

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16083 - L2 Version 1  
Chandra X-Ray Center

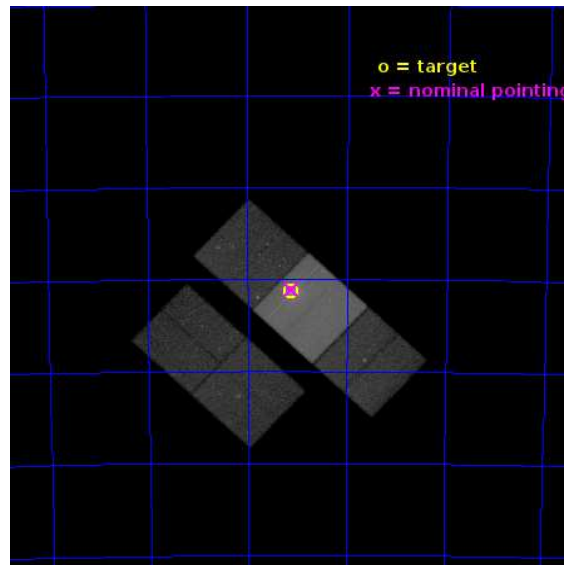
L2 Processing Date : Jul 20 2014

## 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

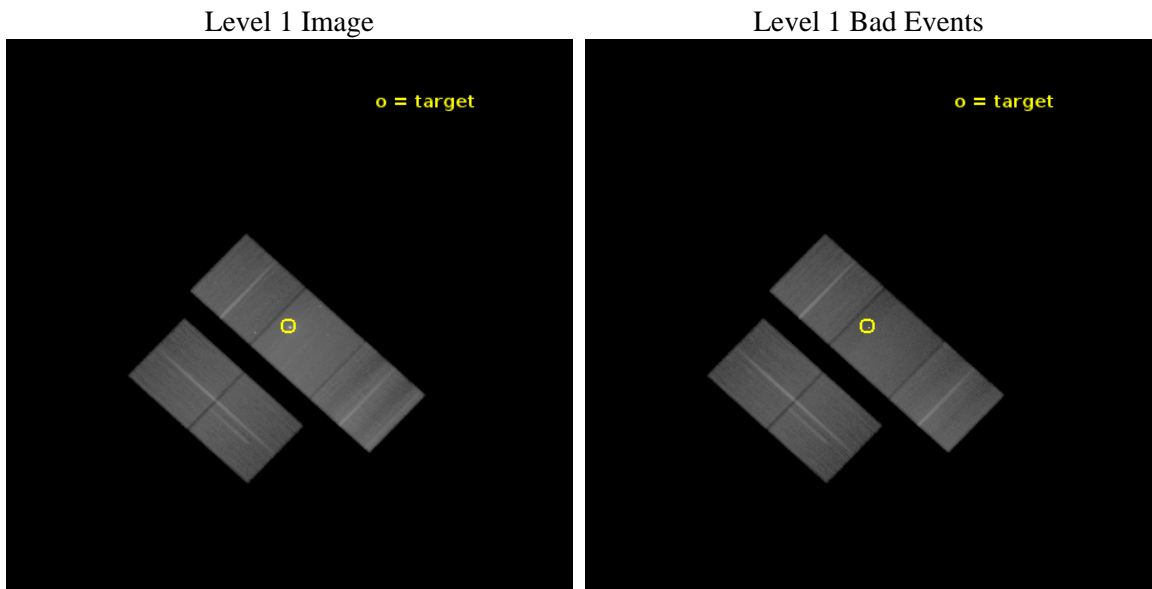
seq_num	702974	Sequence number
obs_id	16083	Observation id
title	Testing relativistic feedback at crucial jet power	Proposal title
observer	Prof Diana Worrall	Principal investigator
object	PKS B2152-699-HIC	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	329.280833	Observer's specified target RA [deg]
dec_targ	-69.687917	Observer's specified target Dec [deg]
ra_nom	329.27931498143	Nominal RA [deg]
dec_nom	-69.684848496069	Nominal Dec [deg]
roll_nom	43.155201938674	Nominal Roll [deg]
revision	1	Processing version of data
ontime	122769.30094421	Sum of GTIs [s]
livetime	121165.22964593	Livetime [s]
ontime2	122756.73674268	Sum of GTIs [s]
ontime3	122759.87780303	Sum of GTIs [s]
ontime6	122756.73683232	Sum of GTIs [s]
ontime7	122769.30094421	Sum of GTIs [s]
ontime8	122763.01884335	Sum of GTIs [s]
l2events	661154	Number of level 2 events



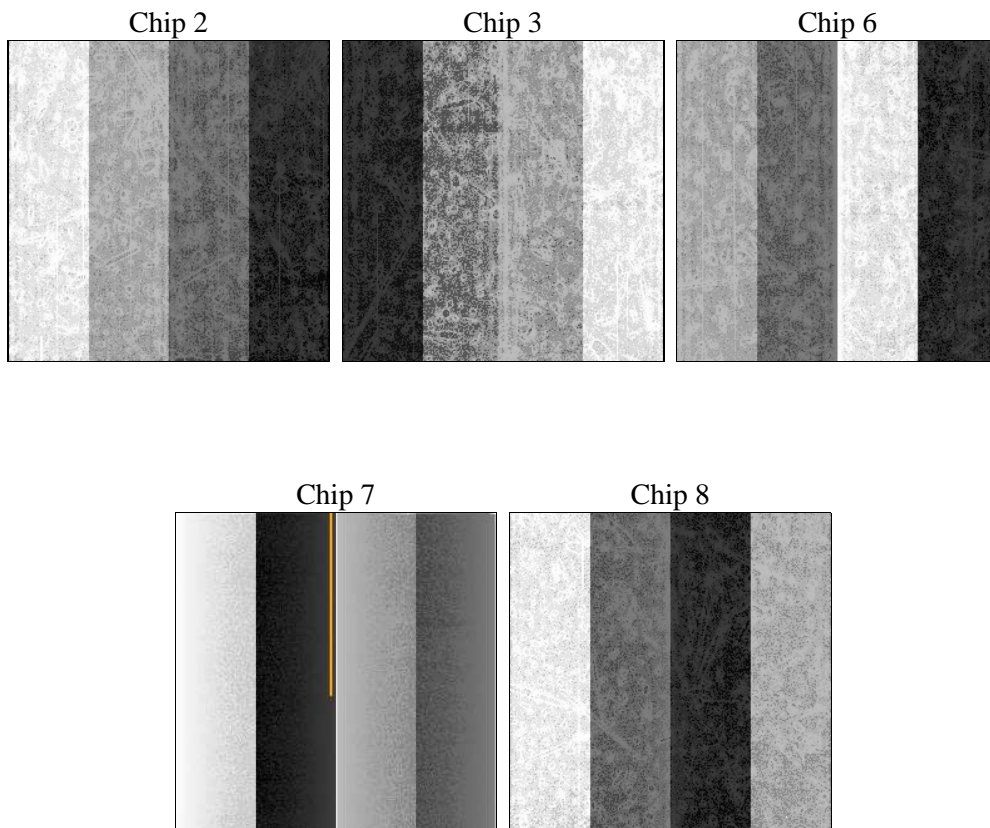
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	122700.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	122769.30094421	Sum of GTIs [s]
caldbver	4.6.2	&#160	ontime2	122756.73674268	Sum of GTIs [s]
date	2014-07-21T01:25:26	Date and time of file creation	ontime3	122759.87780303	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	122756.73683232	Sum of GTIs [s]
			ontime7	122769.30094421	Sum of GTIs [s]
			ontime8	122763.01884335	Sum of GTIs [s]
			l1events	3414178	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	559837	556402	605801	910441	781697
rejected events	493392	491289	527678	493982	576042
rejected %	88%	88%	87%	54%	73%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	23713	22694	29076	47229	58542
	4%	4%	4%	5%	7%
grade 1 events	305	338	280	1913	623
	0%	0%	0%	0%	0%
grade 2 events	16057	14673	17148	87788	49293
	2%	2%	2%	9%	6%
grade 3 events	6559	6834	7487	35913	21431
	1%	1%	1%	3%	2%
grade 4 events	6929	6962	7240	35449	20153
	1%	1%	1%	3%	2%
grade 5 events	25523	31450	31151	87522	44812
	4%	5%	5%	9%	5%
grade 6 events	13190	13950	17174	210088	56240
	2%	2%	2%	23%	7%
grade 7 events	467561	459501	496245	404539	530603
	83%	82%	81%	44%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	329.257401	329.2793149814266	CCD I2 on	O3	Y
[deg] Pointing Dec	-69.711213	-69.68484849606938	CCD I3 on	O2	Y
[deg] Pointing Roll	42.978019	43.15520193867375	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	O1	Y
[s] Observation start time (MET)	522138100.184000	522136889.9311	CCD S5 on	N	N
Observation start date	2014-07-19T06:20:33	2014-07-19T06:01:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	522260800.184000	522261764.66303	On-chip summing requested	N	N
Observation end date	2014-07-20T16:25:33	2014-07-20T16:42:44	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



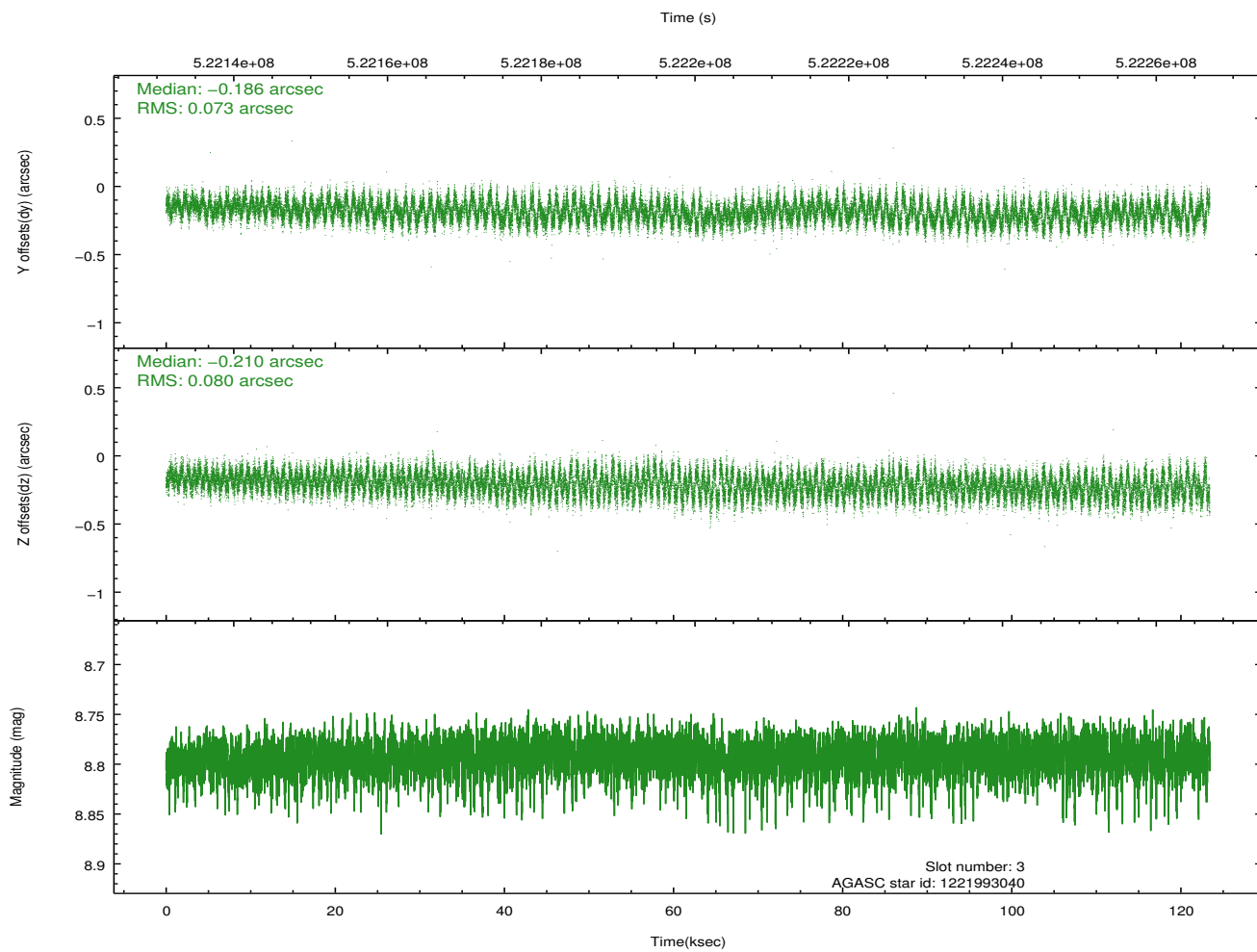
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.01	30106	-0.127	-0.044	0.042	0.064	0.000000	0.000000	-775.62	-1739.24
1	FID	ACIS-S-4	7.10	30105	0.298	0.069	0.060	0.080	0.000000	0.000000	2138.15	169.45
2	FID	ACIS-S-5	7.12	30101	-0.209	-0.031	0.034	0.044	0.000000	0.000000	-1828.65	162.92
3	GUIDE	1221993040	8.79	60120	-0.186	-0.210	0.117	0.180	329.911887	-69.225732	1799.54	705.16
4	GUIDE	1222510376	8.89	60181	0.208	0.283	0.126	0.197	328.974100	-70.536772	-2274.37	-1943.59
5	GUIDE	1222515472	9.40	60166	-0.108	-0.351	0.236	0.367	327.696970	-69.436721	-786.76	2047.92
6	GUIDE	1222519848	6.96	60209	0.086	0.195	0.106	0.166	328.892628	-70.068316	-1204.71	-636.37
7	GUIDE	1222639984	8.86	60170	-0.009	0.097	0.098	0.155	330.310234	-69.445781	1616.74	-215.90

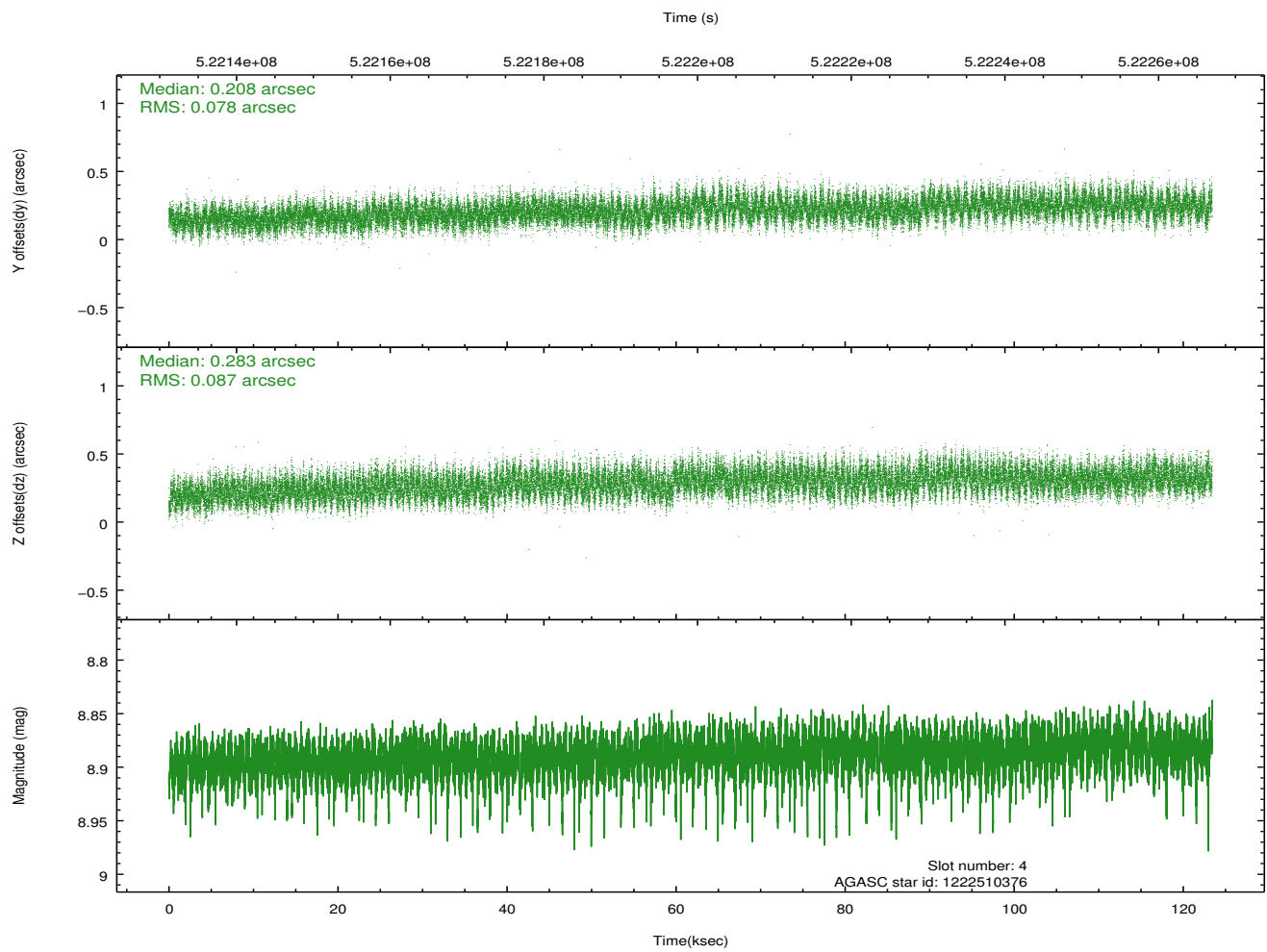
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## 2.4 Star Slots

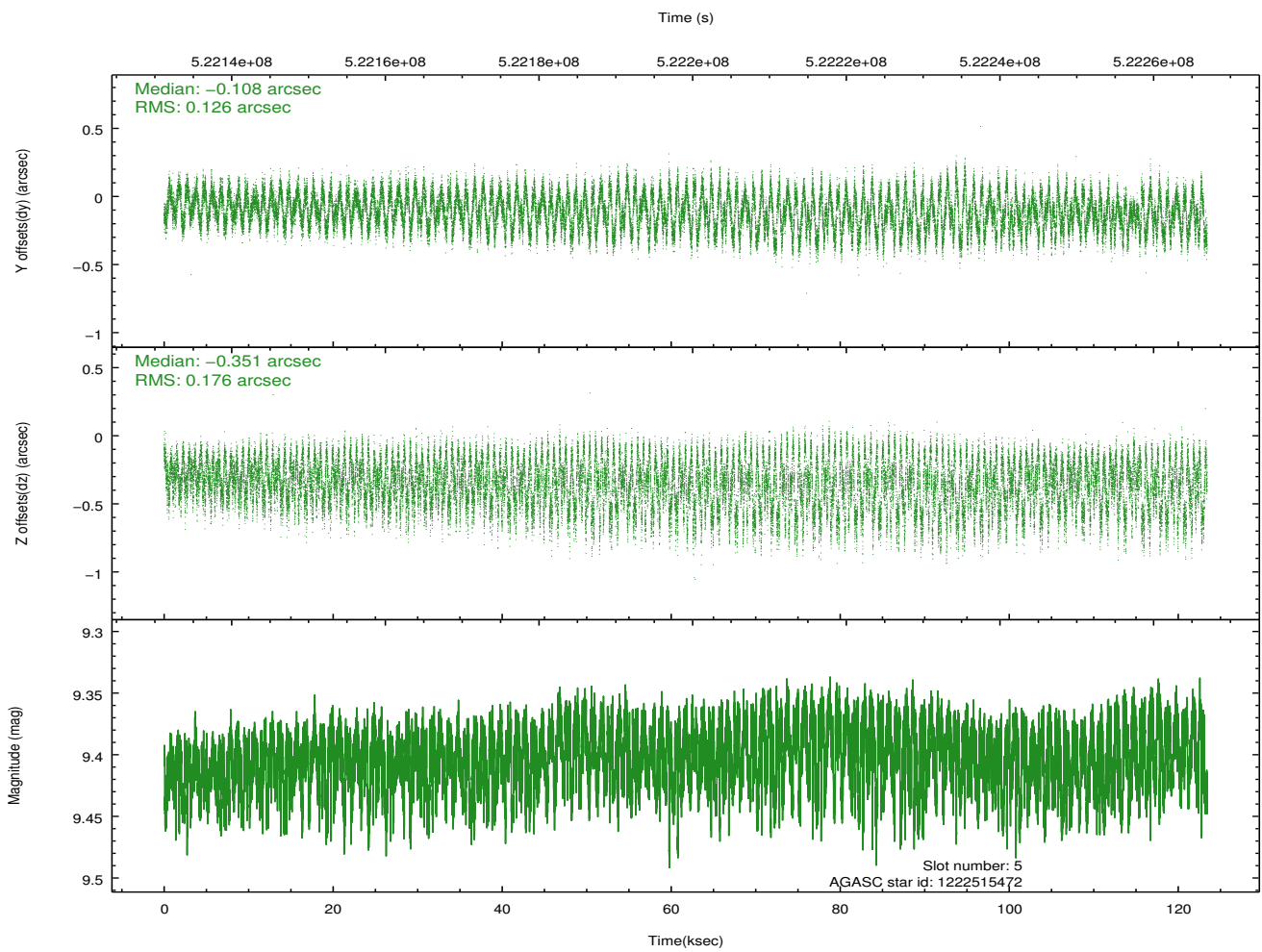
### 2.4.1 Slot 3



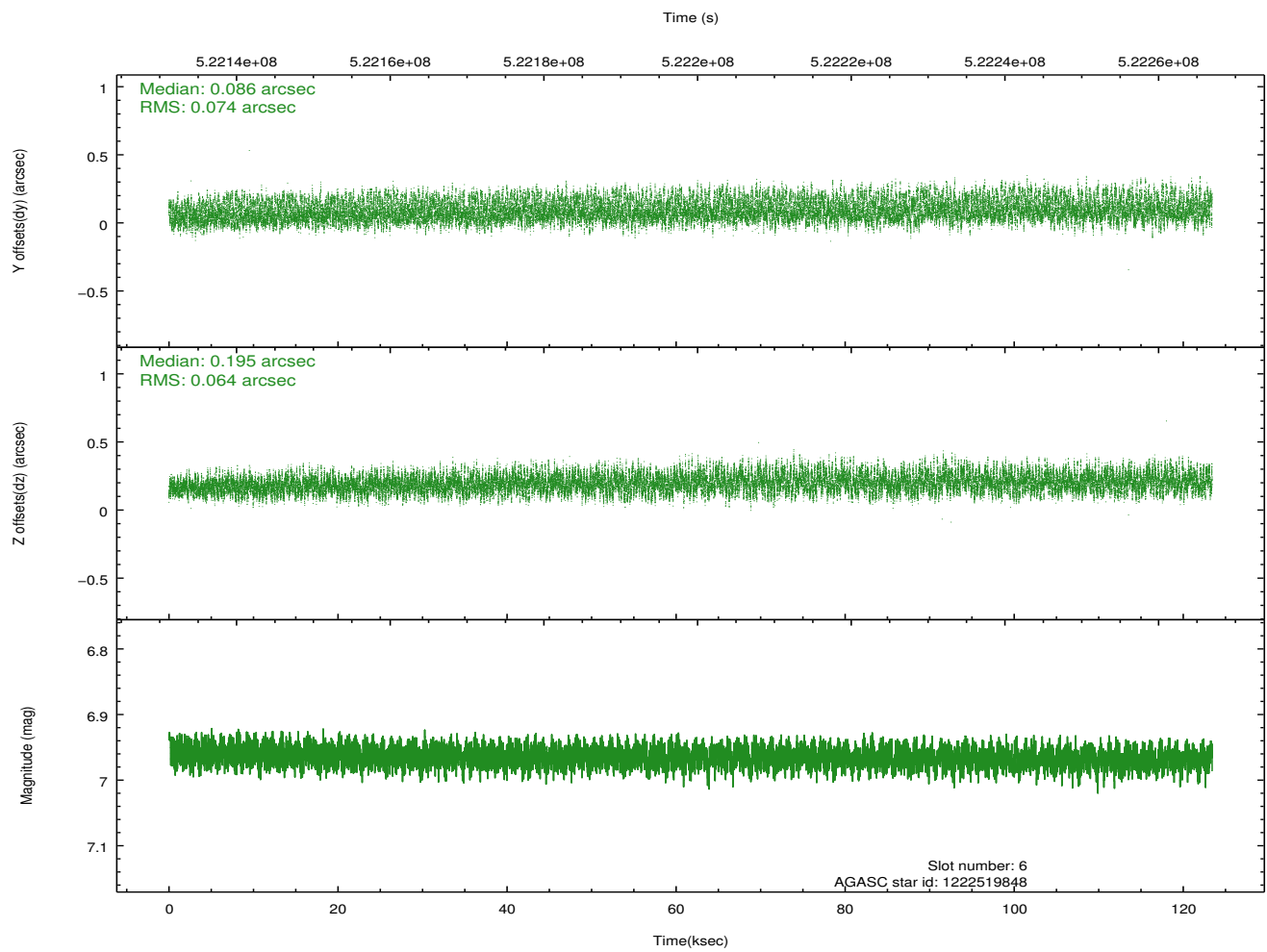
## 2.4.2 Slot 4



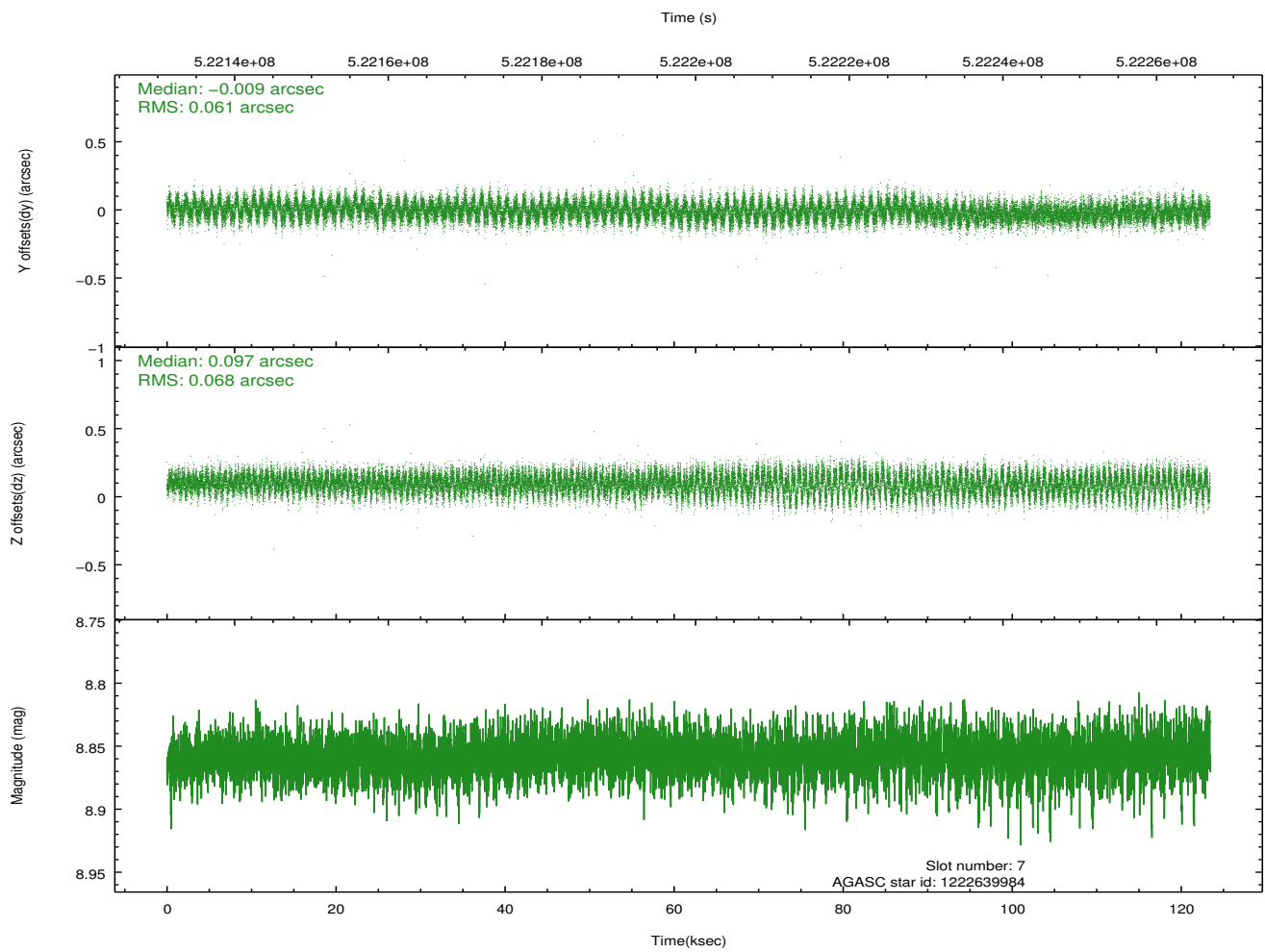
### 2.4.3 Slot 5



## 2.4.4 Slot 6

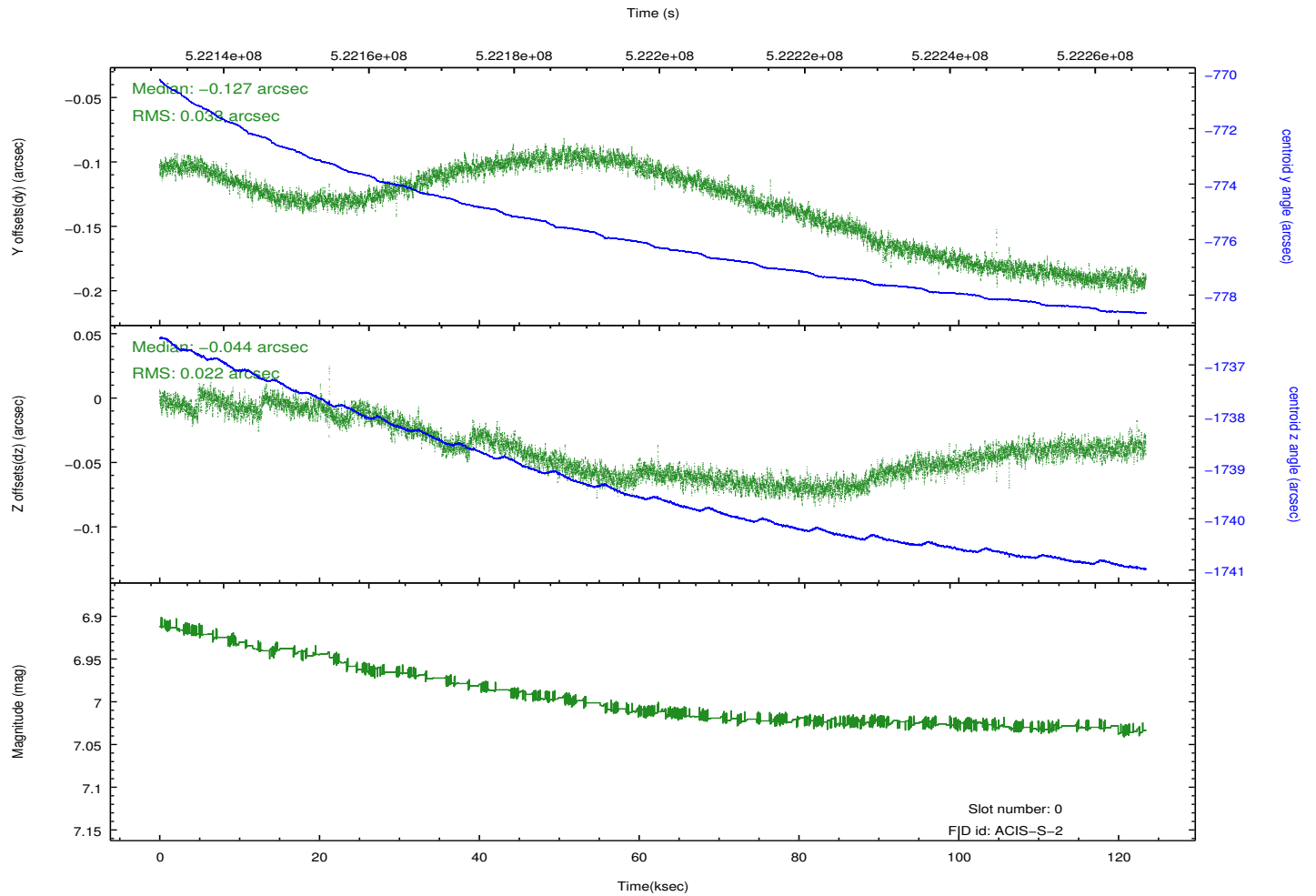
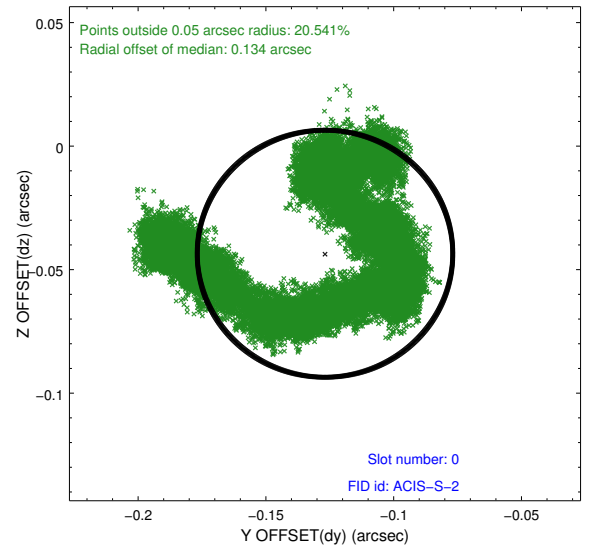
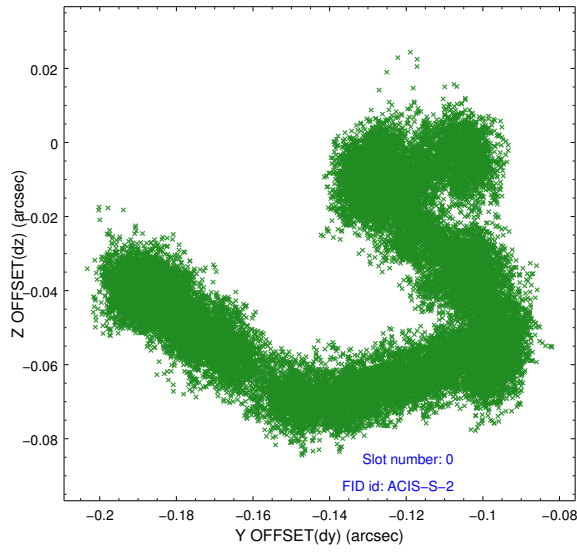


## 2.4.5 Slot 7

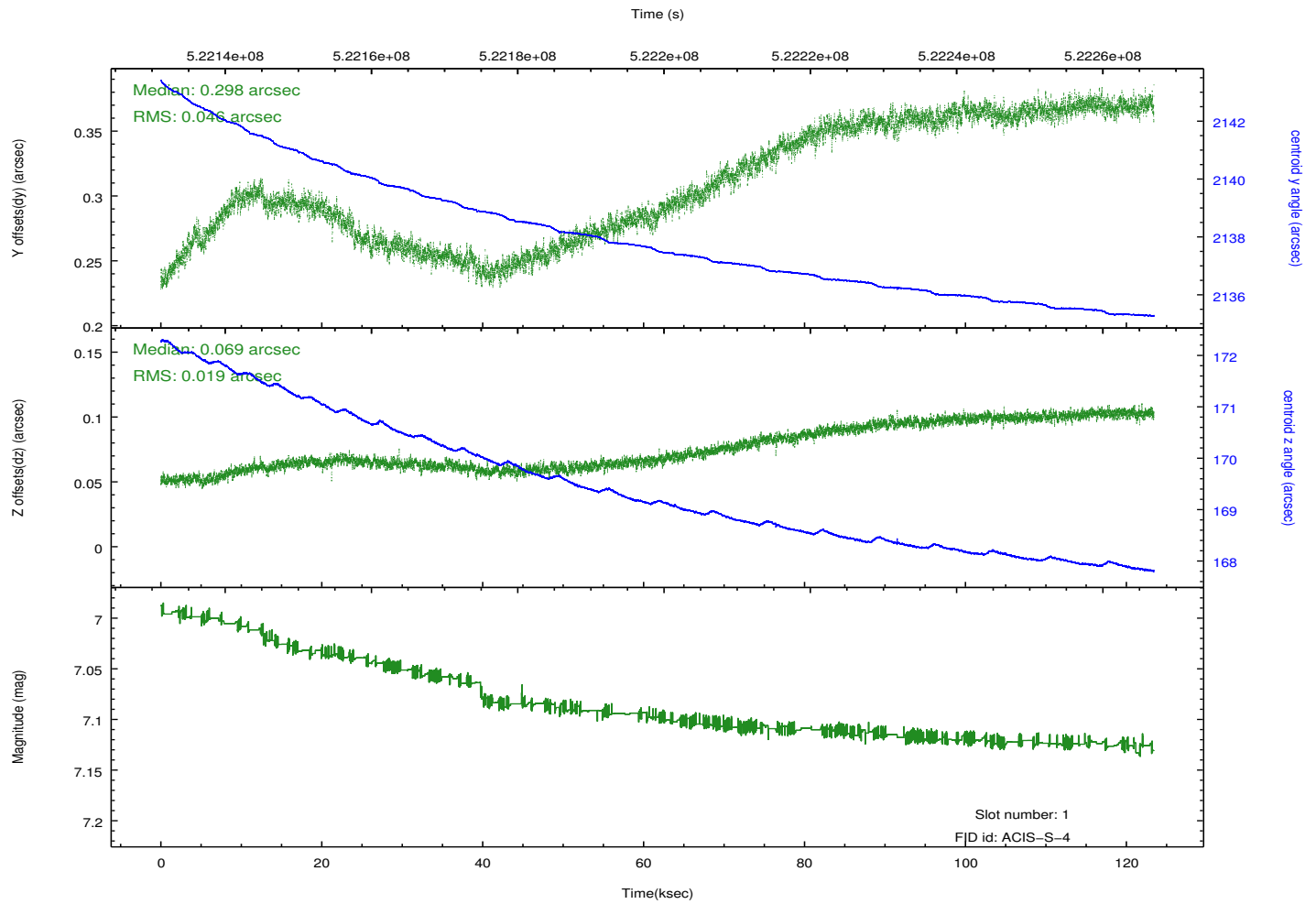
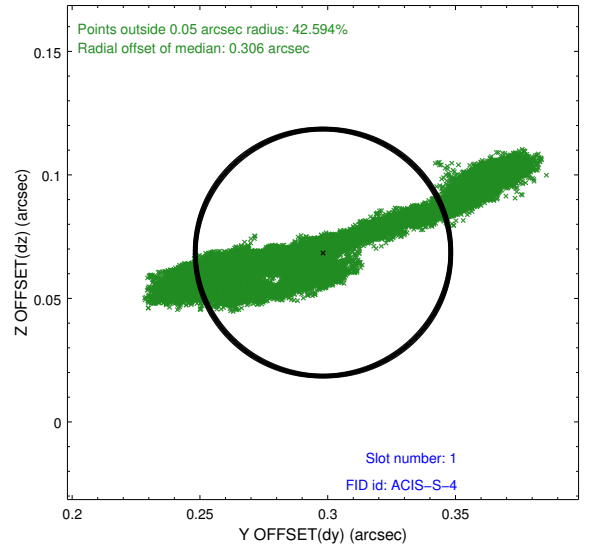
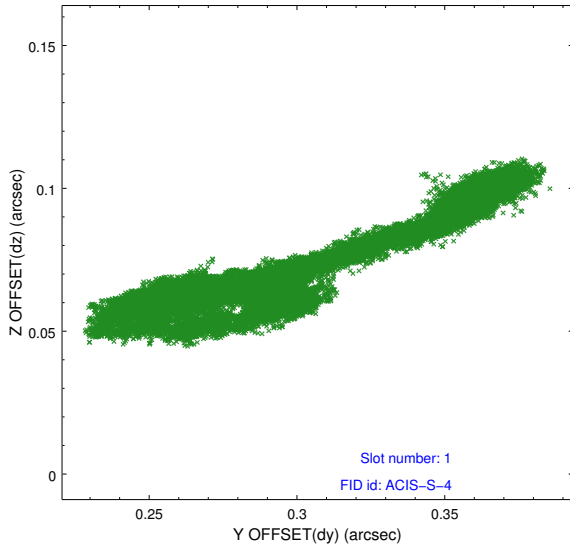


## 2.5 FID Slots

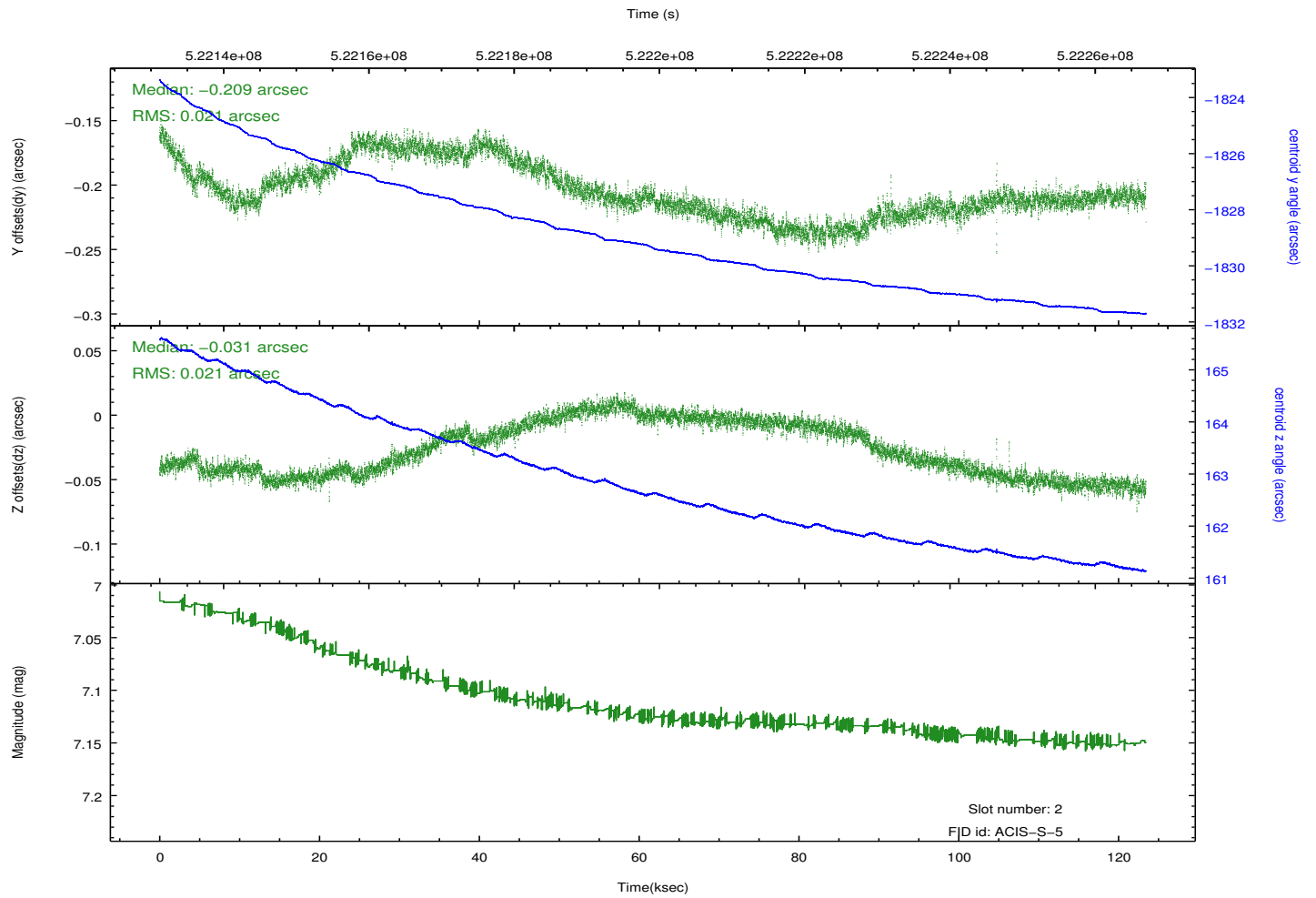
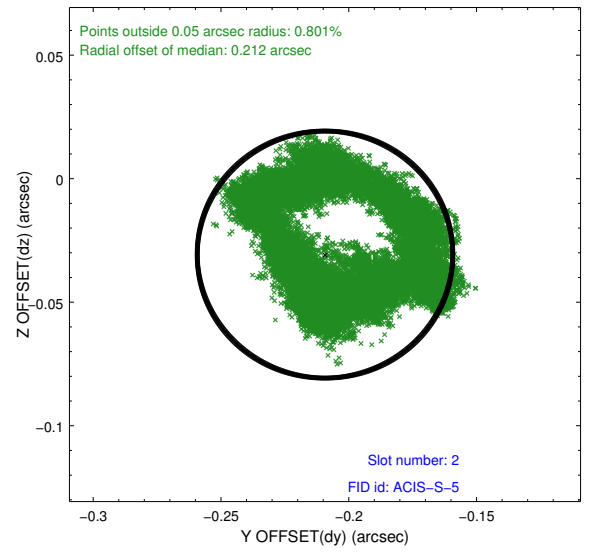
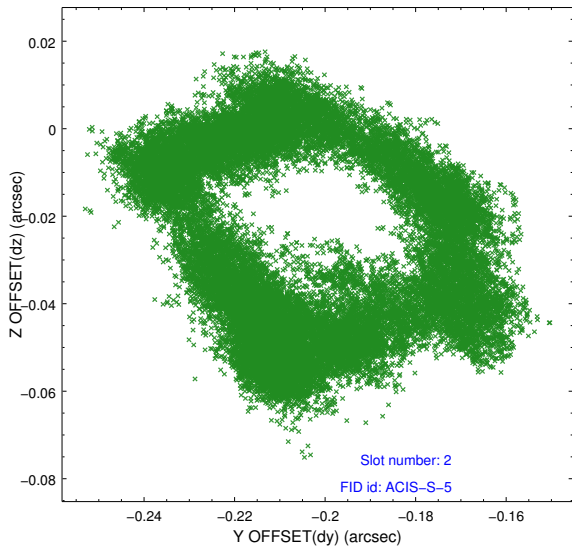
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.07.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	122.76930094421

## A.2 Comments

Joint Proposal: HST. Roll preference met.