

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10351 - L2 Version 2  
Chandra X-Ray Center

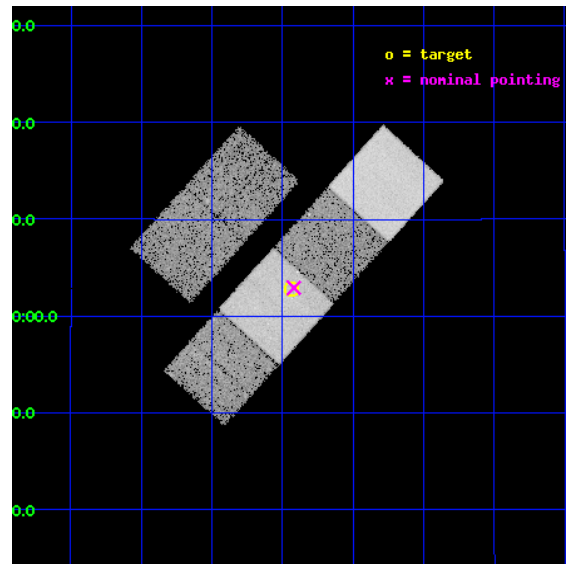
L2 Processing Date : Jun 12 2012

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# 1 Front

seq_num	701894	Sequence number
obs_id	10351	Observation id
title	Evolution of Activity in Massive Gas-rich Mergers: The X-ray Perspective	Proposal title
observer	Prof. Sylvain Veilleux	Principal investigator
object	F23234+0946	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	351.484583	Observer's specified target RA [deg]
dec_targ	10.047278	Observer's specified target Dec [deg]
ra_nom	351.47984872159	Nominal RA [deg]
dec_nom	10.048637613978	Nominal Dec [deg]
roll_nom	132.15736113242	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15038.83814925	Sum of GTIs [s]
livetime	14848.407325303	Livetime [s]
ontime2	15038.879189253	Sum of GTIs [s]
ontime3	15038.71502924	Sum of GTIs [s]
ontime5	15038.797109246	Sum of GTIs [s]
ontime6	15038.756069243	Sum of GTIs [s]
ontime7	15038.83814925	Sum of GTIs [s]
ontime8	15038.673989236	Sum of GTIs [s]
l2events	178563	Number of level 2 events

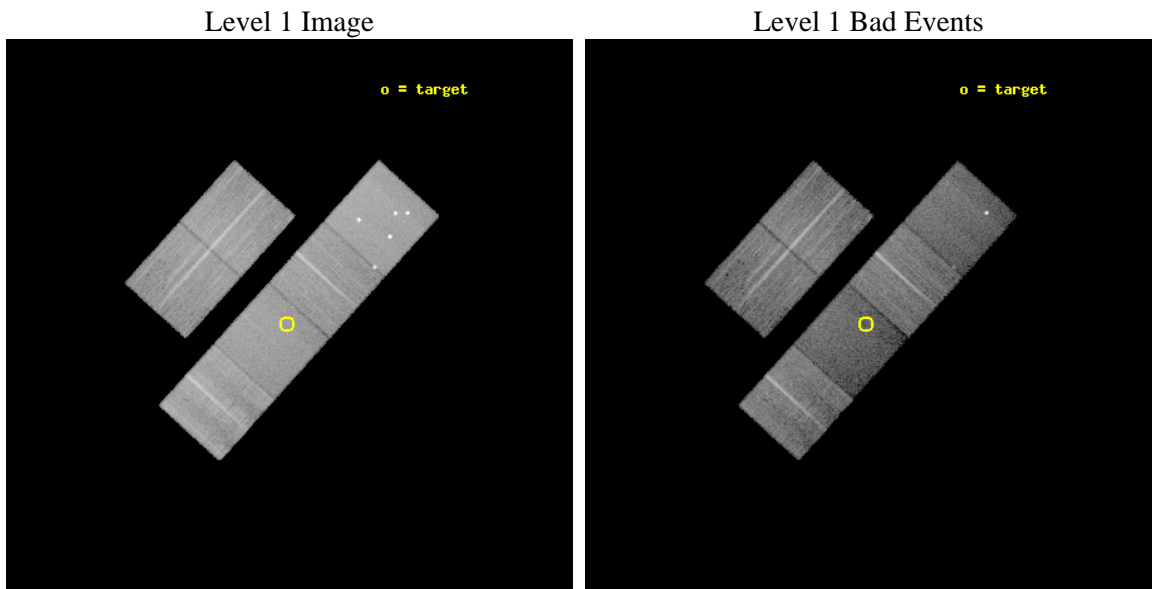




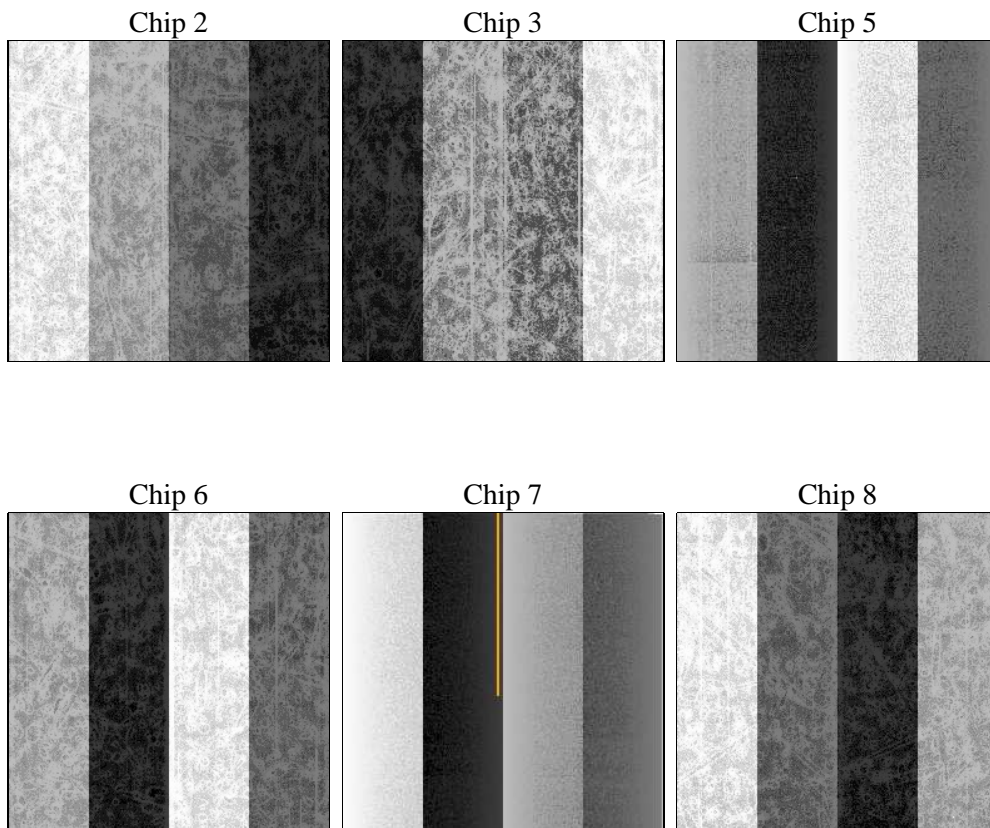
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	15038.83814925	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	15038.879189253	Sum of GTIs [s]
date	2012-06-12T01:33:36	Date and time of file creation	ontime3	15038.71502924	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	15038.797109246	Sum of GTIs [s]
			ontime6	15038.756069243	Sum of GTIs [s]
			ontime7	15038.83814925	Sum of GTIs [s]
			ontime8	15038.673989236	Sum of GTIs [s]
			l1events	827118	Number of level 1 events

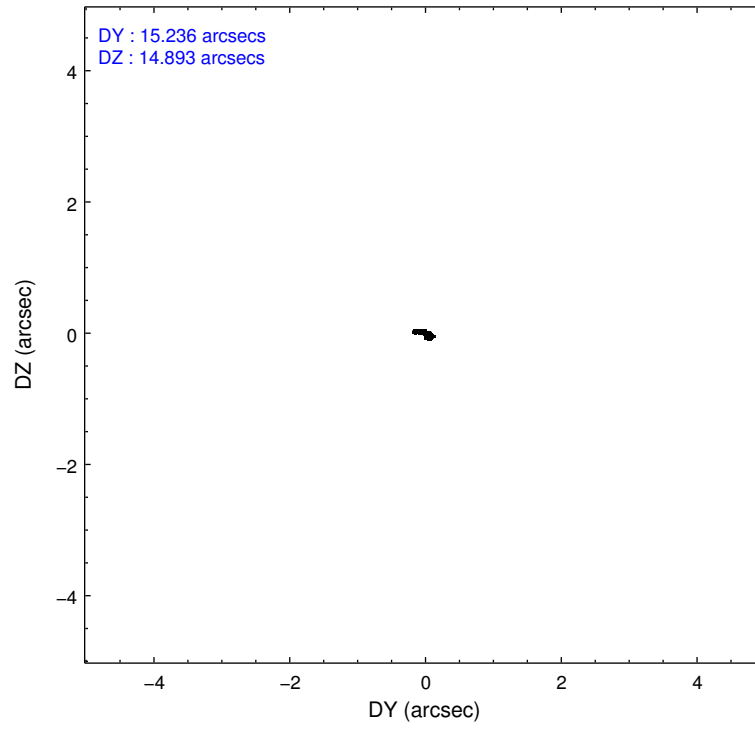
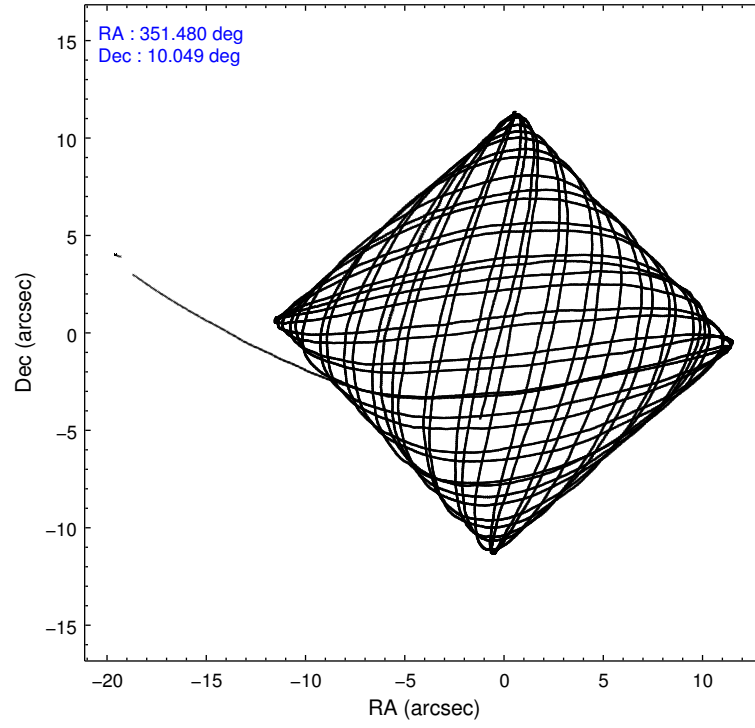
### 2.1.4 Events

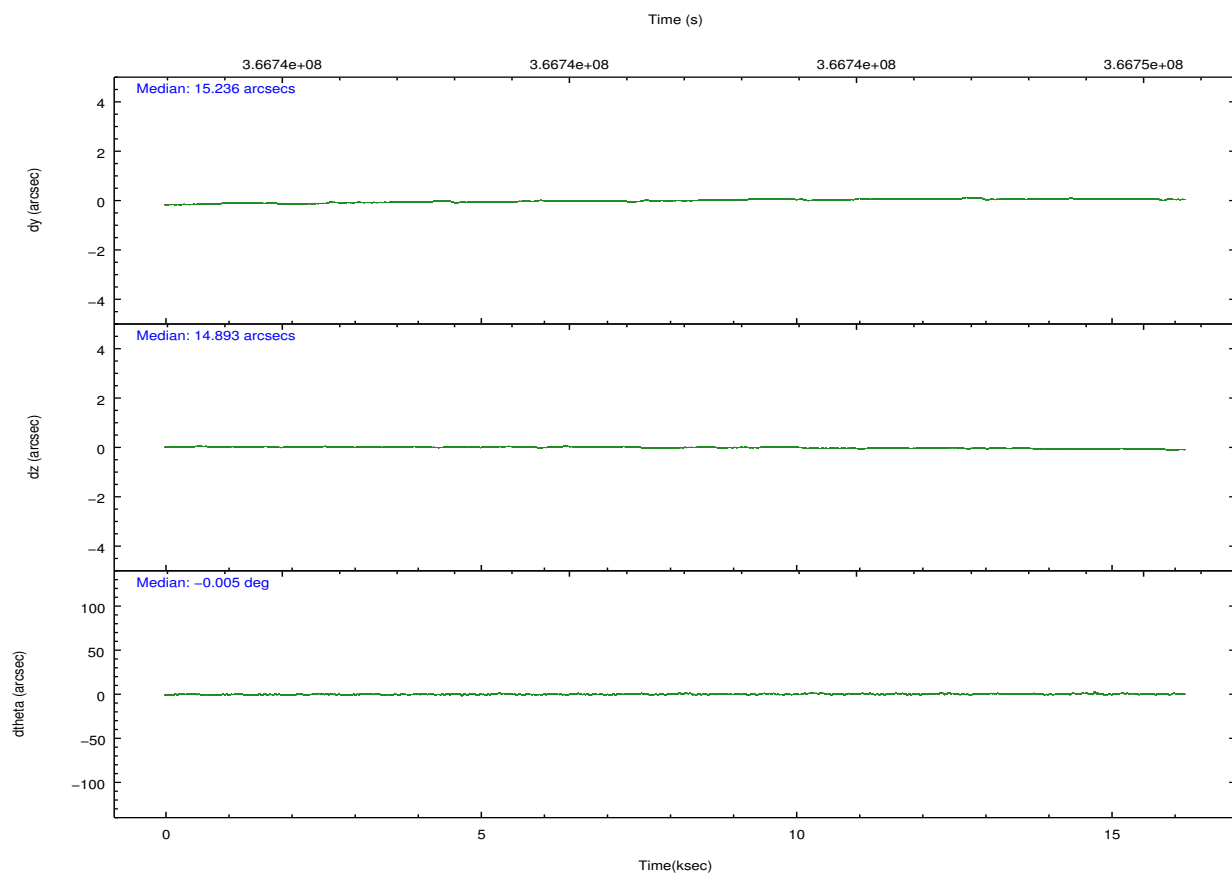
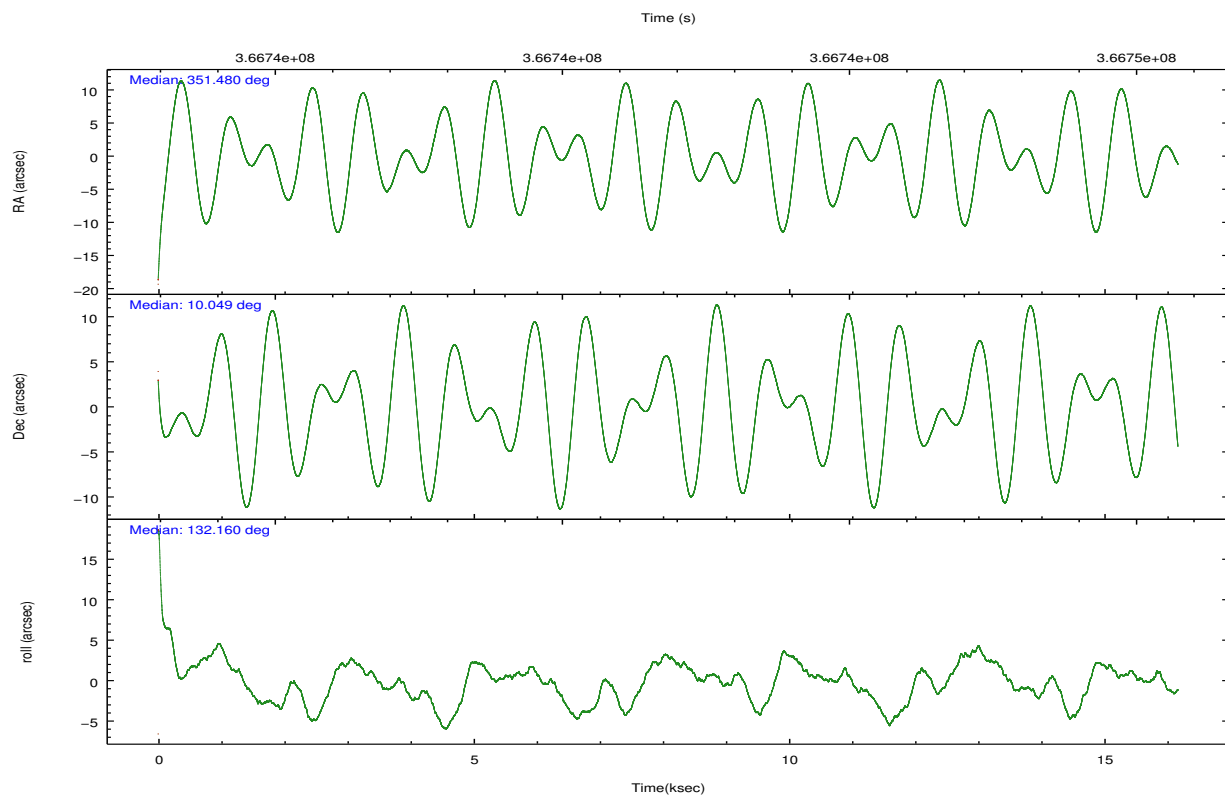
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	137829	118669	173800	124460	120512	151848	grade 0 events	4509	4125	20440	4649	5963	10882
rejected events	125600	107432	76844	111785	61553	112739		3%	3%	11%	3%	4%	7%
rejected %	91%	90%	44%	89%	51%	74%	grade 1 events	82	67	951	60	218	146
								0%	0%	0%	0%	0%	0%
							grade 2 events	3057	2459	26914	2836	12405	9107
								2%	2%	15%	2%	10%	5%
							grade 3 events	1225	1289	3549	1334	5444	4458
								0%	1%	2%	1%	4%	2%
							grade 4 events	1271	1237	3504	1290	5400	4079
								0%	1%	2%	1%	4%	2%
							grade 5 events	3583	4250	13369	4323	12815	6493
								2%	3%	7%	3%	10%	4%
							grade 6 events	2168	2140	42601	2572	29770	10603
								1%	1%	24%	2%	24%	6%
							grade 7 events	121934	103102	62472	107396	48497	106080
								88%	86%	35%	86%	40%	69%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	351.506396	351.4798487215933	CCD I2 on	O1	Y
[deg] Pointing Dec	10.040611	10.04863761397771	CCD I3 on	O2	Y
[deg] Pointing Roll	131.996090	132.1573611324185	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O5	Y
[s] Observation start time (MET)	366734916.184000	366732379.0723	CCD S5 on	N	N
Observation start date	2009-08-15T14:47:30	2009-08-15T14:06:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	366749916.184000	366750239.1857	On-chip summing requested	N	N
Observation end date	2009-08-15T18:57:30	2009-08-15T19:03:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



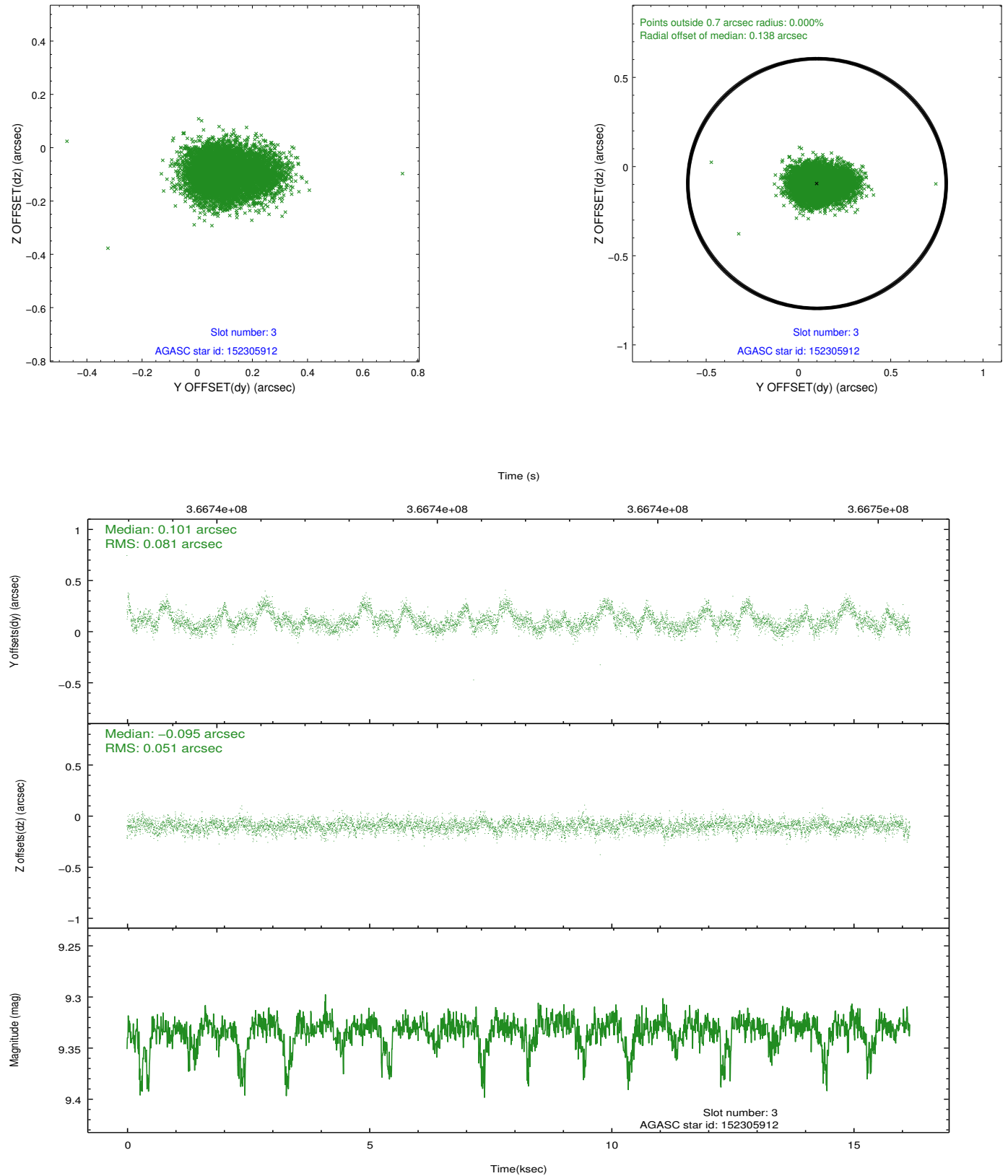


### Slot Statistics

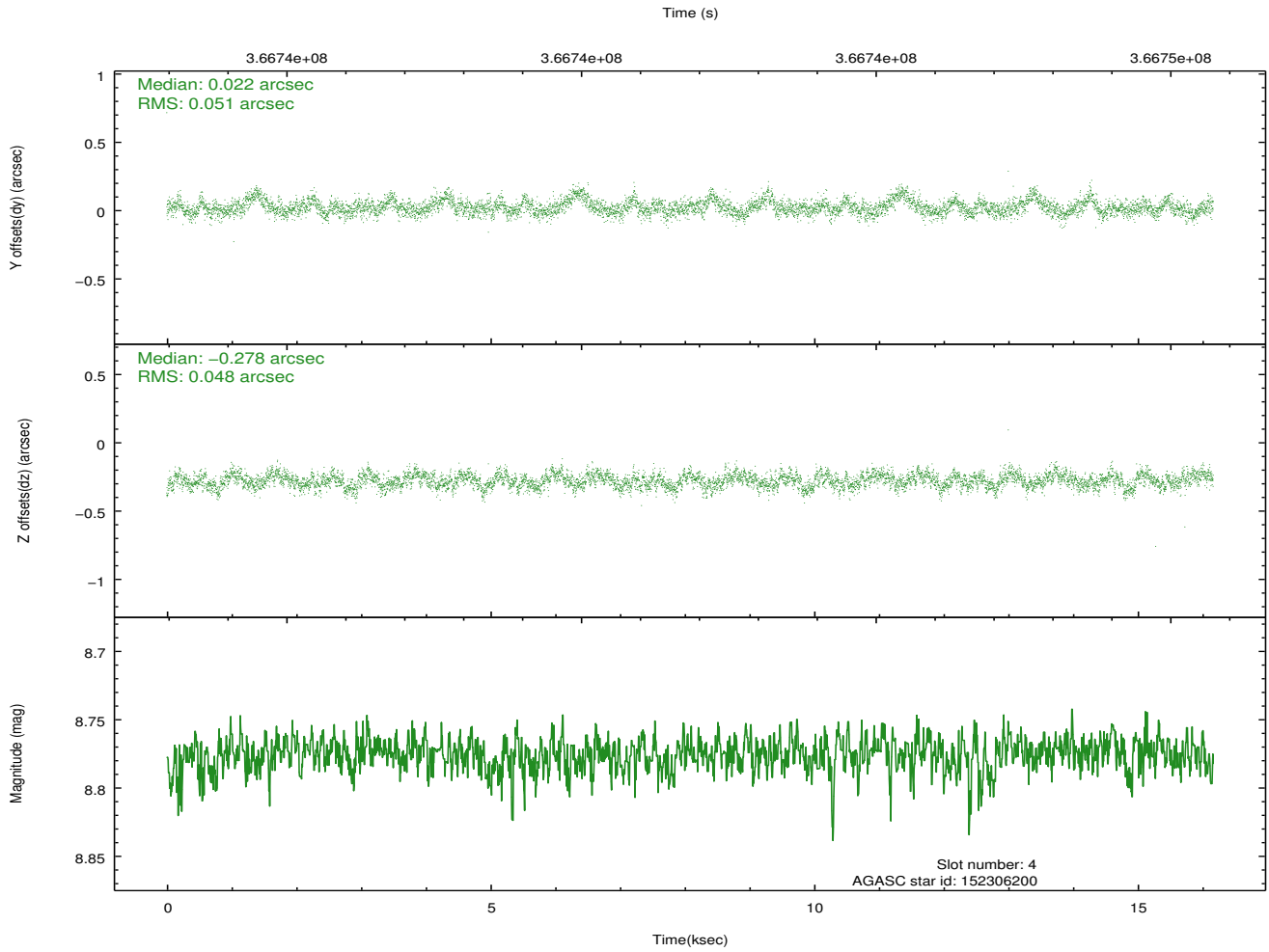
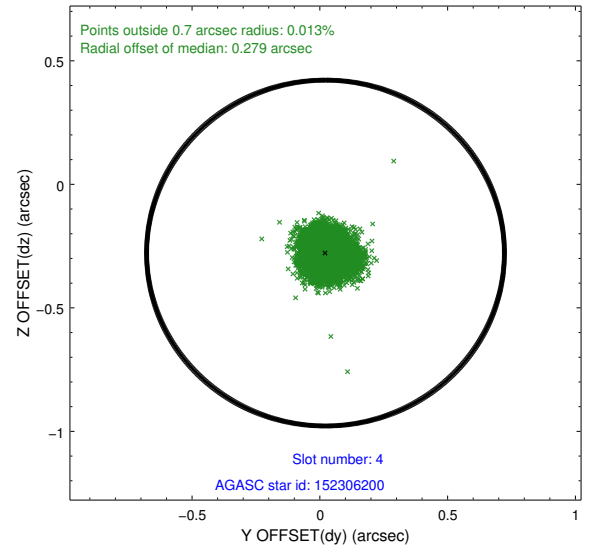
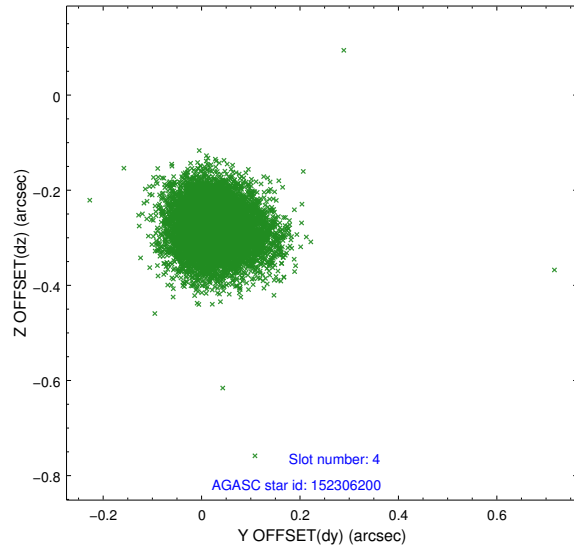
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	3943	-0.098	-0.036	0.007	0.011	0.000000	0.000000	-768.28	-1736.30
1	FID	ACIS-S-4	6.97	3944	0.214	0.057	0.006	0.012	0.000000	0.000000	2145.16	172.02
2	FID	ACIS-S-5	7.00	3944	-0.147	-0.012	0.007	0.013	0.000000	0.000000	-1820.85	165.89
3	GUIDE	152305912	9.33	7882	0.101	-0.095	0.099	0.172	351.824803	9.744389	-1547.56	-126.21
4	GUIDE	152306200	8.78	7874	0.022	-0.278	0.073	0.121	351.665179	9.749829	-1154.63	281.66
5	GUIDE	152701240	9.12	7880	-0.053	0.096	0.095	0.153	351.216624	10.631608	2268.07	-661.56
6	GUIDE	152706216	9.63	7871	0.030	0.017	0.115	0.187	351.207032	10.521654	1996.94	-371.29
7	GUIDE	152709704	9.39	7882	-0.114	0.261	0.107	0.172	352.287307	10.071090	-1767.66	-2132.22

## 2.4 Star Slots

### 2.4.1 Slot 3

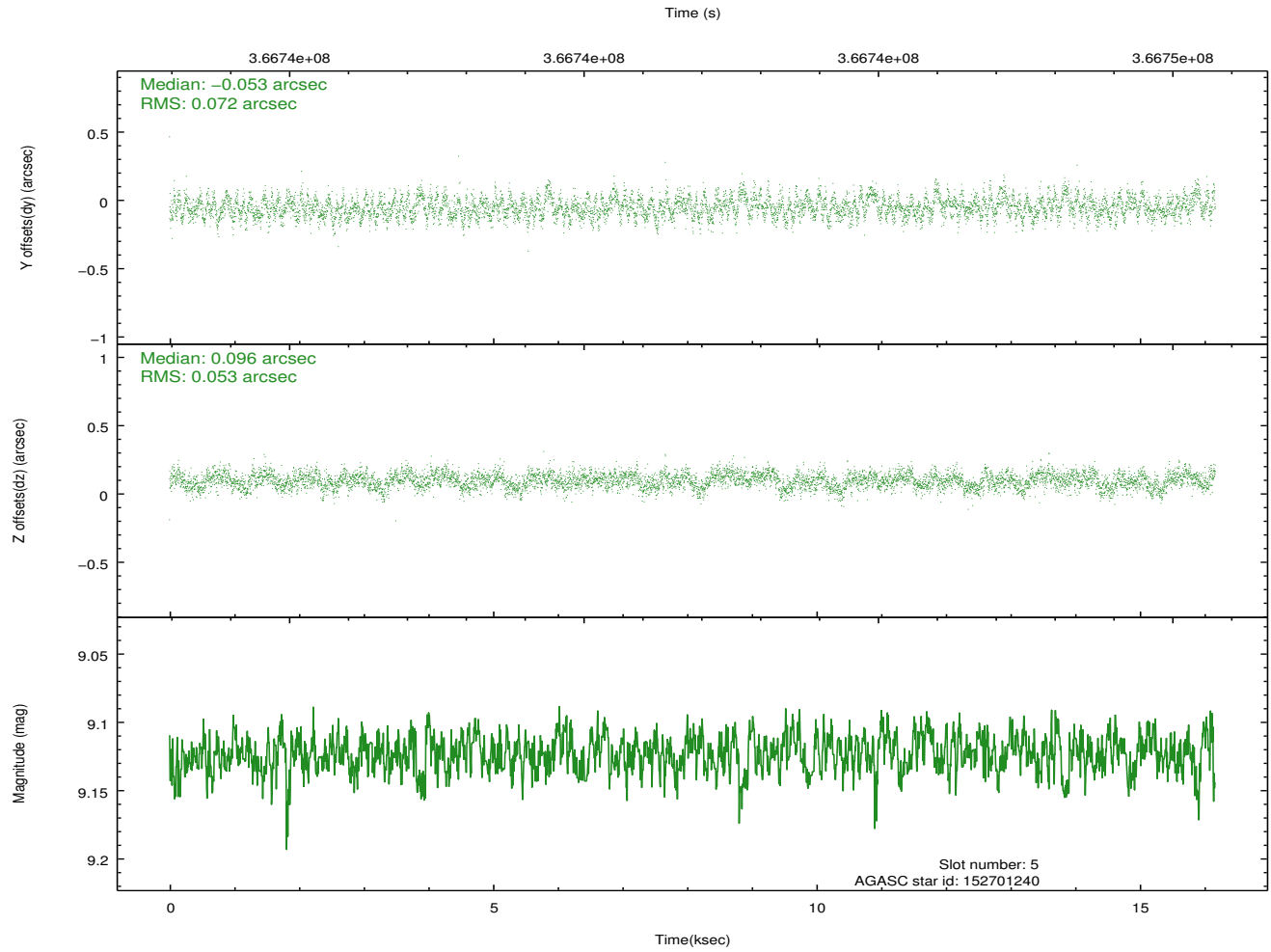
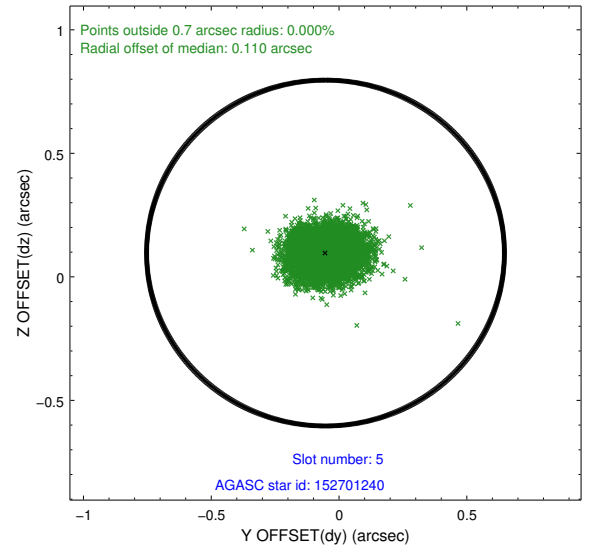
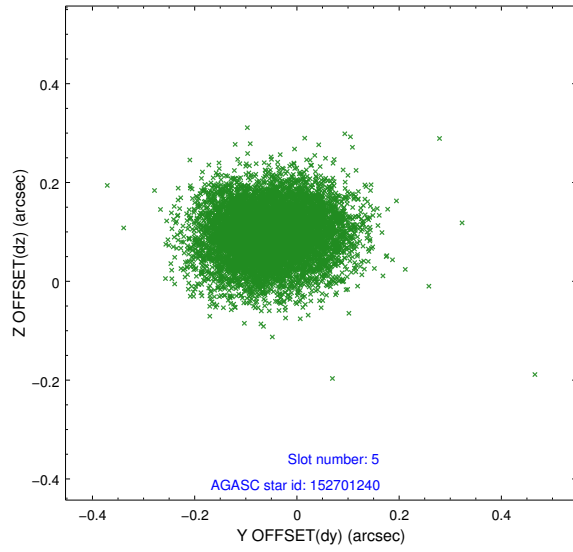


## 2.4.2 Slot 4

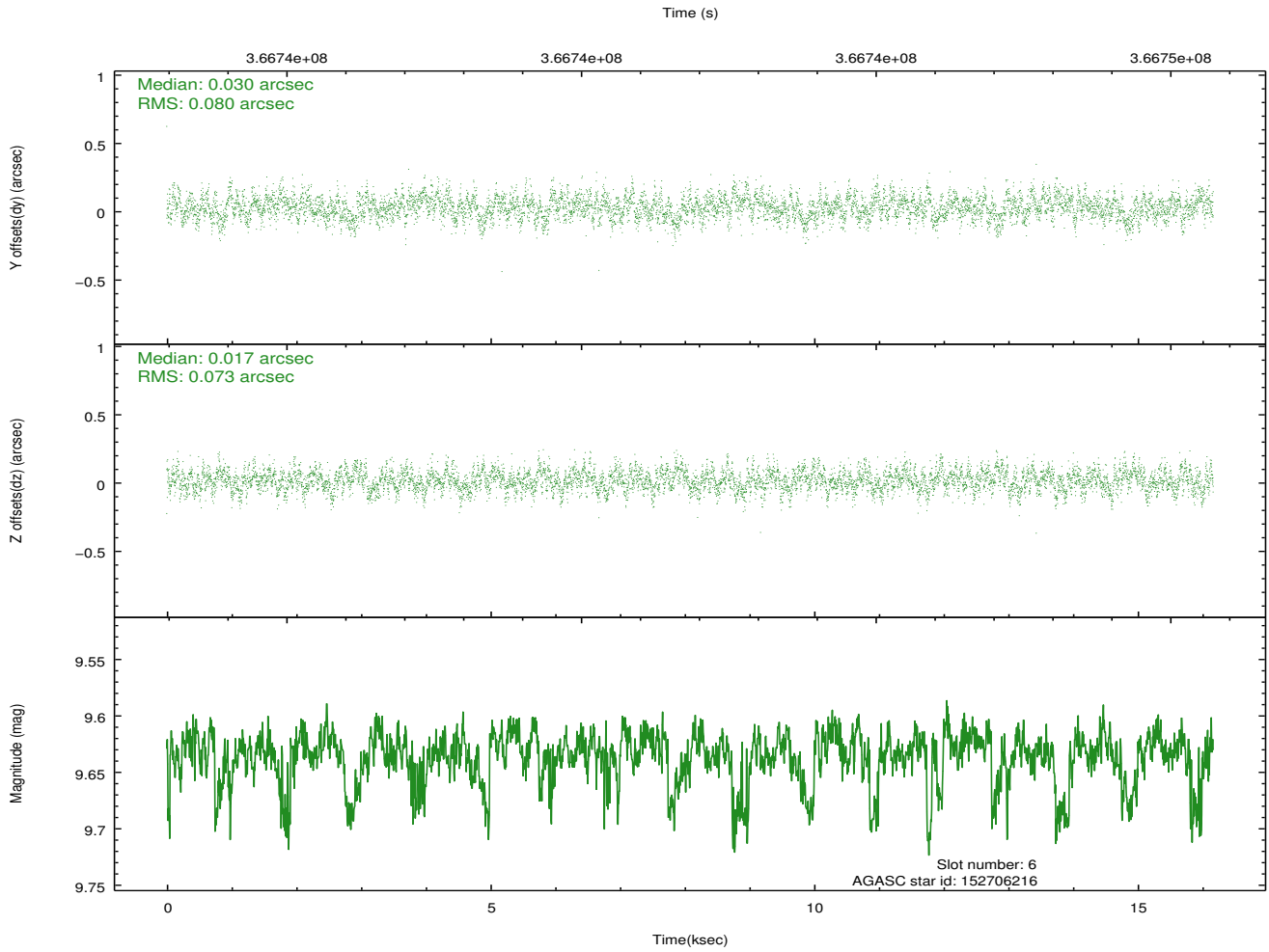
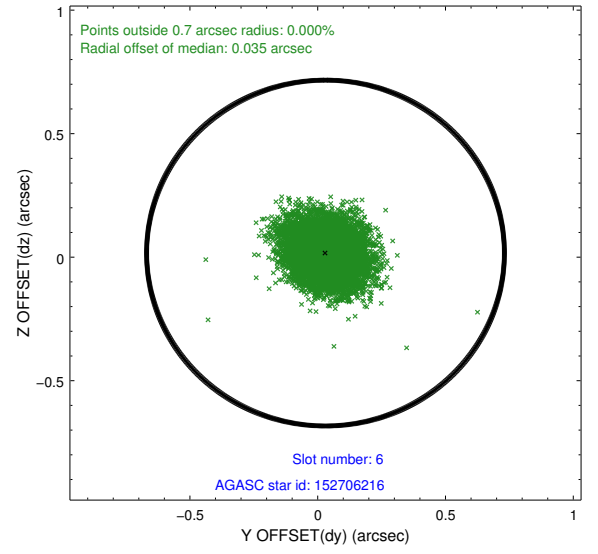
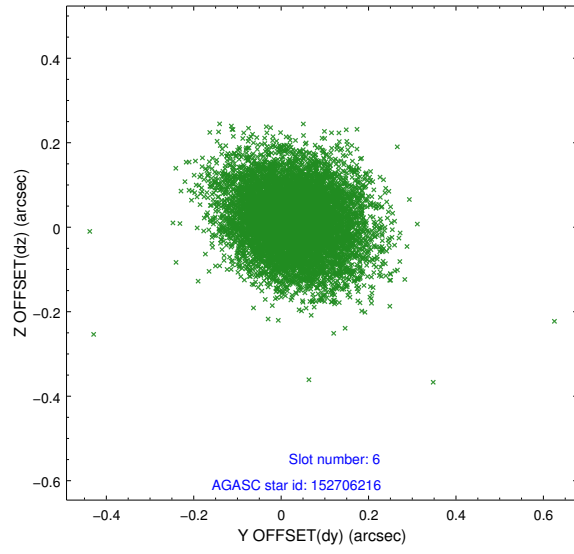




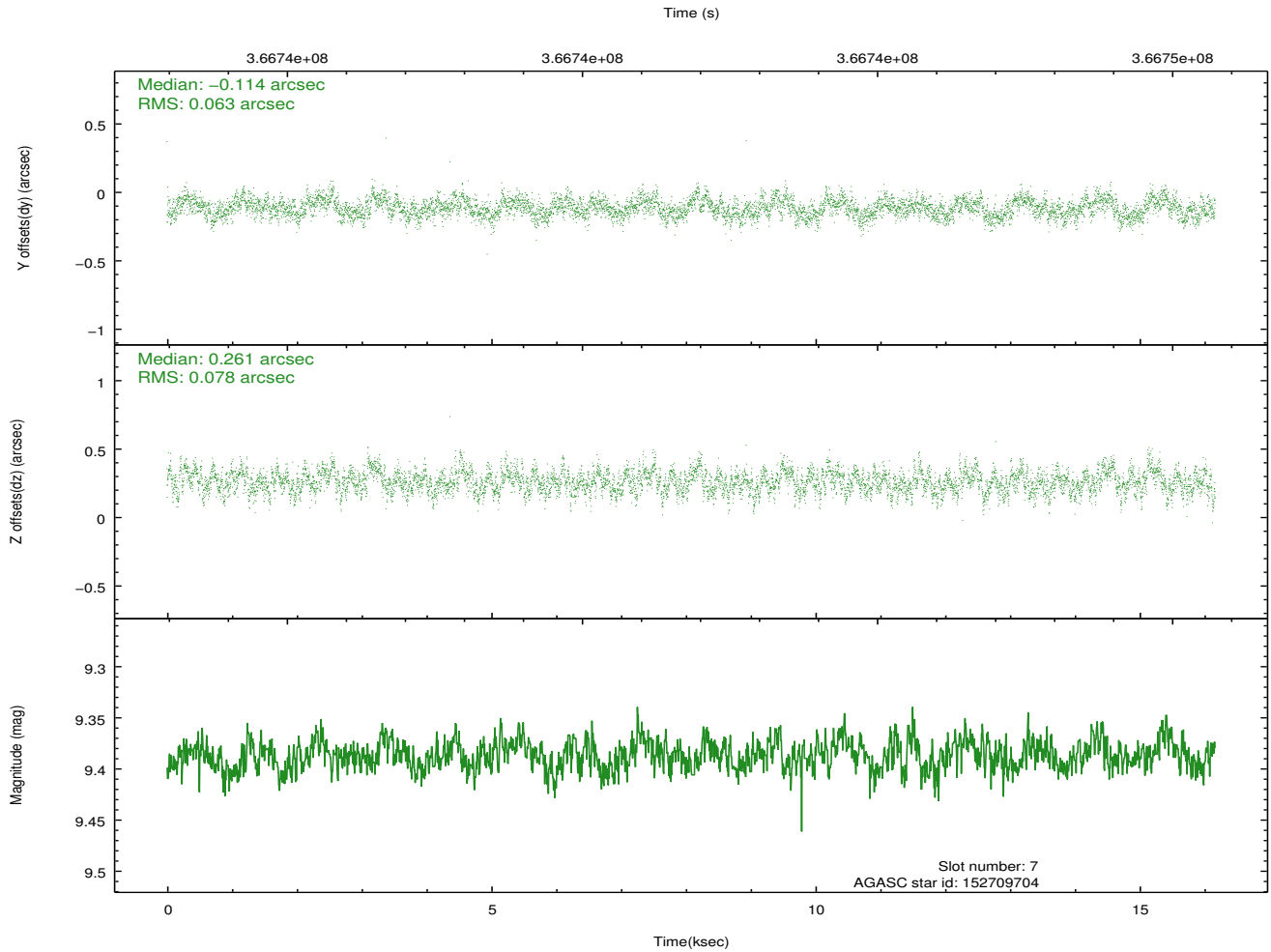
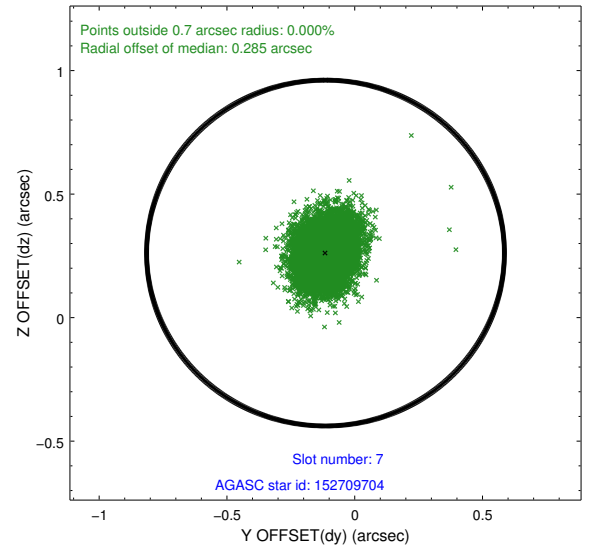
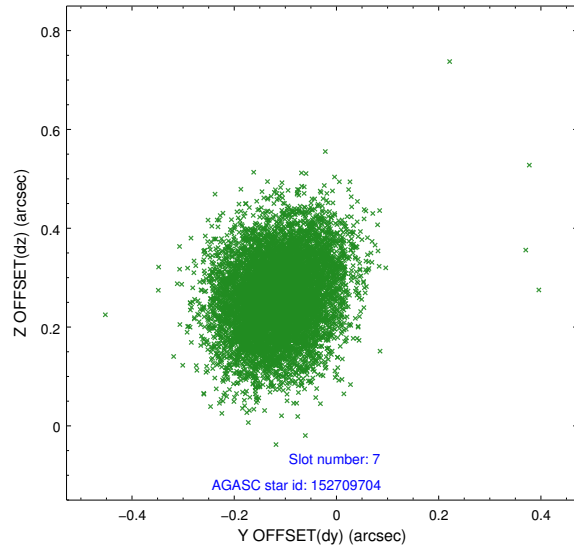
### 2.4.3 Slot 5



## 2.4.4 Slot 6

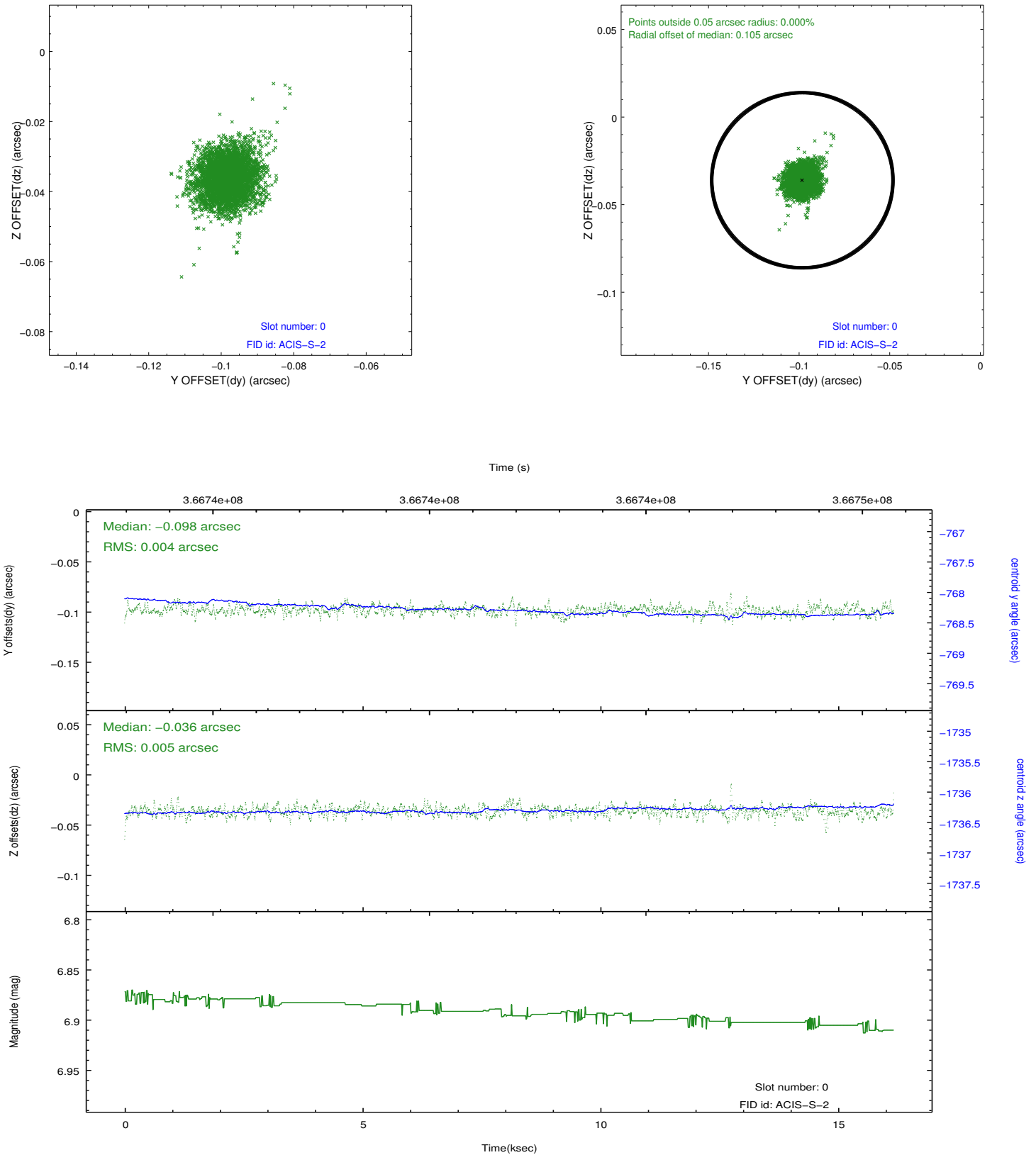


## 2.4.5 Slot 7

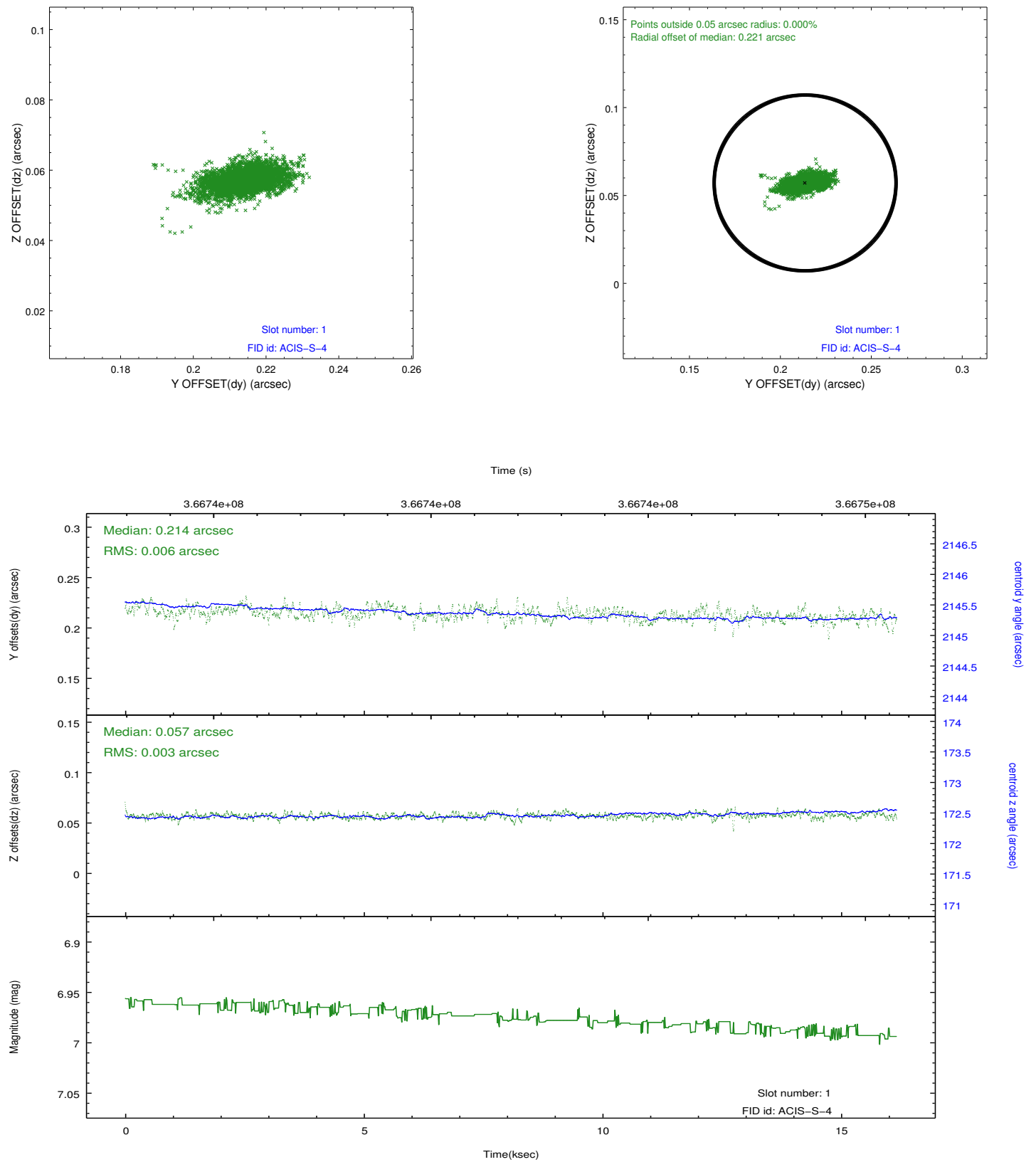


## 2.5 FID Slots

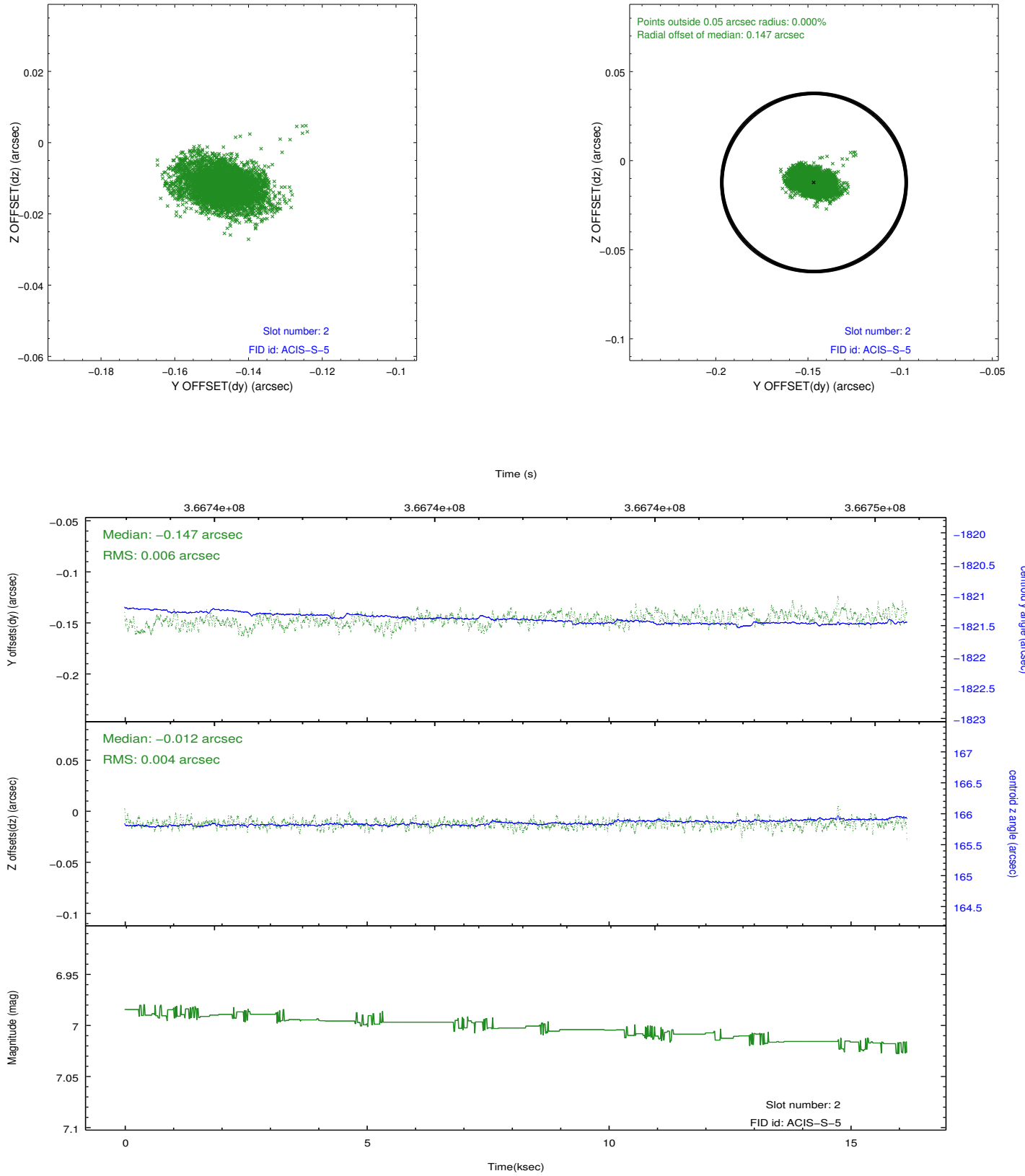
### 2.5.1 Slot 0



## 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)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.0399999

### A.2 Comments