

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7835 - L2 Version 3  
Chandra X-Ray Center

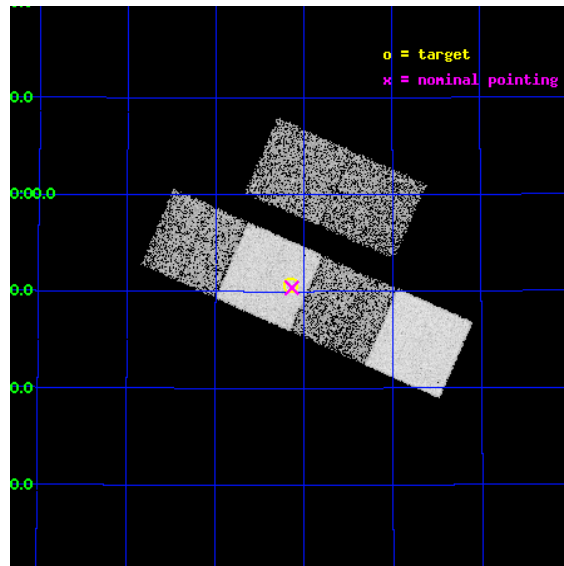
L2 Processing Date : Apr 21 2012

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# 1 Front

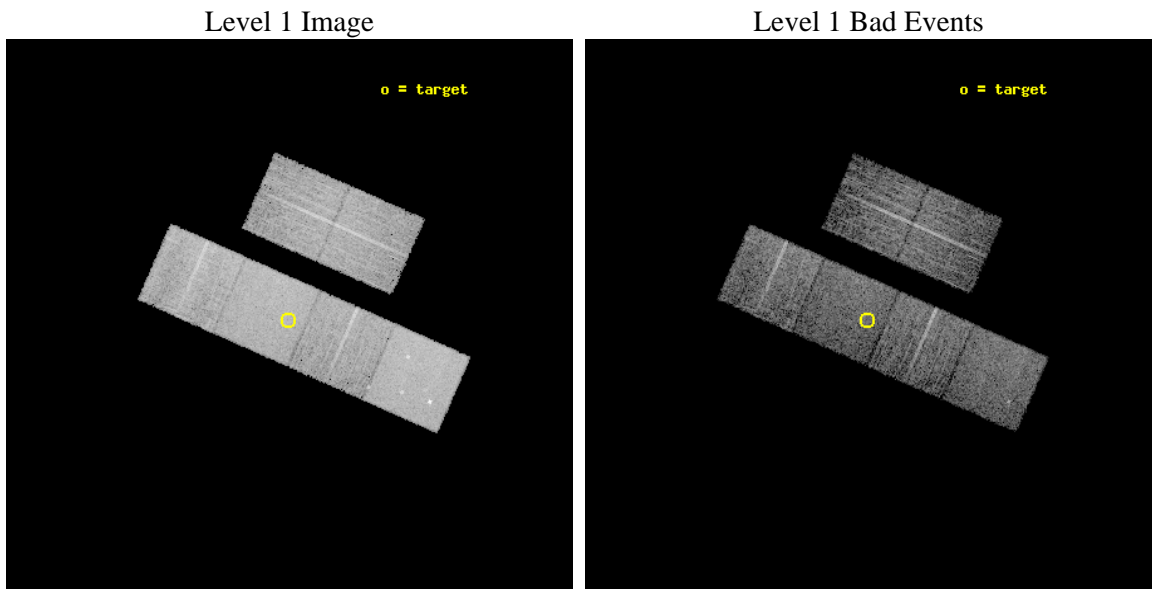
seq_num	701499	Sequence number
obs_id	7835	Observation id
title	Demographics of black holes in the local Universe.	Proposal title
observer	Prof. Smita Mathur	Principal investigator
object	UGC 5460	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	152.03875	Observer's specified target RA [deg]
dec_targ	51.843889	Observer's specified target Dec [deg]
ra_nom	152.03441783104	Nominal RA [deg]
dec_nom	51.839858551336	Nominal Dec [deg]
roll_nom	203.76829366262	Nominal Roll [deg]
revision	3	Processing version of data
ontime	5164.7999808192	Sum of GTIs [s]
livetime	5099.4001735929	Livetime [s]
ontime2	5164.7999808192	Sum of GTIs [s]
ontime3	5164.7999808192	Sum of GTIs [s]
ontime5	5164.7999808192	Sum of GTIs [s]
ontime6	5164.7999808192	Sum of GTIs [s]
ontime7	5164.7999808192	Sum of GTIs [s]
ontime8	5164.7999808192	Sum of GTIs [s]
l2events	79654	Number of level 2 events



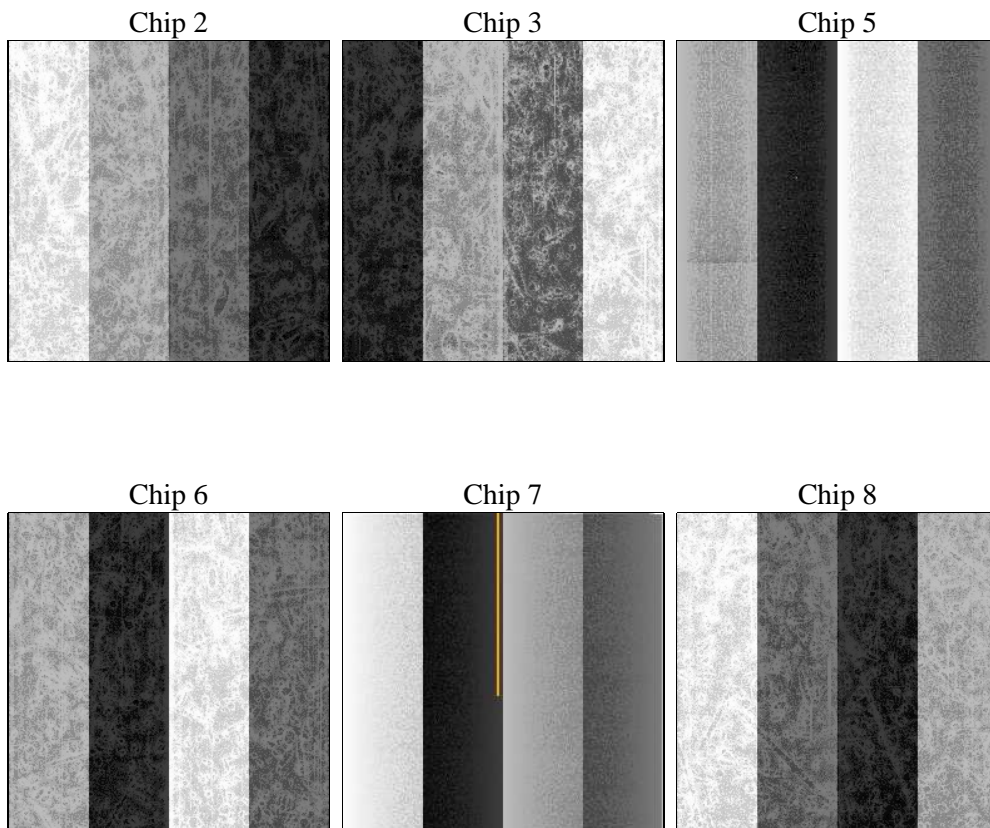
## 2 OBI

### 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	5164.7999808192	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	5164.7999808192	Sum of GTIs [s]
date	2012-04-21T02:02:06	Date and time of file creation	ontime3	5164.7999808192	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	5164.7999808192	Sum of GTIs [s]
			ontime6	5164.7999808192	Sum of GTIs [s]
			ontime7	5164.7999808192	Sum of GTIs [s]
			ontime8	5164.7999808192	Sum of GTIs [s]
			l1events	408310	Number of level 1 events

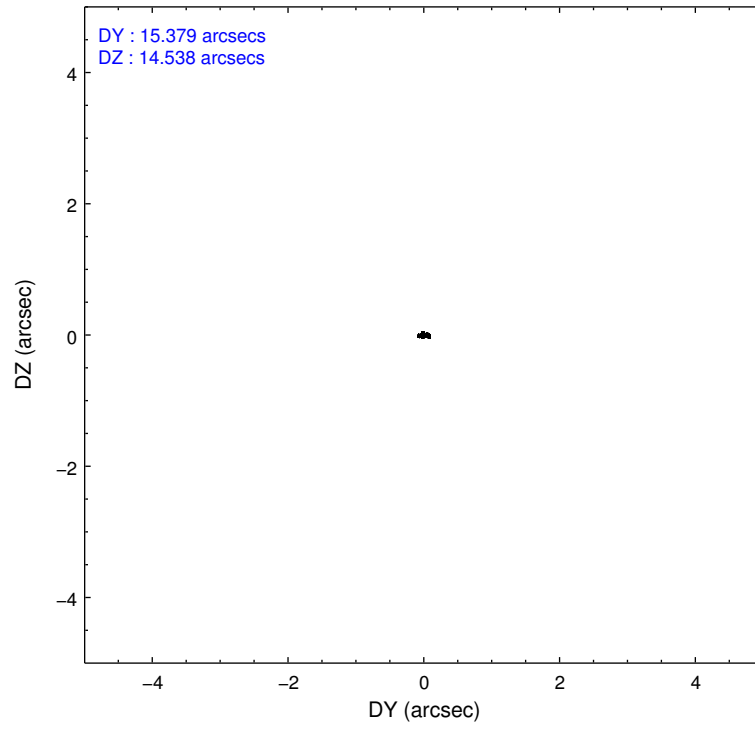
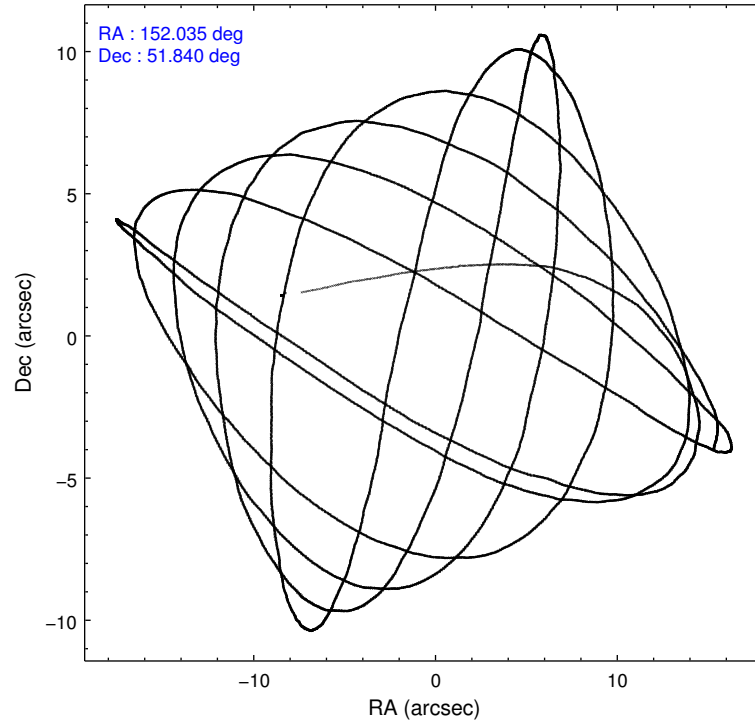
### 2.1.4 Events

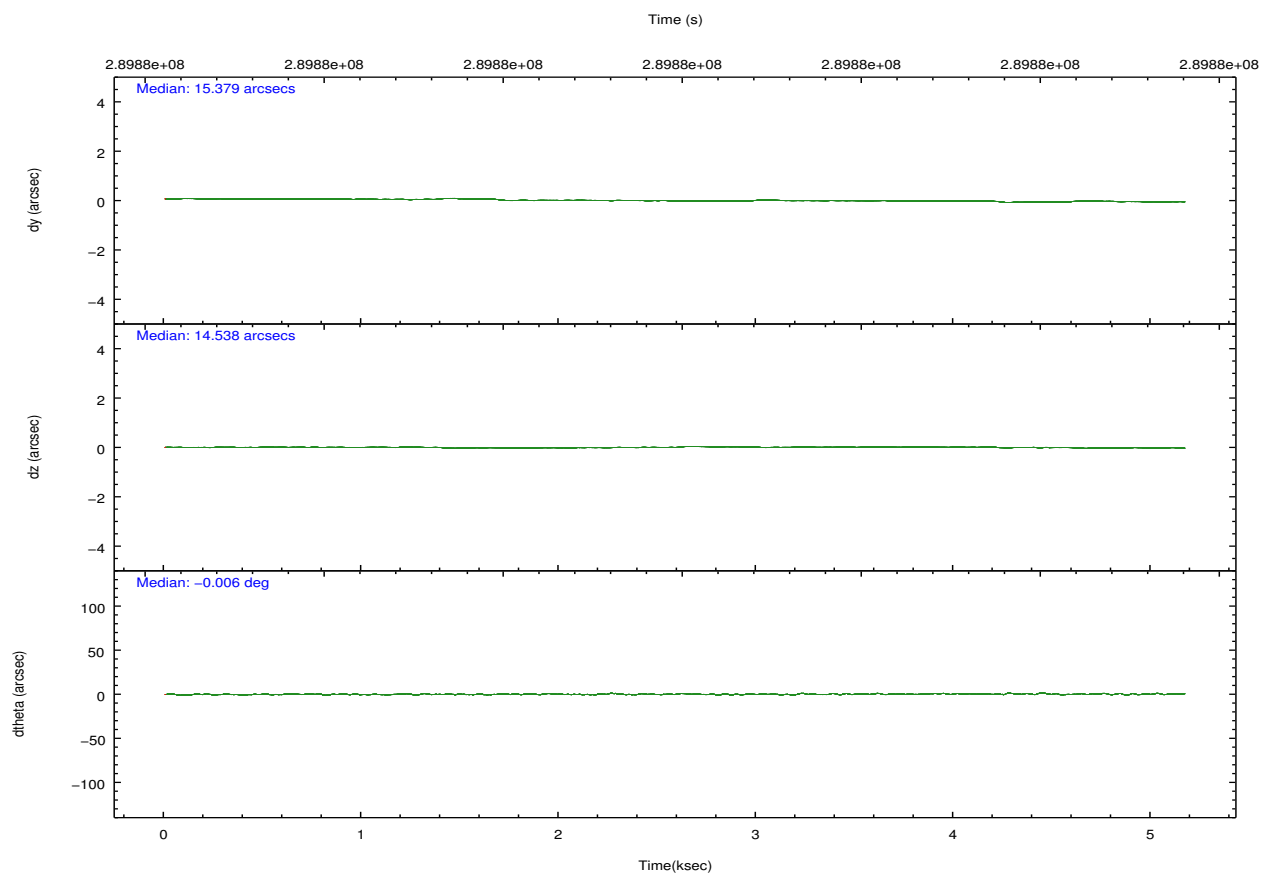
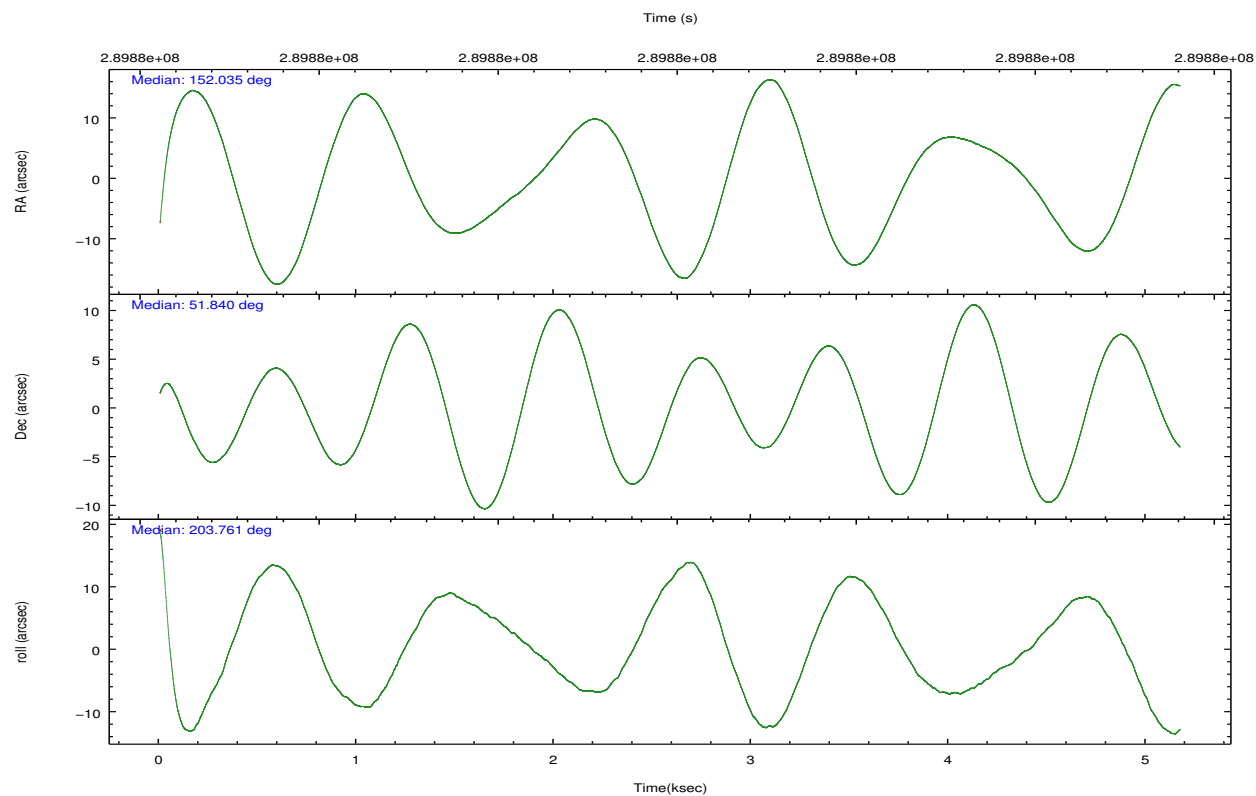
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	56554	56339	87584	57526	77976	72331	grade 0 events	2801	2967	4101	2803	2917	5196
rejected events	51018	50690	53492	51679	50270	57824		4%	5%	4%	4%	3%	7%
rejected %	90%	89%	61%	89%	64%	79%	grade 1 events	50	45	347	33	89	51
								0%	0%	0%	0%	0%	0%
							grade 2 events	1418	1278	12194	1445	6552	3795
								2%	2%	13%	2%	8%	5%
							grade 3 events	617	632	1512	681	2777	1707
								1%	1%	1%	1%	3%	2%
							grade 4 events	582	670	1484	659	2746	1634
								1%	1%	1%	1%	3%	2%
							grade 5 events	2289	2486	6132	2663	7362	3522
								4%	4%	7%	4%	9%	4%
							grade 6 events	1137	1183	21239	1359	17847	4592
								2%	2%	24%	2%	22%	6%
							grade 7 events	47660	47078	40575	47883	37686	51834
								84%	83%	46%	83%	48%	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	152.059978	152.0344178310396	Subarray requested	NONE	NONE
[deg] Pointing Dec	51.862172	51.83985855133558	Alternating exposures requested	N	N
[deg] Pointing Roll	203.591521	203.7682936626196	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	289878546.184000	289876852.59664			
Observation start date	2007-03-10T01:48:01	2007-03-10T01:20:52			
[s] Observation end time (MET)	289883546.184000	289884345.8595			
Observation end date	2007-03-10T03:11:21	2007-03-10T03:25:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



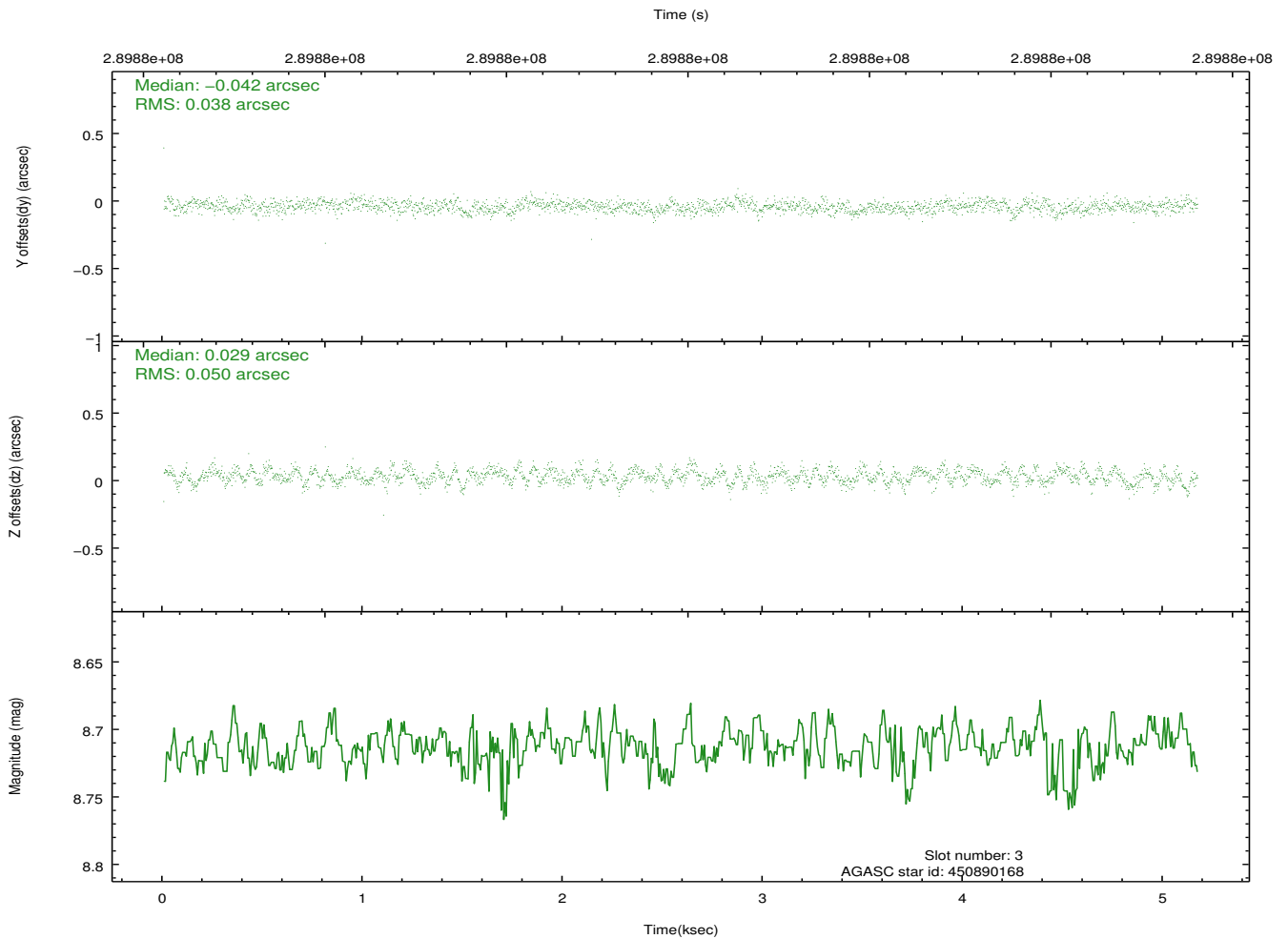
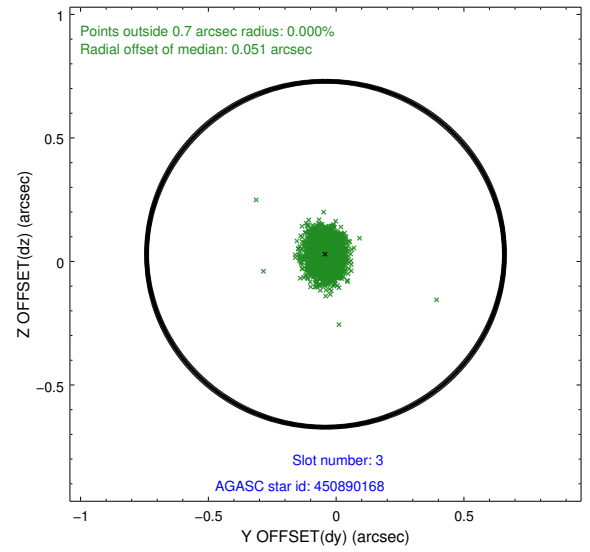
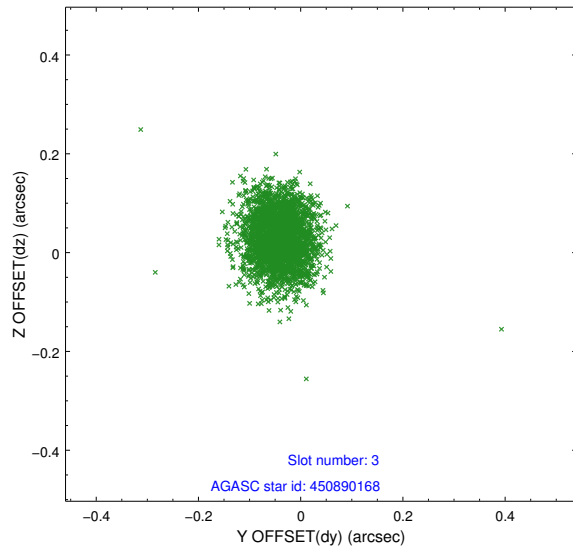


### Slot Statistics

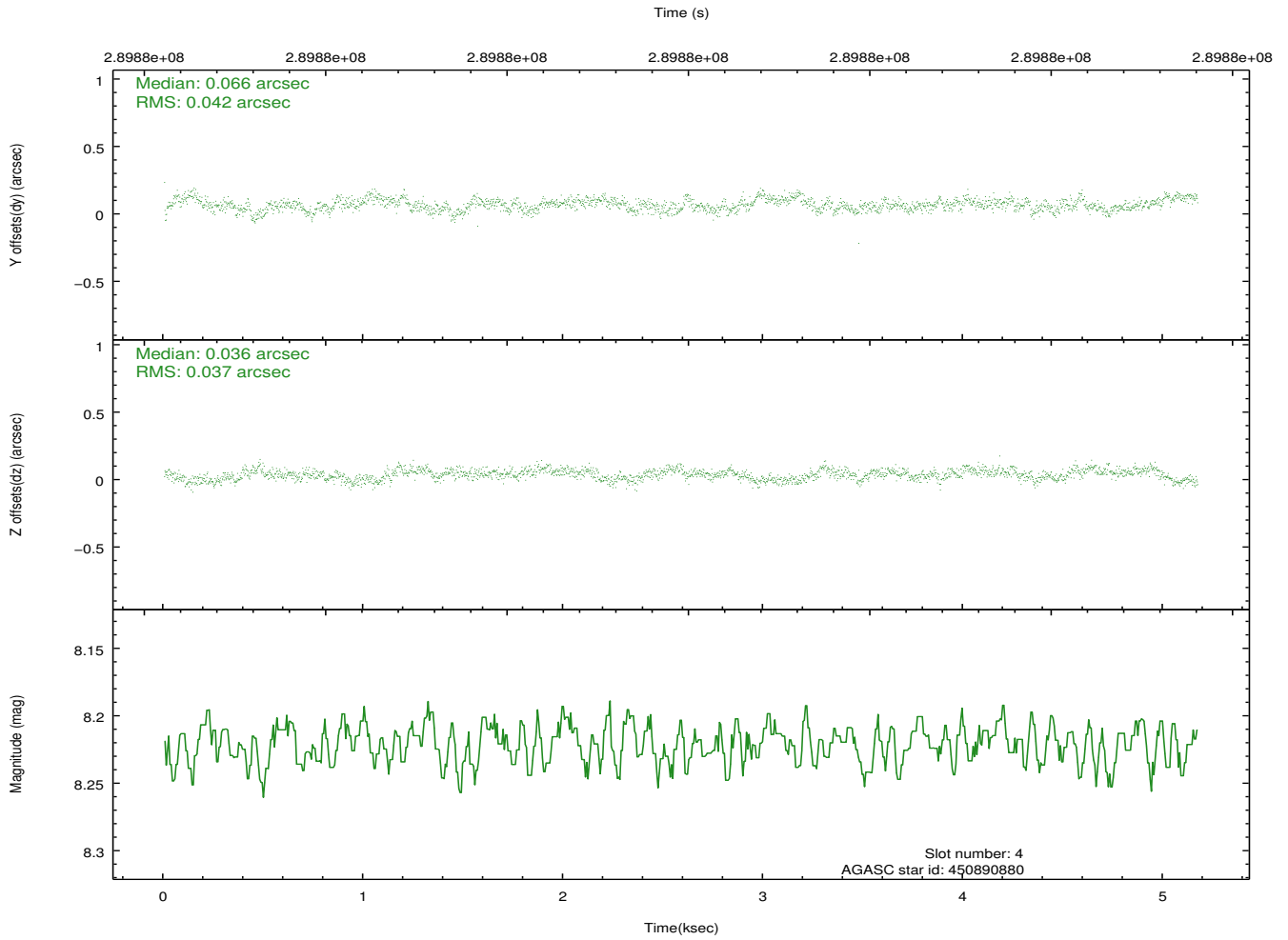
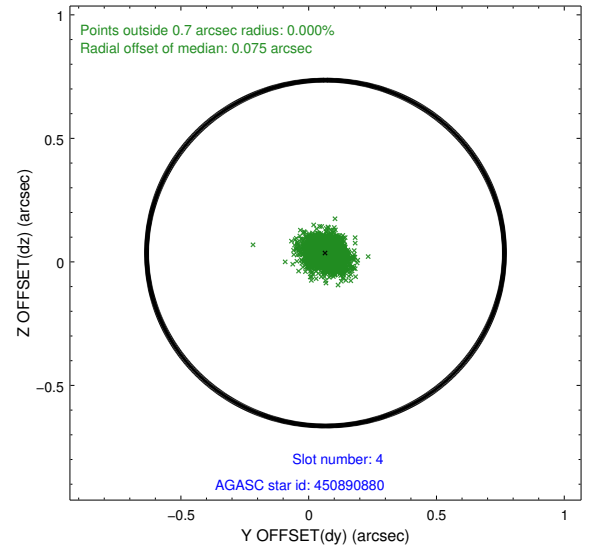
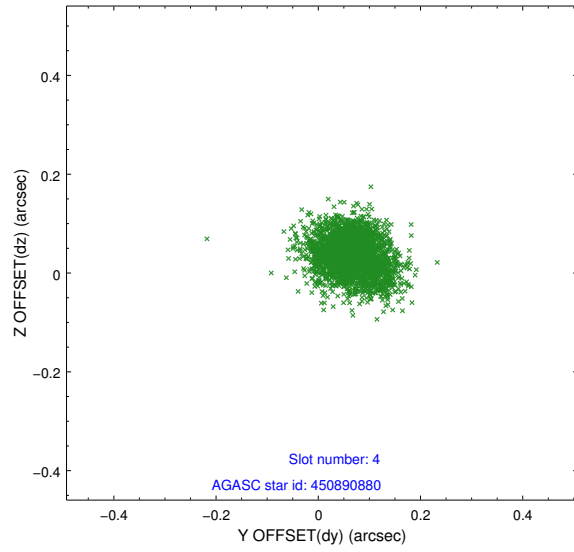
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	1261	0.051	-0.032	0.006	0.010	0.000000	0.000000	927.74	-1731.56
1	FID	ACIS-S-5	7.23	1261	-0.129	0.027	0.006	0.011	0.000000	0.000000	-1820.81	164.82
2	FID	ACIS-S-6	7.34	1261	0.056	0.016	0.006	0.011	0.000000	0.000000	392.00	810.12
3	GUIDE	450890168	8.71	2519	-0.042	0.029	0.066	0.107	151.772445	52.155102	158.82	-1220.90
4	GUIDE	450890880	8.22	2521	0.066	0.036	0.059	0.098	151.398749	51.391108	2037.75	953.20
5	GUIDE	450891944	9.49	2521	0.089	-0.072	0.098	0.157	151.808732	51.599904	893.65	639.84
6	GUIDE	450898736	8.84	2521	0.023	-0.032	0.068	0.115	151.230493	51.518985	2193.99	379.47
7	GUIDE	450894072	7.69	2520	-0.137	0.037	0.063	0.103	153.233470	51.475982	-1862.51	2307.91

## 2.4 Star Slots

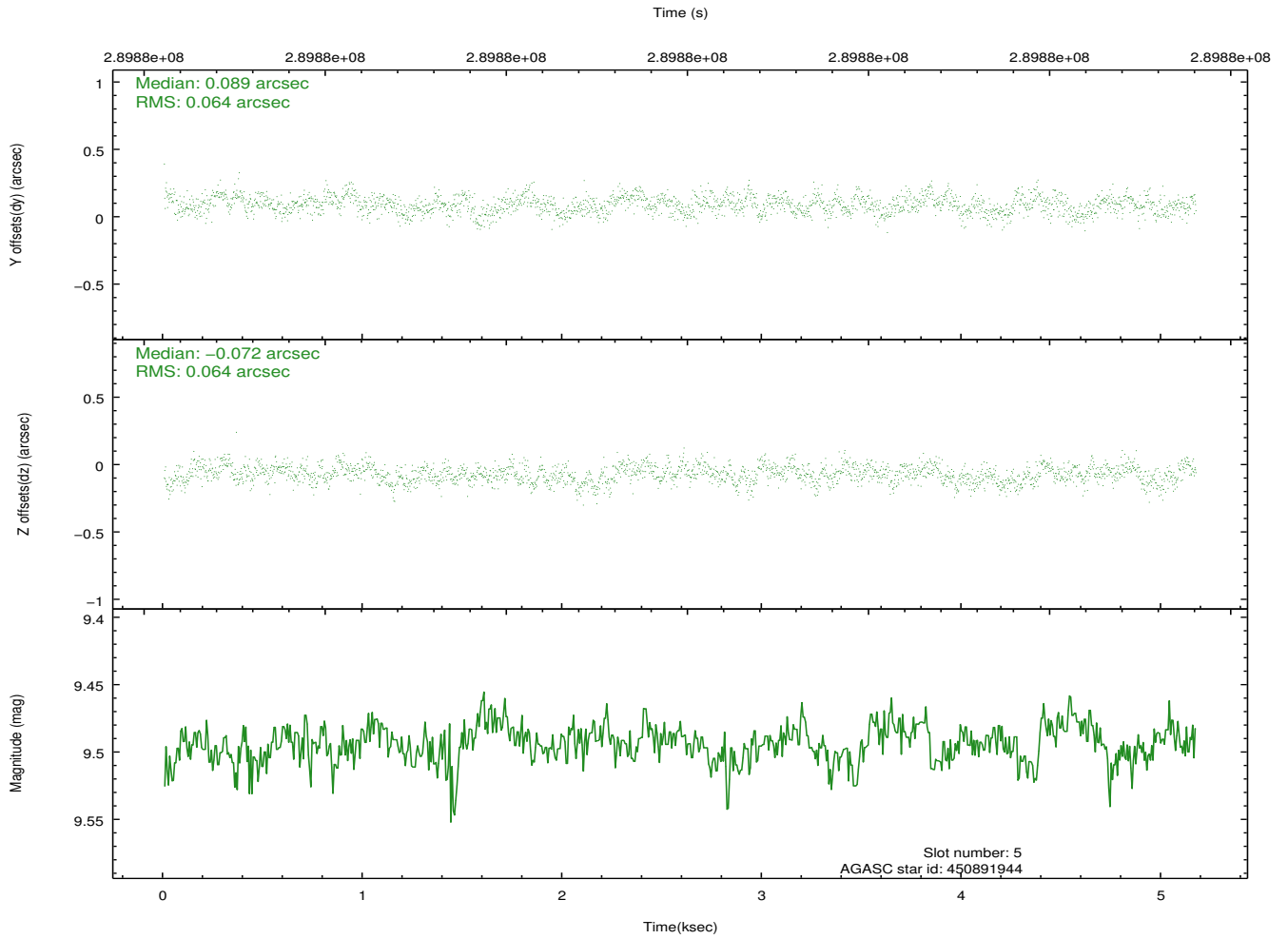
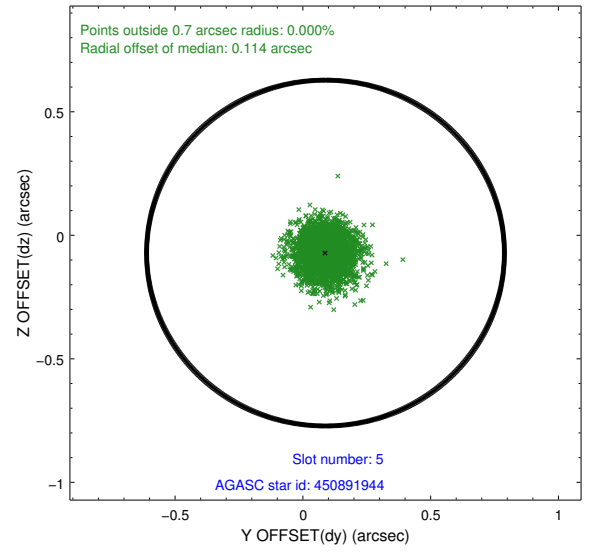
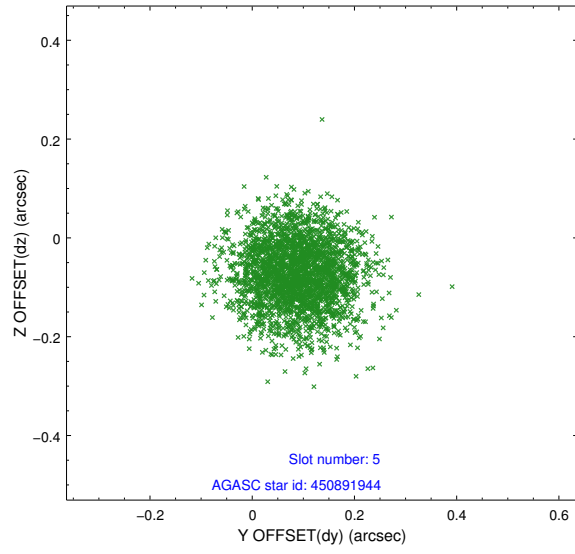
### 2.4.1 Slot 3



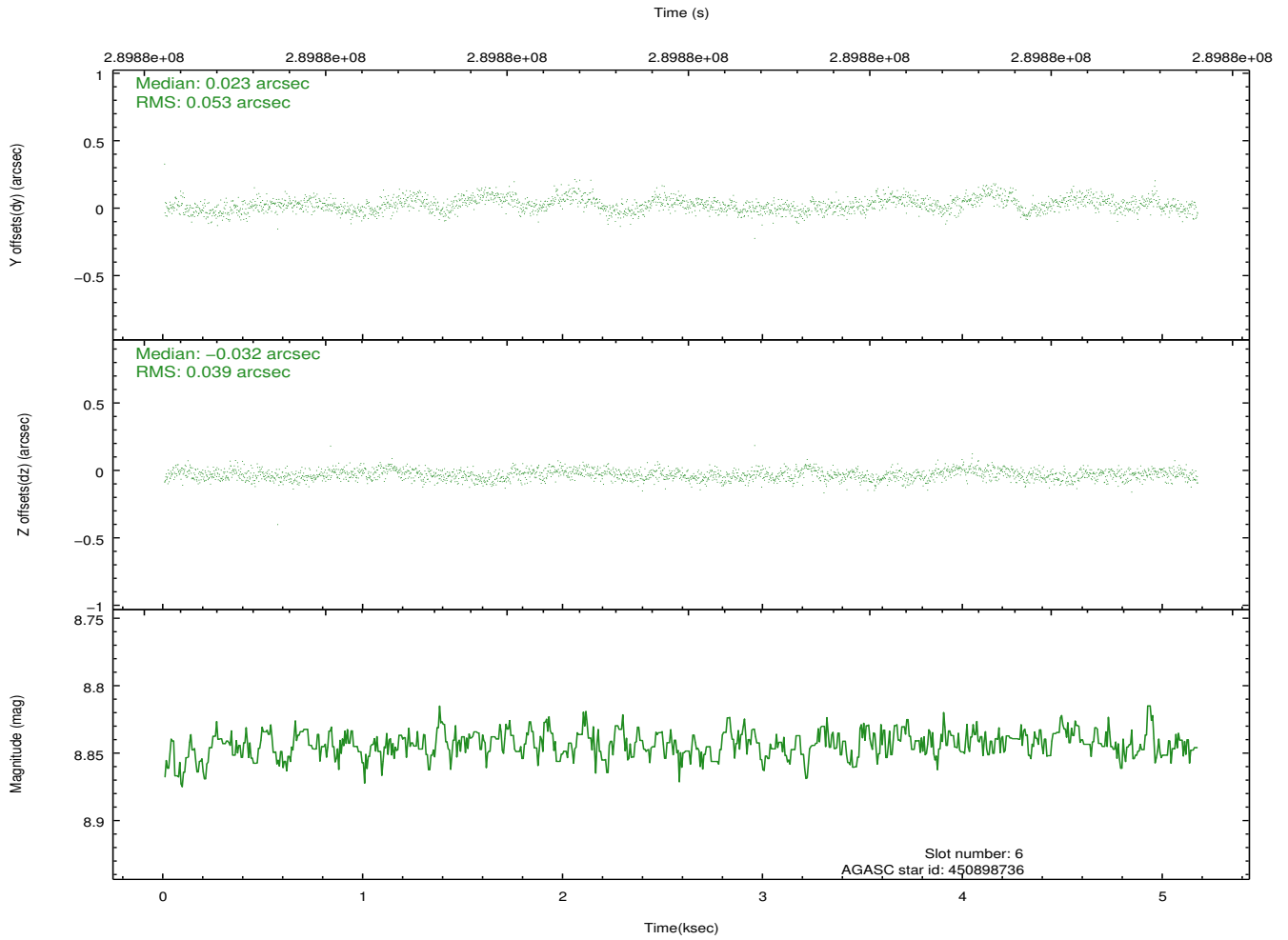
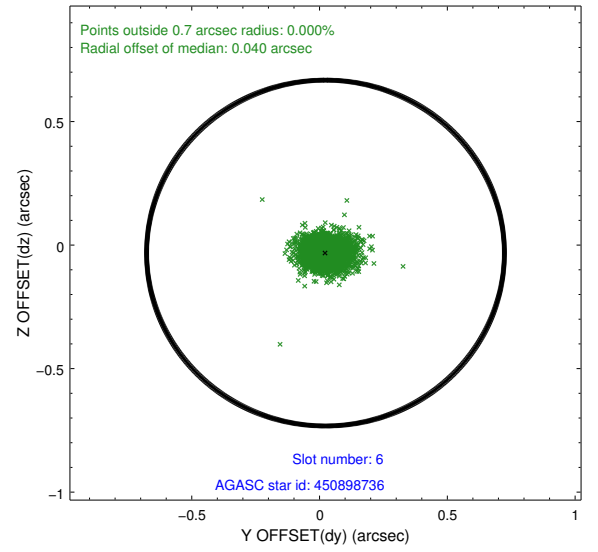
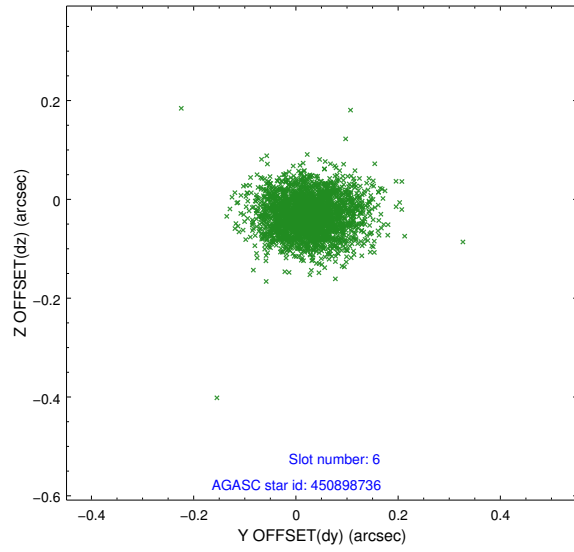
## 2.4.2 Slot 4



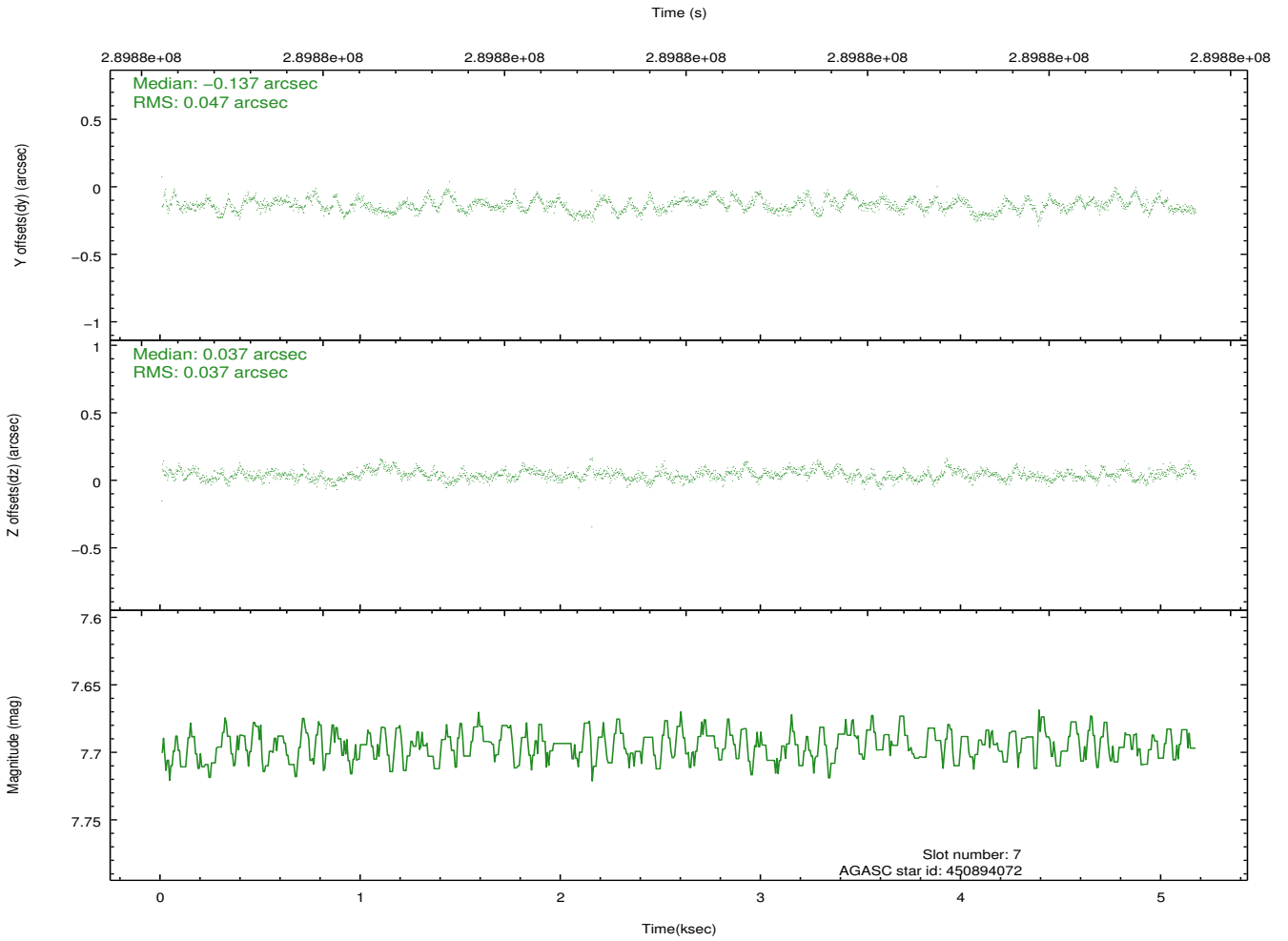
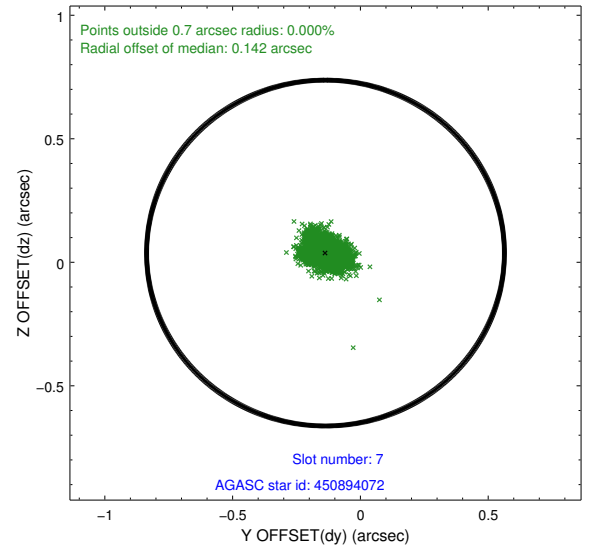
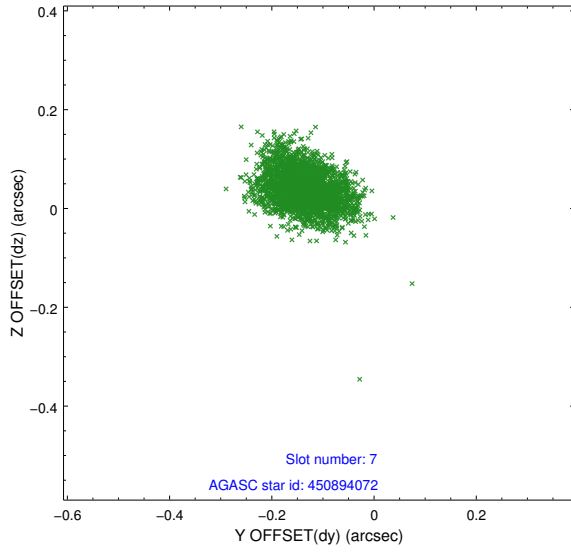
### 2.4.3 Slot 5



## 2.4.4 Slot 6

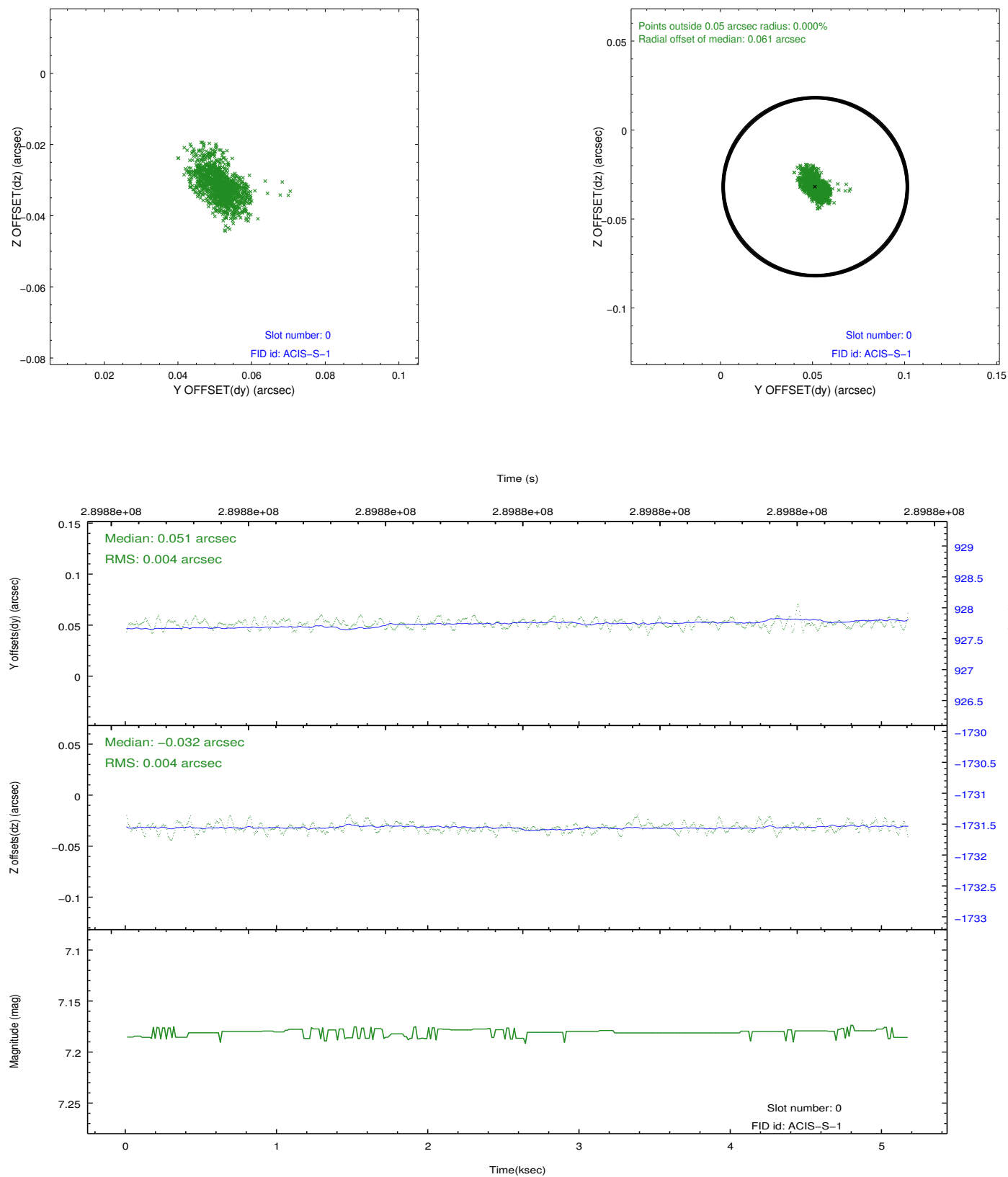


## 2.4.5 Slot 7

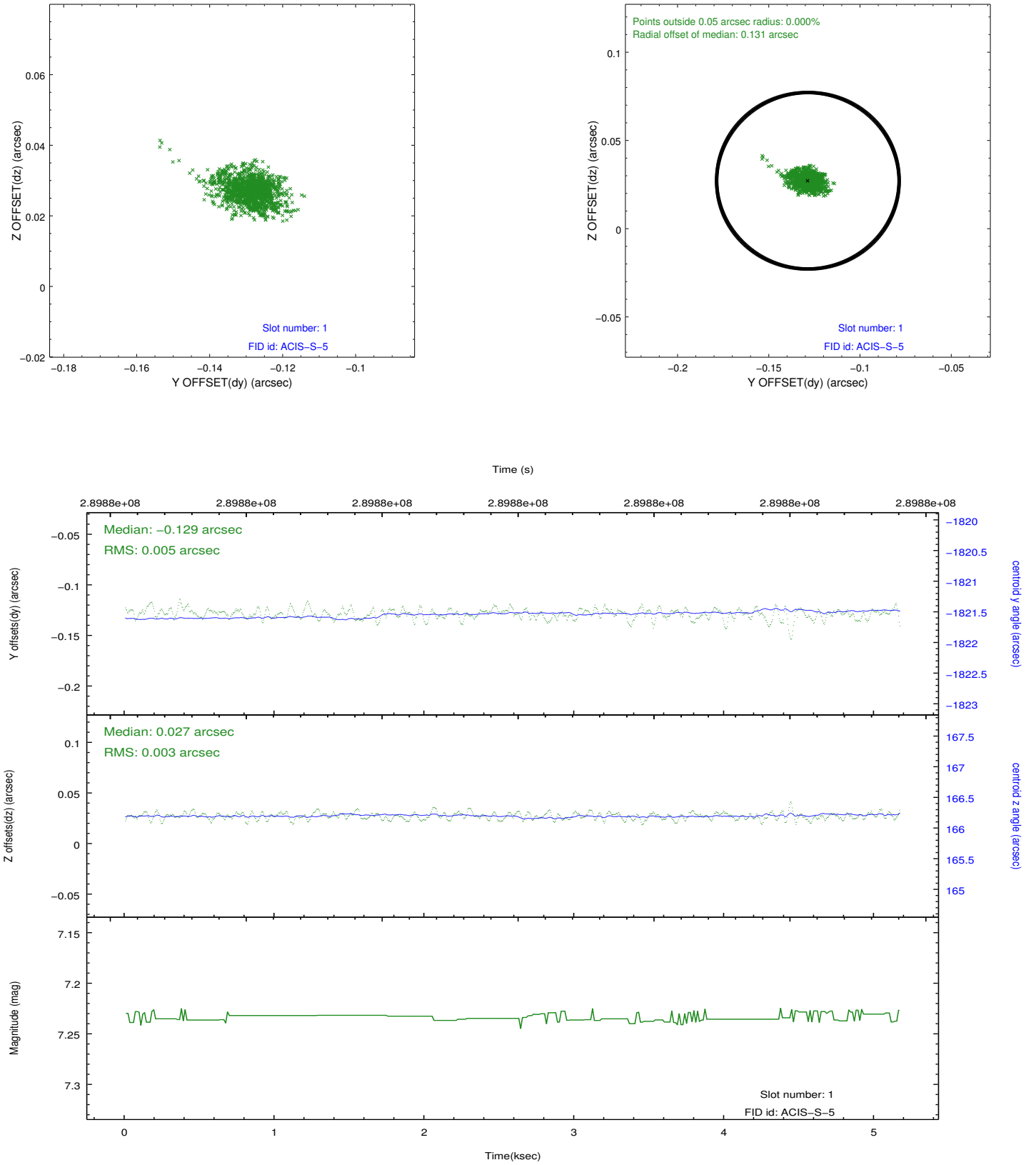


## 2.5 FID Slots

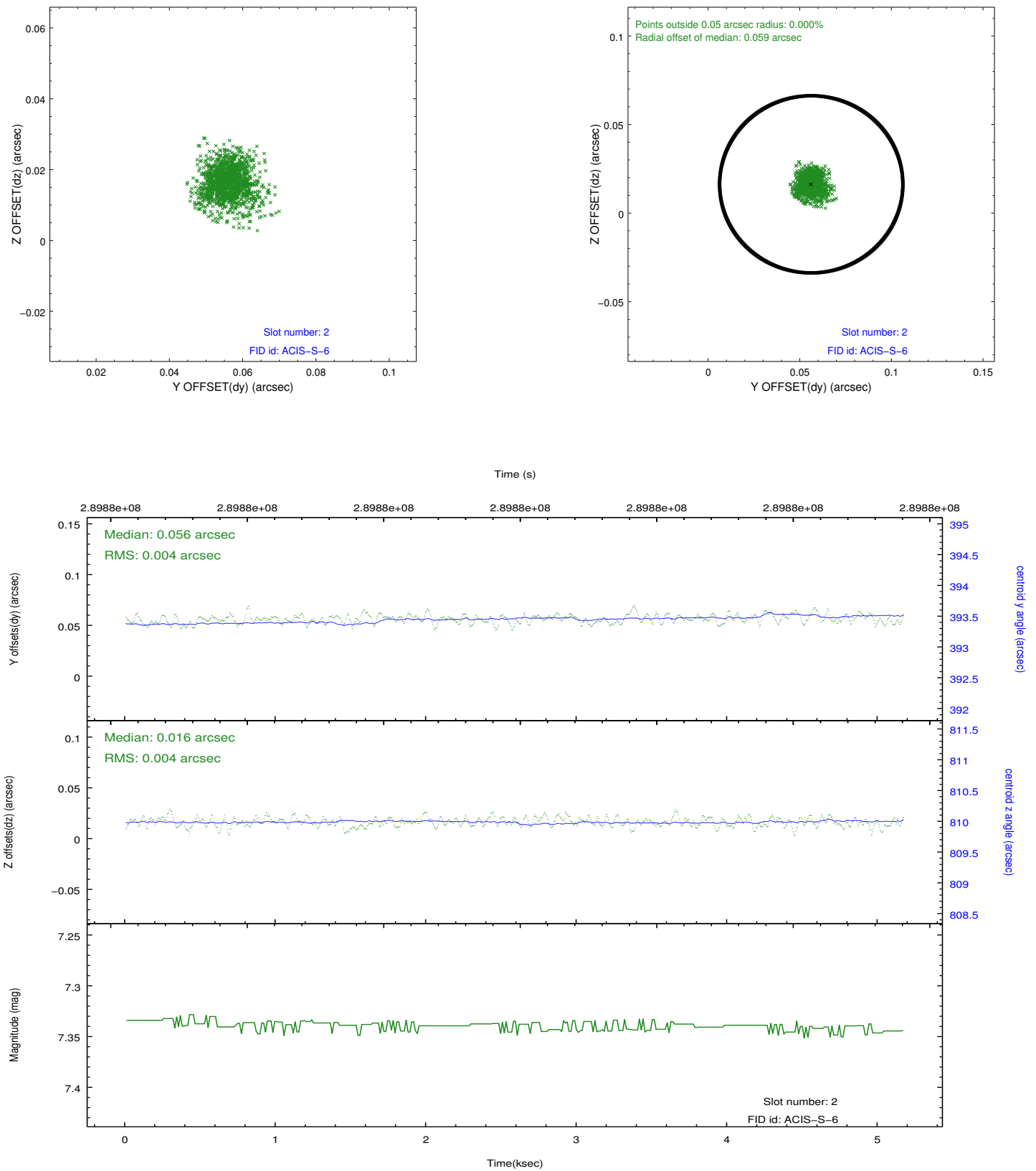
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.04.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.16479998

### A.2 Comments