

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13863 - L2 Version 2  
Chandra X-Ray Center

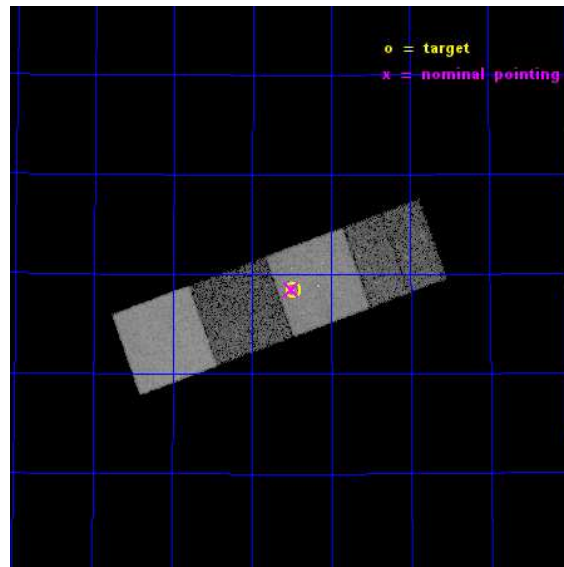
L2 Processing Date : Nov 27 2014

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# 1 Front

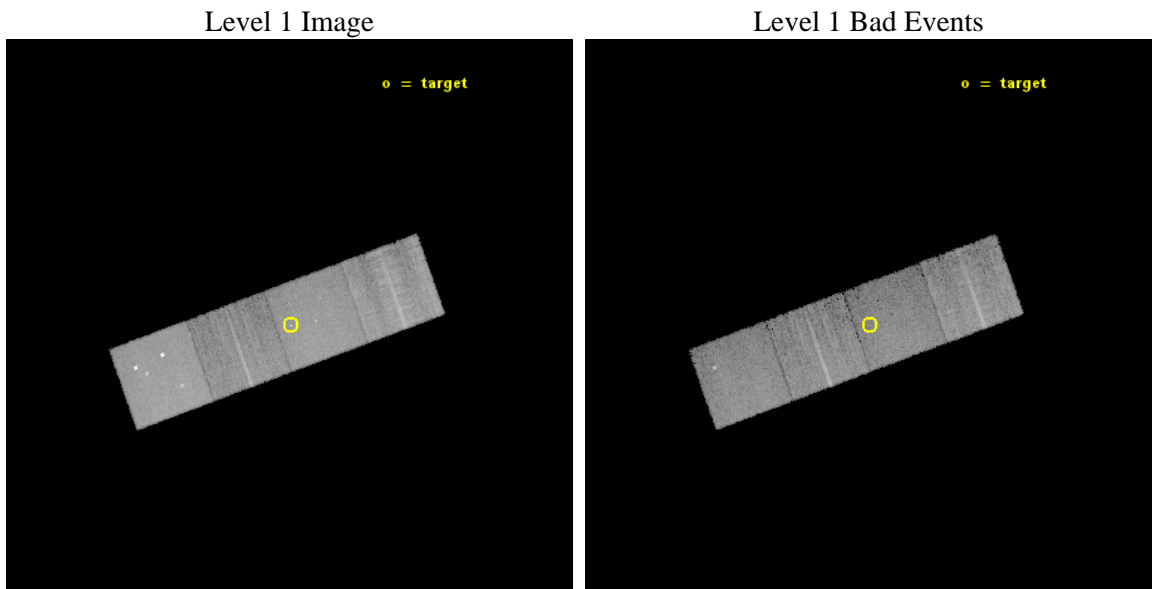
seq_num	702589	Sequence number
obs_id	13863	Observation id
title	The Radio--X-ray--BH-Mass Plane for the Smallest Supermassive Black Holes	Proposal title
observer	Dr. Kayhan Gultekin	Principal investigator
object	SDSS J140829.26+562823.5	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	212.122083	Observer's specified target RA [deg]
dec_targ	56.473194	Observer's specified target Dec [deg]
ra_nom	212.12642342838	Nominal RA [deg]
dec_nom	56.47506696215	Nominal Dec [deg]
roll_nom	340.07519346453	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15115.600116253	Sum of GTIs [s]
livetime	14918.103672791	Livetime [s]
ontime5	15115.600116253	Sum of GTIs [s]
ontime6	15109.318245351	Sum of GTIs [s]
ontime7	15115.600116253	Sum of GTIs [s]
ontime8	15115.600116253	Sum of GTIs [s]
l2events	124797	Number of level 2 events



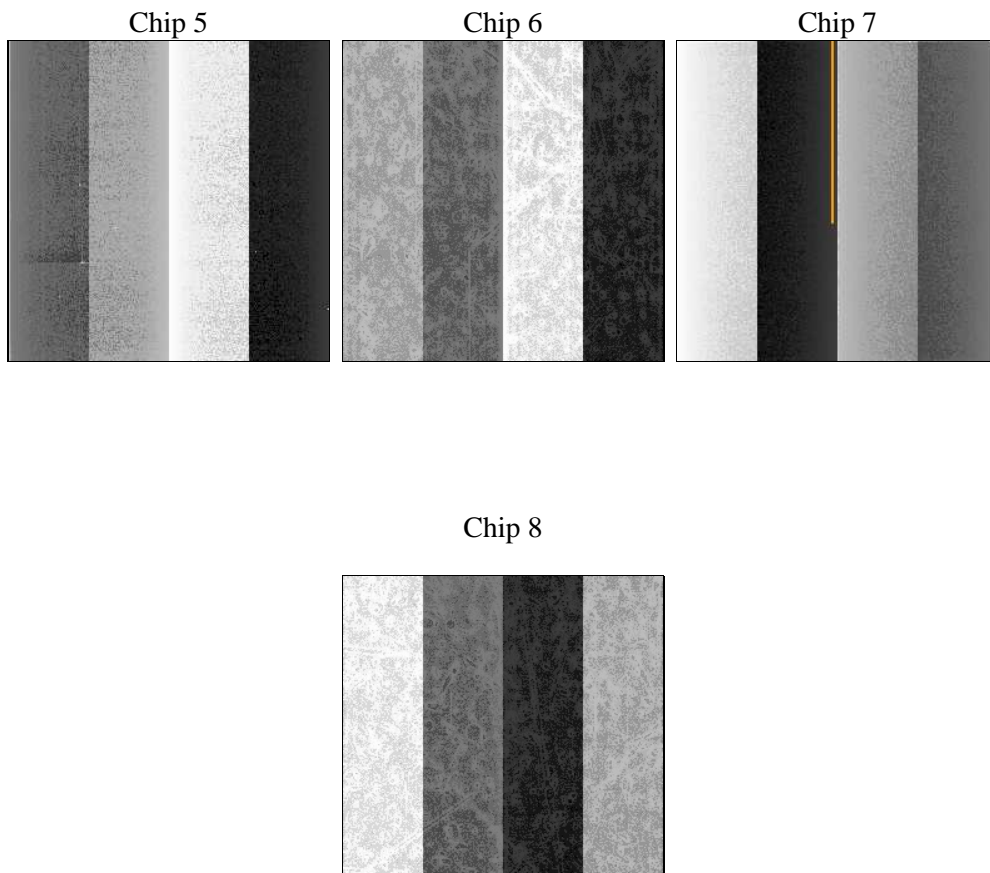
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15043.097000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15115.600116253	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime5	15115.600116253	Sum of GTIs [s]
date	2014-11-27T22:50:09	Date and time of file creation	ontime6	15109.318245351	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	15115.600116253	Sum of GTIs [s]
			ontime8	15115.600116253	Sum of GTIs [s]
			l1events	430652	Number of level 1 events

### 2.1.4 Events

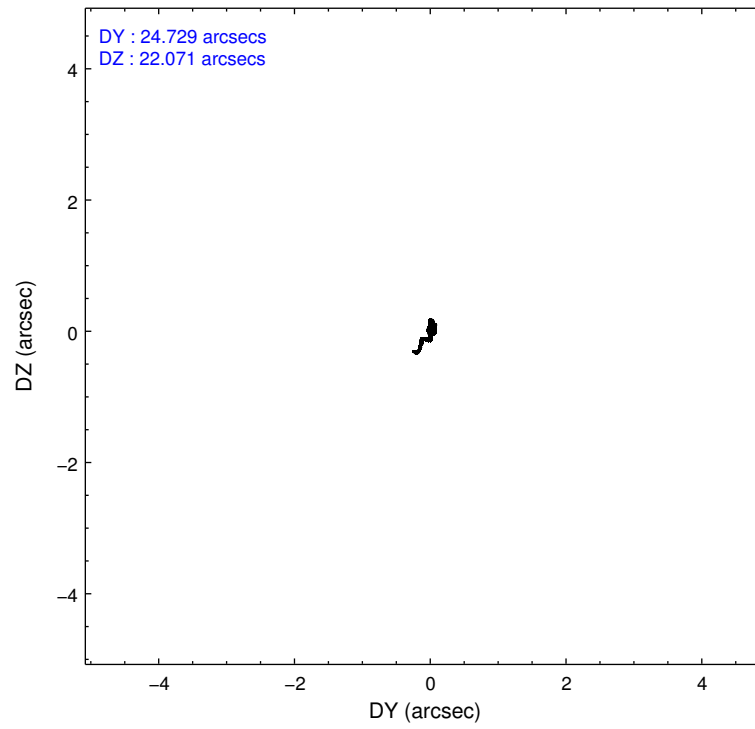
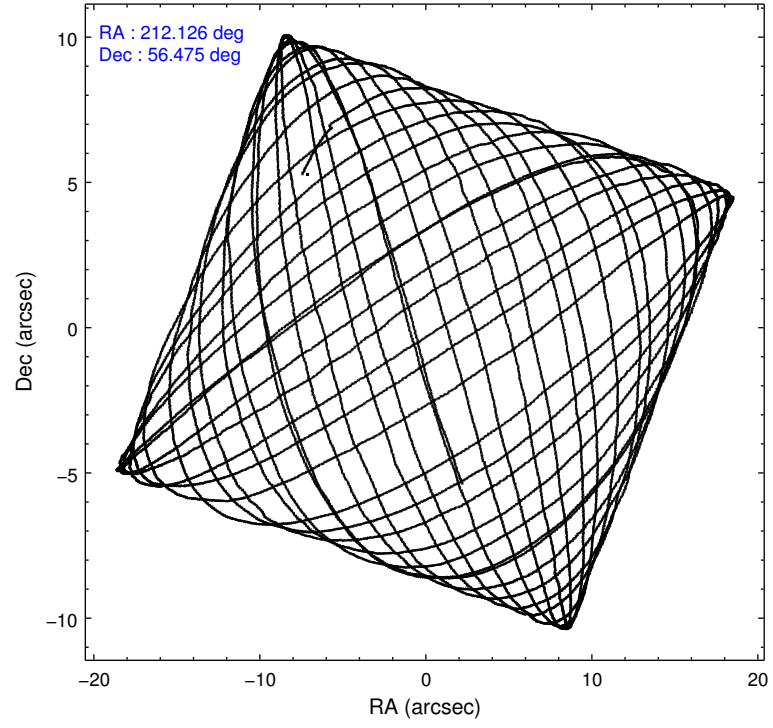
	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	134145	80030	105876	110601
rejected events	65902	70010	58137	78126
rejected %	49%	87%	54%	70%

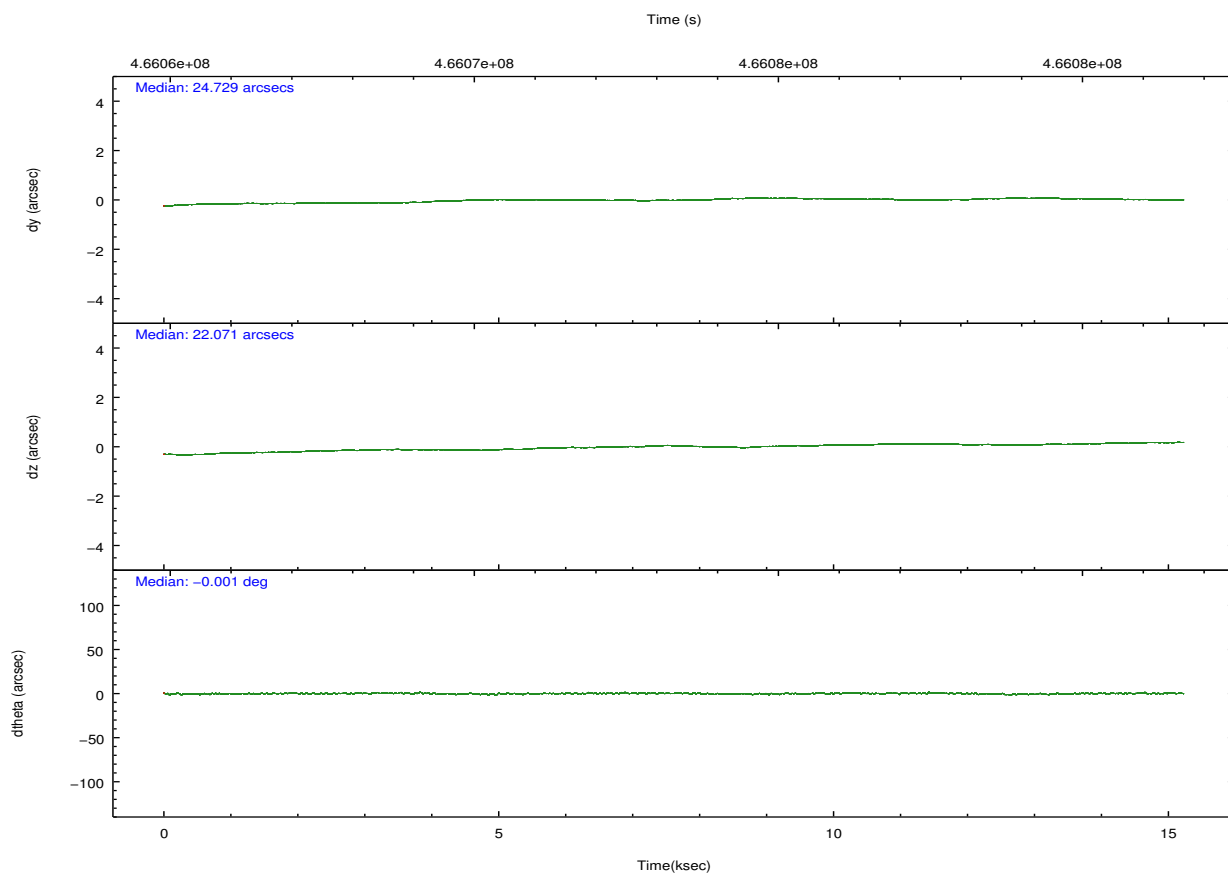
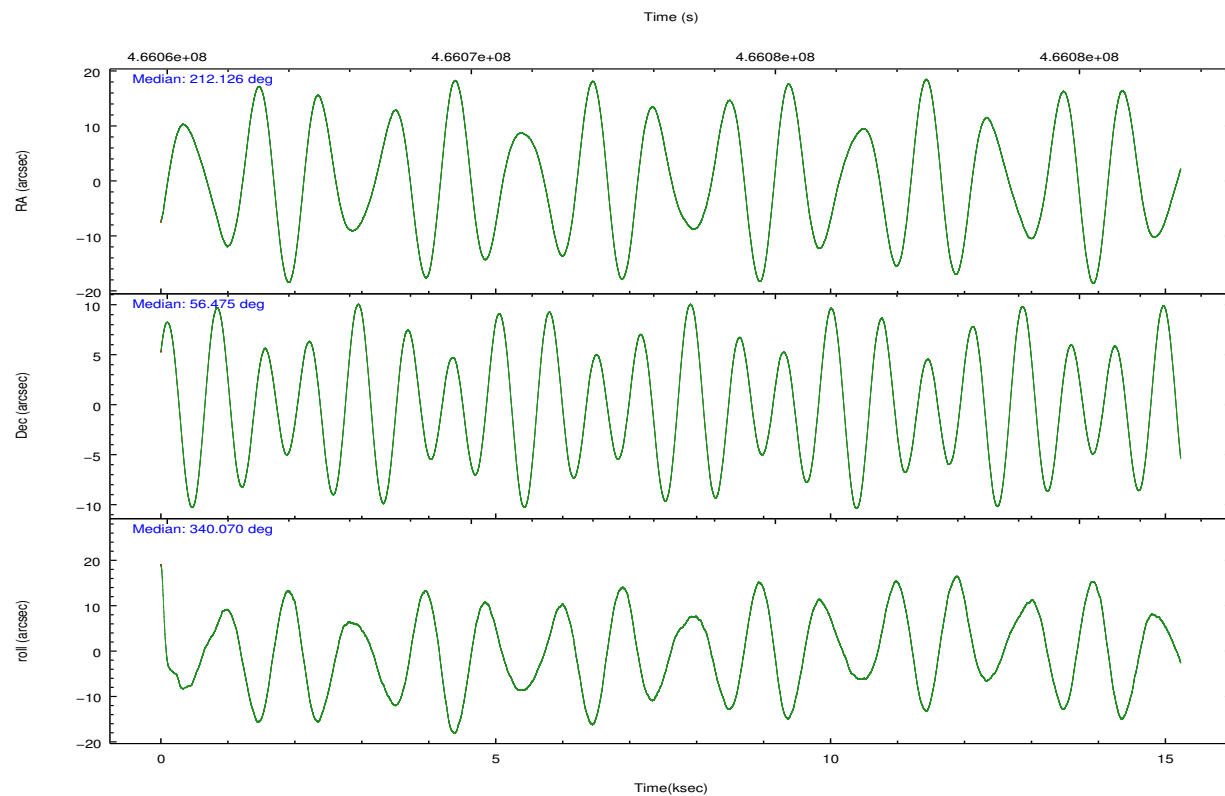
	<b>ccd 5</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	11199	3692	4652	10500
	8%	4%	4%	9%
grade 1 events	783	35	124	82
	0%	0%	0%	0%
grade 2 events	19475	2246	9933	7004
	14%	2%	9%	6%
grade 3 events	2283	962	4172	3657
	1%	1%	3%	3%
grade 4 events	2268	978	4161	3555
	1%	1%	3%	3%
grade 5 events	9744	3952	10845	5858
	7%	4%	10%	5%
grade 6 events	33053	2148	24852	7765
	24%	2%	23%	7%
grade 7 events	55340	66017	47137	72180
	41%	82%	44%	65%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	212.077821	212.1264234283803	Subarray requested	NONE	NONE
[deg] Pointing Dec	56.469882	56.47506696215049	Alternating exposures requested	N	N
[deg] Pointing Roll	339.959072	340.0751934645343	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	466065850.184000	466064549.89756			
Observation start date	2012-10-08T06:43:03	2012-10-08T06:22:29			
[s] Observation end time (MET)	466080893.184000	466081125.17345			
Observation end date	2012-10-08T10:53:46	2012-10-08T10:58:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



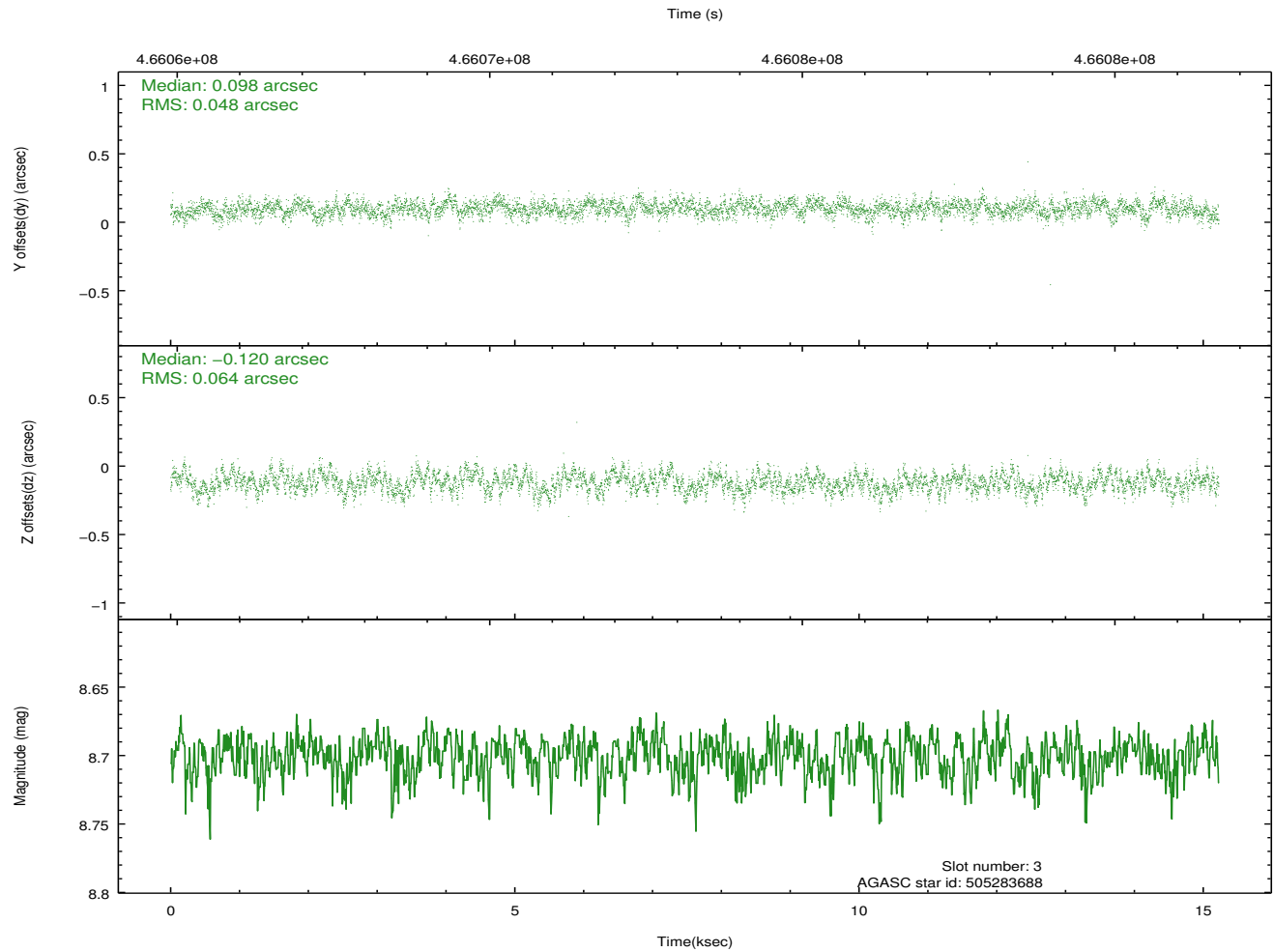
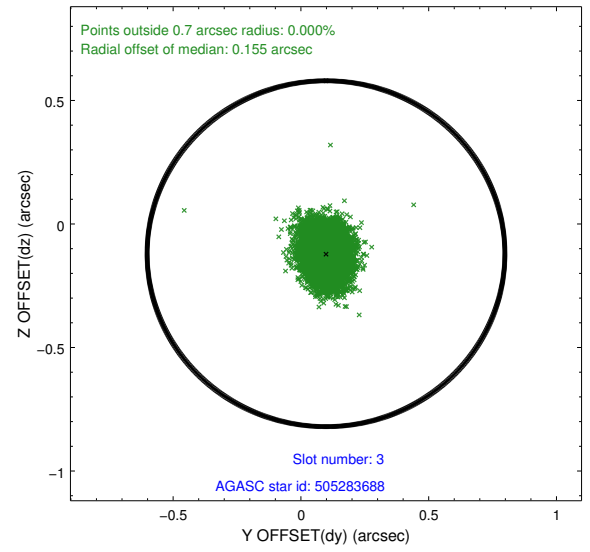
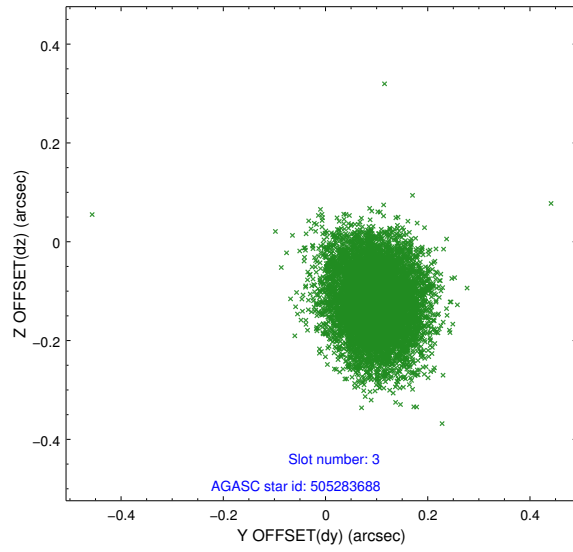


### Slot Statistics

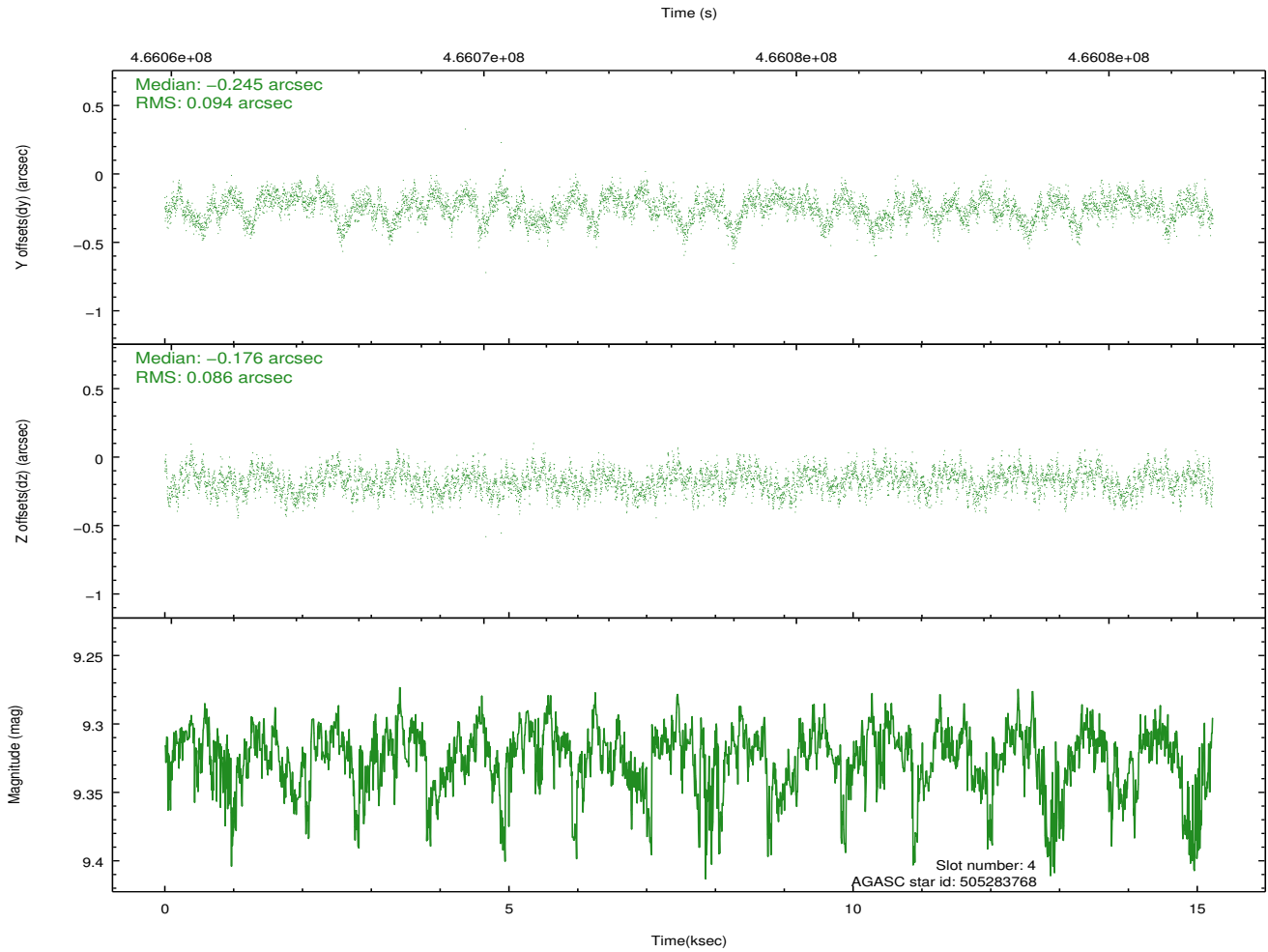
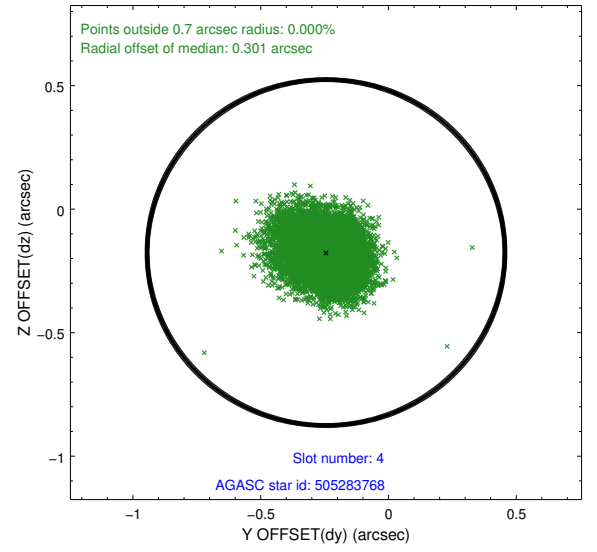
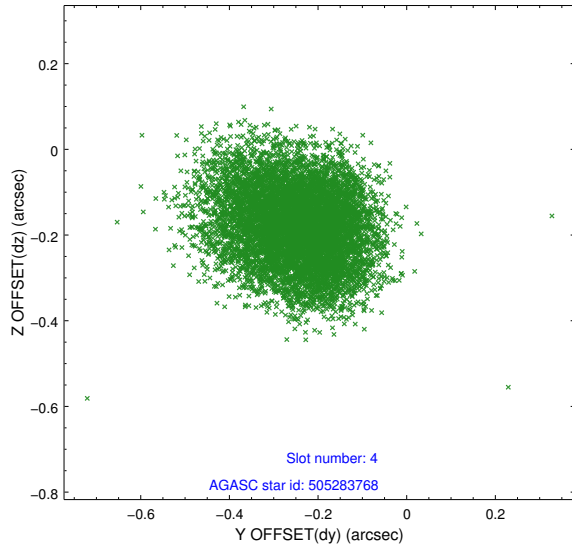
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	3714	-0.187	-0.121	0.007	0.012	0.000000	0.000000	-778.23	-1743.63
1	FID		ACIS-S-4	7.01	3715	0.212	0.103	0.006	0.010	0.000000	0.000000	2135.42	164.60
2	FID		ACIS-S-6	7.15	3714	-0.052	0.026	0.010	0.015	0.000000	0.000000	384.41	802.35
3	GUIDE	used	505283688	8.70	7427	0.098	-0.120	0.085	0.139	211.845119	56.721091	-741.96	692.54
4	GUIDE	used	505283768	9.32	7424	-0.245	-0.176	0.137	0.216	212.372621	56.086825	1028.70	-1091.13
5	GUIDE	used	505285696	7.00	7429	0.134	0.068	0.079	0.126	211.324174	56.520646	-1471.00	-333.44
6	GUIDE	used	505285816	9.14	7405	-0.105	-0.069	0.147	0.229	212.600034	56.776374	588.49	1393.28
7	GUIDE	used	505292384	9.05	7419	0.128	0.303	0.092	0.148	211.845486	55.862904	308.56	-2212.15

## 2.4 Star Slots

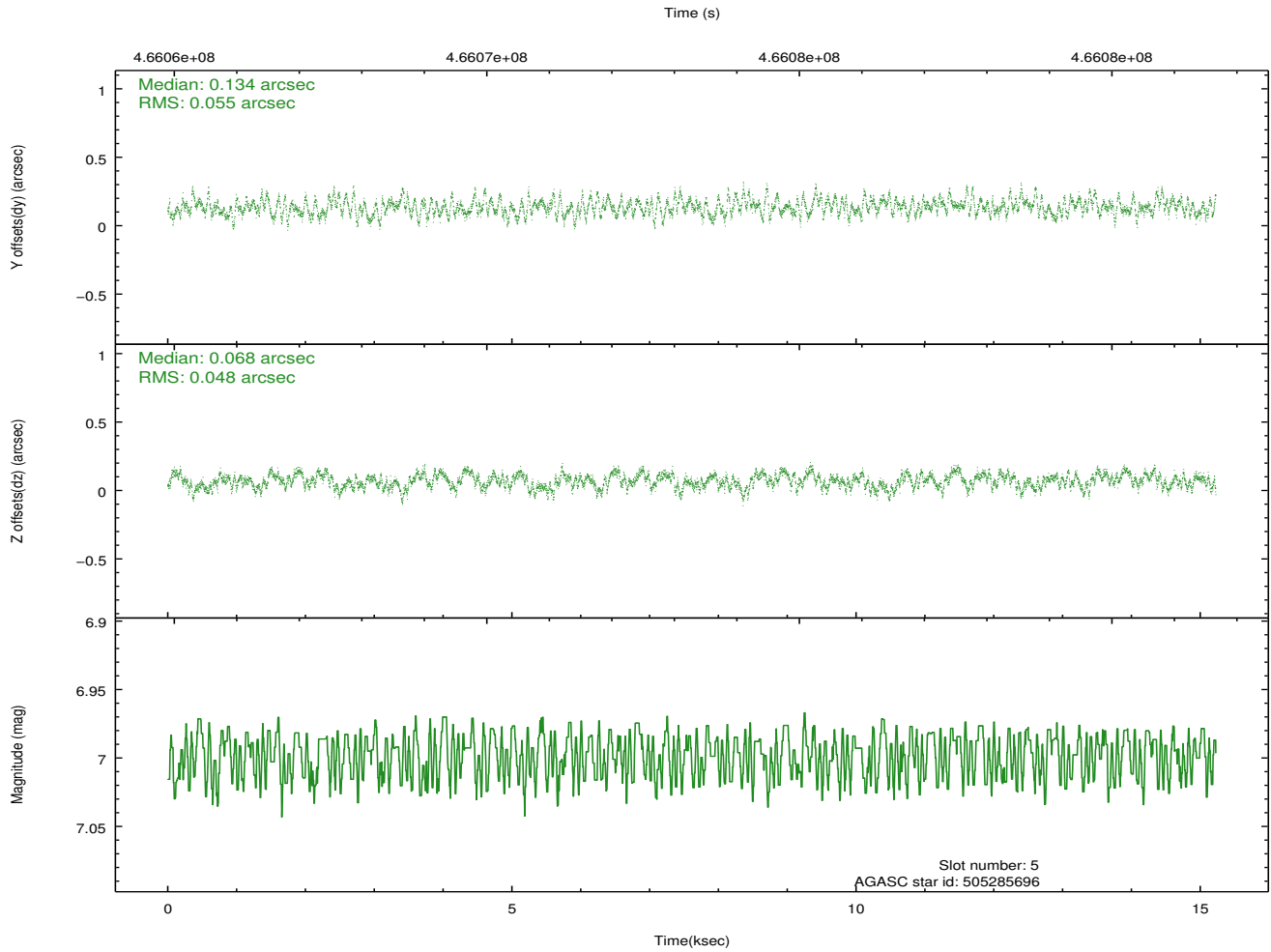
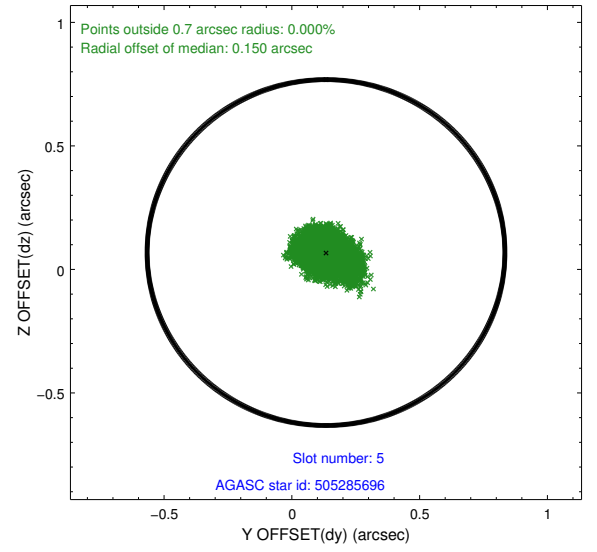
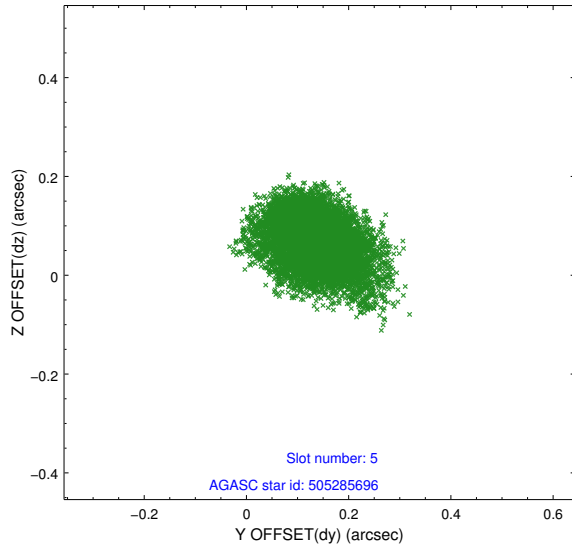
### 2.4.1 Slot 3



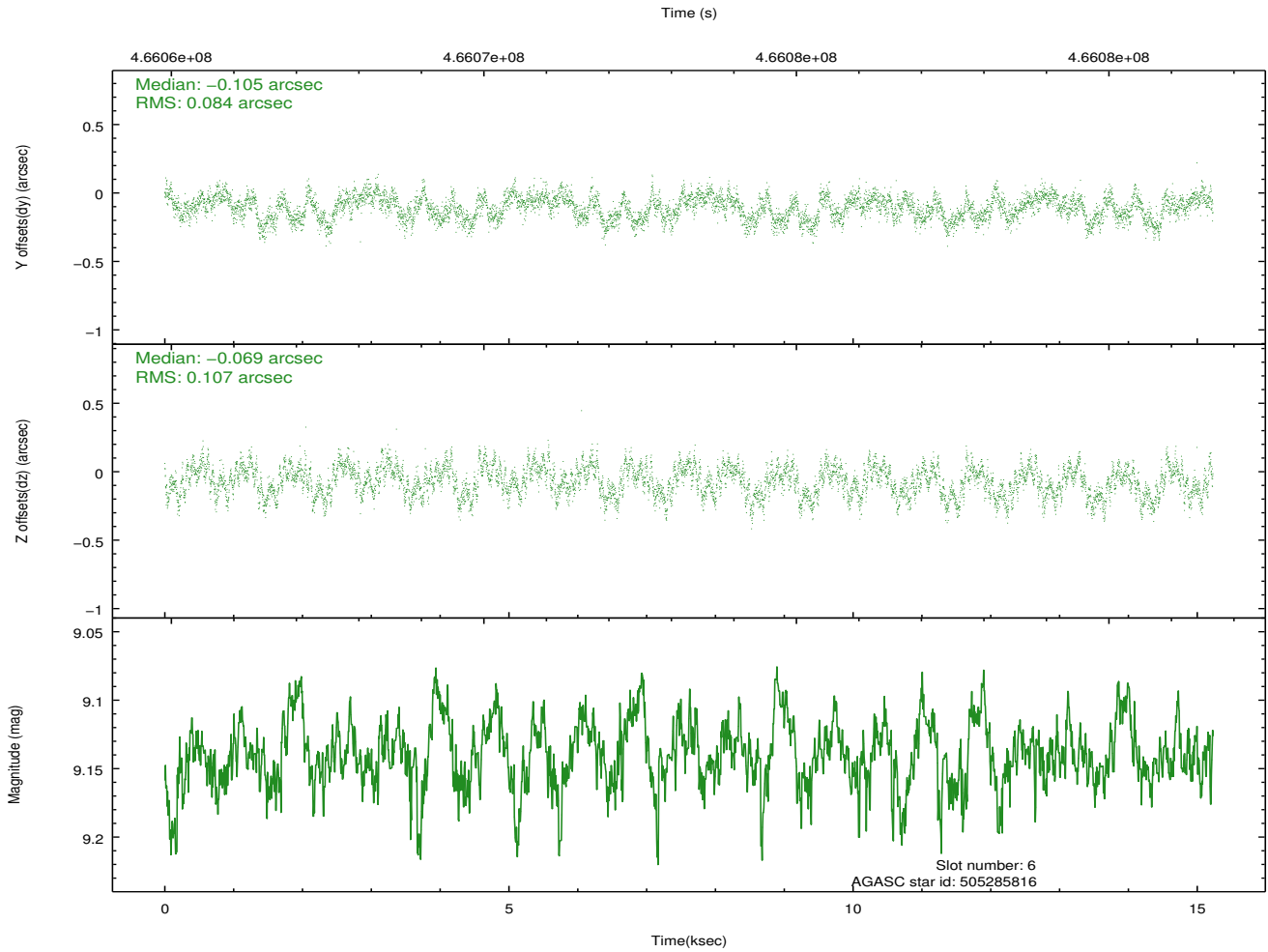
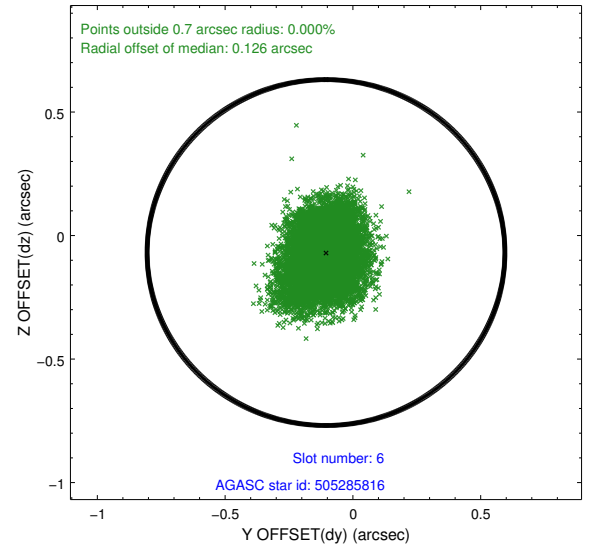
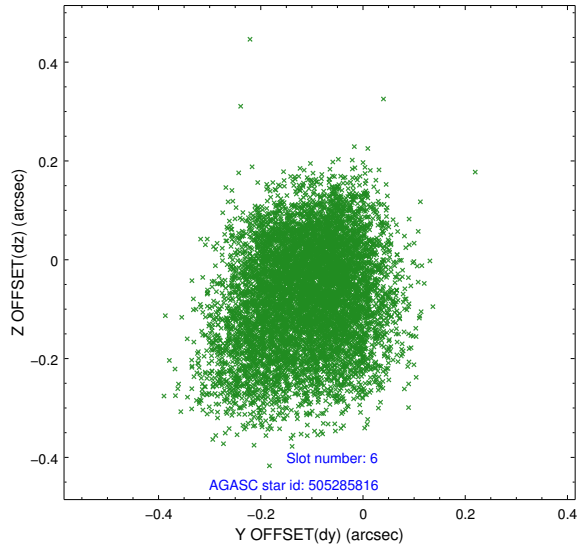
## 2.4.2 Slot 4



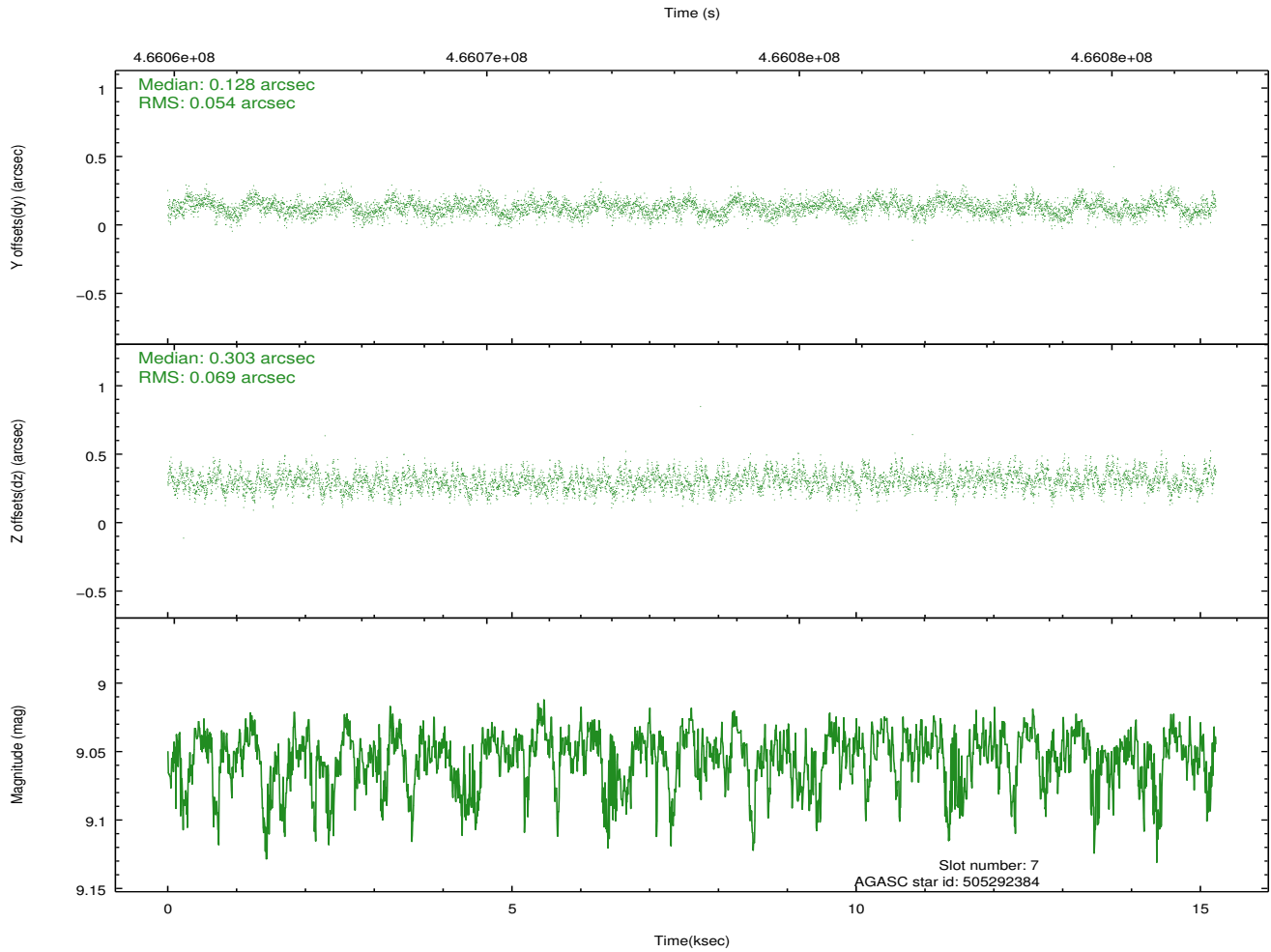
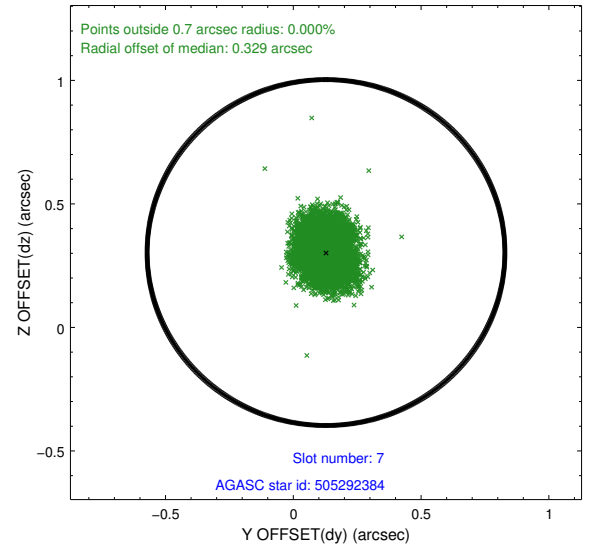
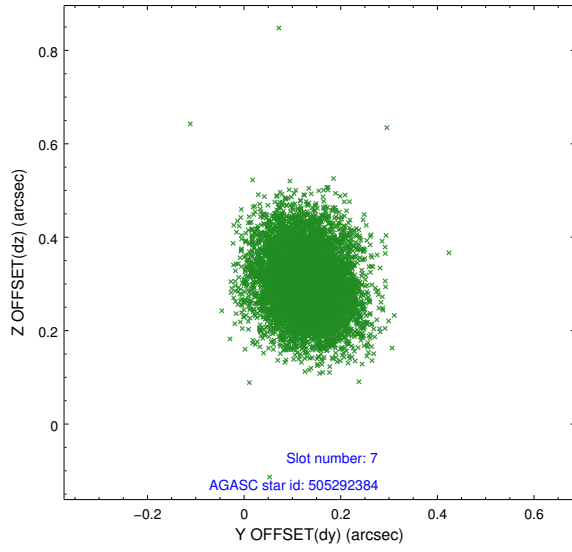
### 2.4.3 Slot 5



## 2.4.4 Slot 6

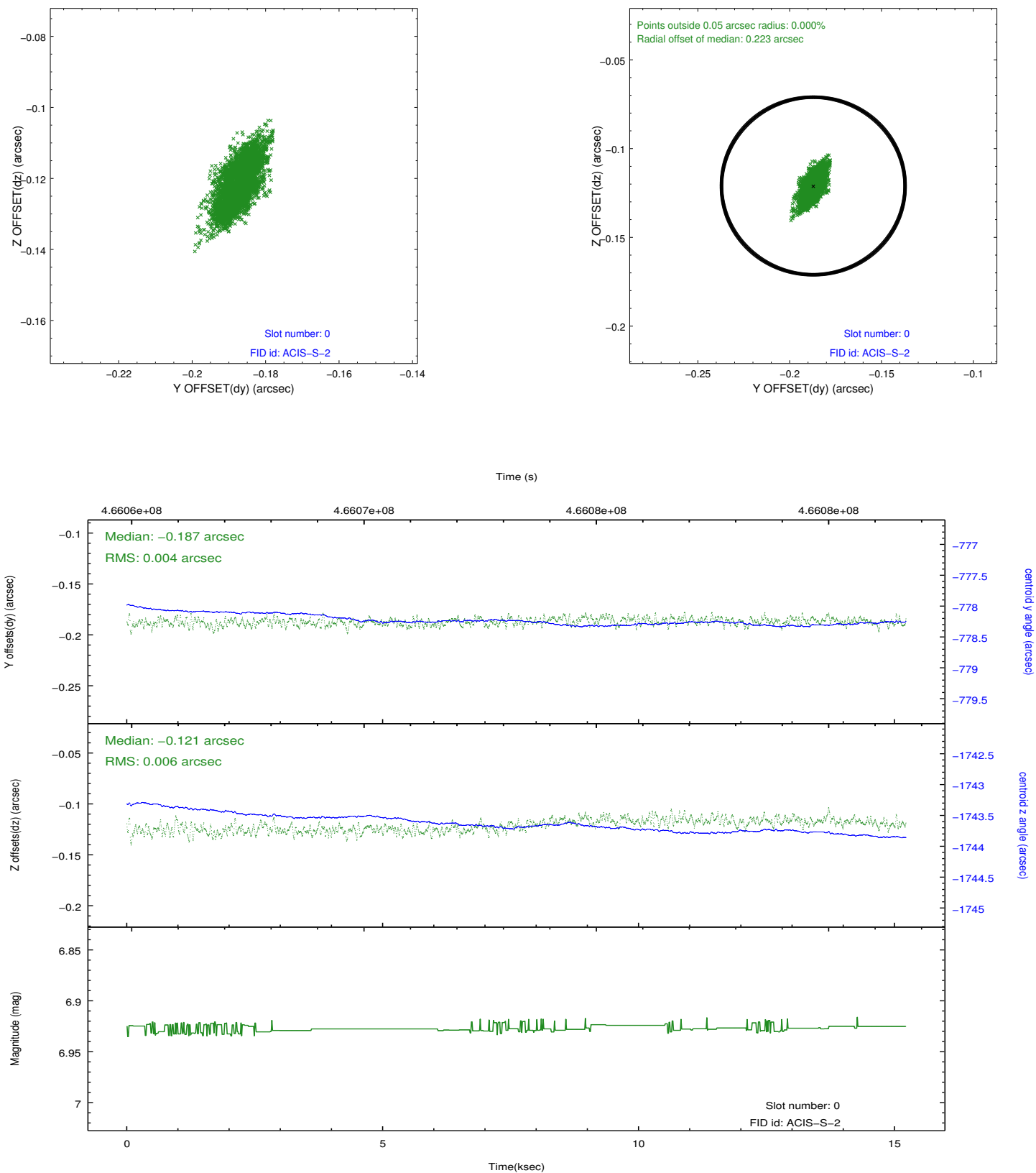


## 2.4.5 Slot 7

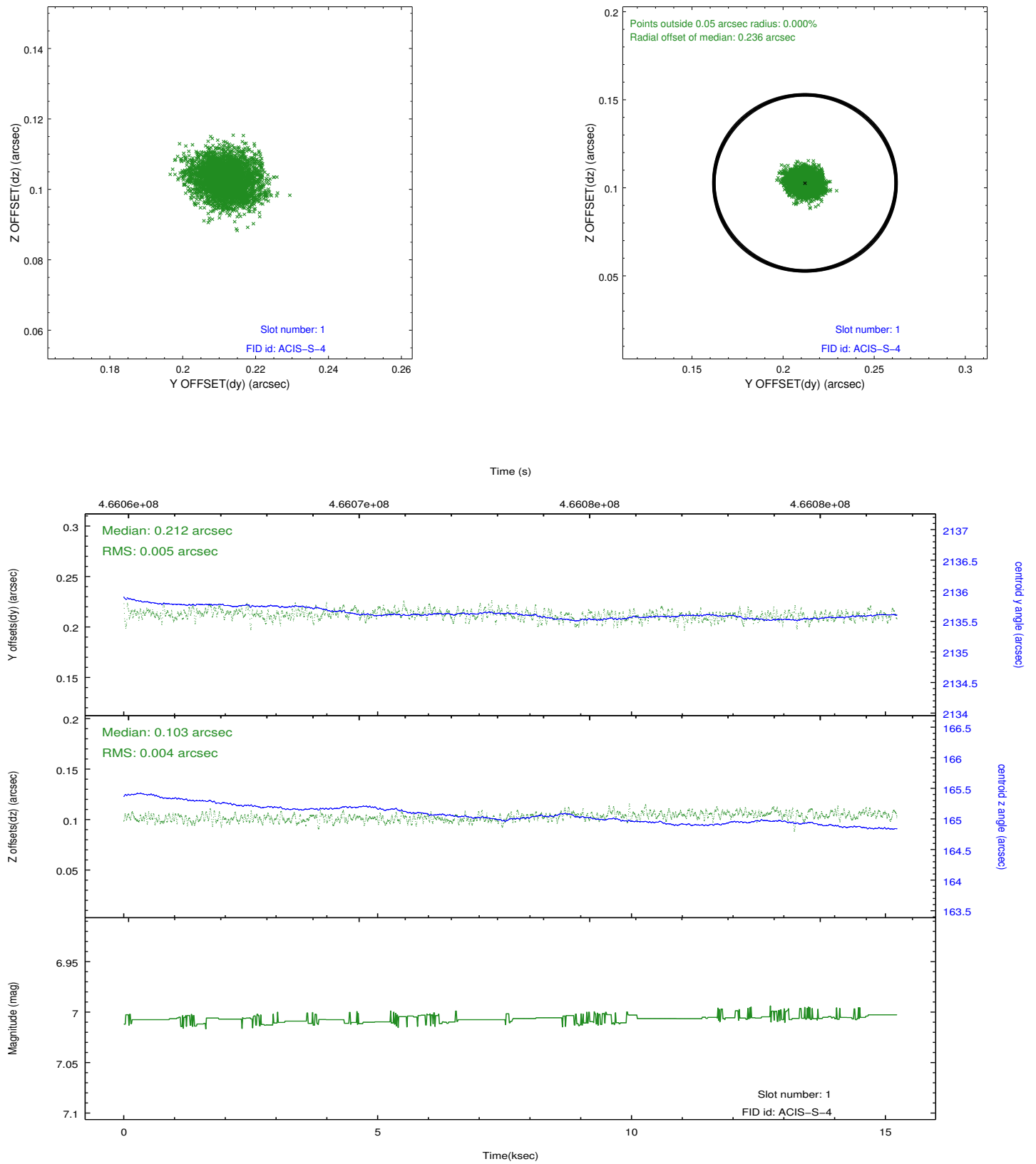


## 2.5 FID Slots

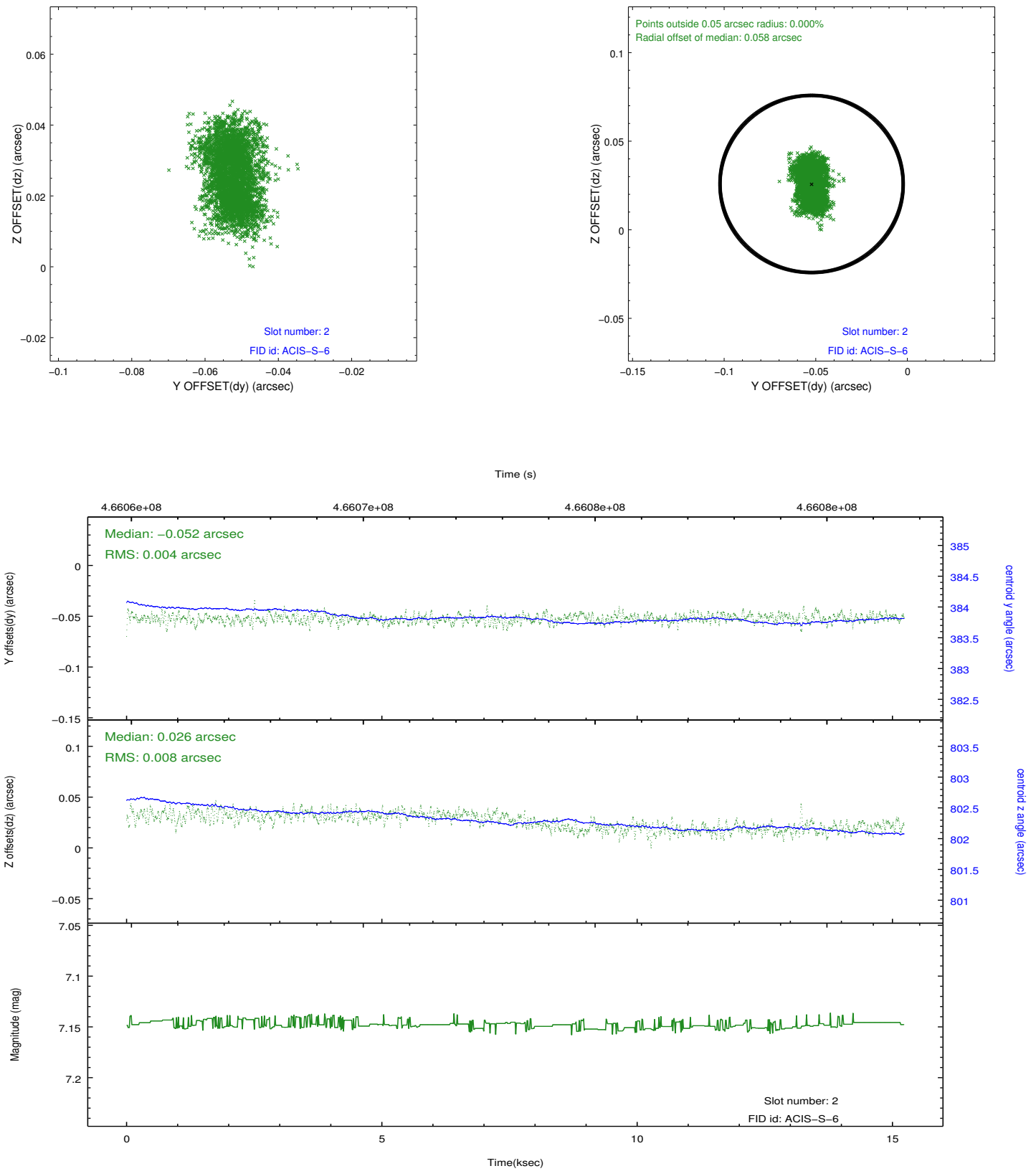
### 2.5.1 Slot 0



## 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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.115600116253

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.