

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 20146 - L2 Version 1  
Chandra X-Ray Center

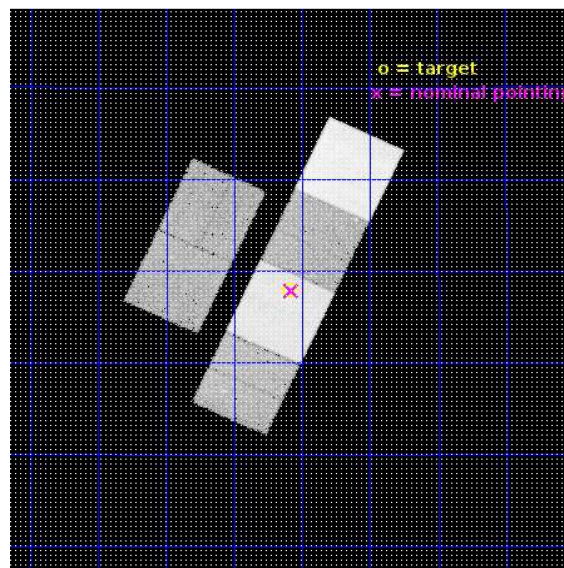
L2 Processing Date : May 10 2019

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# 1 Front

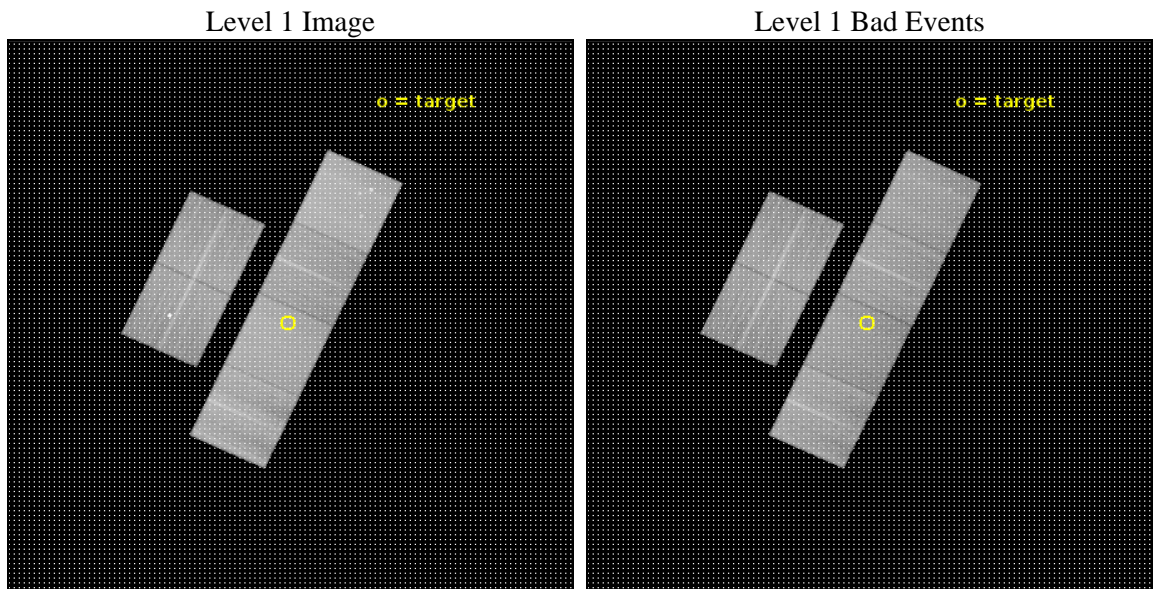
seq_num	201168	Sequence number
obs_id	20146	Observation id
title	Catching an FUor in the Act: Chandra ToO Observations of Extreme Accretion onto Young S	Proposal title
observer	David Pooley	Principal investigator
object	Gaia17bpi	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	292.773292	Observer's specified target RA [deg]
dec_targ	18.464519	Observer's specified target Dec [deg]
ra_nom	292.76966490506	Nominal RA [deg]
dec_nom	18.46424633554	Nominal Dec [deg]
roll_nom	114.91766975272	Nominal Roll [deg]
revision	1	Processing version of data
ontime	32950.400490999	Sum of GTIs [s]
livetime	32533.162679633	Livetime [s]
ontime2	32950.400490999	Sum of GTIs [s]
ontime3	32950.37790668	Sum of GTIs [s]
ontime5	32950.400490999	Sum of GTIs [s]
ontime6	32950.400490999	Sum of GTIs [s]
ontime7	32950.400490999	Sum of GTIs [s]
ontime8	32947.095826387	Sum of GTIs [s]
l2events	411263	Number of level 2 events



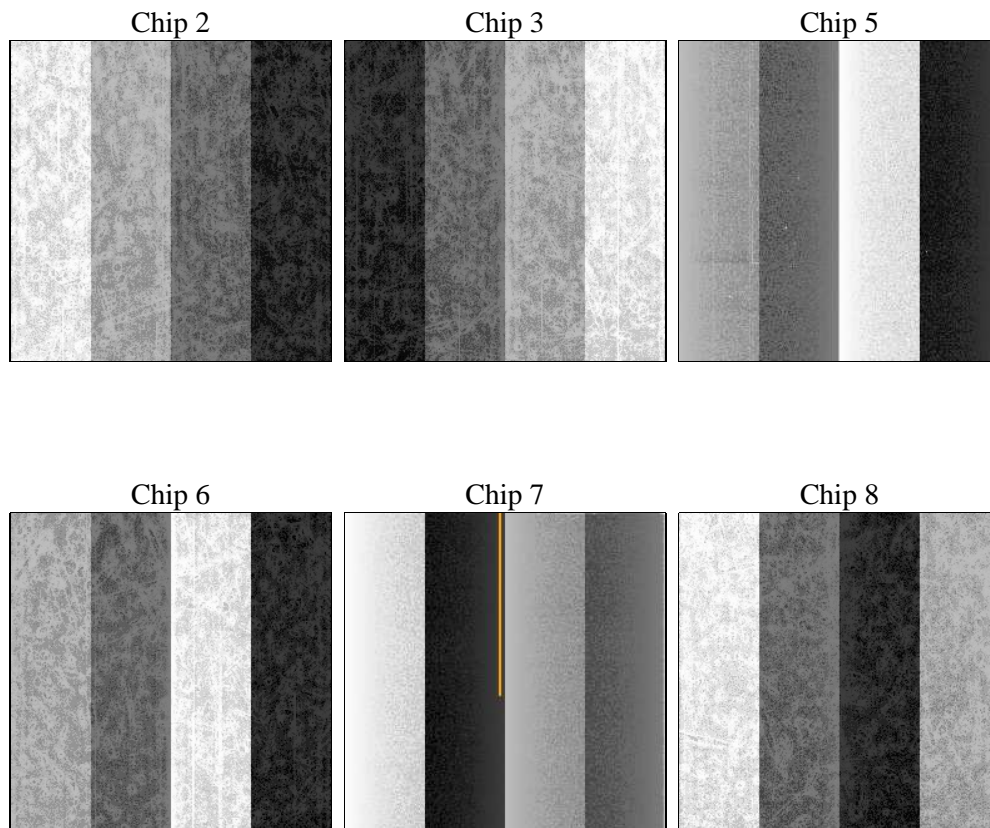
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	32950.400490999	Sum of GTIs [s]
caldbver	4.8.2	&#160	ontime2	32950.400490999	Sum of GTIs [s]
date	2019-05-10T13:22:19	Date and time of file creation	ontime3	32950.37790668	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	32950.400490999	Sum of GTIs [s]
			ontime6	32950.400490999	Sum of GTIs [s]
			ontime7	32950.400490999	Sum of GTIs [s]
			ontime8	32947.095826387	Sum of GTIs [s]
			l1events	1768930	Number of level 1 events

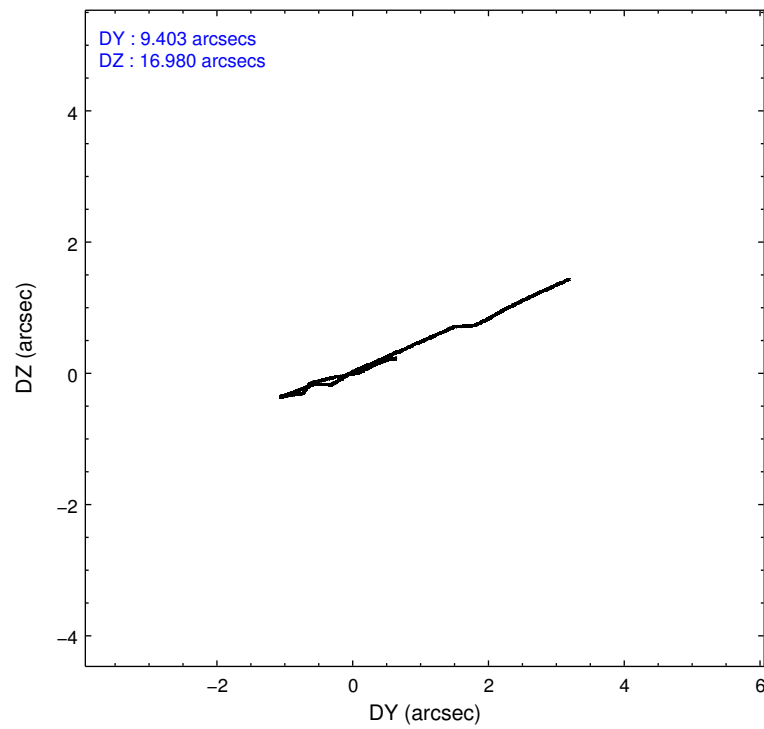
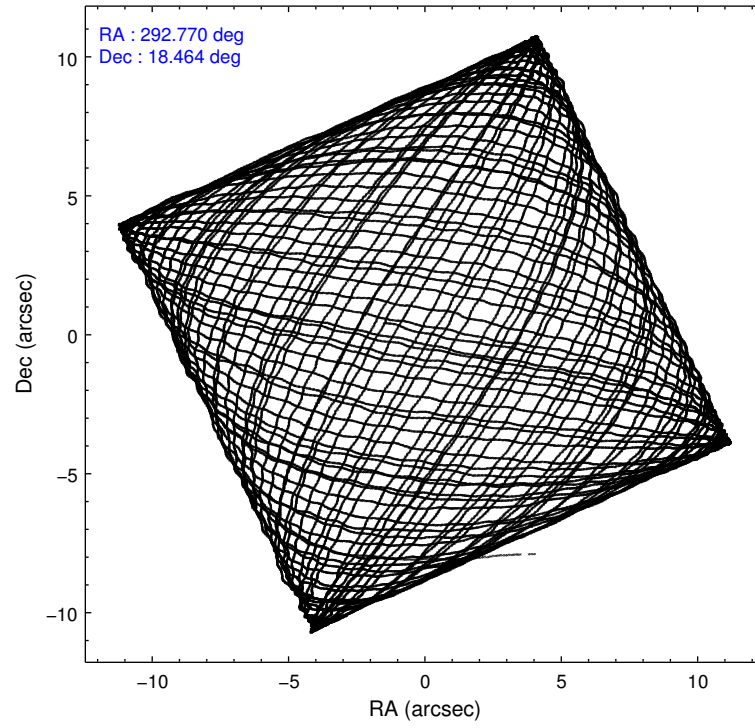
### 2.1.4 Events

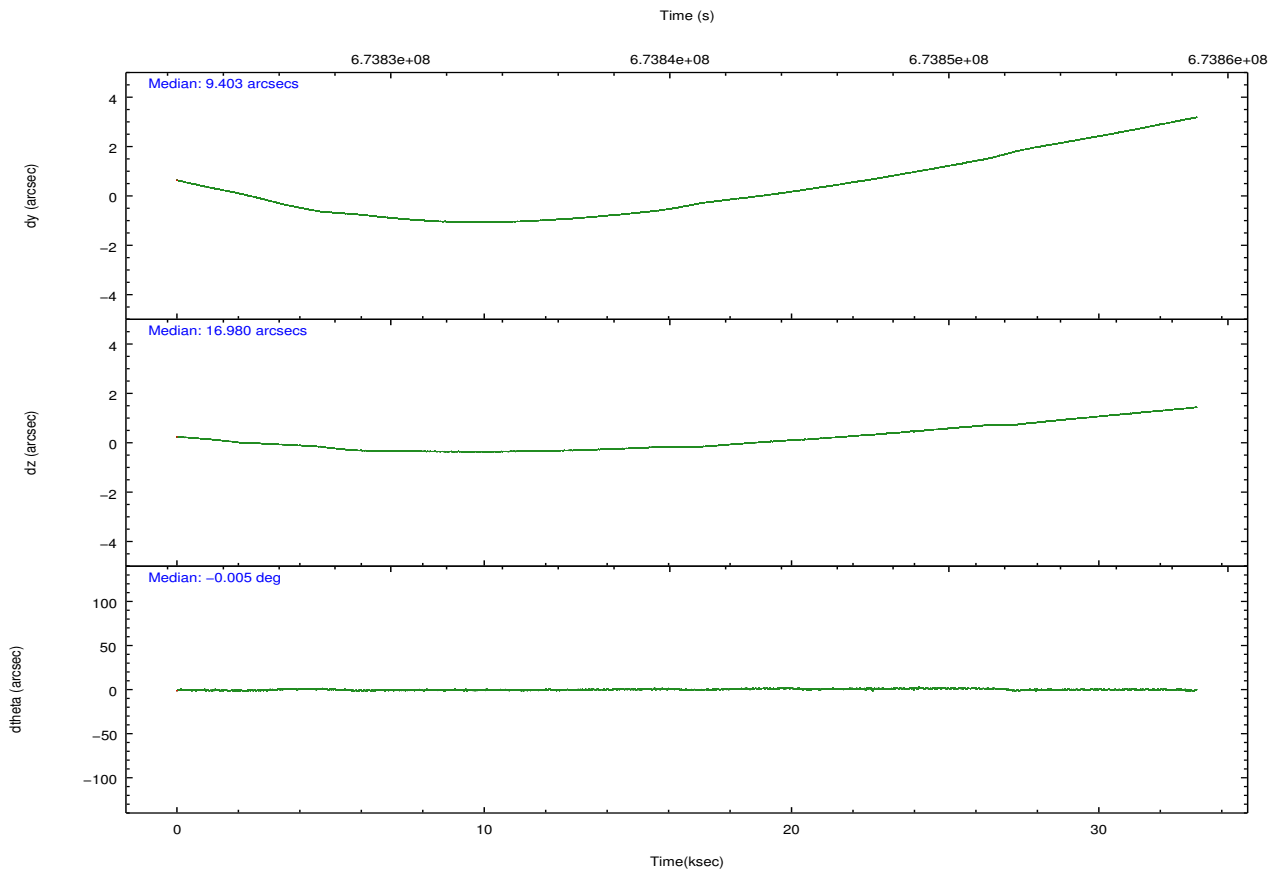
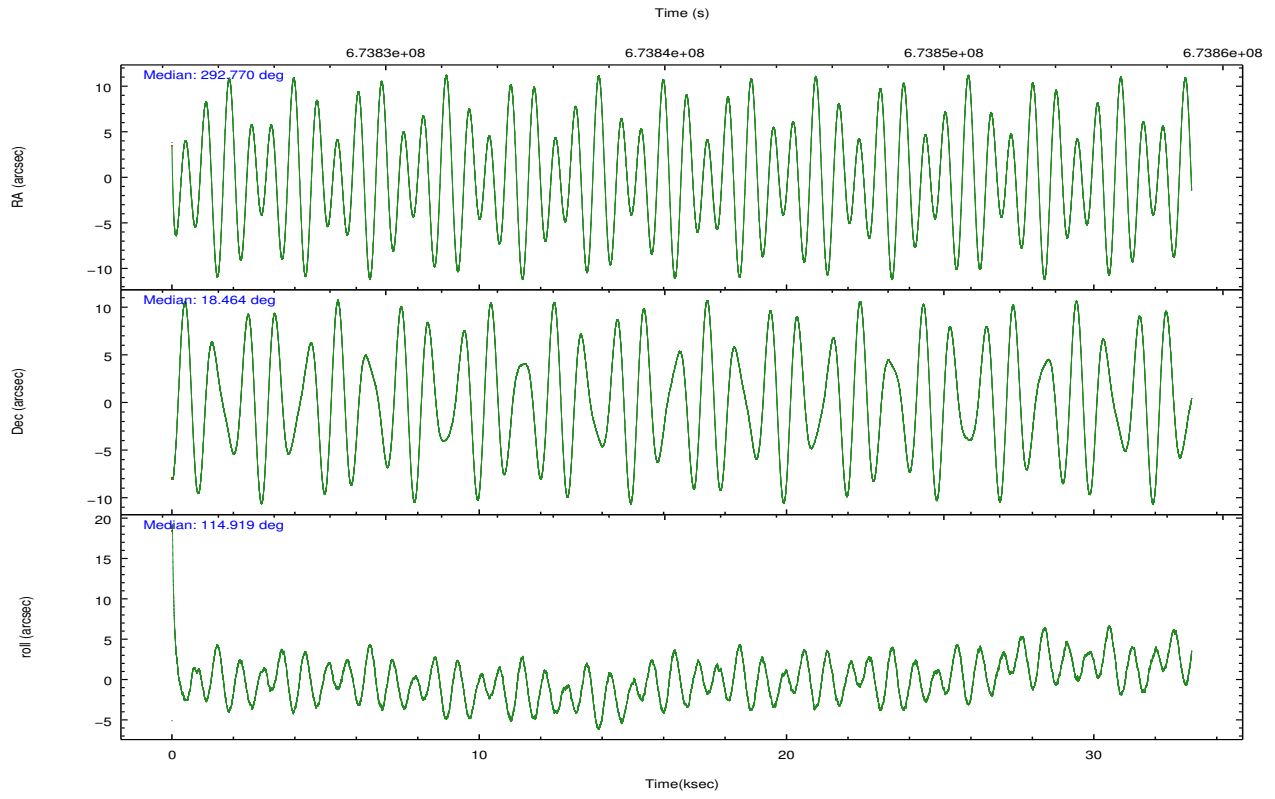
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	251830	243699	389939	250934	315336	317192	grade 0 events	9451	18621	13139	9459	11527	23416
rejected events	225554	208694	202173	222193	178811	233155		3%	7%	3%	3%	3%	7%
rejected %	89%	85%	51%	88%	56%	73%	grade 1 events	134	187	1431	113	461	244
								0%	0%	0%	0%	0%	0%
							grade 2 events	6464	5593	59032	7073	28949	20664
								2%	2%	15%	2%	9%	6%
							grade 3 events	2504	2770	5489	2557	10677	8431
								0%	1%	1%	1%	3%	2%
							grade 4 events	2621	2668	5375	2533	10506	7835
								1%	1%	1%	1%	3%	2%
							grade 5 events	10050	11403	25687	10912	30918	17075
								3%	4%	6%	4%	9%	5%
							grade 6 events	5239	5357	104747	7122	74886	23695
								2%	2%	26%	2%	23%	7%
							grade 7 events	215367	197100	175039	211165	147412	215832
								85%	80%	44%	84%	46%	68%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	292.793556	292.7696649050576	CCD I2 on	O1	Y
[deg] Pointing Dec	18.448777	18.4642463355403	CCD I3 on	O2	Y
[deg] Pointing Roll	114.753471	114.9176697527238	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O4	Y
[s] Observation start time (MET)	673824197.184000	673823168.59048	CCD S5 on	N	N
Observation start date	2019-05-09T21:22:08	2019-05-09T21:06:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	673857197.184000	673858022.69256	On-chip summing requested	N	N
Observation end date	2019-05-10T06:32:08	2019-05-10T06:47:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





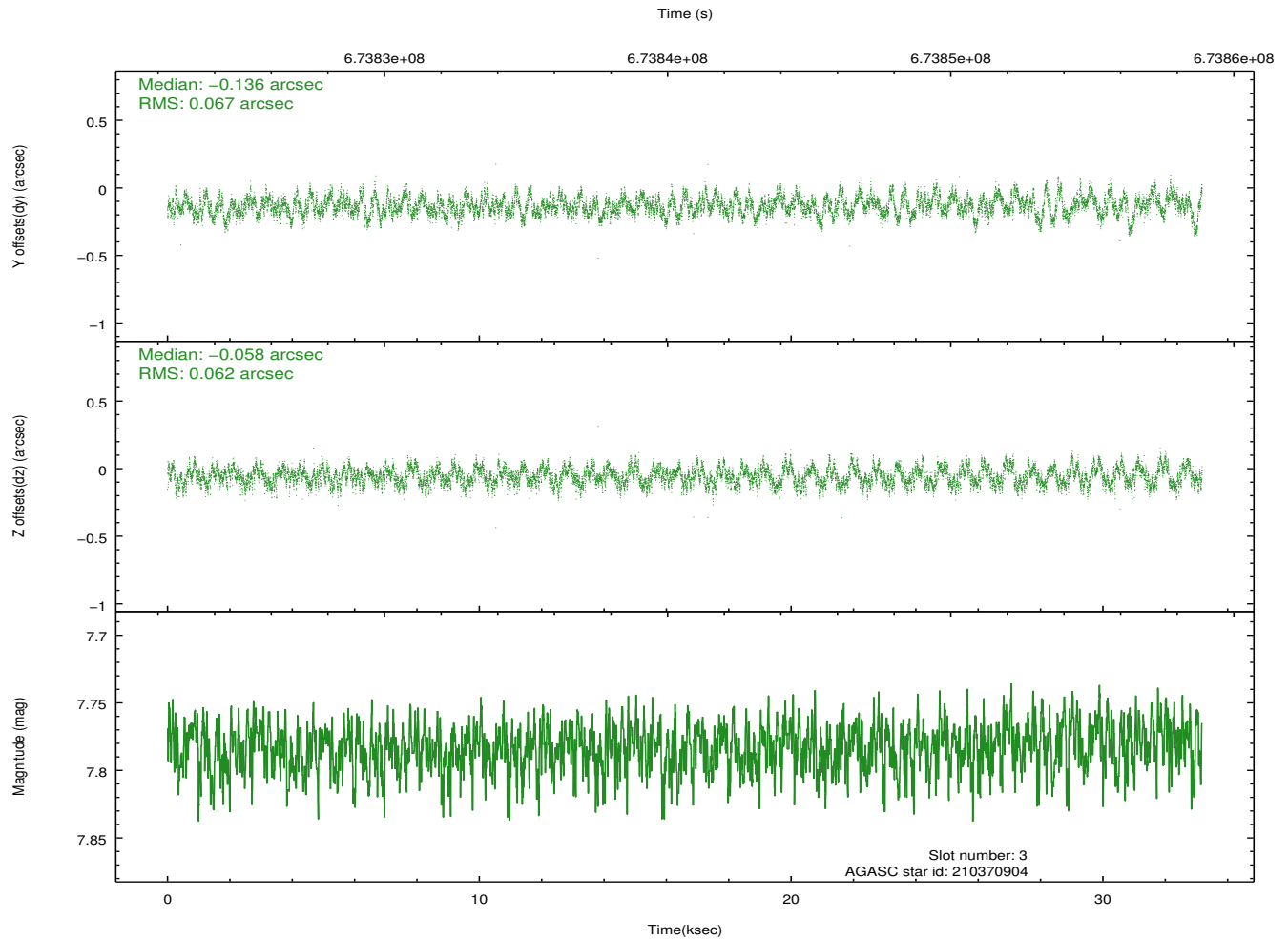
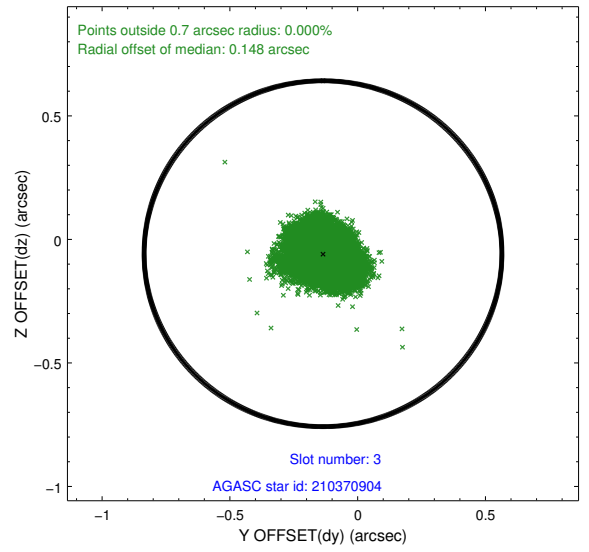
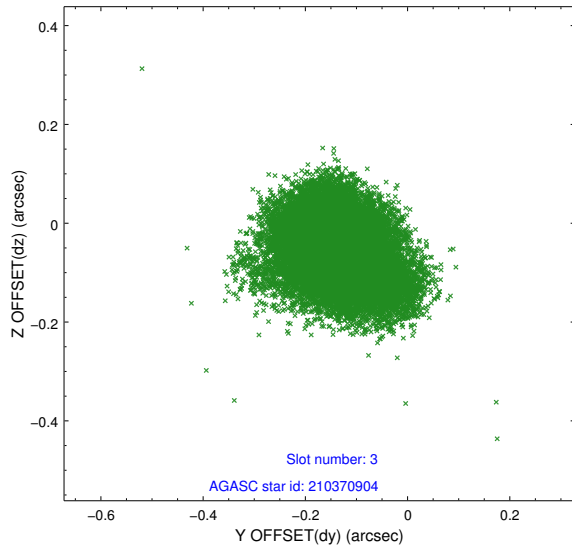
### Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-3	7.29	8093	1.000	-0.205	-0.205	0.023	0.030	0.000000	0.000000	50.46	-1867
1	FID		ACIS-S-4	7.16	8093	1.000	0.627	0.206	0.020	0.047	0.000000	0.000000	2151.43	170
2	FID		ACIS-S-5	7.13	8093	1.000	-0.456	0.009	0.037	0.056	0.000000	0.000000	-1815.78	163
3	GUIDE	used	210370904	7.78	16182	1.000	-0.136	-0.058	0.099	0.154	292.563039	18.704932	1166.75	328
4	GUIDE	used	210372512	8.52	16179	1.000	-0.351	-0.150	0.114	0.187	292.201979	18.486300	971.12	1776
5	GUIDE	used	210372800	7.59	16184	1.000	0.075	-0.109	0.096	0.162	292.605285	17.695257	-2192.46	1722
6	GUIDE	used	210373136	7.94	16186	1.000	0.311	0.177	0.116	0.195	292.893985	17.958185	-1747.51	427
7	GUIDE	used	210375784	7.12	16183	1.000	0.102	0.142	0.089	0.146	292.707024	18.250669	-523.66	567

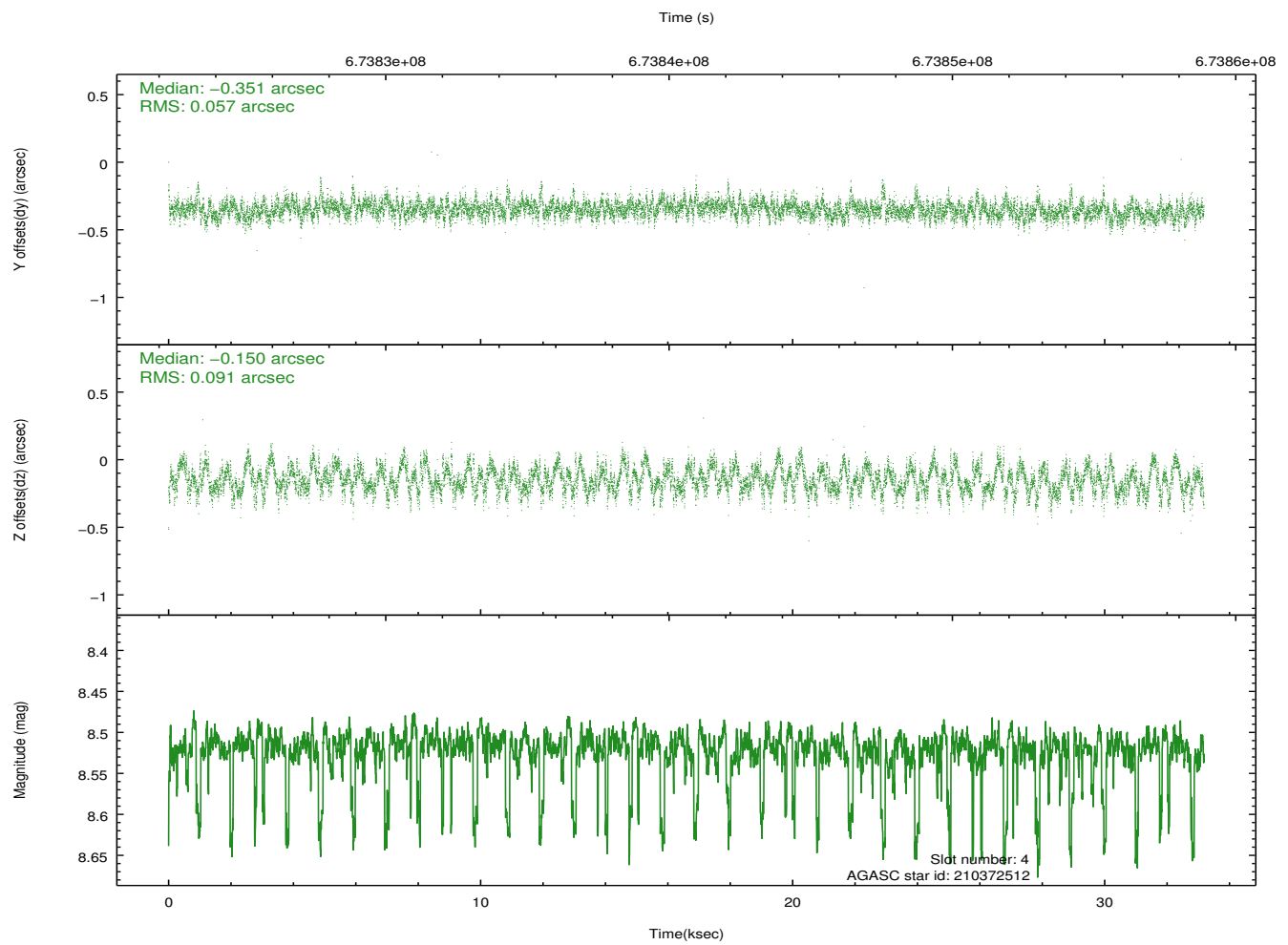
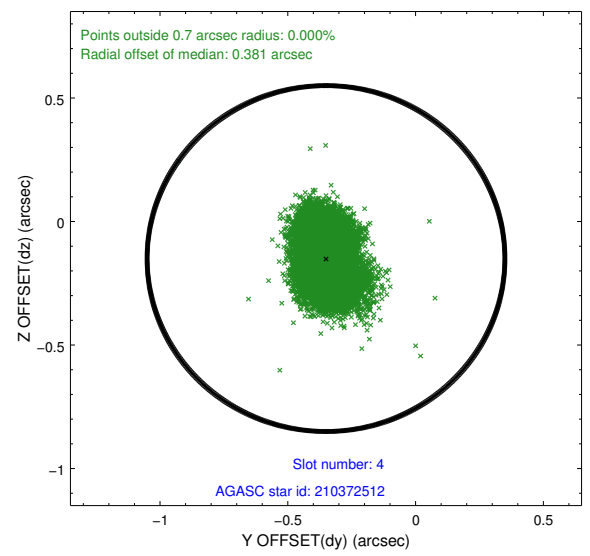
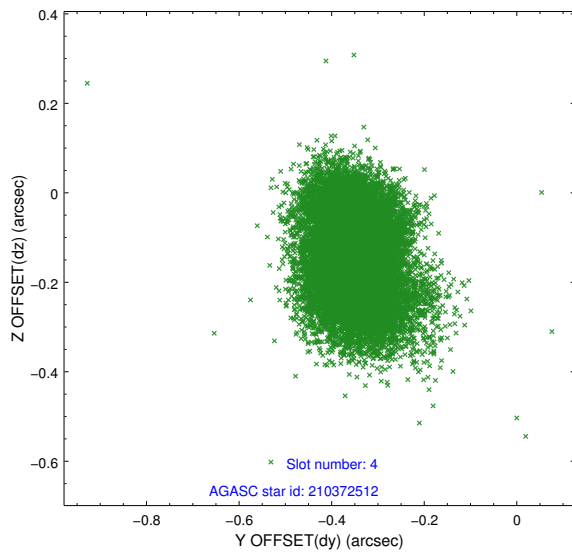
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## 2.4 Star Slots

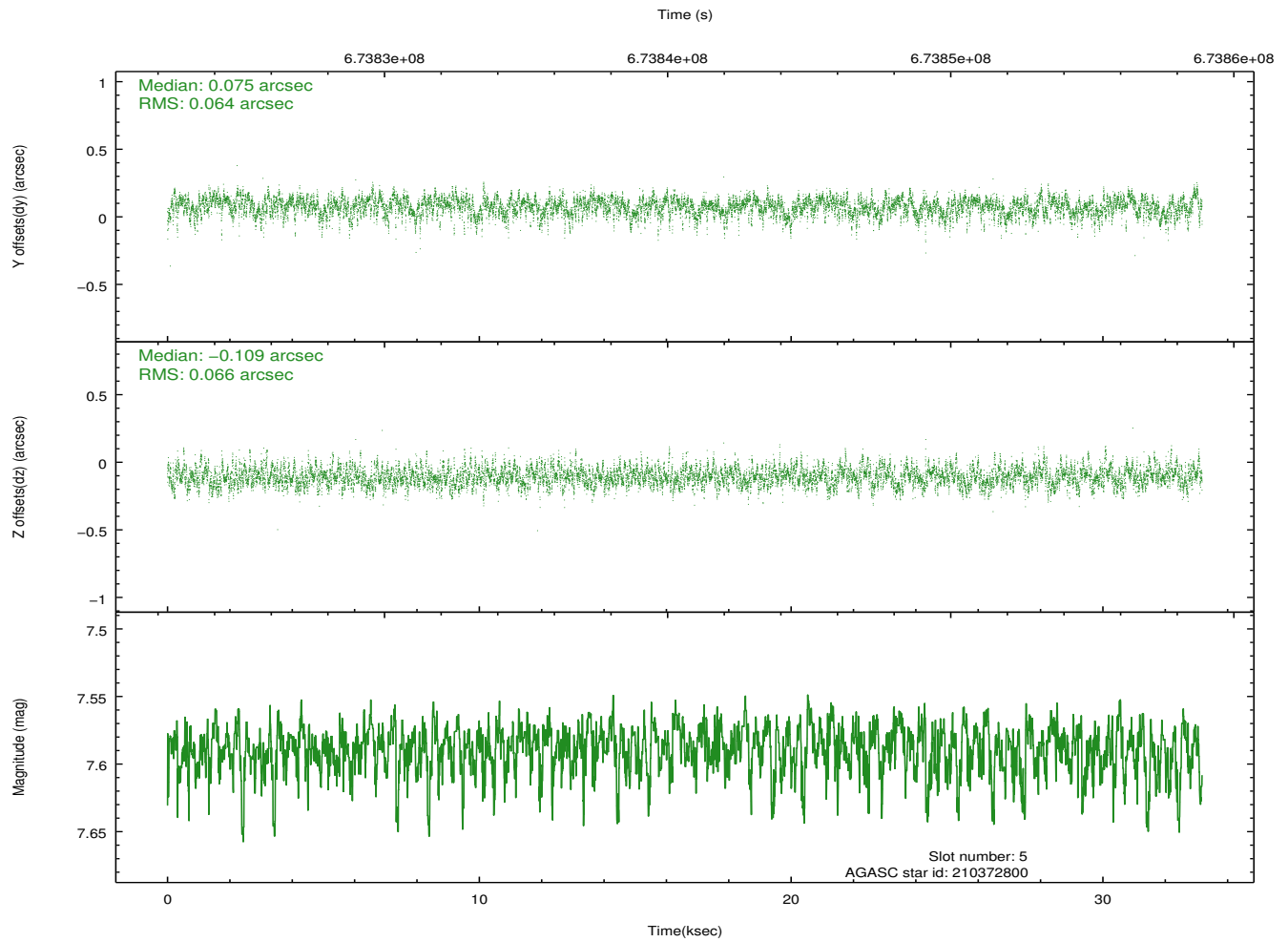
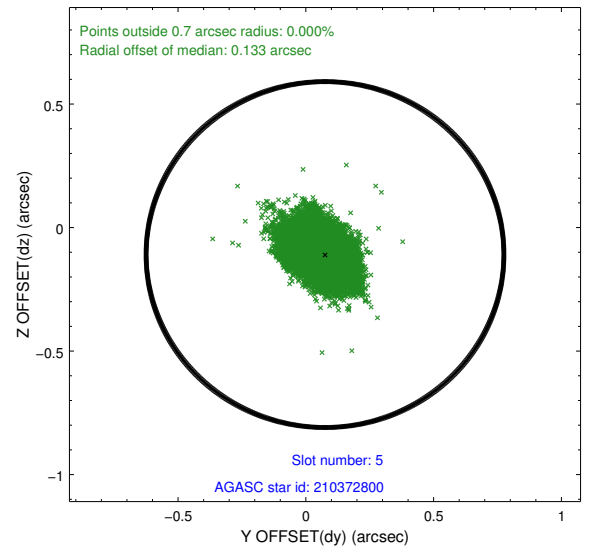
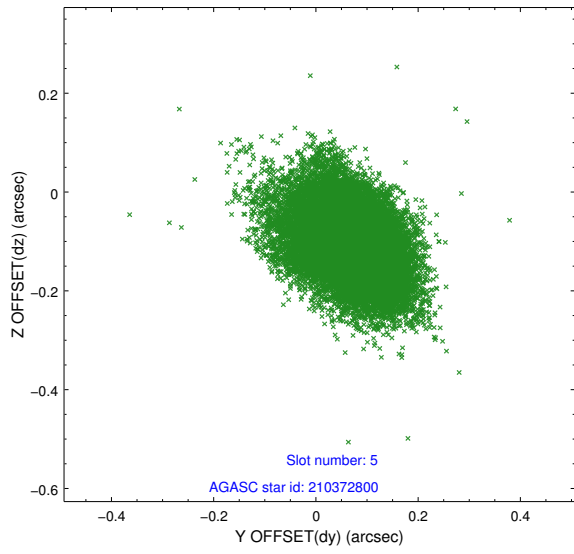
### 2.4.1 Slot 3



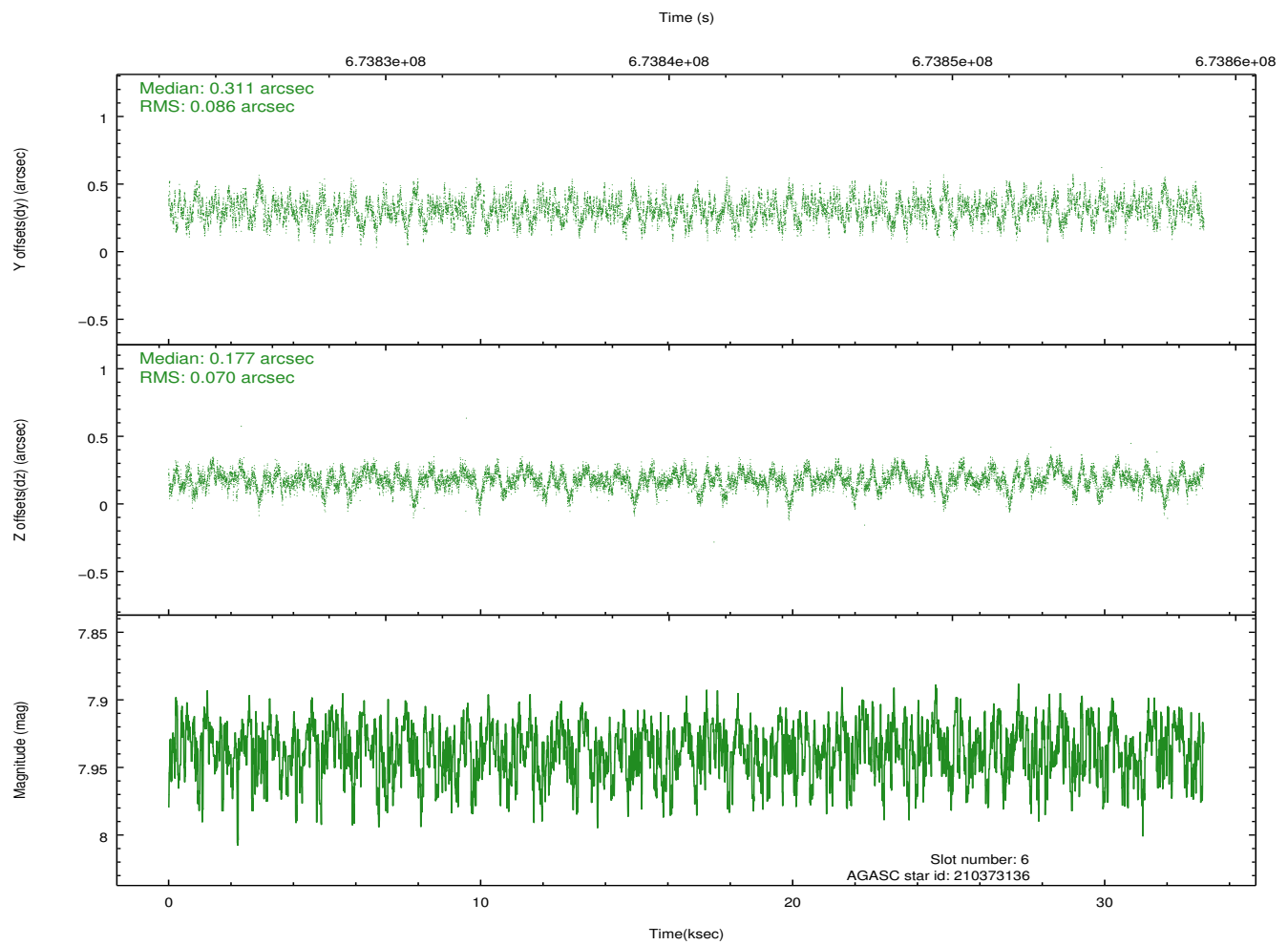
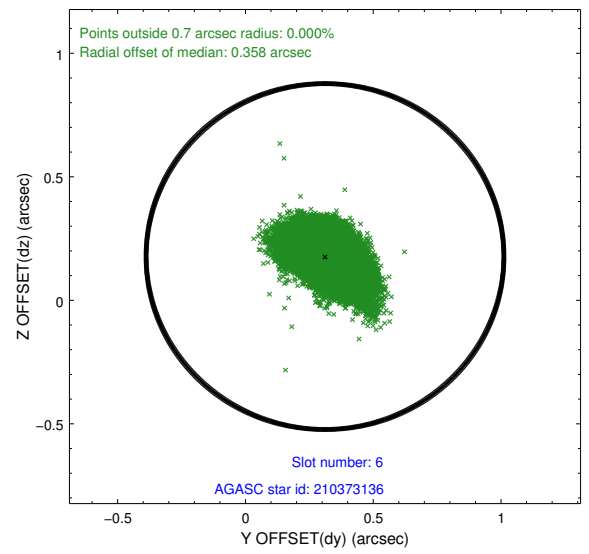
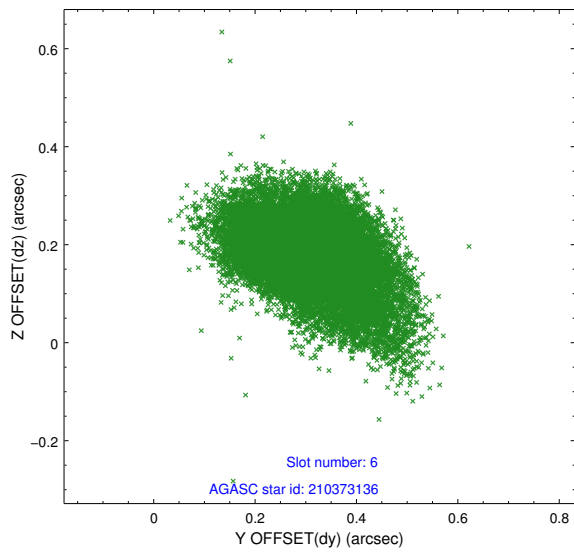
## 2.4.2 Slot 4



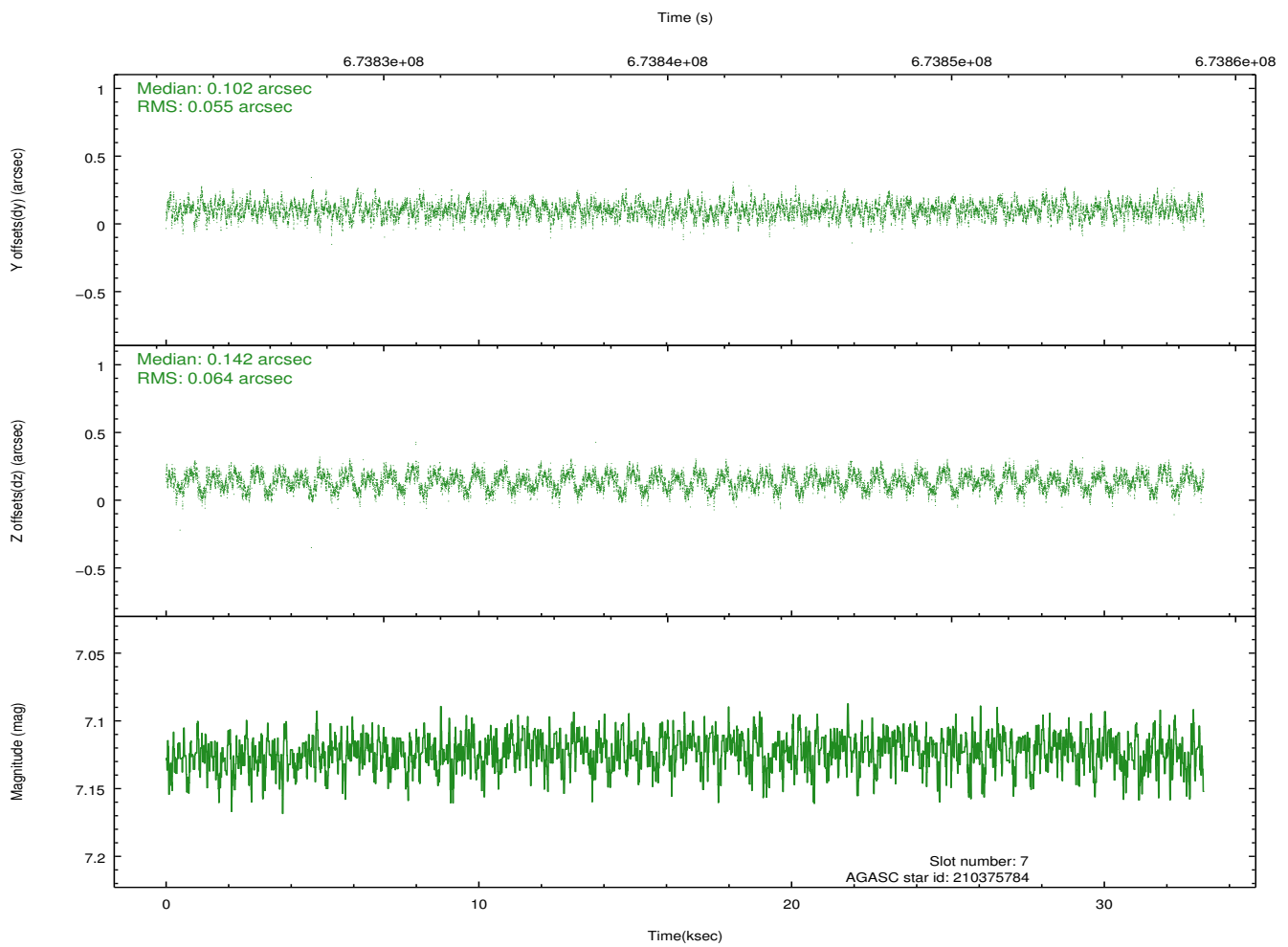
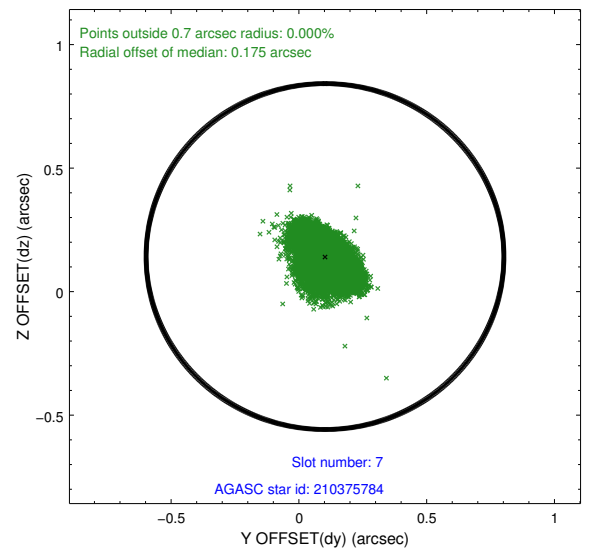
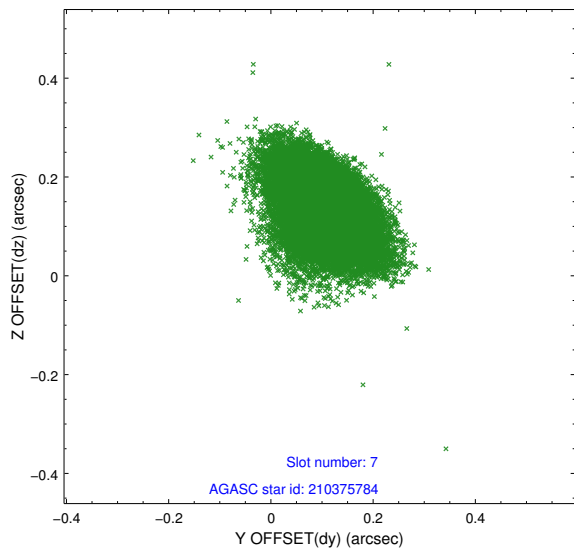
### 2.4.3 Slot 5



## 2.4.4 Slot 6

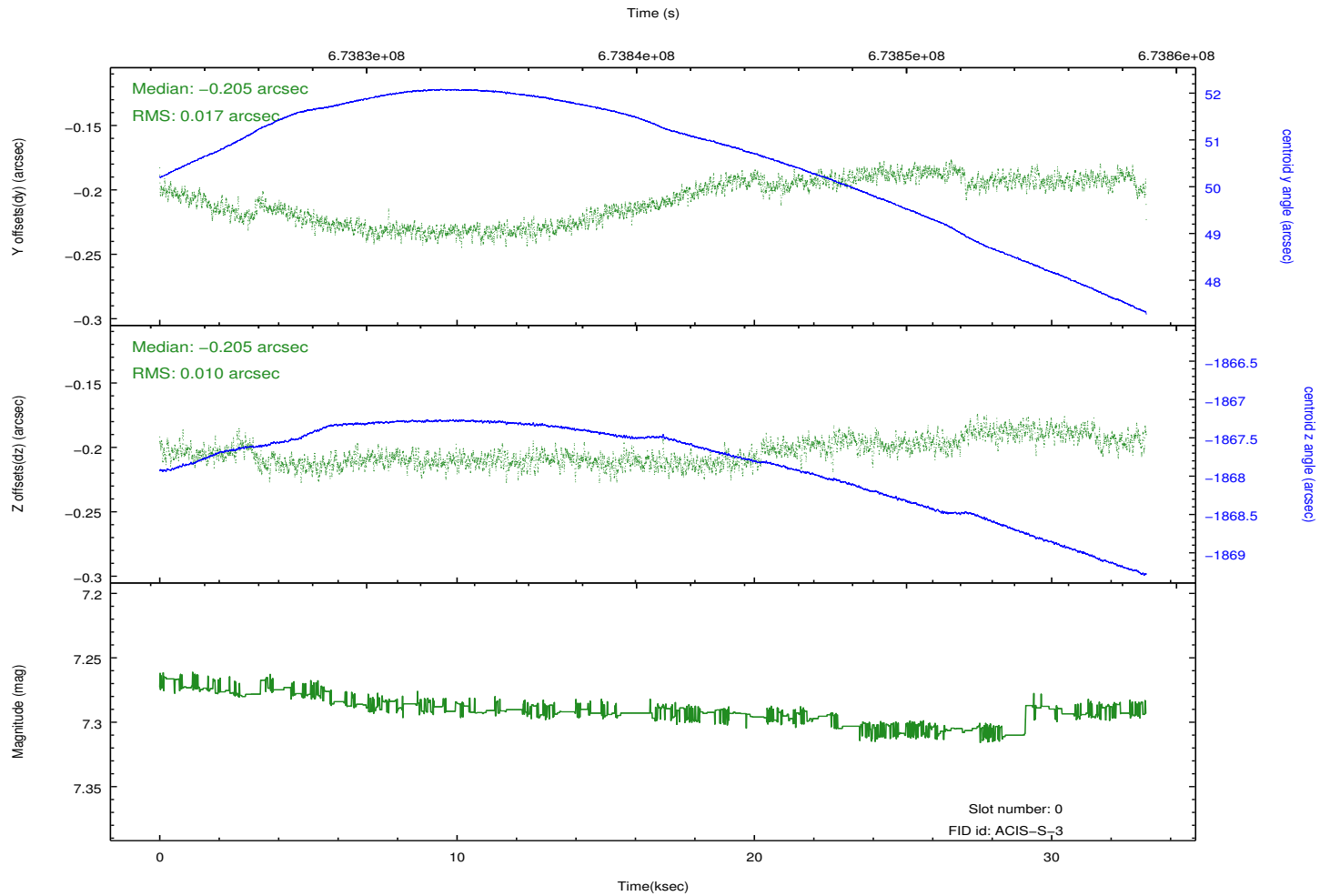
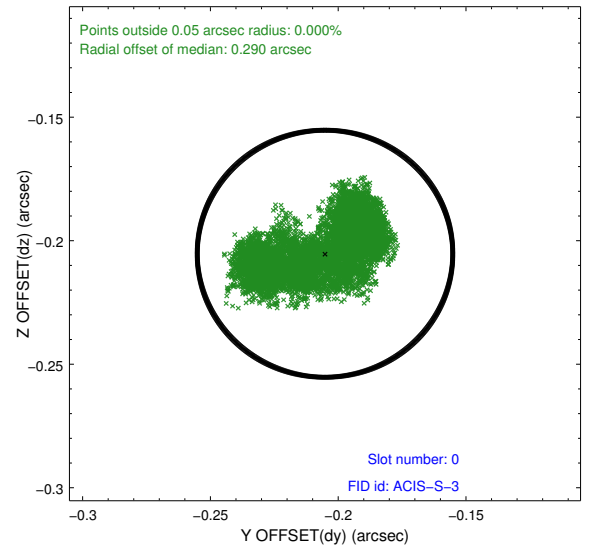
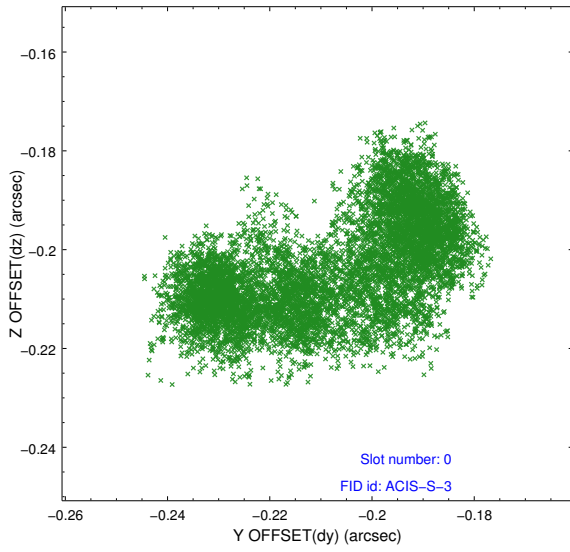


## 2.4.5 Slot 7

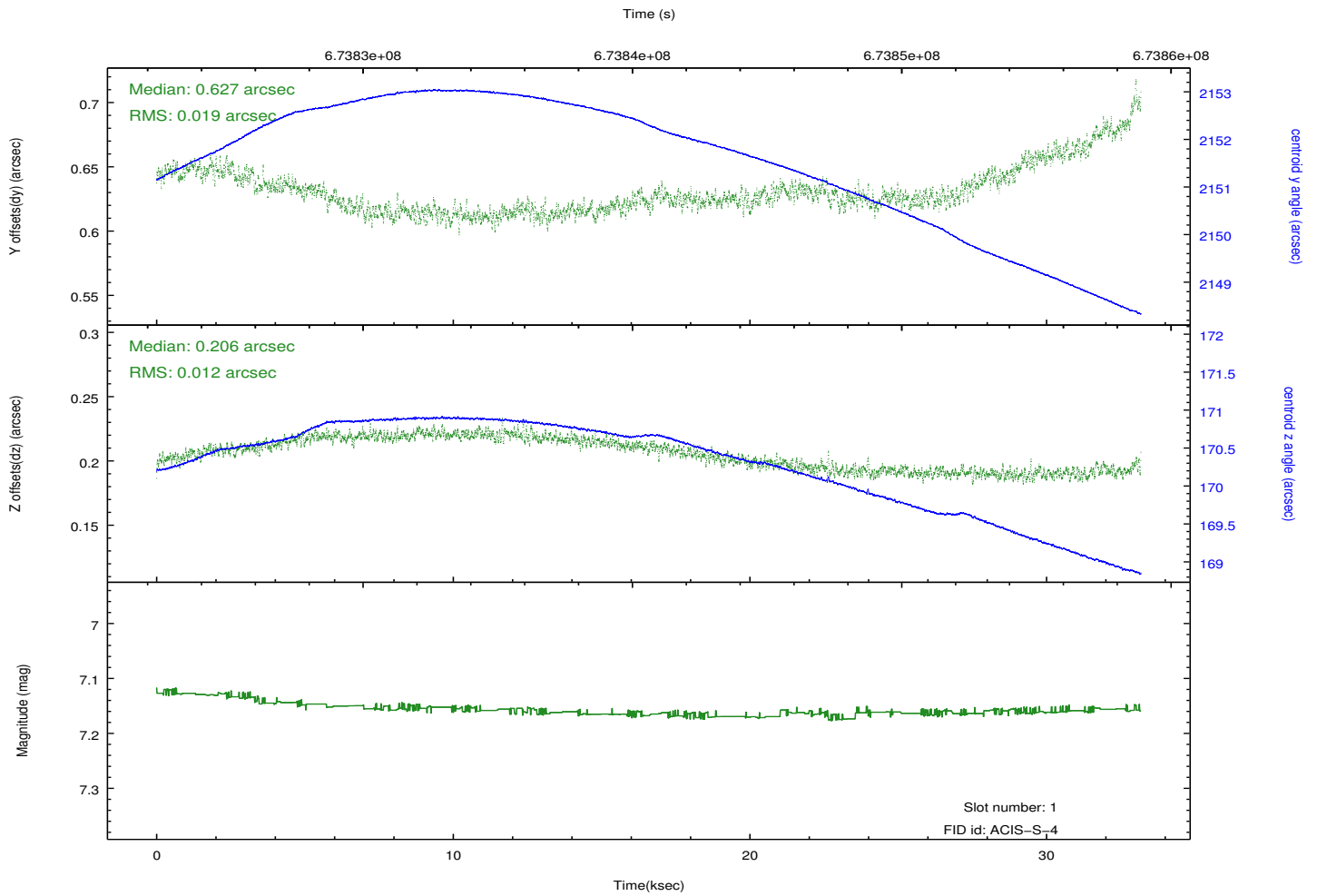
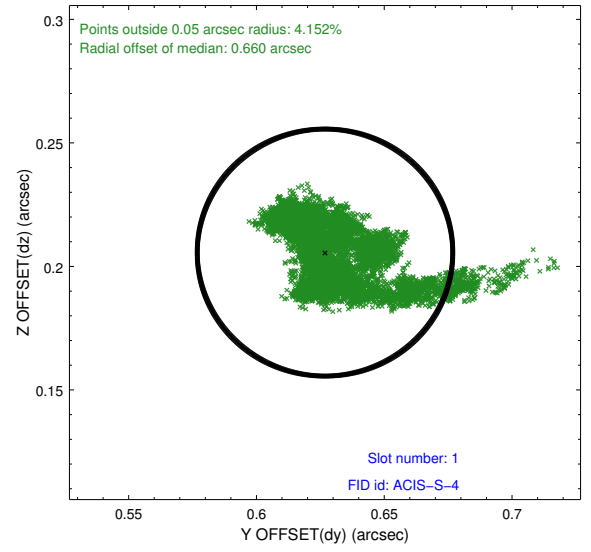
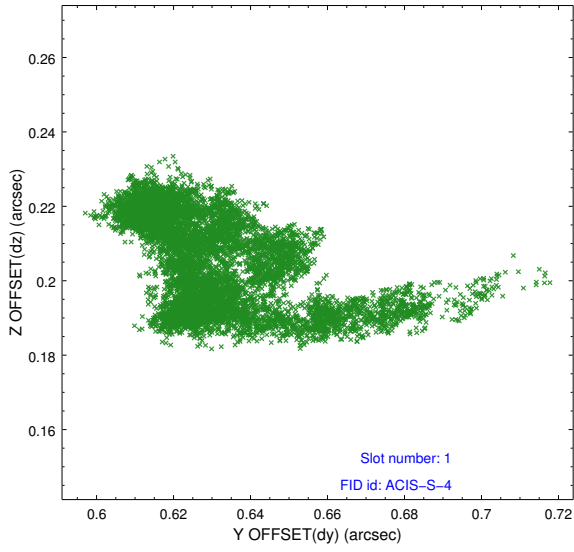


## 2.5 FID Slots

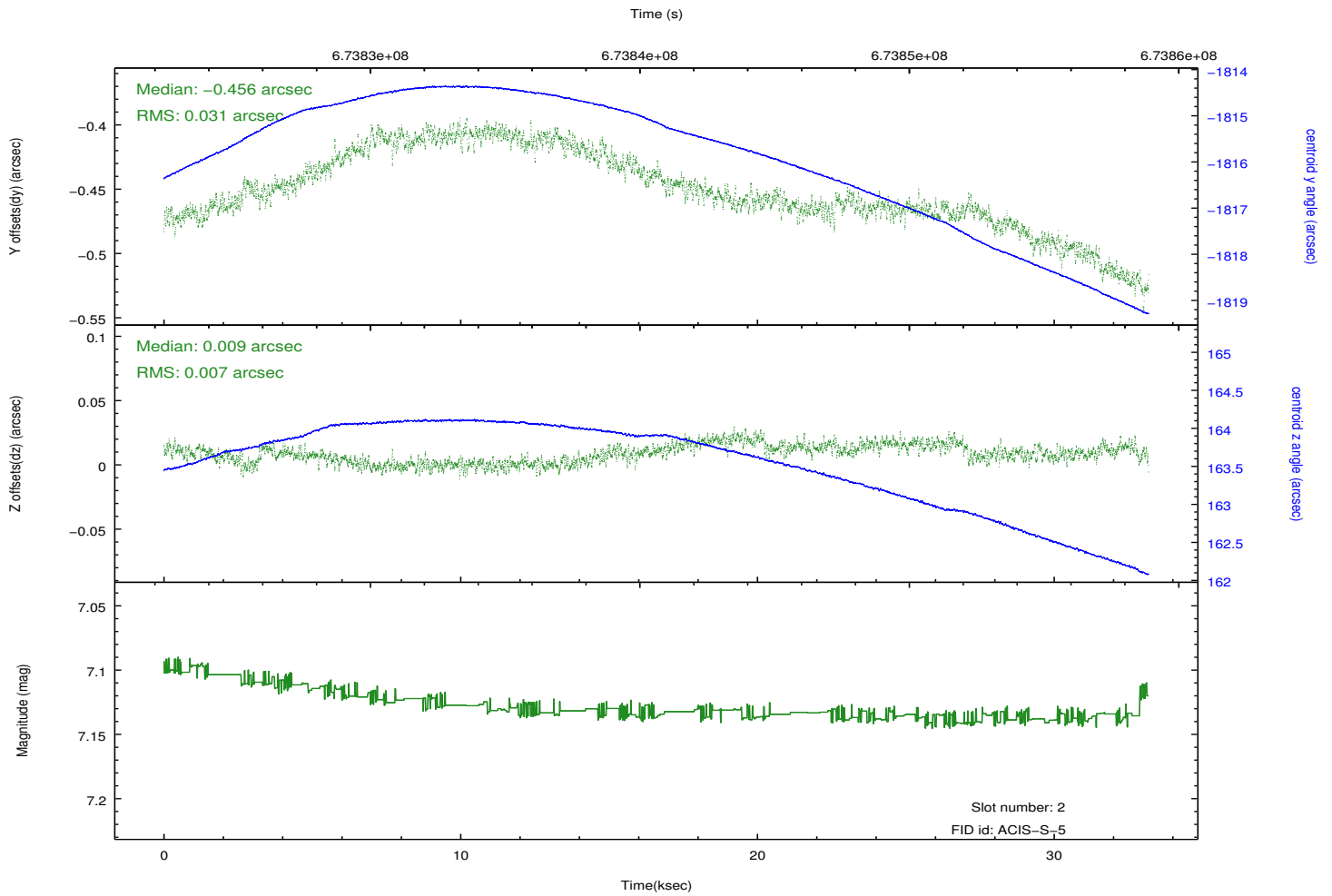
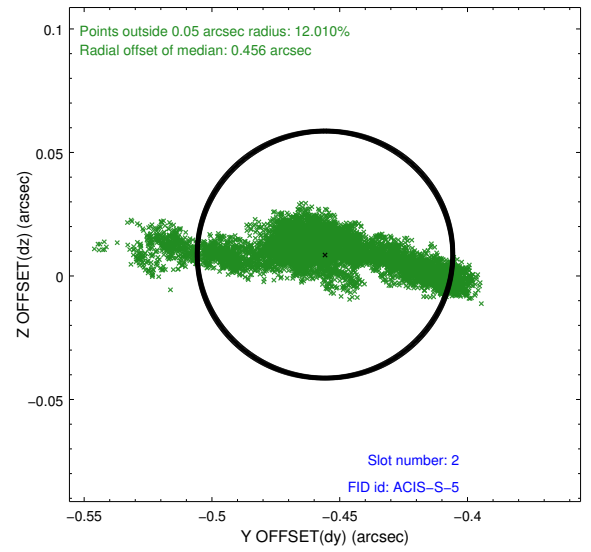
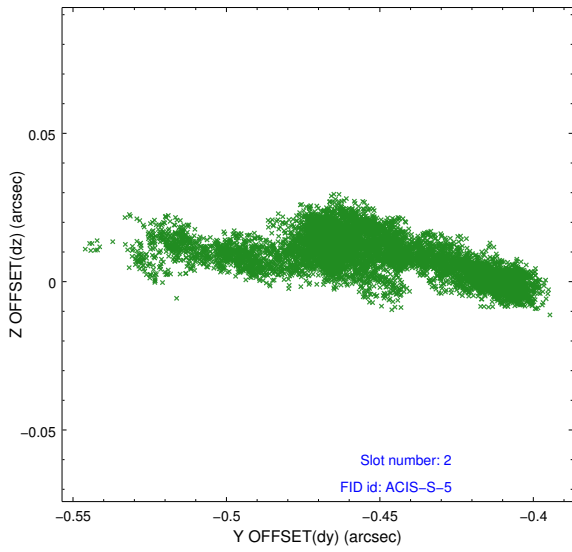
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.05.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.950400490999

## A.2 Comments