

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10748 - L2 Version 2  
Chandra X-Ray Center

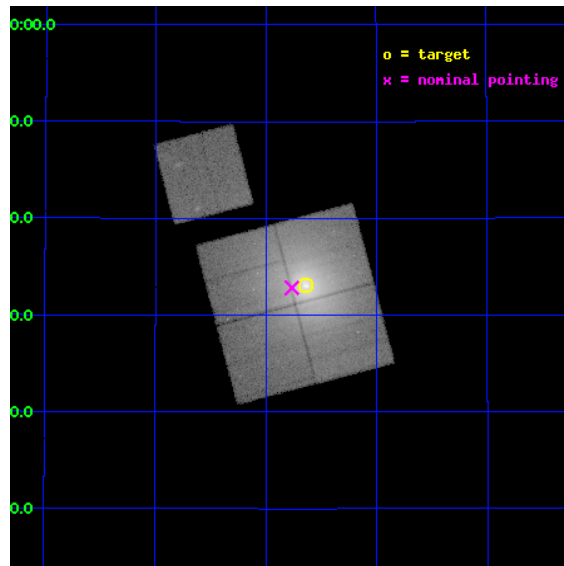
L2 Processing Date : Jun 16 2012

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# 1 Front

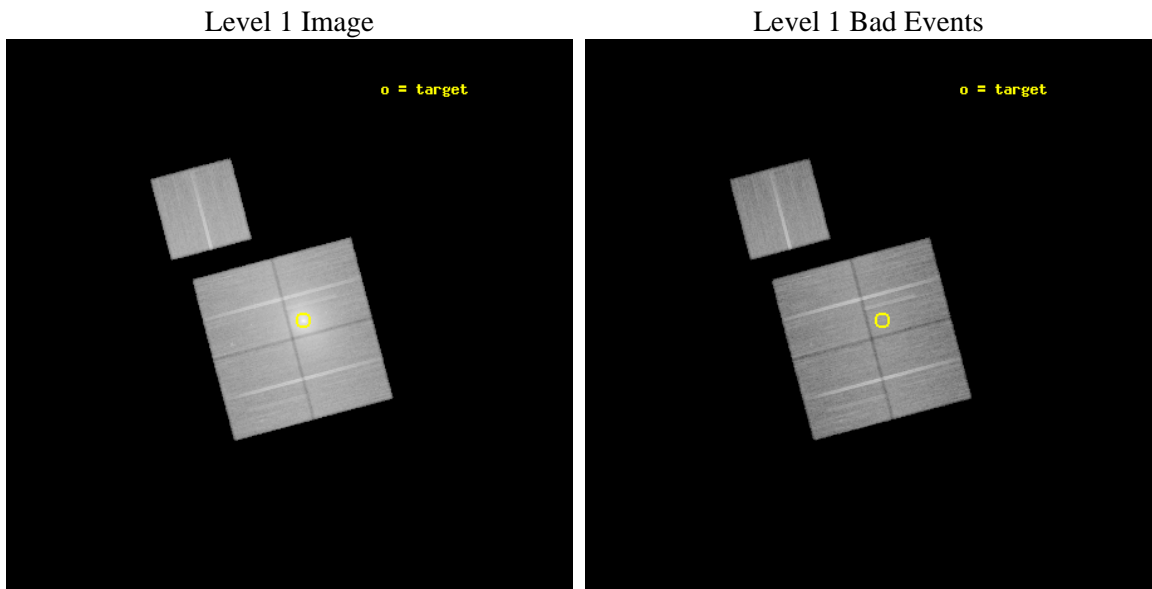
seq_num	800849	Sequence number
obs_id	10748	Observation id
title	Abell 2199: AGN outbursts and merger	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	Abell 2199	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.16	Observer's specified target RA [deg]
dec_targ	39.551111	Observer's specified target Dec [deg]
ra_nom	247.19134545441	Nominal RA [deg]
dec_nom	39.547142295895	Nominal Dec [deg]
roll_nom	345.18872901724	Nominal Roll [deg]
revision	2	Processing version of data
ontime	41112.200316191	Sum of GTIs [s]
livetime	40575.039152698	Livetime [s]
ontime0	41109.059325993	Sum of GTIs [s]
ontime1	41112.200316191	Sum of GTIs [s]
ontime2	41105.918365657	Sum of GTIs [s]
ontime3	41112.200316191	Sum of GTIs [s]
ontime6	41109.059345841	Sum of GTIs [s]
l2events	588855	Number of level 2 events



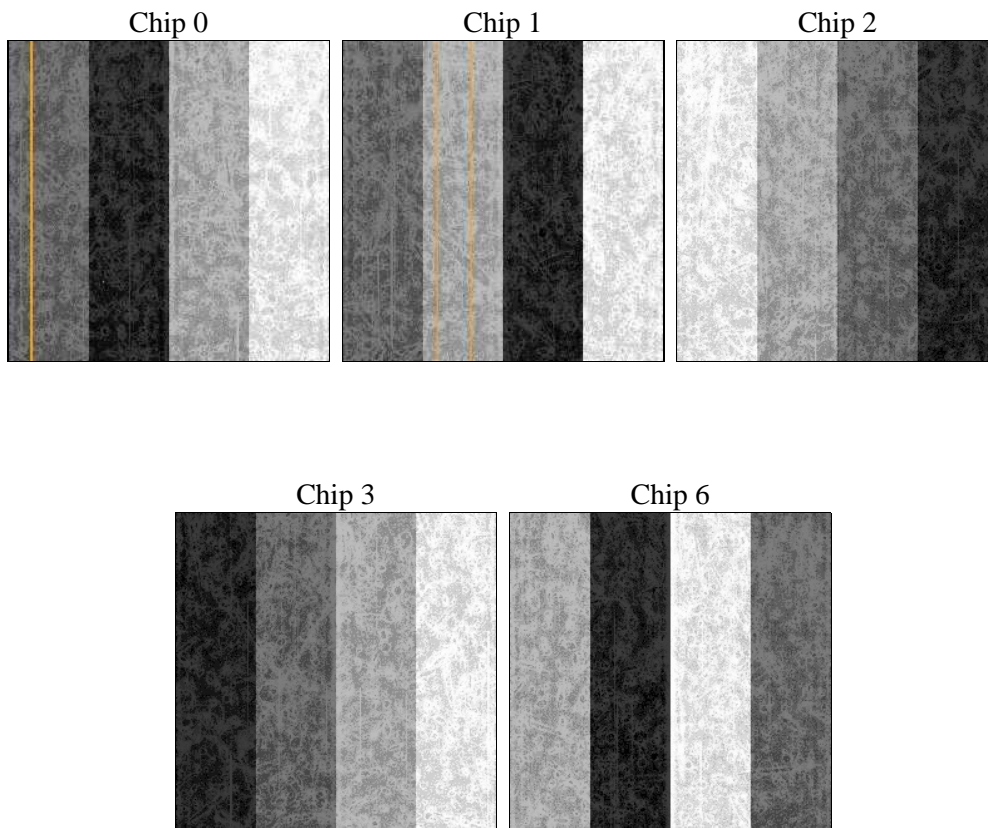
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	41000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	41112.200316191	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime0	41109.059325993	Sum of GTIs [s]
date	2012-06-16T17:50:52	Date and time of file creation	ontime1	41112.200316191	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	41105.918365657	Sum of GTIs [s]
			ontime3	41112.200316191	Sum of GTIs [s]
			ontime6	41109.059345841	Sum of GTIs [s]
			l1events	2249445	Number of level 1 events

### 2.1.4 Events

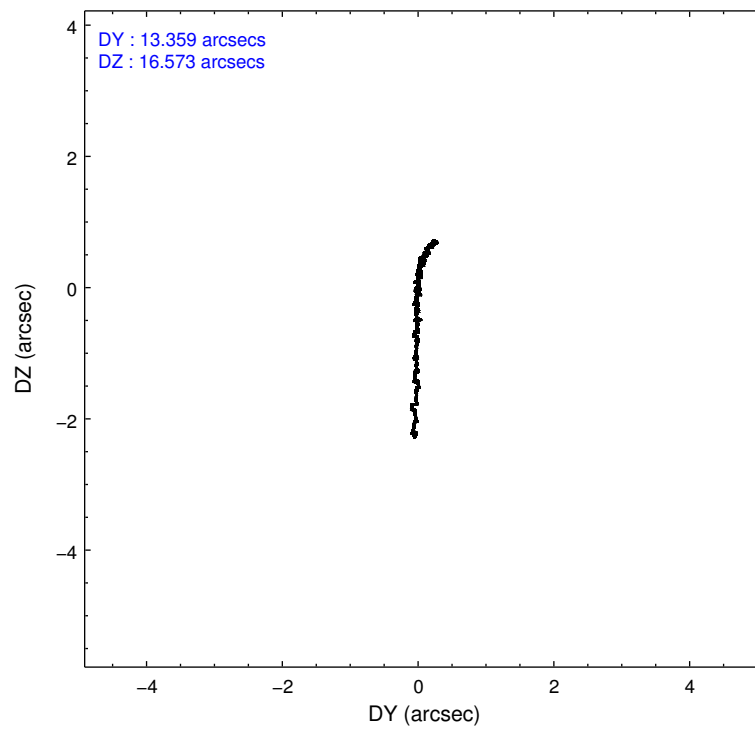
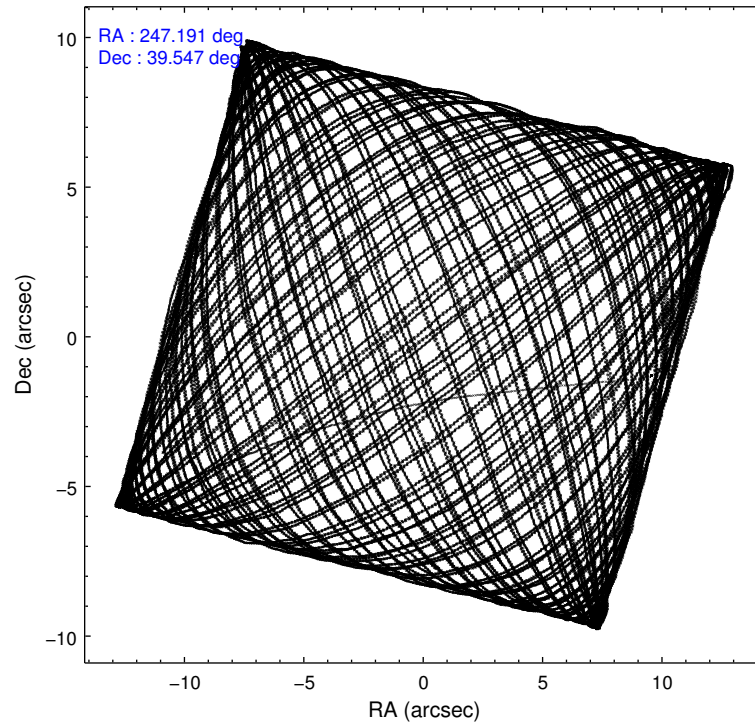
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	373214	433083	449919	622526	370703
rejected events	304321	303454	342224	332706	327609
rejected %	81%	70%	76%	53%	88%

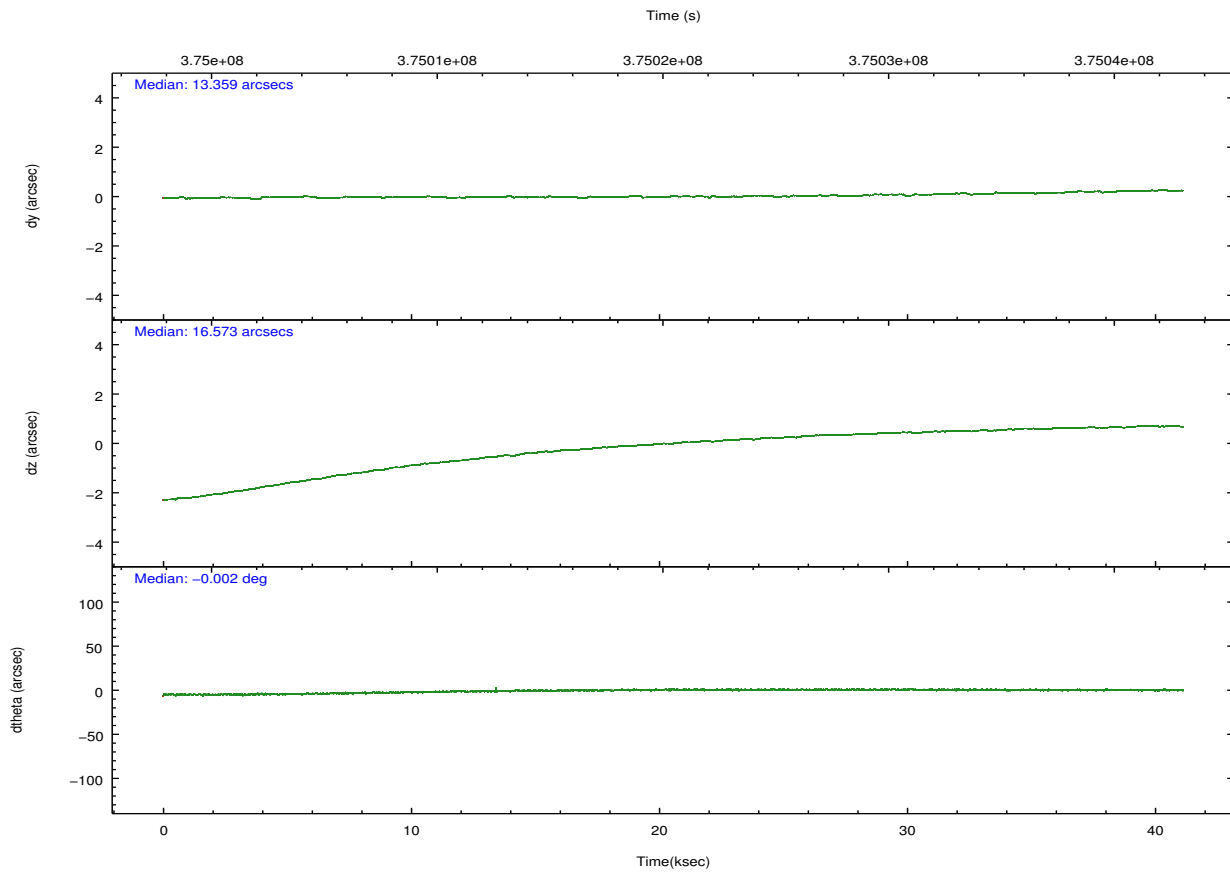
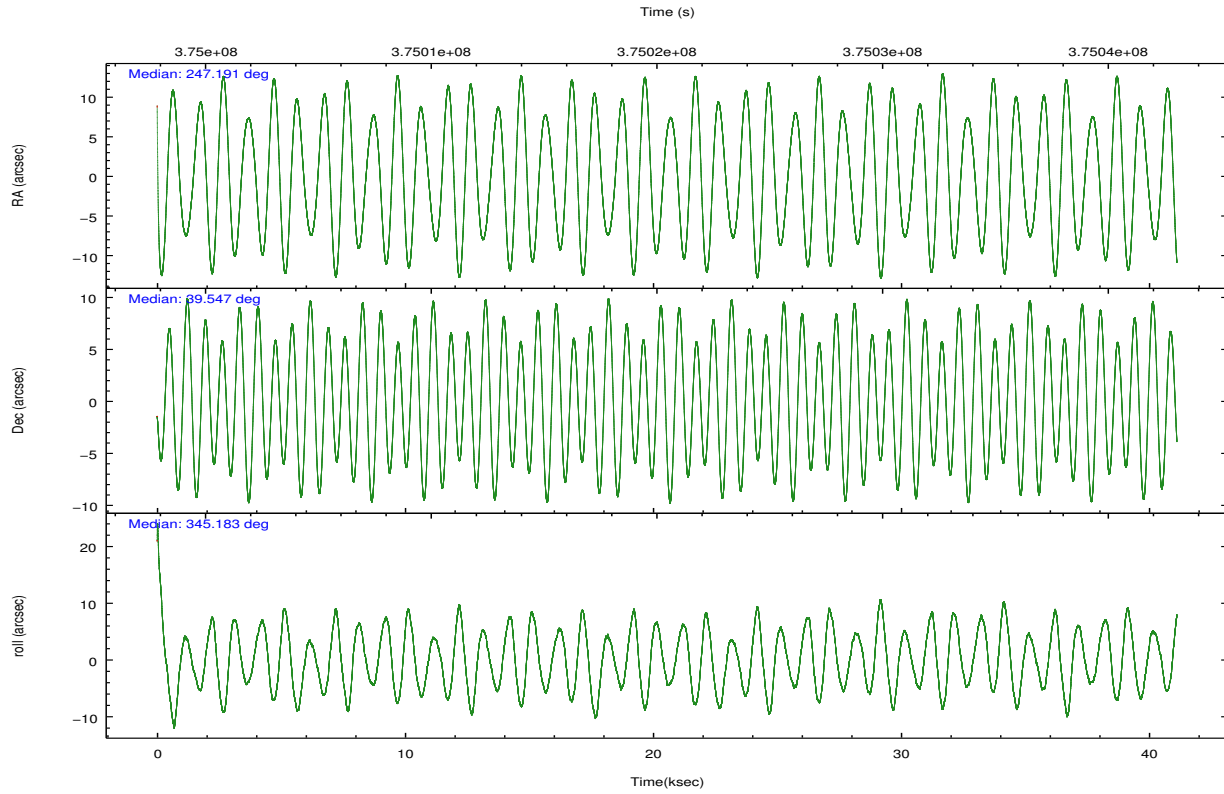
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	38702	87054	72366	224095	17987
	10%	20%	16%	35%	4%
grade 1 events	352	648	732	1736	204
	0%	0%	0%	0%	0%
grade 2 events	12665	19115	15637	32466	8843
	3%	4%	3%	5%	2%
grade 3 events	4968	6844	5764	11048	4085
	1%	1%	1%	1%	1%
grade 4 events	4947	6889	5939	11039	4179
	1%	1%	1%	1%	1%
grade 5 events	13346	14852	12864	16276	14945
	3%	3%	2%	2%	4%
grade 6 events	8014	10558	8407	12528	8225
	2%	2%	1%	2%	2%
grade 7 events	290220	287123	328210	313338	312235
	77%	66%	72%	50%	84%

## 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	247.156984	247.1913454544106	CCD I2 on	Y	Y
[deg] Pointing Dec	39.539832	39.5471422958949	CCD I3 on	Y	Y
[deg] Pointing Roll	345.001913	345.1887290172377	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	-230.692463	-230.6909432334316	CCD S3 on	N	N
[mm] SIM translation stage offset	-2.9	-2.901509769498119	CCD S4 on	N	N
[s] Observation start time (MET)	375000007.184000	374998791.28779	CCD S5 on	N	N
Observation start date	2009-11-19T06:39:01	2009-11-19T06:19:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	375041007.184000	375041916.62747	On-chip summing requested	N	N
Observation end date	2009-11-19T18:02:21	2009-11-19T18:18:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



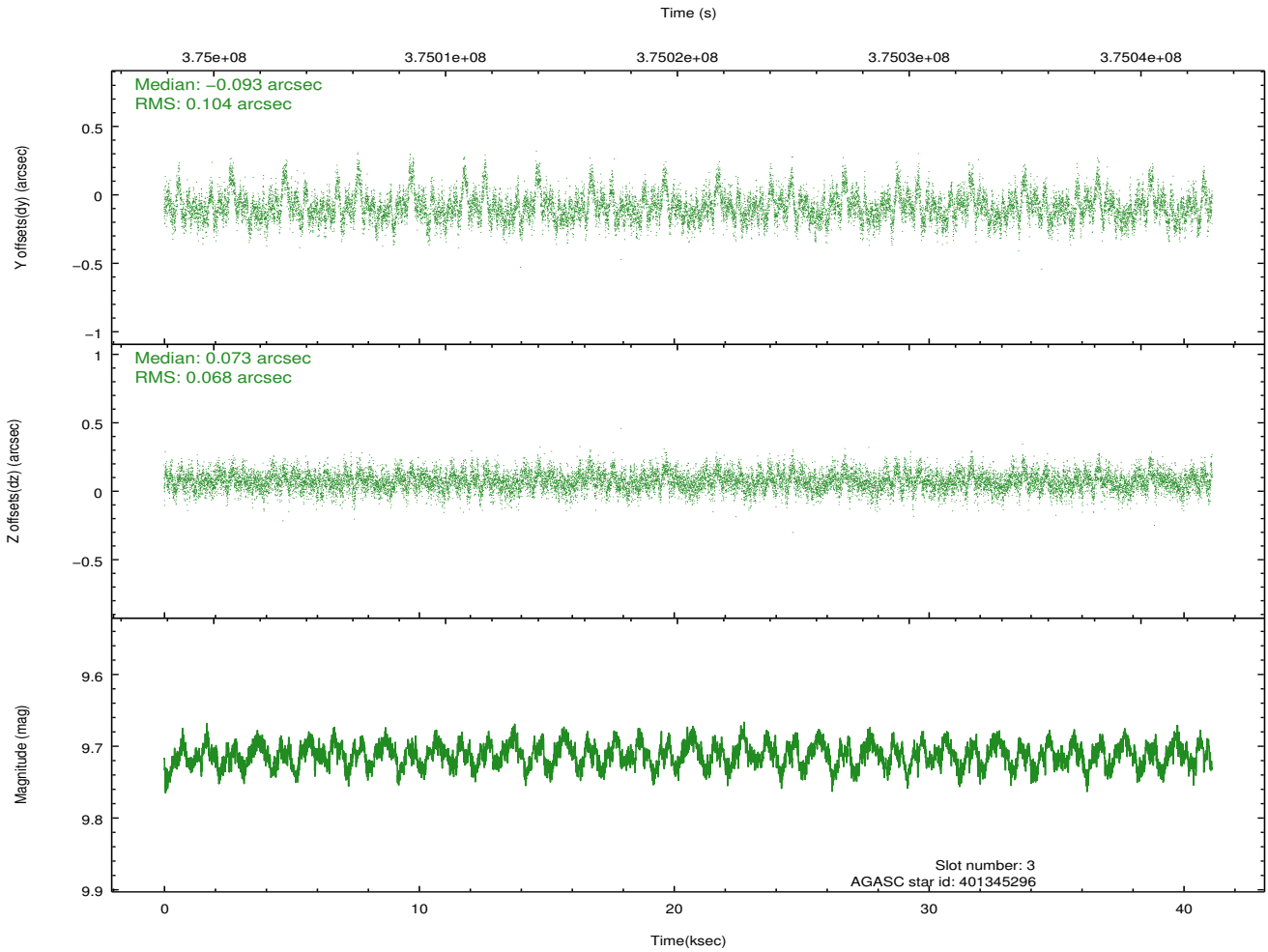
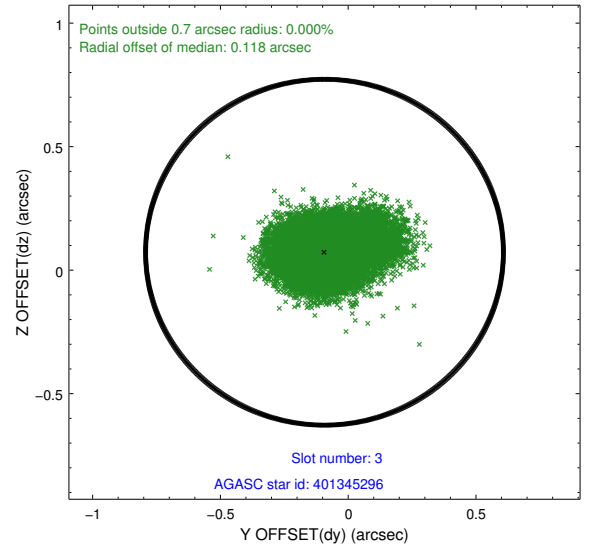
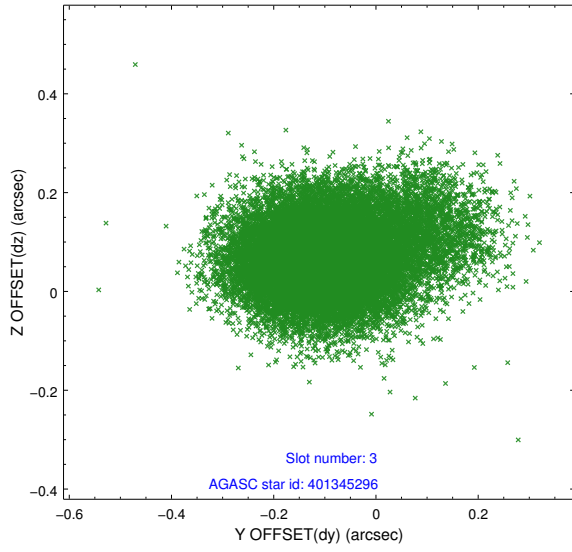


### Slot Statistics

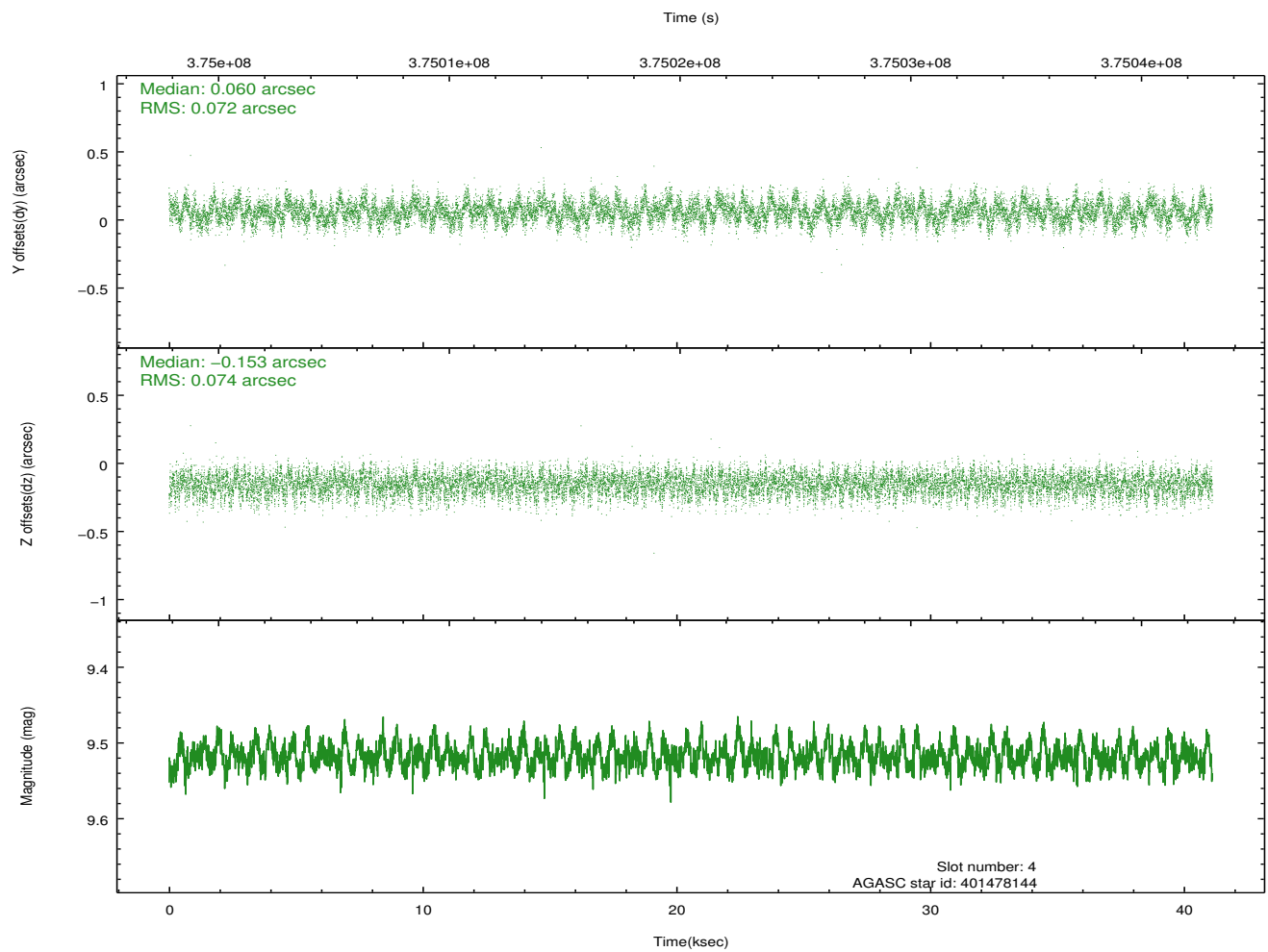
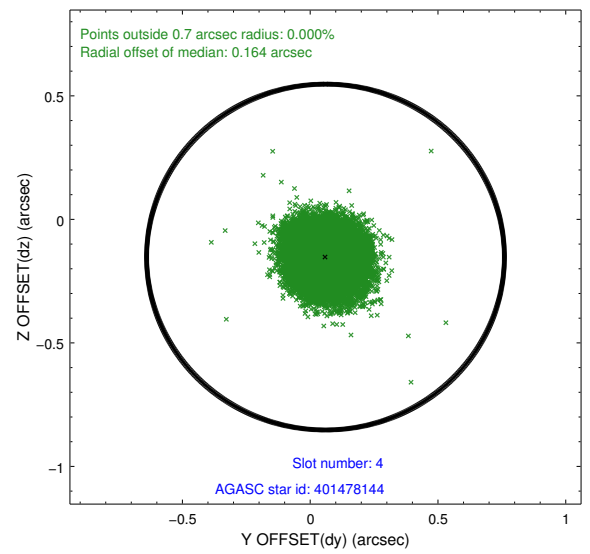
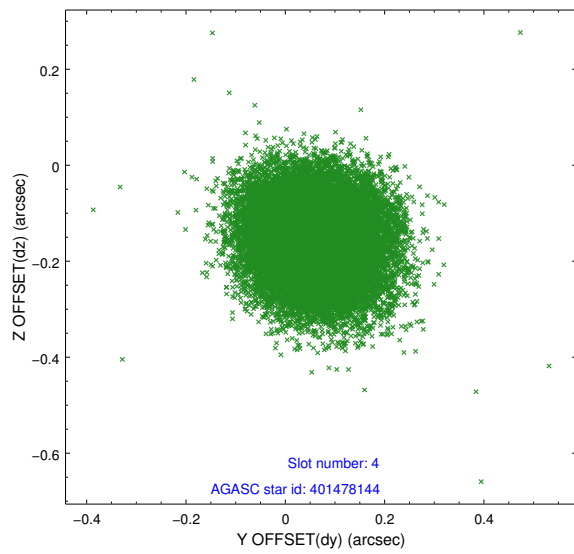
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.03	10028	0.083	-0.032	0.015	0.064	0.000000	0.000000	926.13	-899.46
1	FID	ACIS-I-5	7.02	10030	-0.224	0.085	0.016	0.038	0.000000	0.000000	-1822.27	998.13
2	FID	ACIS-I-6	7.04	10028	0.051	0.018	0.018	0.036	0.000000	0.000000	391.65	1642.58
3	GUIDE	401345296	9.71	20042	-0.093	0.073	0.127	0.225	246.414533	39.580805	-2029.75	-382.36
4	GUIDE	401478144	9.52	20030	0.060	-0.153	0.111	0.175	247.248621	39.077700	678.49	-1540.52
5	GUIDE	401479168	9.81	19913	-0.014	0.035	0.169	0.284	248.051525	39.792234	2151.88	1531.07
6	GUIDE	401481984	8.70	20045	0.023	-0.022	0.073	0.116	247.136950	39.776672	-273.83	809.51
7	GUIDE	401483160	9.70	20027	0.021	0.064	0.131	0.210	247.172429	38.956724	585.61	-2016.36

## 2.4 Star Slots

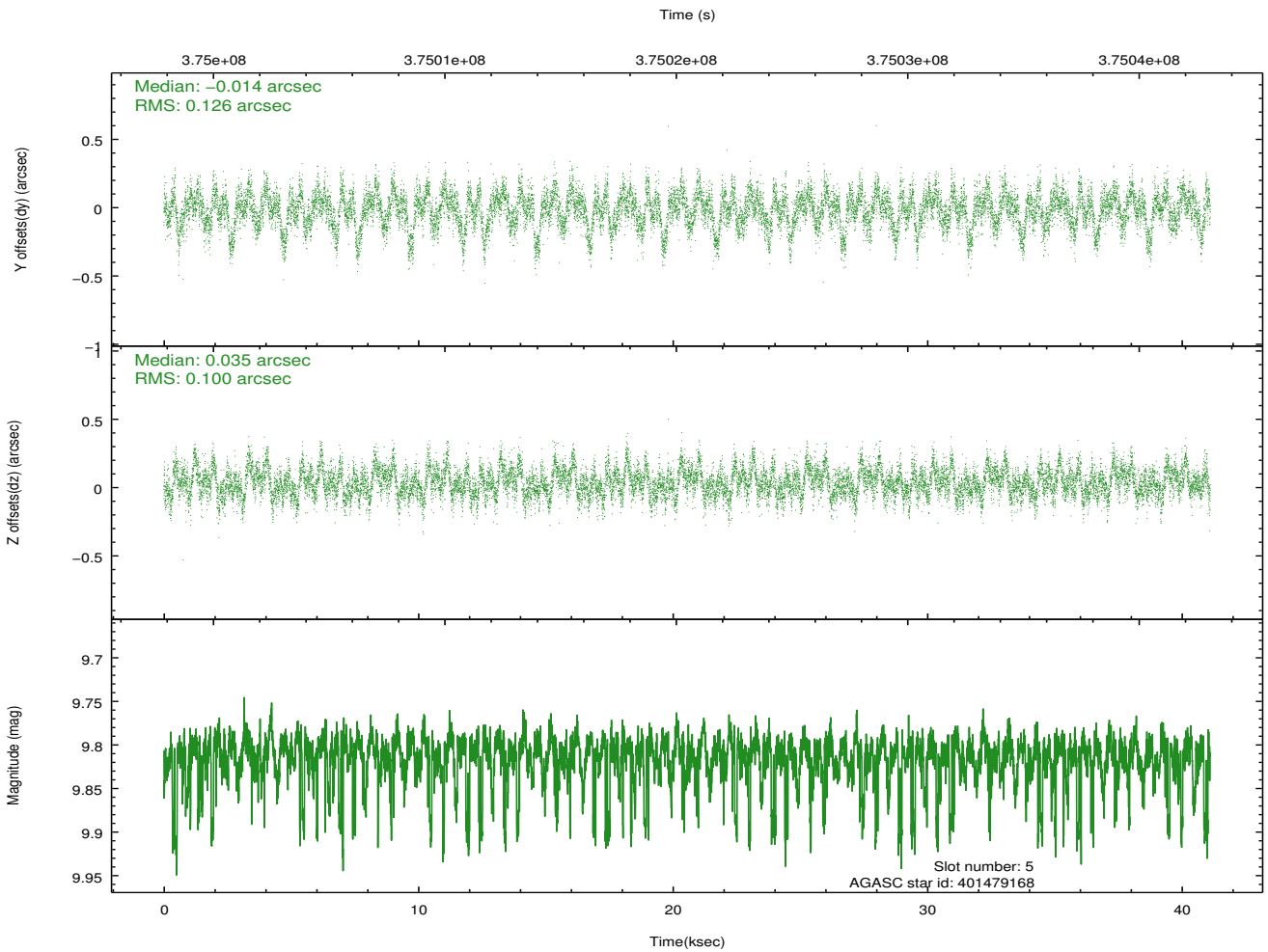
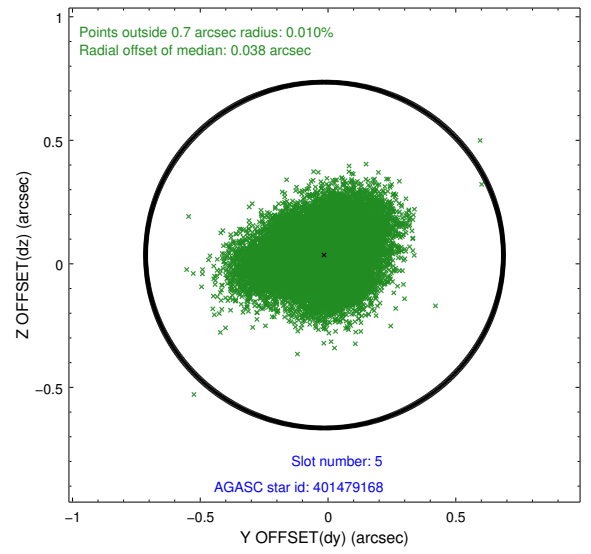
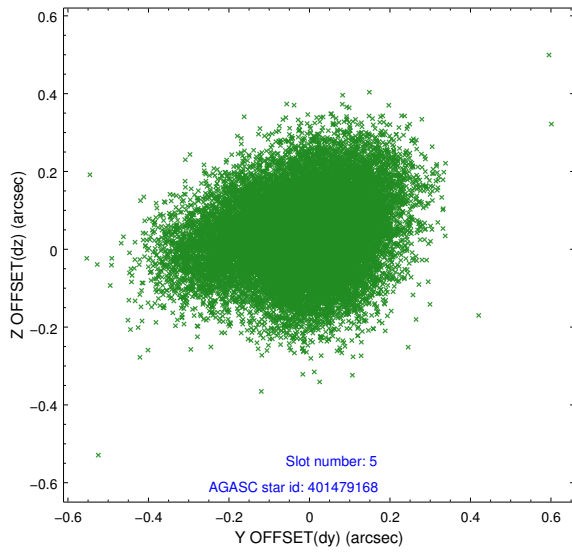
### 2.4.1 Slot 3



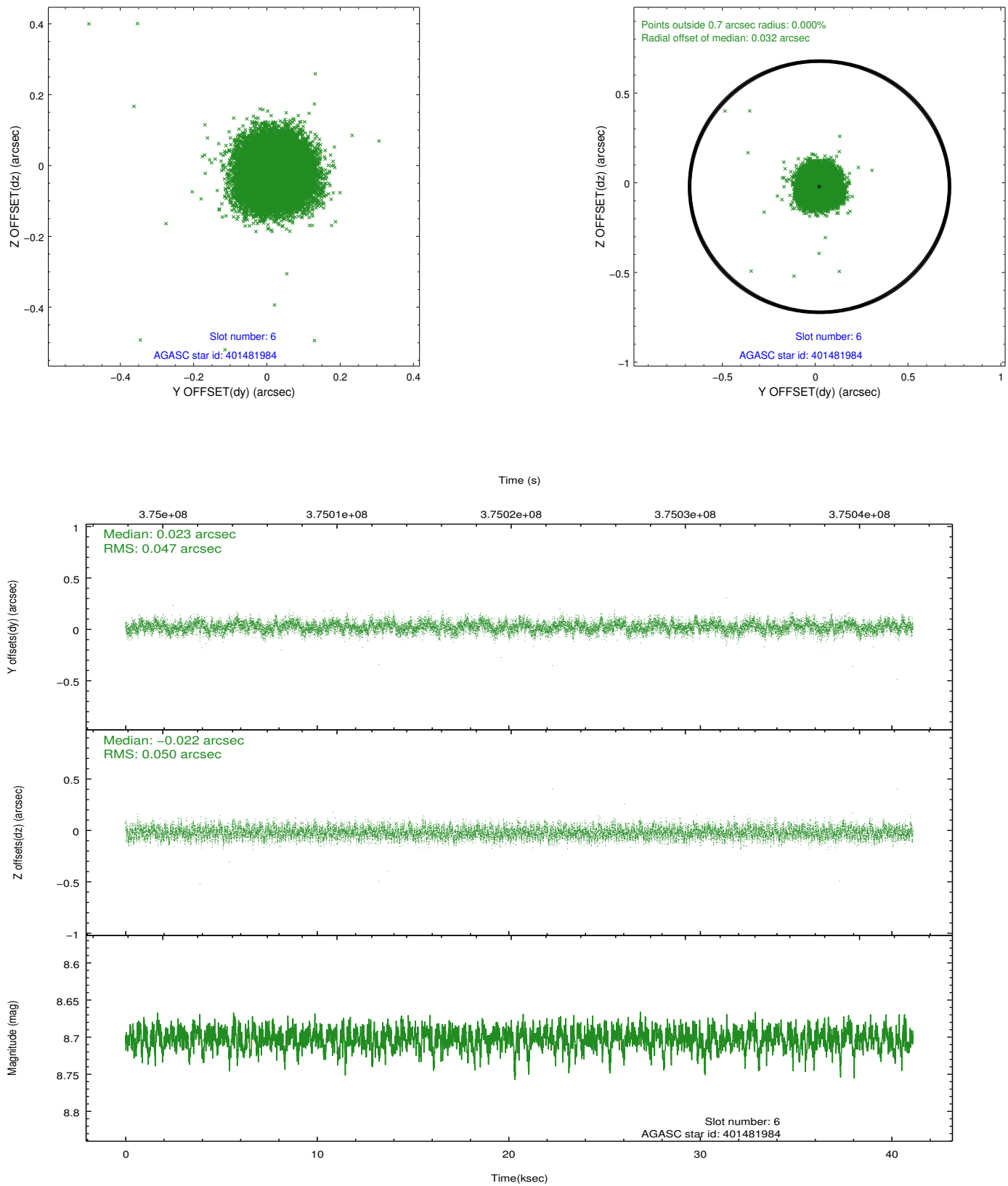
## 2.4.2 Slot 4



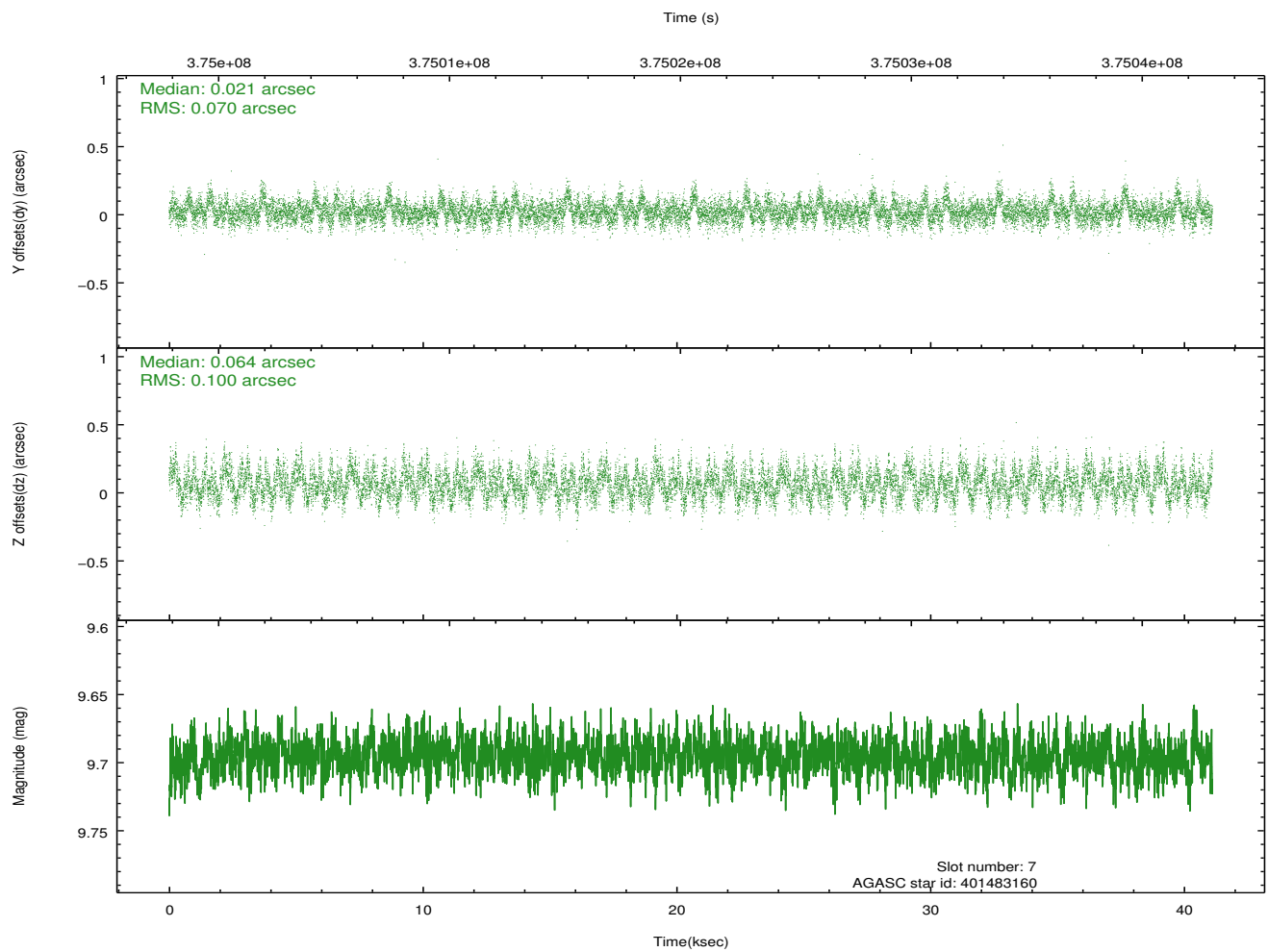
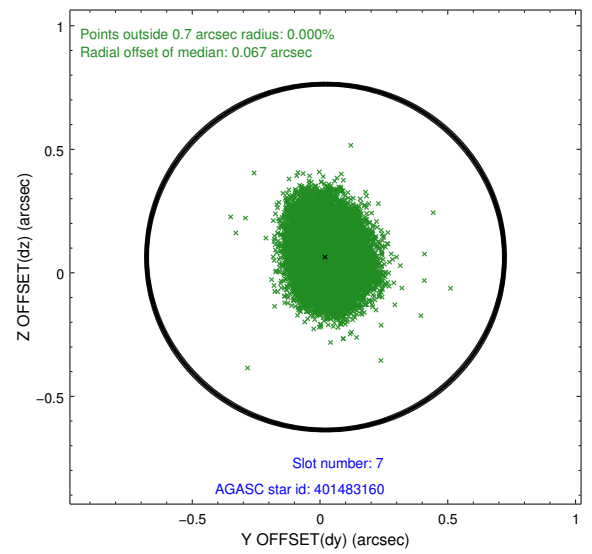
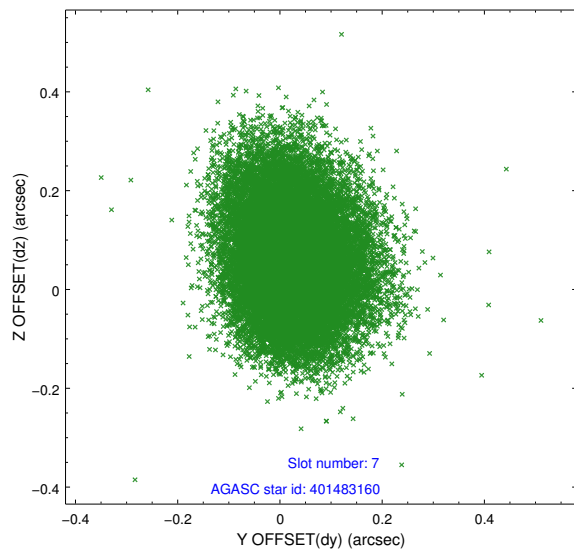
### 2.4.3 Slot 5



## 2.4.4 Slot 6

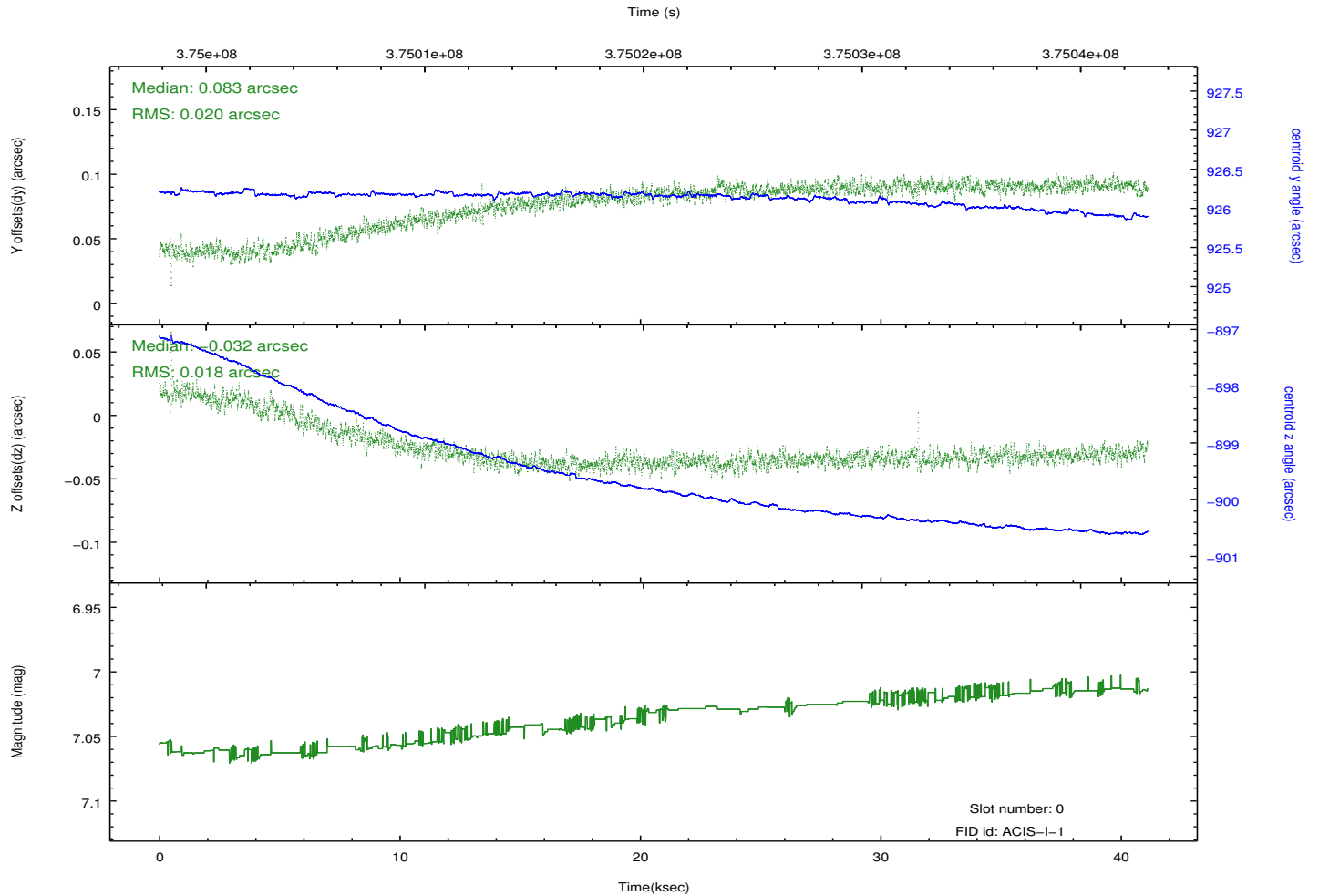
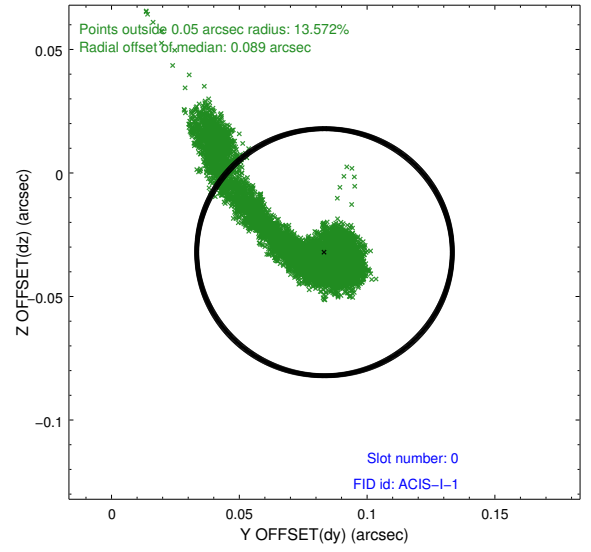
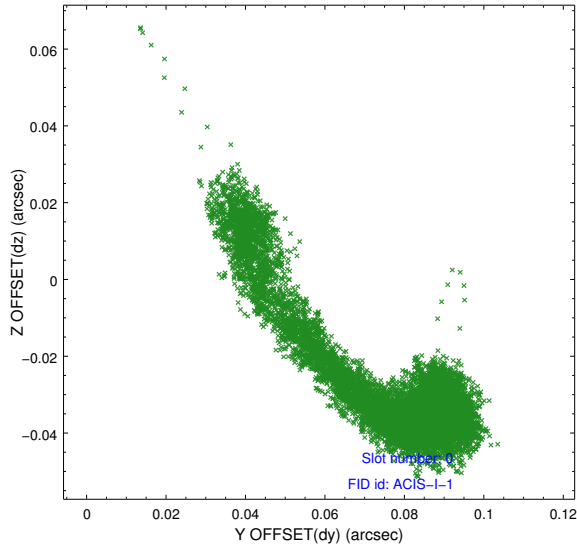


## 2.4.5 Slot 7

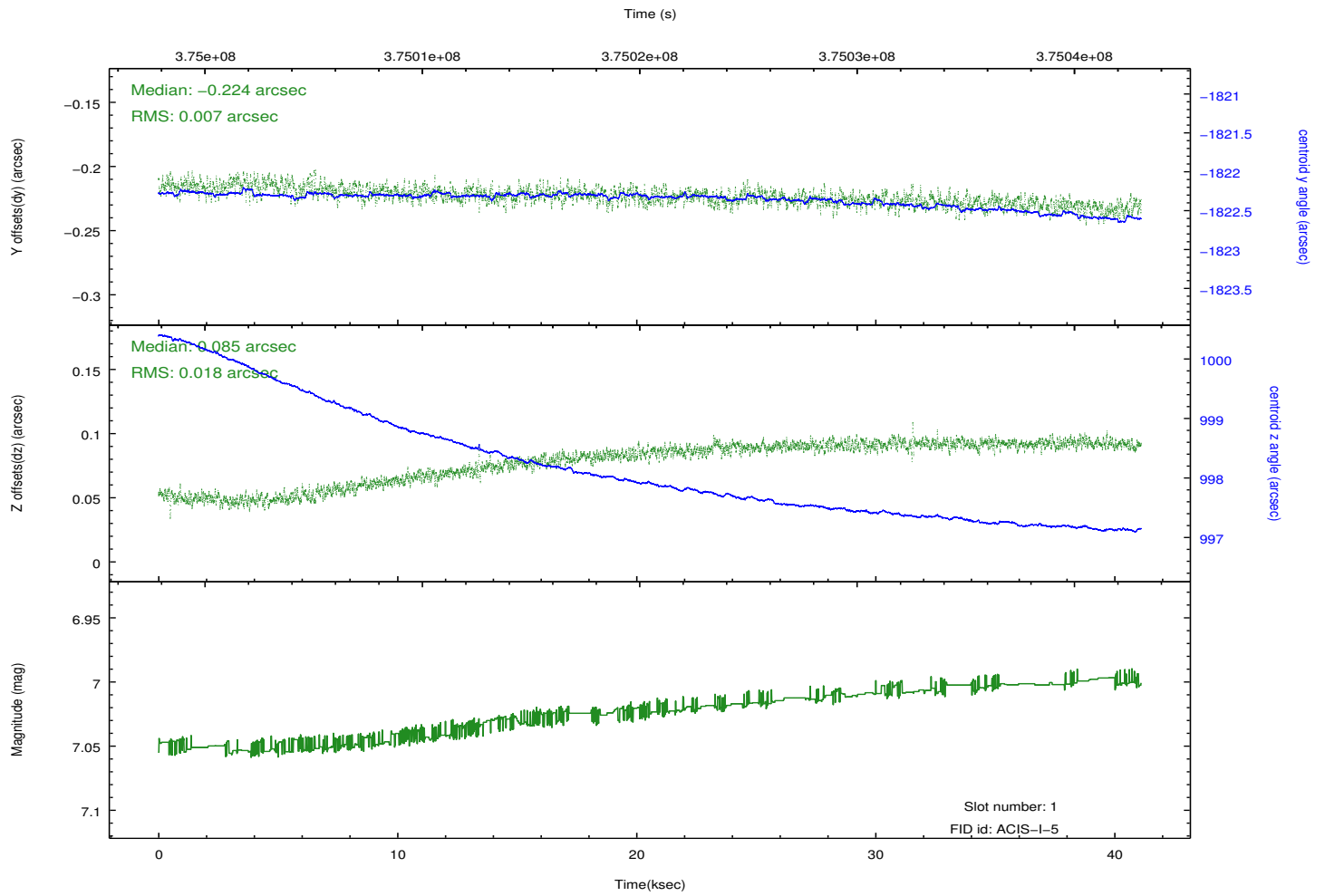
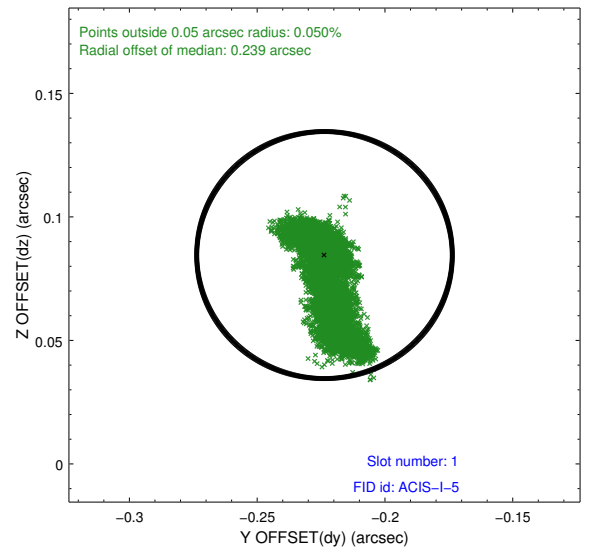
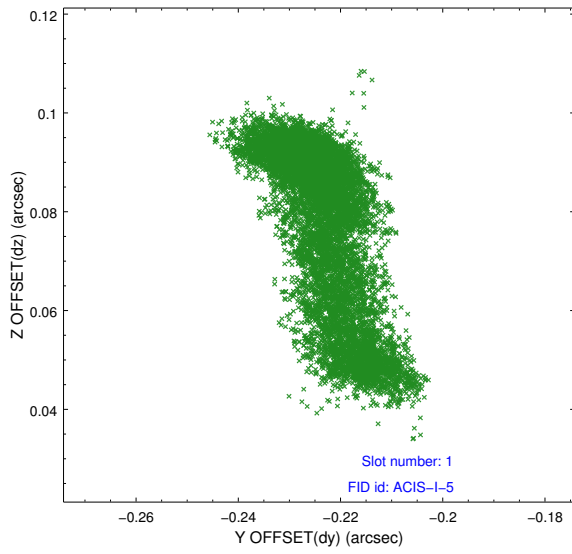


## 2.5 FID Slots

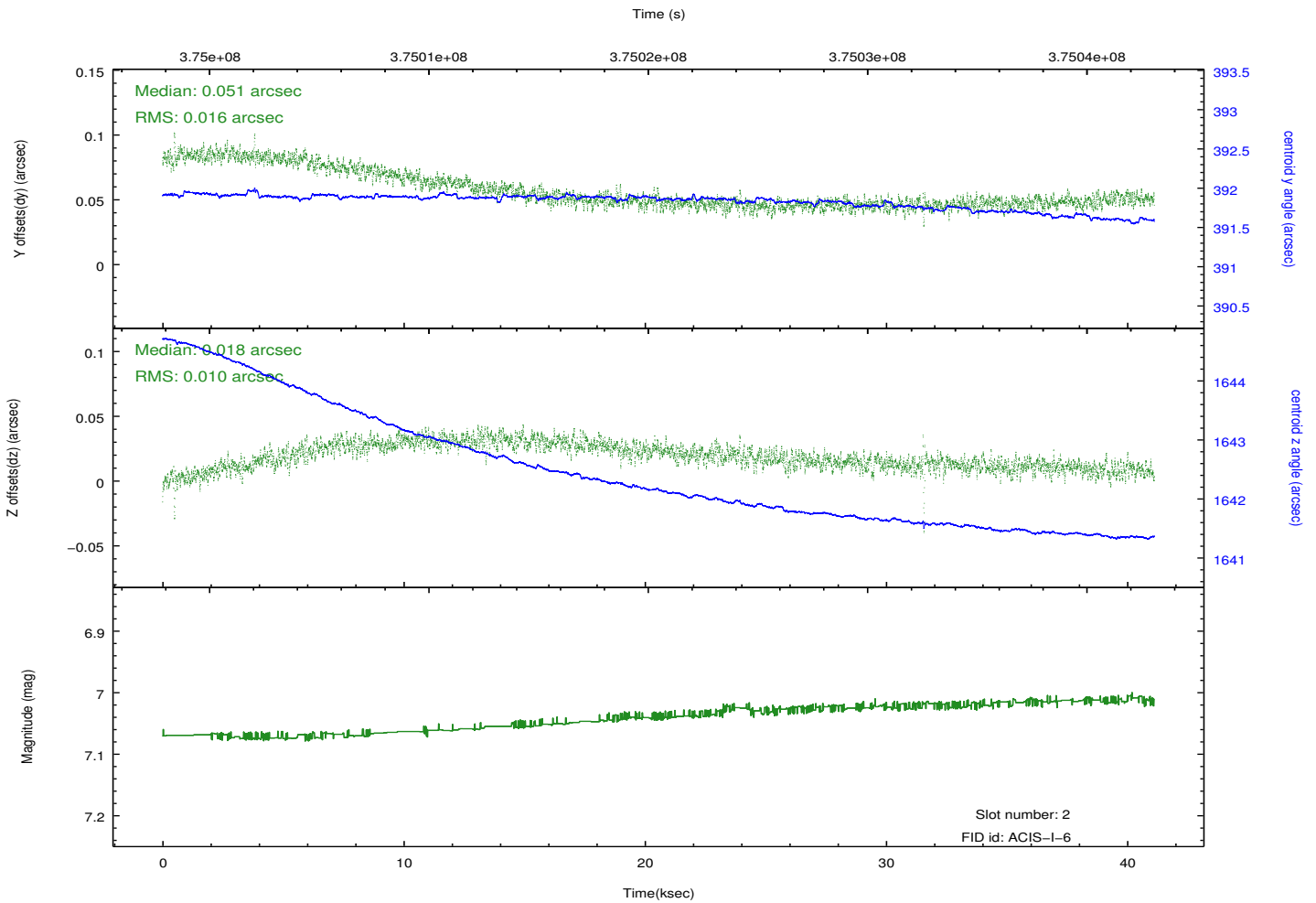
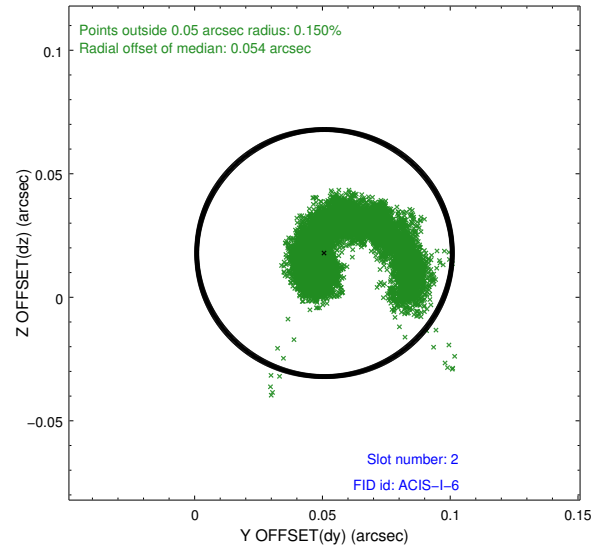
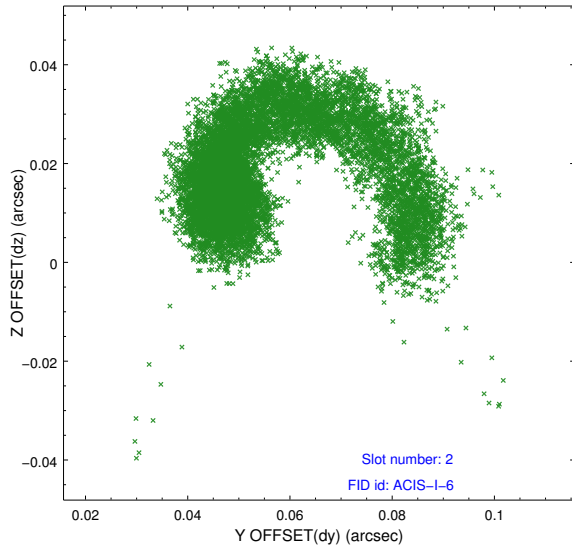
### 2.5.1 Slot 0



## 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)	2012.06.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	41.112200316191

## A.2 Comments