

# V&V Reference Report

## L2 ASCDS Version : 10.9.1

Observation 6820 - L2 Version 5  
Chandra X-Ray Center

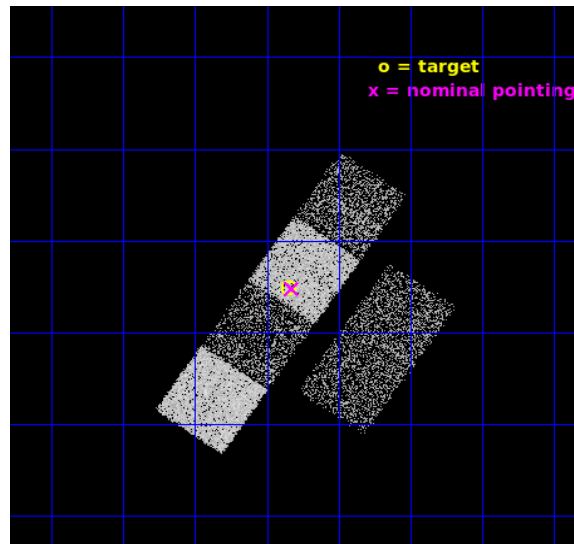
L2 Processing Date : Oct 11 2020

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# 1 Front

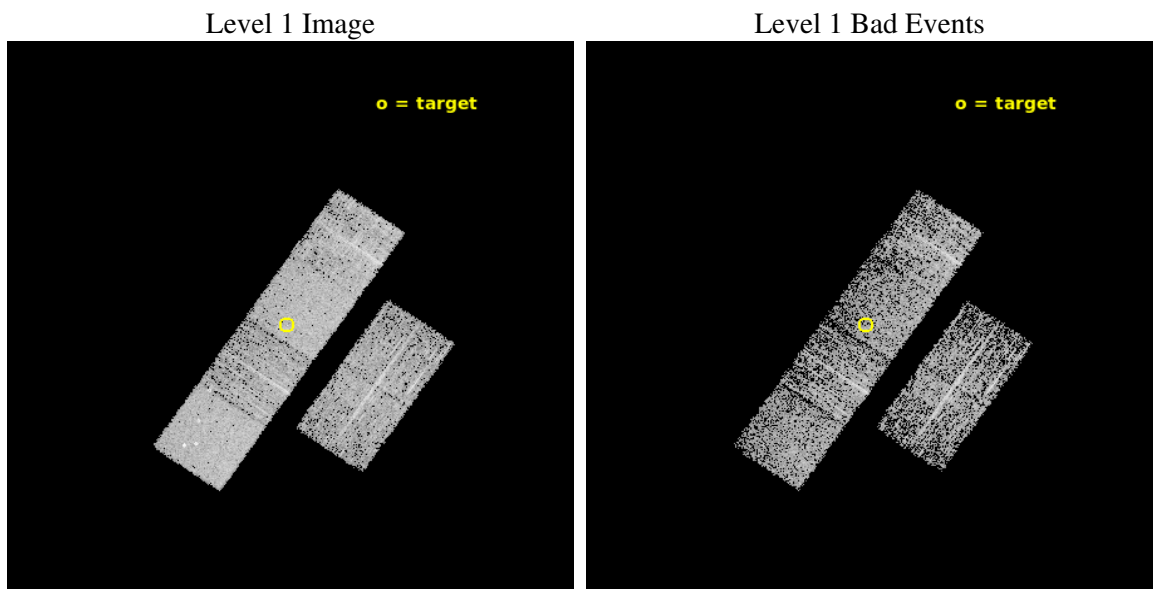
seq_num	701238	Sequence number
obs_id	6820	Observation id
title	Chandra ACIS Snapshot Observations of the Most Luminous Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Gordon Garmire	Principal investigator
object	SDSS J0209-0005	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	32.46125	Observer's specified target RA [deg]
dec_targ	-0.085111	Observer's specified target Dec [deg]
ra_nom	32.456423506615	Nominal RA [deg]
dec_nom	-0.086813219752976	Nominal Dec [deg]
roll_nom	304.50439776439	Nominal Roll [deg]
revision	5	Processing version of data
ontime	2197.0271422267	Sum of GTIs [s]
livetime	2169.2070616609	Livetime [s]
ontime2	2197.06818223	Sum of GTIs [s]
ontime3	2196.9040222168	Sum of GTIs [s]
ontime5	2196.9861022234	Sum of GTIs [s]
ontime6	2196.9450622201	Sum of GTIs [s]
ontime7	2197.0271422267	Sum of GTIs [s]
ontime8	2196.8629822433	Sum of GTIs [s]
l2events	28558	Number of level 2 events



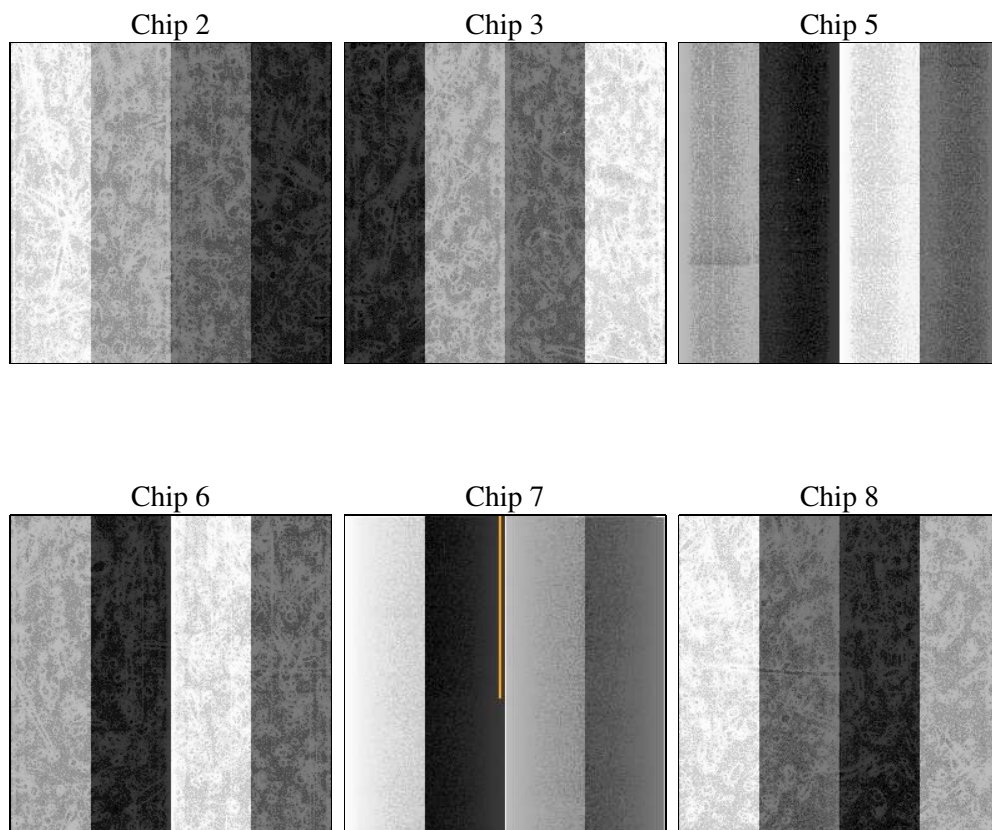
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2192.095000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	2197.0271422267	Sum of GTIs [s]
caldsver	4.9.2	&#160	ontime2	2197.06818223	Sum of GTIs [s]
date	2020-10-12T03:27:52	Date and time of file creation	ontime3	2196.9040222168	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	2196.9861022234	Sum of GTIs [s]
			ontime6	2196.9450622201	Sum of GTIs [s]
			ontime7	2197.0271422267	Sum of GTIs [s]
			ontime8	2196.8629822433	Sum of GTIs [s]
			l1events	126910	Number of level 1 events

### 2.1.4 Events

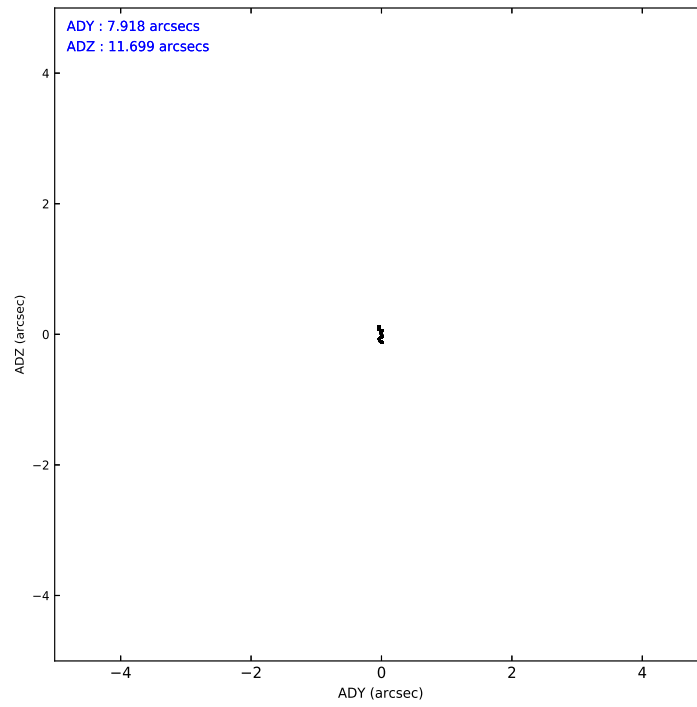
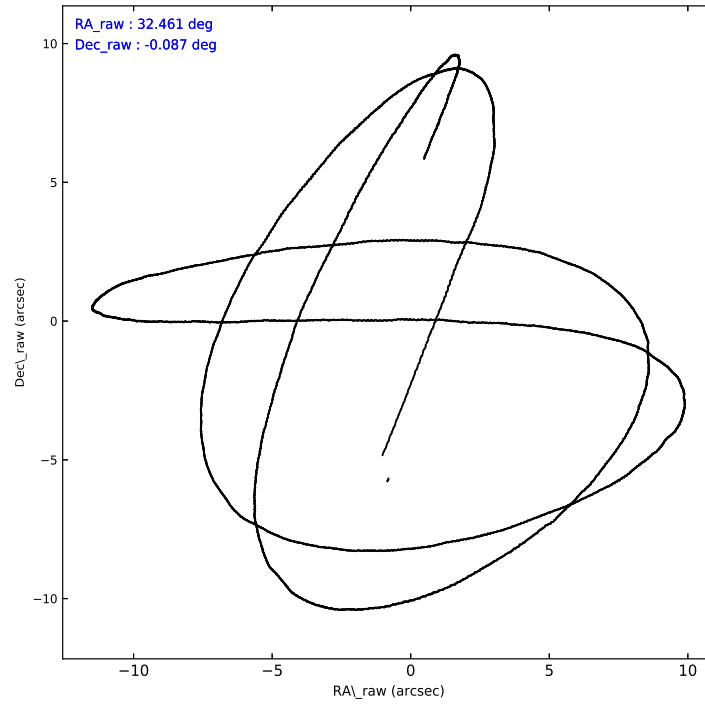
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	17235	17105	26576	18071	23977	23946
rejected events	15162	15087	14236	15985	14012	18339
rejected %	87%	88%	53%	88%	58%	76%

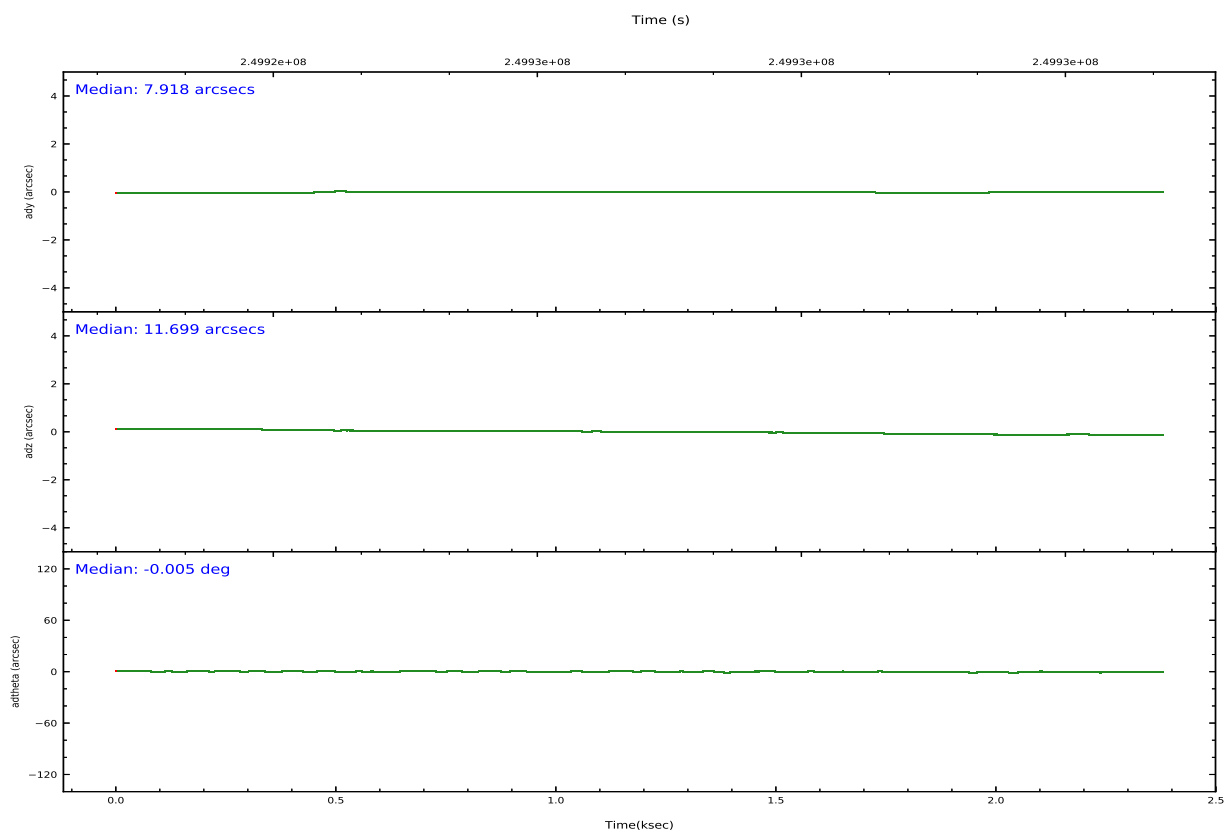
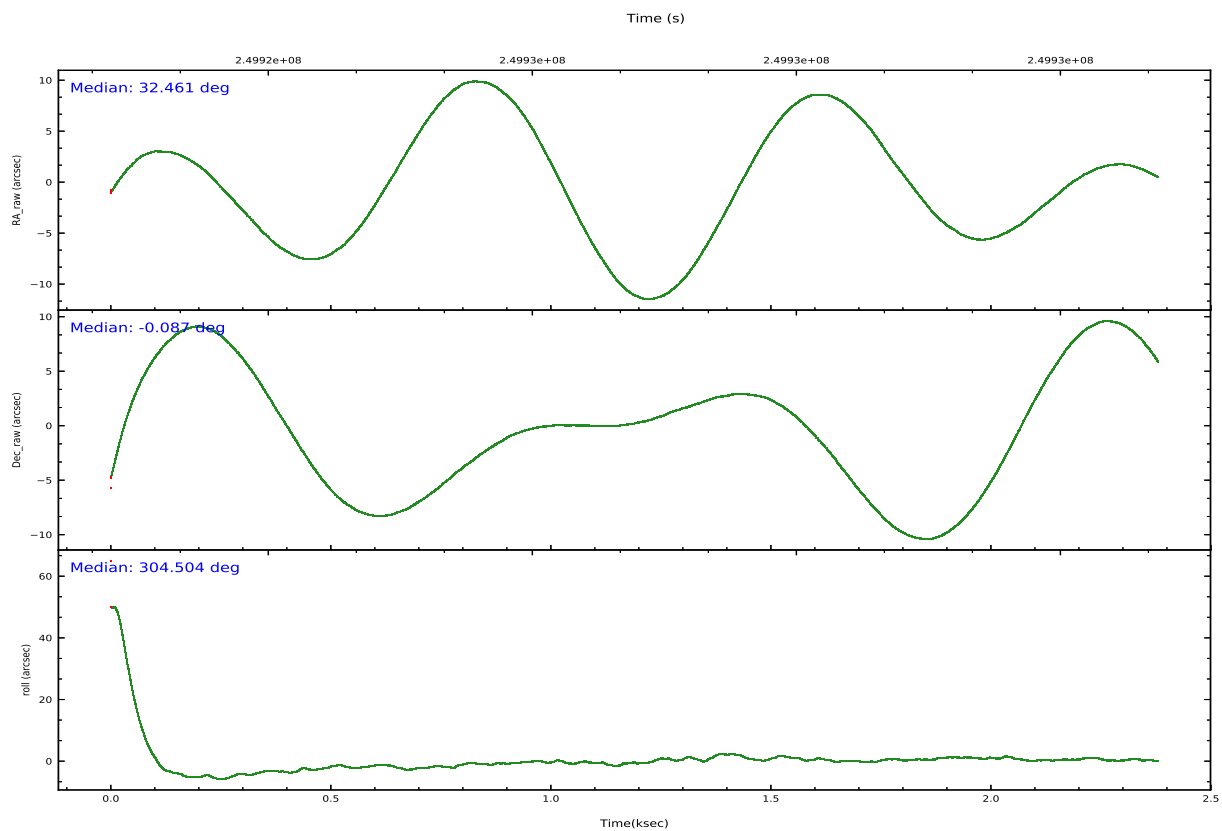
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	963	920	1429	820	845	1597
	5%	5%	5%	4%	3%	6%
grade 1 events	15	13	53	6	30	18
	0%	0%	0%	0%	0%	0%
grade 2 events	402	397	3569	468	1986	1370
	2%	2%	13%	2%	8%	5%
grade 3 events	152	198	520	196	876	555
	0%	1%	1%	1%	3%	2%
grade 4 events	199	190	475	196	858	533
	1%	1%	1%	1%	3%	2%
grade 5 events	666	790	1913	808	2212	1108
	3%	4%	7%	4%	9%	4%
grade 6 events	358	317	6354	407	5419	1557
	2%	1%	23%	2%	22%	6%
grade 7 events	14480	14280	12263	15170	11751	17208
	84%	83%	46%	83%	49%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	32.435834	32.456423506615	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.075704	-0.086813219752976	Alternating exposures requested	N	N
[deg] Pointing Roll	304.360482	304.50439776439	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	249924831.184000	249923791.87356			
Observation start date	2005-12-02T15:32:47	2005-12-02T15:16:31			
[s] Observation end time (MET)	249927023.184000	249927243.56122			
Observation end date	2005-12-02T16:09:19	2005-12-02T16:14:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect





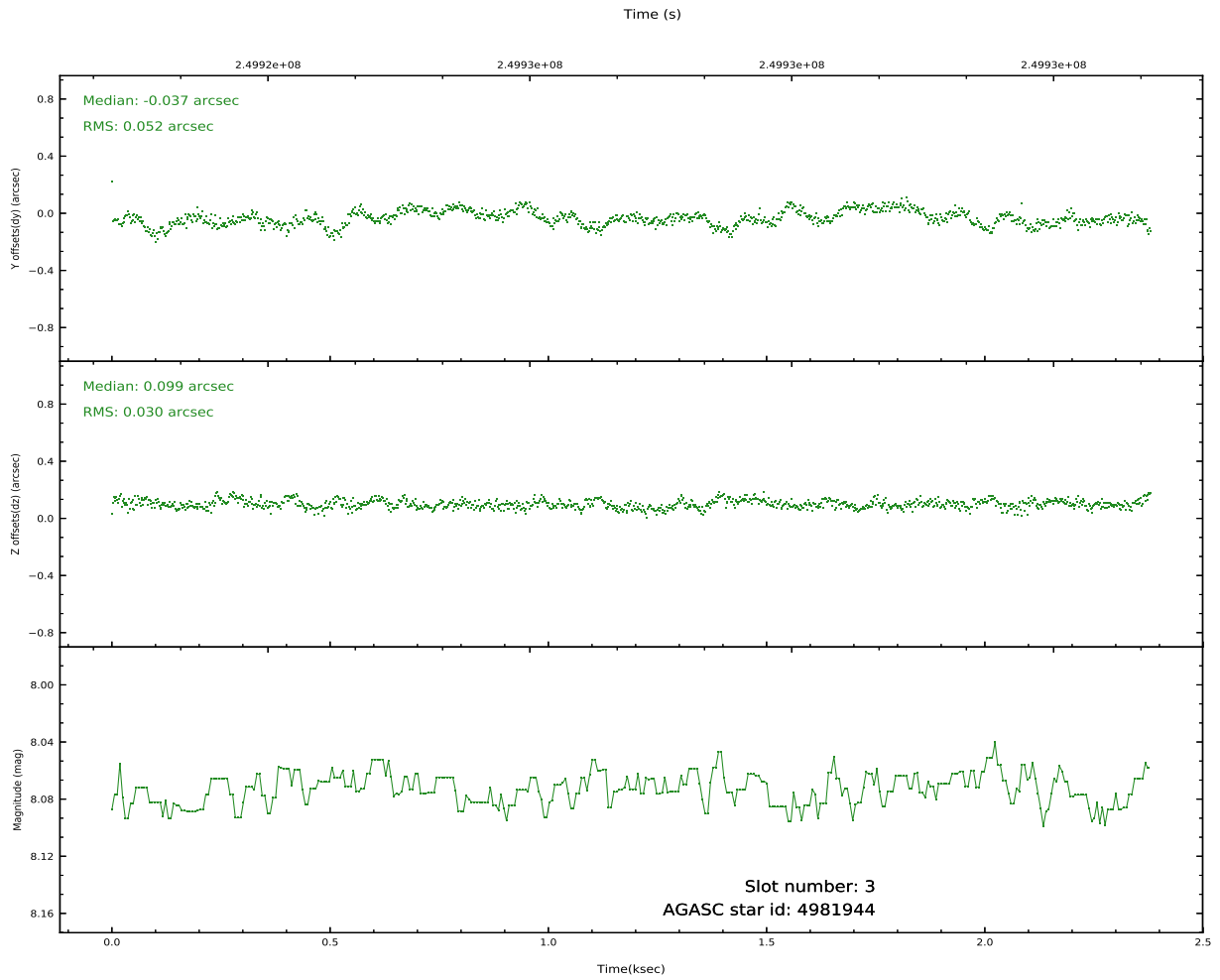
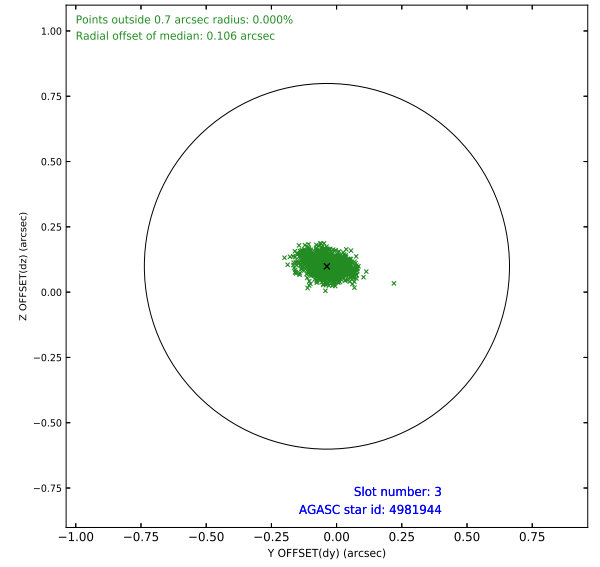
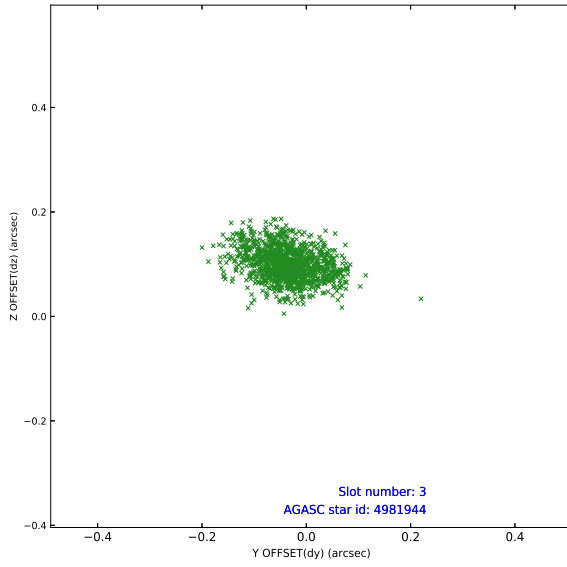
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.10	581	1.000	-0.053	-0.058	0.007	0.010	0.000000	0.000000	-760.69	-1733
1	FID		ACIS-S-4	7.21	581	1.000	0.157	0.041	0.006	0.011	0.000000	0.000000	2151.51	172
2	FID		ACIS-S-5	7.23	578	1.000	-0.135	0.025	0.007	0.012	0.000000	0.000000	-1810.14	169
3	GUIDE	used	4981944	8.07	1162	1.000	-0.037	0.099	0.064	0.108	32.552714	0.494378	-1456.03	1505
4	GUIDE	used	4984112	8.05	1162	1.000	-0.060	0.082	0.066	0.103	32.933733	0.223546	121.63	2088
5	GUIDE	used	614605504	7.27	1162	1.000	0.033	-0.124	0.048	0.074	32.113697	-0.419301	368.46	-1653
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	614728296	8.49	1160	1.000	0.063	-0.057	0.076	0.112	32.601360	-0.092275	387.24	456

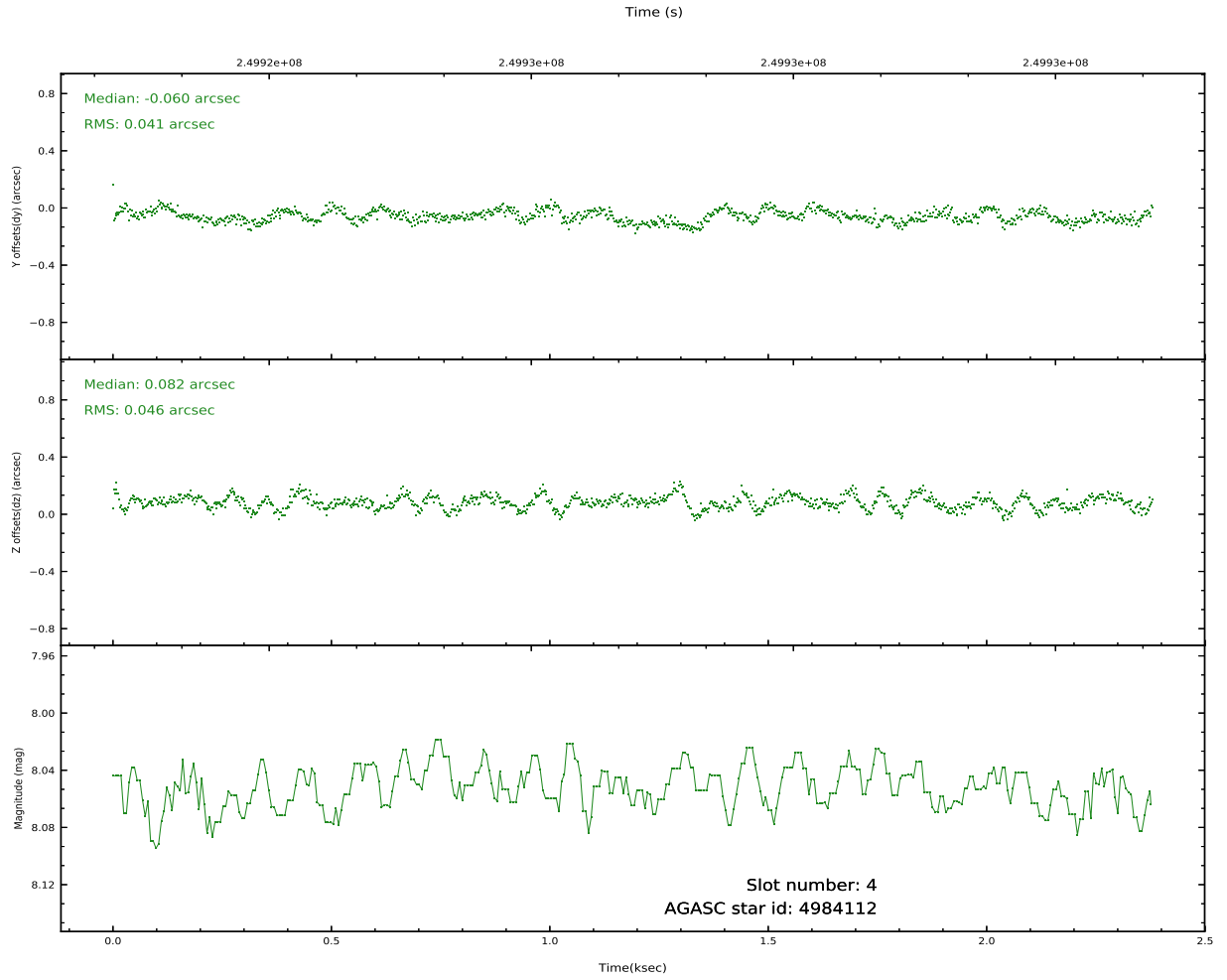
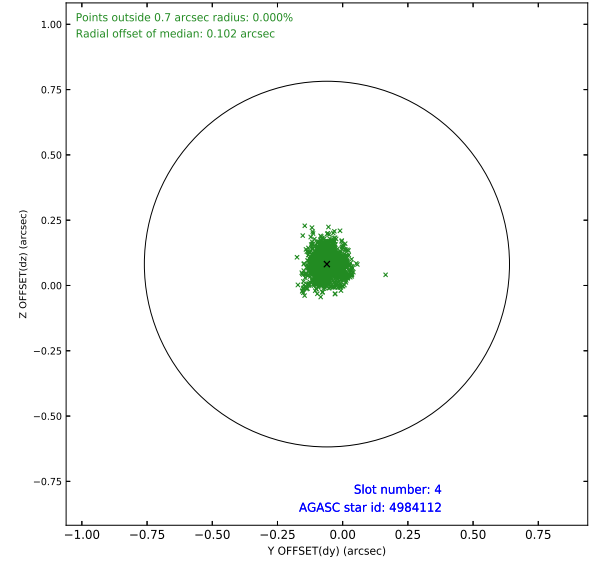
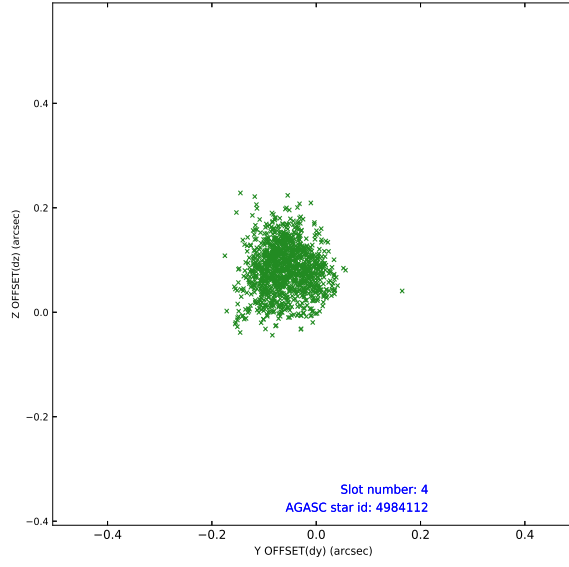


## 2.4 Star Slots

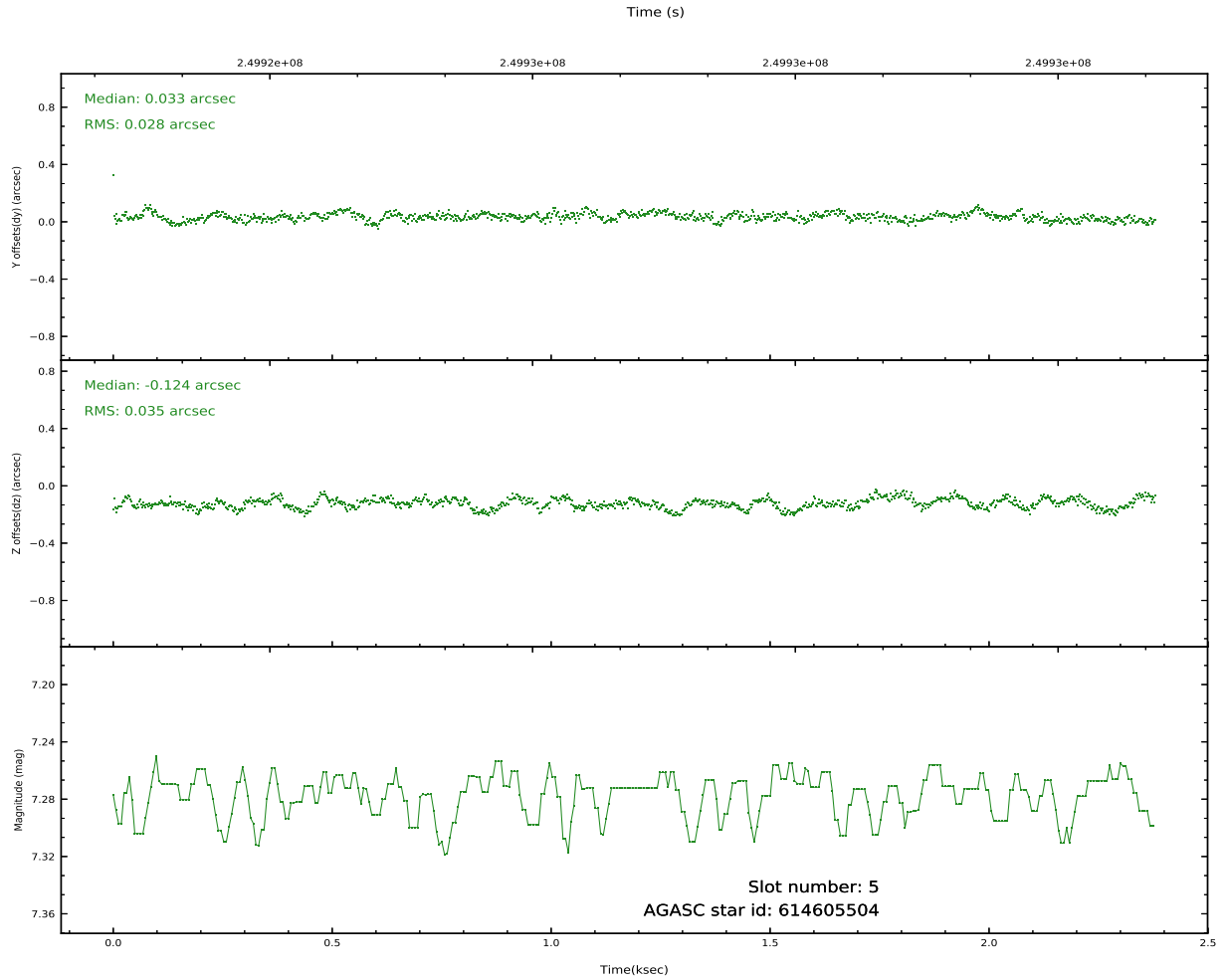
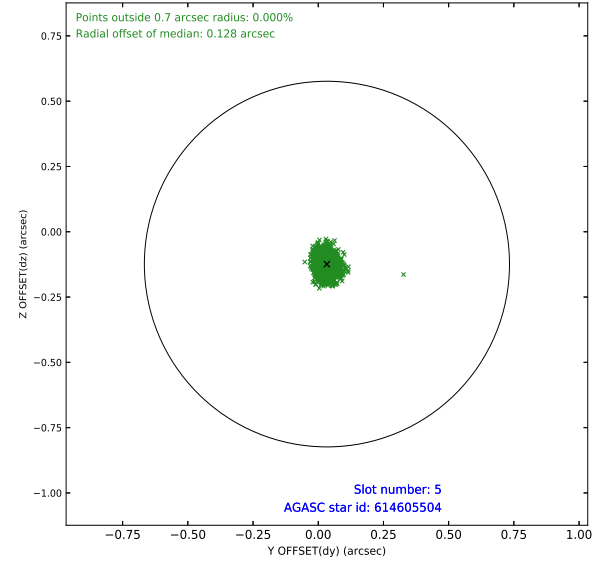
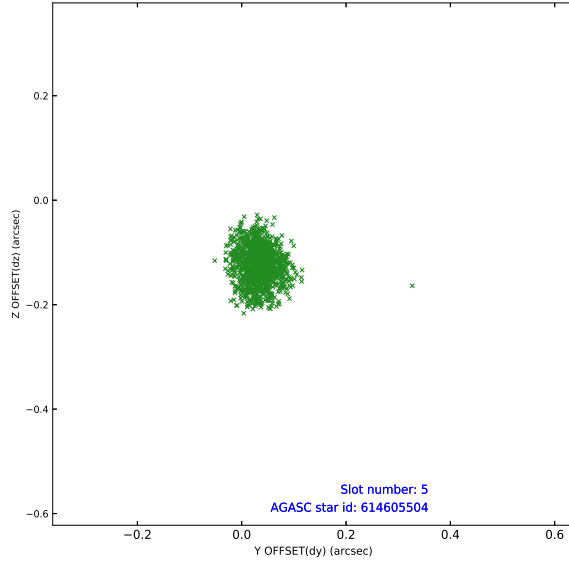
### 2.4.1 Slot 3



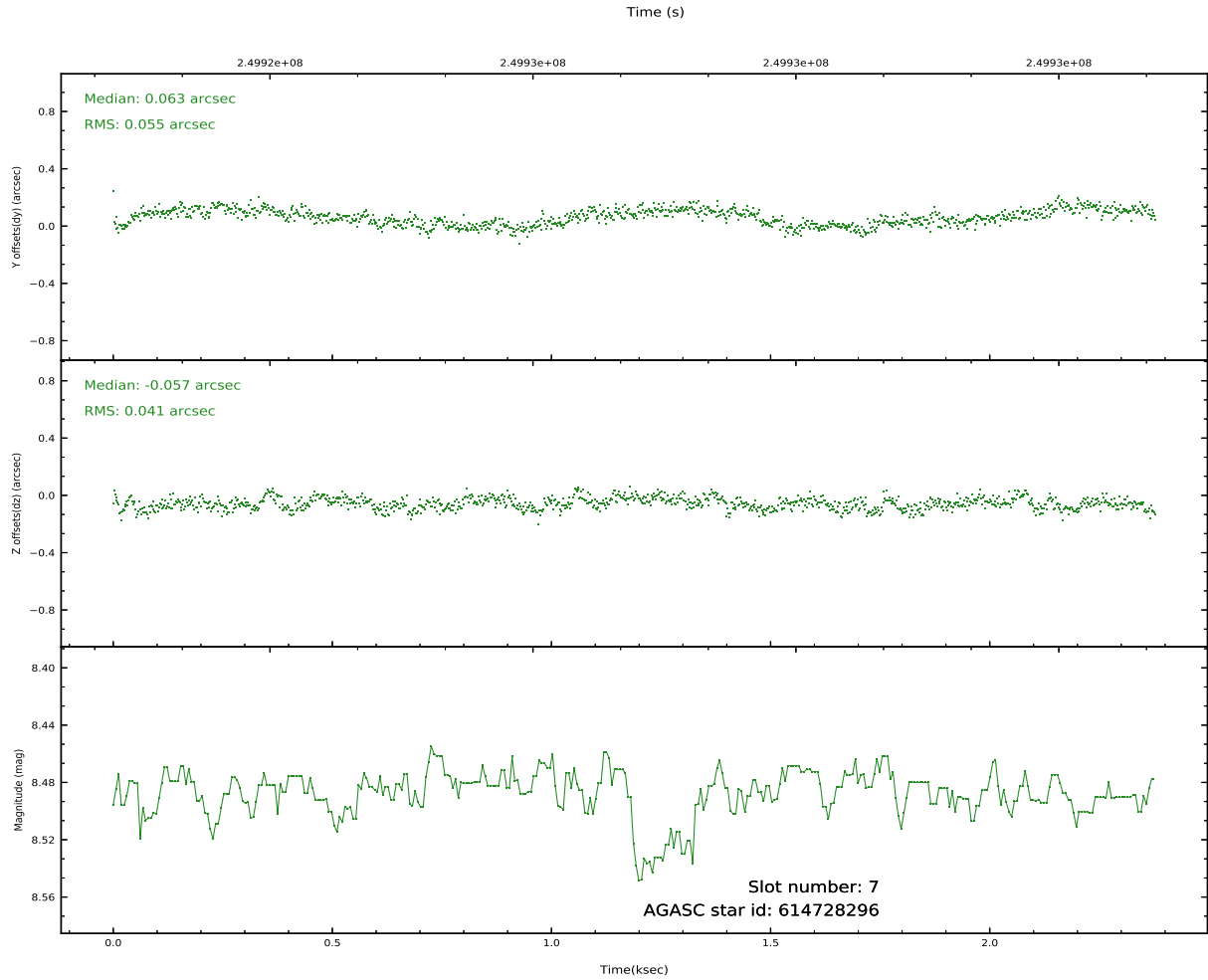
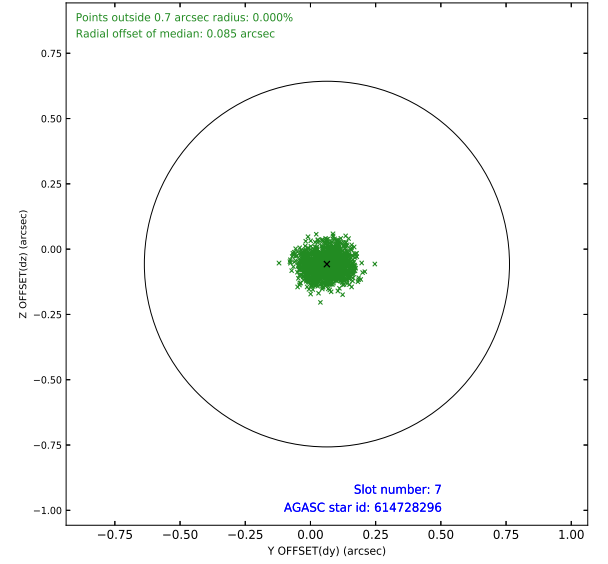
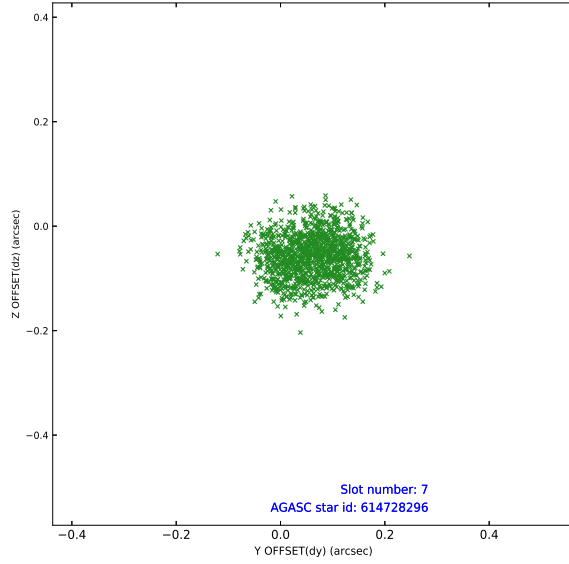
## 2.4.2 Slot 4



### 2.4.3 Slot 5

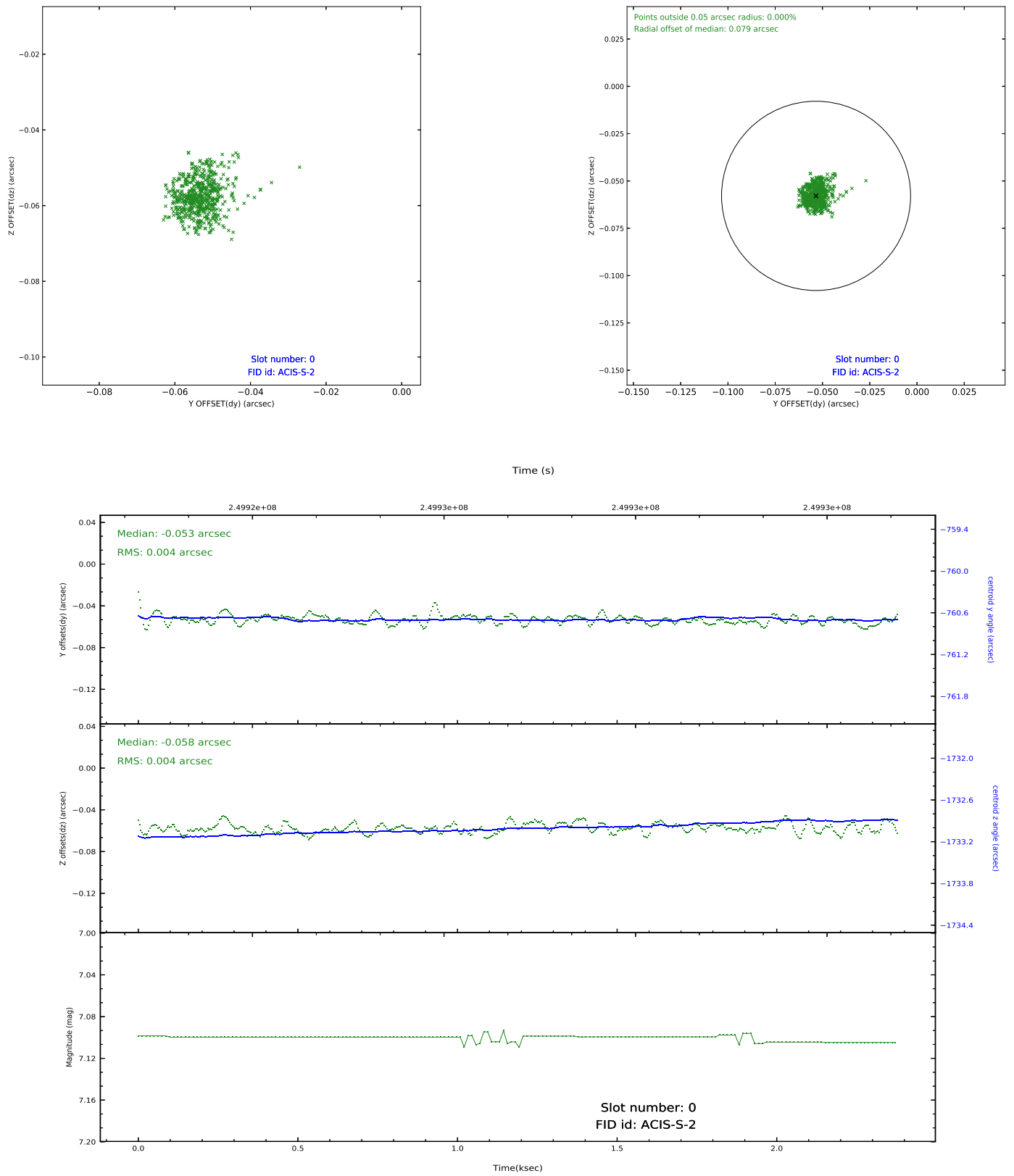


## 2.4.4 Slot 7

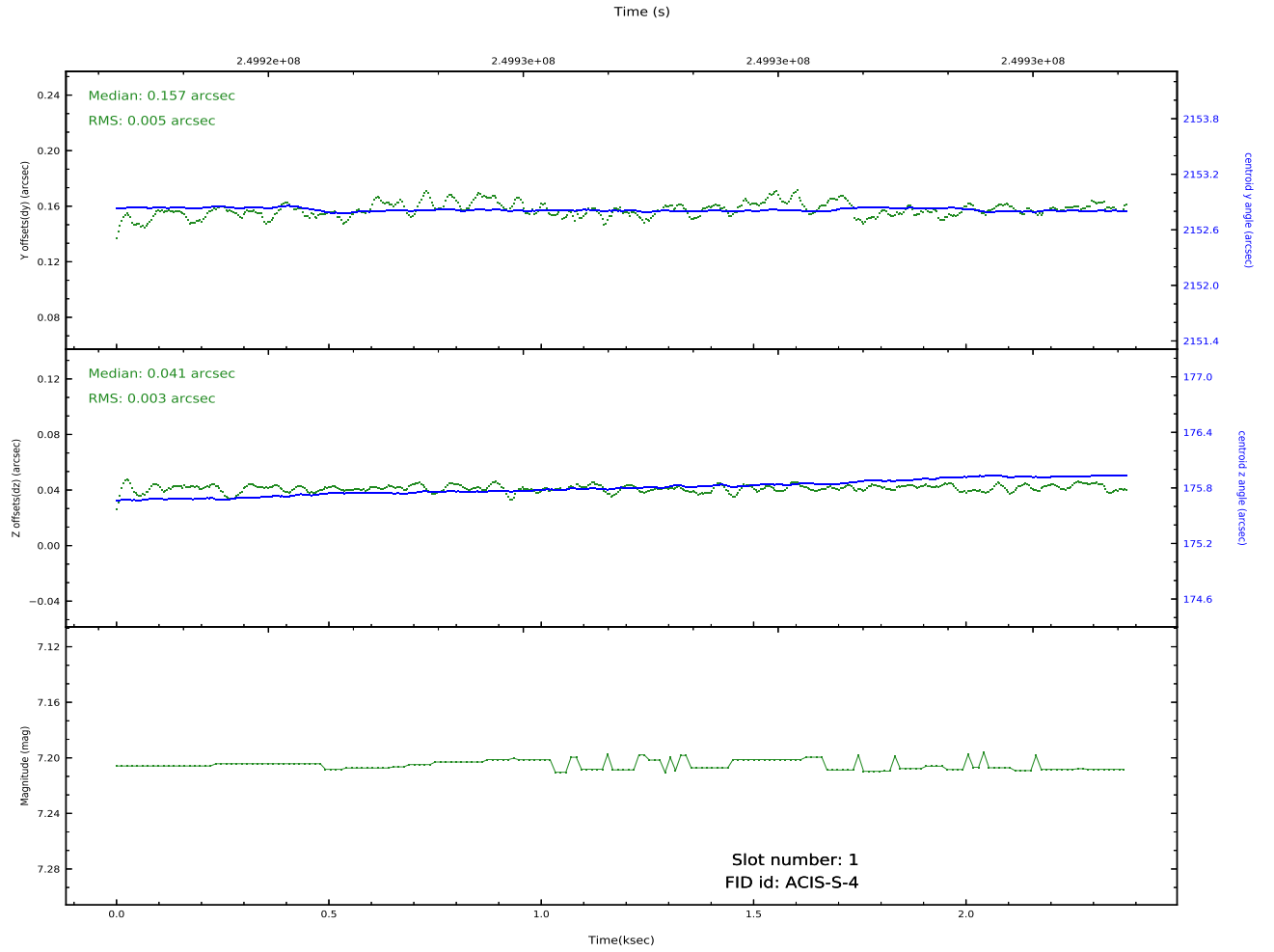
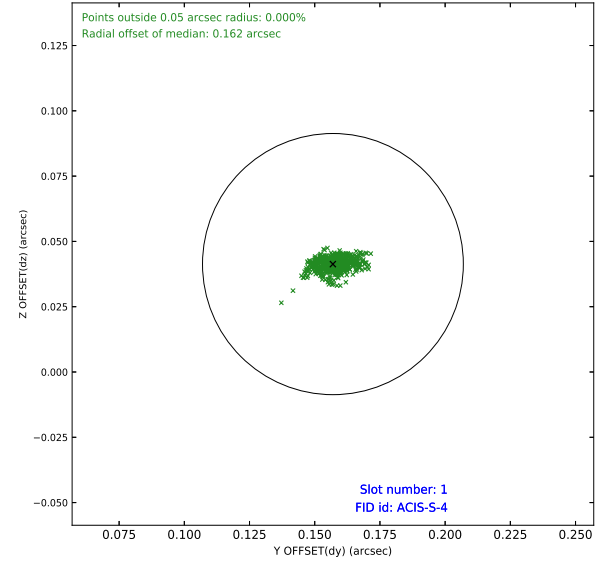
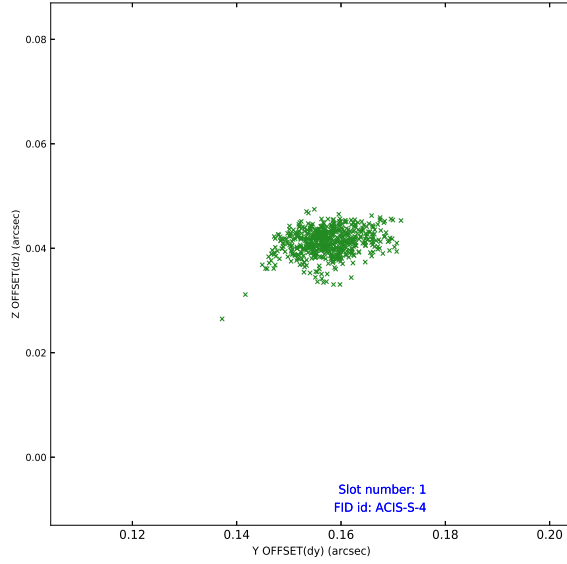


## 2.5 FID Slots

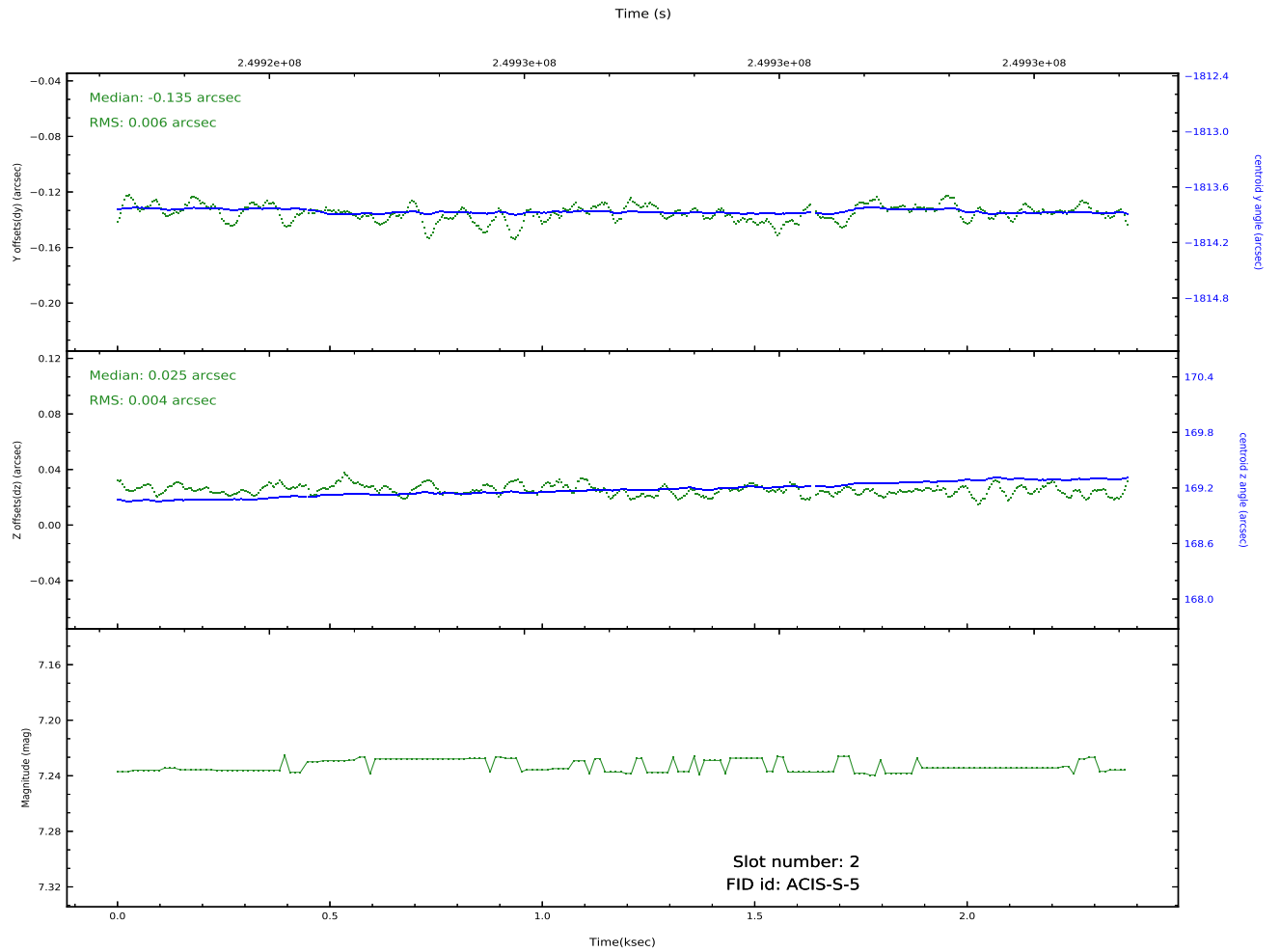
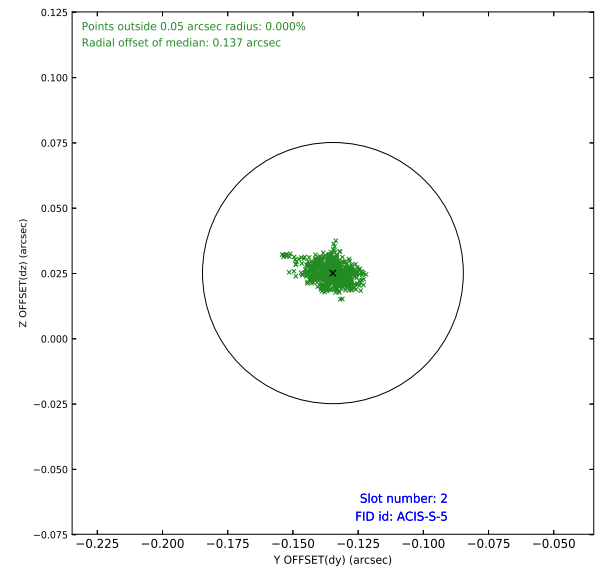
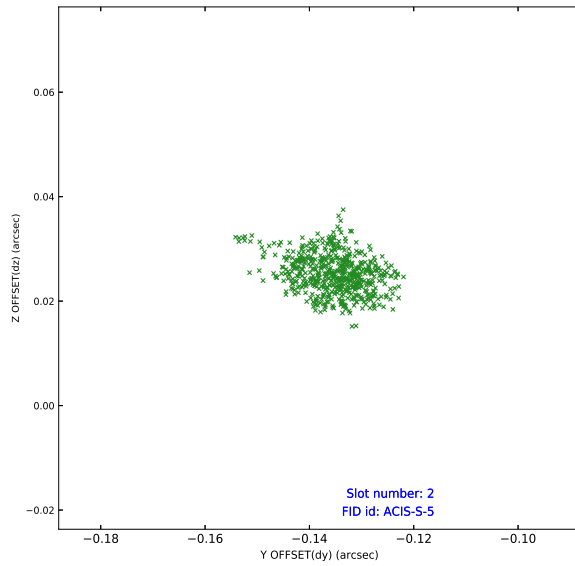
### 2.5.1 Slot 0



## 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)	2020.10.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.198399

## A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.