

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3070 - L2 Version 3  
Chandra X-Ray Center

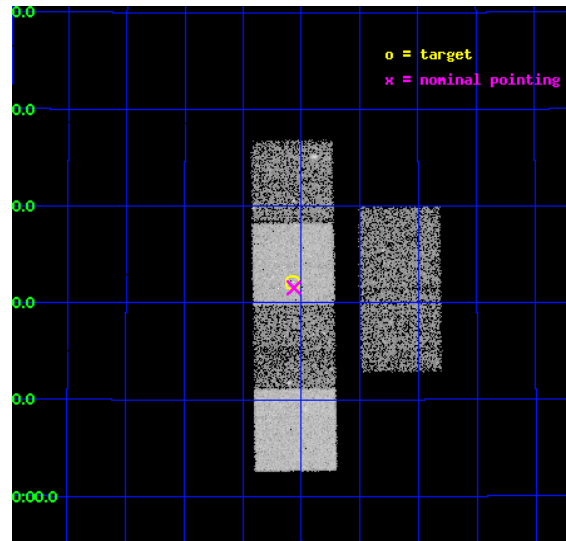
L2 Processing Date : Oct 11 2012

## 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

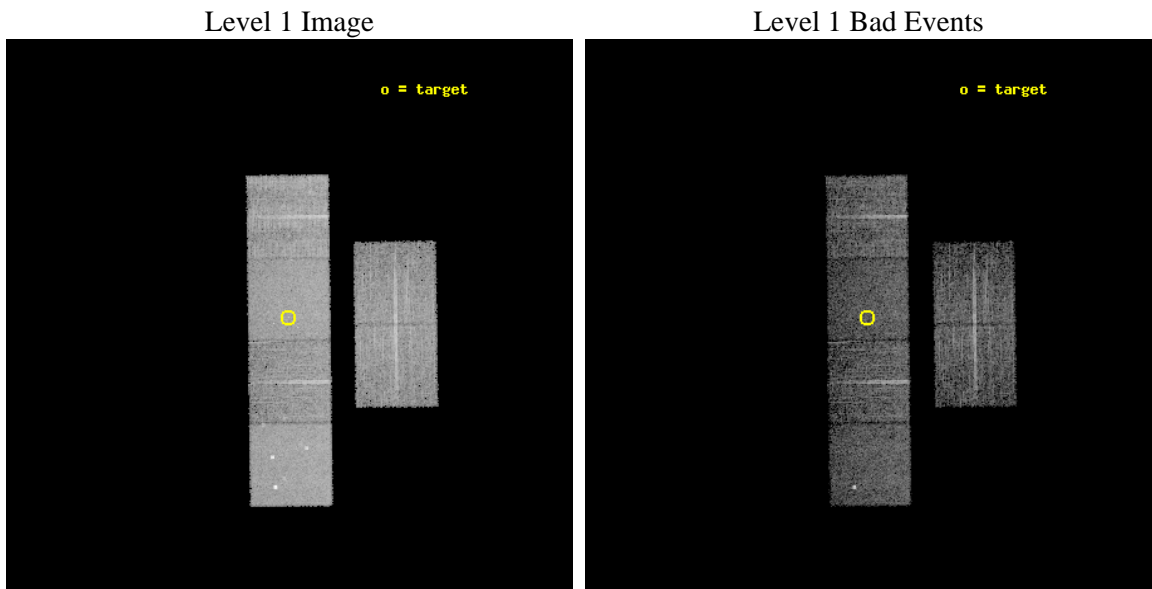
seq_num	700509	Sequence number
obs_id	3070	Observation id
title	X-RAY WEAK BROAD-LINE QUASARS: ABSORPTION OR INTRINSIC X_RAY WEAKNESS ?	Proposal title
observer	Dr Guido Risaliti	Principal investigator
object	HS 1202+3538	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.268333	Observer's specified target RA [deg]
dec_targ	35.368917	Observer's specified target Dec [deg]
ra_nom	181.2660788846	Nominal RA [deg]
dec_nom	35.359474310908	Nominal Dec [deg]
roll_nom	269.26601837135	Nominal Roll [deg]
revision	3	Processing version of data
ontime	6760.5272602737	Sum of GTIs [s]
livetime	6674.9213934033	Livetime [s]
ontime2	6760.568300277	Sum of GTIs [s]
ontime3	6760.4041402638	Sum of GTIs [s]
ontime5	6760.4862202704	Sum of GTIs [s]
ontime6	6760.4451802671	Sum of GTIs [s]
ontime7	6760.5272602737	Sum of GTIs [s]
ontime8	6760.3631002903	Sum of GTIs [s]
l2events	76733	Number of level 2 events



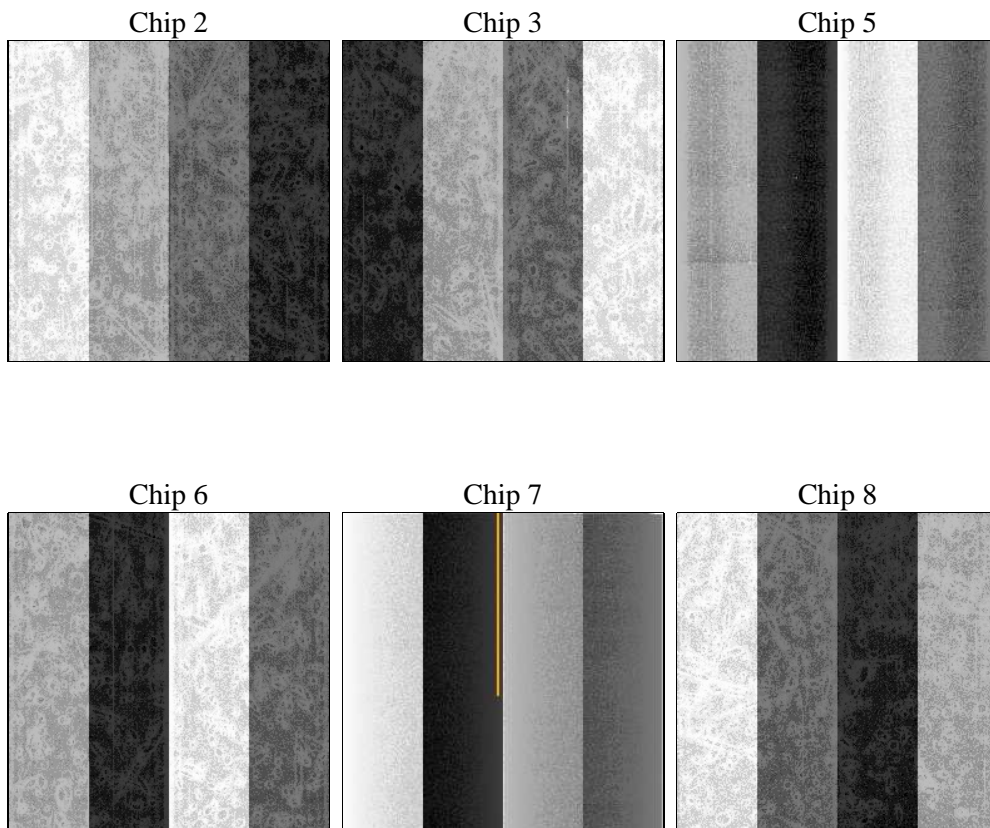
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	6800.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6760.5272602737	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	6760.568300277	Sum of GTIs [s]
date	2012-10-11T15:45:17	Date and time of file creation	ontime3	6760.4041402638	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	6760.4862202704	Sum of GTIs [s]
			ontime6	6760.4451802671	Sum of GTIs [s]
			ontime7	6760.5272602737	Sum of GTIs [s]
			ontime8	6760.3631002903	Sum of GTIs [s]
			l1events	320335	Number of level 1 events

### 2.1.4 Events

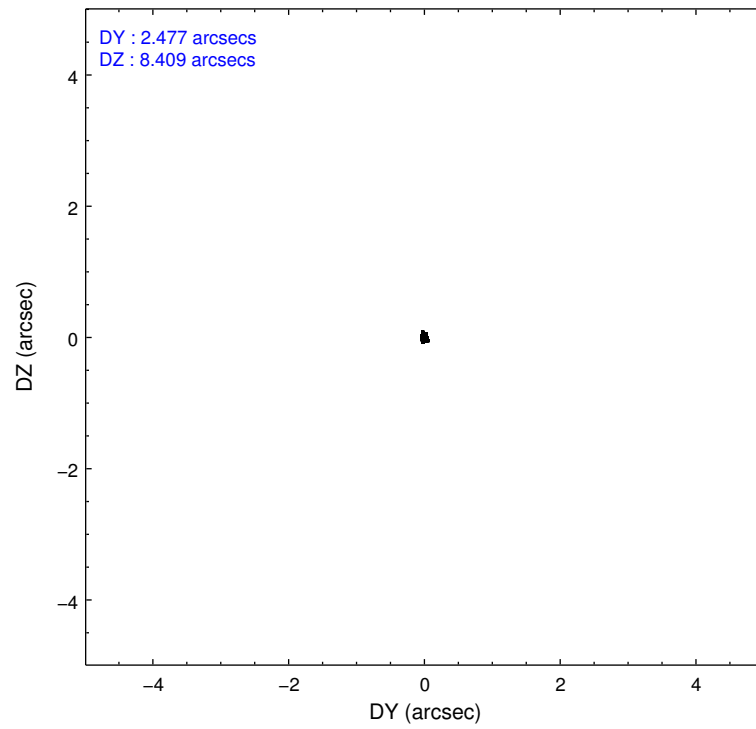
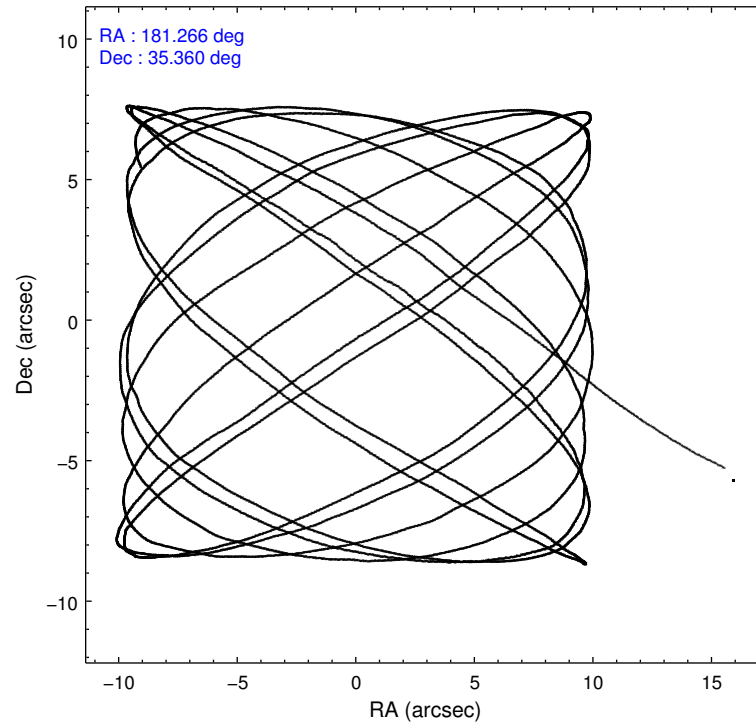
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	45635	43159	67057	44555	58865	61064	grade 0 events	2759	2655	4743	2740	2609	5822
rejected events	39505	37338	34449	38216	32749	44414		6%	6%	7%	6%	4%	9%
rejected %	86%	86%	51%	85%	55%	72%	grade 1 events	31	24	753	19	53	46
								0%	0%	1%	0%	0%	0%
							grade 2 events	1362	1202	9398	1267	5204	2989
								2%	2%	14%	2%	8%	4%
							grade 3 events	499	503	1367	599	2459	2182
								1%	1%	2%	1%	4%	3%
							grade 4 events	498	508	1320	538	2342	1937
								1%	1%	1%	1%	3%	3%
							grade 5 events	1529	1756	4677	1822	5469	2457
								3%	4%	6%	4%	9%	4%
							grade 6 events	1012	956	15802	1202	13511	3723
								2%	2%	23%	2%	22%	6%
							grade 7 events	37945	35555	28997	36368	27218	41908
								83%	82%	43%	81%	46%	68%

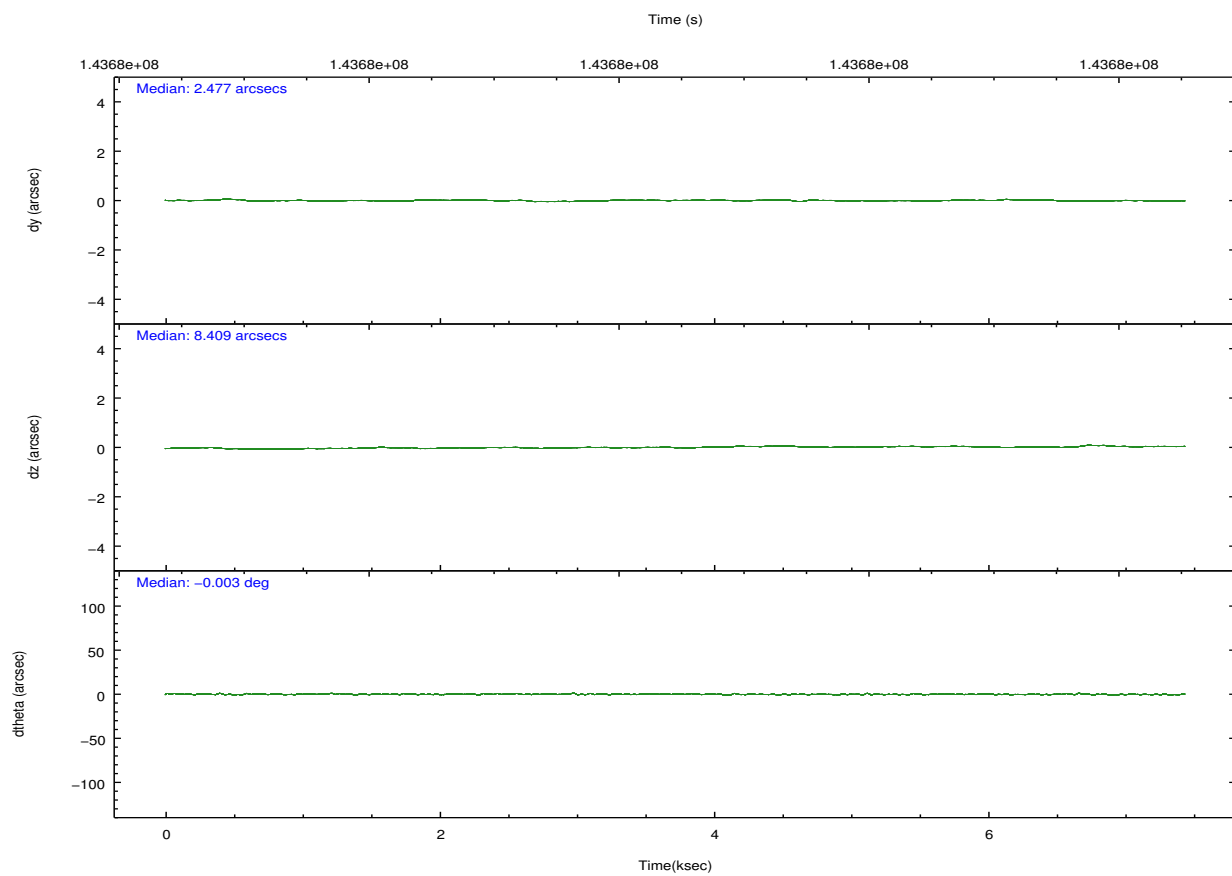
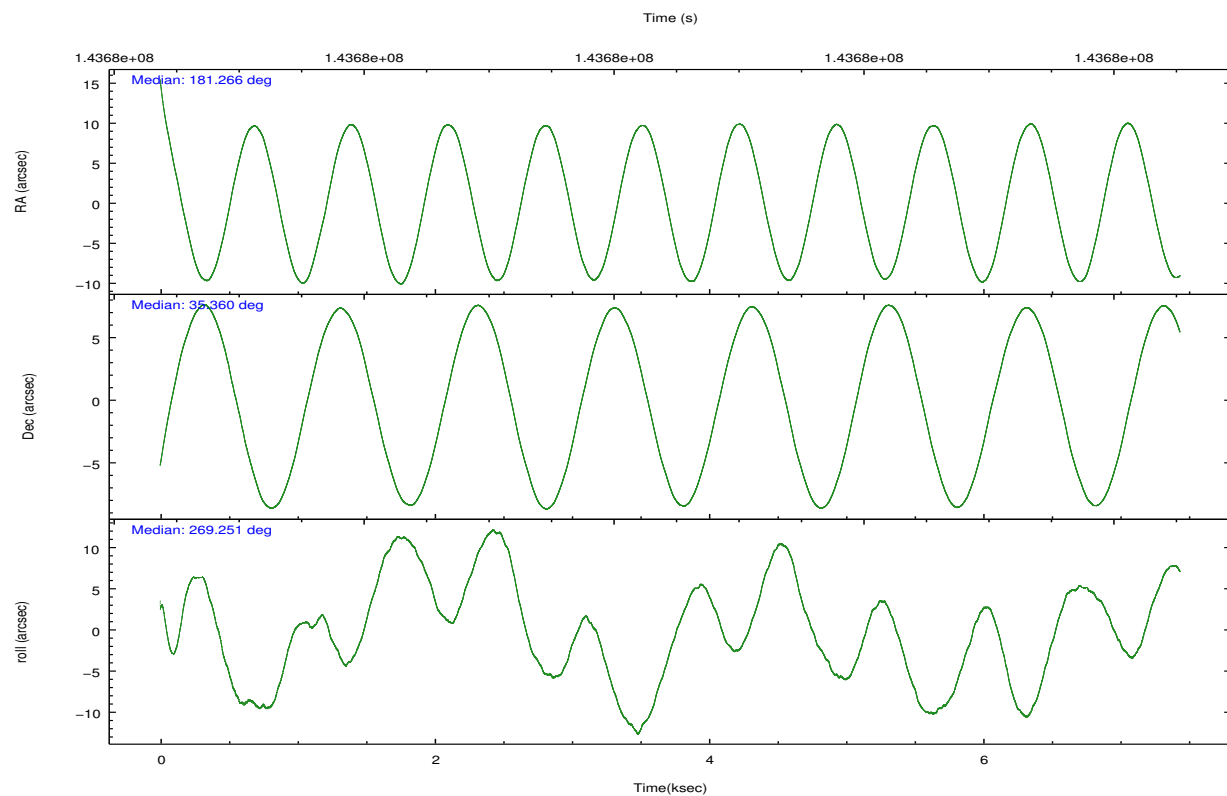


## 2.2 Compared Parameters

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	181.249382	181.2660788846039	Subarray requested	NONE	NONE
[deg] Pointing Dec	35.382992	35.35947431090789	Alternating exposures requested	N	N
[deg] Pointing Roll	269.119052	269.2660183713514	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	143677365.184000	143676177.09567			
Observation start date	2002-07-21T22:21:41	2002-07-21T22:02:57			
[s] Observation end time (MET)	143684165.184000	143684562.62101			
Observation end date	2002-07-22T00:15:01	2002-07-22T00:22:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect



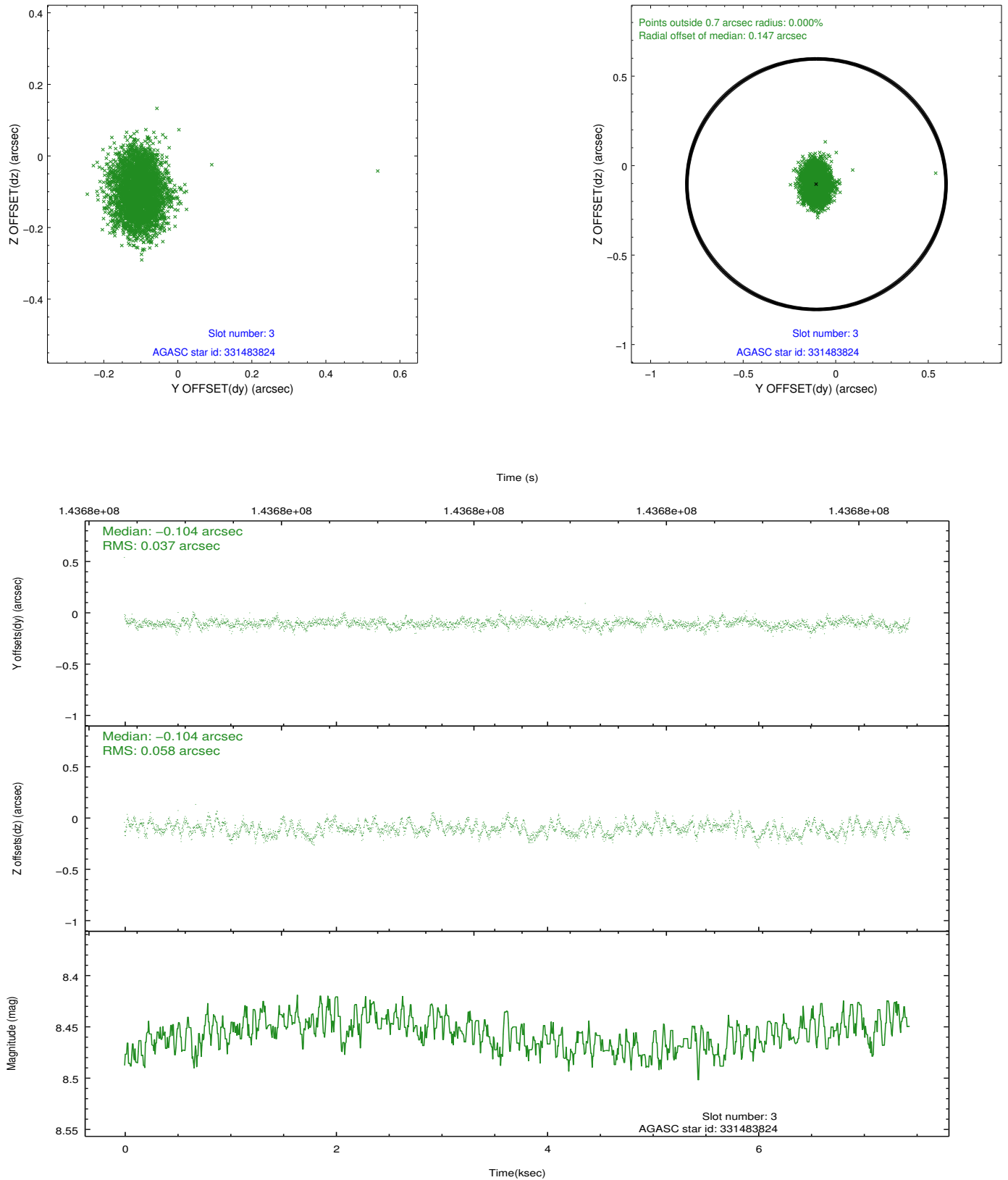


### Slot Statistics

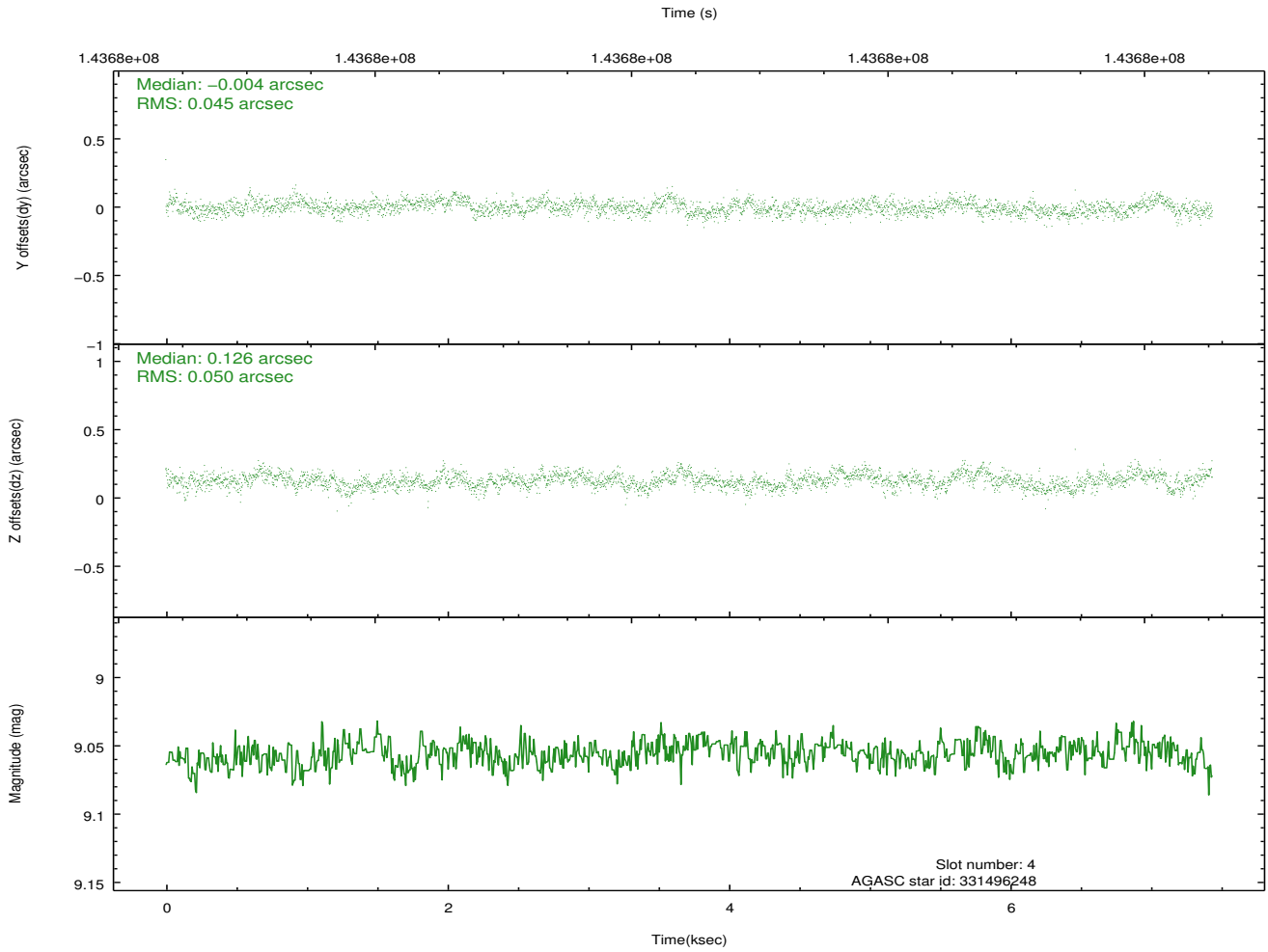
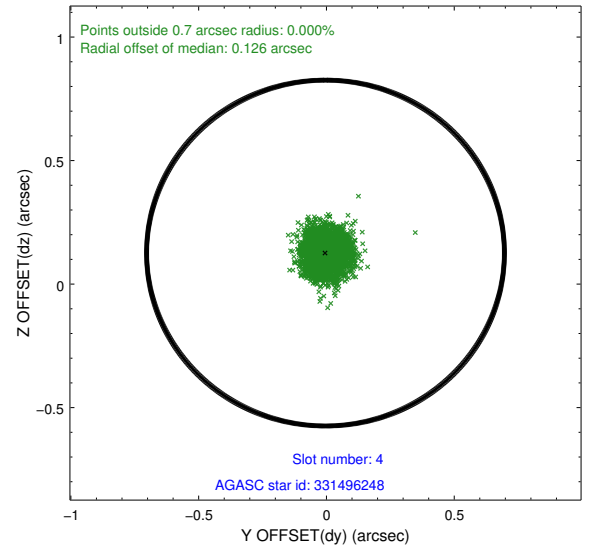
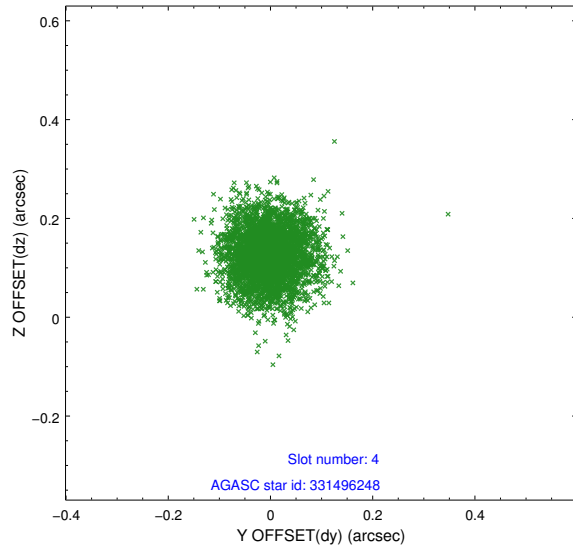
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1813	-0.008	0.004	0.006	0.011	0.000000	0.000000	-755.13	-1729.55
1	FID	ACIS-S-4	7.20	1814	-0.039	0.003	0.005	0.009	0.000000	0.000000	2157.79	178.11
2	FID	ACIS-S-5	7.24	1814	0.017	0.002	0.006	0.010	0.000000	0.000000	-1806.94	172.70
3	GUIDE	331483824	8.46	3629	-0.104	-0.104	0.073	0.118	180.666969	35.727343	-1216.93	-1722.02
4	GUIDE	331496248	9.06	3626	-0.004	0.126	0.072	0.115	181.210124	35.687171	-1092.36	-132.80
5	GUIDE	331496720	7.27	3629	-0.008	0.127	0.059	0.102	181.168847	35.567415	-659.42	-246.66
6	GUIDE	331498488	9.77	3609	0.060	0.125	0.115	0.189	181.654333	35.339665	135.99	1190.83
7	GUIDE	331482600	9.58	3625	0.056	-0.275	0.096	0.163	180.711313	35.641189	-907.87	-1589.12

## 2.4 Star Slots

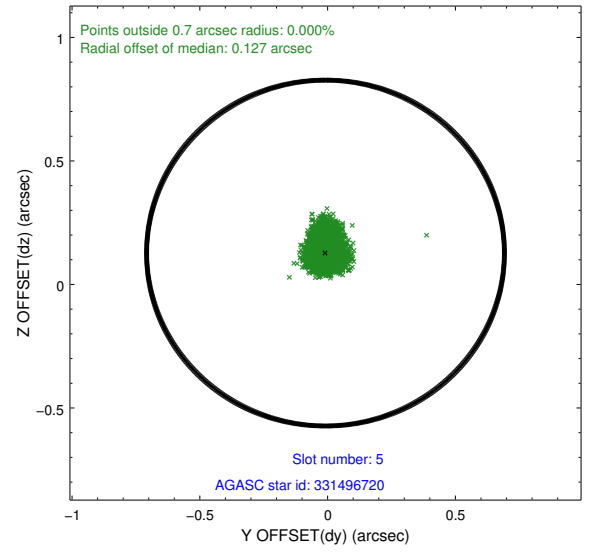
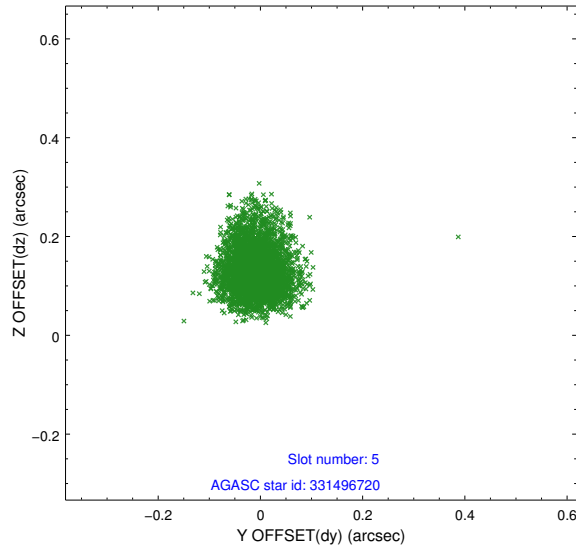
### 2.4.1 Slot 3



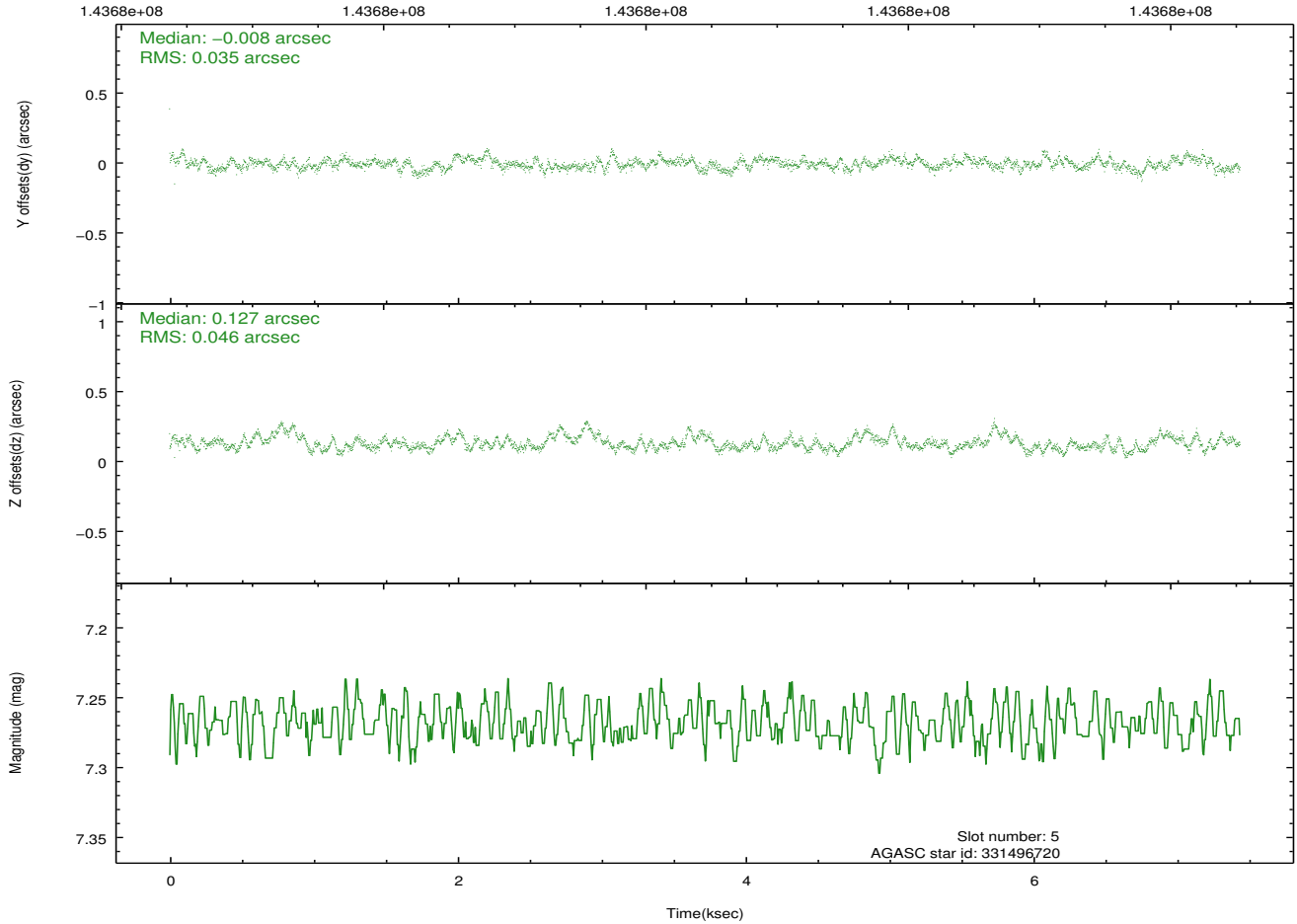
## 2.4.2 Slot 4



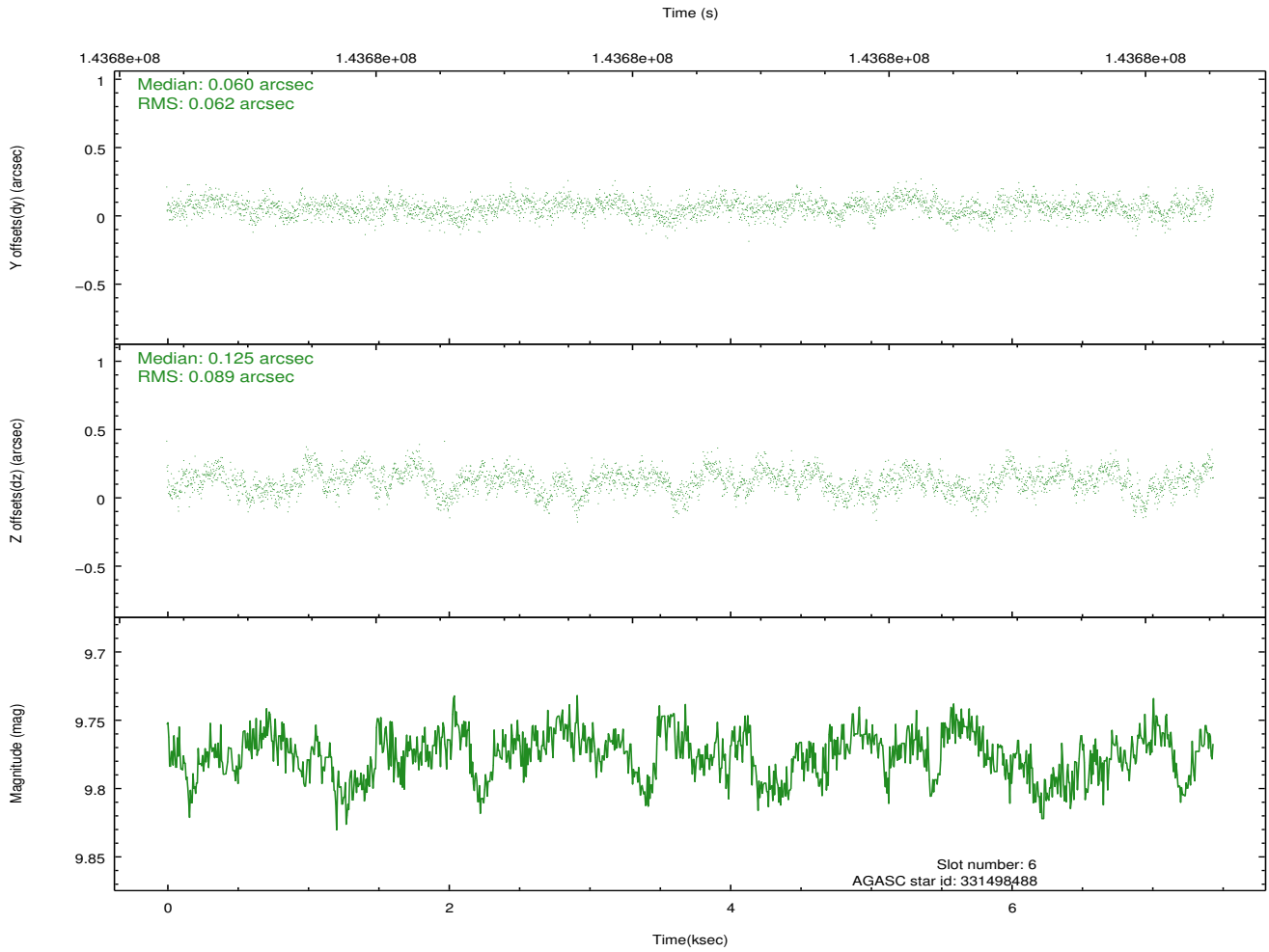
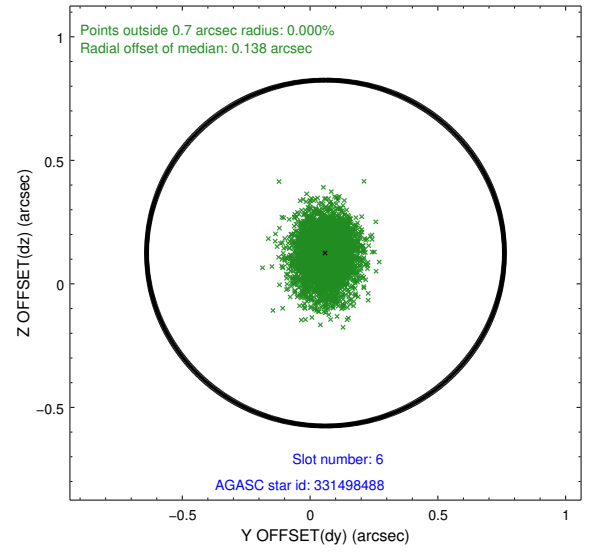
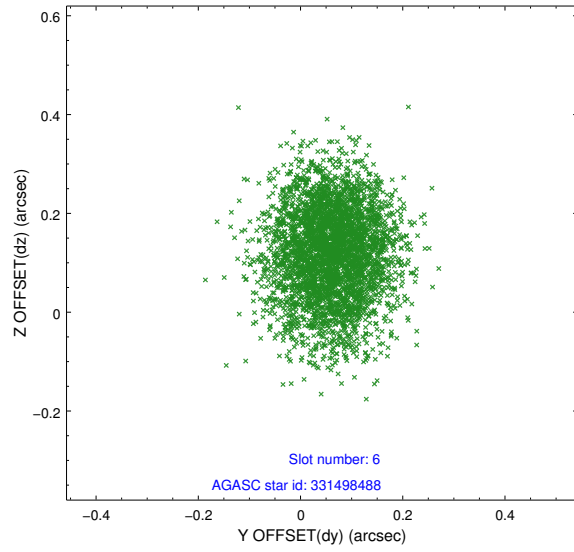
### 2.4.3 Slot 5



Time (s)

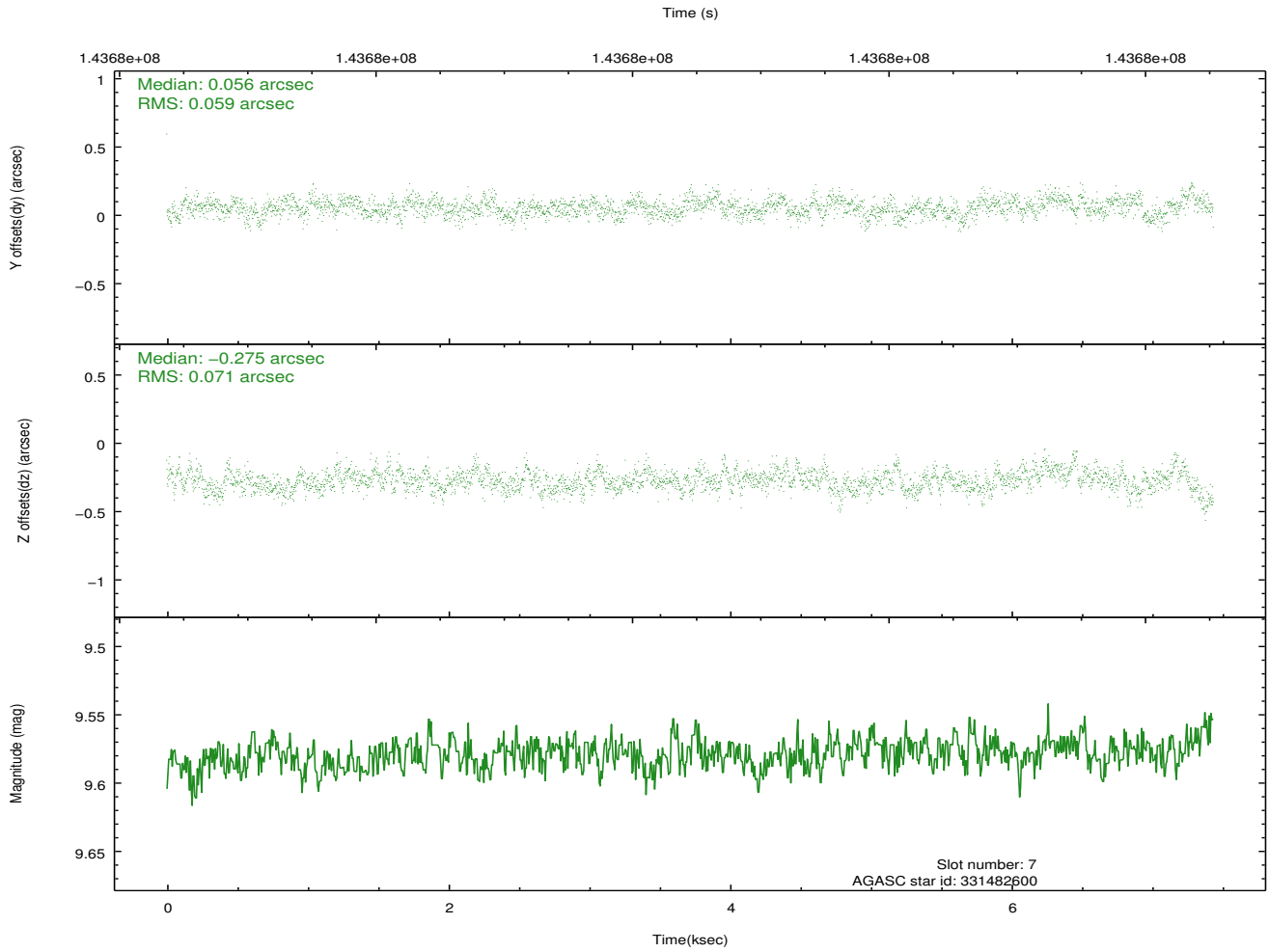
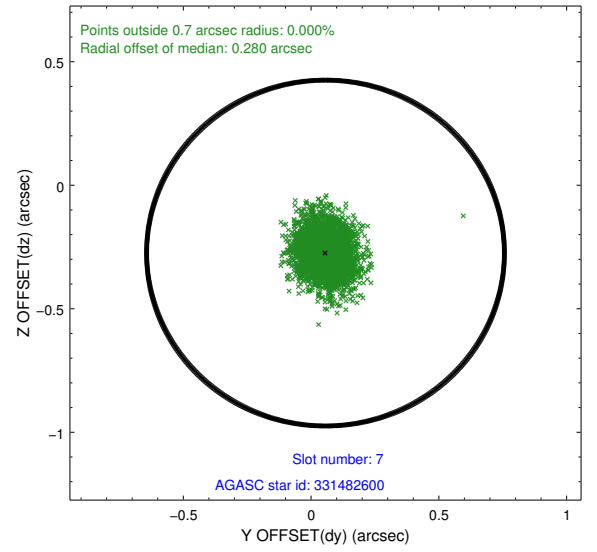
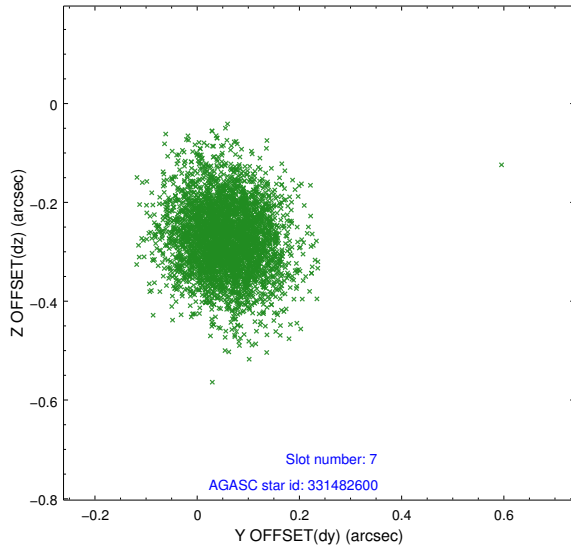


## 2.4.4 Slot 6



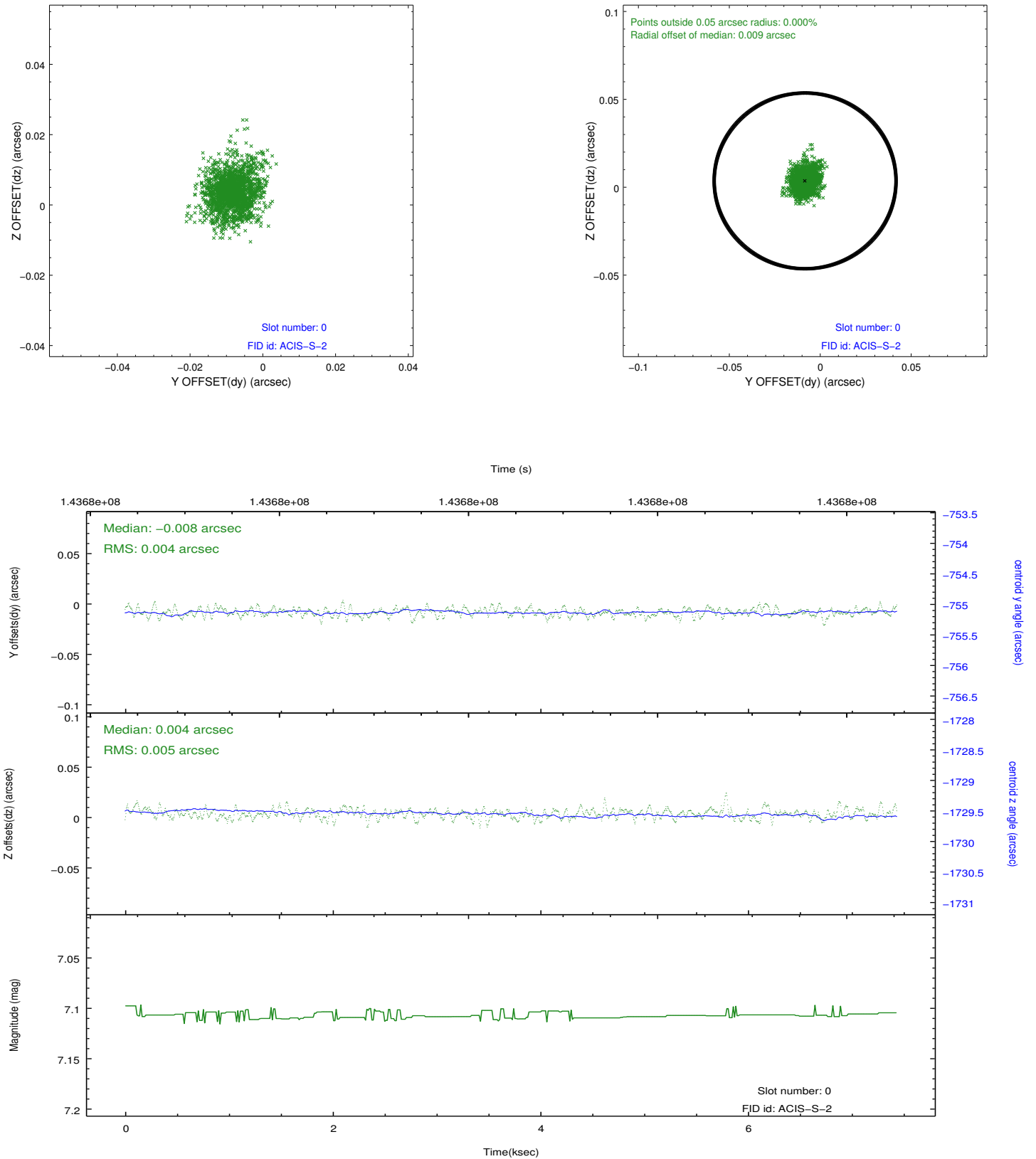


## 2.4.5 Slot 7

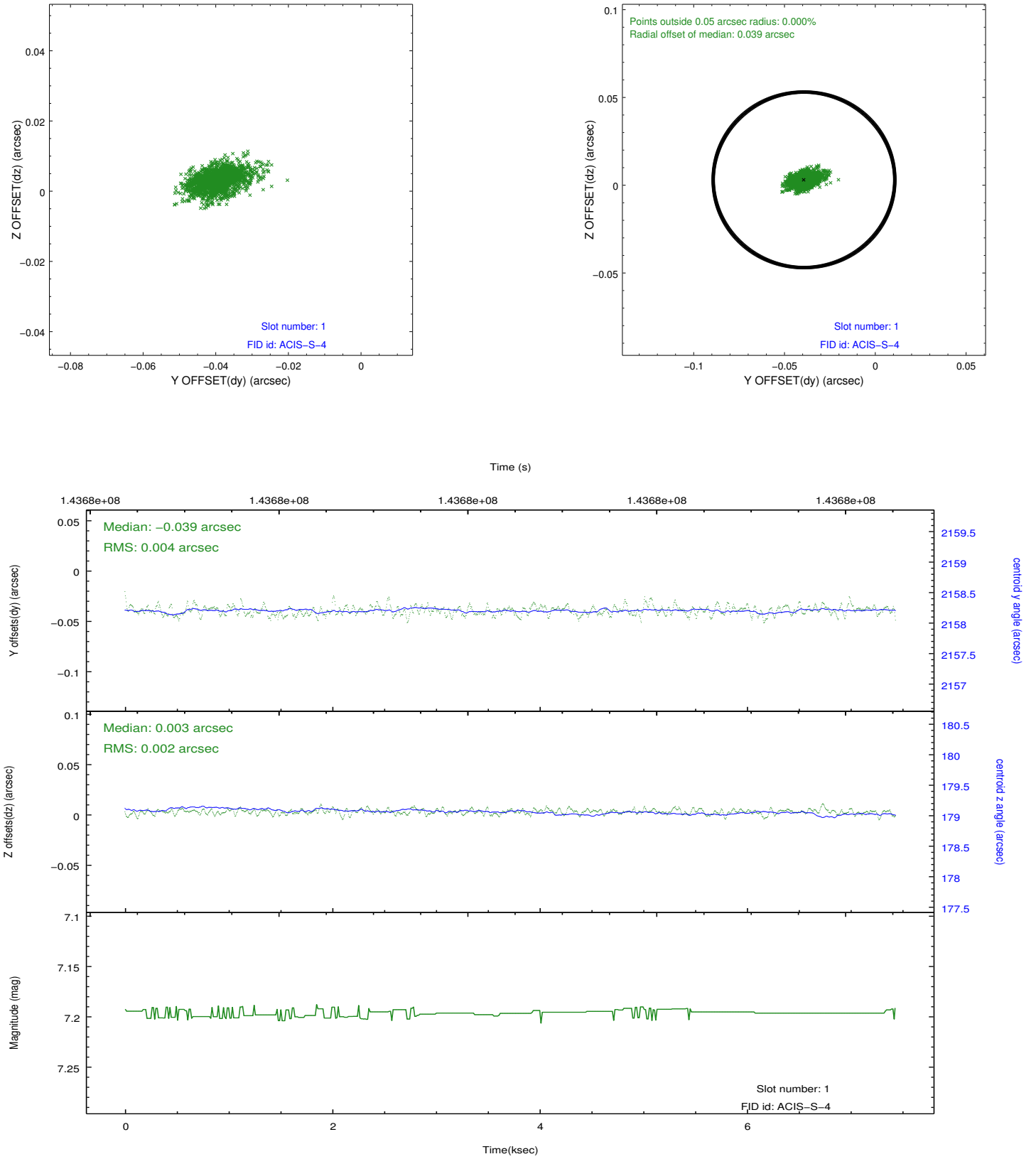


## 2.5 FID Slots

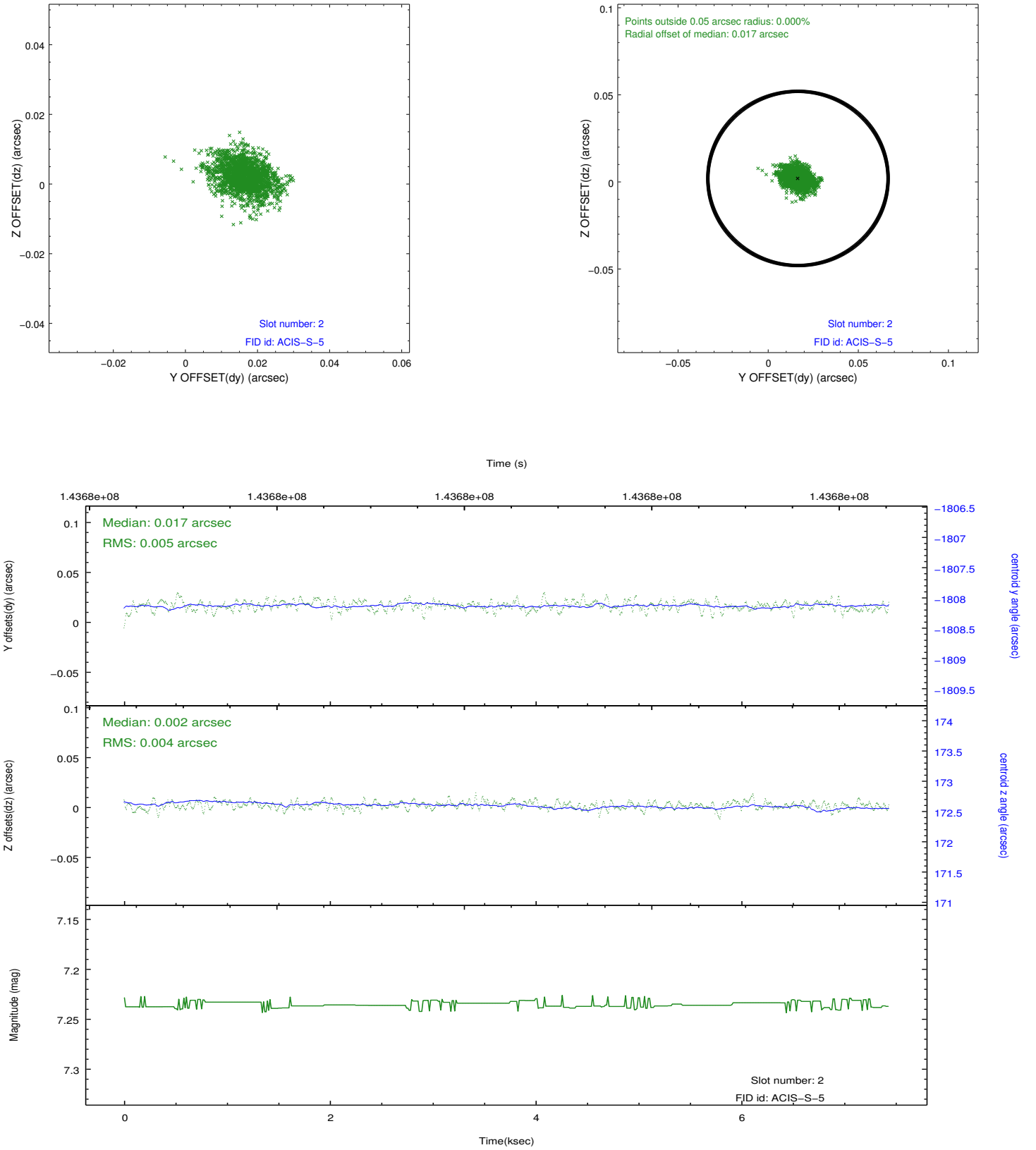
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2012.10.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.761

### A.2 Comments