

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4154 - L2 Version 3  
Chandra X-Ray Center

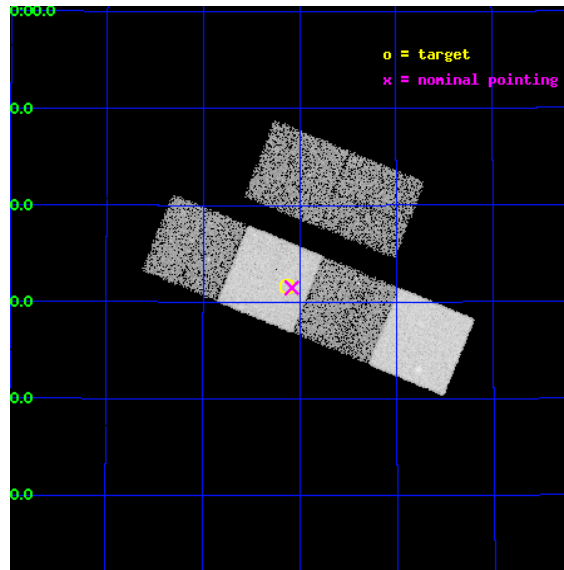
L2 Processing Date : Oct 24 2012

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# 1 Front

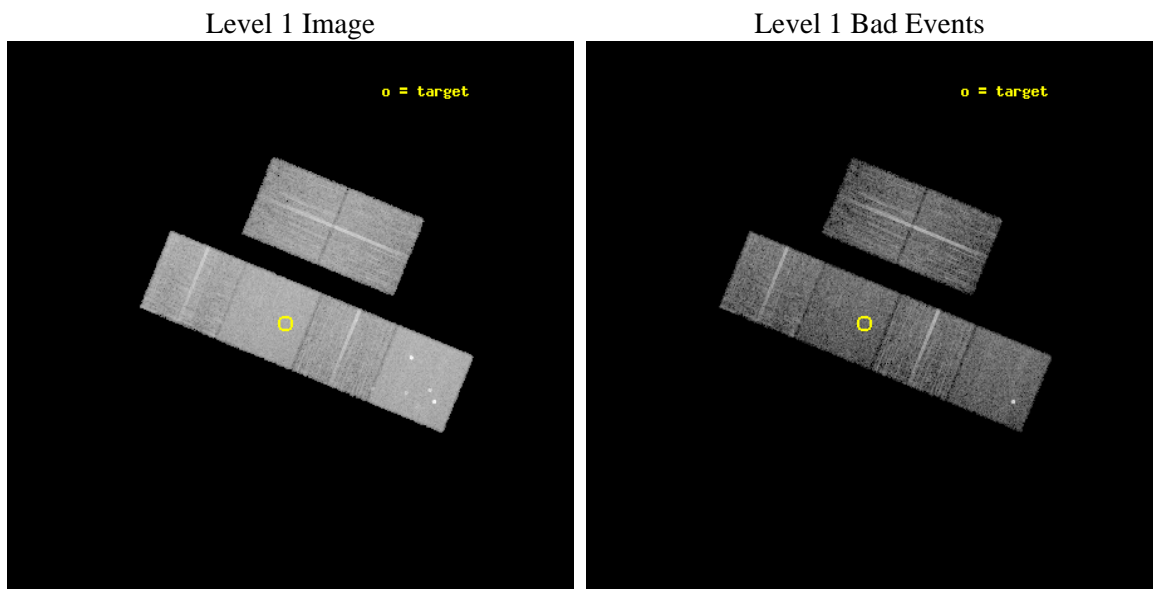
seq_num	700833	Sequence number
obs_id	4154	Observation id
title	X-RAY TRACE OF THE EARLY RISE OF THE QUASAR POPULATION	Proposal ti
observer	Dr. Takamitsu Miyaji	Principal investigator
object	PC 1035+4747	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	159.534167	Observer's specified target RA [deg]
dec_targ	47.526833	Observer's specified target Dec [deg]
ra_nom	159.52022170052	Nominal RA [deg]
dec_nom	47.524829606042	Nominal Dec [deg]
roll_nom	202.25190997624	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9961.5999628901	Sum of GTIs [s]
livetime	9835.4601860047	Livetime [s]
ontime2	9961.5999628901	Sum of GTIs [s]
ontime3	9961.5999628901	Sum of GTIs [s]
ontime5	9961.5999628901	Sum of GTIs [s]
ontime6	9961.5999628901	Sum of GTIs [s]
ontime7	9961.5999628901	Sum of GTIs [s]
ontime8	9961.5999628901	Sum of GTIs [s]
l2events	111379	Number of level 2 events



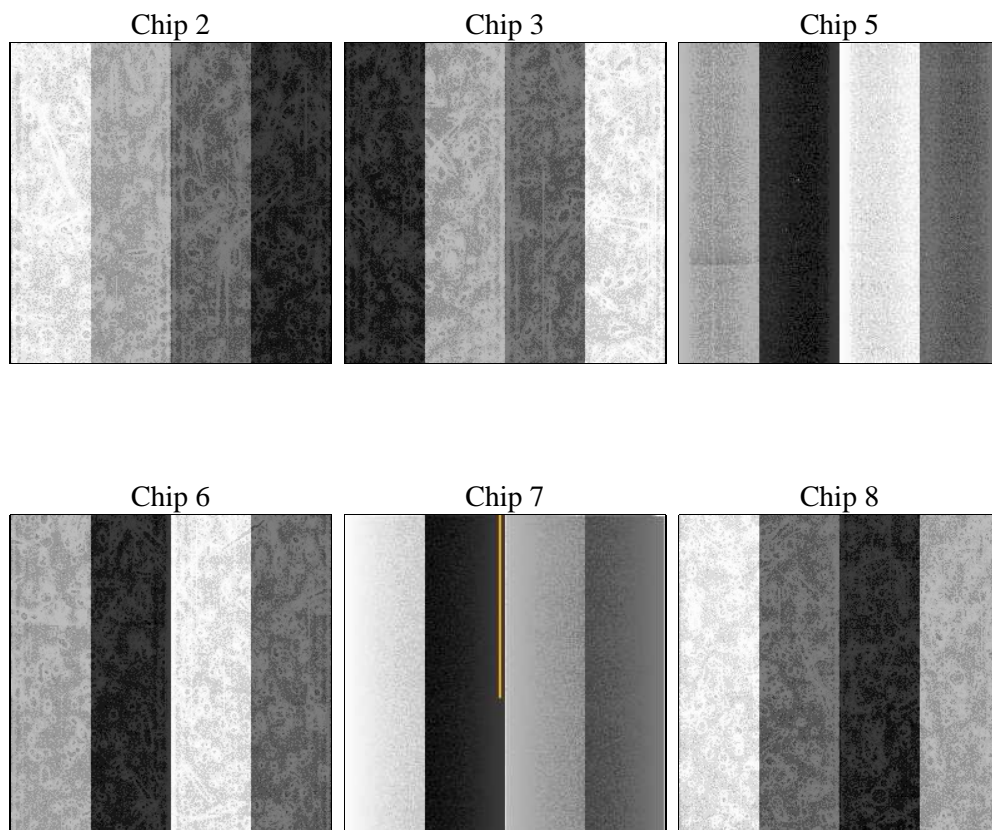
## 2 OBI

### 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	8.4.5	Processing system revision	ontime	9961.5999628901	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	9961.5999628901	Sum of GTIs [s]
date	2012-10-24T19:08:28	Date and time of file creation	ontime3	9961.5999628901	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	9961.5999628901	Sum of GTIs [s]
			ontime6	9961.5999628901	Sum of GTIs [s]
			ontime7	9961.5999628901	Sum of GTIs [s]
			ontime8	9961.5999628901	Sum of GTIs [s]
			l1events	463778	Number of level 1 events

### 2.1.4 Events

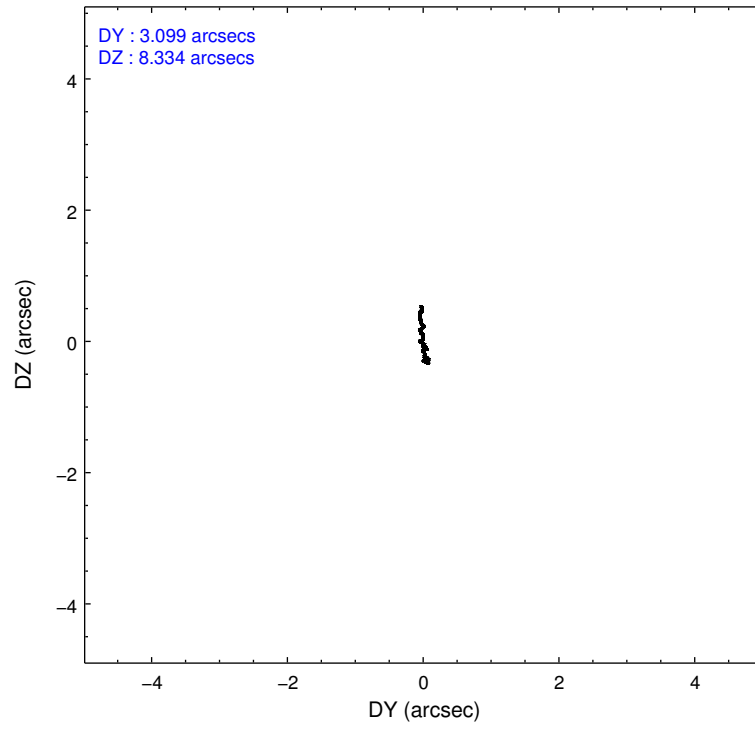
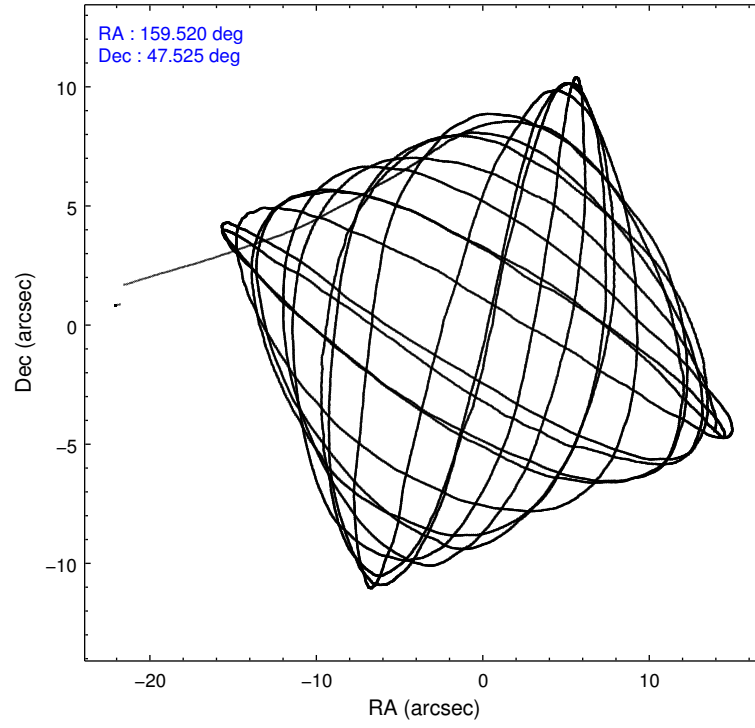
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	64238	62074	101300	66690	88790	80686	grade 0 events	3486	3337	8080	3576	3791	5700
rejected events	56522	54626	51313	58473	49003	63720		5%	5%	7%	5%	4%	7%
rejected %	87%	88%	50%	87%	55%	78%	grade 1 events	37	28	1300	28	88	63
								0%	0%	1%	0%	0%	0%
							grade 2 events	1526	1409	13667	1732	7613	3606
								2%	2%	13%	2%	8%	4%
							grade 3 events	714	742	2091	718	3534	1760
								1%	1%	2%	1%	3%	2%
							grade 4 events	691	717	2003	738	3493	1692
								1%	1%	1%	1%	3%	2%
							grade 5 events	2410	2677	6844	2898	8064	3634
								3%	4%	6%	4%	9%	4%
							grade 6 events	1303	1245	24159	1454	21373	4214
								2%	2%	23%	2%	24%	5%
							grade 7 events	54071	51919	43156	55546	40834	60017
								84%	83%	42%	83%	45%	74%

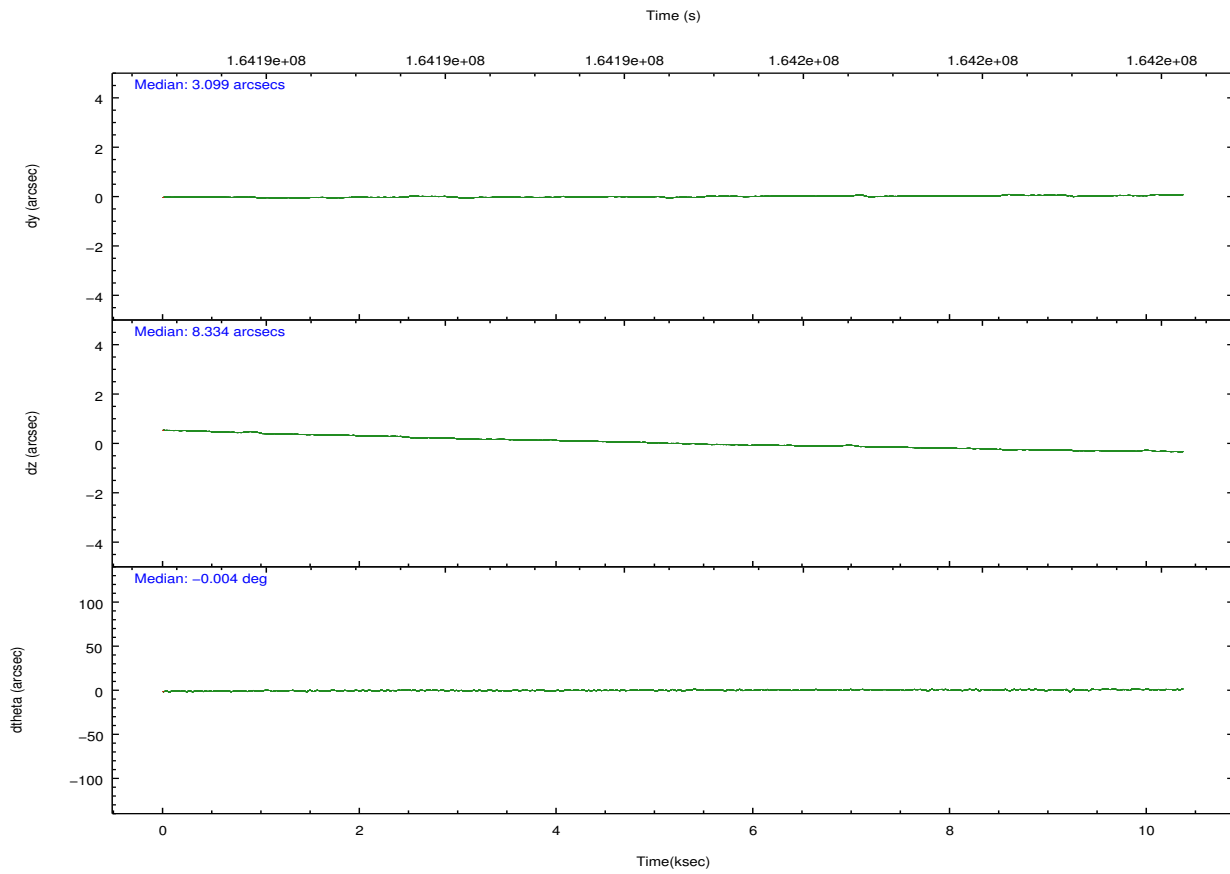
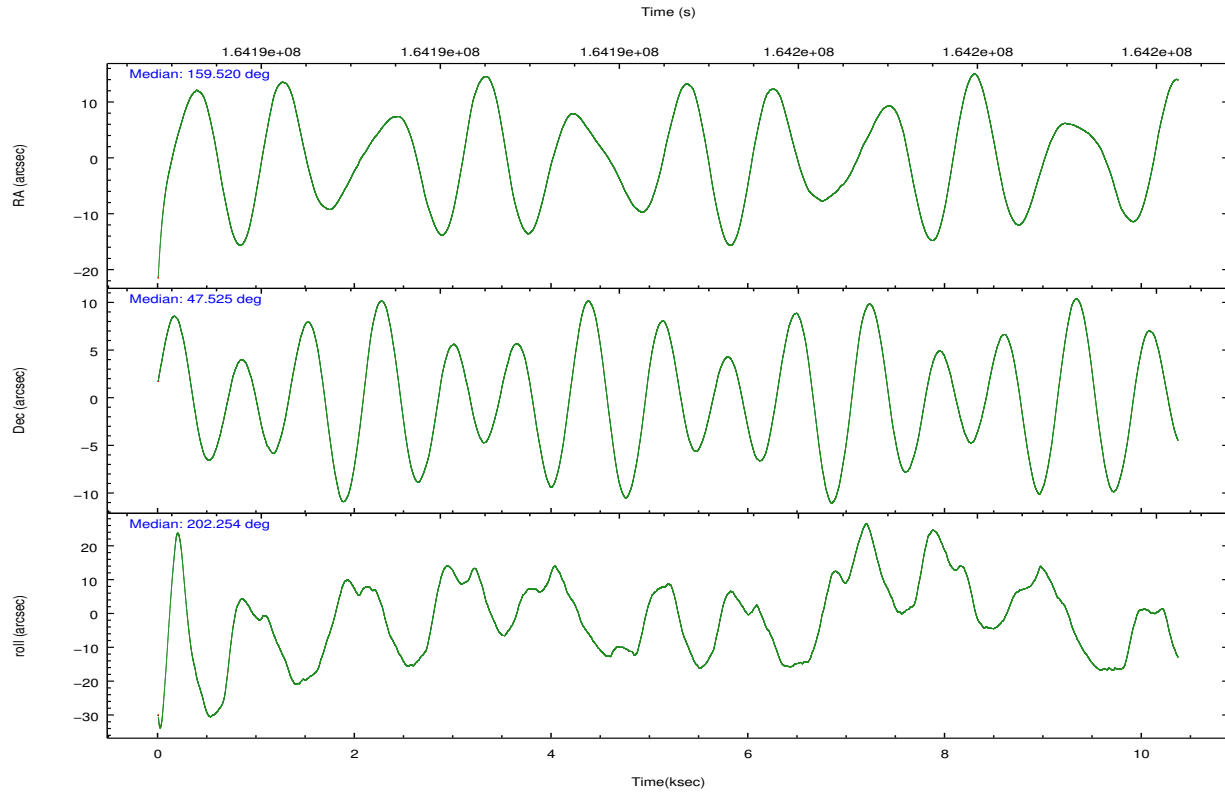


## 2.2 Compared Parameters

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	159.544429	159.520221700515	Subarray requested	NONE	NONE
[deg] Pointing Dec	47.546545	47.52482960604176	Alternating exposures requested	N	N
[deg] Pointing Roll	202.077516	202.2519099762386	[s] Primary exposure time	0.000000	3.2
[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)	164189733.184000	164188682.43679			
Observation start date	2003-03-16T08:14:29	2003-03-16T07:58:02			
[s] Observation end time (MET)	164199733.184000	164200207.02478			
Observation end date	2003-03-16T11:01:09	2003-03-16T11:10:07			
Read mode	TIMED	TIMED			

## 2.3 Aspect



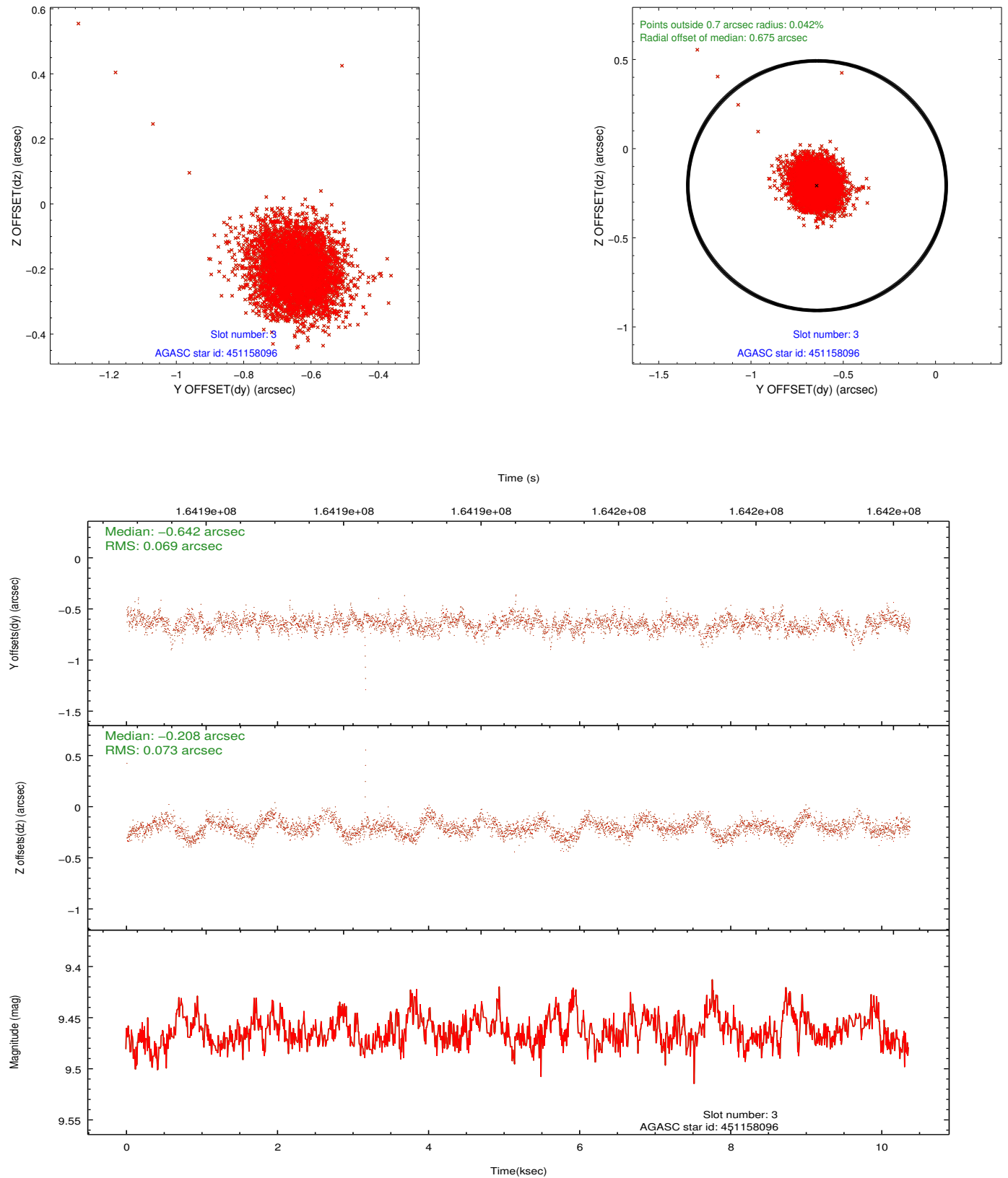


### Slot Statistics

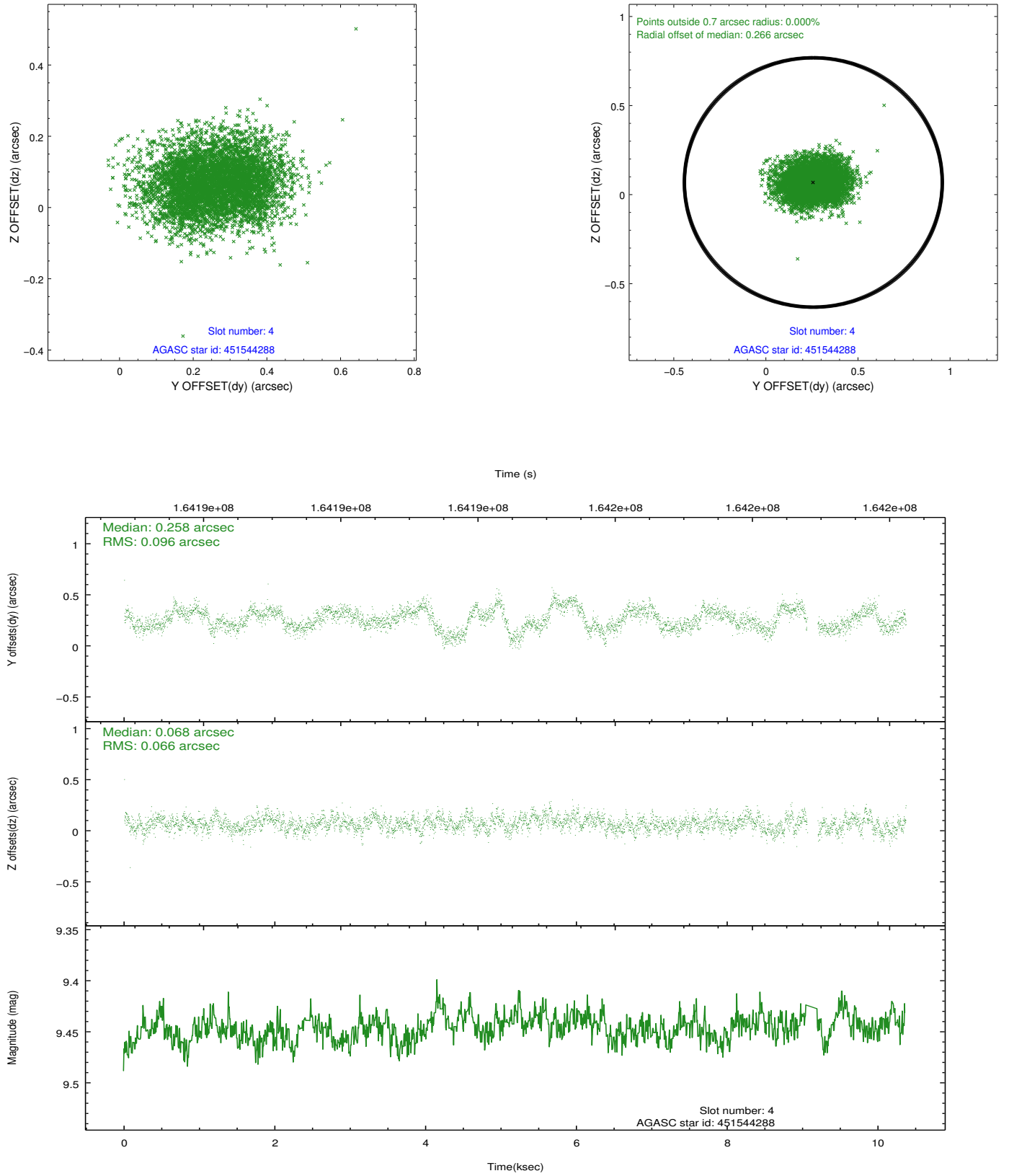
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2528	-0.022	-0.019	0.008	0.013	0.000000	0.000000	-755.76	-1729.60
1	FID	ACIS-S-4	7.21	2529	0.012	0.016	0.007	0.012	0.000000	0.000000	2157.32	178.40
2	FID	ACIS-S-5	7.24	2529	-0.021	0.013	0.007	0.011	0.000000	0.000000	-1807.95	172.64
3	BAD	451158096	9.46	4775	-0.642	-0.208	0.104	0.169	158.959389	47.024859	2035.62	1196.09
4	GUIDE	451544288	9.45	4987	0.258	0.068	0.123	0.199	159.703072	47.731523	-605.05	-472.34
5	GUIDE	451547920	10.07	5032	0.040	0.243	0.116	0.198	159.911090	47.949442	-1364.83	-1013.11
6	GUIDE	451549504	8.30	5058	0.149	0.147	0.070	0.110	159.896365	47.775108	-1098.41	-443.86
7	GUIDE	451549600	7.83	5057	0.180	-0.260	0.137	0.193	159.037923	47.753645	854.93	-1155.31

## 2.4 Star Slots

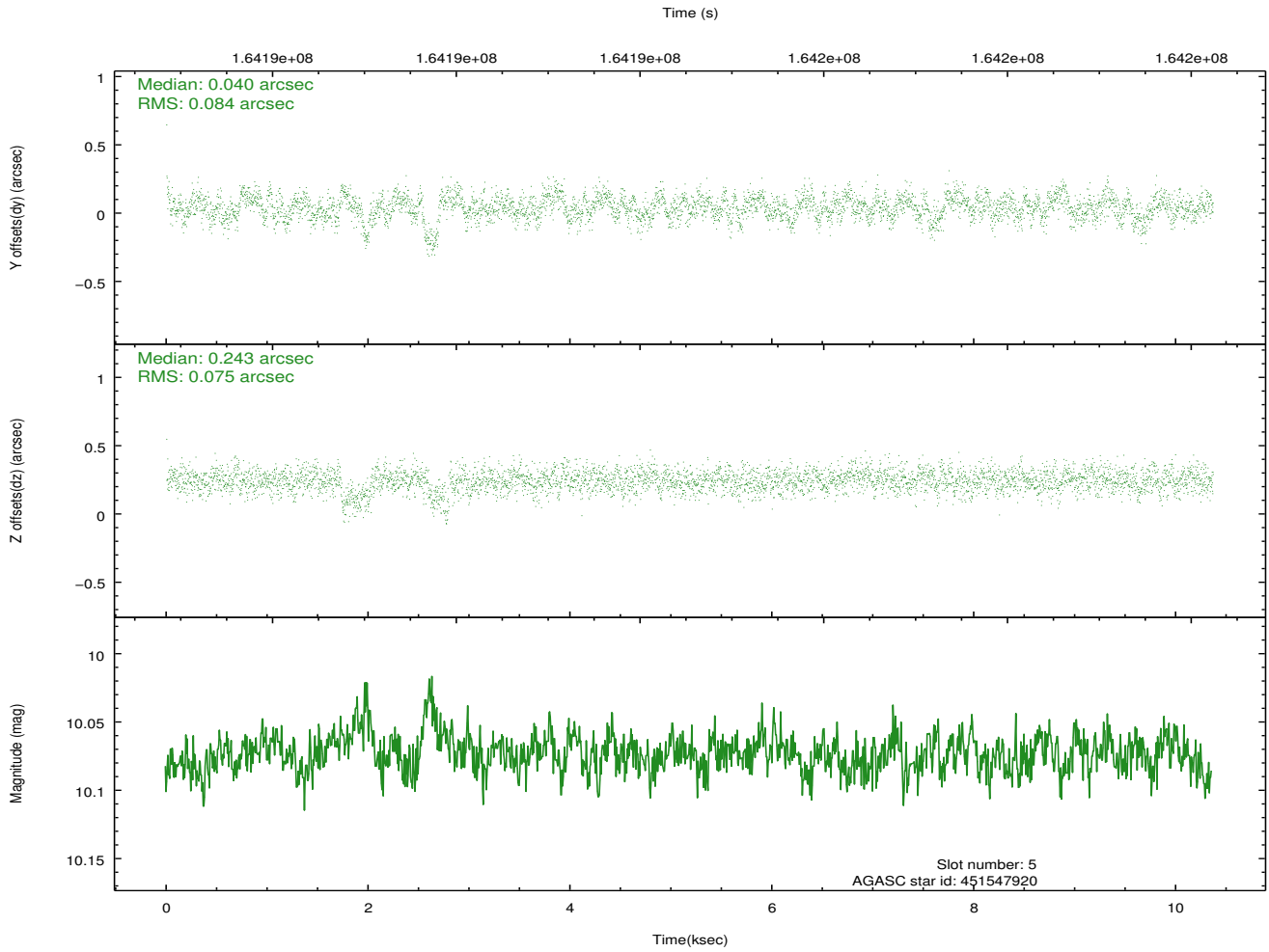
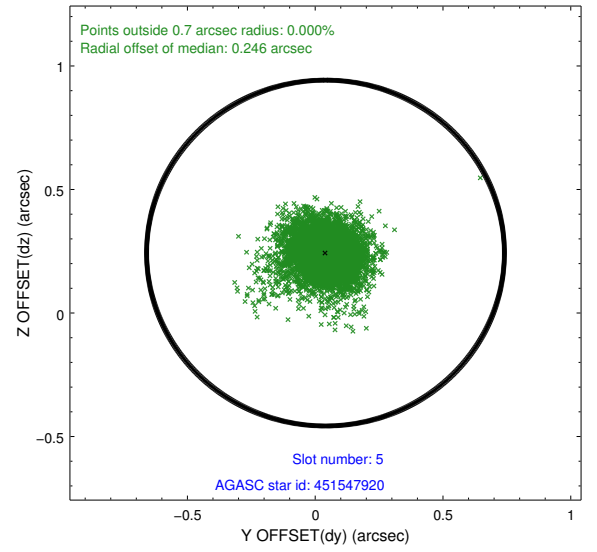
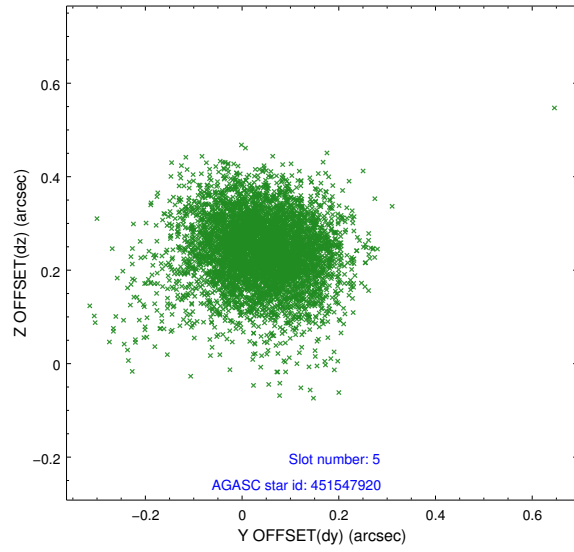
### 2.4.1 Slot 3



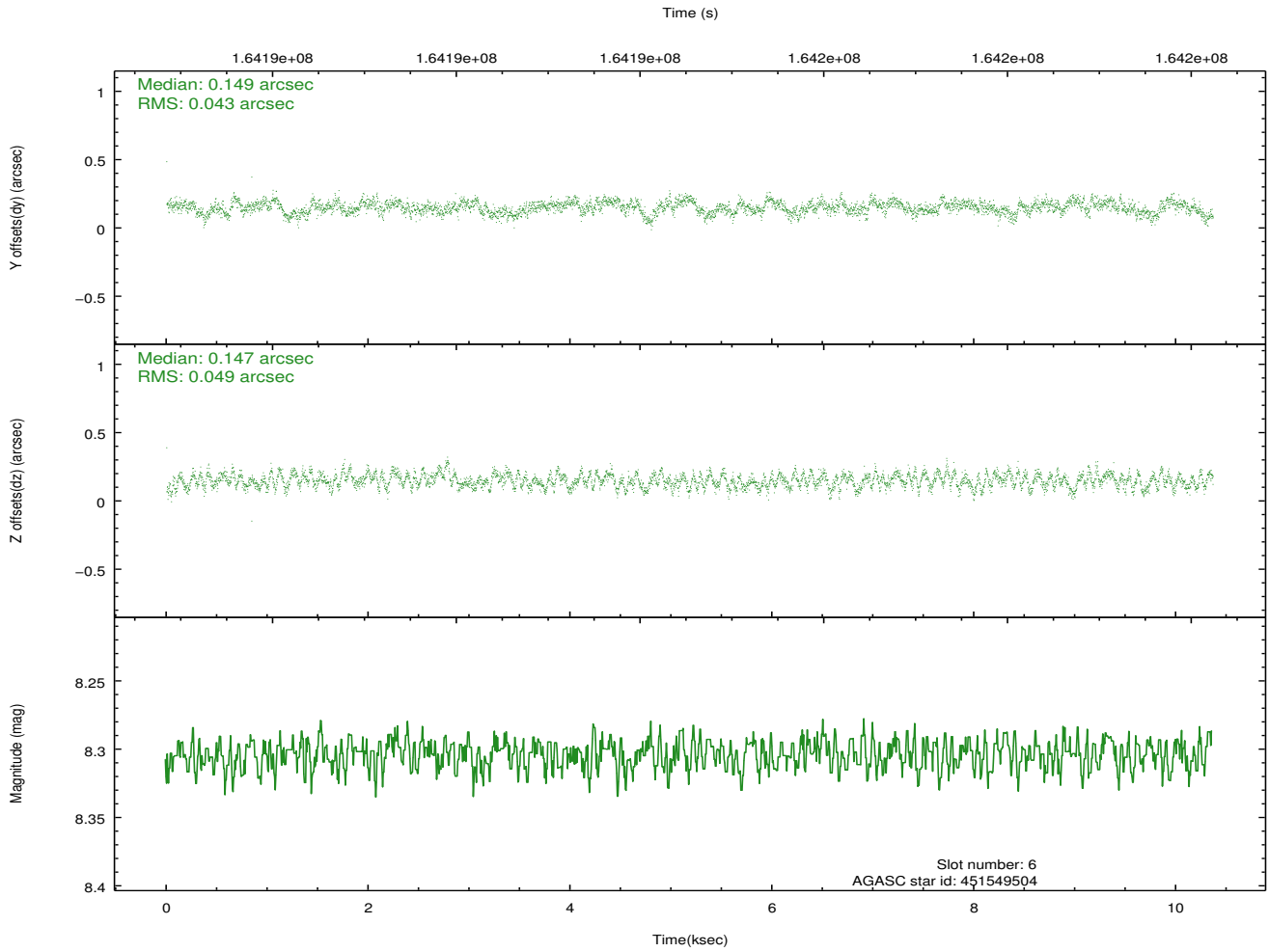
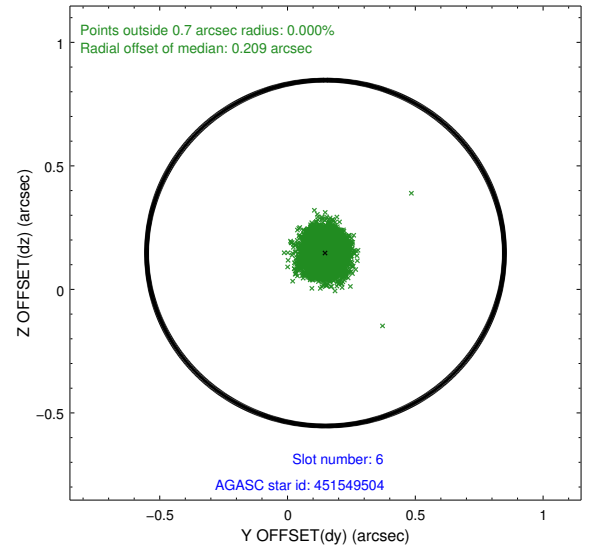
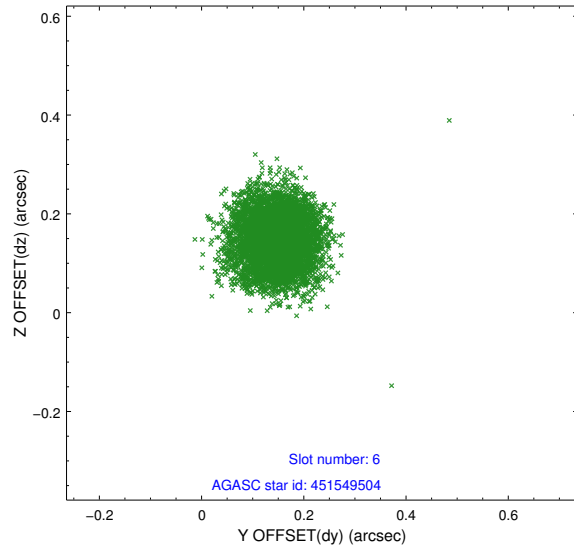
## 2.4.2 Slot 4



### 2.4.3 Slot 5

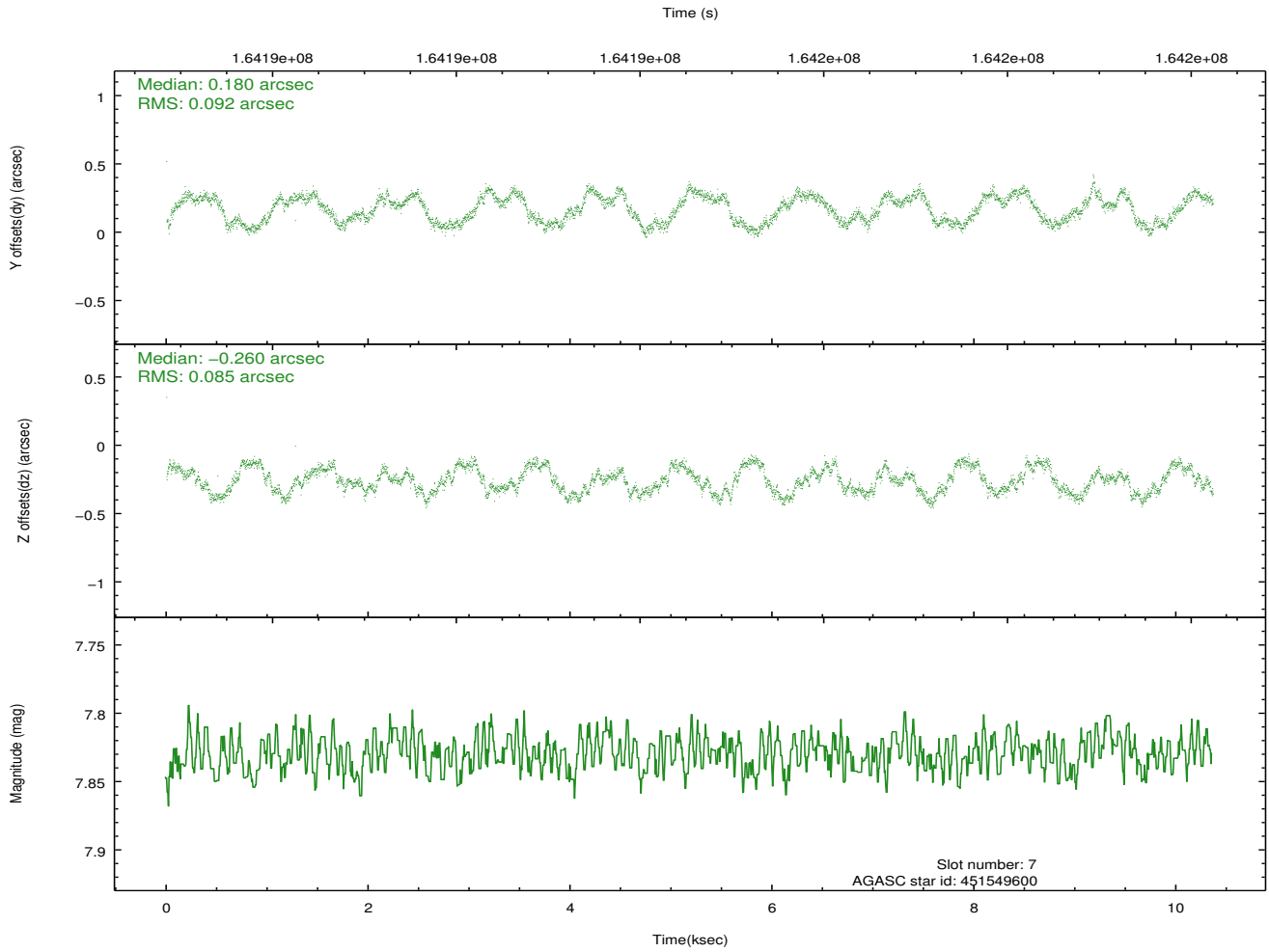
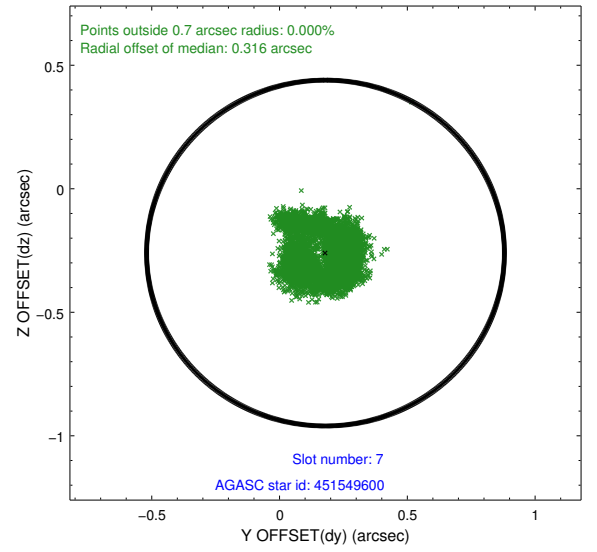
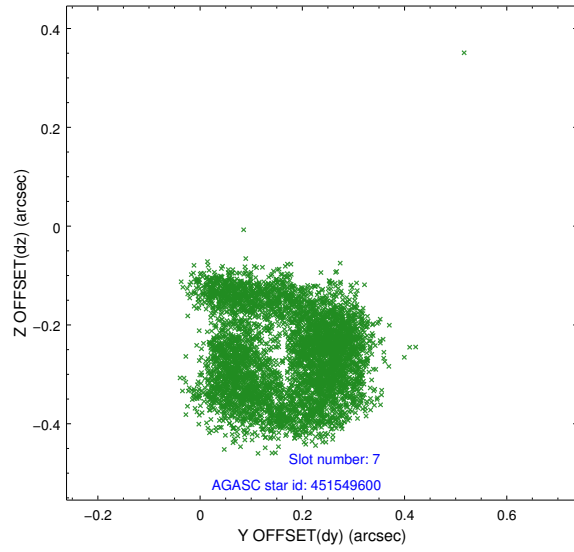


## 2.4.4 Slot 6



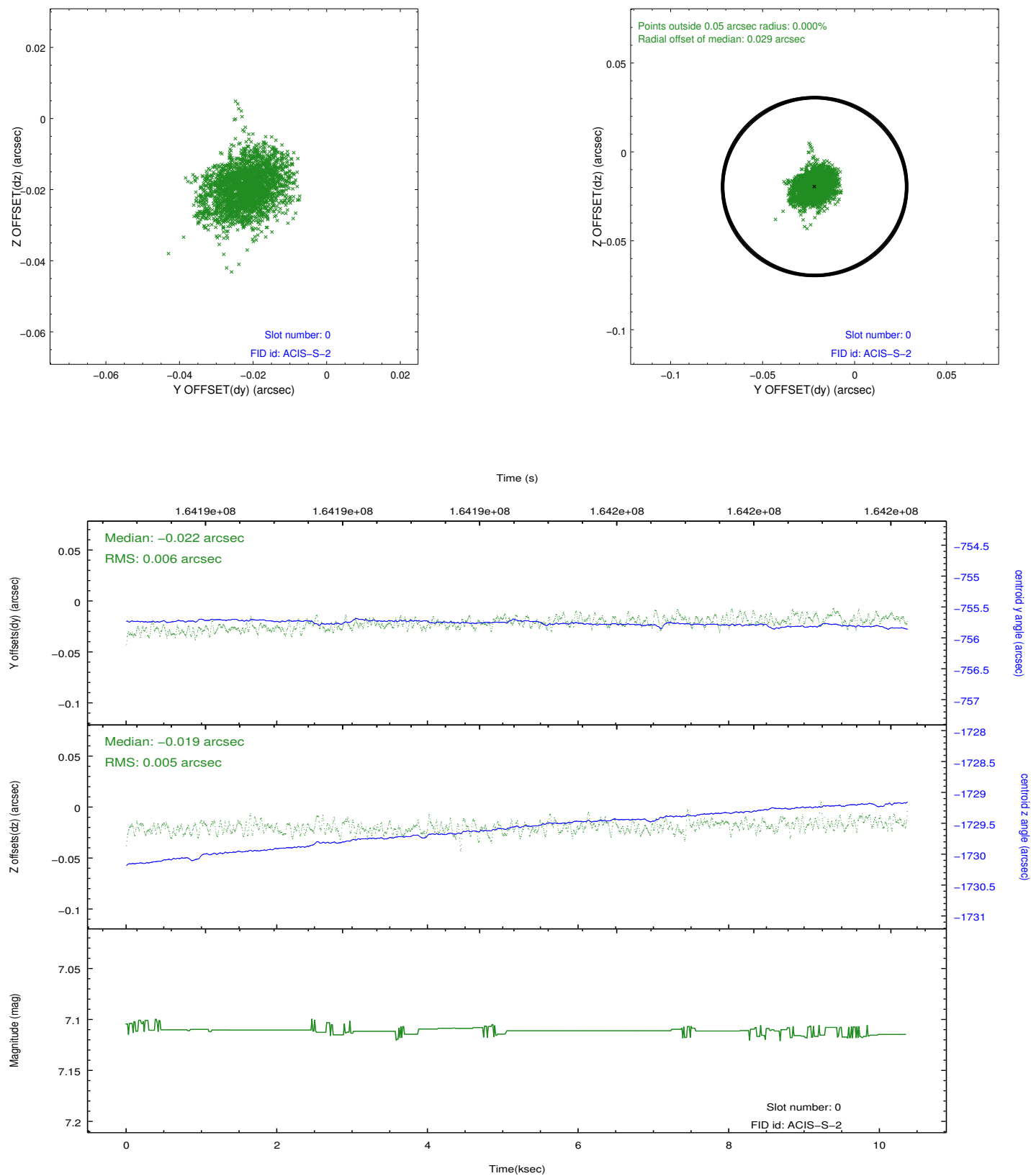


## 2.4.5 Slot 7

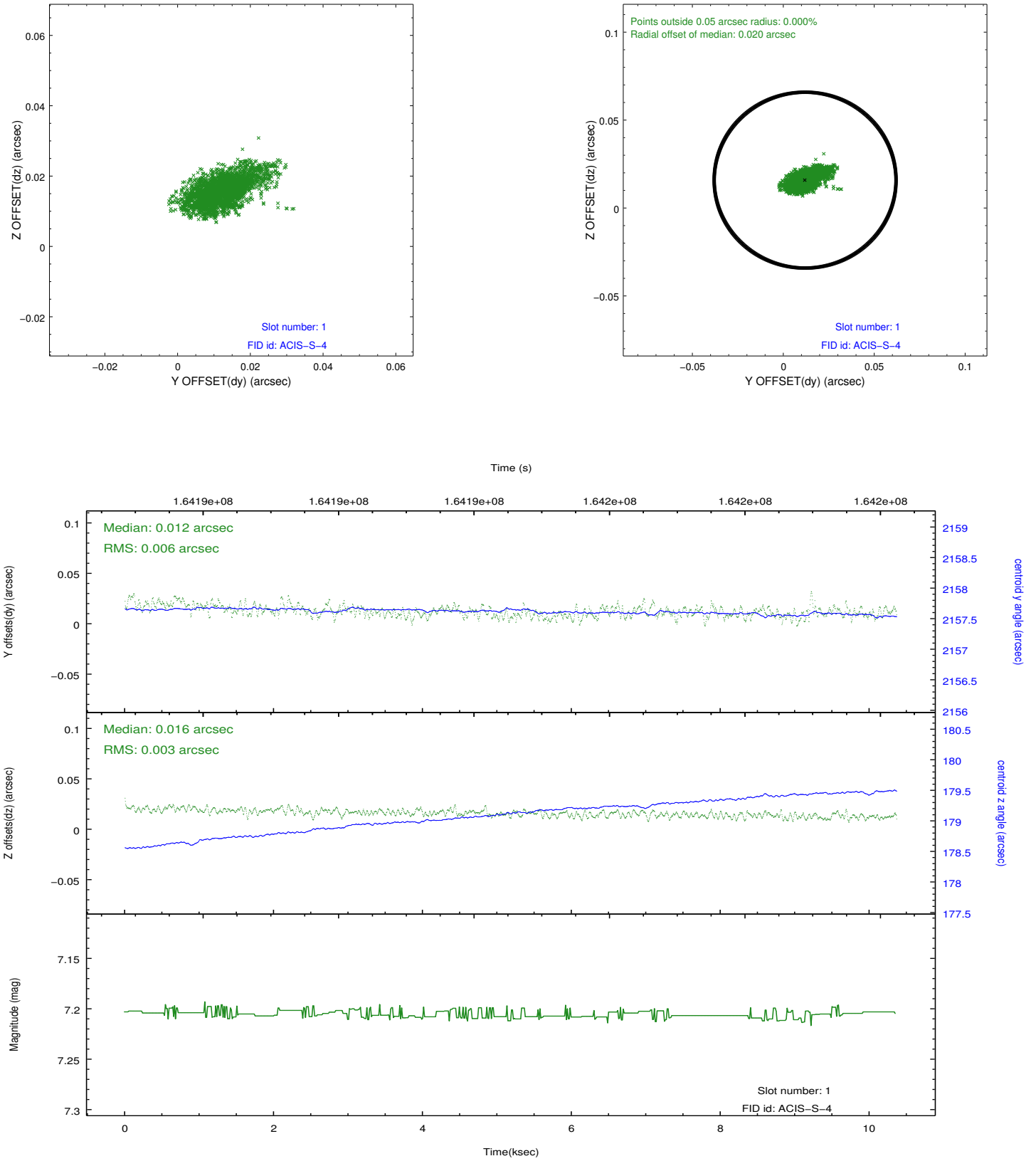


## 2.5 FID Slots

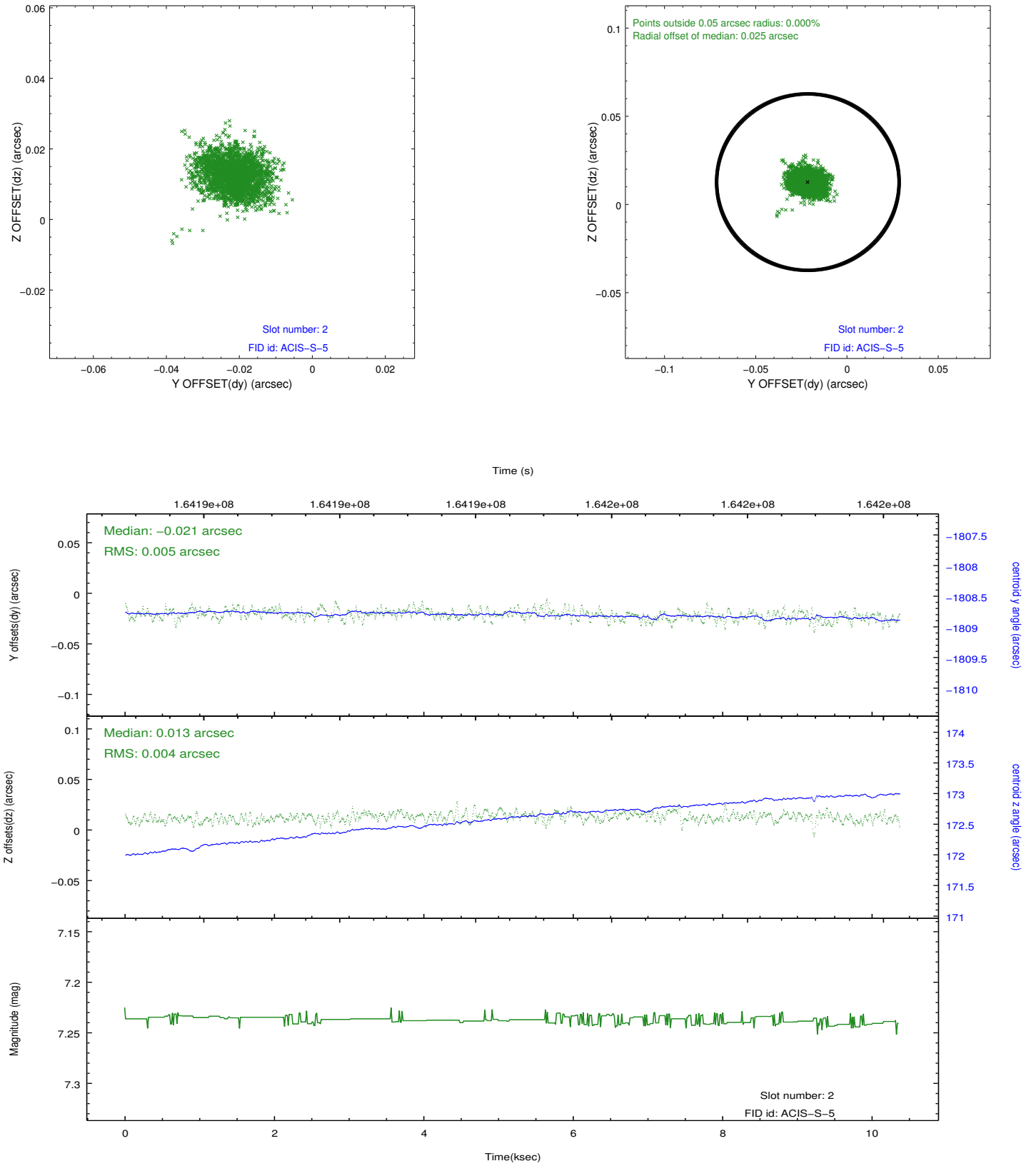
### 2.5.1 Slot 0



## 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)	2012.11.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.965

### A.2 Comments