

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12080 - L2 Version 2  
Chandra X-Ray Center

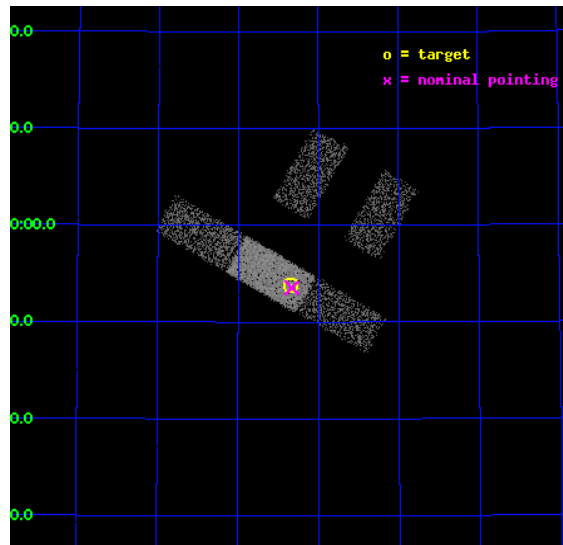
L2 Processing Date : Jun 22 2012

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# 1 Front

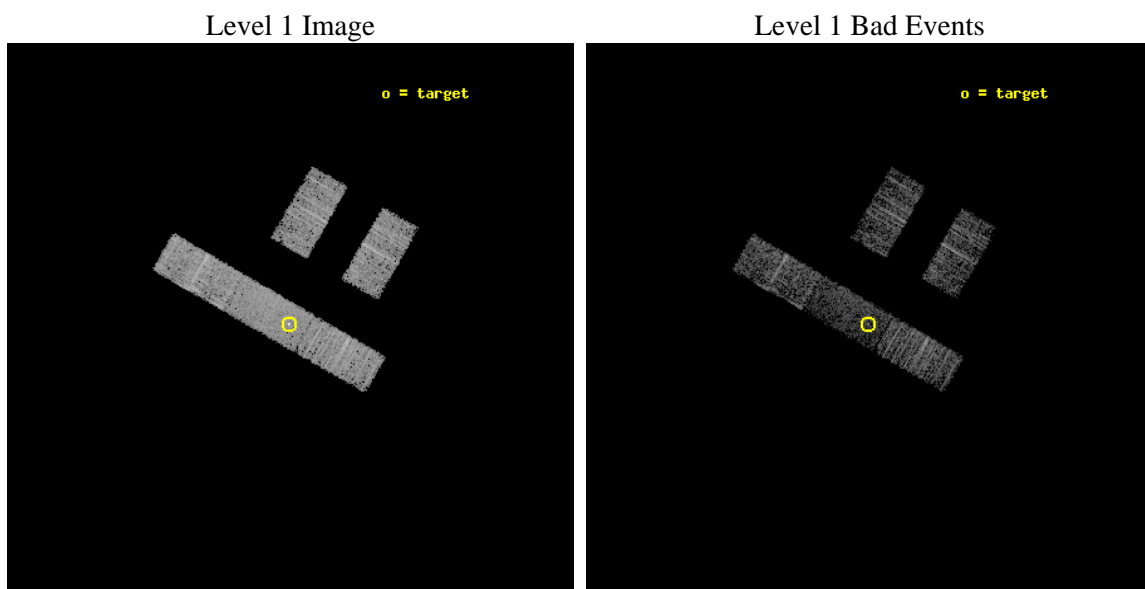
seq_num	702310	Sequence number
obs_id	12080	Observation id
title	Gravitationally lensed quasar Q0957+561AB in outburst	Proposal tit
observer	Dr Luis Goicoechea	Principal investigator
object	Q0957+561	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	150.336667	Observer's specified target RA [deg]
dec_targ	55.897056	Observer's specified target Dec [deg]
ra_nom	150.33268670621	Nominal RA [deg]
dec_nom	55.892658099579	Nominal Dec [deg]
roll_nom	209.90731427662	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3126.299978137	Sum of GTIs [s]
livetime	3052.6064667285	Livetime [s]
ontime2	3126.299978137	Sum of GTIs [s]
ontime3	3126.299978137	Sum of GTIs [s]
ontime6	3126.299978137	Sum of GTIs [s]
ontime7	3126.299978137	Sum of GTIs [s]
ontime8	3126.299978137	Sum of GTIs [s]
l2events	12875	Number of level 2 events



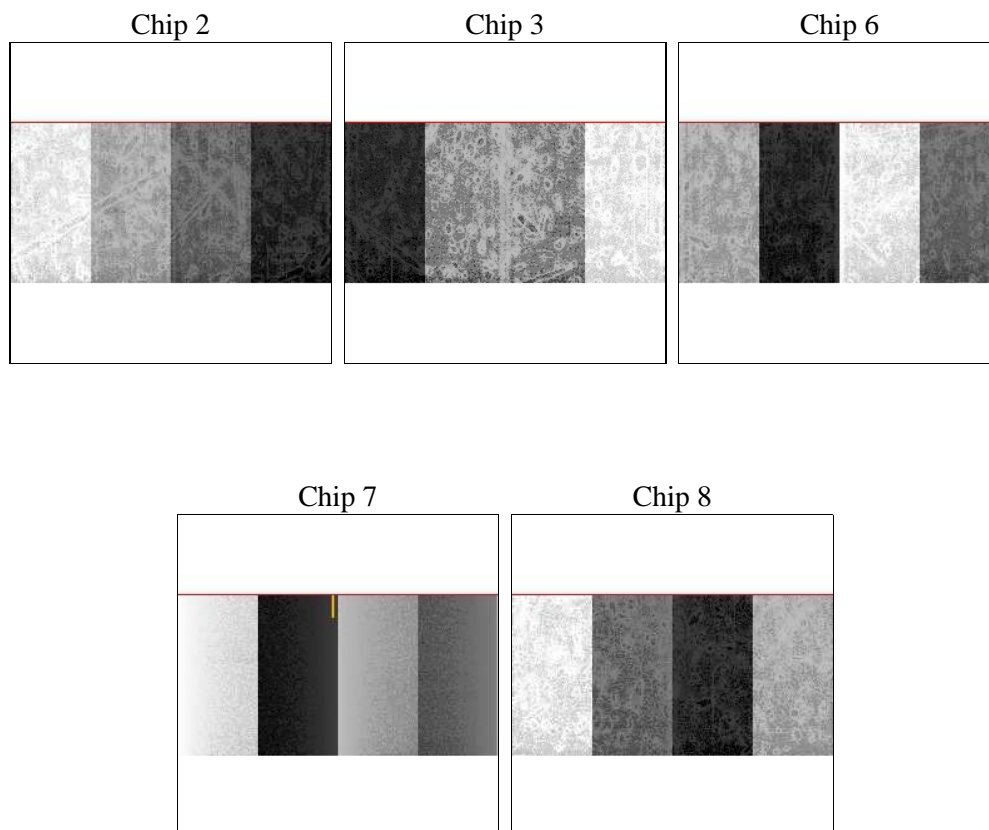
## 2 OBI

### 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	3126.299978137	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	3126.299978137	Sum of GTIs [s]
date	2012-06-22T16:57:33	Date and time of file creation	ontime3	3126.299978137	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	3126.299978137	Sum of GTIs [s]
			ontime7	3126.299978137	Sum of GTIs [s]
			ontime8	3126.299978137	Sum of GTIs [s]
			l1events	108491	Number of level 1 events

### 2.1.4 Events

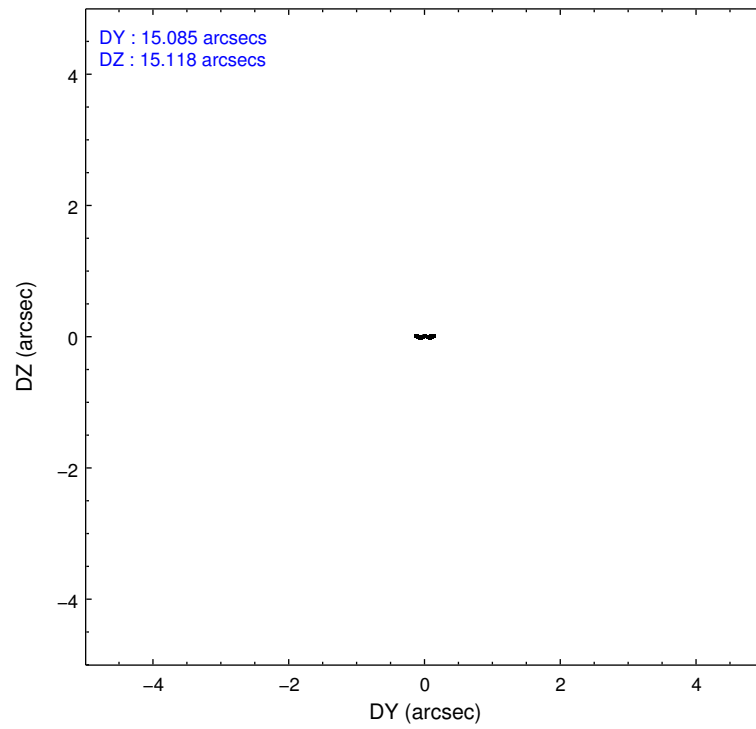
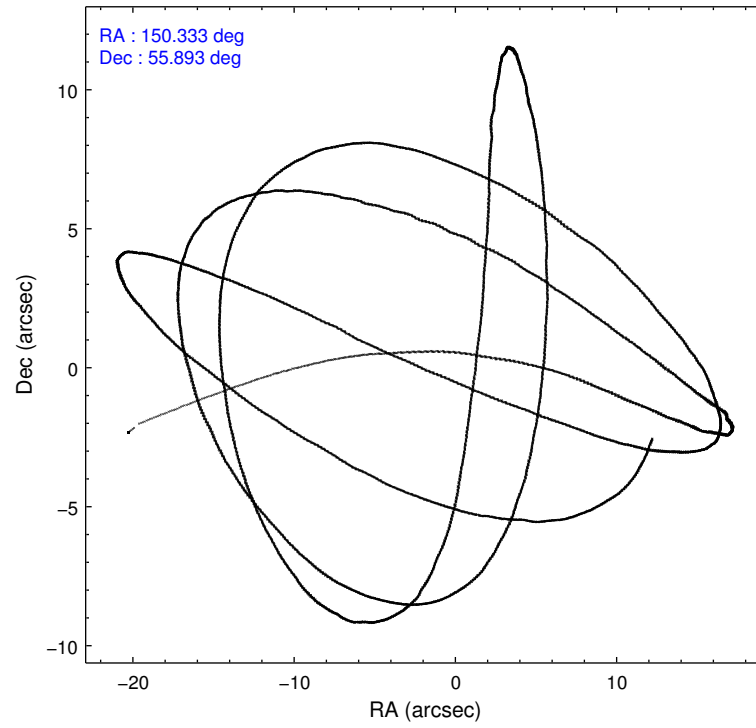
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	19239	18264	21593	23488	25907
rejected events	17782	16908	20096	15543	21420
rejected %	92%	92%	93%	66%	82%

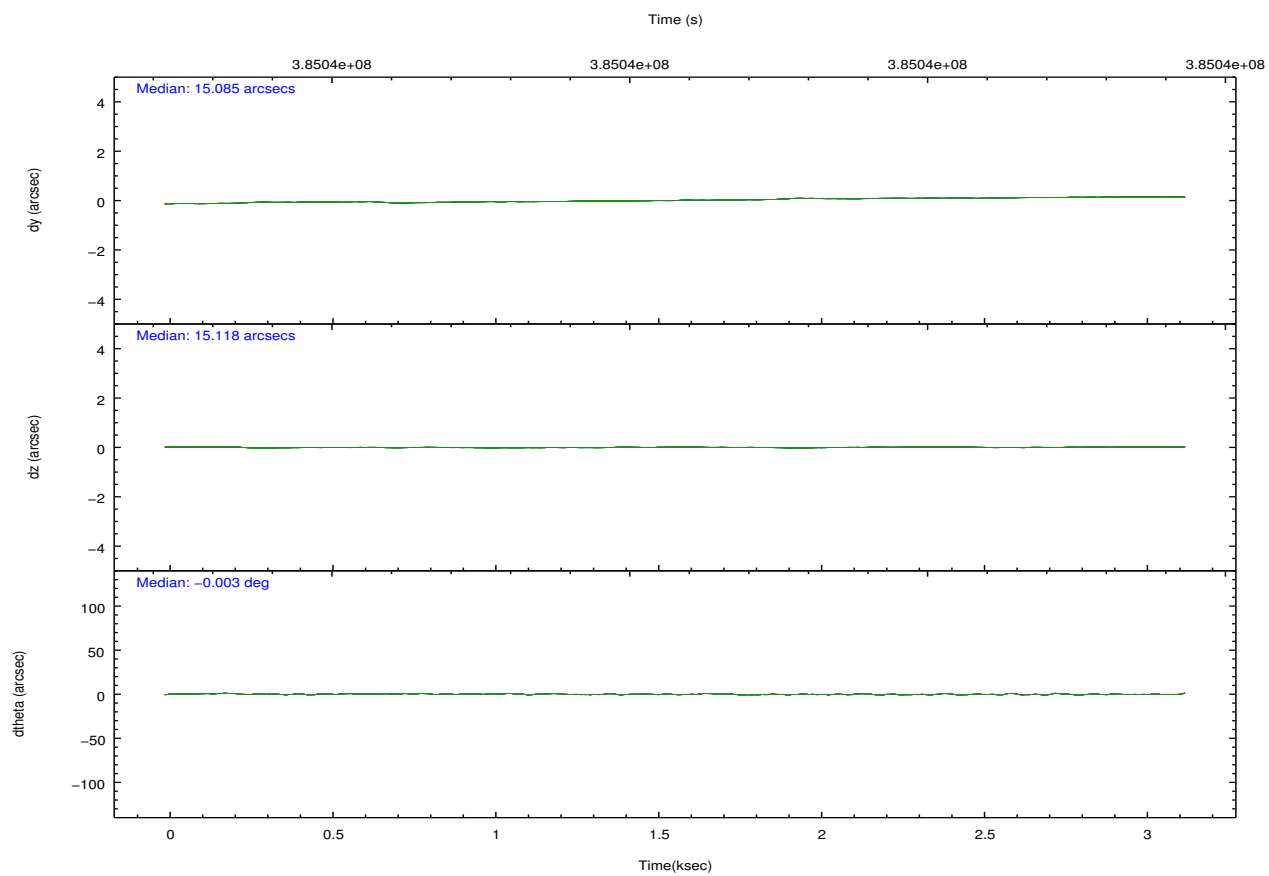
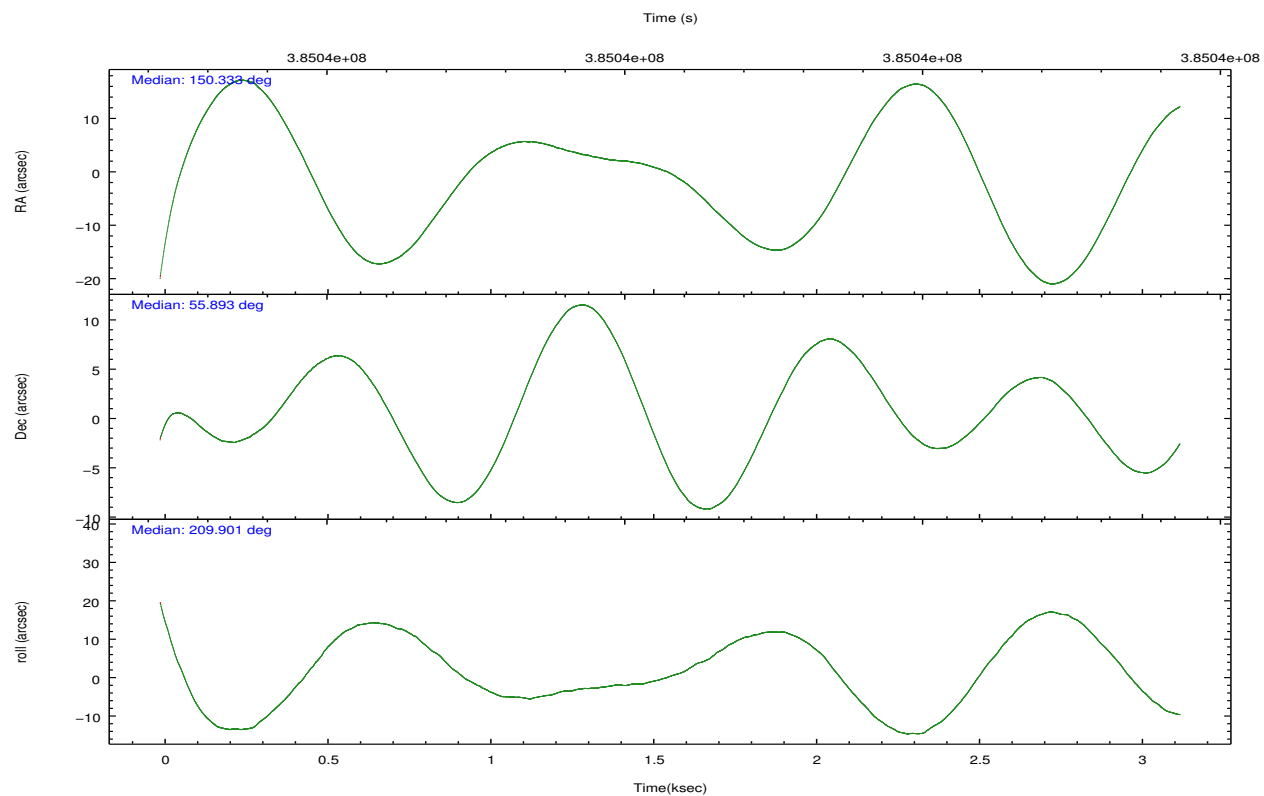
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	700	651	750	1254	2001
	3%	3%	3%	5%	7%
grade 1 events	13	5	5	29	21
	0%	0%	0%	0%	0%
grade 2 events	454	444	451	2454	1461
	2%	2%	2%	10%	5%
grade 3 events	269	272	249	1111	778
	1%	1%	1%	4%	3%
grade 4 events	250	224	245	1137	757
	1%	1%	1%	4%	2%
grade 5 events	641	805	845	2452	1167
	3%	4%	3%	10%	4%
grade 6 events	413	367	470	5354	1759
	2%	2%	2%	22%	6%
grade 7 events	16499	15496	18578	9697	17963
	85%	84%	86%	41%	69%

## 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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	150.356437	150.3326867062083	CCD I2 on	O4	Y
[deg] Pointing Dec	55.916635	55.89265809957931	CCD I3 on	O3	Y
[deg] Pointing Roll	209.731007	209.9073142766242	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	O1	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	O2	Y
[s] Observation start time (MET)	385041715.184000	385040054.13334	CCD S5 on	N	N
Observation start date	2010-03-15T12:00:49	2010-03-15T11:34:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	385044715.184000	385045446.14611	On-chip summing requested	N	N
Observation end date	2010-03-15T12:50:49	2010-03-15T13:04:06	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	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





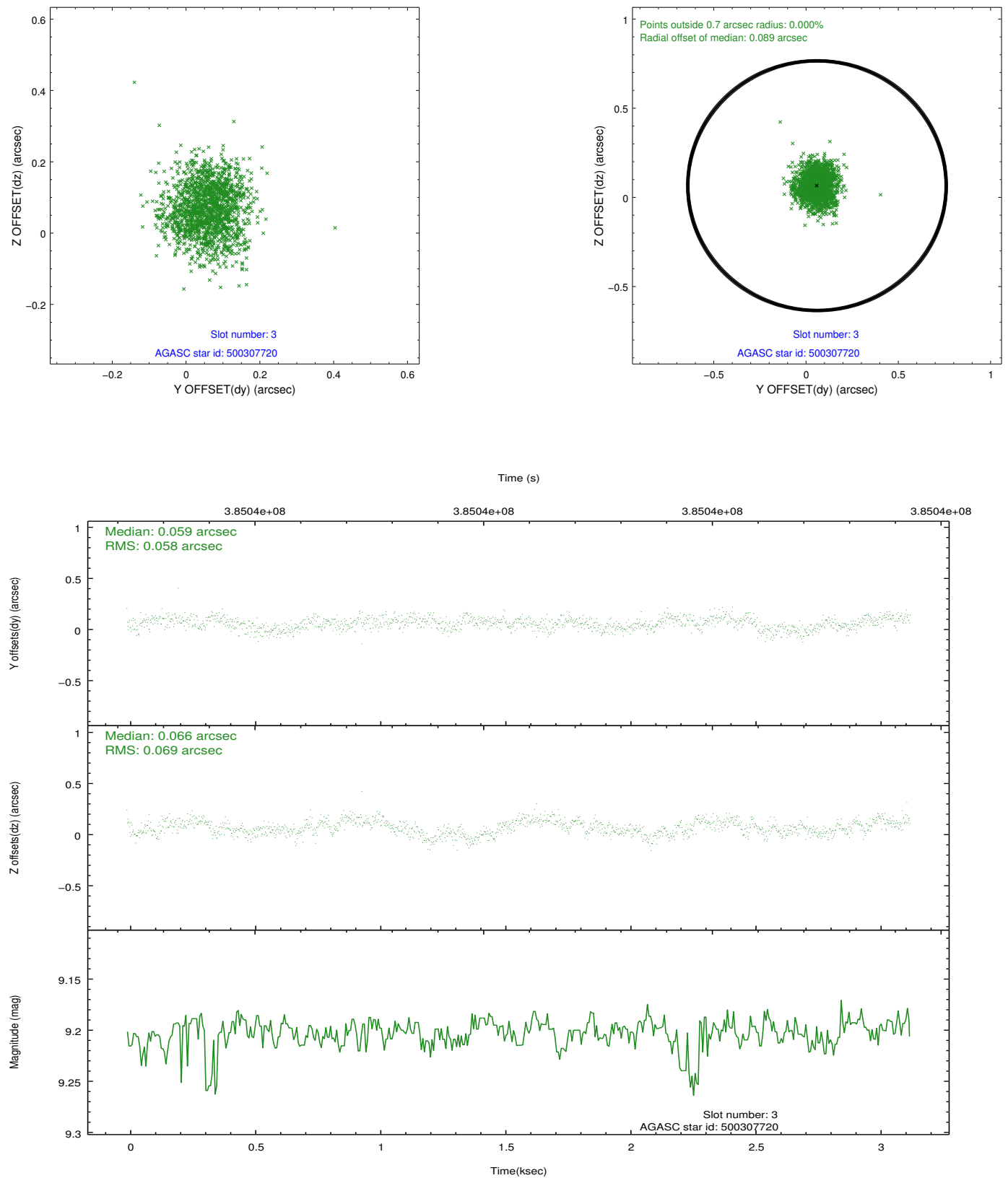
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.91	764	-0.120	-0.077	0.005	0.009	0.000000	0.000000	-768.21	-1736.57
1	FID	ACIS-S-4	7.00	764	0.128	0.065	0.006	0.010	0.000000	0.000000	2144.40	169.91
2	FID	ACIS-S-6	7.13	764	-0.036	0.019	0.006	0.010	0.000000	0.000000	396.49	809.60
3	GUIDE	500307720	9.20	1528	0.059	0.066	0.096	0.151	149.835368	56.109010	563.03	-1123.68
4	GUIDE	500309776	7.94	1528	-0.088	-0.077	0.070	0.110	150.409238	55.585087	502.55	1091.76
5	GUIDE	500311288	8.57	1524	0.139	-0.016	0.066	0.107	149.915988	55.168561	2120.88	1887.65
6	GUIDE	500437816	8.68	1527	0.002	-0.027	0.070	0.114	151.181905	56.134575	-1830.42	132.13
7	GUIDE	500442560	7.02	1527	-0.107	0.049	0.058	0.098	151.619747	55.769496	-1971.87	1708.10

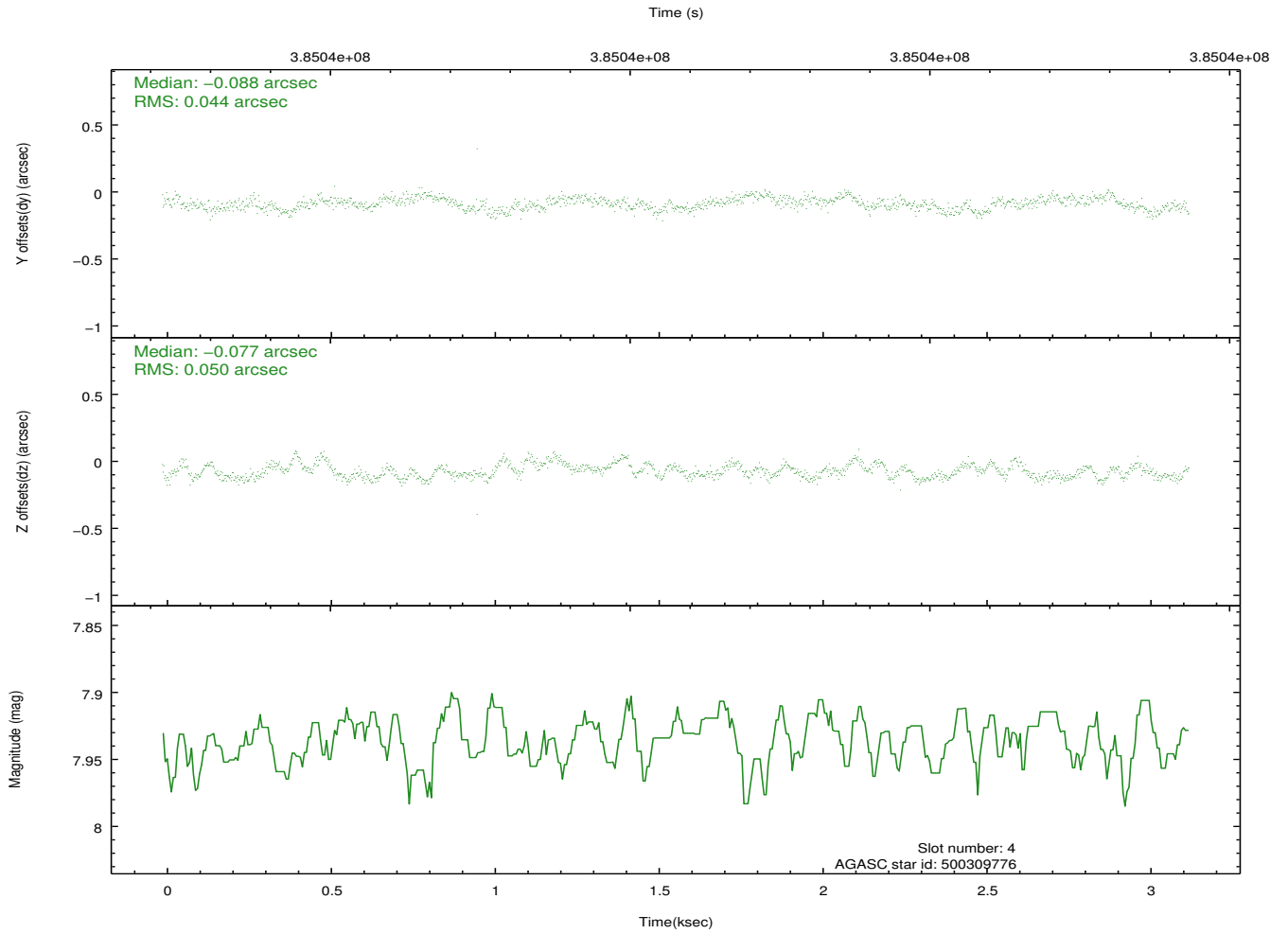
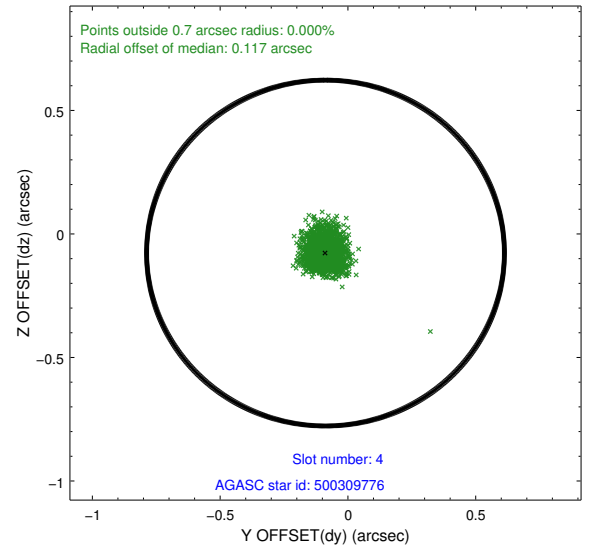
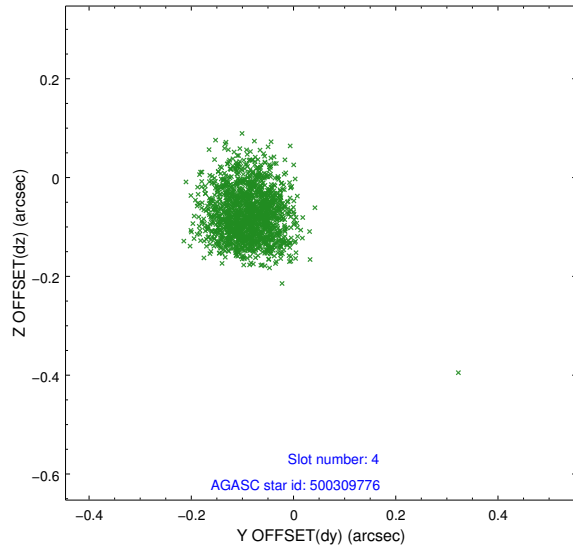


## 2.4 Star Slots

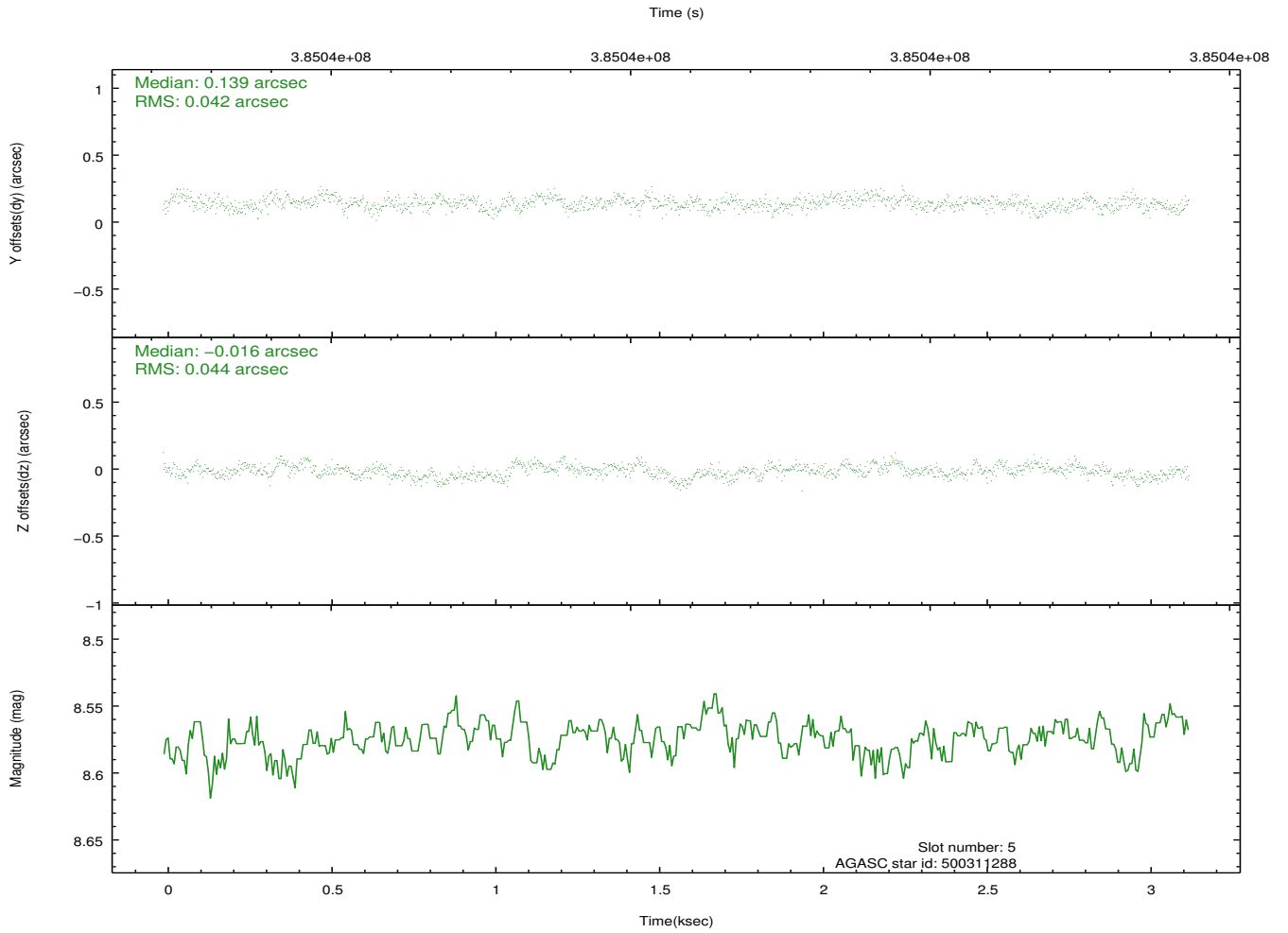
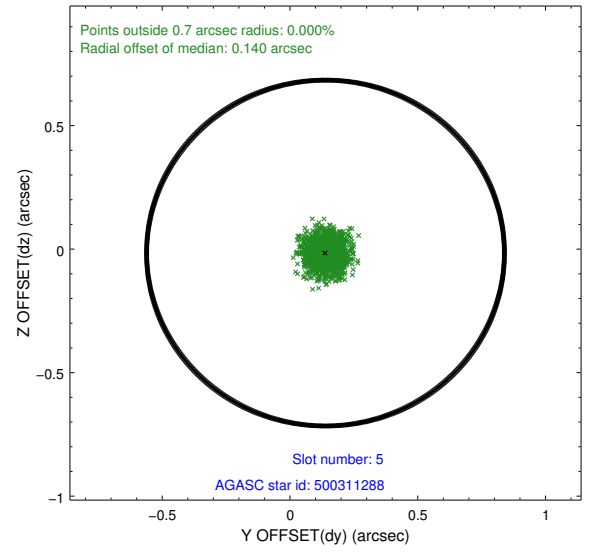
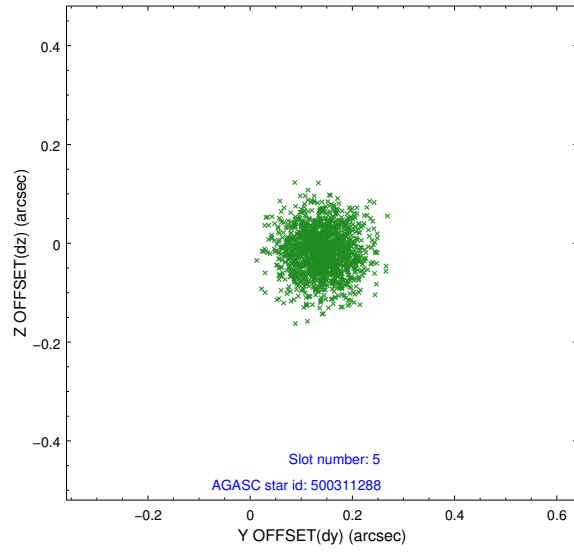
### 2.4.1 Slot 3



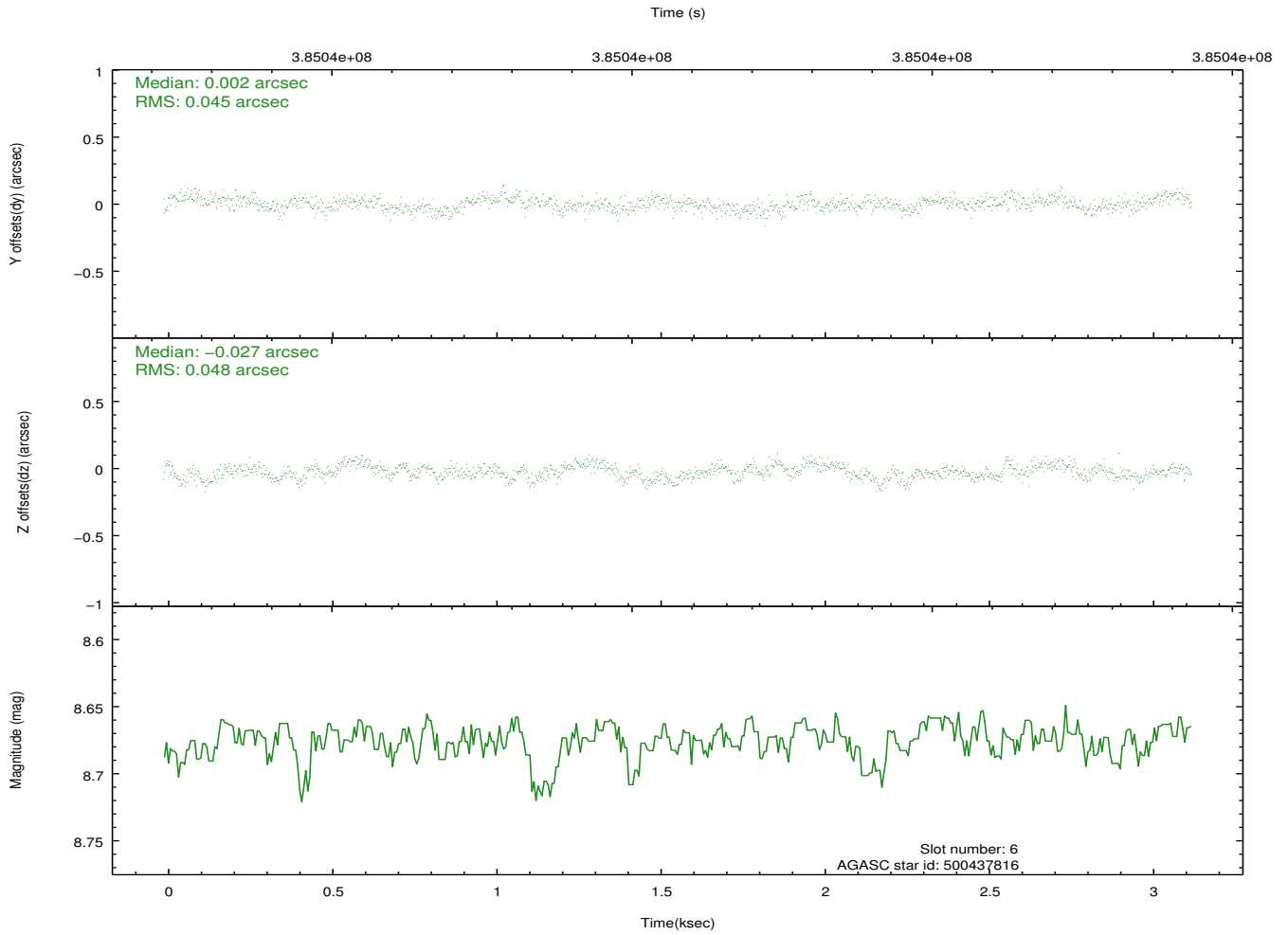
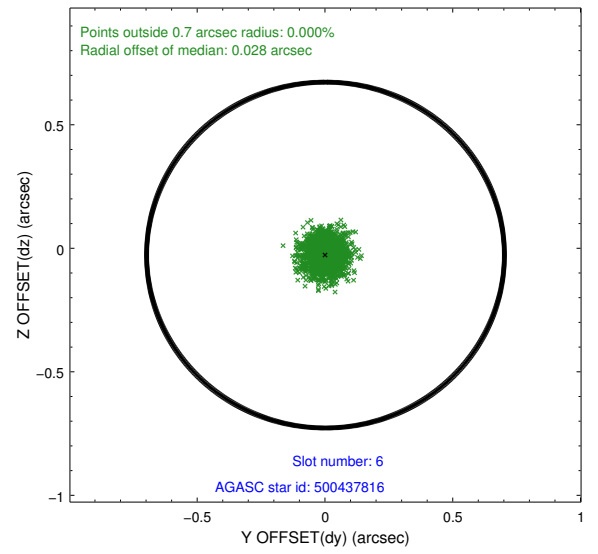
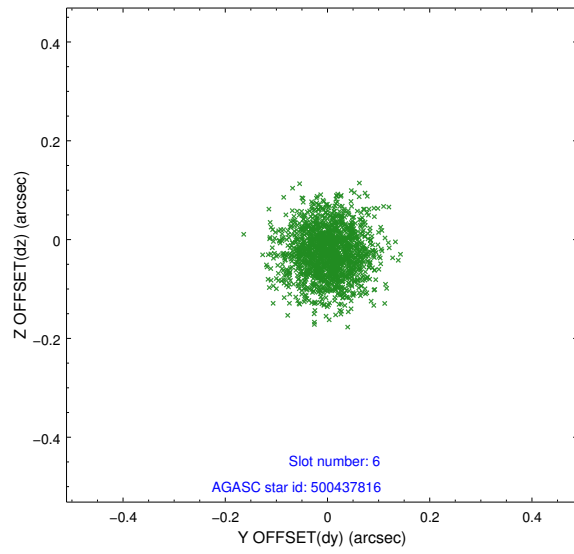
## 2.4.2 Slot 4



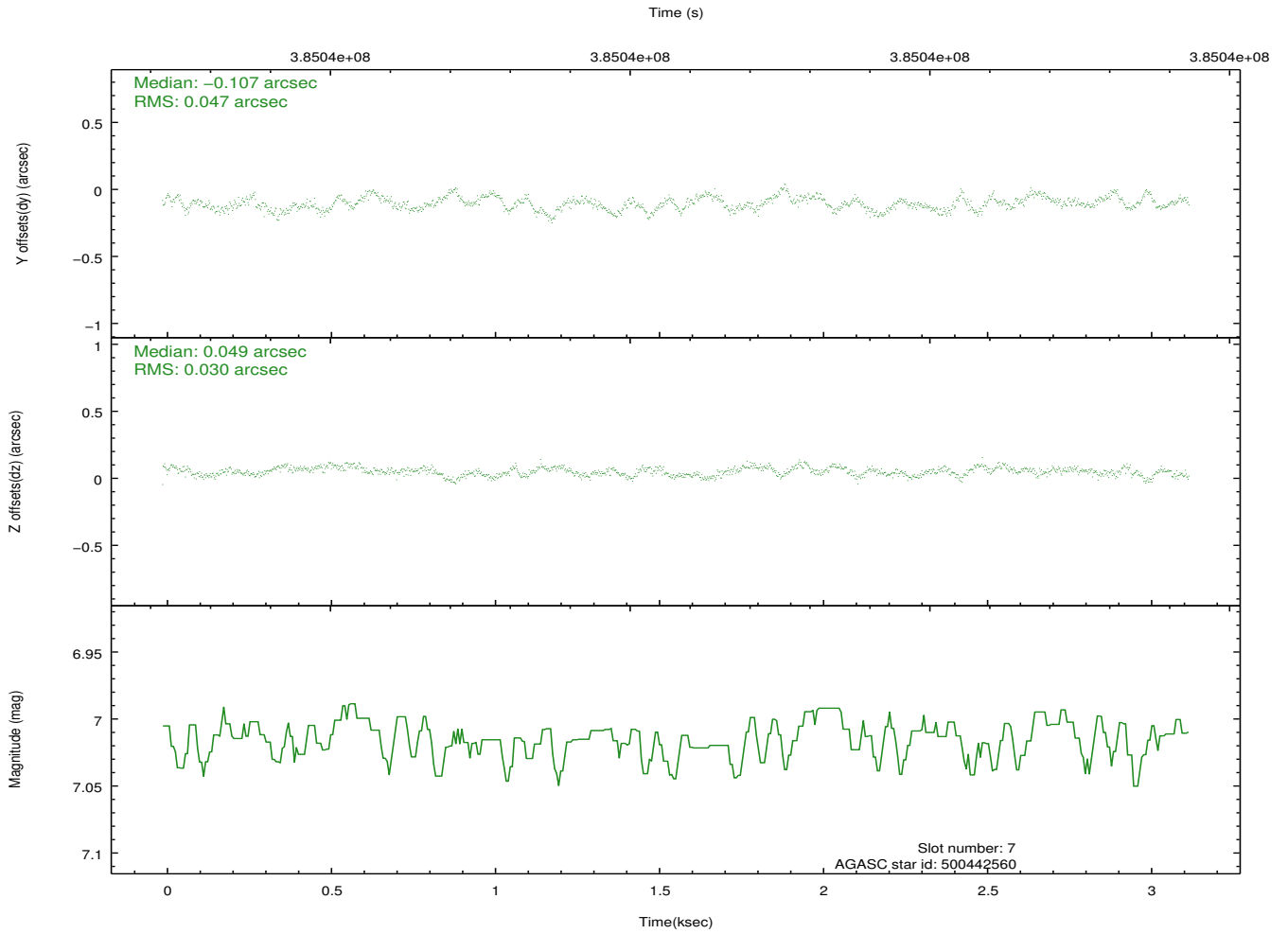
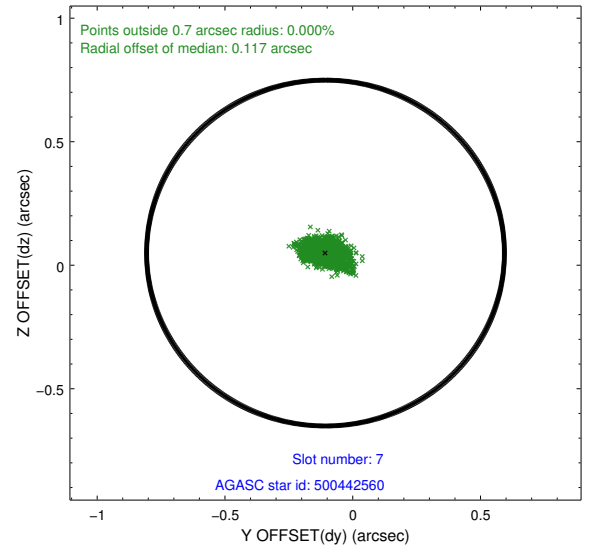
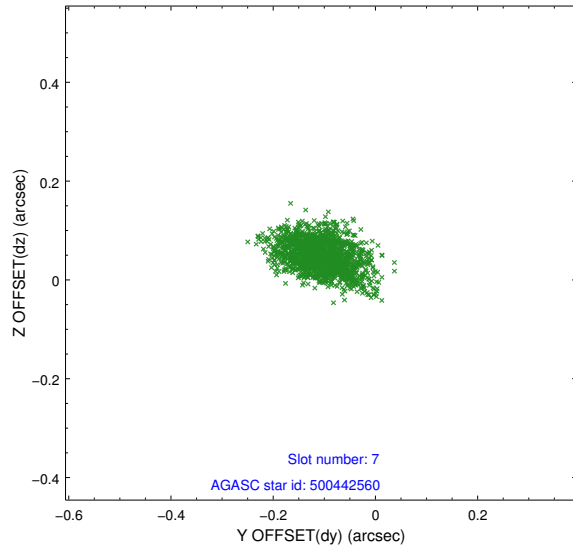
### 2.4.3 Slot 5



## 2.4.4 Slot 6

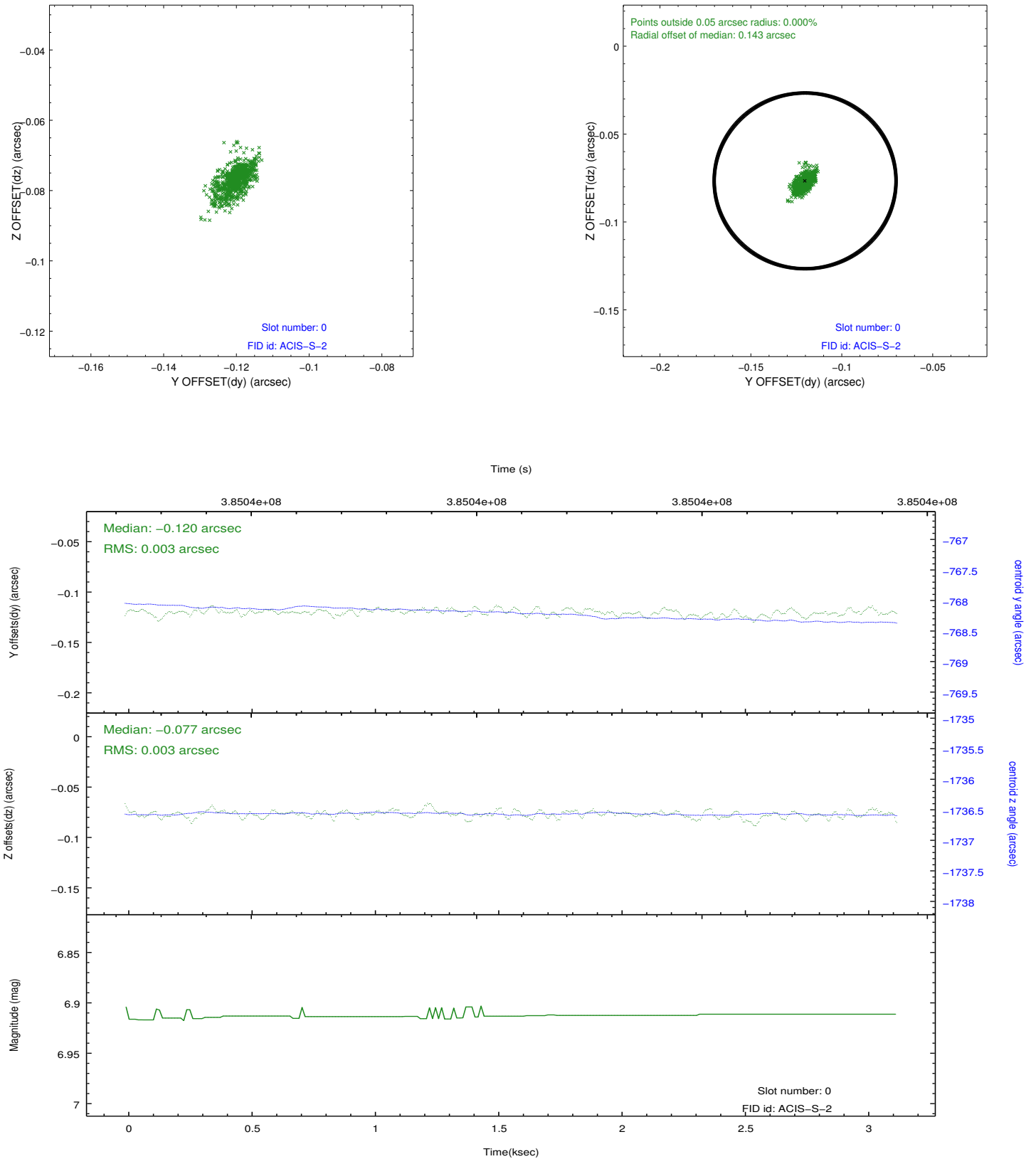


## 2.4.5 Slot 7

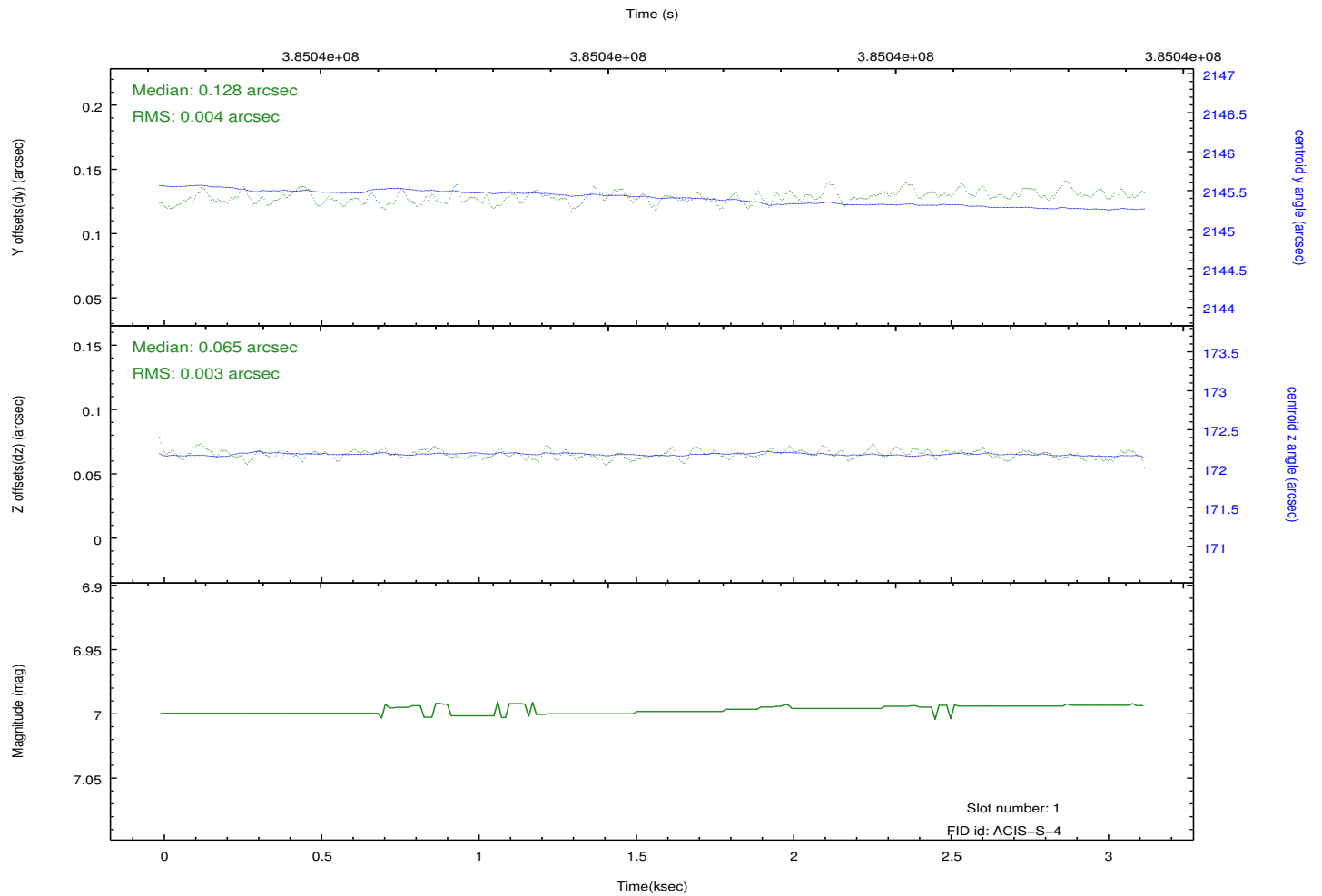
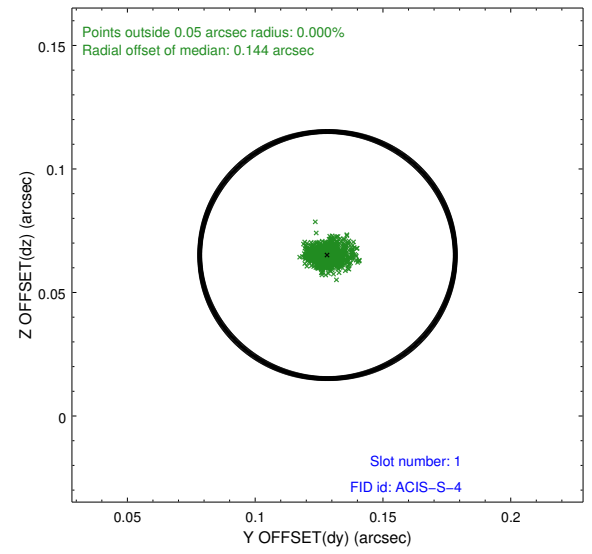
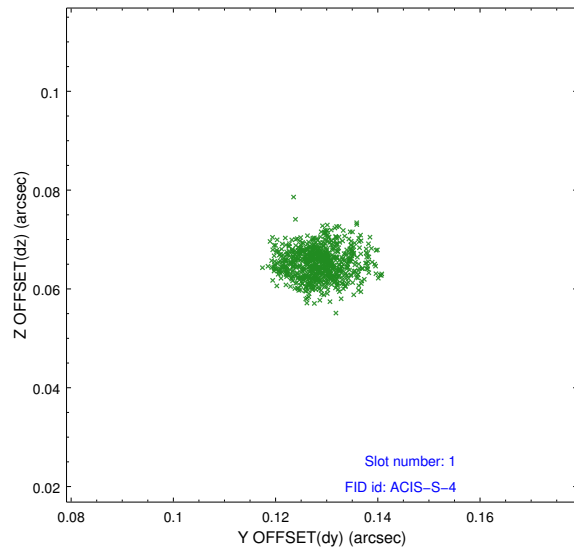


## 2.5 FID Slots

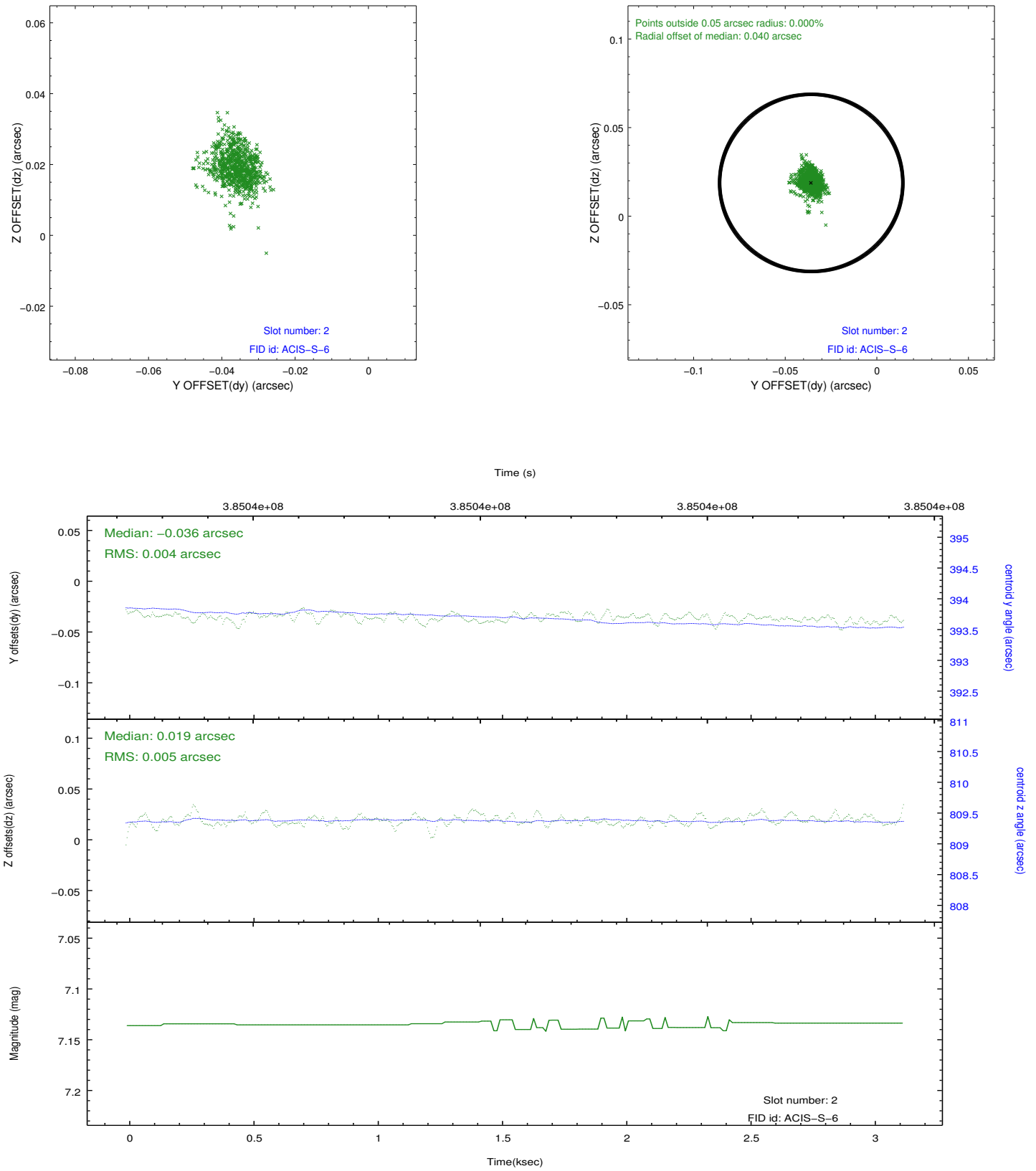
### 2.5.1 Slot 0



## 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)	2012.06.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.126299978137

### A.2 Comments