

# V&V Reference Report

## L2 ASCDS Version : 10.4.1

Observation 16574 - L2 Version 1  
Chandra X-Ray Center

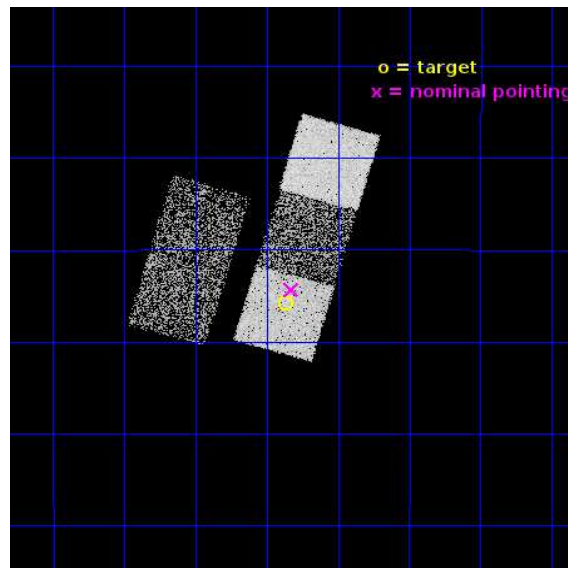
L2 Processing Date : Aug 6 2015

## 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

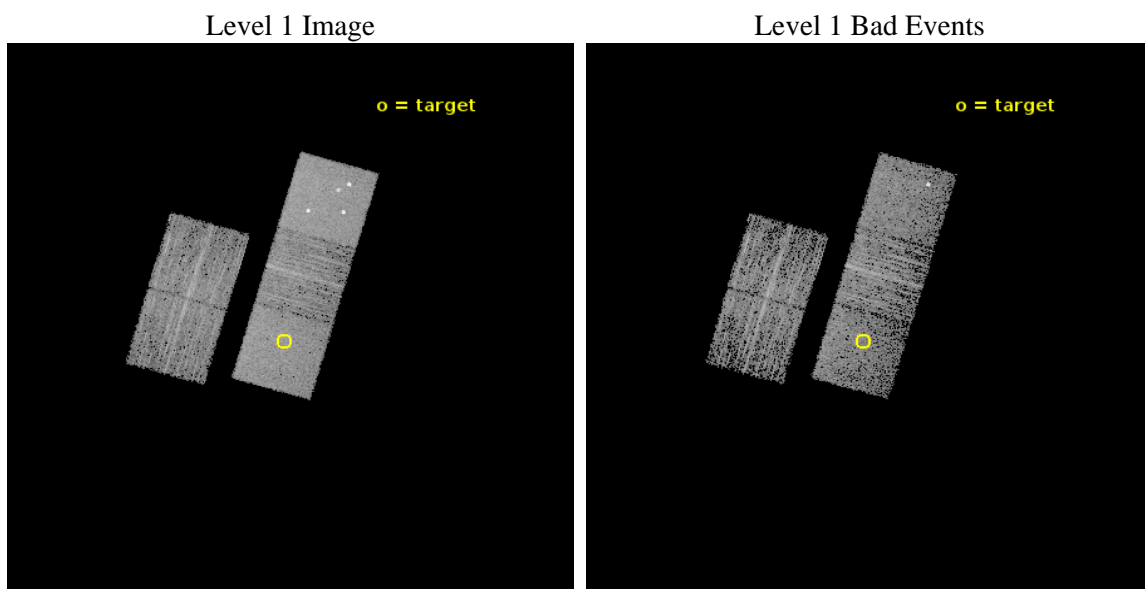
seq_num	801437	Sequence number
obs_id	16574	Observation id
title	Scaling Relations of Distant, SZ-confirmed XXL Galaxy Clusters	Pro
observer	Dr Adam Mantz	Principal investigator
object	XLSSJ021322.21-060552	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	33.342083	Observer's specified target RA [deg]
dec_targ	-6.098	Observer's specified target Dec [deg]
ra_nom	33.331875157328	Nominal RA [deg]
dec_nom	-6.0722421210107	Nominal Dec [deg]
roll_nom	106.19955132411	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5065.4000390768	Sum of GTIs [s]
livetime	4999.216858473	Livetime [s]
ontime2	5065.4000390768	Sum of GTIs [s]
ontime3	5065.4000390768	Sum of GTIs [s]
ontime5	5065.4000390768	Sum of GTIs [s]
ontime6	5065.4000390768	Sum of GTIs [s]
ontime7	5065.4000390768	Sum of GTIs [s]
l2events	42913	Number of level 2 events



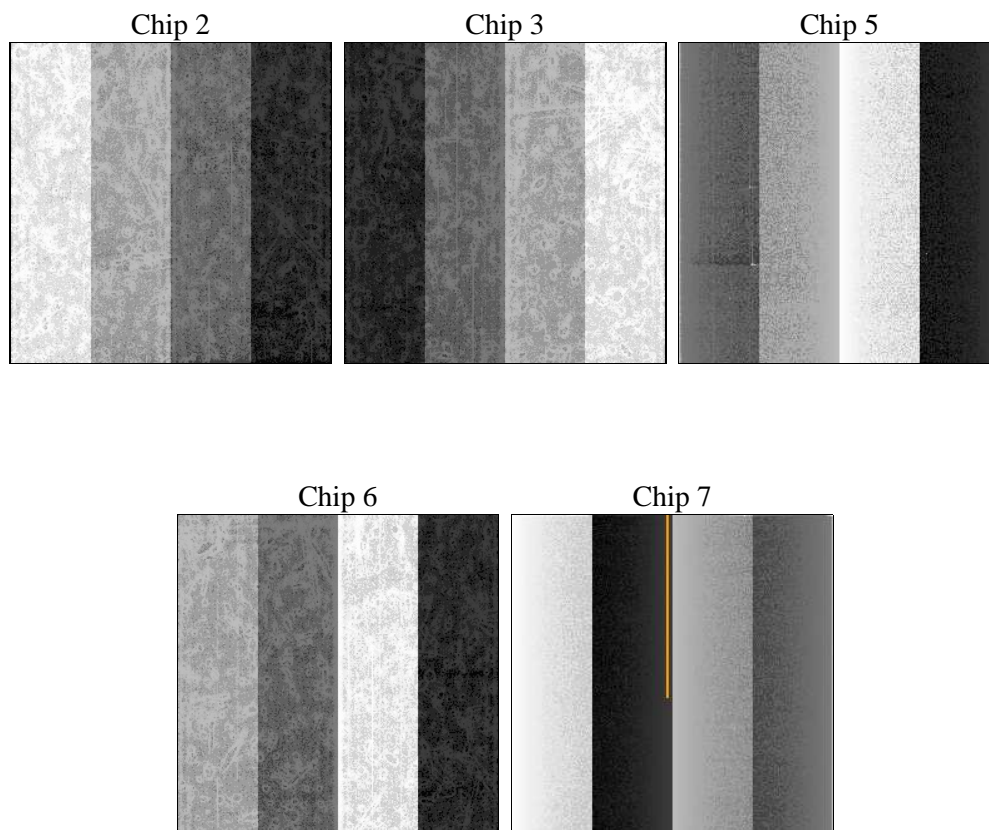
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.585000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	5065.4000390768	Sum of GTIs [s]
caldsver	4.6.8	&#160	ontime2	5065.4000390768	Sum of GTIs [s]
date	2015-08-06T14:23:42	Date and time of file creation	ontime3	5065.4000390768	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	5065.4000390768	Sum of GTIs [s]
			ontime6	5065.4000390768	Sum of GTIs [s]
			ontime7	5065.4000390768	Sum of GTIs [s]
			l1events	168336	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	28051	25311	49740	29240	35994
rejected events	25155	22433	24694	26117	20535
rejected %	89%	88%	49%	89%	57%

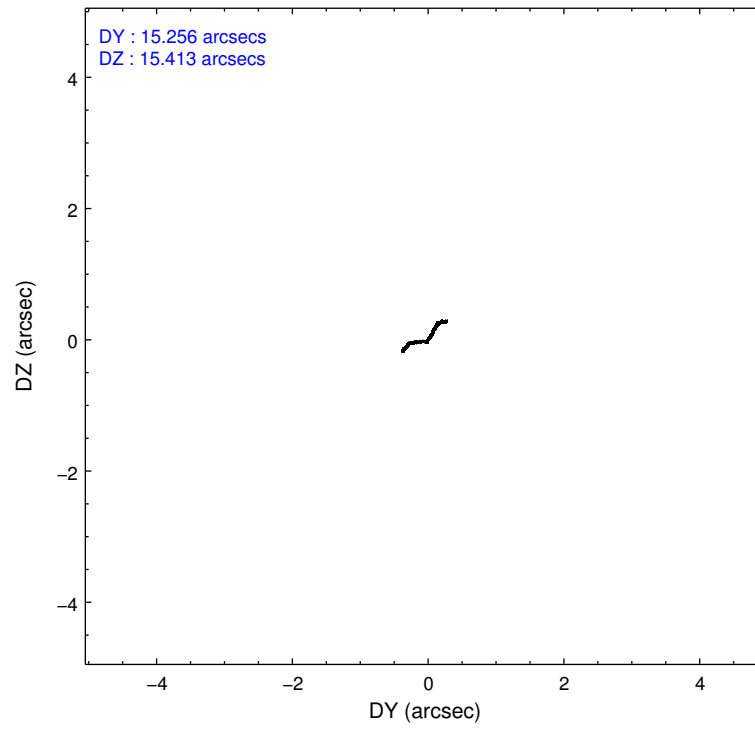
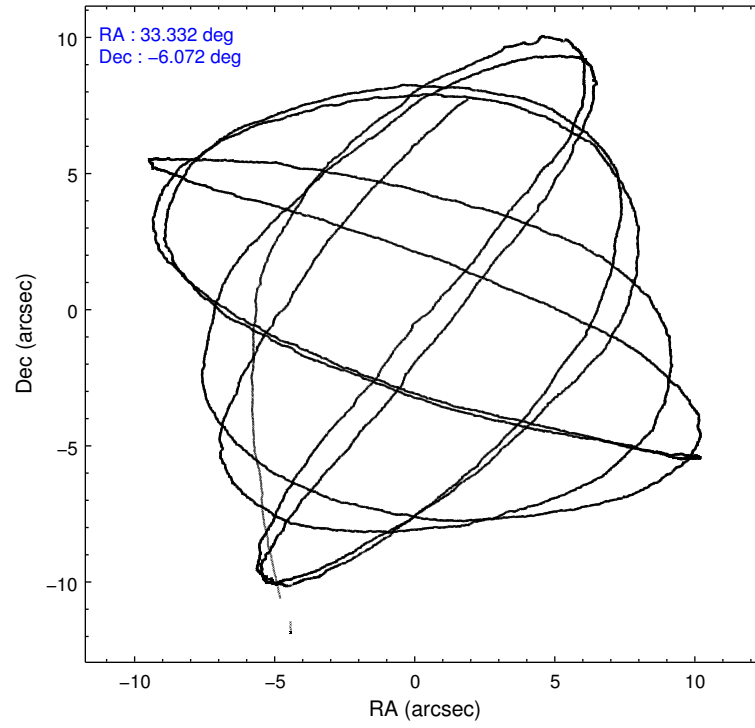
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	1004	971	5205	1003	1304
	3%	3%	10%	3%	3%
grade 1 events	23	13	107	11	53
	0%	0%	0%	0%	0%
grade 2 events	690	646	6761	723	3092
	2%	2%	13%	2%	8%
grade 3 events	279	309	697	323	1254
	0%	1%	1%	1%	3%
grade 4 events	283	324	655	335	1226
	1%	1%	1%	1%	3%
grade 5 events	1108	1369	3389	1406	3608
	3%	5%	6%	4%	10%
grade 6 events	643	629	11741	742	8588
	2%	2%	23%	2%	23%
grade 7 events	24021	21050	21185	24697	16869
	85%	83%	42%	84%	46%

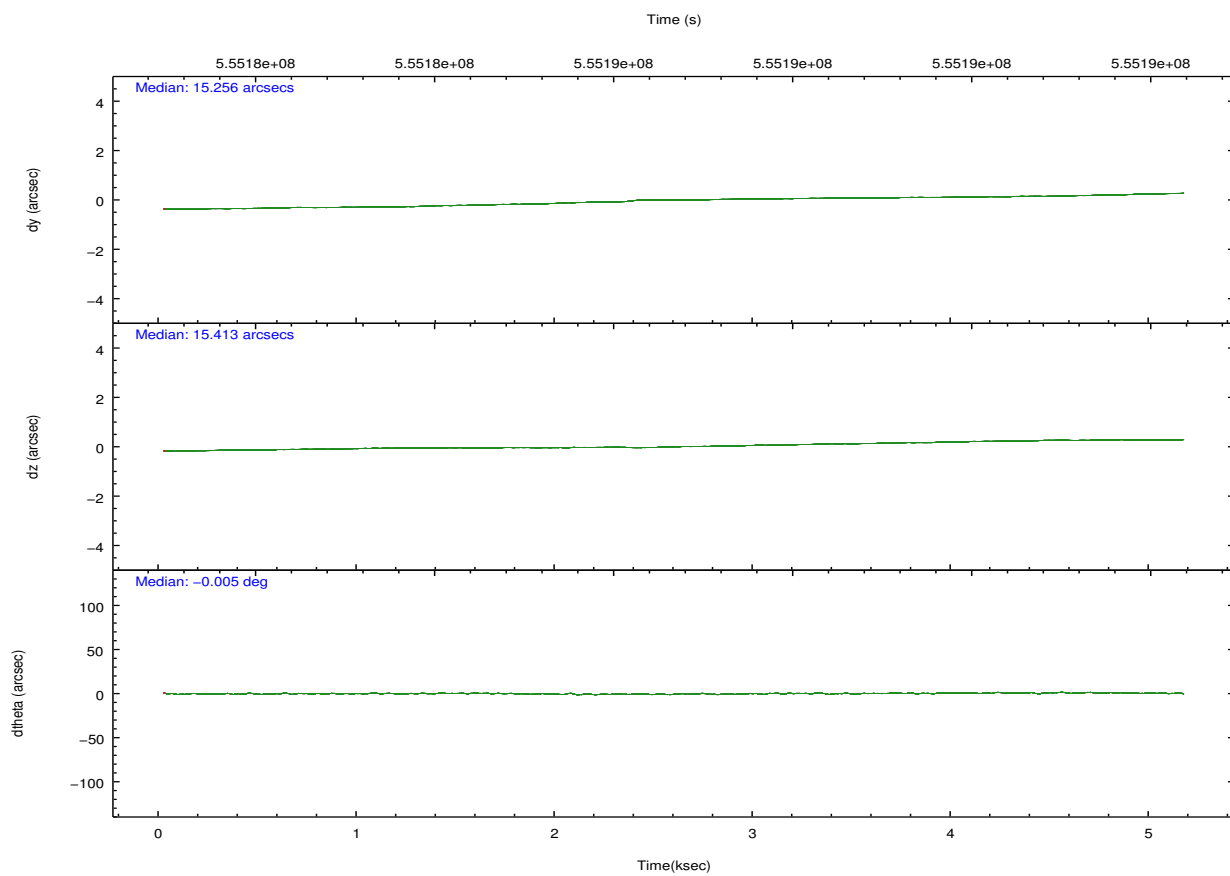
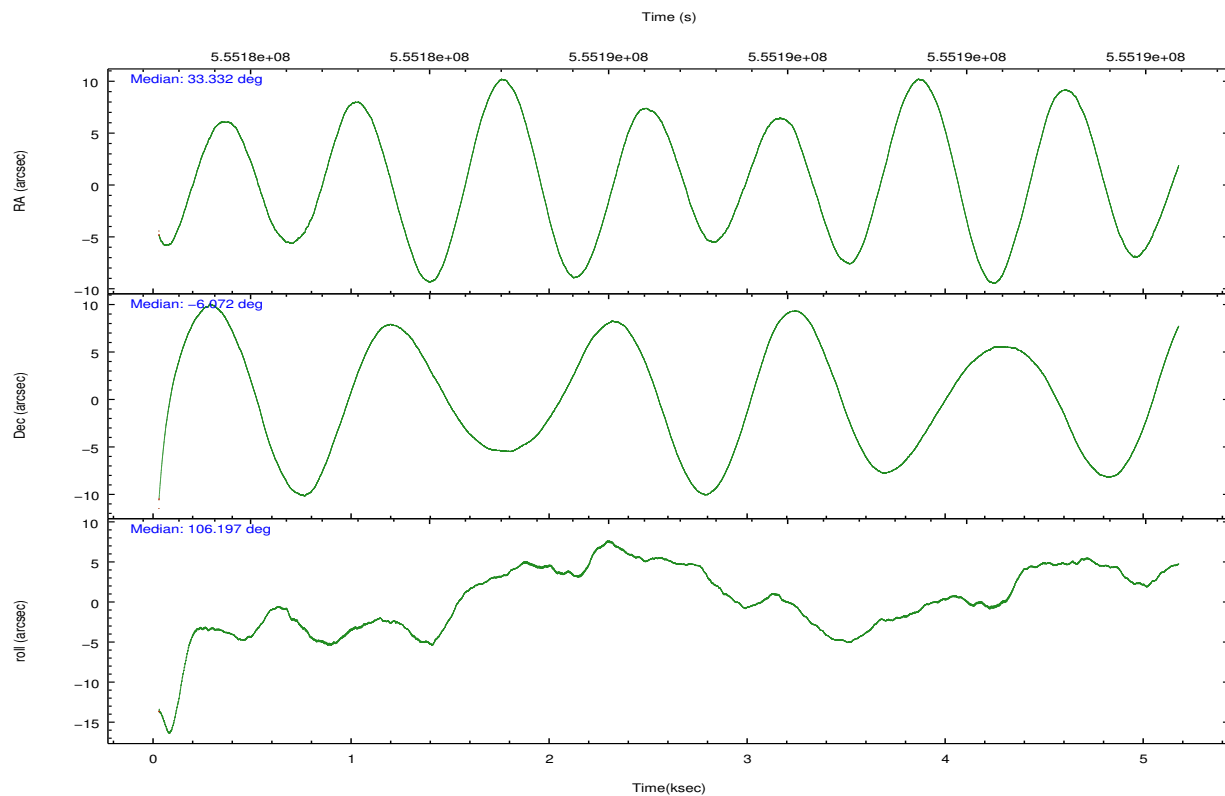


## 2.2 Compared Parameters

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	33.352092	33.33187515732757	CCD I2 on	O1	Y
[deg] Pointing Dec	-6.090978	-6.072242121010723	CCD I3 on	O2	Y
[deg] Pointing Roll	106.045065	106.1995513241143	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	N	N
[s] Observation start time (MET)	555183922.184000	555182639.62632	CCD S5 on	N	N
Observation start date	2015-08-05T17:44:14	2015-08-05T17:23:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	555188923.184000	555189139.15169	On-chip summing requested	N	N
Observation end date	2015-08-05T19:07:35	2015-08-05T19:12:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



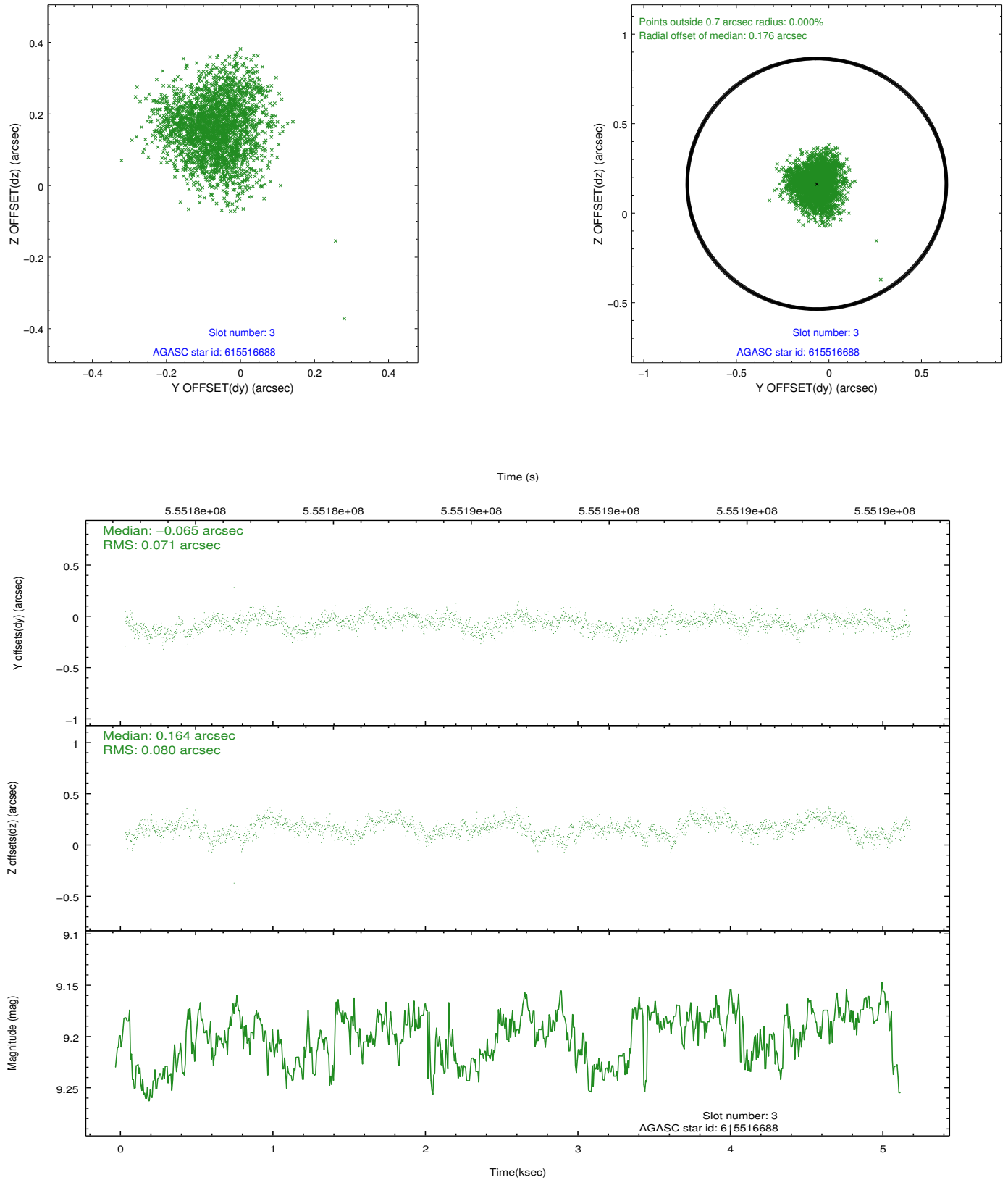


### Slot Statistics

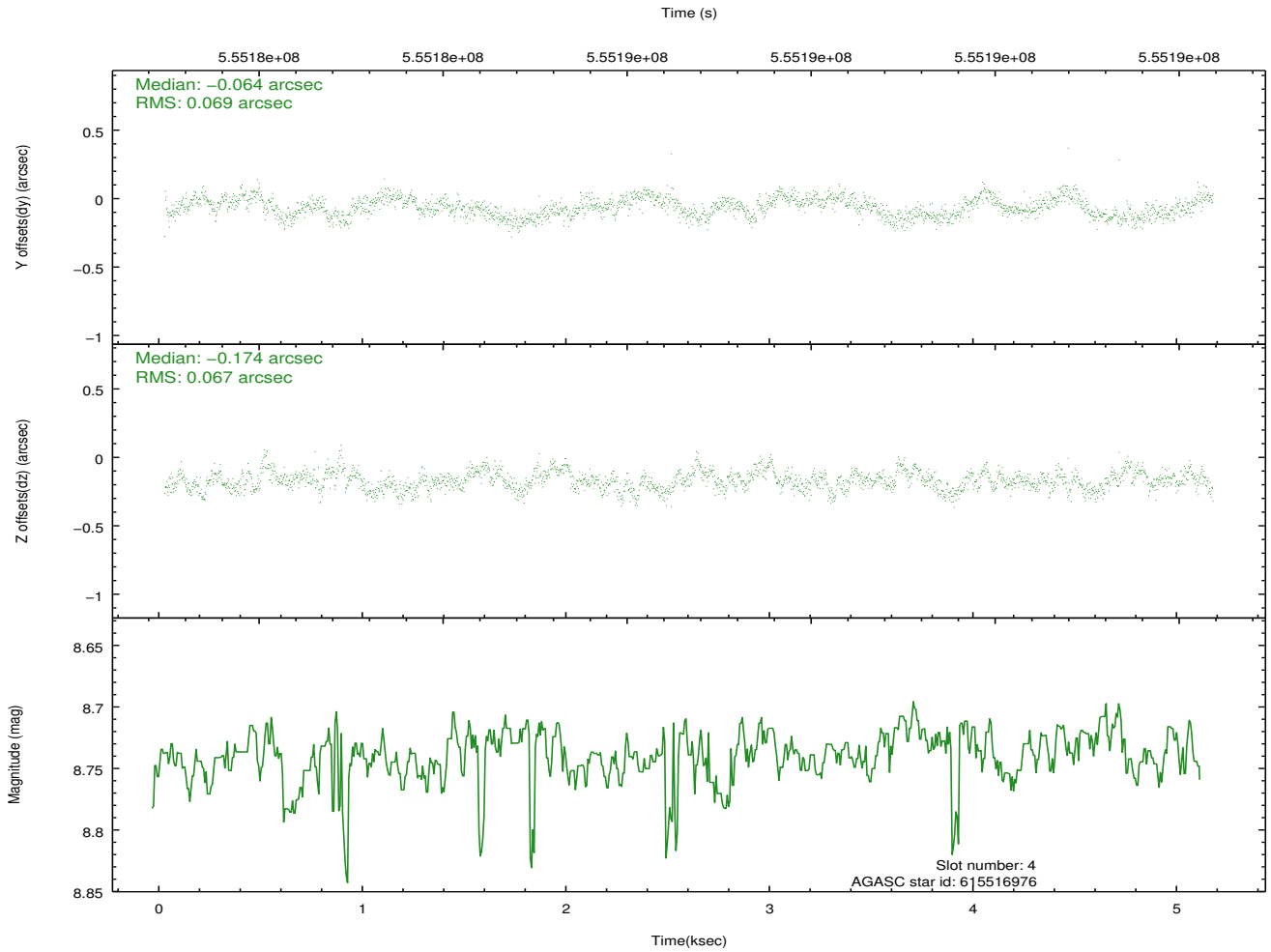
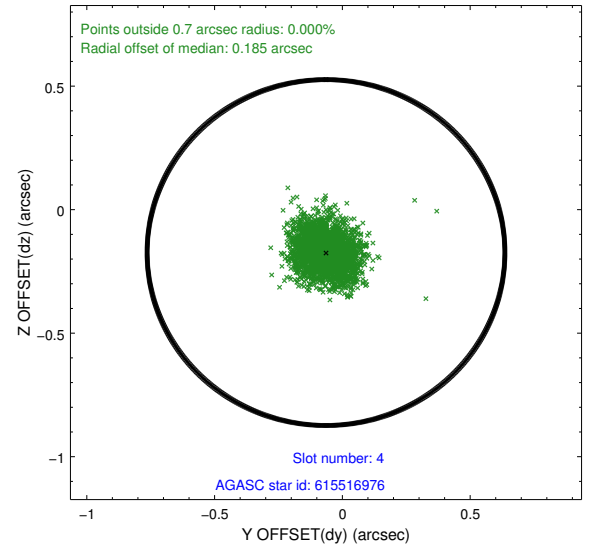
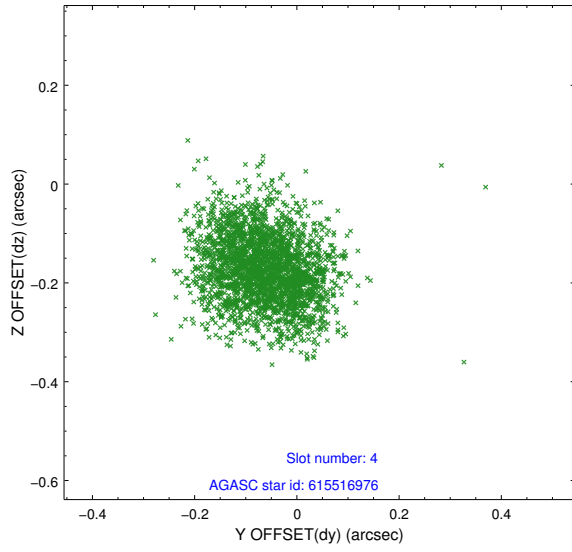
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	1256	-0.127	-0.018	0.007	0.012	0.000000	0.000000	-768.27	-1736.88
1	FID		ACIS-S-4	7.09	1257	0.296	0.066	0.007	0.013	0.000000	0.000000	2144.86	170.50
2	FID		ACIS-S-5	7.11	1257	-0.199	-0.040	0.009	0.015	0.000000	0.000000	-1819.71	165.36
3	GUIDE	used	615516688	9.20	2512	-0.065	0.164	0.115	0.180	32.828801	-5.642411	2068.86	1355.96
4	GUIDE	used	615516976	8.74	2509	-0.064	-0.174	0.103	0.161	32.922966	-6.134513	274.07	1519.68
5	GUIDE	used	615517216	9.06	2512	-0.048	0.266	0.104	0.164	33.313379	-5.999331	355.16	40.81
6	GUIDE	used	615517384	9.05	2512	0.322	0.794	0.099	0.163	33.475444	-6.374605	-1102.39	-142.21
7	GUIDE	used	615518928	8.56	2511	-0.148	-1.050	0.117	0.178	33.717262	-6.105948	-413.99	-1242.71

## 2.4 Star Slots

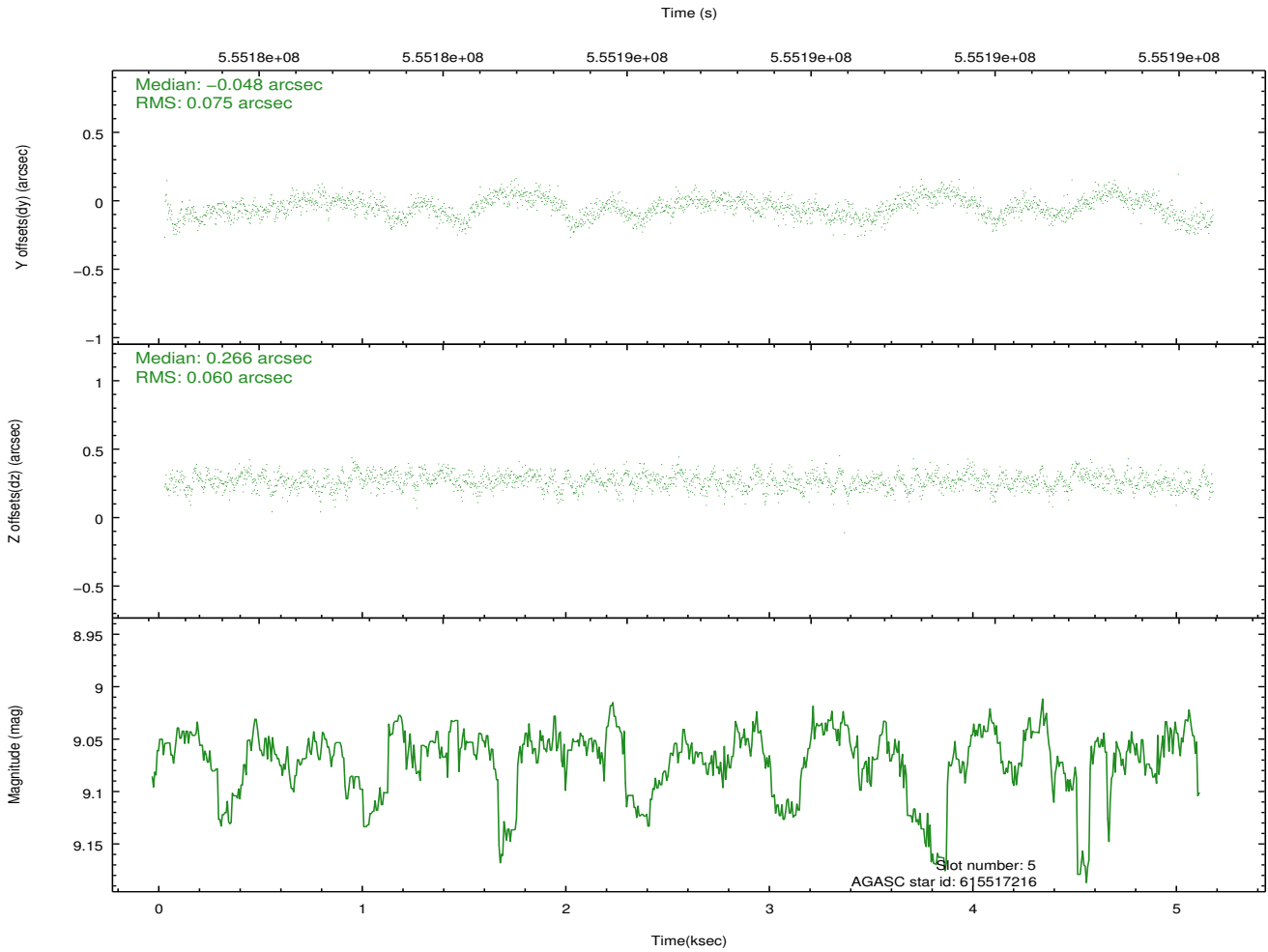
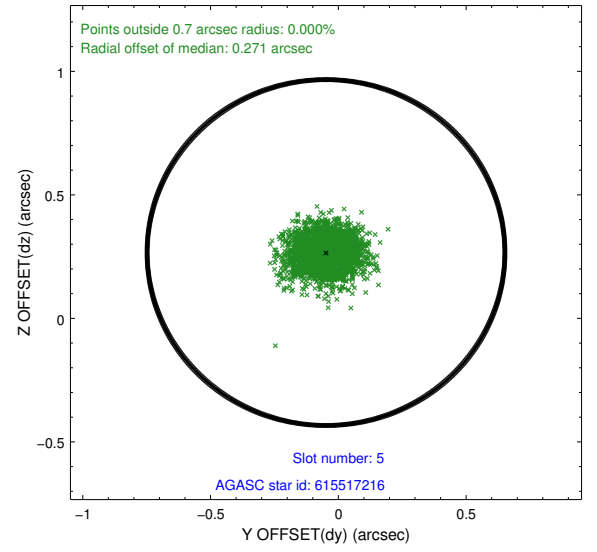
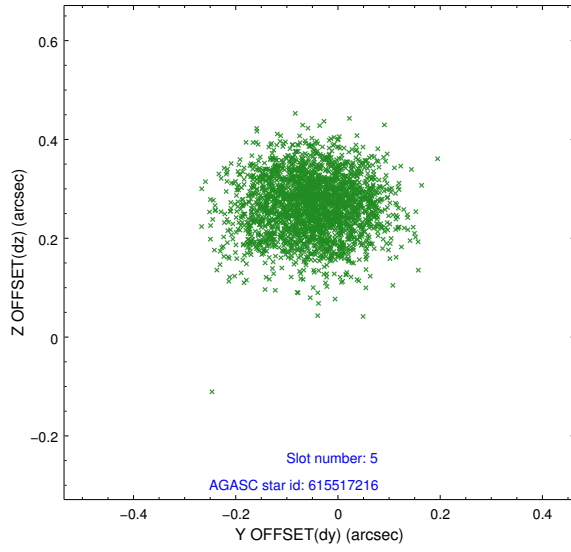
### 2.4.1 Slot 3



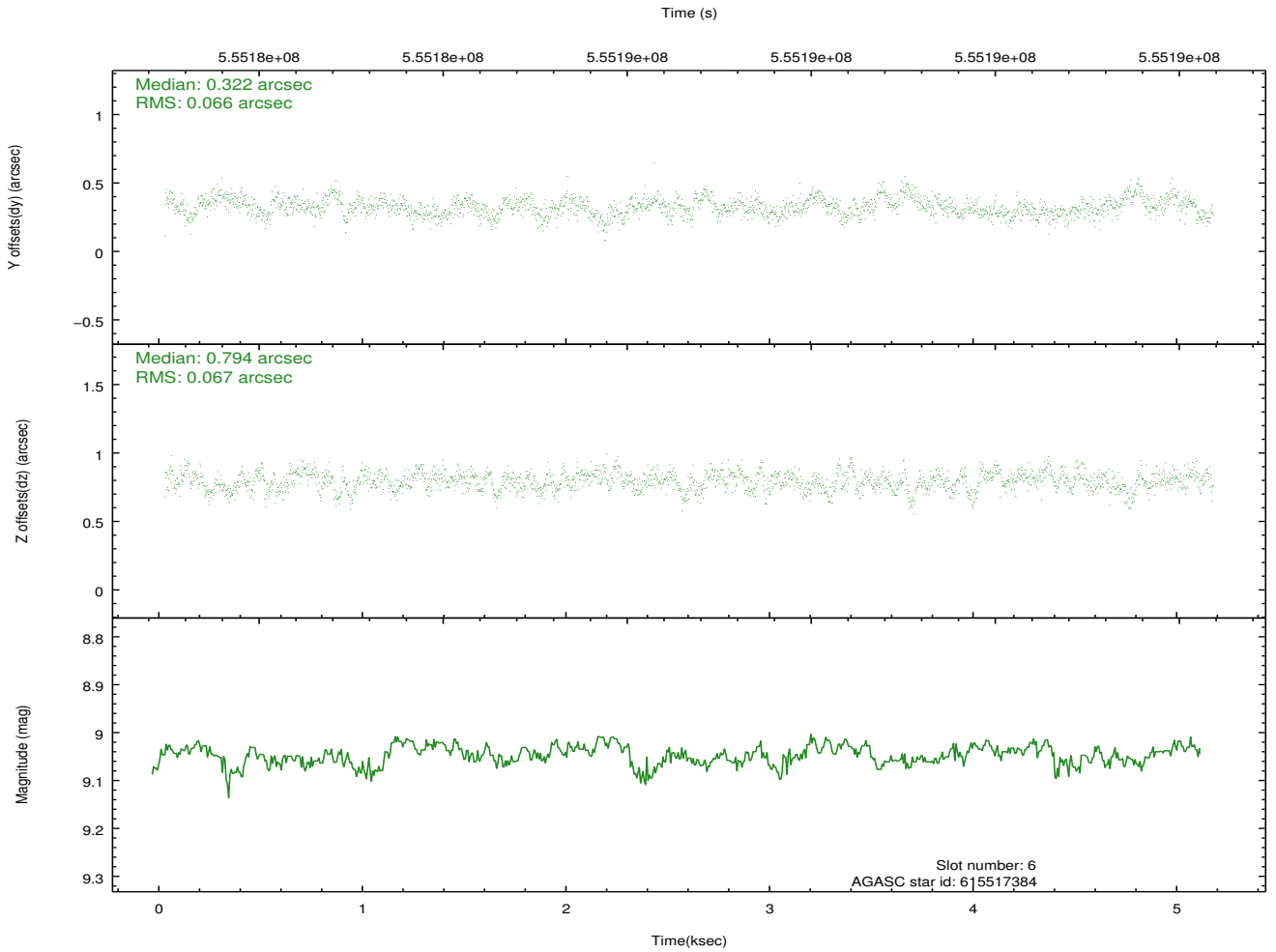
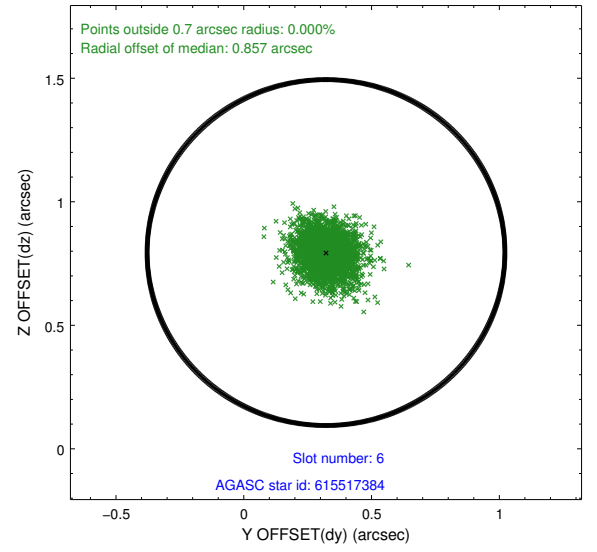
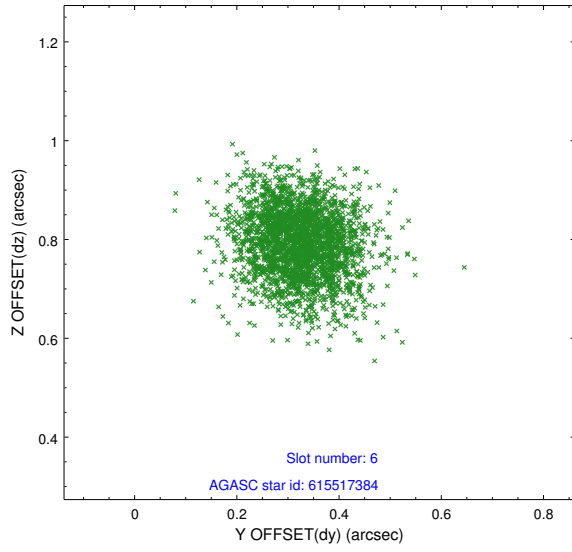
## 2.4.2 Slot 4



### 2.4.3 Slot 5

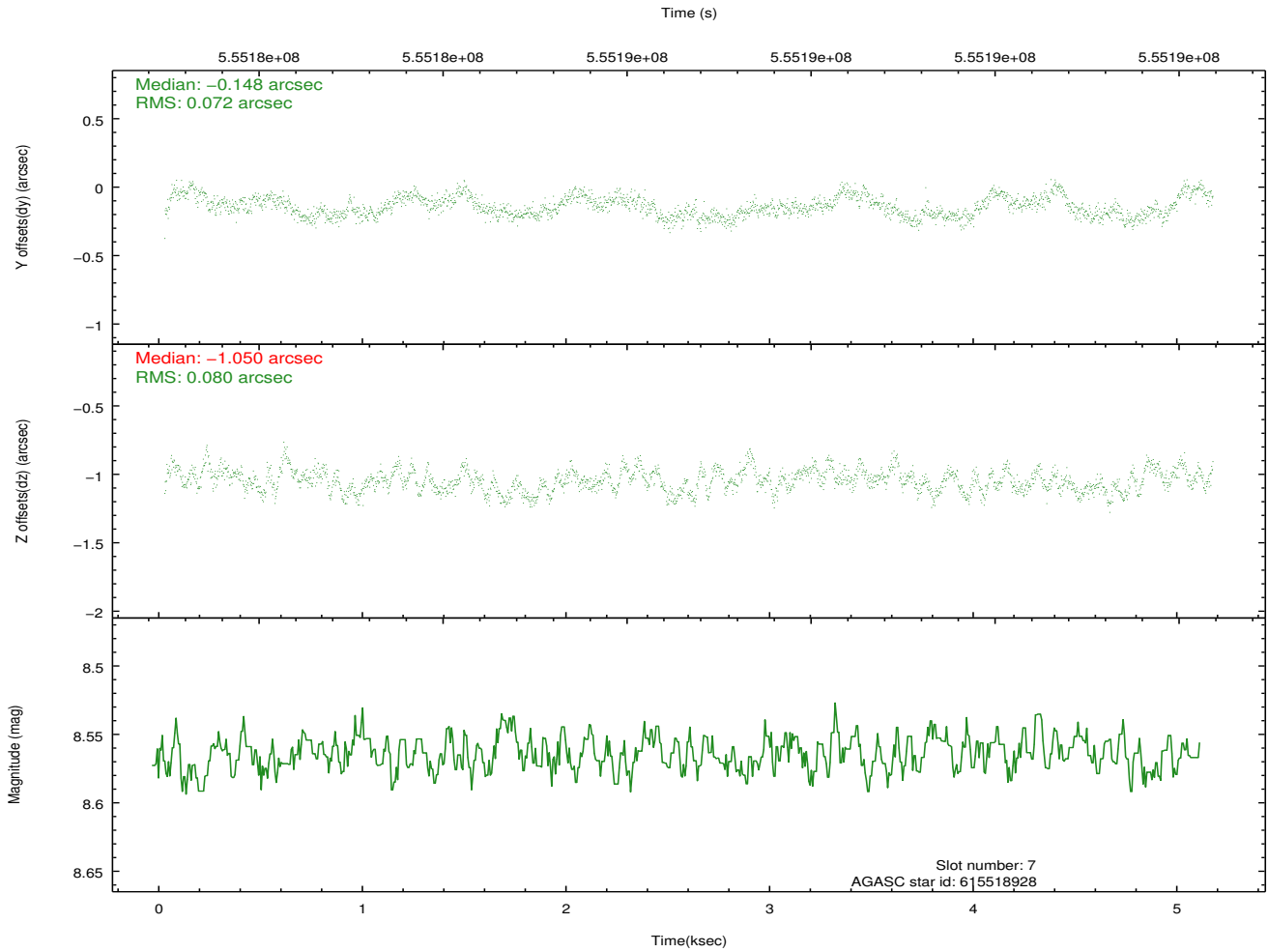
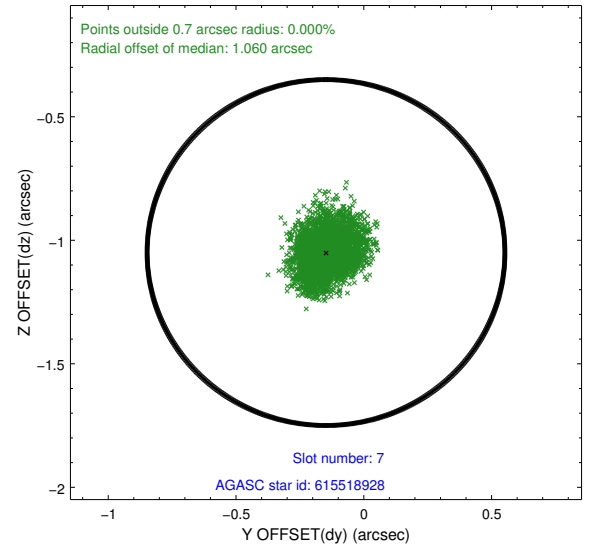
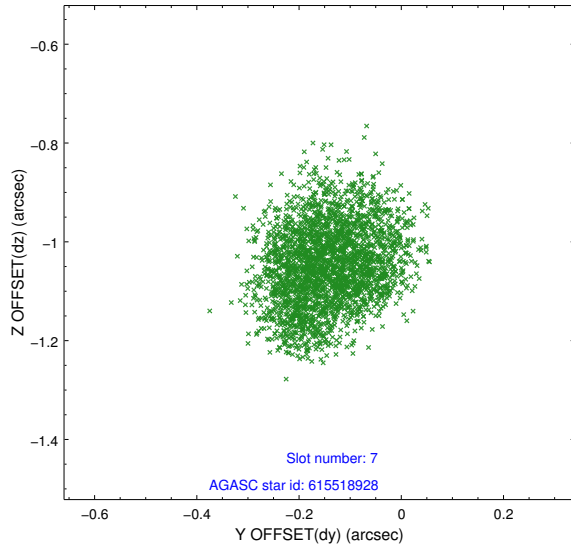


## 2.4.4 Slot 6



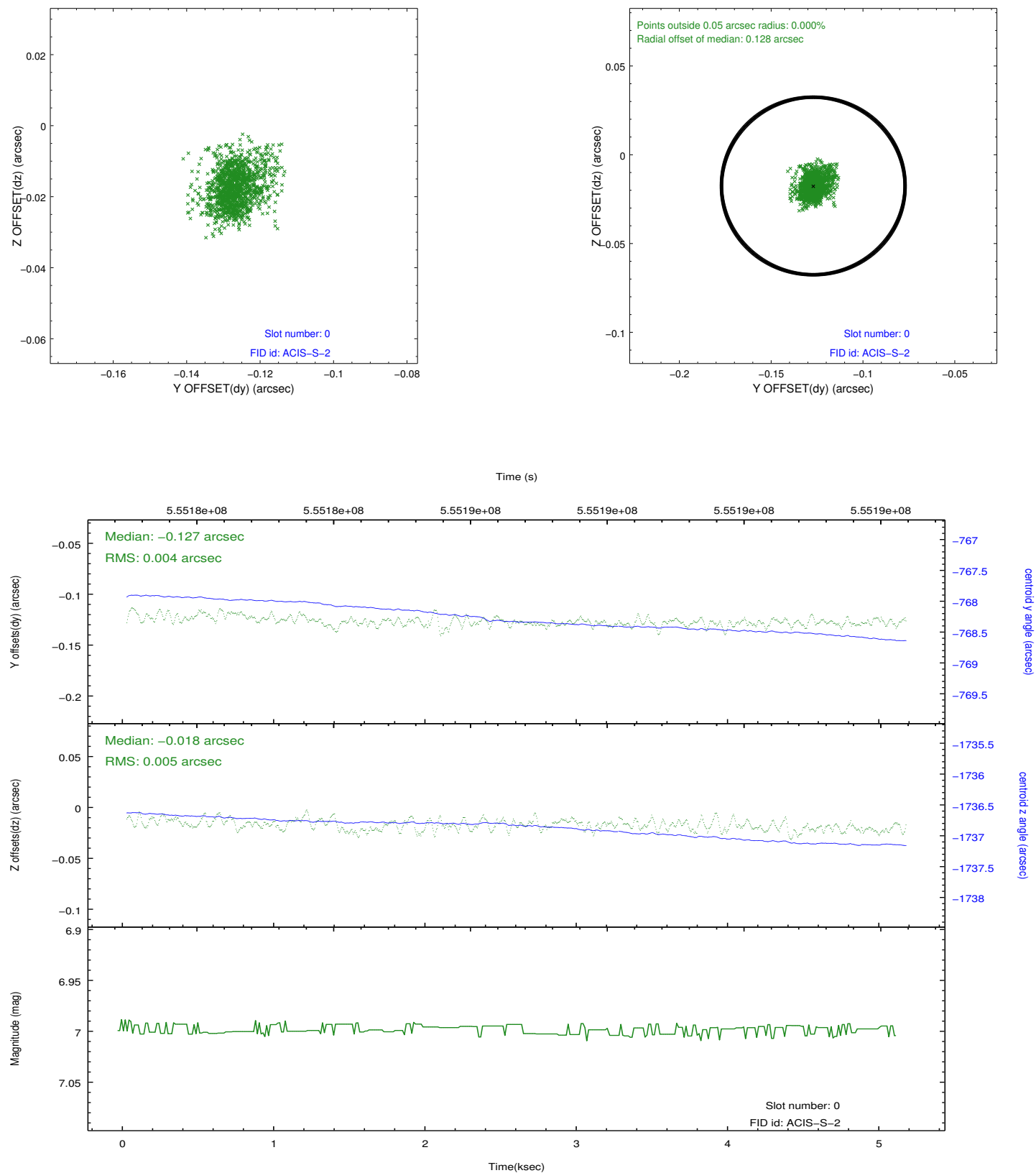


## 2.4.5 Slot 7

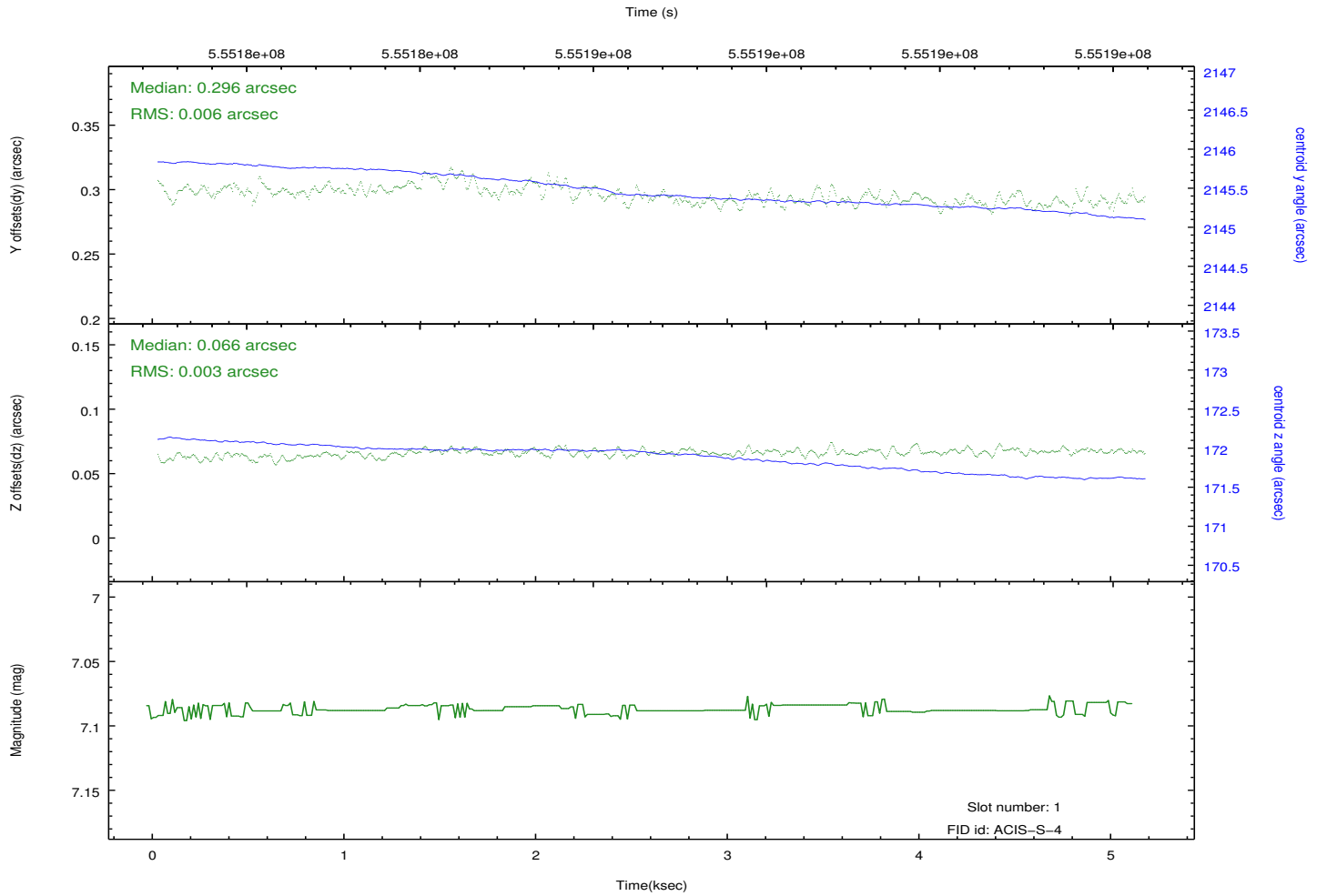
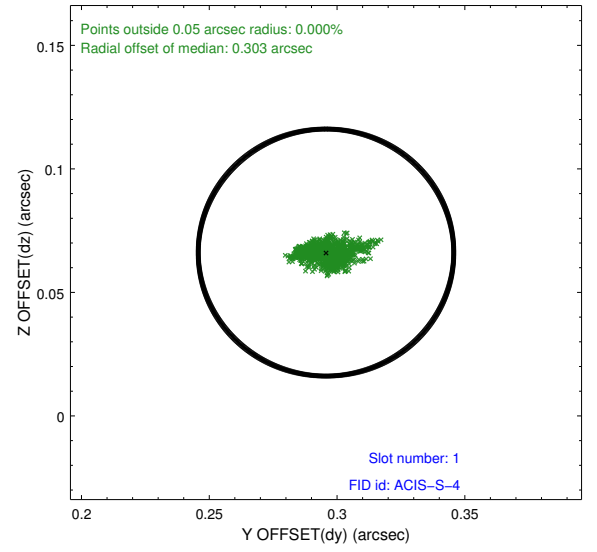
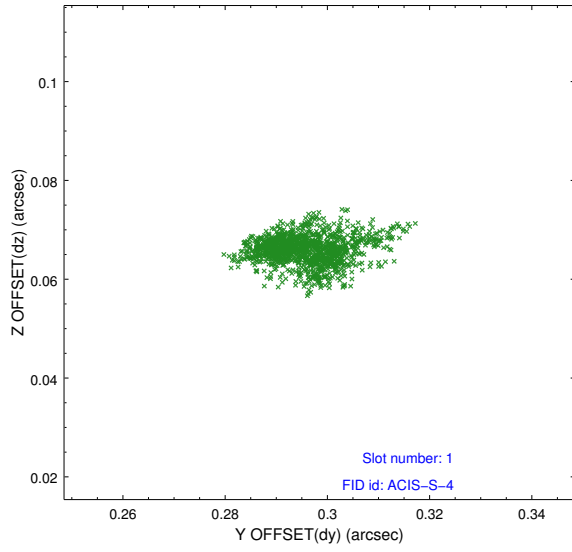


## 2.5 FID Slots

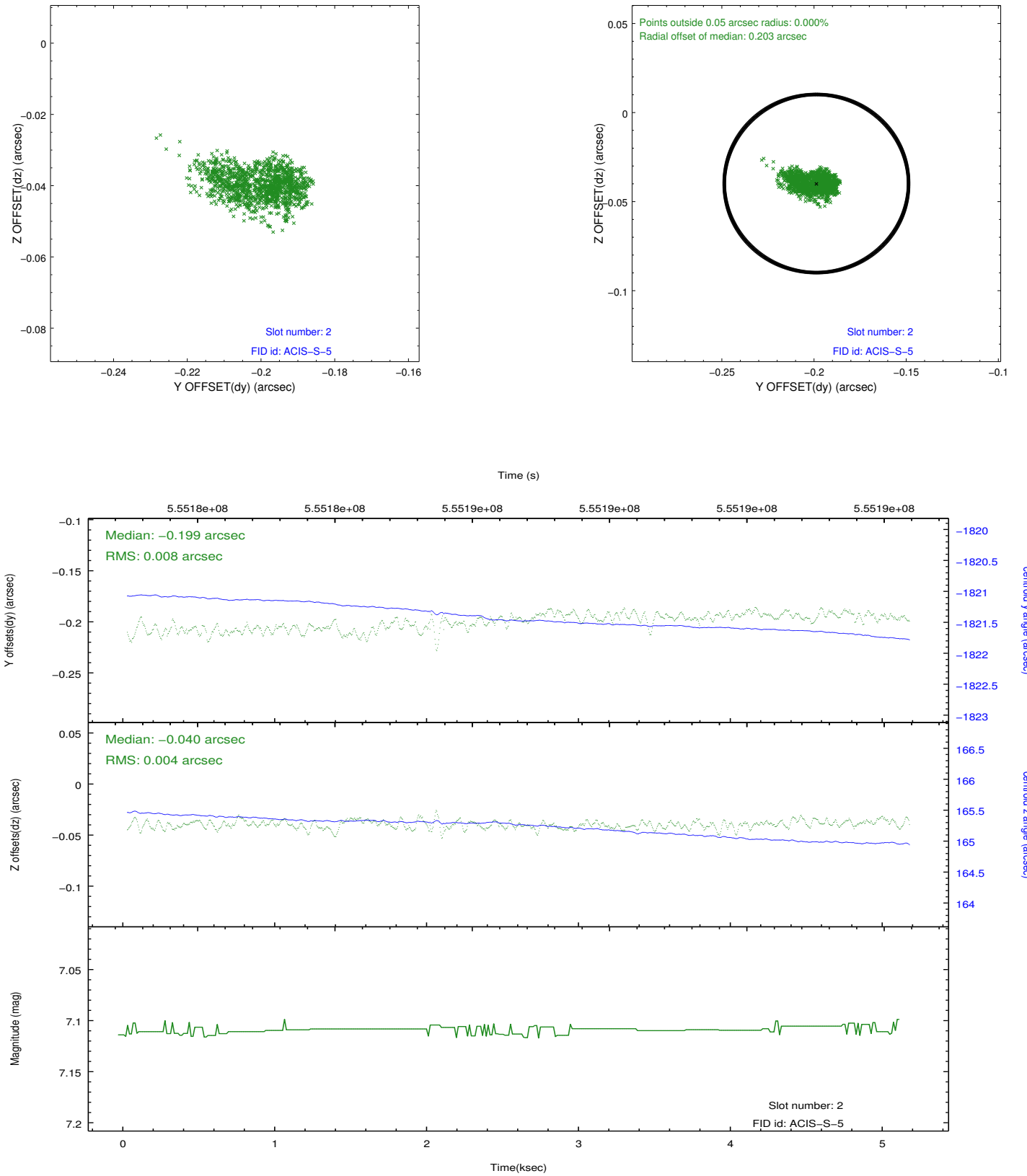
### 2.5.1 Slot 0



## 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)	2015.08.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0654000390768

### A.2 Comments

Joint proposal with XMM.