

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9170 - L2 Version 2  
Chandra X-Ray Center

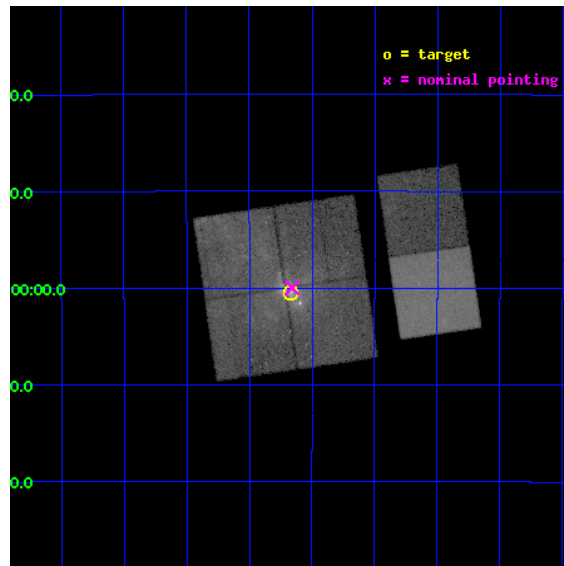
L2 Processing Date : May 14 2012

## 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

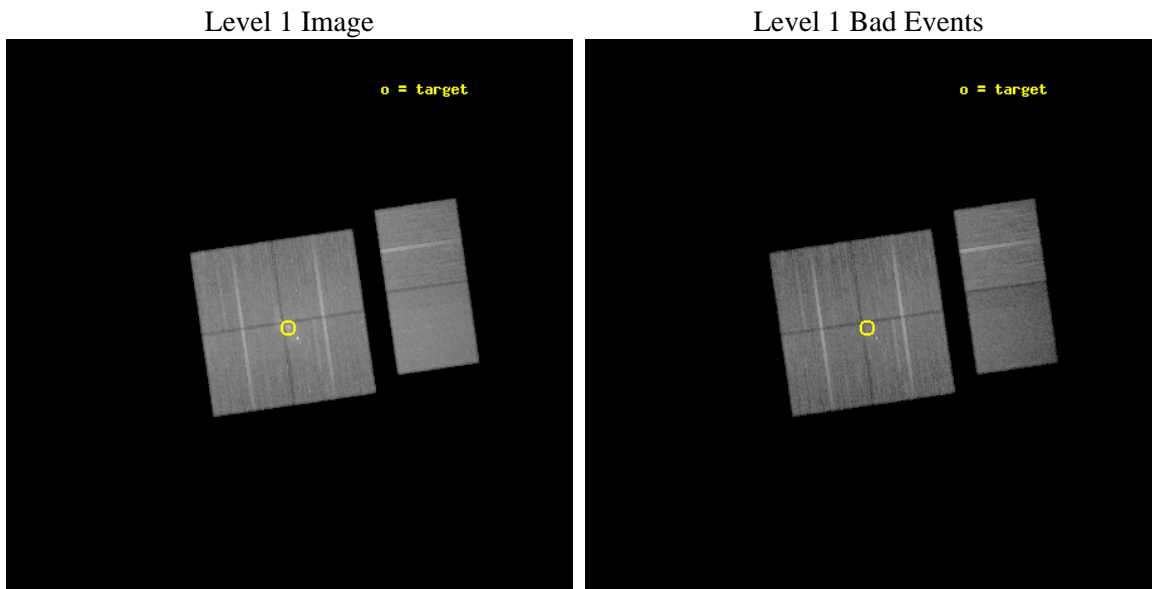
seq_num	701612	Sequence number
obs_id	9170	Observation id
title	Simultaneous Chandra, VLT, and APEX Observations of Sgr A*	Proposa
observer	Prof Farhad Yusef-Zadeh	Principal investigator
object	Sgr A*	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.41520839902	Nominal RA [deg]
dec_nom	-28.999810704896	Nominal Dec [deg]
roll_nom	81.707982456558	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27144.985438406	Sum of GTIs [s]
livetime	26801.259288037	Livetime [s]
ontime0	27144.862318397	Sum of GTIs [s]
ontime1	27144.9033584	Sum of GTIs [s]
ontime2	27141.703398108	Sum of GTIs [s]
ontime3	27144.985438406	Sum of GTIs [s]
ontime6	27141.826488316	Sum of GTIs [s]
ontime7	27145.02647841	Sum of GTIs [s]
l2events	319740	Number of level 2 events



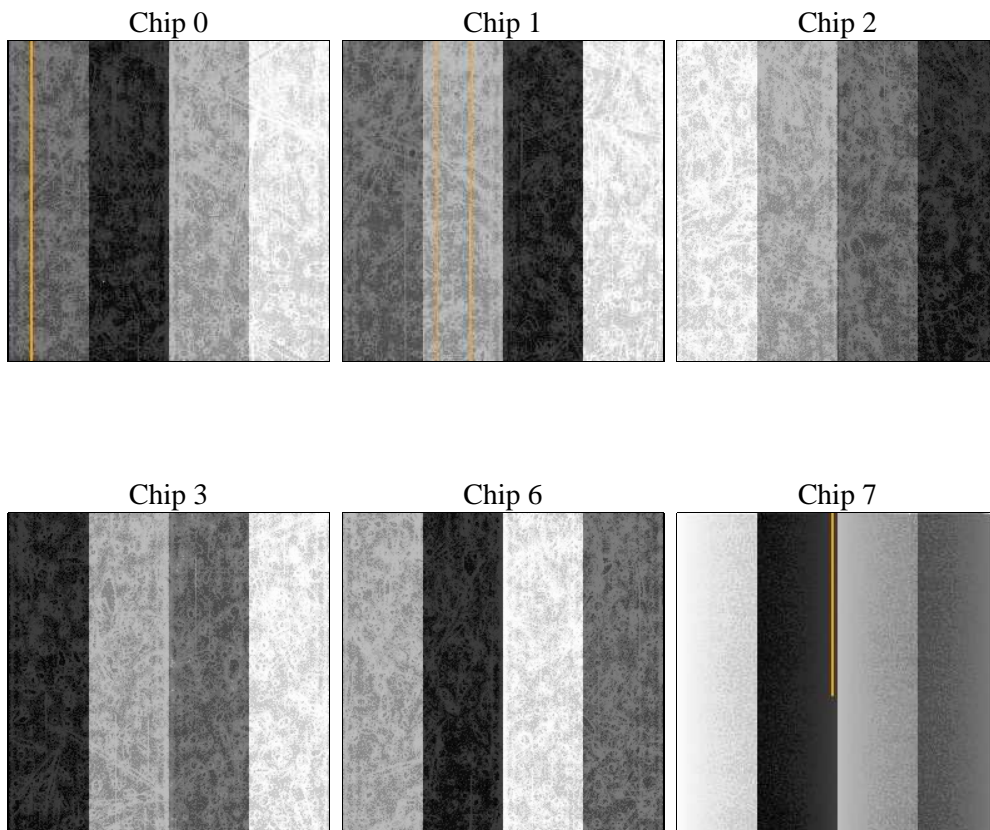
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27100.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	27144.985438406	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime0	27144.862318397	Sum of GTIs [s]
date	2012-05-14T01:58:38	Date and time of file creation	ontime1	27144.9033584	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	27141.703398108	Sum of GTIs [s]
			ontime3	27144.985438406	Sum of GTIs [s]
			ontime6	27141.826488316	Sum of GTIs [s]
			ontime7	27145.02647841	Sum of GTIs [s]
			l1events	1412634	Number of level 1 events

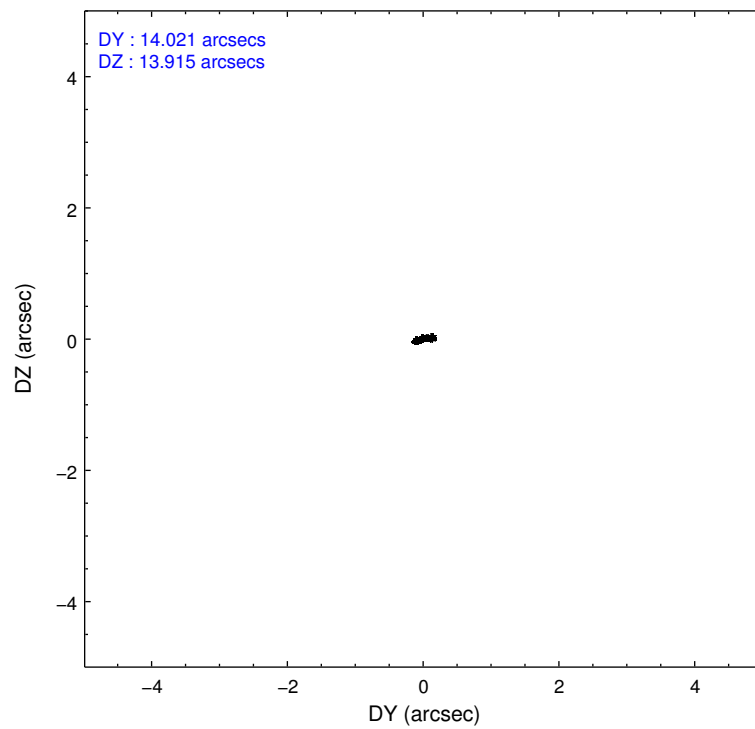
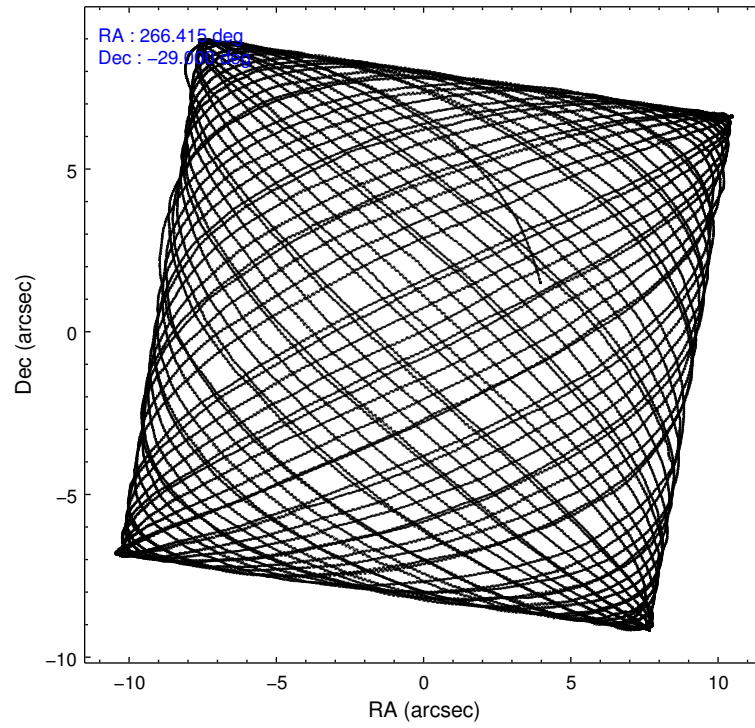
### 2.1.4 Events

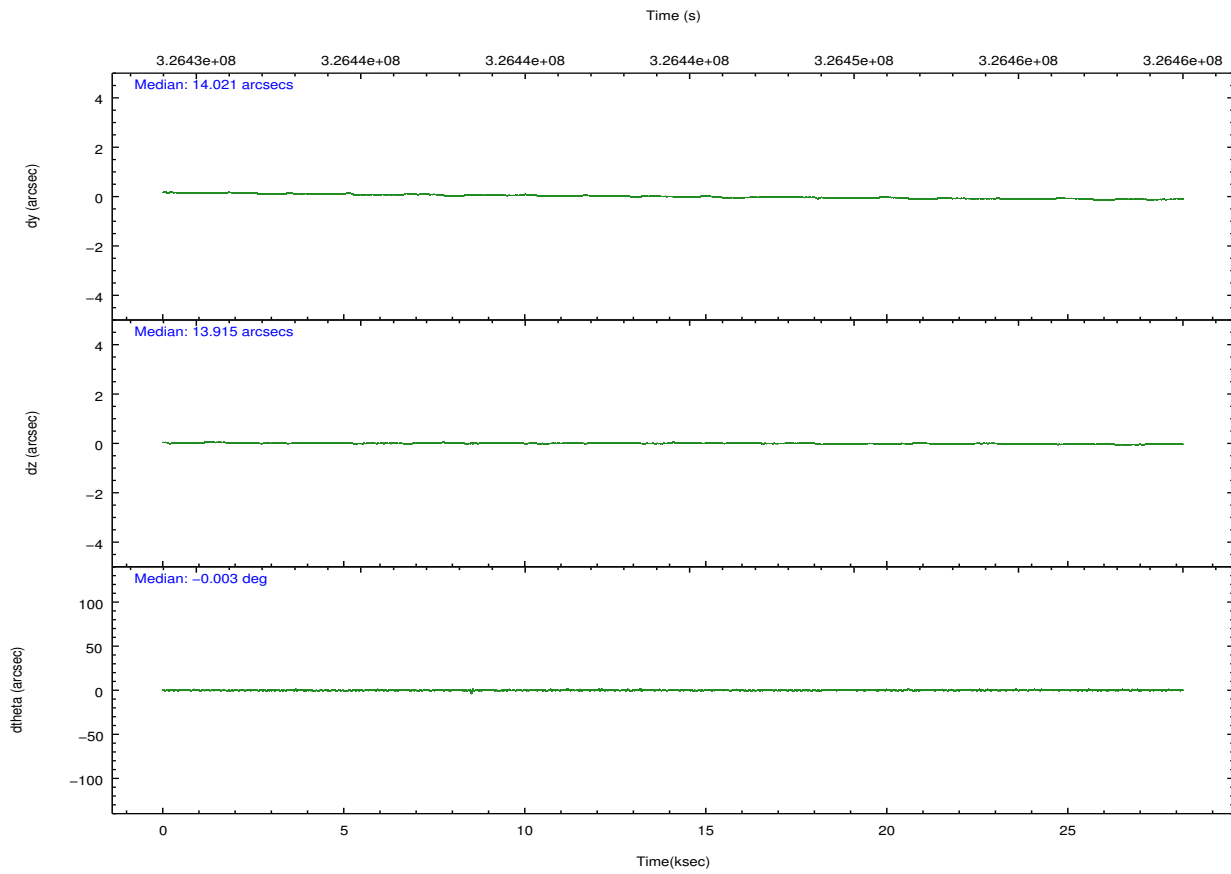
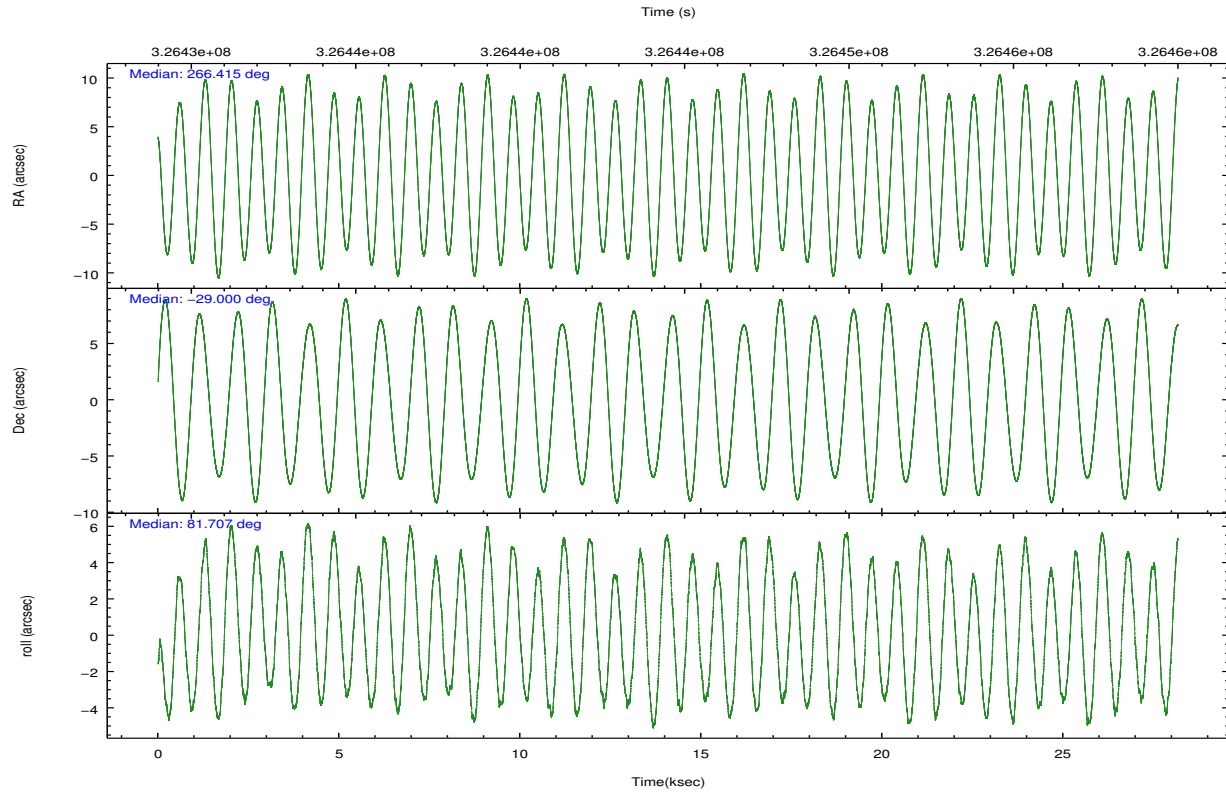
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	236695	222123	240231	246757	222511	244317	grade 0 events	34559	25474	21625	31285	11373	11288
rejected events	176523	174170	199400	190015	194934	129916		14%	11%	9%	12%	5%	4%
rejected %	74%	78%	83%	77%	87%	53%	grade 1 events	308	206	211	676	117	310
								0%	0%	0%	0%	0%	0%
							grade 2 events	10488	8844	7737	9609	5775	23456
								4%	3%	3%	3%	2%	9%
							grade 3 events	4229	3587	3220	4152	2679	10581
								1%	1%	1%	1%	1%	4%
							grade 4 events	4038	3524	3125	4214	2663	10668
								1%	1%	1%	1%	1%	4%
							grade 5 events	7720	8411	7069	9301	8893	25169
								3%	3%	2%	3%	3%	10%
							grade 6 events	6869	6533	5137	7500	5094	58424
								2%	2%	2%	3%	2%	23%
							grade 7 events	168484	165544	192107	180020	185917	104421
								71%	74%	79%	72%	83%	42%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	266.426972	266.4152083990199	CCD I2 on	Y	Y
[deg] Pointing Dec	-29.025324	-28.99981070489601	CCD I3 on	Y	Y
[deg] Pointing Roll	81.504999	81.70798245655848	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
Phase constraints	Y	Y	CCD S5 on	N	N
[d] Phase period	0.997270	0.997270	Number of optional ACIS chips dropped	0	0
[d] Phase epoch (MJD)	54587.160000	54587.160000	On-chip summing requested	N	N
Phase start	0.000000	0.000000	Subarray requested	NONE	NONE
Phase end	0.334000	0.334000	Alternating exposures requested	N	N
Phase start error	0.020000	0.020000	[s] Primary exposure time	0.000000	3.2
Phase end error	0.020000	0.020000			
[s] Observation start time (MET)	326431480.184000	326430030.23236			
Observation start date	2008-05-06T03:23:35	2008-05-06T03:00:30			
[s] Observation end time (MET)	326458580.184000	326458820.43376			
Observation end date	2008-05-06T10:55:15	2008-05-06T11:00:20			
Read mode	TIMED	TIMED			

## 2.3 Aspect



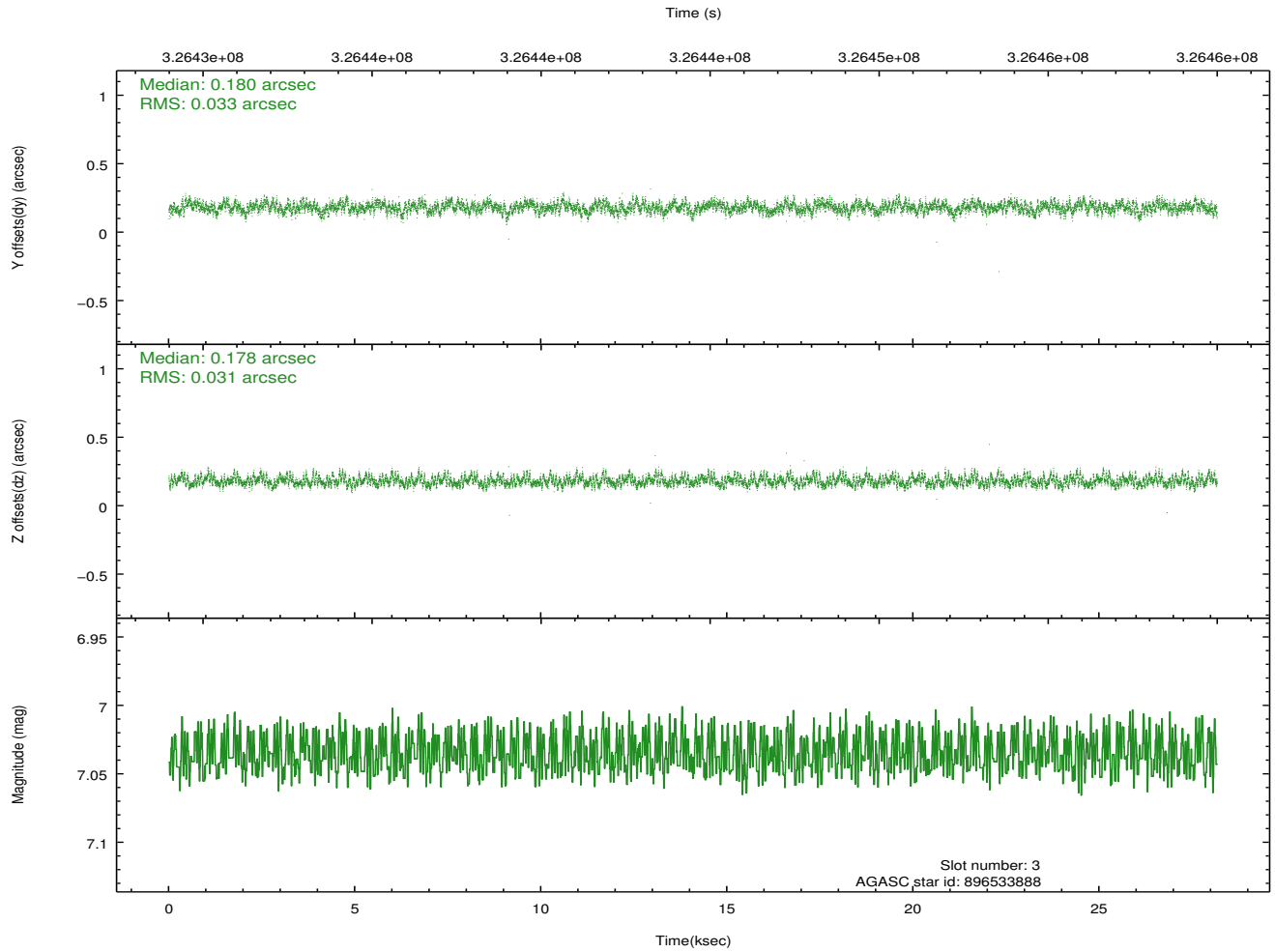
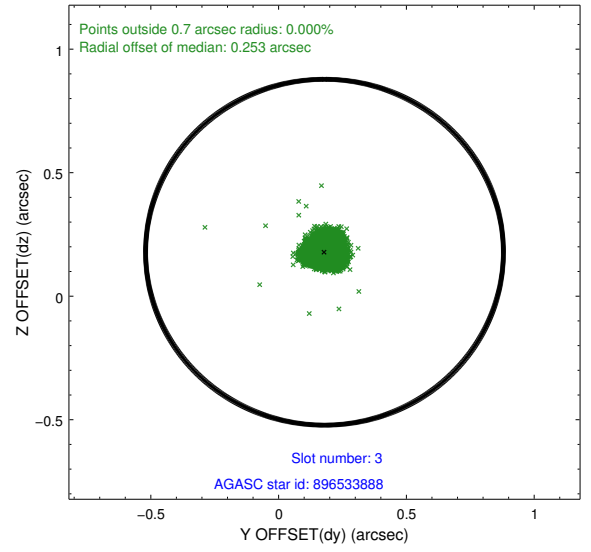
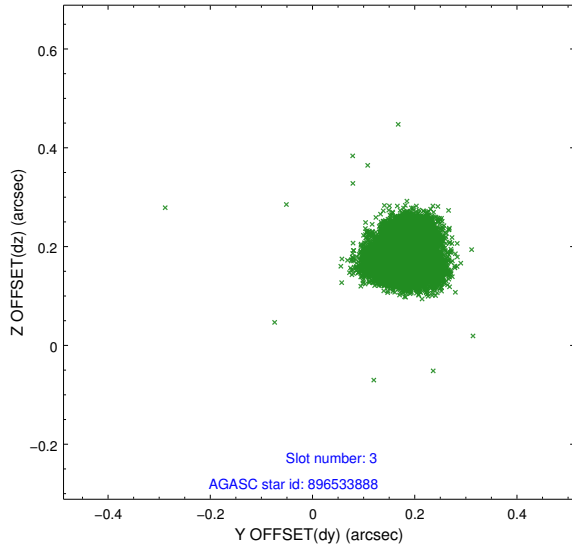


### Slot Statistics

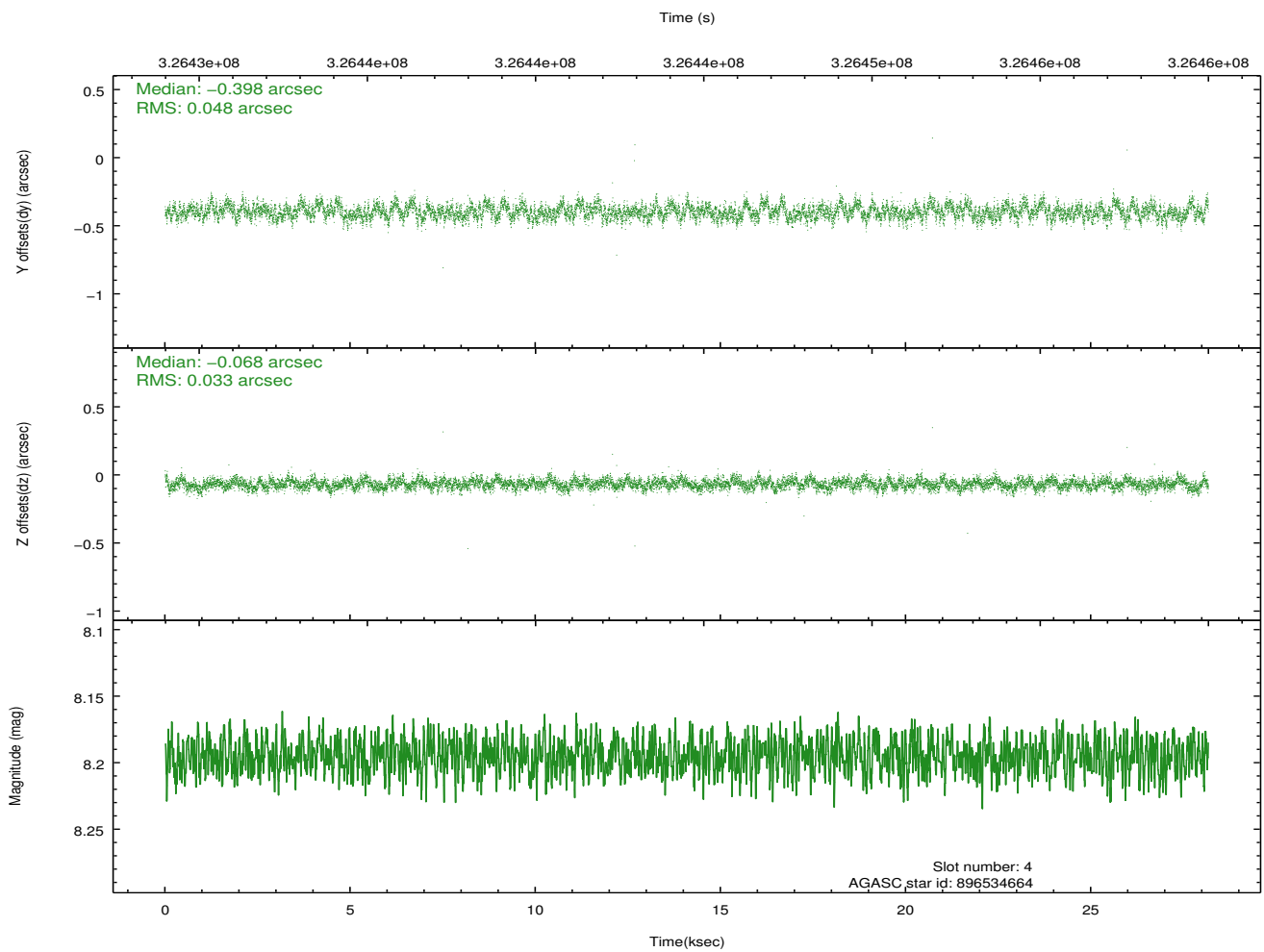
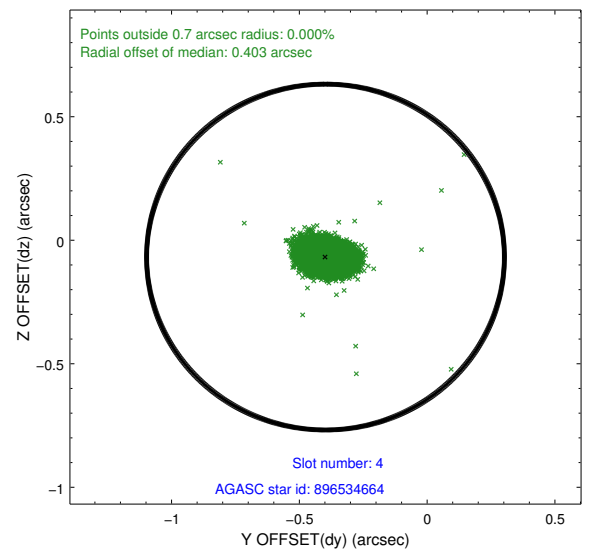
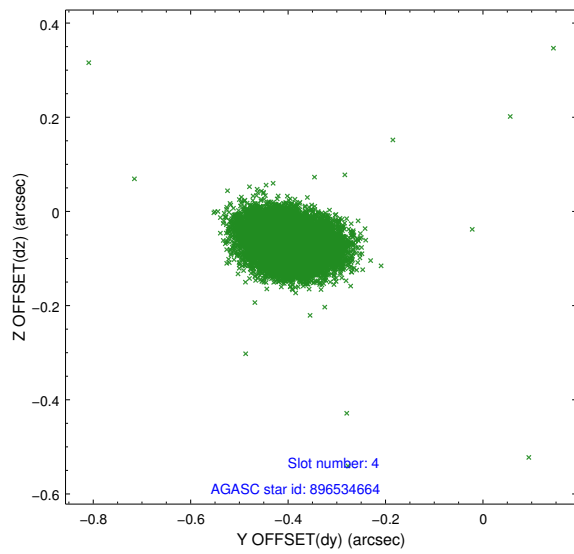
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.05	6871	0.022	0.031	0.006	0.011	0.000000	0.000000	925.49	-837.44
1	FID	ACIS-I-5	7.03	6871	-0.206	0.036	0.006	0.011	0.000000	0.000000	-1822.82	1059.98
2	FID	ACIS-I-6	7.04	6871	0.093	0.004	0.007	0.011	0.000000	0.000000	390.98	1704.57
3	GUIDE	896533888	7.04	13742	0.180	0.178	0.048	0.077	266.666434	-29.392757	-1197.89	-938.17
4	GUIDE	896534664	8.20	13732	-0.398	-0.068	0.060	0.100	266.405570	-28.407461	2189.37	395.58
5	GUIDE	896537776	7.53	13741	0.341	0.191	0.050	0.078	266.655684	-29.665673	-2174.49	-1048.06
6	GUIDE	896403224	8.29	13736	0.214	-0.252	0.071	0.113	265.612825	-29.438915	-1858.65	2302.89
7	GUIDE	896538696	6.88	13740	-0.342	-0.053	0.043	0.069	266.298470	-28.325572	2430.59	775.10

## 2.4 Star Slots

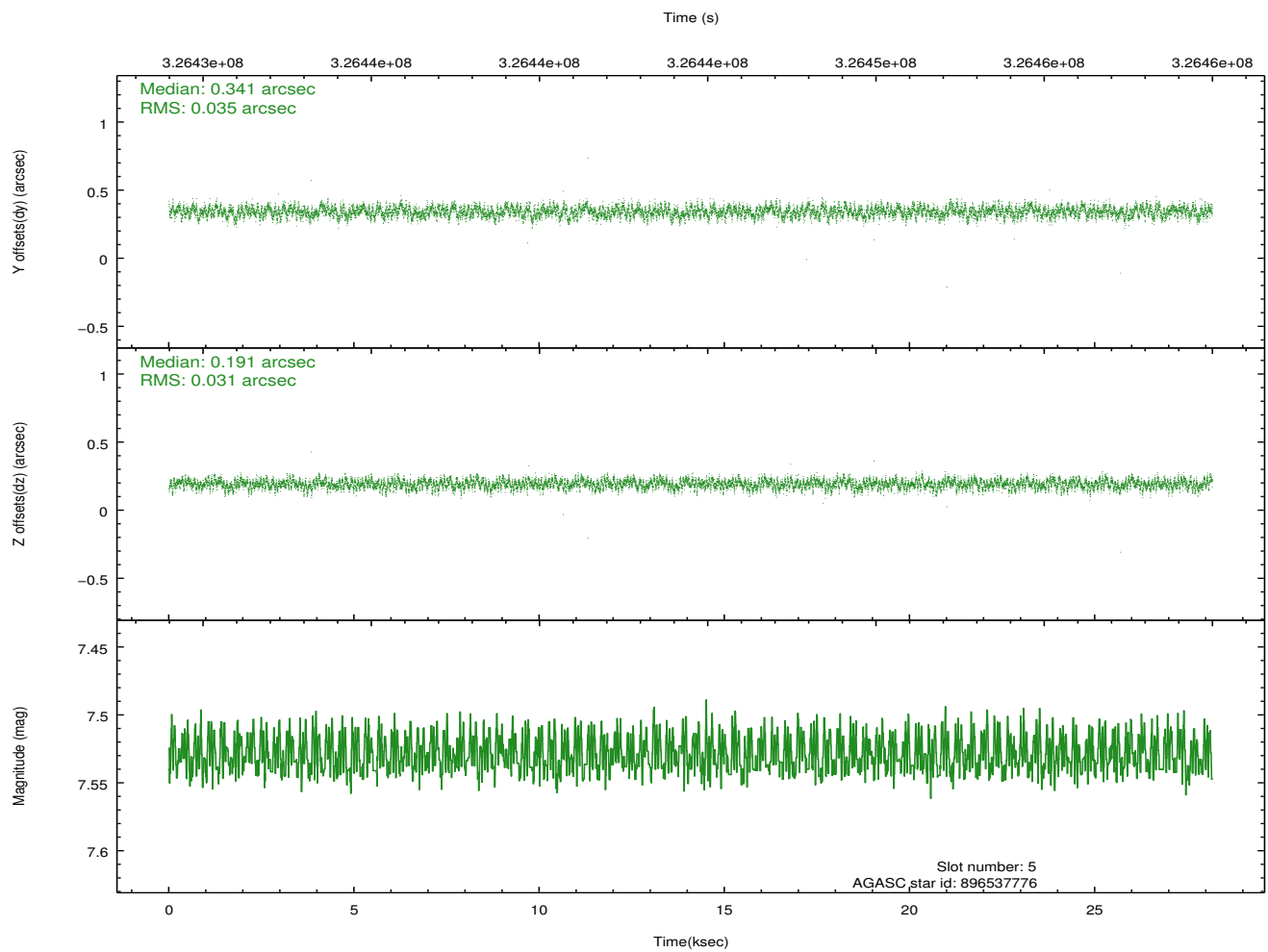
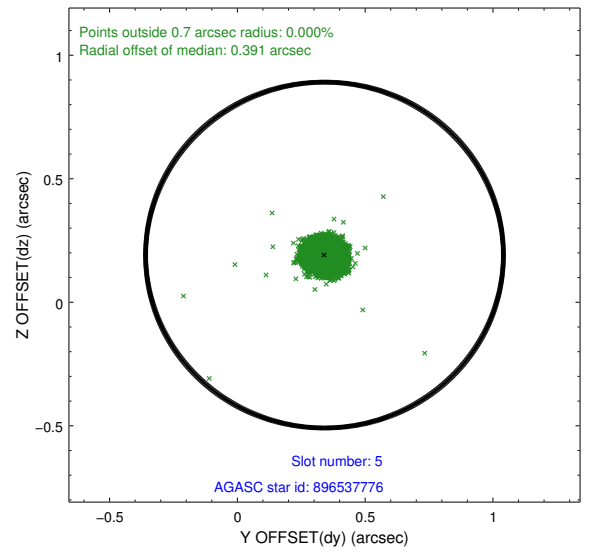
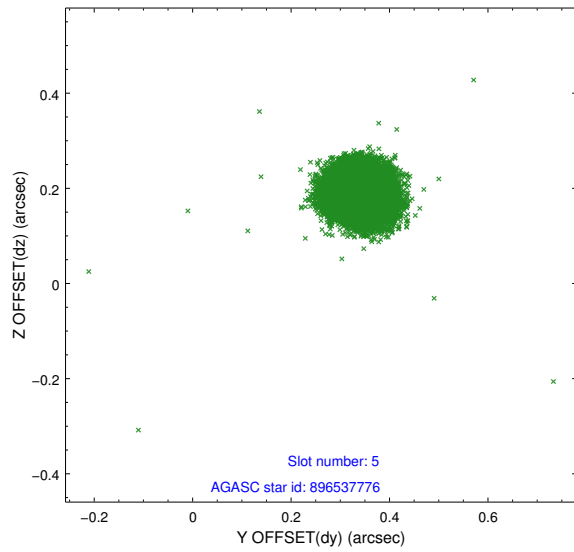
### 2.4.1 Slot 3



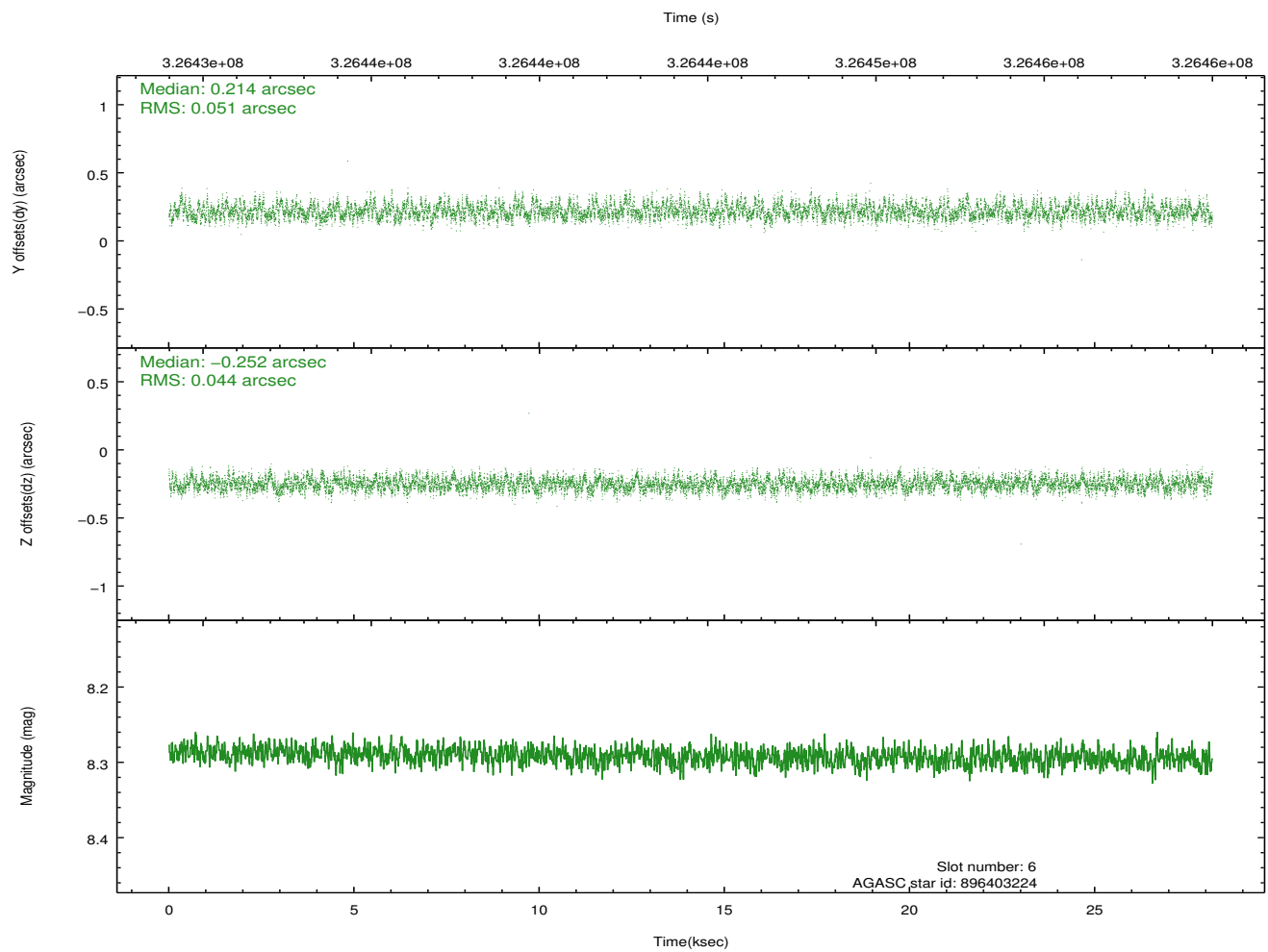
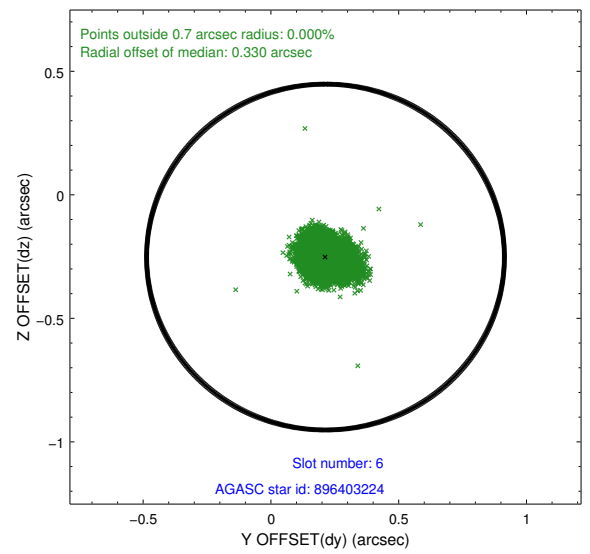
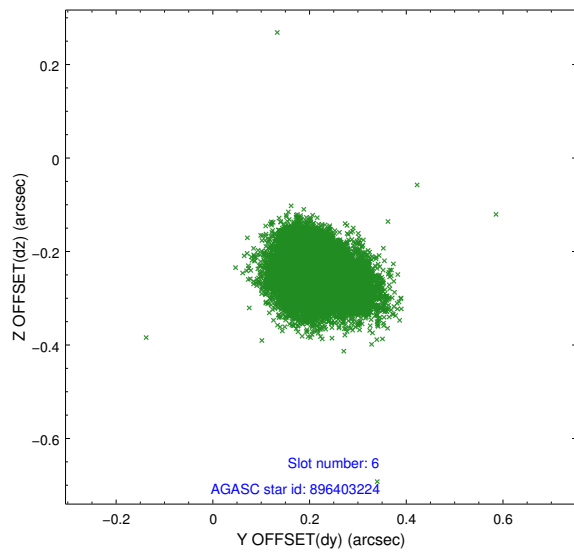
## 2.4.2 Slot 4



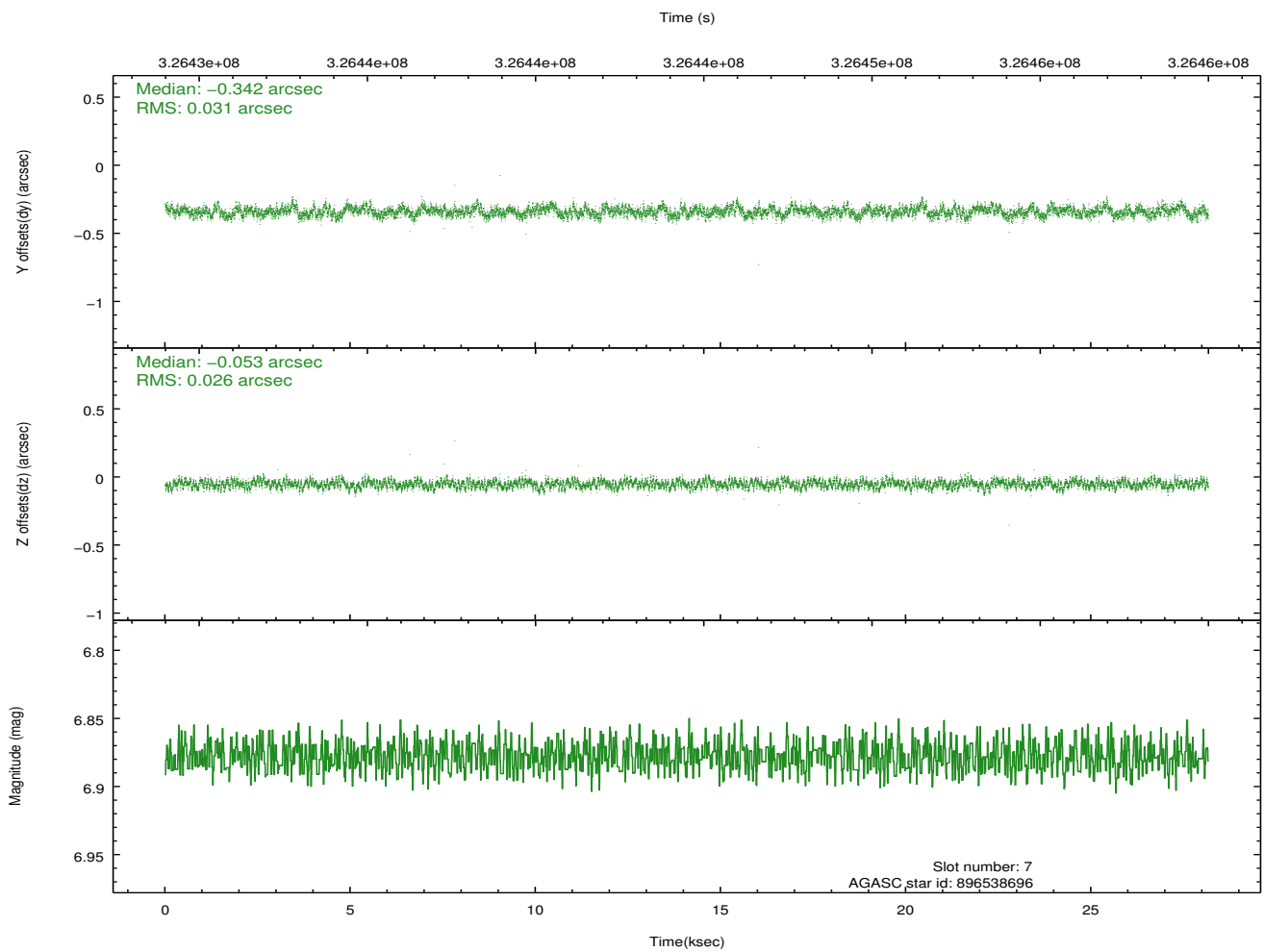
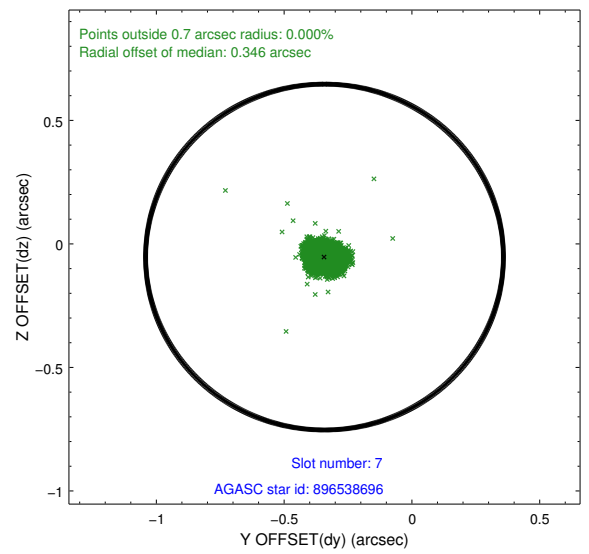
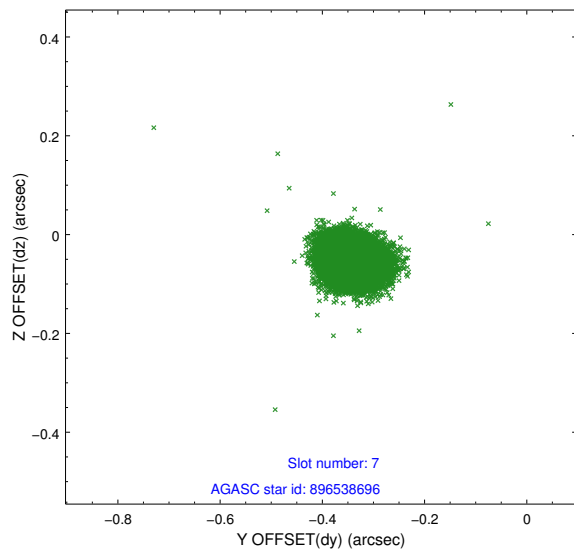
### 2.4.3 Slot 5



## 2.4.4 Slot 6

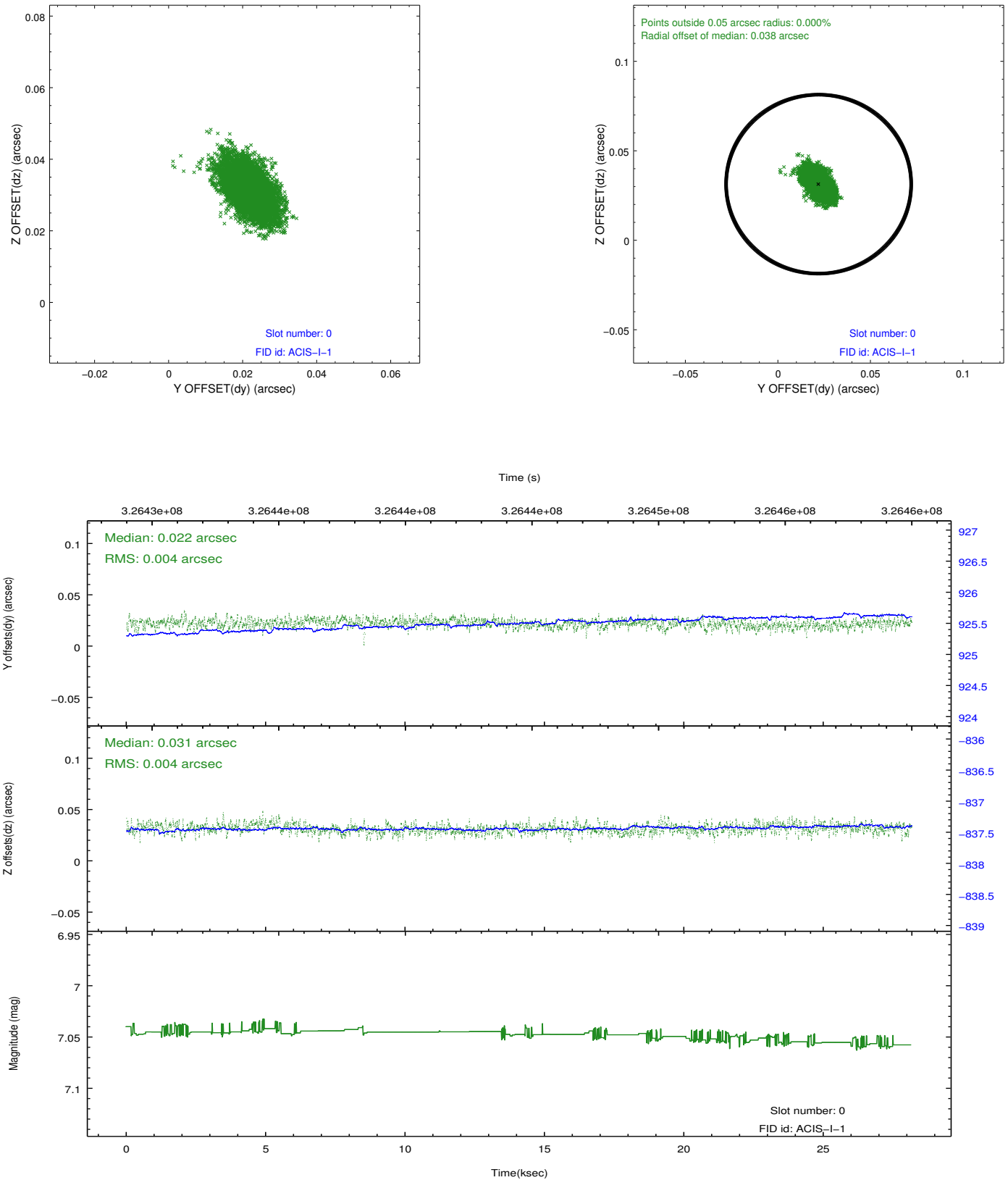


## 2.4.5 Slot 7

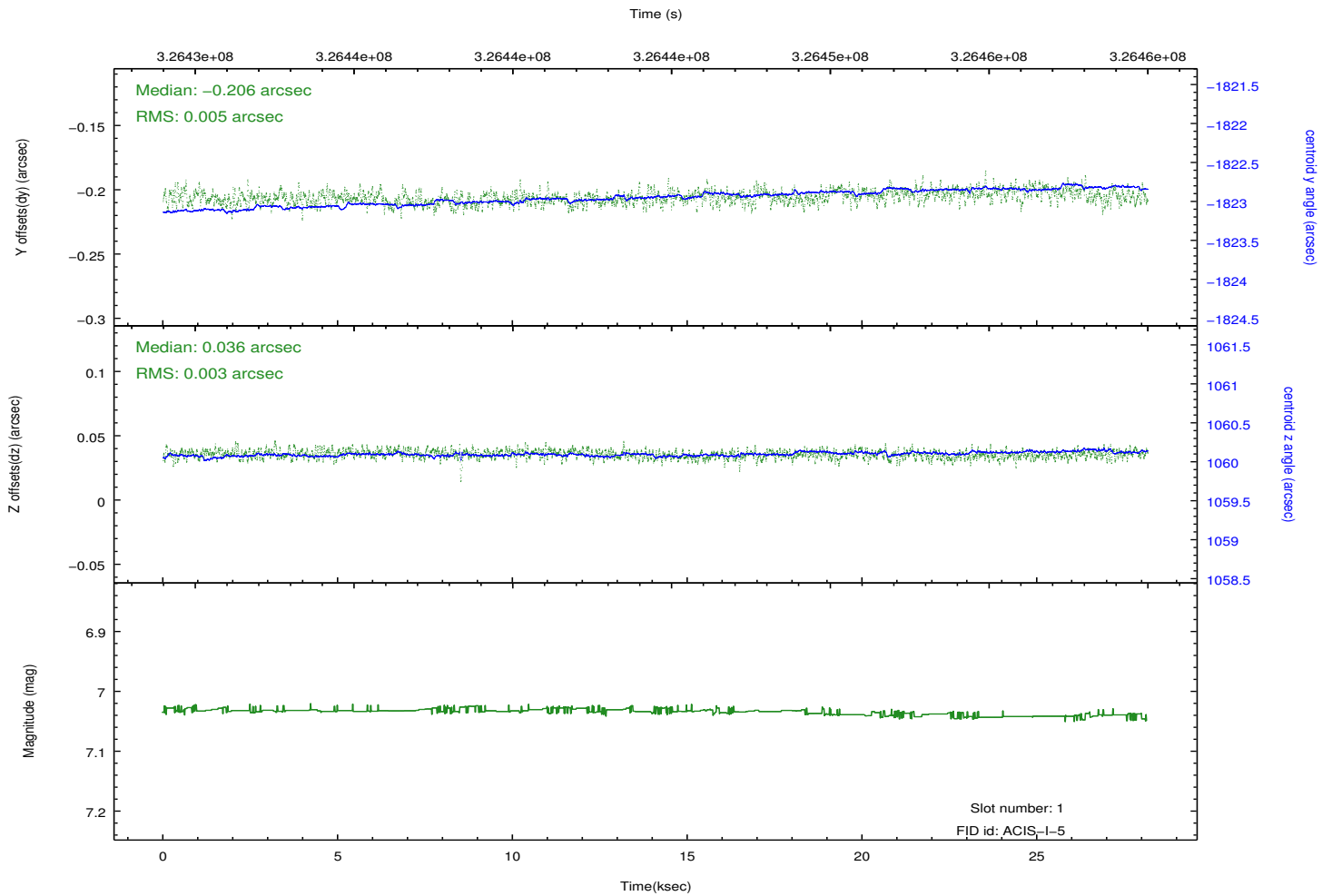
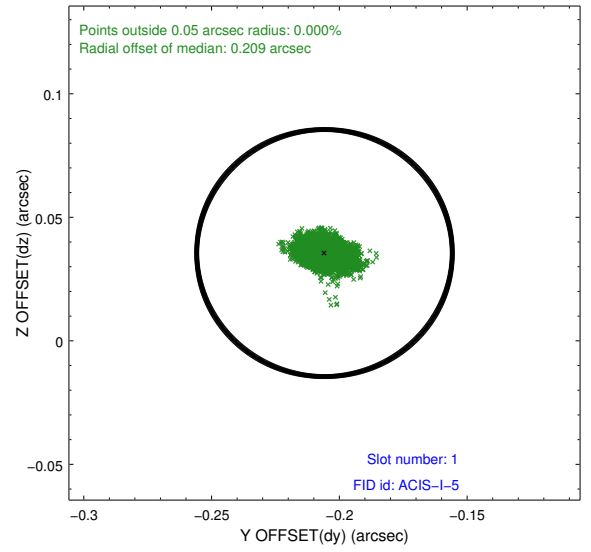
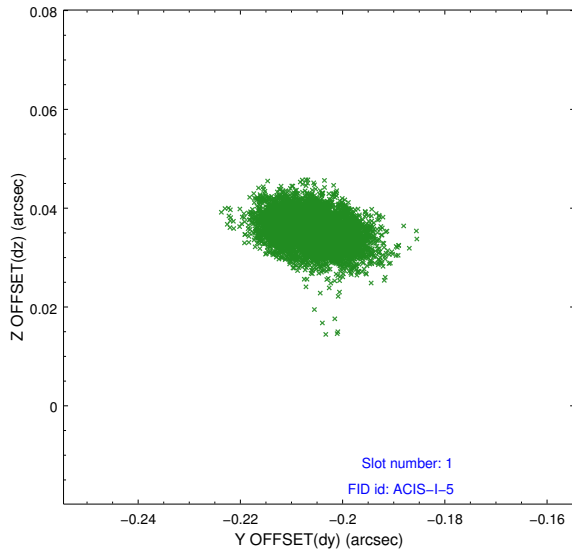


## 2.5 FID Slots

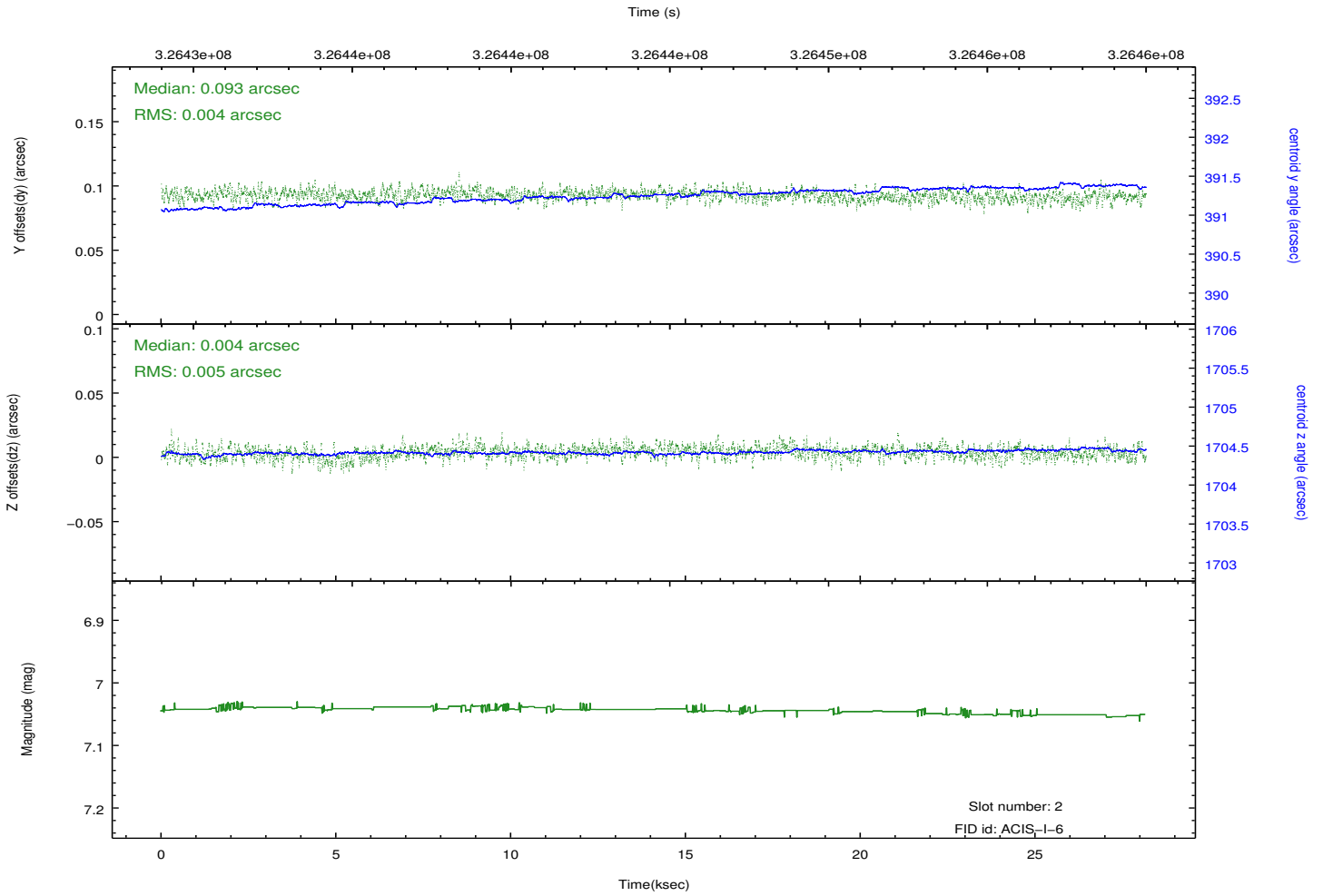
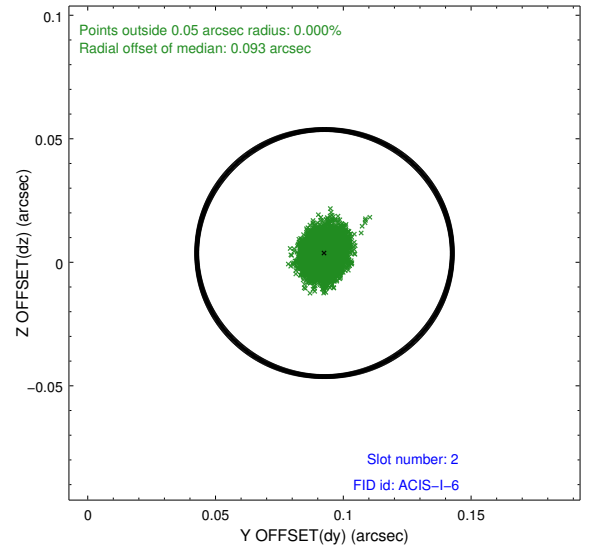
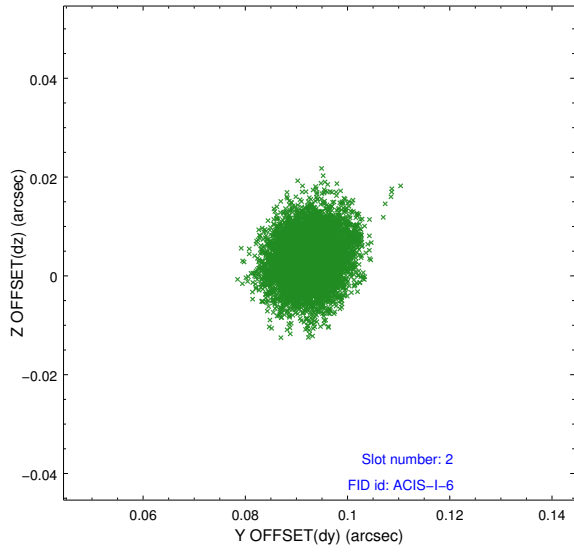
### 2.5.1 Slot 0



## 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)	2012.05.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.1455998

## A.2 Comments

Phase constraint met.