

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2972 - L2 Version 3  
Chandra X-Ray Center

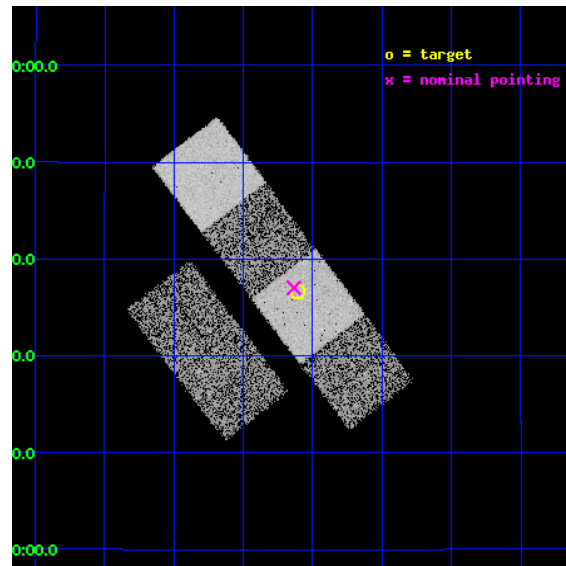
L2 Processing Date : Oct 17 2012

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# 1 Front

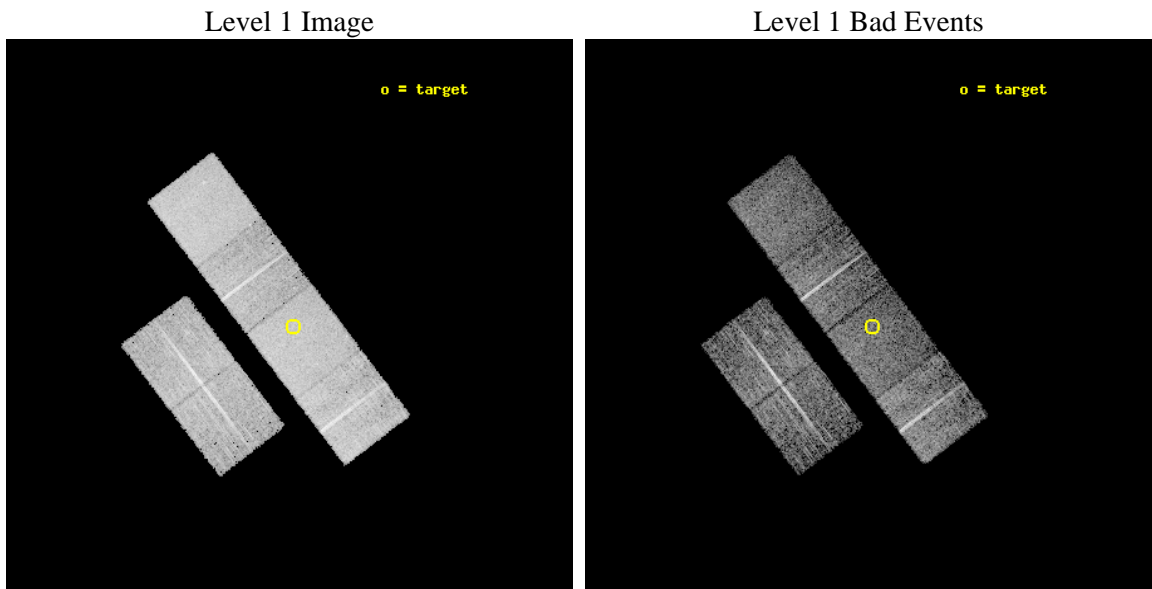
seq_num	700411	Sequence number
obs_id	2972	Observation id
title	A COMPLETE X-RAY SAMPLE OF BROAD ABSORPTION LINE QSOS	Proposal tit
observer	Professor Gordon Garmire	Principal investigator
object	LBQS 1235+1453	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.401667	Observer's specified target RA [deg]
dec_targ	14.611111	Observer's specified target Dec [deg]
ra_nom	189.40865068782	Nominal RA [deg]
dec_nom	14.617258328182	Nominal Dec [deg]
roll_nom	52.807122168915	Nominal Roll [deg]
revision	3	Processing version of data
ontime	6732.2619183958	Sum of GTIs [s]
livetime	6647.0139643036	Livetime [s]
ontime2	6729.0620280504	Sum of GTIs [s]
ontime3	6732.1387983859	Sum of GTIs [s]
ontime5	6732.2208783925	Sum of GTIs [s]
ontime6	6732.1798383892	Sum of GTIs [s]
ontime7	6732.2619183958	Sum of GTIs [s]
ontime8	6728.8566884696	Sum of GTIs [s]
l2events	68282	Number of level 2 events



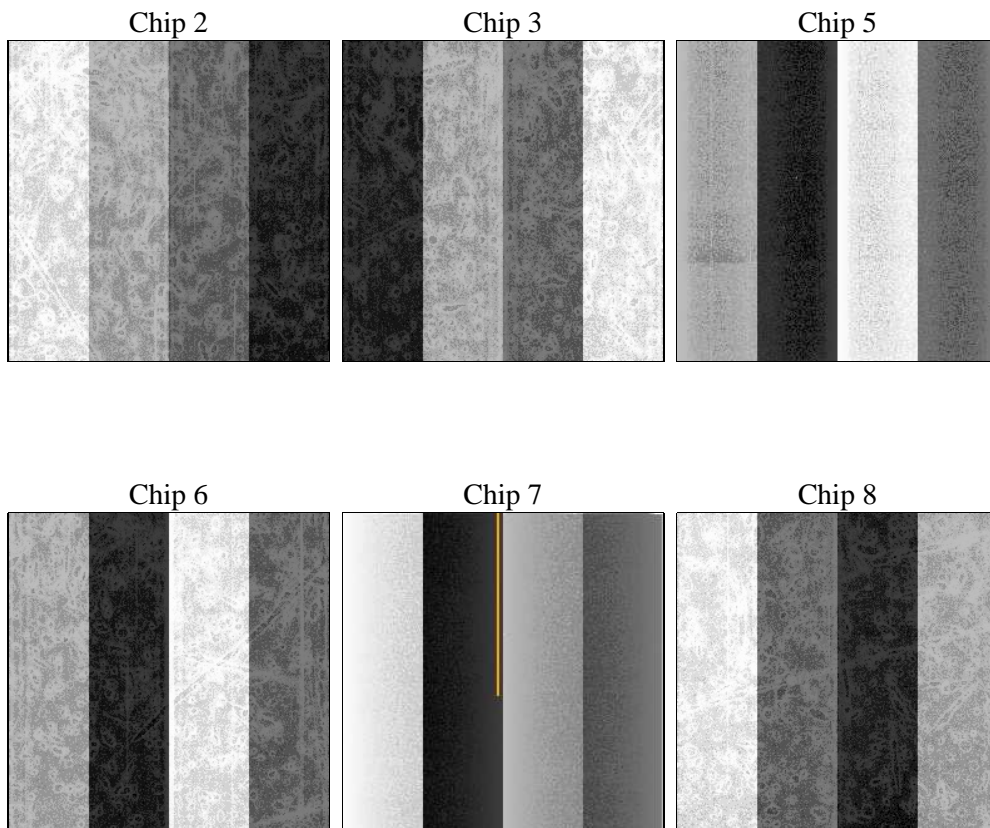
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6732.2619183958	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	6729.0620280504	Sum of GTIs [s]
date	2012-10-17T11:59:08	Date and time of file creation	ontime3	6732.1387983859	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	6732.2208783925	Sum of GTIs [s]
			ontime6	6732.1798383892	Sum of GTIs [s]
			ontime7	6732.2619183958	Sum of GTIs [s]
			ontime8	6728.8566884696	Sum of GTIs [s]
			l1events	305250	Number of level 1 events

### 2.1.4 Events

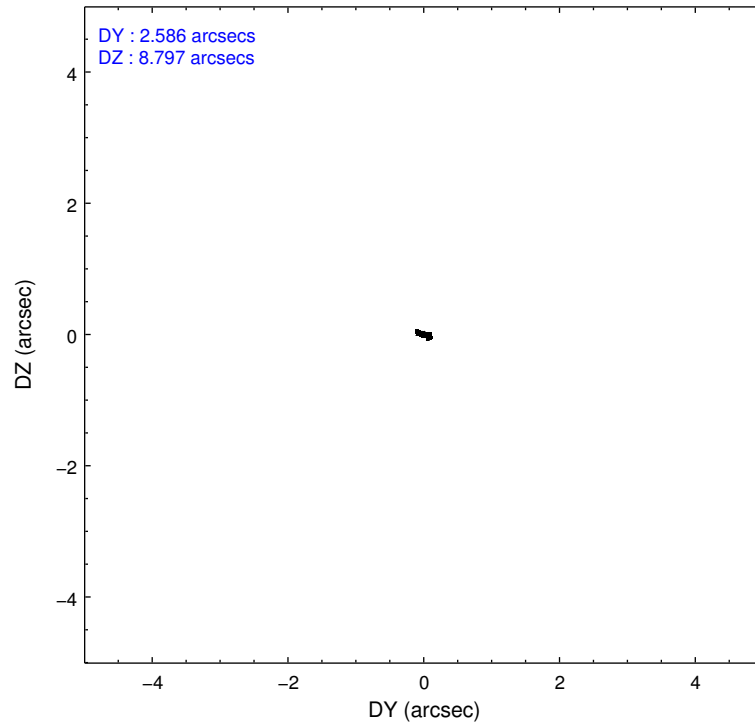
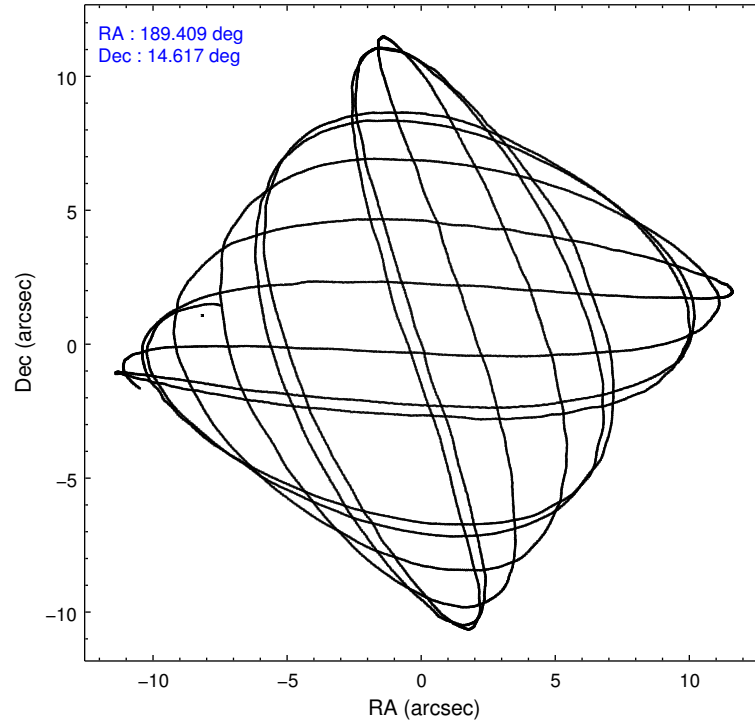
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	45254	41148	60571	43289	57398	57590	grade 0 events	2411	2283	2065	2208	2387	3618
rejected events	39964	36131	33194	38014	33623	46714		5%	5%	3%	5%	4%	6%
rejected %	88%	87%	54%	87%	58%	81%	grade 1 events	23	31	75	23	43	34
								0%	0%	0%	0%	0%	0%
							grade 2 events	1058	894	8228	999	4707	2420
								2%	2%	13%	2%	8%	4%
							grade 3 events	503	483	1104	490	2176	1083
								1%	1%	1%	1%	3%	1%
							grade 4 events	520	546	1149	528	2158	1026
								1%	1%	1%	1%	3%	1%
							grade 5 events	1591	1829	4549	1889	5490	2486
								3%	4%	7%	4%	9%	4%
							grade 6 events	803	817	14862	1055	12368	2765
								1%	1%	24%	2%	21%	4%
							grade 7 events	38345	34265	28539	36097	28069	44158
								84%	83%	47%	83%	48%	76%

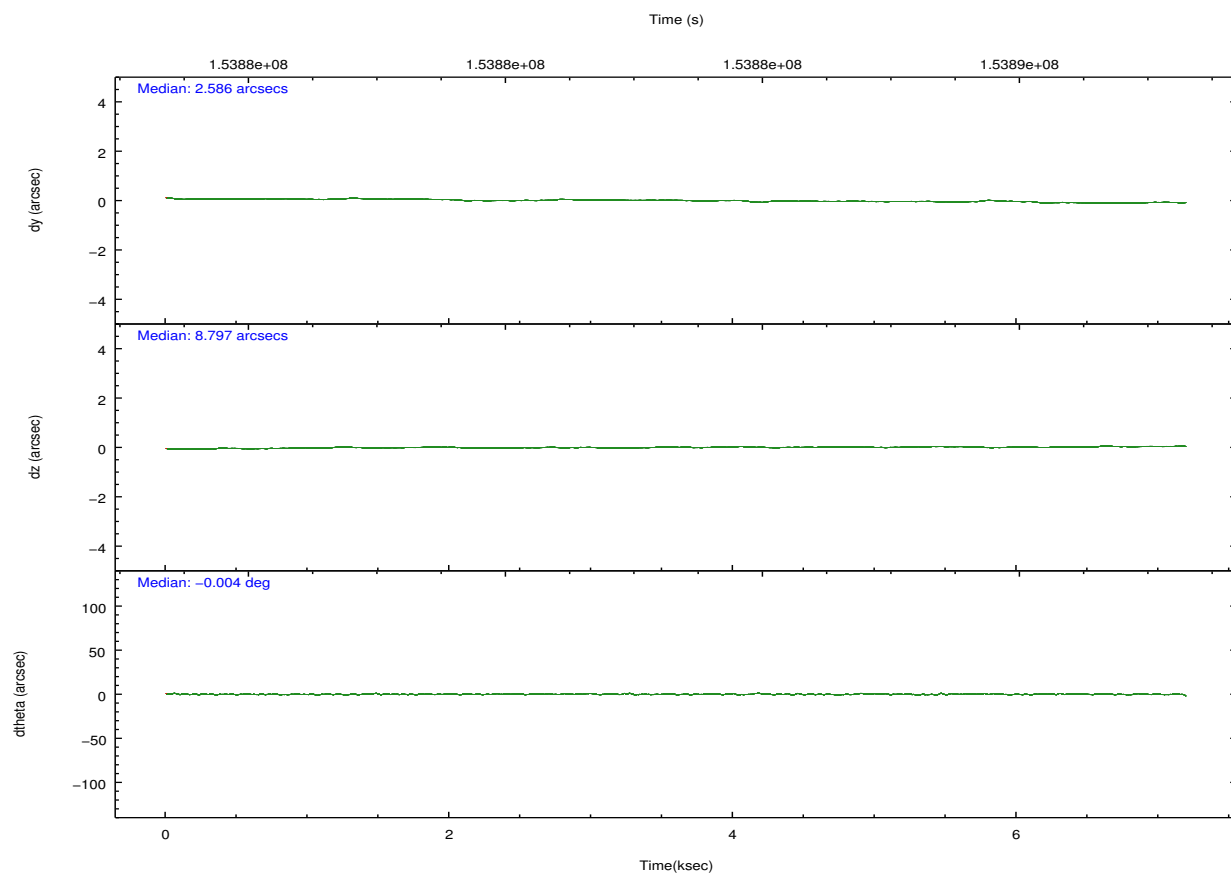
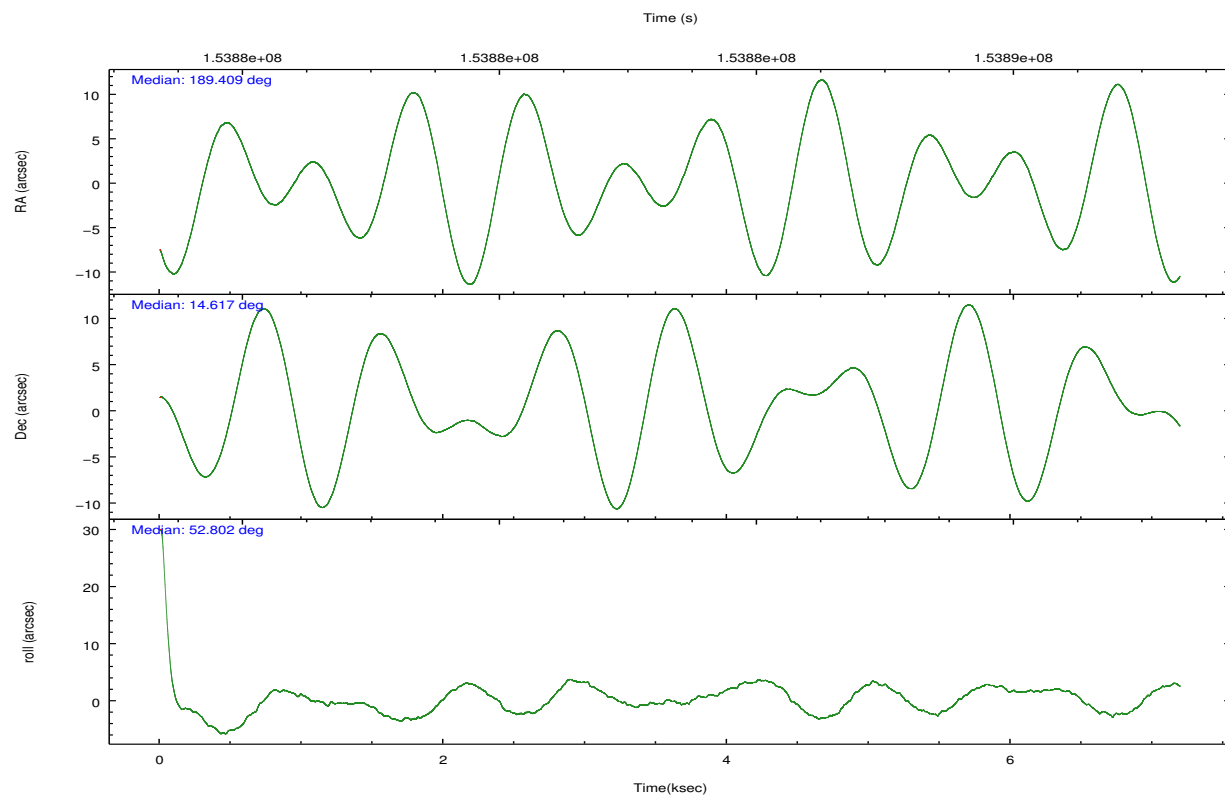


## 2.2 Compared Parameters

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	189.405551	189.408650687821	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.590211	14.61725832818188	Alternating exposures requested	N	N
[deg] Pointing Roll	52.651229	52.80712216891479	[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)	153879926.184000	153879502.60517			
Observation start date	2002-11-17T00:24:22	2002-11-17T00:18:22			
[s] Observation end time (MET)	153886926.184000	153887139.36798			
Observation end date	2002-11-17T02:21:02	2002-11-17T02:25:39			
Read mode	TIMED	TIMED			

## 2.3 Aspect



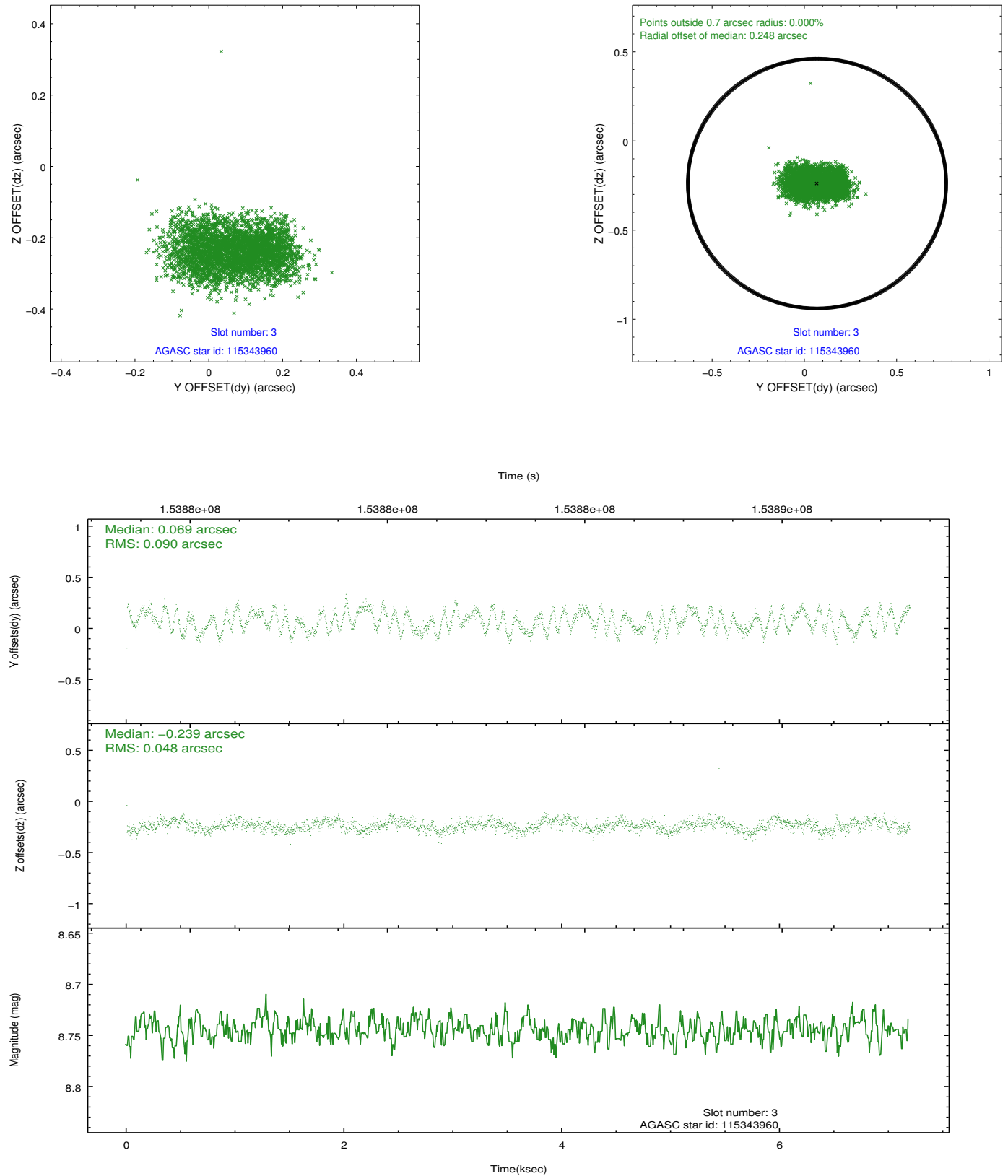


### Slot Statistics

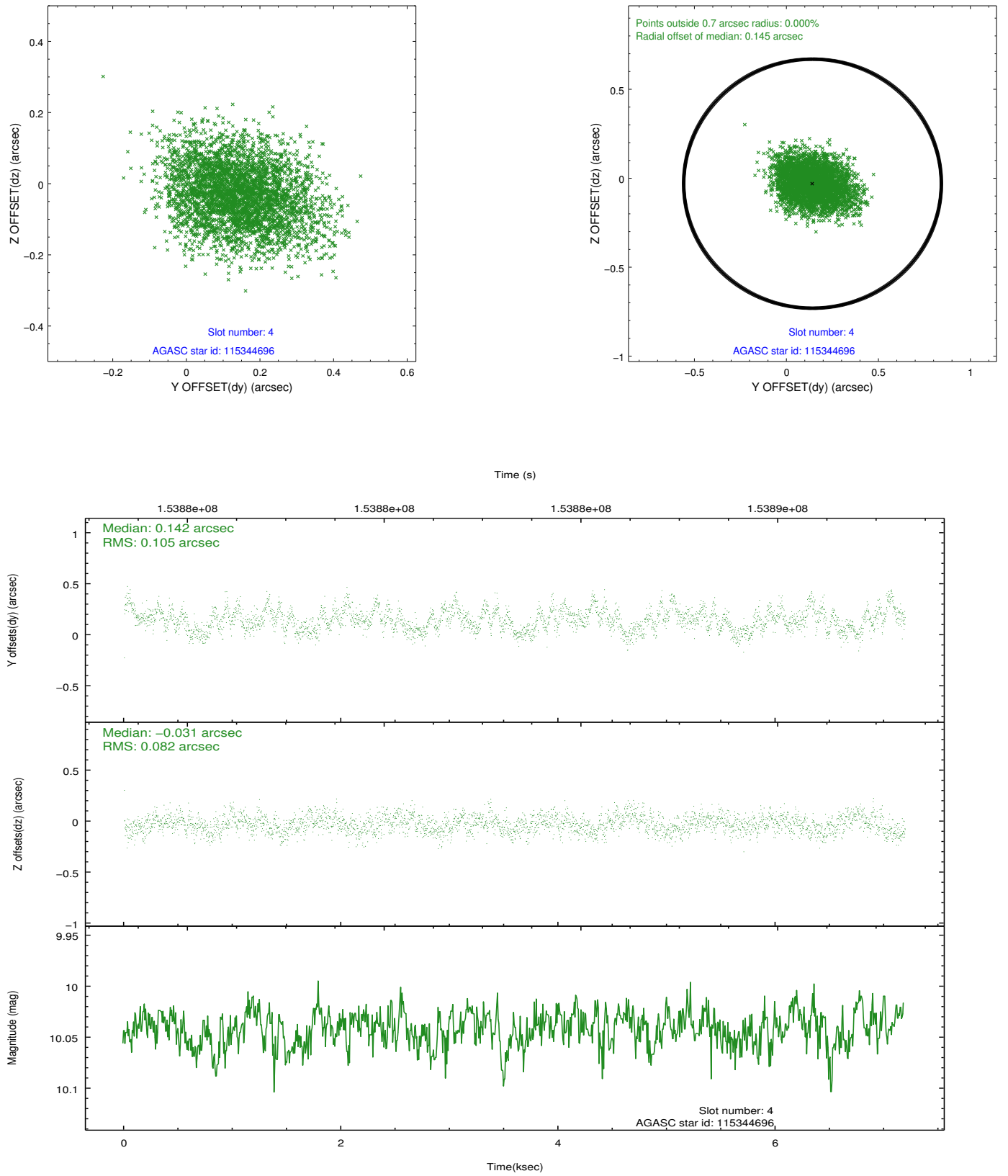
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1755	-0.020	-0.004	0.007	0.011	0.000000	0.000000	-755.23	-1730.01
1	FID	ACIS-S-4	7.20	1755	-0.015	0.010	0.006	0.010	0.000000	0.000000	2157.69	177.66
2	FID	ACIS-S-5	7.24	1755	0.003	0.002	0.008	0.014	0.000000	0.000000	-1807.02	172.24
3	GUIDE	115343960	8.74	3509	0.069	-0.239	0.112	0.170	188.590007	14.643744	-1565.87	2377.47
4	GUIDE	115344696	10.04	3506	0.142	-0.031	0.143	0.232	188.739926	14.495064	-1677.21	1638.64
5	GUIDE	115475336	7.75	3508	-0.013	-0.015	0.097	0.180	189.606179	14.872414	1231.19	61.82
6	GUIDE	115482704	7.02	3508	0.032	0.308	0.092	0.132	189.646201	13.805457	-1734.25	-2382.77
7	GUIDE	189543784	9.05	3505	-0.237	-0.015	0.155	0.223	189.184903	15.264210	1463.81	2080.52

## 2.4 Star Slots

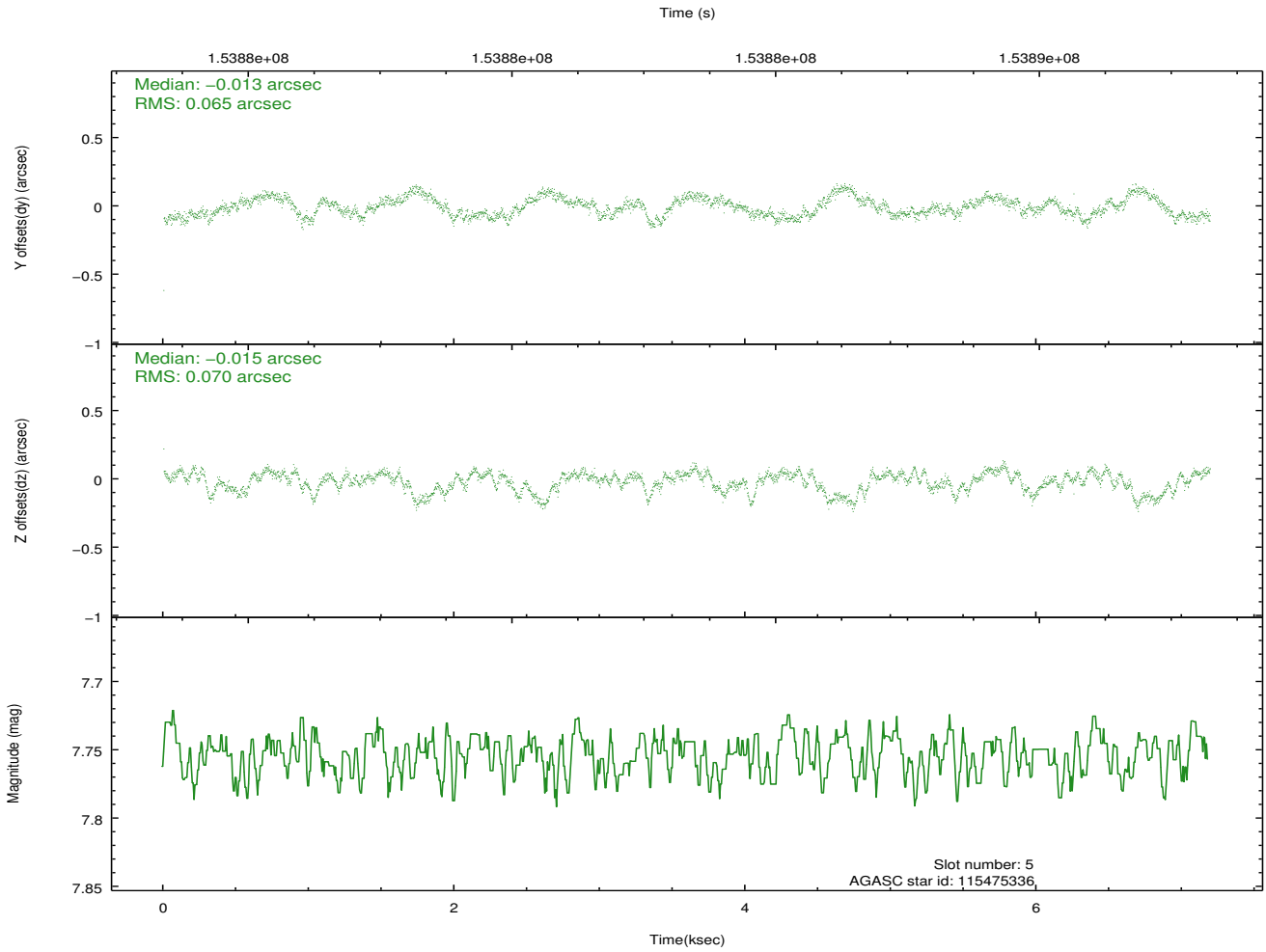
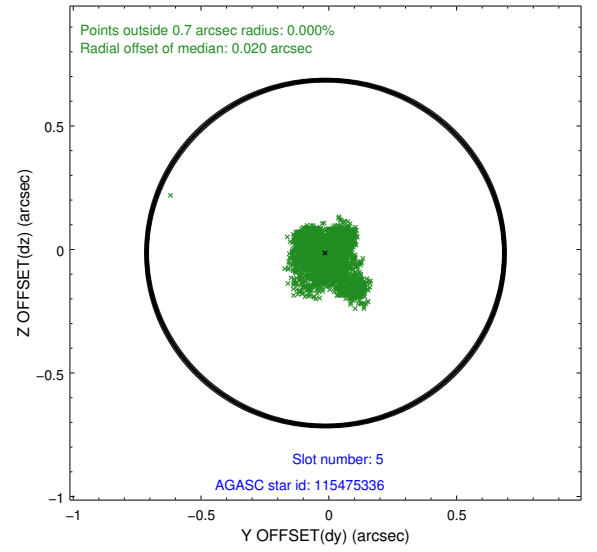
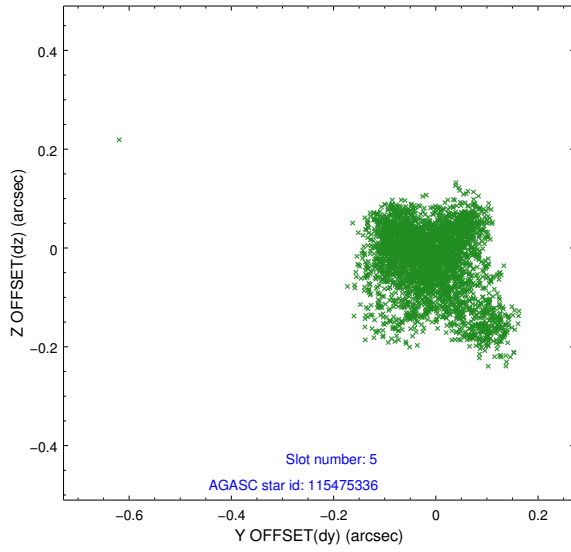
### 2.4.1 Slot 3



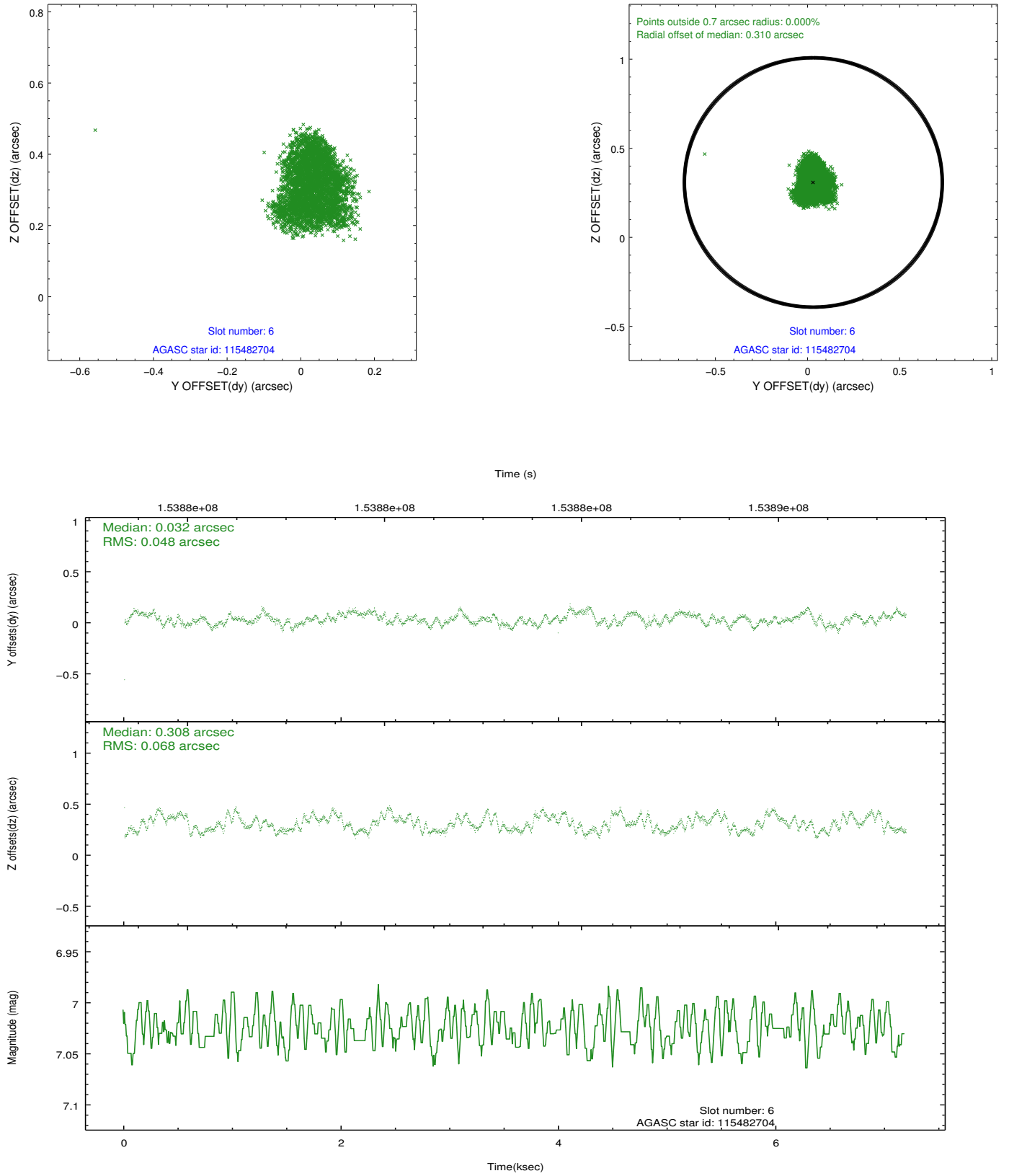
## 2.4.2 Slot 4



### 2.4.3 Slot 5

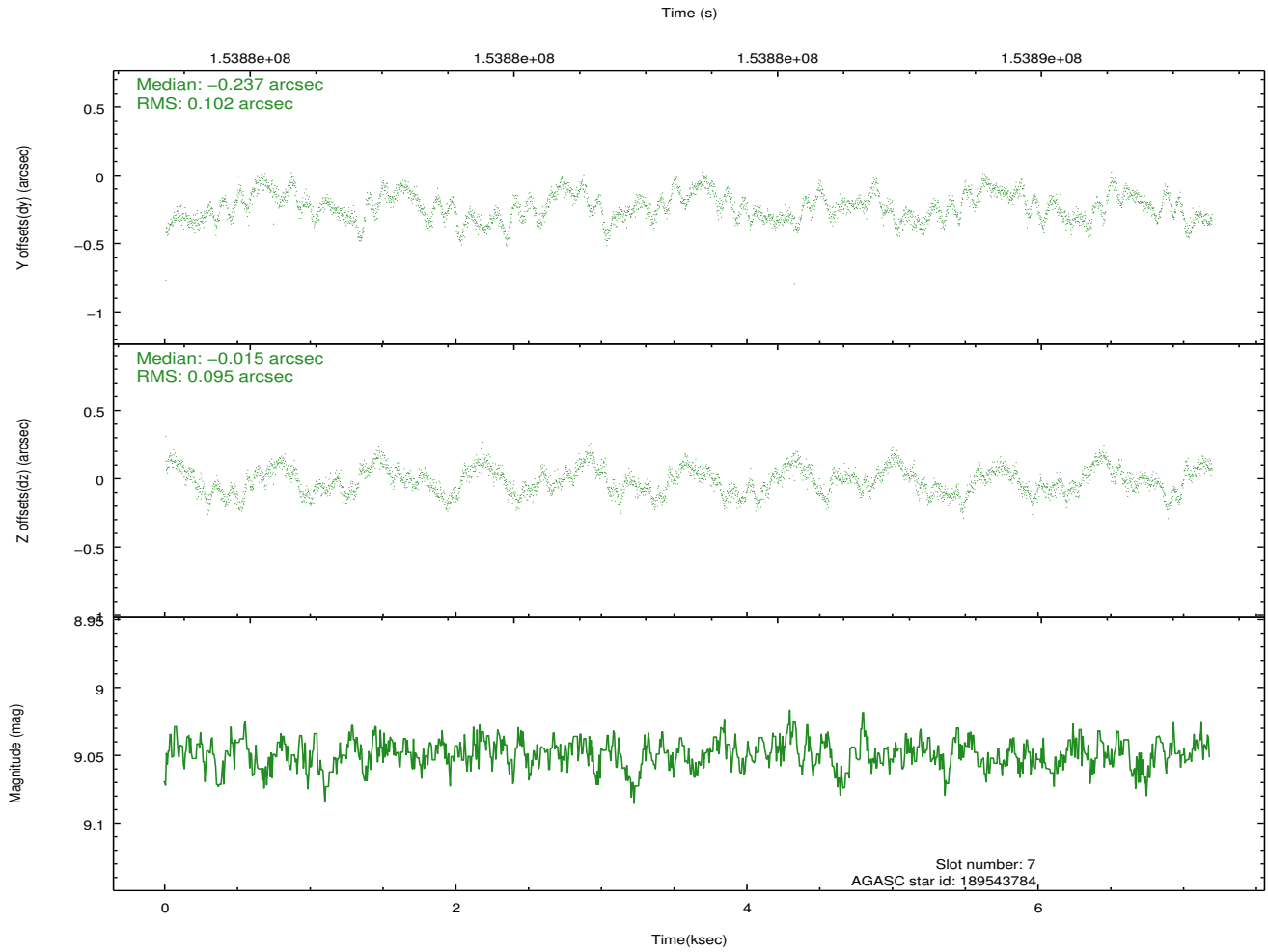
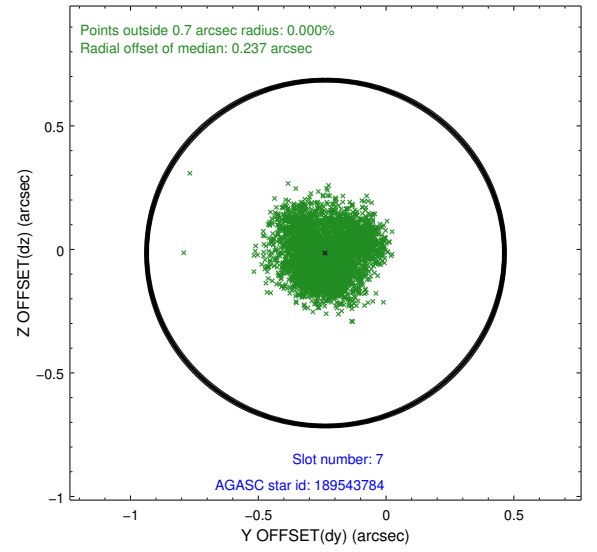
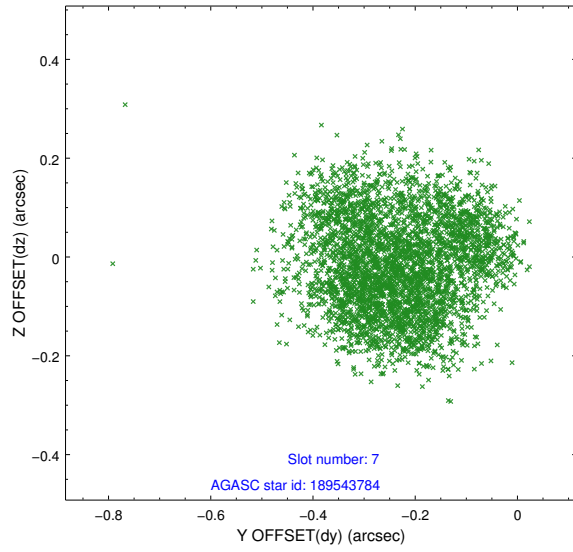


## 2.4.4 Slot 6



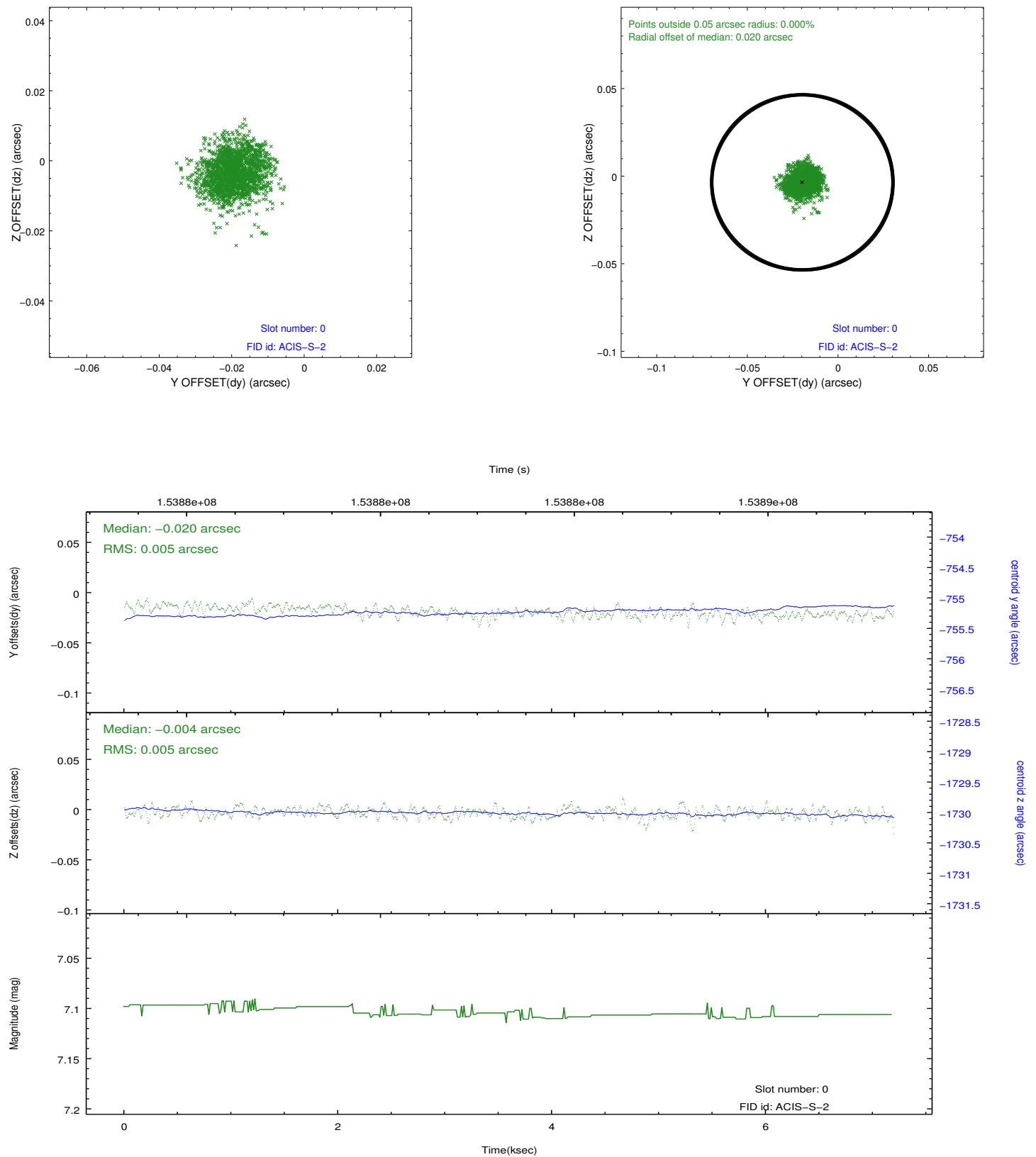


## 2.4.5 Slot 7

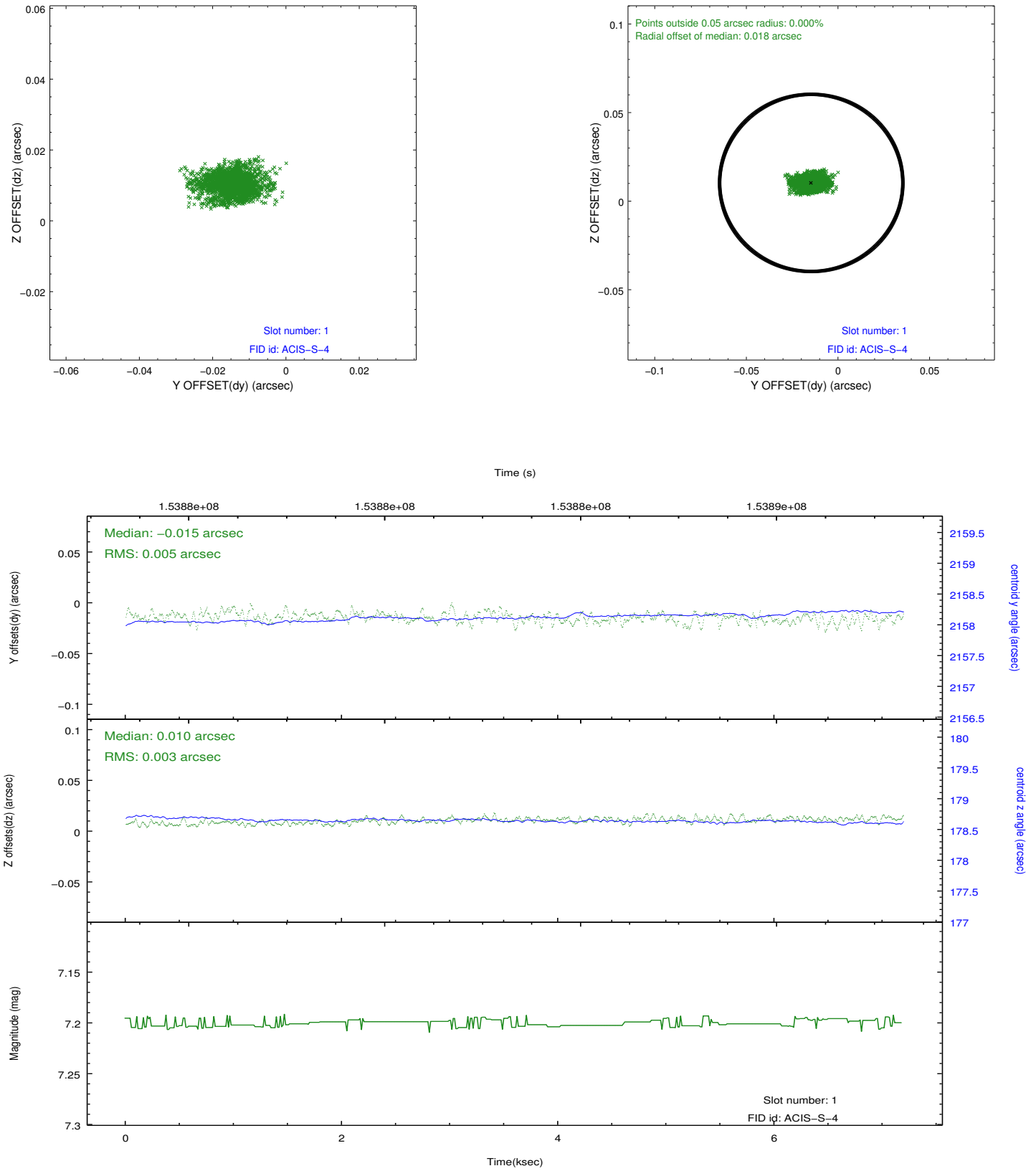


## 2.5 FID Slots

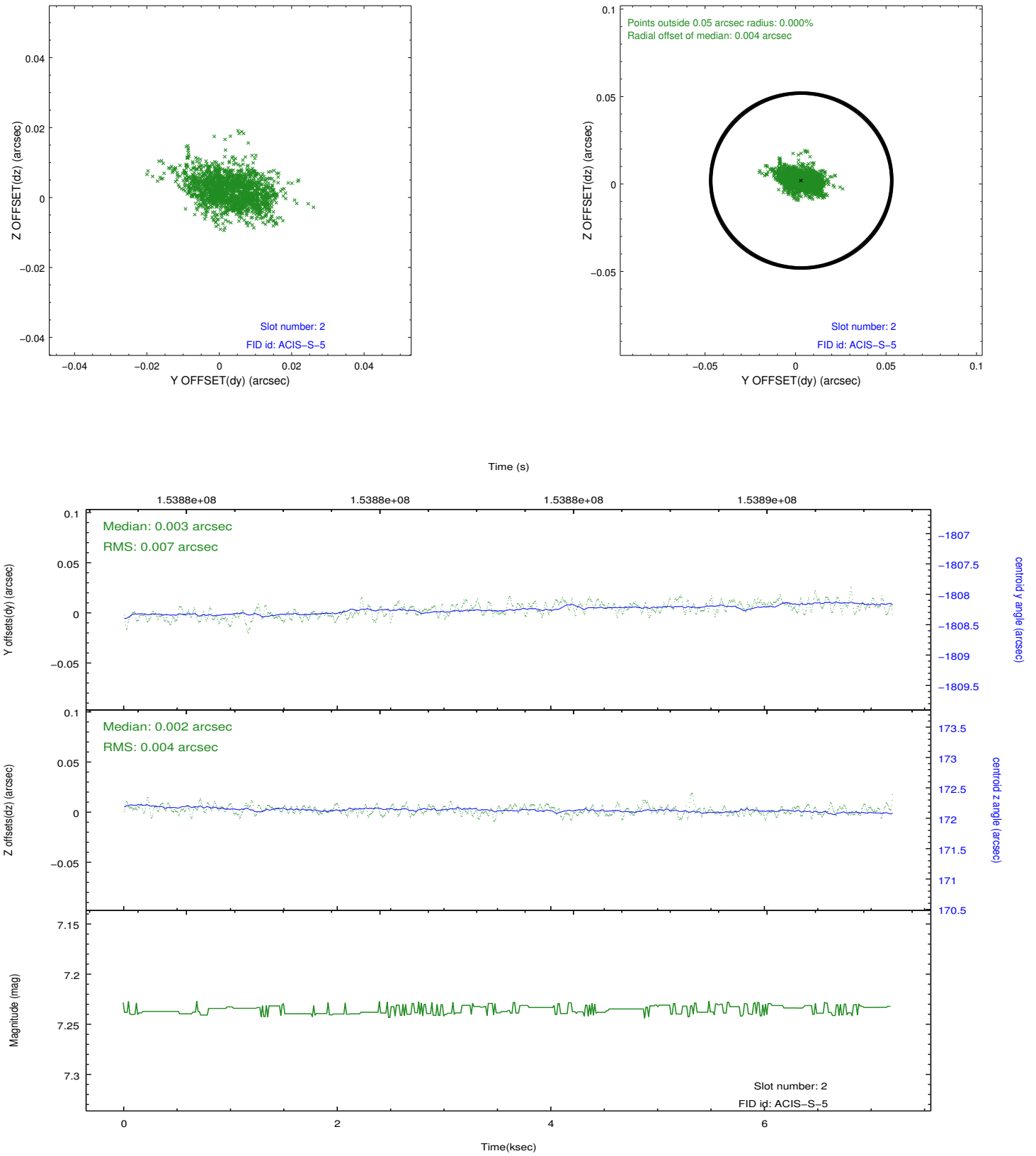
### 2.5.1 Slot 0



## 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)	2012.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.732

### A.2 Comments