

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 14351 - L2 Version 2  
Chandra X-Ray Center

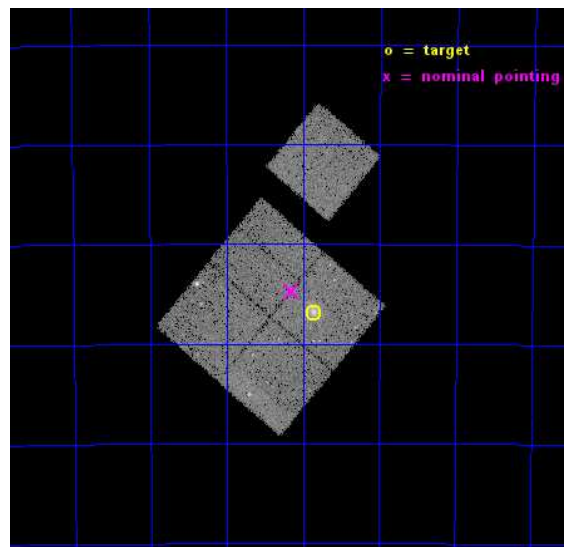
L2 Processing Date : Nov 29 2014

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# 1 Front

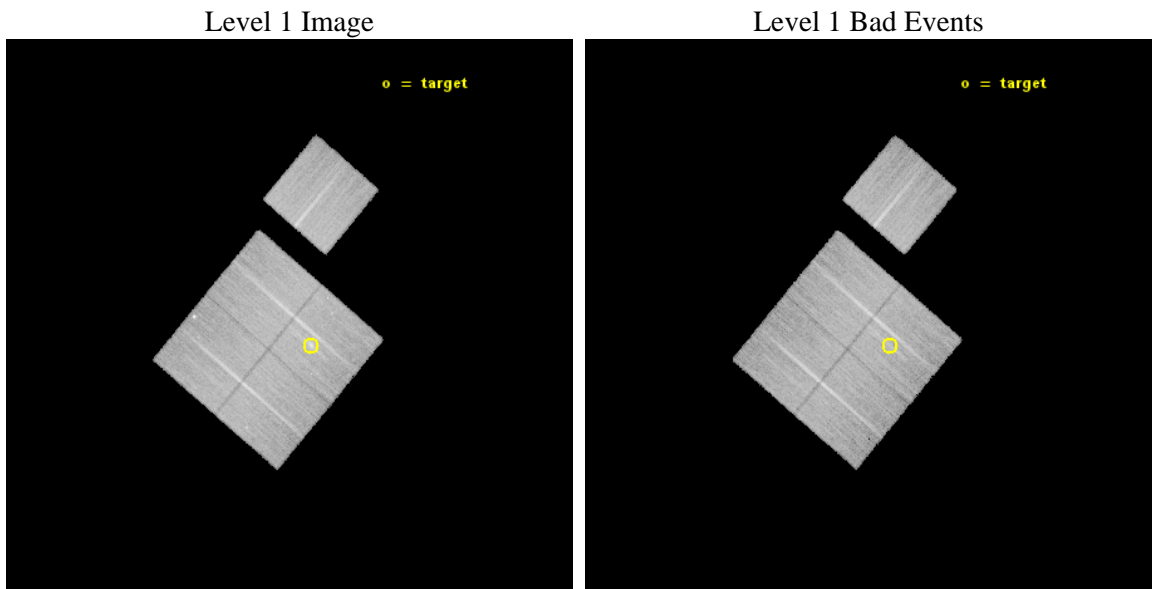
seq_num	801197	Sequence number
obs_id	14351	Observation id
title	A DETAILED CHANDRA/HST STUDY OF THE FIRST z approx 1 CLUSTER BLINDLY DISCOVERED IN THE PLANCK ALL SKY SURVEY	Proposal title
observer	Dr. Pasquale Mazzotta	Principal investigator
object	PLCKG266.6-27.3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	93.966667	Observer's specified target RA [deg]
dec_targ	-57.781	Observer's specified target Dec [deg]
ra_nom	94.038206089426	Nominal RA [deg]
dec_nom	-57.745757009224	Nominal Dec [deg]
roll_nom	40.269192525945	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26581.596814275	Sum of GTIs [s]
livetime	26234.288682809	Livetime [s]
ontime0	26581.473694265	Sum of GTIs [s]
ontime1	26581.514734268	Sum of GTIs [s]
ontime2	26581.555774271	Sum of GTIs [s]
ontime3	26581.596814275	Sum of GTIs [s]
ontime6	26581.432654262	Sum of GTIs [s]
l2events	78223	Number of level 2 events



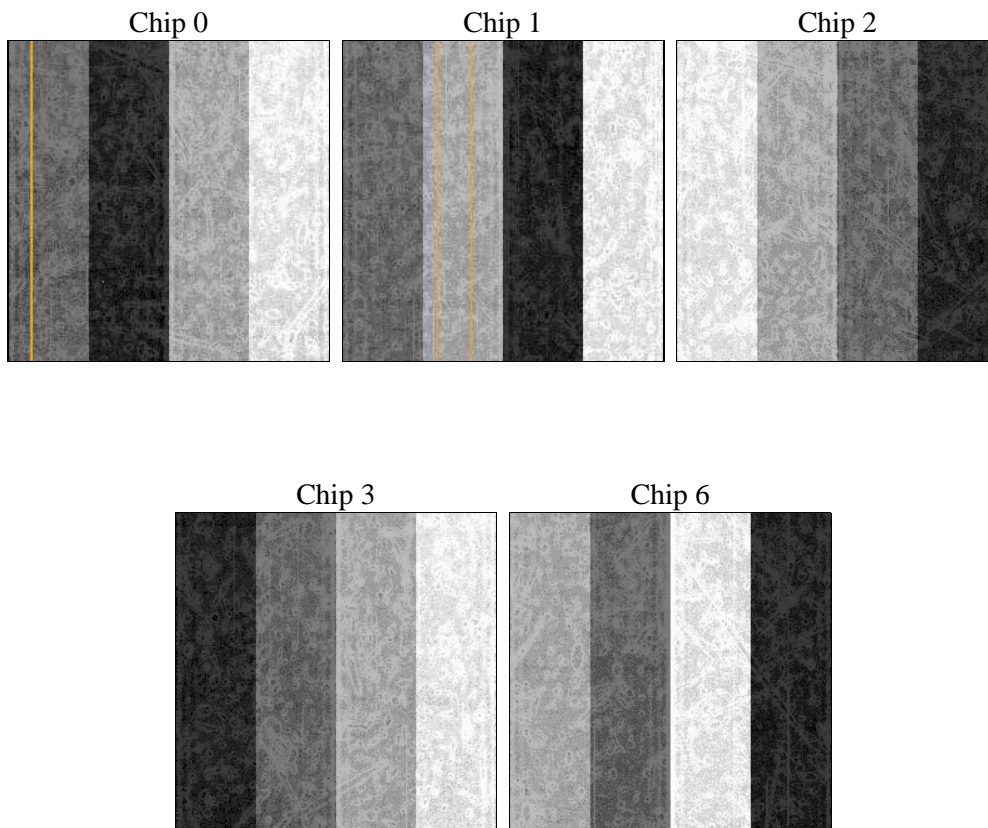
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	26581.596814275	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	26581.473694265	Sum of GTIs [s]
date	2014-11-29T13:08:22	Date and time of file creation	ontime1	26581.514734268	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	26581.555774271	Sum of GTIs [s]
			ontime3	26581.596814275	Sum of GTIs [s]
			ontime6	26581.432654262	Sum of GTIs [s]
			l1events	694792	Number of level 1 events

### 2.1.4 Events

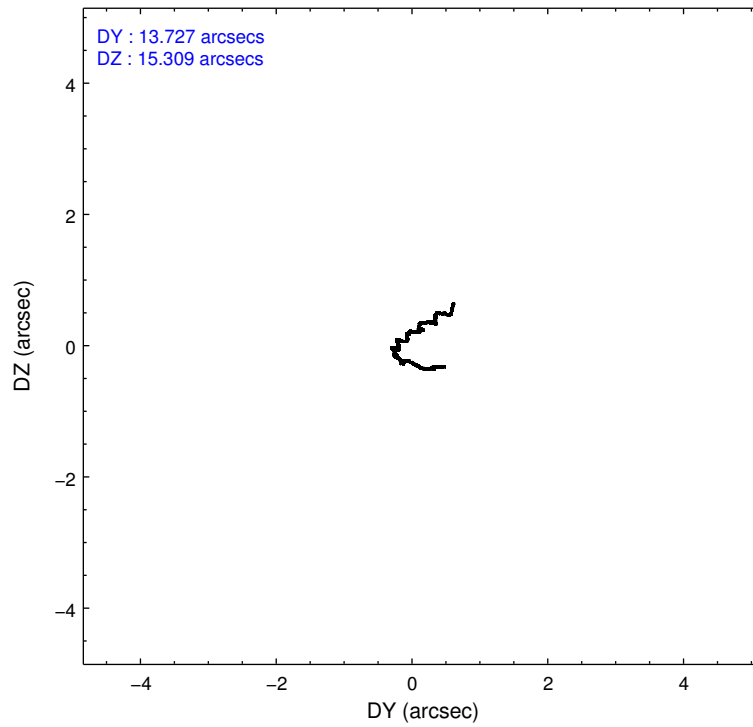
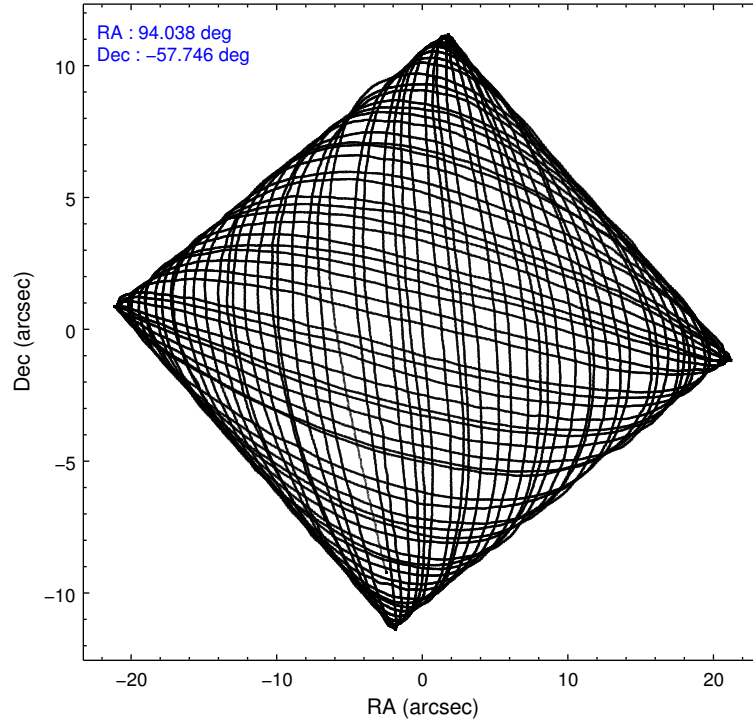
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	131333	132670	145844	141816	143129
rejected events	113108	113299	129076	121766	125514
rejected %	86%	85%	88%	85%	87%

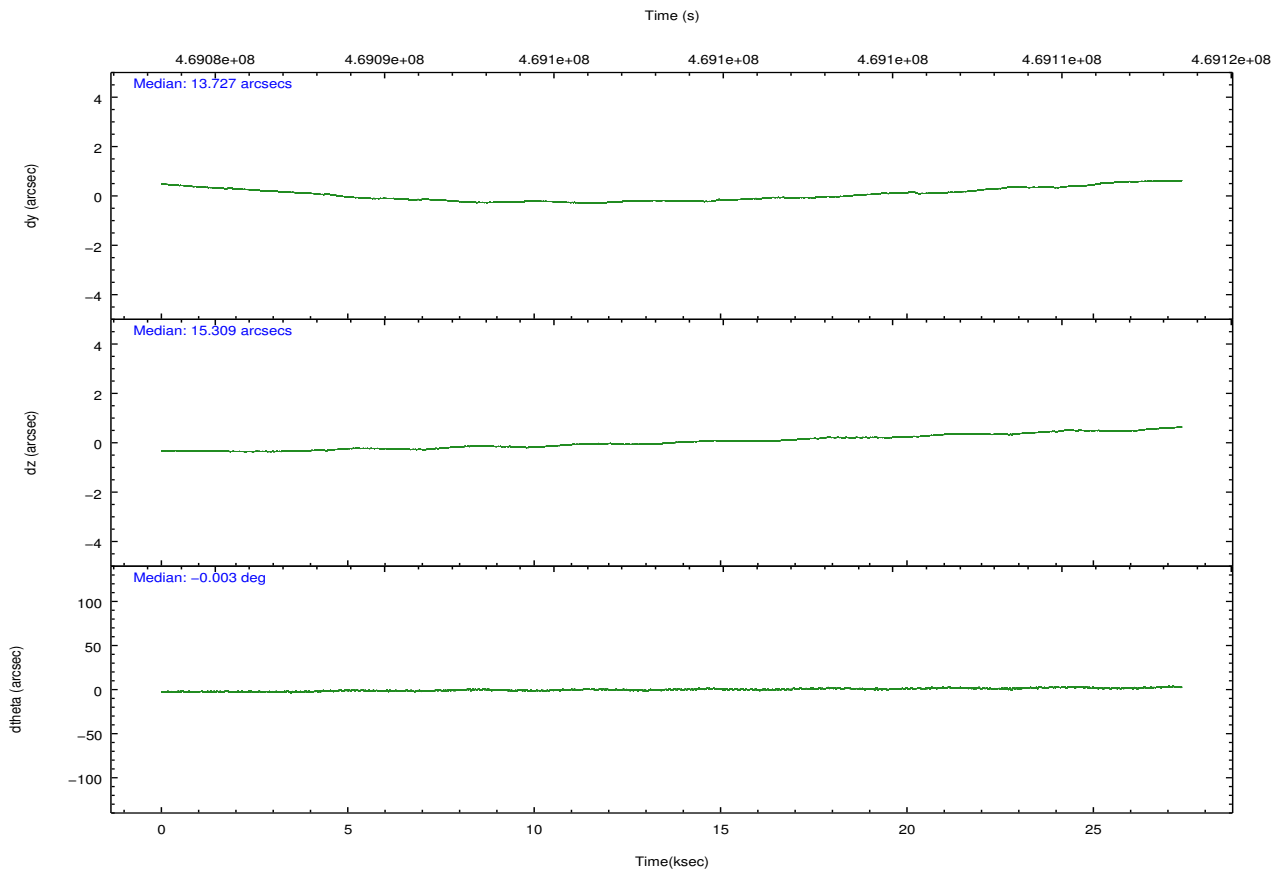
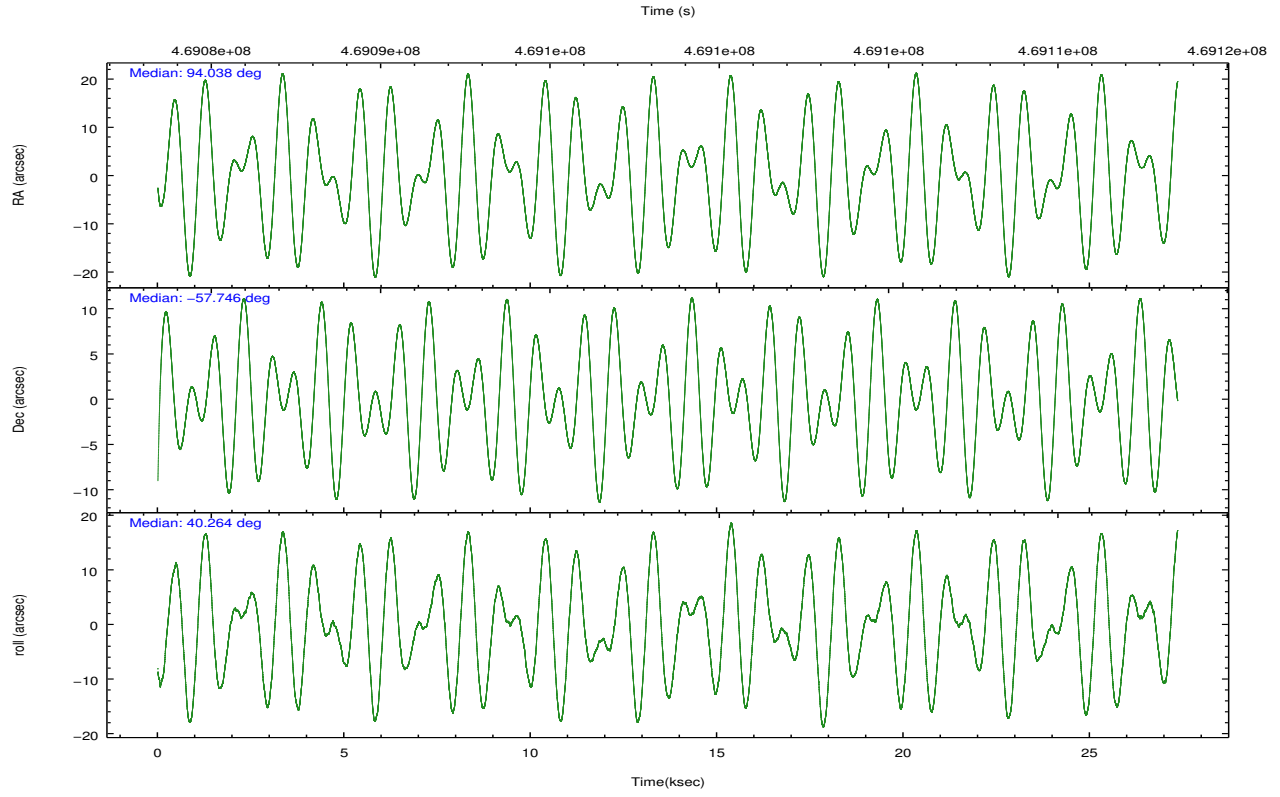
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	6679	7003	6000	8847	6135
	5%	5%	4%	6%	4%
grade 1 events	78	75	89	99	67
	0%	0%	0%	0%	0%
grade 2 events	4377	4619	4167	4008	3943
	3%	3%	2%	2%	2%
grade 3 events	1856	1856	1728	1819	1828
	1%	1%	1%	1%	1%
grade 4 events	1785	1886	1624	1857	1739
	1%	1%	1%	1%	1%
grade 5 events	6646	7157	6429	7629	7250
	5%	5%	4%	5%	5%
grade 6 events	3530	4008	3252	3520	3976
	2%	3%	2%	2%	2%
grade 7 events	106382	106066	122555	114037	118191
	81%	79%	84%	80%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	94.020983	94.03820608942648	CCD I2 on	Y	Y
[deg] Pointing Dec	-57.771687	-57.74575700922444	CCD I3 on	Y	Y
[deg] Pointing Roll	40.045941	40.26919252594548	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	469085669.184000	469084050.92225	CCD S5 on	N	N
Observation start date	2012-11-12T05:33:22	2012-11-12T05:07:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	469112169.184000	469113222.93632	On-chip summing requested	N	N
Observation end date	2012-11-12T12:55:02	2012-11-12T13:13:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





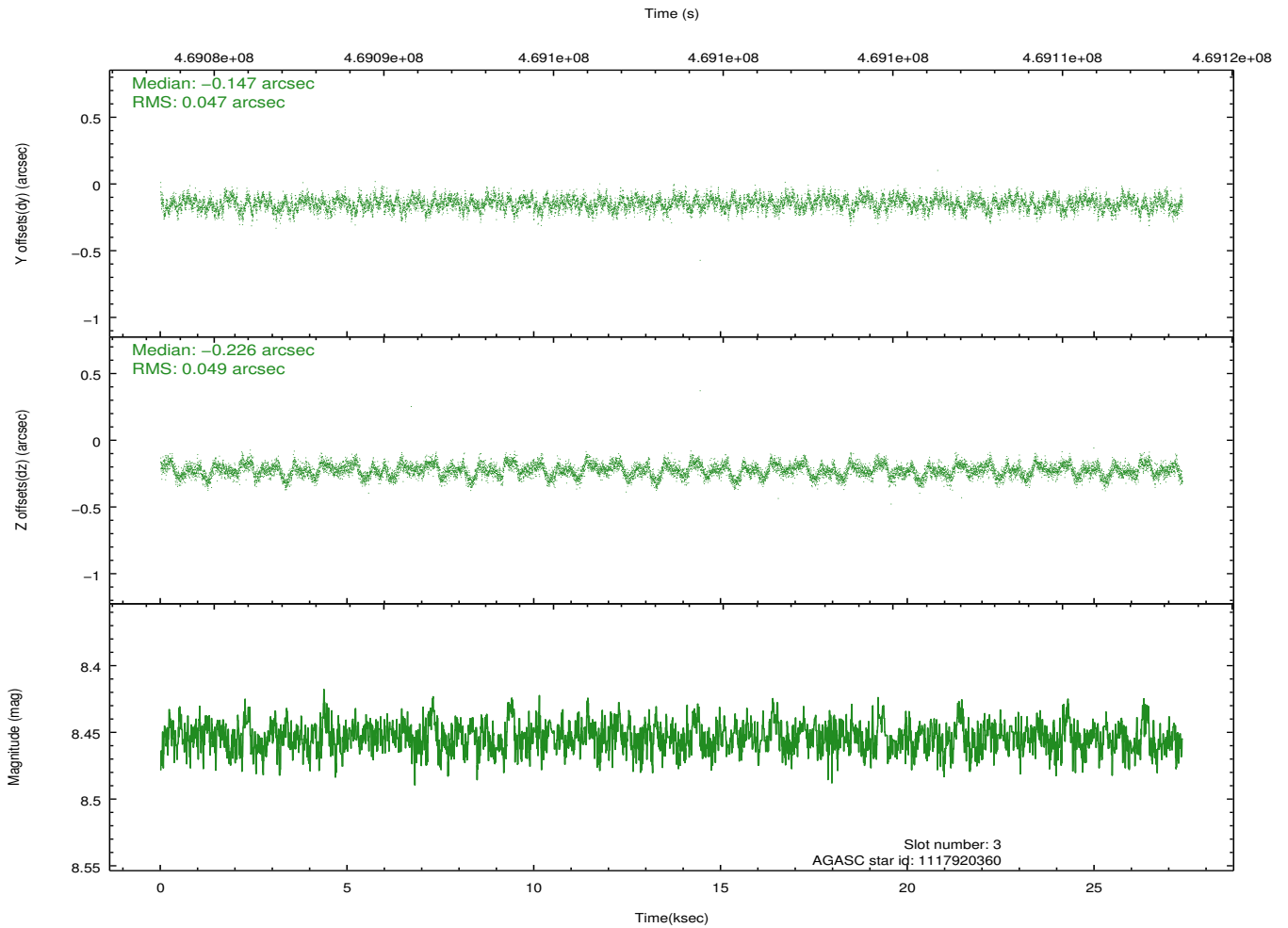
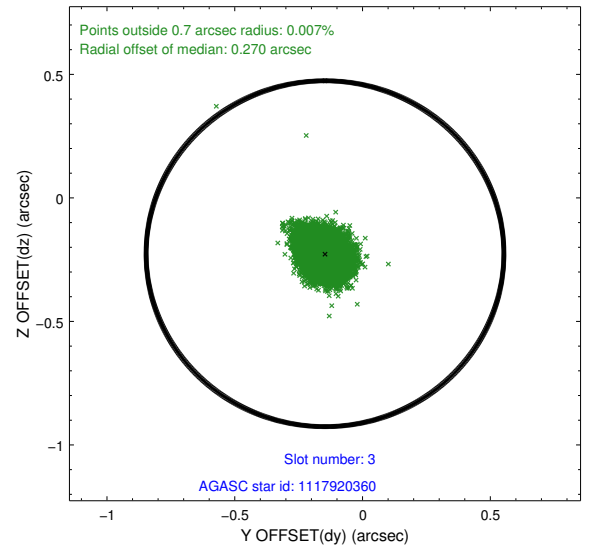
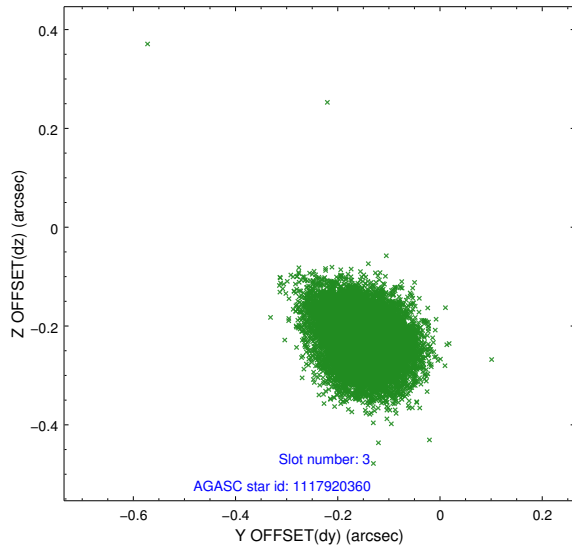
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.08	6672	0.123	-0.098	0.021	0.034	0.000000	0.000000	925.70	-998.12
1	FID		ACIS-I-5	7.06	6672	-0.304	0.093	0.014	0.025	0.000000	0.000000	-1822.81	899.44
2	FID		ACIS-I-6	7.08	6672	0.085	0.074	0.011	0.023	0.000000	0.000000	391.06	1544.08
3	GUIDE	used	1117920360	8.45	13343	-0.147	-0.226	0.072	0.117	92.689586	-57.826981	-2097.87	1470.21
4	GUIDE	used	1119617128	9.09	13332	0.516	0.574	0.123	0.201	93.986624	-58.000911	-580.41	-588.74
5	GUIDE	used	1119617976	8.00	13345	-0.223	-0.205	0.081	0.123	94.543198	-57.336411	1782.57	544.20
6	GUIDE	used	1119620096	9.02	13316	-0.119	0.067	0.125	0.198	94.803811	-58.054312	482.34	-1744.22
7	GUIDE	used	1119622936	9.54	13225	-0.019	-0.198	0.119	0.191	93.865538	-57.055249	1426.46	2170.00

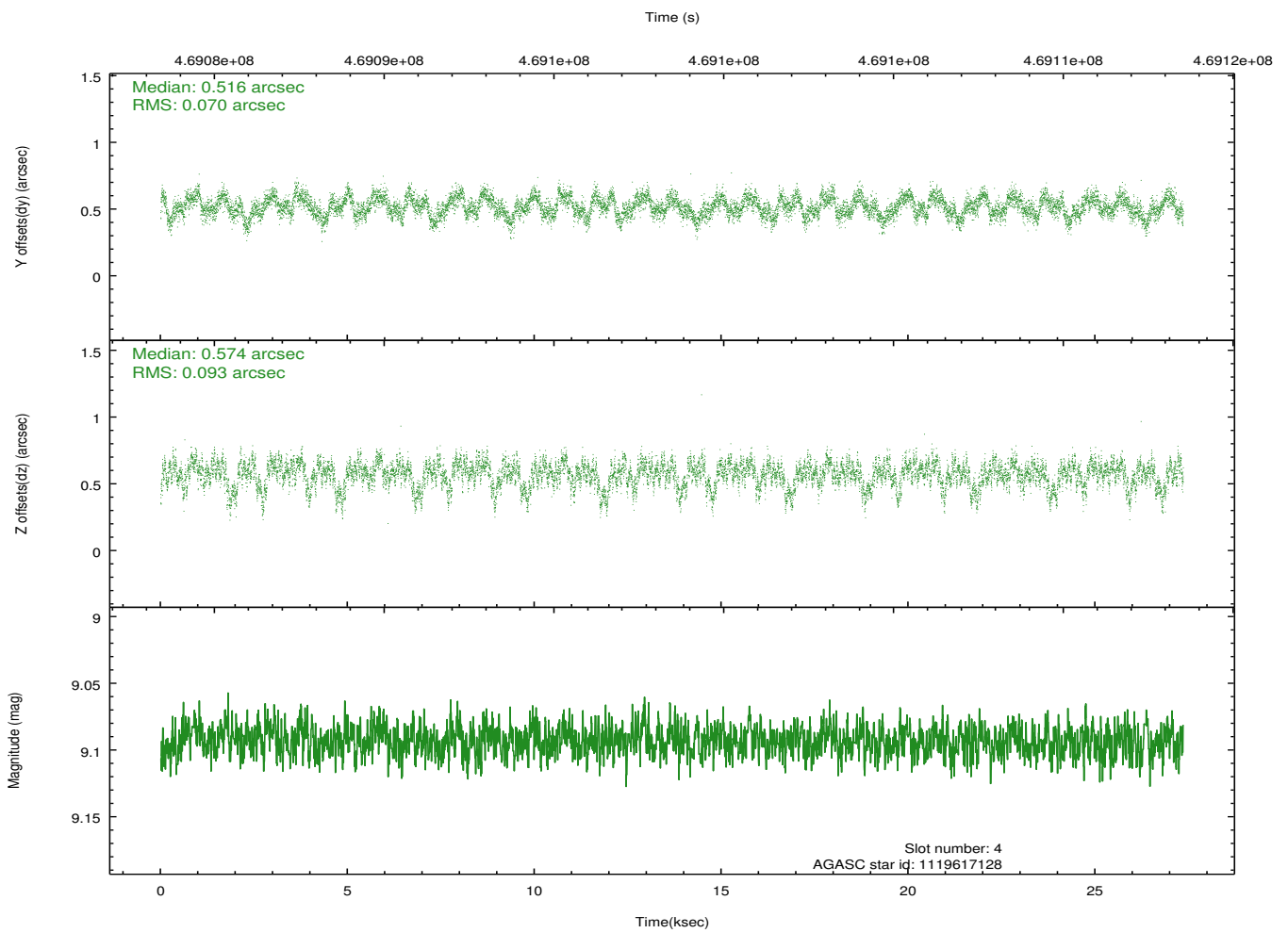
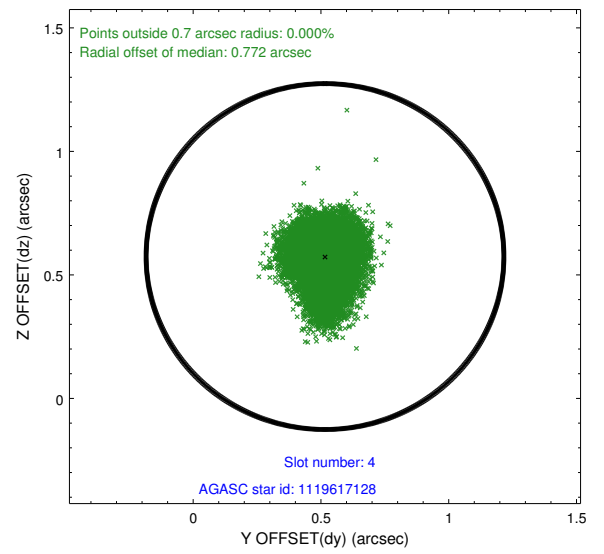
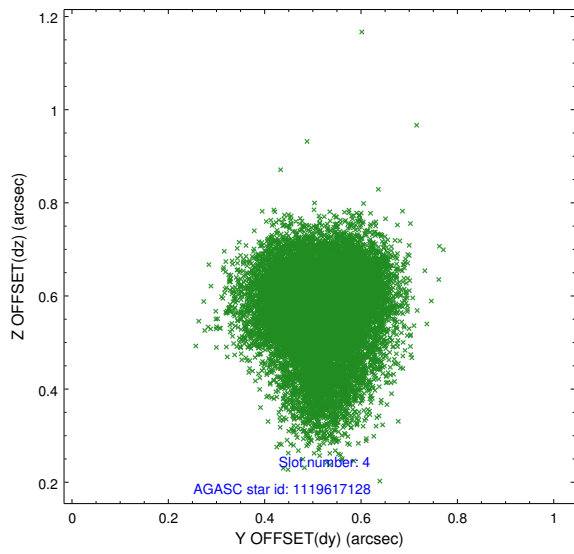
∞

## 2.4 Star Slots

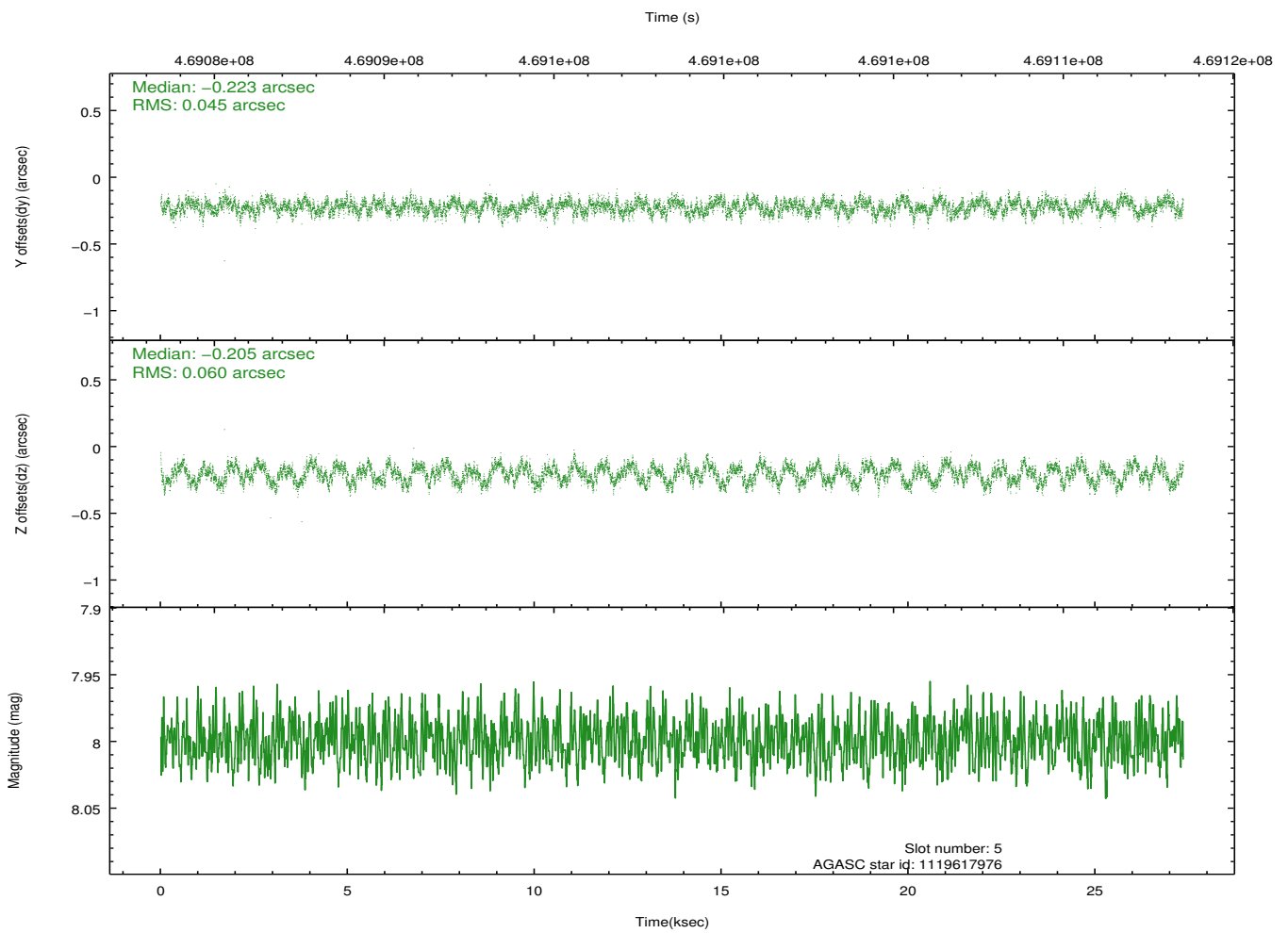
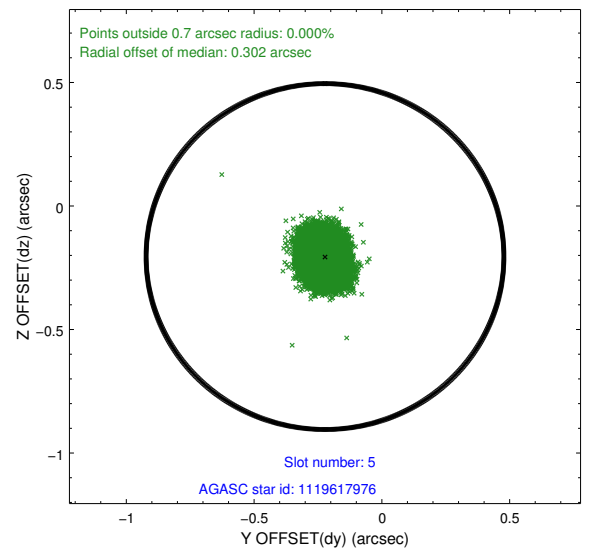
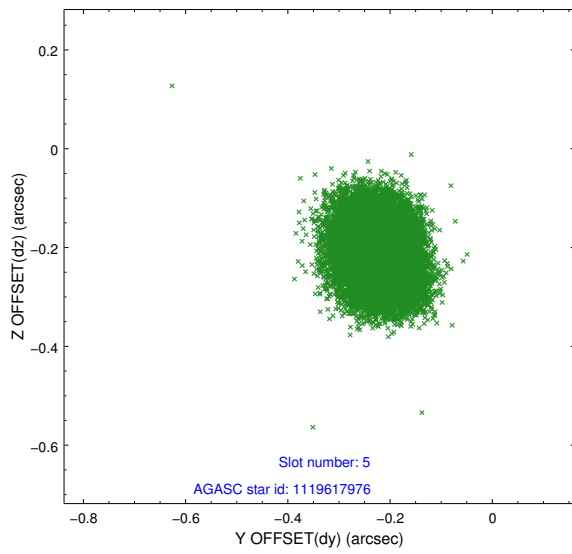
### 2.4.1 Slot 3



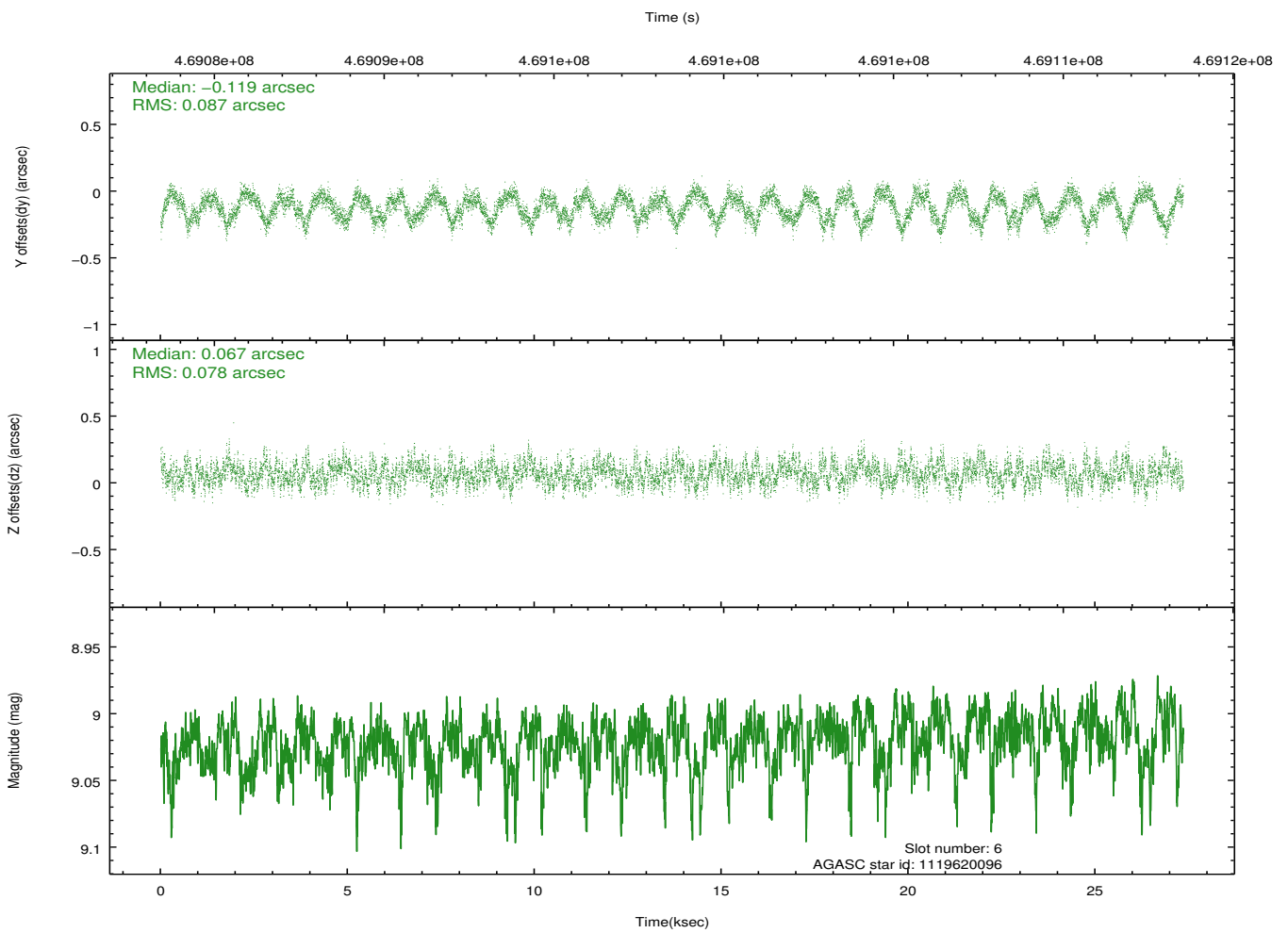
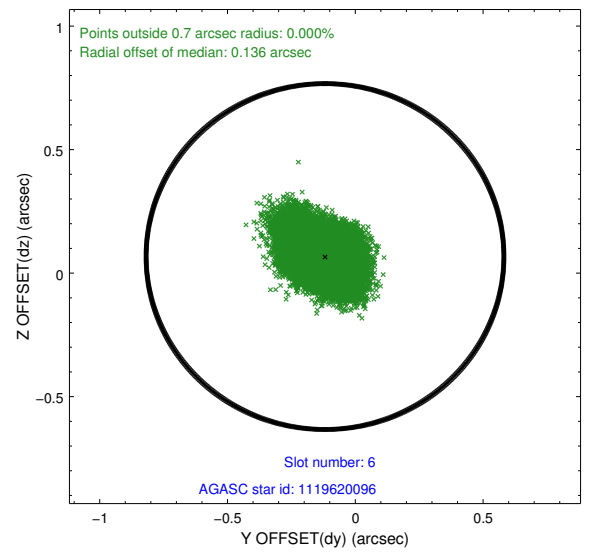
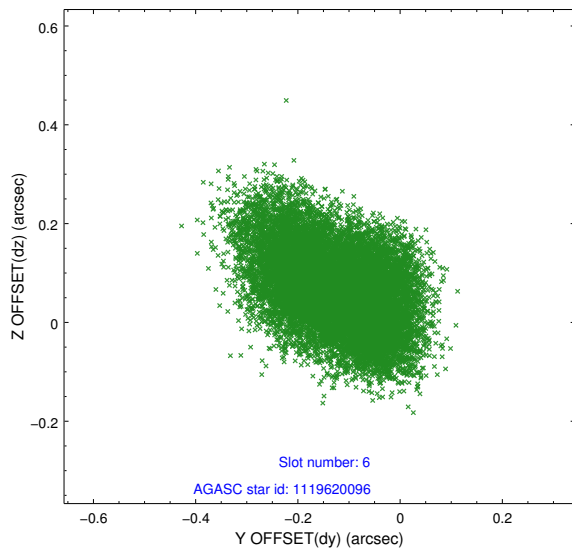
## 2.4.2 Slot 4



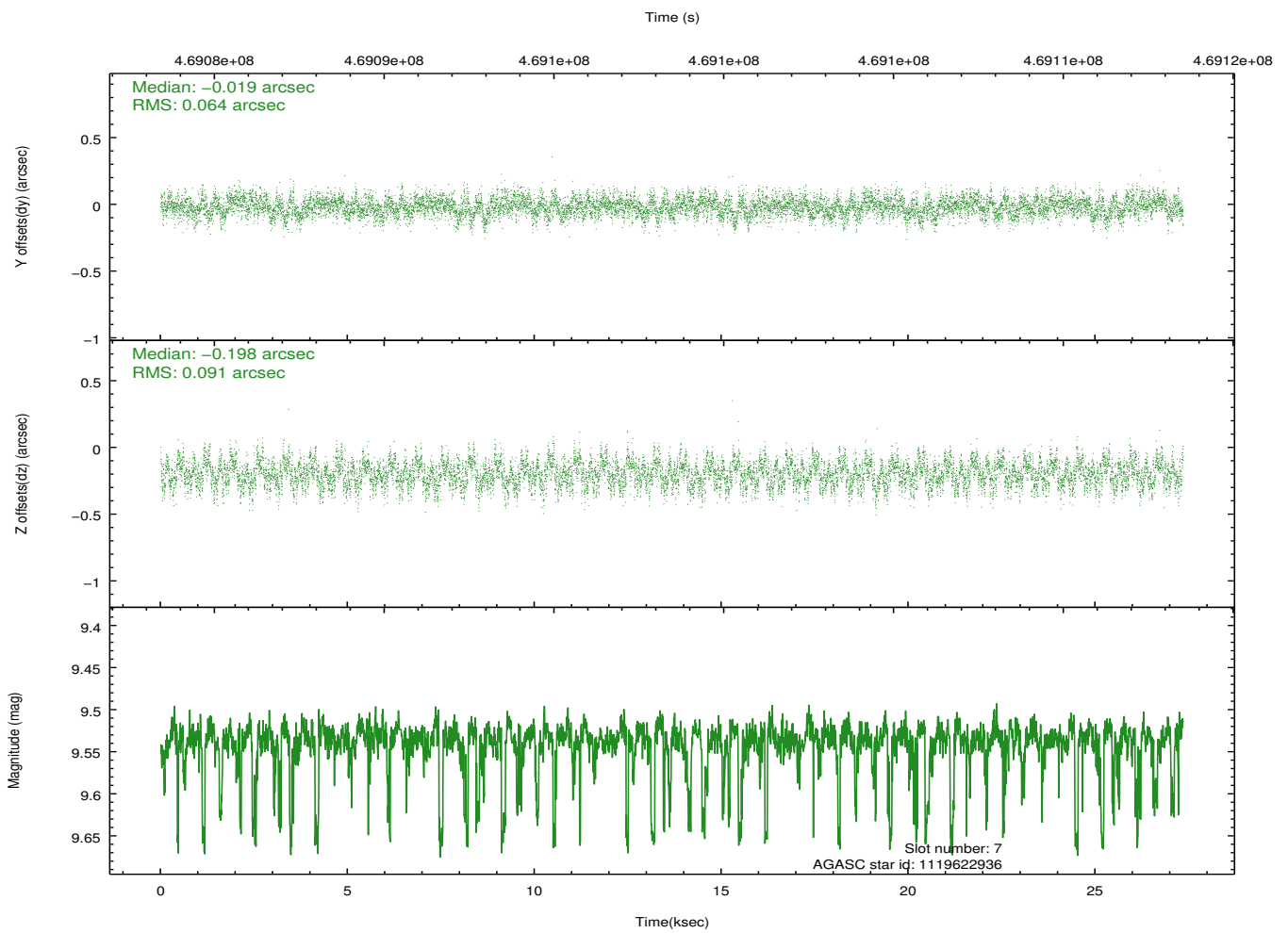
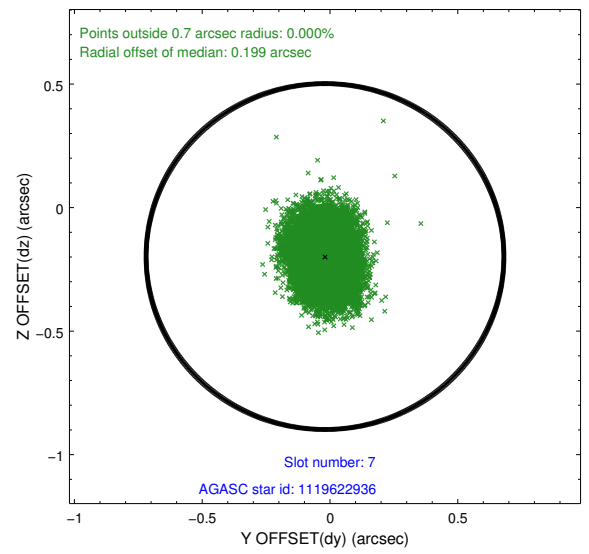
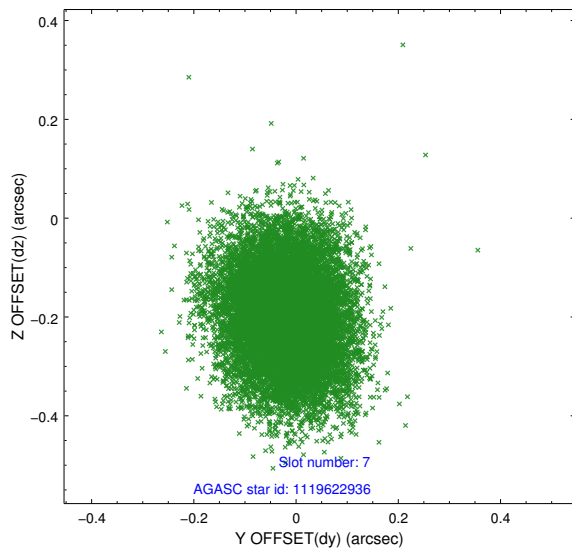
### 2.4.3 Slot 5



## 2.4.4 Slot 6

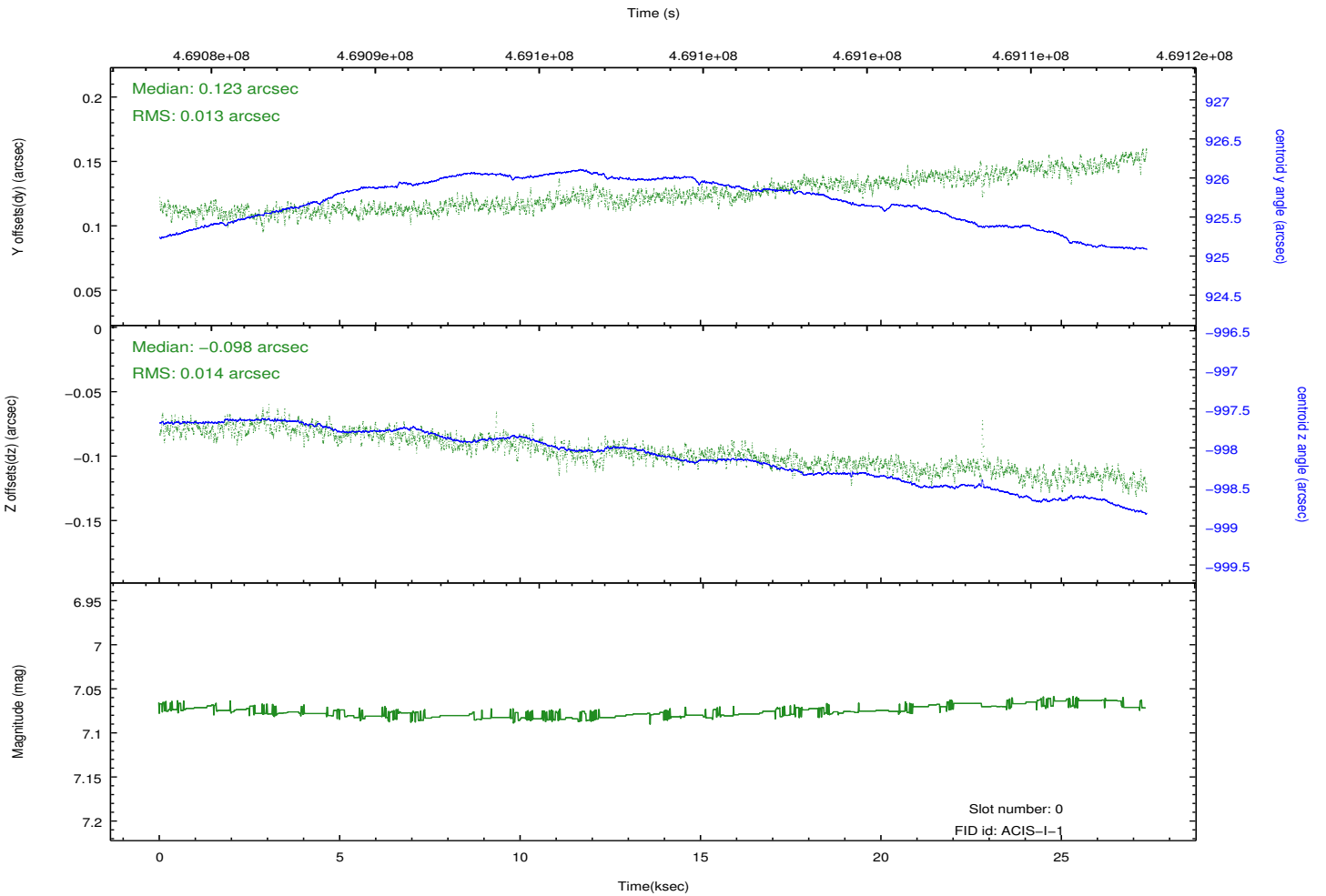
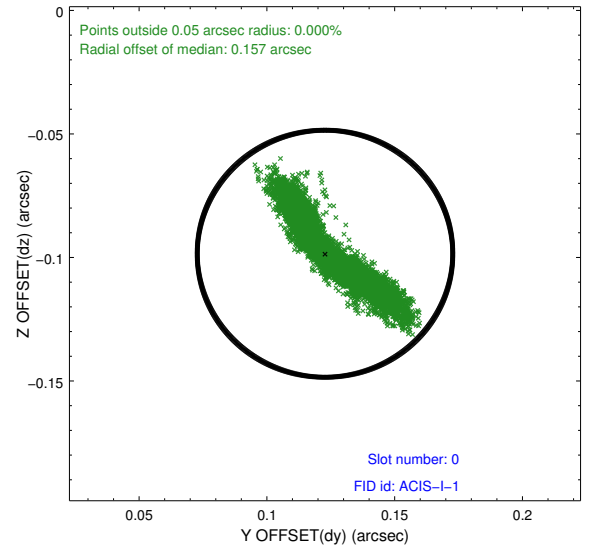
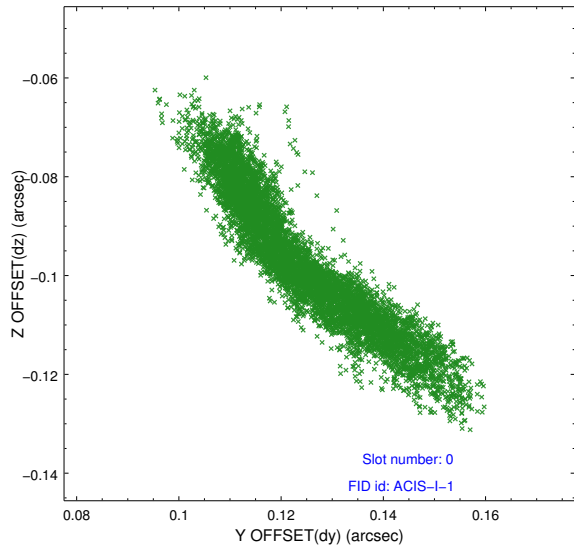


## 2.4.5 Slot 7

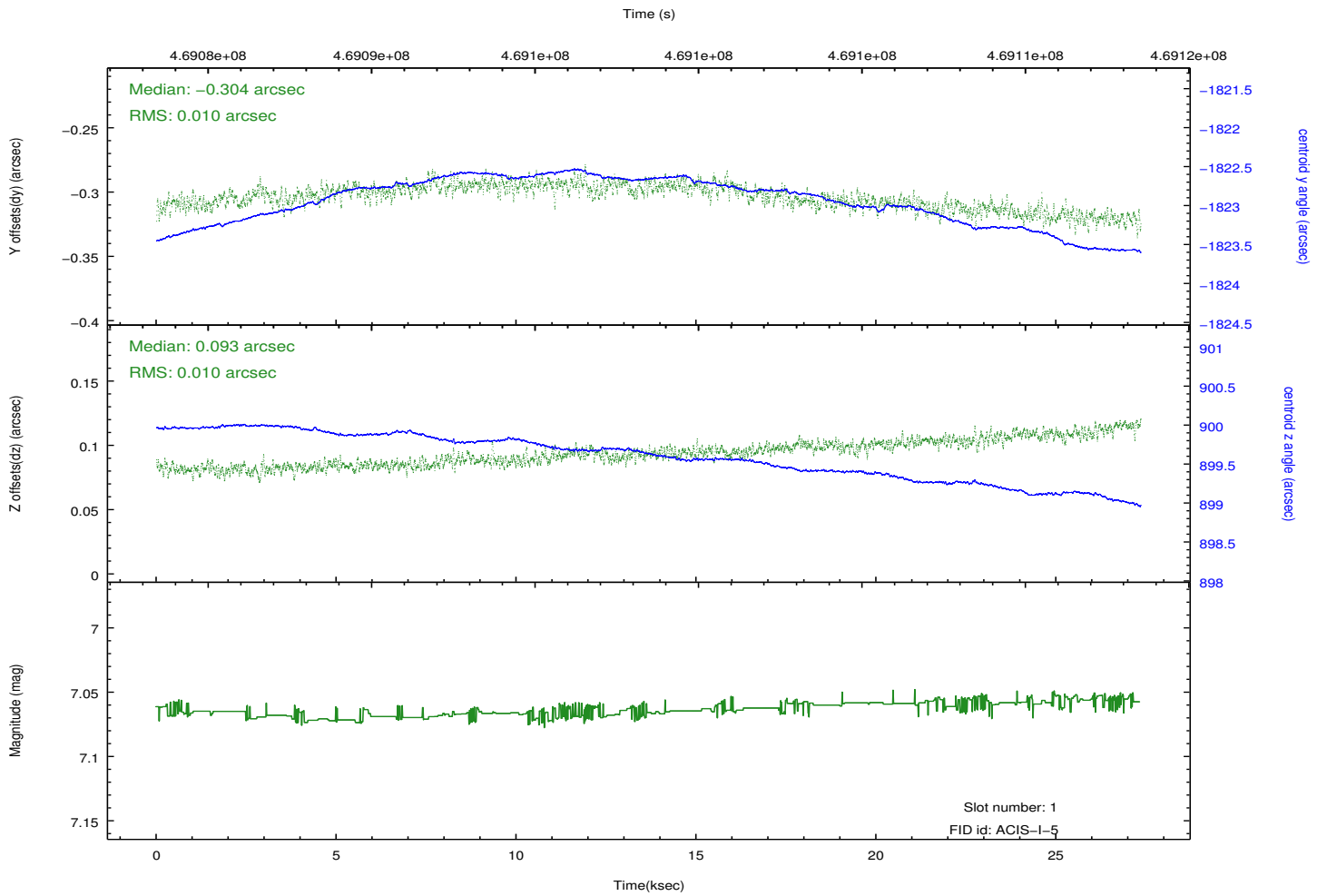
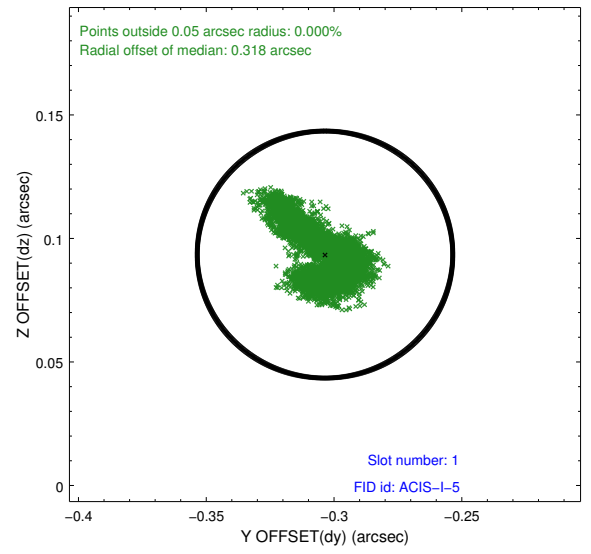
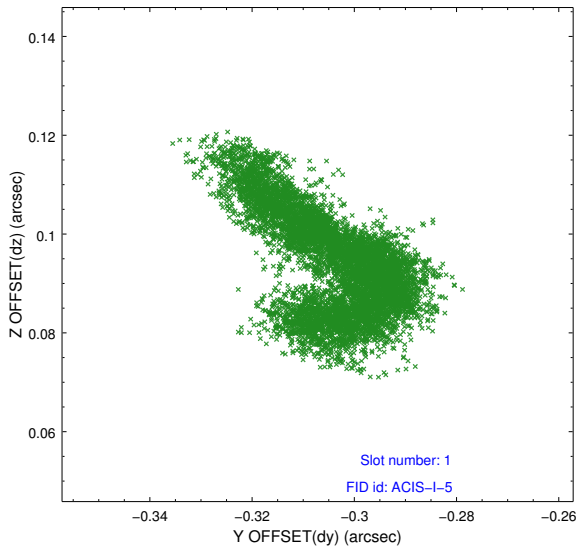


## 2.5 FID Slots

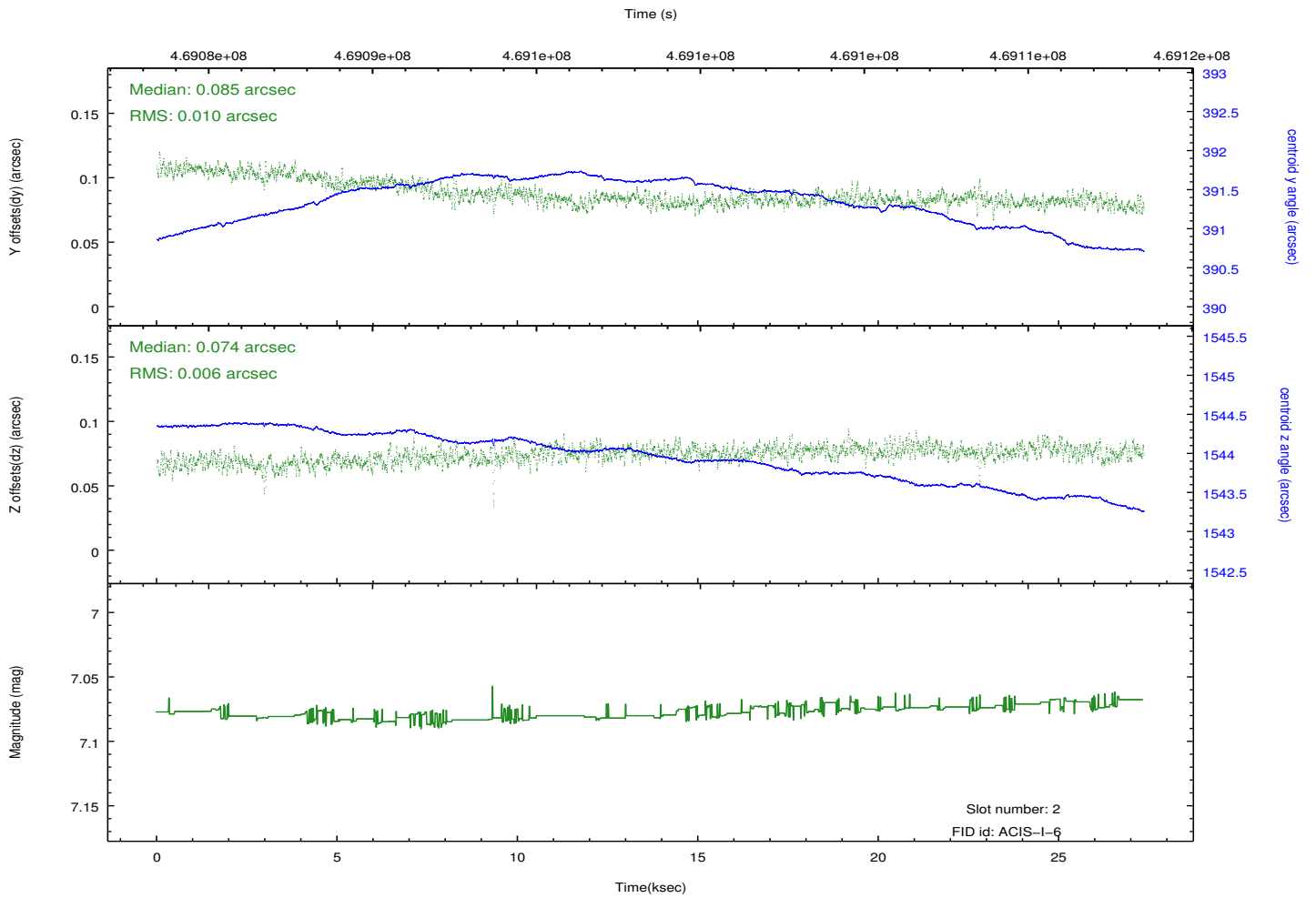
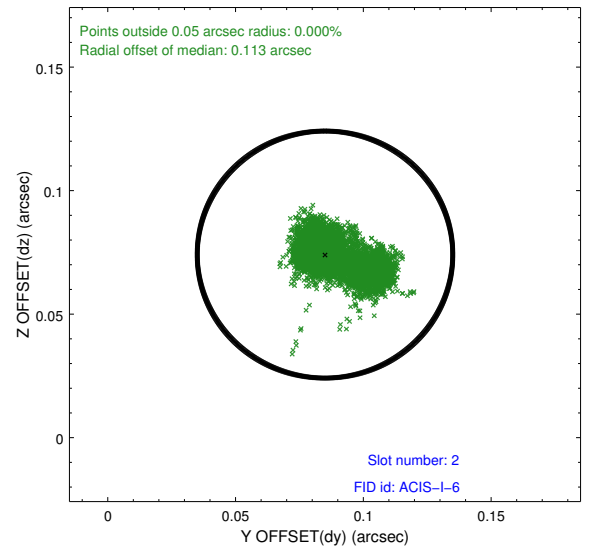
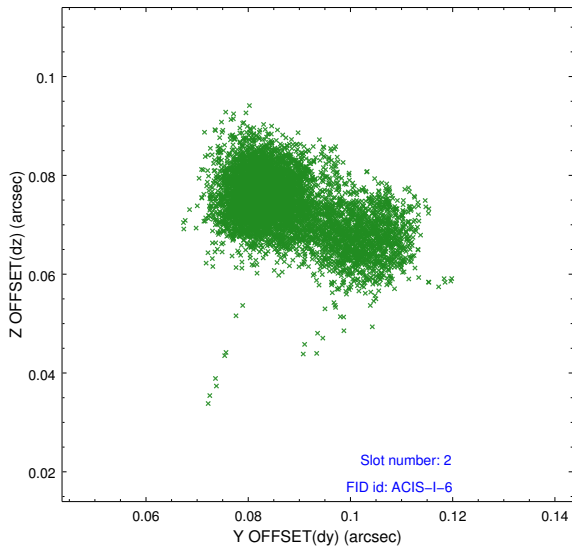
### 2.5.1 Slot 0



## 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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.581596814275

## A.2 Comments

Joint proposal with HST.

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.