

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7783 - L2 Version 2  
Chandra X-Ray Center

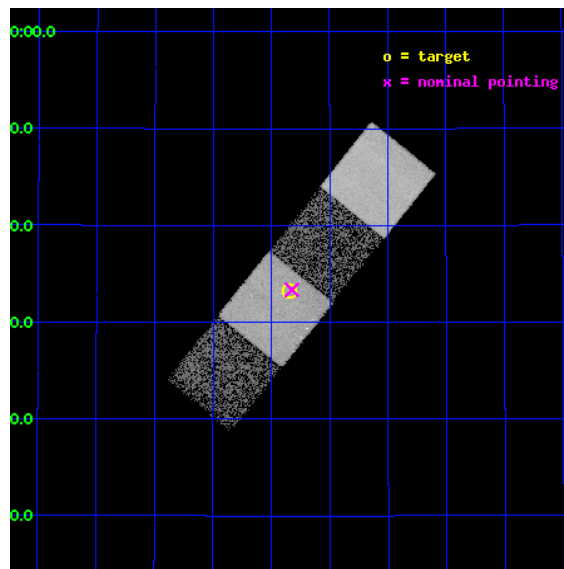
L2 Processing Date : May 11 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

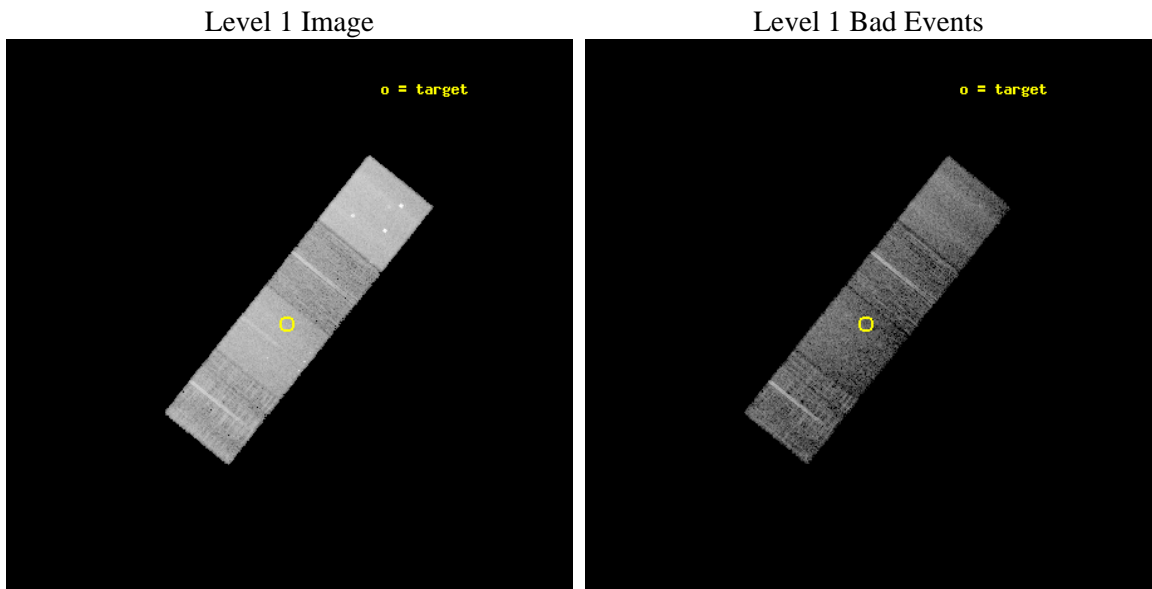
seq_num	701451	Sequence number
obs_id	7783	Observation id
title	An Exploratory Chandra Survey of Weak-Line Quasars from the Sloan Digital Sky Survey	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J1335+3533	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	203.961667	Observer's specified target RA [deg]
dec_targ	35.554389	Observer's specified target Dec [deg]
ra_nom	203.95607198095	Nominal RA [deg]
dec_nom	35.556018379535	Nominal Dec [deg]
roll_nom	128.7424235674	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23783.200182915	Sum of GTIs [s]
livetime	23472.455163588	Livetime [s]
ontime5	23783.200182915	Sum of GTIs [s]
ontime6	7384.2204406857	Sum of GTIs [s]
ontime7	23783.200182915	Sum of GTIs [s]
ontime8	7384.261480689	Sum of GTIs [s]
l2events	133933	Number of level 2 events



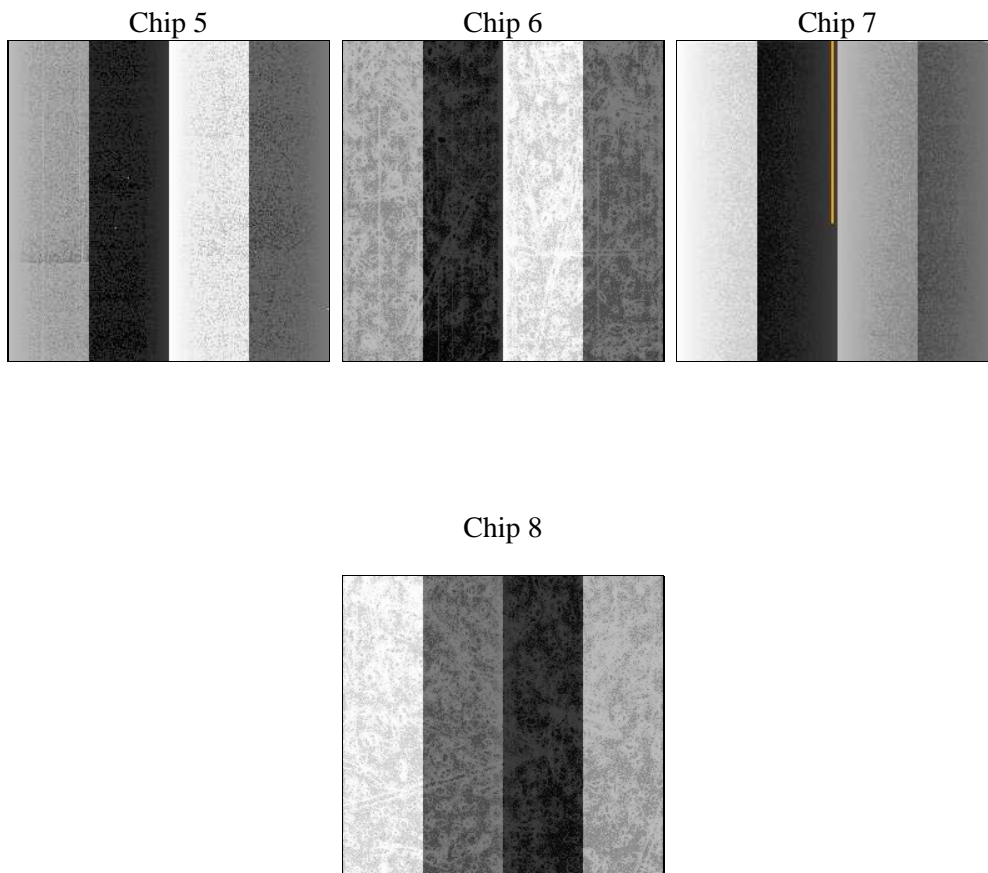
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23600.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	23783.200182915	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime5	23783.200182915	Sum of GTIs [s]
date	2012-05-11T12:59:58	Date and time of file creation	ontime6	7384.2204406857	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	23783.200182915	Sum of GTIs [s]
			ontime8	7384.261480689	Sum of GTIs [s]
			l1events	335856	Number of level 1 events

### 2.1.4 Events

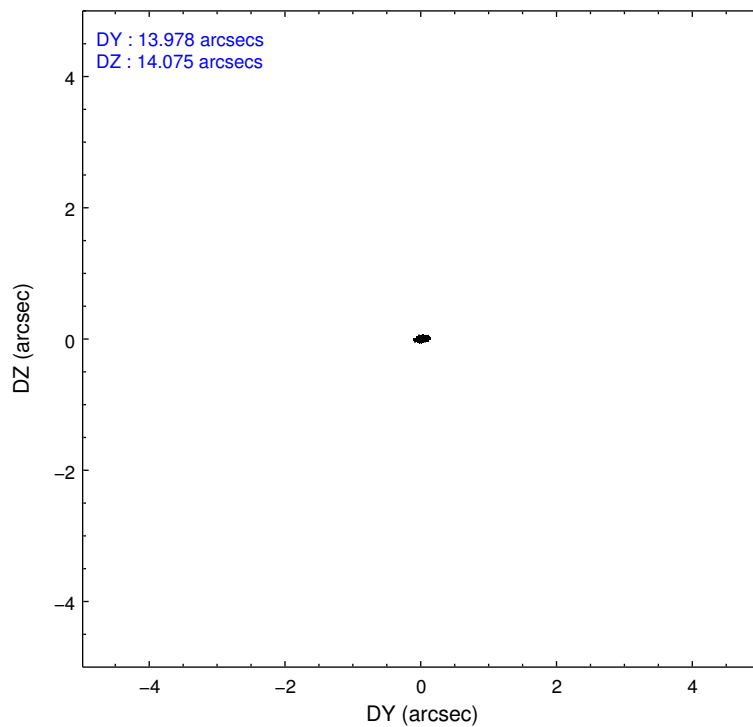
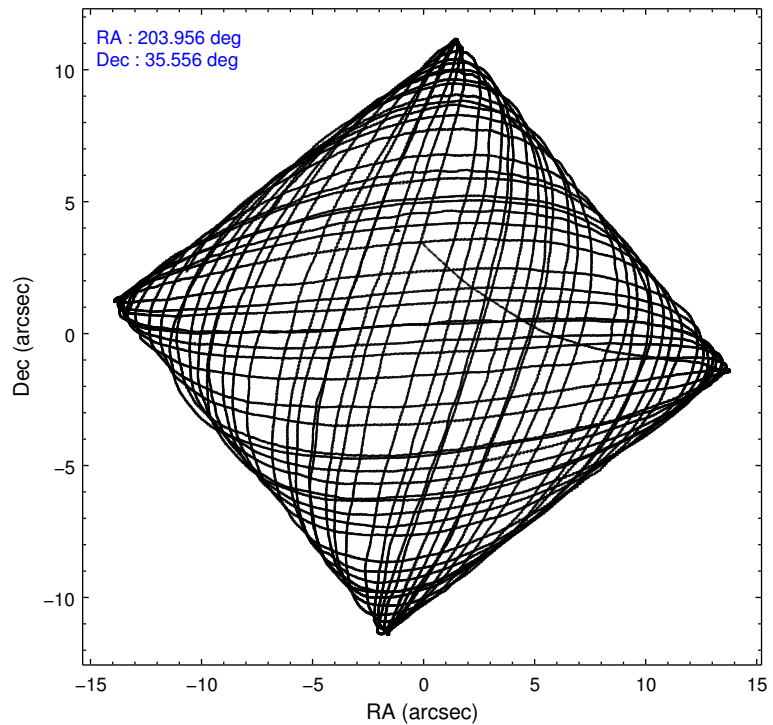
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	136646	47528	90178	61504
rejected events	53411	43183	37969	45258
rejected %	39%	90%	42%	73%

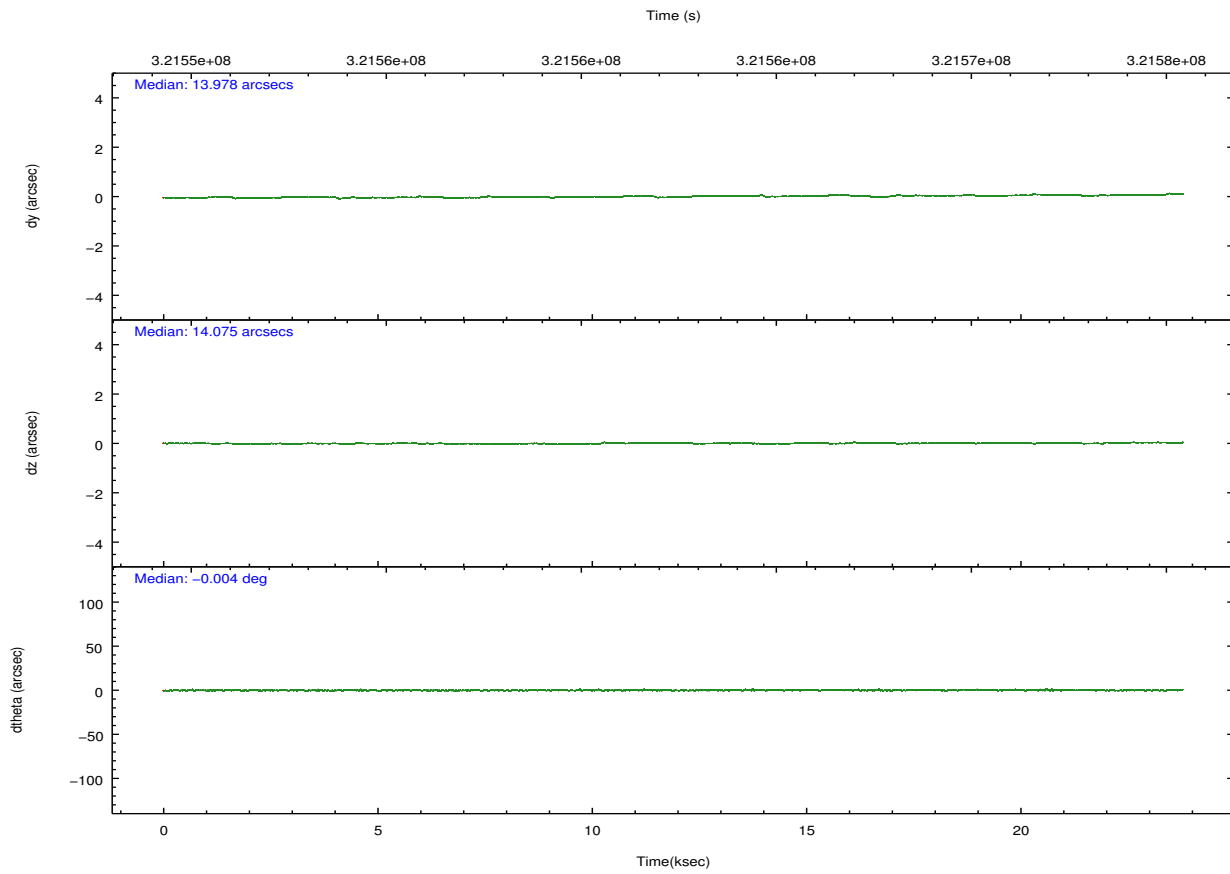
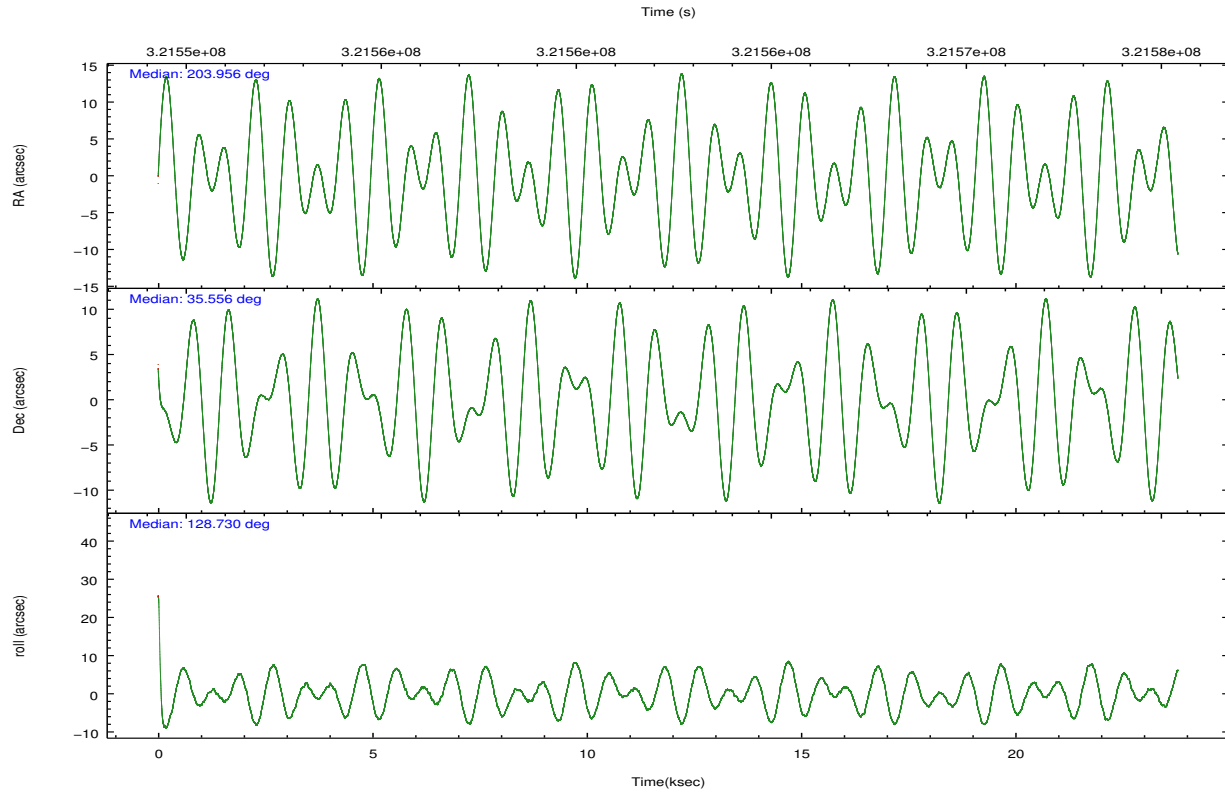
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	11977	1724	7318	4601
	8%	3%	8%	7%
grade 1 events	500	14	235	71
	0%	0%	0%	0%
grade 2 events	25909	967	12635	3842
	18%	2%	14%	6%
grade 3 events	4332	519	5442	1827
	3%	1%	6%	2%
grade 4 events	4194	440	5279	1733
	3%	0%	5%	2%
grade 5 events	10937	960	9228	1720
	8%	2%	10%	2%
grade 6 events	37116	737	21695	4398
	27%	1%	24%	7%
grade 7 events	41681	42167	28346	43312
	30%	88%	31%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	203.987530	203.9560719809463	Subarray requested	NONE	NONE
[deg] Pointing Dec	35.546454	35.55601837953483	Alternating exposures requested	N	N
[deg] Pointing Roll	128.567486	128.7424235674018	[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)	321550643.184000	321549669.30728			
Observation start date	2008-03-10T15:36:18	2008-03-10T15:21:09			
[s] Observation end time (MET)	321574243.184000	321574985.78351			
Observation end date	2008-03-10T22:09:38	2008-03-10T22:23:05			
Read mode	TIMED	TIMED			

## 2.3 Aspect



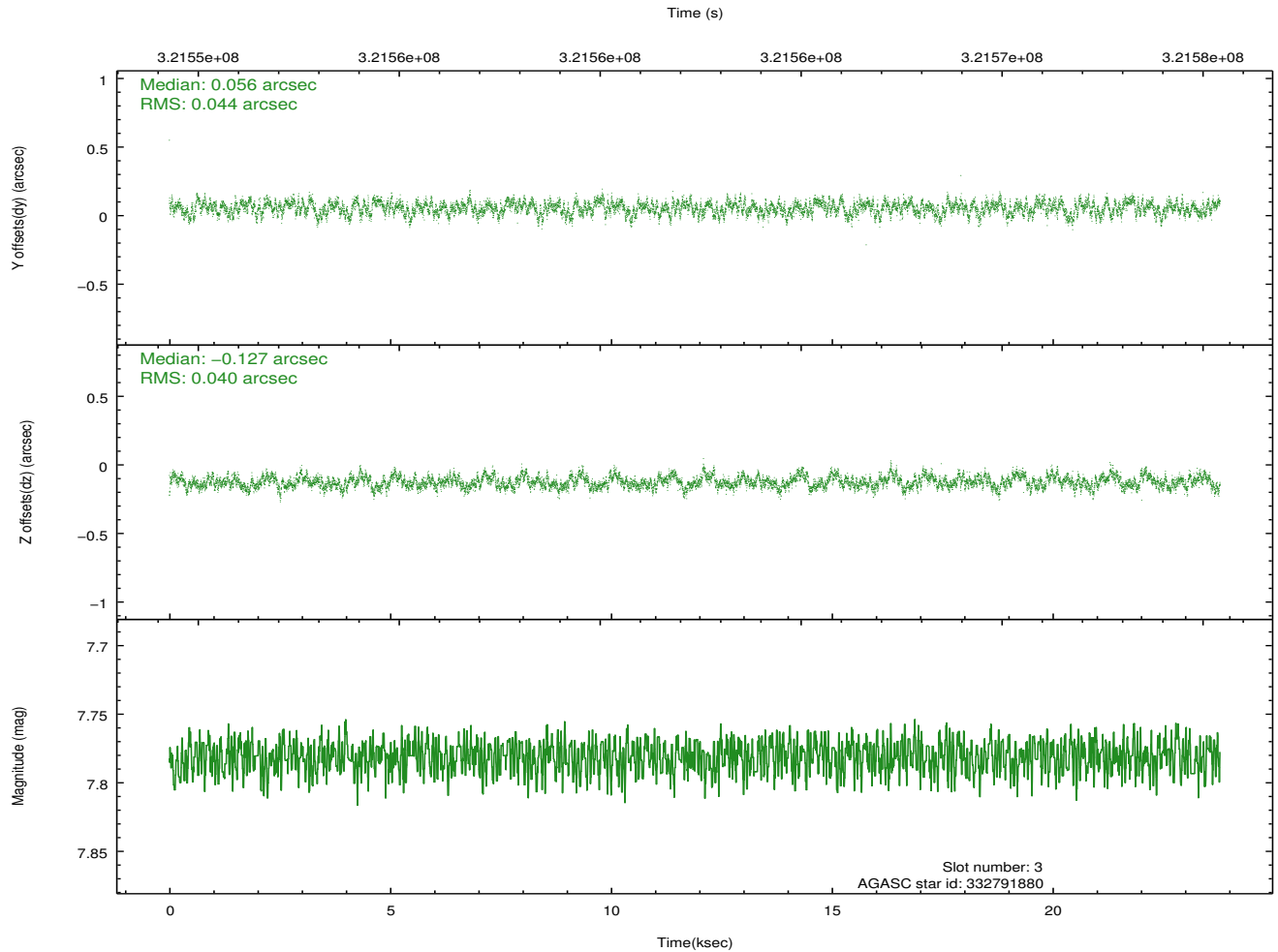
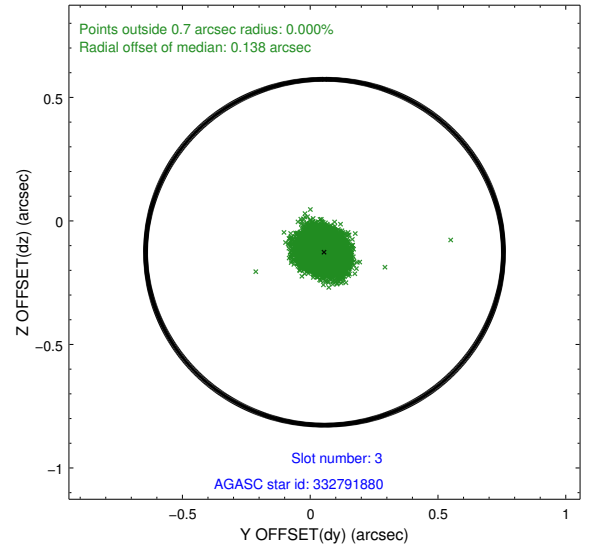
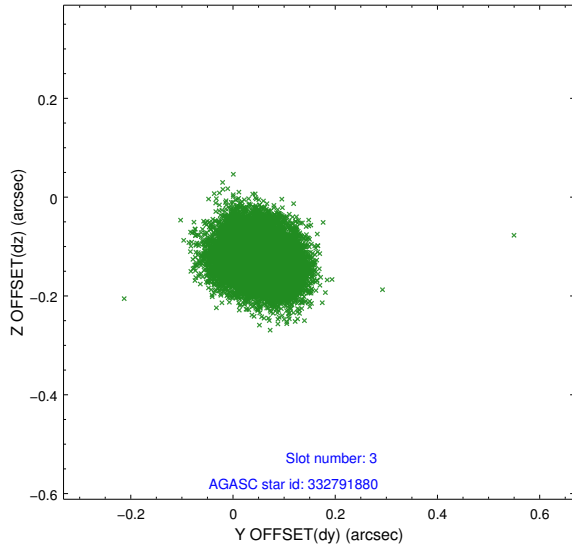


### Slot Statistics

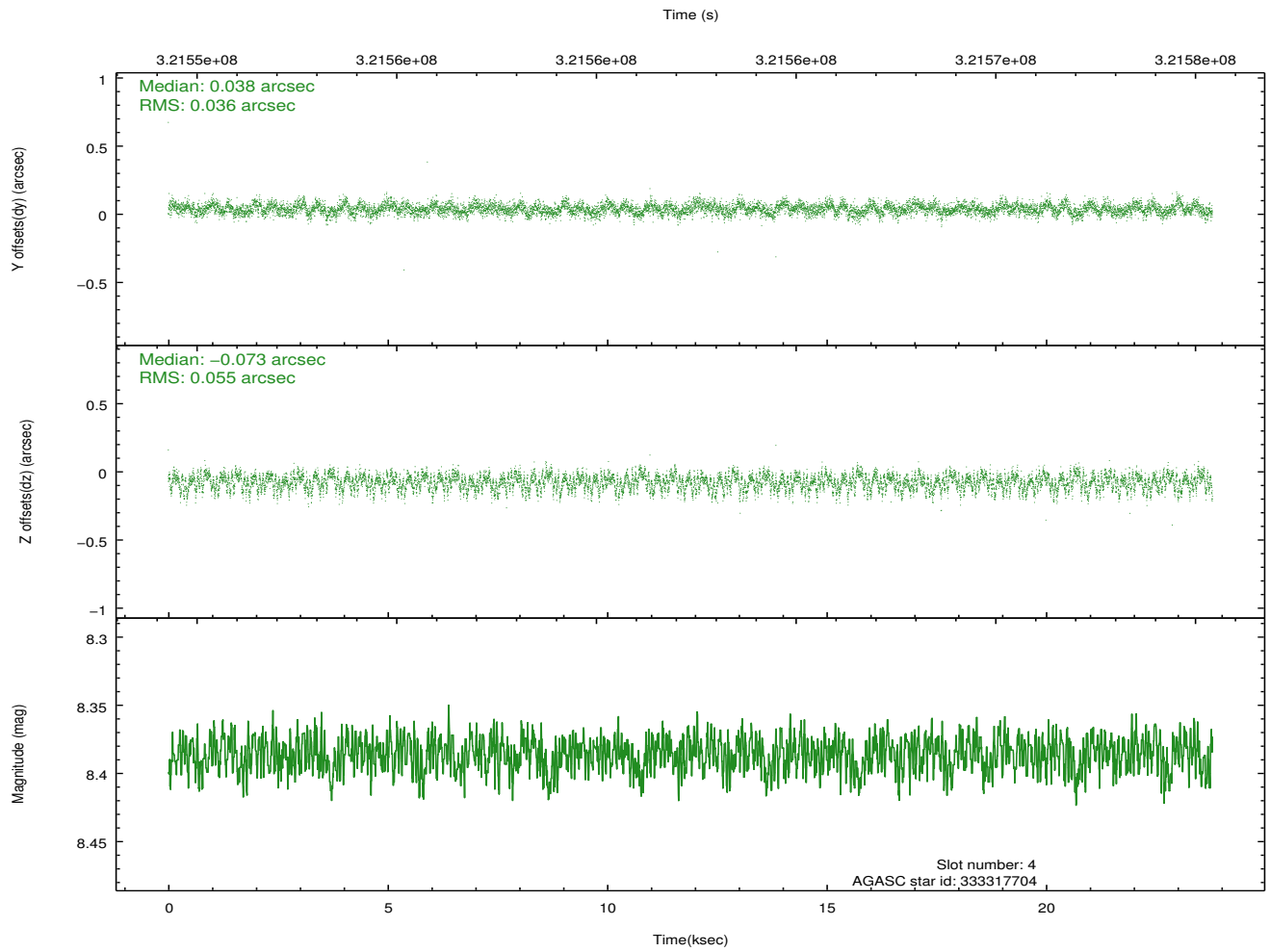
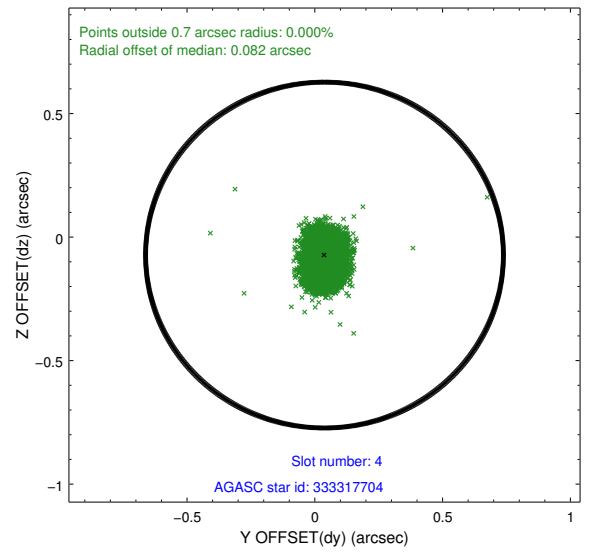
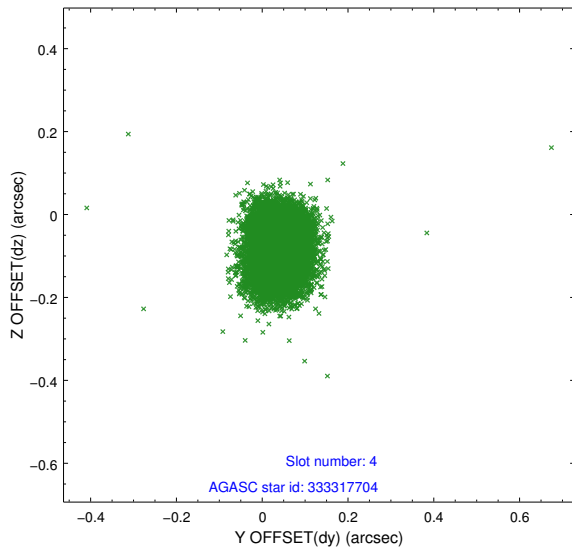
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	5803	-0.067	-0.057	0.007	0.011	0.000000	0.000000	-766.98	-1735.49
1	FID	ACIS-S-4	7.19	5803	0.198	0.048	0.007	0.012	0.000000	0.000000	2146.49	172.97
2	FID	ACIS-S-5	7.22	5802	-0.162	0.018	0.007	0.012	0.000000	0.000000	-1819.76	166.74
3	GUIDE	332791880	7.78	11605	0.056	-0.127	0.065	0.101	203.868626	34.977483	-1382.84	1551.26
4	GUIDE	333317704	8.39	11600	0.038	-0.073	0.068	0.114	204.369867	35.717764	-214.24	-1260.82
5	GUIDE	333325200	9.28	11590	-0.135	0.210	0.144	0.229	204.415447	36.146797	917.15	-2320.94
6	GUIDE	333325360	8.99	11599	0.118	-0.037	0.074	0.118	204.231782	35.051266	-1841.81	547.86
7	GUIDE	333325392	8.22	11599	-0.078	0.035	0.081	0.130	204.049036	35.862220	777.17	-848.31

## 2.4 Star Slots

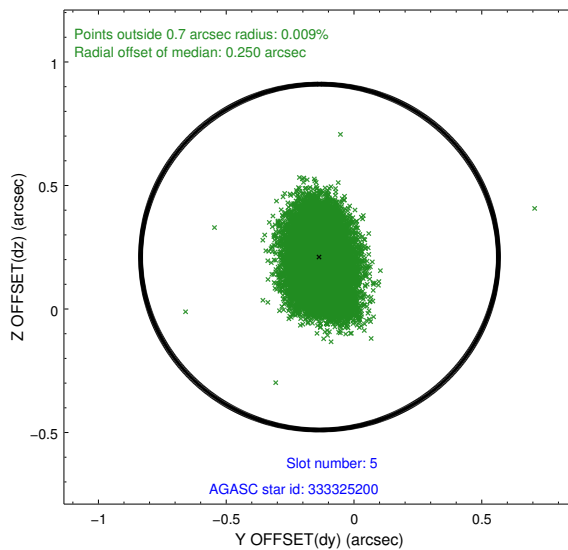
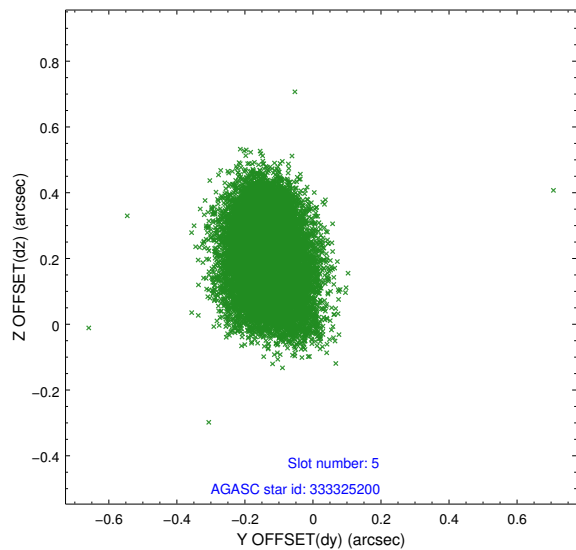
### 2.4.1 Slot 3



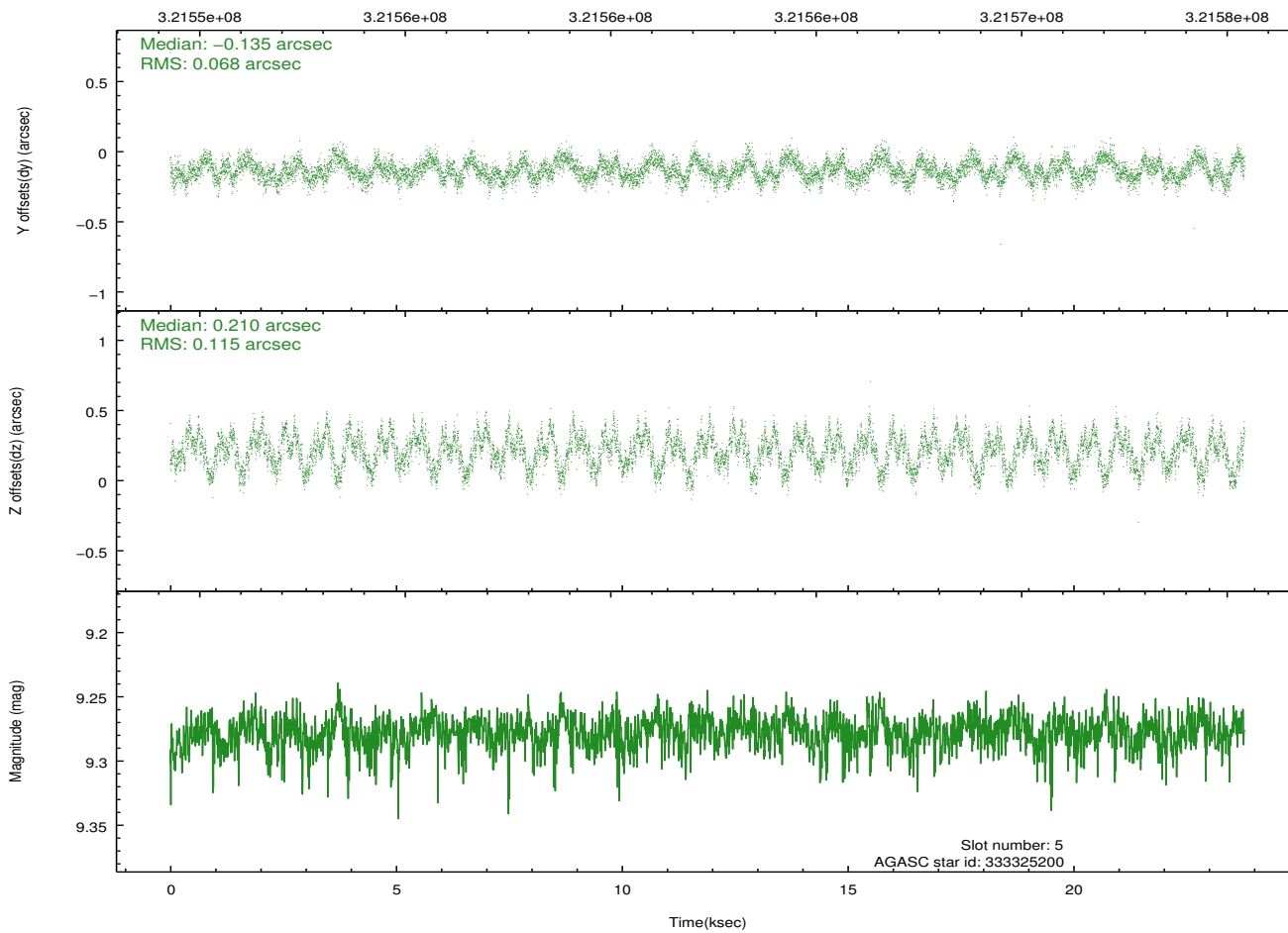
## 2.4.2 Slot 4



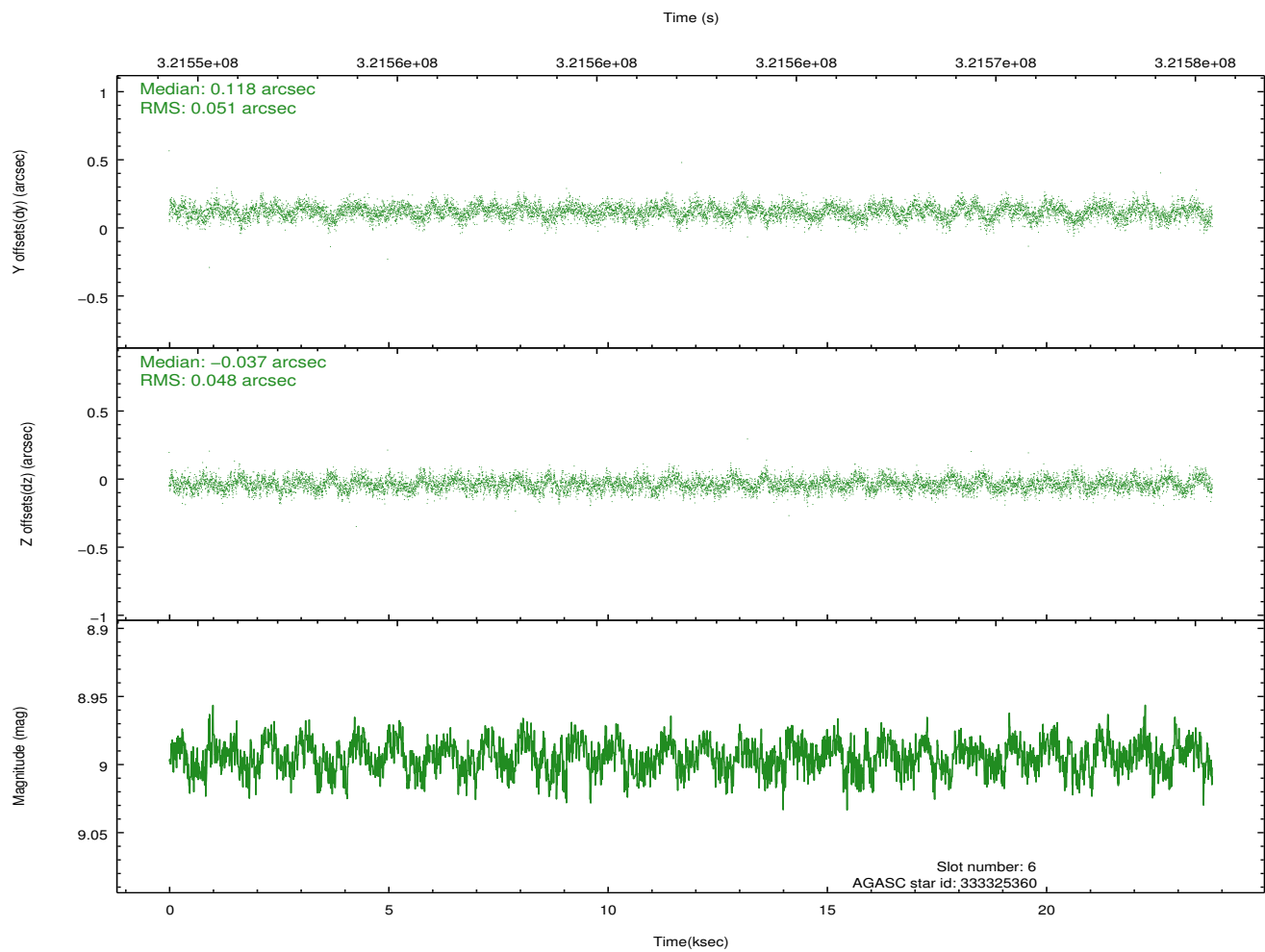
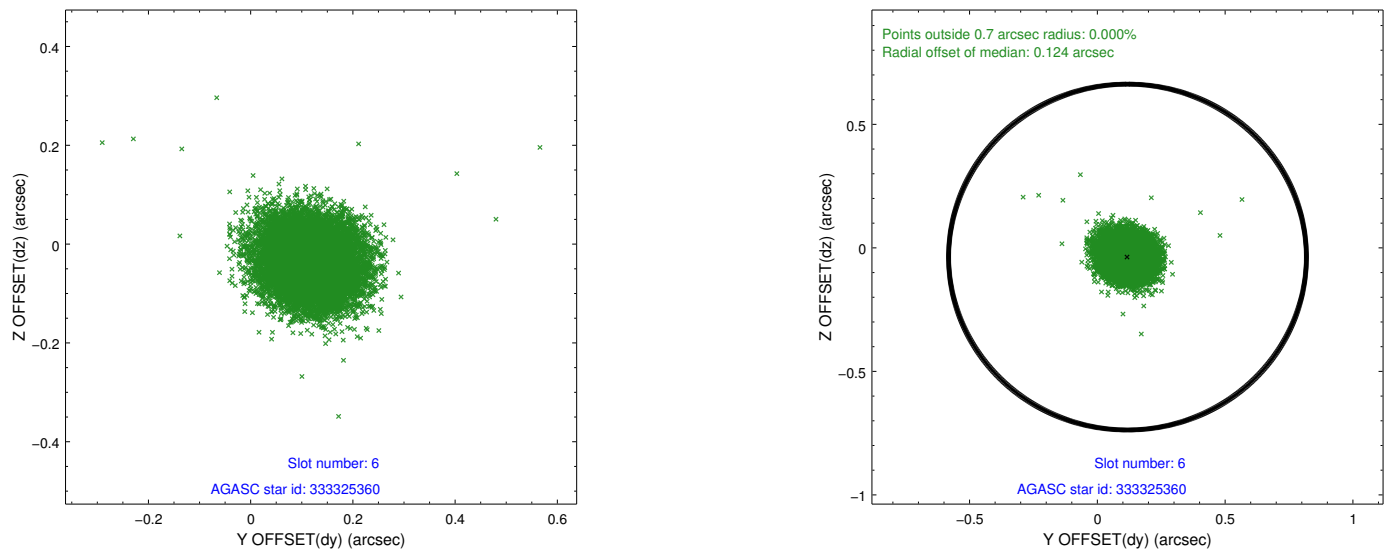
### 2.4.3 Slot 5



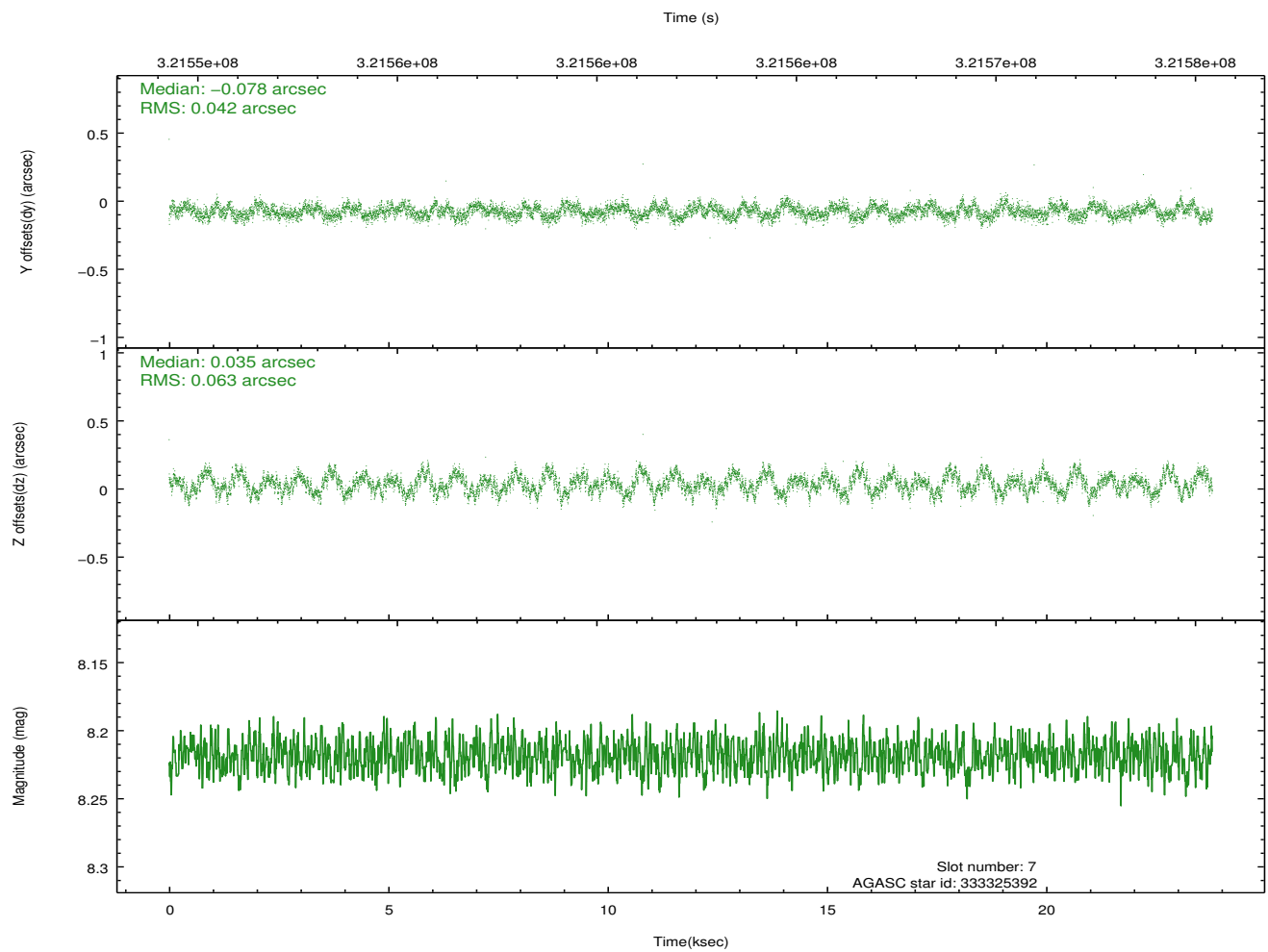
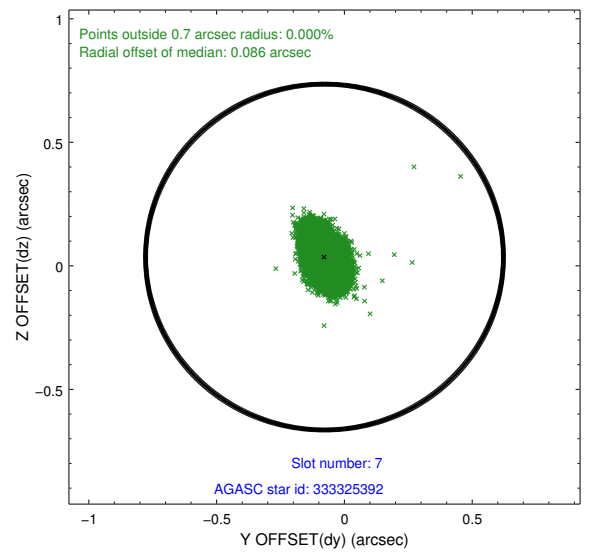
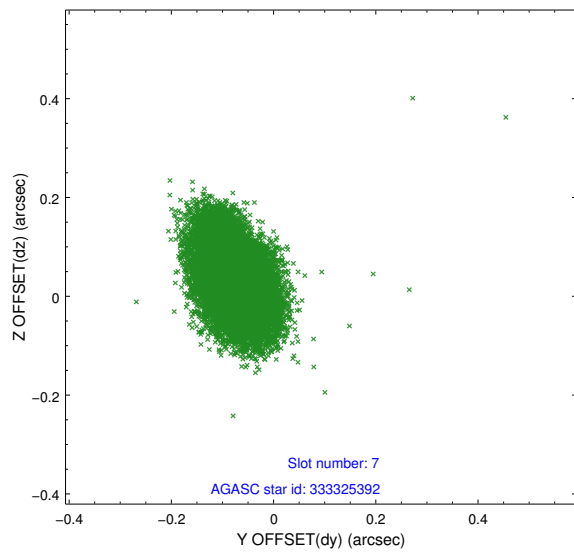
Time (s)



## 2.4.4 Slot 6

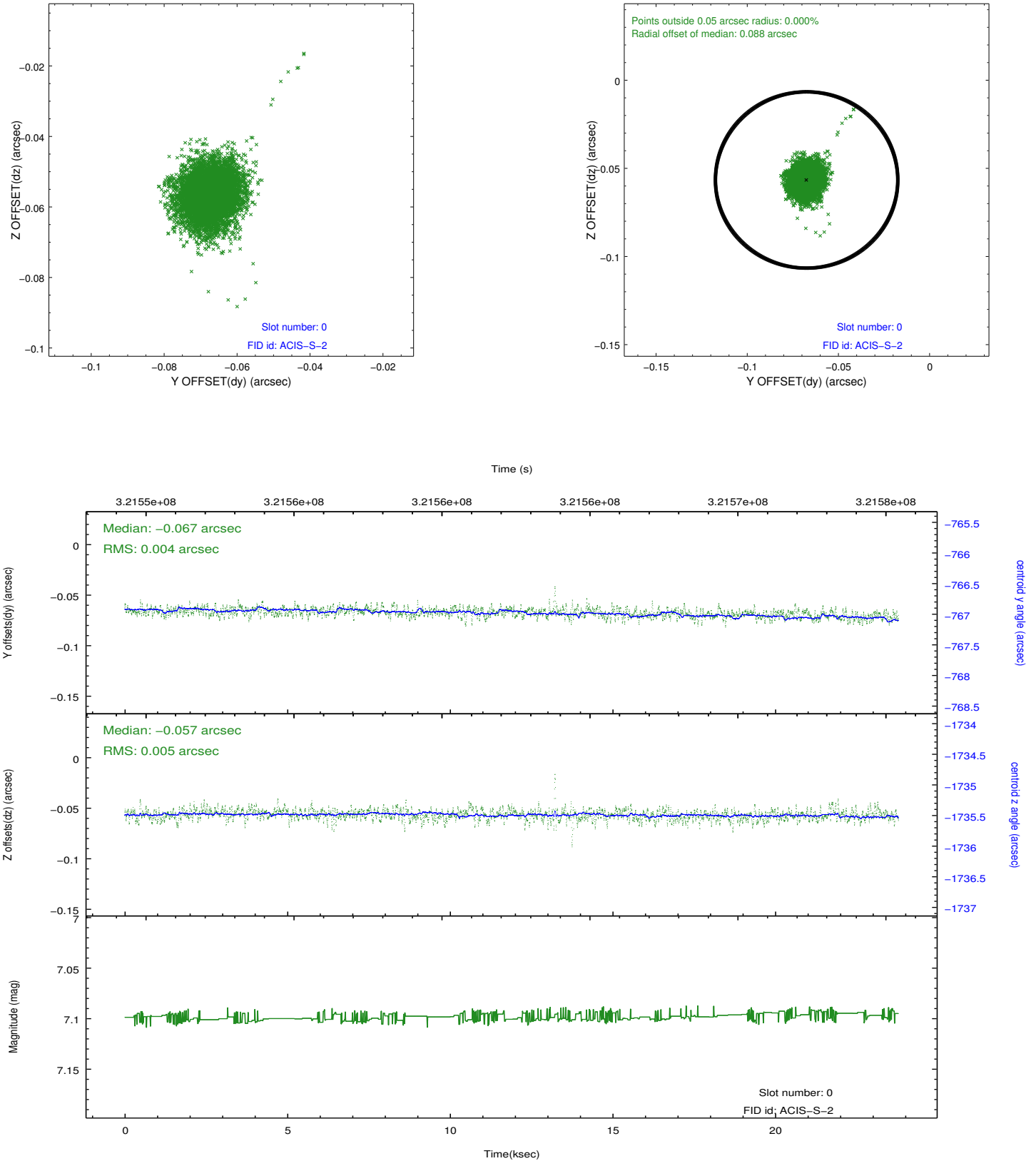


## 2.4.5 Slot 7

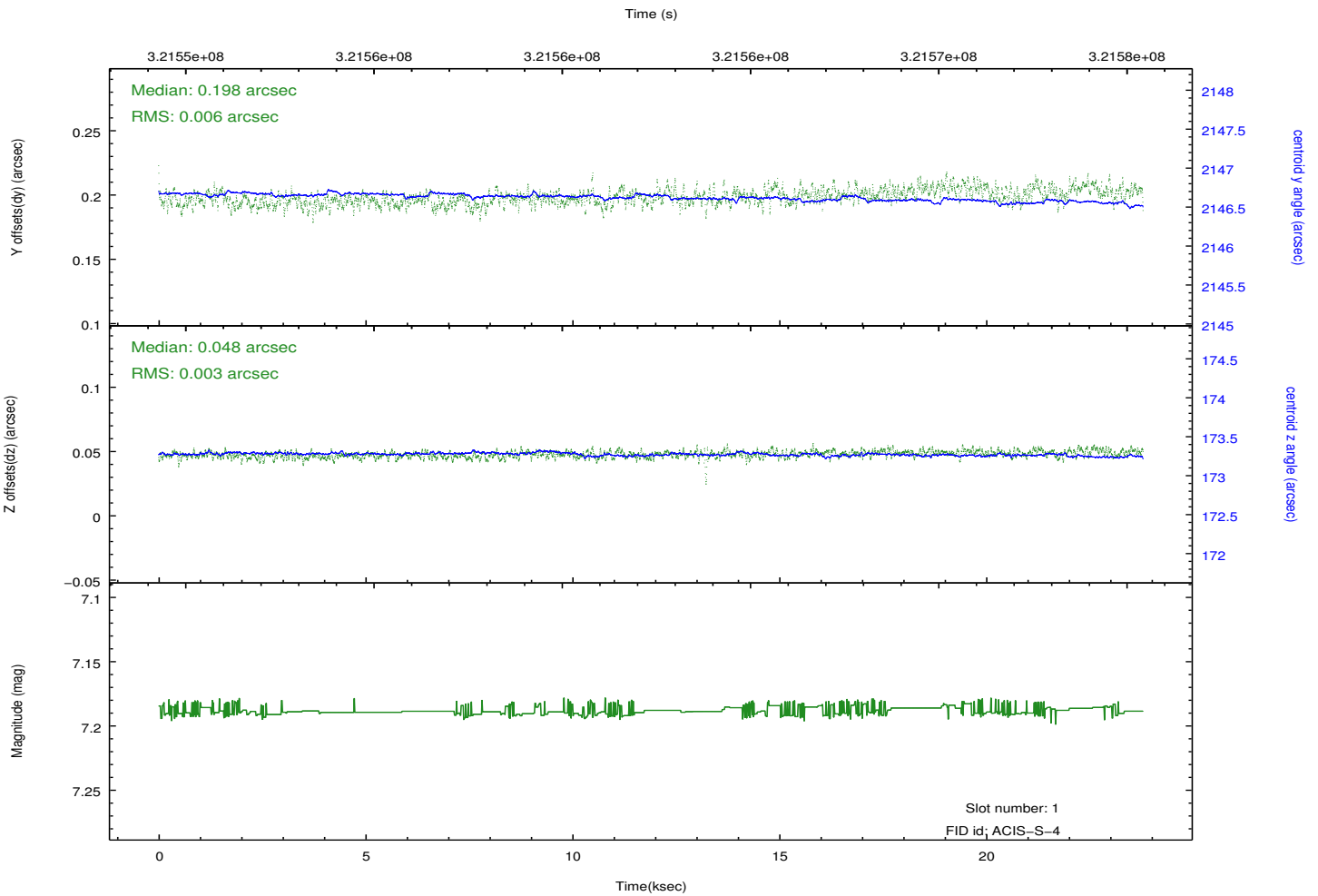
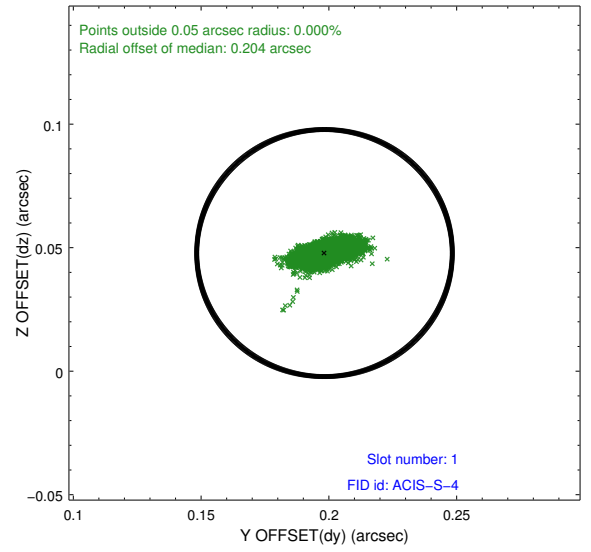
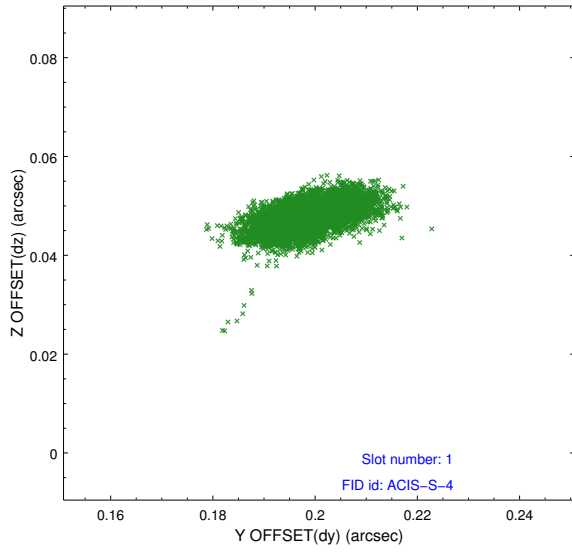


## 2.5 FID Slots

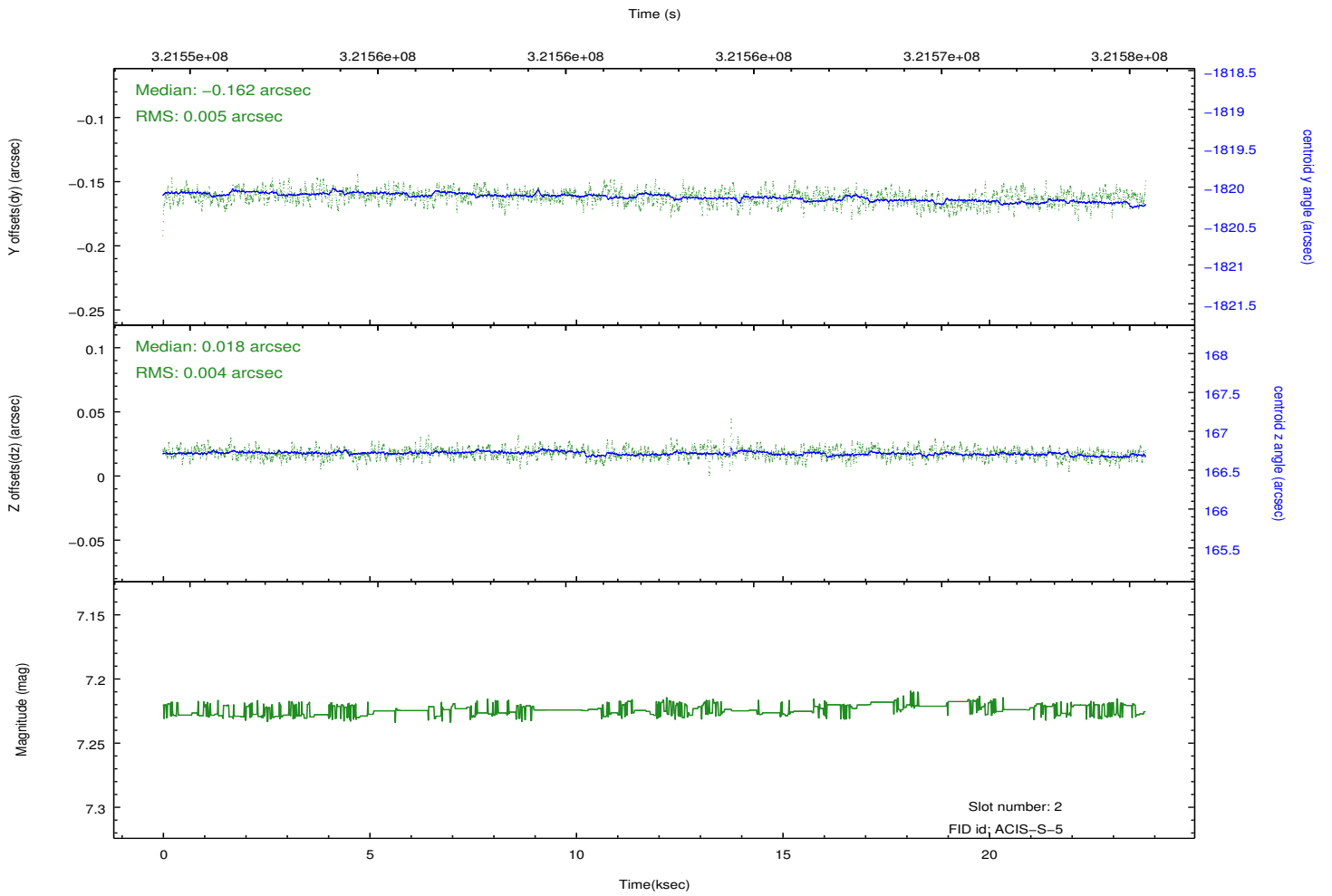
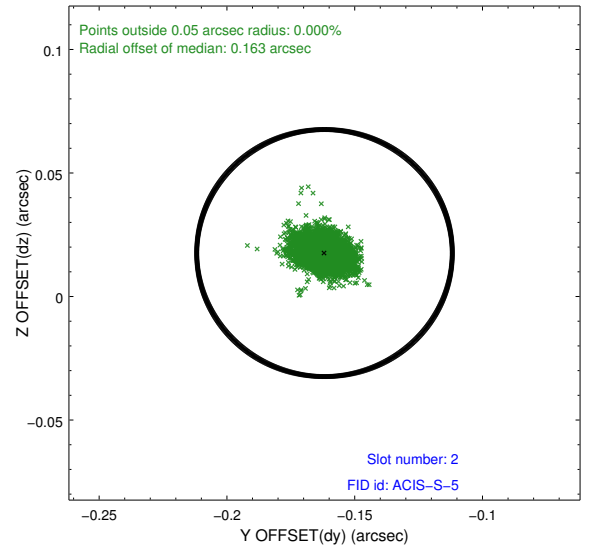
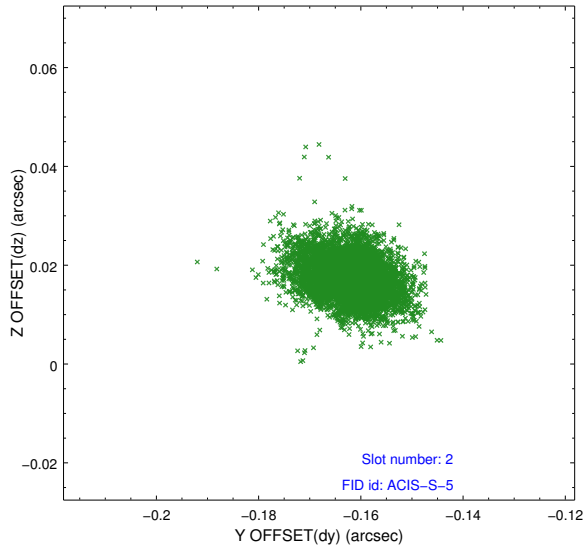
### 2.5.1 Slot 0



## 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)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.7832001

## A.2 Comments

An instrument anomaly occurred during this observation that affected chips 6 and 8 only. The target is positioned on chip 7 and is not affected by the anomaly. Front End Processors (FEPs) 3 and 4 attached to CCDs S2 and S4 reset on frame #2374 during OBSID 7783. This resulted in only 7359 s of the desired 23810 s exposure on these two CCDs. There is no event data from these CCDs/FEPs after the point at which the FEPs reset. The target and hence the primary science was on S3. S3 and S1 operated nominally for the entire observation and produced the full exposure.