

# V&V Reference Report

## L2 ASCDS Version : 10.2.1

Observation 14214 - L2 Version 2  
Chandra X-Ray Center

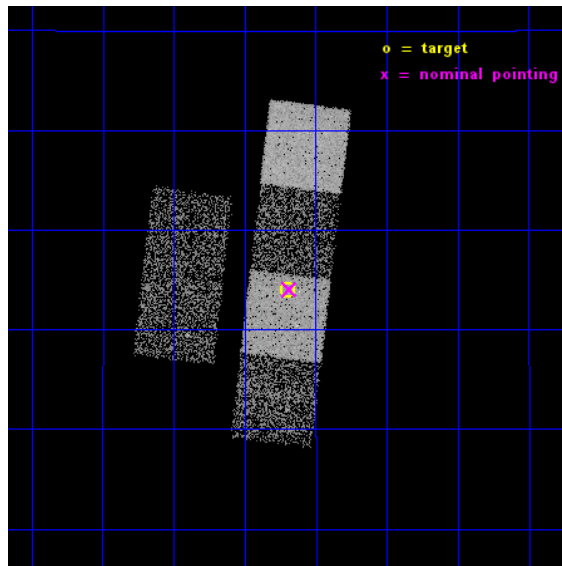
L2 Processing Date : Dec 10 2014

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# 1 Front

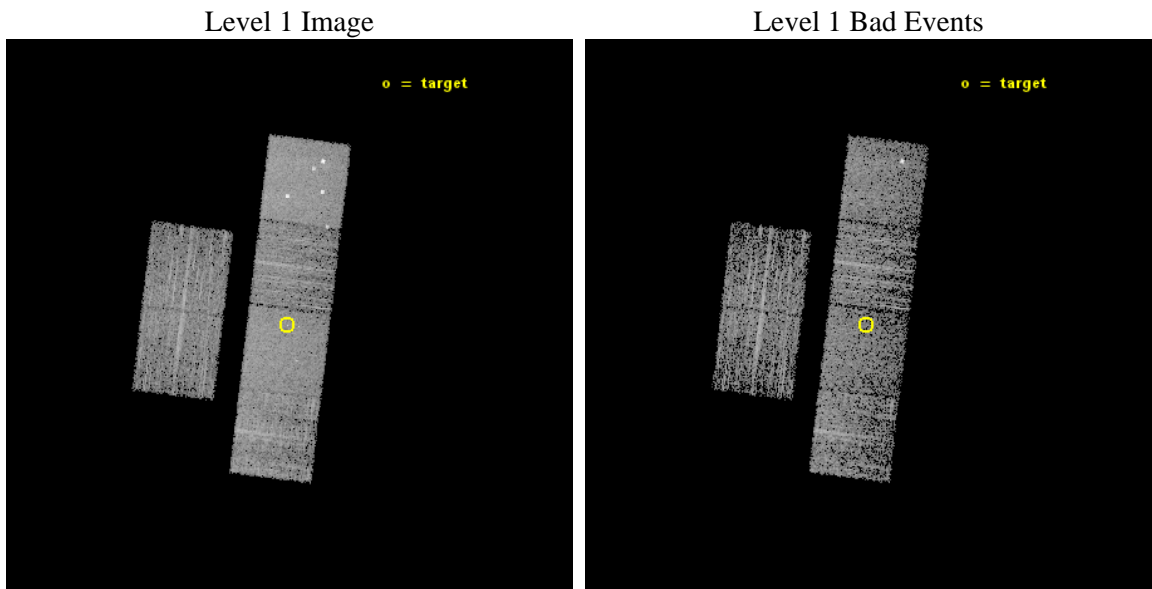
seq_num	702710	Sequence number
obs_id	14214	Observation id
title	Exploratory X-ray Monitoring of z>4 Radio-Quiet Quasars	Proposal t
observer	Prof. Ohad Shemmer	Principal investigator
object	PSS 1326+0743	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.549167	Observer's specified target RA [deg]
dec_targ	7.732639	Observer's specified target Dec [deg]
ra_nom	201.54632067388	Nominal RA [deg]
dec_nom	7.7339429158391	Nominal Dec [deg]
roll_nom	96.962543184328	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4963.1999815702	Sum of GTIs [s]
livetime	4900.3529549234	Livetime [s]
ontime2	4963.1999815702	Sum of GTIs [s]
ontime3	4963.1999815702	Sum of GTIs [s]
ontime5	4963.1999815702	Sum of GTIs [s]
ontime6	4963.1999815702	Sum of GTIs [s]
ontime7	4963.1999815702	Sum of GTIs [s]
ontime8	4963.1999815702	Sum of GTIs [s]
l2events	40775	Number of level 2 events



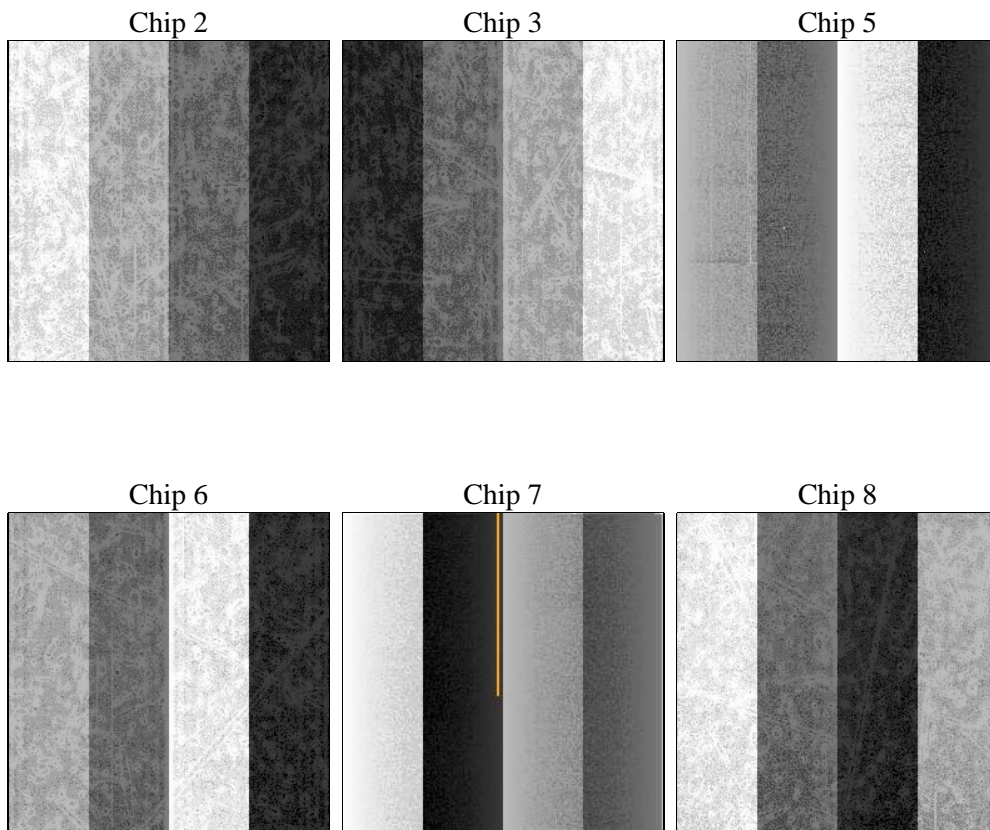
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4963.1999815702	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime2	4963.1999815702	Sum of GTIs [s]
date	2014-12-10T16:04:00	Date and time of file creation	ontime3	4963.1999815702	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	4963.1999815702	Sum of GTIs [s]
			ontime6	4963.1999815702	Sum of GTIs [s]
			ontime7	4963.1999815702	Sum of GTIs [s]
			ontime8	4963.1999815702	Sum of GTIs [s]
			l1events	177186	Number of level 1 events

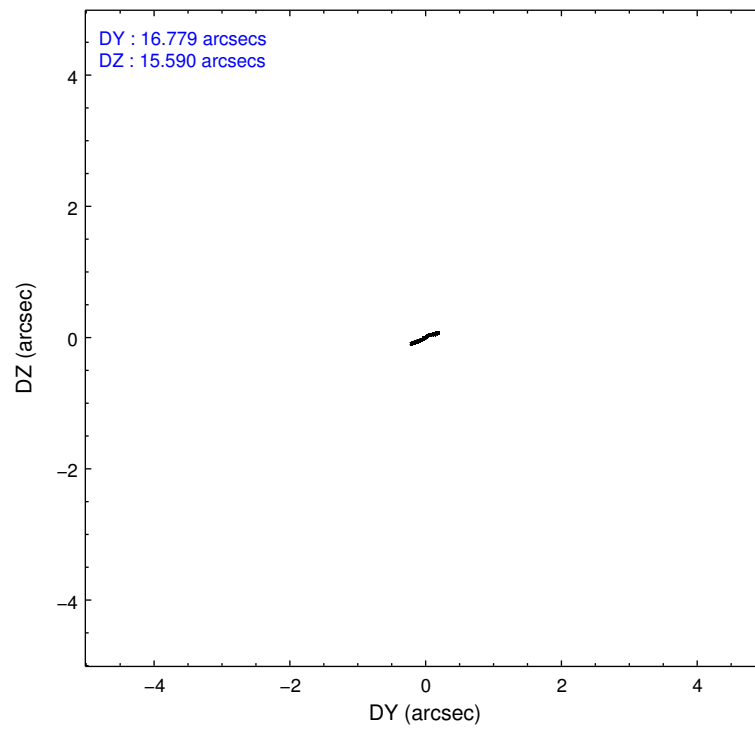
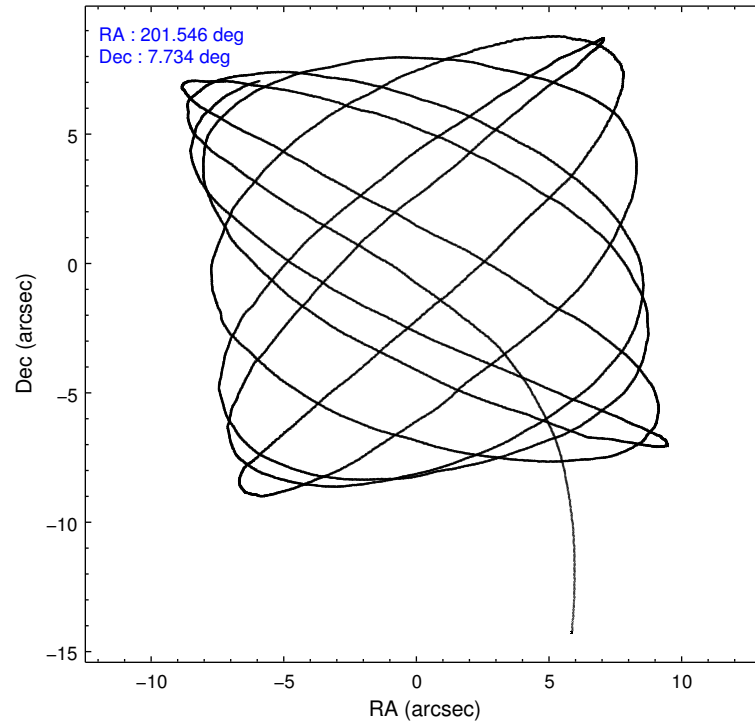
### 2.1.4 Events

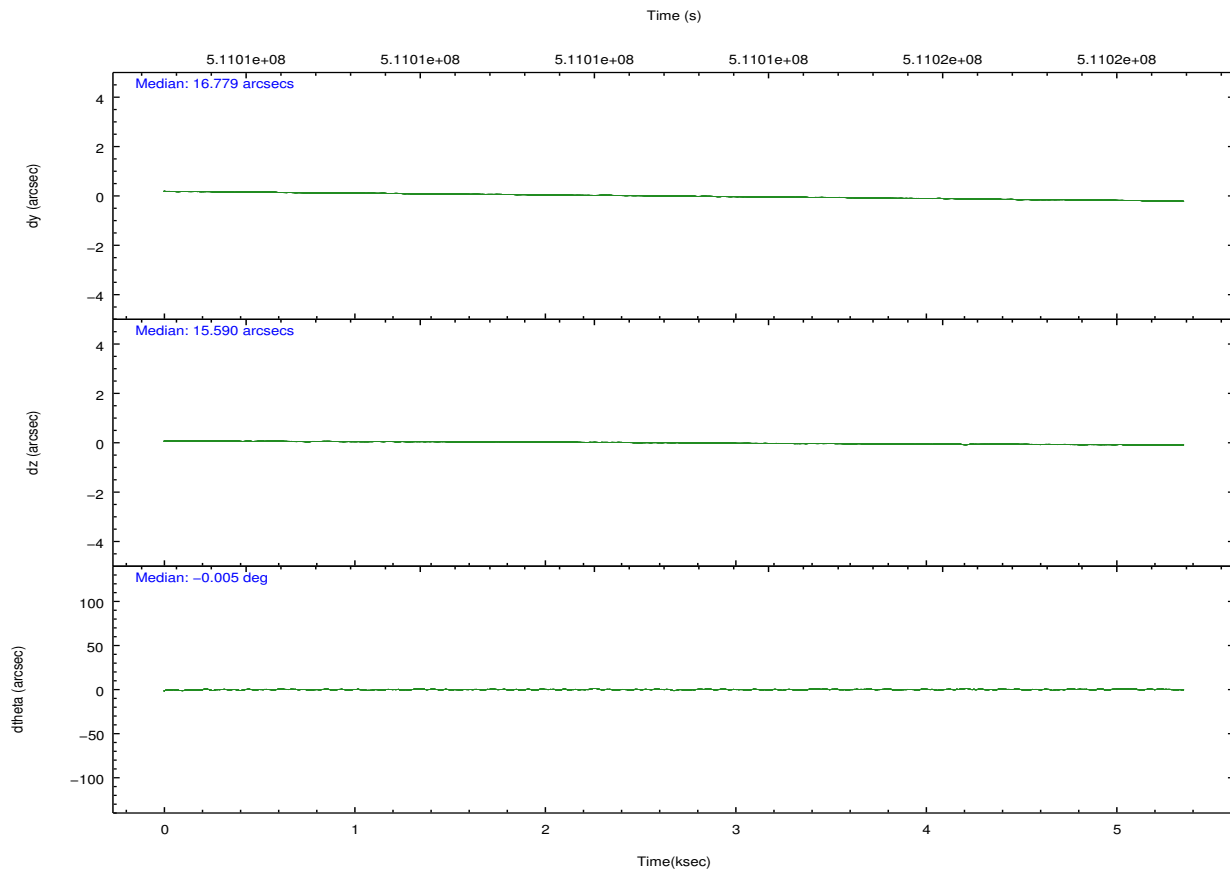
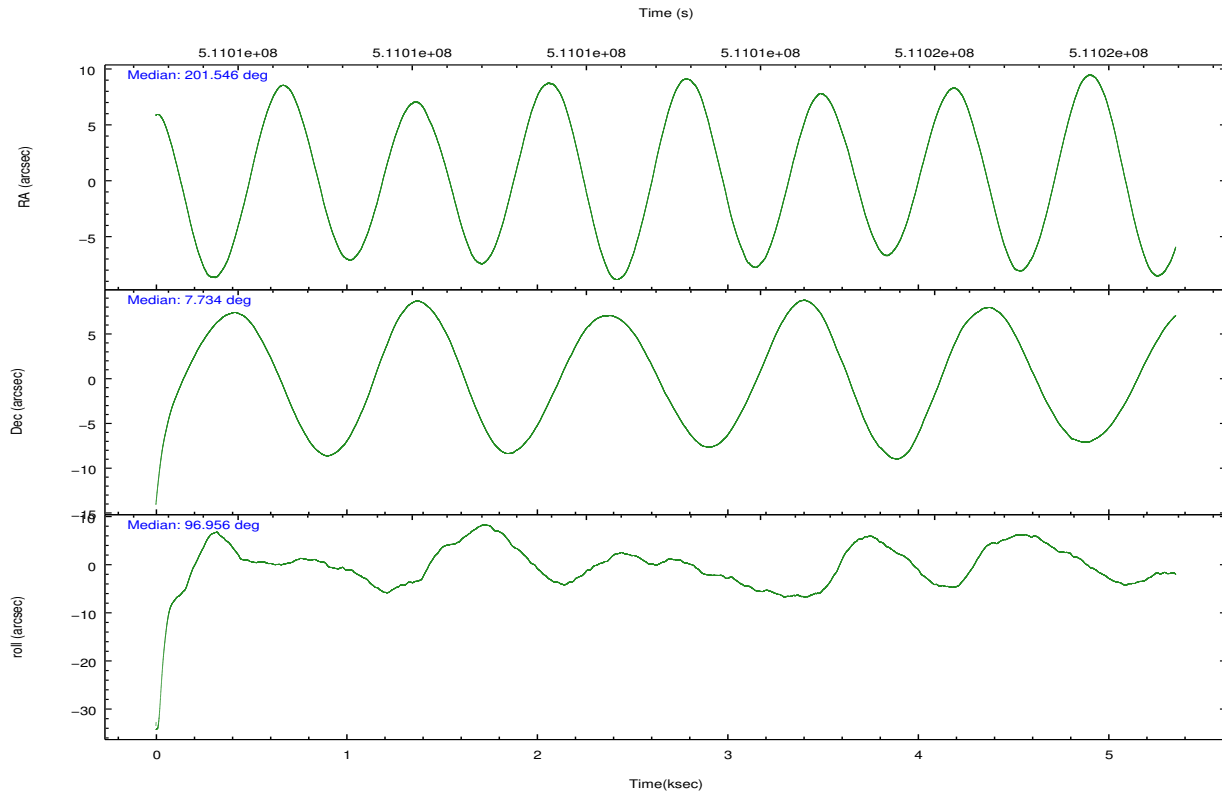
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	23379	23110	43590	24851	32438	29818	grade 0 events	1000	1005	4638	989	1224	2167
rejected events	20721	20401	21651	22042	18484	22488		4%	4%	10%	3%	3%	7%
rejected %	88%	88%	49%	88%	56%	75%	grade 1 events	13	10	110	14	22	18
								0%	0%	0%	0%	0%	0%
							grade 2 events	608	584	5890	639	3008	1691
								2%	2%	13%	2%	9%	5%
							grade 3 events	277	288	545	264	1067	779
								1%	1%	1%	1%	3%	2%
							grade 4 events	256	276	535	288	1100	674
								1%	1%	1%	1%	3%	2%
							grade 5 events	981	1155	2810	1232	3158	1753
								4%	4%	6%	4%	9%	5%
							grade 6 events	518	557	10345	632	7566	2022
								2%	2%	23%	2%	23%	6%
							grade 7 events	19726	19235	18717	20793	15293	20714
								84%	83%	42%	83%	47%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	201.563299	201.5463206738835	CCD I2 on	O2	Y
[deg] Pointing Dec	7.712322	7.733942915839069	CCD I3 on	O1	Y
[deg] Pointing Roll	96.803688	96.96254318432818	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	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	Y	Y
[s] Observation start time (MET)	511011136.184000	511010087.91647	CCD S5 on	N	N
Observation start date	2014-03-12T11:31:09	2014-03-12T11:14:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	511016136.184000	511016828.82934	On-chip summing requested	N	N
Observation end date	2014-03-12T12:54:29	2014-03-12T13:07:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





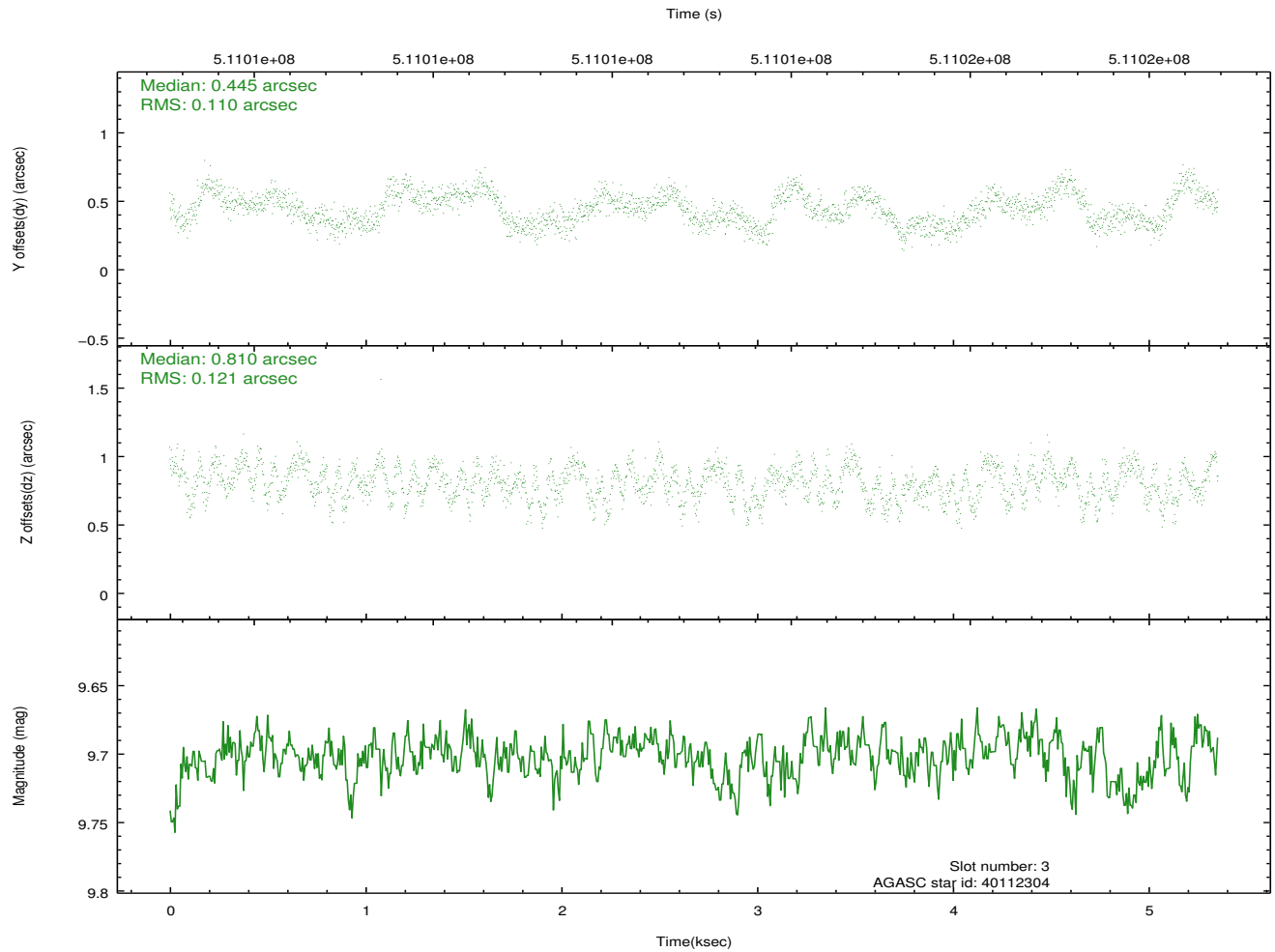
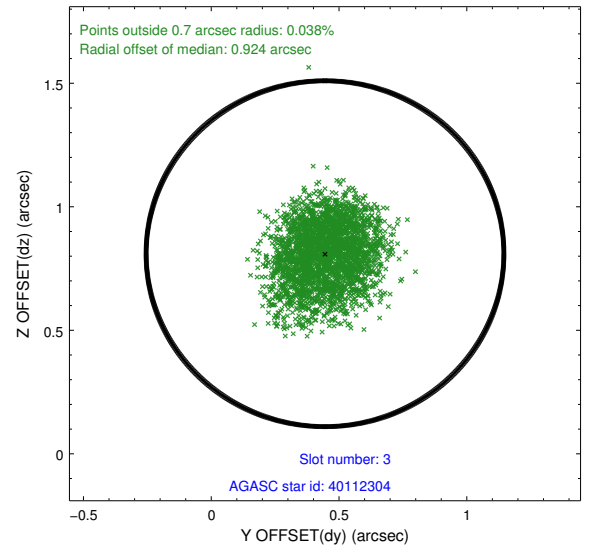
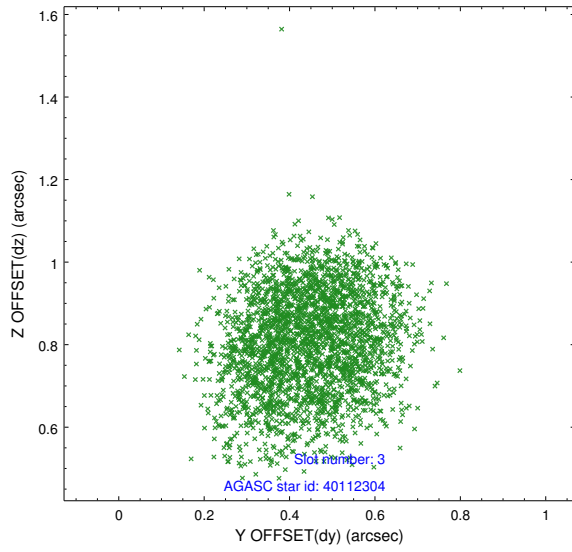
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	1306	-0.125	-0.021	0.009	0.018	0.000000	0.000000	-769.89	-1736.96
1	FID		ACIS-S-4	7.18	1306	0.259	0.066	0.007	0.011	0.000000	0.000000	2143.23	170.48
2	FID		ACIS-S-5	7.21	1306	-0.165	-0.037	0.008	0.015	0.000000	0.000000	-1821.35	165.28
3	GUIDE	used	40112304	9.70	2612	0.445	0.810	0.177	0.269	202.225576	7.441058	-1247.16	-2231.38
4	GUIDE	used	40113544	7.95	2611	0.107	0.059	0.092	0.151	201.675538	7.453262	-973.44	-287.05
5	GUIDE	used	116785920	10.31	2567	0.069	-0.071	0.273	0.484	201.538112	8.224194	1840.67	-128.77
6	GUIDE	used	116791744	10.31	2604	-0.723	-0.462	0.274	0.423	201.164615	7.930997	950.76	1317.77
7	GUIDE	used	116791824	9.17	2611	0.053	-0.311	0.156	0.242	201.287828	7.911044	827.49	890.83

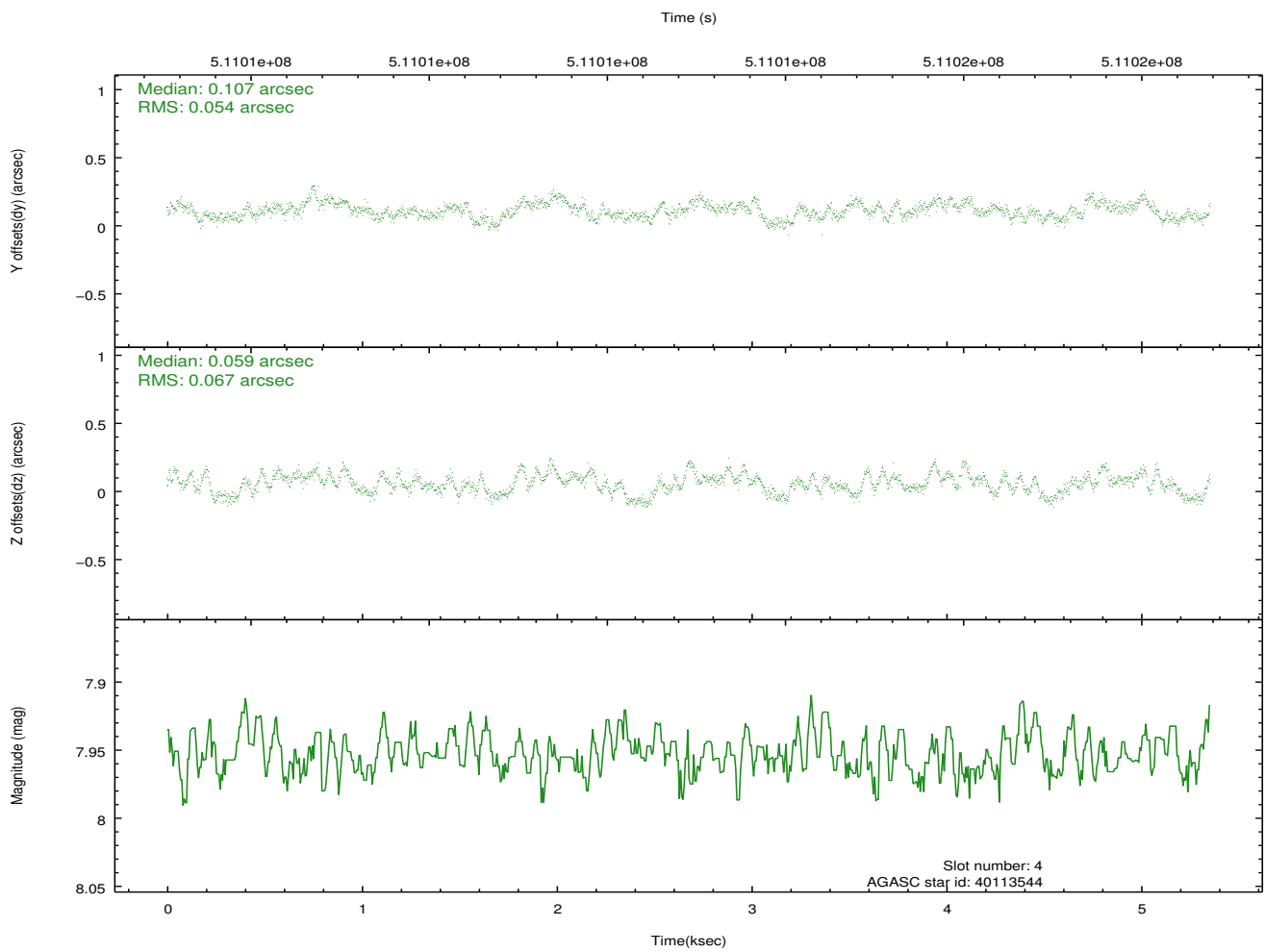
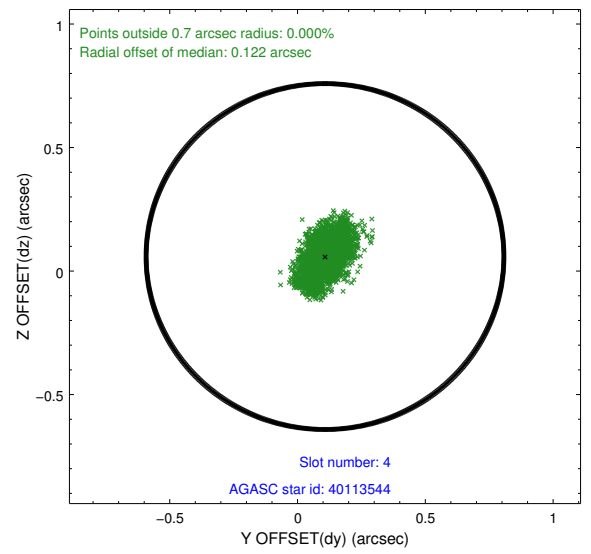
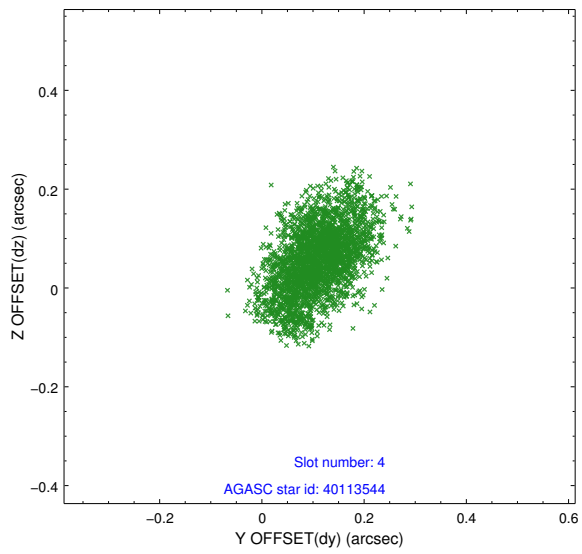
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## 2.4 Star Slots

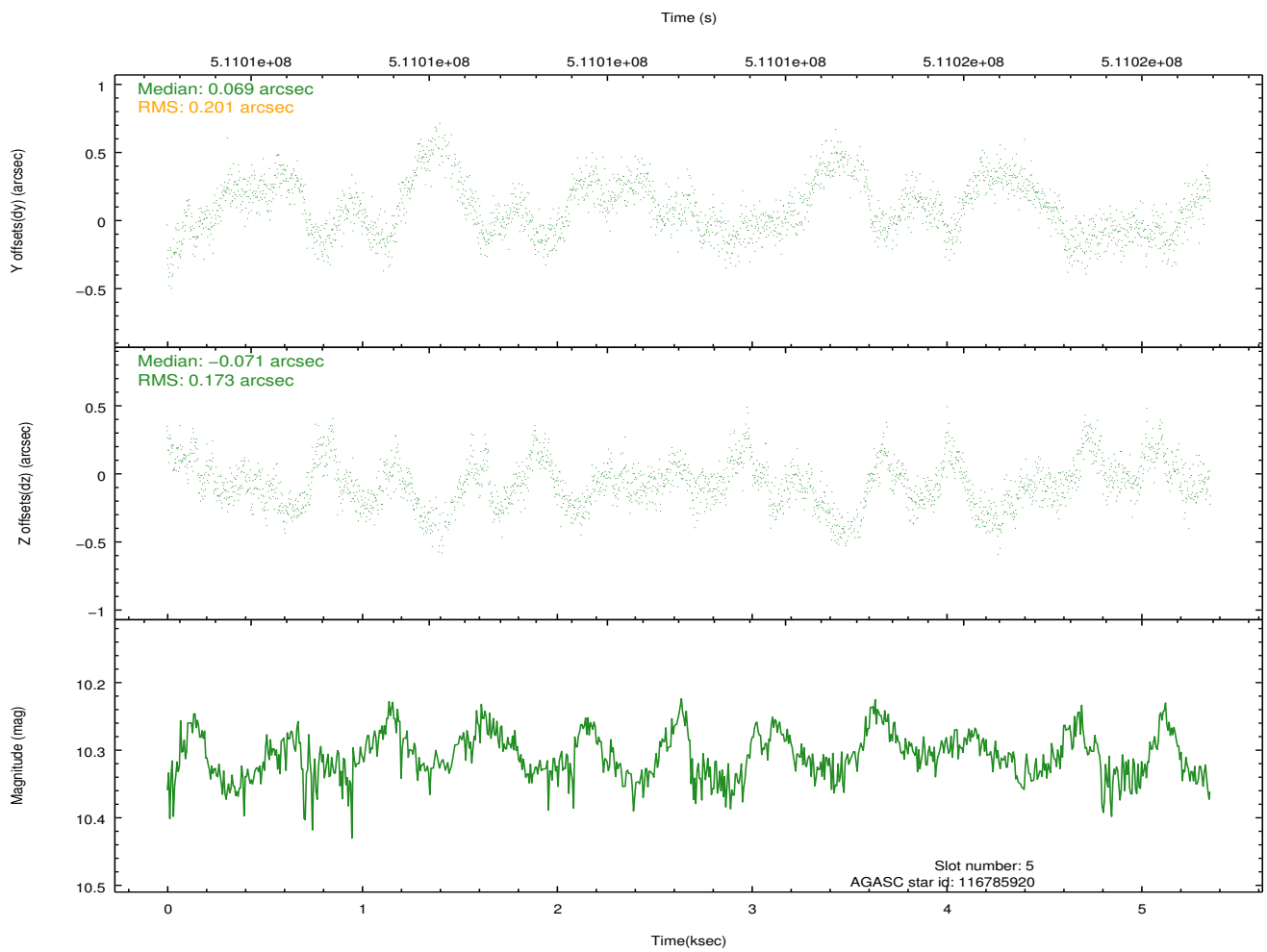
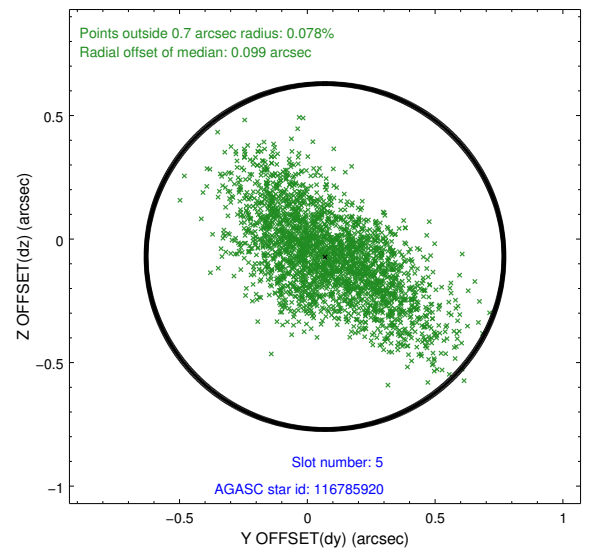
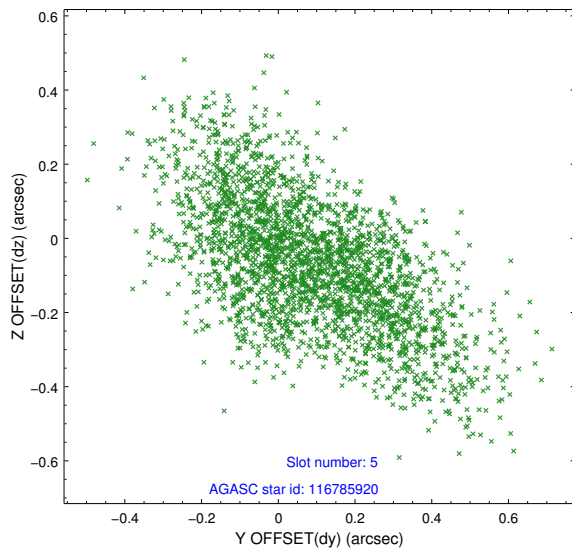
### 2.4.1 Slot 3



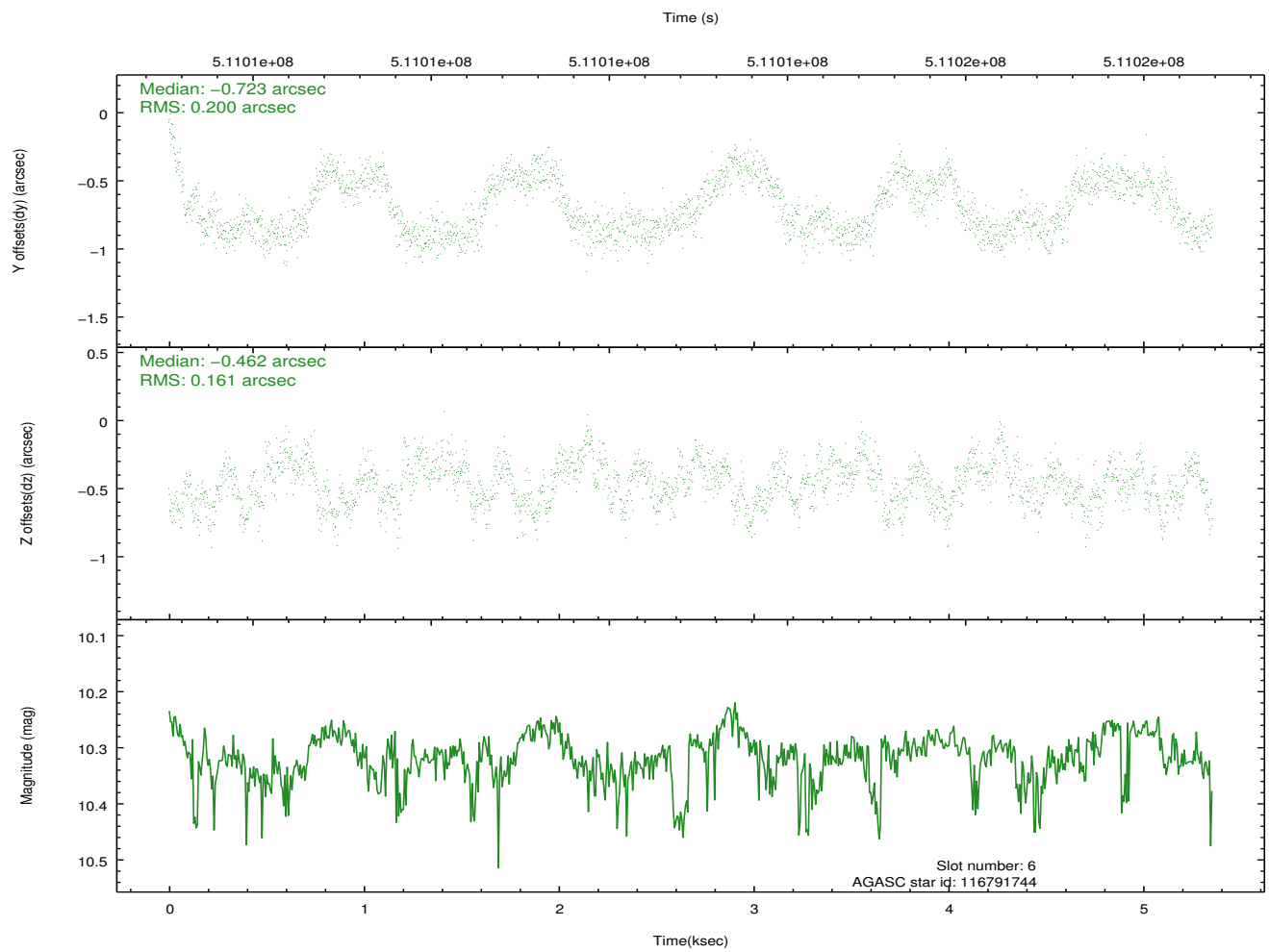
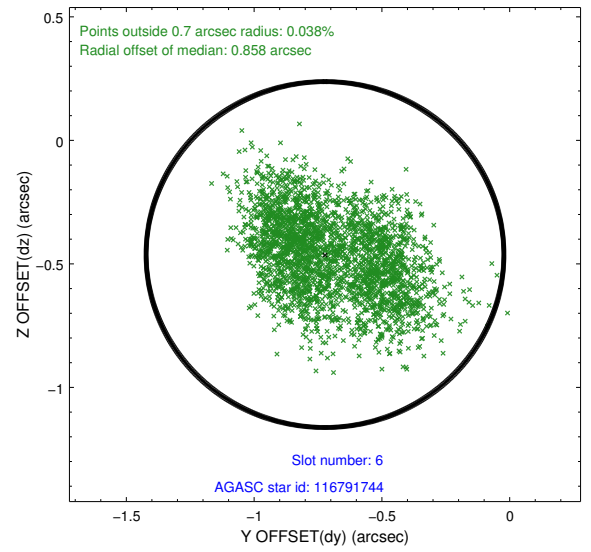
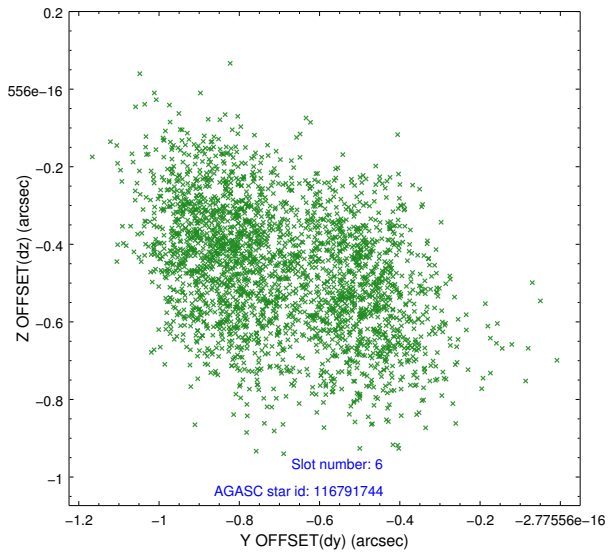
## 2.4.2 Slot 4



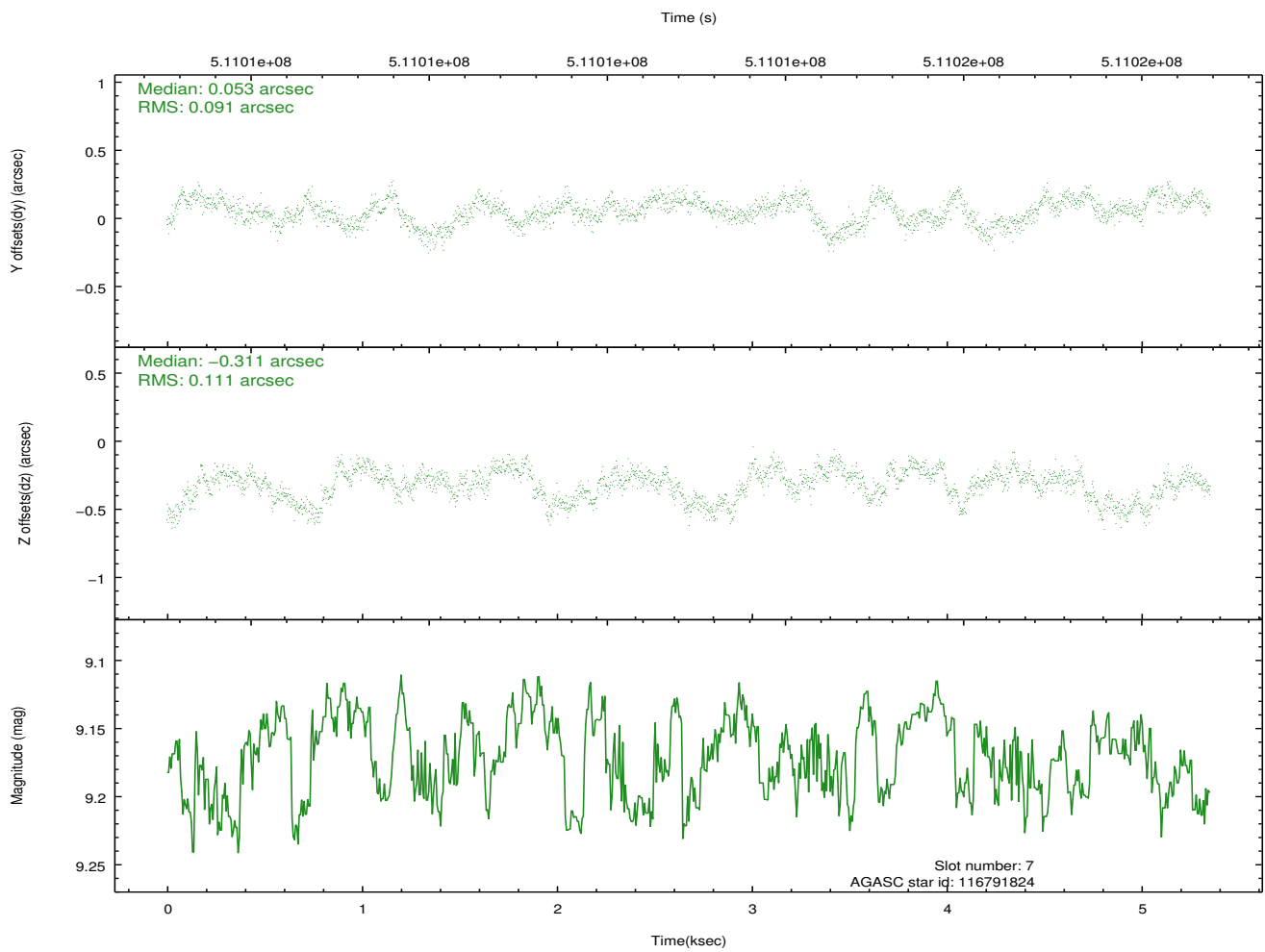
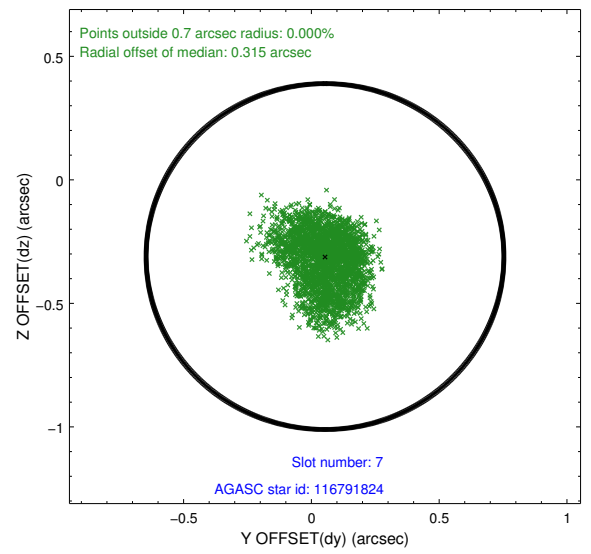
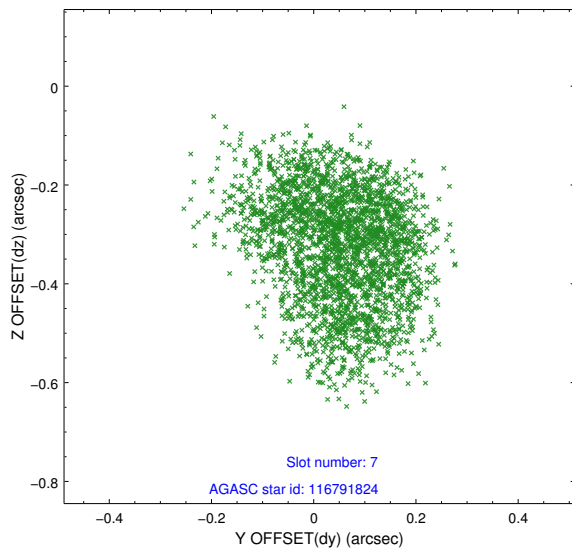
### 2.4.3 Slot 5



## 2.4.4 Slot 6

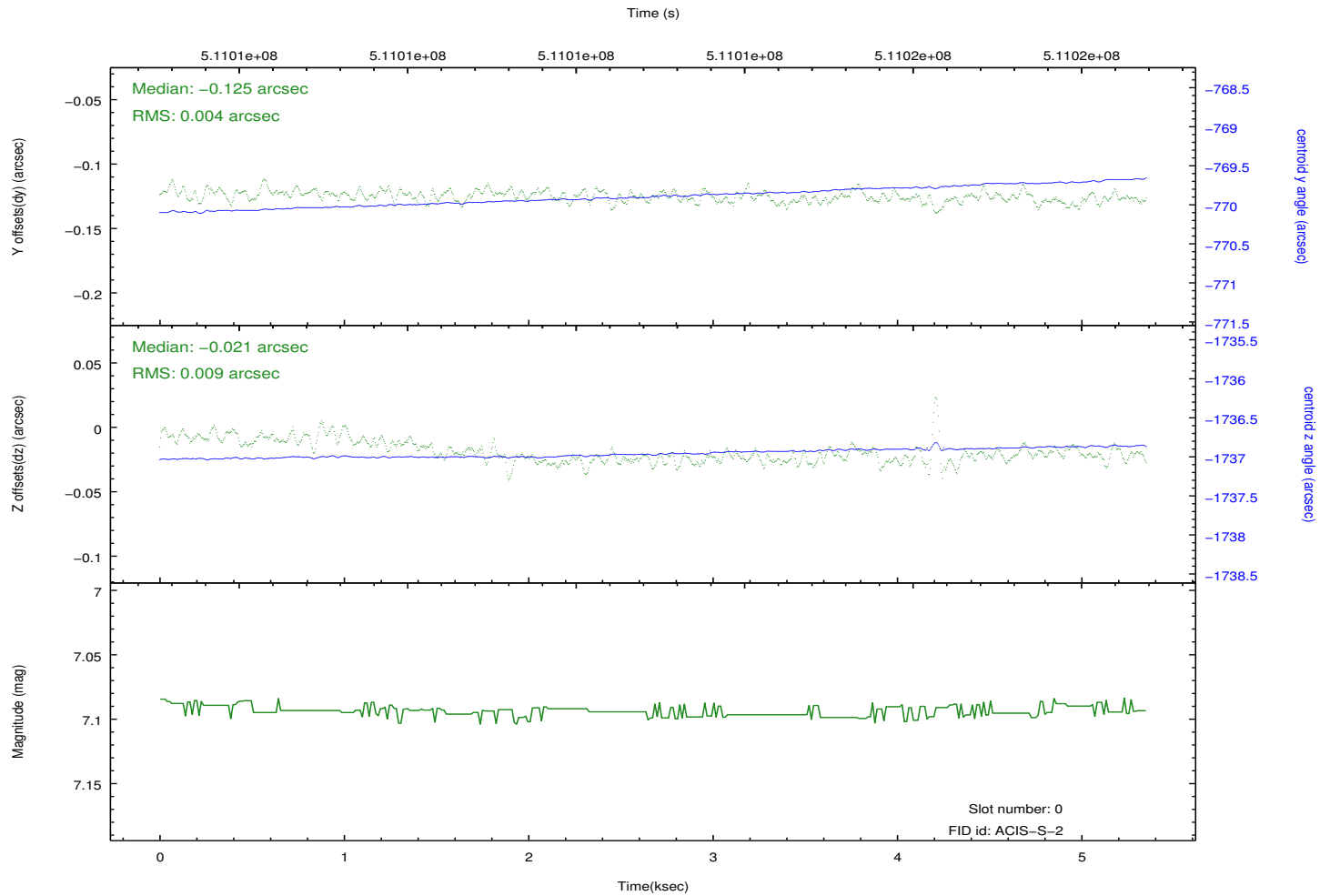
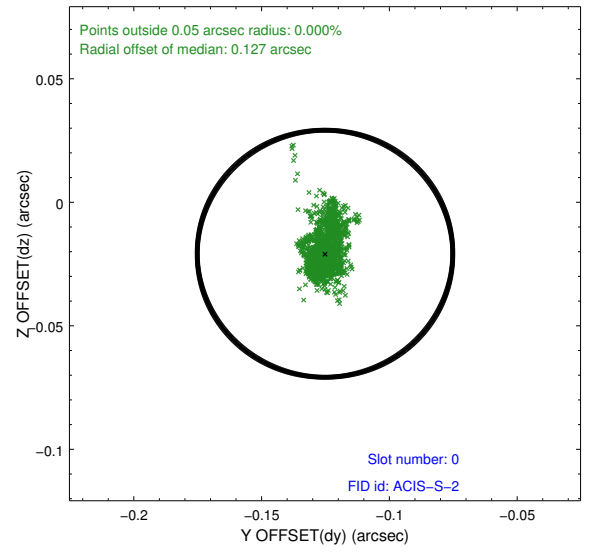
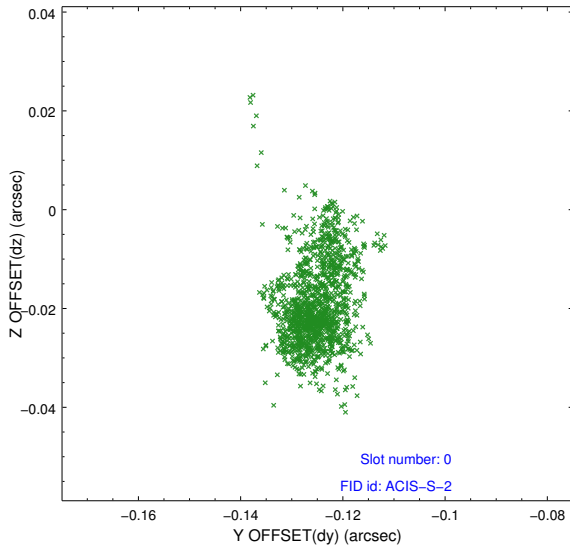


## 2.4.5 Slot 7

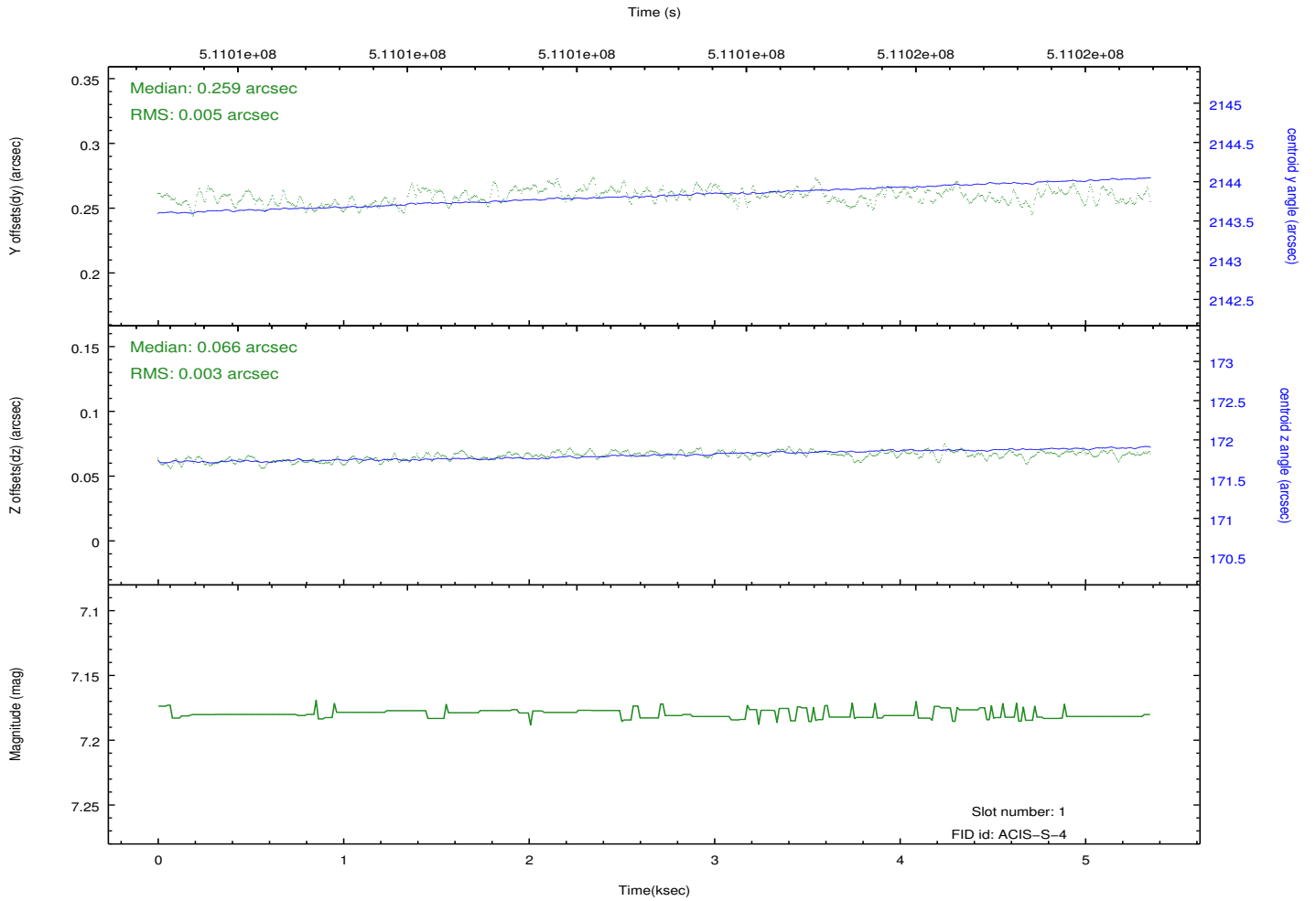
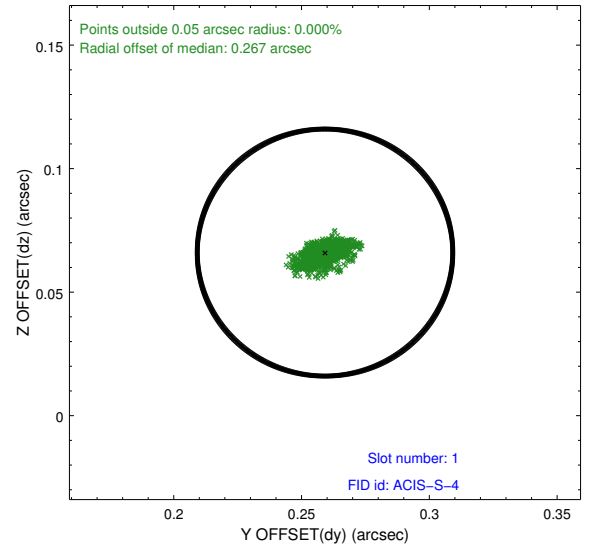
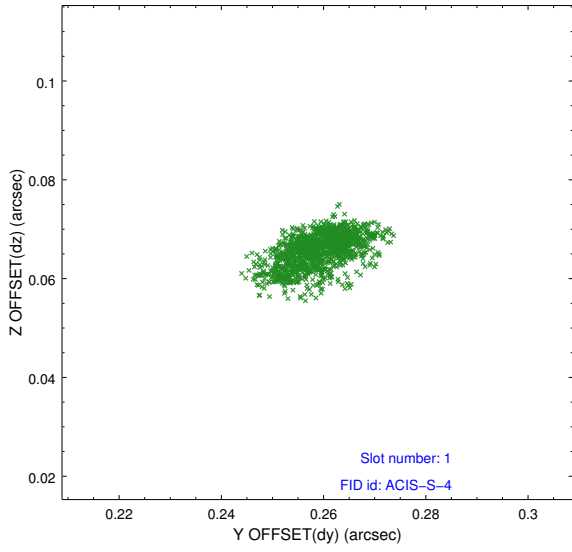


## 2.5 FID Slots

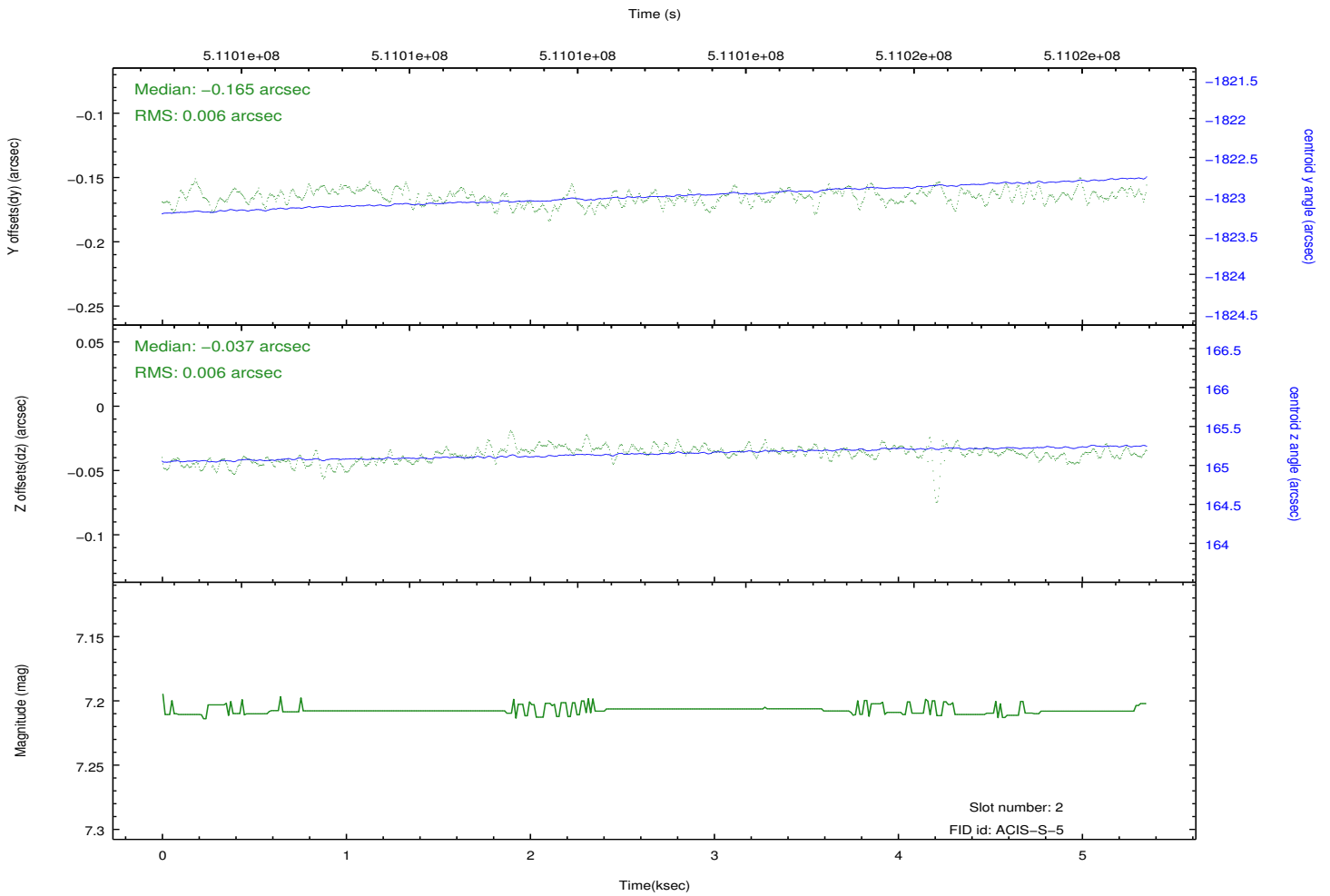
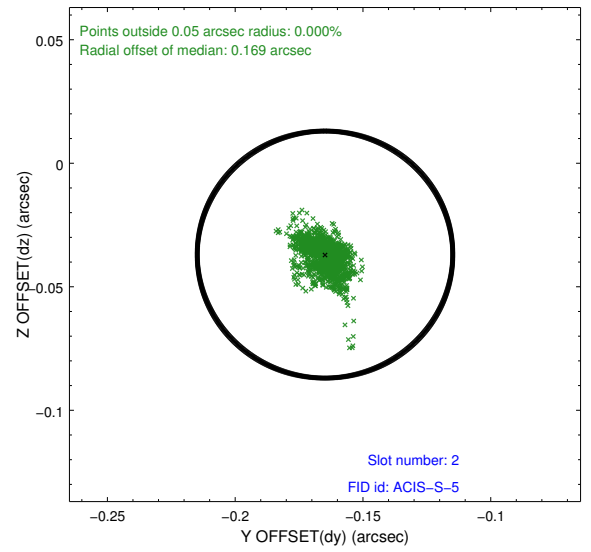
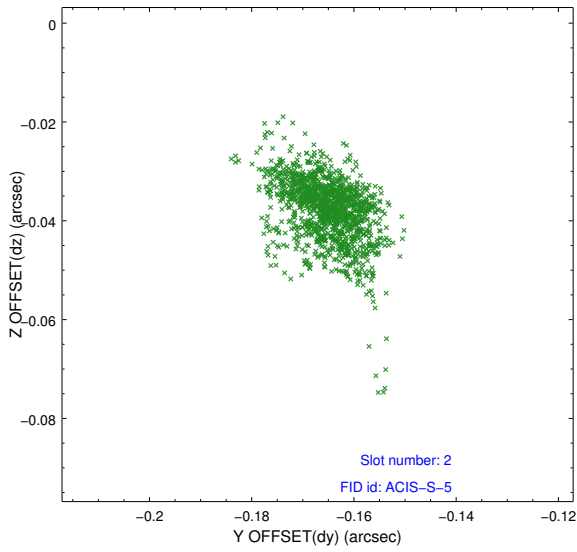
### 2.5.1 Slot 0



## 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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9631999815702

## 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.