

# V&V Reference Report

## L2 ASCDS Version : 10

Observation 14219 - L2 Version 2  
Chandra X-Ray Center

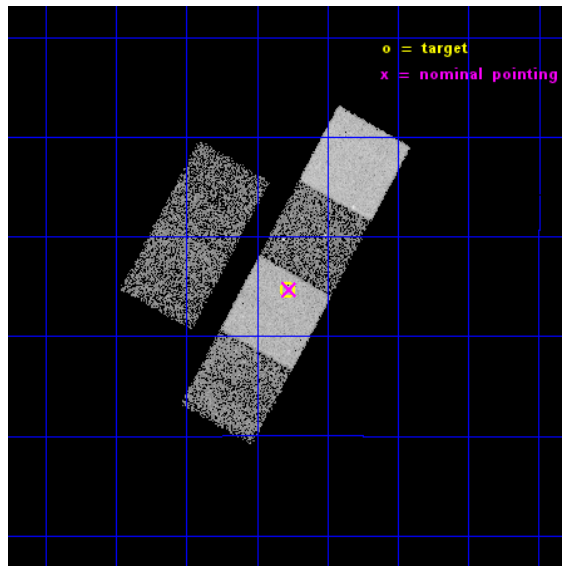
L2 Processing Date : Dec 4 2014

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# 1 Front

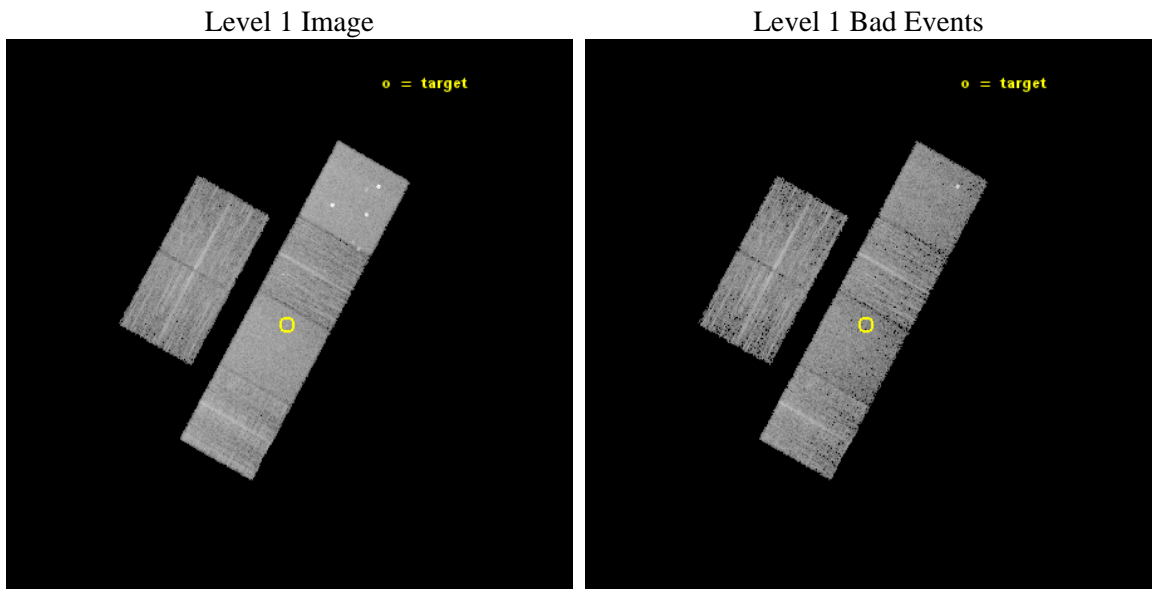
seq_num	702715	Sequence number
obs_id	14219	Observation id
title	Exploratory X-ray Monitoring of z>4 Radio-Quiet Quasars	Proposal t
observer	Prof. Ohad Shemmer	Principal investigator
object	BR 0351-1034	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	58.445417	Observer's specified target RA [deg]
dec_targ	-10.421944	Observer's specified target Dec [deg]
ra_nom	58.442324031039	Nominal RA [deg]
dec_nom	-10.421788951163	Nominal Dec [deg]
roll_nom	118.8977933615	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9964.7999629378	Sum of GTIs [s]
livetime	9838.6196657249	Livetime [s]
ontime2	9964.7999629378	Sum of GTIs [s]
ontime3	9964.7999629378	Sum of GTIs [s]
ontime5	9964.7999629378	Sum of GTIs [s]
ontime6	9964.7999629378	Sum of GTIs [s]
ontime7	9964.7999629378	Sum of GTIs [s]
ontime8	9964.7999629378	Sum of GTIs [s]
l2events	84963	Number of level 2 events



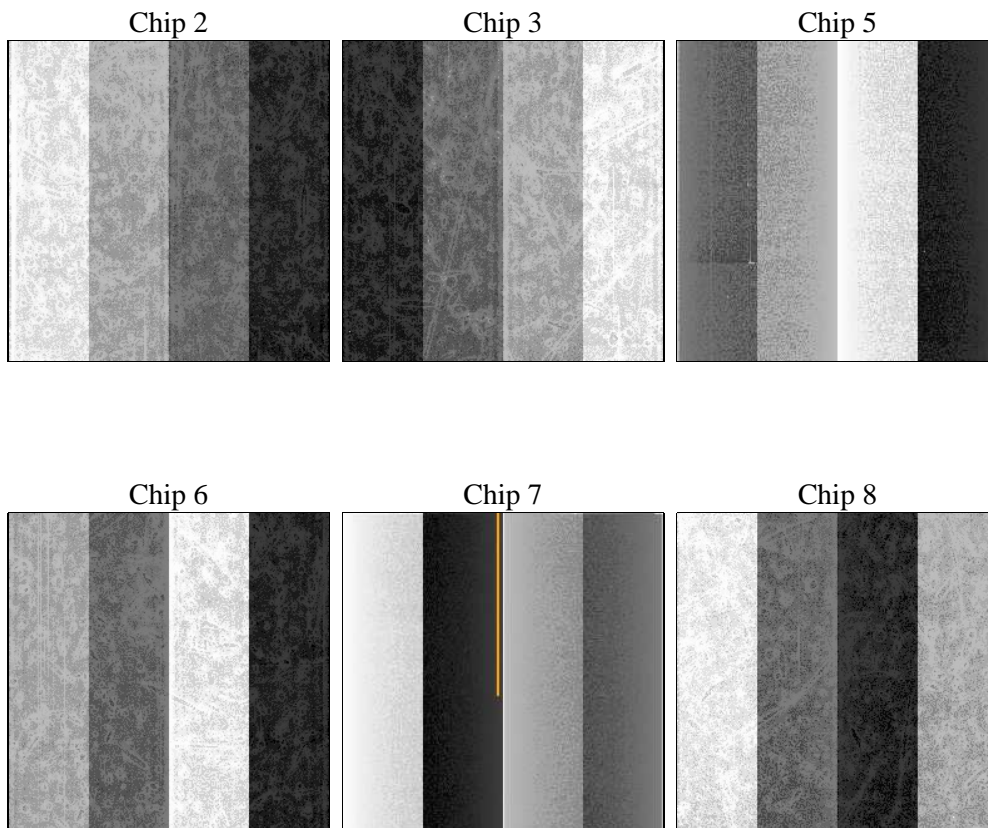
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.270000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9964.7999629378	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime2	9964.7999629378	Sum of GTIs [s]
date	2014-12-04T18:55:59	Date and time of file creation	ontime3	9964.7999629378	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9964.7999629378	Sum of GTIs [s]
			ontime6	9964.7999629378	Sum of GTIs [s]
			ontime7	9964.7999629378	Sum of GTIs [s]
			ontime8	9964.7999629378	Sum of GTIs [s]
			l1events	360128	Number of level 1 events

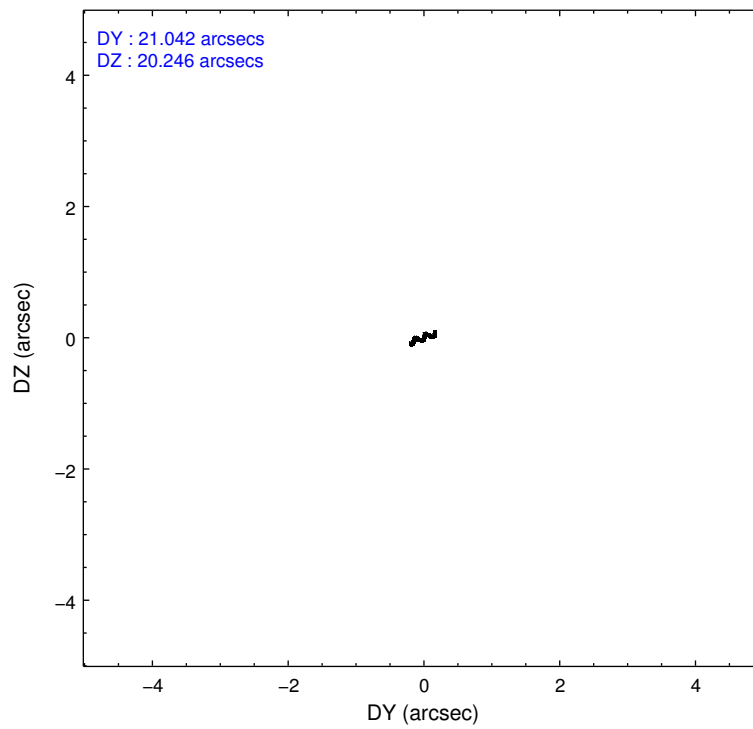
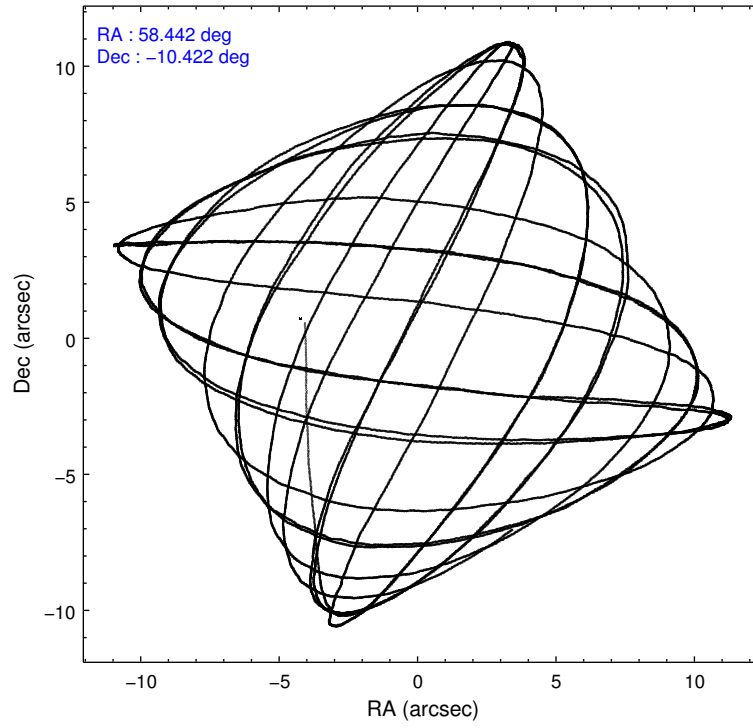
### 2.1.4 Events

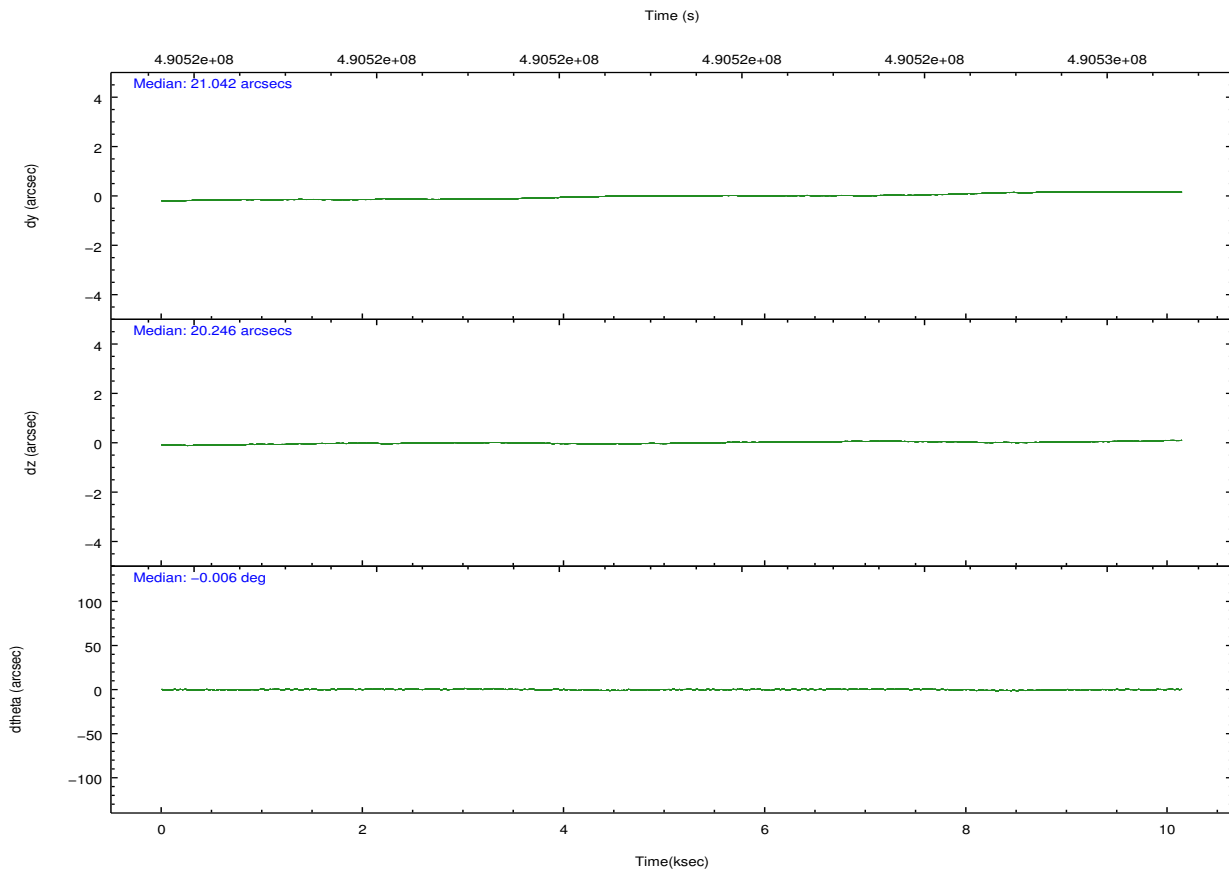
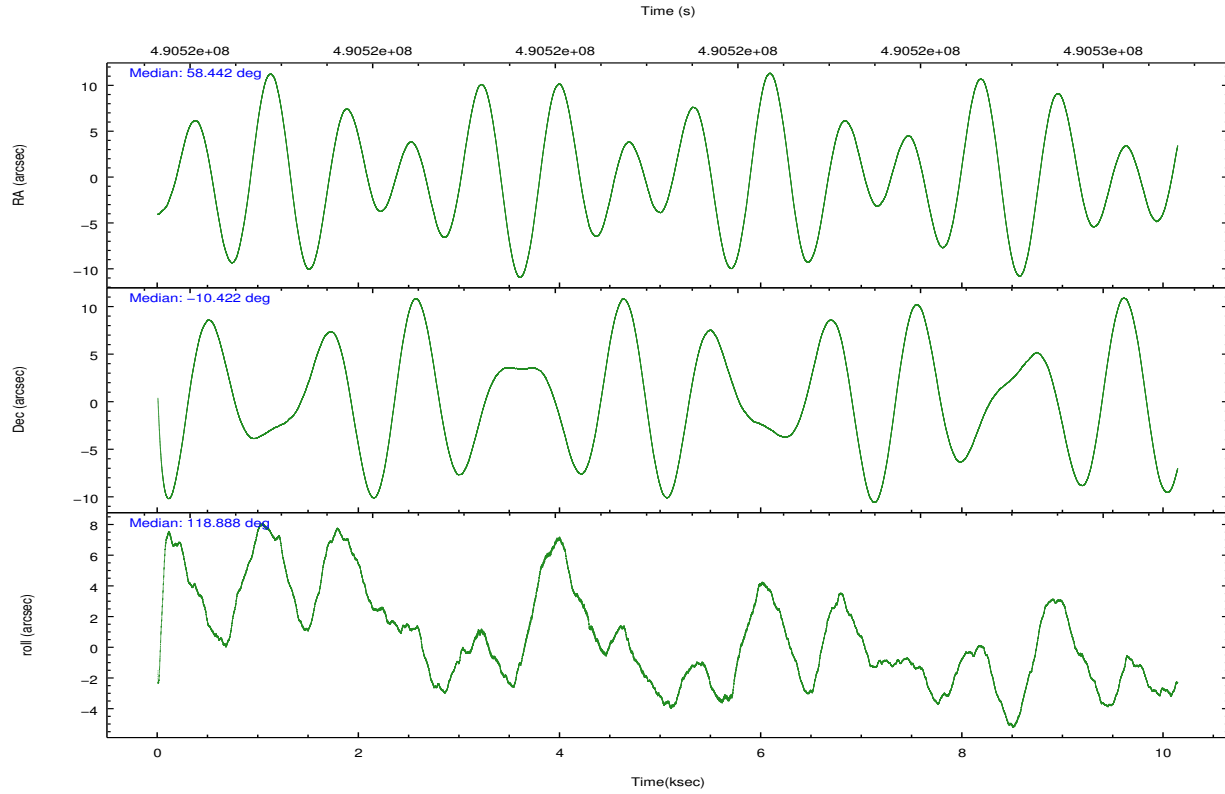
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	47624	46938	85013	49654	65850	65049	grade 0 events	1903	1731	7257	2224	2589	5119
rejected events	42192	41711	41788	43507	36948	47508		3%	3%	8%	4%	3%	7%
rejected %	88%	88%	49%	87%	56%	73%	grade 1 events	27	25	140	24	67	36
								0%	0%	0%	0%	0%	0%
							grade 2 events	1326	1202	12637	1359	5967	4137
								2%	2%	14%	2%	9%	6%
							grade 3 events	584	578	1376	604	2440	1790
								1%	1%	1%	1%	3%	2%
							grade 4 events	595	566	1241	578	2268	1727
								1%	1%	1%	1%	3%	2%
							grade 5 events	2026	2500	5908	2558	6722	3626
								4%	5%	6%	5%	10%	5%
							grade 6 events	1026	1151	20733	1383	15647	4770
								2%	2%	24%	2%	23%	7%
							grade 7 events	40137	39185	35721	40924	30150	43844
								84%	83%	42%	82%	45%	67%

## 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	58.466349	58.44232403103906	CCD I2 on	O2	Y
[deg] Pointing Dec	-10.435557	-10.42178895116288	CCD I3 on	O1	Y
[deg] Pointing Roll	118.745537	118.8977933615035	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)	490516306.184000	490514633.18121	CCD S5 on	N	N
Observation start date	2013-07-18T06:30:39	2013-07-18T06:03:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	490526306.184000	490526532.40686	On-chip summing requested	N	N
Observation end date	2013-07-18T09:17:19	2013-07-18T09:22:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





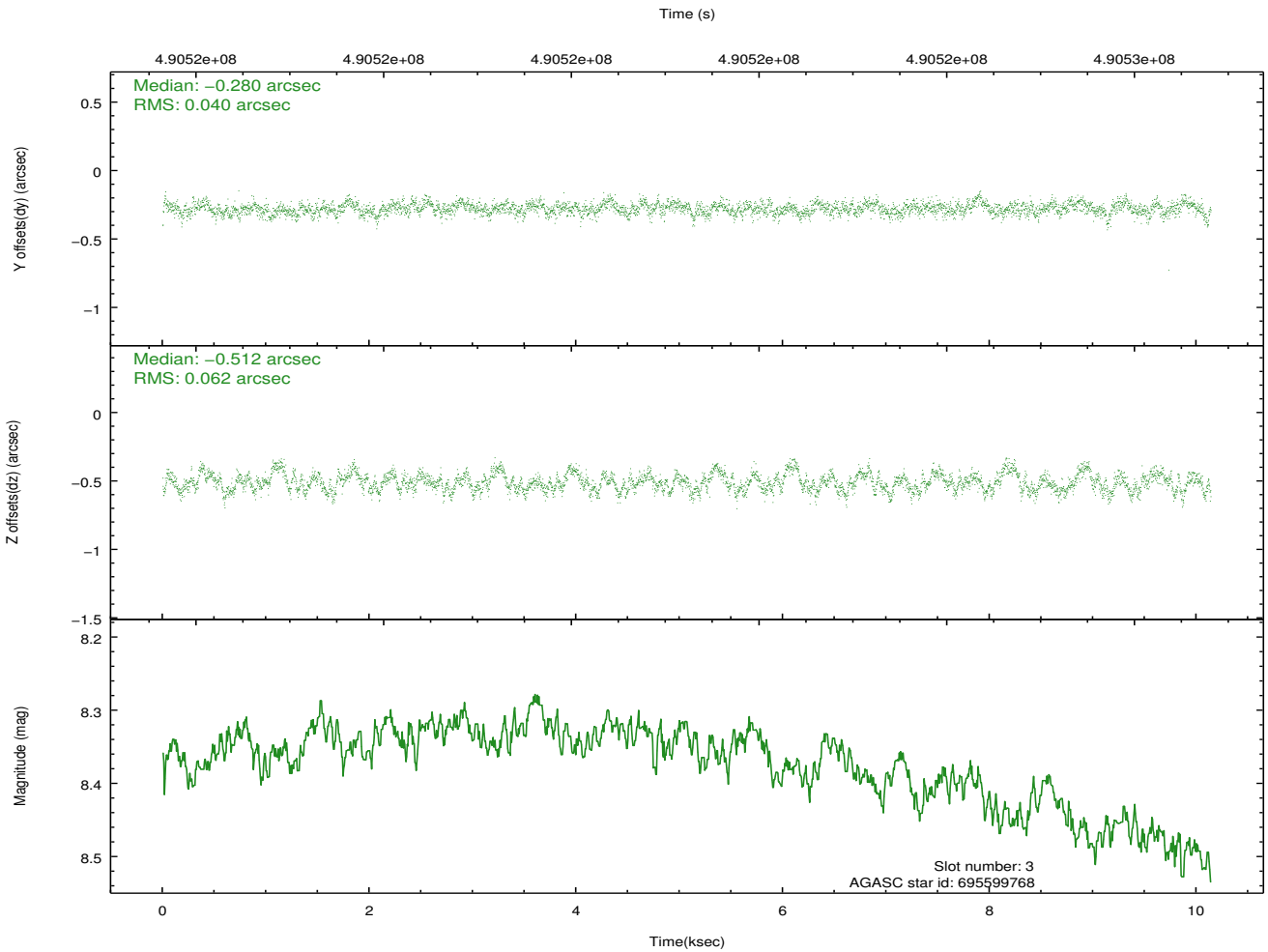
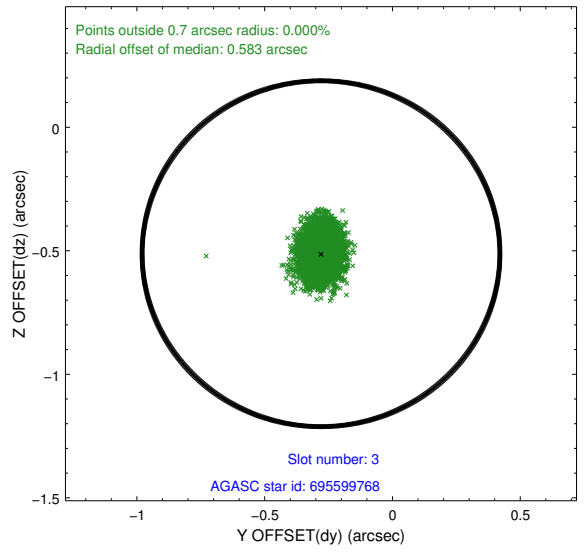
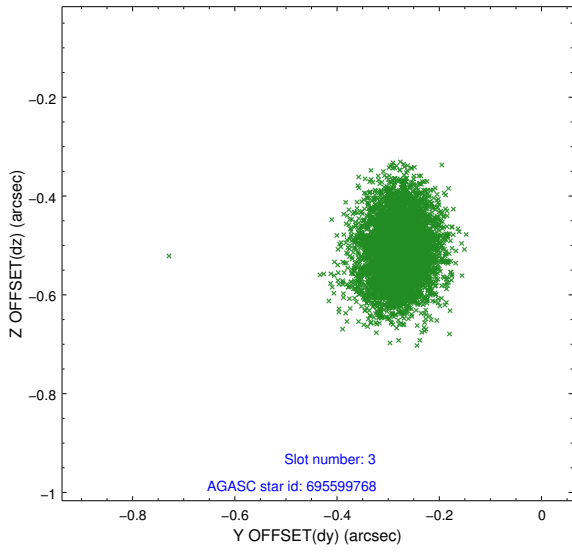
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.01	2473	0.009	-0.021	0.008	0.014	0.000000	0.000000	921.90	-1737.36
1	FID		ACIS-S-4	7.02	2473	0.139	0.014	0.006	0.010	0.000000	0.000000	2139.70	166.31
2	FID		ACIS-S-5	7.05	2473	-0.175	0.019	0.006	0.012	0.000000	0.000000	-1826.51	160.45
3	GUIDE	used	695599768	8.36	4945	-0.280	-0.512	0.079	0.127	57.972264	-10.530423	538.79	1699.31
4	GUIDE	used	695604392	9.28	4908	0.122	-0.325	0.157	0.241	58.154149	-10.872582	-848.57	1724.85
5	GUIDE	used	695736200	8.98	4915	0.001	0.142	0.110	0.172	58.904941	-10.536646	-1066.23	-1184.98
6	GUIDE	used	695738664	9.19	4869	0.100	0.207	0.111	0.184	59.003553	-10.335305	-599.23	-1840.98
7	GUIDE	used	695735384	9.57	4934	0.055	0.485	0.146	0.229	59.134934	-10.249864	-554.74	-2396.17

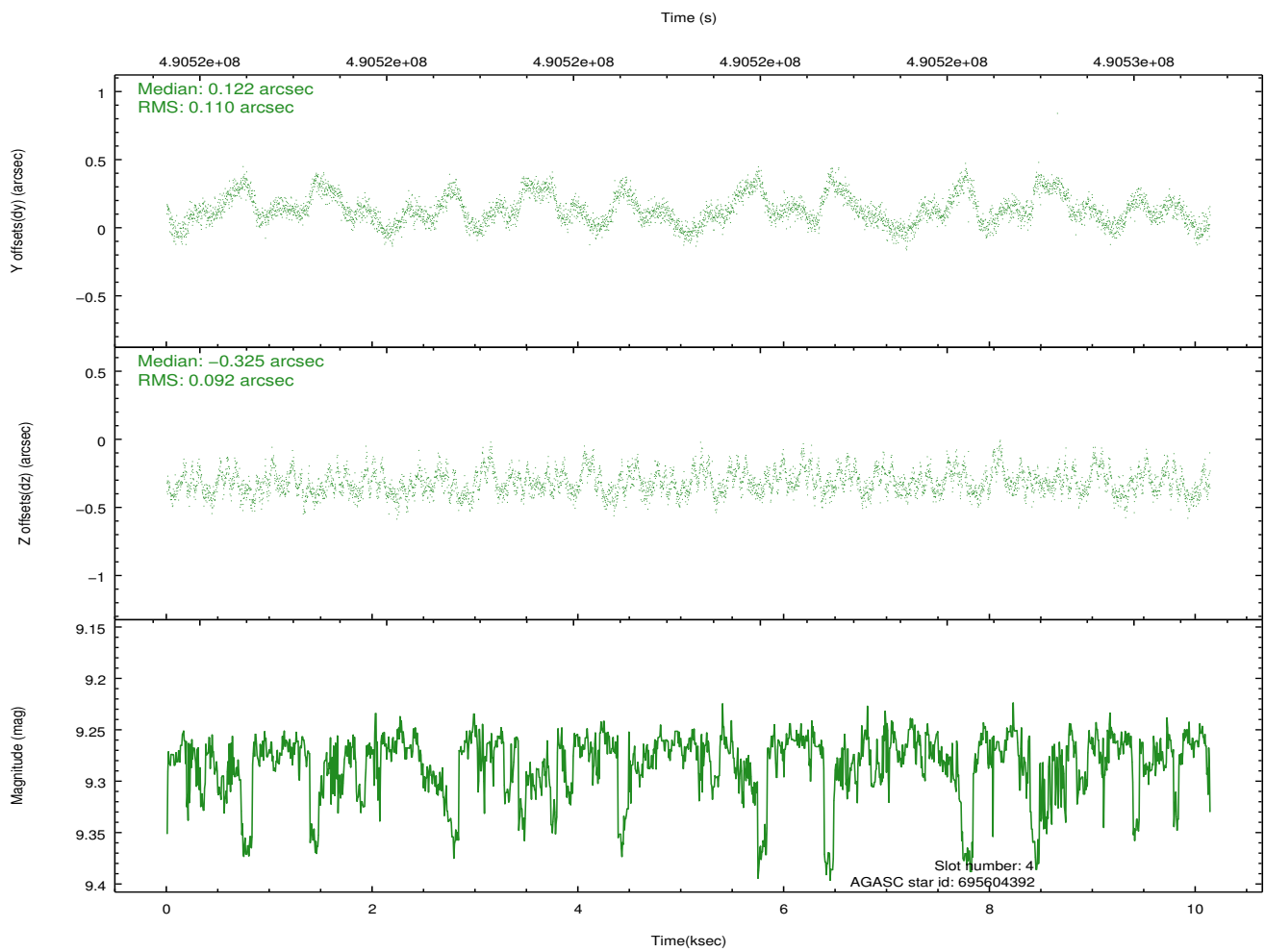
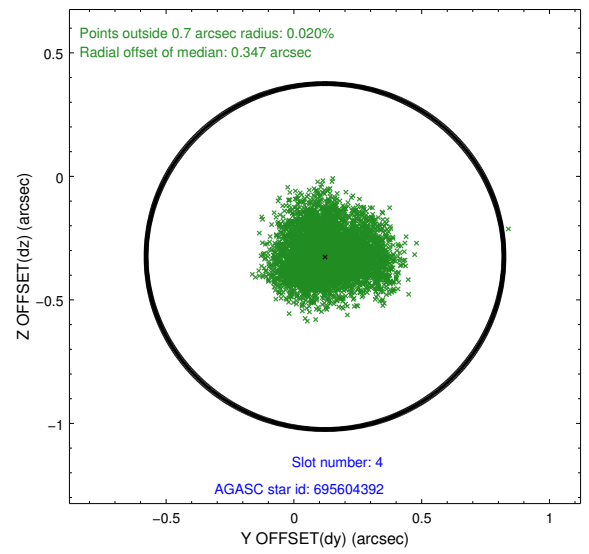
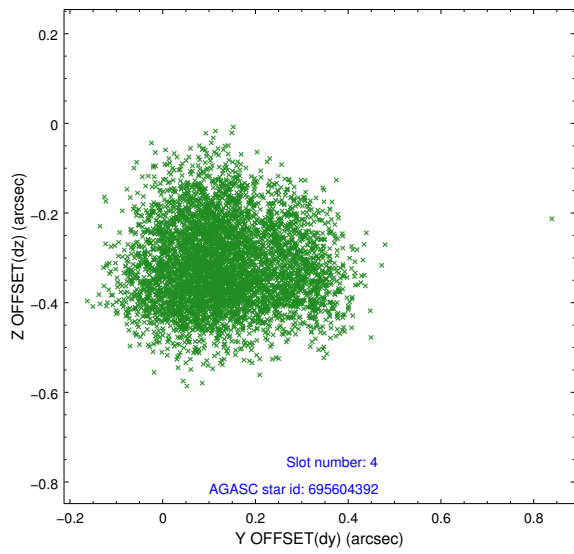
∞

## 2.4 Star Slots

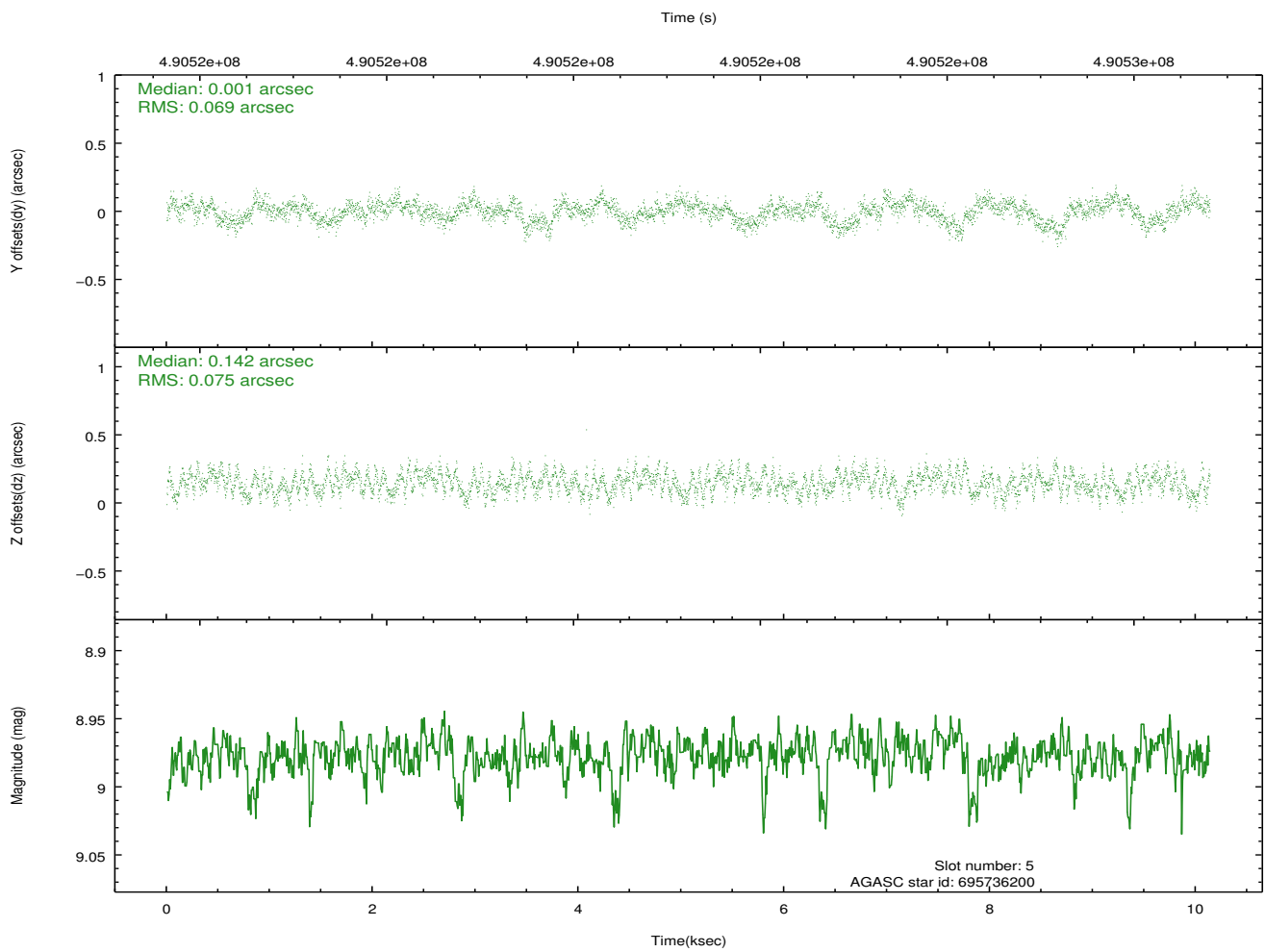
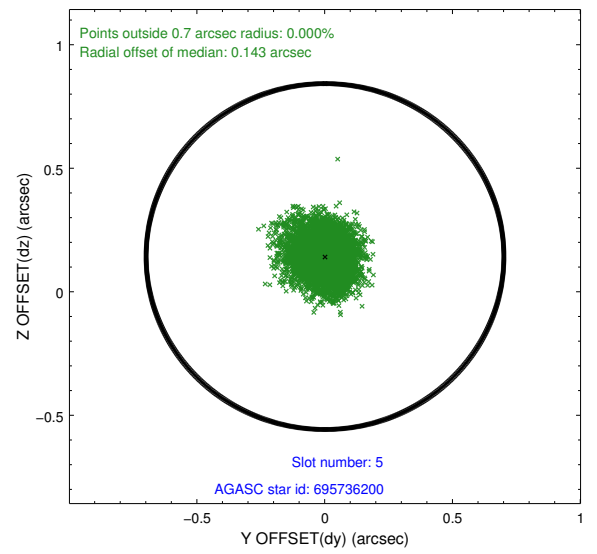
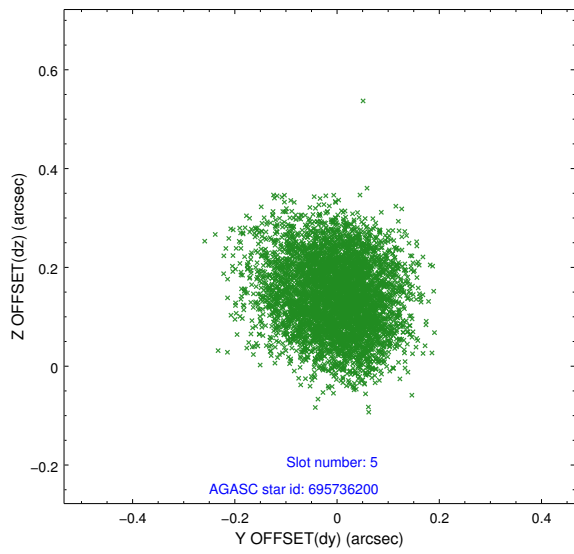
### 2.4.1 Slot 3



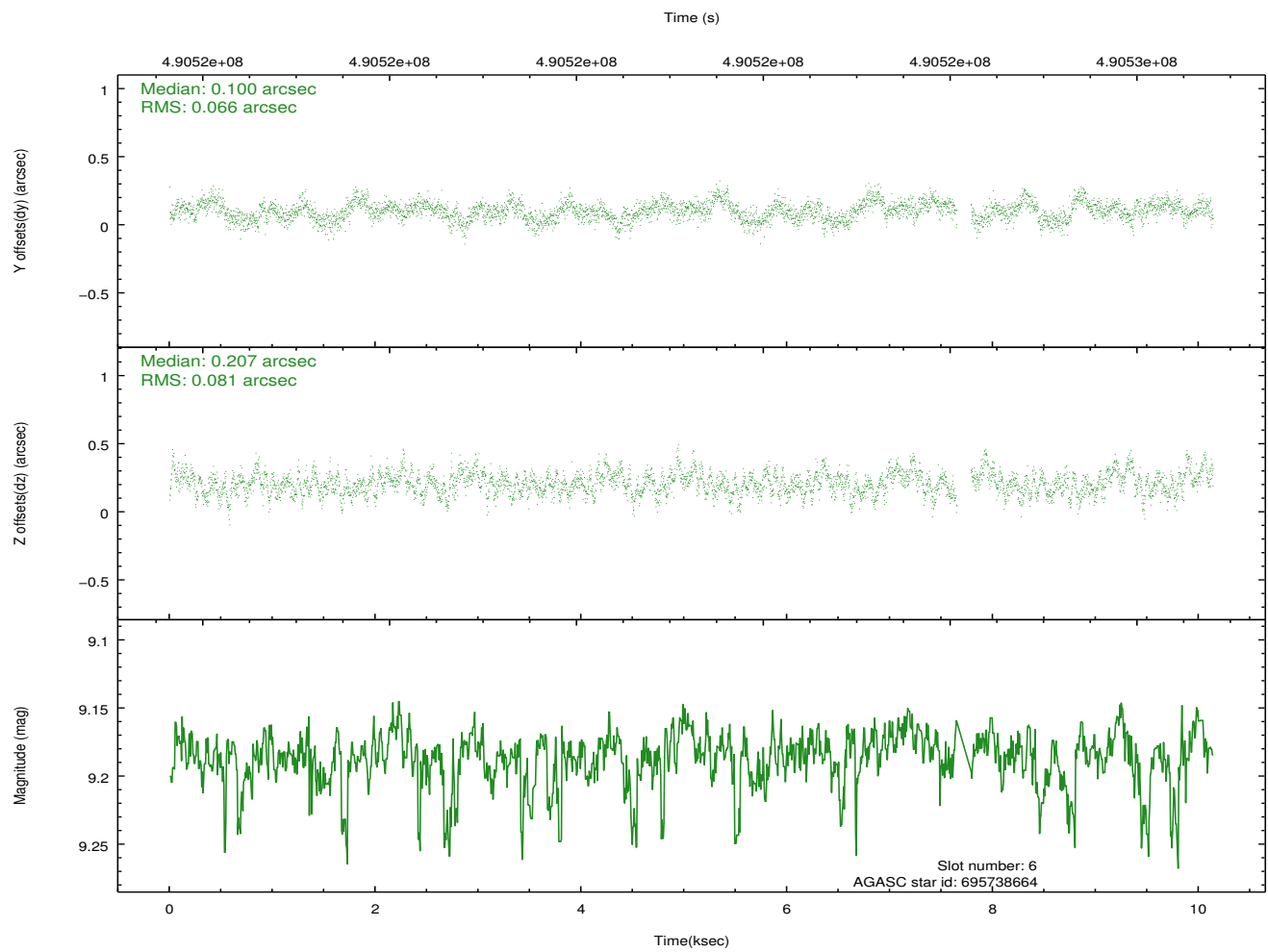
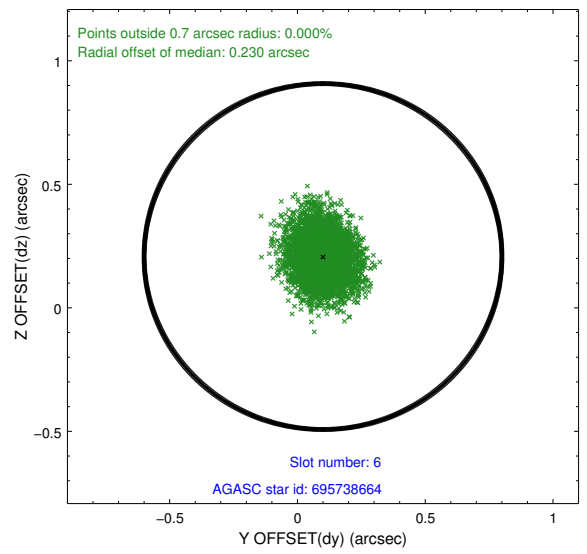
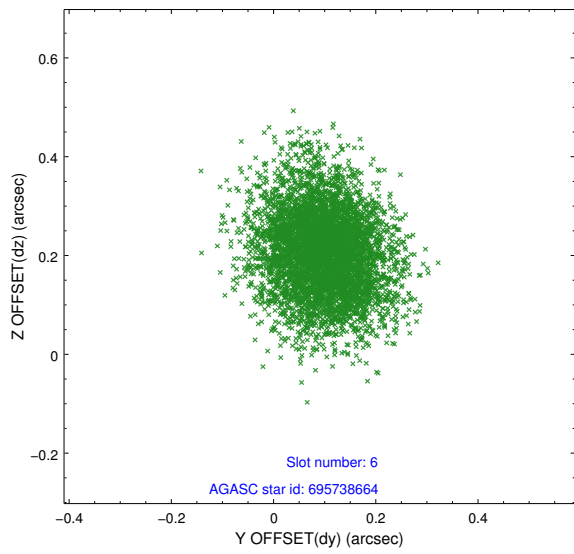
## 2.4.2 Slot 4



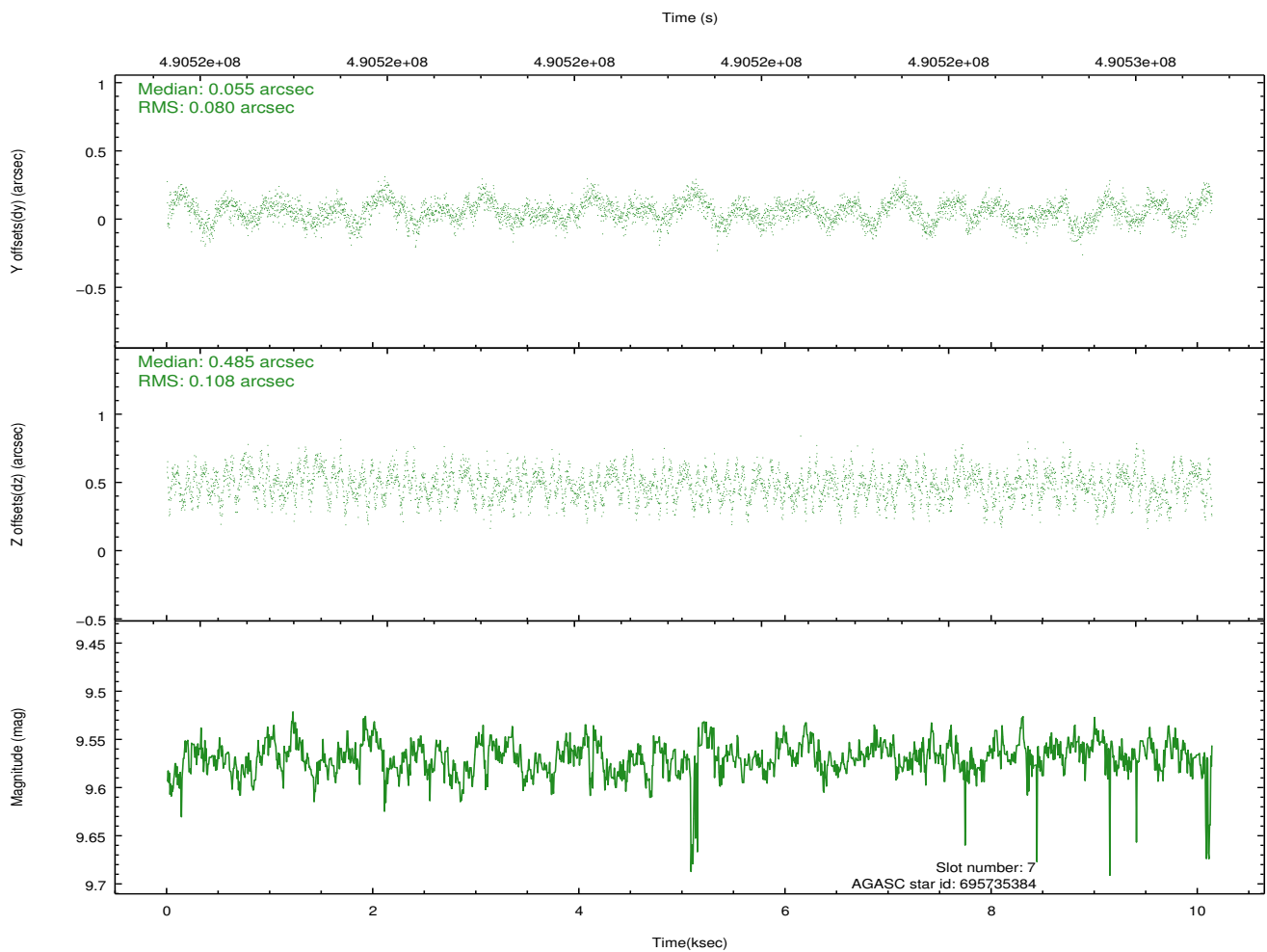
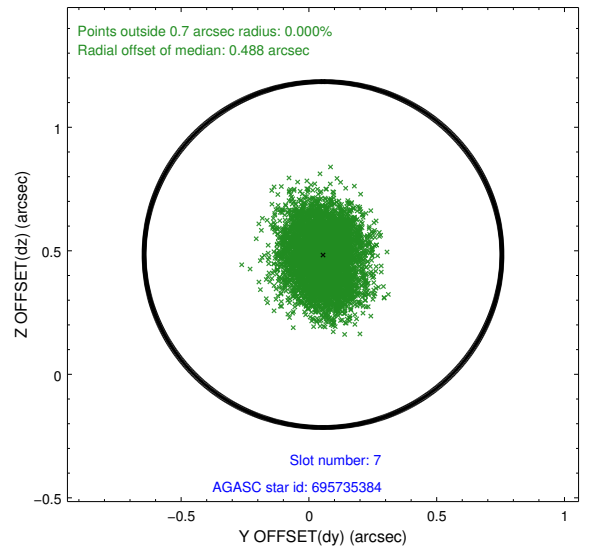
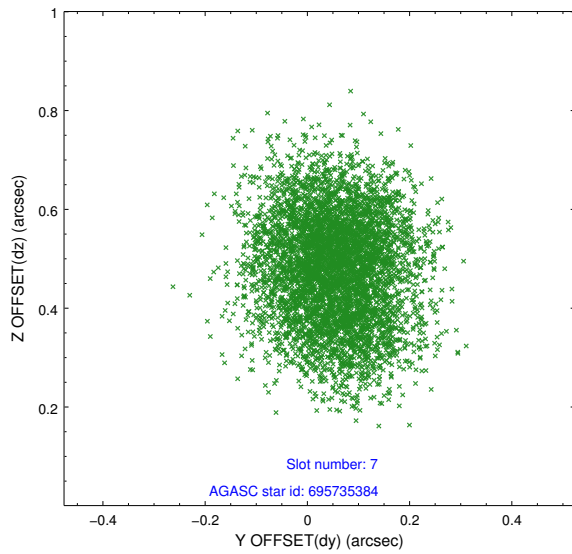
### 2.4.3 Slot 5



## 2.4.4 Slot 6

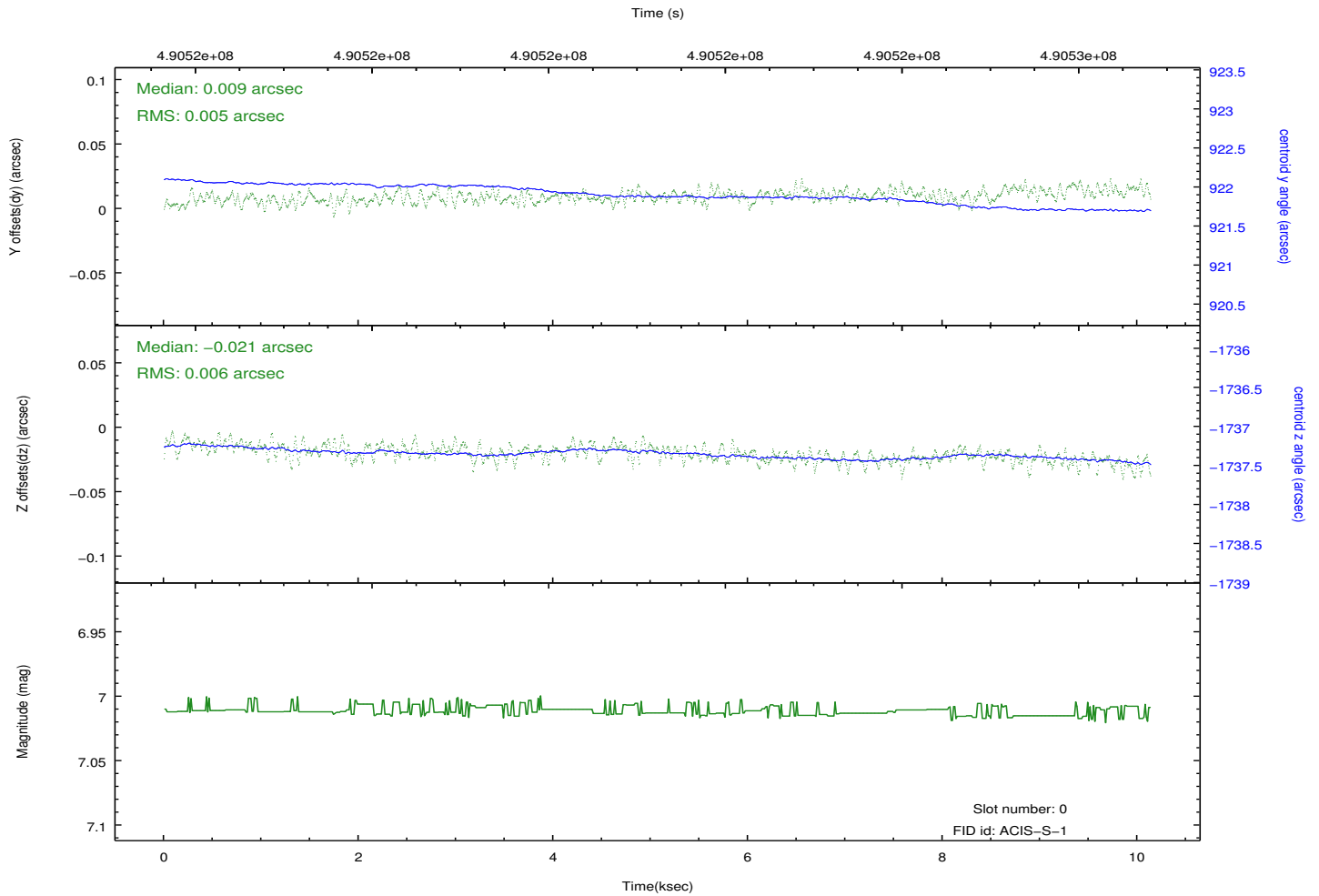
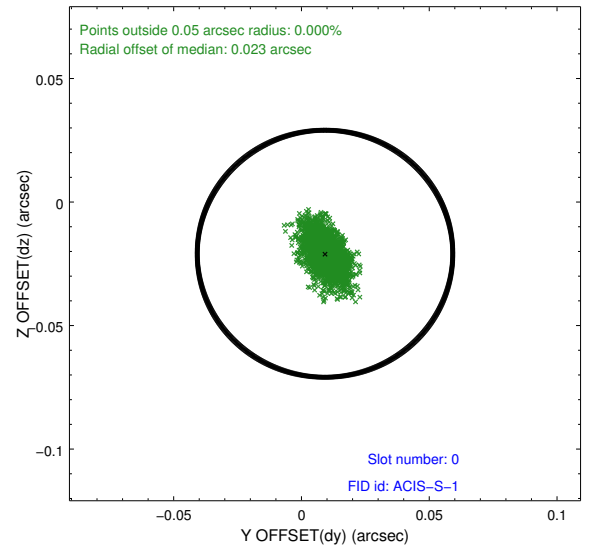
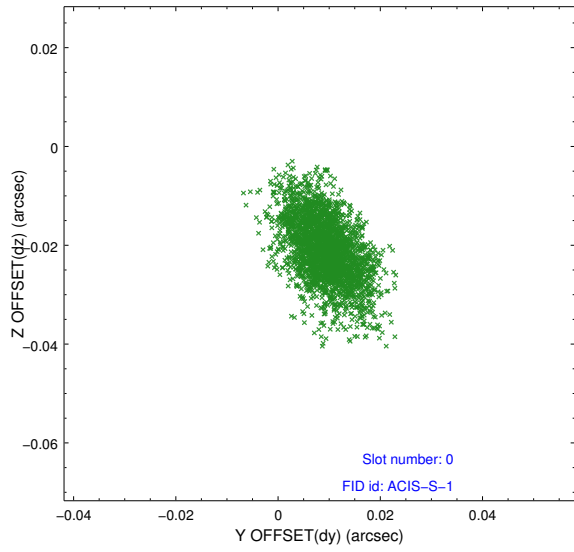


## 2.4.5 Slot 7

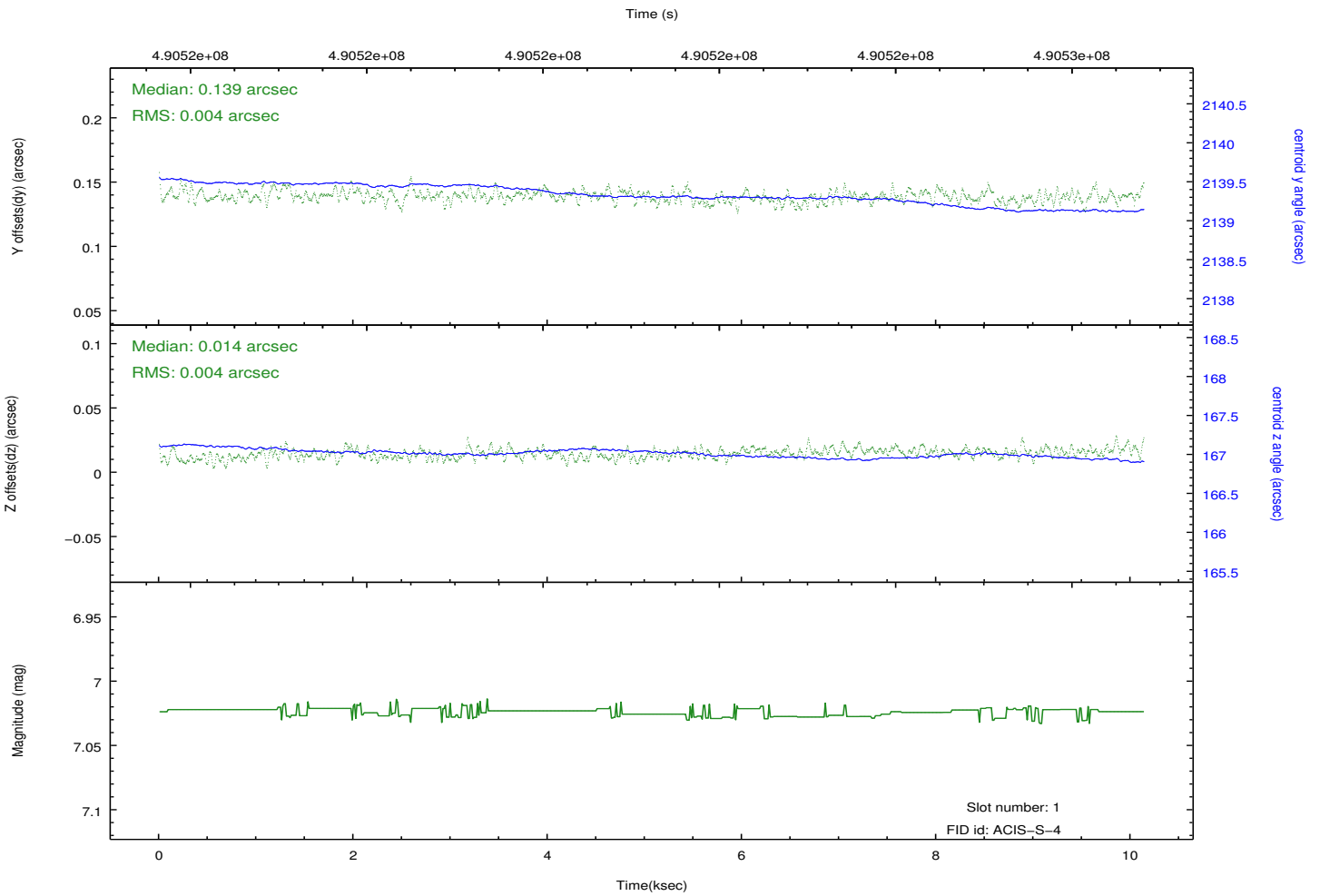
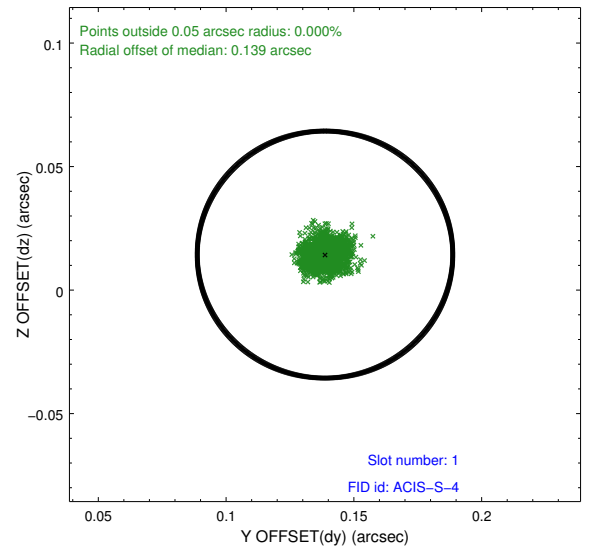
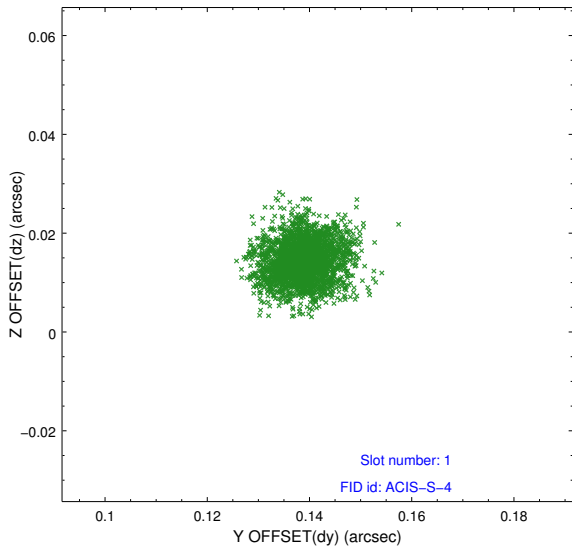


## 2.5 FID Slots

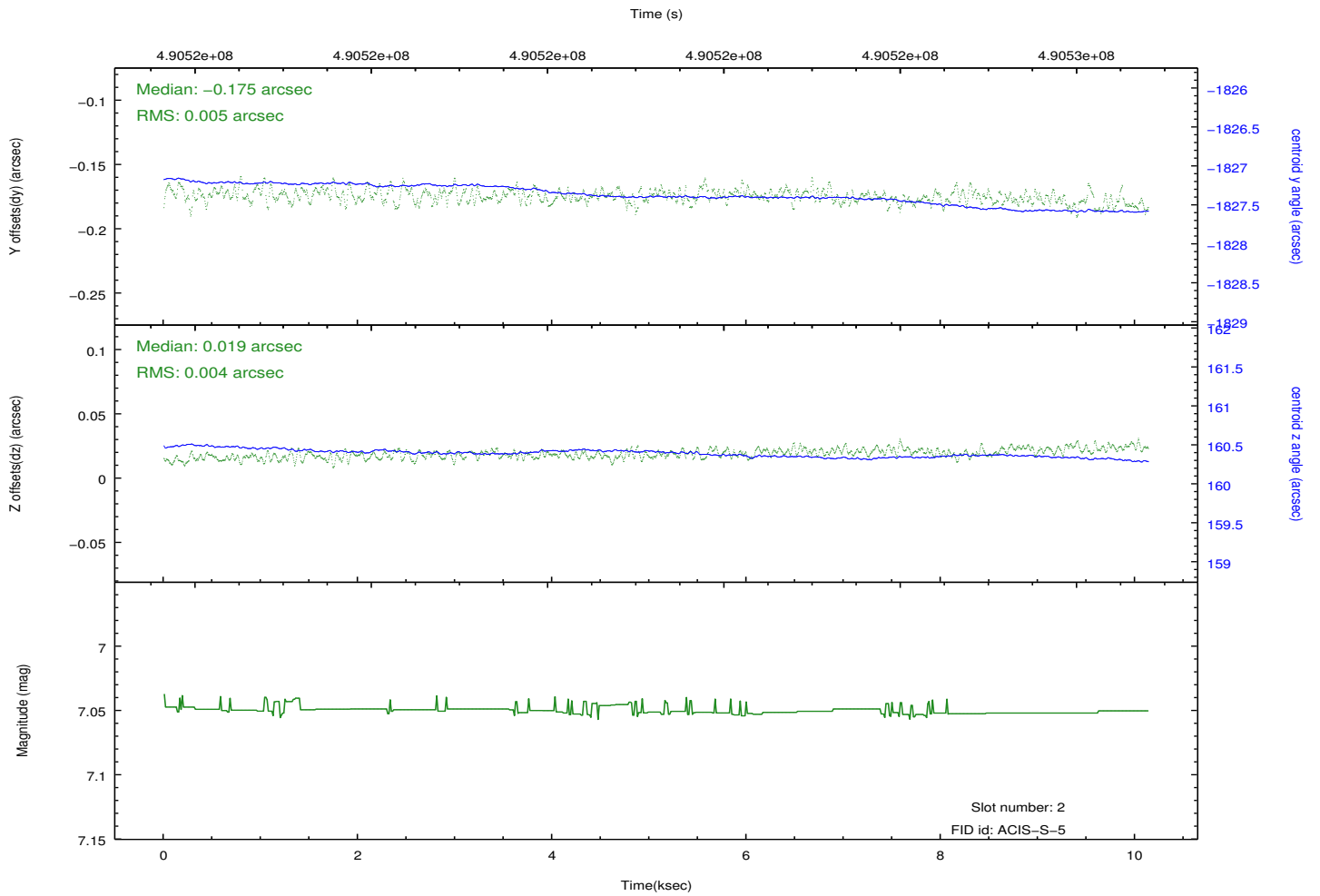
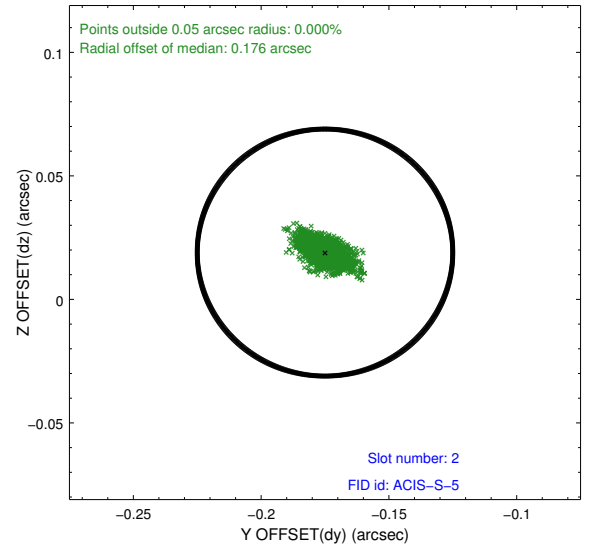
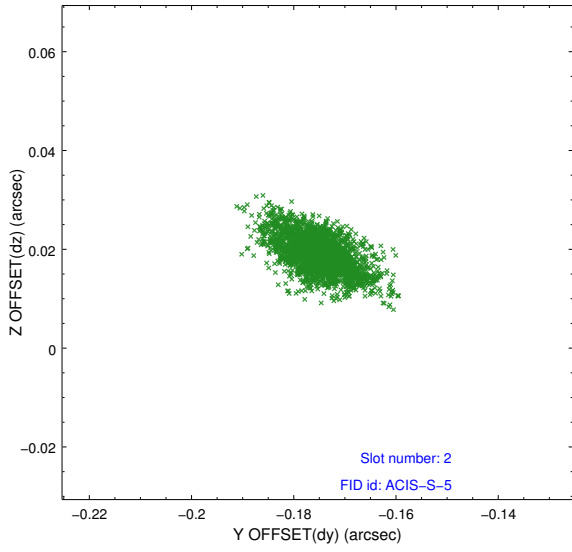
### 2.5.1 Slot 0



## 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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9647999629378

## 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.