

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1845 - L2 Version 4  
Chandra X-Ray Center

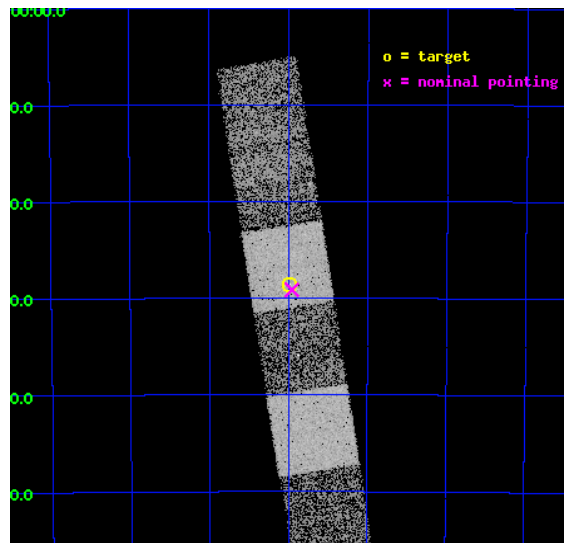
L2 Processing Date : Sep 1 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

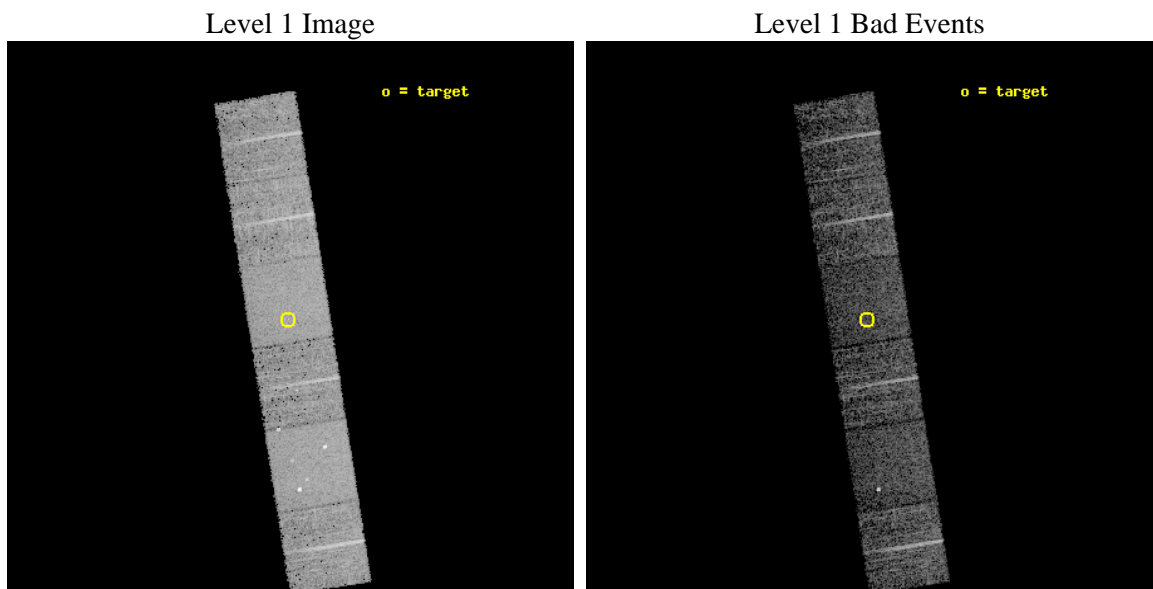
seq_num	400111	Sequence number
obs_id	1845	Observation id
title	OBSERVATIONS OF A BLACK HOLE CANDIDATE X-RAY TRANSIENT DURING OUTBURST DECAY	Proposal title
observer	Dr. John Tomsick	Principal investigator
object	XTE J1550-564	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	237.745	Observer's specified target RA [deg]
dec_targ	-56.476389	Observer's specified target Dec [deg]
ra_nom	237.73918041974	Nominal RA [deg]
dec_nom	-56.485797166486	Nominal Dec [deg]
roll_nom	261.06571541015	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5164.8000047952	Sum of GTIs [s]
livetime	5099.4001972653	Livetime [s]
ontime4	5164.8000047952	Sum of GTIs [s]
ontime5	5164.8000047952	Sum of GTIs [s]
ontime6	5164.8000047952	Sum of GTIs [s]
ontime7	5164.8000047952	Sum of GTIs [s]
ontime8	5164.8000047952	Sum of GTIs [s]
ontime9	5164.8000047952	Sum of GTIs [s]
l2events	55553	Number of level 2 events



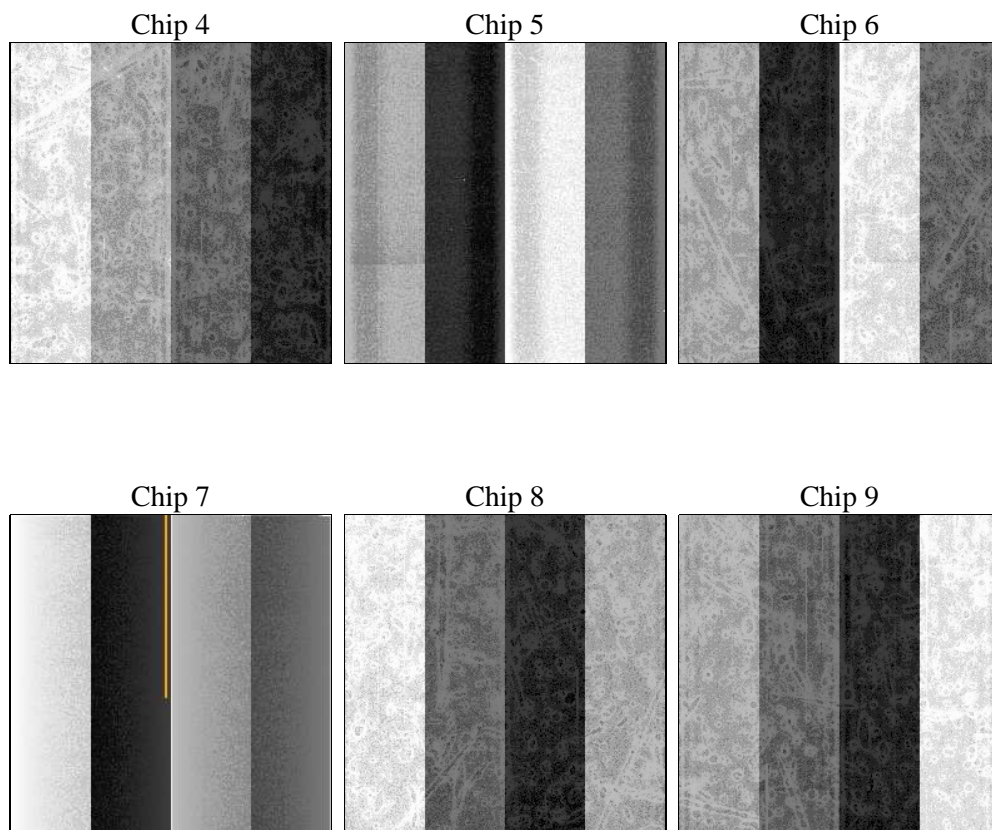
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5164.8000047952	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime4	5164.8000047952	Sum of GTIs [s]
date	2012-09-01T01:57:31	Date and time of file creation	ontime5	5164.8000047952	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	5164.8000047952	Sum of GTIs [s]
			ontime7	5164.8000047952	Sum of GTIs [s]
			ontime8	5164.8000047952	Sum of GTIs [s]
			ontime9	5164.8000047952	Sum of GTIs [s]
			l1events	280122	Number of level 1 events

### 2.1.4 Events

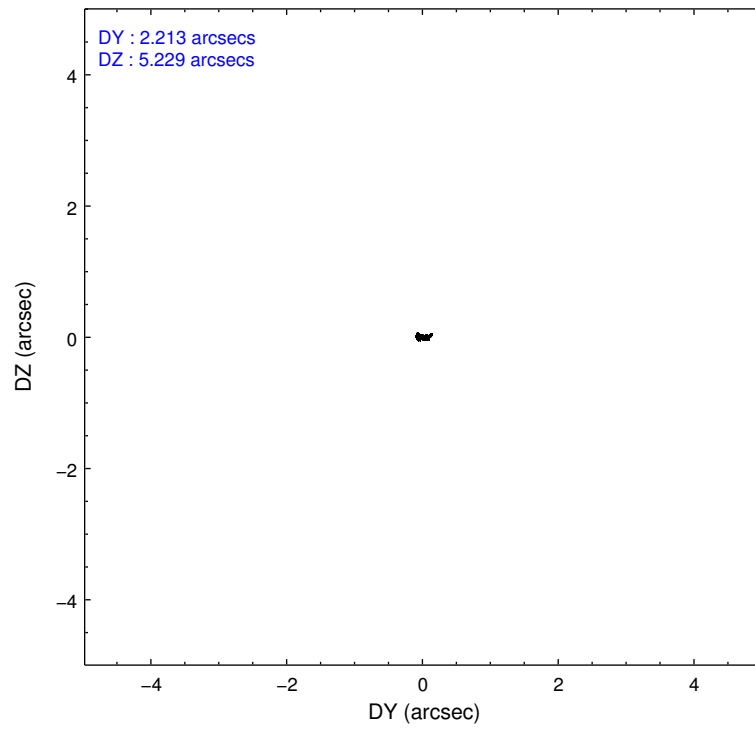
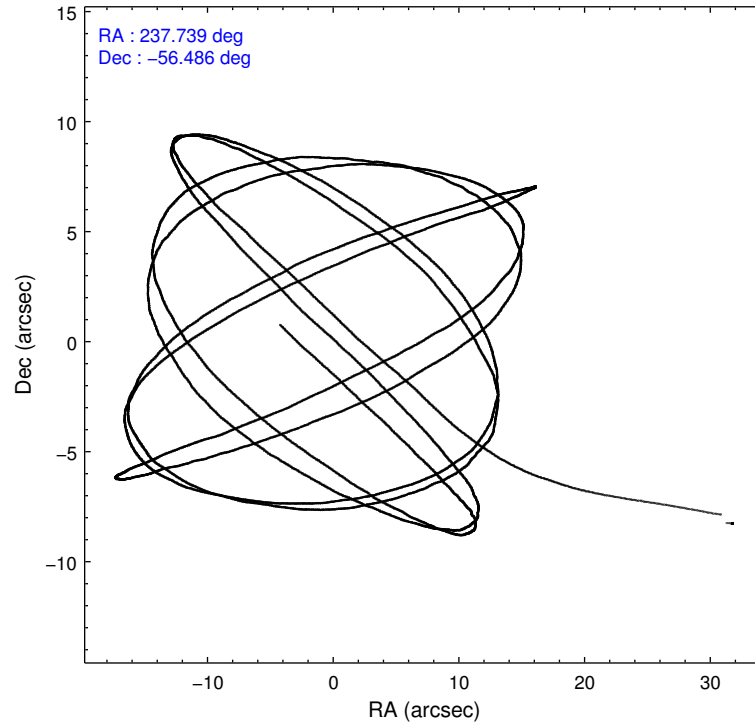
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	42610	60020	38171	54346	47538	37437	grade 0 events	2388	5147	2770	3098	4585	3372
rejected events	38605	36744	33905	35098	38264	32371		5%	8%	7%	5%	9%	9%
rejected %	90%	61%	88%	64%	80%	86%	grade 1 events	12	97	11	39	23	17
								0%	0%	0%	0%	0%	0%
							grade 2 events	1098	9320	895	5421	2031	986
								2%	15%	2%	9%	4%	2%
							grade 3 events	398	1536	425	2561	1094	466
								0%	2%	1%	4%	2%	1%
							grade 4 events	387	1447	404	2492	961	416
								0%	2%	1%	4%	2%	1%
							grade 5 events	1307	3837	1529	4428	1843	1460
								3%	6%	4%	8%	3%	3%
							grade 6 events	718	14702	842	14394	2222	813
								1%	24%	2%	26%	4%	2%
							grade 7 events	36302	23934	31295	21913	34779	29907
								85%	39%	81%	40%	73%	79%

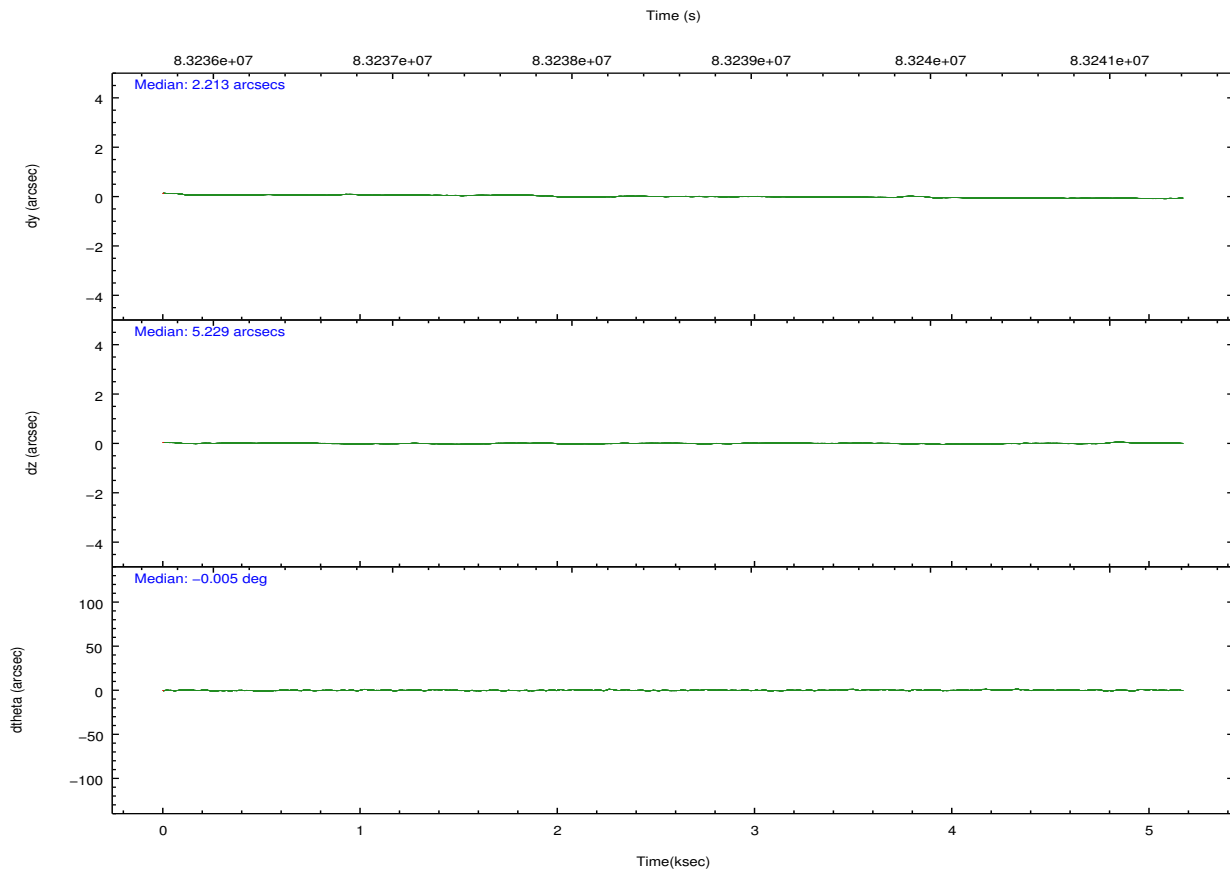
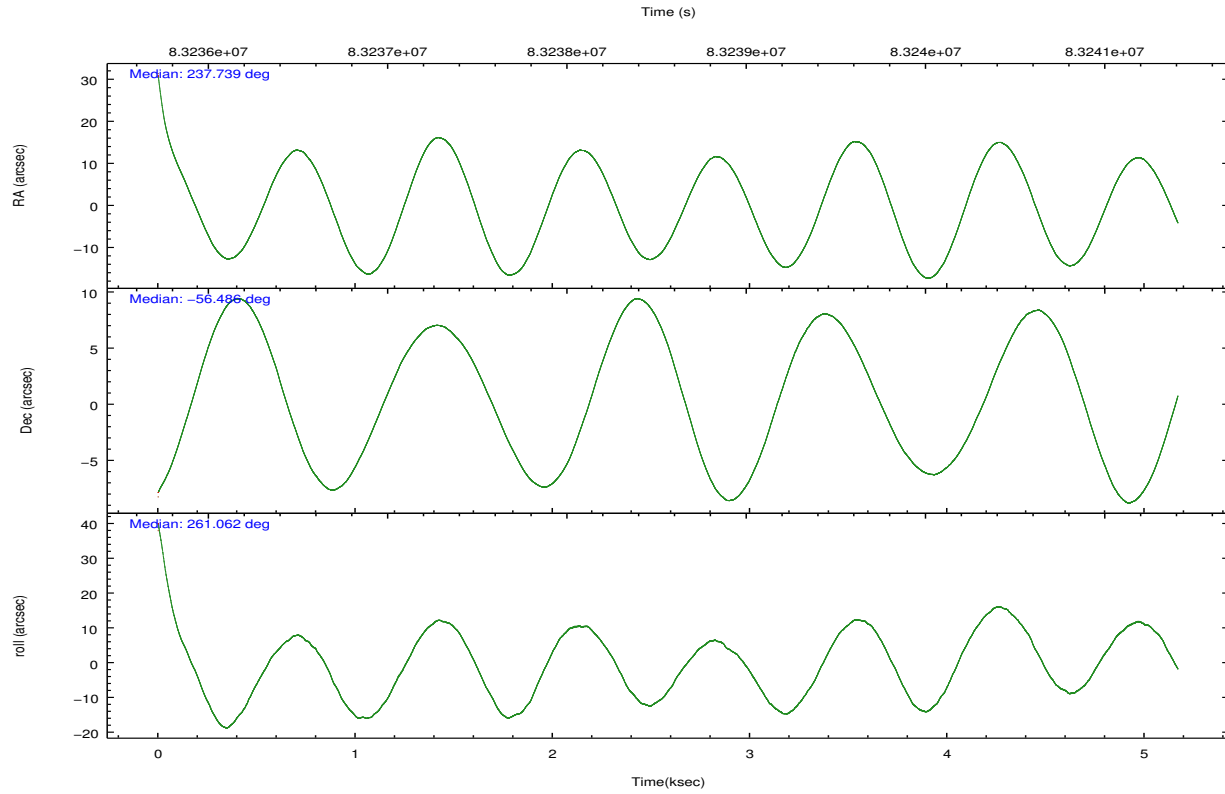


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-456789	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	237.720954	237.7391804197404	CCD I2 on	Y	N
[deg] Pointing Dec	-56.460257	-56.48579716648569	CCD I3 on	Y	N
[deg] Pointing Roll	260.893856	261.0657154101523	CCD S0 on	N	Y
[s] Window start time (MET)	80611264.184000	80611264.184000	CCD S1 on	Y	Y
[s] Window stop time (MET)	83116864.184000	83116864.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S5 on	N	Y
[mm] SIM translation stage offset	0	0.00754346686406393	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	83236149.184000	83234585.104615	On-chip summing requested	N	N
Observation start date	2000-08-21T09:08:05	2000-08-21T08:43:05	Subarray requested	NONE	NONE
[s] Observation end time (MET)	83241149.184000	83241699.11738101	Alternating exposures requested	N	N
Observation end date	2000-08-21T10:31:25	2000-08-21T10:41:39	[s] Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

## 2.3 Aspect



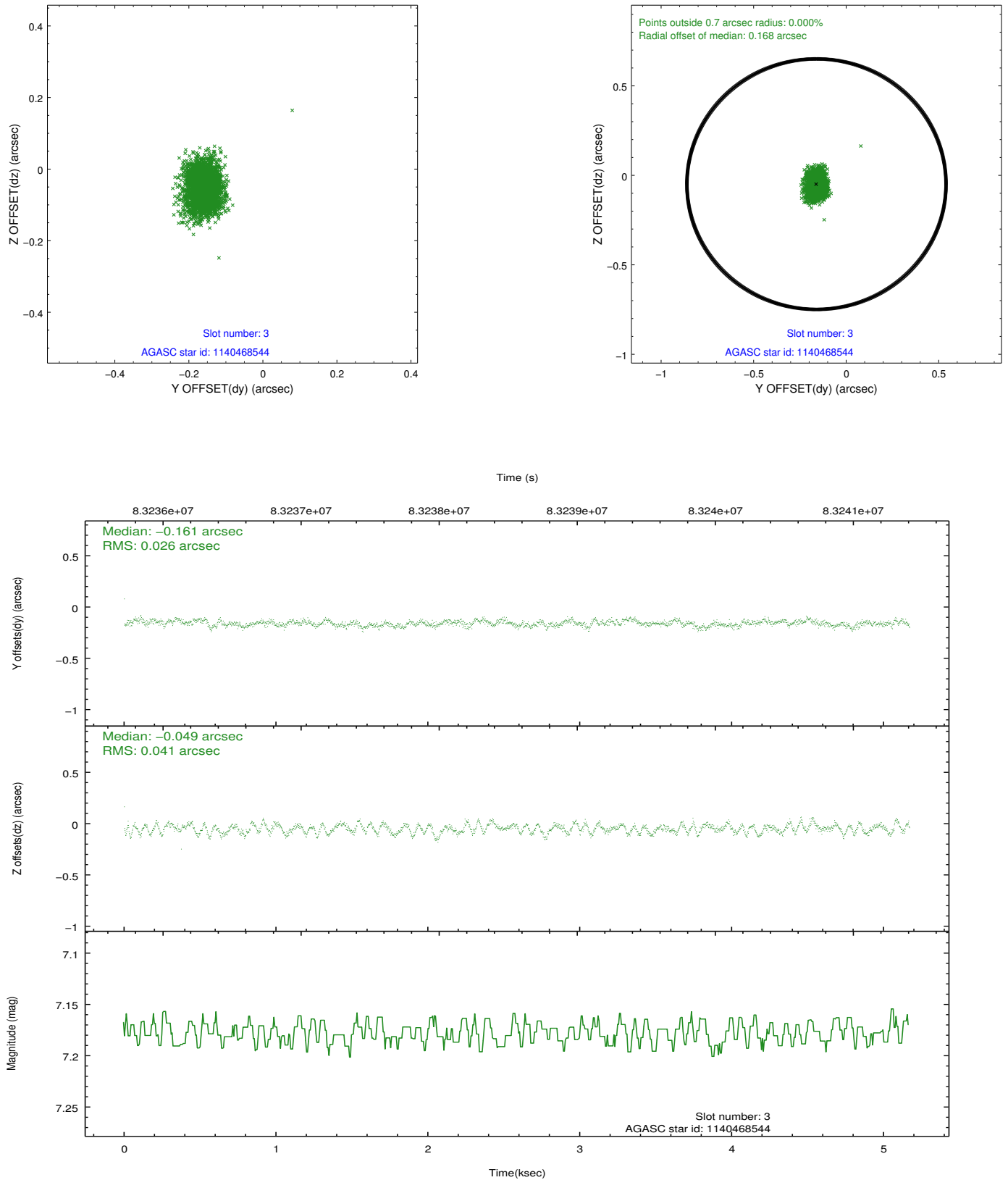


### Slot Statistics

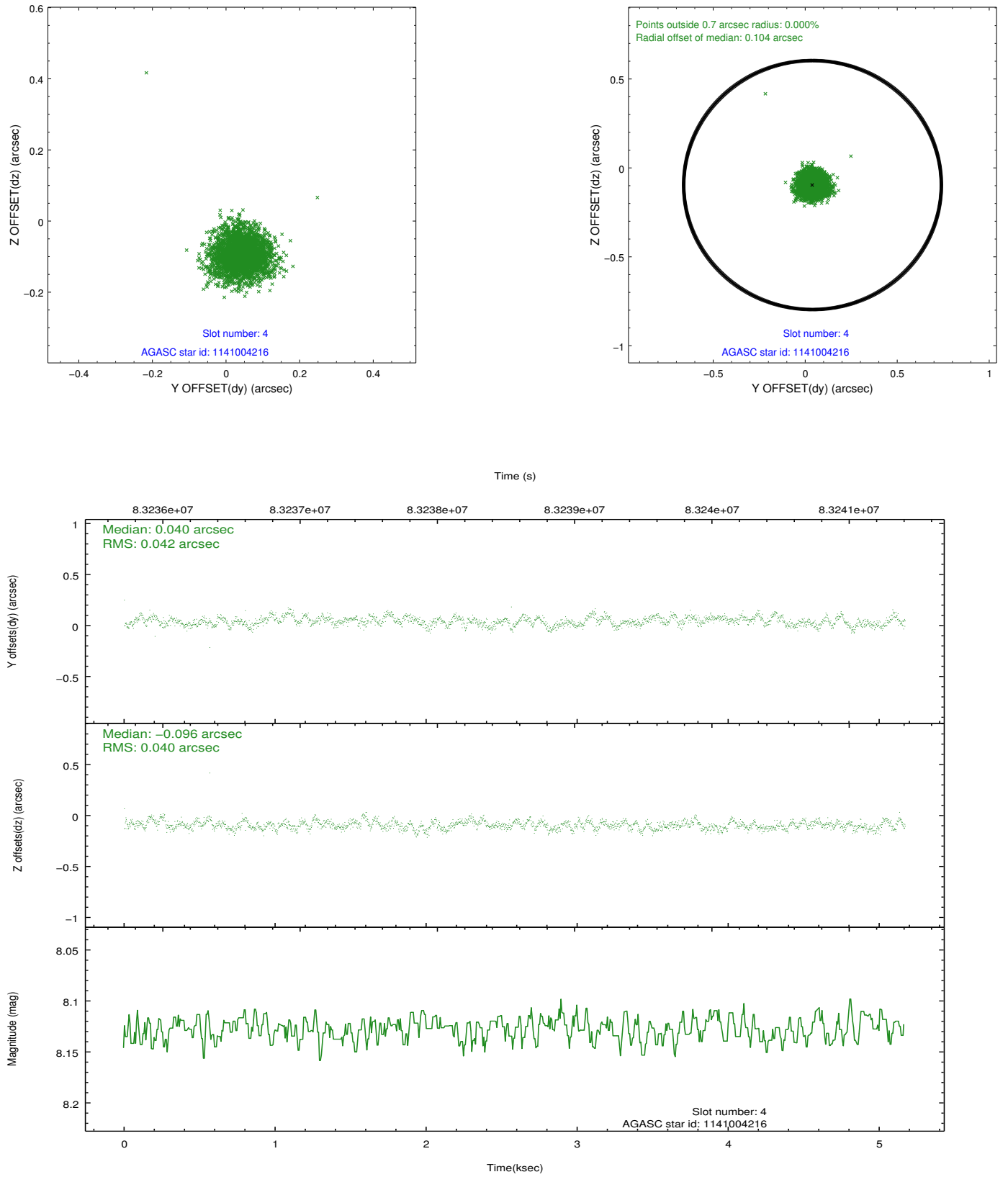
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1262	-0.035	0.001	0.007	0.011	0.000000	0.000000	-754.85	-1726.35
1	FID	ACIS-S-4	7.21	1261	-0.006	0.017	0.005	0.010	0.000000	0.000000	2157.90	180.97
2	FID	ACIS-S-5	7.23	1262	0.010	-0.009	0.007	0.011	0.000000	0.000000	-1806.16	175.90
3	GUIDE	1140468544	7.18	2523	-0.161	-0.049	0.050	0.083	237.524626	-55.920475	-1856.05	-698.28
4	GUIDE	1141004216	8.13	2522	0.040	-0.096	0.061	0.097	237.245988	-56.471011	189.86	-925.87
5	GUIDE	1141008368	9.63	2523	-0.015	-0.006	0.082	0.133	237.932994	-56.629432	535.13	511.14
6	GUIDE	1141004616	9.66	2521	0.101	0.110	0.094	0.162	238.066818	-56.808784	1132.54	872.66
7	GUIDE	1140998992	9.51	2522	0.031	0.047	0.084	0.137	238.012836	-56.351628	-477.04	513.96

## 2.4 Star Slots

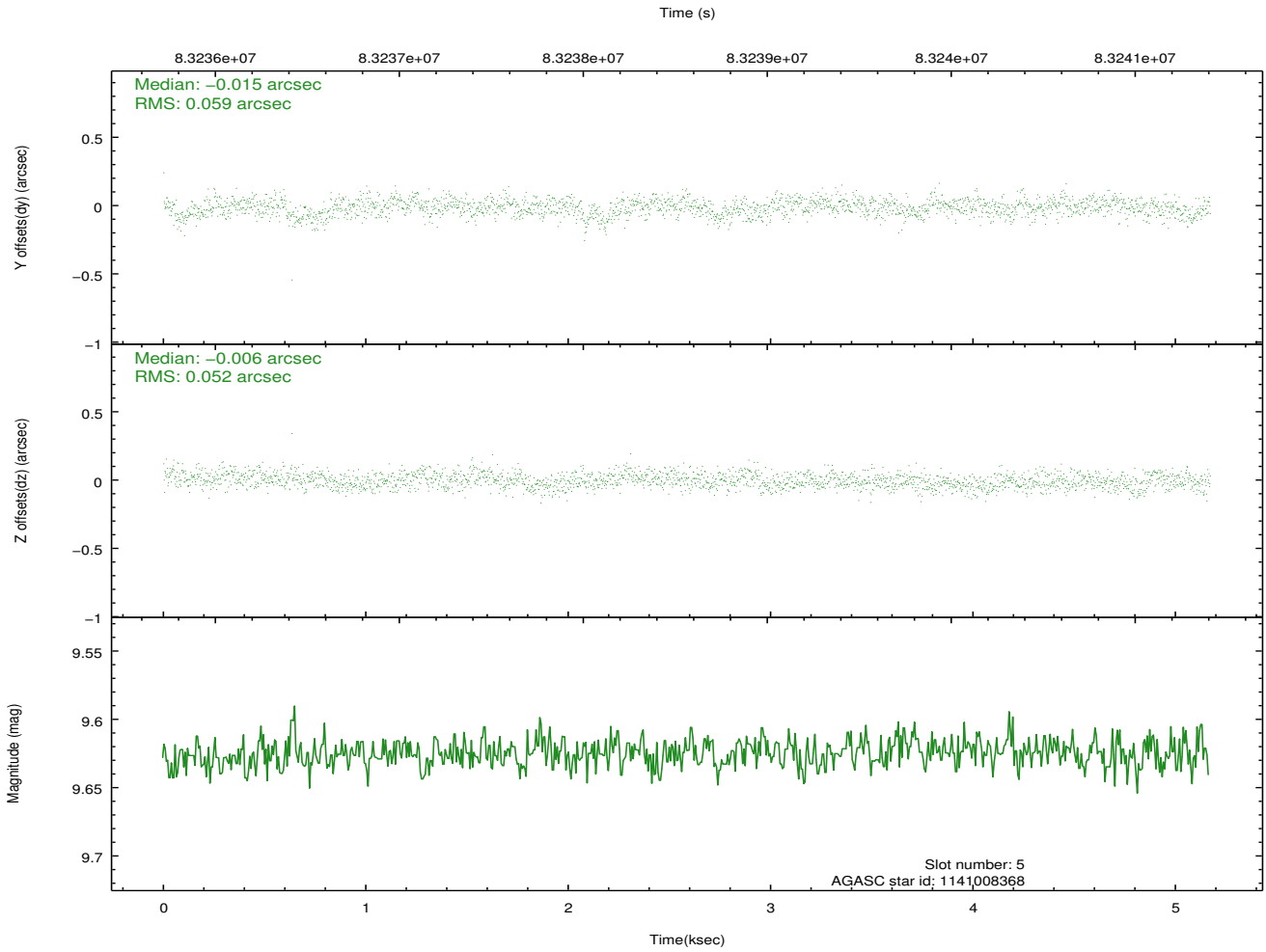
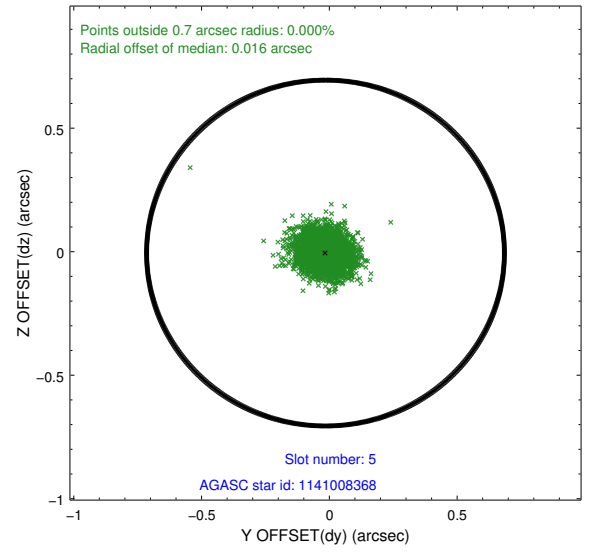
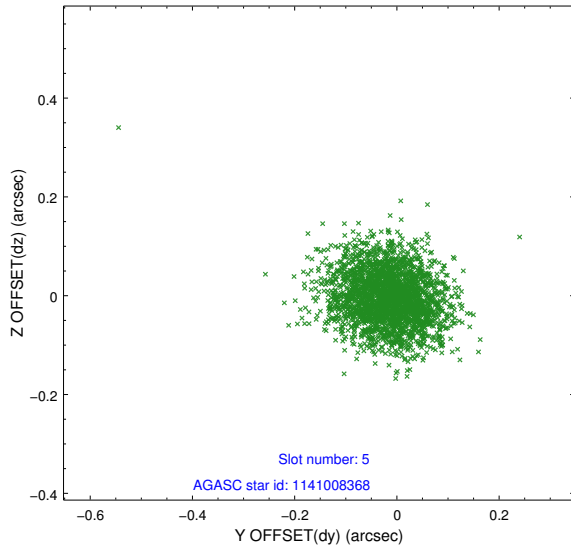
### 2.4.1 Slot 3



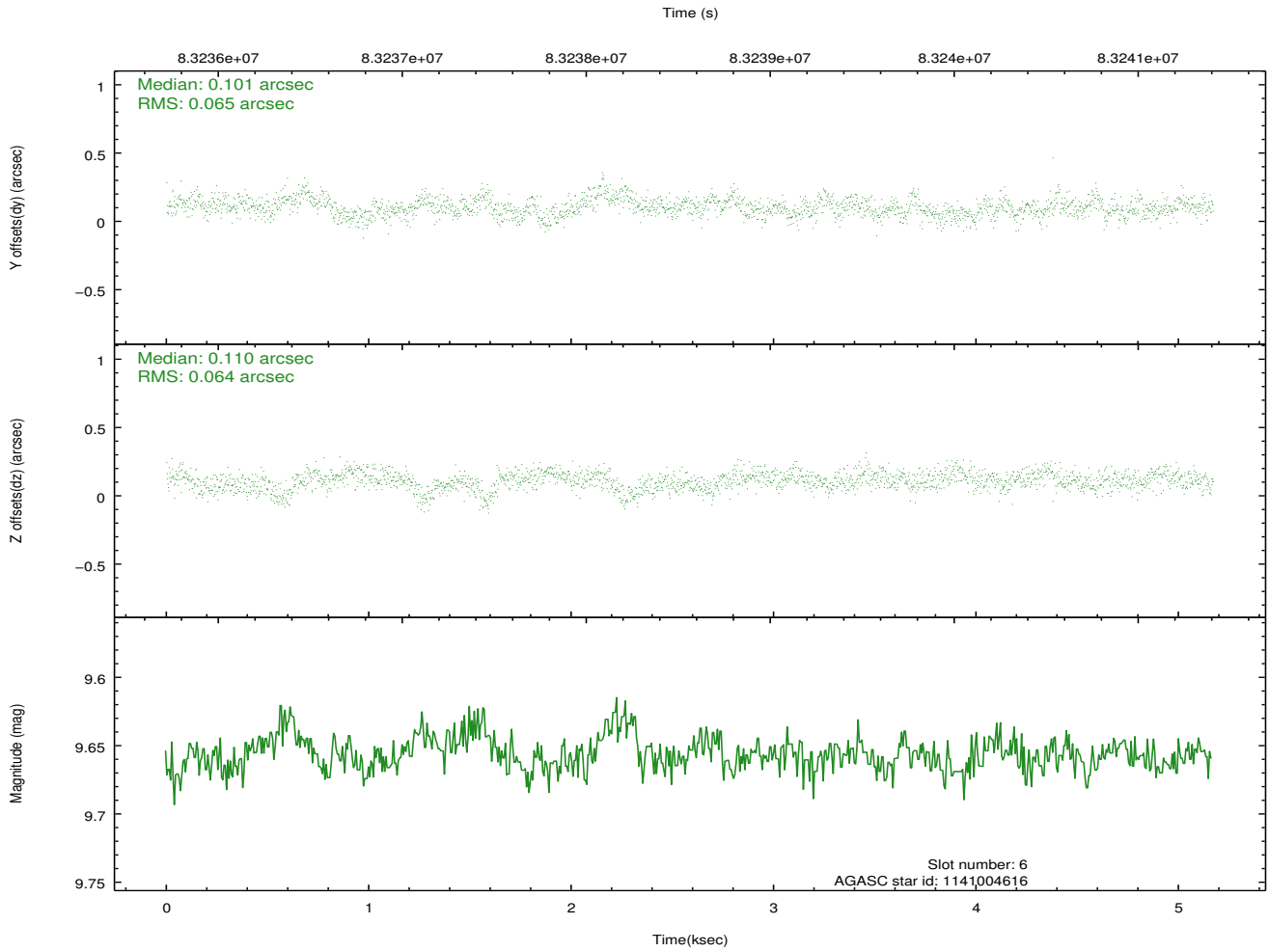
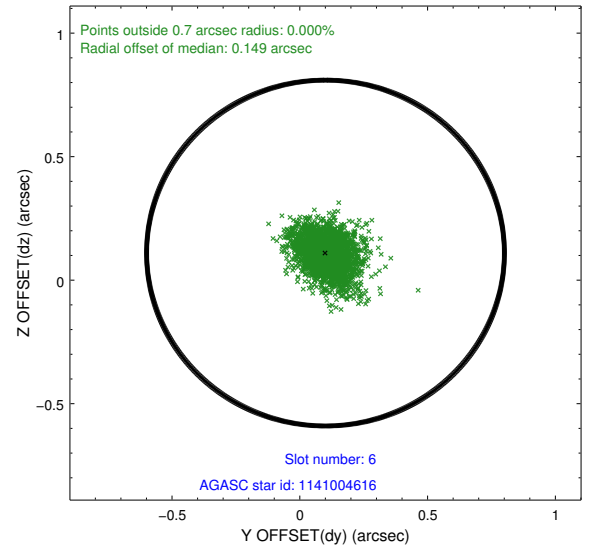
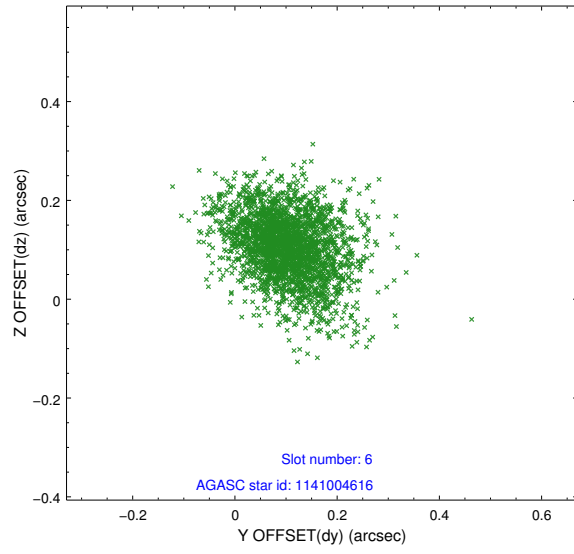
## 2.4.2 Slot 4



### 2.4.3 Slot 5

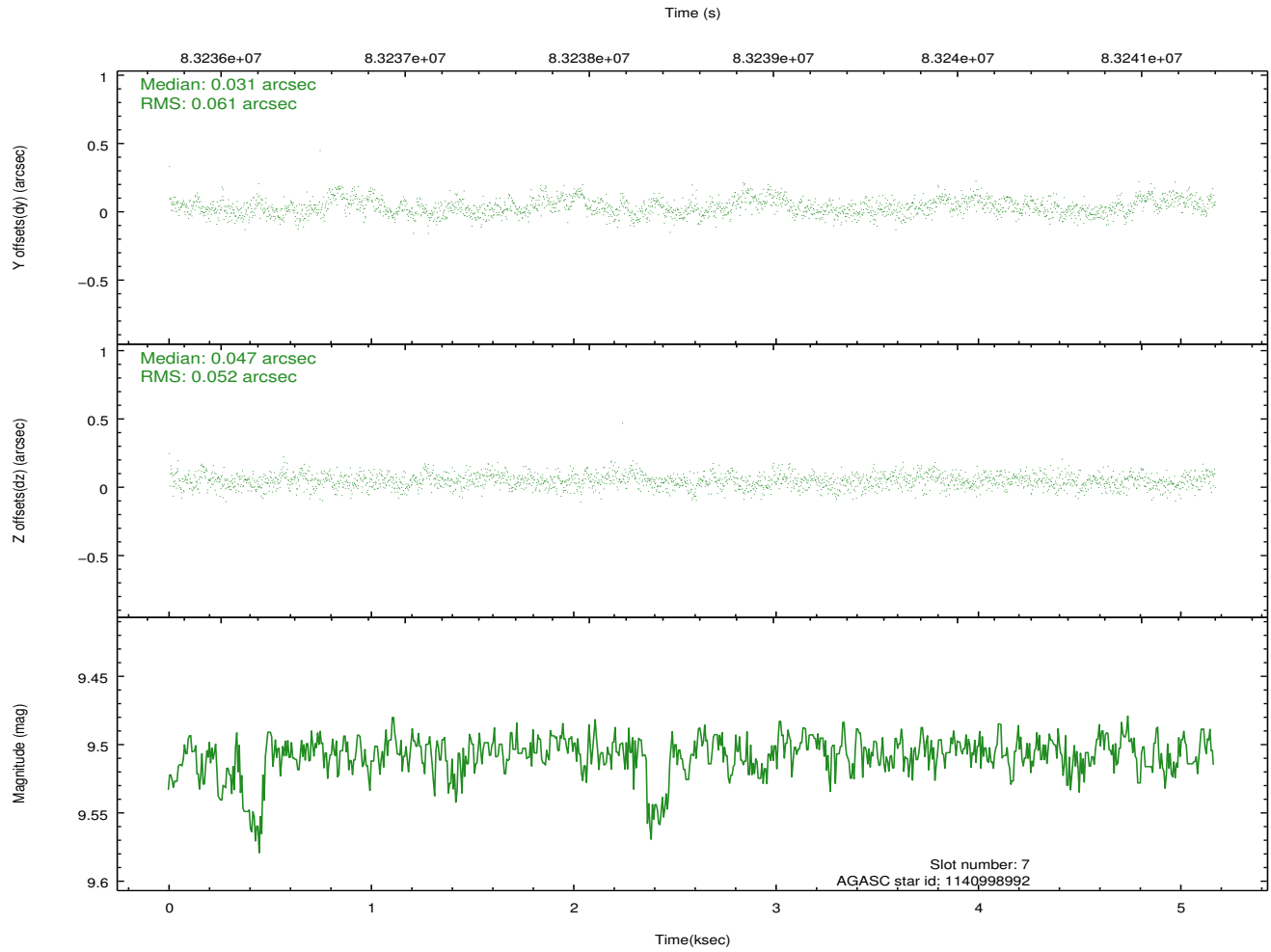
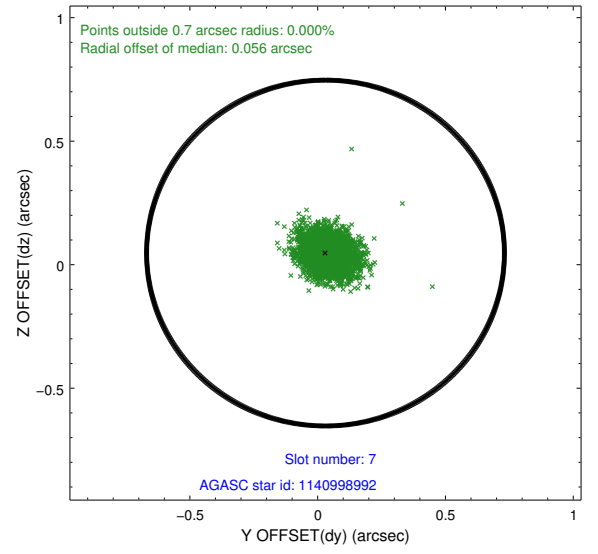
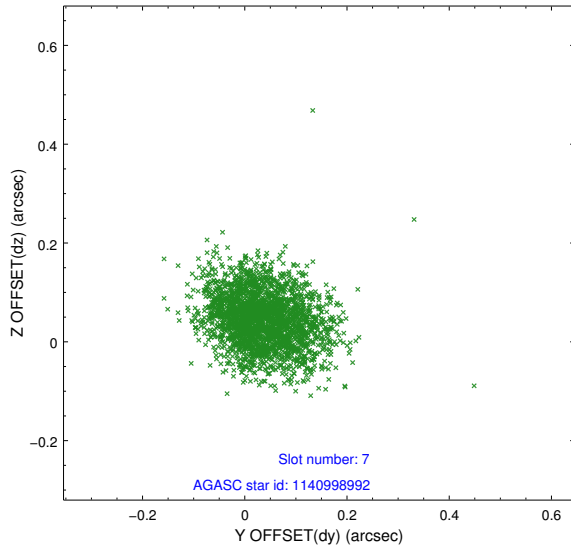


## 2.4.4 Slot 6



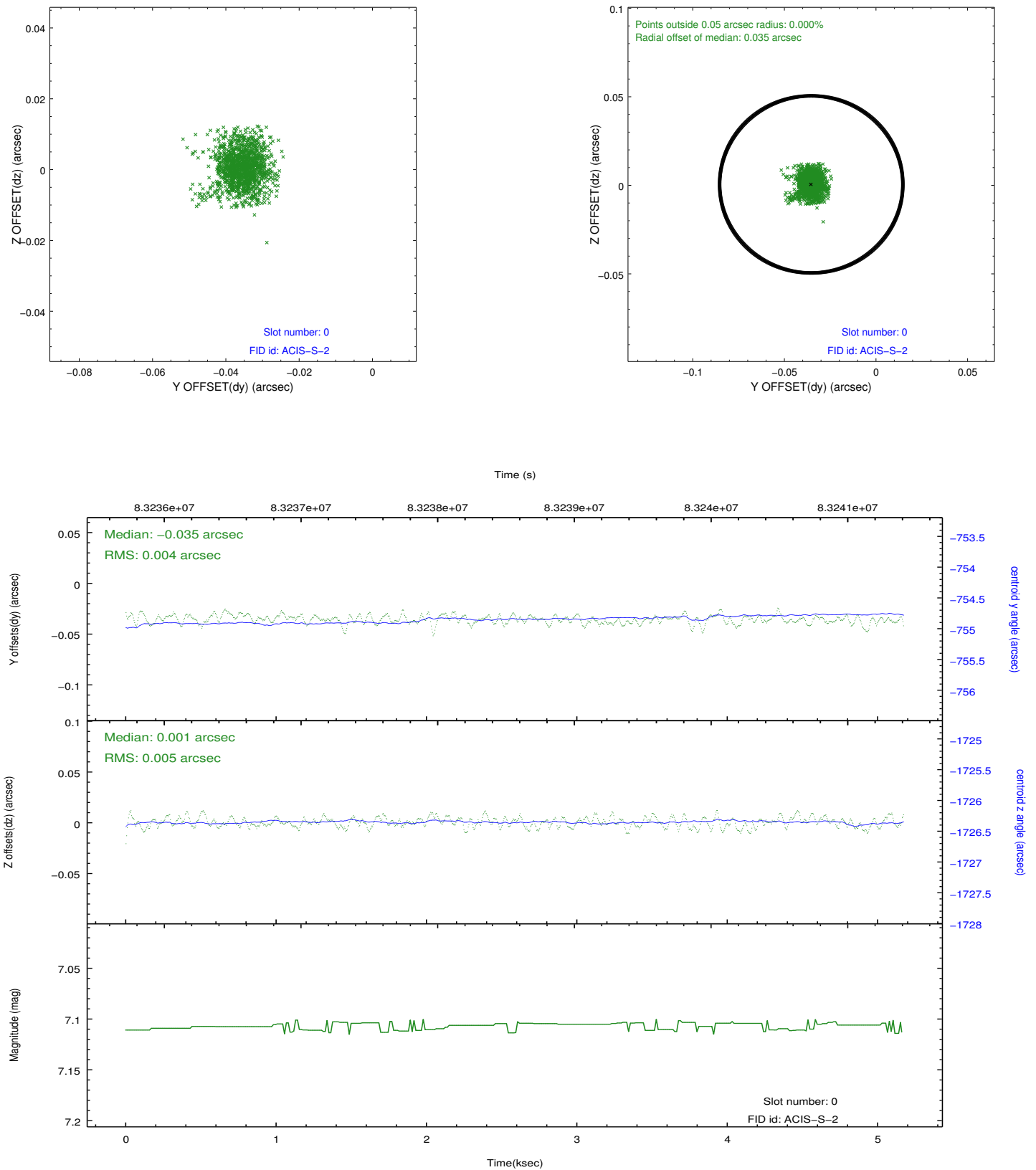


## 2.4.5 Slot 7

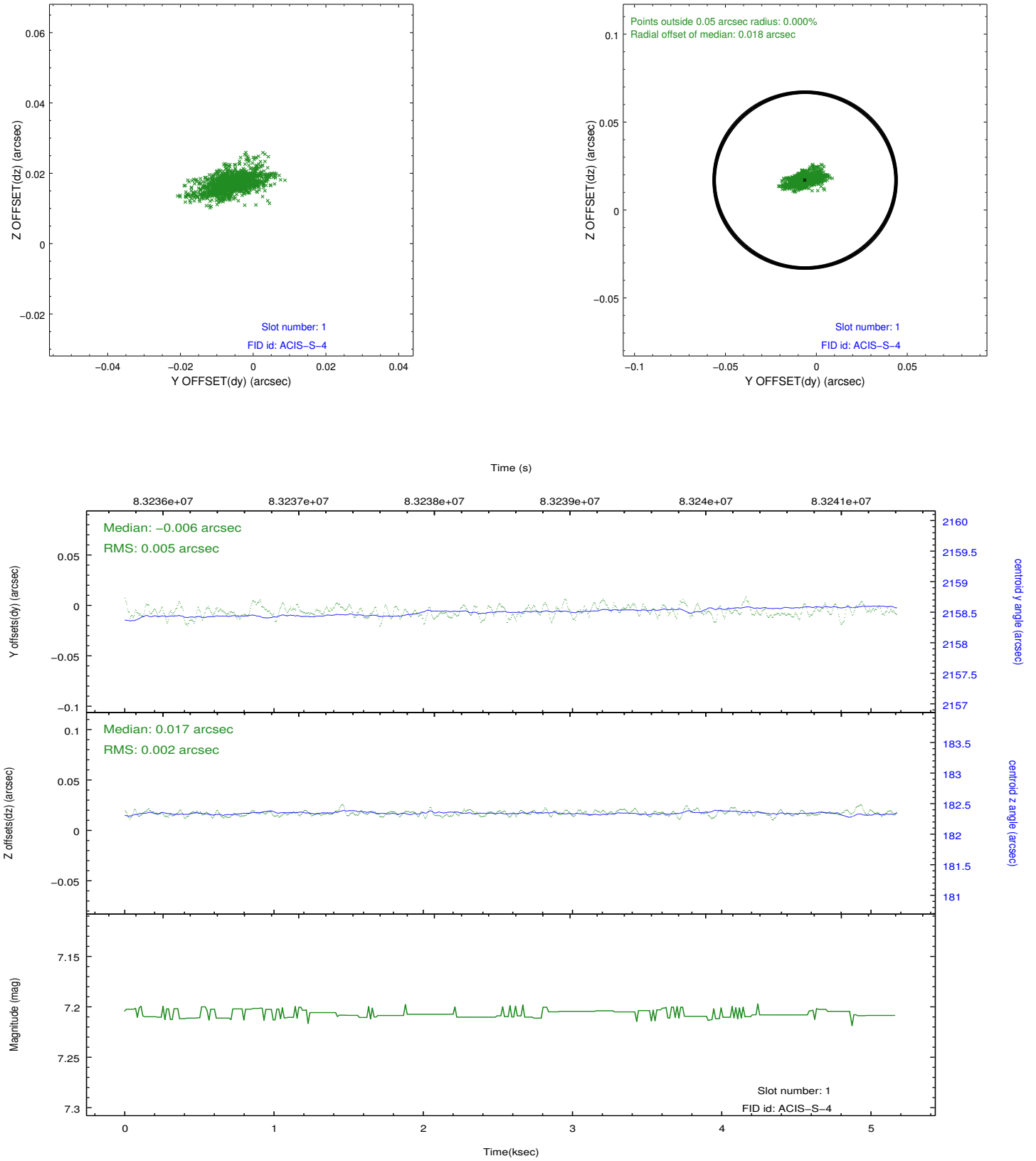


## 2.5 FID Slots

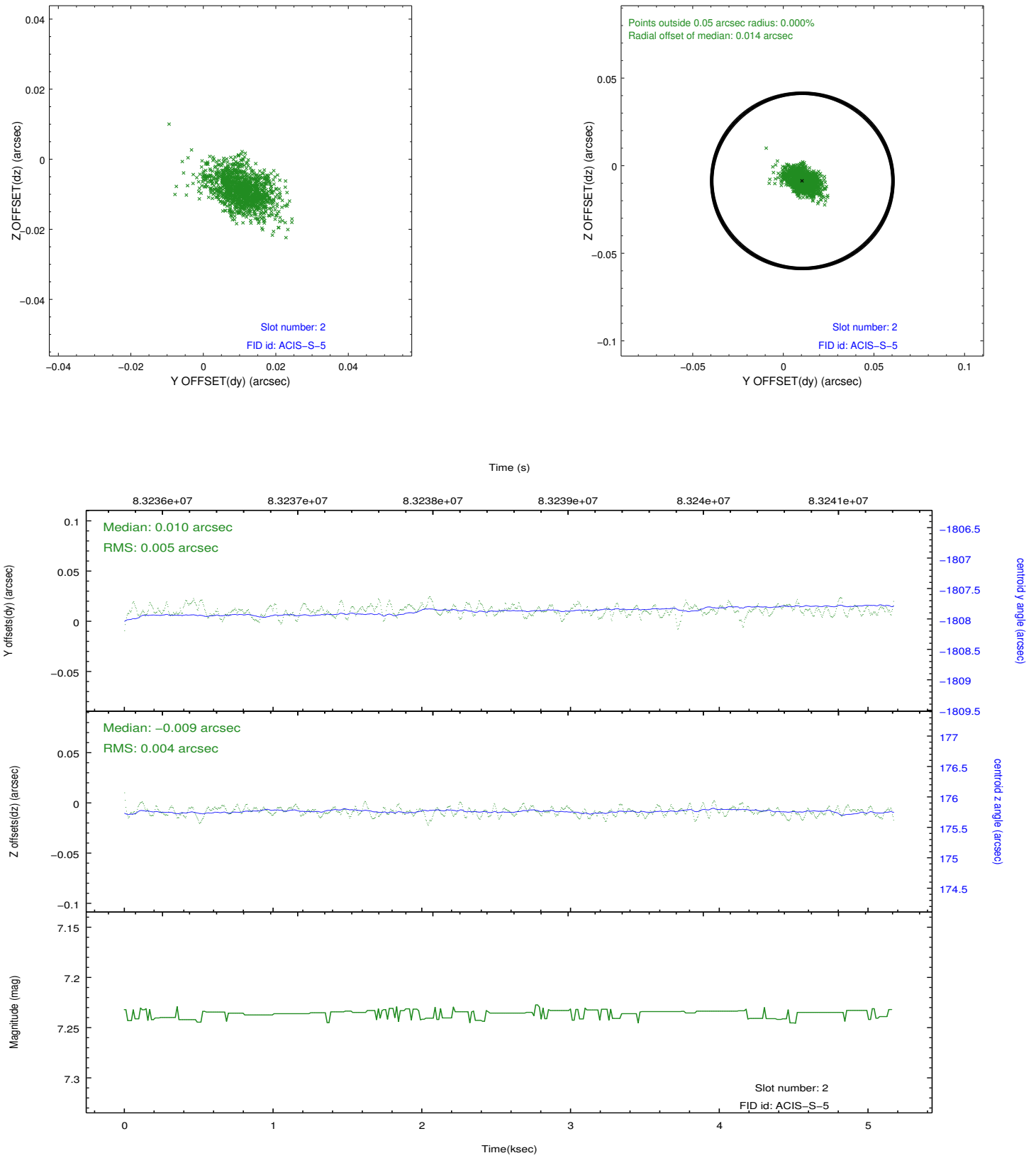
### 2.5.1 Slot 0



## 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)	2012.09.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.164

## A.2 Comments

From the original V&V report: 'Window constraint not met: Observation occurred about 16.5 hours after the end of the specified observation window. Requested Temporal Window: Start: Jul 22 2000 12:00AM Stop: Aug 20 2000 12:00AM. Actual observation start: DATE-OBS='2000-08-21T08:43:05' / Date and time of observation start. Predicted and actual detname do not match: predicted = ACIS-235678; actual = ACIS-456789. CDO has reviewed obsid 1845 and find that it satisfies the science requirements. Purpose was to observe the transient XTE J1550-564 during decay to quiescence. Observing a day after the stated window closing is OK. So, no need to reobserve. OK to release data to PI. -- FDS, 9/27/2000'