

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15006 - L2 Version 2  
Chandra X-Ray Center

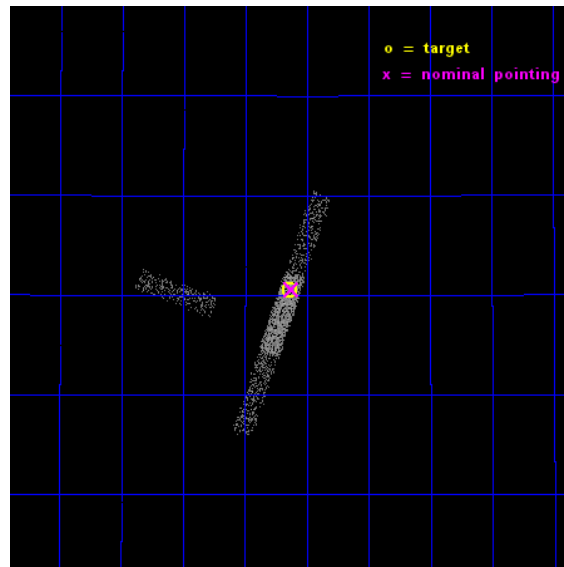
L2 Processing Date : Dec 1 2014

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# 1 Front

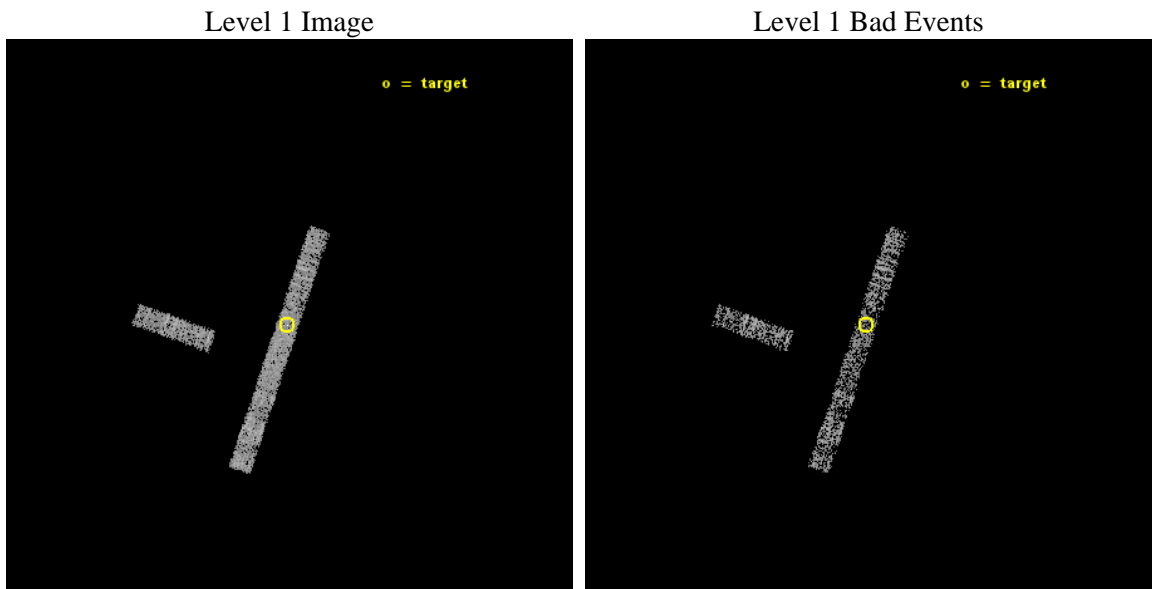
seq_num	702814	Sequence number
obs_id	15006	Observation id
title	The Herschel Legacy of powerful 3C radio galaxies and quasars II: observing Proposal.	Proposal title
observer	Dr Joanna Kuraszekiewicz	Principal investigator
object	3C286	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	202.784583	Observer's specified target RA [deg]
dec_targ	30.509139	Observer's specified target Dec [deg]
ra_nom	202.78114961597	Nominal RA [deg]
dec_nom	30.509742057174	Nominal Dec [deg]
roll_nom	109.18274230199	Nominal Roll [deg]
revision	2	Processing version of data
ontime	2085.0	Sum of GTIs [s]
liveltime	2002.8048874203	Livetime [s]
ontime3	2085.0	Sum of GTIs [s]
ontime6	2085.0	Sum of GTIs [s]
ontime7	2085.0	Sum of GTIs [s]
ontime8	2085.0	Sum of GTIs [s]
l2events	3051	Number of level 2 events



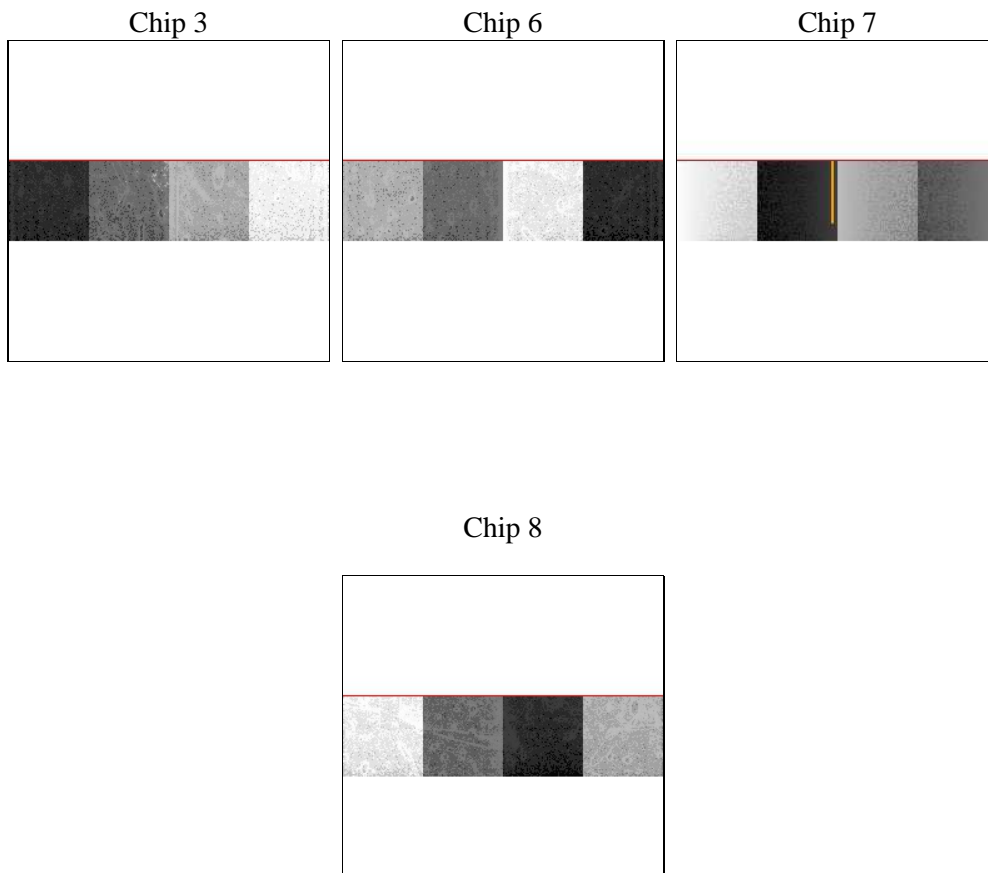
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	2085.0	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime3	2085.0	Sum of GTIs [s]
date	2014-12-01T22:00:36	Date and time of file creation	ontime6	2085.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	2085.0	Sum of GTIs [s]
			ontime8	2085.0	Sum of GTIs [s]
			l1events	15441	Number of level 1 events

### 2.1.4 Events

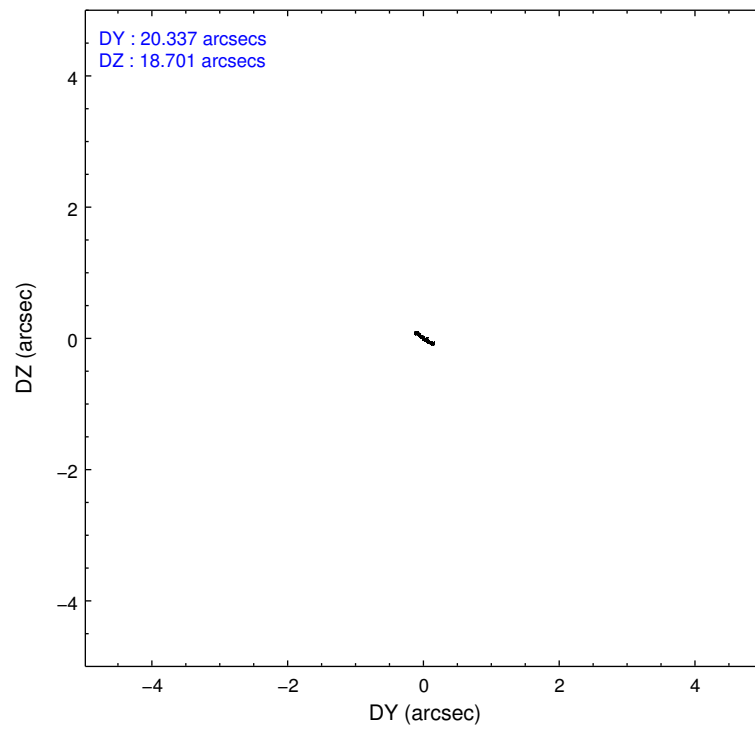
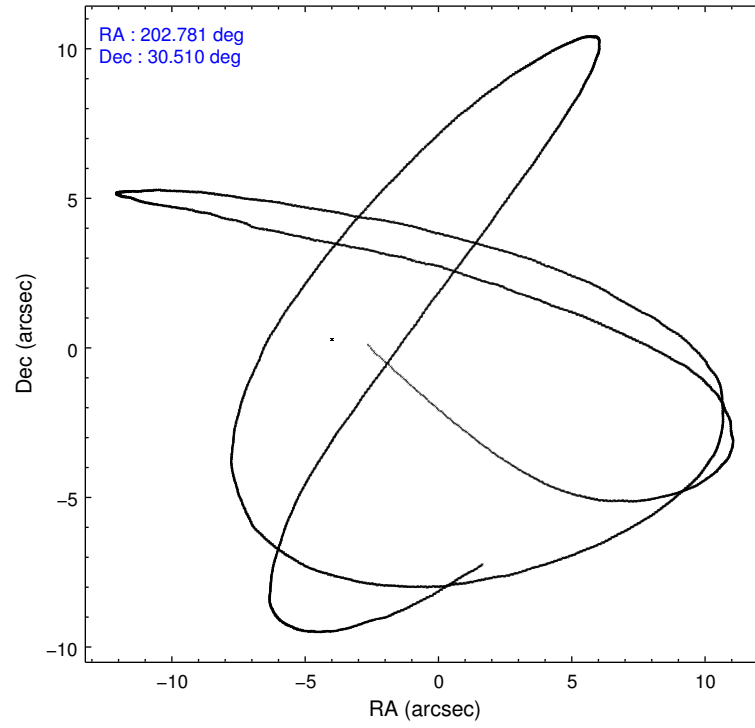
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	3426	3504	4247	4264
rejected events	3060	3090	2210	3164
rejected %	89%	88%	52%	74%

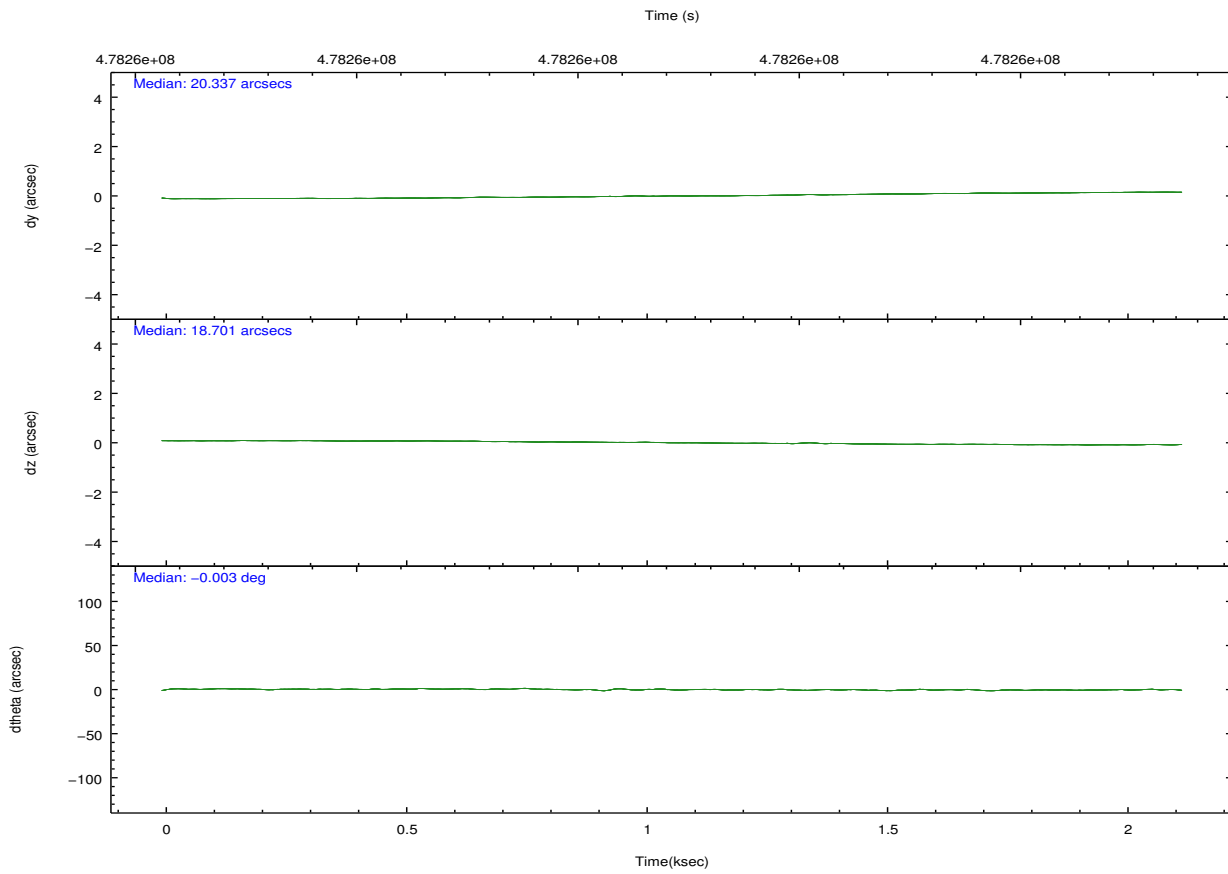
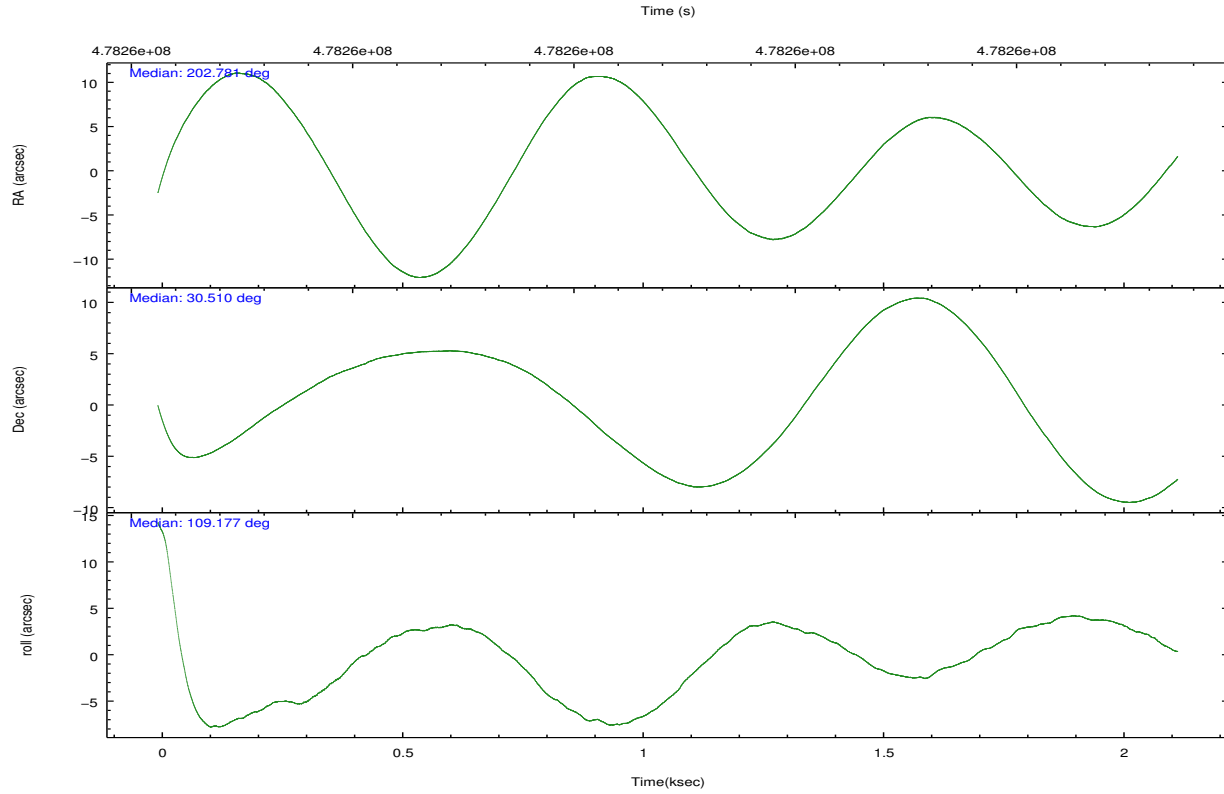
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	115	119	248	317
	3%	3%	5%	7%
grade 1 events	1	0	4	4
	0%	0%	0%	0%
grade 2 events	64	91	428	246
	1%	2%	10%	5%
grade 3 events	48	54	216	128
	1%	1%	5%	3%
grade 4 events	63	63	187	115
	1%	1%	4%	2%
grade 5 events	157	141	415	204
	4%	4%	9%	4%
grade 6 events	76	87	959	294
	2%	2%	22%	6%
grade 7 events	2902	2949	1790	2956
	84%	84%	42%	69%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	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	202.805461	202.7811496159653	CCD I2 on	N	N
[deg] Pointing Dec	30.492243	30.50974205717406	CCD I3 on	O1	Y
[deg] Pointing Roll	109.013638	109.1827423019879	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	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	O2	Y
[s] Observation start time (MET)	478258768.184000	478257542.60419	CCD S5 on	N	N
Observation start date	2013-02-26T09:38:21	2013-02-26T09:19:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	478260768.184000	478261393.0169	On-chip summing requested	N	N
Observation end date	2013-02-26T10:11:41	2013-02-26T10:23:13	Subarray requested	CUSTOM	1/4
Read mode	TIMED	TIMED	Subarray start row	385	385
			Subarray row count	256	256
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

## 2.3 Aspect





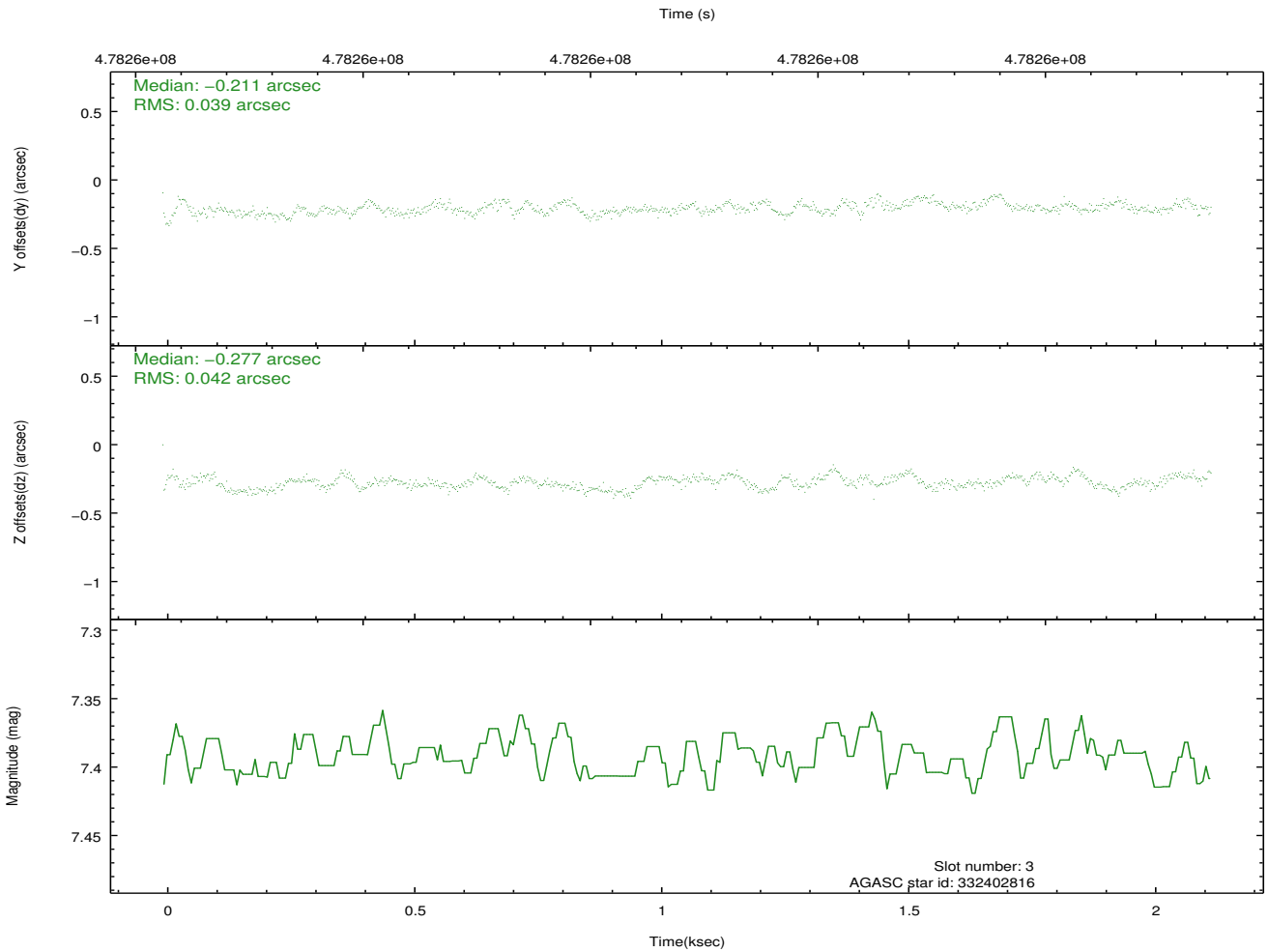
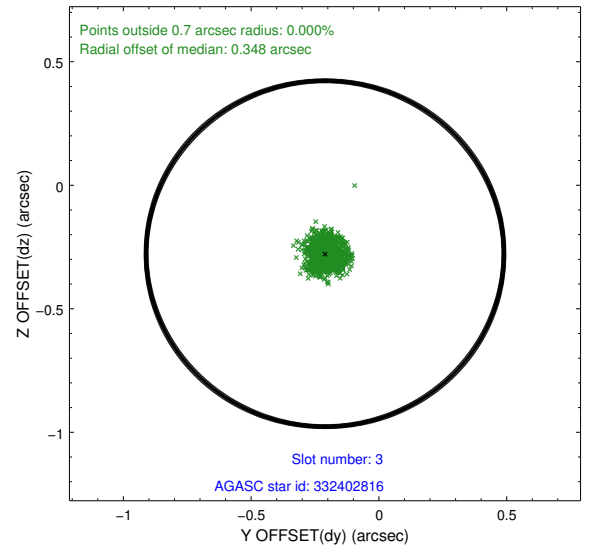
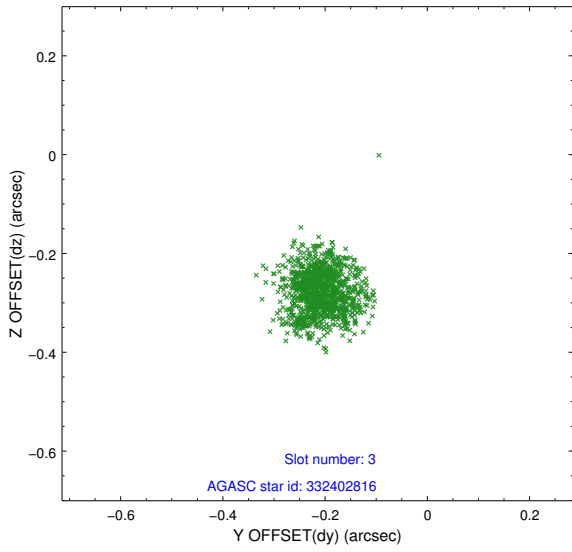
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.92	518	-0.124	-0.058	0.006	0.016	0.000000	0.000000	-773.61	-1740.18
1	FID		ACIS-S-4	7.00	517	0.267	0.075	0.008	0.016	0.000000	0.000000	2138.67	165.19
2	FID		ACIS-S-5	7.02	518	-0.175	-0.009	0.008	0.020	0.000000	0.000000	-1822.54	162.35
3	GUIDE	used	332402816	7.39	1036	-0.211	-0.277	0.062	0.096	203.199728	30.748307	476.76	-1454.40
4	GUIDE	used	332404280	8.10	1036	-0.302	-0.198	0.073	0.116	202.228644	30.560345	819.36	1607.79
5	GUIDE	used	332405440	9.26	1036	0.212	0.201	0.122	0.205	203.646221	30.318610	-1431.66	-2268.13
6	GUIDE	used	332407376	8.97	1036	0.216	0.074	0.101	0.159	203.382617	30.157623	-1719.70	-1310.53
7	GUIDE	used	332407408	9.05	1035	0.090	0.210	0.109	0.187	203.759056	30.144515	-2139.23	-2403.55

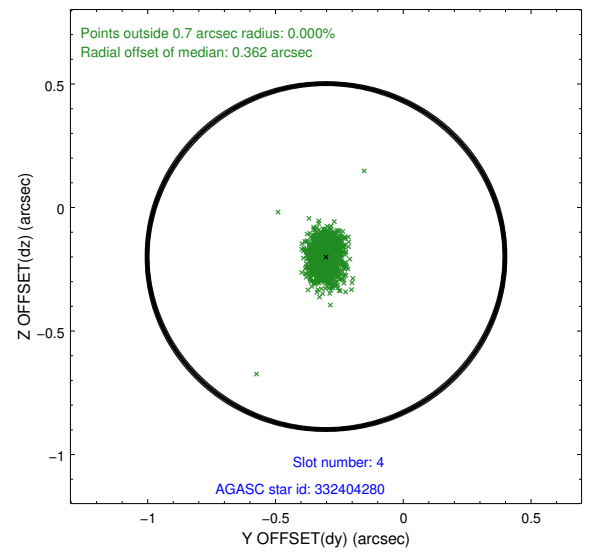
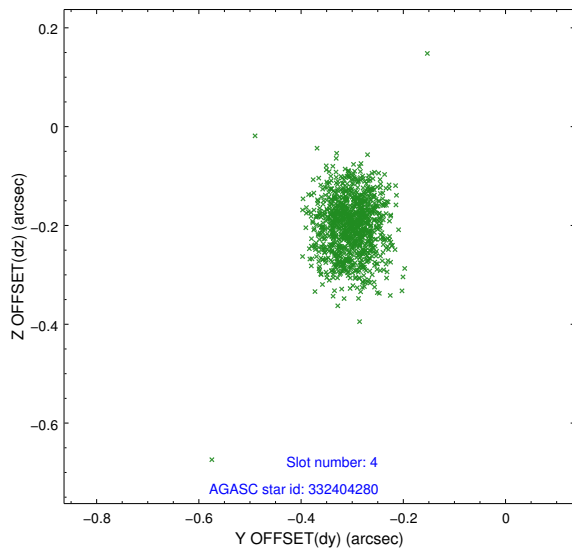
∞

## 2.4 Star Slots

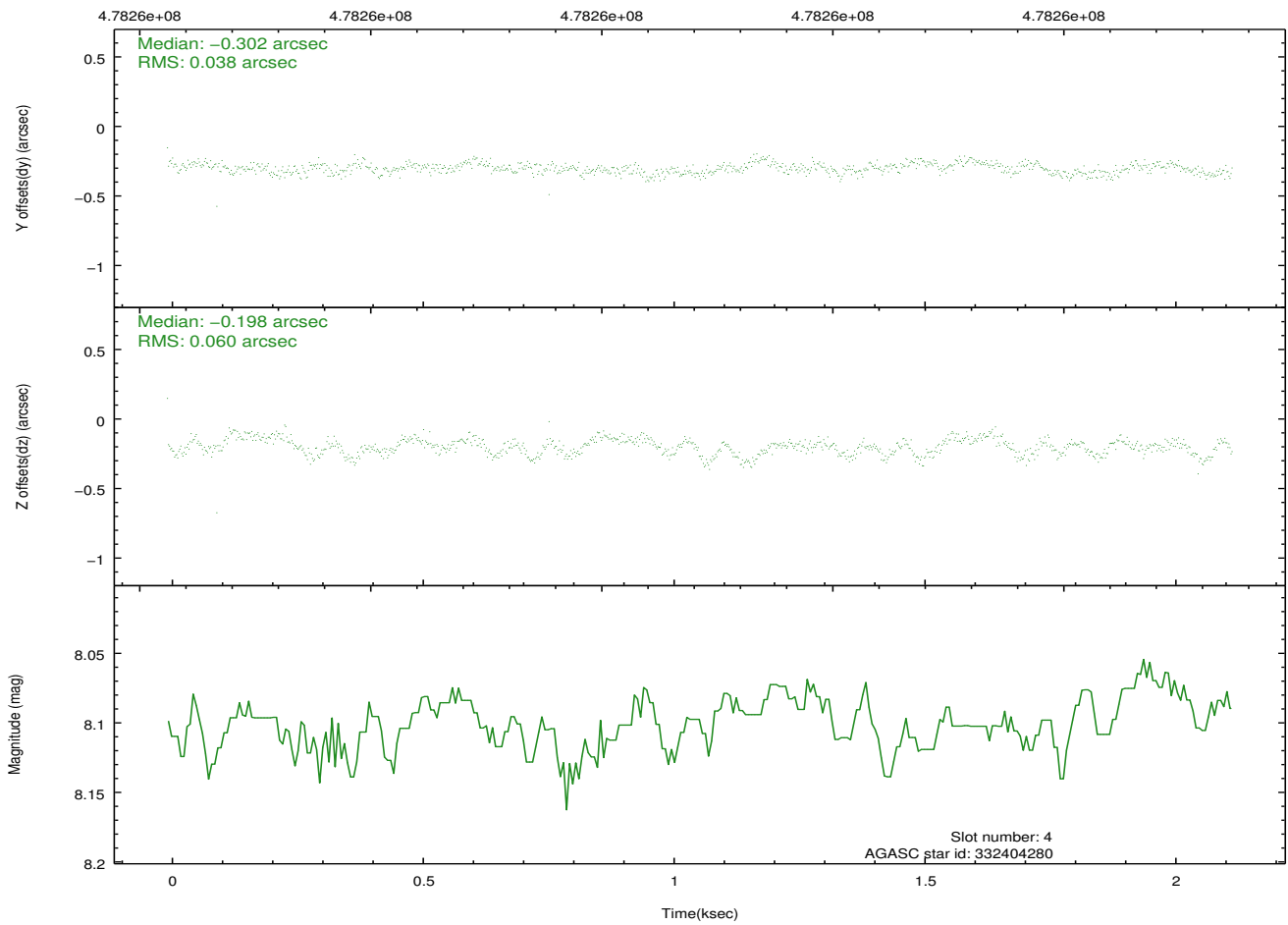
### 2.4.1 Slot 3



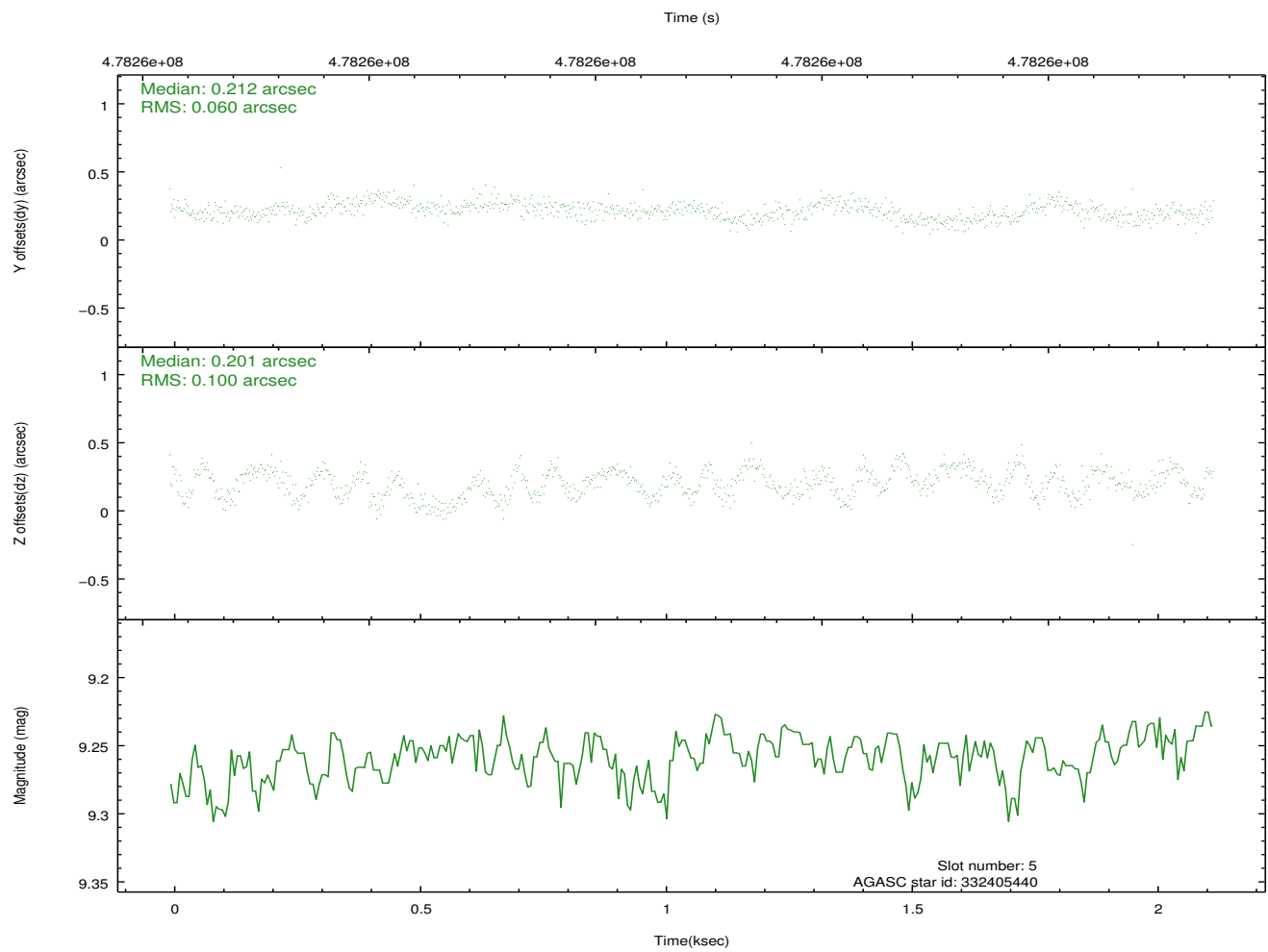
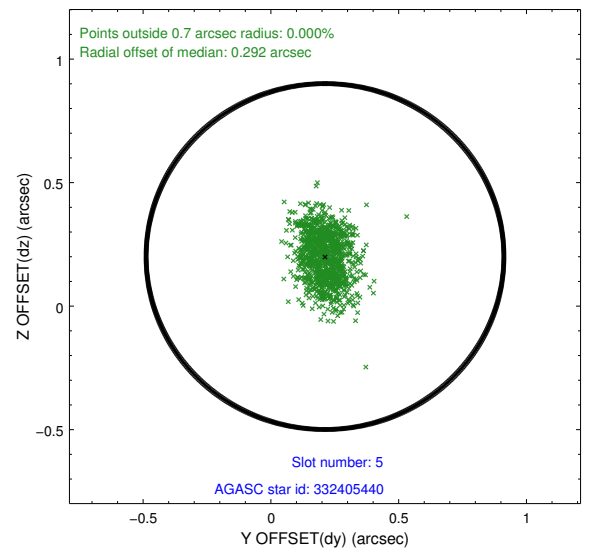
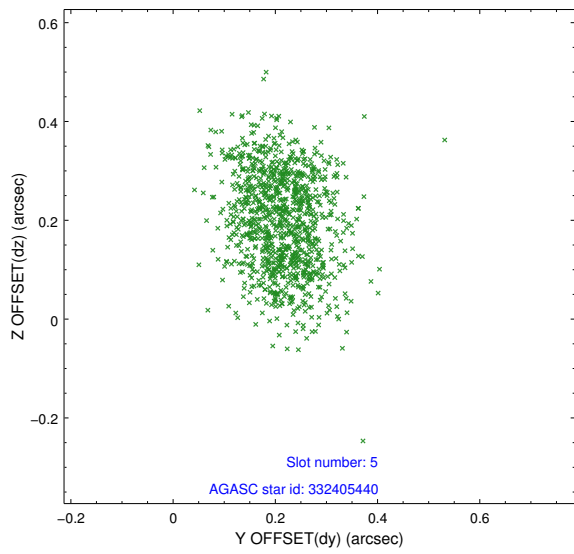
## 2.4.2 Slot 4



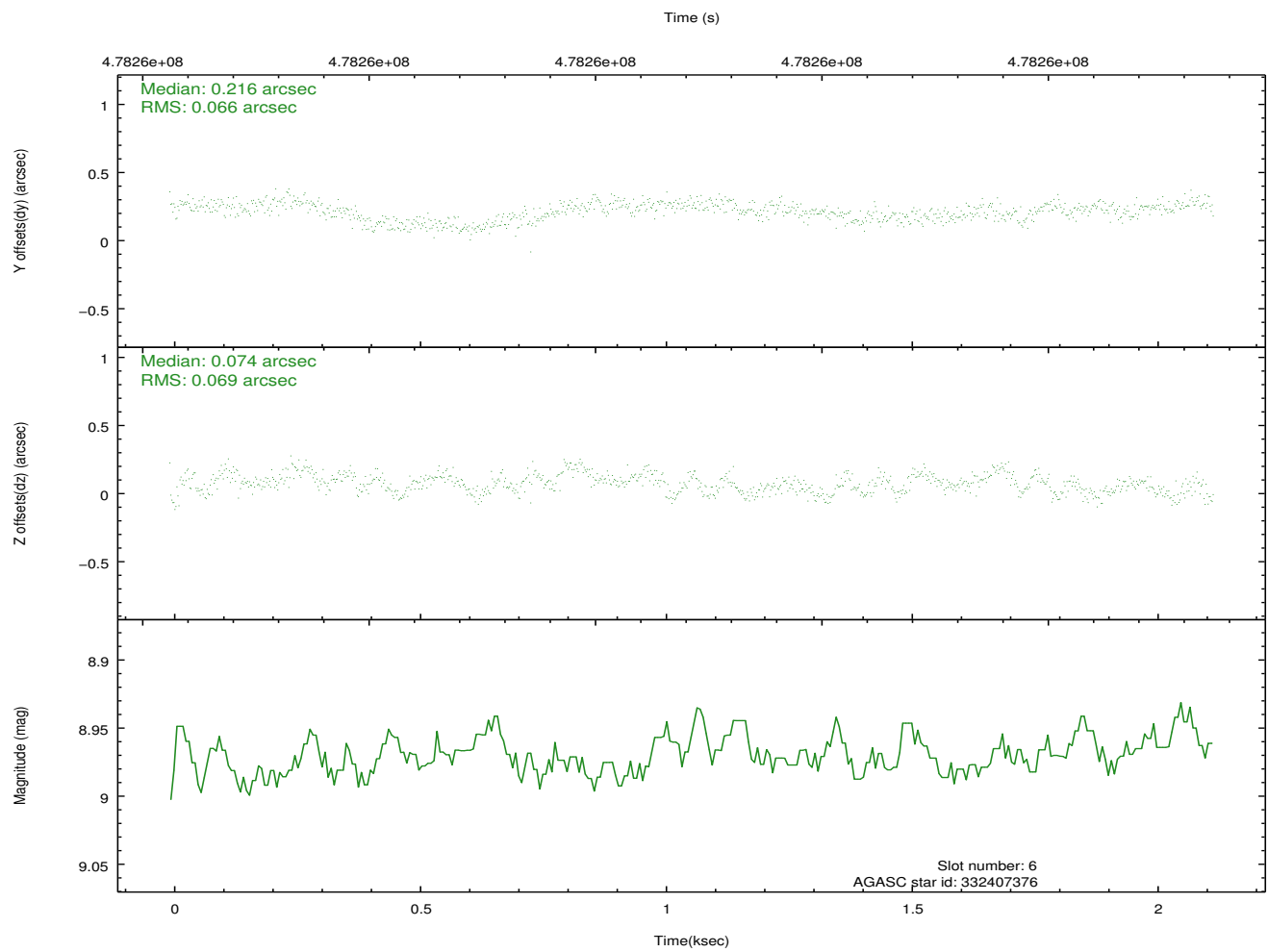
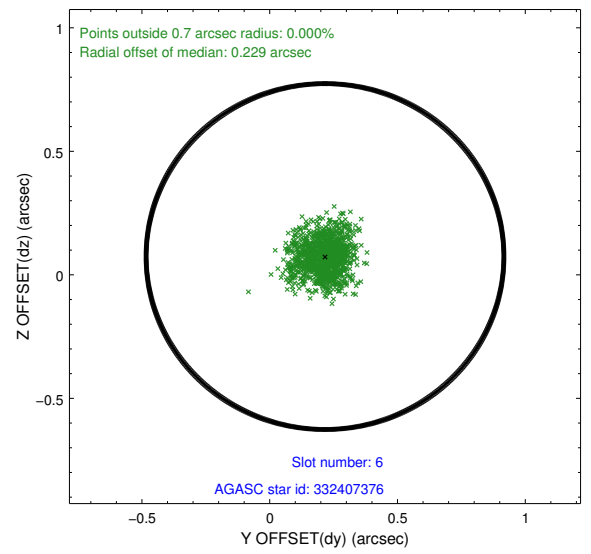
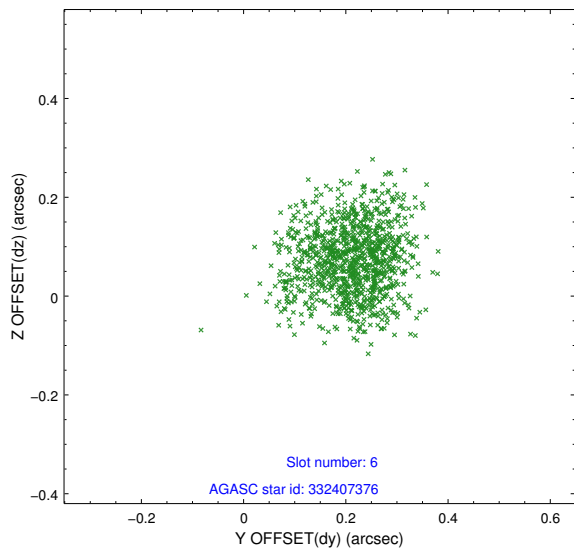
Time (s)



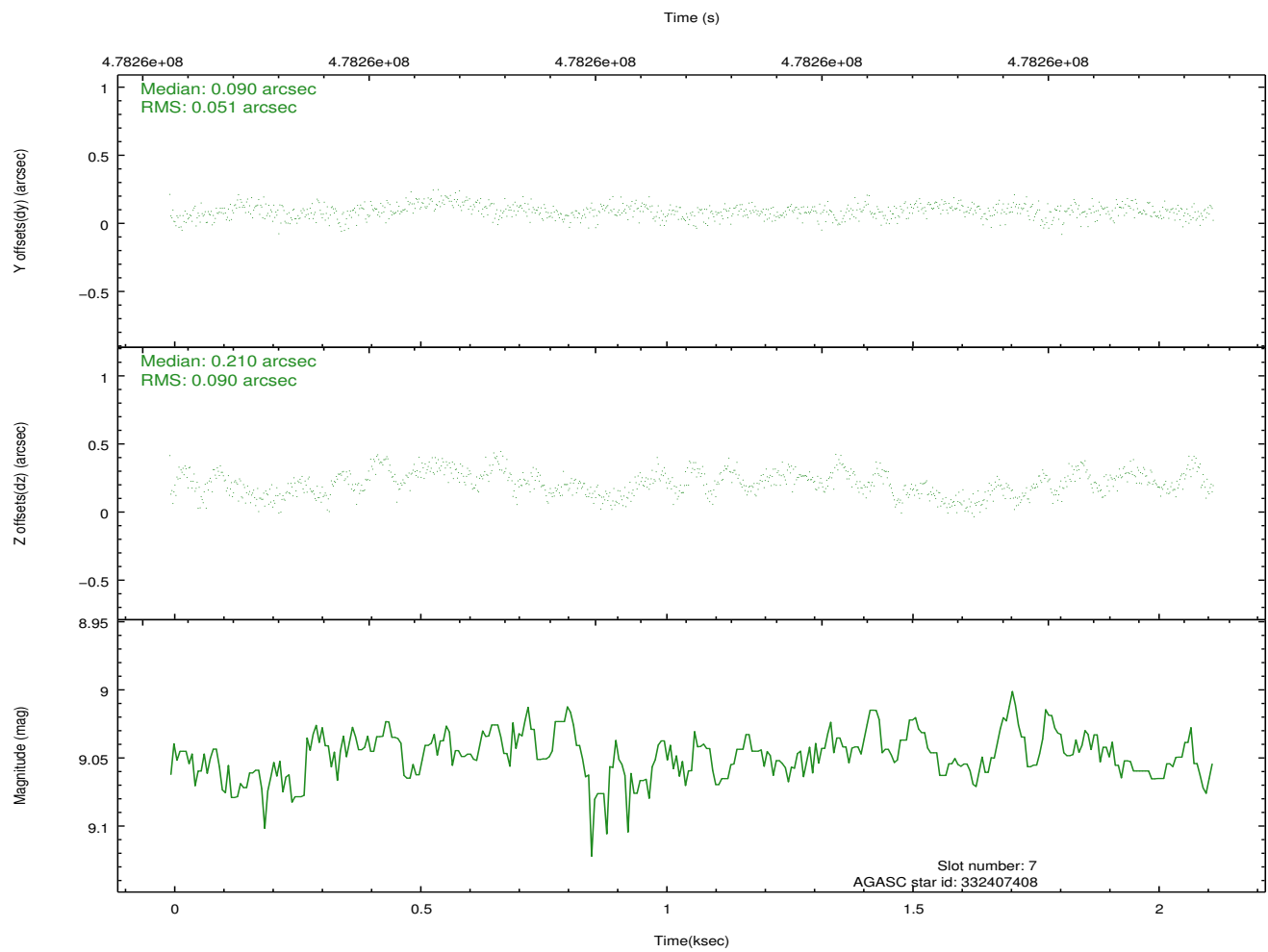
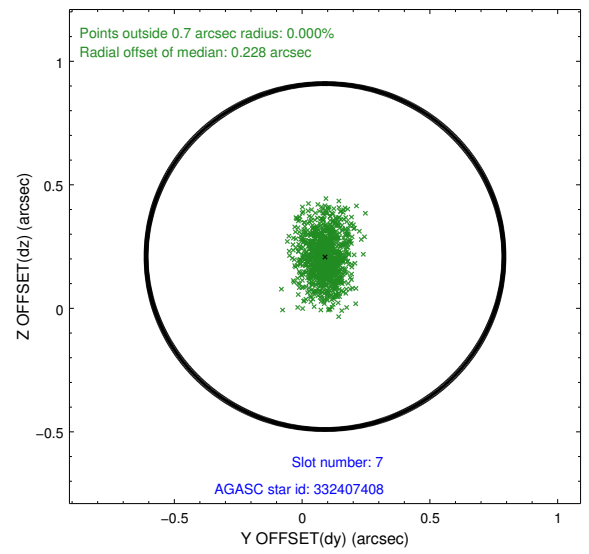
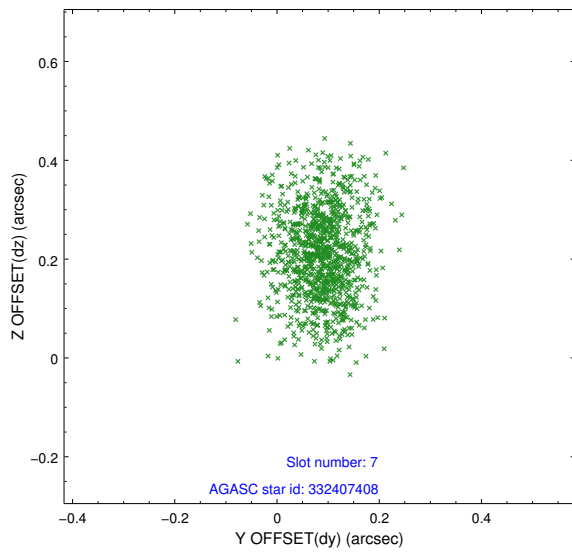
### 2.4.3 Slot 5



## 2.4.4 Slot 6

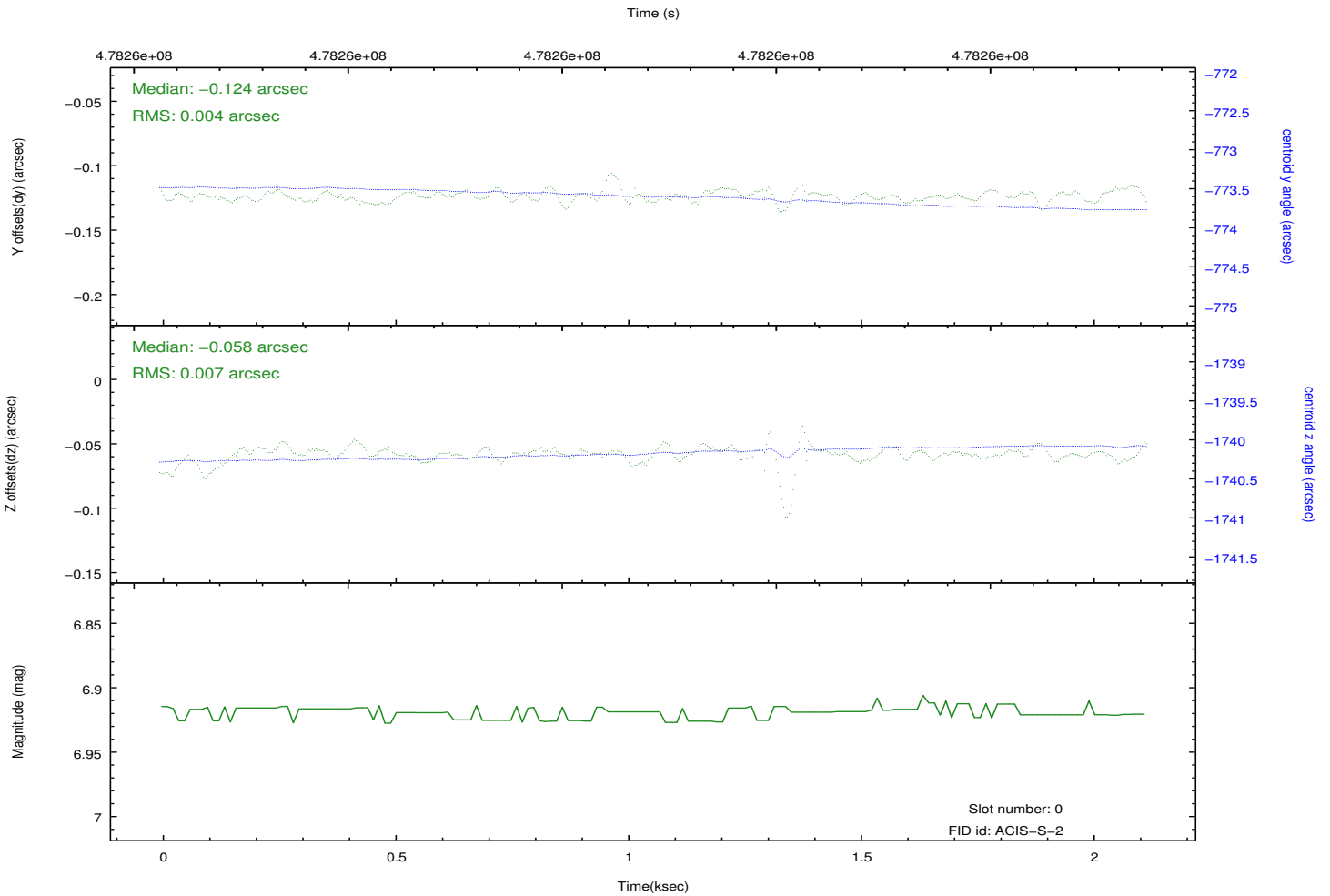
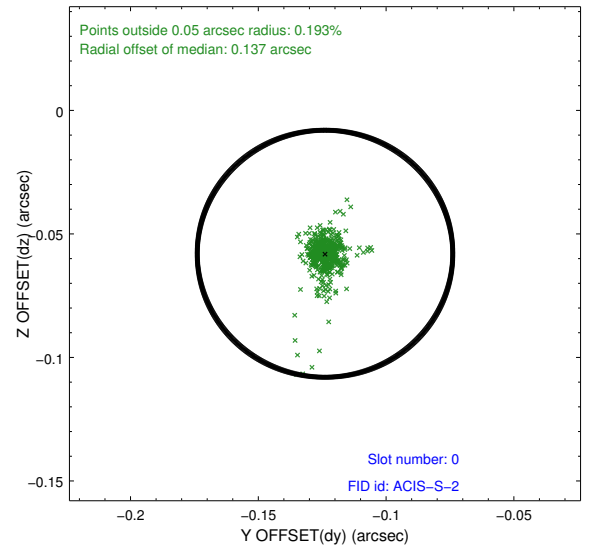
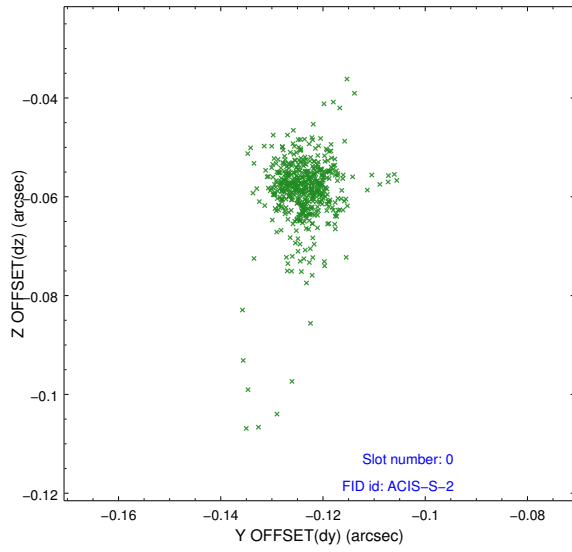


## 2.4.5 Slot 7

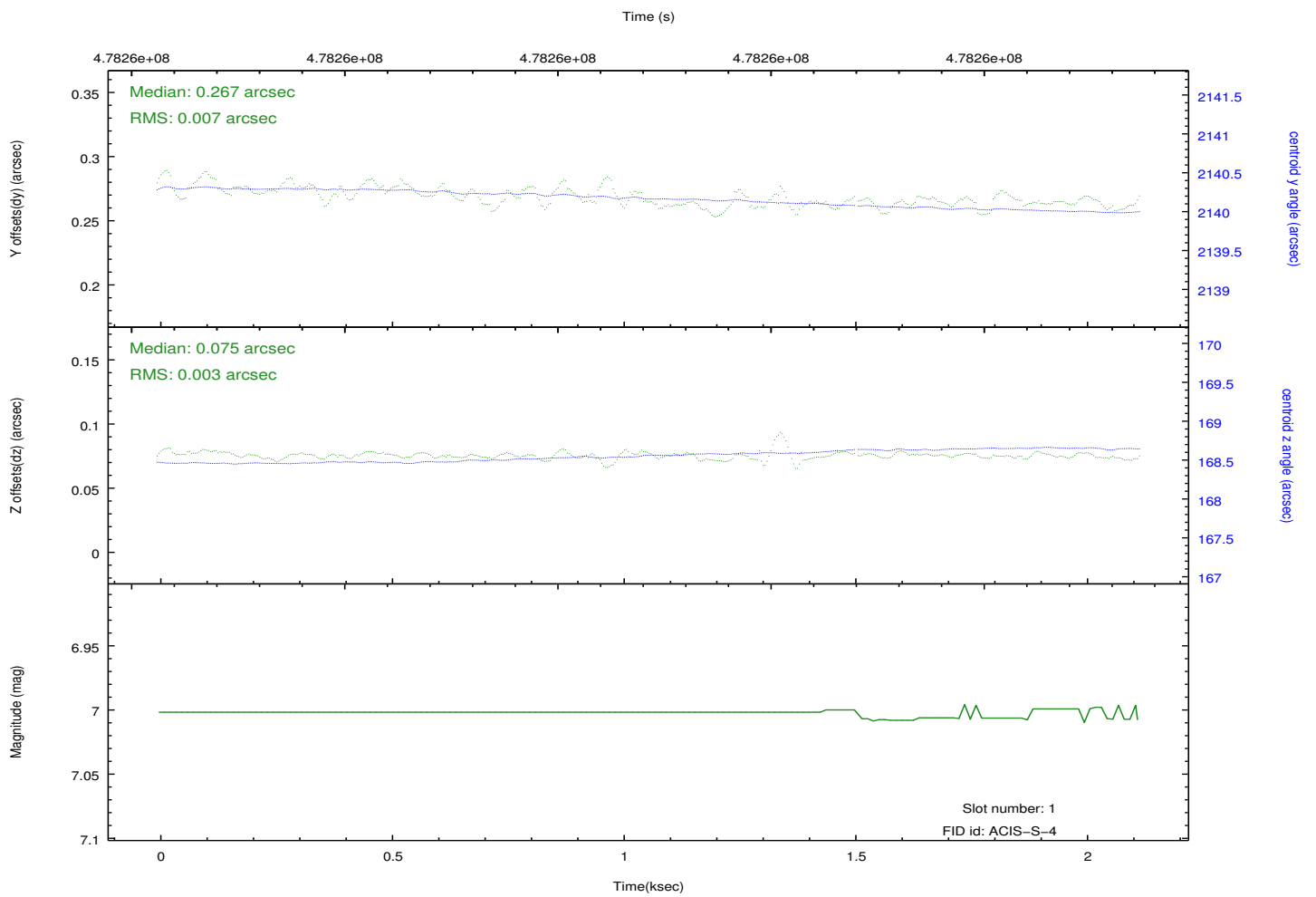
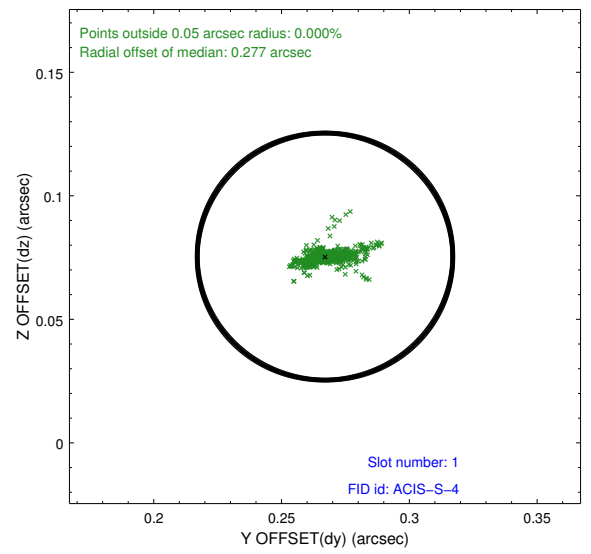
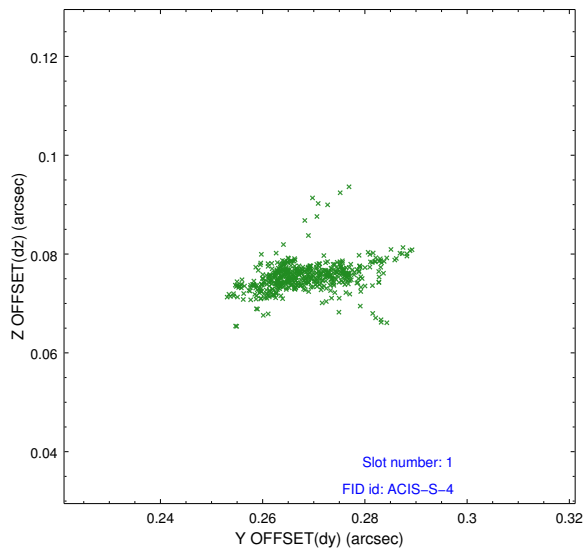


## 2.5 FID Slots

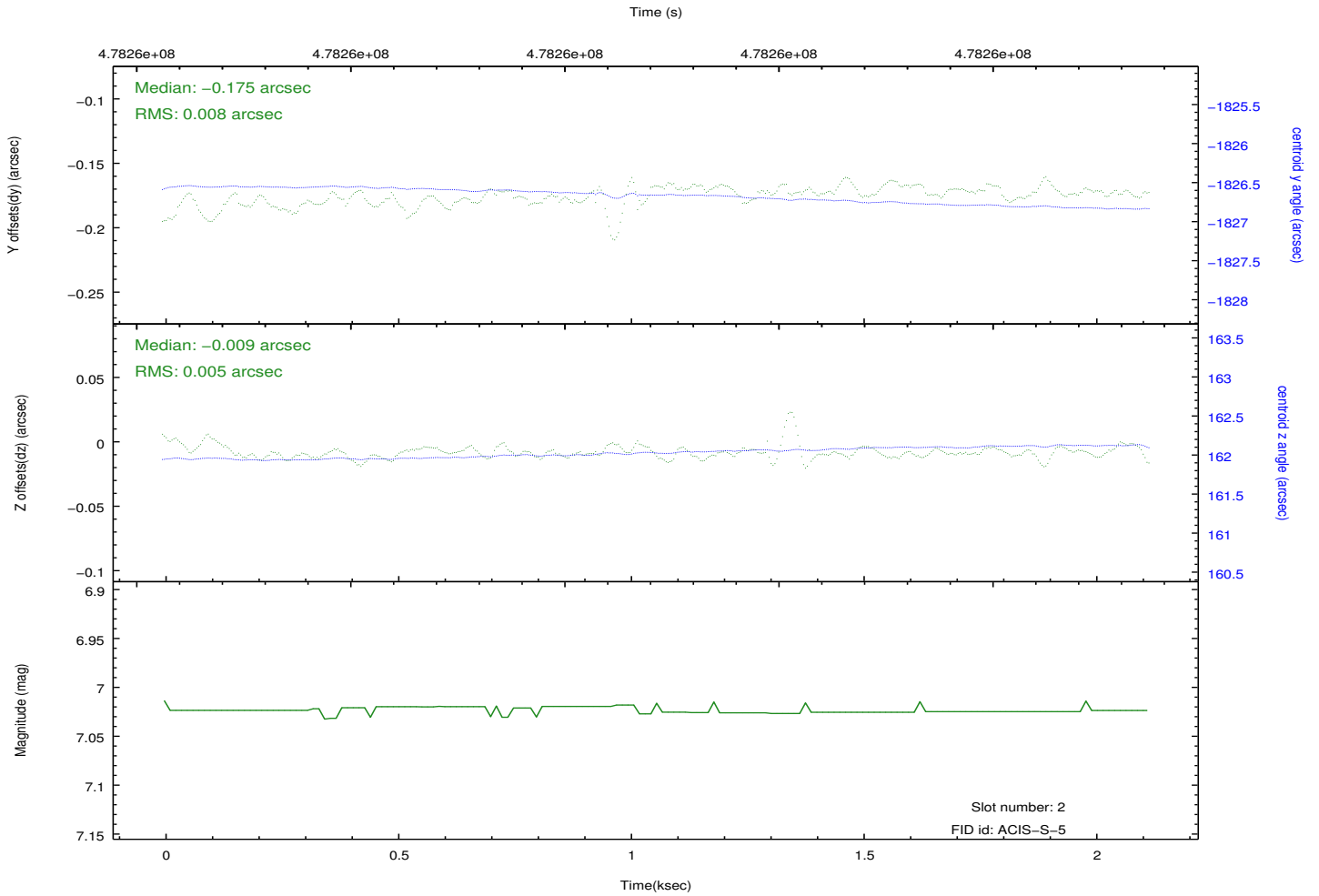
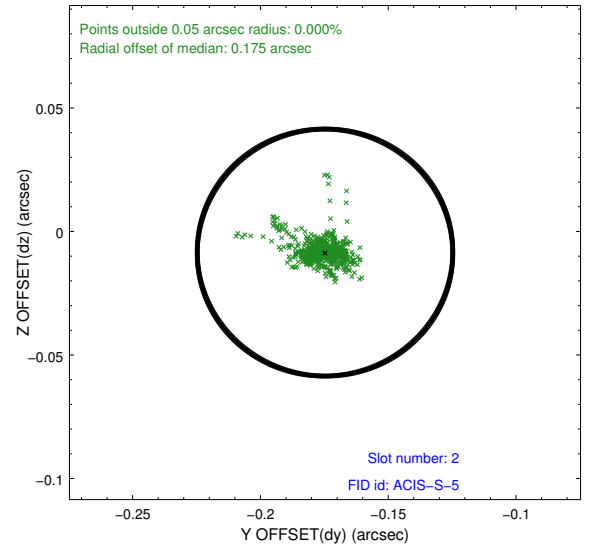
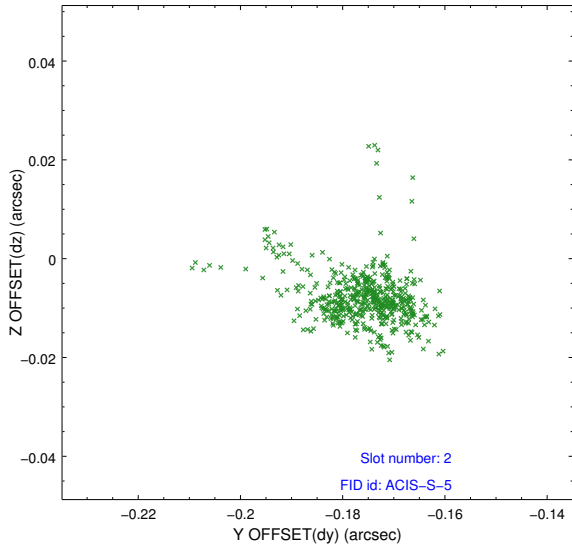
### 2.5.1 Slot 0



## 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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.085

## 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.