

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12745 - L2 Version 2  
Chandra X-Ray Center

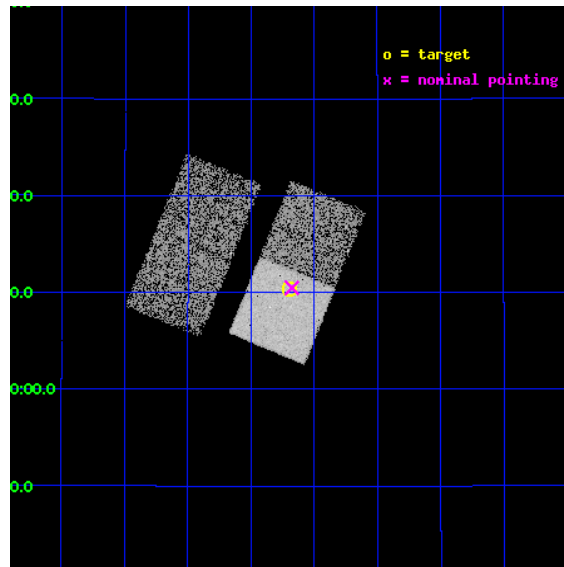
L2 Processing Date : Feb 10 2012

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# 1 Front

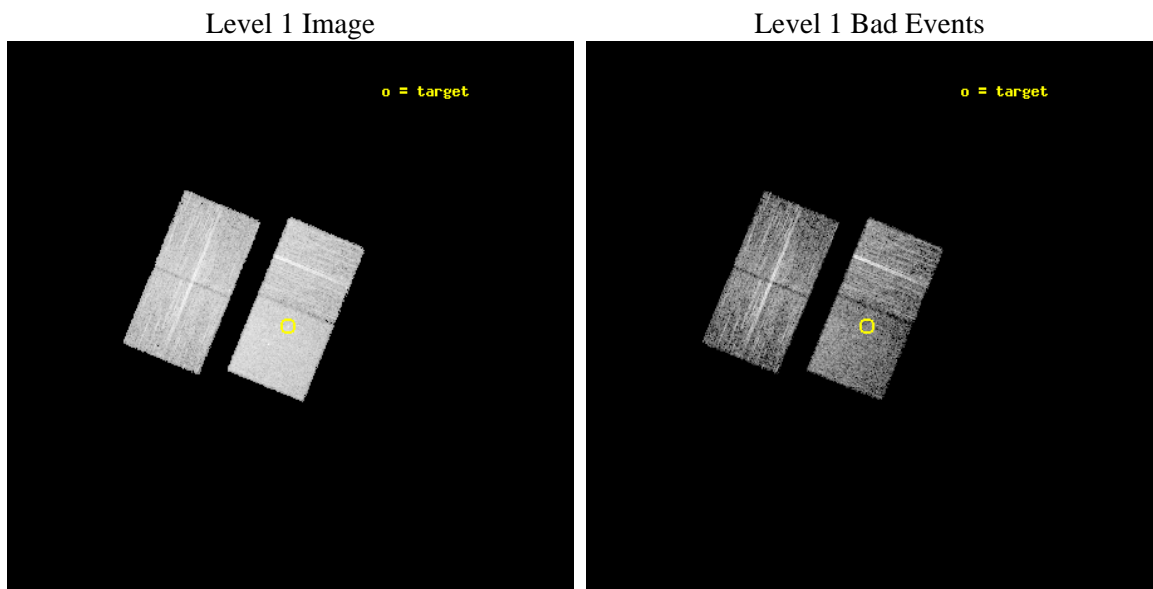
seq_num	702381	Sequence number
obs_id	12745	Observation id
title	Completing the Chandra 3C Snapshot Survey: Extragalactic Radio Sources with $z < 0.3$	Proposal title
observer	Dr. Daniel Harris	Principal investigator
object	3C 436	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	326.04875	Observer's specified target RA [deg]
dec_targ	28.171917	Observer's specified target Dec [deg]
ra_nom	326.04427168938	Nominal RA [deg]
dec_nom	28.174751066506	Nominal Dec [deg]
roll_nom	112.2934905258	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8056.4687023163	Sum of GTIs [s]
livetime	7951.2050076345	Livetime [s]
ontime2	8056.3455823064	Sum of GTIs [s]
ontime3	8053.245661974	Sum of GTIs [s]
ontime6	8056.427662313	Sum of GTIs [s]
ontime7	8056.4687023163	Sum of GTIs [s]
l2events	44657	Number of level 2 events



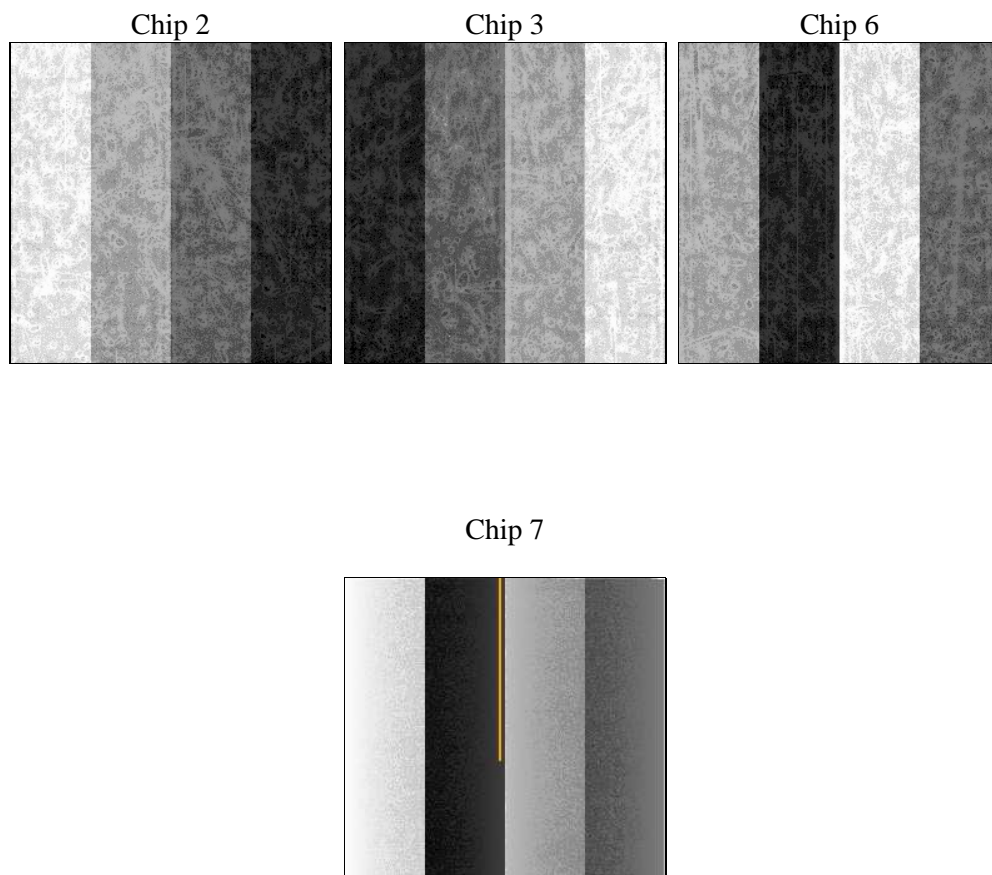
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	8056.4687023163	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime2	8056.3455823064	Sum of GTIs [s]
date	2012-02-11T00:17:52	Date and time of file creation	ontime3	8053.245661974	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8056.427662313	Sum of GTIs [s]
			ontime7	8056.4687023163	Sum of GTIs [s]
			l1events	225000	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	51696	51038	54888	67378
rejected events	45786	45665	48578	37087
rejected %	88%	89%	88%	55%

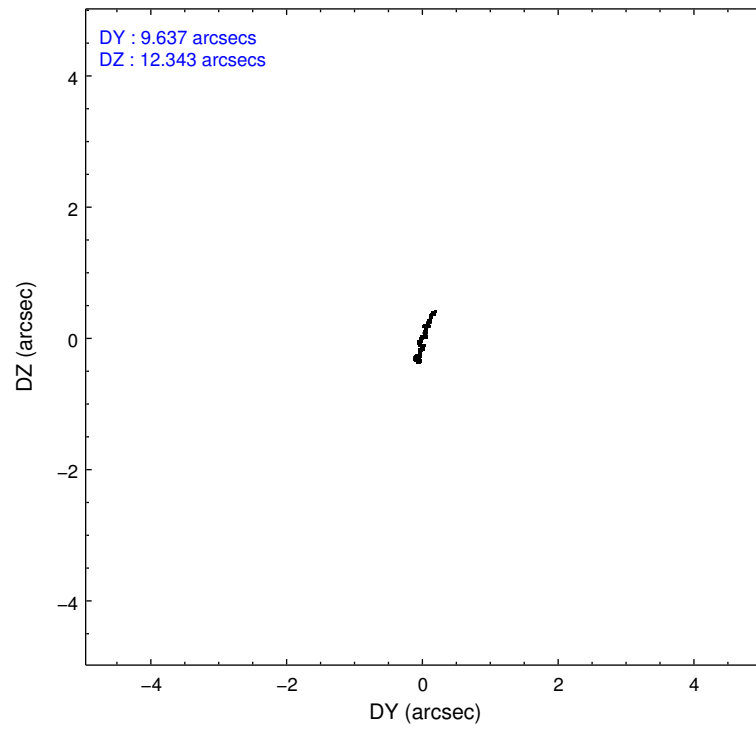
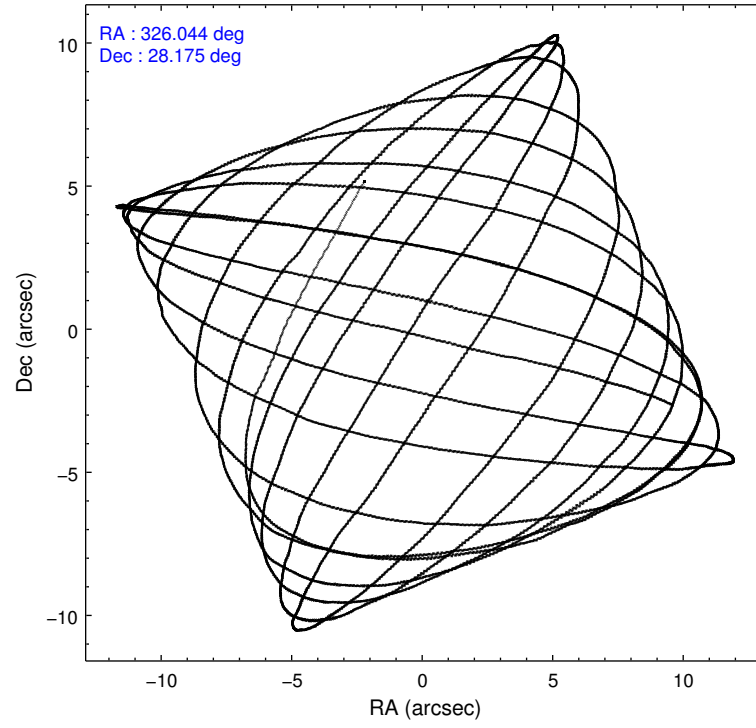
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2126	1867	2188	2829
	4%	3%	3%	4%
grade 1 events	36	31	35	79
	0%	0%	0%	0%
grade 2 events	1424	1169	1384	6133
	2%	2%	2%	9%
grade 3 events	578	612	686	2641
	1%	1%	1%	3%
grade 4 events	654	602	652	2705
	1%	1%	1%	4%
grade 5 events	2191	2460	2469	6962
	4%	4%	4%	10%
grade 6 events	1130	1126	1403	15996
	2%	2%	2%	23%
grade 7 events	43557	43171	46071	30033
	84%	84%	83%	44%

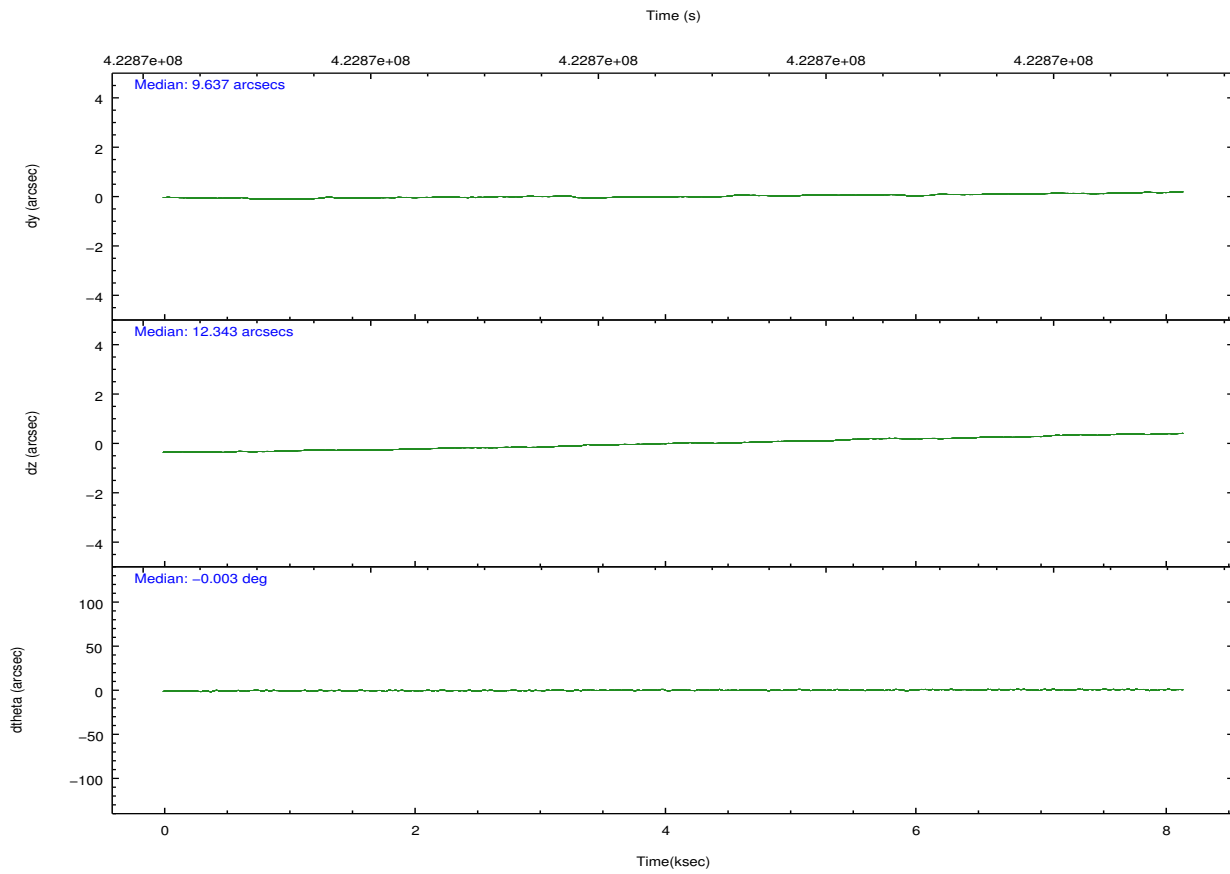
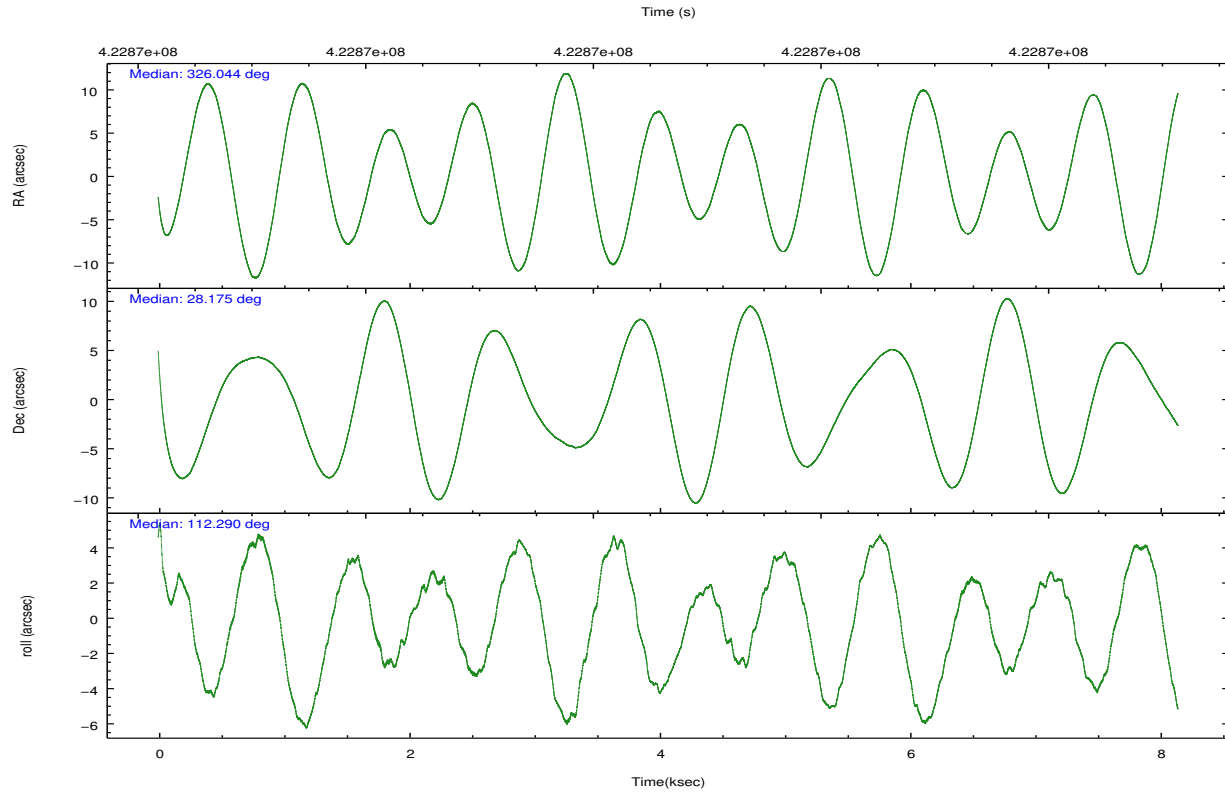


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	326.069087	326.0442716893847	CCD I2 on	O1	Y
[deg] Pointing Dec	28.158339	28.17475106650583	CCD I3 on	O2	Y
[deg] Pointing Roll	112.125141	112.2934905258019	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	422866725.184000	422865697.18991	CCD S5 on	N	N
Observation start date	2011-05-27T06:57:39	2011-05-27T06:41:37	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	422874725.184000	422875326.04041	On-chip summing requested	N	N
Observation end date	2011-05-27T09:10:59	2011-05-27T09:22:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



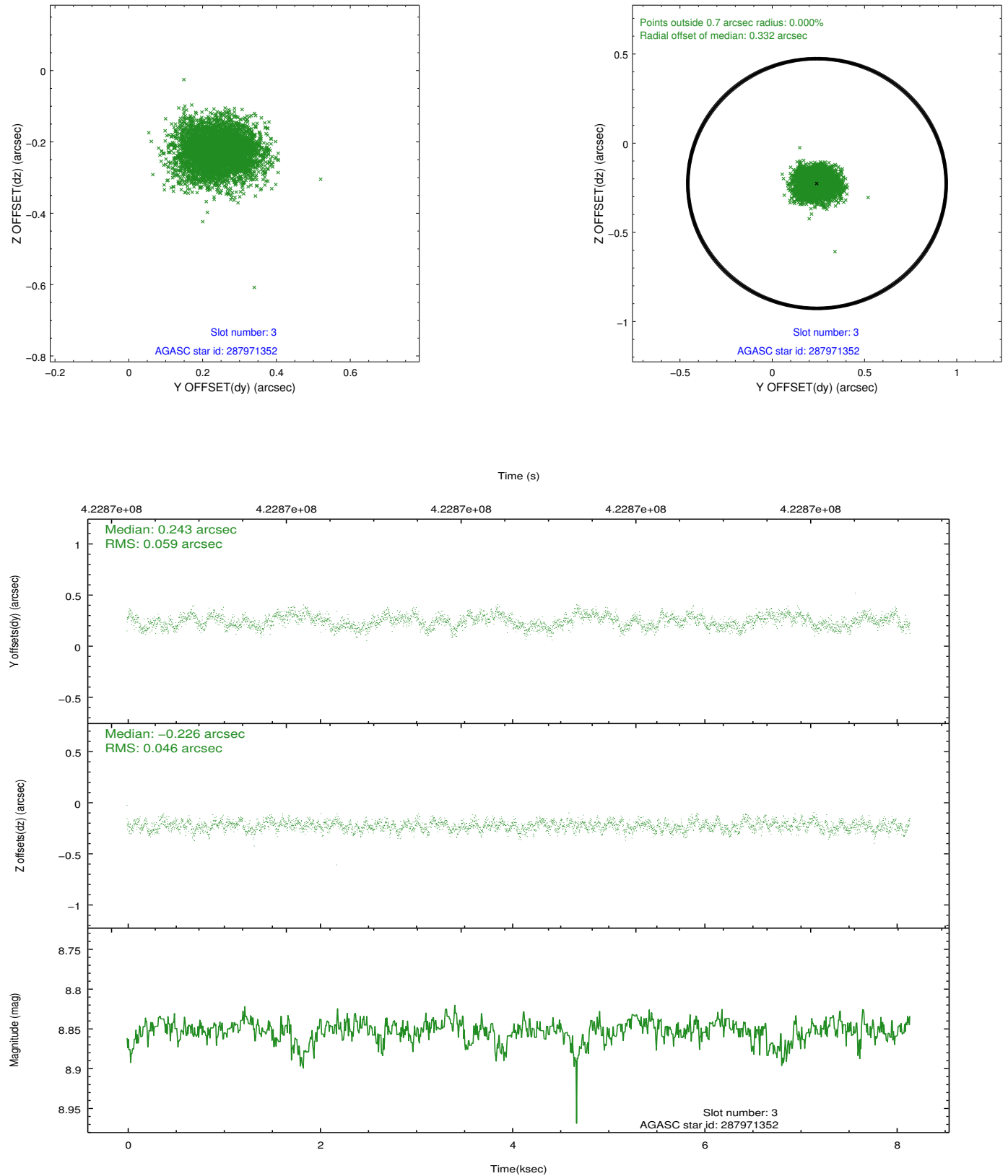


### Slot Statistics

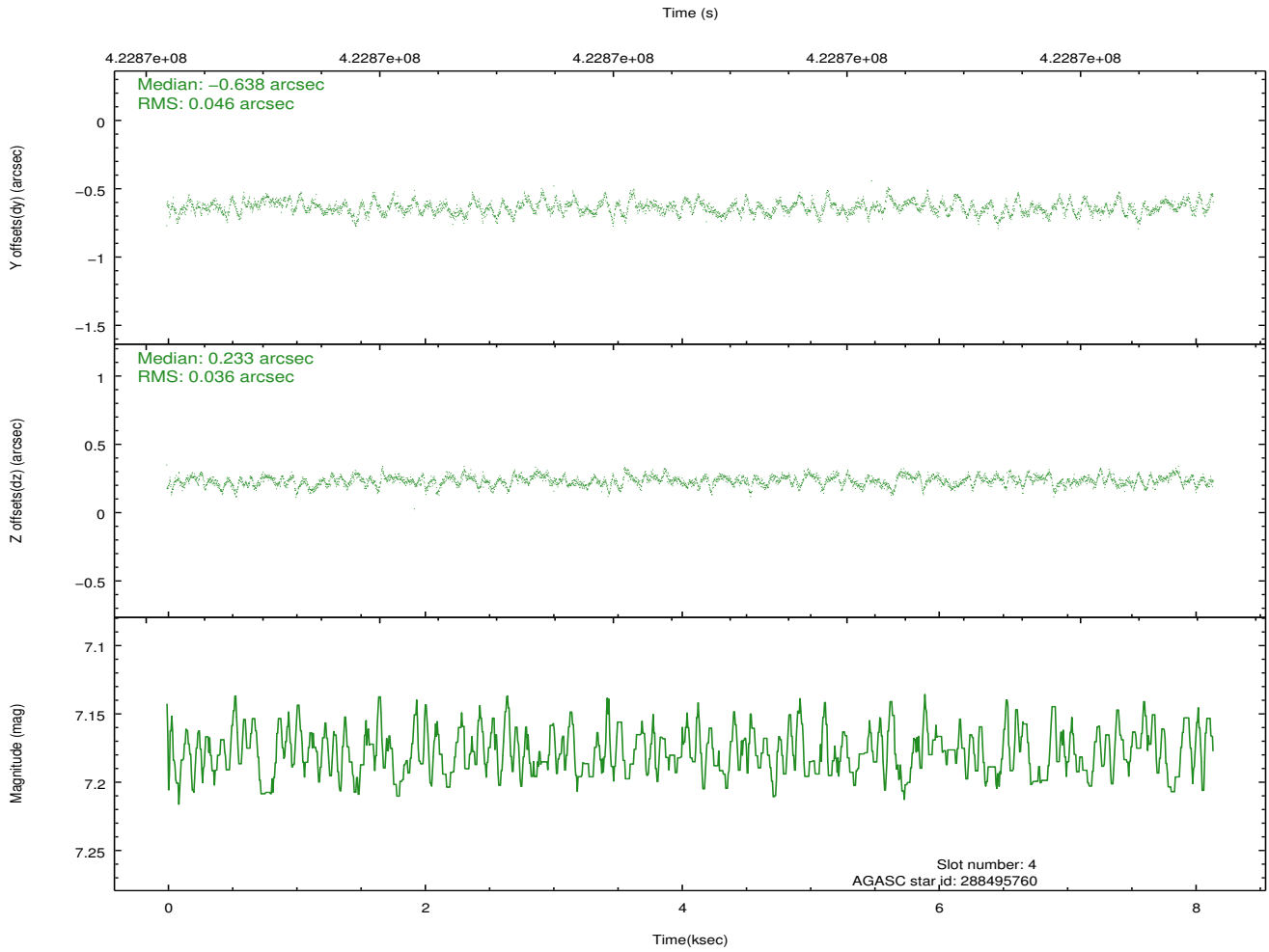
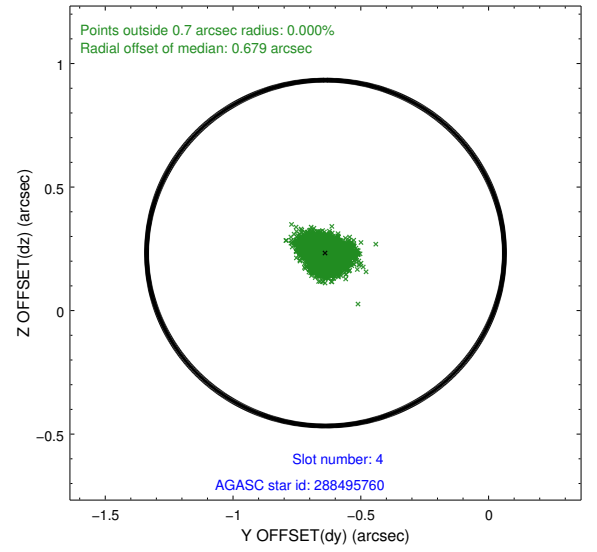
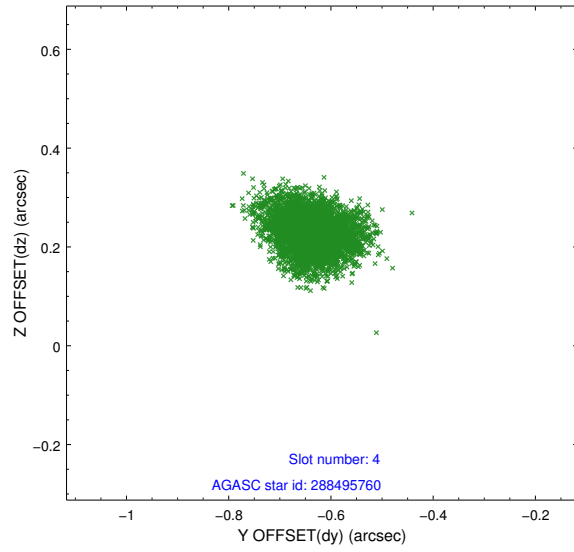
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	1987	-0.023	-0.022	0.011	0.017	0.000000	0.000000	-762.52	-1733.66
1	FID	ACIS-S-4	7.02	1986	0.150	0.017	0.006	0.011	0.000000	0.000000	2150.64	174.12
2	FID	ACIS-S-5	7.05	1988	-0.158	0.014	0.010	0.015	0.000000	0.000000	-1814.60	168.61
3	GUIDE	287971352	8.85	3974	0.243	-0.226	0.081	0.127	326.115416	27.691792	-1611.27	495.93
4	GUIDE	288495760	7.18	3974	-0.638	0.233	0.063	0.102	326.079931	28.781601	2064.84	-876.08
5	GUIDE	288498264	8.75	3971	-0.077	-0.326	0.070	0.115	325.561232	28.420154	1482.41	1133.06
6	GUIDE	289671072	9.03	3970	0.308	0.141	0.092	0.147	326.623494	27.793243	-1877.98	-1141.41
7	GUIDE	289670904	8.29	3974	0.161	0.181	0.073	0.118	326.829741	28.091753	-1124.98	-2150.29

## 2.4 Star Slots

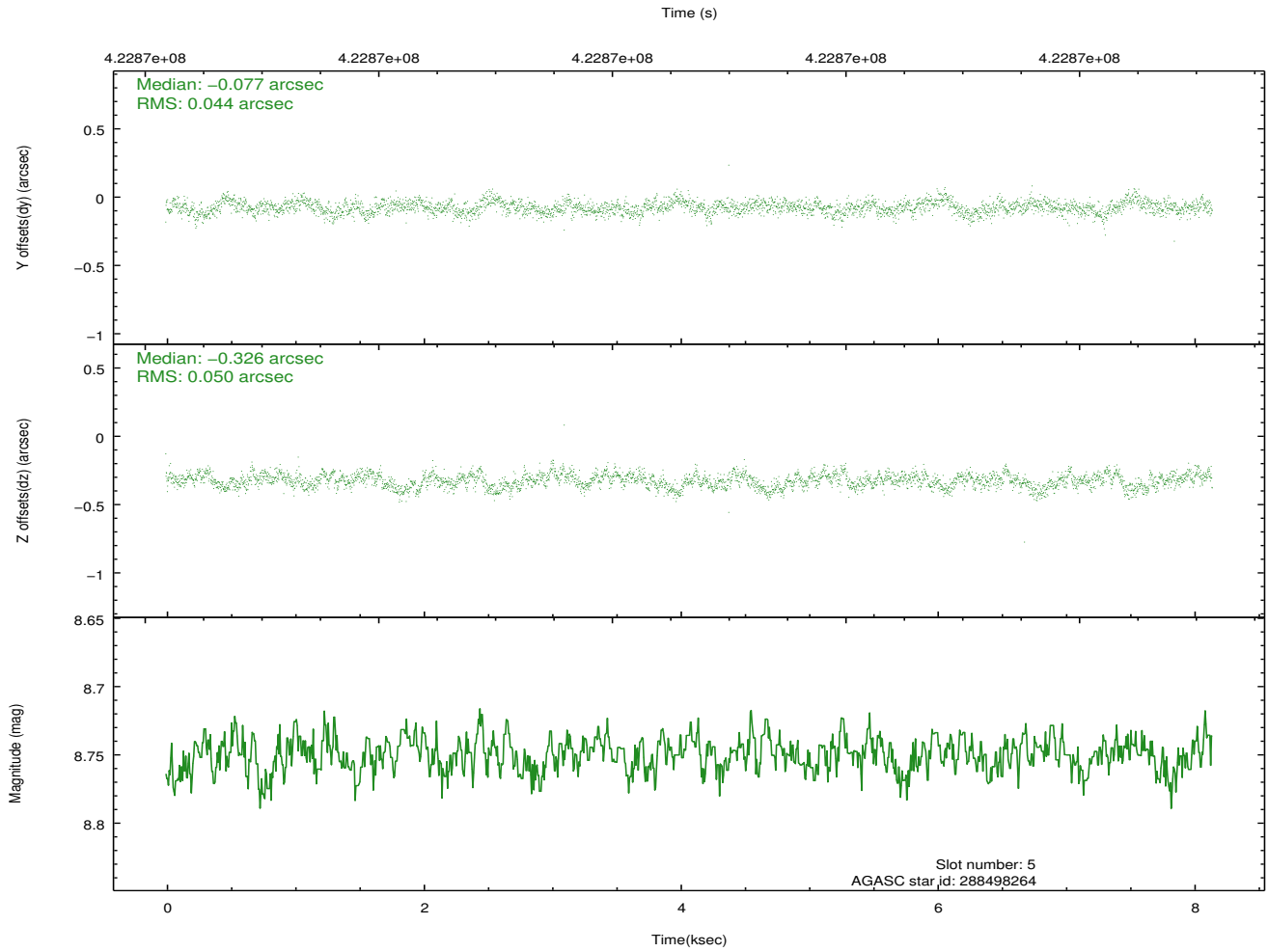
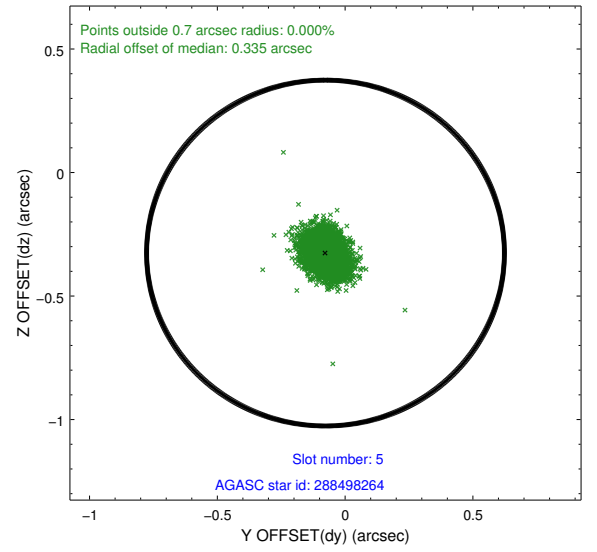
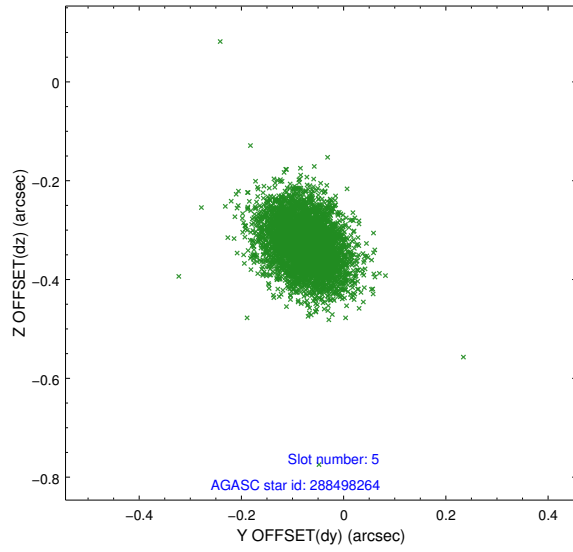
### 2.4.1 Slot 3



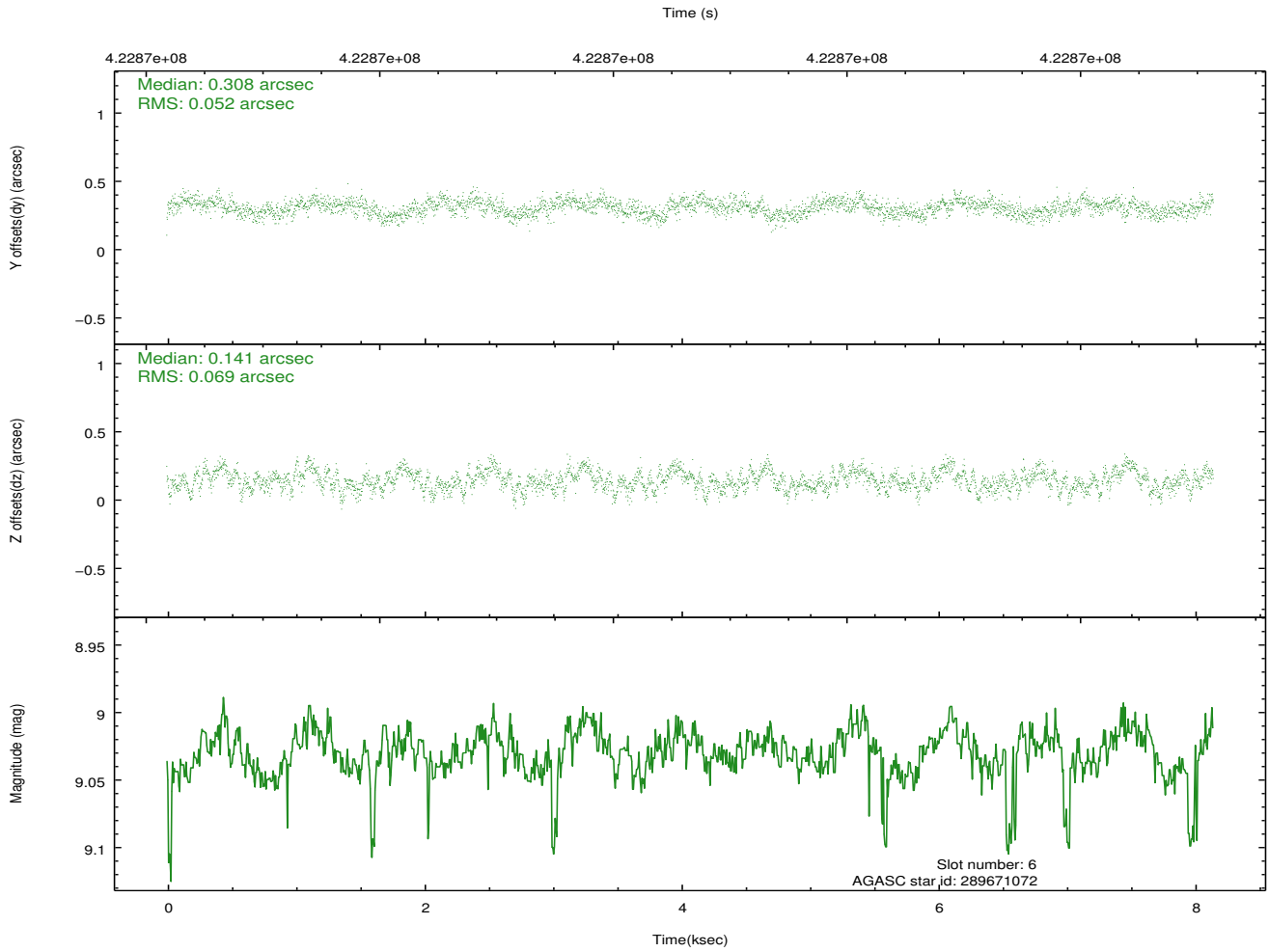
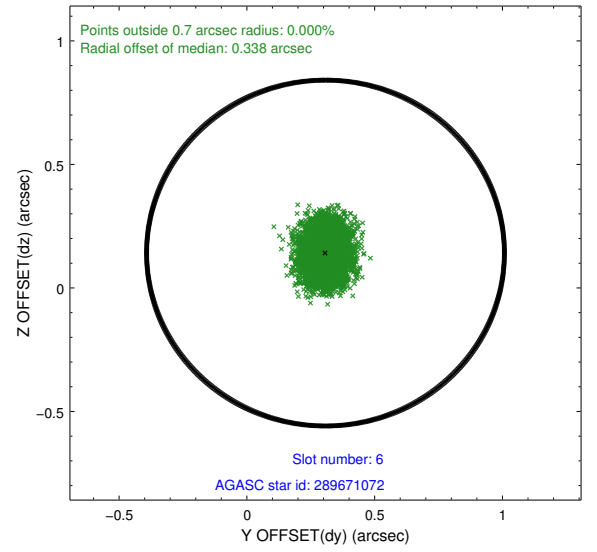
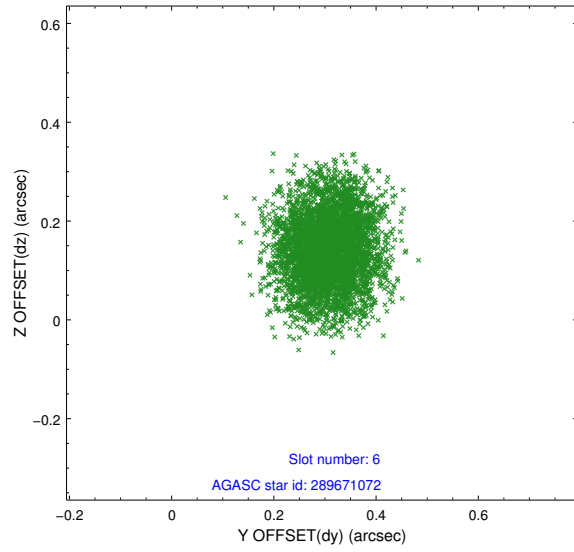
## 2.4.2 Slot 4



### 2.4.3 Slot 5

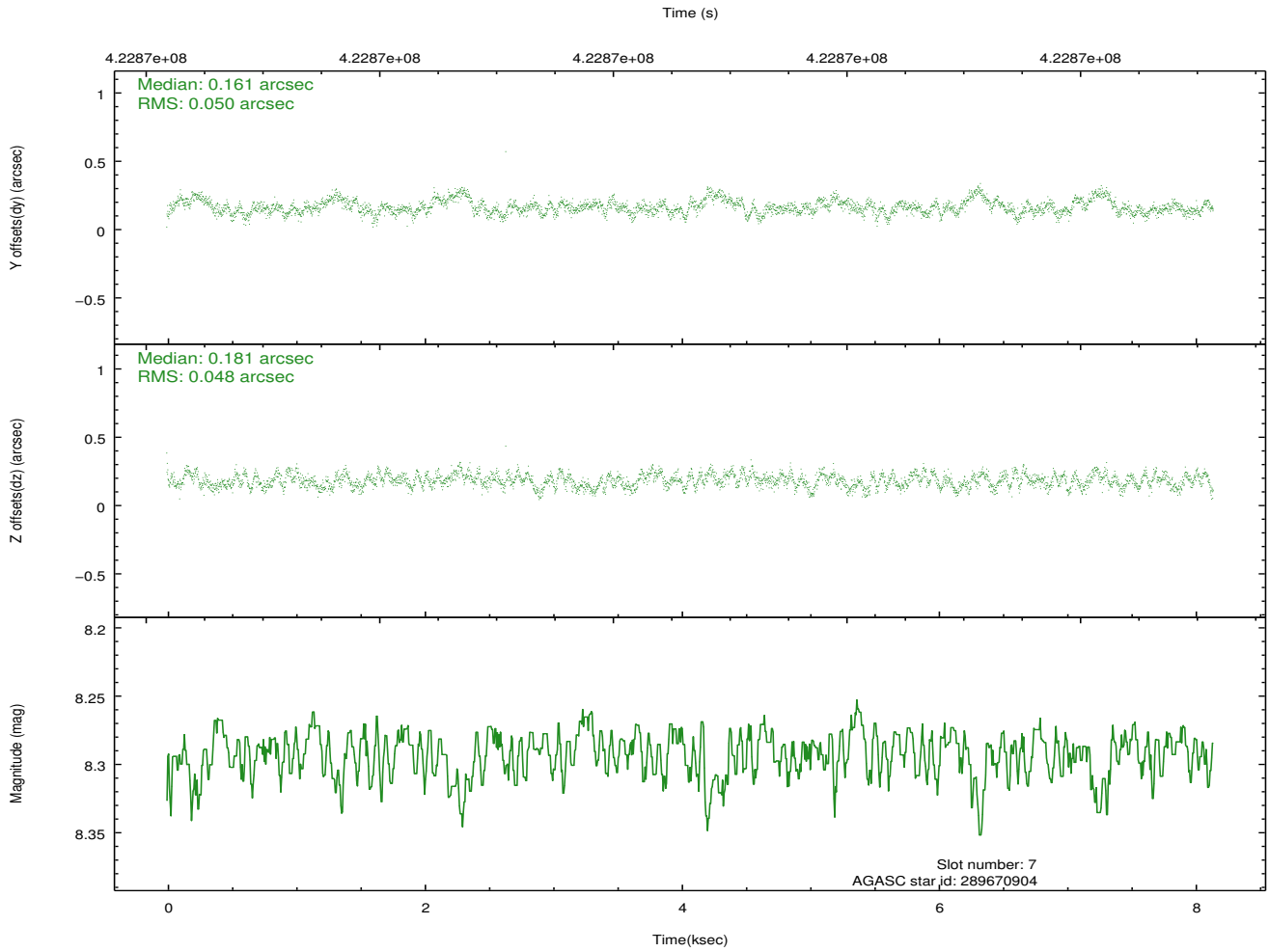
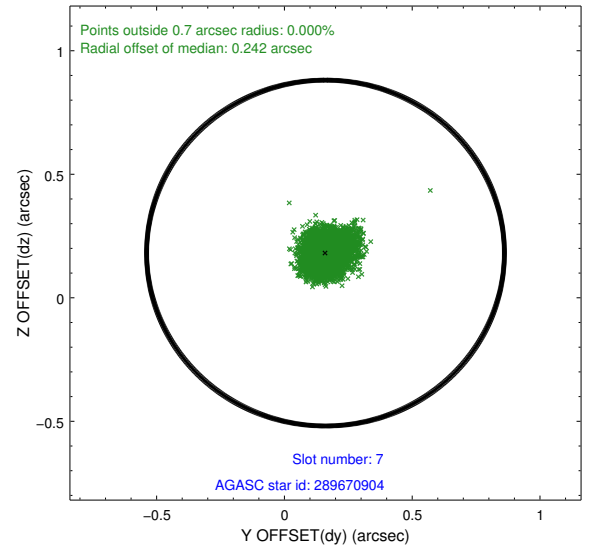
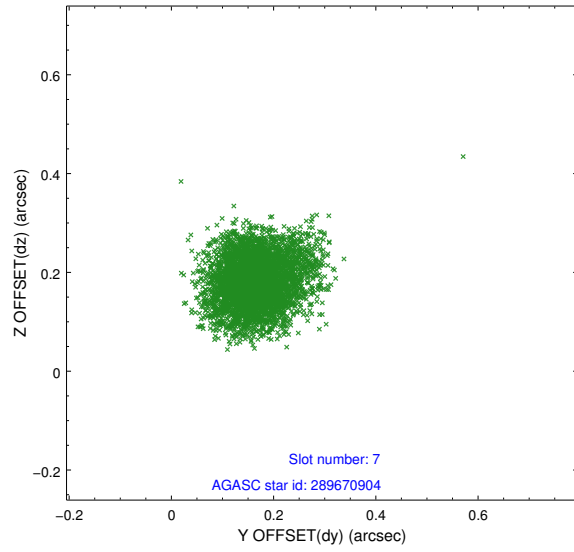


## 2.4.4 Slot 6



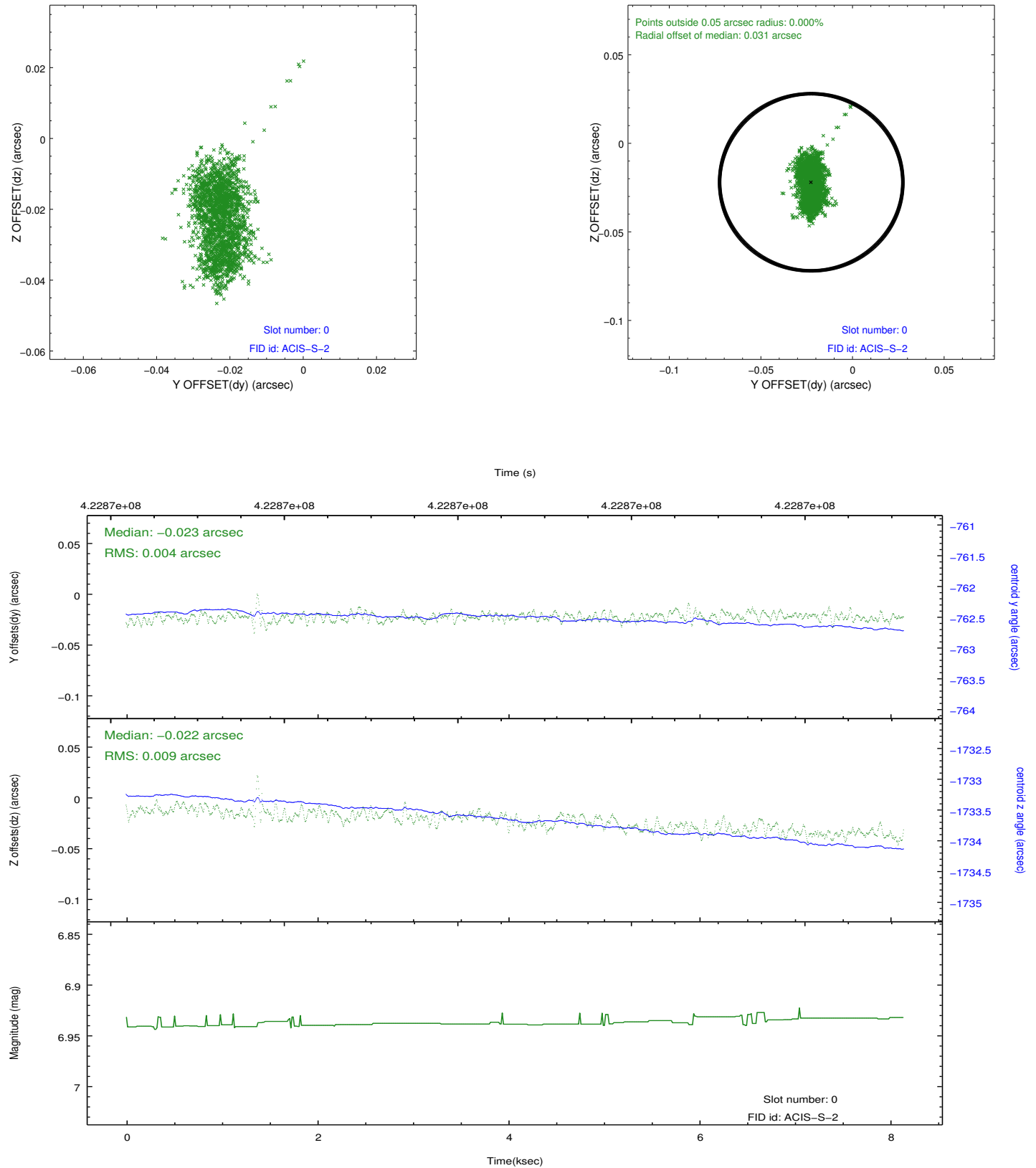


## 2.4.5 Slot 7

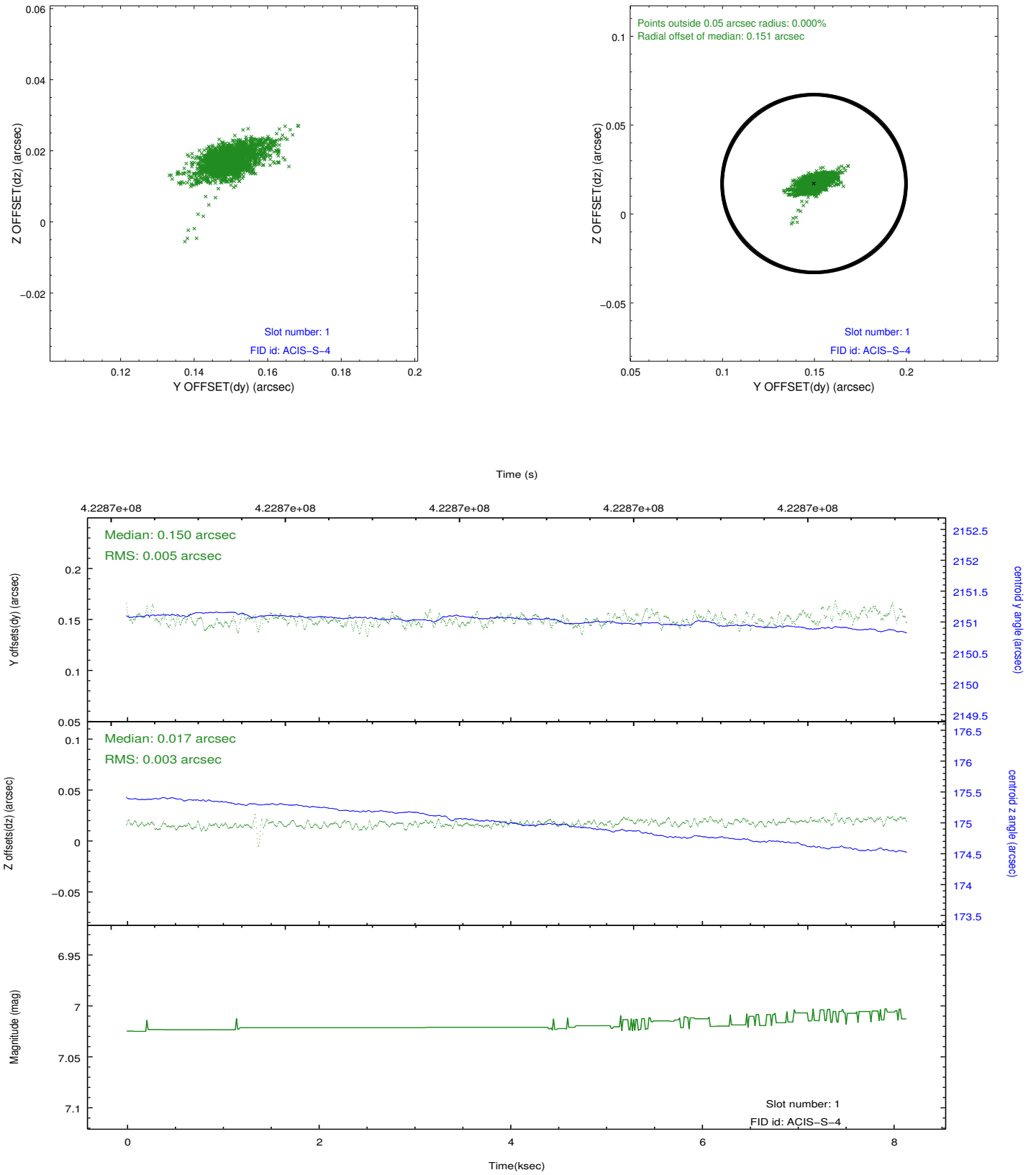


## 2.5 FID Slots

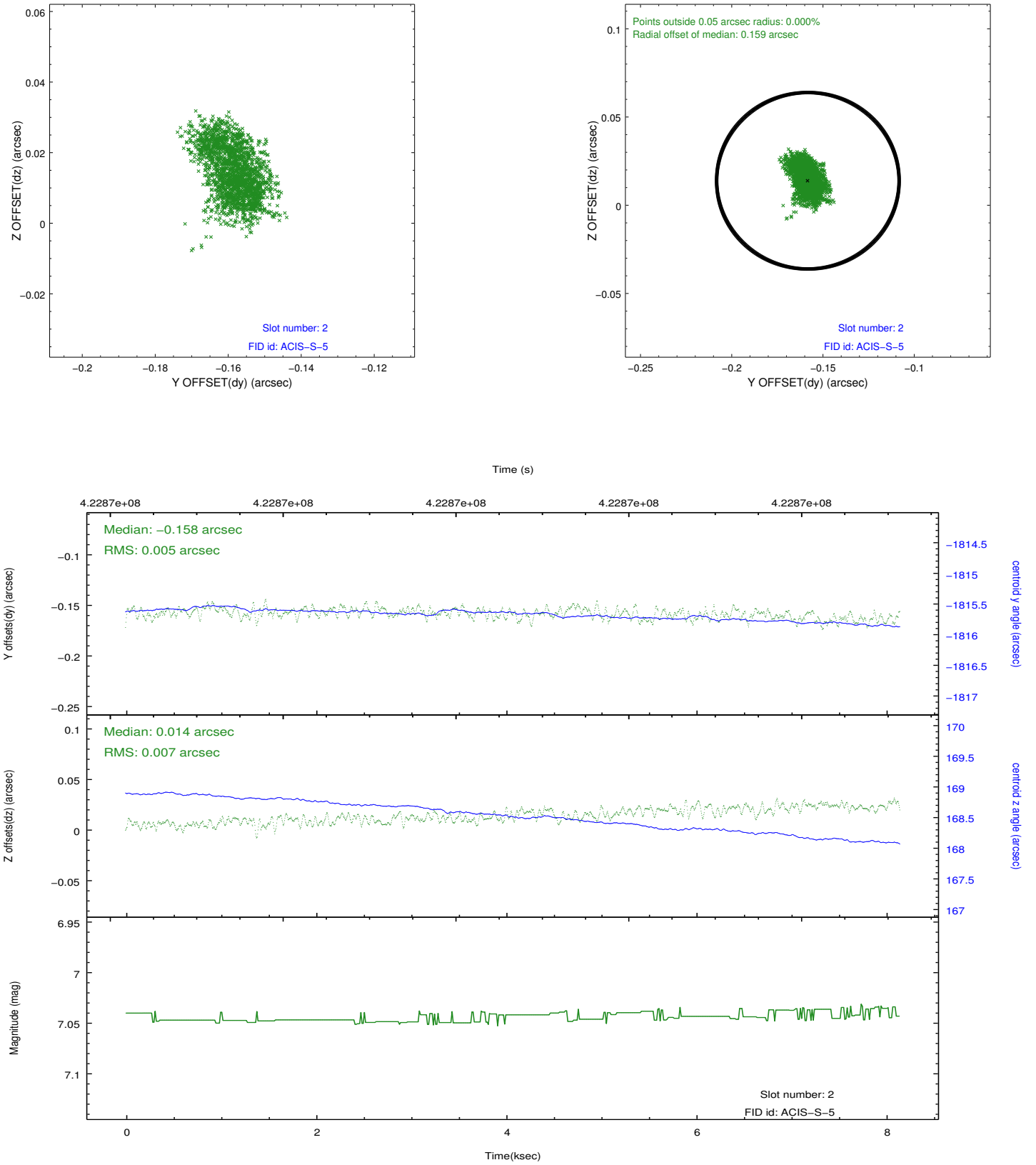
### 2.5.1 Slot 0



## 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)	2012.02.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0564686956406

## A.2 Comments

The data for this observation have been processed using the 'EDSER' sub-pixel event-repositioning algorithm of Li et al. (2004, ApJ, 610, 1204). Small-scale features should become sharper for sources near the aim point. The improvement will be less noticeable for off-axis sources where the size of the point-spread function is comparable to or larger than the size of an ACIS pixel. To take full advantage of the improvement, images should be binned on spatial scales smaller than the size of an ACIS pixel. Note that, at present, the point-spread function has not been calibrated for data to which the EDSER algorithm has been applied. If dither was disabled for the observation, then the algorithm can introduce artificial aliasing effects on spatial scales smaller than a pixel. If you would prefer to use no sub-pixel adjustment or to apply a coordinate randomization, then use `acis_process_events` to reprocess the data with the parameter `pix_adj=NONE` or `RANDOMIZE`, respectively.