

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9542 - L2 Version 2  
Chandra X-Ray Center

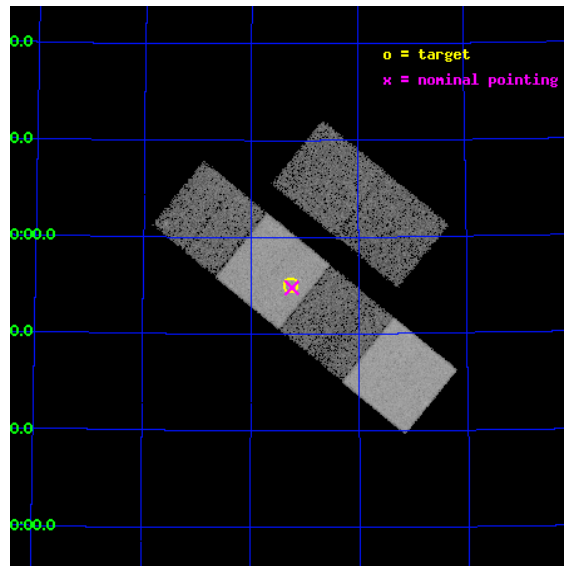
L2 Processing Date : May 11 2012

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# 1 Front

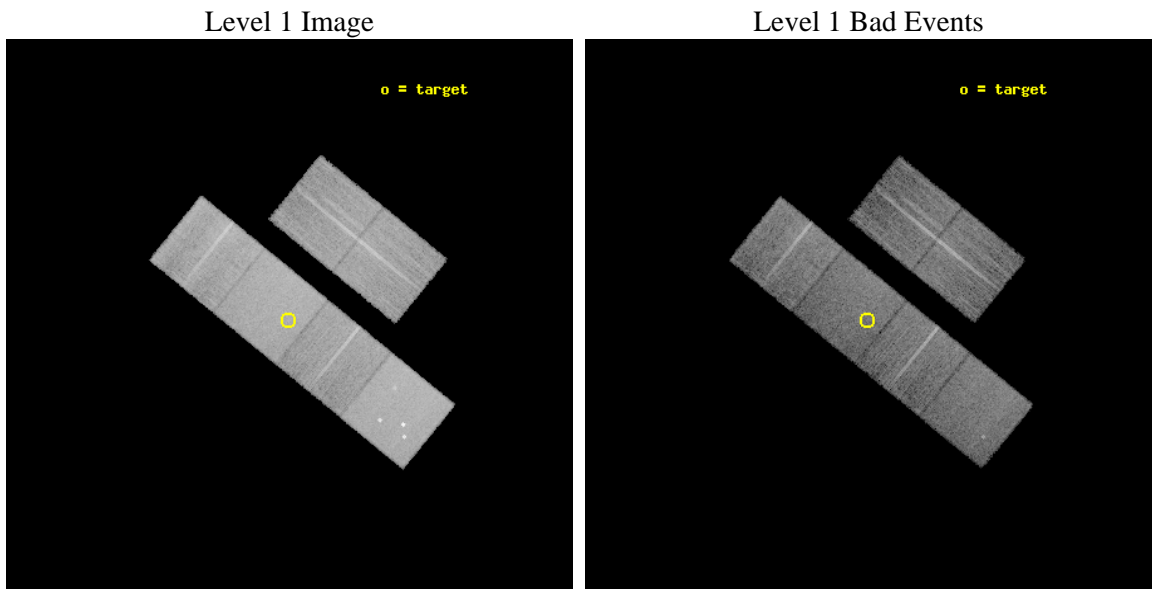
seq_num	600683	Sequence number
obs_id	9542	Observation id
title	Galaxies across the Octaves: A Chandra Legacy Survey of SINGS Galaxies	Proposal title
observer	Dr Leigh Jenkins	Principal investigator
object	NGC 2976	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	146.814583	Observer's specified target RA [deg]
dec_targ	67.917528	Observer's specified target Dec [deg]
ra_nom	146.81040487794	Nominal RA [deg]
dec_nom	67.912990287587	Nominal Dec [deg]
roll_nom	219.16140975487	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9948.7999629974	Sum of GTIs [s]
livetime	9822.8222674178	Livetime [s]
ontime2	9948.7999629974	Sum of GTIs [s]
ontime3	9948.7999629974	Sum of GTIs [s]
ontime5	9948.7999629974	Sum of GTIs [s]
ontime6	9948.7999629974	Sum of GTIs [s]
ontime7	9948.7999629974	Sum of GTIs [s]
ontime8	9948.7999629974	Sum of GTIs [s]
l2events	159044	Number of level 2 events



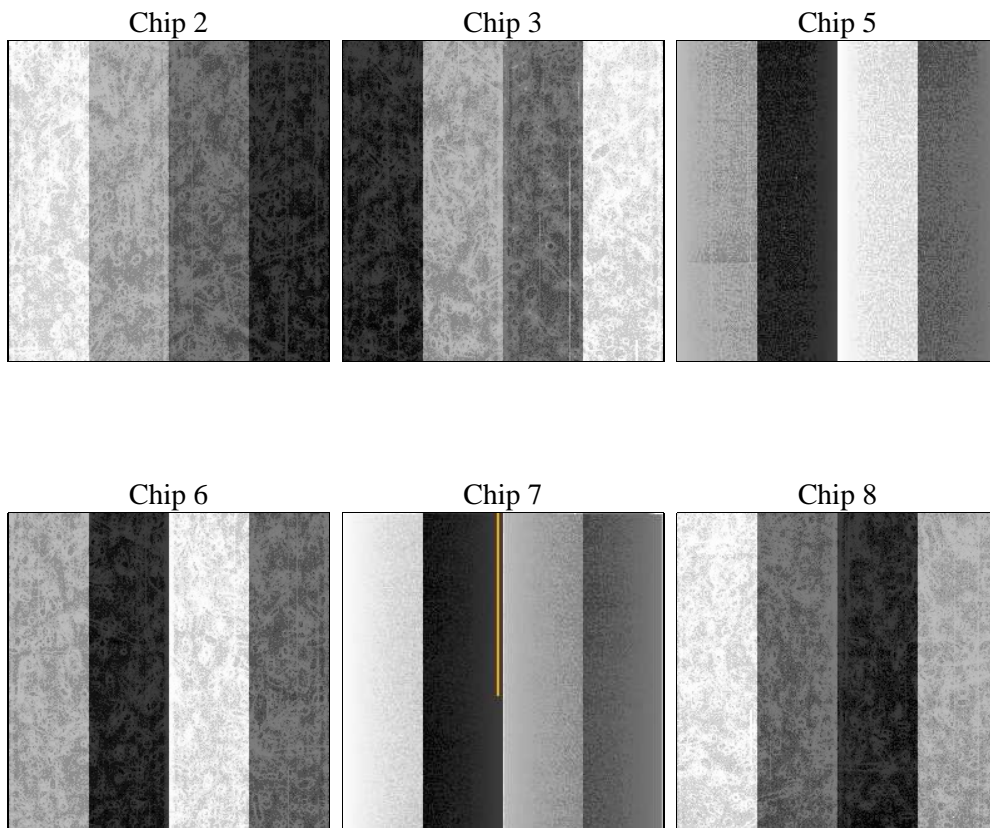
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	9948.7999629974	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	9948.7999629974	Sum of GTIs [s]
date	2012-05-12T00:26:27	Date and time of file creation	ontime3	9948.7999629974	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	9948.7999629974	Sum of GTIs [s]
			ontime6	9948.7999629974	Sum of GTIs [s]
			ontime7	9948.7999629974	Sum of GTIs [s]
			ontime8	9948.7999629974	Sum of GTIs [s]
			l1events	694152	Number of level 1 events

### 2.1.4 Events

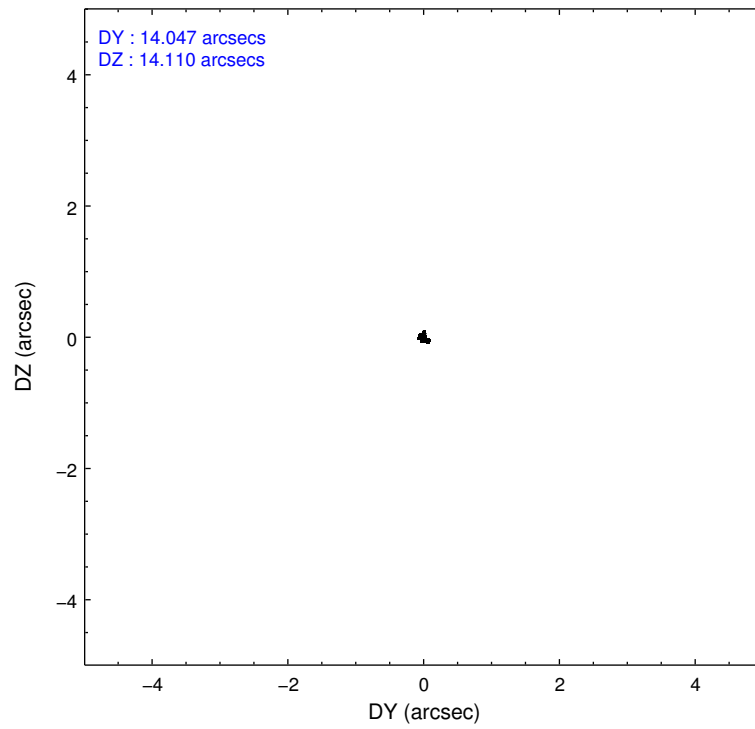
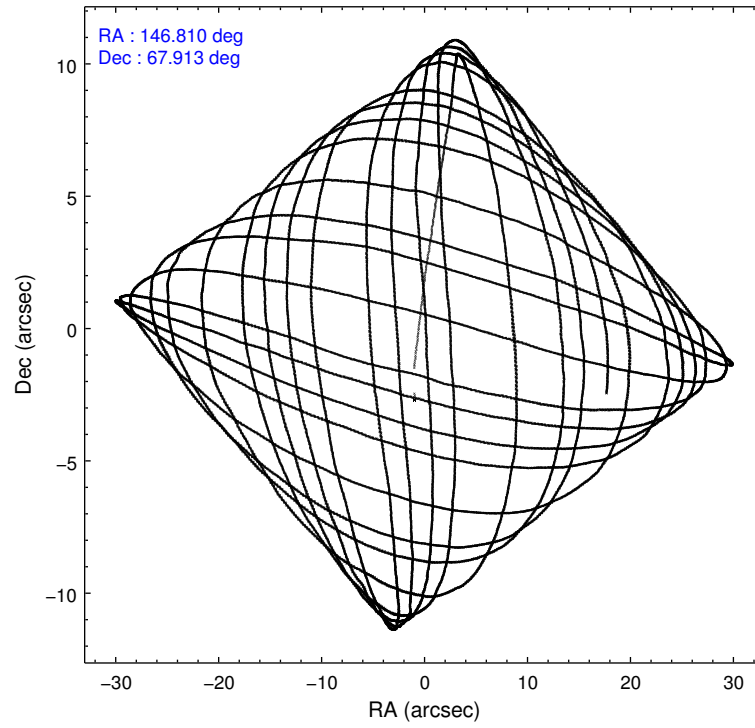
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	98298	92627	152256	94854	134165	121952	grade 0 events	4790	4806	9053	4507	4759	8673
rejected events	87016	81333	81540	83332	78778	94165		4%	5%	5%	4%	3%	7%
rejected %	88%	87%	53%	87%	58%	77%	grade 1 events	68	56	328	50	137	92
								0%	0%	0%	0%	0%	0%
							grade 2 events	2390	2247	20916	2536	11293	6402
								2%	2%	13%	2%	8%	5%
							grade 3 events	1055	1114	2401	1101	4654	2791
								1%	1%	1%	1%	3%	2%
							grade 4 events	1095	1103	2330	1058	4538	2656
								1%	1%	1%	1%	3%	2%
							grade 5 events	3961	4359	10660	4583	12382	6102
								4%	4%	7%	4%	9%	5%
							grade 6 events	1955	2028	36034	2323	30163	7284
								1%	2%	23%	2%	22%	5%
							grade 7 events	82984	76914	70534	78696	66239	87952
								84%	83%	46%	82%	49%	72%

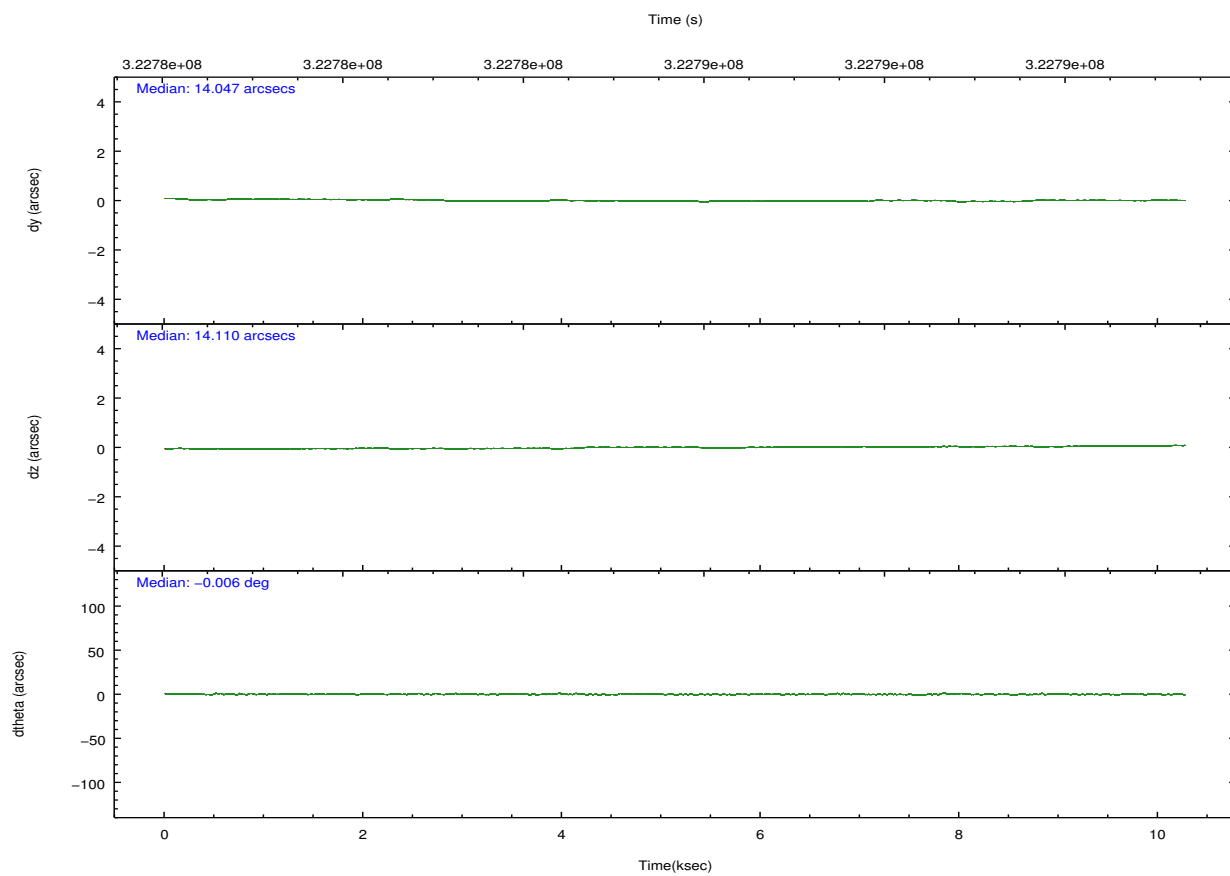
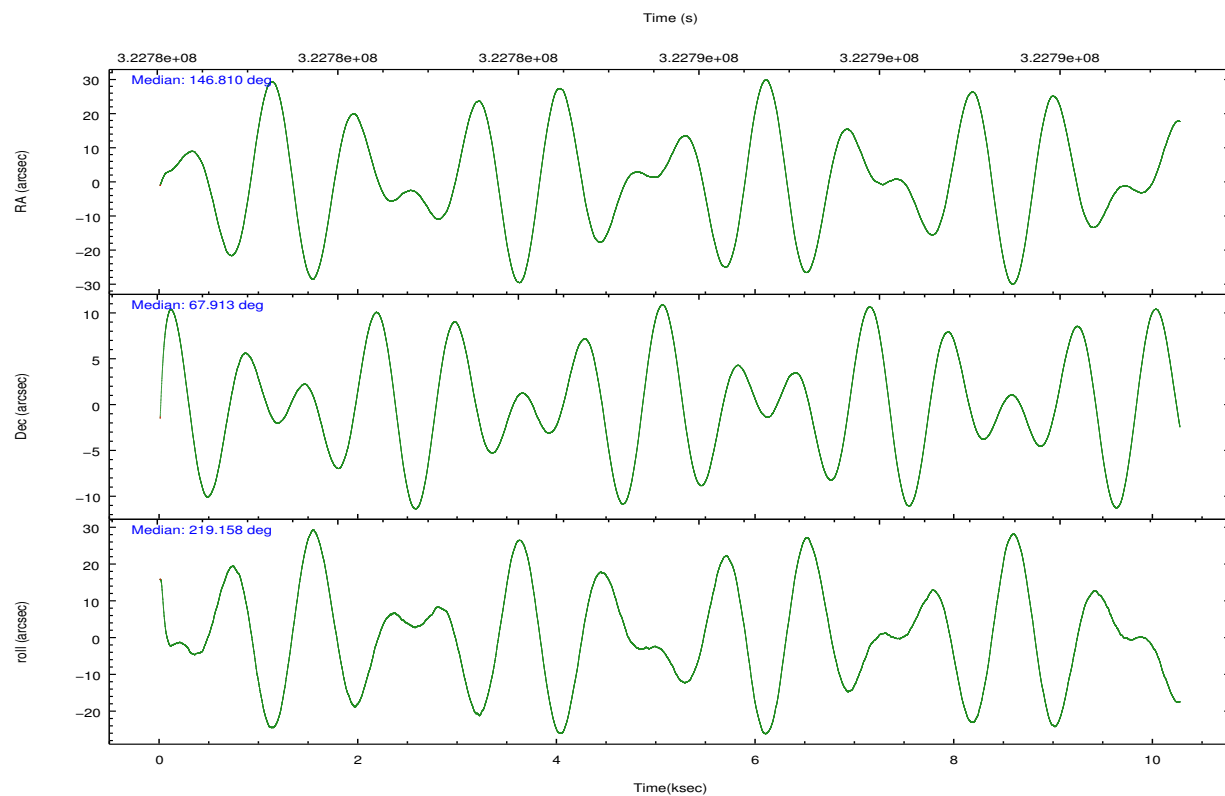


## 2.2 Compared Parameters

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	146.835333	146.8104048779398	CCD I2 on	O1	Y
[deg] Pointing Dec	67.938632	67.91299028758692	CCD I3 on	O2	Y
[deg] Pointing Roll	218.981659	219.161409754875	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	322780822.184000	322779816.4546	CCD S5 on	N	N
Observation start date	2008-03-24T21:19:17	2008-03-24T21:03:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	322790822.184000	322791477.88017	On-chip summing requested	N	N
Observation end date	2008-03-25T00:05:57	2008-03-25T00:17:57	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



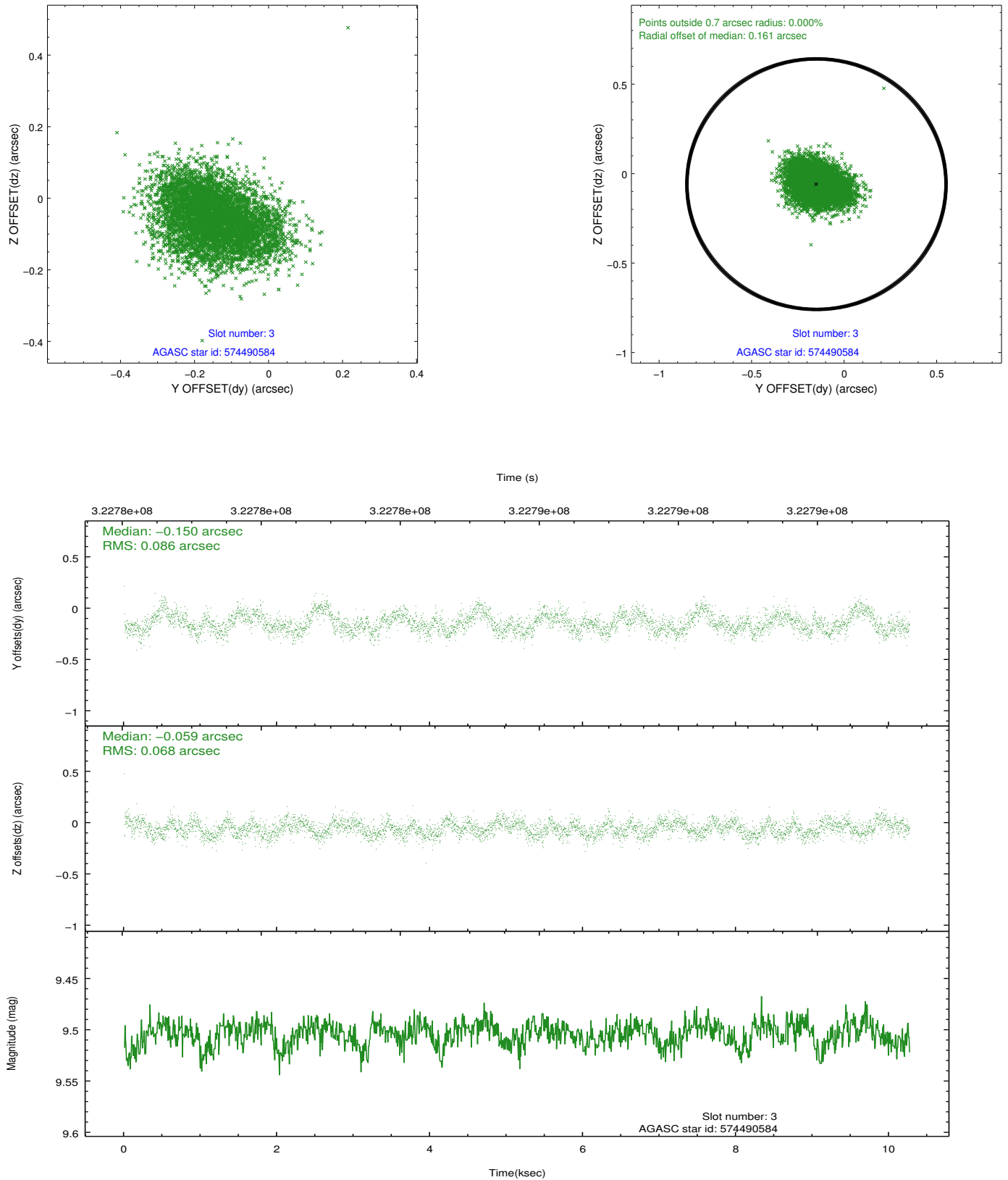


### Slot Statistics

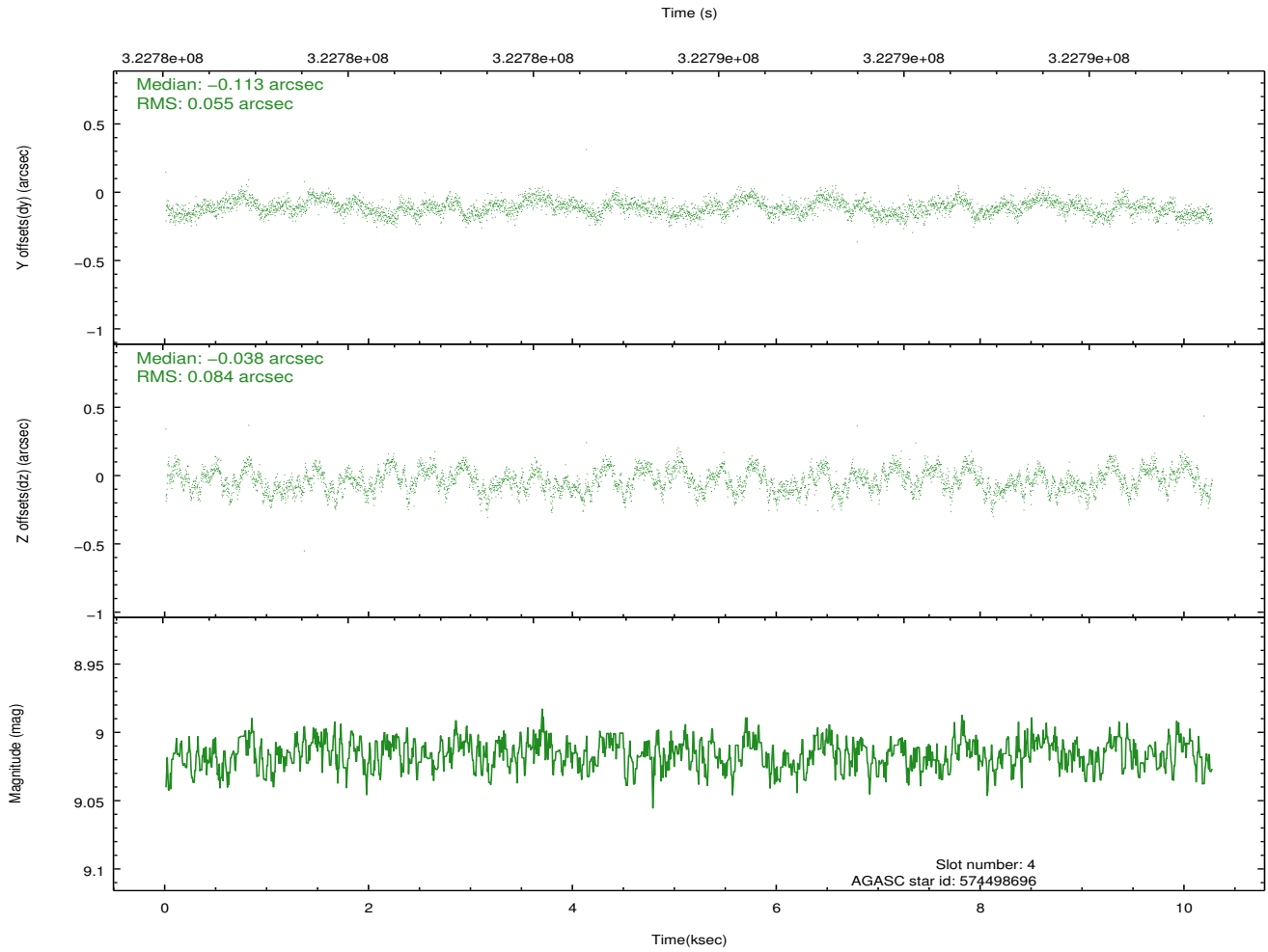
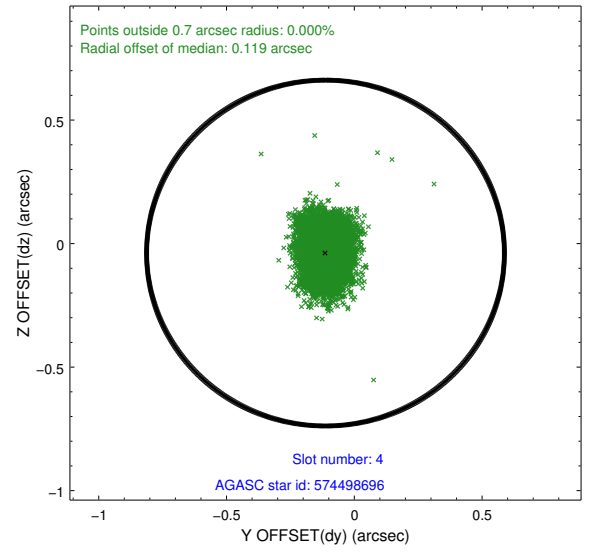
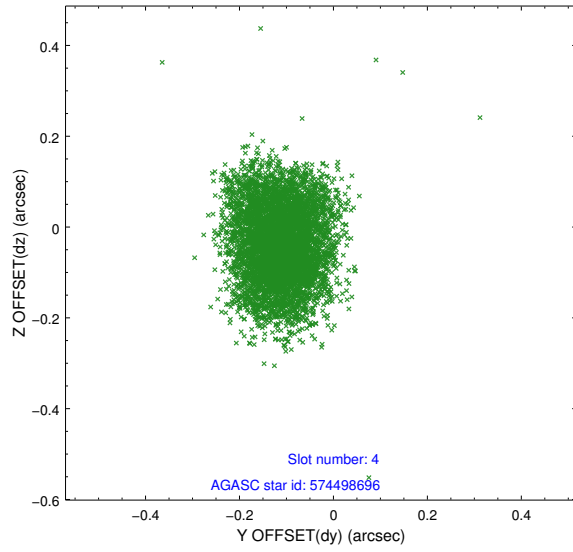
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	2505	0.074	-0.024	0.006	0.011	0.000000	0.000000	929.12	-1731.06
1	FID	ACIS-S-5	7.23	2505	-0.158	0.047	0.006	0.011	0.000000	0.000000	-1819.83	166.03
2	FID	ACIS-S-6	7.33	2505	0.063	-0.011	0.007	0.011	0.000000	0.000000	394.10	810.52
3	GUIDE	574490584	9.50	5001	-0.150	-0.059	0.117	0.187	148.421828	68.168920	-2189.75	670.83
4	GUIDE	574498696	9.02	5005	-0.113	-0.038	0.106	0.167	146.881317	68.486979	-1288.94	-1496.08
5	GUIDE	574500920	10.12	4998	0.020	0.098	0.230	0.342	147.014605	68.742334	-2001.81	-2102.18
6	GUIDE	574502640	9.15	5005	0.174	-0.056	0.105	0.168	145.824634	67.522284	2017.43	281.25
7	GUIDE	574504696	8.41	5006	0.062	0.051	0.077	0.130	144.712253	68.014195	2023.07	-2048.80

## 2.4 Star Slots

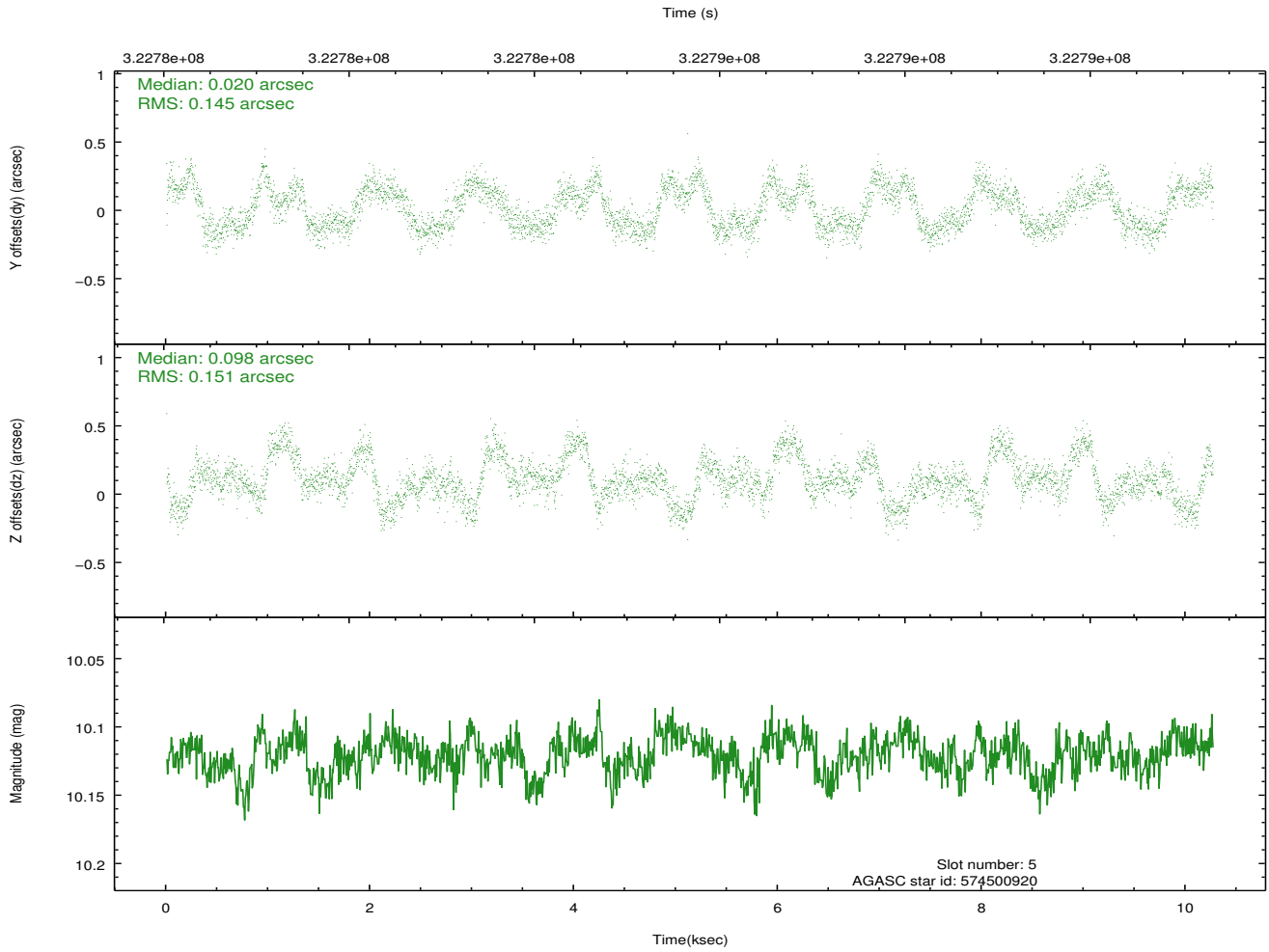
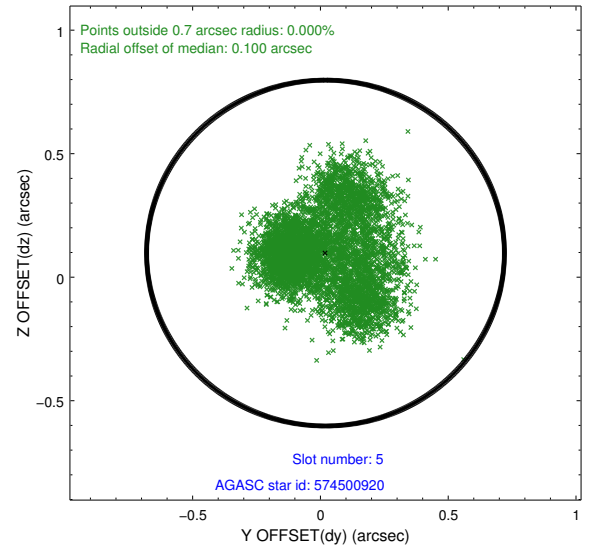
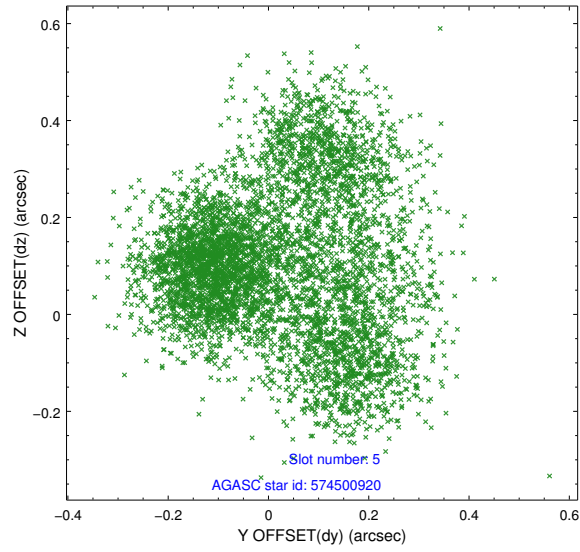
### 2.4.1 Slot 3



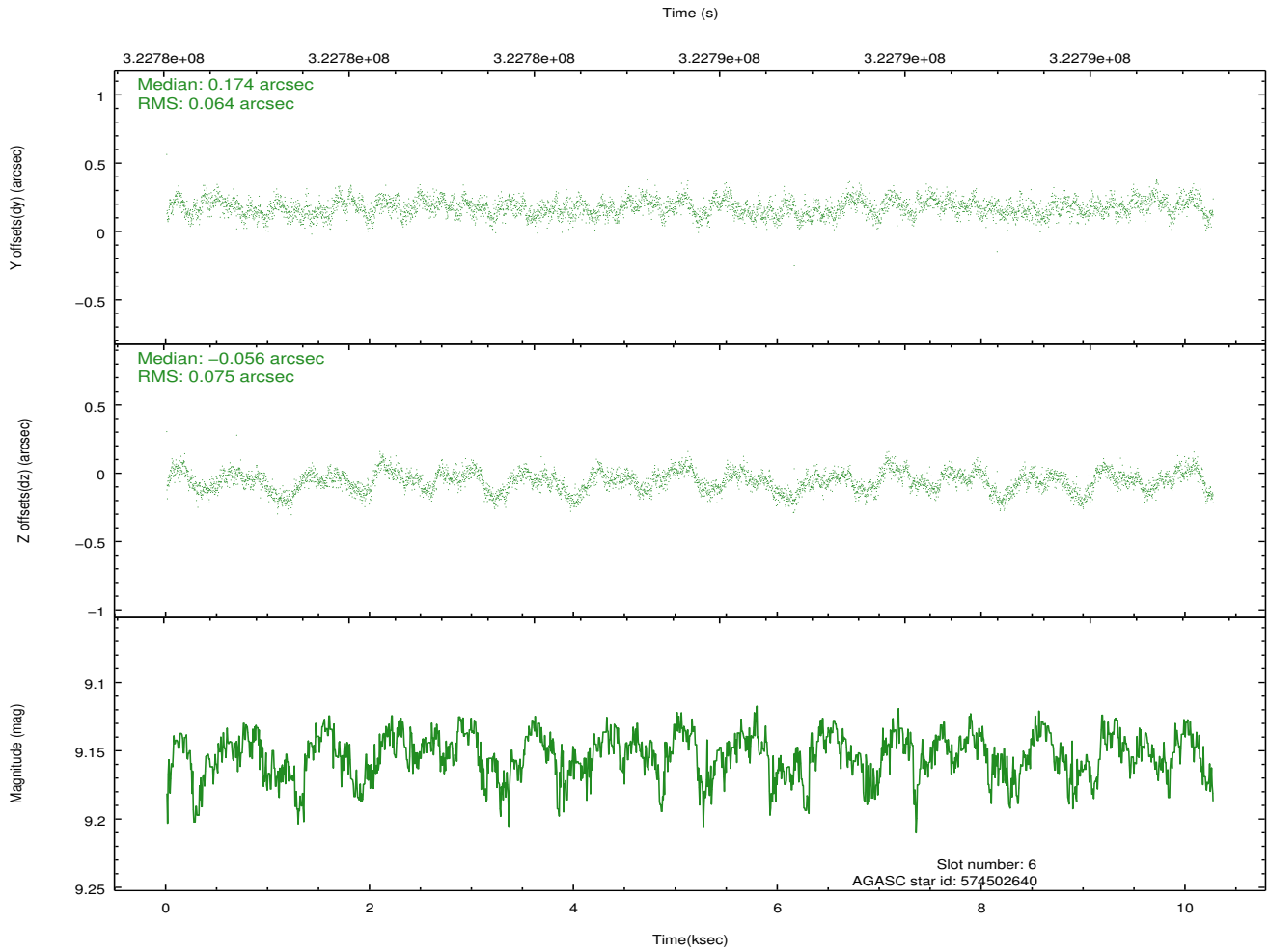
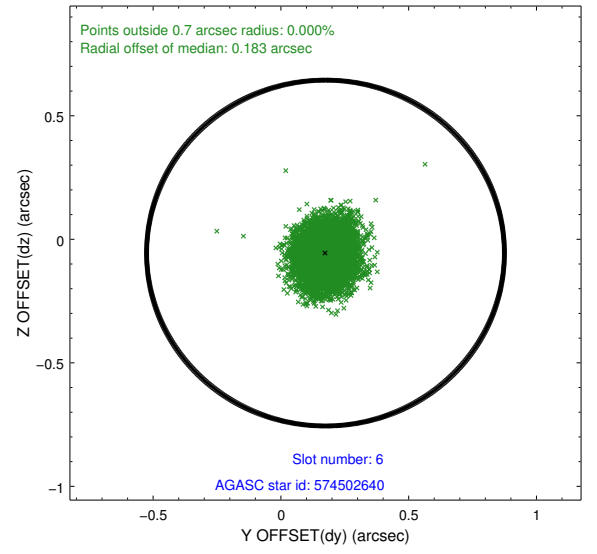
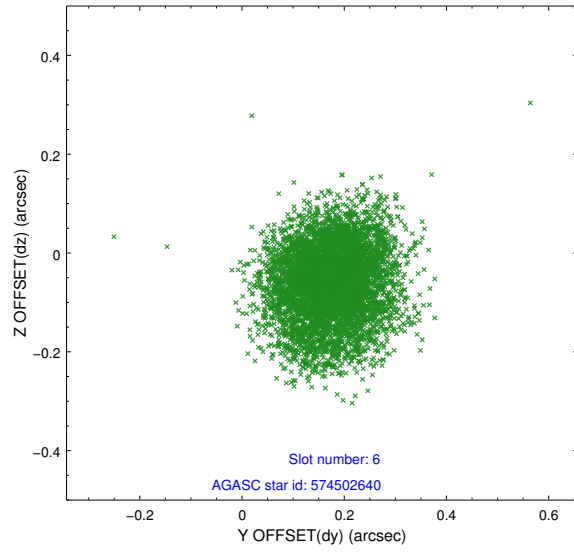
## 2.4.2 Slot 4



### 2.4.3 Slot 5

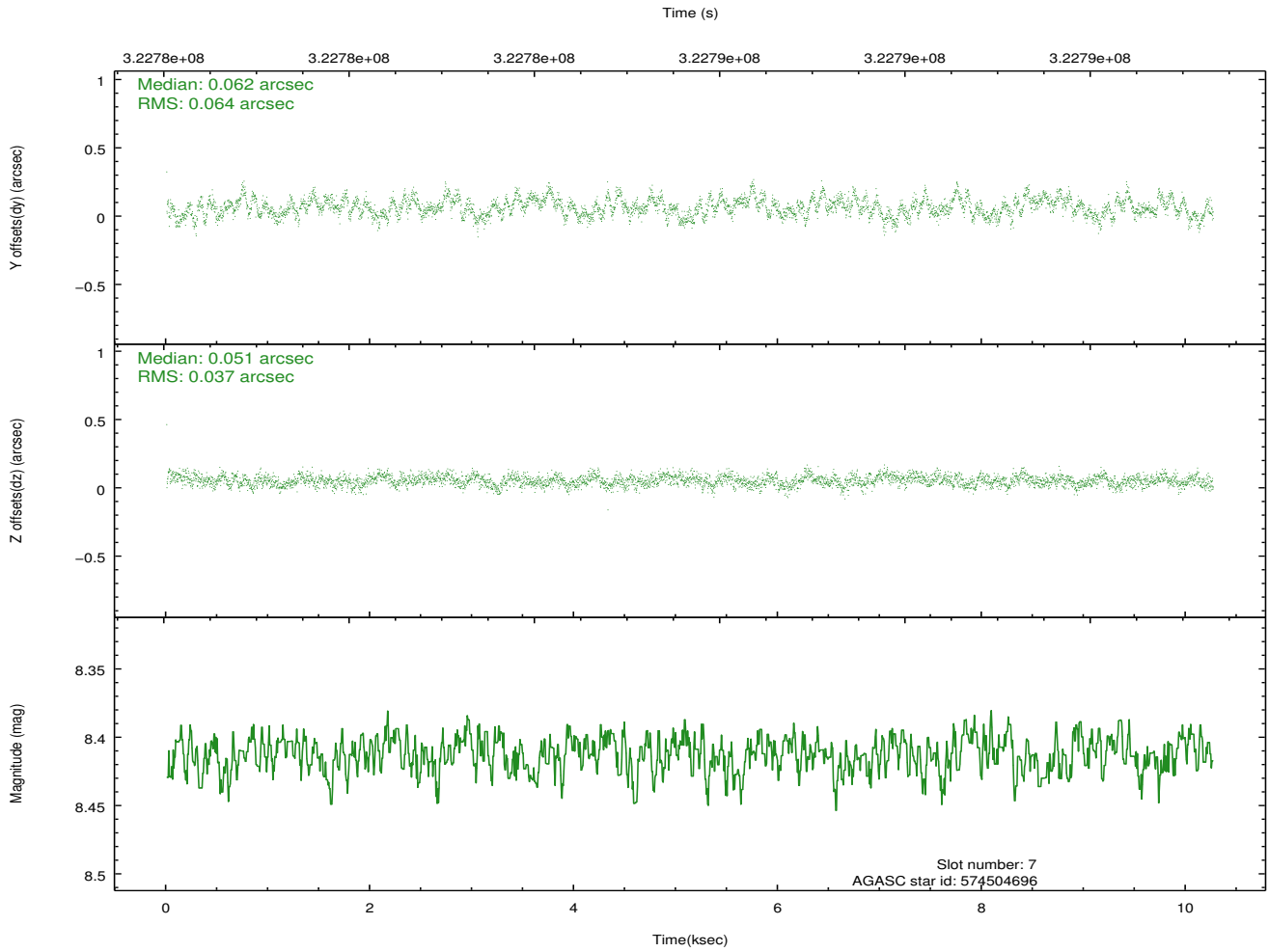
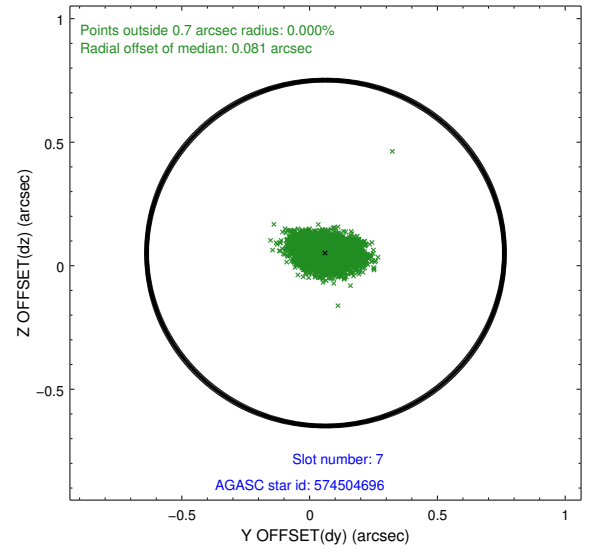
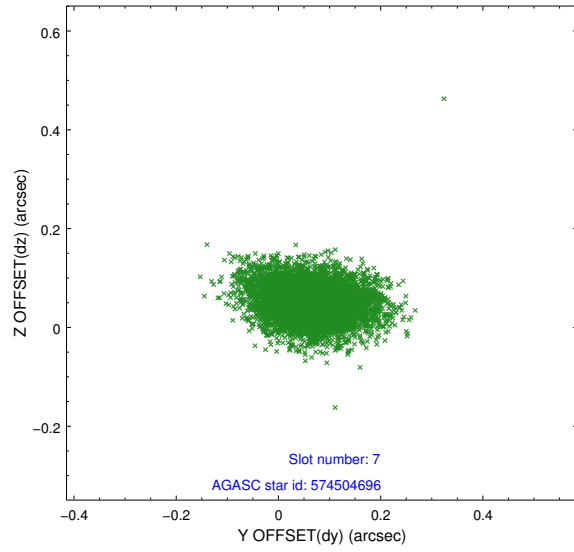


## 2.4.4 Slot 6



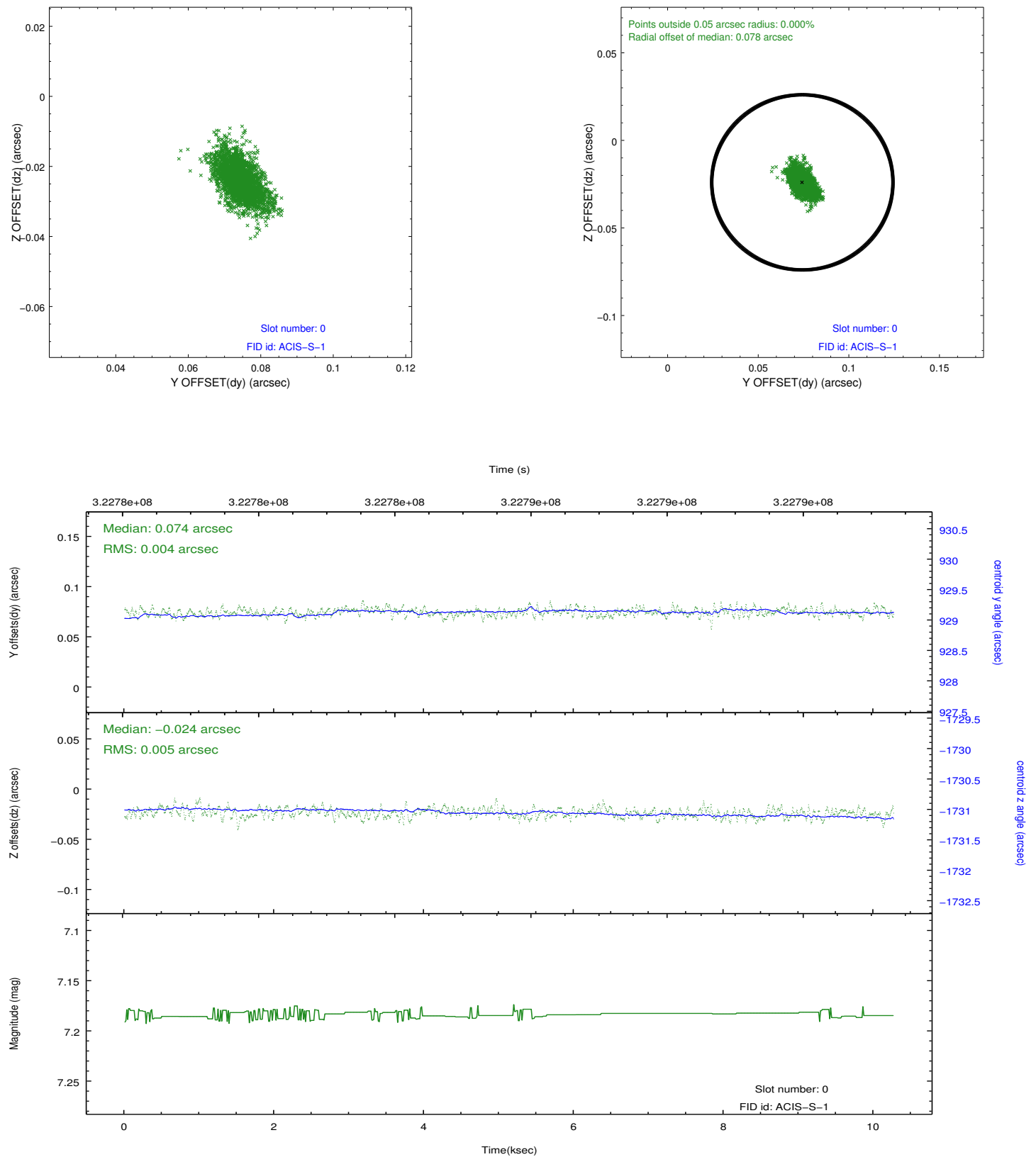


## 2.4.5 Slot 7

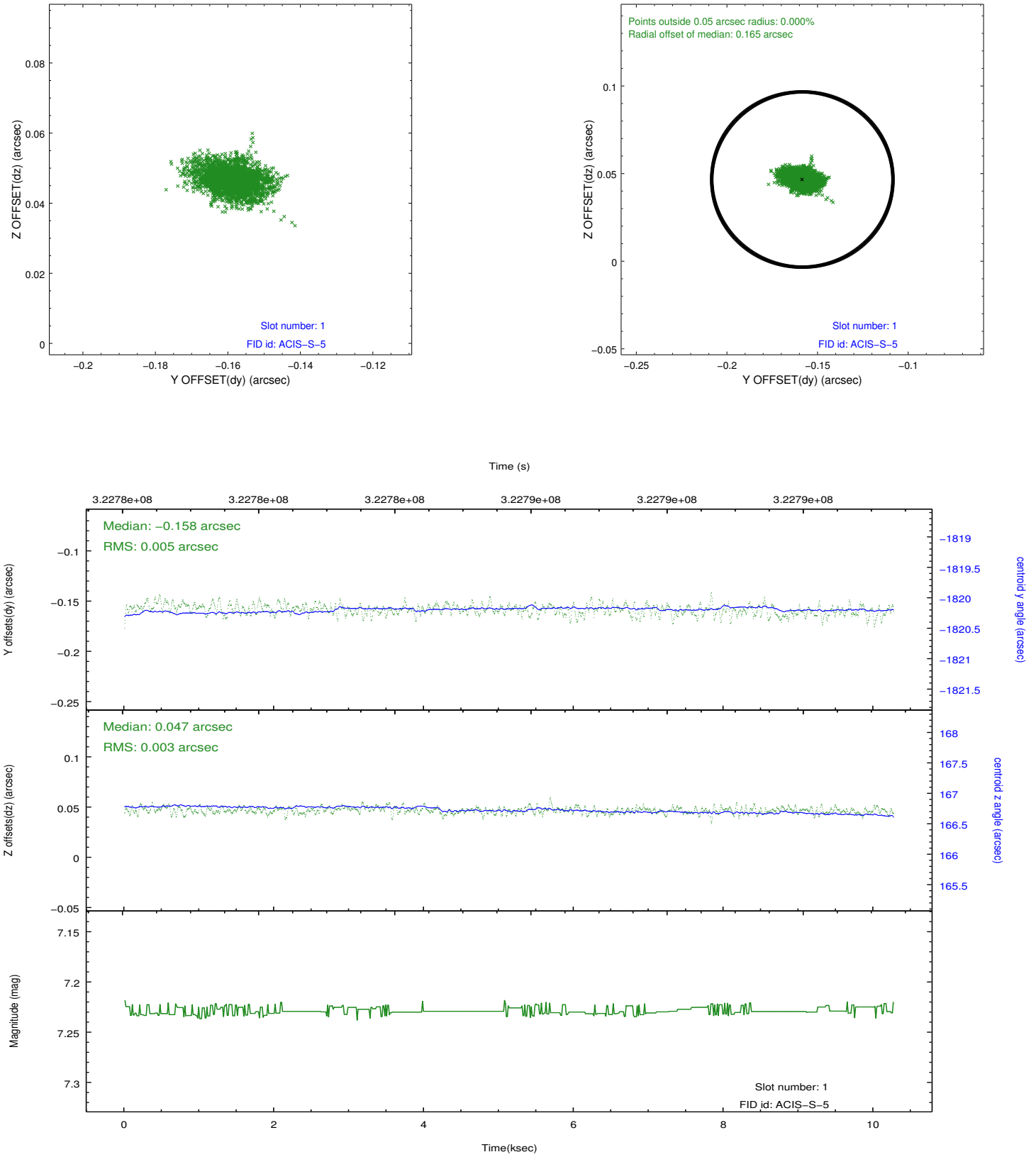


## 2.5 FID Slots

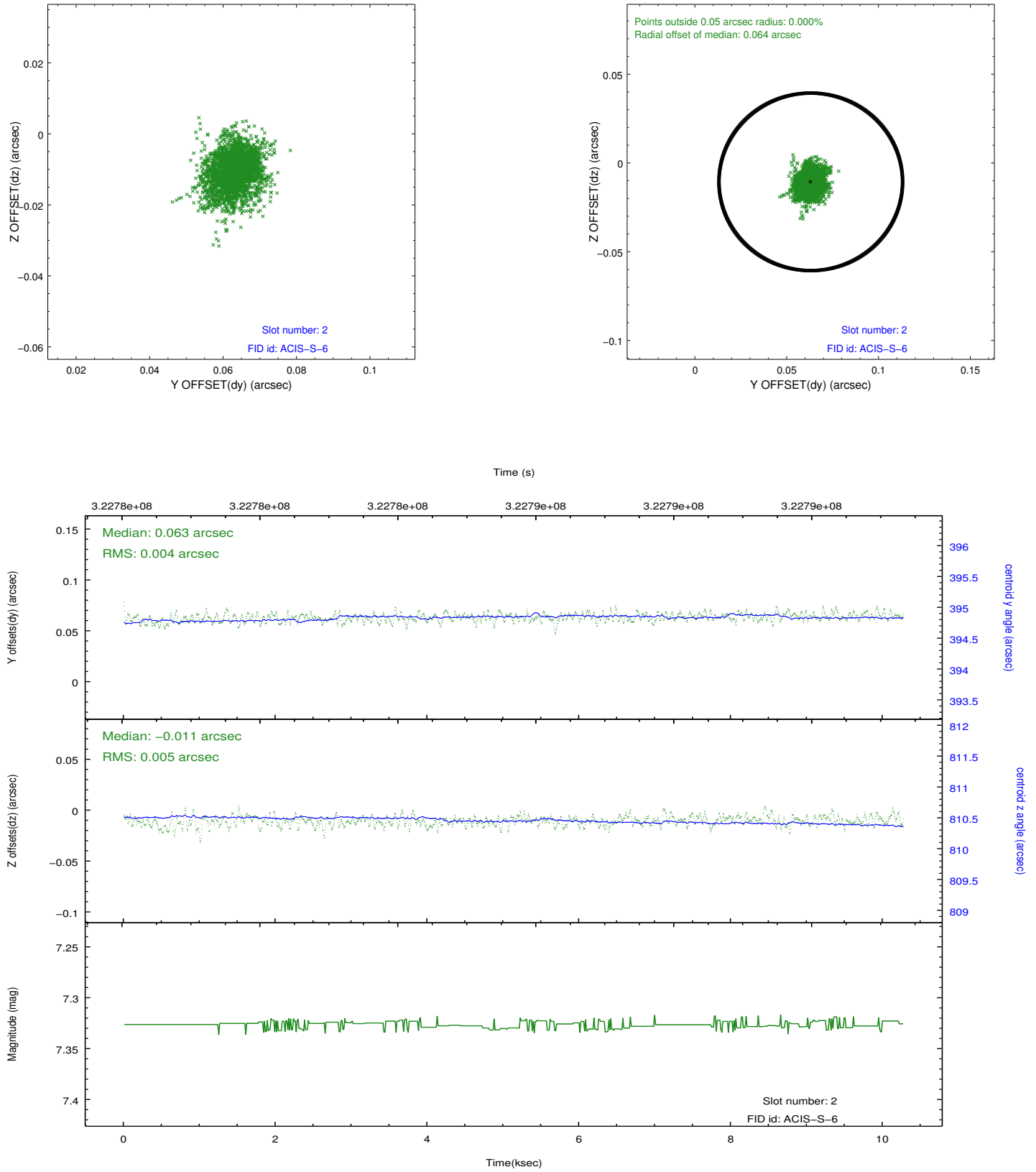
### 2.5.1 Slot 0



## 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)	2012.05.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.94879996

### A.2 Comments

Roll preference met.