

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7912 - L2 Version 2  
Chandra X-Ray Center

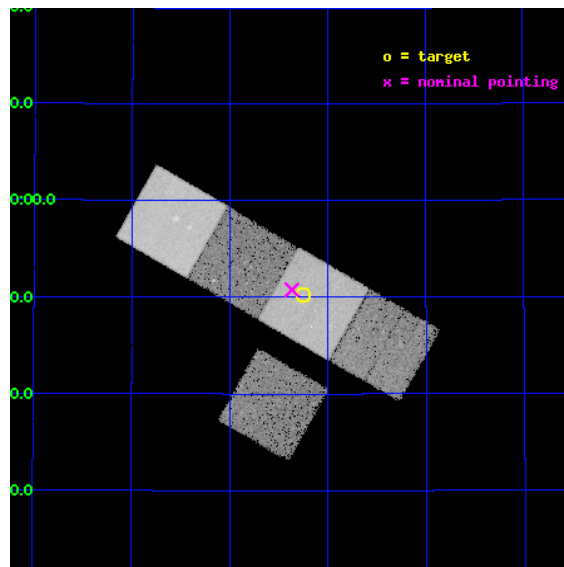
L2 Processing Date : May 1 2012

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# 1 Front

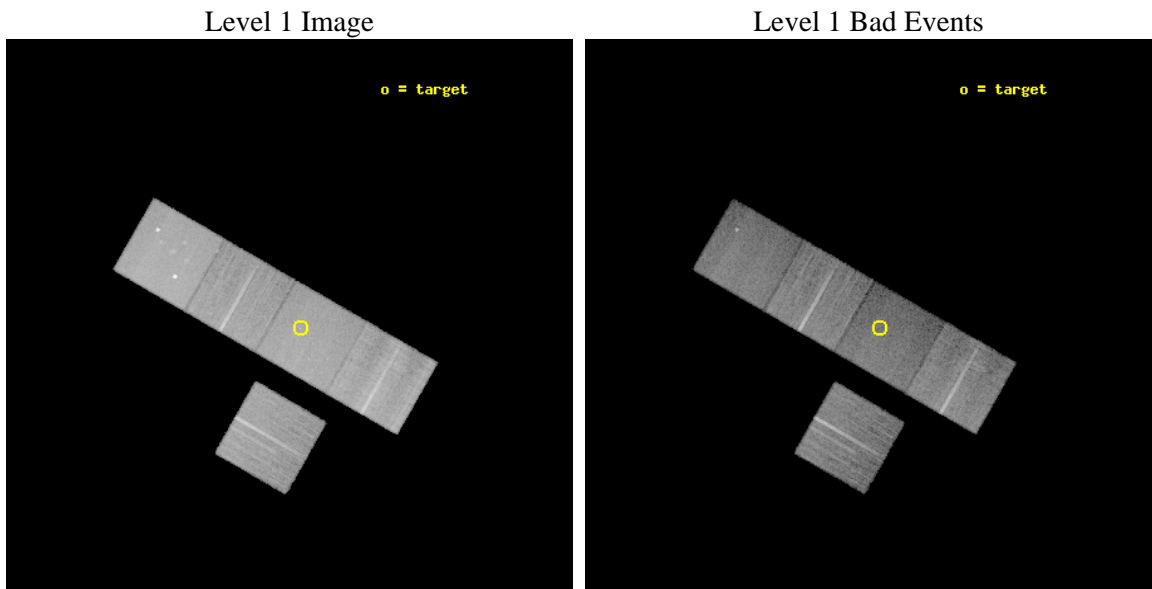
seq_num	800630	Sequence number
obs_id	7912	Observation id
title	A search for clusters around luminous radio-quiet FRI quasars	Prop
observer	Professor Andrew Fabian	Principal investigator
object	7C1037+4650	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	159.314167	Observer's specified target RA [deg]
dec_targ	46.837306	Observer's specified target Dec [deg]
ra_nom	159.34171017033	Nominal RA [deg]
dec_nom	46.84619795135	Nominal Dec [deg]
roll_nom	29.847573354135	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19623.000150919	Sum of GTIs [s]
livetime	19366.611207705	Livetime [s]
ontime3	19619.85918057	Sum of GTIs [s]
ontime5	19623.000150919	Sum of GTIs [s]
ontime6	19619.859190524	Sum of GTIs [s]
ontime7	19623.000150919	Sum of GTIs [s]
ontime8	19623.000150919	Sum of GTIs [s]
l2events	226952	Number of level 2 events



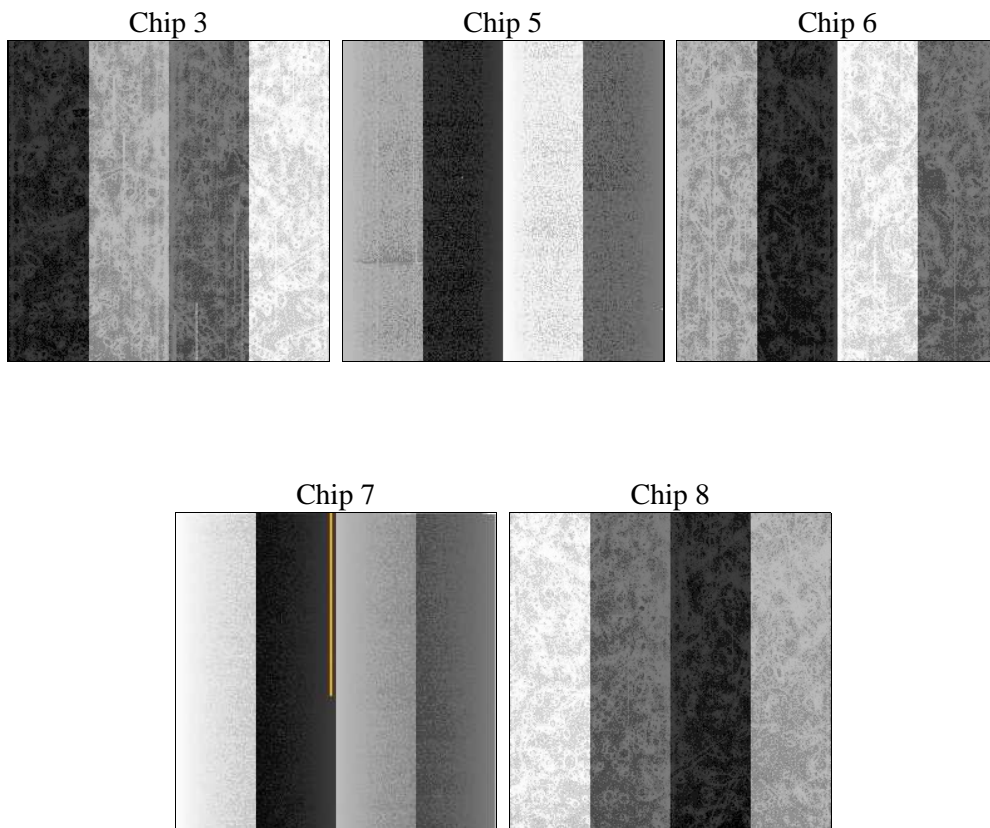
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	19500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	19623.000150919	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime3	19619.85918057	Sum of GTIs [s]
date	2012-05-01T22:06:38	Date and time of file creation	ontime5	19623.000150919	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19619.859190524	Sum of GTIs [s]
			ontime7	19623.000150919	Sum of GTIs [s]
			ontime8	19623.000150919	Sum of GTIs [s]
			l1events	937811	Number of level 1 events

### 2.1.4 Events

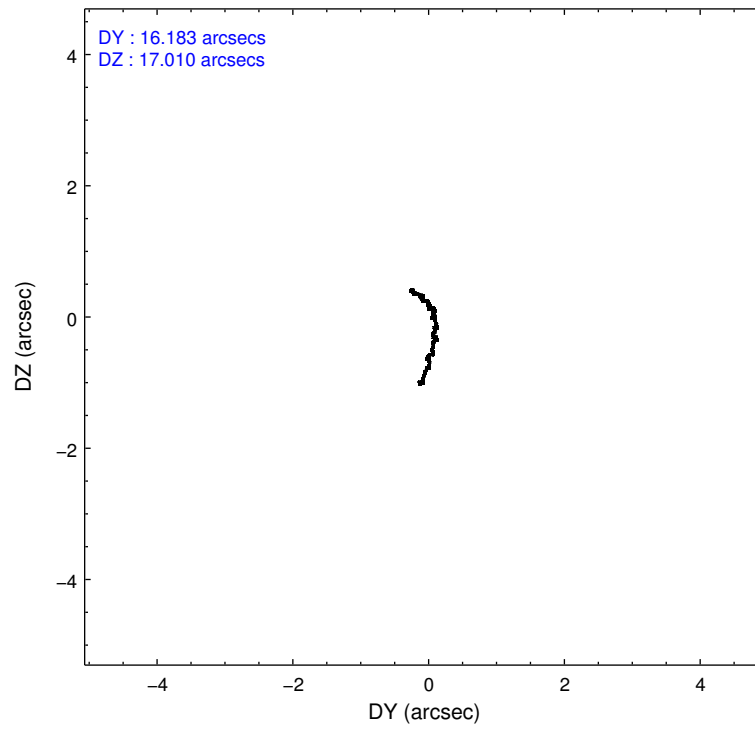
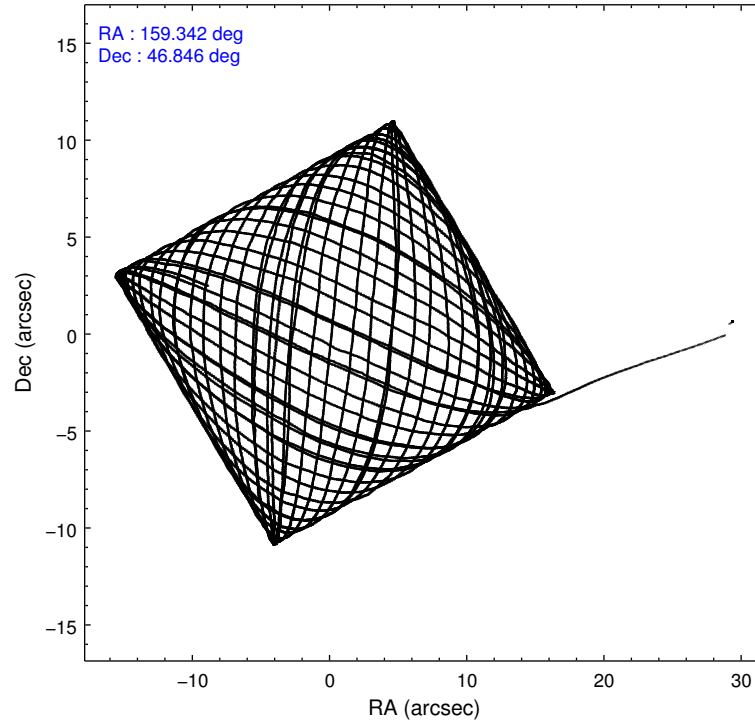
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	157357	229233	163330	182286	205605
rejected events	142689	115867	146801	101531	157416
rejected %	90%	50%	89%	55%	76%

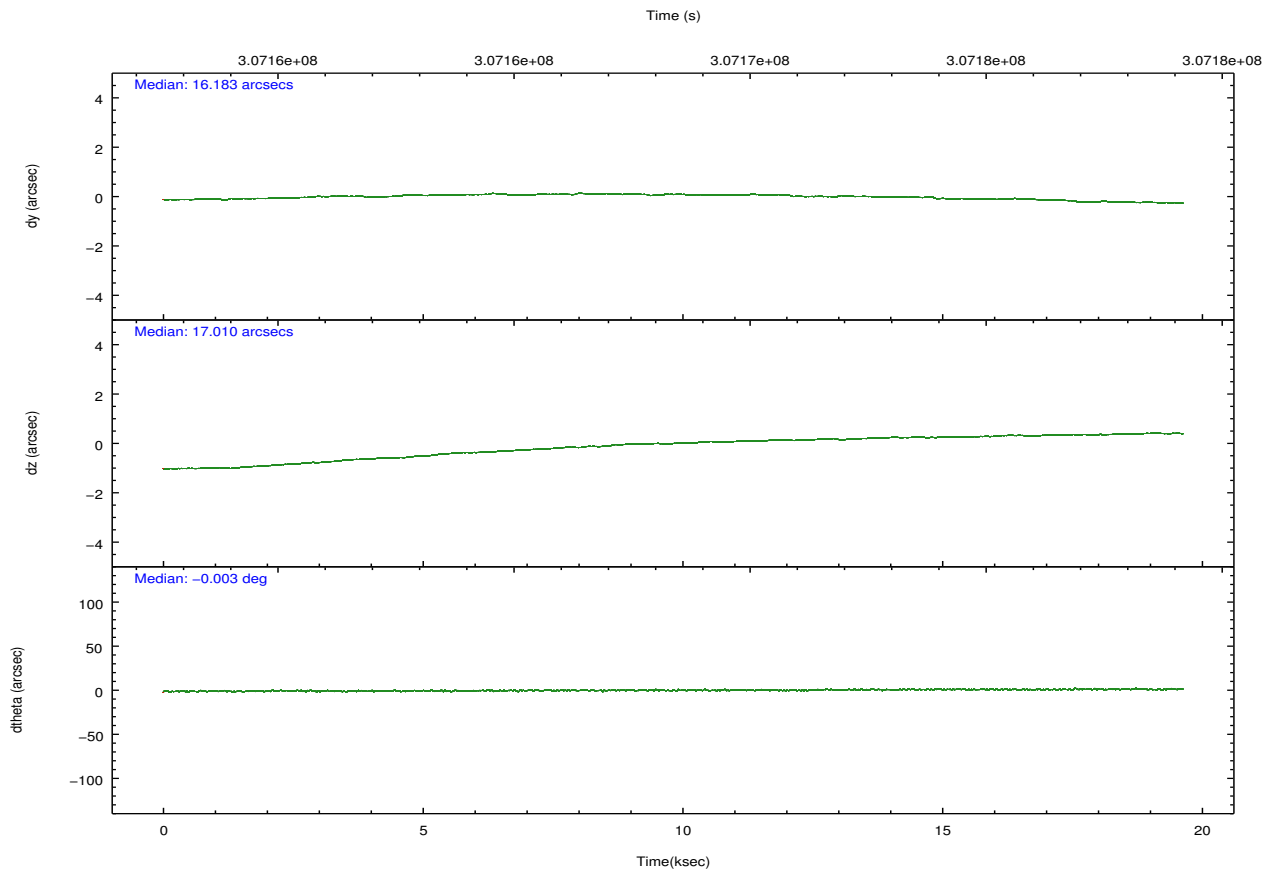
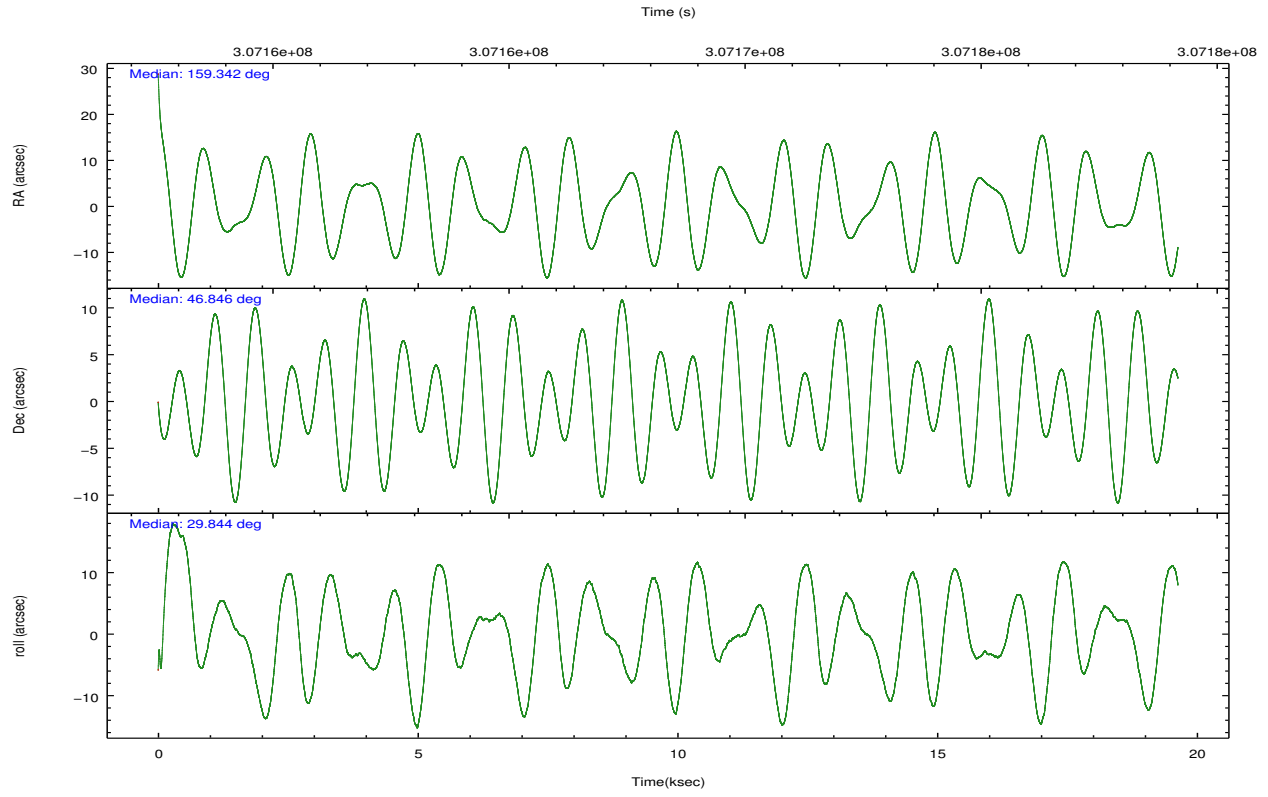
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	5344	15493	5953	7942	15079
	3%	6%	3%	4%	7%
grade 1 events	93	956	88	249	162
	0%	0%	0%	0%	0%
grade 2 events	3268	33380	3656	16752	11402
	2%	14%	2%	9%	5%
grade 3 events	1705	4853	1885	7712	5282
	1%	2%	1%	4%	2%
grade 4 events	1723	4724	1909	7656	5005
	1%	2%	1%	4%	2%
grade 5 events	6500	17559	6565	19442	9561
	4%	7%	4%	10%	4%
grade 6 events	3028	58178	3587	42883	12684
	1%	25%	2%	23%	6%
grade 7 events	135696	94090	139687	79650	146430
	86%	41%	85%	43%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	159.322128	159.341710170327	Subarray requested	NONE	NONE
[deg] Pointing Dec	46.822380	46.84619795135027	Alternating exposures requested	N	N
[deg] Pointing Roll	29.705228	29.84757335413535	[s] Primary exposure time	0.000000	3.1
[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)	307158685.184000	307157440.1485			
Observation start date	2007-09-26T01:50:20	2007-09-26T01:30:40			
[s] Observation end time (MET)	307178185.184000	307178905.69954			
Observation end date	2007-09-26T07:15:20	2007-09-26T07:28:25			
Read mode	TIMED	TIMED			

## 2.3 Aspect



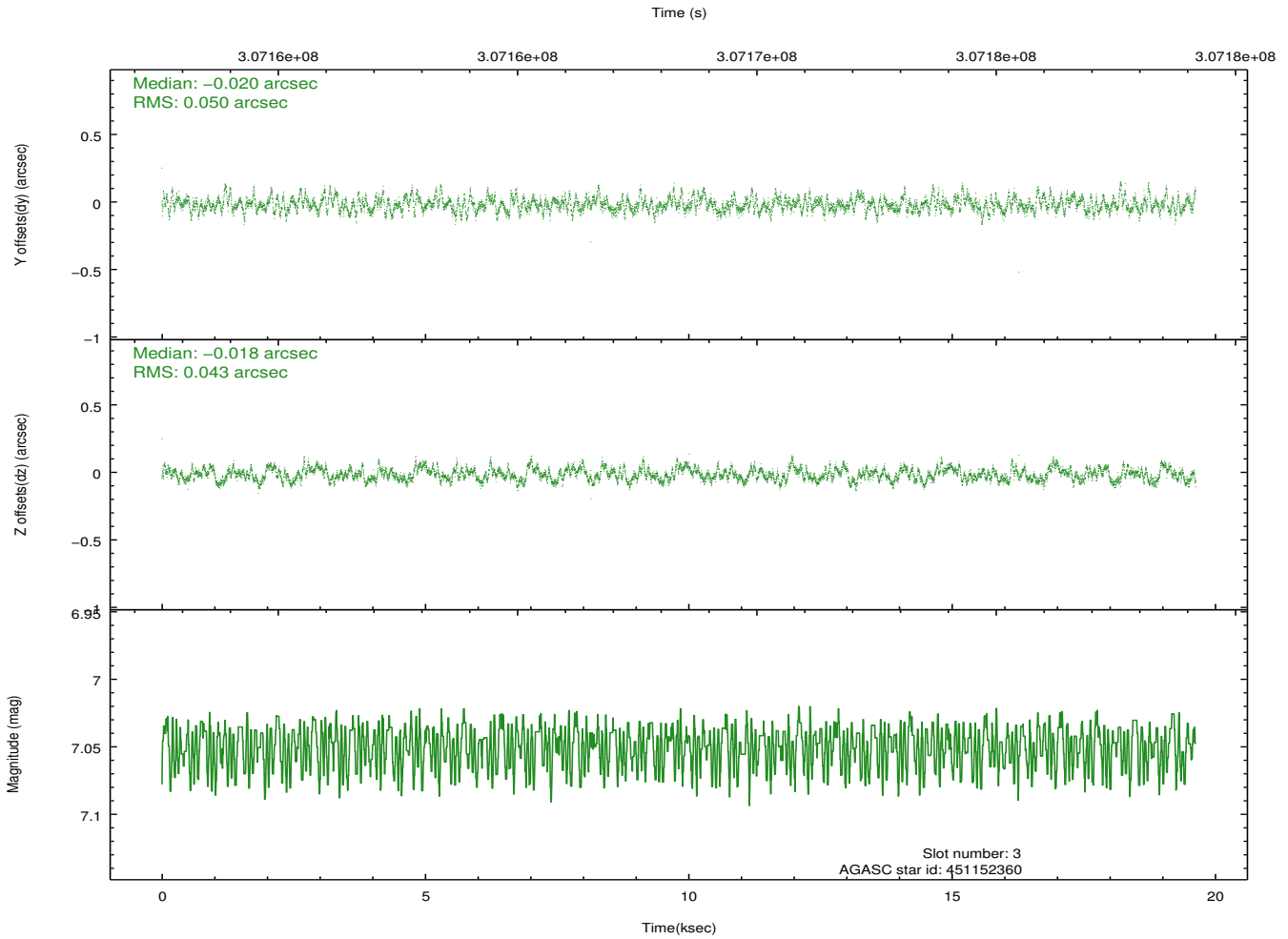
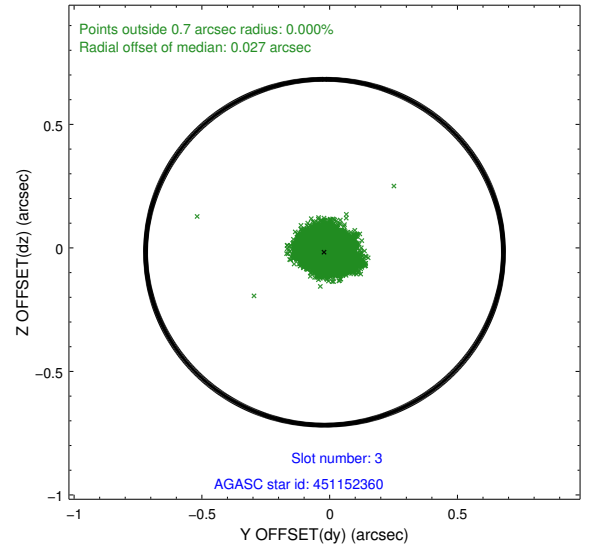
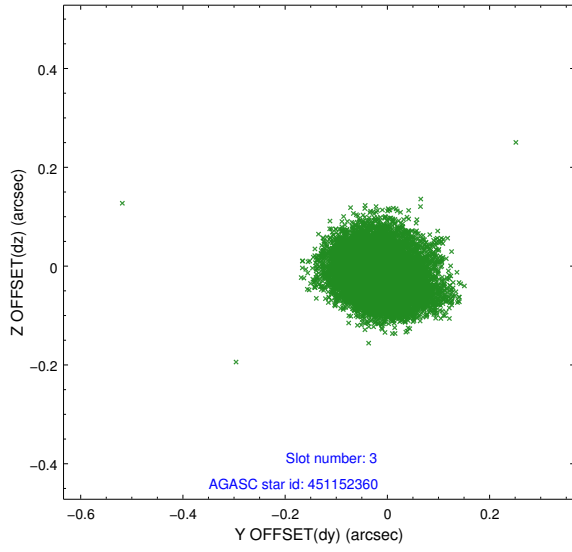


### Slot Statistics

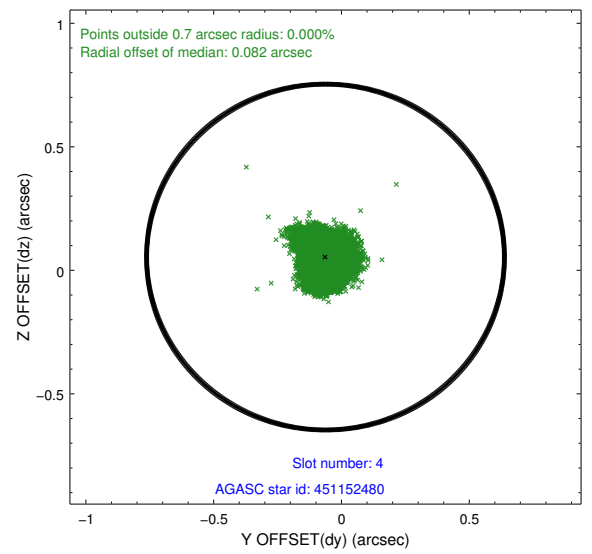
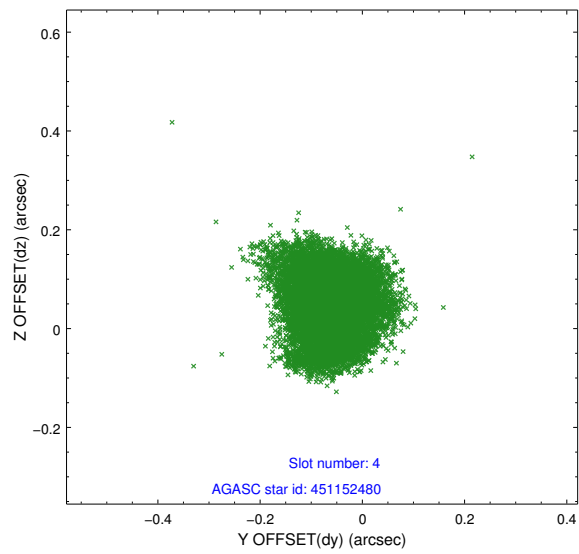
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	4789	-0.102	-0.069	0.007	0.011	0.000000	0.000000	-769.31	-1738.35
1	FID	ACIS-S-4	7.19	4787	0.123	0.046	0.008	0.012	0.000000	0.000000	2144.15	169.98
2	FID	ACIS-S-6	7.32	4789	-0.048	0.031	0.009	0.015	0.000000	0.000000	393.04	807.62
3	GUIDE	451152360	7.05	9575	-0.020	-0.018	0.071	0.112	159.294556	46.548065	-548.18	-824.18
4	GUIDE	451152480	7.63	9573	-0.063	0.054	0.087	0.132	160.031477	46.840766	1553.78	-801.09
5	GUIDE	451158096	9.45	9566	-0.001	-0.123	0.095	0.153	158.959389	47.024859	-410.65	1076.18
6	GUIDE	451159520	9.93	9495	0.117	0.115	0.172	0.265	158.873255	46.164355	-2144.13	-1500.09
7	GUIDE	451544288	9.43	9569	-0.024	-0.025	0.109	0.173	159.703072	47.731523	2423.78	2388.01

## 2.4 Star Slots

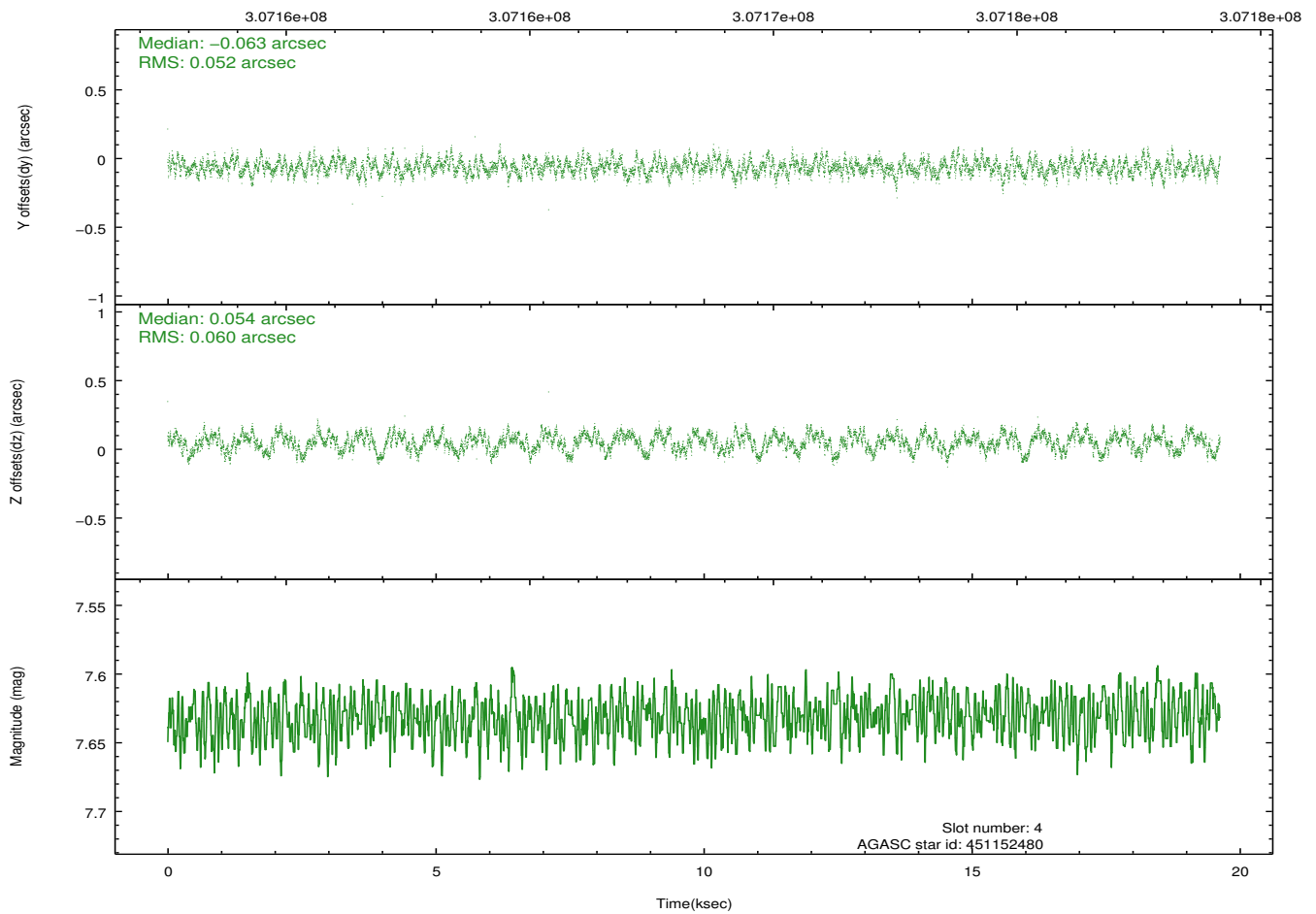
### 2.4.1 Slot 3



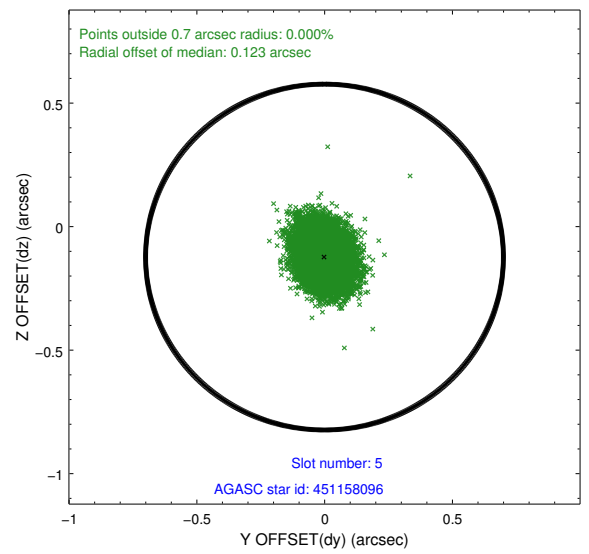
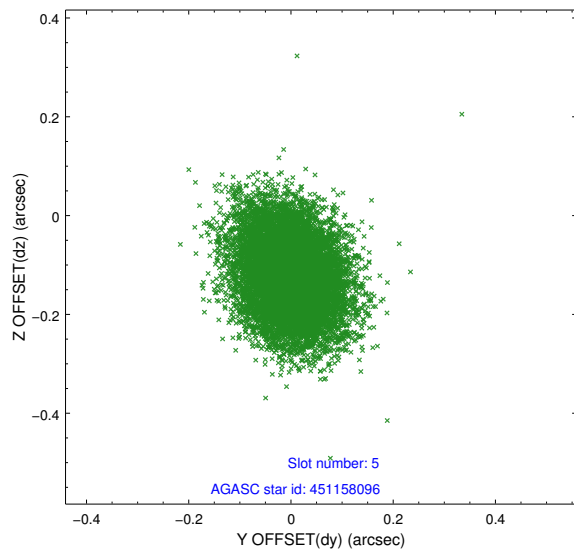
## 2.4.2 Slot 4



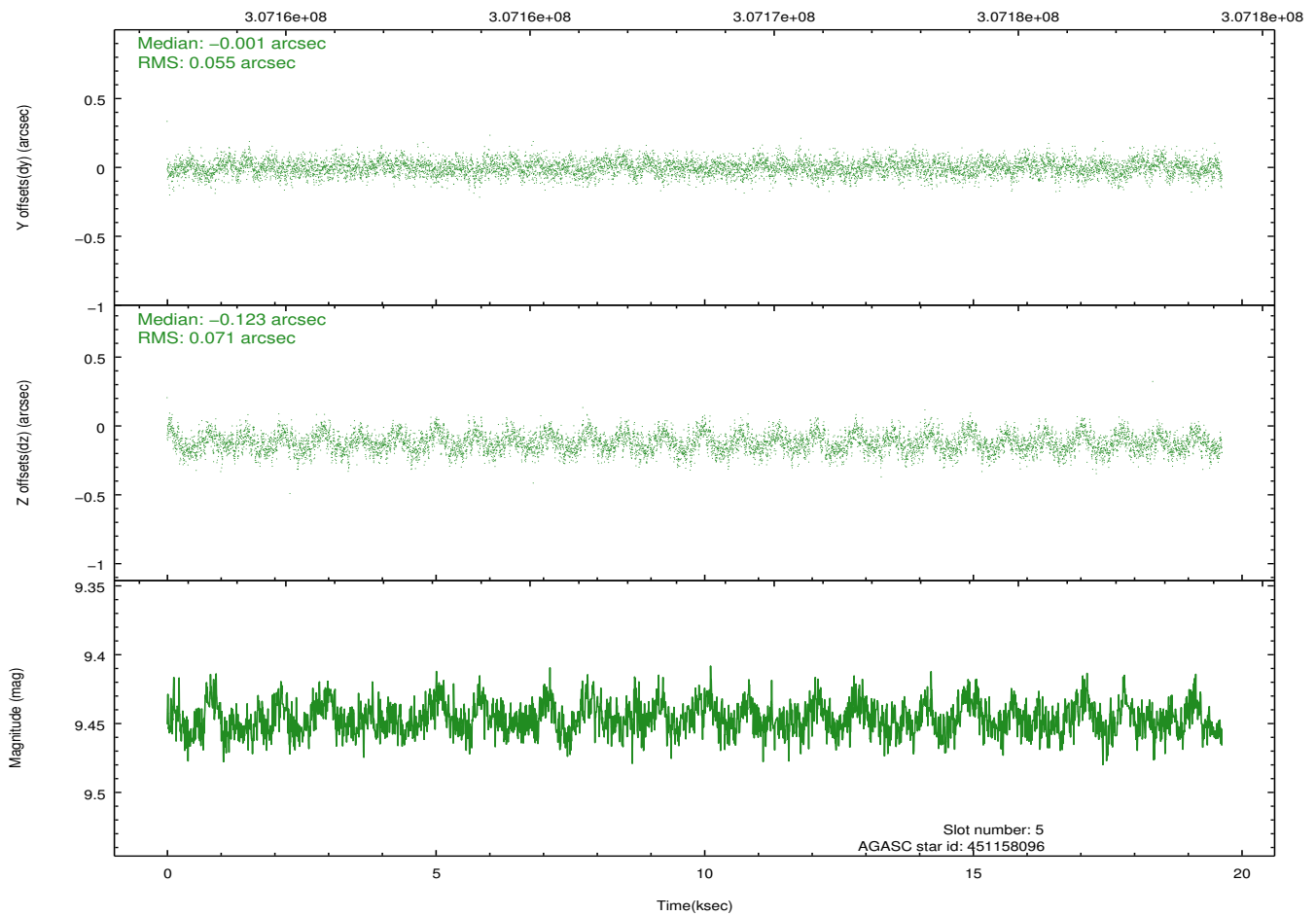
Time (s)



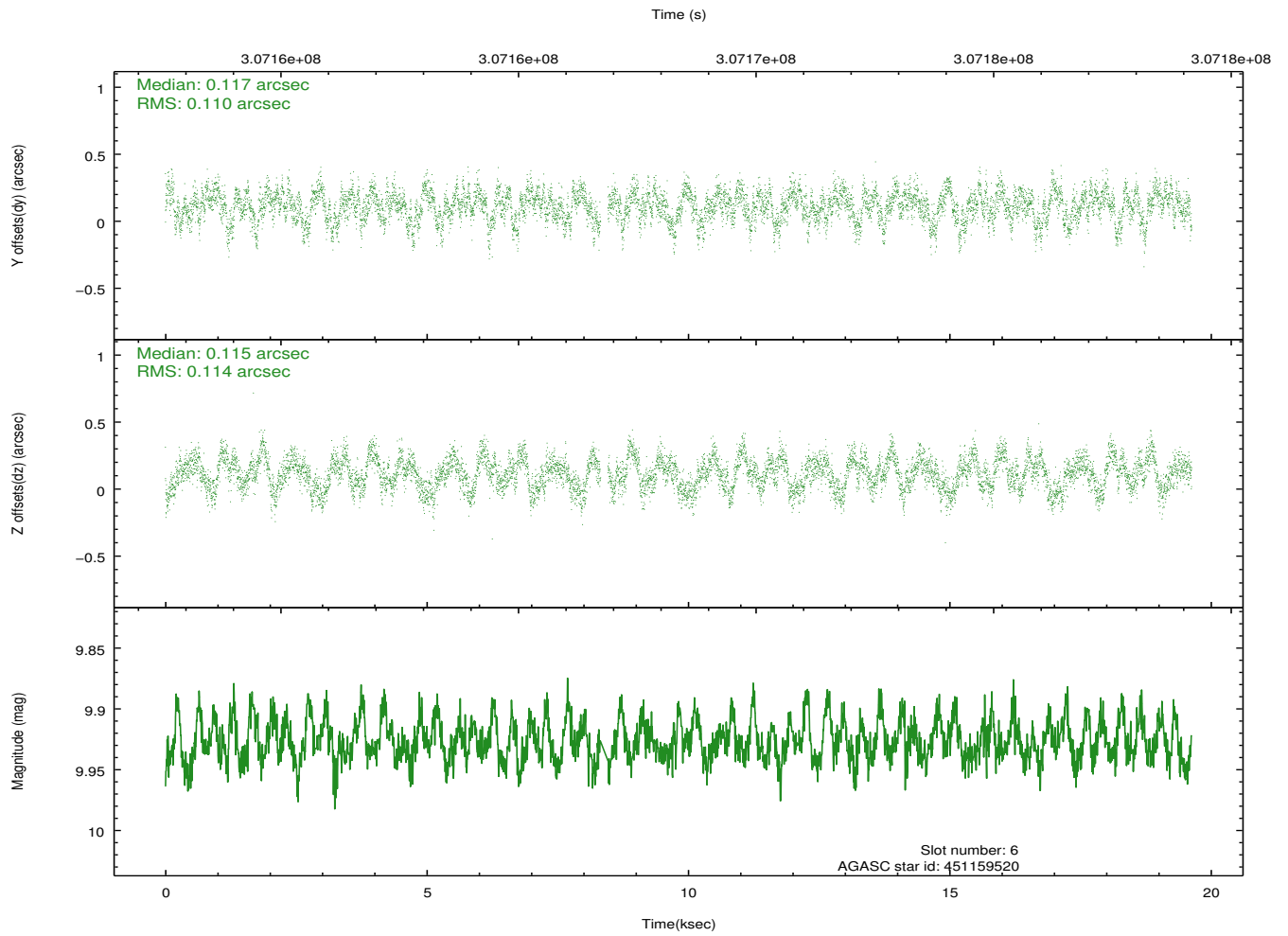
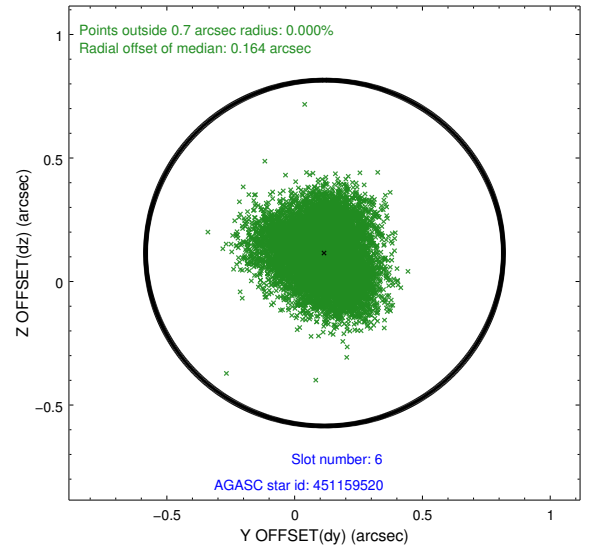
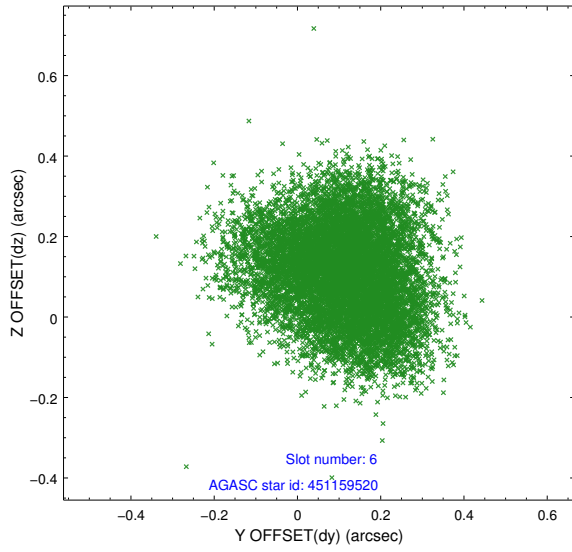
### 2.4.3 Slot 5



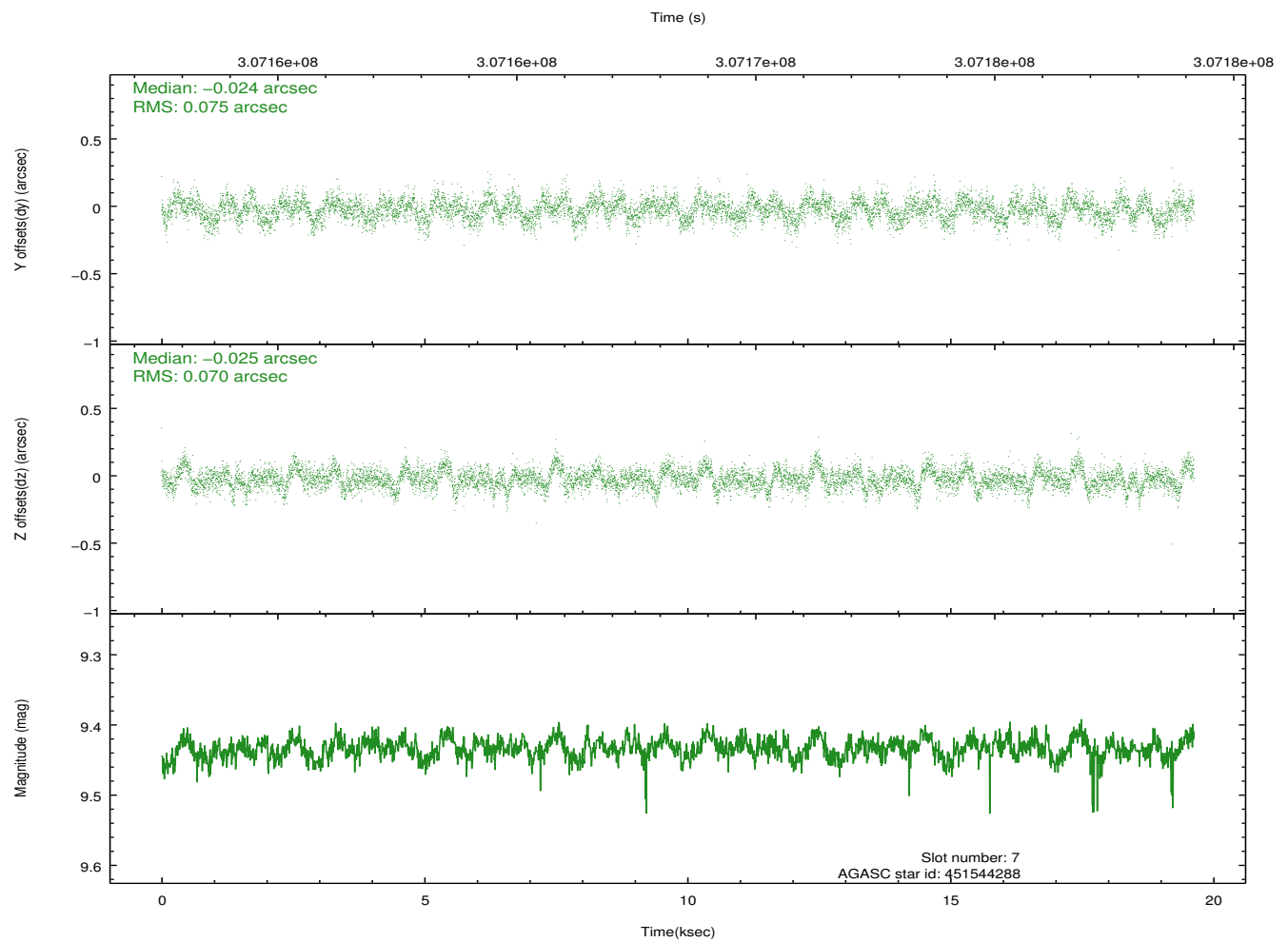
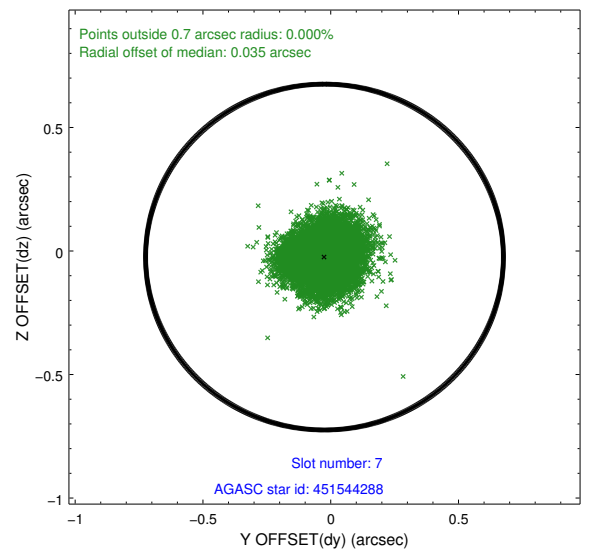
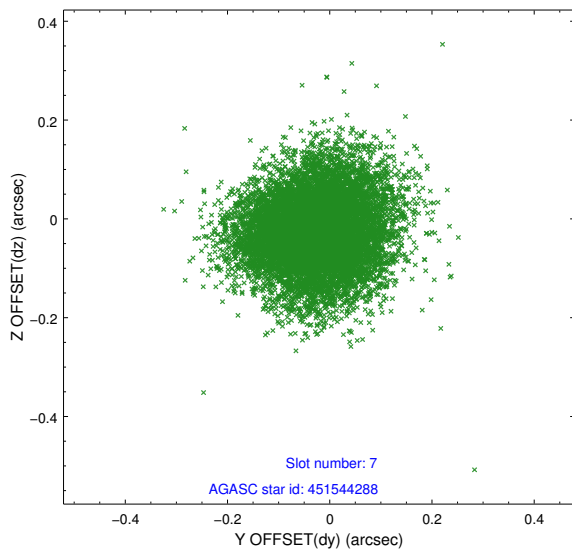
Time (s)



## 2.4.4 Slot 6

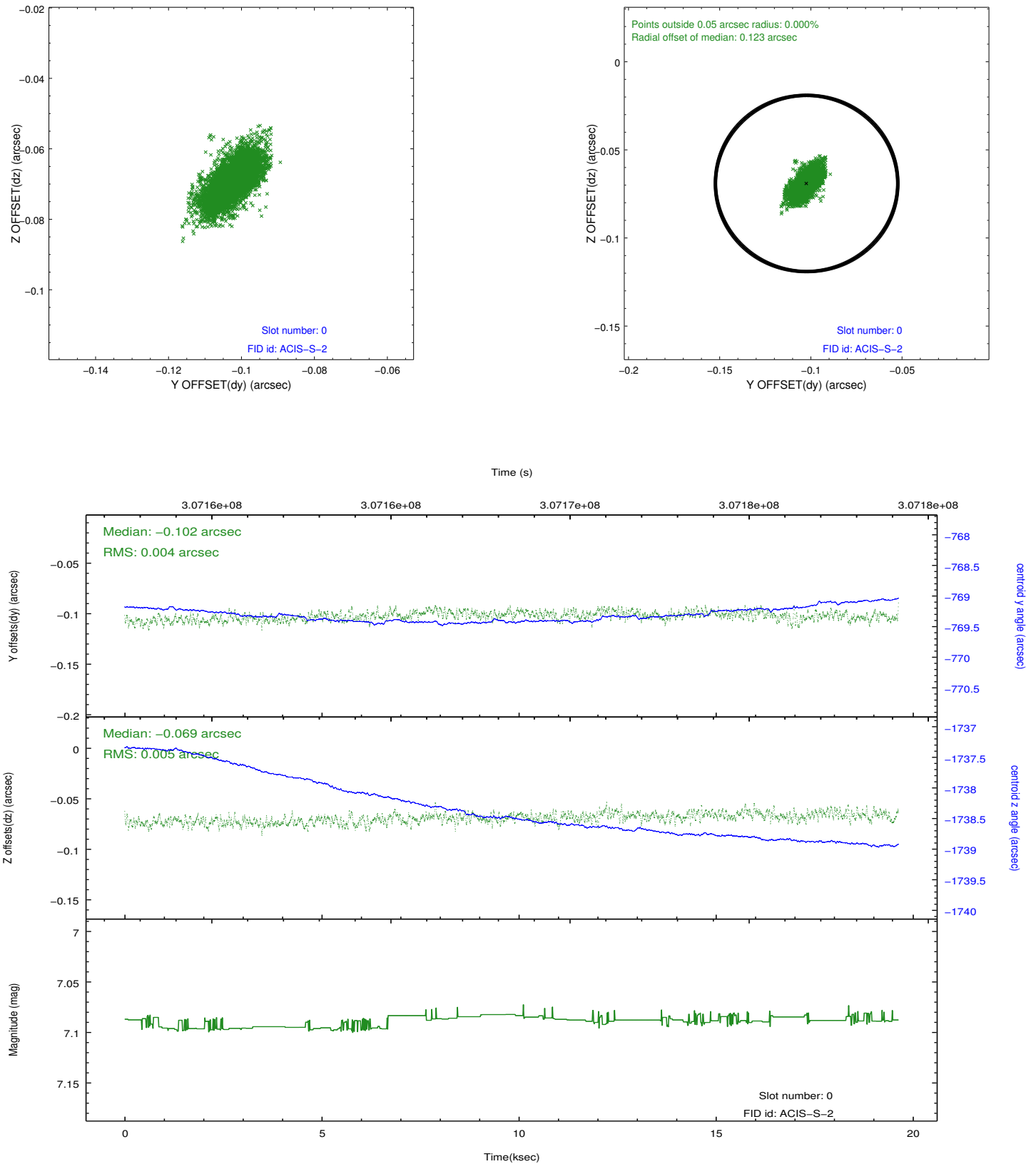


## 2.4.5 Slot 7

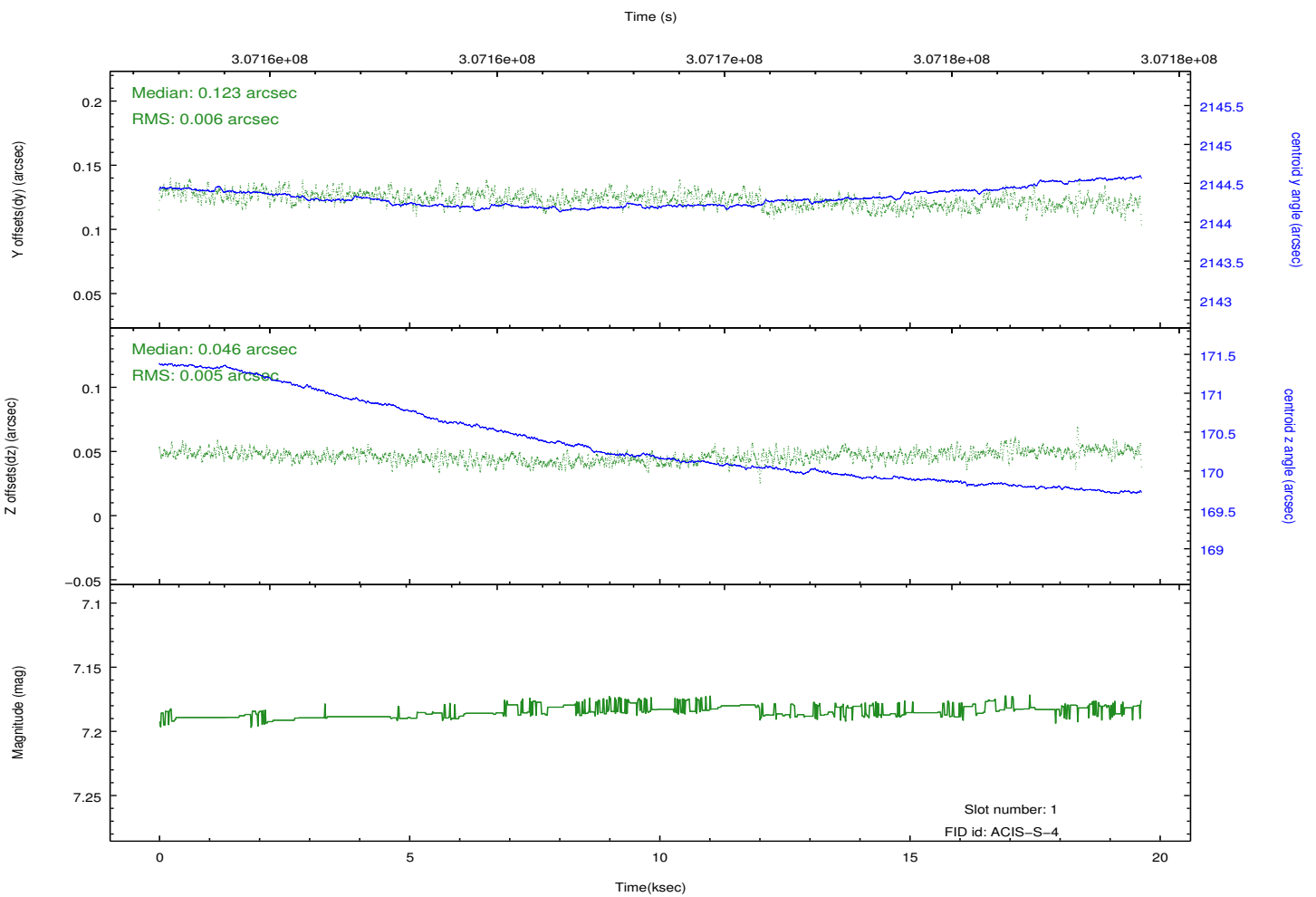
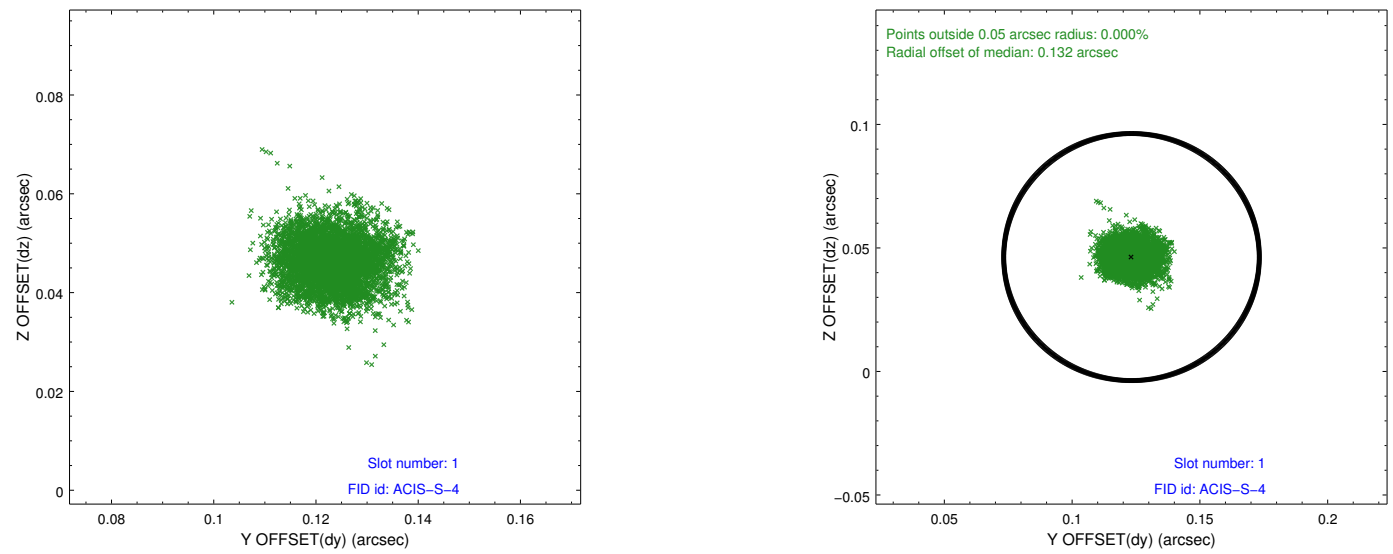


## 2.5 FID Slots

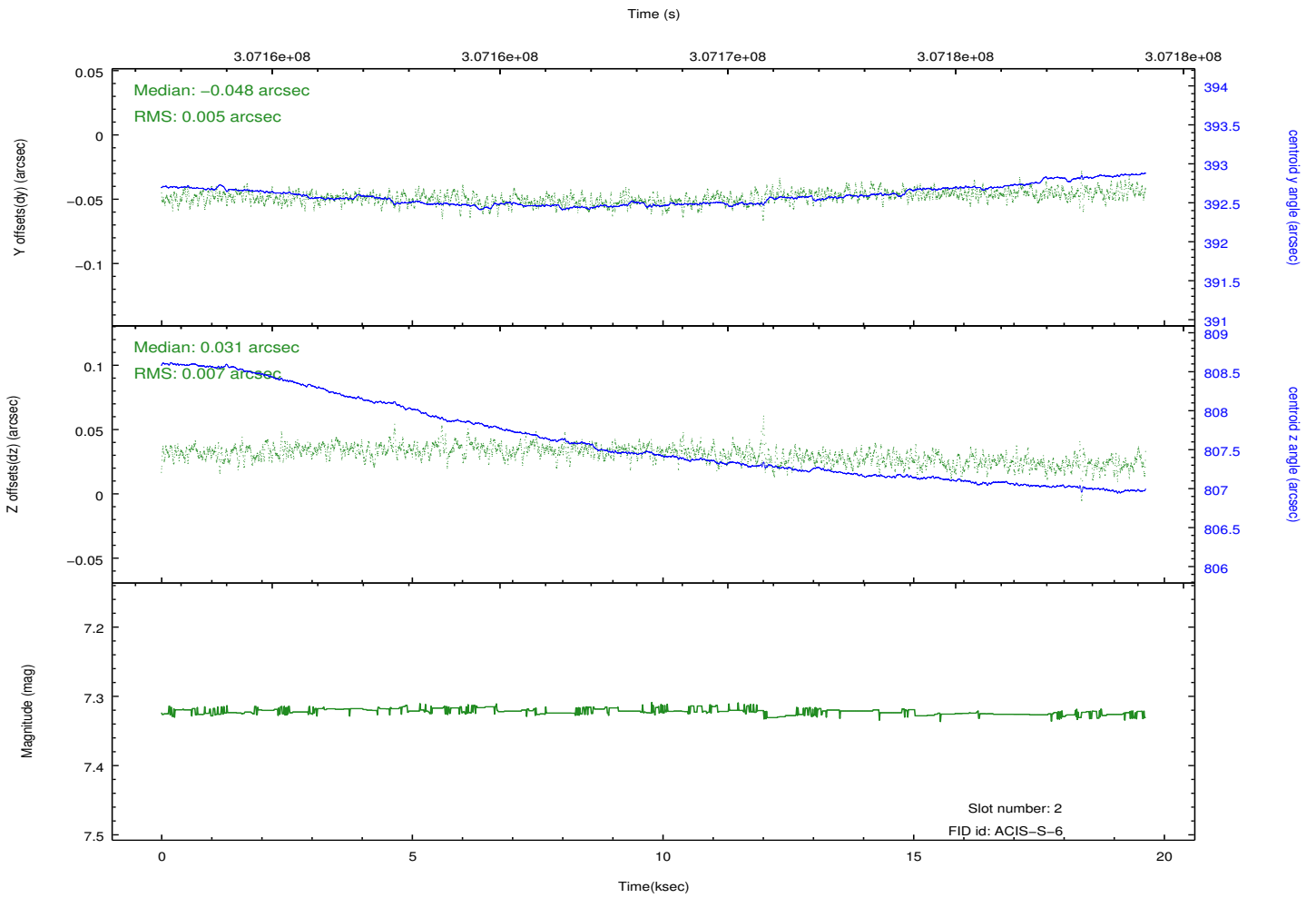
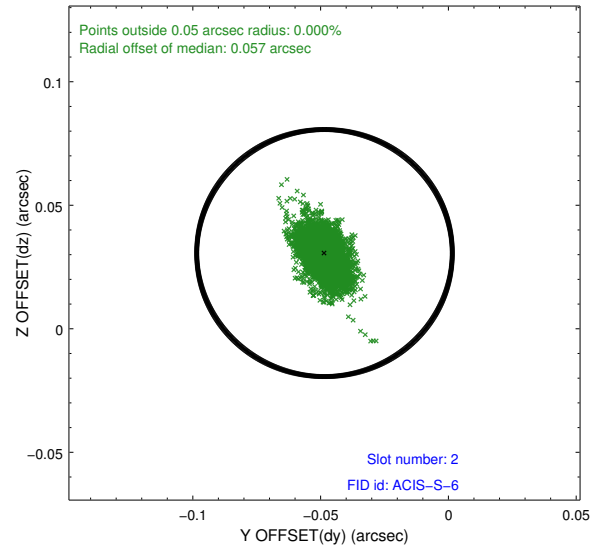
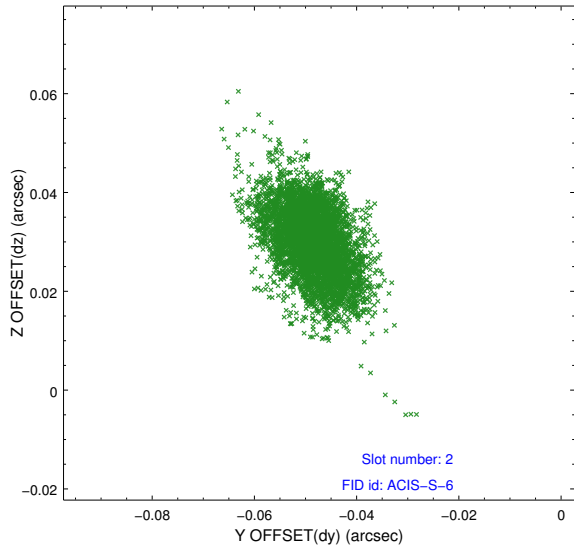
### 2.5.1 Slot 0



## 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)	2012.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.6230001

## A.2 Comments