

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4048 - L2 Version 3  
Chandra X-Ray Center

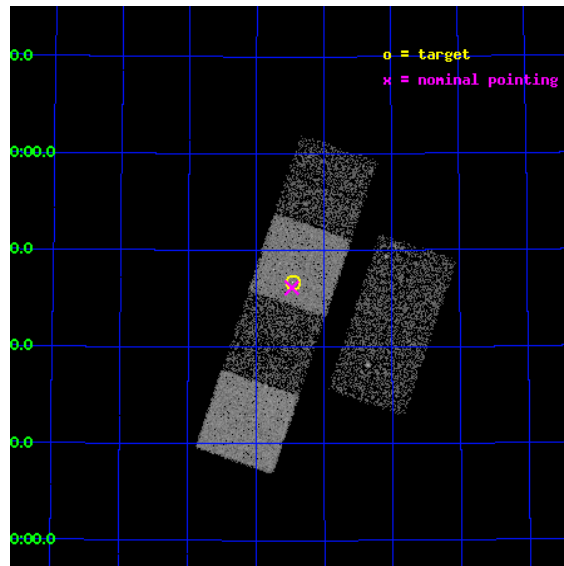
L2 Processing Date : Nov 3 2012

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# 1 Front

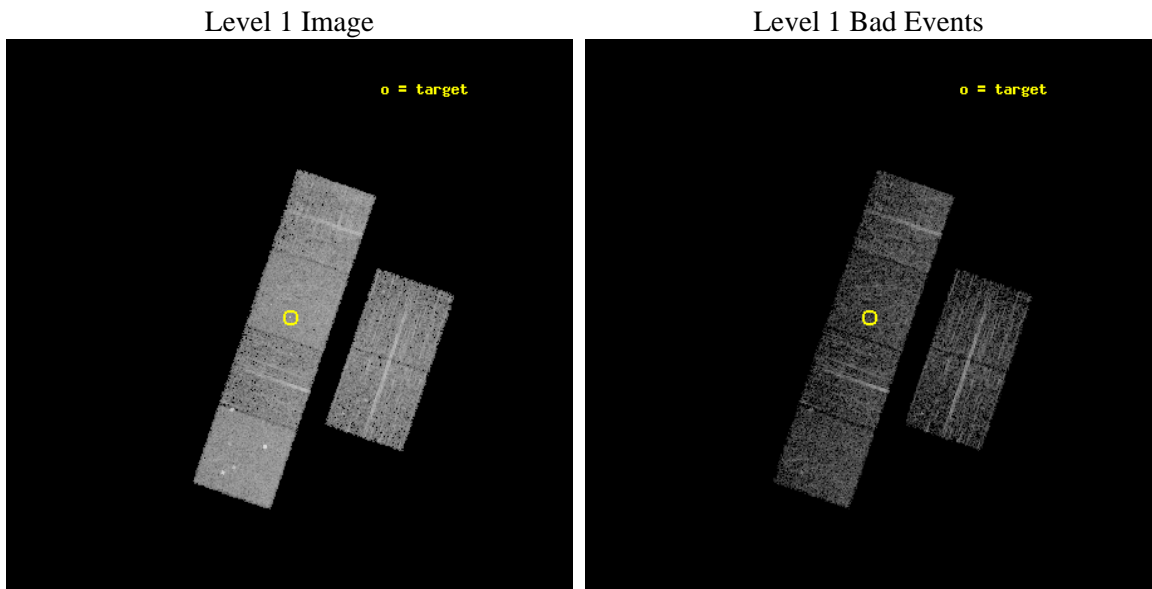
seq_num	700727	Sequence number
obs_id	4048	Observation id
title	WHY DO WE SEE BROAD LINES IN X-RAY ABSORBED AGN?	Proposal title
observer	Dr. Belinda Wilkes	Principal investigator
object	2MASS153628+614642	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	234.115417	Observer's specified target RA [deg]
dec_targ	61.77825	Observer's specified target Dec [deg]
ra_nom	234.11861807821	Nominal RA [deg]
dec_nom	61.768821678436	Nominal Dec [deg]
roll_nom	288.78248960679	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4206.6216977239	Sum of GTIs [s]
livetime	4153.3549208638	Livetime [s]
ontime2	4206.6627377272	Sum of GTIs [s]
ontime3	4206.498577714	Sum of GTIs [s]
ontime5	4206.5806577206	Sum of GTIs [s]
ontime6	4206.5396177173	Sum of GTIs [s]
ontime7	4206.6216977239	Sum of GTIs [s]
ontime8	4203.2164678276	Sum of GTIs [s]
l2events	42804	Number of level 2 events



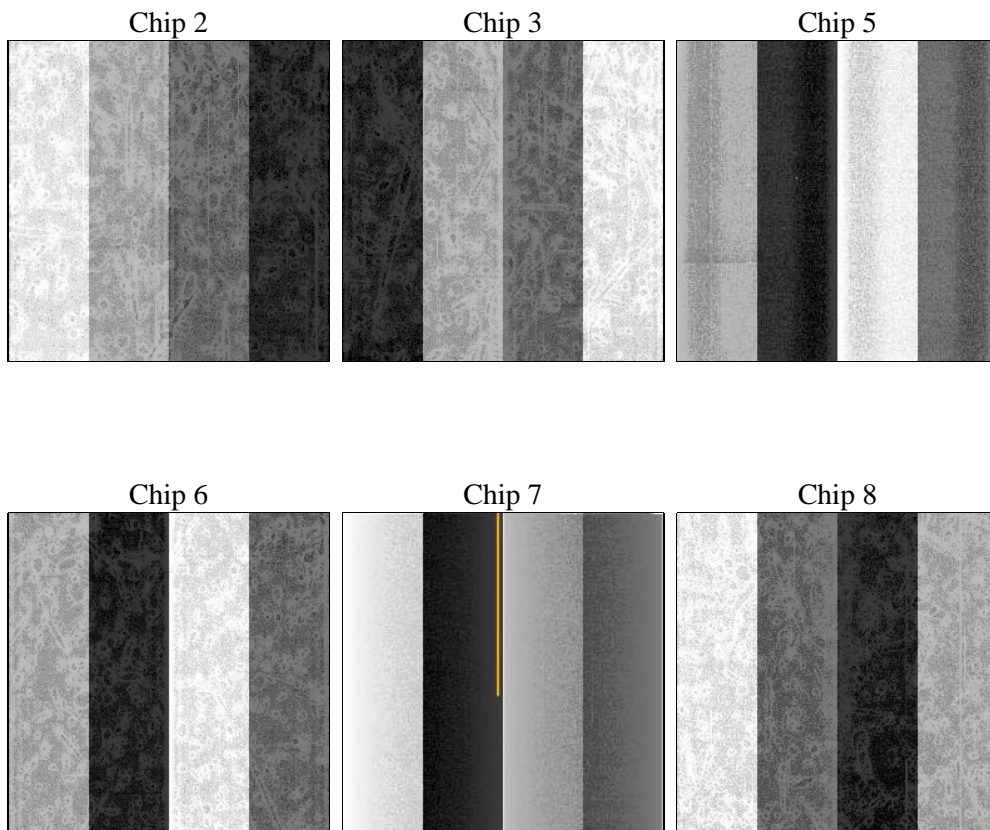
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4450.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4206.6216977239	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	4206.6627377272	Sum of GTIs [s]
date	2012-11-03T19:14:15	Date and time of file creation	ontime3	4206.498577714	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4206.5806577206	Sum of GTIs [s]
			ontime6	4206.5396177173	Sum of GTIs [s]
			ontime7	4206.6216977239	Sum of GTIs [s]
			ontime8	4203.2164678276	Sum of GTIs [s]
			l1events	191902	Number of level 1 events

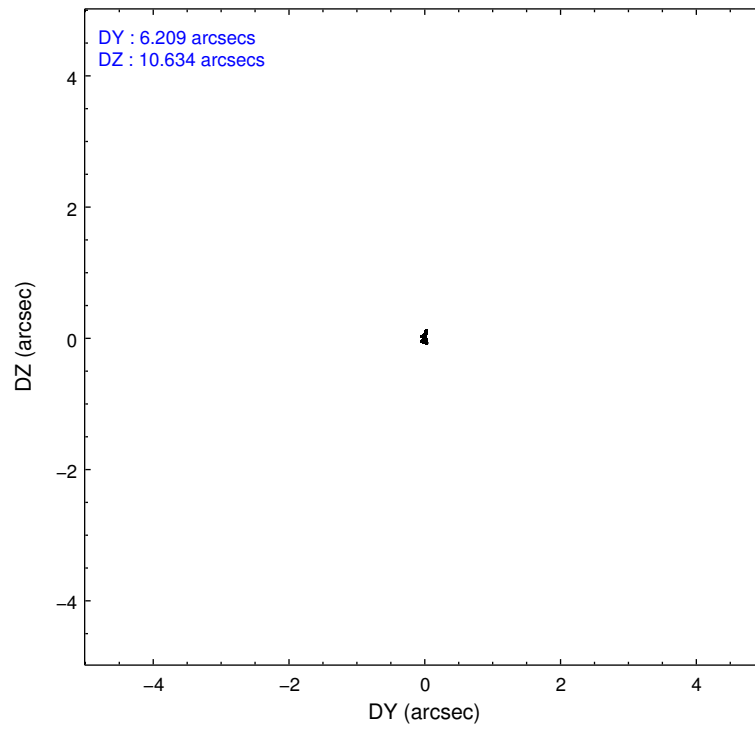
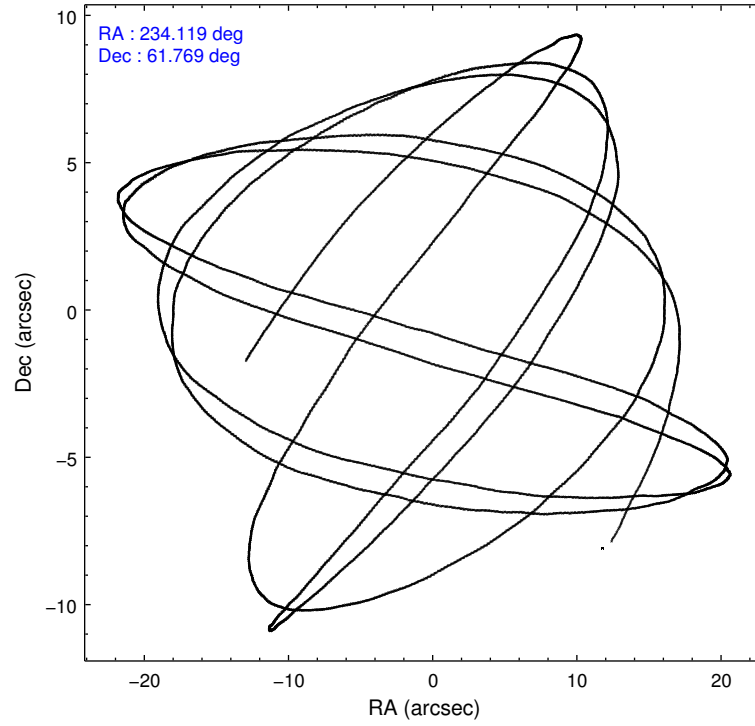
### 2.1.4 Events

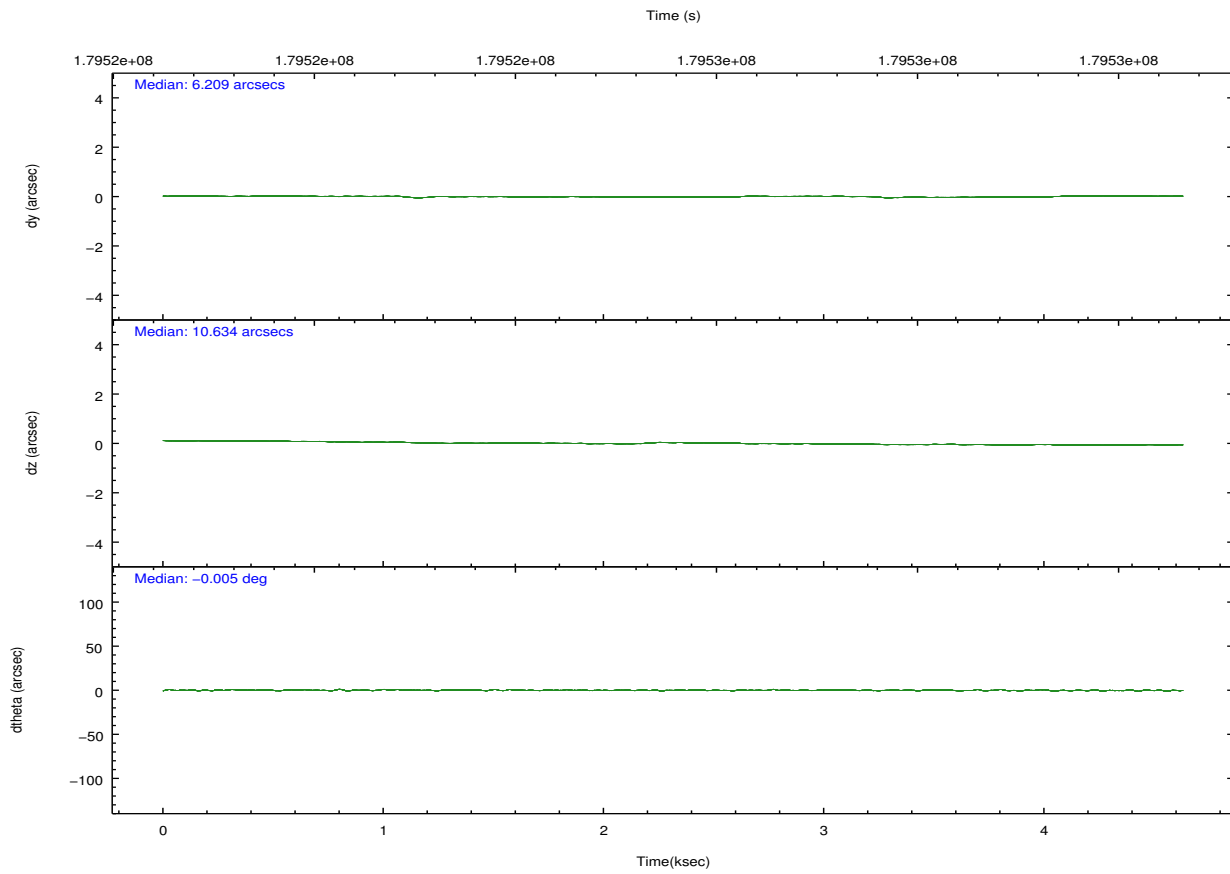
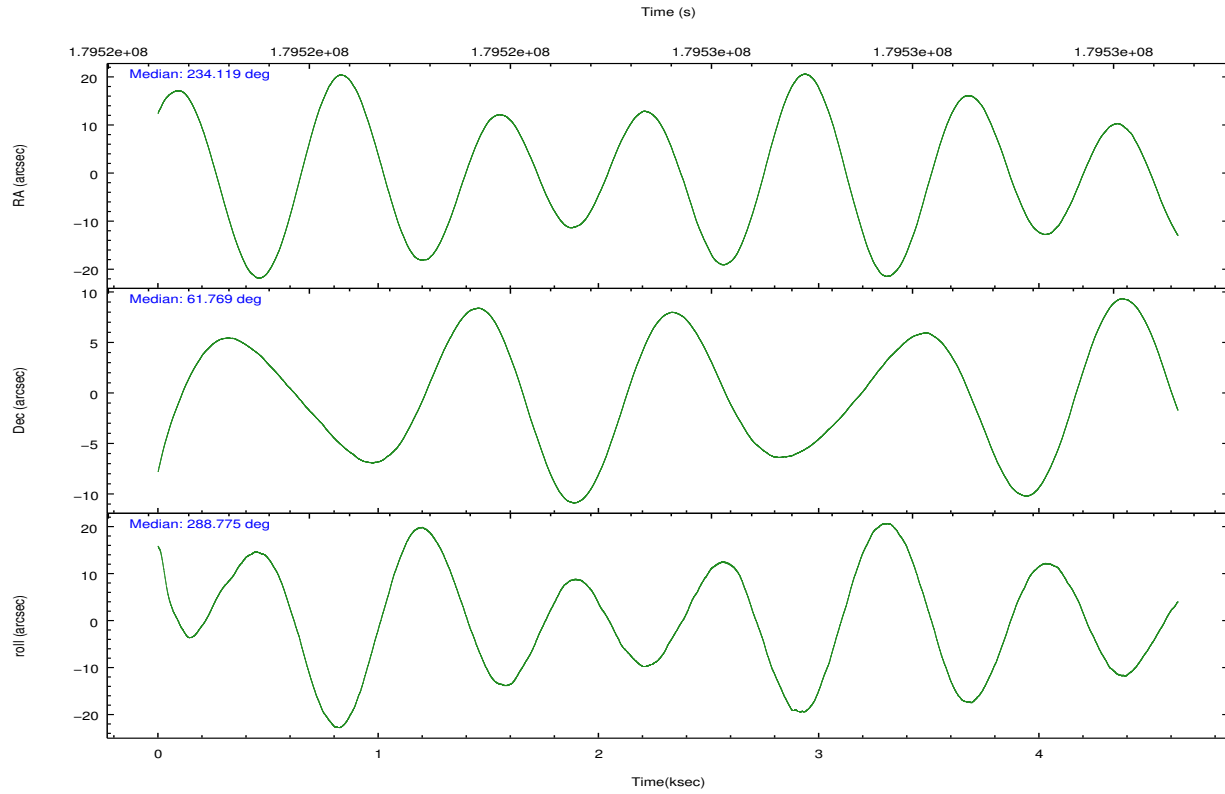
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	26858	25650	40567	26318	36799	35710	grade 0 events	1493	1346	2997	1227	1563	2024
rejected events	23660	22586	21289	23185	21478	28841		5%	5%	7%	4%	4%	5%
rejected %	88%	88%	52%	88%	58%	80%	grade 1 events	20	17	142	8	37	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	631	566	5290	662	2959	1531
								2%	2%	13%	2%	8%	4%
							grade 3 events	279	306	780	323	1439	724
								1%	1%	1%	1%	3%	2%
							grade 4 events	282	296	798	286	1378	698
								1%	1%	1%	1%	3%	1%
							grade 5 events	1051	1122	2986	1181	3419	1545
								3%	4%	7%	4%	9%	4%
							grade 6 events	516	552	9434	636	7990	1894
								1%	2%	23%	2%	21%	5%
							grade 7 events	22586	21445	18140	21995	18014	27260
								84%	83%	44%	83%	48%	76%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	234.074668	234.1186180782124	Subarray requested	NONE	NONE
[deg] Pointing Dec	61.786339	61.7688216784357	Alternating exposures requested	N	N
[deg] Pointing Roll	288.664546	288.7824896067867	[s] Primary exposure time	0.000000	3.2
[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)	179523653.184000	179523064.38811			
Observation start date	2003-09-09T19:39:49	2003-09-09T19:31:04			
[s] Observation end time (MET)	179528103.184000	179528495.35084			
Observation end date	2003-09-09T20:53:59	2003-09-09T21:01:35			
Read mode	TIMED	TIMED			

## 2.3 Aspect



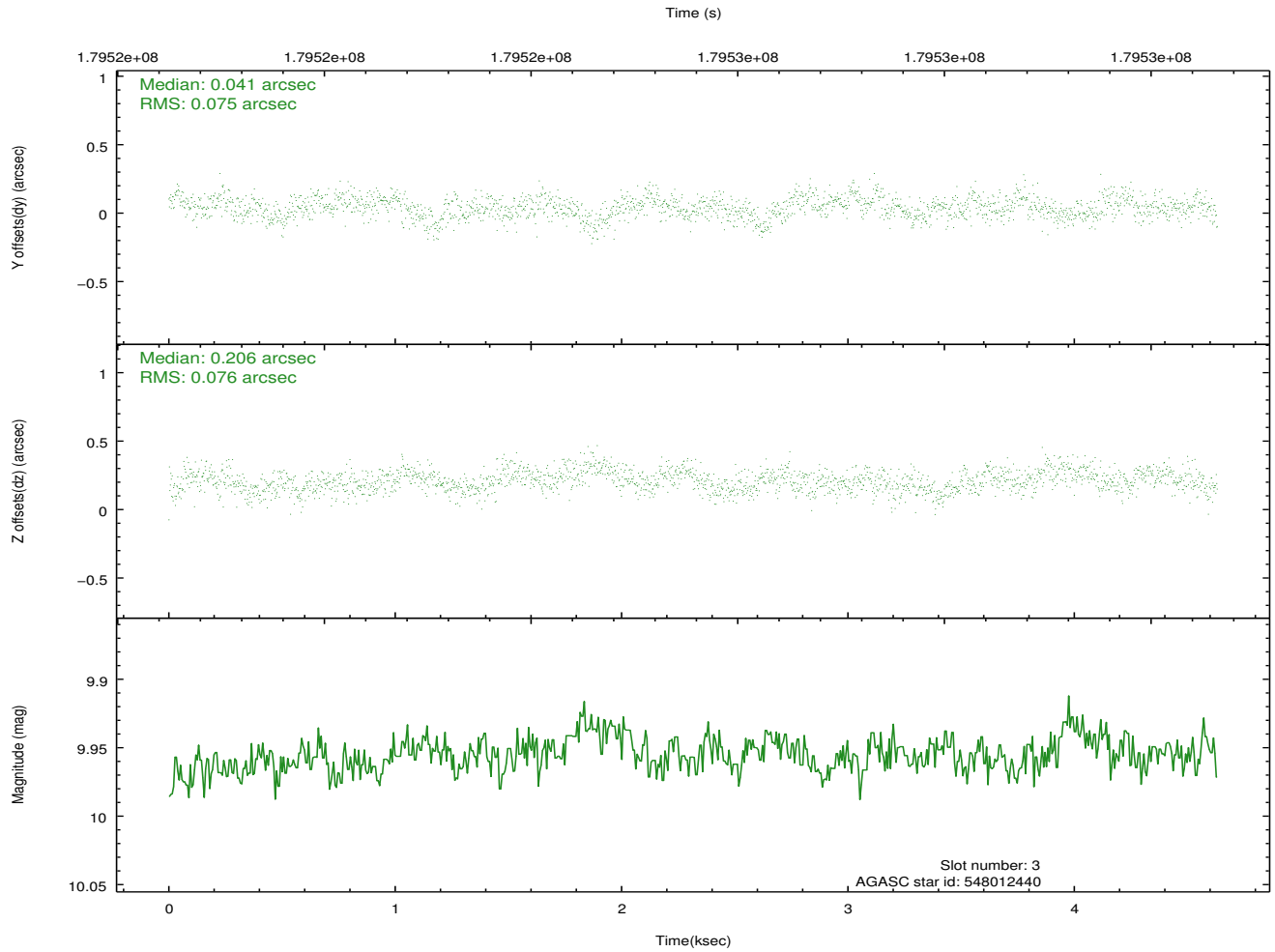
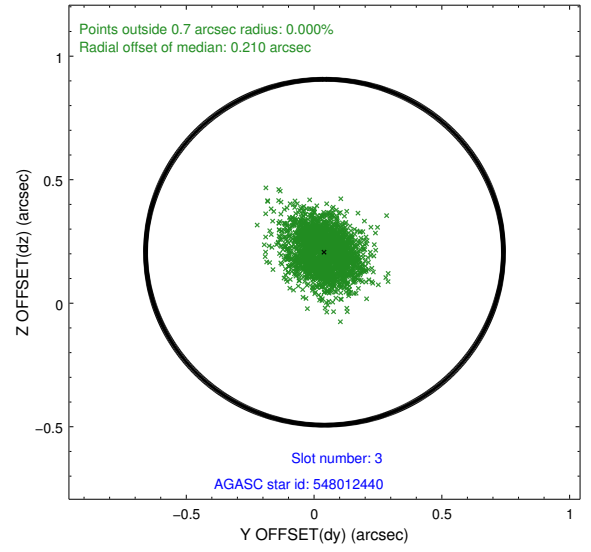
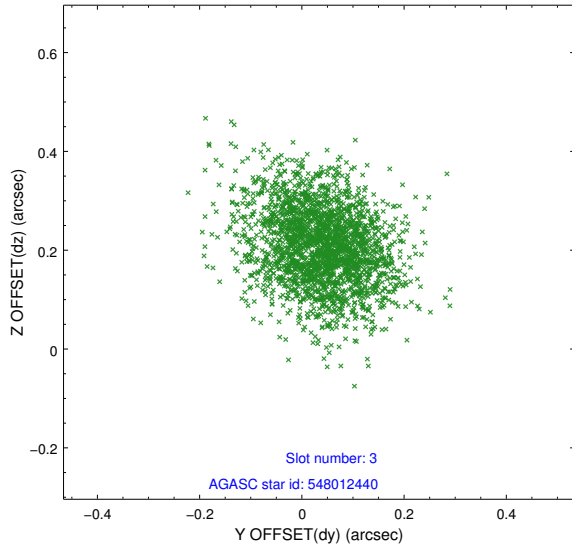


### Slot Statistics

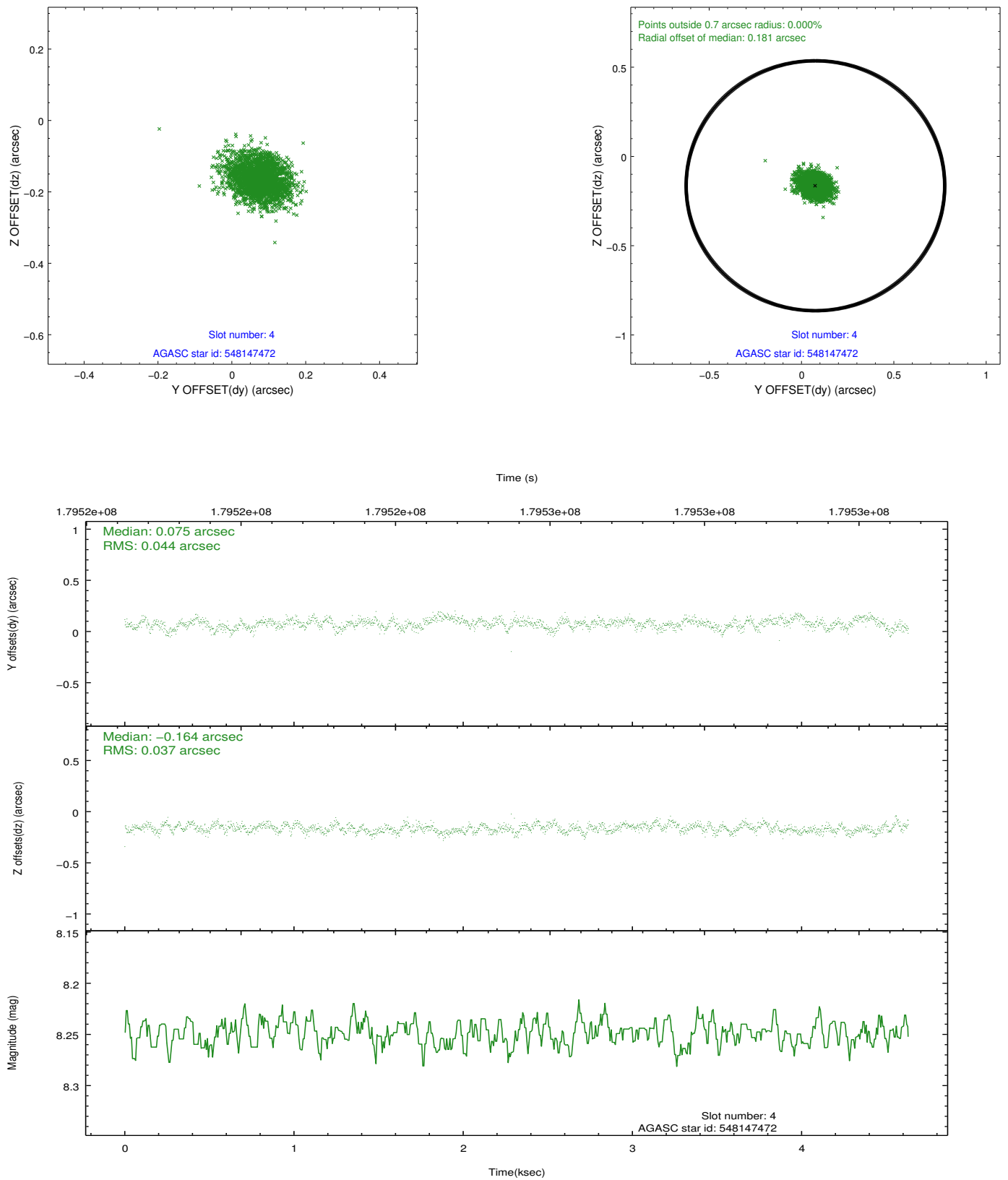
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	1130	-0.059	-0.007	0.007	0.012	0.000000	0.000000	-758.97	-1731.92
1	FID	ACIS-S-4	7.20	1130	0.061	0.030	0.005	0.011	0.000000	0.000000	2153.80	175.27
2	FID	ACIS-S-5	7.23	1130	-0.033	-0.015	0.007	0.011	0.000000	0.000000	-1810.11	170.35
3	GUIDE	548012440	9.96	2260	0.041	0.206	0.112	0.187	233.796469	61.979149	-808.36	-223.33
4	GUIDE	548147472	8.25	2260	0.075	-0.164	0.061	0.099	234.523755	61.420419	1493.12	311.31
5	GUIDE	548149344	9.52	2259	-0.006	-0.138	0.111	0.176	235.126745	62.360708	-1409.19	2330.59
6	GUIDE	548150728	8.61	2260	-0.048	0.033	0.075	0.114	234.994476	61.549361	1302.31	1226.11
7	GUIDE	548152728	8.41	2259	-0.062	0.060	0.073	0.122	235.137213	61.880754	241.85	1821.87

## 2.4 Star Slots

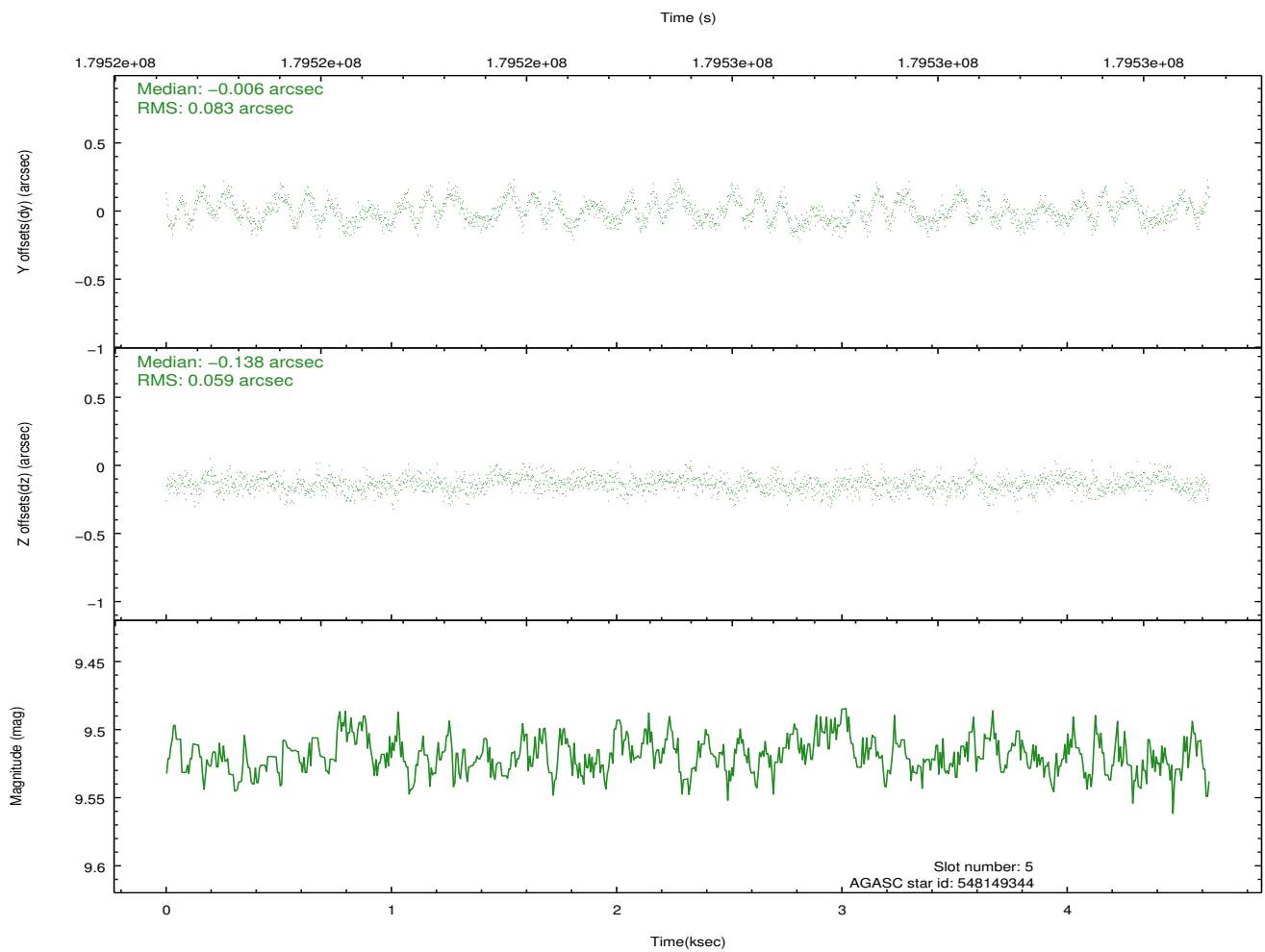
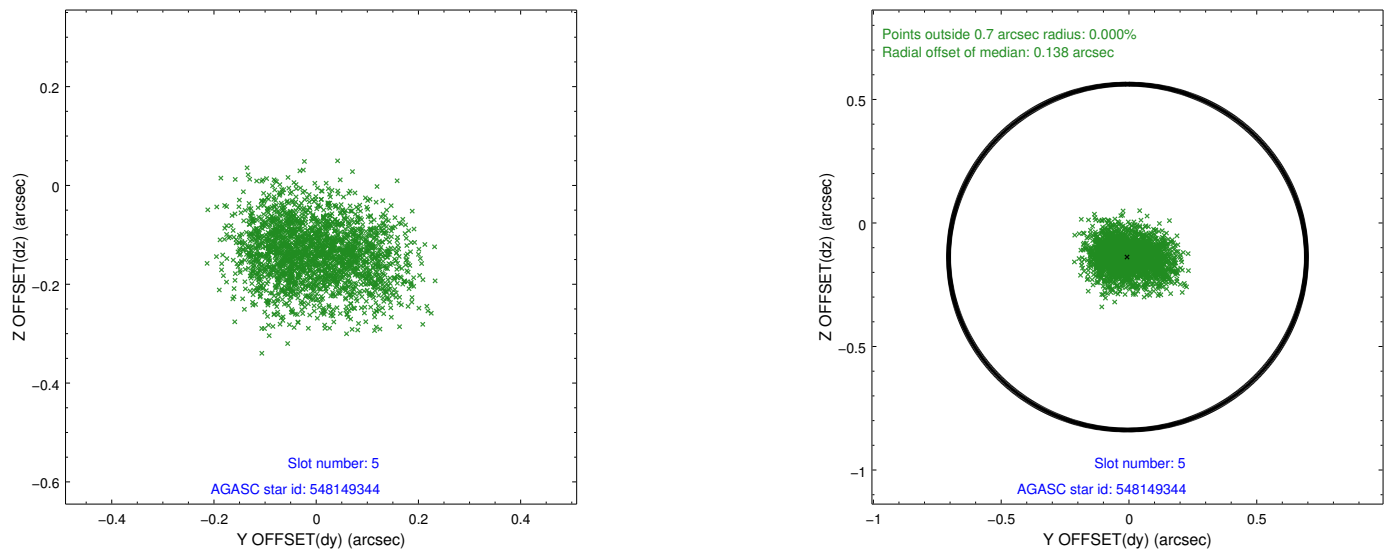
### 2.4.1 Slot 3



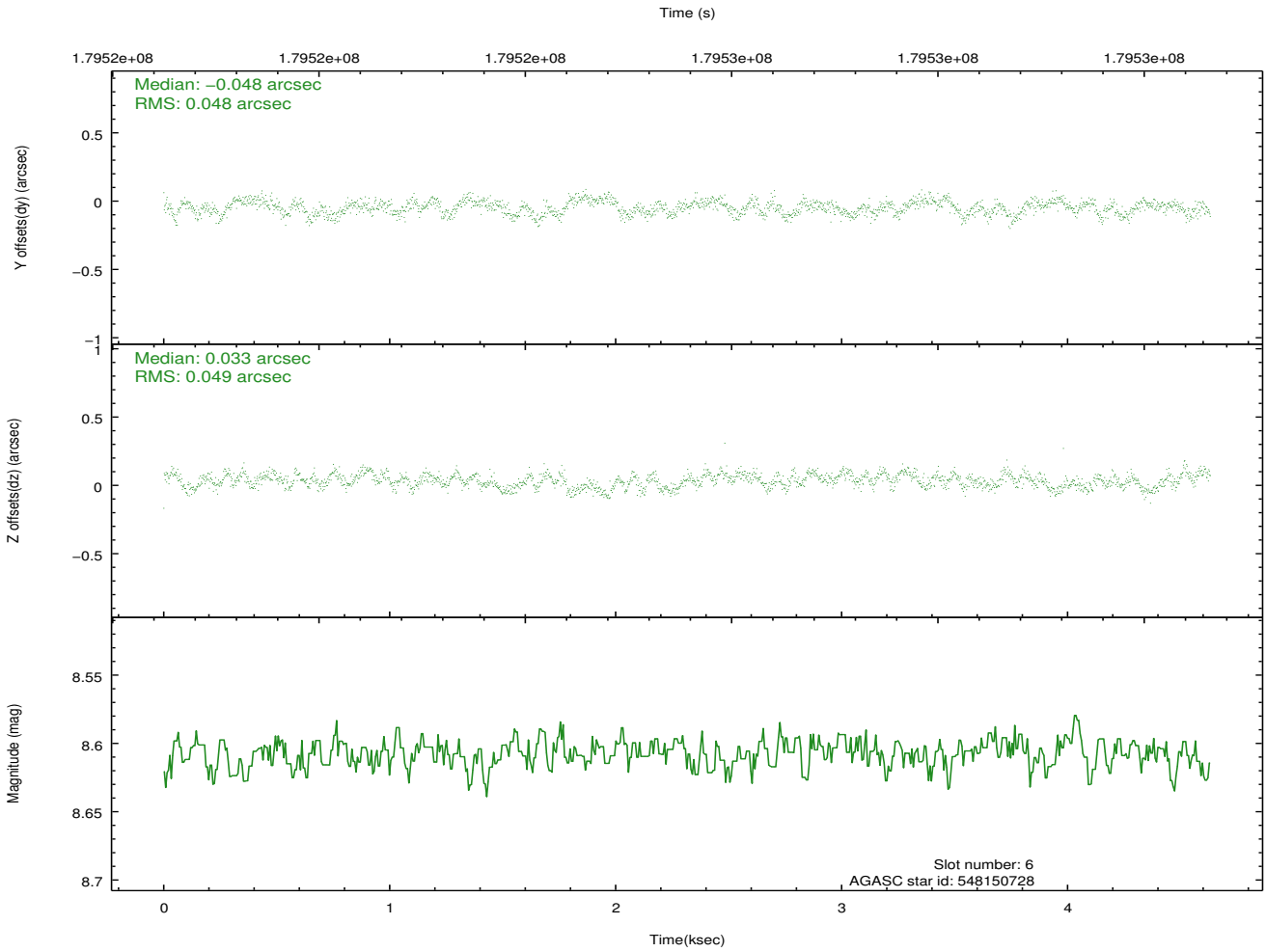
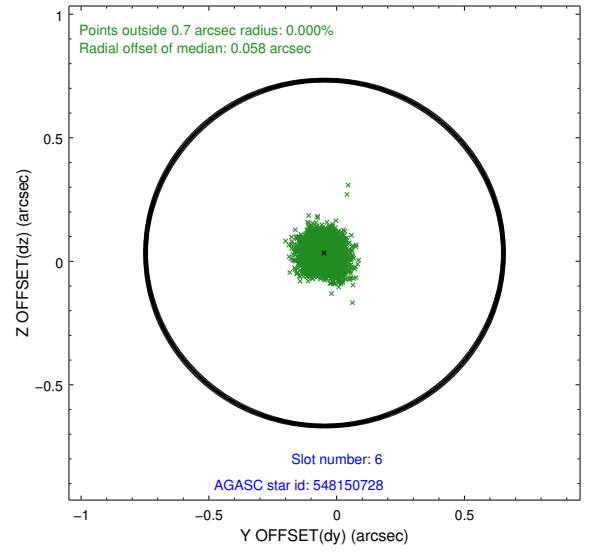
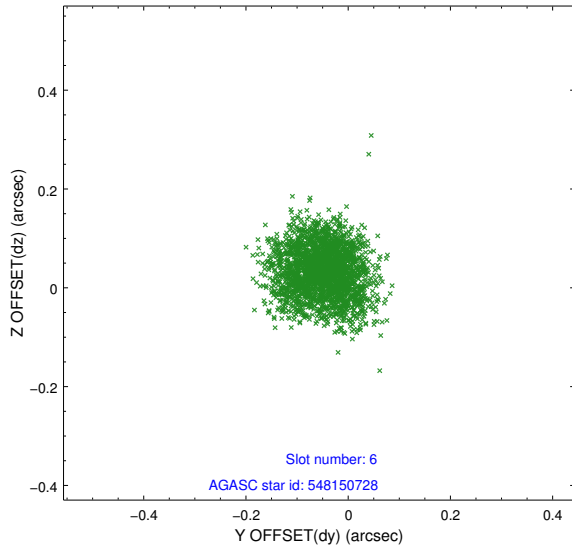
## 2.4.2 Slot 4



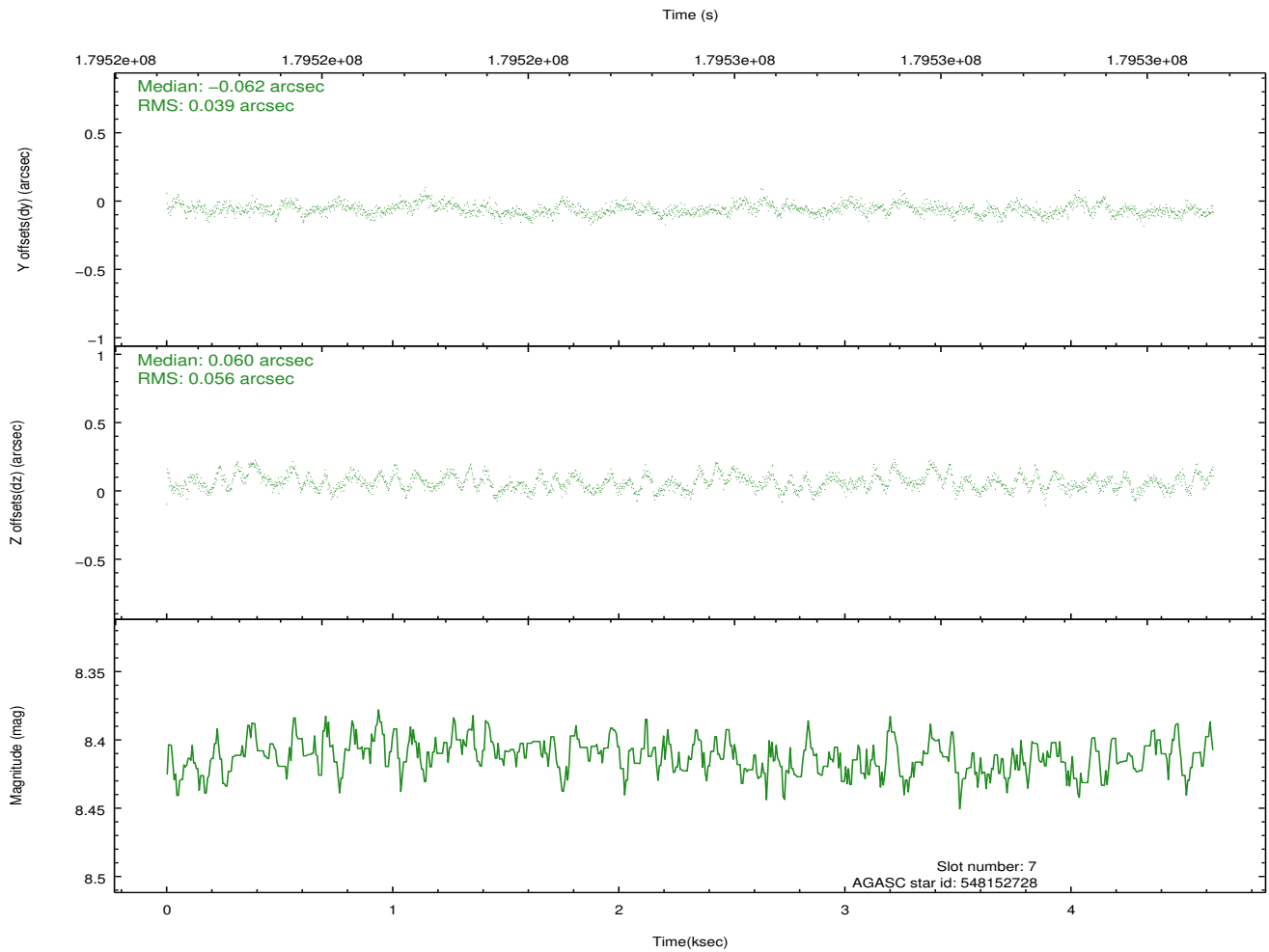
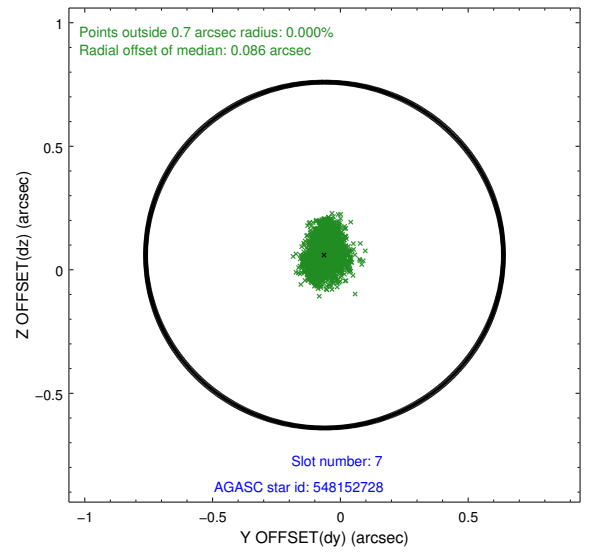
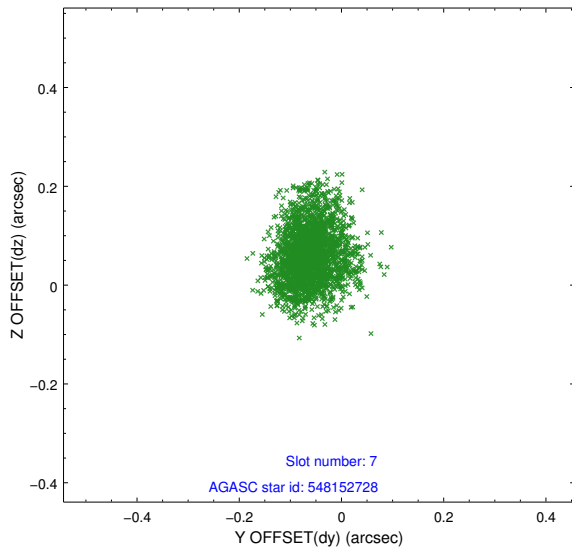
### 2.4.3 Slot 5



## 2.4.4 Slot 6

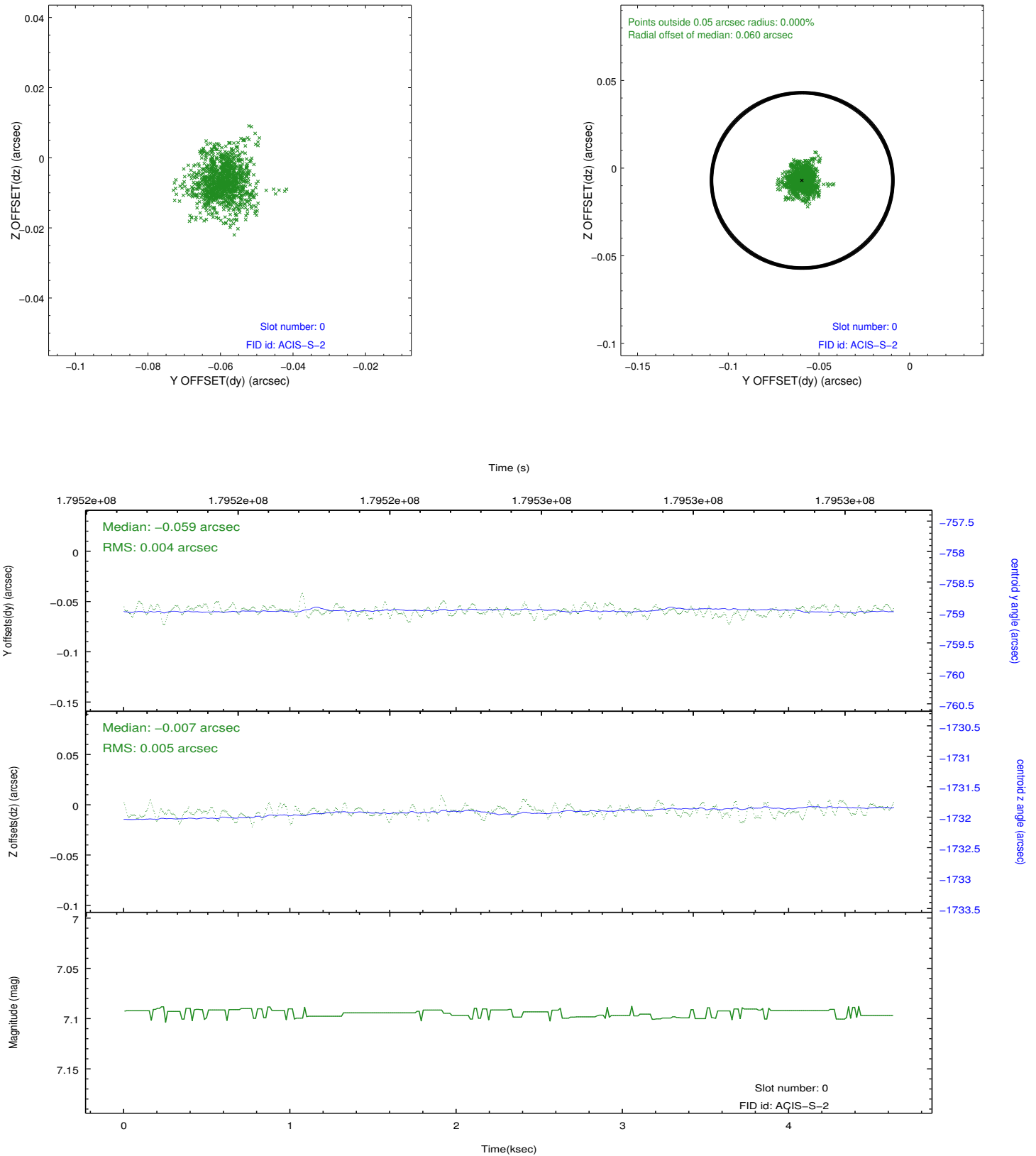


## 2.4.5 Slot 7

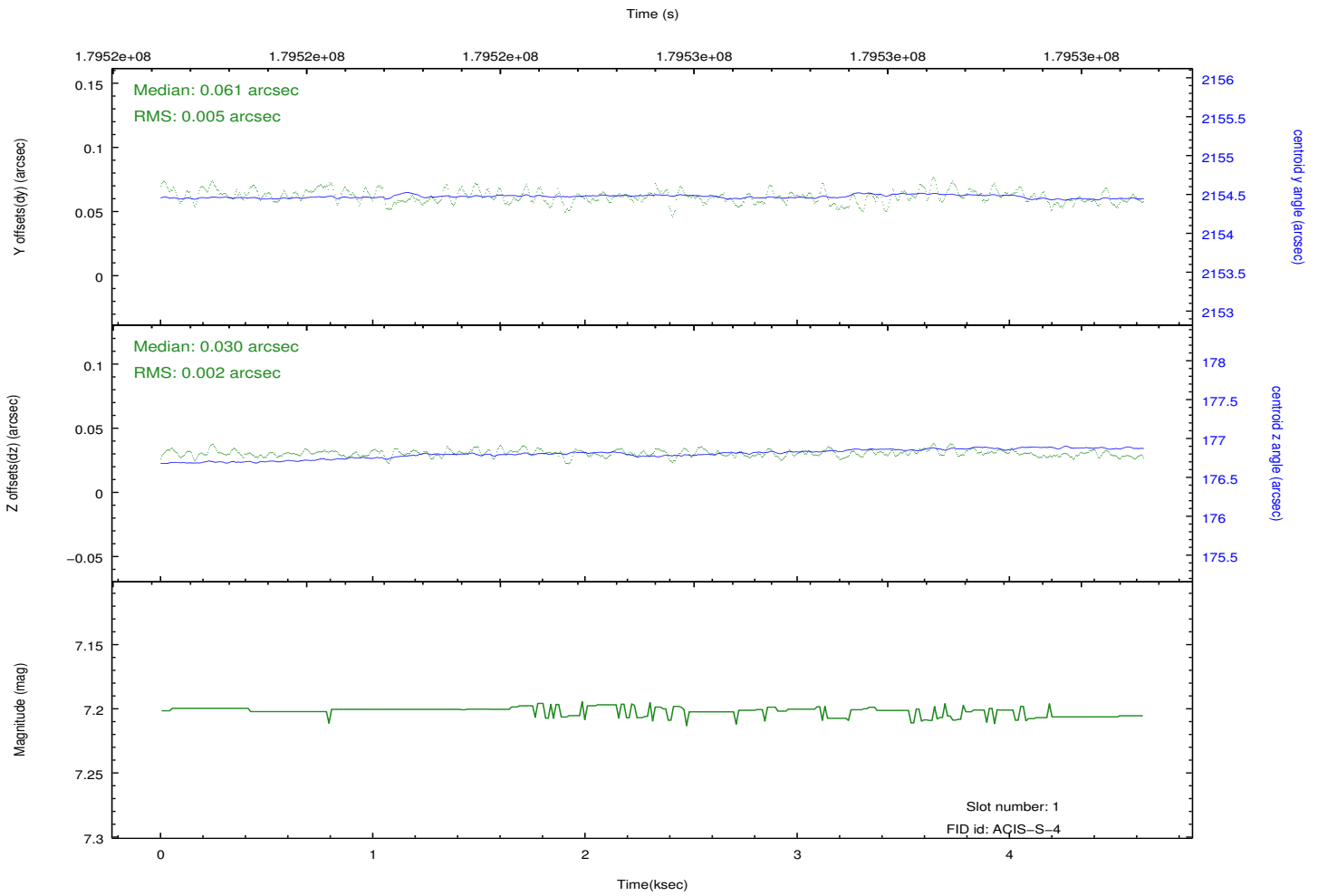
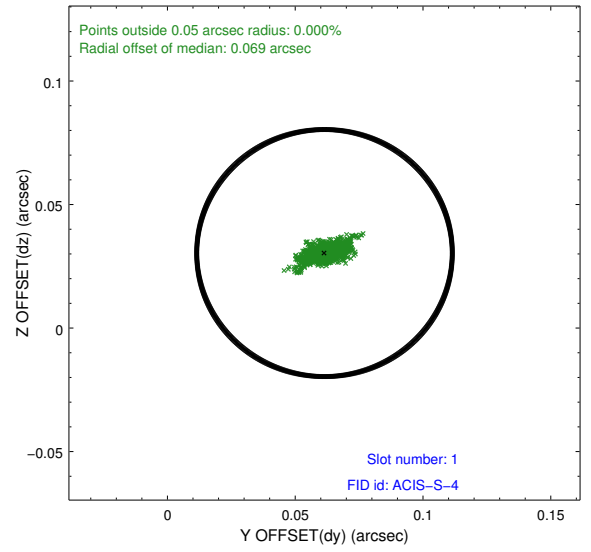
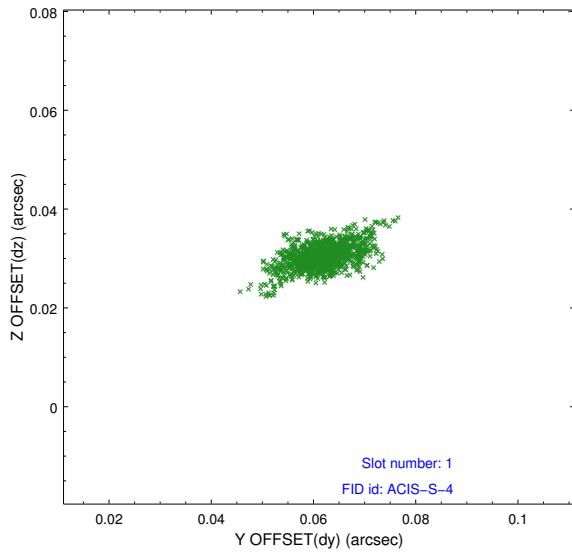


## 2.5 FID Slots

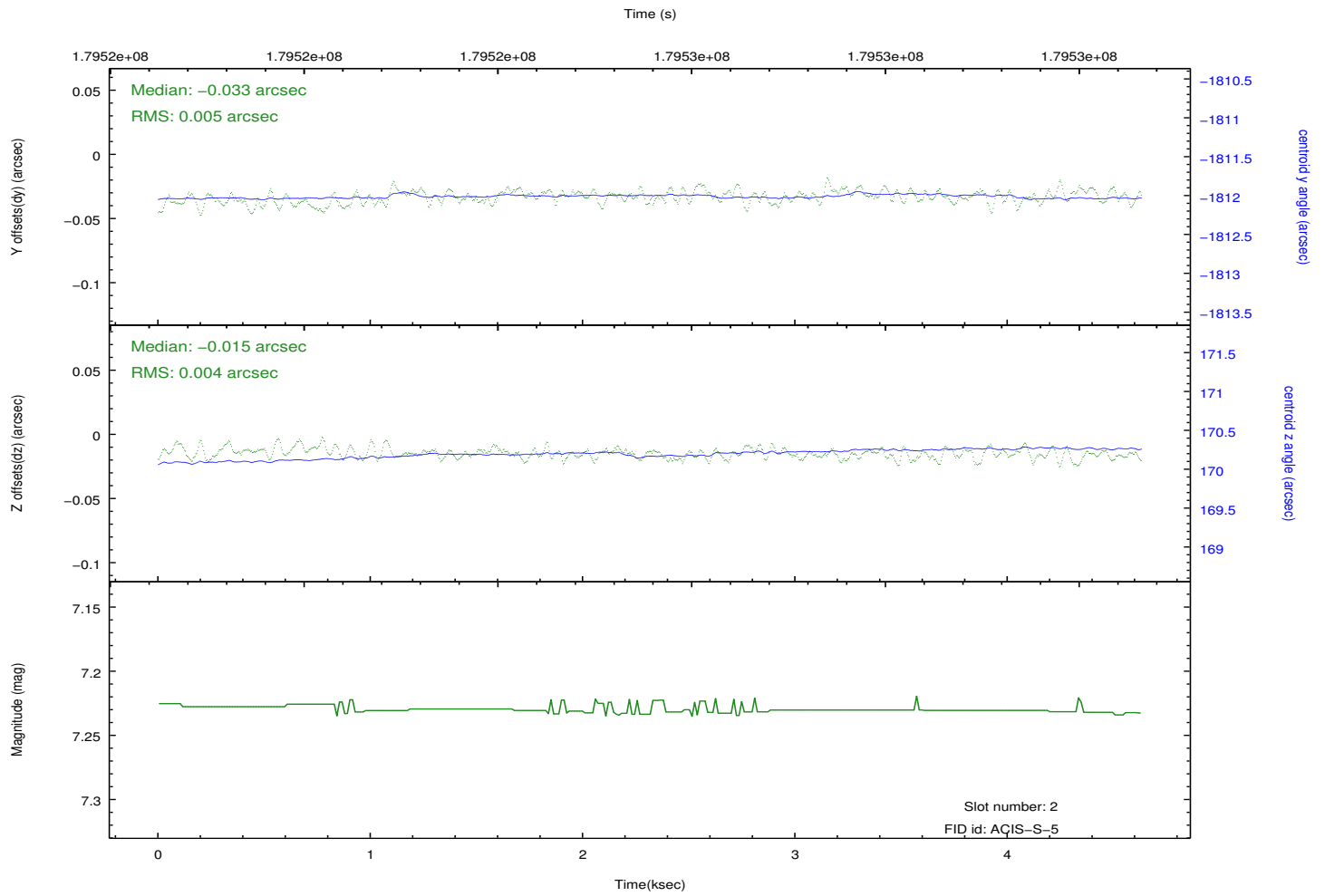
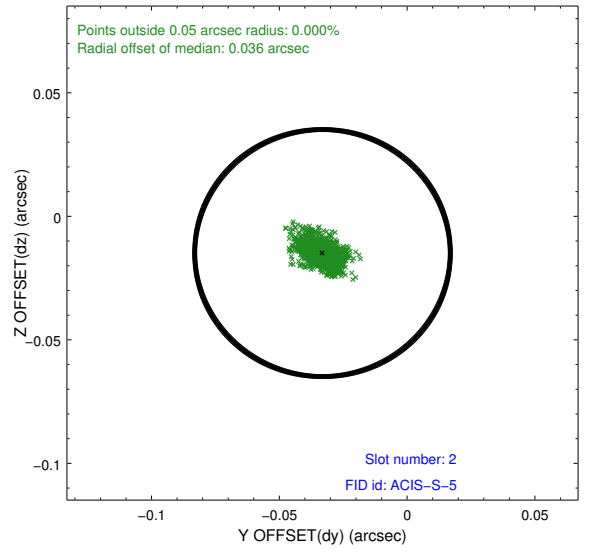
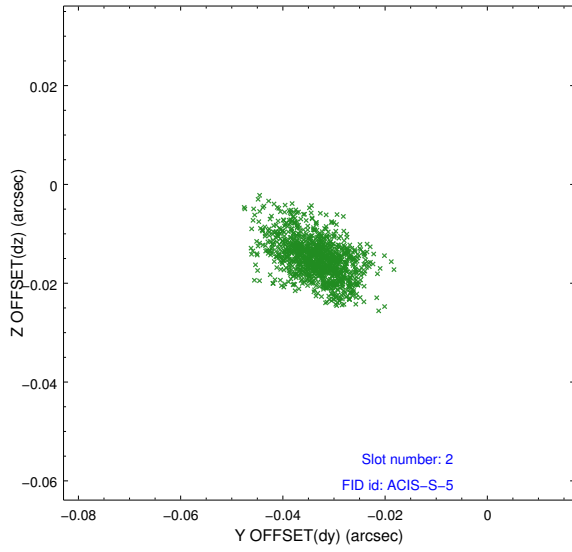
### 2.5.1 Slot 0



## 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)	2012.11.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.207

## A.2 Comments