

# V&V Reference Report

## L2 ASCDS Version : 10.8

Observation 21501 - L2 Version 1  
Chandra X-Ray Center

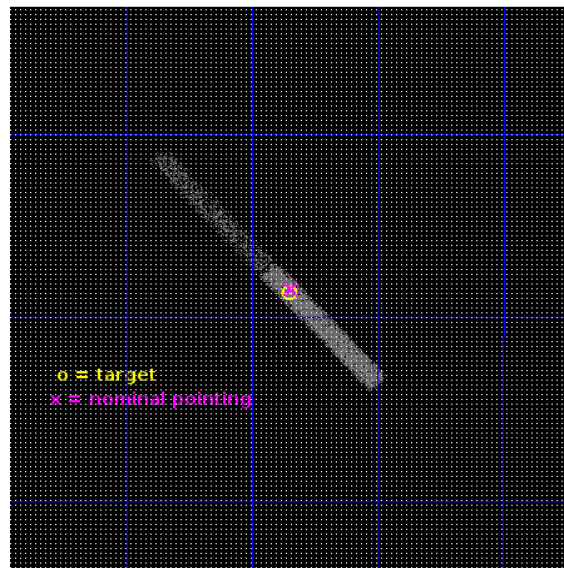
L2 Processing Date : Aug 27 2019

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# 1 Front

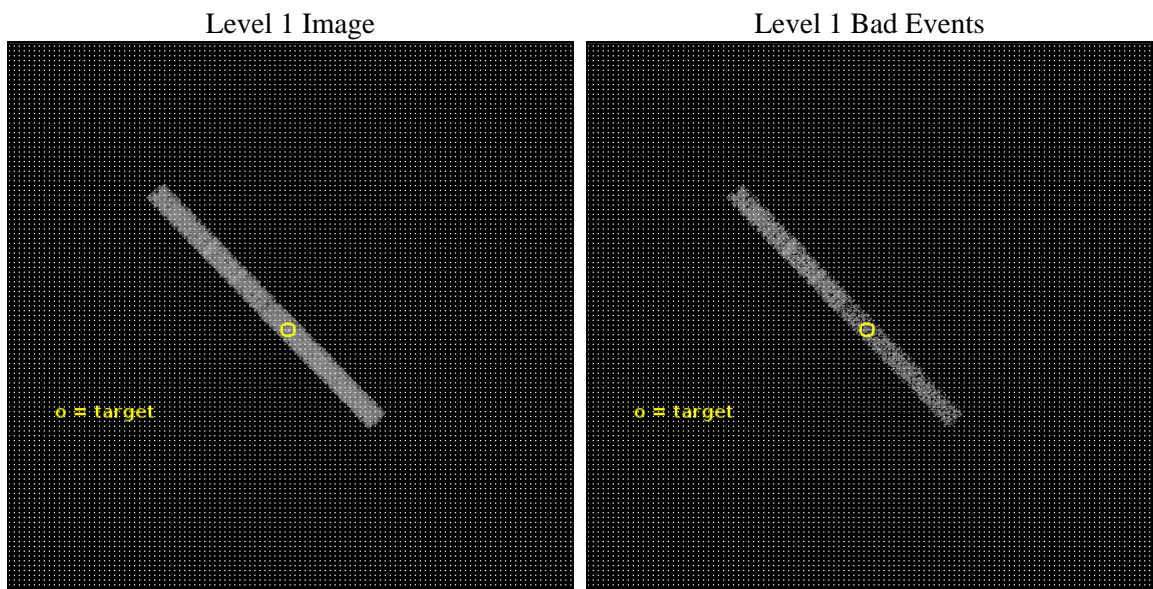
seq_num	703794	Sequence number
obs_id	21501	Observation id
title	Synchrotron emission in low-redshift quasars	Proposal title
observer	Mark Birkinshaw	Principal investigator
object	MRC2338-290	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	355.2125	Observer's specified target RA [deg]
dec_targ	-28.811611	Observer's specified target Dec [deg]
ra_nom	355.21100163002	Nominal RA [deg]
dec_nom	-28.807517002786	Nominal Dec [deg]
roll_nom	47.155930837324	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10090.991770387	Sum of GTIs [s]
livetime	9325.5505788728	Livetime [s]
ontime6	10090.950730443	Sum of GTIs [s]
ontime7	10090.991770387	Sum of GTIs [s]
l2events	8178	Number of level 2 events



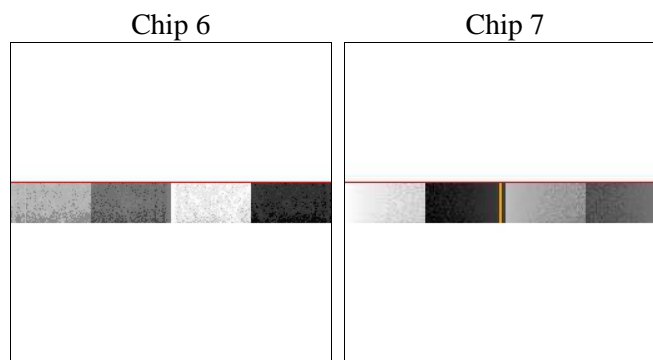
## 2 OBI

### 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	Processing system revision	ontime	10090.991770387	Sum of GTIs [s]
caldsver	4.8.3.1	&#160	ontime6	10090.950730443	Sum of GTIs [s]
date	2019-08-27T13:17:12	Date and time of file creation	ontime7	10090.991770387	Sum of GTIs [s]
revision	1	Processing version of data	l1events	27181	Number of level 1 events

### 2.1.4 Events

	ccd 6	ccd 7
level 1 events	12915	14266
rejected events	11341	7018
rejected %	87%	49%

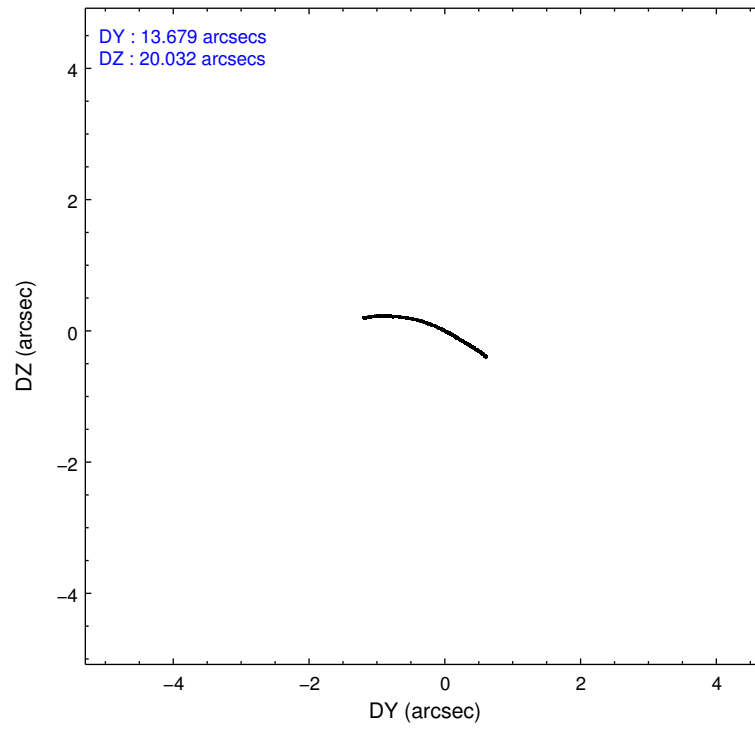
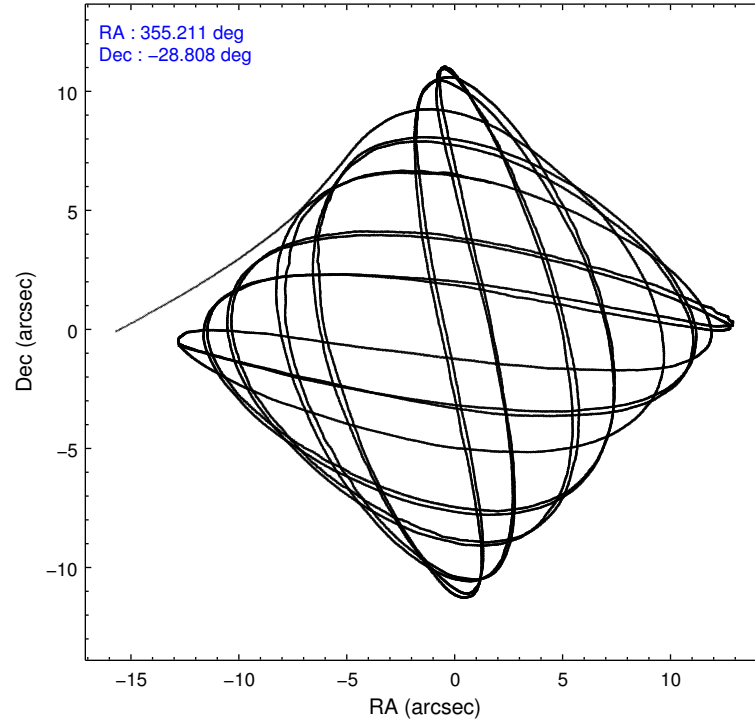
	ccd 6	ccd 7
grade 0 events	408	828
	3%	5%
grade 1 events	4	23
	0%	0%
grade 2 events	295	1560
	2%	10%
grade 3 events	307	885
	2%	6%
grade 4 events	298	931
	2%	6%
grade 5 events	485	1374
	3%	9%
grade 6 events	266	3044
	2%	21%
grade 7 events	10852	5621
	84%	39%

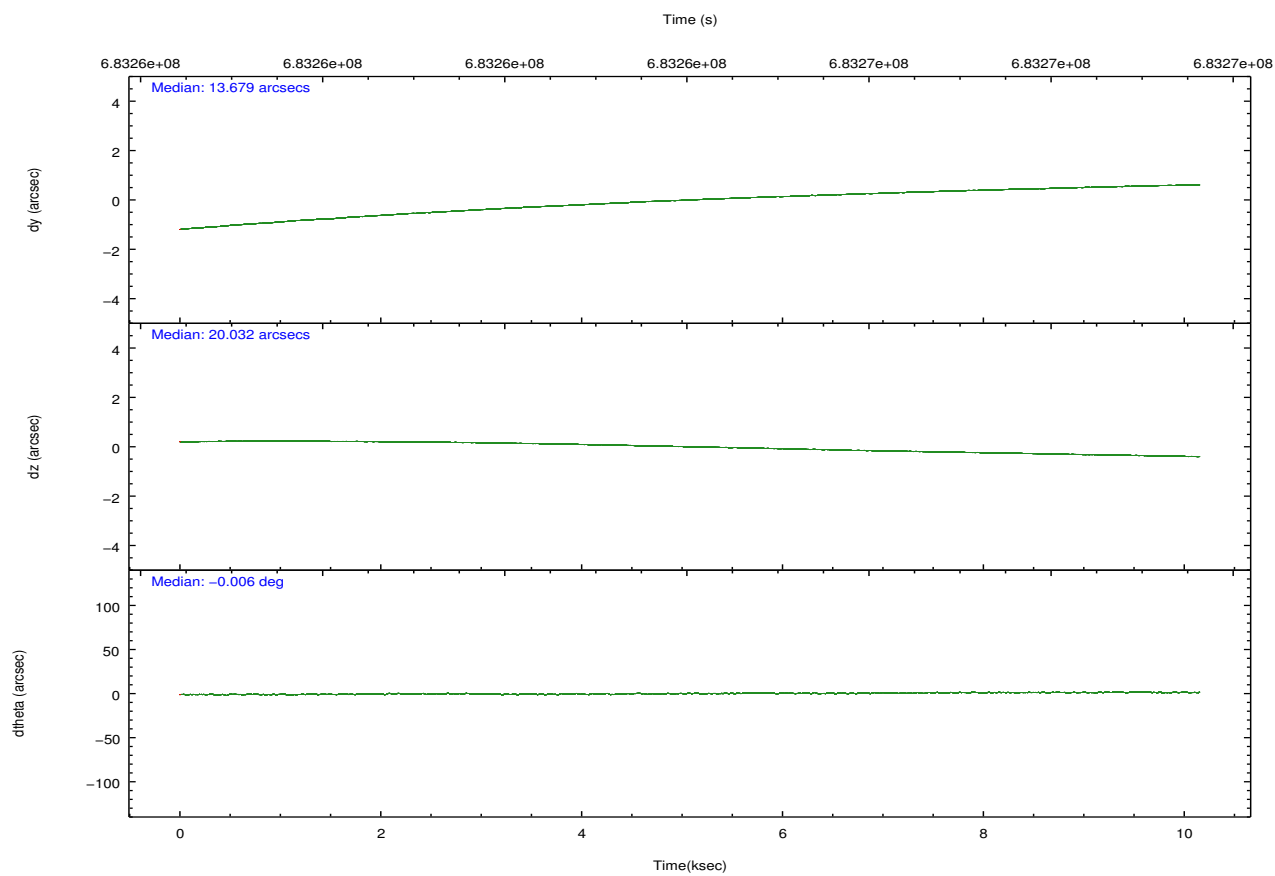
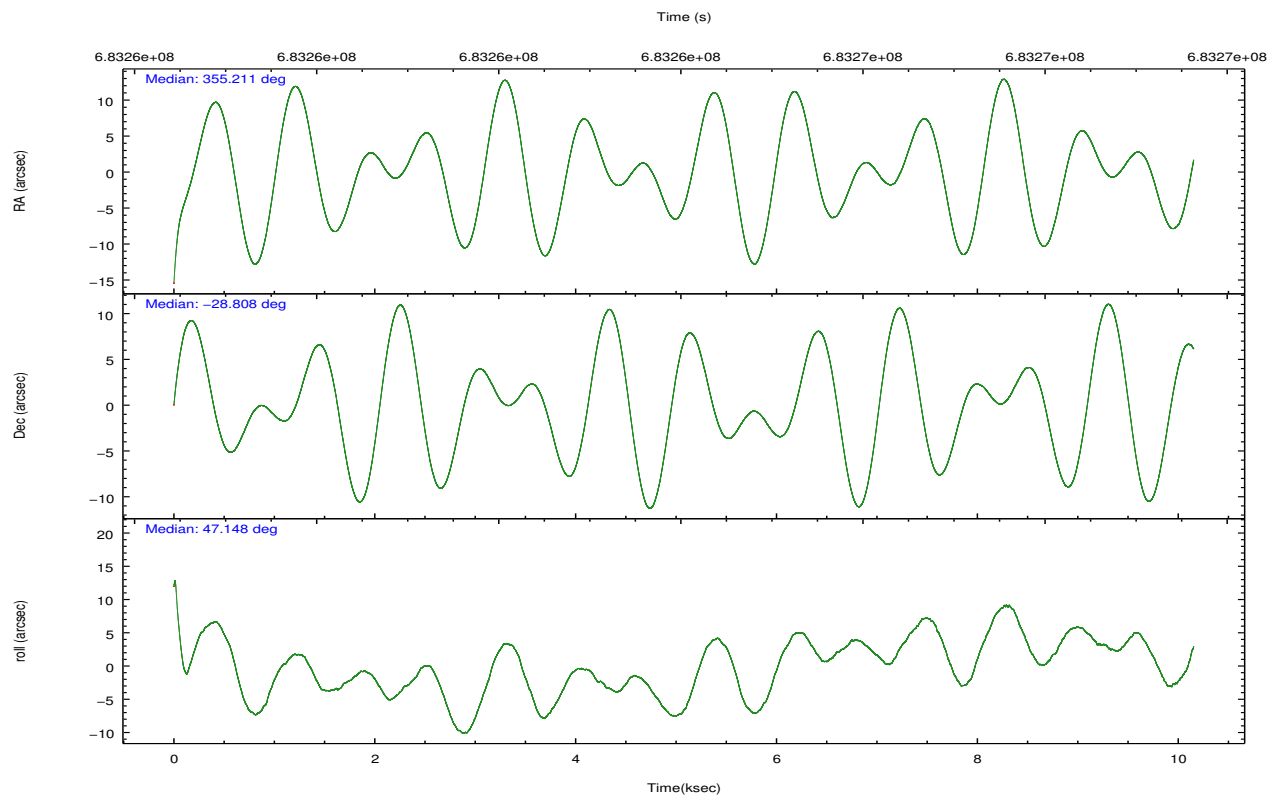


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-67	ACIS-67	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	355.204491	355.2110016300156	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-28.834404	-28.80751700278565	Subarray start row	449	449
[deg] Pointing Roll	46.996138	47.15593083732404	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.5
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	683259111.184000	683257908.24438			
Observation start date	2019-08-27T02:10:42	2019-08-27T01:51:48			
[s] Observation end time (MET)	683269111.184000	683270212.85762			
Observation end date	2019-08-27T04:57:22	2019-08-27T05:16:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect



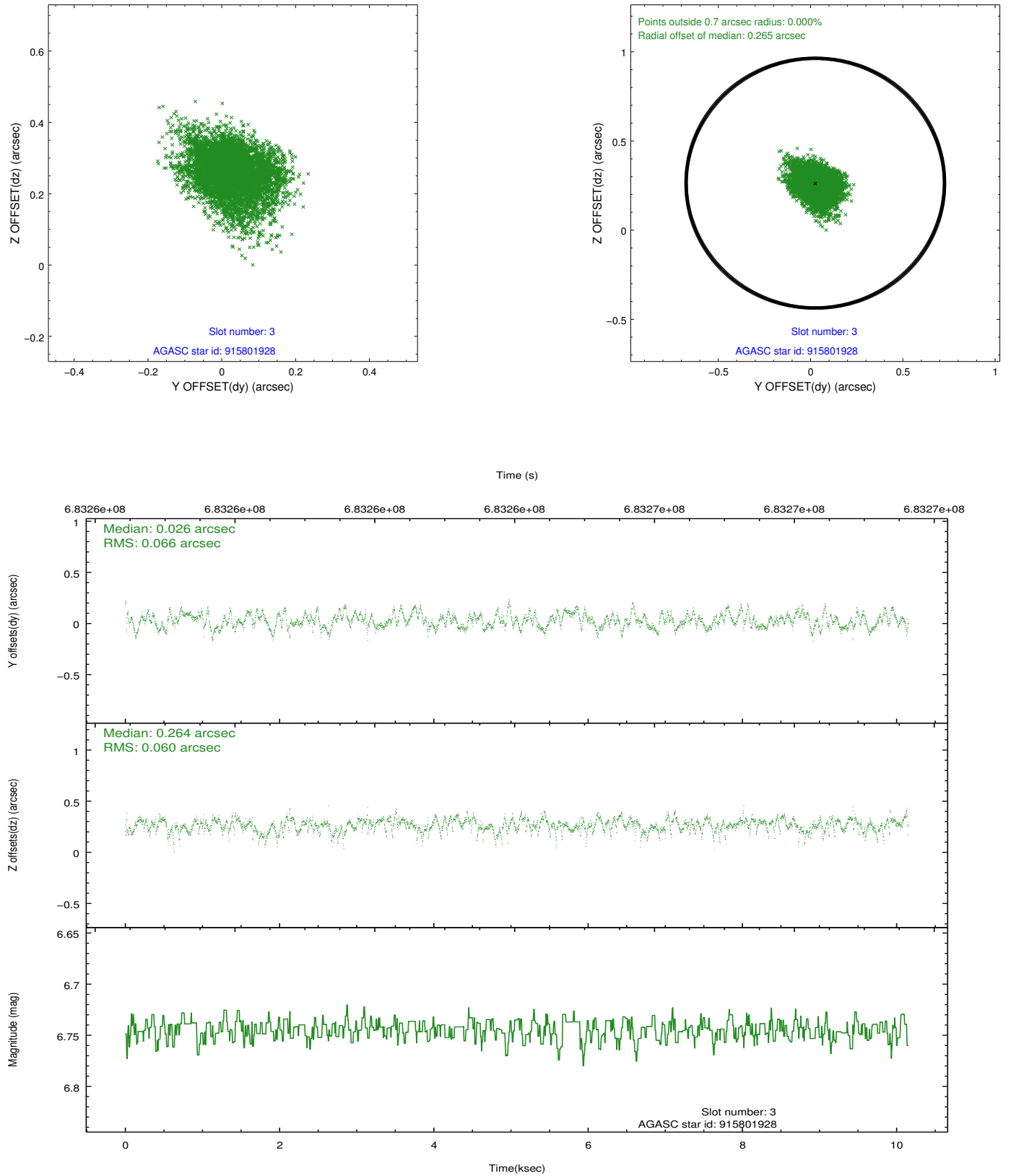


Slot Statistics

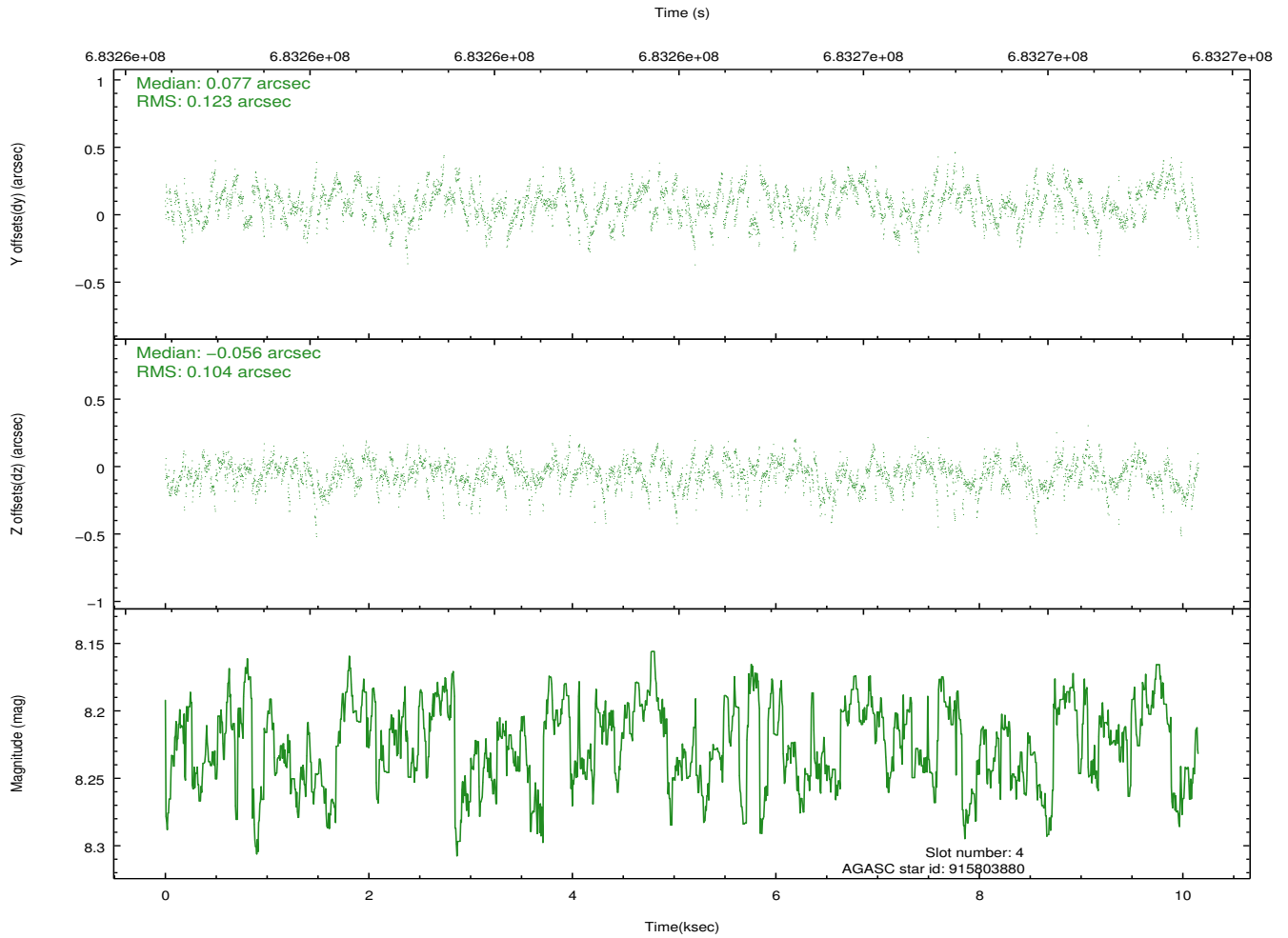
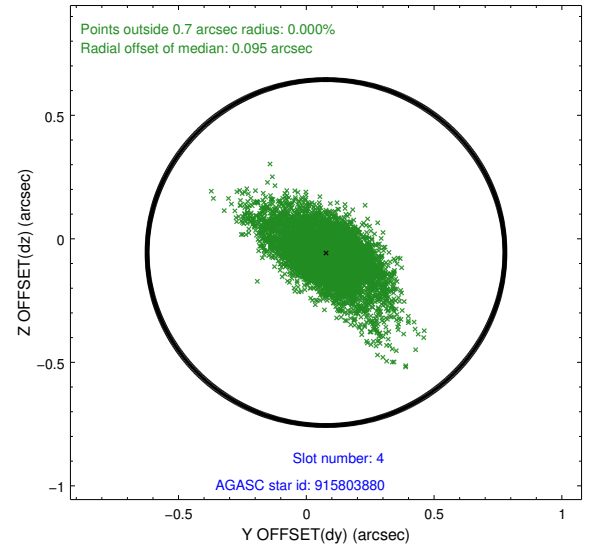
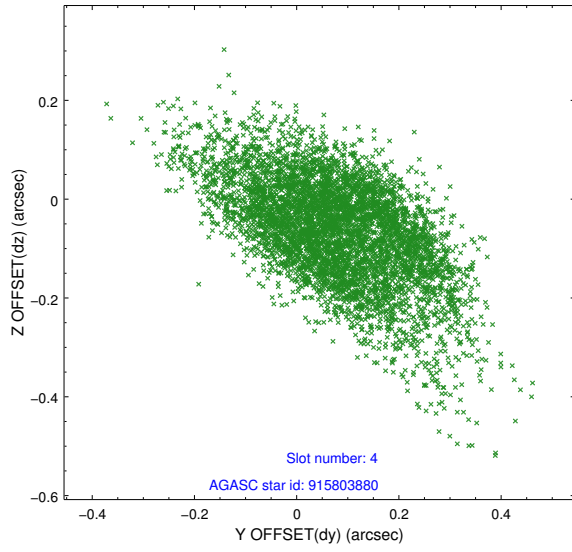
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	6.96	2477	1.000	-0.261	-0.160	0.025	0.039	0.000000	0.000000	-766.70	-1741
1	FID		ACIS-S-4	7.09	2477	1.000	0.729	0.169	0.031	0.082	0.000000	0.000000	2147.24	166
2	FID		ACIS-S-5	7.05	2477	1.000	-0.498	0.000	0.019	0.064	0.000000	0.000000	-1819.18	160
3	GUIDE	used	915801928	6.74	4954	1.000	0.026	0.264	0.094	0.152	355.759338	-29.043996	636.56	-1794
4	GUIDE	used	915803880	8.22	4952	1.000	0.077	-0.056	0.162	0.294	356.163277	-28.746829	2286.55	-2006
5	GUIDE	used	915804392	8.76	4881	1.000	0.127	0.022	0.130	0.210	354.514263	-28.760288	-1294.44	1769
6	GUIDE	used	915808520	7.28	4952	1.000	-0.004	0.074	0.110	0.183	354.987029	-28.942279	-751.39	235
7	GUIDE	used	915809048	7.78	4950	1.000	-0.222	-0.287	0.112	0.168	355.056720	-28.359150	929.24	1508

## 2.4 Star Slots

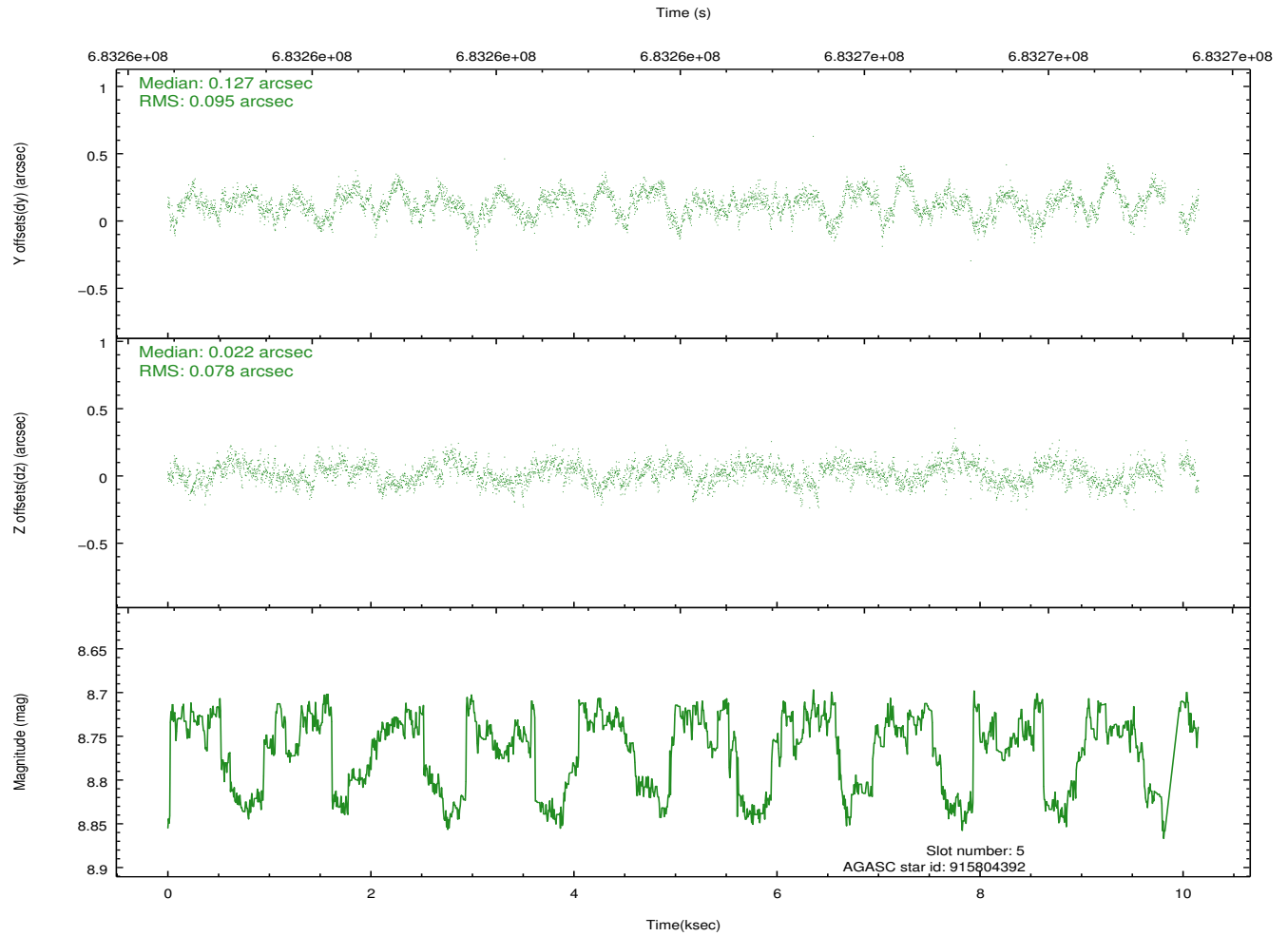
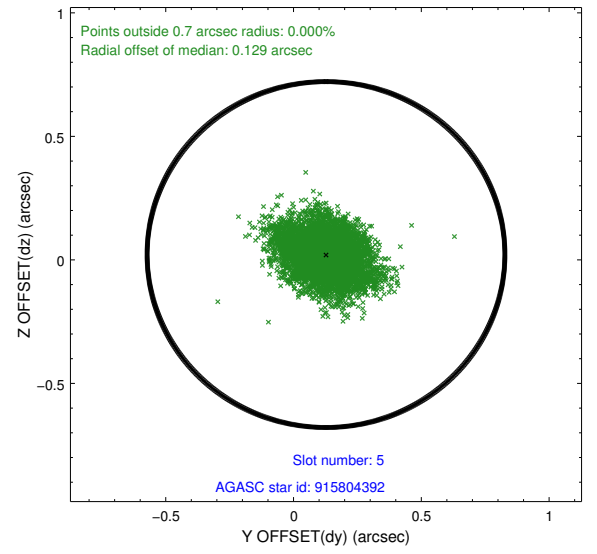
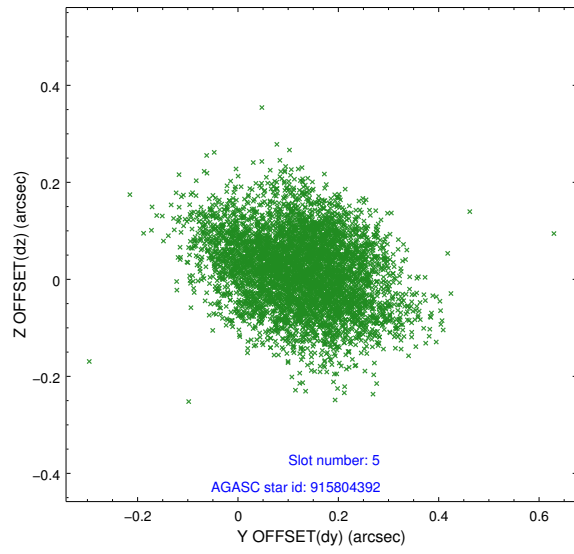
### 2.4.1 Slot 3



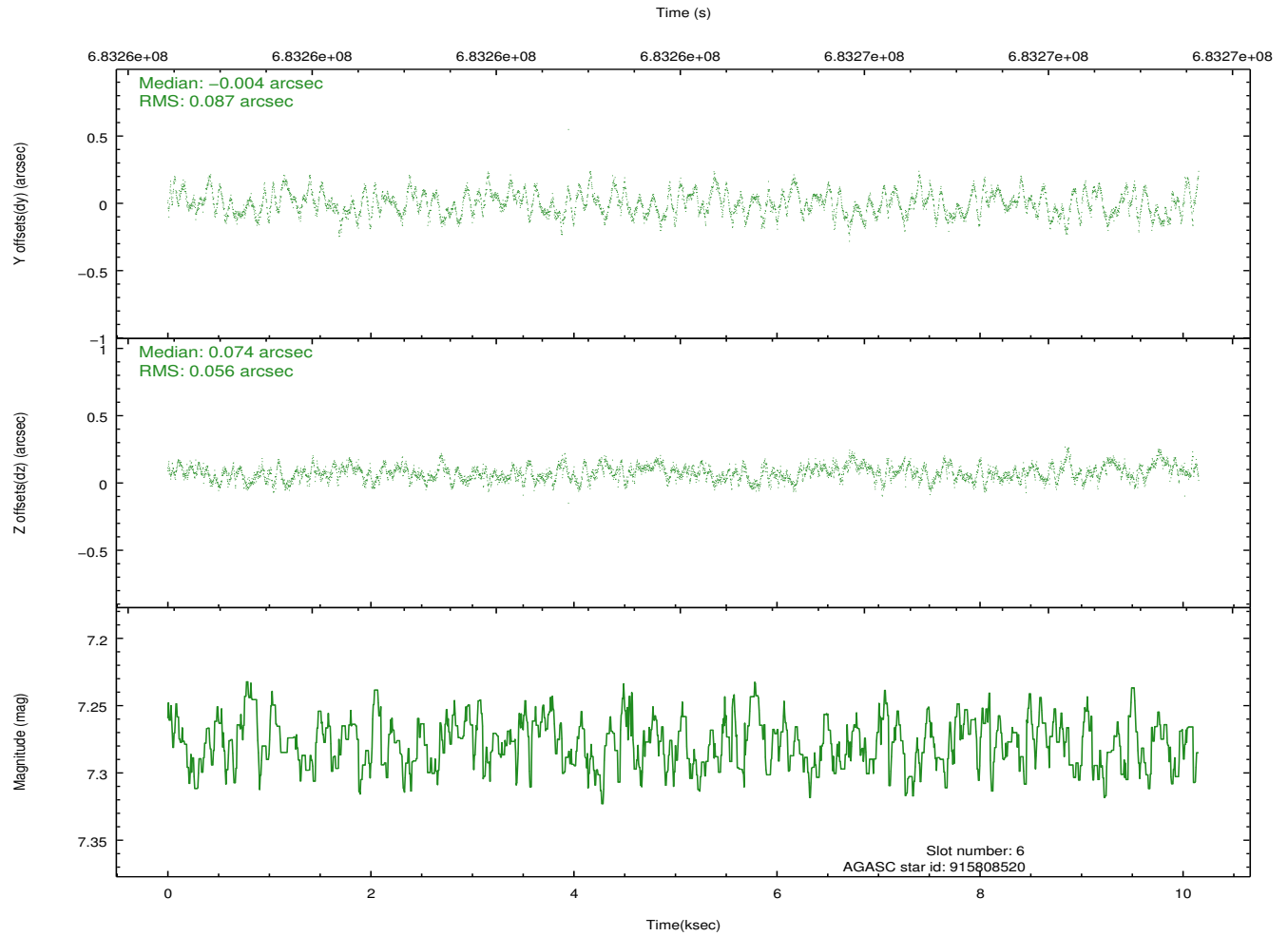
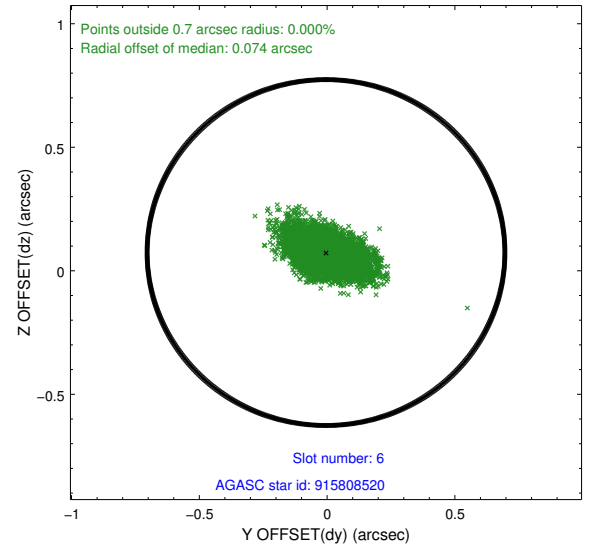
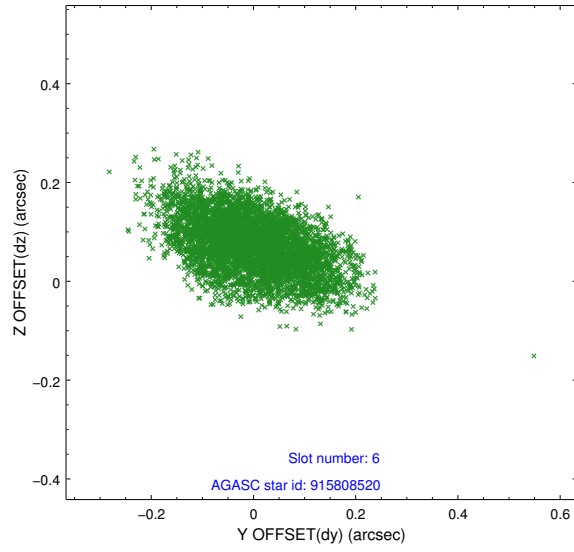
## 2.4.2 Slot 4



### 2.4.3 Slot 5

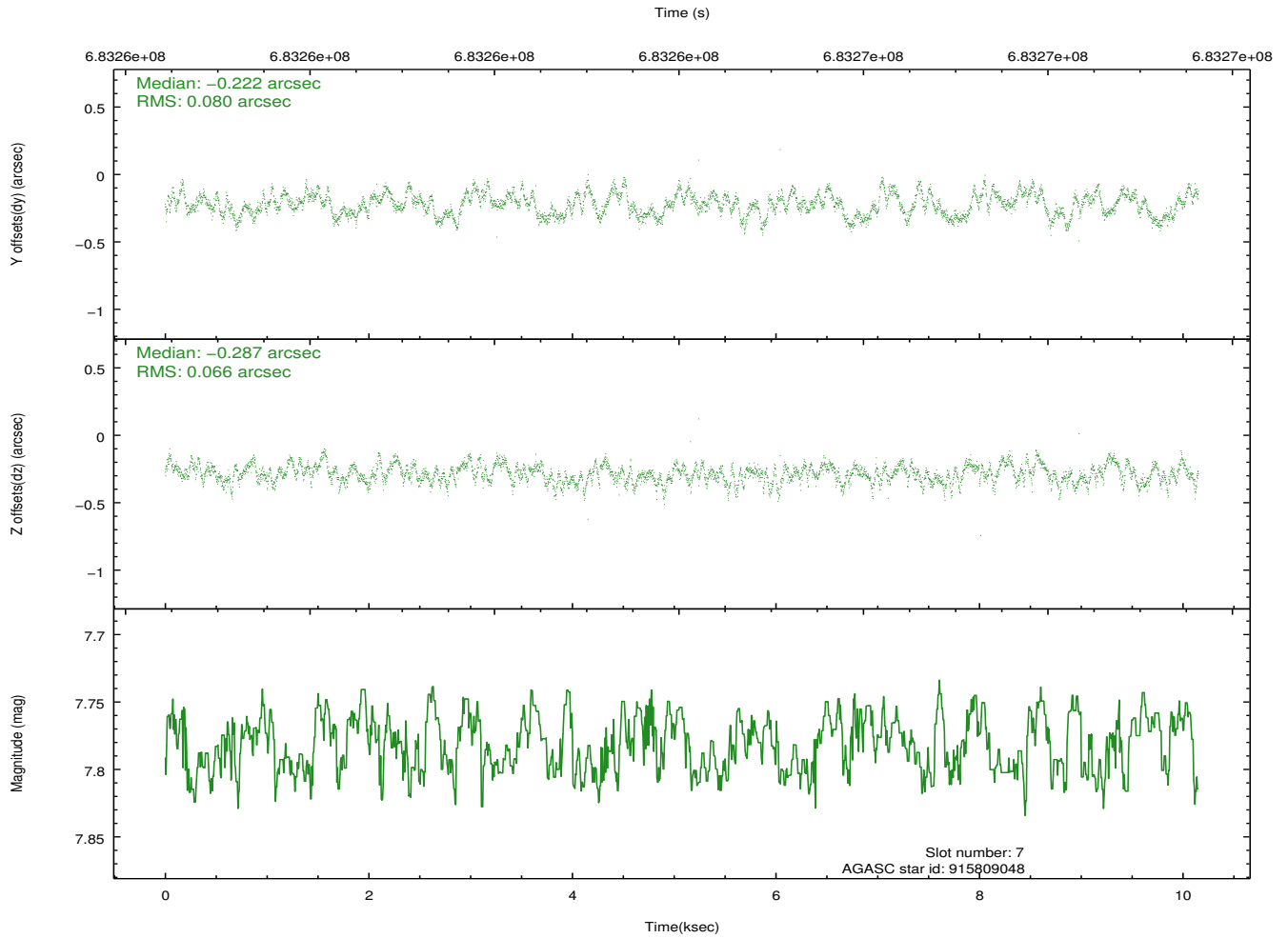
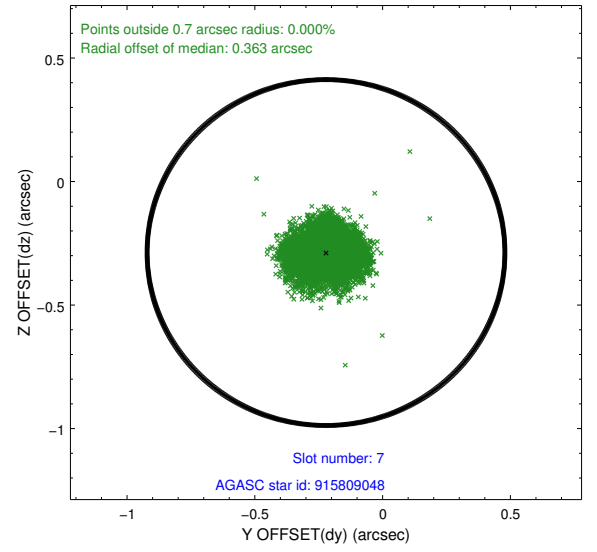
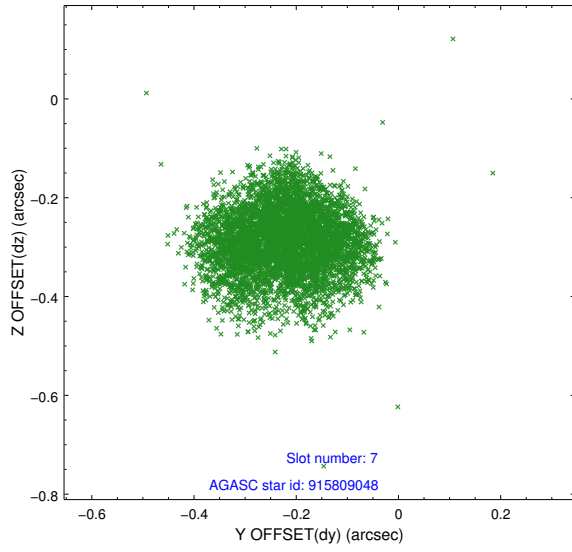


## 2.4.4 Slot 6



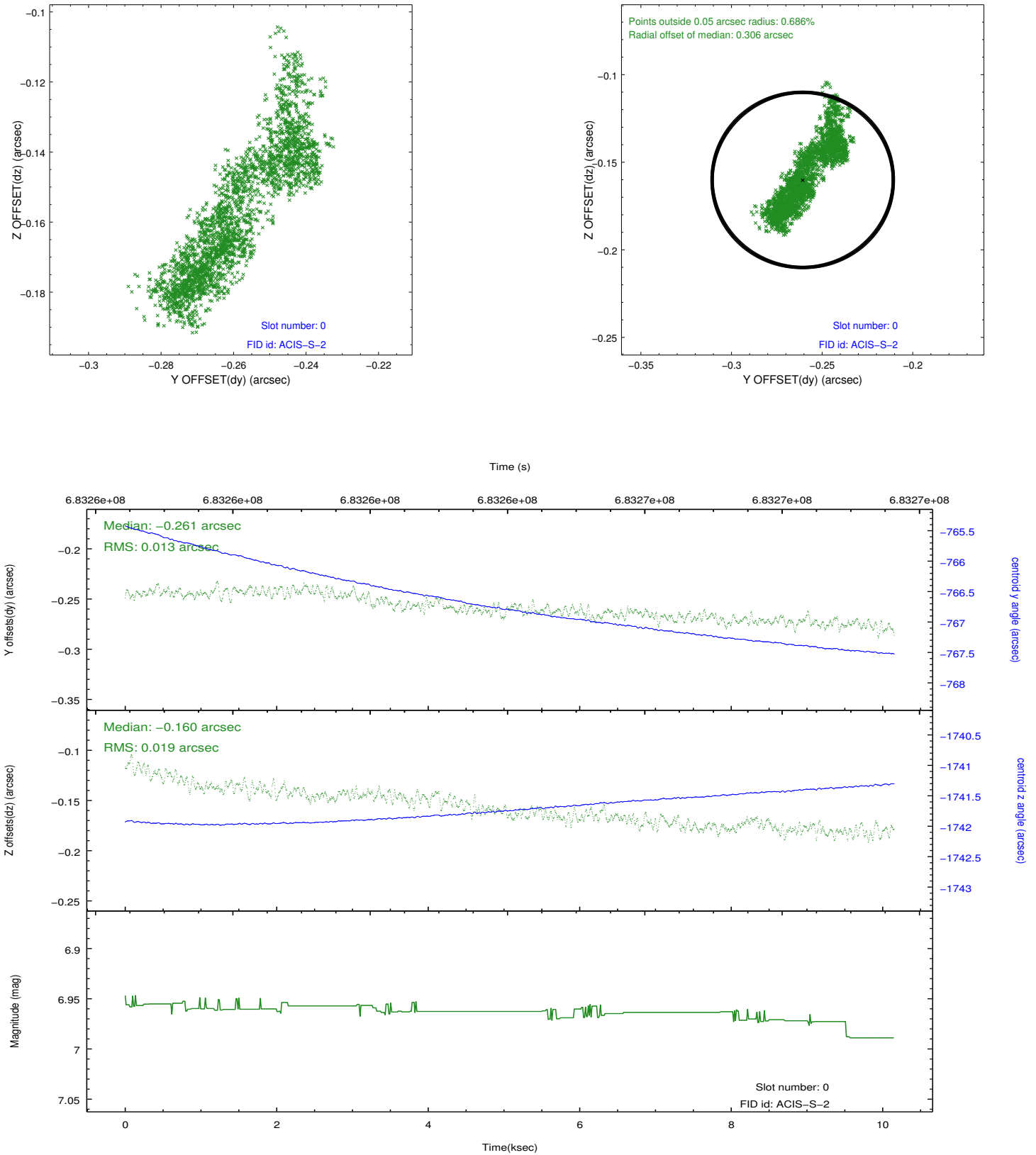


## 2.4.5 Slot 7

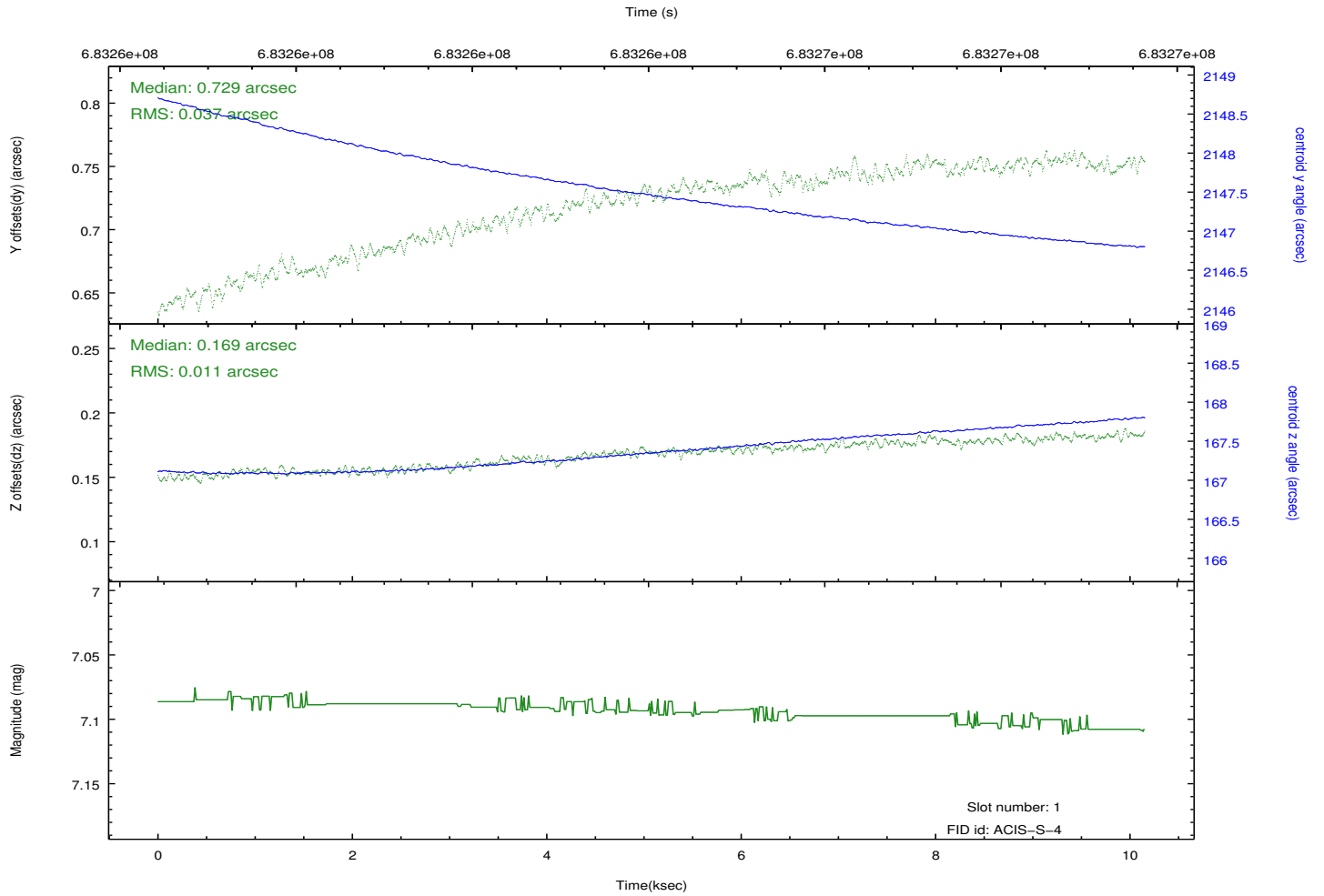
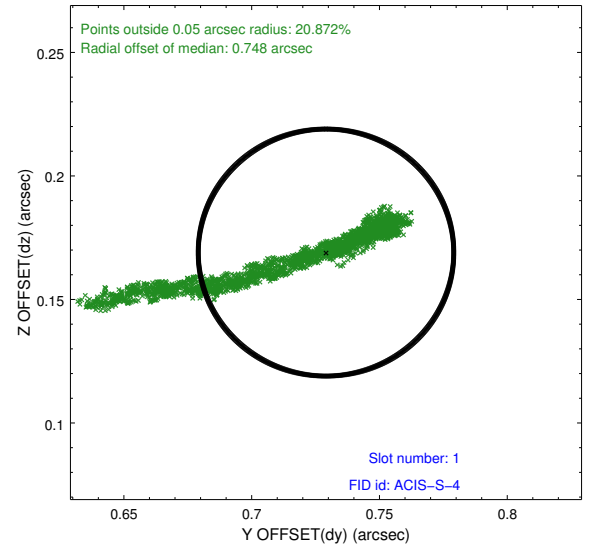
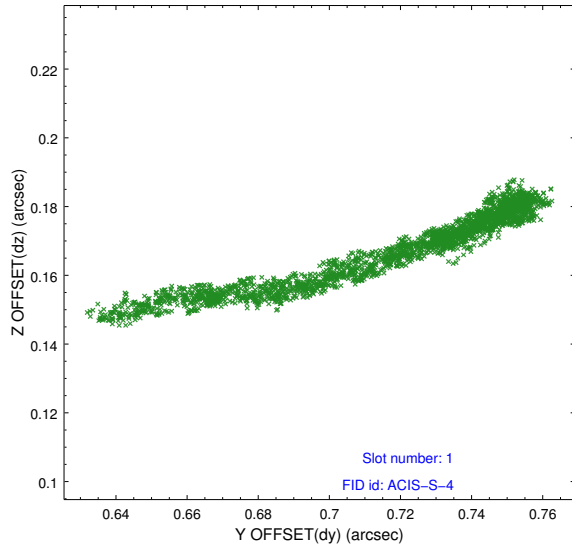


## 2.5 FID Slots

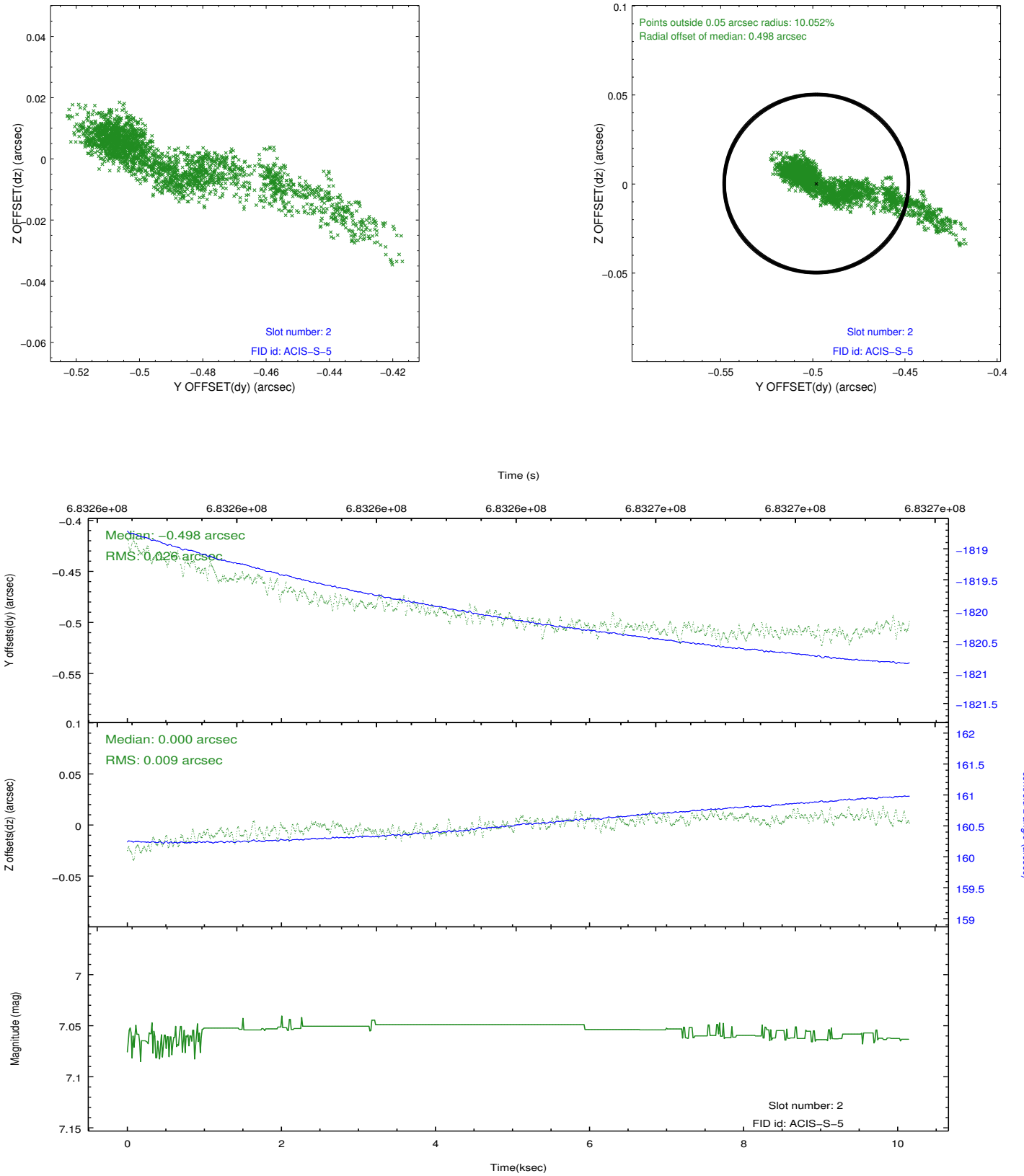
### 2.5.1 Slot 0



## 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)	2019.08.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.090991770387

### A.2 Comments