

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10389 - L2 Version 2  
Chandra X-Ray Center

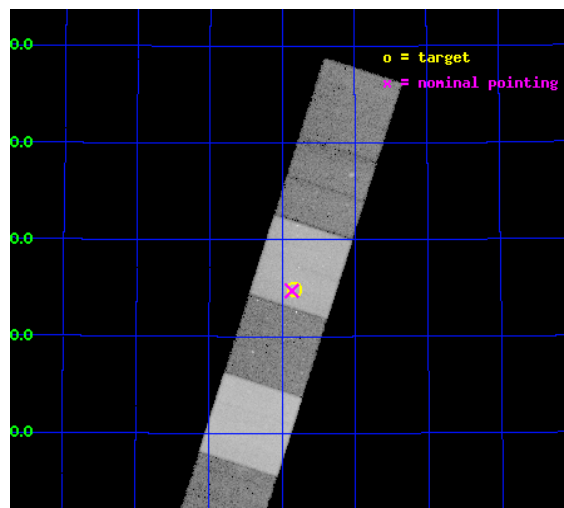
L2 Processing Date : Jun 10 2012

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# 1 Front

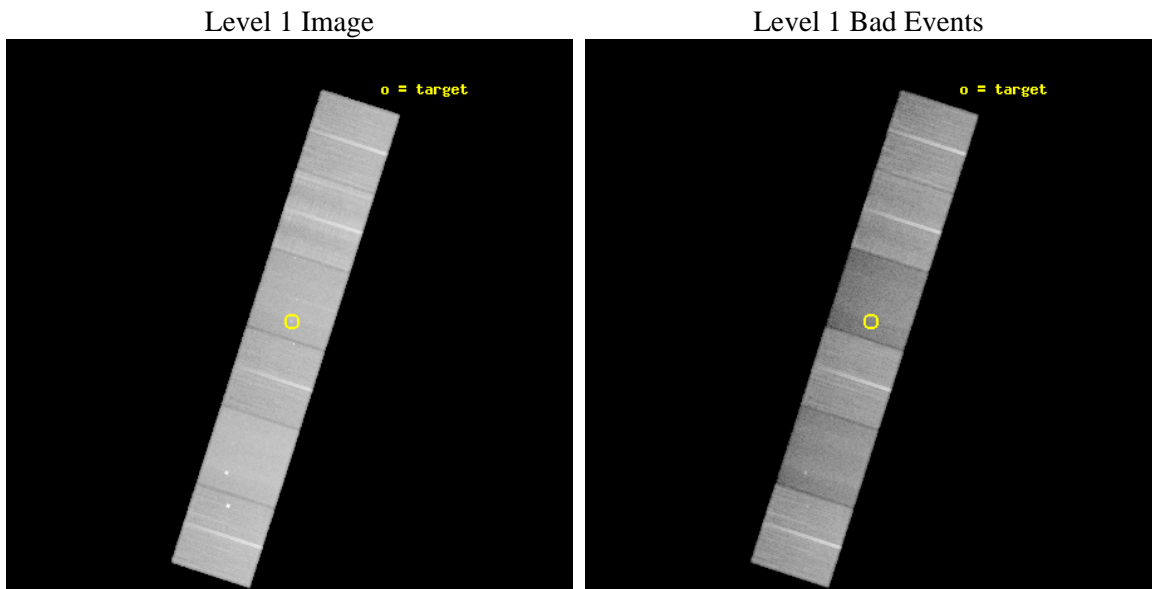
seq_num	701932	Sequence number
obs_id	10389	Observation id
title	The Structure and Physics of the Youngest Radio Galaxies	Proposal
observer	Prof. Eric Perlman	Principal investigator
object	NGC3894	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.209583	Observer's specified target RA [deg]
dec_targ	59.415528	Observer's specified target Dec [deg]
ra_nom	177.21681930179	Nominal RA [deg]
dec_nom	59.412372114553	Nominal Dec [deg]
roll_nom	287.80487018302	Nominal Roll [deg]
revision	2	Processing version of data
ontime	39036.72516042	Sum of GTIs [s]
livetime	38542.418641345	Livetime [s]
ontime4	39033.525240123	Sum of GTIs [s]
ontime5	39036.684120417	Sum of GTIs [s]
ontime6	39036.643080413	Sum of GTIs [s]
ontime7	39036.72516042	Sum of GTIs [s]
ontime8	39030.120199382	Sum of GTIs [s]
ontime9	39036.561000407	Sum of GTIs [s]
l2events	467751	Number of level 2 events



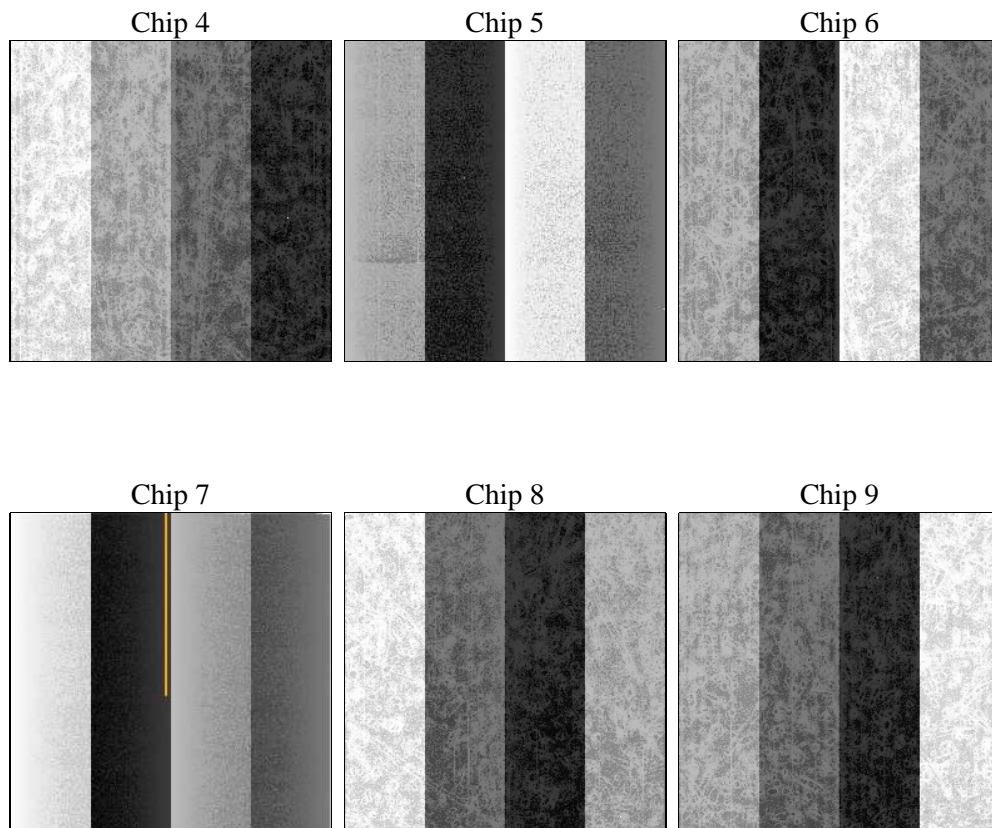
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	39036.72516042	Sum of GTIs [s]
caldbver	4.4.10	&#160	ontime4	39033.525240123	Sum of GTIs [s]
date	2012-06-10T14:29:33	Date and time of file creation	ontime5	39036.684120417	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	39036.643080413	Sum of GTIs [s]
			ontime7	39036.72516042	Sum of GTIs [s]
			ontime8	39030.120199382	Sum of GTIs [s]
			ontime9	39036.561000407	Sum of GTIs [s]
			l1events	2148334	Number of level 1 events

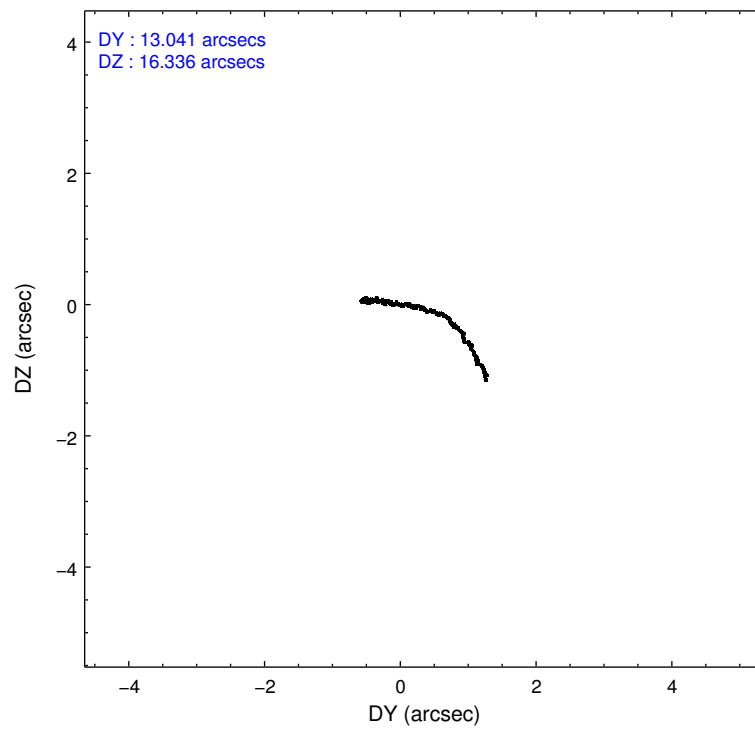
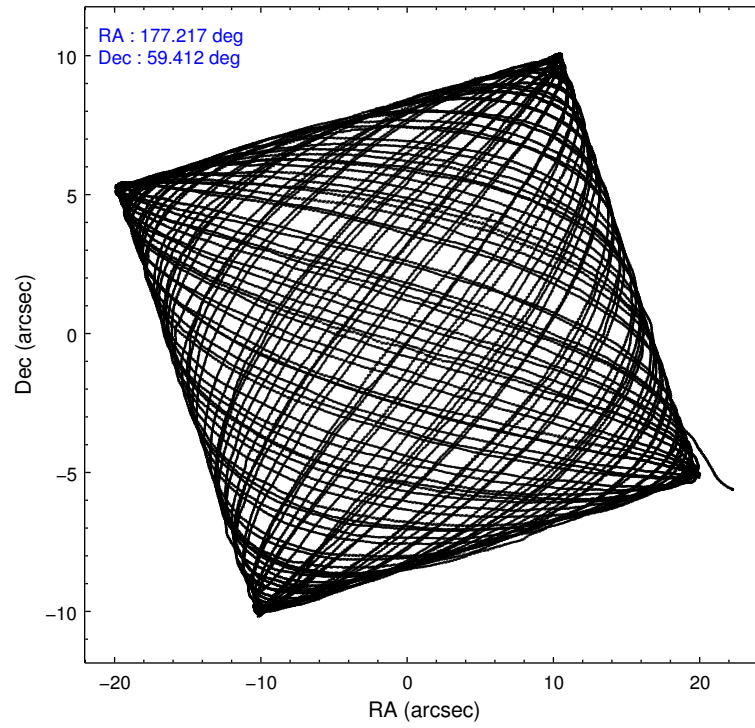
### 2.1.4 Events

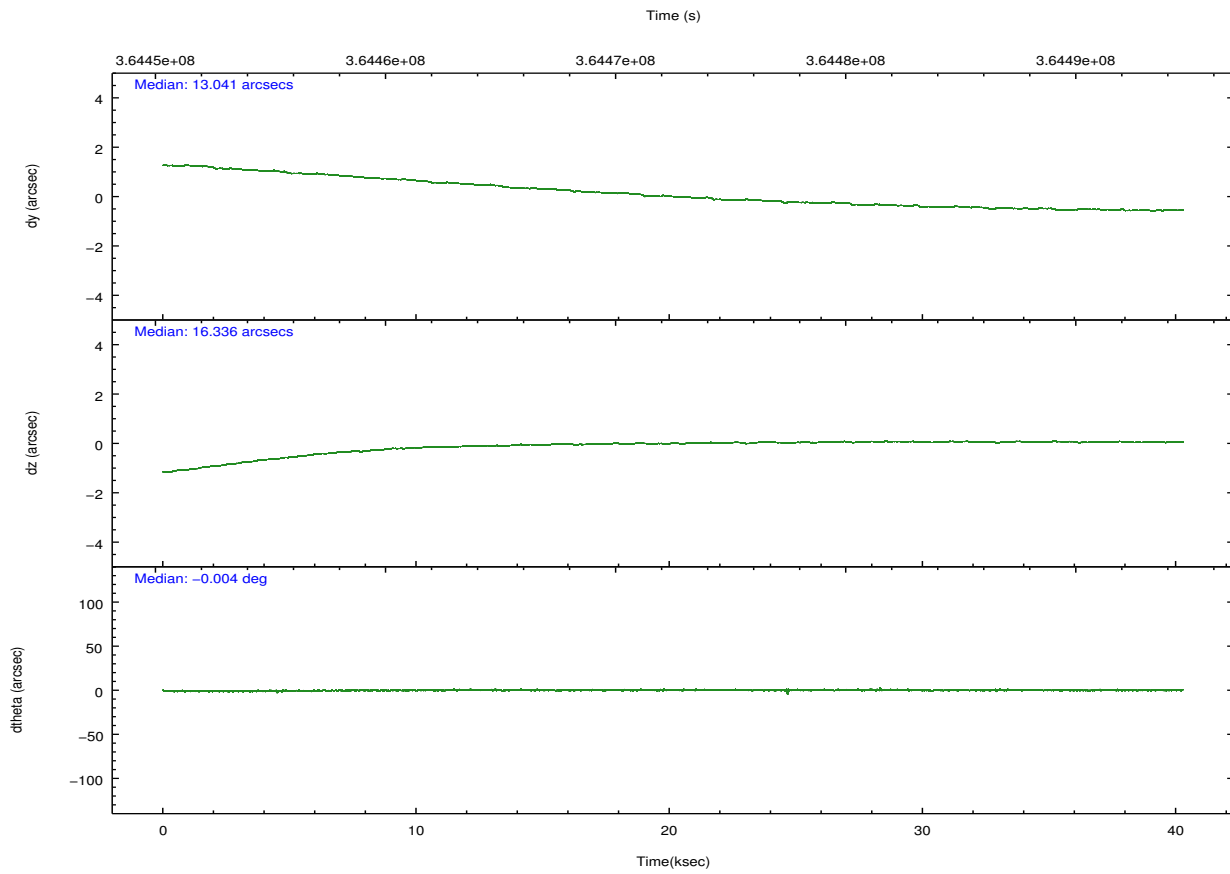
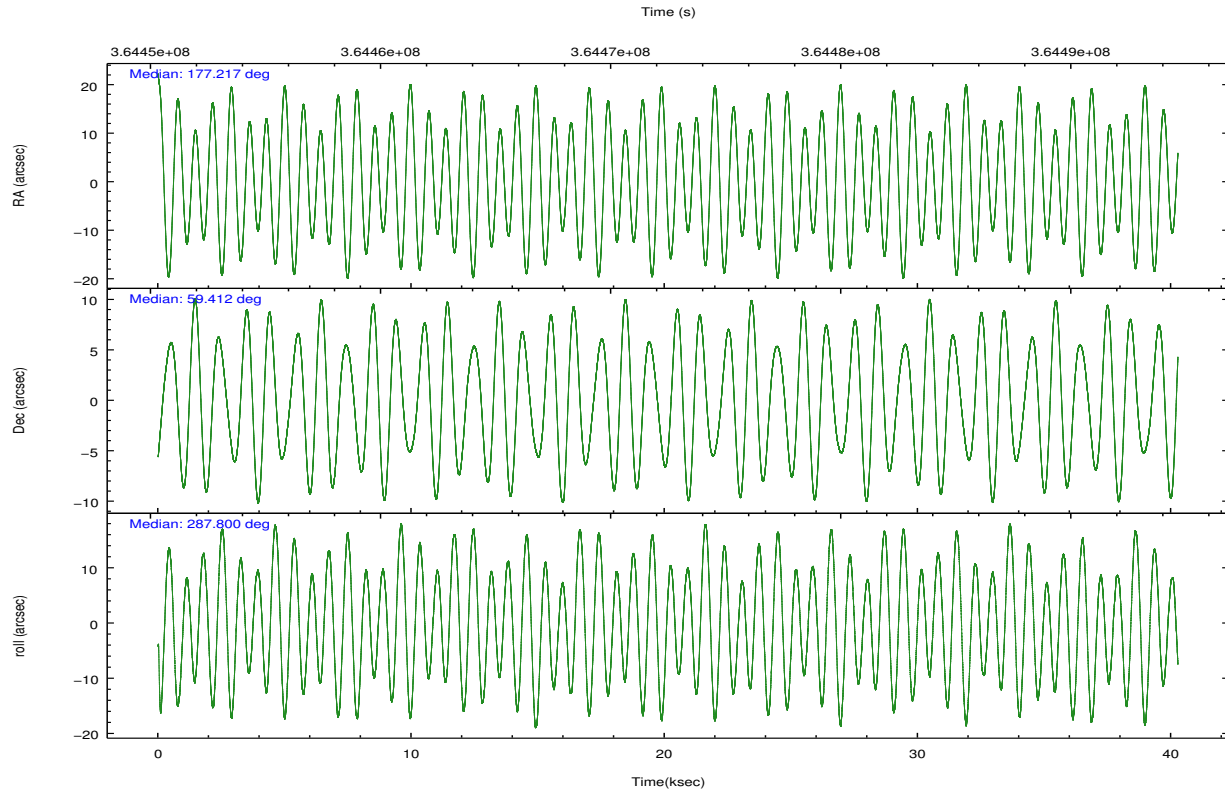
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	382778	404861	325773	312550	406311	316061	grade 0 events	17804	17988	12922	16193	29440	11240
rejected events	342994	192622	291687	157242	301453	283534		4%	4%	3%	5%	7%	3%
rejected %	89%	47%	89%	50%	74%	89%	grade 1 events	418	1286	196	490	394	181
								0%	0%	0%	0%	0%	0%
							grade 2 events	8870	66055	7547	33385	24996	7231
								2%	16%	2%	10%	6%	2%
							grade 3 events	3820	9473	3547	14451	11395	3624
								0%	2%	1%	4%	2%	1%
							grade 4 events	3593	9455	3484	14145	10643	3549
								0%	2%	1%	4%	2%	1%
							grade 5 events	11412	33177	11165	33449	17511	12487
								2%	8%	3%	10%	4%	3%
							grade 6 events	5700	109304	6591	77147	28435	6886
								1%	26%	2%	24%	6%	2%
							grade 7 events	331161	158123	280321	123290	283497	270863
								86%	39%	86%	39%	69%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	177.176501	177.2168193017902	Subarray requested	NONE	NONE
[deg] Pointing Dec	59.430456	59.41237211455291	Alternating exposures requested	N	N
[deg] Pointing Roll	287.682956	287.8048701830197	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	364453641.184000	364452088.62064			
Observation start date	2009-07-20T05:06:15	2009-07-20T04:41:28			
[s] Observation end time (MET)	364492641.184000	364493625.21022			
Observation end date	2009-07-20T15:56:15	2009-07-20T16:13:45			
Read mode	TIMED	TIMED			

## 2.3 Aspect



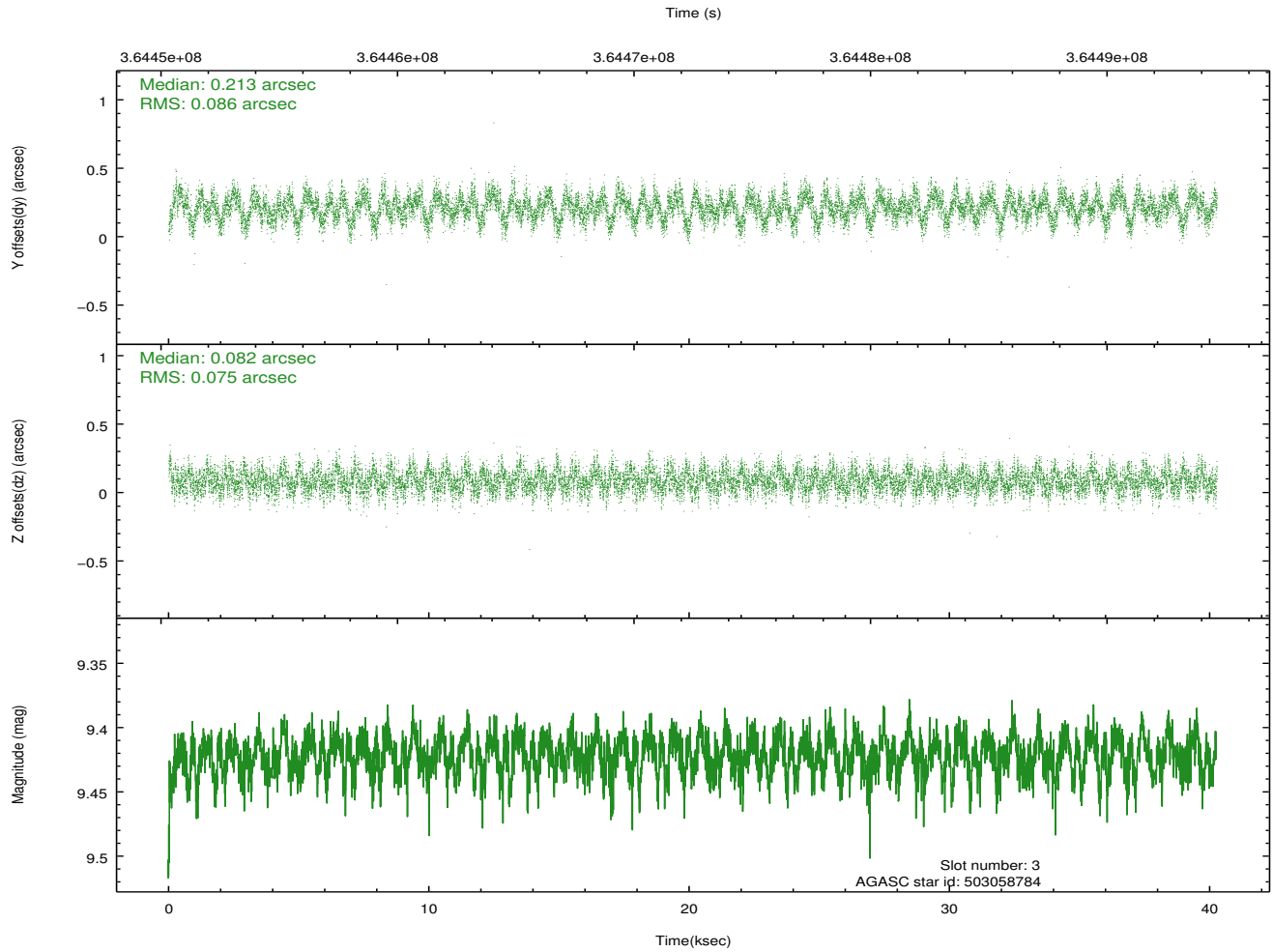
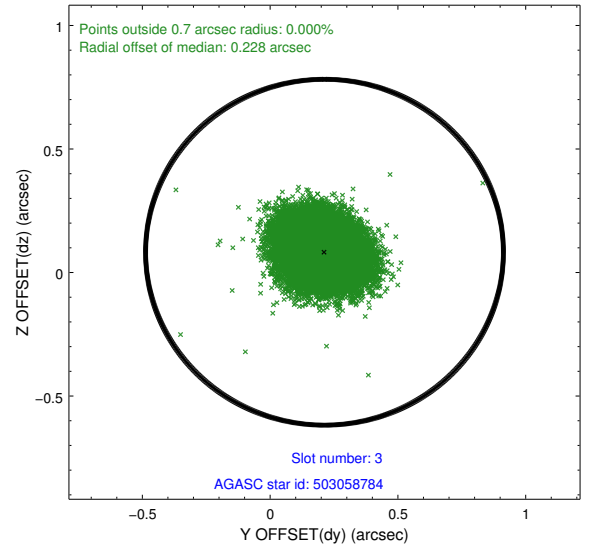
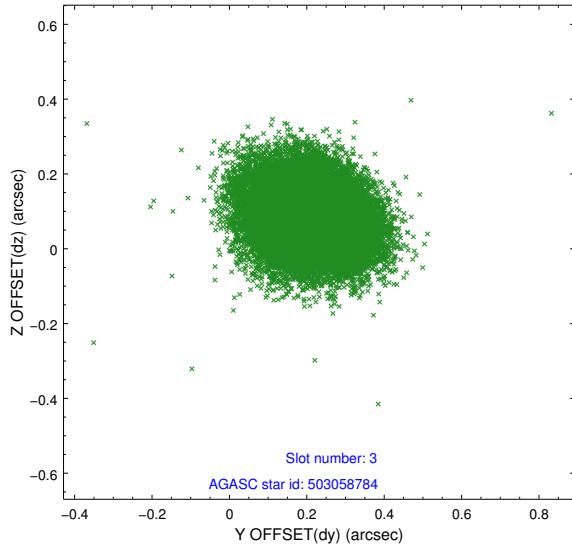


### Slot Statistics

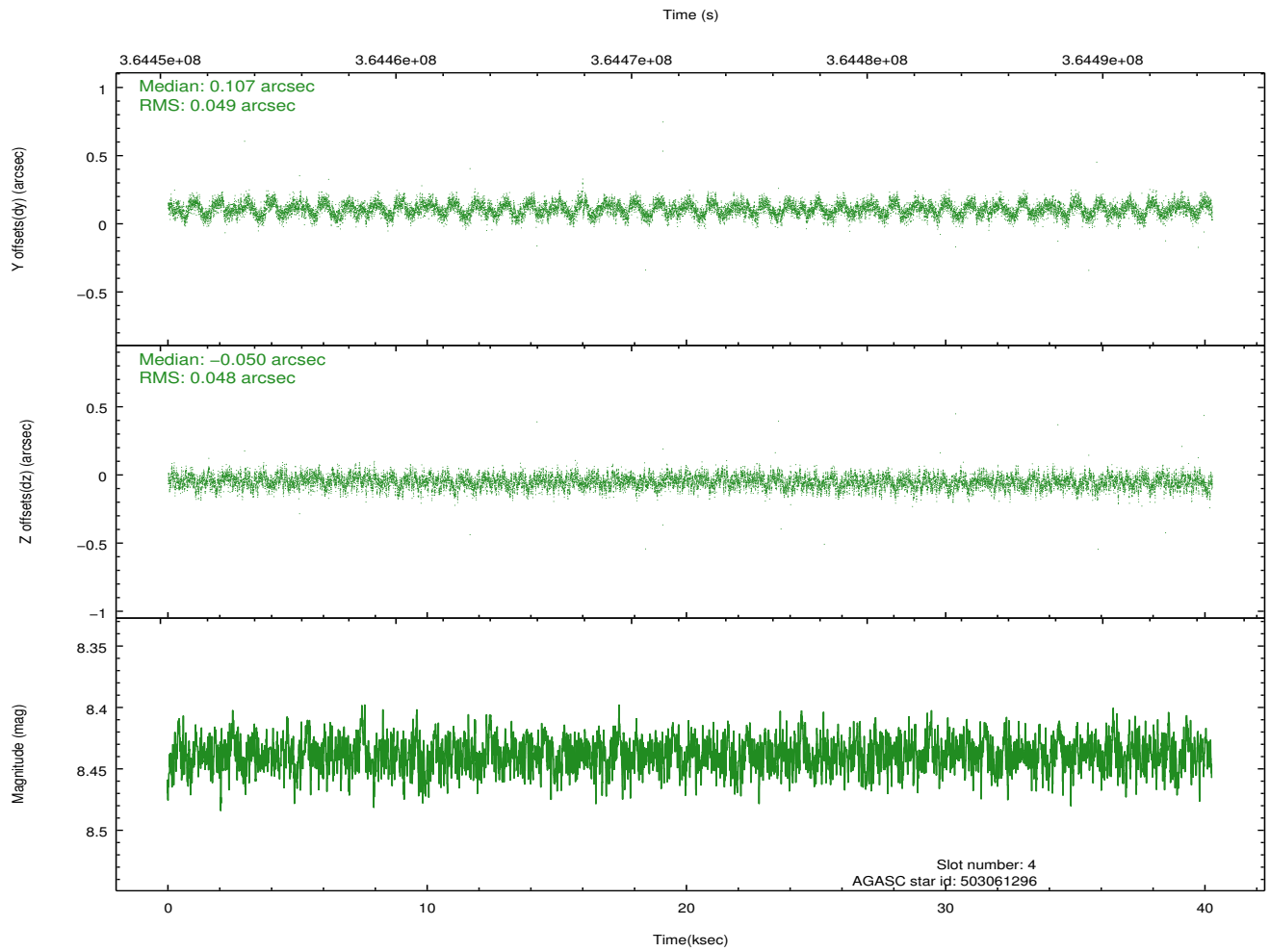
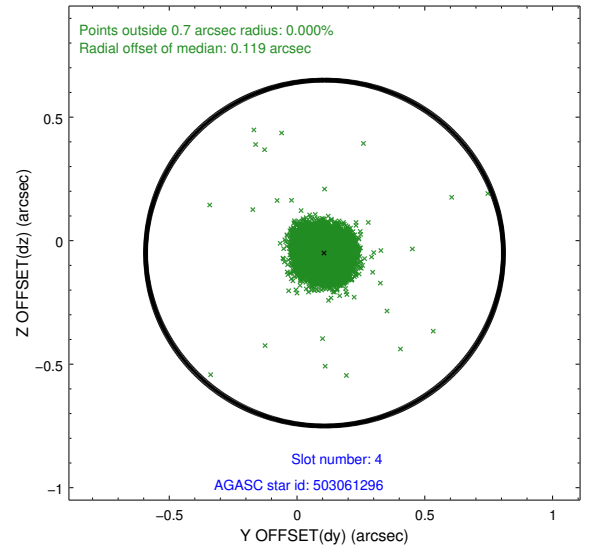
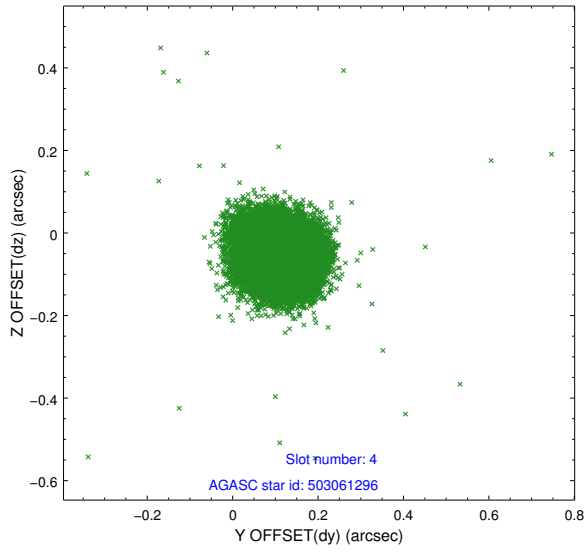
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	9823	-0.034	-0.012	0.014	0.049	0.000000	0.000000	-766.13	-1737.62
1	FID	ACIS-S-4	6.97	9822	0.148	0.020	0.032	0.061	0.000000	0.000000	2147.33	170.89
2	FID	ACIS-S-5	6.99	9822	-0.148	-0.001	0.020	0.028	0.000000	0.000000	-1819.07	164.53
3	GUIDE	503058784	9.42	19618	0.213	0.082	0.122	0.193	177.197718	59.012089	1447.49	-419.51
4	GUIDE	503061296	8.44	19636	0.107	-0.050	0.072	0.113	176.644541	59.209106	458.35	-1174.57
5	GUIDE	503186912	9.53	19615	-0.025	-0.130	0.105	0.169	178.360577	59.355731	898.03	1994.13
6	GUIDE	503187128	9.46	19616	-0.184	-0.050	0.108	0.169	178.147568	59.383971	687.93	1649.00
7	GUIDE	503059248	9.35	19624	-0.105	0.141	0.104	0.165	175.825378	59.872412	-2280.53	-1834.94

## 2.4 Star Slots

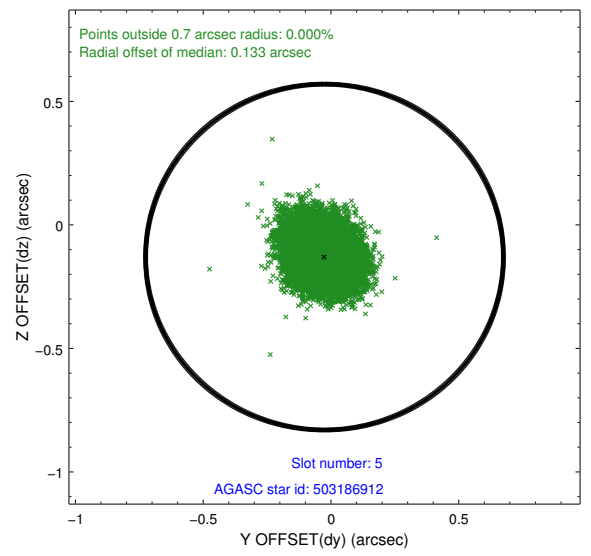
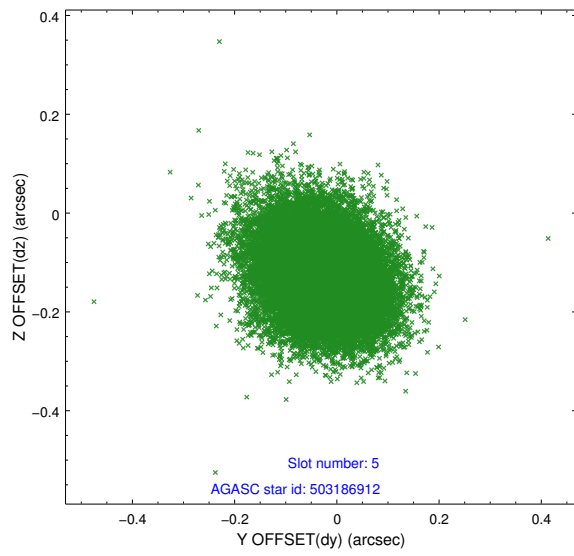
### 2.4.1 Slot 3



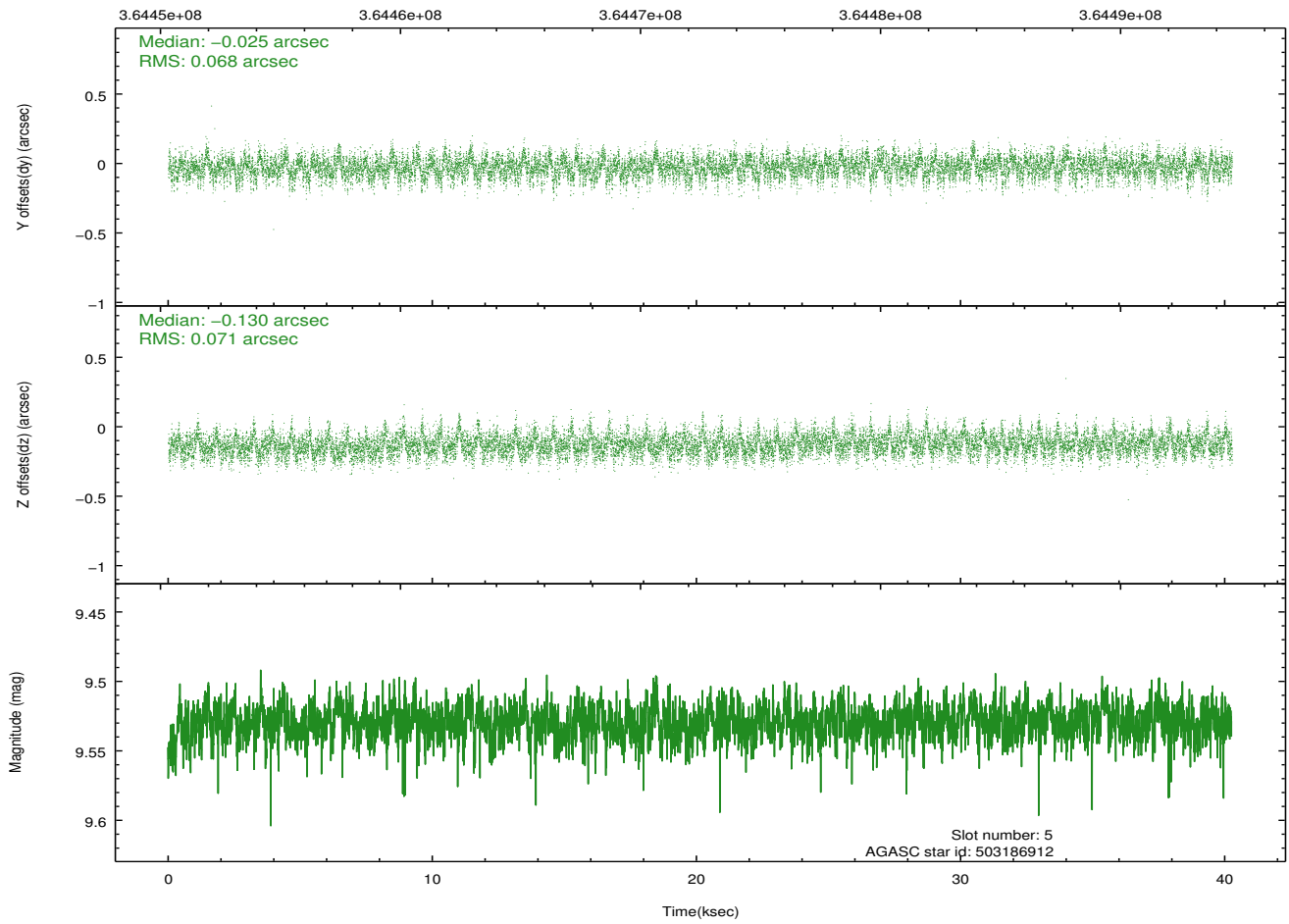
### 2.4.2 Slot 4



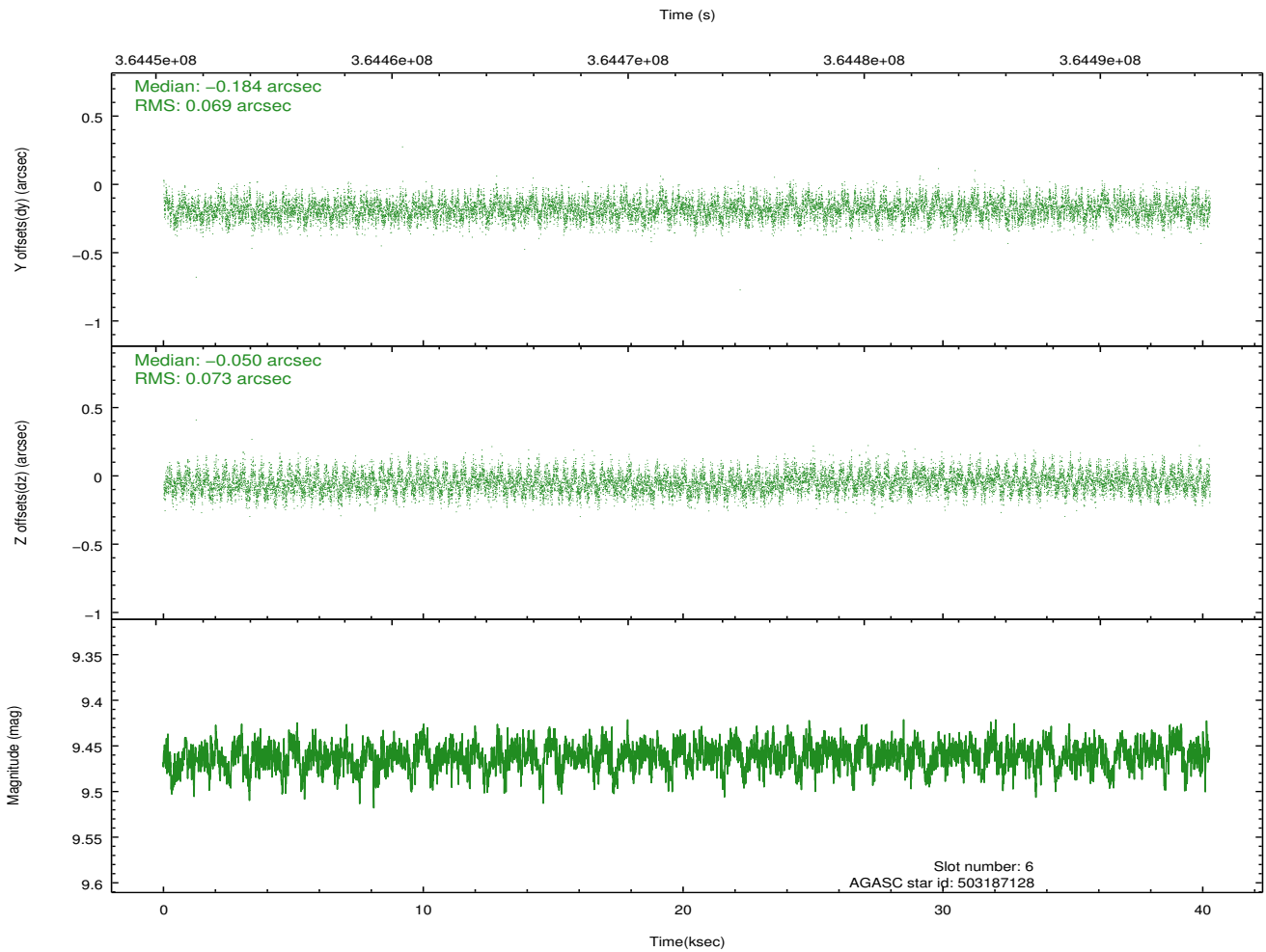
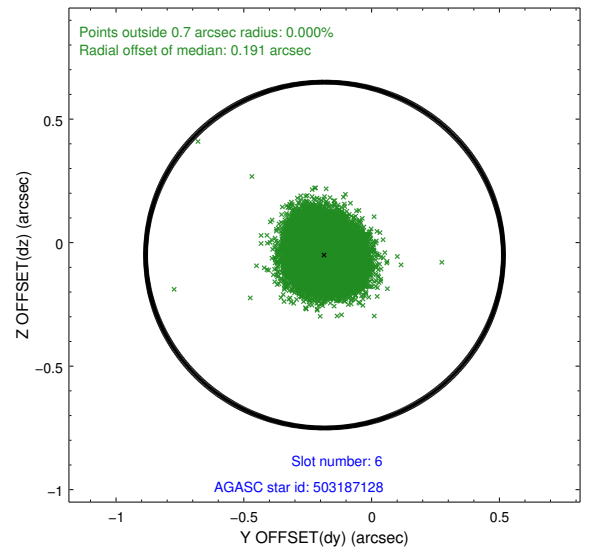
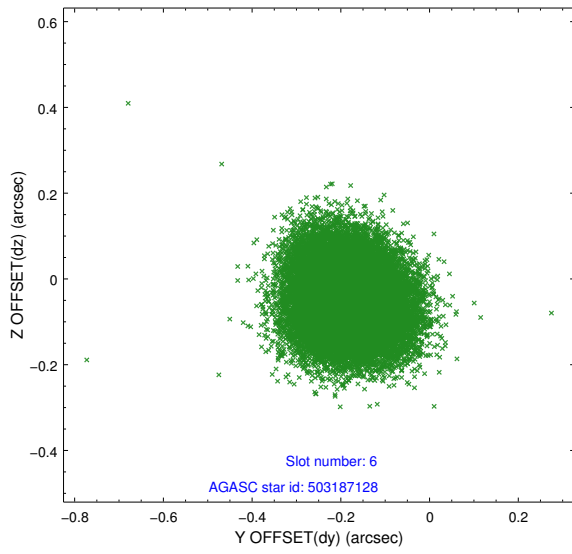
### 2.4.3 Slot 5



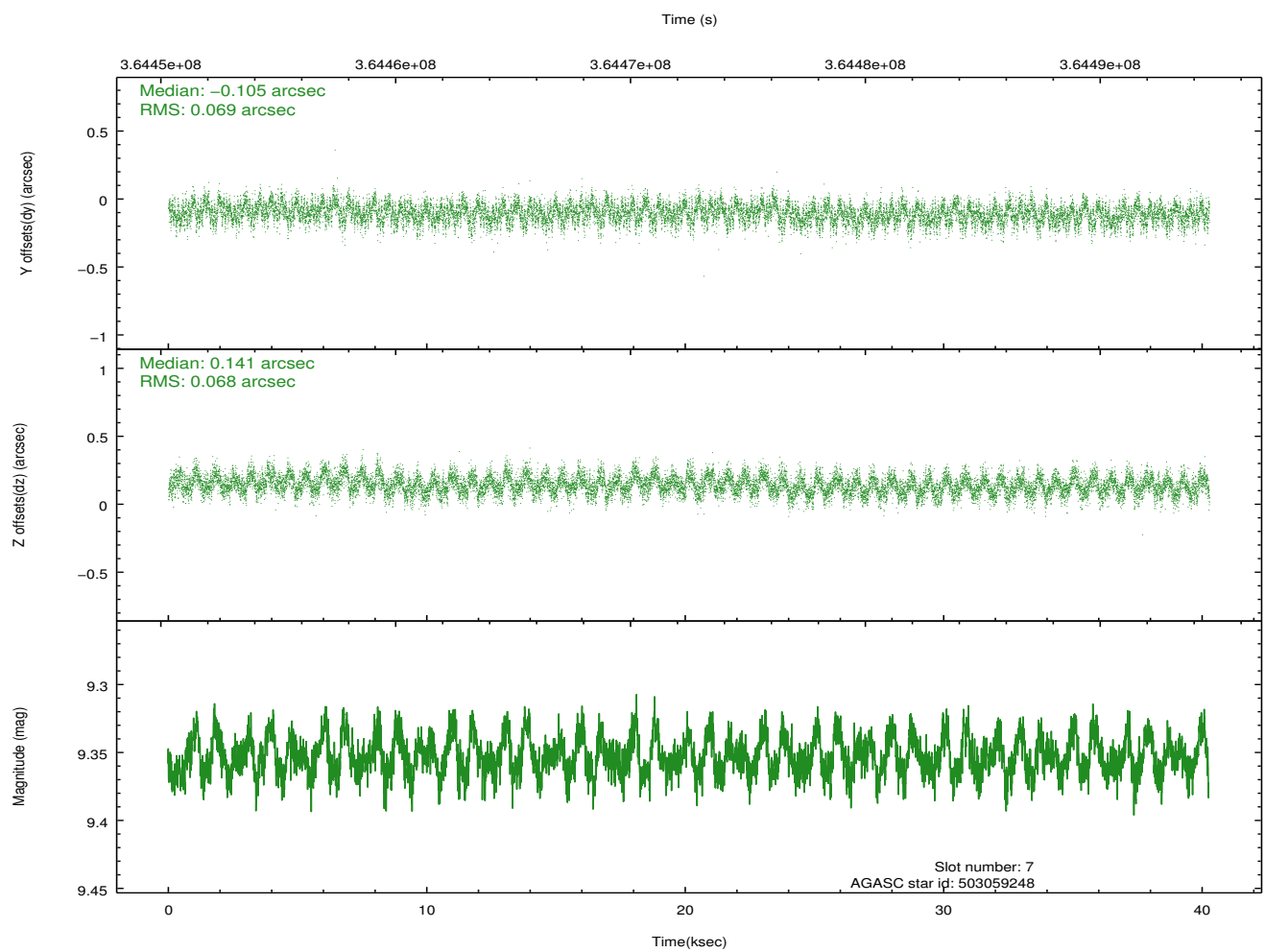
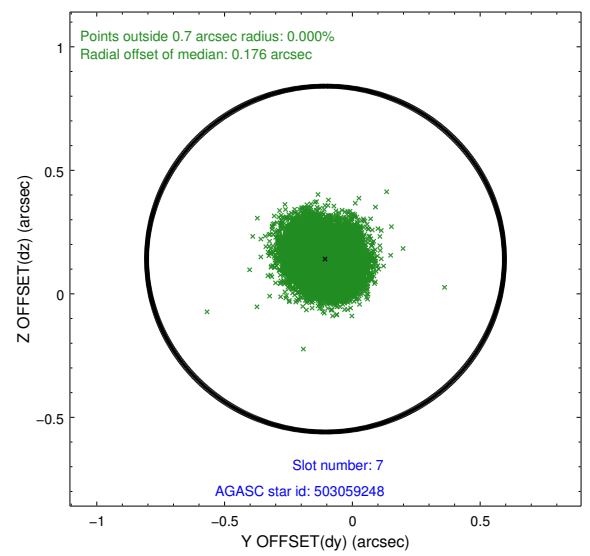
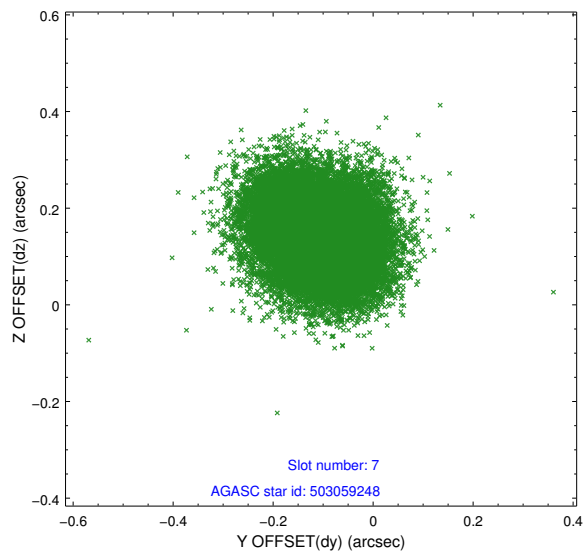
Time (s)



## 2.4.4 Slot 6

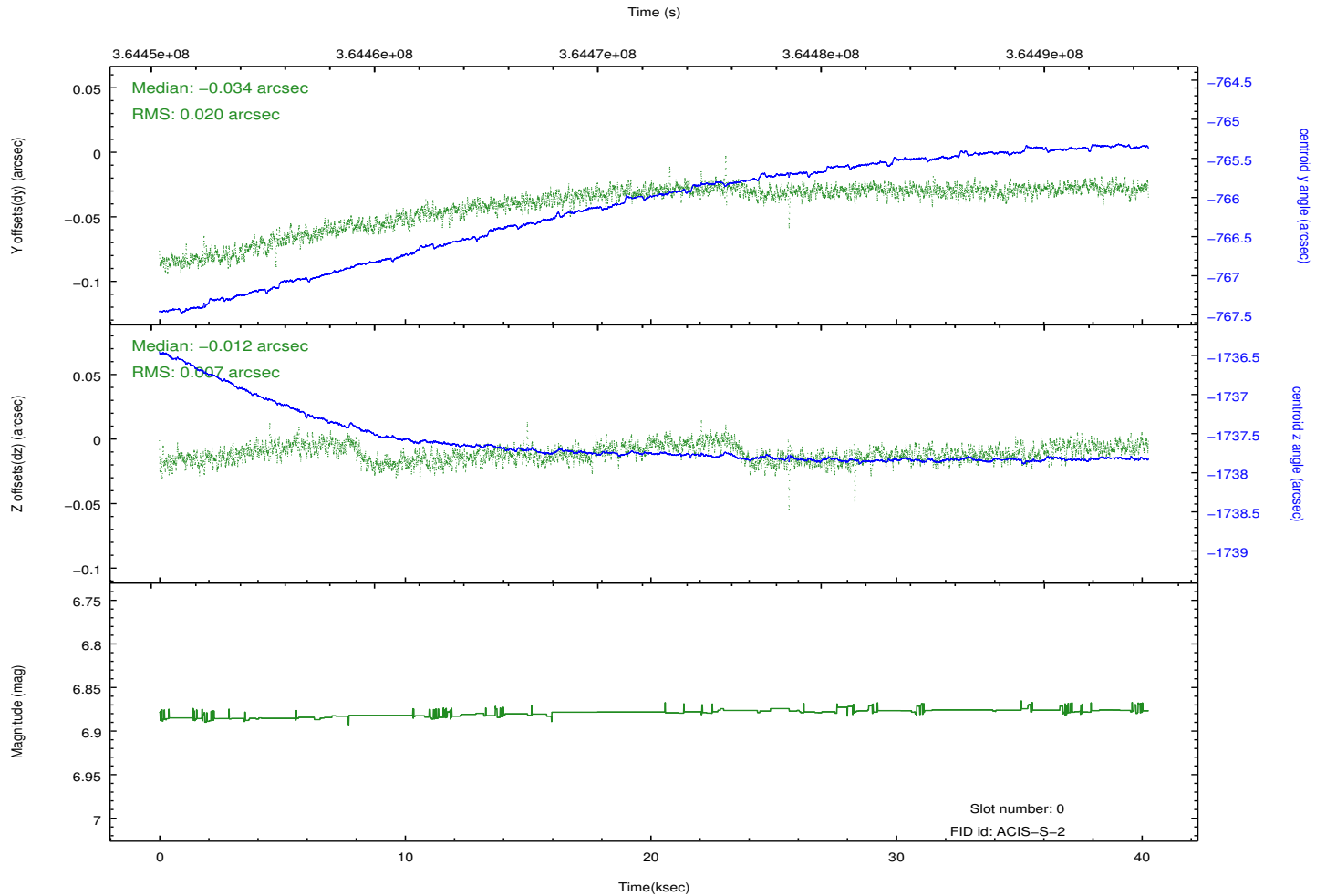
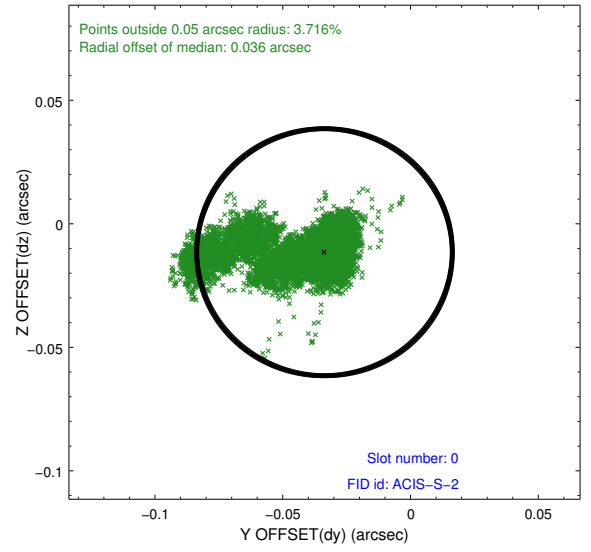
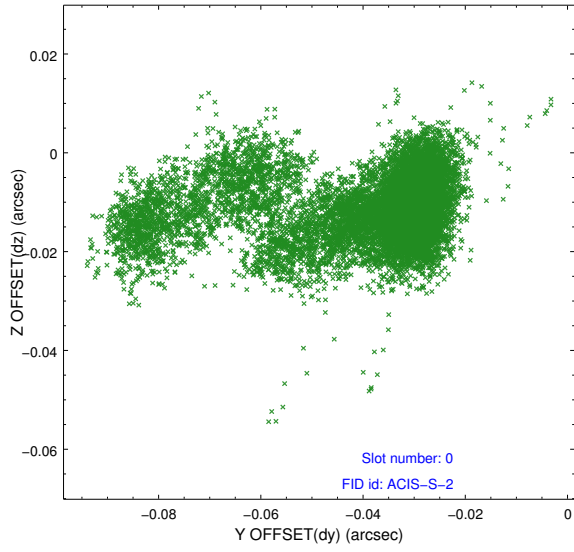


## 2.4.5 Slot 7

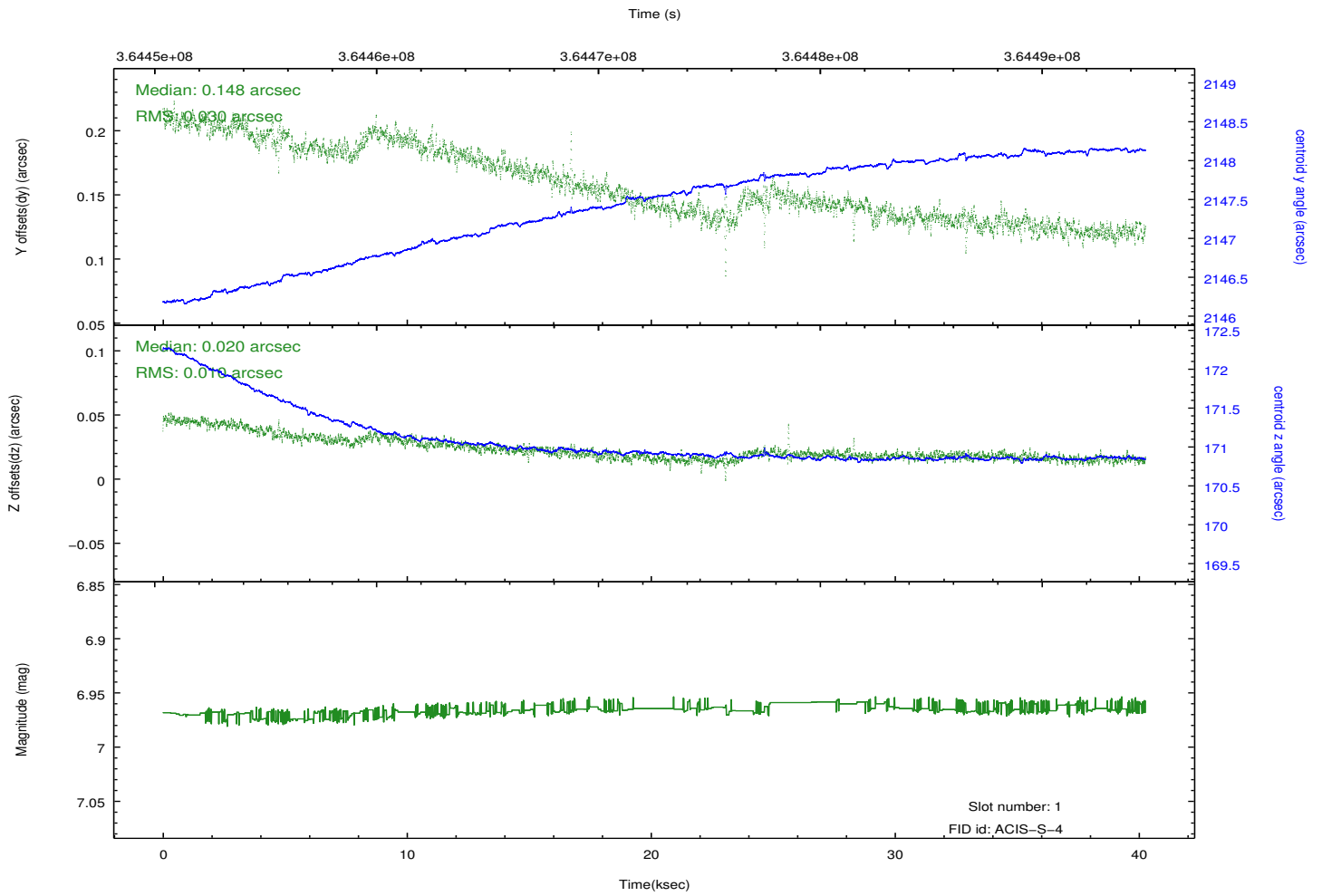
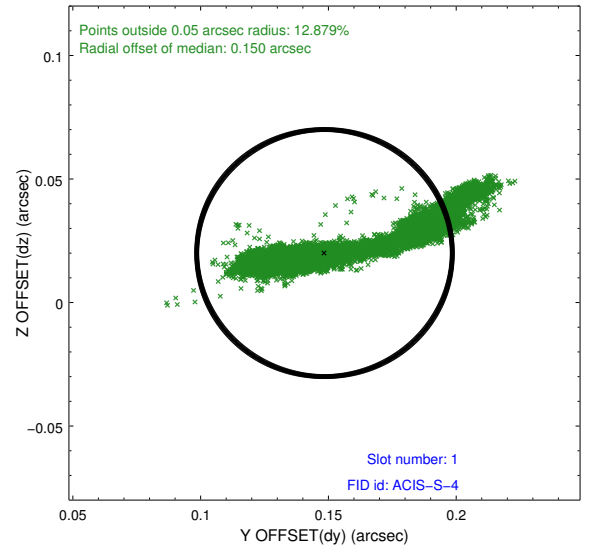
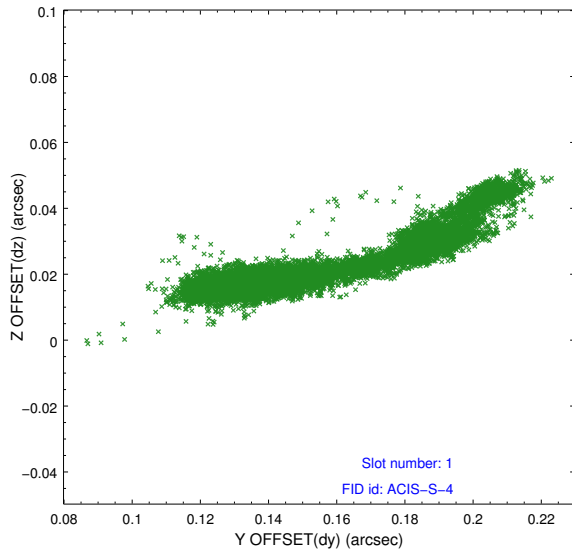


## 2.5 FID Slots

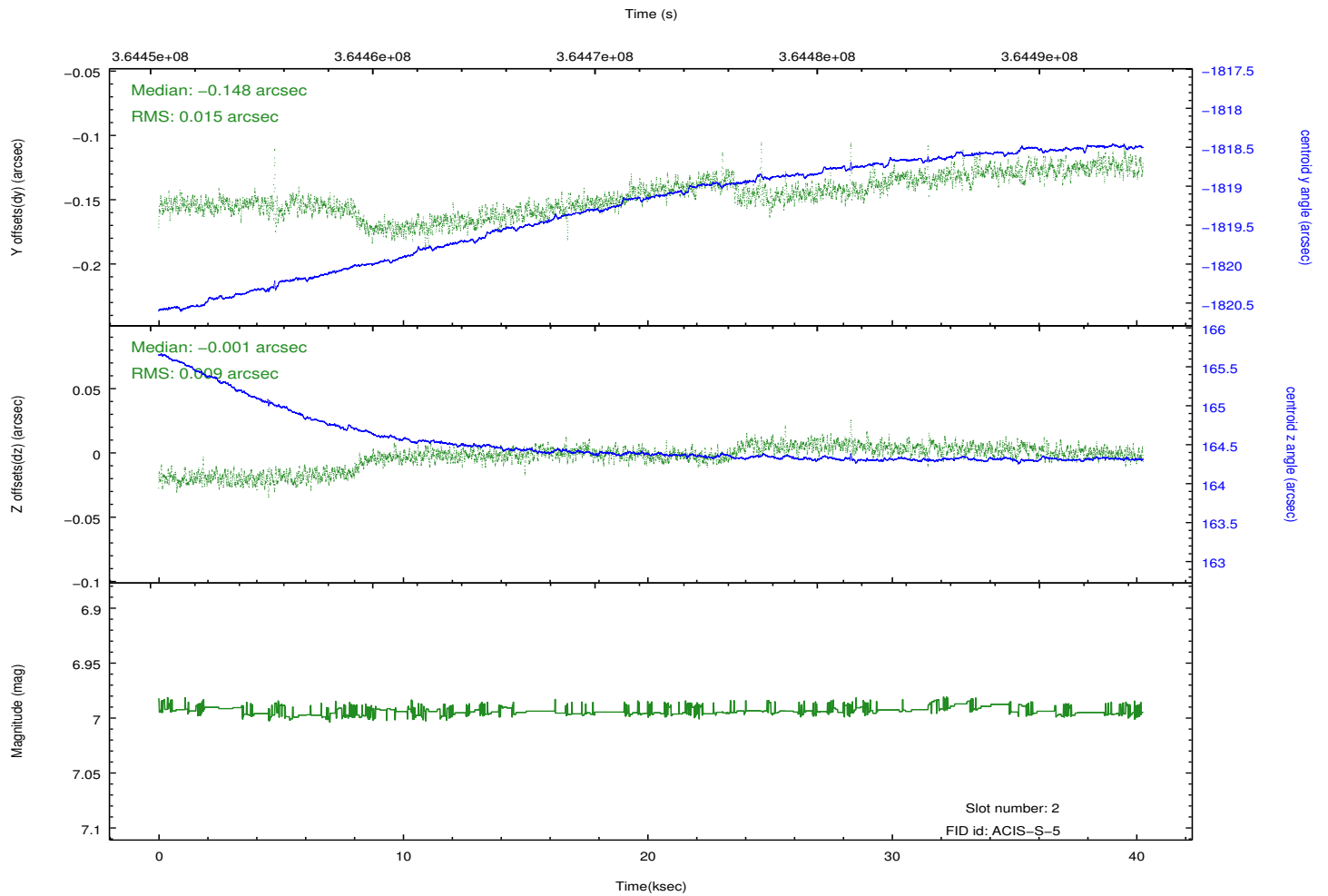
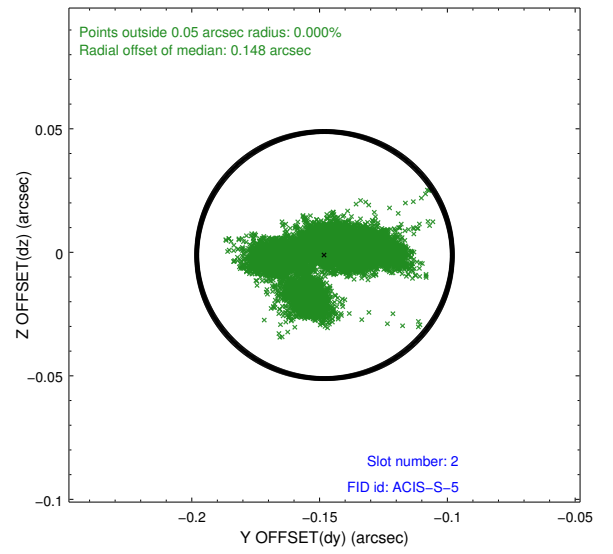
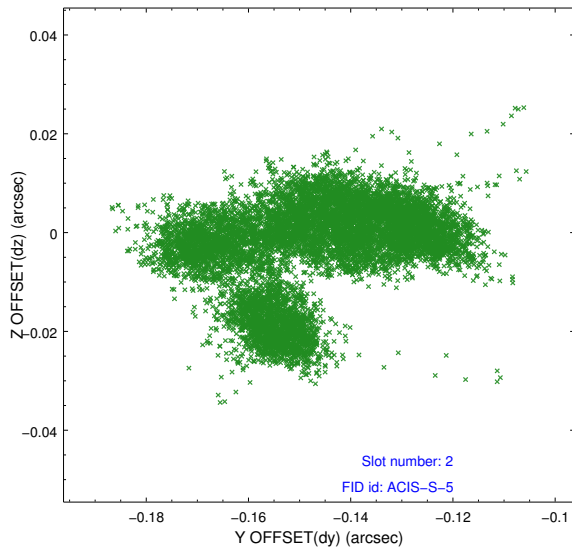
### 2.5.1 Slot 0



## 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)	2012.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.036725163877

## A.2 Comments

Joint proposal with HST.