

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4022 - L2 Version 3  
Chandra X-Ray Center

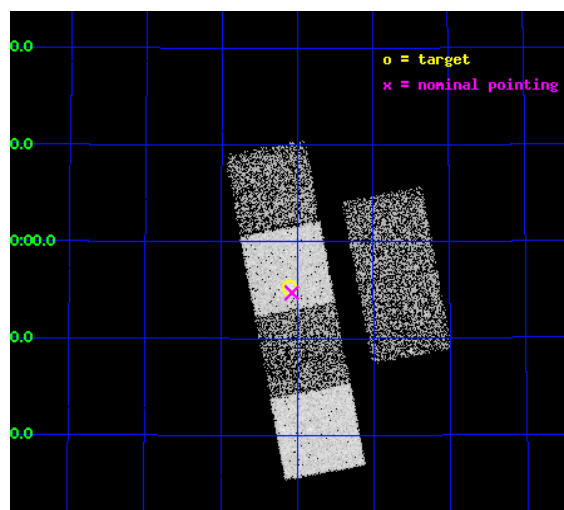
L2 Processing Date : Nov 1 2012

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# 1 Front

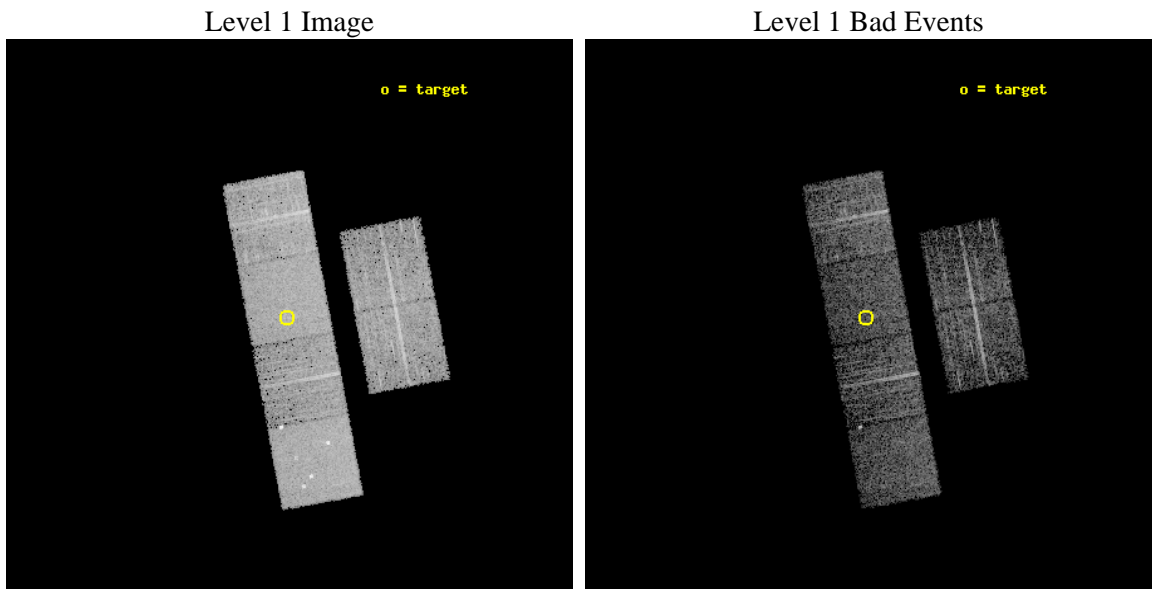
seq_num	700701	Sequence number
obs_id	4022	Observation id
title	A CHANDRA SURVEY OF INFRARED-BRIGHT LINER GALAXIES	Proposal title
observer	Dr. Shobita Satyapal	Principal investigator
object	NGC5678	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	218.024167	Observer's specified target RA [deg]
dec_targ	57.921389	Observer's specified target Dec [deg]
ra_nom	218.01787933491	Nominal RA [deg]
dec_nom	57.912377363402	Nominal Dec [deg]
roll_nom	259.35179891251	Nominal Roll [deg]
revision	3	Processing version of data
ontime	4793.0352945924	Sum of GTIs [s]
livetime	4732.3429956729	Livetime [s]
ontime2	4793.0763345957	Sum of GTIs [s]
ontime3	4792.9121745825	Sum of GTIs [s]
ontime5	4792.9942545891	Sum of GTIs [s]
ontime6	4792.9532145858	Sum of GTIs [s]
ontime7	4793.0352945924	Sum of GTIs [s]
ontime8	4789.6300447881	Sum of GTIs [s]
l2events	47089	Number of level 2 events



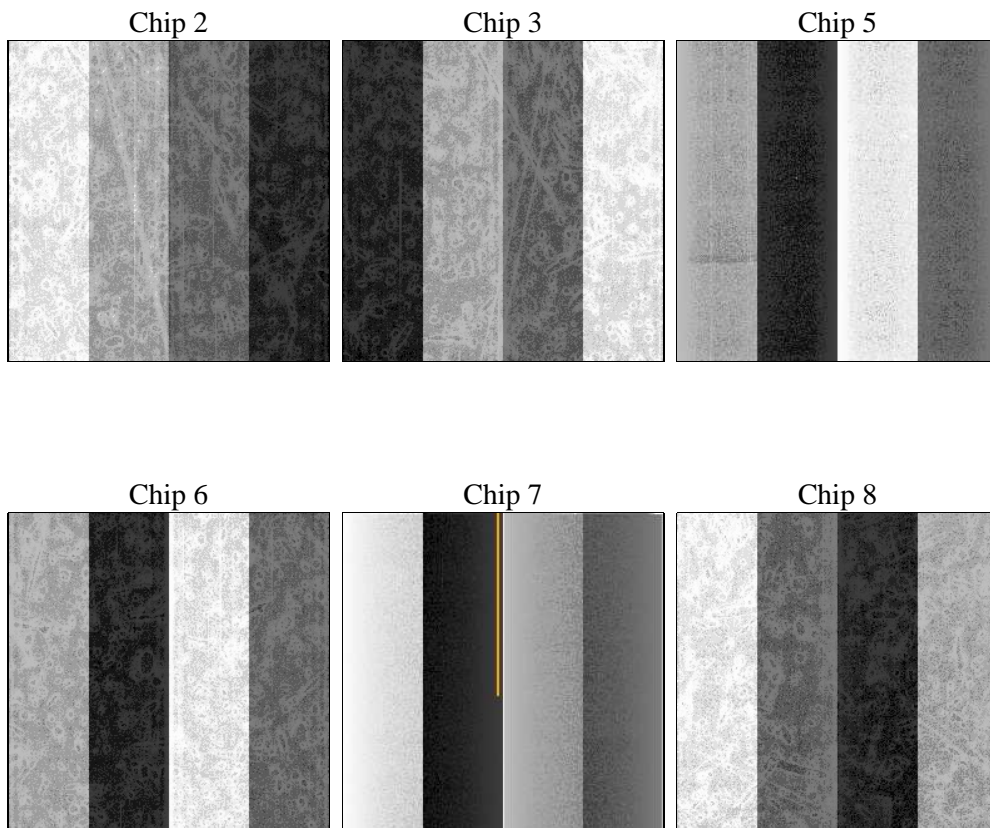
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5038.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	4793.0352945924	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	4793.0763345957	Sum of GTIs [s]
date	2012-11-01T10:34:34	Date and time of file creation	ontime3	4792.9121745825	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	4792.9942545891	Sum of GTIs [s]
			ontime6	4792.9532145858	Sum of GTIs [s]
			ontime7	4793.0352945924	Sum of GTIs [s]
			ontime8	4789.6300447881	Sum of GTIs [s]
			l1events	214380	Number of level 1 events

### 2.1.4 Events

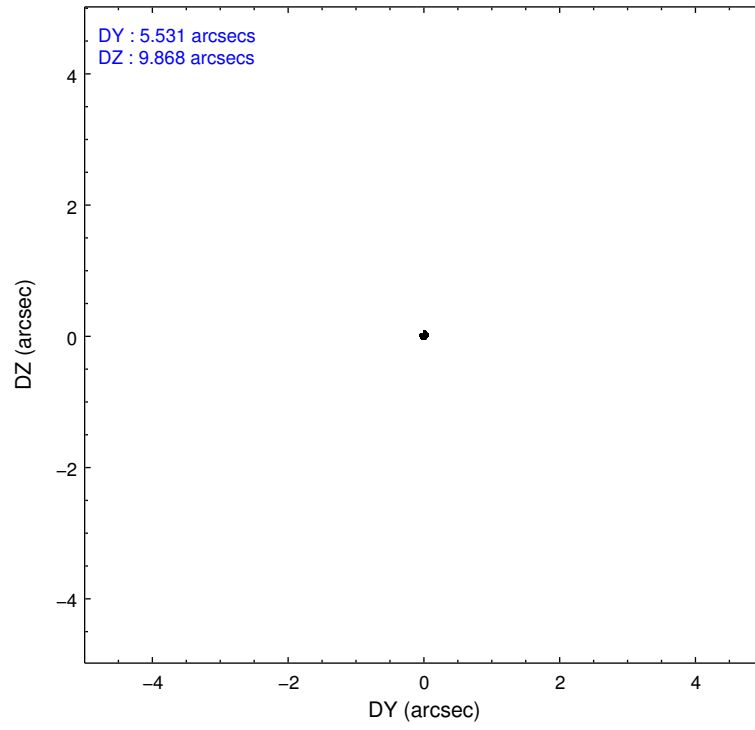
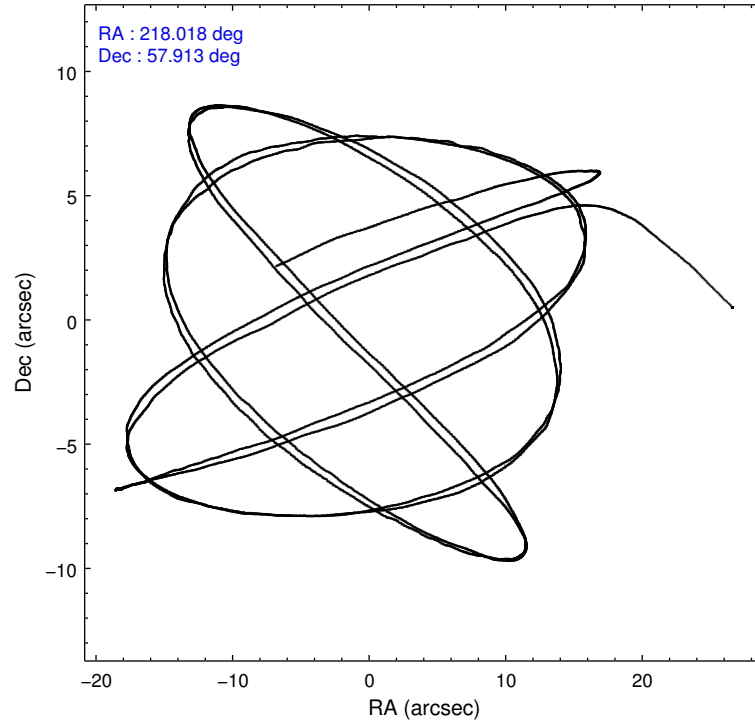
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	29493	28185	44951	29470	39838	42443	grade 0 events	1633	1523	3203	1326	1629	2813
rejected events	25895	24684	23727	25963	23317	33634		5%	5%	7%	4%	4%	6%
rejected %	87%	87%	52%	88%	58%	79%	grade 1 events	17	10	181	17	44	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	730	732	5840	752	3307	1855
								2%	2%	12%	2%	8%	4%
							grade 3 events	318	328	892	356	1488	1049
								1%	1%	1%	1%	3%	2%
							grade 4 events	352	312	888	359	1465	958
								1%	1%	1%	1%	3%	2%
							grade 5 events	1241	1236	3328	1329	3775	1781
								4%	4%	7%	4%	9%	4%
							grade 6 events	573	608	10417	717	8643	2138
								1%	2%	23%	2%	21%	5%
							grade 7 events	24629	23436	20202	24614	19487	31805
								83%	83%	44%	83%	48%	74%

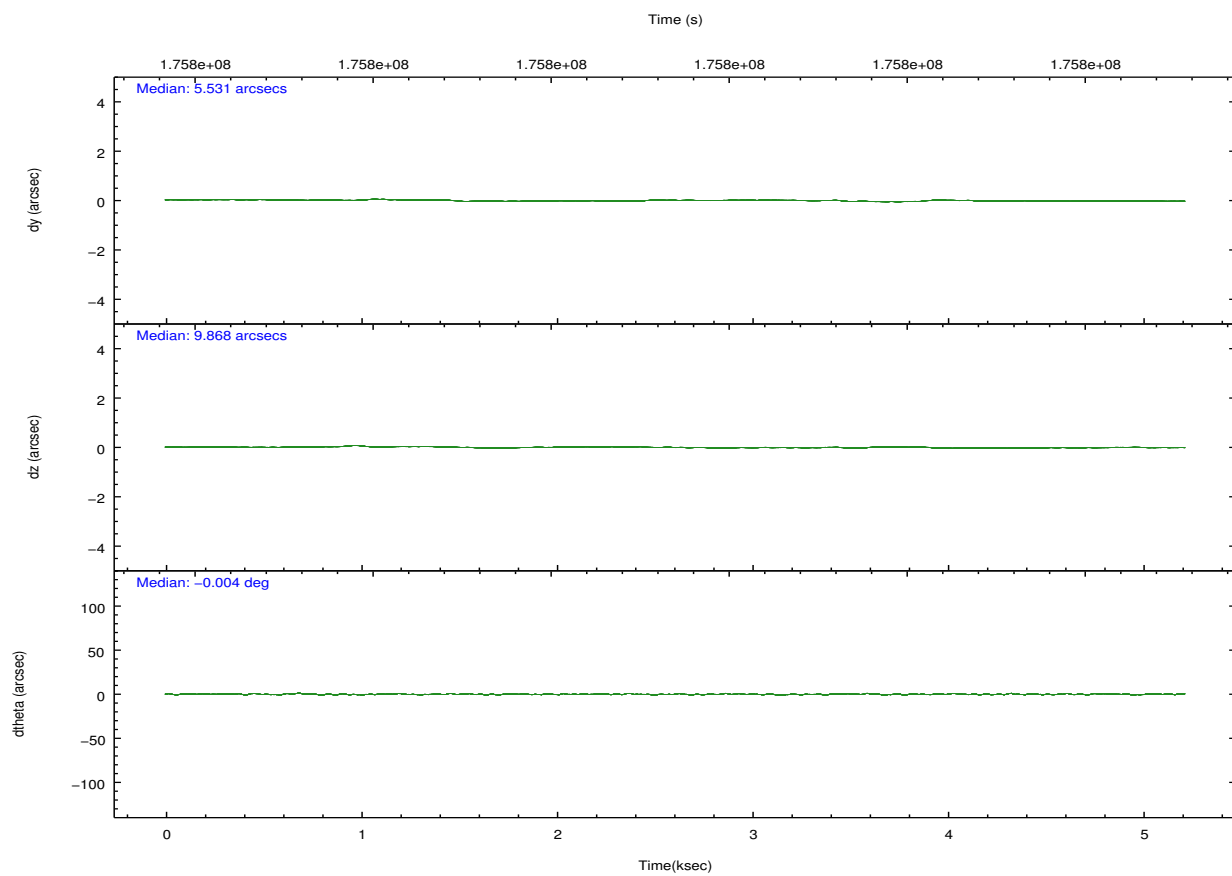
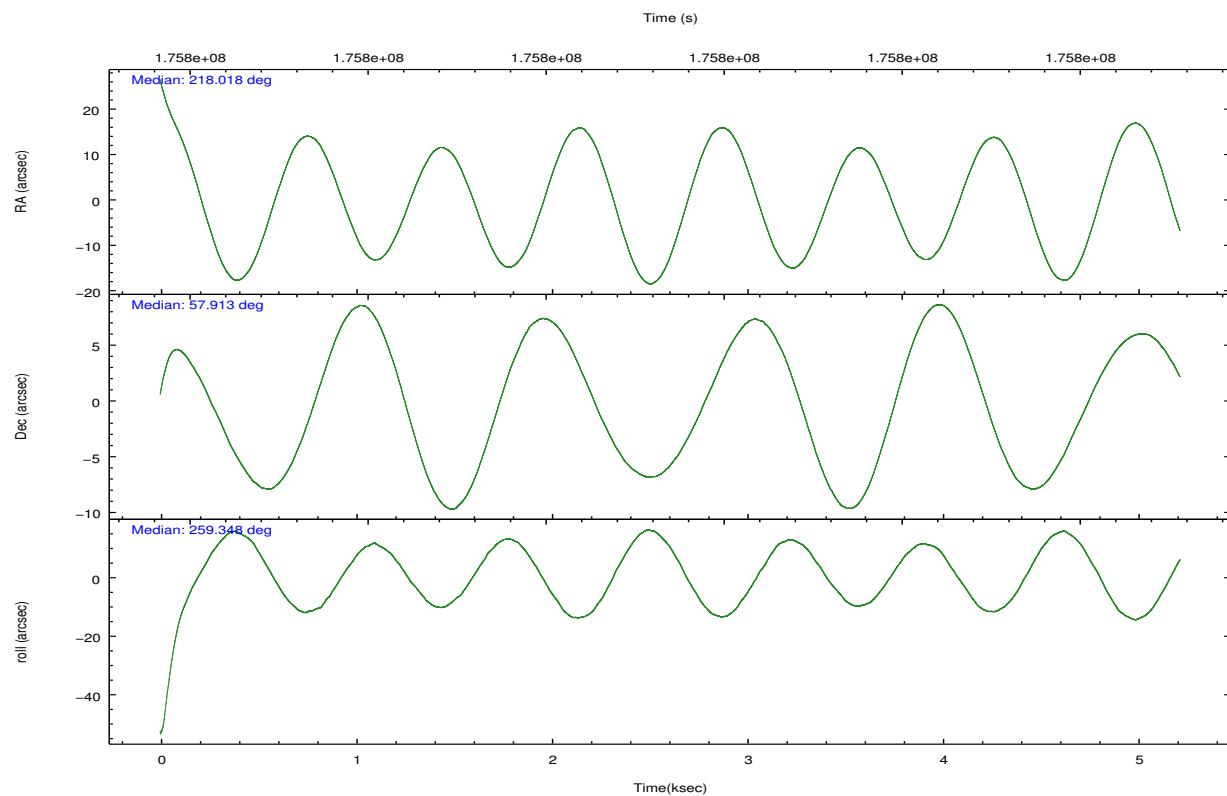


## 2.2 Compared Parameters

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	218.000064	218.017879334913	Subarray requested	NONE	NONE
[deg] Pointing Dec	57.937919	57.91237736340237	Alternating exposures requested	N	N
[deg] Pointing Roll	259.210361	259.35179891251	[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)	175795259.184000	175794514.49118			
Observation start date	2003-07-28T15:59:55	2003-07-28T15:48:34			
[s] Observation end time (MET)	175800297.184000	175800636.81644			
Observation end date	2003-07-28T17:23:53	2003-07-28T17:30:36			
Read mode	TIMED	TIMED			

## 2.3 Aspect



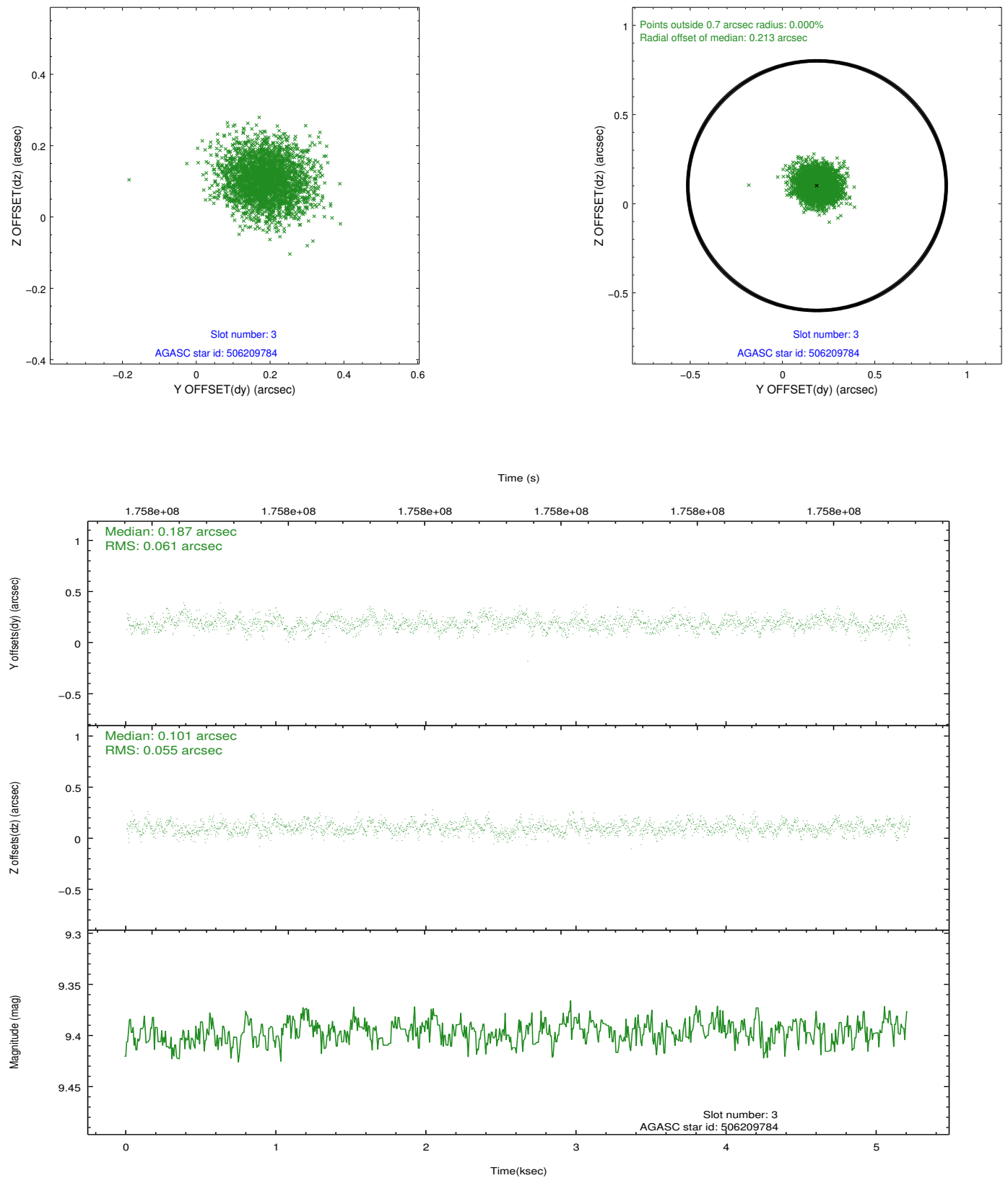


### Slot Statistics

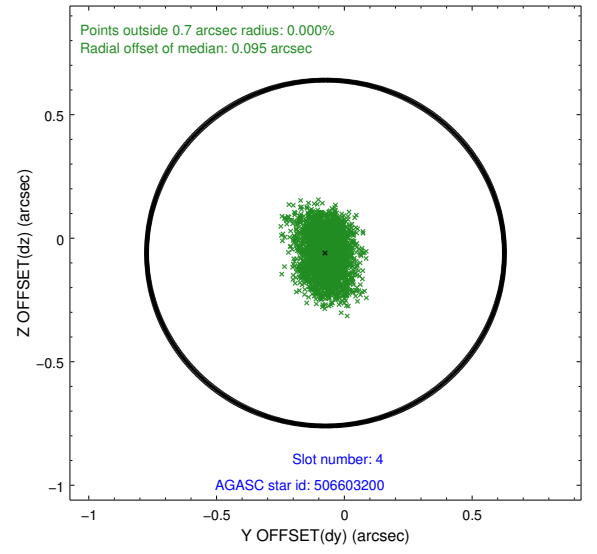
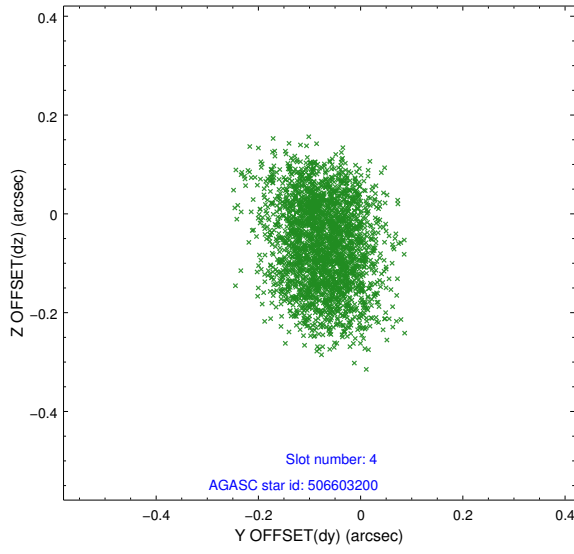
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	1273	-0.084	-0.060	0.006	0.010	0.000000	0.000000	-758.32	-1731.12
1	FID	ACIS-S-4	7.20	1273	0.057	0.050	0.006	0.011	0.000000	0.000000	2154.57	176.27
2	FID	ACIS-S-6	7.34	1273	-0.000	0.017	0.007	0.012	0.000000	0.000000	405.23	814.96
3	GUIDE	506209784	9.40	2543	0.187	0.101	0.088	0.139	217.198701	57.472545	1927.86	-1211.78
4	GUIDE	506603200	9.42	2546	-0.074	-0.060	0.112	0.173	217.211354	58.364739	-1237.69	-1753.04
5	GUIDE	506729000	7.84	2546	-0.078	-0.191	0.059	0.097	218.197050	58.423283	-1786.57	36.49
6	GUIDE	506601256	8.06	2546	-0.129	0.162	0.060	0.094	217.750789	58.619234	-2323.12	-918.57
7	GUIDE	506734224	8.46	2543	0.101	-0.007	0.081	0.129	219.088834	57.560659	923.30	2315.59

## 2.4 Star Slots

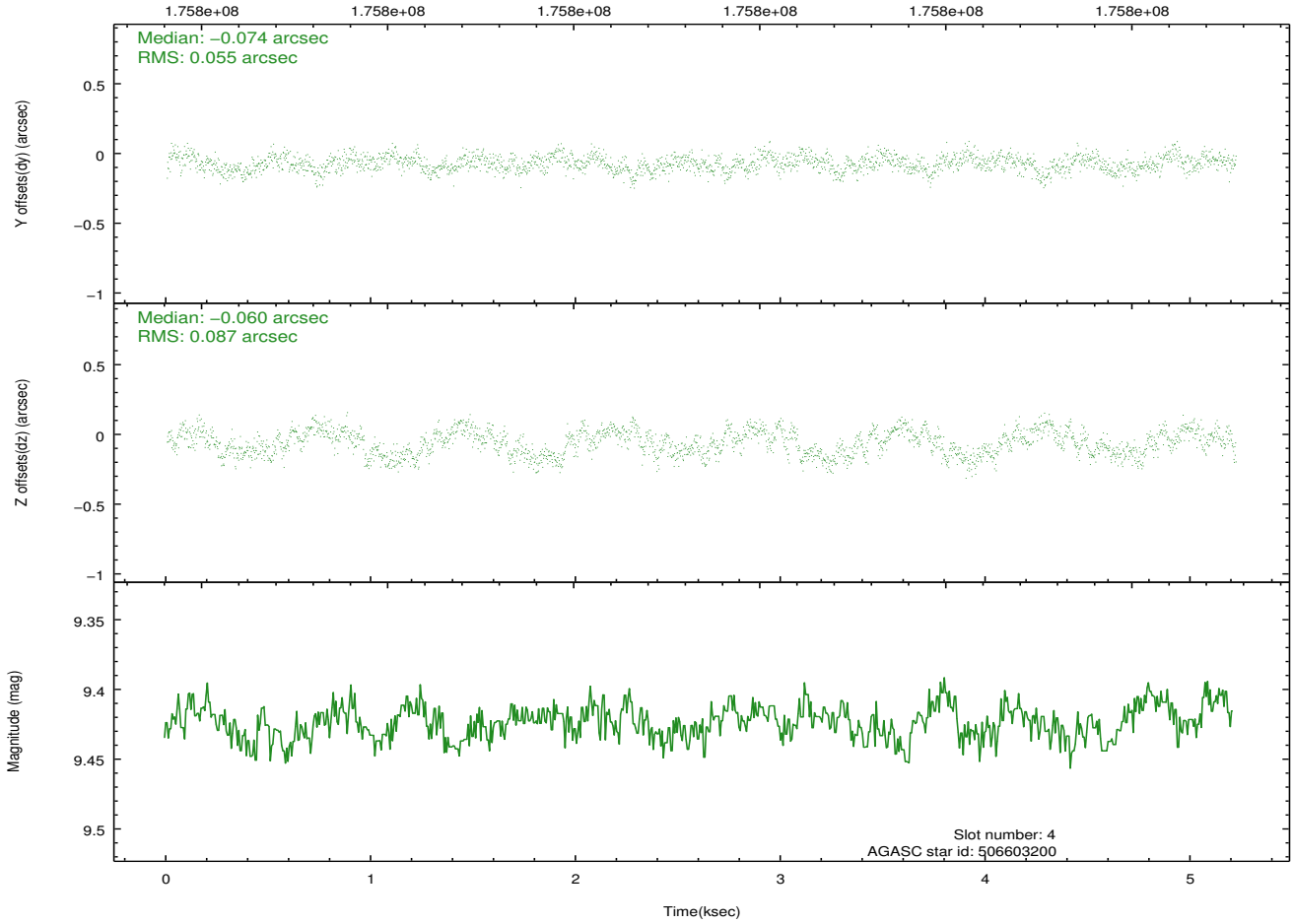
### 2.4.1 Slot 3



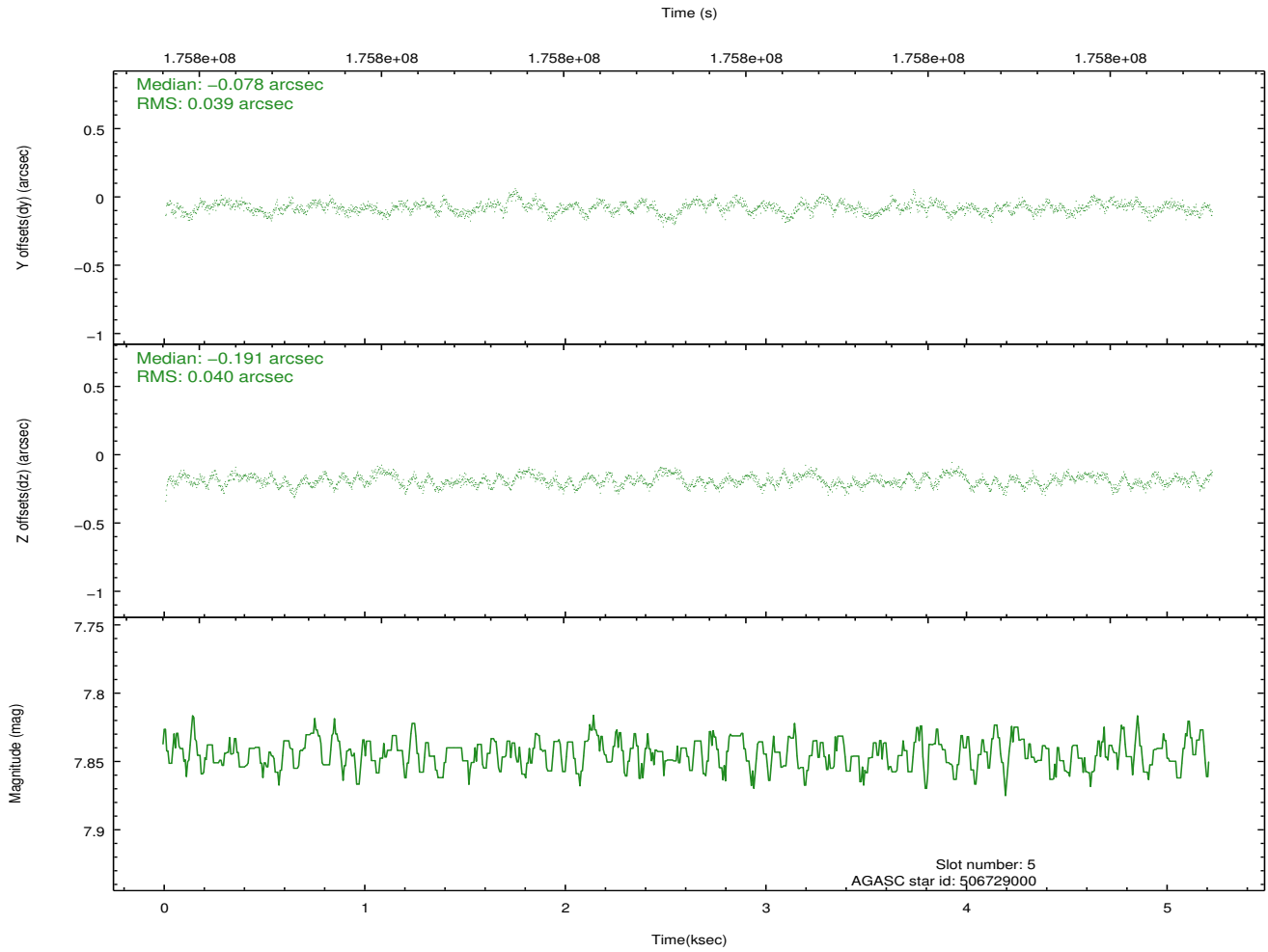
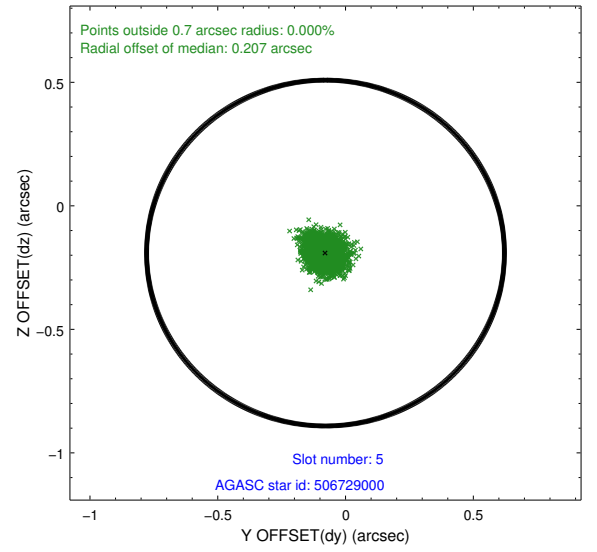
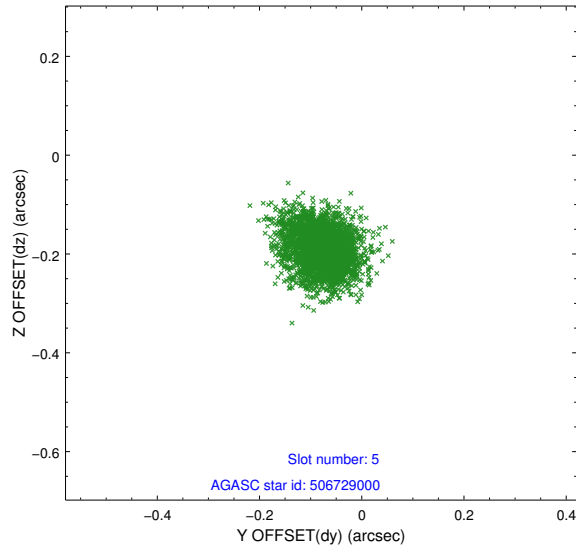
## 2.4.2 Slot 4



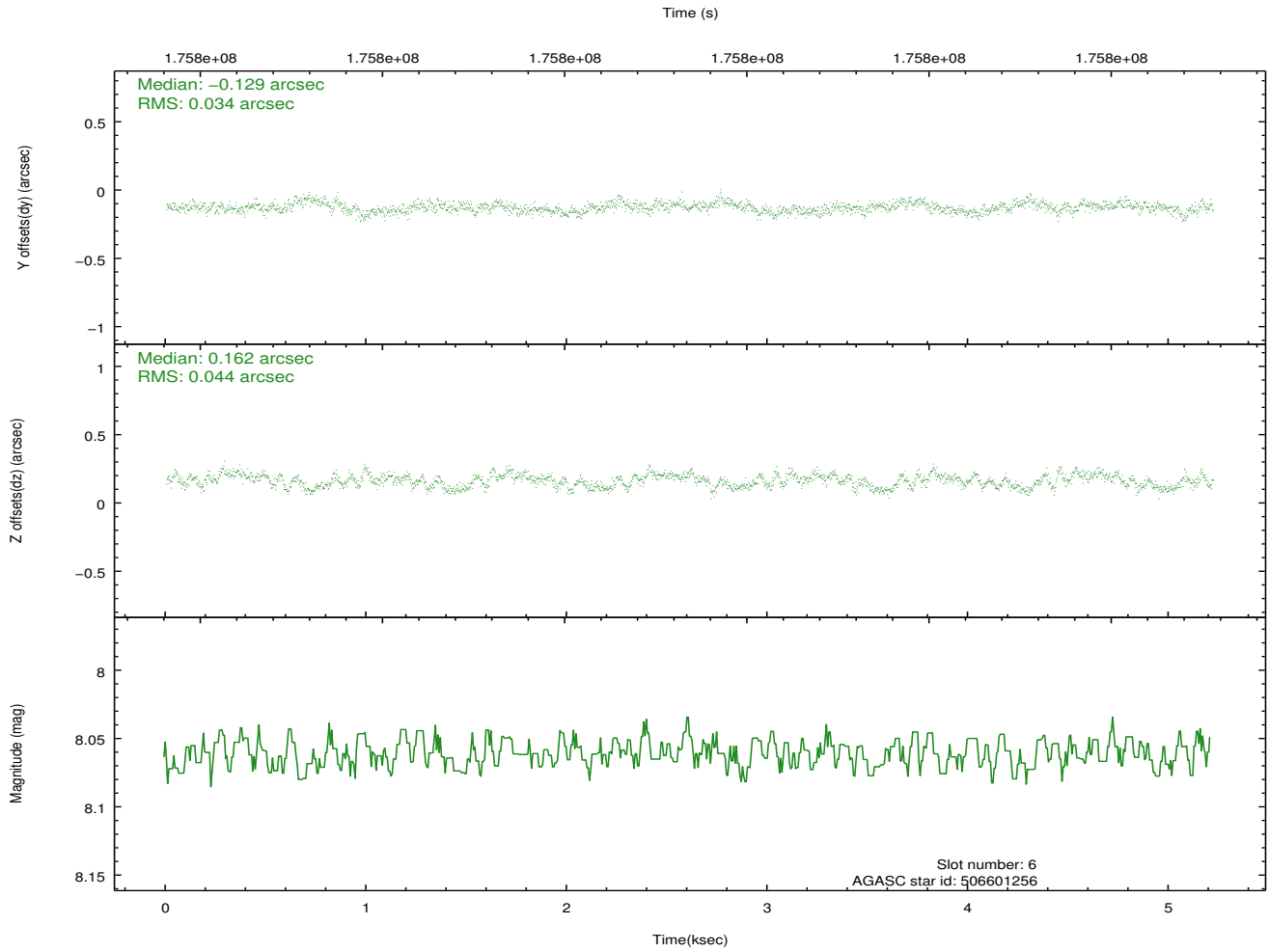
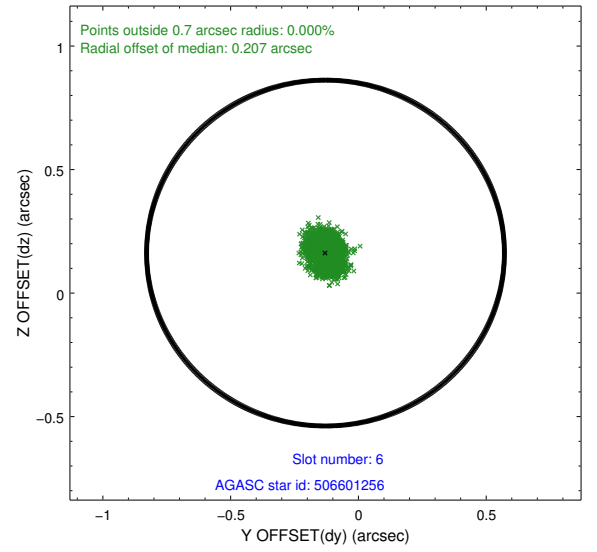
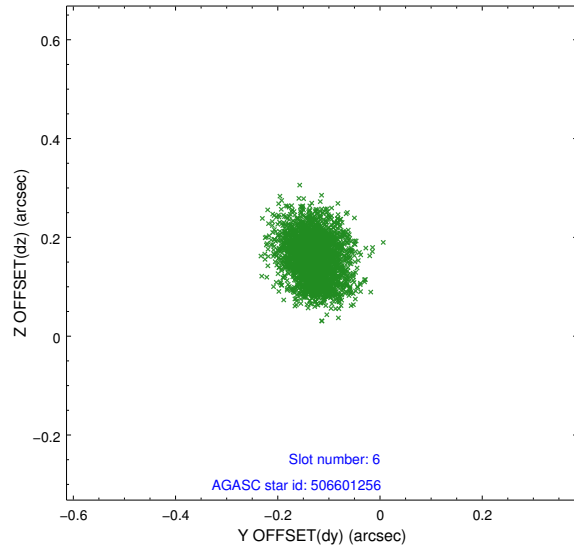
Time (s)



### 2.4.3 Slot 5

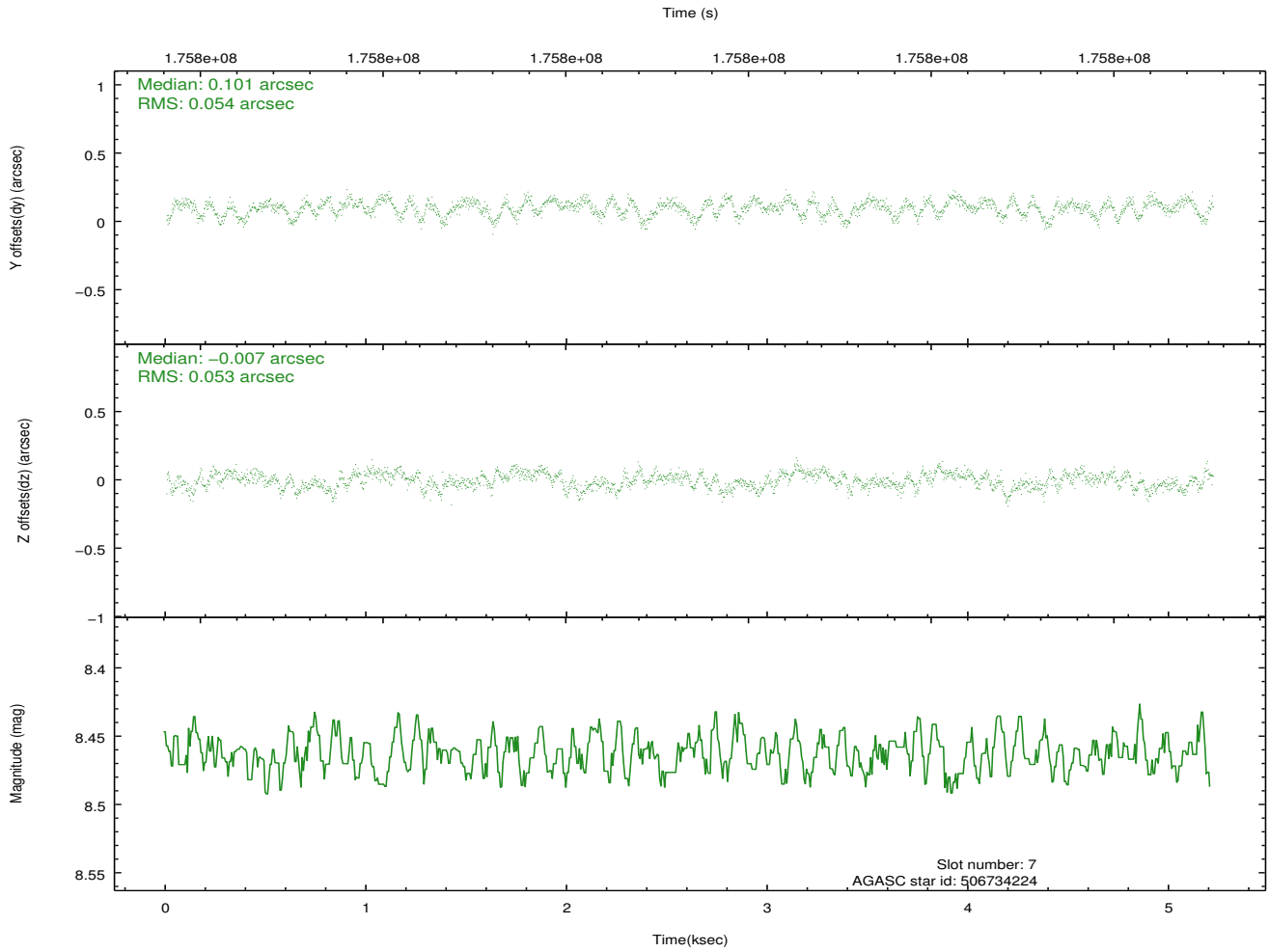
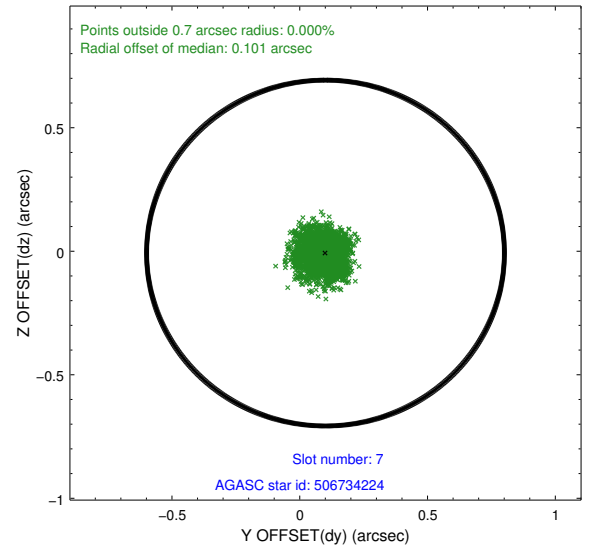
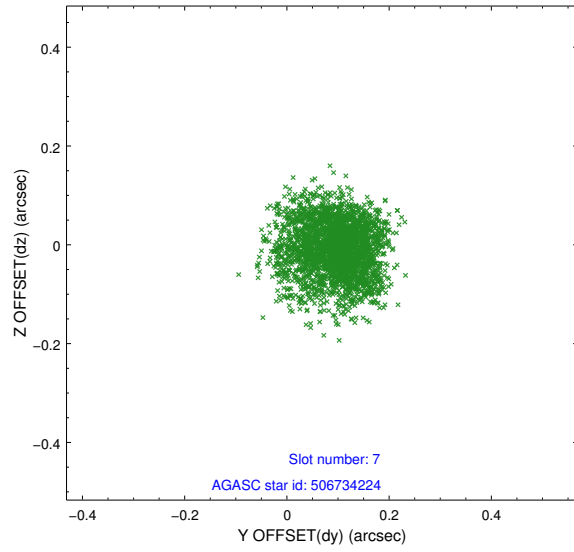


## 2.4.4 Slot 6



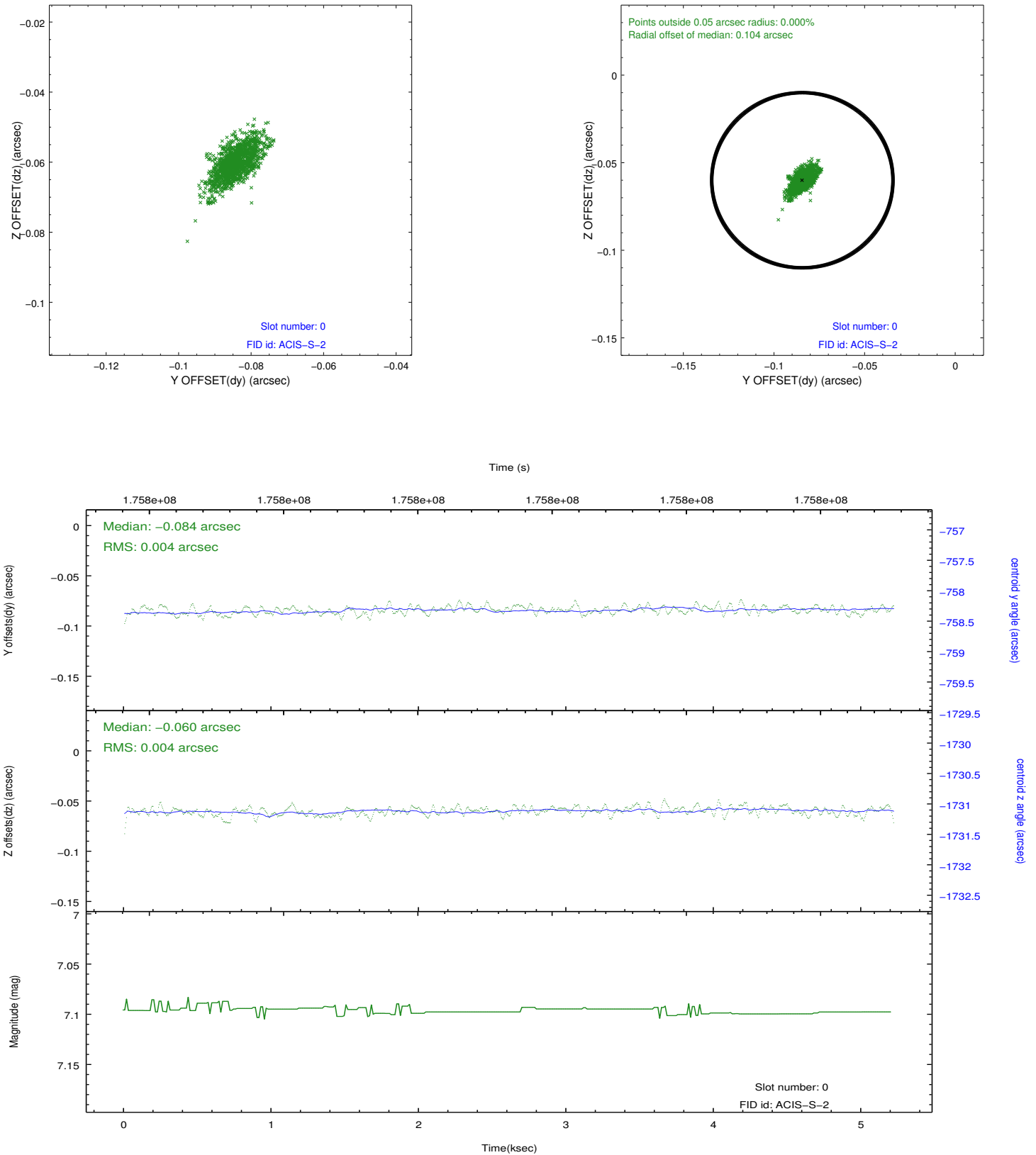


## 2.4.5 Slot 7

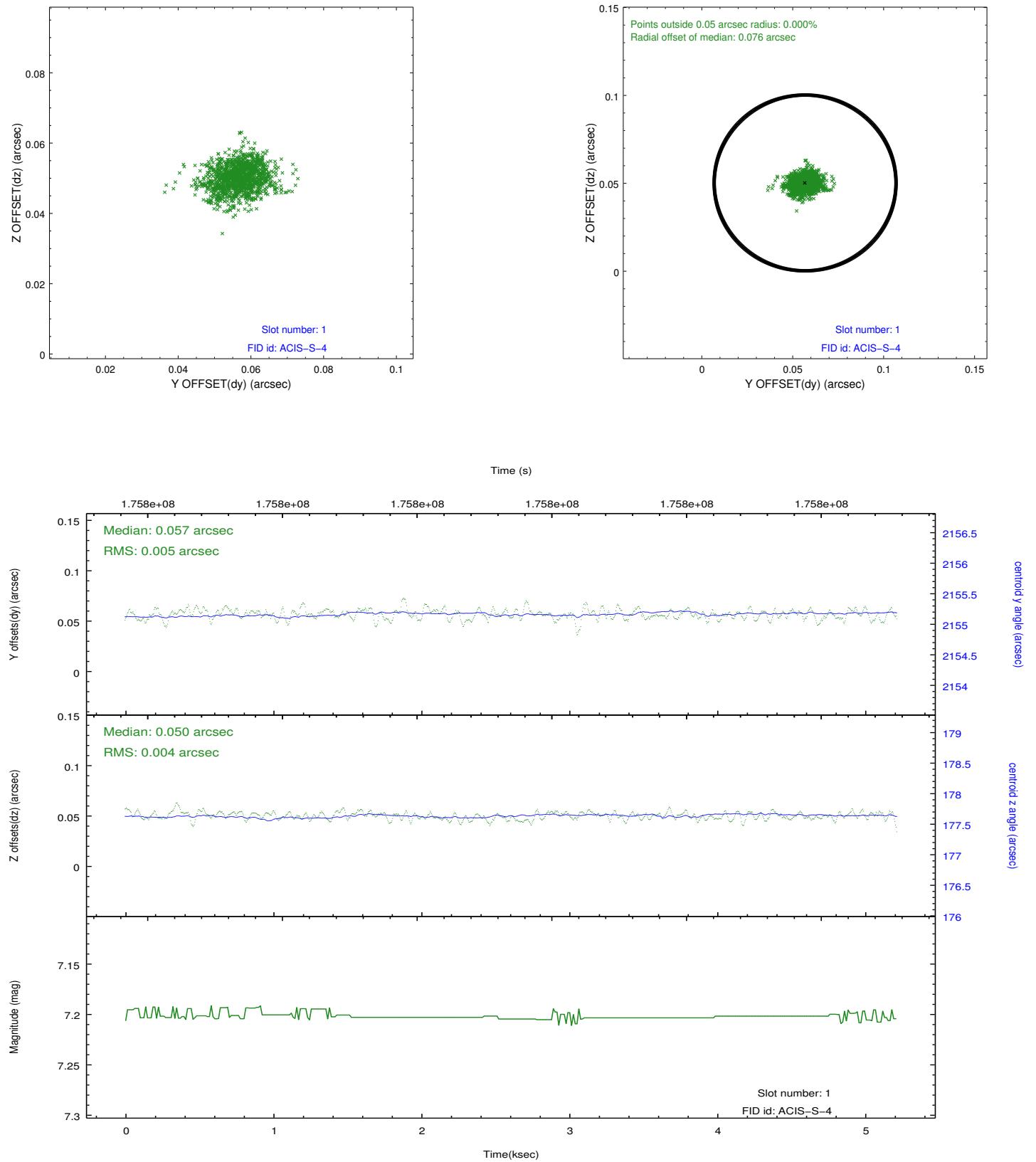


## 2.5 FID Slots

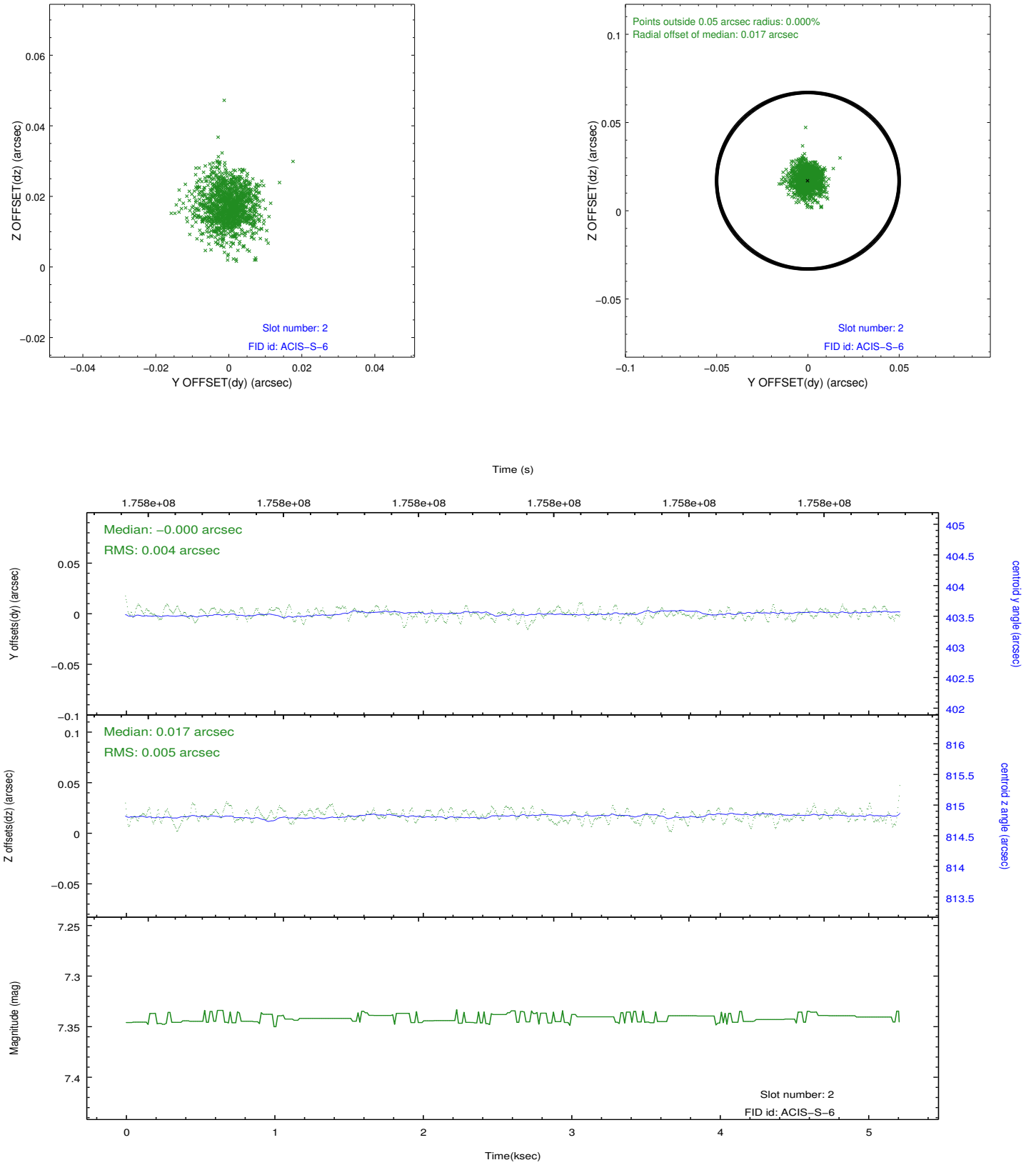
### 2.5.1 Slot 0



## 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)	2012.11.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.793

### A.2 Comments