

# V&V Reference Report

## L2 ASCDS Version : 10.7.1

Observation 21509 - L2 Version 1  
Chandra X-Ray Center

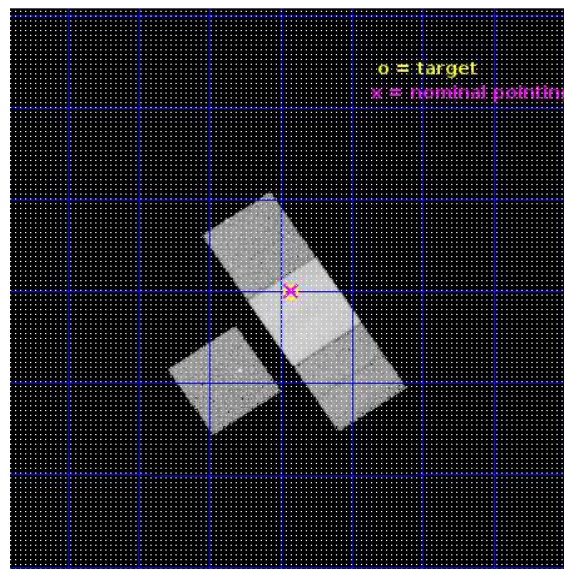
L2 Processing Date : Jan 15 2019

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# 1 Front

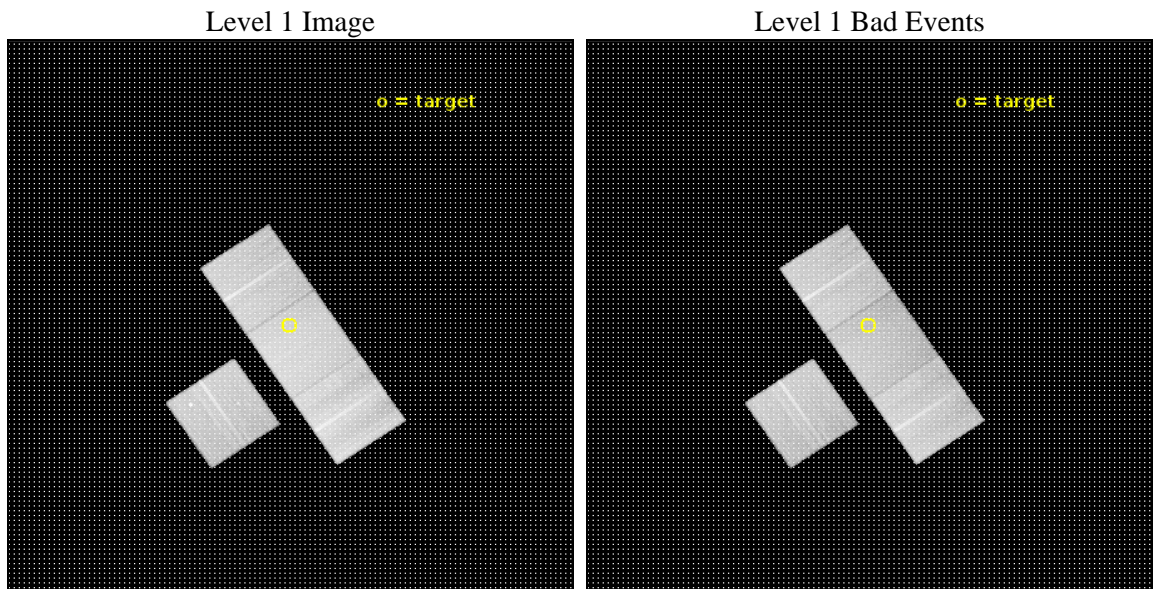
seq_num	703802	Sequence number
obs_id	21509	Observation id
title	J1047+0739: X-ray weak/obscured AGN or extreme starburst?	Proposal
observer	Franz Bauer	Principal investigator
object	J1047+0739	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.982917	Observer's specified target RA [deg]
dec_targ	7.664194	Observer's specified target Dec [deg]
ra_nom	161.98105200795	Nominal RA [deg]
dec_nom	7.6679500528631	Nominal Dec [deg]
roll_nom	56.156861937424	Nominal Roll [deg]
revision	1	Processing version of data
ontime	39063.10030055	Sum of GTIs [s]
livetime	38552.712137288	Livetime [s]
ontime3	39063.10030055	Sum of GTIs [s]
ontime6	39063.10030055	Sum of GTIs [s]
ontime7	39063.10030055	Sum of GTIs [s]
ontime8	39059.959240437	Sum of GTIs [s]
l2events	246254	Number of level 2 events



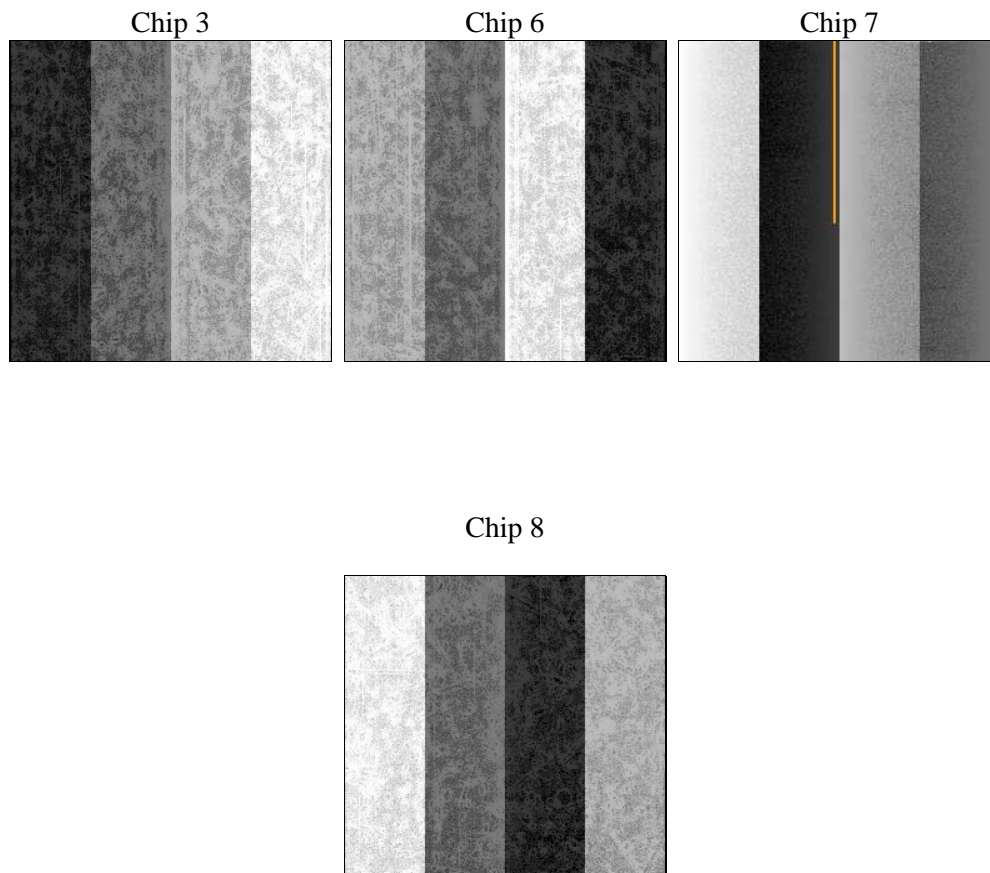
## 2 OBI

### 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	10.7.1	Processing system revision	ontime	39063.10030055	Sum of GTIs [s]
caldbver	4.8.2	&#160	ontime3	39063.10030055	Sum of GTIs [s]
date	2019-01-15T05:40:44	Date and time of file creation	ontime6	39063.10030055	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	39063.10030055	Sum of GTIs [s]
			ontime8	39059.959240437	Sum of GTIs [s]
			l1events	1378497	Number of level 1 events

### 2.1.4 Events

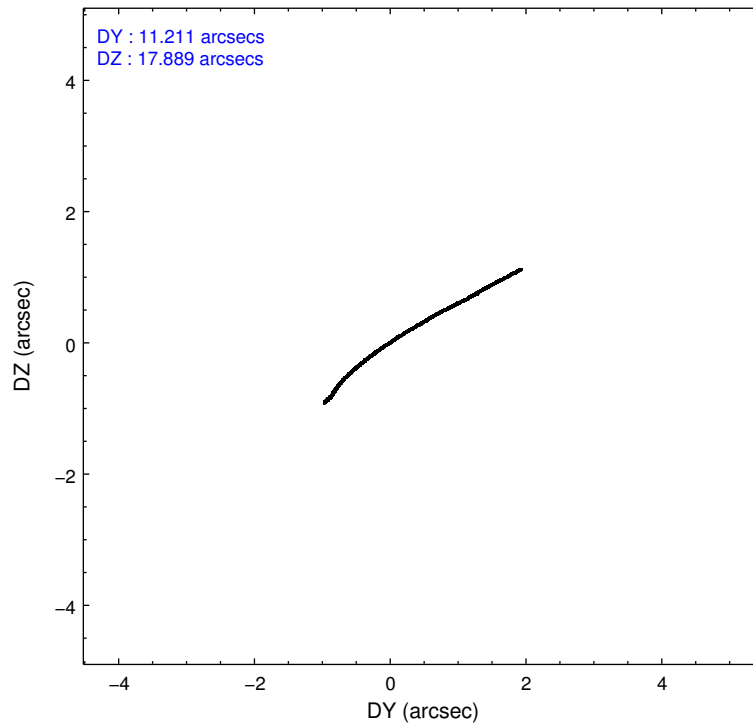
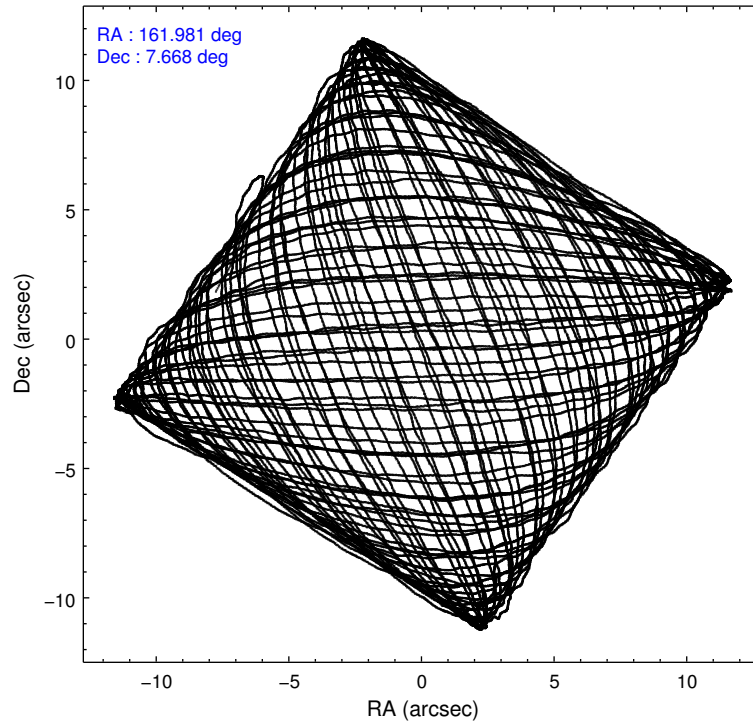
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	294694	316945	379458	387400
rejected events	263011	282866	217367	291860
rejected %	89%	89%	57%	75%

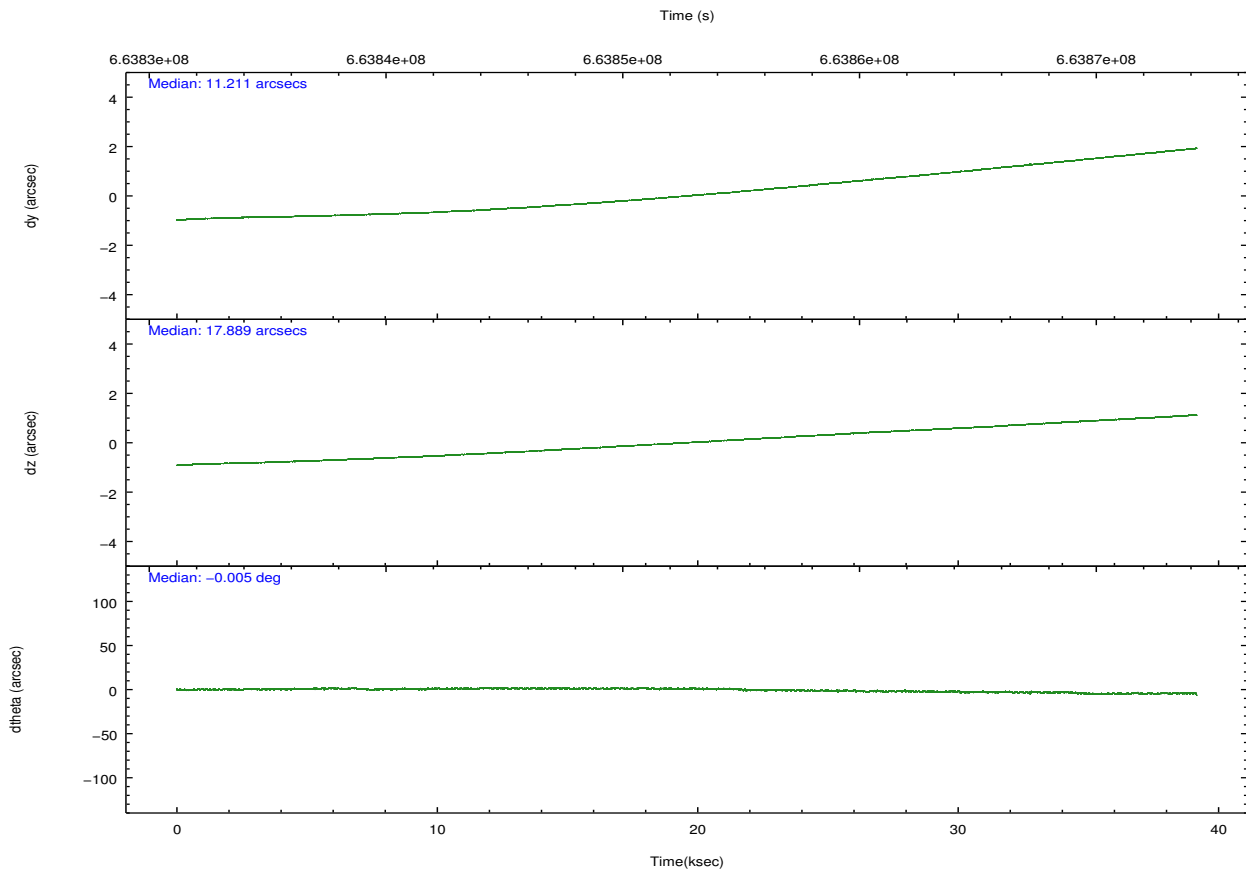
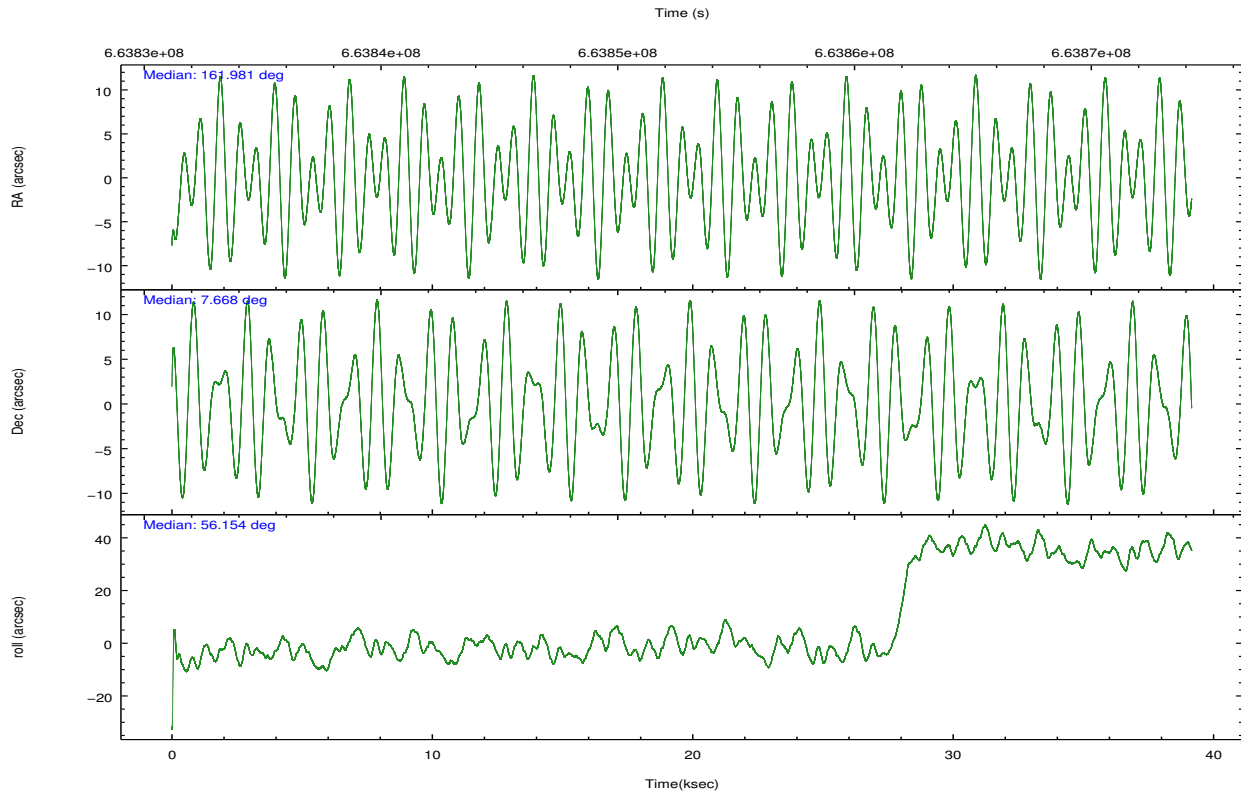
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	10338	9489	13164	26071
	3%	2%	3%	6%
grade 1 events	155	137	585	310
	0%	0%	0%	0%
grade 2 events	8612	9480	33308	23693
	2%	2%	8%	6%
grade 3 events	3009	2777	12564	9551
	1%	0%	3%	2%
grade 4 events	2982	2781	12308	8968
	1%	0%	3%	2%
grade 5 events	12806	12157	36172	19677
	4%	3%	9%	5%
grade 6 events	6748	9554	90759	27279
	2%	3%	23%	7%
grade 7 events	250044	270570	180598	271851
	84%	85%	47%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	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	161.979567	161.9810520079453	CCD I2 on	O1	N
[deg] Pointing Dec	7.640540	7.667950052863133	CCD I3 on	Y	Y
[deg] Pointing Roll	56.000447	56.15686193742421	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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	Y	Y
[s] Observation start time (MET)	663833278.184000	663832145.5179501	CCD S5 on	N	N
Observation start date	2019-01-14T06:06:49	2019-01-14T05:49:05	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	663872278.184000	663873233.6704	On-chip summing requested	N	N
Observation end date	2019-01-14T16:56:49	2019-01-14T17:13:53	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



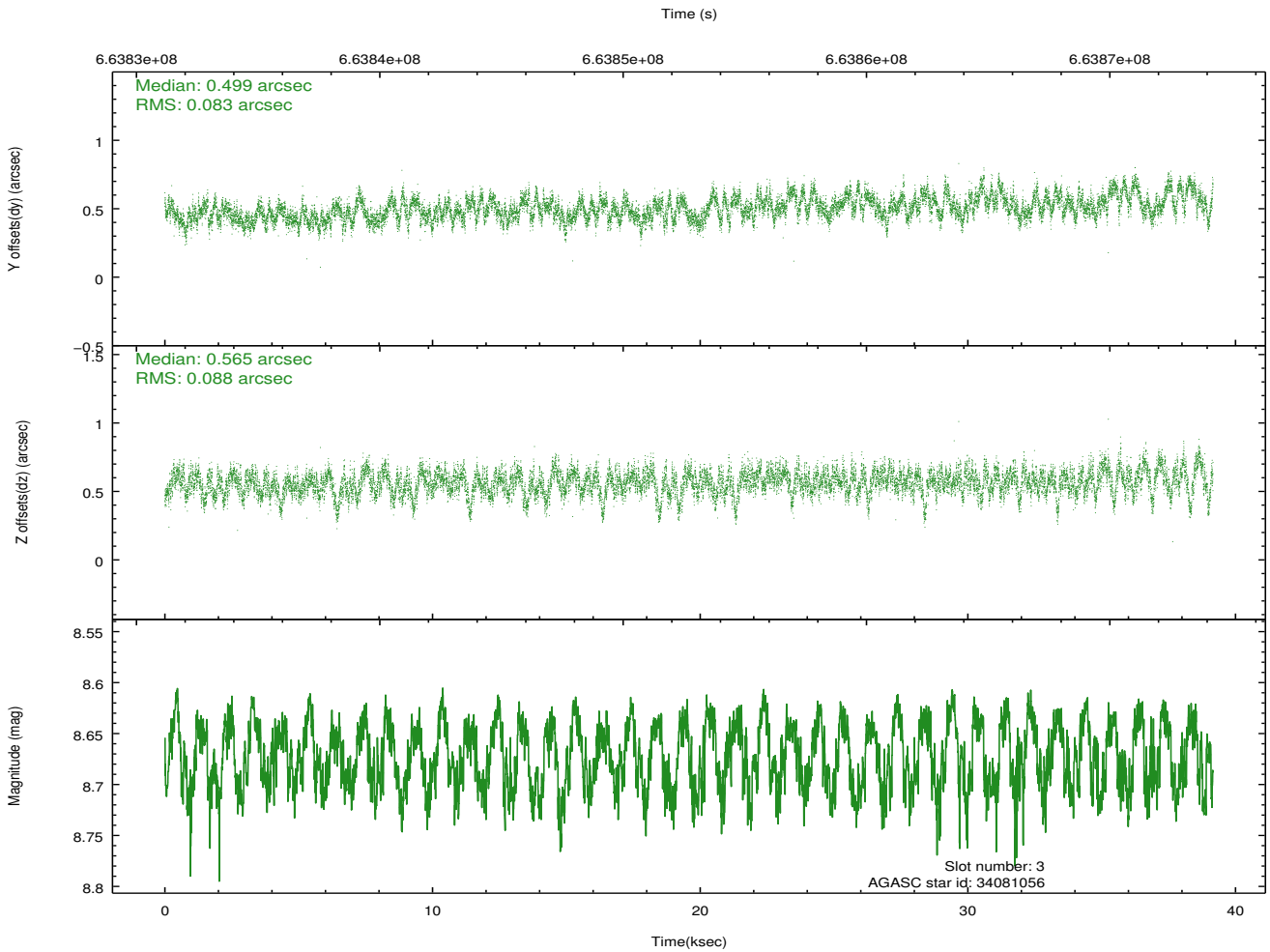
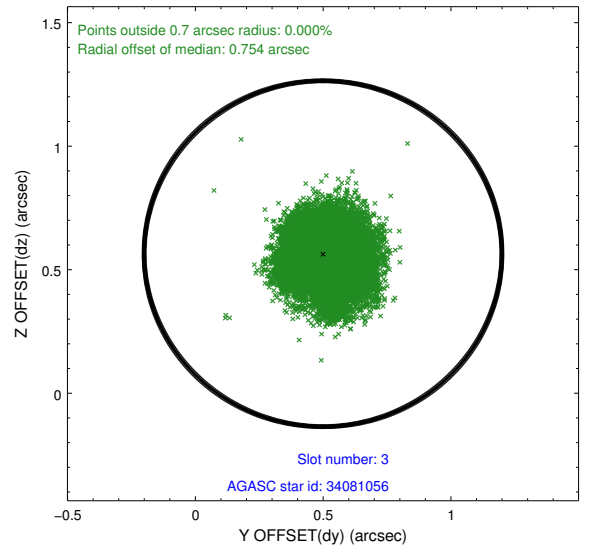
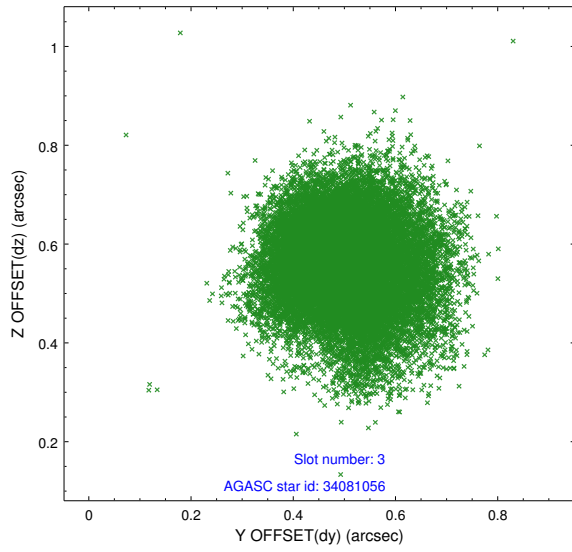


### Slot Statistics

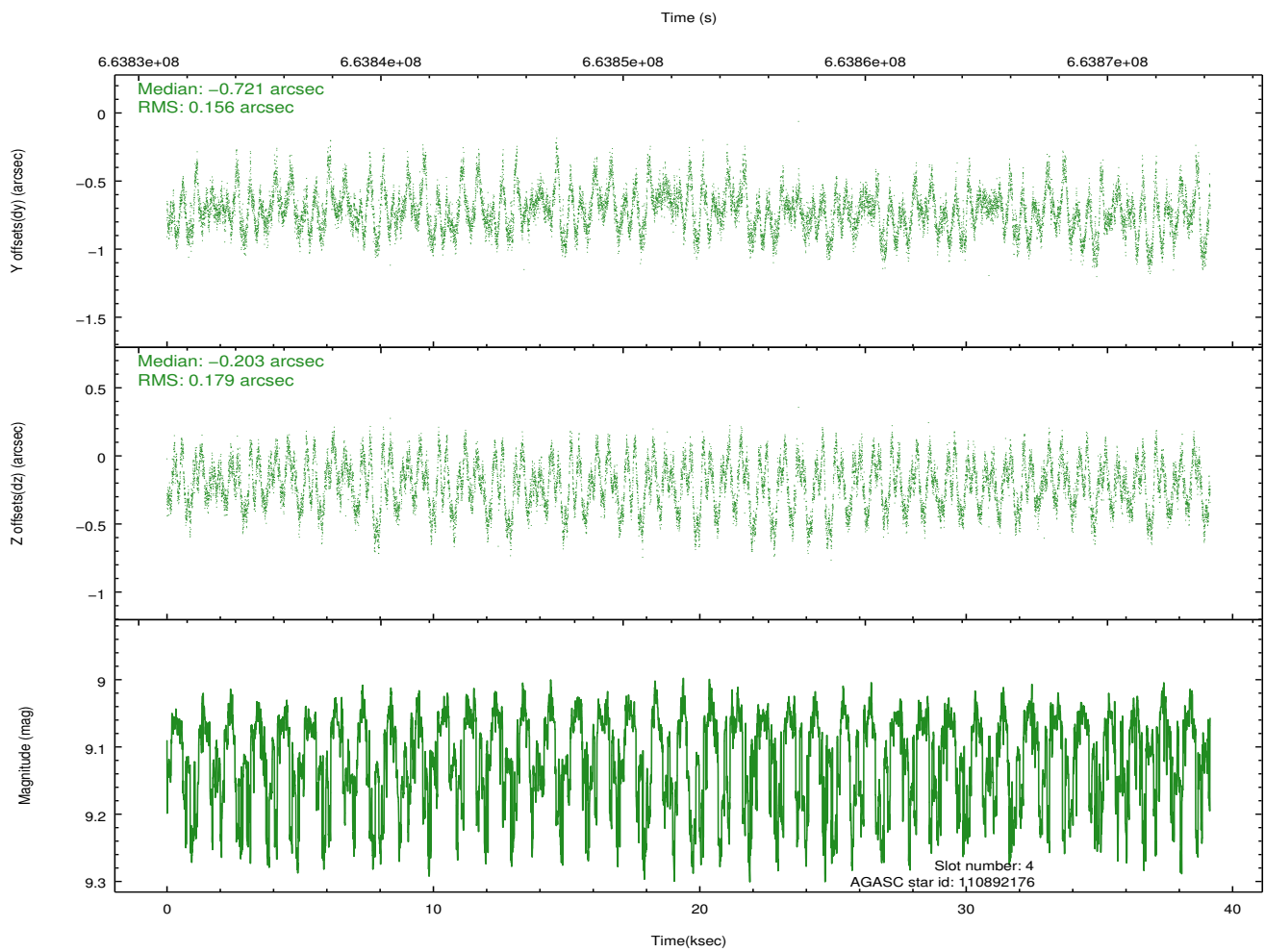
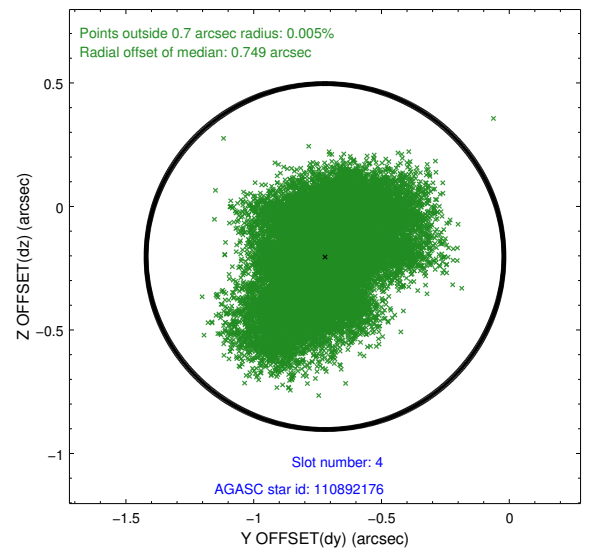
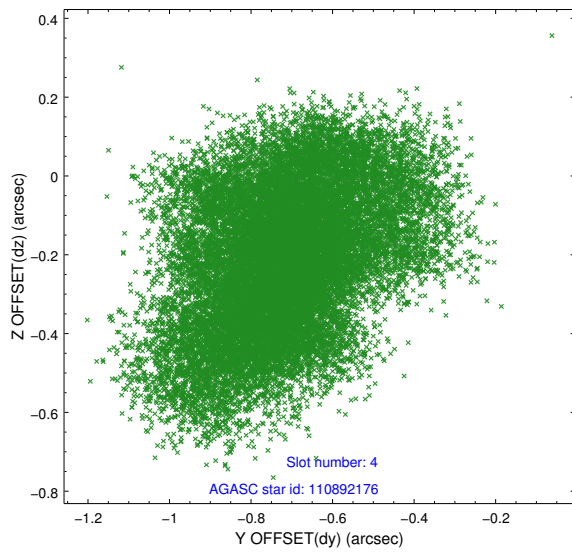
slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.17	9548	1.000	-0.274	-0.210	0.021	0.039	0.000000	0.000000	-764.49	-1739
1	FID		ACIS-S-4	7.31	9551	1.000	0.707	0.187	0.032	0.077	0.000000	0.000000	2149.73	169
2	FID		ACIS-S-5	7.29	9549	1.000	-0.466	0.030	0.043	0.067	0.000000	0.000000	-1817.54	162
3	GUIDE	used	34081056	8.67	19095	1.000	0.499	0.565	0.128	0.209	162.119383	7.010257	-1600.98	-1682
4	GUIDE	used	110892176	9.11	19080	1.000	-0.721	-0.203	0.259	0.405	162.069113	8.356059	2313.51	1176
5	GUIDE	used	110894472	9.85	18835	1.000	-0.583	-0.615	0.227	0.381	161.989294	8.357224	2158.27	1413
6	GUIDE	used	34079656	9.74	19068	1.000	0.237	-0.210	0.314	0.480	161.801886	7.389703	-1102.79	21
7	GUIDE	used	34080888	9.32	19069	1.000	0.584	0.471	0.260	0.388	162.053654	6.790256	-2388.72	-1930

## 2.4 Star Slots

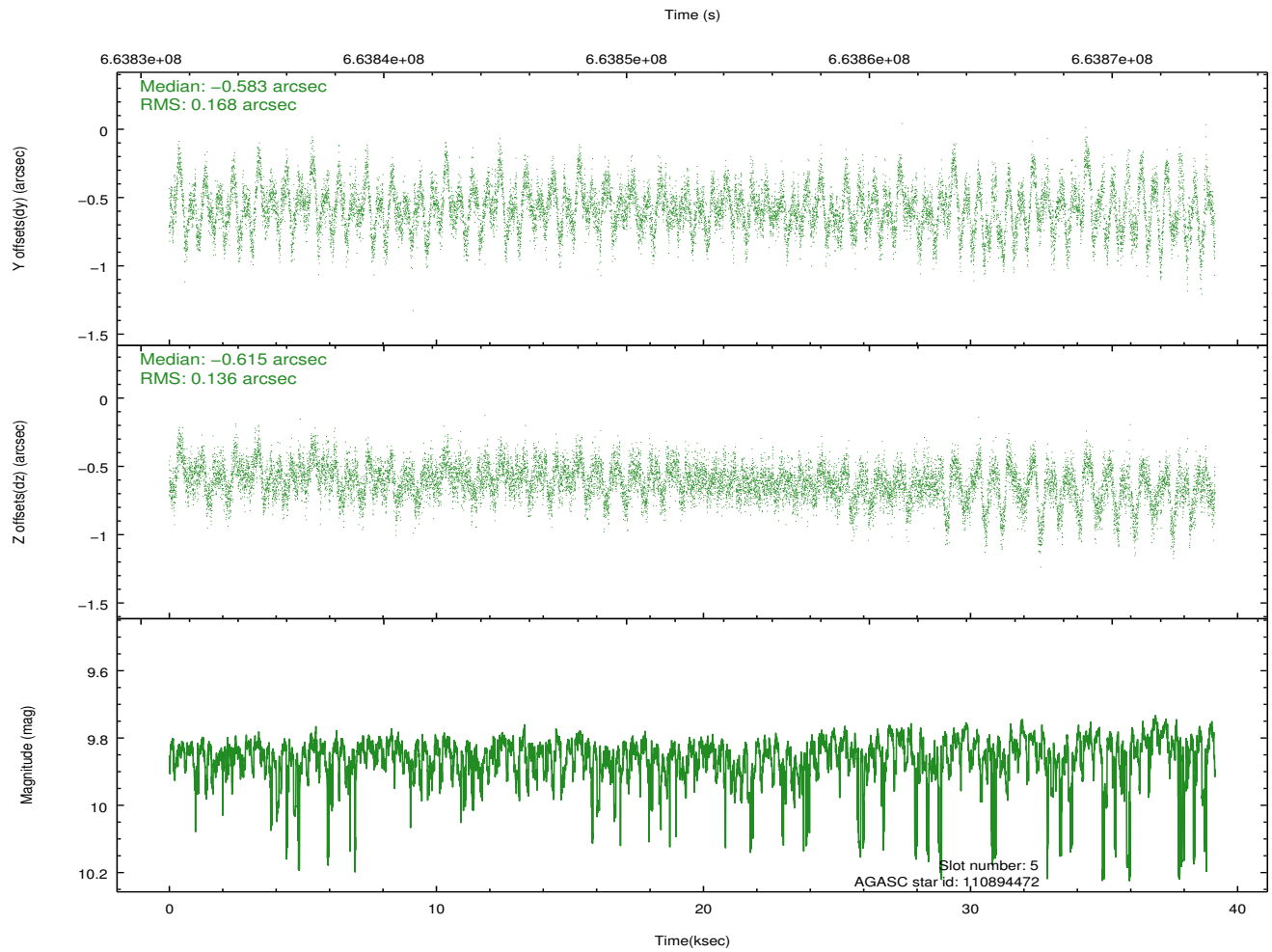
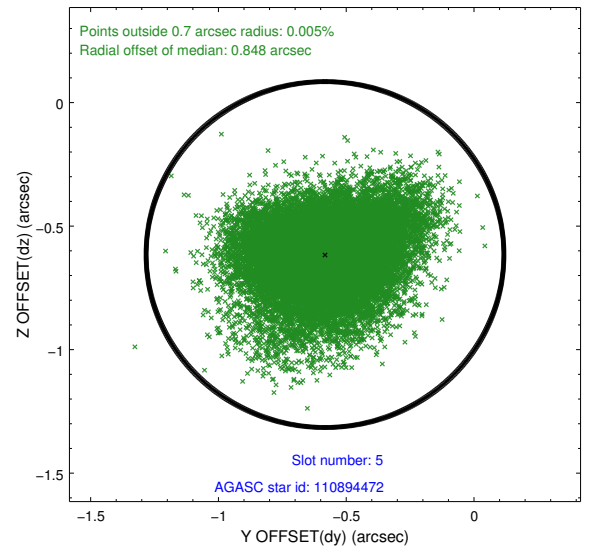
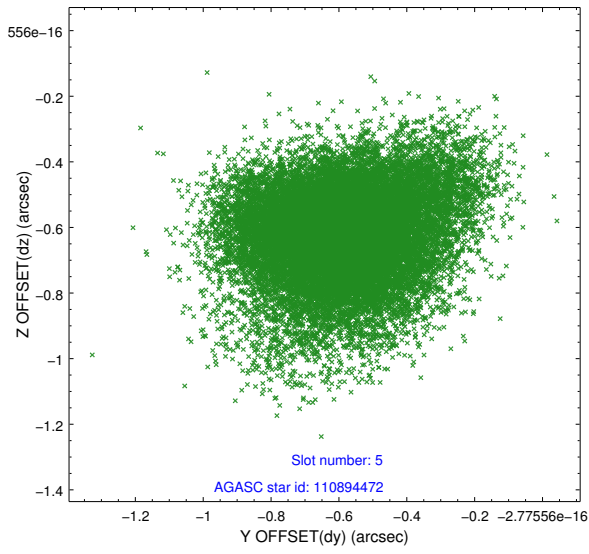
### 2.4.1 Slot 3



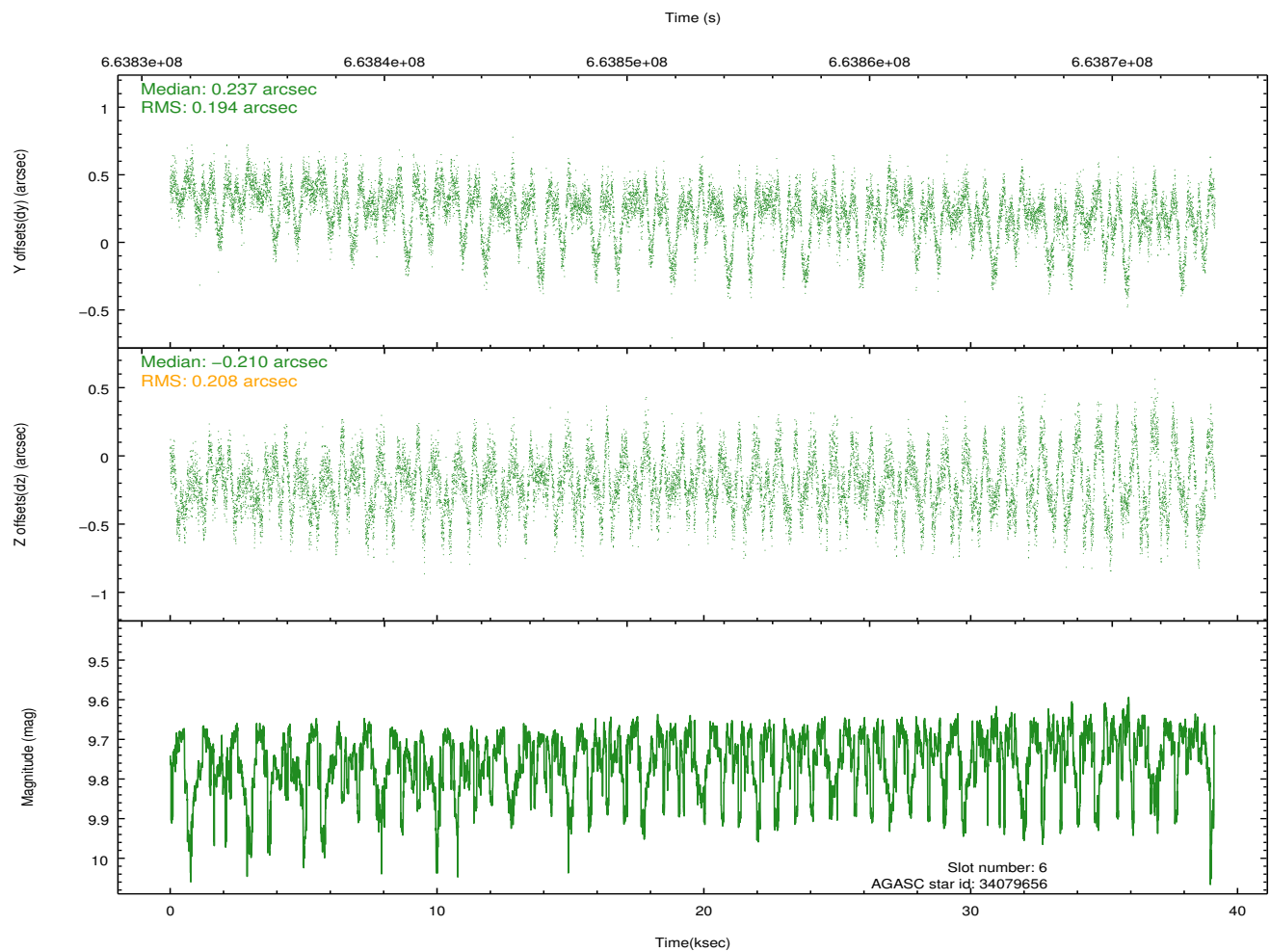
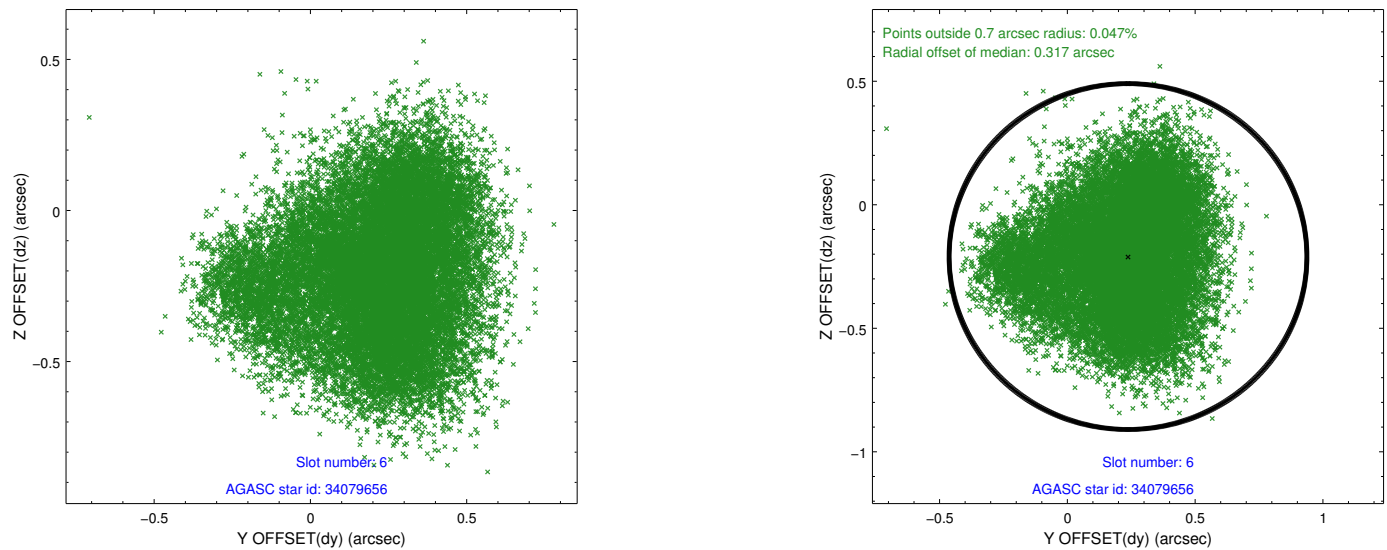
## 2.4.2 Slot 4



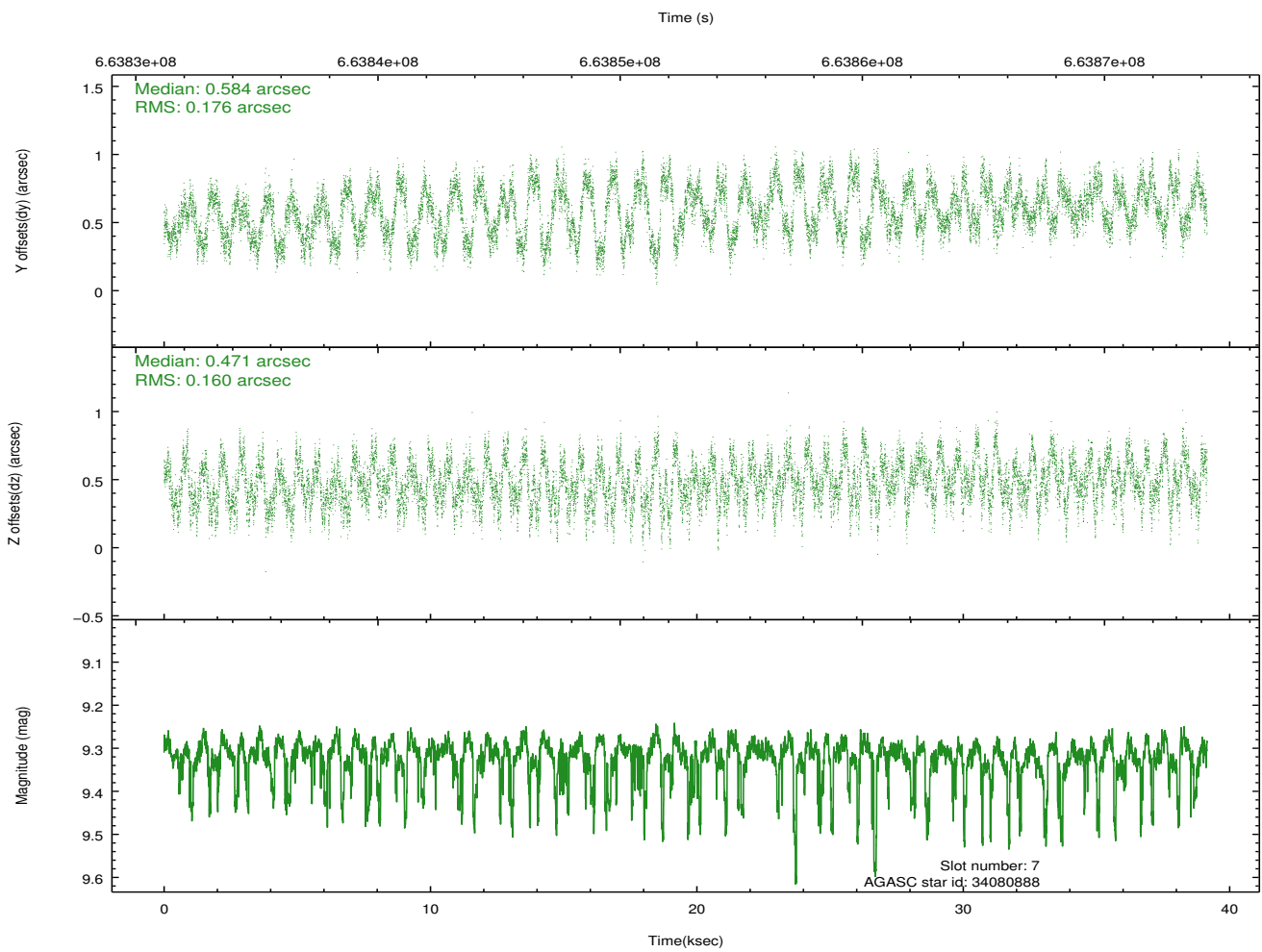
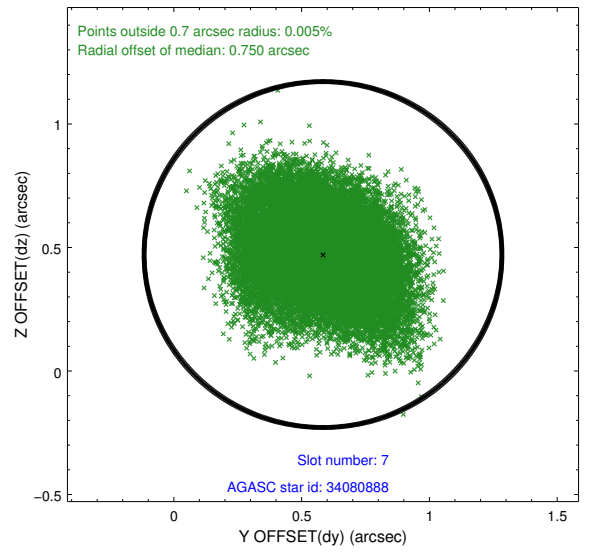
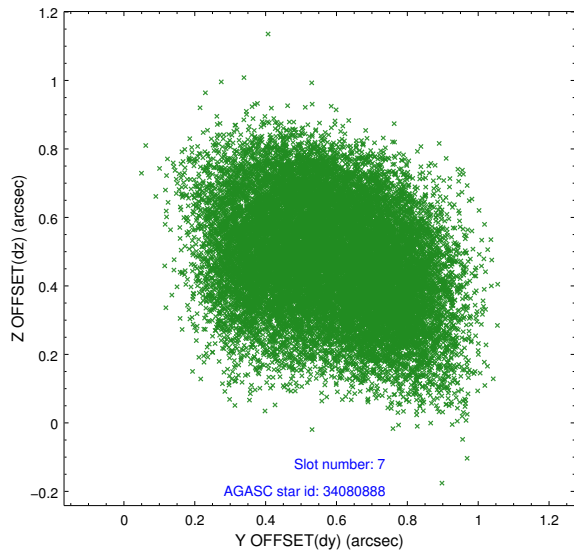
### 2.4.3 Slot 5



## 2.4.4 Slot 6

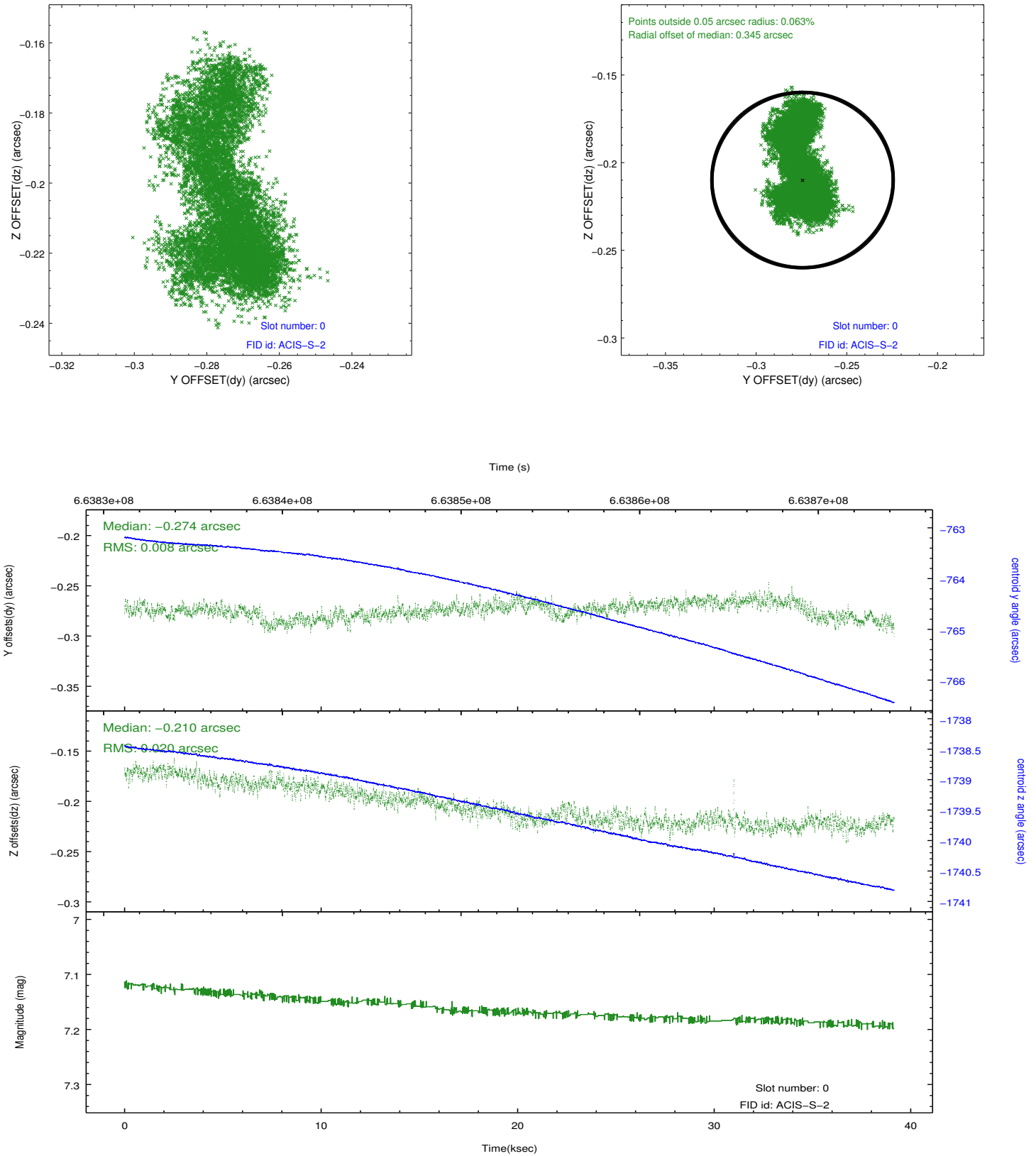


## 2.4.5 Slot 7

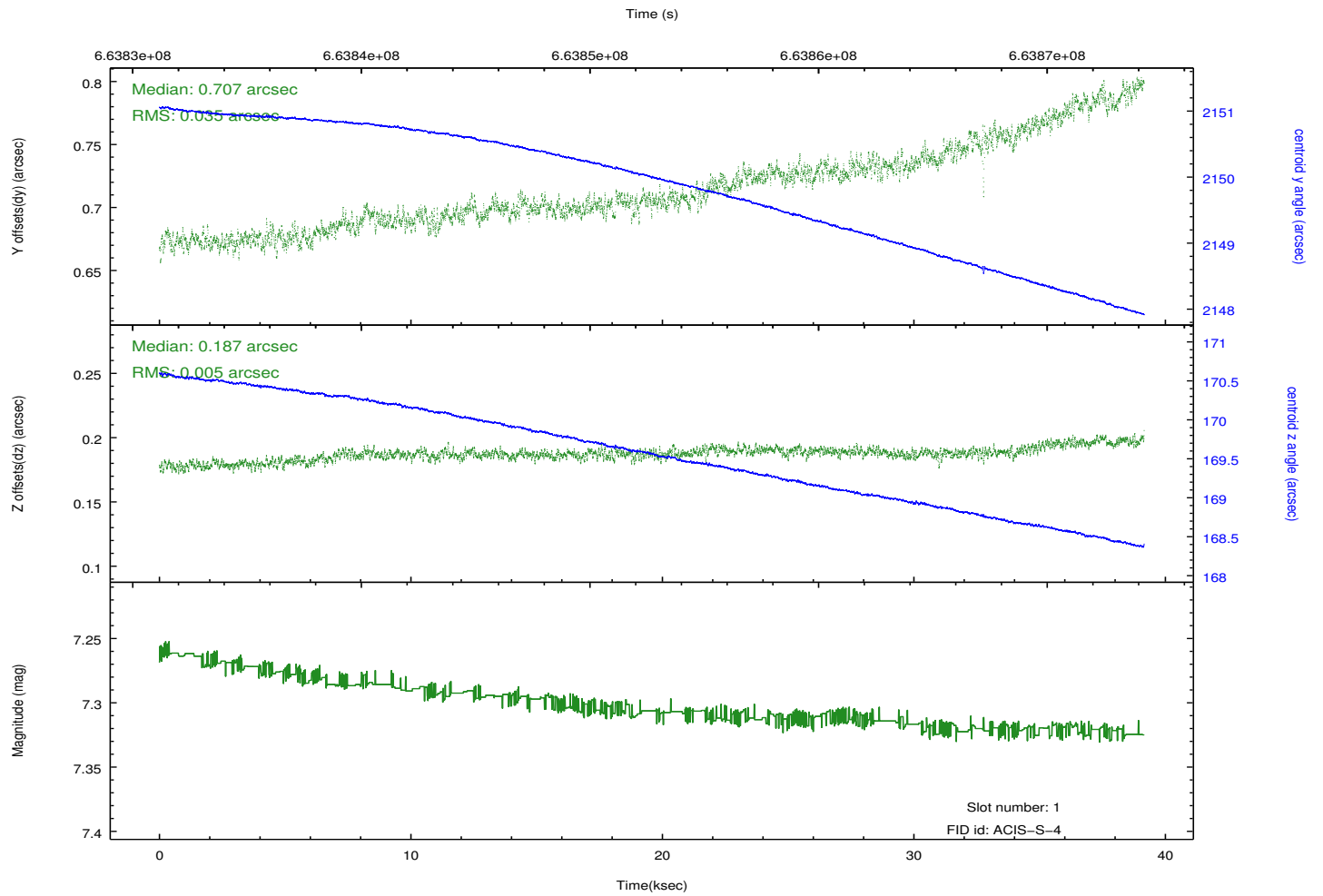
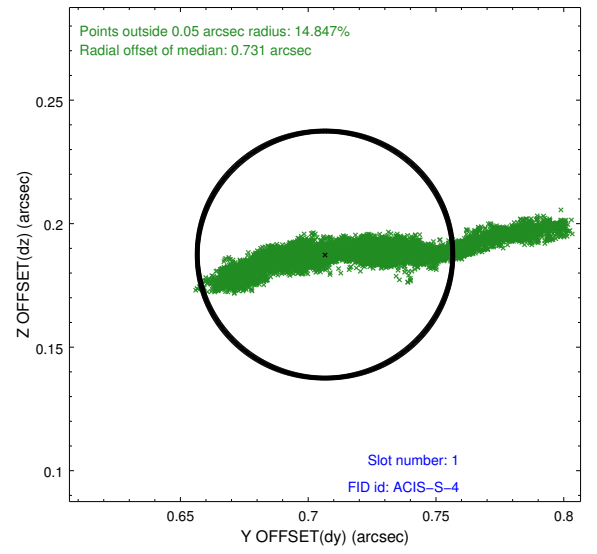
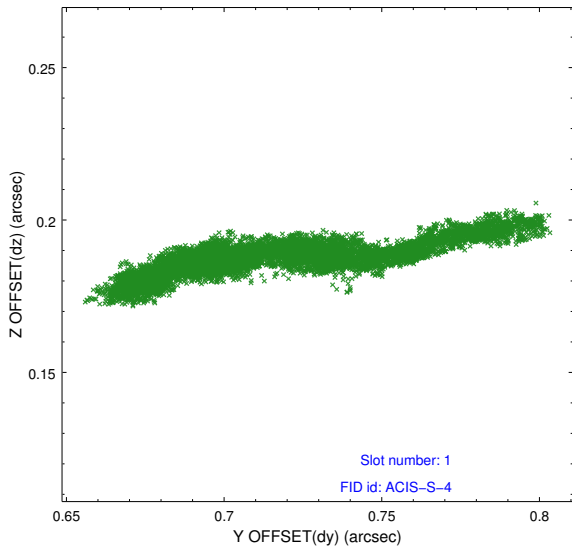


## 2.5 FID Slots

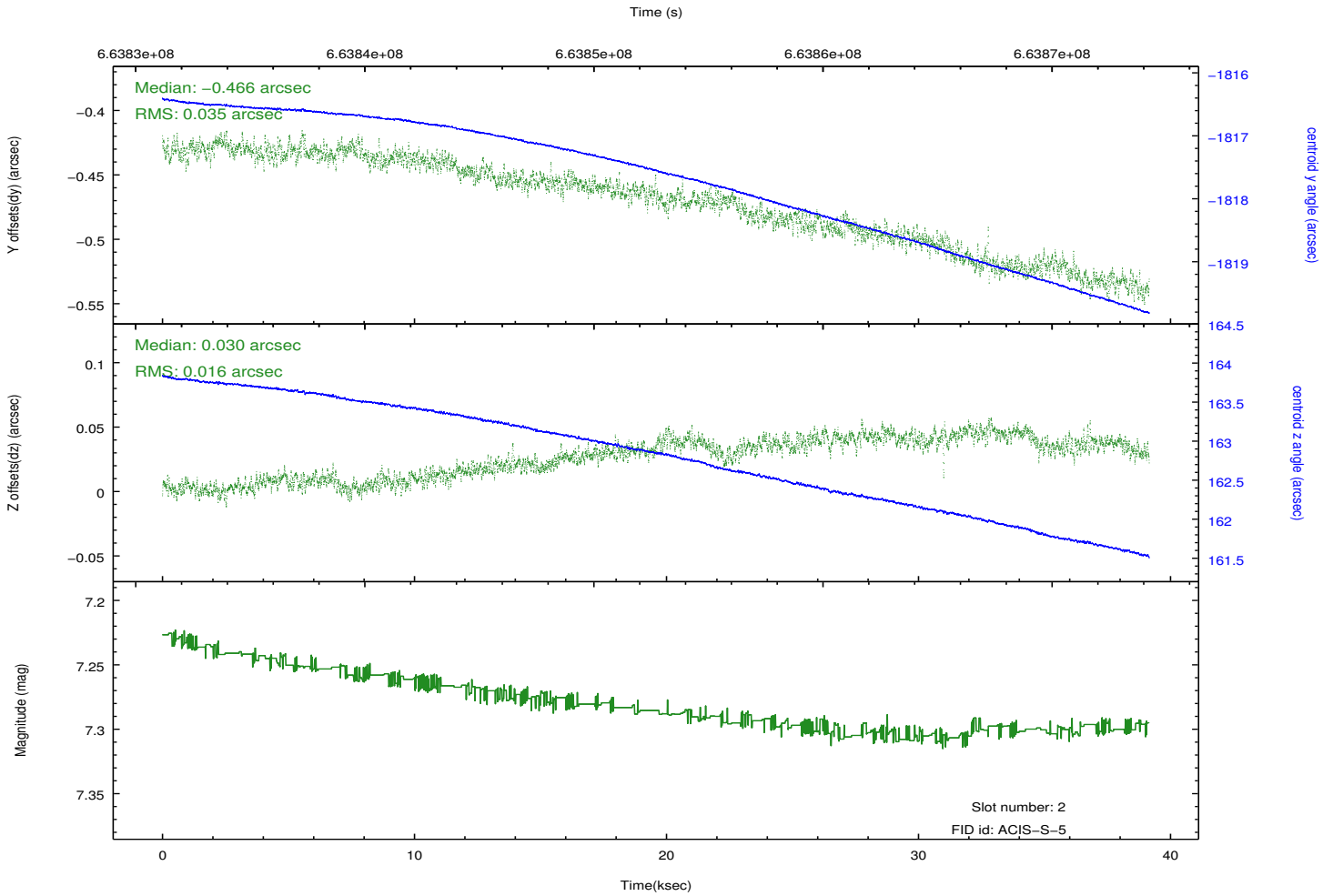
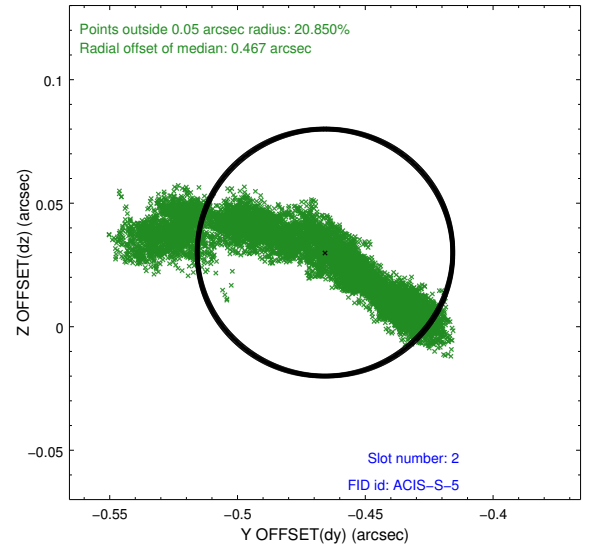
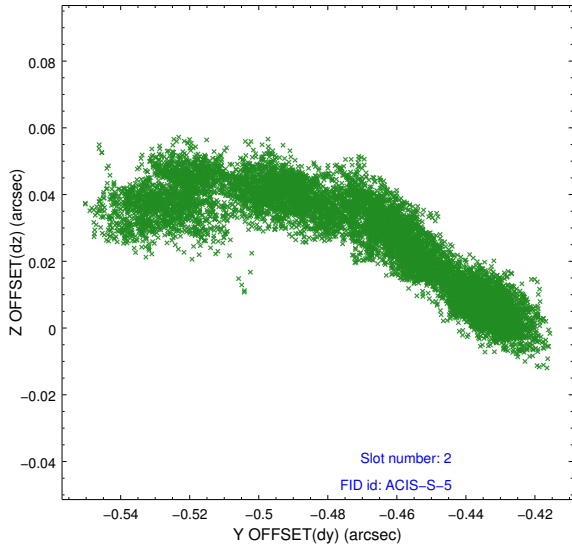
### 2.5.1 Slot 0



## 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)	2019.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.06310030055

### A.2 Comments