

# V&V Reference Report

## L2 ASCDS Version : 10.8.1

Observation 23171 - L2 Version 1  
Chandra X-Ray Center

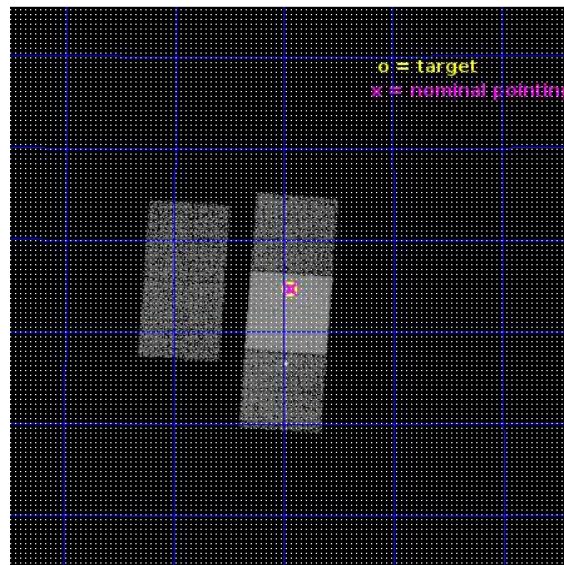
L2 Processing Date : Feb 17 2020

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# 1 Front

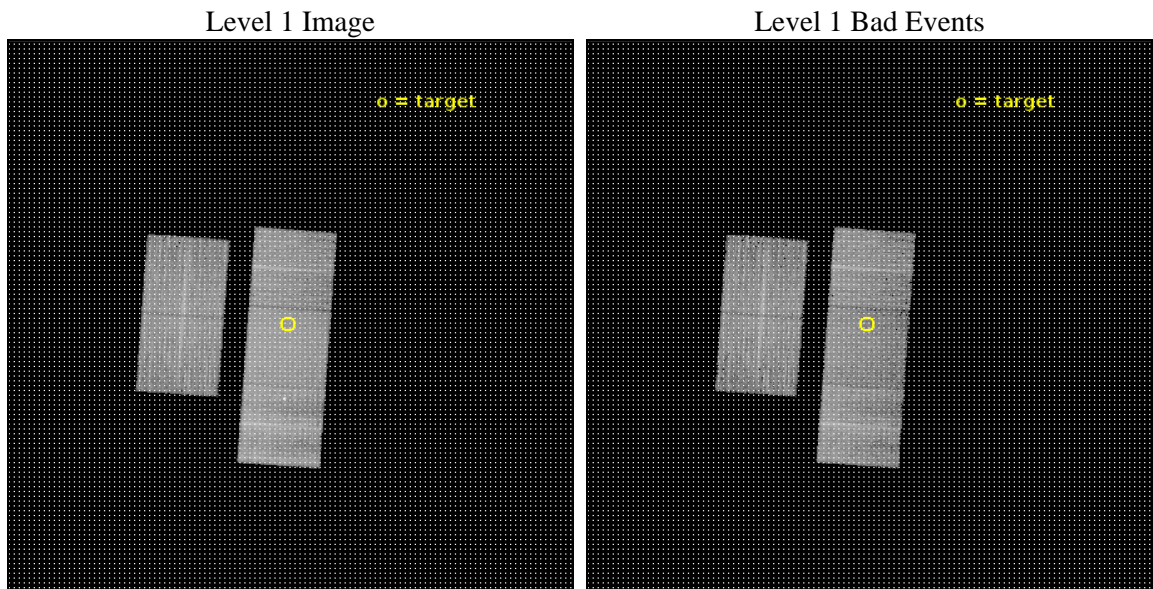
seq_num	503201	Sequence number
obs_id	23171	Observation id
title	A Candidate Low-luminosity Gamma-ray Burst Identified by an Early Optical Flash	Proposal title
observer	Anna Ho	Principal investigator
object	SN2020bvc	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.487548	Observer's specified target RA [deg]
dec_targ	40.243758	Observer's specified target Dec [deg]
ra_nom	218.482666137	Nominal RA [deg]
dec_nom	40.245368945357	Nominal Dec [deg]
roll_nom	94.112684965675	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10055.783659697	Sum of GTIs [s]
livetime	9924.3974432224	Livetime [s]
ontime2	10055.619499683	Sum of GTIs [s]
ontime3	10055.70157969	Sum of GTIs [s]
ontime6	10055.742619753	Sum of GTIs [s]
ontime7	10055.783659697	Sum of GTIs [s]
ontime8	10055.660539746	Sum of GTIs [s]
l2events	79162	Number of level 2 events



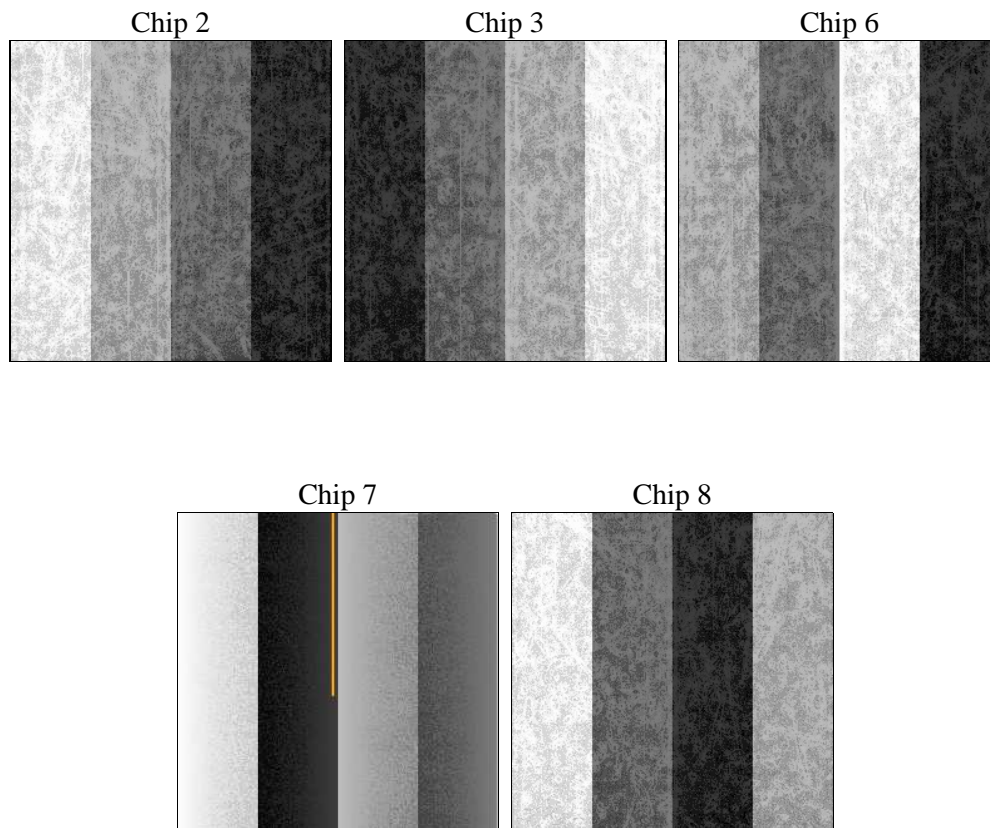
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	10055.783659697	Sum of GTIs [s]
caldbver	4.8.4.2	&#160	ontime2	10055.619499683	Sum of GTIs [s]
date	2020-02-17T05:49:32	Date and time of file creation	ontime3	10055.70157969	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10055.742619753	Sum of GTIs [s]
			ontime7	10055.783659697	Sum of GTIs [s]
			ontime8	10055.660539746	Sum of GTIs [s]
			l1events	446941	Number of level 1 events

### 2.1.4 Events

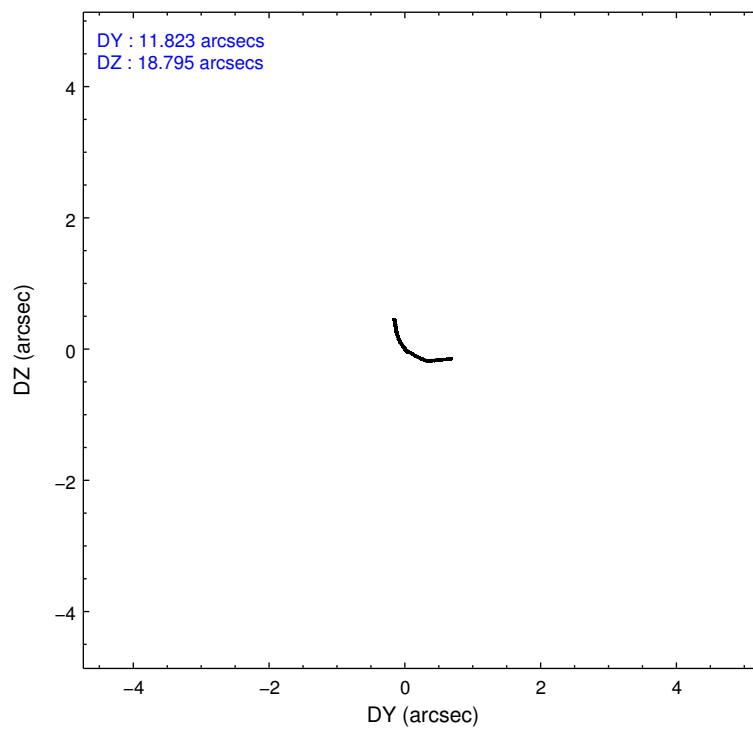
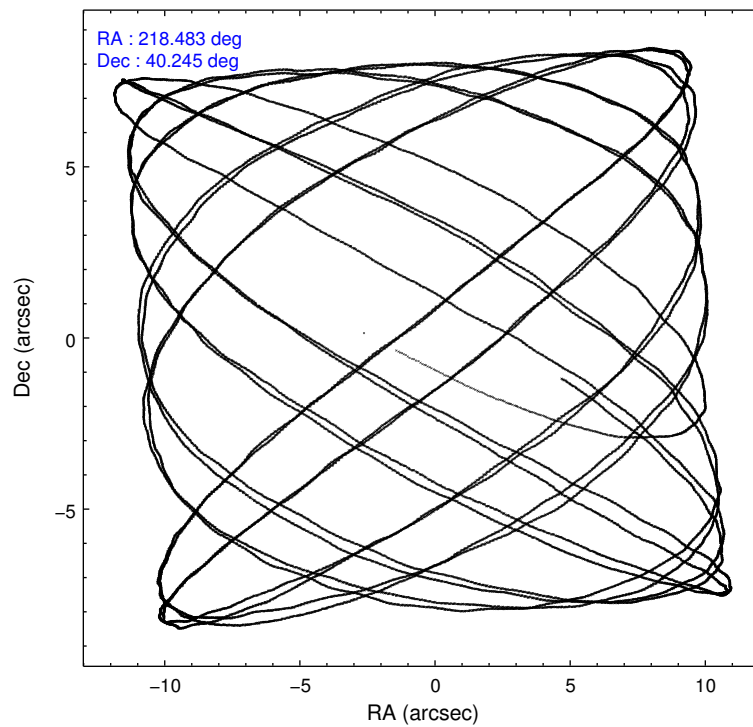
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	75913	76508	80302	103563	110655
rejected events	67224	67984	70986	58159	78740
rejected %	88%	88%	88%	56%	71%

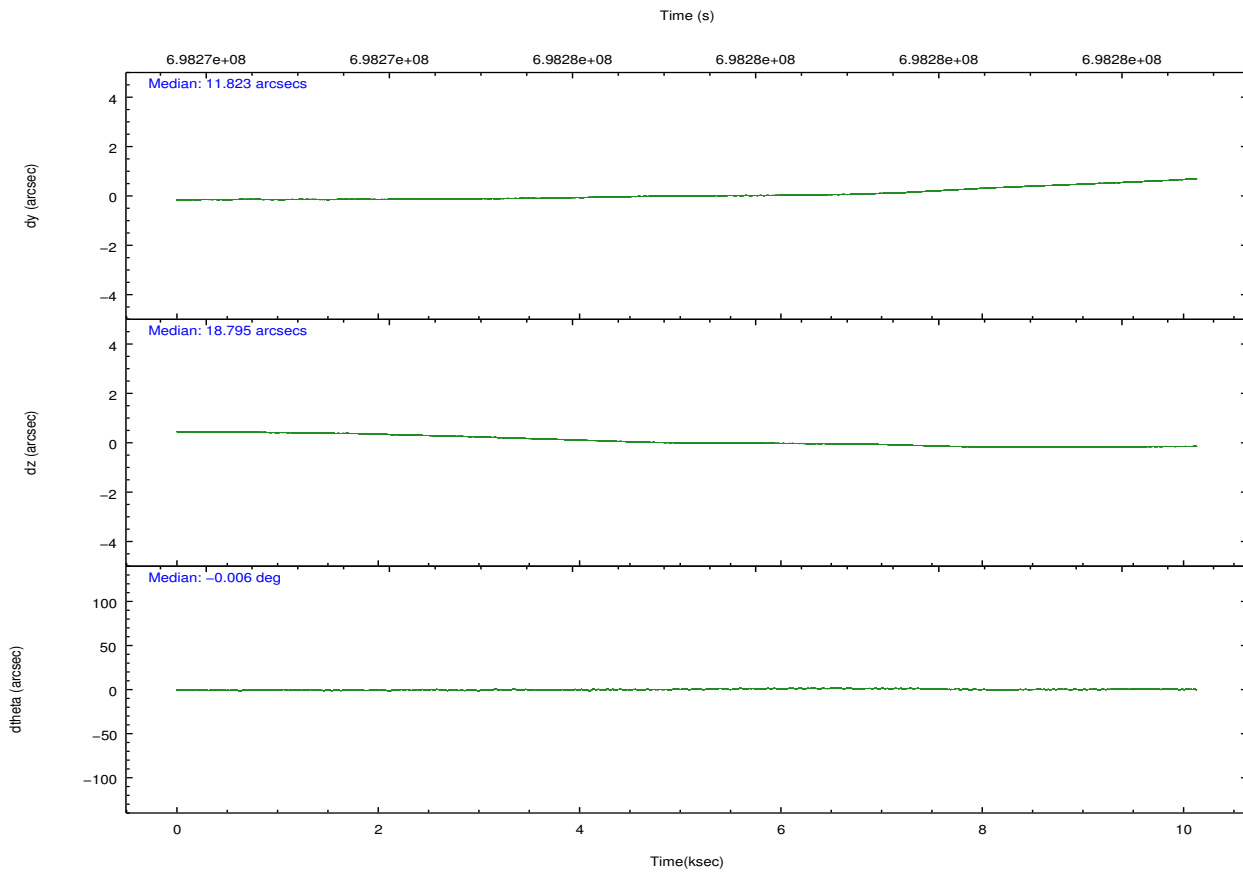
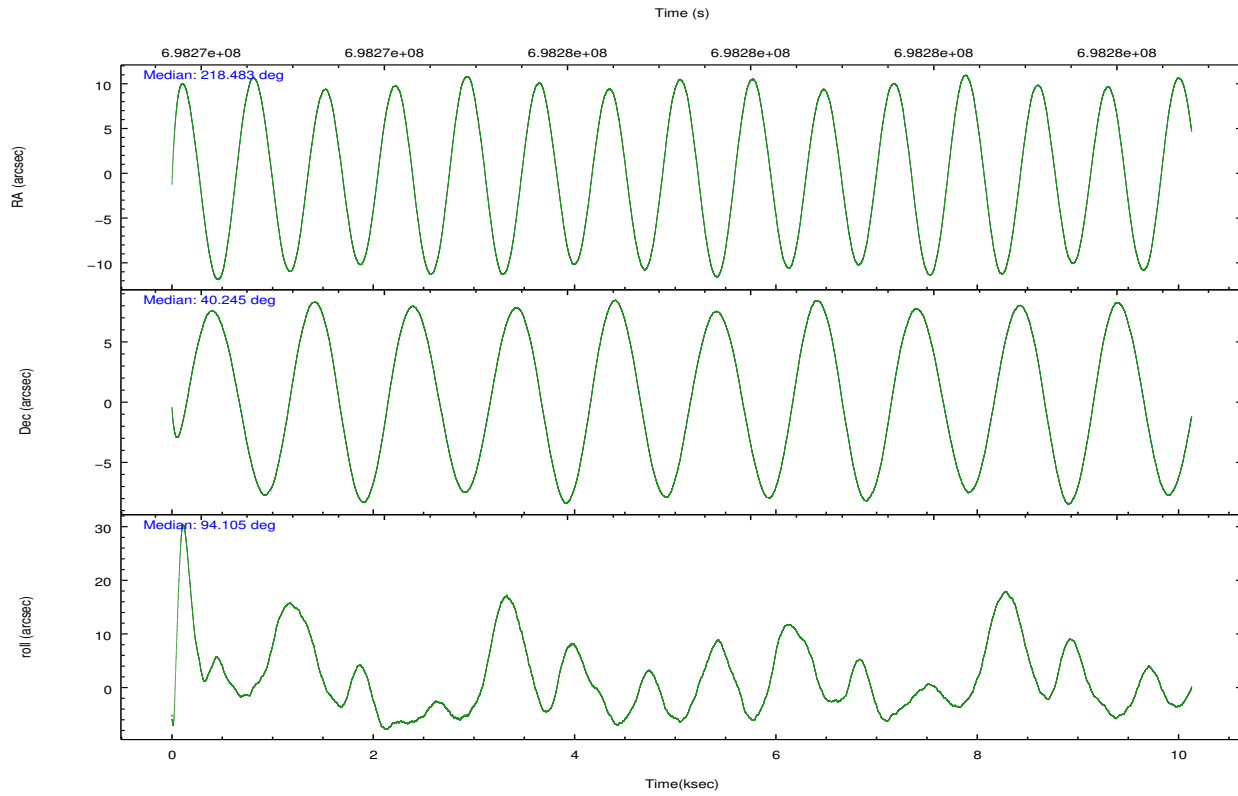
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3063	3123	3131	3966	10227
	4%	4%	3%	3%	9%
grade 1 events	46	52	41	148	102
	0%	0%	0%	0%	0%
grade 2 events	2190	1891	2163	9848	7574
	2%	2%	2%	9%	6%
grade 3 events	806	861	887	3522	2986
	1%	1%	1%	3%	2%
grade 4 events	921	856	943	3657	2785
	1%	1%	1%	3%	2%
grade 5 events	3318	3815	4016	10255	5879
	4%	4%	5%	9%	5%
grade 6 events	1713	1797	2195	24433	8353
	2%	2%	2%	23%	7%
grade 7 events	63856	64113	66926	47734	72749
	84%	83%	83%	46%	65%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	218.503177	218.4826661370036	CCD I2 on	O1	Y
[deg] Pointing Dec	40.222866	40.245368945357	CCD I3 on	Y	Y
[deg] Pointing Roll	93.942876	94.11268496567487	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	698272338.184000	698271242.00041	CCD S5 on	N	N
Observation start date	2020-02-16T20:31:09	2020-02-16T20:14:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	698282338.184000	698283003.87613	On-chip summing requested	N	N
Observation end date	2020-02-16T23:17:49	2020-02-16T23:30:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





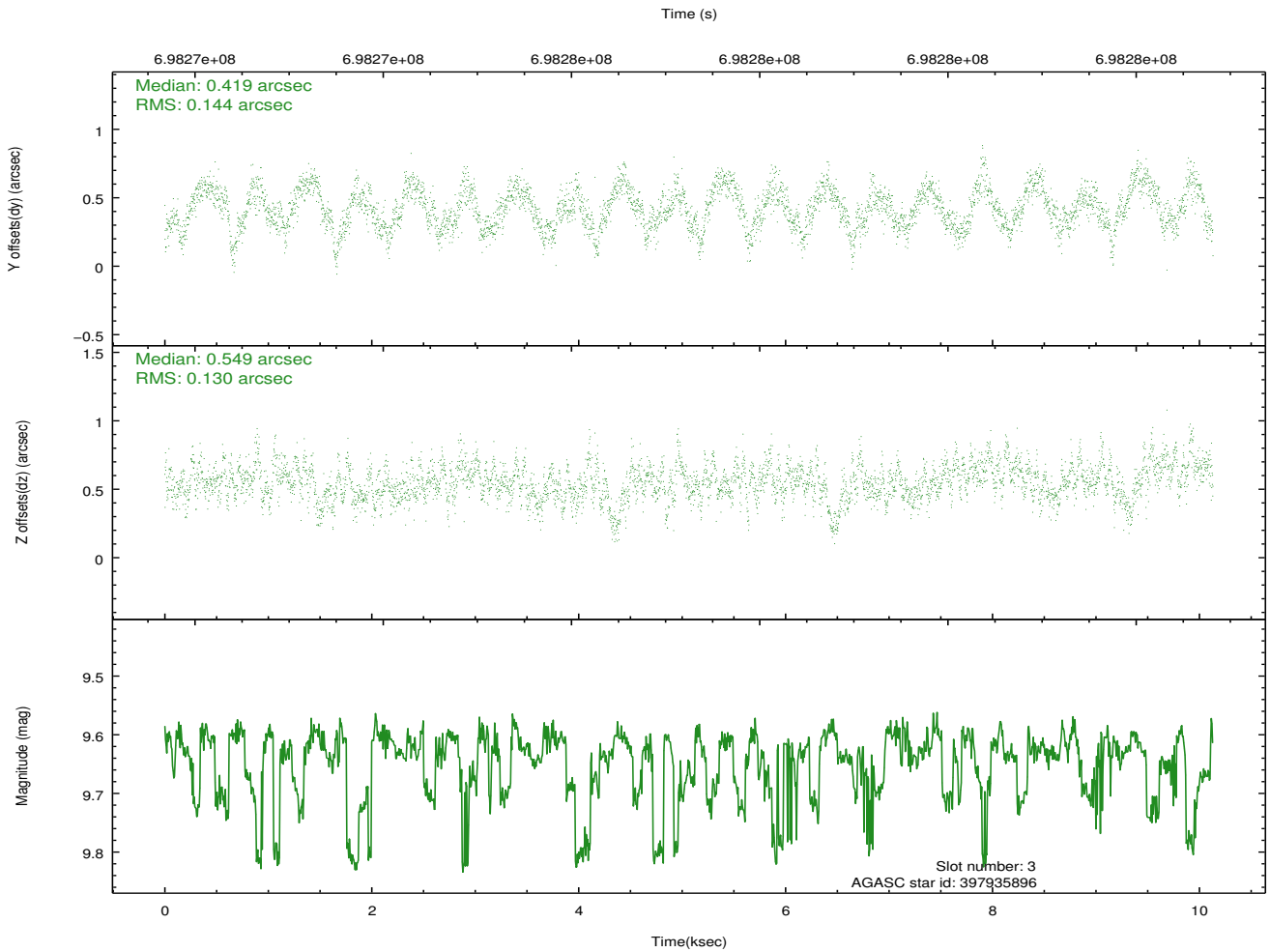
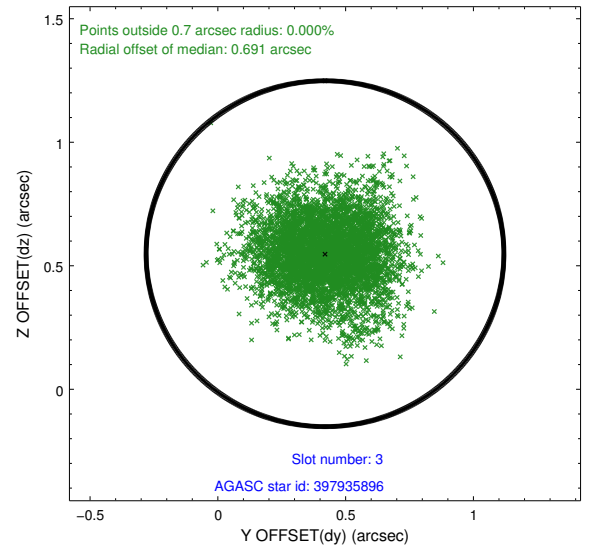
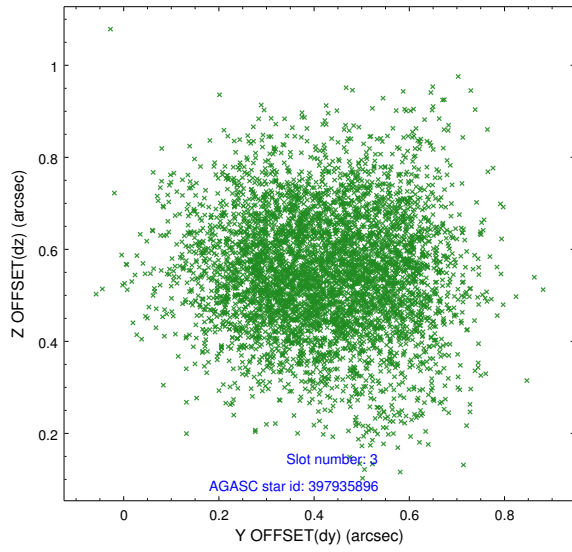
### Slot Statistics

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	6.96	2471	1.000	-0.243	-0.161	0.017	0.026	0.000000	0.000000	-764.98	-1740
1	FID		ACIS-S-4	7.09	2471	1.000	0.663	0.162	0.008	0.019	0.000000	0.000000	2148.91	167
2	FID		ACIS-S-5	7.07	2471	1.000	-0.446	0.010	0.020	0.035	0.000000	0.000000	-1817.41	161
3	GUIDE	used	397935896	9.64	4932	1.000	0.419	0.549	0.205	0.339	218.979782	39.931846	-1131.11	-1240
4	GUIDE	used	398329232	7.46	4943	1.000	-0.473	-0.367	0.081	0.123	218.233358	40.839867	2267.54	580
5	GUIDE	used	398331992	7.67	4943	1.000	0.391	0.342	0.087	0.147	219.049907	40.252311	7.93	-1505
6	GUIDE	used	398332440	8.78	4939	1.000	0.003	-0.280	0.118	0.200	218.348874	40.552435	1213.93	339
7	GUIDE	used	398332664	8.71	4937	1.000	-0.336	-0.231	0.123	0.217	217.886680	40.371455	655.12	1649

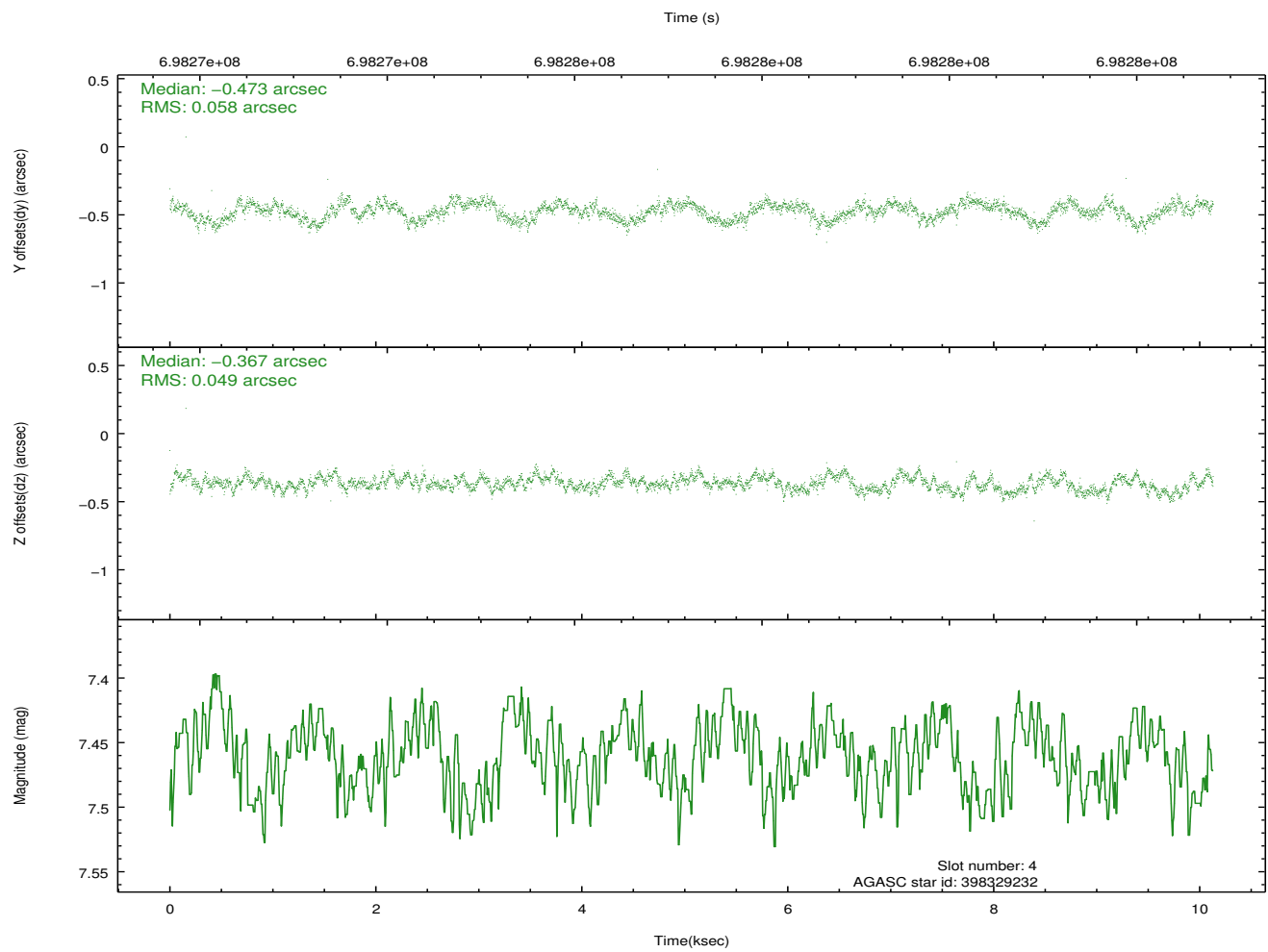
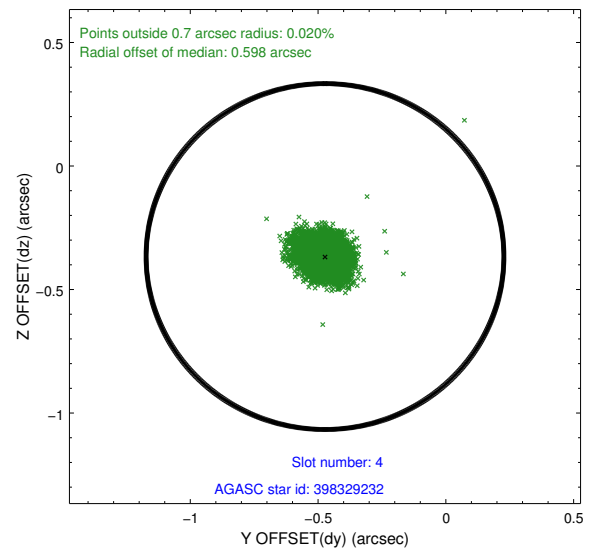
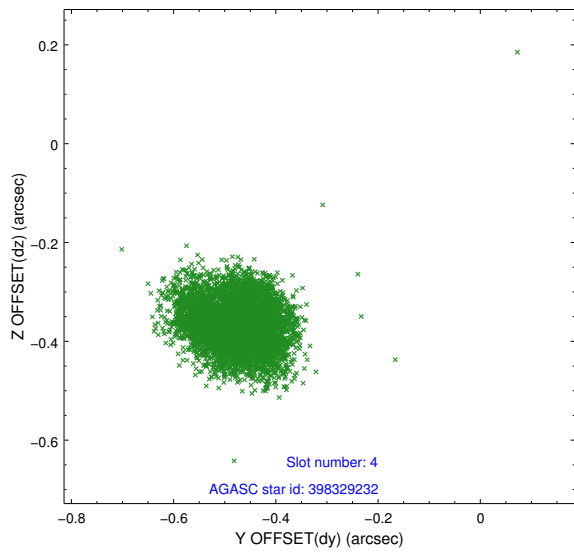
∞

## 2.4 Star Slots

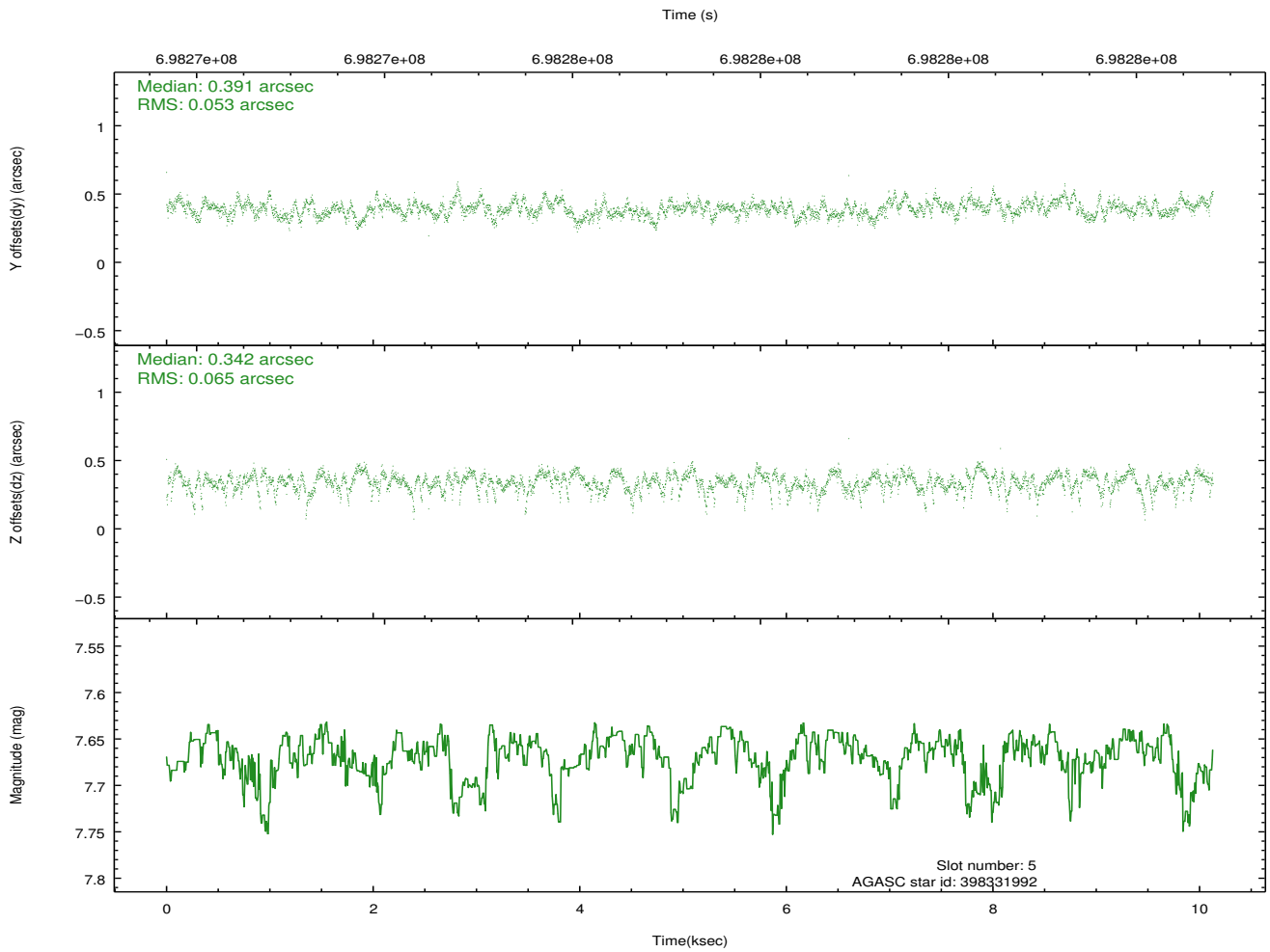
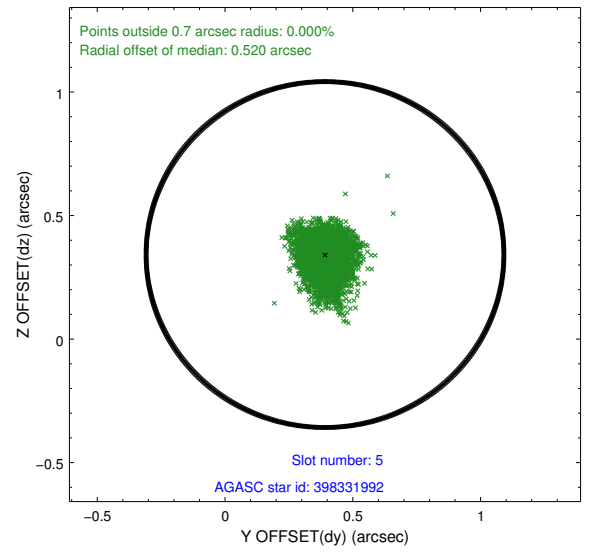
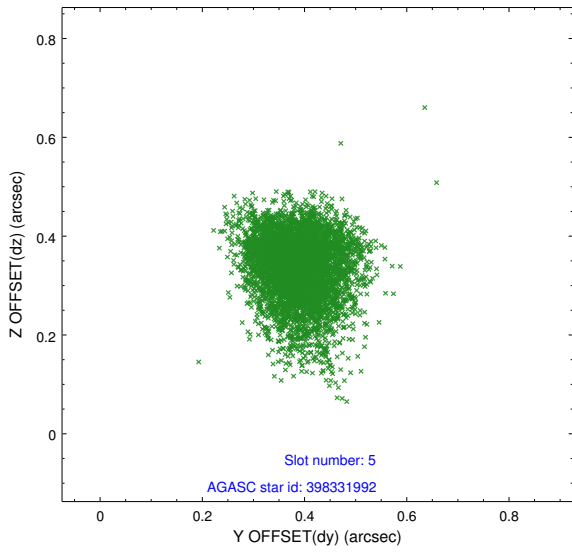
### 2.4.1 Slot 3



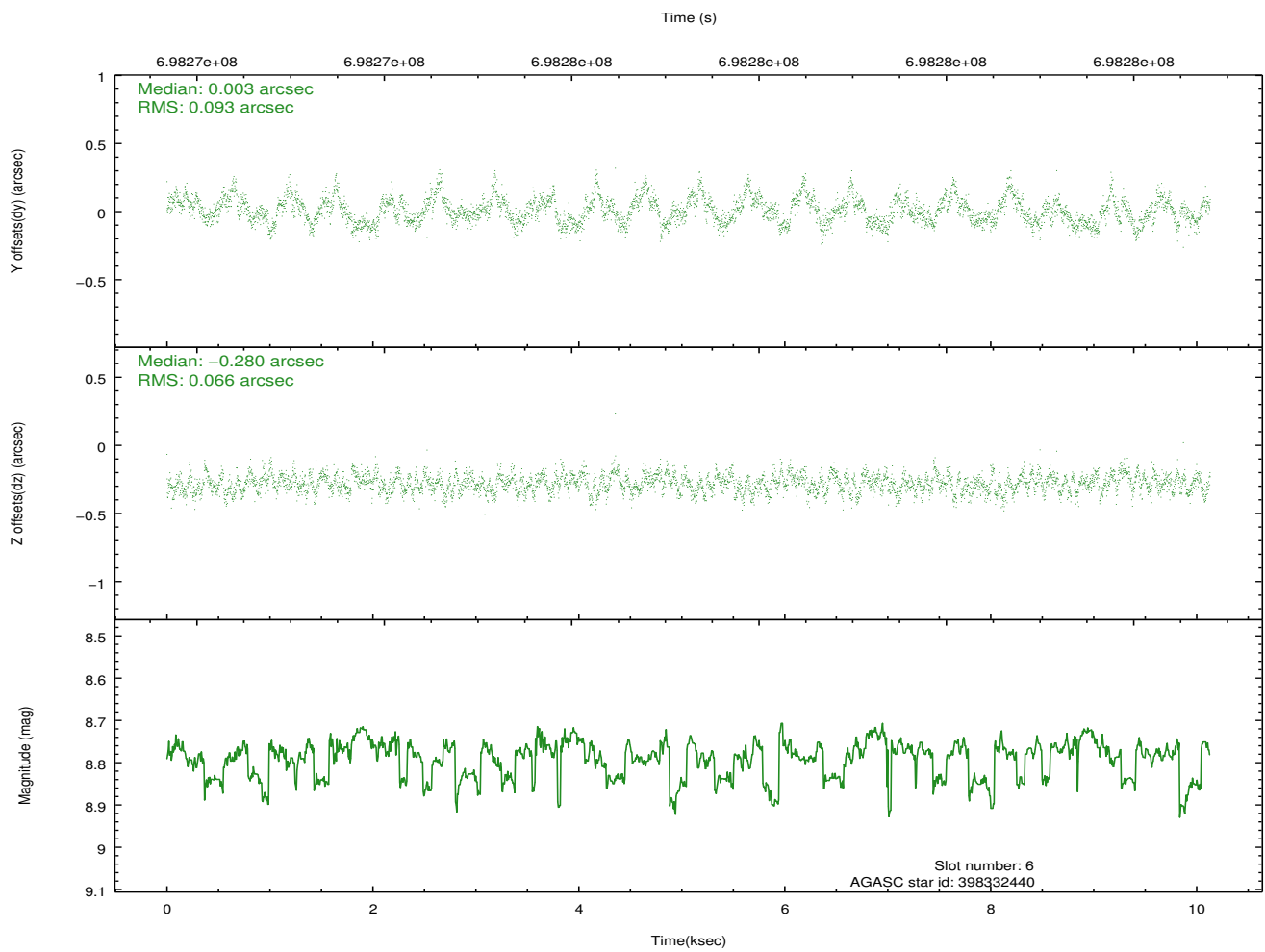
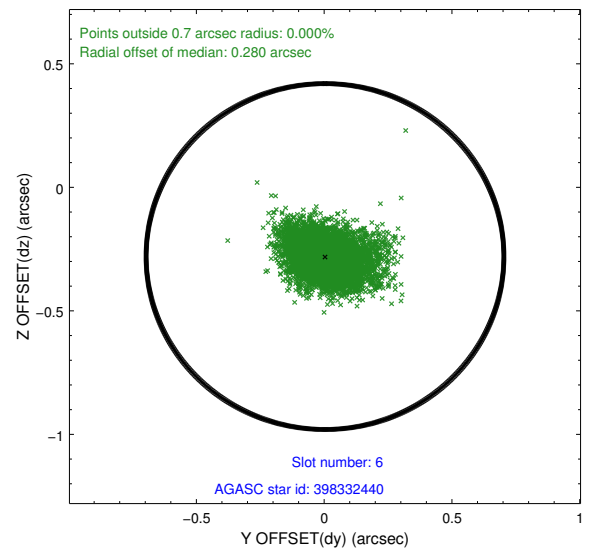
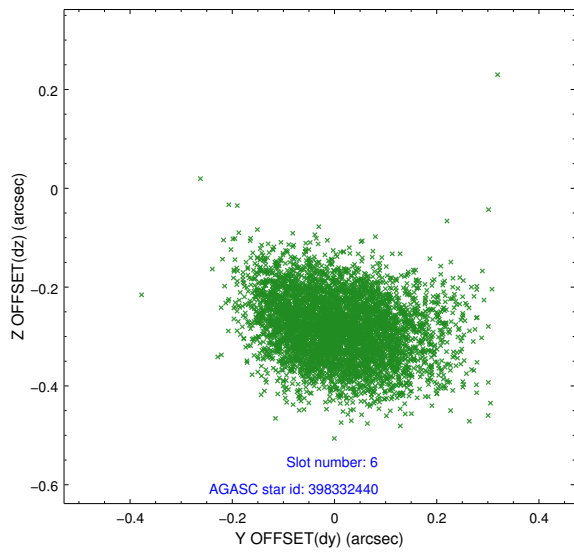
## 2.4.2 Slot 4



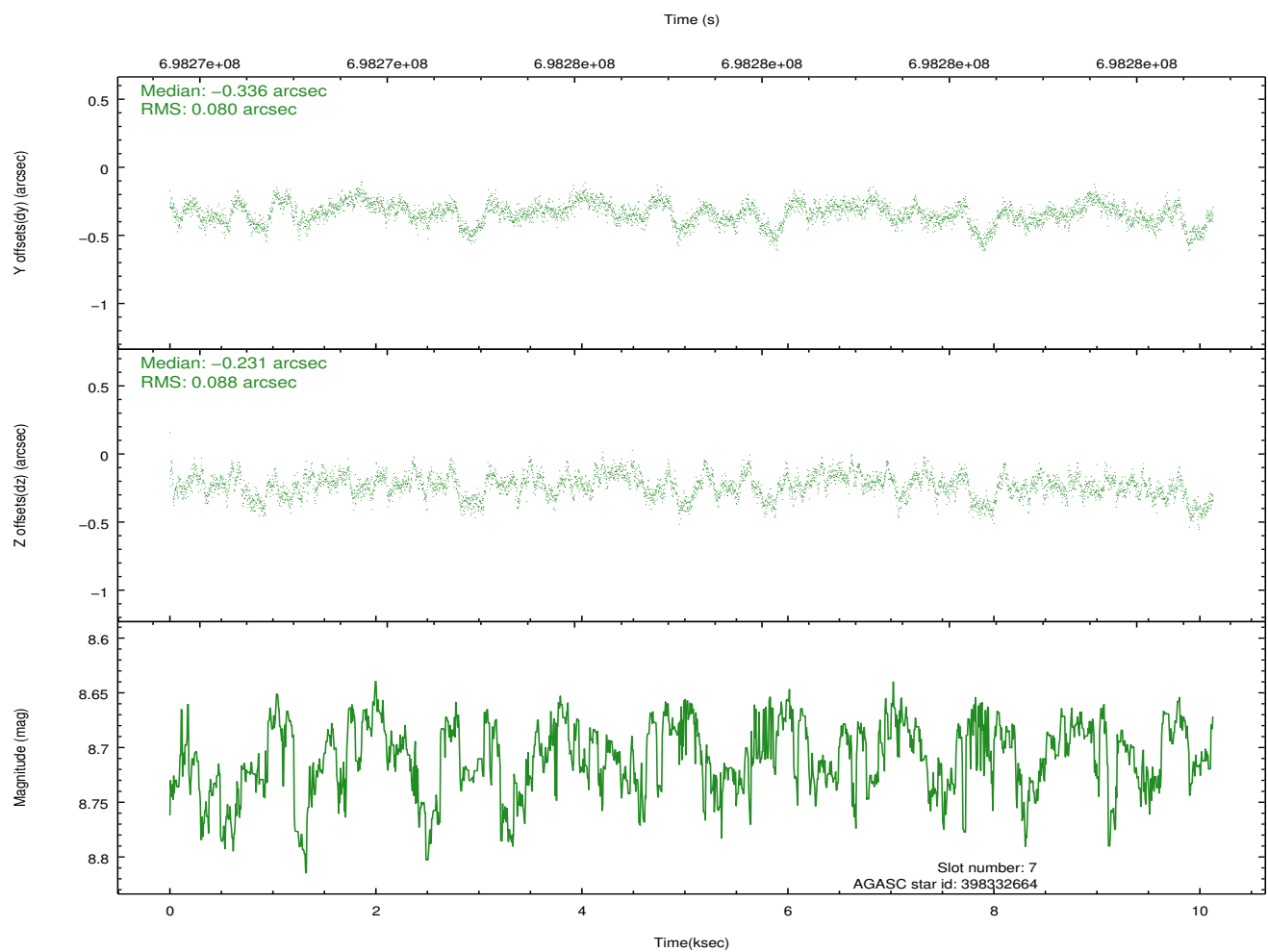
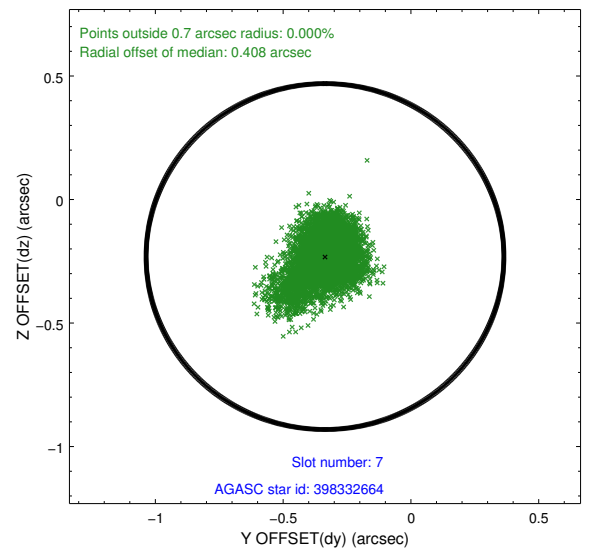
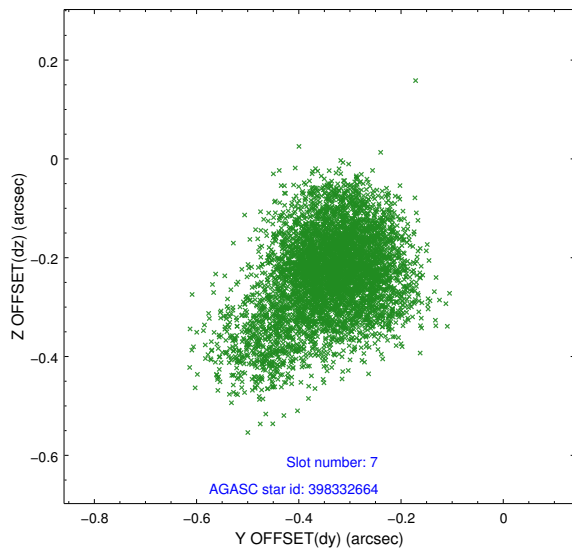
### 2.4.3 Slot 5



## 2.4.4 Slot 6

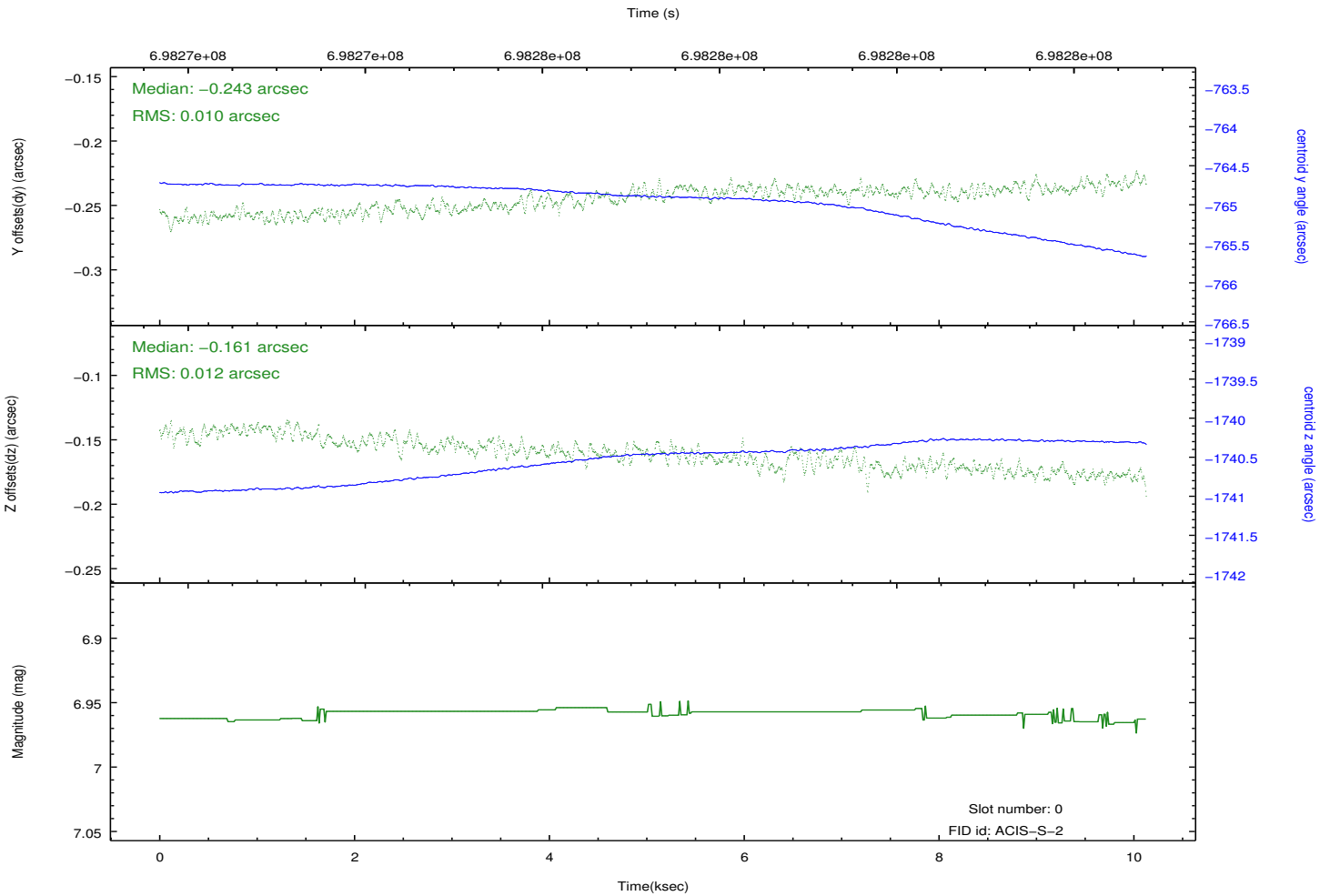
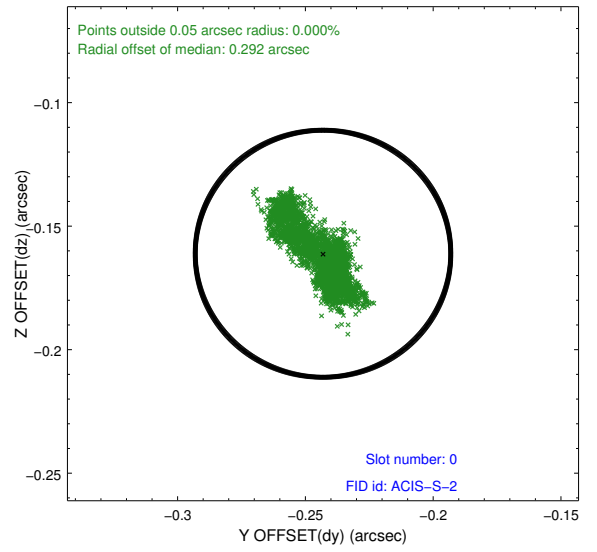
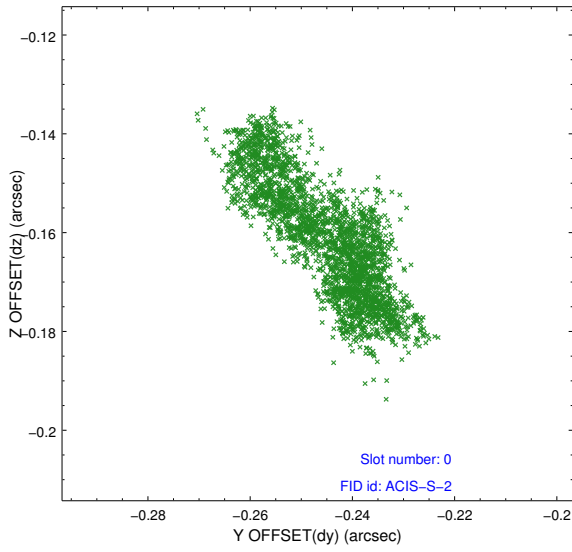


## 2.4.5 Slot 7

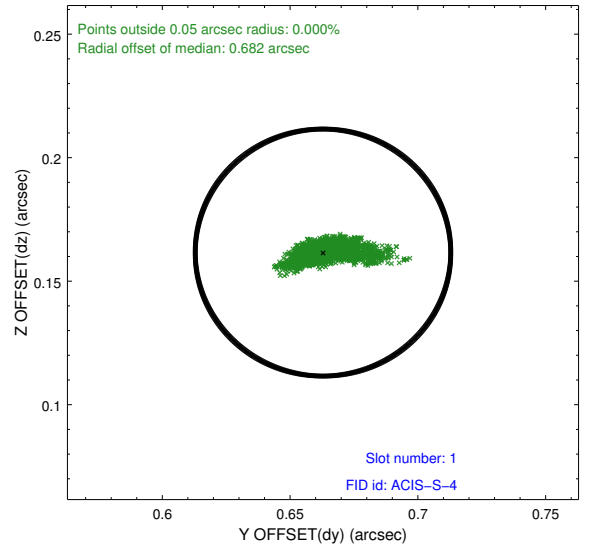
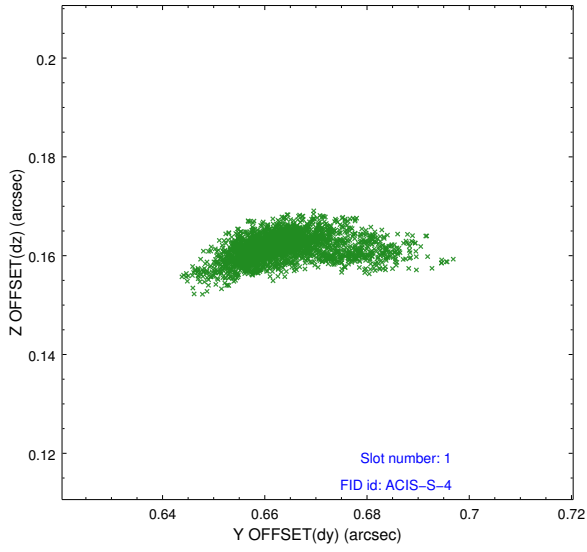


## 2.5 FID Slots

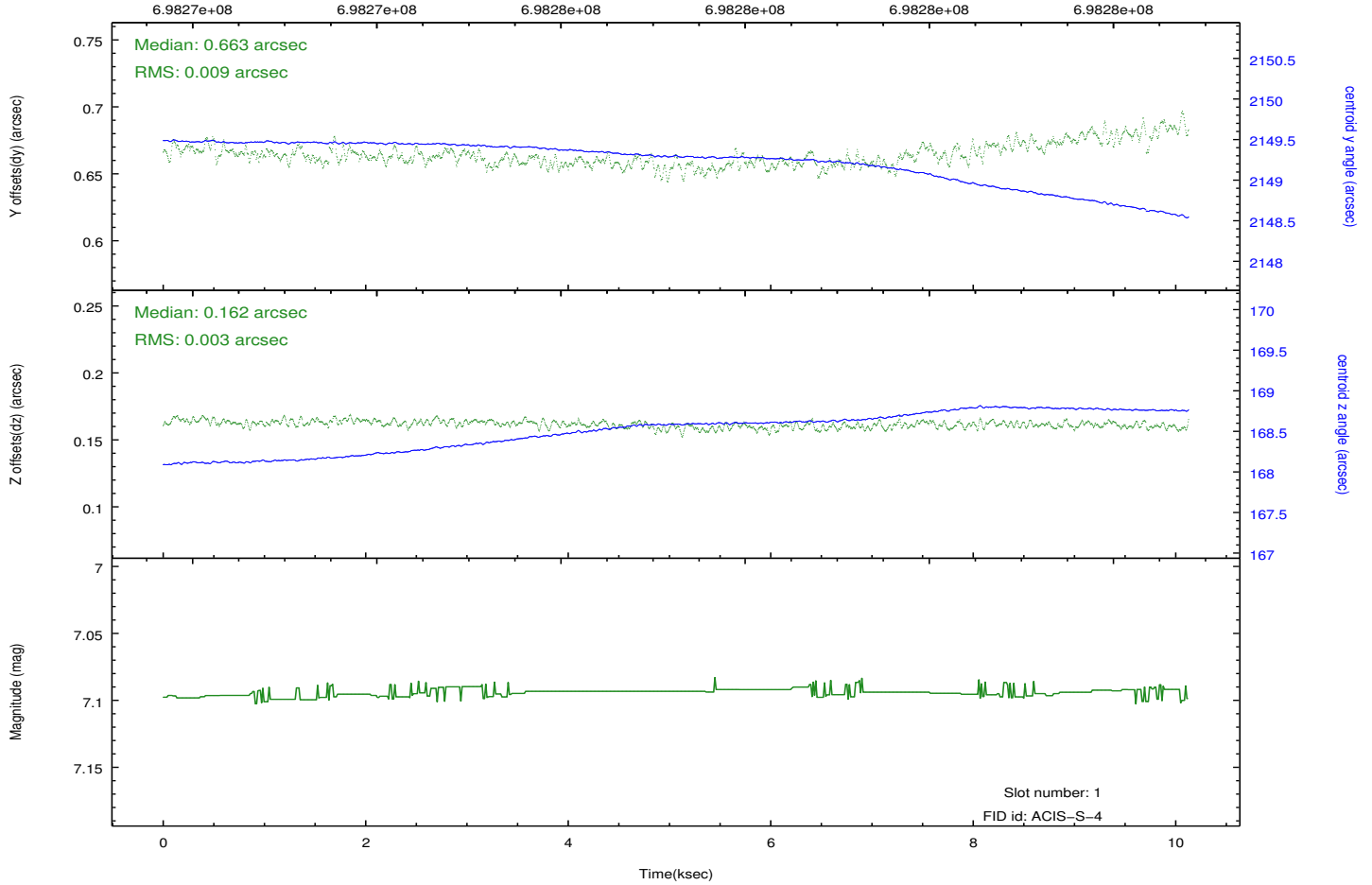
### 2.5.1 Slot 0



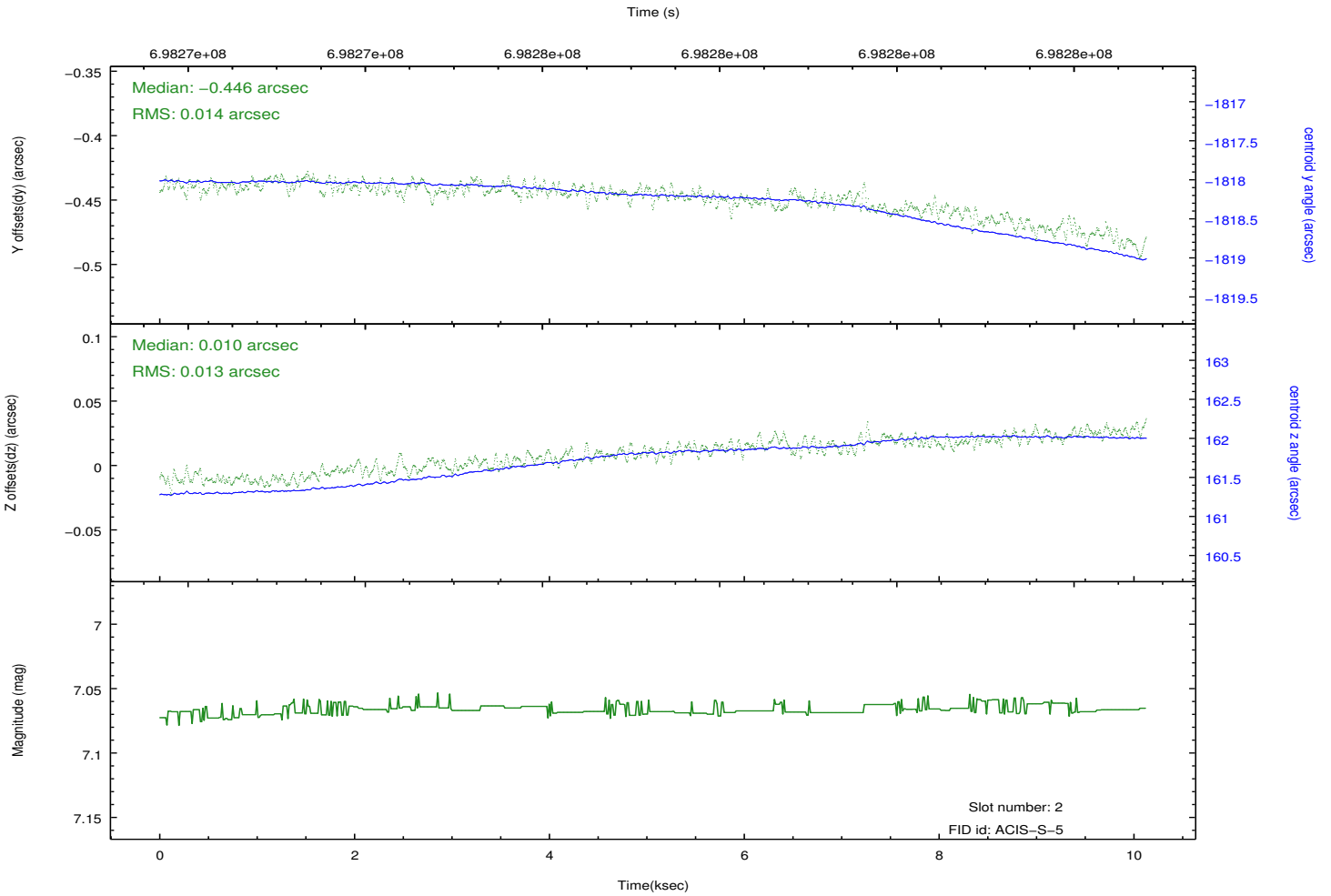
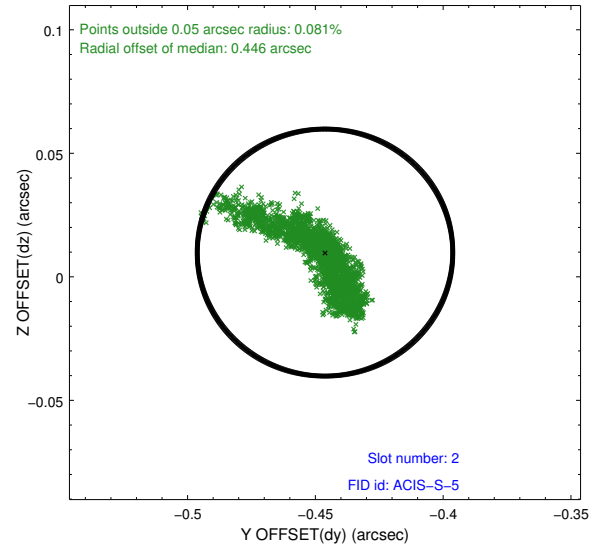
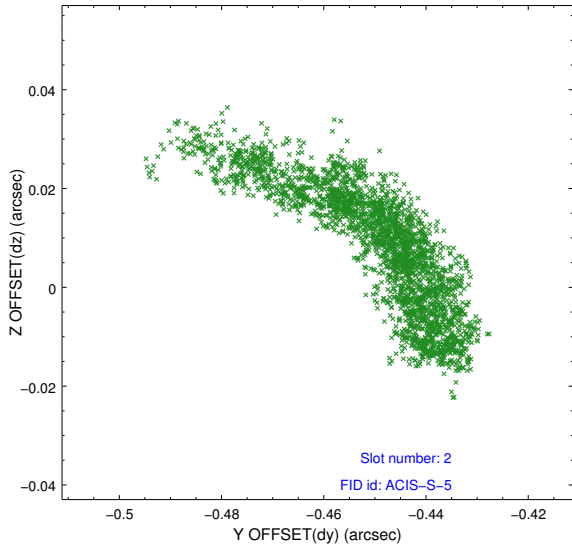
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Francesca Civano
V&V Date (YYYY-MM-DD)	2020.02.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.055783659697

### A.2 Comments