

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12287 - L2 Version 2  
Chandra X-Ray Center

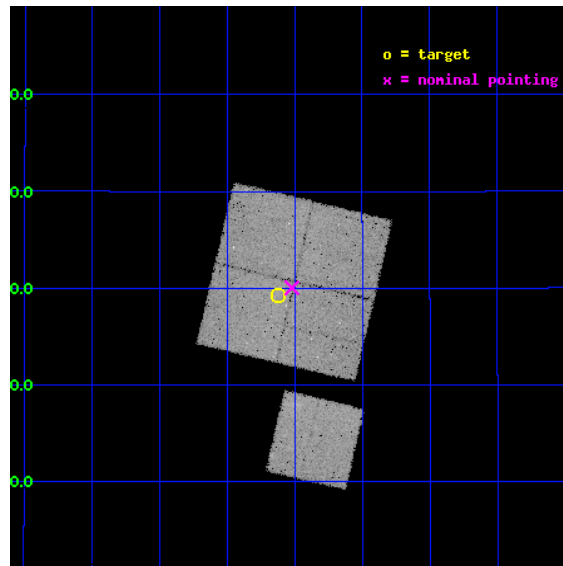
L2 Processing Date : Jul 2 2012

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# 1 Front

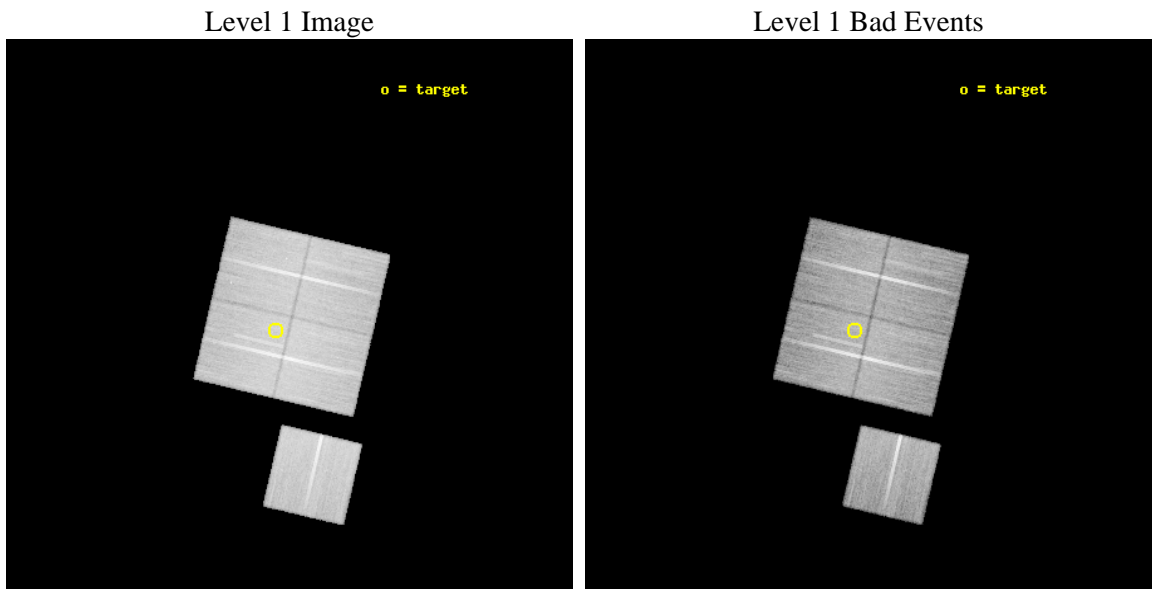
seq_num	900942	Sequence number
obs_id	12287	Observation id
title	Testing inverse Compton heating in high-z galaxies	Proposal title
observer	Professor Ian Smail	Principal investigator
object	4C19.71	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	326.03125	Observer's specified target RA [deg]
dec_targ	19.4875	Observer's specified target Dec [deg]
ra_nom	326.00510941413	Nominal RA [deg]
dec_nom	19.500688321481	Nominal Dec [deg]
roll_nom	193.21741132183	Nominal Roll [deg]
revision	2	Processing version of data
ontime	36499.35926038	Sum of GTIs [s]
livetime	36022.468261206	Livetime [s]
ontime0	36496.218240261	Sum of GTIs [s]
ontime1	36499.359260499	Sum of GTIs [s]
ontime2	36502.500280738	Sum of GTIs [s]
ontime3	36499.35926038	Sum of GTIs [s]
ontime6	36502.500280738	Sum of GTIs [s]
l2events	112912	Number of level 2 events



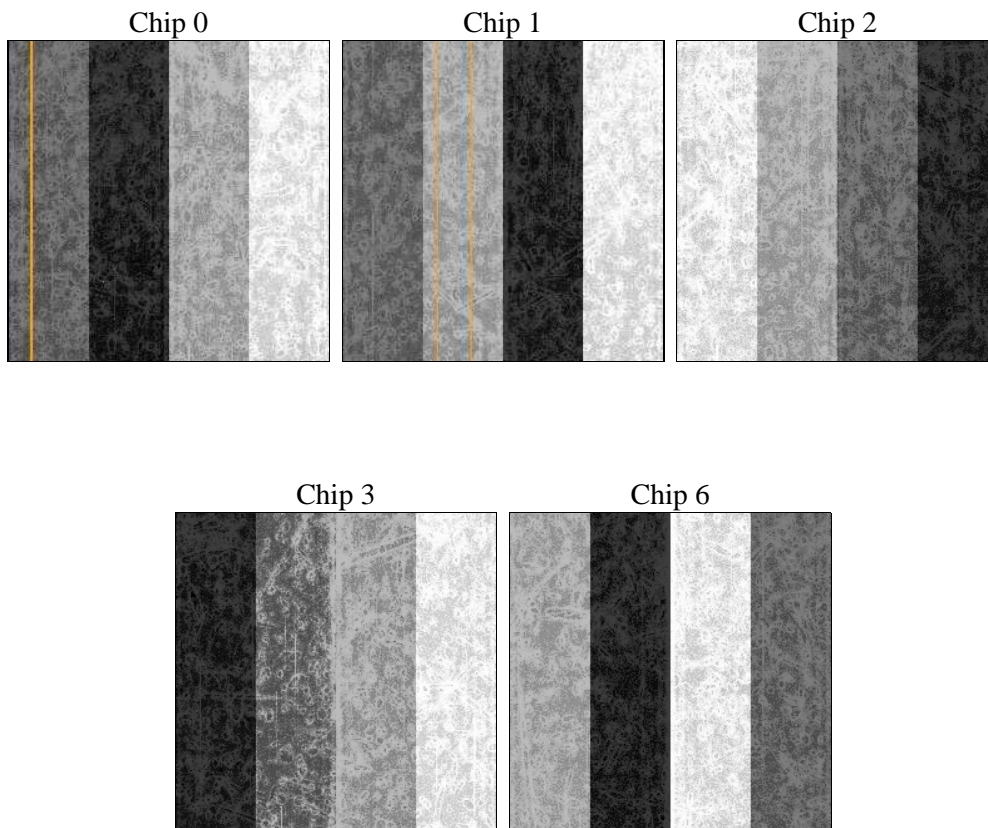
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36454.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	36499.35926038	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime0	36496.218240261	Sum of GTIs [s]
date	2012-07-02T06:33:32	Date and time of file creation	ontime1	36499.359260499	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	36502.500280738	Sum of GTIs [s]
			ontime3	36499.35926038	Sum of GTIs [s]
			ontime6	36502.500280738	Sum of GTIs [s]
			l1events	1271550	Number of level 1 events

### 2.1.4 Events

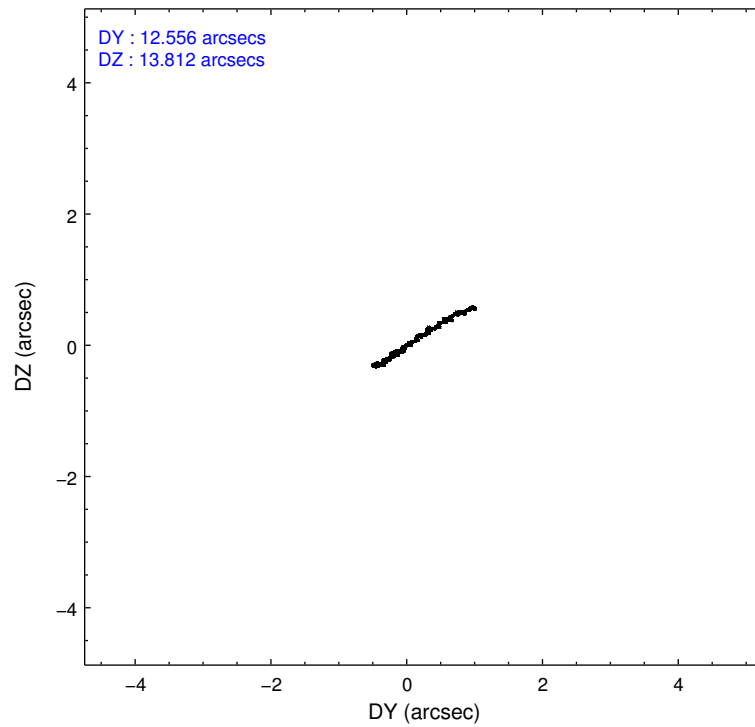
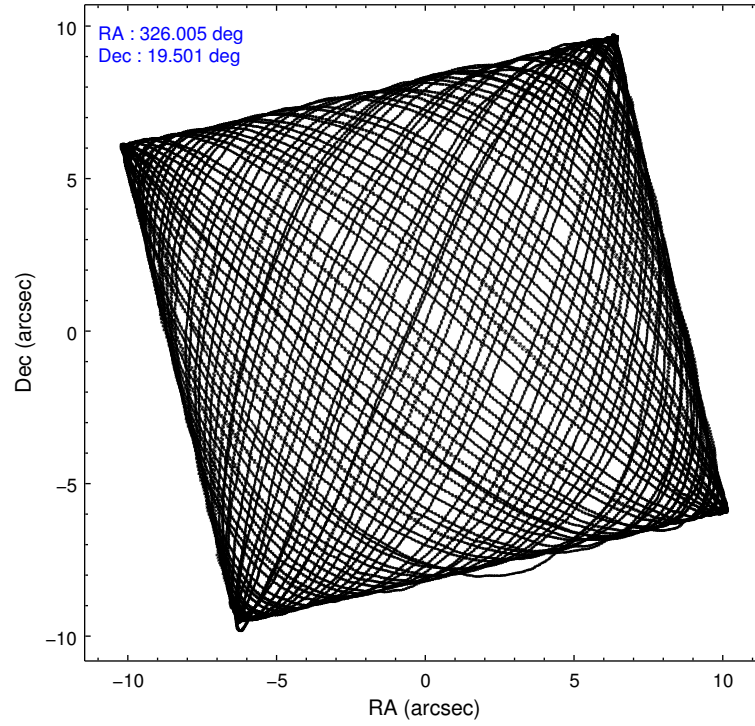
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	238084	242742	274740	256859	259125
rejected events	210808	214137	247910	231018	231539
rejected %	88%	88%	90%	89%	89%

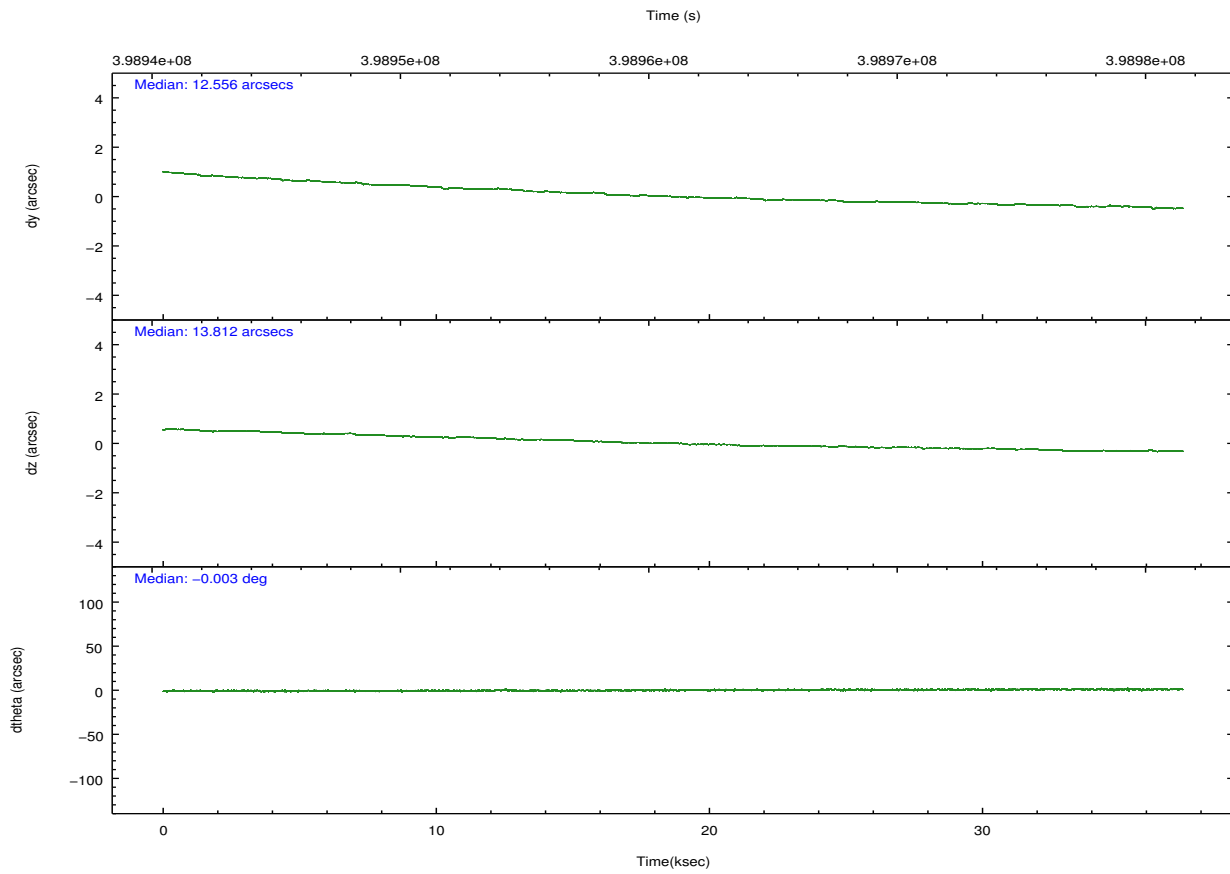
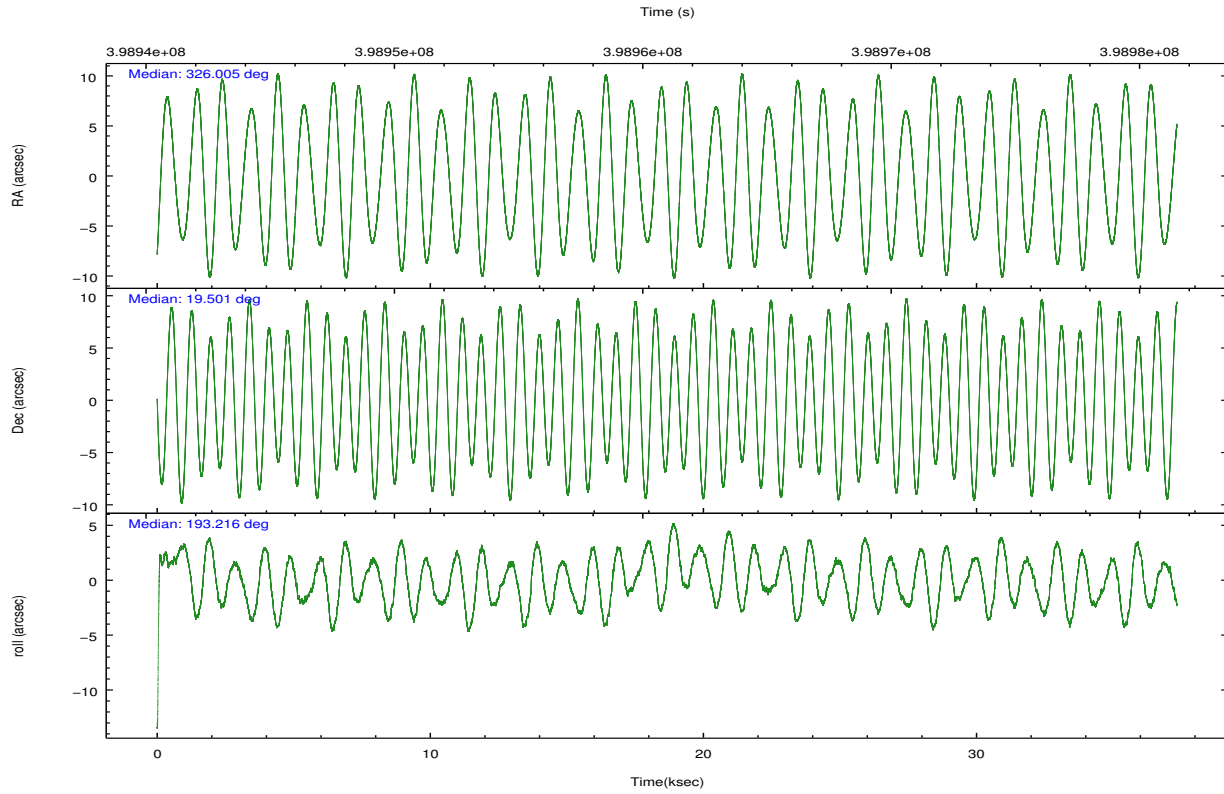
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9846	9760	10166	9475	9988
	4%	4%	3%	3%	3%
grade 1 events	157	134	161	154	141
	0%	0%	0%	0%	0%
grade 2 events	6597	6453	6272	5661	6108
	2%	2%	2%	2%	2%
grade 3 events	2965	3194	2723	2808	2835
	1%	1%	0%	1%	1%
grade 4 events	2762	3152	2783	2758	2929
	1%	1%	1%	1%	1%
grade 5 events	8730	9539	8278	10209	9322
	3%	3%	3%	3%	3%
grade 6 events	5107	6047	4889	5141	5734
	2%	2%	1%	2%	2%
grade 7 events	201920	204463	239468	220653	222068
	84%	84%	87%	85%	85%

## 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	326.026293	326.0051094141256	CCD I2 on	Y	Y
[deg] Pointing Dec	19.519608	19.5006883214809	CCD I3 on	Y	Y
[deg] Pointing Roll	193.001653	193.217411321832	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	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	398943188.184000	398941907.41695	CCD S5 on	N	N
Observation start date	2010-08-23T09:32:02	2010-08-23T09:11:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	398979642.184000	398980642.16894	On-chip summing requested	N	N
Observation end date	2010-08-23T19:39:36	2010-08-23T19:57:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



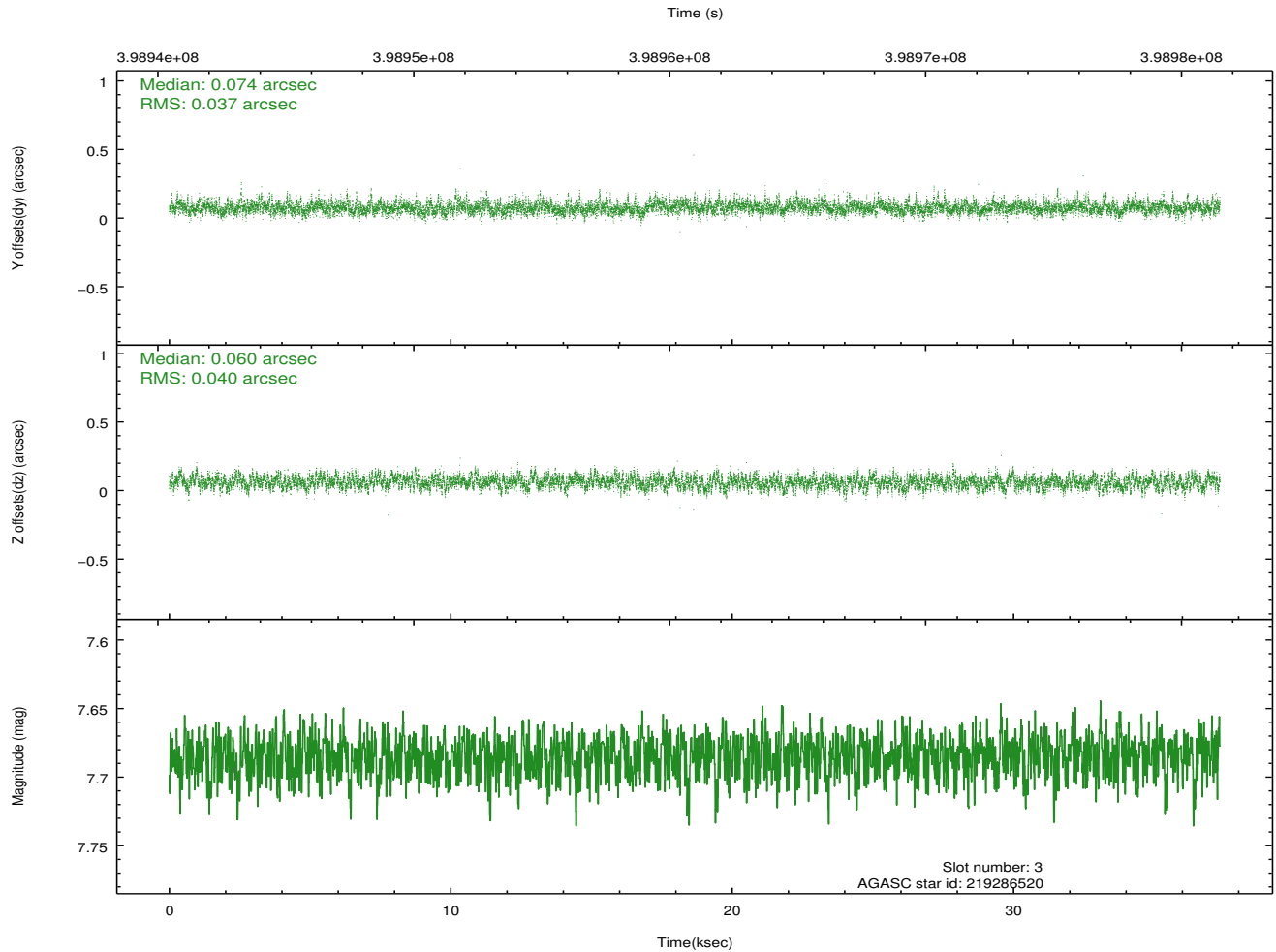
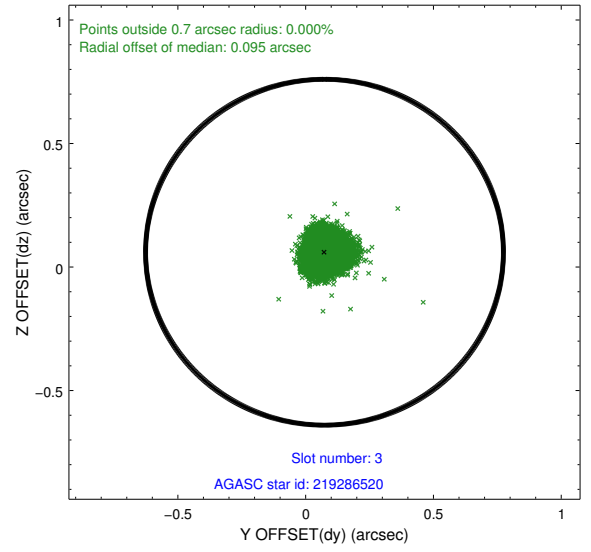
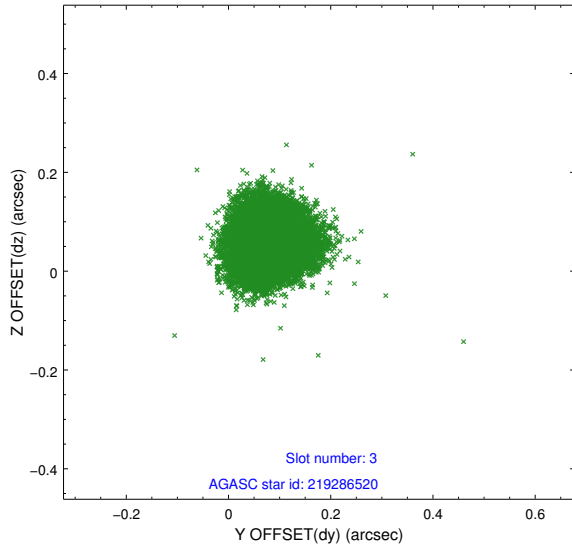


### Slot Statistics

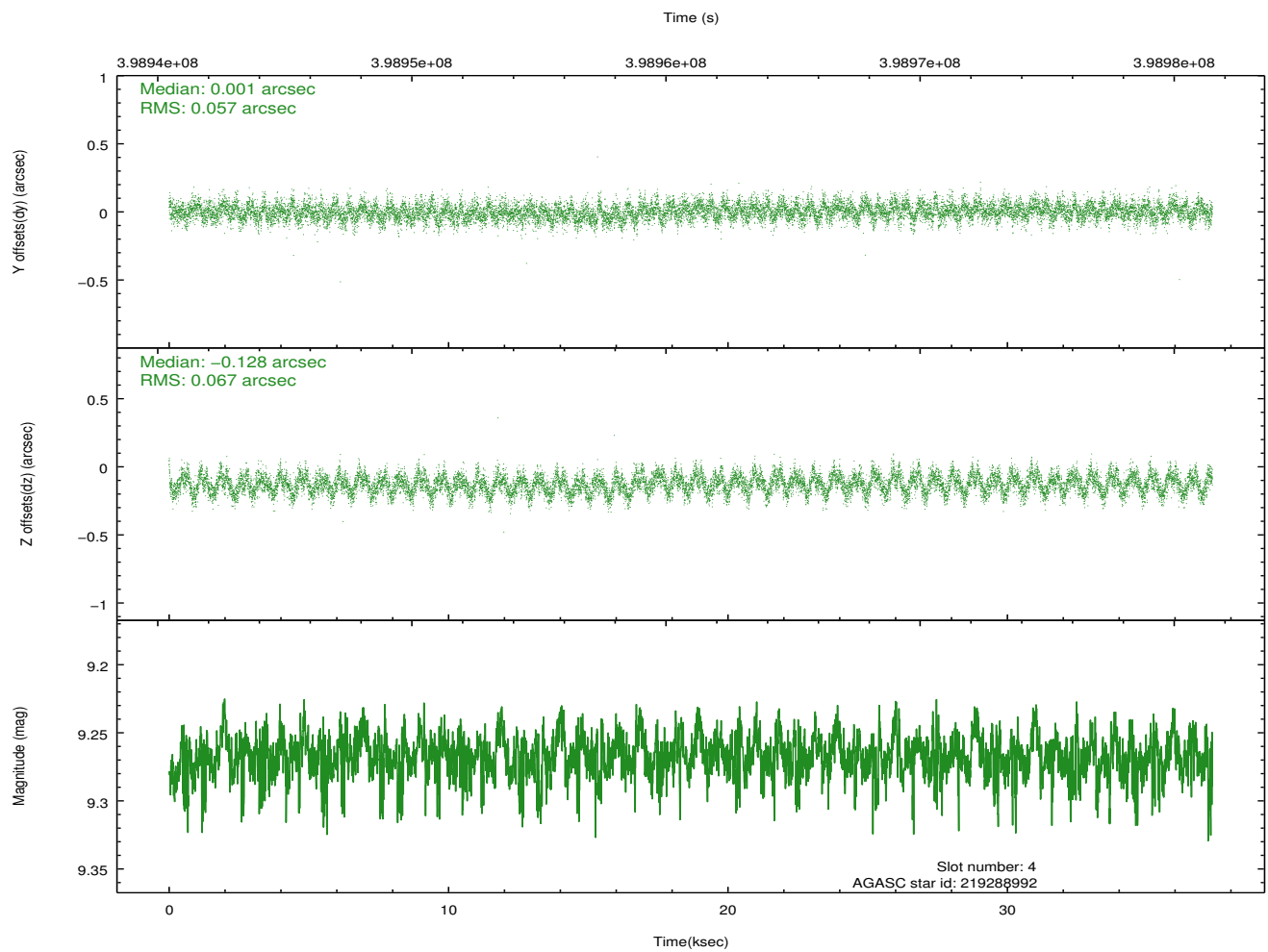
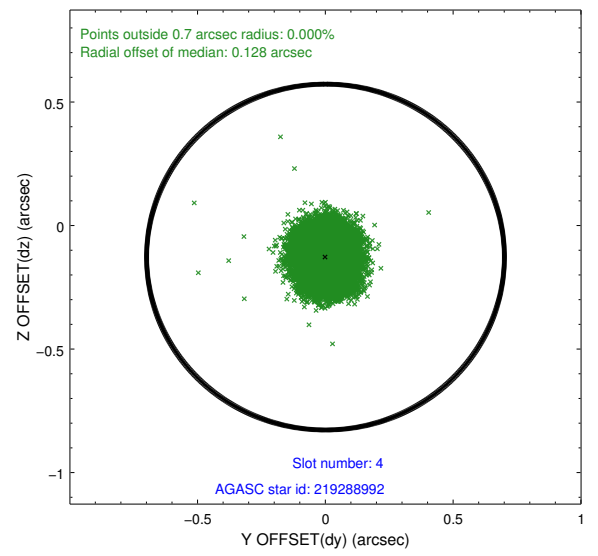
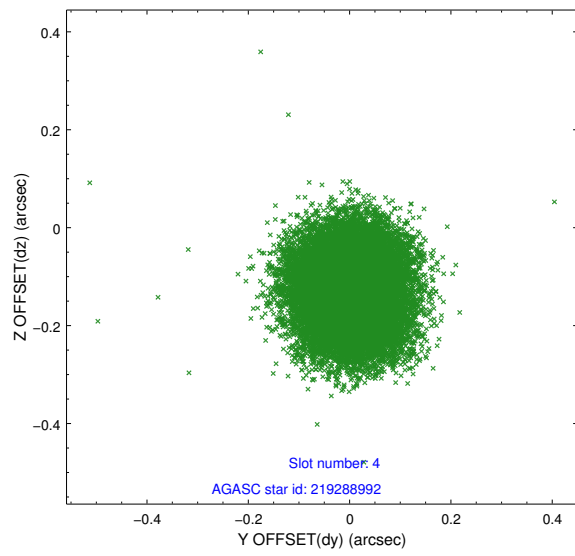
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.08	9107	0.032	0.019	0.009	0.017	0.000000	0.000000	926.92	-837.40
1	FID	ACIS-I-5	7.07	9106	-0.189	0.048	0.013	0.032	0.000000	0.000000	-1821.43	1060.06
2	FID	ACIS-I-6	7.07	9106	0.066	0.003	0.014	0.032	0.000000	0.000000	392.43	1704.59
3	GUIDE	219286520	7.69	18203	0.074	0.060	0.058	0.093	325.874410	19.635485	408.88	-521.59
4	GUIDE	219288992	9.27	18190	0.001	-0.128	0.094	0.149	325.572133	18.847343	2052.06	2008.46
5	GUIDE	219416272	8.53	18207	0.039	0.109	0.066	0.105	326.533325	20.024312	-2080.18	-1386.62
6	GUIDE	219421568	7.74	18209	0.030	-0.029	0.058	0.096	326.680674	19.477088	-2130.59	644.82
7	GUIDE	219417616	7.93	18202	-0.146	-0.013	0.061	0.105	326.841195	19.097413	-2361.00	2098.57

## 2.4 Star Slots

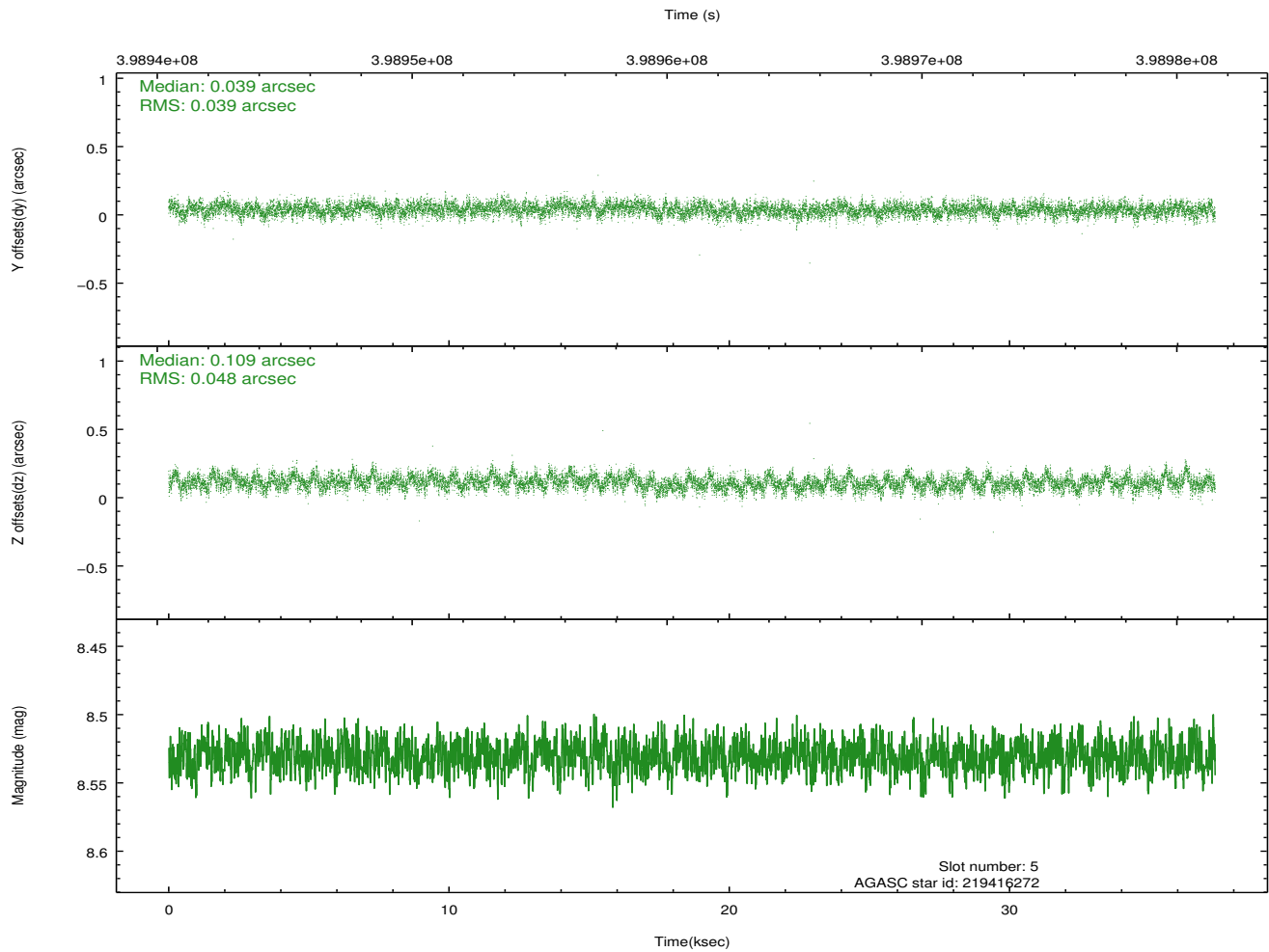
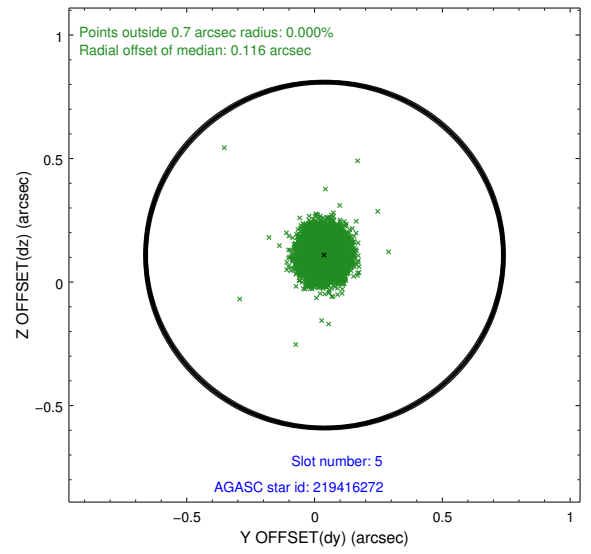
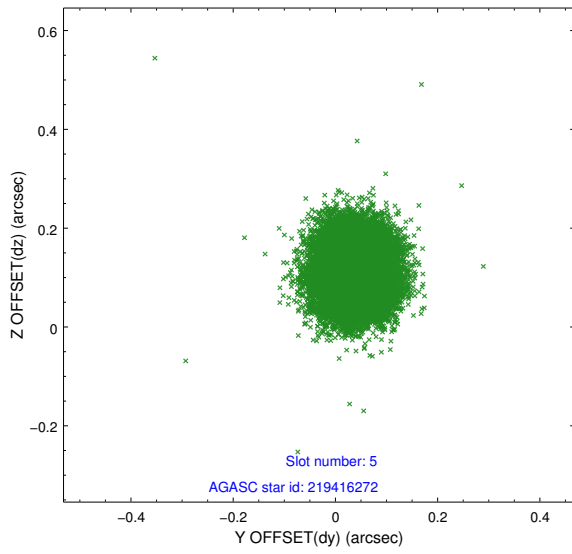
### 2.4.1 Slot 3



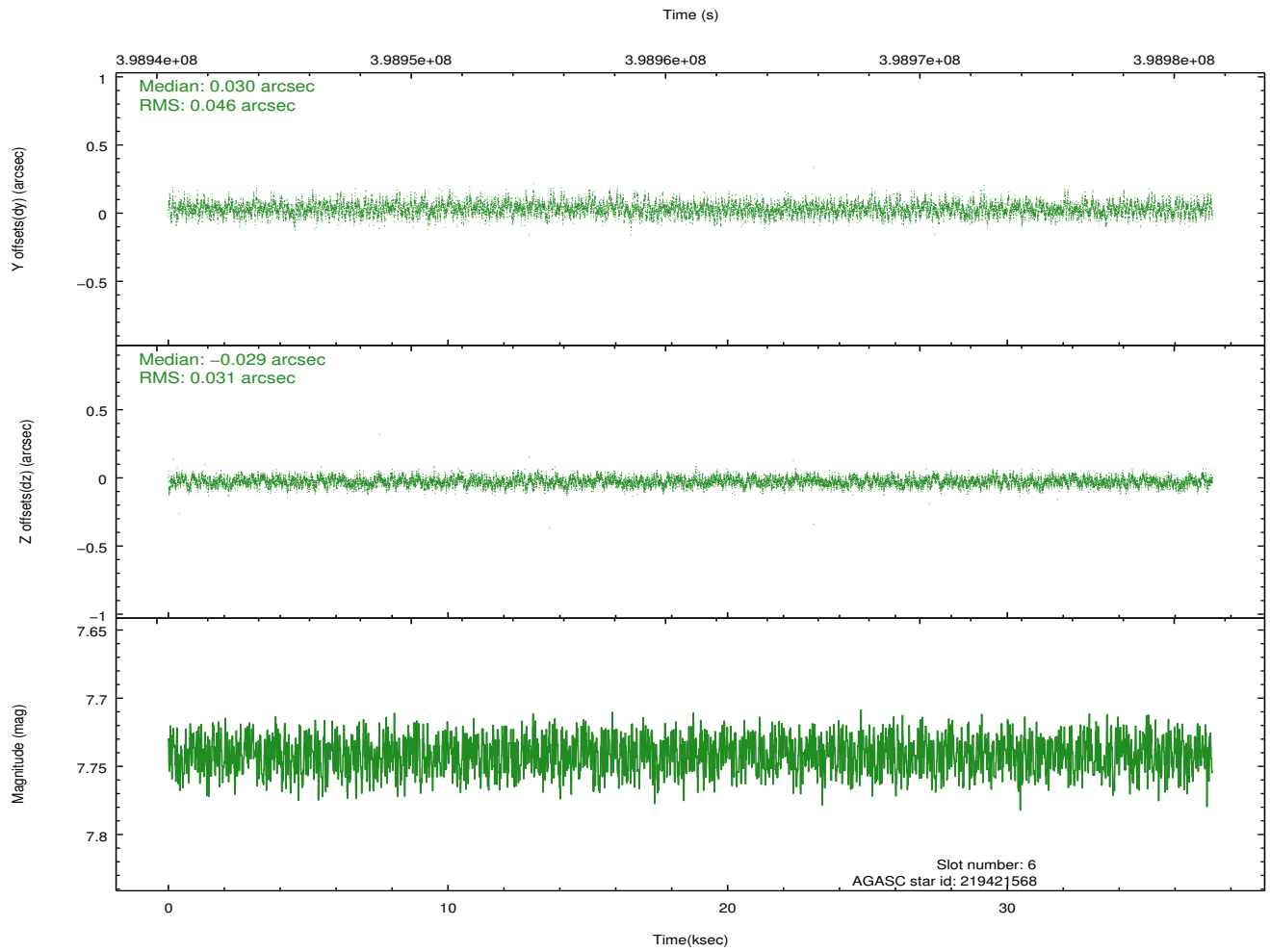
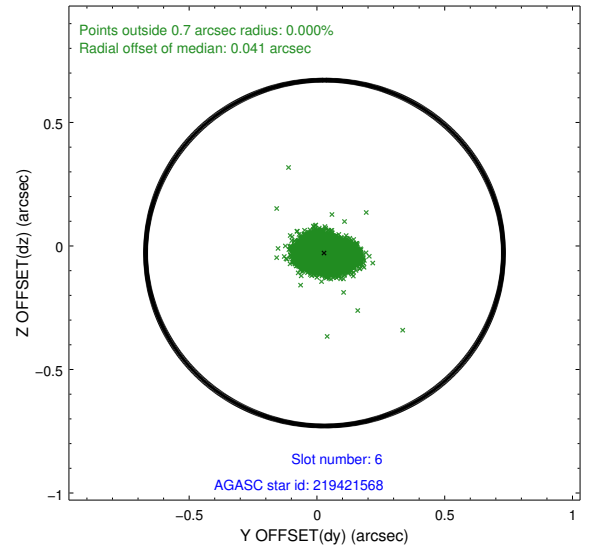
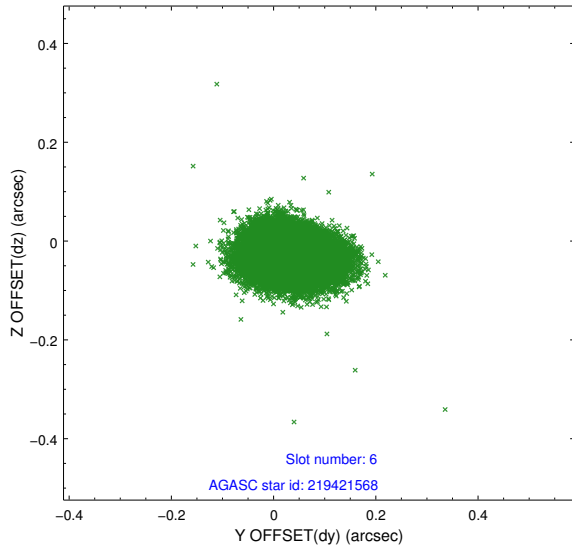
## 2.4.2 Slot 4



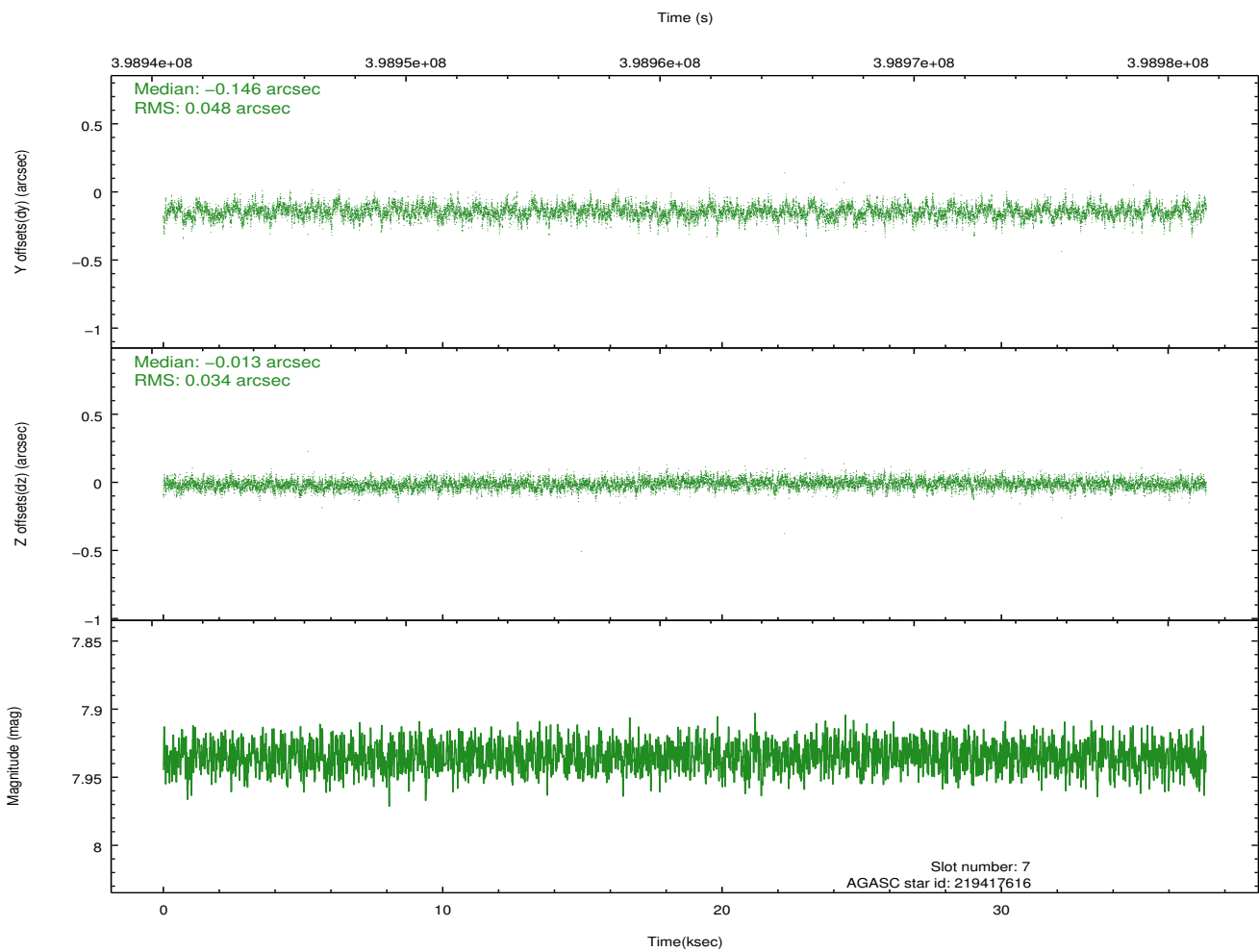
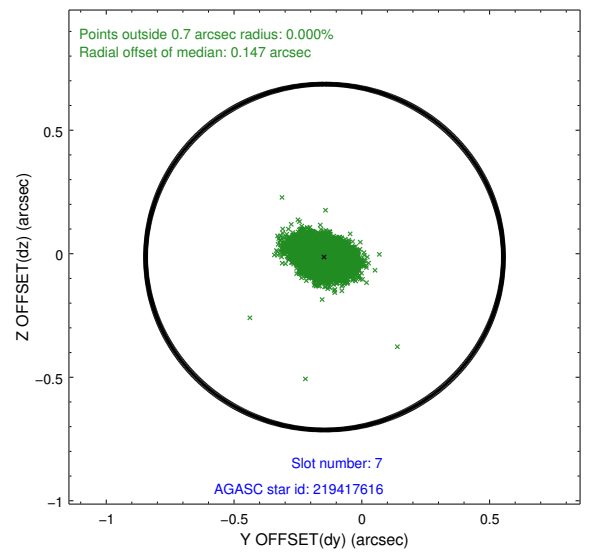
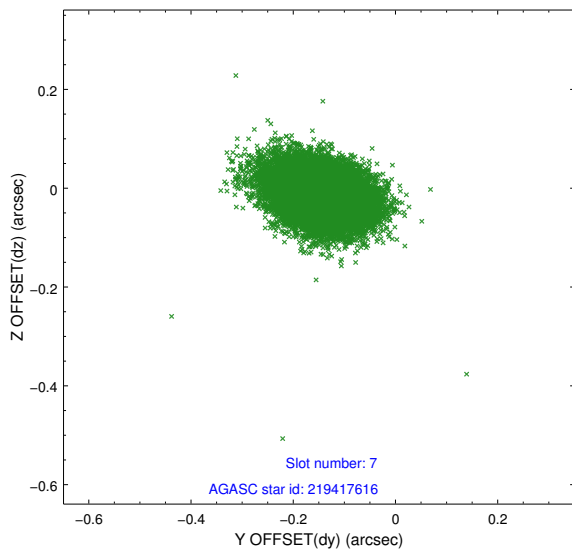
### 2.4.3 Slot 5



### 2.4.4 Slot 6

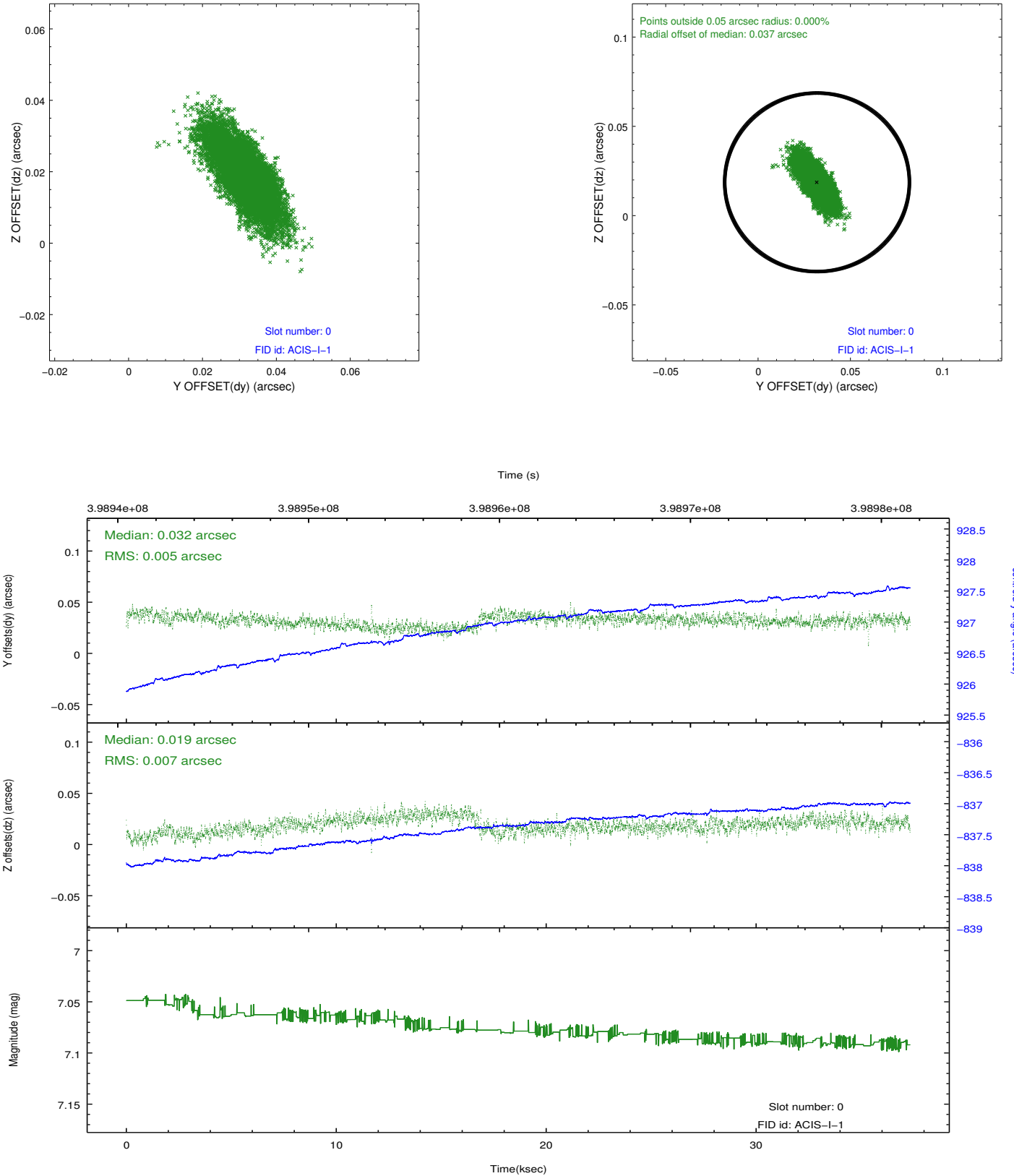


## 2.4.5 Slot 7

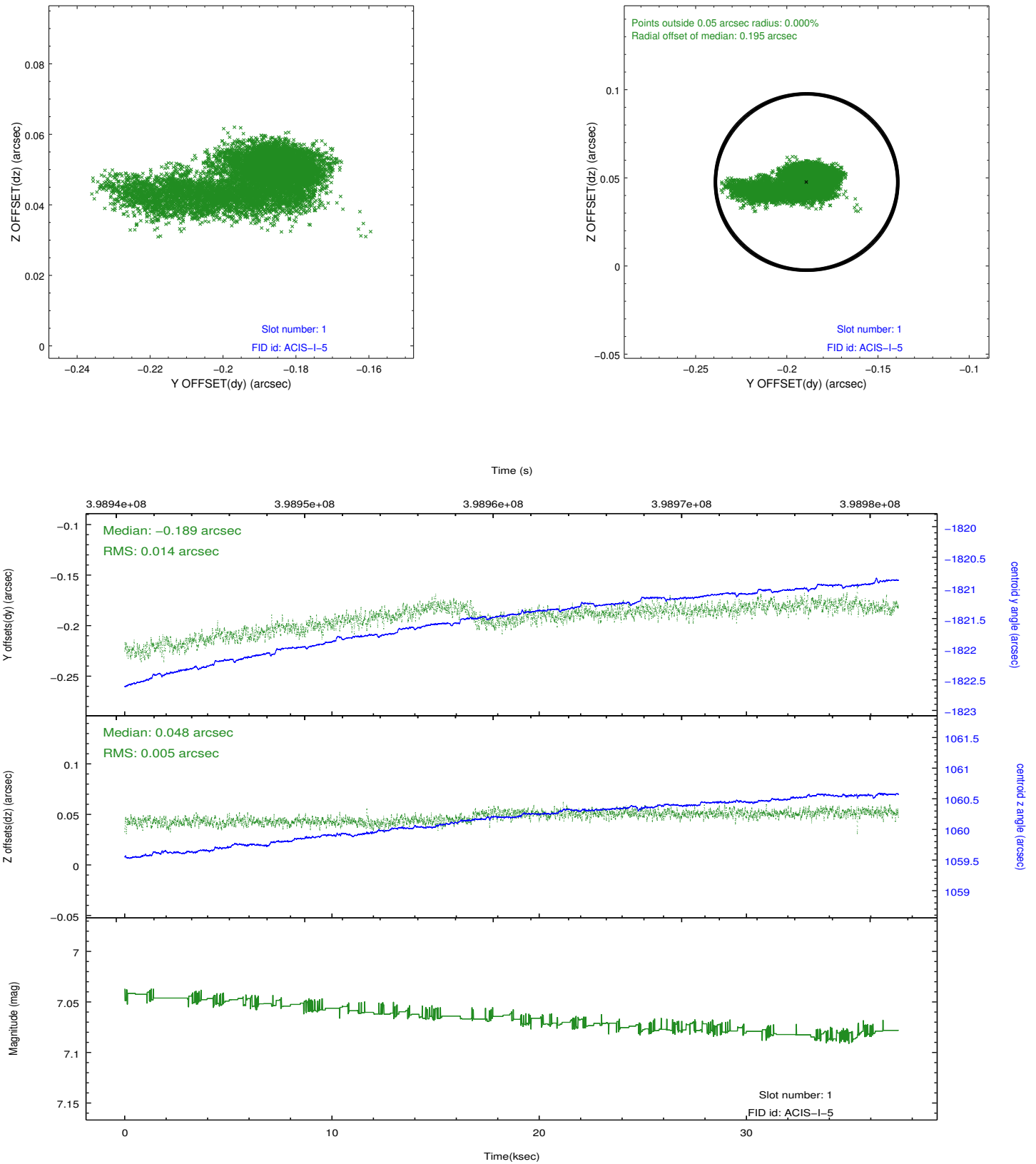


## 2.5 FID Slots

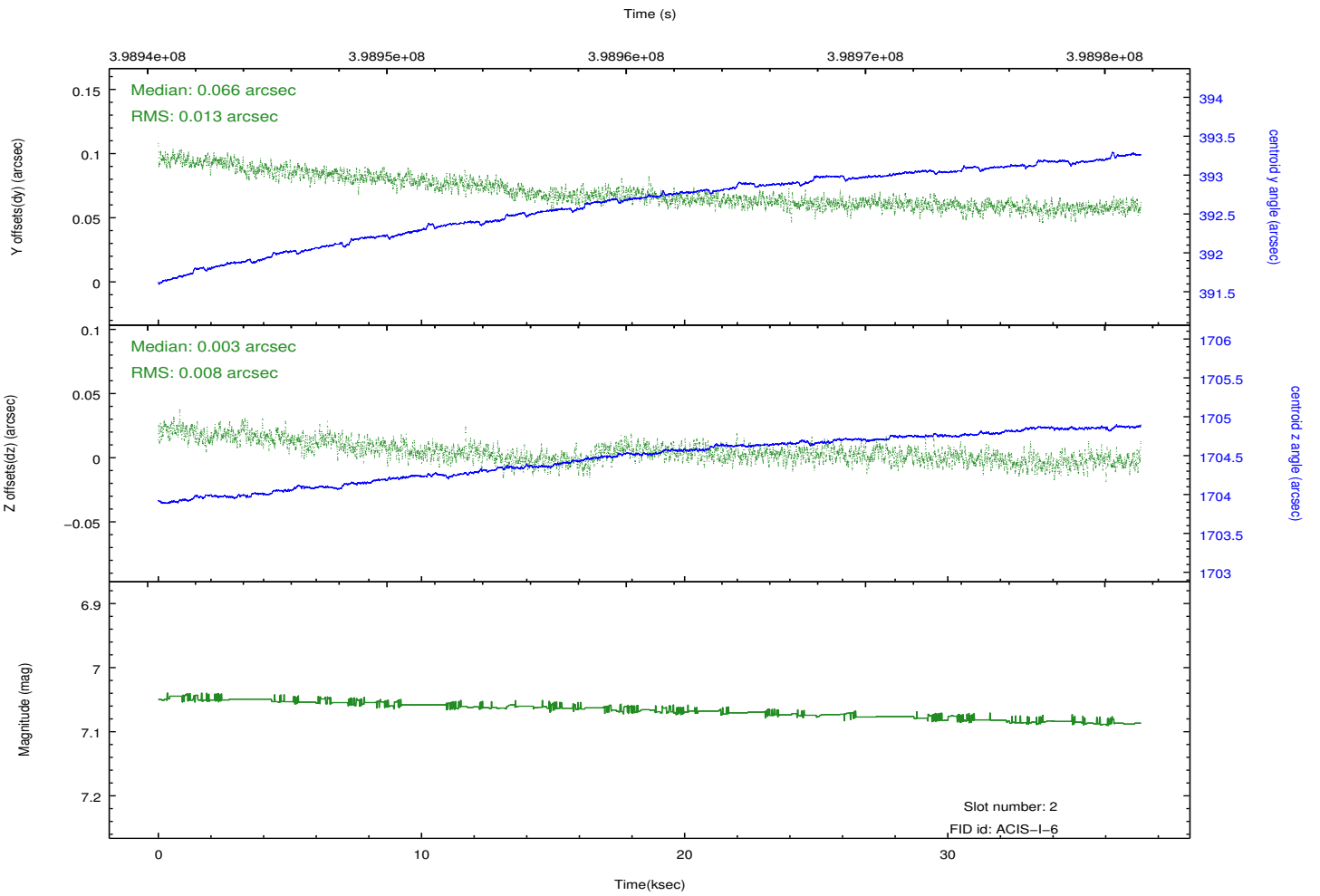
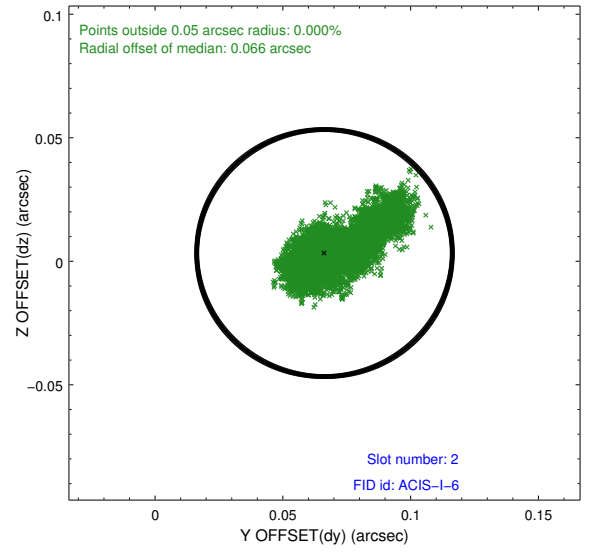
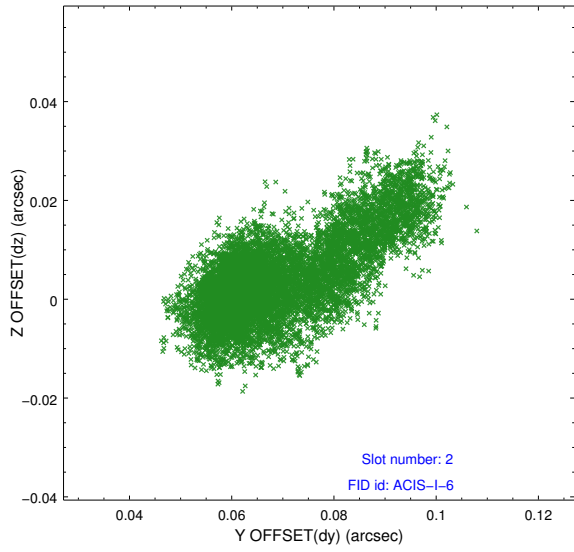
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.49935926044

### **A.2 Comments**