

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10347 - L2 Version 3  
Chandra X-Ray Center

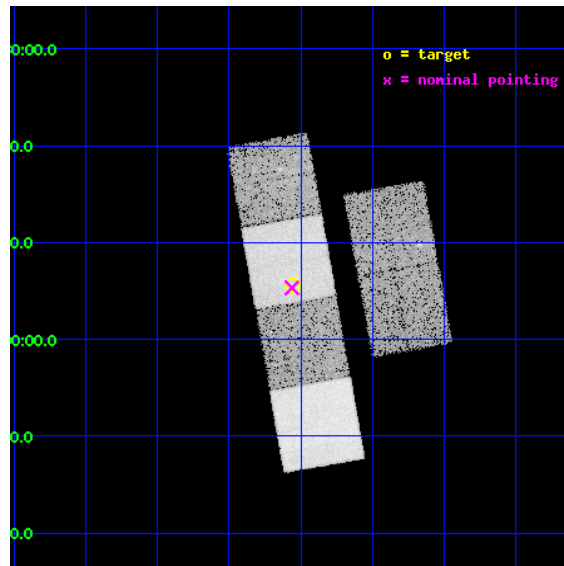
L2 Processing Date : Jun 4 2012

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# 1 Front

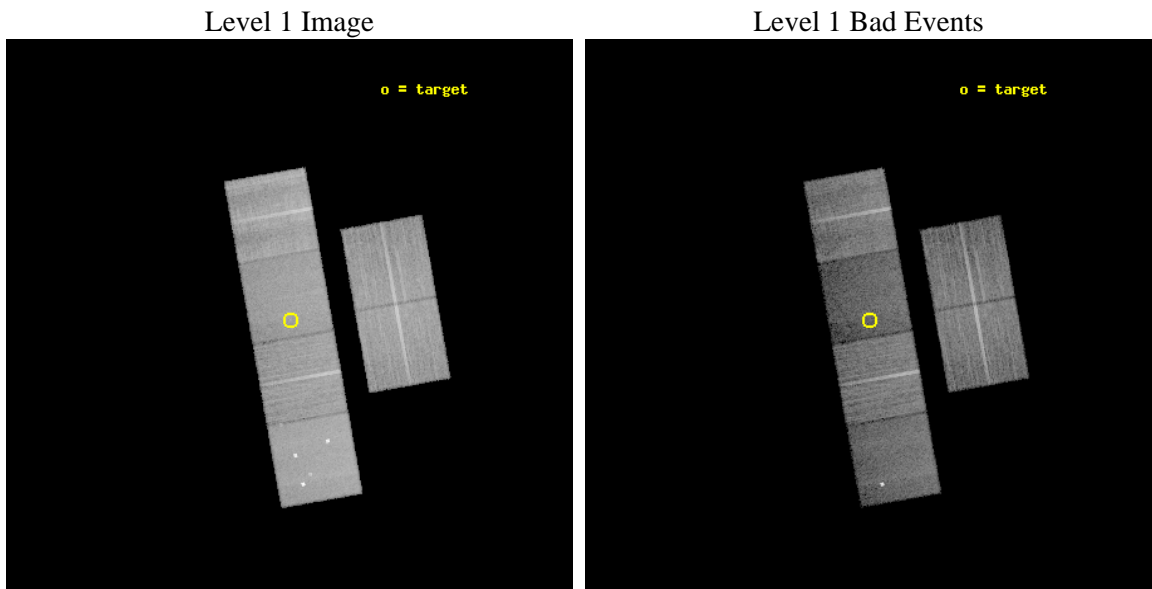
seq_num	701890	Sequence number
obs_id	10347	Observation id
title	Evolution of Activity in Massive Gas-rich Mergers: The X-ray Perspective	Proposal title
observer	Prof. Sylvain Veilleux	Principal investigator
object	F11095-0238	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	168.01375	Observer's specified target RA [deg]
dec_targ	-2.906694	Observer's specified target Dec [deg]
ra_nom	168.01552644649	Nominal RA [deg]
dec_nom	-2.9112251488357	Nominal Dec [deg]
roll_nom	259.88766577214	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15379.199942768	Sum of GTIs [s]
livetime	15184.45925285	Livetime [s]
ontime2	15375.958952487	Sum of GTIs [s]
ontime3	15379.199942768	Sum of GTIs [s]
ontime5	15379.199942768	Sum of GTIs [s]
ontime6	15379.199942768	Sum of GTIs [s]
ontime7	15379.199942768	Sum of GTIs [s]
ontime8	15372.717942059	Sum of GTIs [s]
l2events	179015	Number of level 2 events



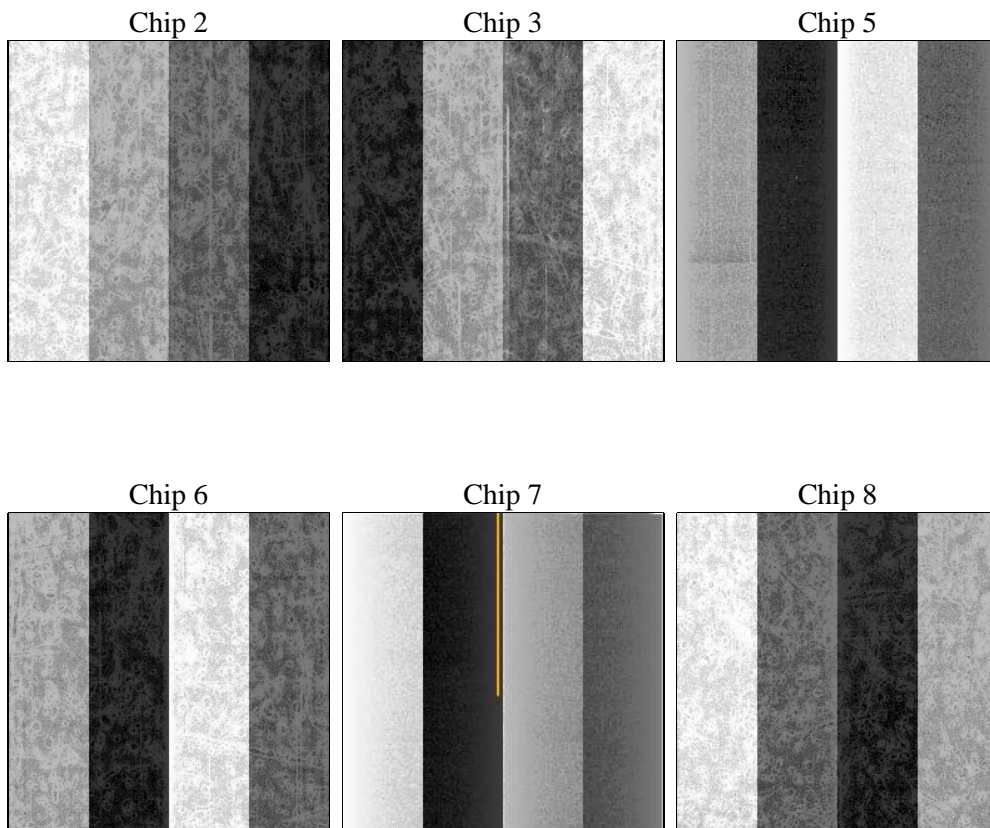
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	15379.199942768	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	15375.958952487	Sum of GTIs [s]
date	2012-06-04T18:38:19	Date and time of file creation	ontime3	15379.199942768	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	15379.199942768	Sum of GTIs [s]
			ontime6	15379.199942768	Sum of GTIs [s]
			ontime7	15379.199942768	Sum of GTIs [s]
			ontime8	15372.717942059	Sum of GTIs [s]
			l1events	860684	Number of level 1 events

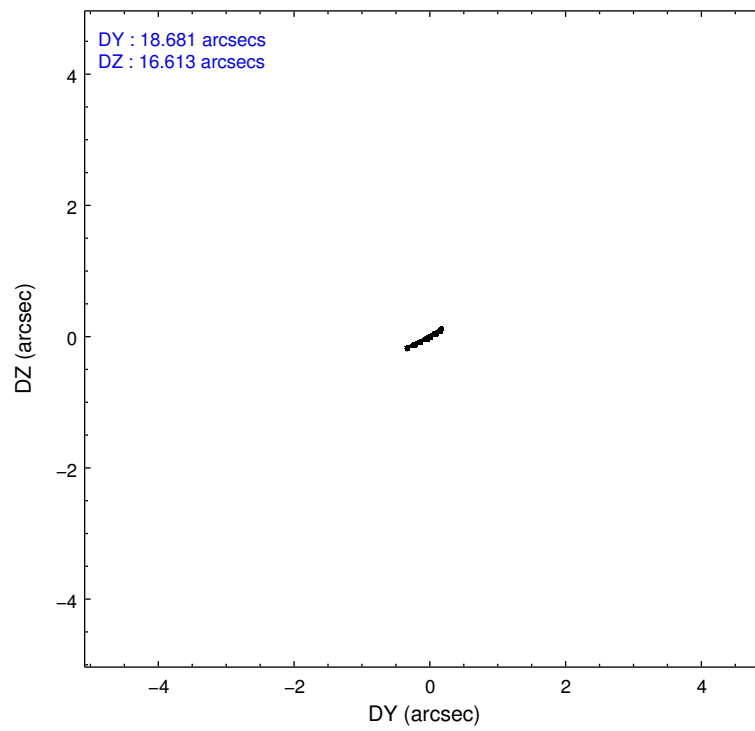
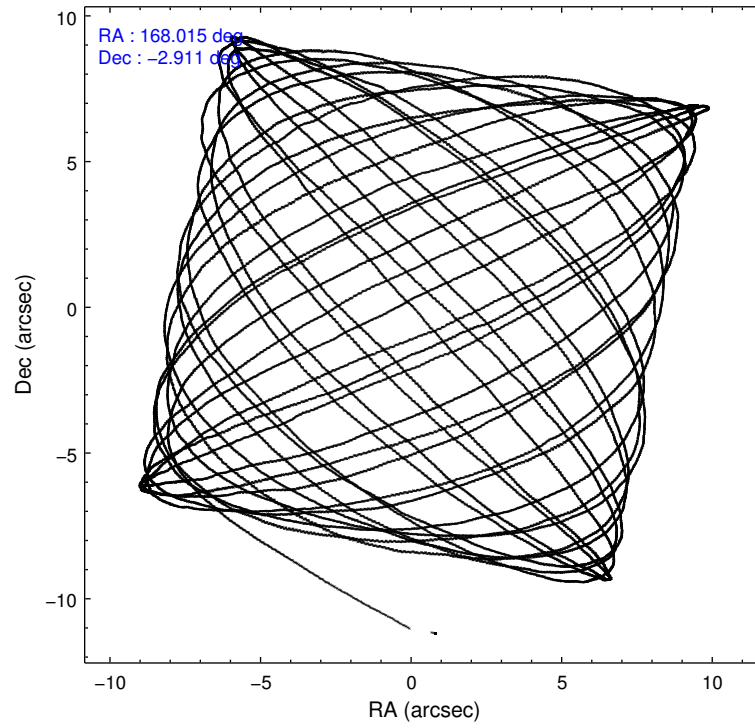
### 2.1.4 Events

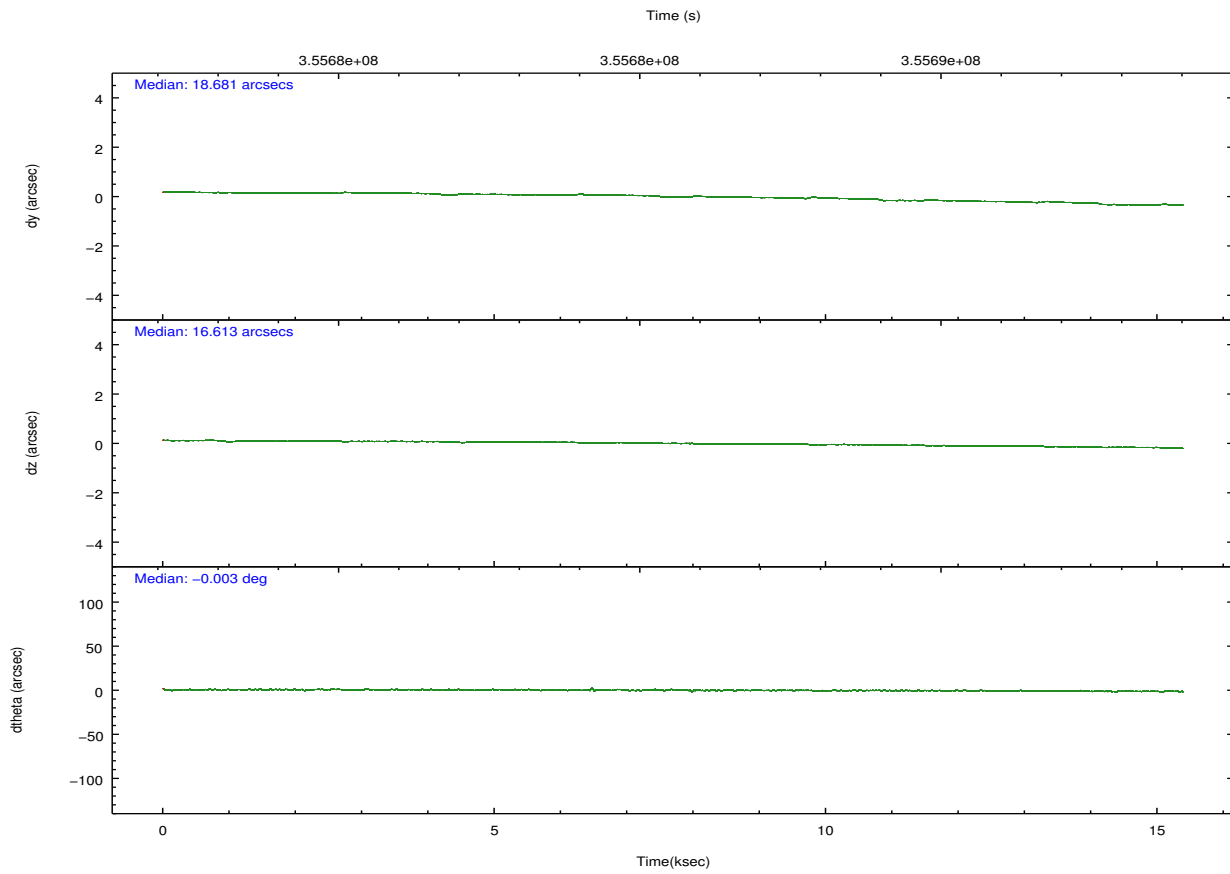
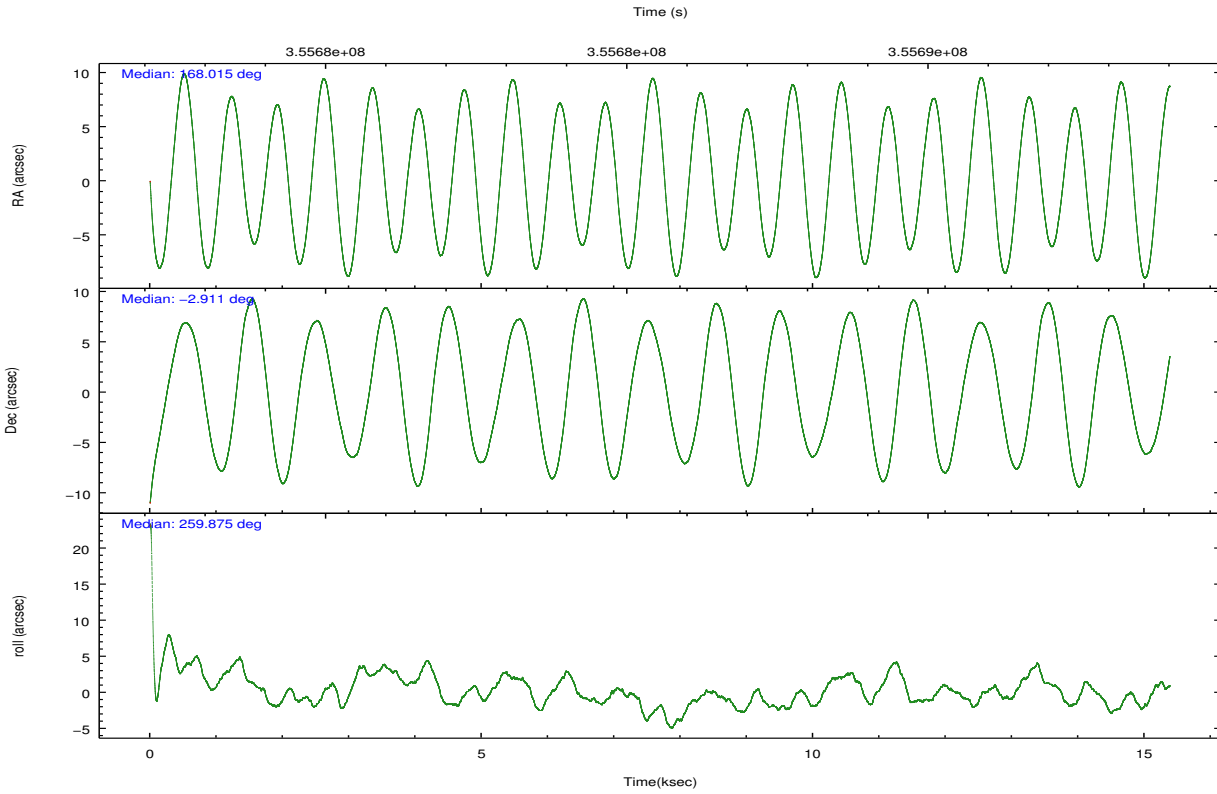
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	138555	125582	176915	131188	126471	161973	grade 0 events	4561	4643	13768	4974	6165	11343
rejected events	126651	113952	87251	118534	67818	123847		3%	3%	7%	3%	4%	7%
rejected %	91%	90%	49%	90%	53%	76%	grade 1 events	87	99	410	62	221	154
								0%	0%	0%	0%	0%	0%
							grade 2 events	3192	2508	28456	2997	13374	9897
								2%	1%	16%	2%	10%	6%
							grade 3 events	1330	1412	3941	1423	5589	4302
								0%	1%	2%	1%	4%	2%
							grade 4 events	1349	1362	3634	1367	5685	3991
								0%	1%	2%	1%	4%	2%
							grade 5 events	4020	4435	14789	4448	13597	7078
								2%	3%	8%	3%	10%	4%
							grade 6 events	2214	2358	45091	2648	31206	11155
								1%	1%	25%	2%	24%	6%
							grade 7 events	121802	108765	66826	113269	50634	114053
								87%	86%	37%	86%	40%	70%

## 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	168.005867	168.0155264464881	CCD I2 on	O1	Y
[deg] Pointing Dec	-2.885617	-2.911225148835654	CCD I3 on	O2	Y
[deg] Pointing Roll	259.730529	259.8876657721381	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O5	Y
[s] Observation start time (MET)	355678048.184000	355676529.15787	CCD S5 on	N	N
Observation start date	2009-04-09T15:26:22	2009-04-09T15:02:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	355693248.184000	355694594.27127	On-chip summing requested	N	N
Observation end date	2009-04-09T19:39:42	2009-04-09T20:03:14	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



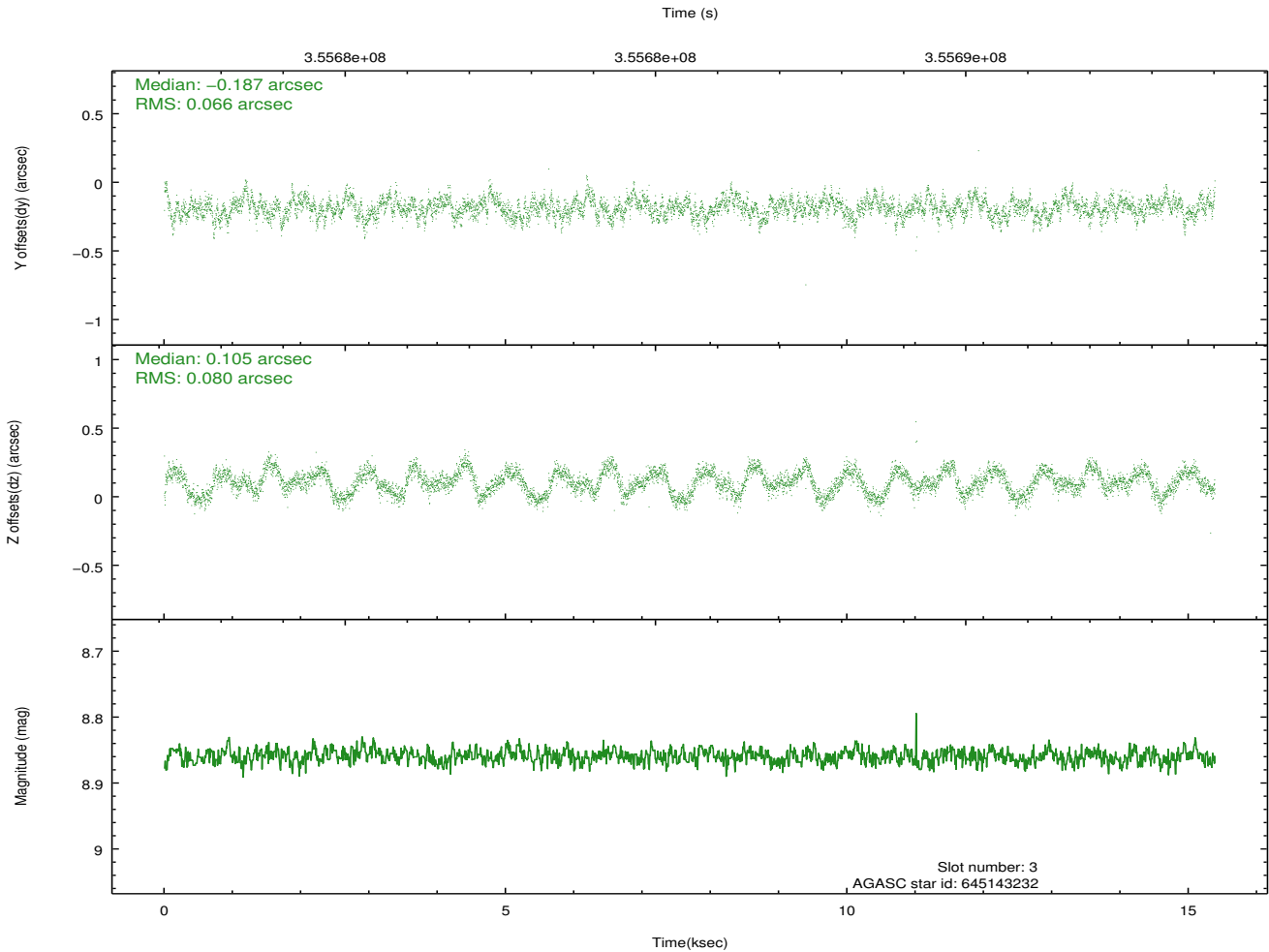
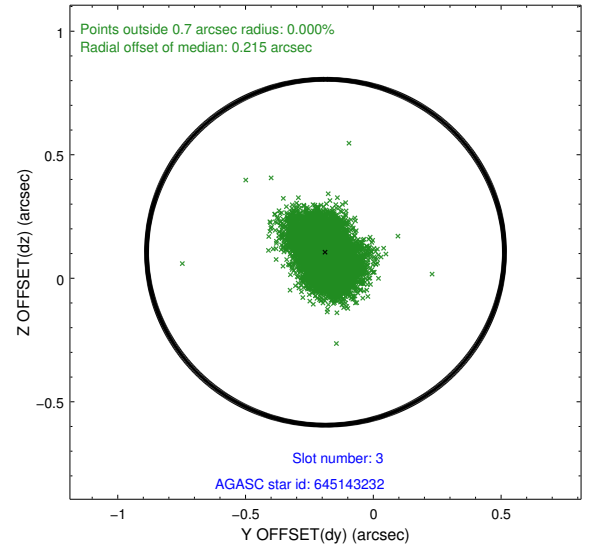
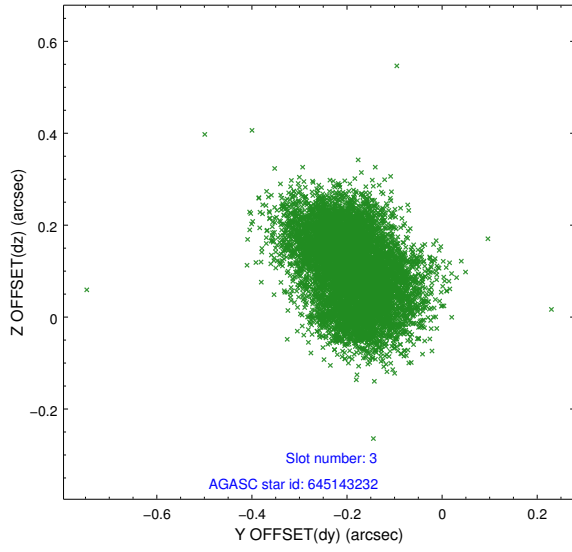


### Slot Statistics

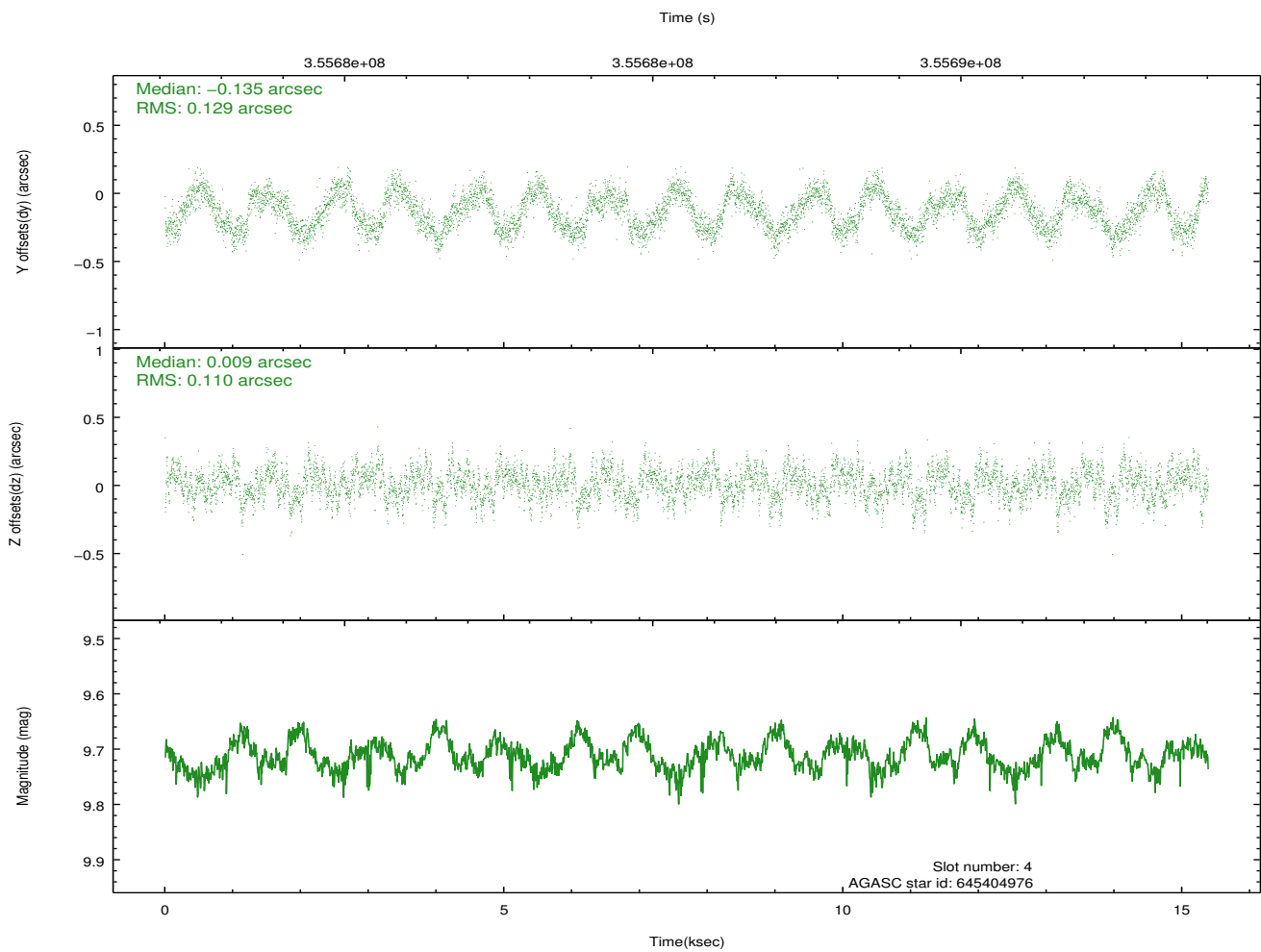
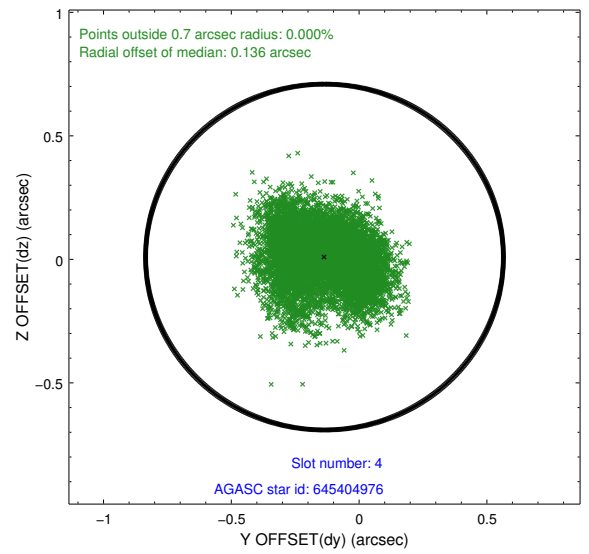
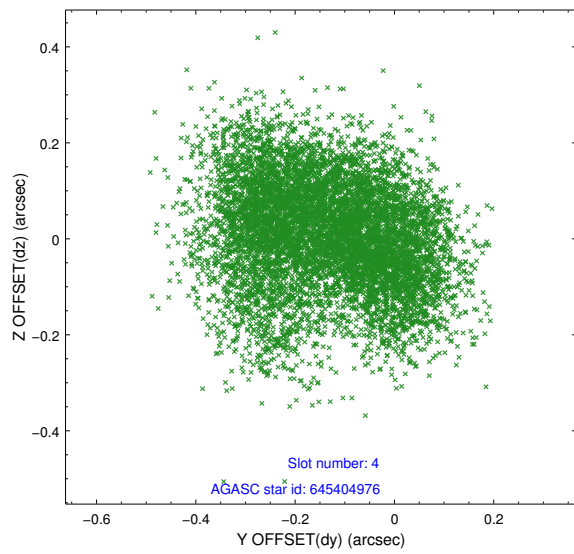
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	3753	-0.089	-0.039	0.007	0.011	0.000000	0.000000	-771.83	-1738.01
1	FID	ACIS-S-4	7.04	3753	0.253	0.053	0.007	0.012	0.000000	0.000000	2141.67	170.24
2	FID	ACIS-S-5	7.08	3753	-0.195	-0.005	0.008	0.013	0.000000	0.000000	-1824.39	164.22
3	GUIDE	645143232	8.86	7503	-0.187	0.105	0.112	0.172	168.605518	-2.428028	-2005.16	1828.53
4	GUIDE	645404976	9.71	7494	-0.135	0.009	0.185	0.282	167.433470	-2.995194	755.61	-1953.59
5	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	645530800	9.77	7496	0.012	0.080	0.162	0.260	167.957399	-2.636302	-851.10	-331.00
7	GUIDE	645403296	10.32	7279	0.316	-0.207	0.291	0.443	167.308889	-3.438388	2406.49	-2108.79

## 2.4 Star Slots

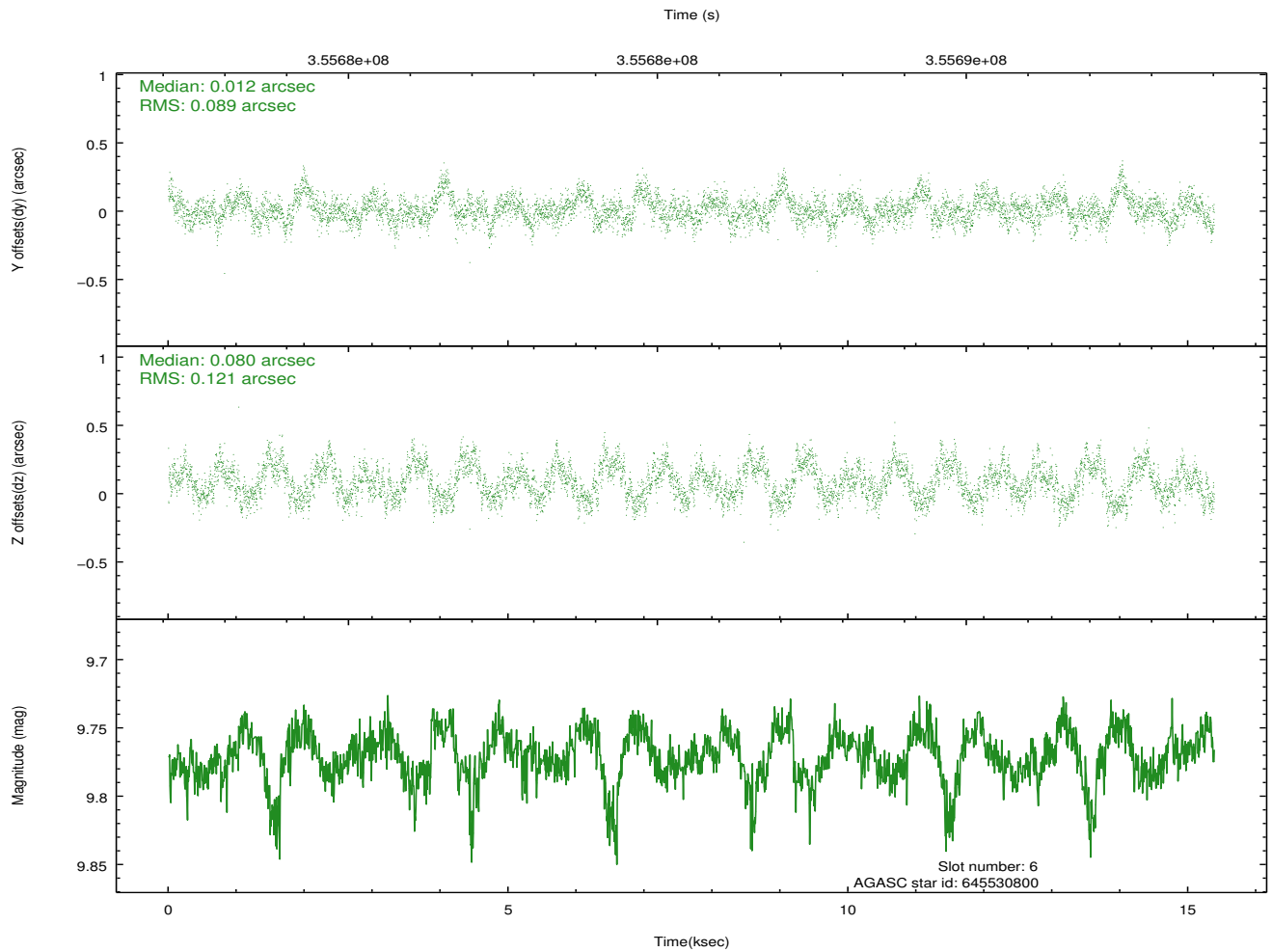
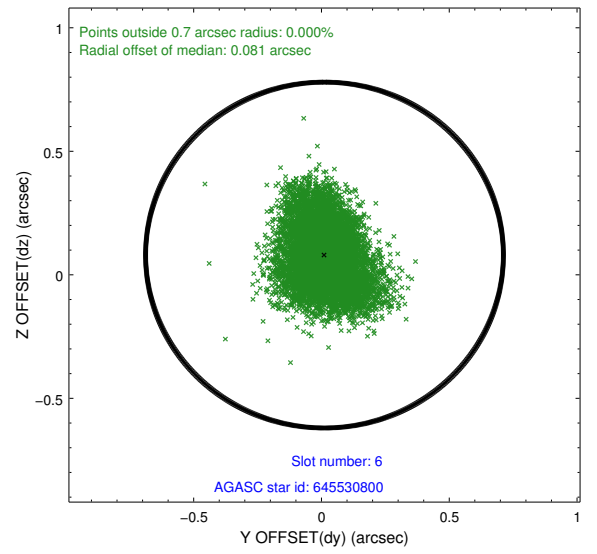
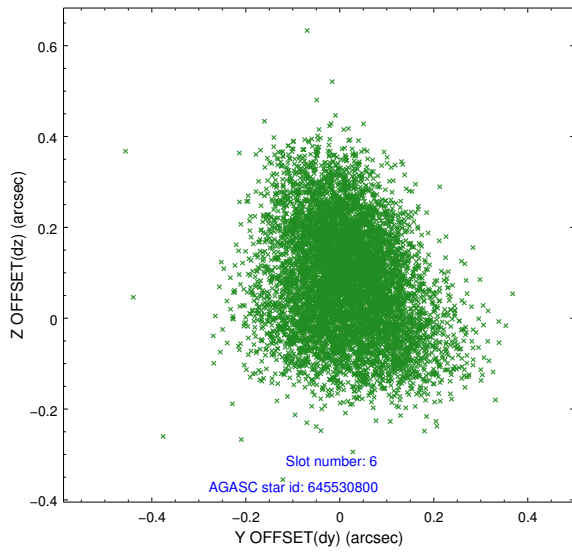
### 2.4.1 Slot 3



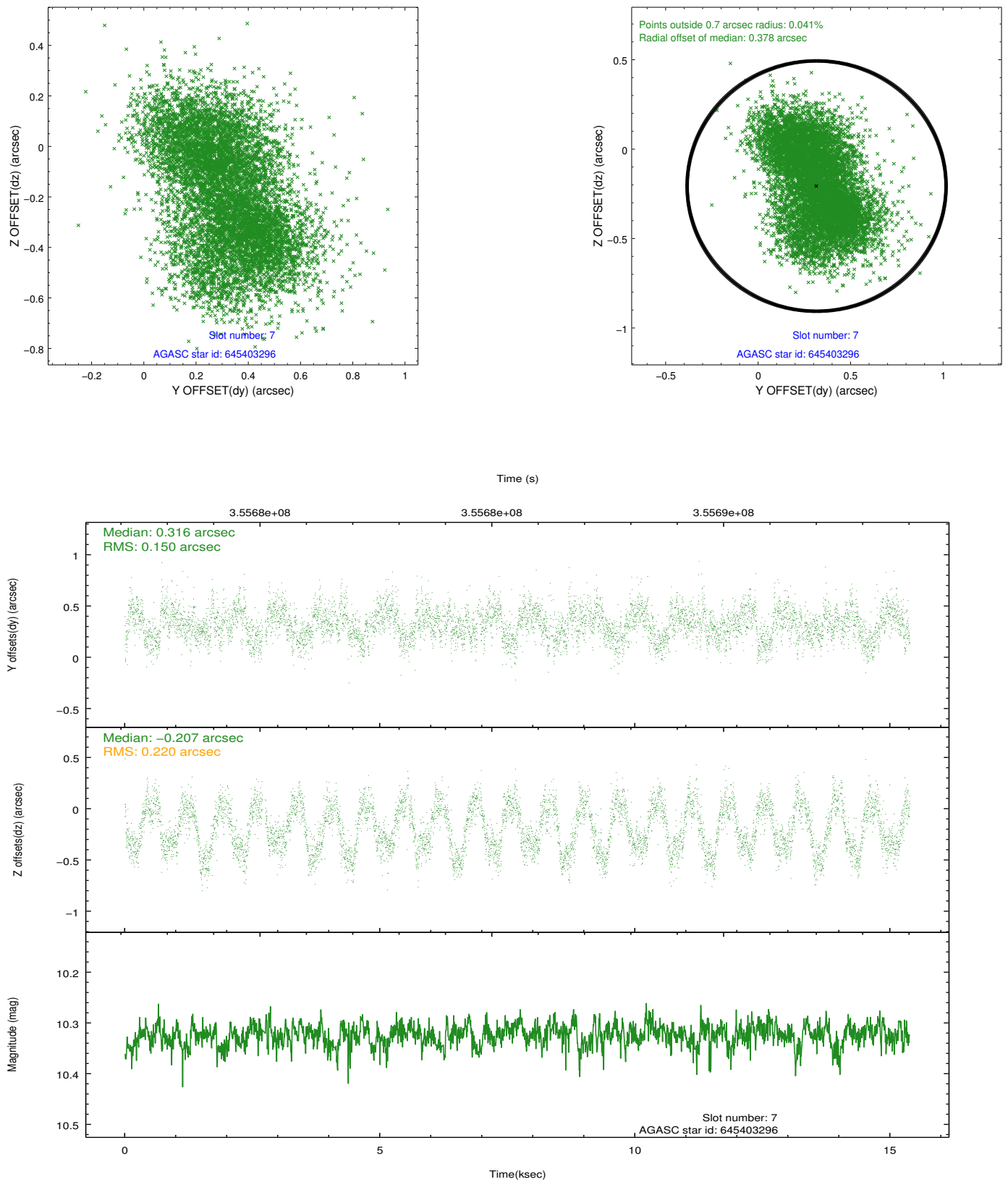
## 2.4.2 Slot 4



### 2.4.3 Slot 6

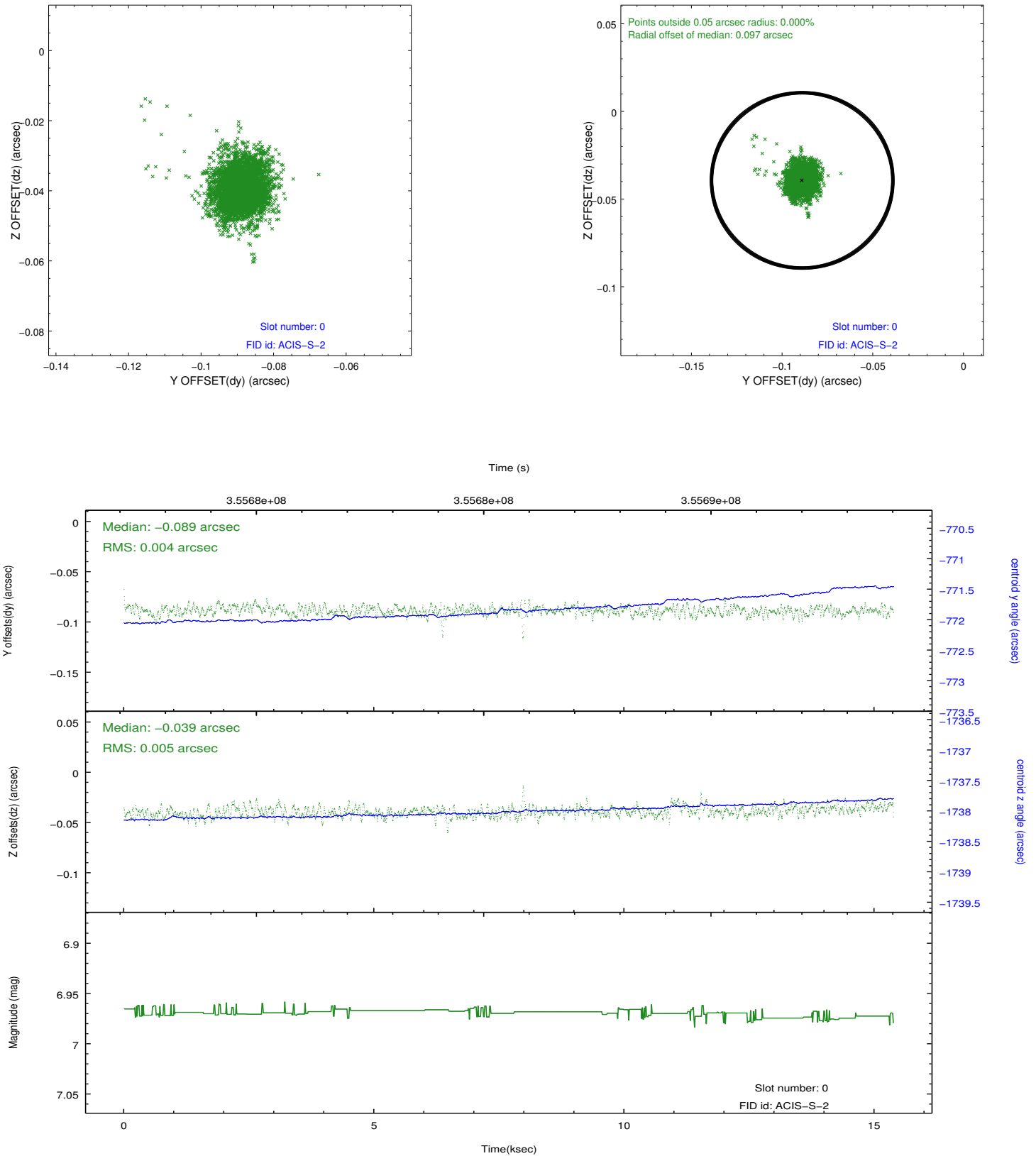


## 2.4.4 Slot 7

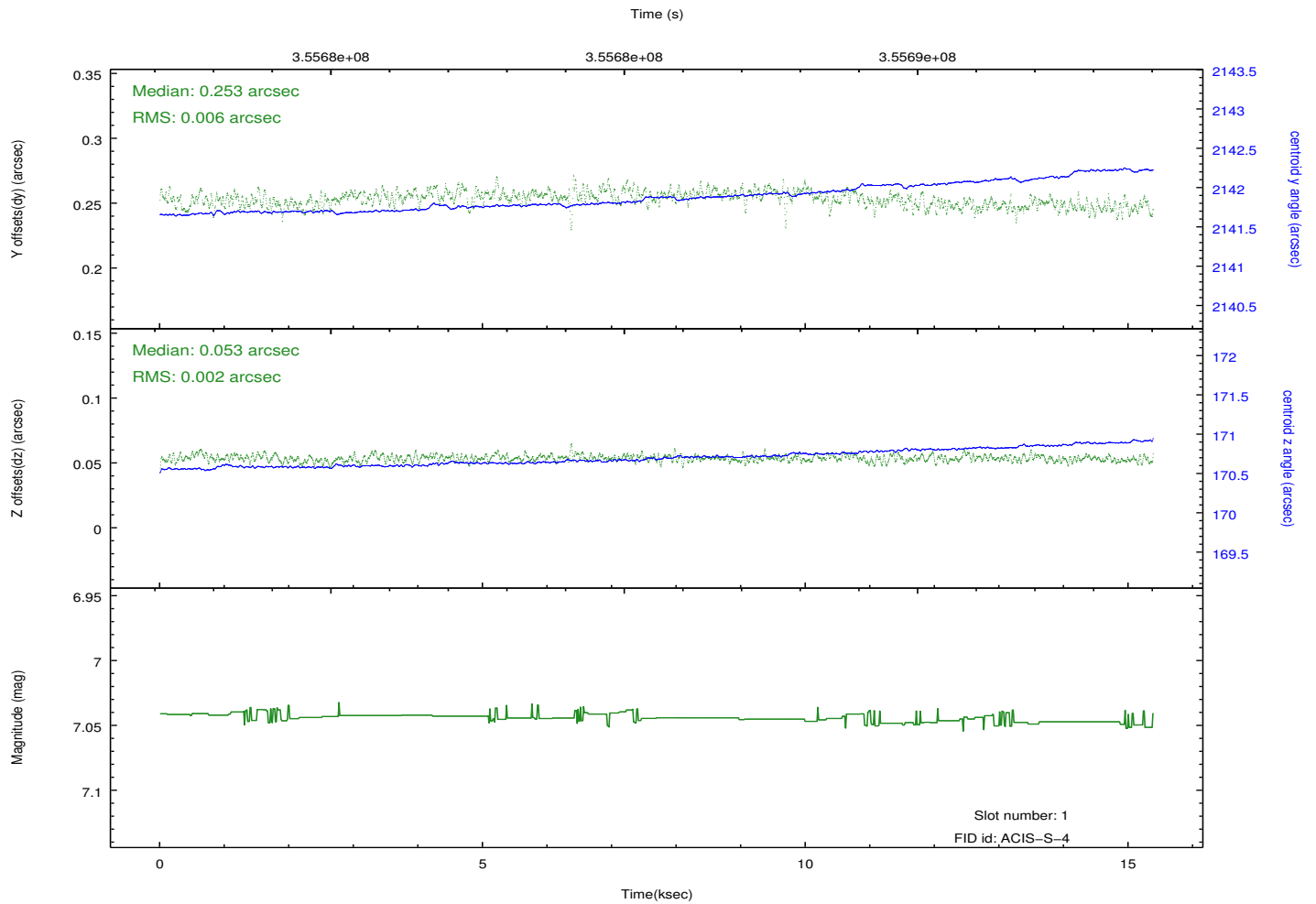
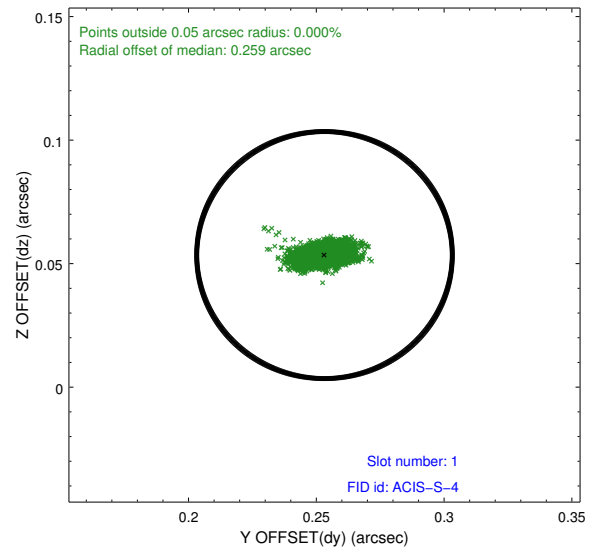
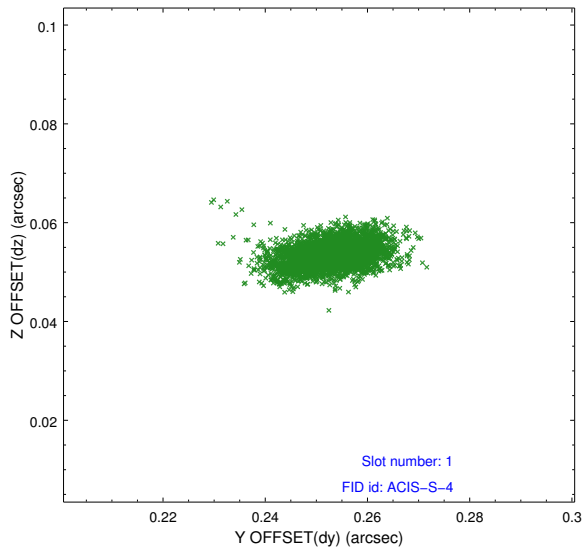


## 2.5 FID Slots

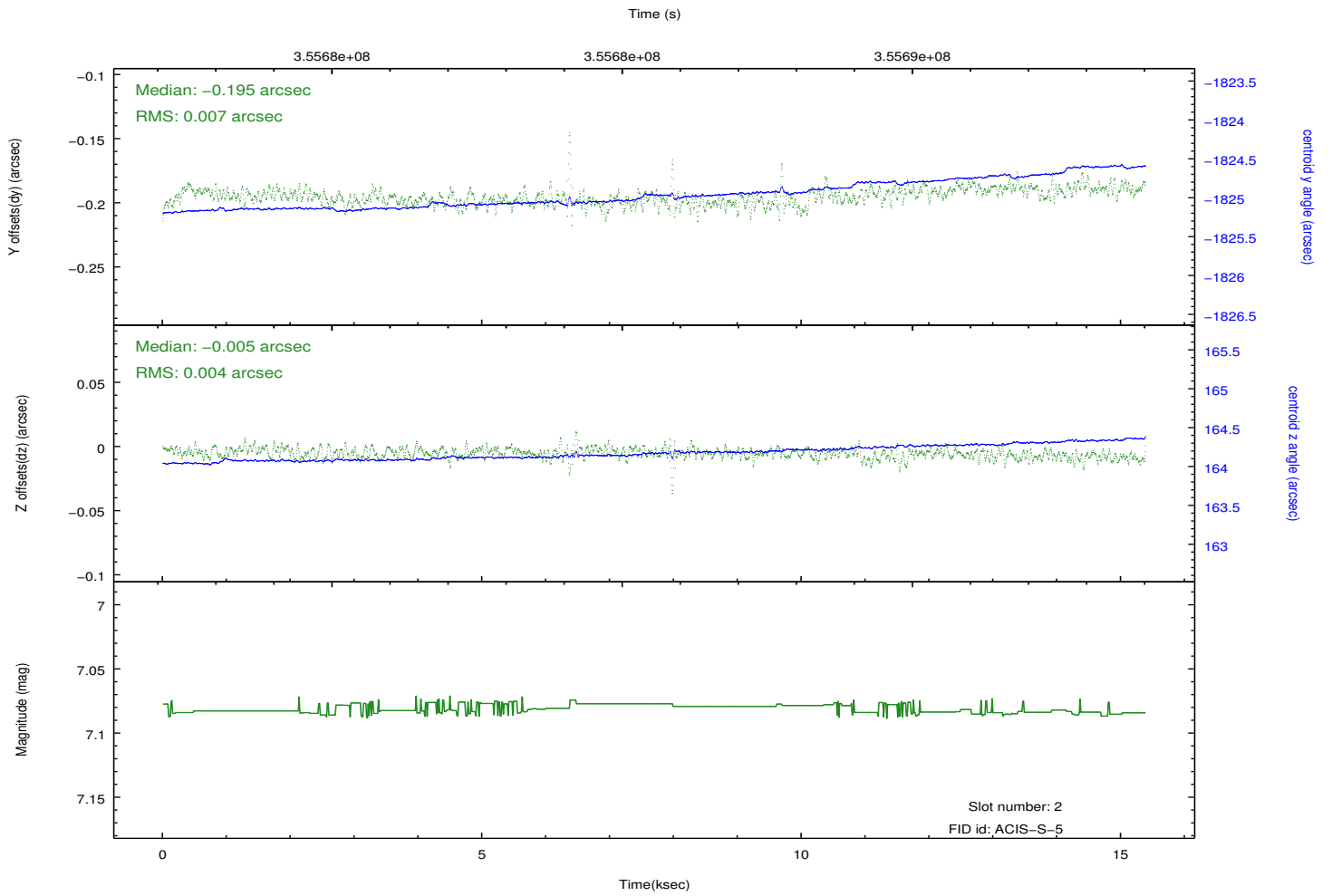
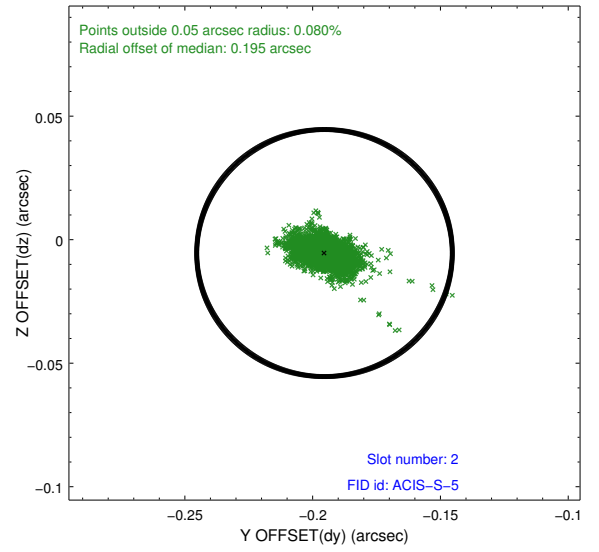
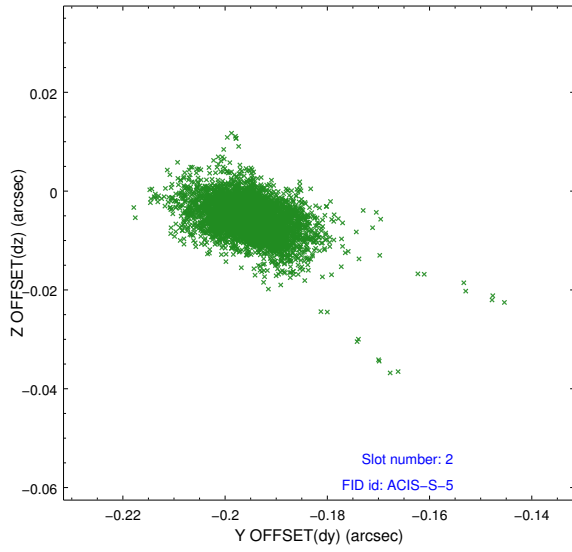
### 2.5.1 Slot 0



## 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)	2012.06.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.3791999

## A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.