

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16352 - L2 Version 1  
Chandra X-Ray Center

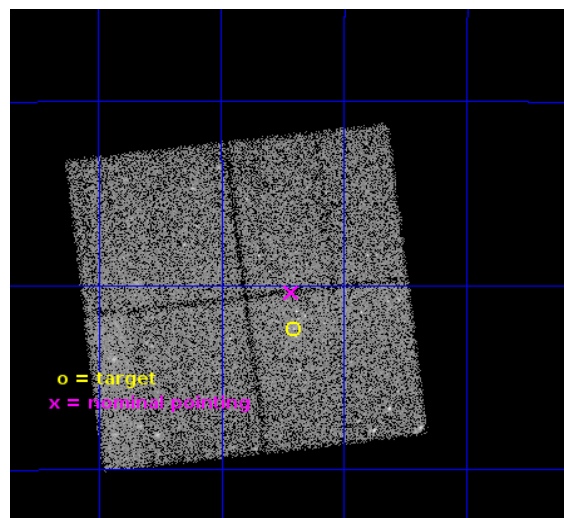
L2 Processing Date : Aug 13 2014

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# 1 Front

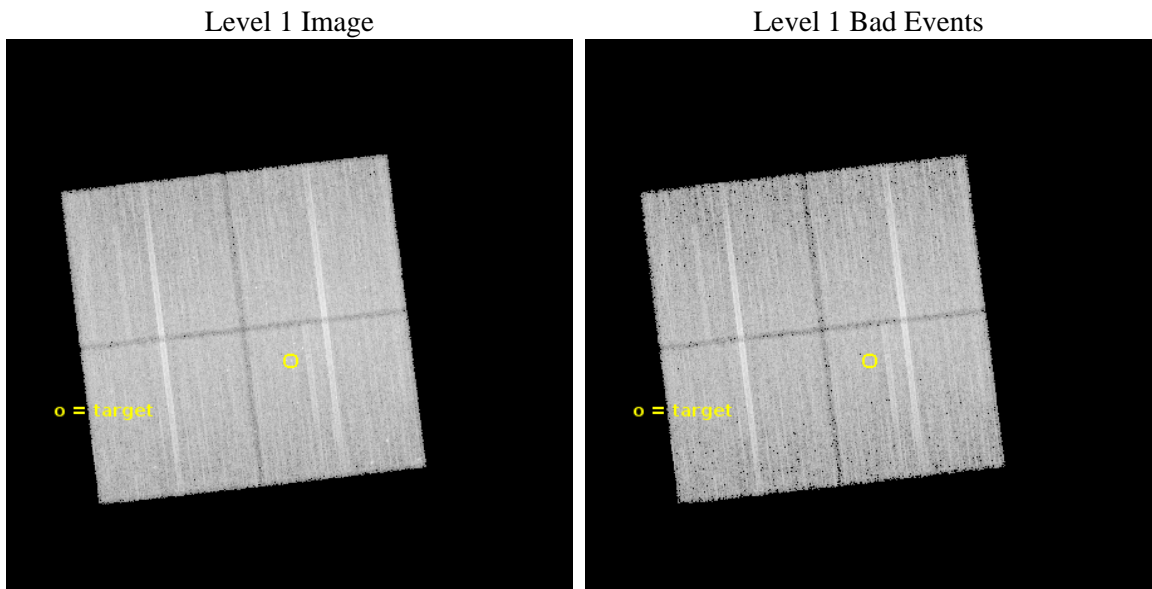
seq_num	601152	Sequence number
obs_id	16352	Observation id
title	Searching for evidence of dwarf galaxy collisions with large spiral galaxies through X-ray emission	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	NGC289	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	13.176667	Observer's specified target RA [deg]
dec_targ	-31.205833	Observer's specified target Dec [deg]
ra_nom	13.178495516188	Nominal RA [deg]
dec_nom	-31.172983540958	Nominal Dec [deg]
roll_nom	83.164124782839	Nominal Roll [deg]
revision	1	Processing version of data
ontime	50086.659354806	Sum of GTIs [s]
livetime	49432.240277073	Livetime [s]
ontime0	50089.800385237	Sum of GTIs [s]
ontime1	50089.800385237	Sum of GTIs [s]
ontime2	50086.659354866	Sum of GTIs [s]
ontime3	50086.659354806	Sum of GTIs [s]
l2events	97084	Number of level 2 events



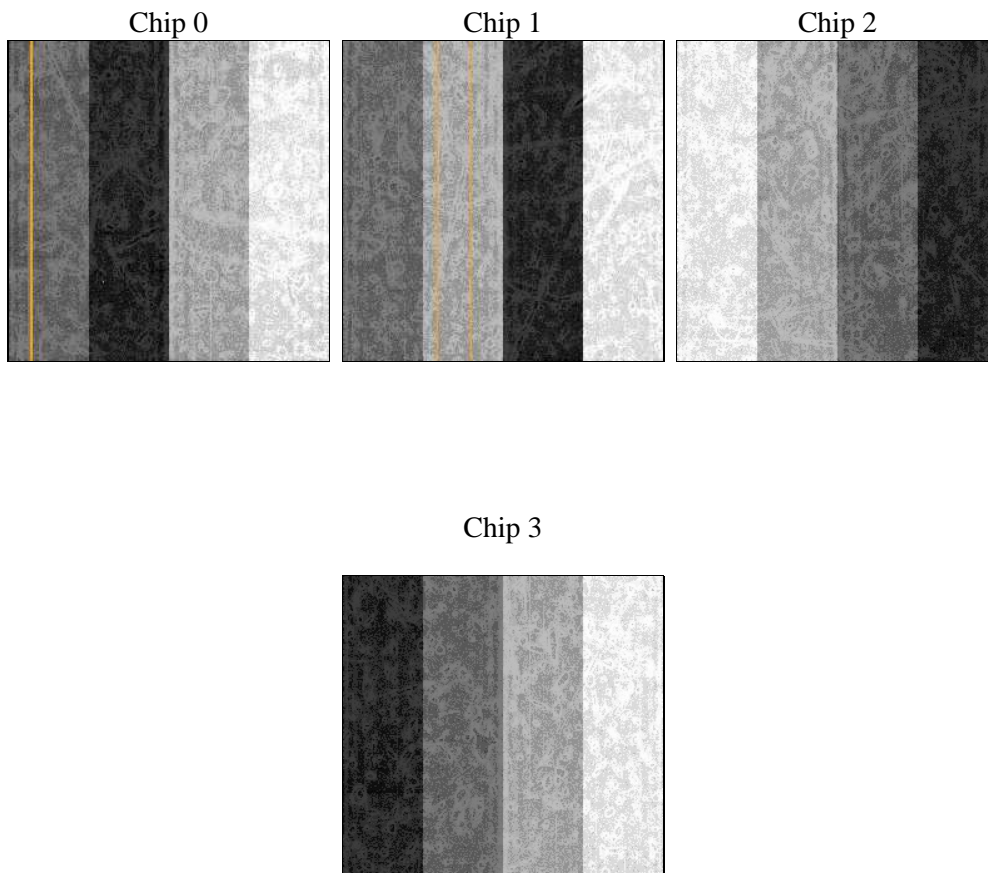
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	50086.659354806	Sum of GTIs [s]
caldsver	4.6.2	&#160	ontime0	50089.800385237	Sum of GTIs [s]
date	2014-08-13T19:06:38	Date and time of file creation	ontime1	50089.800385237	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	50086.659354866	Sum of GTIs [s]
			ontime3	50086.659354806	Sum of GTIs [s]
			l1events	930339	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	220812	227466	240858	241203
rejected events	192413	196069	213748	212801
rejected %	87%	86%	88%	88%

	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9518	10672	9513	10240
	4%	4%	3%	4%
grade 1 events	105	112	133	142
	0%	0%	0%	0%
grade 2 events	6993	7674	6625	6317
	3%	3%	2%	2%
grade 3 events	3011	3047	2805	2880
	1%	1%	1%	1%
grade 4 events	2809	2921	2941	3031
	1%	1%	1%	1%
grade 5 events	11525	12020	10672	13032
	5%	5%	4%	5%
grade 6 events	6073	7086	5229	5938
	2%	3%	2%	2%
grade 7 events	180778	183934	202940	199623
	81%	80%	84%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	13.191302	13.17849551618819	Subarray requested	NONE	NONE
[deg] Pointing Dec	-31.198313	-31.17298354095789	Alternating exposures requested	N	N
[deg] Pointing Roll	82.962089	83.16412478283884	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-228.592463	-228.5990329025337			
[mm] SIM translation stage offset	-5	-4.993420100396037			
[s] Observation start time (MET)	524232990.184000	524232105.35969			
Observation start date	2014-08-12T12:15:23	2014-08-12T12:01:45			
[s] Observation end time (MET)	524282990.184000	524283543.45003			
Observation end date	2014-08-13T02:08:43	2014-08-13T02:19:03			
Read mode	TIMED	TIMED			

## 2.3 Aspect

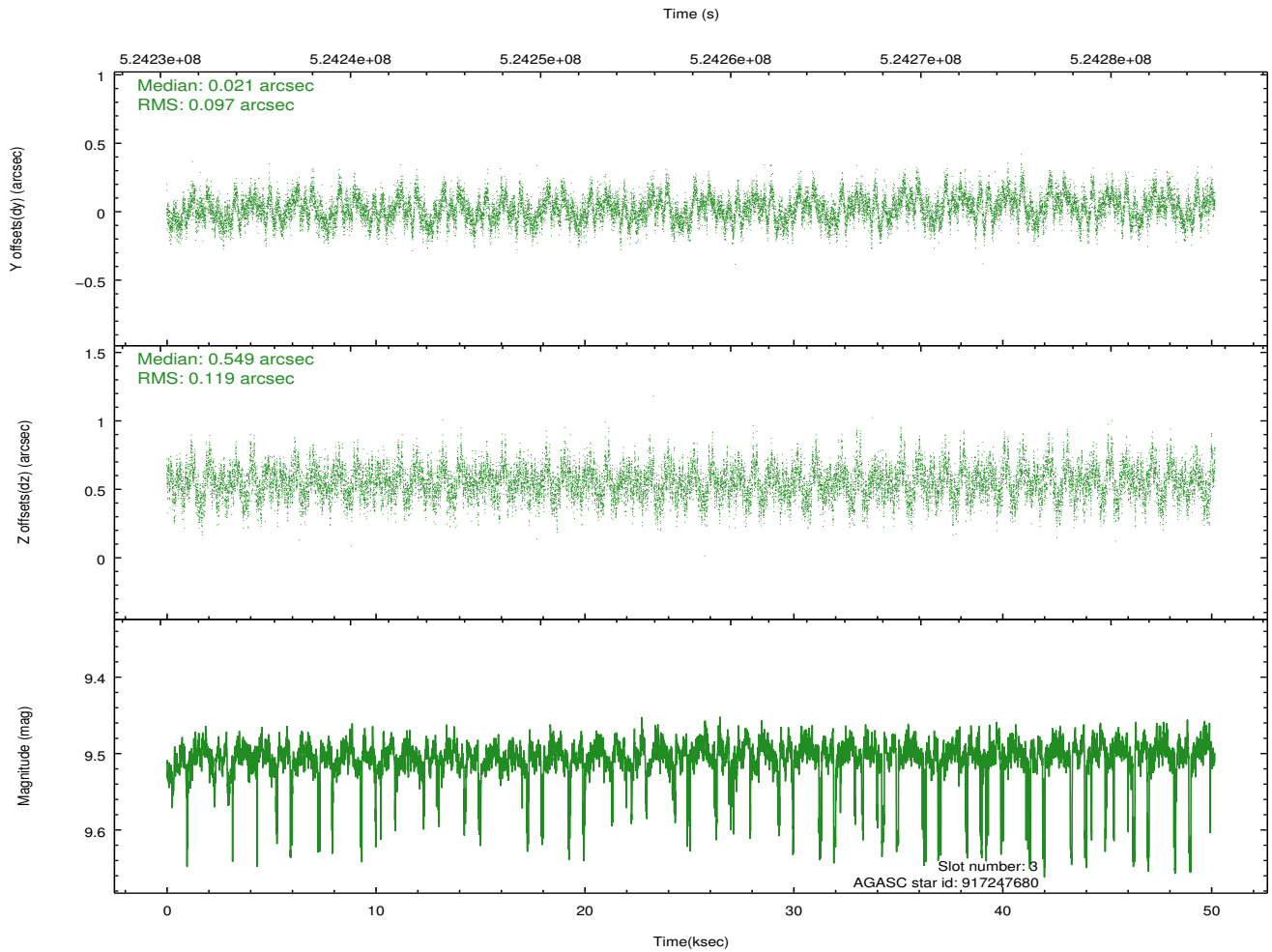
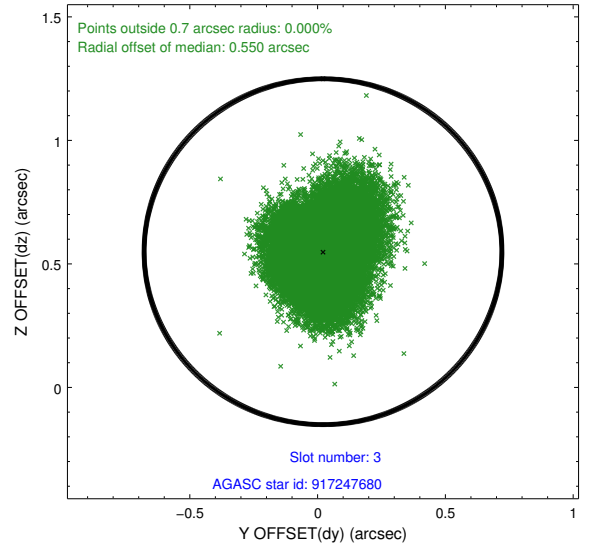
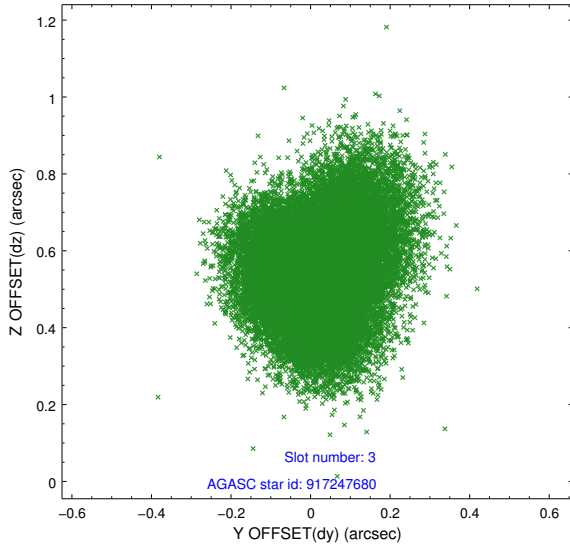


### Slot Statistics

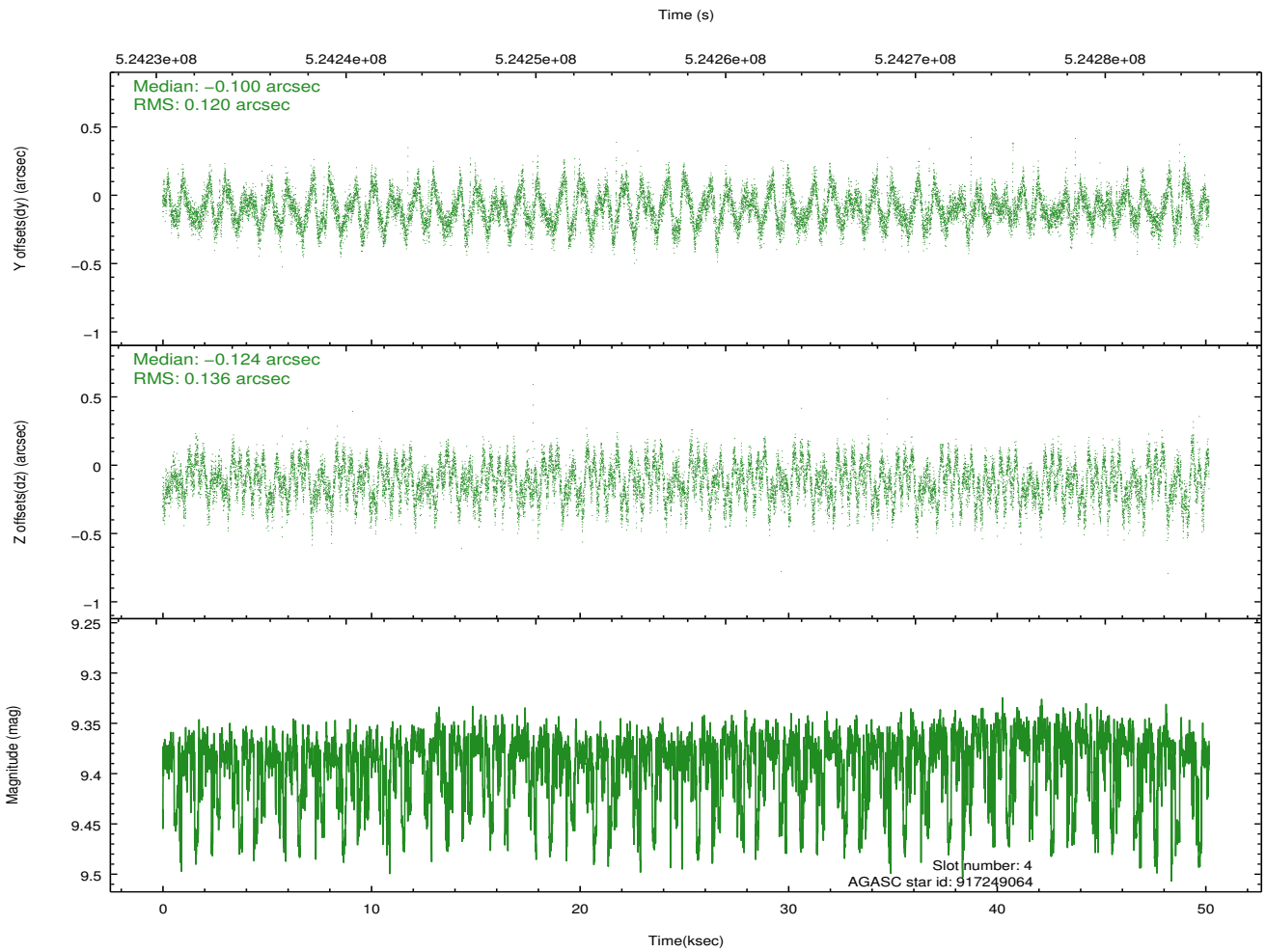
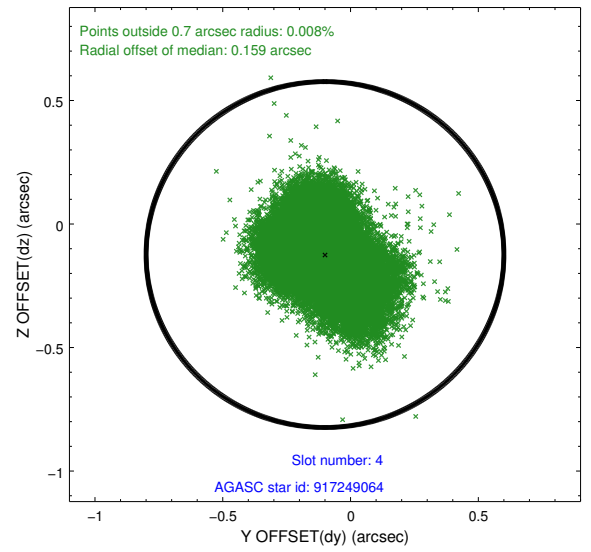
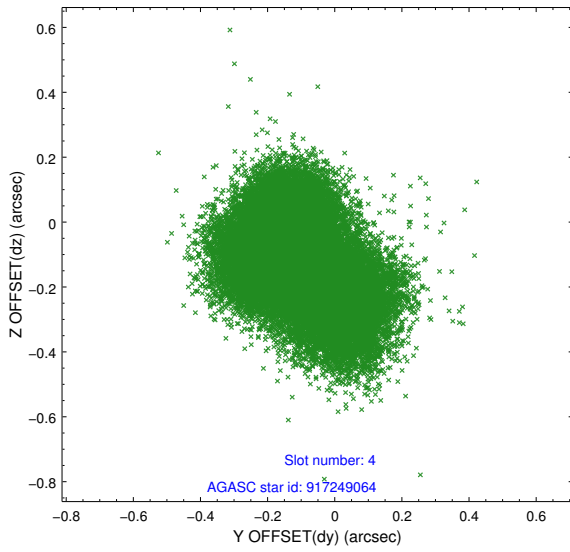
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.18	12235	0.098	-0.115	0.018	0.029	0.000000	0.000000	921.69	-943.30
1	FID	ACIS-I-5	7.18	12237	-0.295	0.062	0.022	0.033	0.000000	0.000000	-1826.89	954.27
2	FID	ACIS-I-6	7.18	12237	0.105	0.125	0.020	0.029	0.000000	0.000000	387.17	1598.89
3	GUIDE	917247680	9.50	24451	0.021	0.549	0.164	0.265	13.448598	-31.749743	-1874.20	-1024.66
4	GUIDE	917249064	9.38	24321	-0.100	-0.124	0.196	0.301	12.977357	-30.958530	775.48	760.60
5	GUIDE	917249344	9.25	24460	-0.109	-0.121	0.143	0.220	12.899080	-30.986075	646.43	988.75
6	GUIDE	917385792	9.25	24452	0.217	-0.393	0.200	0.288	13.639095	-31.644027	-1426.45	-1559.46
7	GUIDE	917386200	10.04	24435	-0.075	0.134	0.389	0.564	13.545318	-30.862468	1332.54	-937.78

## 2.4 Star Slots

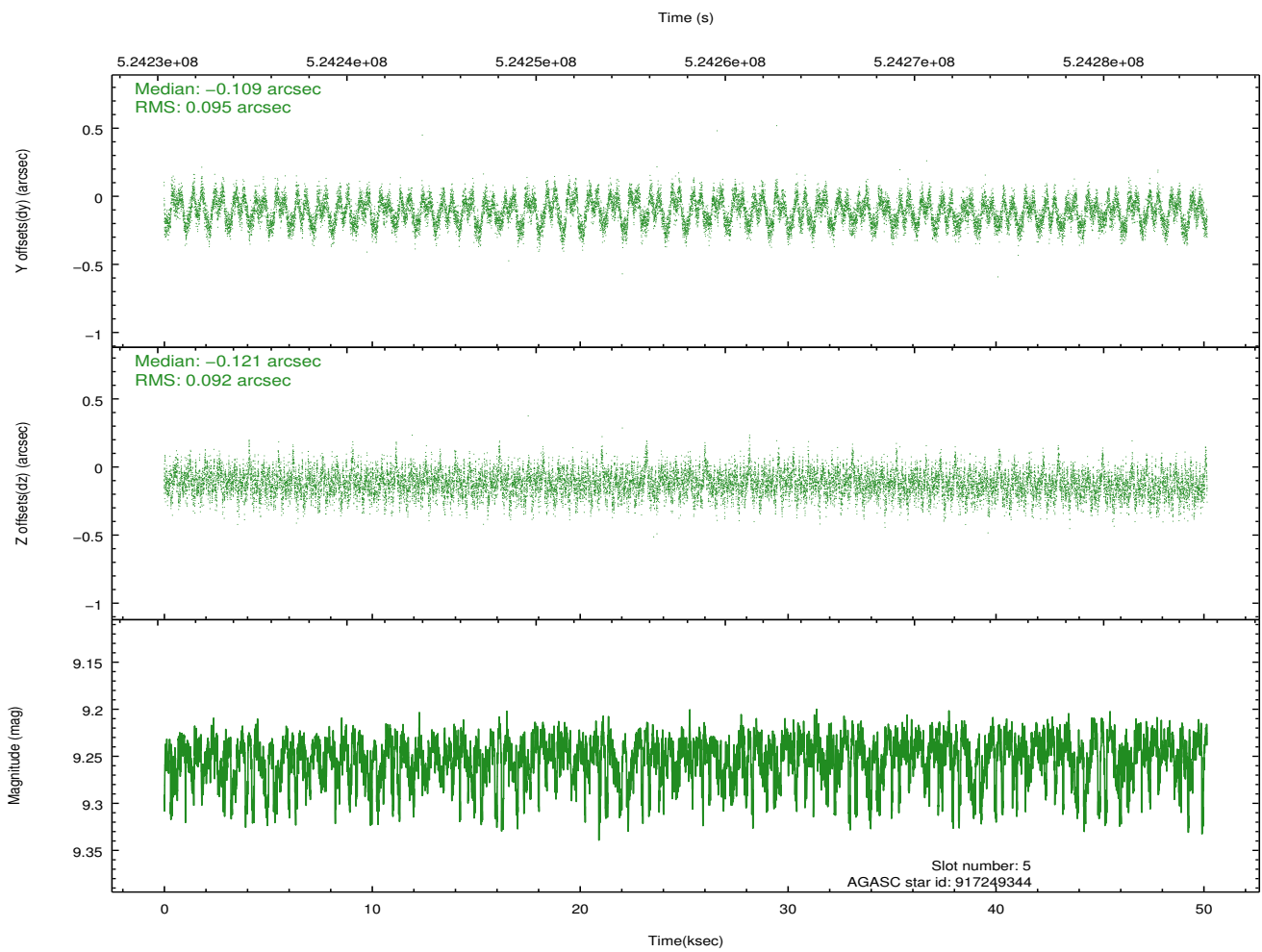
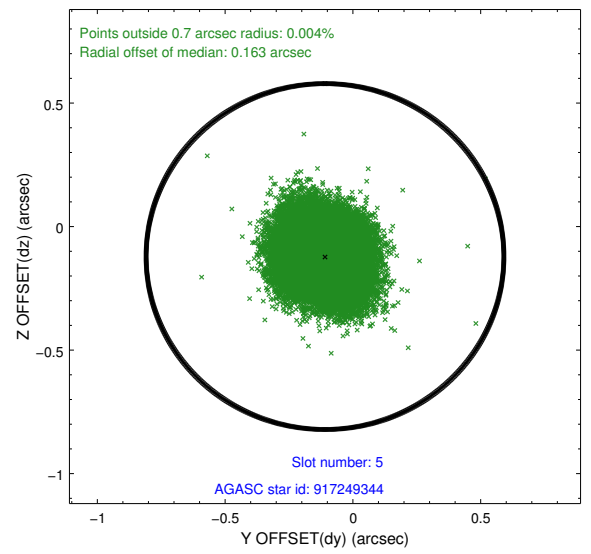
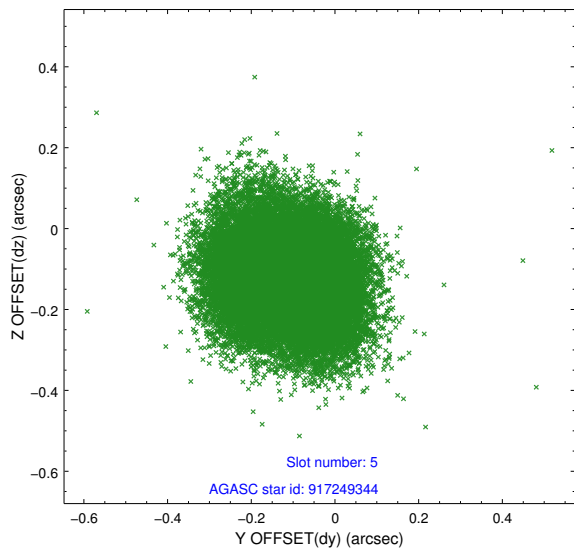
### 2.4.1 Slot 3



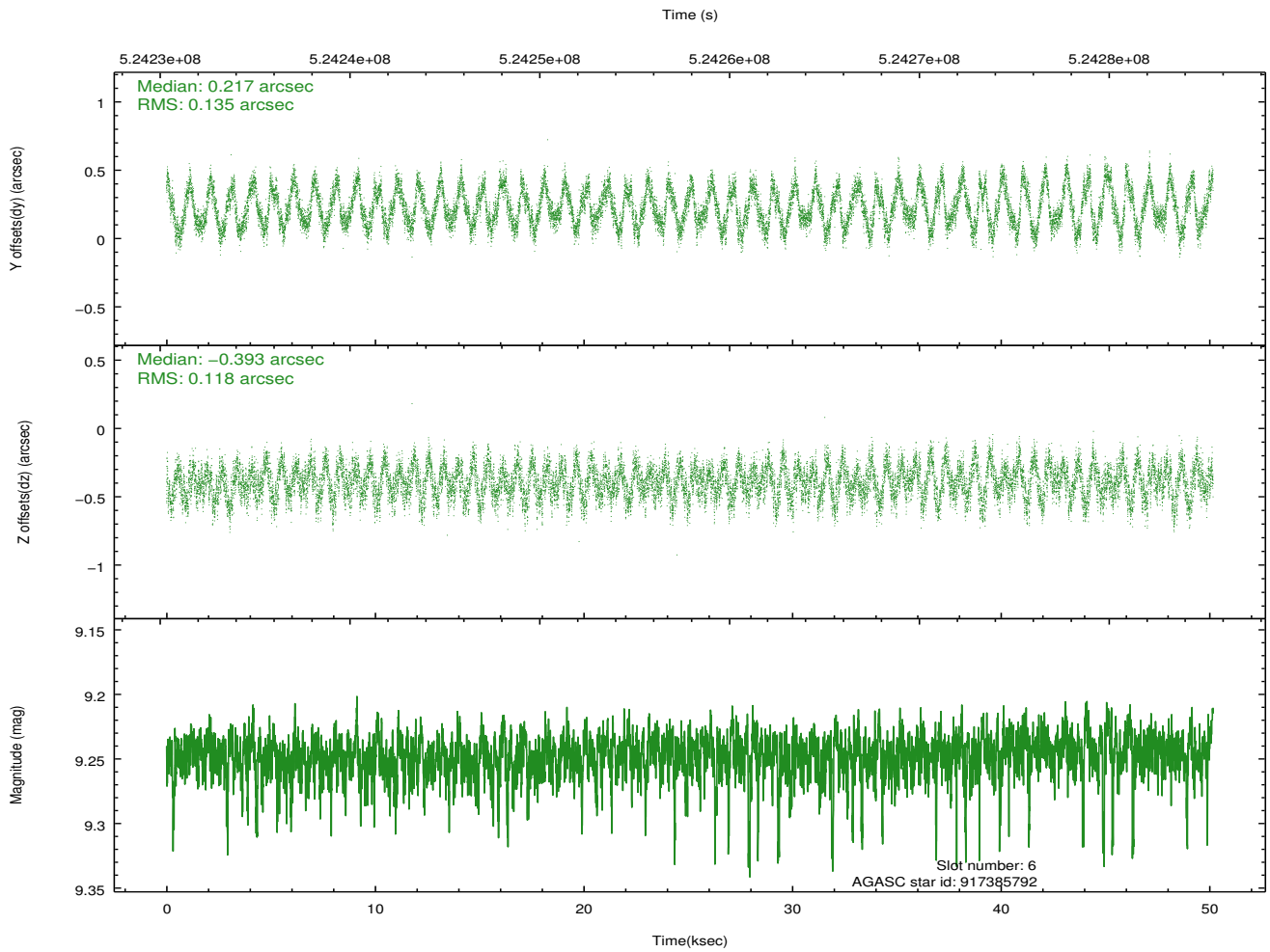
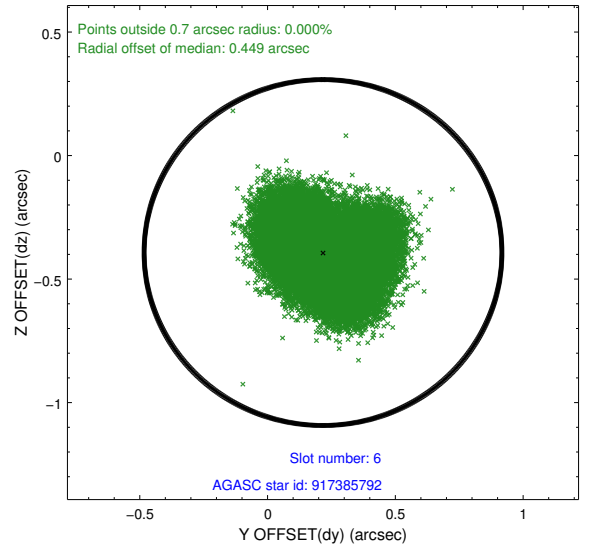
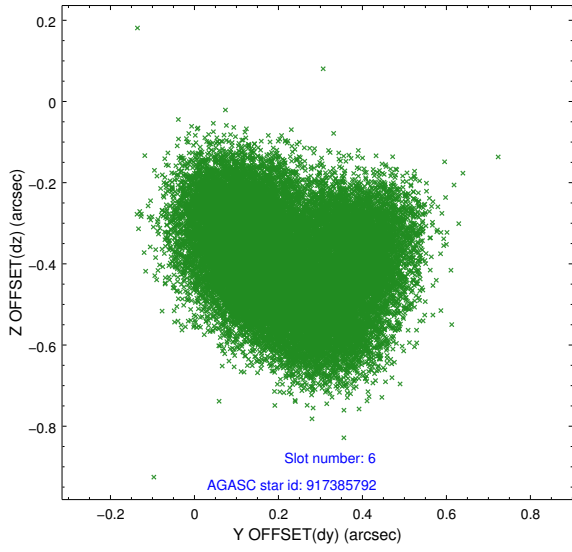
## 2.4.2 Slot 4



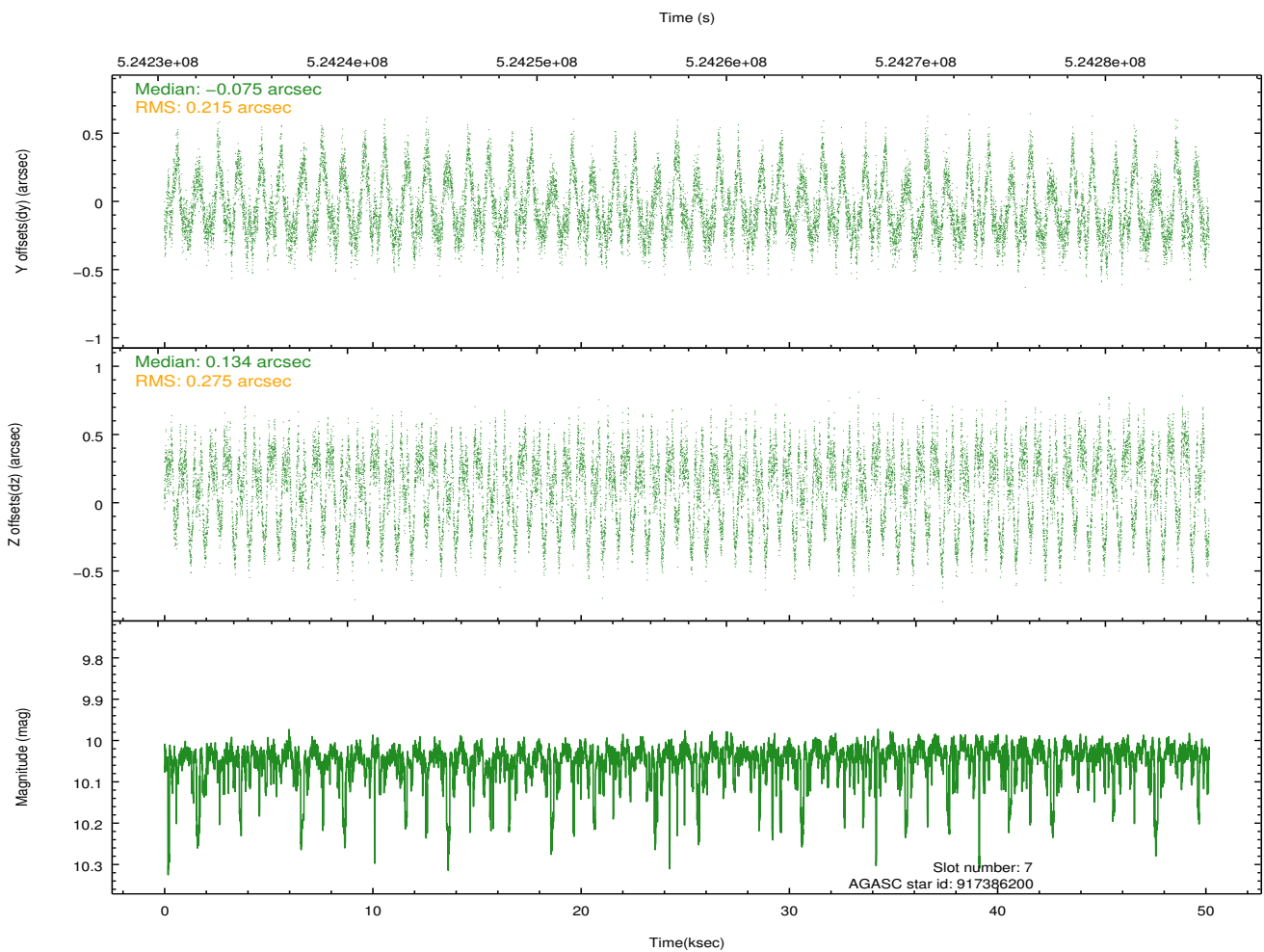
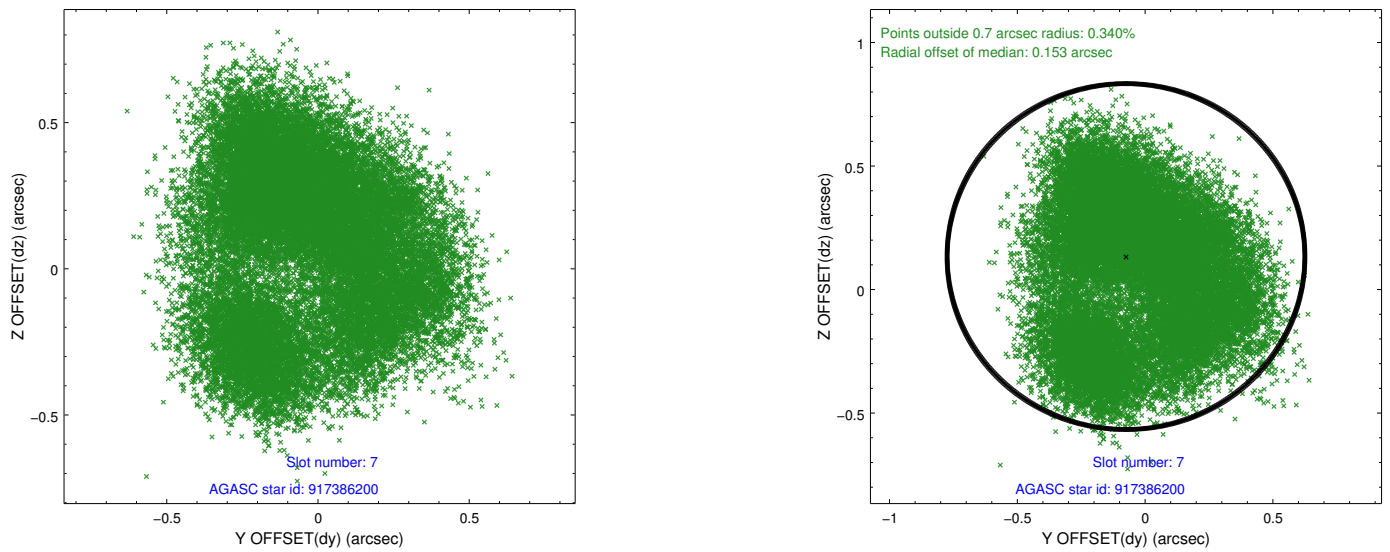
### 2.4.3 Slot 5



### 2.4.4 Slot 6

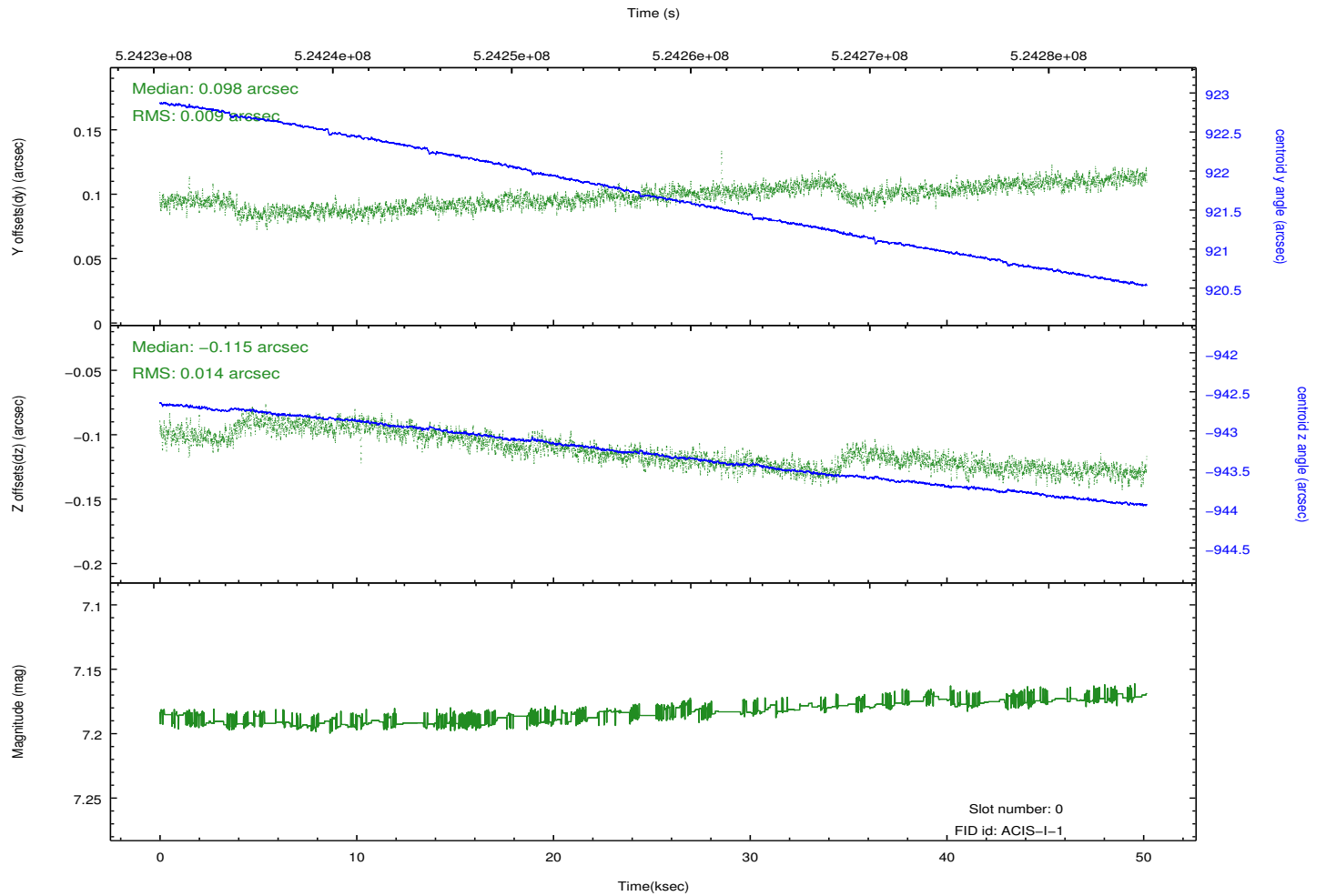
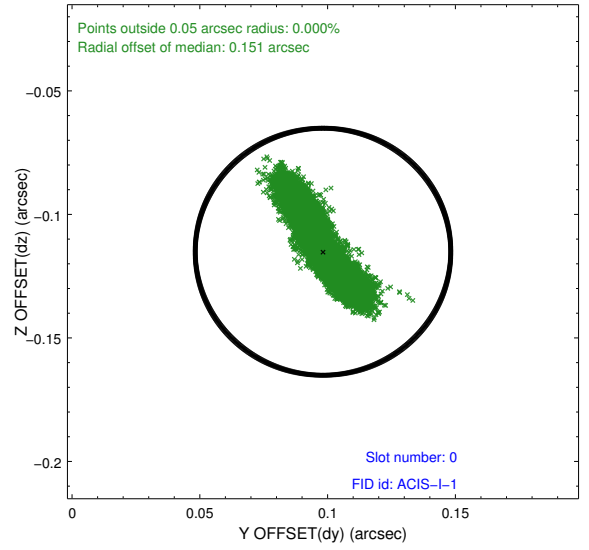
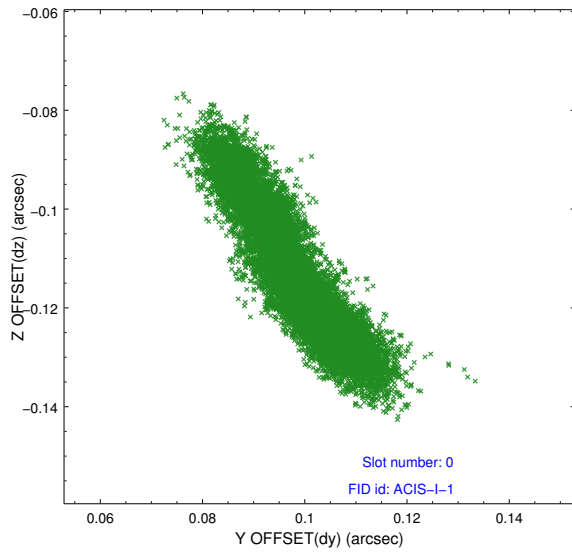


## 2.4.5 Slot 7

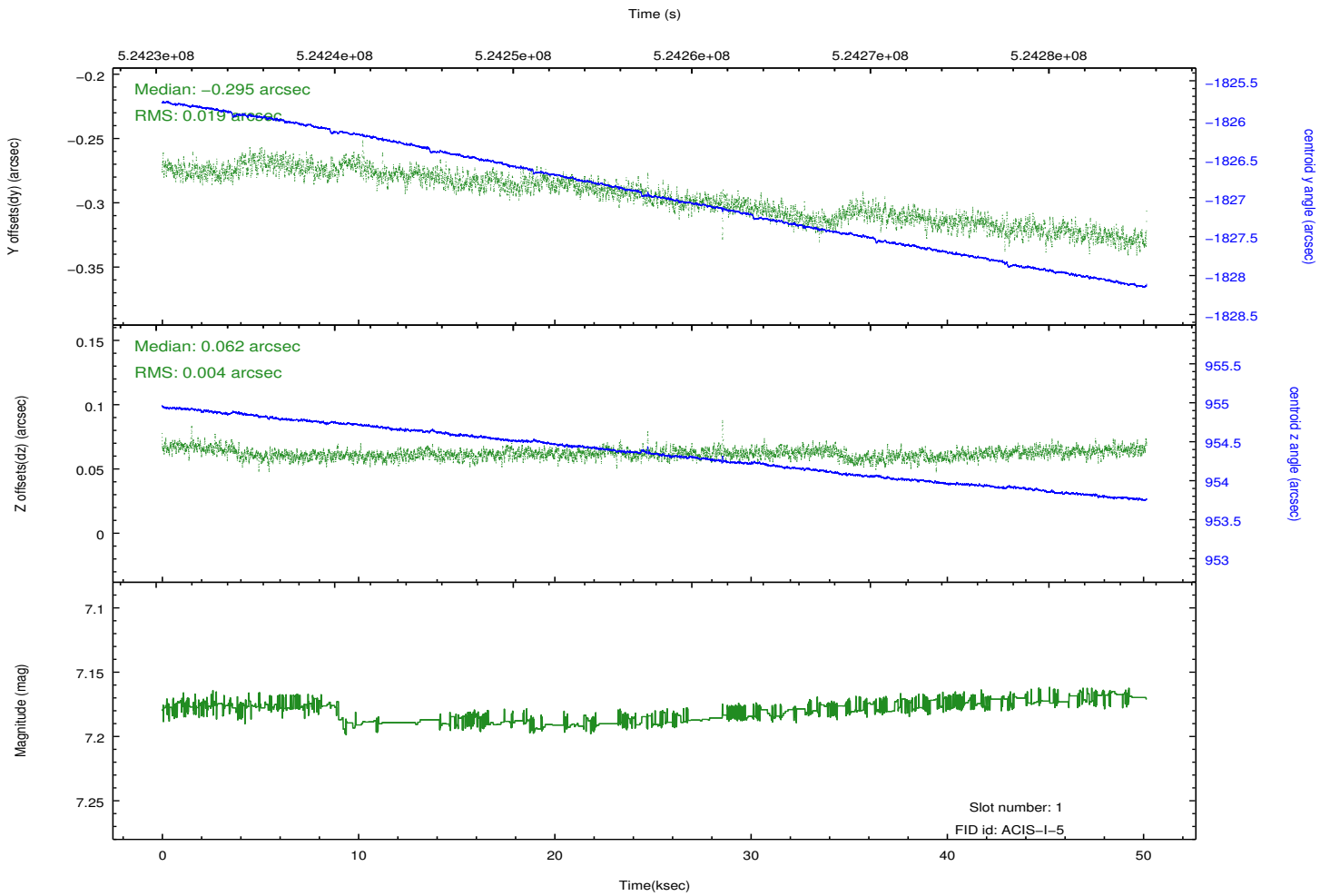
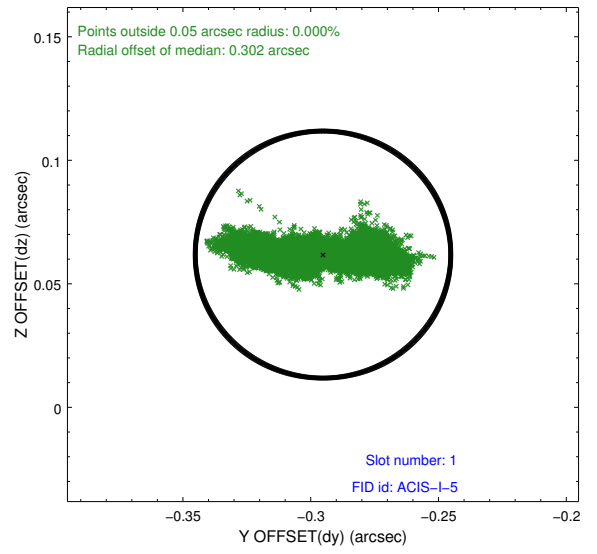
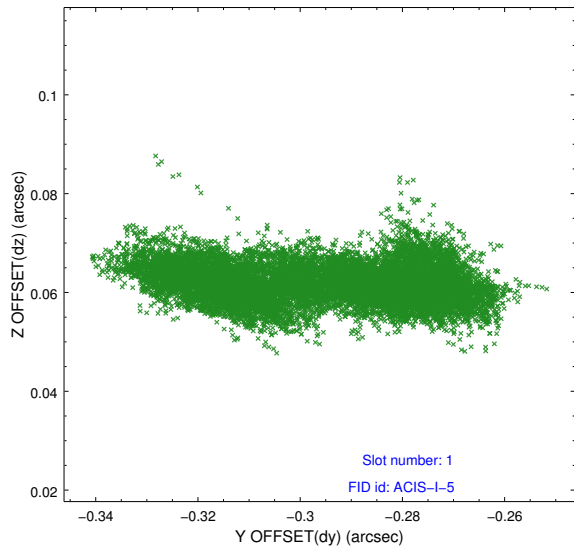


## 2.5 FID Slots

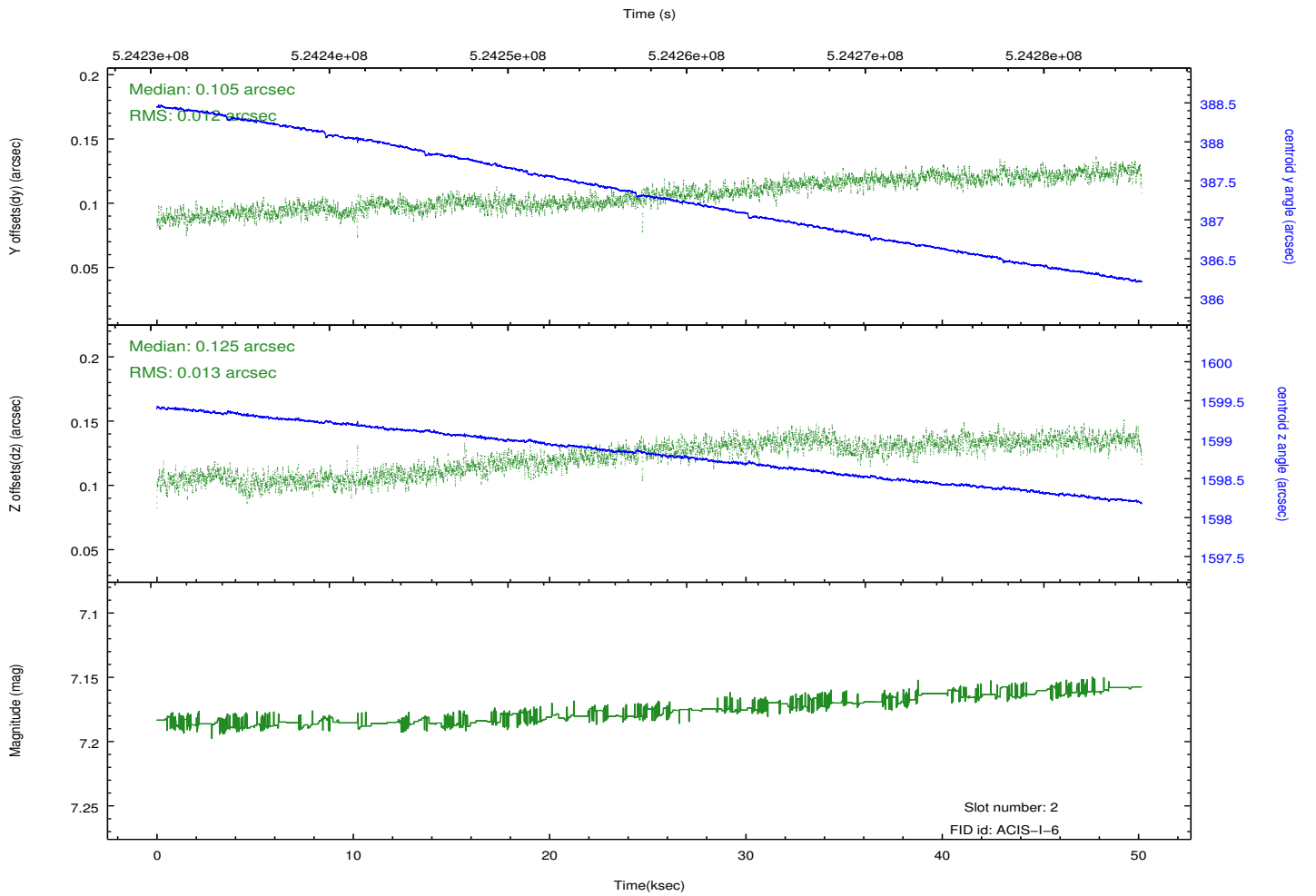
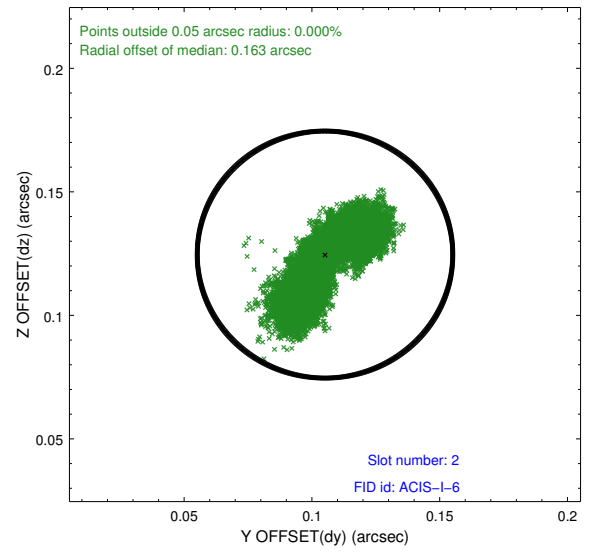
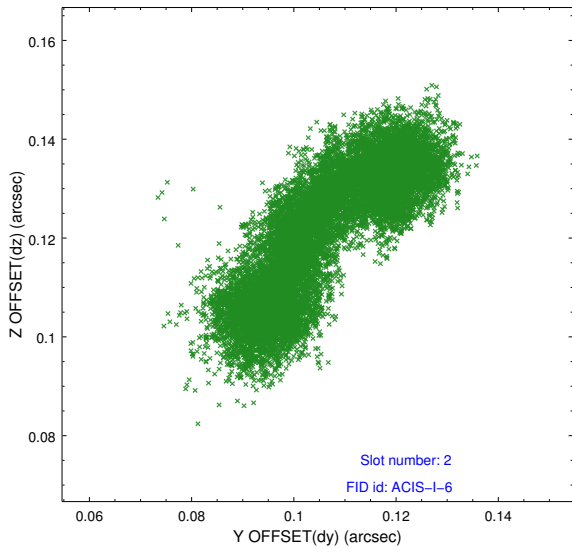
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.08.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.086659354806

## A.2 Comments