

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 8936 - L2 Version 3  
Chandra X-Ray Center

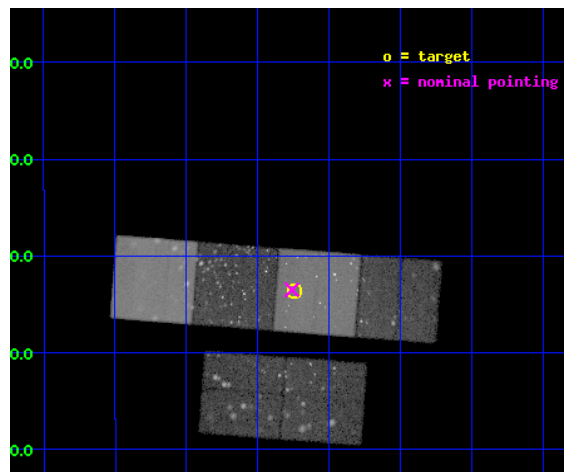
L2 Processing Date : May 6 2013

## 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

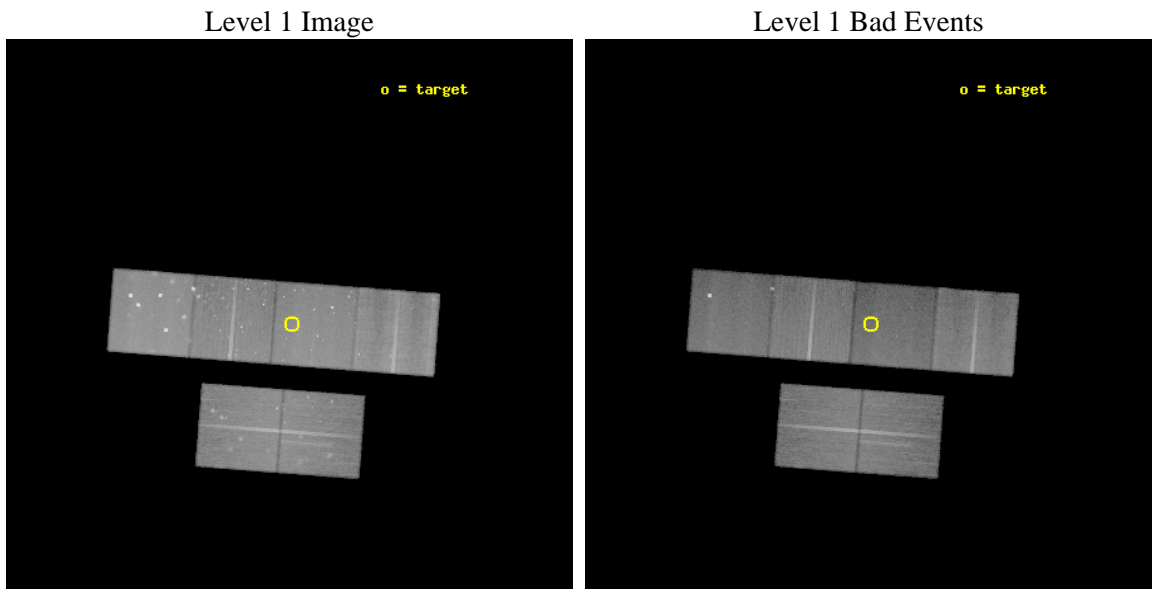
seq_num	200517	Sequence number
obs_id	8936	Observation id
title	Catching the Post-Outburst State of the Erupting Star V1118 Ori	Pr
observer	Prof. Marc Audard	Principal investigator
object	V1118 Ori	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.68625	Observer's specified target RA [deg]
dec_targ	-5.561472	Observer's specified target Dec [deg]
ra_nom	83.690177176967	Nominal RA [deg]
dec_nom	-5.5586094066762	Nominal Dec [deg]
roll_nom	4.4119111752406	Nominal Roll [deg]
revision	3	Processing version of data
ontime	35174.399869025	Sum of GTIs [s]
livetime	34729.000438402	Livetime [s]
ontime2	35171.158898234	Sum of GTIs [s]
ontime3	35174.399869025	Sum of GTIs [s]
ontime5	35174.399869025	Sum of GTIs [s]
ontime6	35174.399869025	Sum of GTIs [s]
ontime7	35174.399869025	Sum of GTIs [s]
ontime8	35171.158858776	Sum of GTIs [s]
l2events	485531	Number of level 2 events



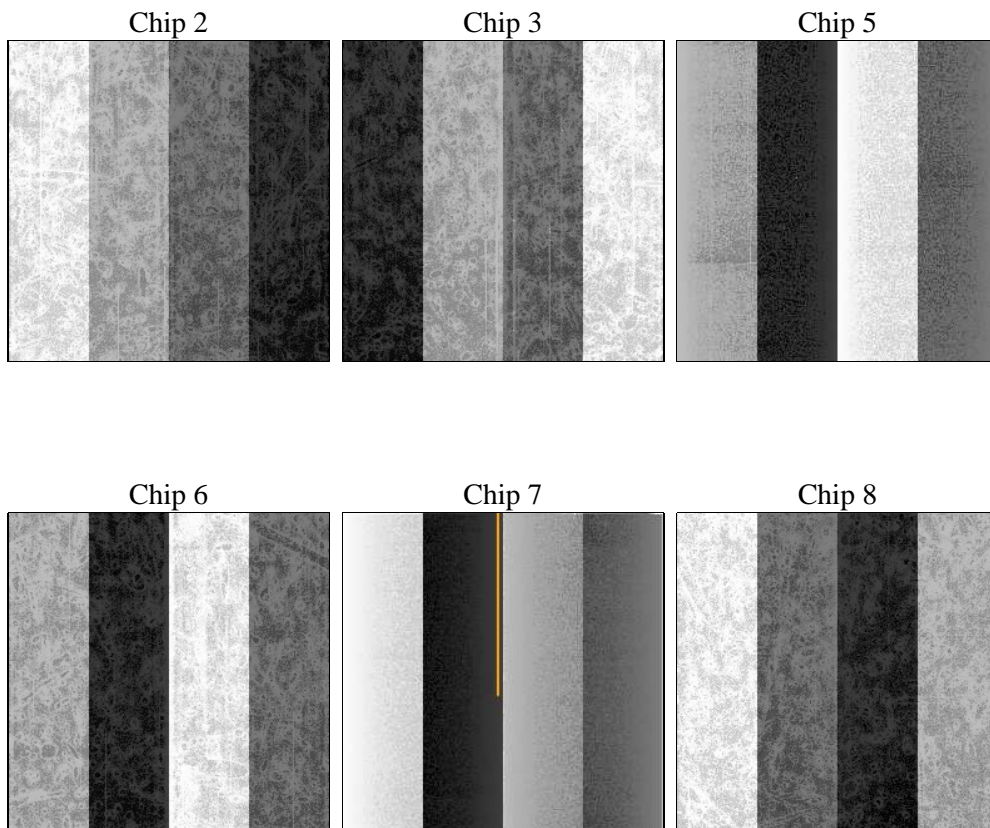
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	35174.399869025	Sum of GTIs [s]
caldbver	4.5.6	&#160	ontime2	35171.158898234	Sum of GTIs [s]
date	2013-05-06T18:15:49	Date and time of file creation	ontime3	35174.399869025	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	35174.399869025	Sum of GTIs [s]
			ontime6	35174.399869025	Sum of GTIs [s]
			ontime7	35174.399869025	Sum of GTIs [s]
			ontime8	35171.158858776	Sum of GTIs [s]
			l1events	2044935	Number of level 1 events

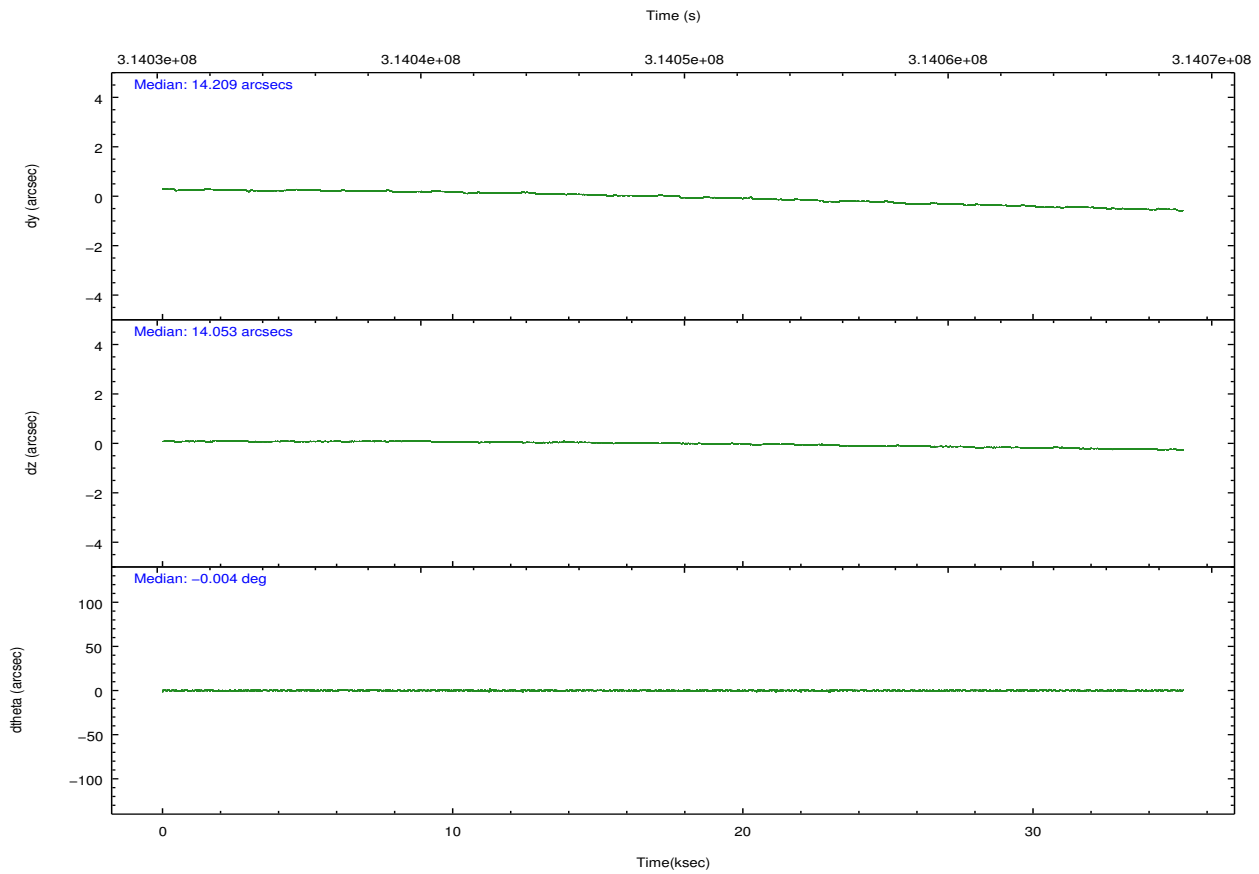
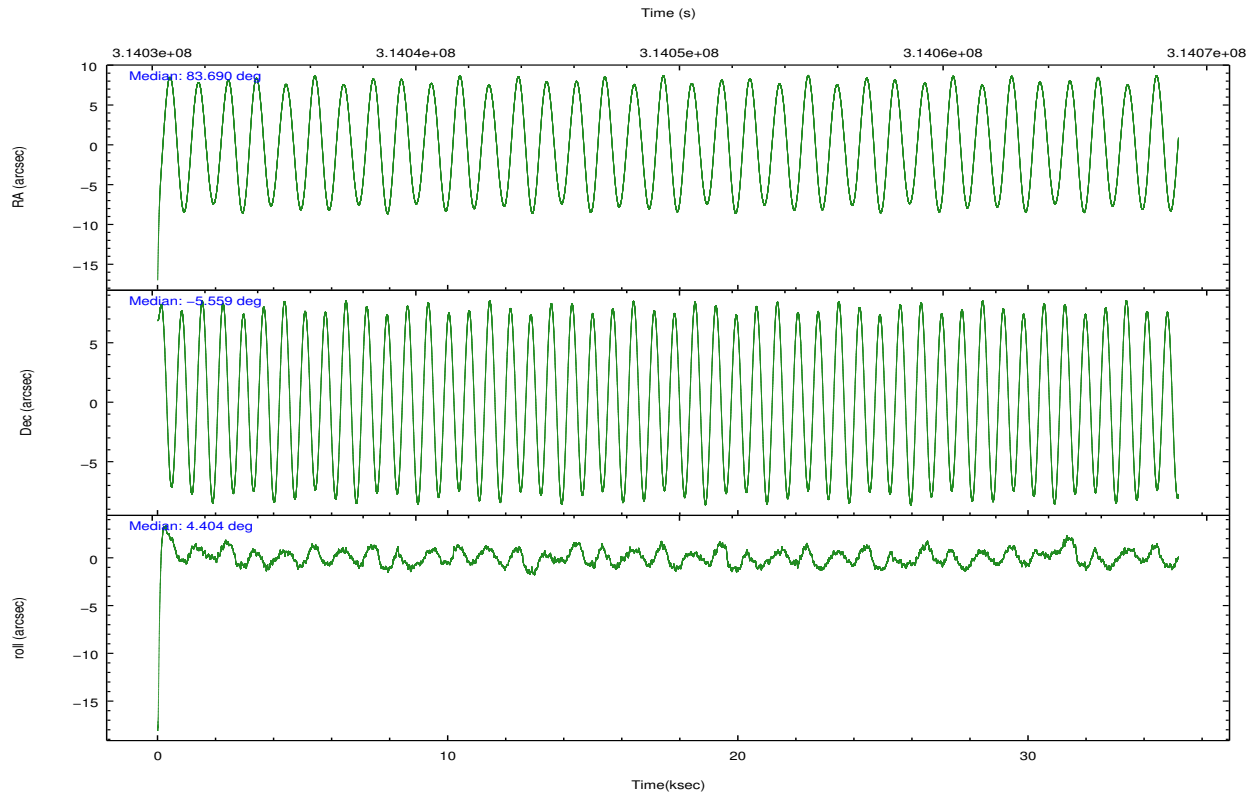
### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	312804	284623	439952	312836	335459	359261	grade 0 events	17482	15945	46894	27922	18828	27854
rejected events	276465	250991	207406	262254	174756	271590		5%	5%	10%	8%	5%	7%
rejected %	88%	88%	47%	83%	52%	75%	grade 1 events	214	183	984	336	486	291
								0%	0%	0%	0%	0%	0%
							grade 2 events	7336	6319	62755	8547	33815	20123
								2%	2%	14%	2%	10%	5%
							grade 3 events	3115	3096	10110	3826	15206	8970
								0%	1%	2%	1%	4%	2%
							grade 4 events	3256	3097	9359	3890	15012	8378
								1%	1%	2%	1%	4%	2%
							grade 5 events	9745	11069	32111	11693	33525	16477
								3%	3%	7%	3%	9%	4%
							grade 6 events	5414	5410	104988	6693	78989	22930
								1%	1%	23%	2%	23%	6%
							grade 7 events	266242	239504	172751	249929	139598	254238
								85%	84%	39%	79%	41%	70%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	83.667737	83.6901771769667	CCD I2 on	O1	Y
[deg] Pointing Dec	-5.574372	-5.558609406676163	CCD I3 on	O2	Y
[deg] Pointing Roll	4.253111	4.411911175240615	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	Y	Y
[s] Observation start time (MET)	314032154.184000	314030954.66773	CCD S5 on	N	N
Observation start date	2007-12-14T15:08:09	2007-12-14T14:49:14	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	314067154.184000	314068404.58204	On-chip summing requested	N	N
Observation end date	2007-12-15T00:51:29	2007-12-15T01:13:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect

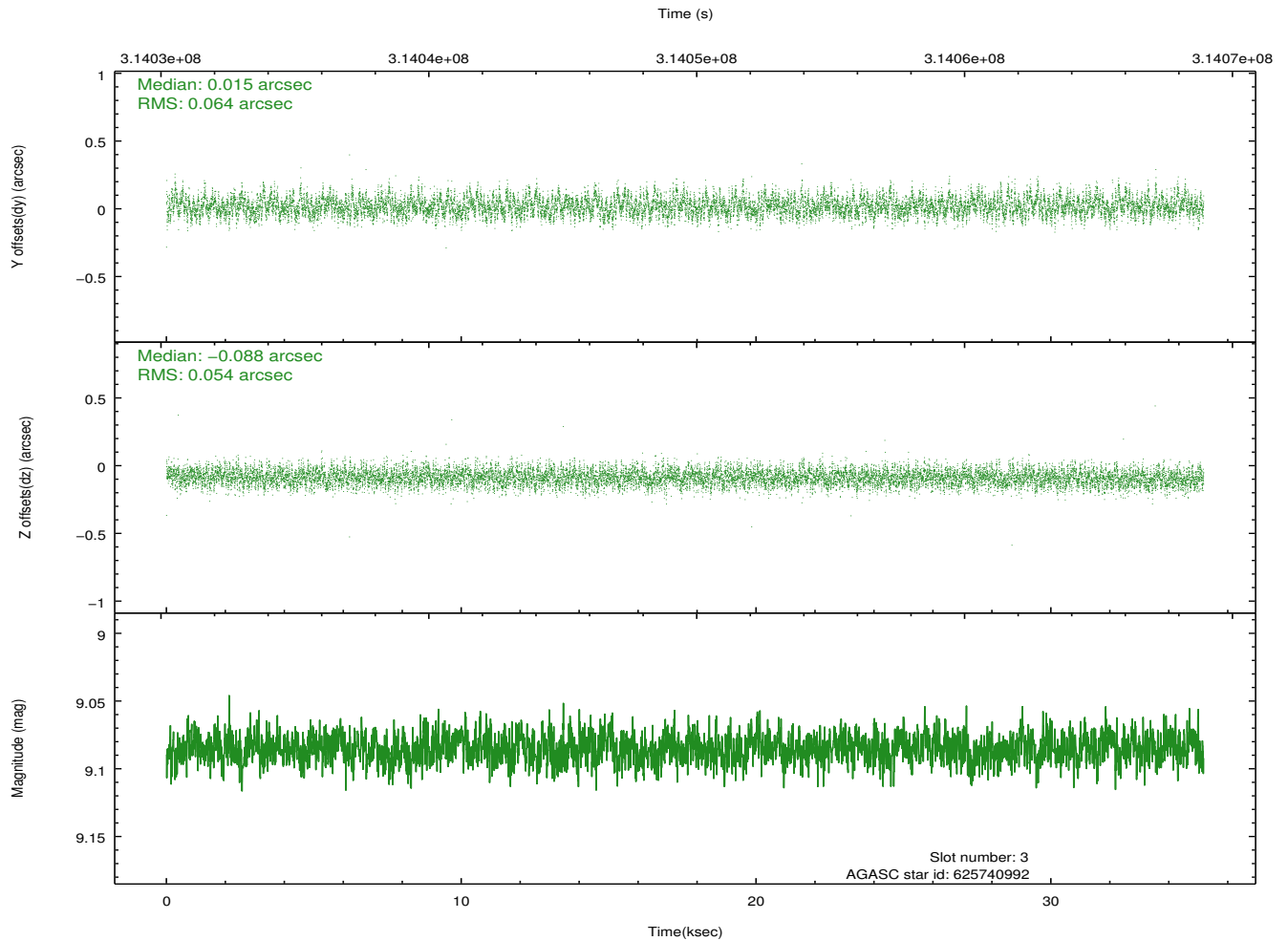
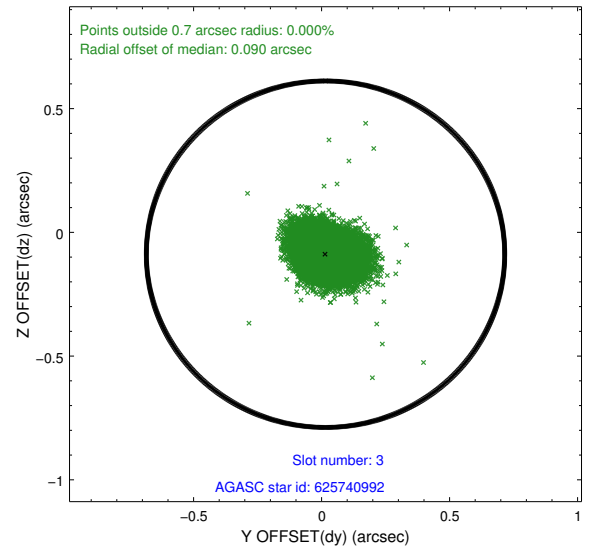
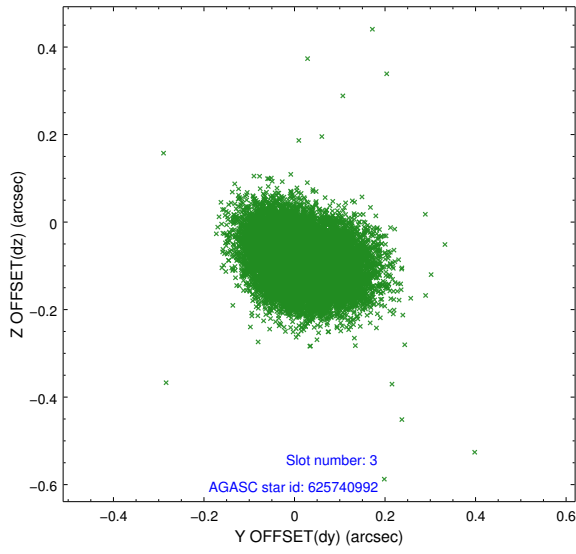


### Slot Statistics

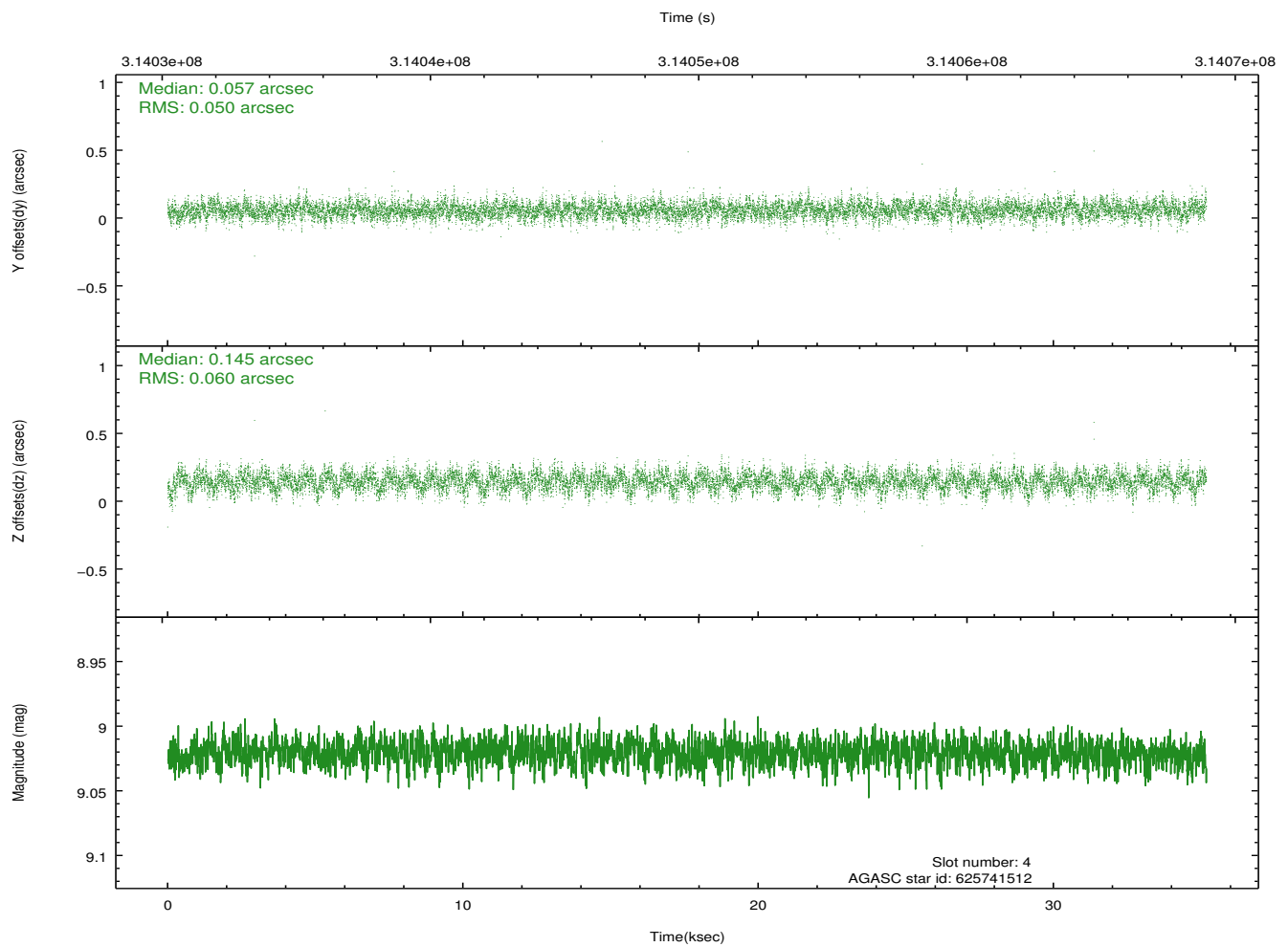
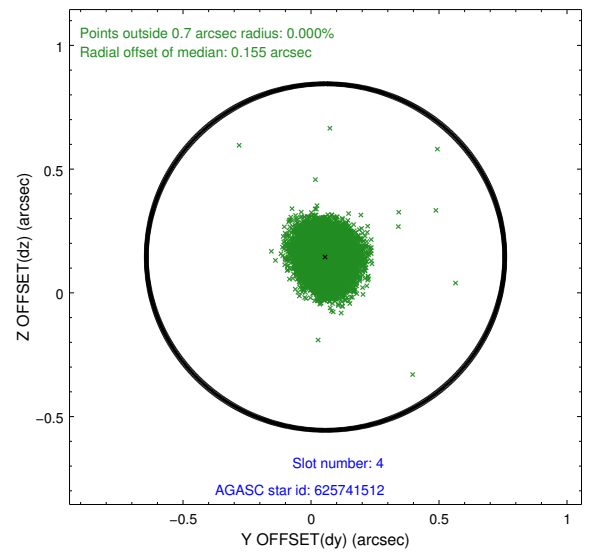
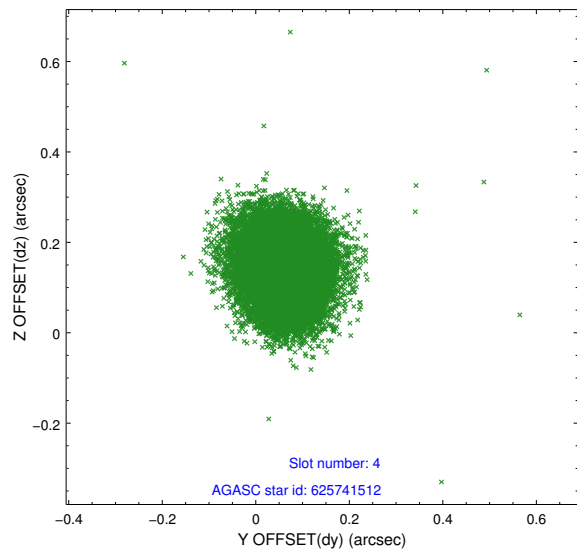
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8581	-0.069	-0.062	0.015	0.025	0.000000	0.000000	-767.16	-1735.33
1	FID	ACIS-S-4	7.19	8579	0.200	0.050	0.014	0.034	0.000000	0.000000	2146.37	173.22
2	FID	ACIS-S-5	7.22	8580	-0.161	0.022	0.009	0.013	0.000000	0.000000	-1820.04	166.91
3	GUIDE	625740992	9.09	17139	0.015	-0.088	0.088	0.144	83.193672	-4.960928	-1531.88	2327.68
4	GUIDE	625741512	9.02	17151	0.057	0.145	0.083	0.135	83.281151	-5.340585	-1319.31	941.92
5	GUIDE	626265688	9.28	17135	-0.070	-0.110	0.083	0.134	83.158748	-5.995438	-1929.48	-1377.50
6	GUIDE	626273040	7.11	17159	0.011	0.068	0.069	0.113	84.062610	-5.647920	1391.36	-369.10
7	GUIDE	626272760	6.65	17161	-0.025	-0.012	0.071	0.131	84.363987	-5.938389	2389.53	-1492.87

## 2.4 Star Slots

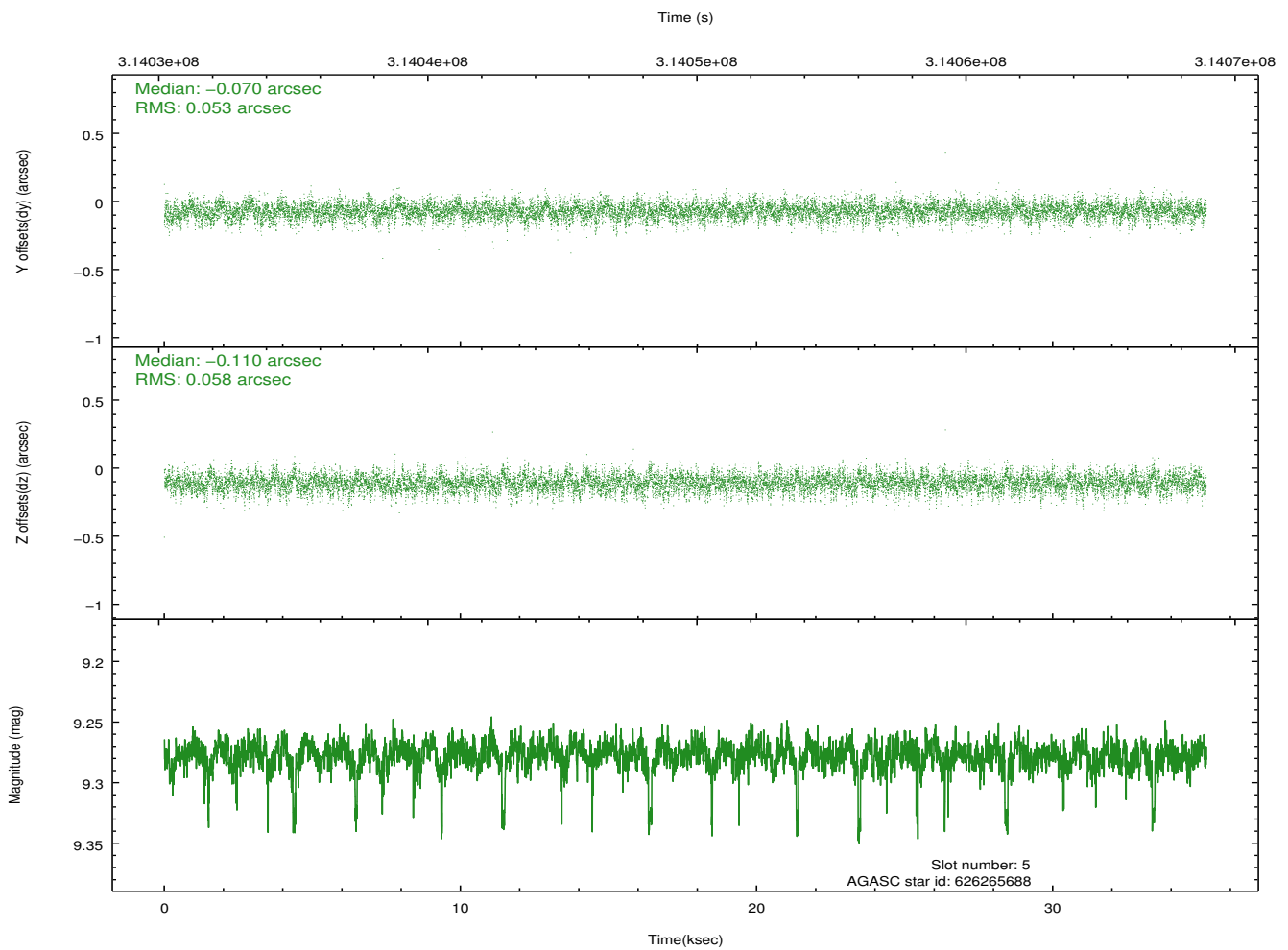
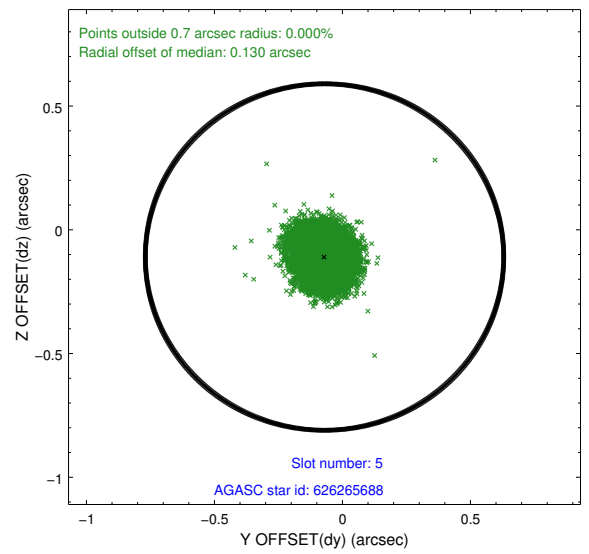
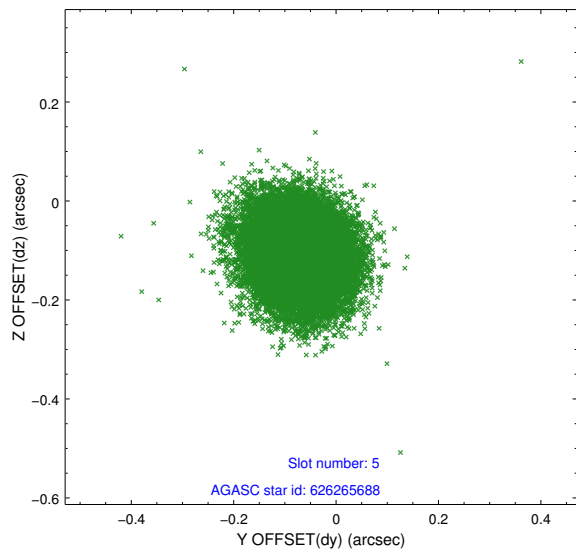
### 2.4.1 Slot 3



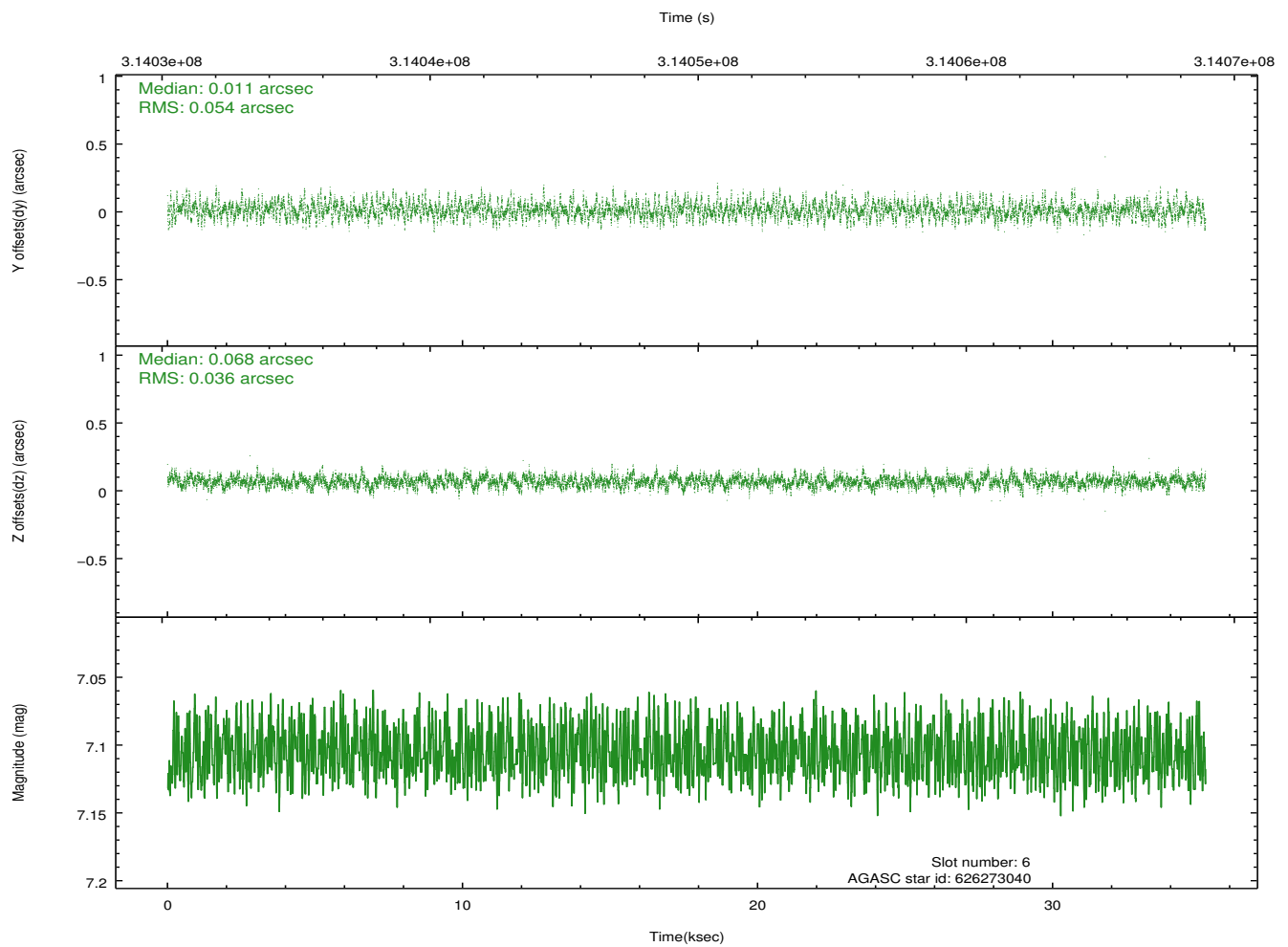
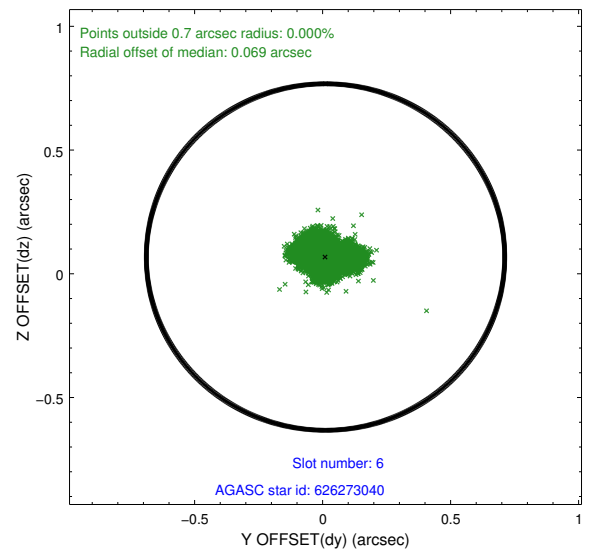
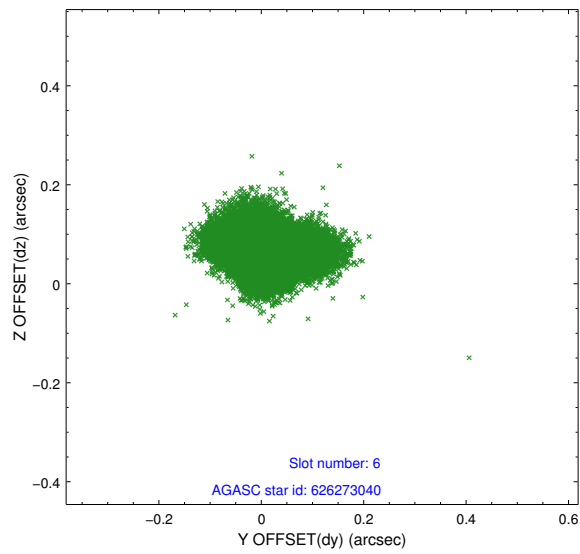
## 2.4.2 Slot 4



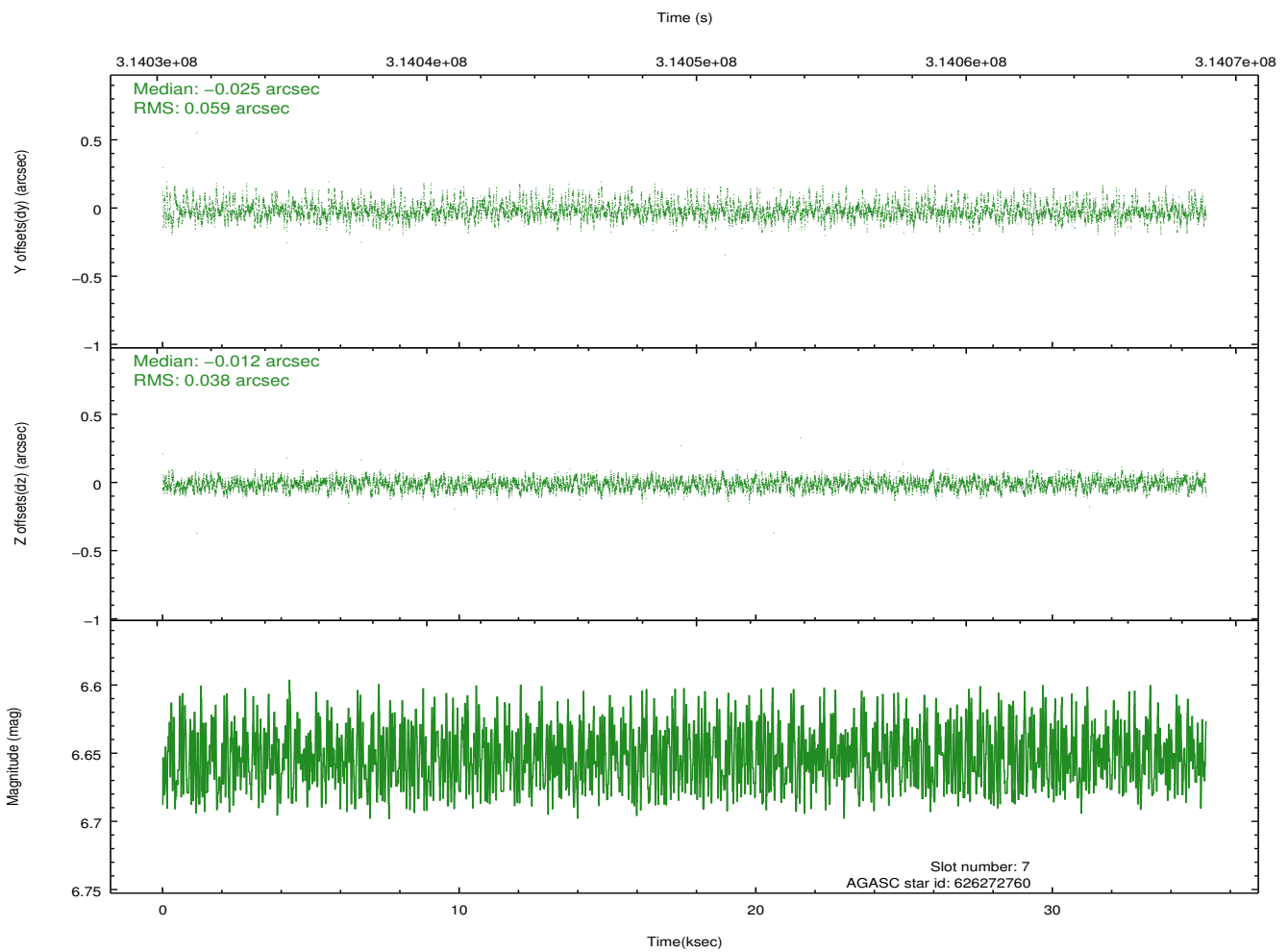
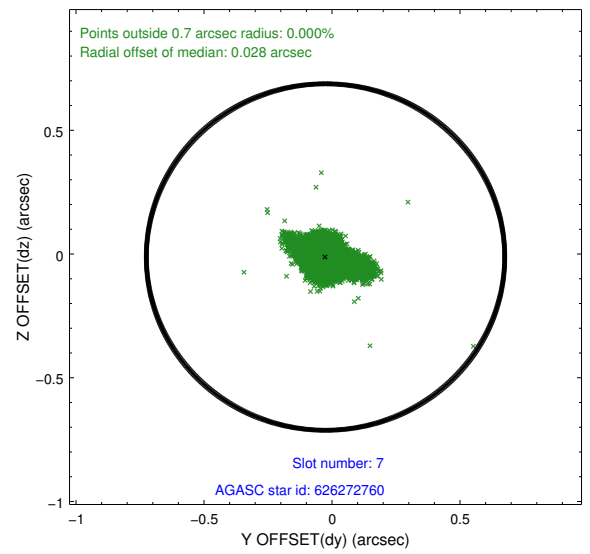
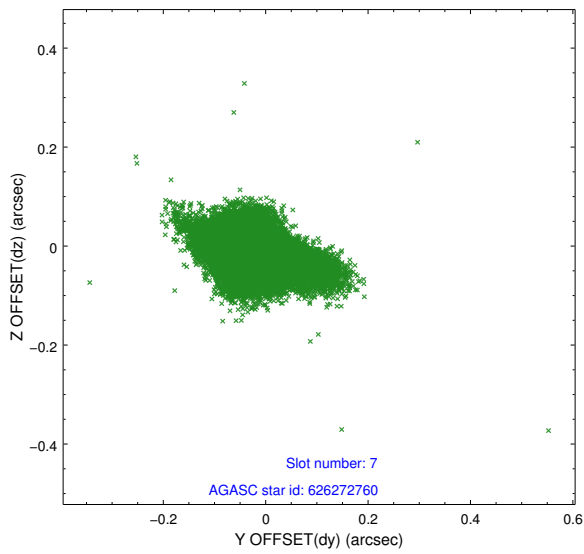
### 2.4.3 Slot 5



## 2.4.4 Slot 6

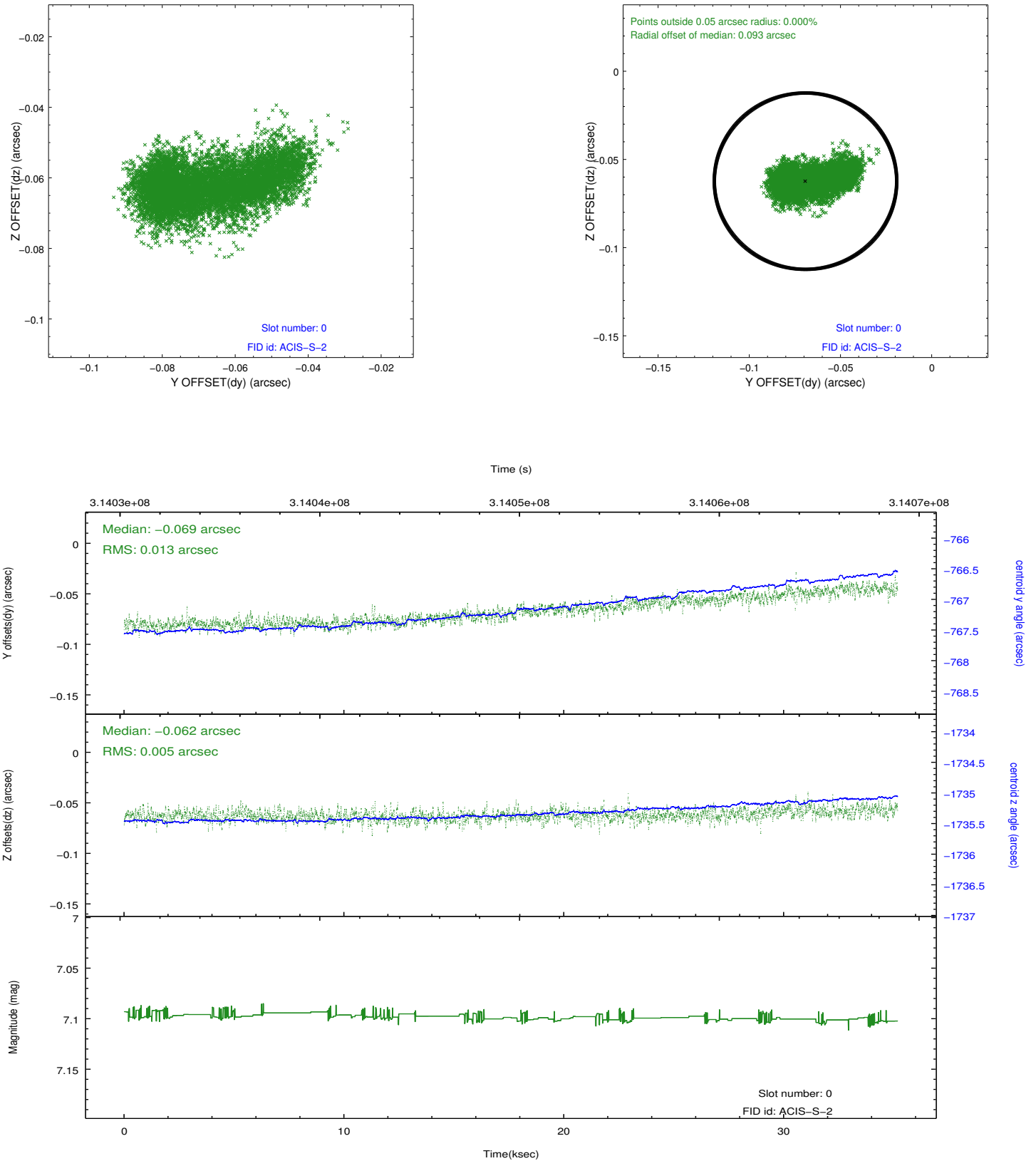


## 2.4.5 Slot 7

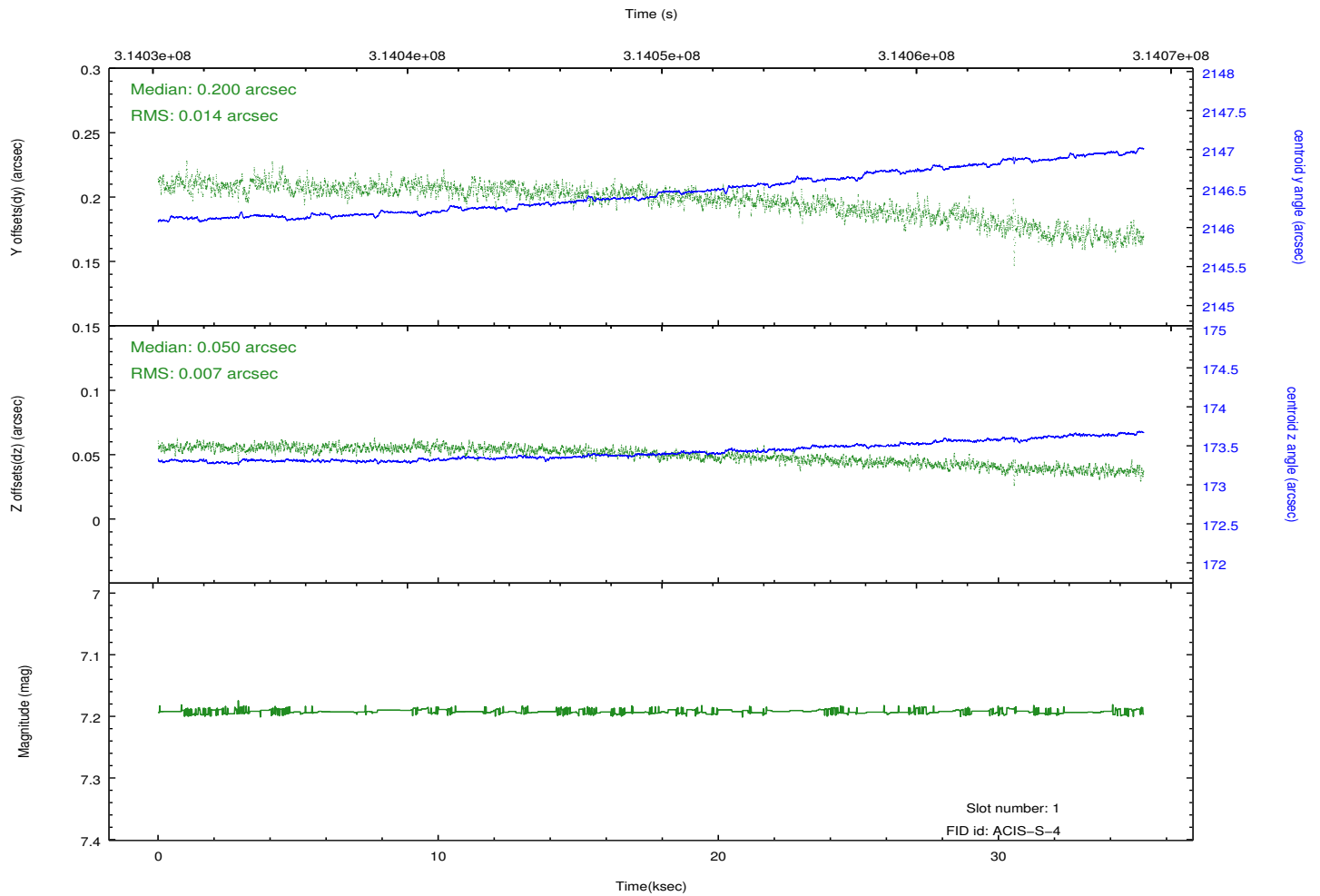
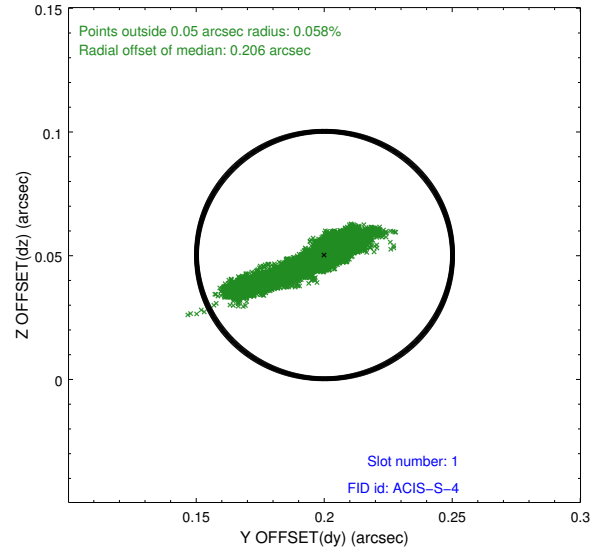
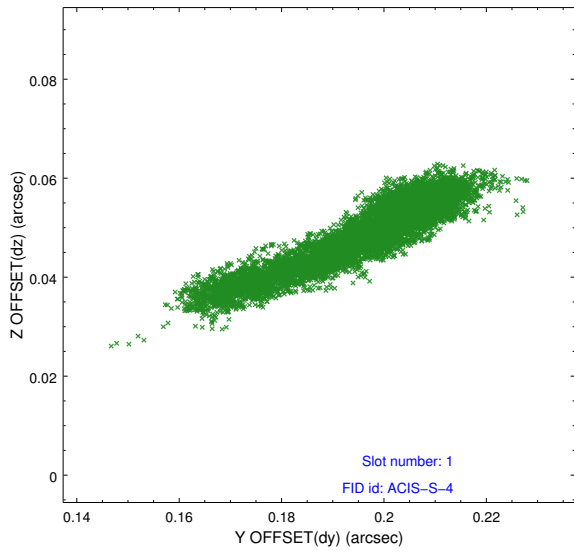


## 2.5 FID Slots

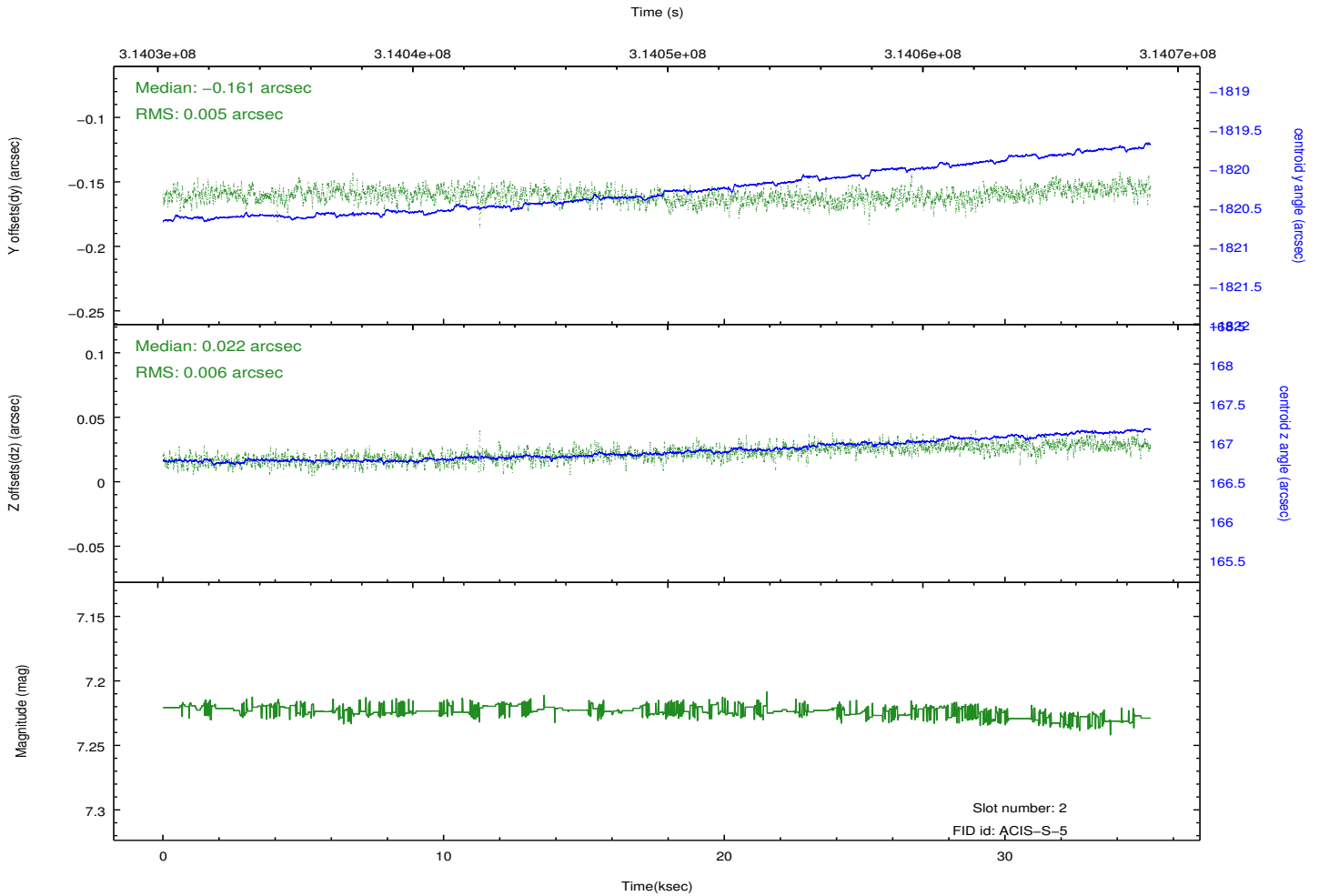
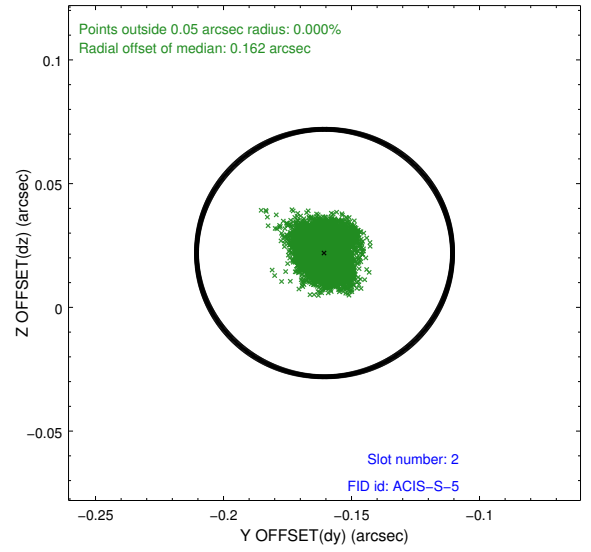
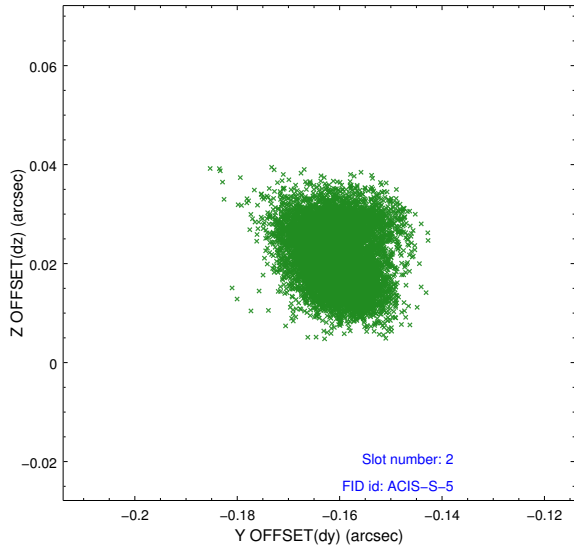
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.06.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.1743998

## A.2 Comments

No ACIS housekeeping data were collected and downlinked for this observation, due to an unexpected shutdown of DPA side B. The only negative impact on the observation is the lack of an accurate focal plane temperature which is used for instrument calibration. In order to process the data, ACIS housekeeping files were constructed that assumed a focal plane temperature of -118.5 degrees C. This value was determined by interpolating between the FP temp values before the anomaly and after DPA side B was turned back on. Data for the analysis was obtained from MTA group in dataseeker.