

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4115 - L2 Version 3  
Chandra X-Ray Center

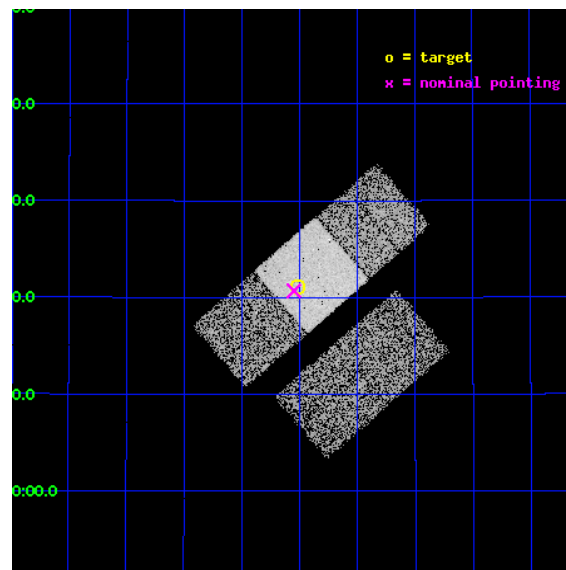
L2 Processing Date : Oct 22 2012

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# 1 Front

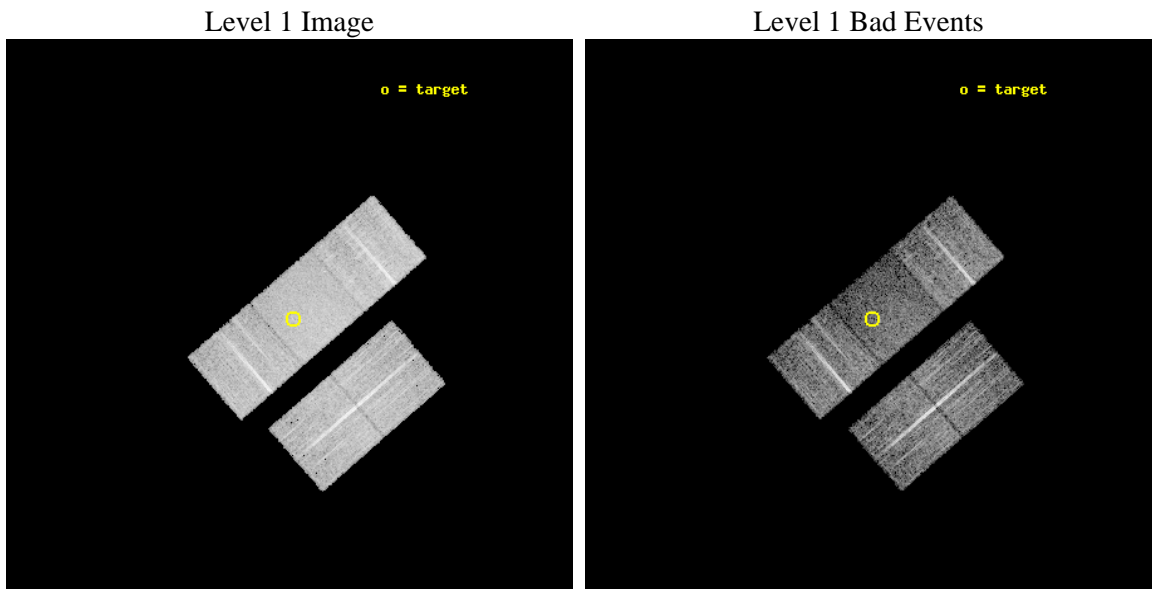
seq_num	700794	Sequence number
obs_id	4115	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS INFRARED GALAXIES (ULIGS)	Pr
observer	Professor Andrew Wilson	Principal investigator
object	F23365+3604	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	354.755	Observer's specified target RA [deg]
dec_targ	36.352389	Observer's specified target Dec [deg]
ra_nom	354.76248926134	Nominal RA [deg]
dec_nom	36.344892654279	Nominal Dec [deg]
roll_nom	319.02298333822	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10235.984599441	Sum of GTIs [s]
livetime	10102.243925027	Livetime [s]
ontime2	10235.820439428	Sum of GTIs [s]
ontime3	10235.902519435	Sum of GTIs [s]
ontime6	10235.943559438	Sum of GTIs [s]
ontime7	10235.984599441	Sum of GTIs [s]
ontime8	10235.861479431	Sum of GTIs [s]
l2events	44129	Number of level 2 events



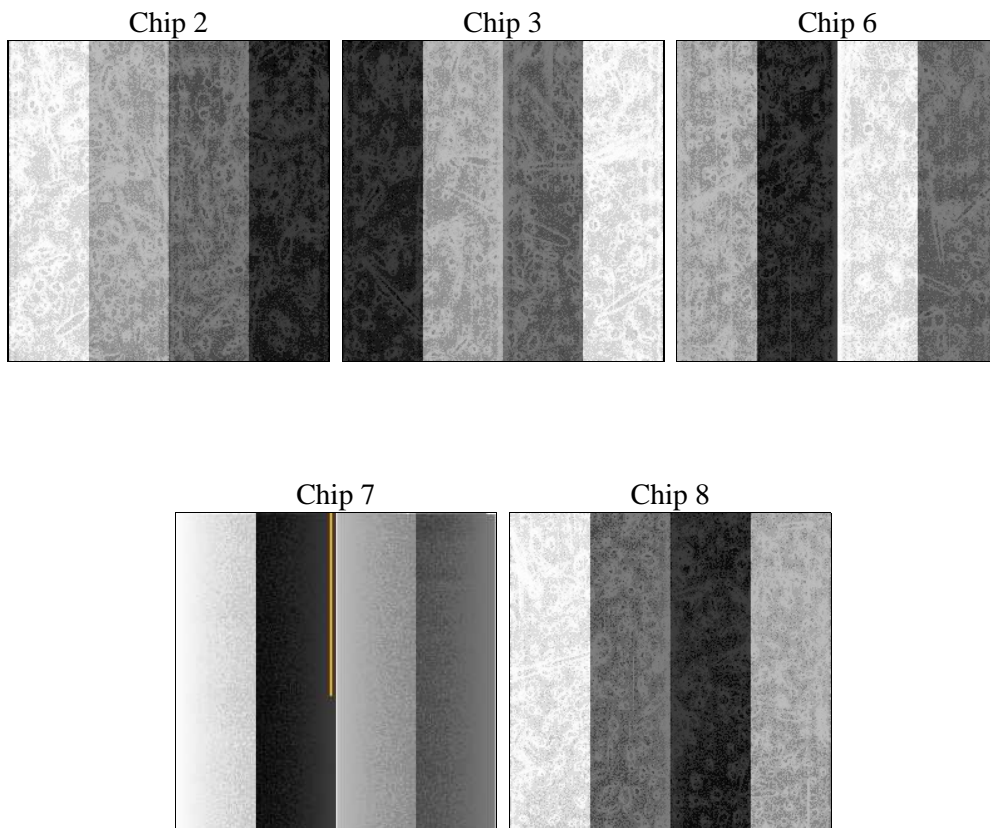
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10130.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	10235.984599441	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	10235.820439428	Sum of GTIs [s]
date	2012-10-22T04:24:06	Date and time of file creation	ontime3	10235.902519435	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	10235.943559438	Sum of GTIs [s]
			ontime7	10235.984599441	Sum of GTIs [s]
			ontime8	10235.861479431	Sum of GTIs [s]
			l1events	285325	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	54756	52380	54889	57492	65808
rejected events	49637	47629	49426	31347	51839
rejected %	90%	90%	90%	54%	78%

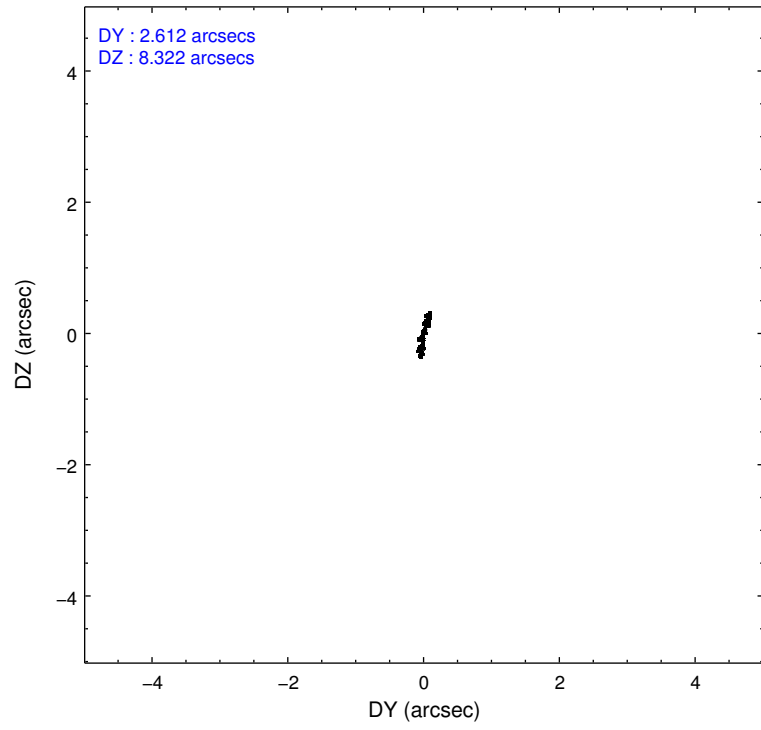
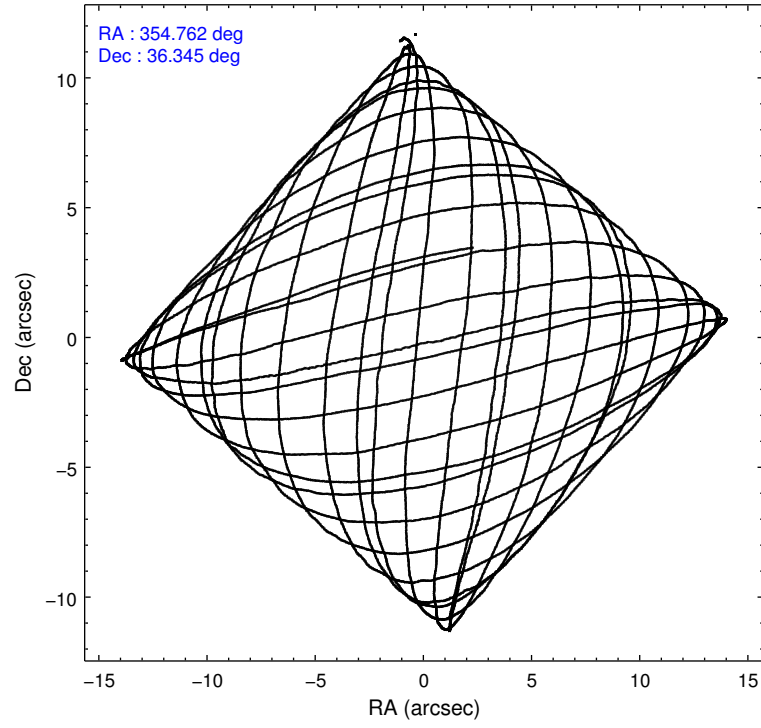
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1973	1671	1949	2486	4345
	3%	3%	3%	4%	6%
grade 1 events	25	23	30	49	36
	0%	0%	0%	0%	0%
grade 2 events	1131	987	1171	5271	2947
	2%	1%	2%	9%	4%
grade 3 events	570	585	609	2526	1575
	1%	1%	1%	4%	2%
grade 4 events	569	573	612	2503	1466
	1%	1%	1%	4%	2%
grade 5 events	1650	1996	2039	6131	2823
	3%	3%	3%	10%	4%
grade 6 events	877	936	1123	13366	3641
	1%	1%	2%	23%	5%
grade 7 events	47961	45609	47356	25160	48975
	87%	87%	86%	43%	74%

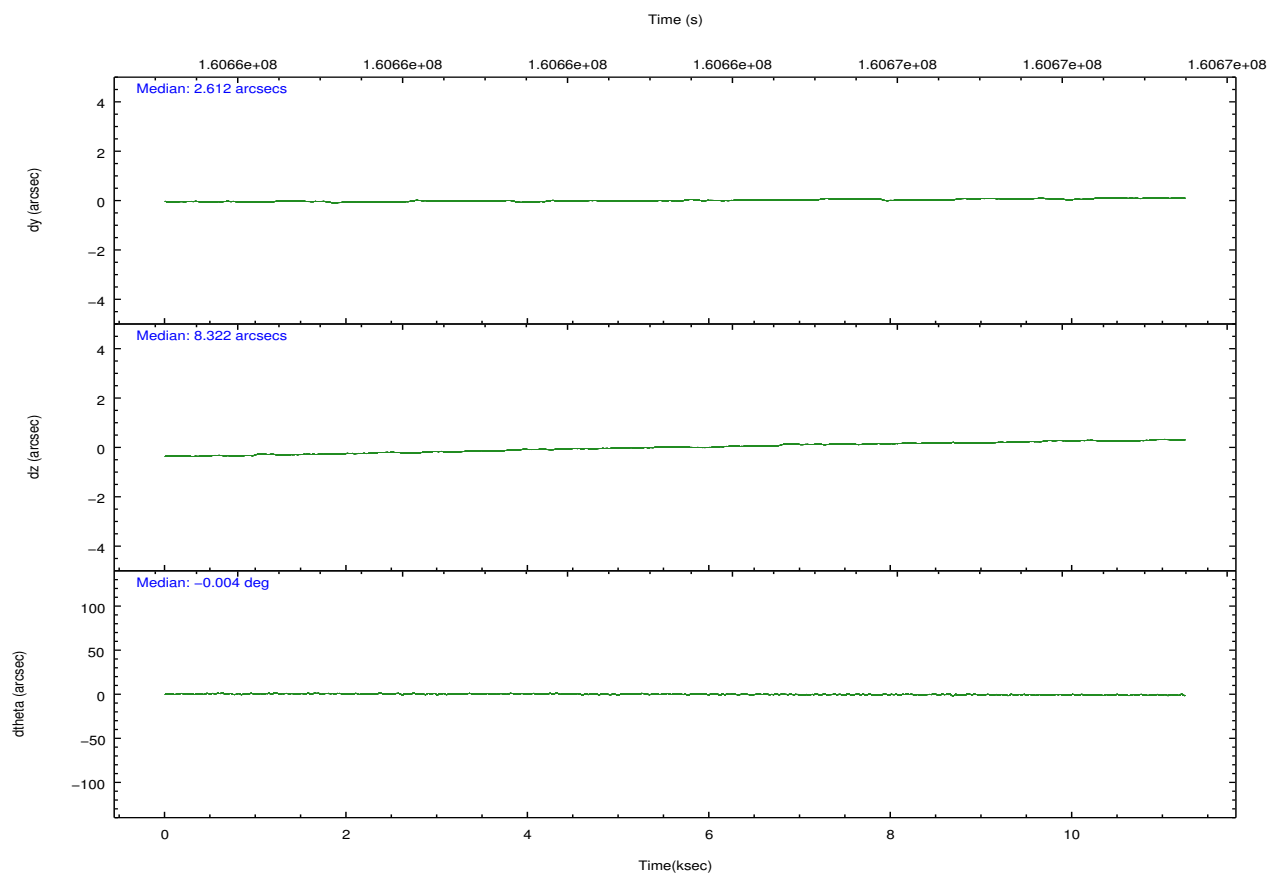
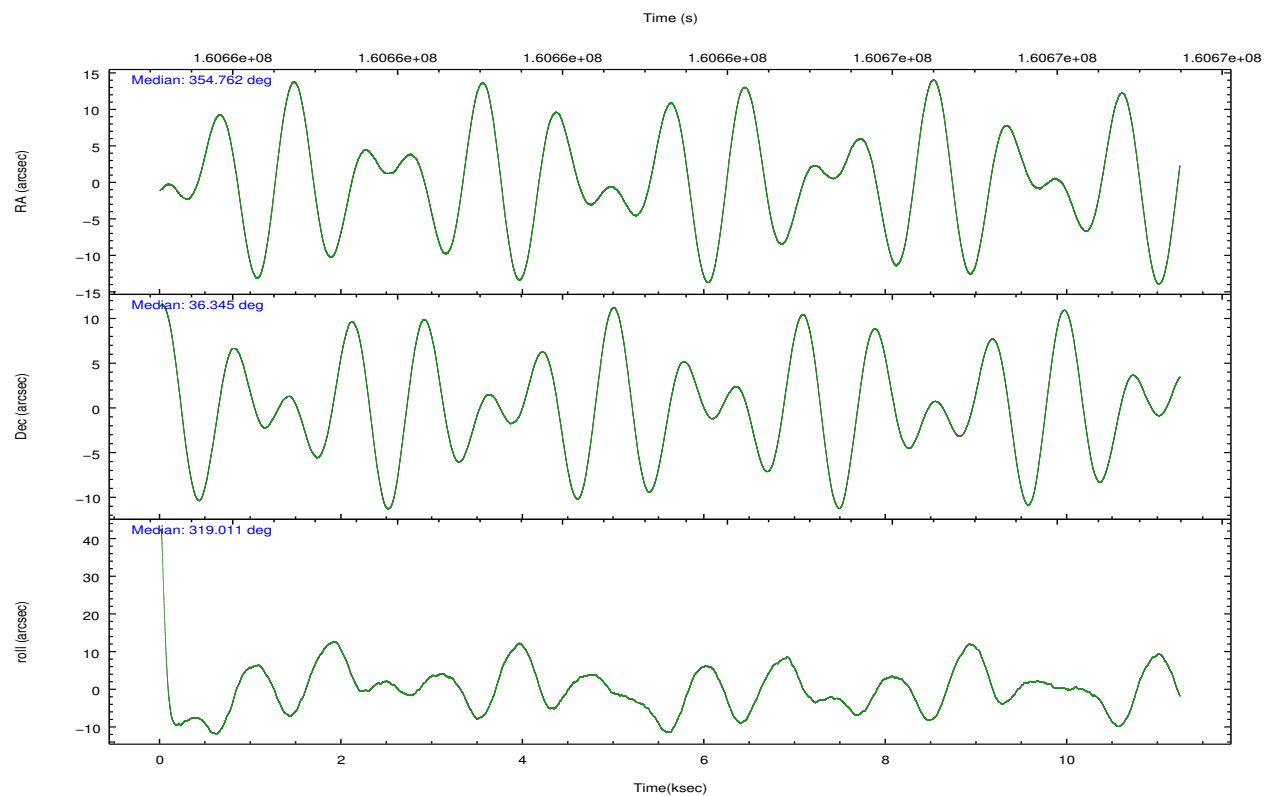


## 2.2 Compared Parameters

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	354.729271	354.7624892613446	Subarray requested	NONE	NONE
[deg] Pointing Dec	36.349679	36.34489265427889	Alternating exposures requested	N	N
[deg] Pointing Roll	318.886047	319.0229833382205	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	160658798.184000	160657372.27582			
Observation start date	2003-02-03T11:25:34	2003-02-03T11:02:52			
[s] Observation end time (MET)	160668928.184000	160669792.71384			
Observation end date	2003-02-03T14:14:24	2003-02-03T14:29:52			
Read mode	TIMED	TIMED			

## 2.3 Aspect



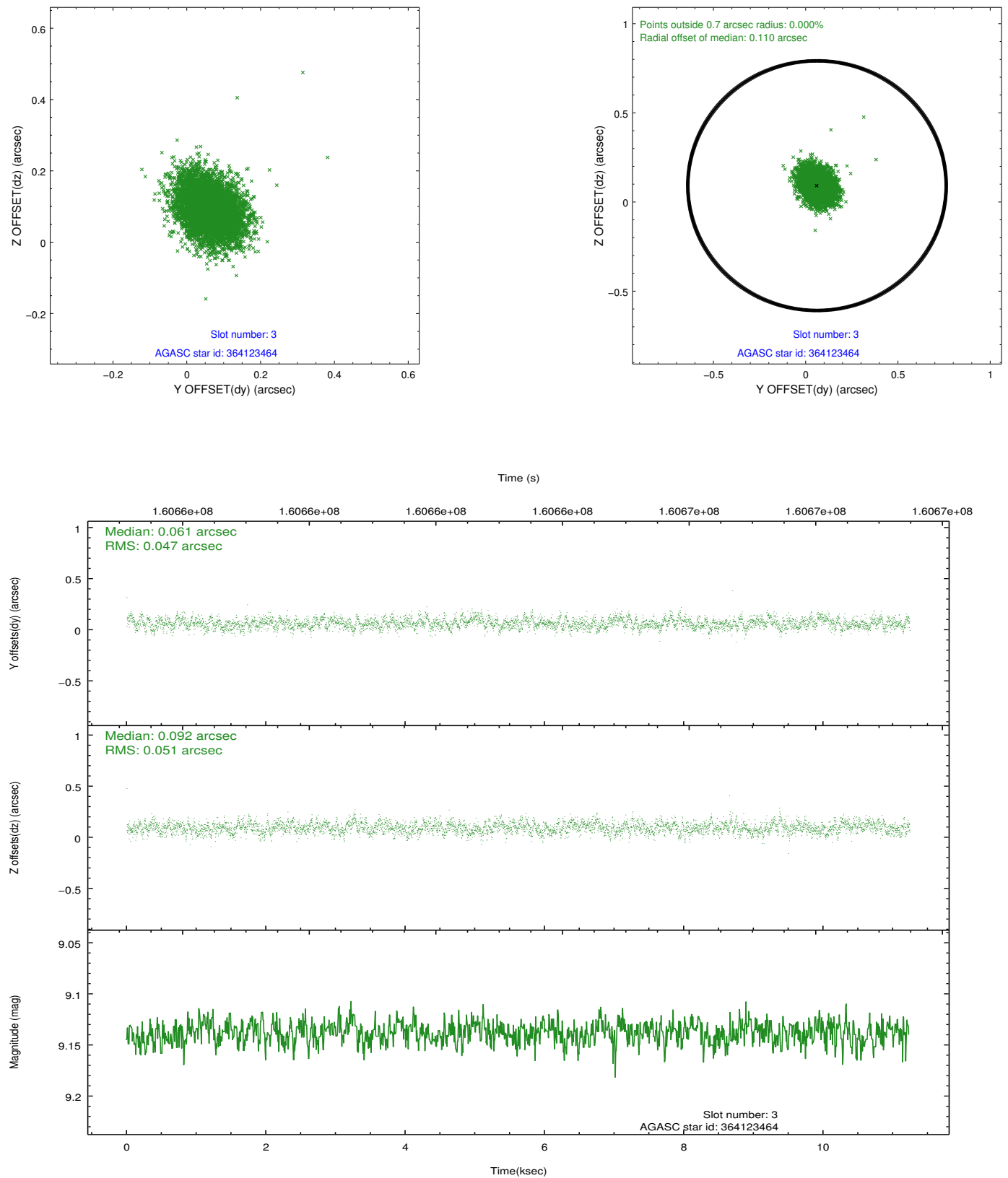


### Slot Statistics

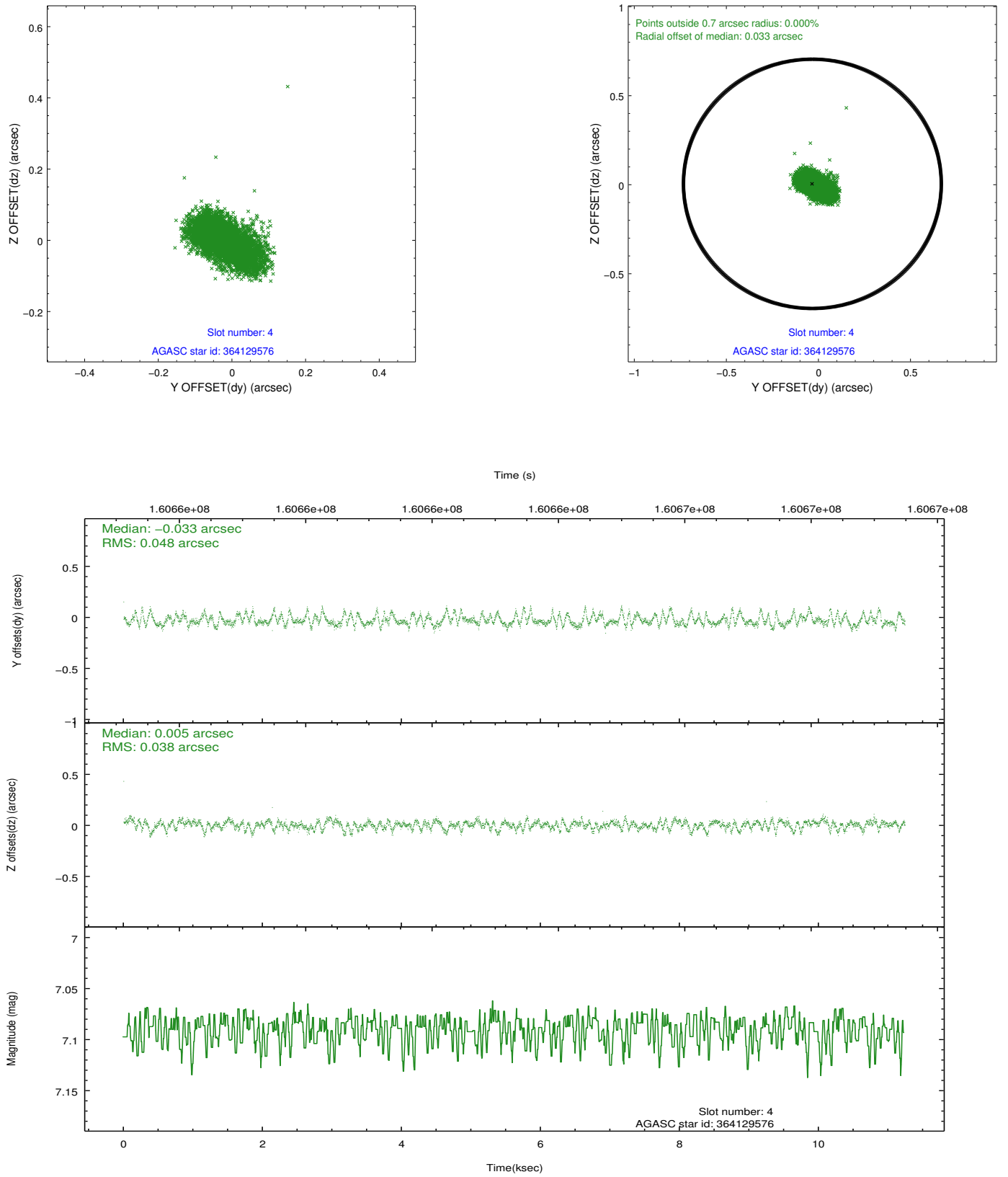
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	2742	-0.016	-0.005	0.008	0.013	0.000000	0.000000	-755.28	-1729.51
1	FID	ACIS-S-4	7.20	2742	-0.018	0.009	0.008	0.013	0.000000	0.000000	2157.80	178.50
2	FID	ACIS-S-5	7.23	2742	0.003	0.005	0.007	0.012	0.000000	0.000000	-1807.51	172.70
3	GUIDE	364123464	9.14	5484	0.061	0.092	0.073	0.119	355.098967	36.805846	-278.38	1939.80
4	GUIDE	364129576	7.09	5485	-0.033	0.005	0.062	0.114	354.367141	35.814844	469.19	-2143.49
5	GUIDE	364132160	9.78	5446	-0.062	0.119	0.122	0.196	354.710806	37.132167	-1892.22	2087.11
6	GUIDE	363599488	9.14	5484	0.272	-0.067	0.099	0.167	354.613990	35.531323	1683.44	-2440.66
7	GUIDE	364132672	7.32	5483	-0.241	-0.138	0.049	0.084	353.684332	36.204127	-1952.26	-2379.12

## 2.4 Star Slots

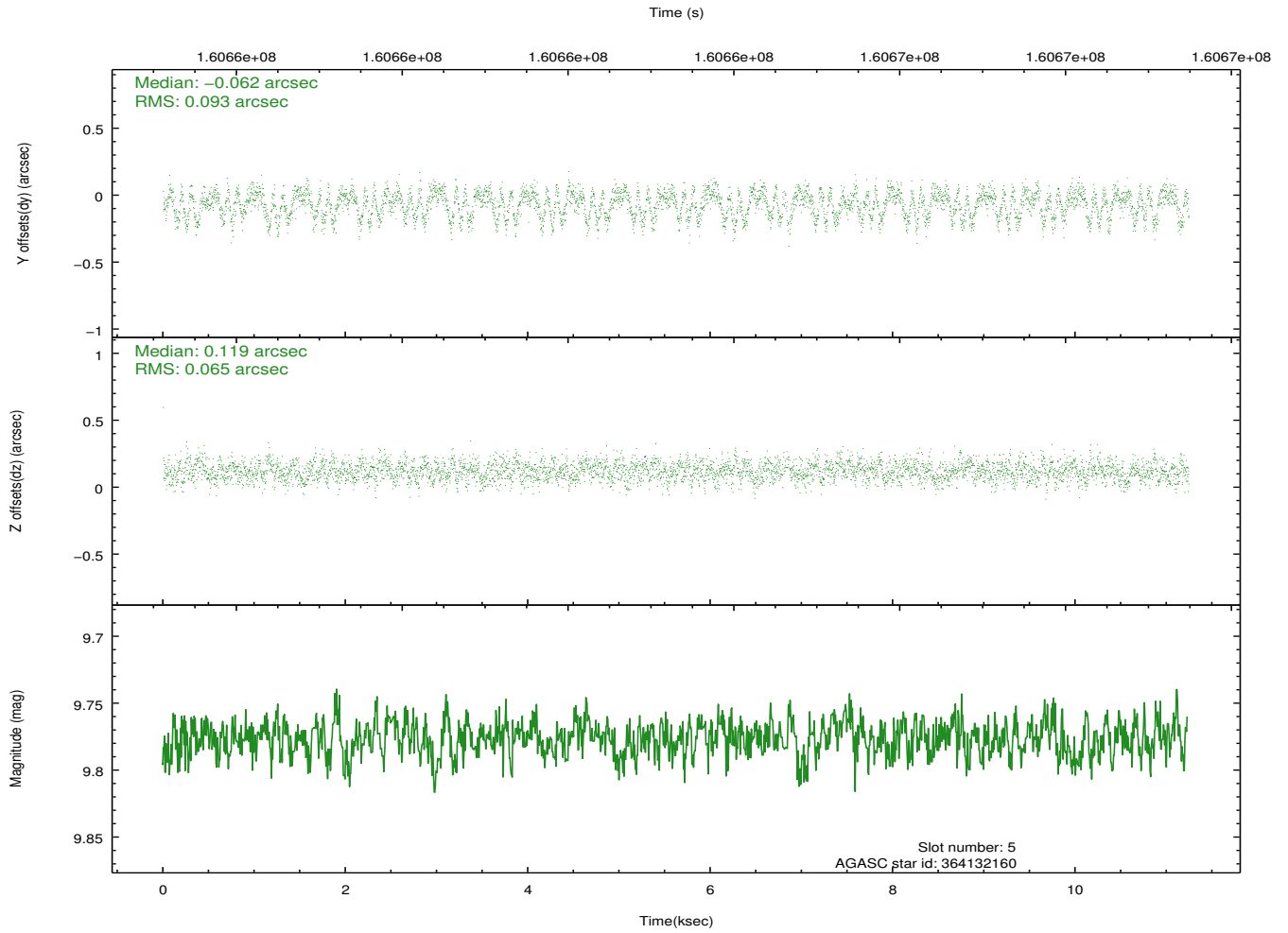
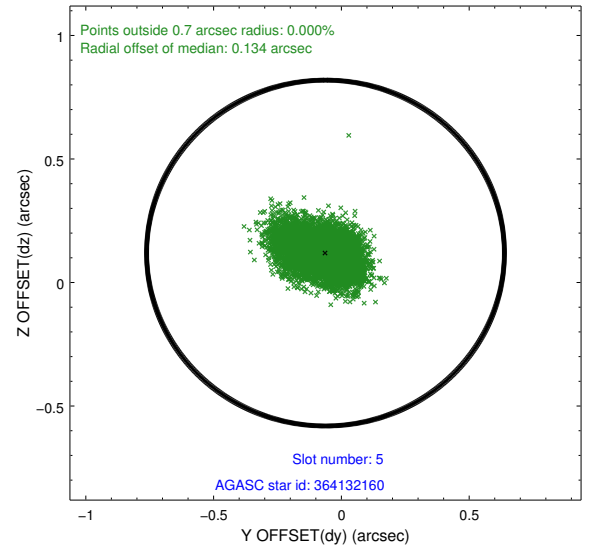
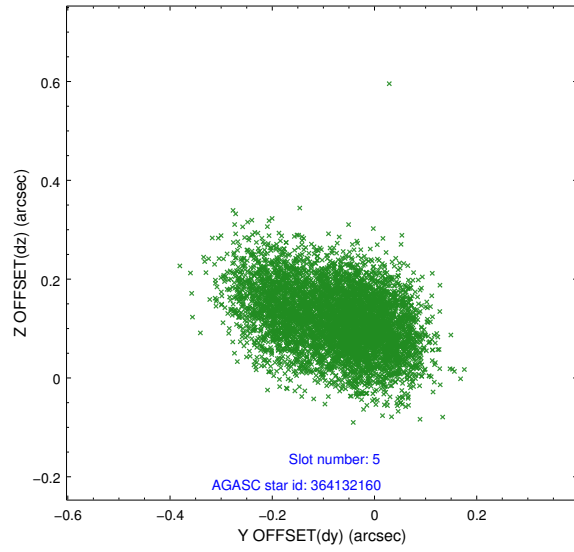
### 2.4.1 Slot 3



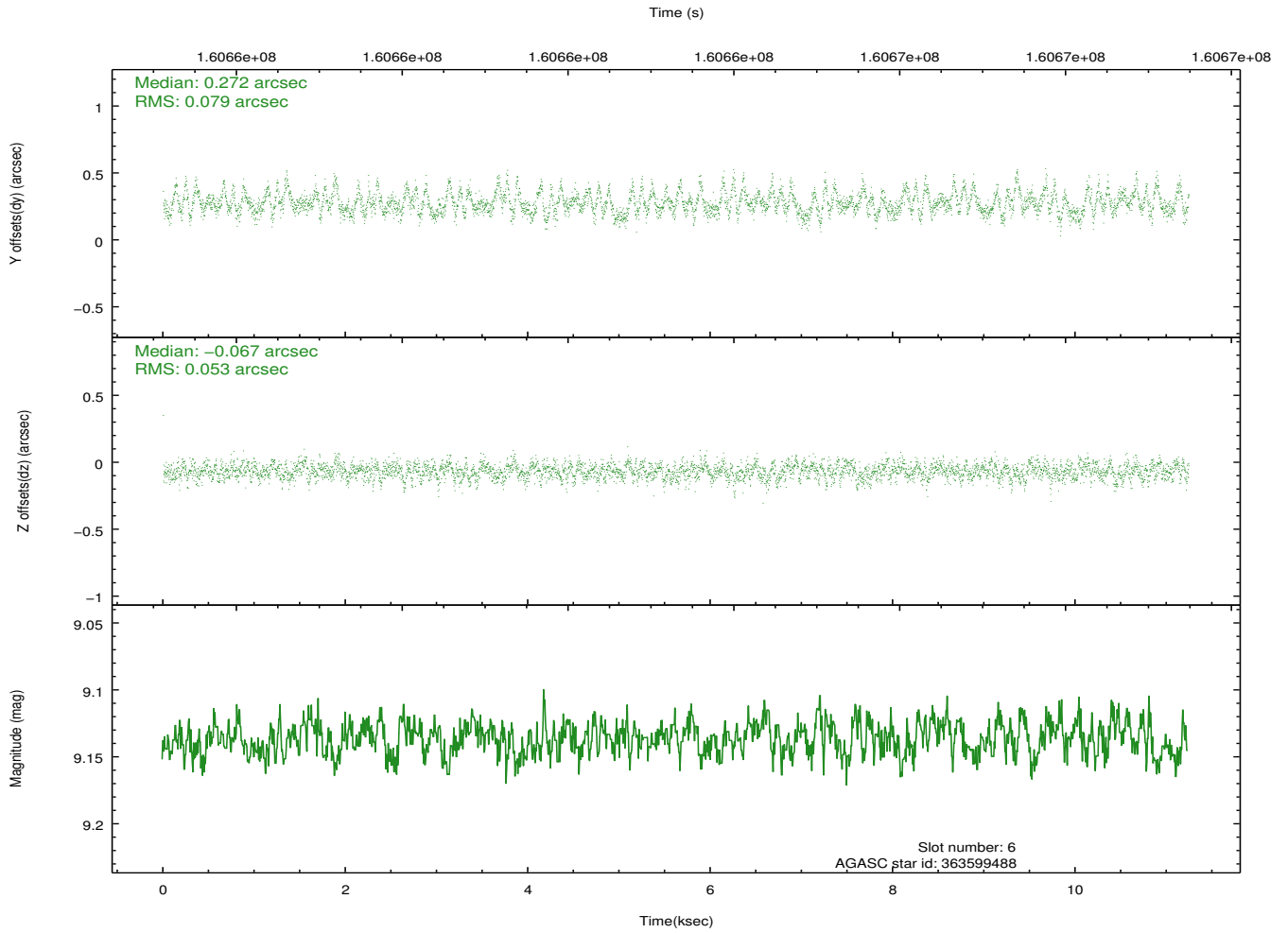
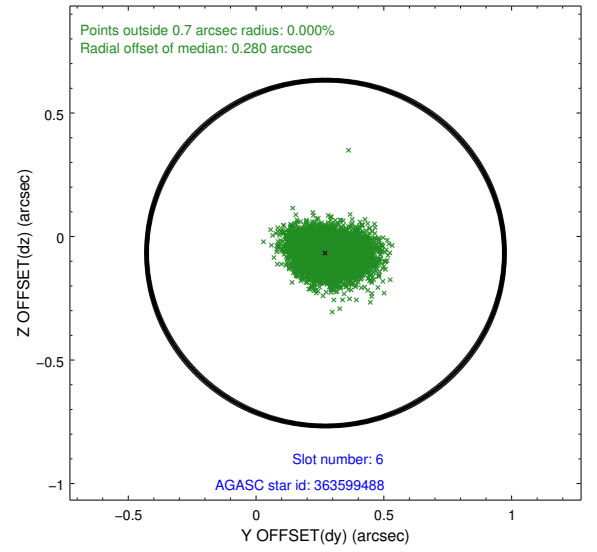
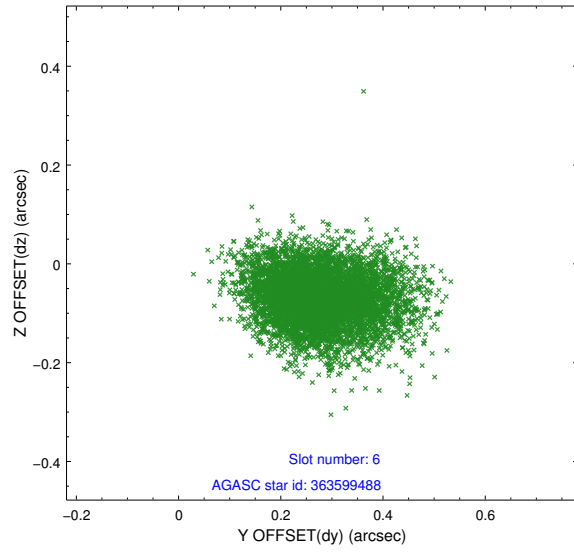
## 2.4.2 Slot 4



### 2.4.3 Slot 5

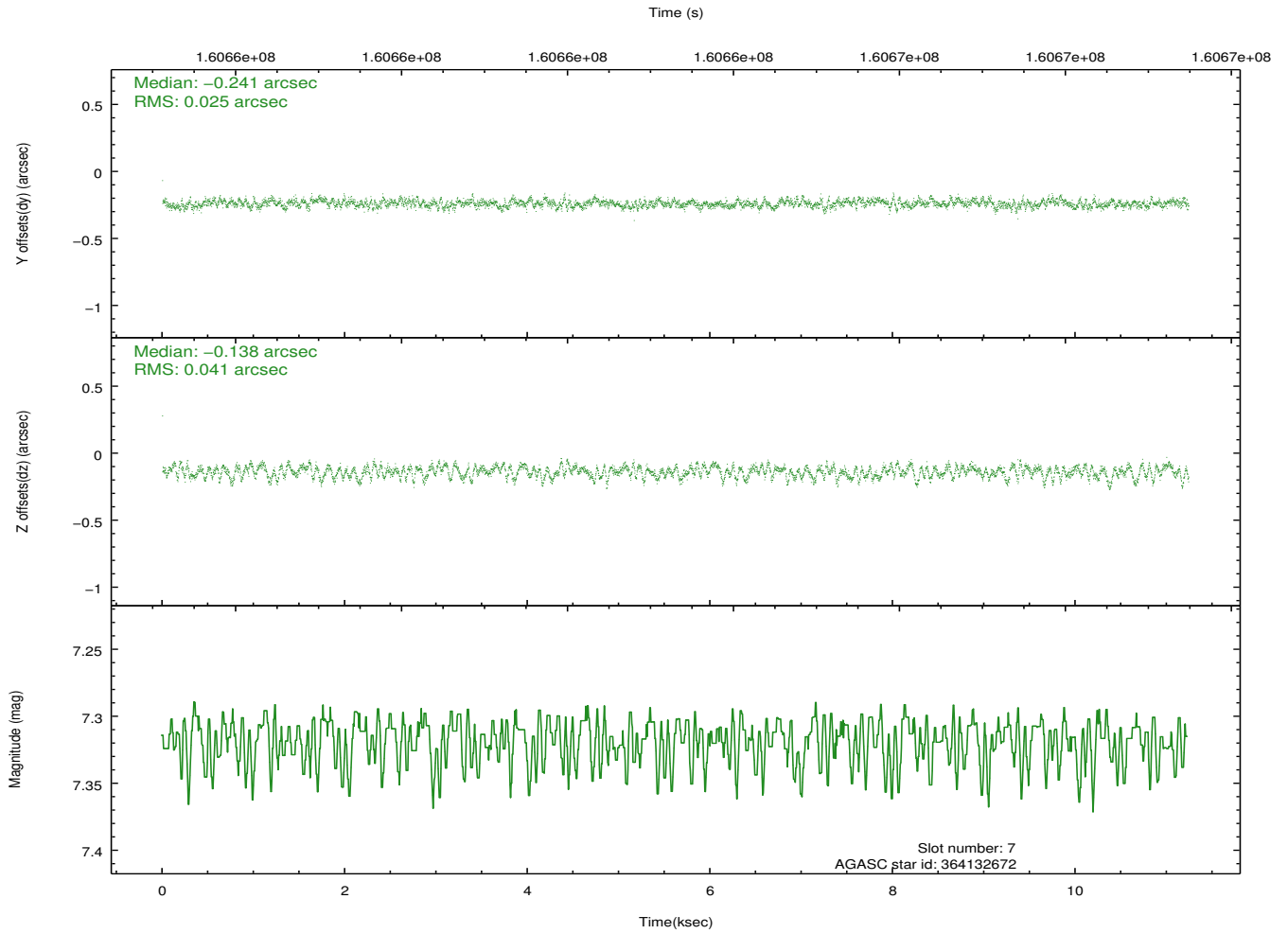
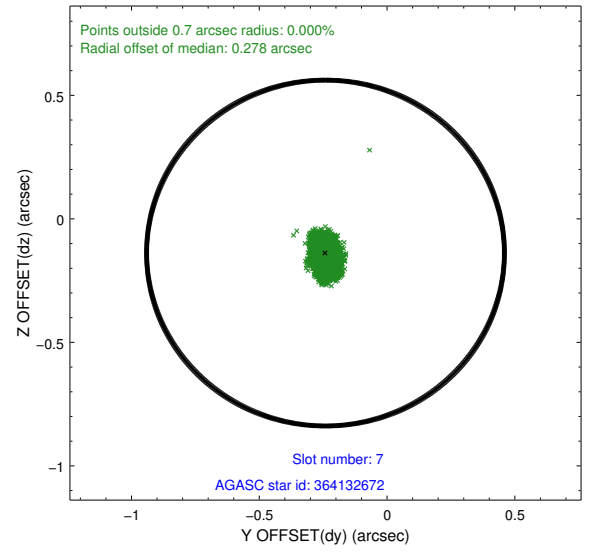
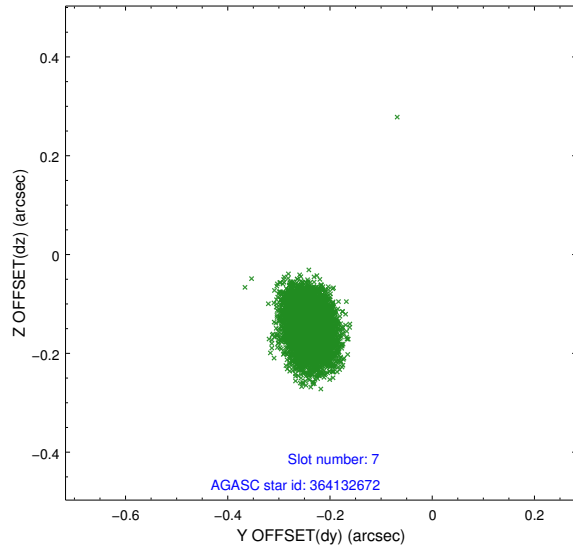


## 2.4.4 Slot 6



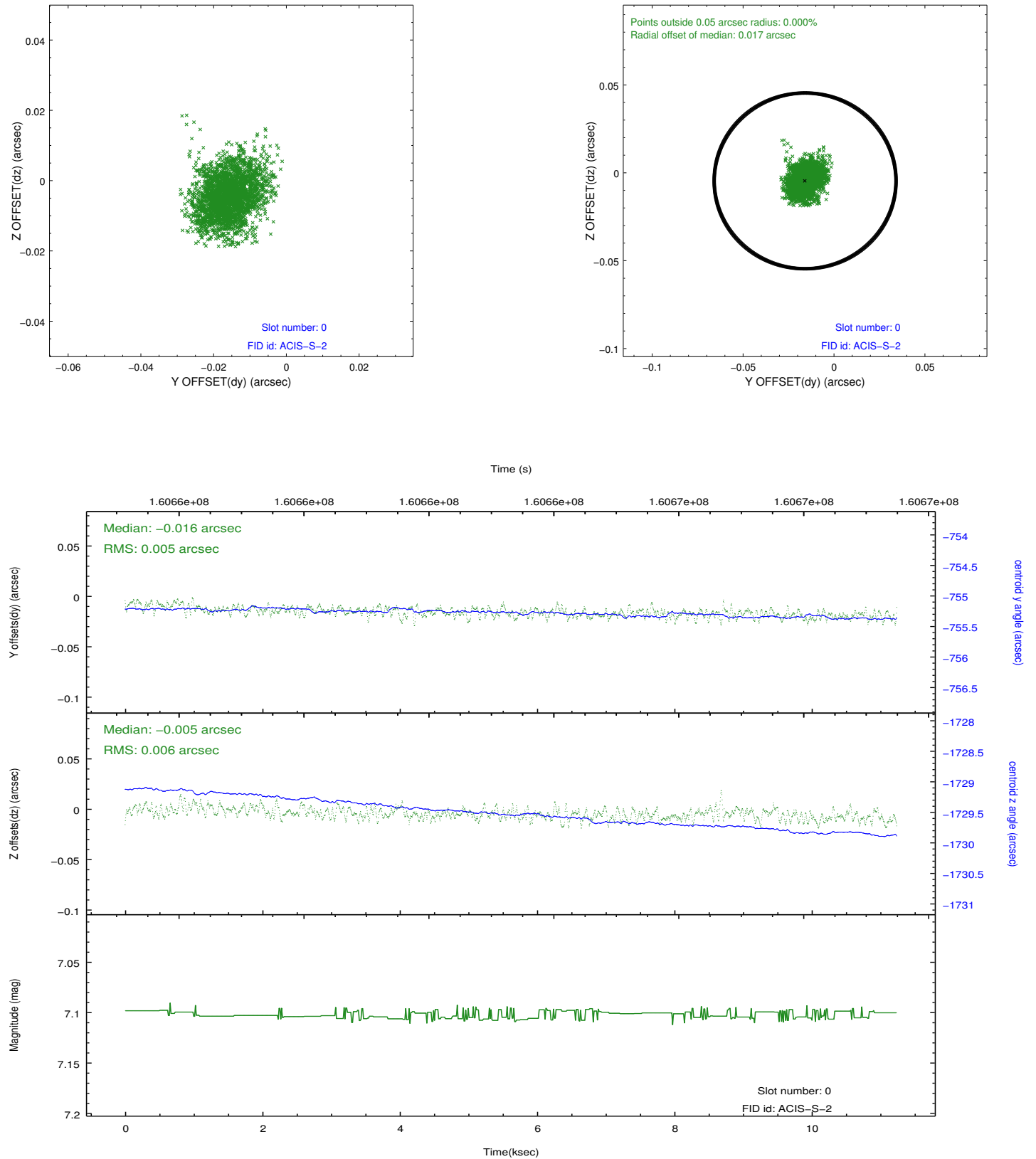


## 2.4.5 Slot 7

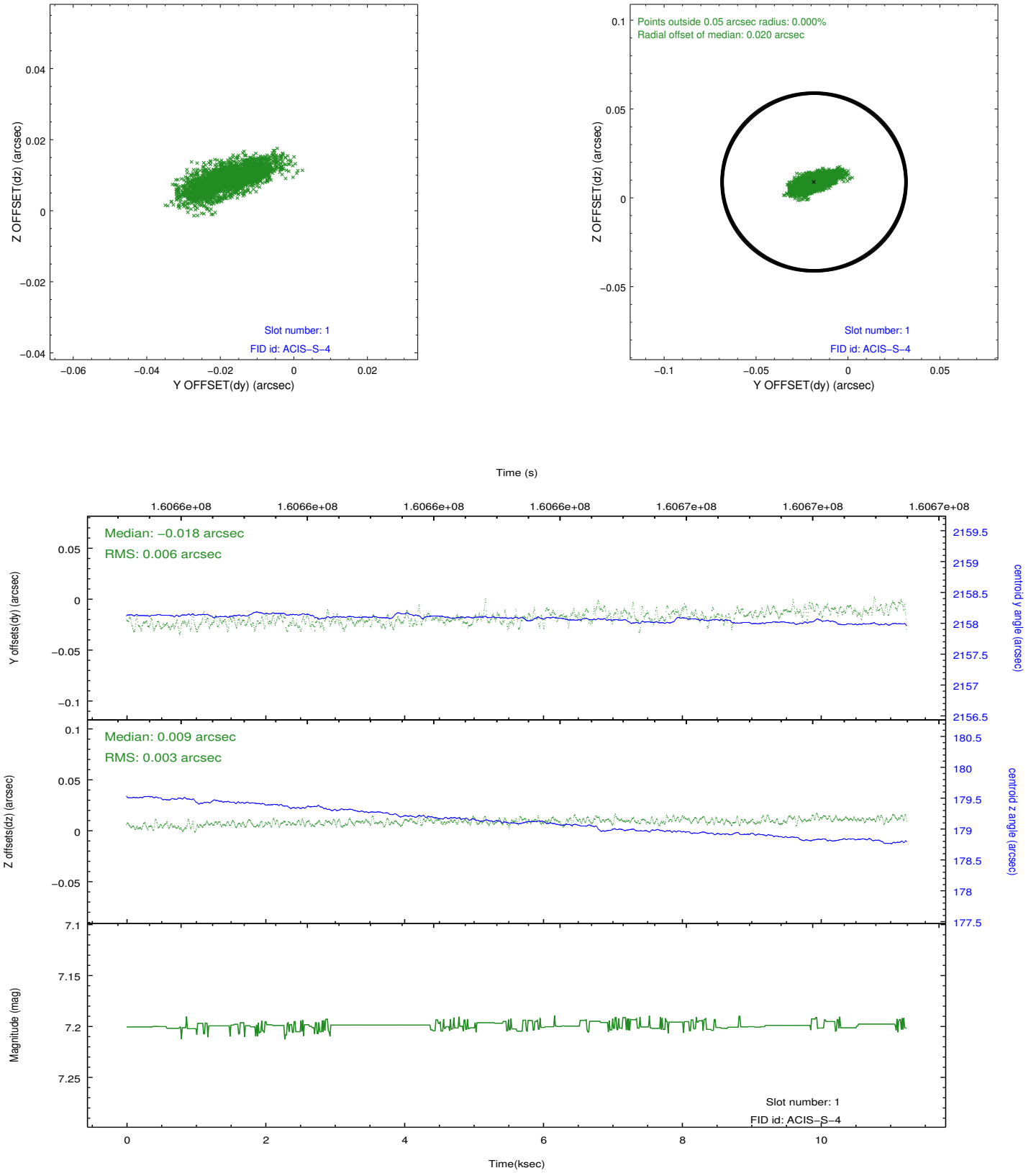


## 2.5 FID Slots

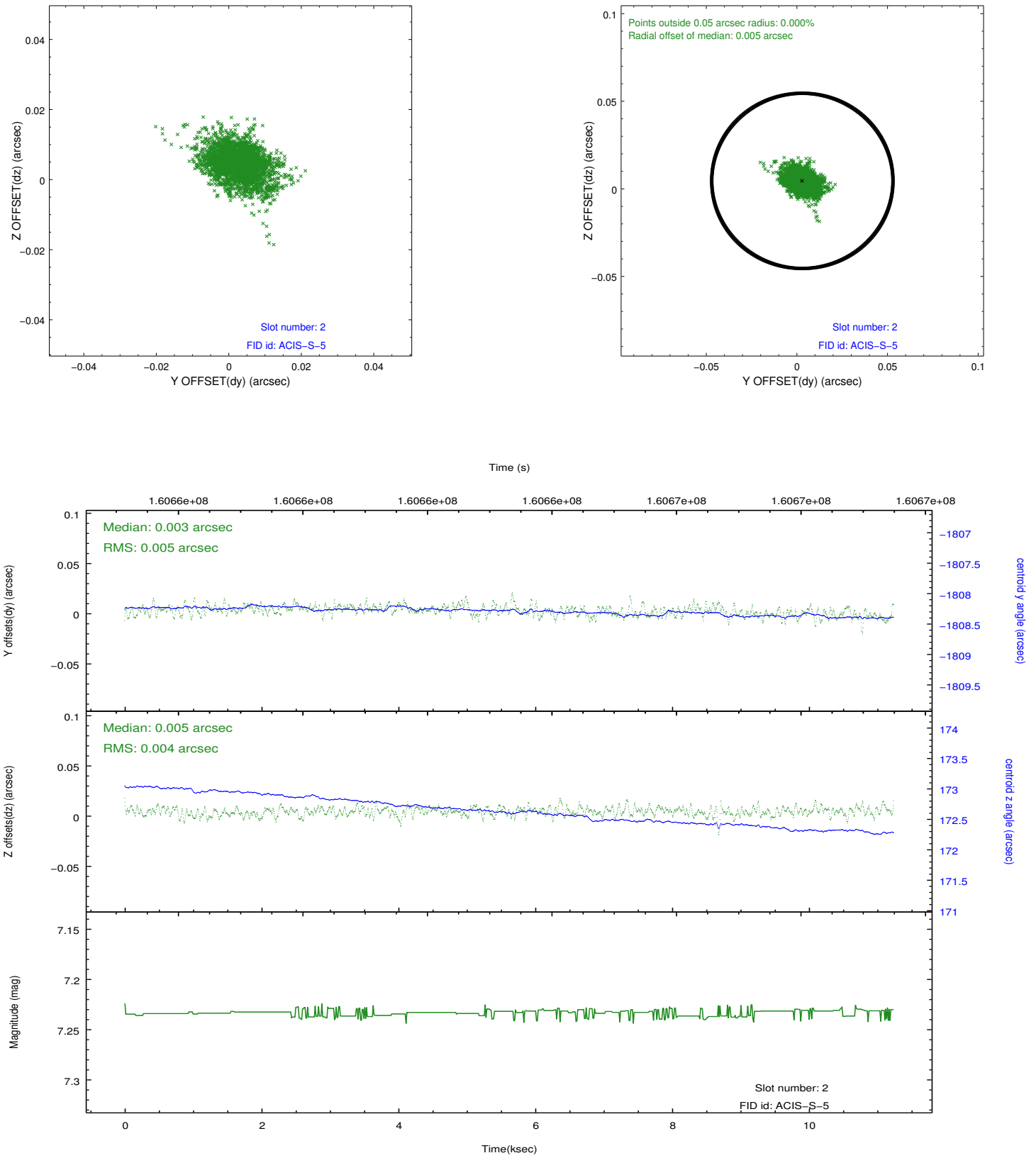
### 2.5.1 Slot 0



## 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)	2012.11.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.236

### A.2 Comments