

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14965 - L2 Version 2  
Chandra X-Ray Center

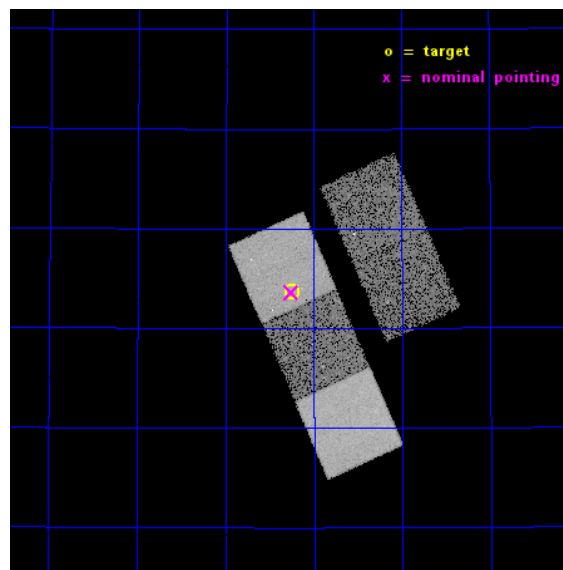
L2 Processing Date : Dec 2 2014

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# 1 Front

seq_num	702774	Sequence number
obs_id	14965	Observation id
title	X-ray Confirmation of Optically Selected Kpc-Scale Binary AGNs	Pro
observer	Dr. Xin Liu	Principal investigator
object	SDSSJ0907+5203	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	136.810417	Observer's specified target RA [deg]
dec_targ	52.062056	Observer's specified target Dec [deg]
ra_nom	136.81363539395	Nominal RA [deg]
dec_nom	52.060284392236	Nominal Dec [deg]
roll_nom	245.96385423275	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15062.374723077	Sum of GTIs [s]
livetime	14865.573708561	Livetime [s]
ontime2	15062.210563064	Sum of GTIs [s]
ontime3	15062.251603067	Sum of GTIs [s]
ontime5	15062.333683074	Sum of GTIs [s]
ontime6	15062.29264307	Sum of GTIs [s]
ontime7	15062.374723077	Sum of GTIs [s]
l2events	125073	Number of level 2 events

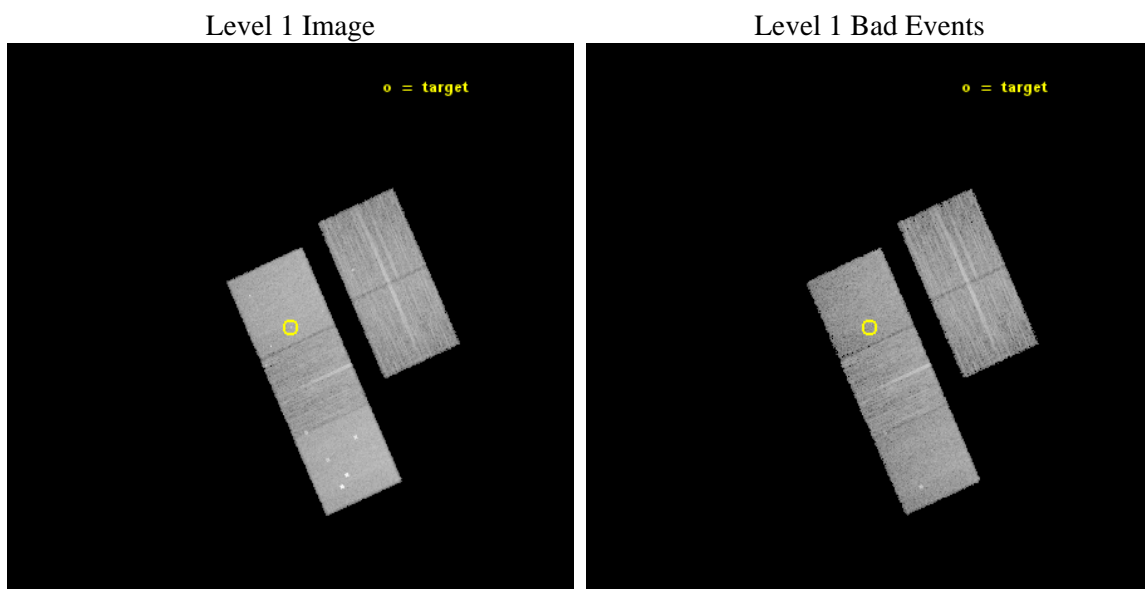




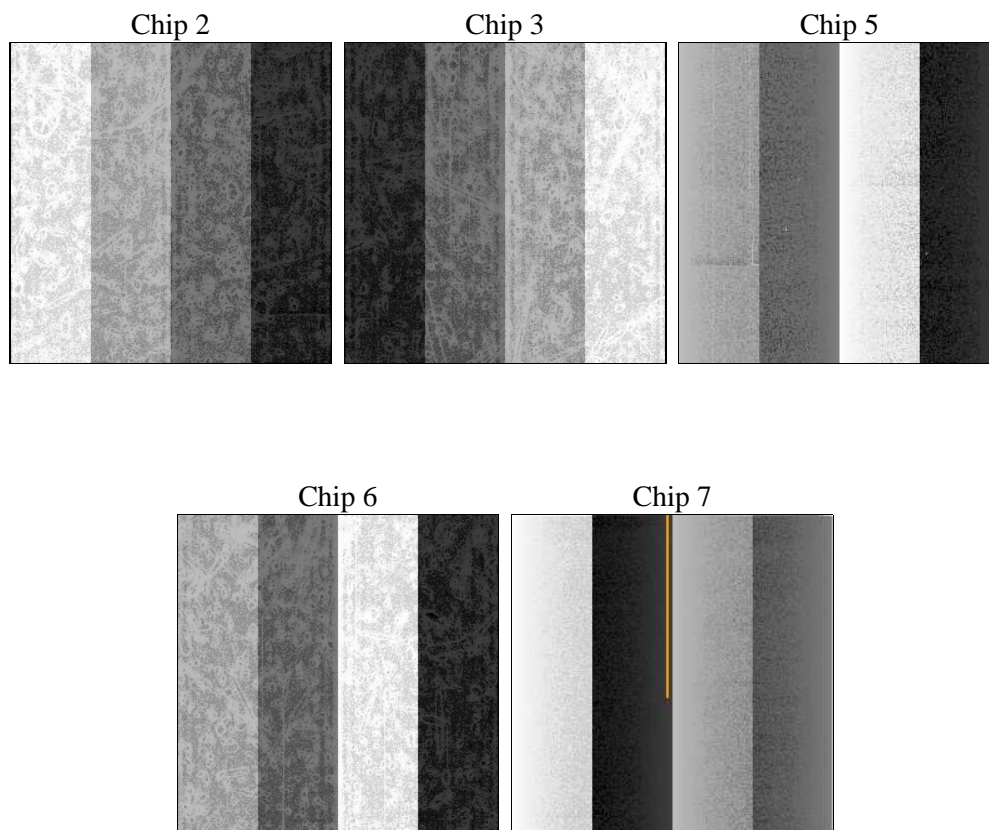
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	15062.374723077	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	15062.210563064	Sum of GTIs [s]
date	2014-12-02T17:39:13	Date and time of file creation	ontime3	15062.251603067	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15062.333683074	Sum of GTIs [s]
			ontime6	15062.29264307	Sum of GTIs [s]
			ontime7	15062.374723077	Sum of GTIs [s]
			l1events	469050	Number of level 1 events

### 2.1.4 Events

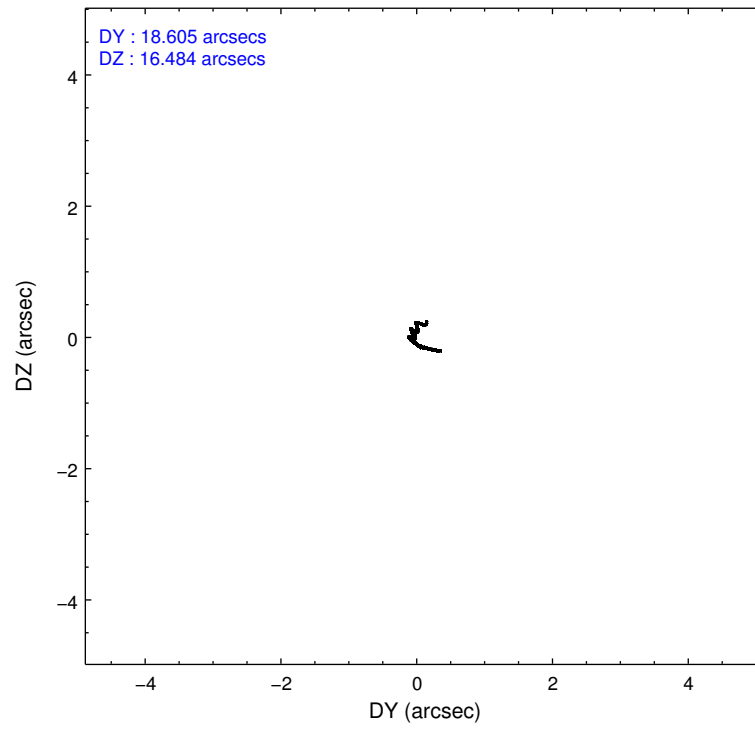
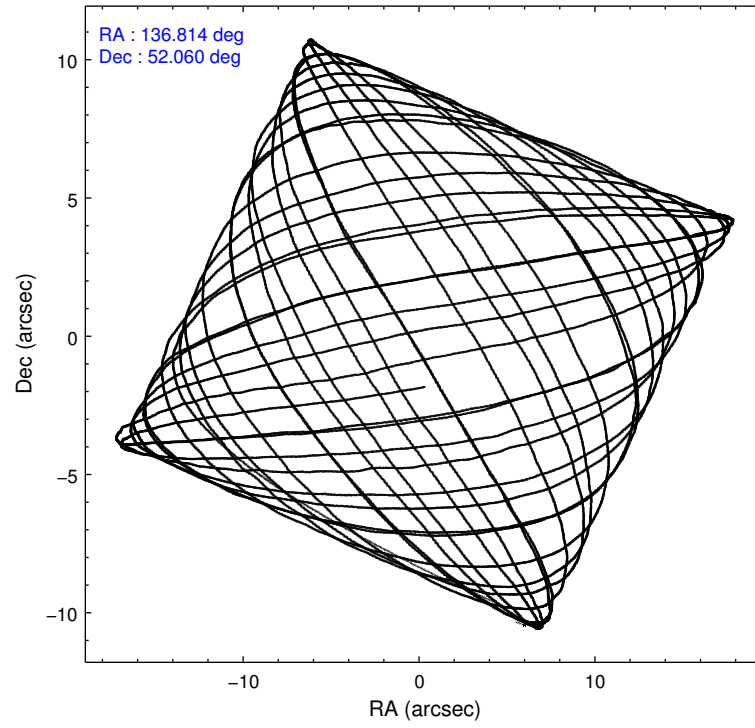
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	77961	74964	130385	78913	106827
rejected events	69384	66385	65821	69261	60696
rejected %	88%	88%	50%	87%	56%

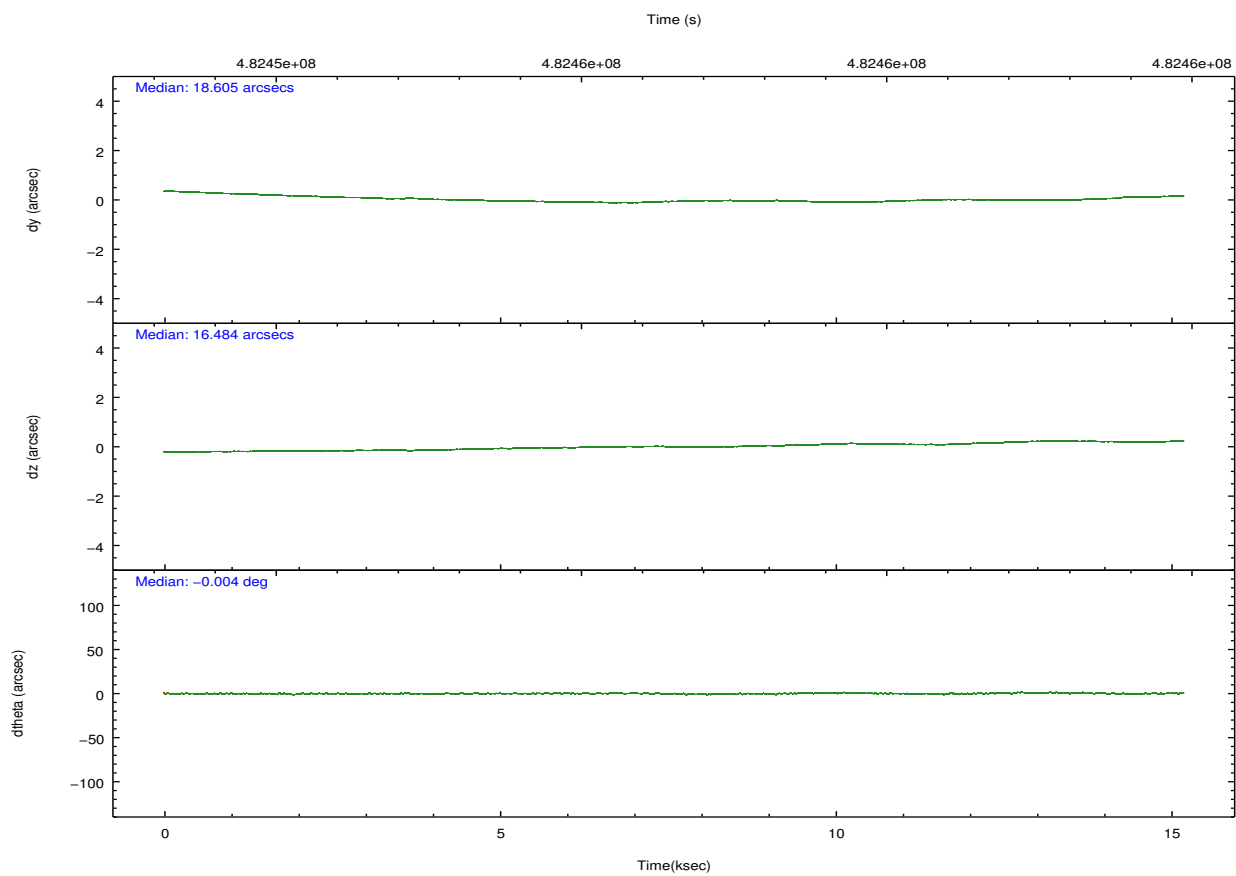
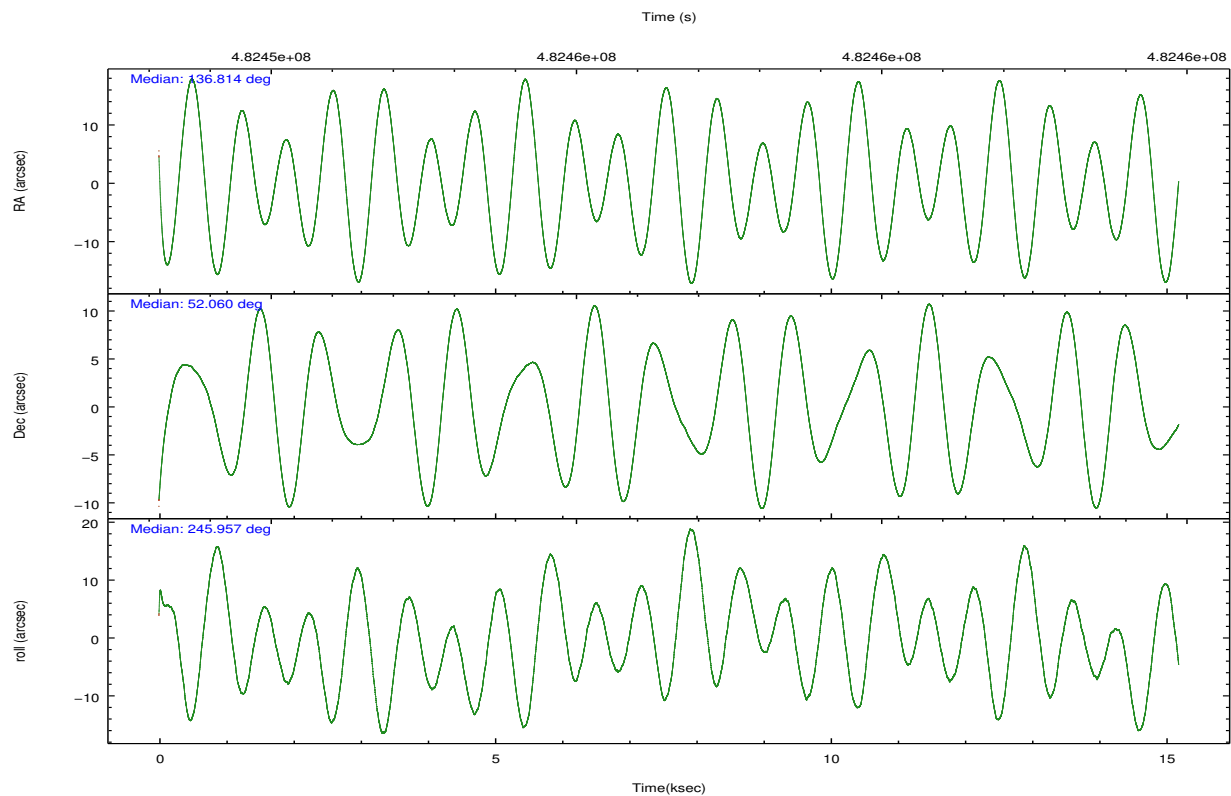
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3139	3097	8527	3350	4155
	4%	4%	6%	4%	3%
grade 1 events	40	44	633	38	149
	0%	0%	0%	0%	0%
grade 2 events	2086	1841	19158	2229	9387
	2%	2%	14%	2%	8%
grade 3 events	911	941	1968	941	3761
	1%	1%	1%	1%	3%
grade 4 events	854	936	1903	947	3799
	1%	1%	1%	1%	3%
grade 5 events	3271	3933	8793	4047	10500
	4%	5%	6%	5%	9%
grade 6 events	1590	1770	33039	2191	25040
	2%	2%	25%	2%	23%
grade 7 events	66070	62402	56364	65170	50036
	84%	83%	43%	82%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	136.808463	136.8136353939474	CCD I2 on	Y	Y
[deg] Pointing Dec	52.087438	52.06028439223569	CCD I3 on	Y	Y
[deg] Pointing Roll	245.811290	245.9638542327549	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	N	N
[s] Observation start time (MET)	482449101.184000	482448105.16846	CCD S5 on	N	N
Observation start date	2013-04-15T21:37:14	2013-04-15T21:21:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	482464101.184000	482464739.38186	On-chip summing requested	N	N
Observation end date	2013-04-16T01:47:14	2013-04-16T01:58:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



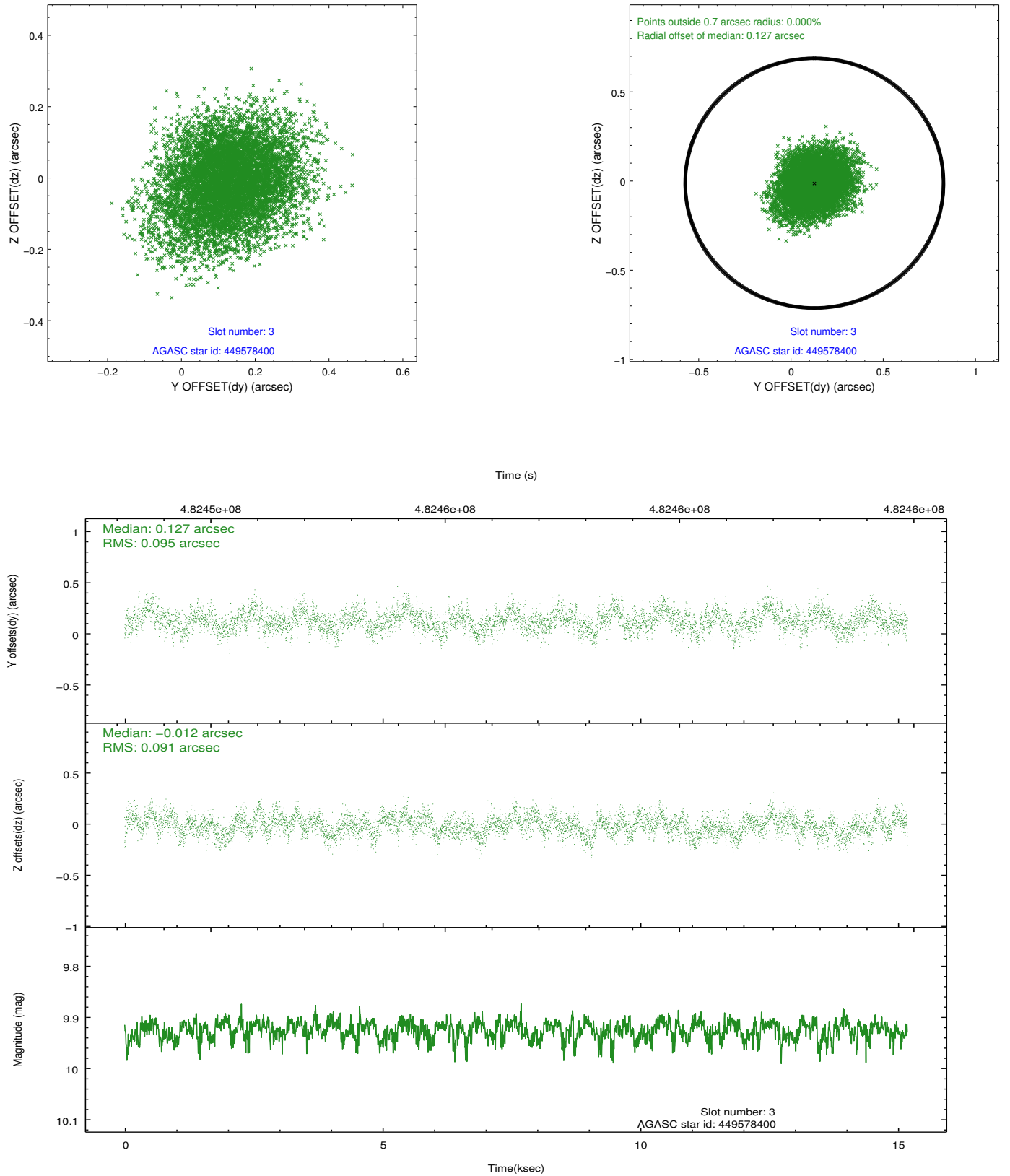


### Slot Statistics

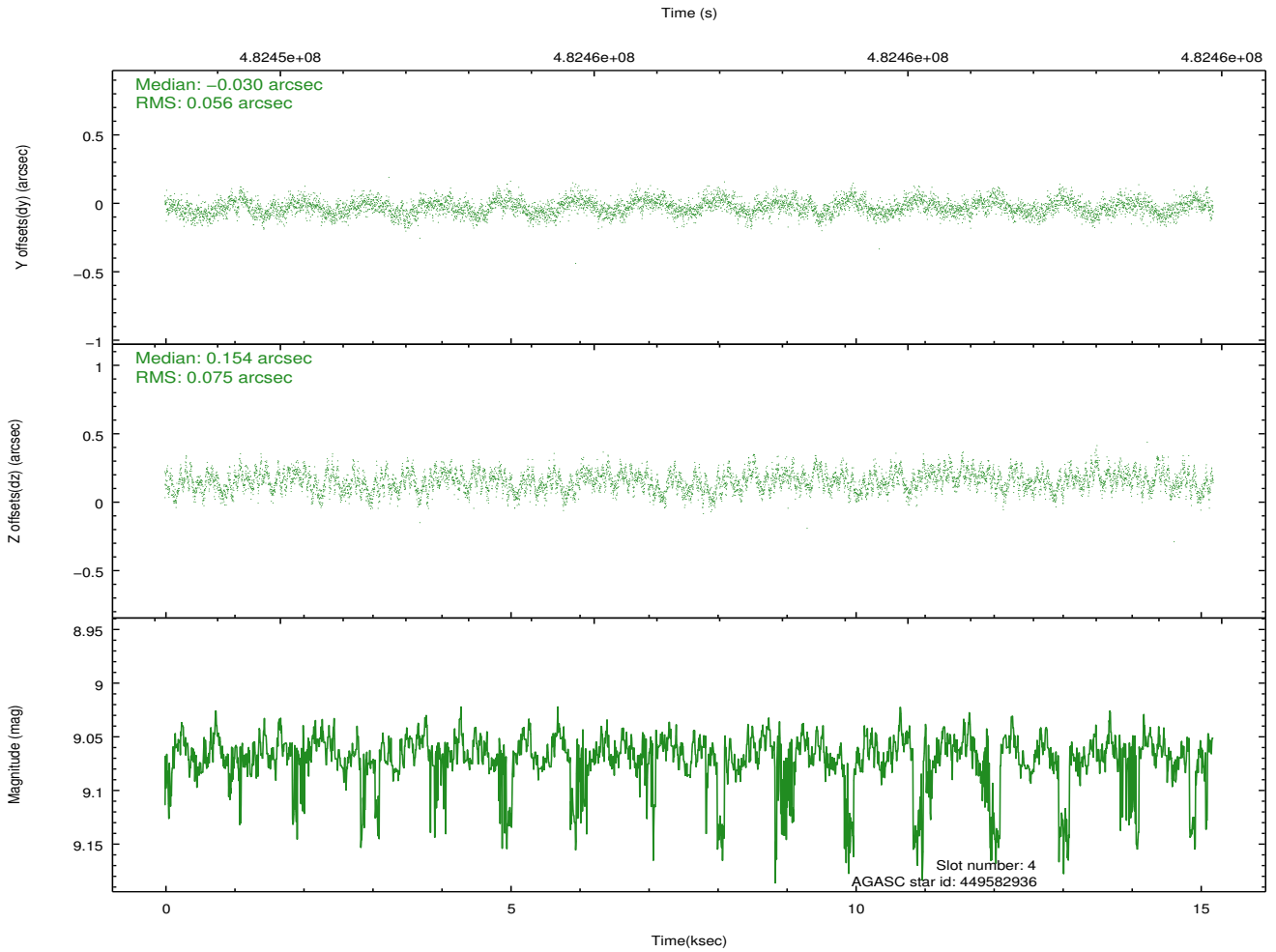
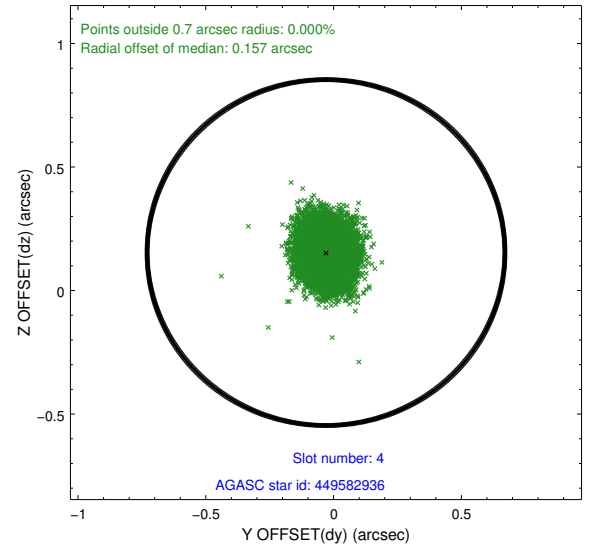
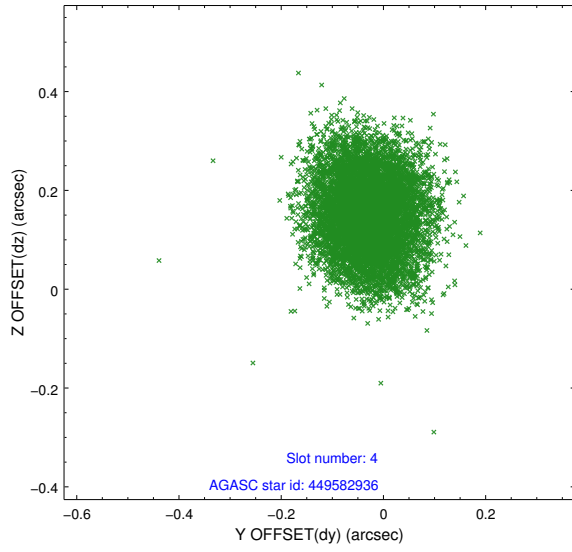
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	3704	-0.125	-0.045	0.009	0.015	0.000000	0.000000	-771.84	-1737.90
1	FID		ACIS-S-4	7.13	3705	0.322	0.073	0.008	0.016	0.000000	0.000000	2141.76	170.38
2	FID		ACIS-S-5	7.17	3705	-0.229	-0.018	0.009	0.013	0.000000	0.000000	-1824.40	164.32
3	GUIDE	used	449578400	9.92	7396	0.127	-0.012	0.140	0.231	137.209759	51.314714	2165.64	1963.22
4	GUIDE	used	449582936	9.07	7392	-0.030	0.154	0.100	0.158	136.721399	52.470378	-1178.74	-738.61
5	GUIDE	used	449583240	9.06	7399	0.211	0.149	0.119	0.185	135.981233	51.615191	2299.42	-994.04
6	GUIDE	used	449584768	7.13	7409	-0.207	-0.236	0.081	0.127	136.806399	51.629931	1504.82	670.55
7	GUIDE	used	449578216	9.57	7379	-0.102	-0.051	0.138	0.218	137.489121	51.473165	1385.85	2295.74

## 2.4 Star Slots

### 2.4.1 Slot 3

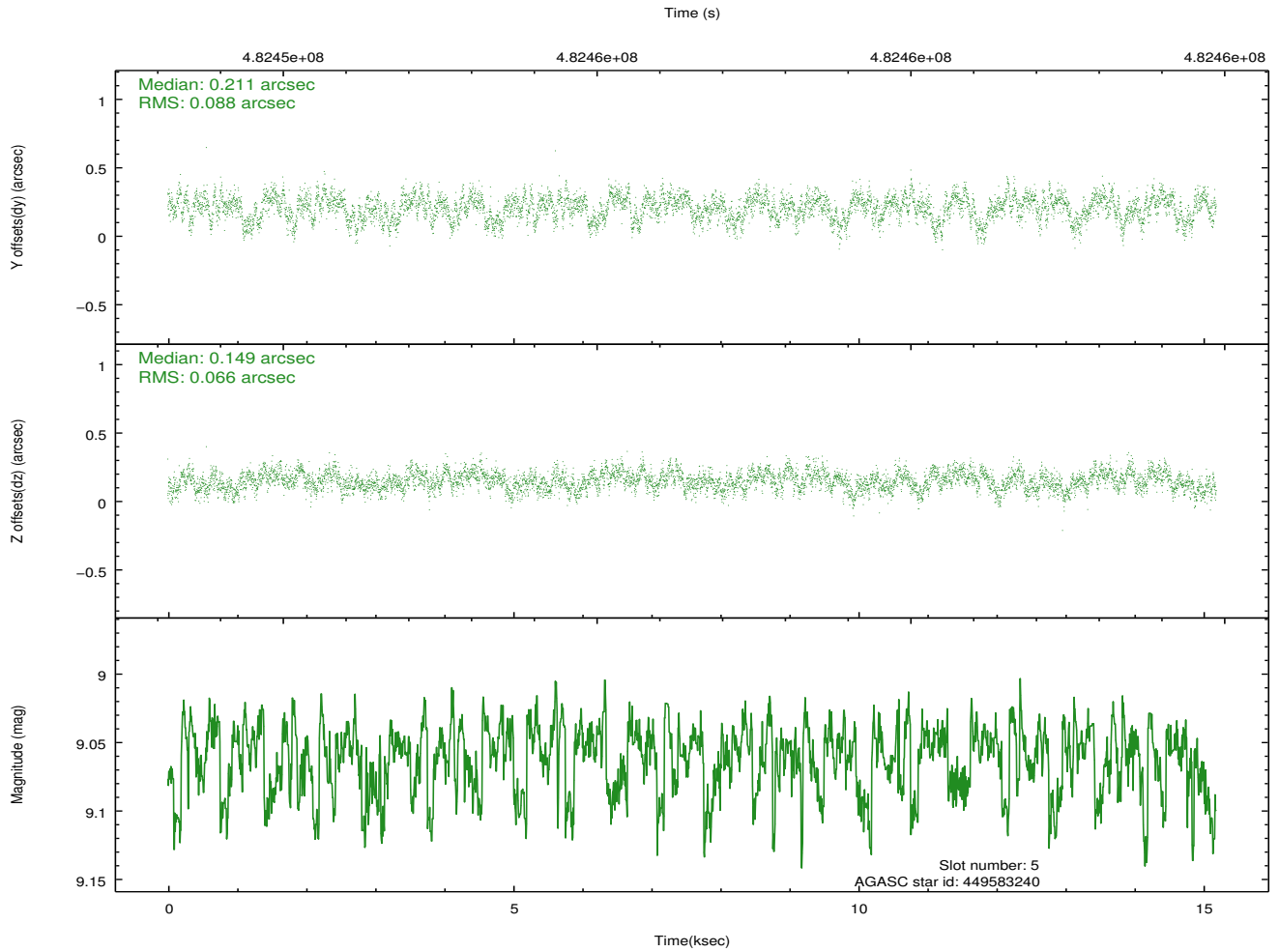
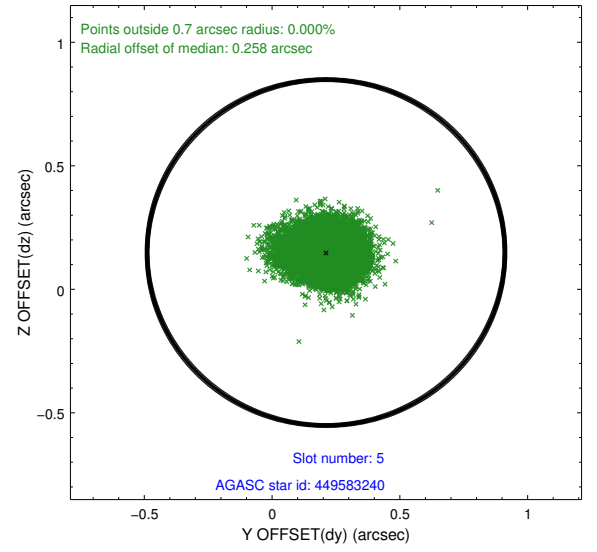
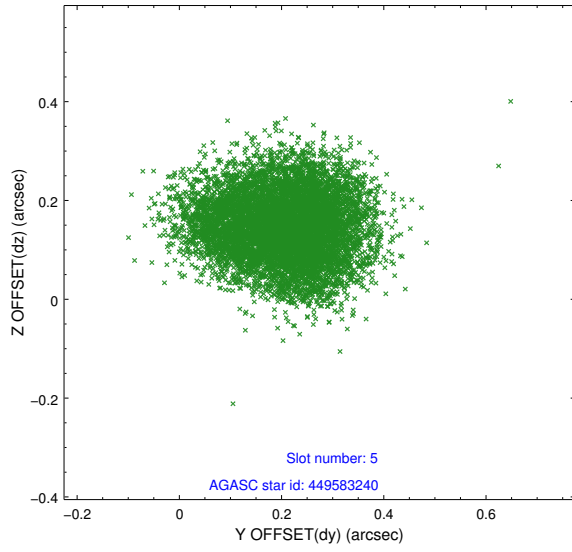


## 2.4.2 Slot 4

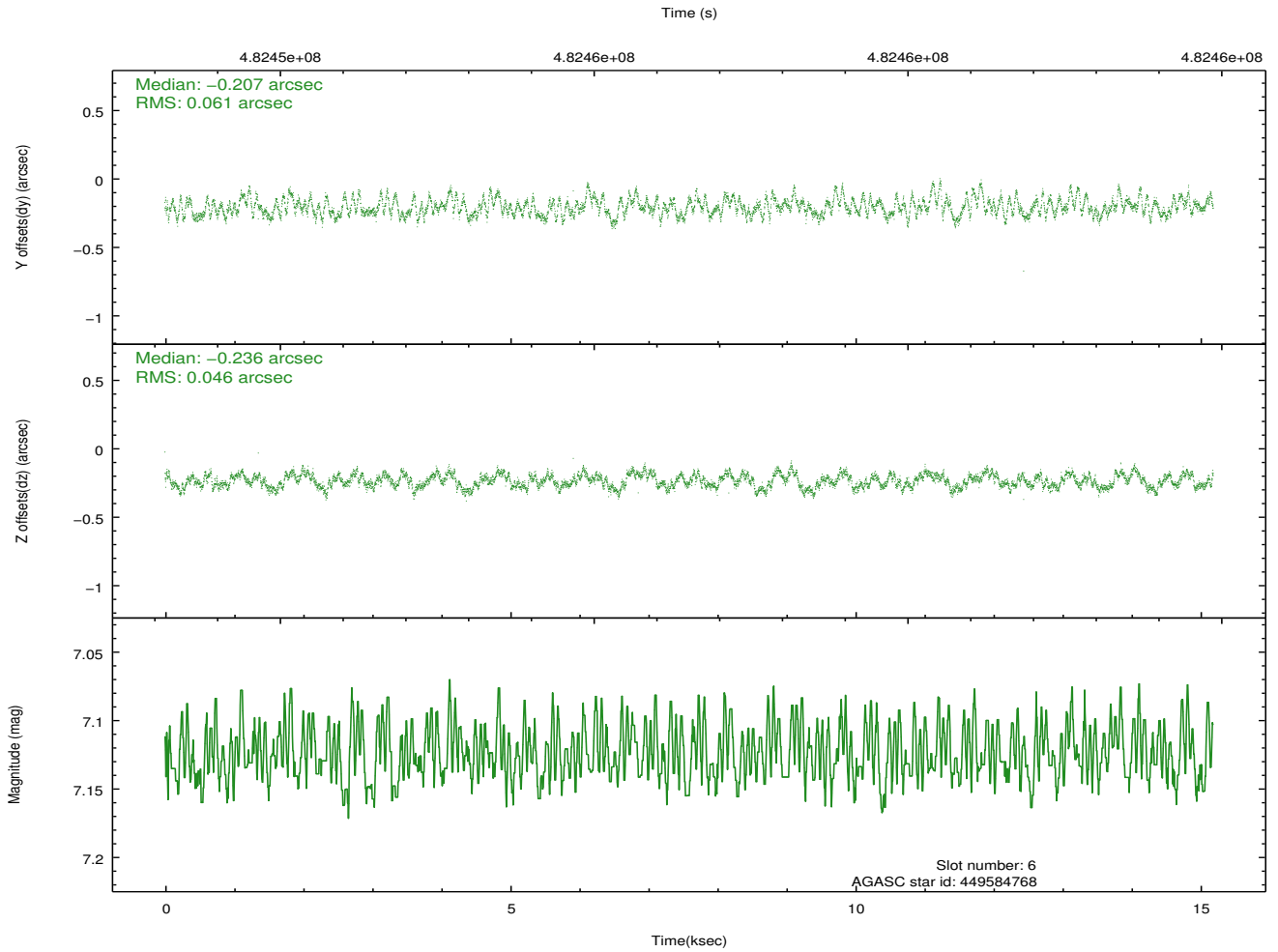
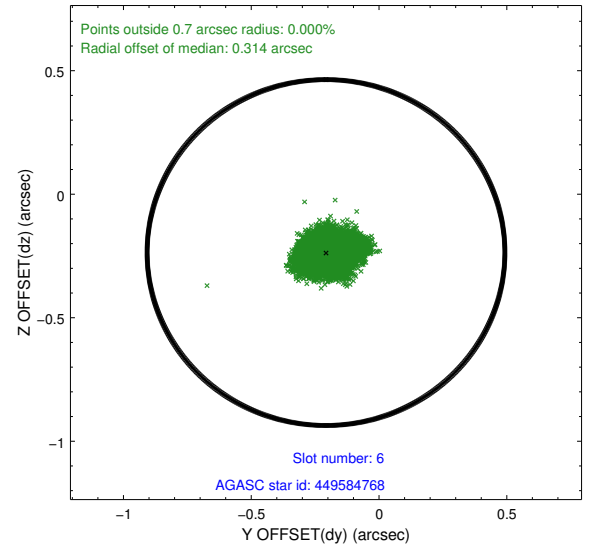
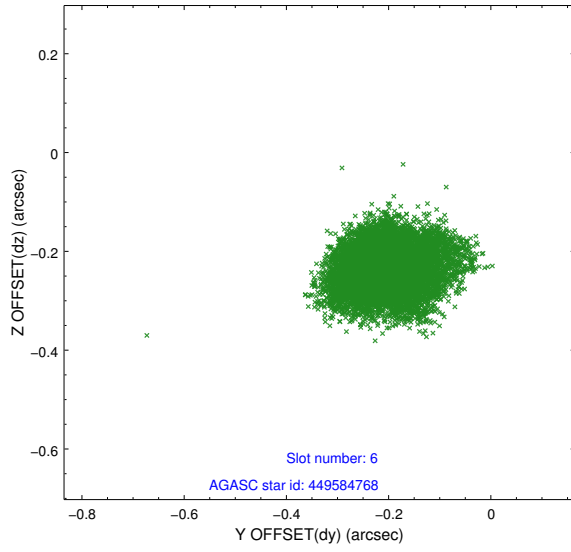




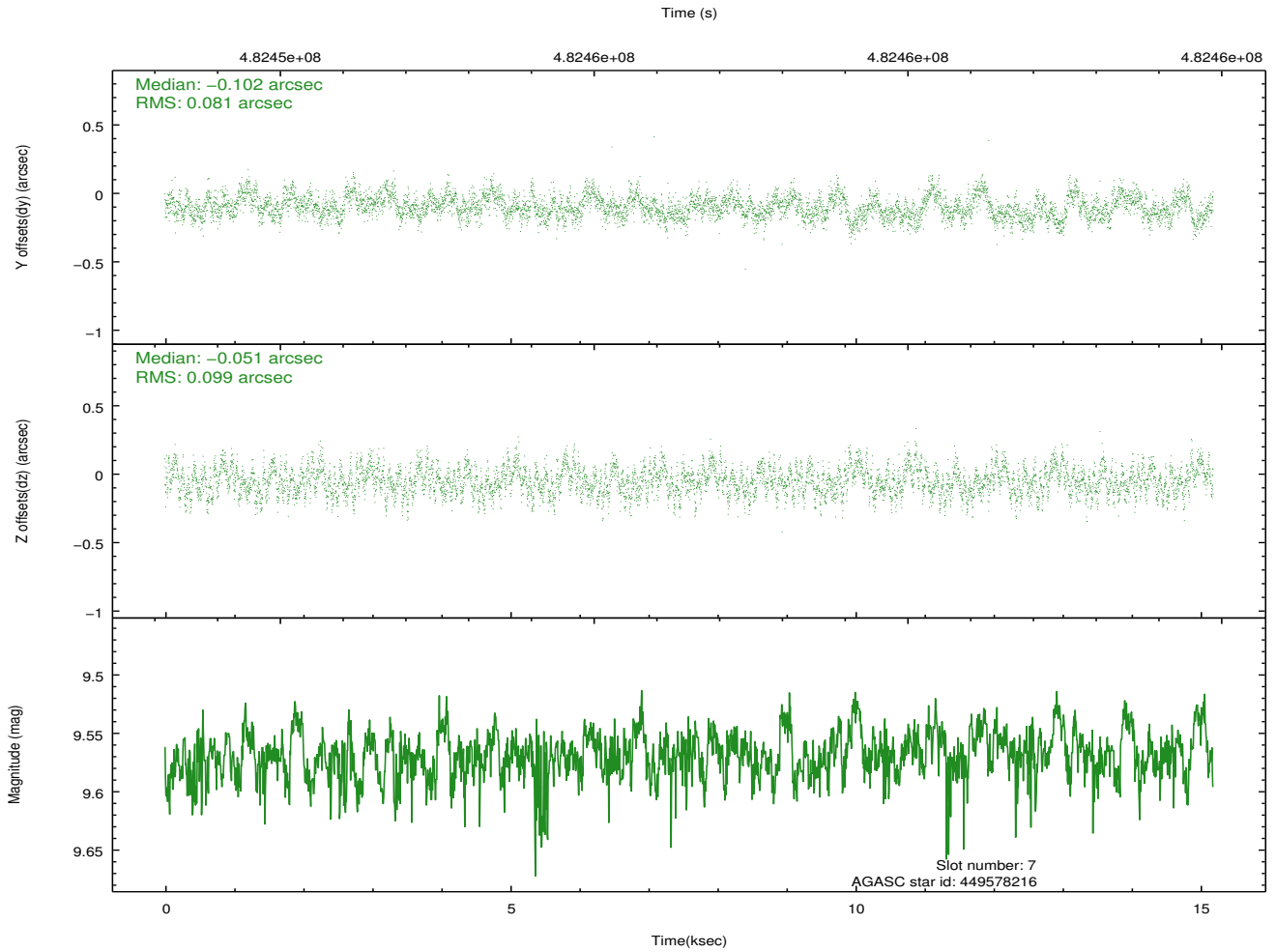
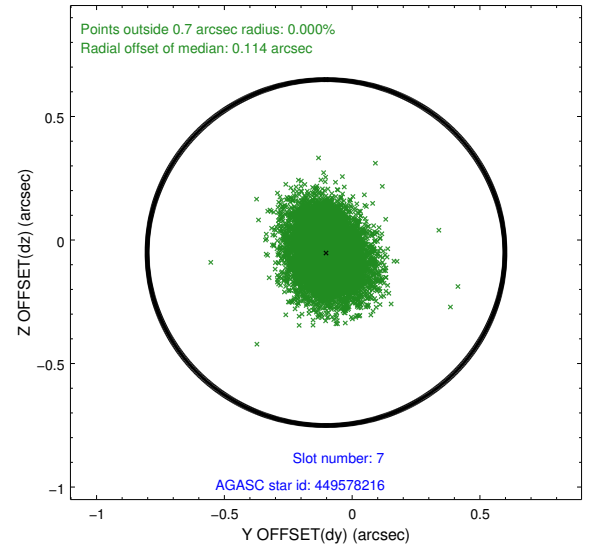
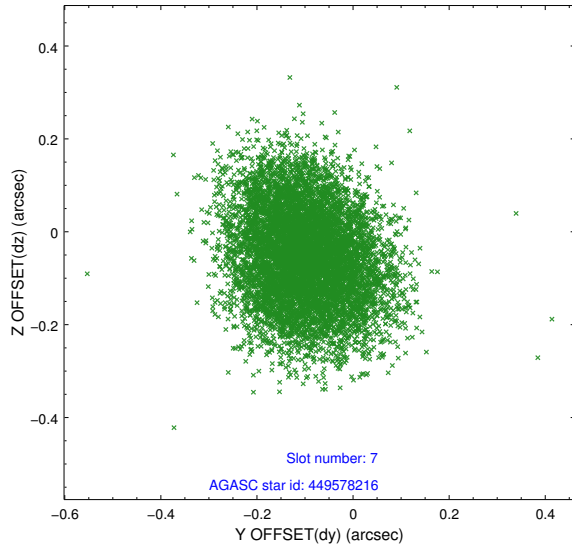
### 2.4.3 Slot 5



## 2.4.4 Slot 6

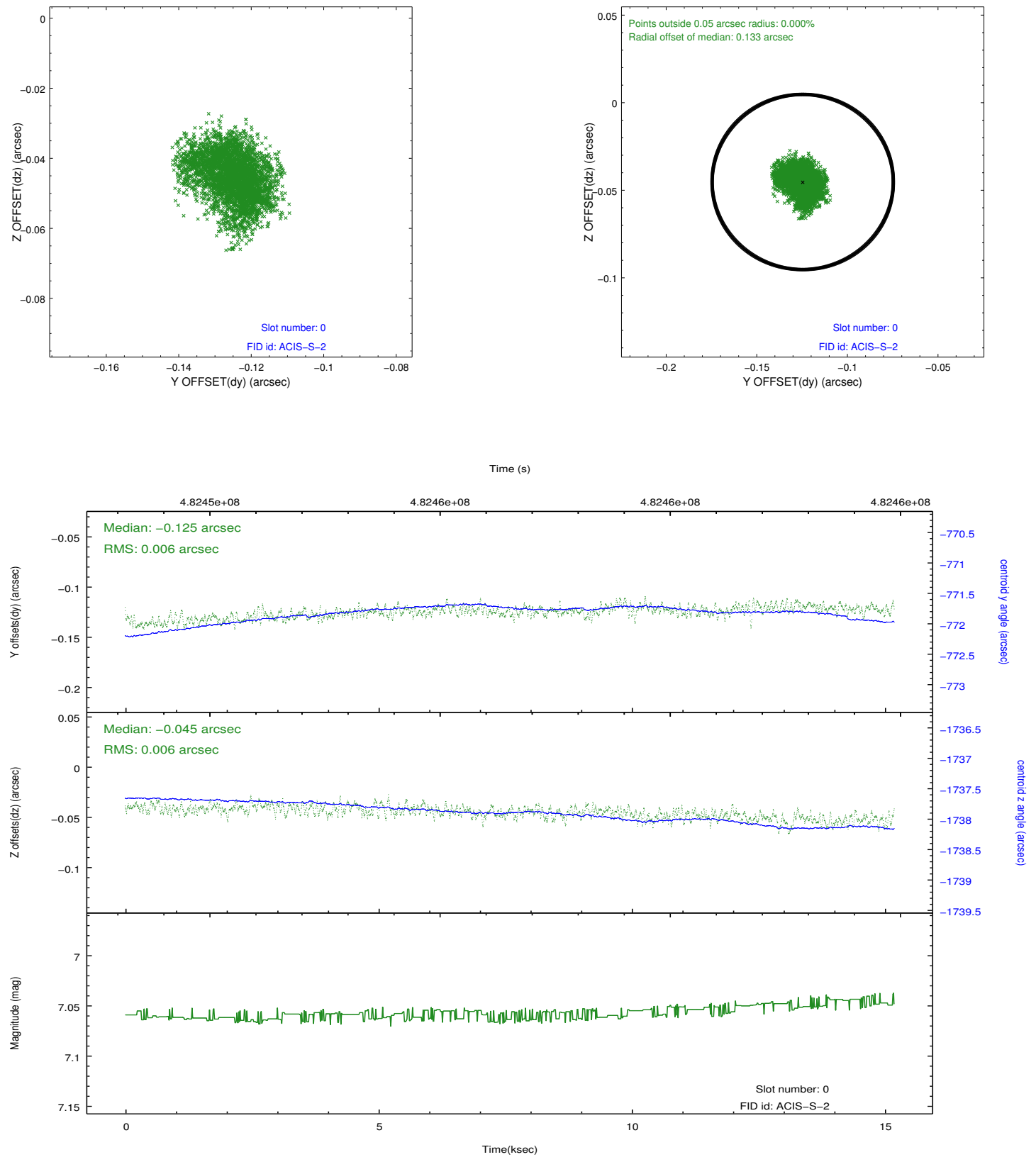


## 2.4.5 Slot 7

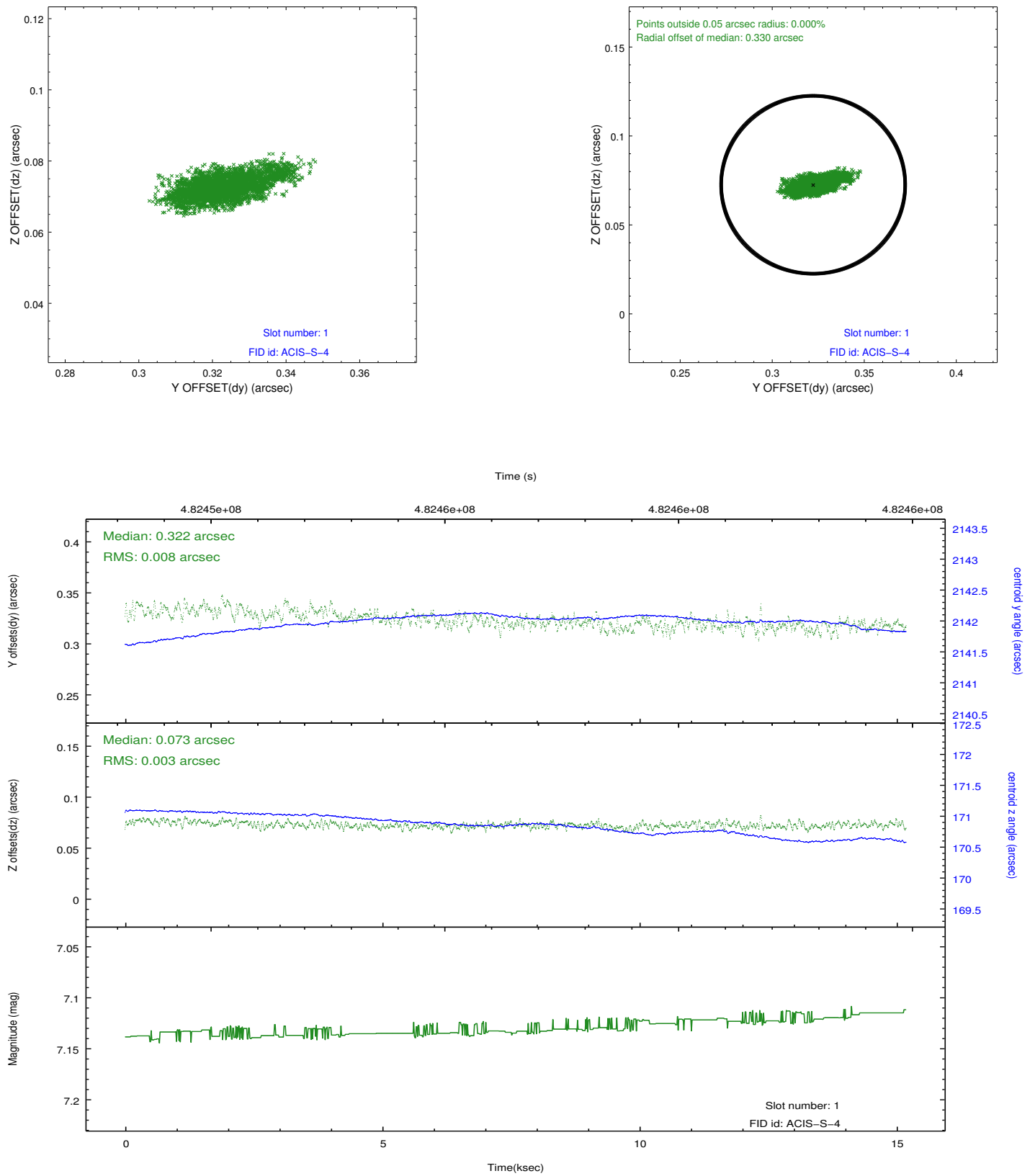


## 2.5 FID Slots

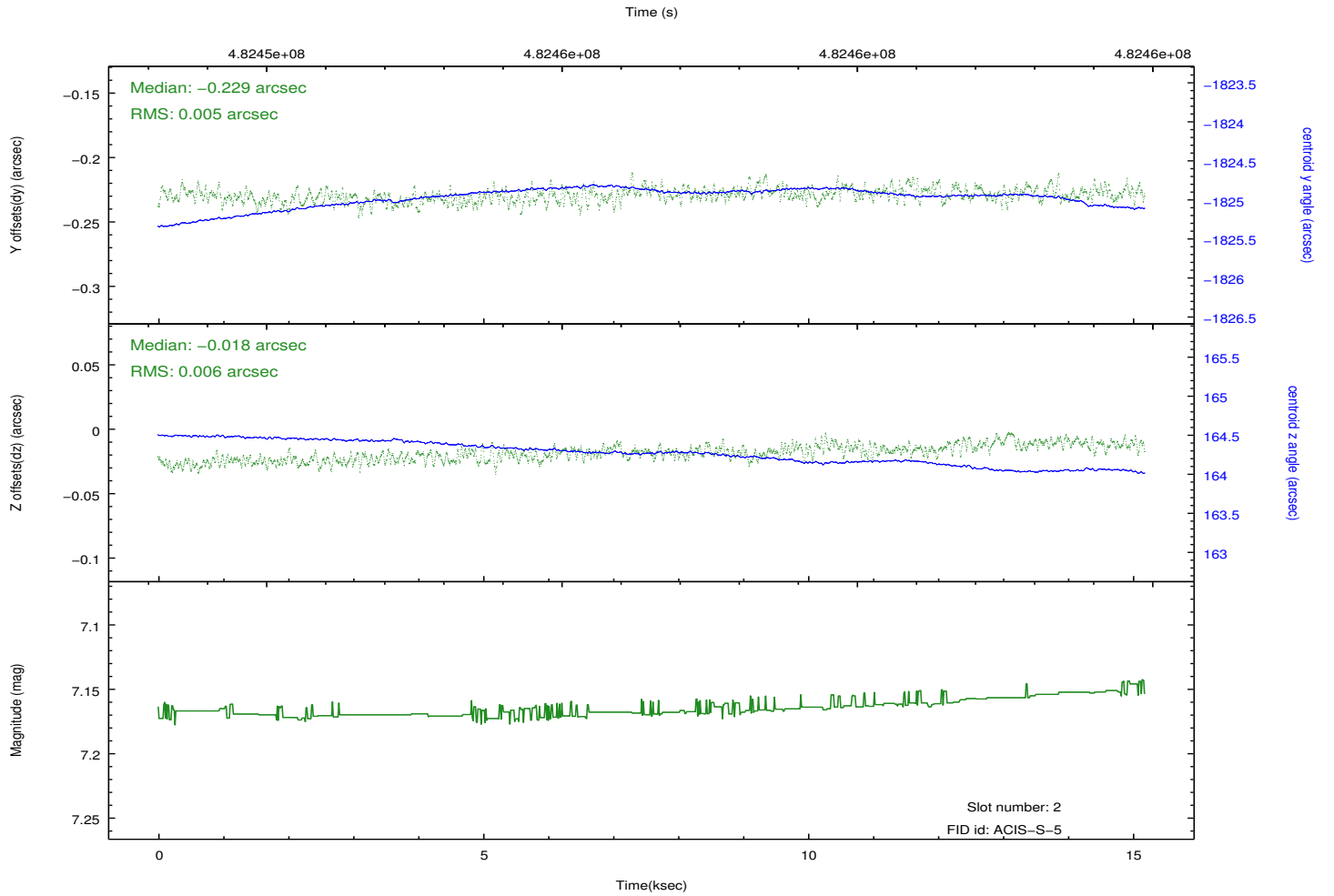
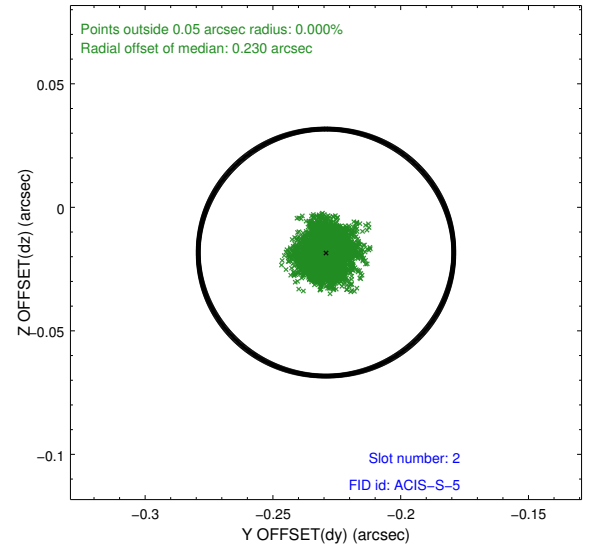
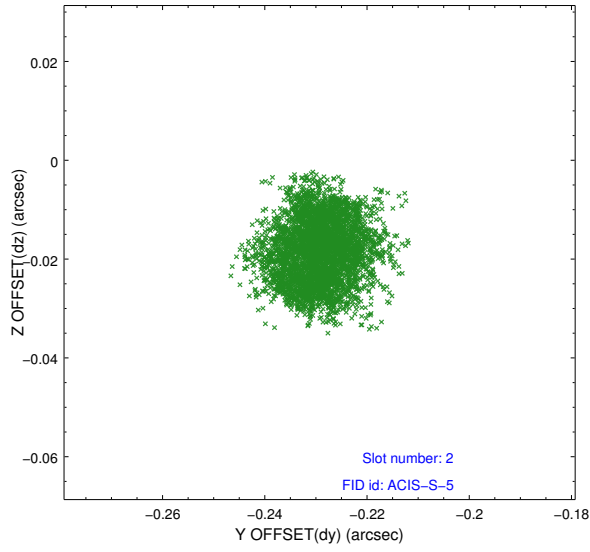
### 2.5.1 Slot 0



## 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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.062374723077

## 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.