

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10566 - L2 Version 2  
Chandra X-Ray Center

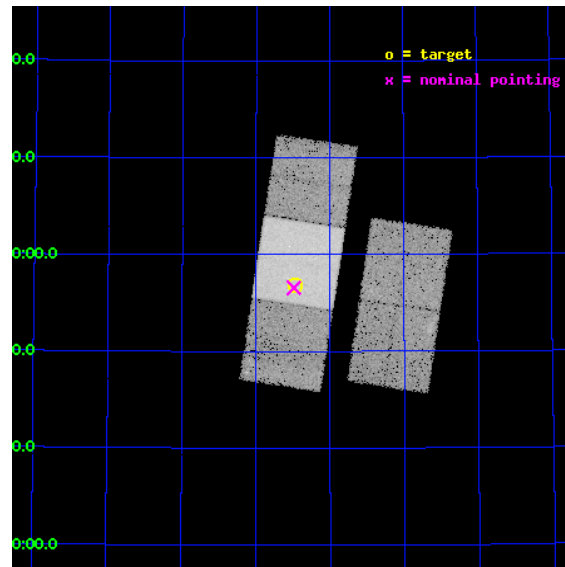
L2 Processing Date : Jun 13 2012

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# 1 Front

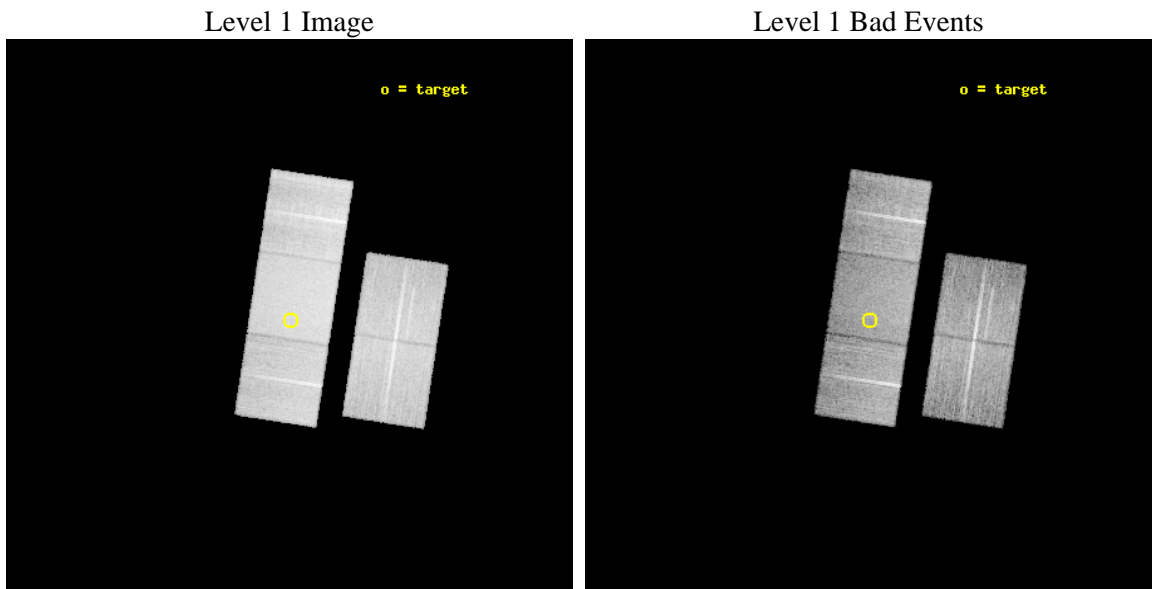
seq_num	600759	Sequence number
obs_id	10566	Observation id
title	The Most Luminous ULXs	Proposal title
observer	Douglas Swartz	Principal investigator
object	Arp 293	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	254.615833	Observer's specified target RA [deg]
dec_targ	58.946667	Observer's specified target Dec [deg]
ra_nom	254.62191792676	Nominal RA [deg]
dec_nom	58.942974579295	Nominal Dec [deg]
roll_nom	278.68786747425	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14188.700109124	Sum of GTIs [s]
livetime	14003.314296629	Livetime [s]
ontime2	14188.700109124	Sum of GTIs [s]
ontime3	14185.559128821	Sum of GTIs [s]
ontime6	14188.700109124	Sum of GTIs [s]
ontime7	14188.700109124	Sum of GTIs [s]
ontime8	14188.700109124	Sum of GTIs [s]
l2events	150354	Number of level 2 events



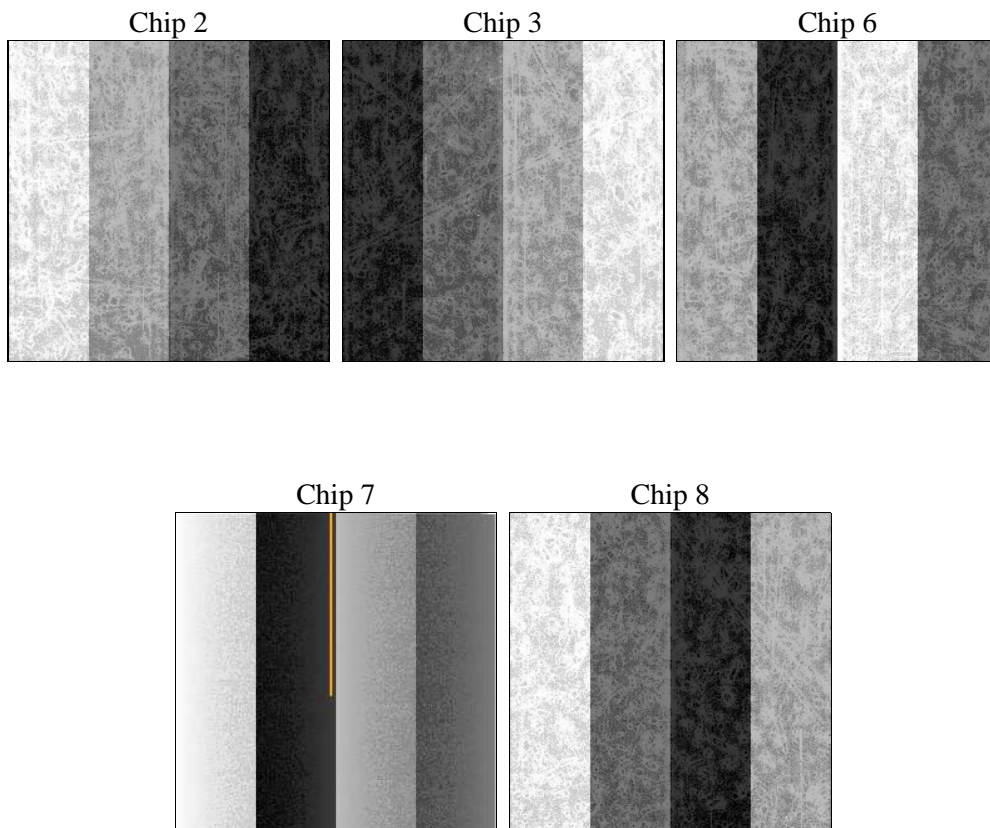
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	14008.559000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	14188.700109124	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	14188.700109124	Sum of GTIs [s]
date	2012-06-13T18:56:59	Date and time of file creation	ontime3	14185.559128821	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14188.700109124	Sum of GTIs [s]
			ontime7	14188.700109124	Sum of GTIs [s]
			ontime8	14188.700109124	Sum of GTIs [s]
			l1events	846821	Number of level 1 events

### 2.1.4 Events

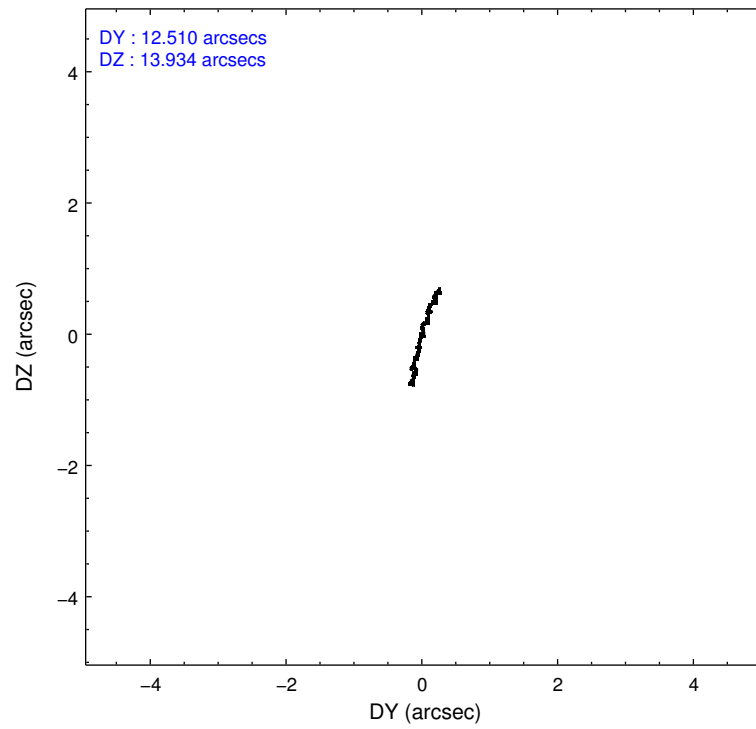
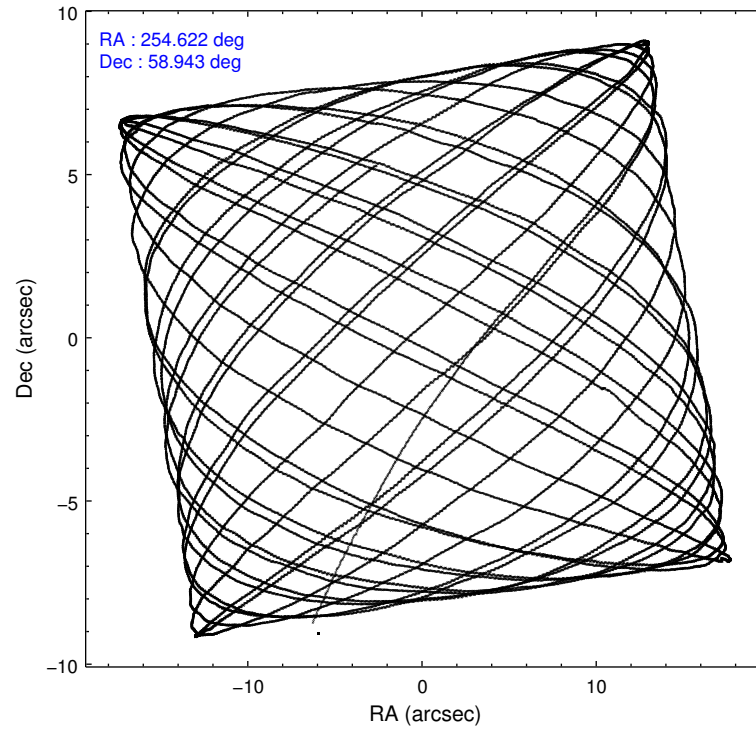
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	147918	143168	152487	211432	191816	grade 0 events	7822	7755	7144	7530	14011
rejected events	130147	125181	134012	124272	147305		5%	5%	4%	3%	7%
rejected %	87%	87%	87%	58%	76%	grade 1 events	86	111	102	232	149
							0%	0%	0%	0%	0%
						grade 2 events	3896	3713	4190	18307	10077
							2%	2%	2%	8%	5%
						grade 3 events	1621	1664	1729	7264	4605
							1%	1%	1%	3%	2%
						grade 4 events	1576	1676	1712	7197	4205
							1%	1%	1%	3%	2%
						grade 5 events	5887	7160	7506	19720	9779
							3%	5%	4%	9%	5%
						grade 6 events	2977	3276	3837	47390	11947
							2%	2%	2%	22%	6%
						grade 7 events	124053	117813	126267	103792	137043
							83%	82%	82%	49%	71%

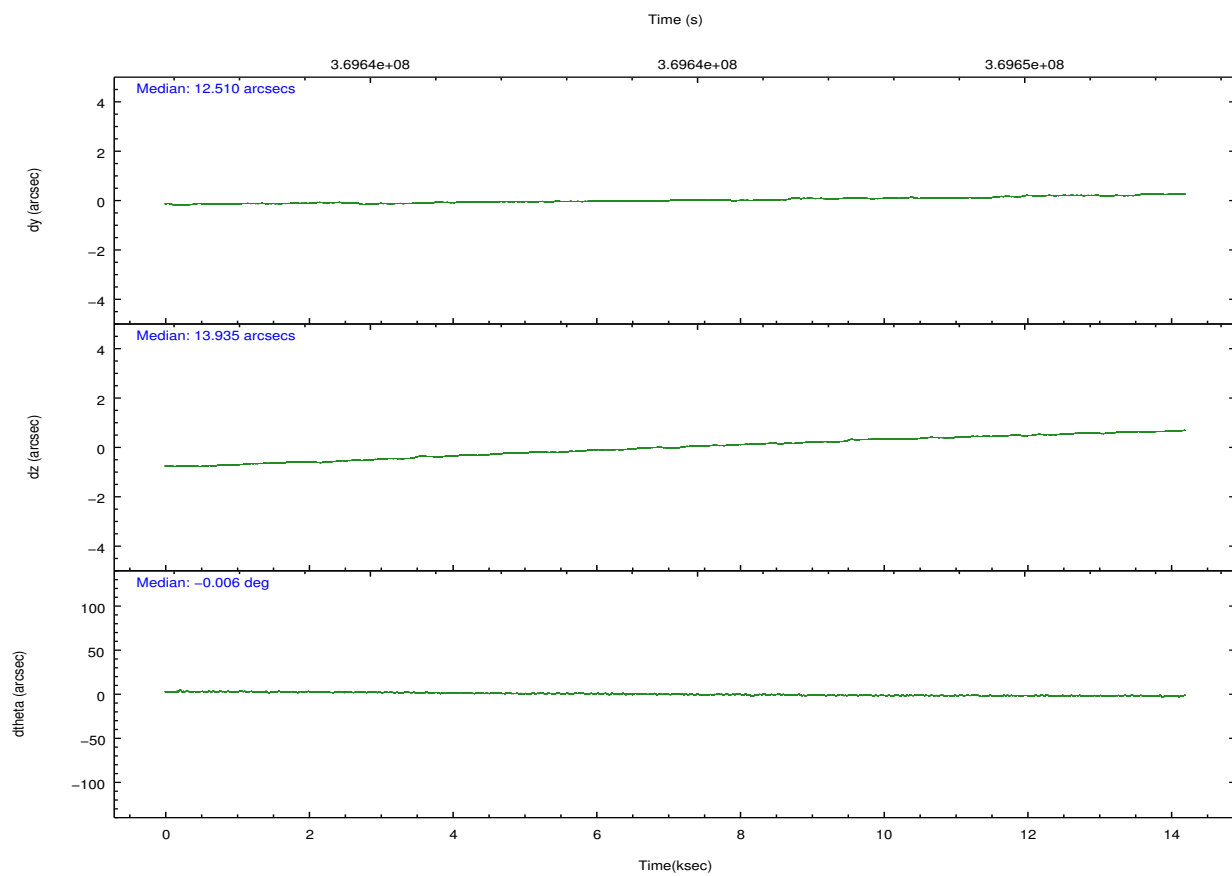
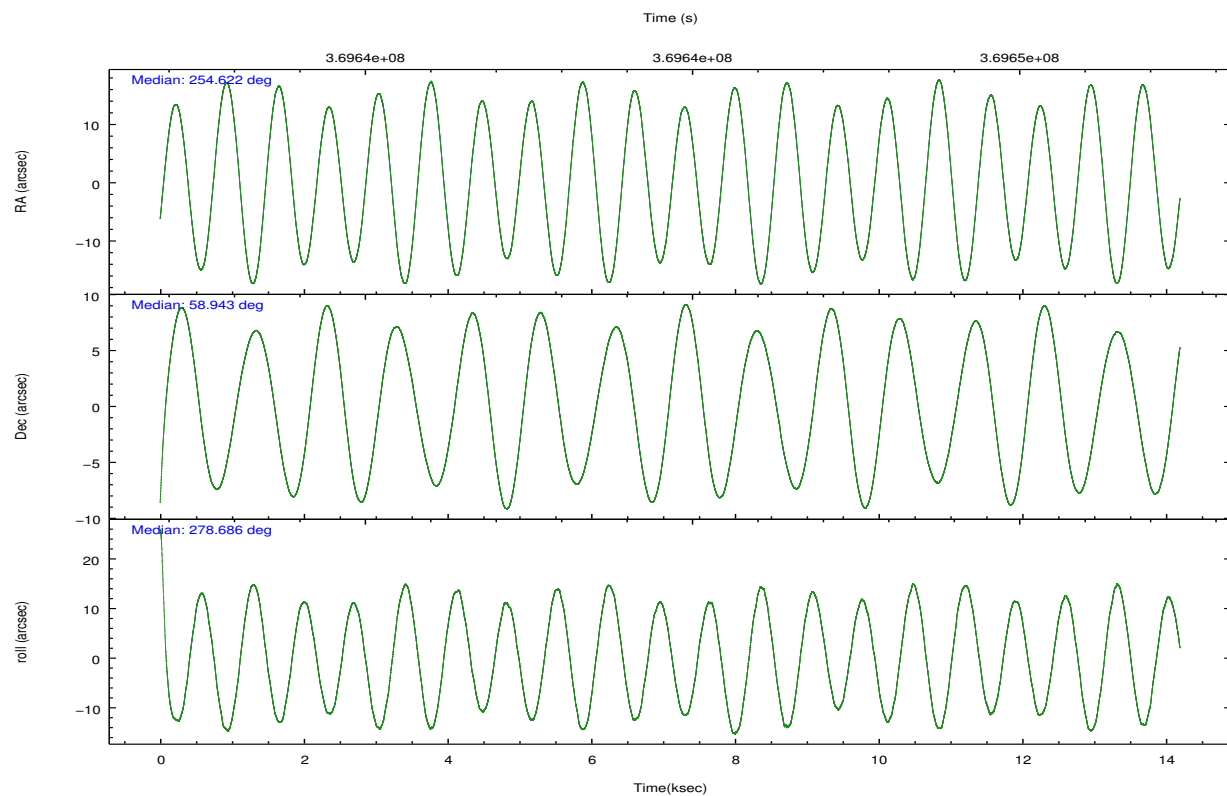


## 2.2 Compared Parameters

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	254.588204	254.621917926759	CCD I2 on	O1	Y
[deg] Pointing Dec	58.964074	58.94297457929494	CCD I3 on	O2	Y
[deg] Pointing Roll	278.560109	278.6878674742516	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)	369637744.184000	369636700.3179	CCD S5 on	N	N
Observation start date	2009-09-18T05:07:58	2009-09-18T04:51:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	369651753.184000	369651974.86867	On-chip summing requested	N	N
Observation end date	2009-09-18T09:01:27	2009-09-18T09:06:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



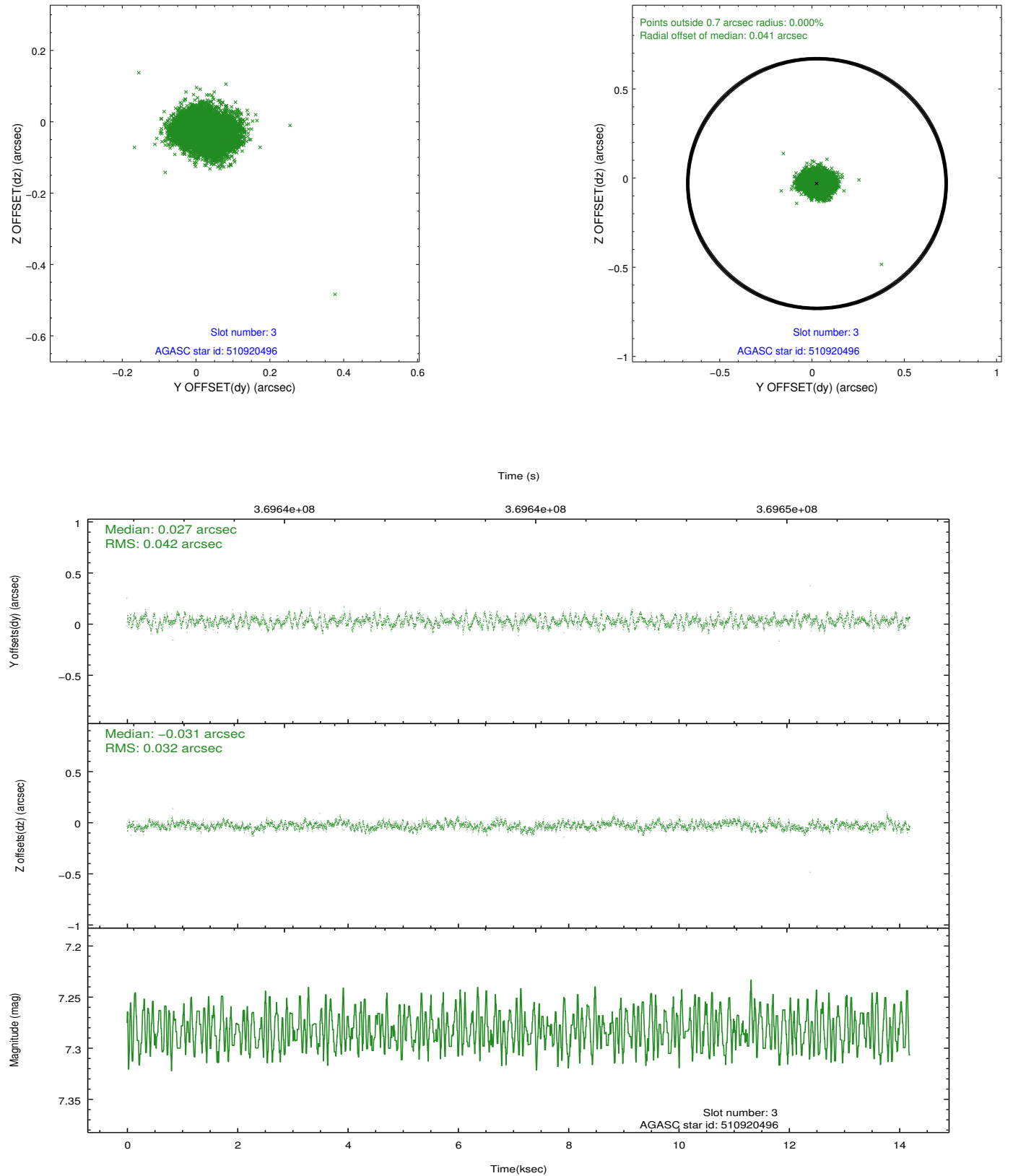


### Slot Statistics

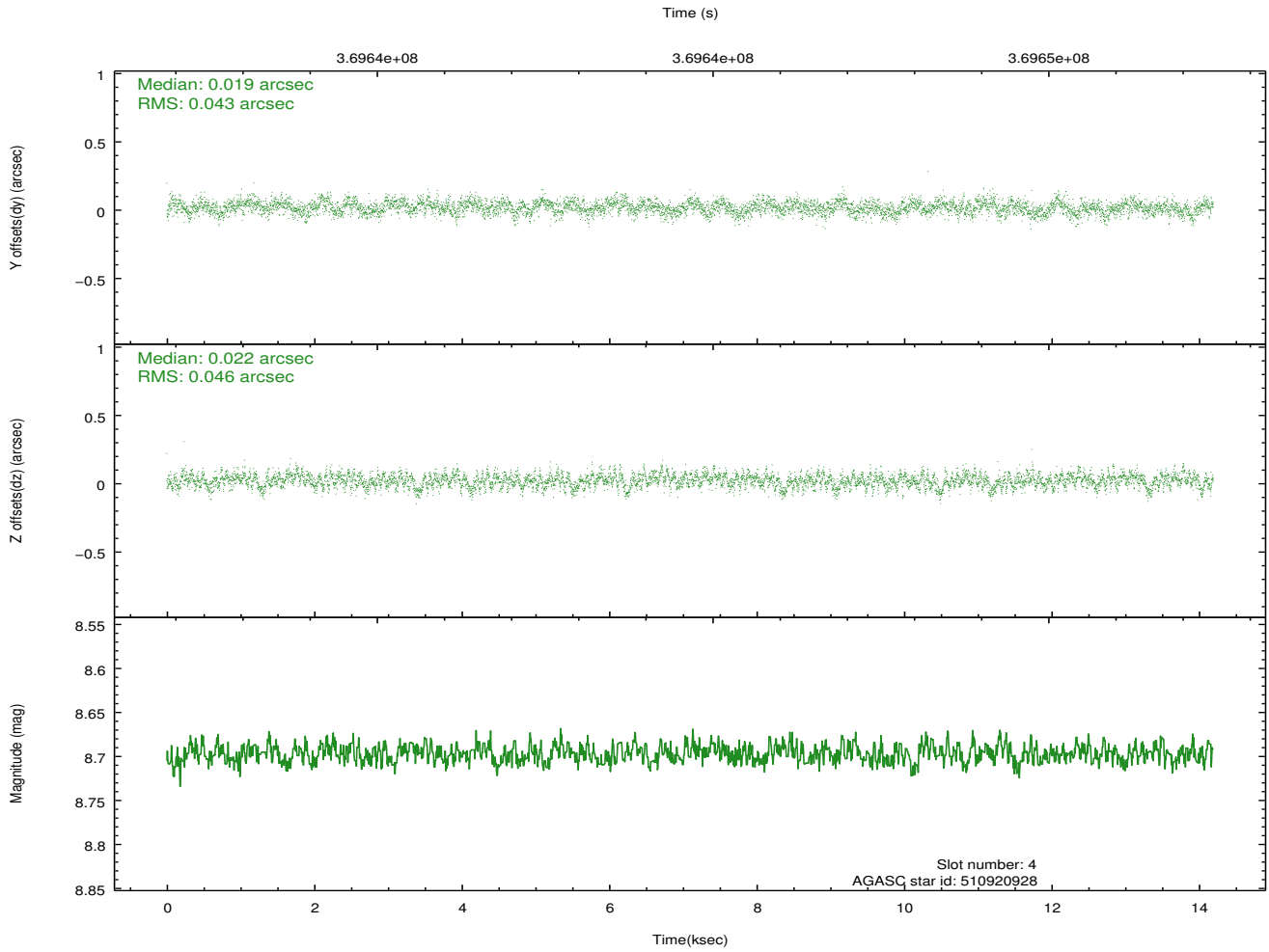
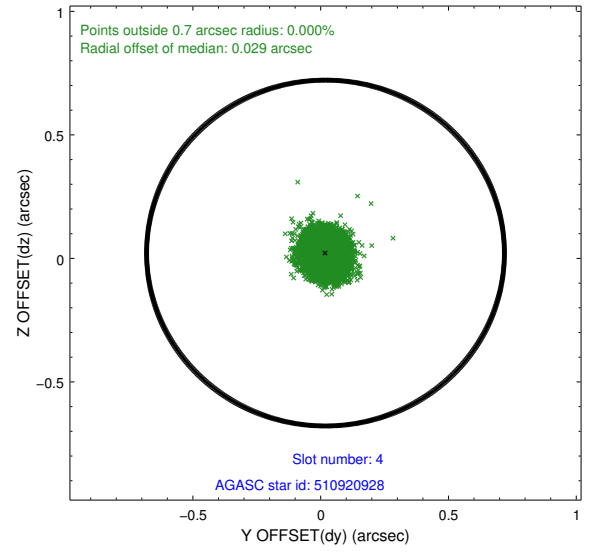
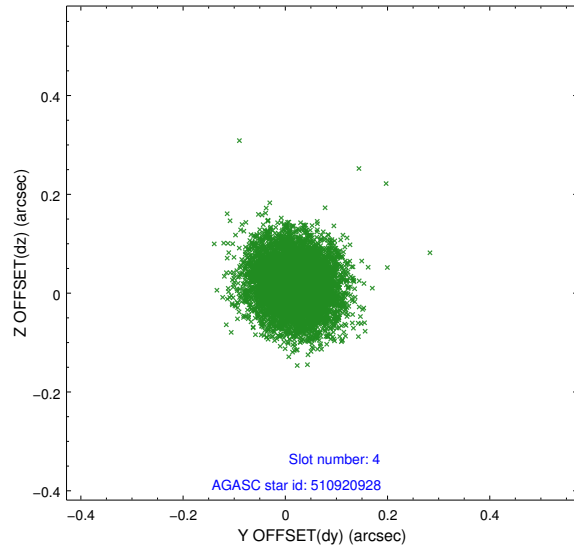
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.03	3462	0.078	-0.034	0.011	0.024	0.000000	0.000000	930.70	-1730.87
1	FID	ACIS-S-5	7.07	3462	-0.132	0.057	0.012	0.017	0.000000	0.000000	-1818.34	166.42
2	FID	ACIS-S-6	7.17	3462	0.031	-0.012	0.016	0.025	0.000000	0.000000	395.83	810.69
3	GUIDE	510920496	7.28	6923	0.027	-0.031	0.057	0.089	254.958655	58.462582	1887.31	421.47
4	GUIDE	510920928	8.70	6924	0.019	0.022	0.067	0.109	254.316069	59.508316	-2012.45	-199.10
5	GUIDE	510924720	7.44	6924	-0.123	0.033	0.048	0.076	255.379555	58.556315	1664.16	1251.96
6	GUIDE	510925768	9.07	6916	0.059	0.062	0.082	0.130	254.861286	58.769782	767.03	400.51
7	GUIDE	510928576	7.95	6921	0.018	-0.084	0.056	0.089	254.927863	58.597670	1398.03	434.26

## 2.4 Star Slots

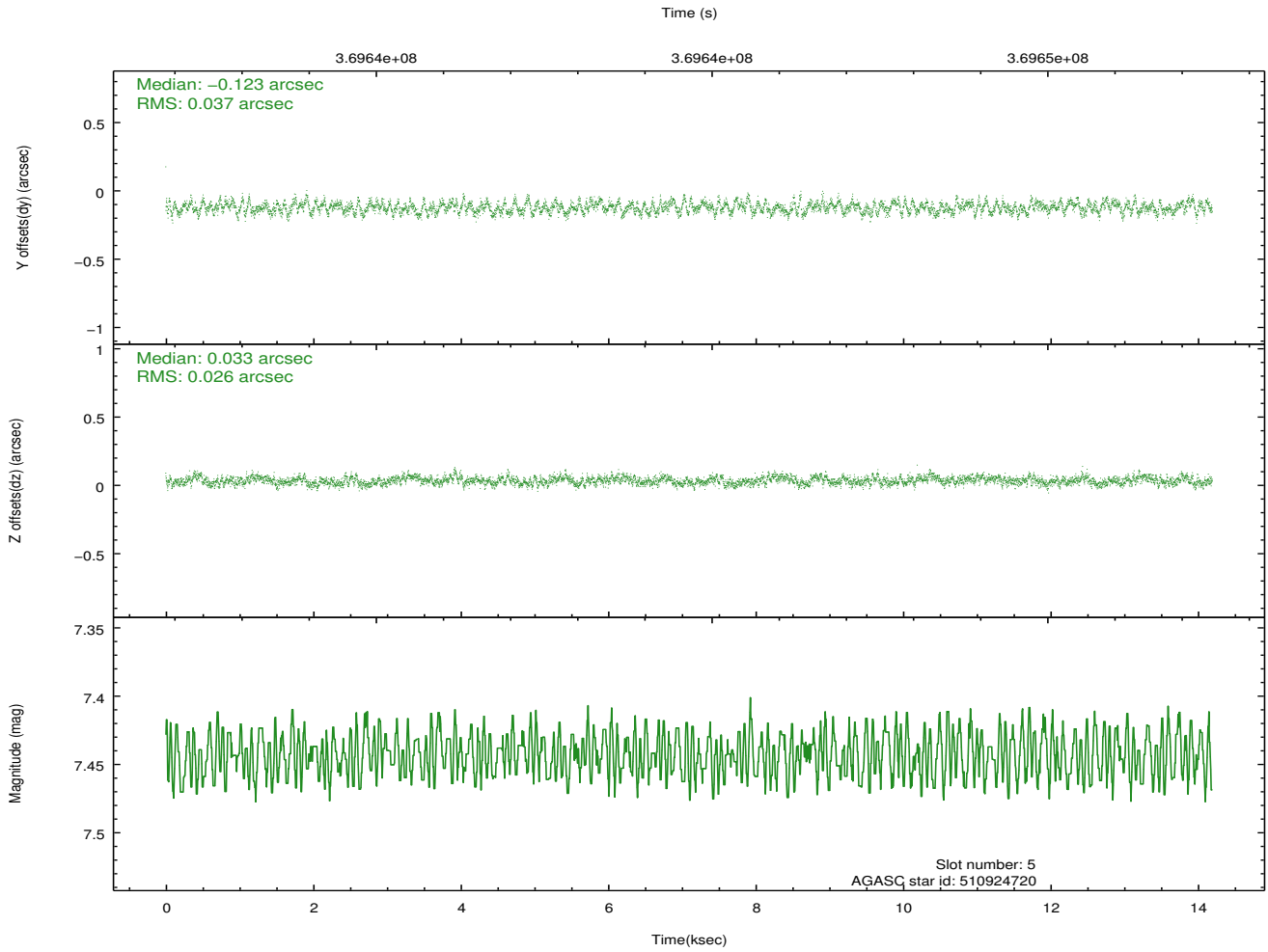
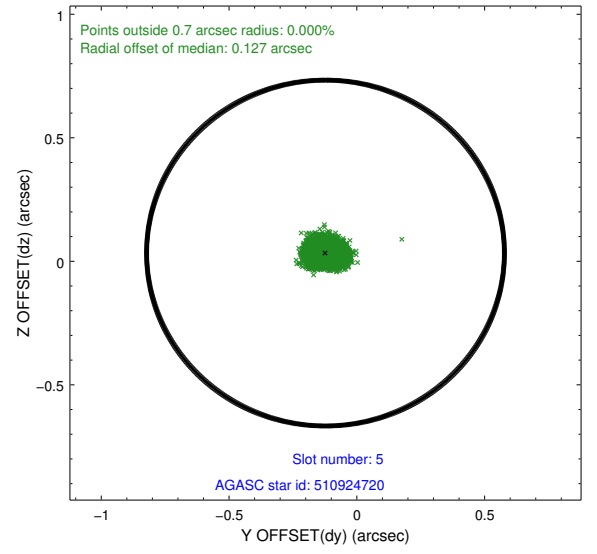
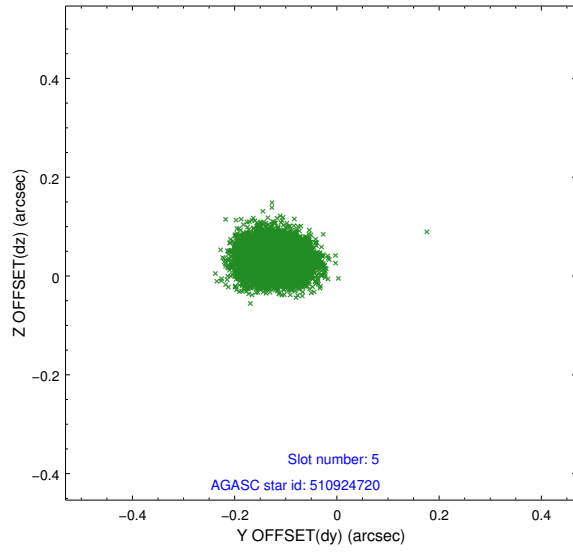
### 2.4.1 Slot 3



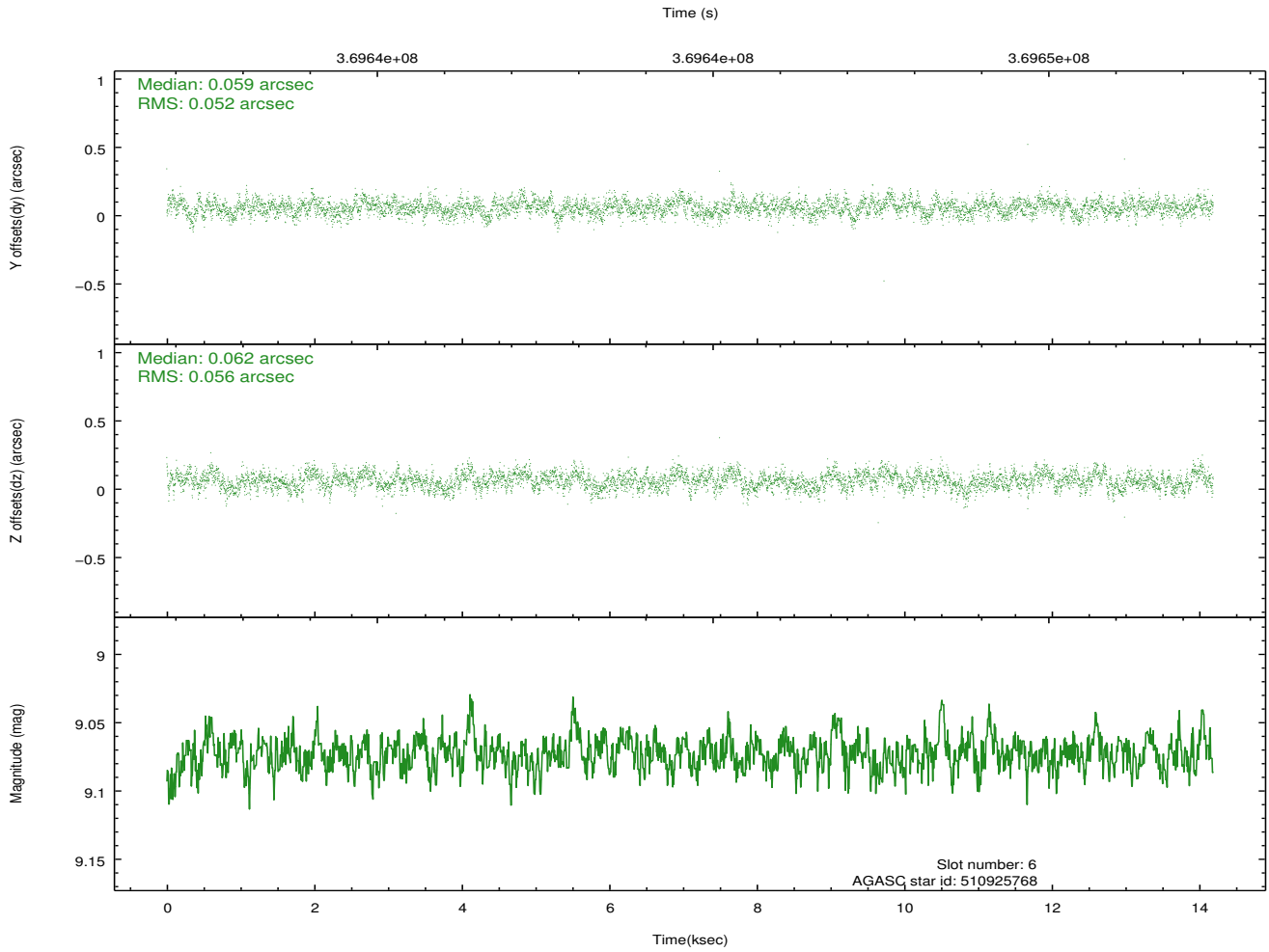
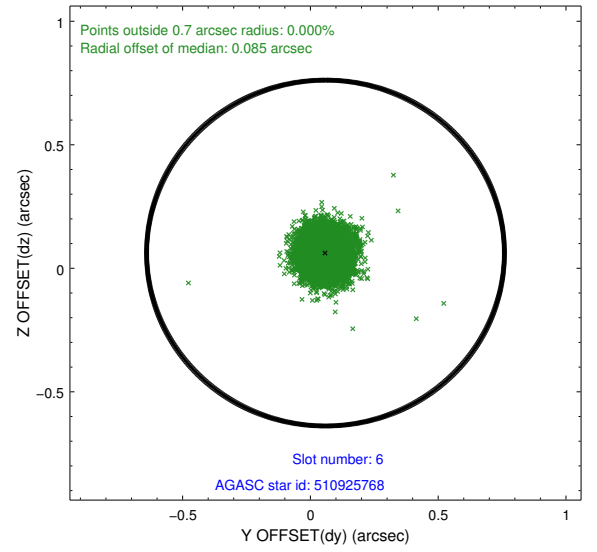
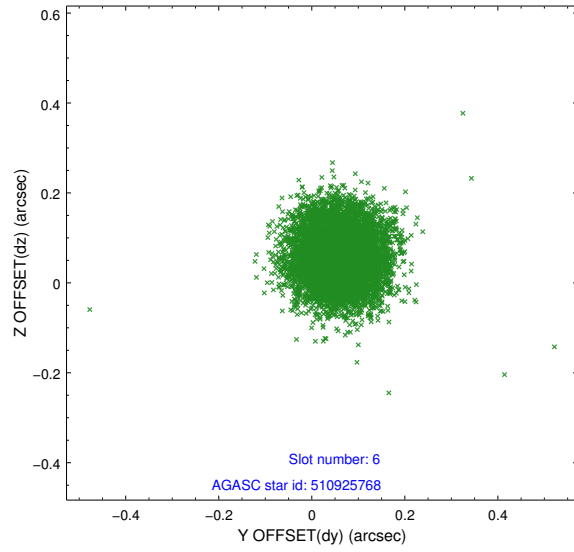
## 2.4.2 Slot 4



### 2.4.3 Slot 5

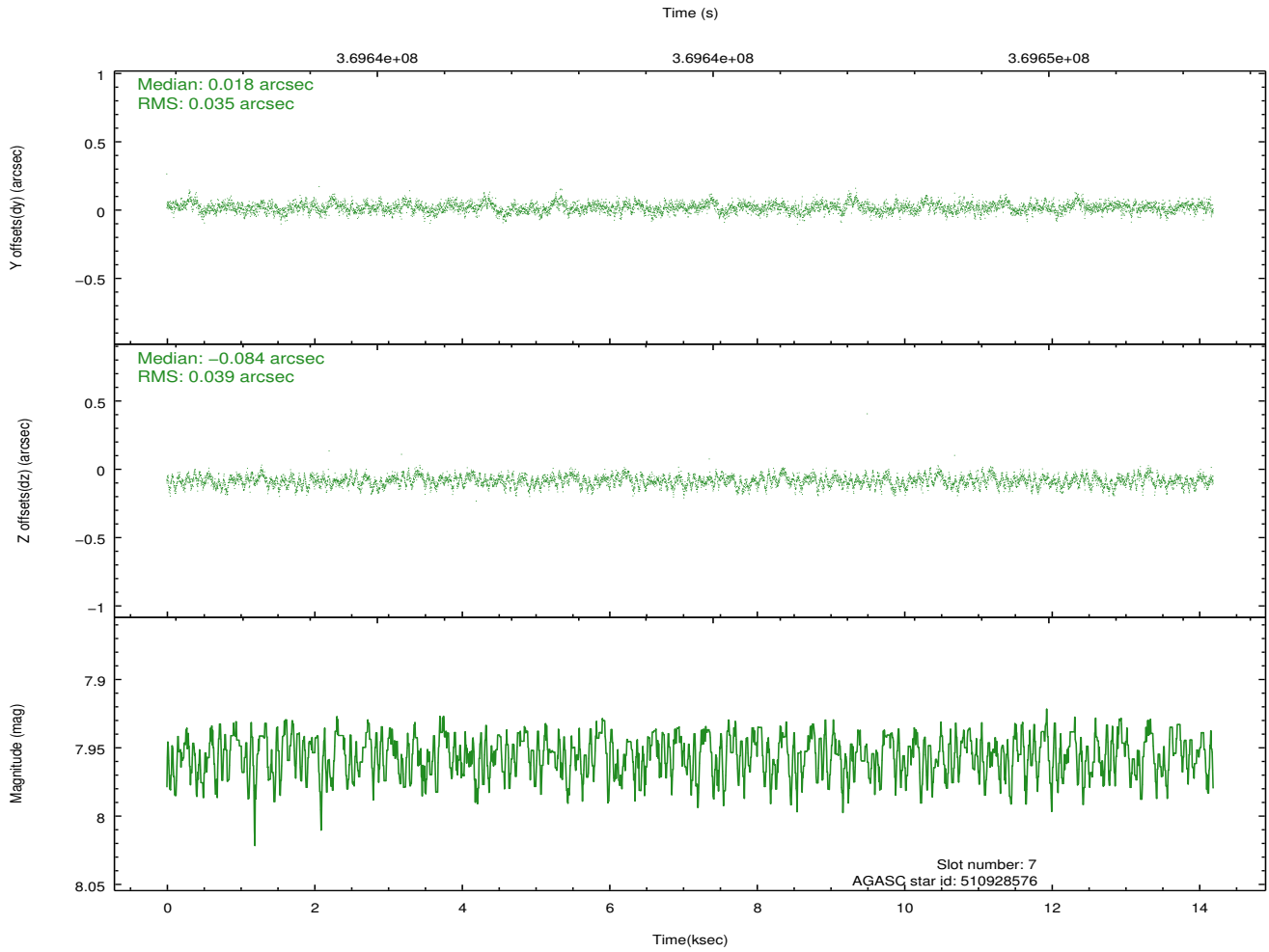
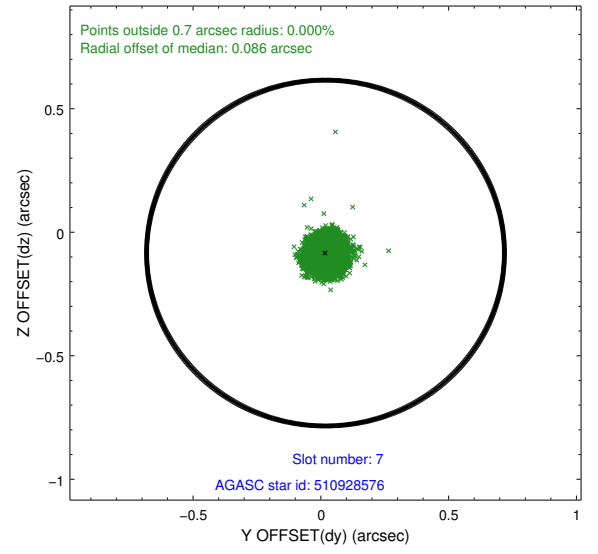
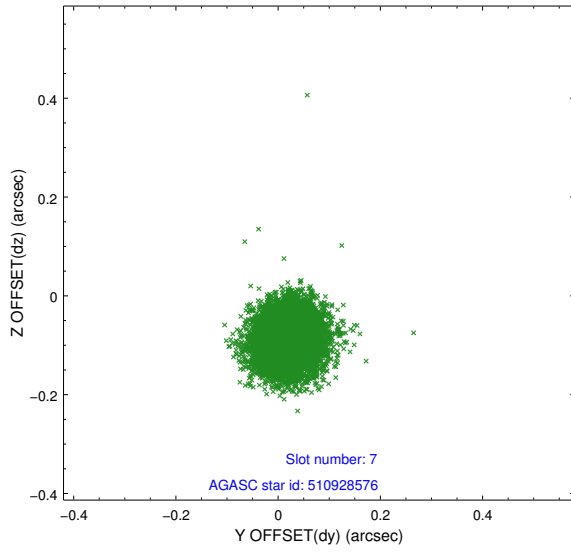


## 2.4.4 Slot 6



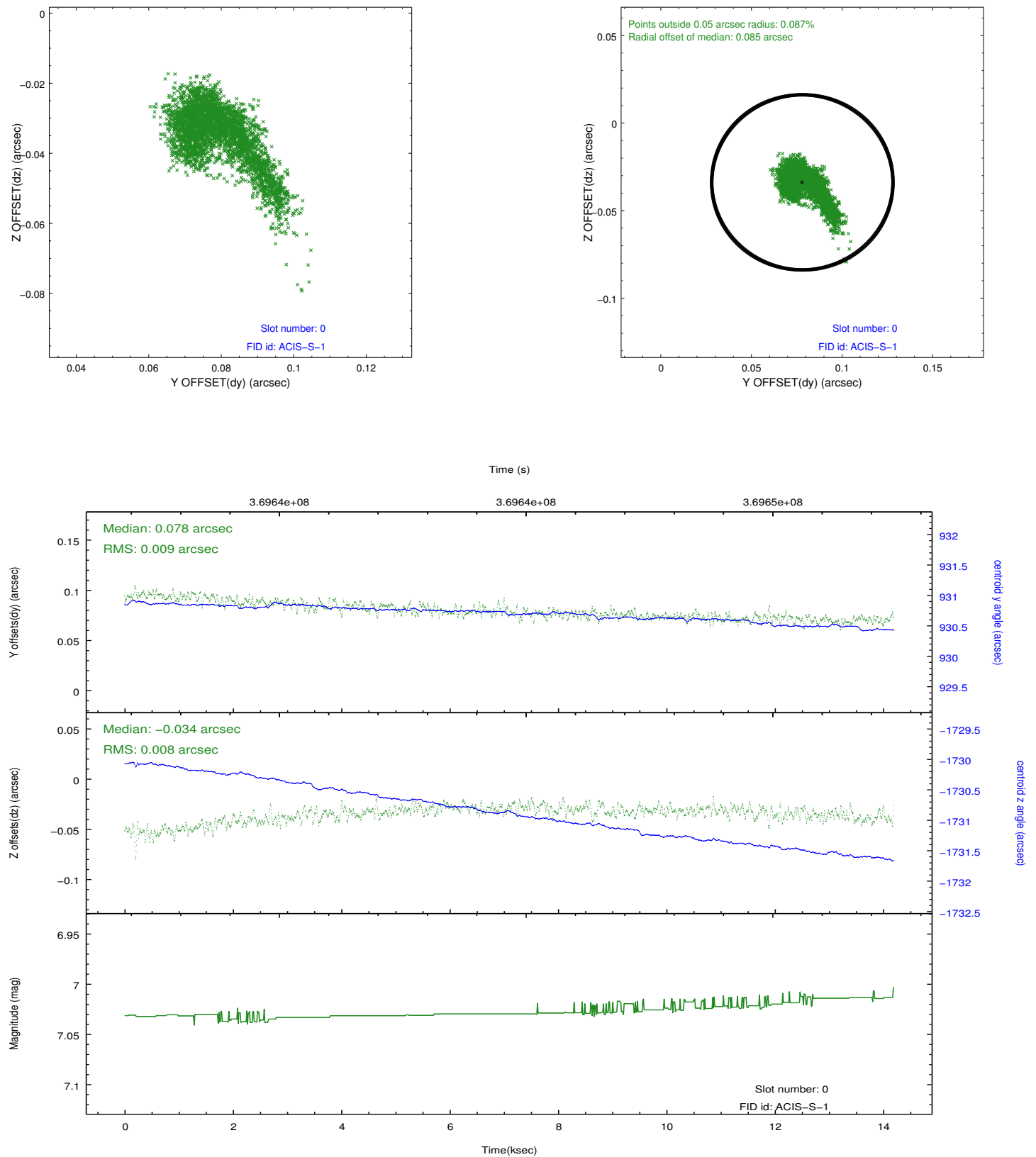


## 2.4.5 Slot 7

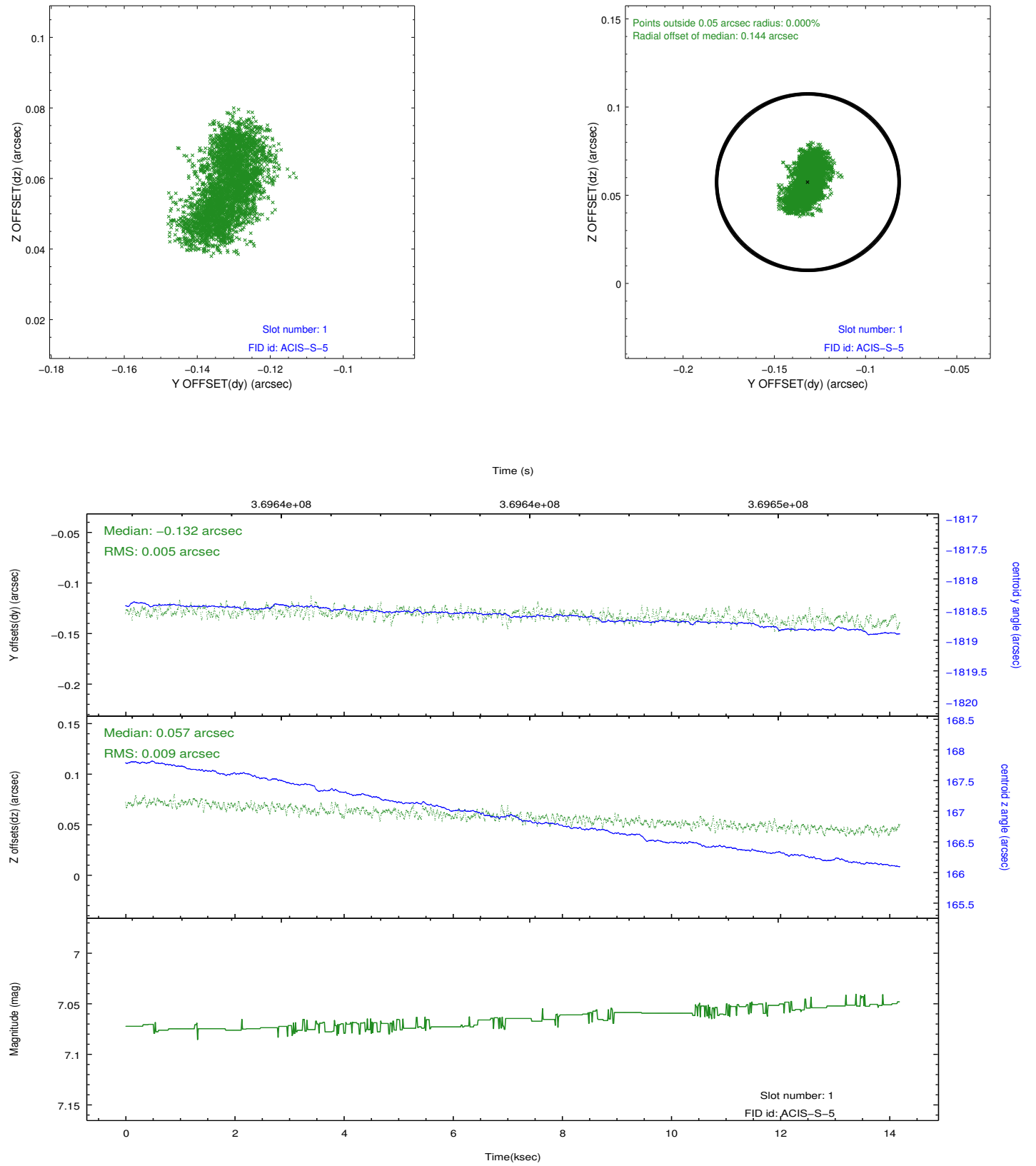


## 2.5 FID Slots

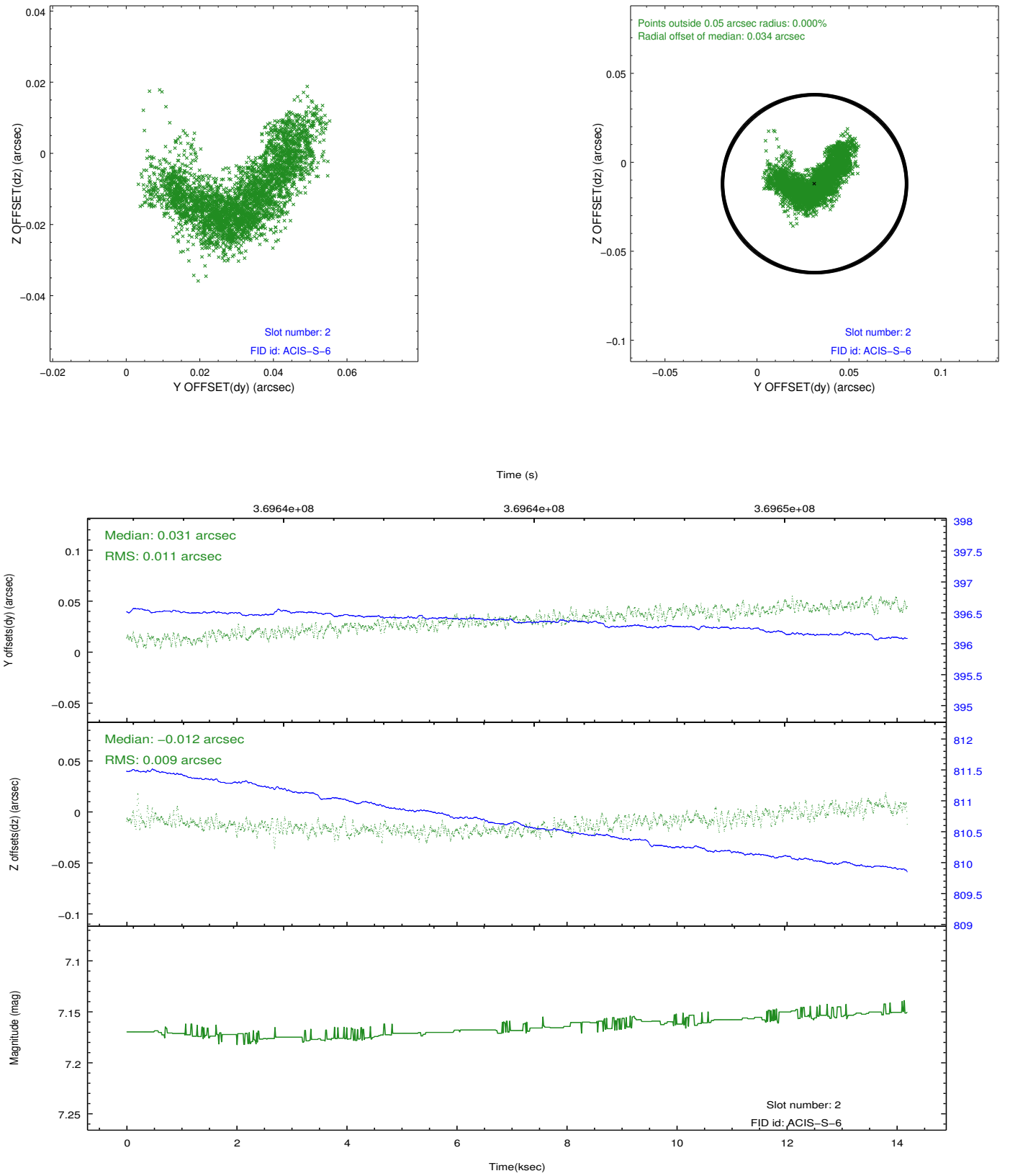
### 2.5.1 Slot 0



## 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)	2012.06.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.188700109124

### A.2 Comments