

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10316 - L2 Version 2  
Chandra X-Ray Center

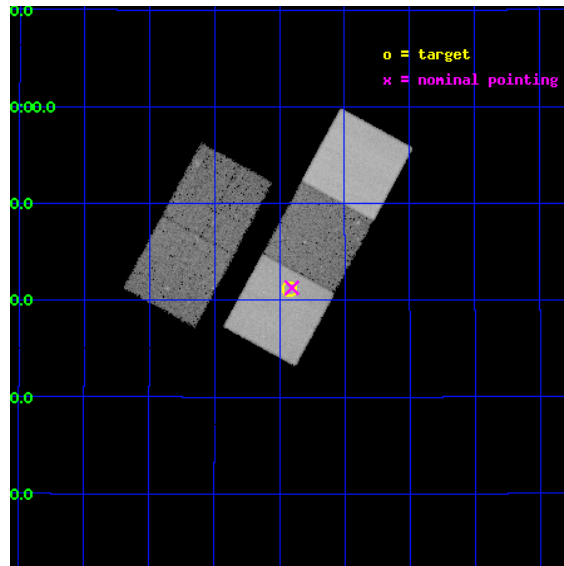
L2 Processing Date : Jun 2 2012

## 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

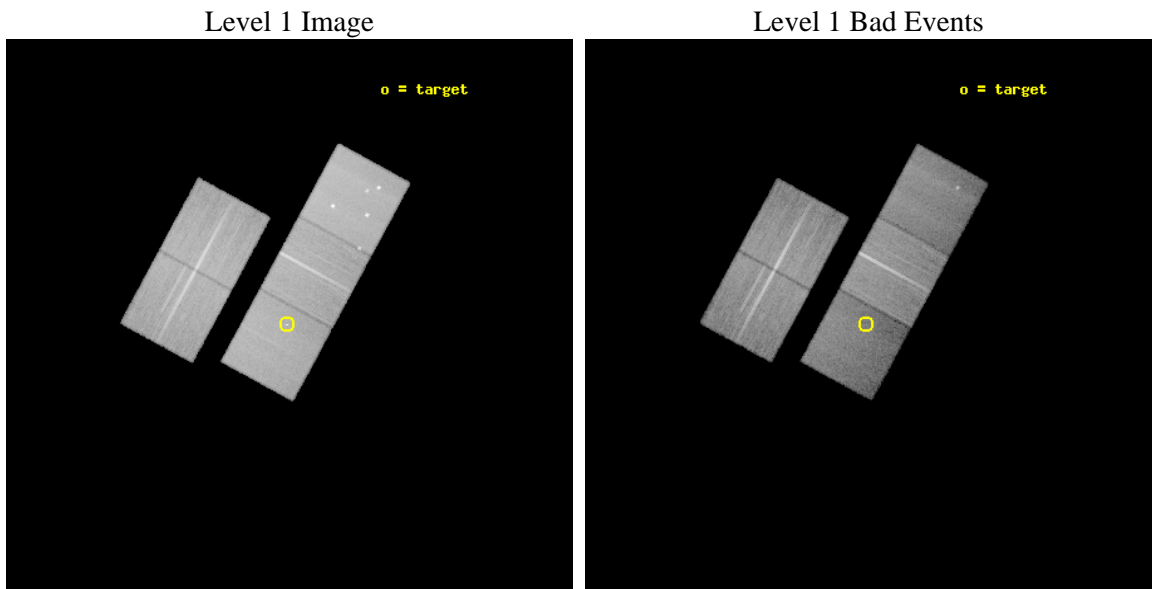
seq_num	701859	Sequence number
obs_id	10316	Observation id
title	Two to Tango? Binary Quasars, their Environments, and the Merger Hypothesis	Proposal title
observer	Dr. Paul Green	Principal investigator
object	SDSSJ1418+2441	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.730833	Observer's specified target RA [deg]
dec_targ	24.685806	Observer's specified target Dec [deg]
ra_nom	214.72620629424	Nominal RA [deg]
dec_nom	24.688188292898	Nominal Dec [deg]
roll_nom	118.5274567799	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30156.659871101	Sum of GTIs [s]
livetime	29762.640908875	Livetime [s]
ontime2	30153.354710758	Sum of GTIs [s]
ontime3	30143.972739816	Sum of GTIs [s]
ontime5	30156.618831098	Sum of GTIs [s]
ontime6	30153.436770916	Sum of GTIs [s]
ontime7	30156.659871101	Sum of GTIs [s]
l2events	329350	Number of level 2 events



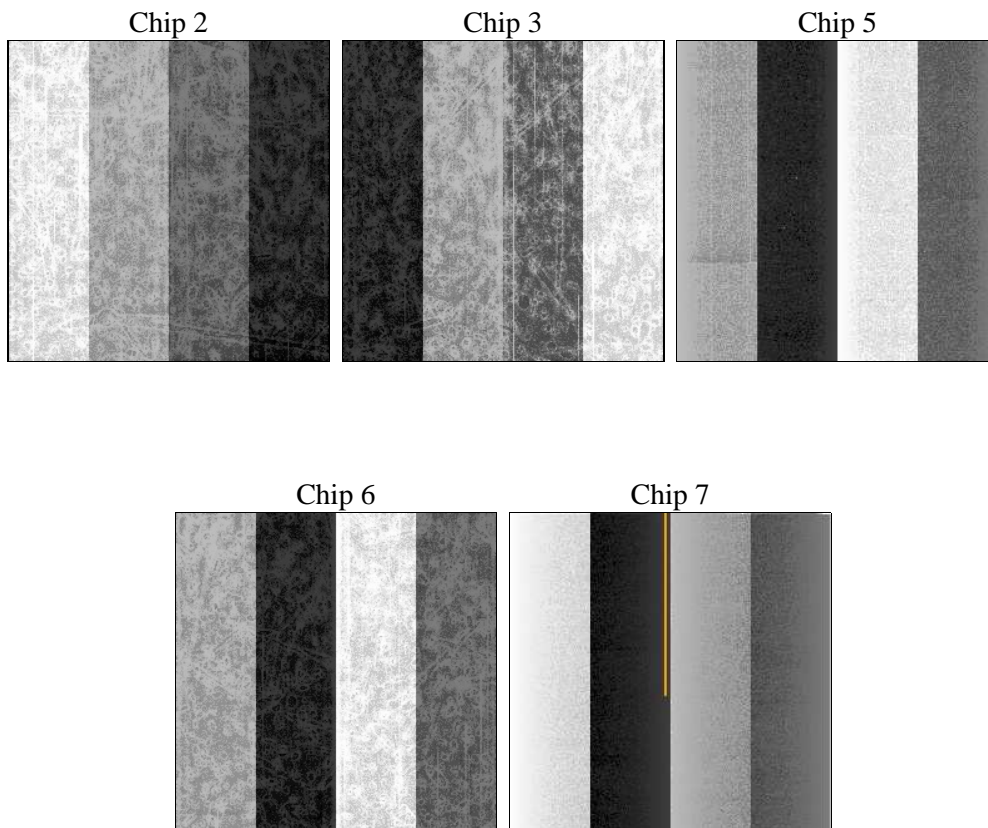
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30121.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30156.659871101	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	30153.354710758	Sum of GTIs [s]
date	2012-06-02T15:55:32	Date and time of file creation	ontime3	30143.972739816	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	30156.618831098	Sum of GTIs [s]
			ontime6	30153.436770916	Sum of GTIs [s]
			ontime7	30156.659871101	Sum of GTIs [s]
			l1events	1297446	Number of level 1 events

### 2.1.4 Events

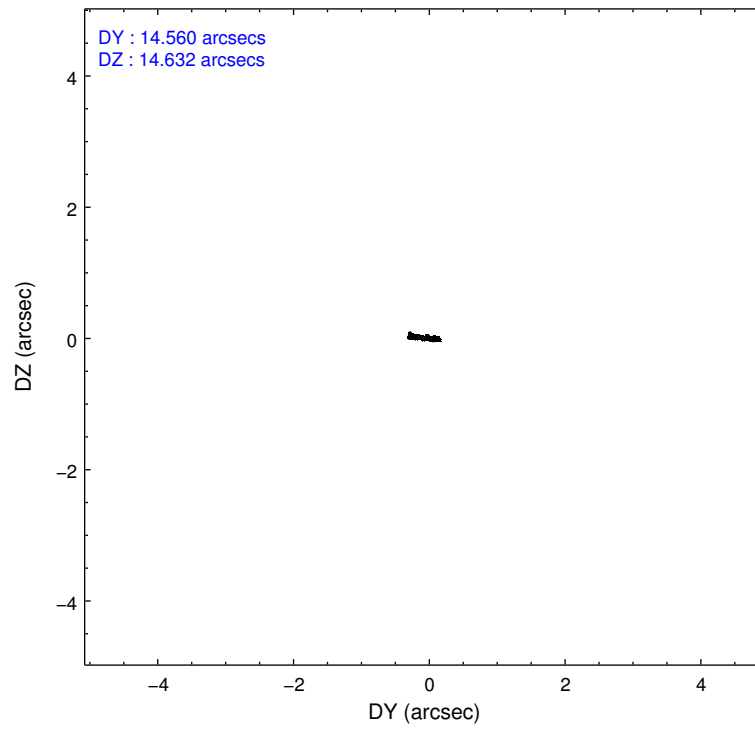
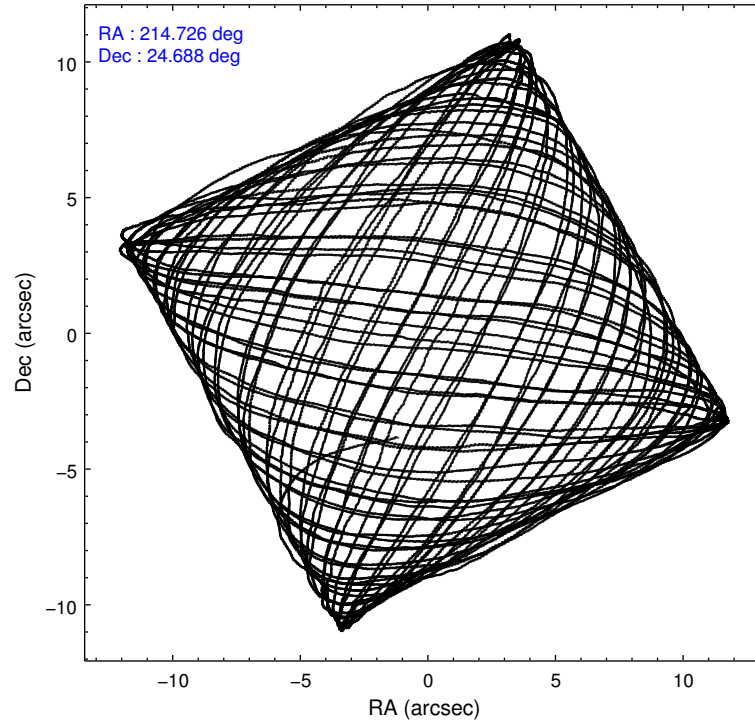
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	252479	237031	321004	247716	239216
rejected events	228754	214291	150008	222360	122124
rejected %	90%	90%	46%	89%	51%

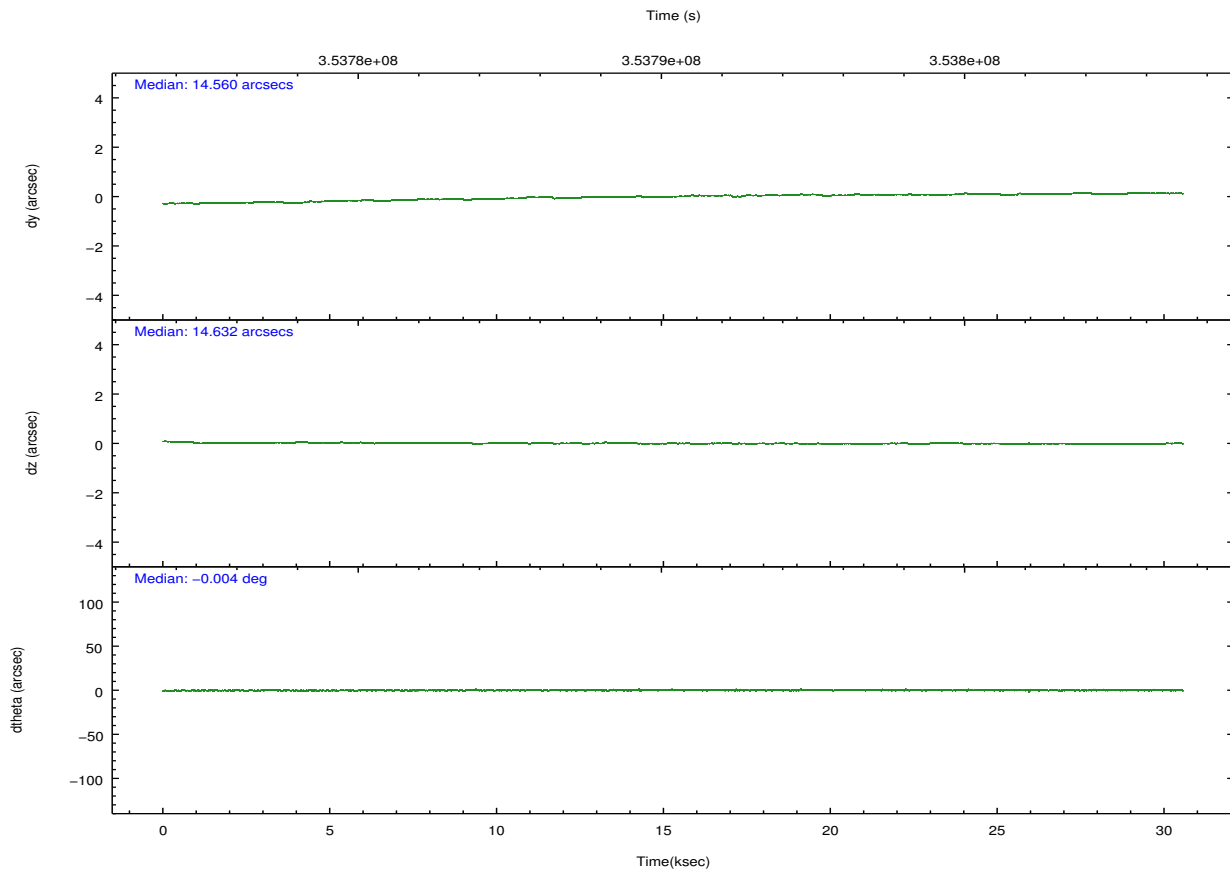
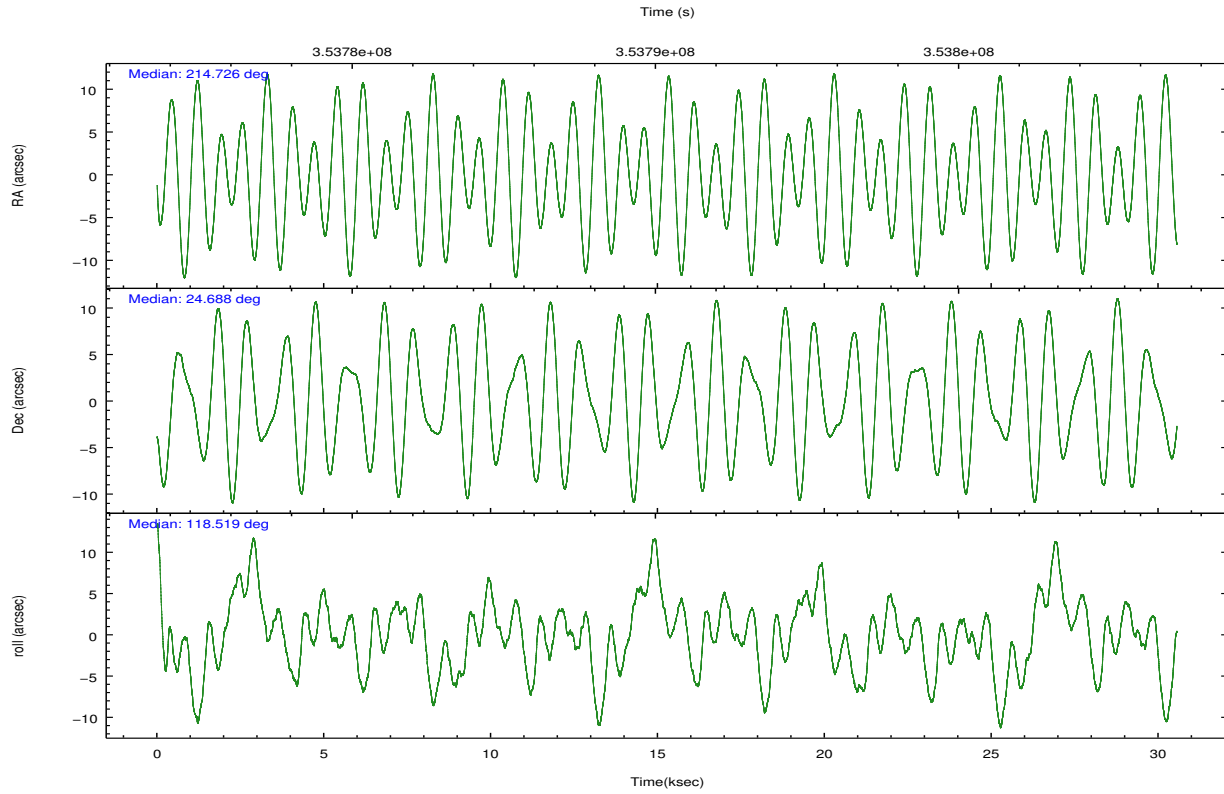
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	8773	8311	21436	9254	12195
	3%	3%	6%	3%	5%
grade 1 events	135	157	712	114	410
	0%	0%	0%	0%	0%
grade 2 events	5836	5066	51913	5604	25123
	2%	2%	16%	2%	10%
grade 3 events	2517	2555	7287	2664	10860
	0%	1%	2%	1%	4%
grade 4 events	2527	2524	6867	2646	10649
	1%	1%	2%	1%	4%
grade 5 events	6866	8501	25548	8784	25380
	2%	3%	7%	3%	10%
grade 6 events	4076	4288	83508	5191	58283
	1%	1%	26%	2%	24%
grade 7 events	221749	205629	123733	213459	96316
	87%	86%	38%	86%	40%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	214.752076	214.7262062942361	CCD I2 on	O2	Y
[deg] Pointing Dec	24.674264	24.6881882928984	CCD I3 on	O3	Y
[deg] Pointing Roll	118.360024	118.527456779895	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	353775550.184000	353774494.47579	CCD S5 on	N	N
Observation start date	2009-03-18T14:58:04	2009-03-18T14:41:34	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	353805671.184000	353806095.73986	On-chip summing requested	N	N
Observation end date	2009-03-18T23:20:05	2009-03-18T23:28:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



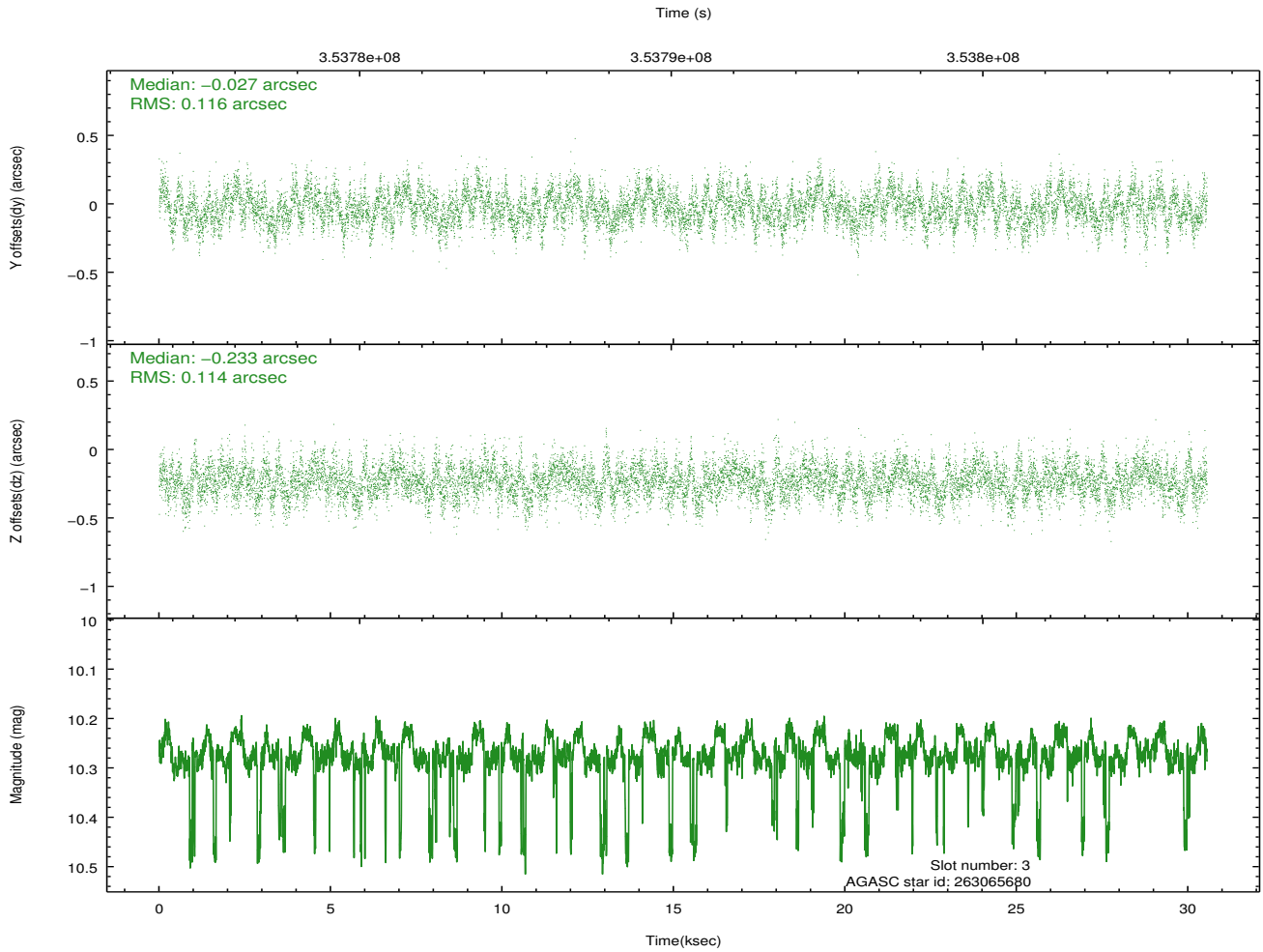
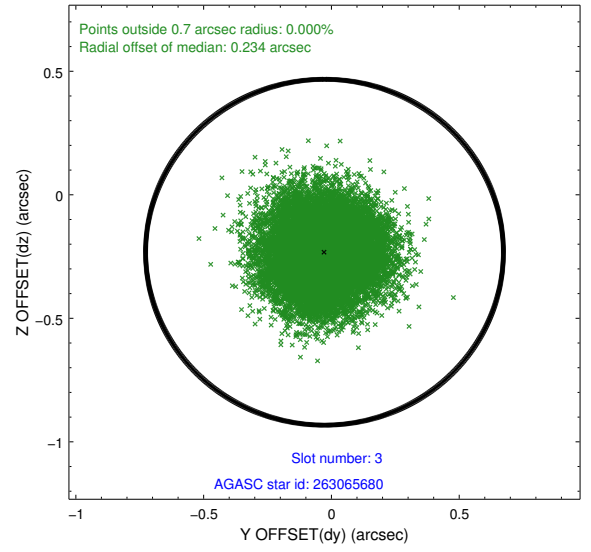
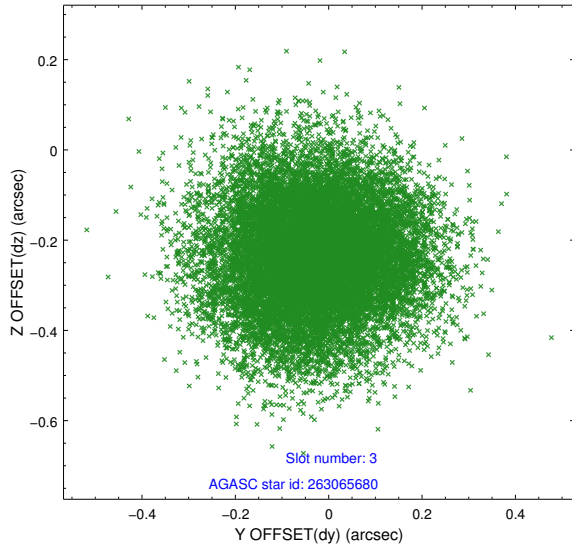


### Slot Statistics

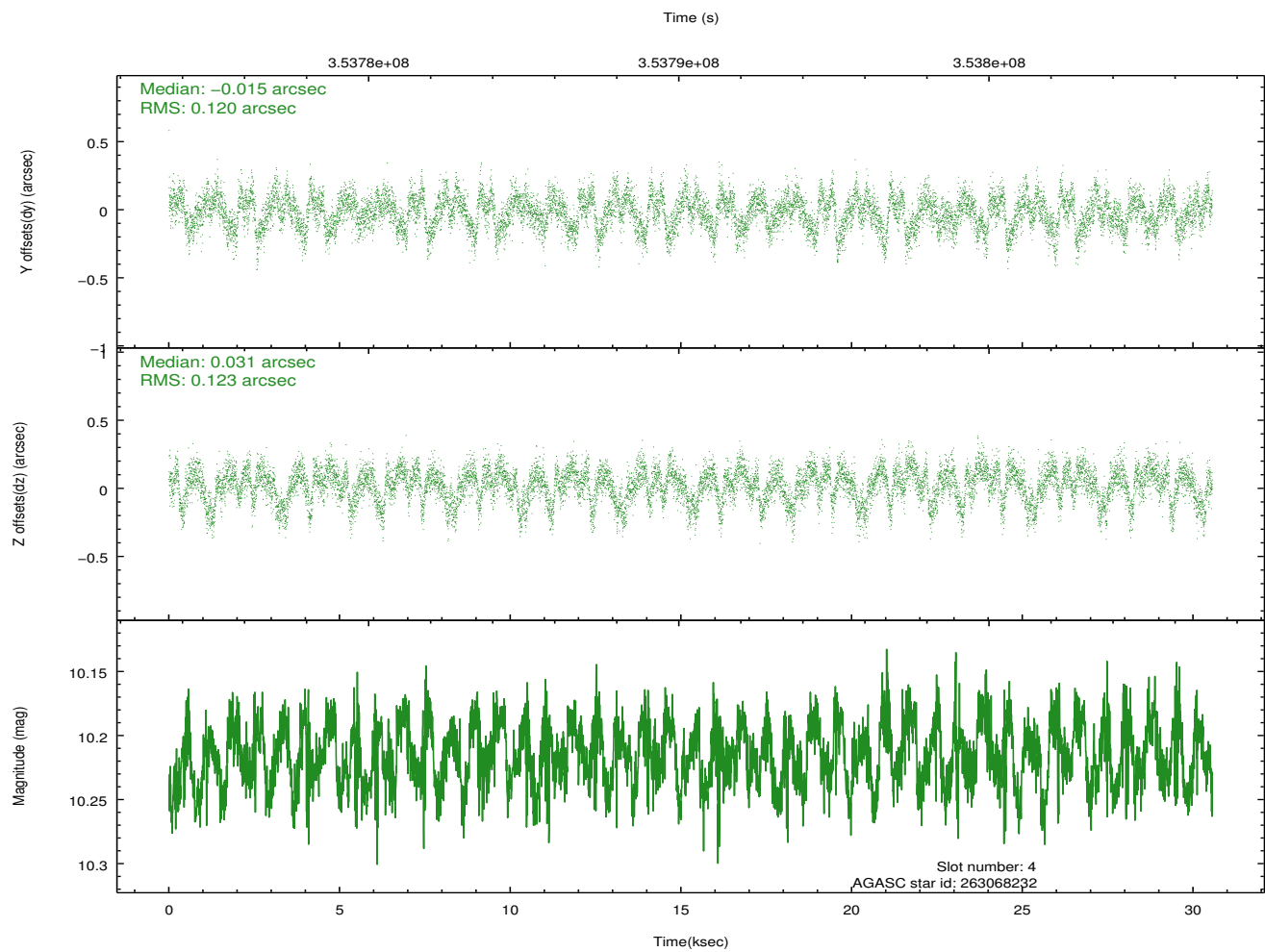
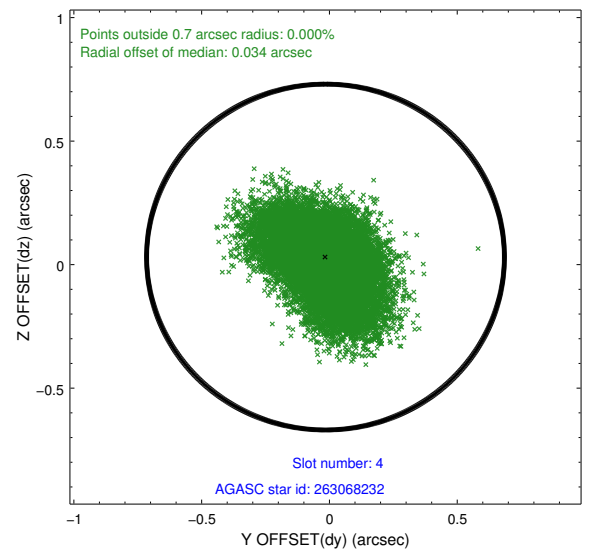
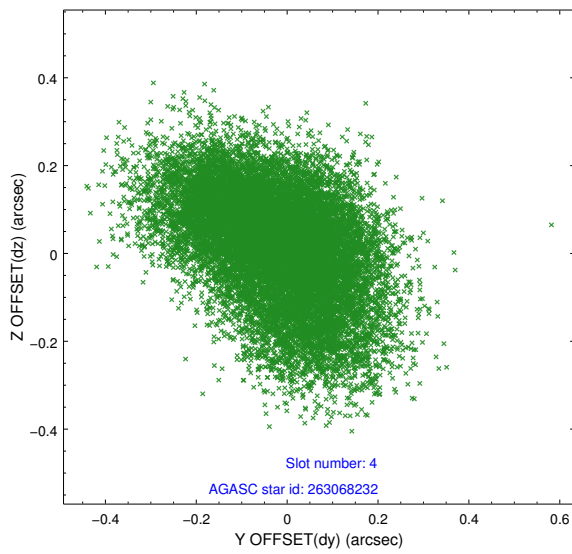
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	7452	-0.078	-0.024	0.007	0.012	0.000000	0.000000	-767.56	-1735.98
1	FID	ACIS-S-4	7.00	7452	0.188	0.044	0.006	0.011	0.000000	0.000000	2145.94	172.51
2	FID	ACIS-S-5	7.03	7453	-0.142	-0.012	0.008	0.014	0.000000	0.000000	-1820.38	166.19
3	GUIDE	263065680	10.27	14816	-0.027	-0.233	0.175	0.279	214.256976	24.497205	212.03	1728.73
4	GUIDE	263068232	10.22	14883	-0.015	0.031	0.182	0.301	214.843239	24.161427	-1766.54	613.57
5	GUIDE	263068920	9.53	14883	0.038	0.061	0.116	0.214	214.588436	23.999044	-1883.15	1628.24
6	GUIDE	263195064	9.28	14827	0.123	0.060	0.131	0.206	215.129983	24.745063	-360.44	-1208.57
7	GUIDE	263464688	9.18	14894	-0.126	0.100	0.155	0.297	214.654702	25.305283	2149.96	-799.55

## 2.4 Star Slots

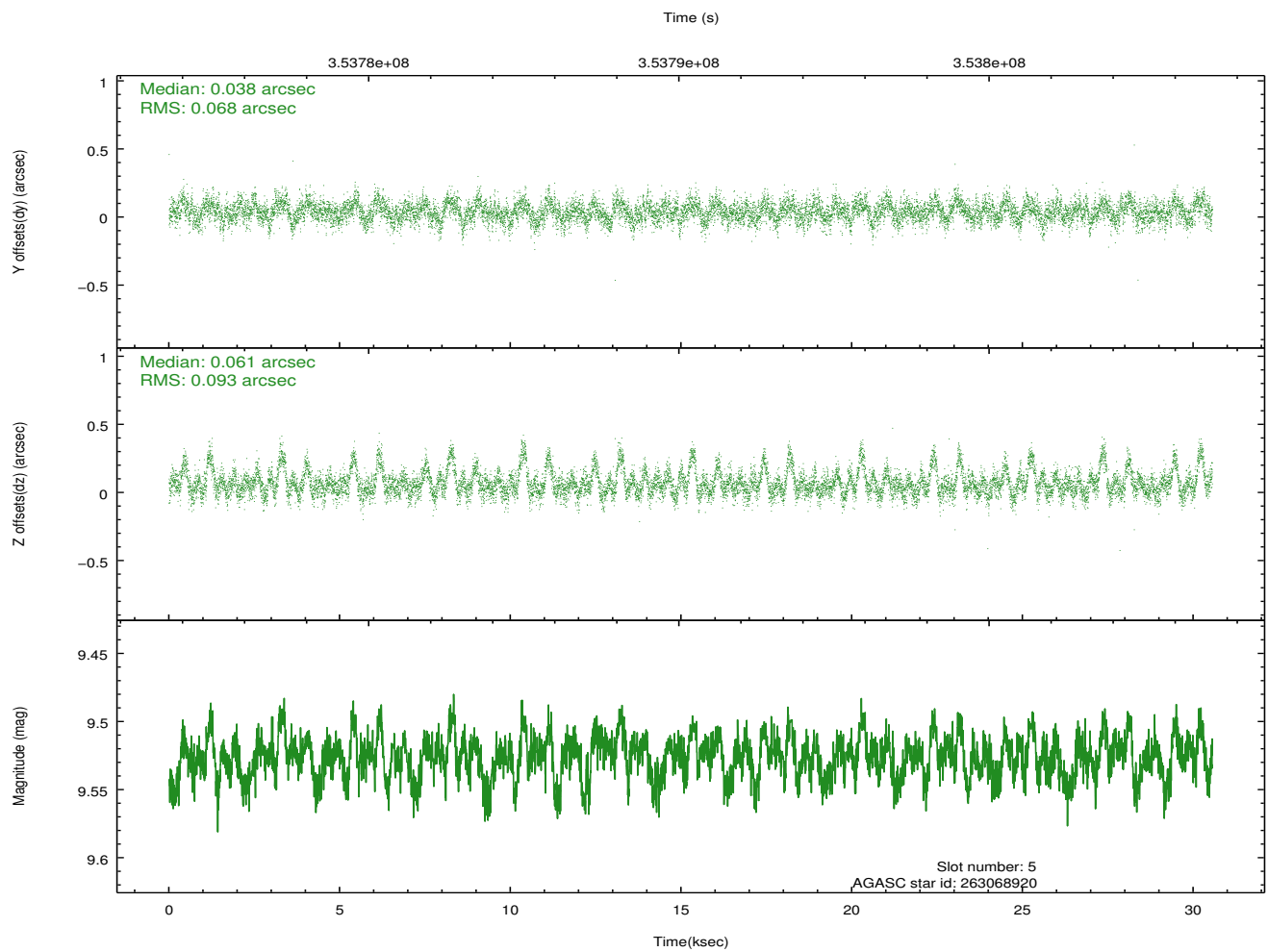
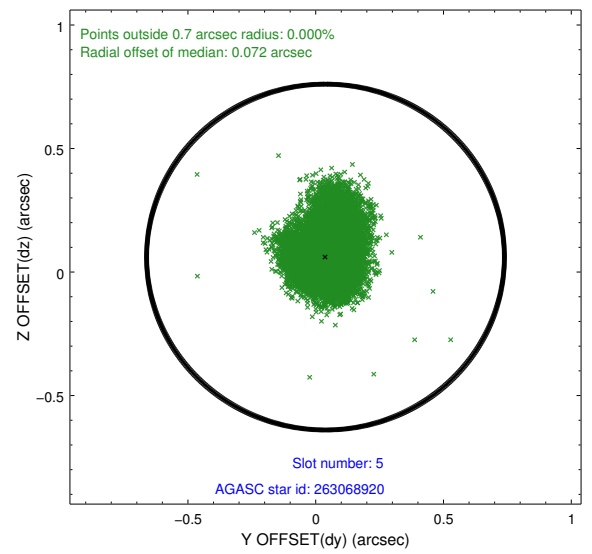
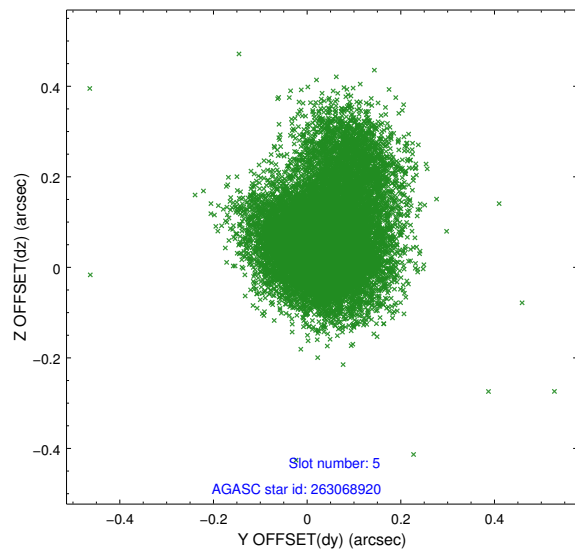
### 2.4.1 Slot 3



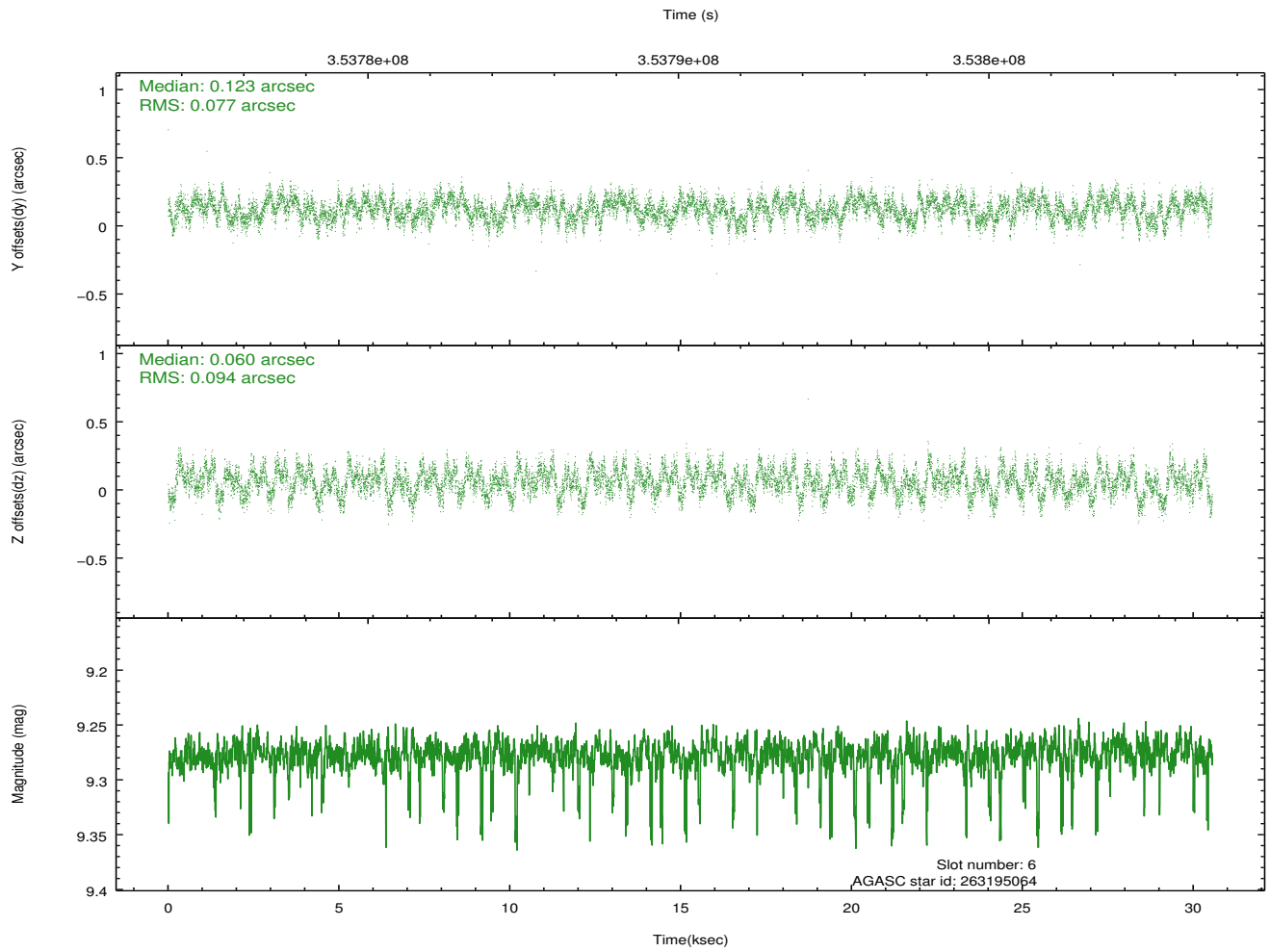
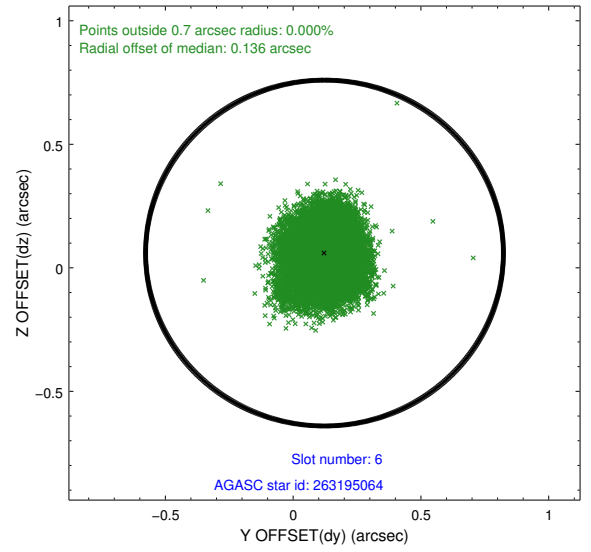
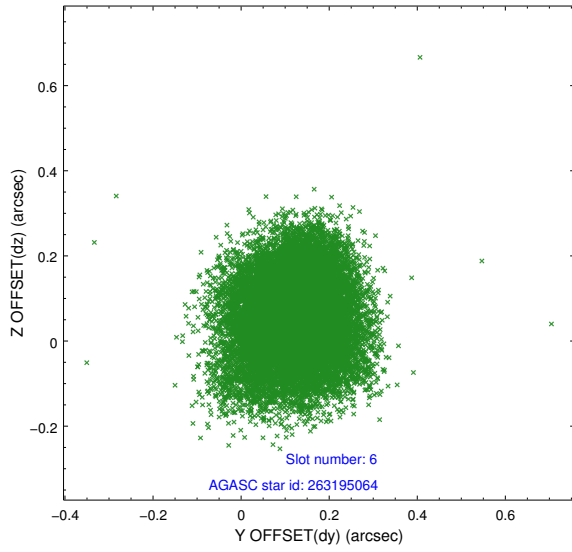
## 2.4.2 Slot 4



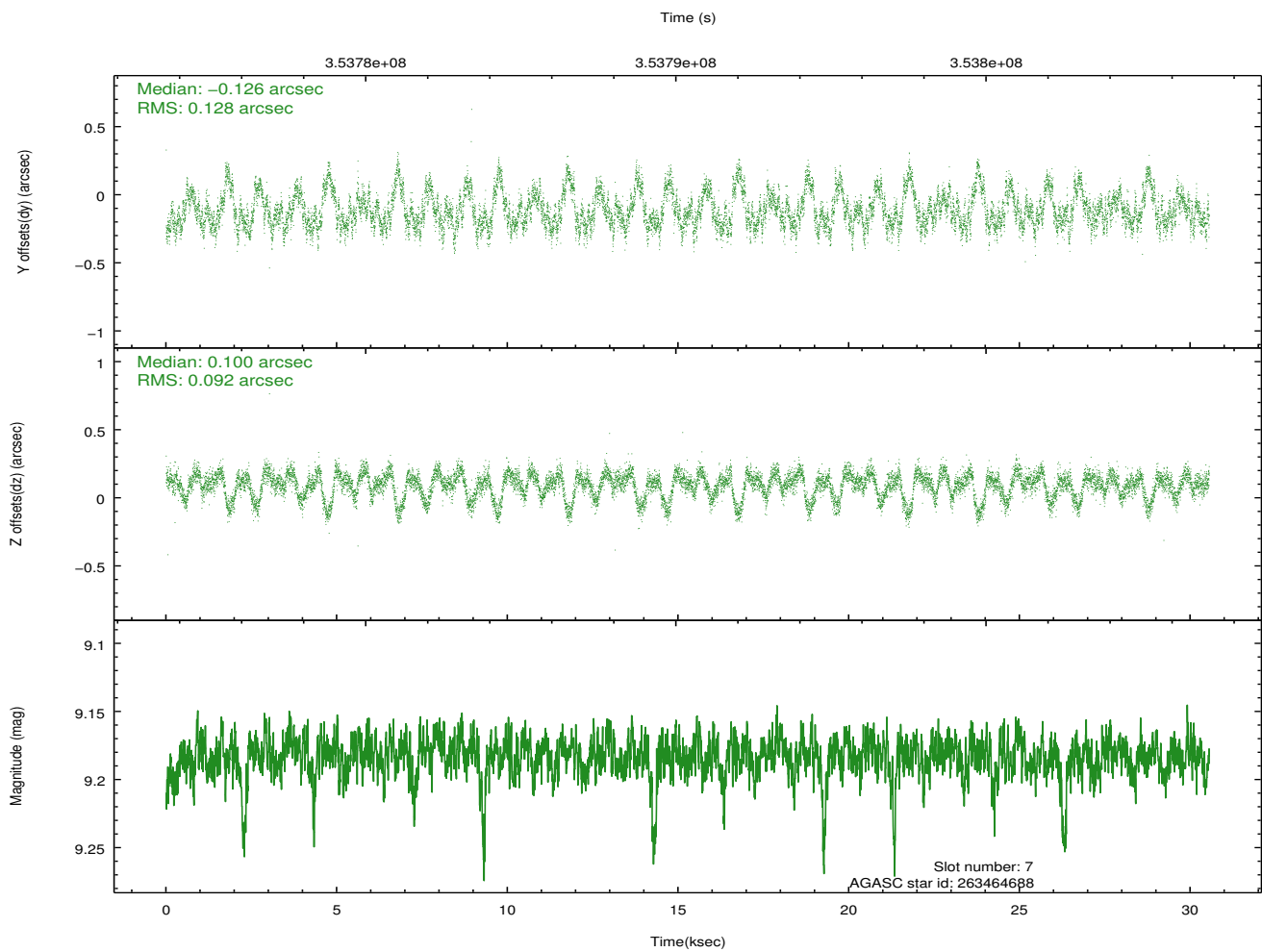
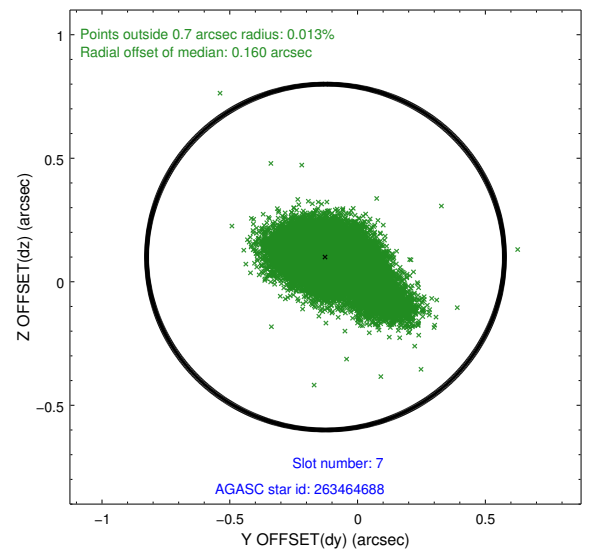
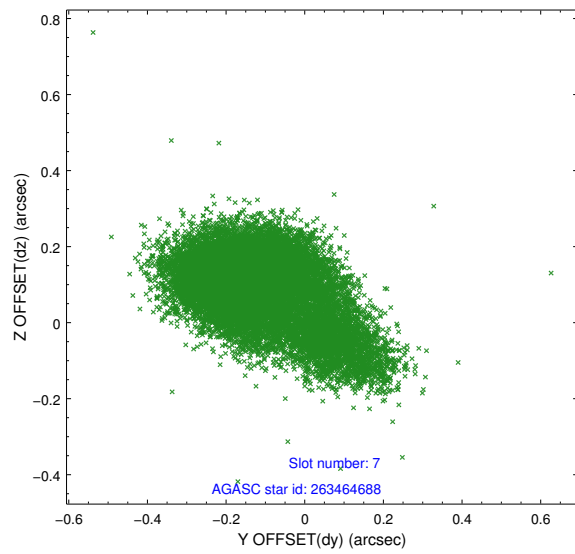
### 2.4.3 Slot 5



### 2.4.4 Slot 6

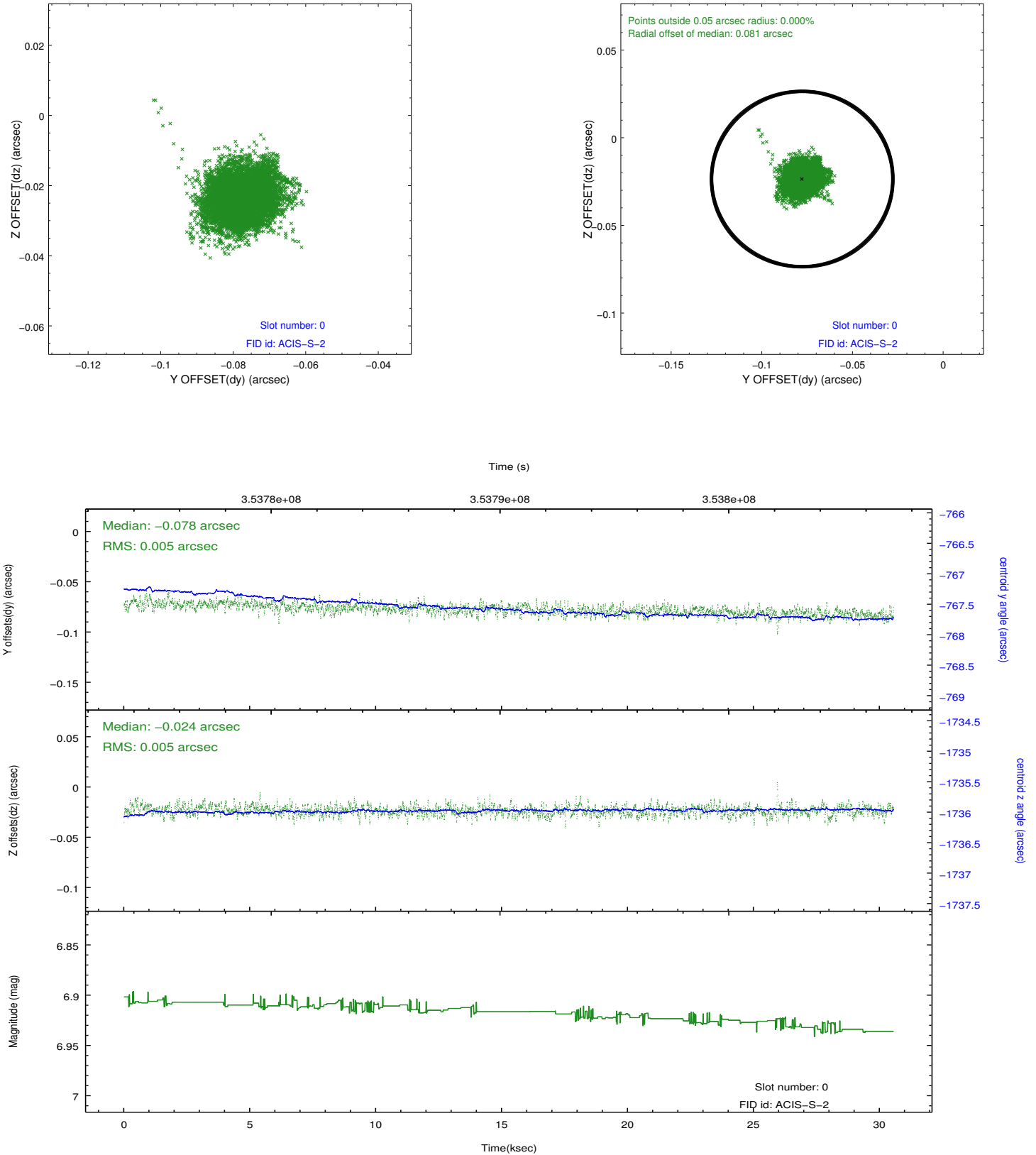


## 2.4.5 Slot 7

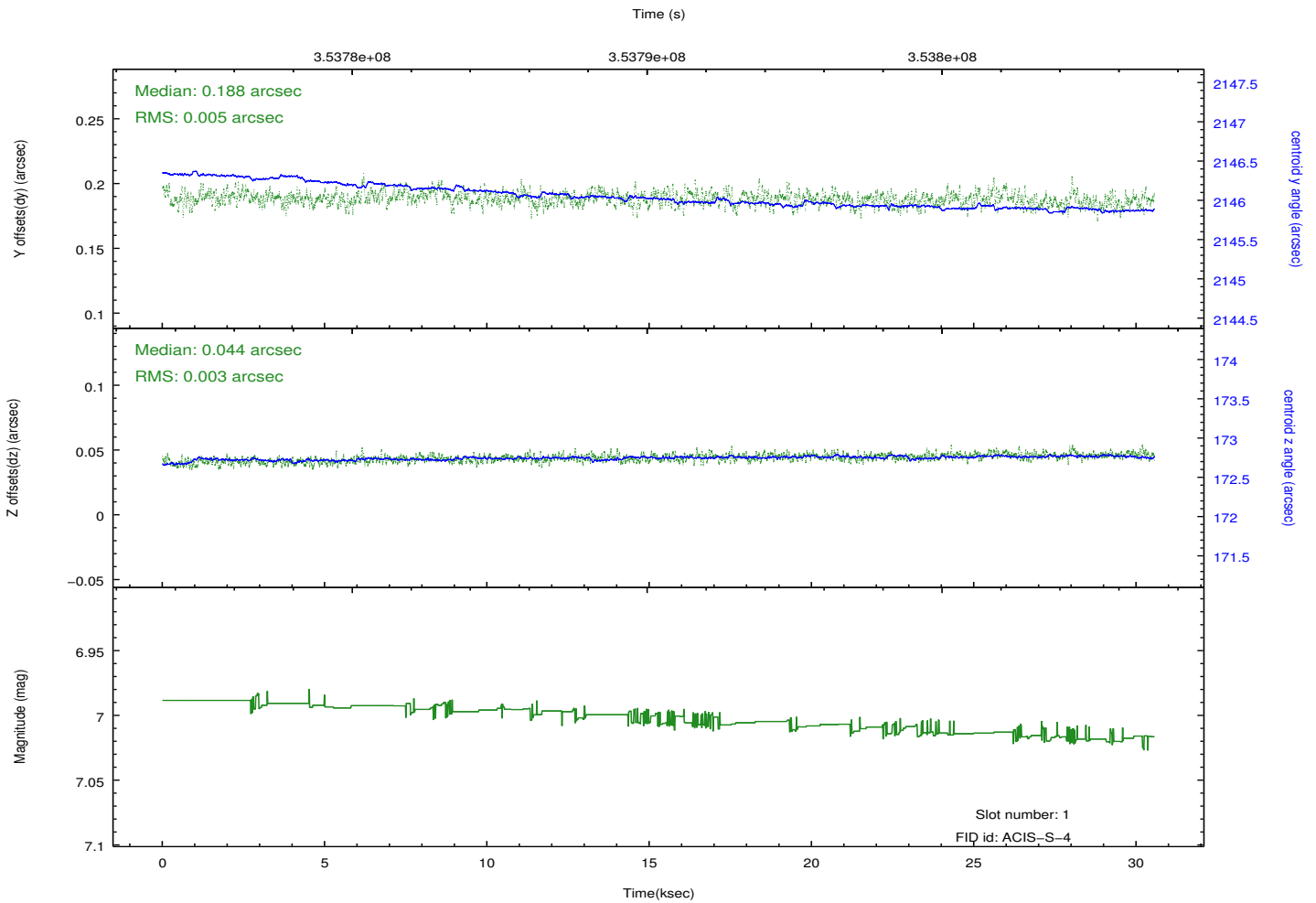
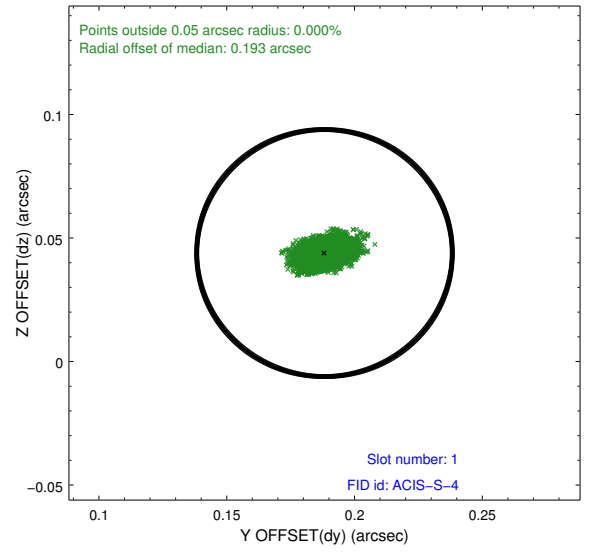
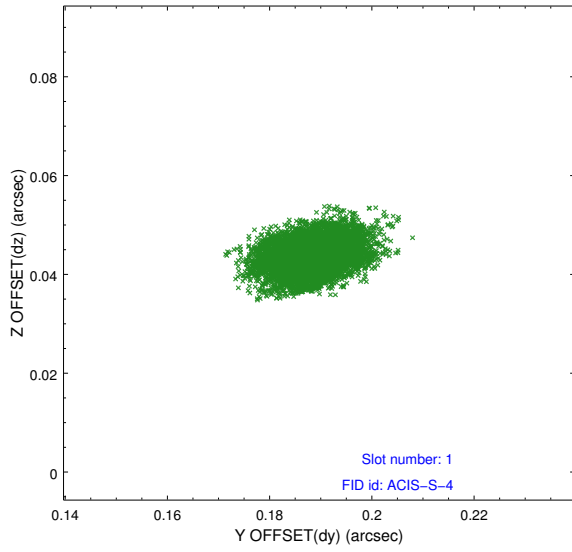


## 2.5 FID Slots

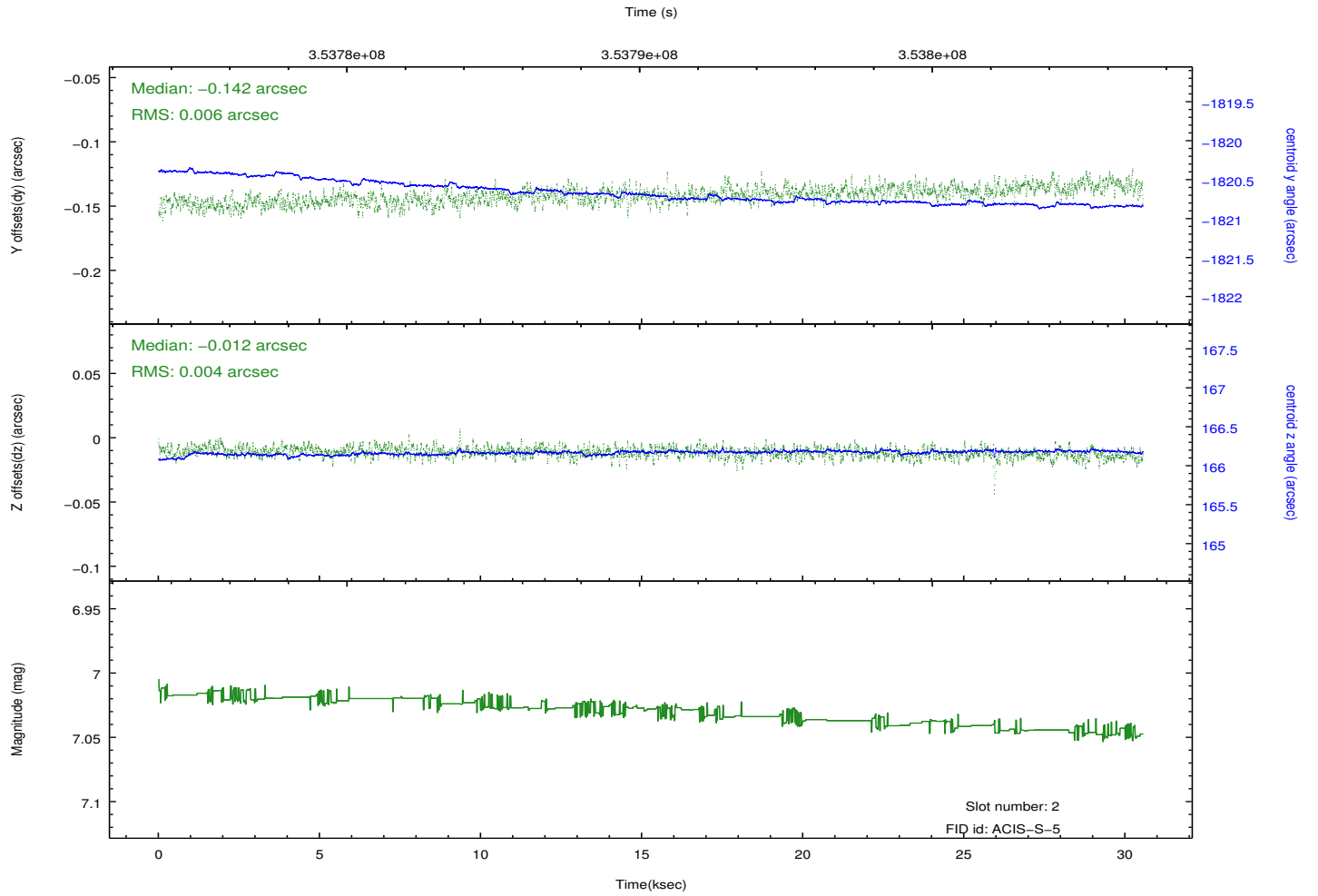
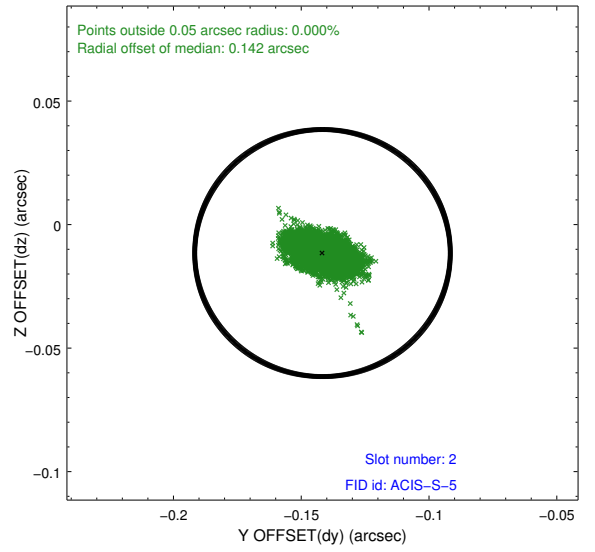
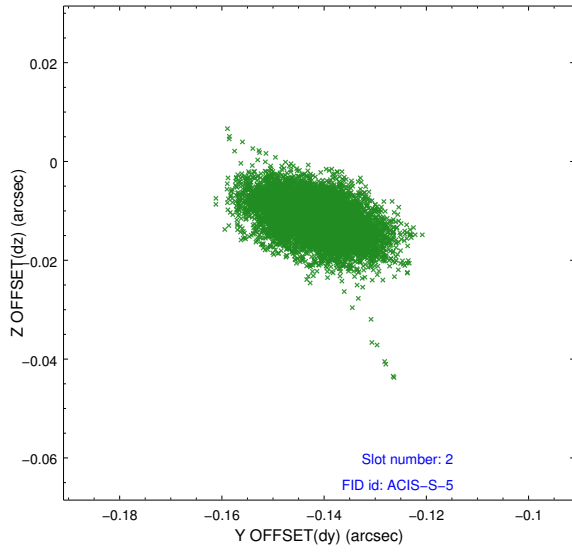
### 2.5.1 Slot 0



## 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)	2012.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.1568002

## A.2 Comments

Joint proposal with NOAO.