

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7863 - L2 Version 2  
Chandra X-Ray Center

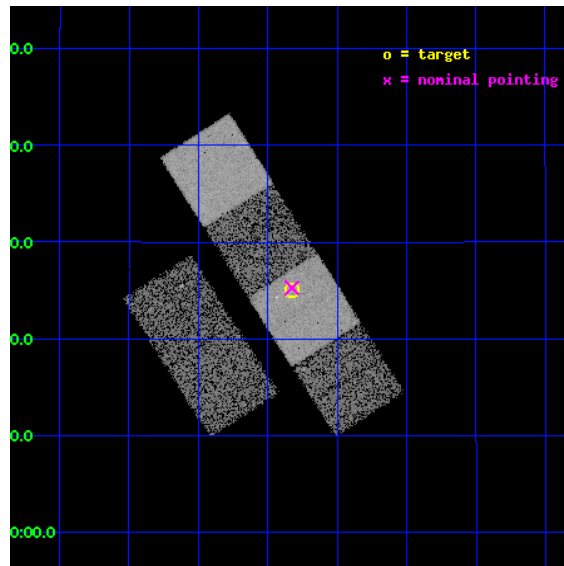
L2 Processing Date : May 5 2012

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# 1 Front

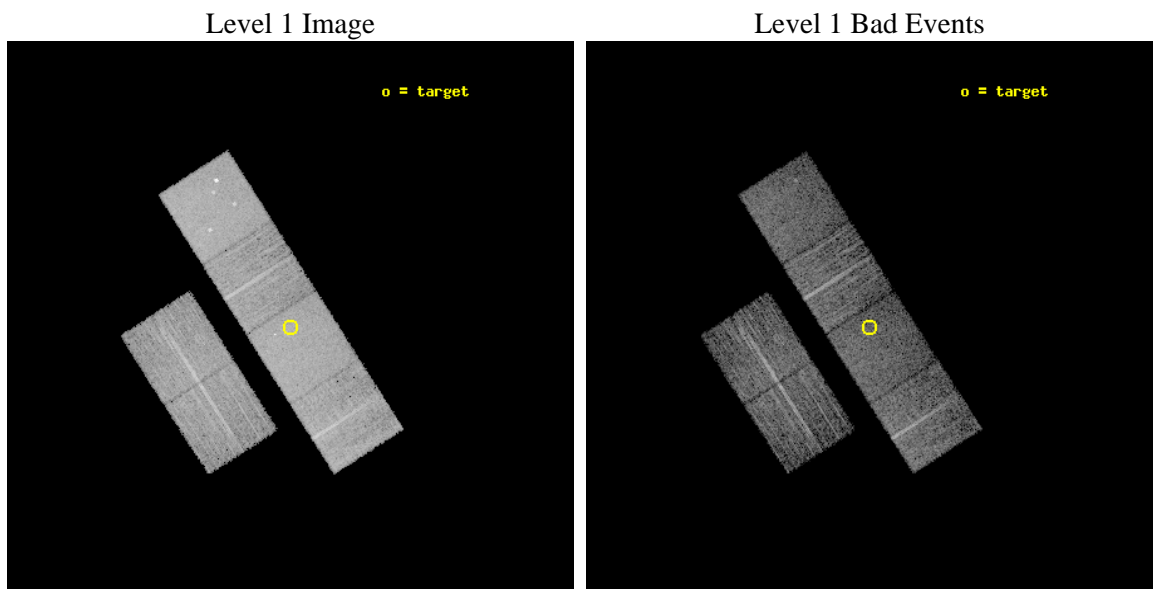
seq_num	701527	Sequence number
obs_id	7863	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	NGC 4254	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	184.706667	Observer's specified target RA [deg]
dec_targ	14.4165	Observer's specified target Dec [deg]
ra_nom	184.70663163248	Nominal RA [deg]
dec_nom	14.421351851569	Nominal Dec [deg]
roll_nom	57.493693763159	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5139.1999809146	Sum of GTIs [s]
livetime	5074.1243363015	Livetime [s]
ontime2	5139.1999809146	Sum of GTIs [s]
ontime3	5139.1999809146	Sum of GTIs [s]
ontime5	5139.1999809146	Sum of GTIs [s]
ontime6	5139.1999809146	Sum of GTIs [s]
ontime7	5139.1999809146	Sum of GTIs [s]
ontime8	5135.9591102004	Sum of GTIs [s]
l2events	82280	Number of level 2 events



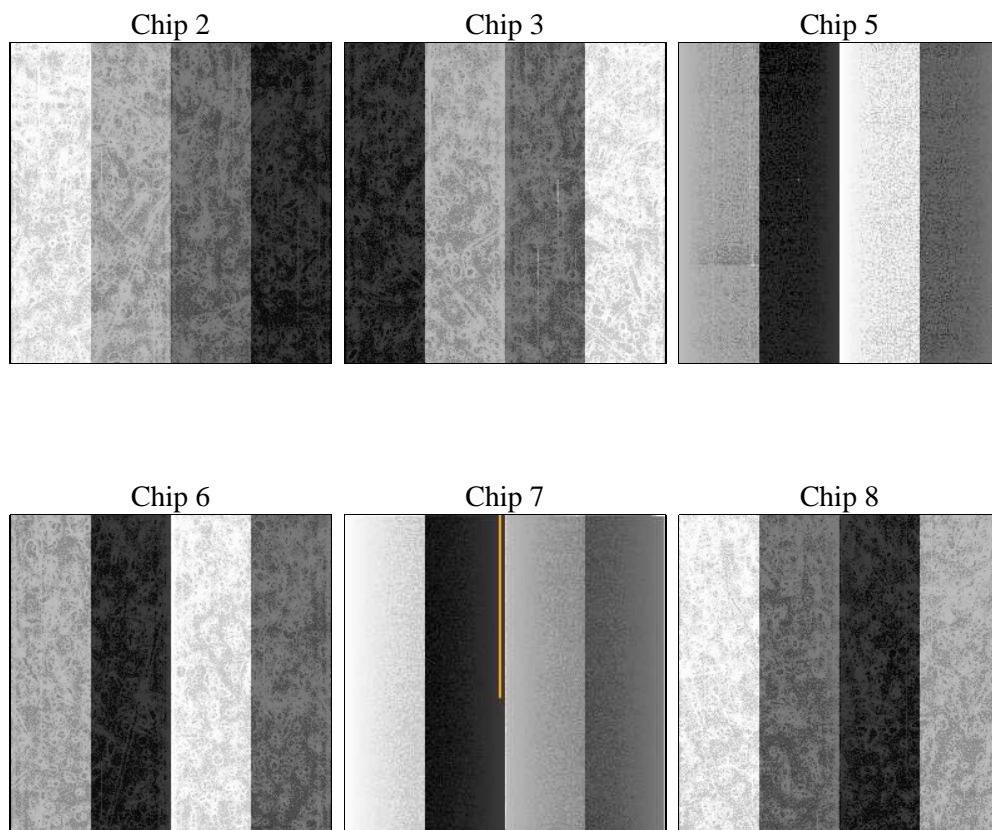
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	5139.1999809146	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	5139.1999809146	Sum of GTIs [s]
date	2012-05-05T04:51:01	Date and time of file creation	ontime3	5139.1999809146	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5139.1999809146	Sum of GTIs [s]
			ontime6	5139.1999809146	Sum of GTIs [s]
			ontime7	5139.1999809146	Sum of GTIs [s]
			ontime8	5135.9591102004	Sum of GTIs [s]
			l1events	403316	Number of level 1 events

### 2.1.4 Events

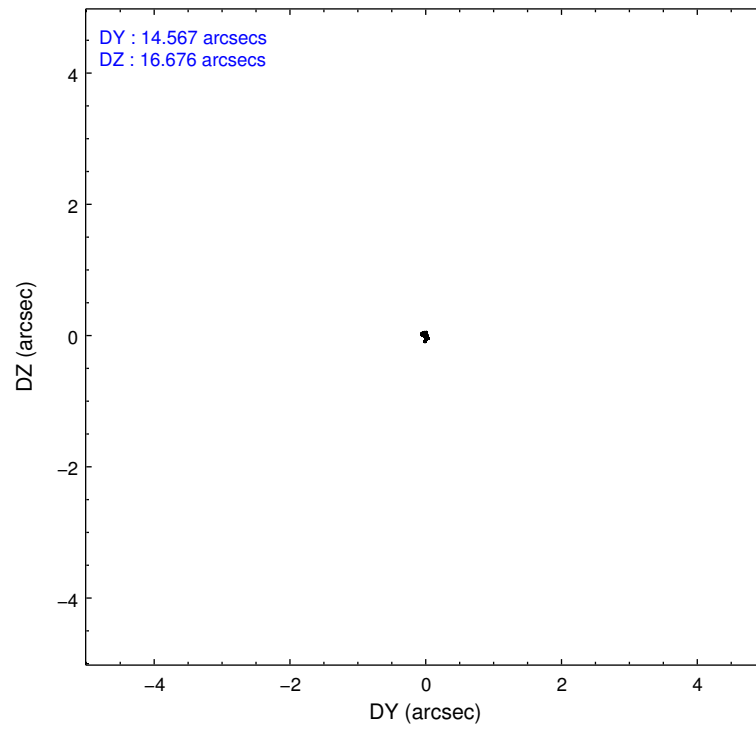
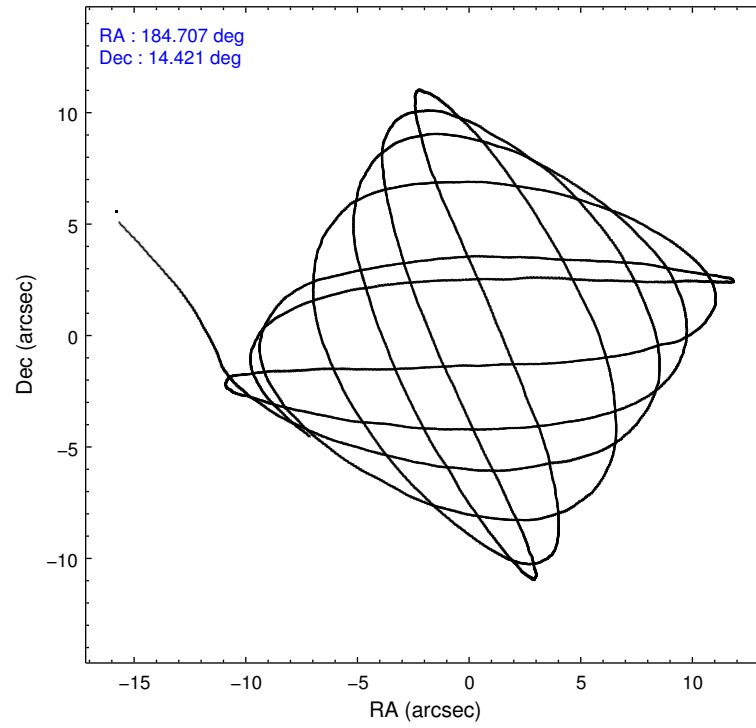
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	57254	52793	85922	58695	77986	70666	grade 0 events	3078	3013	4305	2792	3127	5396
rejected events	51175	46886	50192	52559	48811	55891		5%	5%	5%	4%	4%	7%
rejected %	89%	88%	58%	89%	62%	79%	grade 1 events	46	38	236	29	73	48
								0%	0%	0%	0%	0%	0%
							grade 2 events	1455	1308	12986	1557	6850	3664
								2%	2%	15%	2%	8%	5%
							grade 3 events	616	609	1450	609	2885	1832
								1%	1%	1%	1%	3%	2%
							grade 4 events	634	621	1420	608	2797	1600
								1%	1%	1%	1%	3%	2%
							grade 5 events	2197	2540	5877	2651	7226	3386
								3%	4%	6%	4%	9%	4%
							grade 6 events	1135	1126	20568	1406	17632	4066
								1%	2%	23%	2%	22%	5%
							grade 7 events	48093	43538	39080	49043	37396	50674
								83%	82%	45%	83%	47%	71%

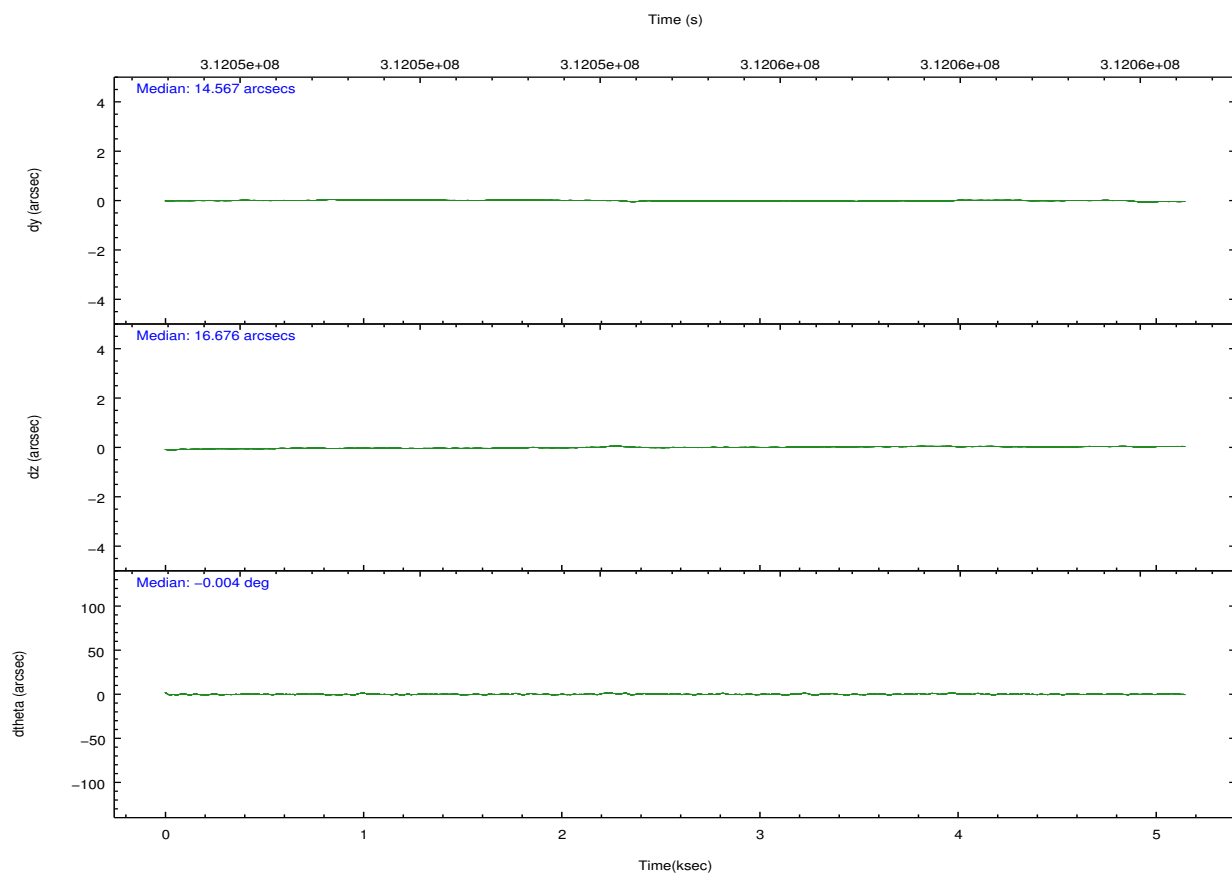
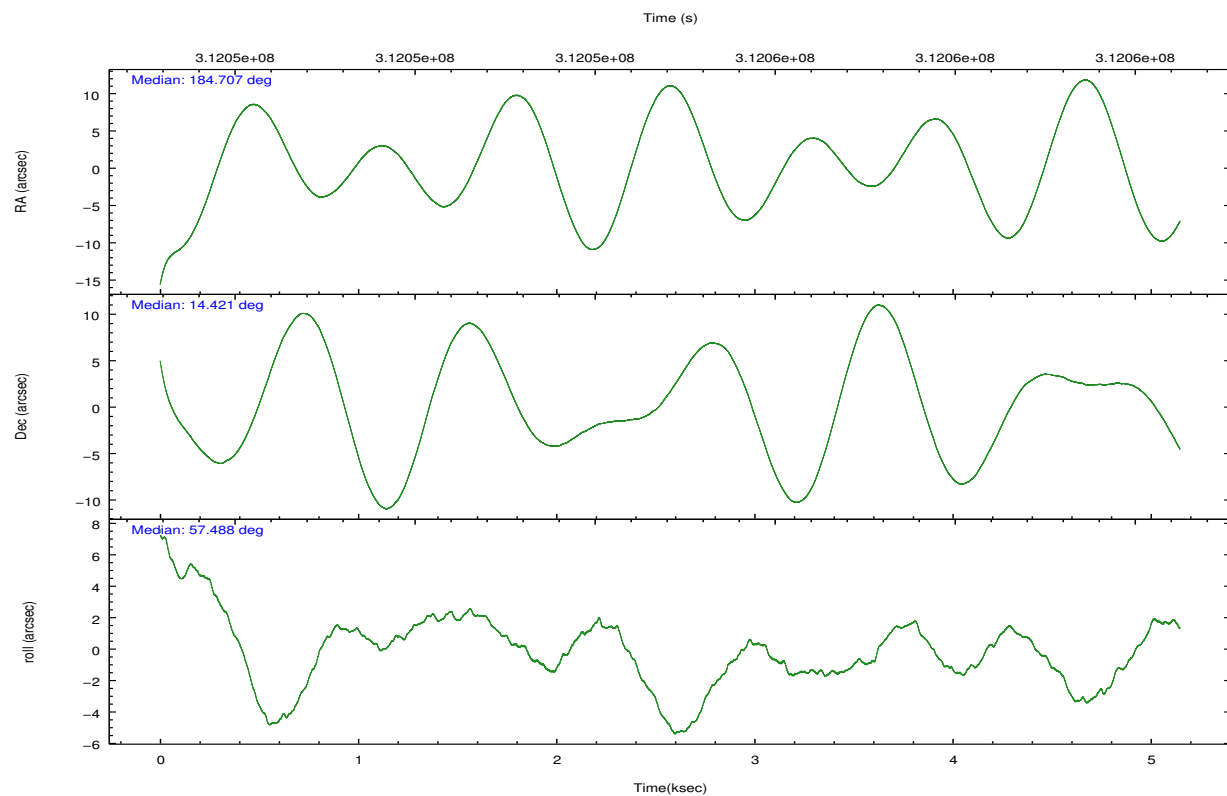


## 2.2 Compared Parameters

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	184.705883	184.706631632483	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.394020	14.42135185156937	Alternating exposures requested	N	N
[deg] Pointing Roll	57.337260	57.49369376315898	[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)	312051986.184000	312050571.03451			
Observation start date	2007-11-21T17:05:21	2007-11-21T16:42:51			
[s] Observation end time (MET)	312056986.184000	312057821.88486			
Observation end date	2007-11-21T18:28:41	2007-11-21T18:43:41			
Read mode	TIMED	TIMED			

## 2.3 Aspect



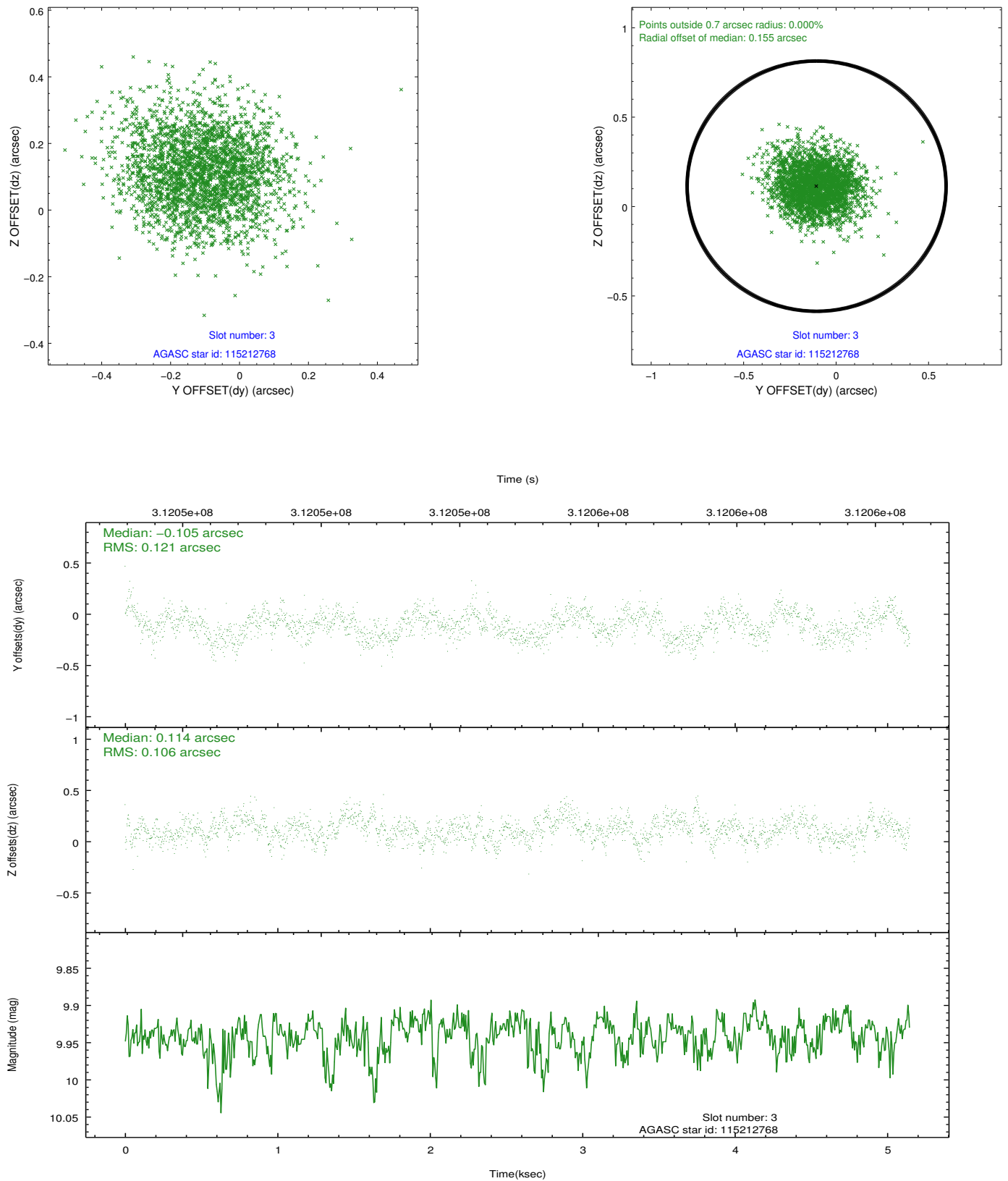


### Slot Statistics

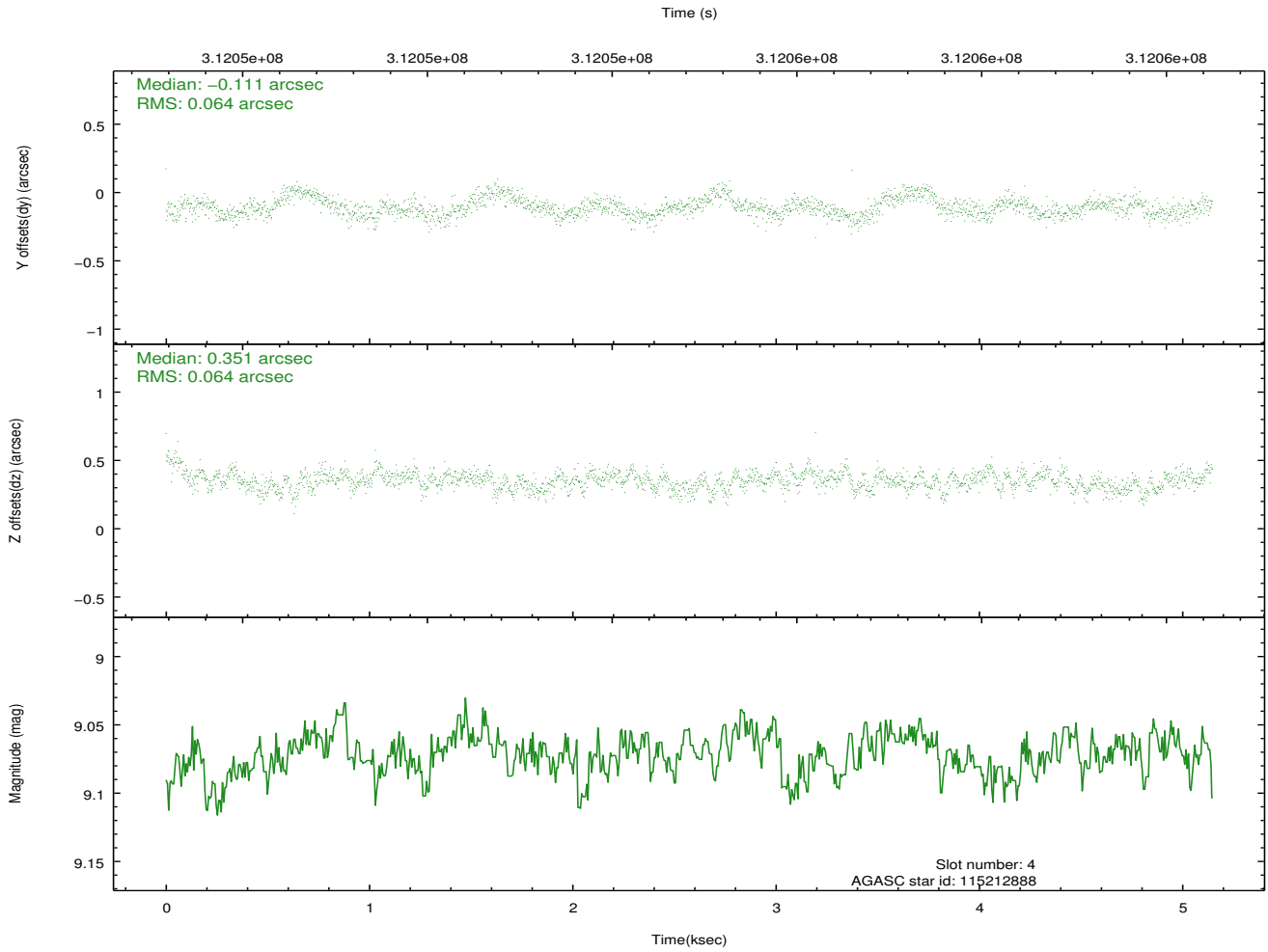
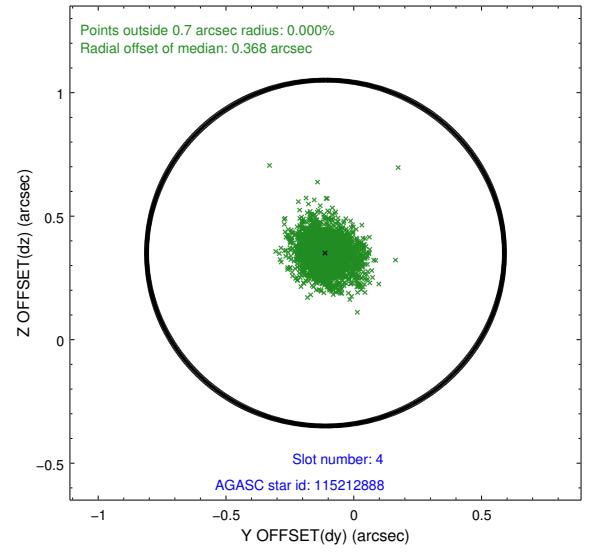
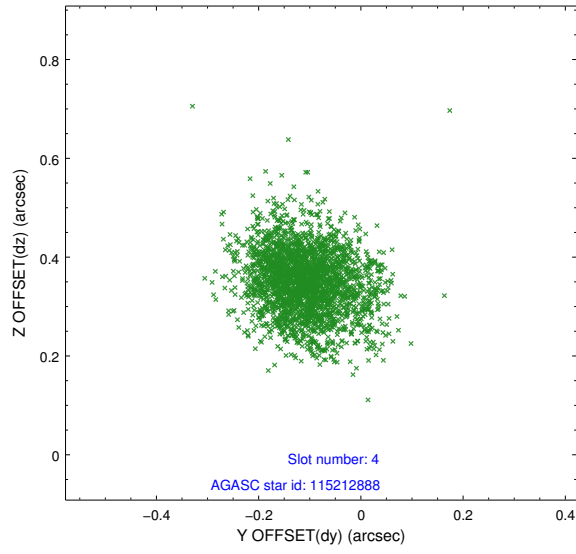
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	1256	0.102	-0.100	0.007	0.012	0.000000	0.000000	928.58	-1733.79
1	FID	ACIS-S-5	7.23	1256	-0.164	0.059	0.006	0.011	0.000000	0.000000	-1819.99	162.76
2	FID	ACIS-S-6	7.32	1256	0.040	0.052	0.007	0.013	0.000000	0.000000	392.85	808.00
3	GUIDE	115212768	9.94	2510	-0.105	0.114	0.171	0.276	185.333076	14.758665	2286.46	-1128.01
4	GUIDE	115212888	9.07	2510	-0.111	0.351	0.095	0.156	184.962096	14.383434	451.82	-772.64
5	GUIDE	115217168	9.63	2509	0.262	-0.159	0.112	0.178	184.139200	14.158763	-1777.85	1208.97
6	GUIDE	115218912	8.28	2512	0.062	-0.061	0.071	0.113	184.400783	14.442830	-426.53	991.41
7	GUIDE	189416408	8.45	2510	-0.106	-0.245	0.072	0.115	184.461757	15.019223	1436.53	1930.67

## 2.4 Star Slots

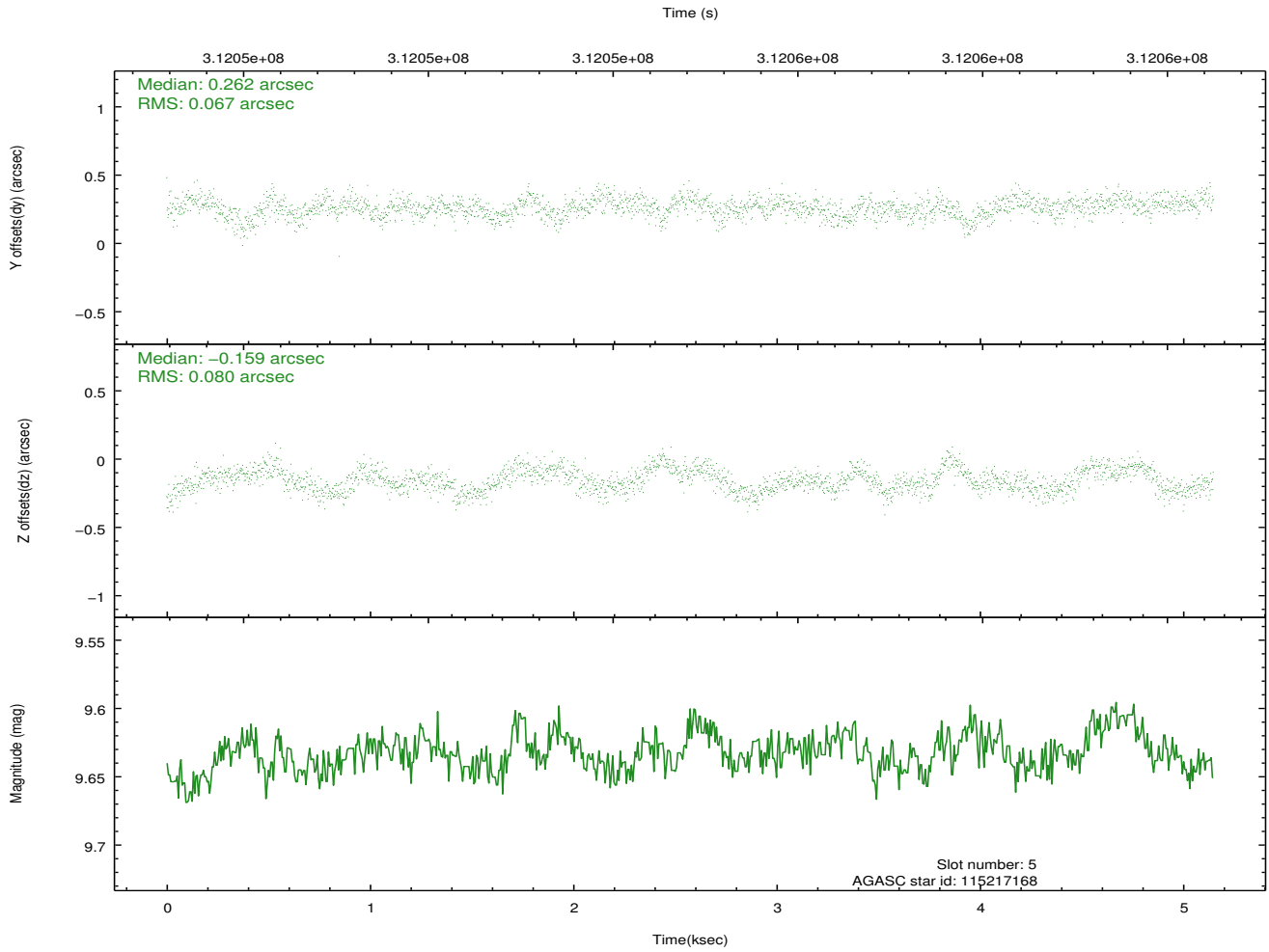
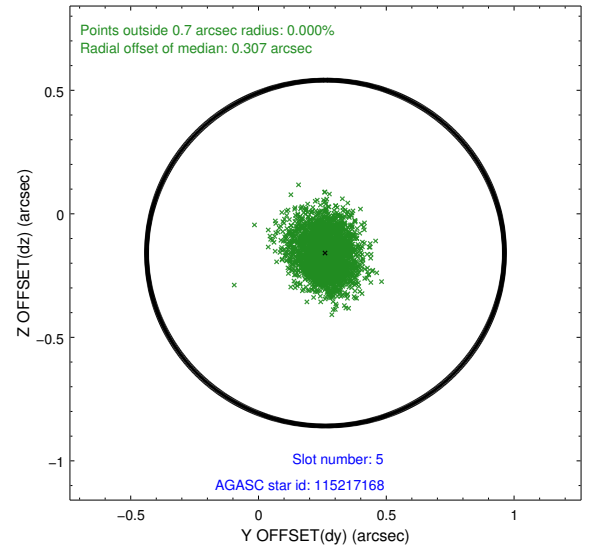
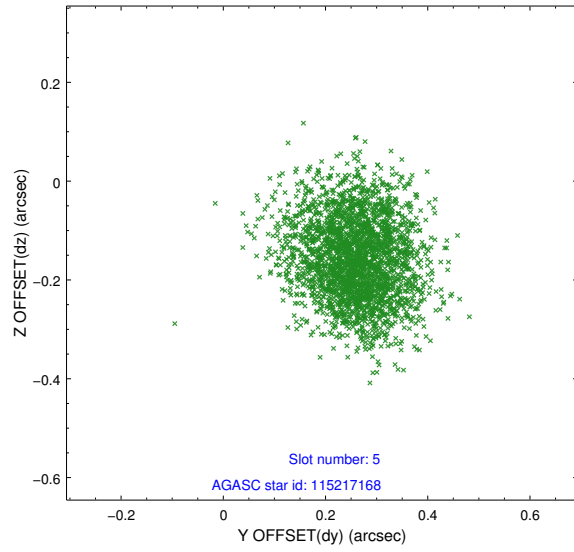
### 2.4.1 Slot 3



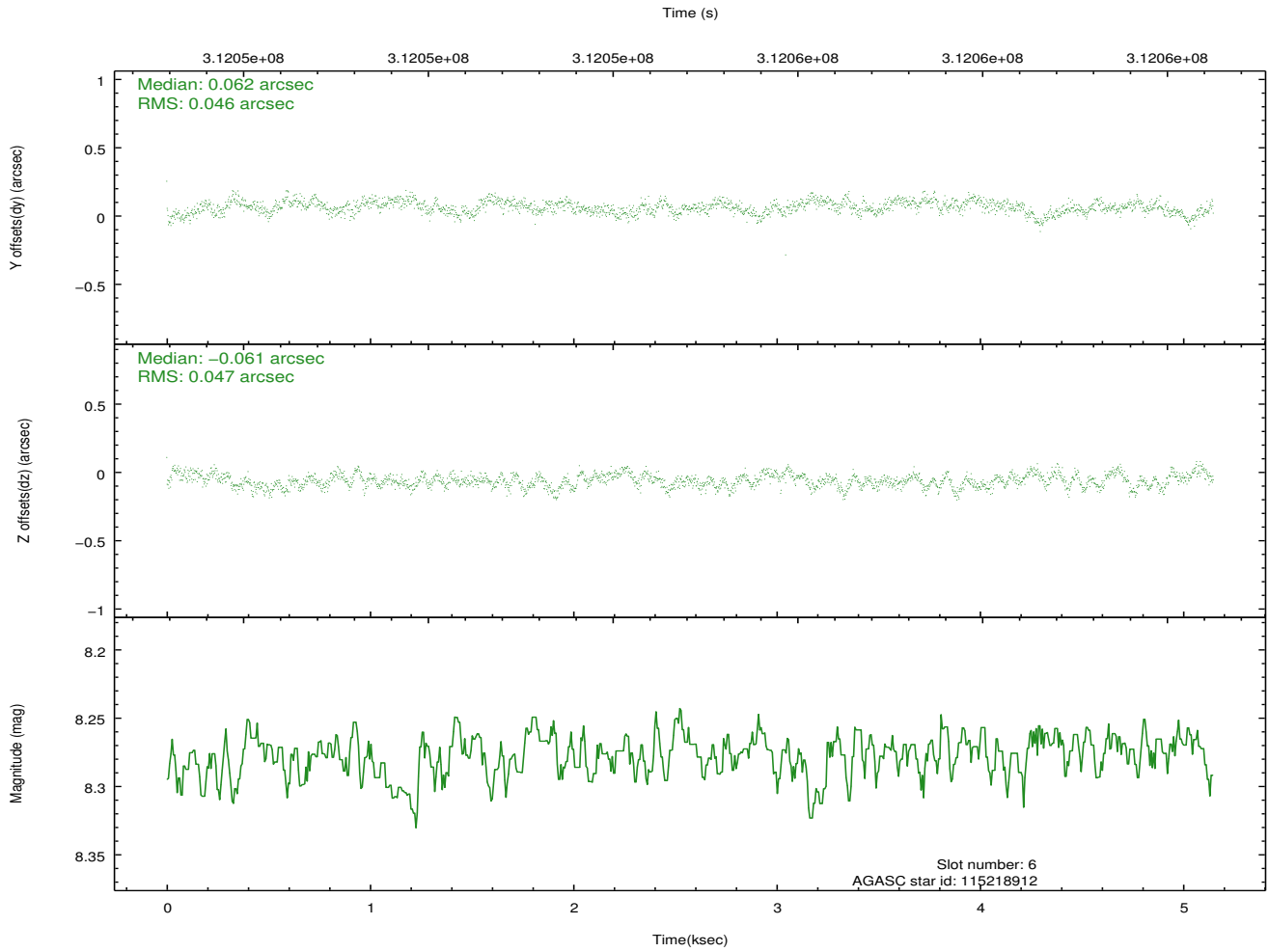
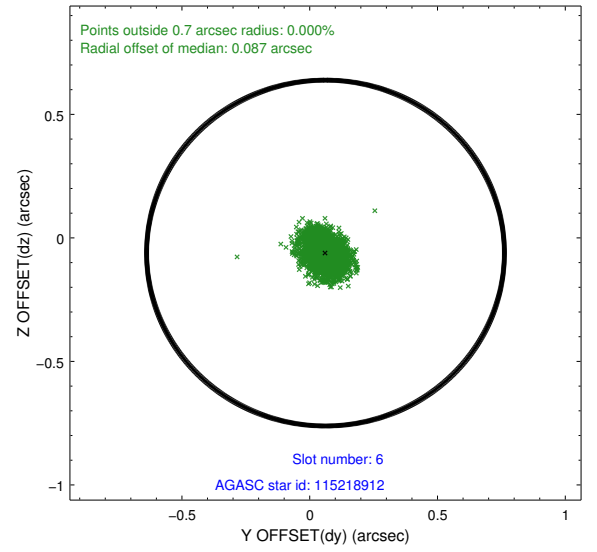
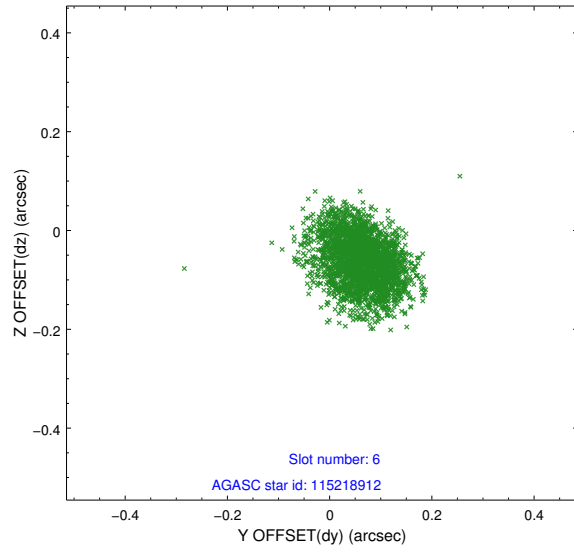
## 2.4.2 Slot 4



### 2.4.3 Slot 5

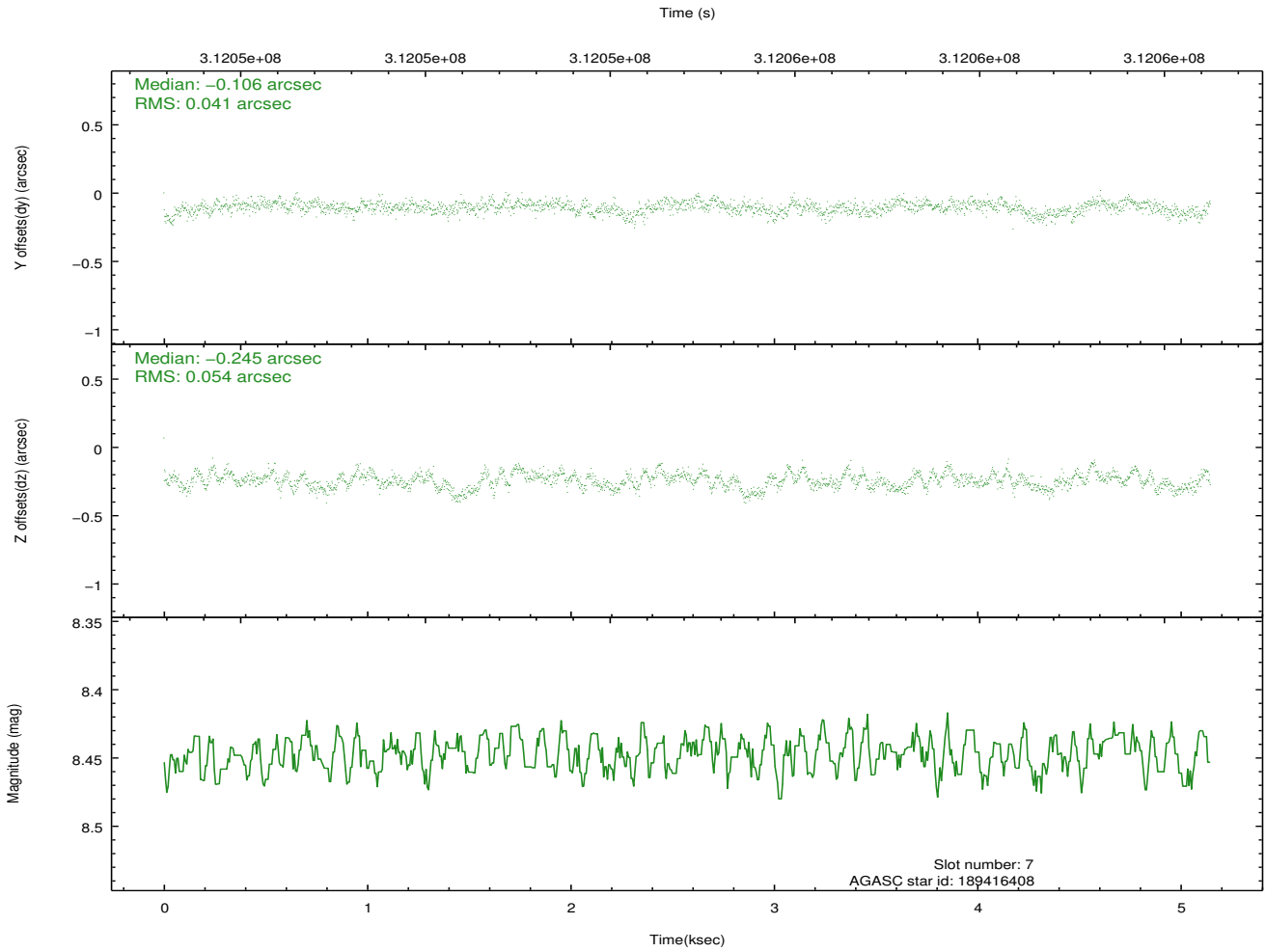
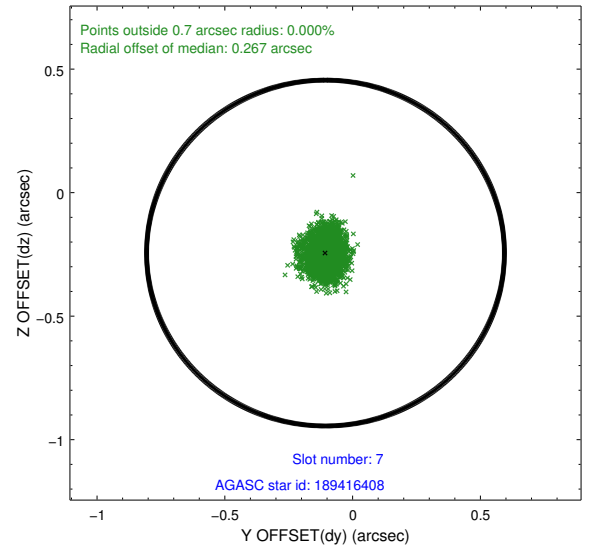
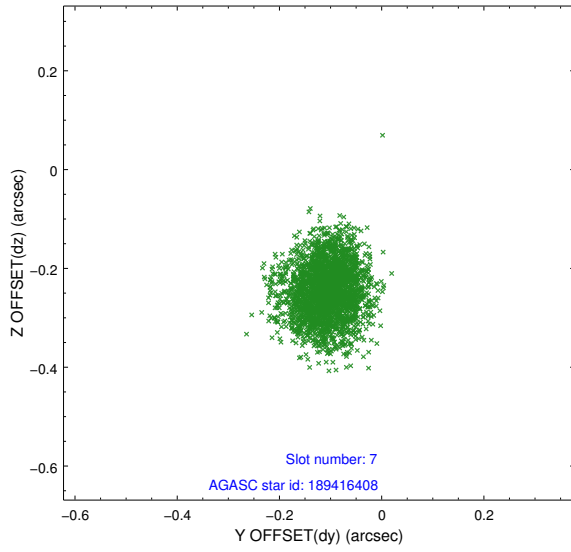


## 2.4.4 Slot 6



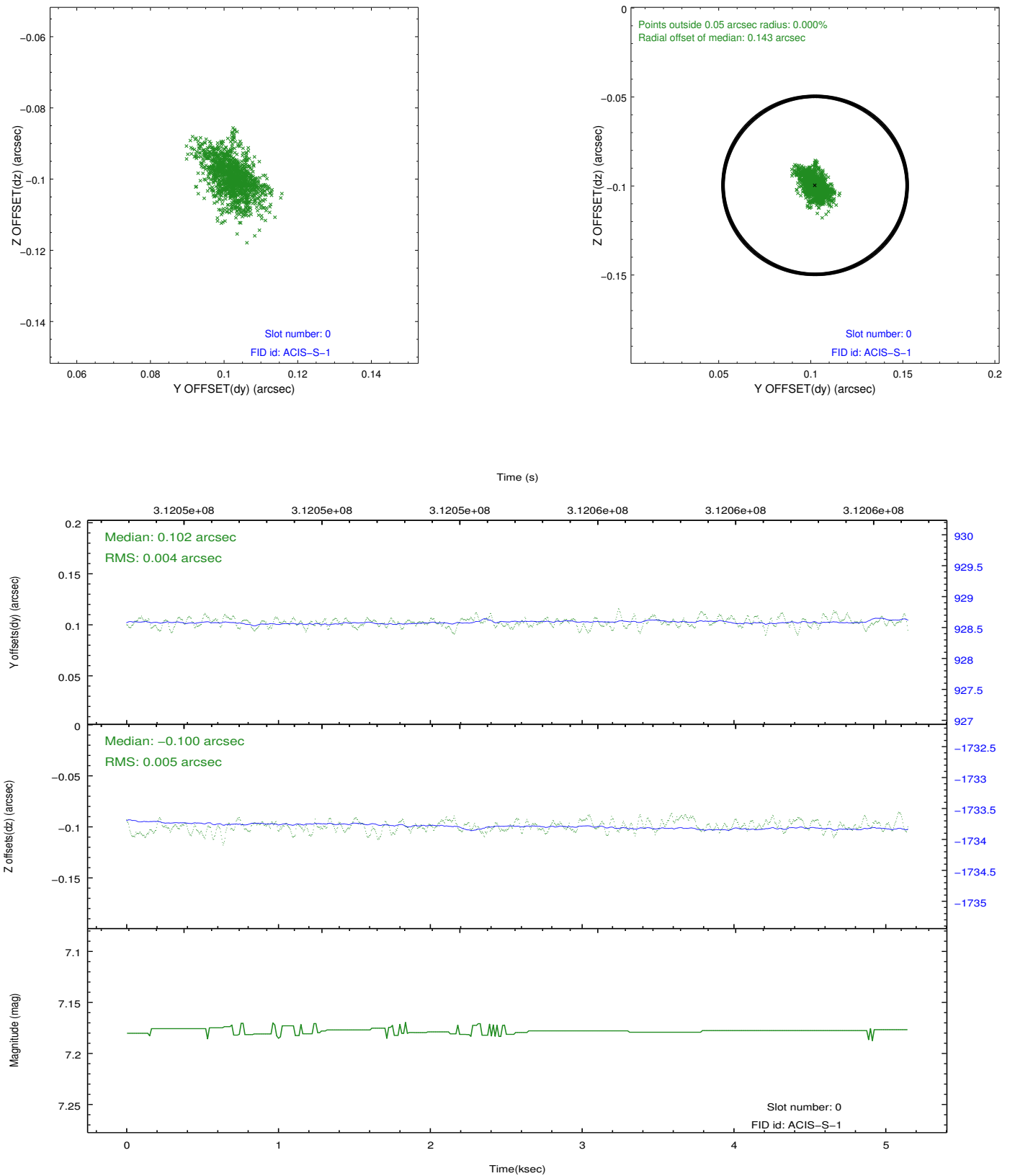


## 2.4.5 Slot 7

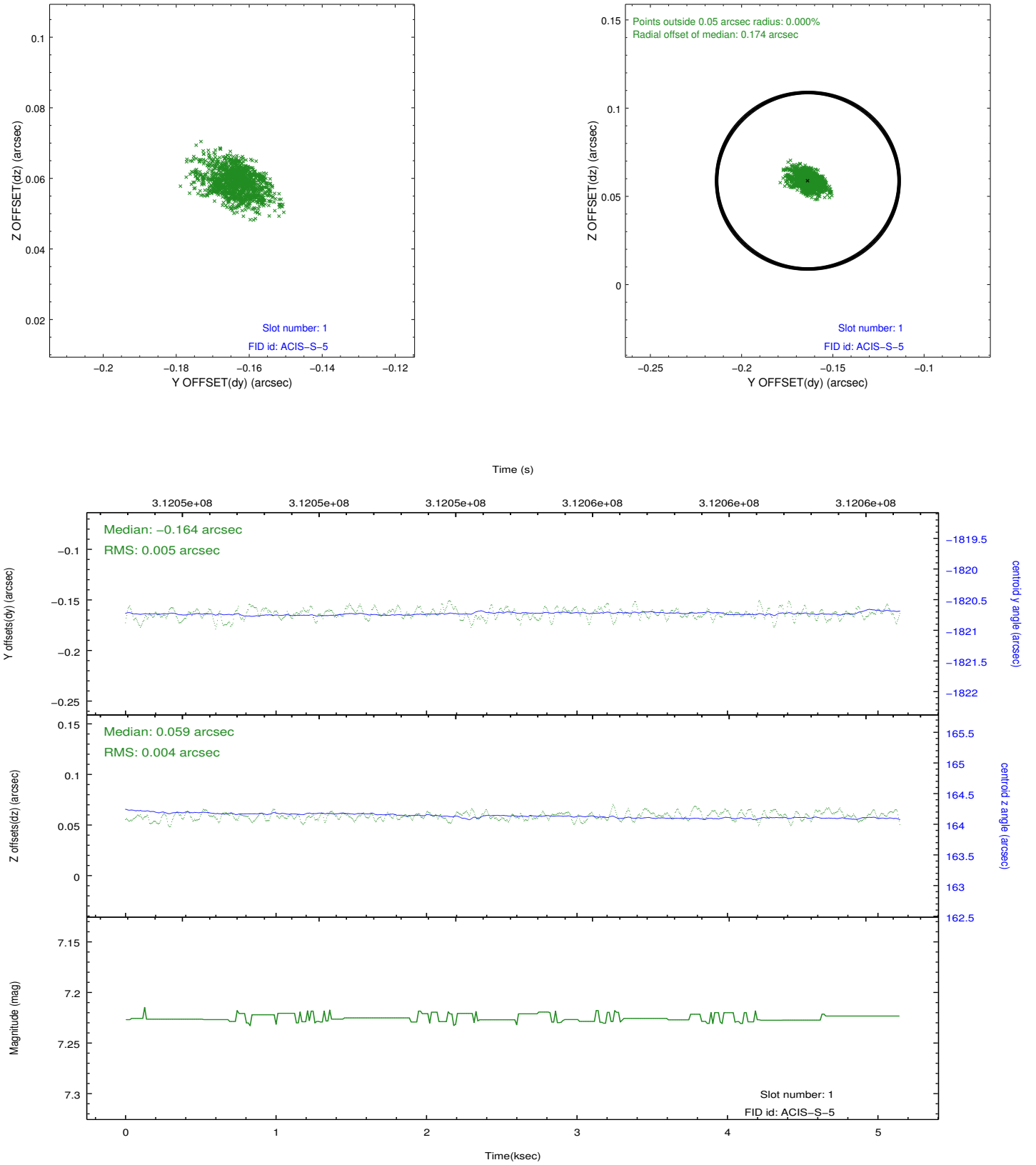


## 2.5 FID Slots

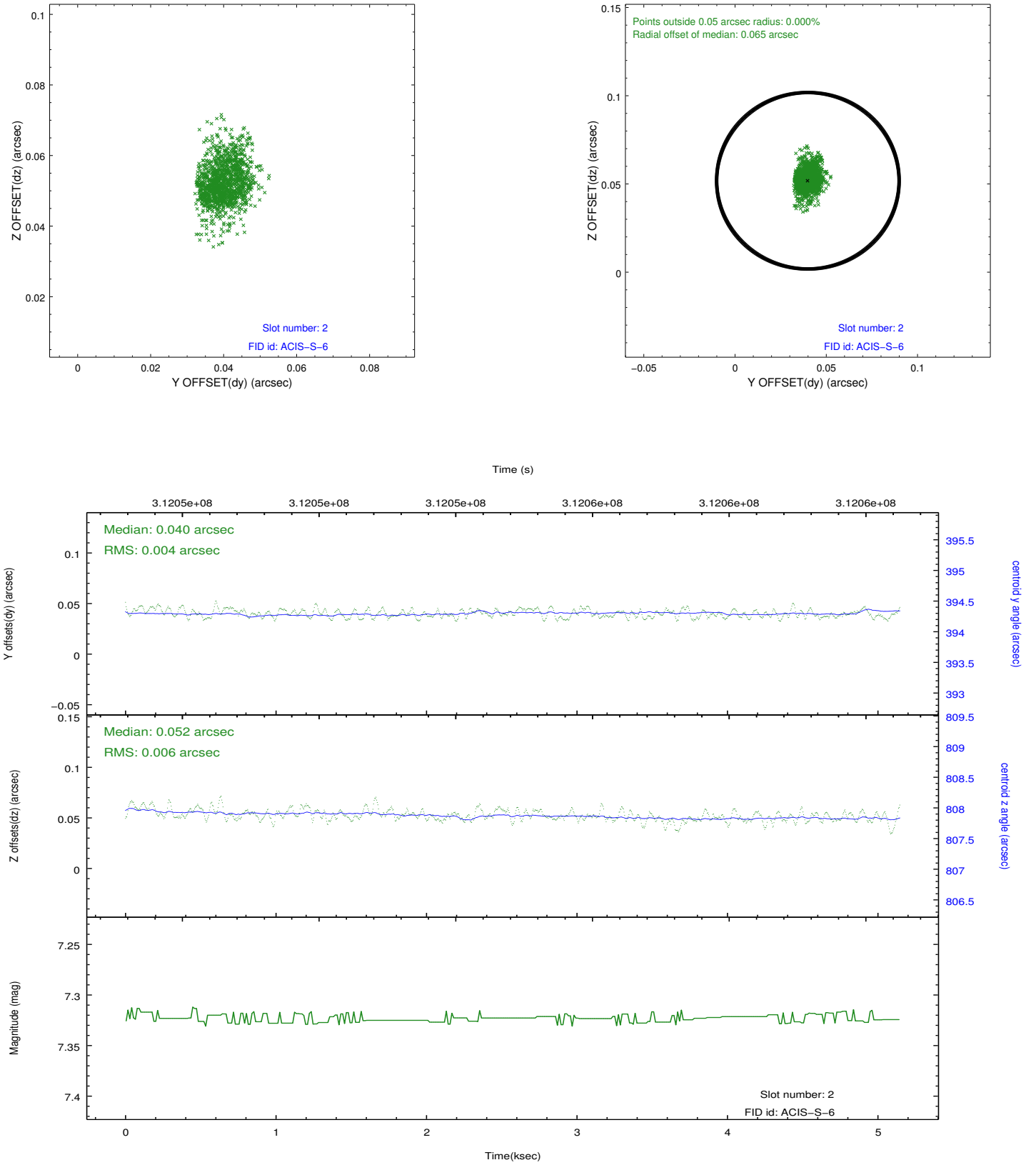
### 2.5.1 Slot 0



## 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)	2012.05.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.13919998

### A.2 Comments