

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14608 - L2 Version 2  
Chandra X-Ray Center

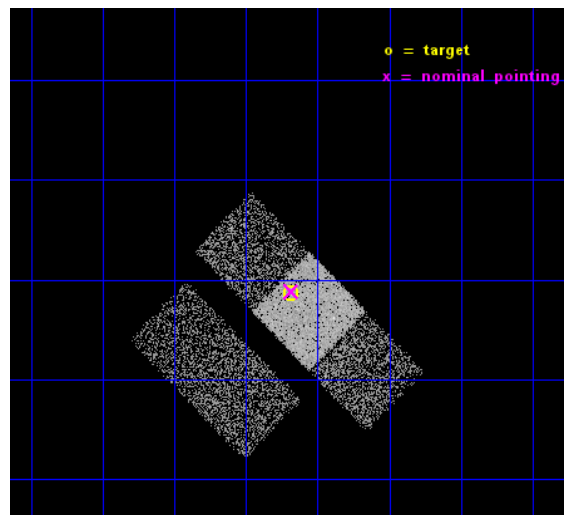
L2 Processing Date : Nov 30 2014

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# 1 Front

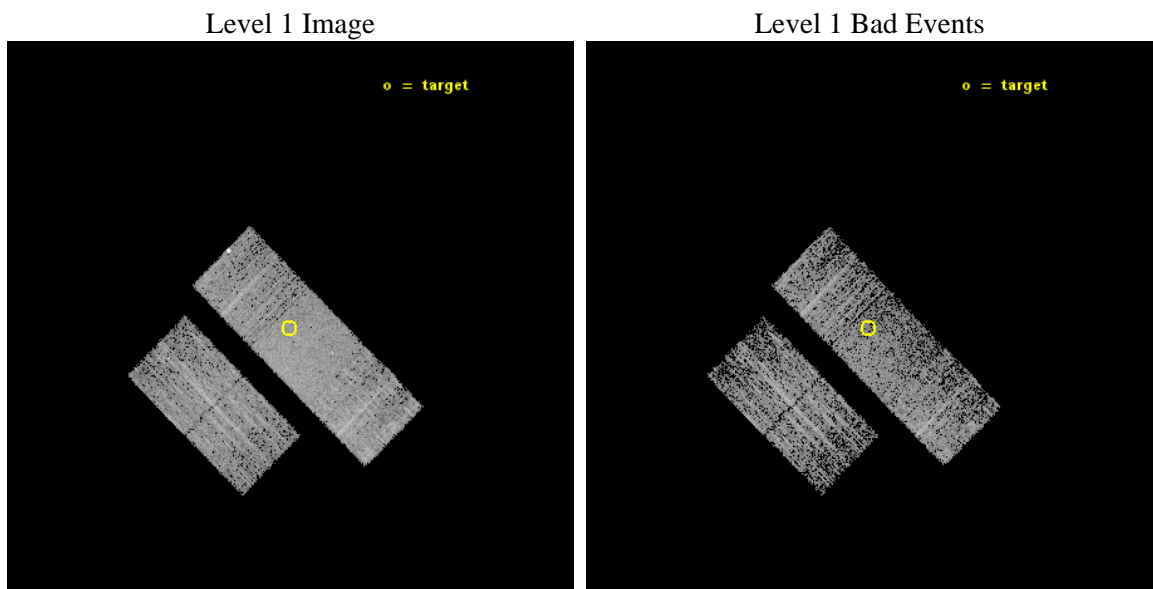
seq_num	300315	Sequence number
obs_id	14608	Observation id
title	Extremely Low-Mass White Dwarfs with Neutron Star Companions	Propo
observer	Dr. Mukremin Kilic	Principal investigator
object	J0751-0141	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	117.921667	Observer's specified target RA [deg]
dec_targ	-1.689139	Observer's specified target Dec [deg]
ra_nom	117.92086163641	Nominal RA [deg]
dec_nom	-1.6862600903923	Nominal Dec [deg]
roll_nom	45.070395214298	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4067.2000312805	Sum of GTIs [s]
livetime	4014.0590686427	Livetime [s]
ontime2	4067.2000312805	Sum of GTIs [s]
ontime3	4067.2000312805	Sum of GTIs [s]
ontime6	4067.2000312805	Sum of GTIs [s]
ontime7	4067.2000312805	Sum of GTIs [s]
ontime8	4067.2000312805	Sum of GTIs [s]
l2events	21193	Number of level 2 events



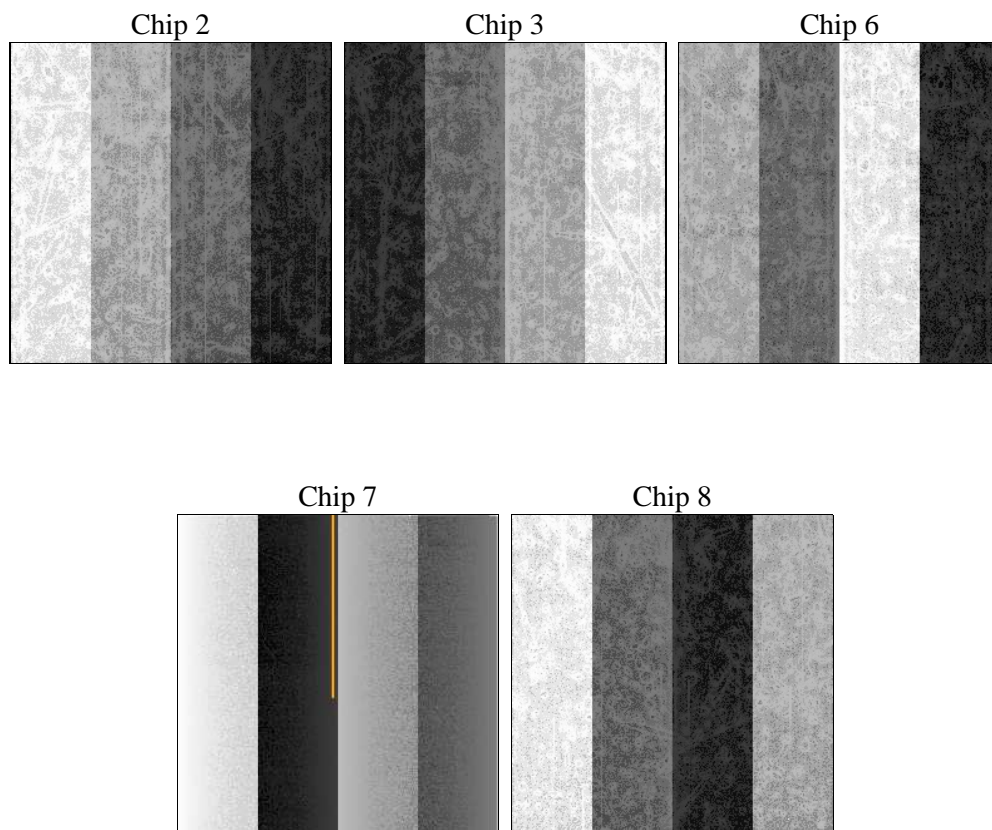
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	4067.2000312805	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	4067.2000312805	Sum of GTIs [s]
date	2014-11-30T19:52:58	Date and time of file creation	ontime3	4067.2000312805	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	4067.2000312805	Sum of GTIs [s]
			ontime7	4067.2000312805	Sum of GTIs [s]
			ontime8	4067.2000312805	Sum of GTIs [s]
			l1events	122885	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	21461	20665	23552	28727	28480
rejected events	19061	18245	19663	16190	20598
rejected %	88%	88%	83%	56%	72%

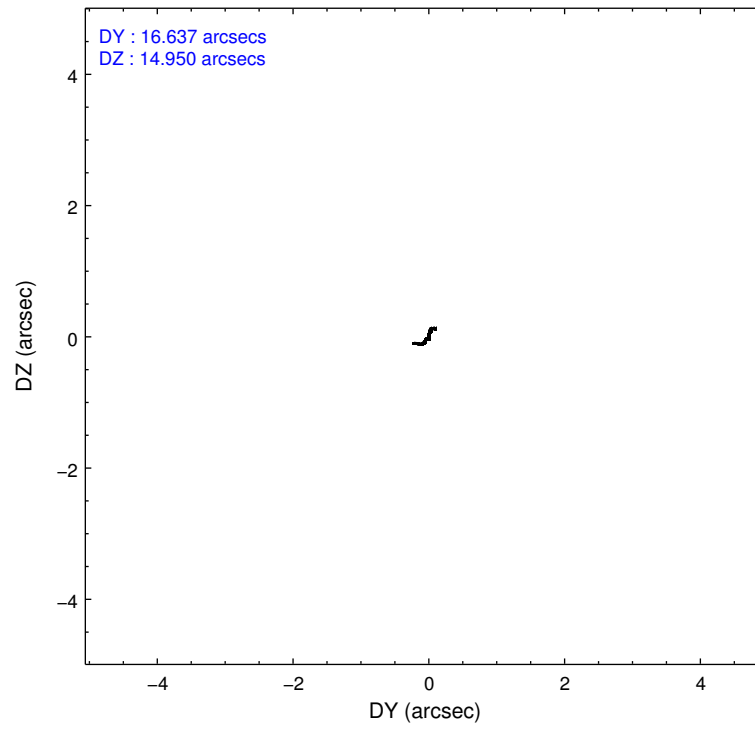
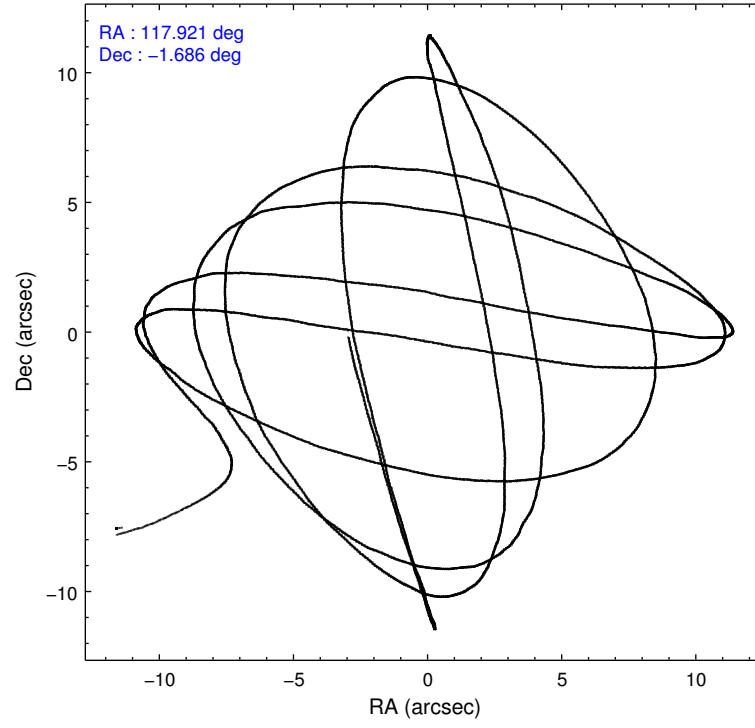
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	855	768	2197	1081	2161
	3%	3%	9%	3%	7%
grade 1 events	6	13	14	30	28
	0%	0%	0%	0%	0%
grade 2 events	642	536	571	2564	1863
	2%	2%	2%	8%	6%
grade 3 events	237	281	272	1090	848
	1%	1%	1%	3%	2%
grade 4 events	237	290	270	1088	754
	1%	1%	1%	3%	2%
grade 5 events	950	1102	1114	3033	1630
	4%	5%	4%	10%	5%
grade 6 events	430	546	587	6729	2266
	2%	2%	2%	23%	7%
grade 7 events	18104	17129	18527	13112	18930
	84%	82%	78%	45%	66%

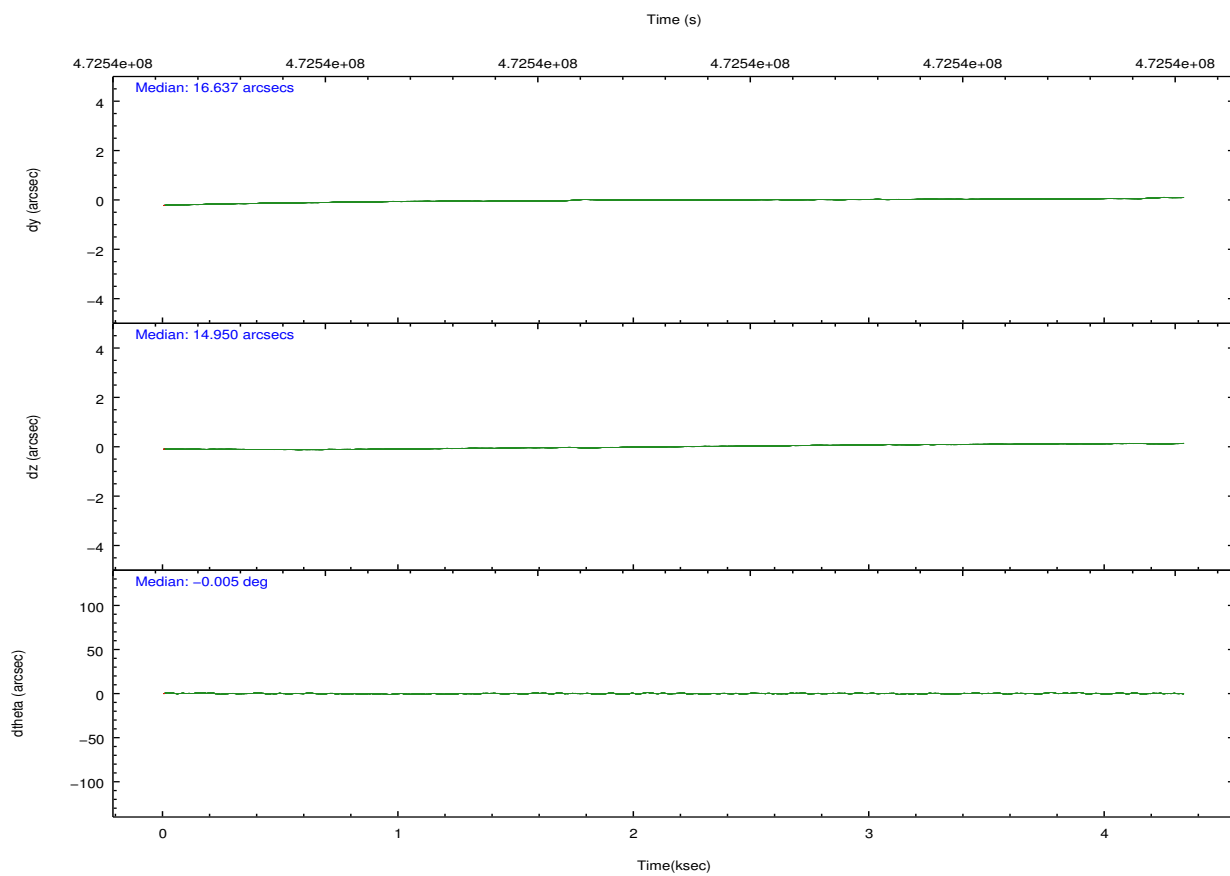
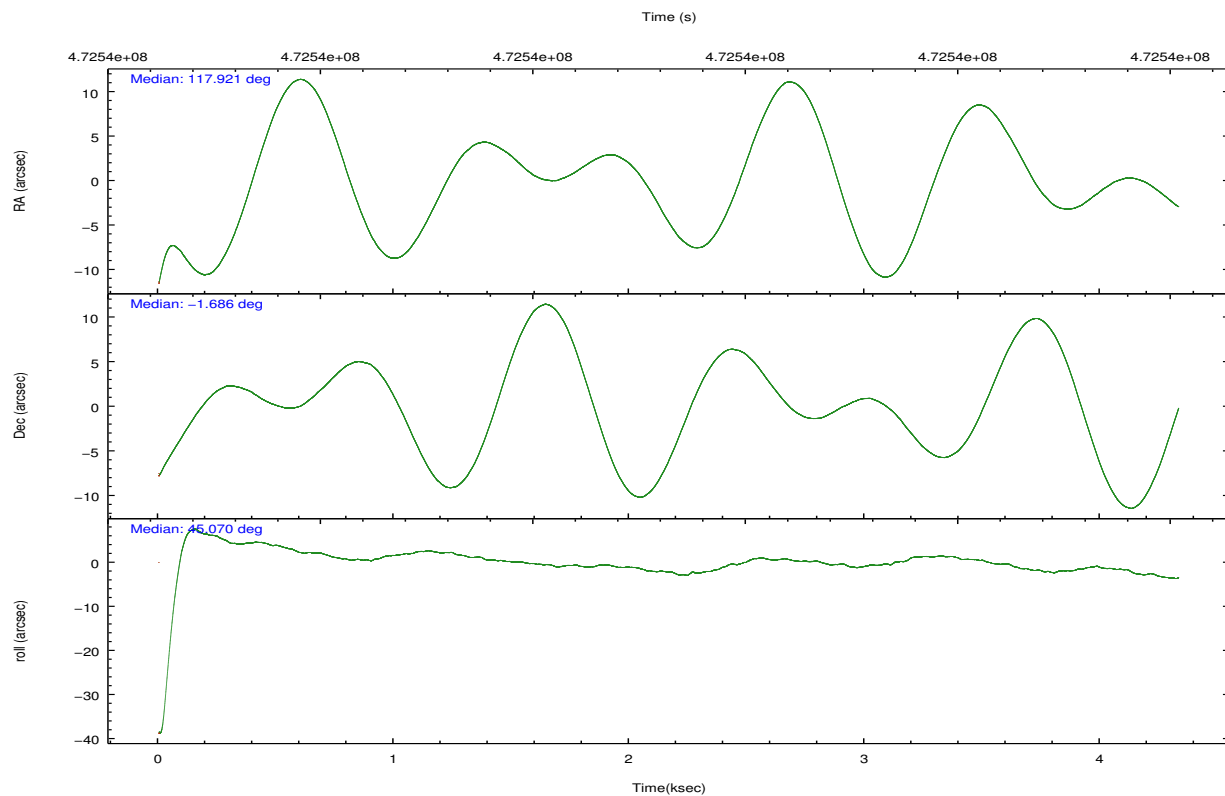


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	117.914326	117.9208616364148	CCD I2 on	O2	Y
[deg] Pointing Dec	-1.712694	-1.686260090392253	CCD I3 on	O1	Y
[deg] Pointing Roll	44.913708	45.07039521429816	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	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O4	Y
[s] Observation start time (MET)	472538803.184000	472537782.97061	CCD S5 on	N	N
Observation start date	2012-12-22T04:45:36	2012-12-22T04:29:42	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	472542803.184000	472543611.12092	On-chip summing requested	N	N
Observation end date	2012-12-22T05:52:16	2012-12-22T06:06:51	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



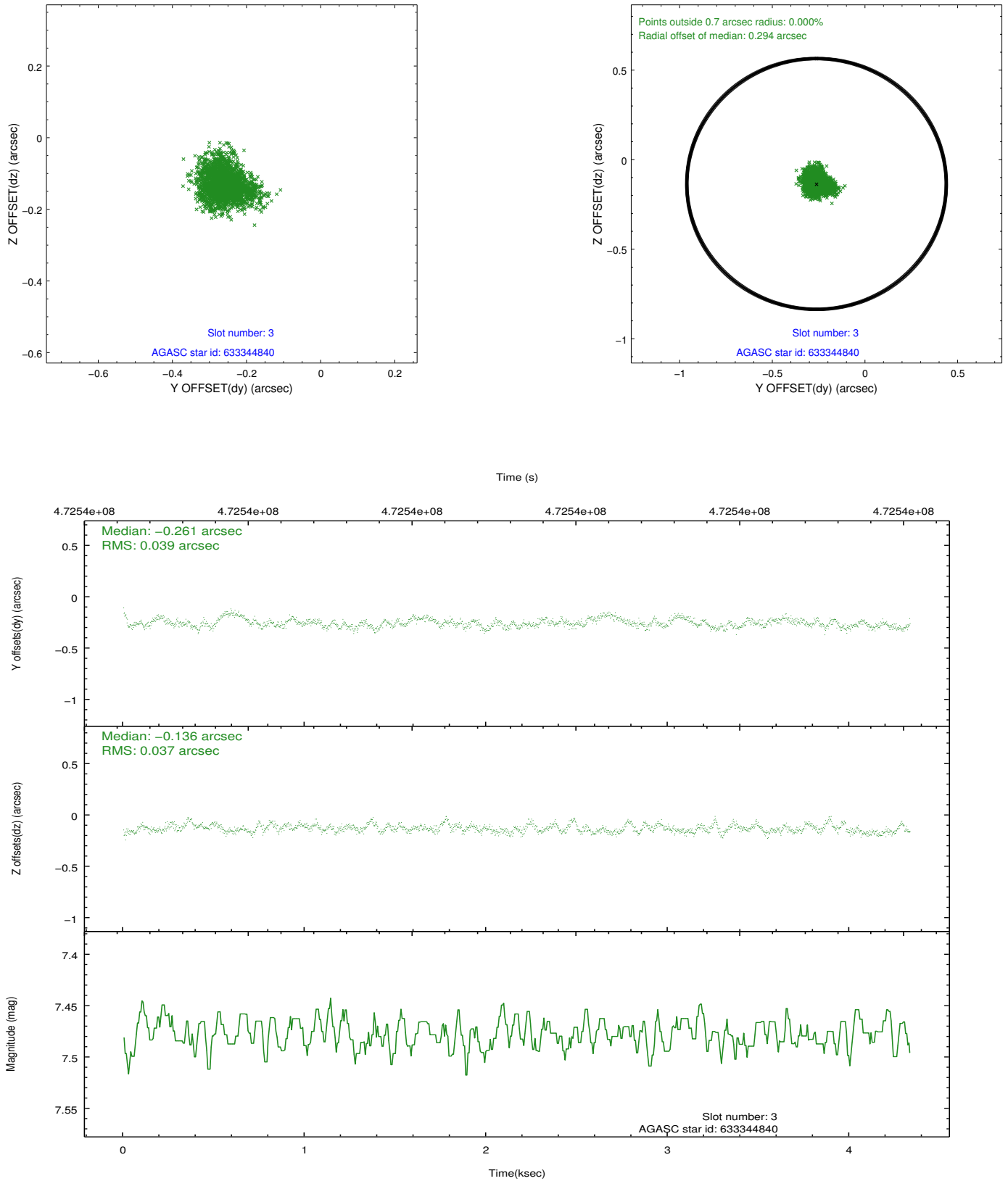


### Slot Statistics

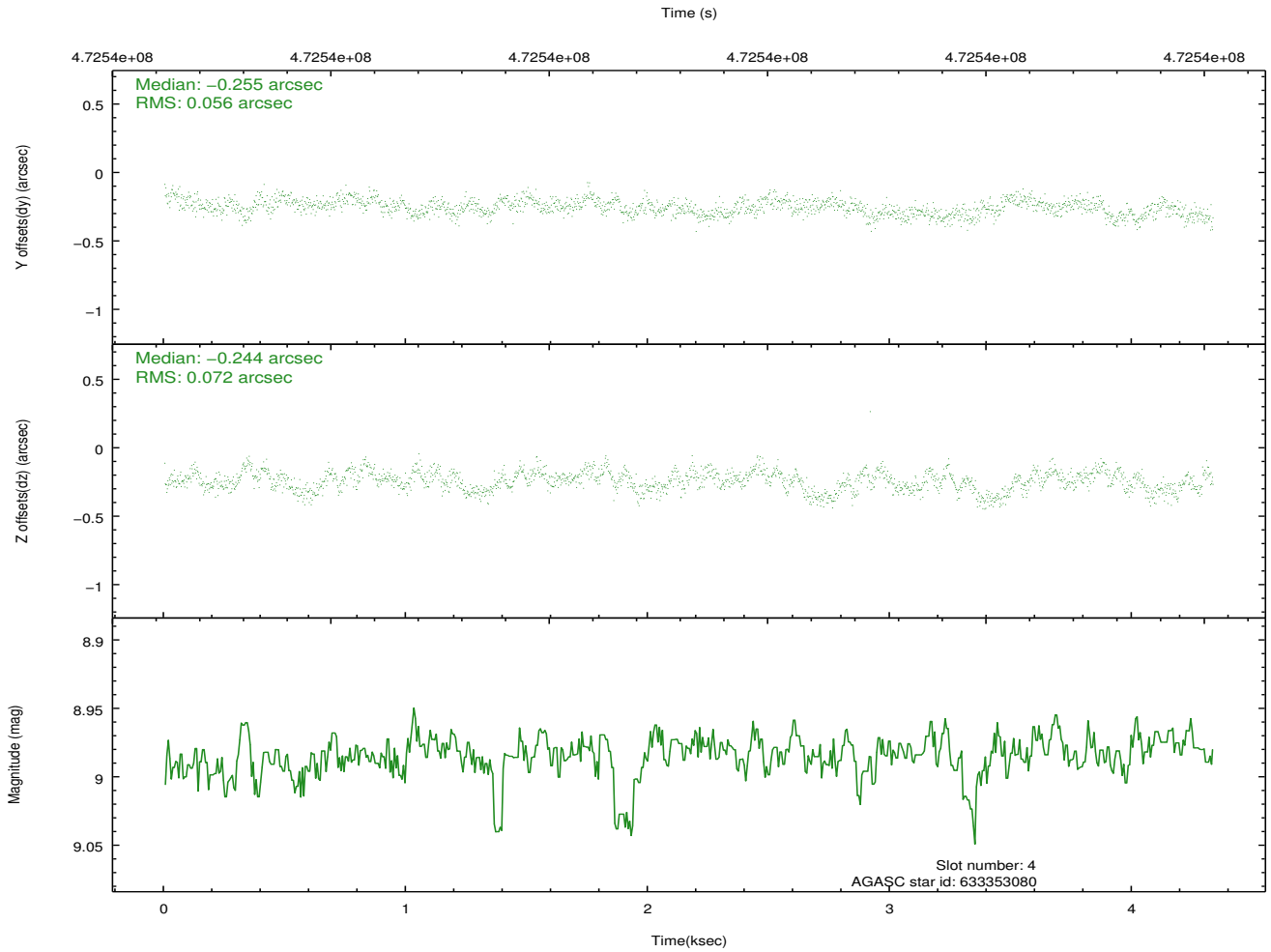
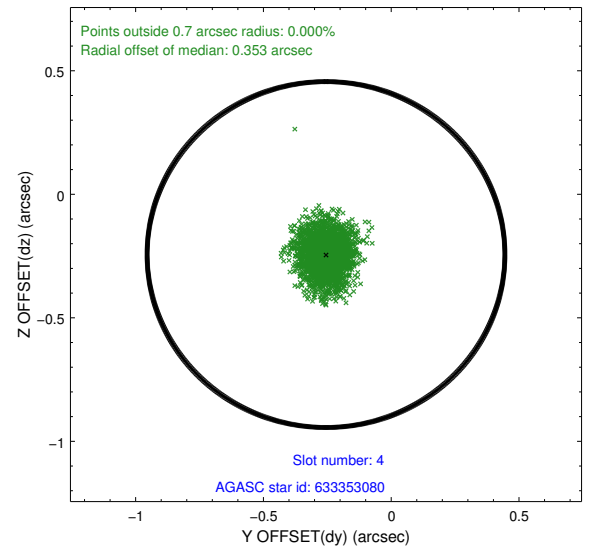
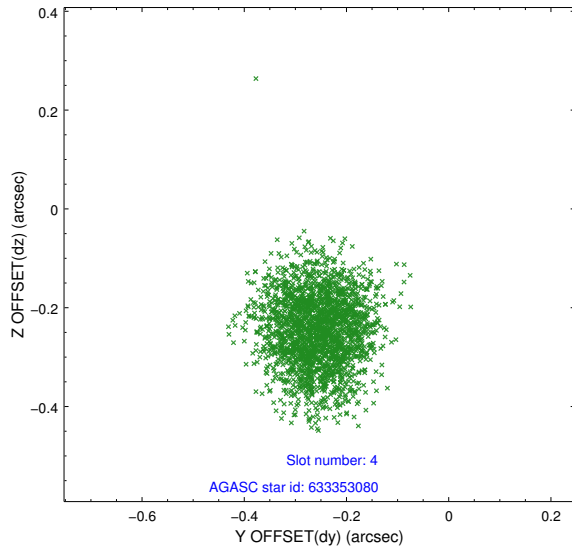
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	1057	-0.118	-0.028	0.012	0.018	0.000000	0.000000	-769.72	-1736.32
1	FID		ACIS-S-4	7.07	1056	0.260	0.065	0.009	0.016	0.000000	0.000000	2143.25	170.82
2	FID		ACIS-S-5	7.10	1057	-0.172	-0.027	0.011	0.016	0.000000	0.000000	-1820.81	165.96
3	GUIDE	used	633344840	7.48	2114	-0.261	-0.136	0.058	0.092	117.710554	-1.365147	364.48	1403.64
4	GUIDE	used	633353080	8.98	2114	-0.255	-0.244	0.097	0.157	117.873094	-1.047502	1586.34	1801.05
5	GUIDE	used	633472872	8.76	2113	0.222	0.164	0.108	0.167	118.241069	-1.437304	1534.36	-127.24
6	GUIDE	used	633864760	9.37	2113	0.136	0.014	0.110	0.175	117.620187	-1.969703	-1401.16	91.81
7	GUIDE	used	633880304	8.56	2112	0.154	0.202	0.074	0.123	117.223090	-1.937234	-2332.11	1183.42

## 2.4 Star Slots

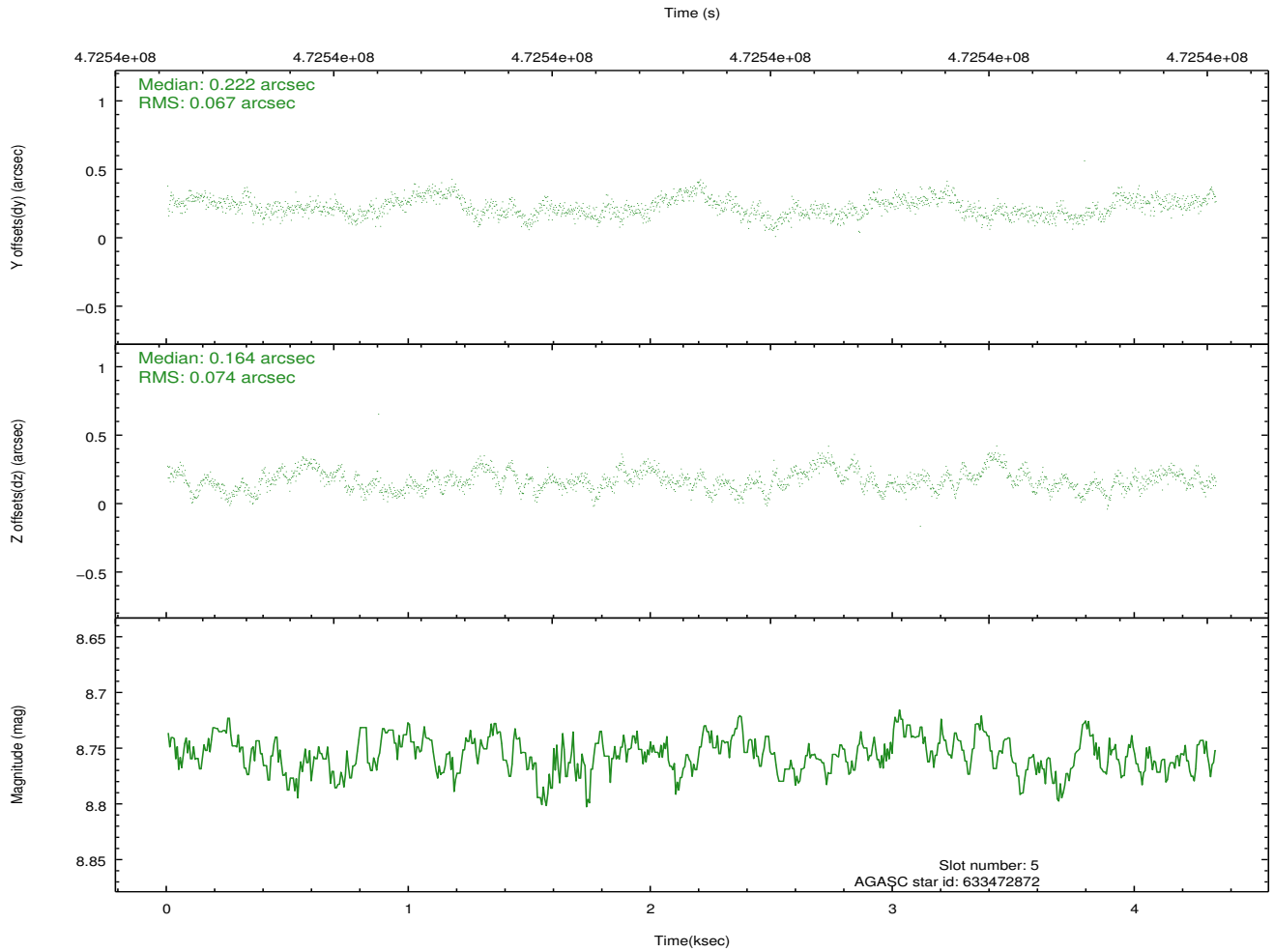
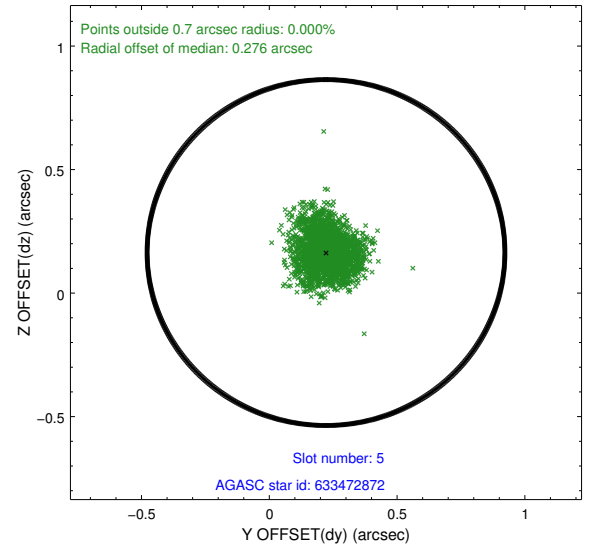
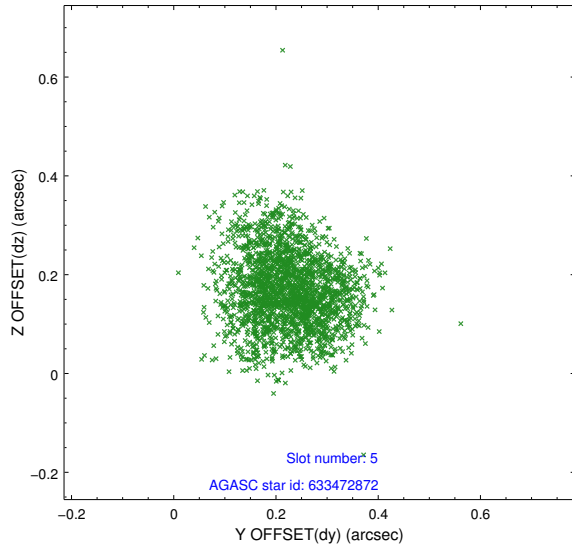
### 2.4.1 Slot 3



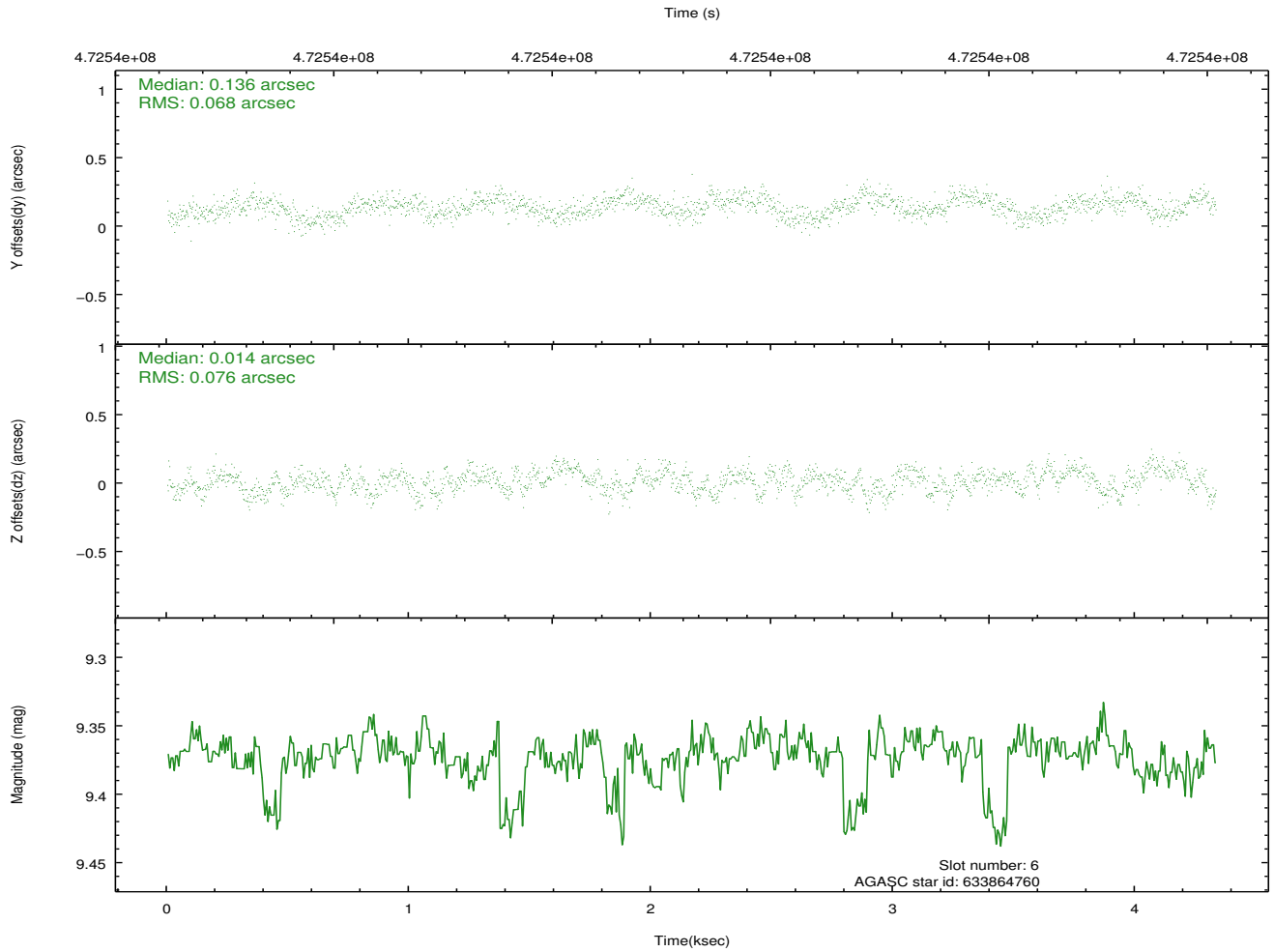
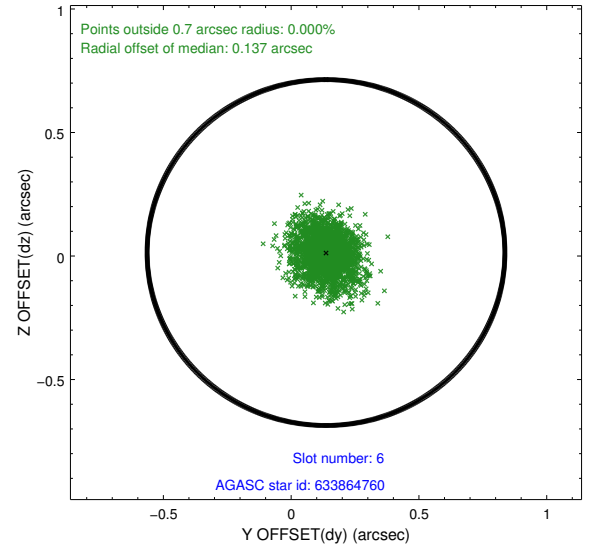
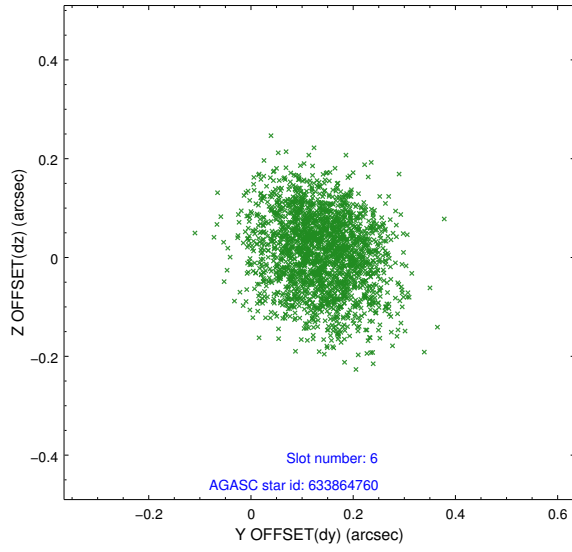
## 2.4.2 Slot 4



### 2.4.3 Slot 5

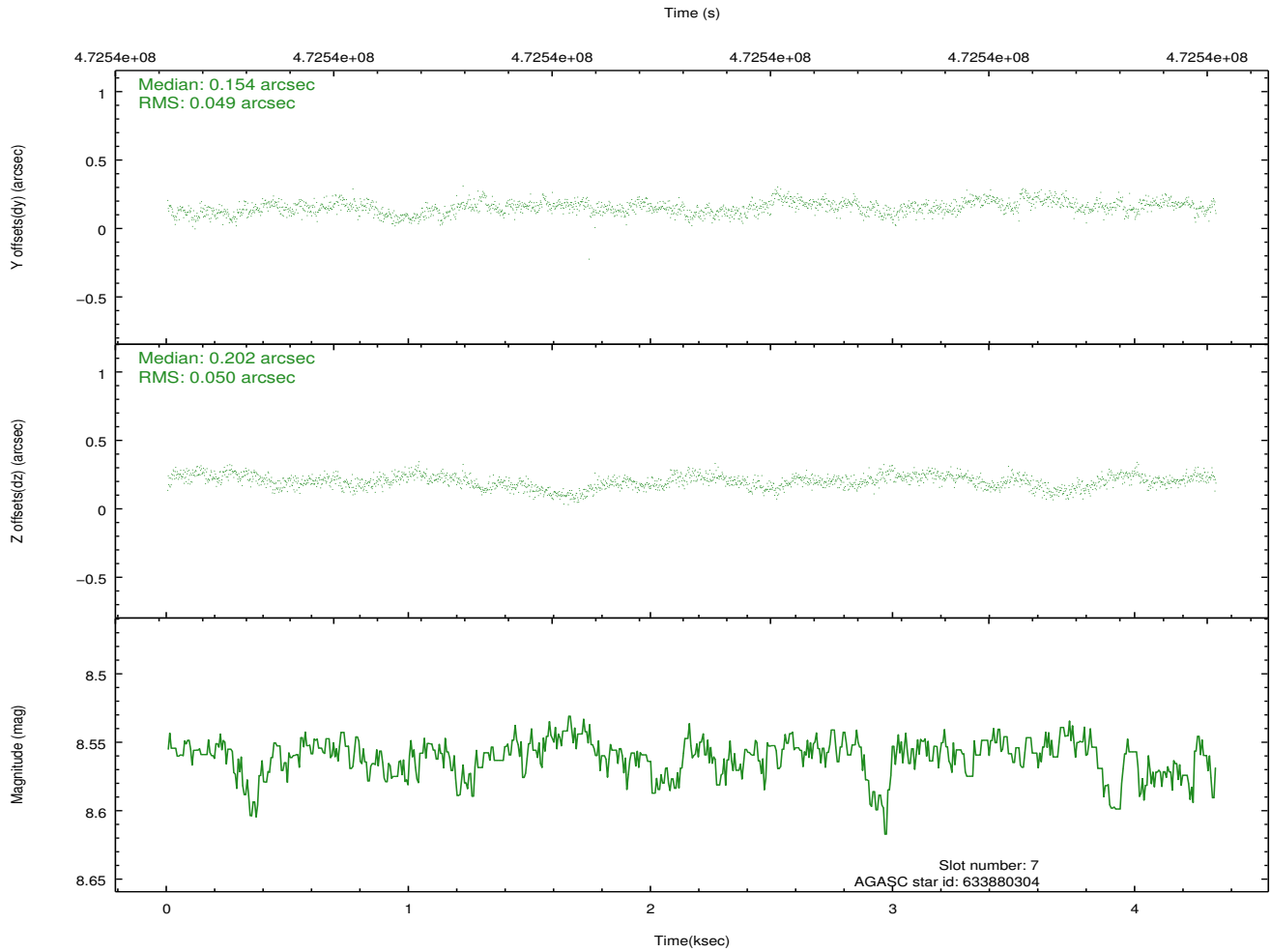
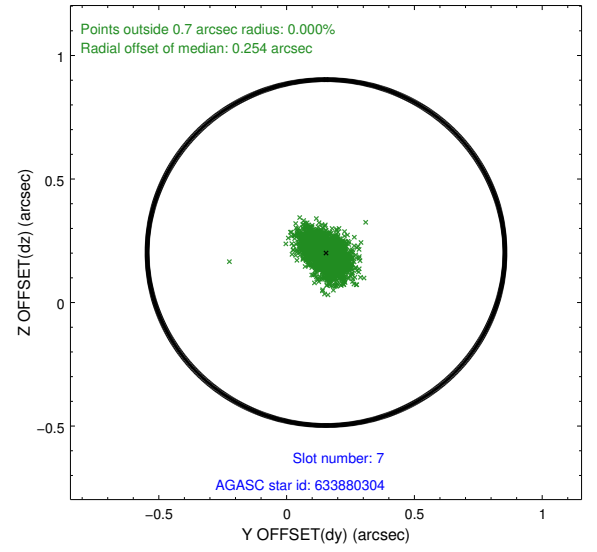
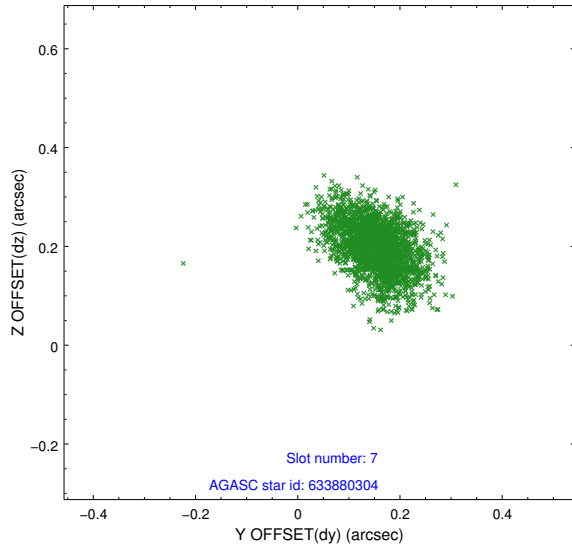


## 2.4.4 Slot 6



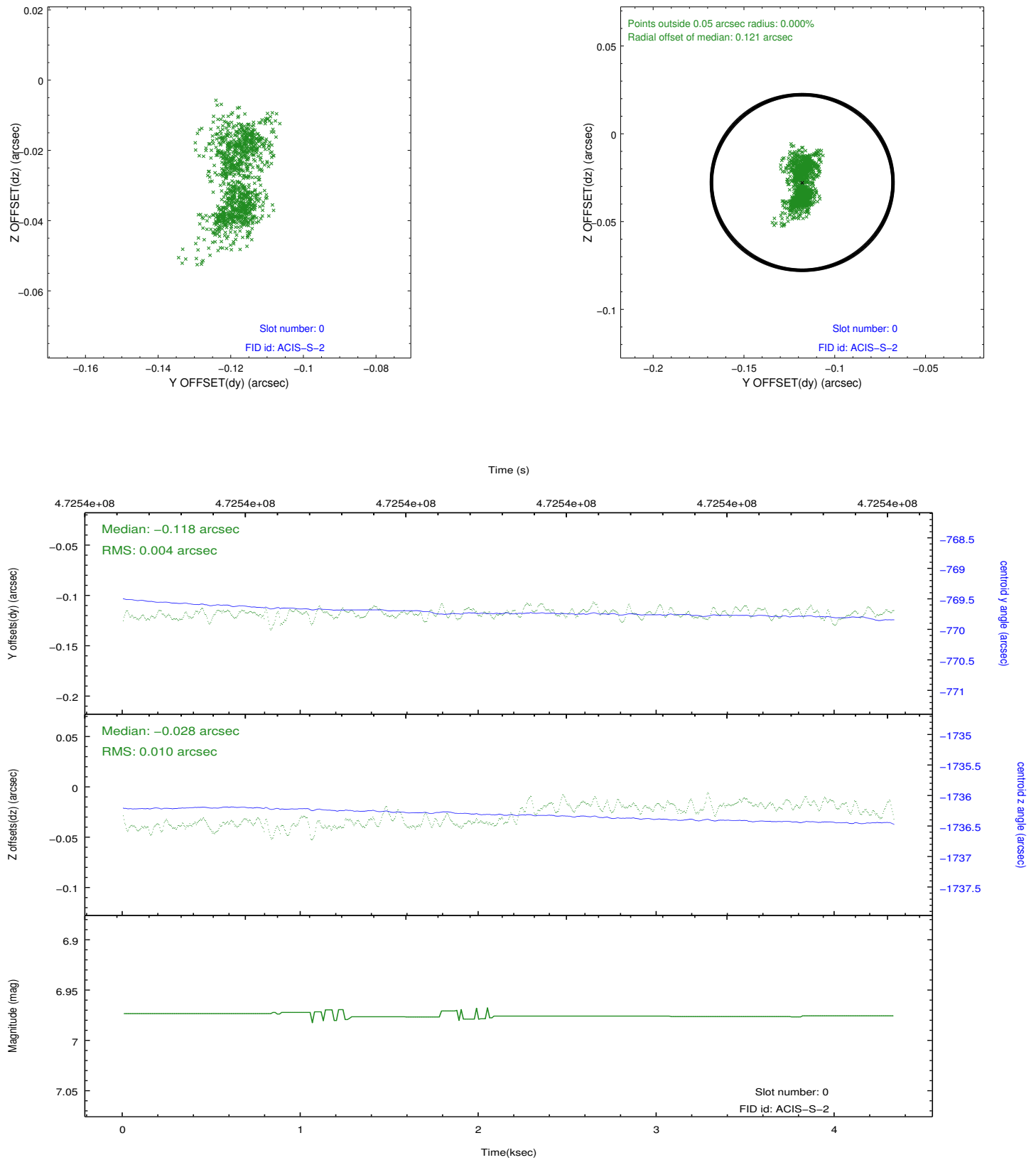


## 2.4.5 Slot 7

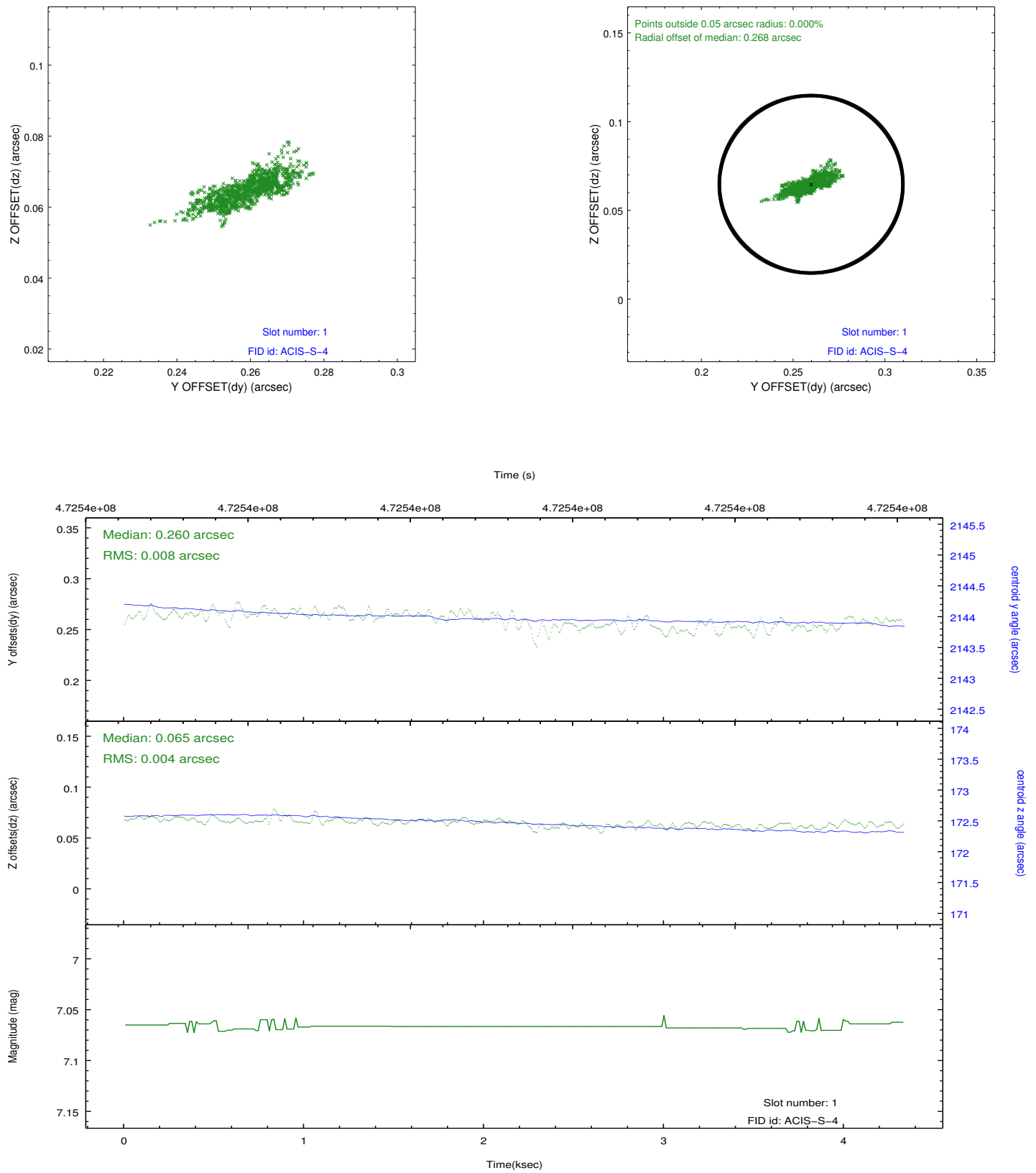


## 2.5 FID Slots

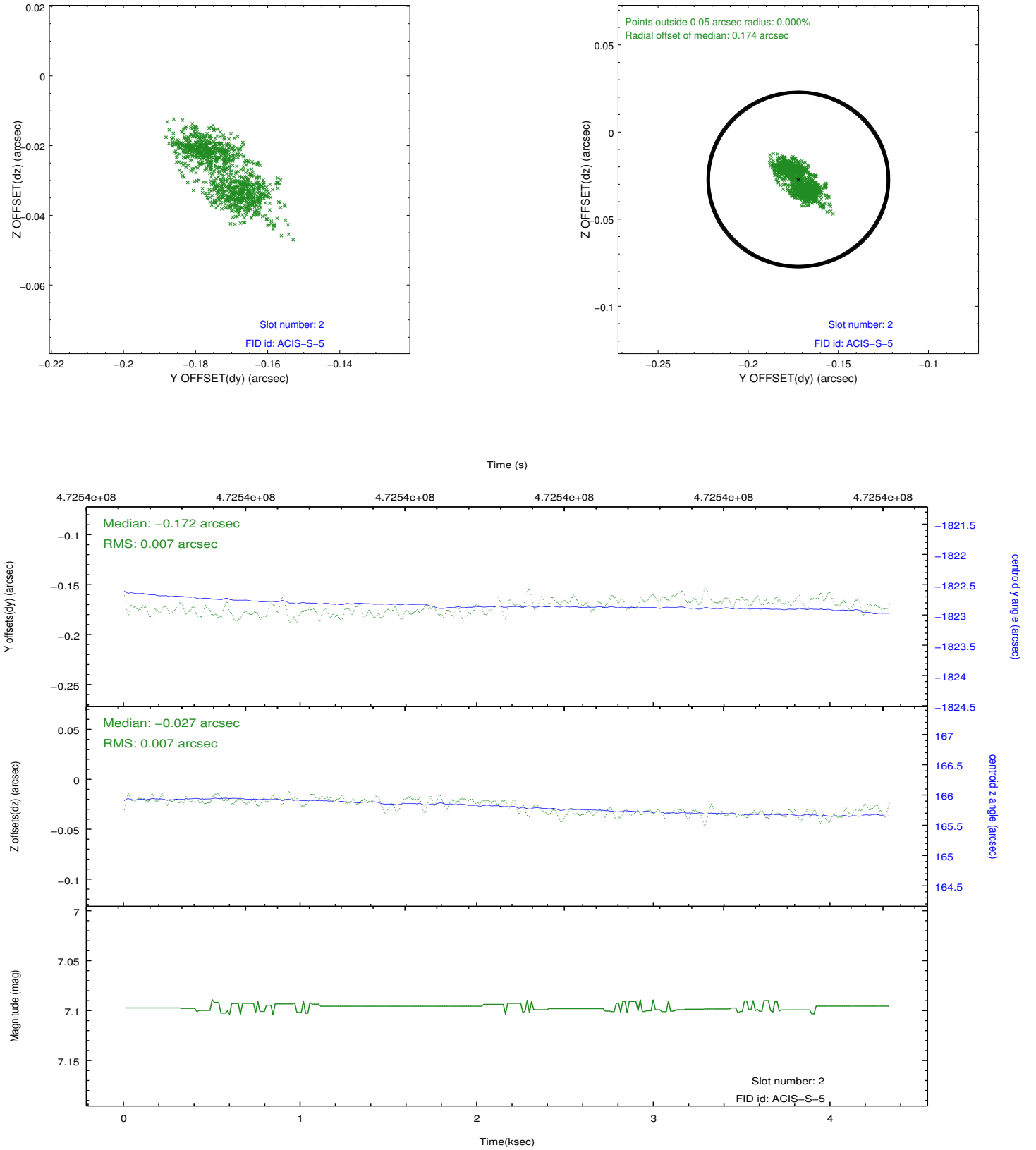
### 2.5.1 Slot 0



## 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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.0672000312805

## 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.