

# V&V Reference Report

## L2 ASCDS Version : 10.8.1

Observation 23172 - L2 Version 1  
Chandra X-Ray Center

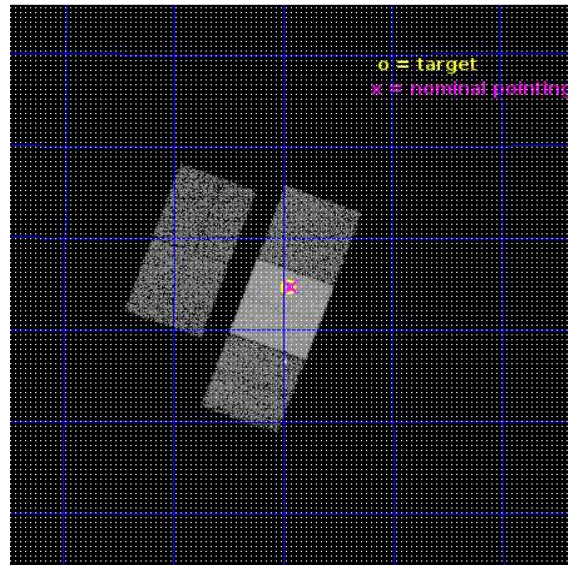
L2 Processing Date : Feb 29 2020

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# 1 Front

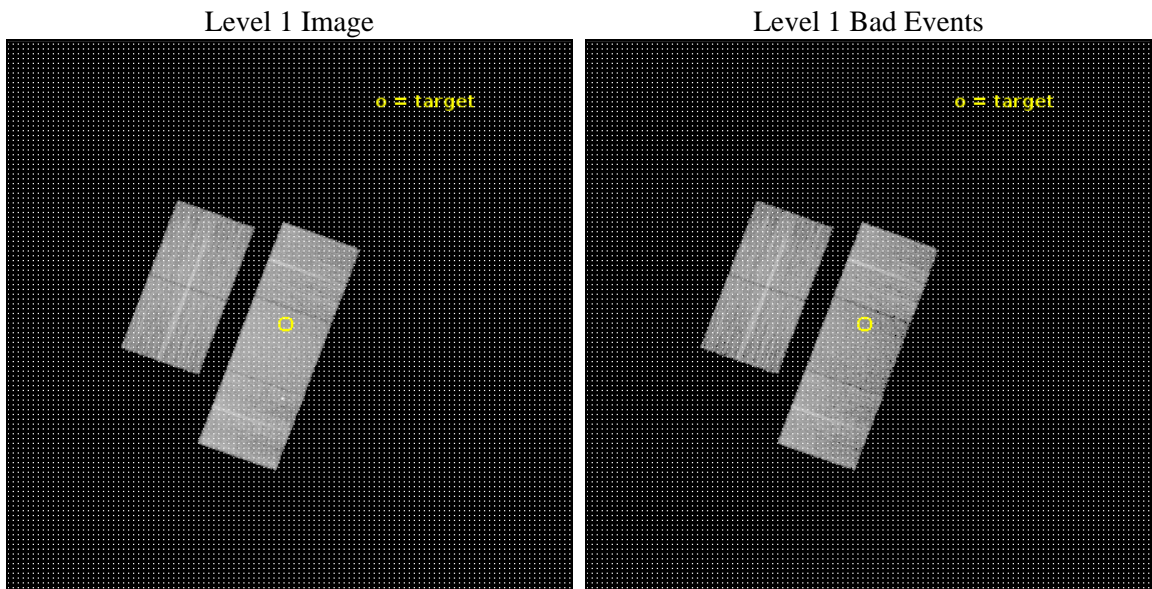
seq_num	503202	Sequence number
obs_id	23172	Observation id
title	A Candidate Low-luminosity Gamma-ray Burst Identified by an Early Optical Flash	Proposal title
observer	Anna Ho	Principal investigator
object	SN2020bvc	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.487548	Observer's specified target RA [deg]
dec_targ	40.243758	Observer's specified target Dec [deg]
ra_nom	218.48099143521	Nominal RA [deg]
dec_nom	40.245262626415	Nominal Dec [deg]
roll_nom	110.16095847449	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10050.200077415	Sum of GTIs [s]
liveltime	9918.8868145534	Livetime [s]
ontime2	10050.200077415	Sum of GTIs [s]
ontime3	10050.200077415	Sum of GTIs [s]
ontime6	10050.200077415	Sum of GTIs [s]
ontime7	10050.200077415	Sum of GTIs [s]
ontime8	10047.059007287	Sum of GTIs [s]
l2events	73685	Number of level 2 events



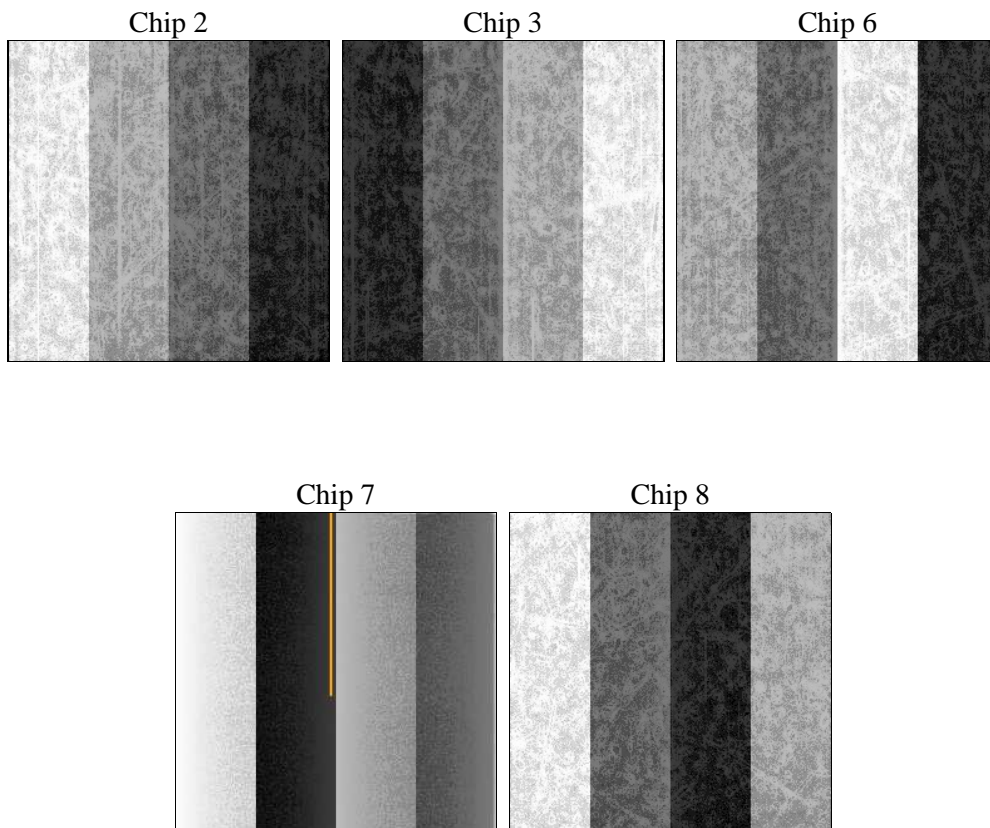
## 2 OBI

### 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	10050.200077415	Sum of GTIs [s]
caldsver	4.8.4.2	&#160	ontime2	10050.200077415	Sum of GTIs [s]
date	2020-02-29T13:30:12	Date and time of file creation	ontime3	10050.200077415	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10050.200077415	Sum of GTIs [s]
			ontime7	10050.200077415	Sum of GTIs [s]
			ontime8	10047.059007287	Sum of GTIs [s]
			l1events	454384	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	81096	79847	84637	103986	104818
rejected events	73213	71925	75758	59858	79016
rejected %	90%	90%	89%	57%	75%

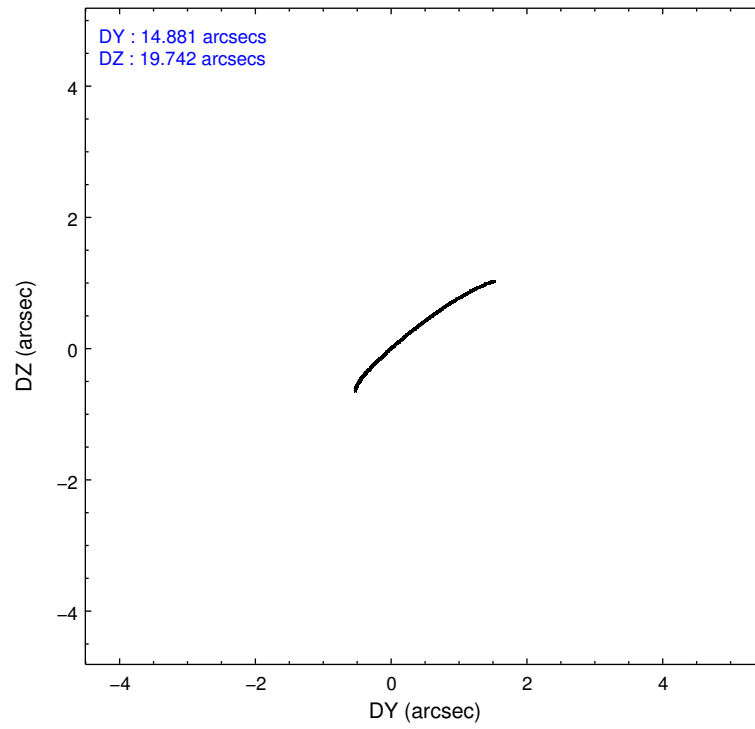
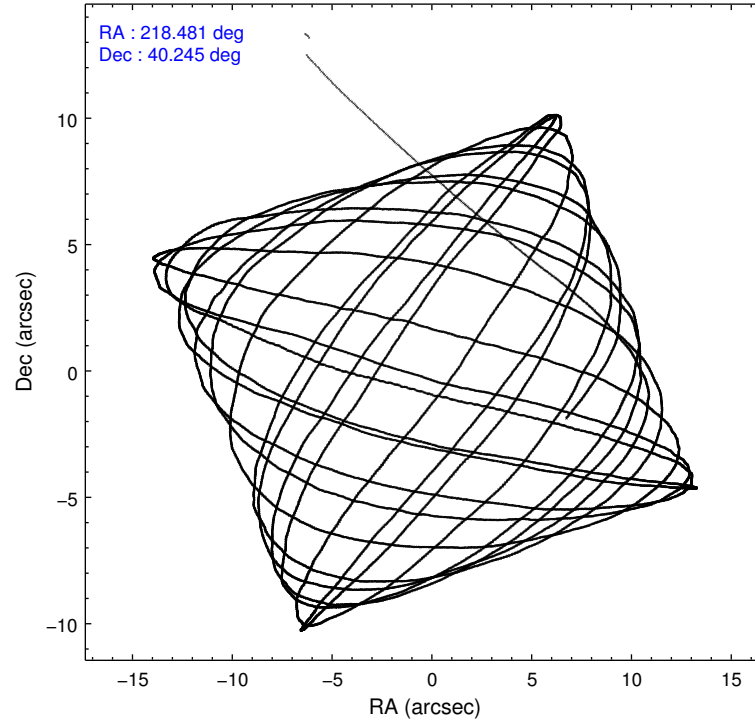
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2716	2538	2341	3596	7832
	3%	3%	2%	3%	7%
grade 1 events	62	39	39	156	79
	0%	0%	0%	0%	0%
grade 2 events	1956	1874	2627	9332	6382
	2%	2%	3%	8%	6%
grade 3 events	755	815	668	3388	2371
	0%	1%	0%	3%	2%
grade 4 events	760	792	687	3282	2214
	0%	0%	0%	3%	2%
grade 5 events	2819	3312	3255	9730	5137
	3%	4%	3%	9%	4%
grade 6 events	1701	1908	2566	24552	7027
	2%	2%	3%	23%	6%
grade 7 events	70327	68569	72454	49950	73776
	86%	85%	85%	48%	70%

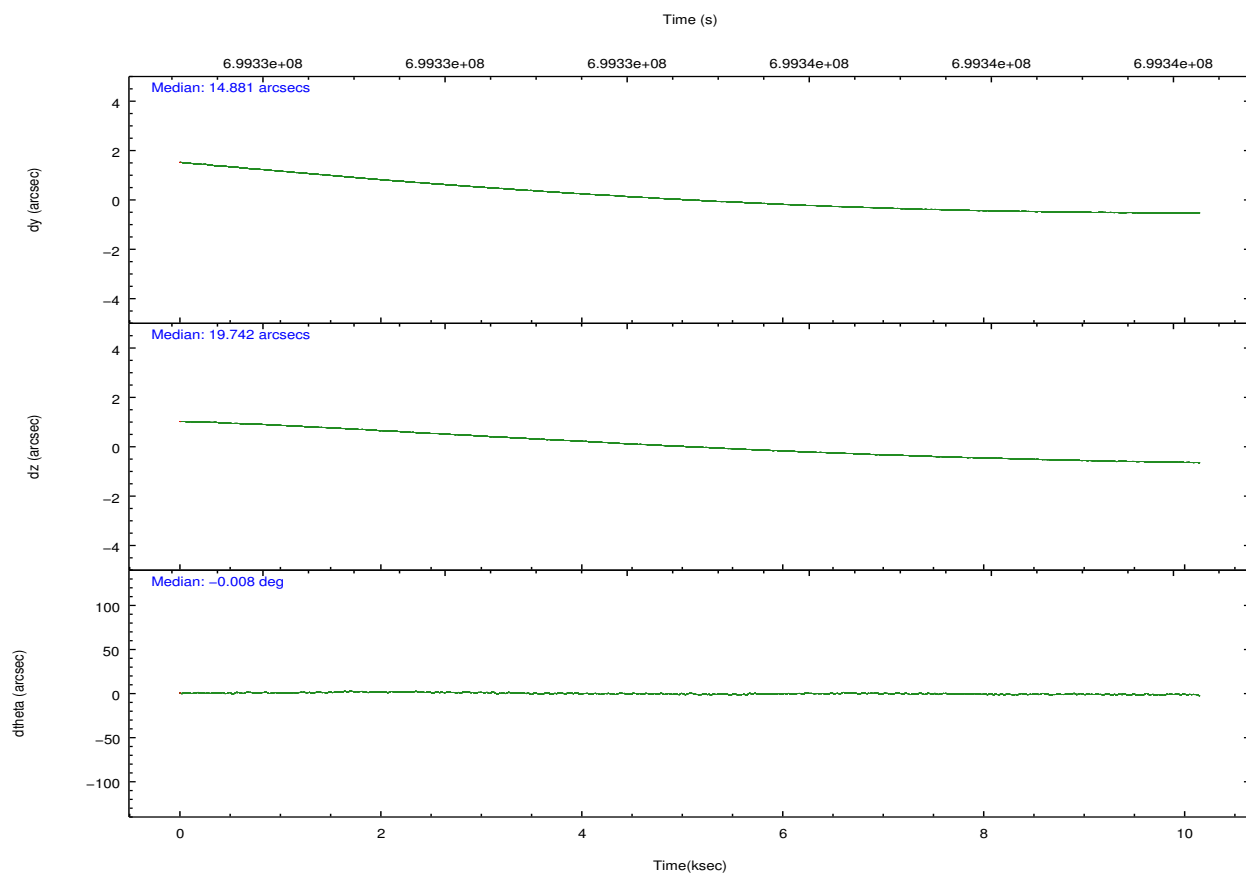
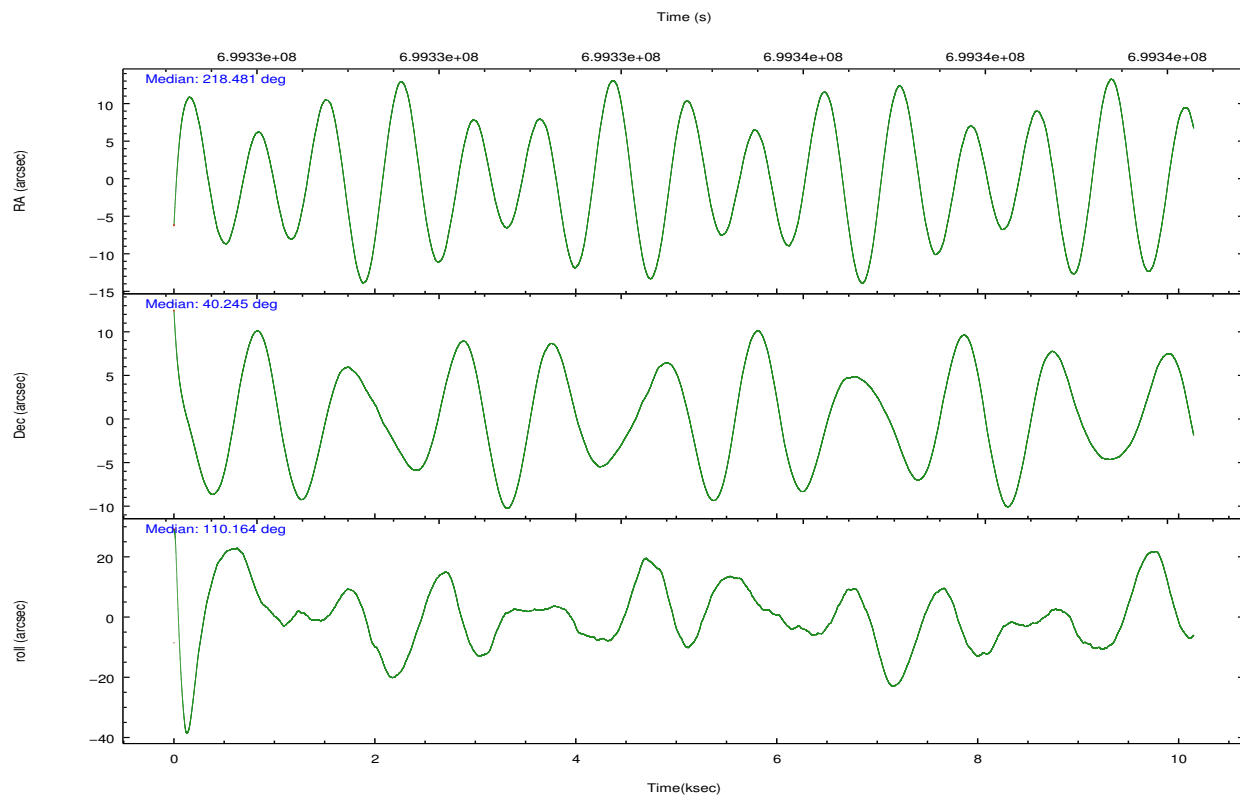


## 2.2 Compared Parameters

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	218.508862	218.4809914352091	CCD I2 on	O1	Y
[deg] Pointing Dec	40.227947	40.24526262641522	CCD I3 on	Y	Y
[deg] Pointing Roll	109.986231	110.1609584744921	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)	699329772.184000	699328703.81445	CCD S5 on	N	N
Observation start date	2020-02-29T02:15:03	2020-02-29T01:58:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	699339772.184000	699340545.64016	On-chip summing requested	N	N
Observation end date	2020-02-29T05:01:43	2020-02-29T05:15:45	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



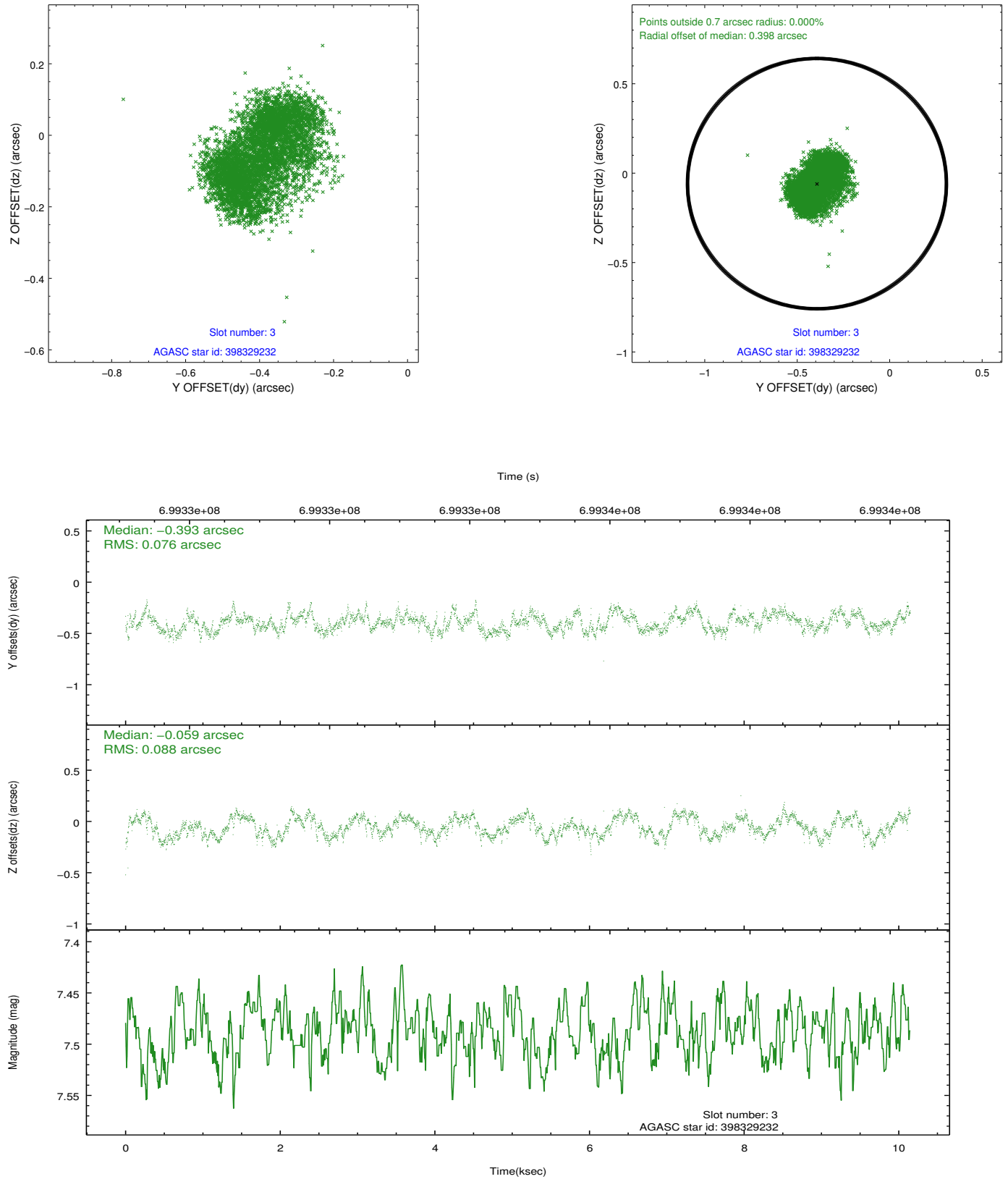


Slot Statistics

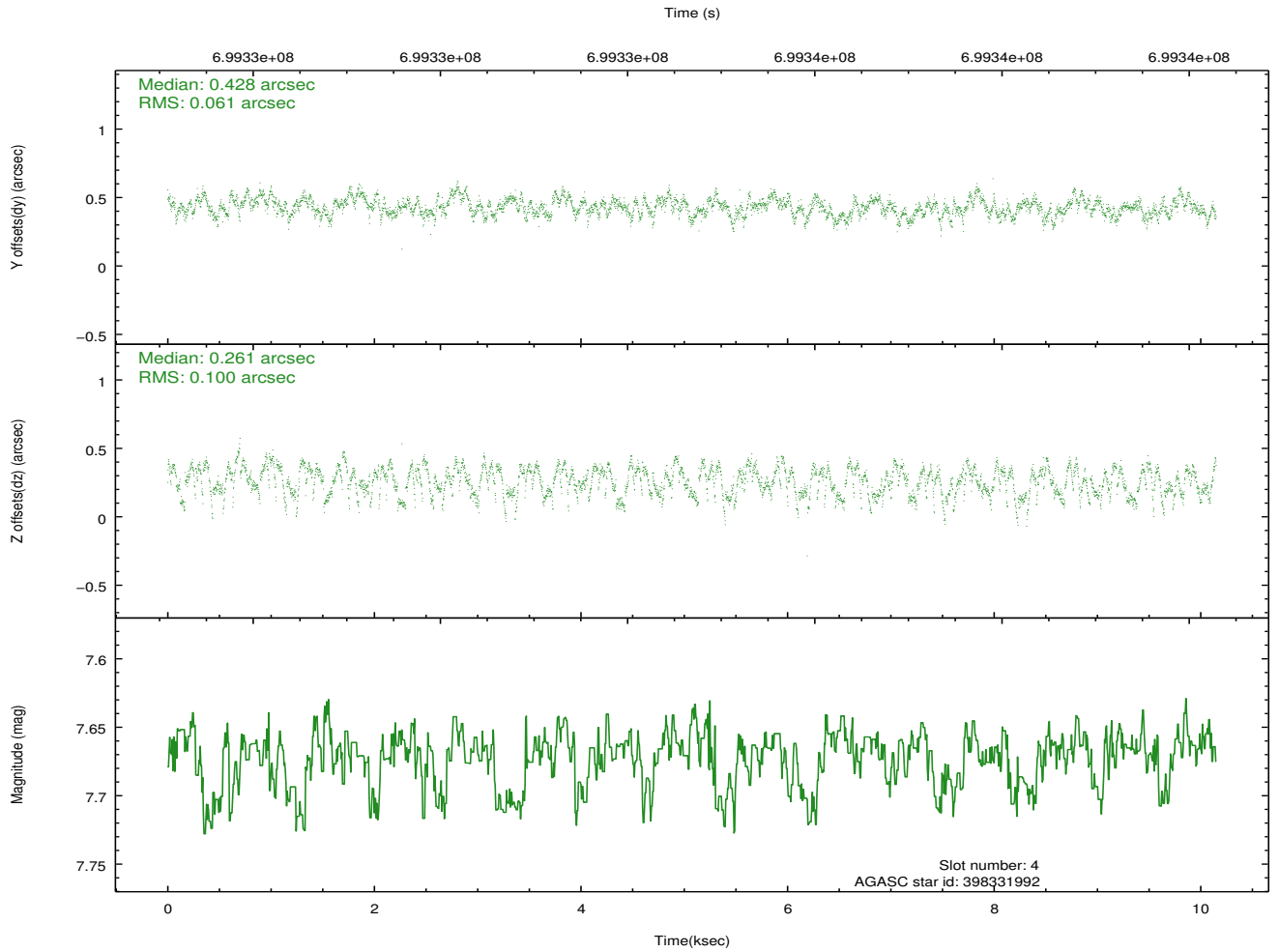
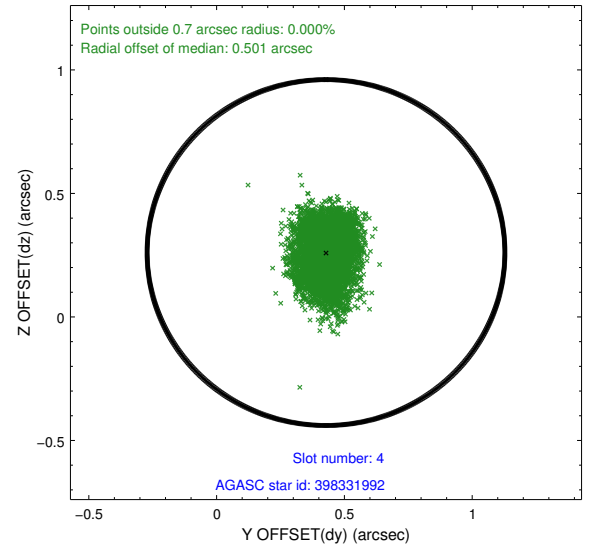
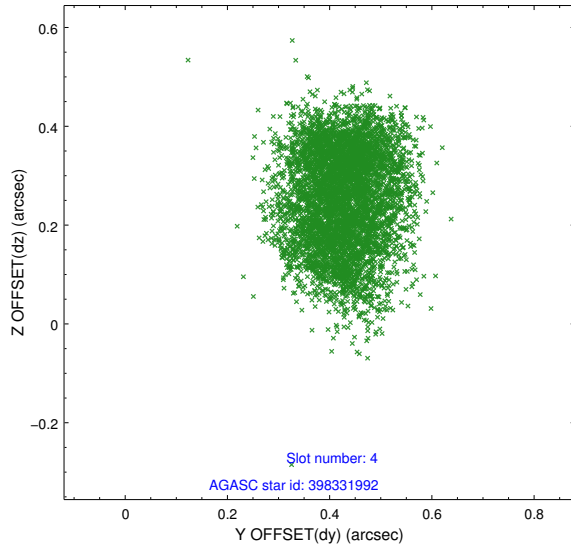
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.24	2476	1.000	0.232	-0.092	0.030	0.047	0.000000	0.000000	928.32	-1736
1	FID		ACIS-S-5	7.23	2476	1.000	-0.581	0.084	0.022	0.031	0.000000	0.000000	-1821.27	160
2	FID		ACIS-S-6	7.40	2476	1.000	0.320	0.020	0.043	0.054	0.000000	0.000000	393.30	804
3	GUIDE	used	398329232	7.49	4952	1.000	-0.393	-0.059	0.129	0.181	218.233358	40.839867	2327.94	-47
4	GUIDE	used	398331992	7.67	4950	1.000	0.428	0.261	0.126	0.194	219.049907	40.252311	-421.07	-1427
5	GUIDE	used	398332440	8.79	4944	1.000	-0.136	-0.441	0.144	0.215	218.348874	40.552435	1248.31	11
6	GUIDE	used	398332664	8.76	4944	1.000	-0.468	-0.536	0.120	0.204	217.886680	40.371455	1073.68	1425
7	GUIDE	used	398334744	8.76	4947	1.000	0.594	0.781	0.202	0.319	219.519887	40.021003	-1637.30	-2368

## 2.4 Star Slots

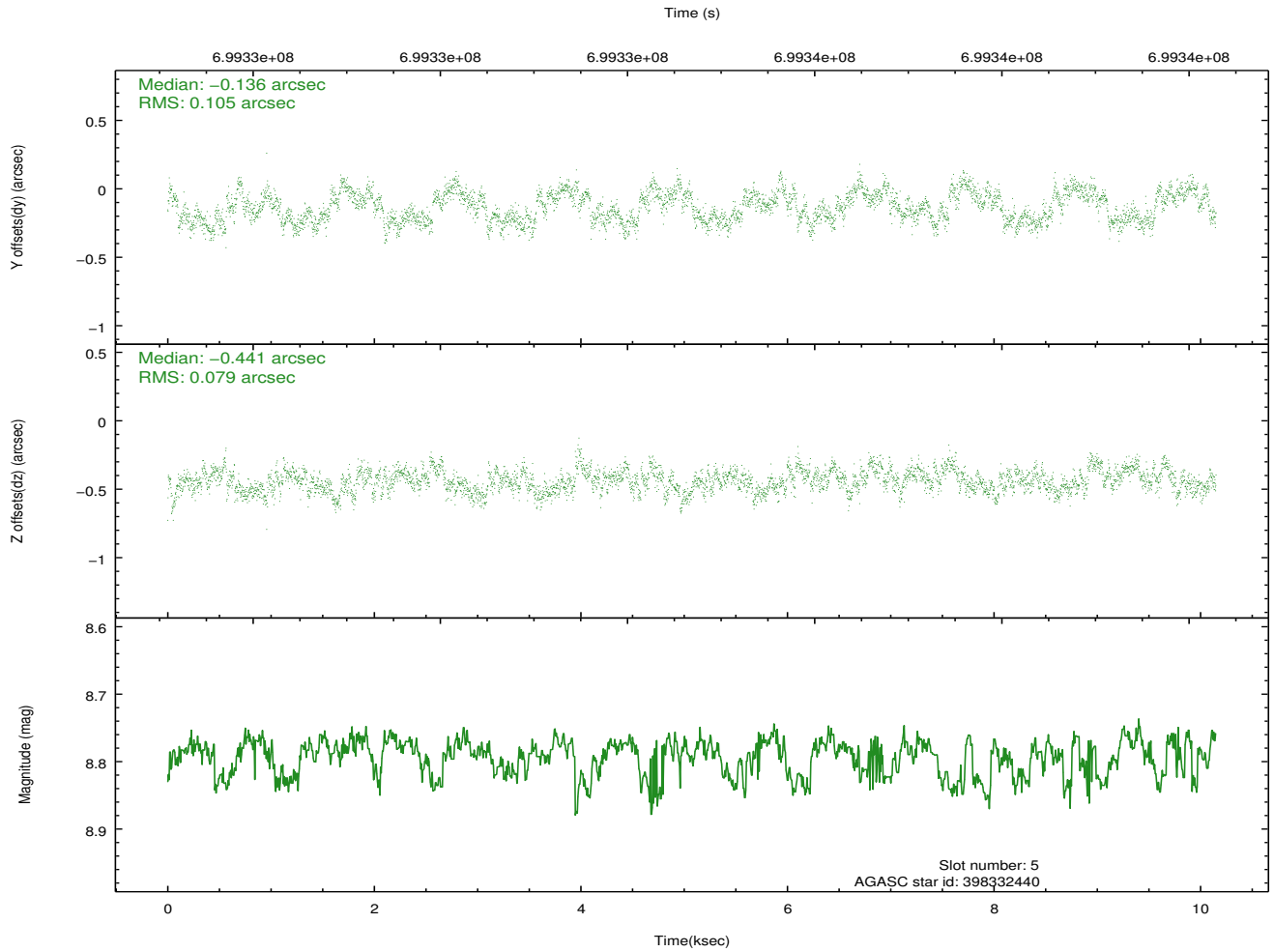
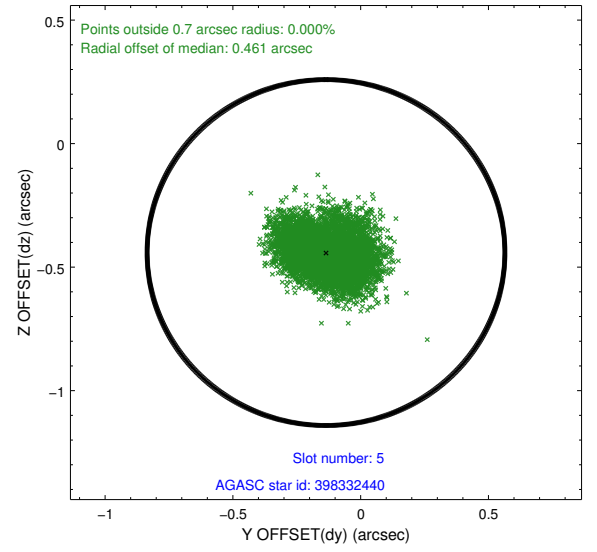
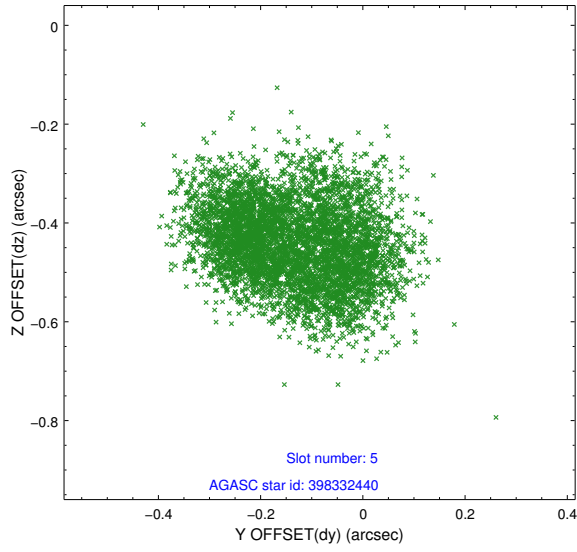
### 2.4.1 Slot 3



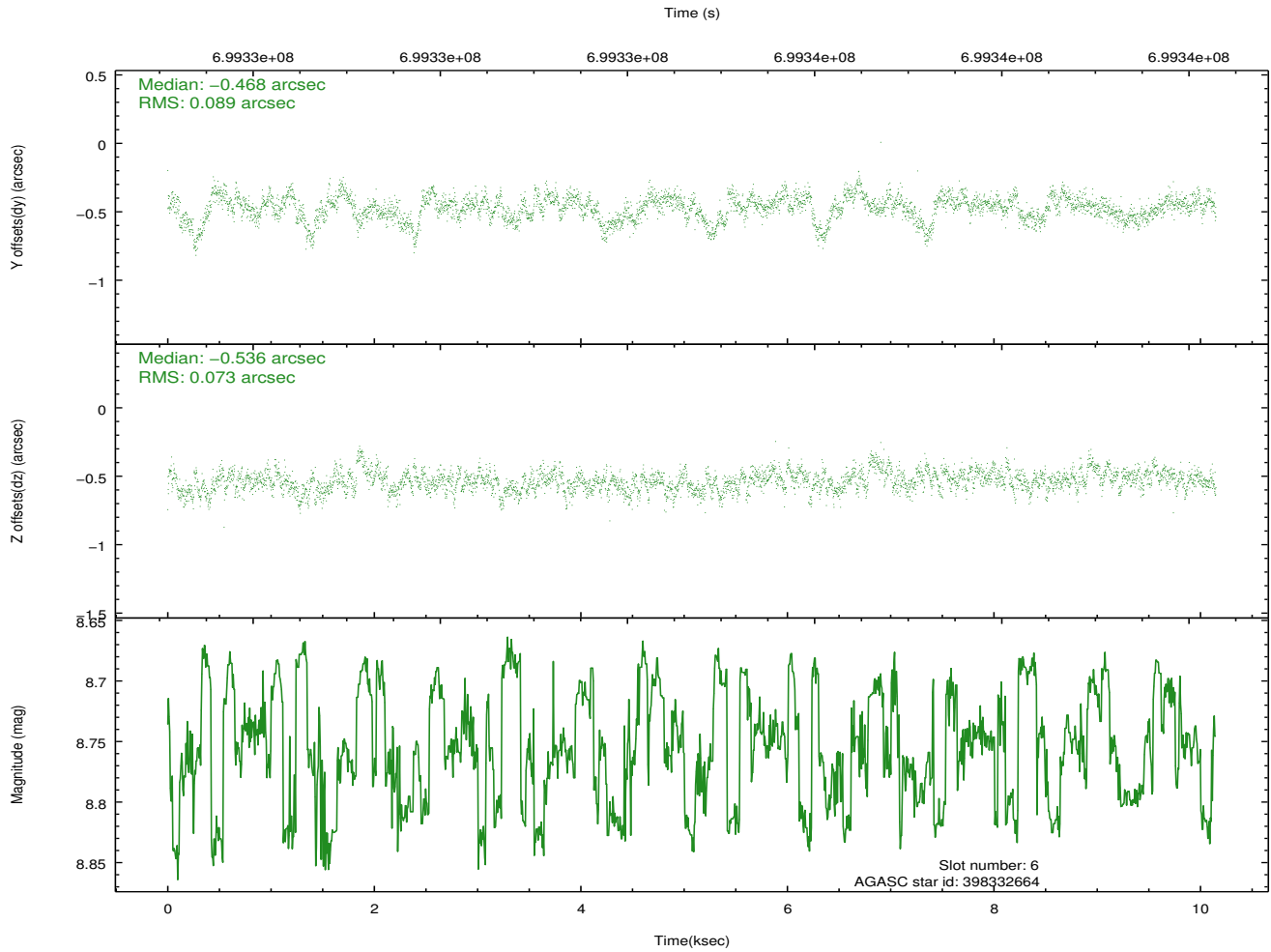
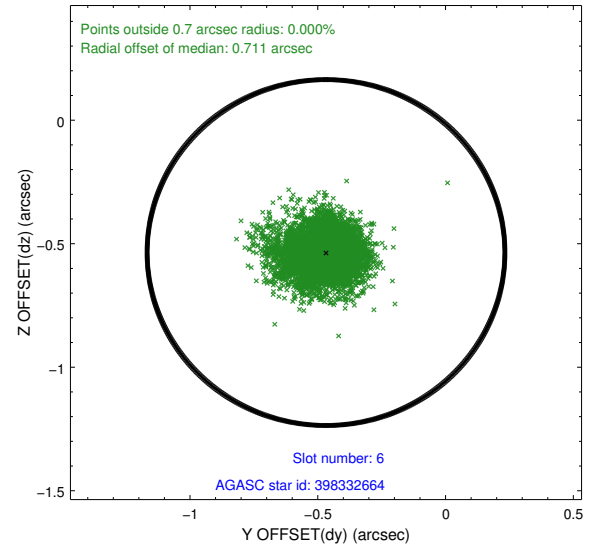
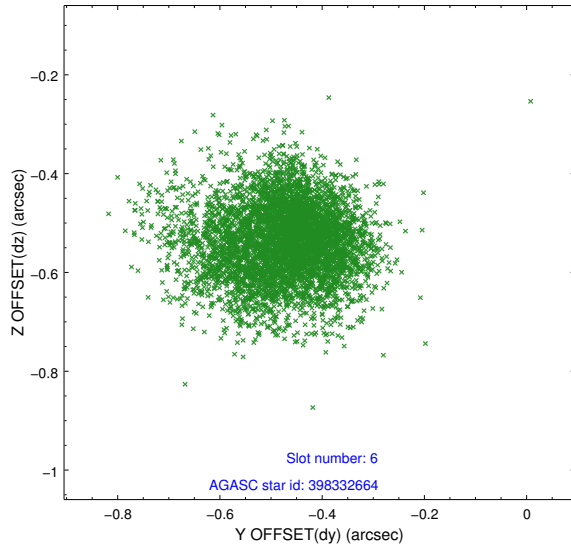
## 2.4.2 Slot 4



### 2.4.3 Slot 5

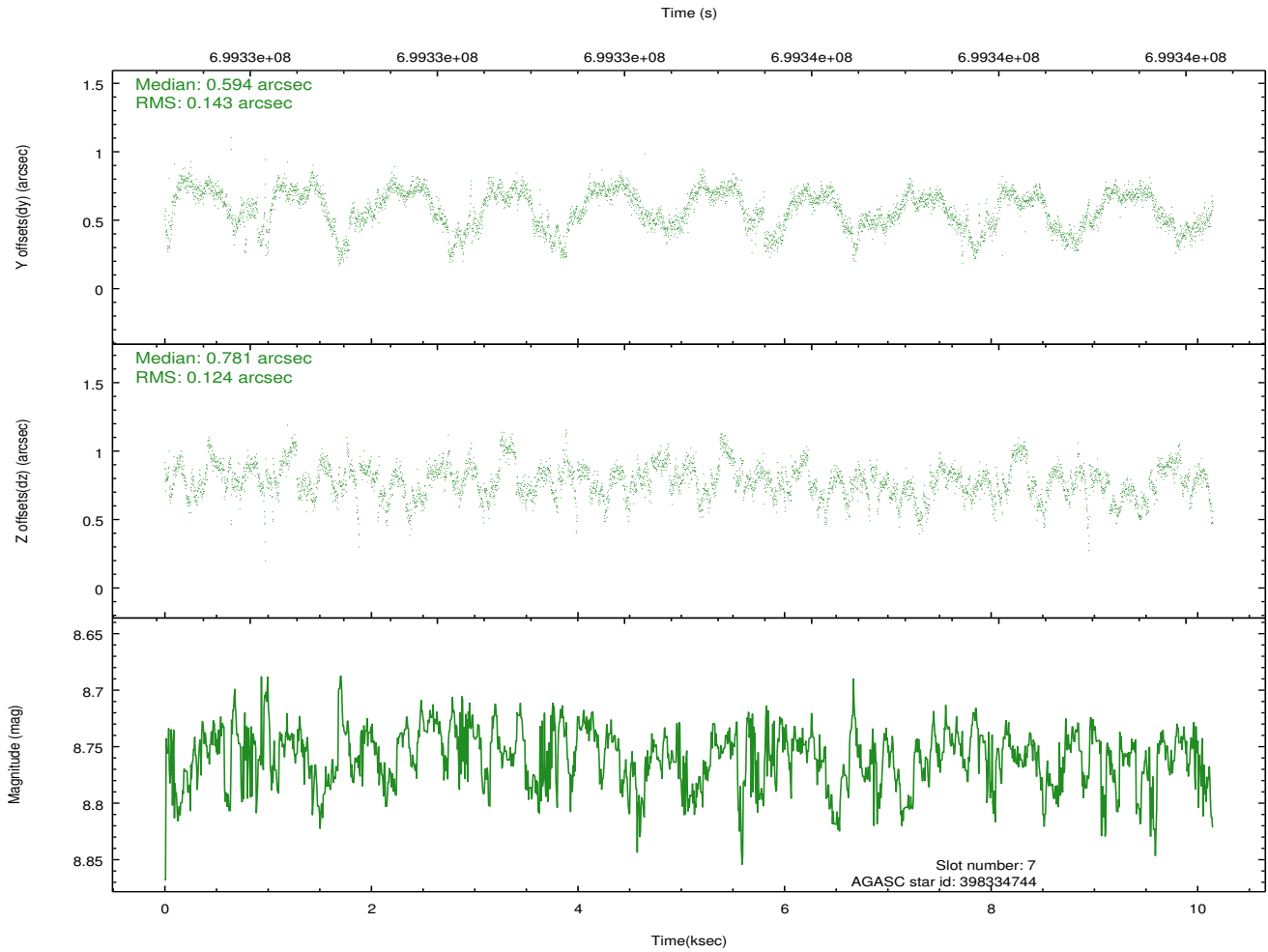
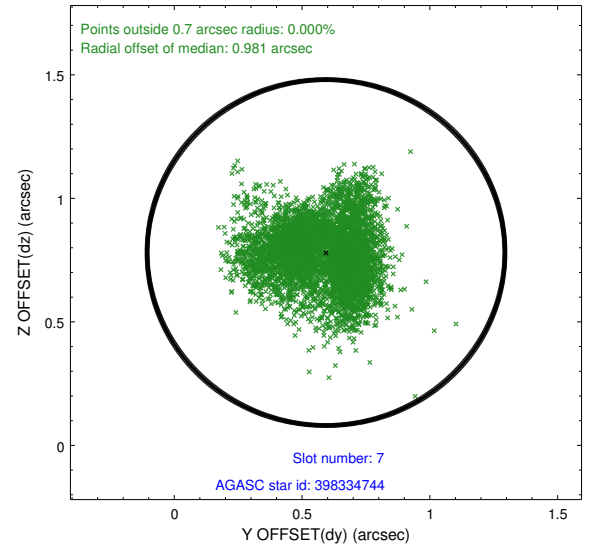
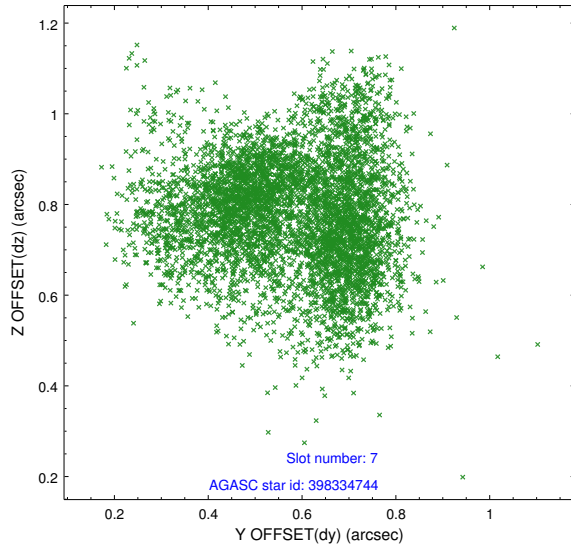


## 2.4.4 Slot 6



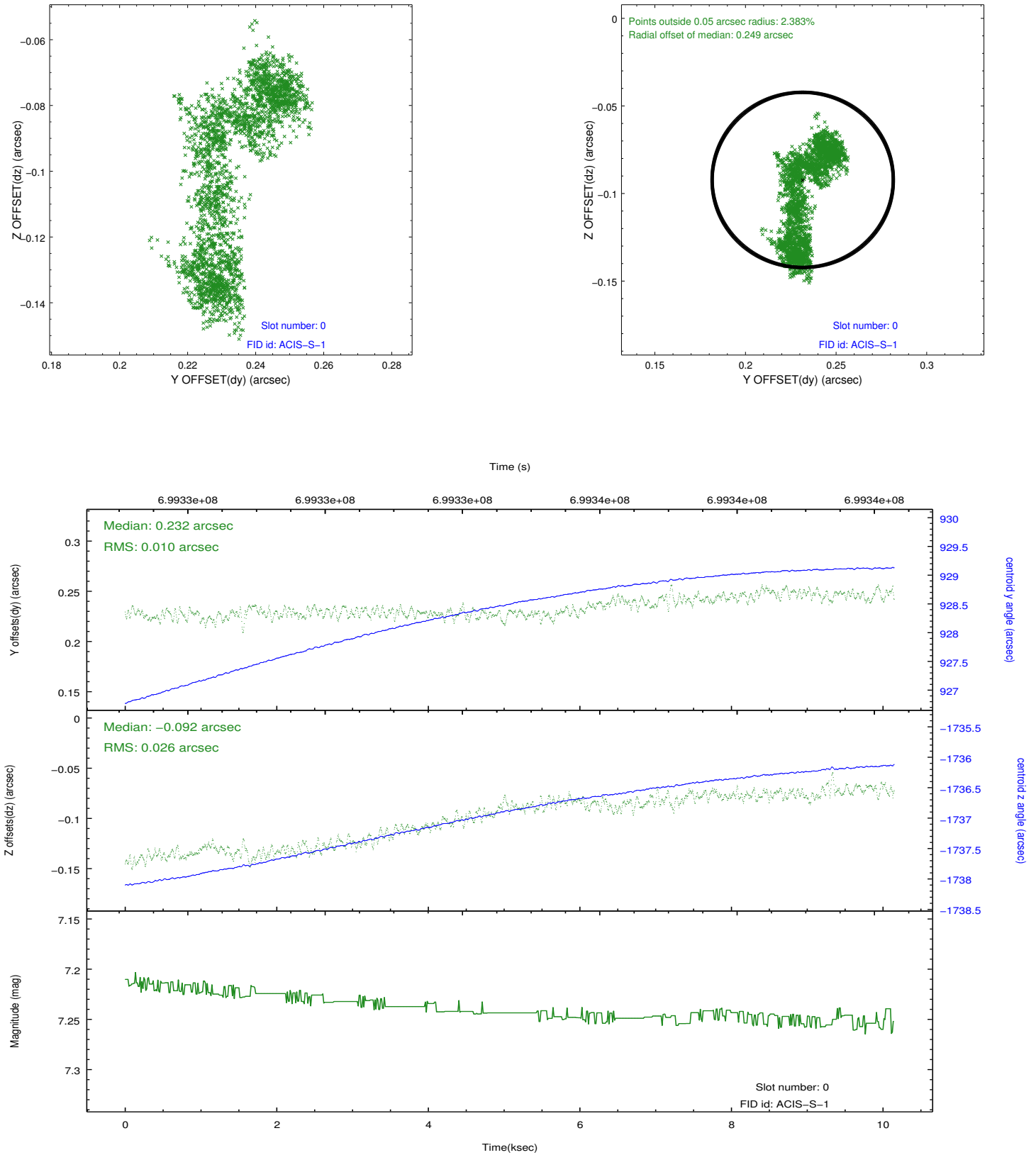


## 2.4.5 Slot 7

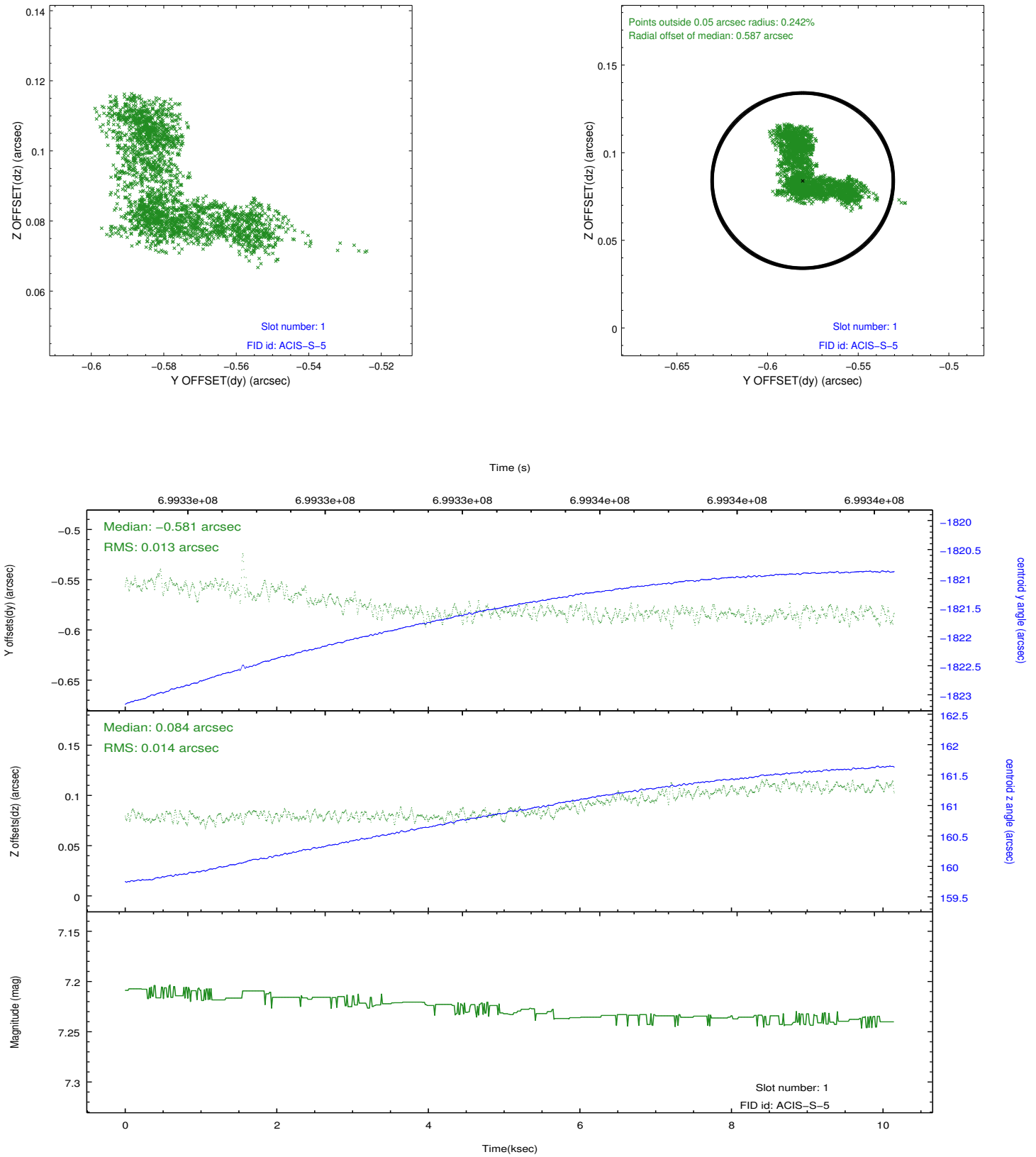


## 2.5 FID Slots

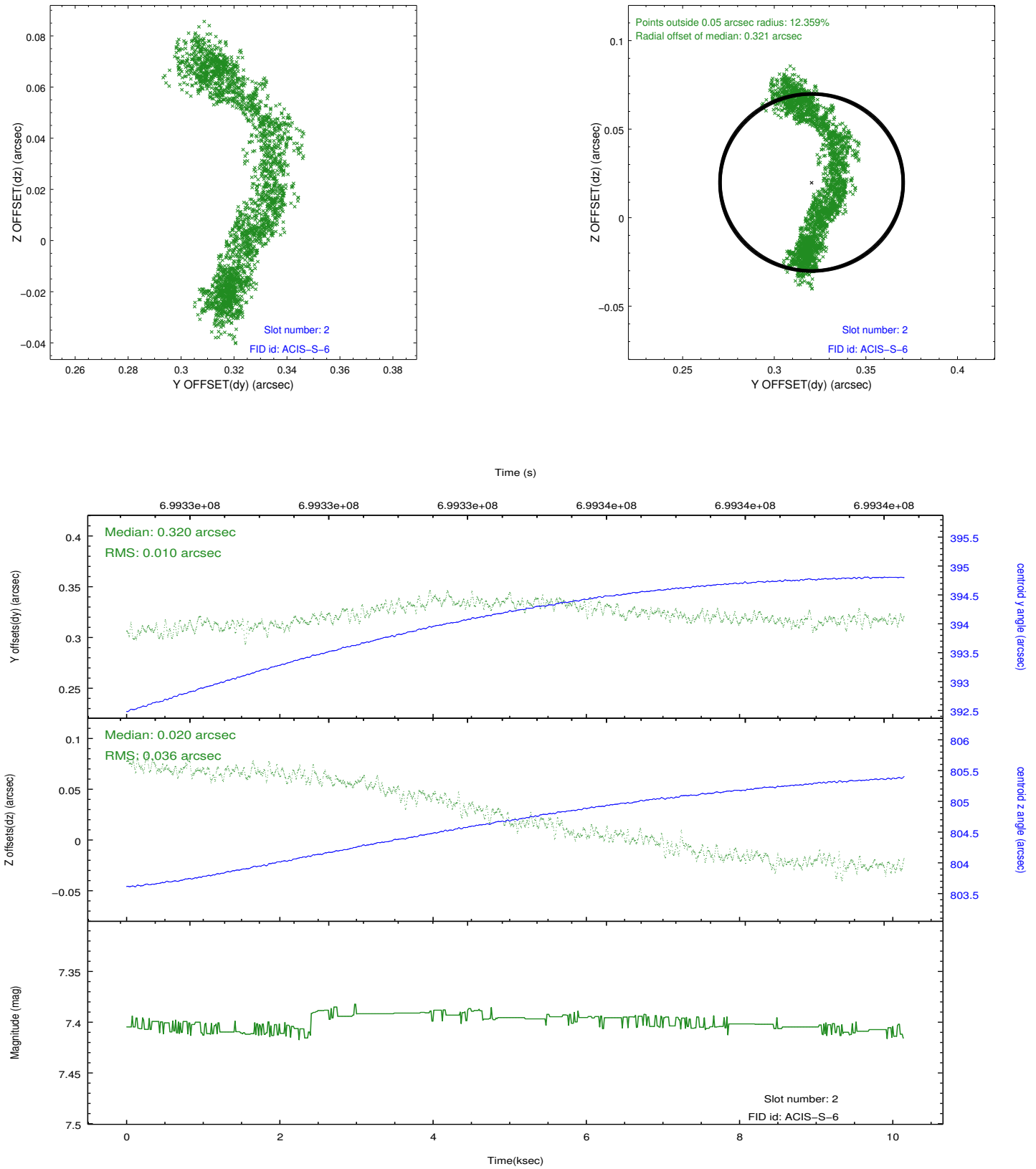
### 2.5.1 Slot 0



## 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)	2020.02.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.050200077415

### A.2 Comments