

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12077 - L2 Version 2  
Chandra X-Ray Center

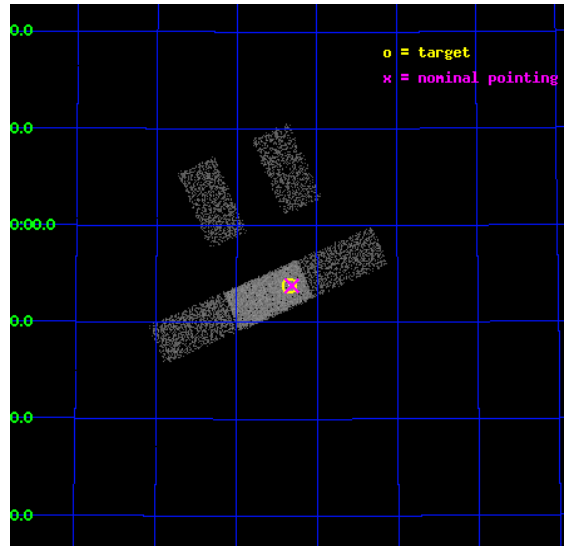
L2 Processing Date : Jun 20 2012

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# 1 Front

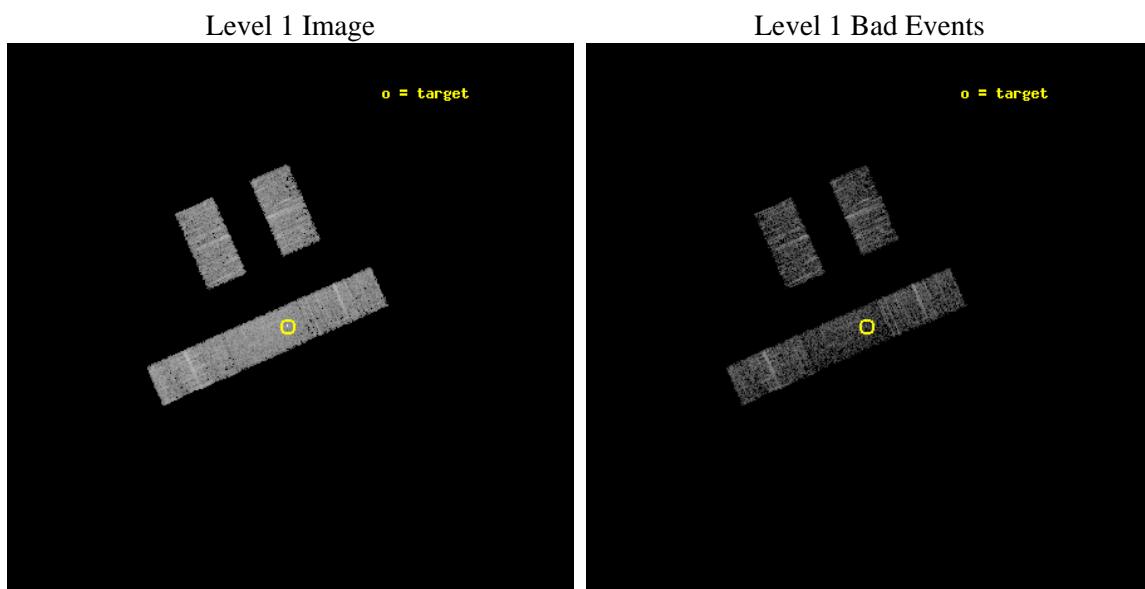
seq_num	702307	Sequence number
obs_id	12077	Observation id
title	Gravitationally lensed quasar Q0957+561AB in outburst	Proposal tit
observer	Dr Luis Goicoechea	Principal investigator
object	Q0957+561	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.336667	Observer's specified target RA [deg]
dec_targ	55.897056	Observer's specified target Dec [deg]
ra_nom	150.3281925311	Nominal RA [deg]
dec_nom	55.896405207773	Nominal Dec [deg]
roll_nom	156.21331996427	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3185.7999777198	Sum of GTIs [s]
livetime	3110.7039253111	Livetime [s]
ontime2	3185.7999777198	Sum of GTIs [s]
ontime3	3185.7999777198	Sum of GTIs [s]
ontime6	3185.7999777198	Sum of GTIs [s]
ontime7	3185.7999777198	Sum of GTIs [s]
ontime8	3185.7999777198	Sum of GTIs [s]
l2events	13711	Number of level 2 events



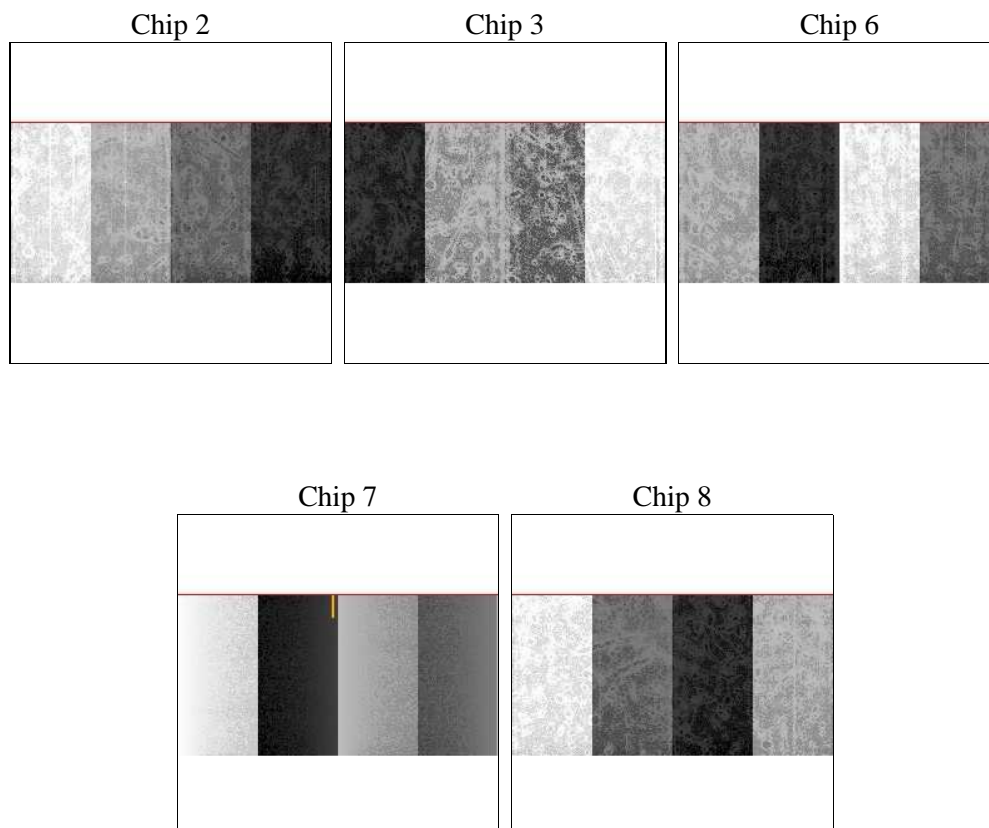
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3185.7999777198	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	3185.7999777198	Sum of GTIs [s]
date	2012-06-20T13:16:53	Date and time of file creation	ontime3	3185.7999777198	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3185.7999777198	Sum of GTIs [s]
			ontime7	3185.7999777198	Sum of GTIs [s]
			ontime8	3185.7999777198	Sum of GTIs [s]
			l1events	106481	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	19494	19588	19601	22946	24852
rejected events	18024	18070	18040	14469	20122
rejected %	92%	92%	92%	63%	80%

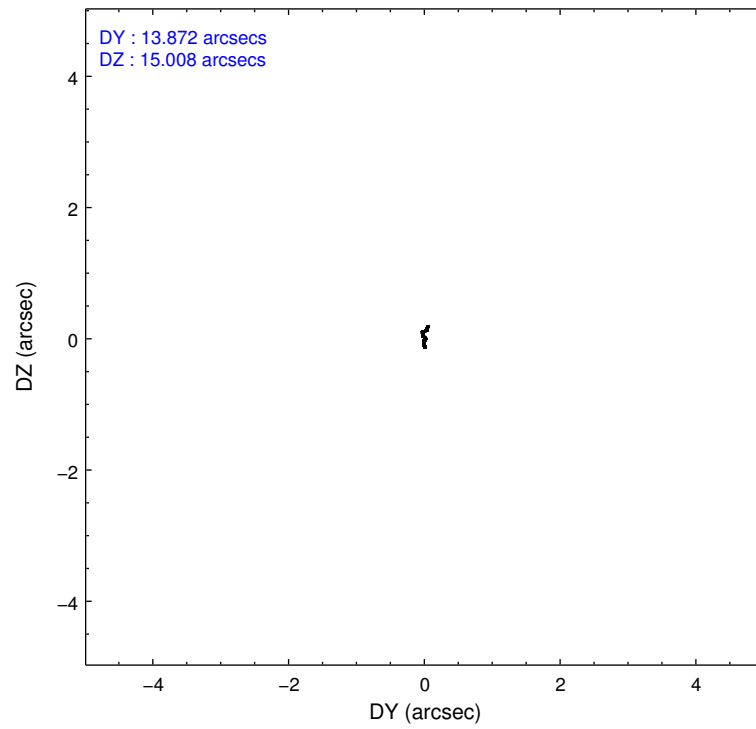
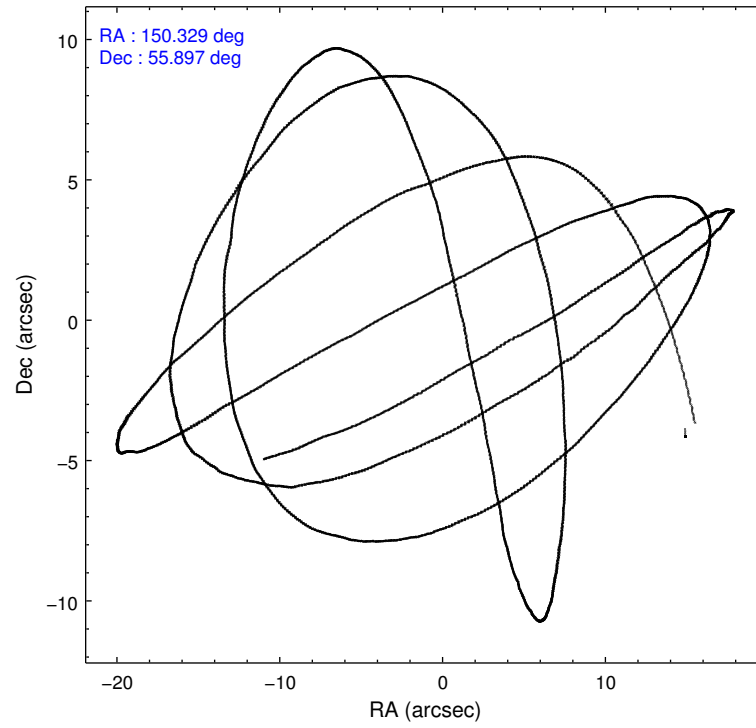
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	691	686	689	1329	1865
	3%	3%	3%	5%	7%
grade 1 events	8	12	10	29	19
	0%	0%	0%	0%	0%
grade 2 events	440	427	487	2393	1323
	2%	2%	2%	10%	5%
grade 3 events	257	256	281	1052	707
	1%	1%	1%	4%	2%
grade 4 events	265	253	256	1129	638
	1%	1%	1%	4%	2%
grade 5 events	680	789	867	2309	1133
	3%	4%	4%	10%	4%
grade 6 events	355	376	426	5167	1716
	1%	1%	2%	22%	6%
grade 7 events	16798	16789	16585	9538	17451
	86%	85%	84%	41%	70%

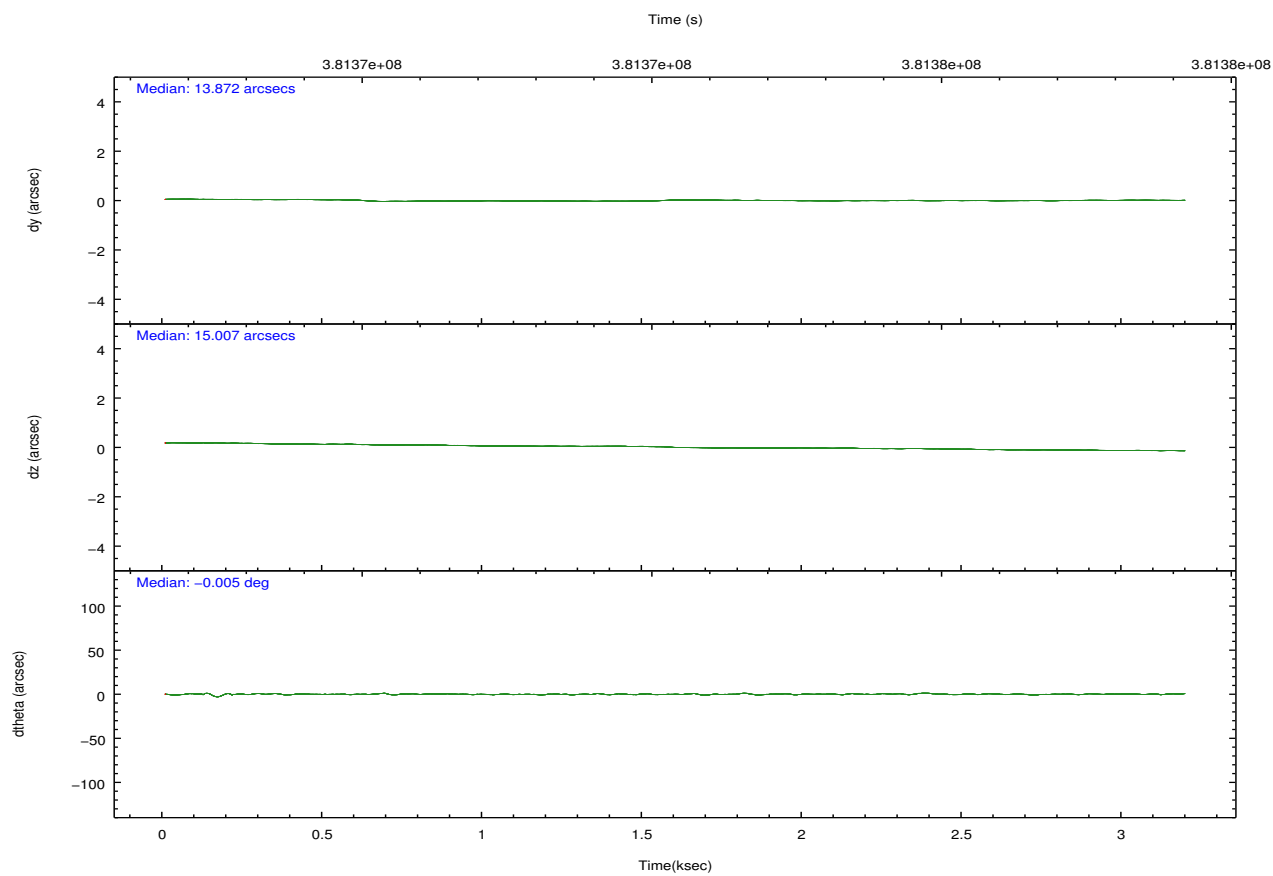
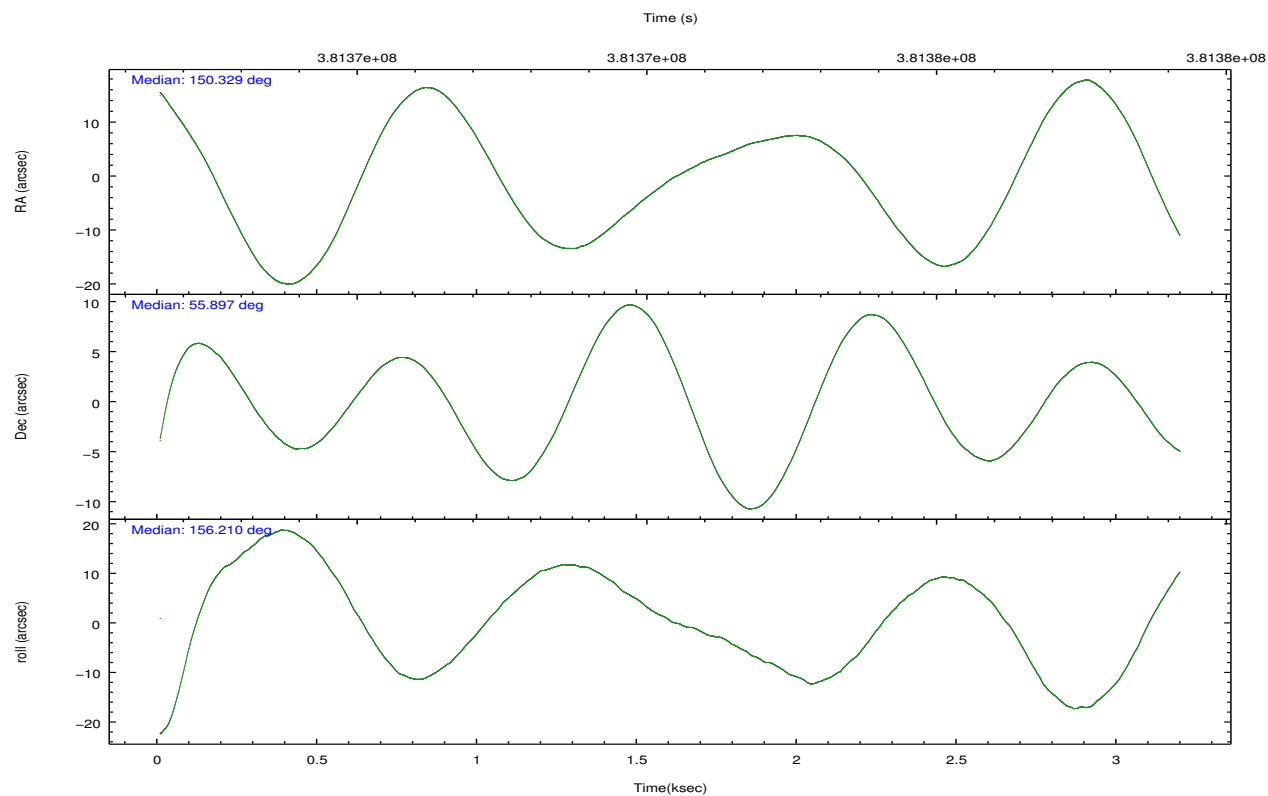
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	150.376498	150.3281925311022
[deg] Pointing Dec	55.899699	55.89640520777318
[deg] Pointing Roll	156.016750	156.2133199642736
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	381372681.184000	381371263.75983
Observation start date	2010-02-01T00:50:15	2010-02-01T00:27:43
[s] Observation end time (MET)	381375681.184000	381376607.5976
Observation end date	2010-02-01T01:40:15	2010-02-01T01:56:47
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O4	Y
CCD I3 on	O3	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/2
Subarray start row	257	257
Subarray row count	512	512
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	1.7

## 2.3 Aspect





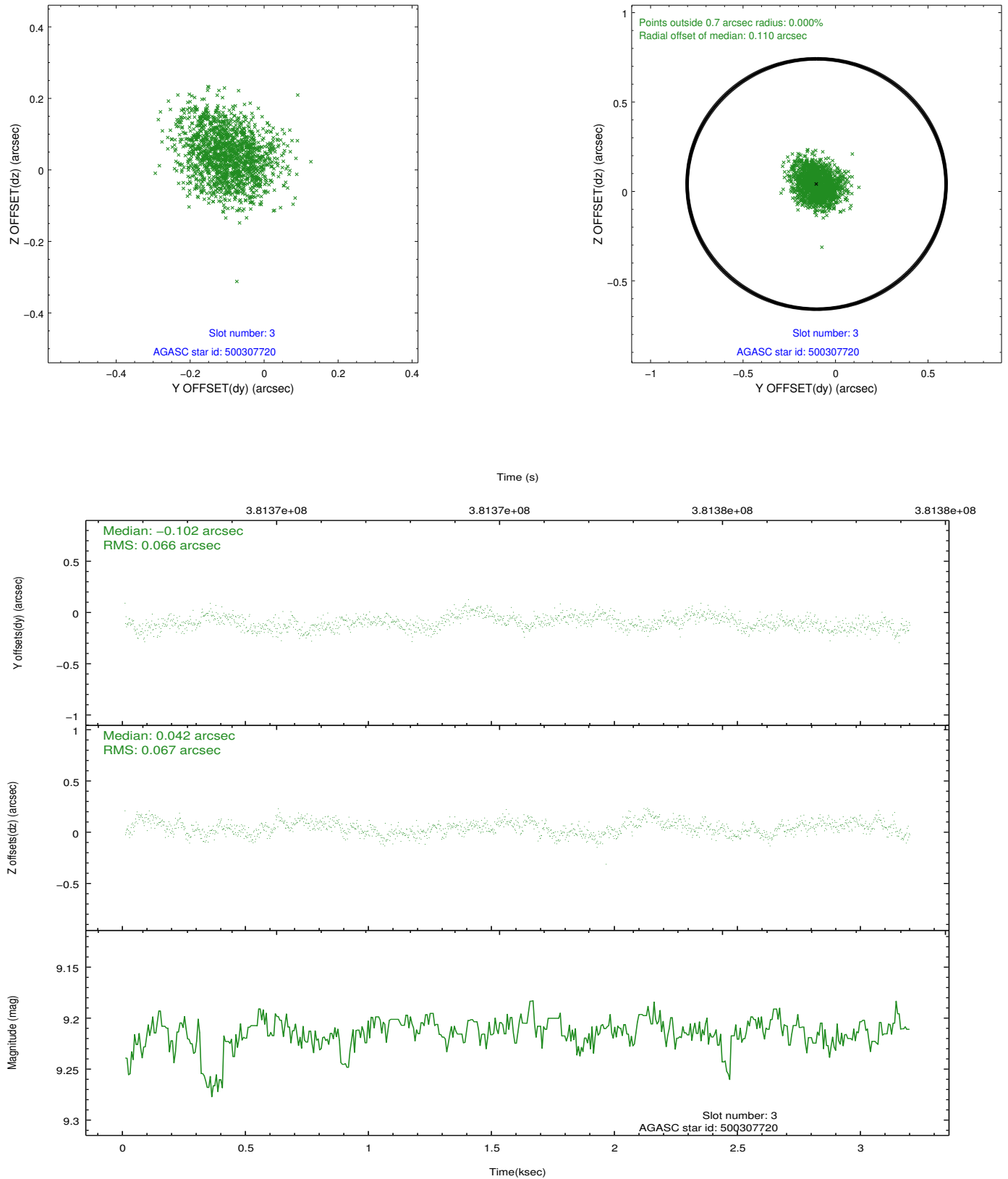
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	779	-0.067	-0.038	0.007	0.014	0.000000	0.000000	-766.86	-1736.45
1	FID	ACIS-S-4	6.97	779	0.204	0.042	0.005	0.010	0.000000	0.000000	2145.75	170.08
2	FID	ACIS-S-5	6.99	779	-0.169	0.005	0.007	0.013	0.000000	0.000000	-1817.27	165.93
3	GUIDE	500307720	9.21	1556	-0.102	0.042	0.101	0.159	149.835368	56.109010	1300.65	-250.24
4	GUIDE	500309776	7.95	1557	-0.101	-0.216	0.071	0.112	150.409238	55.585087	-520.56	1012.61
5	GUIDE	500437816	8.68	1556	-0.004	-0.043	0.081	0.132	151.181905	56.134575	-1128.62	-1436.74
6	GUIDE	500441280	9.45	1556	0.176	0.198	0.121	0.191	151.172137	55.831559	-1565.99	-438.56
7	GUIDE	500443344	9.44	1551	0.030	0.018	0.100	0.159	151.235048	55.451326	-2253.95	752.49

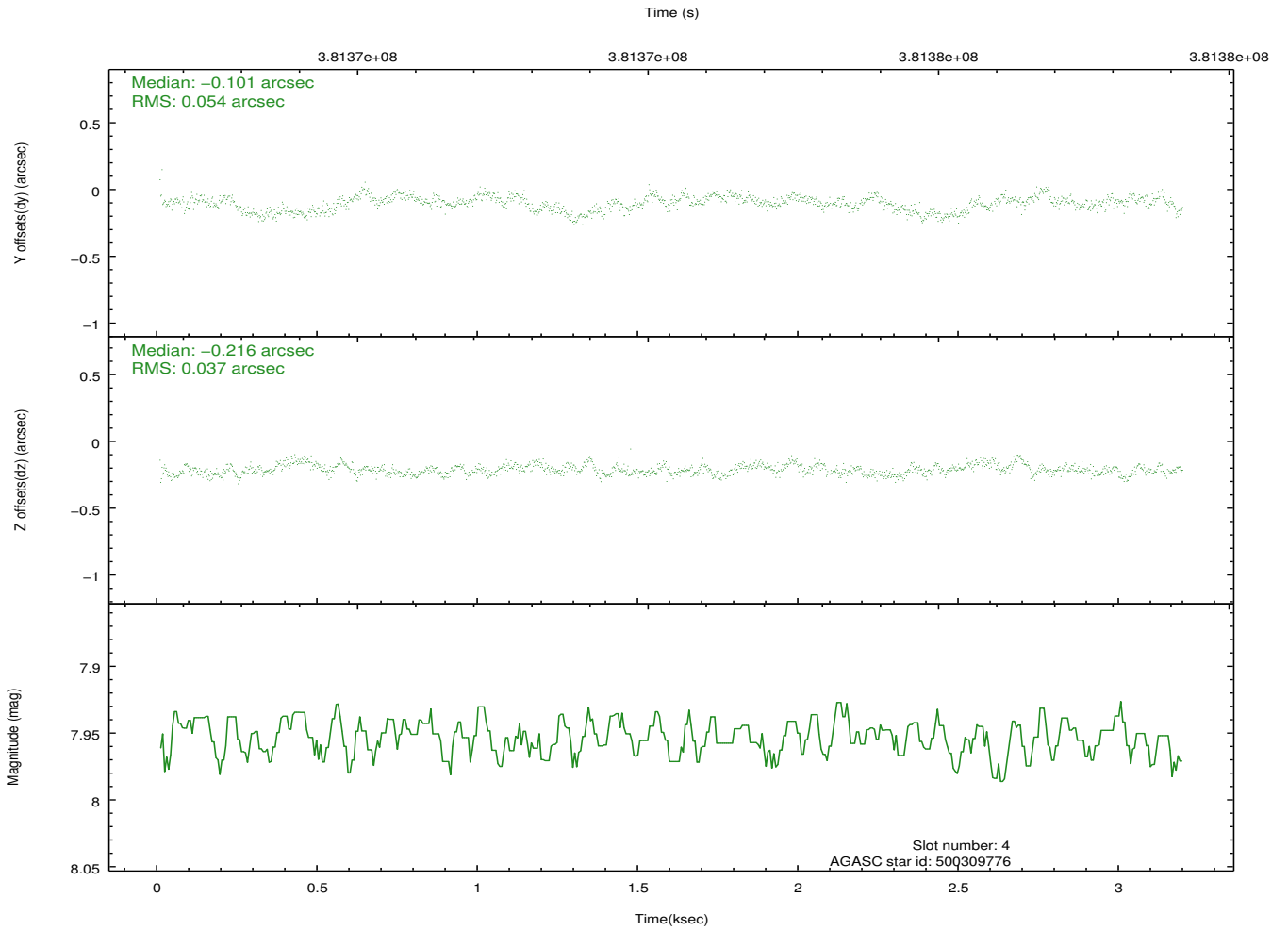
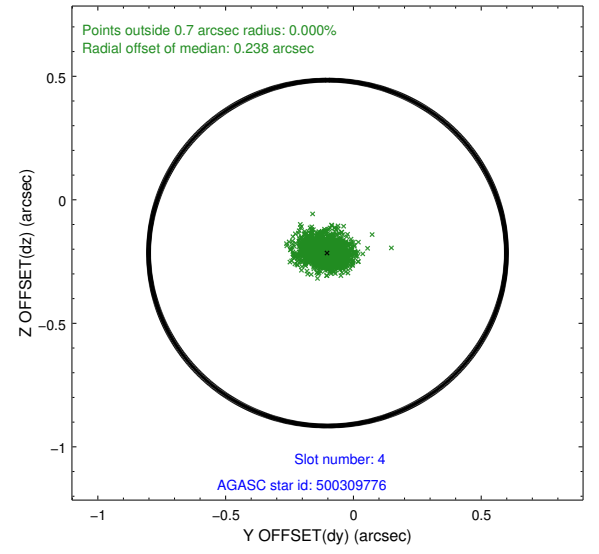
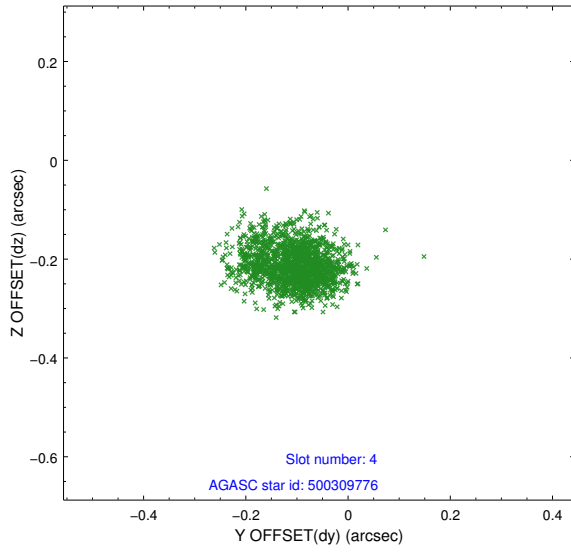


## 2.4 Star Slots

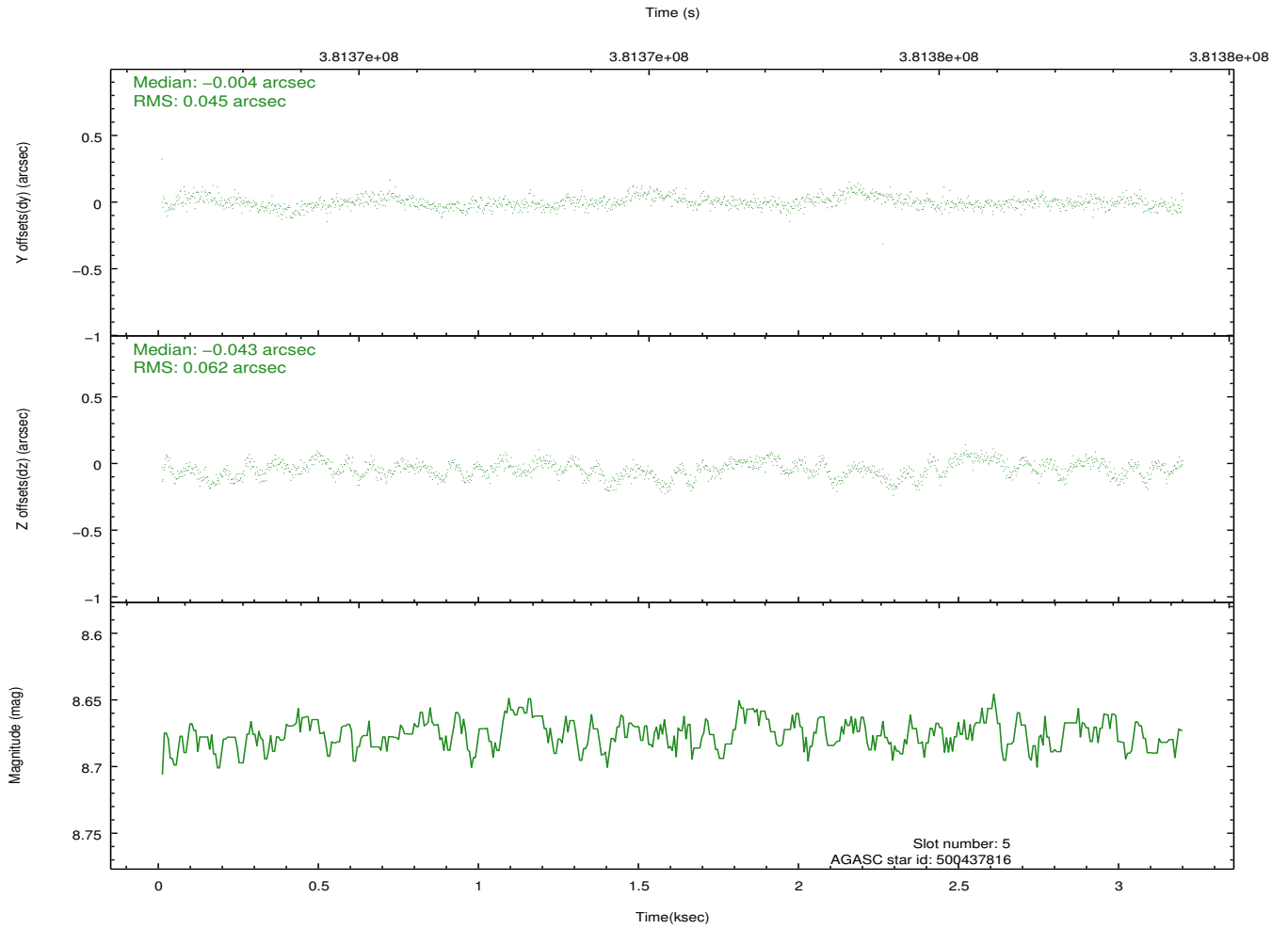
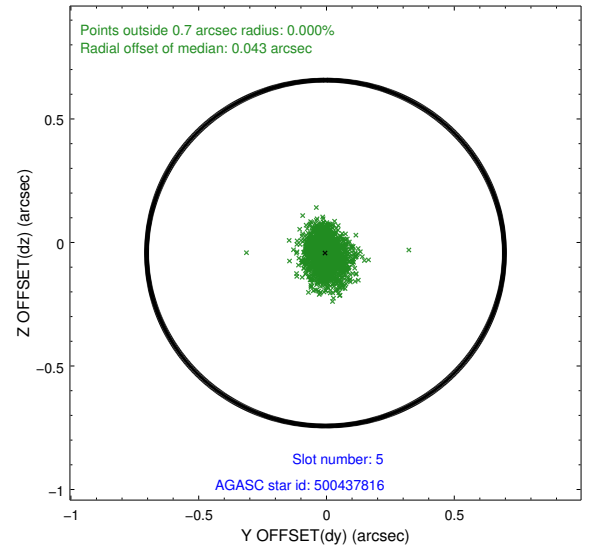
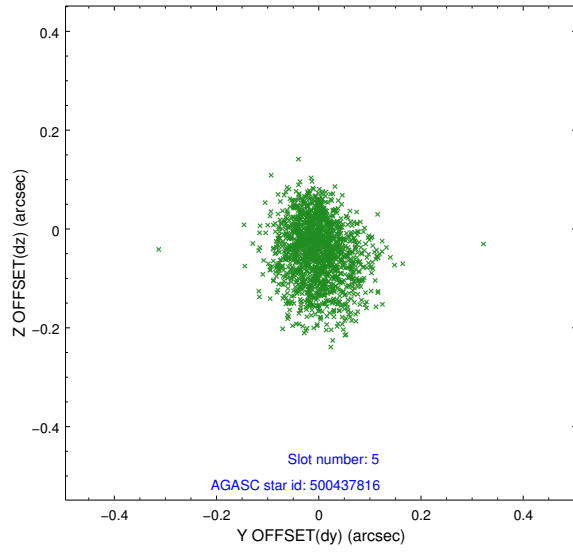
### 2.4.1 Slot 3



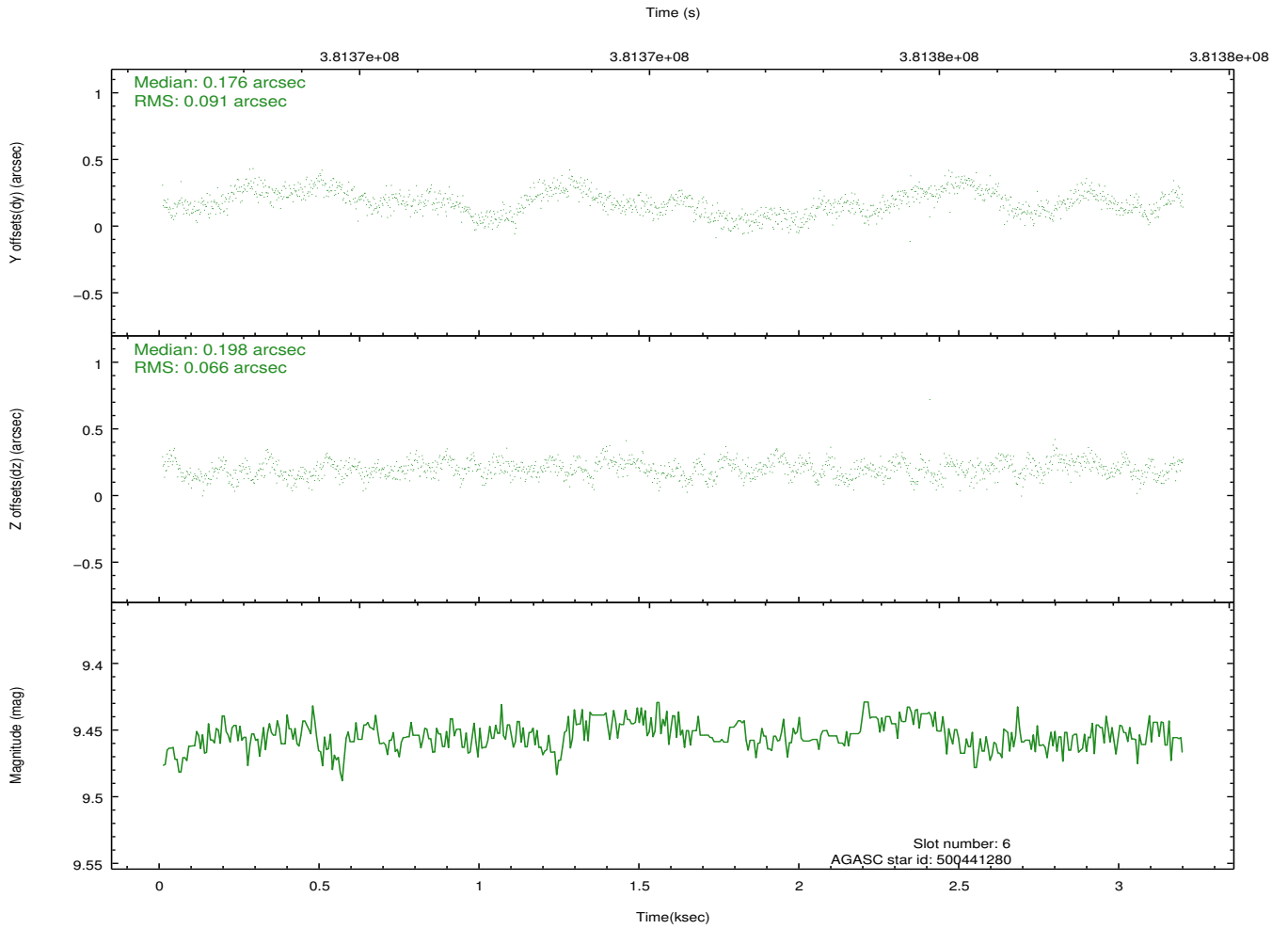
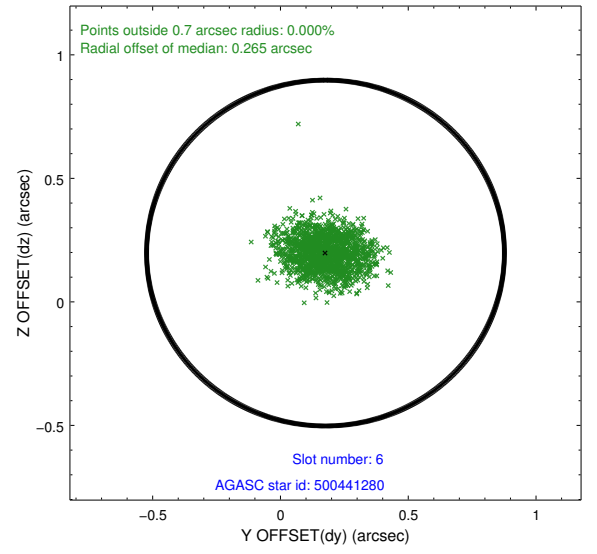
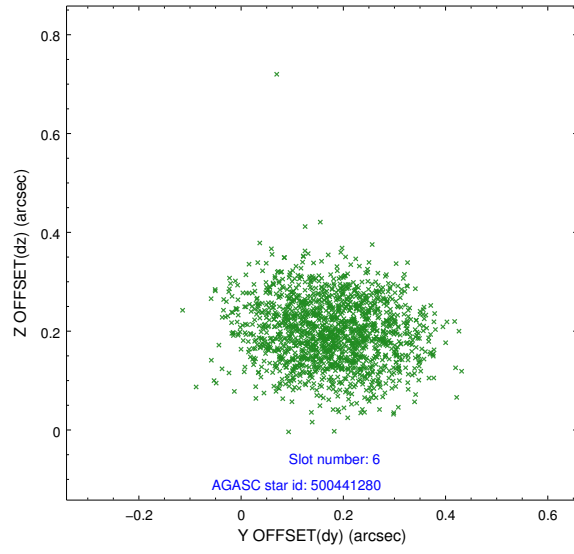
## 2.4.2 Slot 4



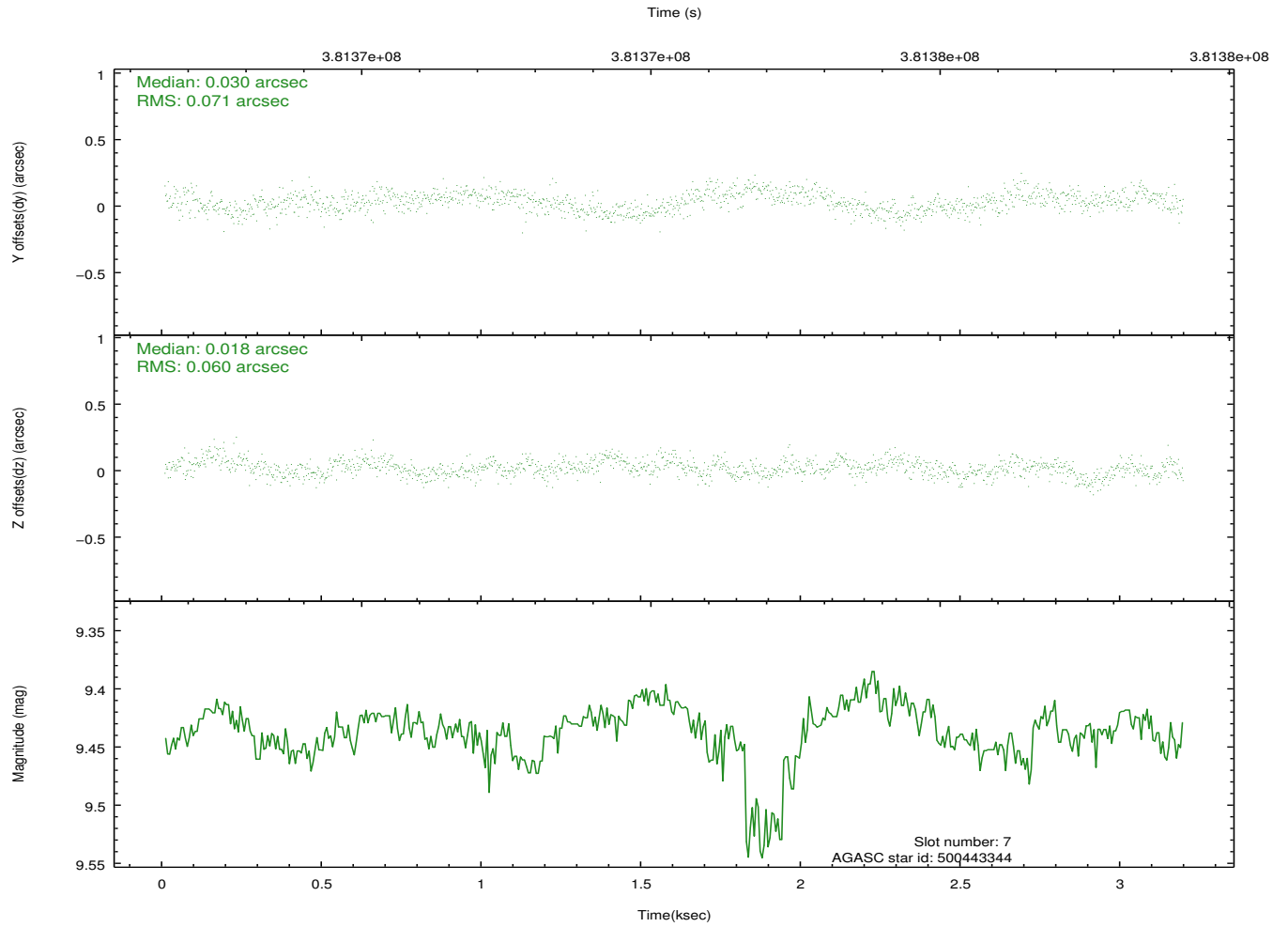
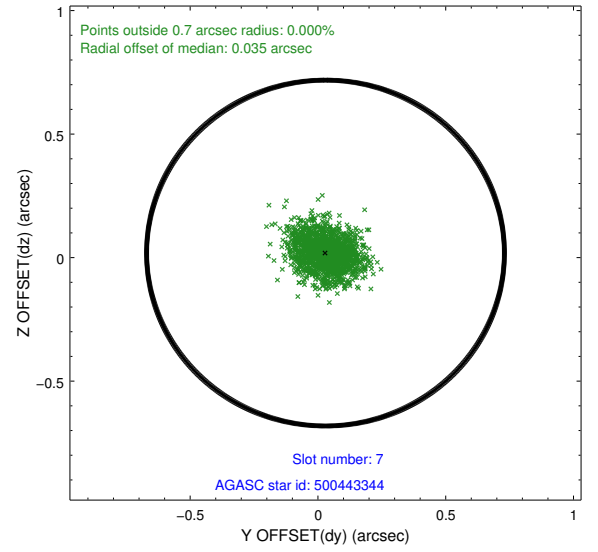
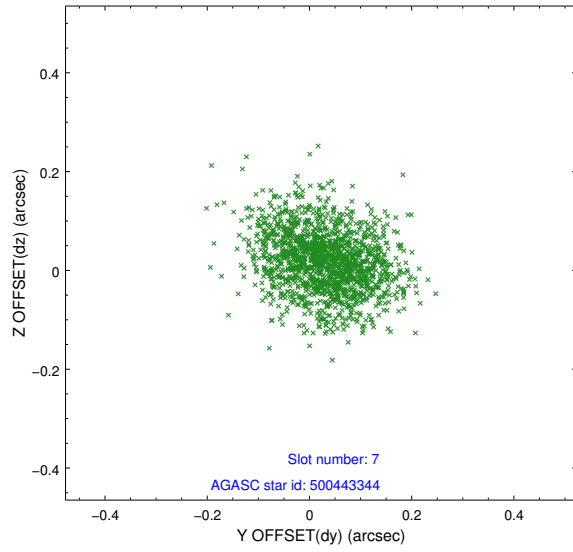
### 2.4.3 Slot 5



## 2.4.4 Slot 6

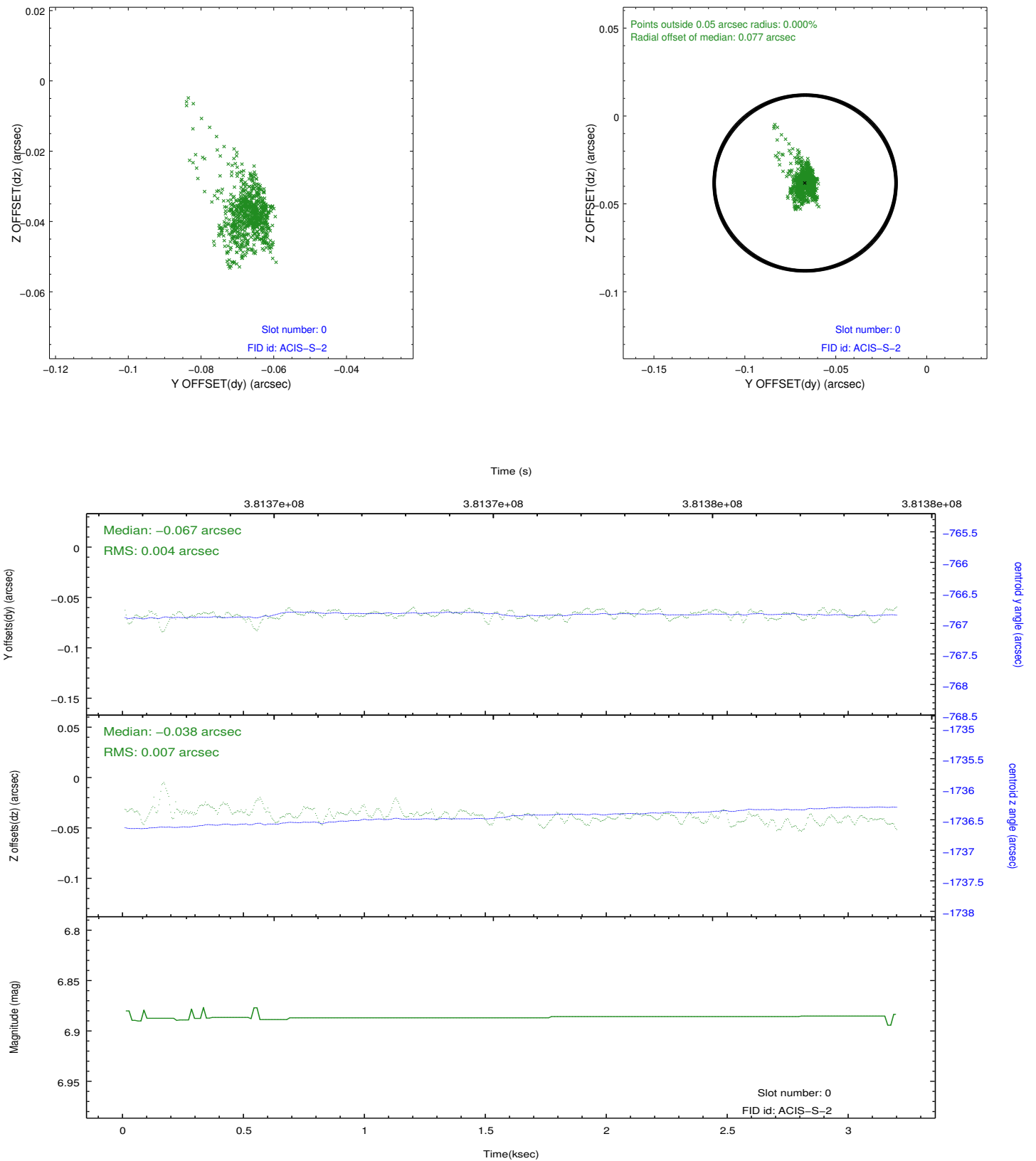


## 2.4.5 Slot 7

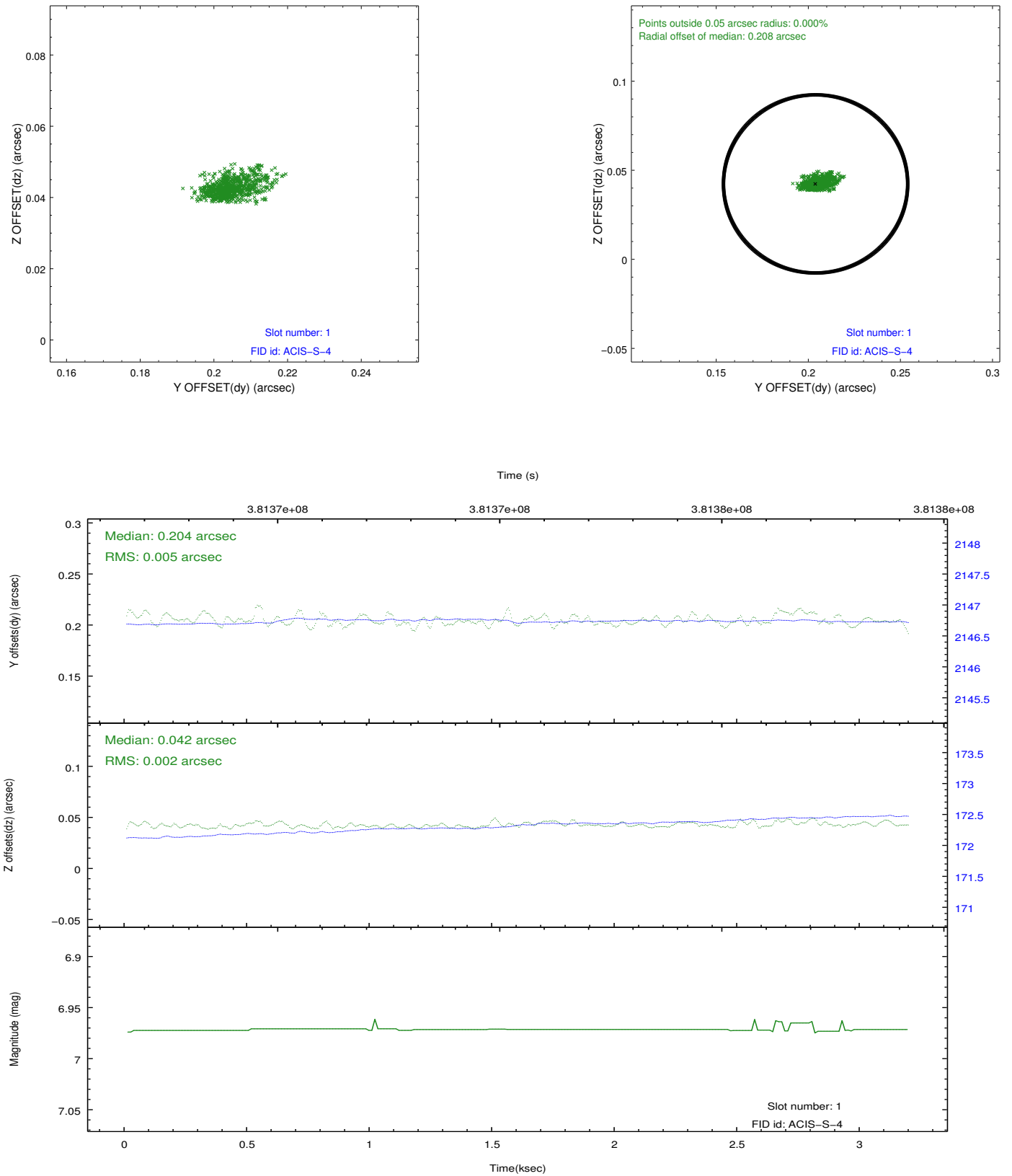


## 2.5 FID Slots

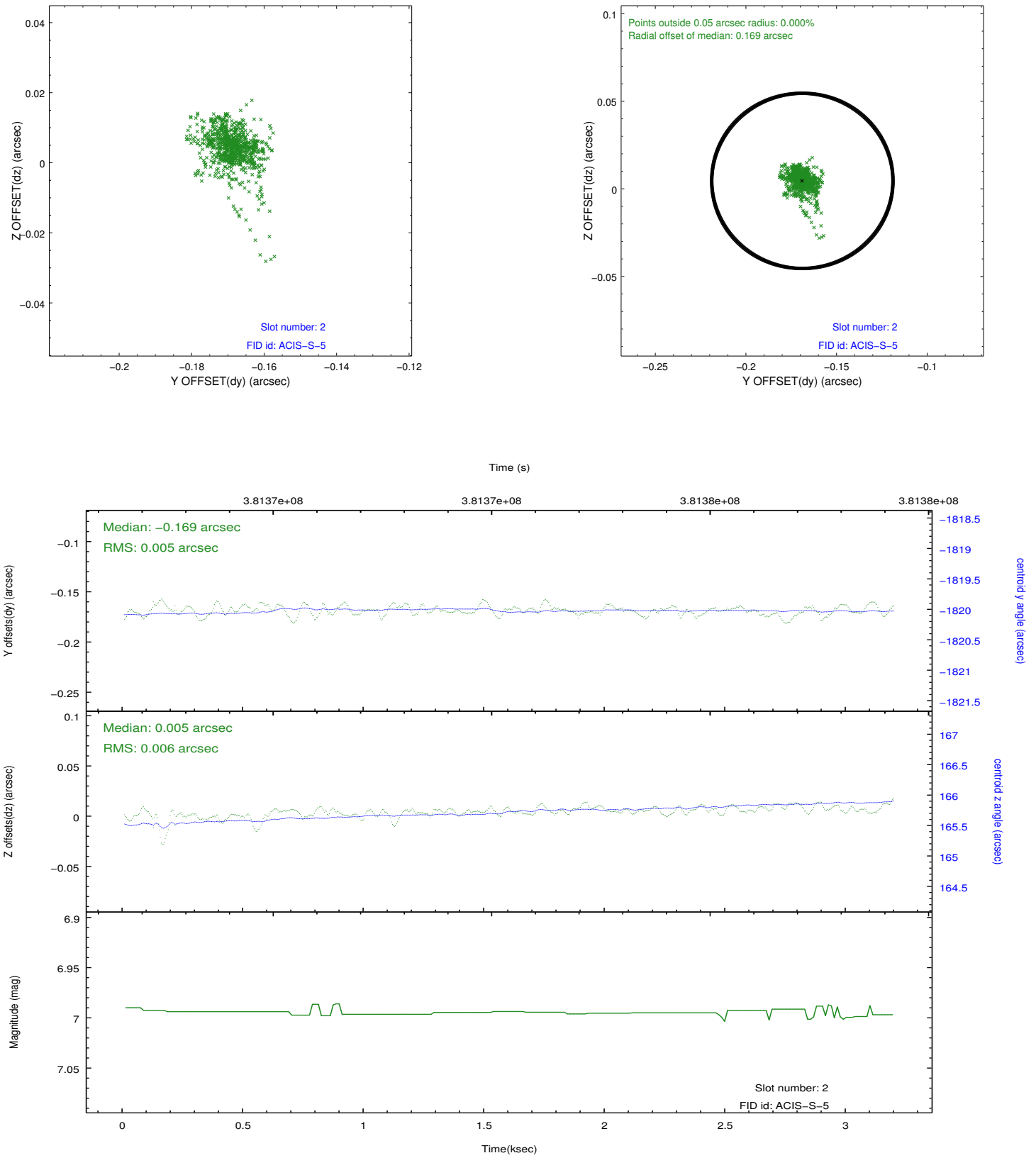
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2





## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.1857999777198

### A.2 Comments