

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14474 - L2 Version 2  
Chandra X-Ray Center

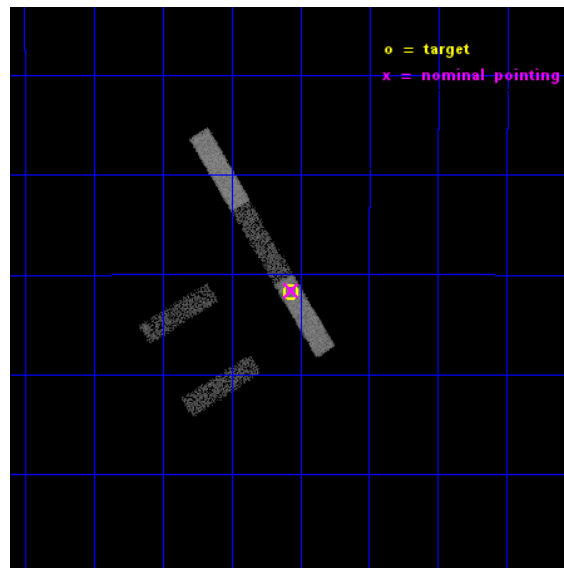
L2 Processing Date : Dec 1 2014

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# 1 Front

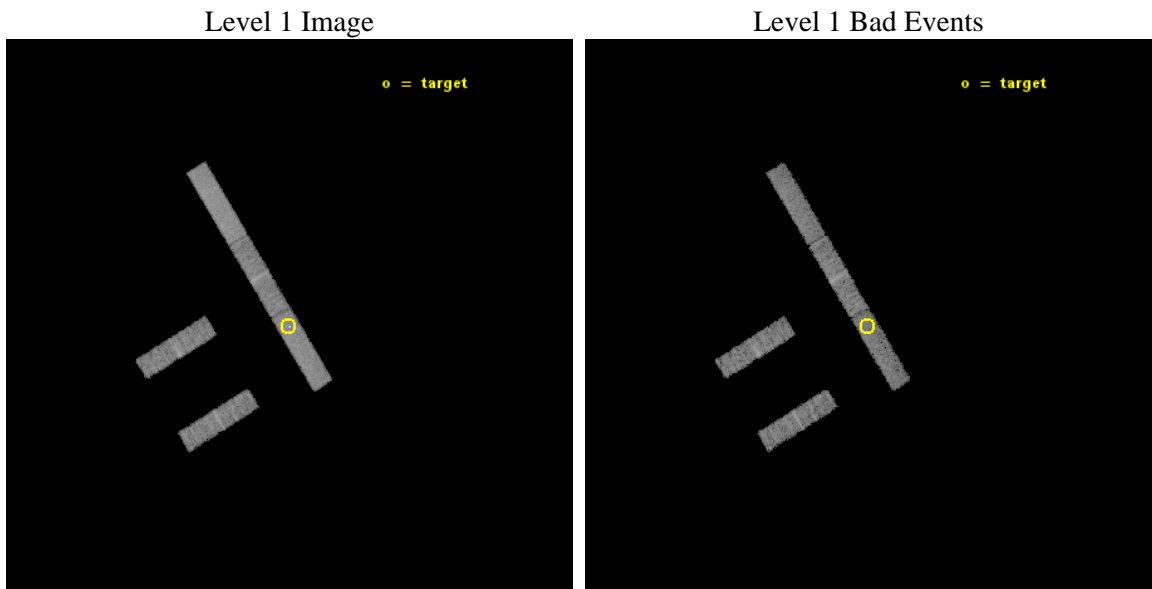
seq_num	200832	Sequence number
obs_id	14474	Observation id
title	Characterizing the X-ray & Stellar Wind Environment in the ~1 Gyr Late Heavy Bombardment System Eta Corvi	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	HD 109085	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.0175	Observer's specified target RA [deg]
dec_targ	-16.196	Observer's specified target Dec [deg]
ra_nom	188.01610599173	Nominal RA [deg]
dec_nom	-16.19321277343	Nominal Dec [deg]
roll_nom	58.708238806185	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9571.8242487907	Sum of GTIs [s]
livetime	9194.4826796192	Livetime [s]
ontime2	9571.6600887775	Sum of GTIs [s]
ontime3	9571.7011287808	Sum of GTIs [s]
ontime5	9571.7832087874	Sum of GTIs [s]
ontime6	9571.7421687841	Sum of GTIs [s]
ontime7	9571.8242487907	Sum of GTIs [s]
l2events	24855	Number of level 2 events



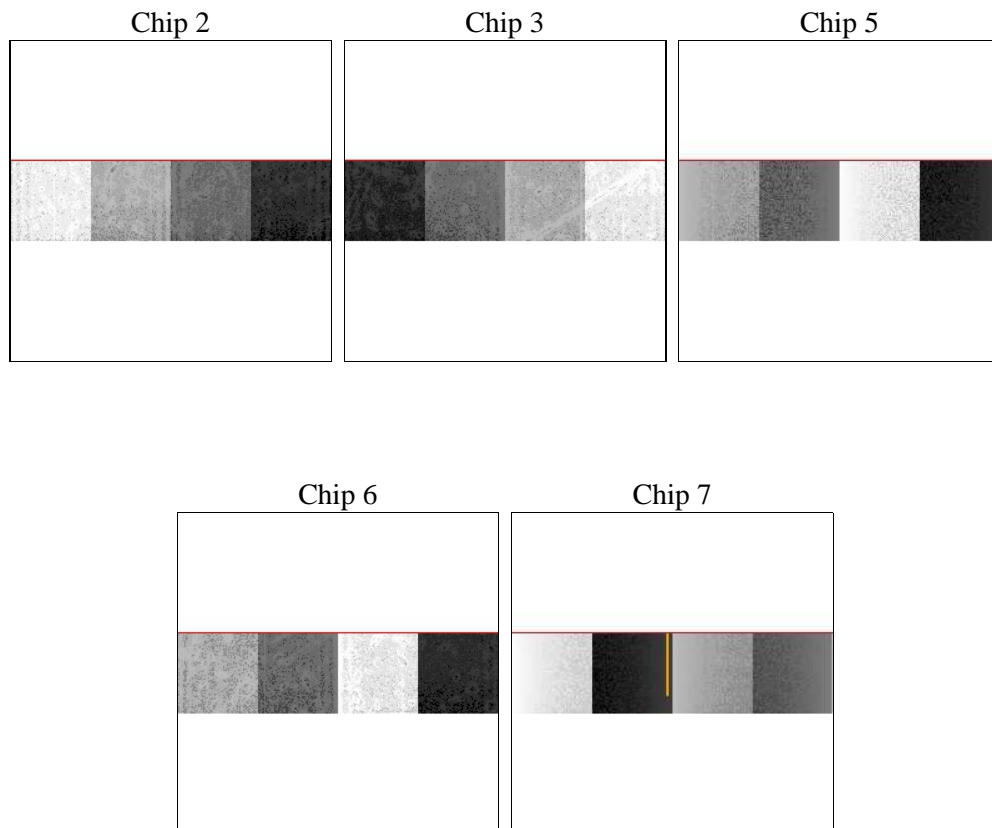
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9571.8242487907	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	9571.6600887775	Sum of GTIs [s]
date	2014-12-01T08:41:27	Date and time of file creation	ontime3	9571.7011287808	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9571.7832087874	Sum of GTIs [s]
			ontime6	9571.7421687841	Sum of GTIs [s]
			ontime7	9571.8242487907	Sum of GTIs [s]
			l1events	88519	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	14995	14454	22899	15677	20494
rejected events	13309	12795	11864	13731	10449
rejected %	88%	88%	51%	87%	50%

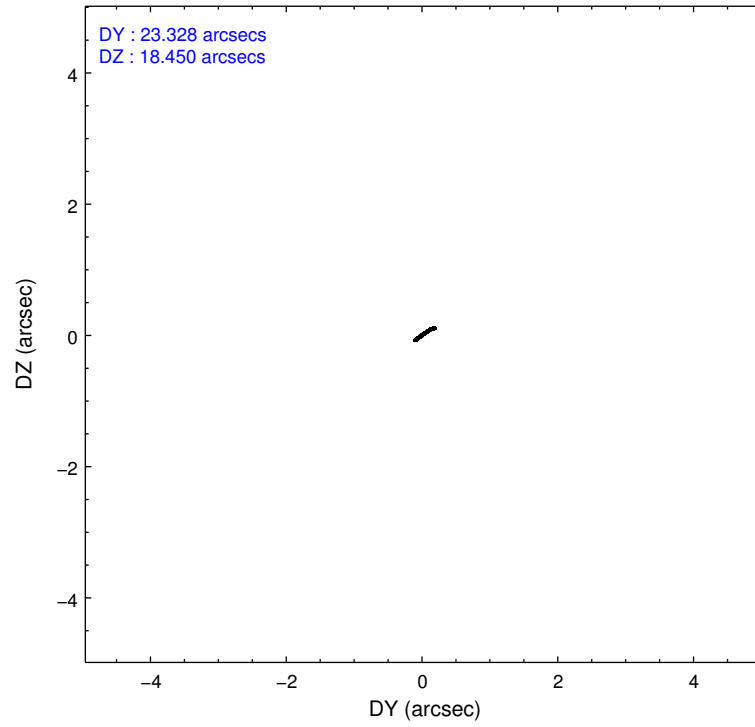
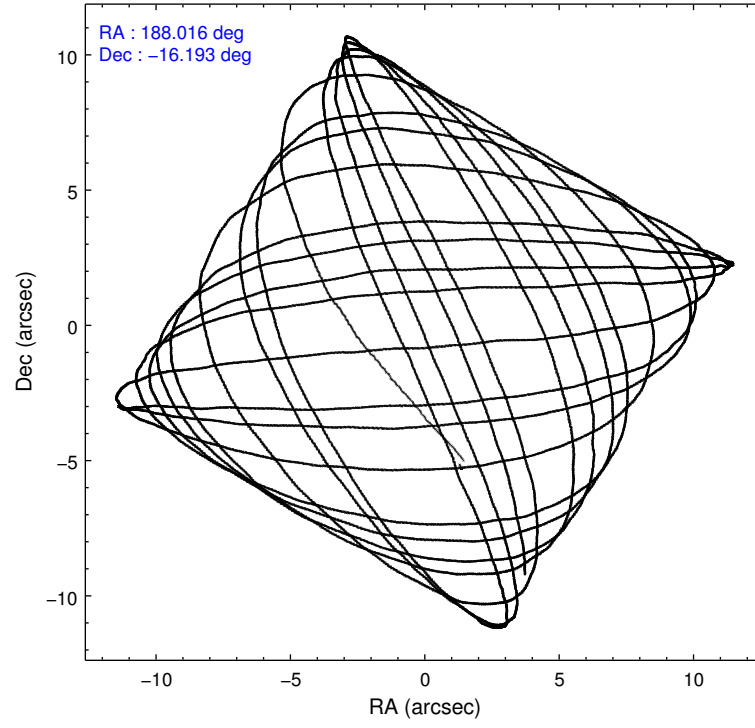
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	525	500	943	595	1369
	3%	3%	4%	3%	6%
grade 1 events	5	7	47	8	33
	0%	0%	0%	0%	0%
grade 2 events	337	327	3258	397	2054
	2%	2%	14%	2%	10%
grade 3 events	263	251	629	297	1122
	1%	1%	2%	1%	5%
grade 4 events	252	246	596	273	1094
	1%	1%	2%	1%	5%
grade 5 events	503	696	2049	763	2073
	3%	4%	8%	4%	10%
grade 6 events	309	335	5611	384	4410
	2%	2%	24%	2%	21%
grade 7 events	12801	12092	9766	12960	8339
	85%	83%	42%	82%	40%

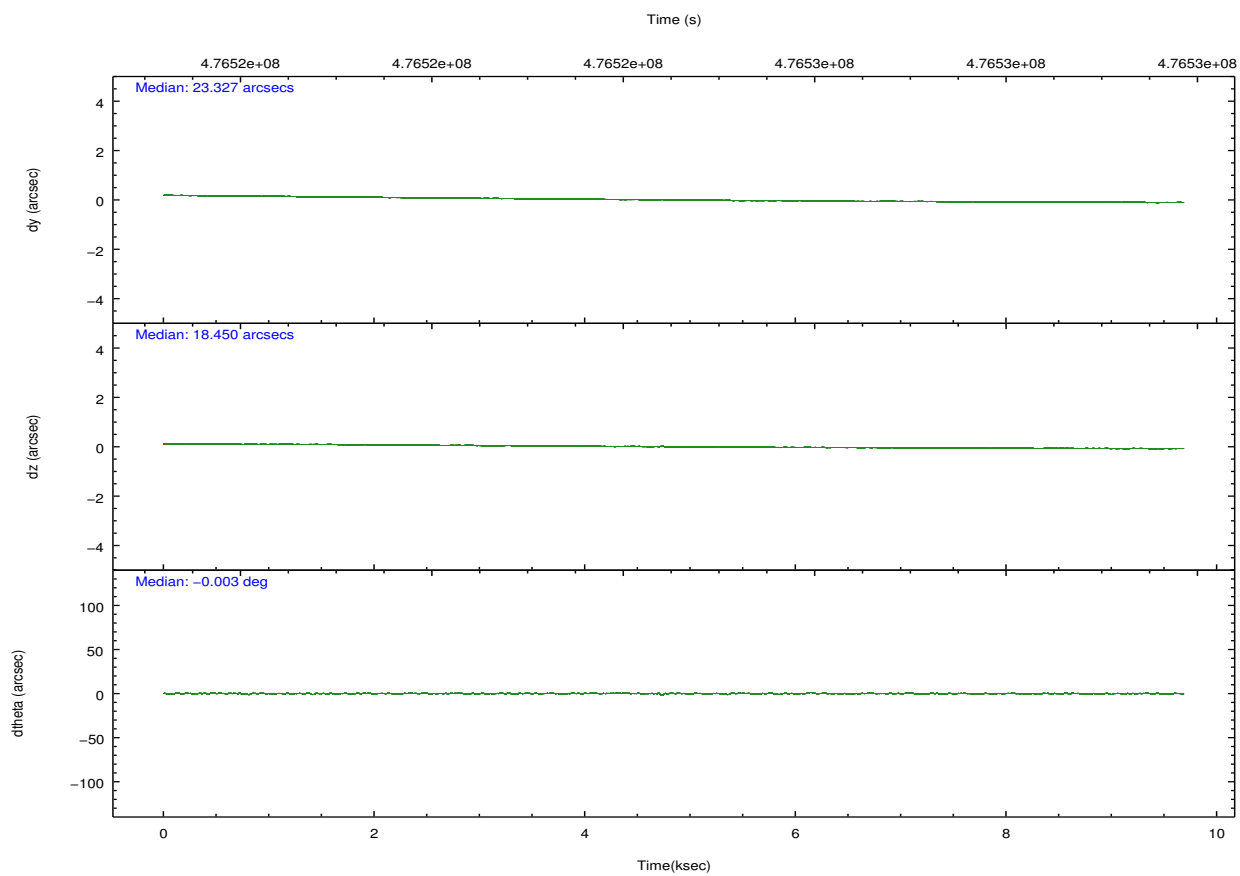
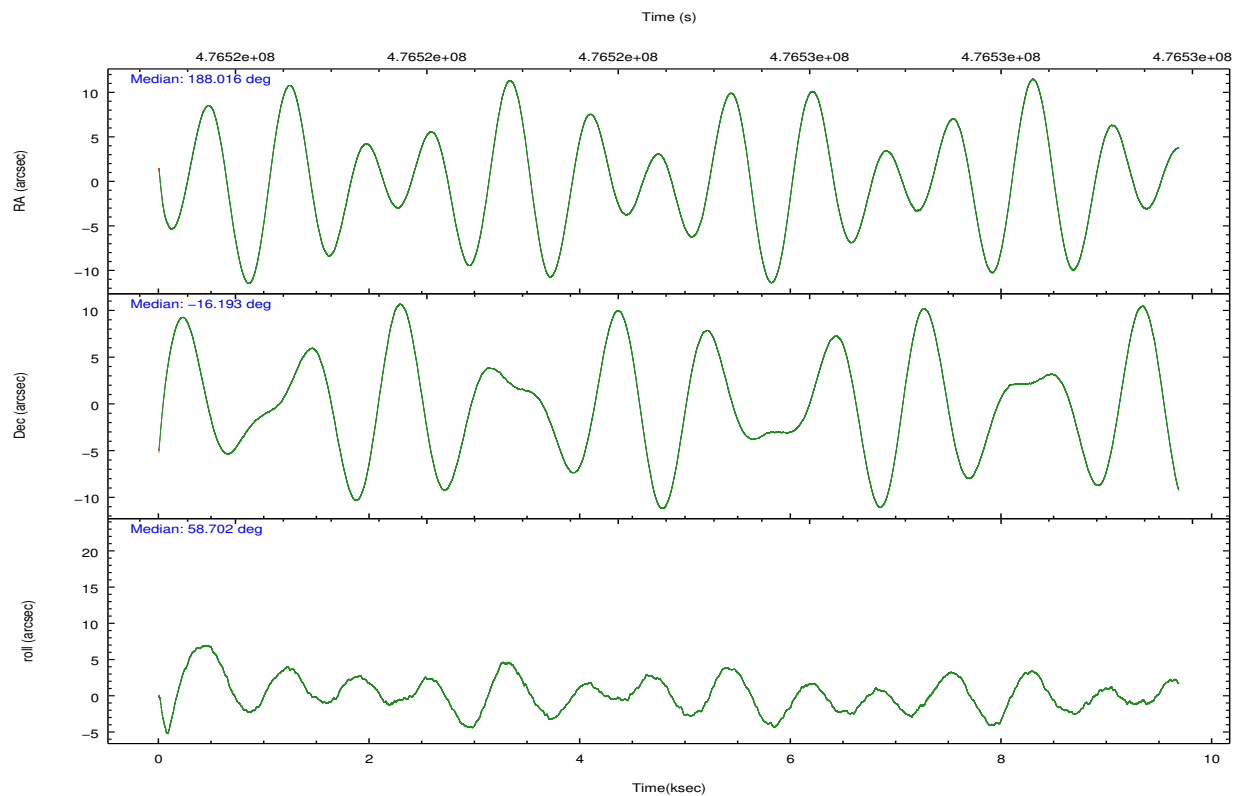


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	188.015858	188.0161059917333	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-16.220628	-16.1932127734299	Subarray start row	385	385
[deg] Pointing Roll	58.551536	58.70823880618529	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	476519868.184000	476519173.2603			
Observation start date	2013-02-06T06:36:41	2013-02-06T06:26:13			
[s] Observation end time (MET)	476529368.184000	476530198.16089			
Observation end date	2013-02-06T09:15:01	2013-02-06T09:29:58			
Read mode	TIMED	TIMED			

## 2.3 Aspect



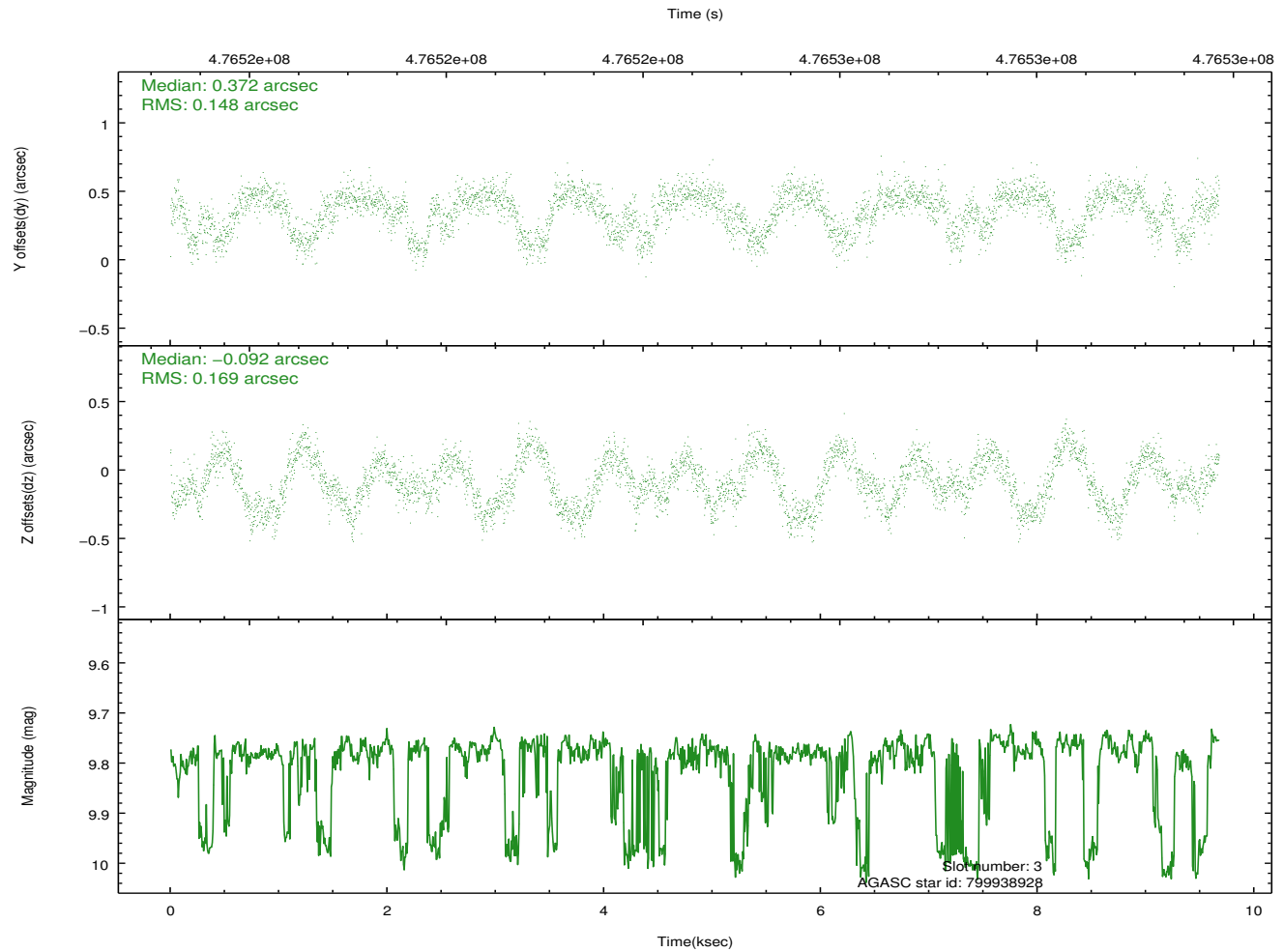
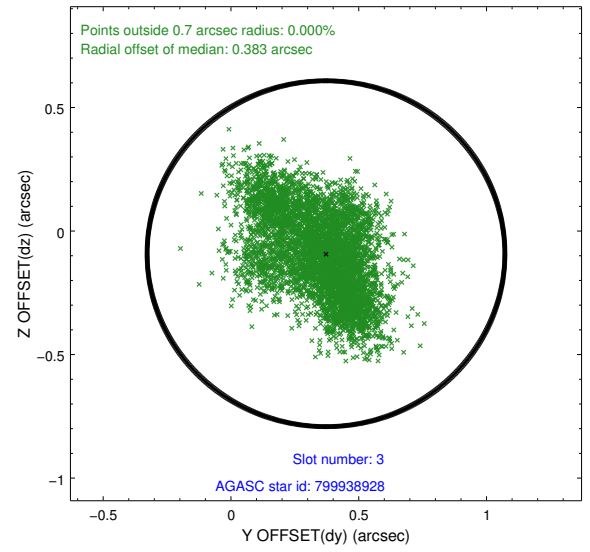
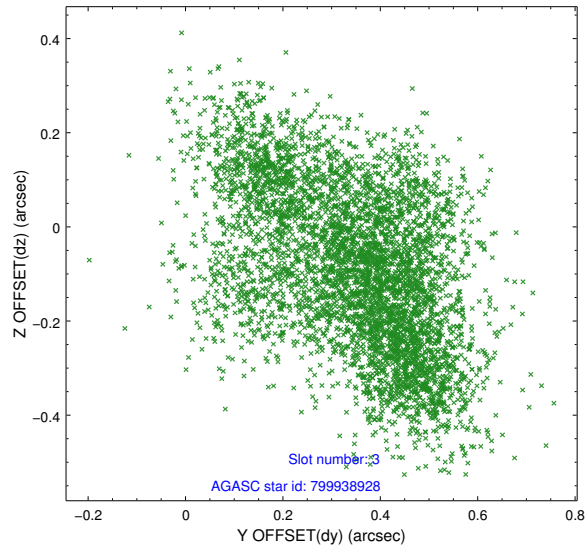


### Slot Statistics

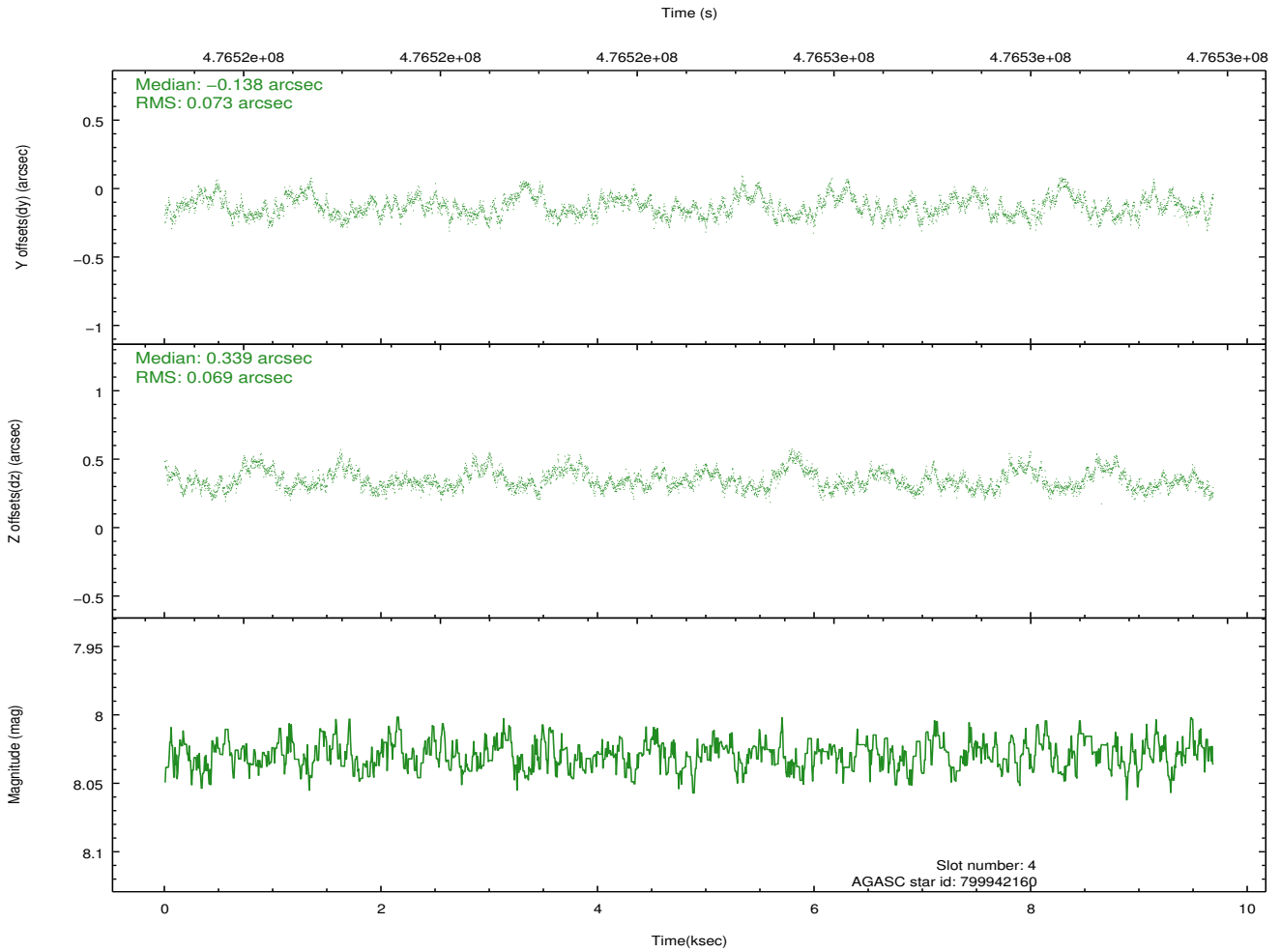
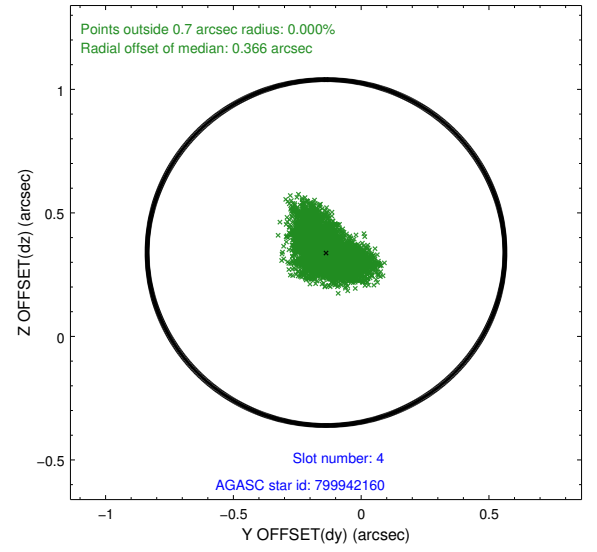
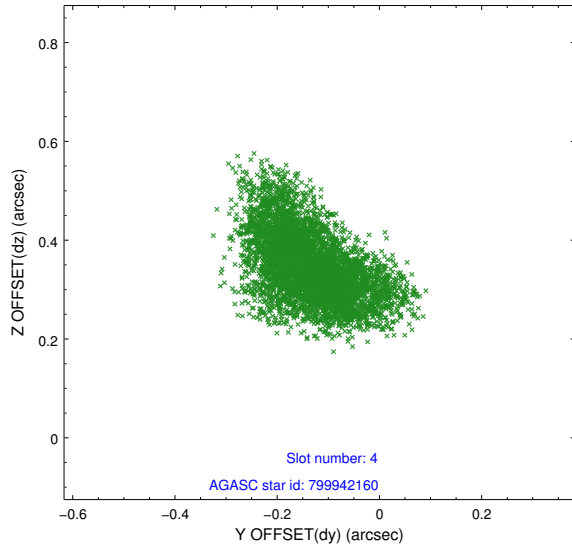
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	2362	-0.124	-0.081	0.008	0.012	0.000000	0.000000	-776.69	-1739.95
1	FID		ACIS-S-4	7.10	2362	0.324	0.082	0.009	0.015	0.000000	0.000000	2136.81	168.08
2	FID		ACIS-S-5	7.13	2361	-0.231	0.008	0.007	0.011	0.000000	0.000000	-1828.90	162.36
3	GUIDE	used	799938928	9.79	4644	0.372	-0.092	0.247	0.384	187.528541	-16.643478	-2177.83	638.86
4	GUIDE	used	799942160	8.03	4718	-0.138	0.339	0.106	0.174	188.654146	-16.354391	736.00	-2132.57
5	GUIDE	used	799942944	7.41	4724	0.086	0.293	0.079	0.120	188.225311	-16.660106	-973.12	-1442.09
6	GUIDE	used	799949752	7.79	4723	0.055	-0.219	0.088	0.149	187.267657	-16.392120	-1879.88	1880.55
7	GUIDE	used	799933864	7.72	4722	-0.351	-0.337	0.089	0.132	187.954729	-15.715631	1439.23	1128.86

## 2.4 Star Slots

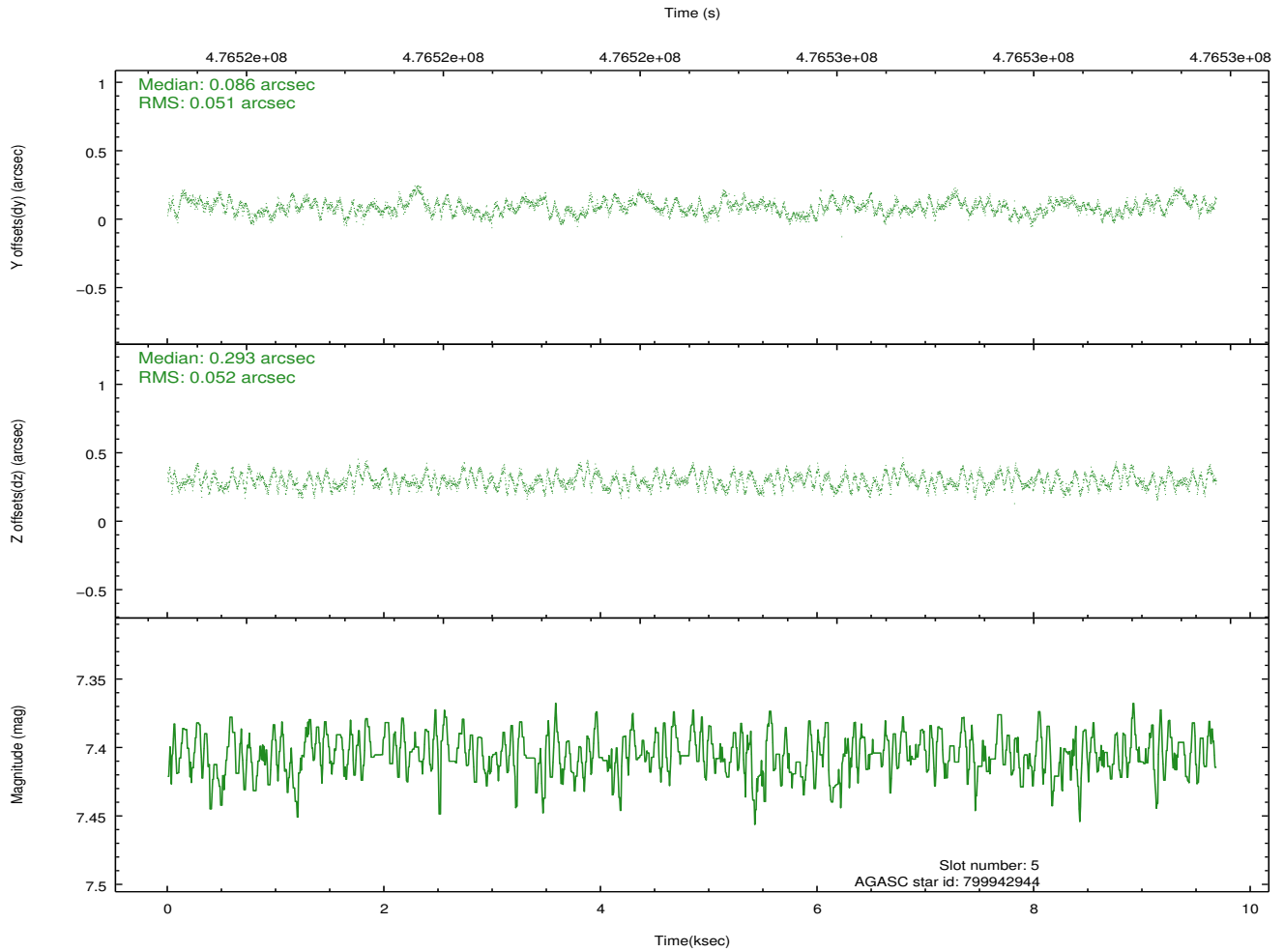
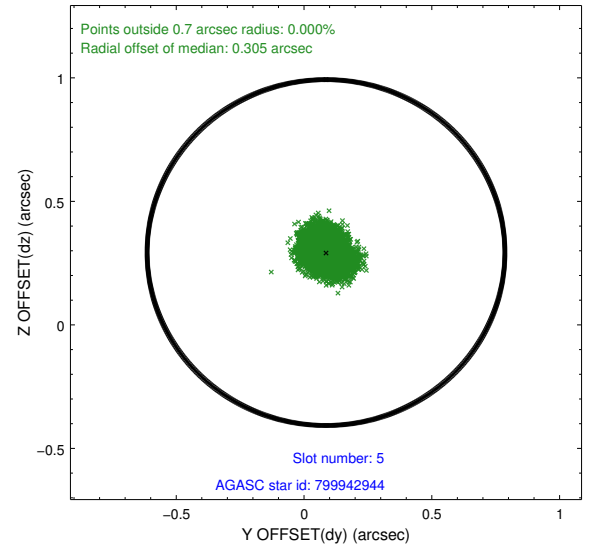
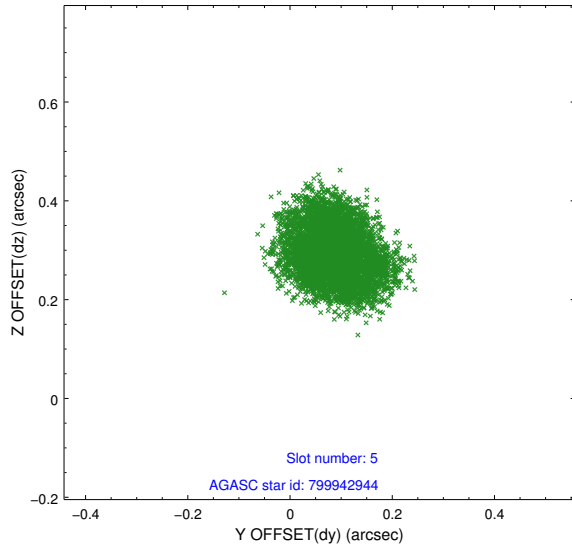
### 2.4.1 Slot 3



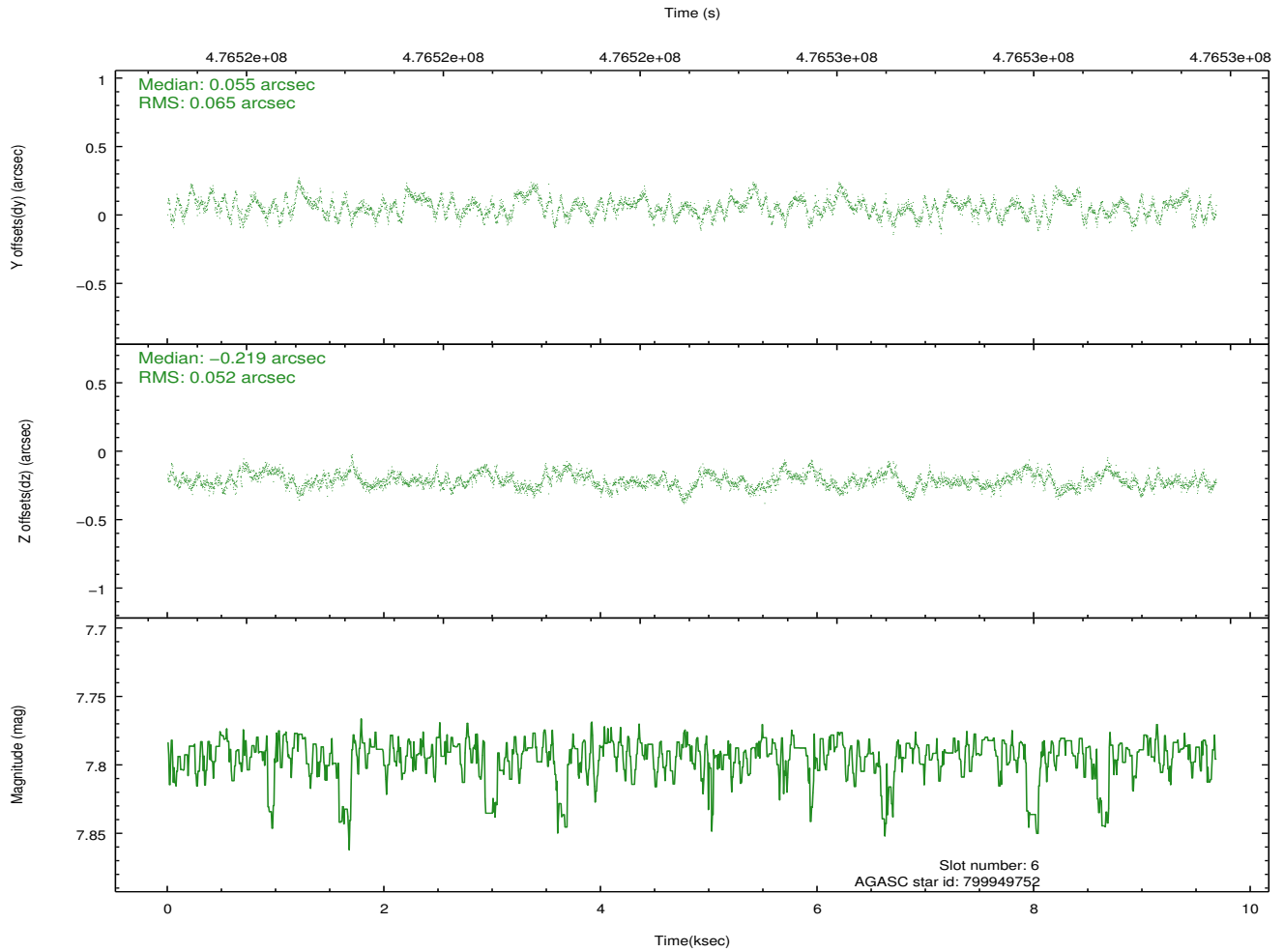
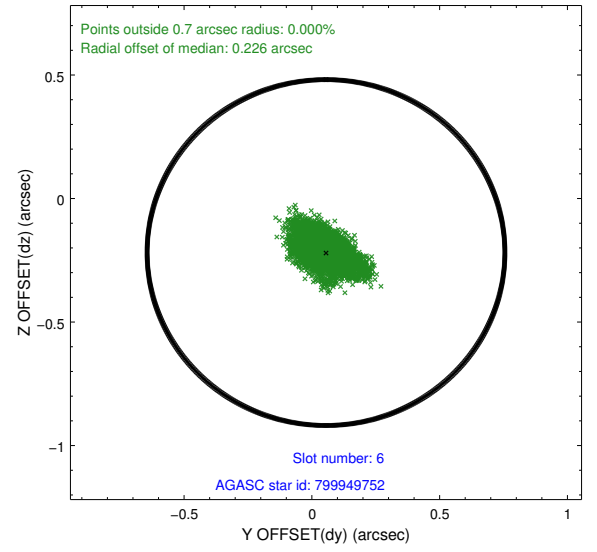
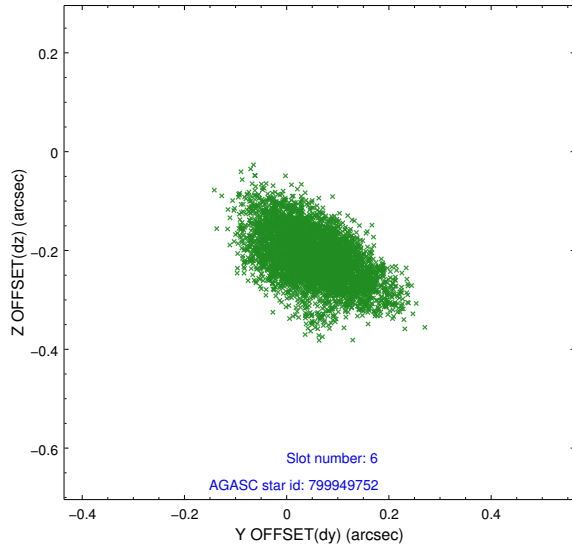
## 2.4.2 Slot 4



### 2.4.3 Slot 5

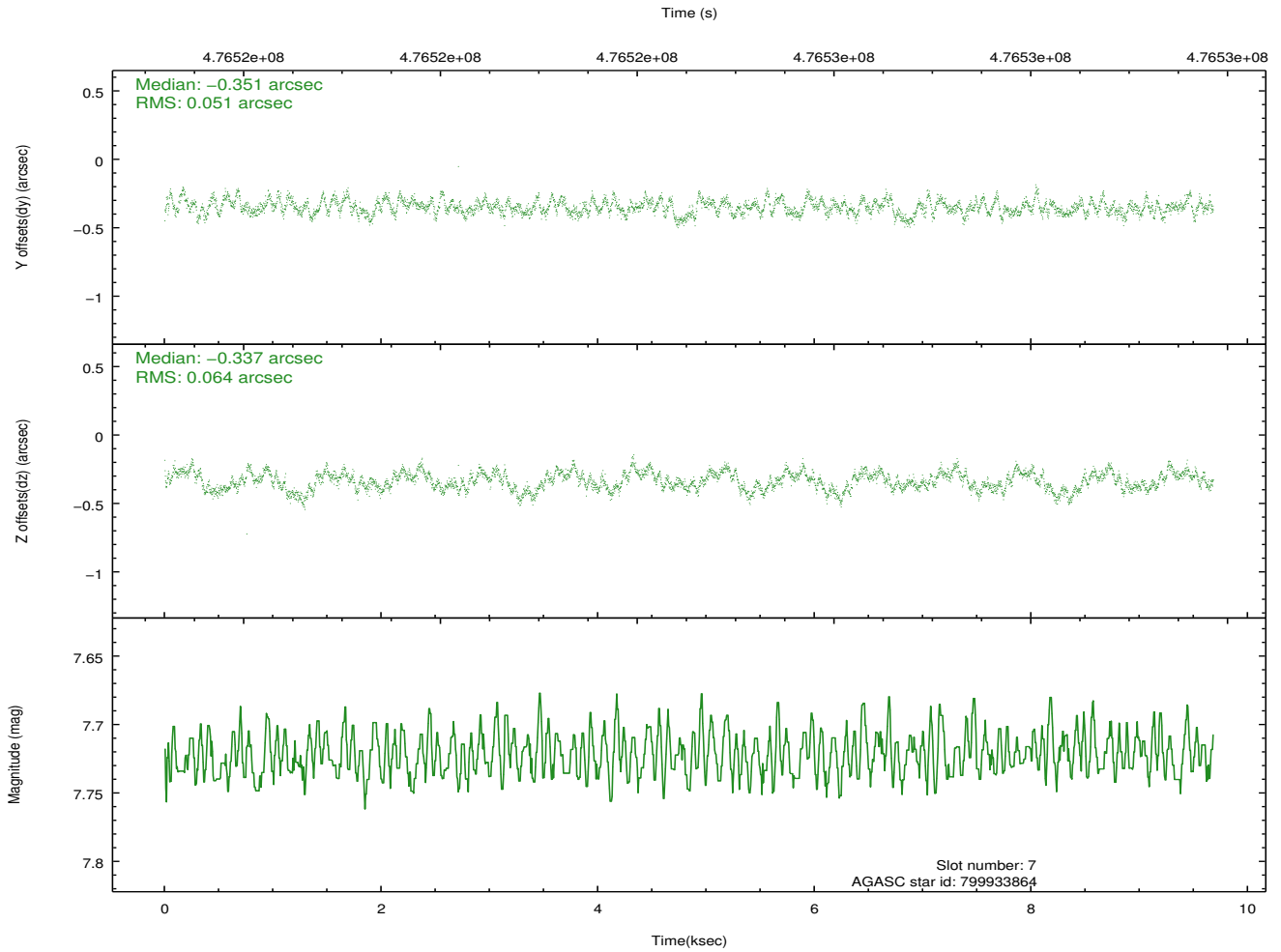
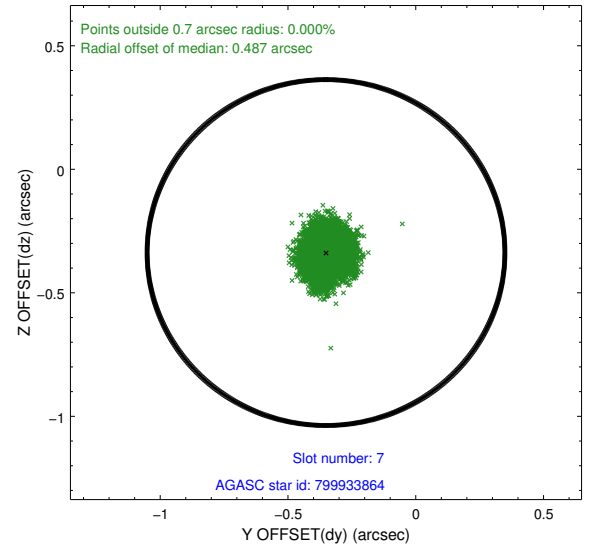
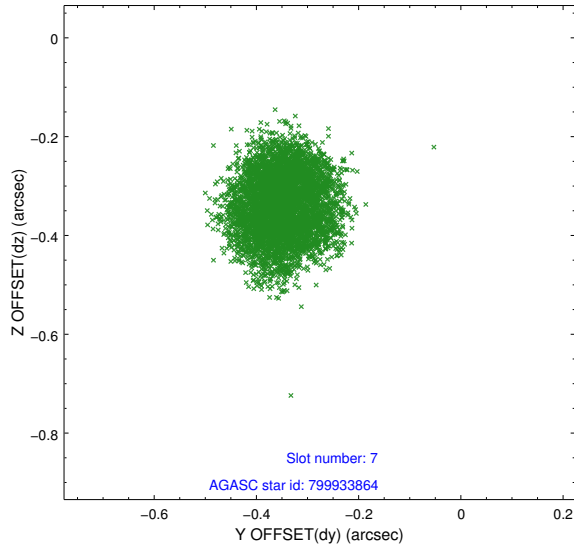


## 2.4.4 Slot 6



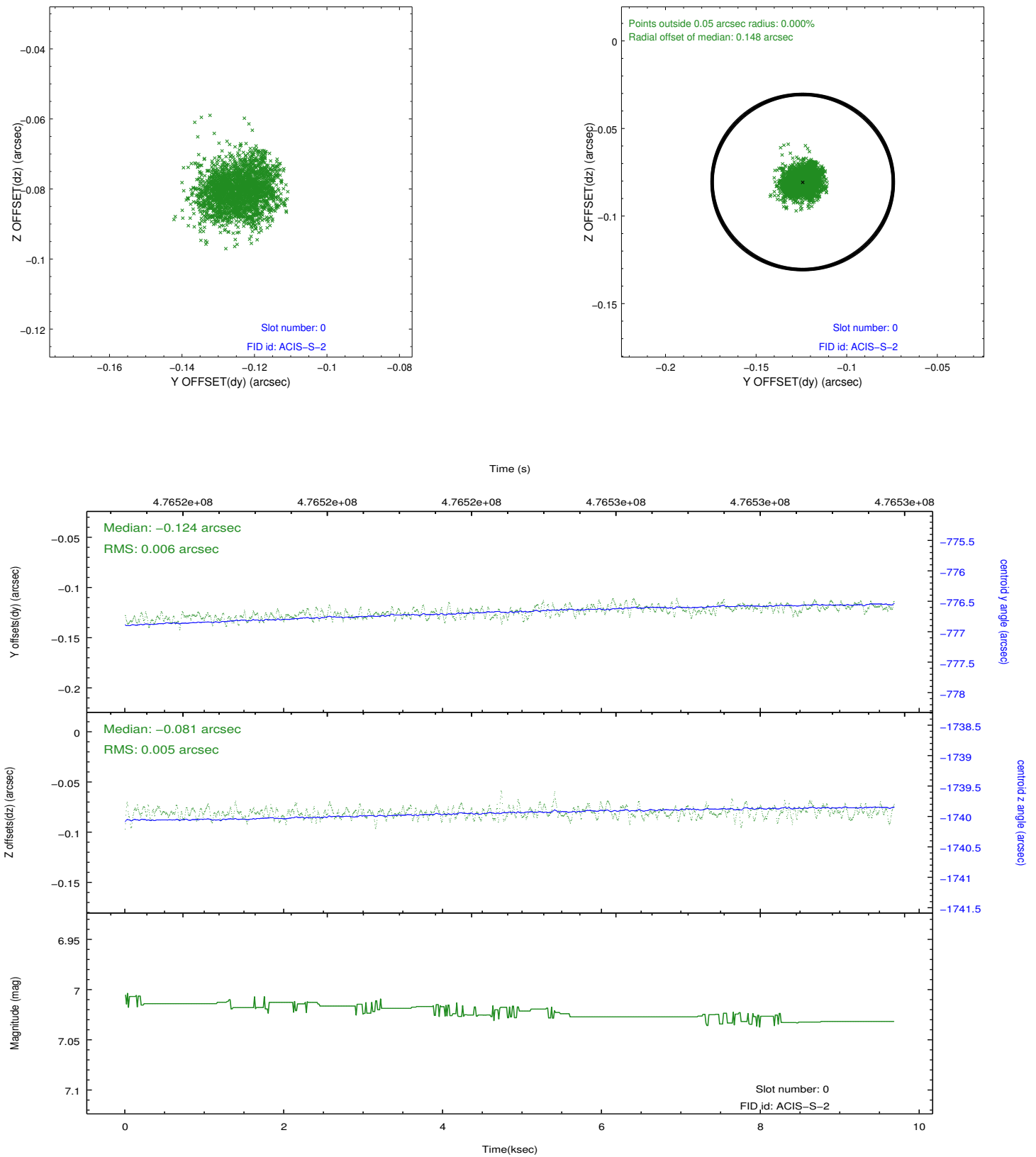


## 2.4.5 Slot 7

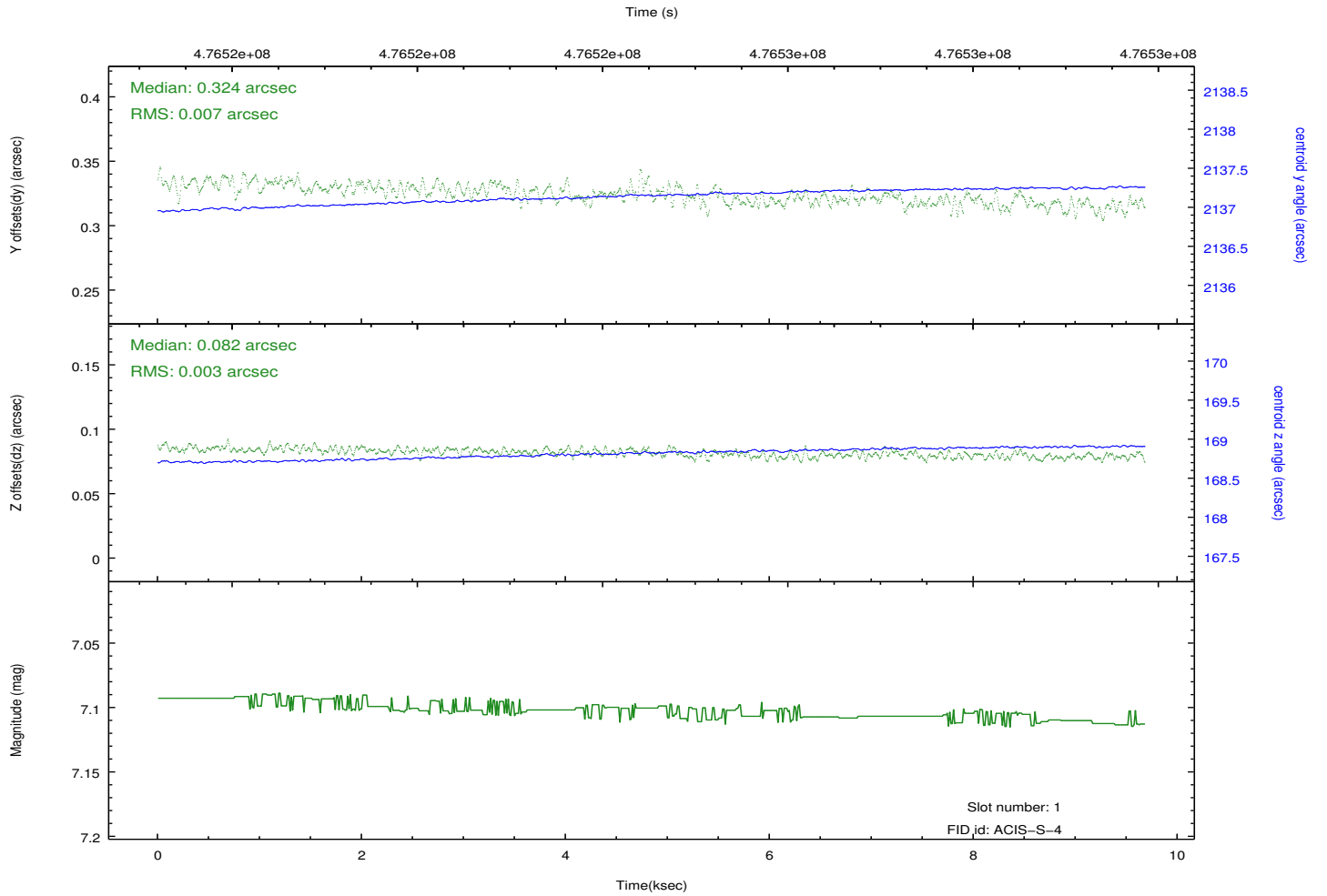
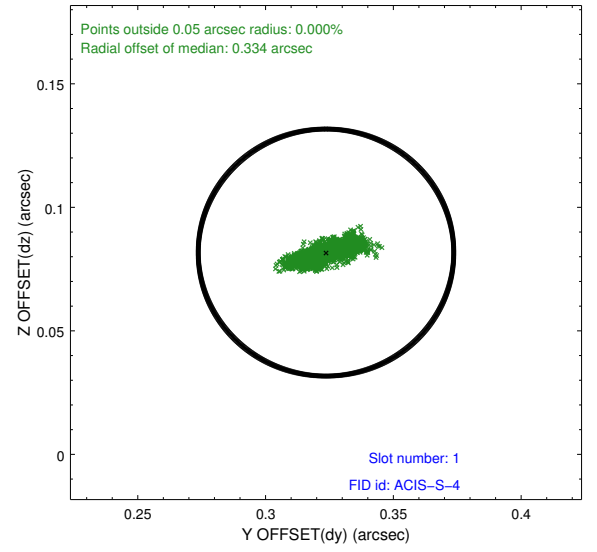
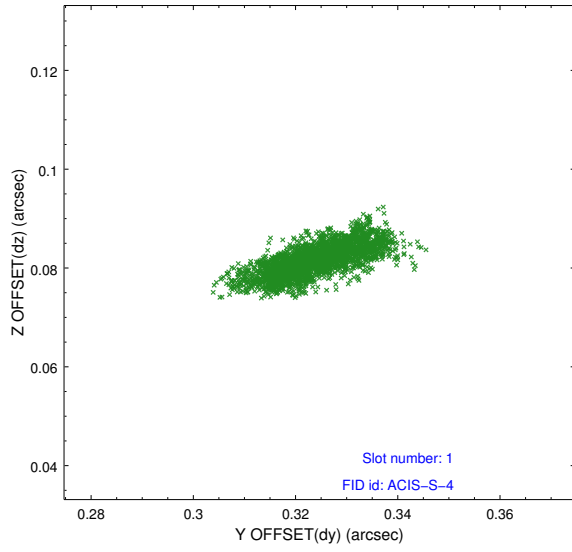


## 2.5 FID Slots

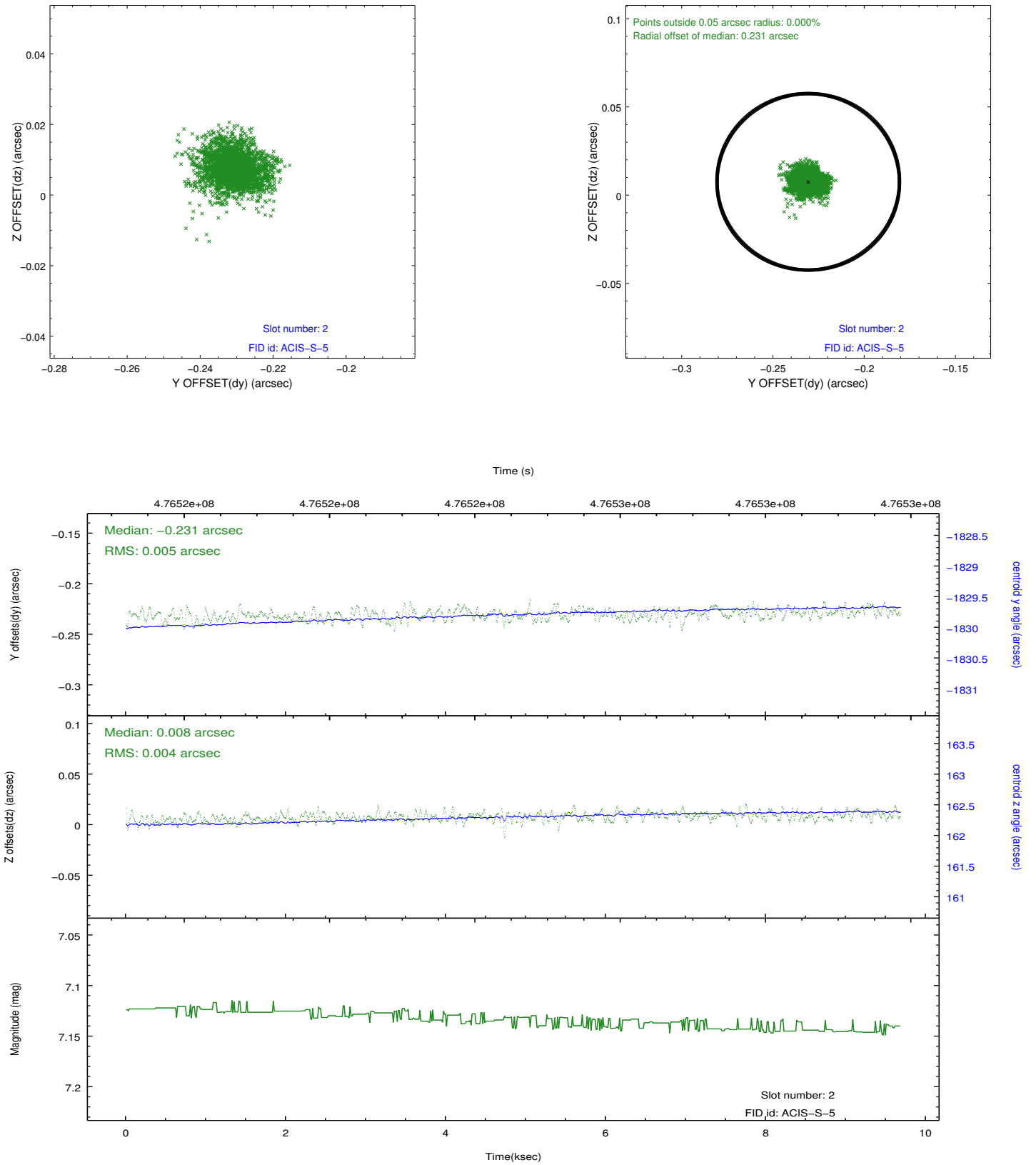
### 2.5.1 Slot 0



## 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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.5718242487907

## 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.