

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 15740 - L2 Version 1  
Chandra X-Ray Center

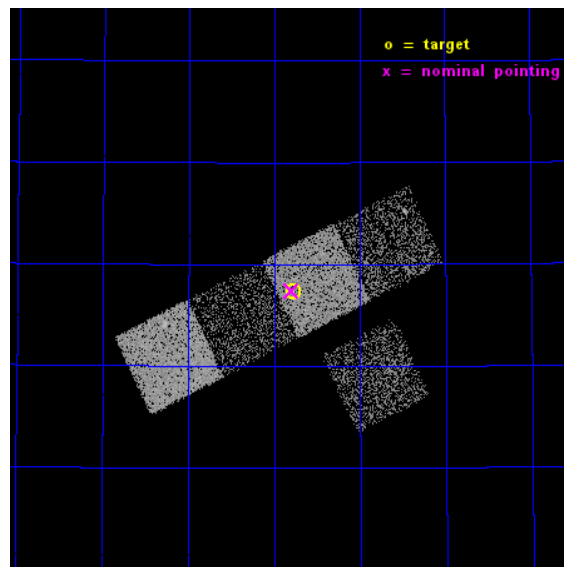
L2 Processing Date : Feb 3 2015

## 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

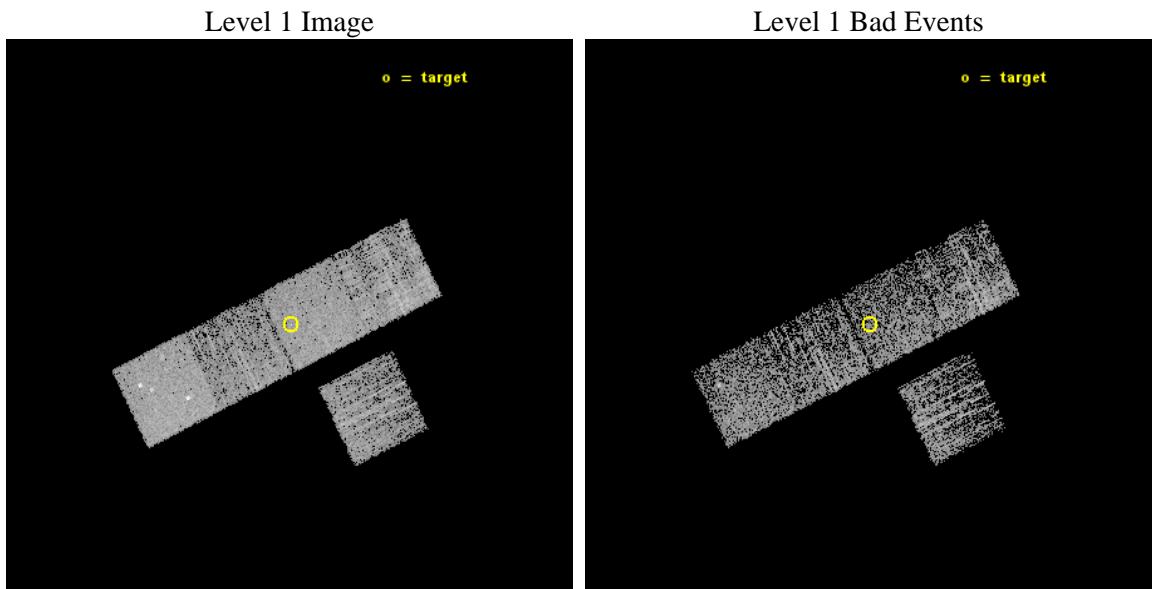
seq_num	300324	Sequence number
obs_id	15740	Observation id
title	Spatial Diagnostics of Potential X-ray Remnants in Old Novae T Aur and DK Lac	Proposal title
observer	Jeremy Drake	Principal investigator
object	DK Lac	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	342.445417	Observer's specified target RA [deg]
dec_targ	53.288694	Observer's specified target Dec [deg]
ra_nom	342.44992219781	Nominal RA [deg]
dec_nom	53.290227416532	Nominal Dec [deg]
roll_nom	333.95635276766	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3062.800023675	Sum of GTIs [s]
livetime	3022.7822865651	Livetime [s]
ontime3	3062.800023675	Sum of GTIs [s]
ontime5	3062.800023675	Sum of GTIs [s]
ontime6	3062.800023675	Sum of GTIs [s]
ontime7	3062.800023675	Sum of GTIs [s]
ontime8	3062.800023675	Sum of GTIs [s]
l2events	24802	Number of level 2 events



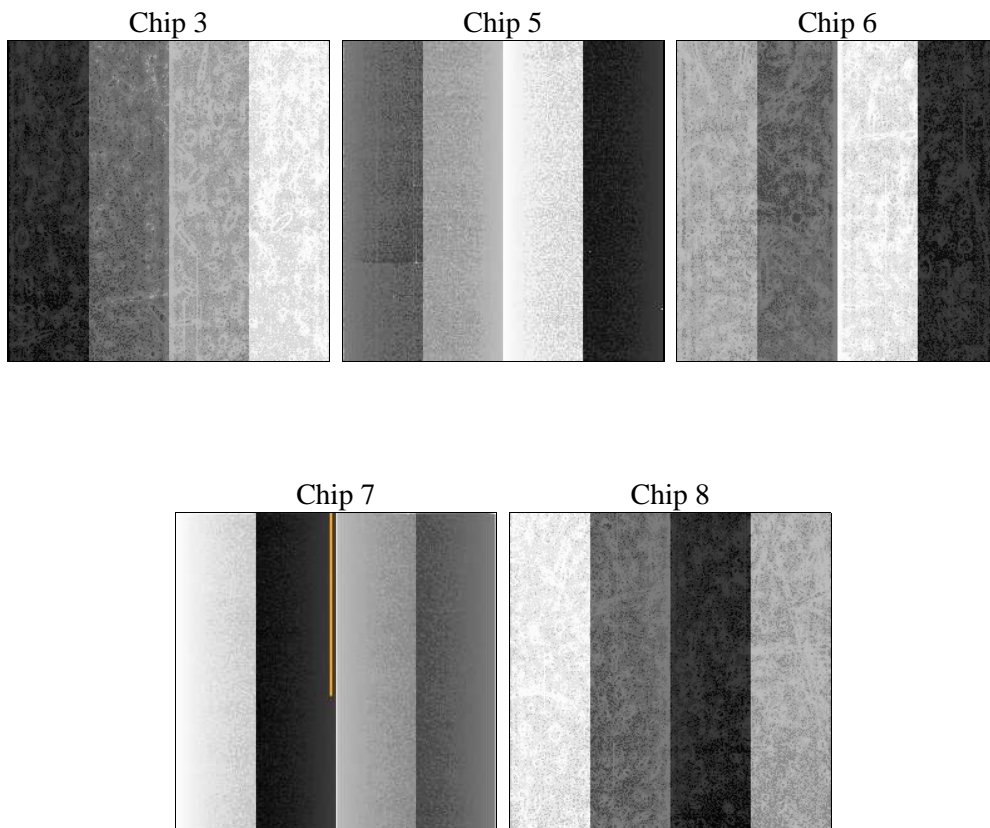
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	3062.800023675	Sum of GTIs [s]
caldsver	4.6.6	&#160	ontime3	3062.800023675	Sum of GTIs [s]
date	2015-02-03T15:57:20	Date and time of file creation	ontime5	3062.800023675	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	3062.800023675	Sum of GTIs [s]
			ontime7	3062.800023675	Sum of GTIs [s]
			ontime8	3062.800023675	Sum of GTIs [s]
			l1events	92535	Number of level 1 events

### 2.1.4 Events

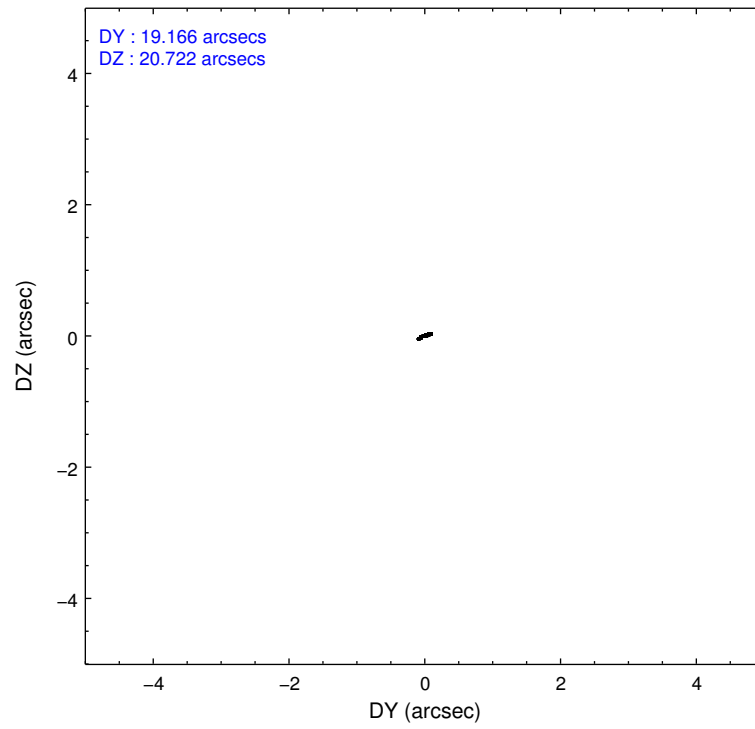
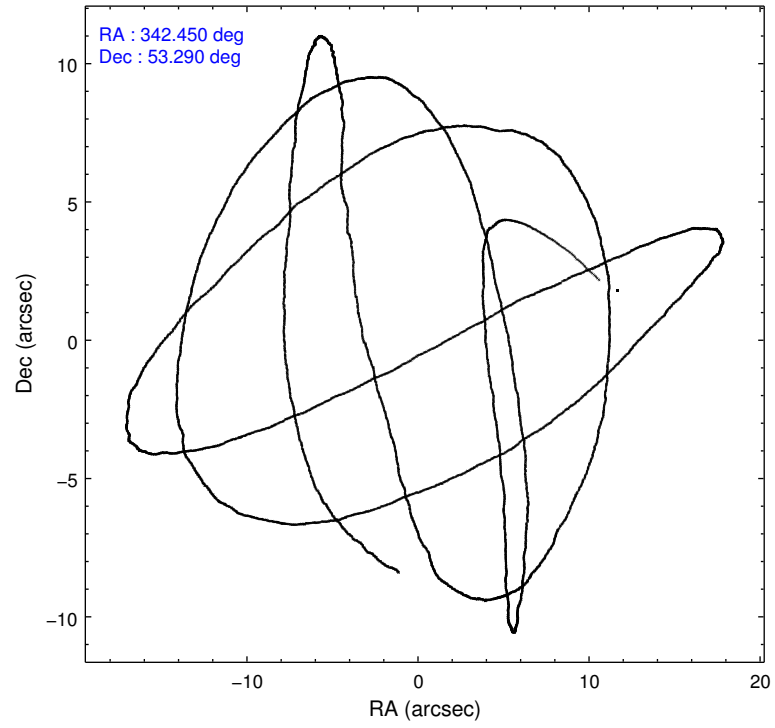
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	14601	25098	13838	19593	19405
rejected events	12466	12762	12050	10959	13731
rejected %	85%	50%	87%	55%	70%

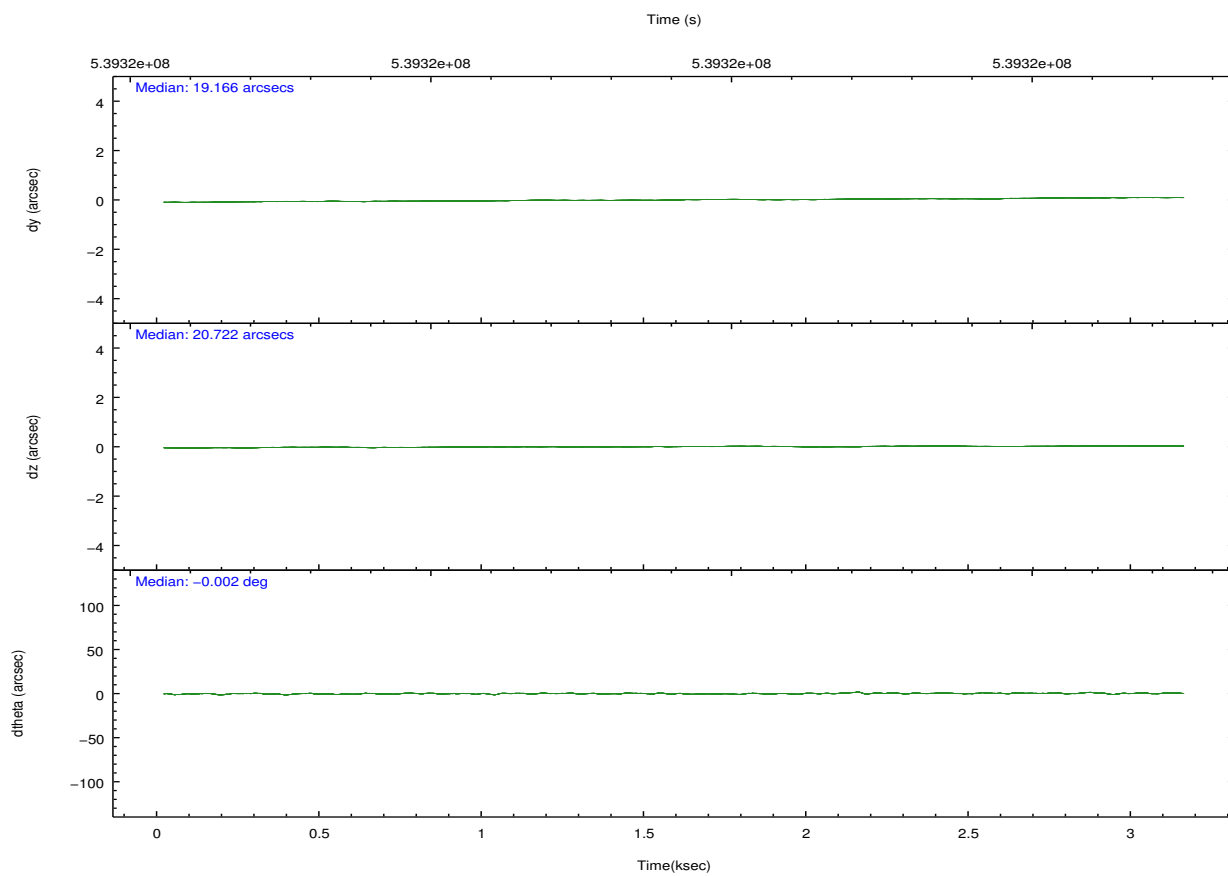
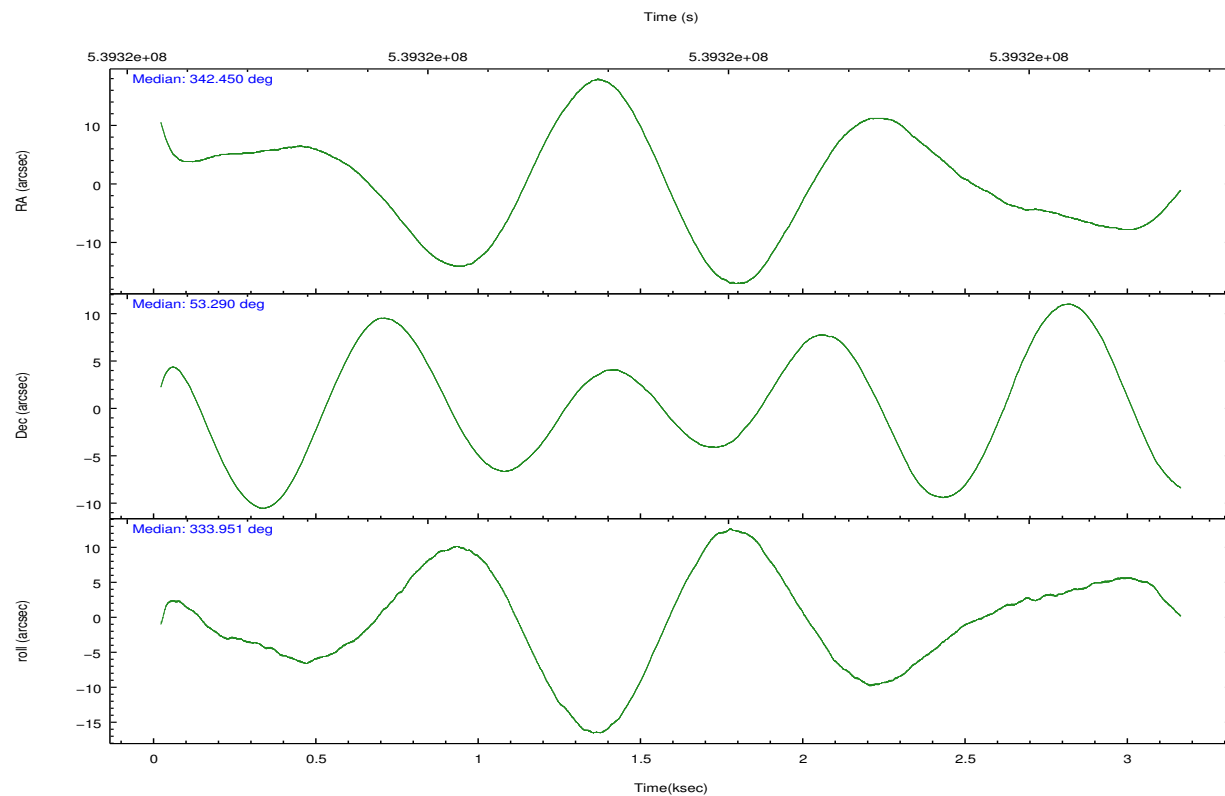
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1012	1518	620	808	1676
	6%	6%	4%	4%	8%
grade 1 events	12	46	10	25	23
	0%	0%	0%	0%	0%
grade 2 events	417	3904	425	1780	1245
	2%	15%	3%	9%	6%
grade 3 events	179	407	182	702	619
	1%	1%	1%	3%	3%
grade 4 events	191	374	170	721	622
	1%	1%	1%	3%	3%
grade 5 events	733	1782	706	1974	978
	5%	7%	5%	10%	5%
grade 6 events	342	6162	397	4643	1517
	2%	24%	2%	23%	7%
grade 7 events	11715	10905	11328	8940	12725
	80%	43%	81%	45%	65%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	342.404162	342.4499221978064	CCD I2 on	N	N
[deg] Pointing Dec	53.288008	53.29022741653249	CCD I3 on	O4	Y
[deg] Pointing Roll	333.836403	333.9563527676588	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	539322404.184000	539320828.31181	CCD S5 on	N	N
Observation start date	2015-02-03T03:45:37	2015-02-03T03:20:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	539325404.184000	539326495.02463	On-chip summing requested	N	N
Observation end date	2015-02-03T04:35:37	2015-02-03T04:54:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





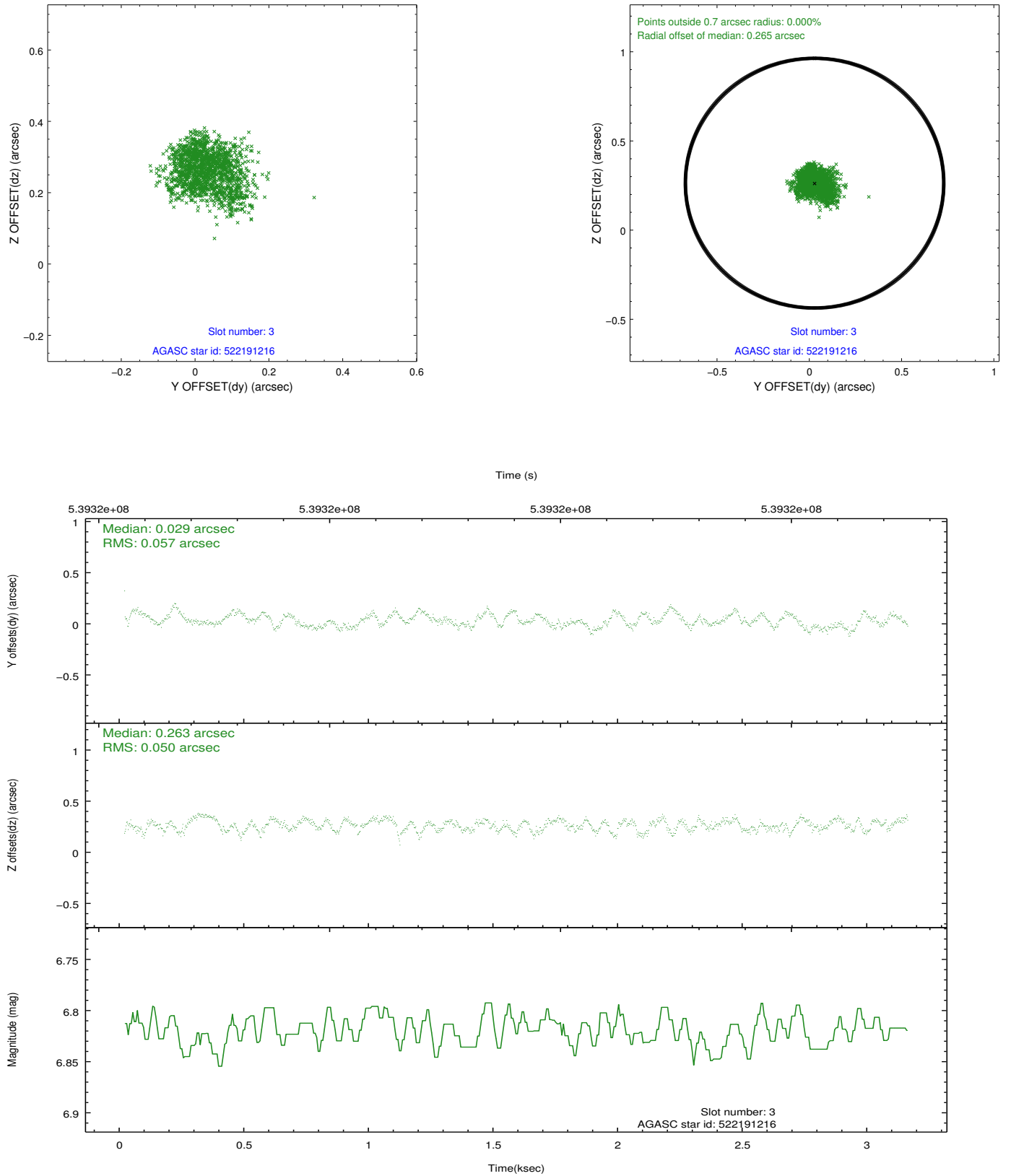
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	767	-0.166	-0.085	0.006	0.009	0.000000	0.000000	-772.49	-1742.30
1	FID		ACIS-S-4	7.03	767	0.189	0.105	0.006	0.010	0.000000	0.000000	2140.29	164.13
2	FID		ACIS-S-6	7.16	767	-0.050	-0.013	0.007	0.012	0.000000	0.000000	392.31	803.79
3	GUIDE	used	522191216	6.82	1534	0.029	0.263	0.080	0.129	341.400345	52.890306	-1331.68	-2232.32
4	GUIDE	used	522195672	7.40	1533	-0.249	-0.290	0.081	0.126	342.540646	53.929294	-759.62	2198.49
5	GUIDE	used	522204136	7.21	1534	-0.051	0.254	0.116	0.184	341.384669	53.374616	-2109.83	-669.71
6	GUIDE	used	522207800	7.56	1534	0.037	-0.030	0.072	0.119	342.937694	53.028491	1445.71	-325.23
7	GUIDE	used	476201536	8.10	1533	0.230	-0.193	0.098	0.172	342.873821	52.397805	2339.29	-2418.28

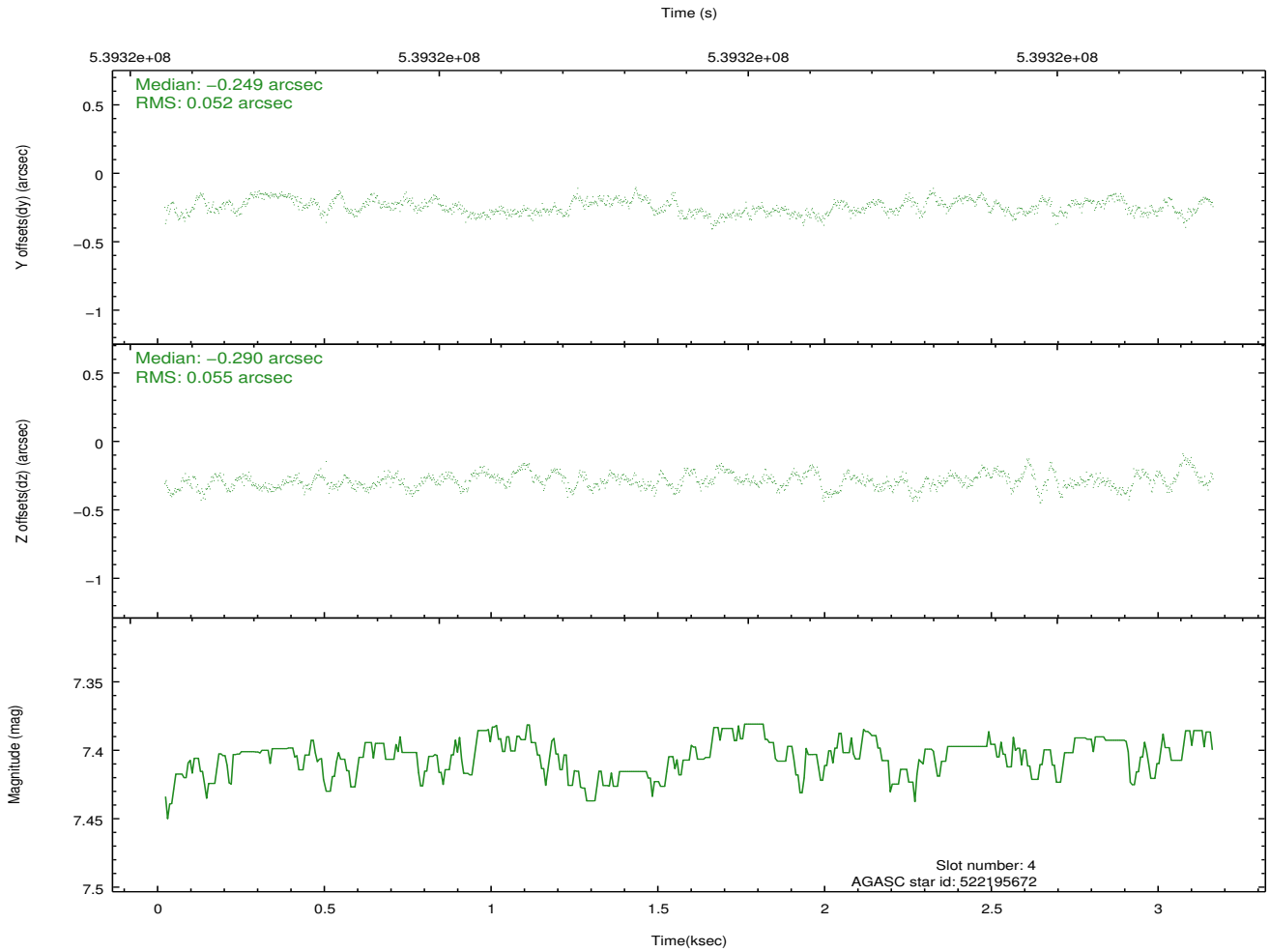
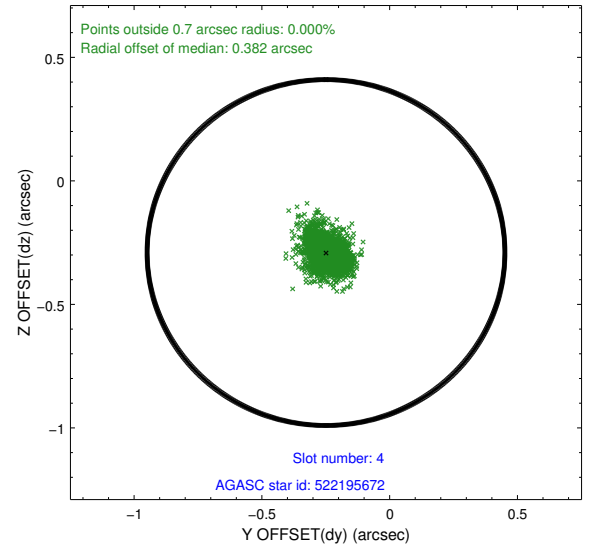
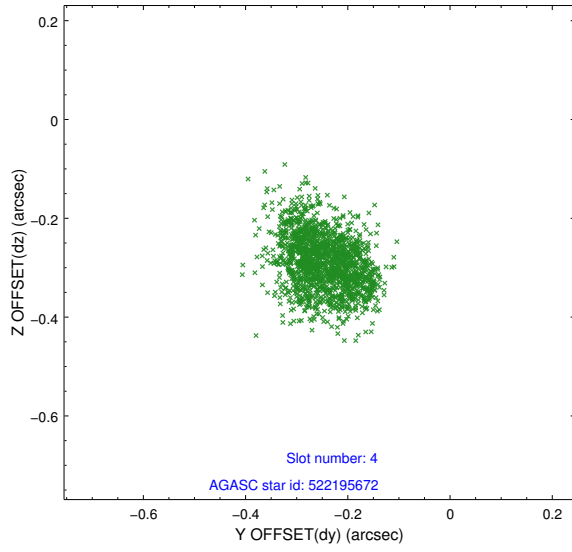


## 2.4 Star Slots

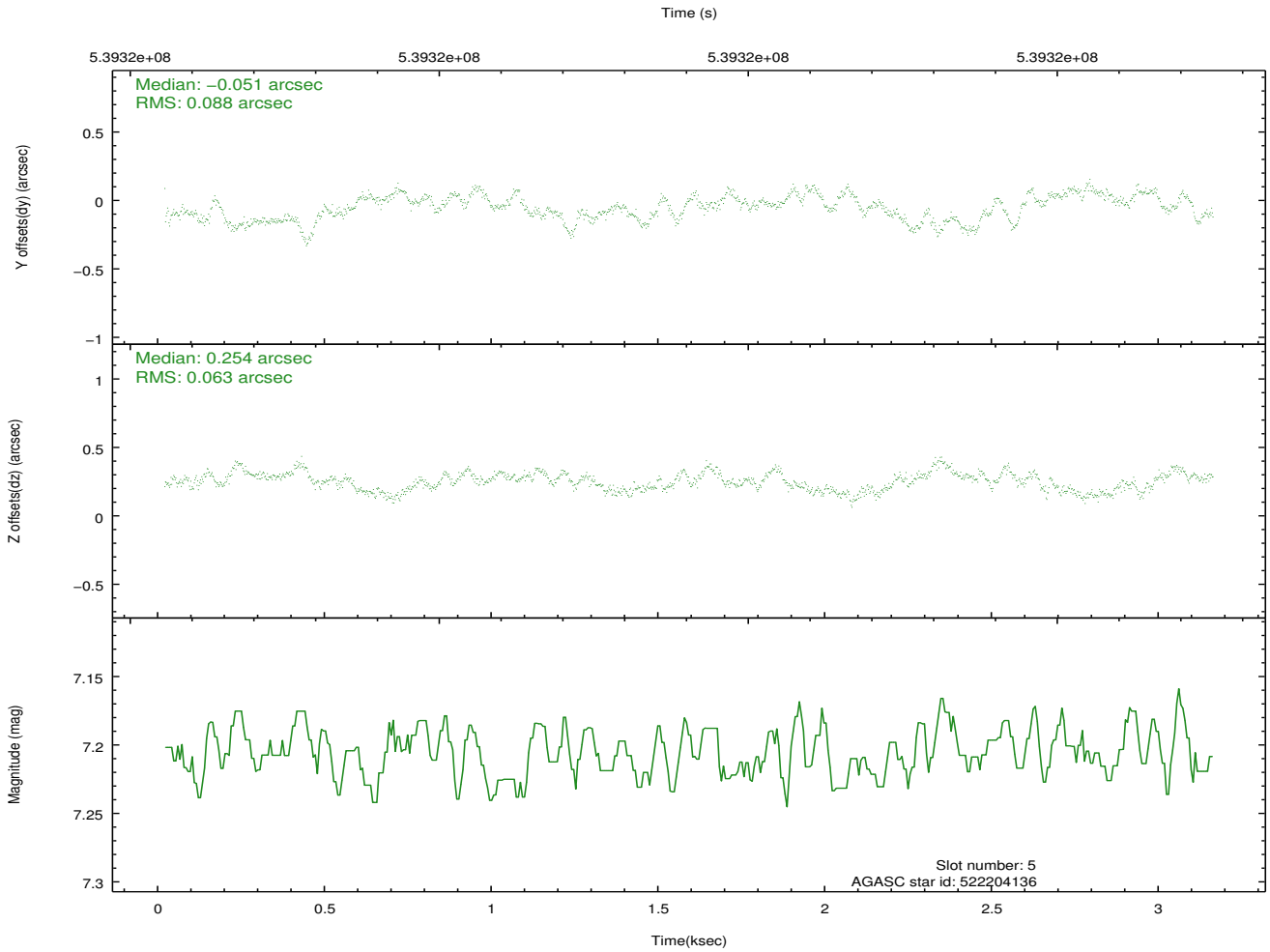
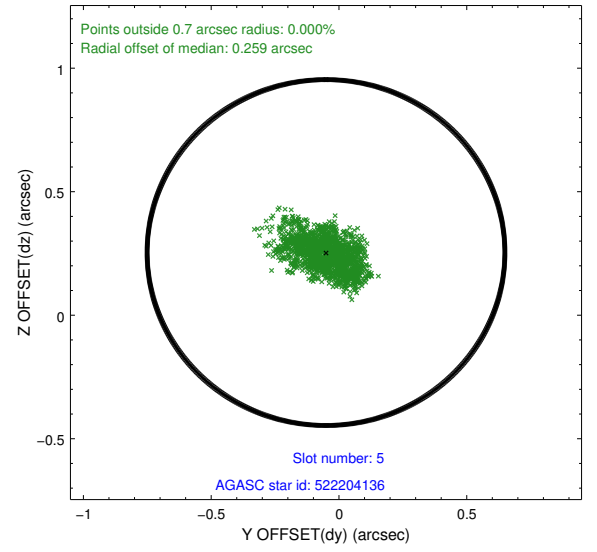
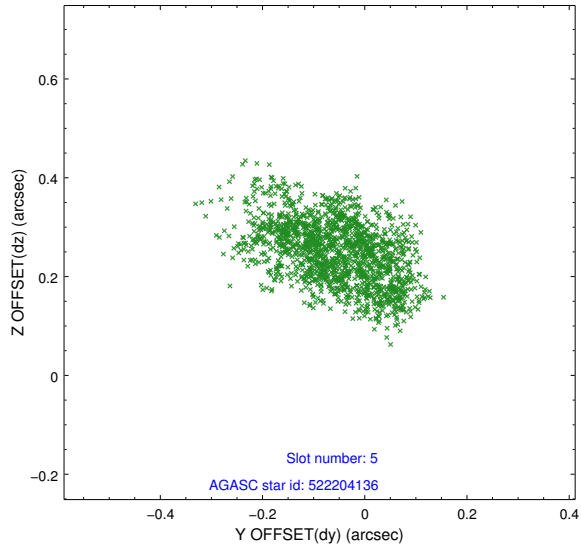
### 2.4.1 Slot 3



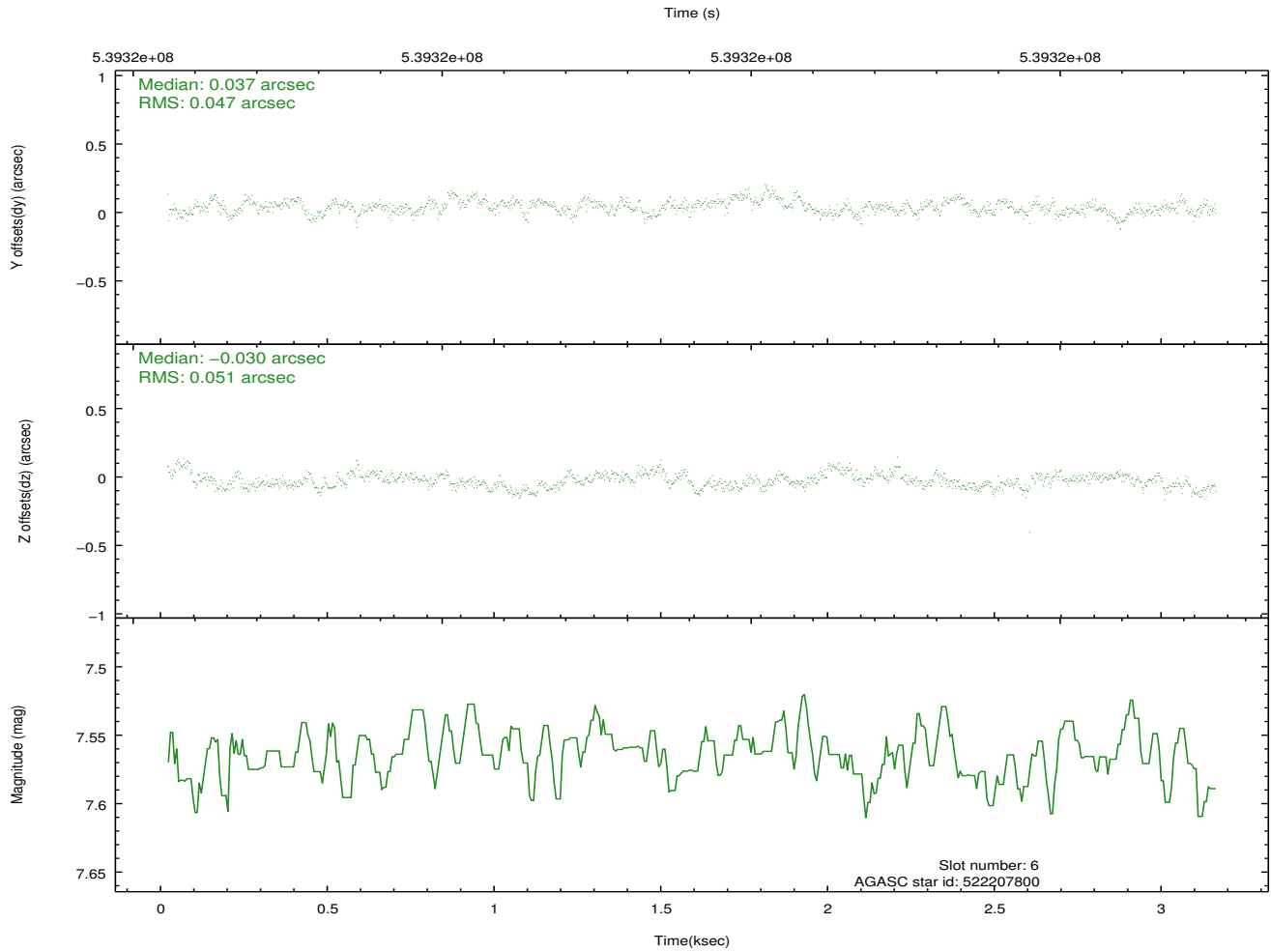
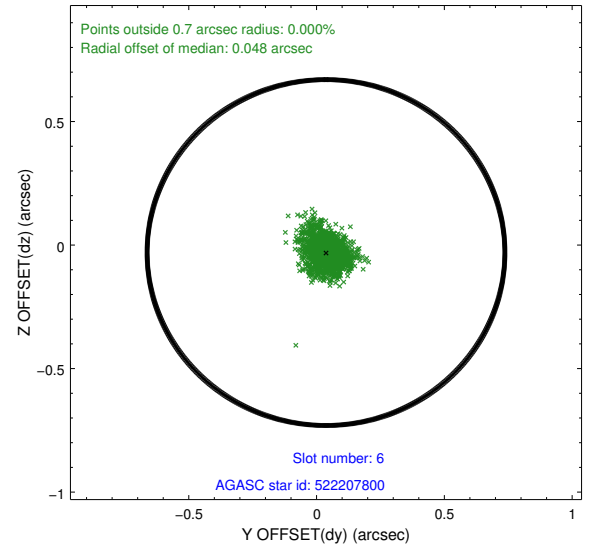
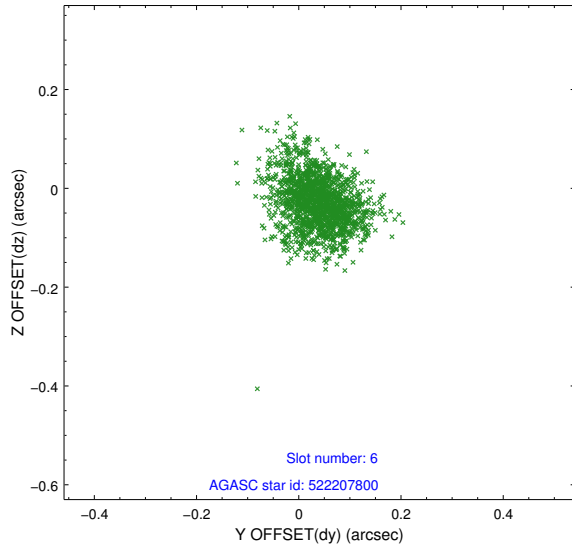
## 2.4.2 Slot 4



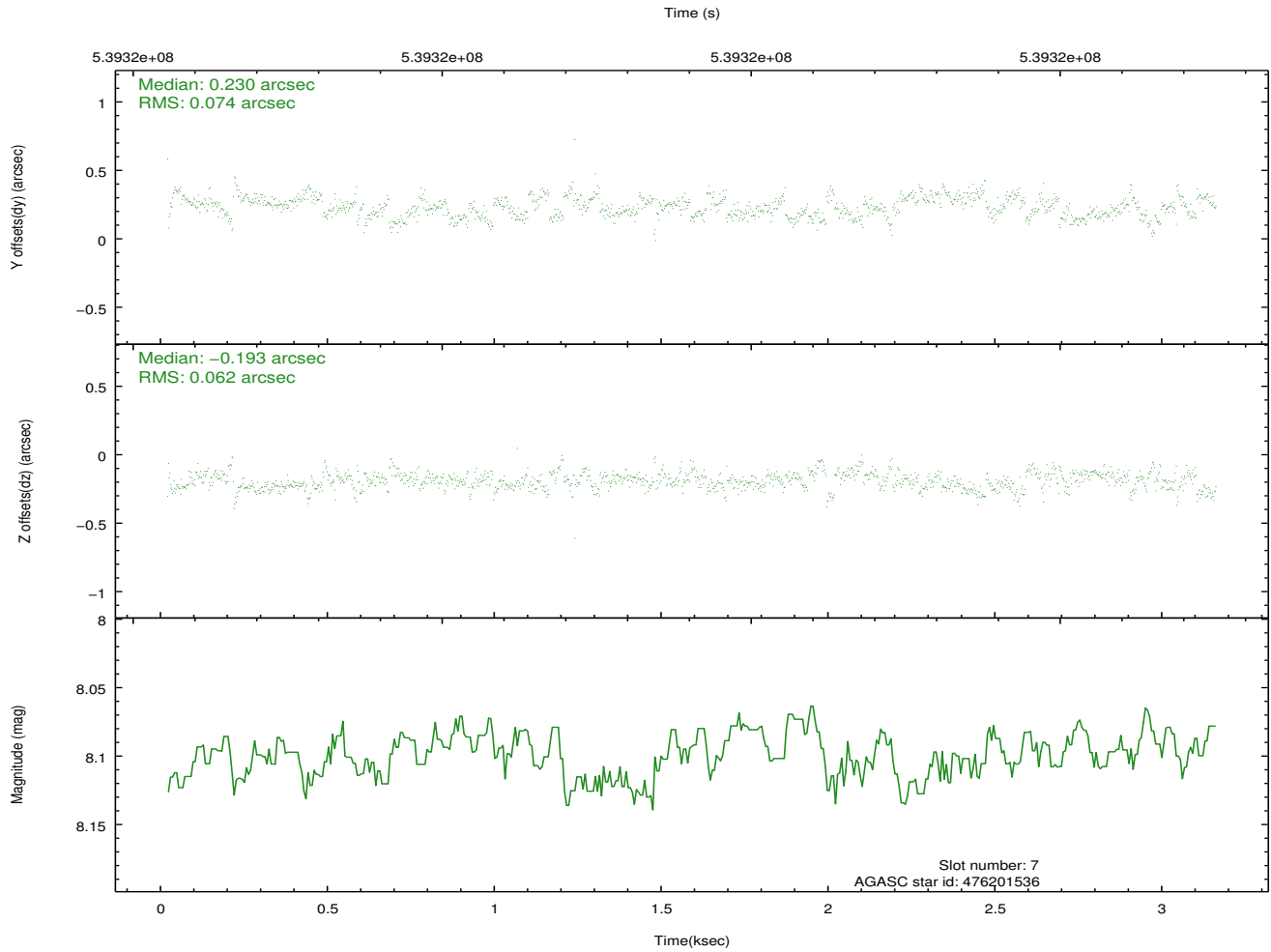
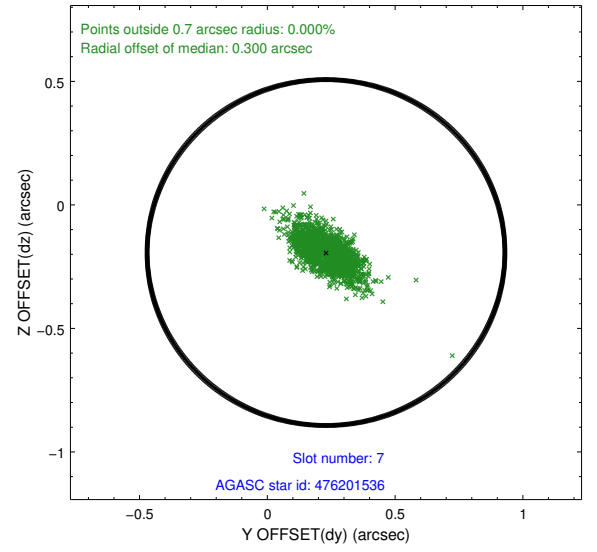
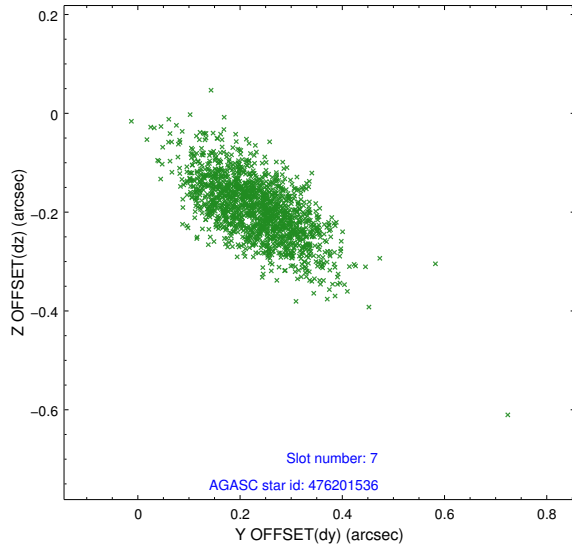
### 2.4.3 Slot 5



## 2.4.4 Slot 6

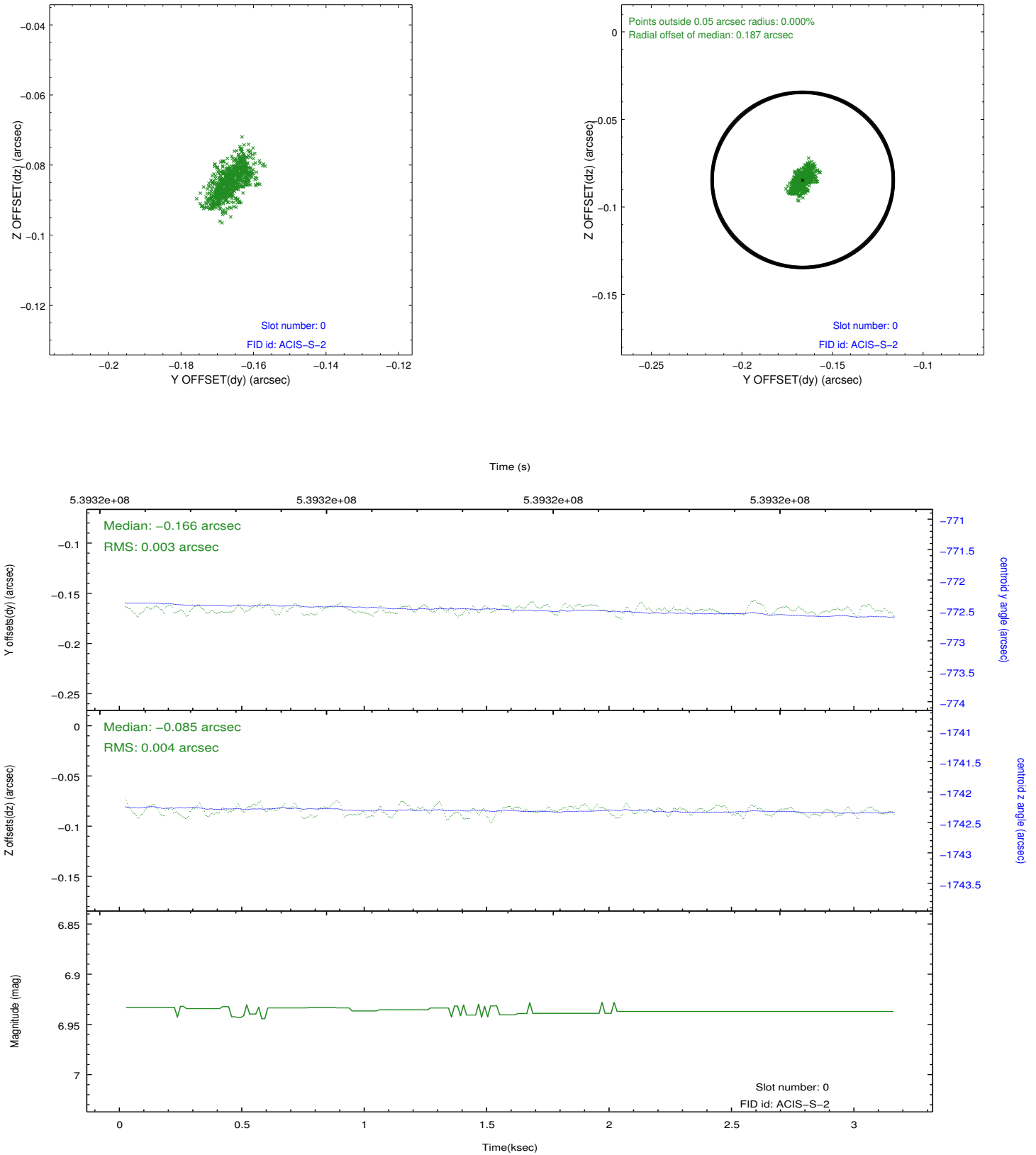


## 2.4.5 Slot 7

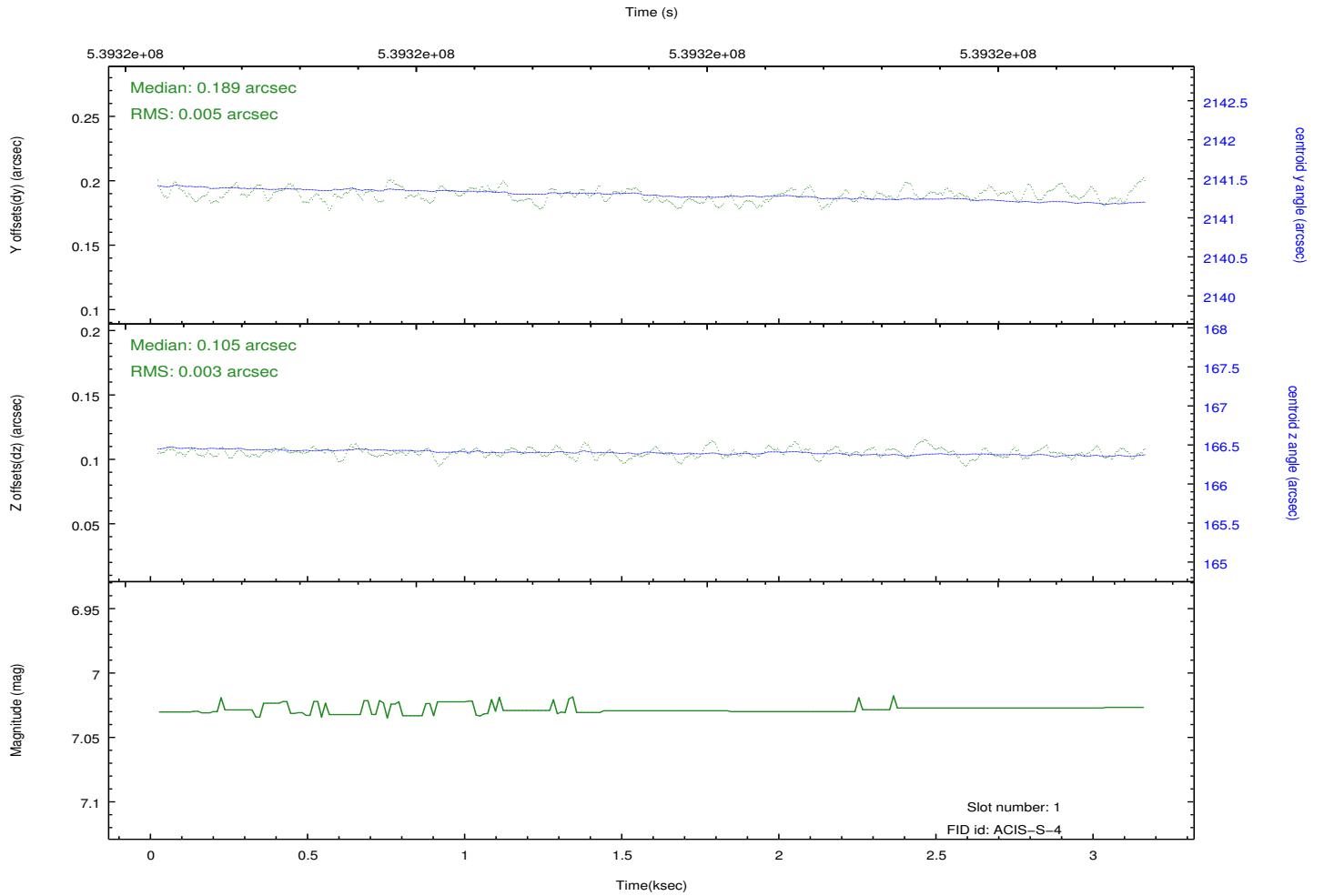
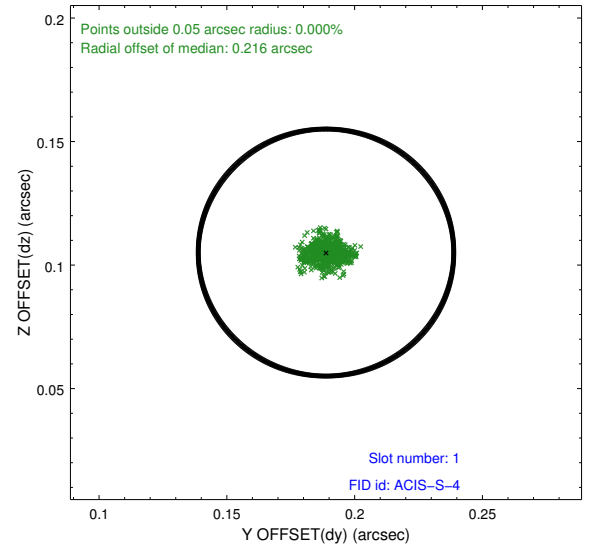
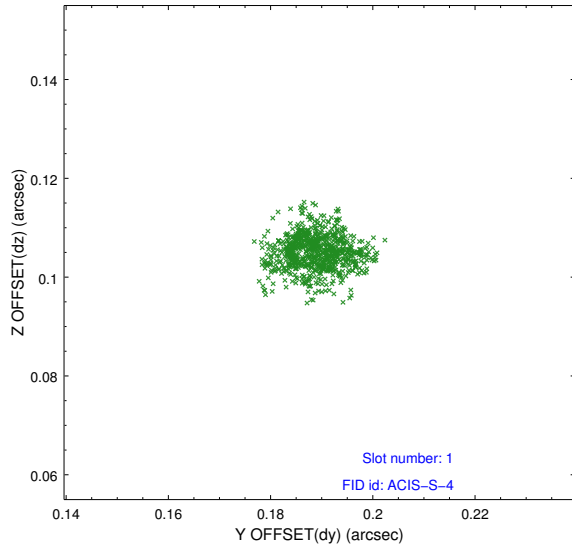


## 2.5 FID Slots

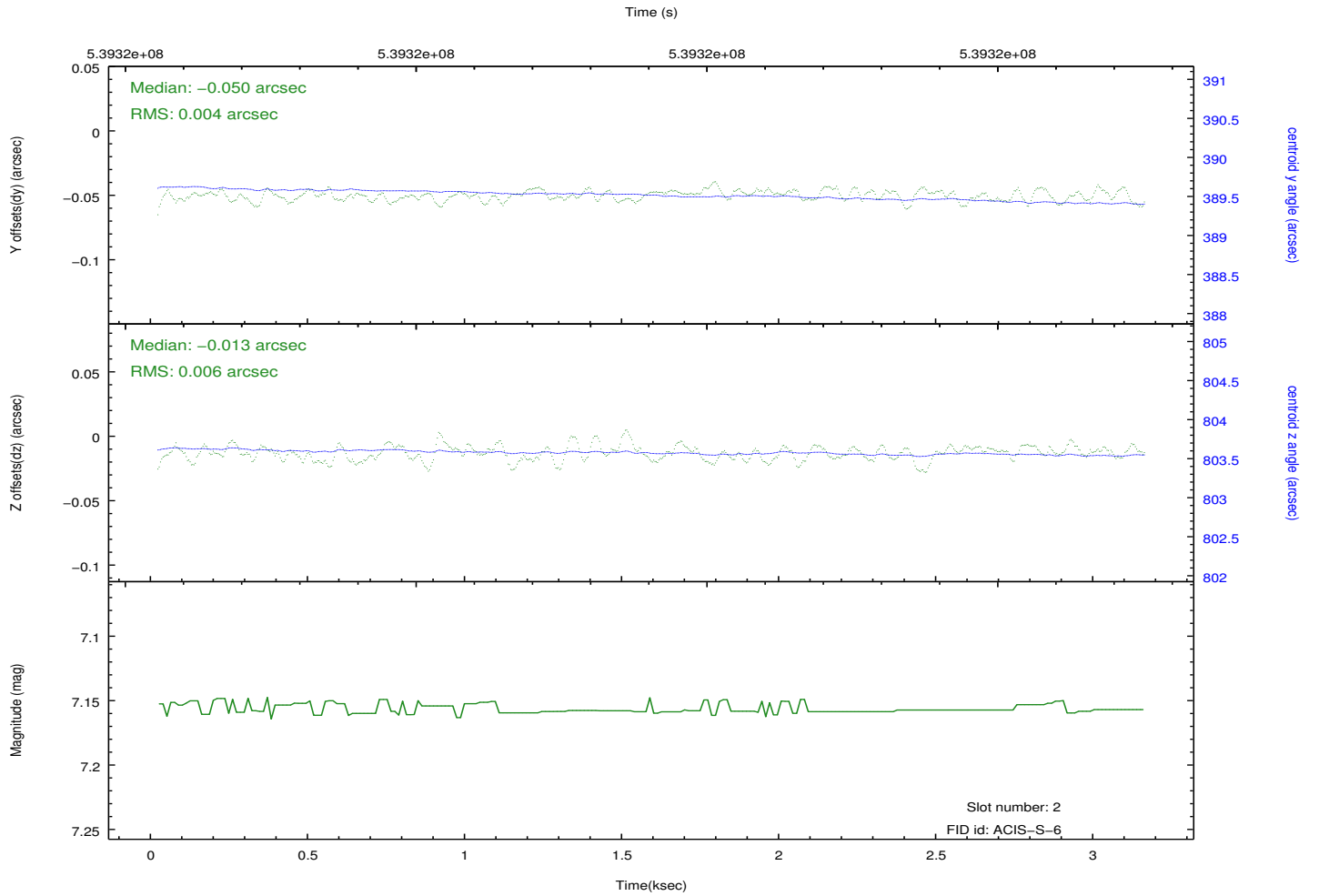
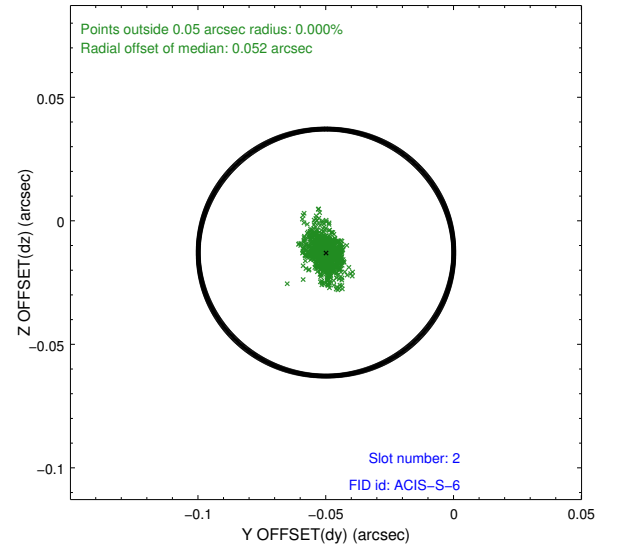
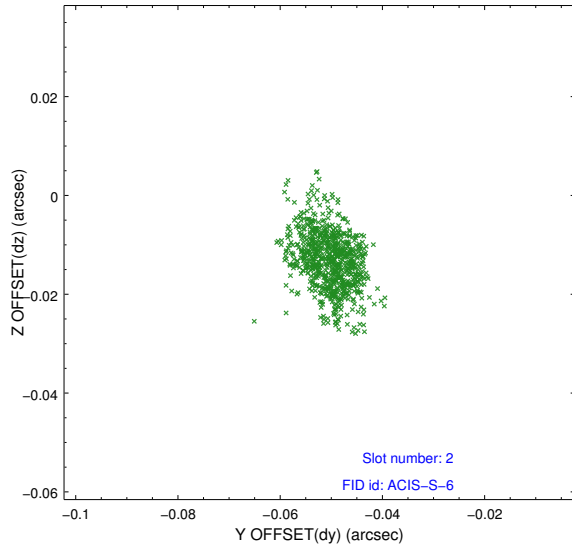
### 2.5.1 Slot 0



## 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)	2015.02.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.062800023675

### A.2 Comments