

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15566 - L2 Version 2  
Chandra X-Ray Center

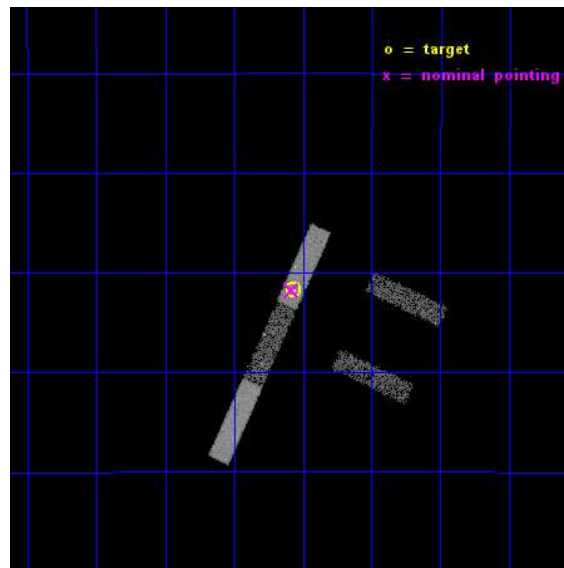
L2 Processing Date : Dec 2 2014

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# 1 Front

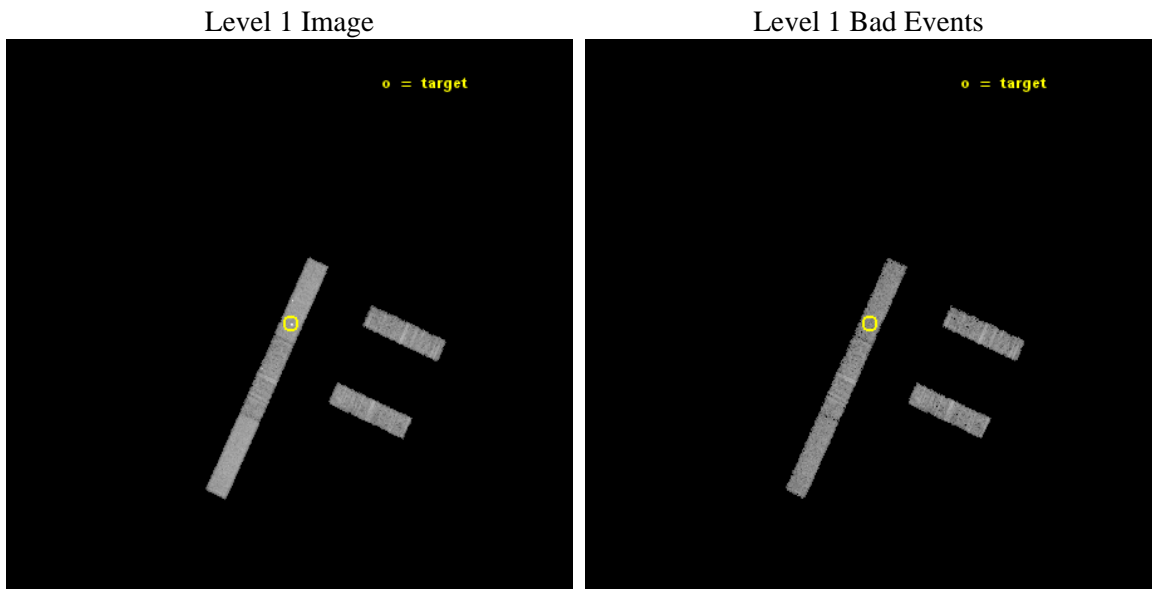
seq_num	200832	Sequence number
obs_id	15566	Observation id
title	Characterizing the X-ray & Stellar Wind Environment in the ~1 Gyr Late Heavy Bombardment System Eta Corvi	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	HD 109085	Source name
dtcycle	0	&#160
cycle	P	events from which 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	188.0205727846	Nominal RA [deg]
dec_nom	-16.196360424686	Nominal Dec [deg]
roll_nom	294.74149739355	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10263.797144413	Sum of GTIs [s]
livetime	9859.1765392425	Livetime [s]
ontime2	10263.6329844	Sum of GTIs [s]
ontime3	10263.674024403	Sum of GTIs [s]
ontime5	10263.75610441	Sum of GTIs [s]
ontime6	10263.715064406	Sum of GTIs [s]
ontime7	10263.797144413	Sum of GTIs [s]
l2events	28346	Number of level 2 events



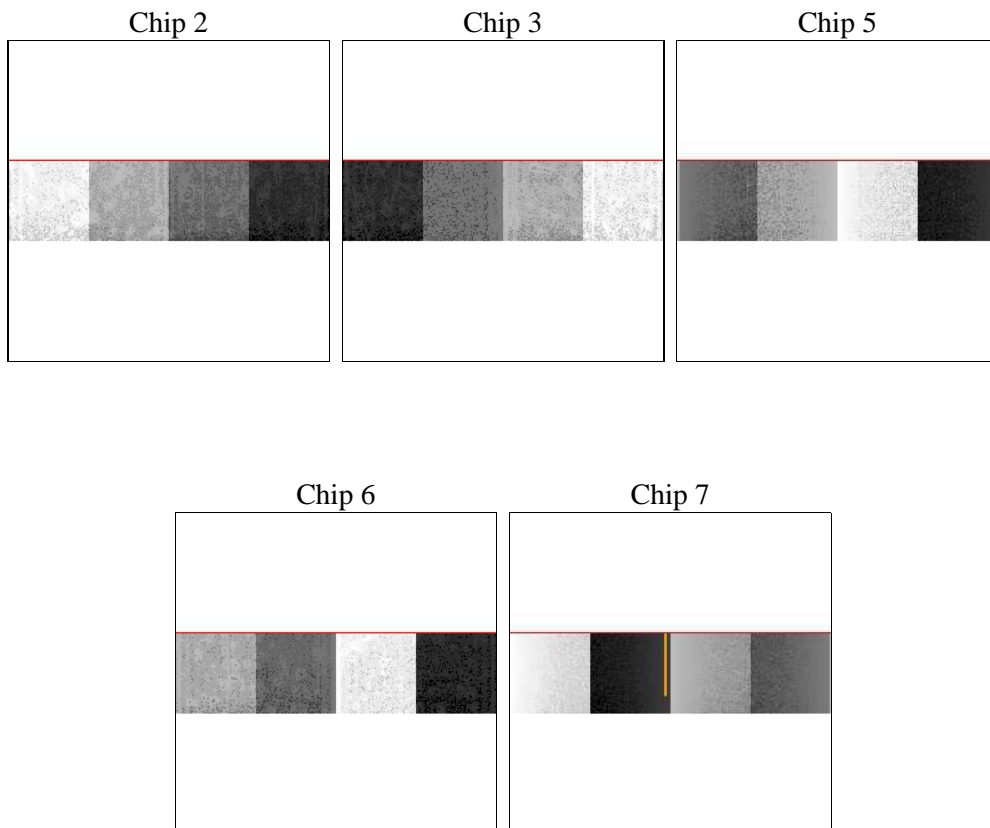
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10191.223000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10263.797144413	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	10263.6329844	Sum of GTIs [s]
date	2014-12-02T15:17:14	Date and time of file creation	ontime3	10263.674024403	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10263.75610441	Sum of GTIs [s]
			ontime6	10263.715064406	Sum of GTIs [s]
			ontime7	10263.797144413	Sum of GTIs [s]
			l1events	96195	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	16279	15382	25010	16275	23249
rejected events	14299	13520	12923	13914	11435
rejected %	87%	87%	51%	85%	49%

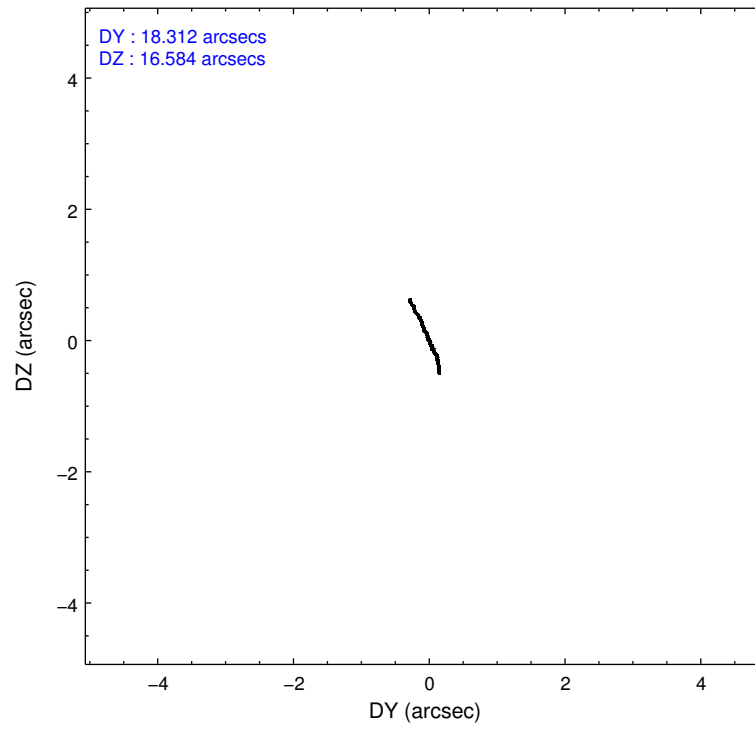
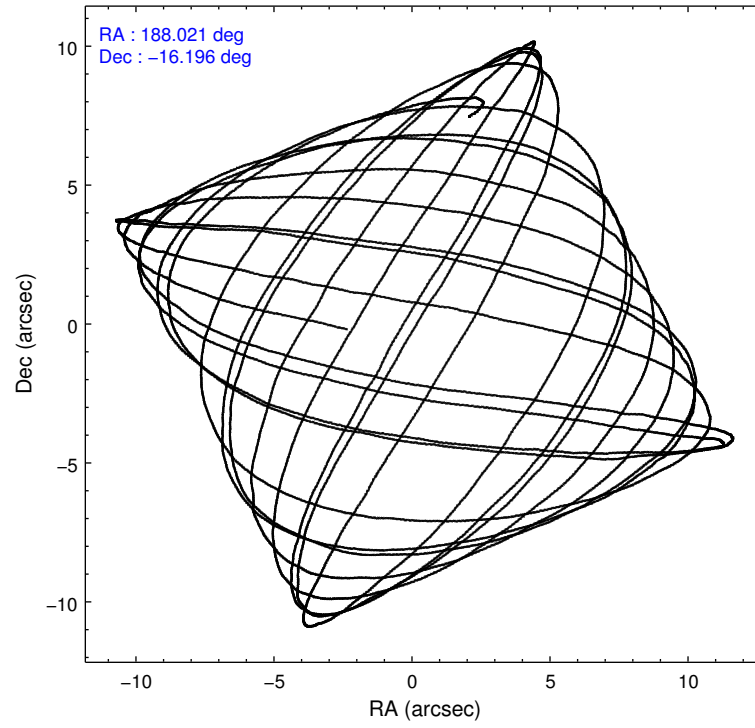
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	717	623	988	969	1755
	4%	4%	3%	5%	7%
grade 1 events	9	7	73	5	37
	0%	0%	0%	0%	0%
grade 2 events	414	374	3672	408	2591
	2%	2%	14%	2%	11%
grade 3 events	232	271	775	299	1257
	1%	1%	3%	1%	5%
grade 4 events	287	260	706	268	1204
	1%	1%	2%	1%	5%
grade 5 events	594	778	2213	733	2152
	3%	5%	8%	4%	9%
grade 6 events	331	335	5946	417	5009
	2%	2%	23%	2%	21%
grade 7 events	13695	12734	10637	13176	9244
	84%	82%	42%	80%	39%

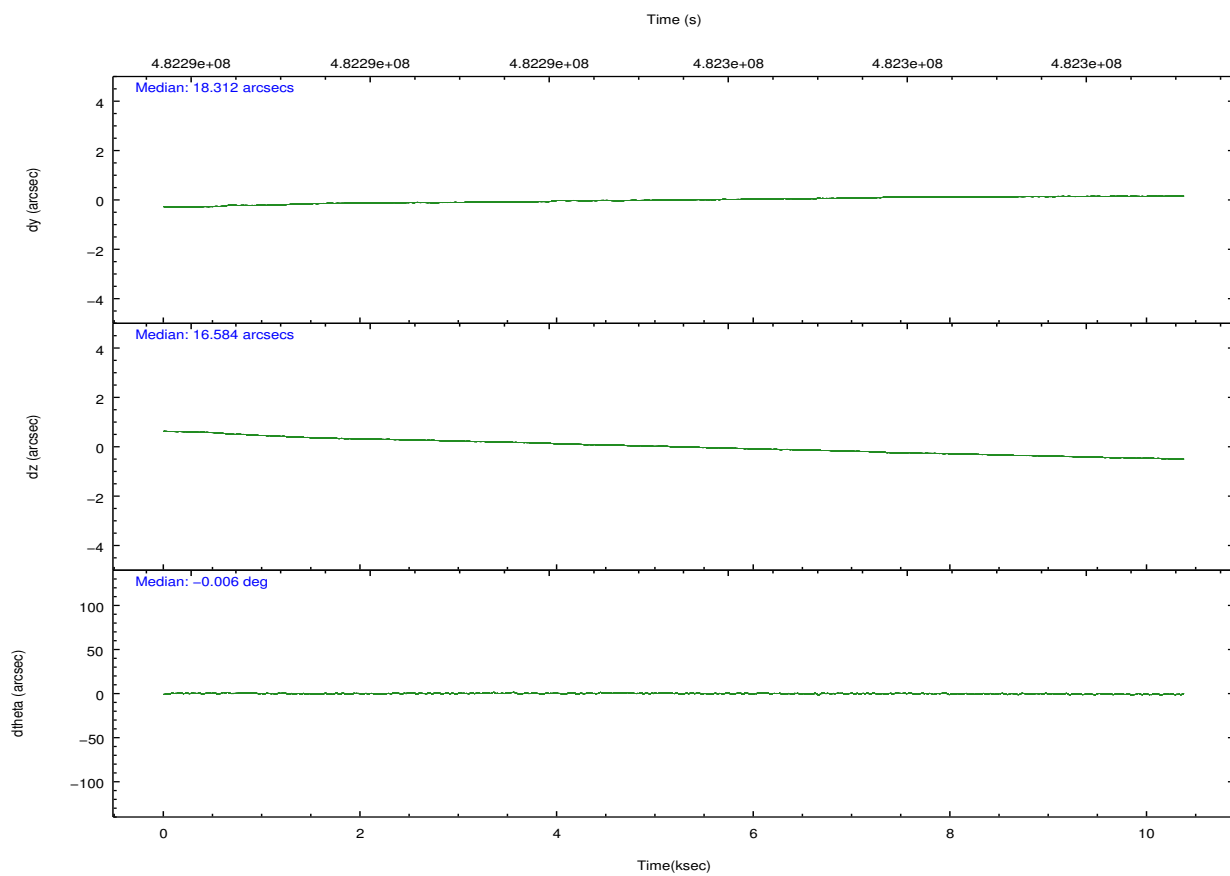
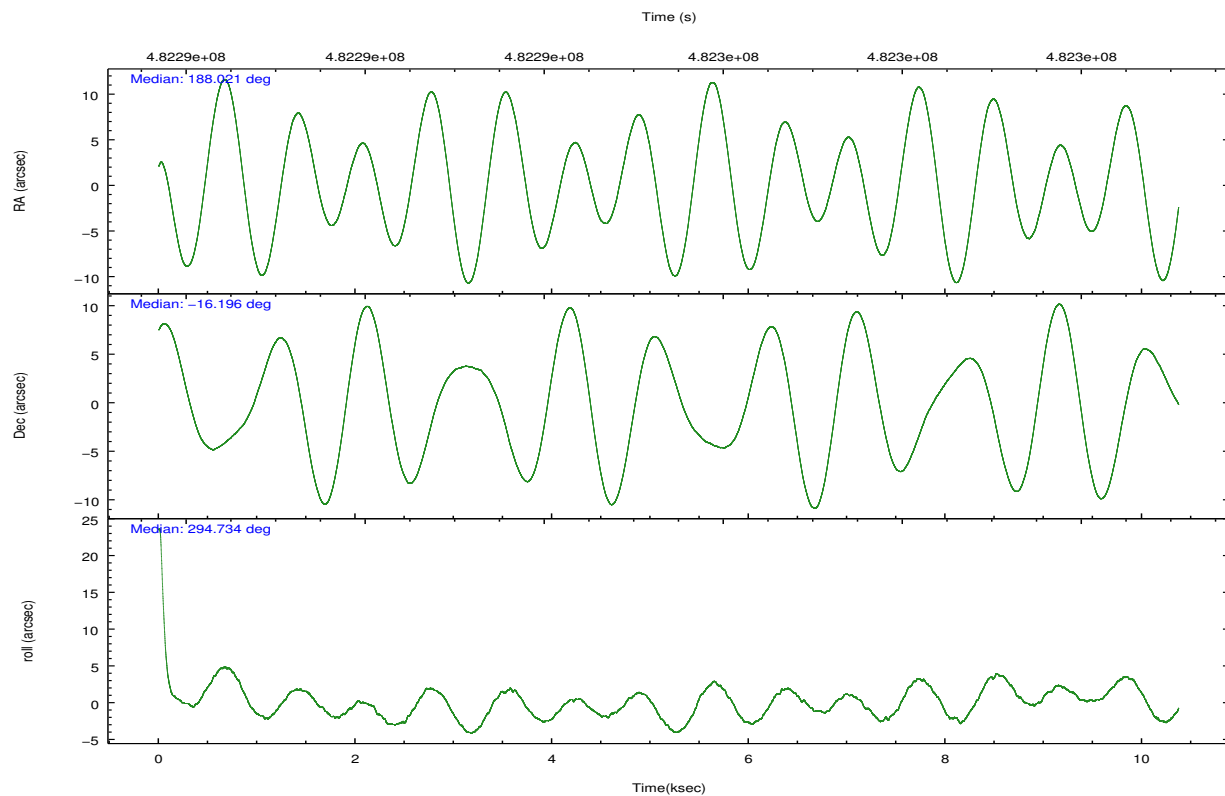


## 2.2 Compared Parameters

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	187.997155	188.0205727846036	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-16.180933	-16.19636042468571	Subarray start row	385	385
[deg] Pointing Roll	294.578311	294.7414973935543	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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	482290395.184000	482289355.72236			
Observation start date	2013-04-14T01:32:08	2013-04-14T01:15:55			
[s] Observation end time (MET)	482300587.184000	482300812.66048			
Observation end date	2013-04-14T04:22:00	2013-04-14T04:26:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect



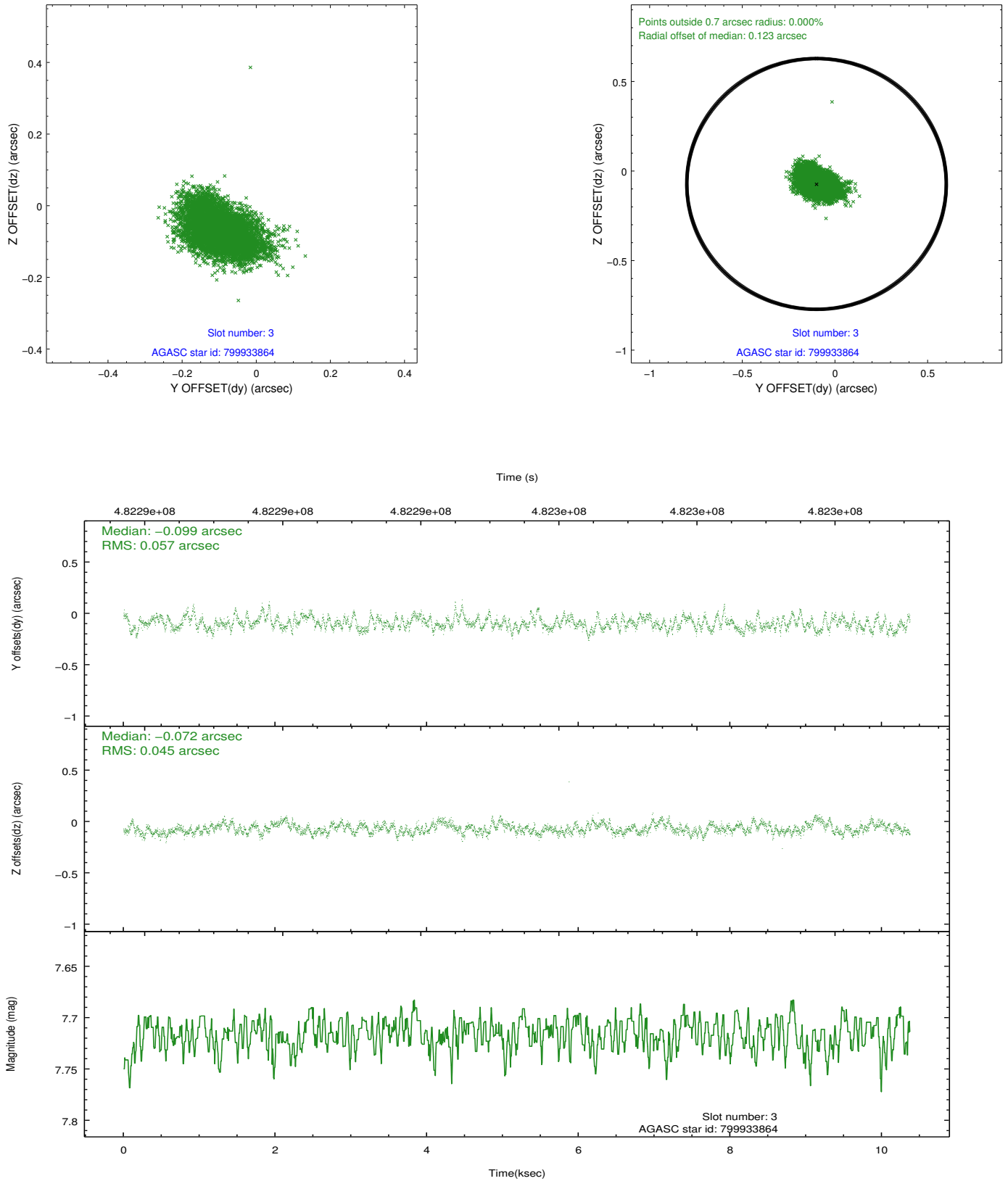


### Slot Statistics

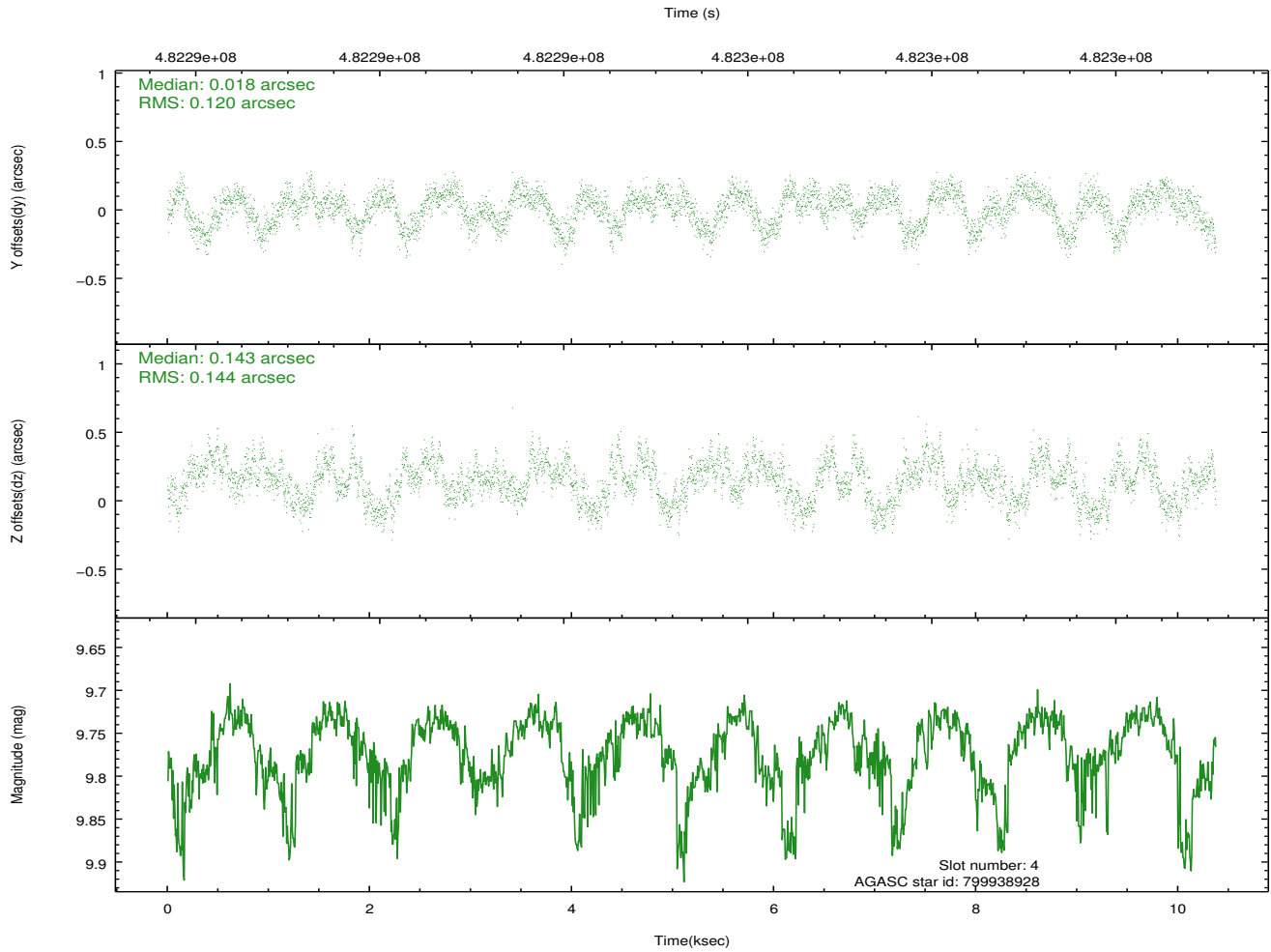
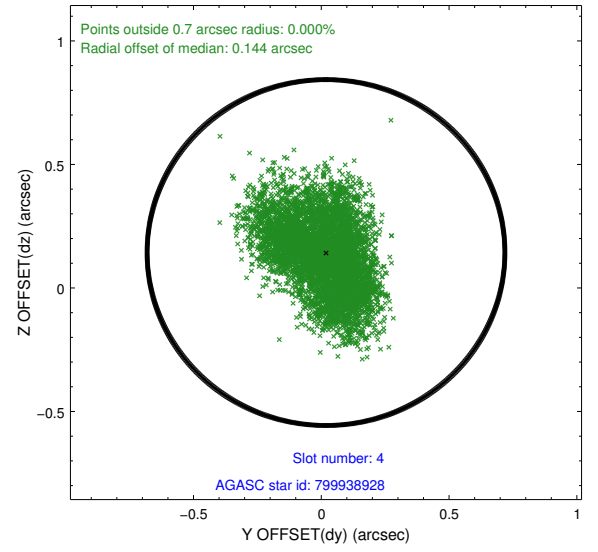
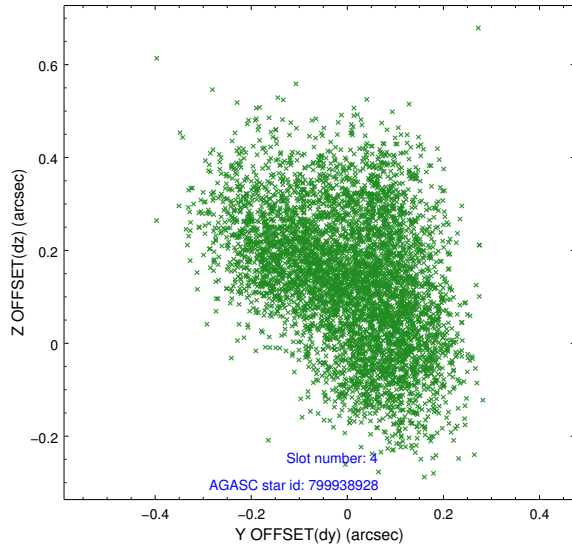
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.01	2530	0.098	-0.096	0.010	0.017	0.000000	0.000000	924.80	-1733.73
1	FID		ACIS-S-5	7.05	2530	-0.172	0.052	0.013	0.019	0.000000	0.000000	-1824.21	163.42
2	FID		ACIS-S-6	7.14	2530	0.054	0.057	0.019	0.034	0.000000	0.000000	389.73	807.98
3	GUIDE	used	799933864	7.72	5059	-0.099	-0.072	0.077	0.126	187.954729	-15.715631	-1583.14	563.21
4	GUIDE	used	799938928	9.77	5054	0.018	0.143	0.203	0.317	187.528541	-16.643478	844.52	-2163.51
5	GUIDE	used	799940480	8.63	5060	0.135	-0.053	0.094	0.160	187.679107	-16.956399	2085.03	-2157.85
6	GUIDE	used	799945248	7.13	5061	0.025	0.190	0.075	0.115	187.161966	-16.005620	-1769.23	-2368.17
7	GUIDE	used	799942160	8.01	5060	-0.070	-0.206	0.095	0.149	188.654146	-16.354391	1514.75	1801.77

## 2.4 Star Slots

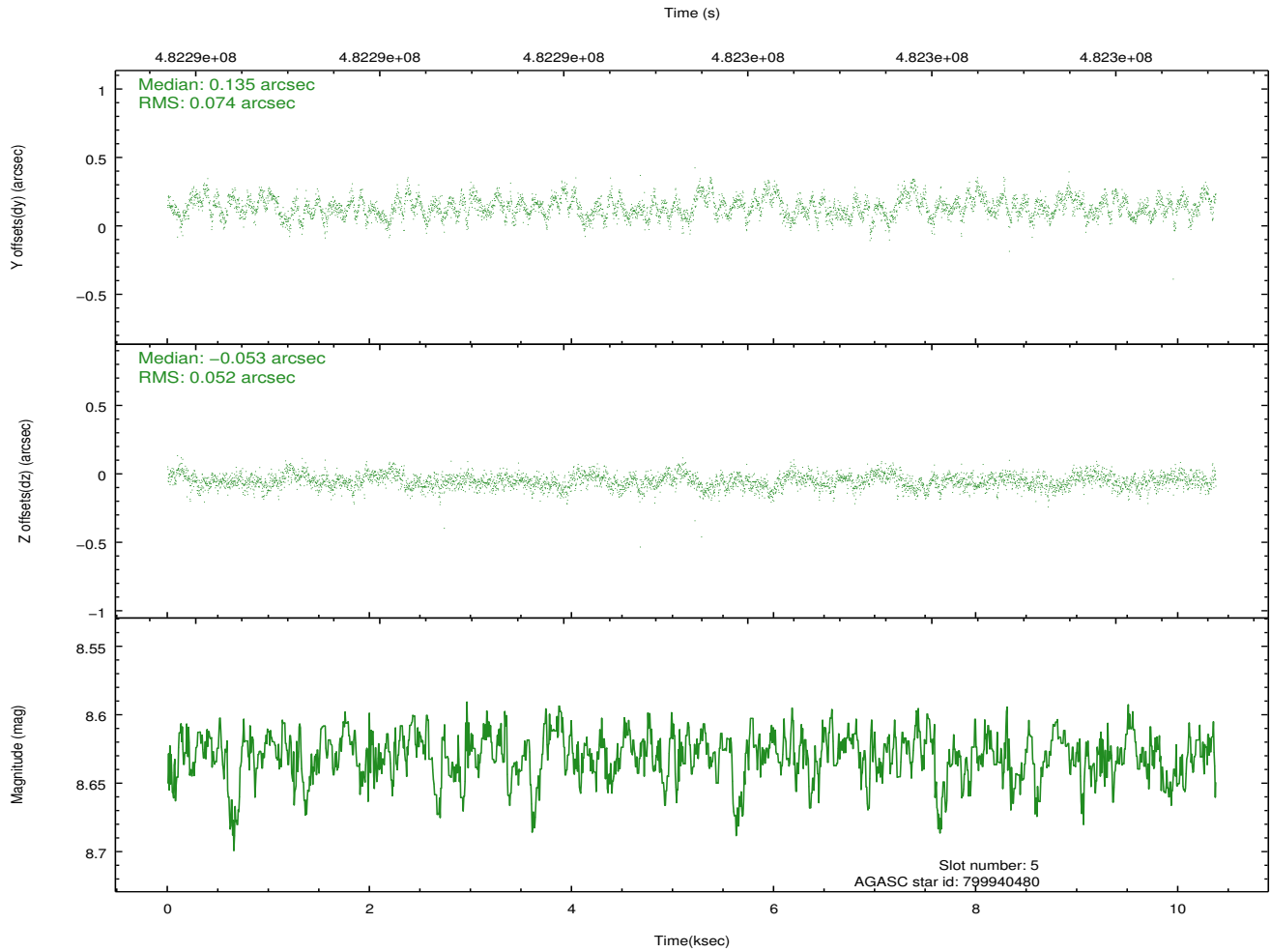
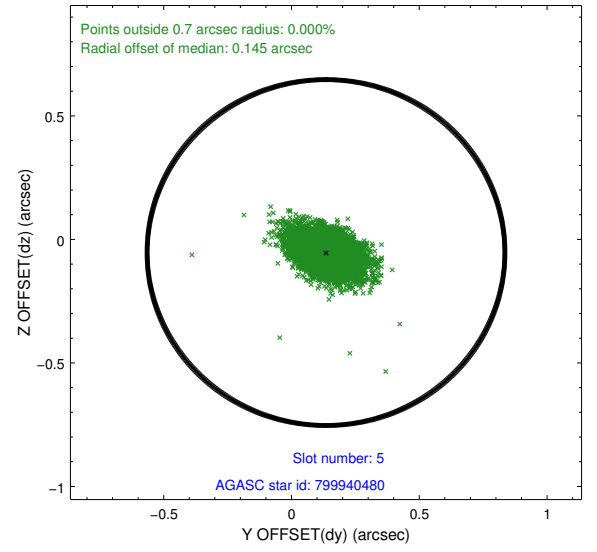
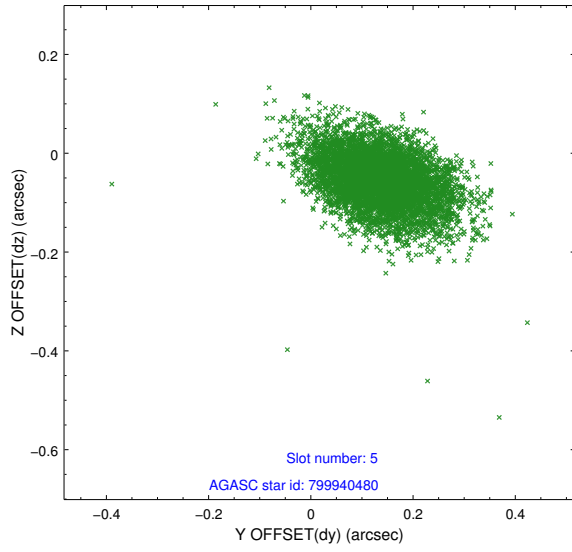
### 2.4.1 Slot 3



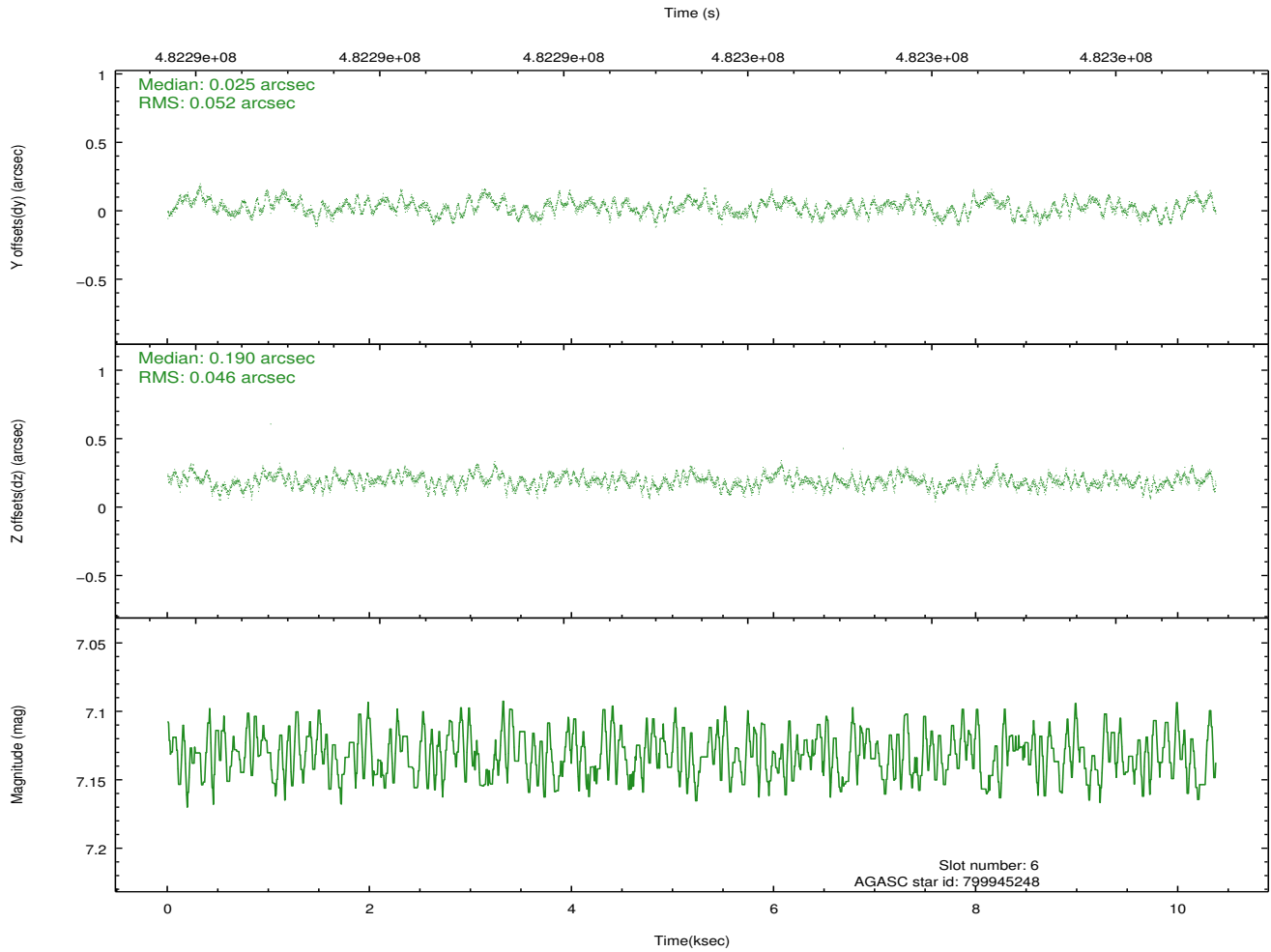
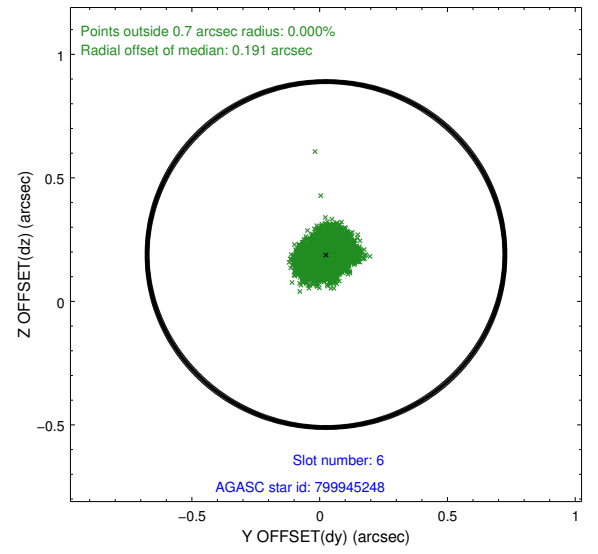
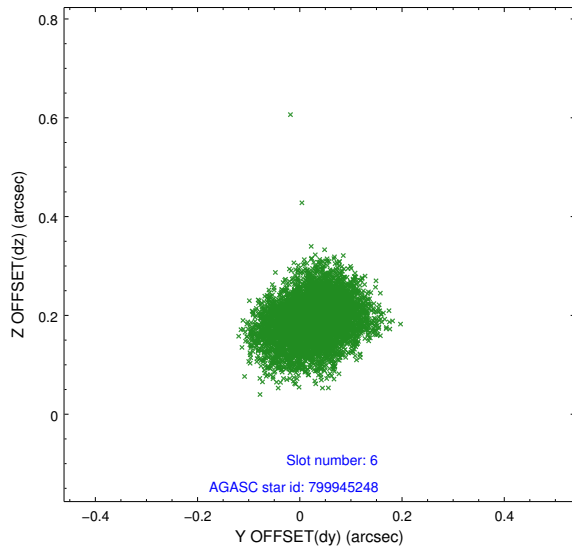
## 2.4.2 Slot 4



### 2.4.3 Slot 5

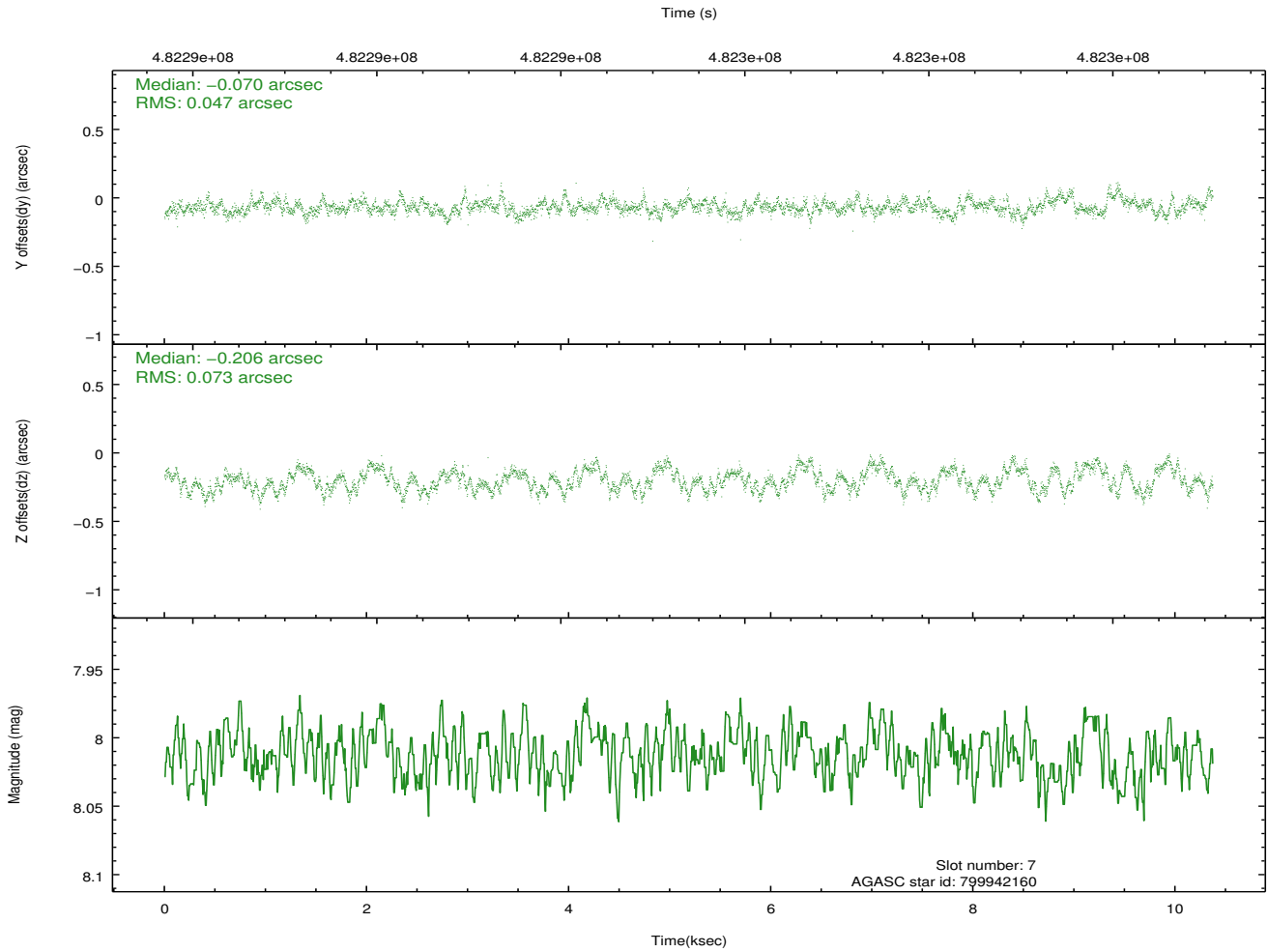
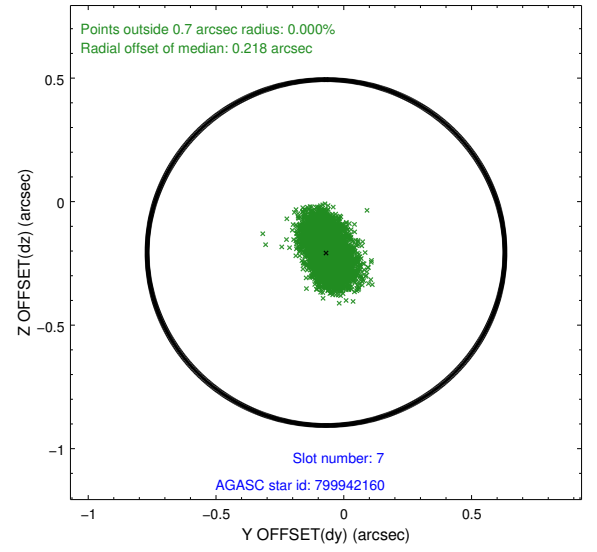
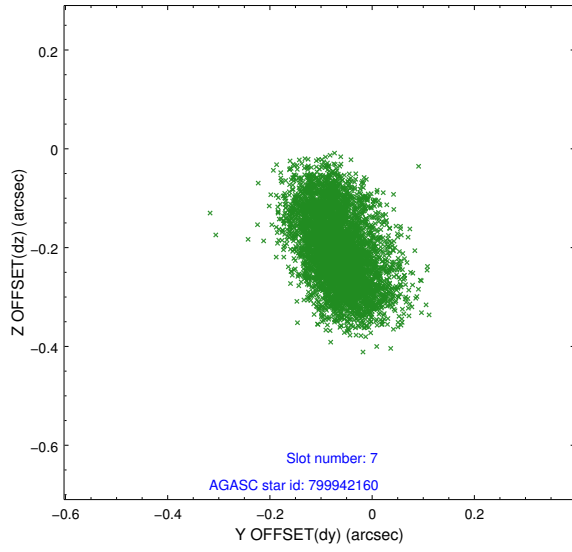


## 2.4.4 Slot 6



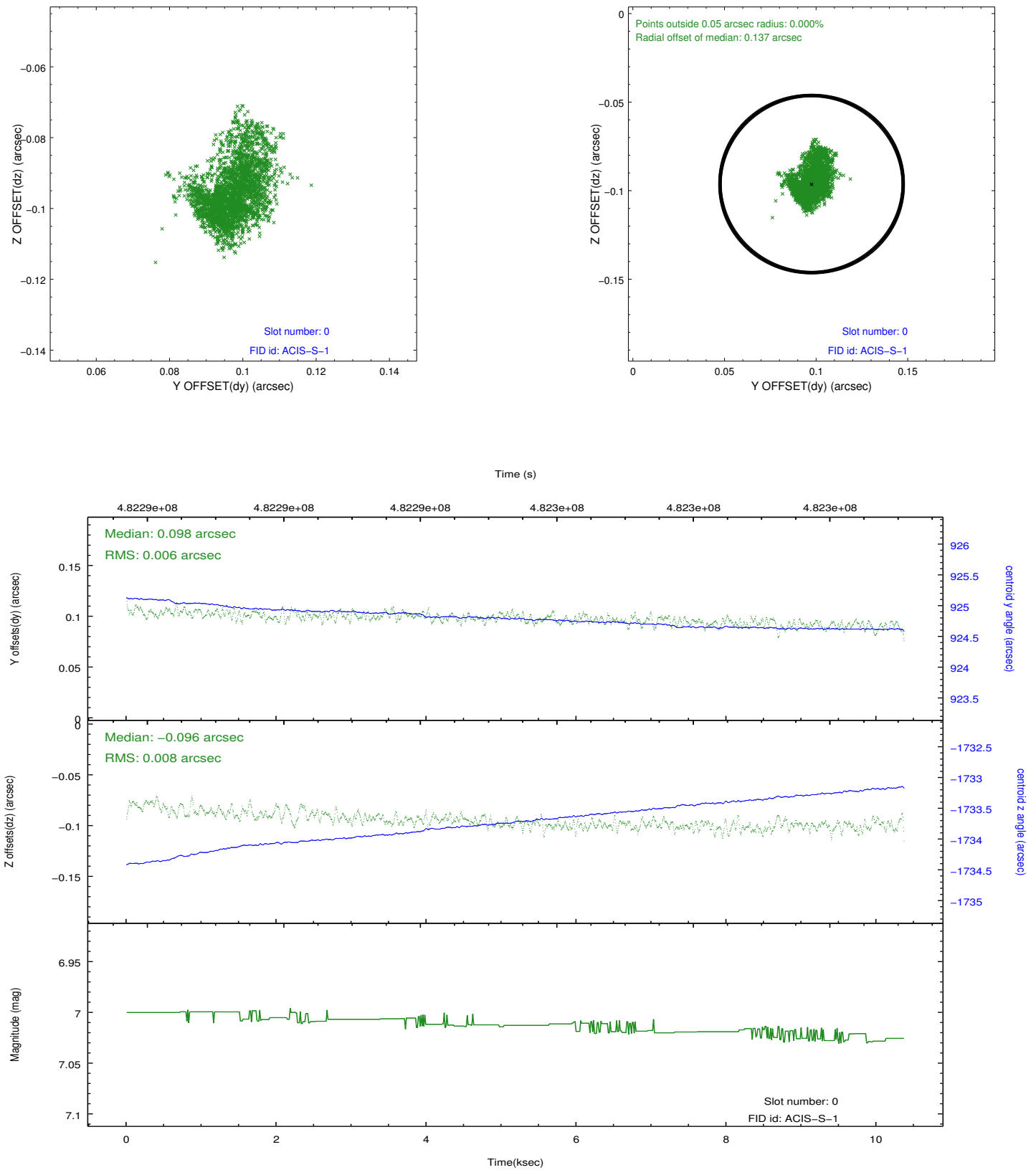


## 2.4.5 Slot 7

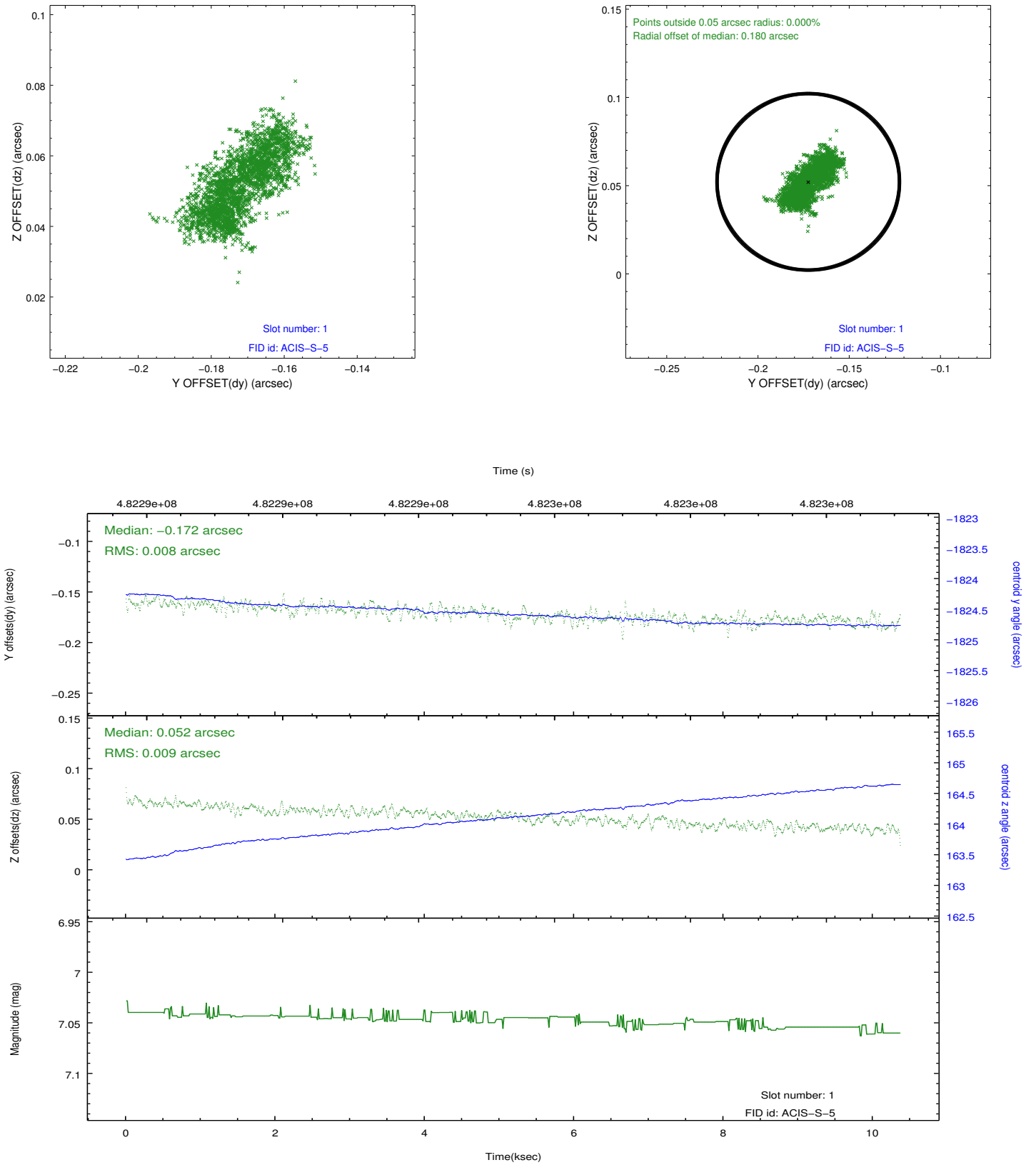


## 2.5 FID Slots

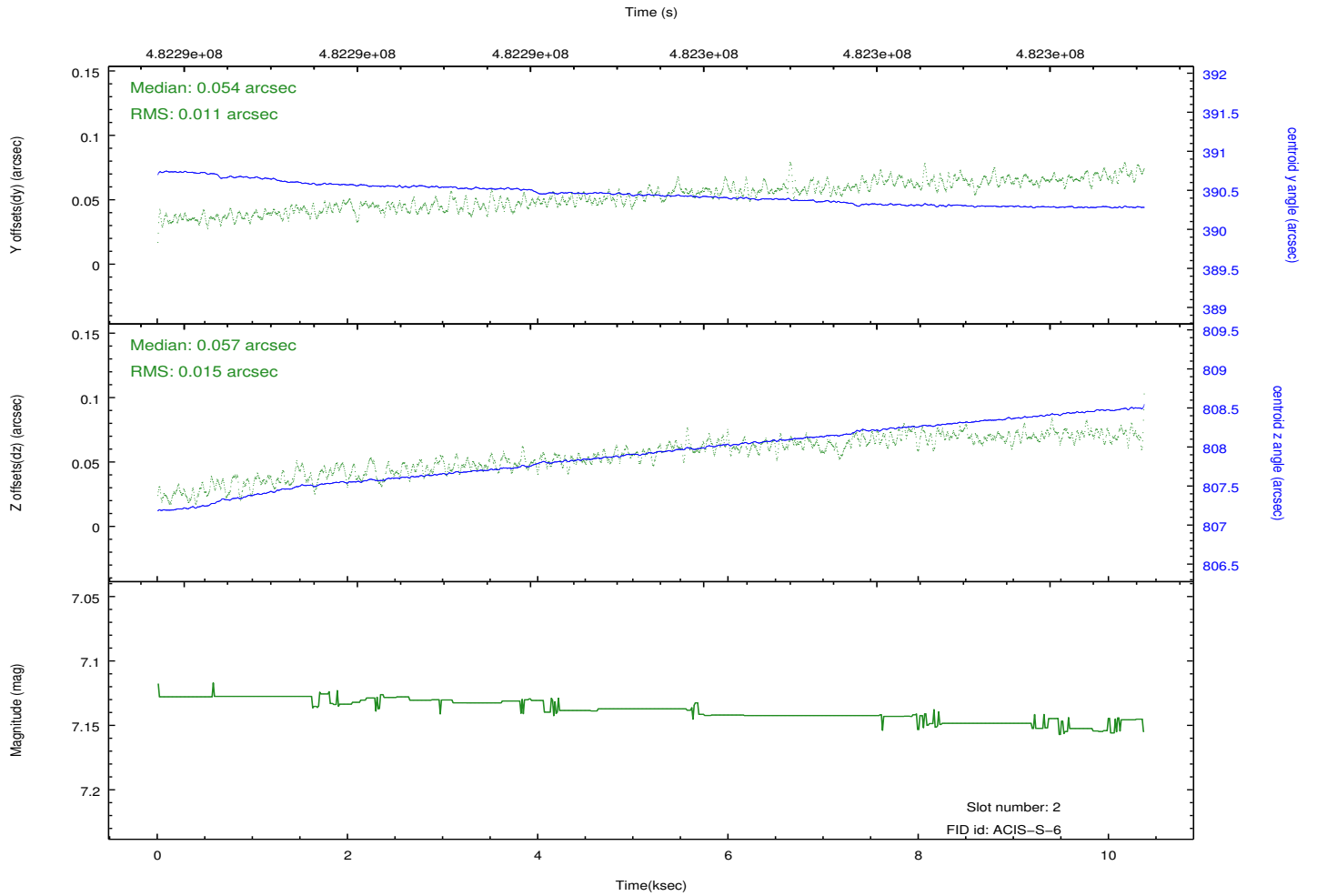
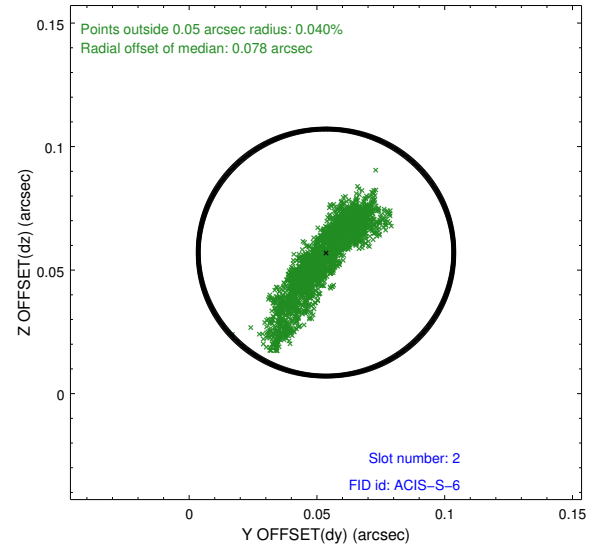
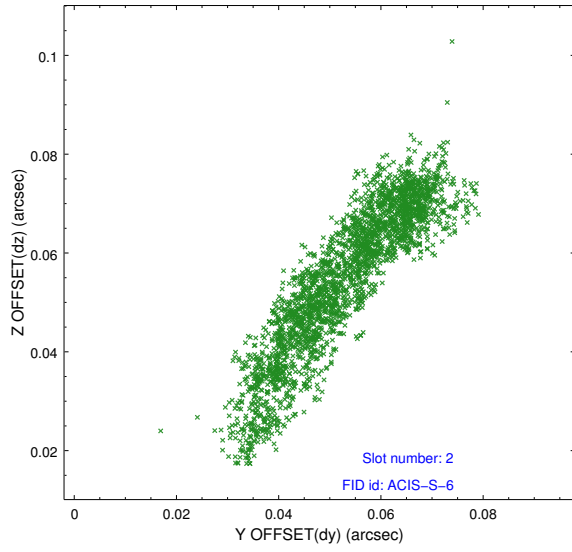
### 2.5.1 Slot 0



## 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	10.263797144413

## 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.