

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10867 - L2 Version 2  
Chandra X-Ray Center

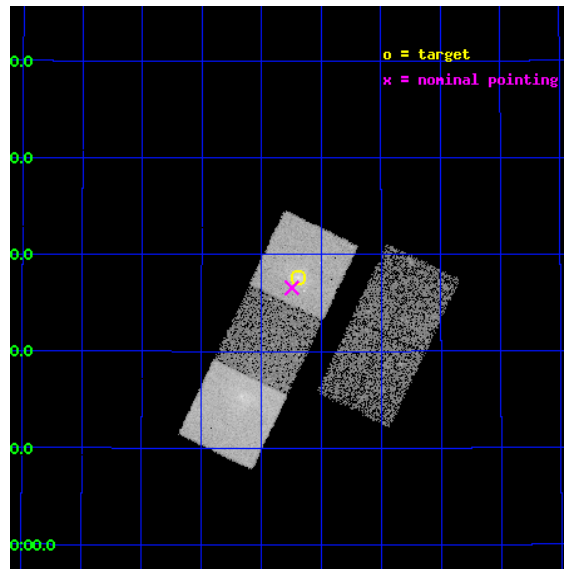
L2 Processing Date : Jun 1 2012

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# 1 Front

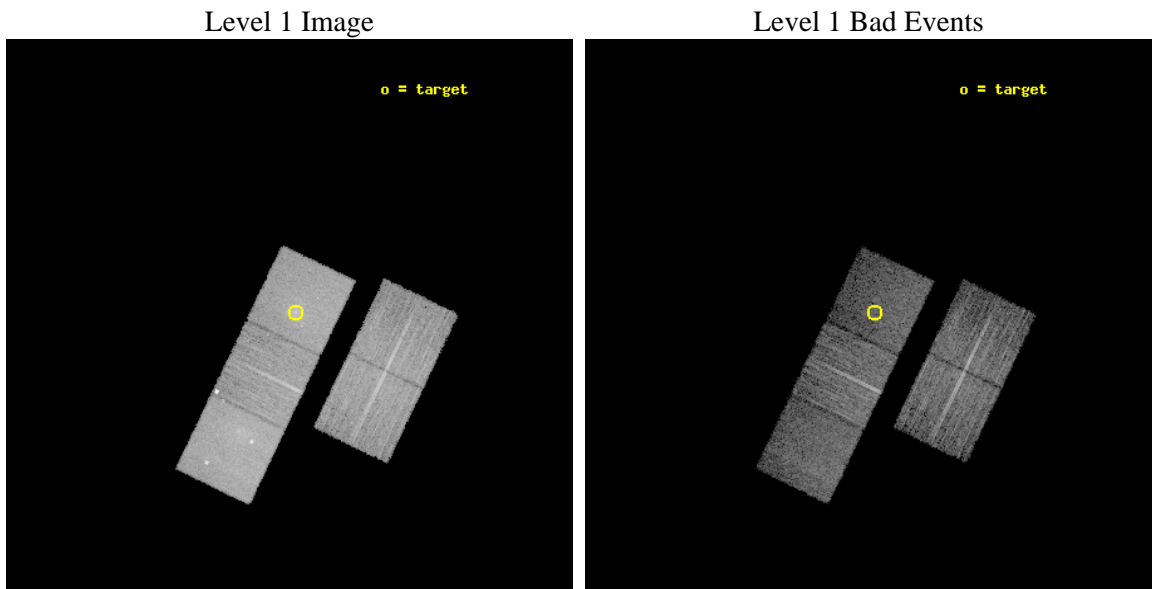
seq_num	600729	Sequence number
obs_id	10867	Observation id
title	Bondi accretion and jet power in a complete sample of elliptical galaxies	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	NGC 499	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	20.797917	Observer's specified target RA [deg]
dec_targ	33.460556	Observer's specified target Dec [deg]
ra_nom	20.811412693845	Nominal RA [deg]
dec_nom	33.442870289569	Nominal Dec [deg]
roll_nom	295.64919912363	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7154.800055027	Sum of GTIs [s]
livetime	7061.3173250209	Livetime [s]
ontime2	7154.800055027	Sum of GTIs [s]
ontime3	7154.800055027	Sum of GTIs [s]
ontime5	7154.800055027	Sum of GTIs [s]
ontime6	7151.6590846777	Sum of GTIs [s]
ontime7	7154.800055027	Sum of GTIs [s]
l2events	102431	Number of level 2 events



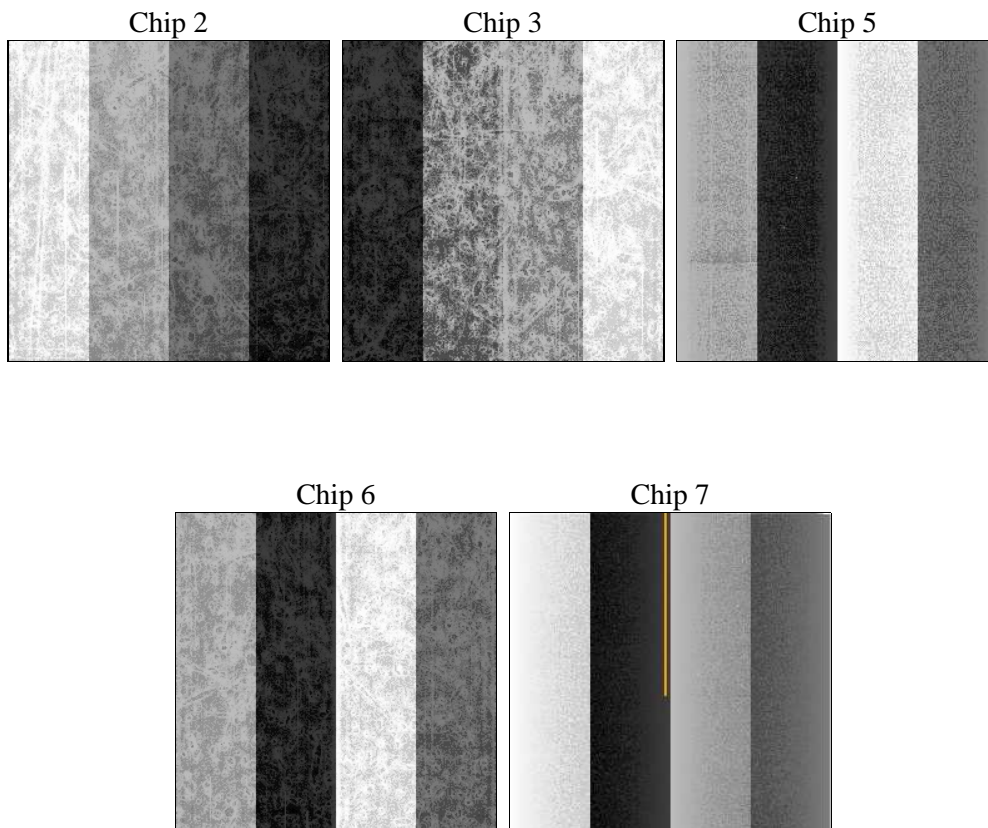
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	7154.800055027	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	7154.800055027	Sum of GTIs [s]
date	2012-06-01T09:16:24	Date and time of file creation	ontime3	7154.800055027	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	7154.800055027	Sum of GTIs [s]
			ontime6	7151.6590846777	Sum of GTIs [s]
			ontime7	7154.800055027	Sum of GTIs [s]
			l1events	376567	Number of level 1 events

### 2.1.4 Events

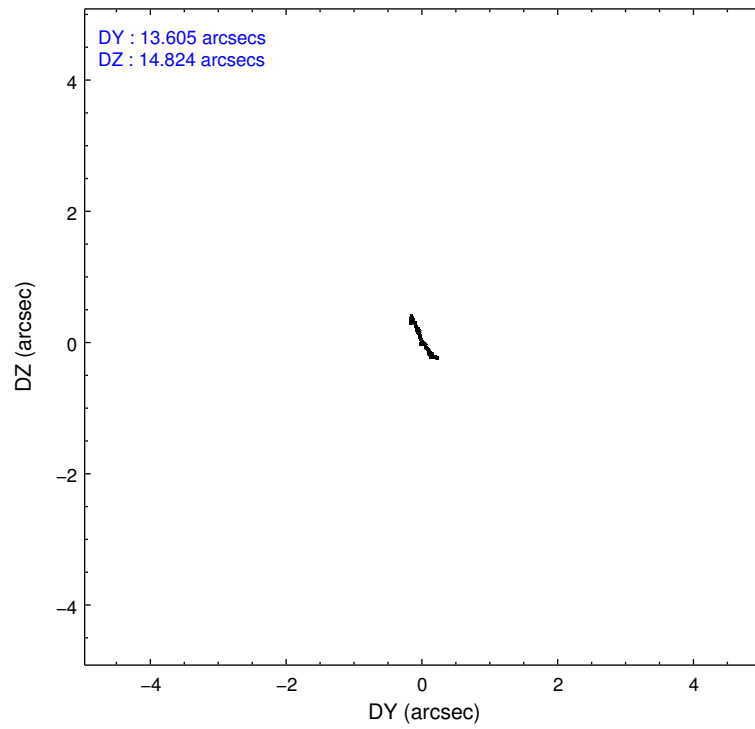
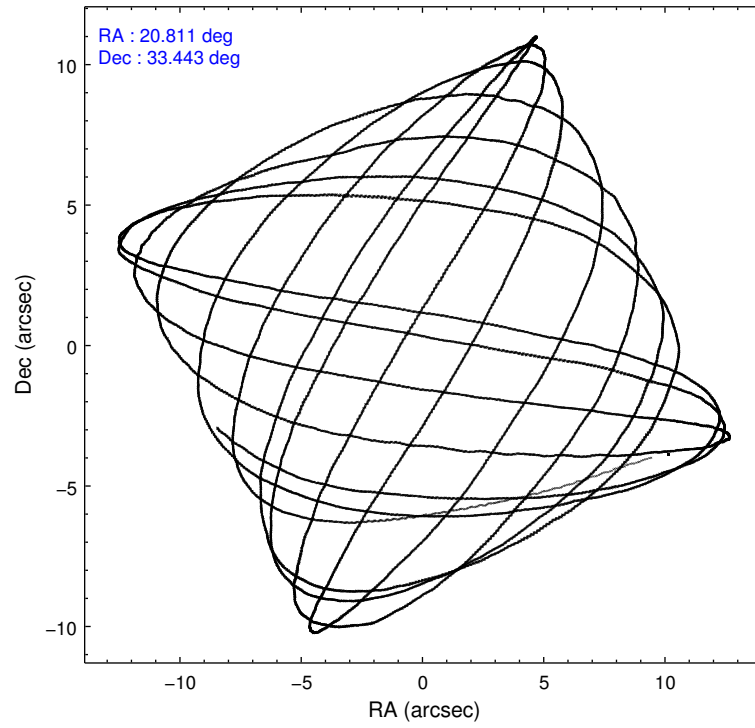
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	67620	60438	99071	70183	79255
rejected events	61255	54548	48034	59615	41649
rejected %	90%	90%	48%	84%	52%

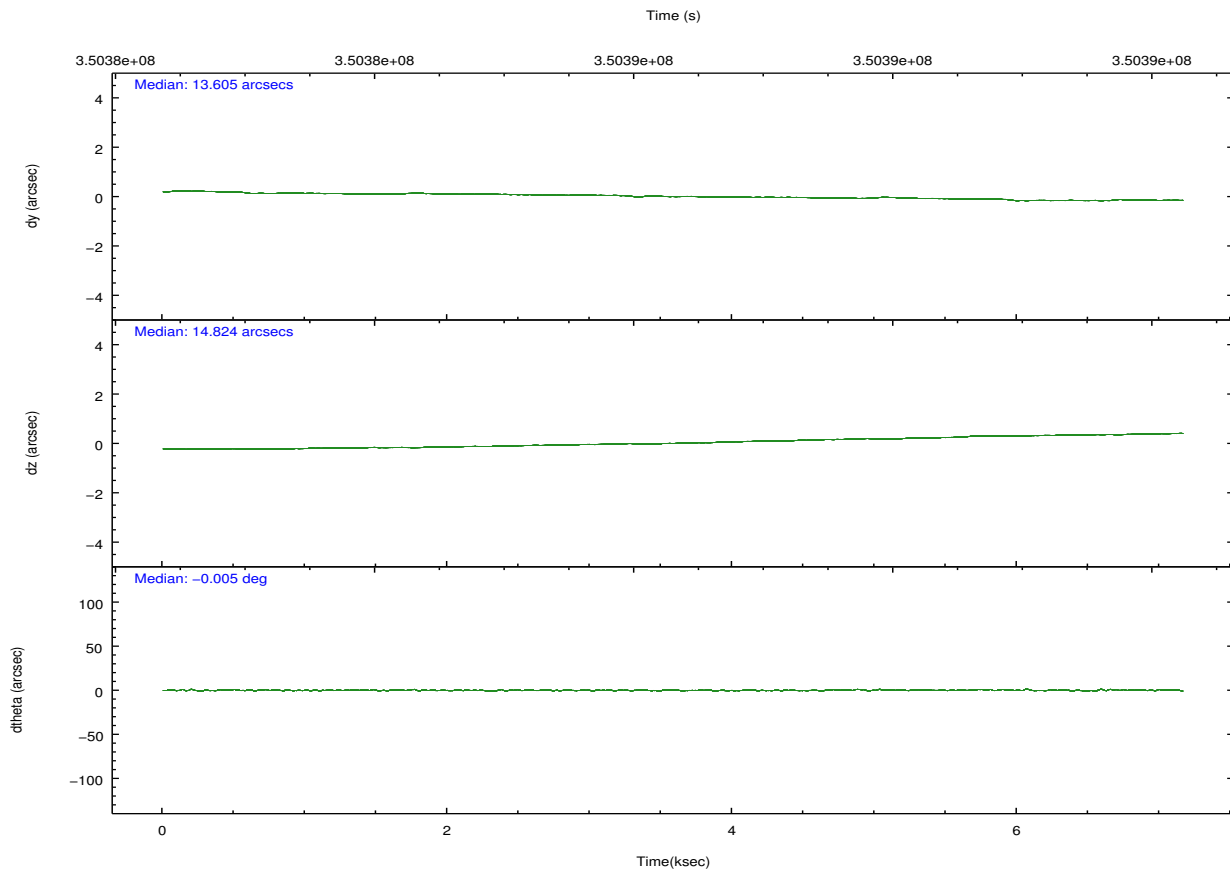
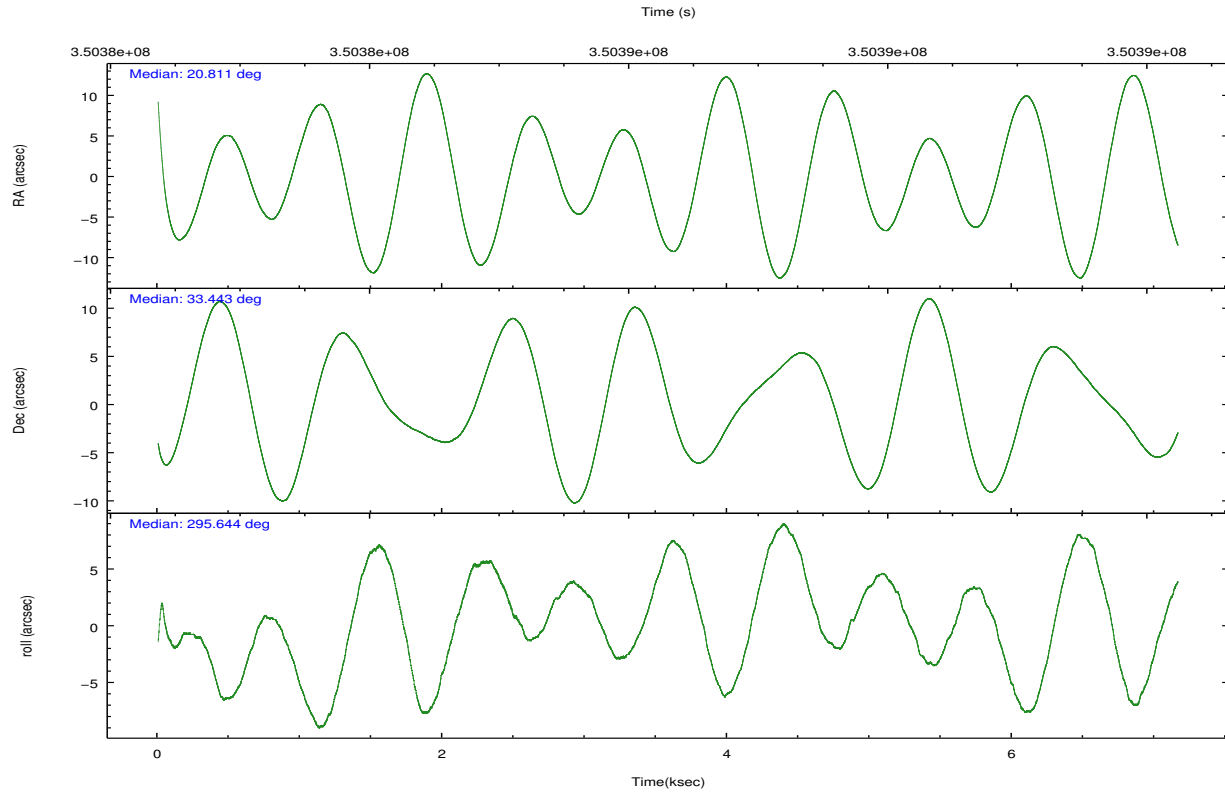
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2575	2289	8270	6282	5078
	3%	3%	8%	8%	6%
grade 1 events	37	38	215	55	102
	0%	0%	0%	0%	0%
grade 2 events	1574	1350	15605	1706	8432
	2%	2%	15%	2%	10%
grade 3 events	680	656	2577	768	3646
	1%	1%	2%	1%	4%
grade 4 events	711	703	2457	781	3655
	1%	1%	2%	1%	4%
grade 5 events	2087	2495	7210	2726	7605
	3%	4%	7%	3%	9%
grade 6 events	1175	1178	24375	1468	18377
	1%	1%	24%	2%	23%
grade 7 events	58781	51729	38362	56397	32360
	86%	85%	38%	80%	40%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	20.784102	20.81141269384543	CCD I2 on	O1	Y
[deg] Pointing Dec	33.458004	33.44287028956938	CCD I3 on	Y	Y
[deg] Pointing Roll	295.507611	295.6491991236322	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	N	N
[s] Observation start time (MET)	350382891.184000	350381738.66992	CCD S5 on	N	N
Observation start date	2009-02-07T08:33:45	2009-02-07T08:15:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	350389891.184000	350390242.07034	On-chip summing requested	N	N
Observation end date	2009-02-07T10:30:25	2009-02-07T10:37:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



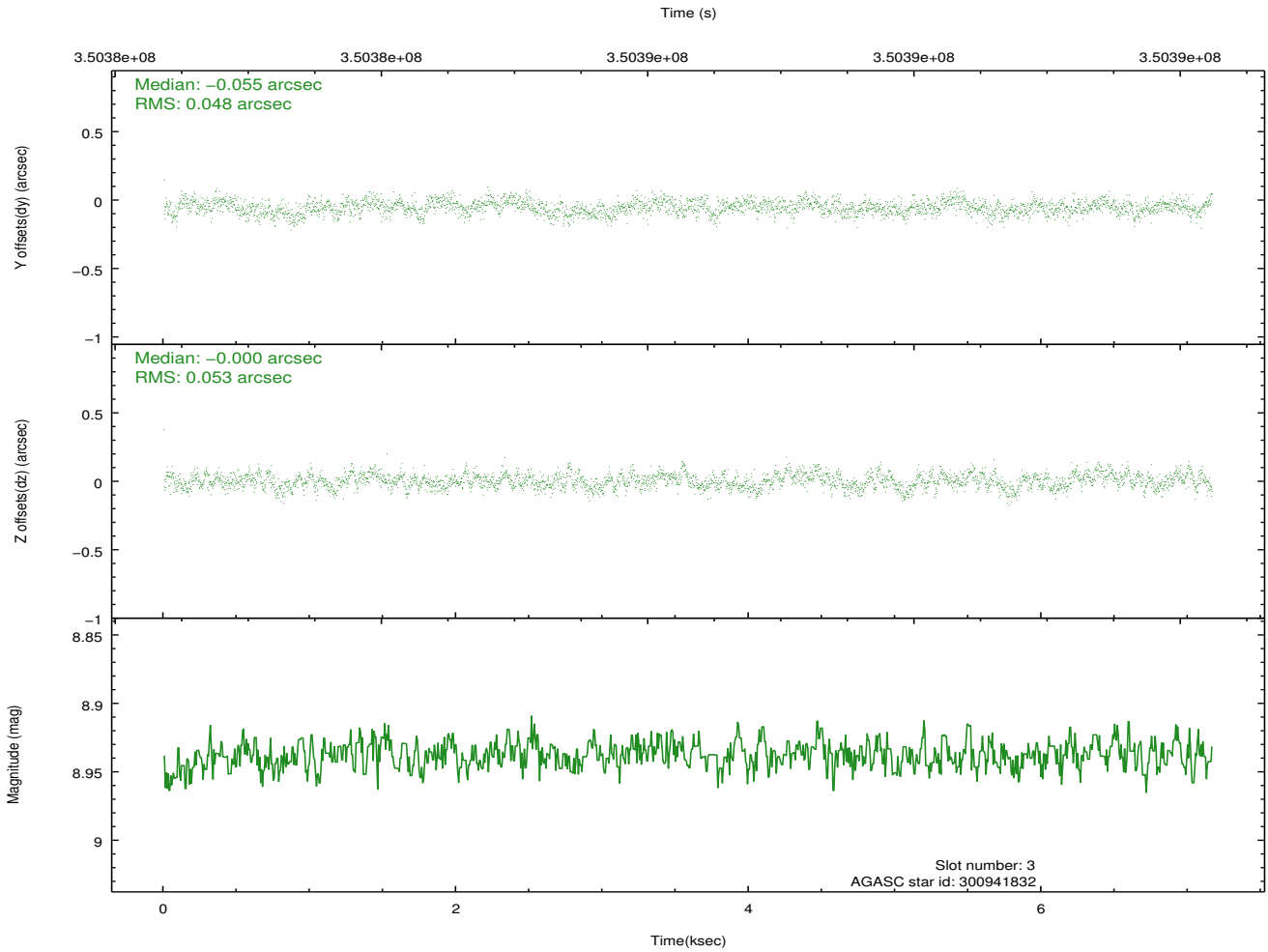
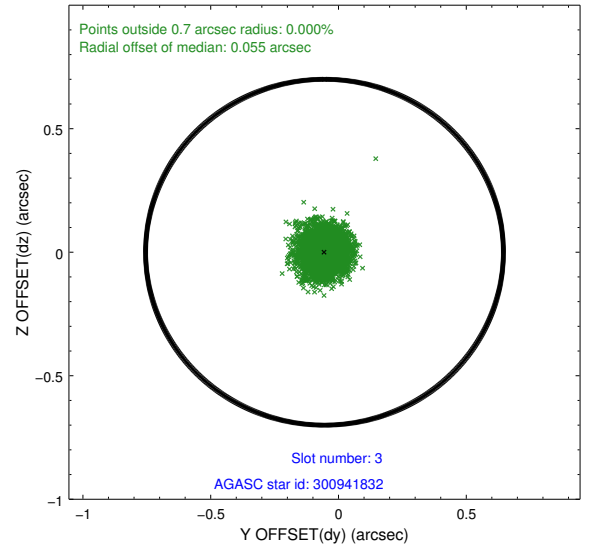
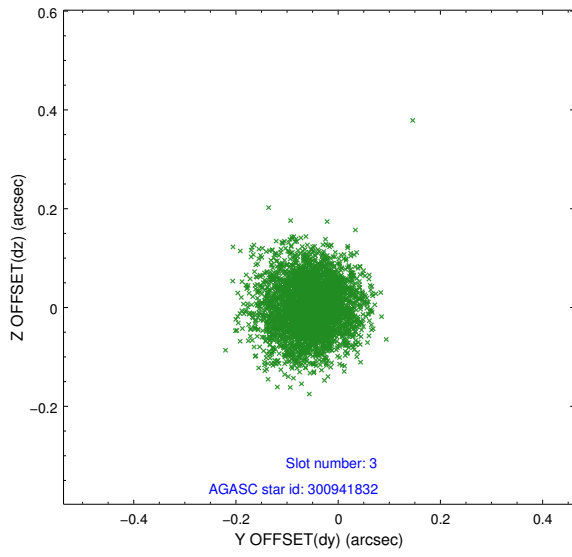


### Slot Statistics

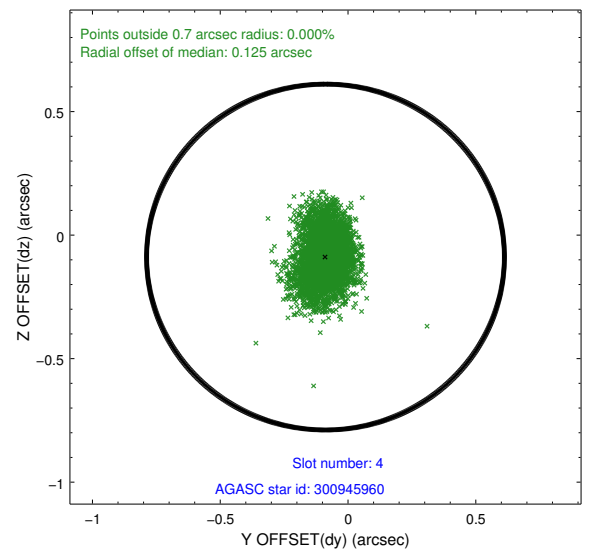
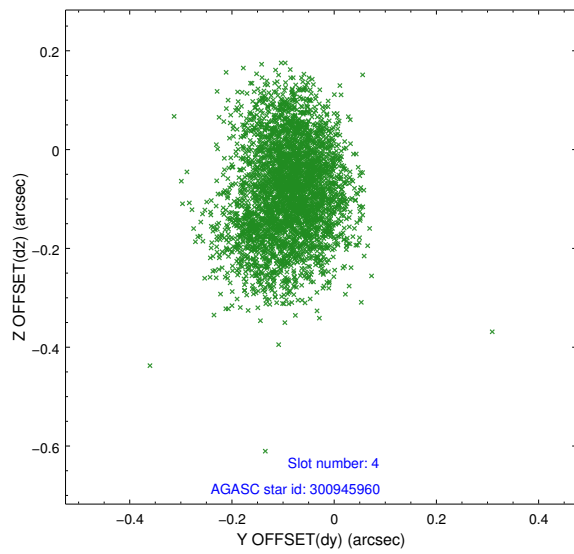
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	1747	0.069	0.005	0.015	0.027	0.000000	0.000000	929.54	-1731.83
1	FID	ACIS-S-2	6.93	1747	-0.090	-0.018	0.009	0.016	0.000000	0.000000	-766.08	-1737.21
2	FID	ACIS-S-6	7.15	1747	0.001	0.020	0.011	0.019	0.000000	0.000000	394.79	808.70
3	GUIDE	300941832	8.94	3492	-0.055	-0.000	0.076	0.123	20.525278	33.237138	381.70	-1045.51
4	GUIDE	300945960	9.32	3477	-0.088	-0.089	0.120	0.196	20.665202	33.720044	-1004.57	84.59
5	GUIDE	300946312	9.06	3490	0.210	-0.027	0.104	0.163	21.172860	33.025821	1907.68	390.30
6	GUIDE	300948240	8.11	3494	0.090	-0.038	0.066	0.108	21.318271	32.949093	2345.53	669.70
7	GUIDE	301471176	9.77	3492	-0.159	0.146	0.141	0.227	21.361136	33.909135	-726.92	2257.88

## 2.4 Star Slots

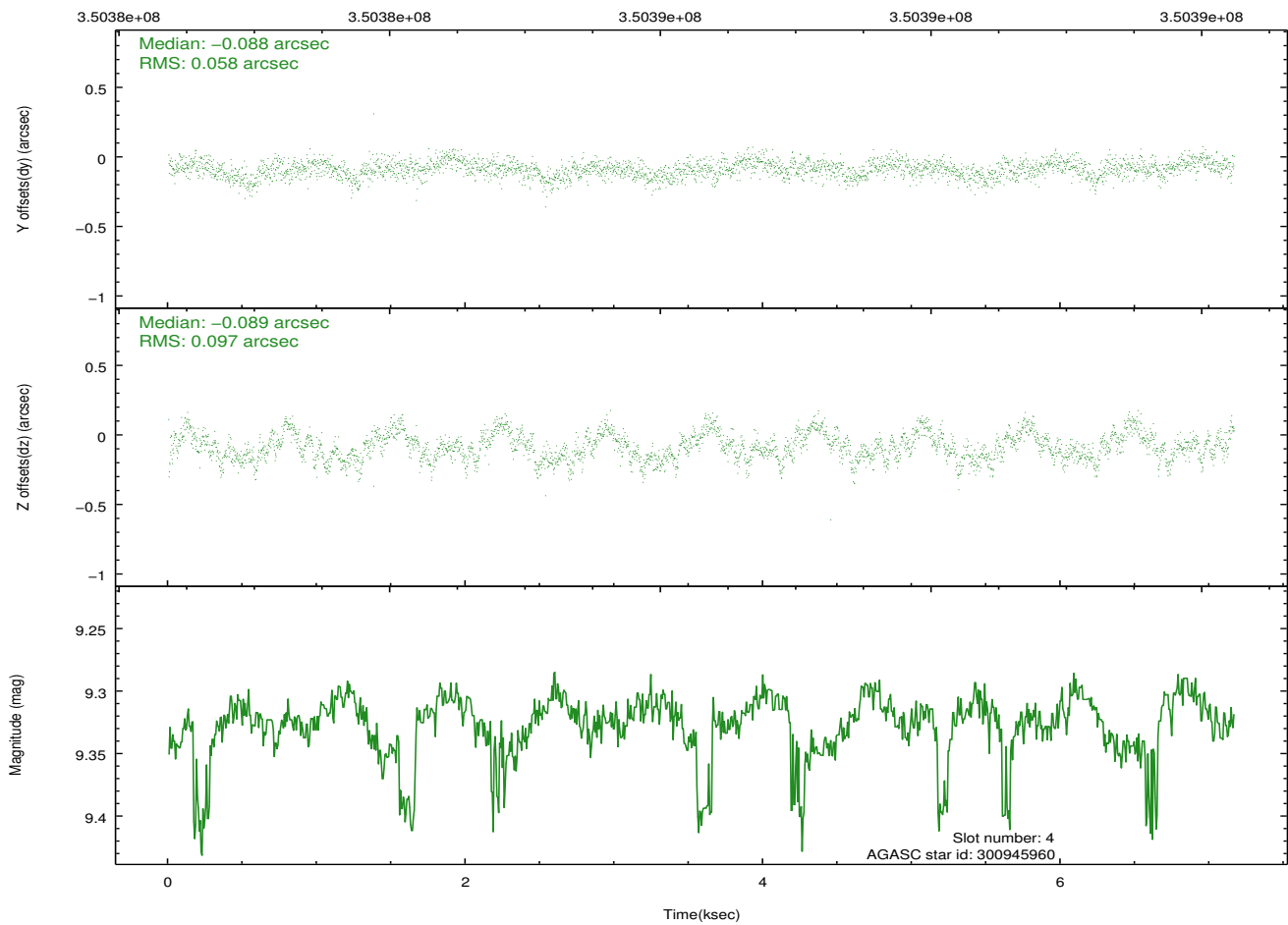
### 2.4.1 Slot 3



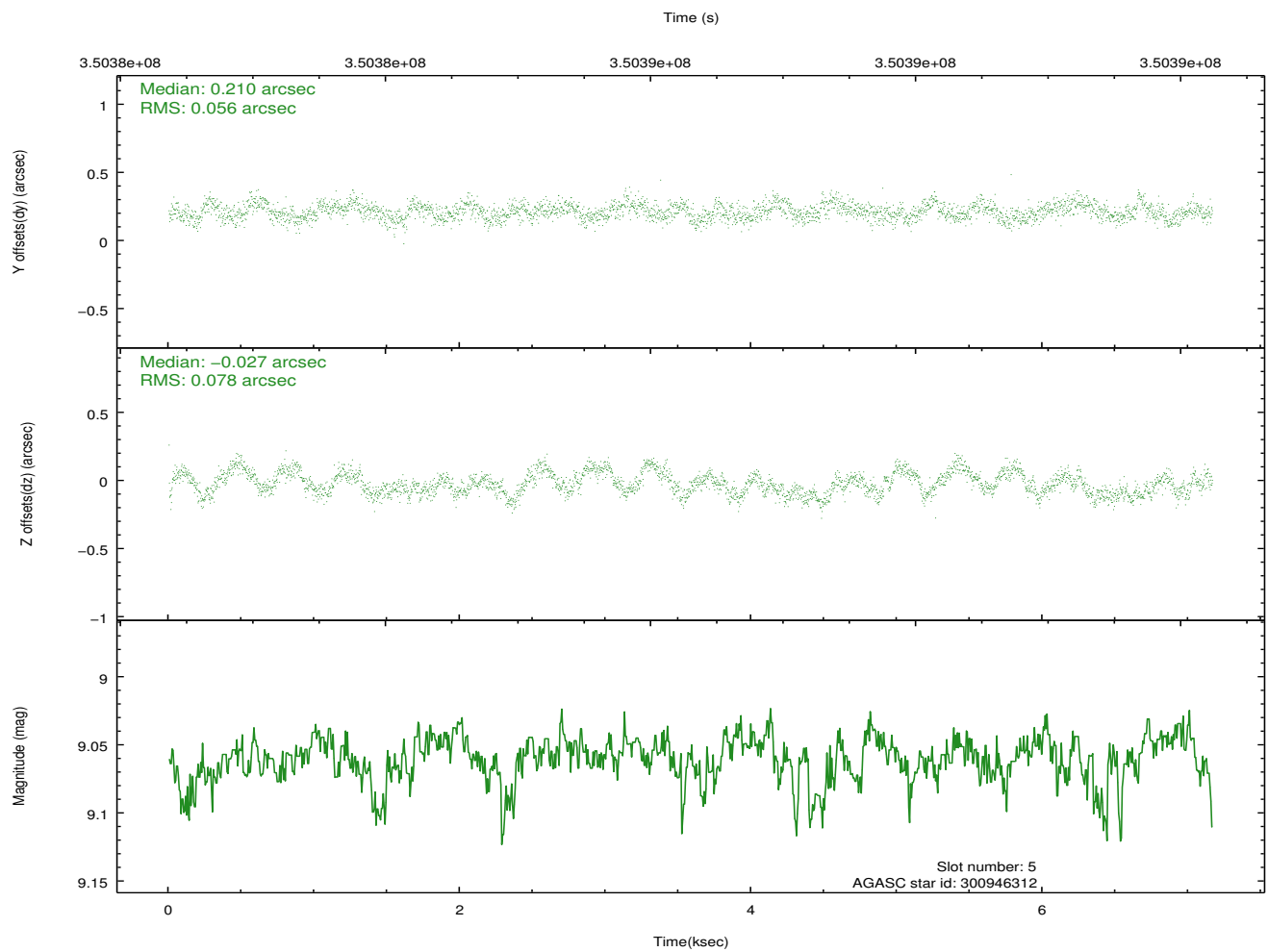
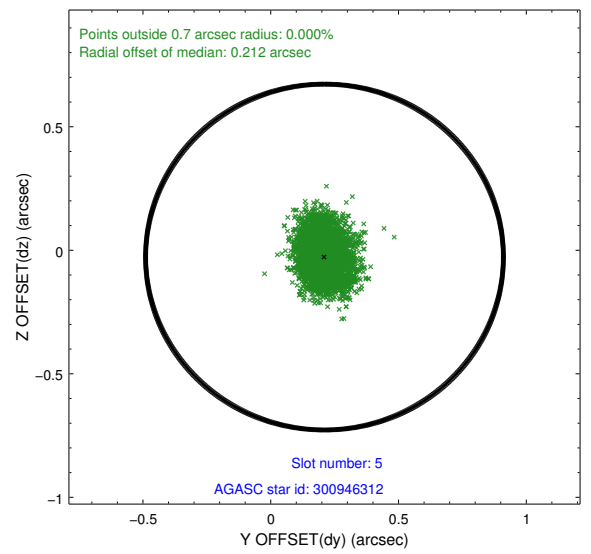
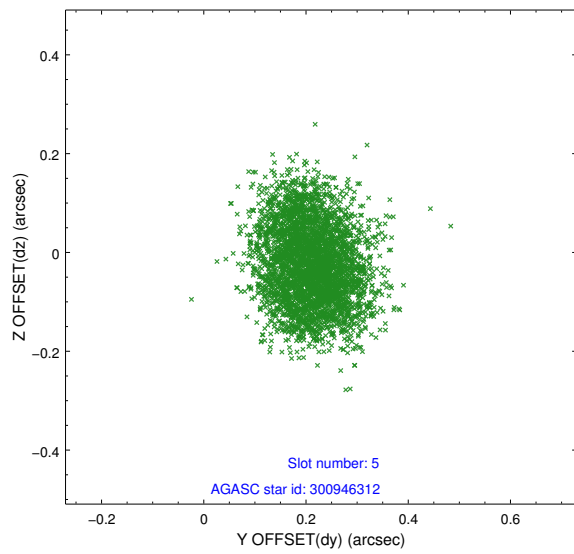
## 2.4.2 Slot 4



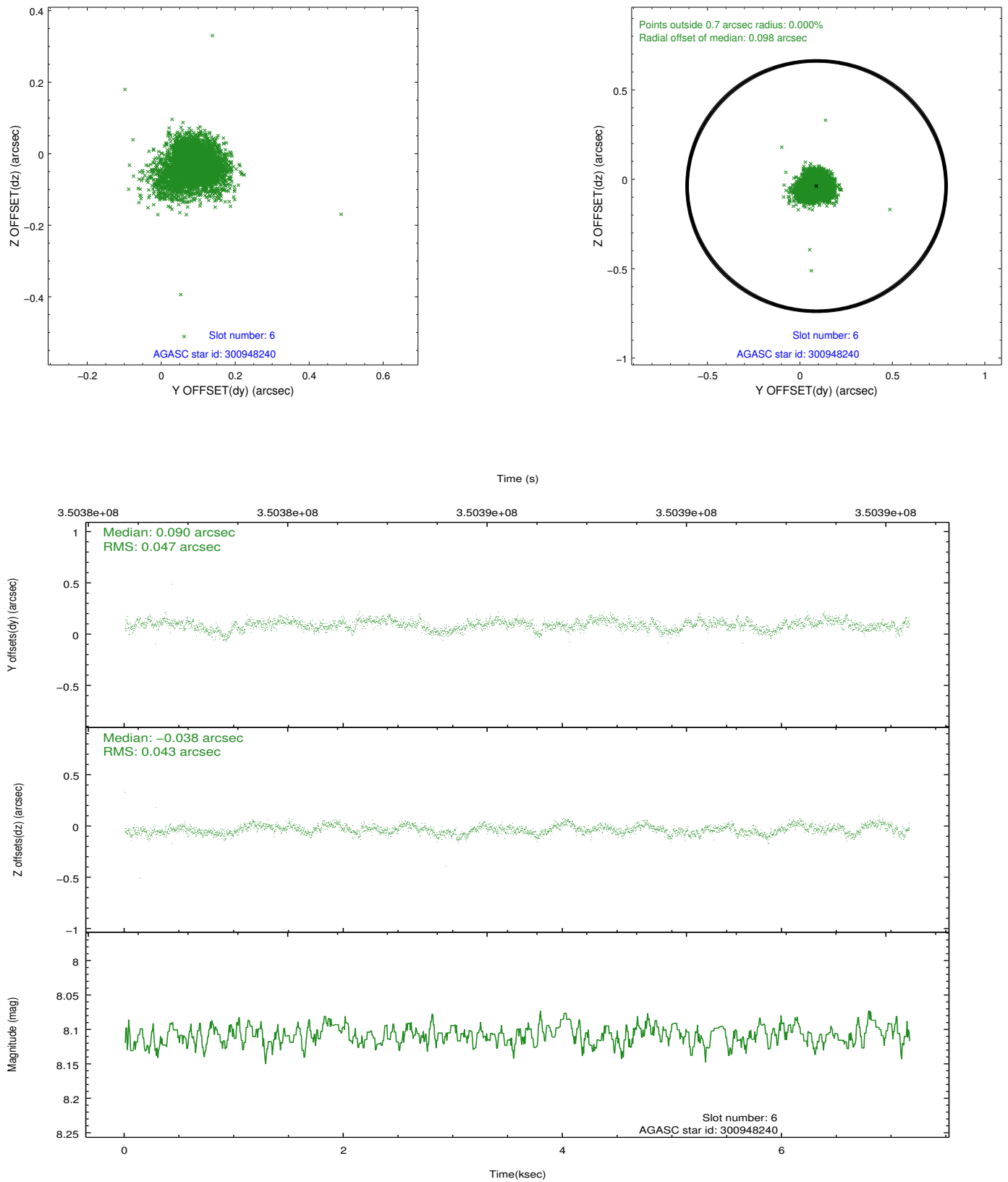
Time (s)



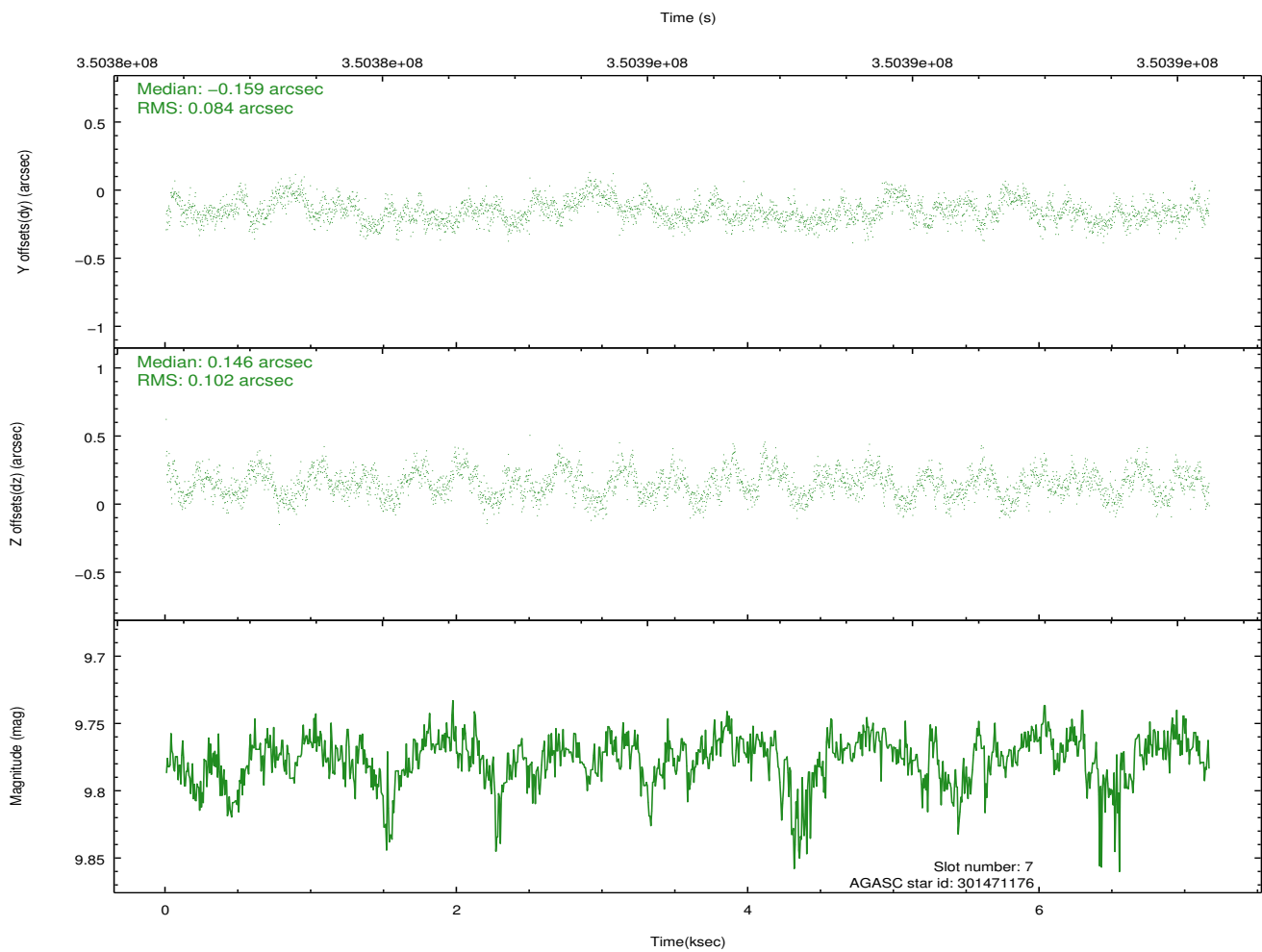
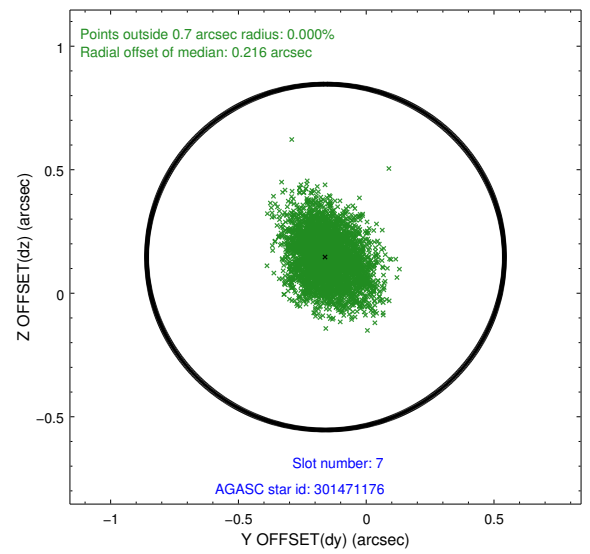
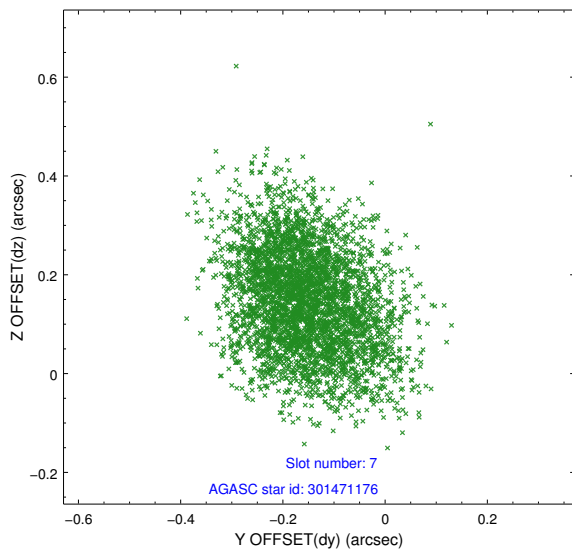
### 2.4.3 Slot 5



## 2.4.4 Slot 6

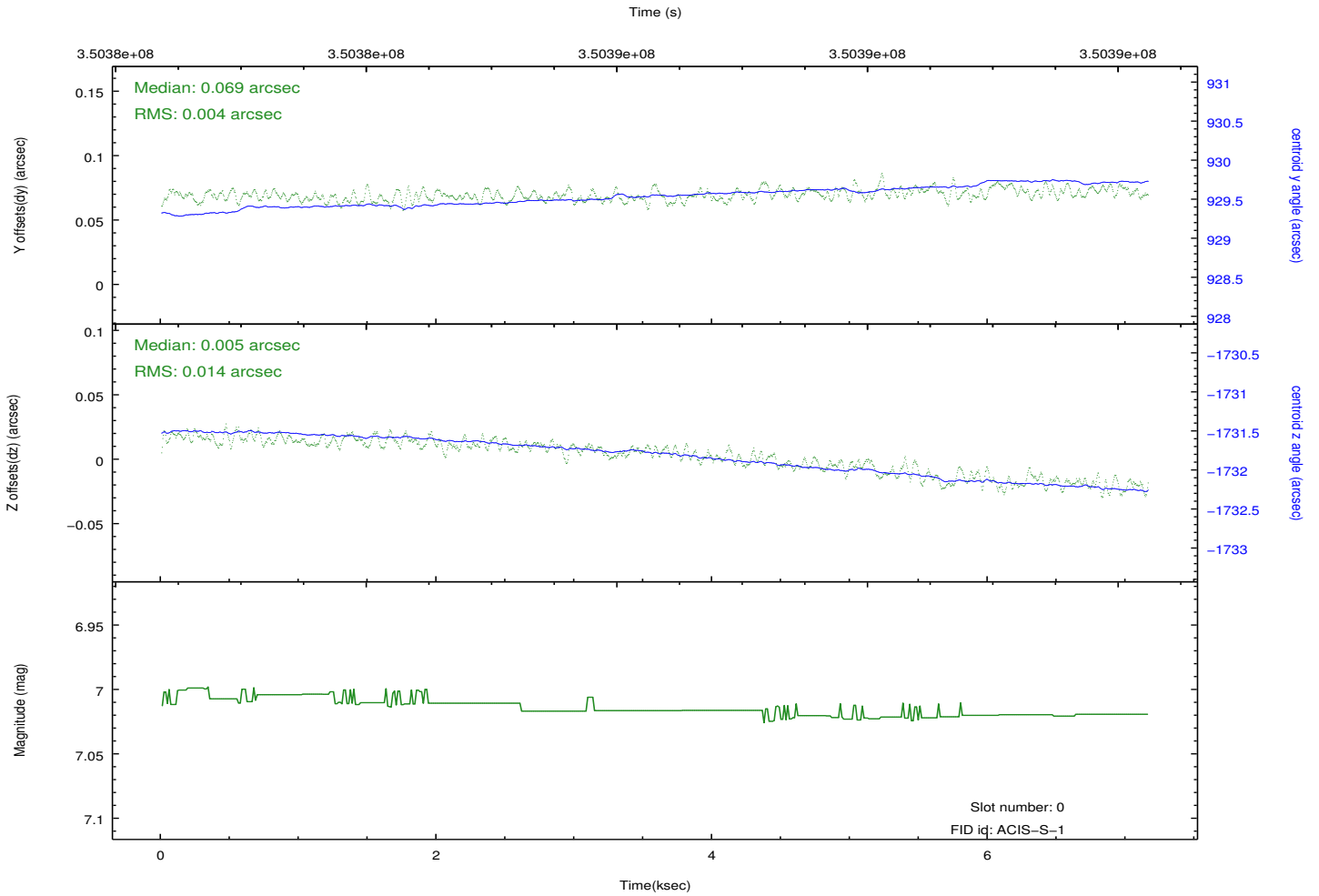
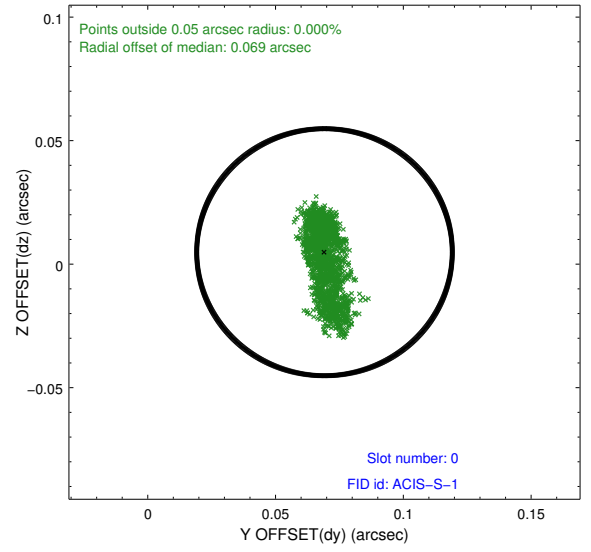
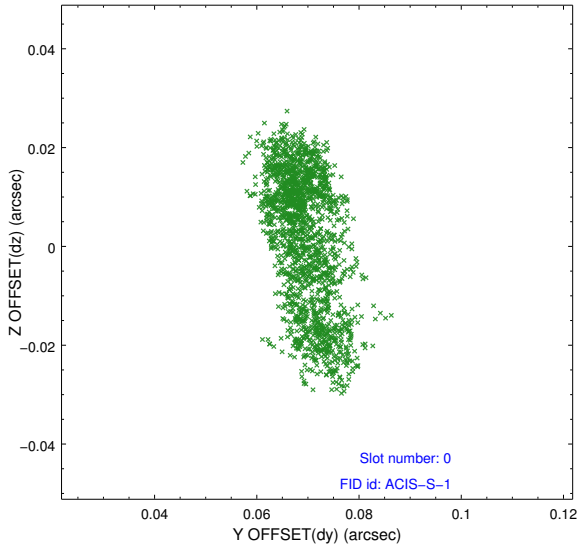


## 2.4.5 Slot 7

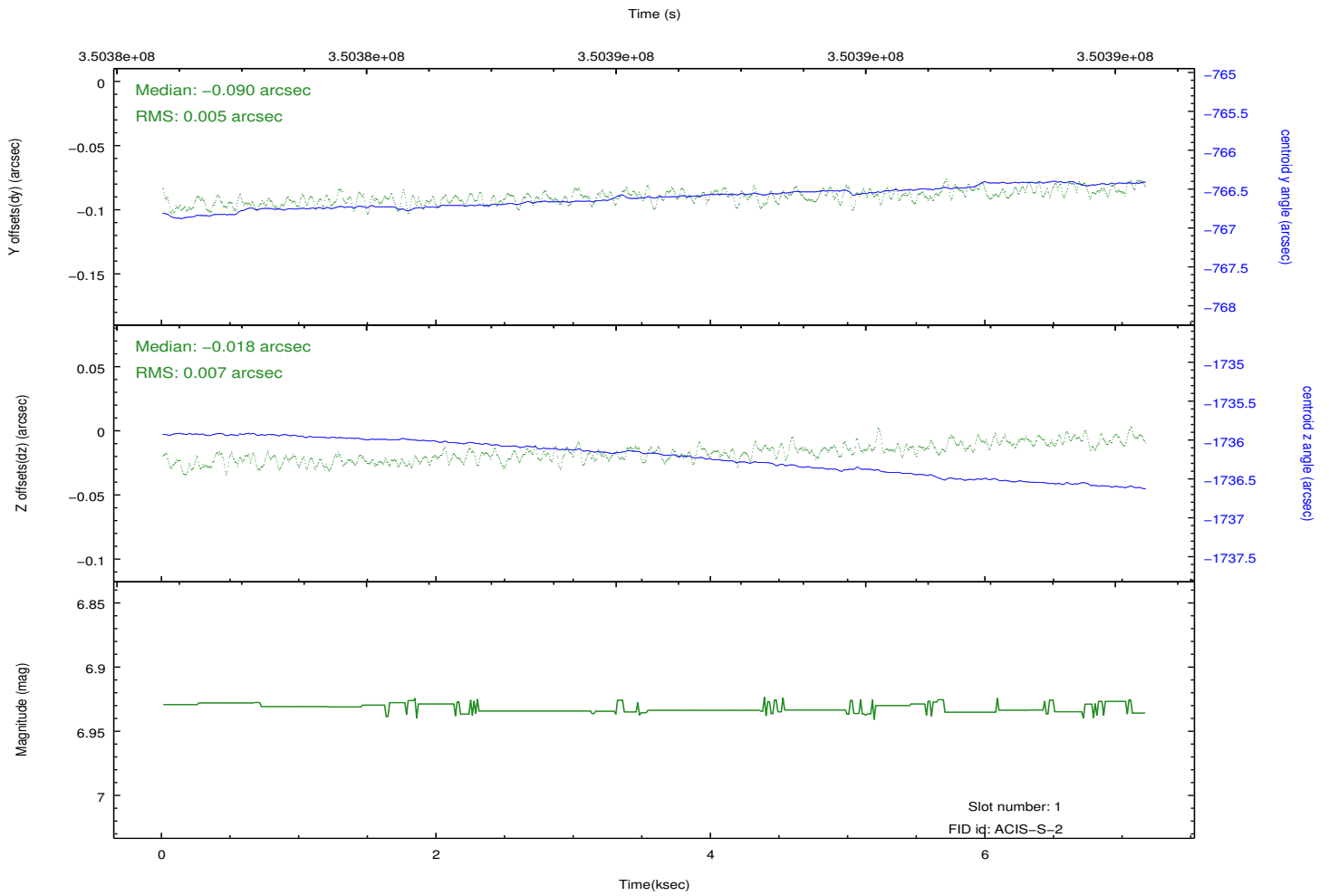
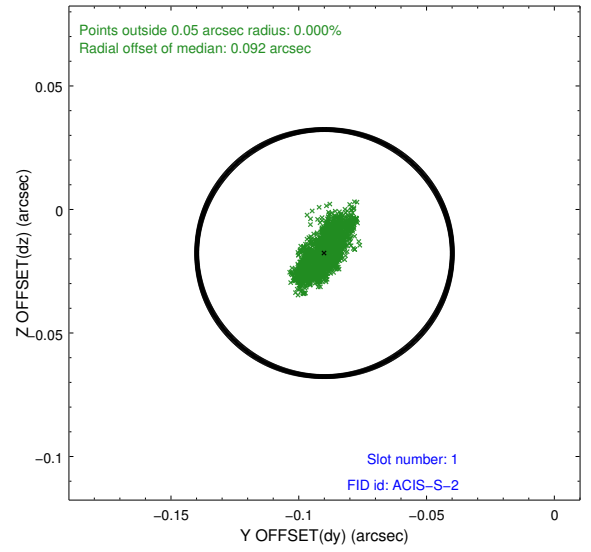
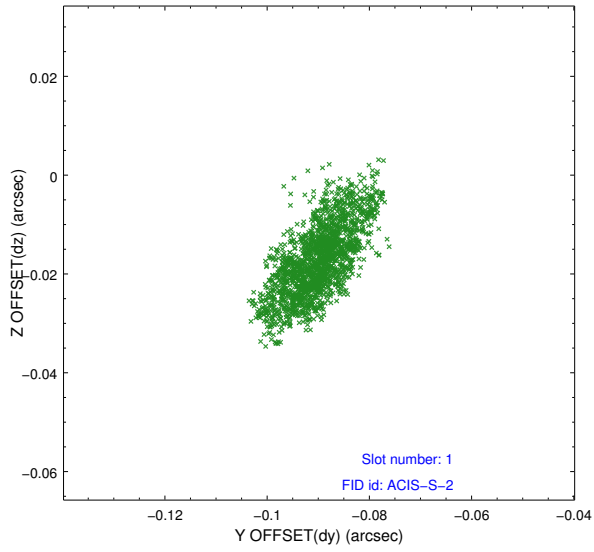


## 2.5 FID Slots

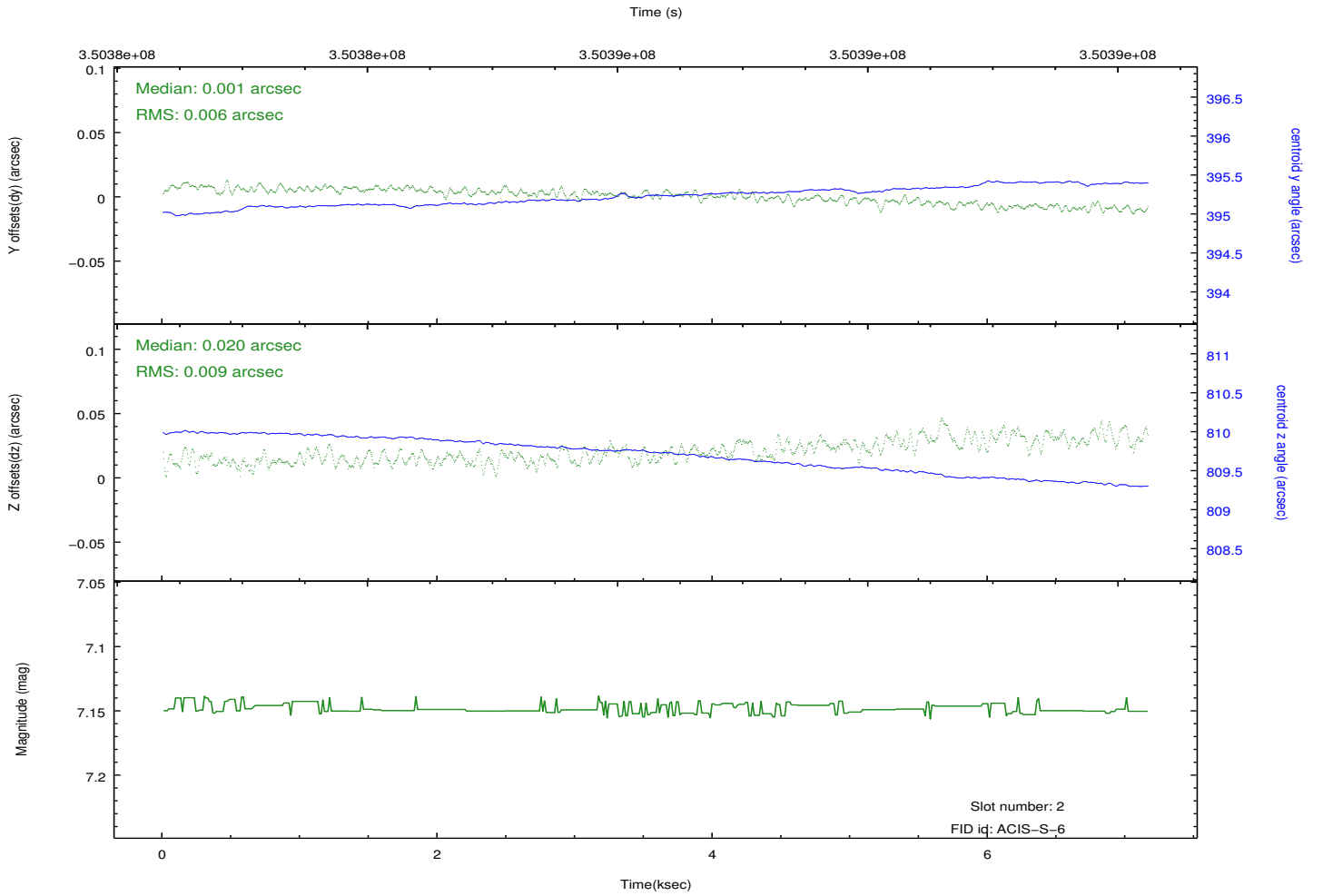
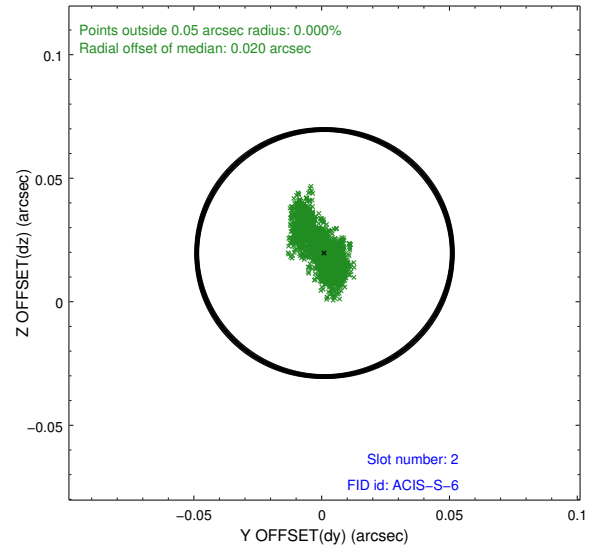
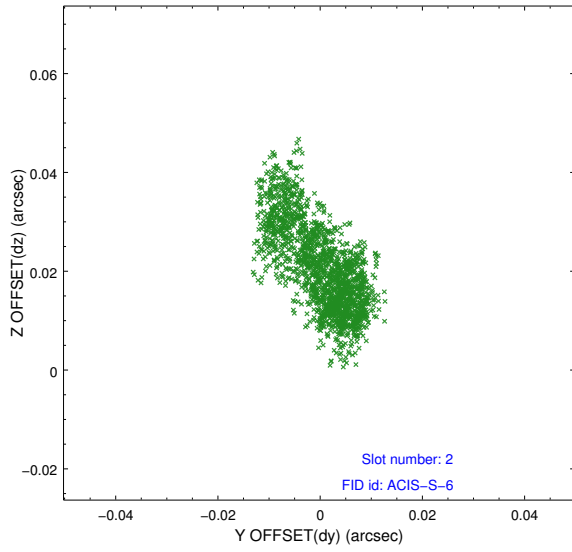
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.06.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.15480005

## A.2 Comments