

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 7896 - L2 Version 2  
Chandra X-Ray Center

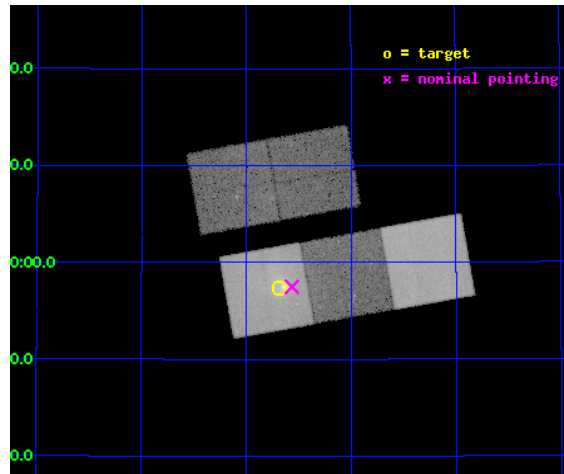
L2 Processing Date : Apr 30 2012

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# 1 Front

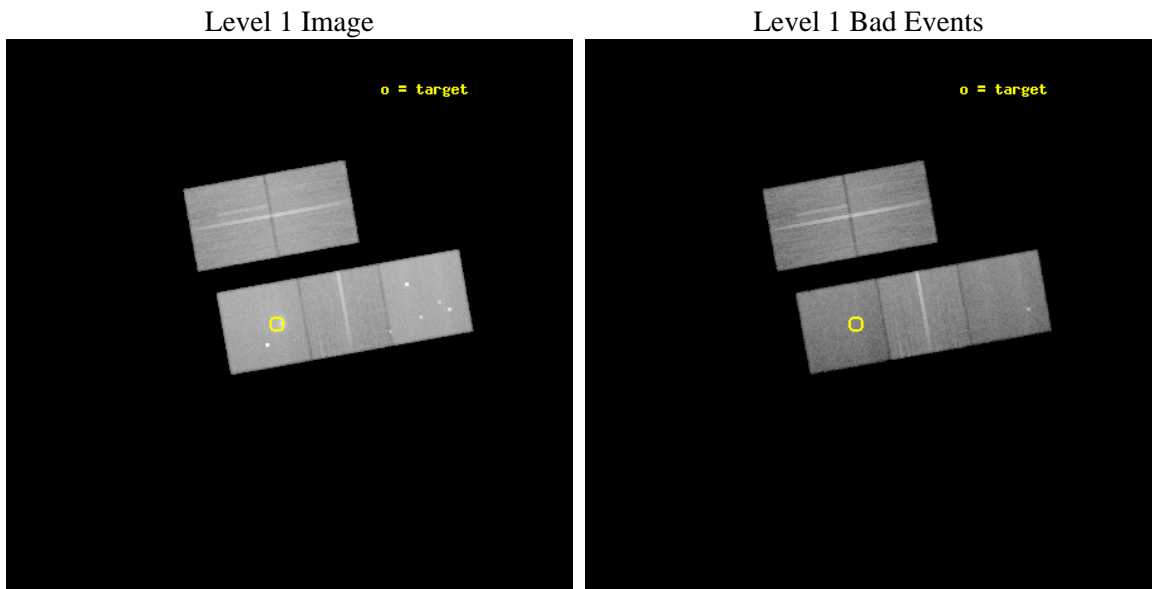
seq_num	800614	Sequence number
obs_id	7896	Observation id
title	The Complex X-ray Morphology of NGC 7618: A Major Group-Group Merger in the Local Universe?	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	UGC 12491	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	349.67	Observer's specified target RA [deg]
dec_targ	42.956944	Observer's specified target Dec [deg]
ra_nom	349.64142469243	Nominal RA [deg]
dec_nom	42.958144792596	Nominal Dec [deg]
roll_nom	169.8756763363	Nominal Roll [deg]
revision	2	Processing version of data
ontime	33182.400255203	Sum of GTIs [s]
livetime	32748.847767341	Livetime [s]
ontime2	33169.836324155	Sum of GTIs [s]
ontime3	33182.400255203	Sum of GTIs [s]
ontime5	33182.400255203	Sum of GTIs [s]
ontime6	33176.118354321	Sum of GTIs [s]
ontime7	33182.400255203	Sum of GTIs [s]
l2events	407018	Number of level 2 events



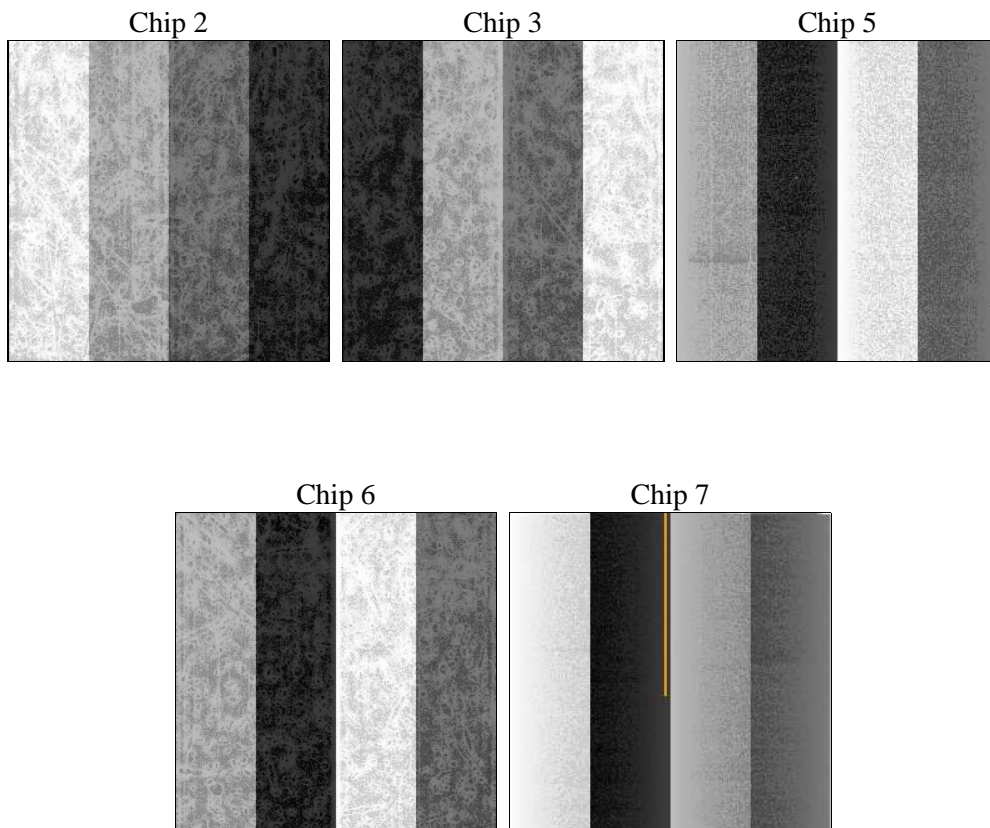
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	33182.400255203	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	33169.836324155	Sum of GTIs [s]
date	2012-04-30T14:48:49	Date and time of file creation	ontime3	33182.400255203	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	33182.400255203	Sum of GTIs [s]
			ontime6	33176.118354321	Sum of GTIs [s]
			ontime7	33182.400255203	Sum of GTIs [s]
			l1events	1562351	Number of level 1 events

### 2.1.4 Events

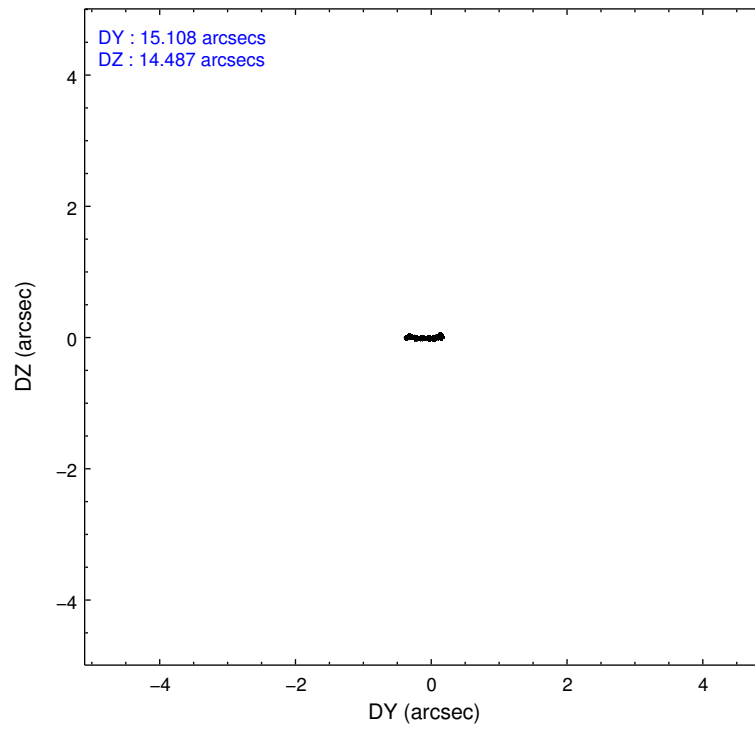
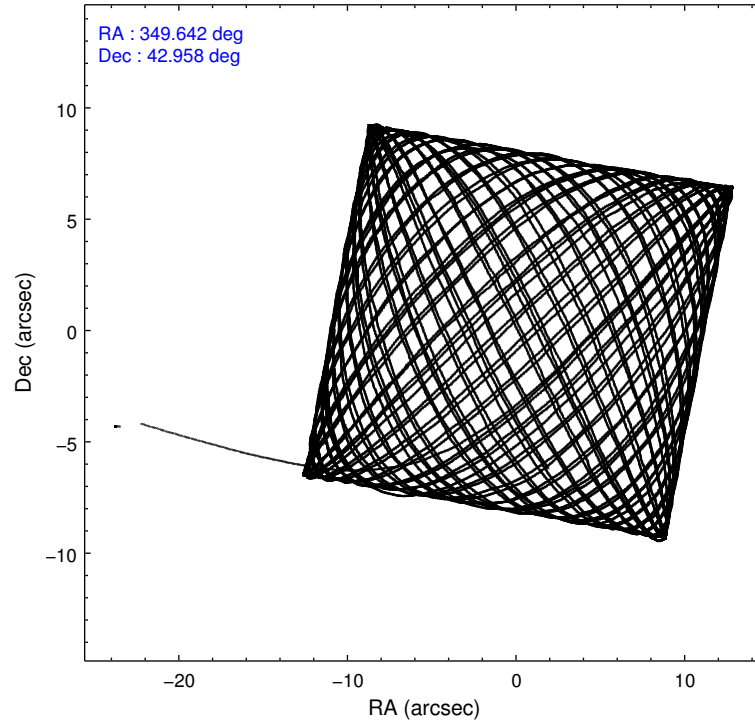
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	279947	265770	386866	279435	350333
rejected events	253742	240277	195321	248287	171173
rejected %	90%	90%	50%	88%	48%

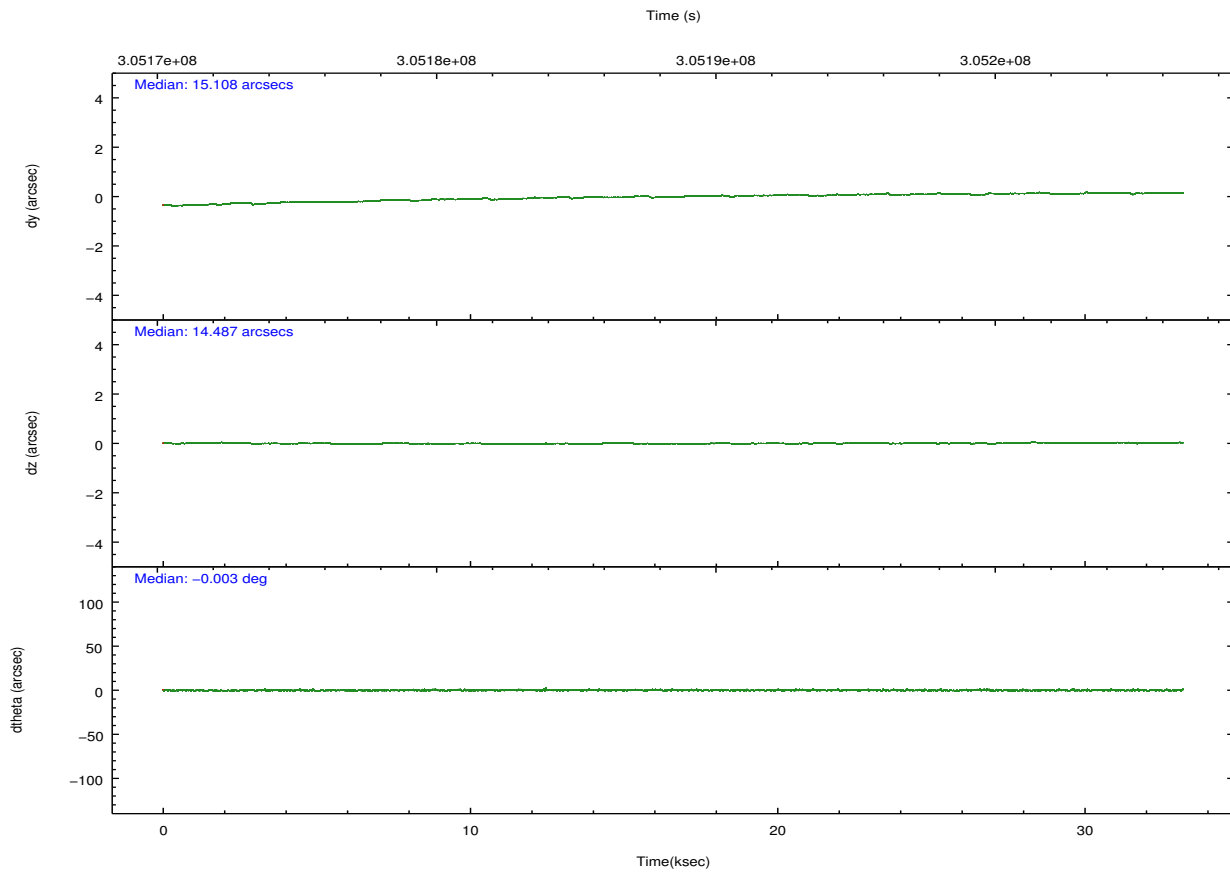
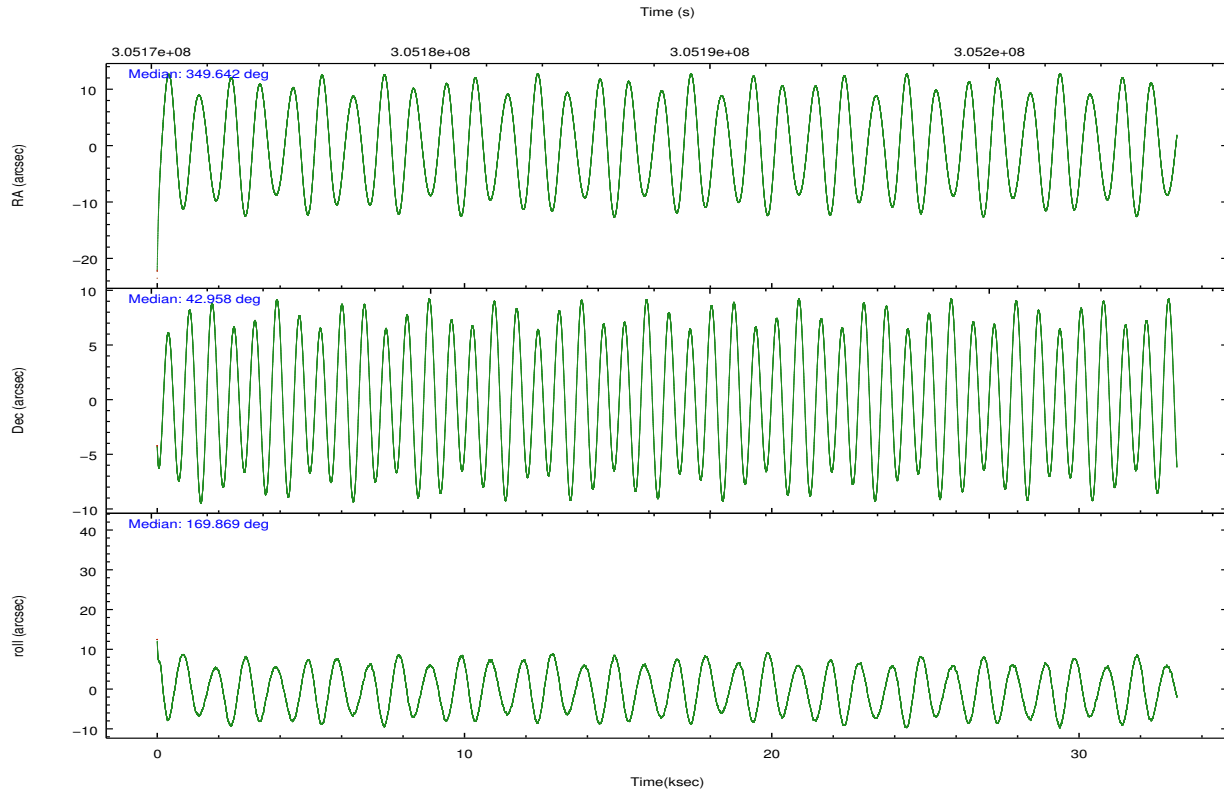
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	9951	9939	26071	12954	34284
	3%	3%	6%	4%	9%
grade 1 events	151	152	746	163	381
	0%	0%	0%	0%	0%
grade 2 events	6263	5403	57173	6471	37260
	2%	2%	14%	2%	10%
grade 3 events	2876	2969	7946	3120	16826
	1%	1%	2%	1%	4%
grade 4 events	3002	2867	7636	3183	16692
	1%	1%	1%	1%	4%
grade 5 events	8765	10775	29819	11111	32112
	3%	4%	7%	3%	9%
grade 6 events	4823	4964	97691	6127	78172
	1%	1%	25%	2%	22%
grade 7 events	244116	228701	159784	236306	134606
	87%	86%	41%	84%	38%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	349.676392	349.6414246924307	CCD I2 on	O1	Y
[deg] Pointing Dec	42.967787	42.95814479259641	CCD I3 on	O2	Y
[deg] Pointing Roll	169.695217	169.8756763362982	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	305172057.184000	305170619.00287	CCD S5 on	N	N
Observation start date	2007-09-03T01:59:52	2007-09-03T01:36:59	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	305205057.184000	305205909.75457	On-chip summing requested	N	N
Observation end date	2007-09-03T11:09:52	2007-09-03T11:25:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



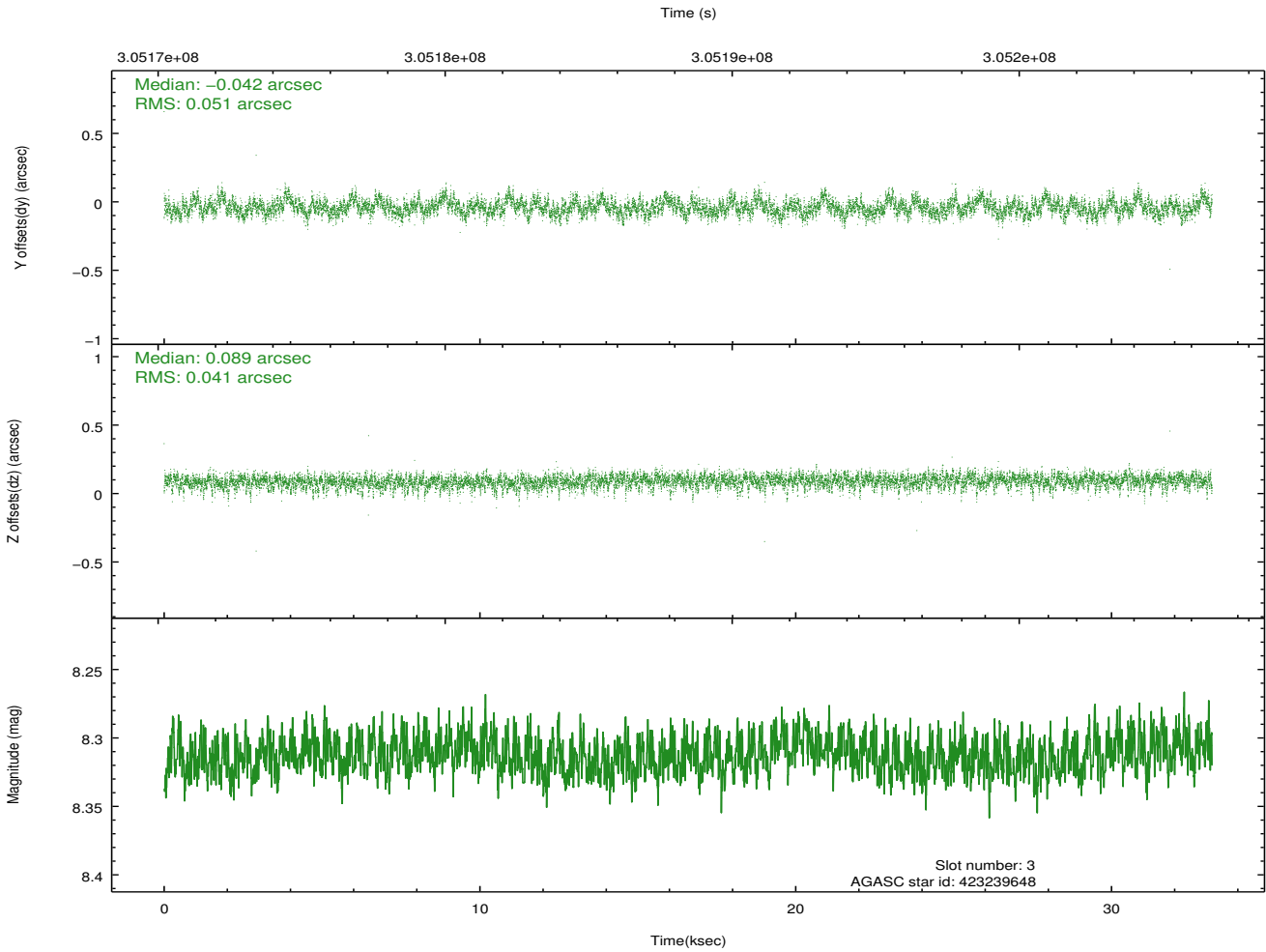
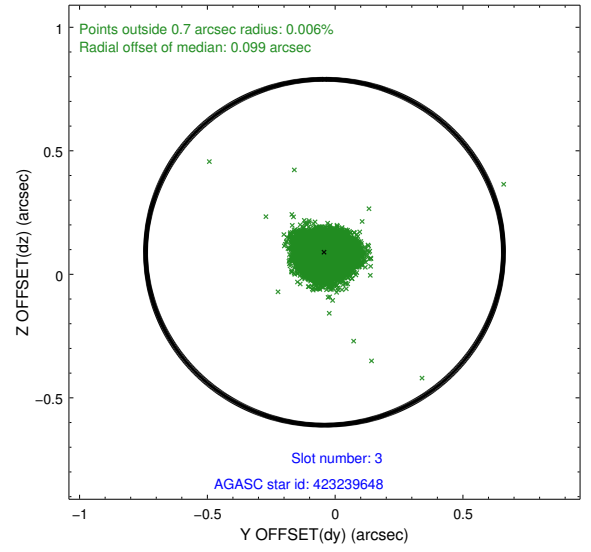
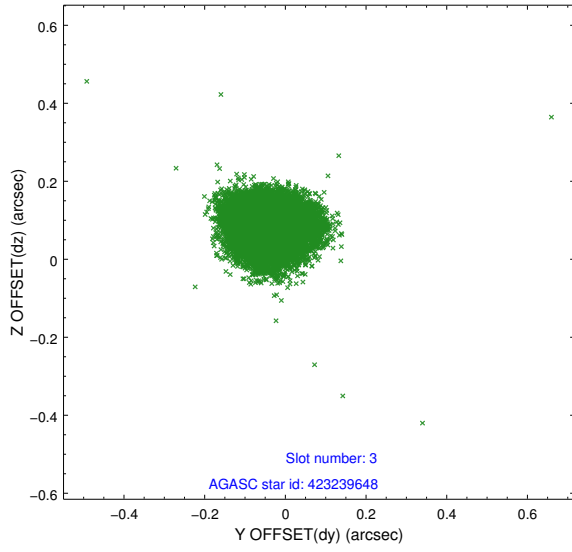


### Slot Statistics

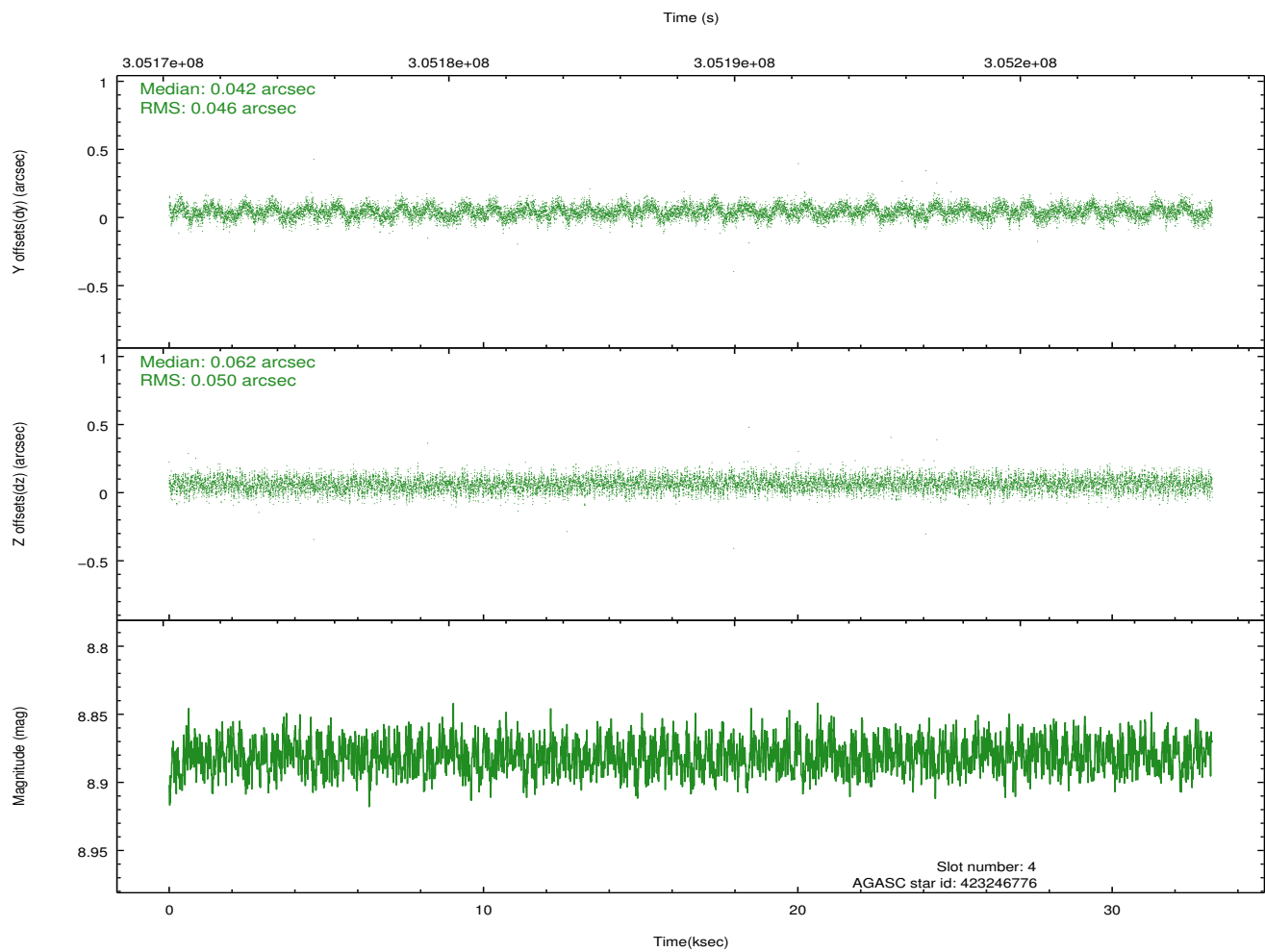
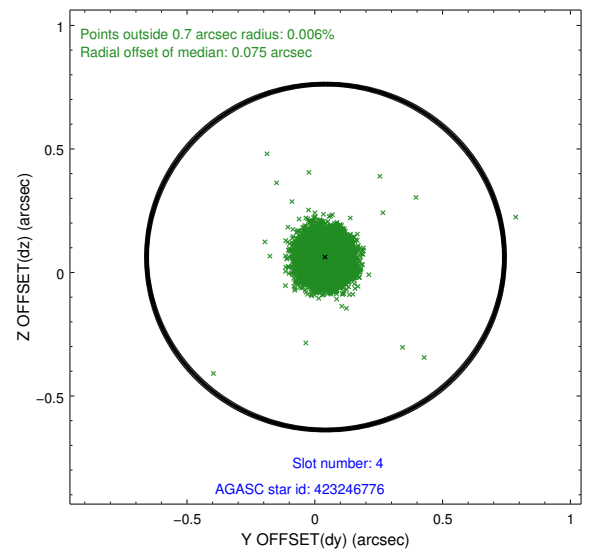
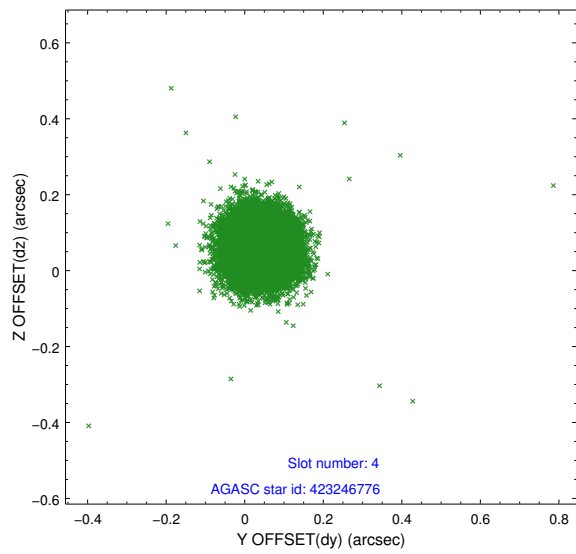
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.09	8095	-0.020	-0.043	0.011	0.019	0.000000	0.000000	-768.09	-1735.83
1	FID	ACIS-S-5	7.23	8094	-0.095	-0.010	0.013	0.021	0.000000	0.000000	-1821.28	166.14
2	FID	ACIS-S-6	7.33	8095	0.090	0.063	0.011	0.018	0.000000	0.000000	393.62	810.14
3	GUIDE	423239648	8.31	16182	-0.042	0.089	0.069	0.113	349.461087	43.553312	930.26	-1973.53
4	GUIDE	423246776	8.88	16183	0.042	0.062	0.072	0.115	349.847786	43.424046	-146.34	-1696.54
5	GUIDE	424938224	8.82	16180	0.155	0.032	0.085	0.133	350.059175	43.180030	-850.96	-933.74
6	GUIDE	422717960	7.36	16189	-0.256	-0.323	0.056	0.089	348.955578	42.579001	1630.85	1710.92
7	GUIDE	422707344	7.88	16188	0.097	0.137	0.081	0.125	349.968942	42.963598	-760.47	-123.99

## 2.4 Star Slots

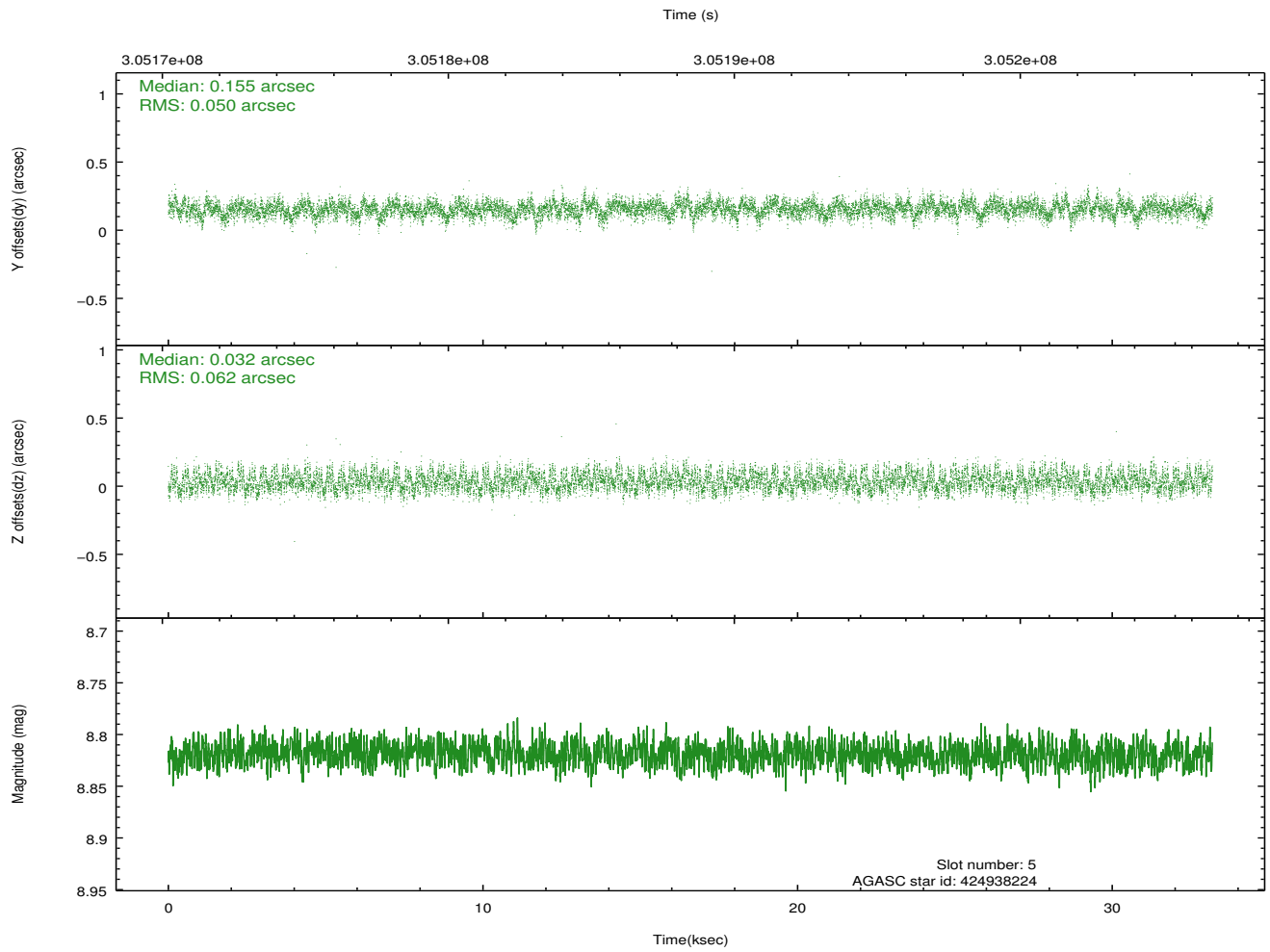
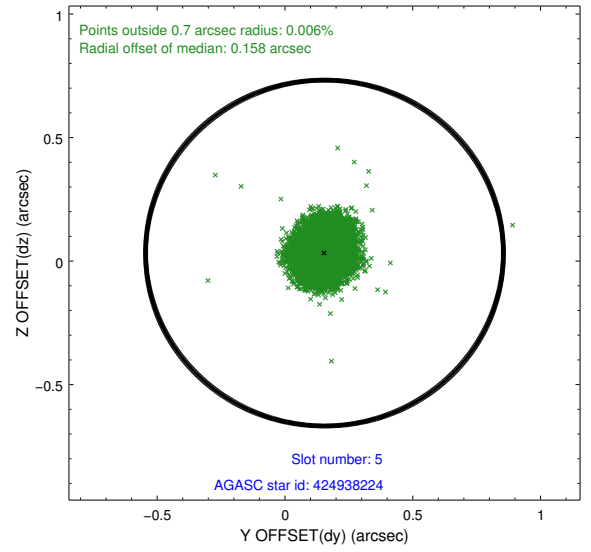
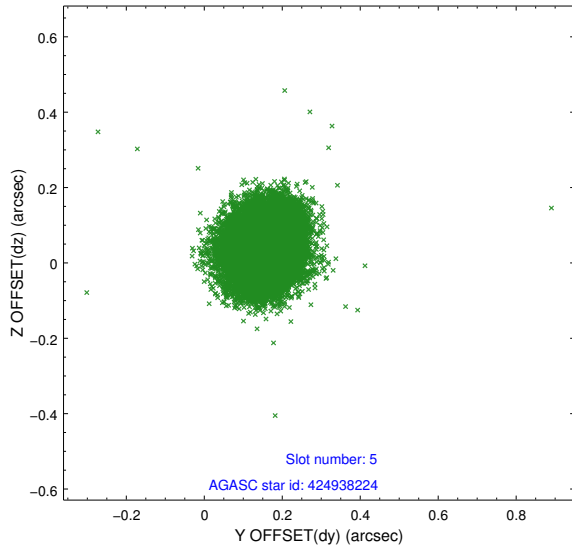
### 2.4.1 Slot 3



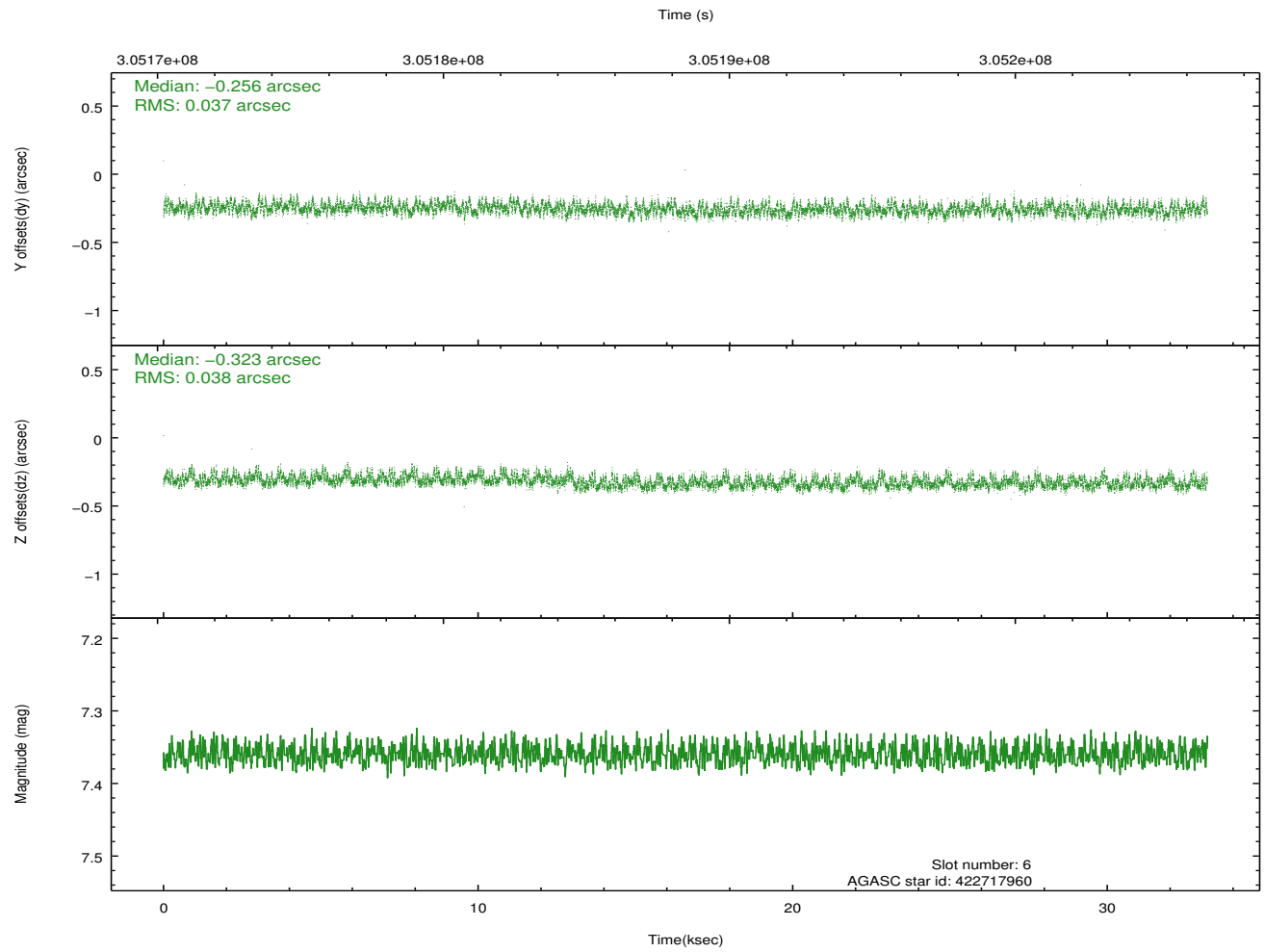
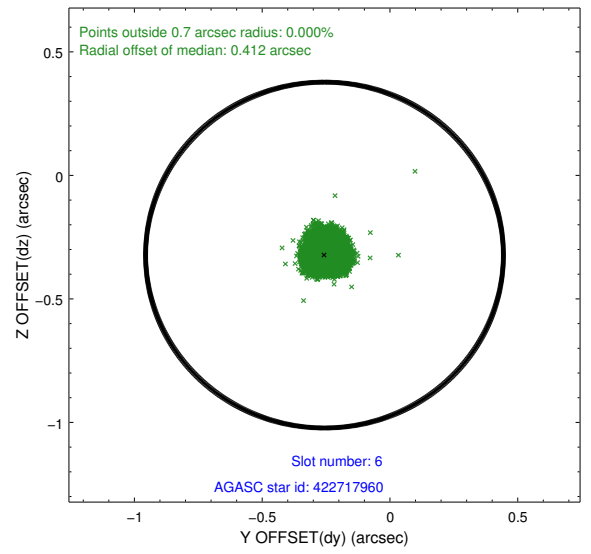
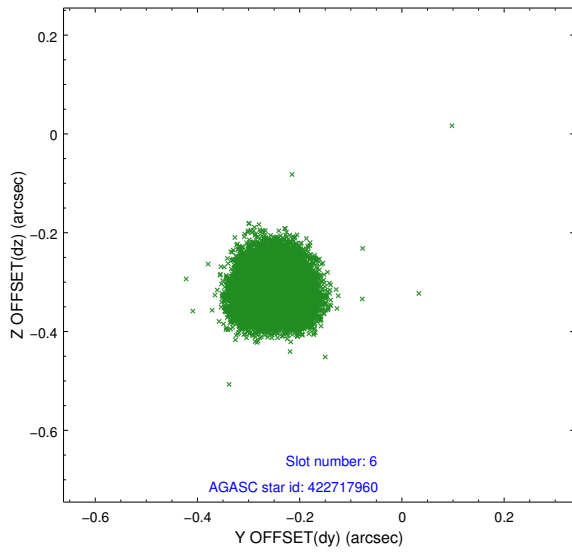
## 2.4.2 Slot 4



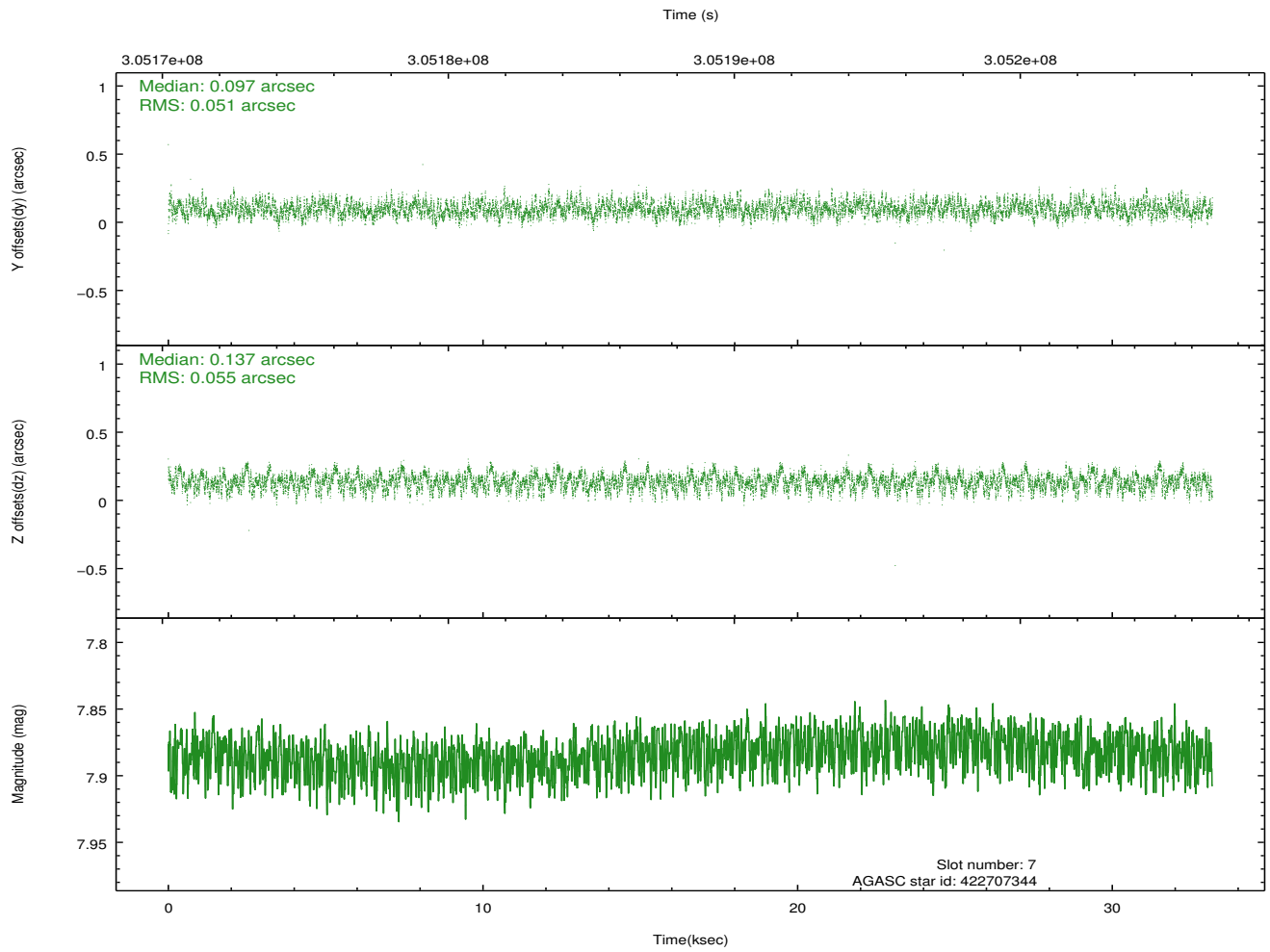
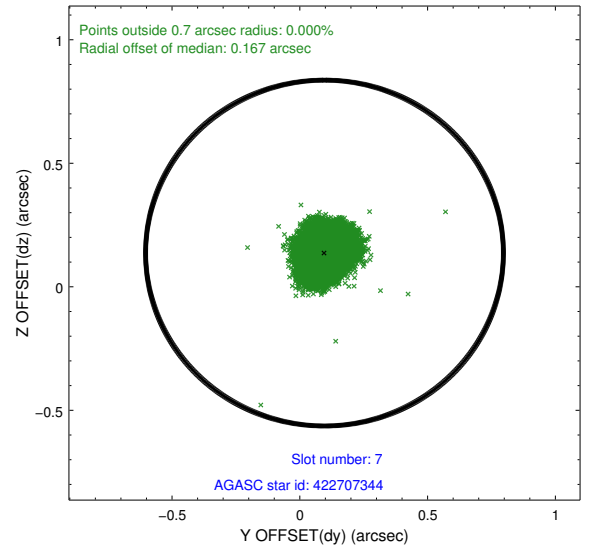
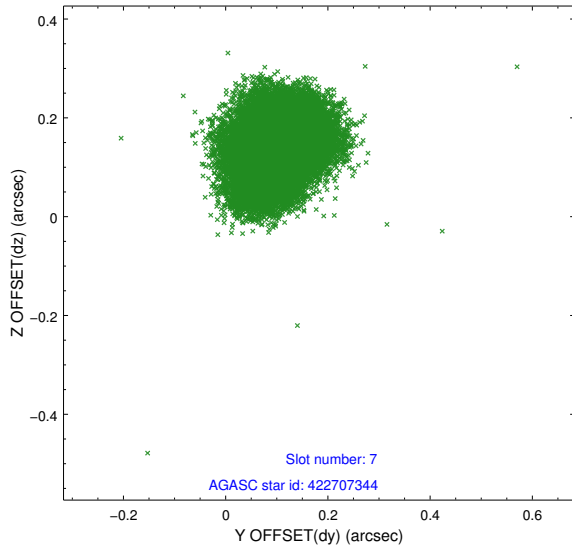
### 2.4.3 Slot 5



### 2.4.4 Slot 6

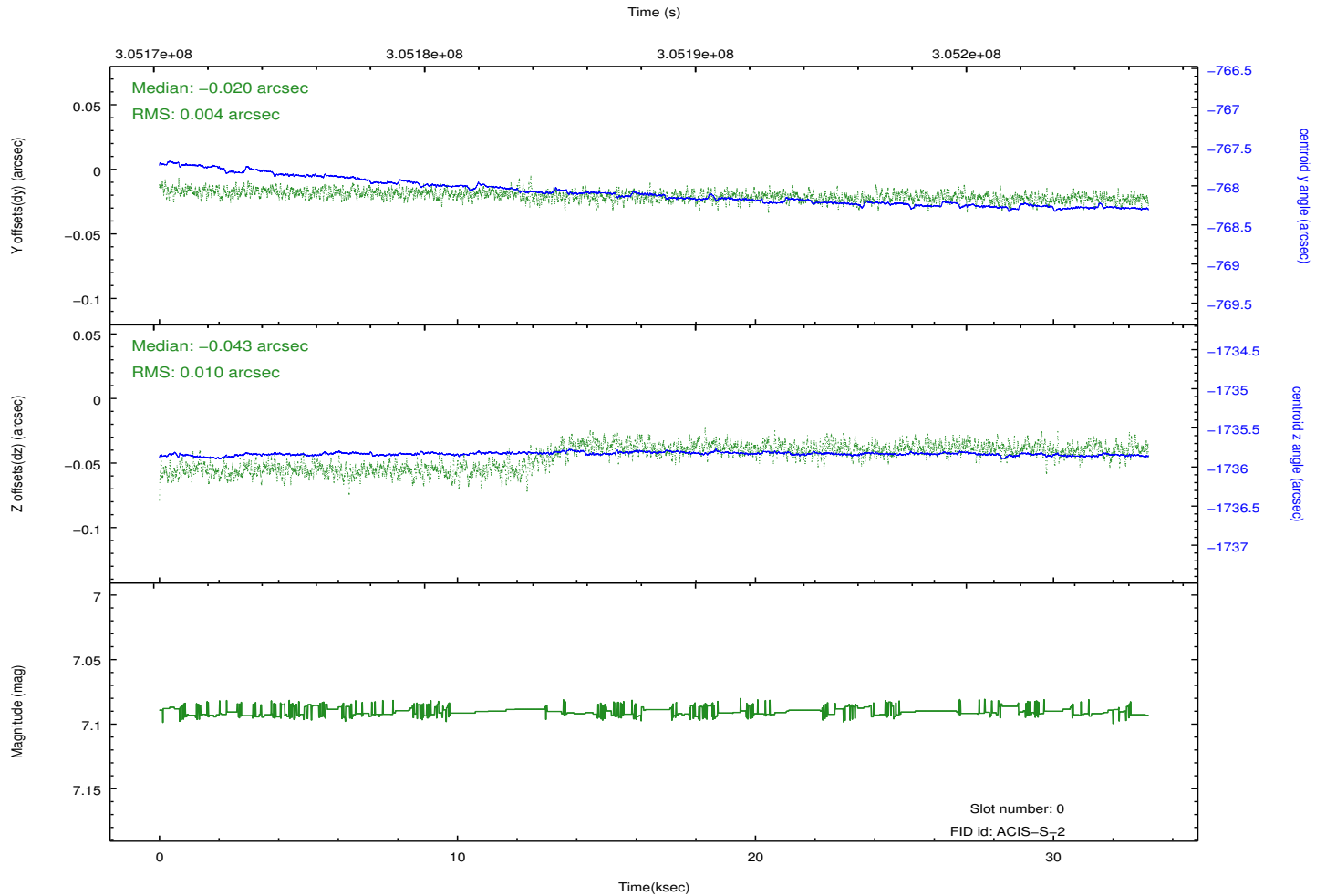
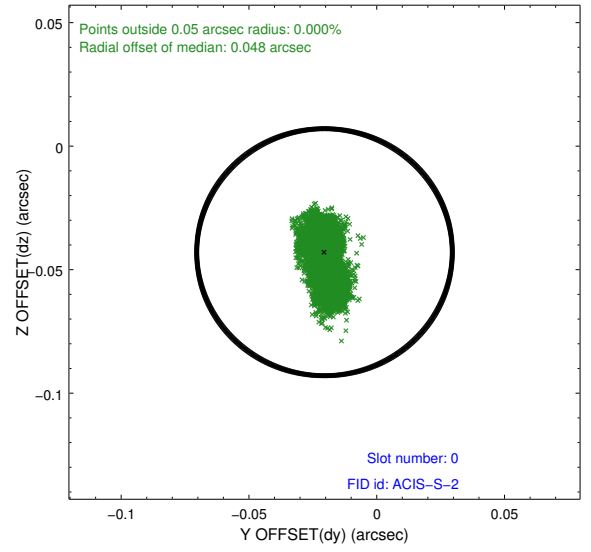
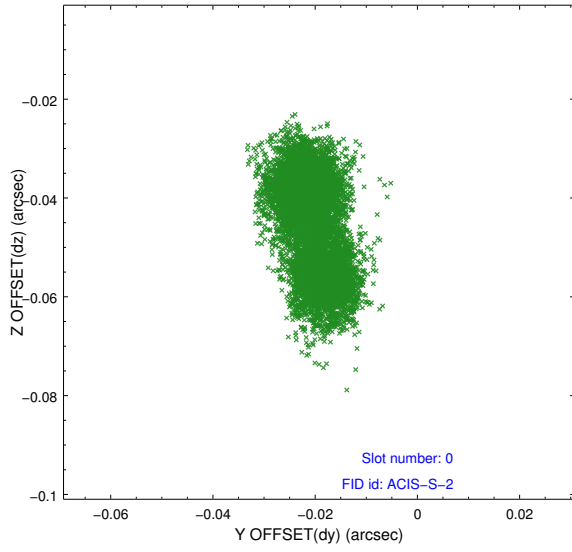


### 2.4.5 Slot 7

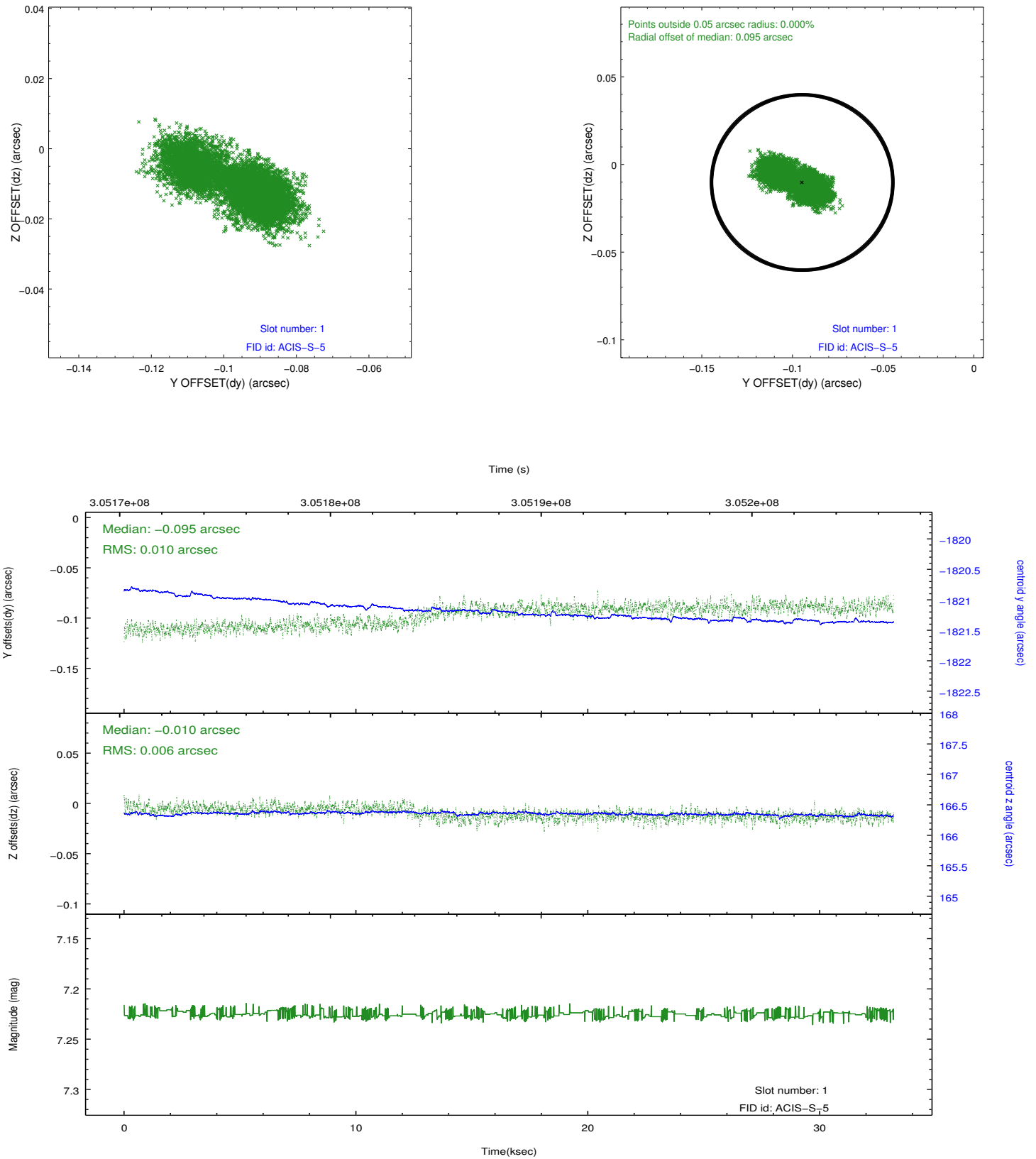


## 2.5 FID Slots

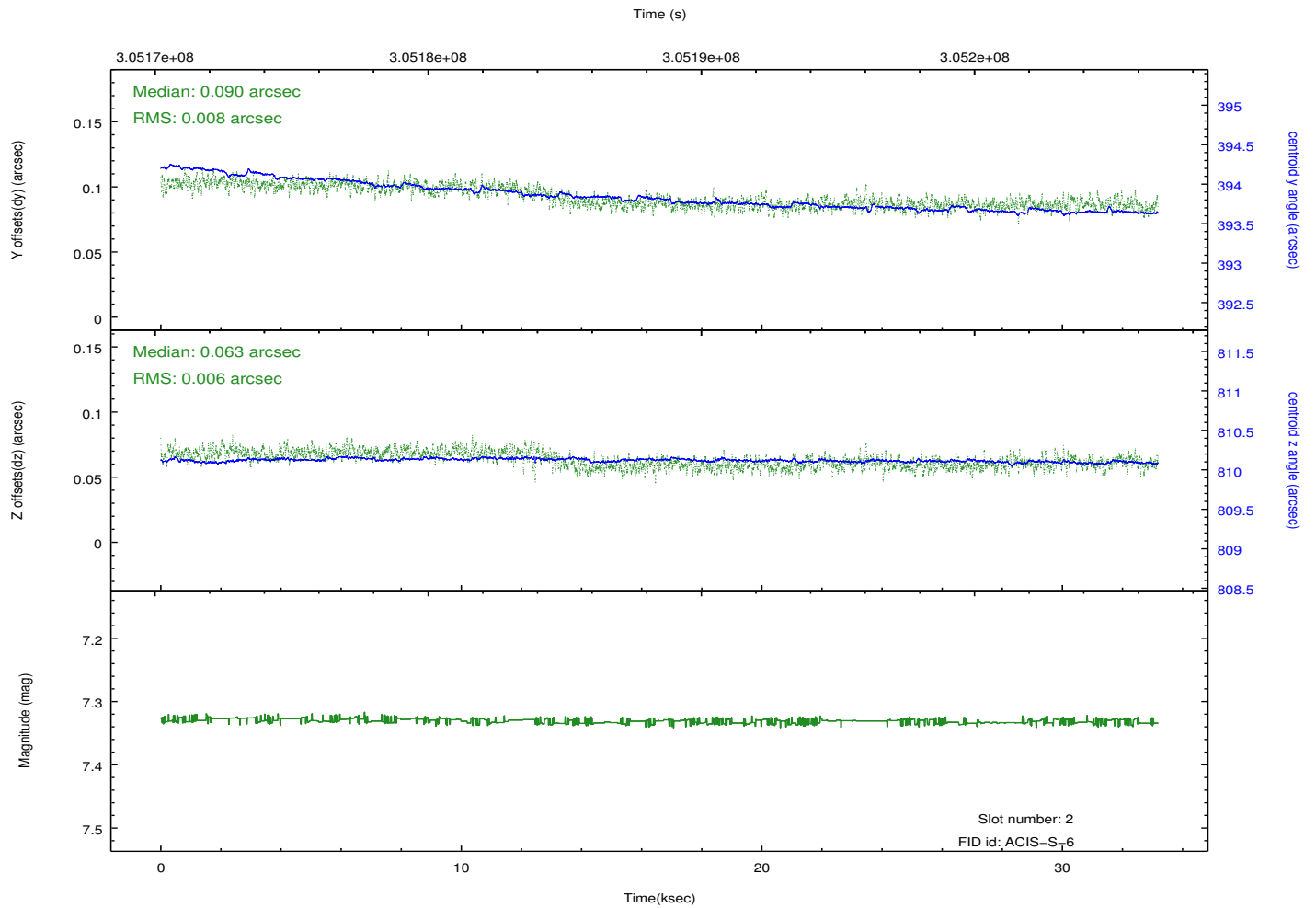
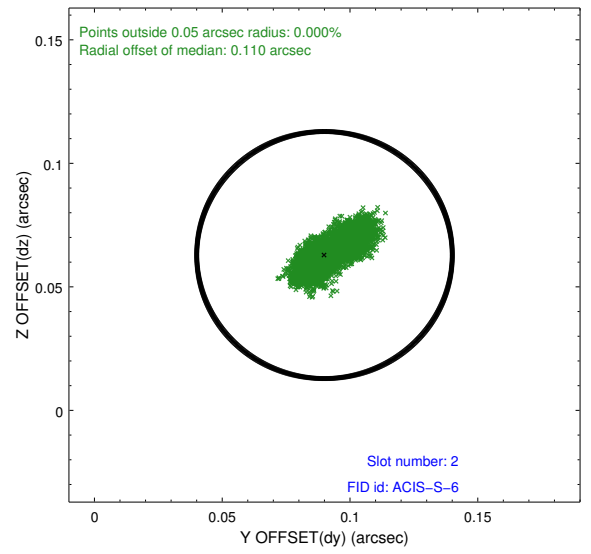
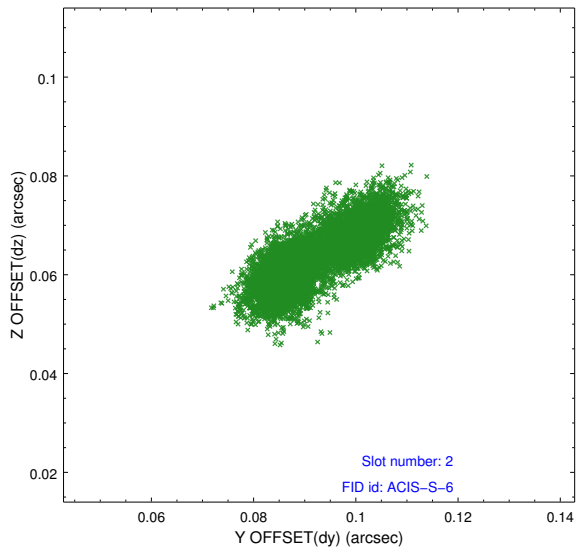
### 2.5.1 Slot 0



## 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)	2012.05.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.1824002

## A.2 Comments