

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 14431 - L2 Version 1  
Chandra X-Ray Center

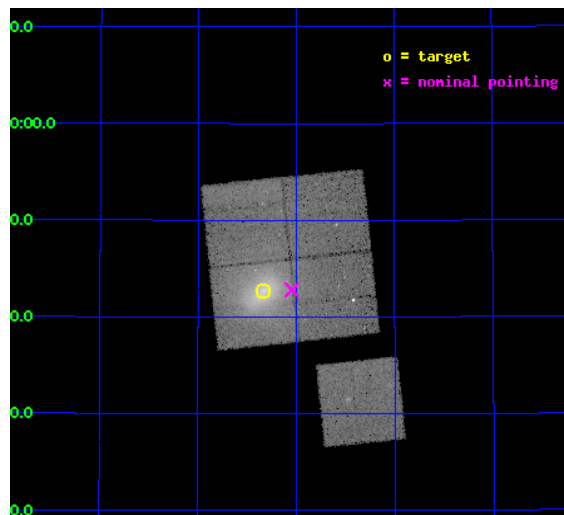
L2 Processing Date : May 28 2012

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# 1 Front

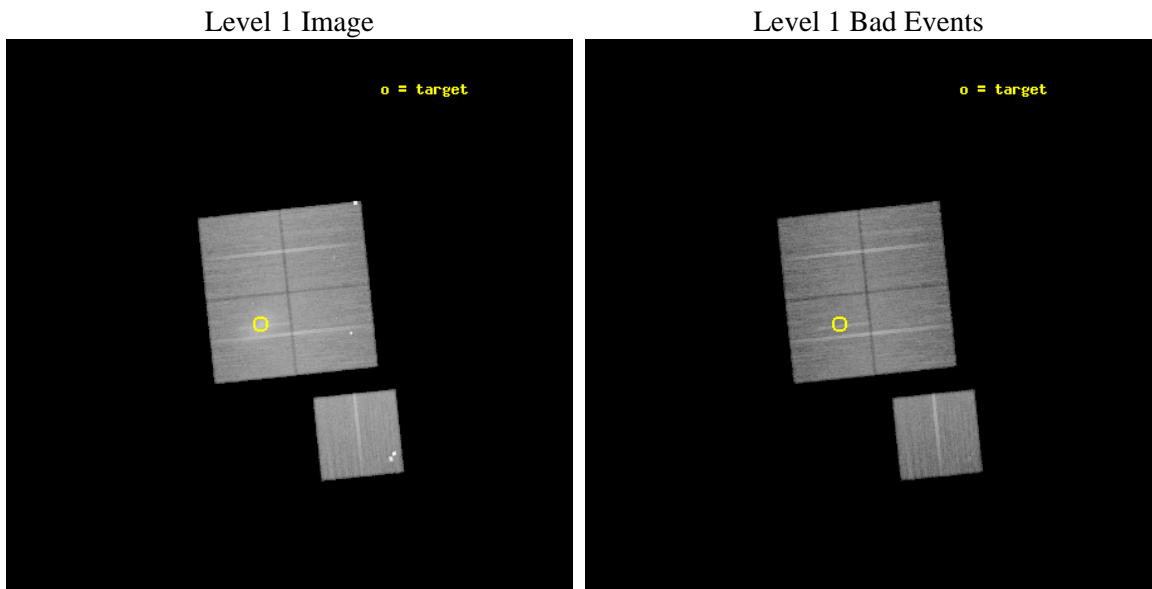
seq_num	801168	Sequence number
obs_id	14431	Observation id
title	A Chandra Study of the Large-Scale Shock Front in Abell 2219	Propo
observer	Prof. Steven Allen	Principal investigator
object	Abell 2219	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	250.083333	Observer's specified target RA [deg]
dec_targ	46.710833	Observer's specified target Dec [deg]
ra_nom	250.01135228115	Nominal RA [deg]
dec_nom	46.713719743155	Nominal Dec [deg]
roll_nom	174.06107573752	Nominal Roll [deg]
revision	1	Processing version of data
ontime	39075.459280312	Sum of GTIs [s]
livetime	38564.90963788	Livetime [s]
ontime0	39072.318299949	Sum of GTIs [s]
ontime1	39075.459280312	Sum of GTIs [s]
ontime2	39075.459310234	Sum of GTIs [s]
ontime3	39075.459280312	Sum of GTIs [s]
ontime6	39075.459310174	Sum of GTIs [s]
l2events	182784	Number of level 2 events



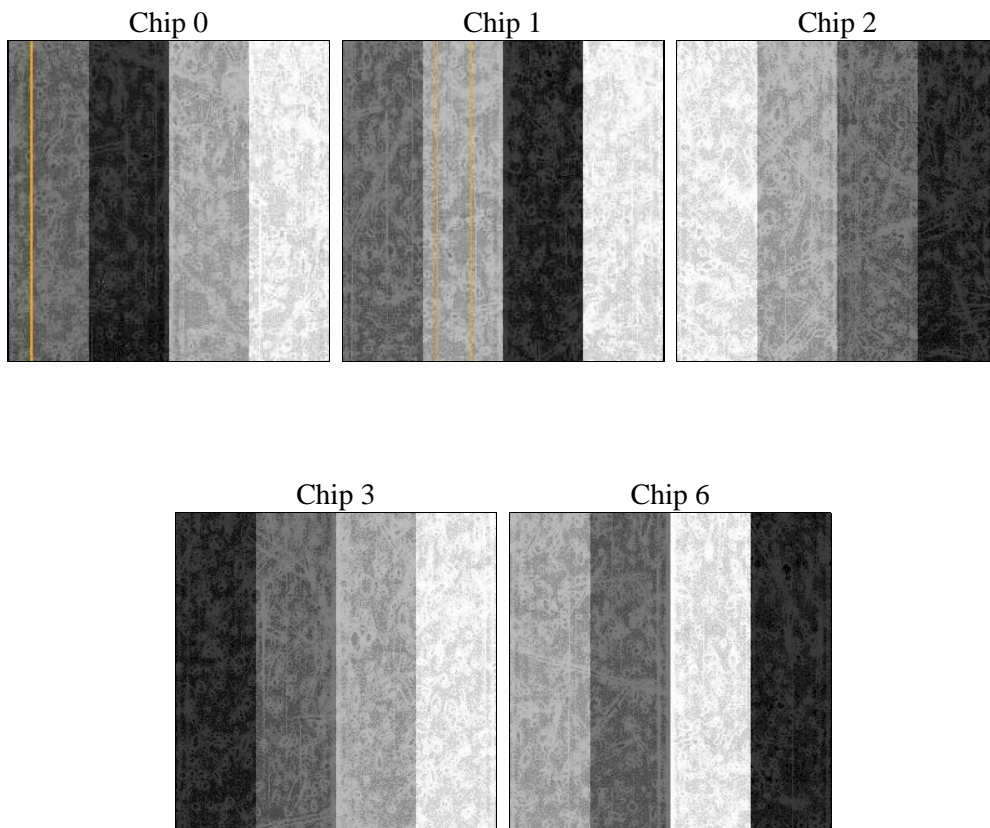
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	39075.459280312	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime0	39072.318299949	Sum of GTIs [s]
date	2012-05-28T18:08:17	Date and time of file creation	ontime1	39075.459280312	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	39075.459310234	Sum of GTIs [s]
			ontime3	39075.459280312	Sum of GTIs [s]
			ontime6	39075.459310174	Sum of GTIs [s]
			l1events	1305421	Number of level 1 events

### 2.1.4 Events

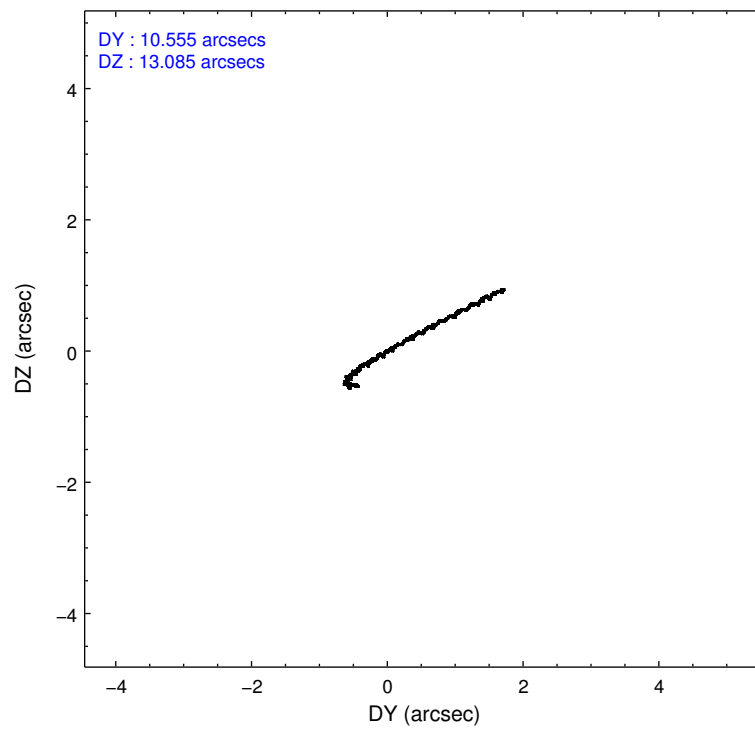
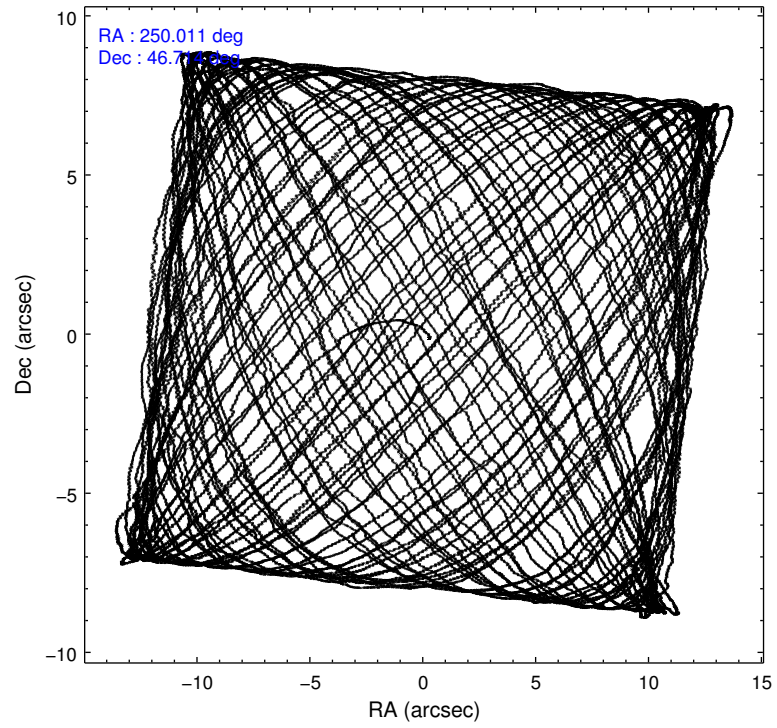
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	236118	231920	262853	300841	273689
rejected events	194912	198392	227161	215500	225607
rejected %	82%	85%	86%	71%	82%

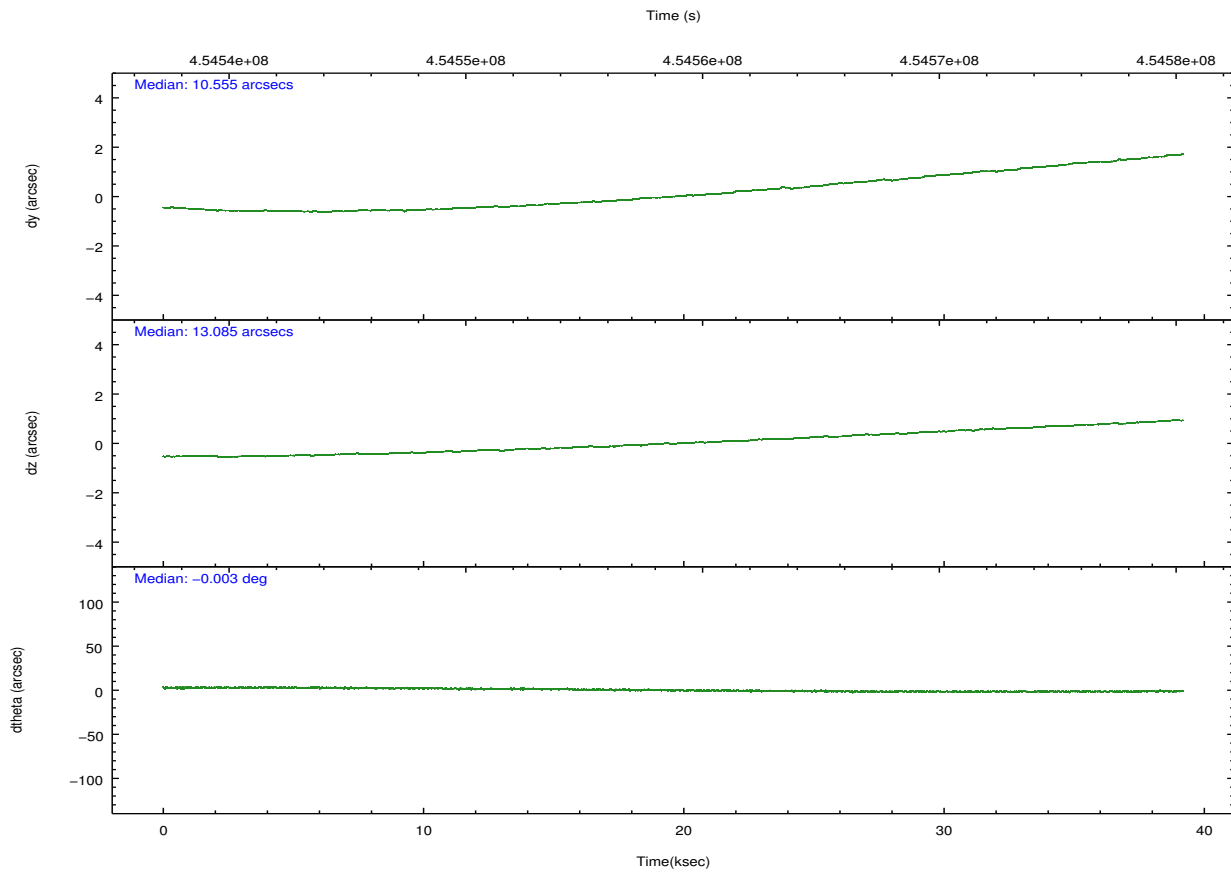
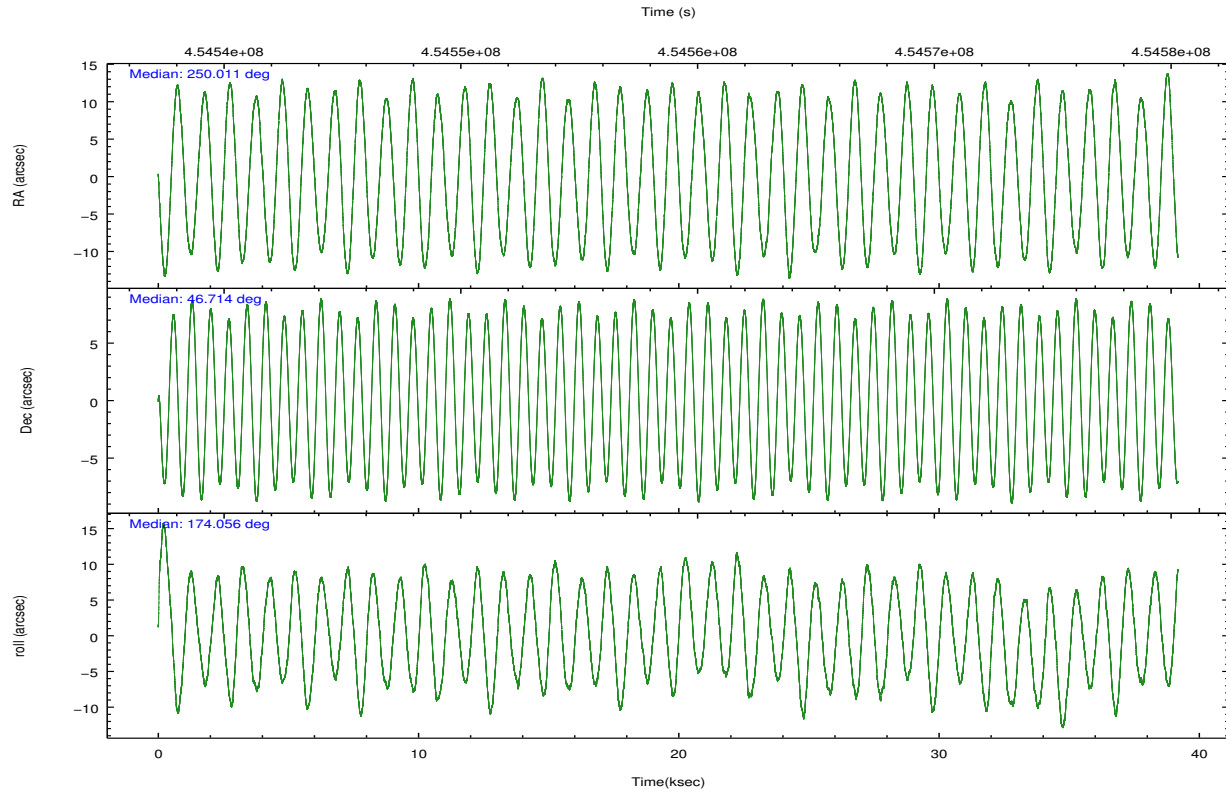
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	22584	13217	16051	57077	29291
	9%	5%	6%	18%	10%
grade 1 events	157	99	226	358	236
	0%	0%	0%	0%	0%
grade 2 events	7585	7879	8243	11986	6989
	3%	3%	3%	3%	2%
grade 3 events	2784	3190	2832	4638	2851
	1%	1%	1%	1%	1%
grade 4 events	2751	2917	3114	4612	2822
	1%	1%	1%	1%	1%
grade 5 events	10322	11093	9966	11986	11324
	4%	4%	3%	3%	4%
grade 6 events	5503	6327	5454	7040	6133
	2%	2%	2%	2%	2%
grade 7 events	184432	187198	216967	203144	214043
	78%	80%	82%	67%	78%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	250.047924	250.0113522811523	CCD I2 on	Y	Y
[deg] Pointing Dec	46.725035	46.71371974315451	CCD I3 on	Y	Y
[deg] Pointing Roll	173.825765	174.0610757375208	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-226.292463	-226.2883771404	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.3	-7.304075862529686	CCD S4 on	N	N
[s] Observation start time (MET)	454539345.184000	454538165.47286	CCD S5 on	N	N
Observation start date	2012-05-27T20:54:39	2012-05-27T20:36:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	454578345.184000	454579280.78755	On-chip summing requested	N	N
Observation end date	2012-05-28T07:44:39	2012-05-28T08:01:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



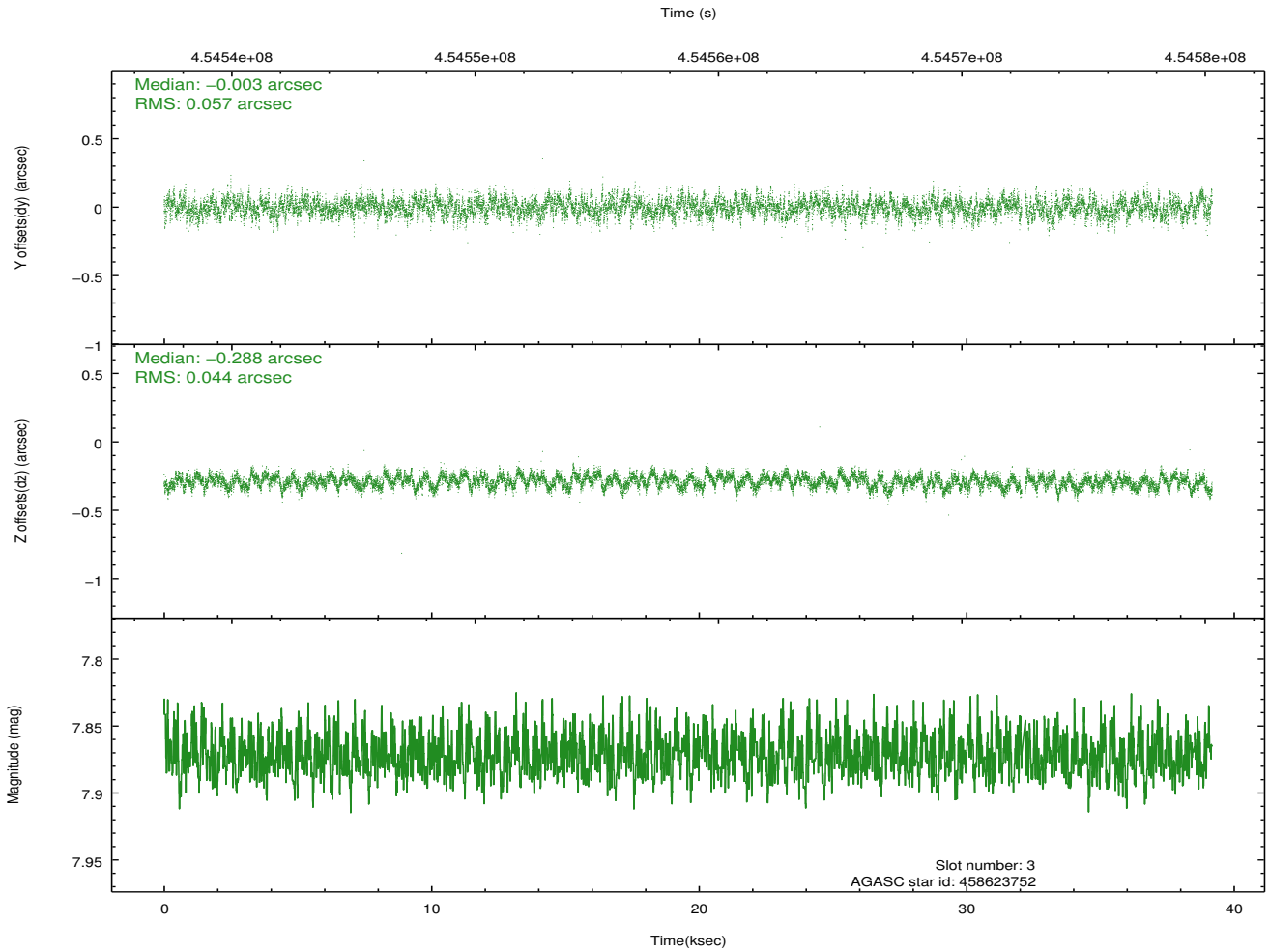
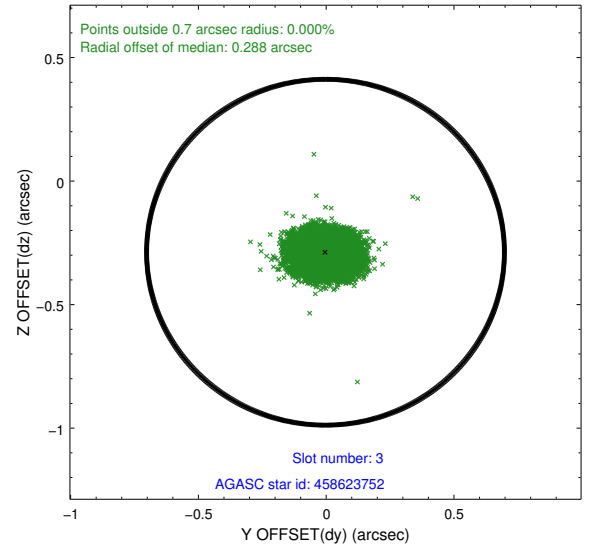
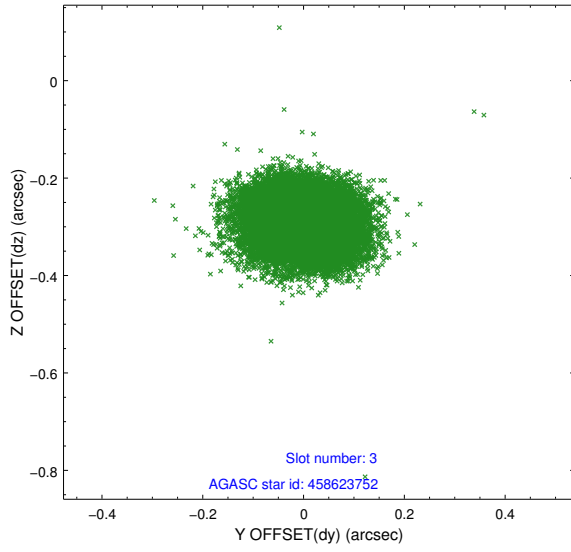


### Slot Statistics

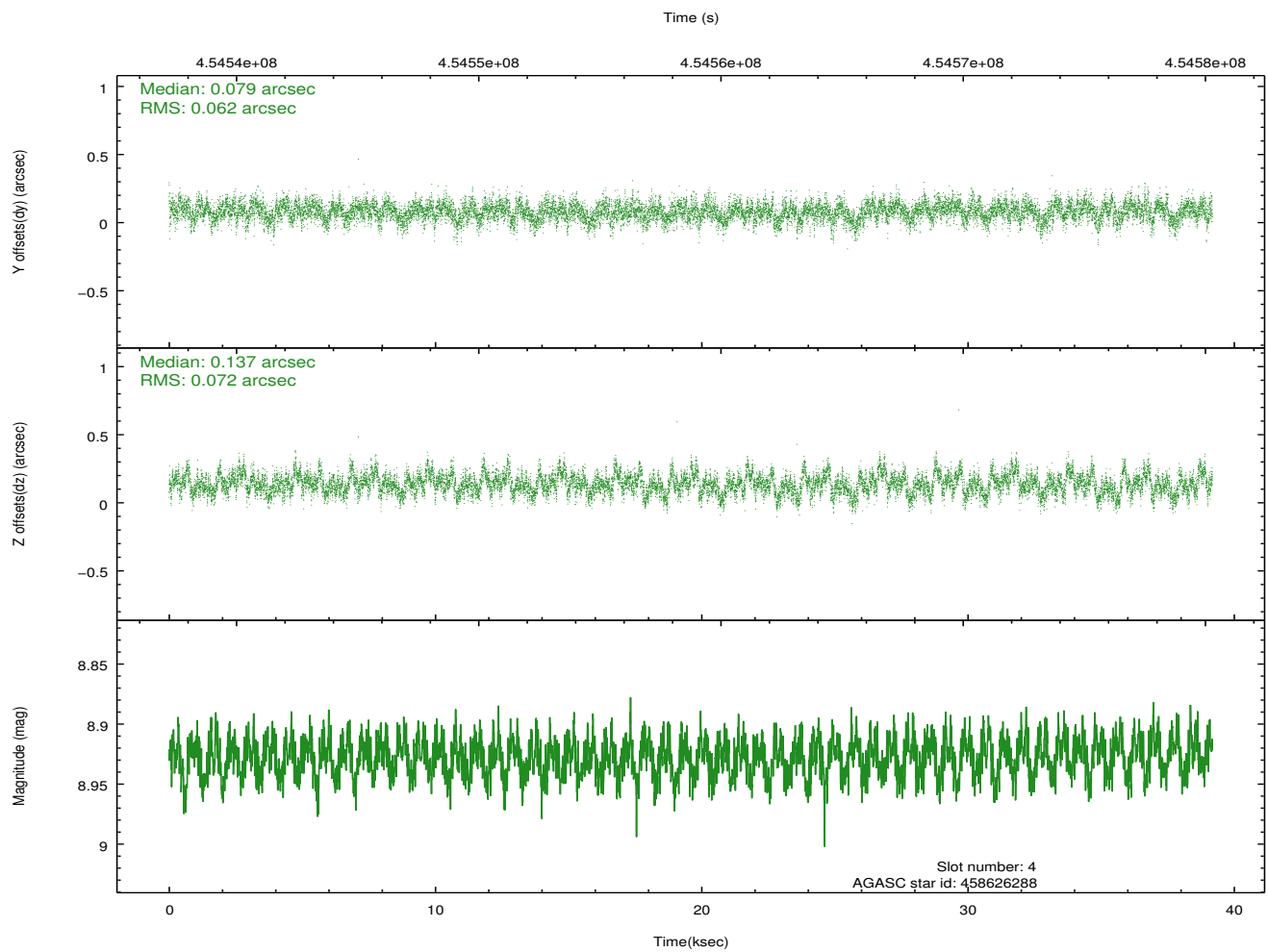
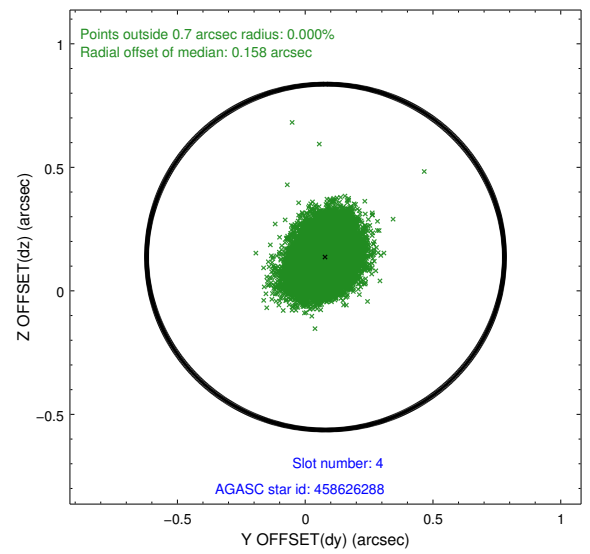
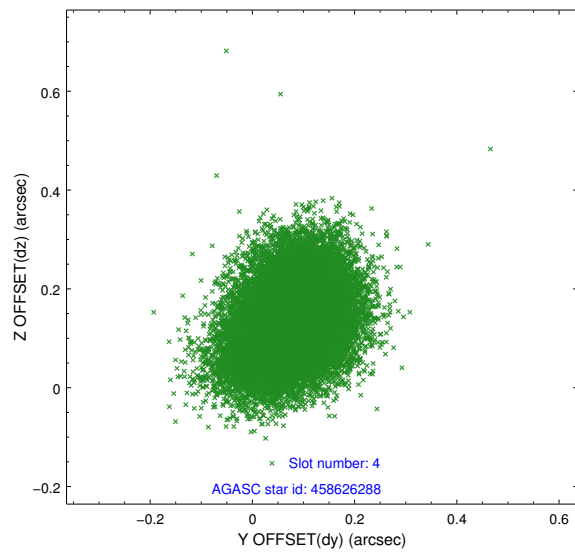
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.07	9556	0.122	-0.086	0.011	0.018	0.000000	0.000000	928.82	-986.71
1	FID	ACIS-I-5	7.08	9558	-0.317	0.090	0.019	0.035	0.000000	0.000000	-1819.73	910.90
2	FID	ACIS-I-6	7.10	9556	0.102	0.067	0.013	0.027	0.000000	0.000000	394.29	1555.43
3	GUIDE	458623752	7.87	19048	-0.003	-0.288	0.076	0.122	249.631548	46.393849	899.88	1293.71
4	GUIDE	458626288	8.93	19102	0.079	0.137	0.101	0.167	250.637186	47.079533	-1297.80	-1429.23
5	GUIDE	458630992	8.82	19097	0.016	-0.193	0.086	0.140	249.097154	46.610030	2295.57	651.58
6	GUIDE	458622504	7.91	19107	-0.273	0.061	0.077	0.122	249.027856	46.364222	2381.25	1548.08
7	GUIDE	458621584	9.46	19096	0.182	0.291	0.158	0.259	250.487899	47.371755	-815.18	-2432.72

## 2.4 Star Slots

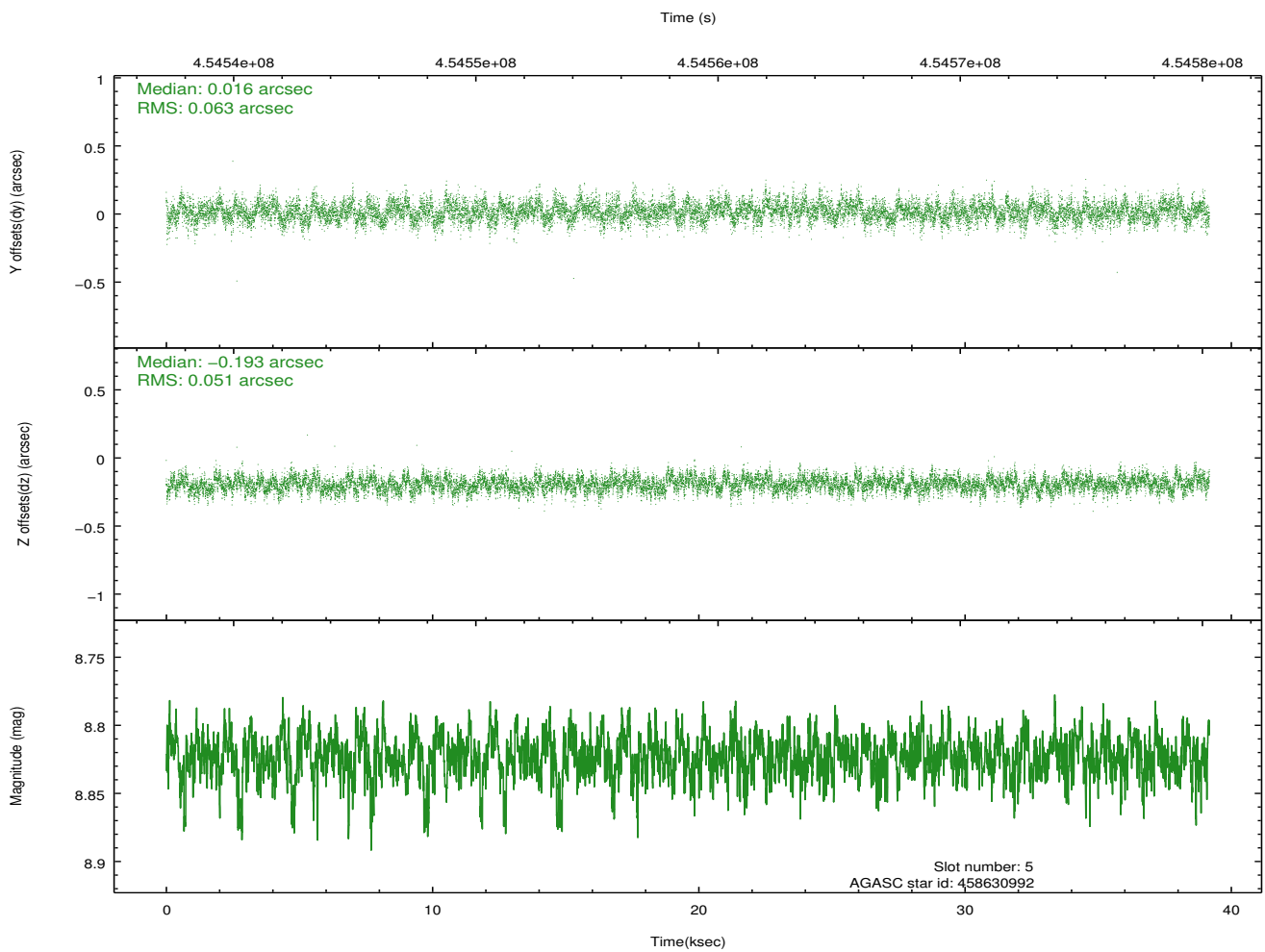
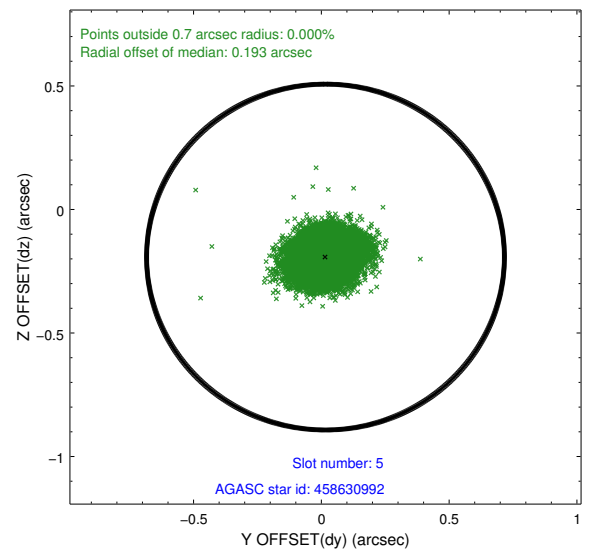
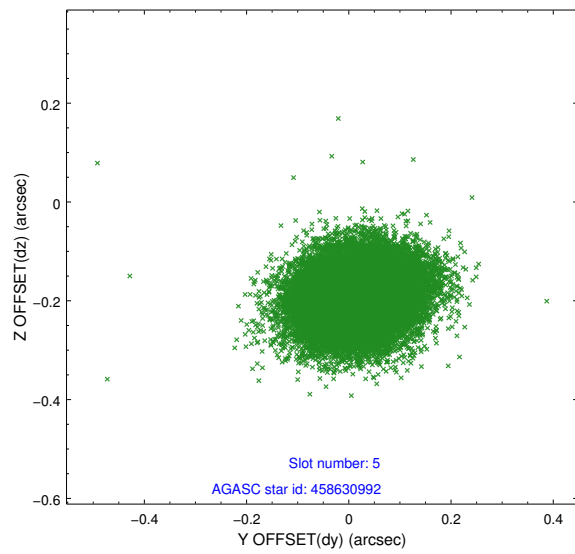
### 2.4.1 Slot 3



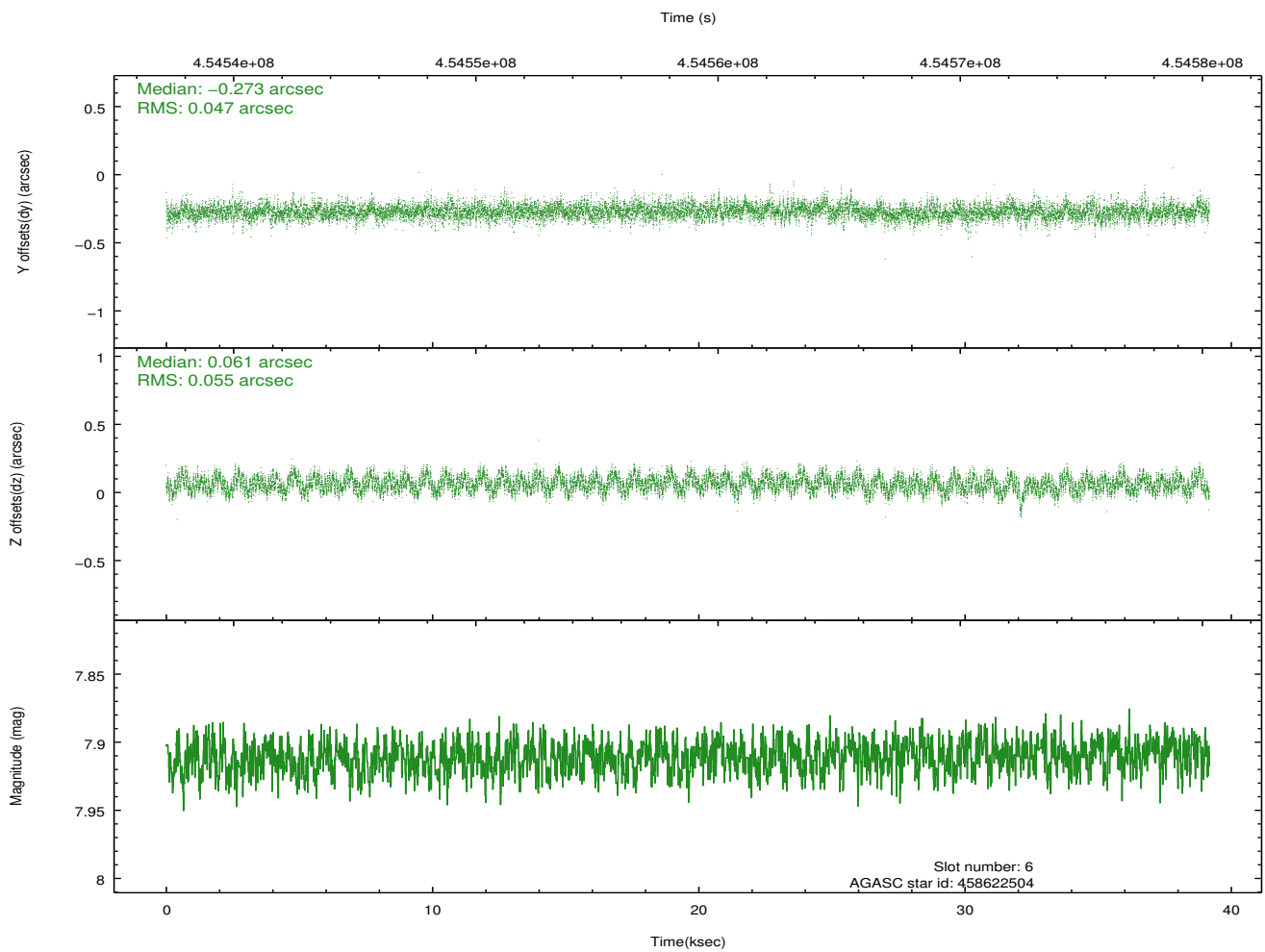
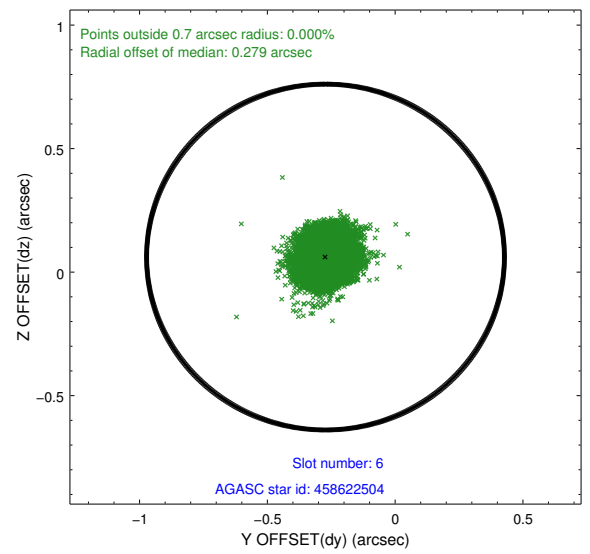
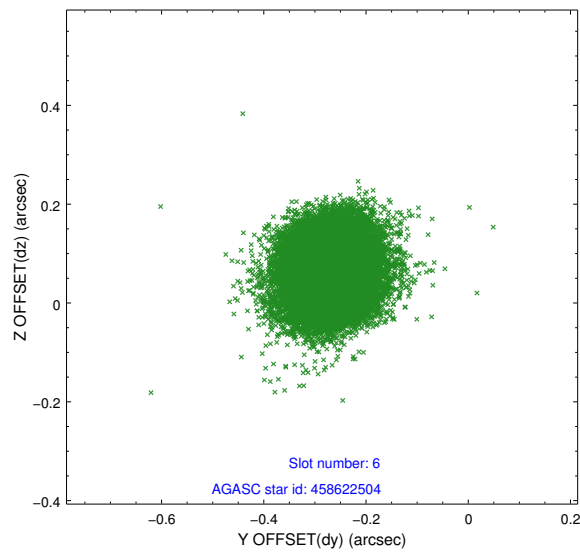
## 2.4.2 Slot 4



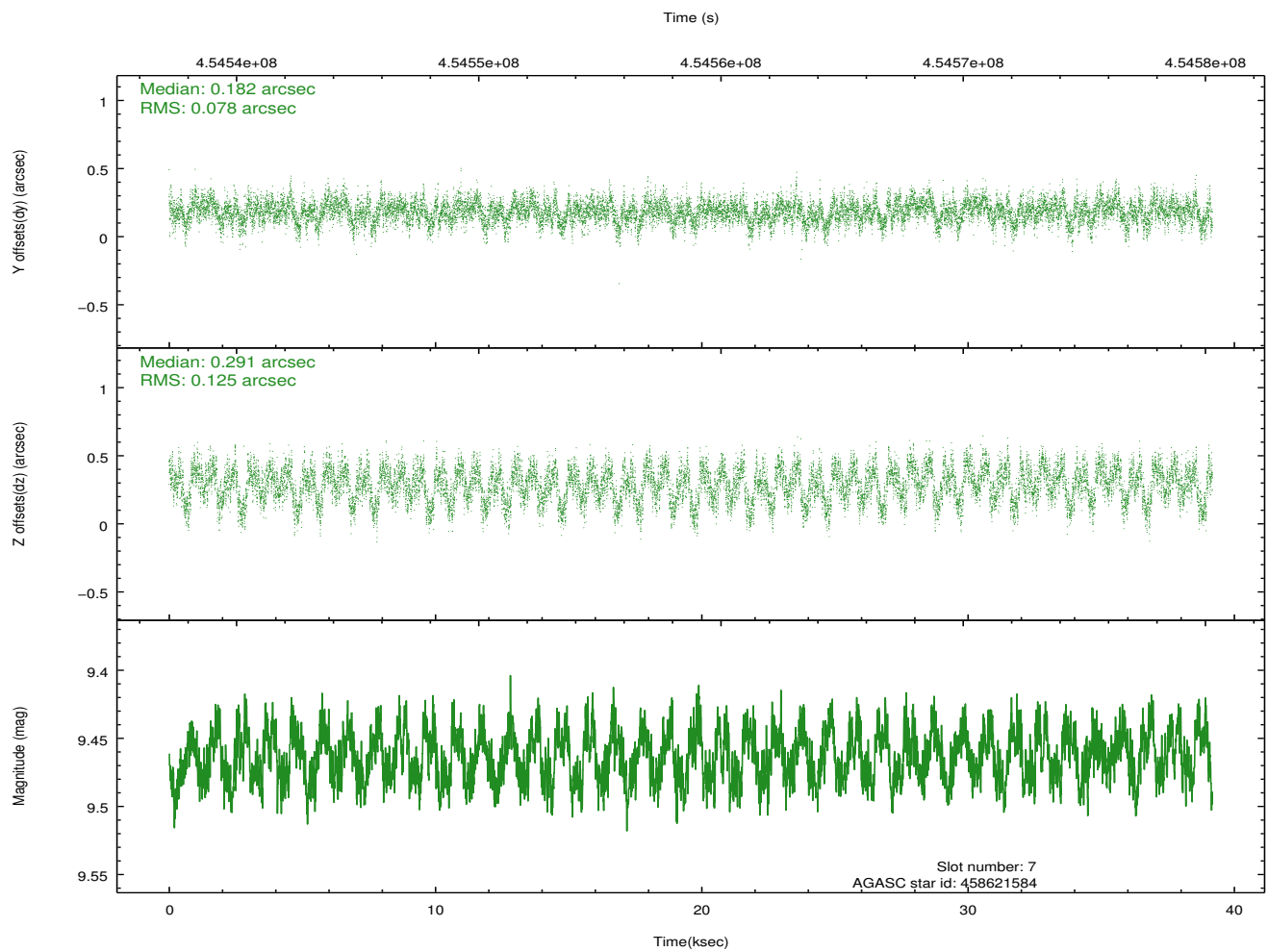
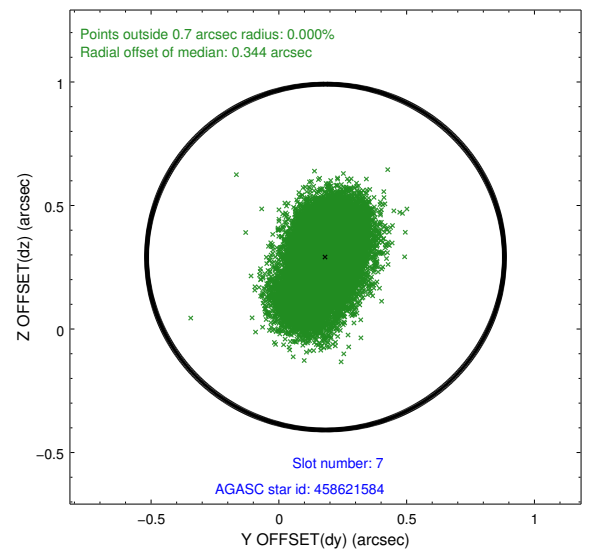
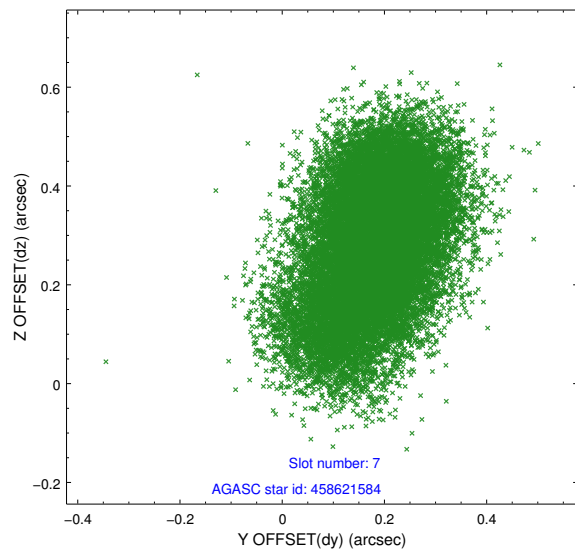
### 2.4.3 Slot 5



## 2.4.4 Slot 6

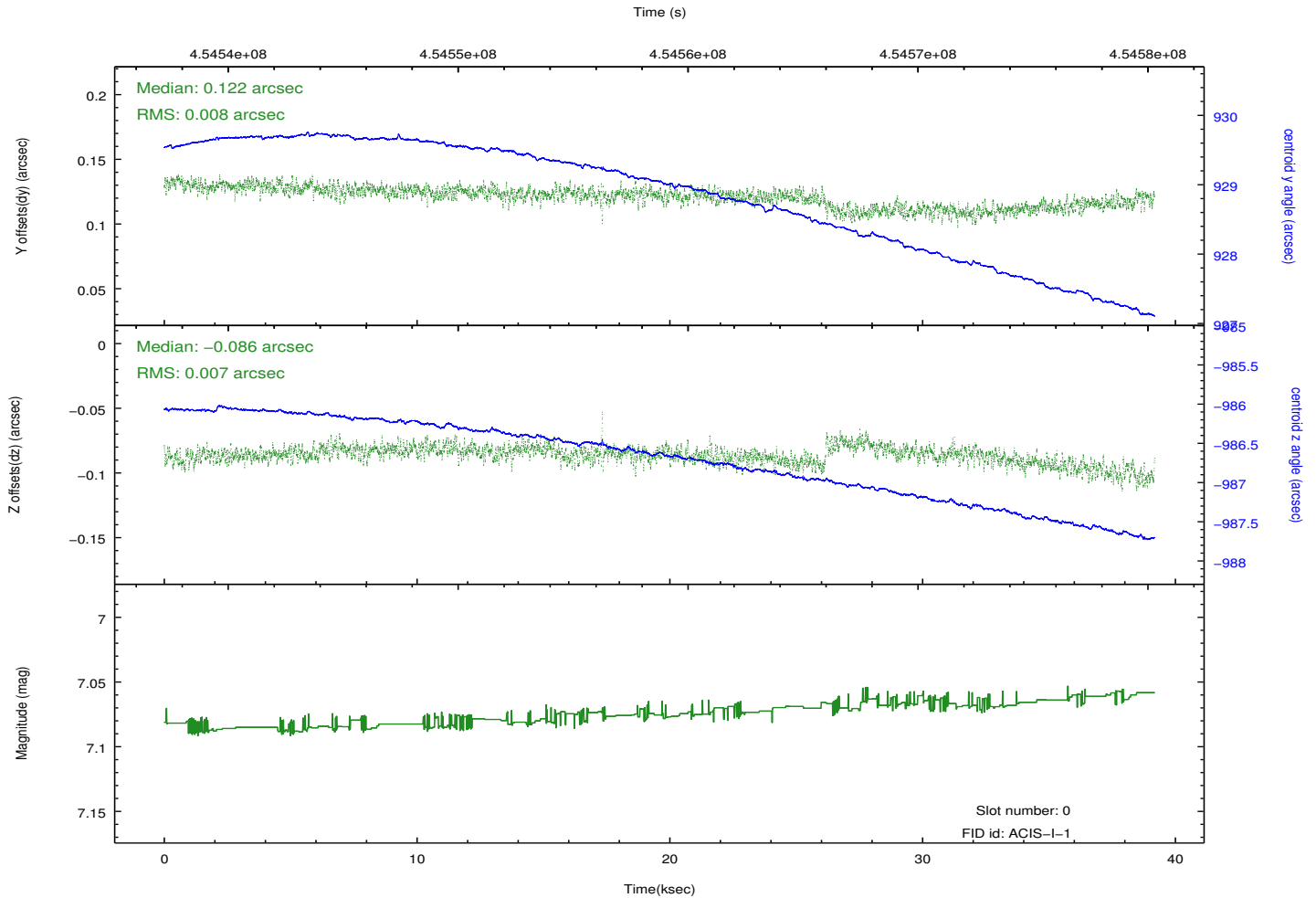
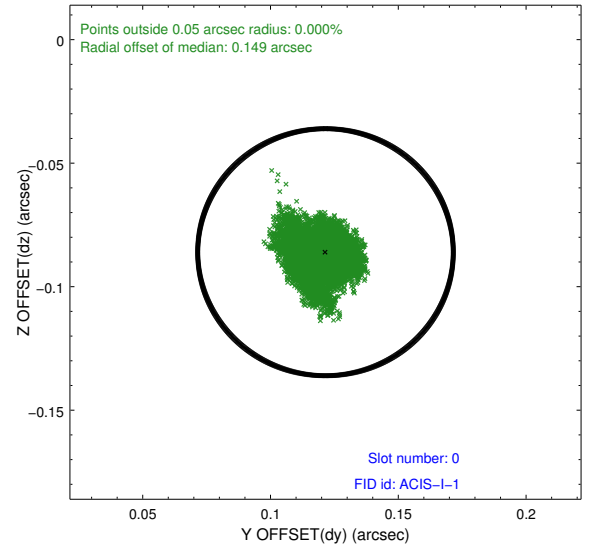
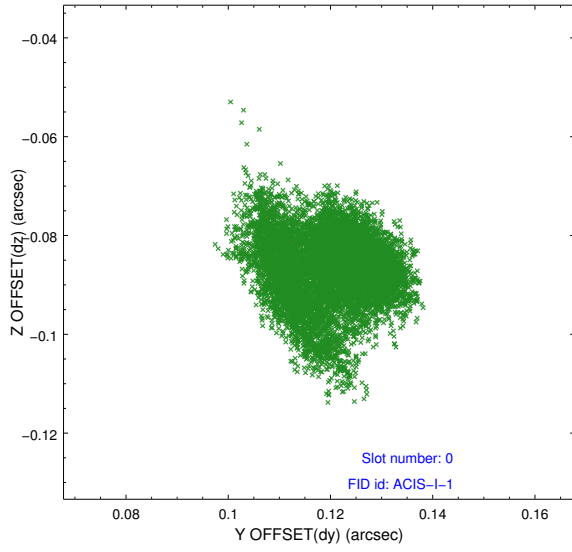


## 2.4.5 Slot 7

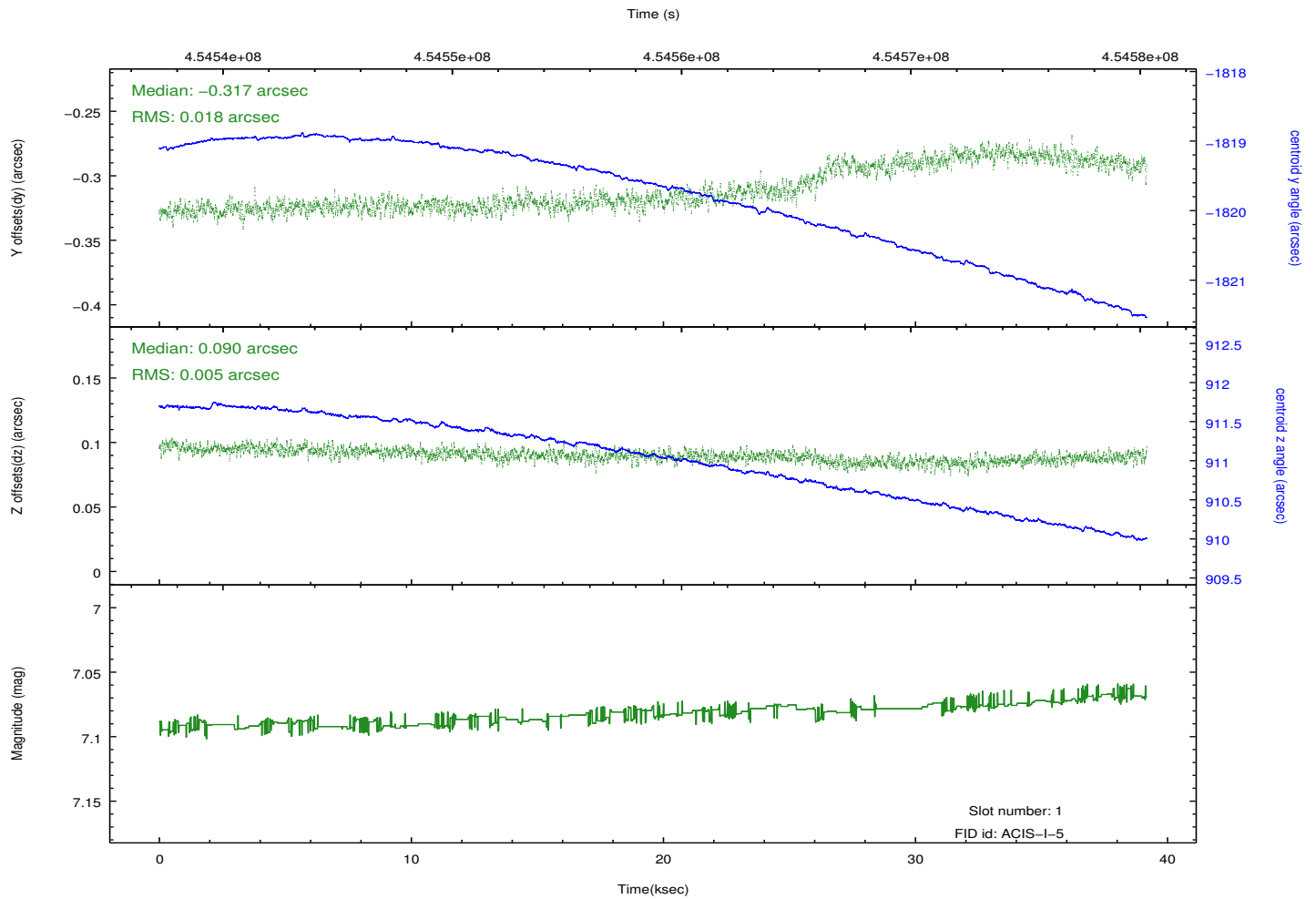
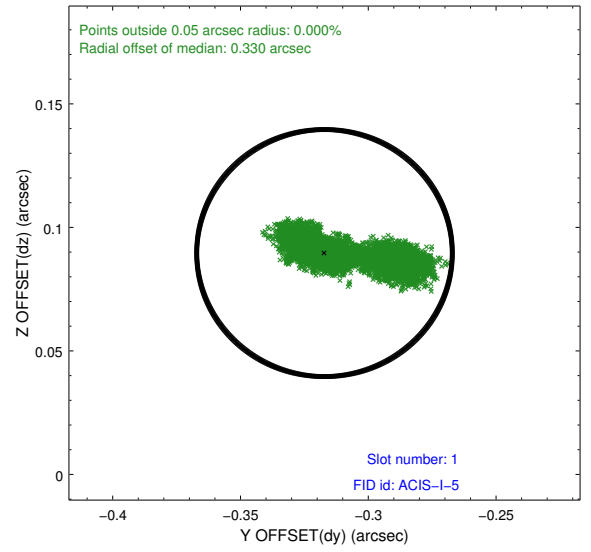
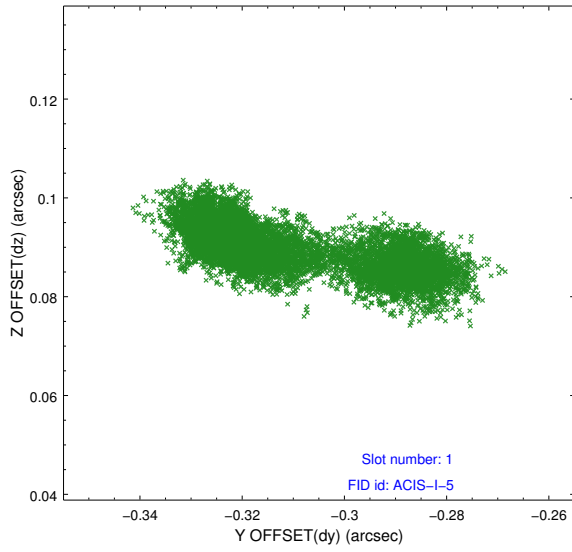


## 2.5 FID Slots

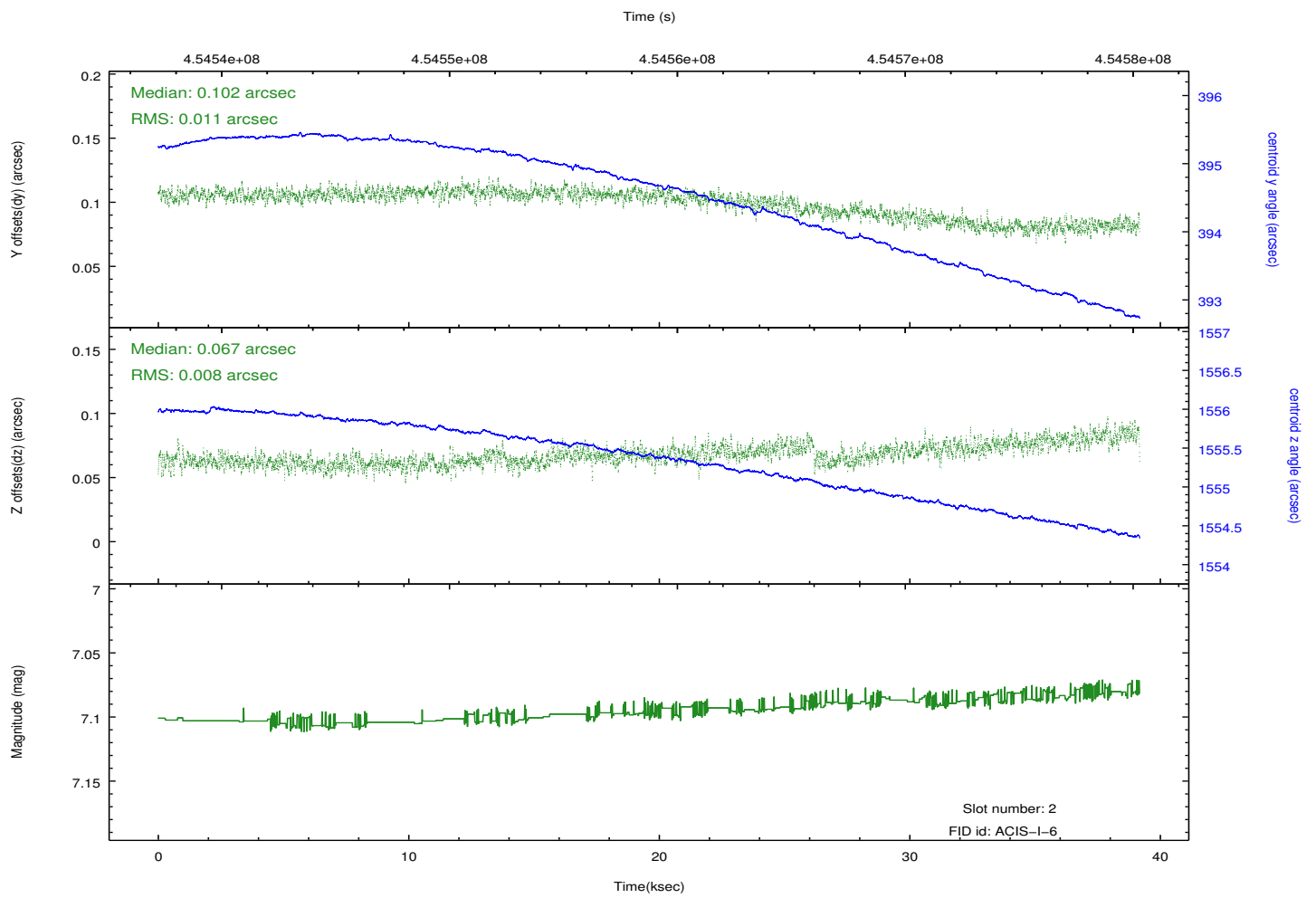
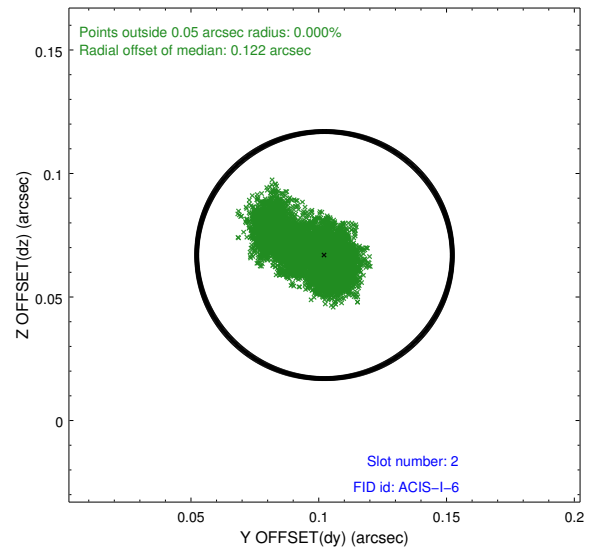
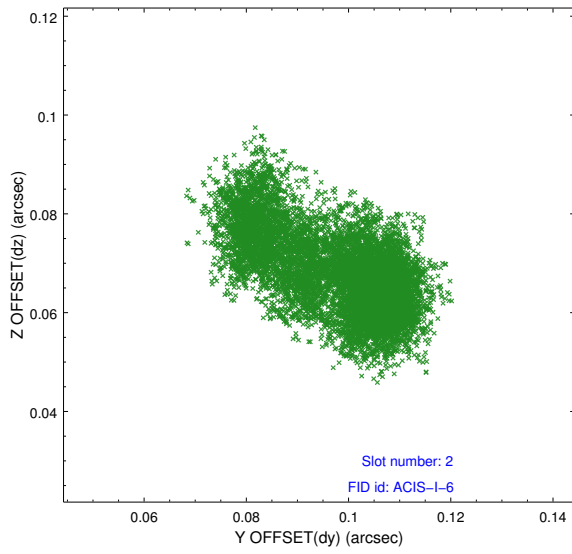
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.05.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.075459280312

### A.2 Comments