

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4047 - L2 Version 4  
Chandra X-Ray Center

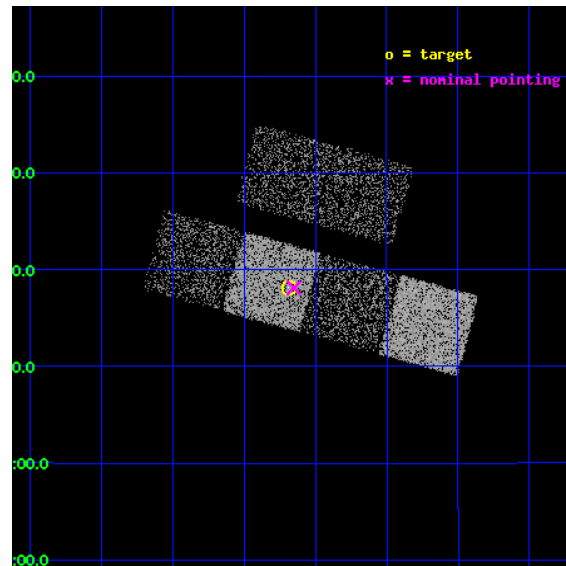
L2 Processing Date : Oct 28 2012

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# 1 Front

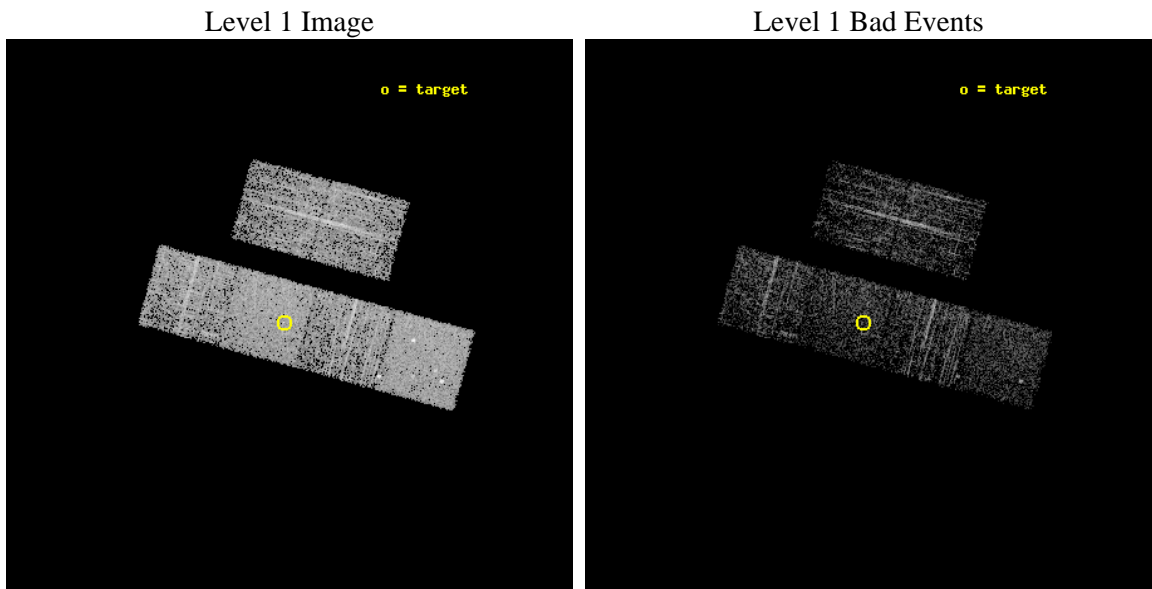
seq_num	700726	Sequence number
obs_id	4047	Observation id
title	WHY DO WE SEE BROAD LINES IN X-RAY ABSORBED AGN?	Proposal title
observer	Dr. Belinda Wilkes	Principal investigator
object	2MASS151141+051810	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.922083	Observer's specified target RA [deg]
dec_targ	5.302639	Observer's specified target Dec [deg]
ra_nom	227.91258043571	Nominal RA [deg]
dec_nom	5.3018229354566	Nominal Dec [deg]
roll_nom	195.22836388024	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2019.1999924779	Sum of GTIs [s]
livetime	1993.6316663569	Livetime [s]
ontime2	2019.1999924779	Sum of GTIs [s]
ontime3	2019.1999924779	Sum of GTIs [s]
ontime5	2019.1999924779	Sum of GTIs [s]
ontime6	2019.1999924779	Sum of GTIs [s]
ontime7	2019.1999924779	Sum of GTIs [s]
ontime8	2019.1678890884	Sum of GTIs [s]
l2events	20646	Number of level 2 events



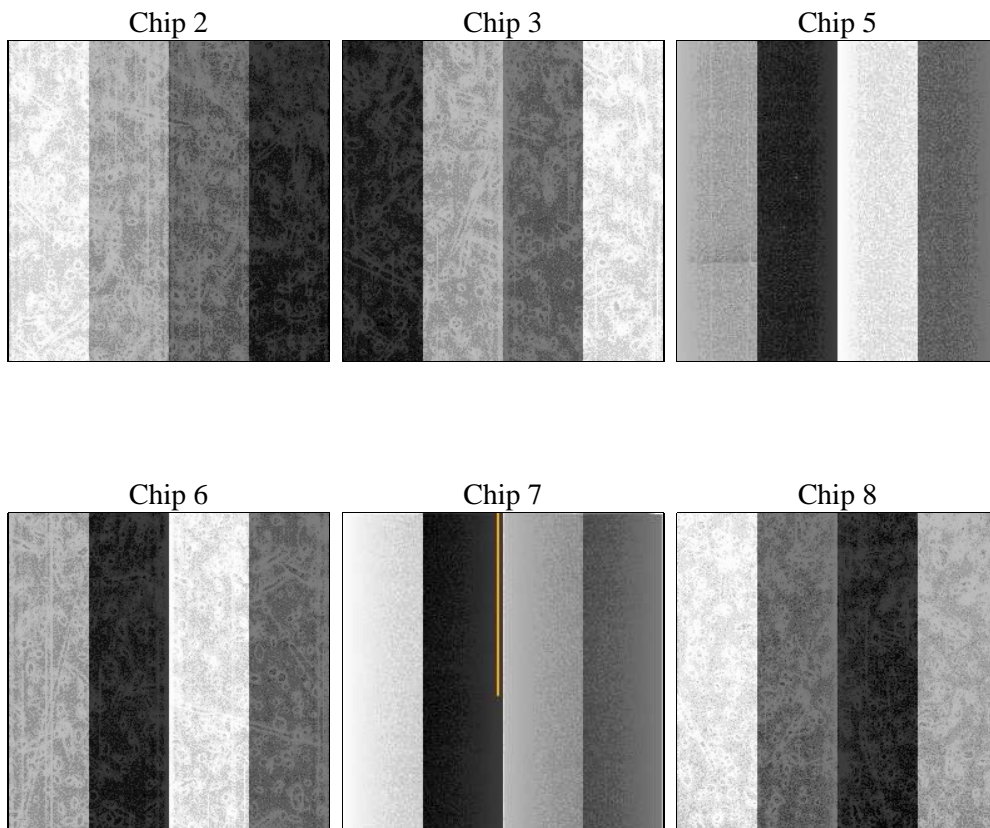
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	2019.1999924779	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	2019.1999924779	Sum of GTIs [s]
date	2012-10-28T13:28:00	Date and time of file creation	ontime3	2019.1999924779	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	2019.1999924779	Sum of GTIs [s]
			ontime6	2019.1999924779	Sum of GTIs [s]
			ontime7	2019.1999924779	Sum of GTIs [s]
			ontime8	2019.1678890884	Sum of GTIs [s]
			l1events	93660	Number of level 1 events

### 2.1.4 Events

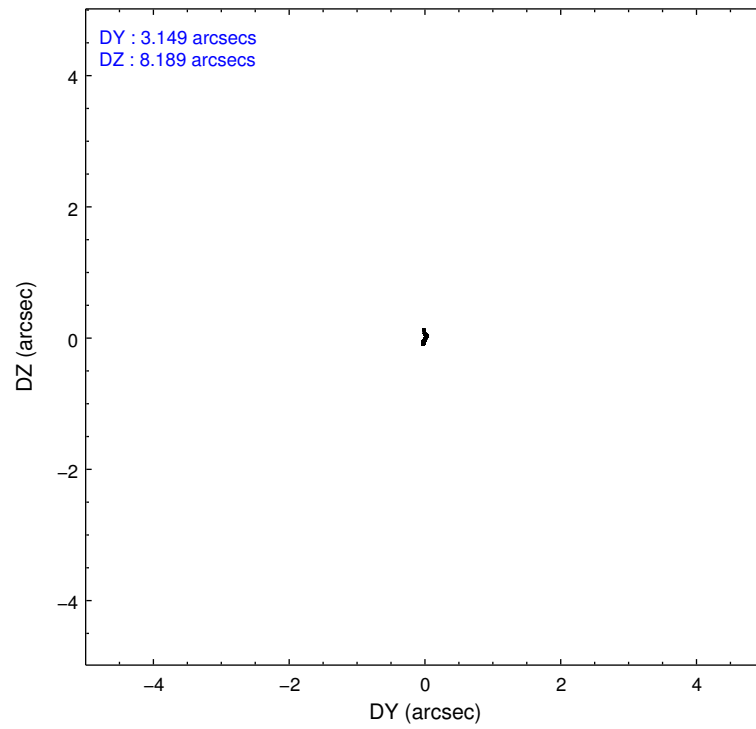
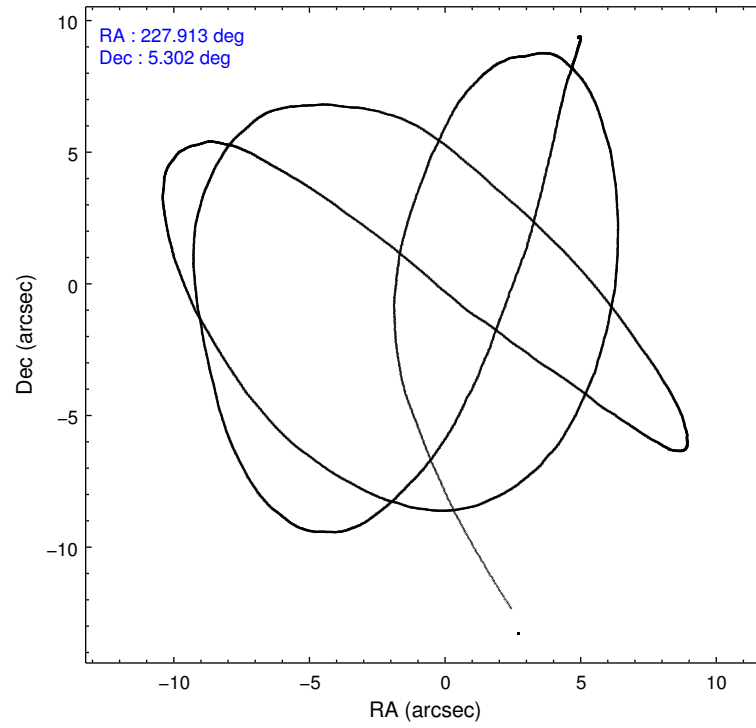
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	14168	12545	19251	14453	17365	15878
rejected events	12519	11048	9981	12637	10402	12671
rejected %	88%	88%	51%	87%	59%	79%

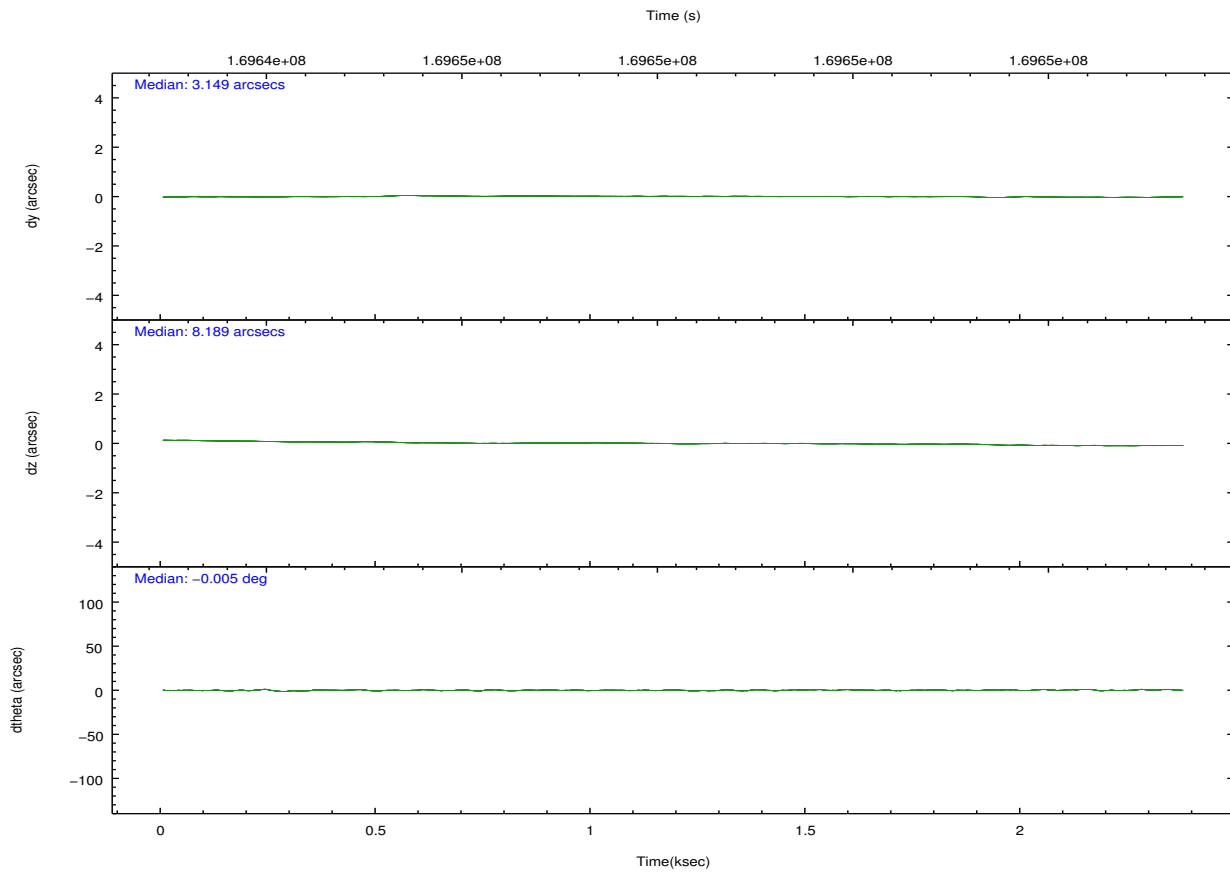
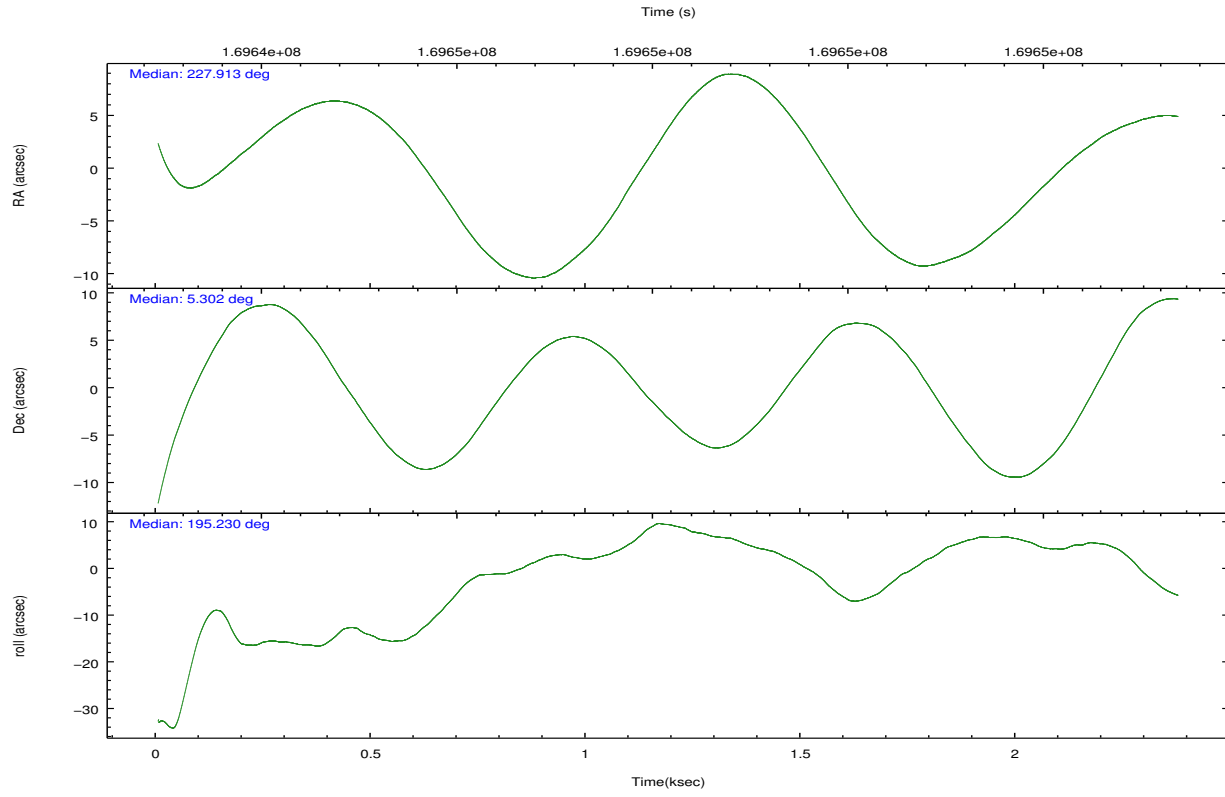
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	761	686	1403	849	749	994
	5%	5%	7%	5%	4%	6%
grade 1 events	7	11	54	6	12	12
	0%	0%	0%	0%	0%	0%
grade 2 events	322	286	2707	338	1332	746
	2%	2%	14%	2%	7%	4%
grade 3 events	142	150	397	179	637	349
	1%	1%	2%	1%	3%	2%
grade 4 events	171	148	362	173	670	286
	1%	1%	1%	1%	3%	1%
grade 5 events	477	530	1481	558	1604	692
	3%	4%	7%	3%	9%	4%
grade 6 events	259	229	4418	282	3599	842
	1%	1%	22%	1%	20%	5%
grade 7 events	12029	10505	8429	12068	8762	11957
	84%	83%	43%	83%	50%	75%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	227.931404	227.9125804357075	Subarray requested	NONE	NONE
[deg] Pointing Dec	5.321366	5.301822935456569	Alternating exposures requested	N	N
[deg] Pointing Roll	195.070063	195.2283638802438	[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)	169645028.184000	169644004.80471			
Observation start date	2003-05-18T11:36:04	2003-05-18T11:20:04			
[s] Observation end time (MET)	169647228.184000	169648084.30488			
Observation end date	2003-05-18T12:12:44	2003-05-18T12:28:04			
Read mode	TIMED	TIMED			

## 2.3 Aspect



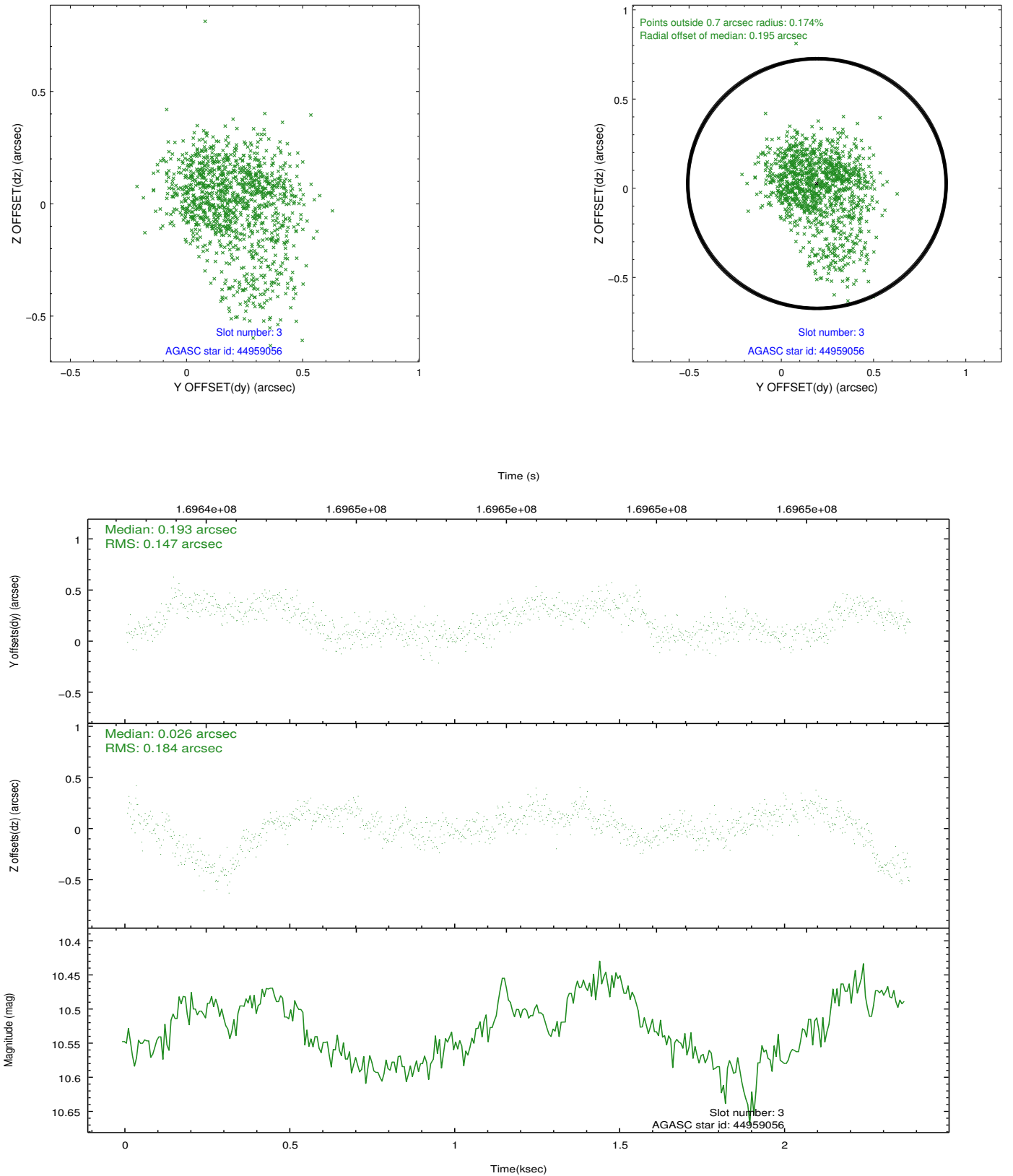


### Slot Statistics

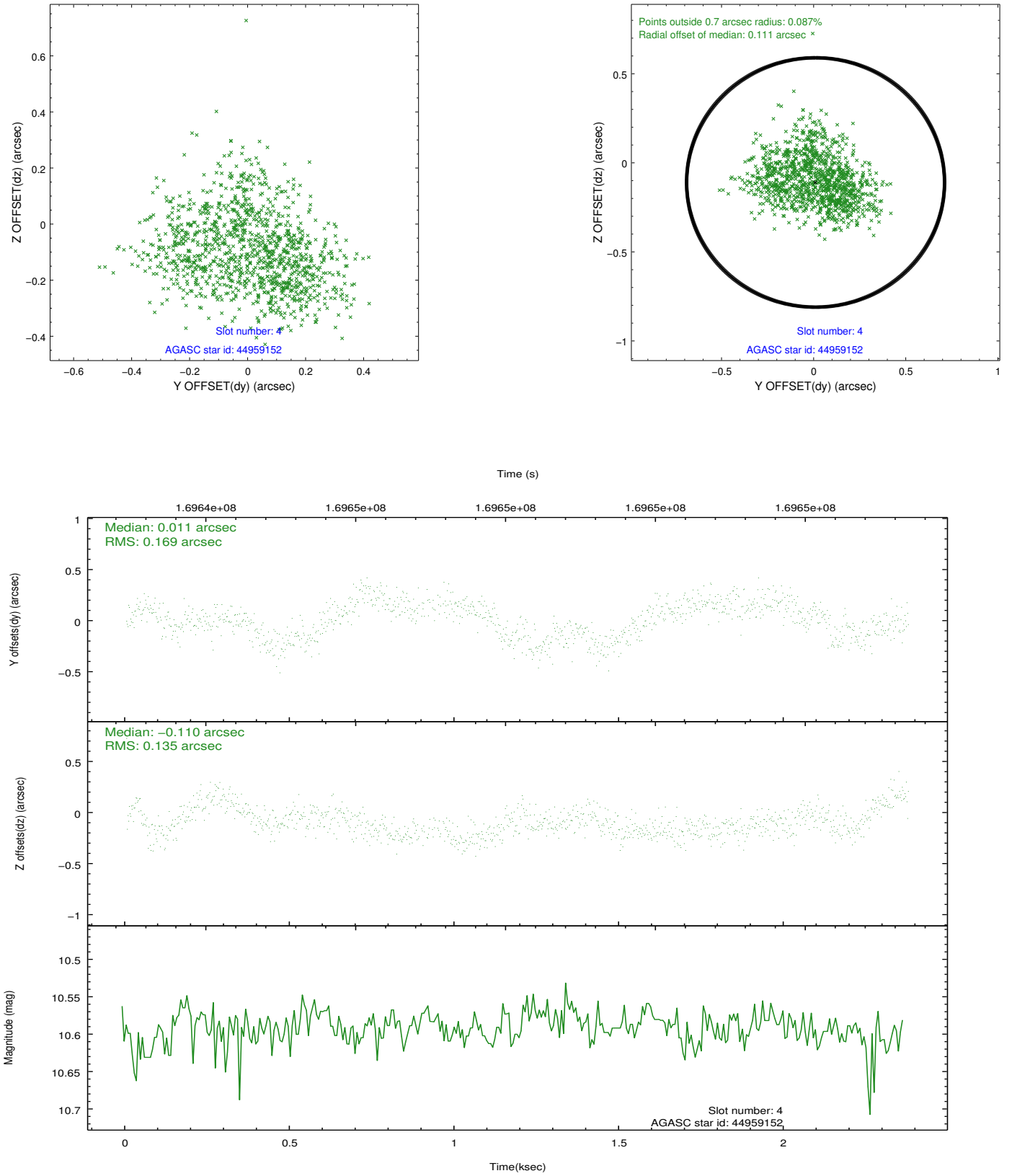
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	579	0.037	-0.004	0.006	0.012	0.000000	0.000000	940.25	-1725.03
1	FID	ACIS-S-5	7.24	579	-0.035	0.044	0.006	0.010	0.000000	0.000000	-1807.25	169.80
2	FID	ACIS-S-6	7.35	579	-0.023	-0.028	0.007	0.012	0.000000	0.000000	402.84	816.74
3	GUIDE	44959056	10.53	1152	0.193	0.026	0.238	0.439	227.388506	5.331015	1870.80	-540.09
4	GUIDE	44959152	10.59	1143	0.011	-0.110	0.235	0.361	227.413679	5.123161	1980.29	205.13
5	GUIDE	44960448	8.31	1158	-0.065	0.045	0.079	0.128	228.589596	4.993840	-1970.55	1751.51
6	GUIDE	44965328	10.34	1159	-0.023	0.056	0.144	0.242	228.534745	5.246265	-2019.53	824.28
7	GUIDE	44965624	7.27	1158	-0.123	-0.002	0.092	0.145	228.383124	5.044201	-1305.98	1385.17

## 2.4 Star Slots

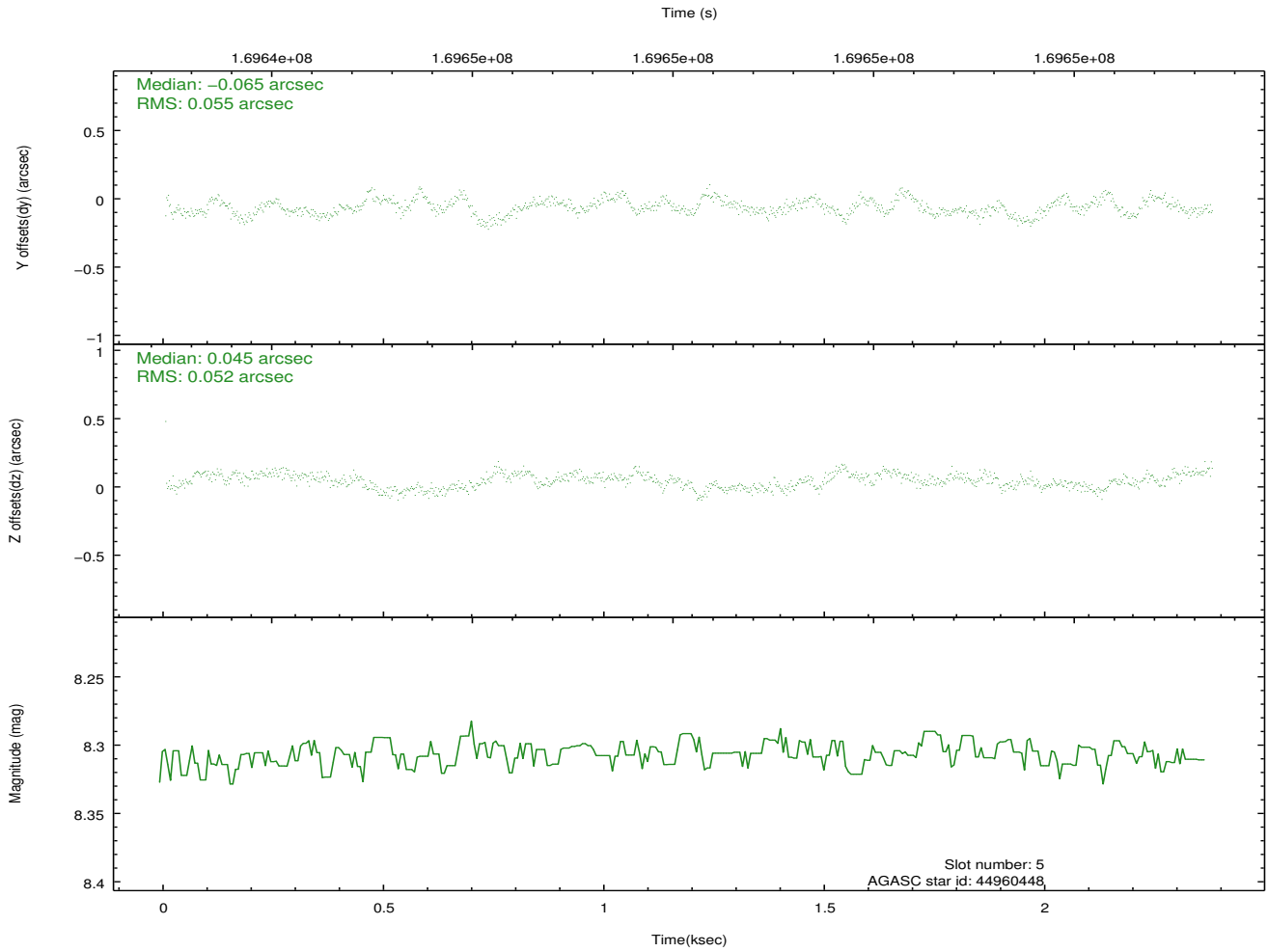
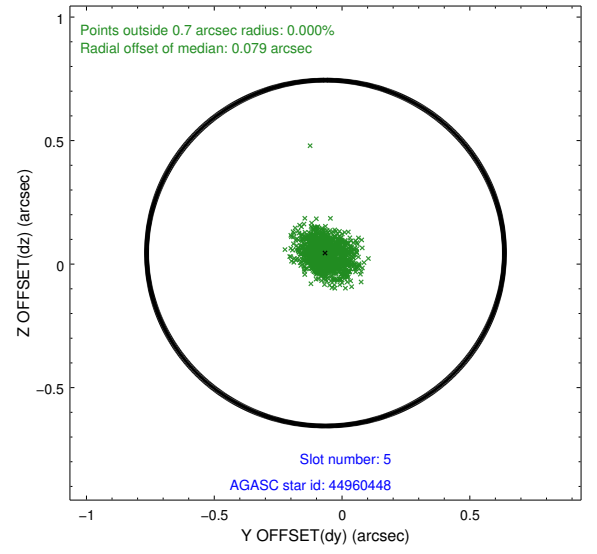
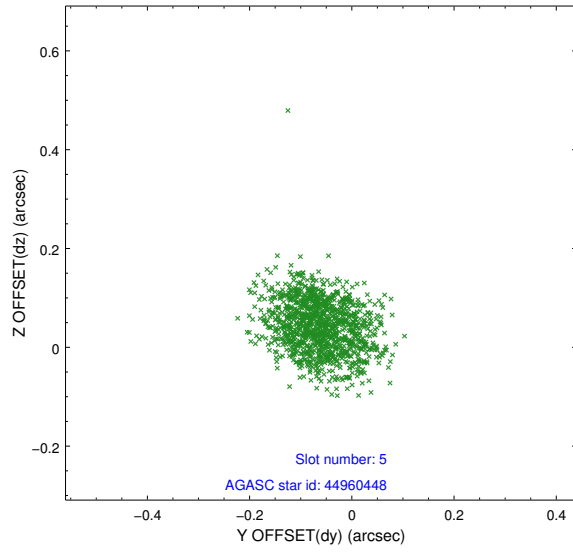
### 2.4.1 Slot 3



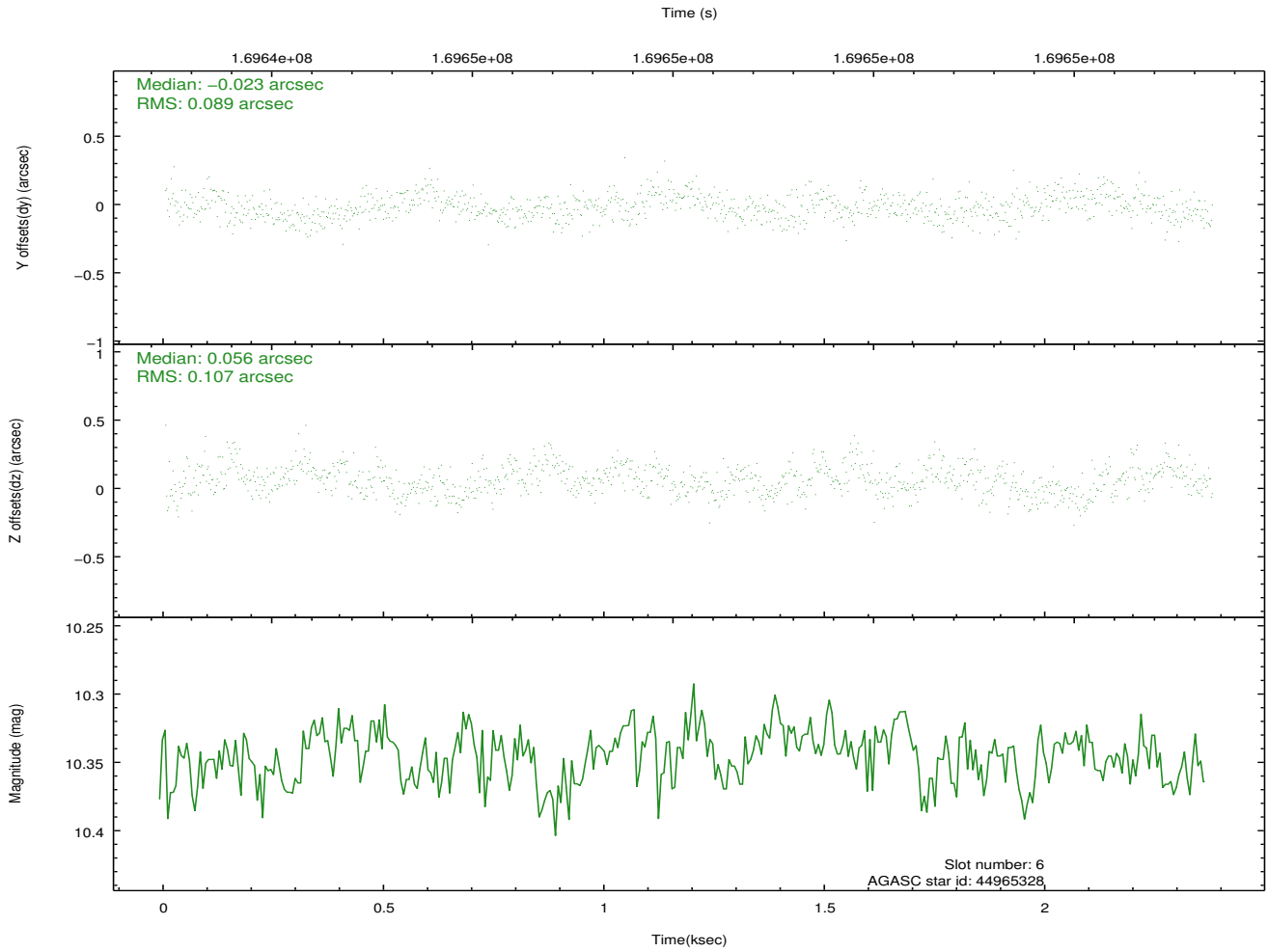
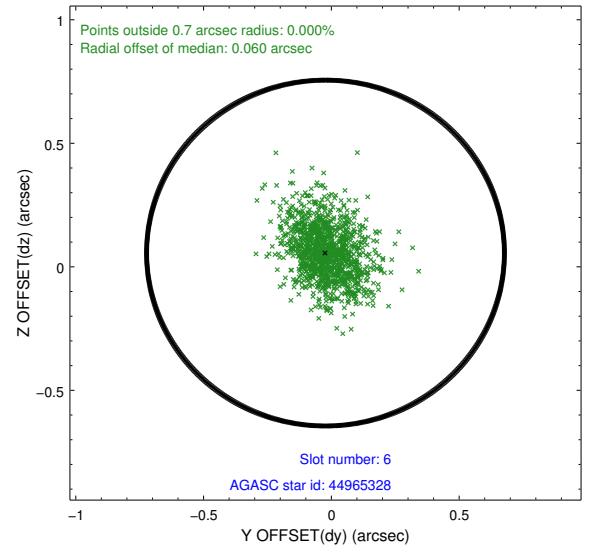
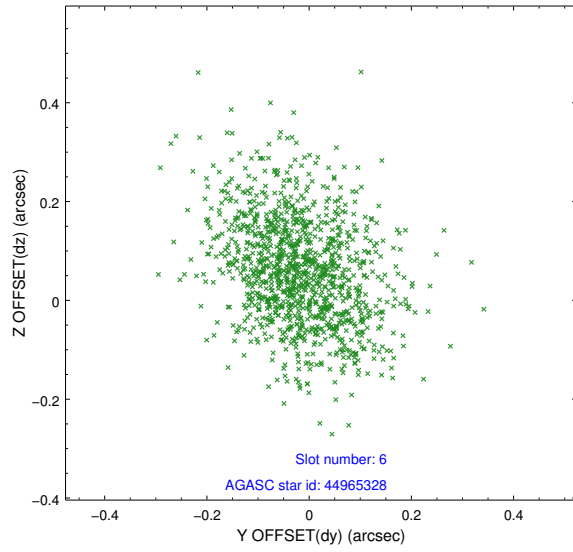
## 2.4.2 Slot 4



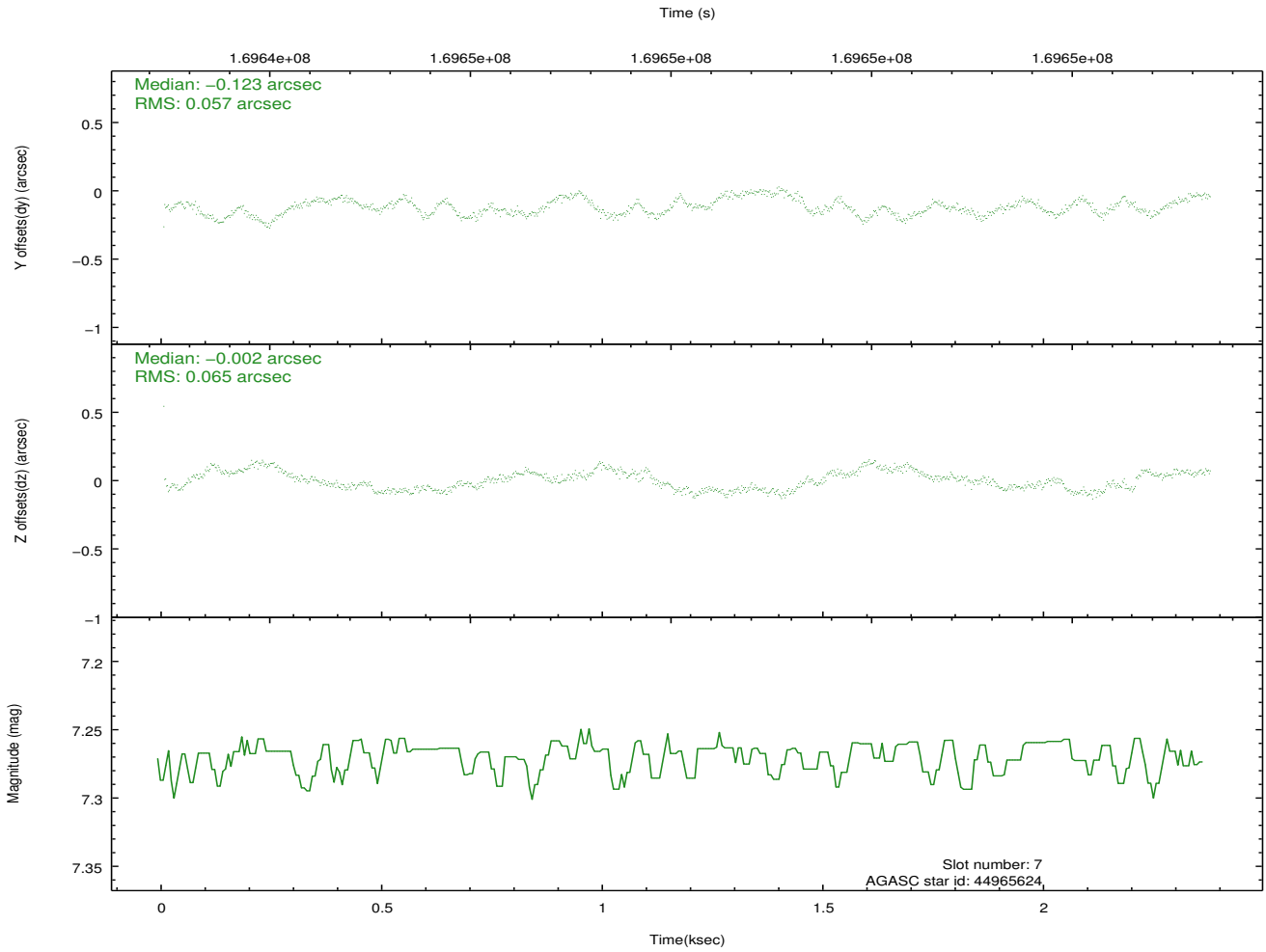
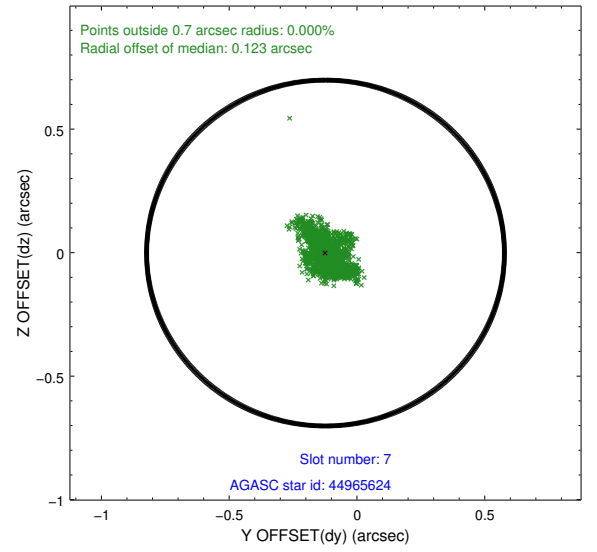
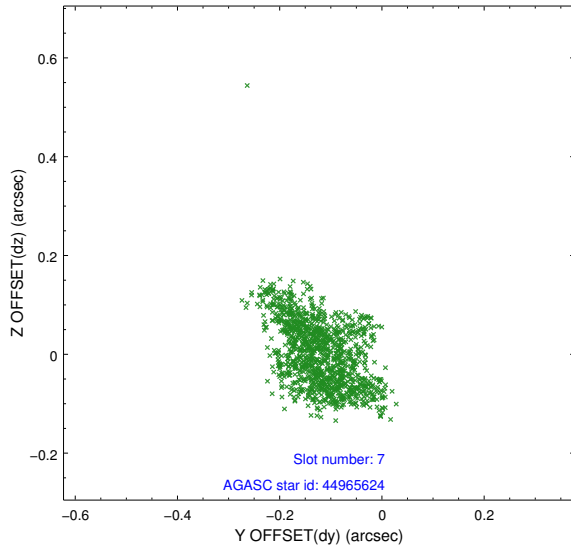
### 2.4.3 Slot 5



## 2.4.4 Slot 6

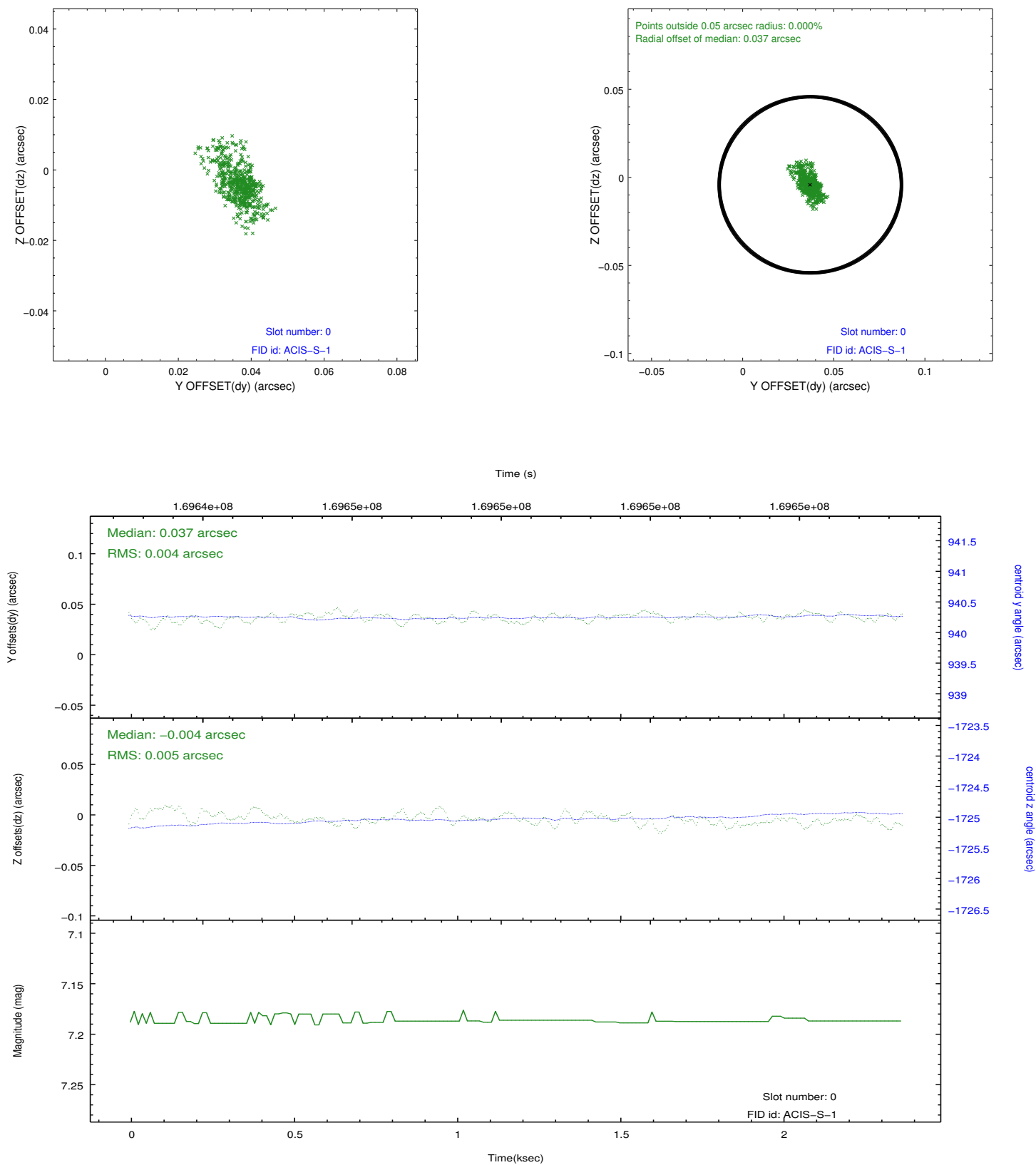


## 2.4.5 Slot 7

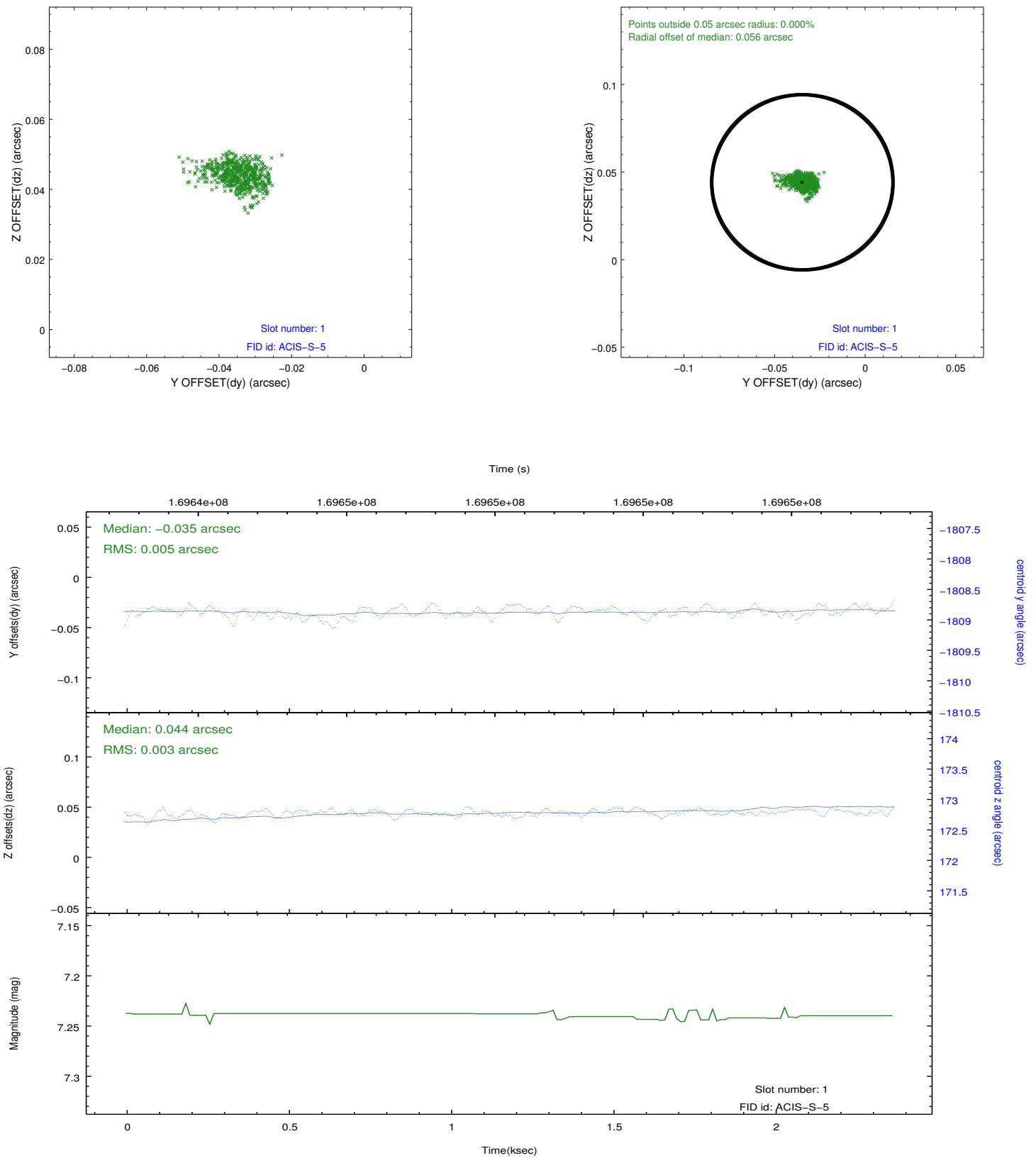


## 2.5 FID Slots

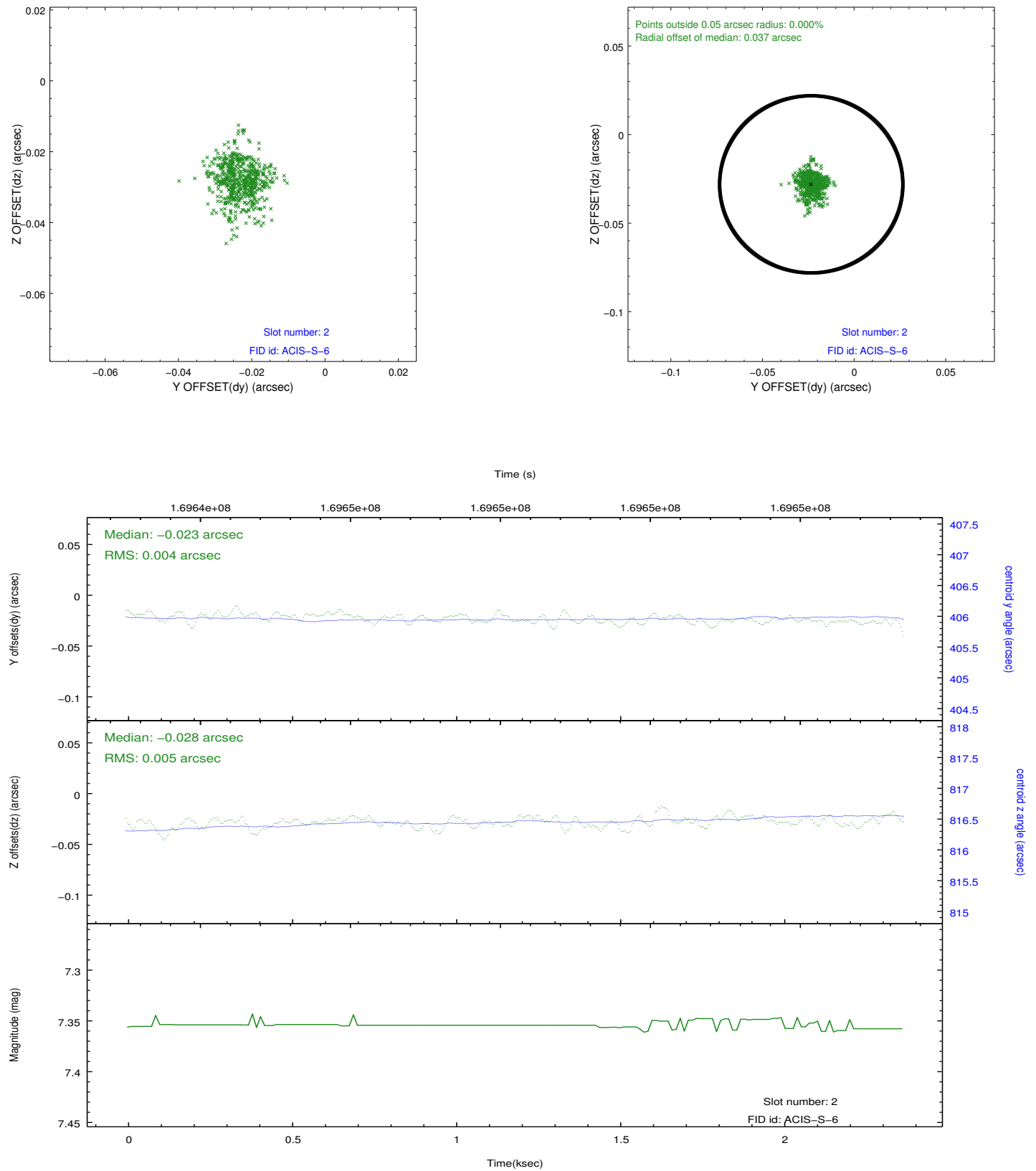
### 2.5.1 Slot 0



## 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)	2012.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.022

### **A.2 Comments**