

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4821 - L2 Version 3  
Chandra X-Ray Center

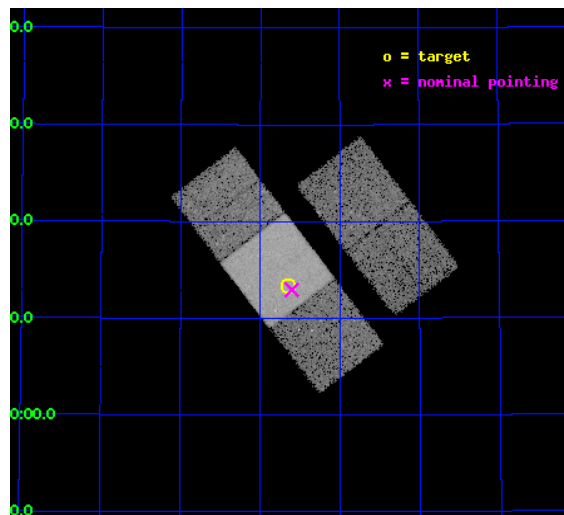
L2 Processing Date : Nov 13 2012

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# 1 Front

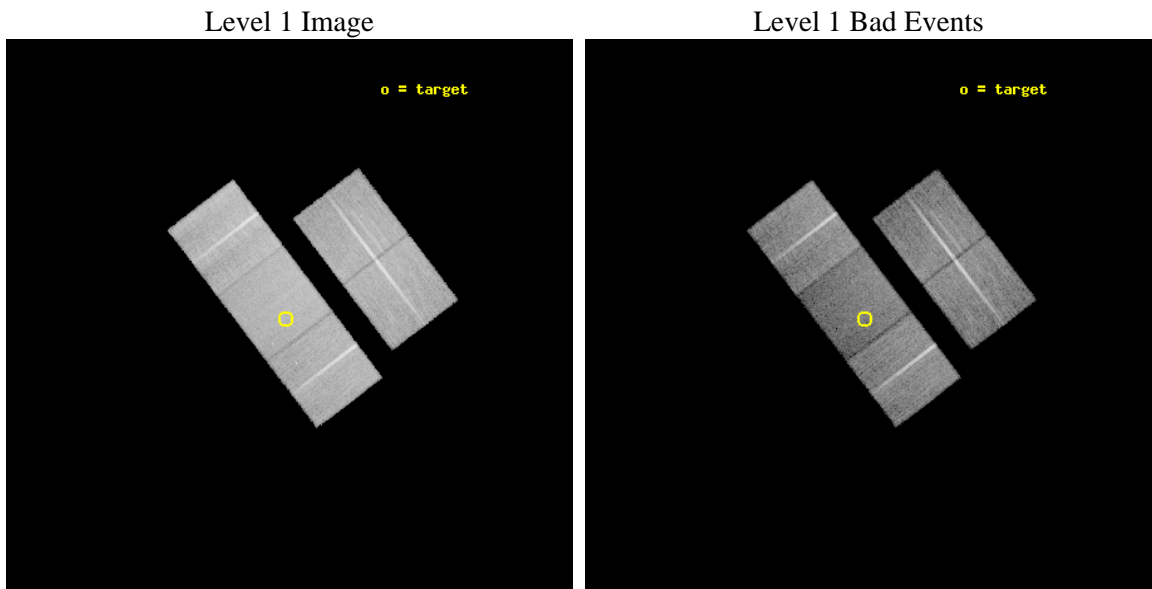
seq_num	700903	Sequence number
obs_id	4821	Observation id
title	Destroying Degeneracy: Spanning the Luminosity Range for Radio-Quiet Quasars at z=4	Proposal title
observer	Dr. Jill Bechtold	Principal investigator
object	QSO 0910+564	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	138.66375	Observer's specified target RA [deg]
dec_targ	56.2225	Observer's specified target Dec [deg]
ra_nom	138.65091079374	Nominal RA [deg]
dec_nom	56.215933706601	Nominal Dec [deg]
roll_nom	232.63222293608	Nominal Roll [deg]
revision	3	Processing version of data
ontime	23299.599955171	Sum of GTIs [s]
livetime	22995.173528841	Livetime [s]
ontime2	23293.318024606	Sum of GTIs [s]
ontime3	23299.599955171	Sum of GTIs [s]
ontime6	23296.458984941	Sum of GTIs [s]
ontime7	23299.599955171	Sum of GTIs [s]
ontime8	23296.458984911	Sum of GTIs [s]
l2events	113366	Number of level 2 events



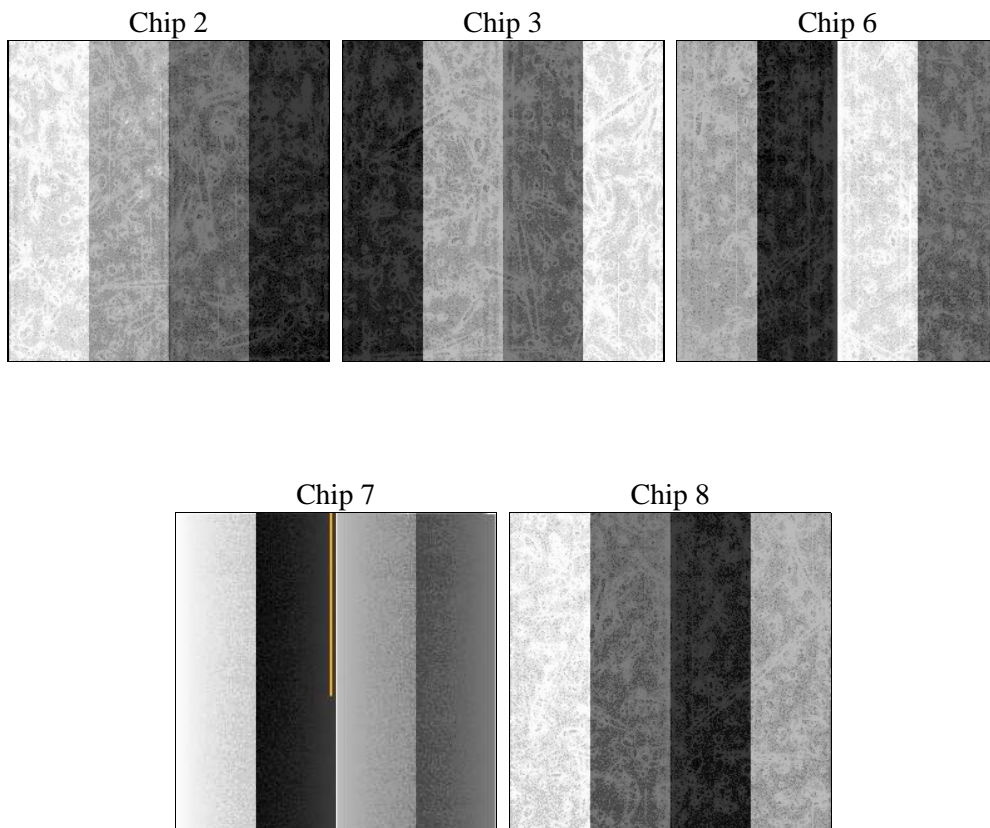
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	23299.599955171	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	23293.318024606	Sum of GTIs [s]
date	2012-11-14T00:53:08	Date and time of file creation	ontime3	23299.599955171	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	23296.458984941	Sum of GTIs [s]
			ontime7	23299.599955171	Sum of GTIs [s]
			ontime8	23296.458984911	Sum of GTIs [s]
			l1events	717969	Number of level 1 events

### 2.1.4 Events

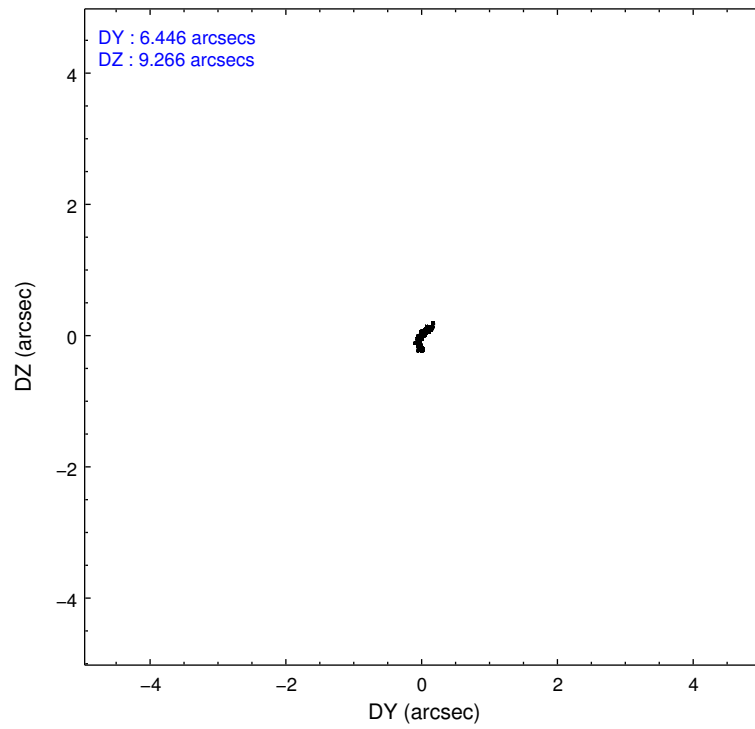
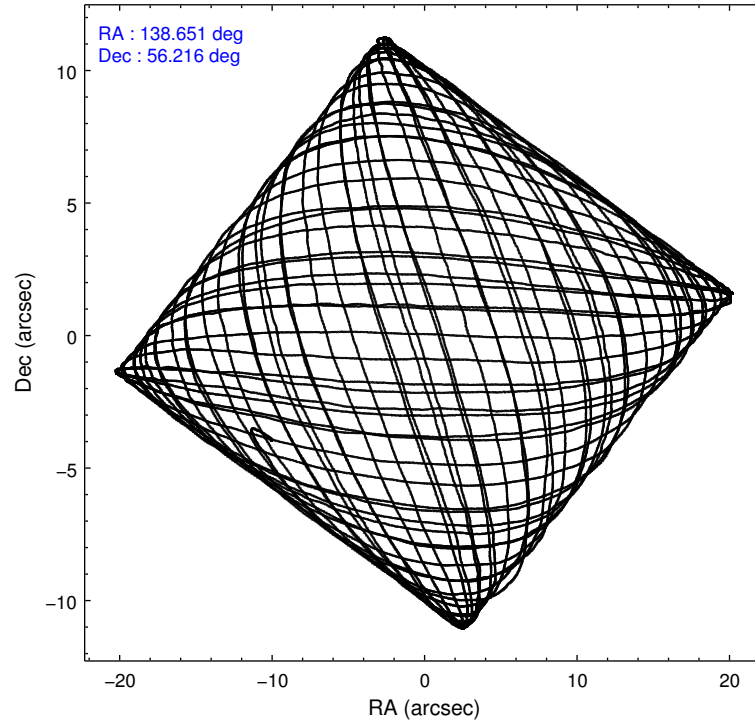
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	132392	129619	138135	149188	168635
rejected events	119910	117384	123972	81620	132101
rejected %	90%	90%	89%	54%	78%

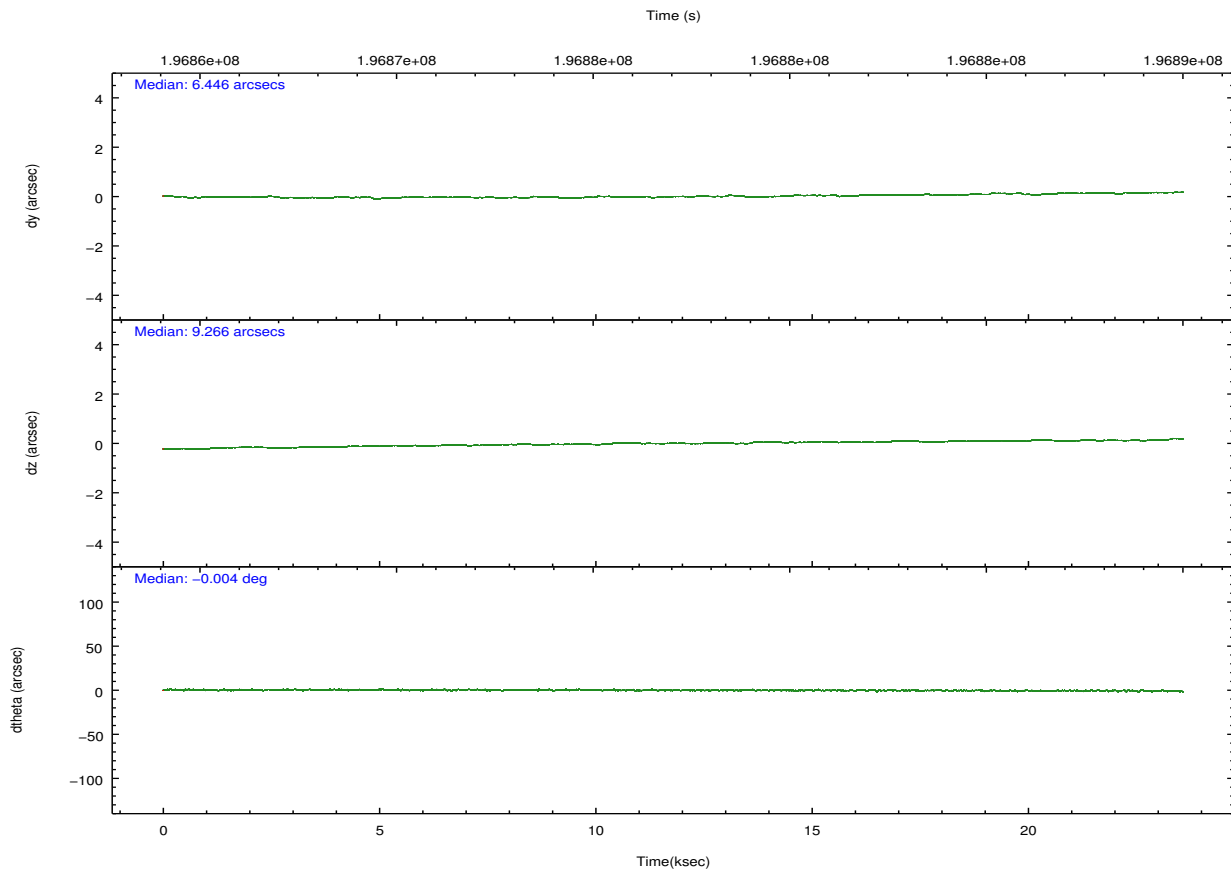
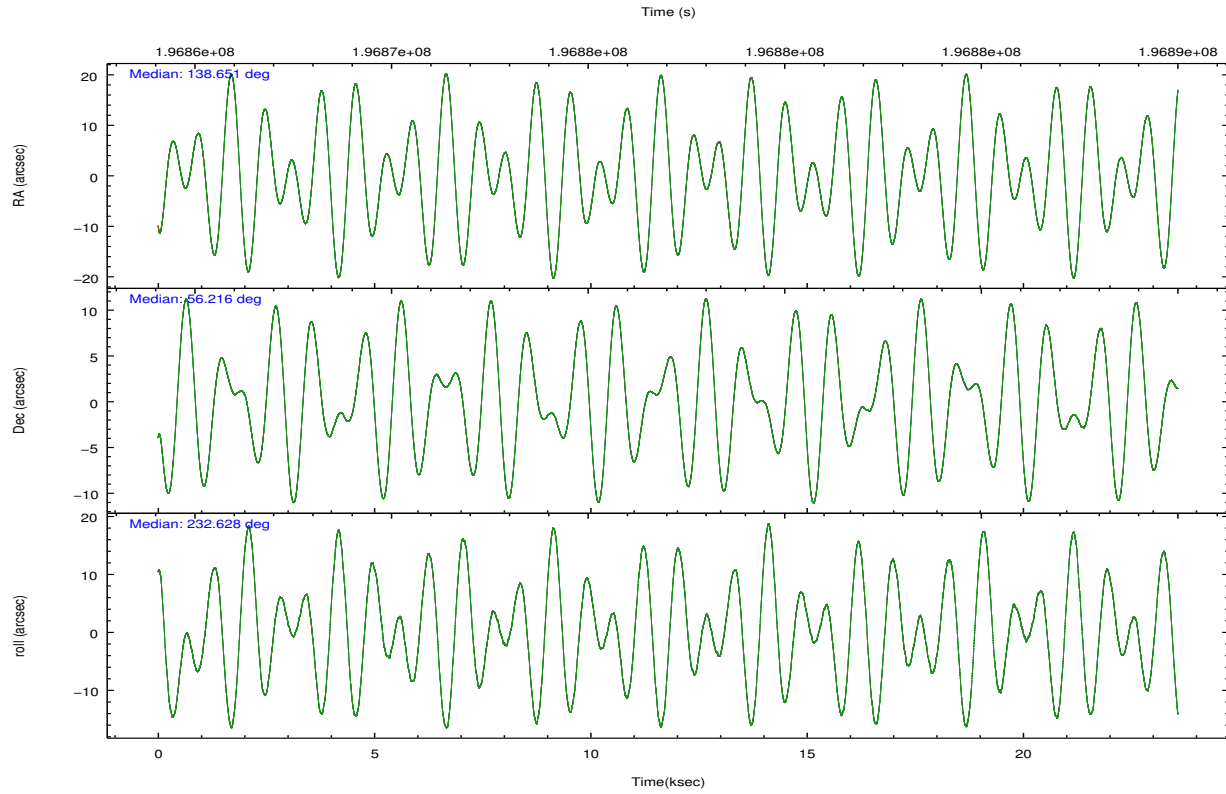
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4390	4197	5089	6022	11191
	3%	3%	3%	4%	6%
grade 1 events	76	74	72	125	130
	0%	0%	0%	0%	0%
grade 2 events	2799	2597	2999	13651	8113
	2%	2%	2%	9%	4%
grade 3 events	1487	1528	1652	6502	3896
	1%	1%	1%	4%	2%
grade 4 events	1434	1410	1520	6396	3676
	1%	1%	1%	4%	2%
grade 5 events	4341	5027	5471	15864	7634
	3%	3%	3%	10%	4%
grade 6 events	2377	2507	2905	35014	9663
	1%	1%	2%	23%	5%
grade 7 events	115488	112279	118427	65614	124332
	87%	86%	85%	43%	73%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	138.656566	138.6509107937374	Subarray requested	NONE	NONE
[deg] Pointing Dec	56.243005	56.2159337066014	Alternating exposures requested	N	N
[deg] Pointing Roll	232.470891	232.632222936084	[s] Primary exposure time	0.000000	3.1
[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)	196865620.184000	196864564.02869			
Observation start date	2004-03-28T12:52:36	2004-03-28T12:36:04			
[s] Observation end time (MET)	196888820.184000	196889444.87978			
Observation end date	2004-03-28T19:19:16	2004-03-28T19:30:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect



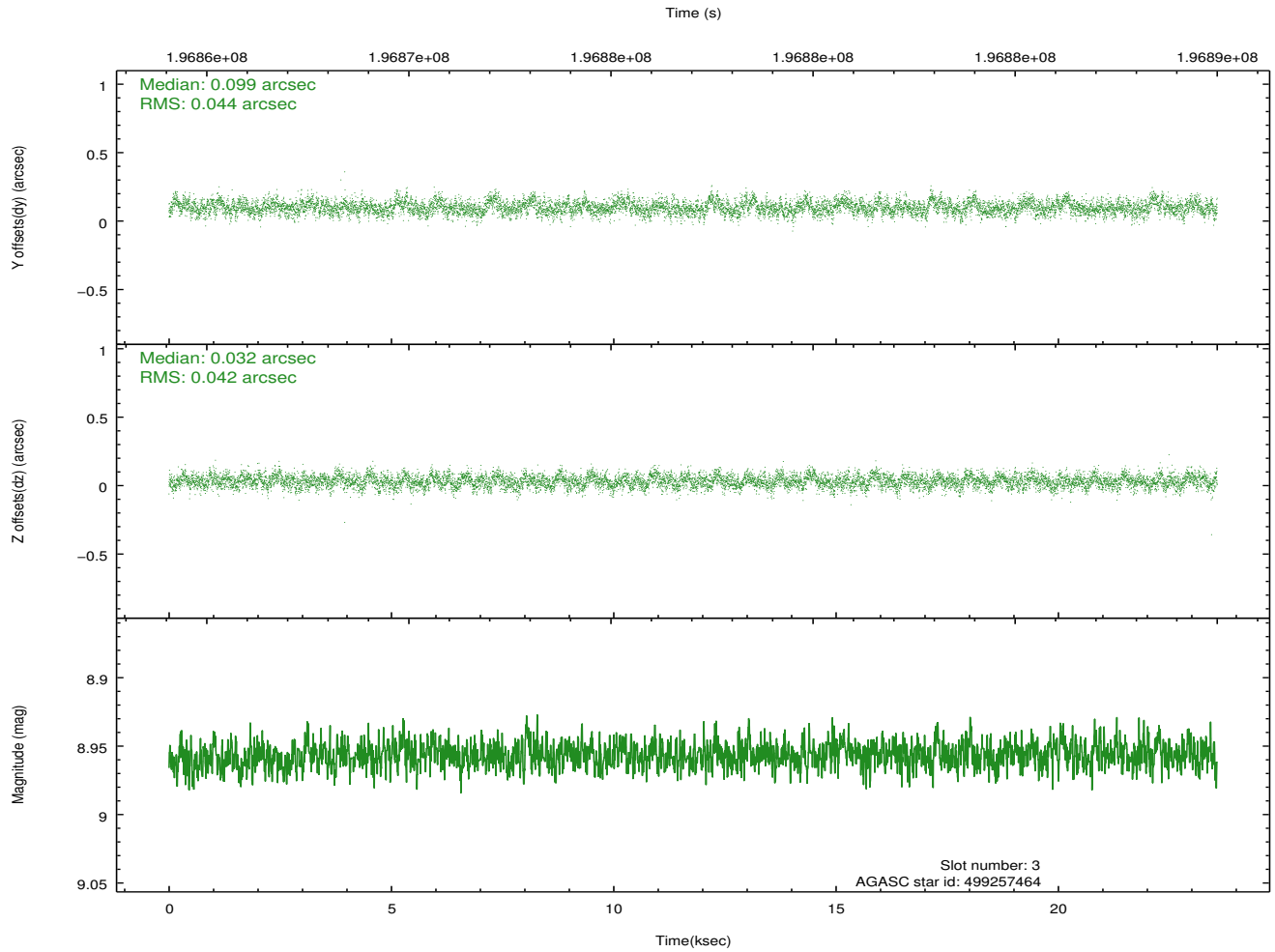
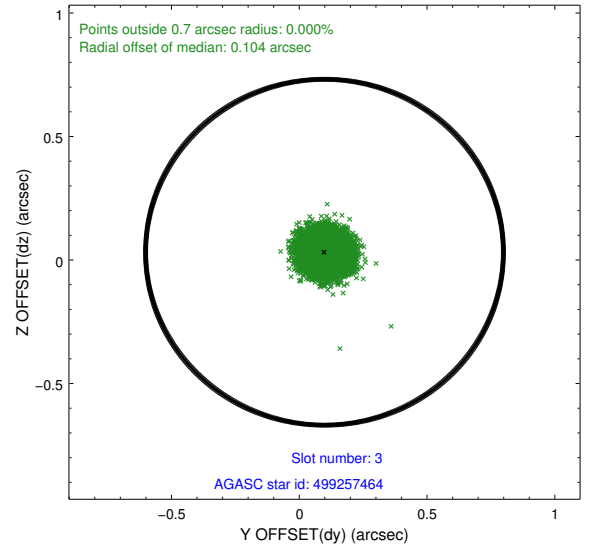
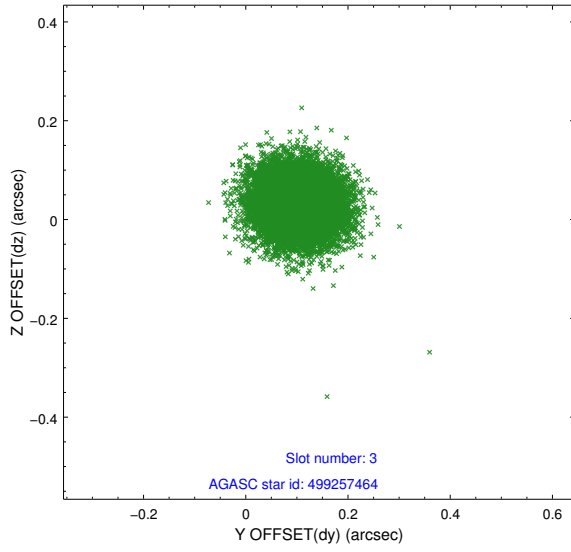


### Slot Statistics

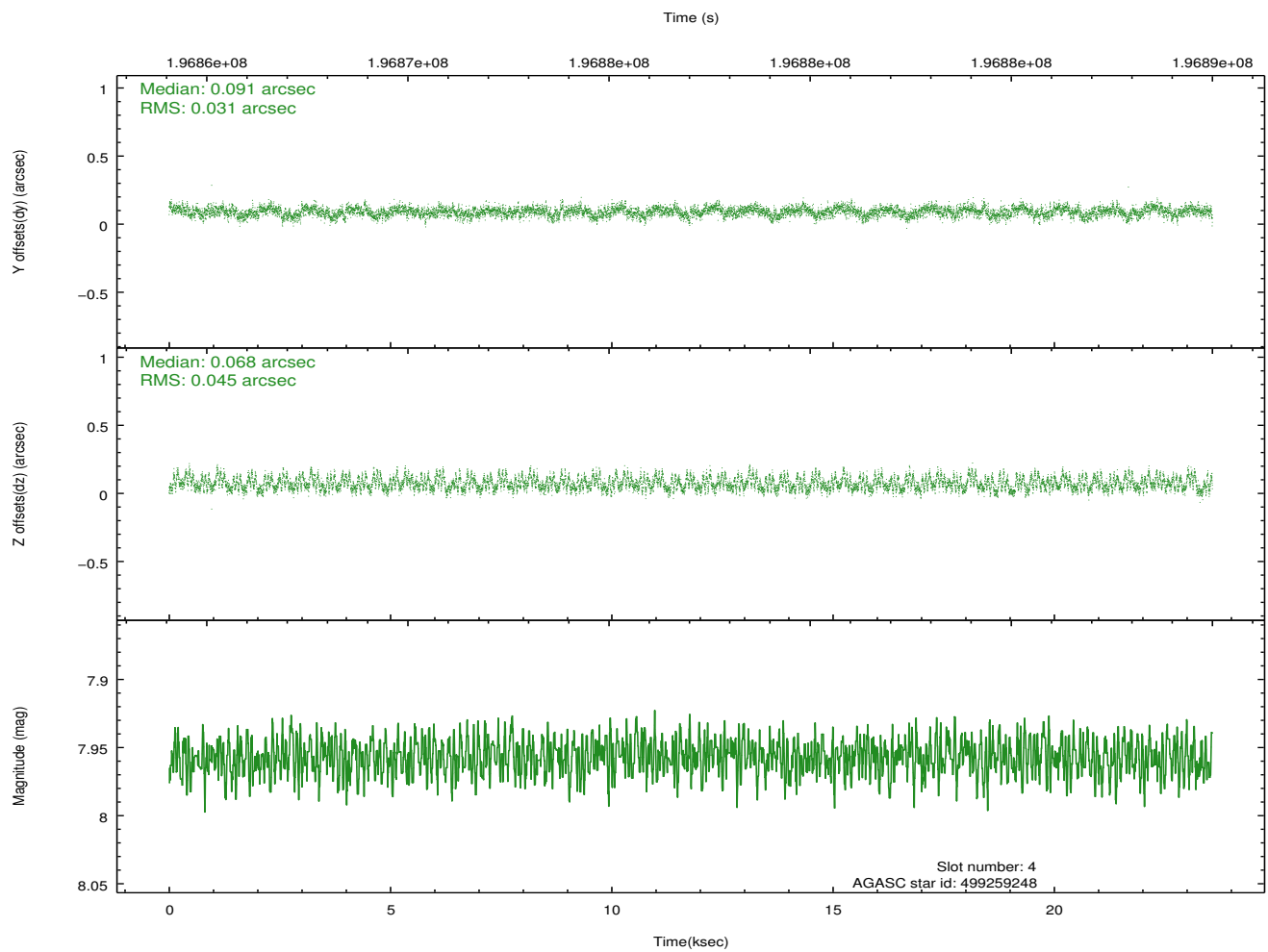
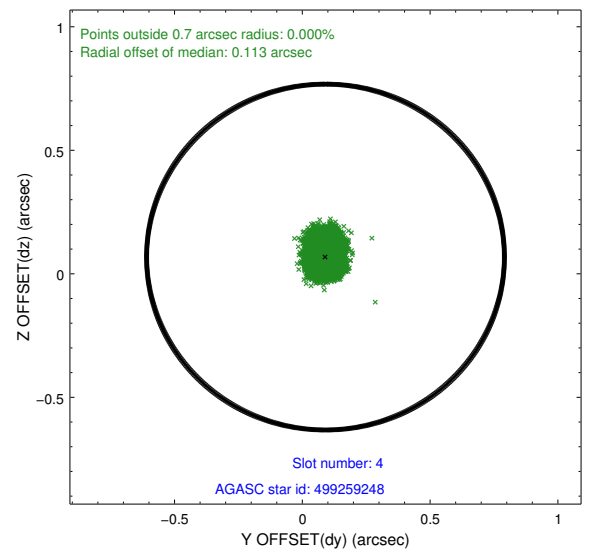
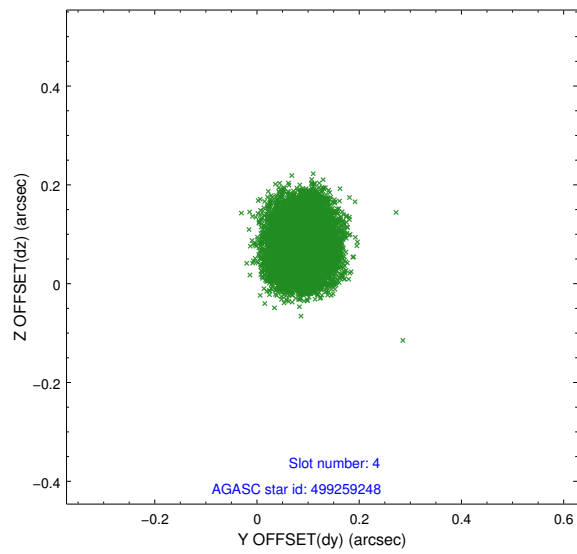
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	5751	-0.072	-0.043	0.006	0.010	0.000000	0.000000	-759.27	-1730.52
1	FID	ACIS-S-4	7.20	5751	0.064	0.041	0.007	0.011	0.000000	0.000000	2154.07	177.91
2	FID	ACIS-S-6	7.35	5751	-0.020	0.009	0.007	0.012	0.000000	0.000000	402.93	815.42
3	GUIDE	499257464	8.96	11496	0.099	0.032	0.065	0.104	138.627188	55.900178	1015.13	705.10
4	GUIDE	499259248	7.96	11500	0.091	0.068	0.058	0.094	138.715022	55.620218	1706.05	1460.44
5	GUIDE	499261384	9.43	11497	-0.101	-0.149	0.091	0.146	138.636550	56.210569	117.27	39.54
6	GUIDE	499261608	8.87	11494	-0.065	0.095	0.069	0.112	138.977392	56.064652	115.49	901.83
7	GUIDE	499263632	9.01	11489	-0.027	-0.050	0.082	0.129	138.052870	56.804949	-883.32	-2178.99

## 2.4 Star Slots

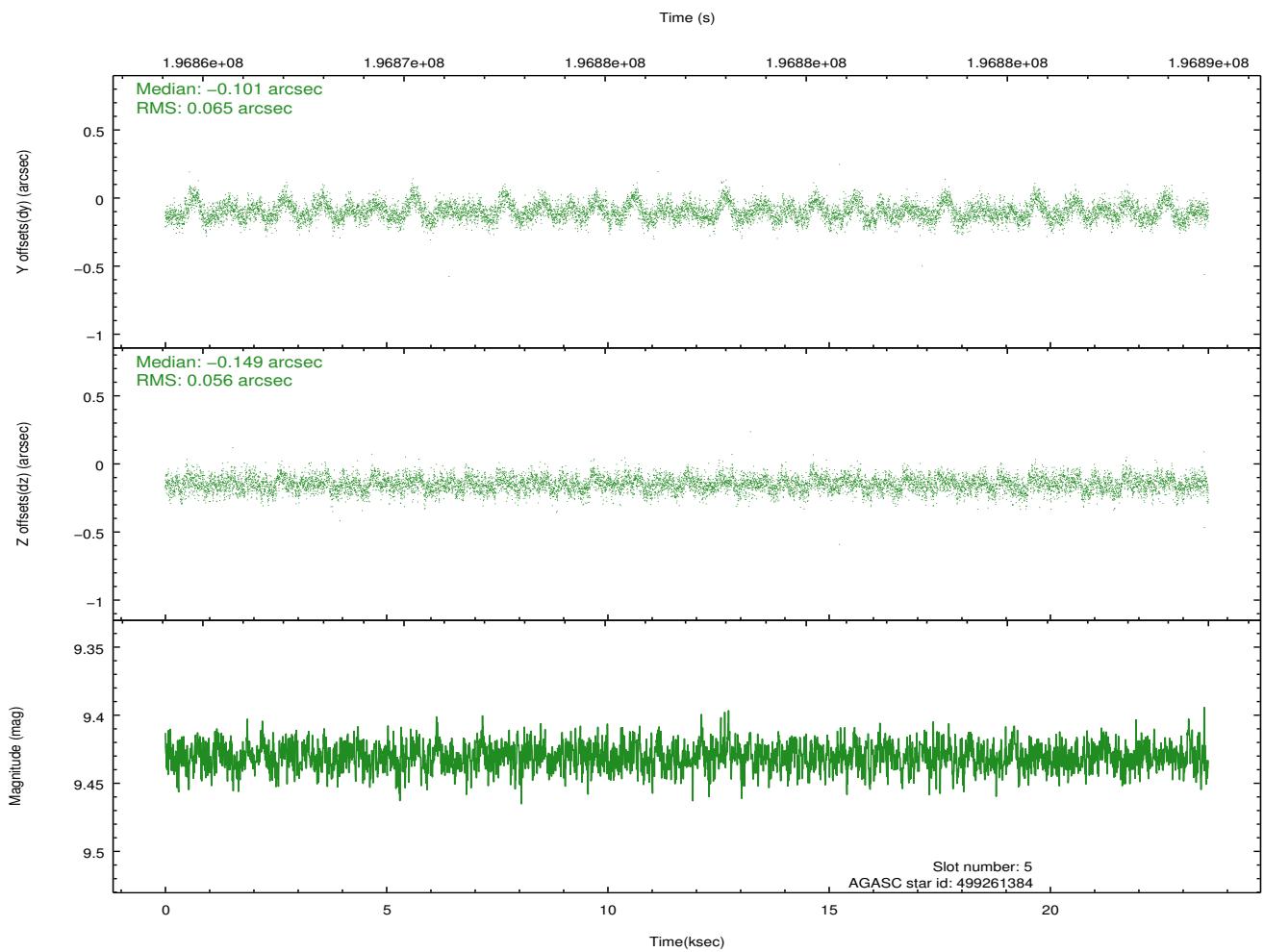
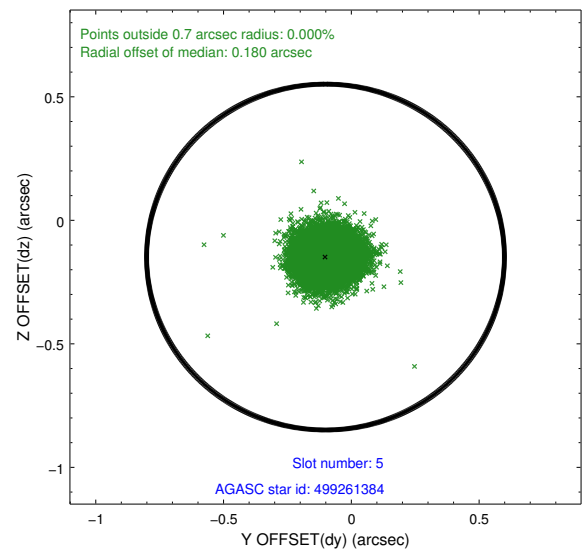
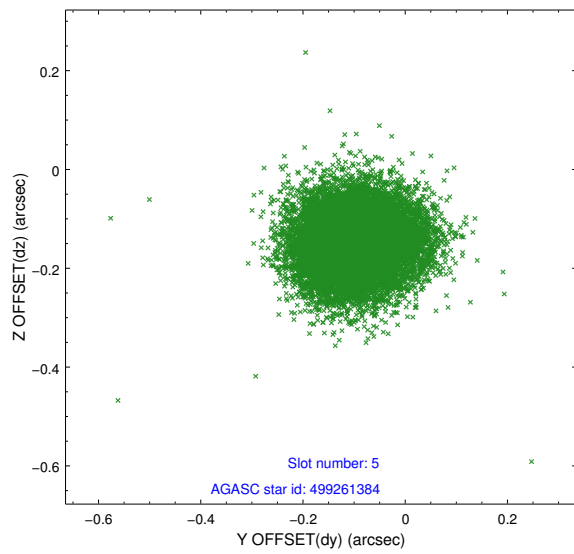
### 2.4.1 Slot 3



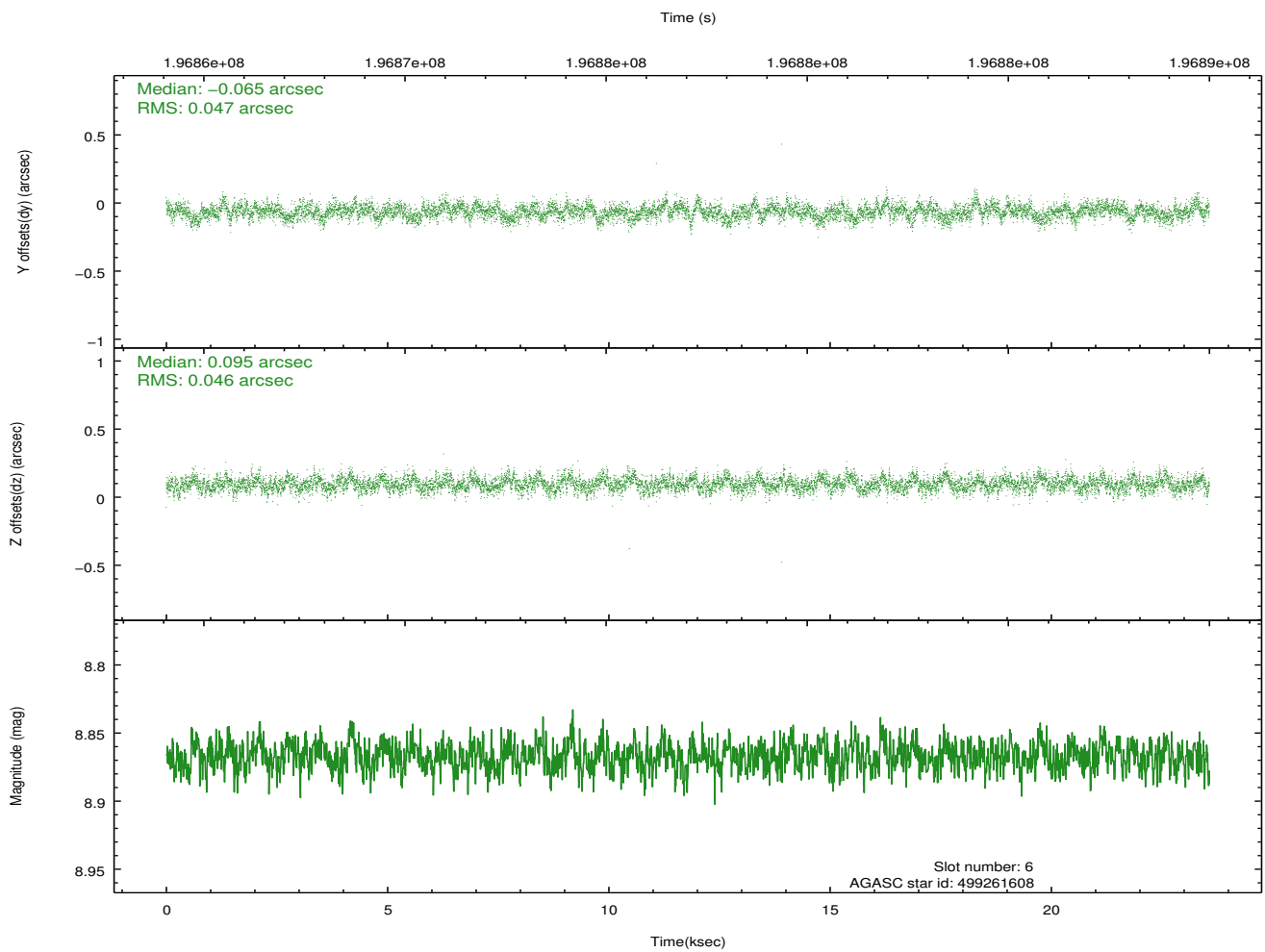
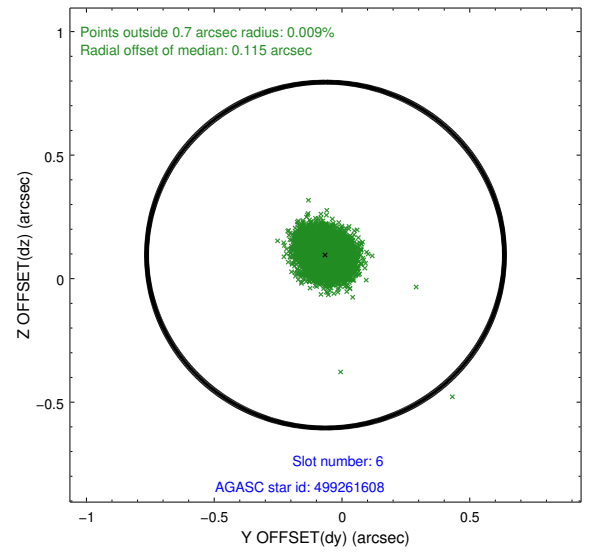
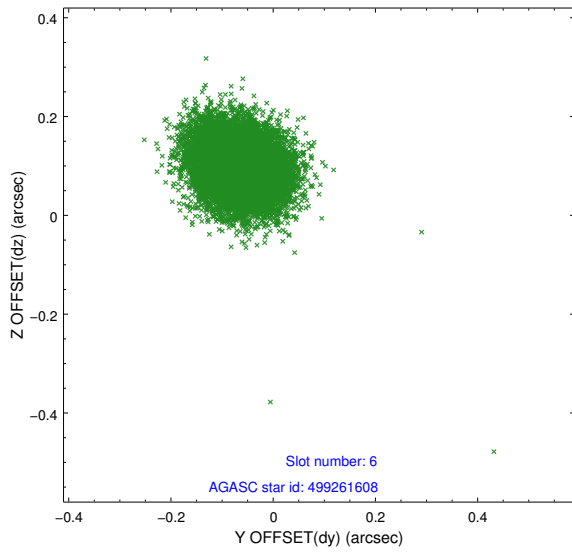
## 2.4.2 Slot 4



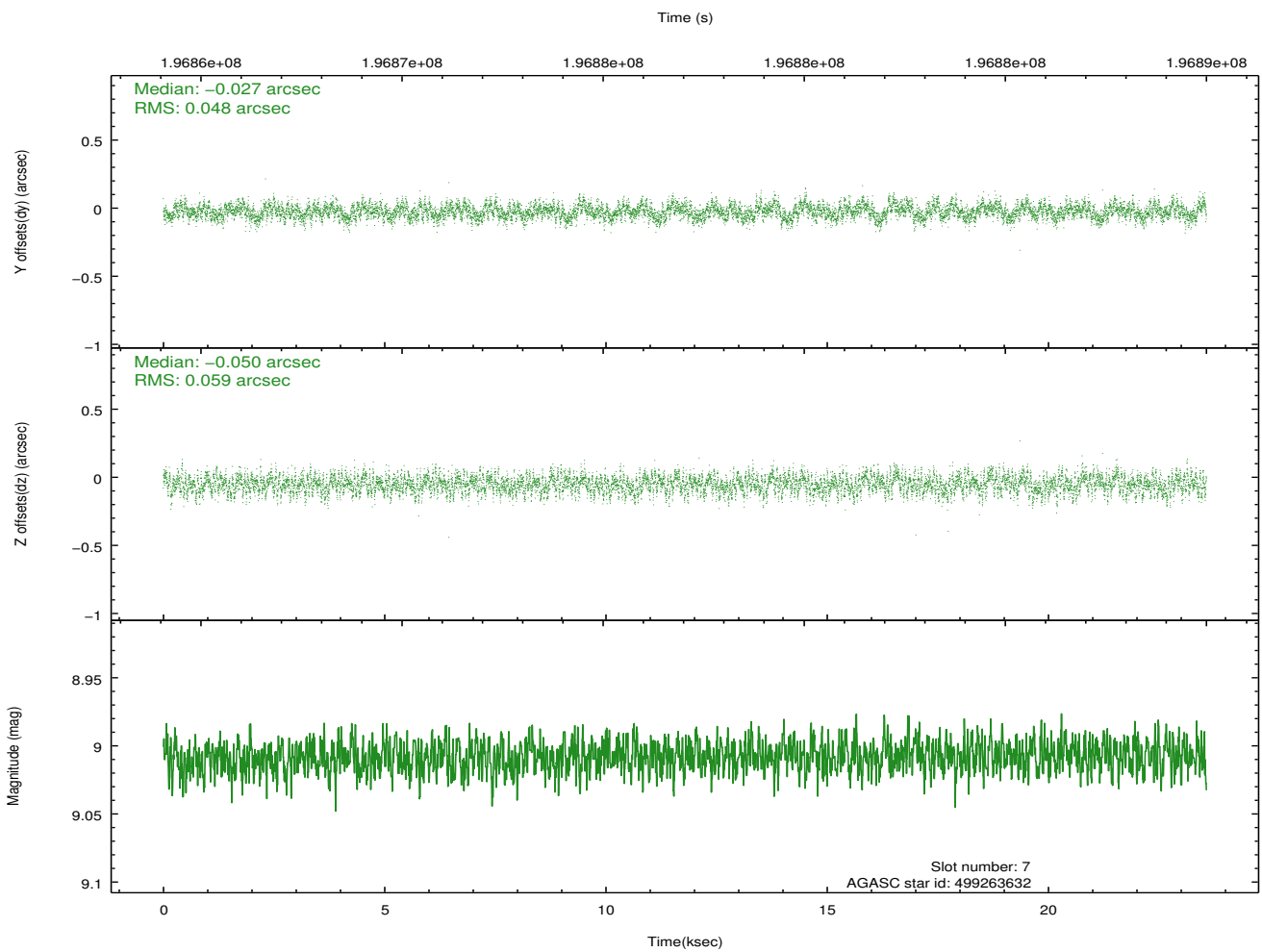
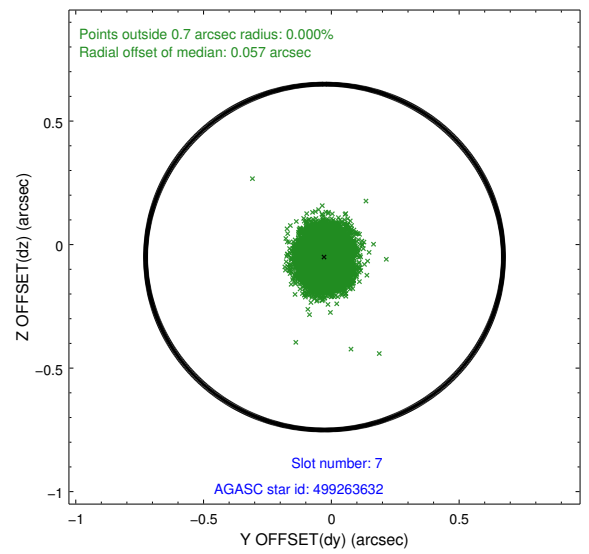
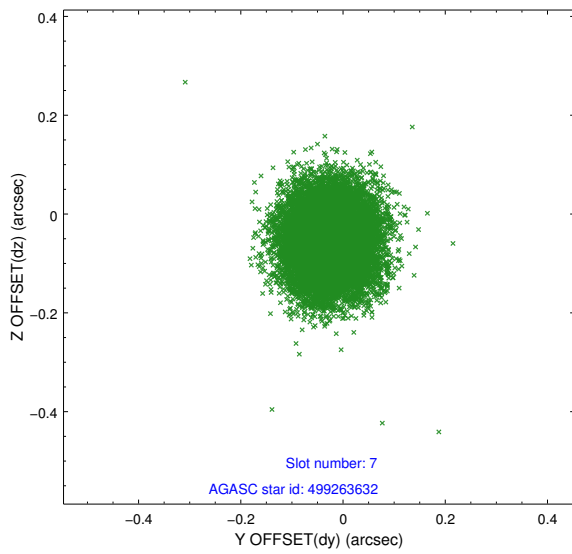
### 2.4.3 Slot 5



## 2.4.4 Slot 6

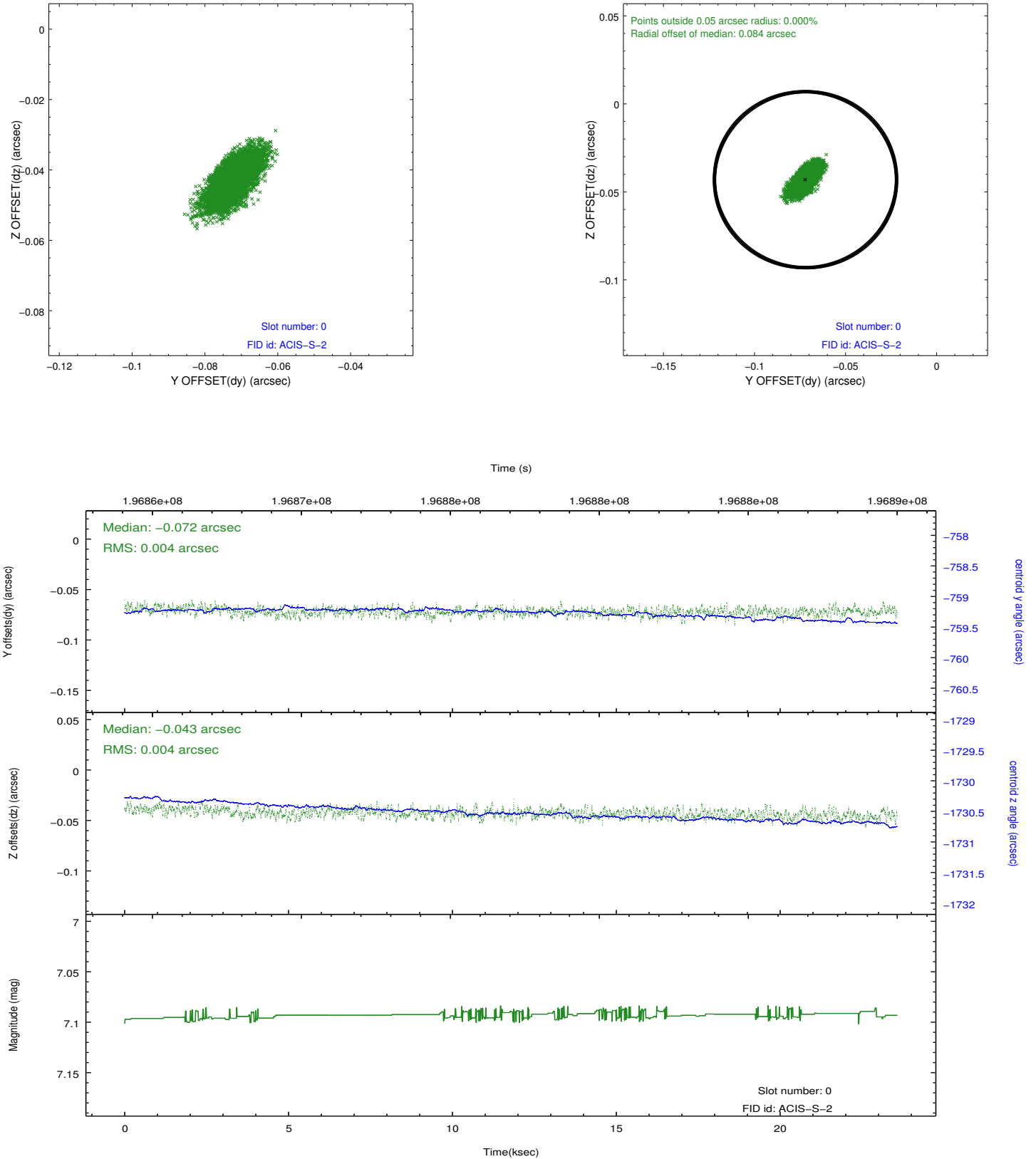


## 2.4.5 Slot 7

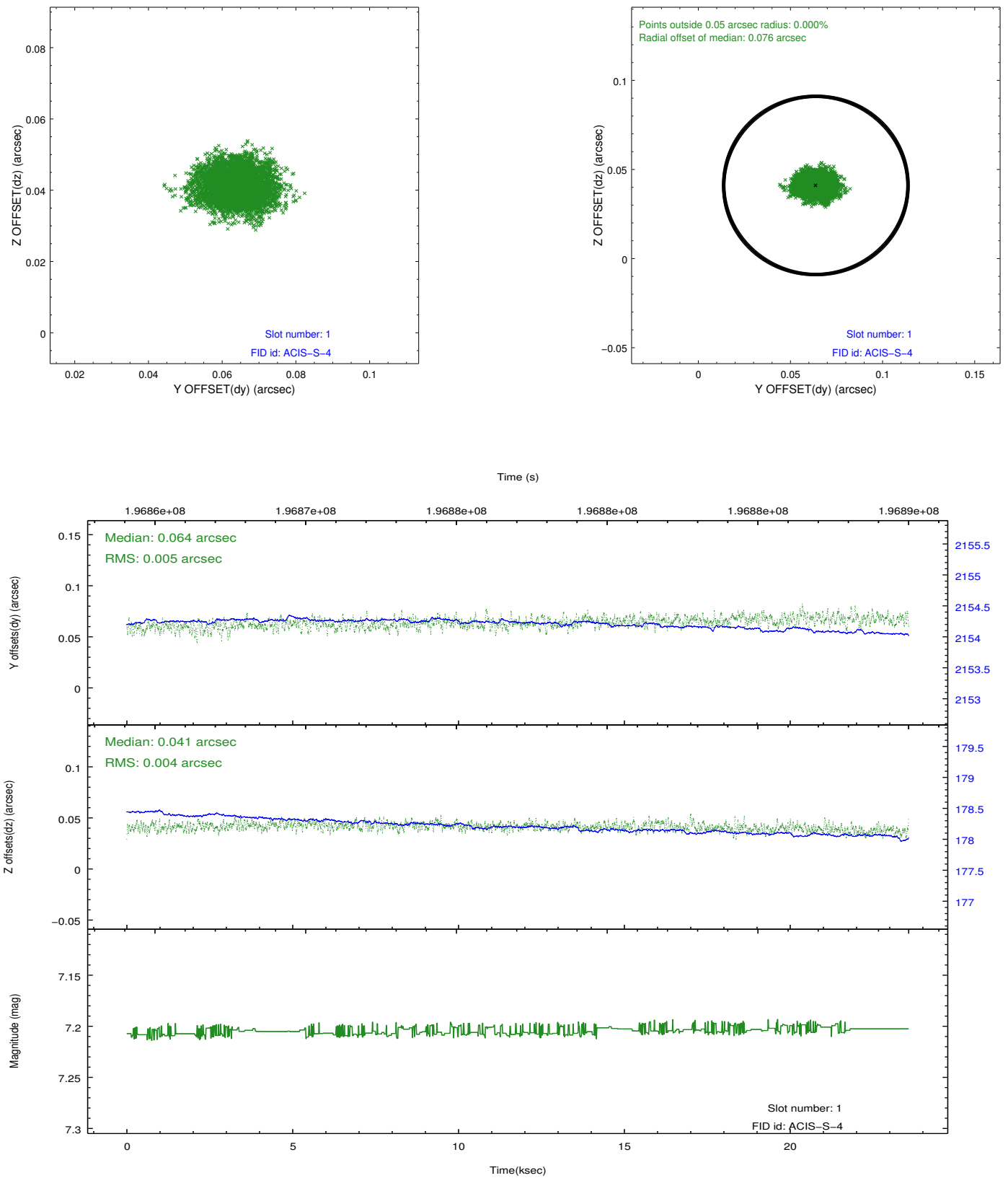


## 2.5 FID Slots

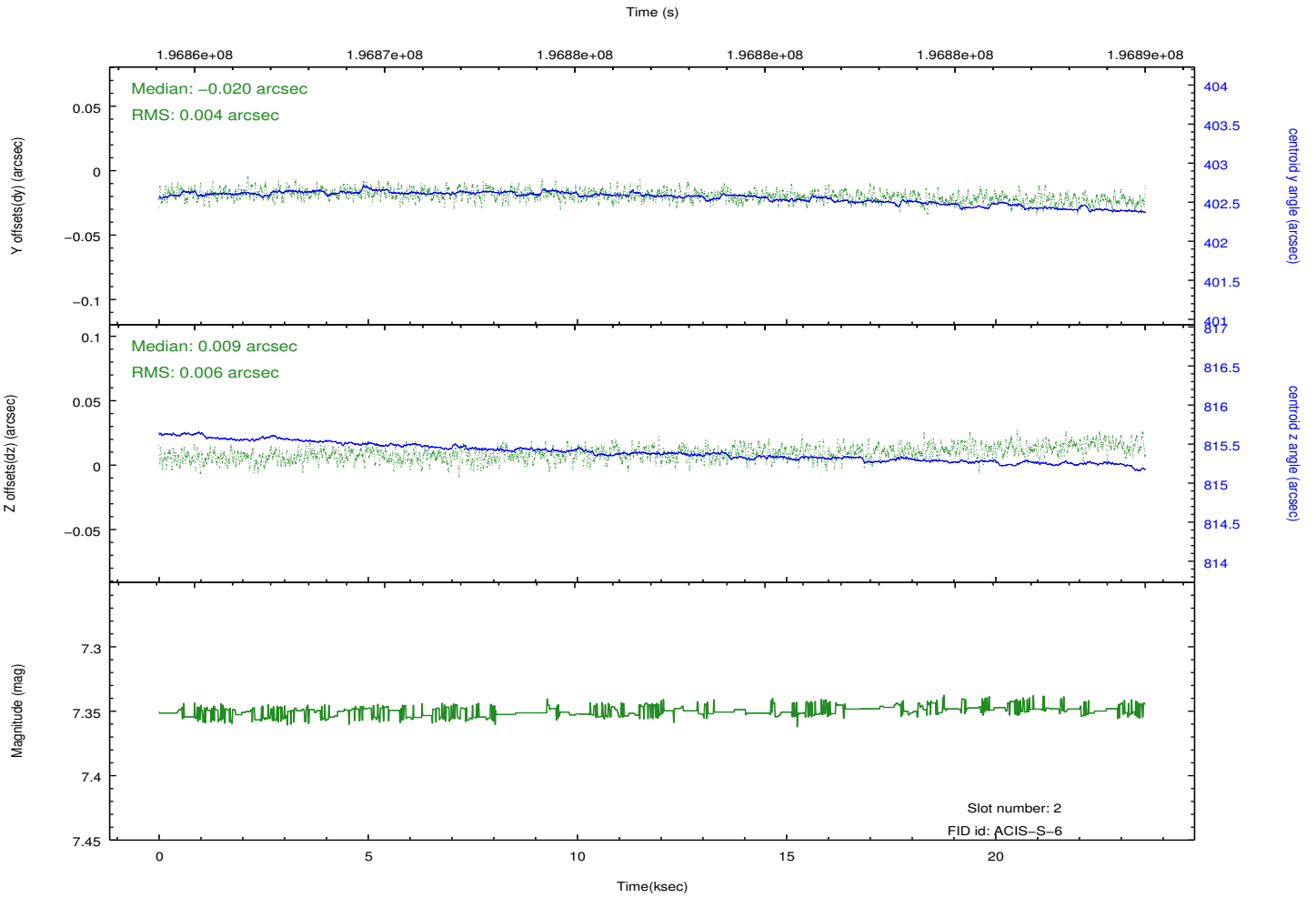
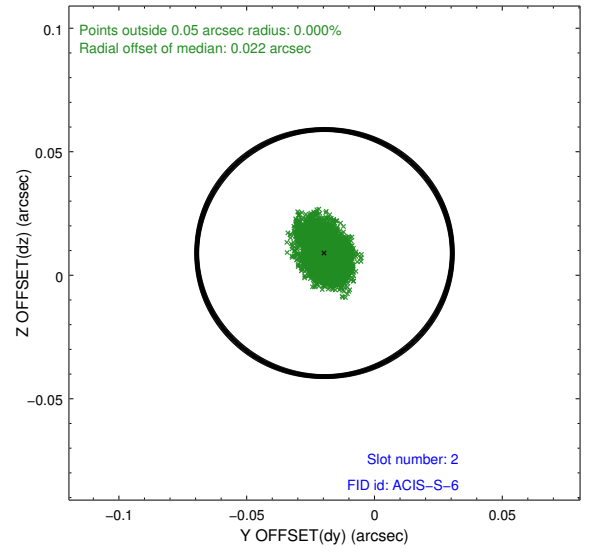
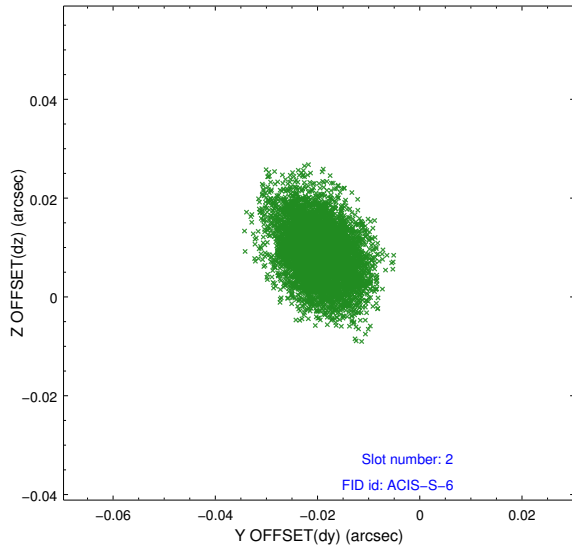
### 2.5.1 Slot 0



## 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)	2012.12.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.302

## A.2 Comments