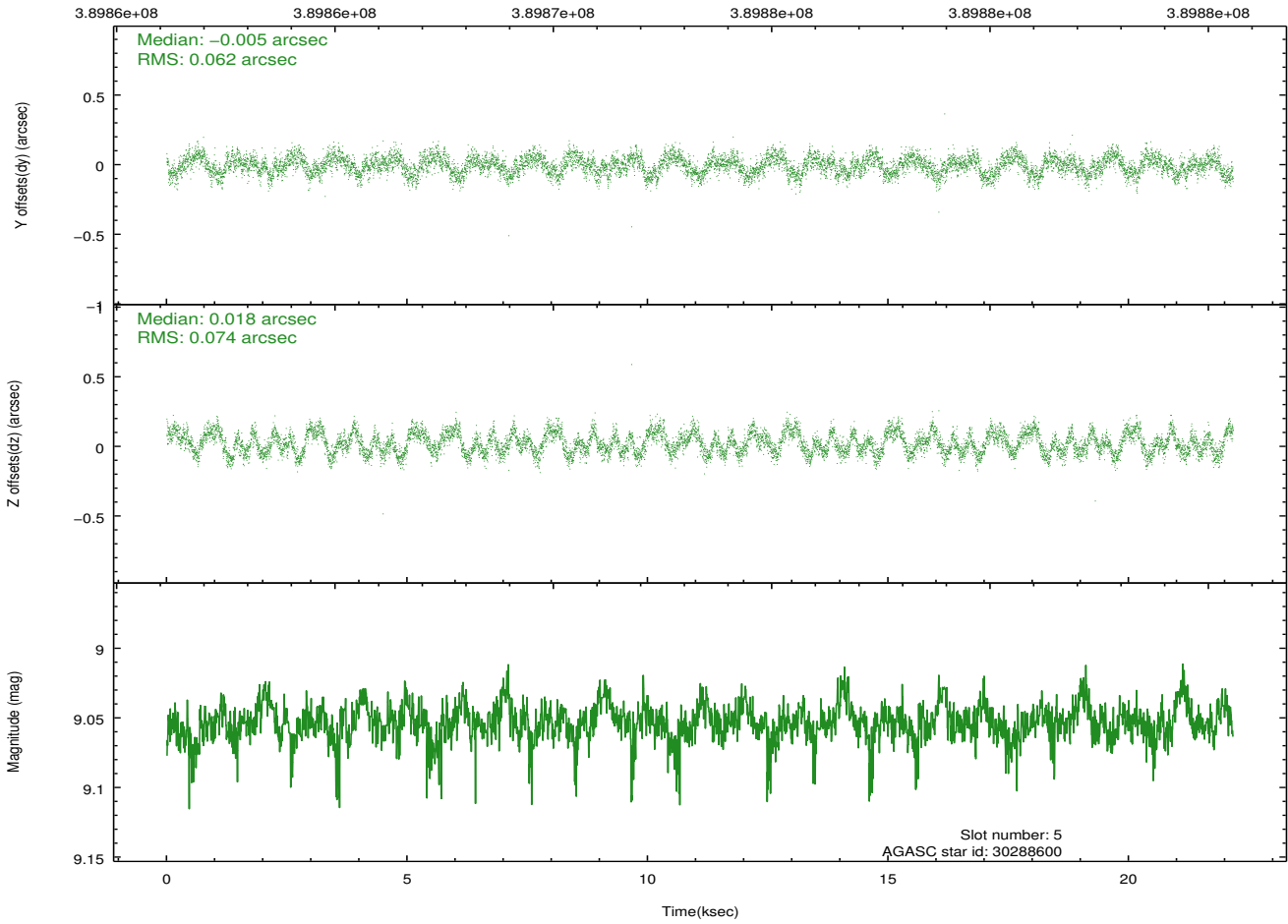
## 2.4.2 Slot 4



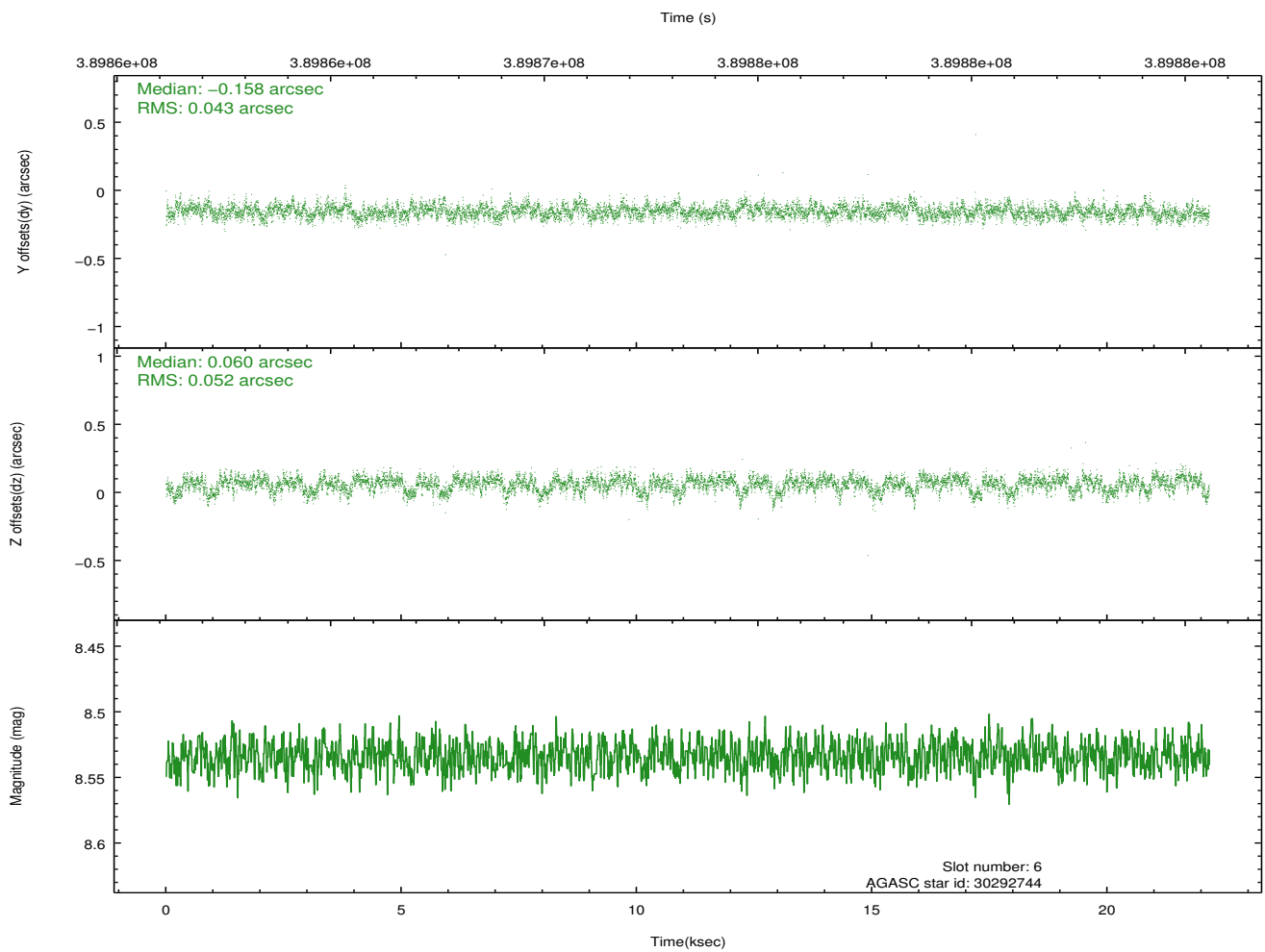
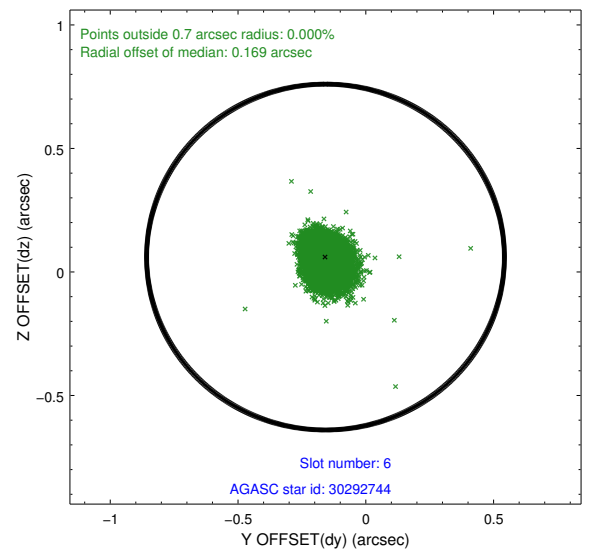
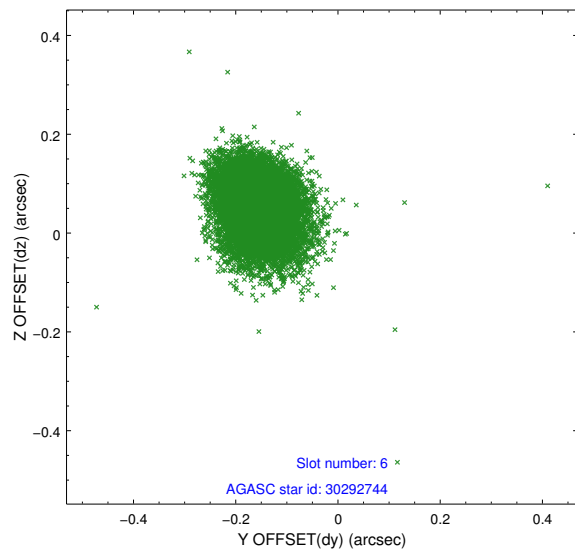
### 2.4.3 Slot 5



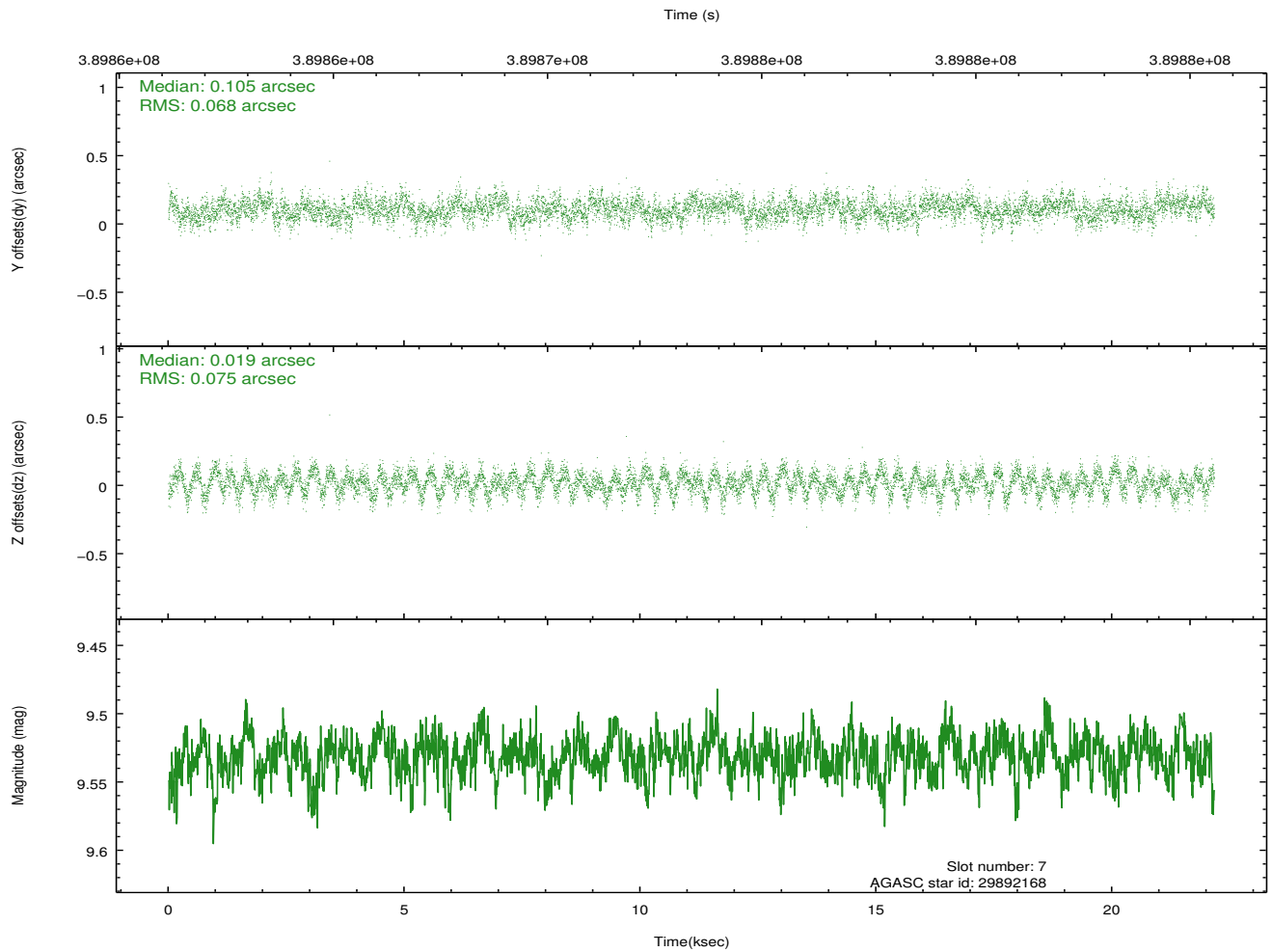
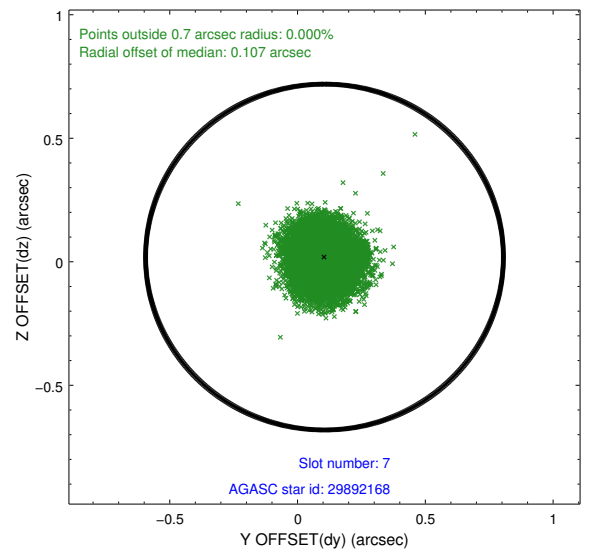
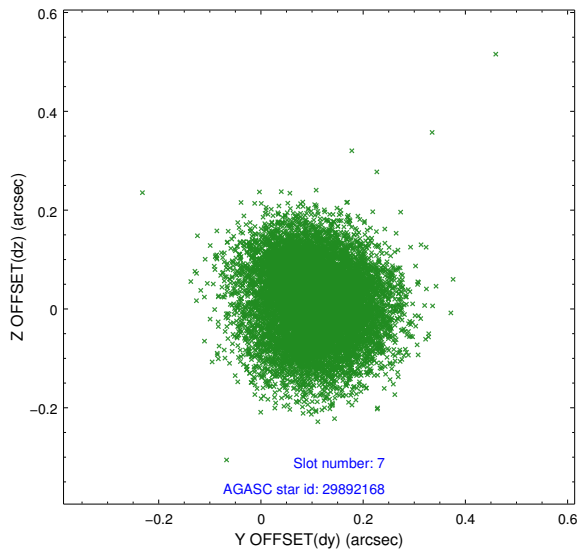
Time (s)



## 2.4.4 Slot 6

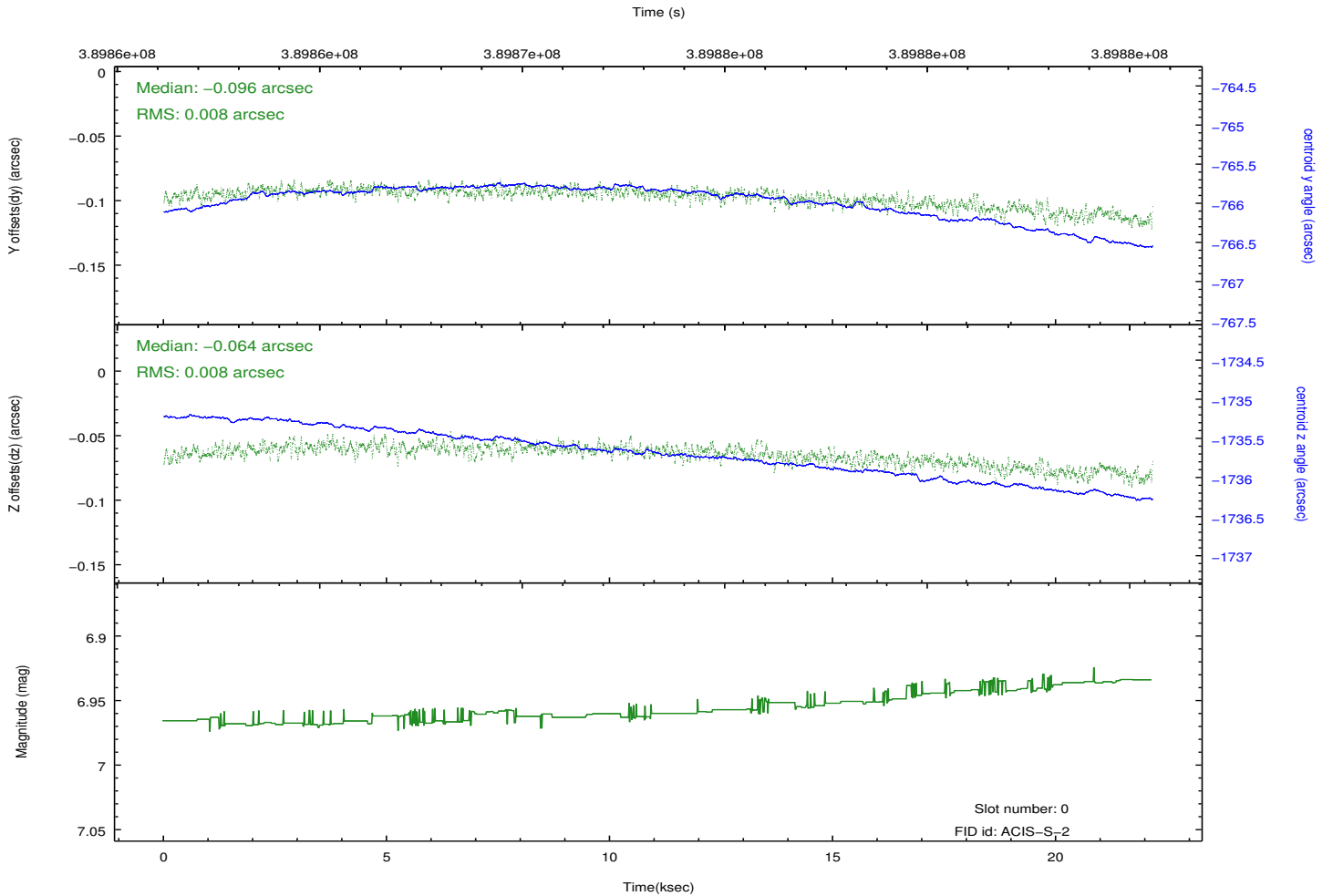
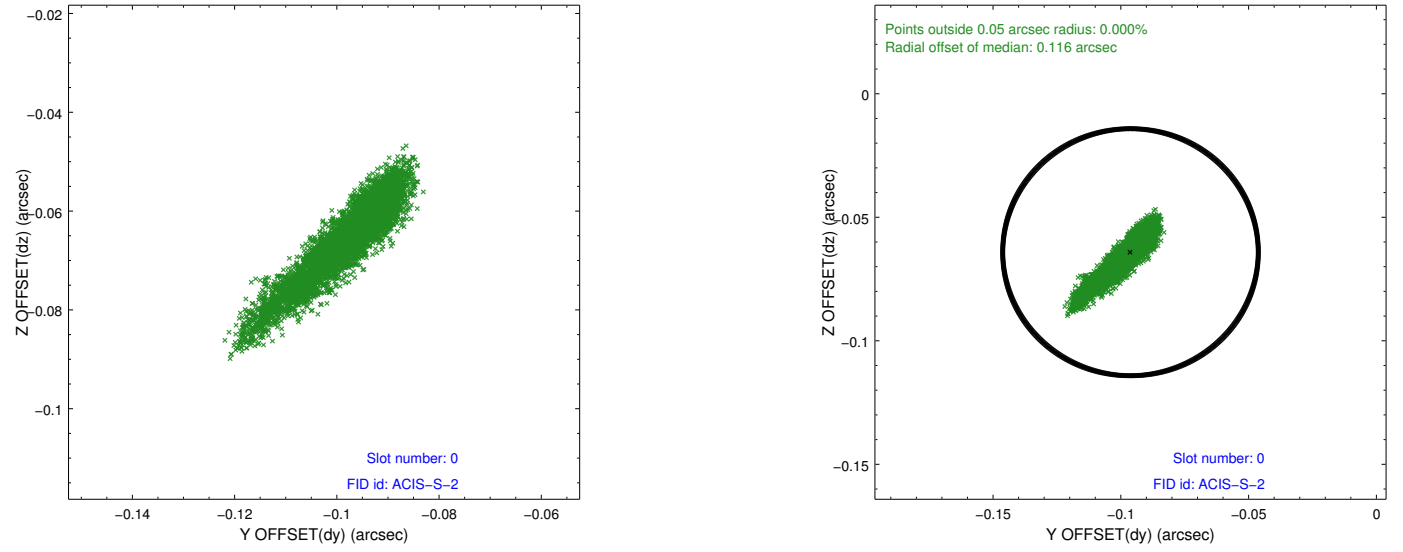


## 2.4.5 Slot 7

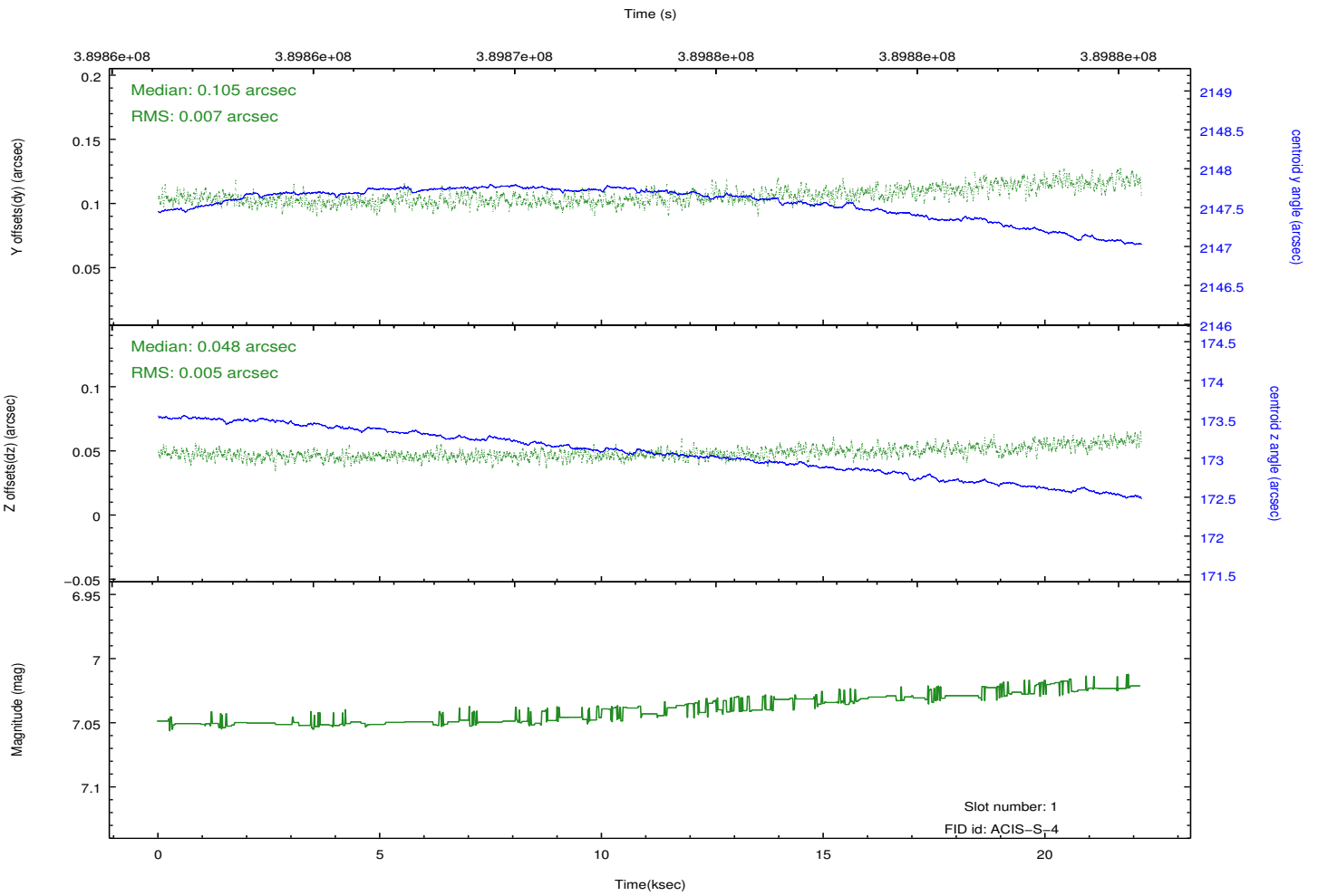
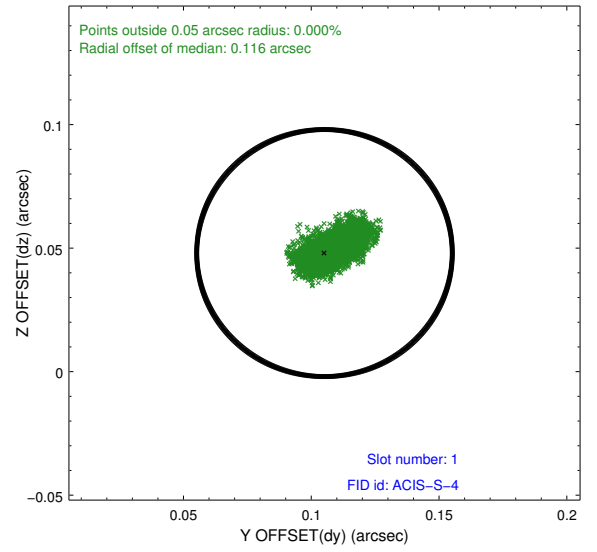
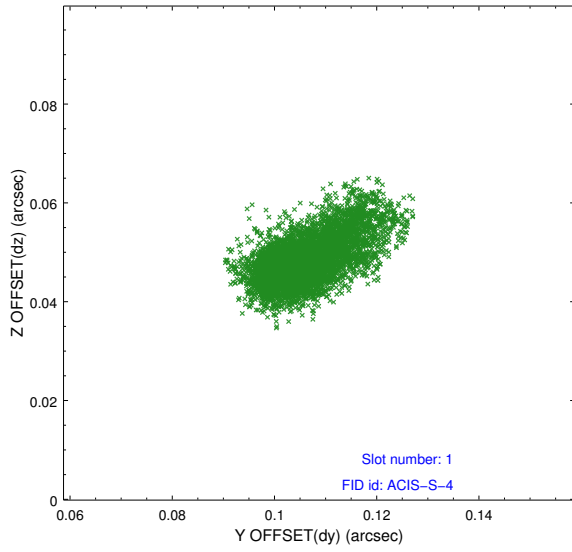


## 2.5 FID Slots

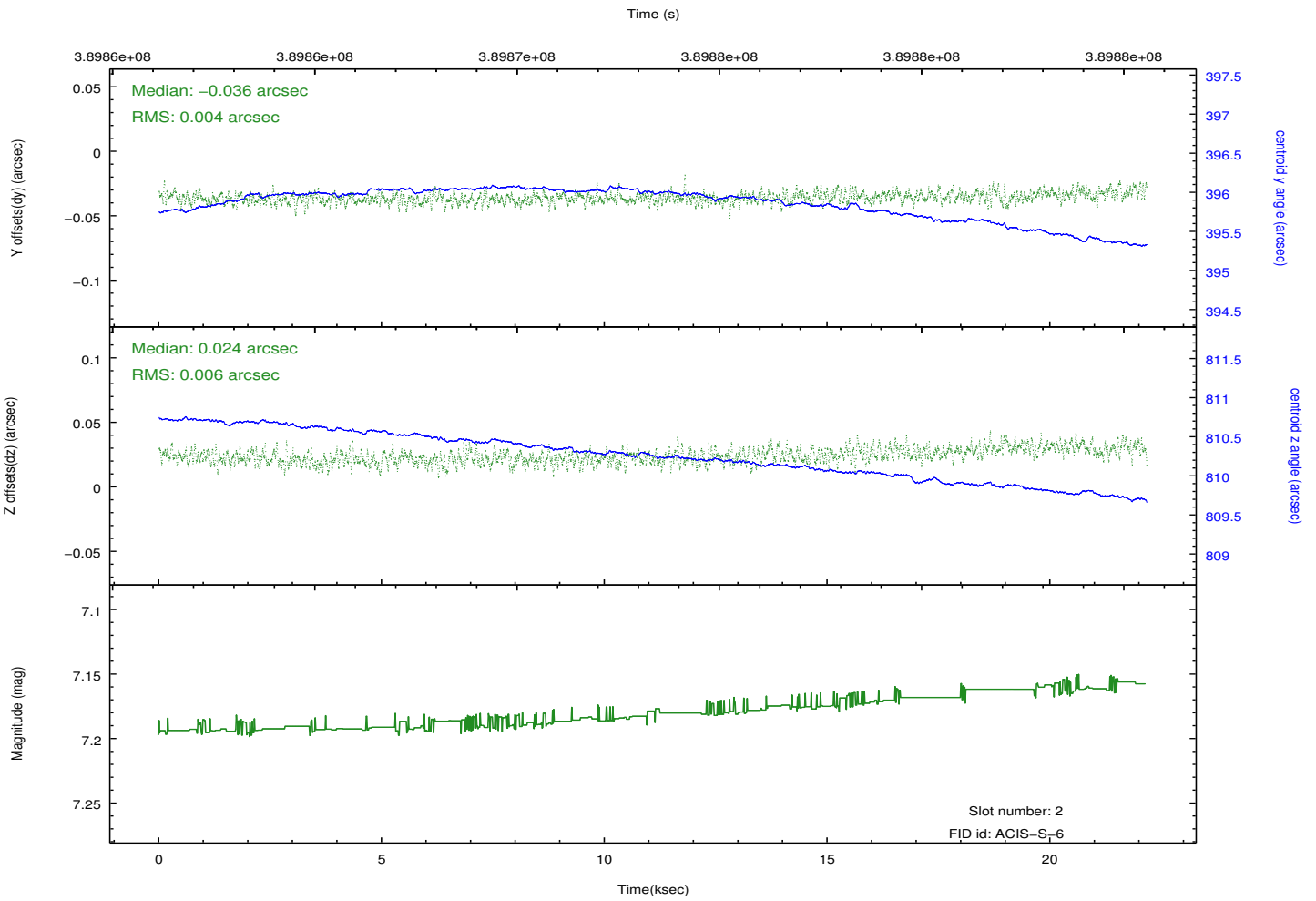
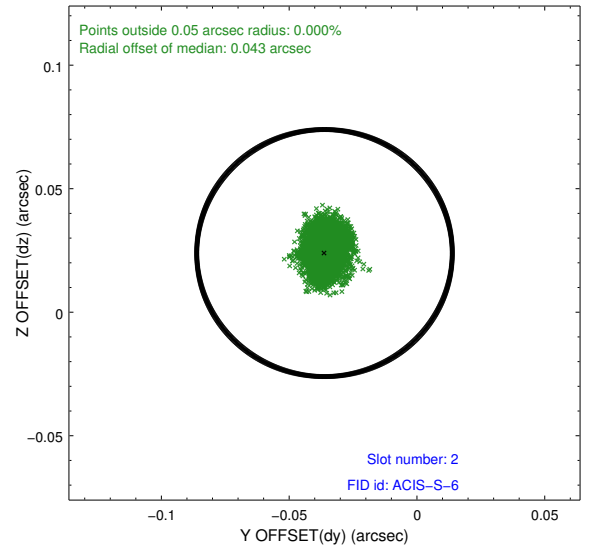
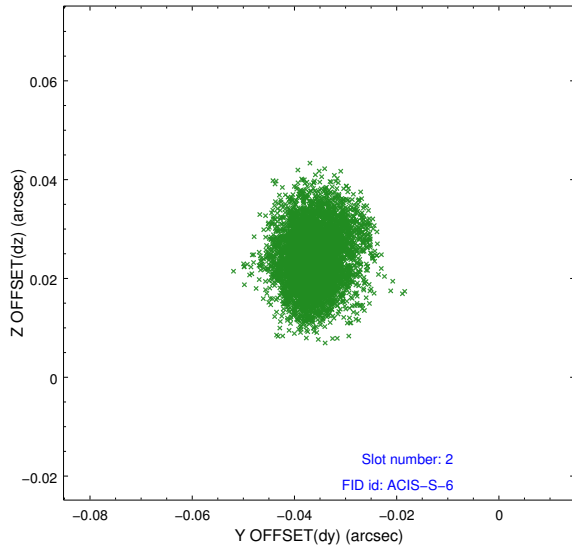
### 2.5.1 Slot 0



## 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)	2012.07.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.164599844635

## A.2 Comments

Monitor constraint met, follows obs11563 by 60 days