

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 15336 - L2 Version 2  
Chandra X-Ray Center

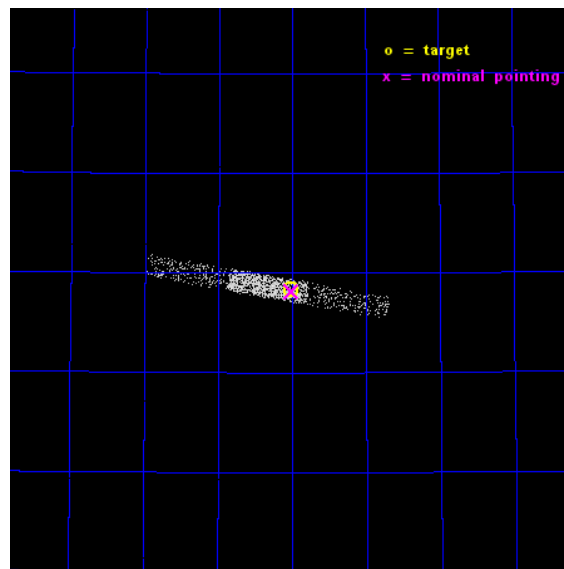
L2 Processing Date : Dec 3 2014

## 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

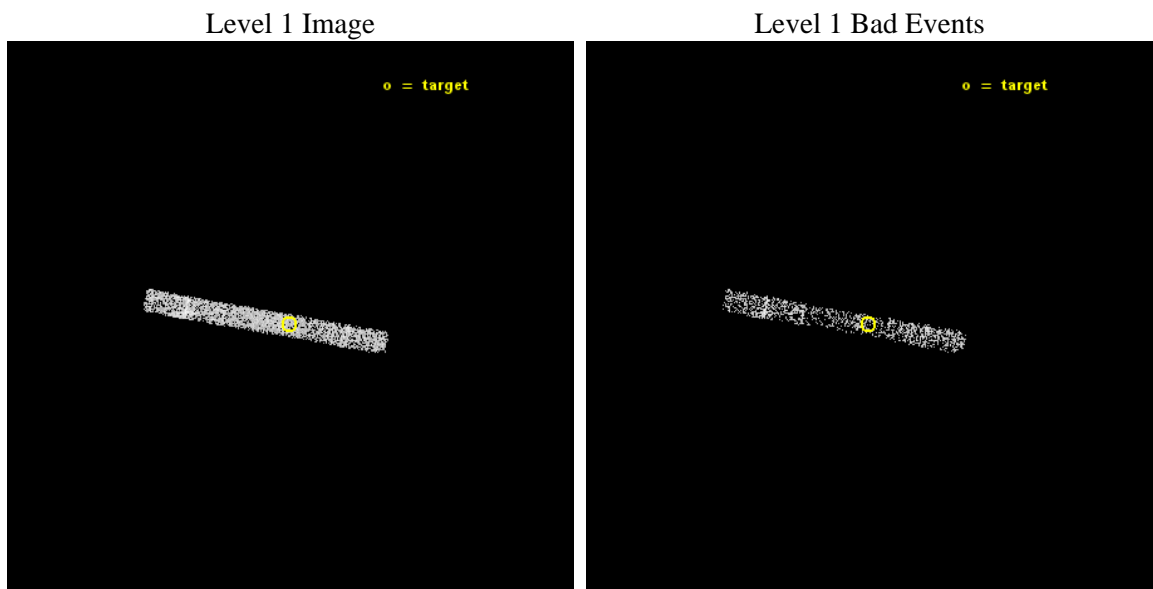
seq_num	702896	Sequence number
obs_id	15336	Observation id
title	Clarifying the Nature of Weak-Line Quasars with Chandra Spectroscopy and Snapshots	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	SDSS J1346+5858	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	206.505417	Observer's specified target RA [deg]
dec_targ	58.97225	Observer's specified target Dec [deg]
ra_nom	206.5028276722	Nominal RA [deg]
dec_nom	58.969155473844	Nominal Dec [deg]
roll_nom	189.79514177631	Nominal Roll [deg]
revision	2	Processing version of data
ontime	1593.76365453	Sum of GTIs [s]
livetime	1524.2575119836	Livetime [s]
ontime6	1593.7226145267	Sum of GTIs [s]
ontime7	1593.76365453	Sum of GTIs [s]
ontime8	1593.6815745234	Sum of GTIs [s]
l2events	1694	Number of level 2 events



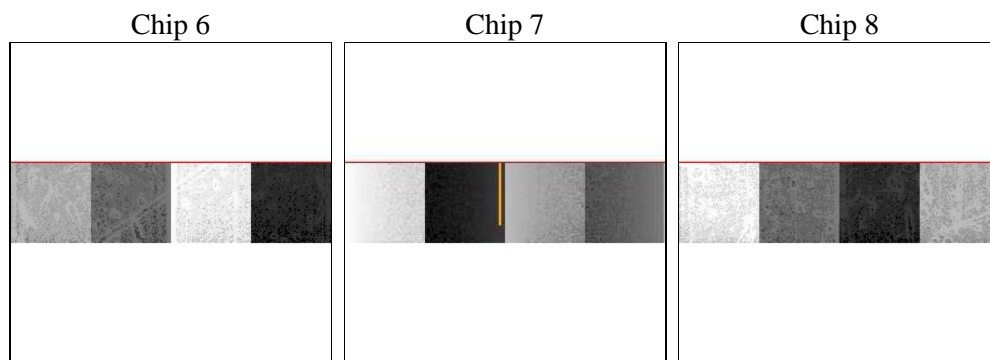
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	1500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	1593.76365453	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime6	1593.7226145267	Sum of GTIs [s]
date	2014-12-03T05:56:17	Date and time of file creation	ontime7	1593.76365453	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	1593.6815745234	Sum of GTIs [s]
			l1events	7936	Number of level 1 events

### 2.1.4 Events

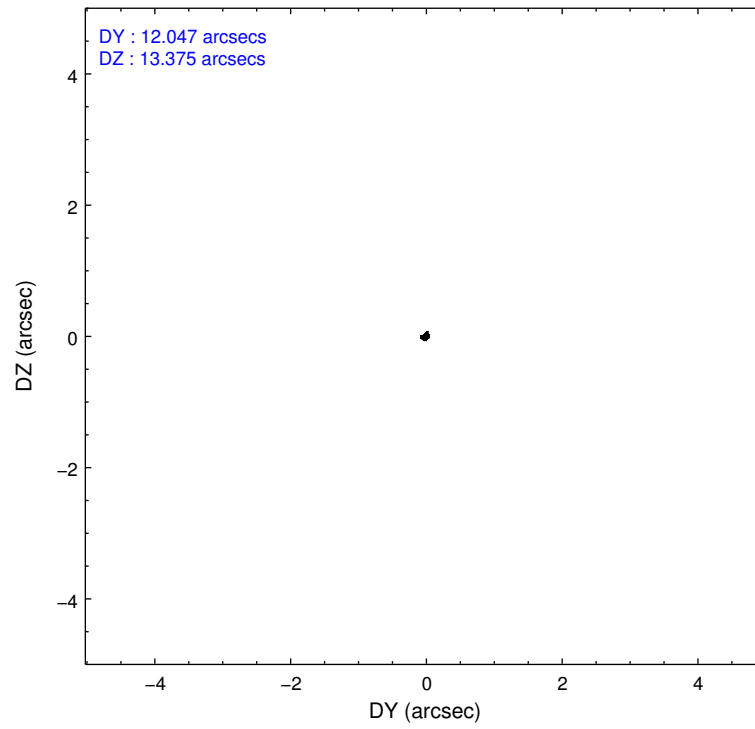
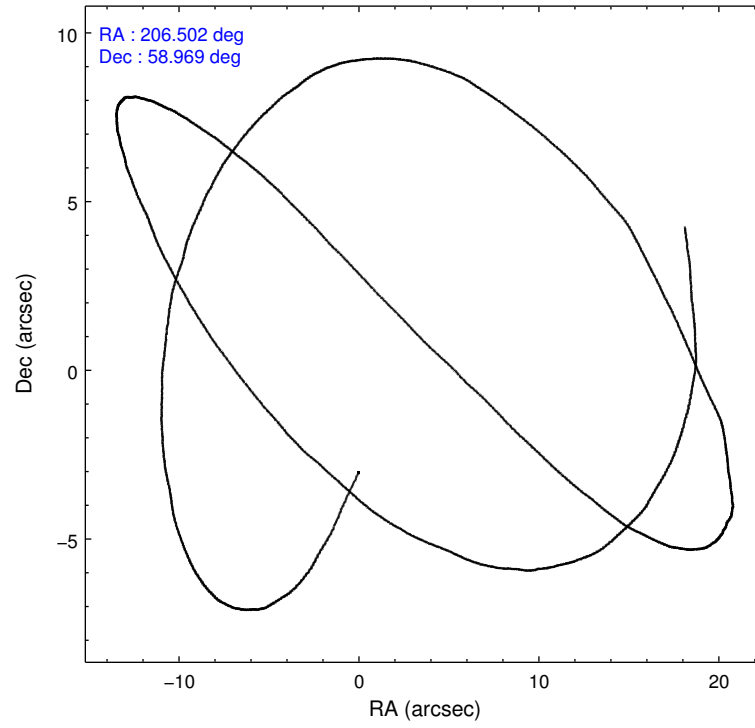
	ccd 6	ccd 7	ccd 8
level 1 events	2300	2466	3170
rejected events	1997	1179	2275
rejected %	86%	47%	71%

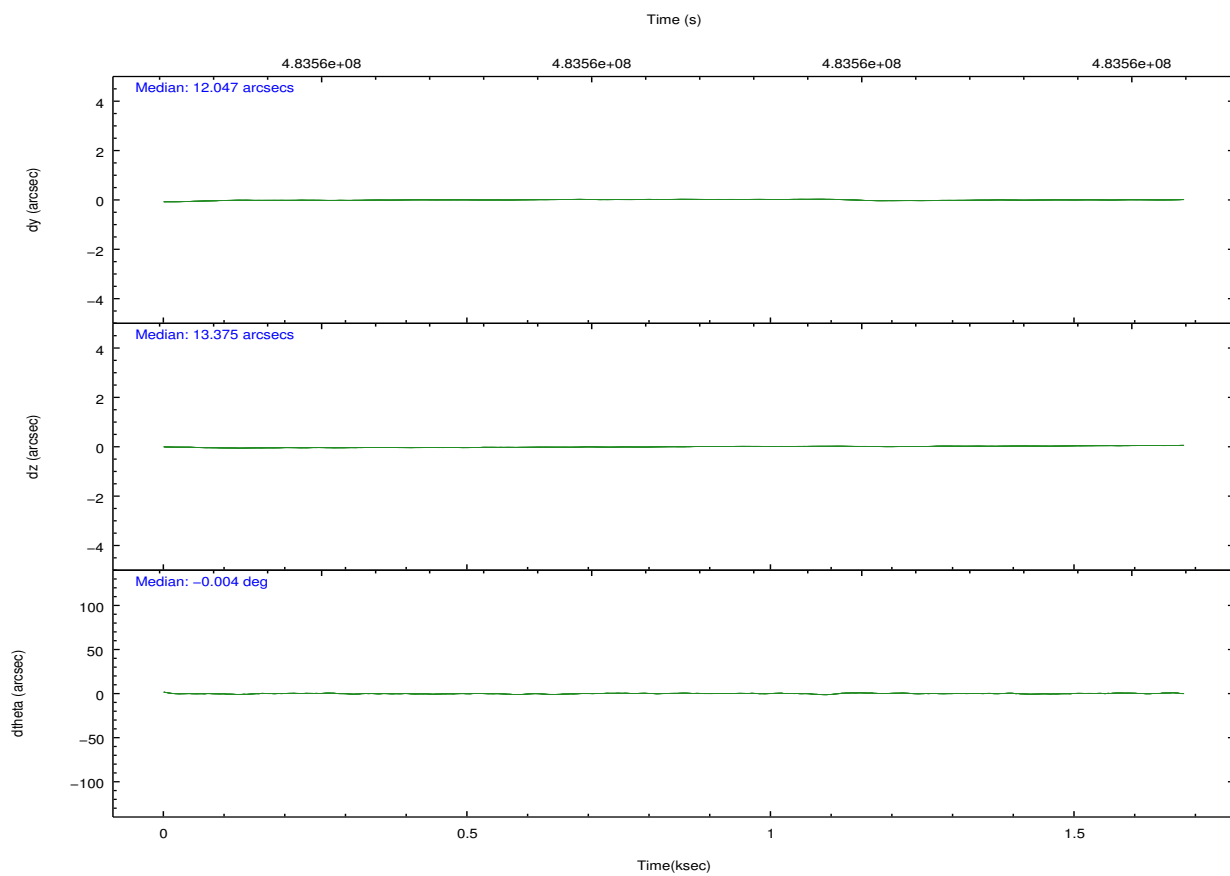
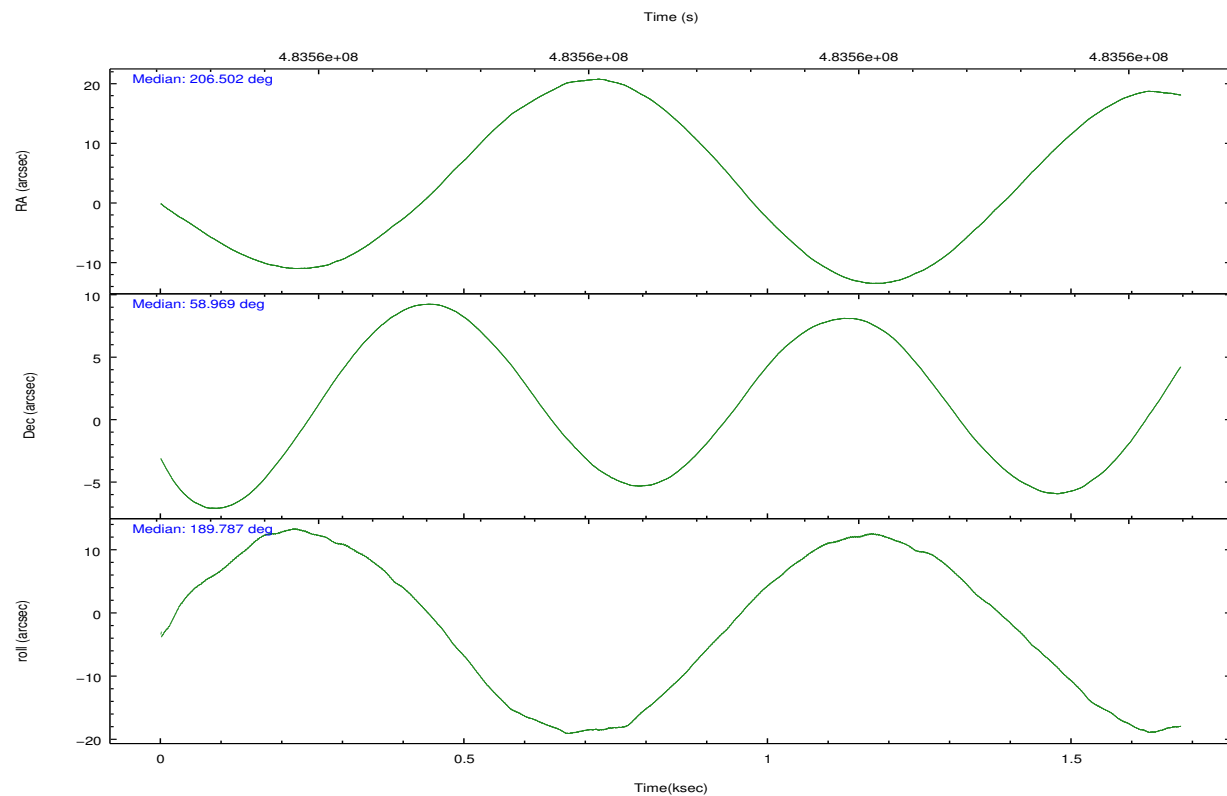
	ccd 6	ccd 7	ccd 8
grade 0 events	96	146	251
	4%	5%	7%
grade 1 events	0	7	1
	0%	0%	0%
grade 2 events	58	271	163
	2%	10%	5%
grade 3 events	37	129	131
	1%	5%	4%
grade 4 events	62	151	117
	2%	6%	3%
grade 5 events	70	229	130
	3%	9%	4%
grade 6 events	50	590	233
	2%	23%	7%
grade 7 events	1927	943	2144
	83%	38%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	206.543455	206.5028276722022	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	58.987245	58.96915547384363	Subarray start row	385	385
[deg] Pointing Roll	189.603688	189.7951417763119	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.9
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	483562486.184000	483561789.25379			
Observation start date	2013-04-28T18:53:39	2013-04-28T18:43:09			
[s] Observation end time (MET)	483563986.184000	483565106.15397			
Observation end date	2013-04-28T19:18:39	2013-04-28T19:38:26			
Read mode	TIMED	TIMED			

## 2.3 Aspect





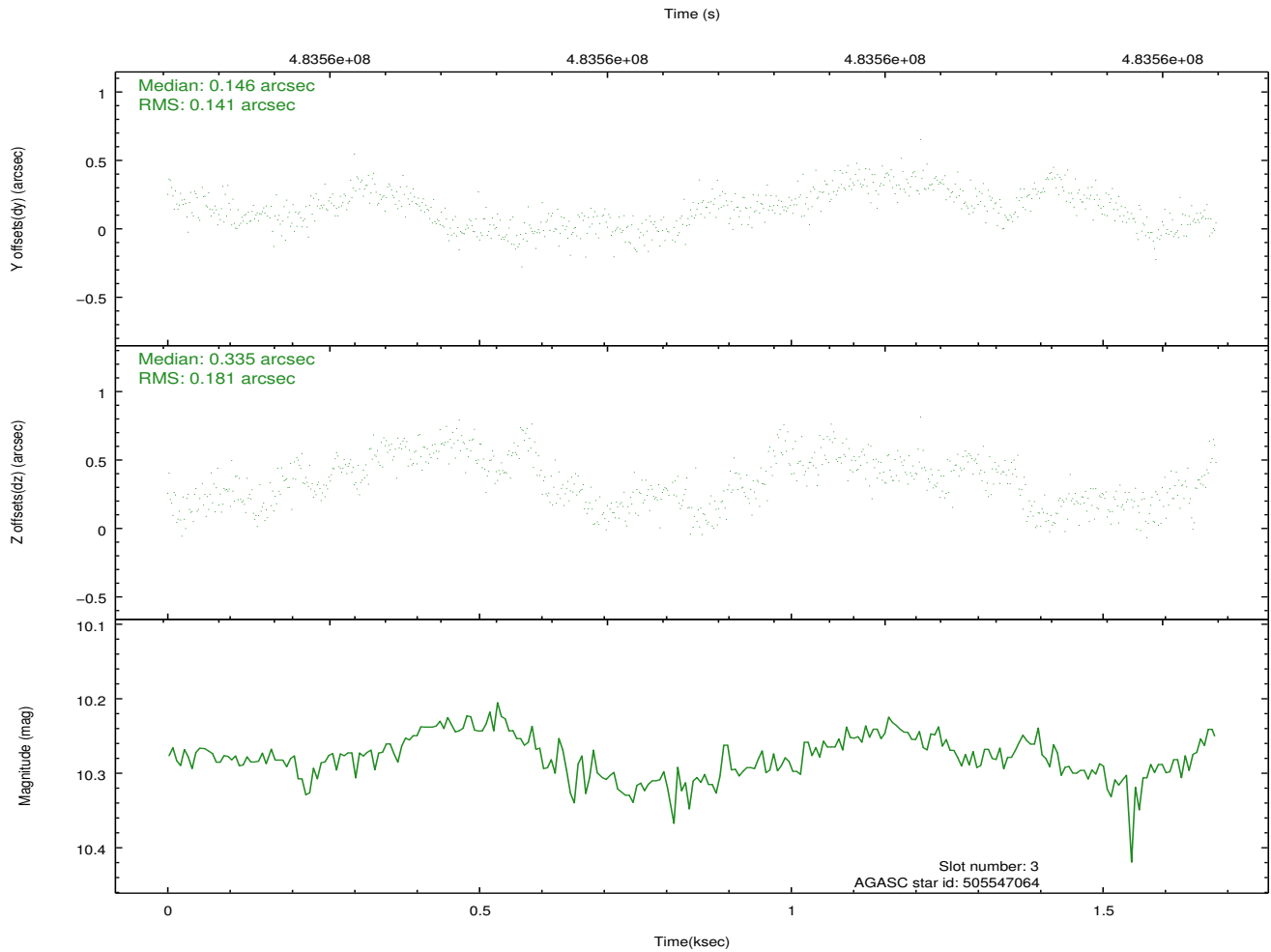
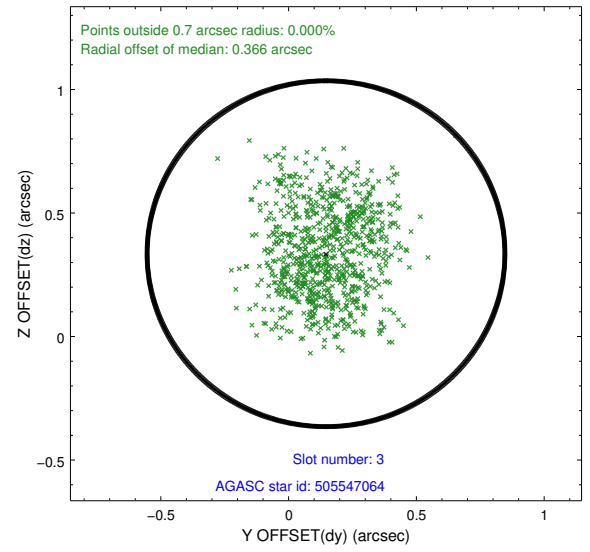
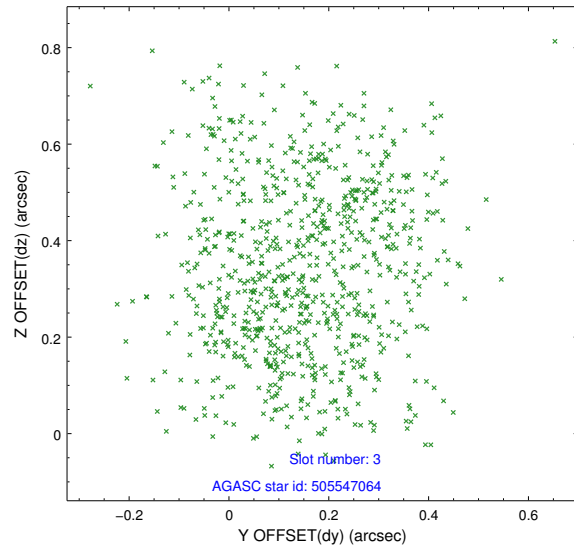
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	410	-0.041	-0.050	0.006	0.010	0.000000	0.000000	-764.99	-1734.75
1	FID		ACIS-S-4	7.14	410	0.165	0.033	0.005	0.009	0.000000	0.000000	2146.72	169.72
2	FID		ACIS-S-5	7.17	410	-0.155	0.025	0.006	0.011	0.000000	0.000000	-1812.89	167.88
3	GUIDE	used	505547064	10.28	815	0.146	0.335	0.243	0.380	206.523092	59.409043	-216.79	-1503.89
4	GUIDE	used	505547776	9.89	818	0.082	-0.064	0.175	0.300	205.533527	59.201282	1705.07	-1086.97
5	GUIDE	used	505547960	9.24	821	0.098	-0.240	0.098	0.156	205.636442	58.849058	1748.25	195.54
6	GUIDE	used	505549504	6.91	821	-0.146	-0.098	0.117	0.179	207.615601	58.539459	-1718.58	1908.49
7	GUIDE	used	505547096	10.36	803	-0.199	0.063	0.210	0.363	205.155606	59.333098	2297.67	-1676.88

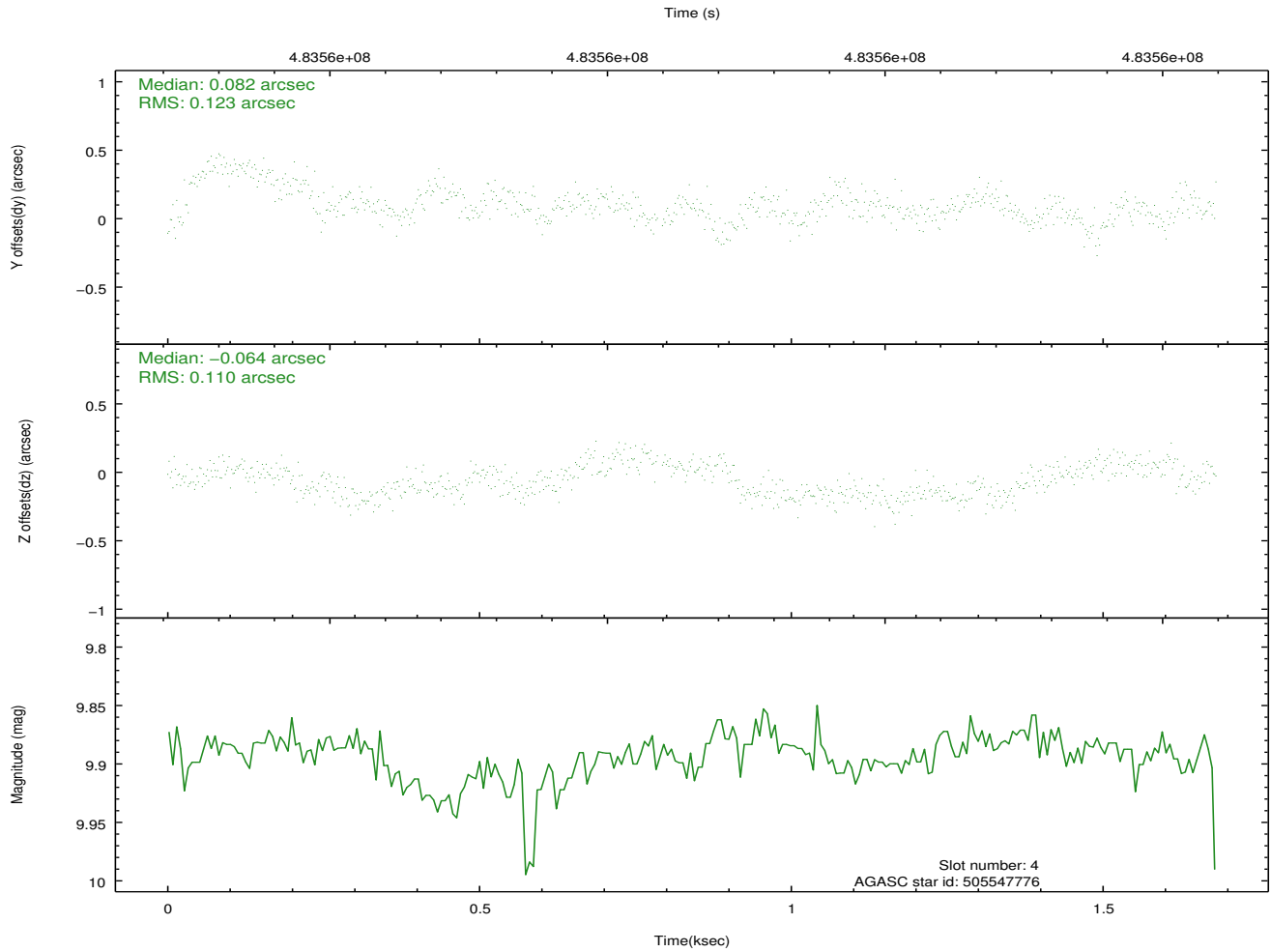
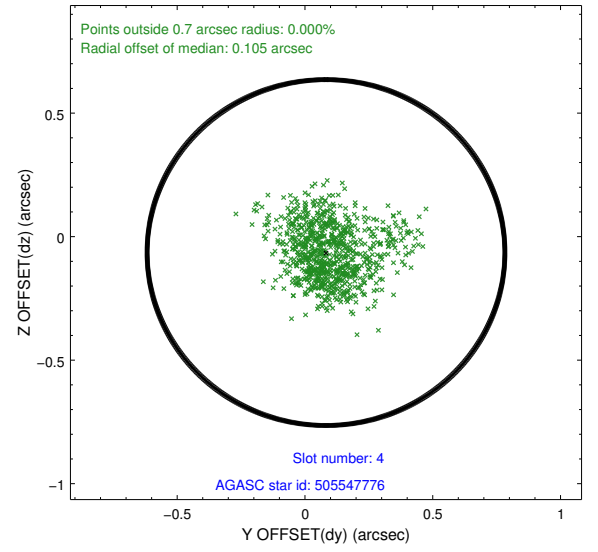
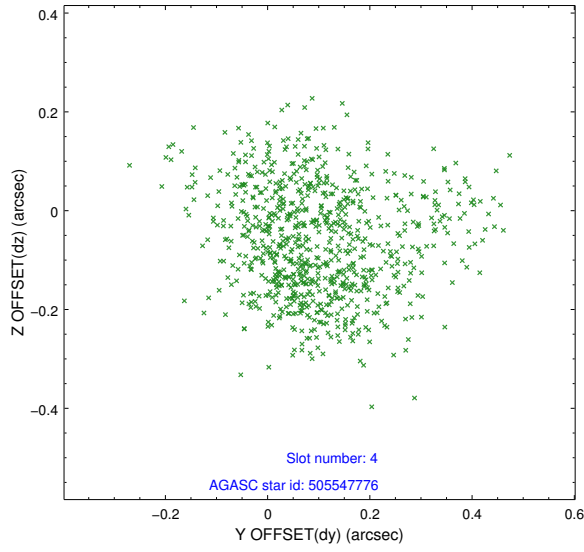


## 2.4 Star Slots

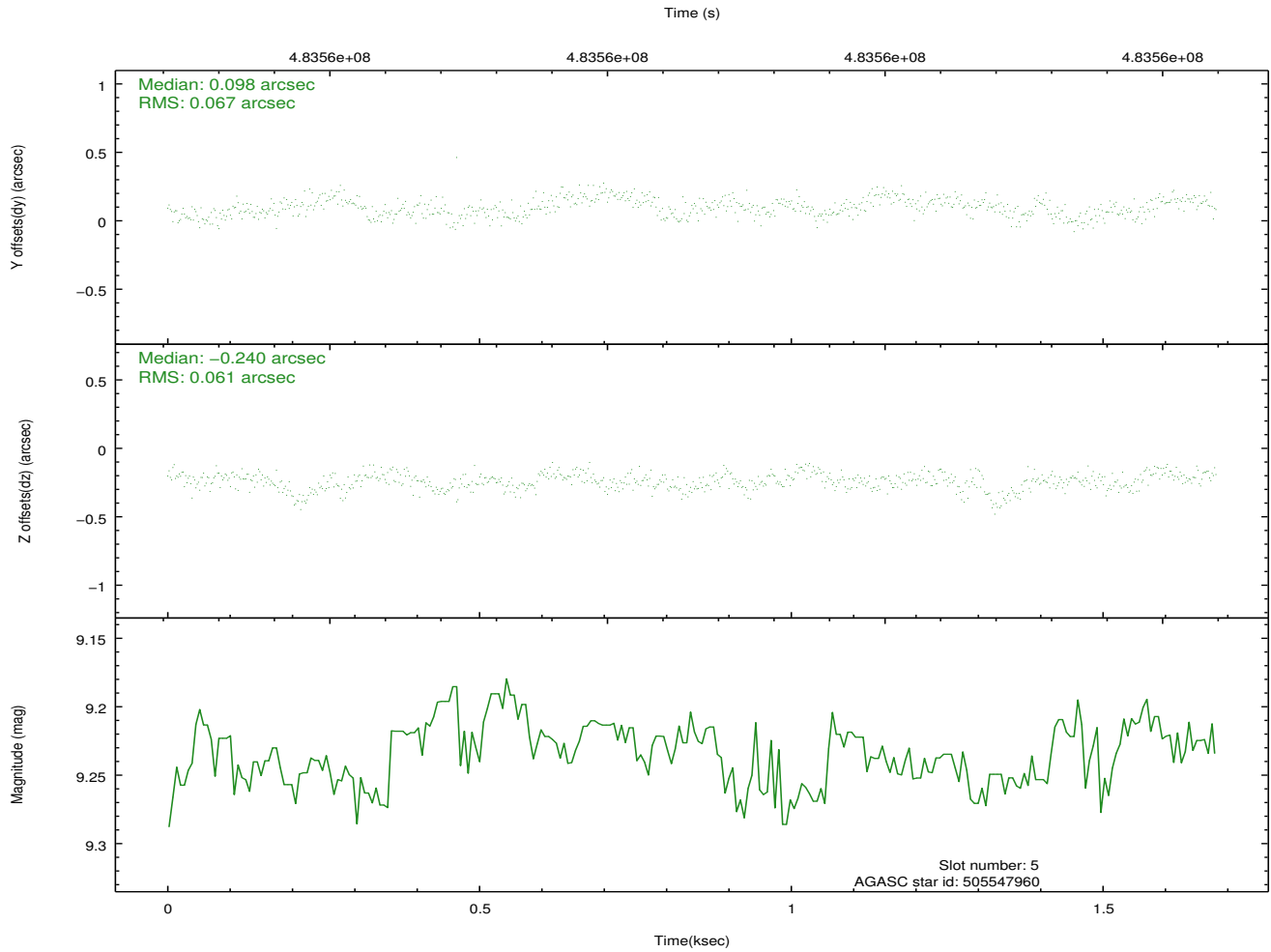
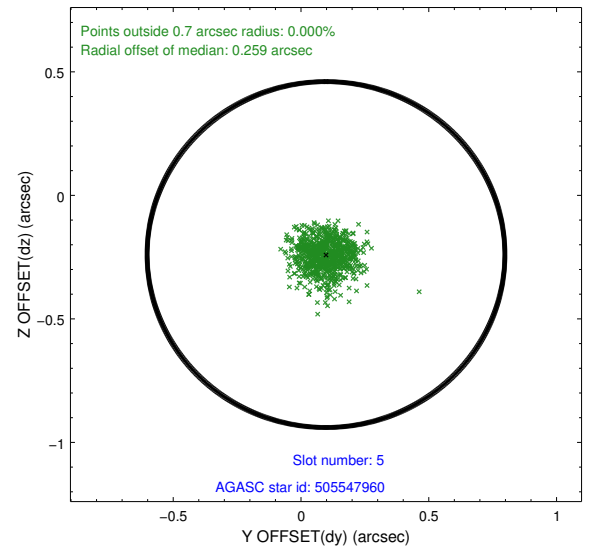
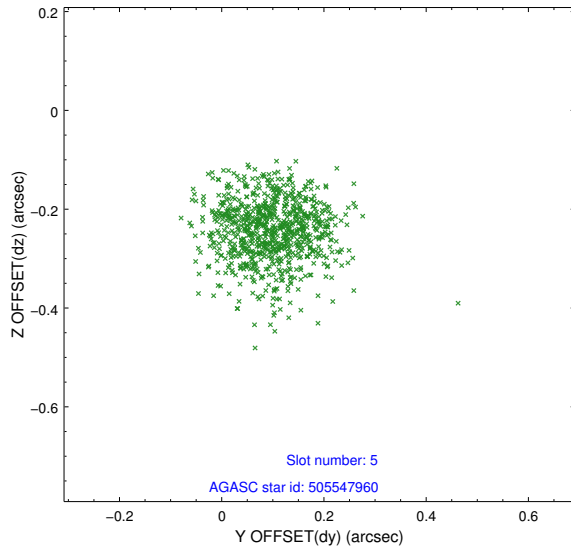
### 2.4.1 Slot 3



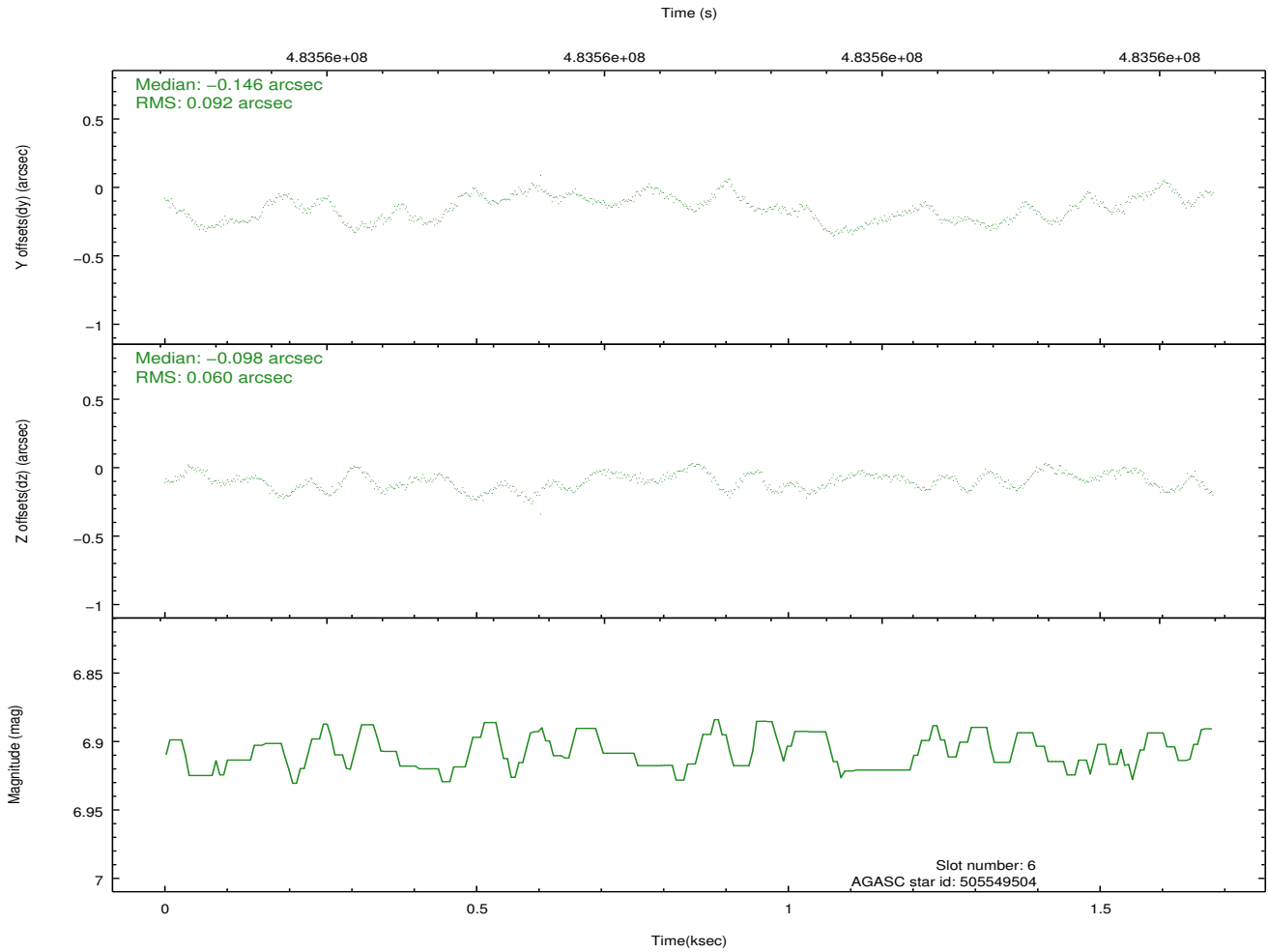
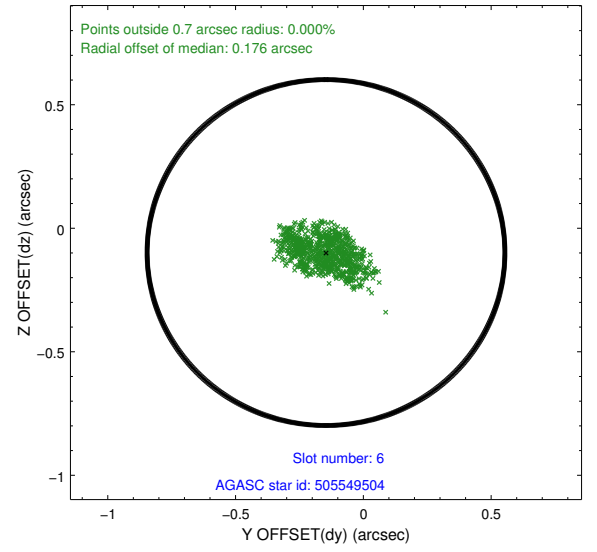
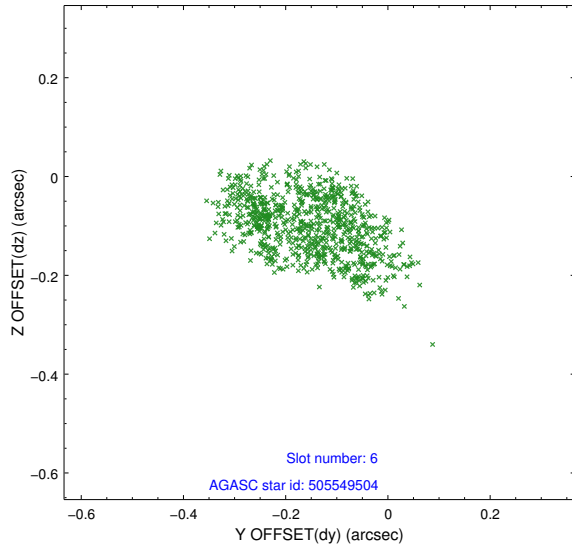
## 2.4.2 Slot 4



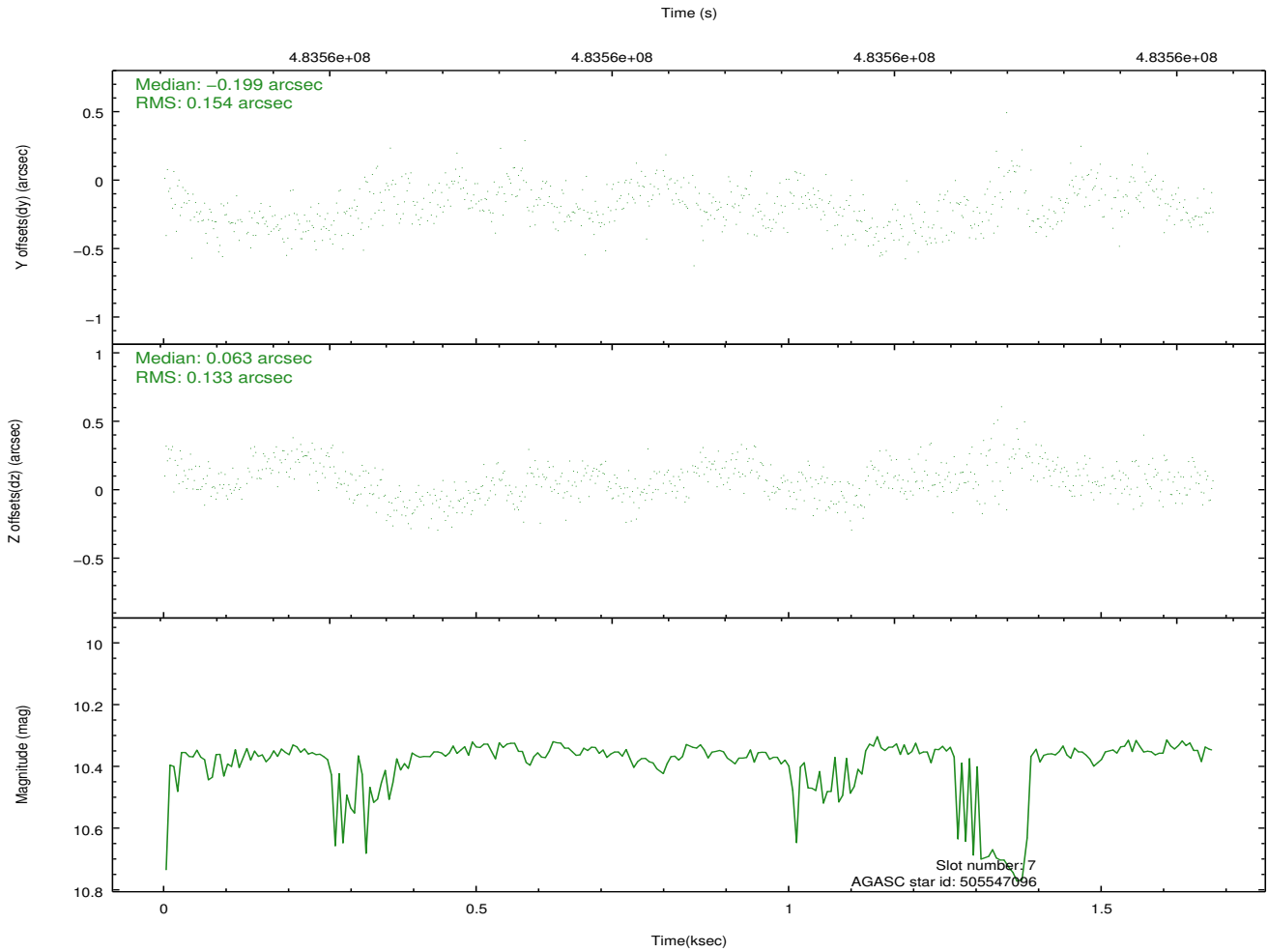
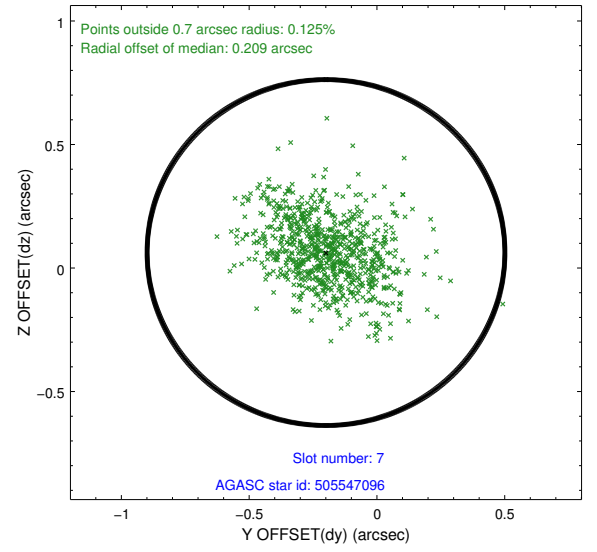
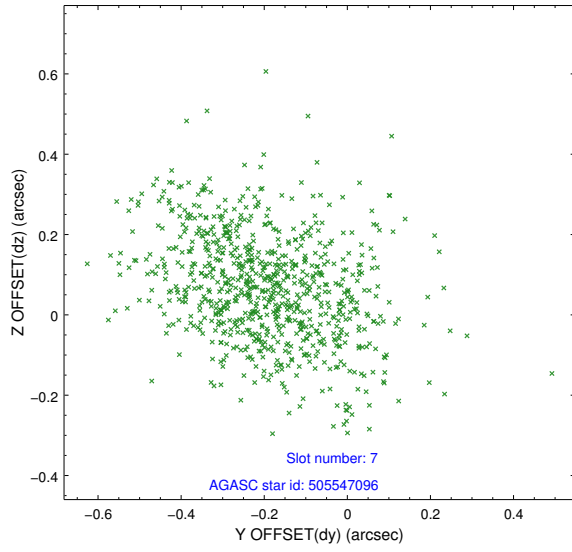
### 2.4.3 Slot 5



## 2.4.4 Slot 6

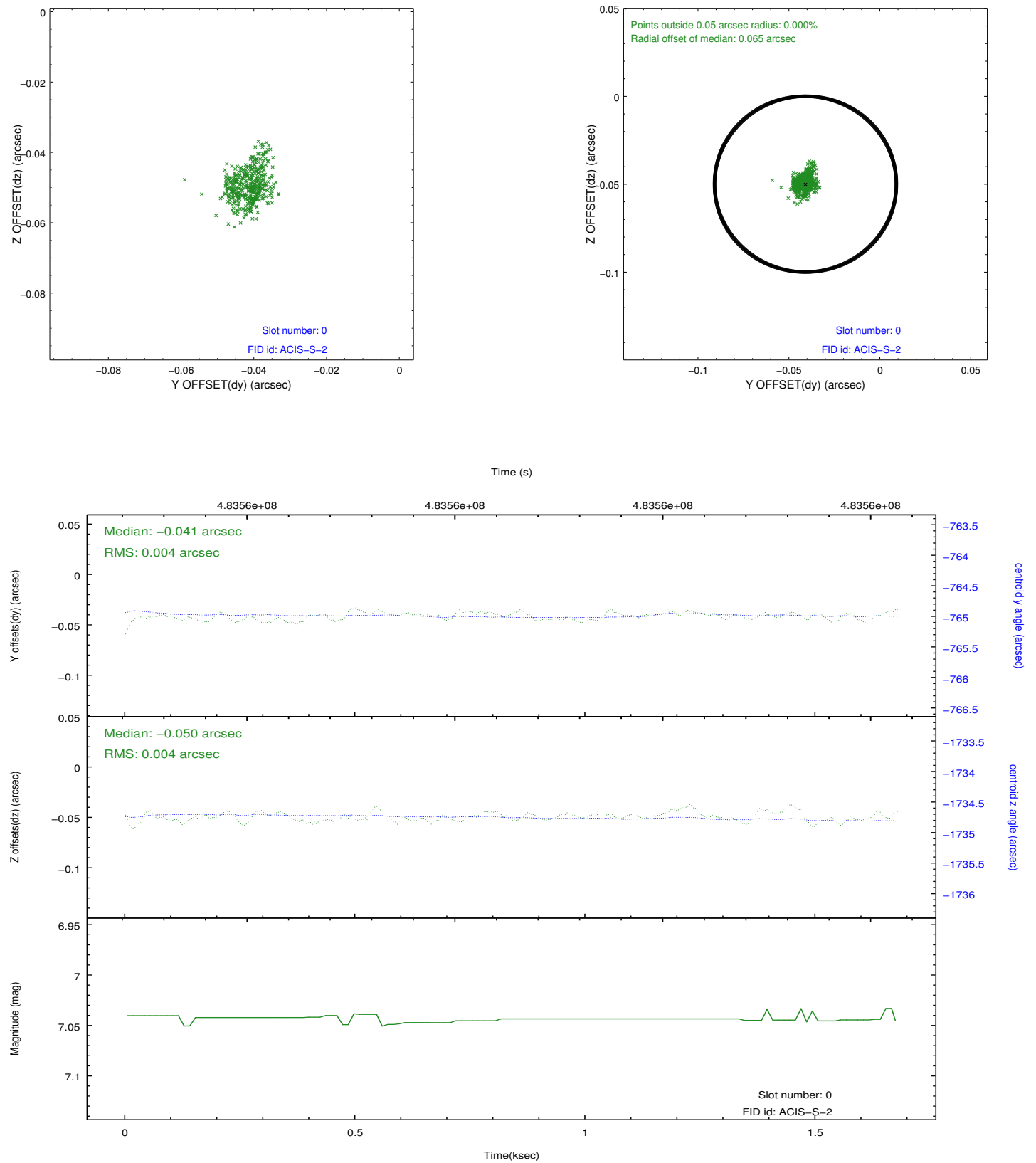


## 2.4.5 Slot 7

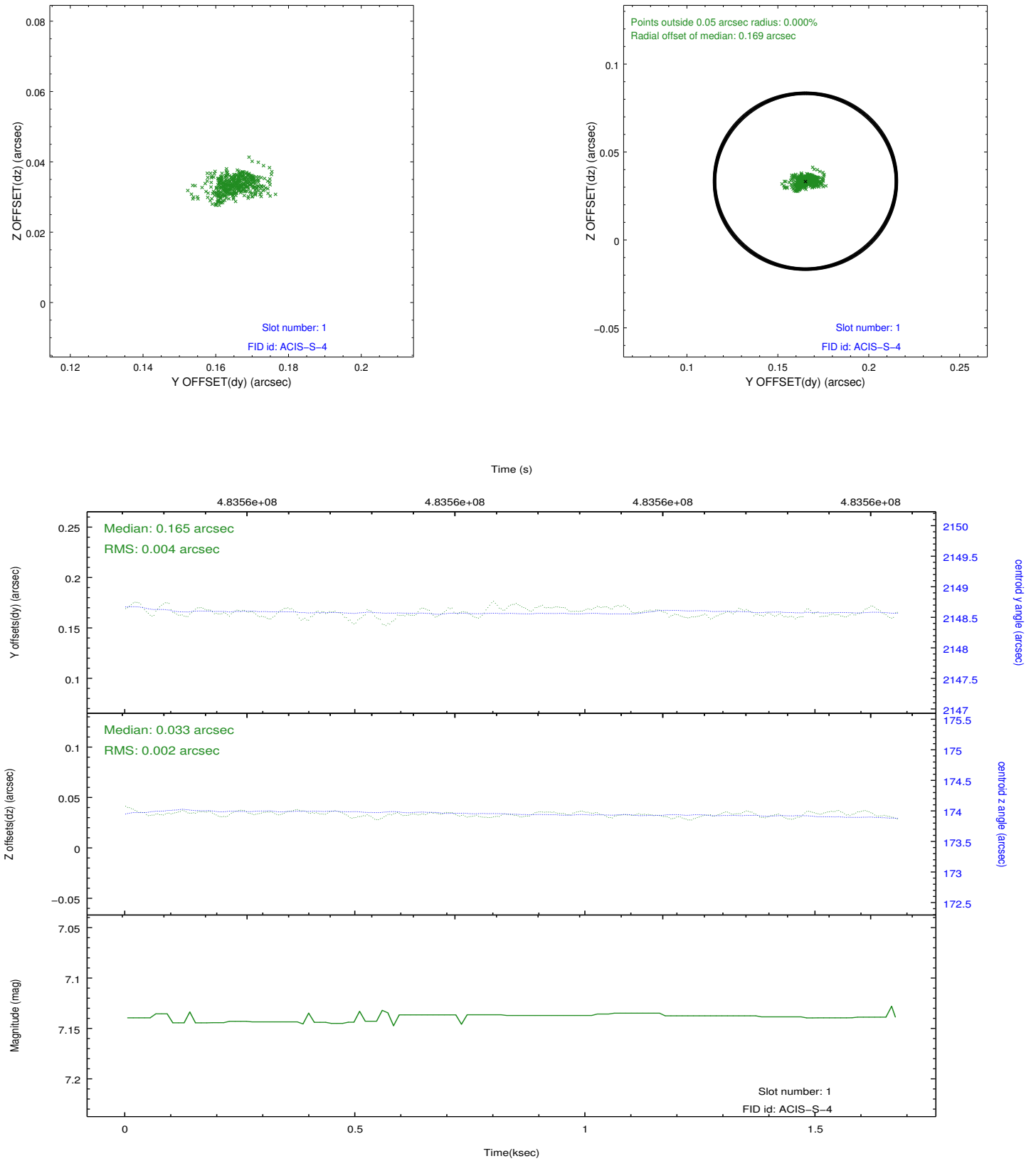


## 2.5 FID Slots

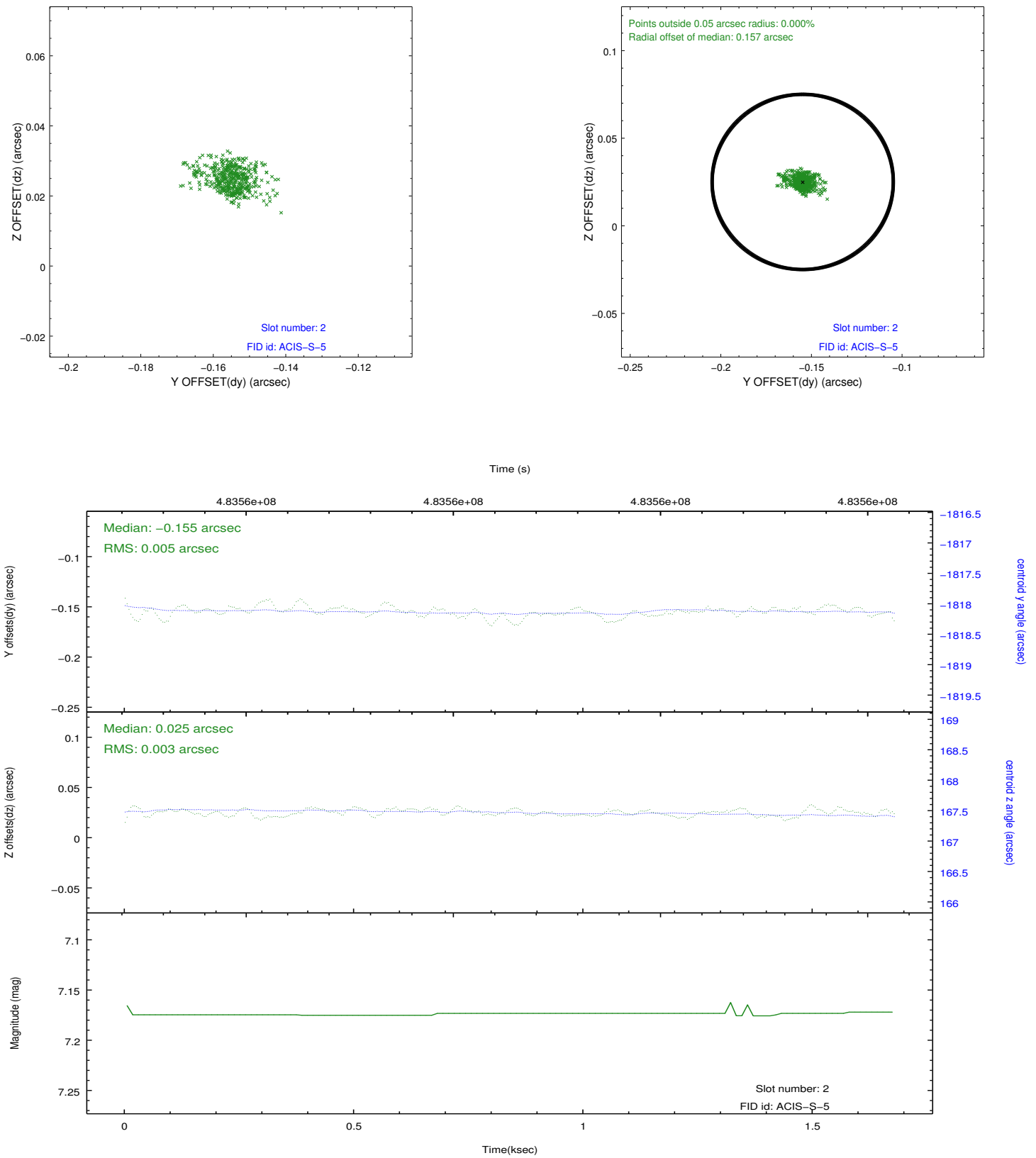
### 2.5.1 Slot 0



## 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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.59376365453

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.