

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10643 - L2 Version 2  
Chandra X-Ray Center

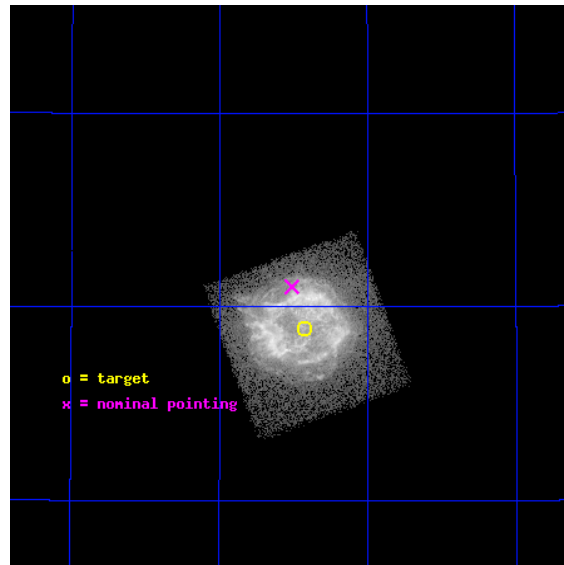
L2 Processing Date : Jun 6 2012

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# 1 Front

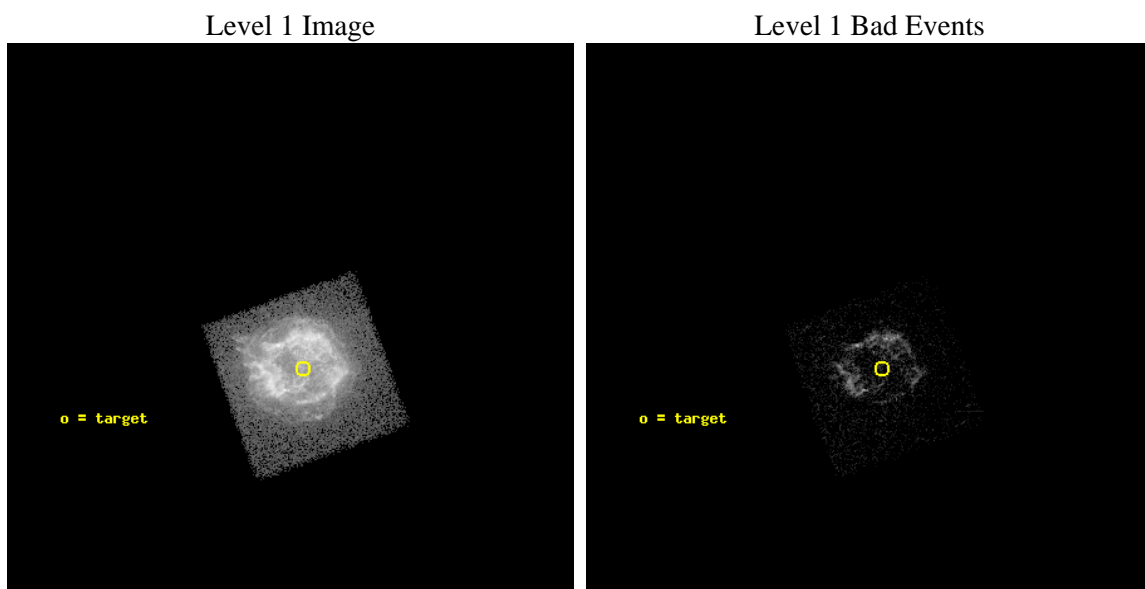
seq_num	590482	Sequence number
obs_id	10643	Observation id
title	AO-10 Observations of the Standard Candles Cas A and G21.5-09.	Pro
observer	Dr. CXC Calibration	Principal investigator
object	Cas A[S3,-120,-2.0,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA [deg]
dec_targ	58.814833	Observer's specified target Dec [deg]
ra_nom	350.87802339734	Nominal RA [deg]
dec_nom	58.850766600068	Nominal Dec [deg]
roll_nom	70.00027407746	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1294.1034510732	Sum of GTIs [s]
livetime	1277.1950367798	Livetime [s]
ontime5	2036.0097078085	Sum of GTIs [s]
ontime6	1853.7917383909	Sum of GTIs [s]
ontime7	1294.1034510732	Sum of GTIs [s]
ontime8	1941.698127985	Sum of GTIs [s]
l2events	371027	Number of level 2 events



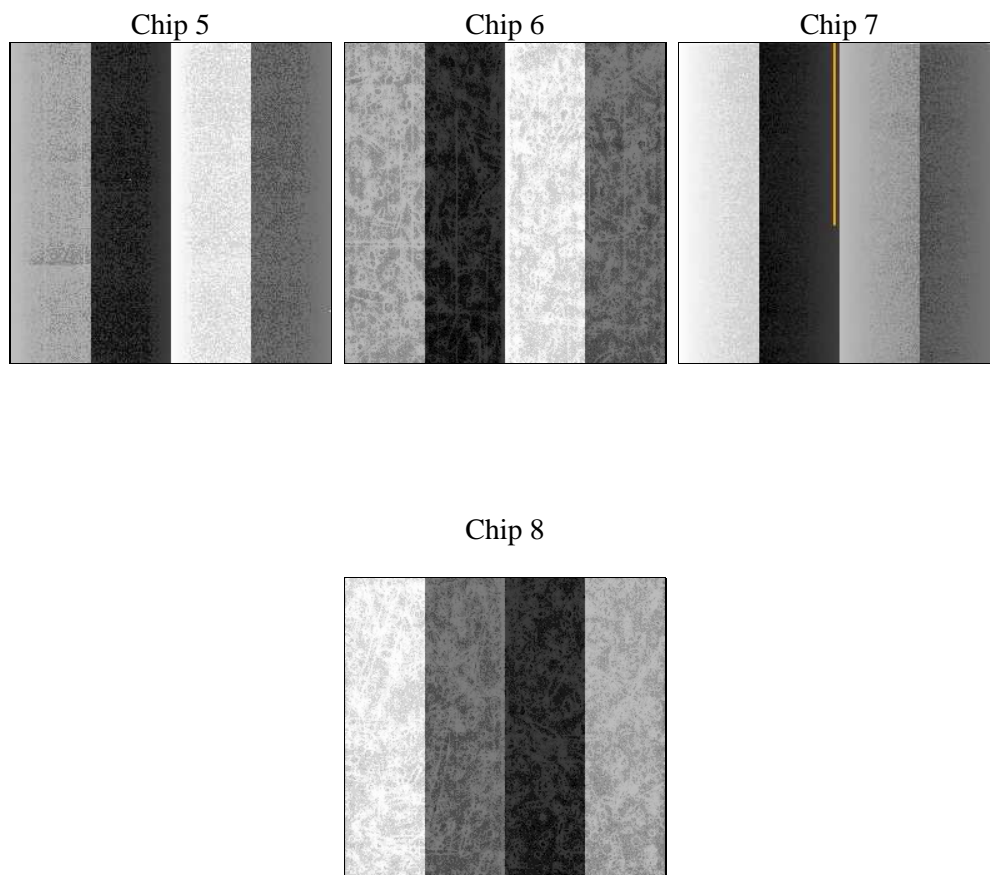
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1294.1034510732	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime5	2036.0097078085	Sum of GTIs [s]
date	2012-06-06T23:41:51	Date and time of file creation	ontime6	1853.7917383909	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	1294.1034510732	Sum of GTIs [s]
			ontime8	1941.698127985	Sum of GTIs [s]
			l1events	400992	Number of level 1 events

### 2.1.4 Events

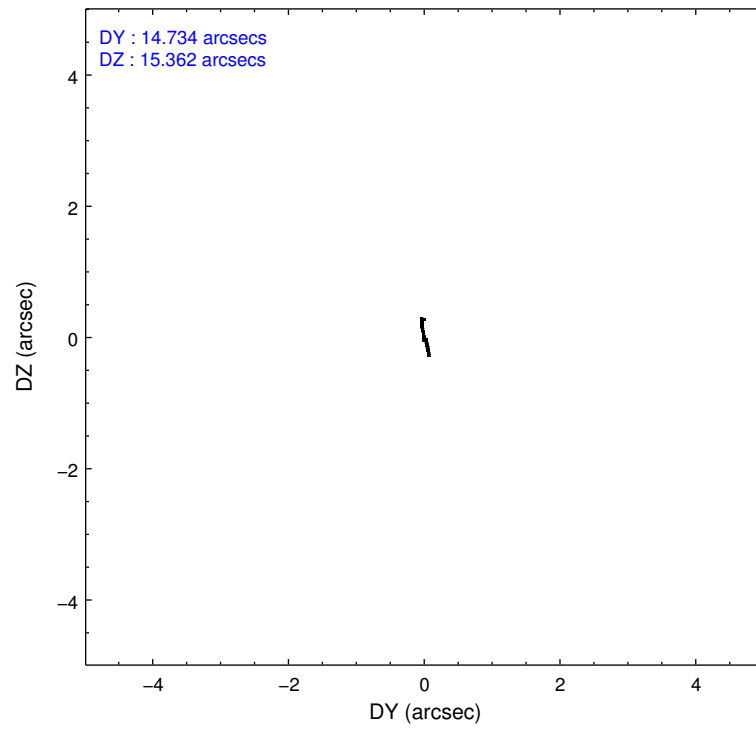
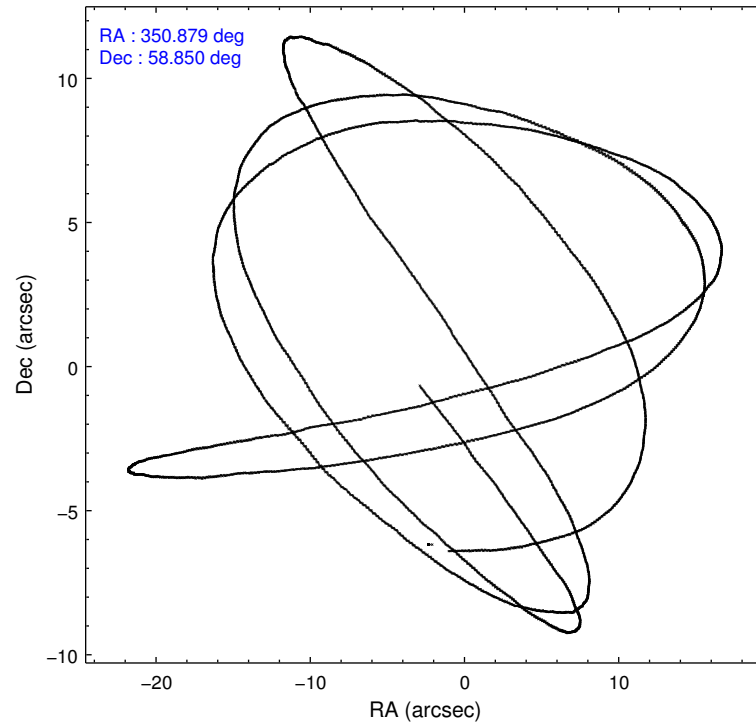
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	0	0	400992	0
rejected events	0	0	25098	0
rejected %	0%	0%	6%	0%

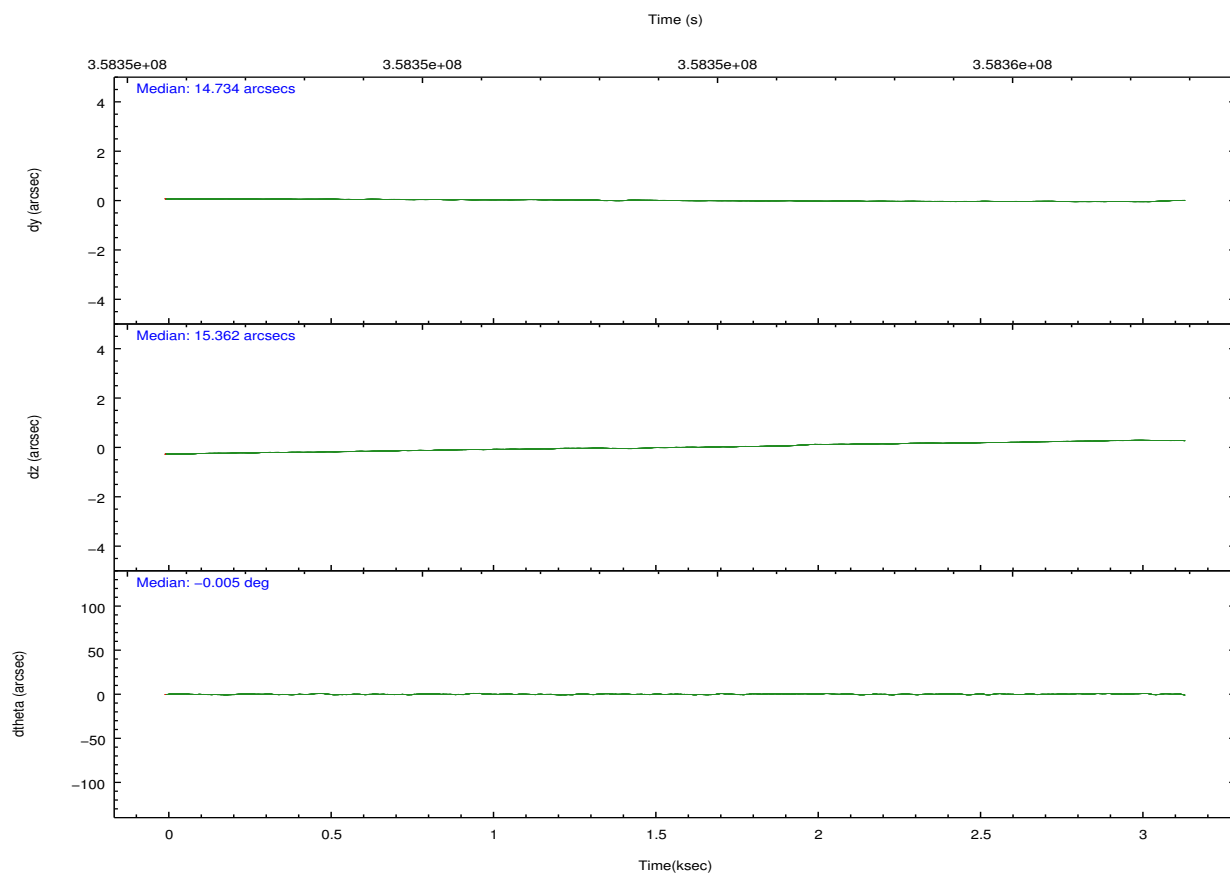
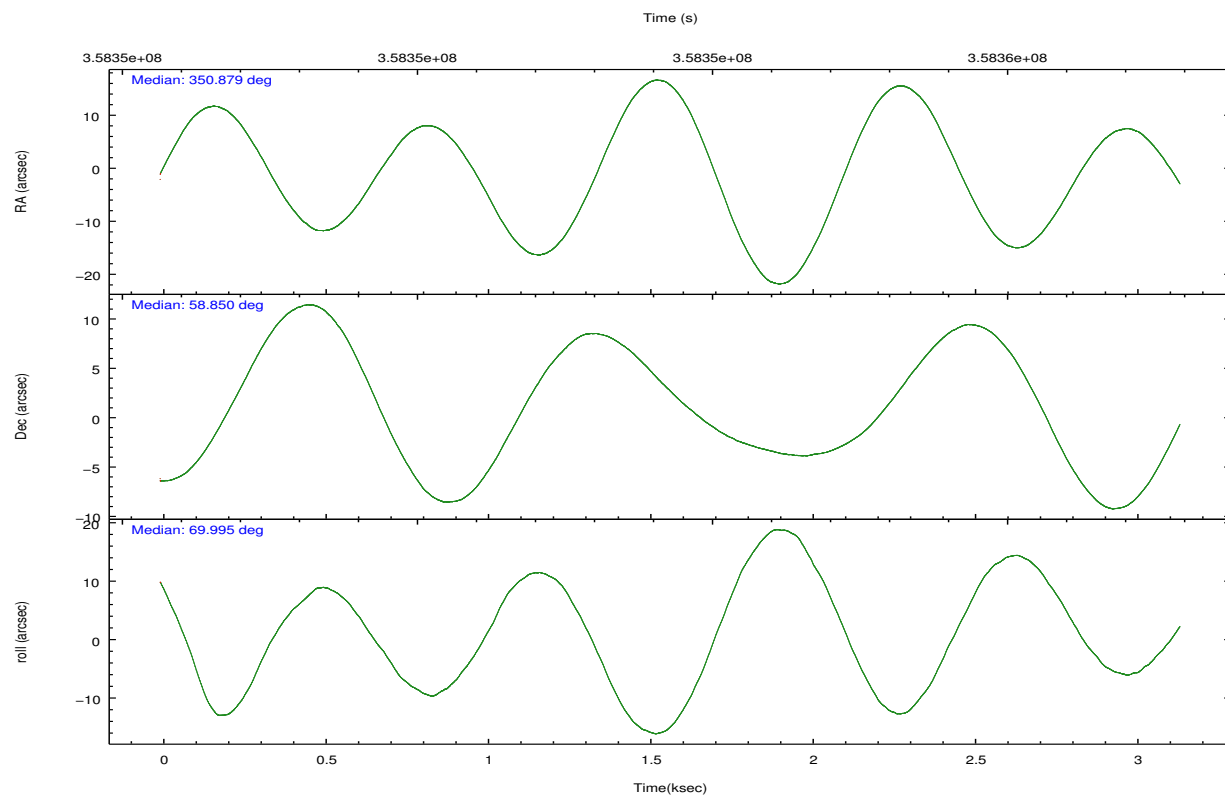
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	0	0	93186	0
	0%	0%	23%	0%
grade 1 events	0	0	1855	0
	0%	0%	0%	0%
grade 2 events	0	0	101287	0
	0%	0%	25%	0%
grade 3 events	0	0	43496	0
	0%	0%	10%	0%
grade 4 events	0	0	43367	0
	0%	0%	10%	0%
grade 5 events	0	0	7723	0
	0%	0%	1%	0%
grade 6 events	0	0	95488	0
	0%	0%	23%	0%
grade 7 events	0	0	14590	0
	0%	0%	3%	0%

## 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	350.887671	350.8780233973437	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.824002	58.85076660006753	Alternating exposures requested	N	N
[deg] Pointing Roll	69.835395	70.00027407746011	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	349833666.184000	349833666.184000			
[s] Window stop time (MET)	360115266.184000	360115266.184000			
[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)	358353417.184000	358352071.92864			
Observation start date	2009-05-10T14:35:51	2009-05-10T14:14:31			
[s] Observation end time (MET)	358355417.184000	358356084.80384			
Observation end date	2009-05-10T15:09:11	2009-05-10T15:21:24			
Read mode	TIMED	TIMED			

## 2.3 Aspect





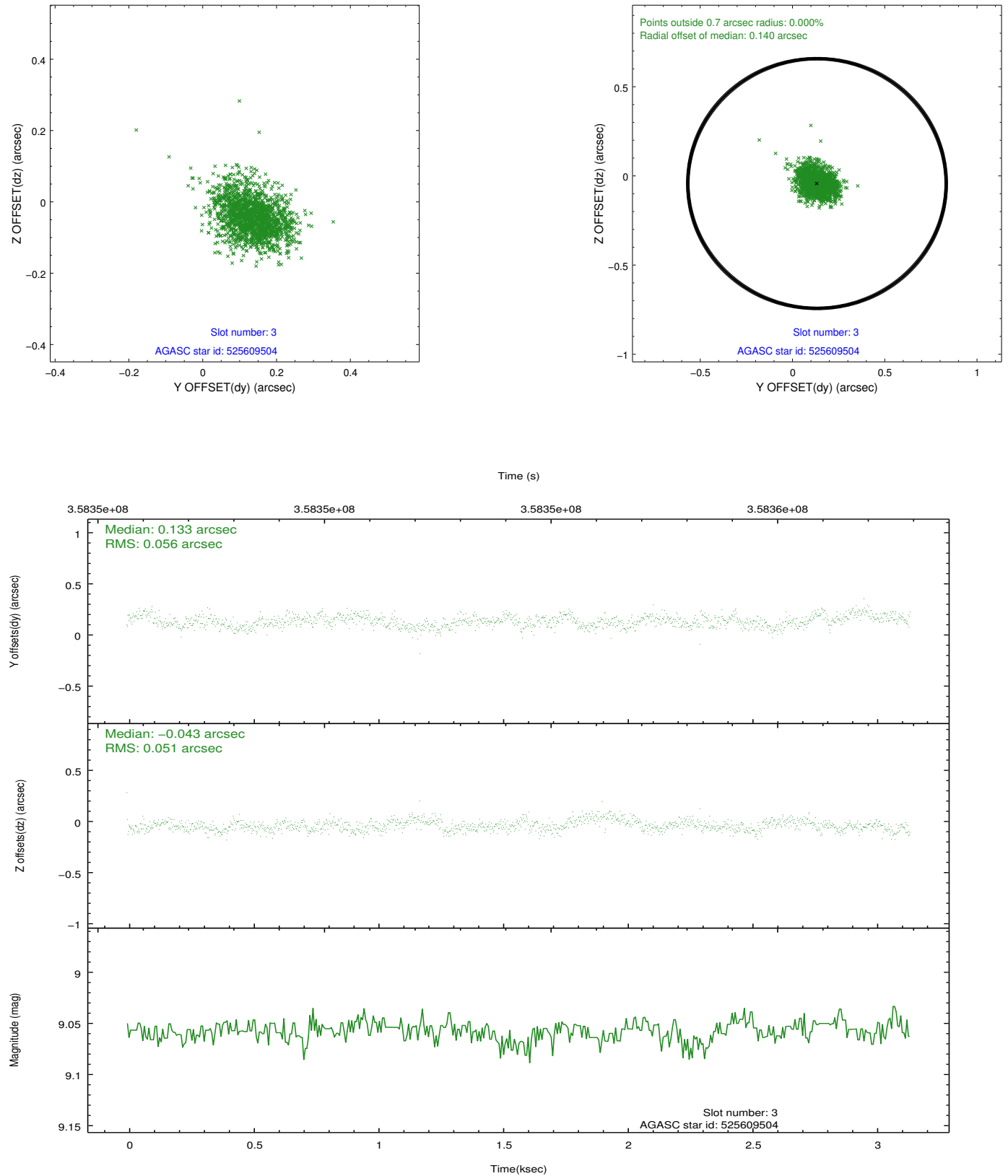
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	767	-0.098	-0.029	0.007	0.012	0.000000	0.000000	-767.79	-1736.75
1	FID	ACIS-S-4	7.03	767	0.220	0.056	0.006	0.010	0.000000	0.000000	2144.86	169.74
2	FID	ACIS-S-5	7.06	767	-0.153	-0.017	0.006	0.010	0.000000	0.000000	-1818.10	165.61
3	GUIDE	525609504	9.06	1532	0.133	-0.043	0.079	0.128	349.896632	58.356658	-2211.27	1182.76
4	GUIDE	525732232	9.10	1531	-0.016	0.140	0.098	0.154	351.669550	58.757012	283.27	-1450.26
5	GUIDE	525732488	8.41	1533	0.077	-0.042	0.065	0.101	350.087090	58.516915	-1547.57	1034.56
6	GUIDE	525735456	7.02	1533	-0.312	-0.083	0.051	0.081	350.628183	59.307249	1468.43	1049.30
7	GUIDE	525735976	8.84	1532	0.118	0.025	0.069	0.114	350.142956	58.277622	-2323.72	649.39

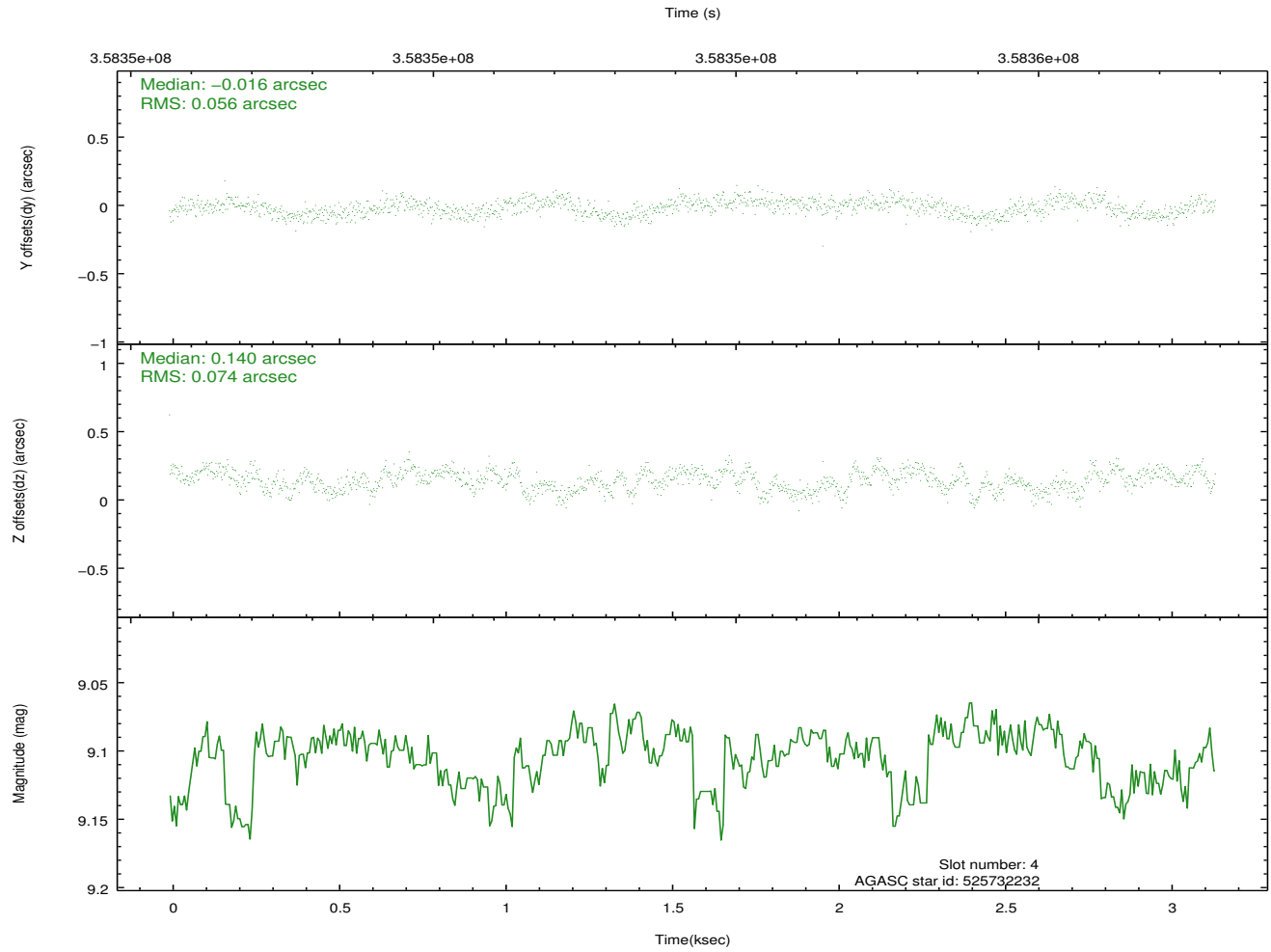
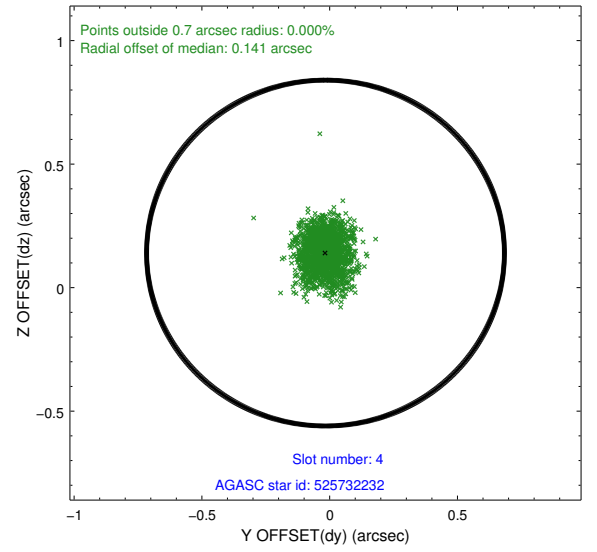
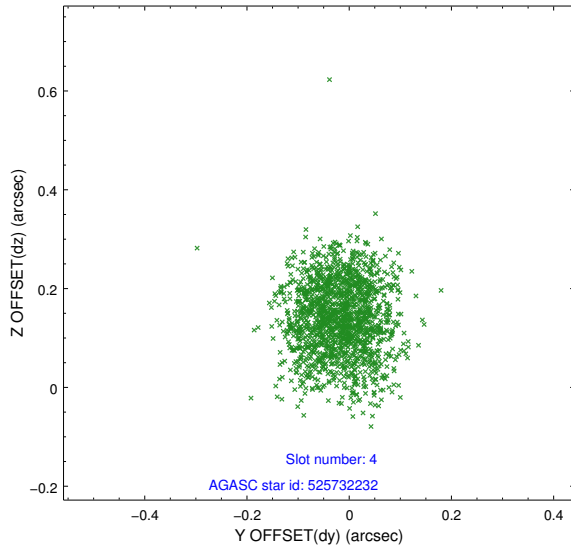


## 2.4 Star Slots

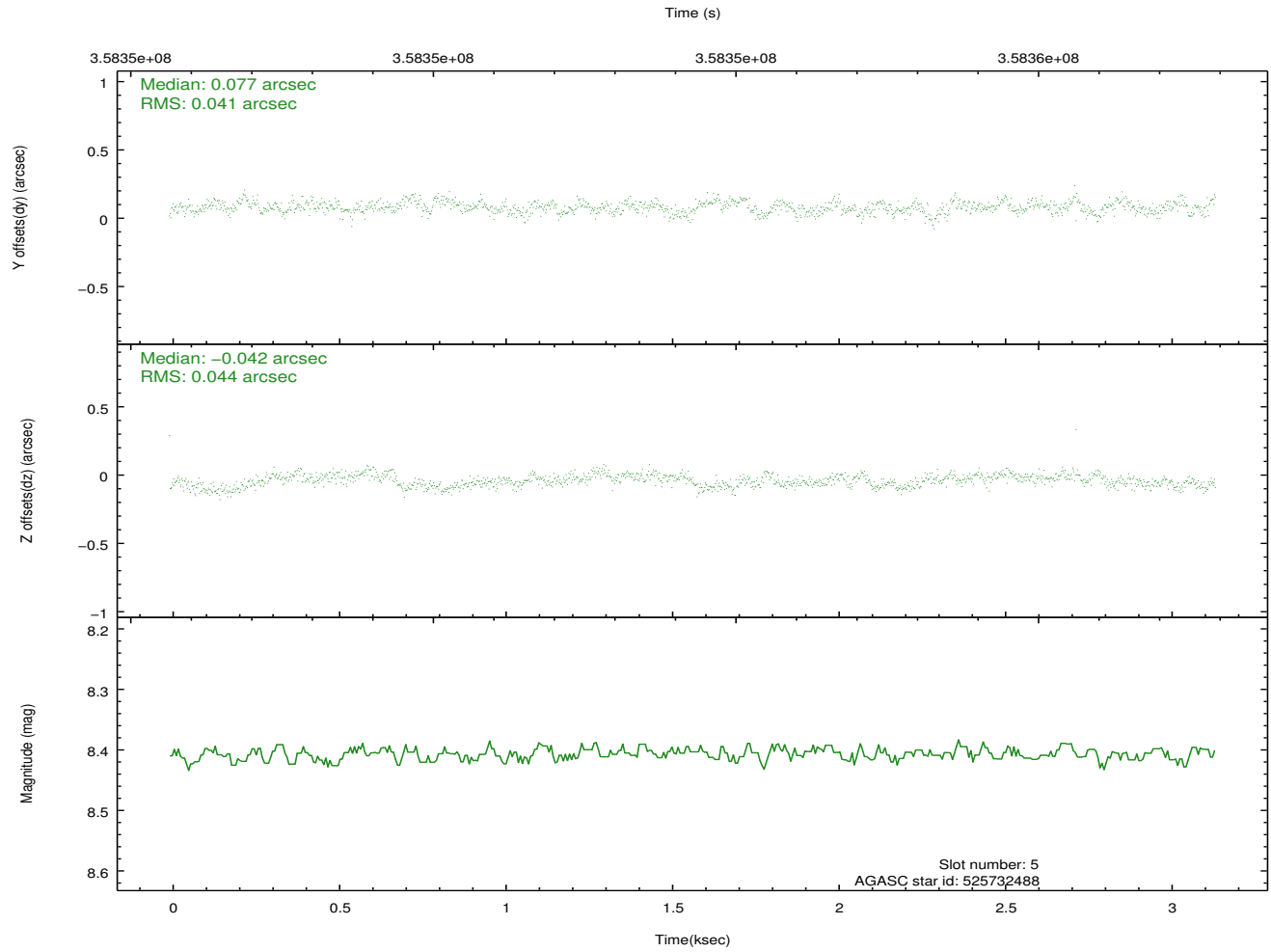
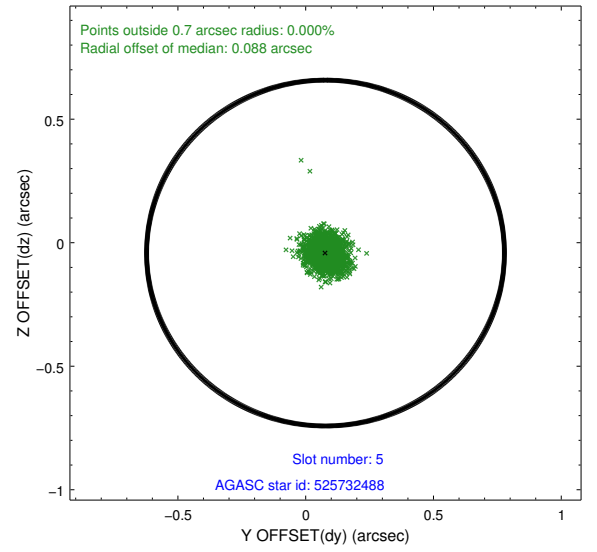
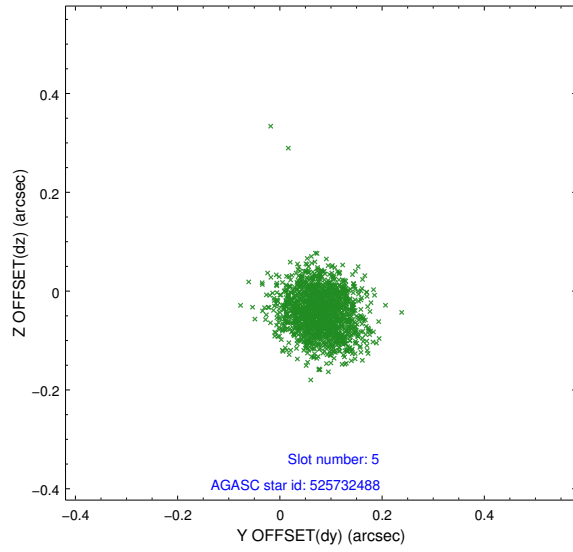
### 2.4.1 Slot 3



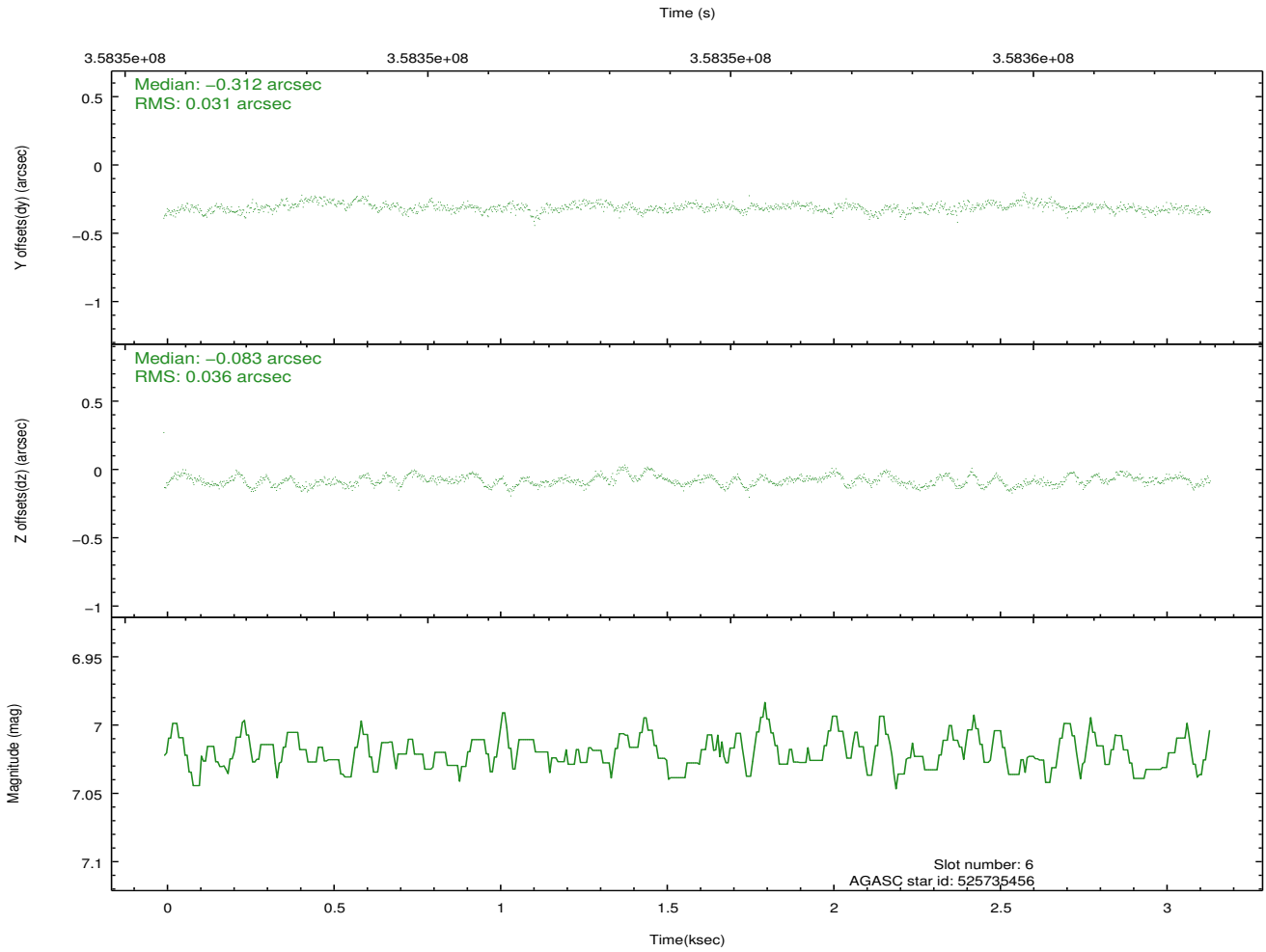
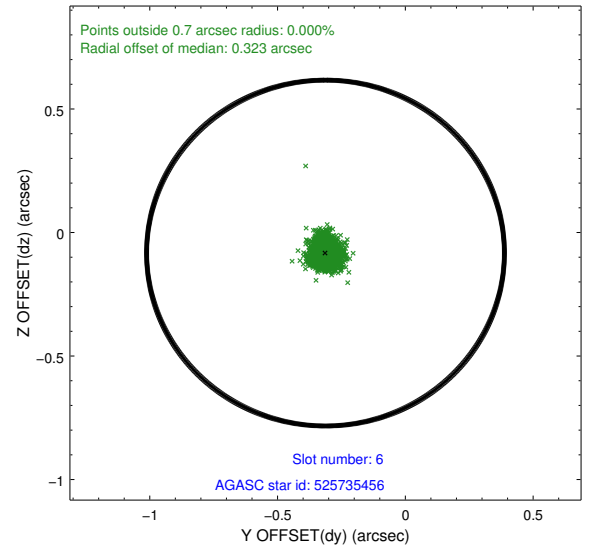
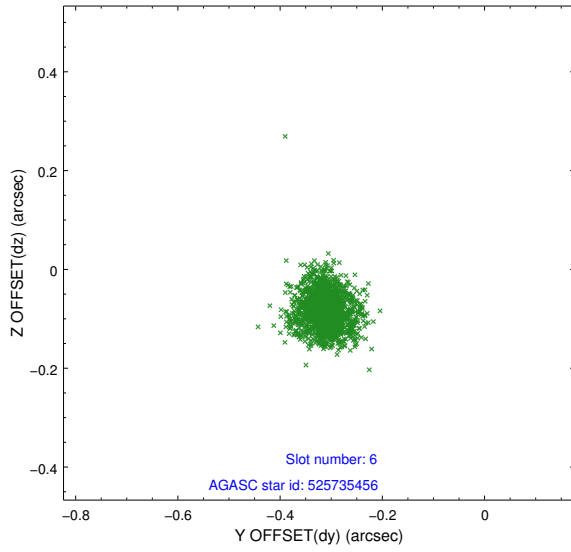
## 2.4.2 Slot 4



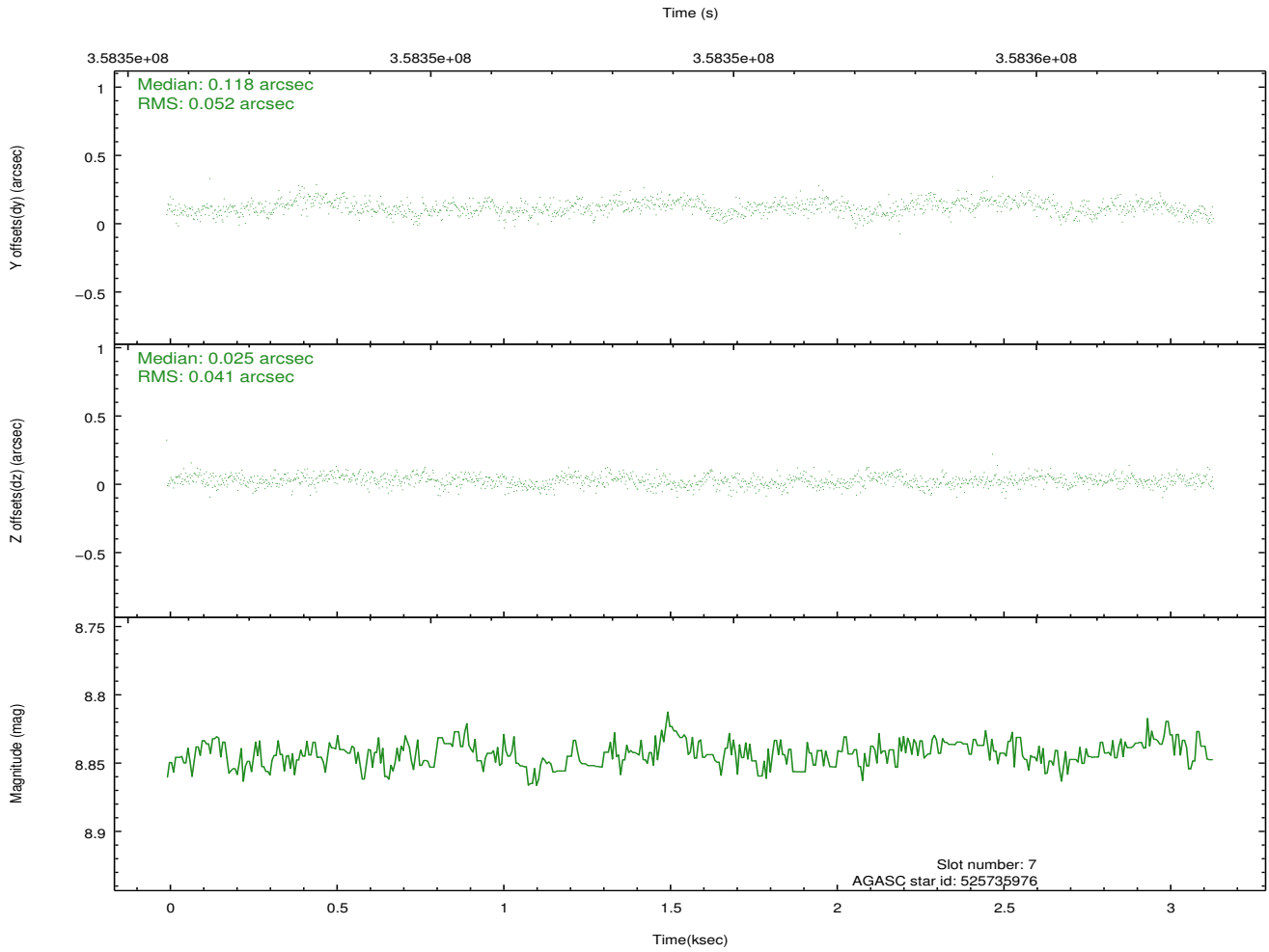
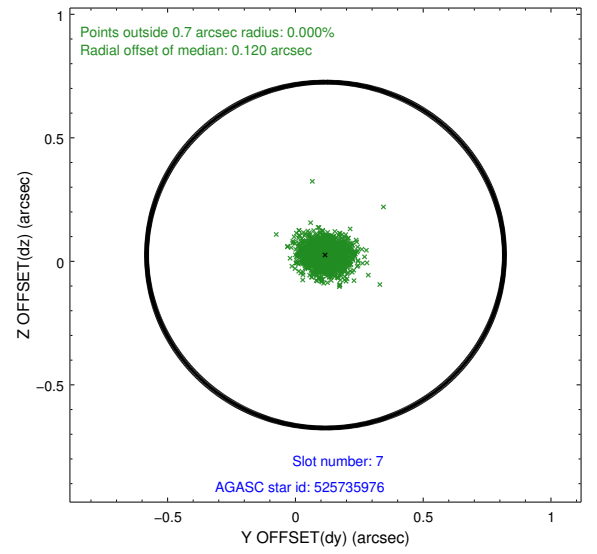
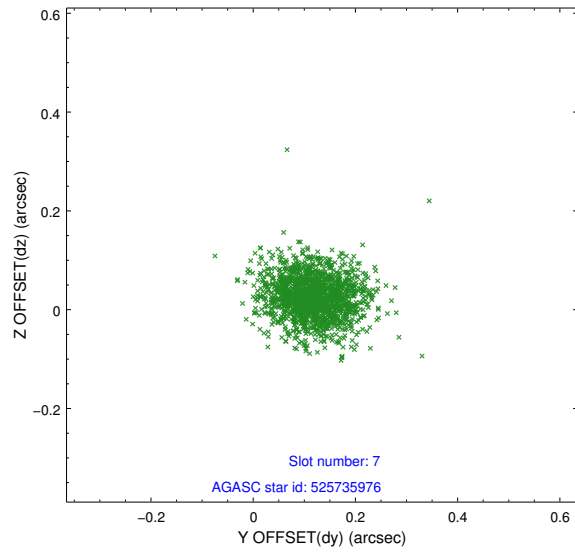
### 2.4.3 Slot 5



## 2.4.4 Slot 6

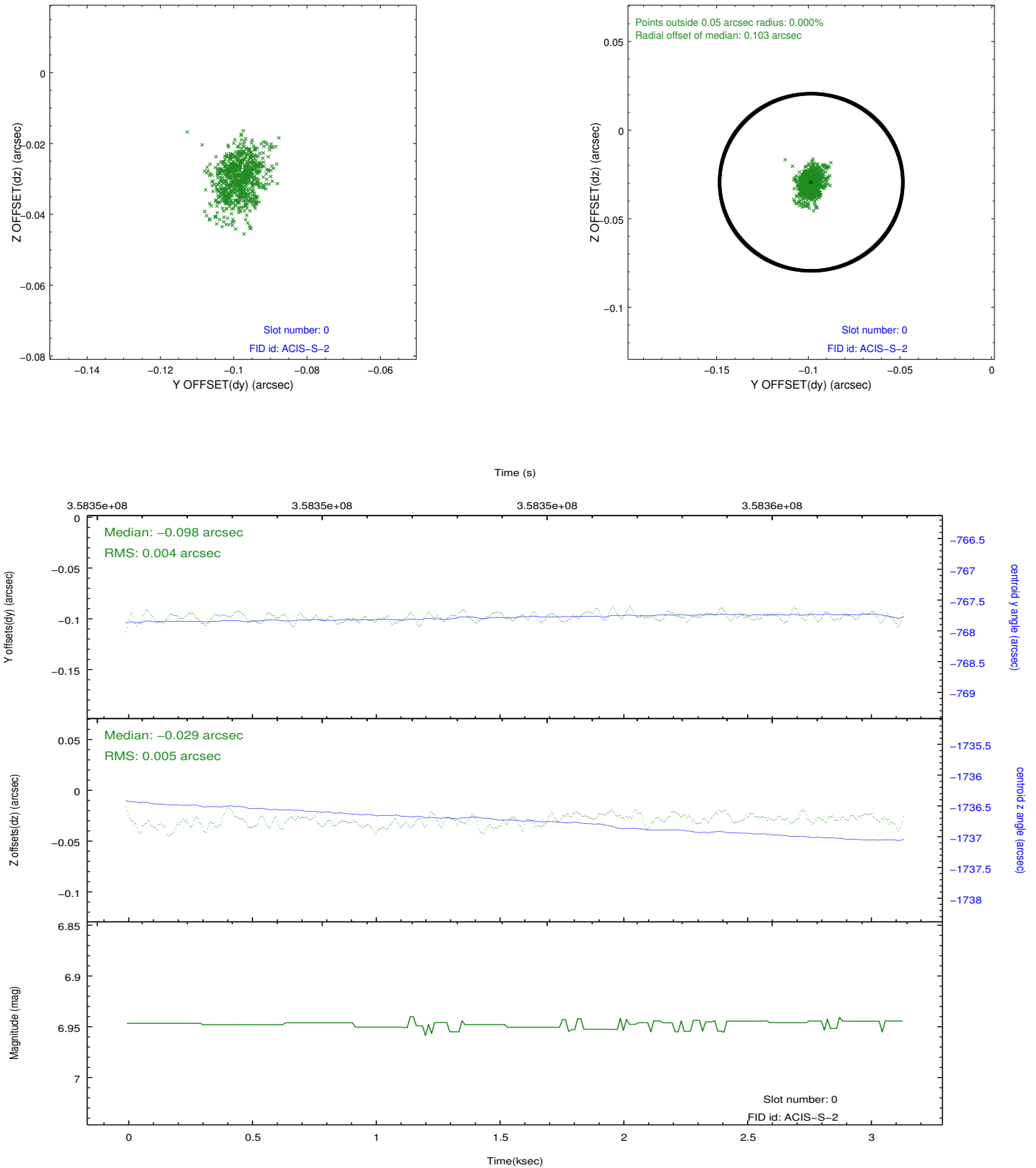


## 2.4.5 Slot 7

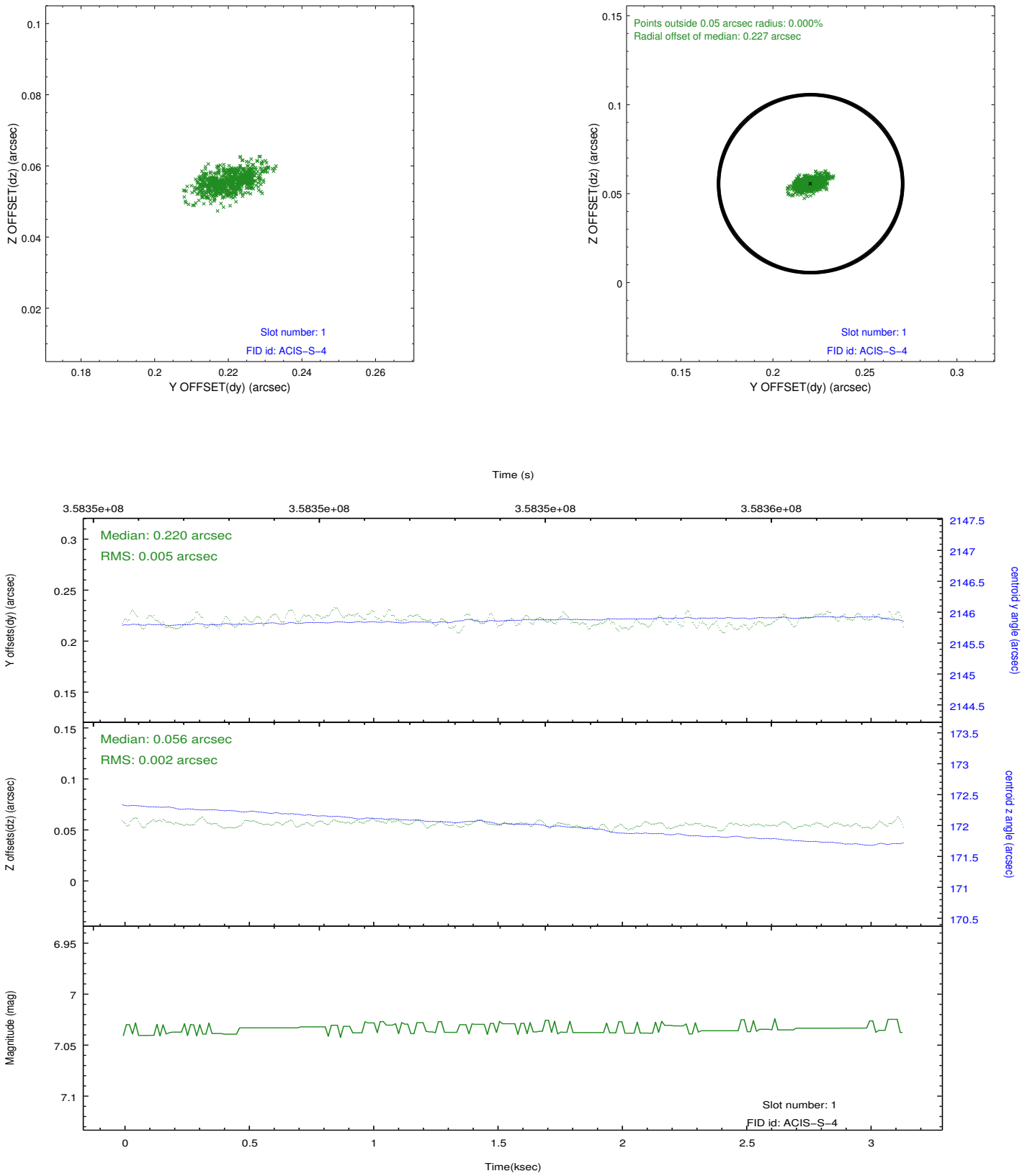


## 2.5 FID Slots

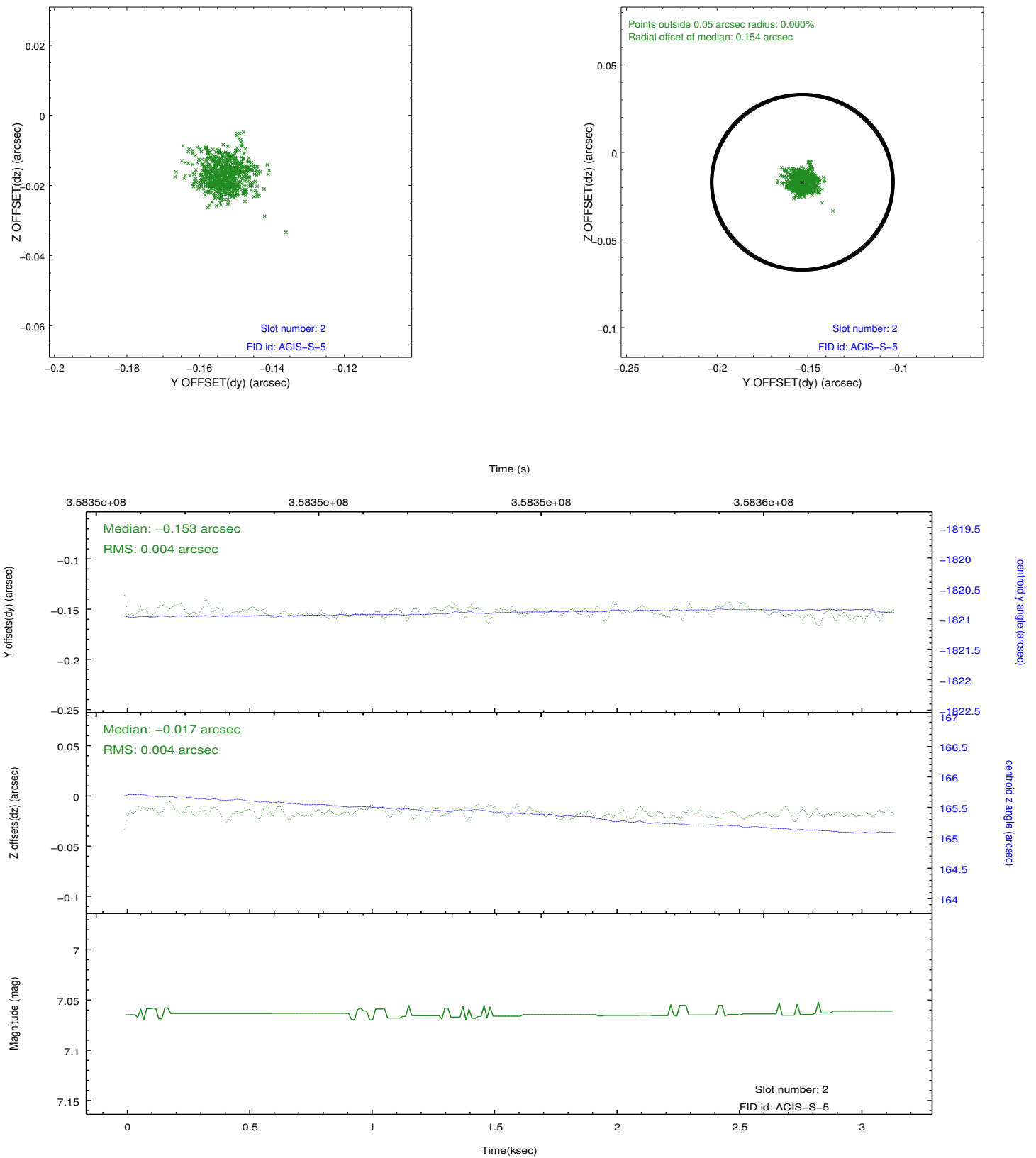
### 2.5.1 Slot 0



2.5.2 Slot 1



### 2.5.3 Slot 2





# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.0367

## A.2 Comments

Window constraint met. === The charge time is based on CCD\_ID=5 (S1), which does reflect the requested exposure. S3 has dropped frames due to telemetry saturation, and its effective exposure time is 1.29 ksec.=== Although 4 ACIS-S CCDs were turned on for this observation, only data from chip S3 were collected. An exclusion filter was used to exclude data from the other 3 chips.