

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 12969 - L2 Version 2  
Chandra X-Ray Center

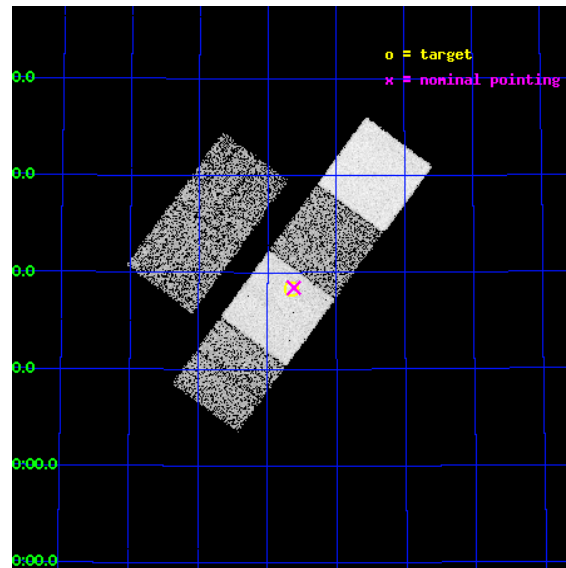
L2 Processing Date : Jul 7 2012

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# 1 Front

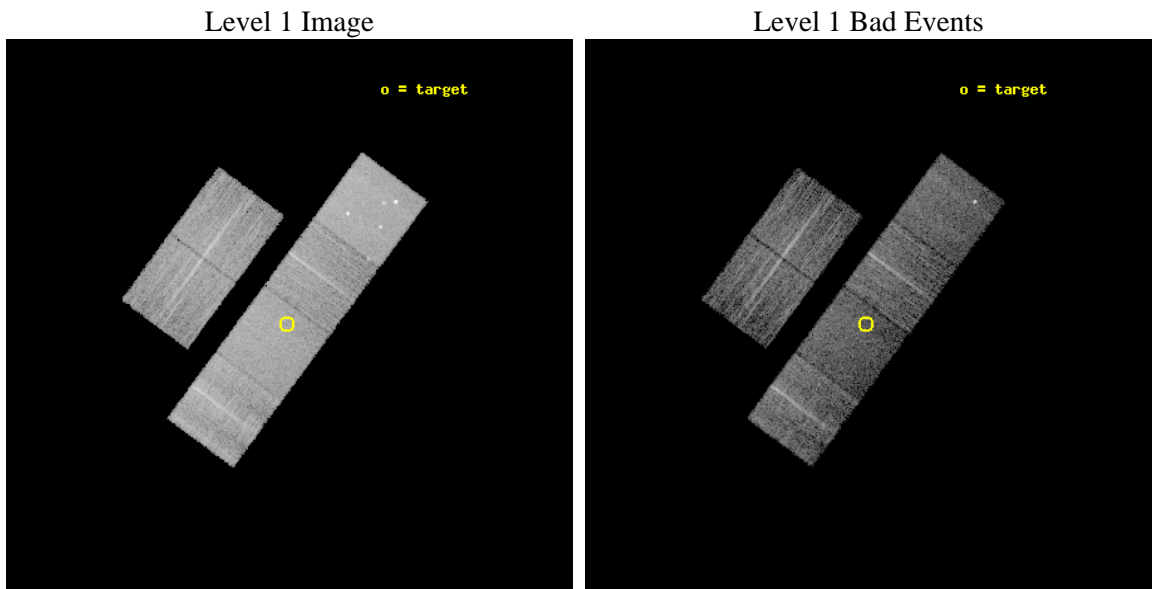
seq_num	600937	Sequence number
obs_id	12969	Observation id
title	X-rays from Isolated Elliptical Galaxies	Proposal title
observer	Dr. DAVID BUOTE	Principal investigator
object	PGC 20238	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	107.164167	Observer's specified target RA [deg]
dec_targ	61.30525	Observer's specified target Dec [deg]
ra_nom	107.15461962473	Nominal RA [deg]
dec_nom	61.307080610367	Nominal Dec [deg]
roll_nom	126.44307804105	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7548.578365922	Sum of GTIs [s]
livetime	7452.9937214445	Livetime [s]
ontime2	7545.3783955574	Sum of GTIs [s]
ontime3	7548.4552459121	Sum of GTIs [s]
ontime5	7548.5373259187	Sum of GTIs [s]
ontime6	7548.4962859154	Sum of GTIs [s]
ontime7	7548.578365922	Sum of GTIs [s]
ontime8	7548.4142059088	Sum of GTIs [s]
l2events	87372	Number of level 2 events



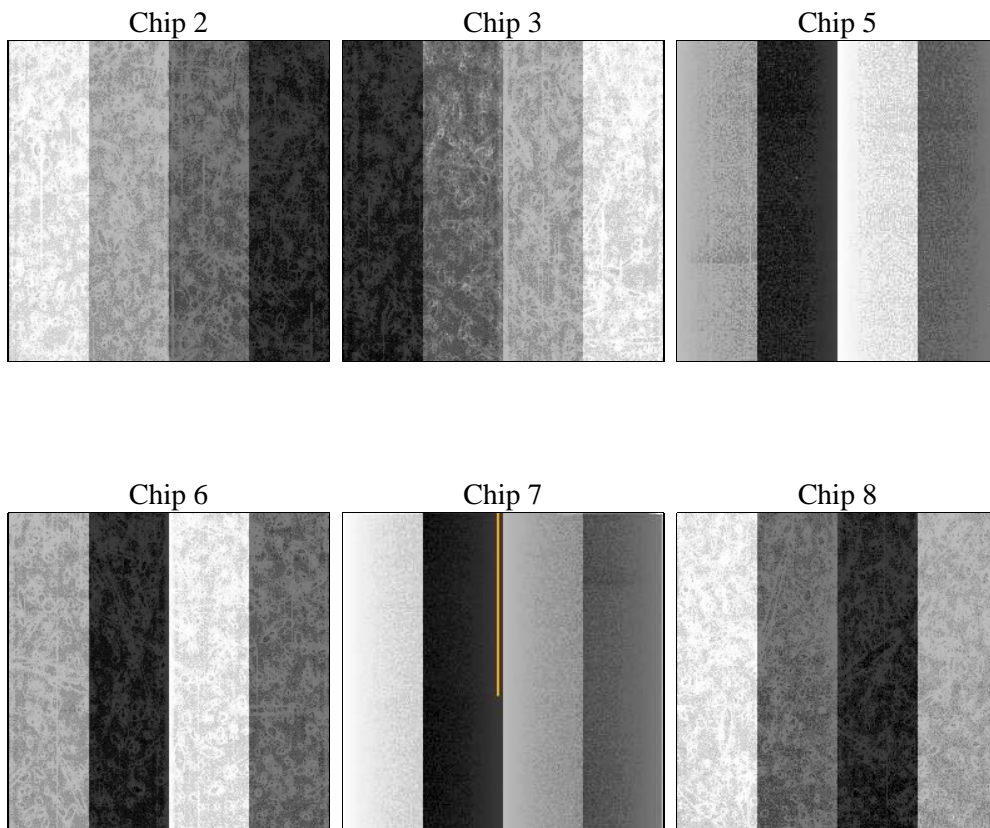
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7548.578365922	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	7545.3783955574	Sum of GTIs [s]
date	2012-07-07T16:50:20	Date and time of file creation	ontime3	7548.4552459121	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	7548.5373259187	Sum of GTIs [s]
			ontime6	7548.4962859154	Sum of GTIs [s]
			ontime7	7548.578365922	Sum of GTIs [s]
			ontime8	7548.4142059088	Sum of GTIs [s]
			l1events	382509	Number of level 1 events

### 2.1.4 Events

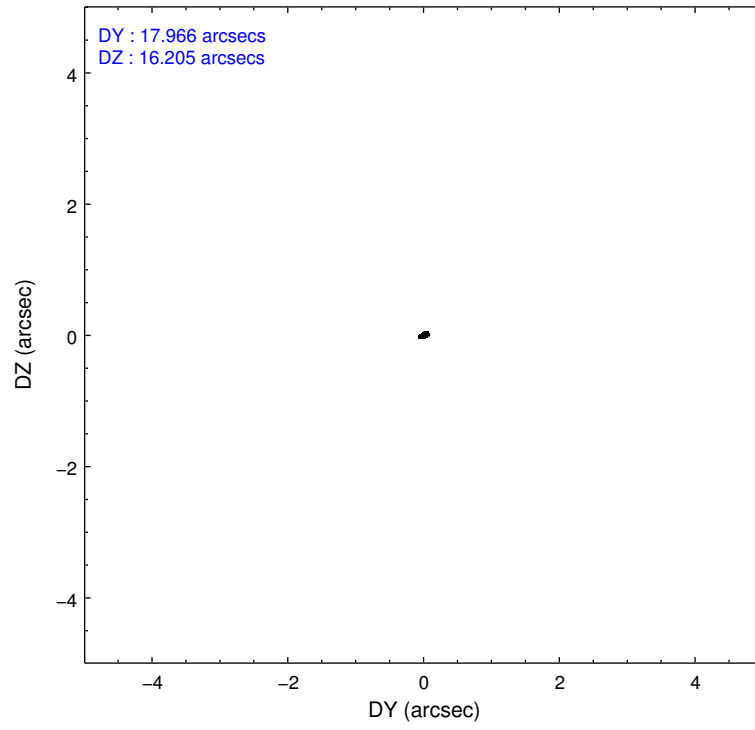
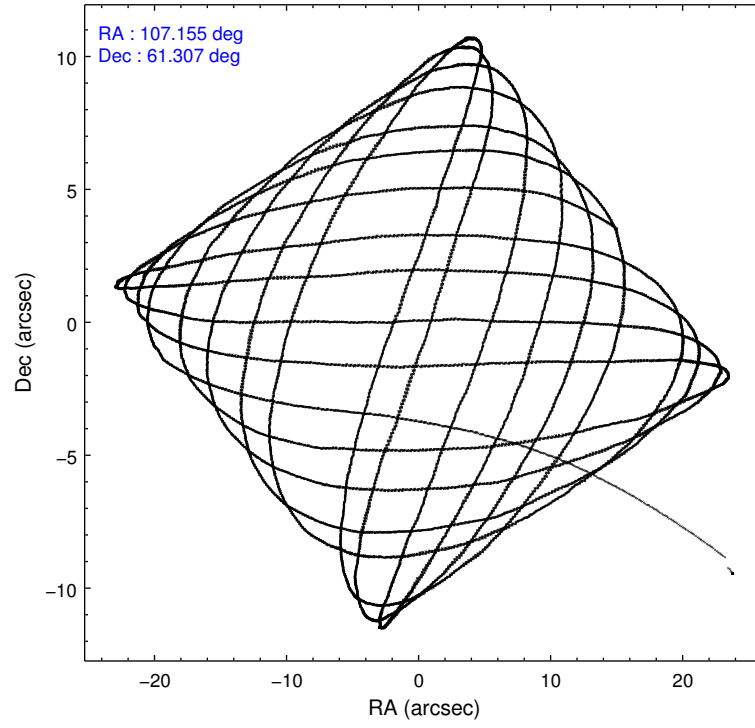
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	55191	52323	84366	54136	66173	70320	grade 0 events	2055	1815	5125	2054	2682	5328
rejected events	49388	46867	42200	48068	36391	51891		3%	3%	6%	3%	4%	7%
rejected %	89%	89%	50%	88%	54%	73%	grade 1 events	31	31	173	25	79	59
								0%	0%	0%	0%	0%	0%
							grade 2 events	1411	1257	12698	1429	6179	4350
								2%	2%	15%	2%	9%	6%
							grade 3 events	609	641	1598	654	2668	1941
								1%	1%	1%	1%	4%	2%
							grade 4 events	632	608	1442	617	2524	1779
								1%	1%	1%	1%	3%	2%
							grade 5 events	2238	2556	6324	2514	6921	3408
								4%	4%	7%	4%	10%	4%
							grade 6 events	1098	1136	21358	1321	15753	5041
								1%	2%	25%	2%	23%	7%
							grade 7 events	47117	44279	35648	45522	29367	48414
								85%	84%	42%	84%	44%	68%

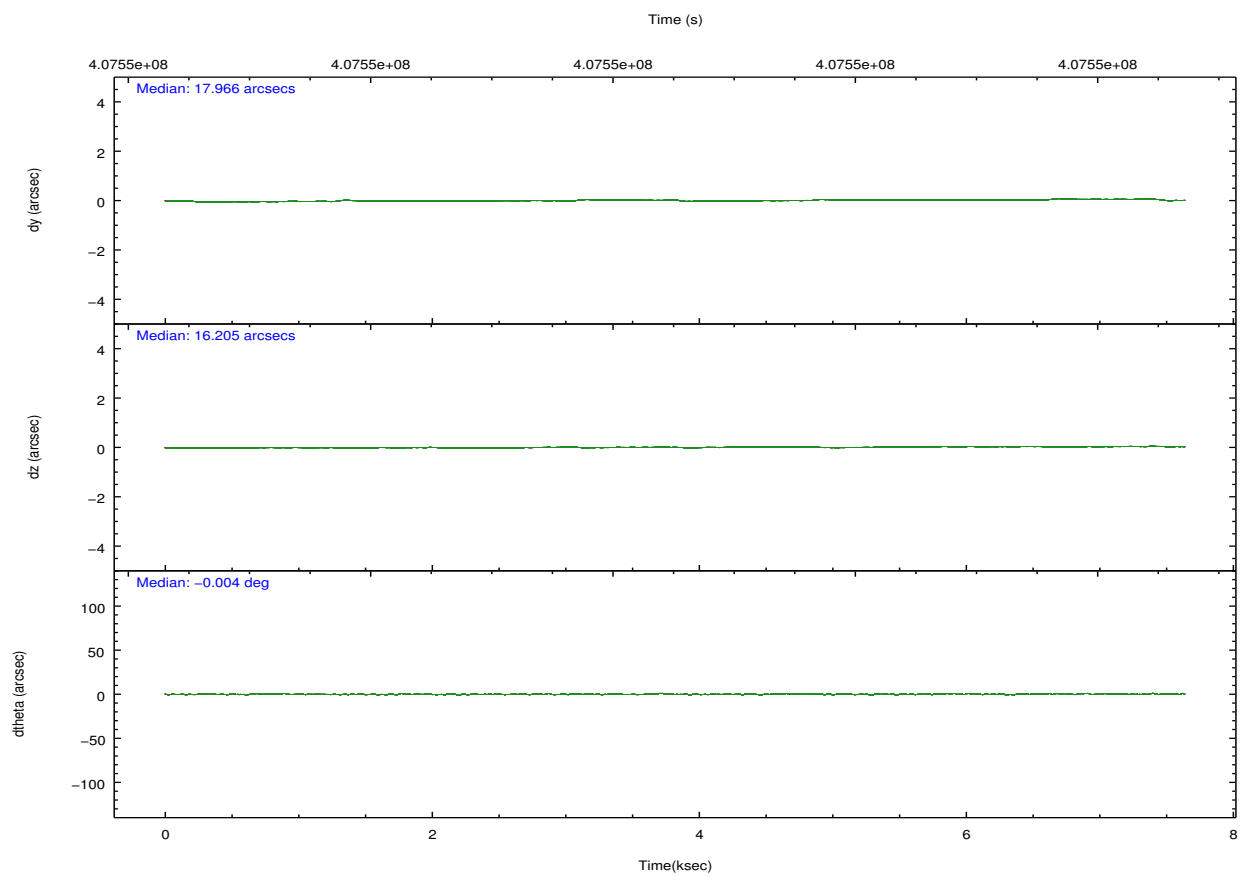
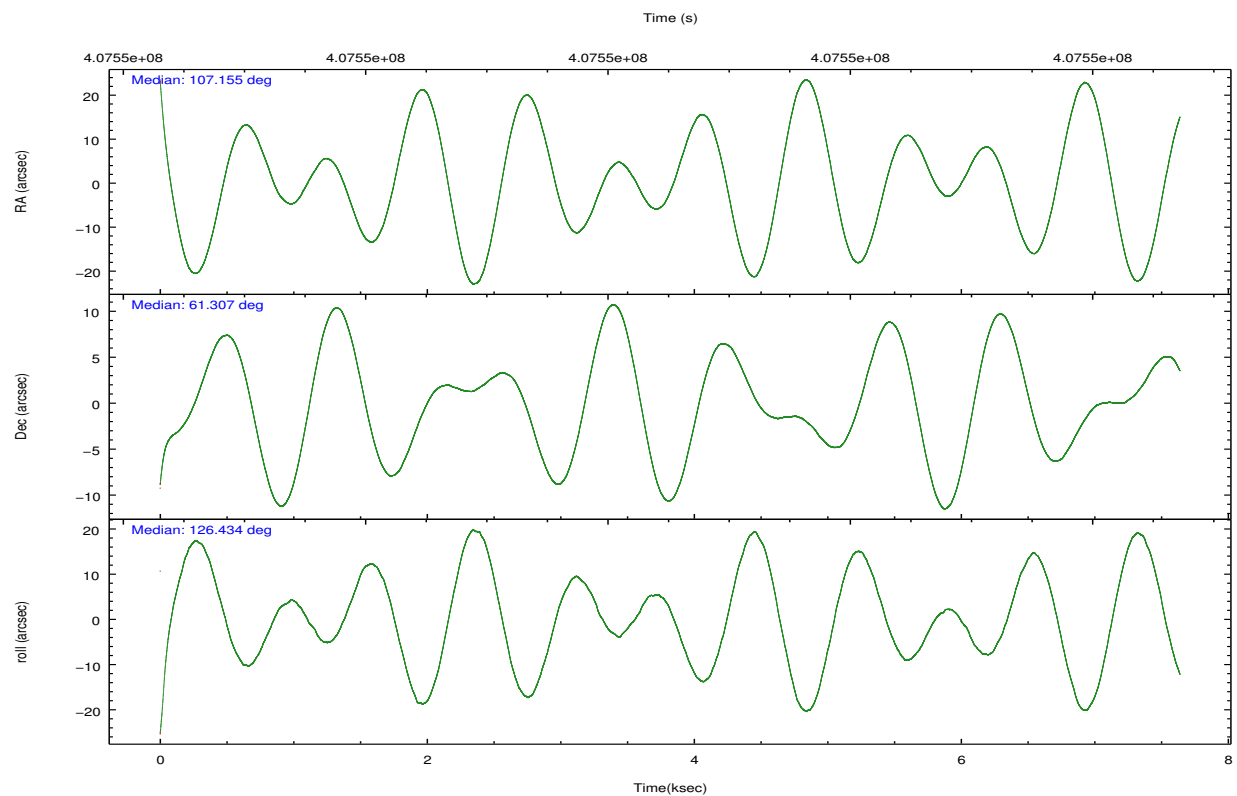


## 2.2 Compared Parameters

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	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	107.207287	107.1546196247277	CCD I2 on	O2	Y
[deg] Pointing Dec	61.296473	61.30708061036704	CCD I3 on	Y	Y
[deg] Pointing Roll	126.240263	126.4430780410528	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	O1	Y
[s] Observation start time (MET)	407546826.184000	407545040.35919	CCD S5 on	N	N
Observation start date	2010-11-30T23:26:00	2010-11-30T22:57:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	407554326.184000	407554795.79719	On-chip summing requested	N	N
Observation end date	2010-12-01T01:31:00	2010-12-01T01:39:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



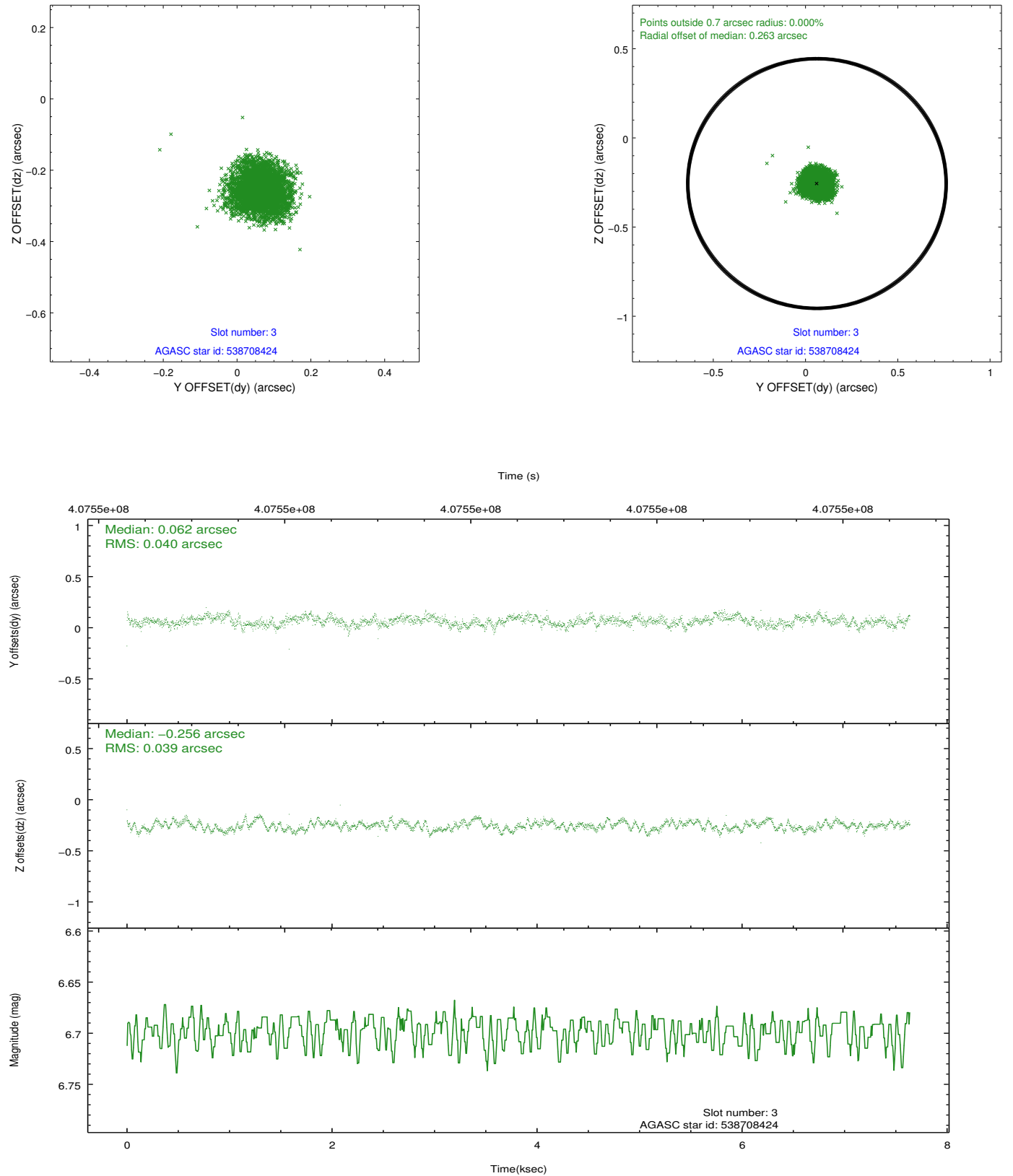


### Slot Statistics

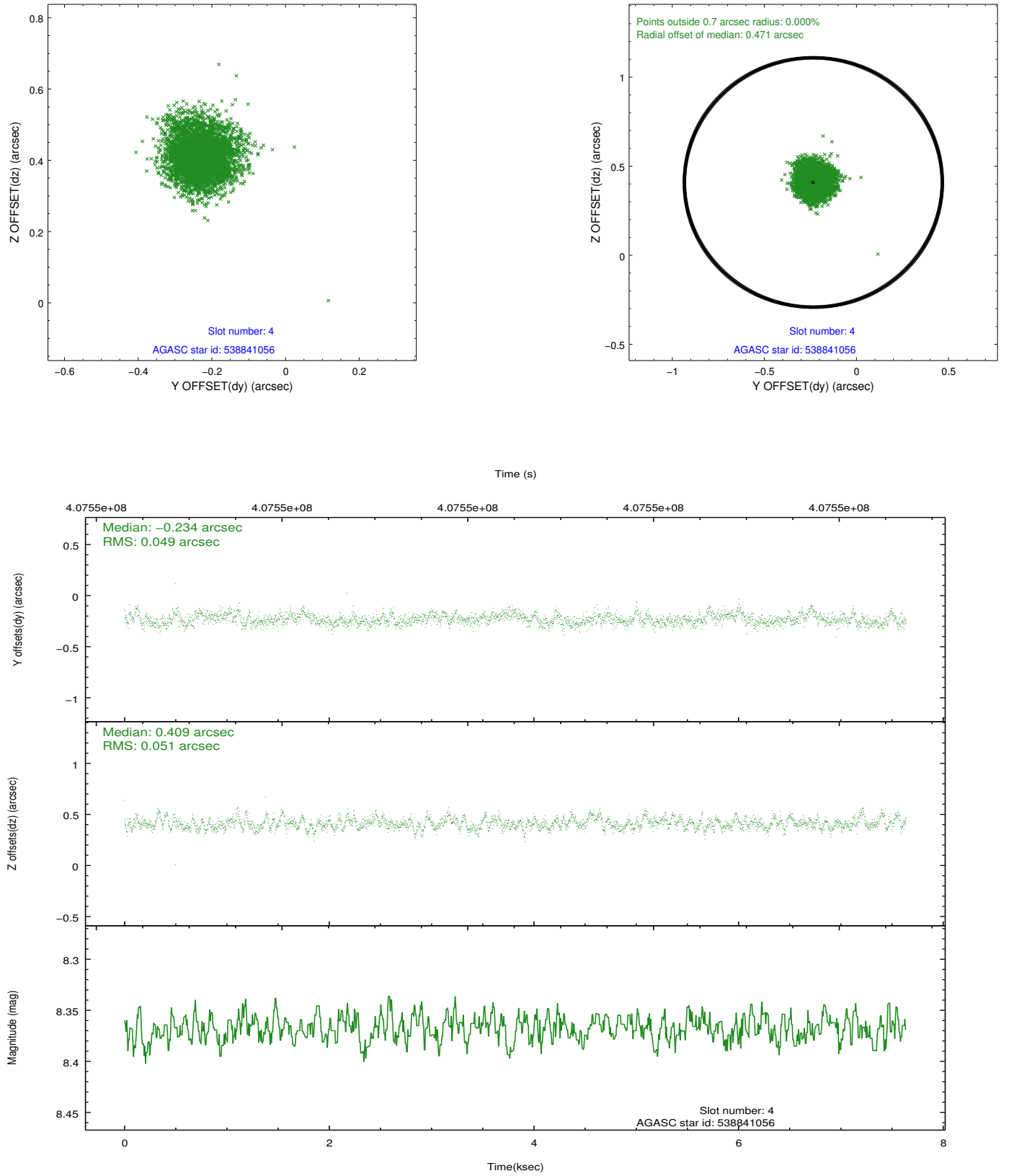
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	1864	-0.074	-0.011	0.006	0.010	0.000000	0.000000	-771.09	-1737.63
1	FID	ACIS-S-4	7.02	1864	0.208	0.039	0.006	0.011	0.000000	0.000000	2142.12	170.13
2	FID	ACIS-S-5	7.05	1863	-0.166	-0.019	0.006	0.011	0.000000	0.000000	-1823.08	164.59
3	GUIDE	538708424	6.70	3726	0.062	-0.256	0.059	0.094	107.087369	61.242151	-34.94	282.83
4	GUIDE	538841056	8.37	3725	-0.234	0.409	0.075	0.123	107.705858	61.857463	1131.02	-1878.09
5	GUIDE	538842512	8.87	3726	0.247	0.244	0.083	0.134	108.415018	61.580163	-383.18	-2283.99
6	GUIDE	538710600	8.77	3725	-0.068	-0.138	0.083	0.127	105.525915	61.316288	1804.51	2278.15
7	GUIDE	538713176	8.09	3726	-0.009	-0.262	0.062	0.099	105.713706	61.307742	1582.58	2041.17

## 2.4 Star Slots

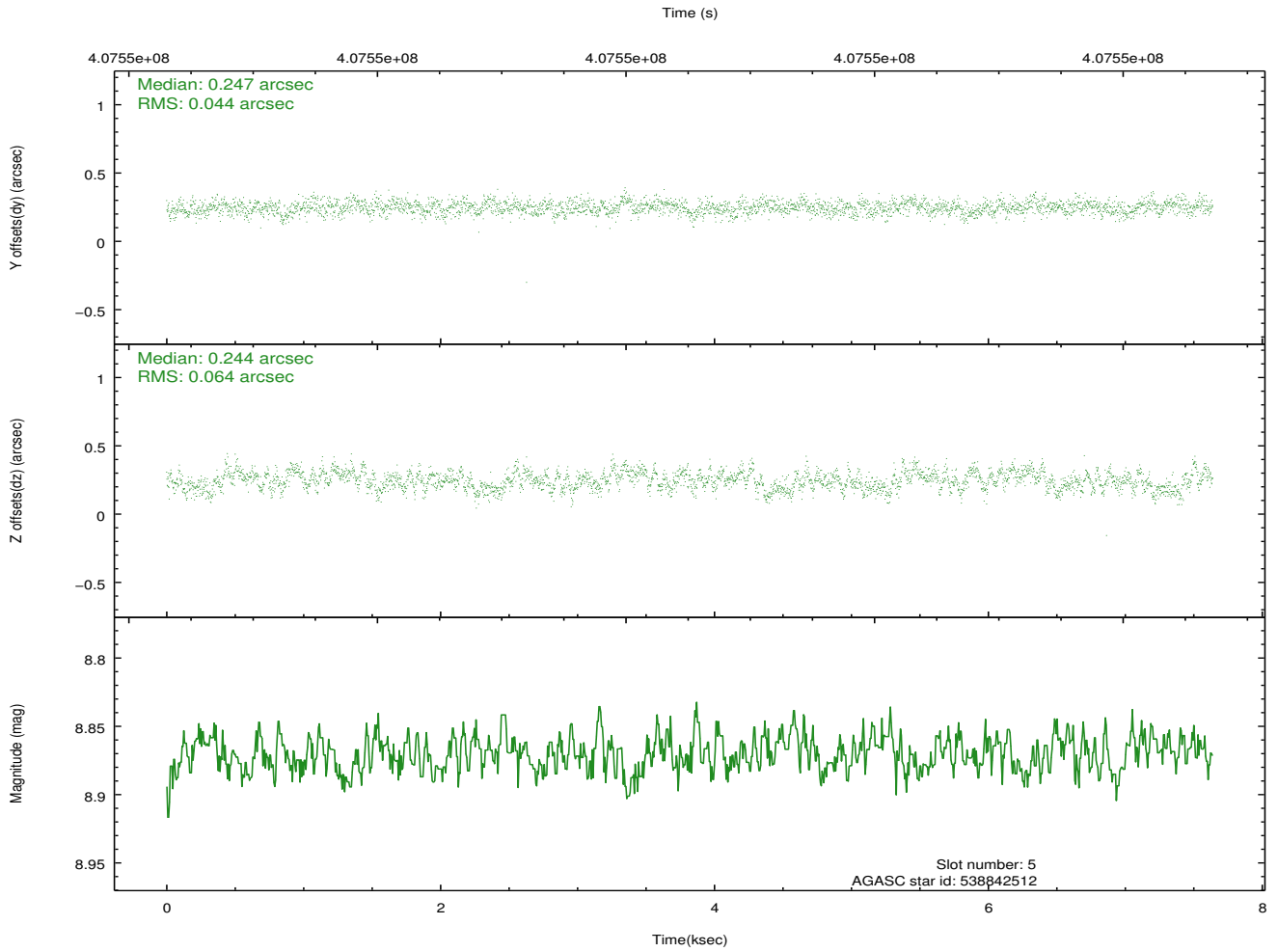
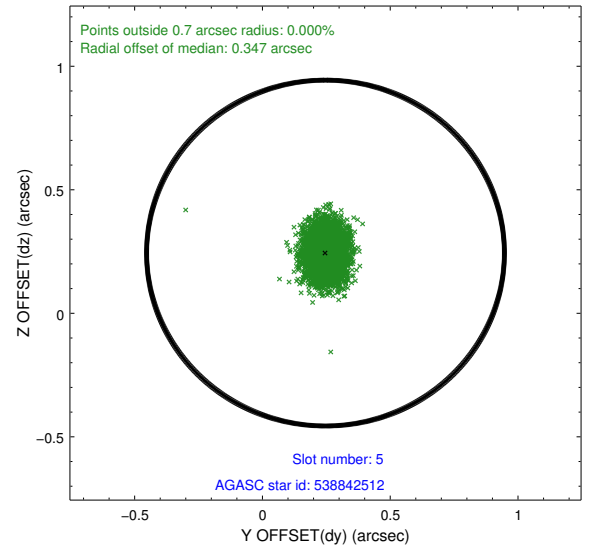
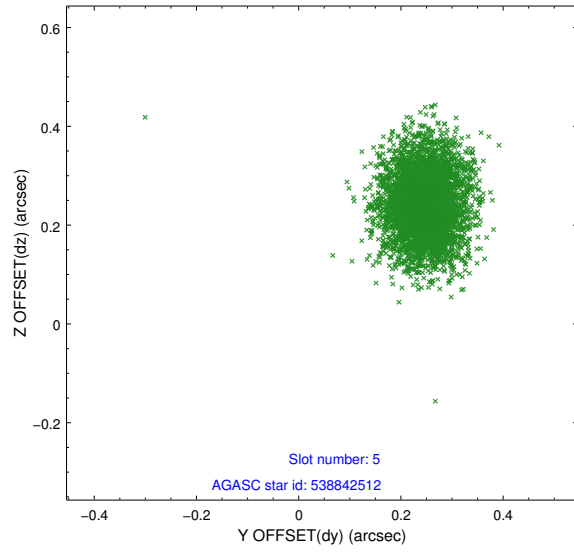
### 2.4.1 Slot 3



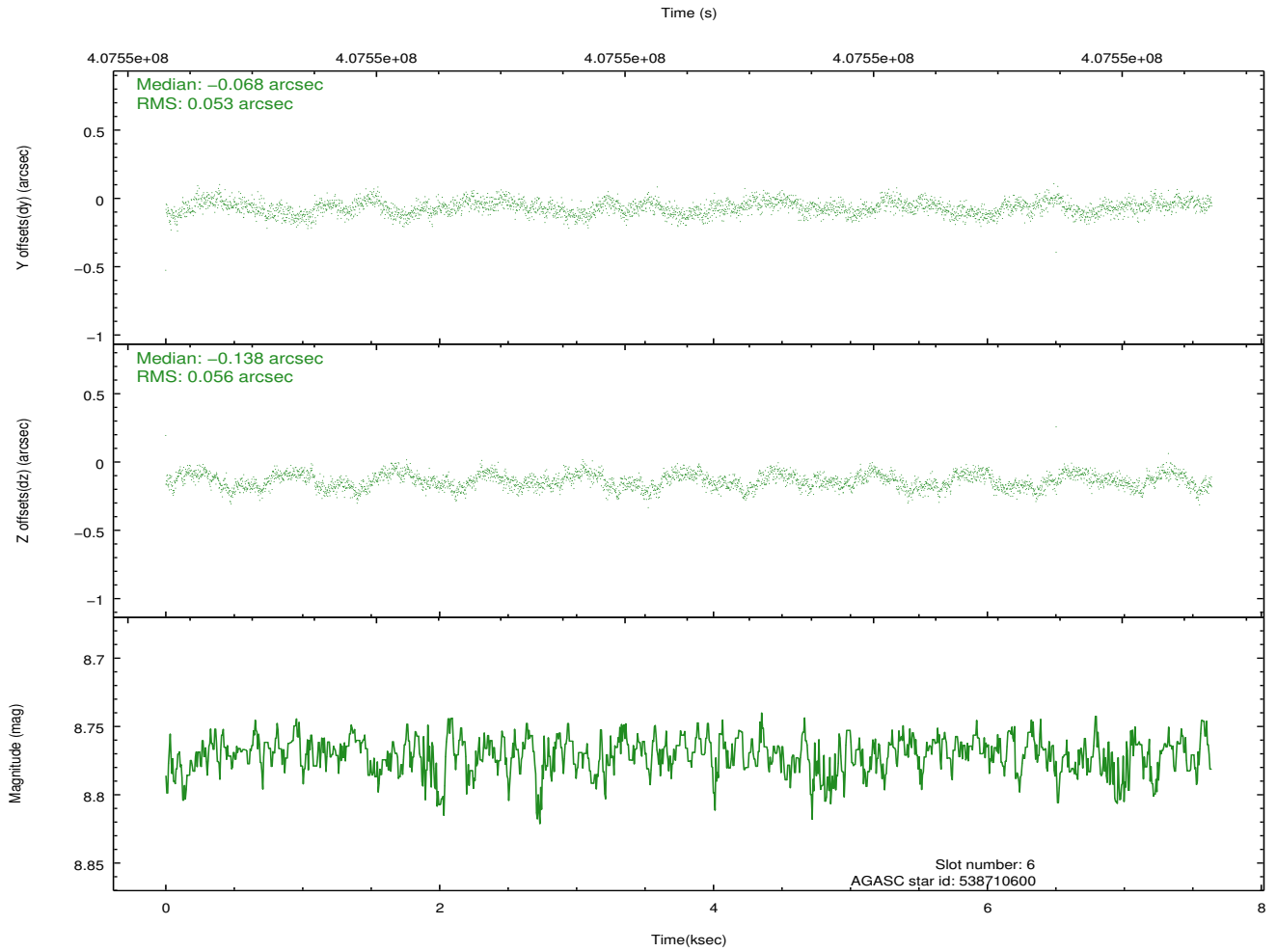
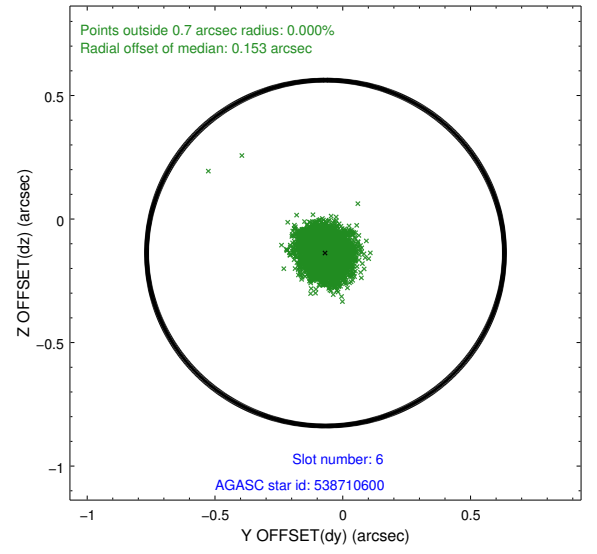
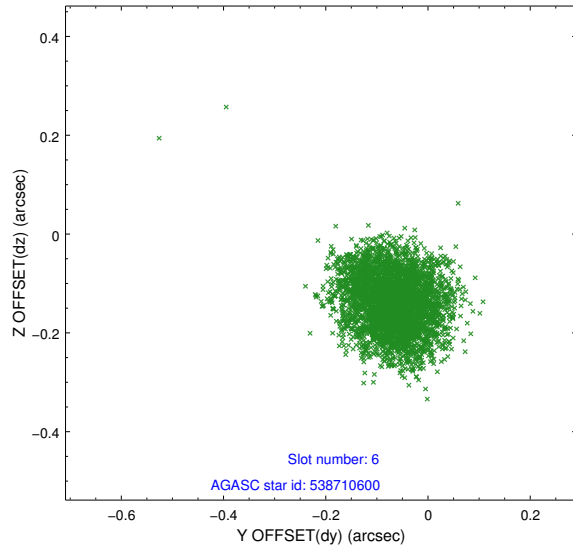
## 2.4.2 Slot 4



### 2.4.3 Slot 5

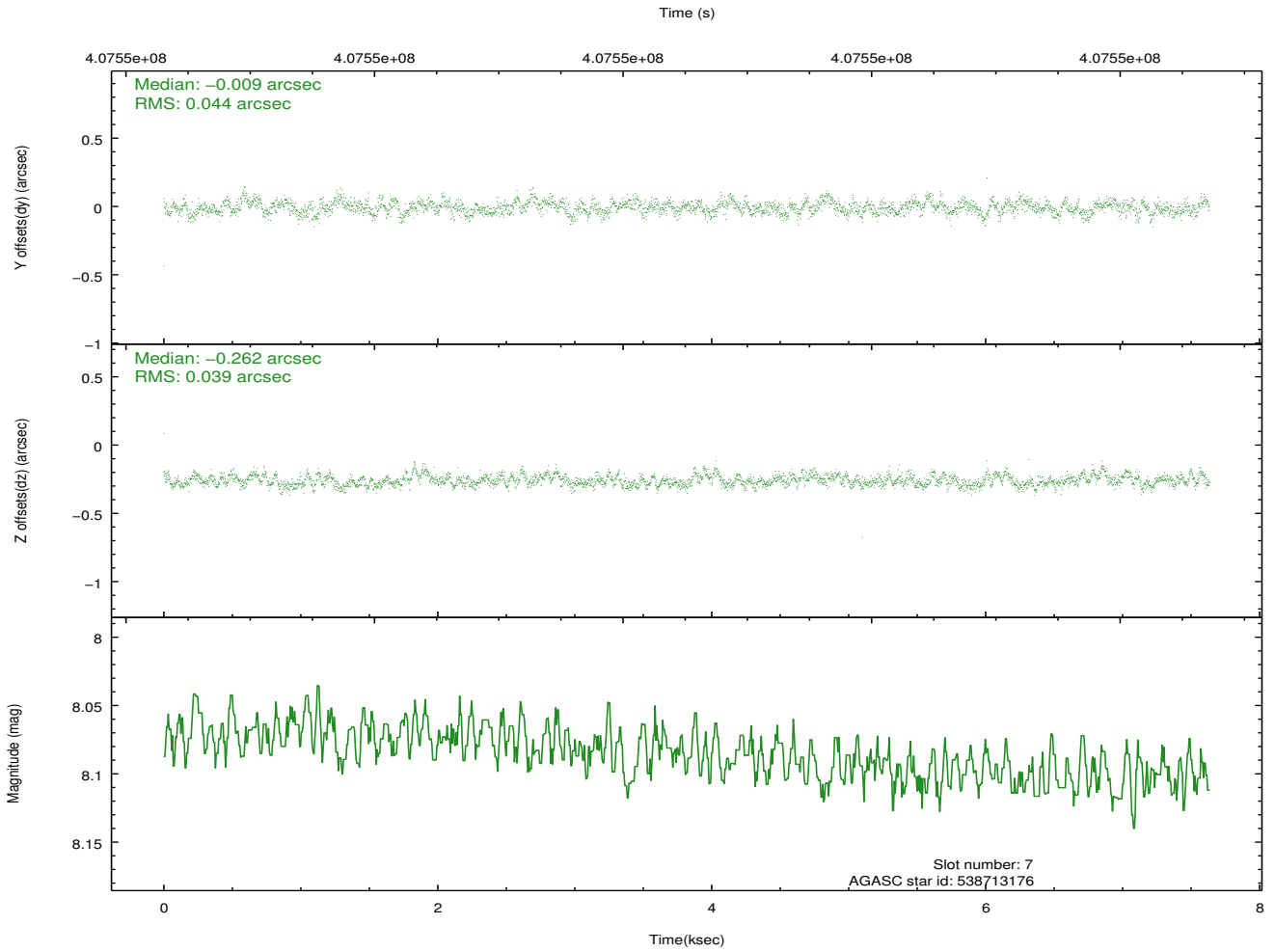
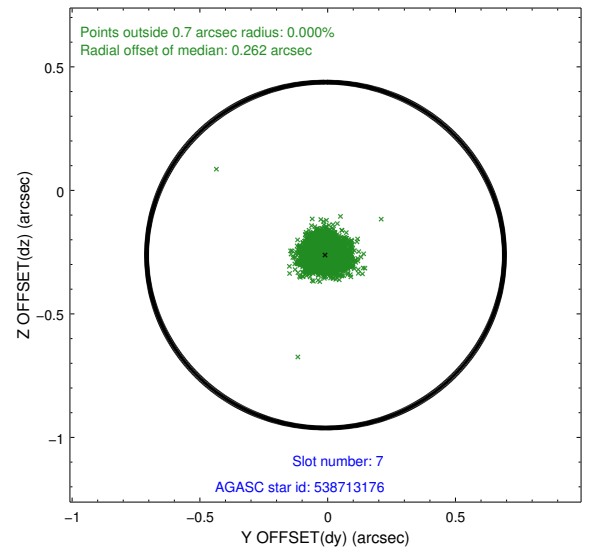
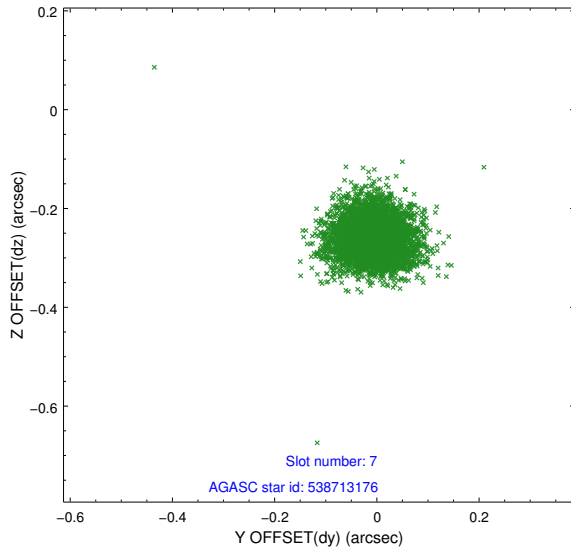


## 2.4.4 Slot 6



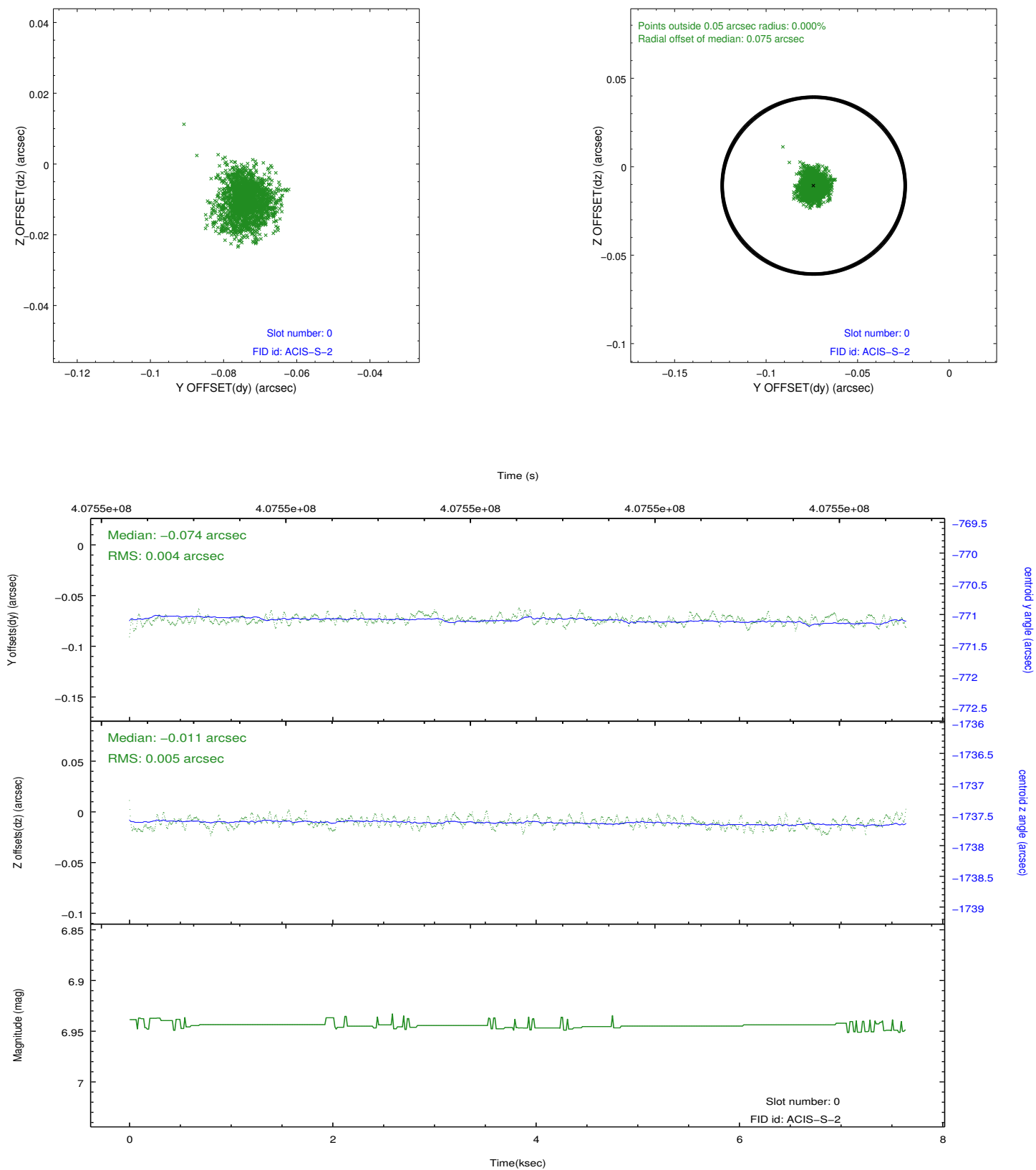


## 2.4.5 Slot 7

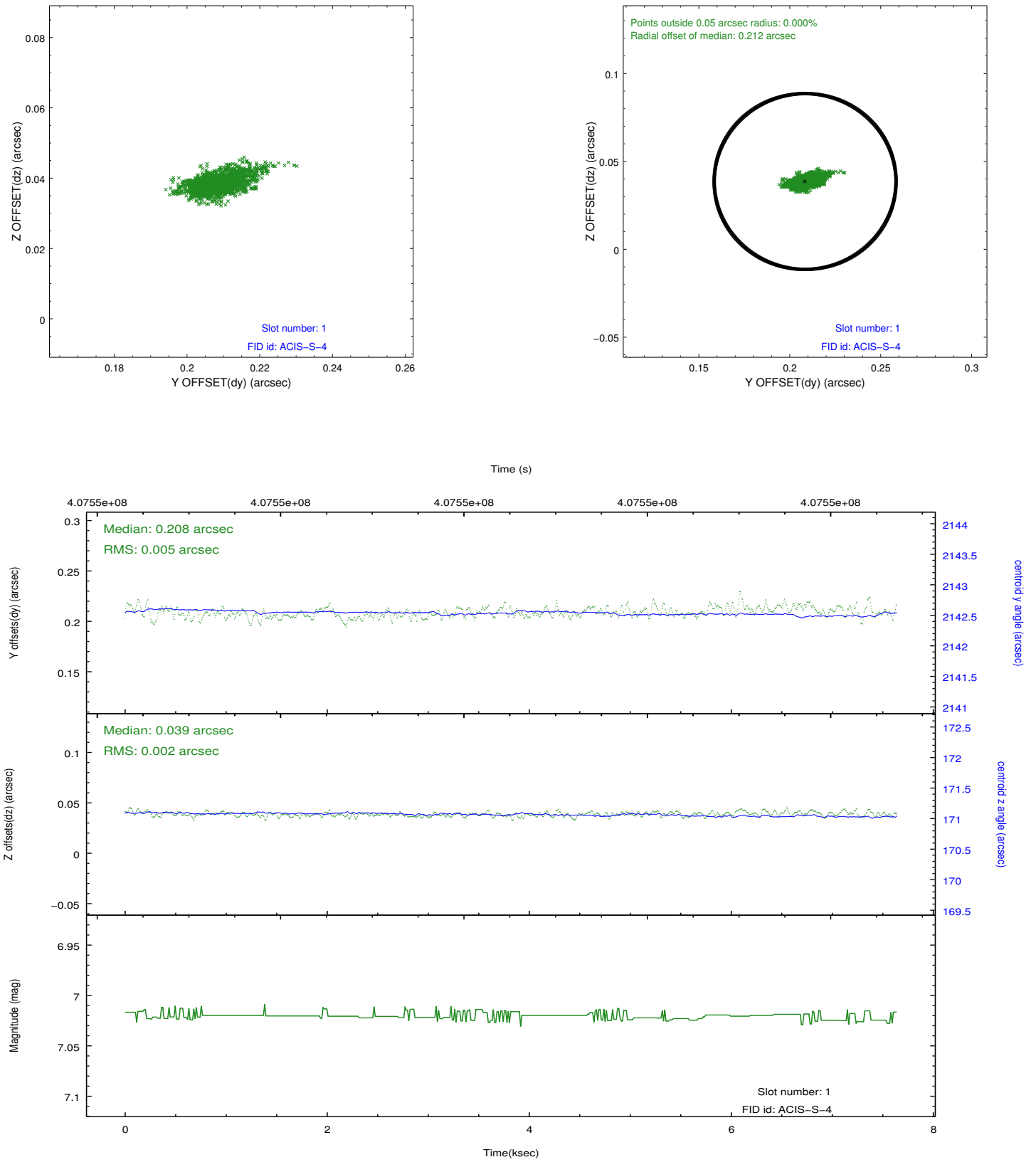


## 2.5 FID Slots

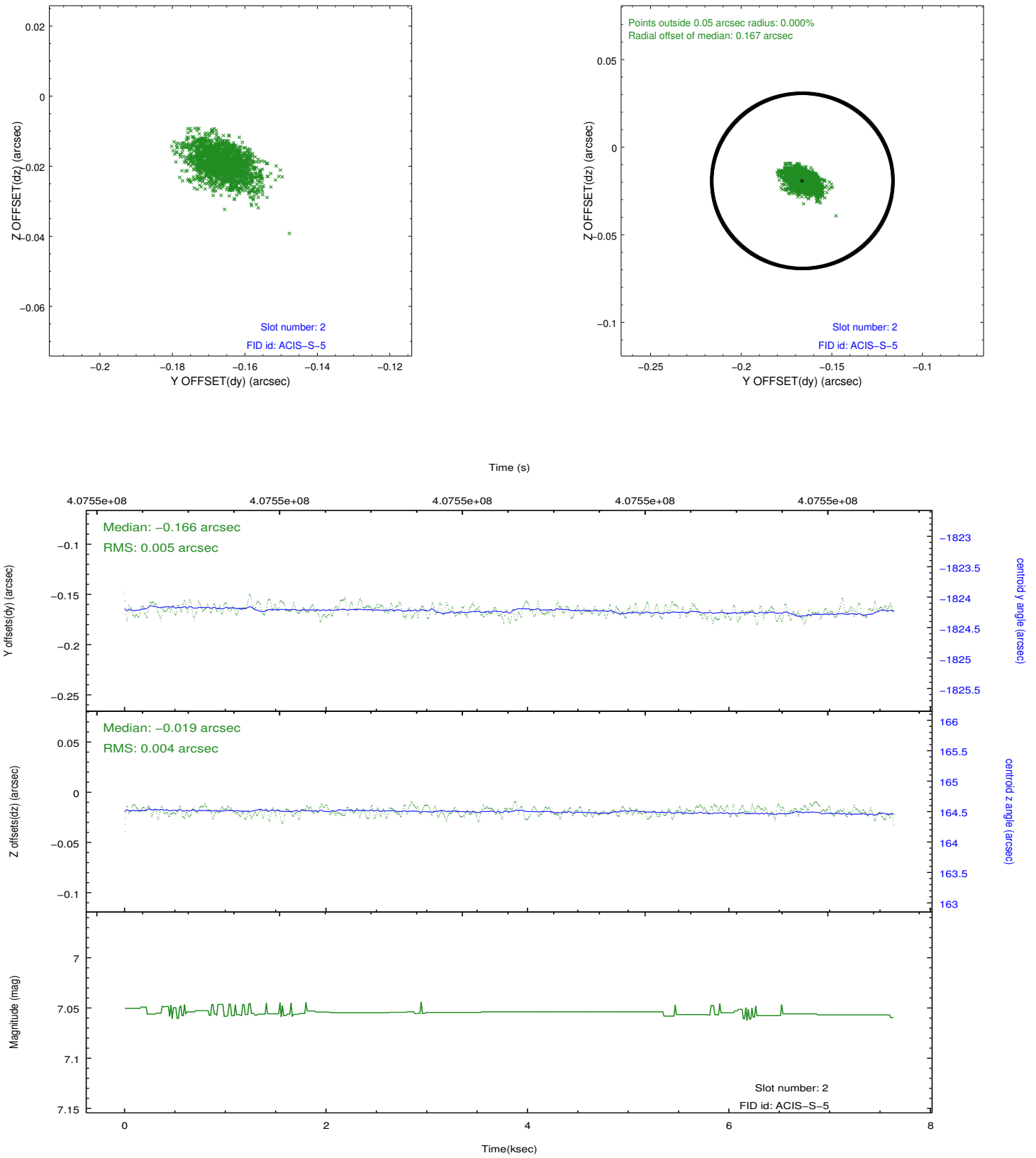
### 2.5.1 Slot 0



## 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)	2012.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.5485783683658

### A.2 Comments