

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14027 - L2 Version 1  
Chandra X-Ray Center

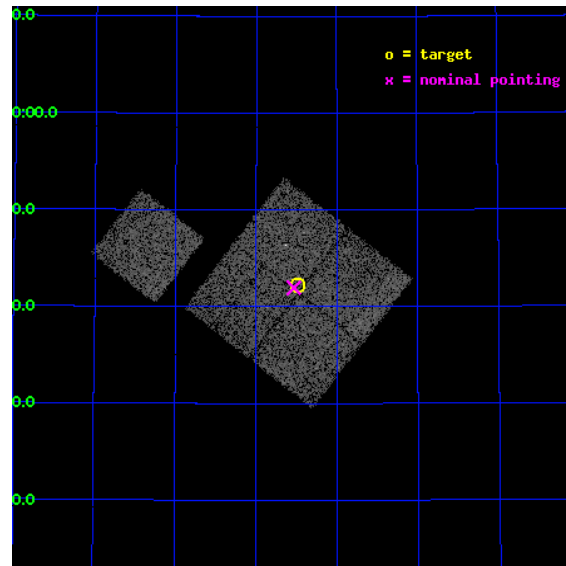
L2 Processing Date : Aug 10 2012

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# 1 Front

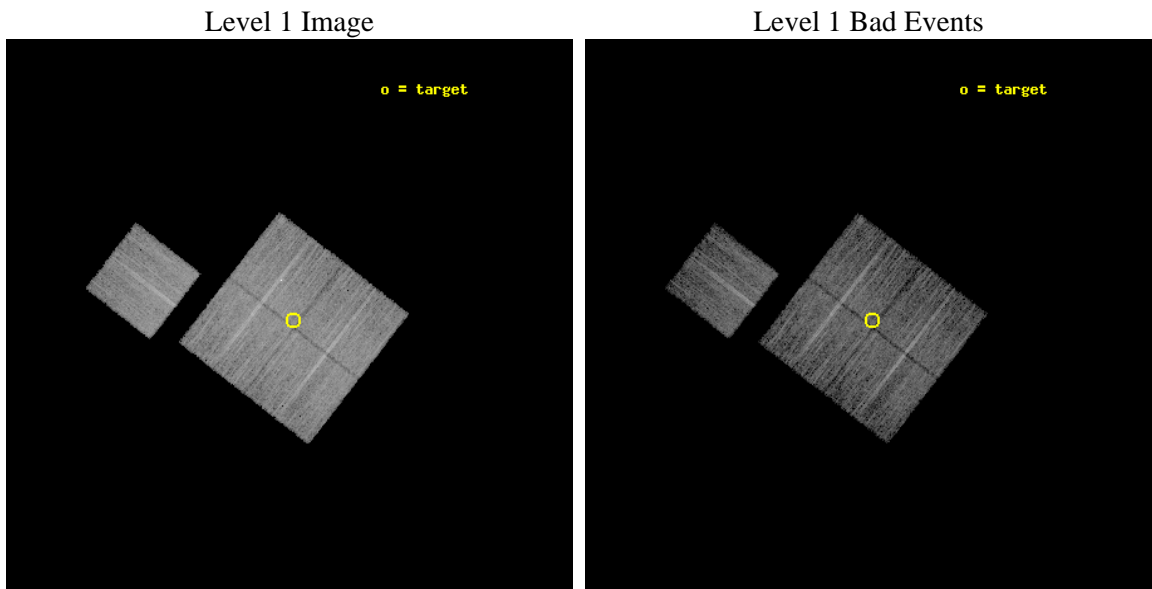
seq_num	801204	Sequence number
obs_id	14027	Observation id
title	No Need for Gas Clumping at the Virial Radius in a Galaxy Group/Cluster?	Proposal title
observer	Dr Philip Humphrey	Principal investigator
object	RXJ1159+5531 Offset 2	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.87125	Observer's specified target RA [deg]
dec_targ	55.703806	Observer's specified target Dec [deg]
ra_nom	179.8830355126	Nominal RA [deg]
dec_nom	55.699193752493	Nominal Dec [deg]
roll_nom	307.89893326527	Nominal Roll [deg]
revision	1	Processing version of data
ontime	12585.498852253	Sum of GTIs [s]
livetime	12421.060044439	Livetime [s]
ontime0	12585.375732243	Sum of GTIs [s]
ontime1	12585.416772246	Sum of GTIs [s]
ontime2	12585.45781225	Sum of GTIs [s]
ontime3	12585.498852253	Sum of GTIs [s]
ontime6	12585.33469224	Sum of GTIs [s]
l2events	33016	Number of level 2 events



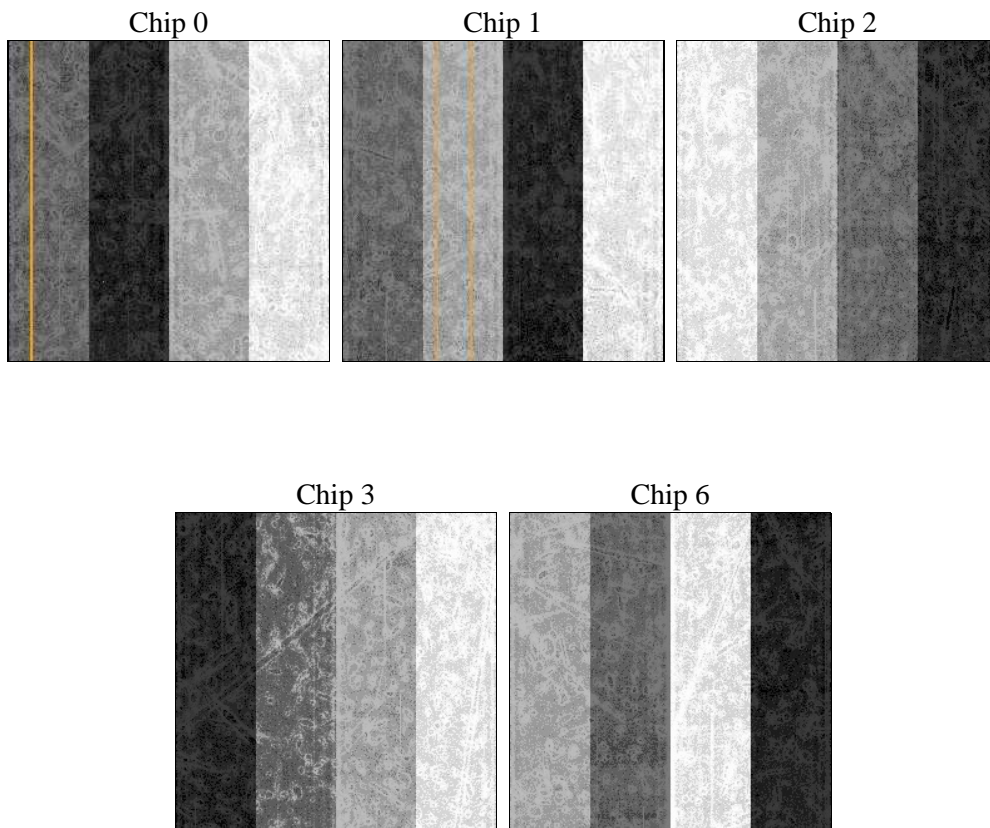
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	12500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	12585.498852253	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	12585.375732243	Sum of GTIs [s]
date	2012-08-10T19:01:03	Date and time of file creation	ontime1	12585.416772246	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	12585.45781225	Sum of GTIs [s]
			ontime3	12585.498852253	Sum of GTIs [s]
			ontime6	12585.33469224	Sum of GTIs [s]
			l1events	309092	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	60356	60171	65029	60778	62758
rejected events	52439	51809	57755	52839	55168
rejected %	86%	86%	88%	86%	87%

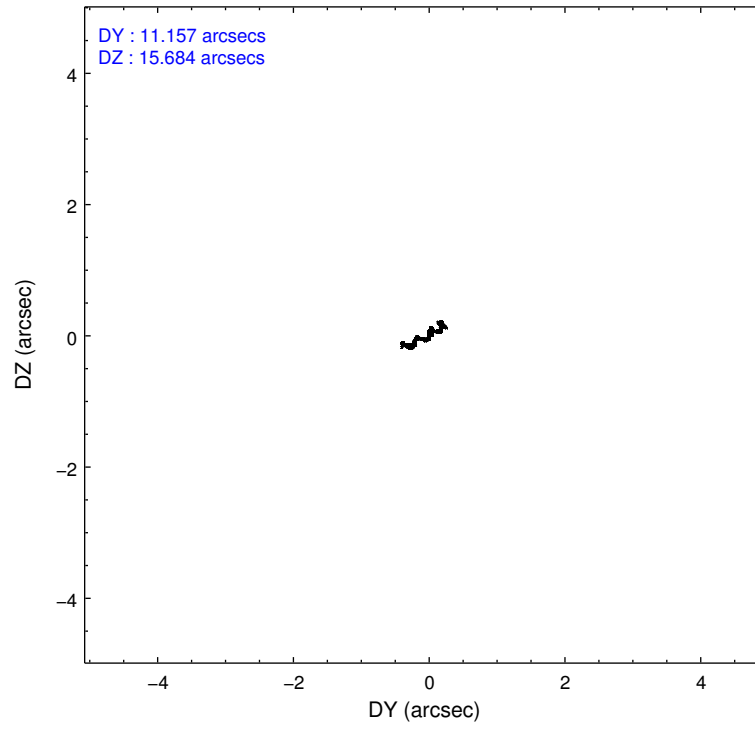
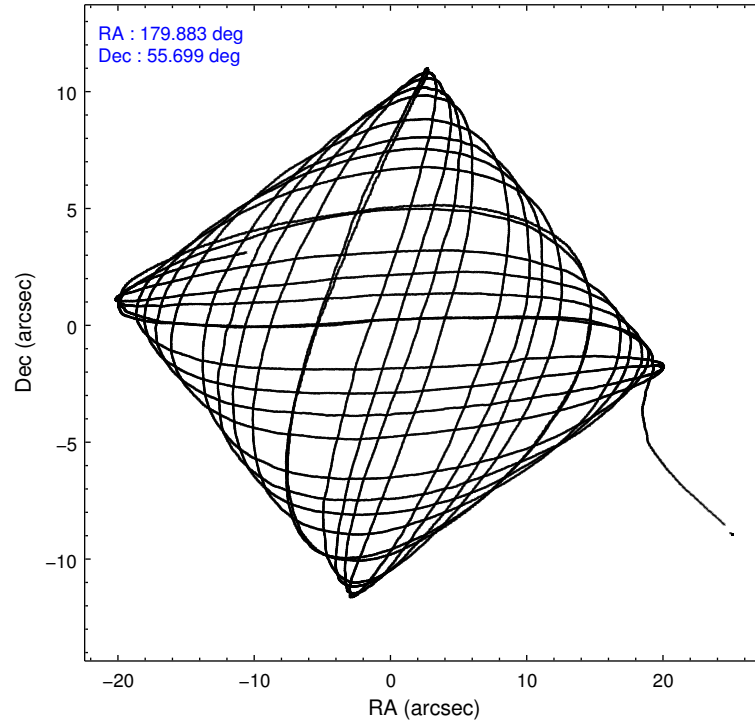
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2791	2852	2574	3280	2665
	4%	4%	3%	5%	4%
grade 1 events	28	45	31	48	32
	0%	0%	0%	0%	0%
grade 2 events	1952	2121	1766	1625	1624
	3%	3%	2%	2%	2%
grade 3 events	825	814	730	805	780
	1%	1%	1%	1%	1%
grade 4 events	738	804	767	778	758
	1%	1%	1%	1%	1%
grade 5 events	2863	3086	2805	3276	3173
	4%	5%	4%	5%	5%
grade 6 events	1615	1772	1437	1454	1765
	2%	2%	2%	2%	2%
grade 7 events	49544	48677	54919	49512	51961
	82%	80%	84%	81%	82%

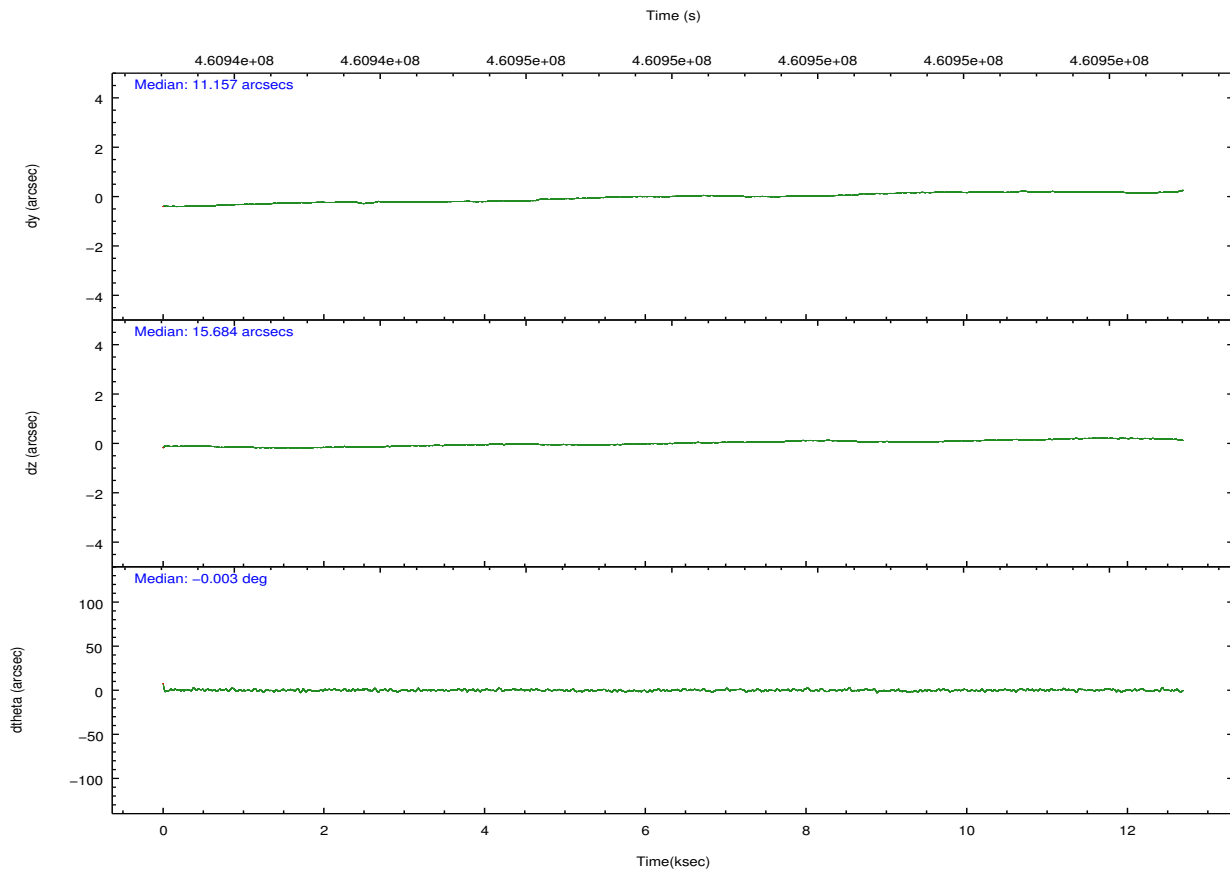
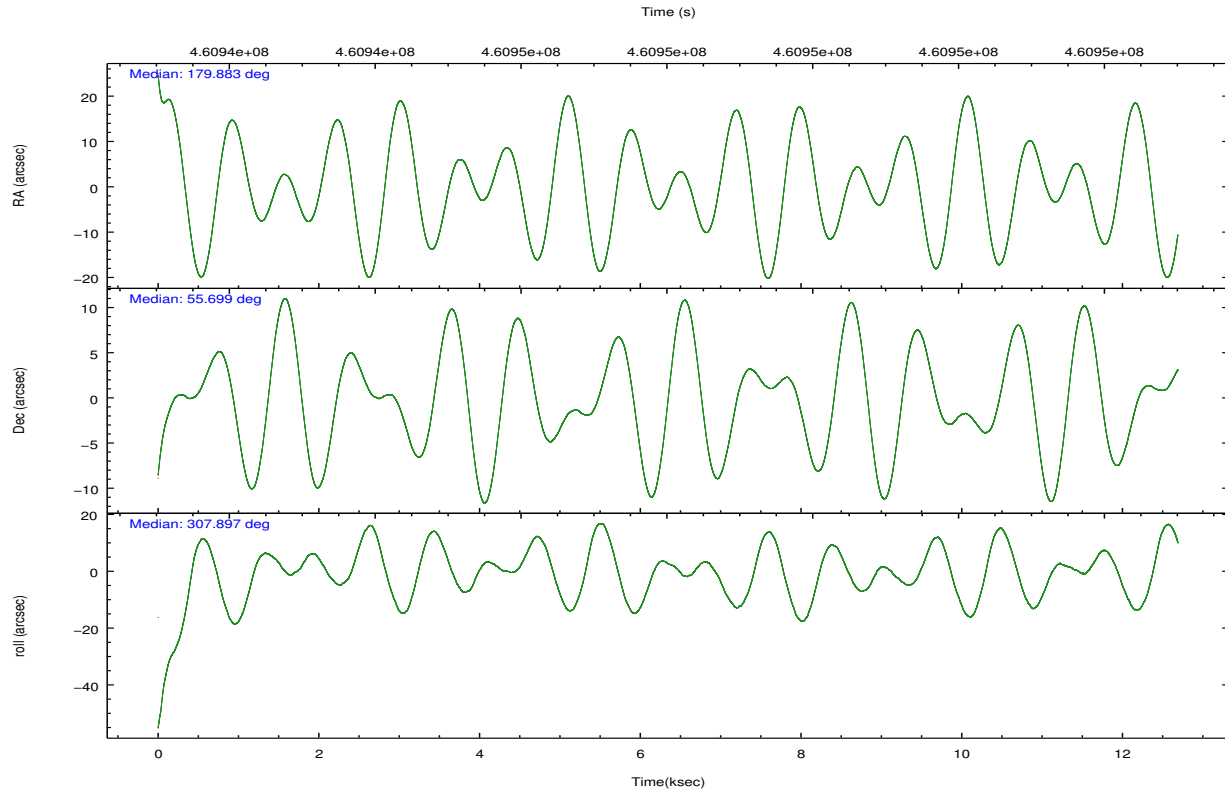


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	179.837724	179.8830355125995	Subarray requested	NONE	NONE
[deg] Pointing Dec	55.709419	55.69919375249269	Alternating exposures requested	N	N
[deg] Pointing Roll	307.727696	307.898933265266	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	460941855.184000	460940625.36061			
Observation start date	2012-08-09T23:23:08	2012-08-09T23:03:45			
[s] Observation end time (MET)	460954355.184000	460955097.84889			
Observation end date	2012-08-10T02:51:28	2012-08-10T03:04:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



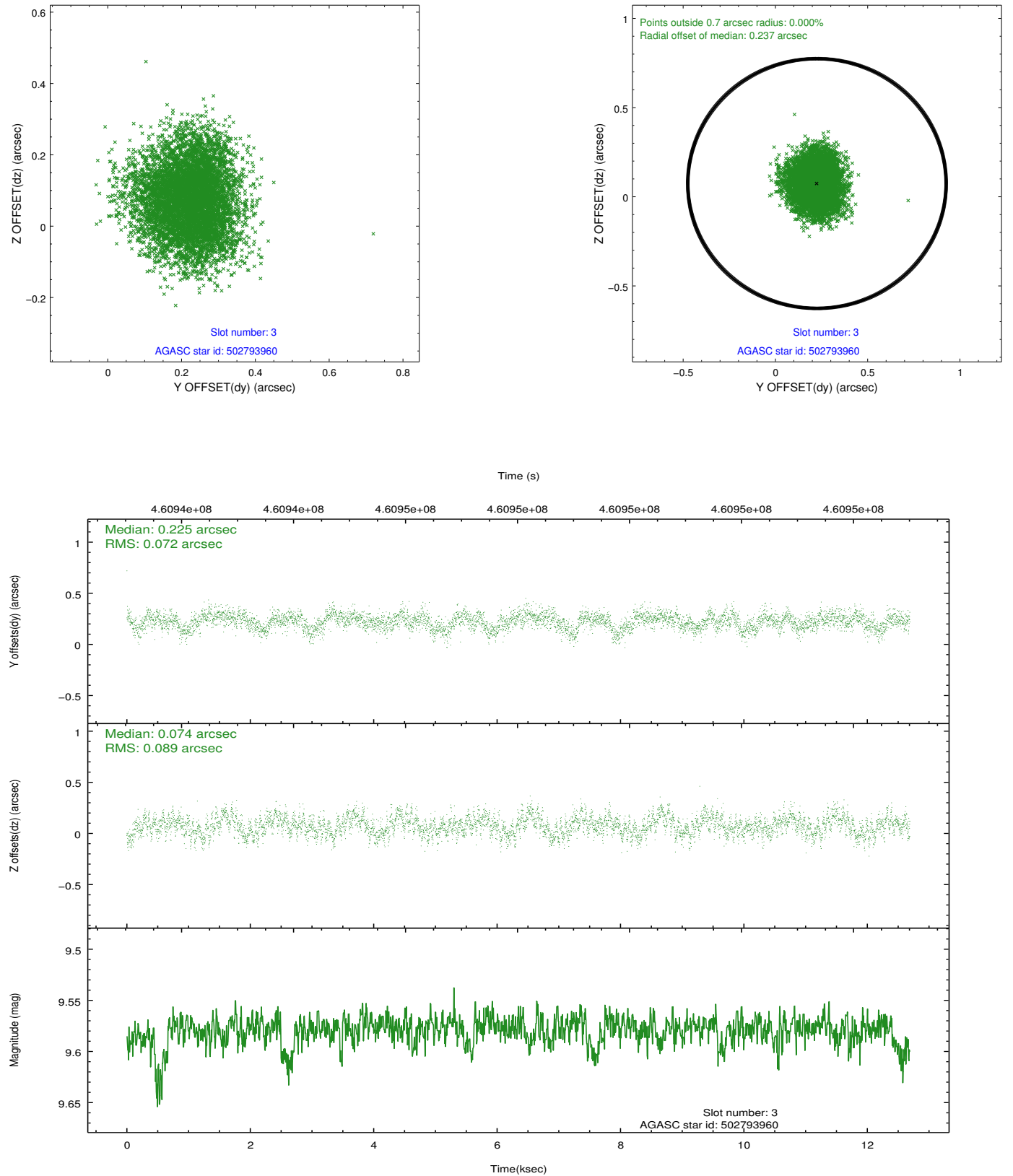


### Slot Statistics

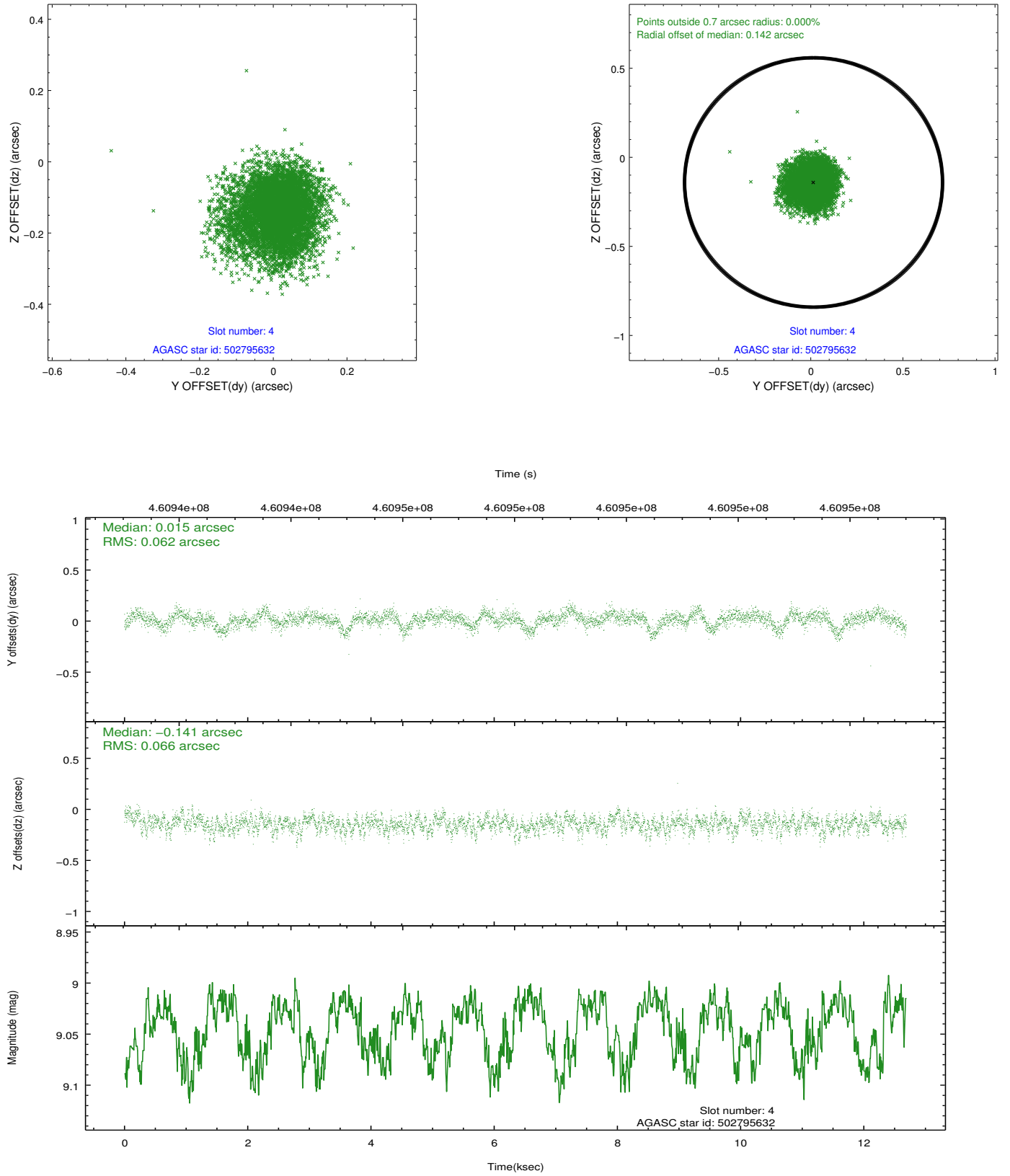
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.04	3096	-0.017	0.030	0.015	0.023	0.000000	0.000000	928.44	-839.28
1	FID	ACIS-I-2	6.95	3096	-0.157	-0.054	0.007	0.012	0.000000	0.000000	-765.57	-846.01
2	FID	ACIS-I-4	6.96	3095	0.077	0.092	0.013	0.020	0.000000	0.000000	2148.23	1060.41
3	GUIDE	502793960	9.58	6184	0.225	0.074	0.123	0.195	179.393376	55.531414	-49.00	-1106.21
4	GUIDE	502795632	9.04	6185	0.015	-0.141	0.097	0.160	180.454171	55.827001	424.14	1248.22
5	GUIDE	502796064	9.72	6178	-0.070	0.099	0.118	0.189	178.783977	55.701683	-1298.41	-1697.42
6	GUIDE	502796152	9.87	6187	-0.118	-0.001	0.141	0.216	179.678914	56.362878	-2054.74	1189.01
7	GUIDE	502792376	9.88	6179	-0.036	-0.016	0.165	0.267	180.437493	55.132253	2394.49	-291.52

## 2.4 Star Slots

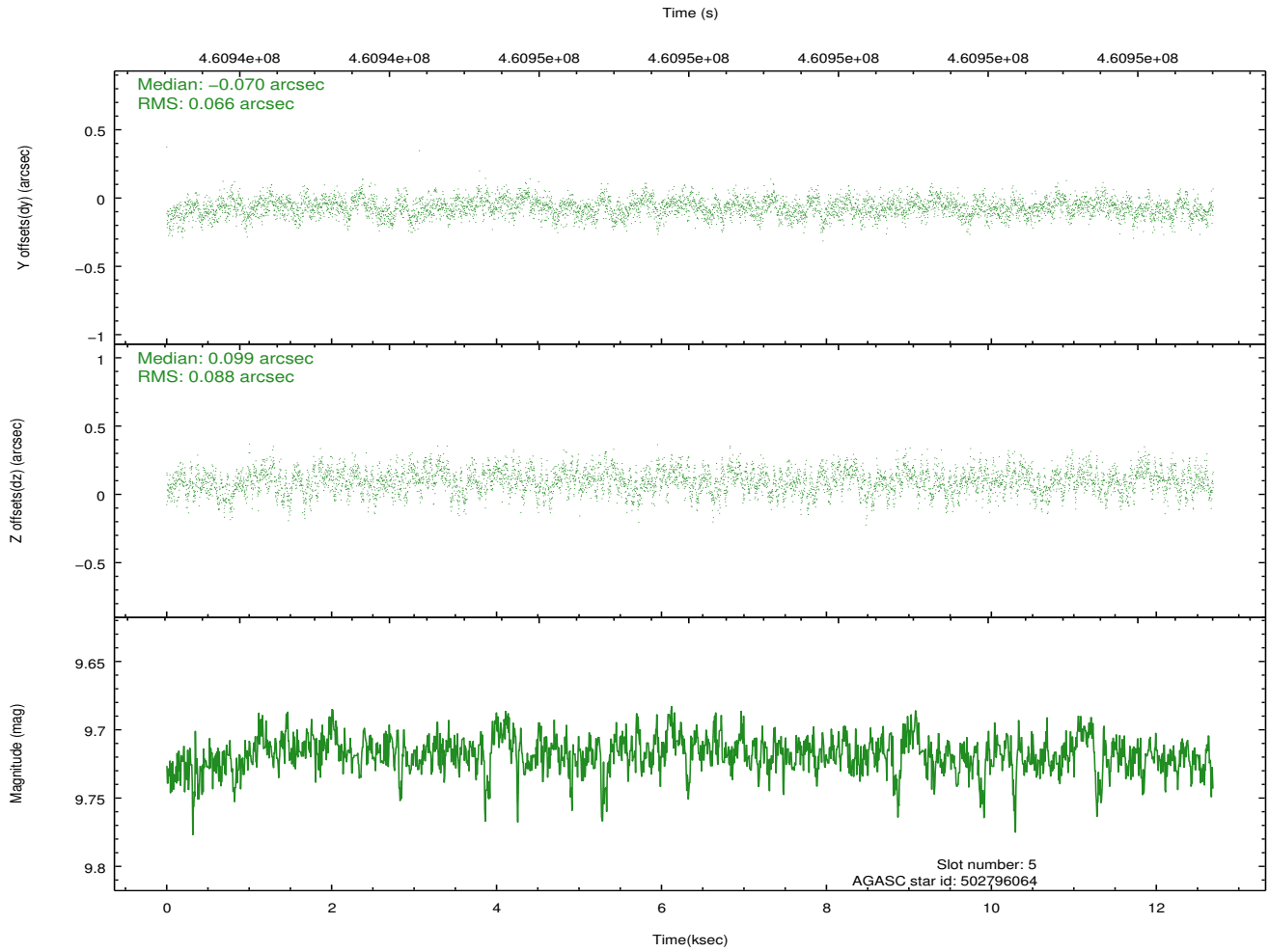
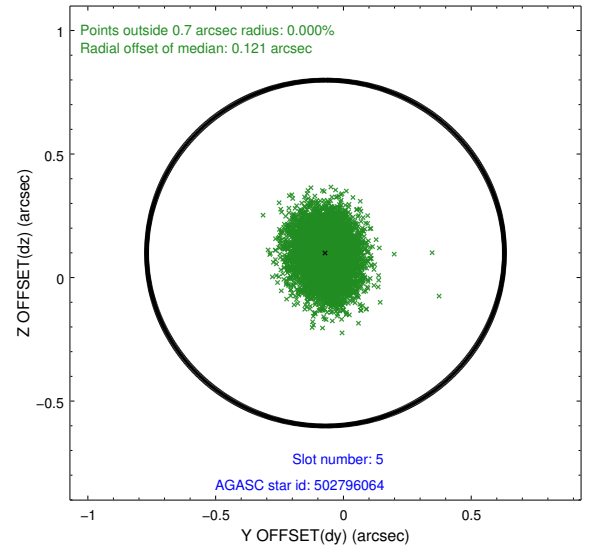
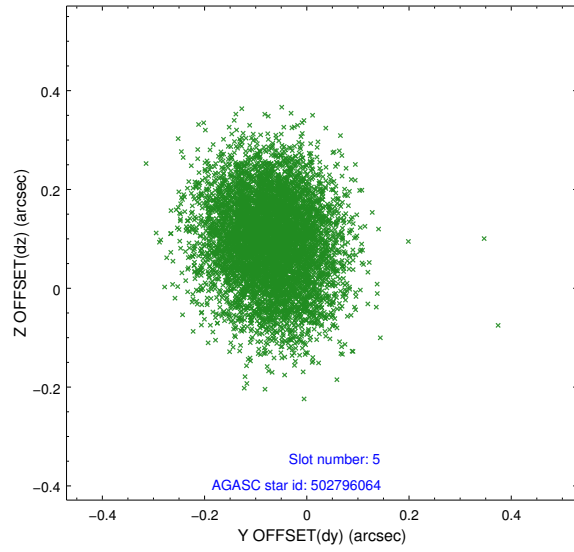
### 2.4.1 Slot 3



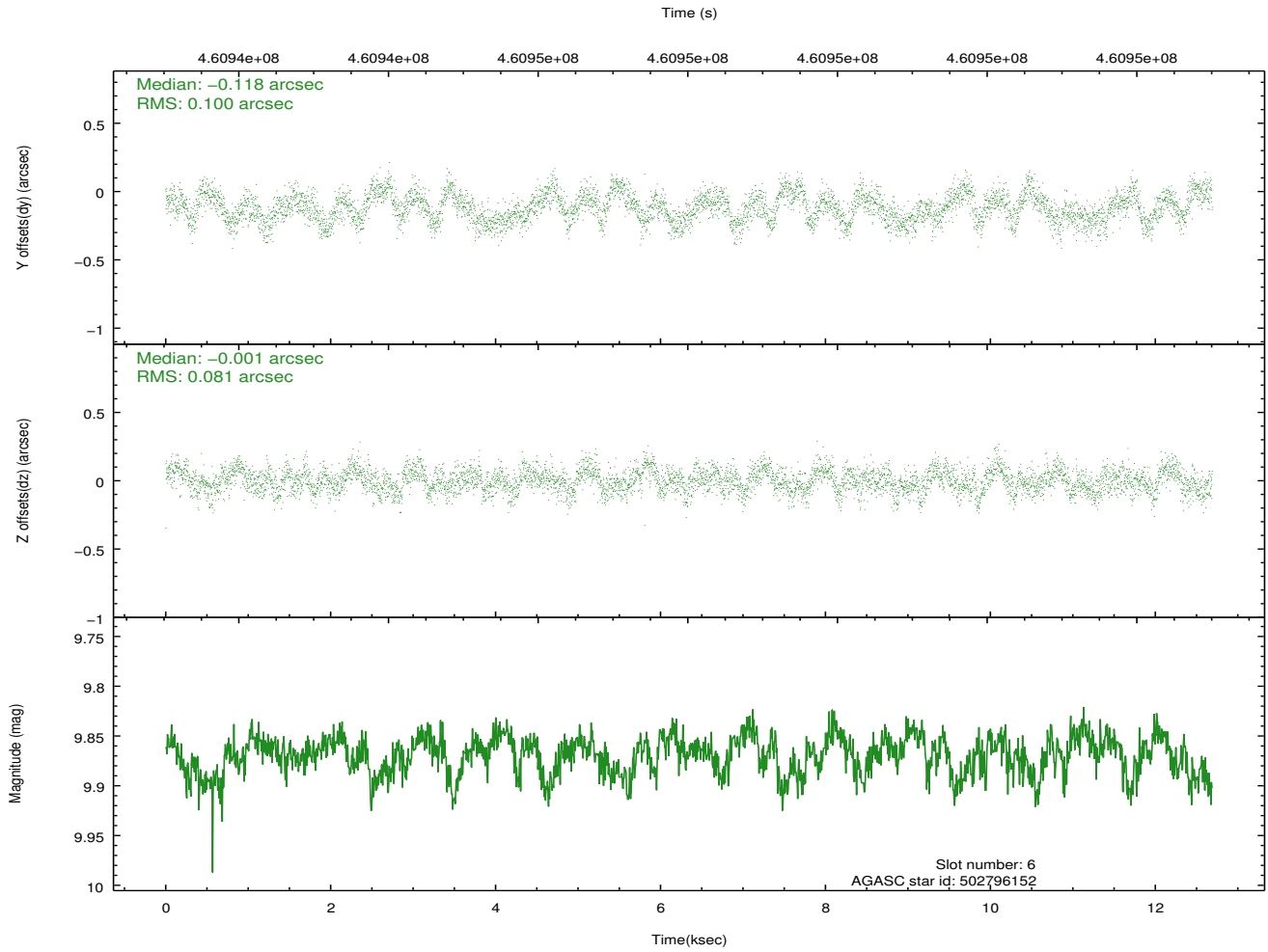
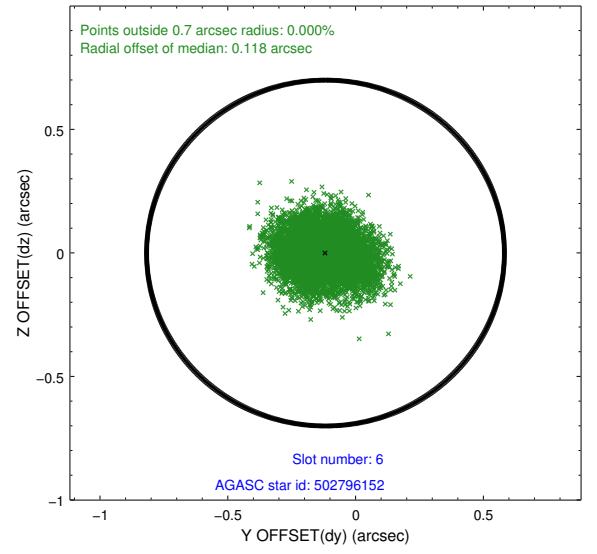
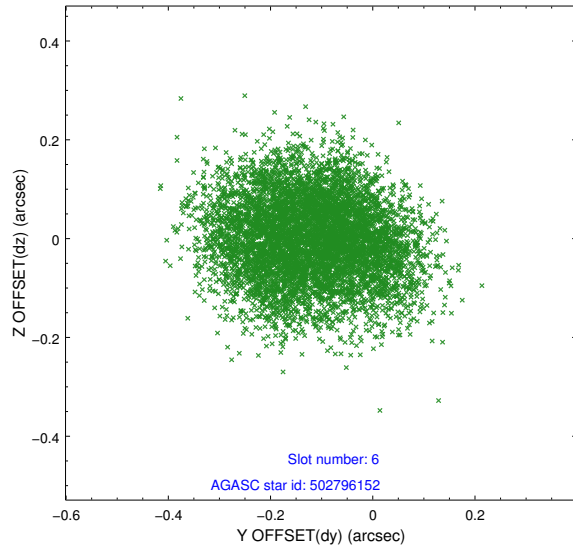
## 2.4.2 Slot 4



### 2.4.3 Slot 5

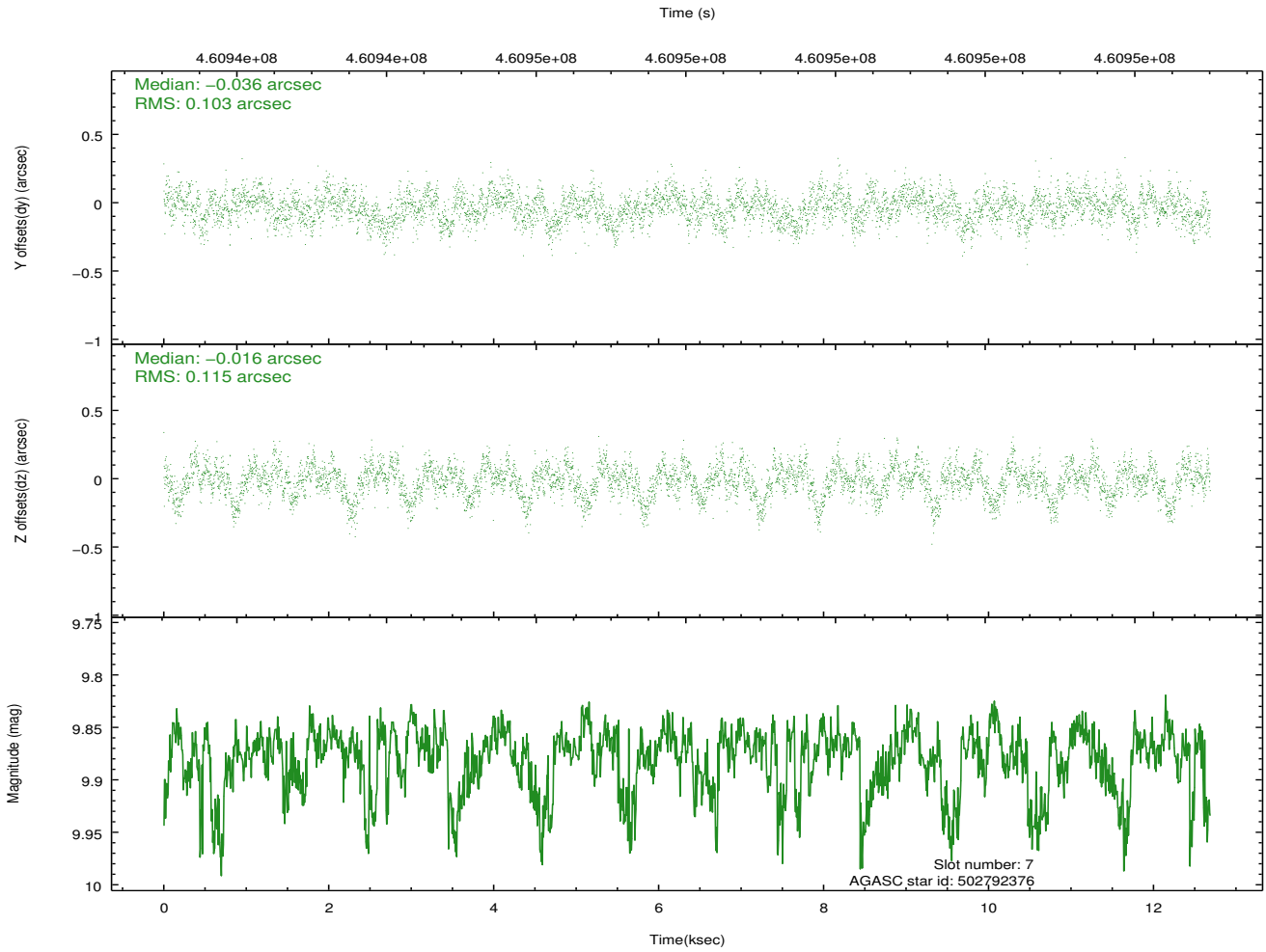
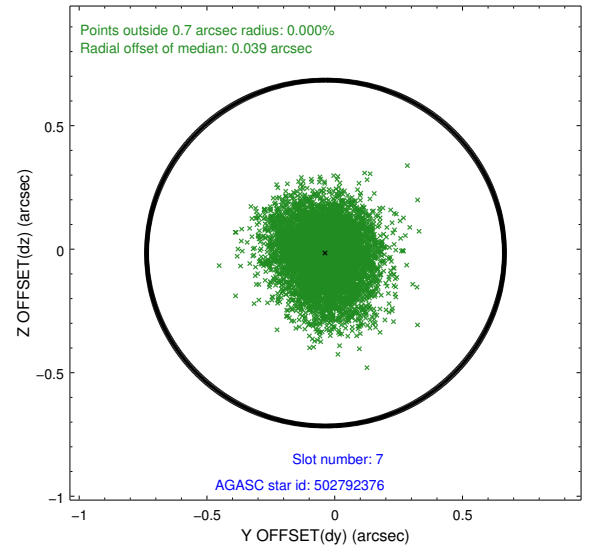
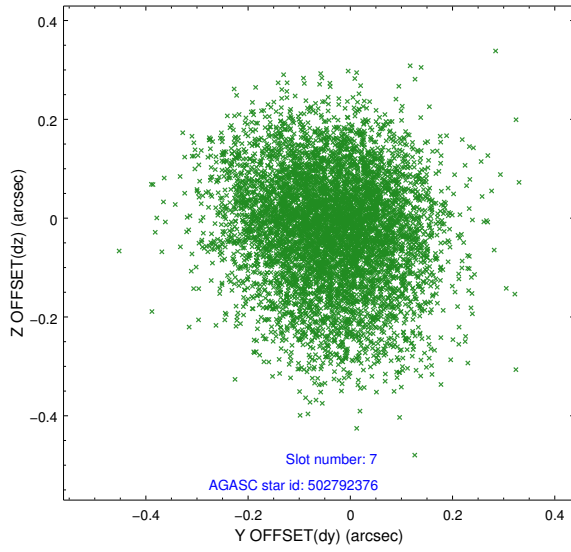


## 2.4.4 Slot 6



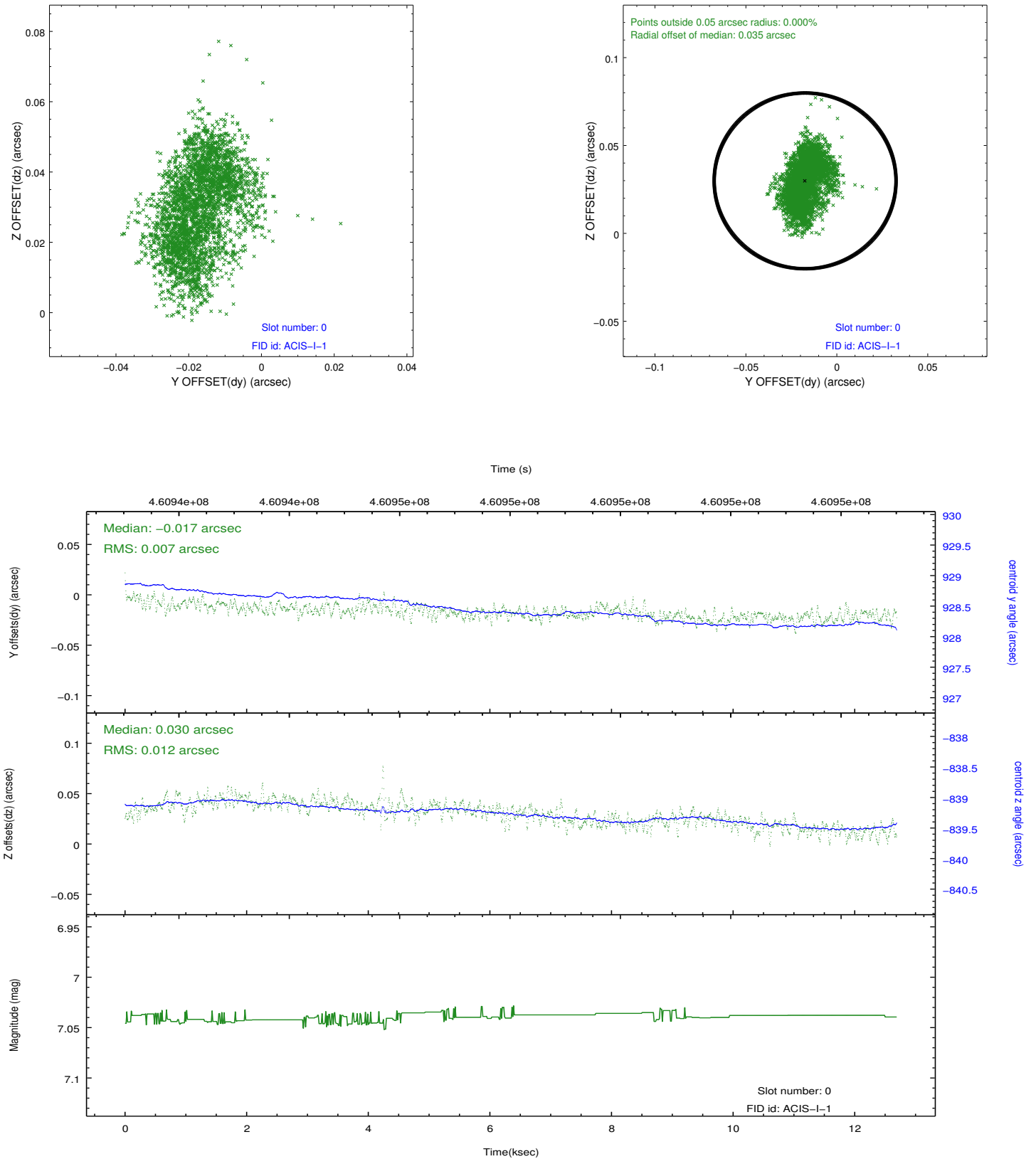


## 2.4.5 Slot 7

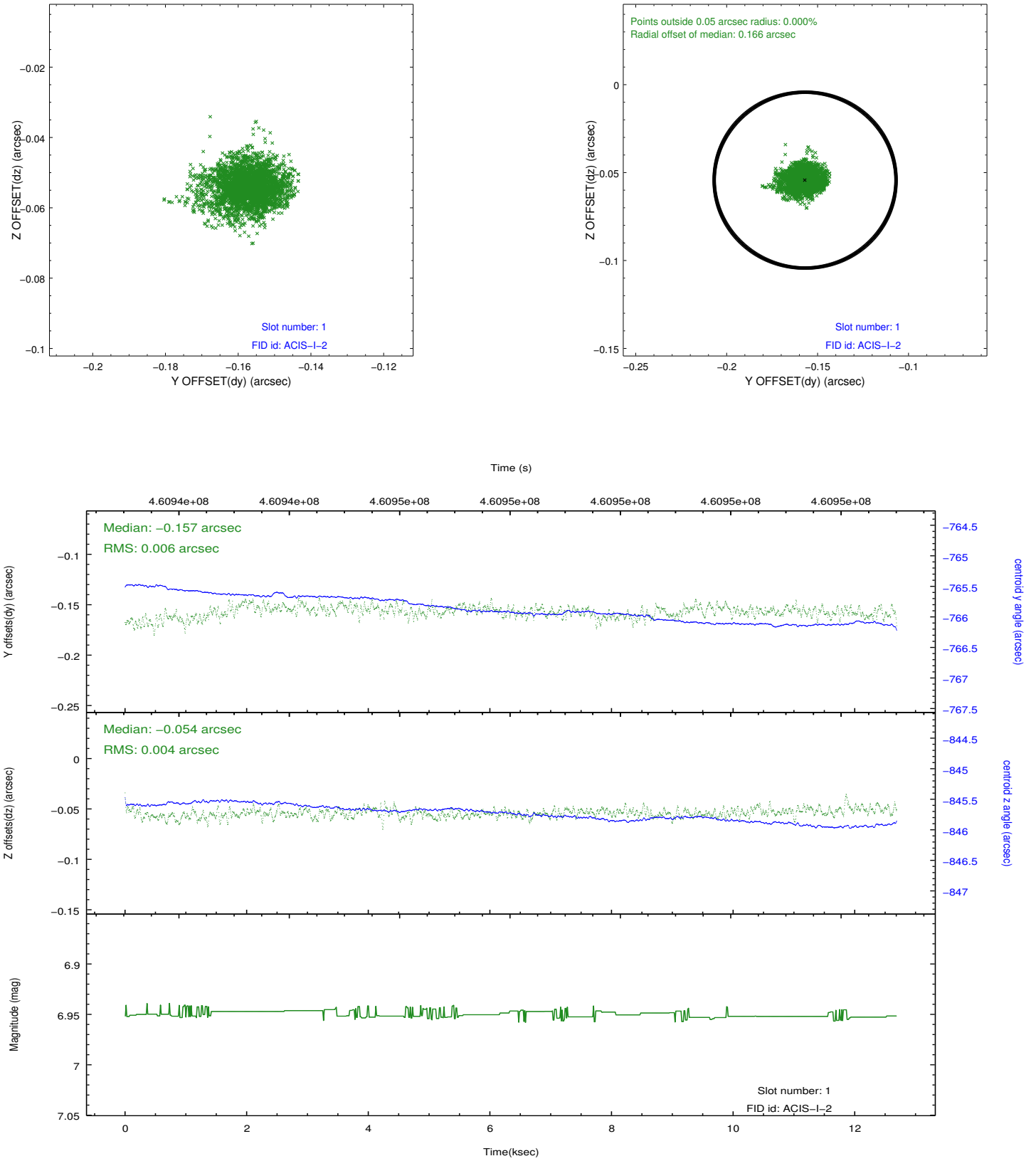


## 2.5 FID Slots

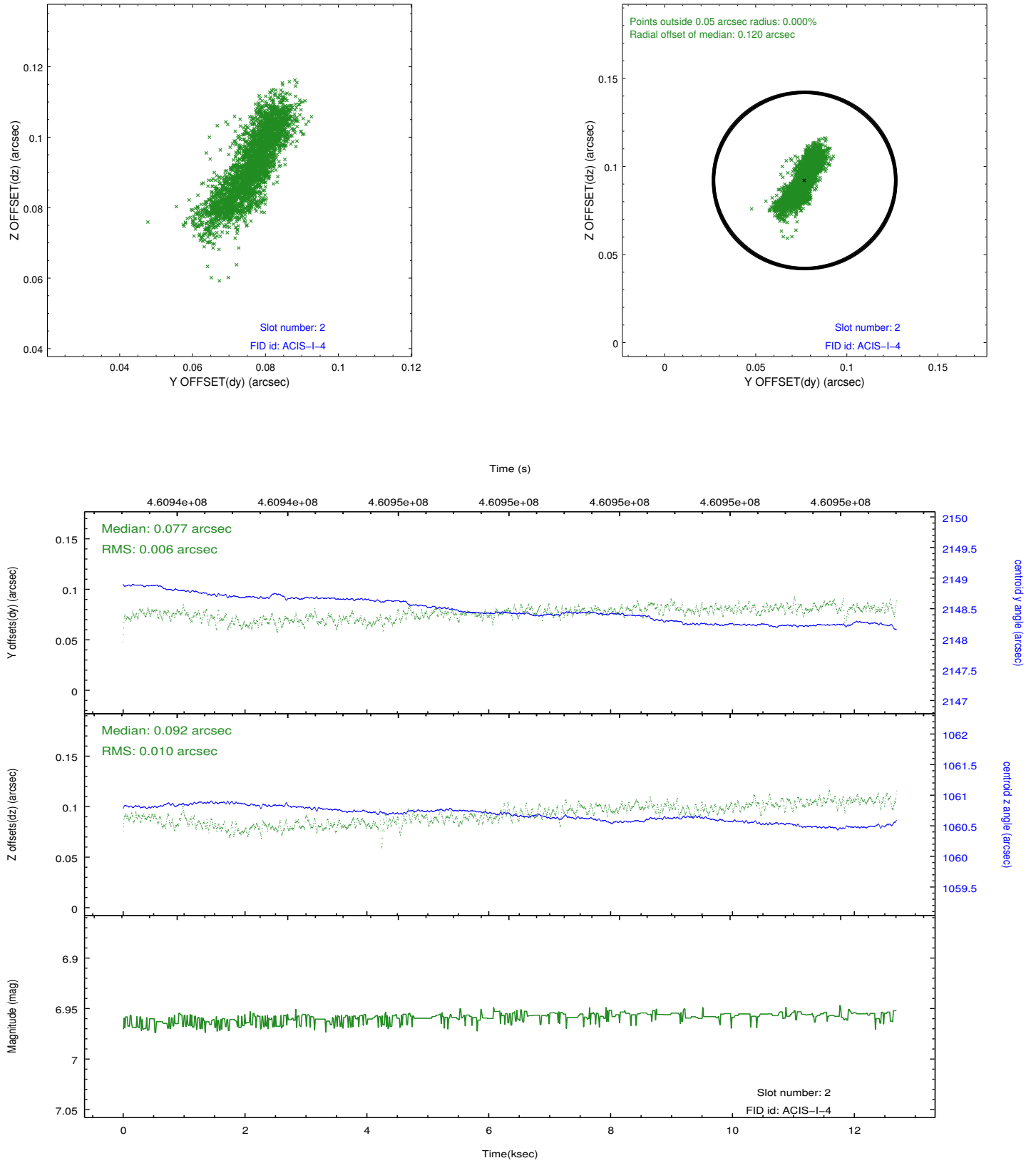
### 2.5.1 Slot 0



## 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)	2012.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.585498852253

### A.2 Comments