

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2922 - L2 Version 3  
Chandra X-Ray Center

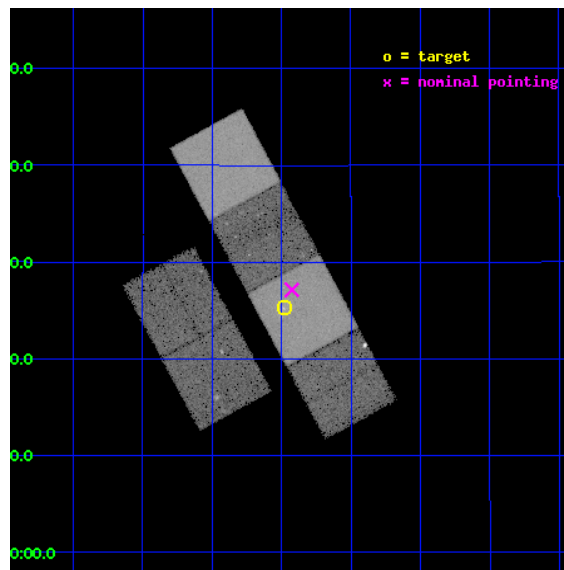
L2 Processing Date : Oct 19 2012

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# 1 Front

seq_num	600259	Sequence number
obs_id	2922	Observation id
title	STUDY OF THE ISM-STRIPPING PROCESS IN THE VIRGO SPIRAL NGC 4501 (M88)	Proposal title
observer	Dr. Hans Boehringer	Principal investigator
object	NGC 4501	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.99375	Observer's specified target RA [deg]
dec_targ	14.422222	Observer's specified target Dec [deg]
ra_nom	187.98125155127	Nominal RA [deg]
dec_nom	14.45234034492	Nominal Dec [deg]
roll_nom	61.646582711385	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18099.199932575	Sum of GTIs [s]
livetime	17870.016964999	Livetime [s]
ontime2	18092.717952222	Sum of GTIs [s]
ontime3	18099.199932575	Sum of GTIs [s]
ontime5	18099.199932575	Sum of GTIs [s]
ontime6	18099.199932575	Sum of GTIs [s]
ontime7	18099.199932575	Sum of GTIs [s]
ontime8	18099.199932575	Sum of GTIs [s]
l2events	238633	Number of level 2 events

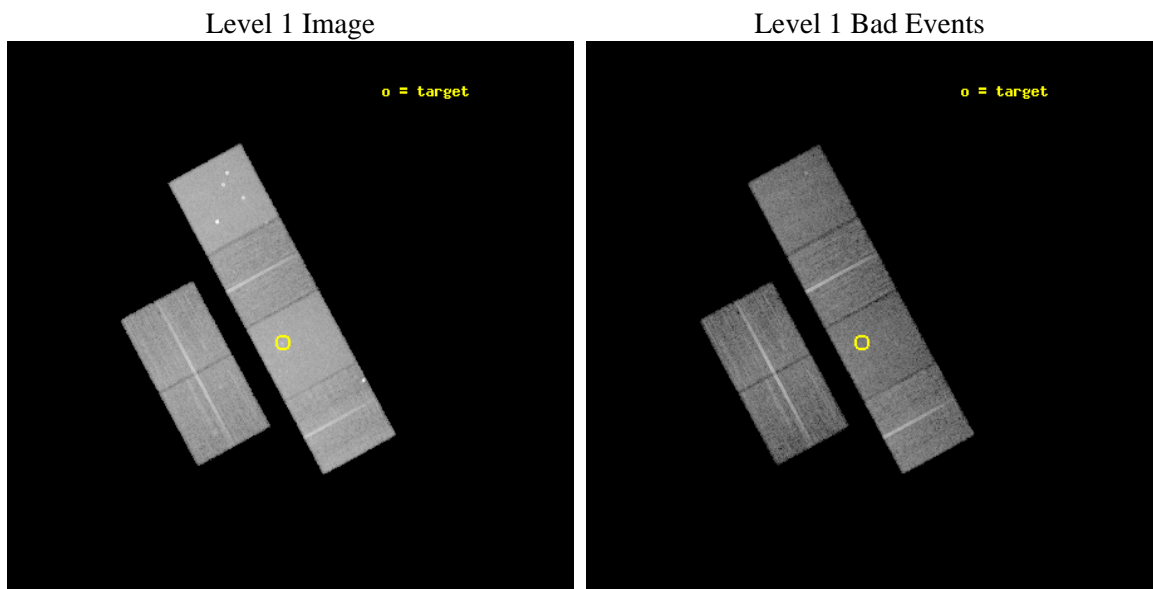




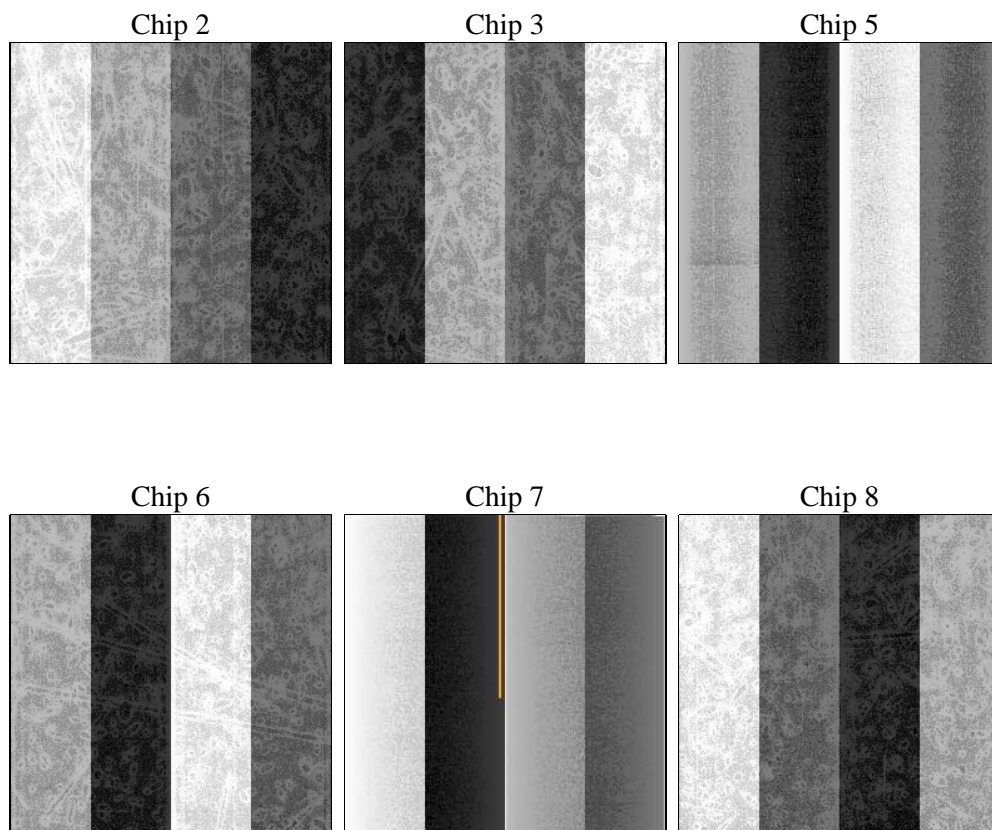
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	18099.199932575	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	18092.717952222	Sum of GTIs [s]
date	2012-10-19T04:58:42	Date and time of file creation	ontime3	18099.199932575	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	18099.199932575	Sum of GTIs [s]
			ontime6	18099.199932575	Sum of GTIs [s]
			ontime7	18099.199932575	Sum of GTIs [s]
			ontime8	18099.199932575	Sum of GTIs [s]
			l1events	852000	Number of level 1 events

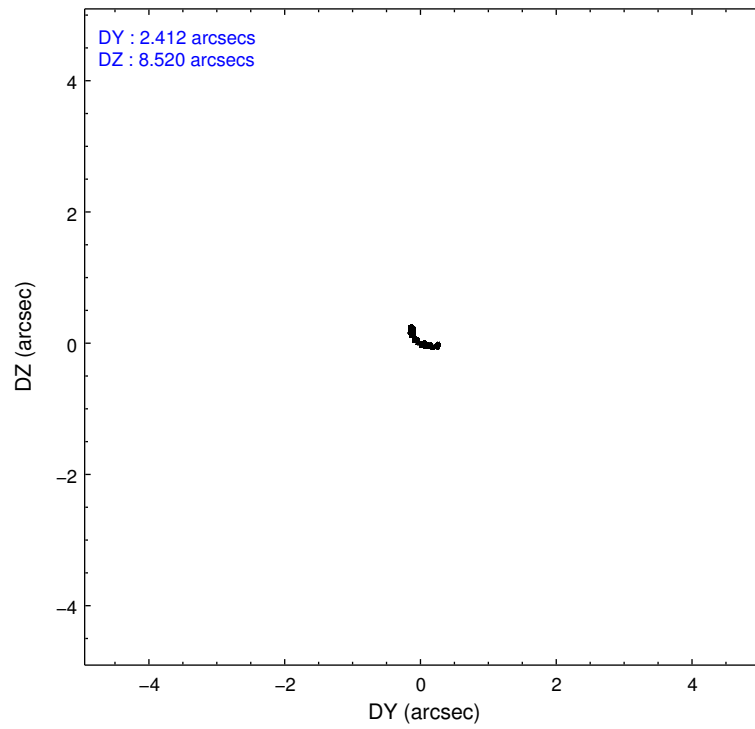
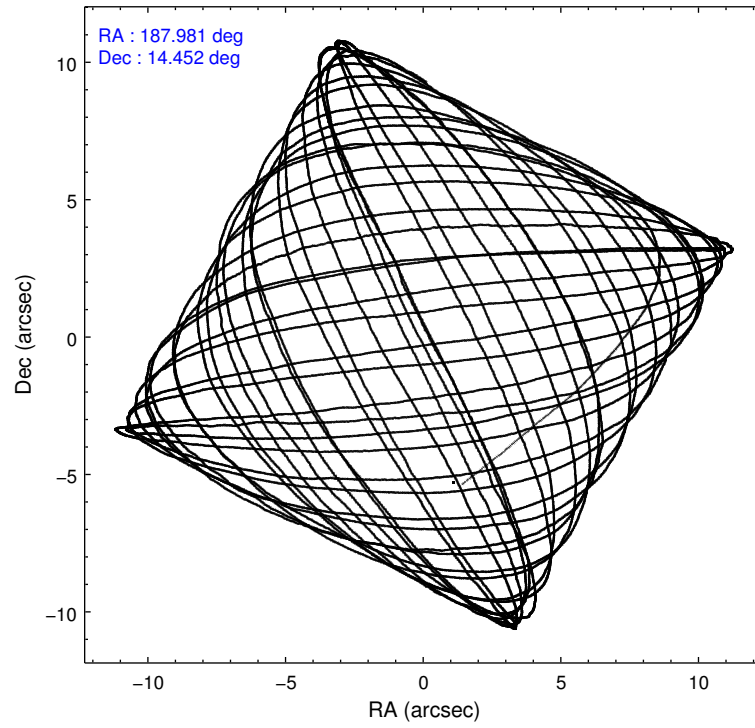
### 2.1.4 Events

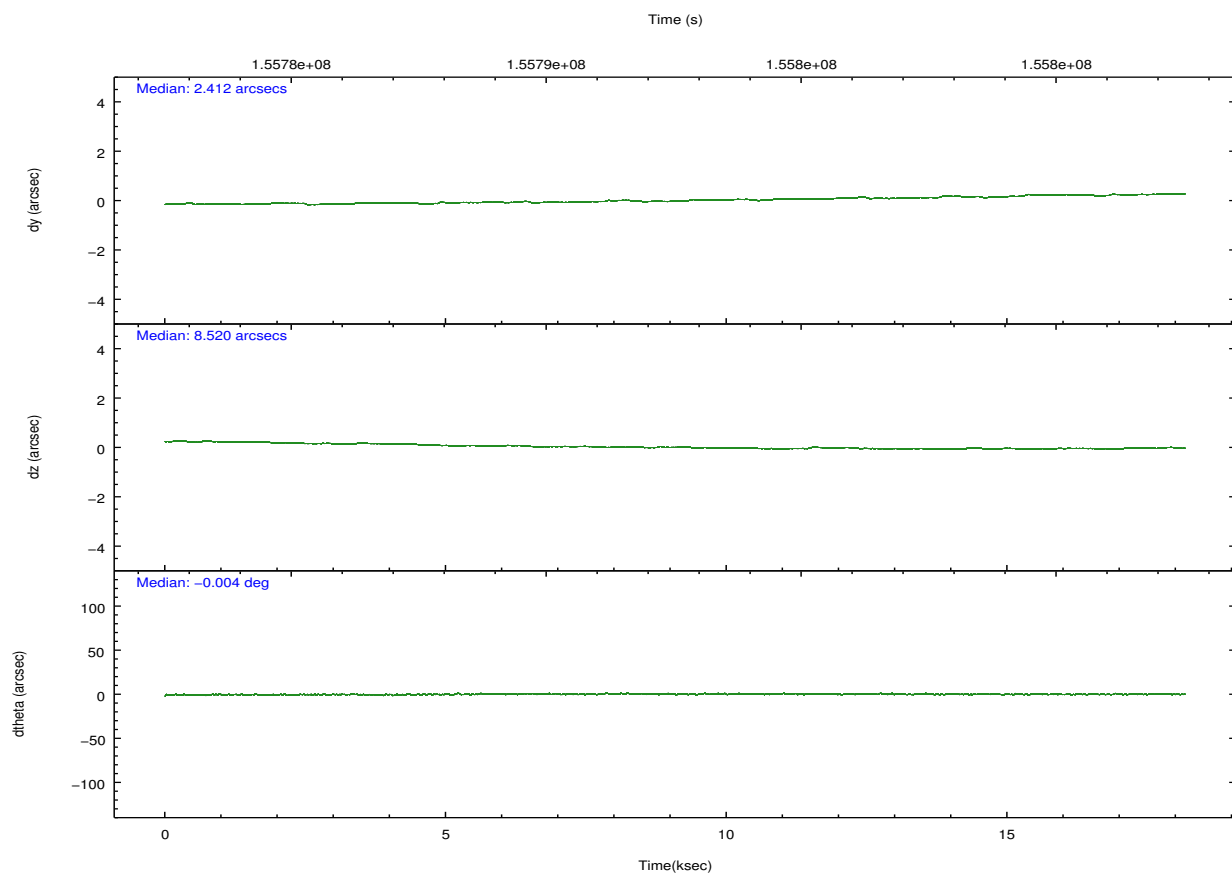
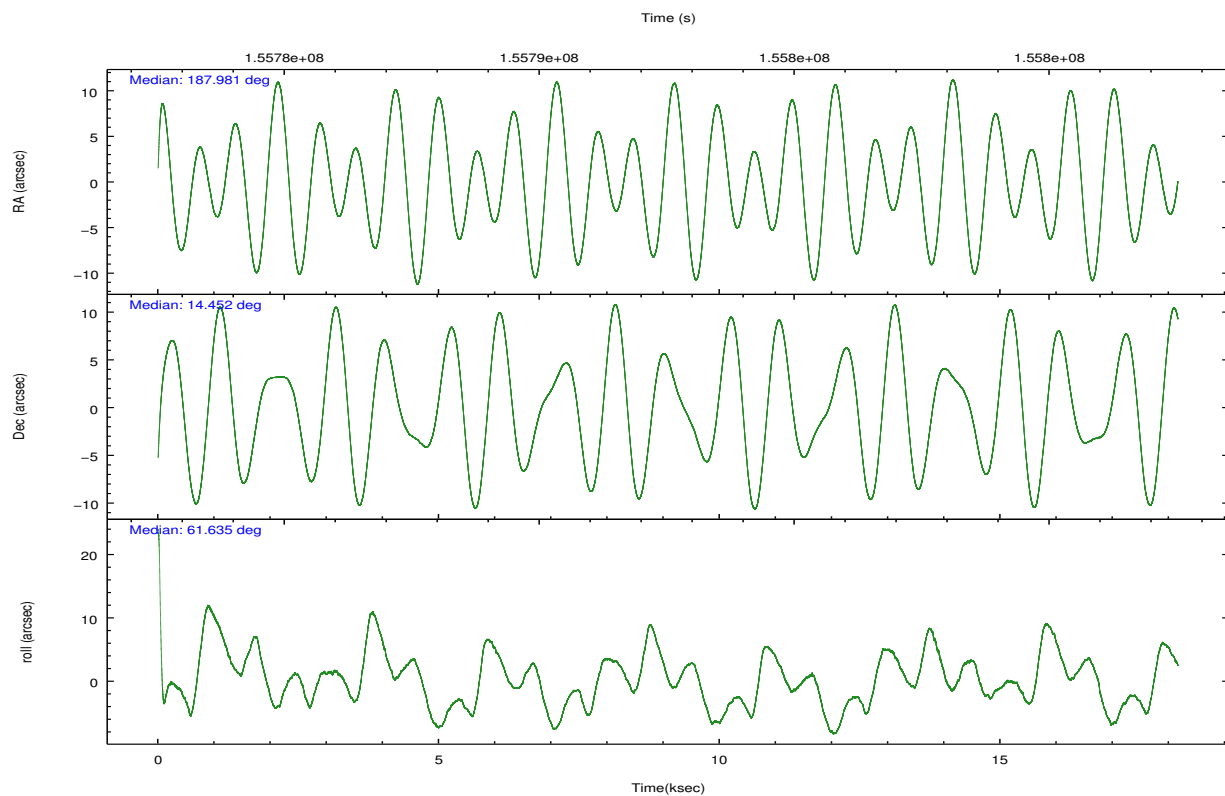
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	118998	111578	187067	116903	170640	146814	grade 0 events	9376	9358	17824	9936	9645	15378
rejected events	101350	94063	88184	97917	86931	110230		7%	8%	9%	8%	5%	10%
rejected %	85%	84%	47%	83%	50%	75%	grade 1 events	85	93	401	69	149	108
								0%	0%	0%	0%	0%	0%
							grade 2 events	3156	2984	26292	3301	16369	7004
								2%	2%	14%	2%	9%	4%
							grade 3 events	1385	1349	4493	1437	7275	3335
								1%	1%	2%	1%	4%	2%
							grade 4 events	1361	1366	4267	1399	7192	3079
								1%	1%	2%	1%	4%	2%
							grade 5 events	4300	4605	12438	4896	14288	6437
								3%	4%	6%	4%	8%	4%
							grade 6 events	2377	2459	46021	2917	43249	7793
								1%	2%	24%	2%	25%	5%
							grade 7 events	96958	89364	75331	92948	72473	103680
								81%	80%	40%	79%	42%	70%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.982456	187.9812515512685	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.425128	14.45234034492016	Alternating exposures requested	N	N
[deg] Pointing Roll	61.489641	61.64658271138519	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	155783612.184000	155782582.25947			
Observation start date	2002-12-09T01:12:28	2002-12-09T00:56:22			
[s] Observation end time (MET)	155801612.184000	155802093.64778			
Observation end date	2002-12-09T06:12:28	2002-12-09T06:21:33			
Read mode	TIMED	TIMED			

## 2.3 Aspect



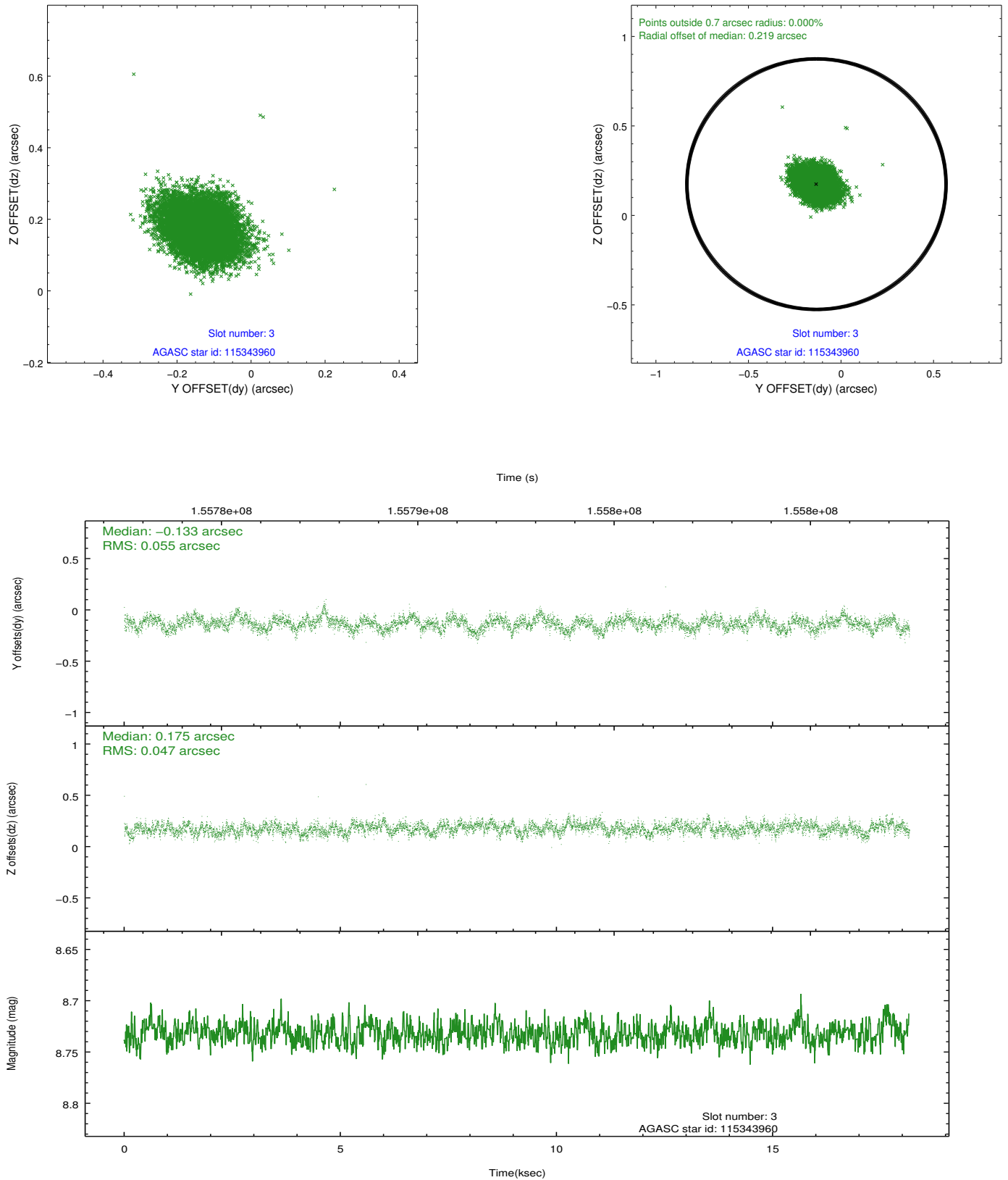


### Slot Statistics

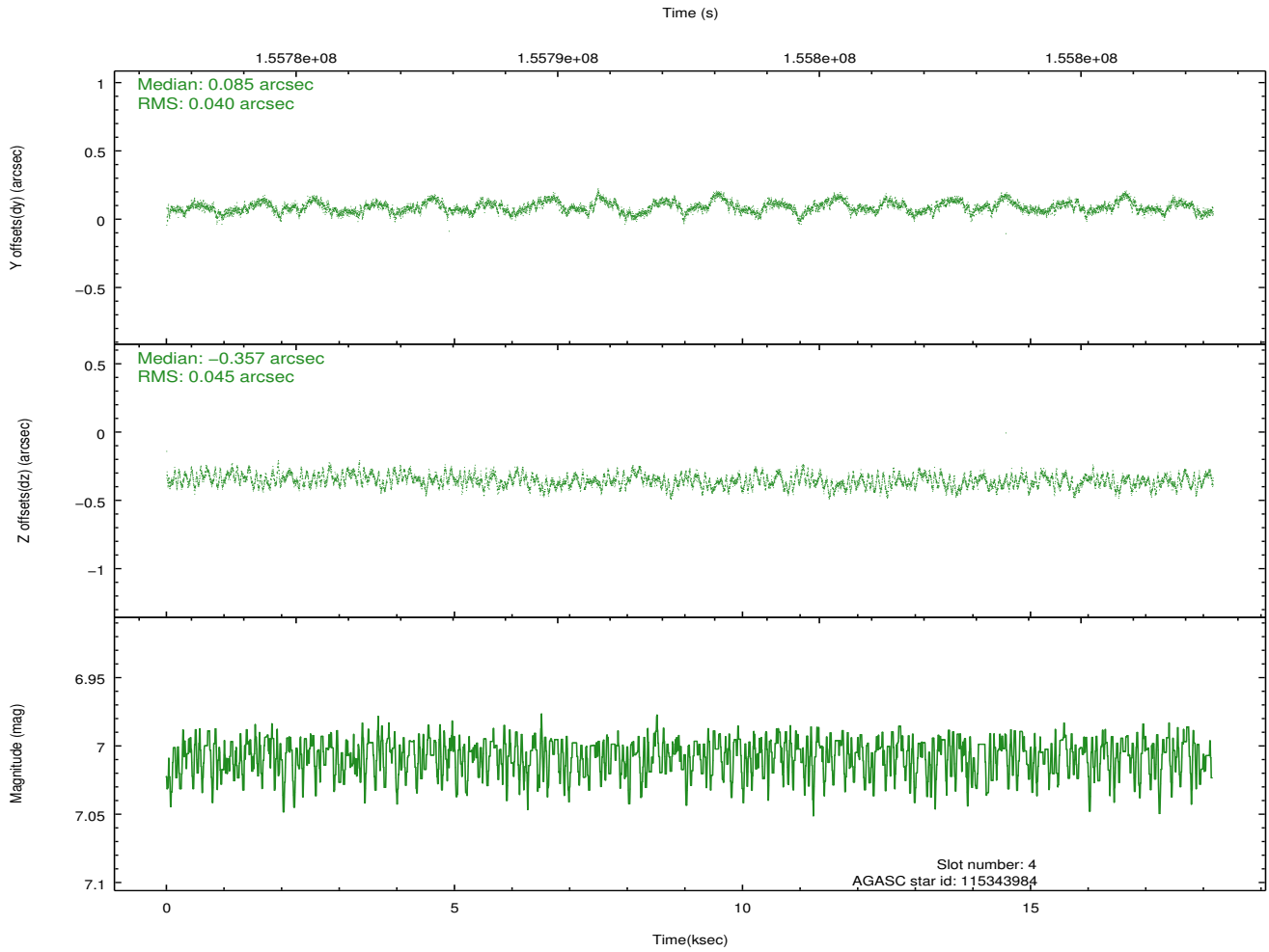
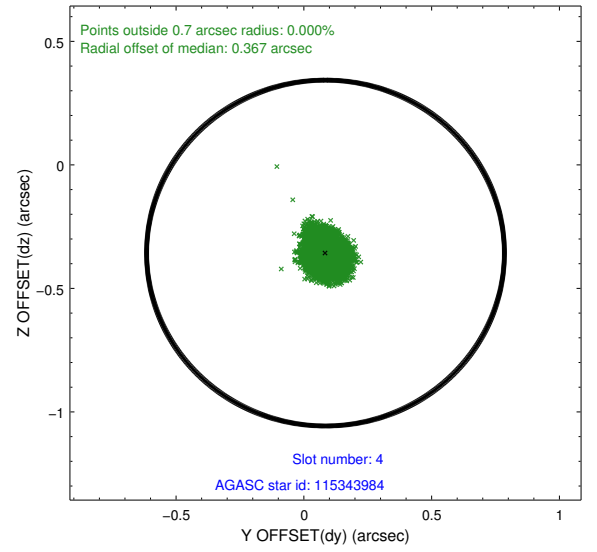
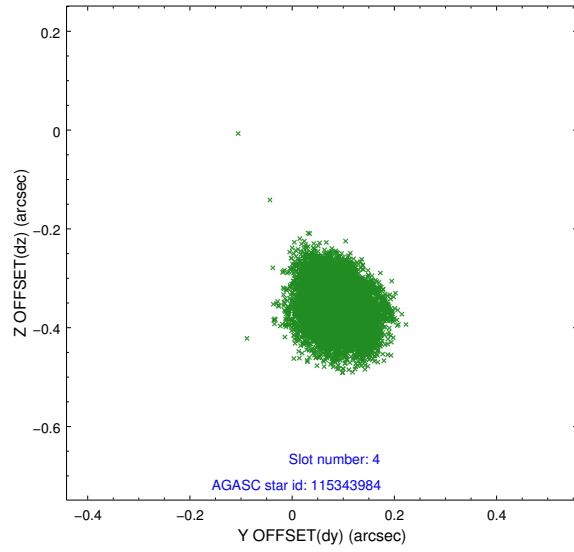
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	4430	-0.016	-0.005	0.012	0.023	0.000000	0.000000	-755.09	-1729.71
1	FID	ACIS-S-4	7.20	4429	-0.025	0.008	0.013	0.033	0.000000	0.000000	2158.10	178.54
2	FID	ACIS-S-5	7.23	4431	0.007	0.004	0.010	0.017	0.000000	0.000000	-1807.61	172.48
3	GUIDE	115343960	8.73	8860	-0.133	0.175	0.077	0.125	188.590007	14.643744	1703.43	-1481.58
4	GUIDE	115343984	7.01	8861	0.085	-0.357	0.065	0.101	187.445111	14.650185	-180.44	2032.34
5	GUIDE	115344184	9.93	8841	0.124	0.058	0.151	0.251	188.223378	14.673173	1184.90	-309.84
6	GUIDE	115344696	10.04	8854	-0.178	0.265	0.122	0.198	188.739926	14.495064	1484.74	-2196.79
7	GUIDE	115345056	9.43	8853	0.108	-0.145	0.111	0.183	187.860673	14.574305	268.67	629.50

## 2.4 Star Slots

### 2.4.1 Slot 3

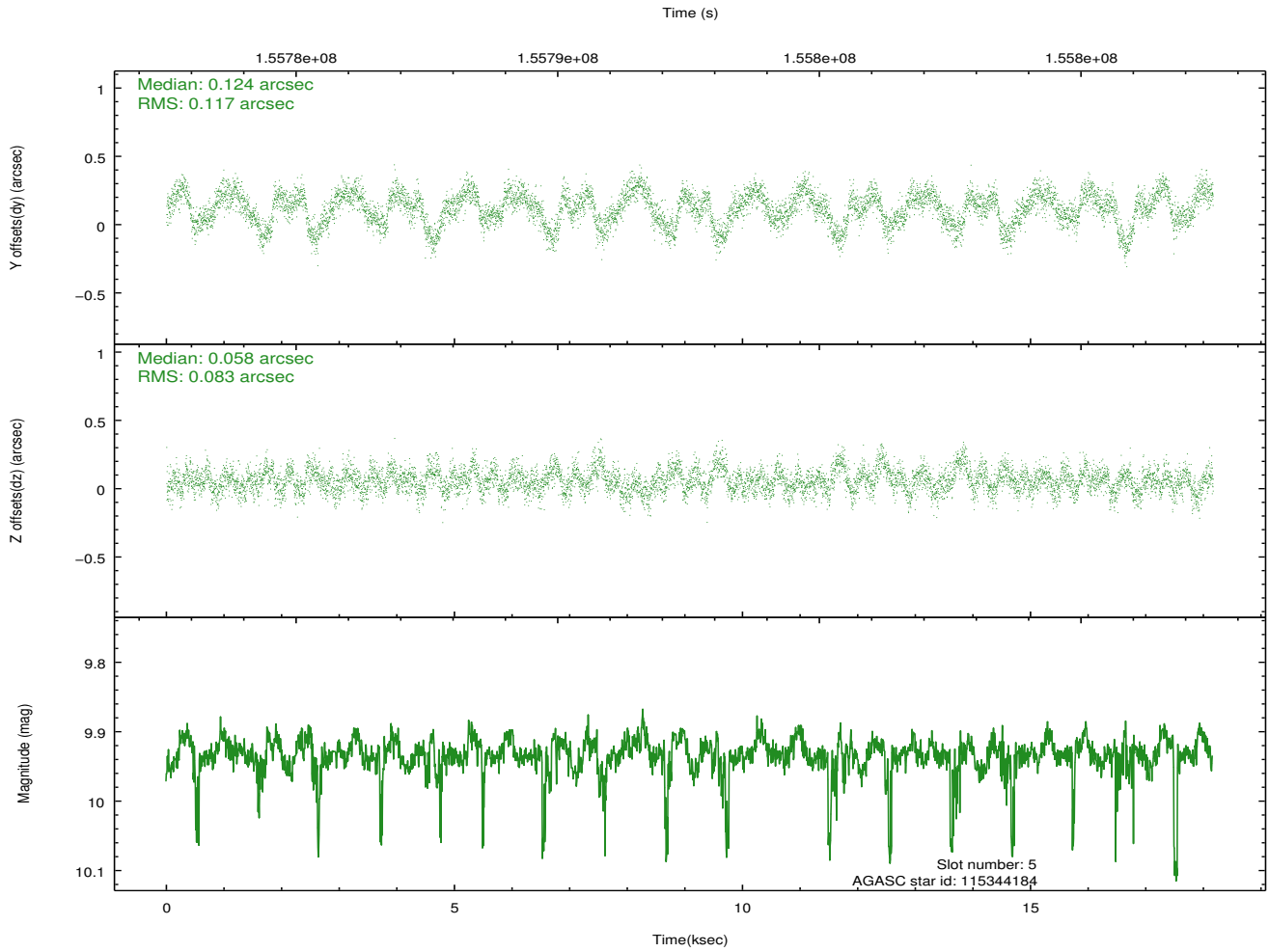
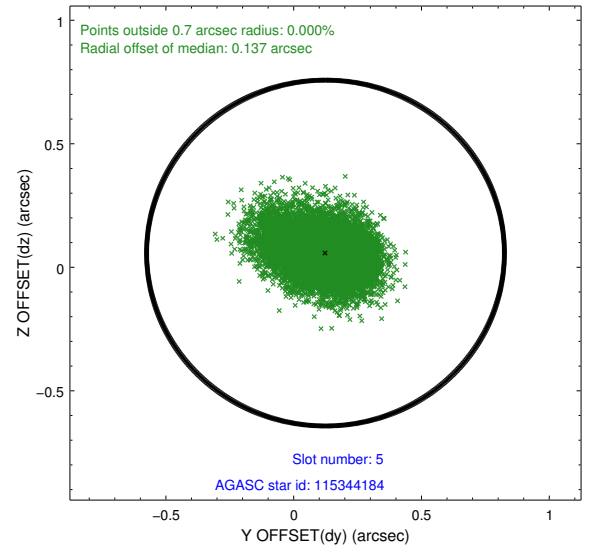
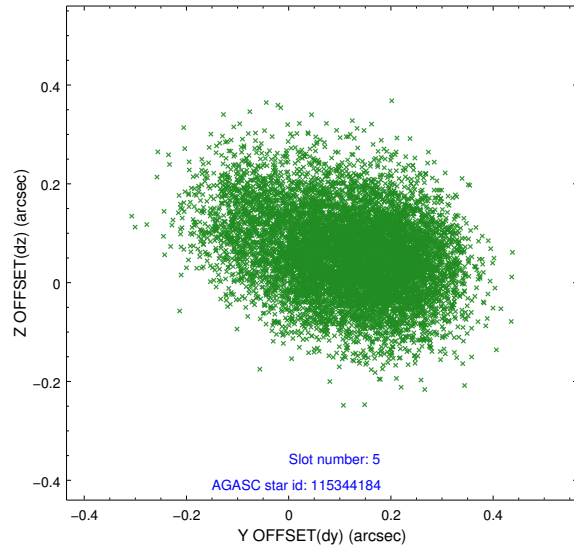


## 2.4.2 Slot 4

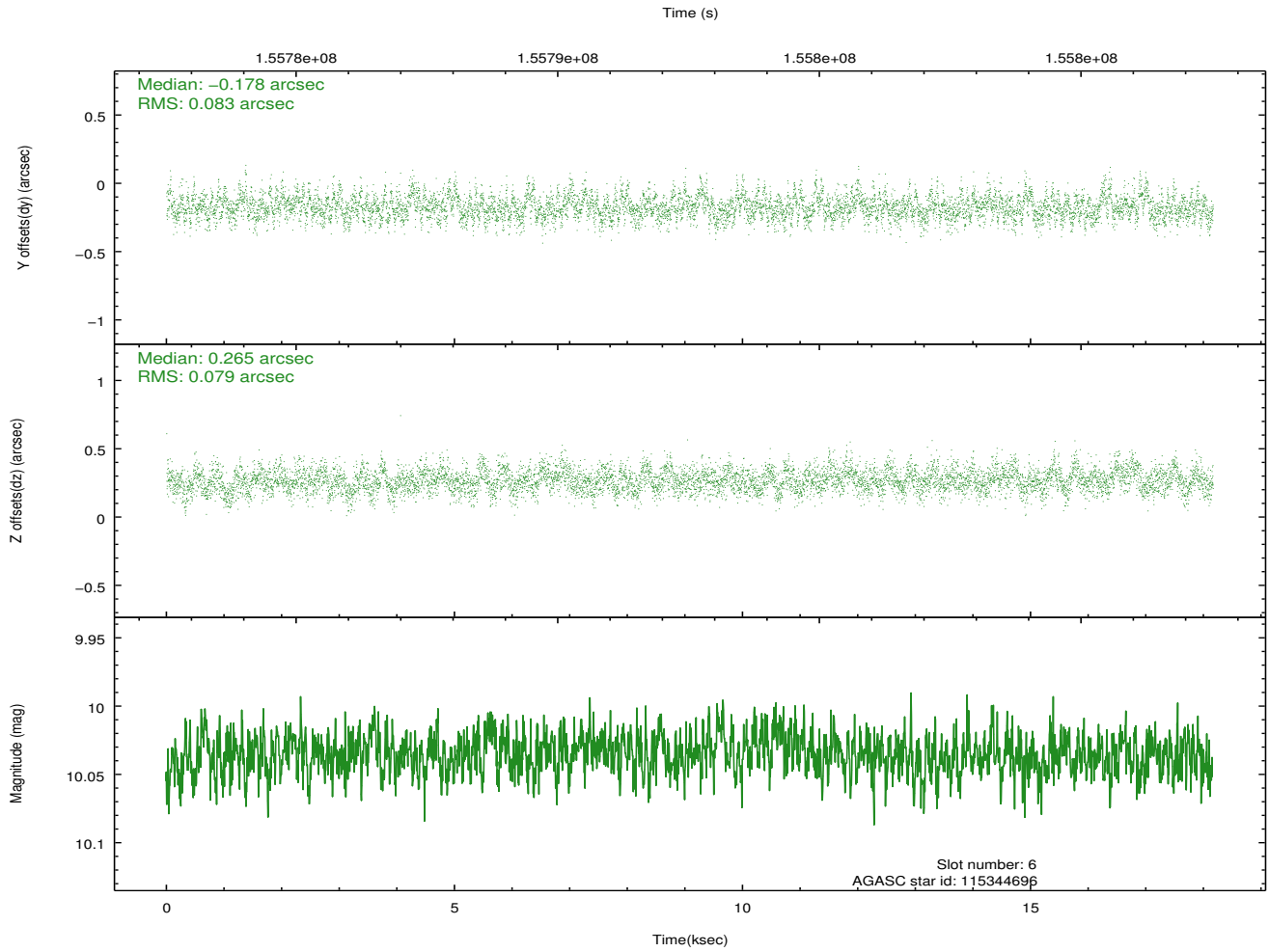
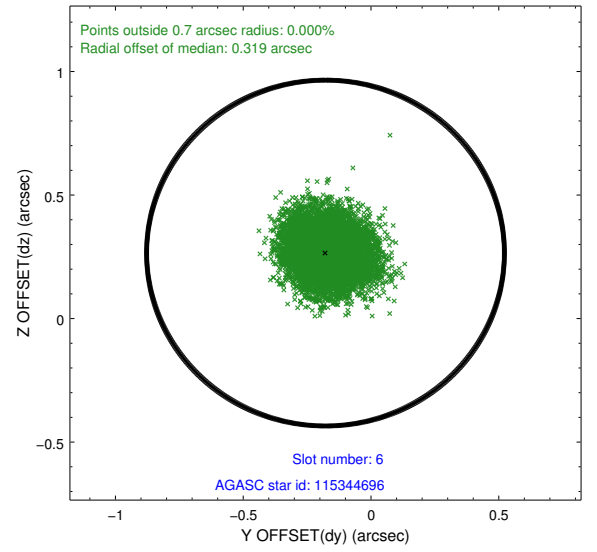
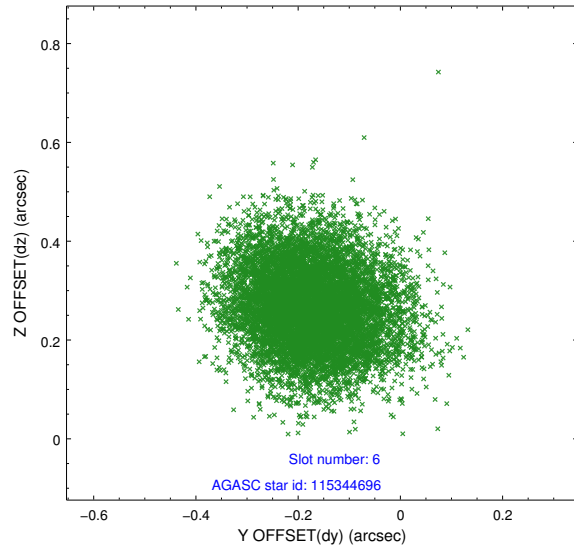




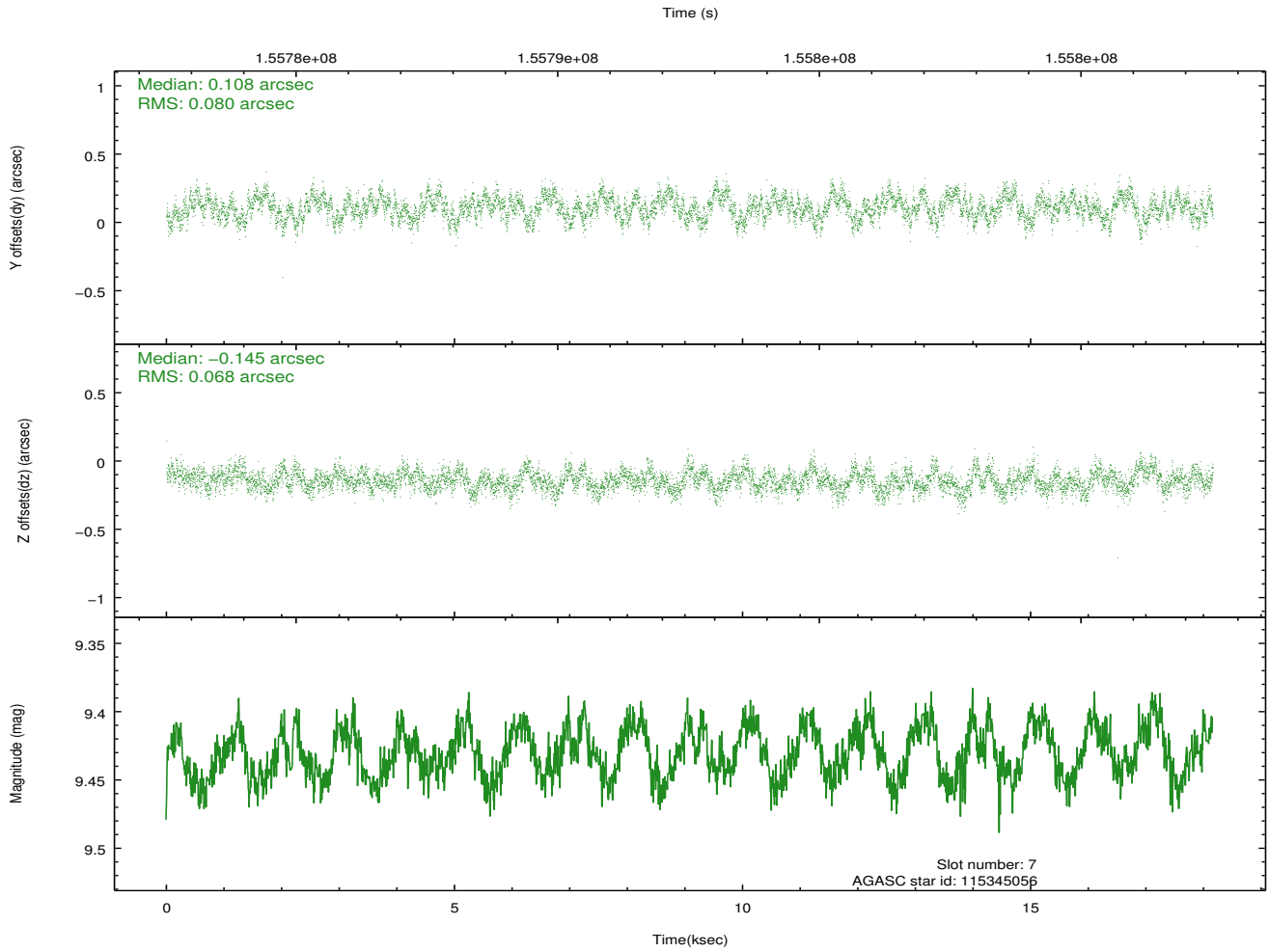
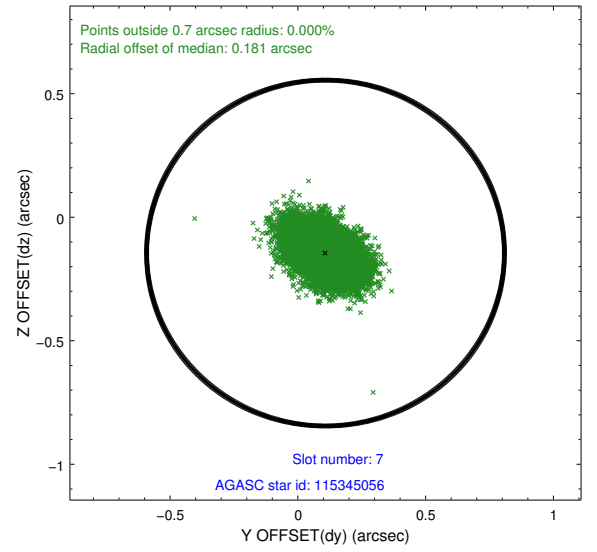
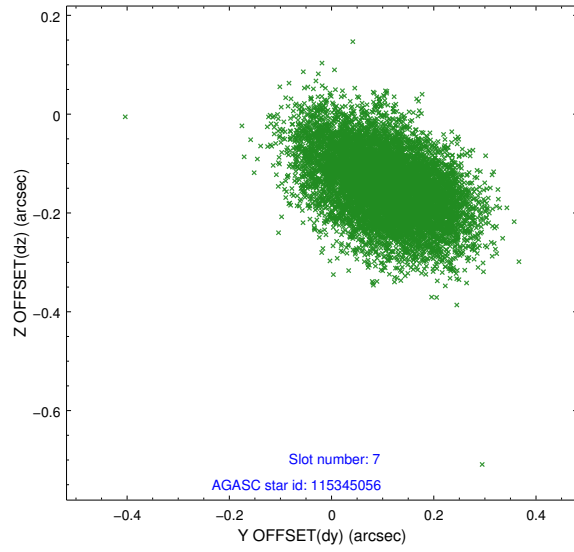
### 2.4.3 Slot 5



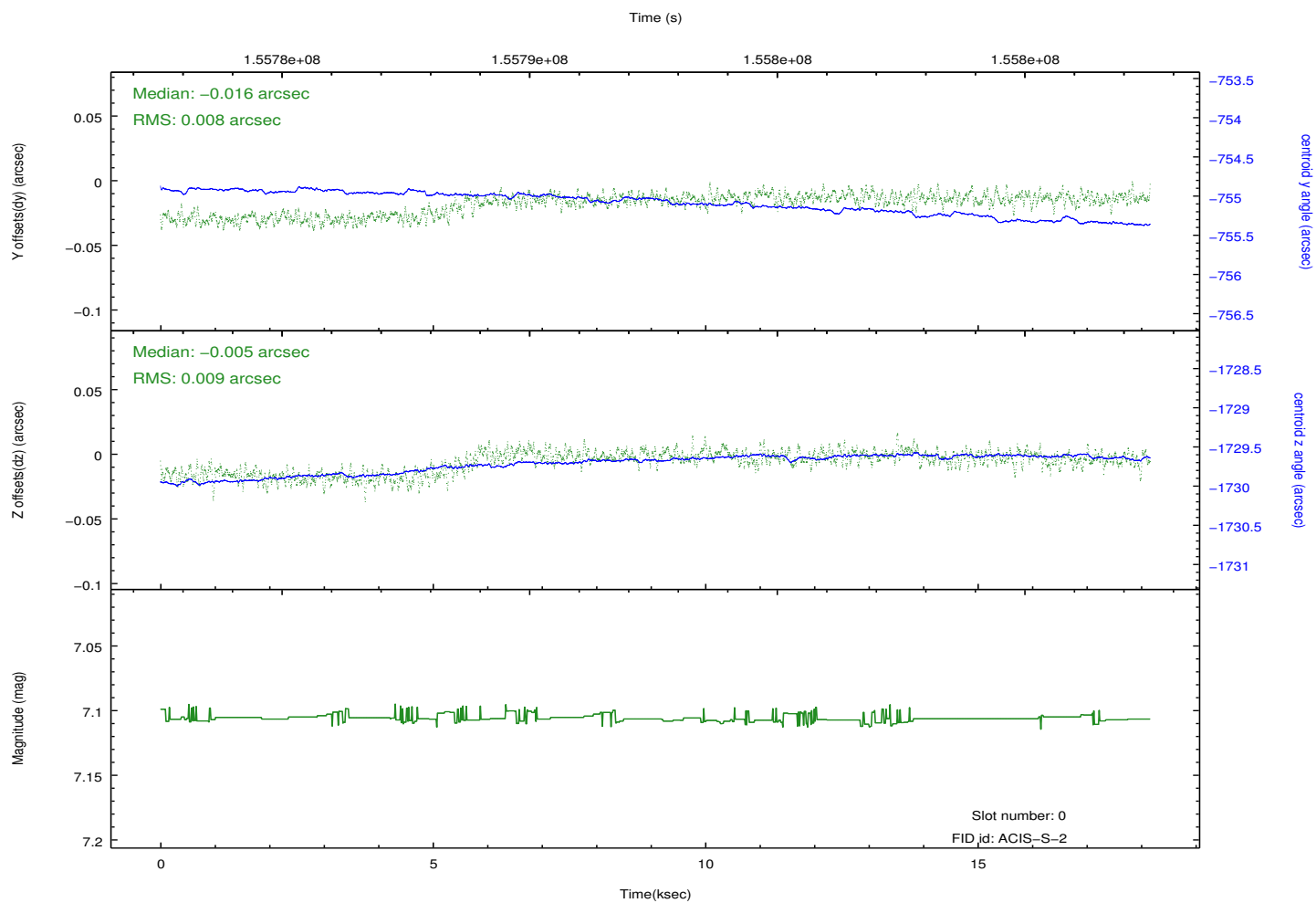
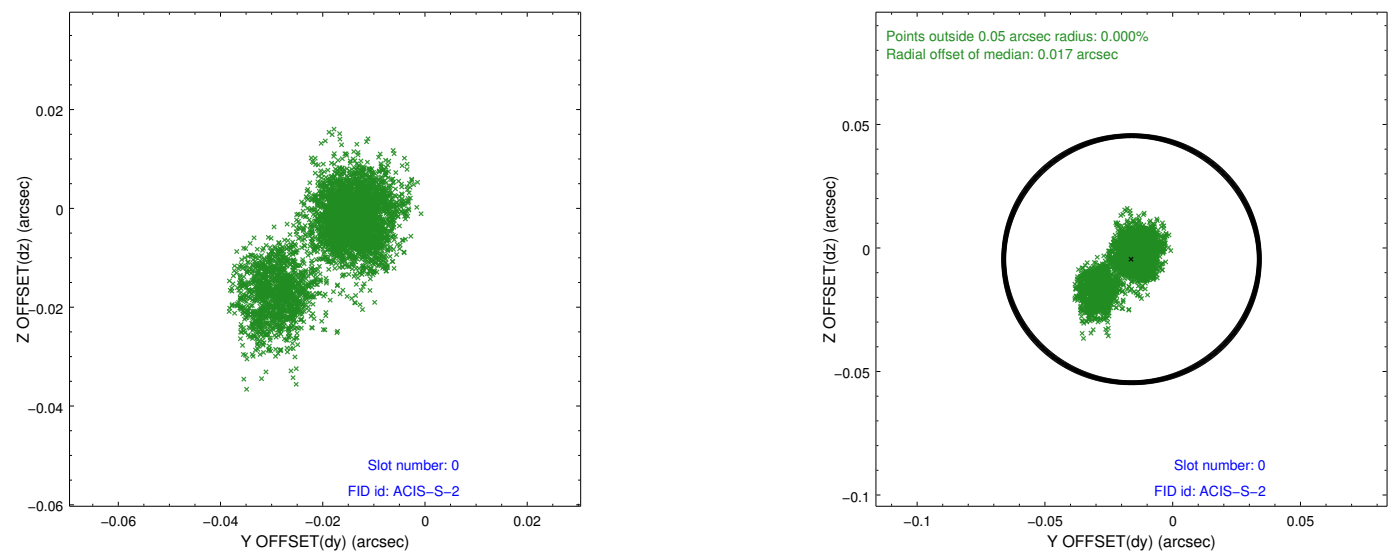
## 2.4.4 Slot 6



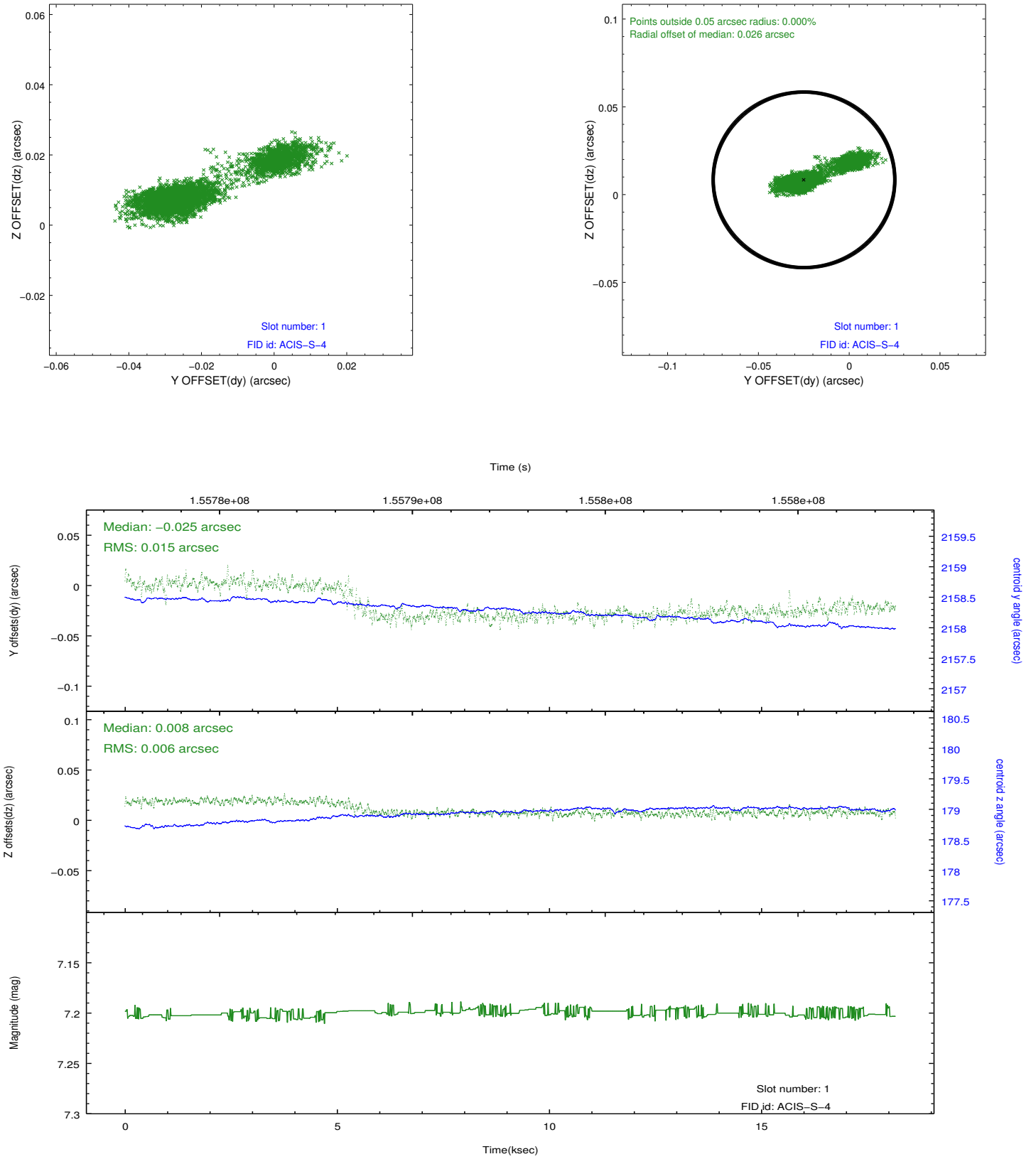
## 2.4.5 Slot 7



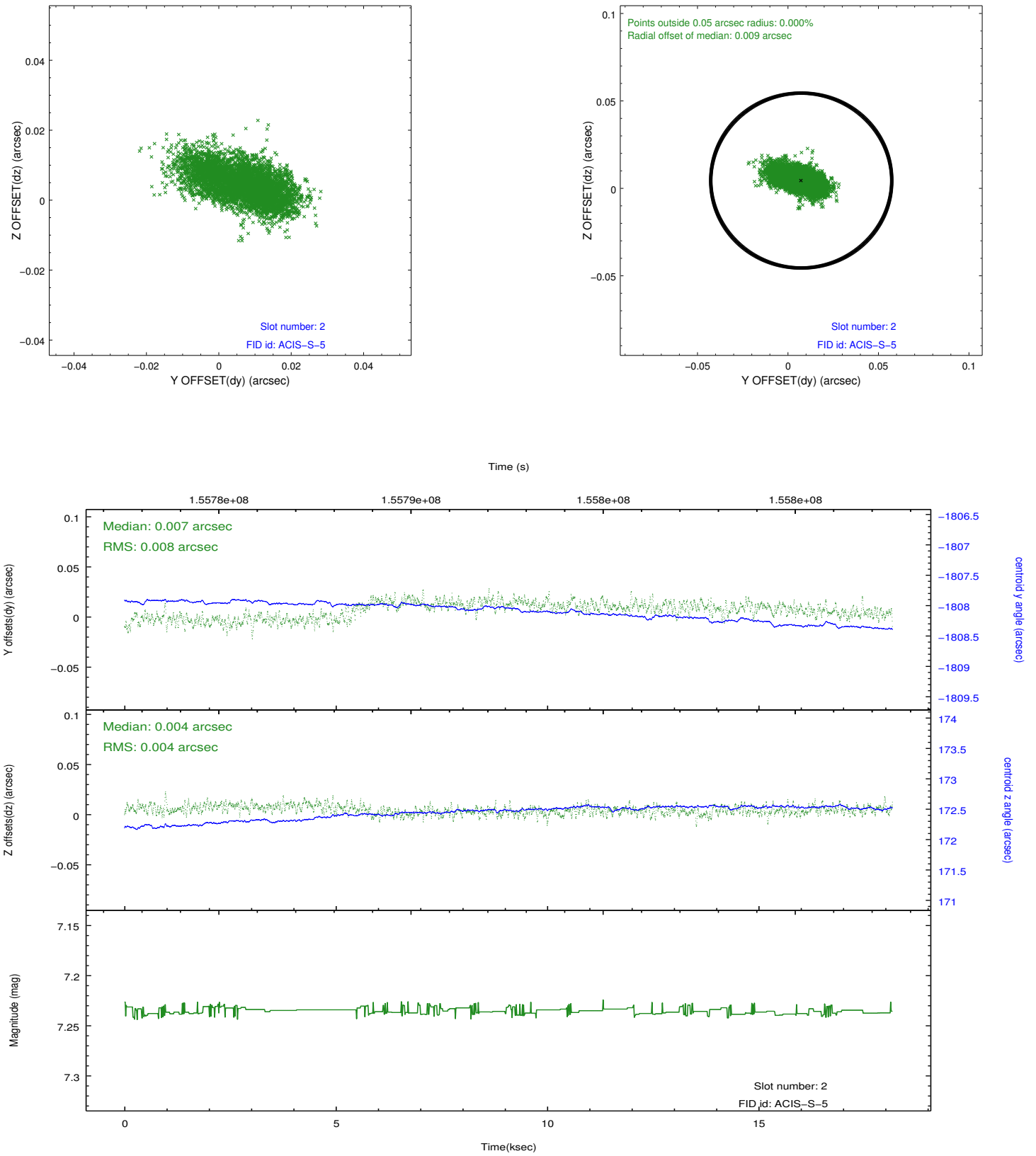
### 2.5.1 Slot 0



## 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)	2012.10.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.102

### **A.2 Comments**