

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3305 - L2 Version 3  
Chandra X-Ray Center

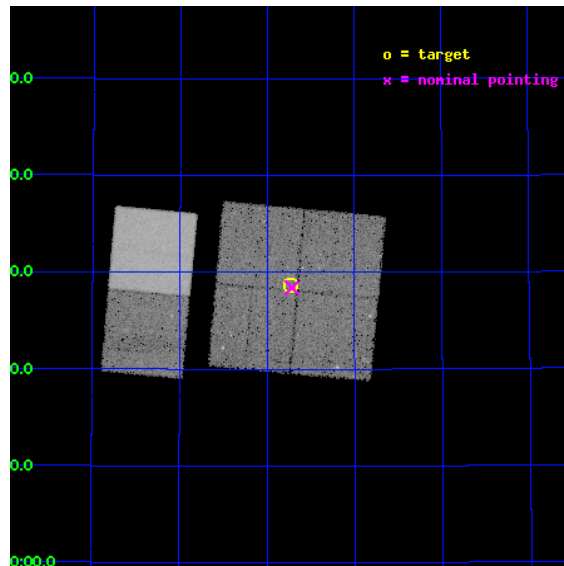
L2 Processing Date : Oct 14 2012

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# 1 Front

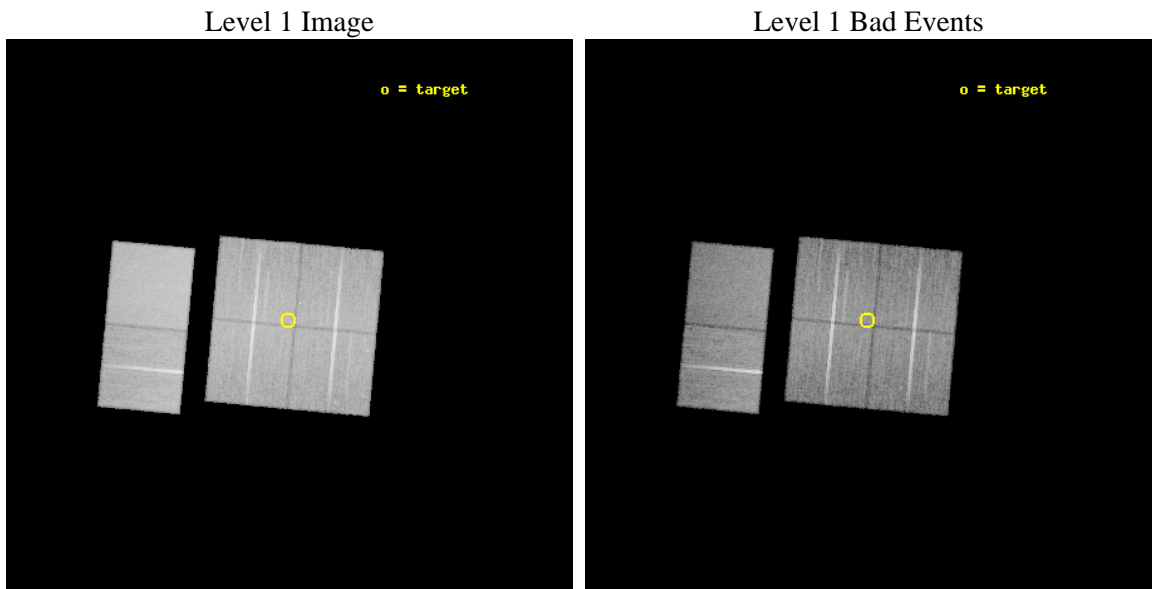
seq_num	900144	Sequence number
obs_id	3305	Observation id
title	THE X-RAY UNIVERSE AT HIGH REDSHIFT	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	GROTH-WESTPHAL FIELD	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.431667	Observer's specified target RA [deg]
dec_targ	52.478111	Observer's specified target Dec [deg]
ra_nom	214.42932159889	Nominal RA [deg]
dec_nom	52.47366950146	Nominal Dec [deg]
roll_nom	275.25626033644	Nominal Roll [deg]
revision	3	Processing version of data
ontime	29779.199889064	Sum of GTIs [s]
livetime	29402.117729187	Livetime [s]
ontime0	29779.199889064	Sum of GTIs [s]
ontime1	29775.95891881	Sum of GTIs [s]
ontime2	29775.958948702	Sum of GTIs [s]
ontime3	29779.199889064	Sum of GTIs [s]
ontime6	29775.958958715	Sum of GTIs [s]
ontime7	29779.199889064	Sum of GTIs [s]
l2events	198618	Number of level 2 events



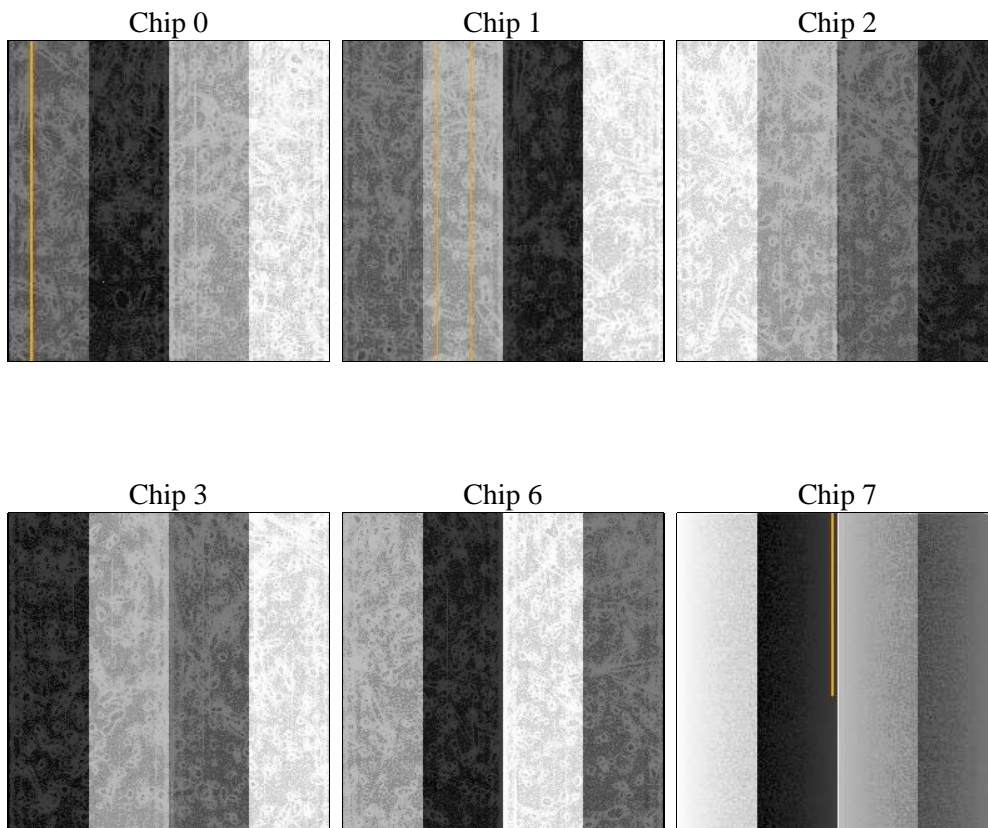
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29759.799000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	29779.199889064	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	29779.199889064	Sum of GTIs [s]
date	2012-10-14T00:48:27	Date and time of file creation	ontime1	29775.95891881	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	29775.958948702	Sum of GTIs [s]
			ontime3	29779.199889064	Sum of GTIs [s]
			ontime6	29775.958958715	Sum of GTIs [s]
			ontime7	29779.199889064	Sum of GTIs [s]
			l1events	1155085	Number of level 1 events

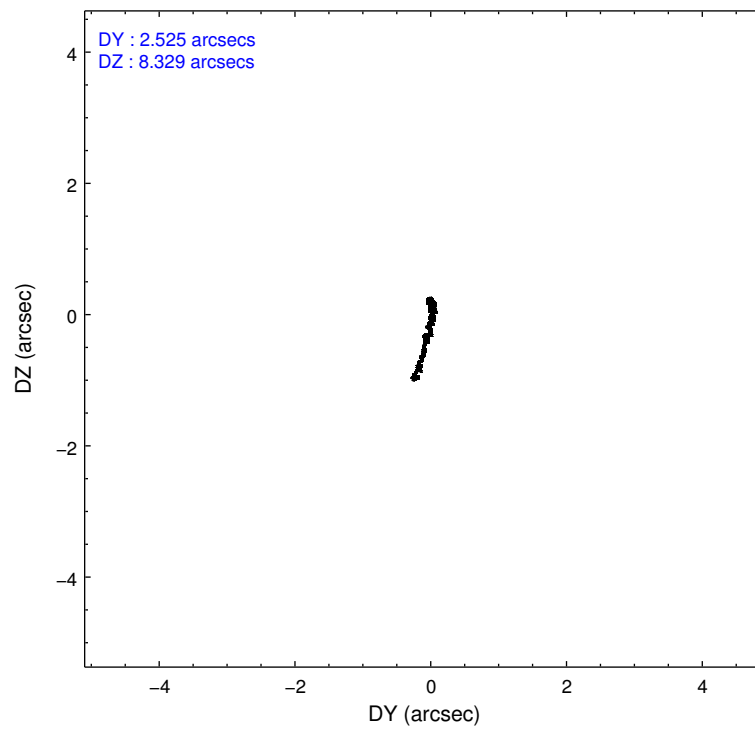
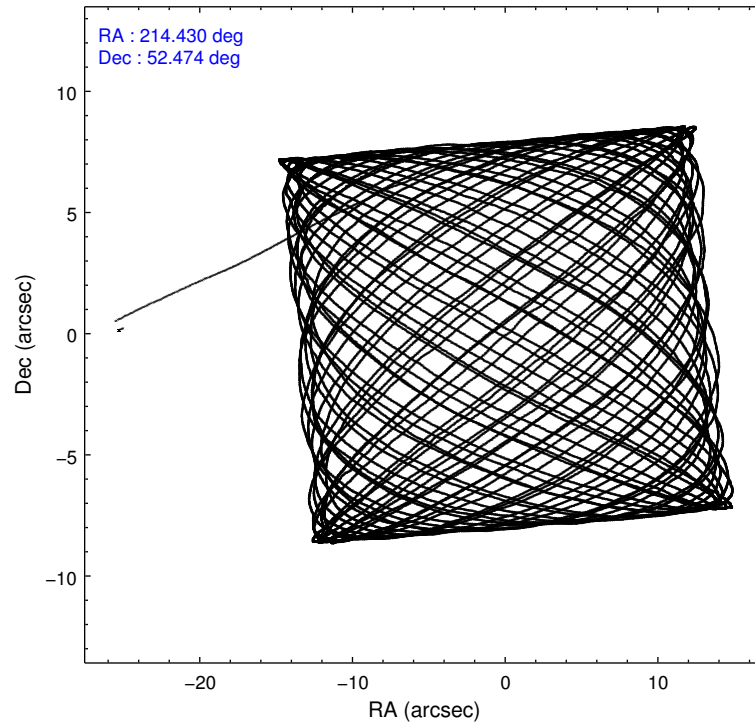
### 2.1.4 Events

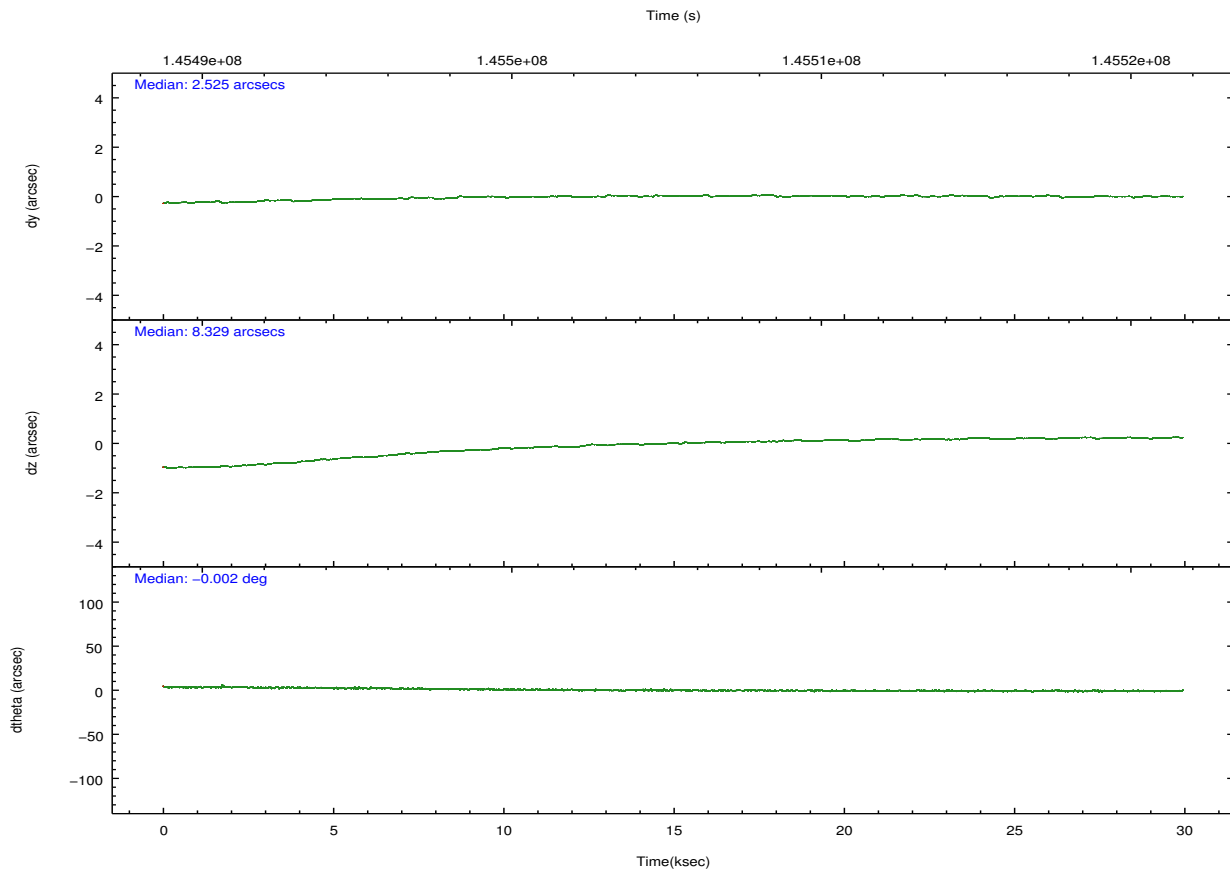
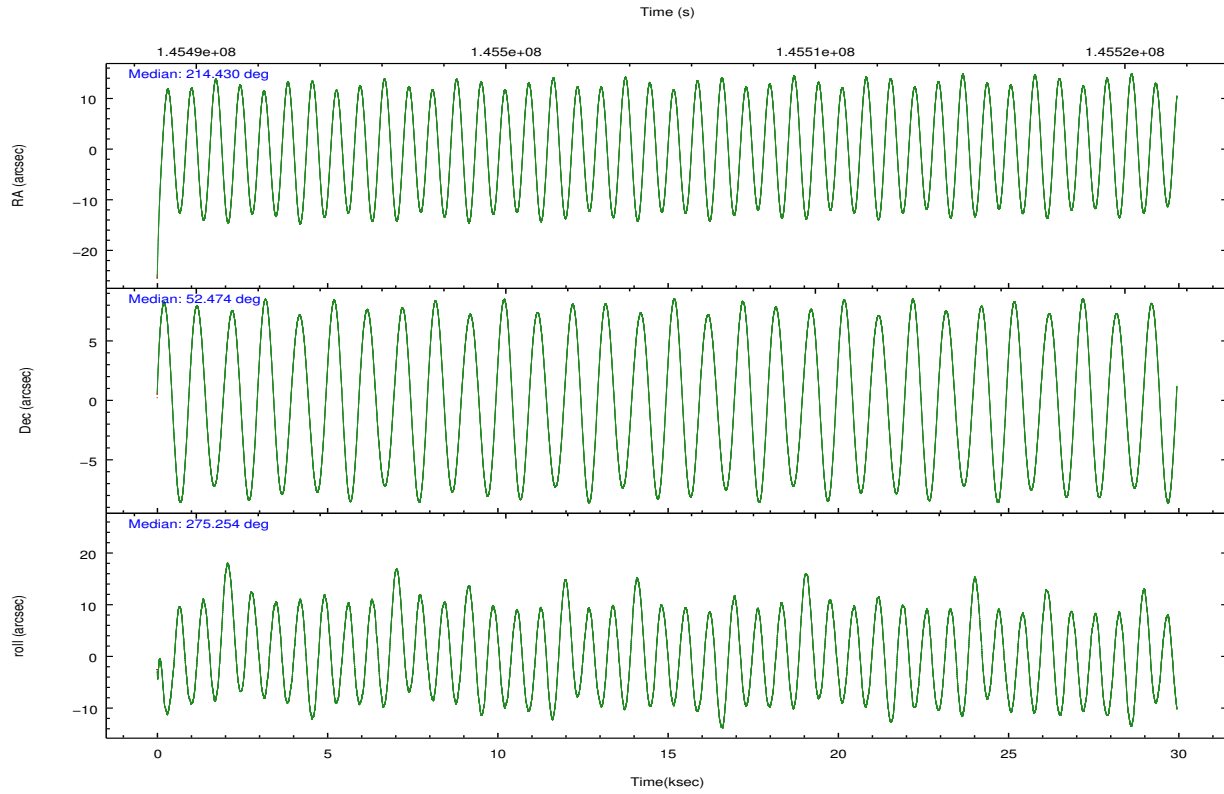
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	171184	172283	182925	186086	193981	248626	grade 0 events	10002	9672	10137	9620	8857	9712
rejected events	148449	148589	160628	164484	171672	144263		5%	5%	5%	5%	4%	3%
rejected %	86%	86%	87%	88%	88%	58%	grade 1 events	93	89	118	116	95	224
								0%	0%	0%	0%	0%	0%
							grade 2 events	4710	4951	4371	4140	4608	20198
								2%	2%	2%	2%	2%	8%
							grade 3 events	2178	2353	2070	2130	2182	9436
								1%	1%	1%	1%	1%	3%
							grade 4 events	2056	2343	2158	2126	2196	9209
								1%	1%	1%	1%	1%	3%
							grade 5 events	7271	7552	7062	7864	8463	23304
								4%	4%	3%	4%	4%	9%
							grade 6 events	3792	4377	3562	3586	4467	55820
								2%	2%	1%	1%	2%	22%
							grade 7 events	141082	140946	153447	156504	163113	120723
								82%	81%	83%	84%	84%	48%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	214.403240	214.4293215988944	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.495987	52.47366950145977	Alternating exposures requested	N	N
[deg] Pointing Roll	275.068273	275.2562603364425	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	145490425.184000	145489437.02027			
Observation start date	2002-08-11T21:59:21	2002-08-11T21:43:57			
[s] Observation end time (MET)	145520184.184000	145520499.13405			
Observation end date	2002-08-12T06:15:20	2002-08-12T06:21:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



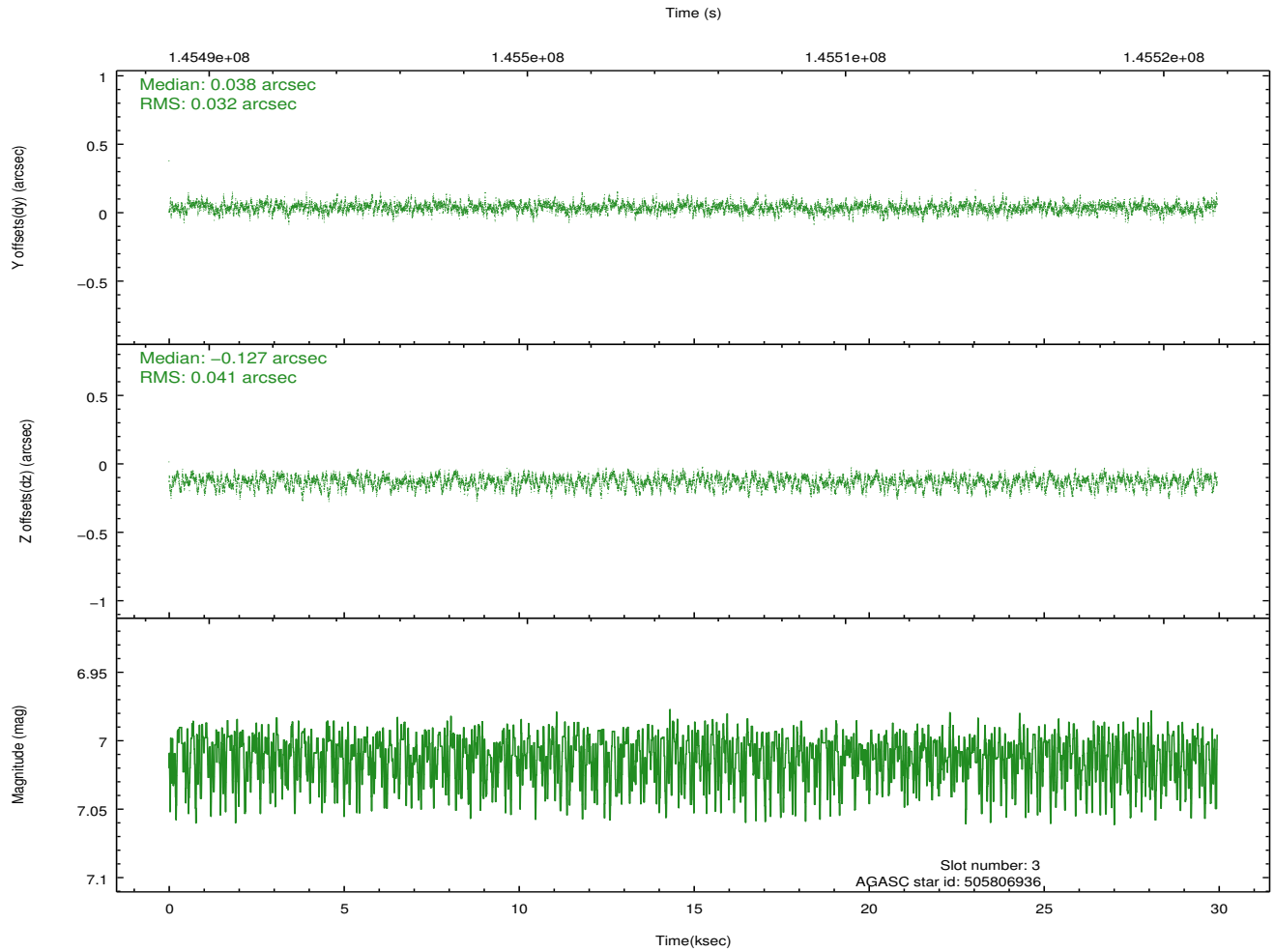
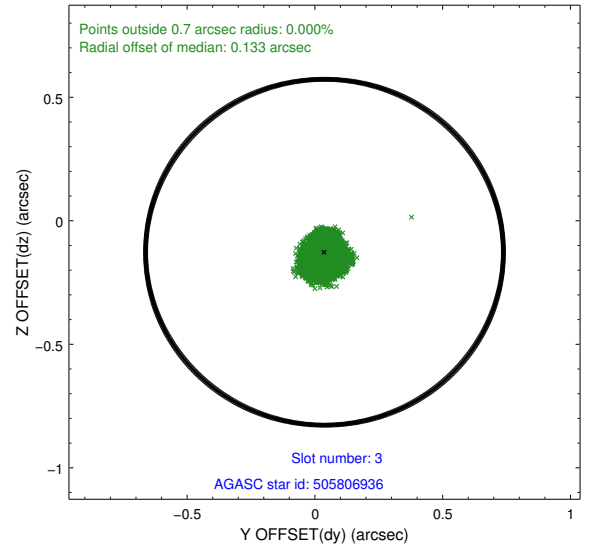
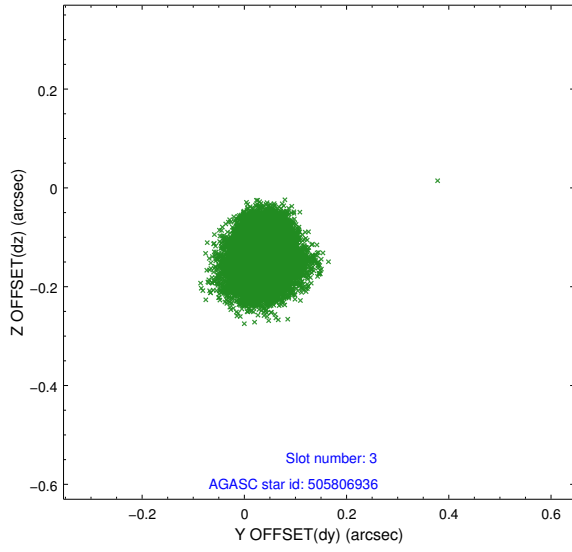


### Slot Statistics

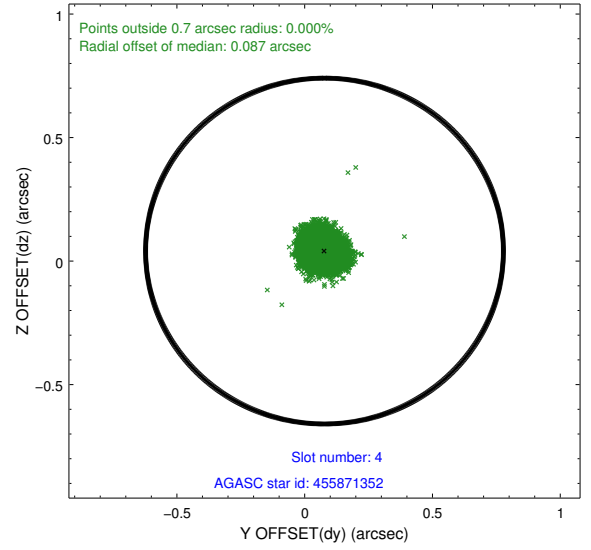
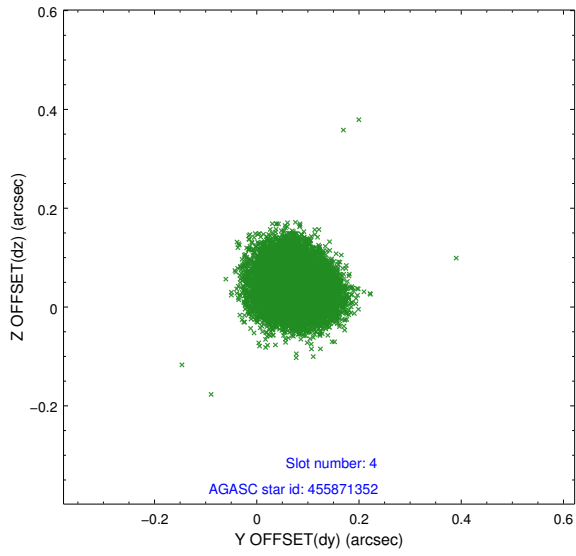
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.25	7306	-0.030	0.065	0.014	0.038	0.000000	0.000000	937.28	-831.55
1	FID	ACIS-I-5	7.24	7305	-0.042	0.032	0.011	0.020	0.000000	0.000000	-1810.79	1065.90
2	FID	ACIS-I-6	7.26	7306	-0.020	-0.026	0.010	0.022	0.000000	0.000000	402.77	1710.41
3	GUIDE	505806936	7.01	14610	0.038	-0.127	0.055	0.091	213.820815	52.535927	-260.74	-1257.84
4	GUIDE	455871352	8.09	14608	0.078	0.041	0.057	0.091	215.099961	52.172669	1288.13	1429.56
5	GUIDE	505812376	7.61	14610	-0.152	0.008	0.055	0.086	214.039537	52.937930	-1656.32	-645.76
6	GUIDE	505808024	9.05	14605	0.009	0.010	0.067	0.108	213.832794	52.669095	-735.55	-1185.53
7	GUIDE	455872024	9.35	14593	0.029	0.073	0.094	0.152	215.329595	52.026605	1851.52	1895.38

## 2.4 Star Slots

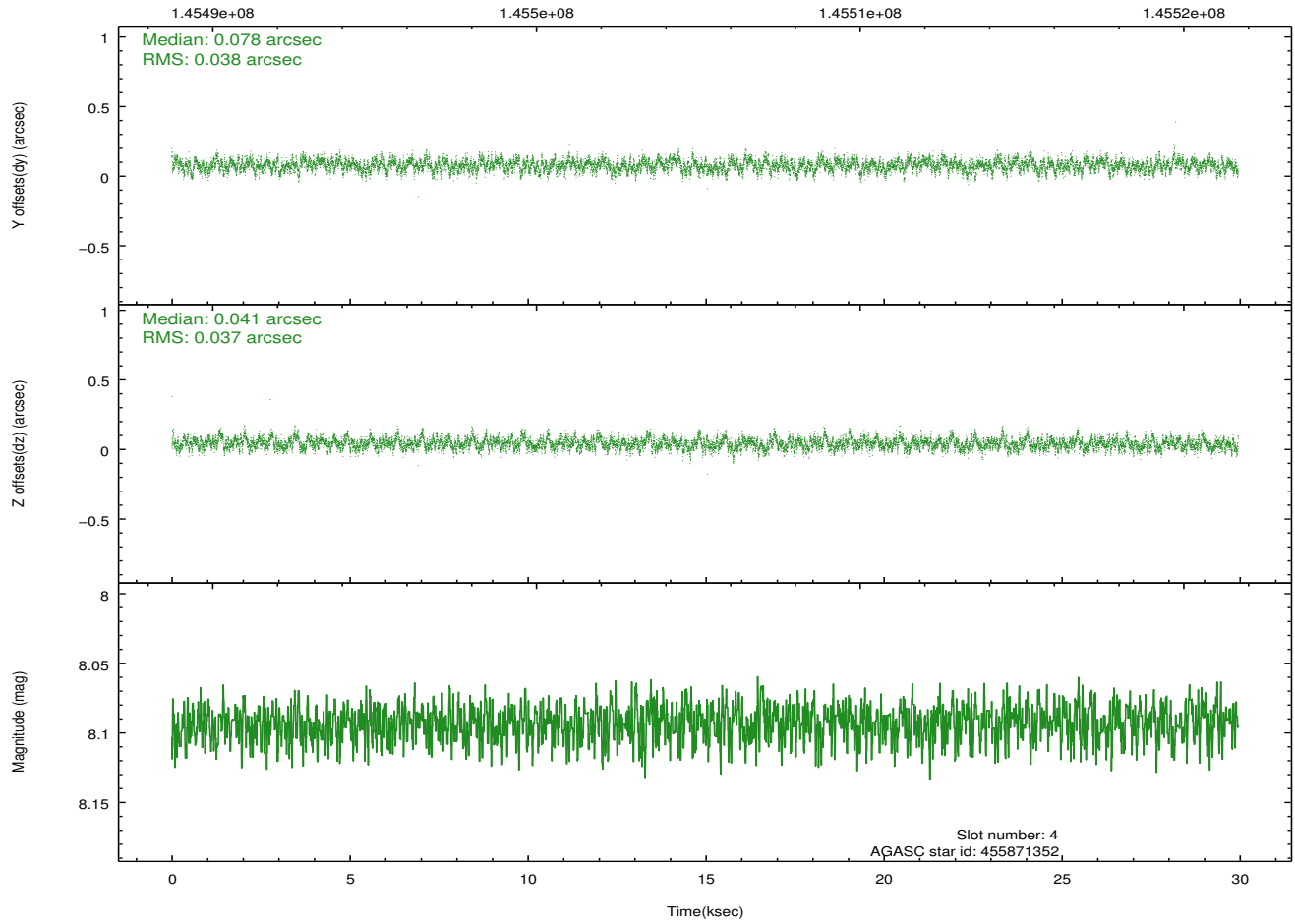
### 2.4.1 Slot 3



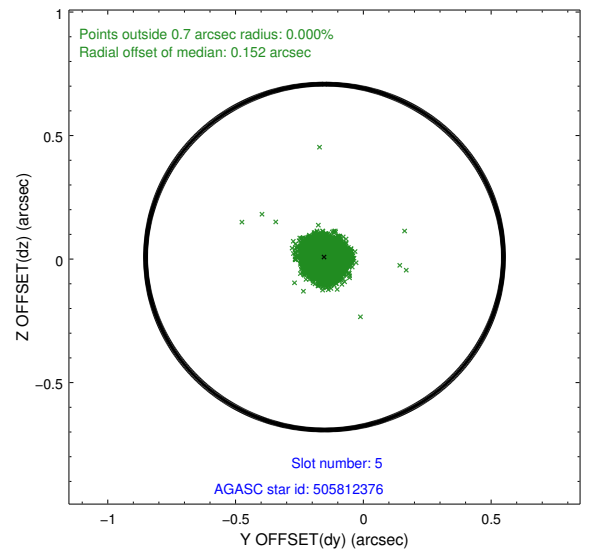
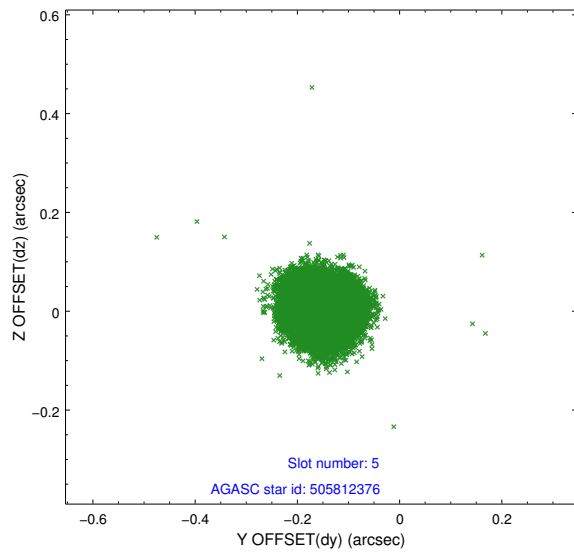
## 2.4.2 Slot 4



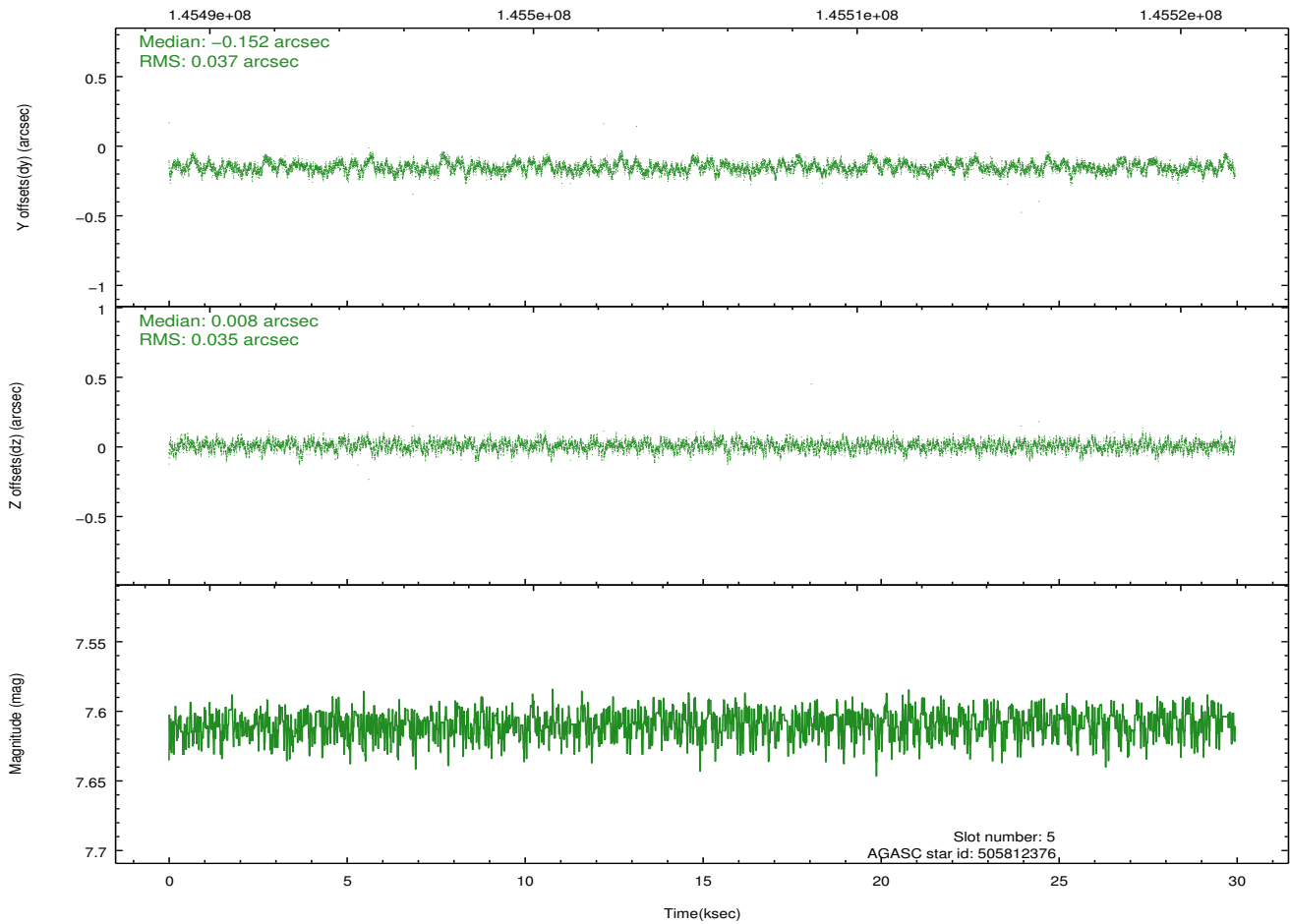
Time (s)



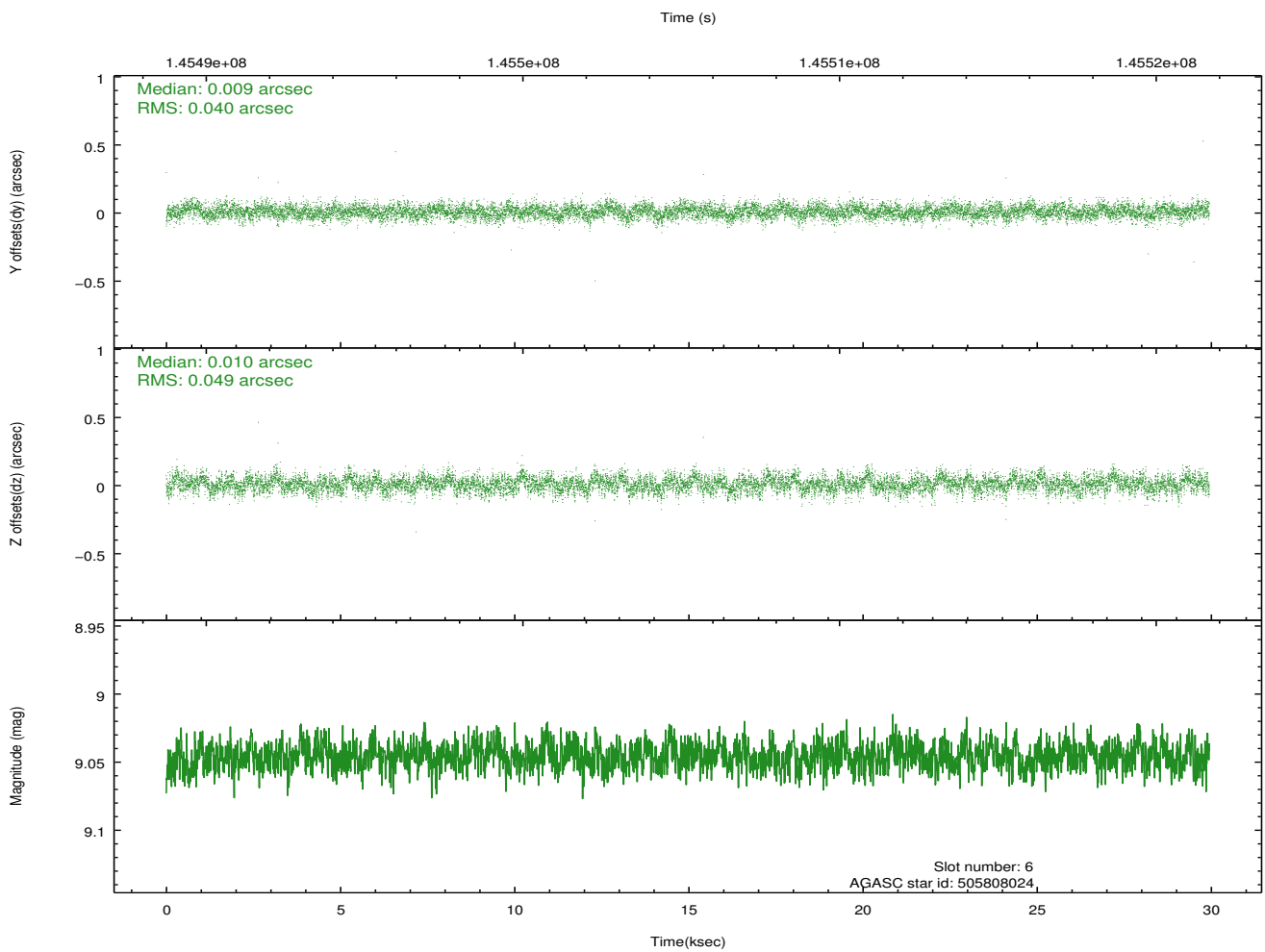
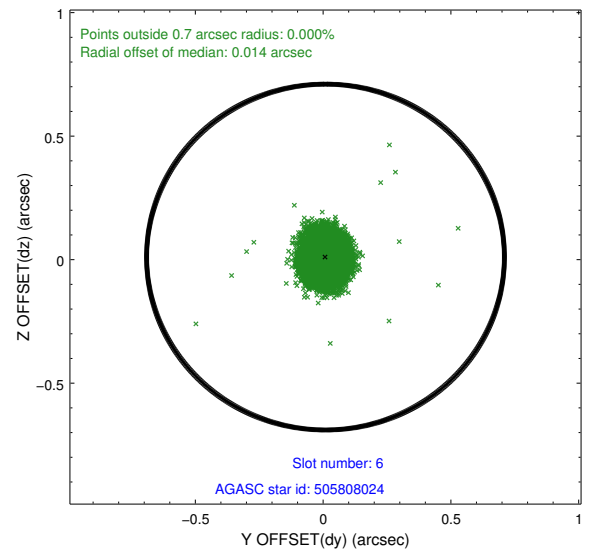
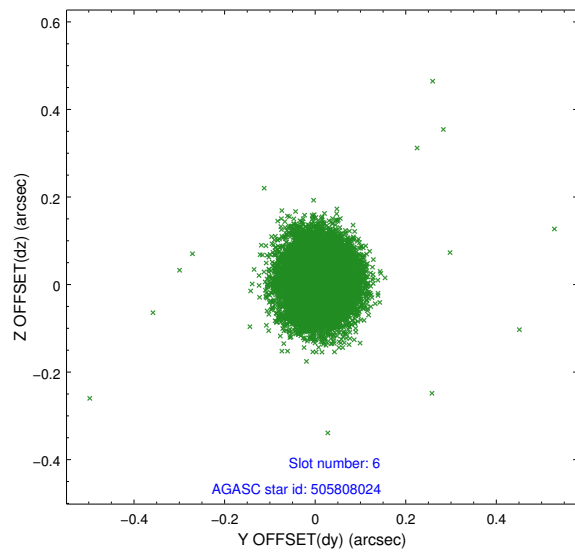
### 2.4.3 Slot 5



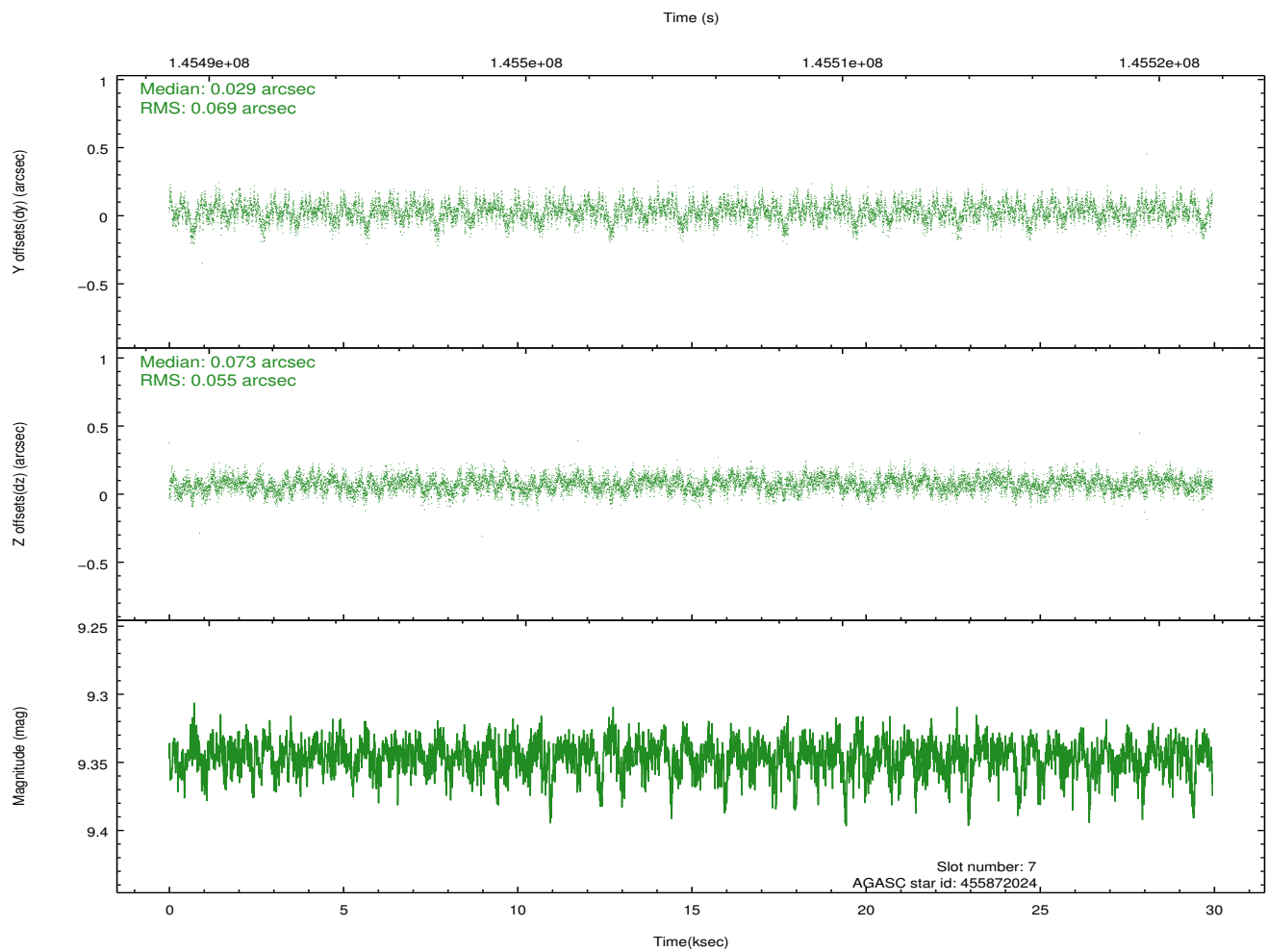
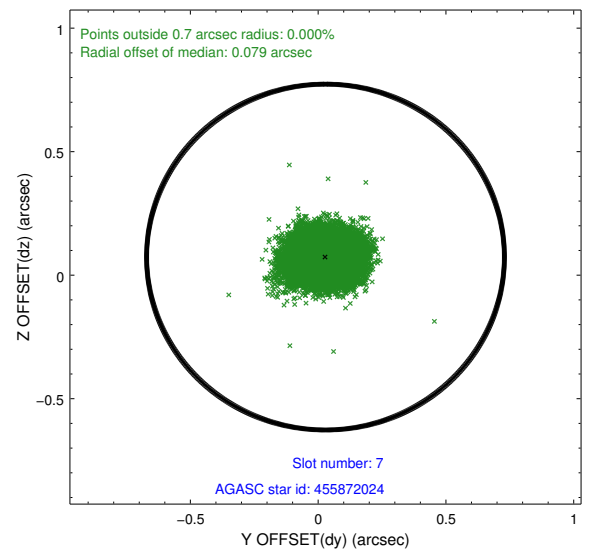
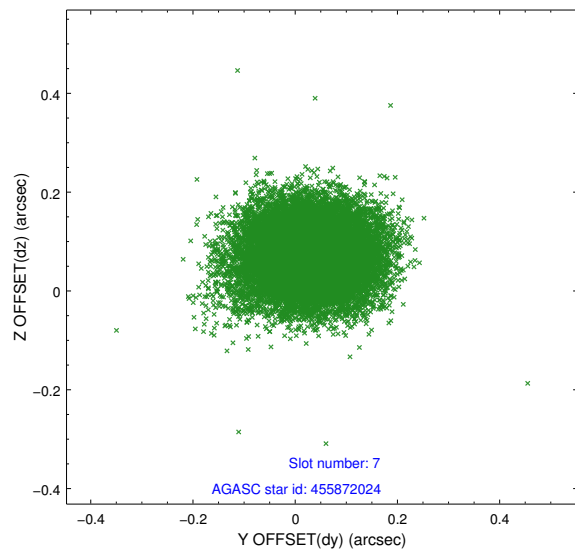
Time (s)



## 2.4.4 Slot 6

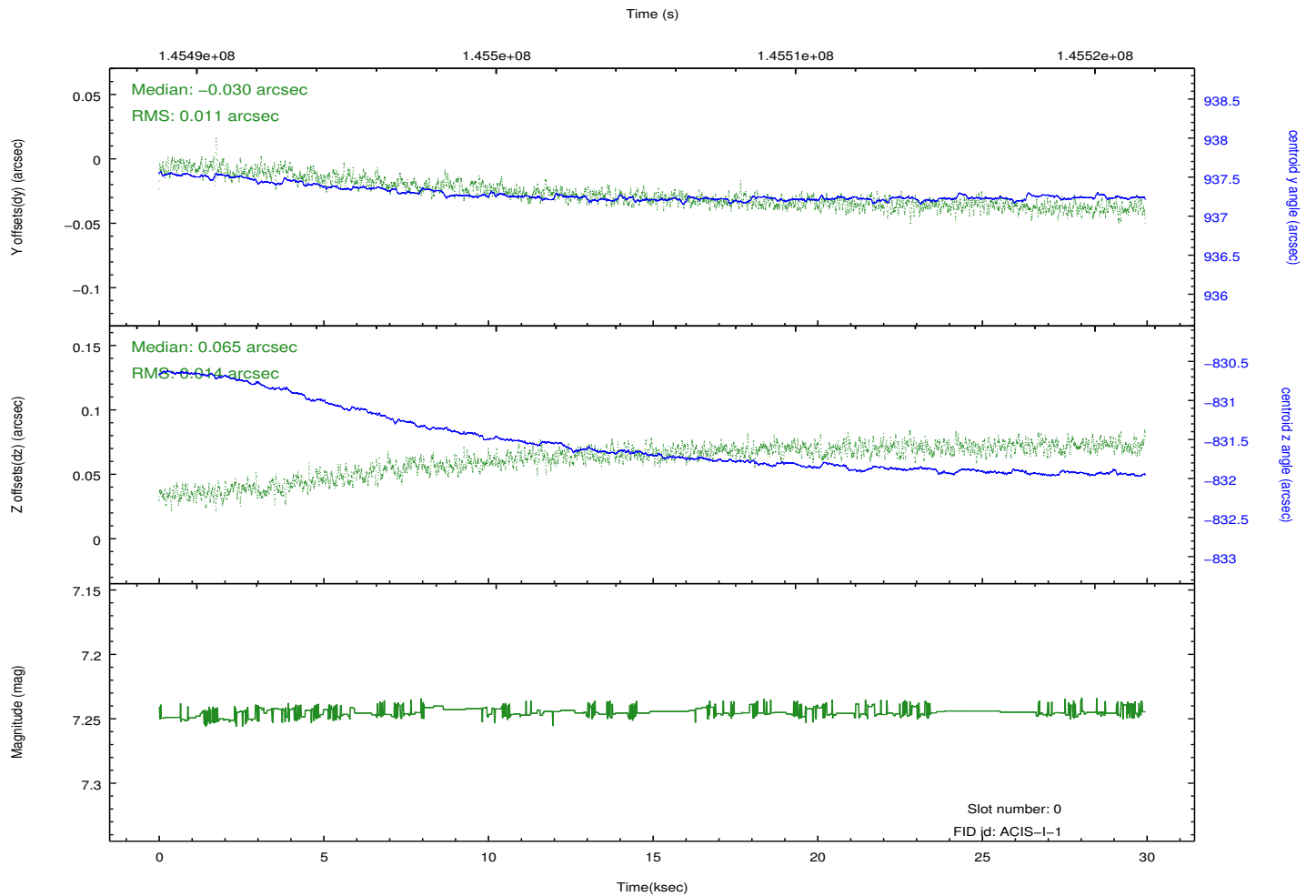
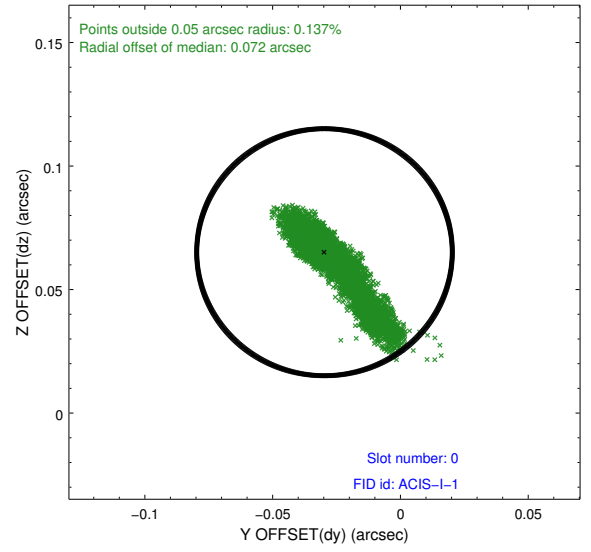
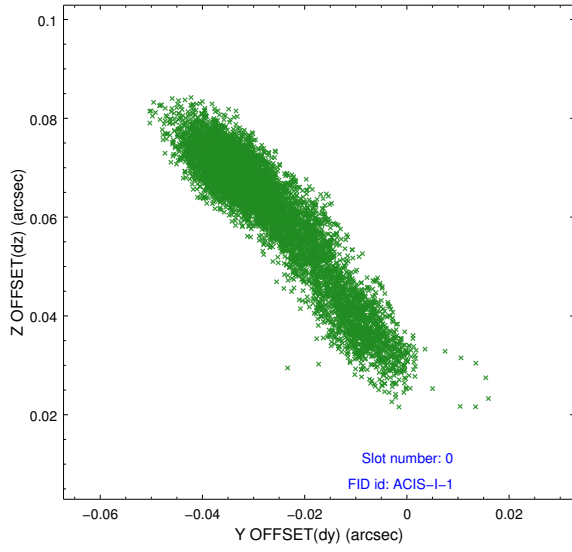


## 2.4.5 Slot 7

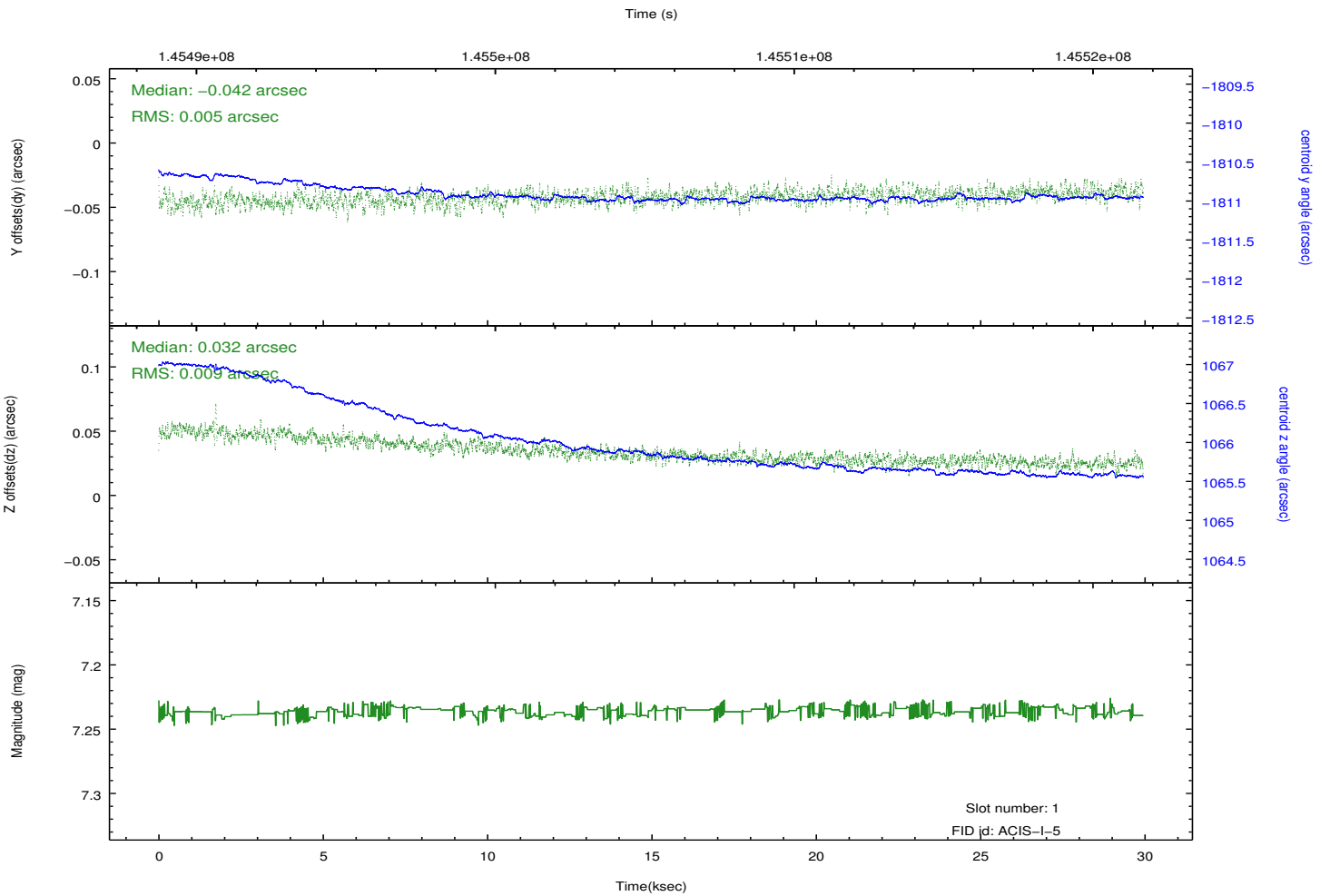
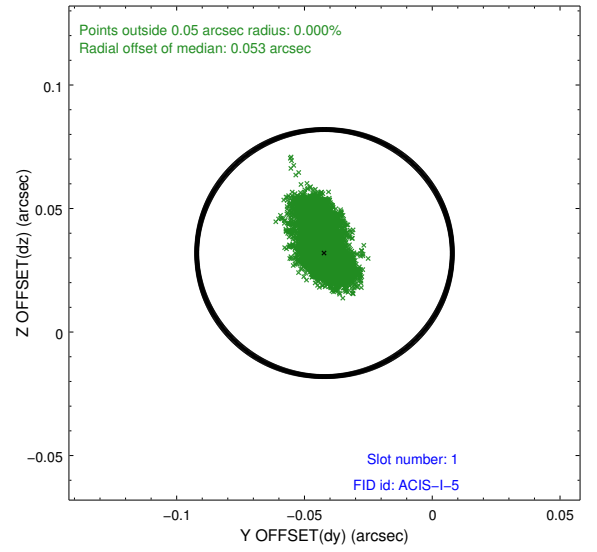
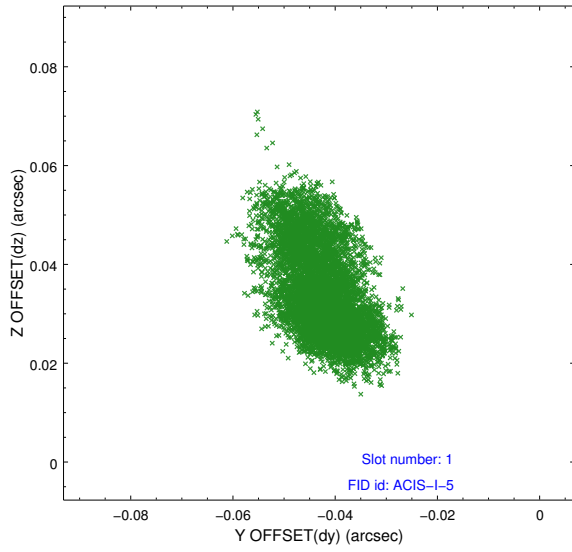


## 2.5 FID Slots

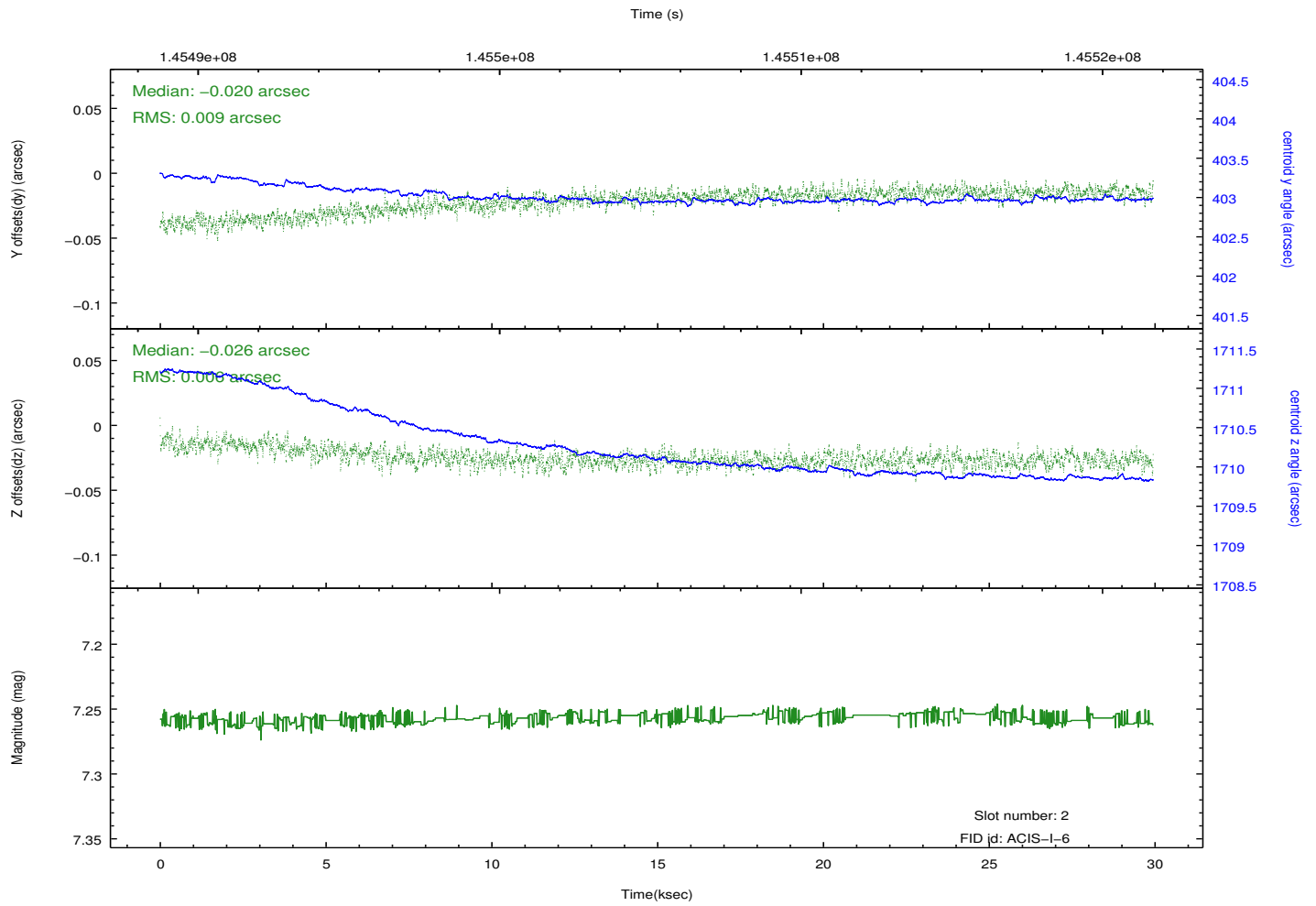
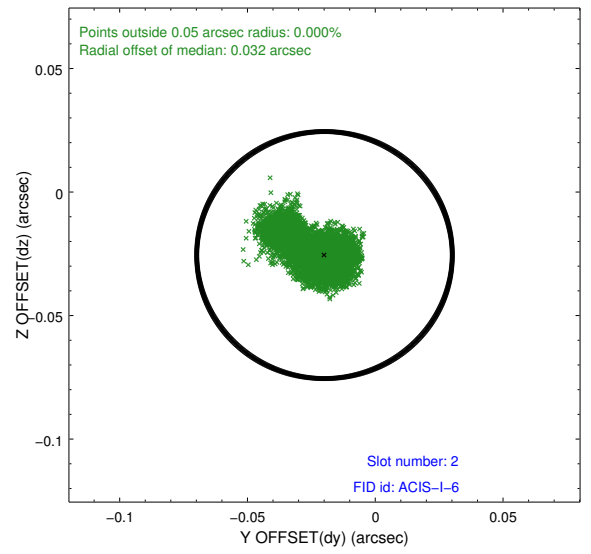
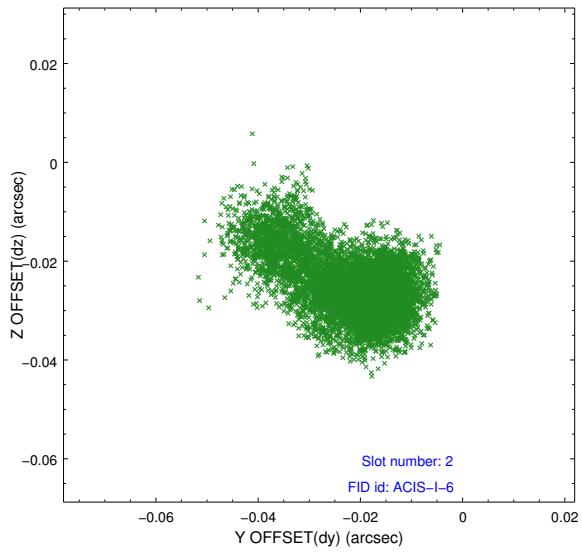
### 2.5.1 Slot 0



## 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)	2012.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.782

### A.2 Comments