

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11071 - L2 Version 2  
Chandra X-Ray Center

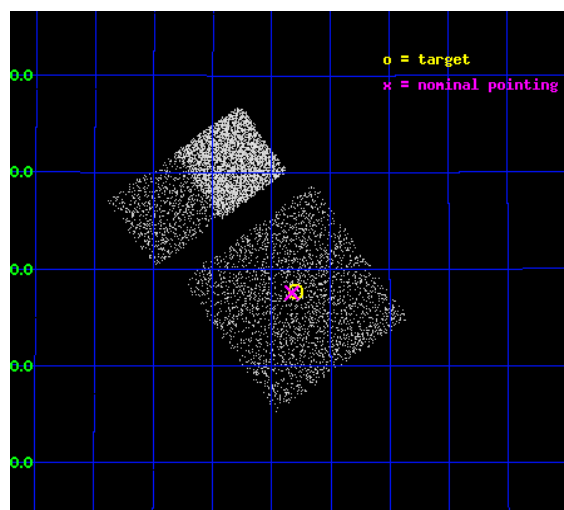
L2 Processing Date : Jun 19 2012

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# 1 Front

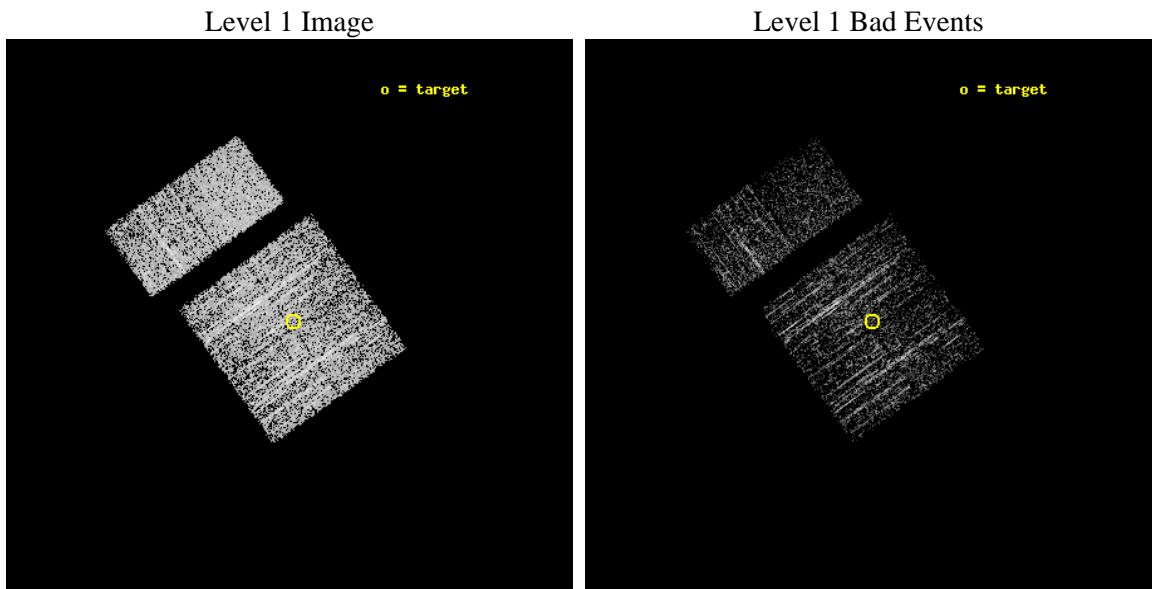
seq_num	401106	Sequence number
obs_id	11071	Observation id
title	Precise Positions of Historically Bright X-ray Binaries	Proposal t
observer	Dr. Alan Levine	Principal investigator
object	IGR J21117+3427	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	317.947917	Observer's specified target RA [deg]
dec_targ	34.462	Observer's specified target Dec [deg]
ra_nom	317.95712941977	Nominal RA [deg]
dec_nom	34.459561943604	Nominal Dec [deg]
roll_nom	324.41457284122	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1039.9999961853	Sum of GTIs [s]
livetime	1026.8308900208	Livetime [s]
ontime0	1039.9999961853	Sum of GTIs [s]
ontime1	1039.9999961853	Sum of GTIs [s]
ontime2	1039.9999961853	Sum of GTIs [s]
ontime3	1039.9999961853	Sum of GTIs [s]
ontime6	1039.9999961853	Sum of GTIs [s]
ontime7	1039.9999961853	Sum of GTIs [s]
l2events	8659	Number of level 2 events



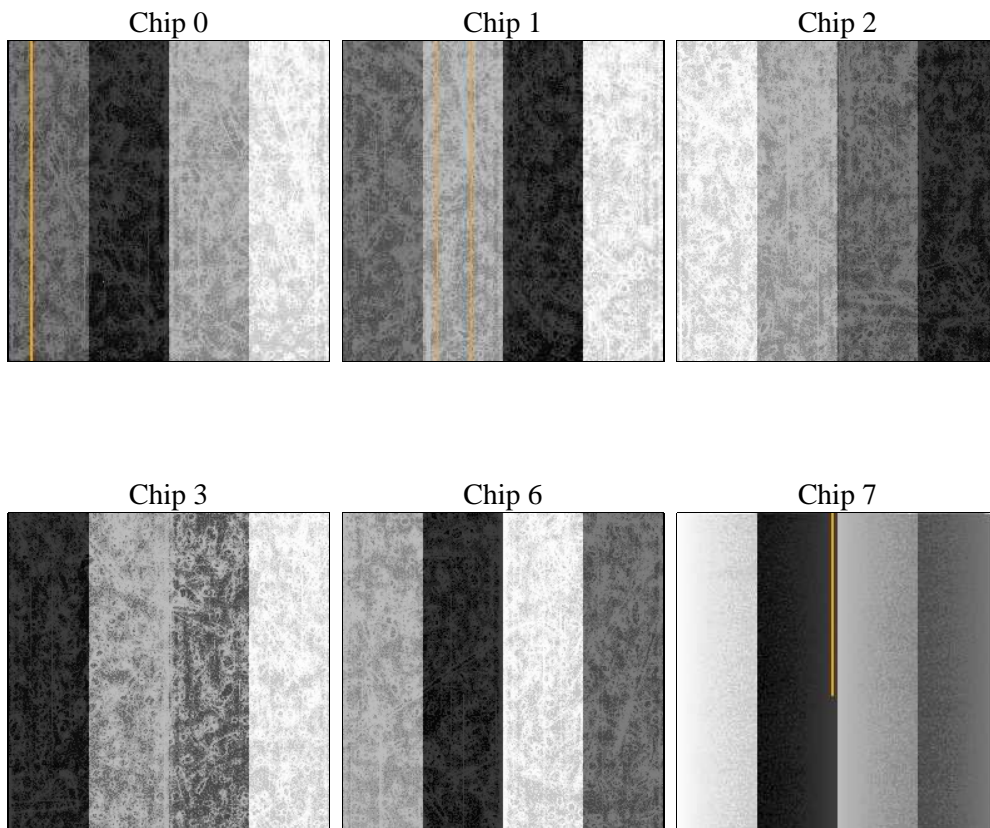
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1039.9999961853	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime0	1039.9999961853	Sum of GTIs [s]
date	2012-06-19T06:54:04	Date and time of file creation	ontime1	1039.9999961853	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	1039.9999961853	Sum of GTIs [s]
			ontime3	1039.9999961853	Sum of GTIs [s]
			ontime6	1039.9999961853	Sum of GTIs [s]
			ontime7	1039.9999961853	Sum of GTIs [s]
			l1events	55743	Number of level 1 events

### 2.1.4 Events

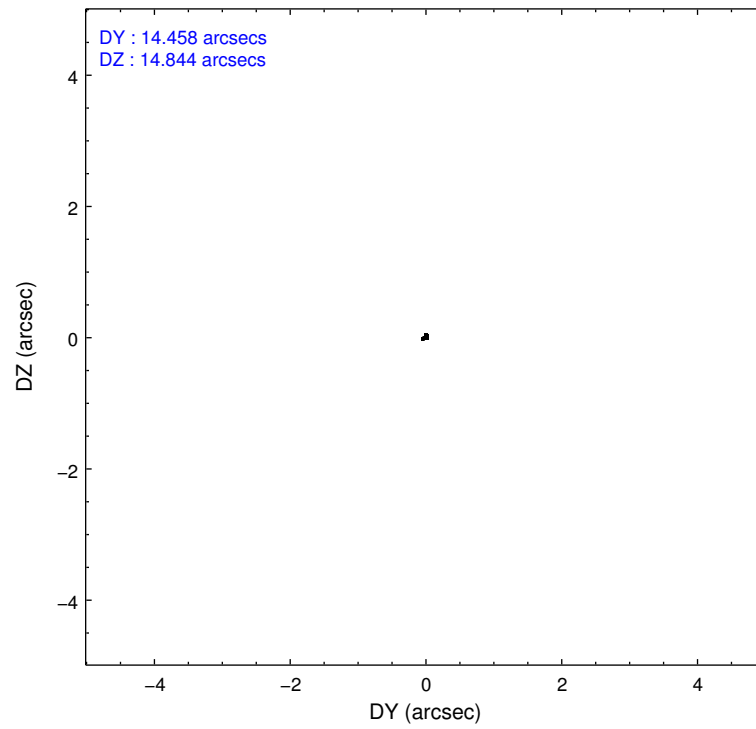
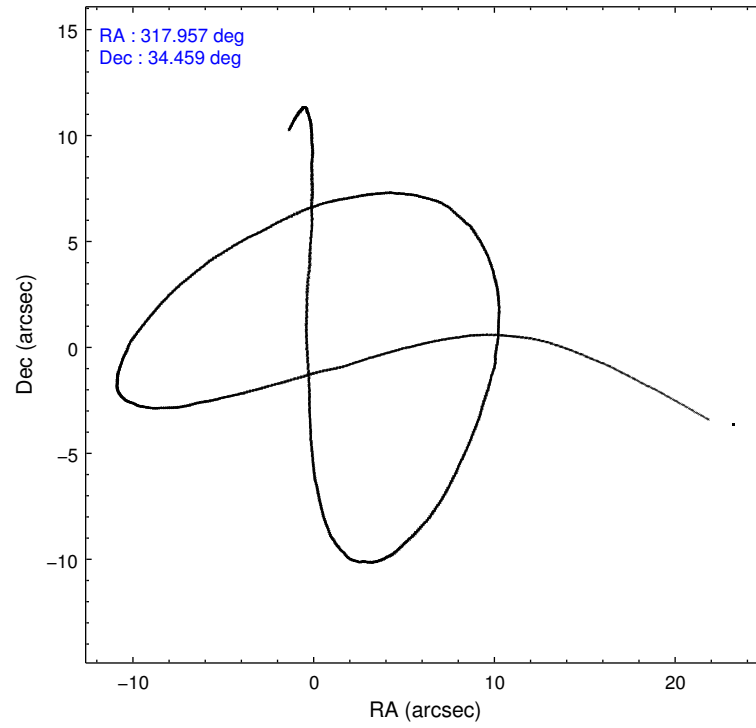
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	9277	8019	10155	8594	9195	10503
rejected events	8357	6965	9274	7709	8195	5688
rejected %	90%	86%	91%	89%	89%	54%

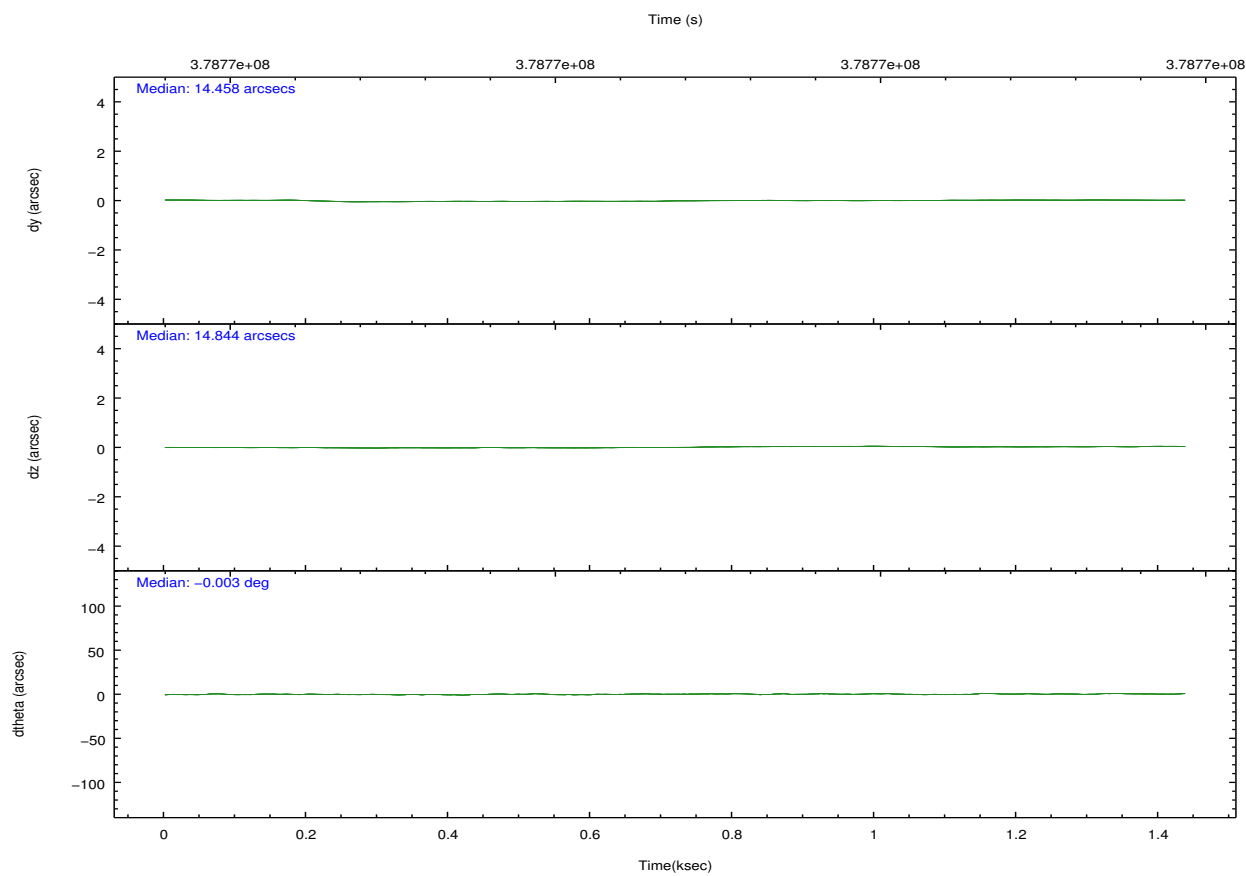
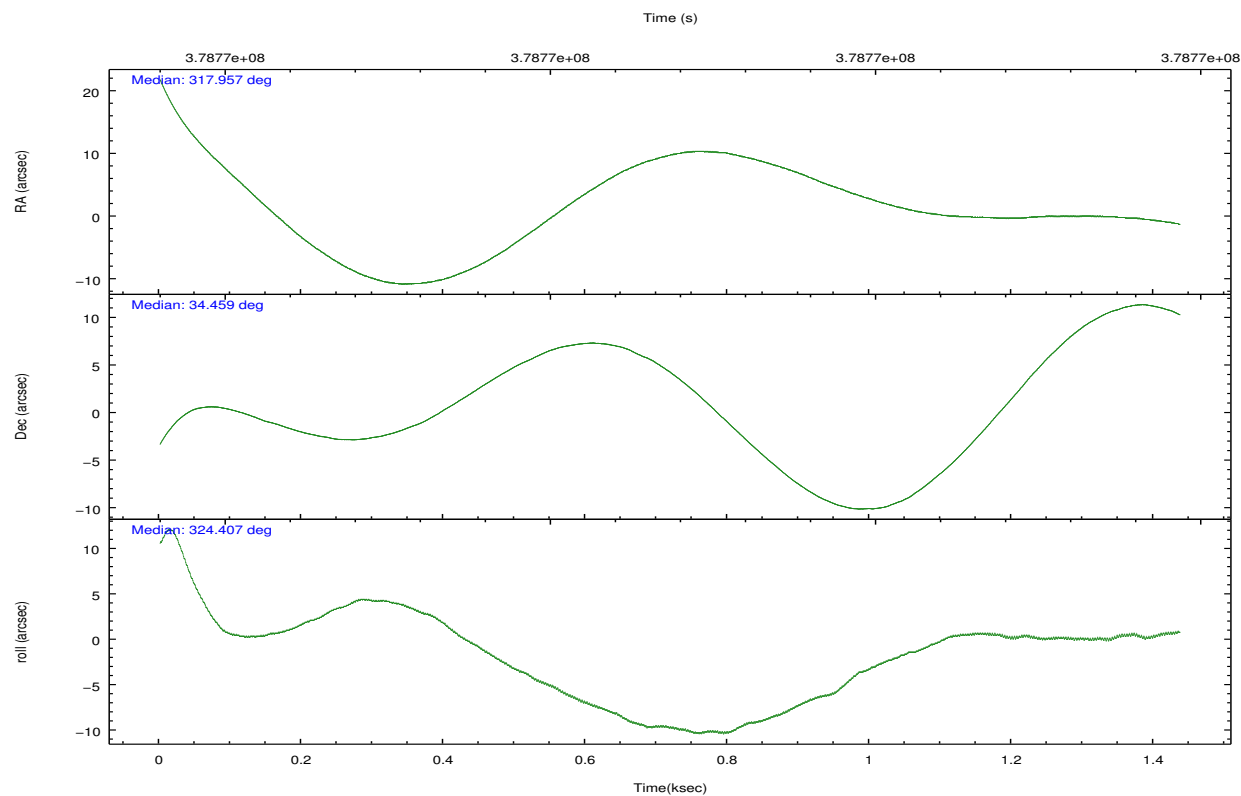
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	313	375	306	329	328	457
	3%	4%	3%	3%	3%	4%
grade 1 events	4	6	1	5	7	17
	0%	0%	0%	0%	0%	0%
grade 2 events	215	258	216	199	248	1004
	2%	3%	2%	2%	2%	9%
grade 3 events	102	114	110	92	109	438
	1%	1%	1%	1%	1%	4%
grade 4 events	94	109	94	94	111	440
	1%	1%	0%	1%	1%	4%
grade 5 events	313	403	305	368	396	1052
	3%	5%	3%	4%	4%	10%
grade 6 events	201	204	164	178	210	2504
	2%	2%	1%	2%	2%	23%
grade 7 events	8035	6550	8959	7329	7786	4591
	86%	81%	88%	85%	84%	43%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	317.924022	317.9571294197685	CCD I2 on	Y	Y
[deg] Pointing Dec	34.462022	34.45956194360355	CCD I3 on	Y	Y
[deg] Pointing Roll	324.224476	324.4145728412237	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	378770903.184000	378769756.74067	CCD S5 on	N	N
Observation start date	2010-01-01T22:07:17	2010-01-01T21:49:16	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	378771903.184000	378772947.05333	On-chip summing requested	N	N
Observation end date	2010-01-01T22:23:57	2010-01-01T22:42:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





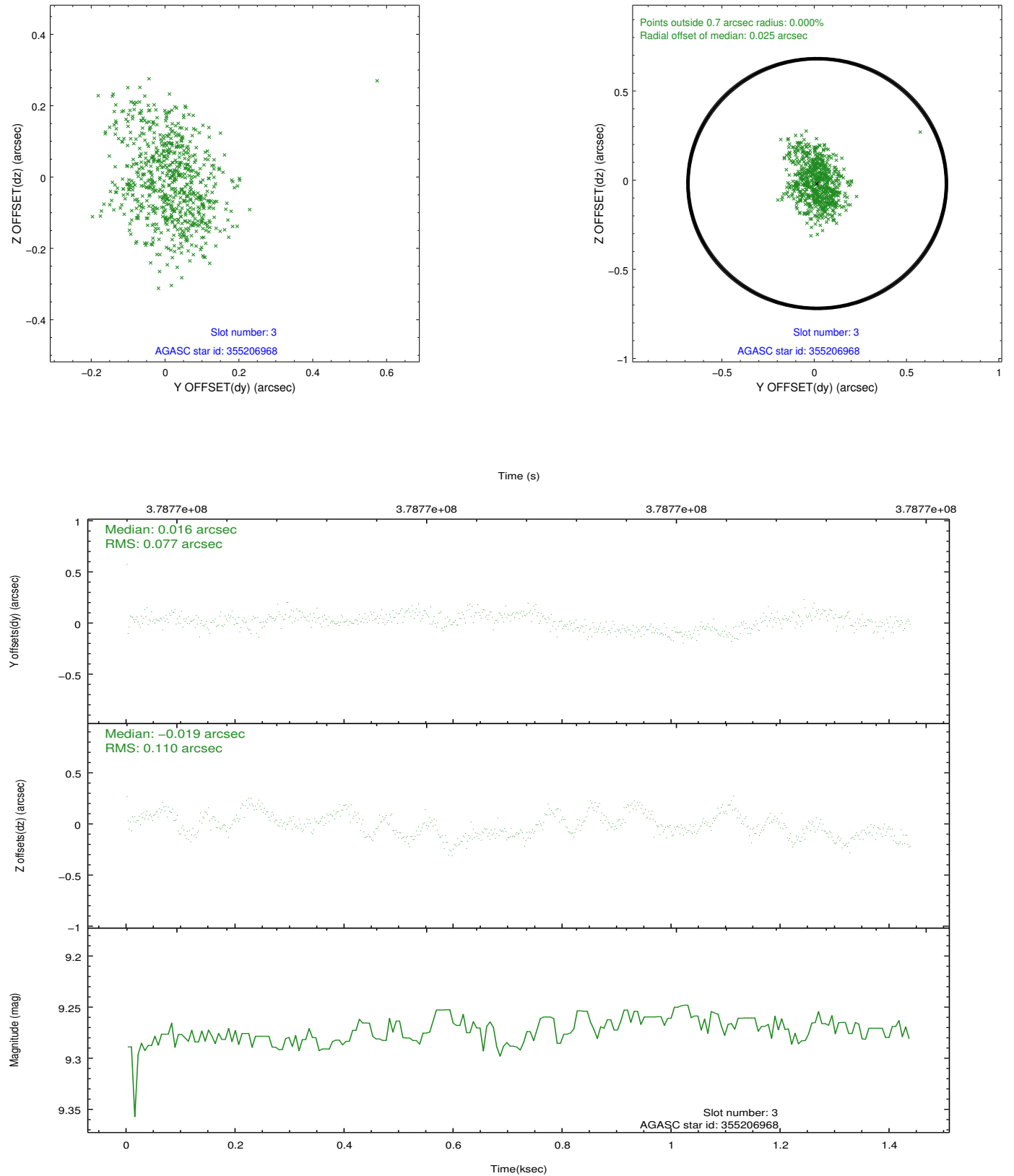
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.06	350	0.025	0.007	0.006	0.011	0.000000	0.000000	925.06	-838.43
1	FID	ACIS-I-5	7.06	351	-0.207	0.033	0.007	0.012	0.000000	0.000000	-1820.76	1056.74
2	FID	ACIS-I-6	7.06	351	0.091	0.030	0.006	0.010	0.000000	0.000000	385.62	1706.49
3	GUIDE	355206968	9.27	702	0.016	-0.019	0.139	0.226	317.542227	34.263052	-503.06	-1243.70
4	GUIDE	355207304	9.25	701	-0.109	0.107	0.137	0.211	317.504672	34.406887	-895.84	-889.03
5	GUIDE	355215992	9.04	702	0.221	0.114	0.084	0.132	318.281459	33.928375	1988.20	-933.95
6	GUIDE	355224240	8.50	702	-0.099	0.070	0.082	0.130	318.529611	34.817665	703.79	2088.16
7	GUIDE	355225088	7.86	699	-0.021	-0.275	0.064	0.105	318.582442	34.294325	1939.69	663.07

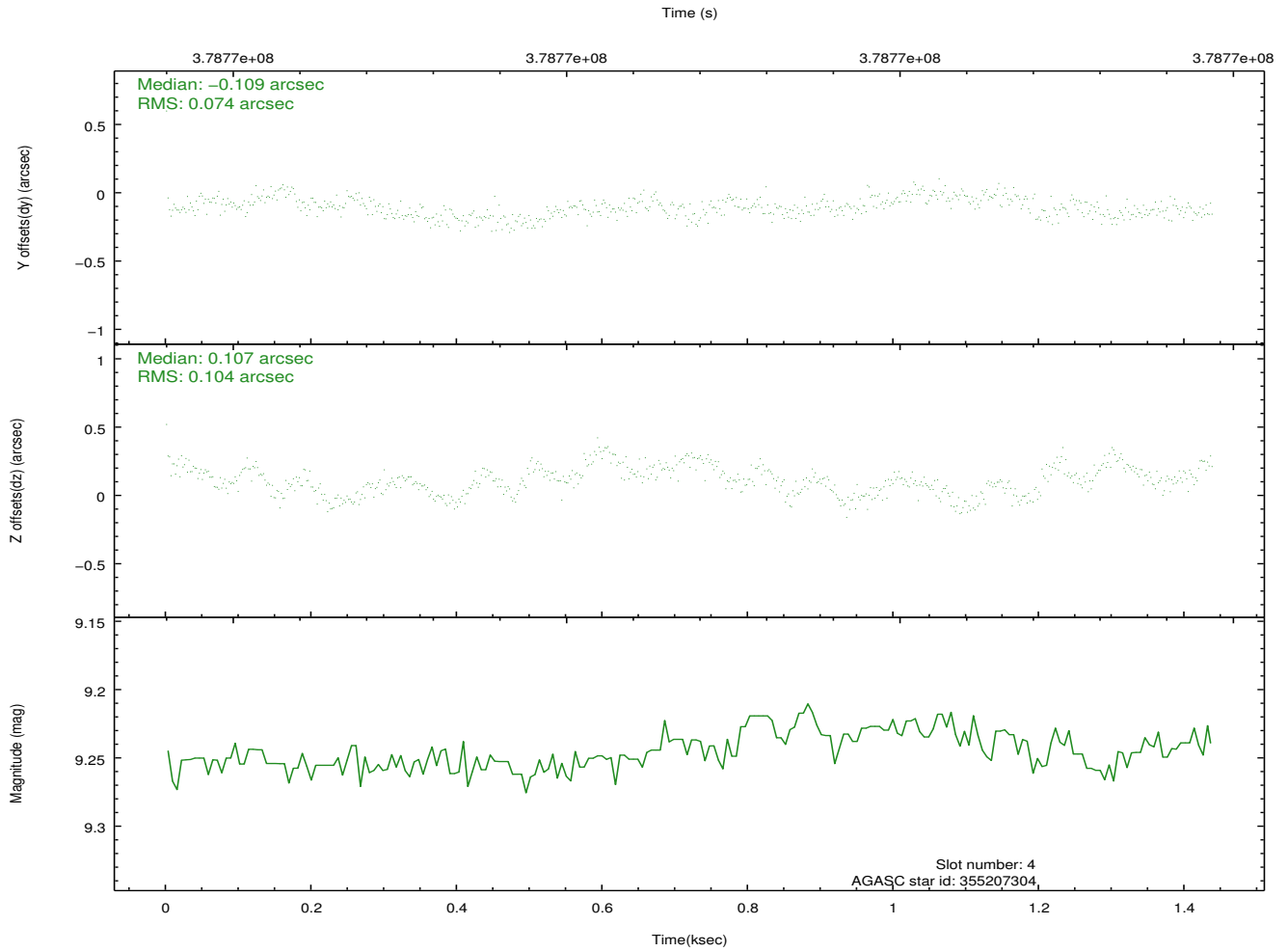
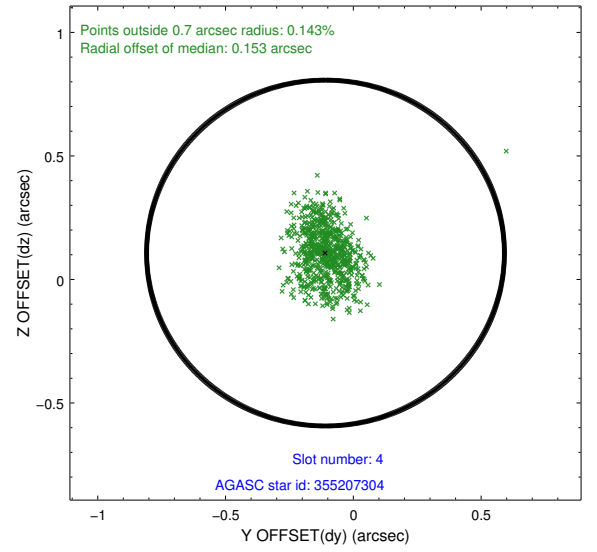
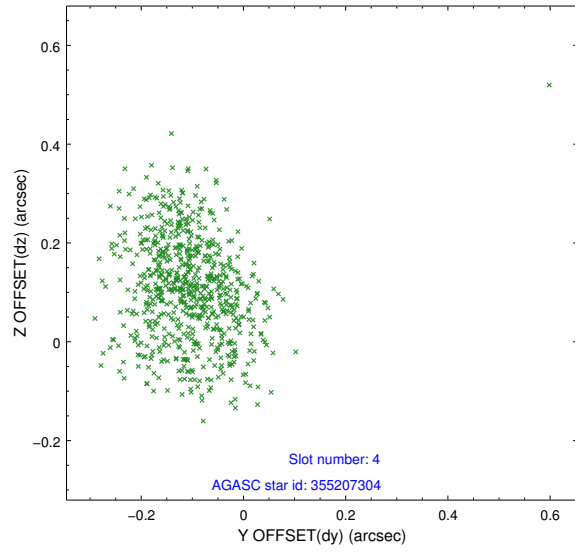


## 2.4 Star Slots

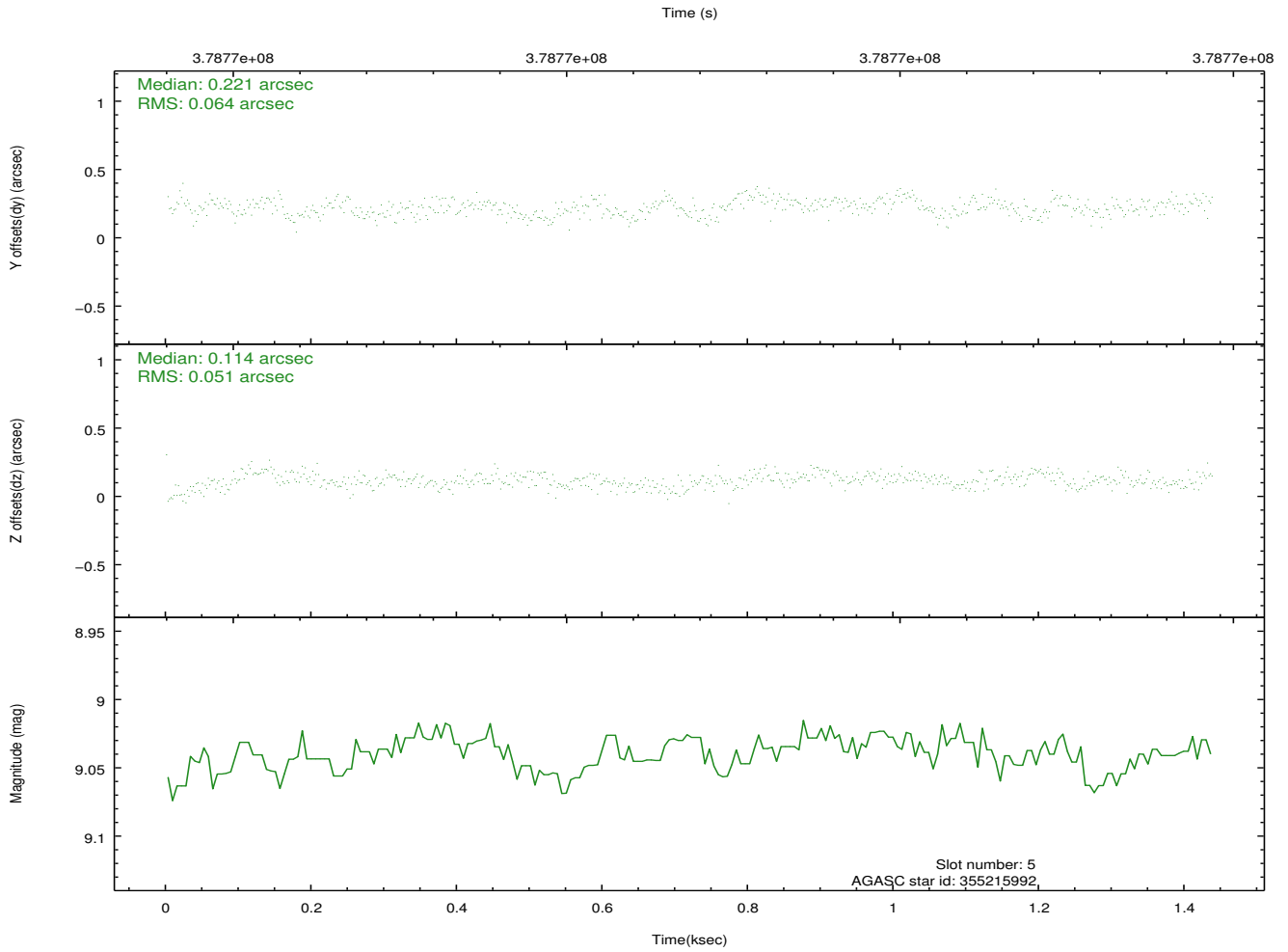
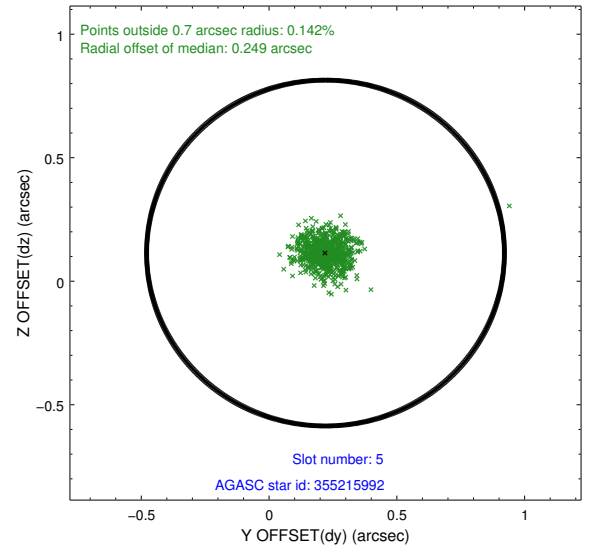
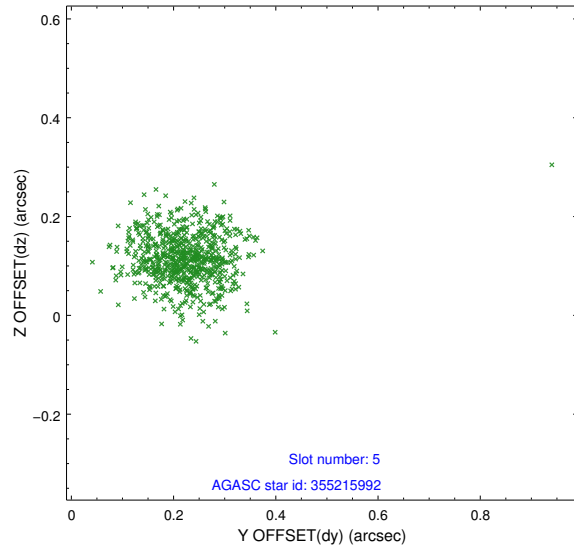
### 2.4.1 Slot 3



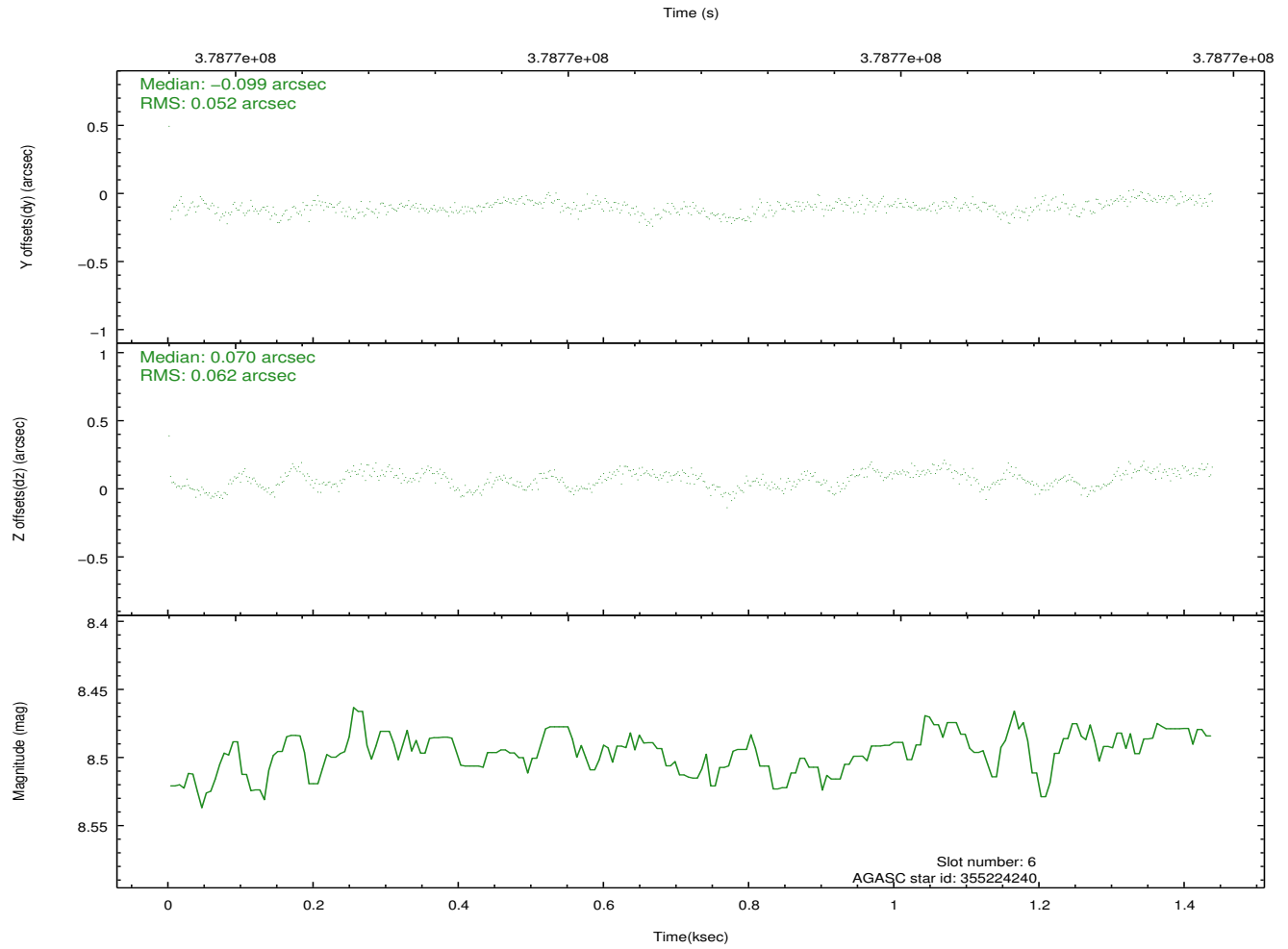
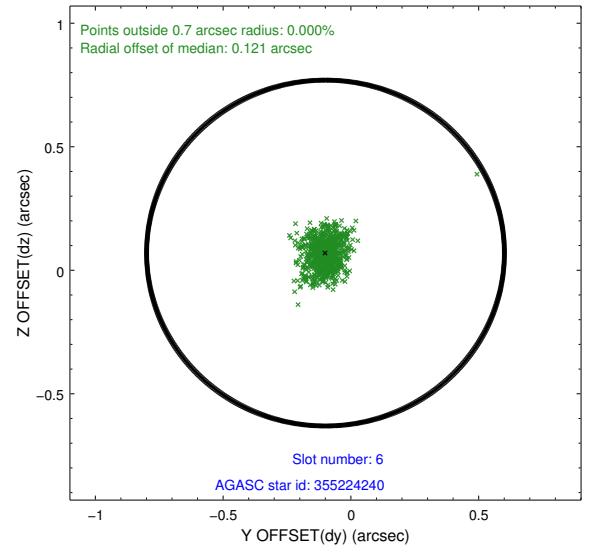
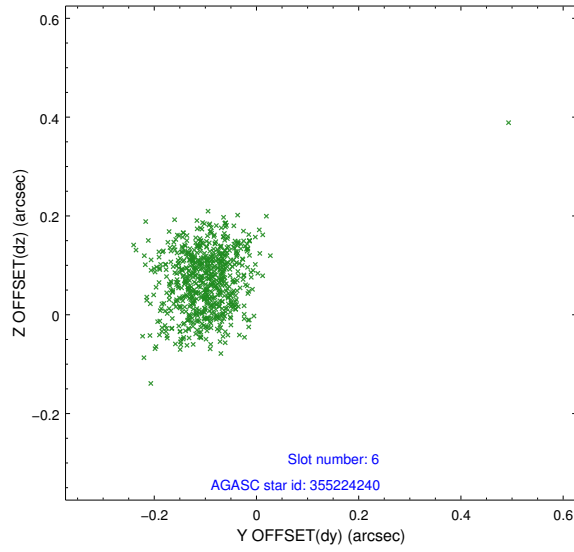
## 2.4.2 Slot 4



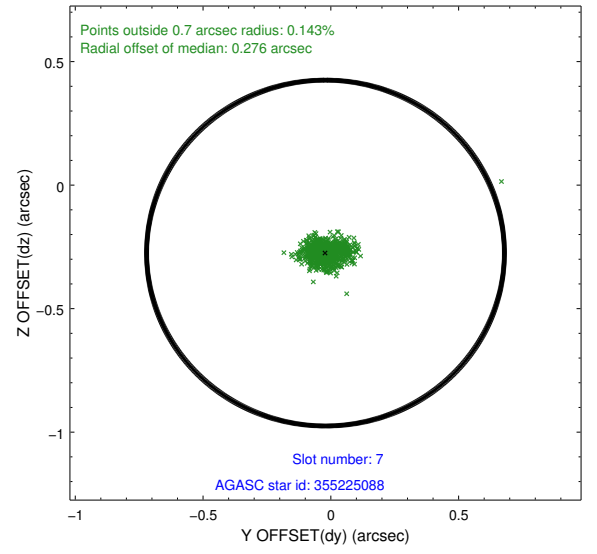
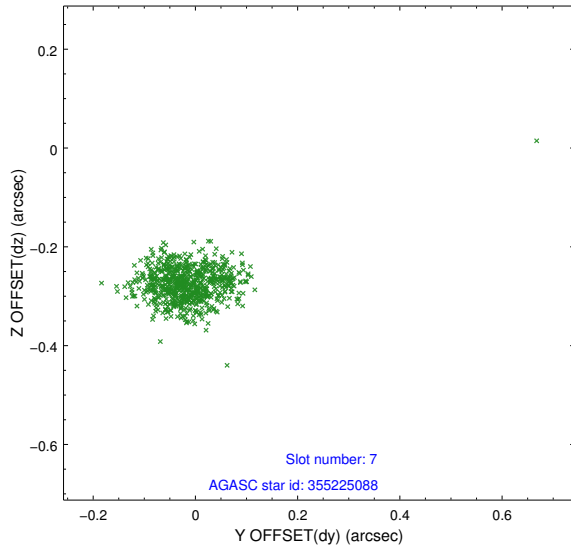
### 2.4.3 Slot 5



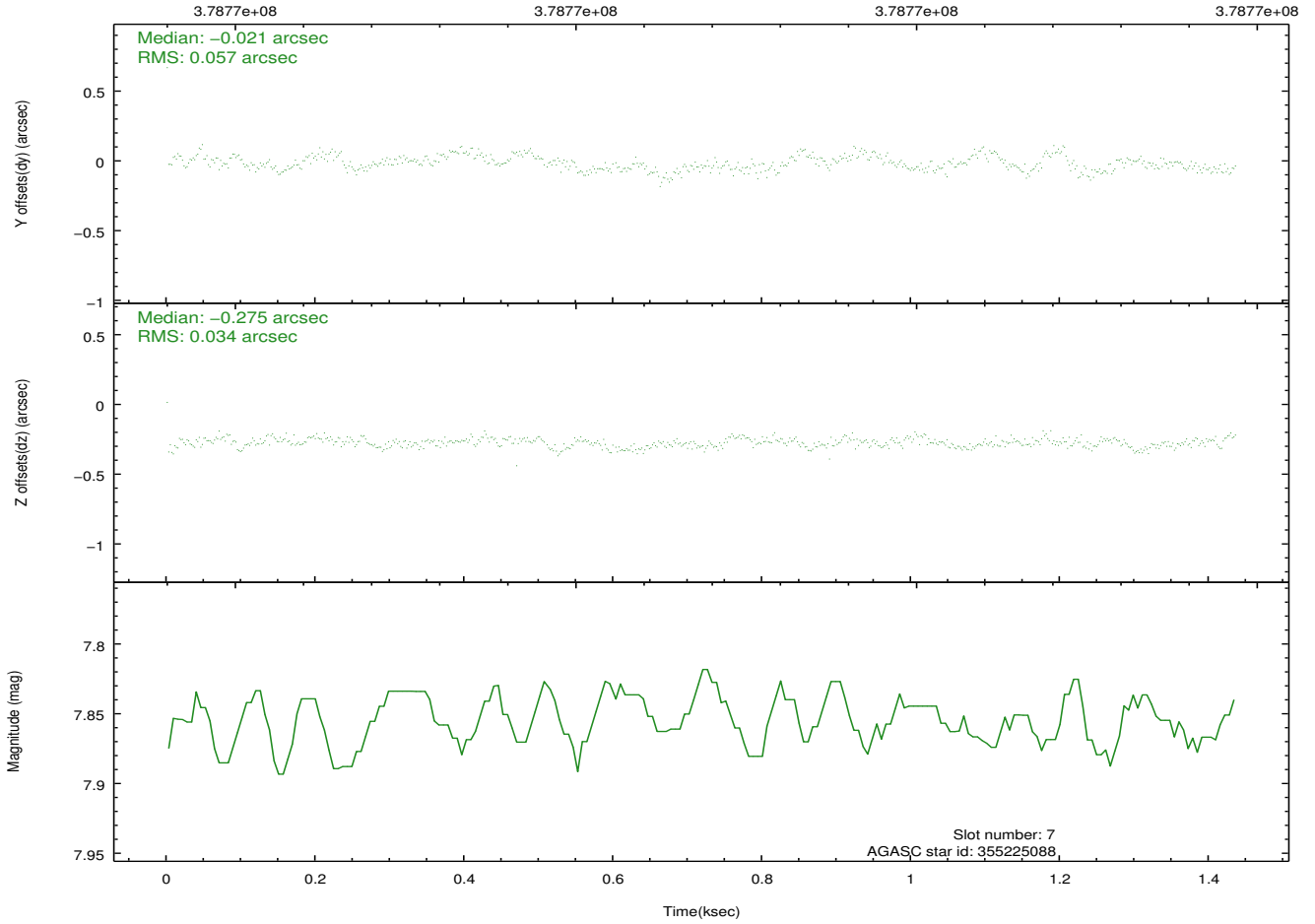
## 2.4.4 Slot 6



## 2.4.5 Slot 7

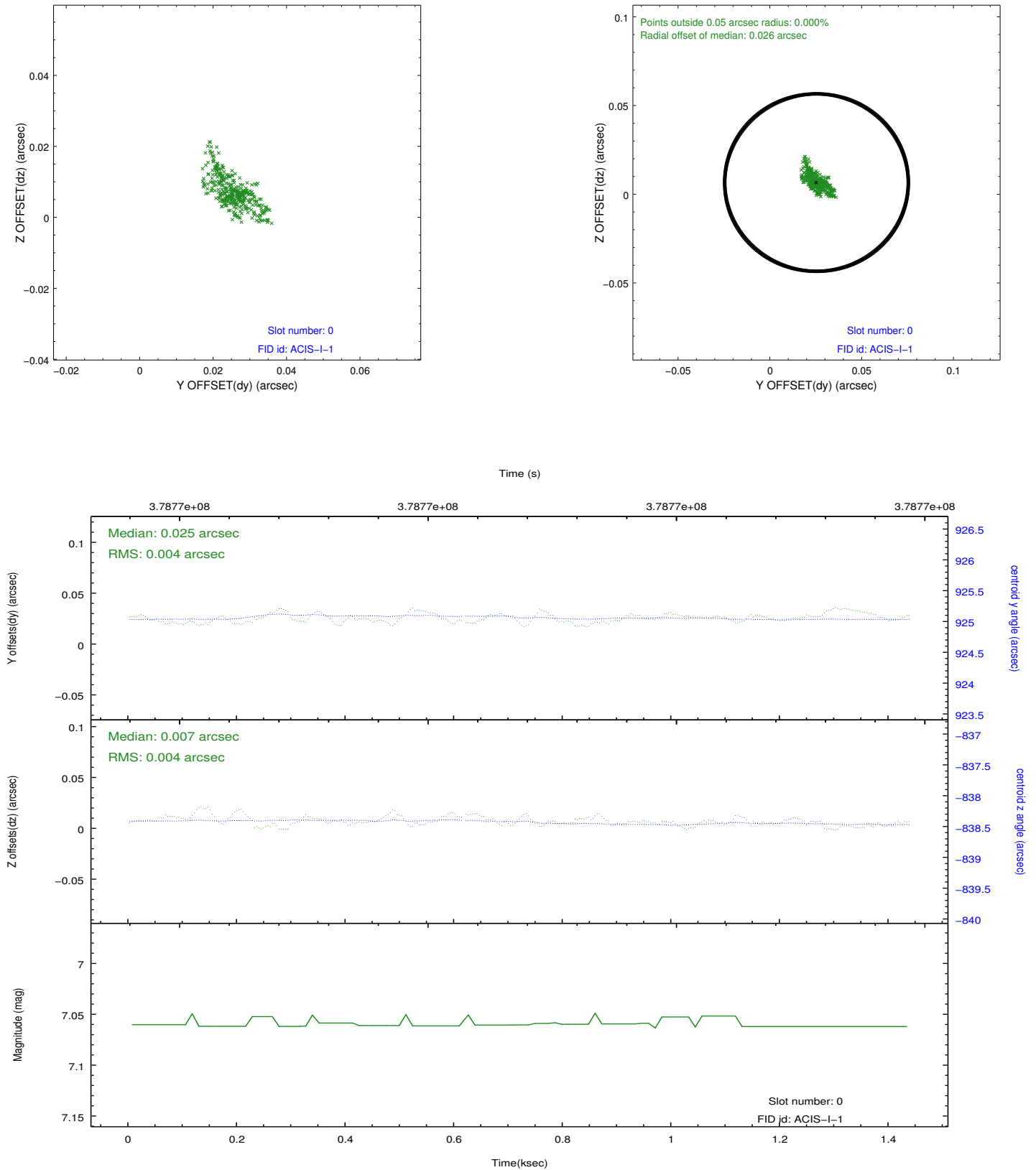


Time (s)

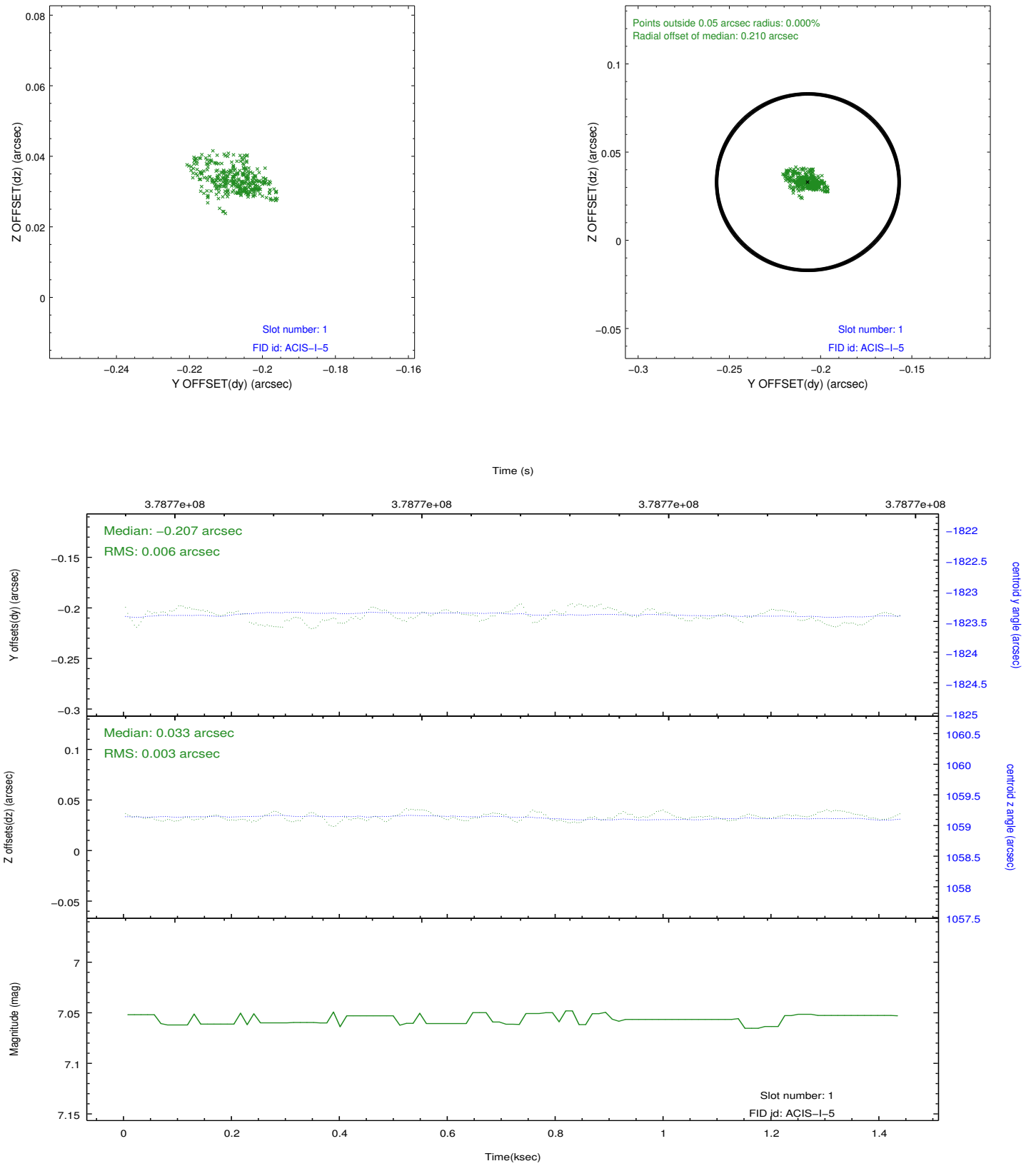


## 2.5 FID Slots

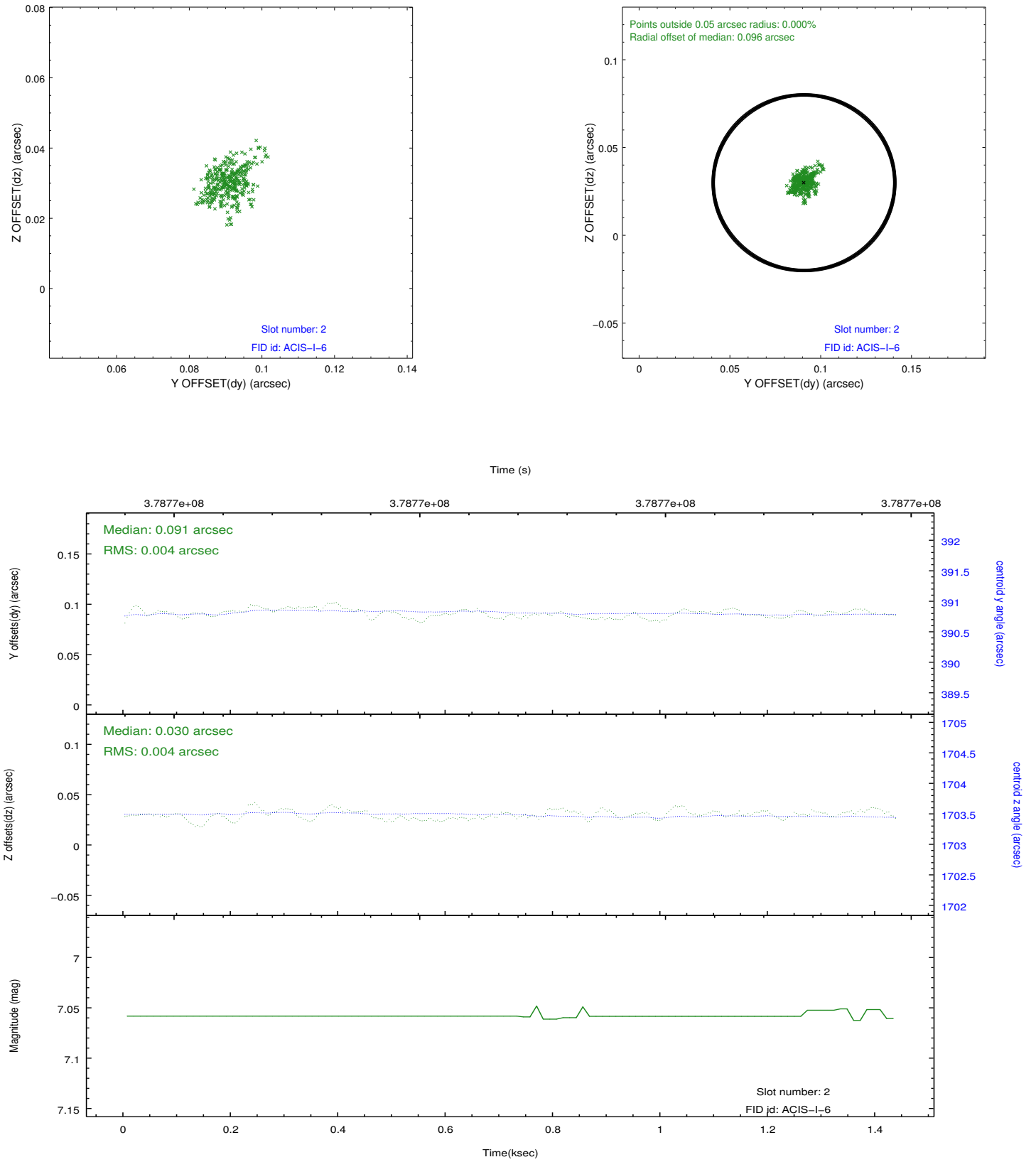
### 2.5.1 Slot 0



## 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)	2012.06.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.0399999961853

### A.2 Comments