

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11571 - L2 Version 2  
Chandra X-Ray Center

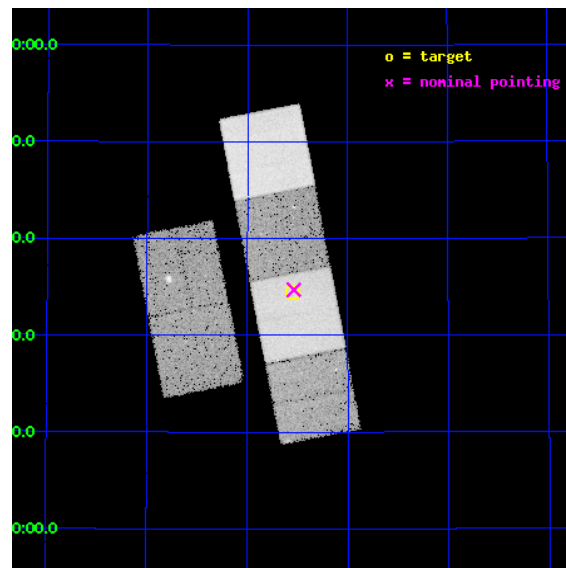
L2 Processing Date : Jun 21 2012

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# 1 Front

seq_num	702157	Sequence number
obs_id	11571	Observation id
title	The environmental and epoch dependence of radio-loud AGN feedback	&#160
observer	Dr Judith Croston	Principal investigator
object	TOOT 1630+4534	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	247.636667	Observer's specified target RA [deg]
dec_targ	45.573889	Observer's specified target Dec [deg]
ra_nom	247.63422738703	Nominal RA [deg]
dec_nom	45.578423921612	Nominal Dec [deg]
roll_nom	79.158397501579	Nominal Roll [deg]
revision	2	Processing version of data
ontime	21046.399921656	Sum of GTIs [s]
livetime	20779.897733227	Livetime [s]
ontime2	21046.399921656	Sum of GTIs [s]
ontime3	21043.158911467	Sum of GTIs [s]
ontime5	21046.399921656	Sum of GTIs [s]
ontime6	21046.399921656	Sum of GTIs [s]
ontime7	21046.399921656	Sum of GTIs [s]
ontime8	21043.158921421	Sum of GTIs [s]
l2events	270800	Number of level 2 events

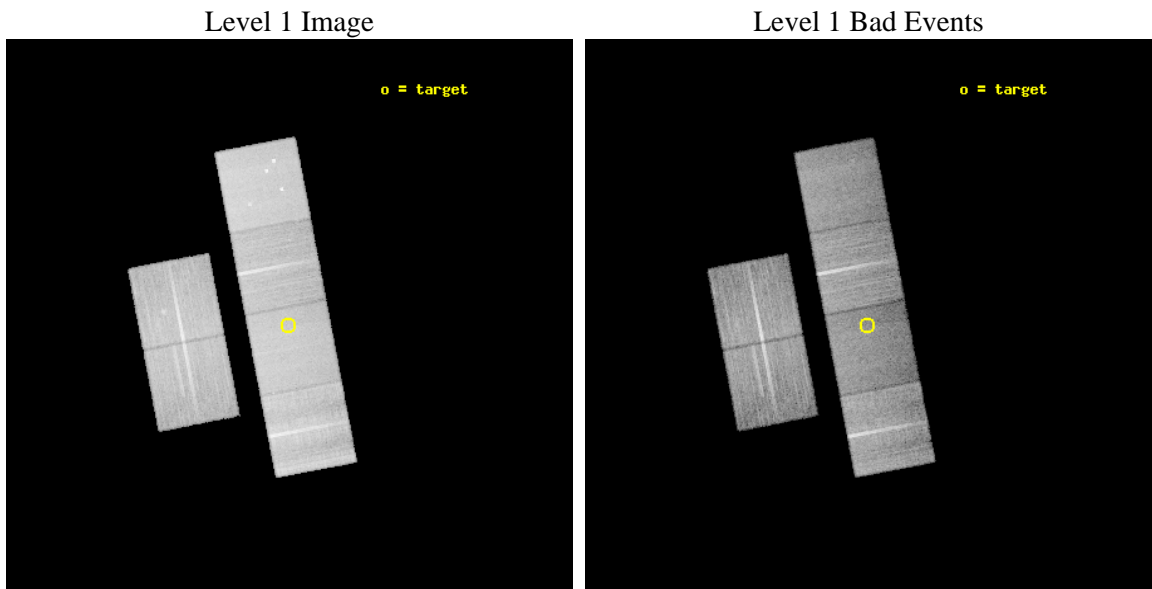




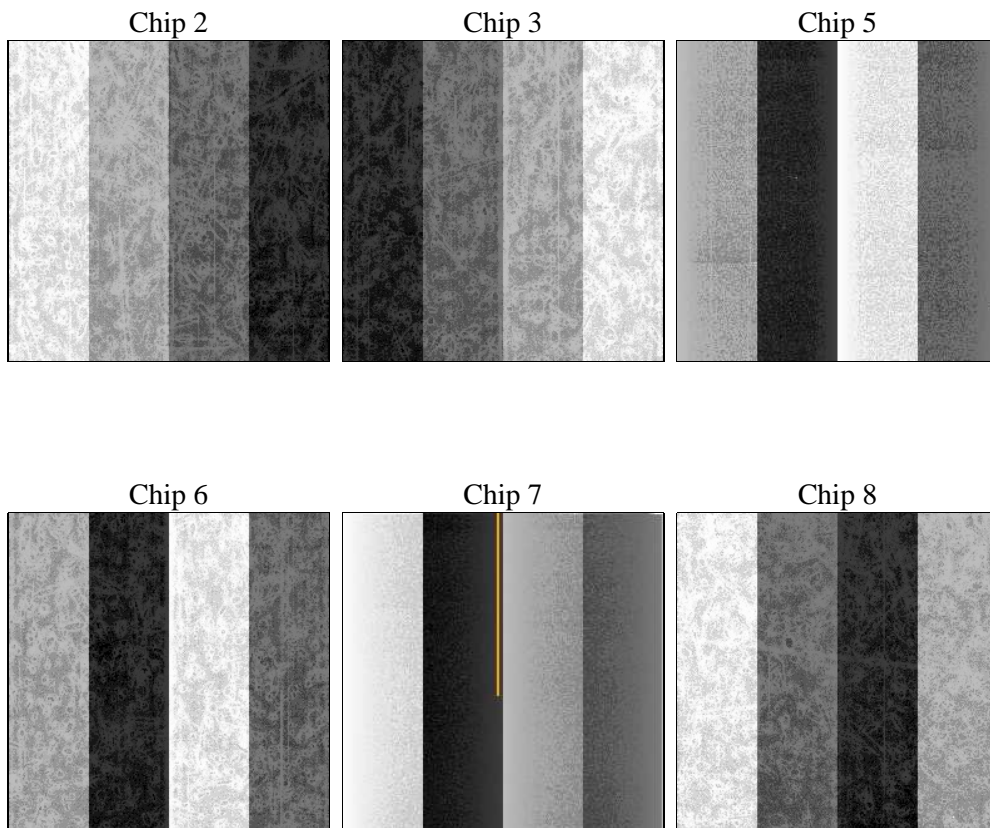
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	21000.949000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	21046.399921656	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	21046.399921656	Sum of GTIs [s]
date	2012-06-21T17:04:13	Date and time of file creation	ontime3	21043.158911467	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	21046.399921656	Sum of GTIs [s]
			ontime6	21046.399921656	Sum of GTIs [s]
			ontime7	21046.399921656	Sum of GTIs [s]
			ontime8	21043.158921421	Sum of GTIs [s]
			l1events	1182096	Number of level 1 events

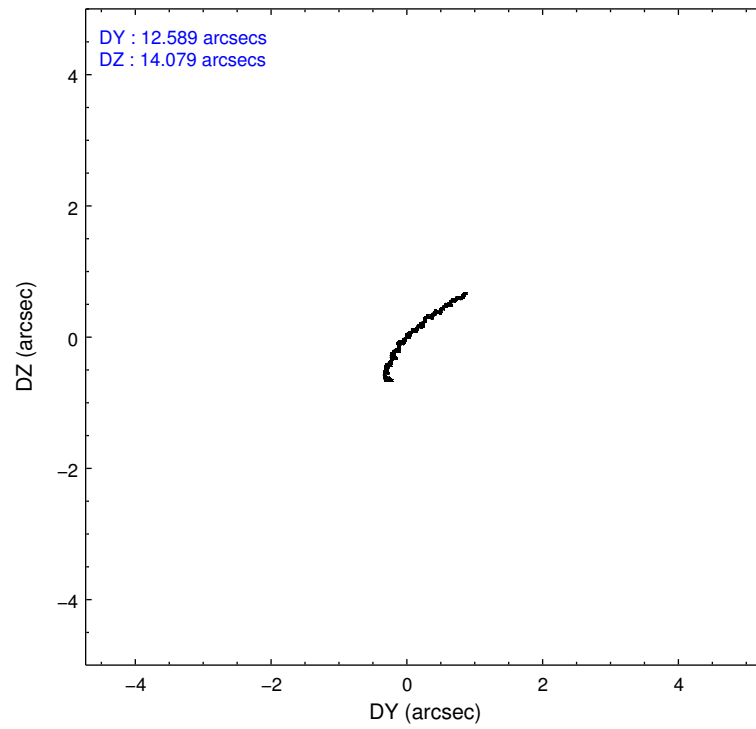
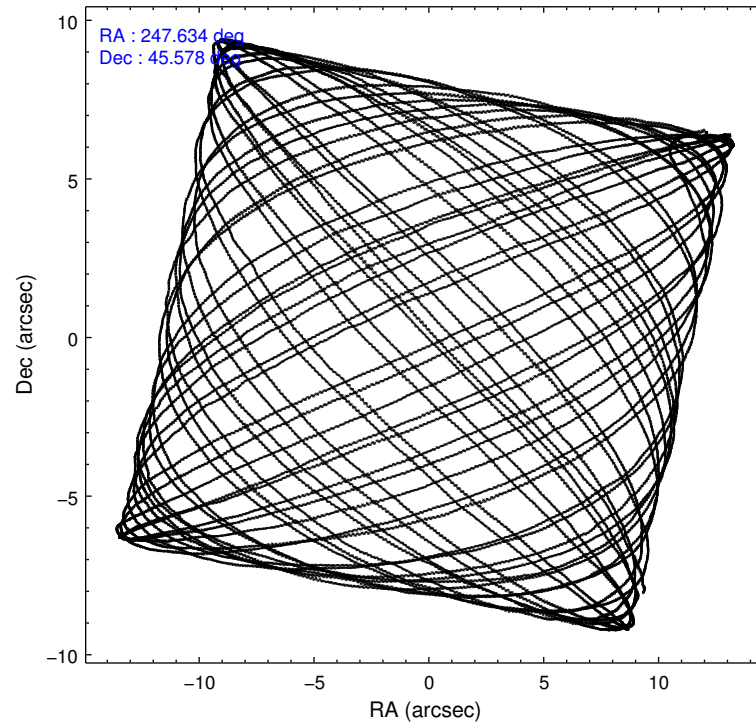
### 2.1.4 Events

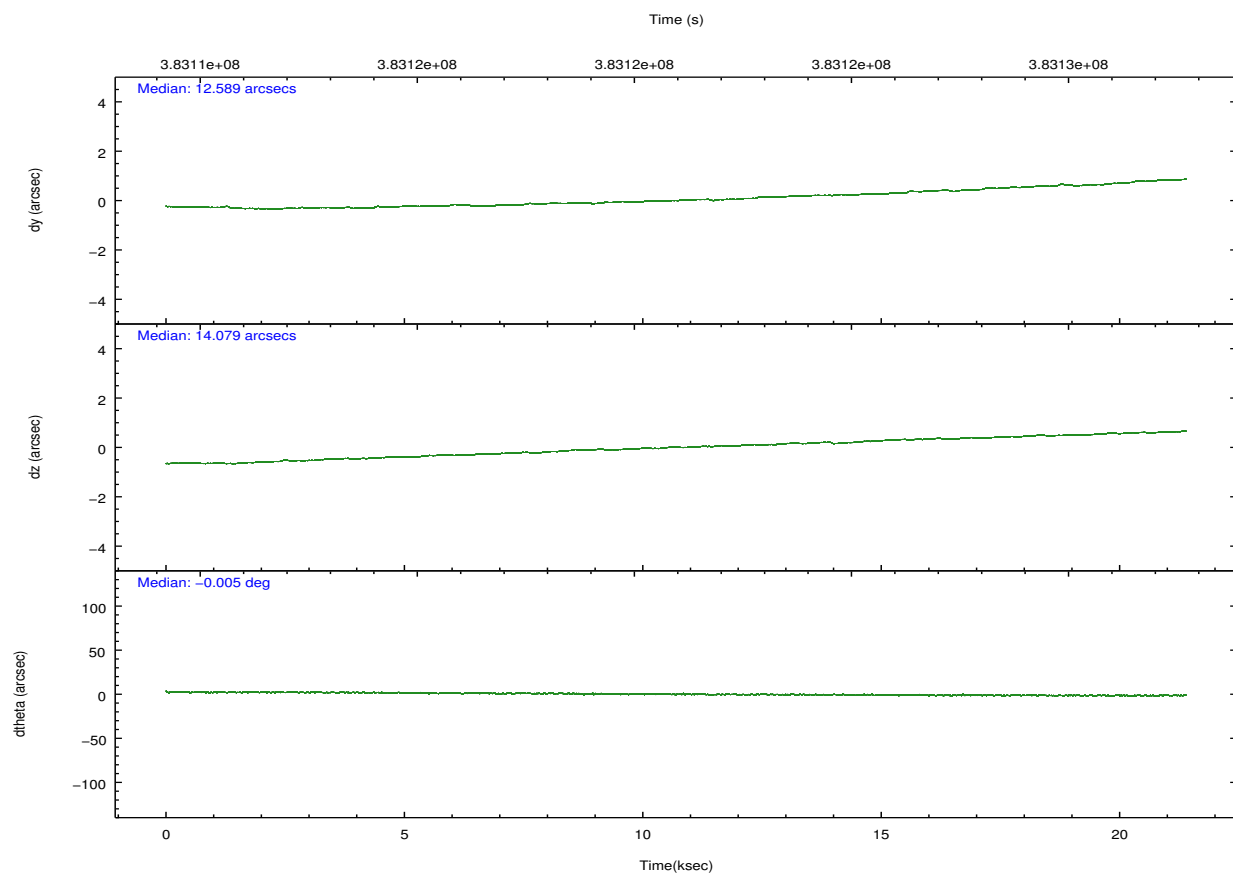
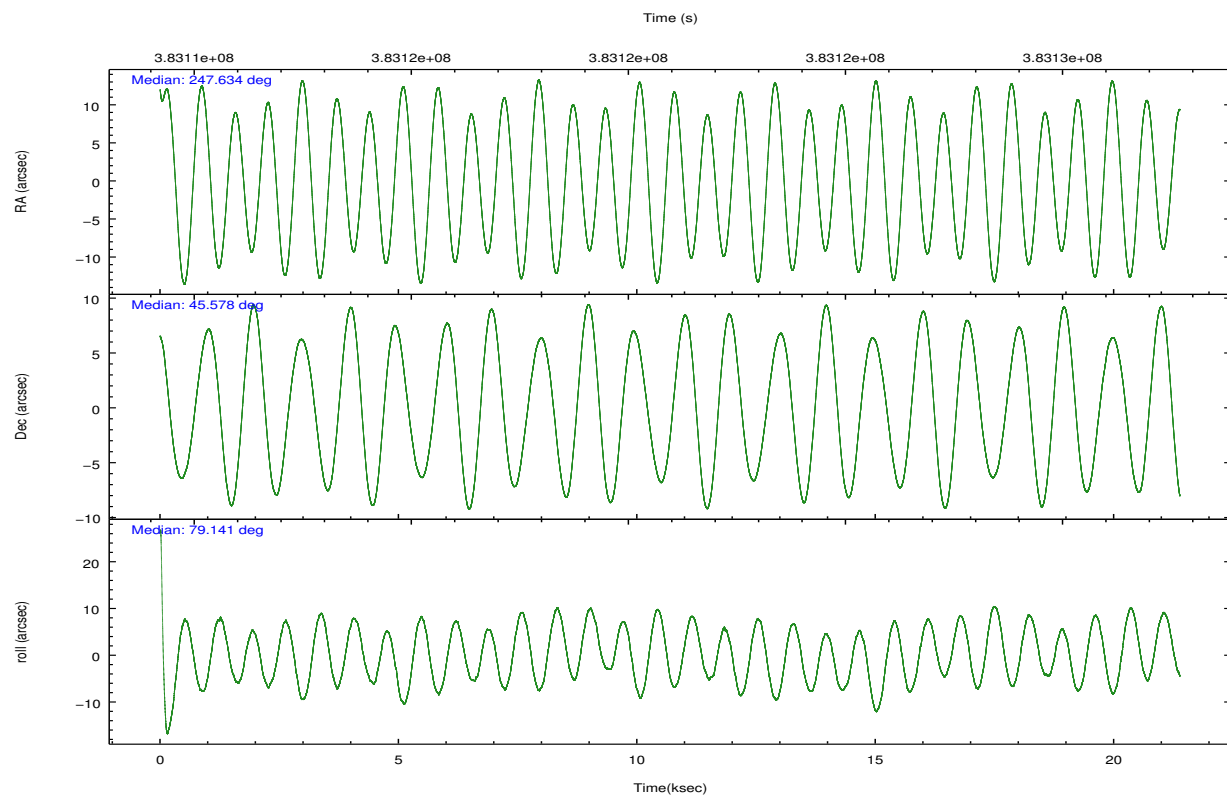
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	177851	160818	248704	173643	202465	218615	grade 0 events	7033	5804	11672	6405	8583	16942
rejected events	159317	144456	125539	155299	110577	162100		3%	3%	4%	3%	4%	7%
rejected %	89%	89%	50%	89%	54%	74%	grade 1 events	107	83	537	99	265	196
								0%	0%	0%	0%	0%	0%
							grade 2 events	4347	3587	36643	4096	19056	13048
								2%	2%	14%	2%	9%	5%
							grade 3 events	1894	1801	4870	1951	8207	6121
								1%	1%	1%	1%	4%	2%
							grade 4 events	1917	1840	4640	1896	8155	5641
								1%	1%	1%	1%	4%	2%
							grade 5 events	6240	7298	19289	7139	21202	10579
								3%	4%	7%	4%	10%	4%
							grade 6 events	3346	3331	65359	3999	47901	14769
								1%	2%	26%	2%	23%	6%
							grade 7 events	152967	137074	105694	148058	89096	151319
								86%	85%	42%	85%	44%	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	247.647523	247.6342273870325	CCD I2 on	O1	Y
[deg] Pointing Dec	45.552712	45.57842392161243	CCD I3 on	O2	Y
[deg] Pointing Roll	78.992251	79.15839750157855	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	383110662.184000	383109553.66041	CCD S5 on	N	N
Observation start date	2010-02-21T03:36:36	2010-02-21T03:19:13	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	383131663.184000	383131879.69905	On-chip summing requested	N	N
Observation end date	2010-02-21T09:26:37	2010-02-21T09:31:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



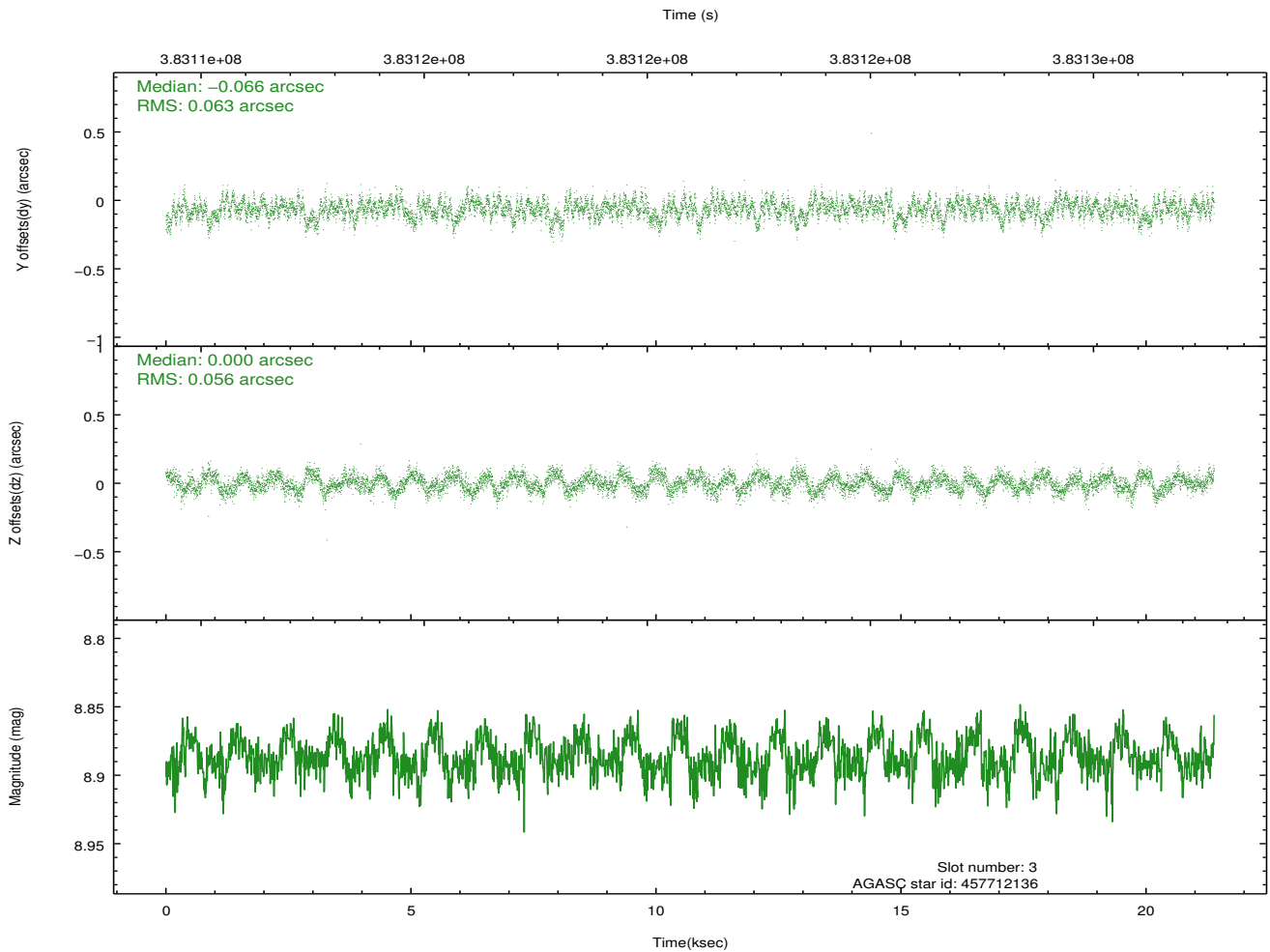
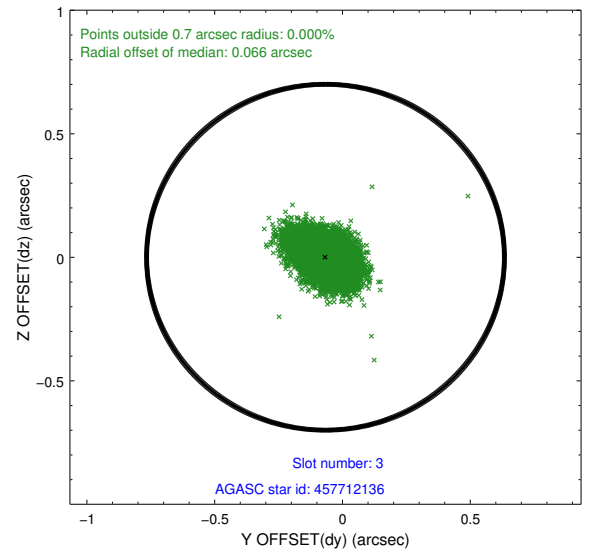
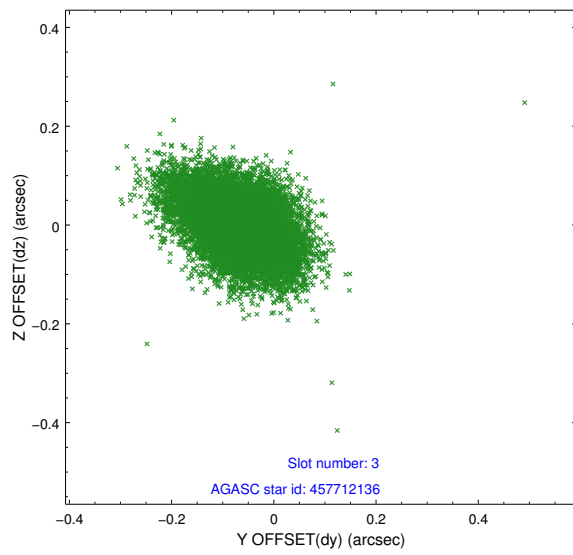


Slot Statistics

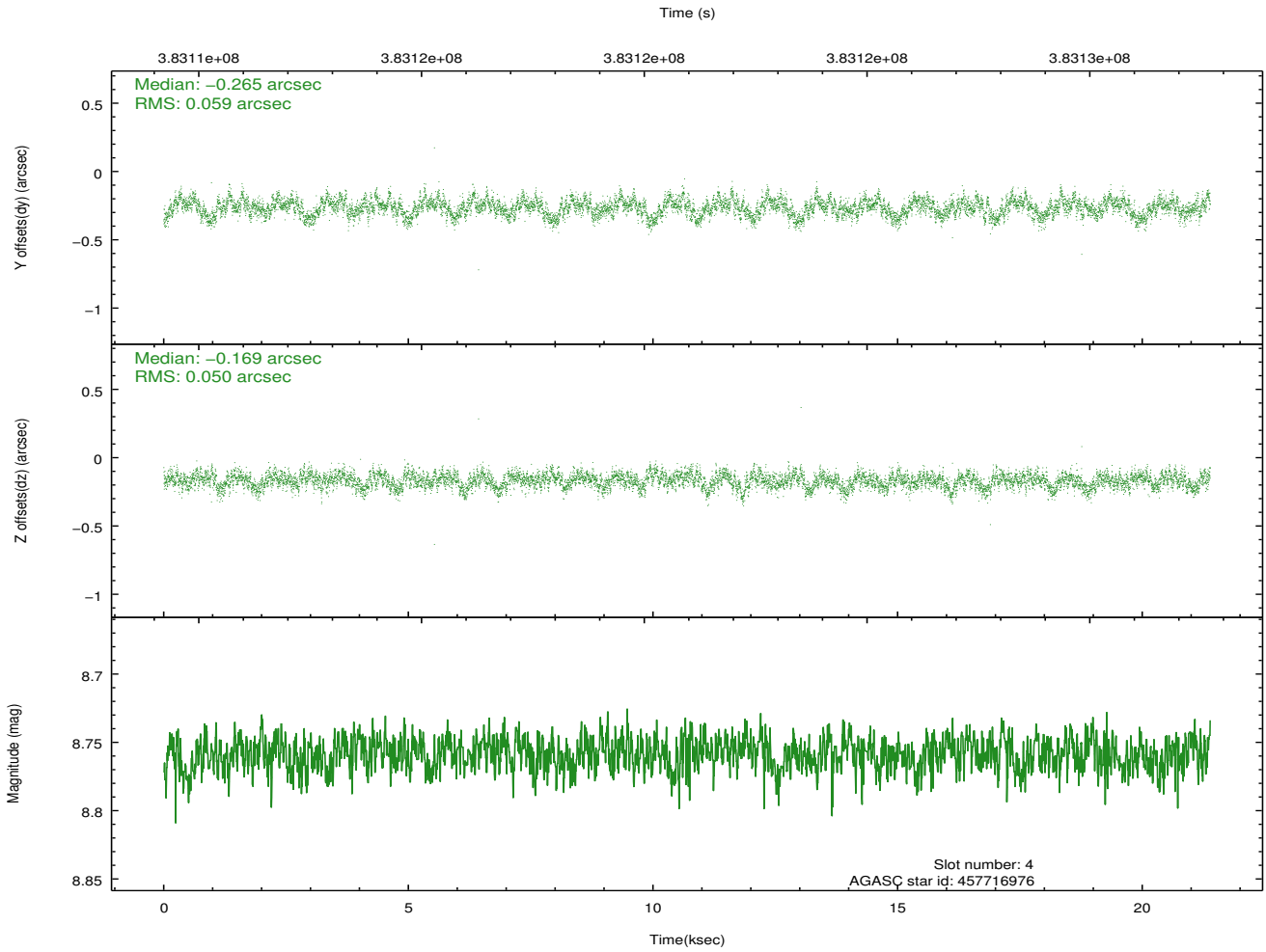
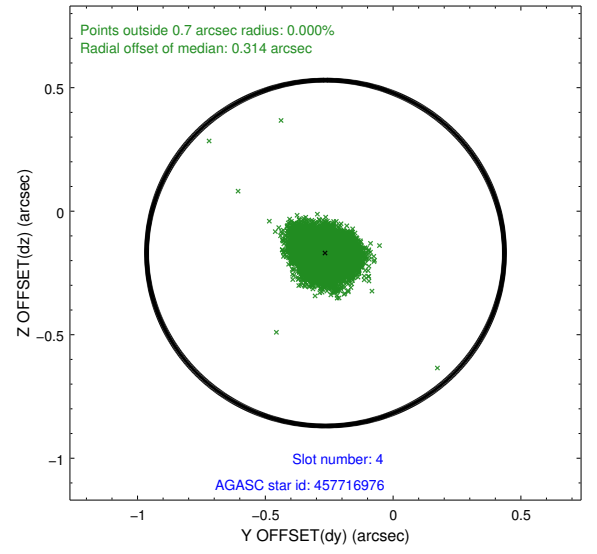
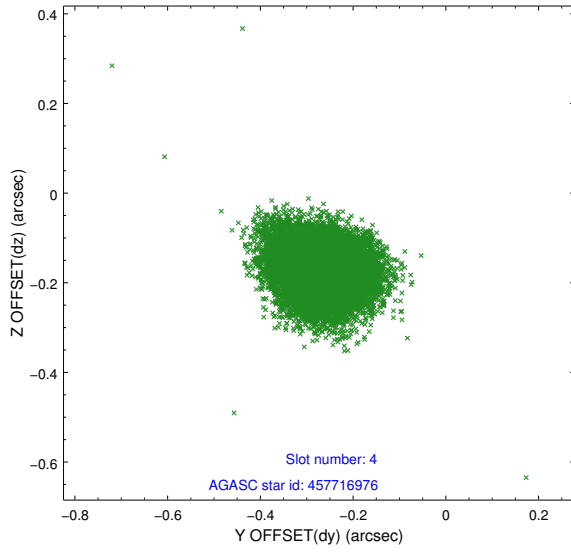
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.95	5217	-0.037	-0.052	0.014	0.021	0.000000	0.000000	-765.61	-1735.48
1	FID	ACIS-S-4	7.04	5217	0.158	0.032	0.016	0.036	0.000000	0.000000	2147.77	172.94
2	FID	ACIS-S-5	7.07	5217	-0.152	0.030	0.013	0.022	0.000000	0.000000	-1818.37	166.76
3	GUIDE	457712136	8.89	10422	-0.066	0.000	0.088	0.148	246.838271	45.189259	-1666.94	1767.90
4	GUIDE	457716976	8.76	10430	-0.265	-0.169	0.082	0.131	246.805338	45.392723	-961.54	1982.32
5	GUIDE	458626168	9.19	10426	-0.339	0.198	0.123	0.201	248.261023	45.127778	-1197.50	-1819.82
6	GUIDE	458627208	9.49	10358	0.758	-0.056	0.221	0.307	247.636895	45.604534	179.09	62.27
7	GUIDE	457715608	9.34	10418	-0.085	0.027	0.111	0.179	246.950816	45.277060	-1303.44	1544.57

## 2.4 Star Slots

### 2.4.1 Slot 3

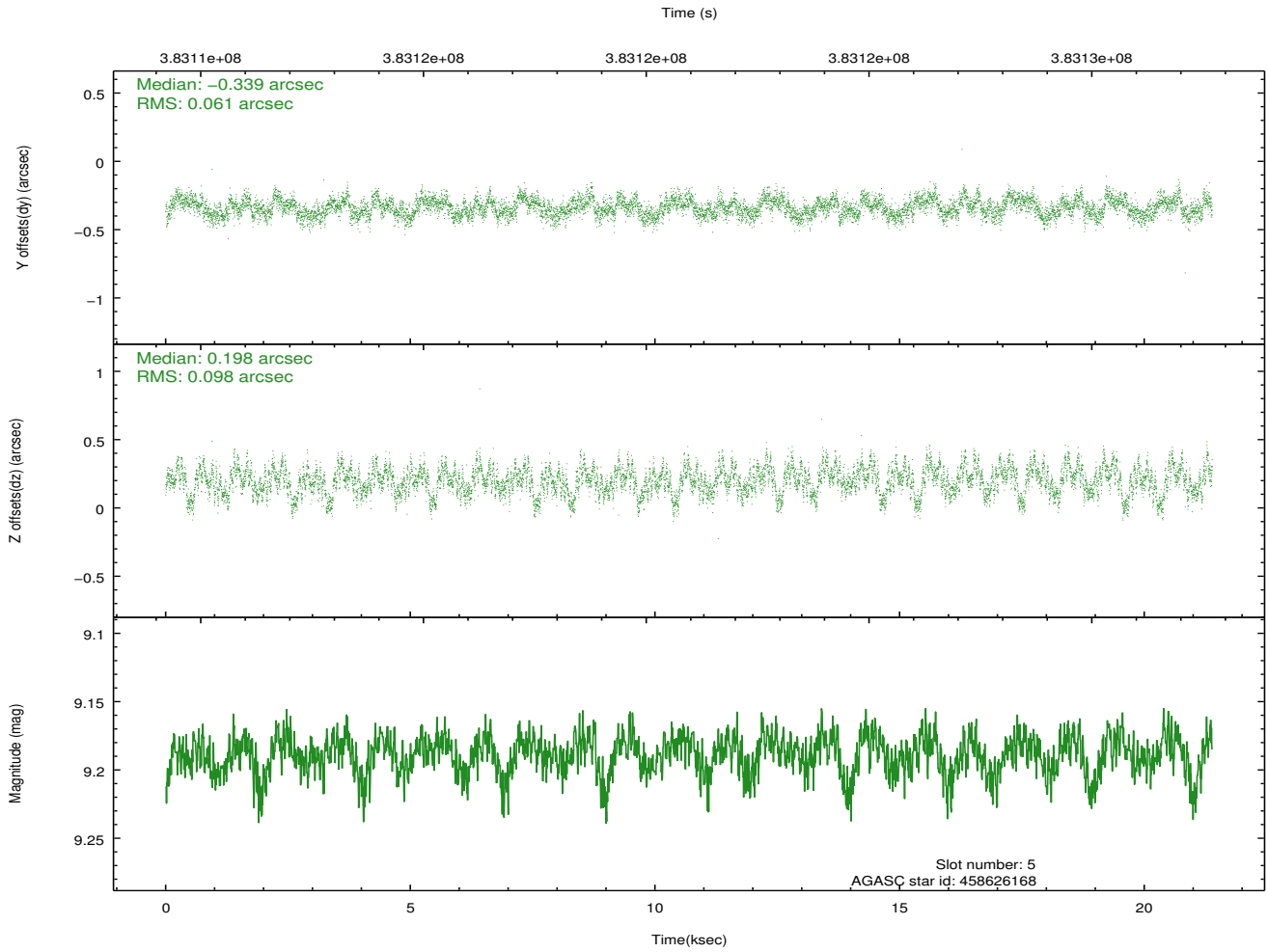
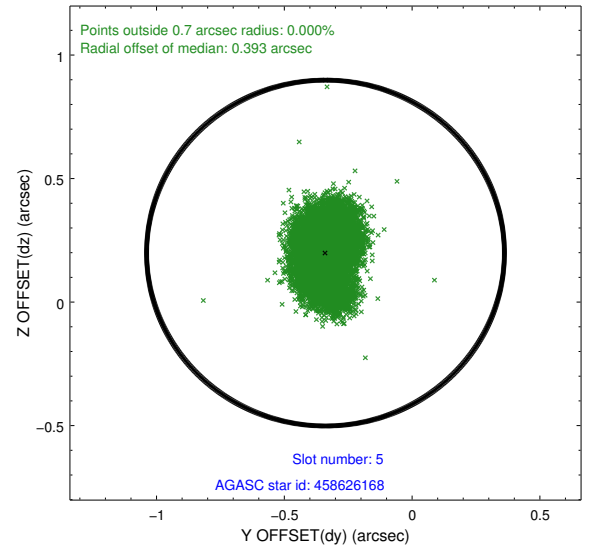
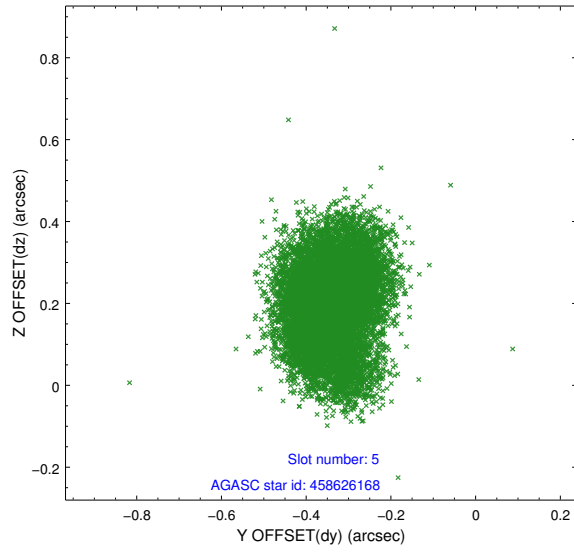


## 2.4.2 Slot 4

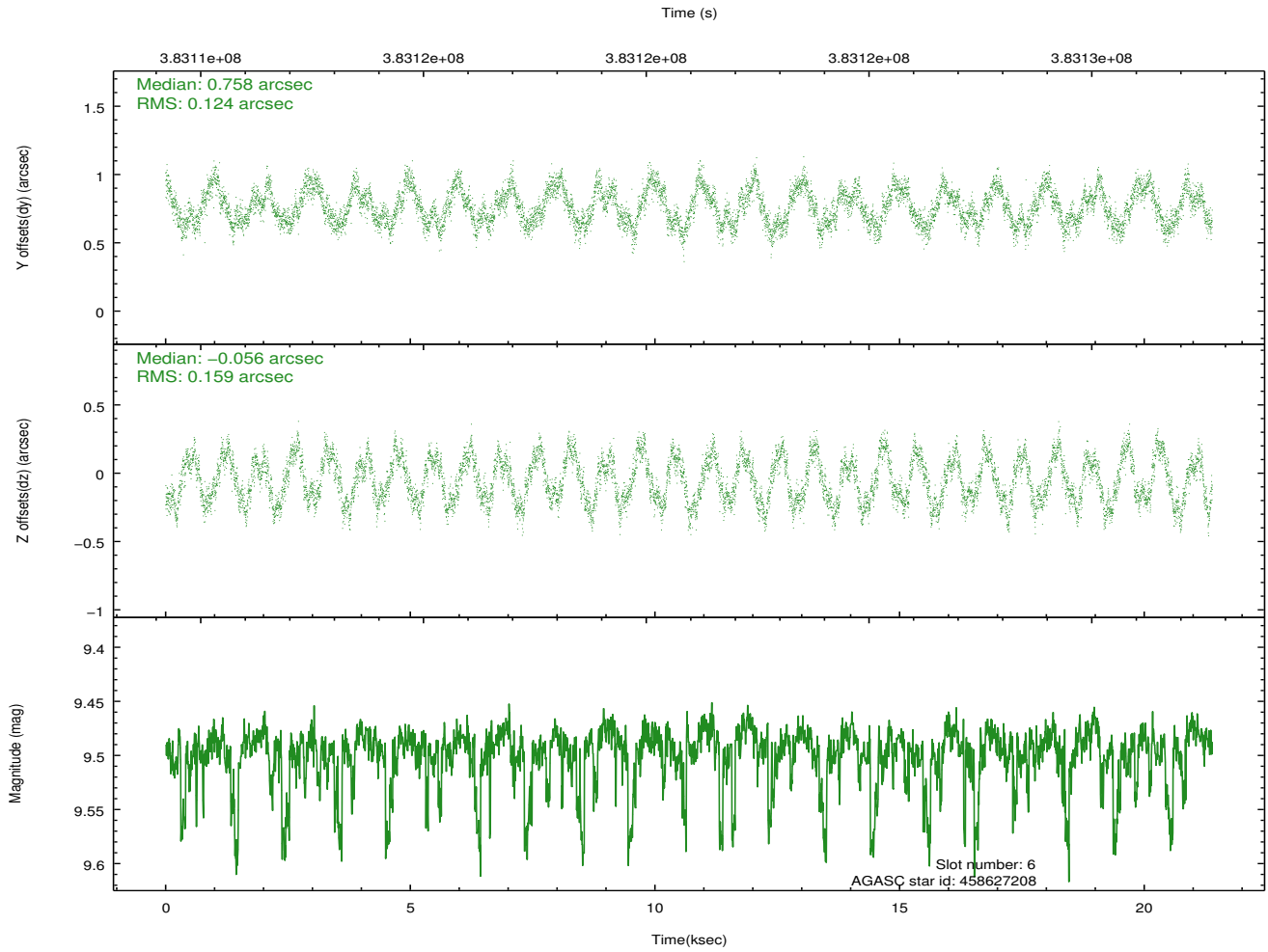
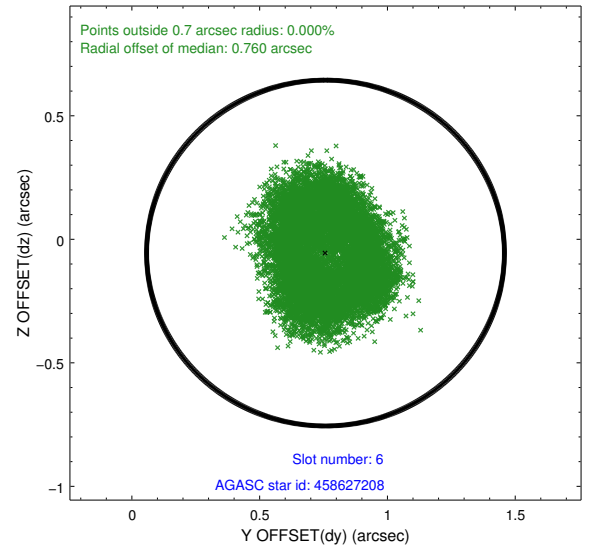
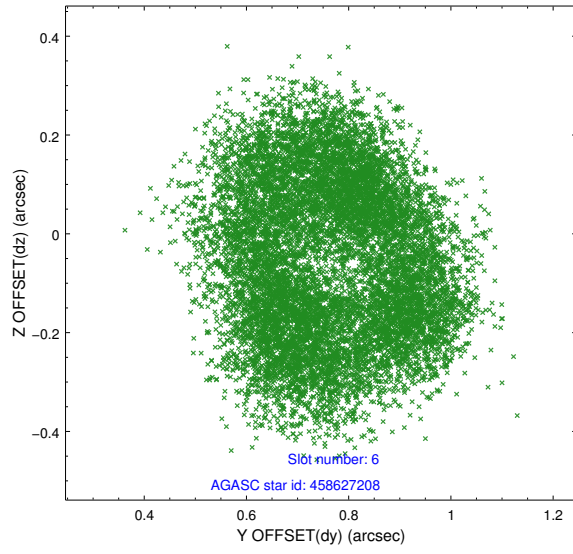




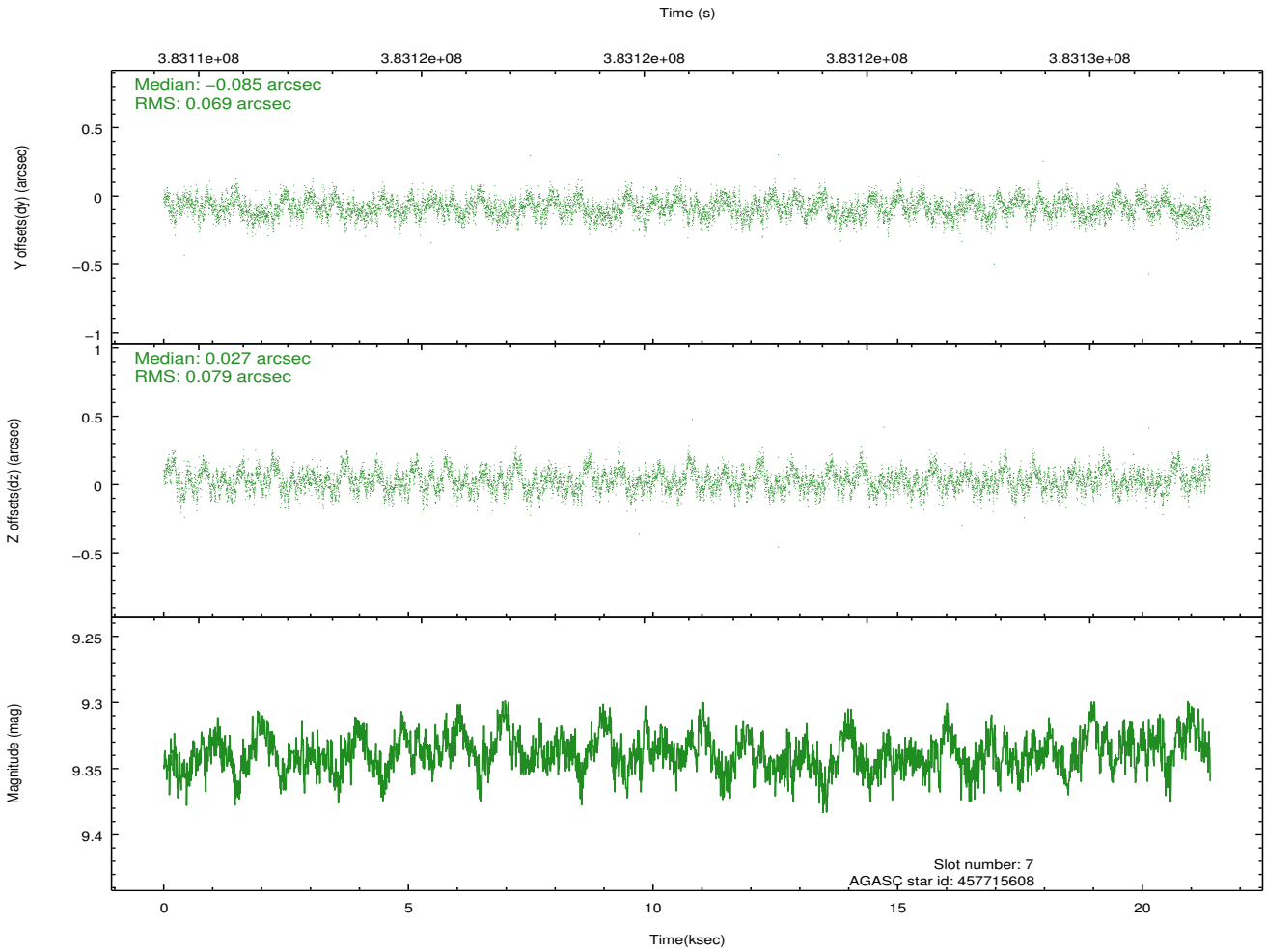
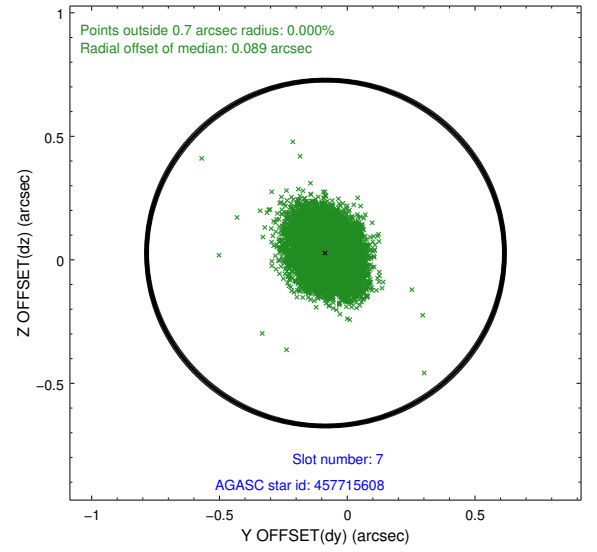
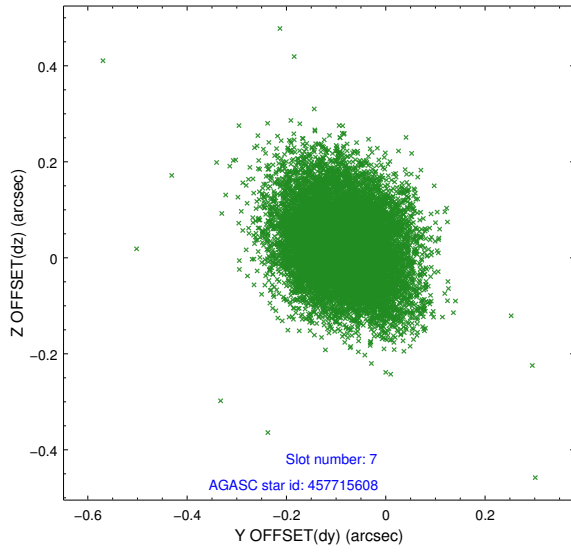
### 2.4.3 Slot 5



## 2.4.4 Slot 6

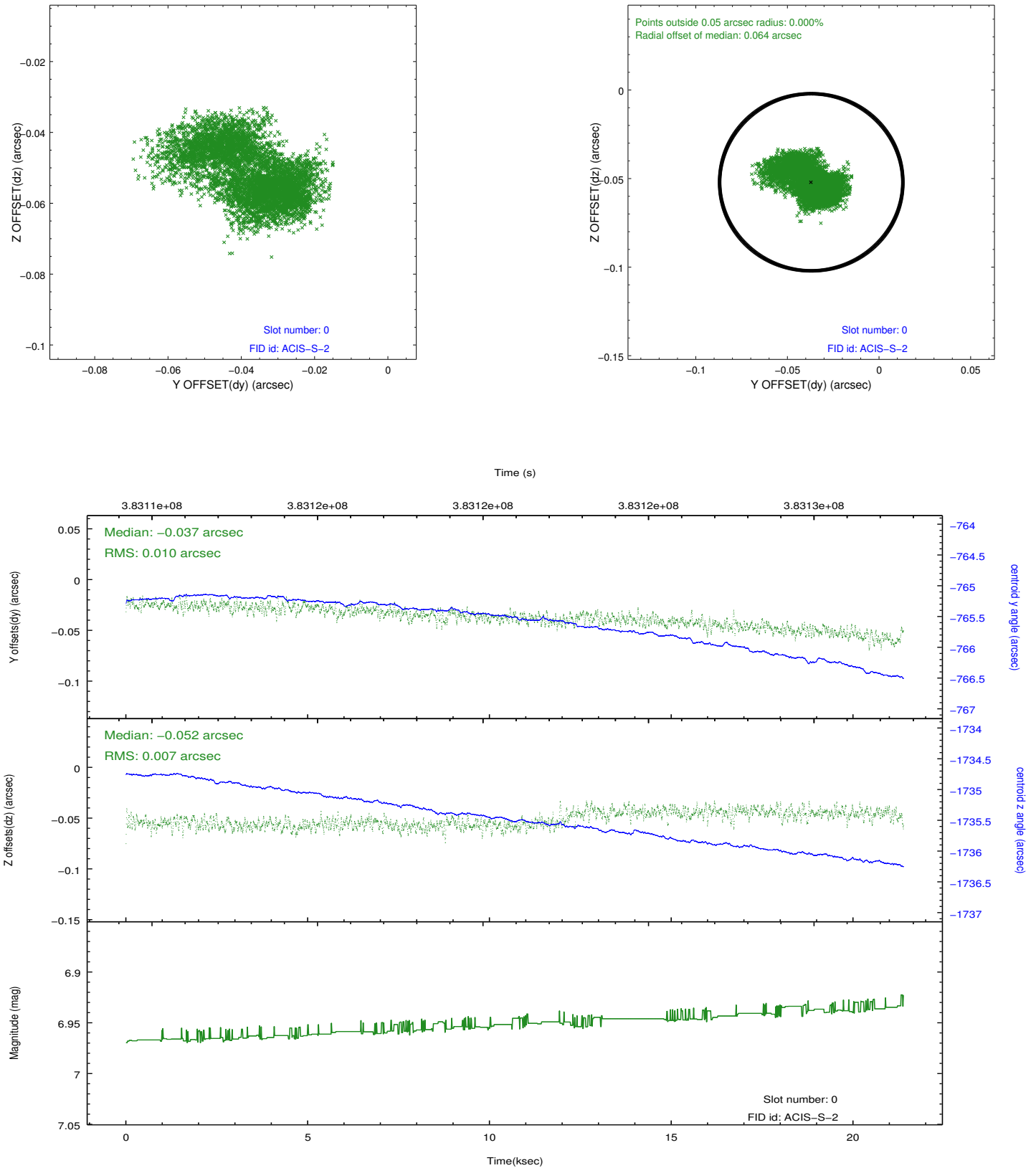


## 2.4.5 Slot 7

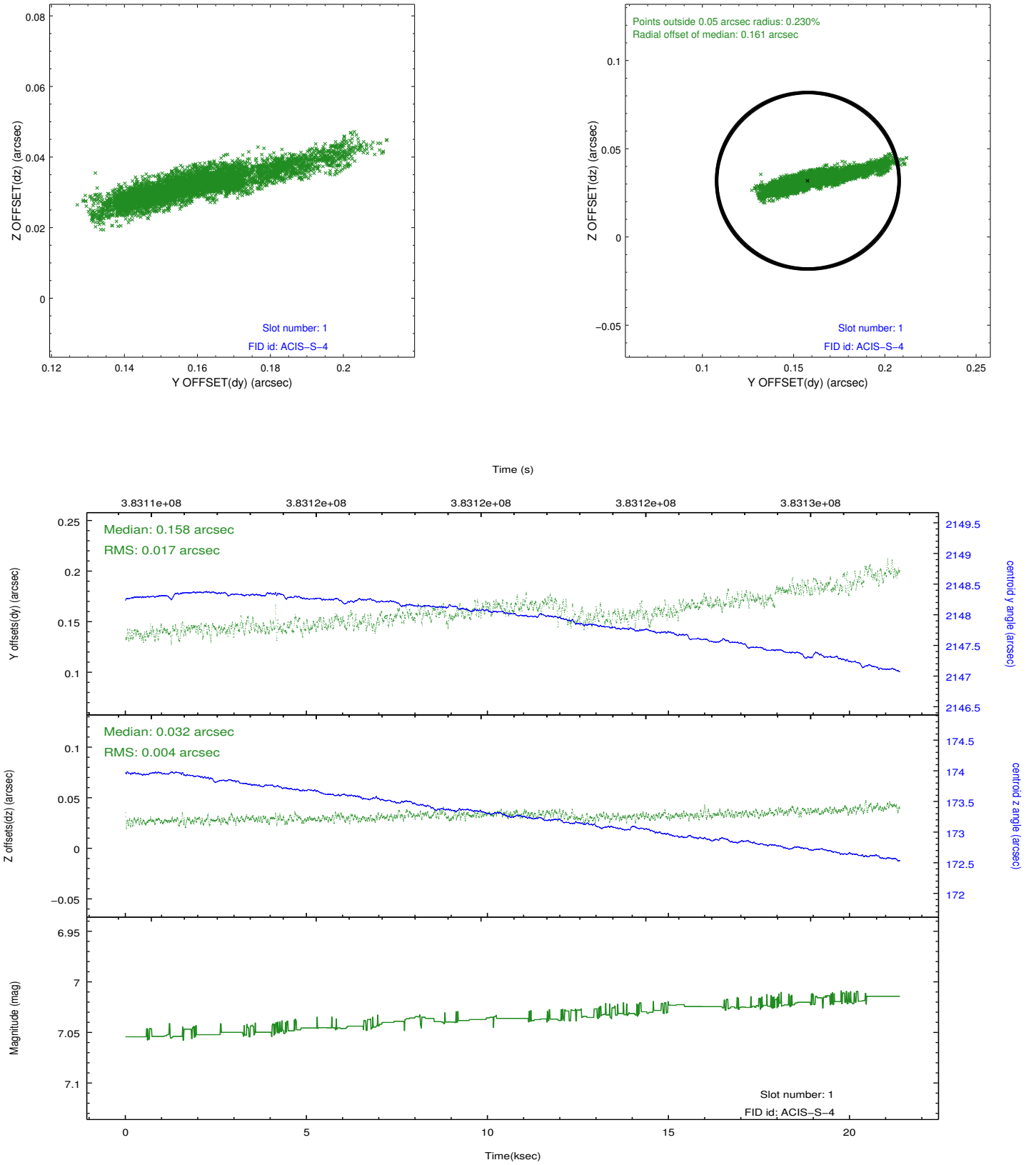


## 2.5 FID Slots

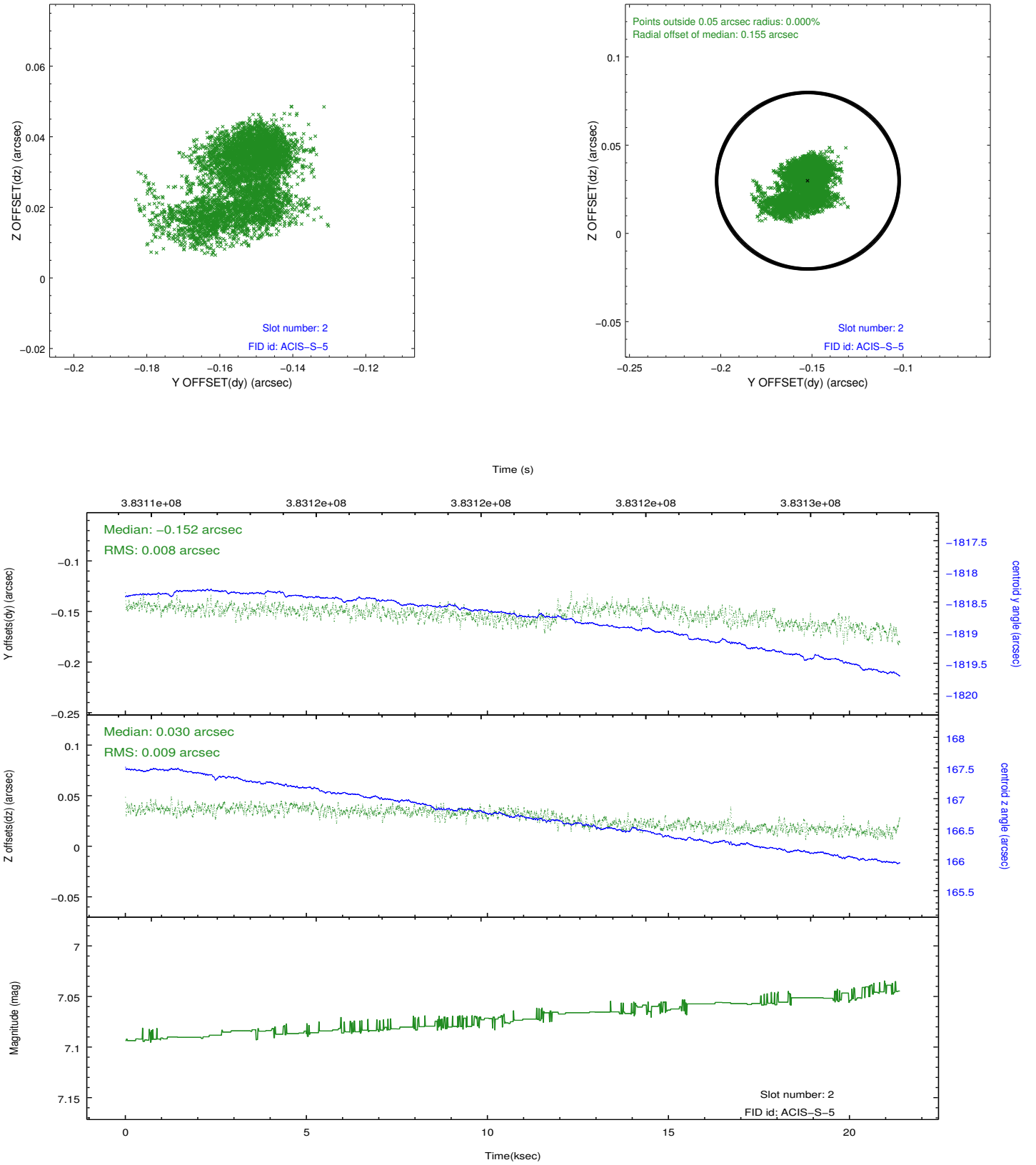
### 2.5.1 Slot 0



## 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)	2012.06.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	21.046399921656

### **A.2 Comments**