

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 9345 - L2 Version 2  
Chandra X-Ray Center

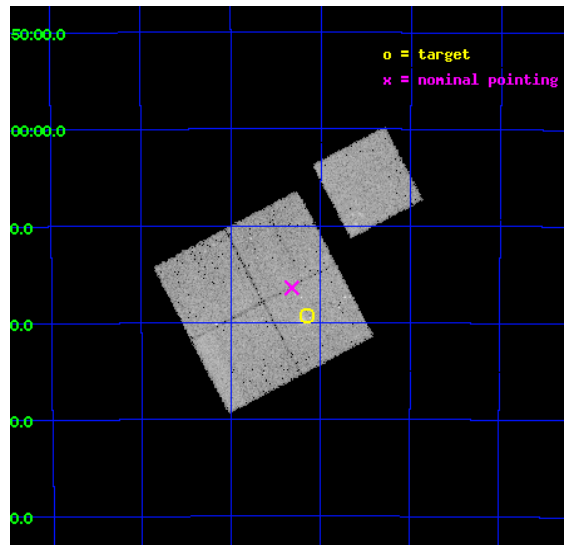
L2 Processing Date : Jun 11 2012

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# 1 Front

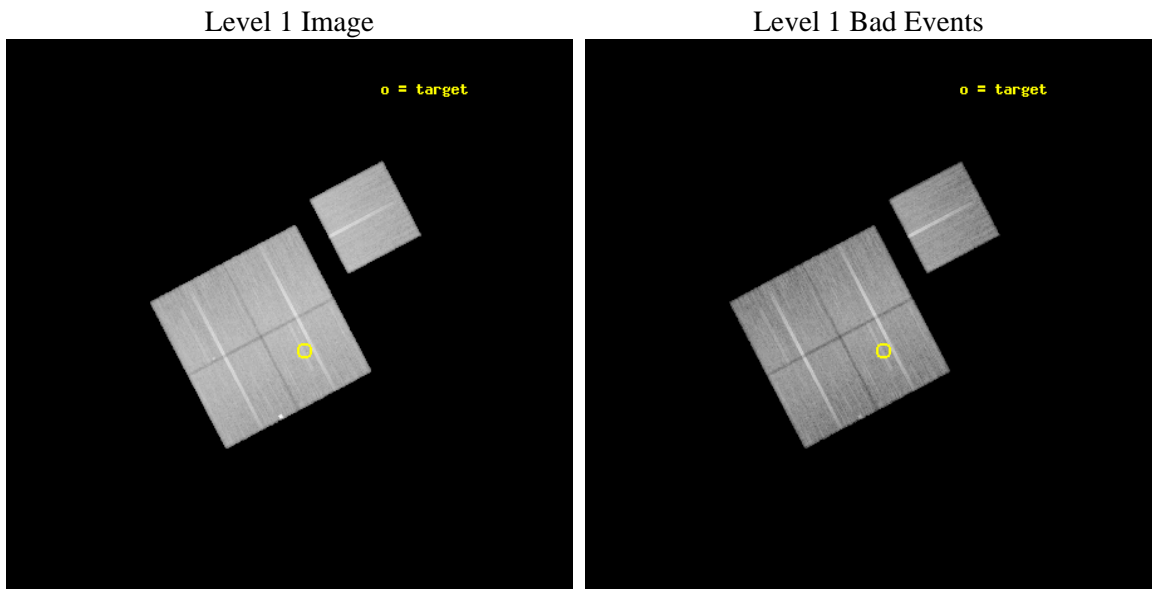
seq_num	800682	Sequence number
obs_id	9345	Observation id
title	South Pole Telescope (SPT) - Chandra Cluster Cosmology	Proposal ti
observer	Dr. Stephen Murray	Principal investigator
object	SPT-CL 2341-5119	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	355.287	Observer's specified target RA [deg]
dec_targ	-51.3208	Observer's specified target Dec [deg]
ra_nom	355.33025212783	Nominal RA [deg]
dec_nom	-51.273593389219	Nominal Dec [deg]
roll_nom	62.242442318365	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30032.718200505	Sum of GTIs [s]
livetime	29640.31862745	Livetime [s]
ontime0	30032.71824038	Sum of GTIs [s]
ontime1	30035.859300137	Sum of GTIs [s]
ontime2	30035.859230757	Sum of GTIs [s]
ontime3	30032.718200505	Sum of GTIs [s]
ontime6	30035.859200895	Sum of GTIs [s]
l2events	115663	Number of level 2 events



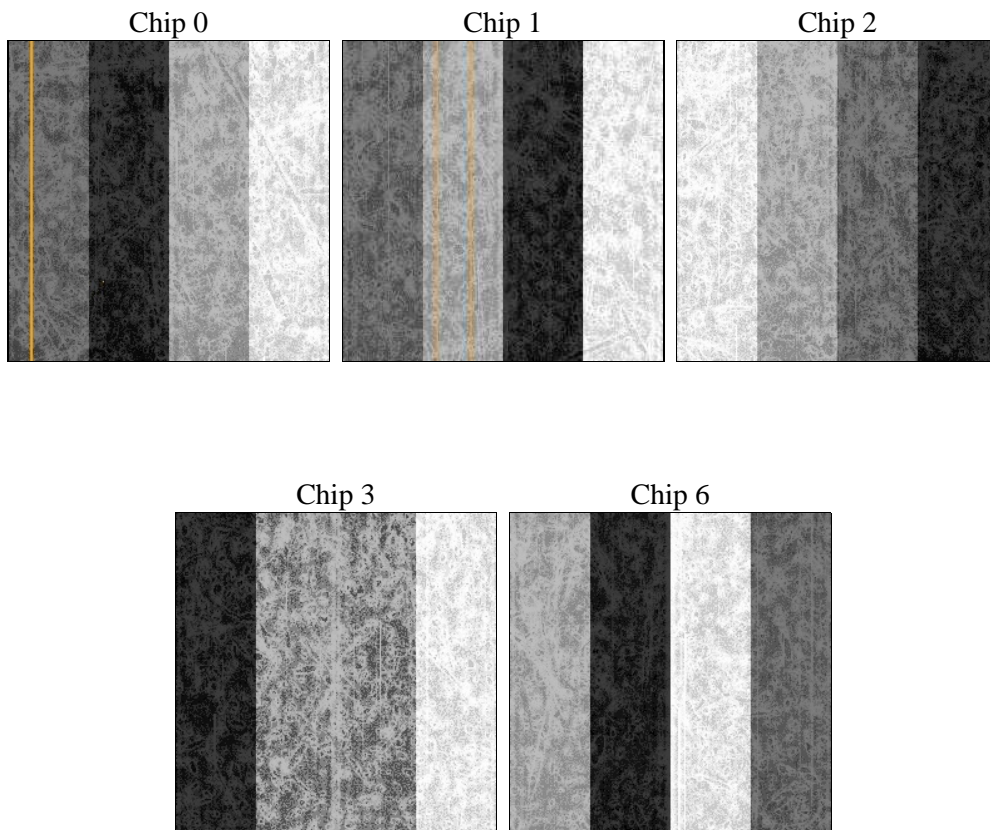
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30032.718200505	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime0	30032.71824038	Sum of GTIs [s]
date	2012-06-11T02:10:17	Date and time of file creation	ontime1	30035.859300137	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30035.859230757	Sum of GTIs [s]
			ontime3	30032.718200505	Sum of GTIs [s]
			ontime6	30035.859200895	Sum of GTIs [s]
			l1events	1324462	Number of level 1 events

### 2.1.4 Events

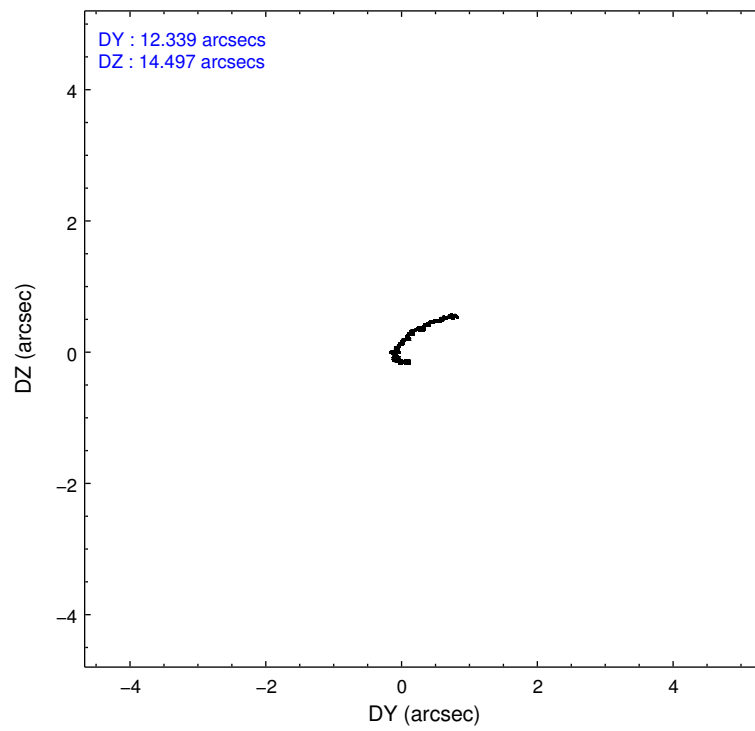
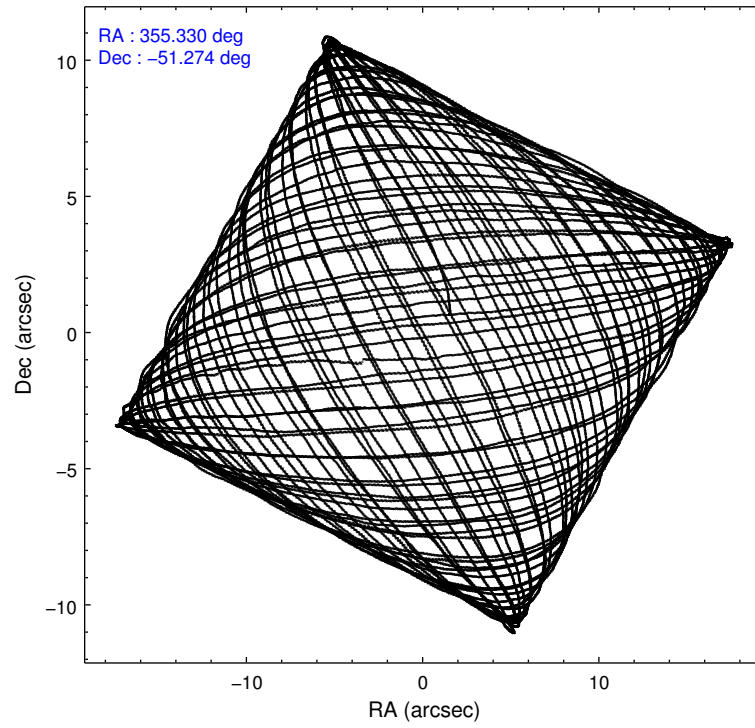
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	252661	253689	281919	266615	269578
rejected events	225524	219204	255114	239759	241616
rejected %	89%	86%	90%	89%	89%

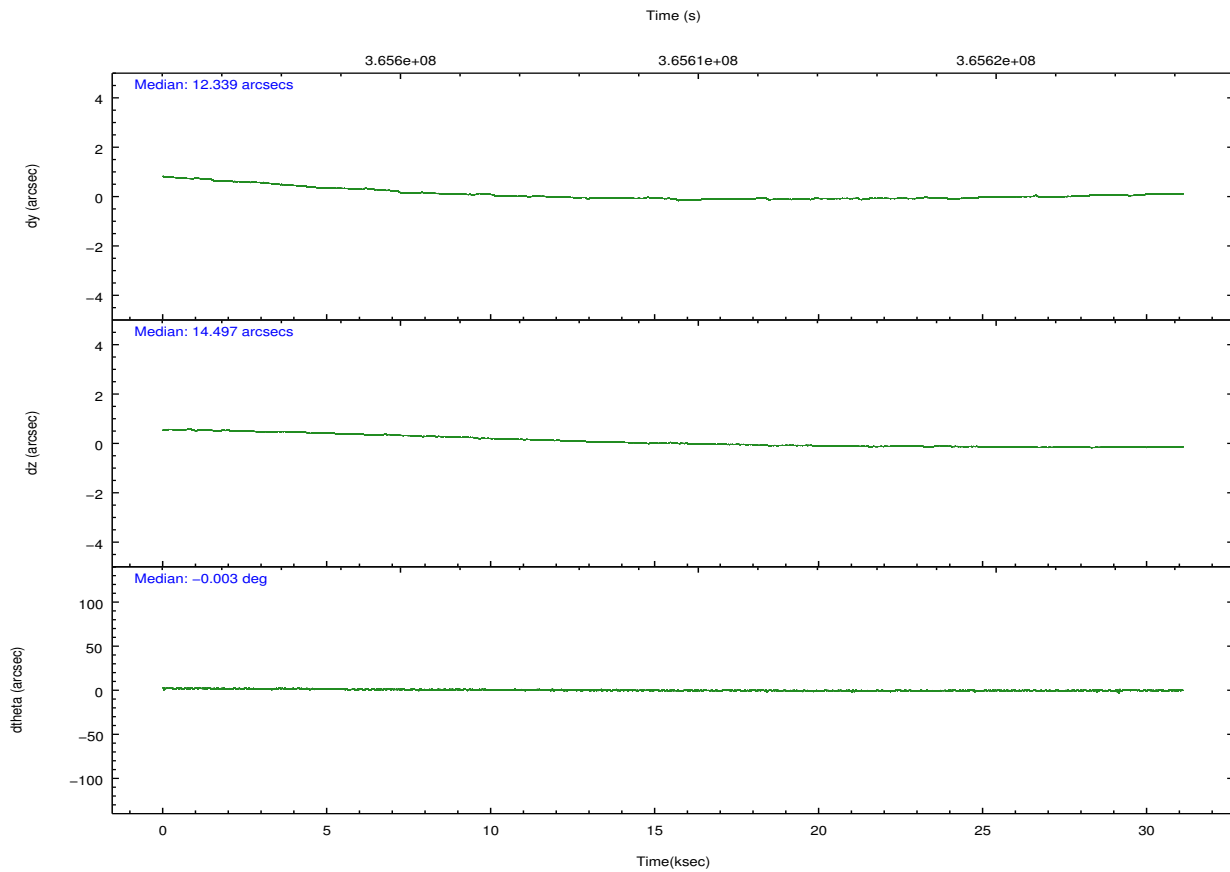
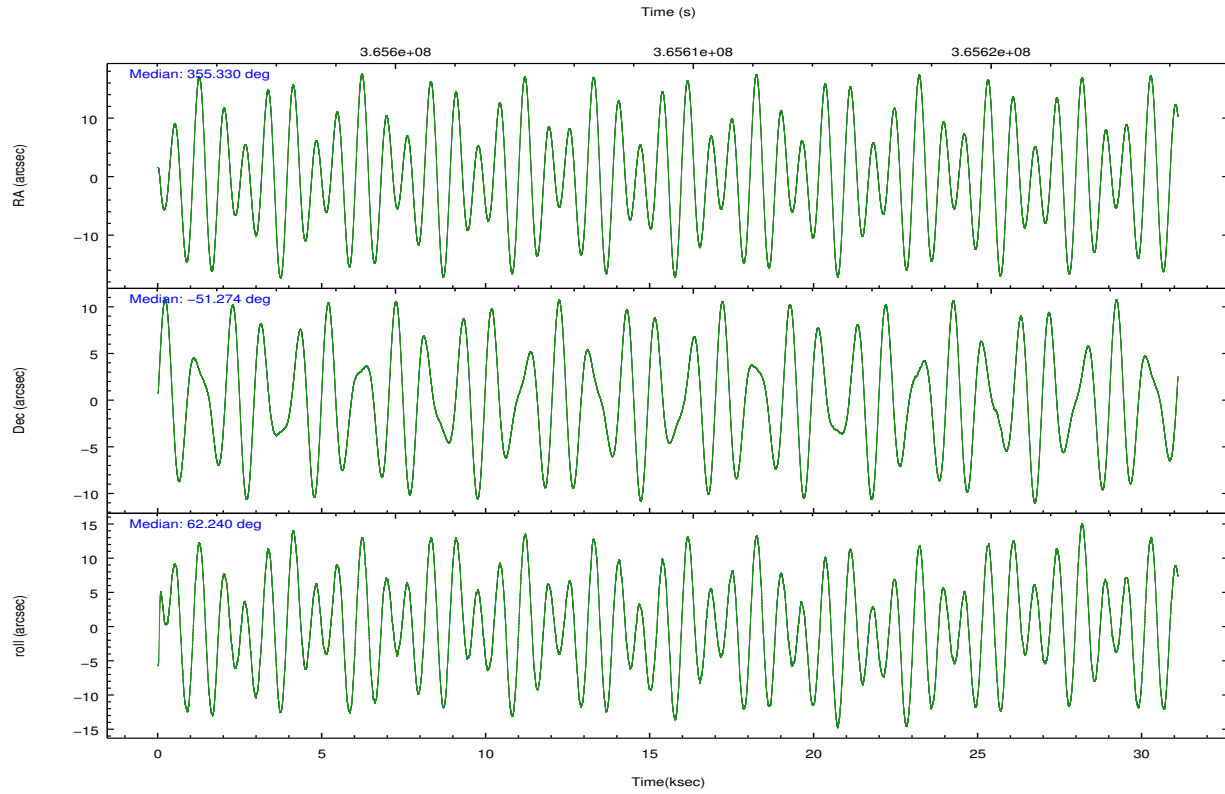
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	9452	14841	9611	9875	9957
	3%	5%	3%	3%	3%
grade 1 events	138	251	168	167	132
	0%	0%	0%	0%	0%
grade 2 events	6801	7024	6706	5971	6182
	2%	2%	2%	2%	2%
grade 3 events	2891	3192	2709	2891	3007
	1%	1%	0%	1%	1%
grade 4 events	2797	3184	2786	2933	2917
	1%	1%	0%	1%	1%
grade 5 events	9682	10778	9276	11295	10761
	3%	4%	3%	4%	3%
grade 6 events	5198	6253	4994	5189	5902
	2%	2%	1%	1%	2%
grade 7 events	215702	208166	245669	228294	230720
	85%	82%	87%	85%	85%

## 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	355.332148	355.3302521278284	CCD I2 on	Y	Y
[deg] Pointing Dec	-51.301074	-51.27359338921927	CCD I3 on	Y	Y
[deg] Pointing Roll	62.035239	62.24244231836514	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	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	365594709.184000	365593022.32777	CCD S5 on	N	N
Observation start date	2009-08-02T10:04:03	2009-08-02T09:37:02	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	365624709.184000	365625163.76688	On-chip summing requested	N	N
Observation end date	2009-08-02T18:24:03	2009-08-02T18:32:43	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





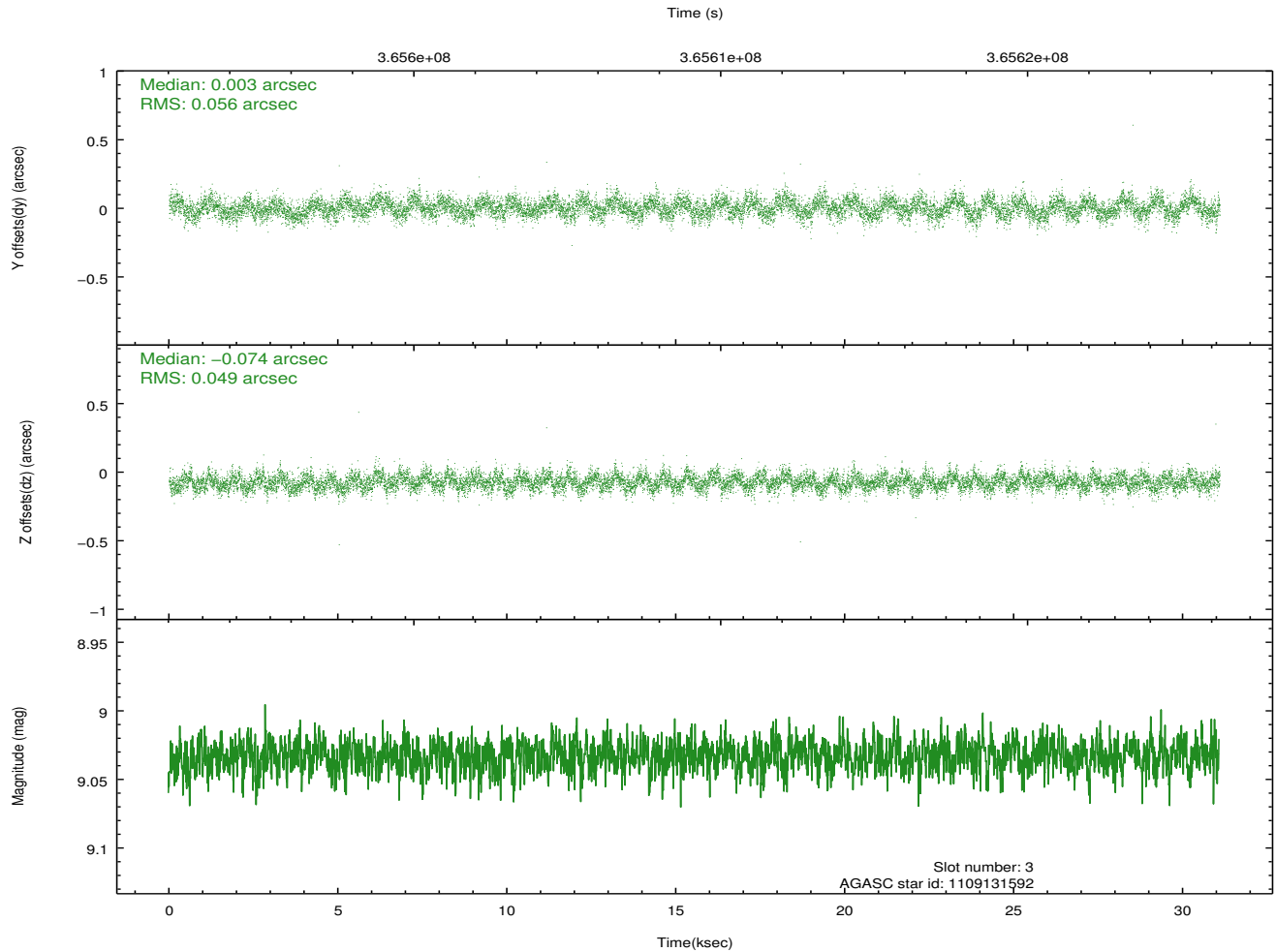
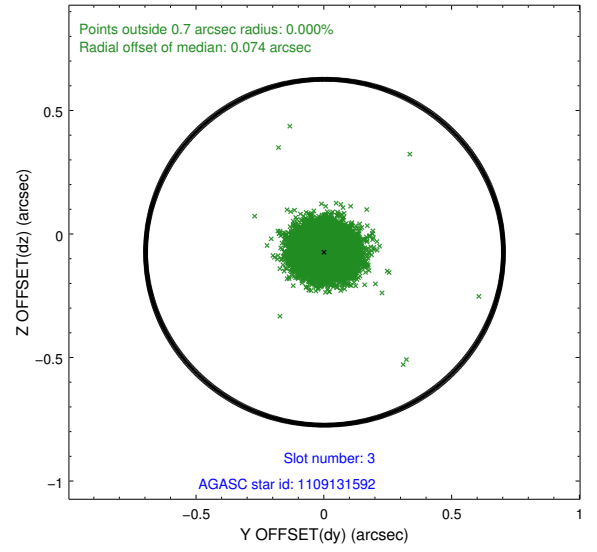
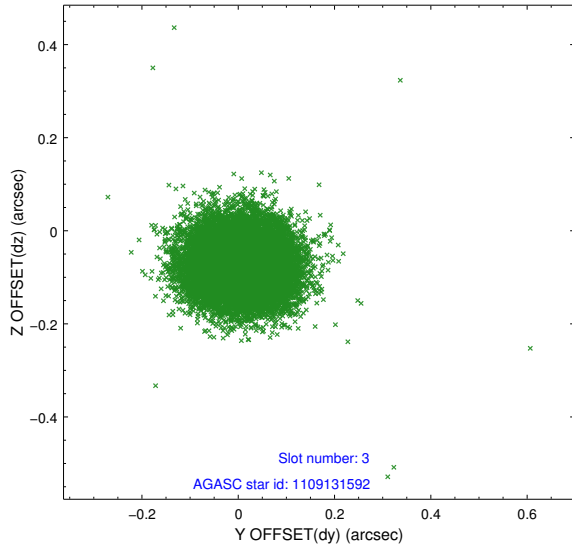
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	7584	0.083	-0.073	0.011	0.021	0.000000	0.000000	927.05	-997.31
1	FID	ACIS-I-5	7.01	7584	-0.225	0.075	0.012	0.032	0.000000	0.000000	-1821.37	900.22
2	FID	ACIS-I-6	7.04	7583	0.051	0.070	0.011	0.021	0.000000	0.000000	392.45	1544.84
3	GUIDE	1109131592	9.03	15156	0.003	-0.074	0.079	0.127	355.617183	-50.699413	2216.84	441.17
4	GUIDE	1109132040	9.32	15148	0.108	0.126	0.095	0.154	355.829522	-52.105894	-2046.24	-2331.95
5	GUIDE	1109132320	8.86	15160	0.131	0.015	0.079	0.126	355.885442	-51.348861	427.65	-1181.77
6	GUIDE	1109134344	7.70	15155	-0.131	0.042	0.067	0.111	355.000339	-51.616738	-1352.92	121.53
7	GUIDE	1109138912	8.03	15162	-0.111	-0.113	0.057	0.094	354.931465	-50.754503	1308.03	1727.34

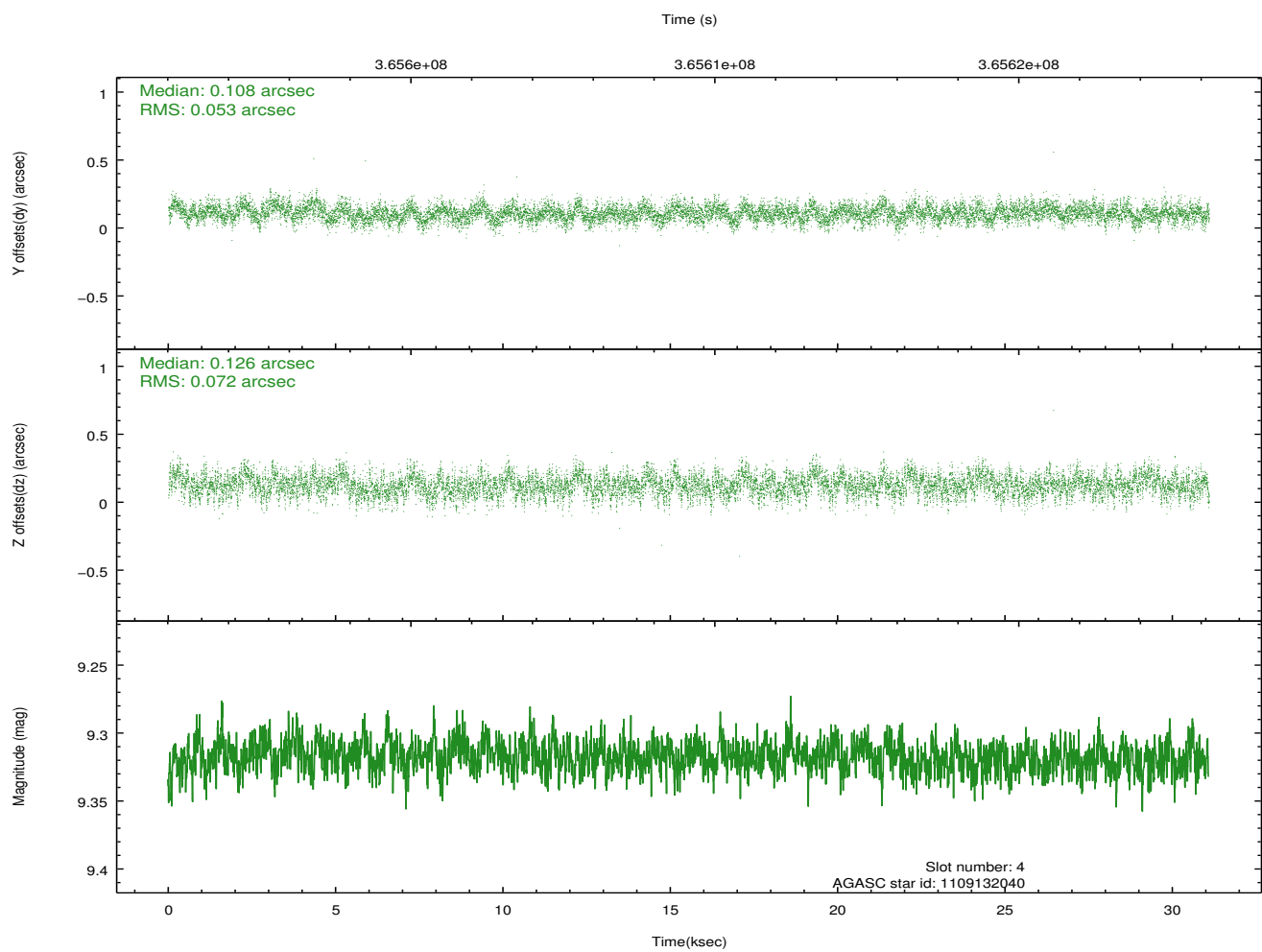
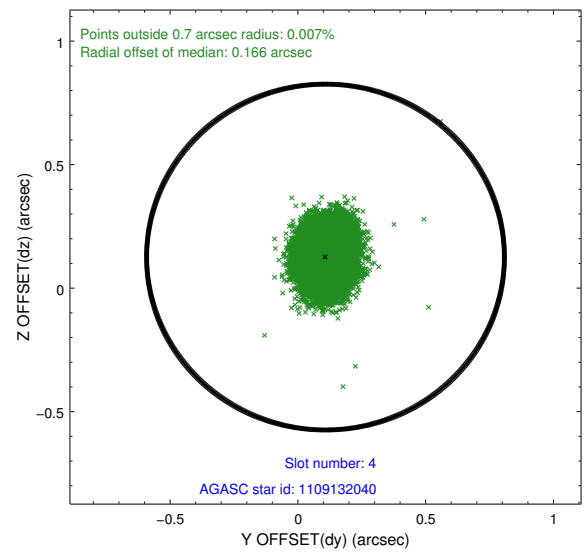
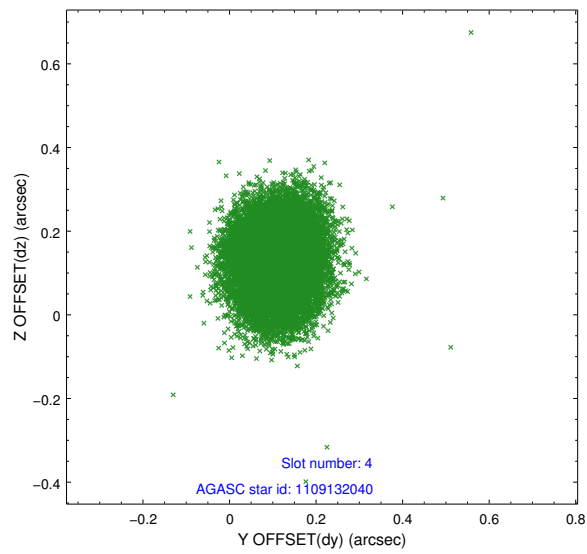
∞

## 2.4 Star Slots

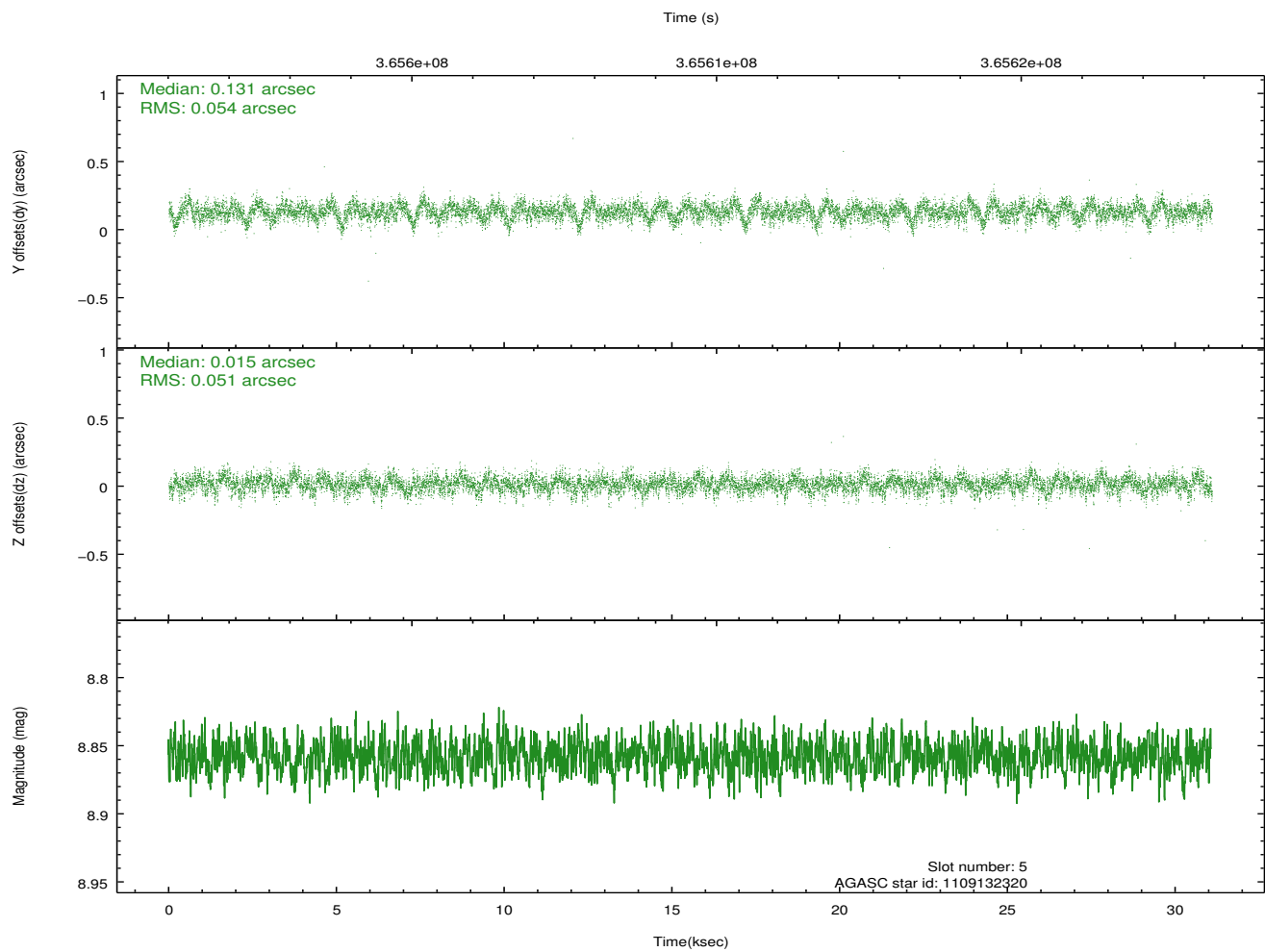
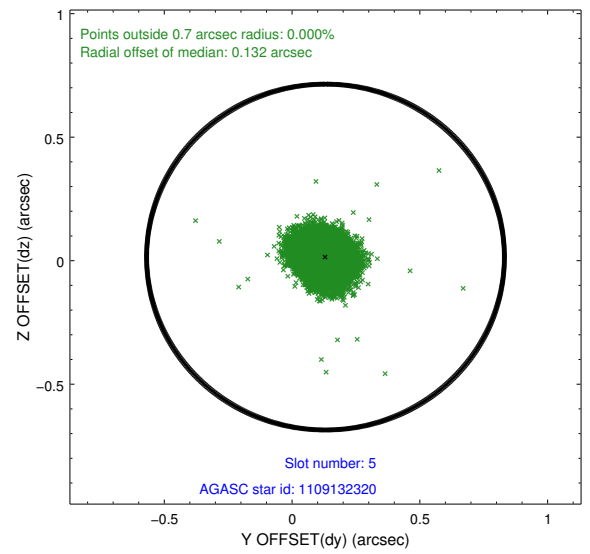
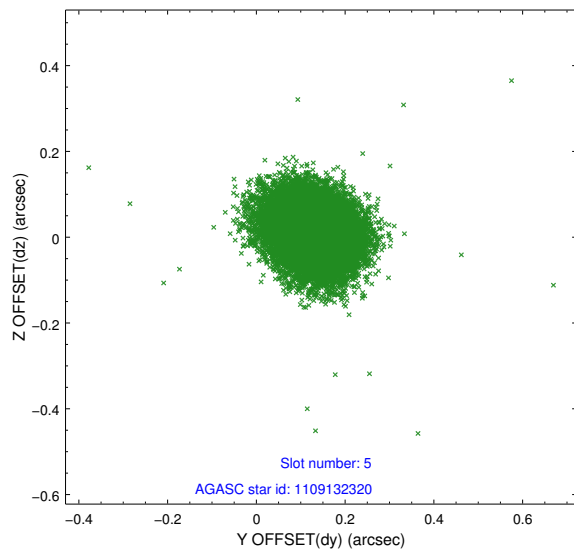
### 2.4.1 Slot 3



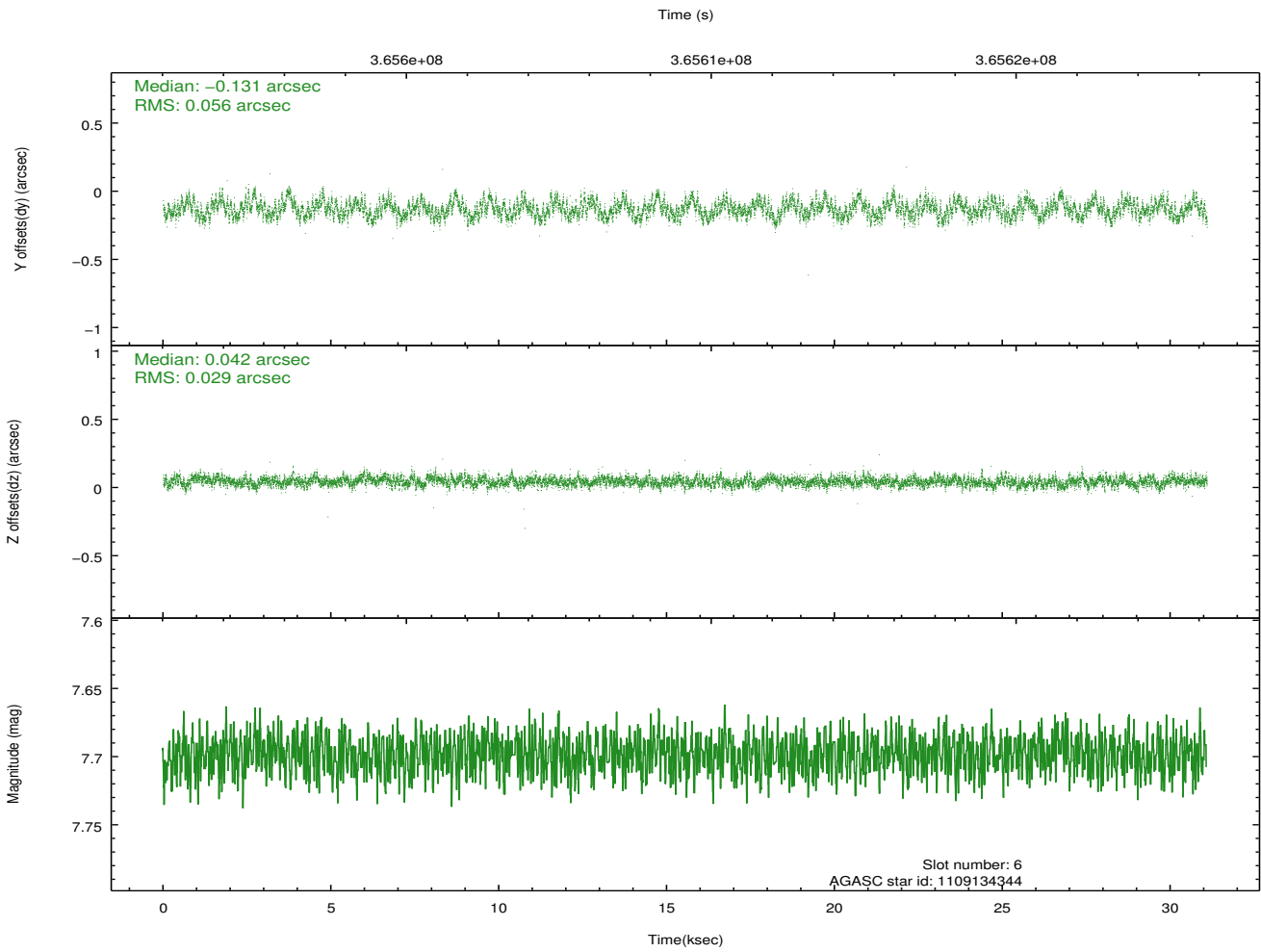
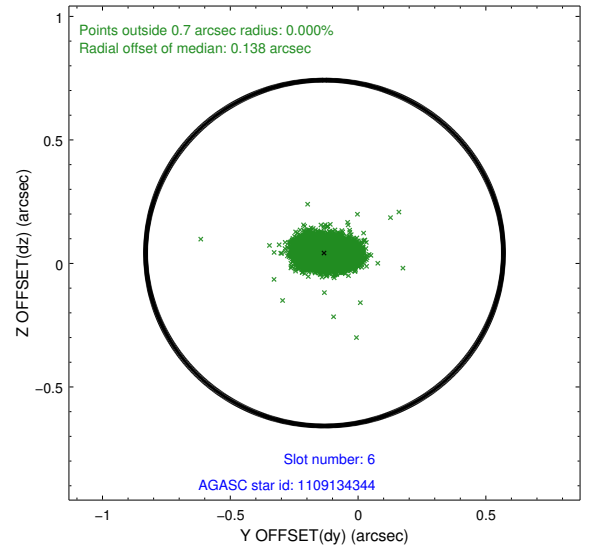
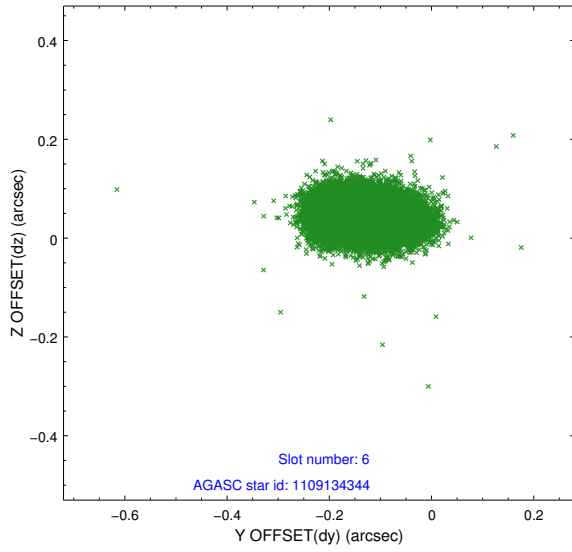
## 2.4.2 Slot 4



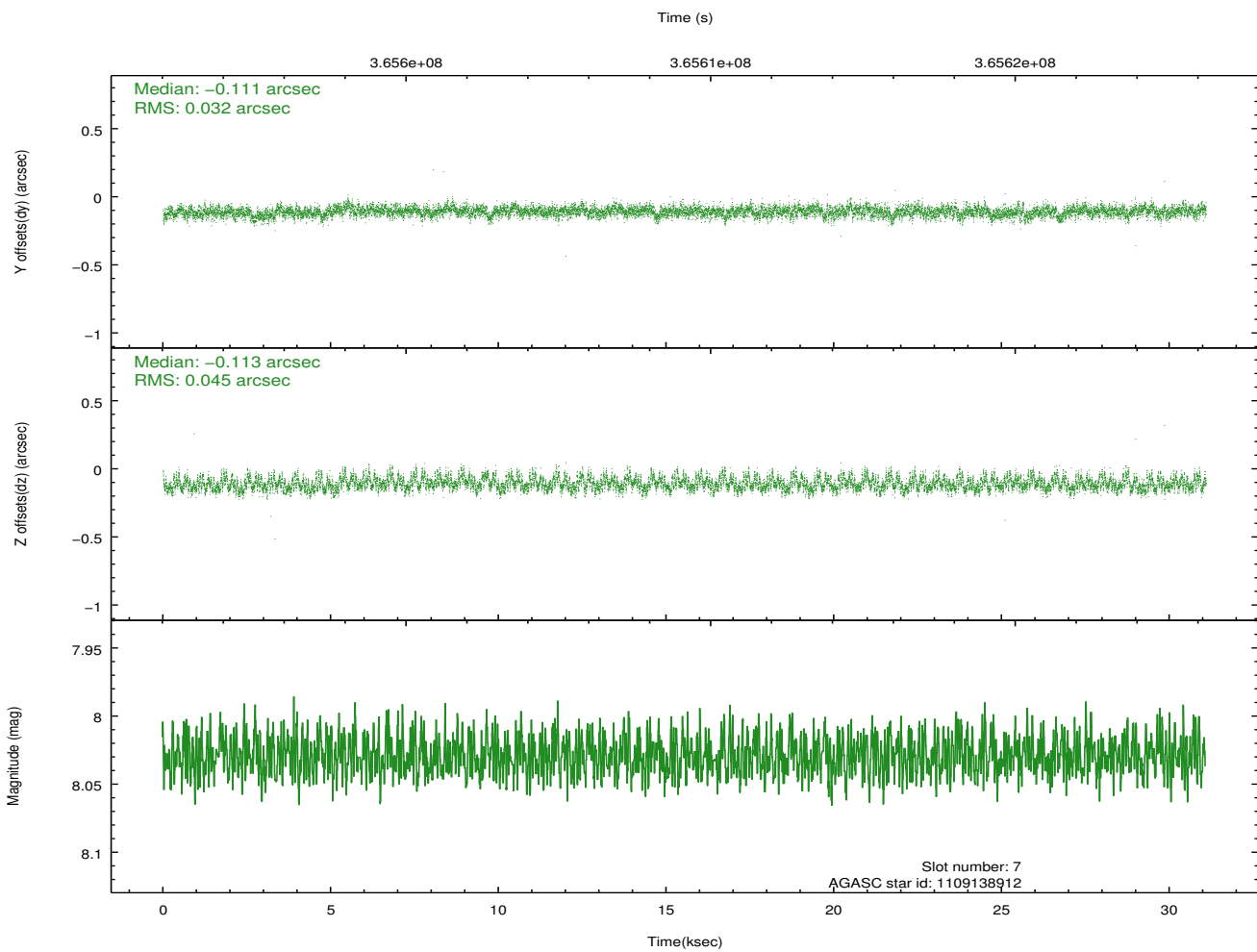
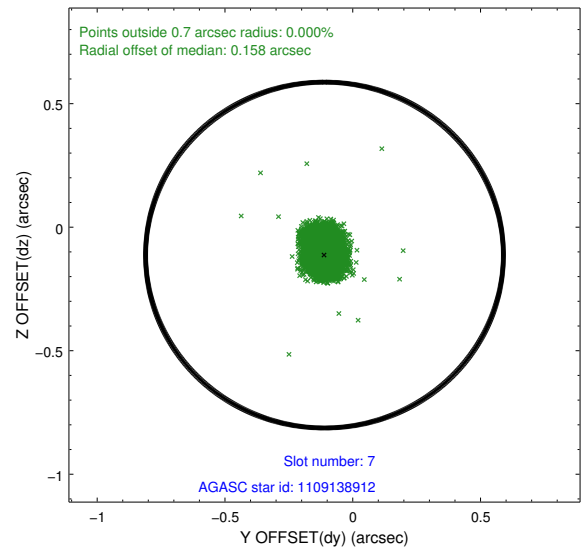
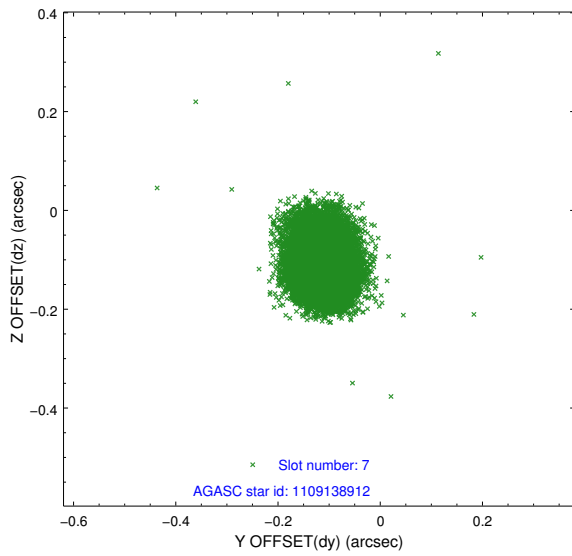
### 2.4.3 Slot 5



## 2.4.4 Slot 6

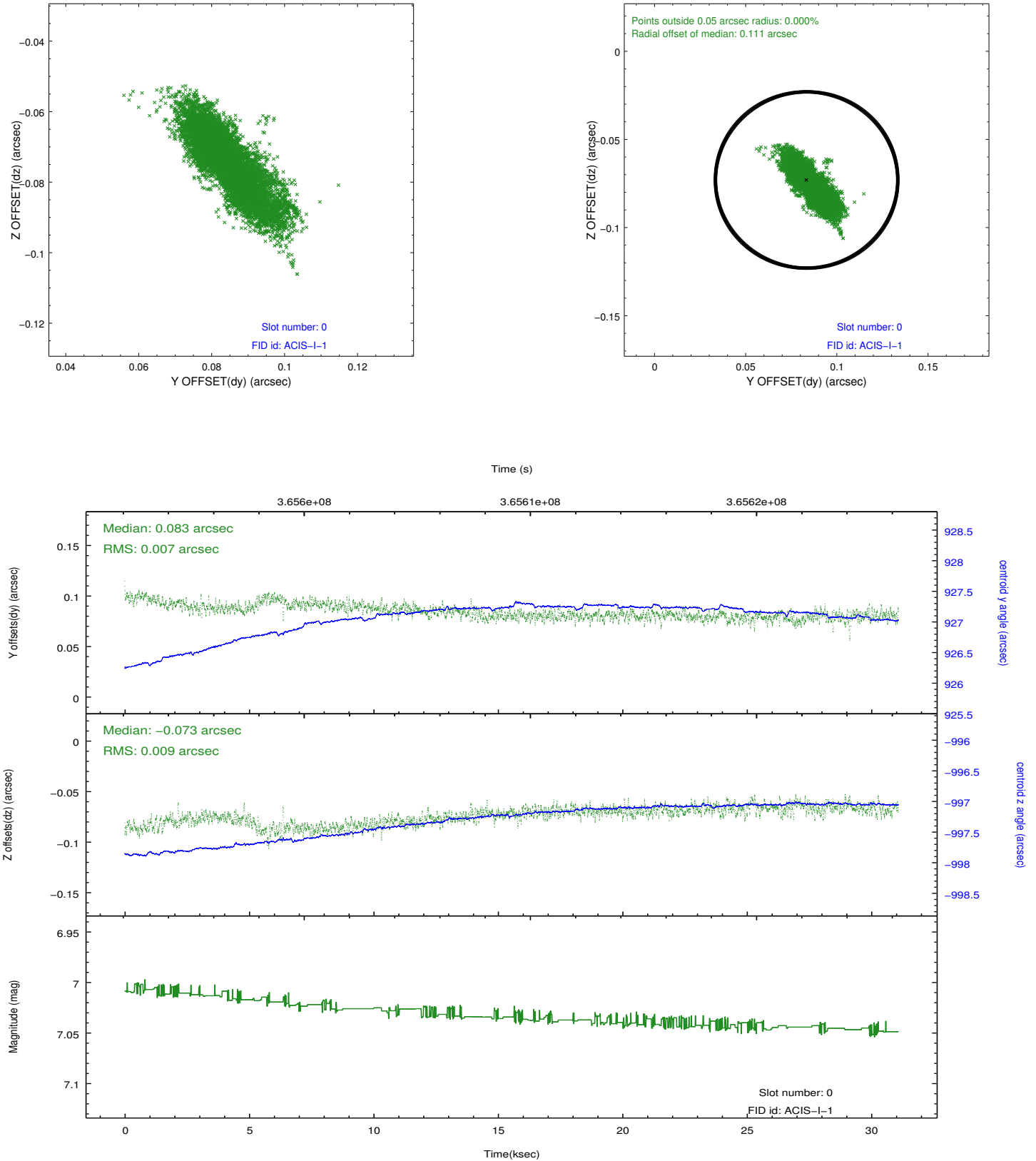


## 2.4.5 Slot 7

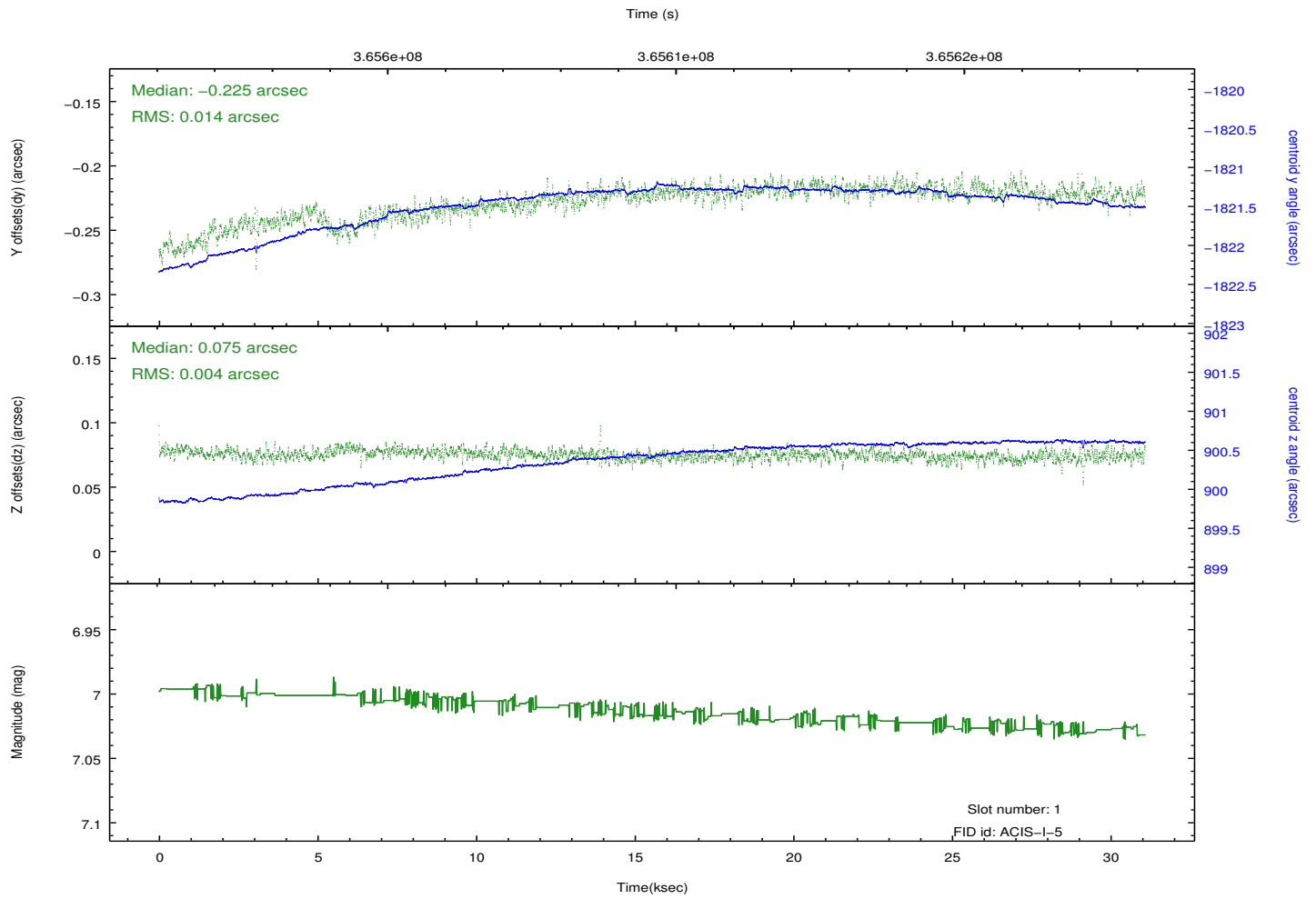
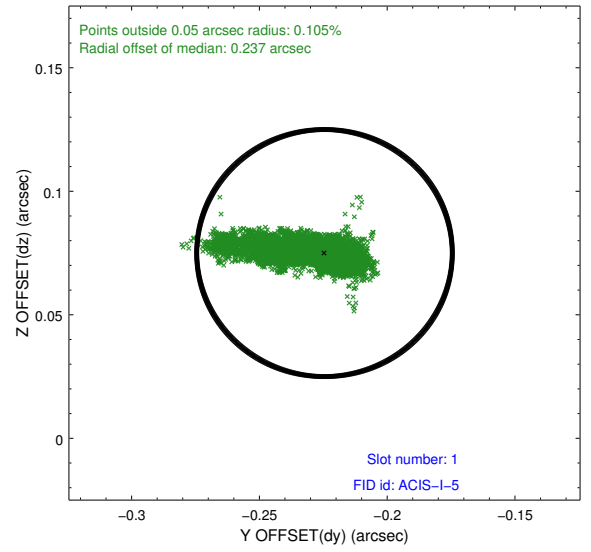
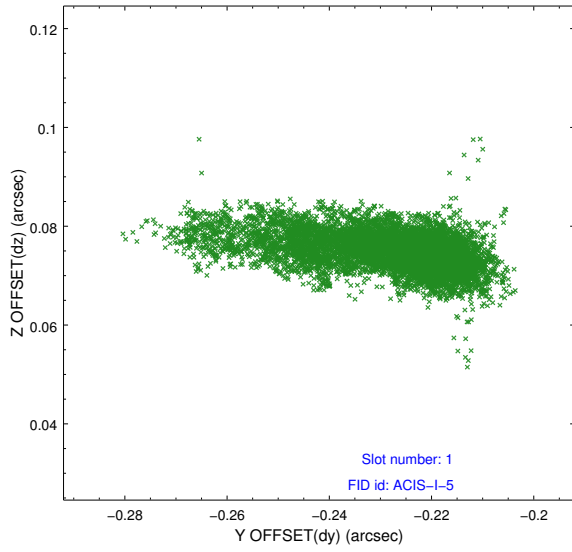


## 2.5 FID Slots

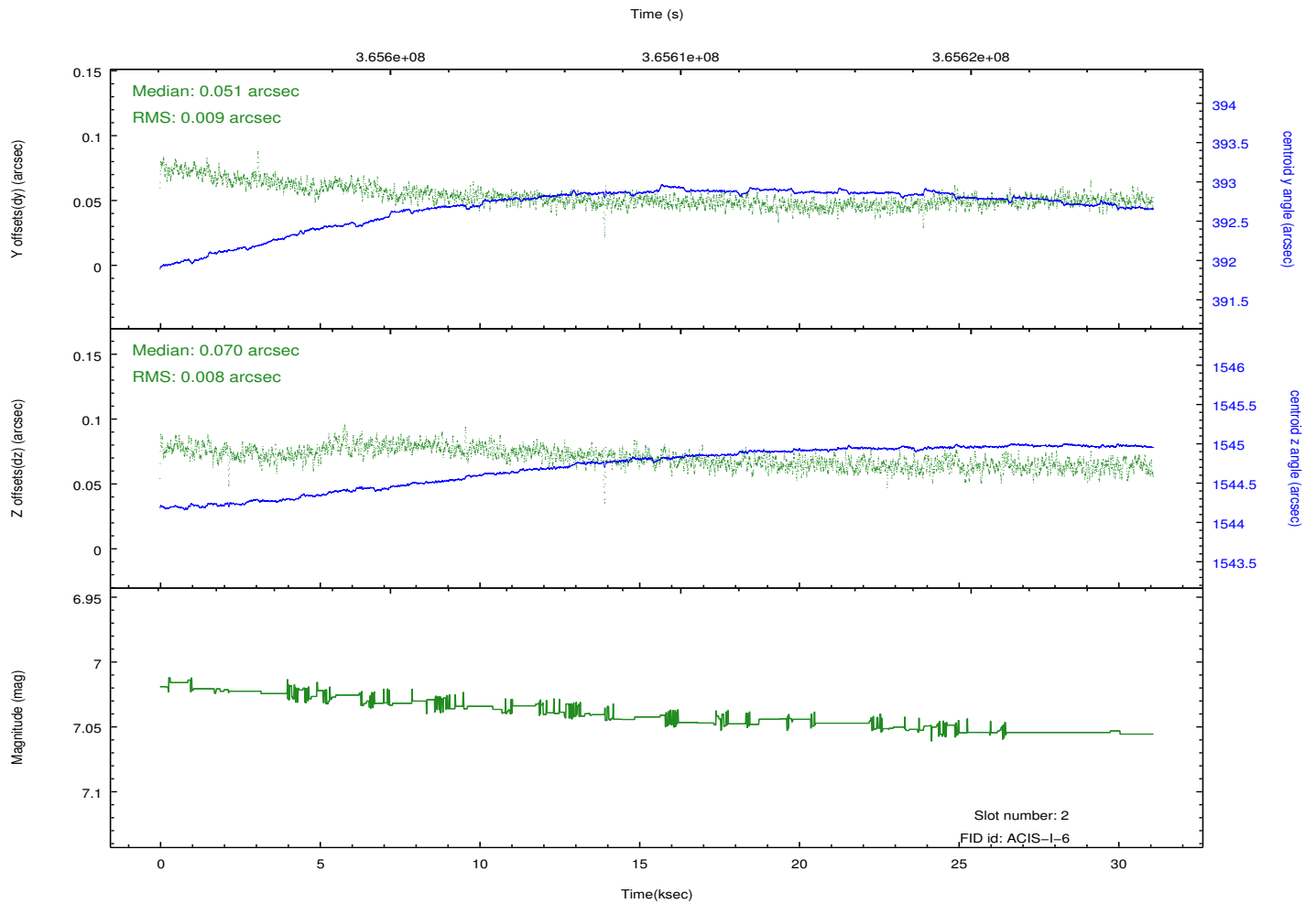
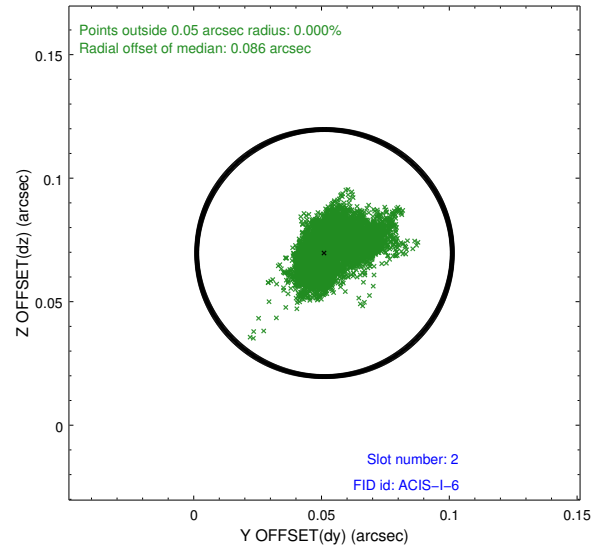
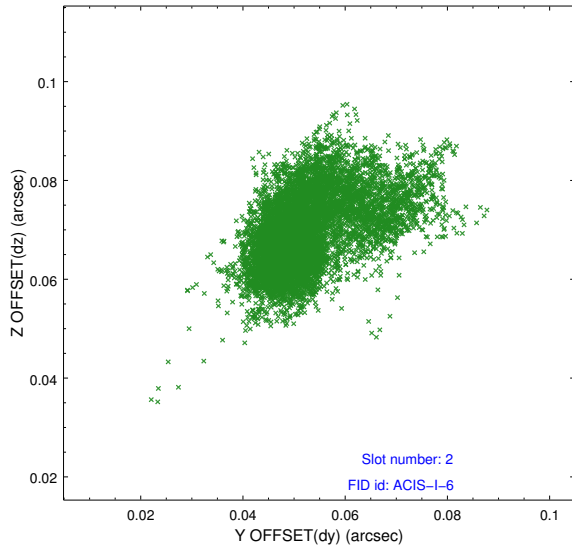
### 2.5.1 Slot 0



## 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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.032113246679

### A.2 Comments