

# V&V Reference Report

## L2 ASCDS Version : 10.4.3.1

Observation 18318 - L2 Version 1  
Chandra X-Ray Center

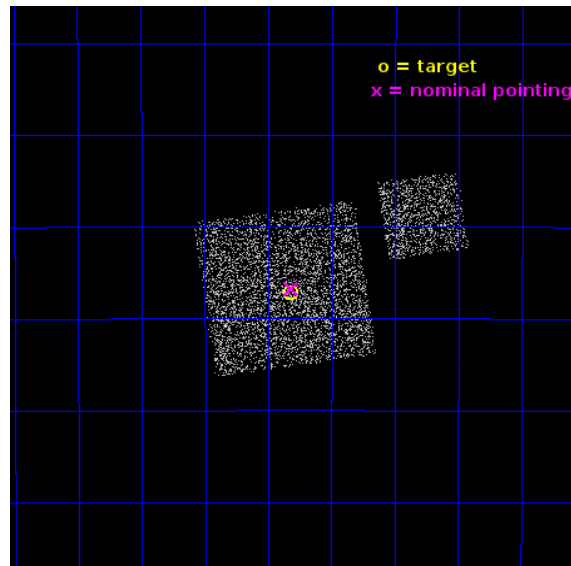
L2 Processing Date : May 12 2016

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# 1 Front

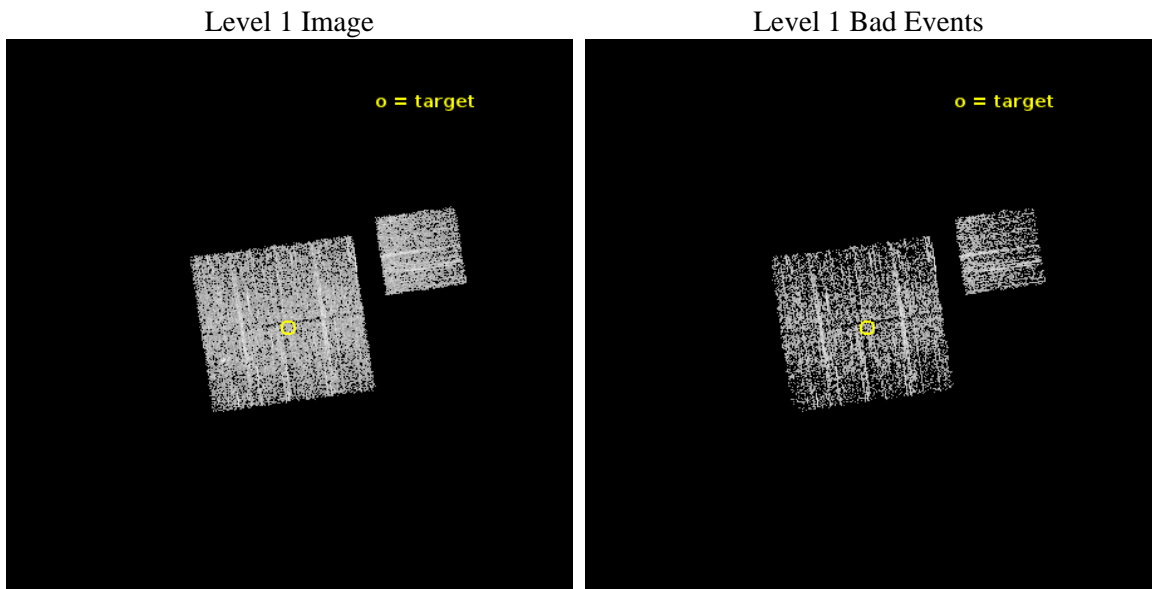
seq_num	300349	Sequence number
obs_id	18318	Observation id
title	X-raying the Galactic center/bulge interface	Proposal title
observer	Q. Daniel Wang	Principal investigator
object	GC-GB interface	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.206	Observer's specified target RA [deg]
dec_targ	-27.786466	Observer's specified target Dec [deg]
ra_nom	265.20427761244	Nominal RA [deg]
dec_nom	-27.779198801369	Nominal Dec [deg]
roll_nom	81.883737013226	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1955.6877957582	Sum of GTIs [s]
livetime	1930.1352949503	Livetime [s]
ontime0	1952.4236154556	Sum of GTIs [s]
ontime1	1955.6057158709	Sum of GTIs [s]
ontime2	1955.6467559338	Sum of GTIs [s]
ontime3	1955.6877957582	Sum of GTIs [s]
ontime6	1955.5236358643	Sum of GTIs [s]
l2events	6663	Number of level 2 events



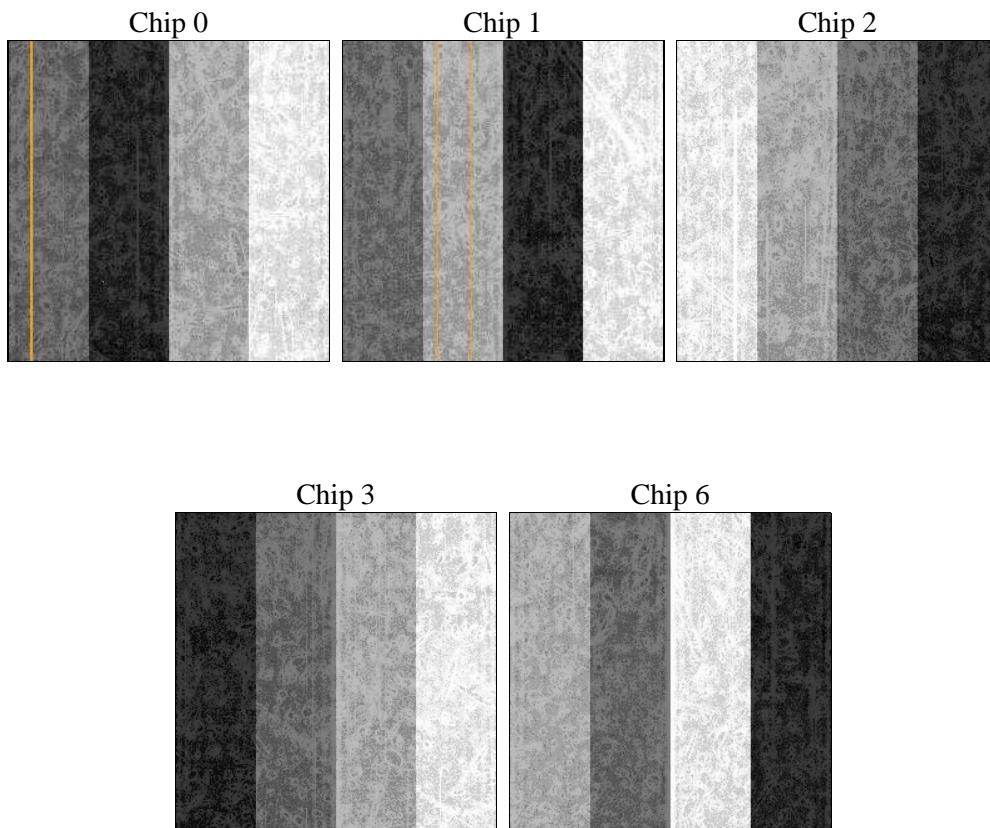
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2180.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	1955.6877957582	Sum of GTIs [s]
caldsver	4.7.1	&#160	ontime0	1952.4236154556	Sum of GTIs [s]
date	2016-05-12T06:22:18	Date and time of file creation	ontime1	1955.6057158709	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	1955.6467559338	Sum of GTIs [s]
			ontime3	1955.6877957582	Sum of GTIs [s]
			ontime6	1955.5236358643	Sum of GTIs [s]
			l1events	60677	Number of level 1 events

### 2.1.4 Events

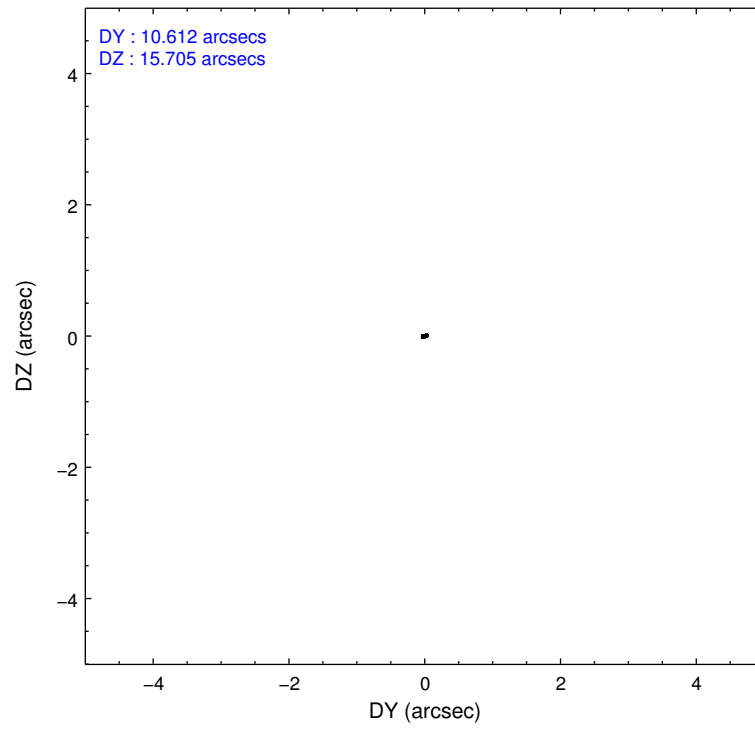
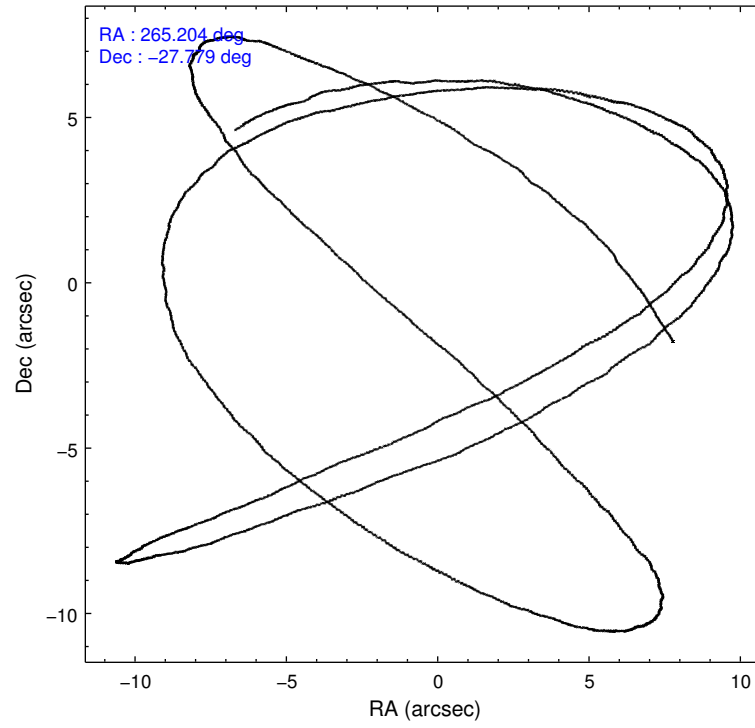
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	11479	12563	12513	11661	12461
rejected events	9906	10765	11015	10153	10942
rejected %	86%	85%	88%	87%	87%

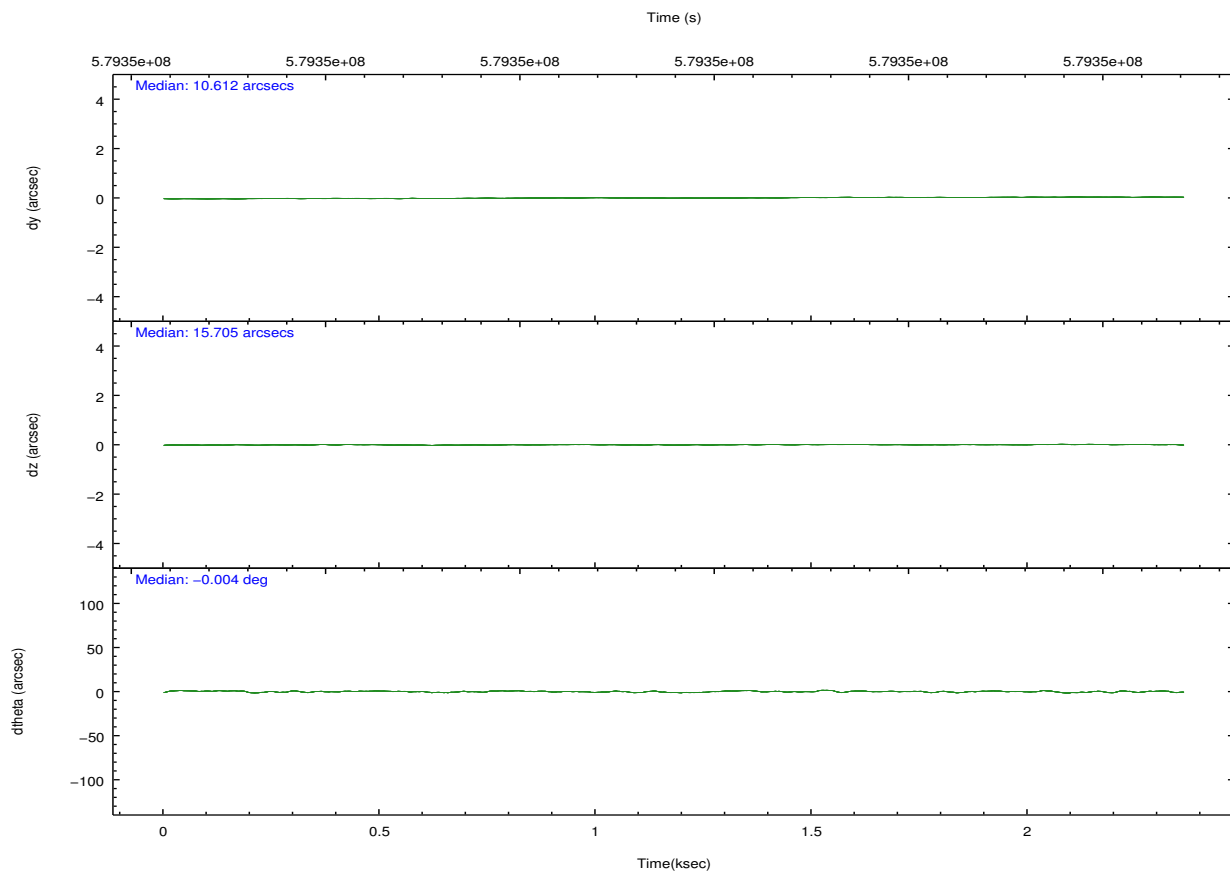
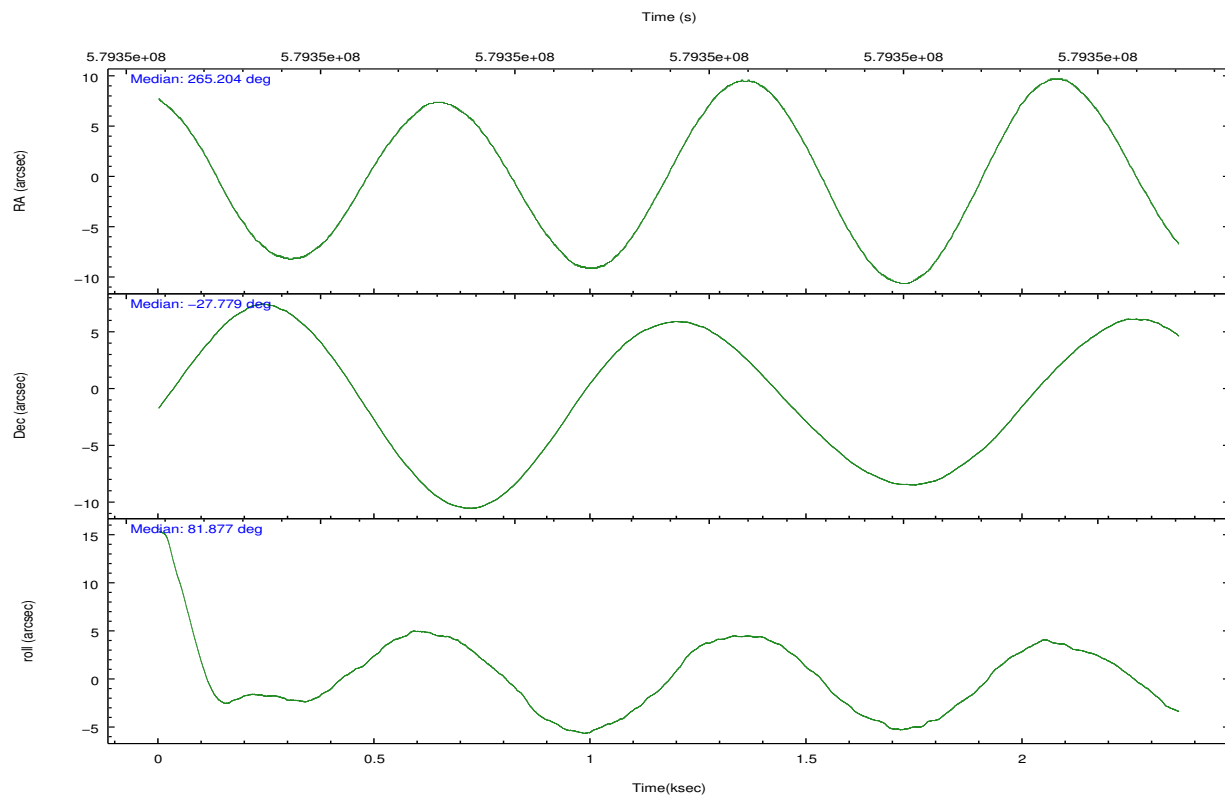
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	625	801	598	634	565
	5%	6%	4%	5%	4%
grade 1 events	5	7	7	5	7
	0%	0%	0%	0%	0%
grade 2 events	379	374	330	302	343
	3%	2%	2%	2%	2%
grade 3 events	151	159	149	155	137
	1%	1%	1%	1%	1%
grade 4 events	137	141	156	139	147
	1%	1%	1%	1%	1%
grade 5 events	498	577	502	650	570
	4%	4%	4%	5%	4%
grade 6 events	283	325	270	280	328
	2%	2%	2%	2%	2%
grade 7 events	9401	10179	10501	9496	10364
	81%	81%	83%	81%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	265.216016	265.2042776124412	CCD I2 on	Y	Y
[deg] Pointing Dec	-27.805062	-27.77919880136874	CCD I3 on	Y	Y
[deg] Pointing Roll	81.680508	81.88373701322608	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	579347896.184000	579347519.99745	CCD S5 on	N	N
Observation start date	2016-05-11T09:57:08	2016-05-11T09:51:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	579350076.184000	579350210.1101	On-chip summing requested	N	N
Observation end date	2016-05-11T10:33:28	2016-05-11T10:36:50	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



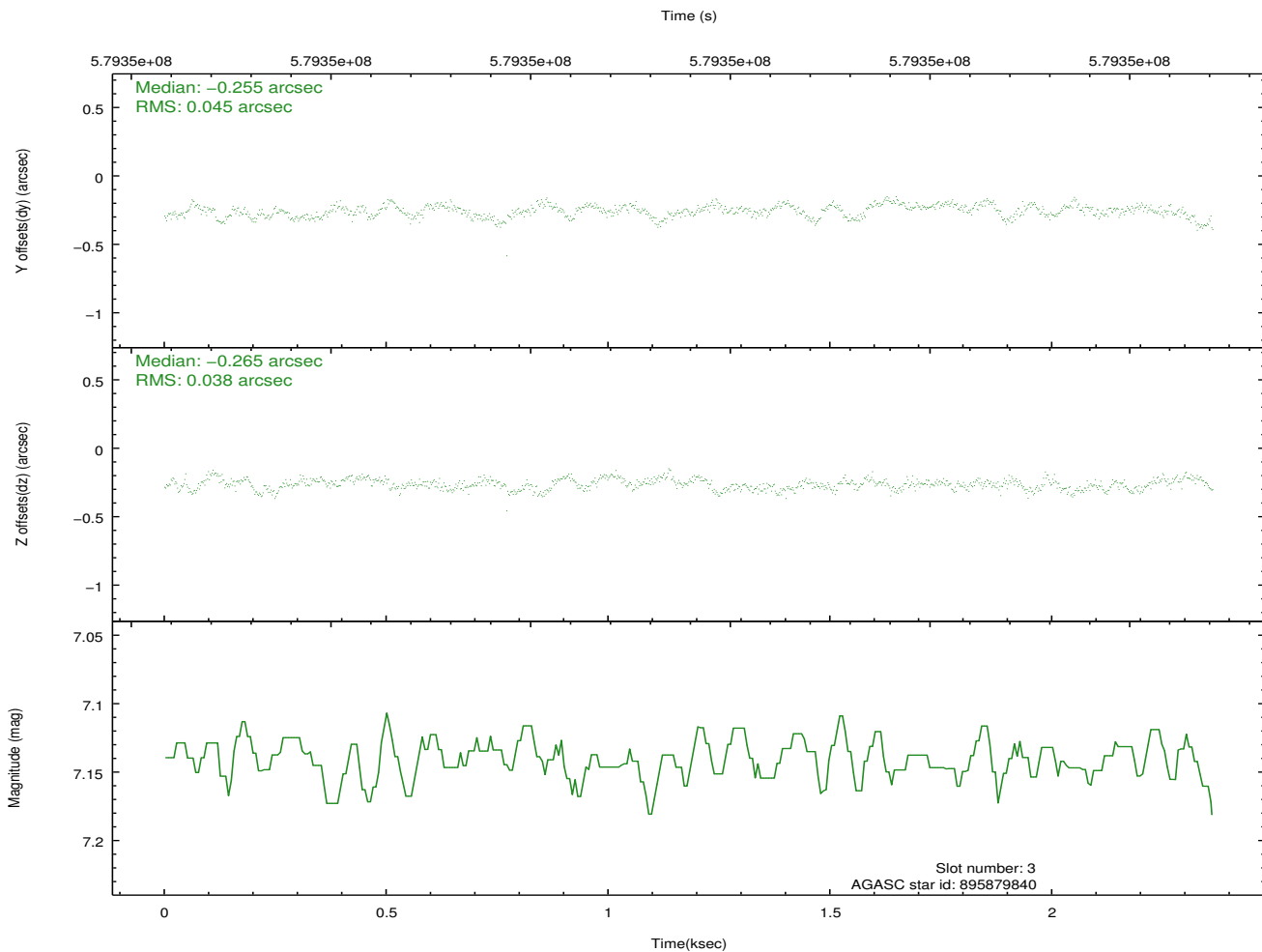
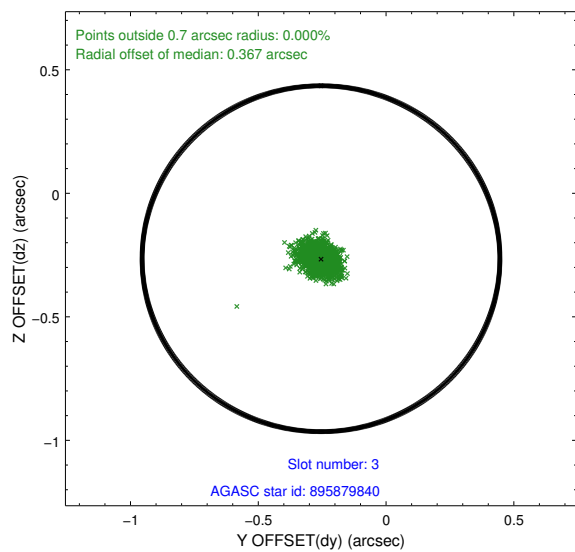
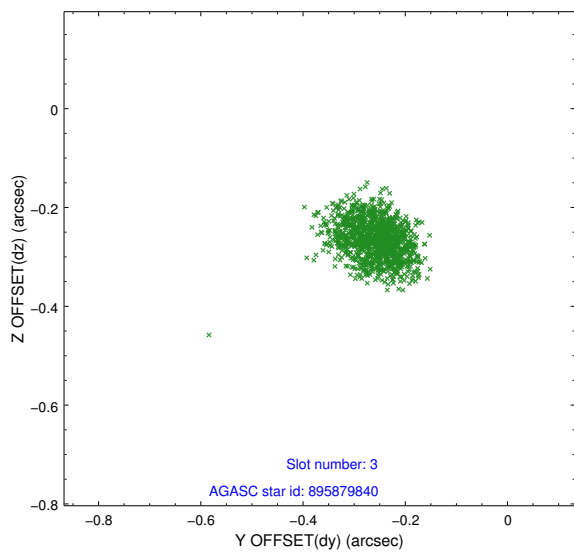


### Slot Statistics

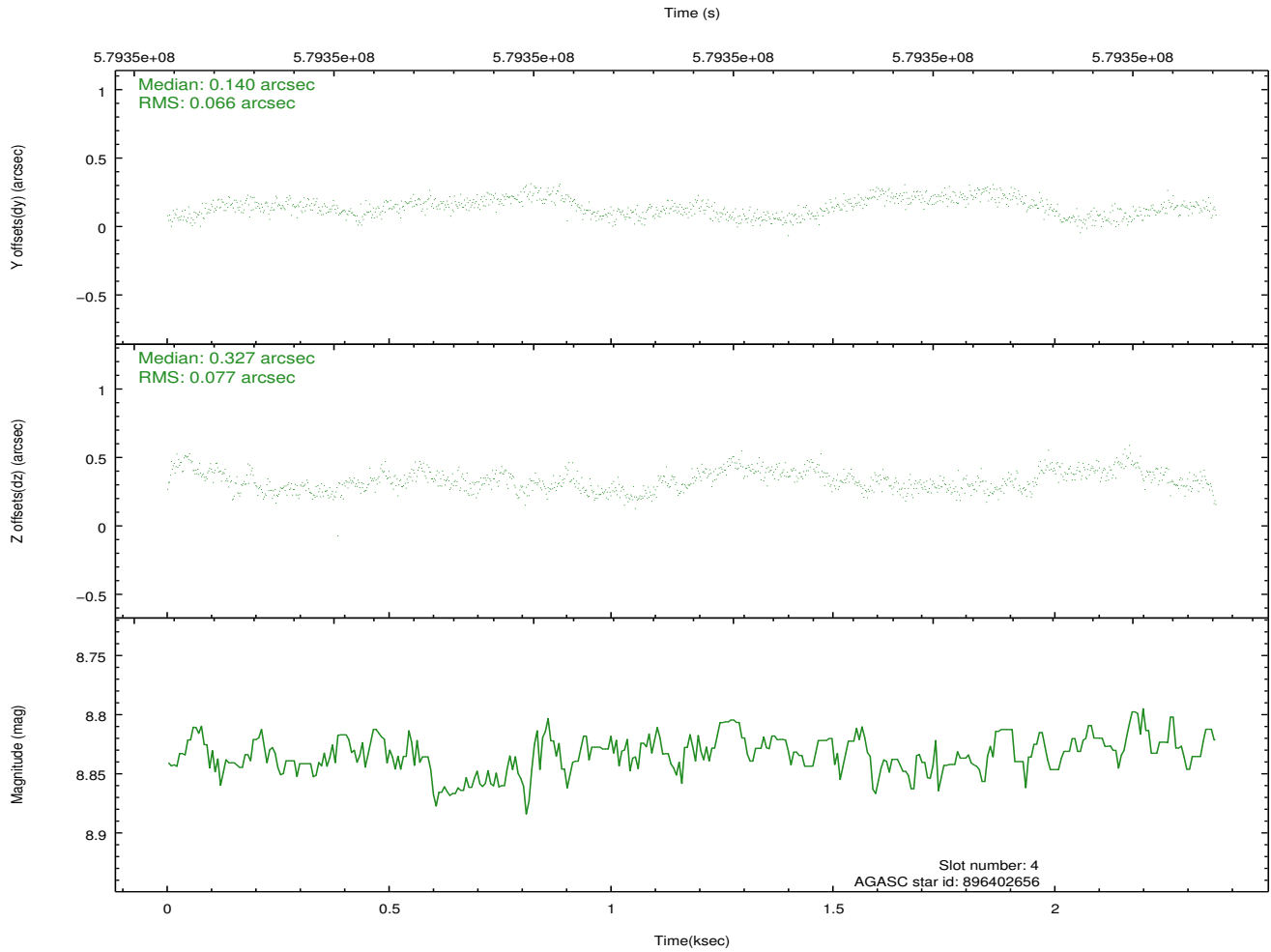
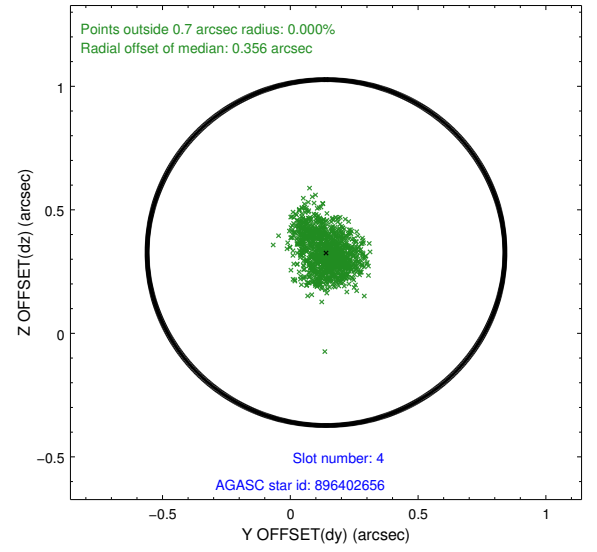
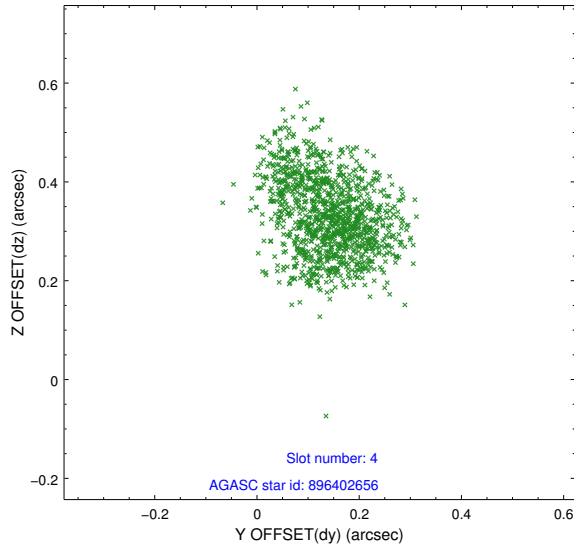
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	576	-0.000	-0.091	0.009	0.015	0.000000	0.000000	928.99	-839.39
1	FID		ACIS-I-4	7.19	575	0.255	0.088	0.008	0.013	0.000000	0.000000	2150.77	1059.24
2	FID		ACIS-I-5	7.24	576	-0.353	0.075	0.007	0.012	0.000000	0.000000	-1815.88	1060.10
3	GUIDE	used	895879840	7.14	1153	-0.255	-0.265	0.063	0.101	265.218397	-27.395778	1457.51	206.00
4	GUIDE	used	896402656	8.83	1153	0.140	0.327	0.110	0.166	265.739192	-28.230753	-1279.13	-1863.75
5	GUIDE	used	896404568	7.82	1153	0.203	0.524	0.082	0.135	265.687293	-28.431080	-2018.62	-1804.07
6	GUIDE	used	896405048	8.27	1152	0.008	-0.384	0.078	0.132	264.482575	-28.152230	-1583.40	2119.69
7	GUIDE	used	896403960	8.57	1150	-0.078	-0.197	0.095	0.156	264.379044	-28.245612	-1965.11	2397.21

## 2.4 Star Slots

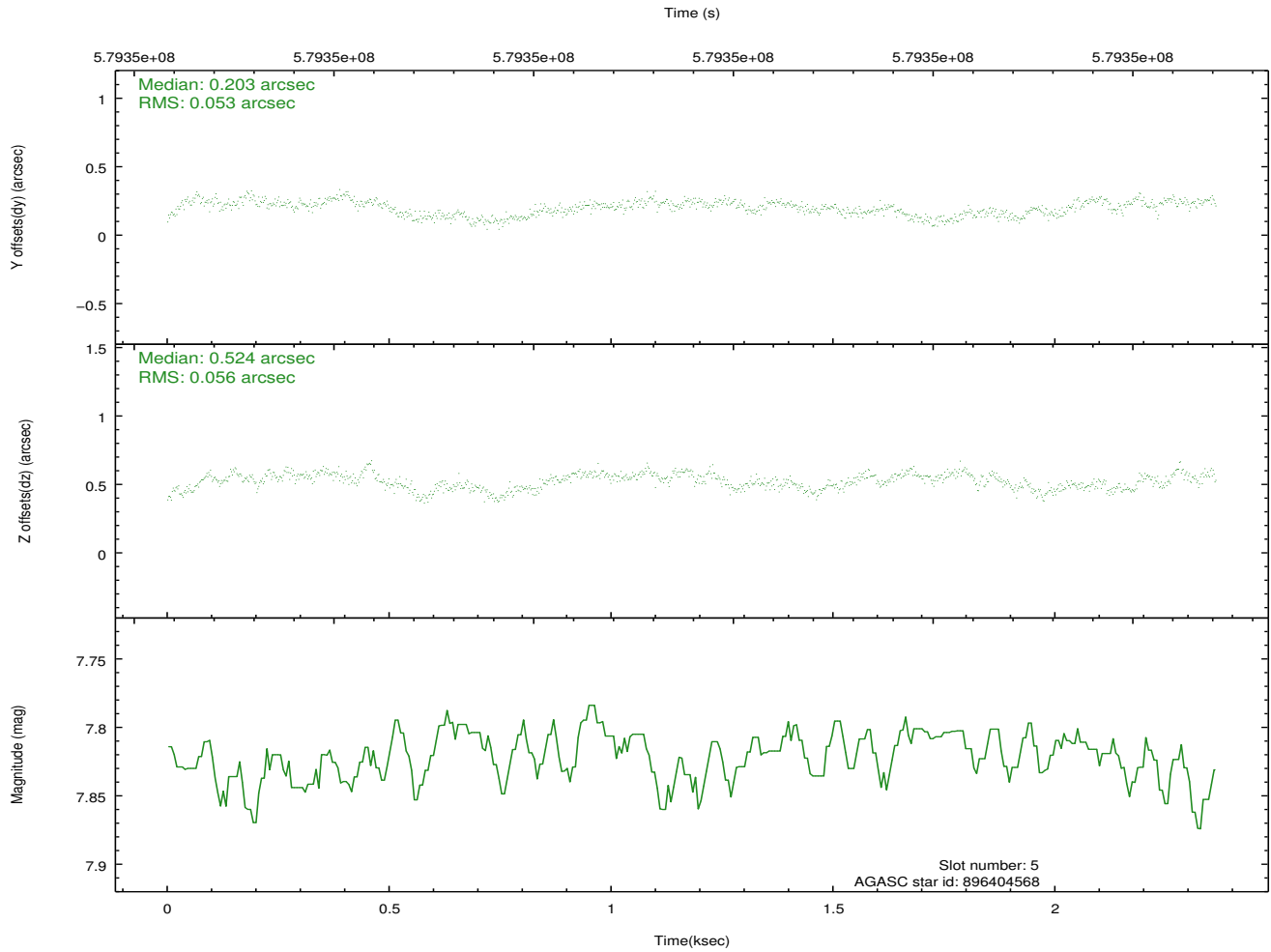
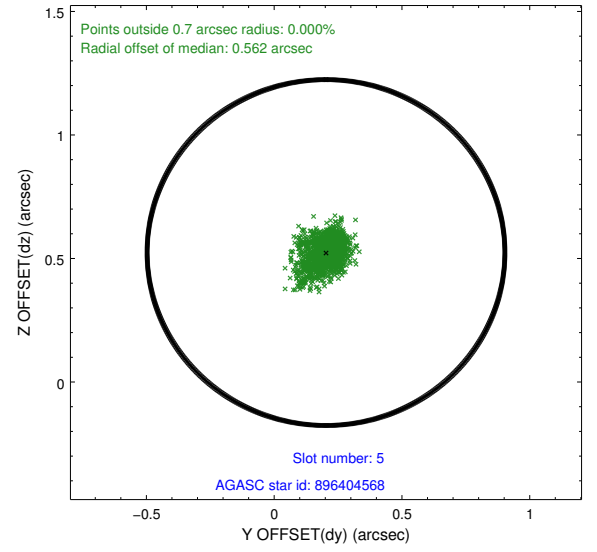
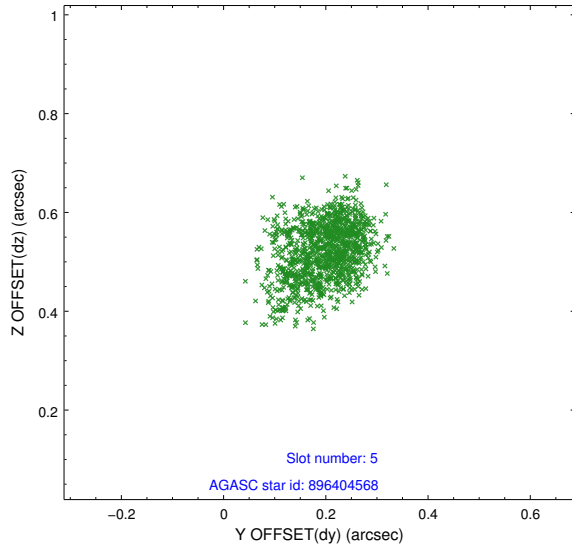
### 2.4.1 Slot 3



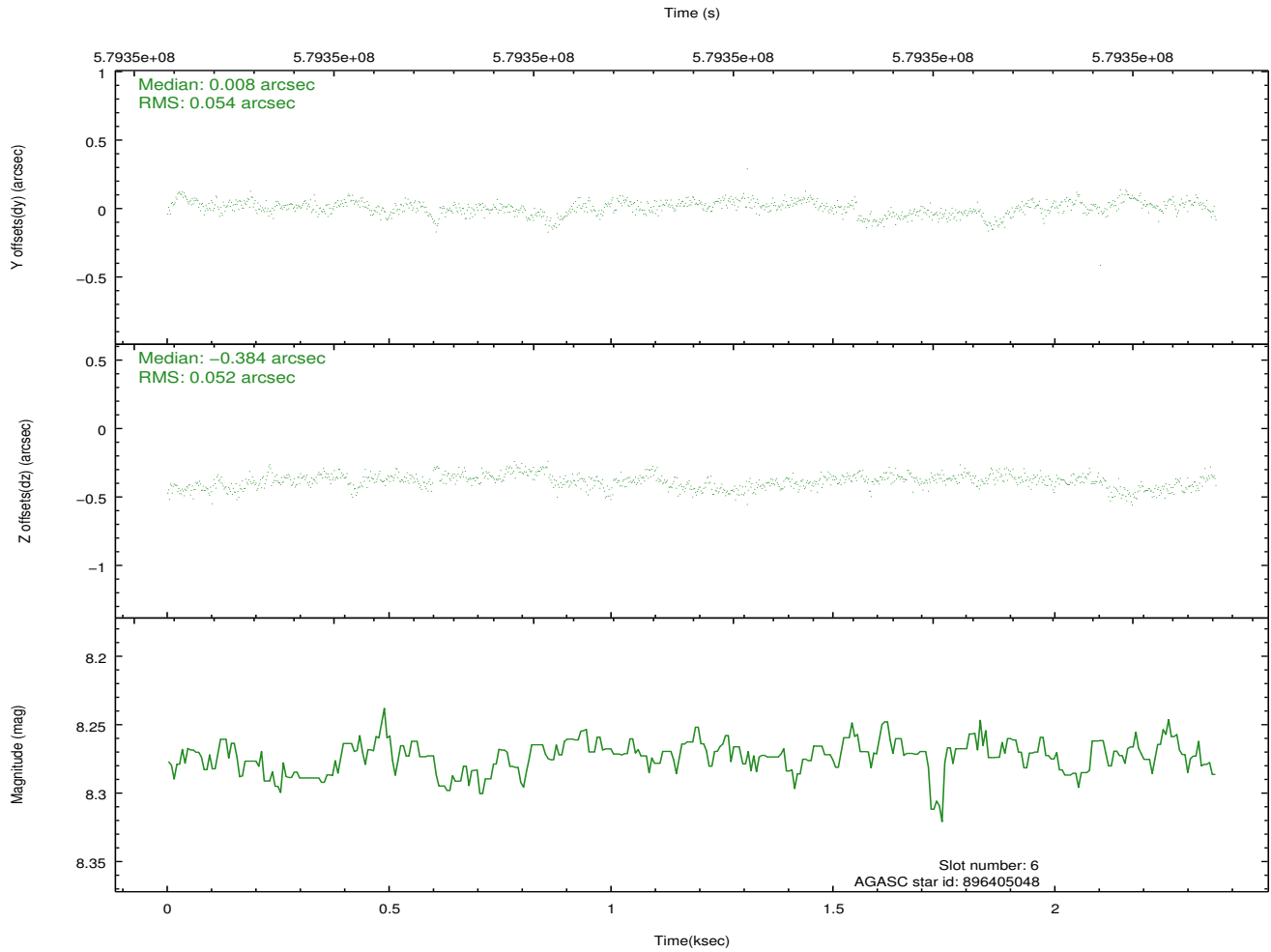
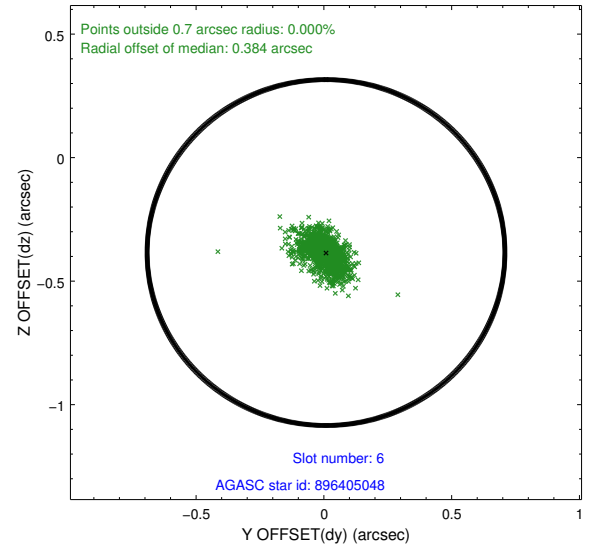
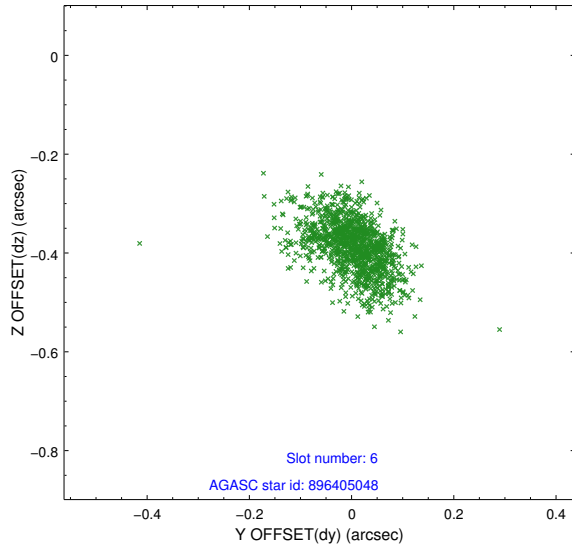
## 2.4.2 Slot 4



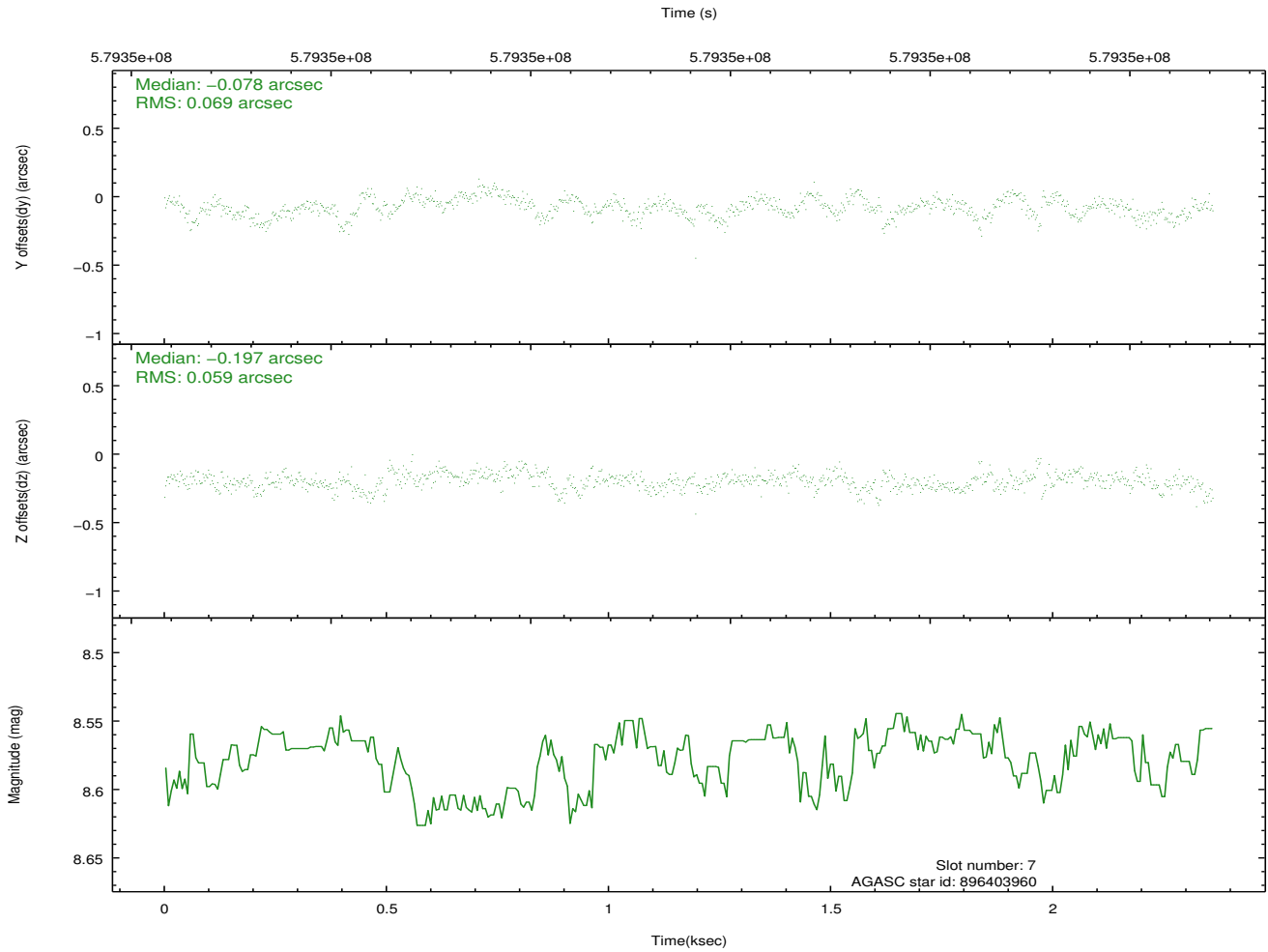
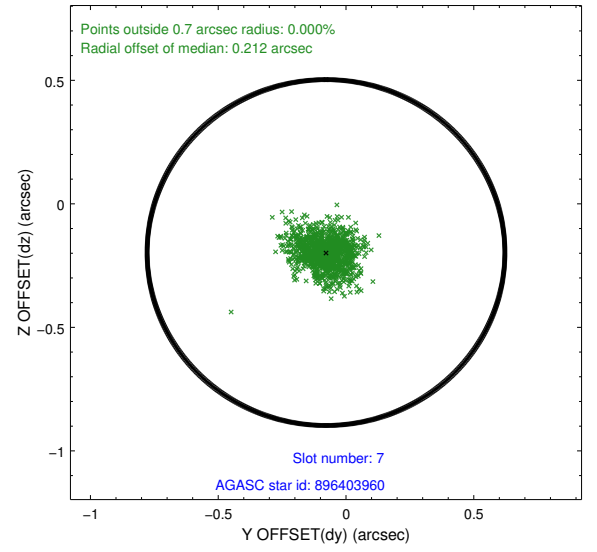
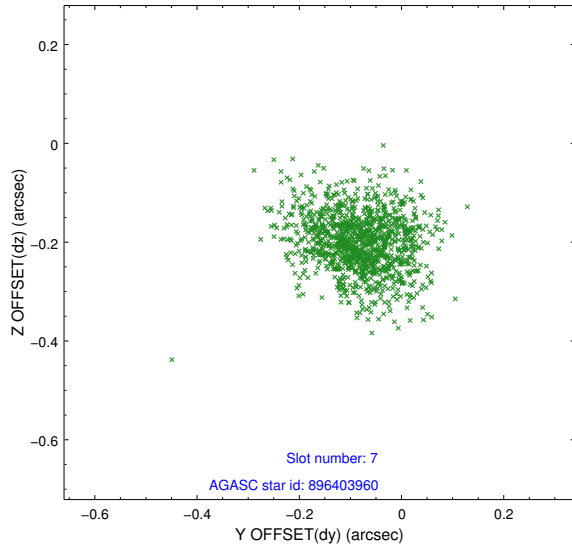
### 2.4.3 Slot 5



## 2.4.4 Slot 6

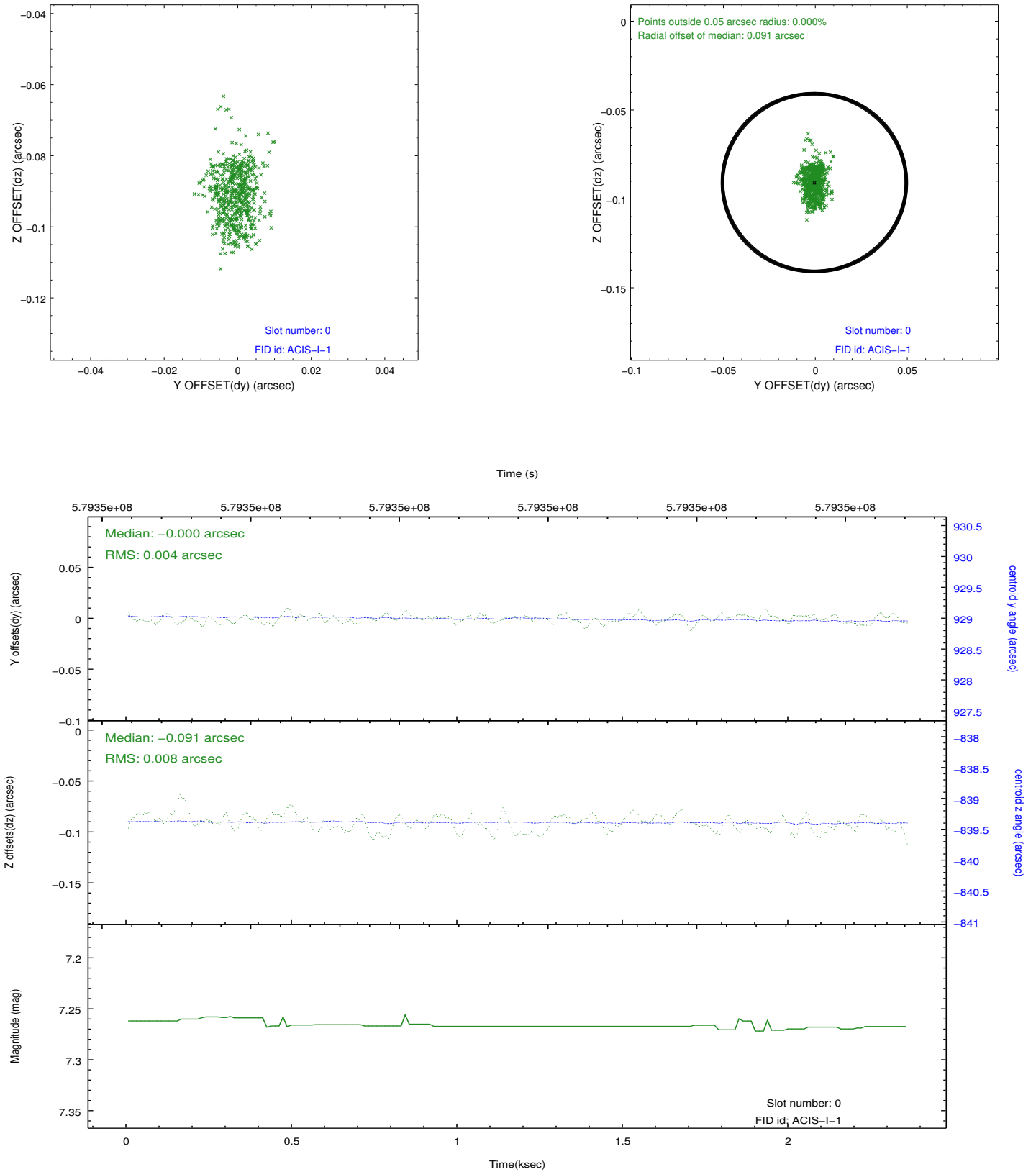


## 2.4.5 Slot 7

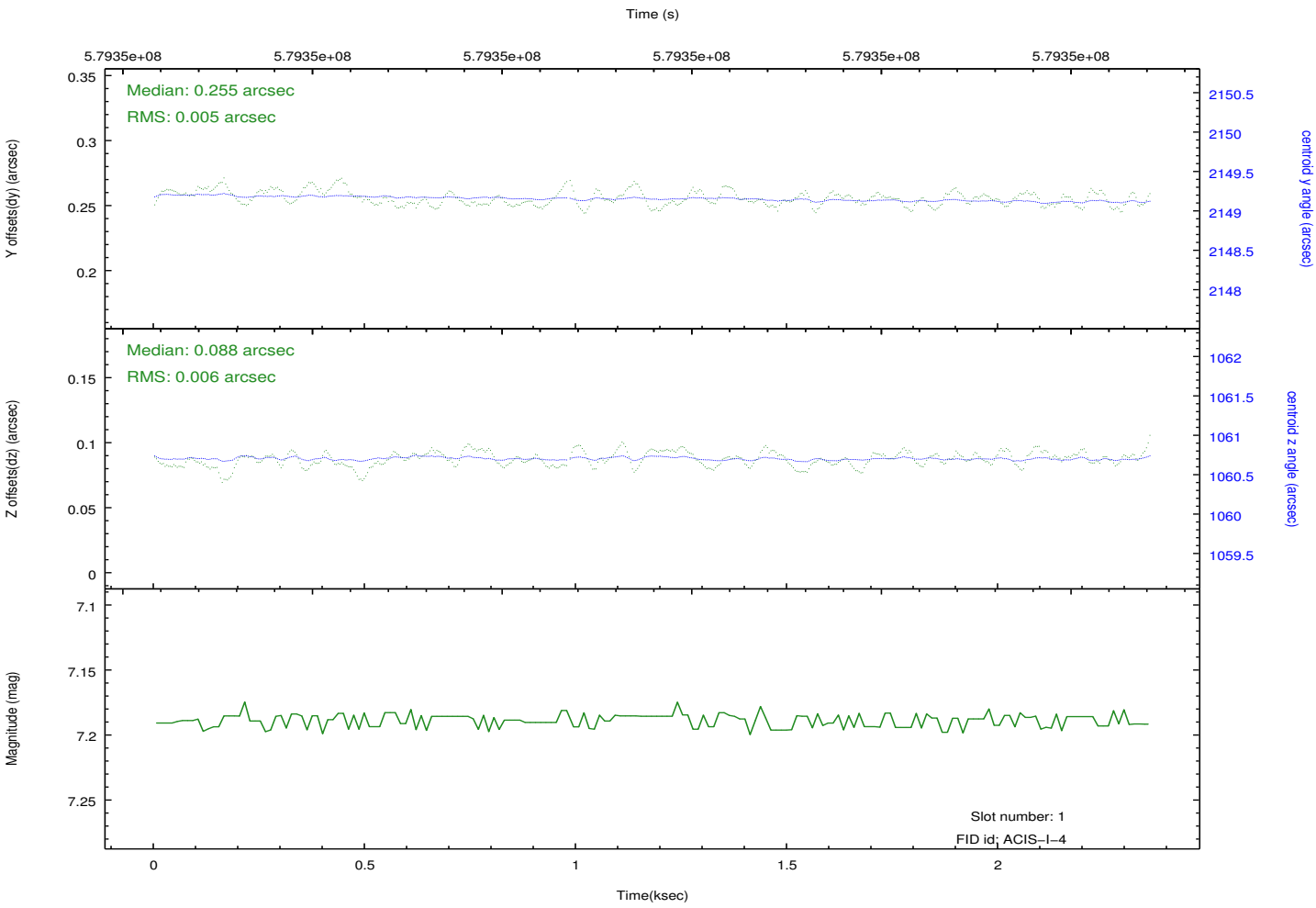
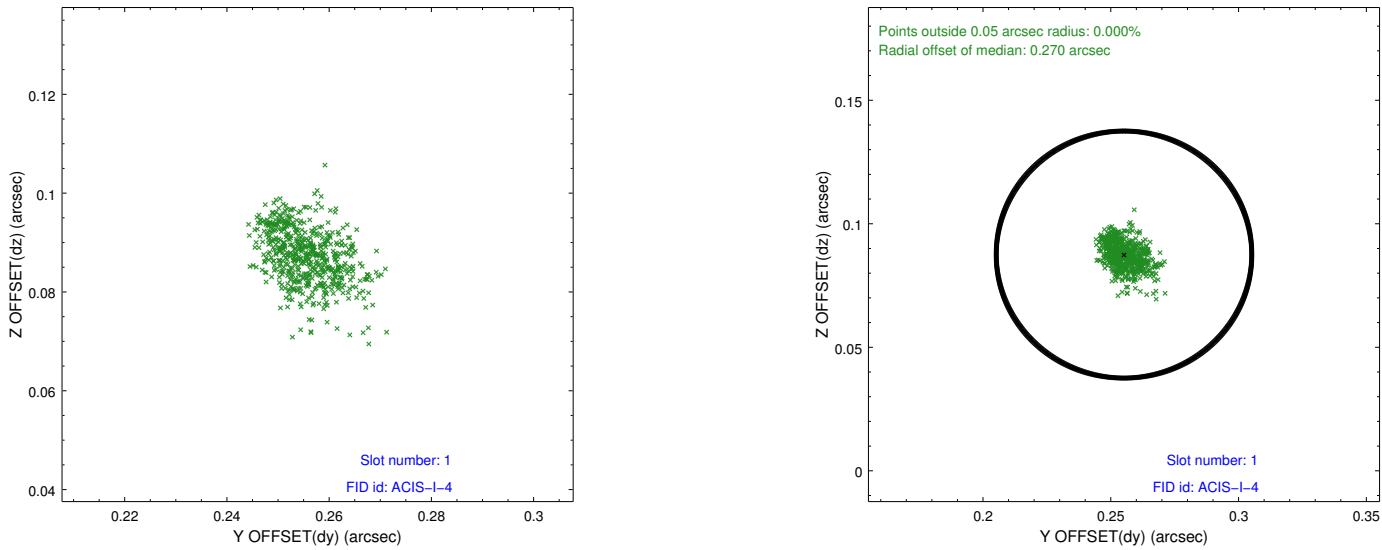


## 2.5 FID Slots

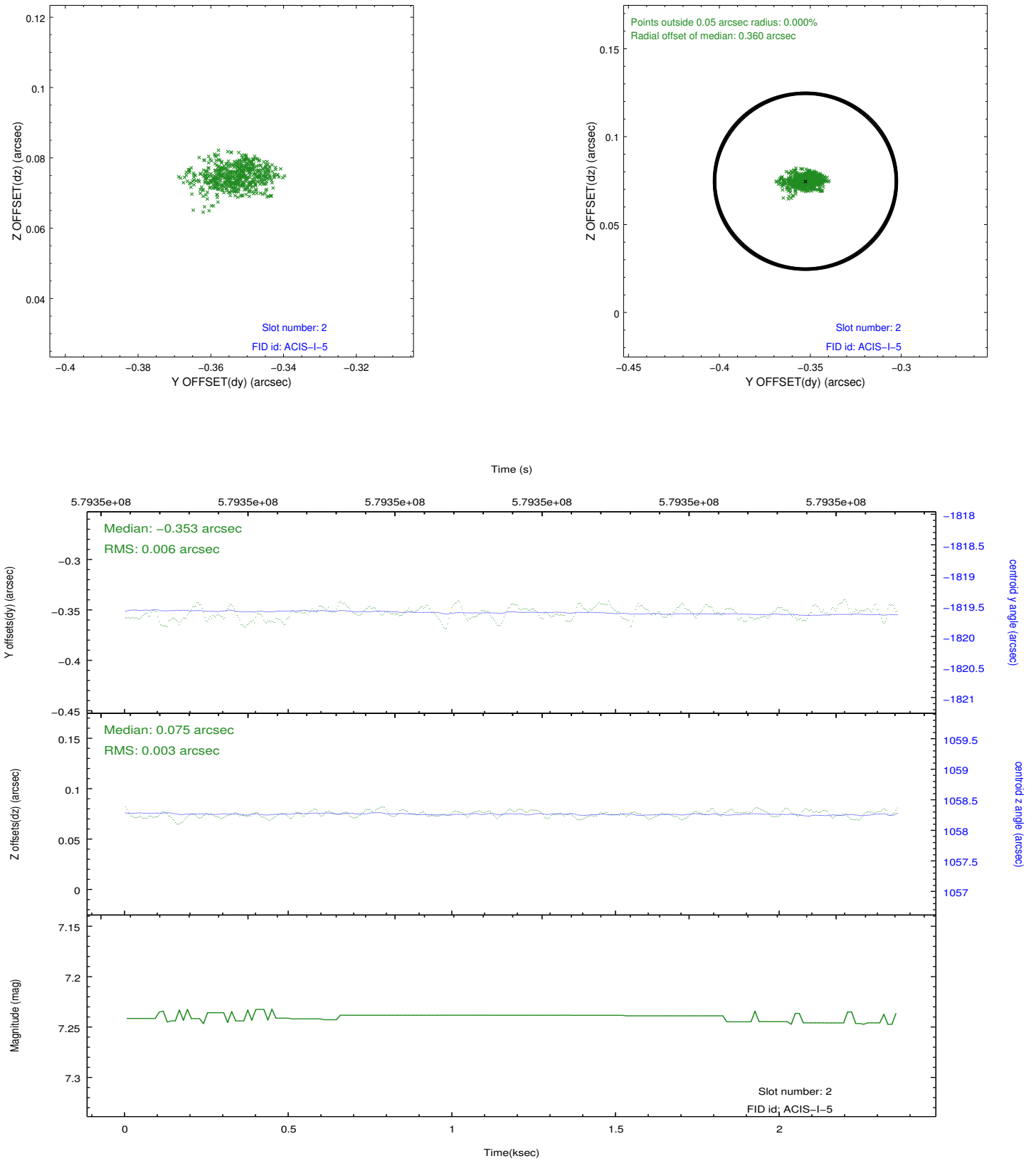
### 2.5.1 Slot 0



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)	2016.05.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.9556877957582

### A.2 Comments