

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 13192 - L2 Version 2  
Chandra X-Ray Center

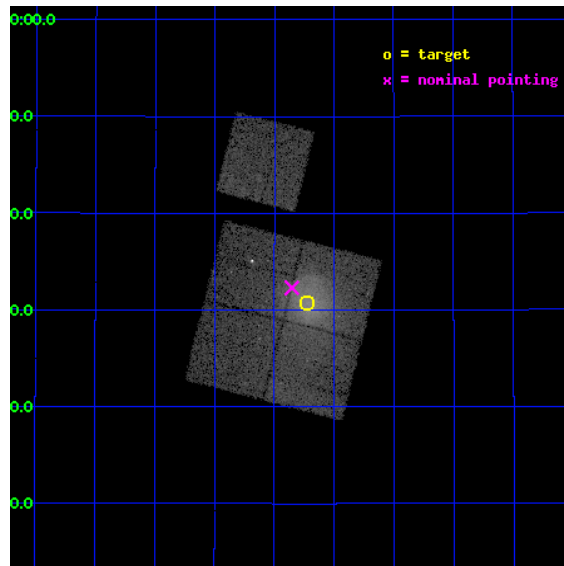
L2 Processing Date : Jul 7 2012

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# 1 Front

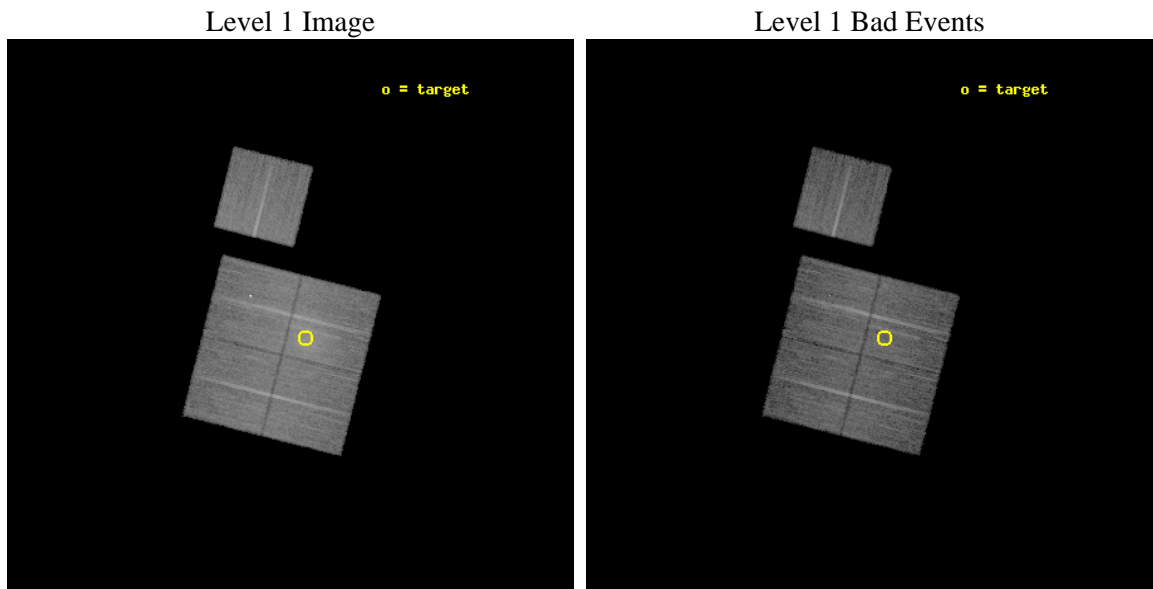
seq_num	801024	Sequence number
obs_id	13192	Observation id
title	Abell 2034: a Merger Near the Plane of the Sky	Proposal title
observer	Dr Paul Nulsen	Principal investigator
object	Abell 2034	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	227.555833	Observer's specified target RA [deg]
dec_targ	33.511944	Observer's specified target Dec [deg]
ra_nom	227.58834196966	Nominal RA [deg]
dec_nom	33.538351461644	Nominal Dec [deg]
roll_nom	14.19072565313	Nominal Roll [deg]
revision	2	Processing version of data
ontime	17053.100131154	Sum of GTIs [s]
livetime	16830.288823631	Livetime [s]
ontime0	17043.677210212	Sum of GTIs [s]
ontime1	17053.100131154	Sum of GTIs [s]
ontime2	17053.100131154	Sum of GTIs [s]
ontime3	17053.100131154	Sum of GTIs [s]
ontime6	17053.100131154	Sum of GTIs [s]
l2events	87813	Number of level 2 events



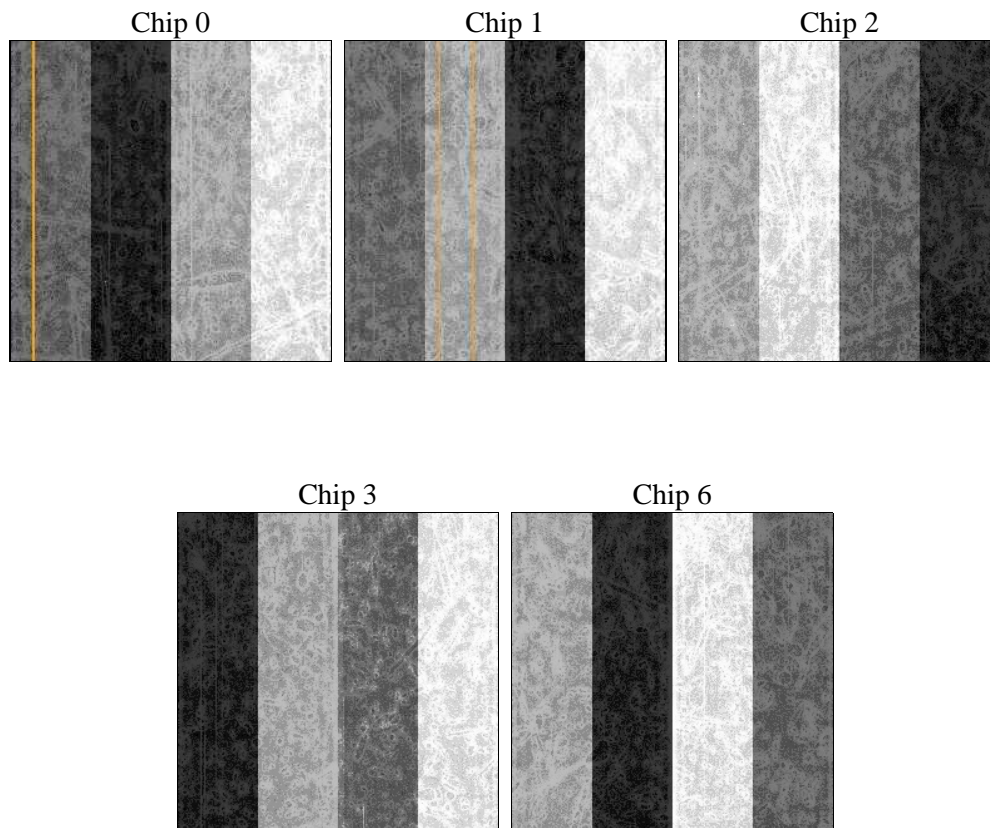
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	17053.100131154	Sum of GTIs [s]
caldbver	4.5.0	&#160	ontime0	17043.677210212	Sum of GTIs [s]
date	2012-07-07T17:00:00	Date and time of file creation	ontime1	17053.100131154	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	17053.100131154	Sum of GTIs [s]
			ontime3	17053.100131154	Sum of GTIs [s]
			ontime6	17053.100131154	Sum of GTIs [s]
			l1events	602205	Number of level 1 events

### 2.1.4 Events

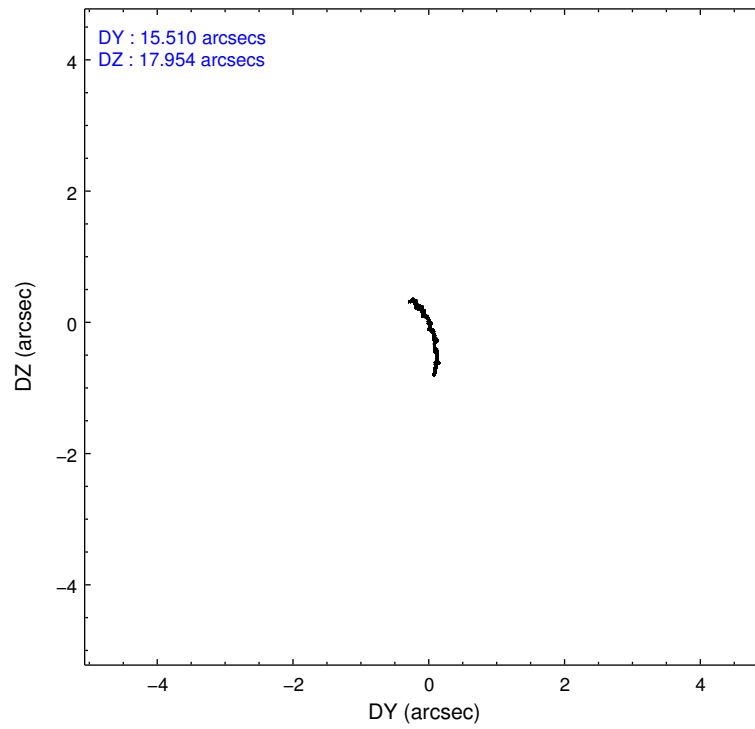
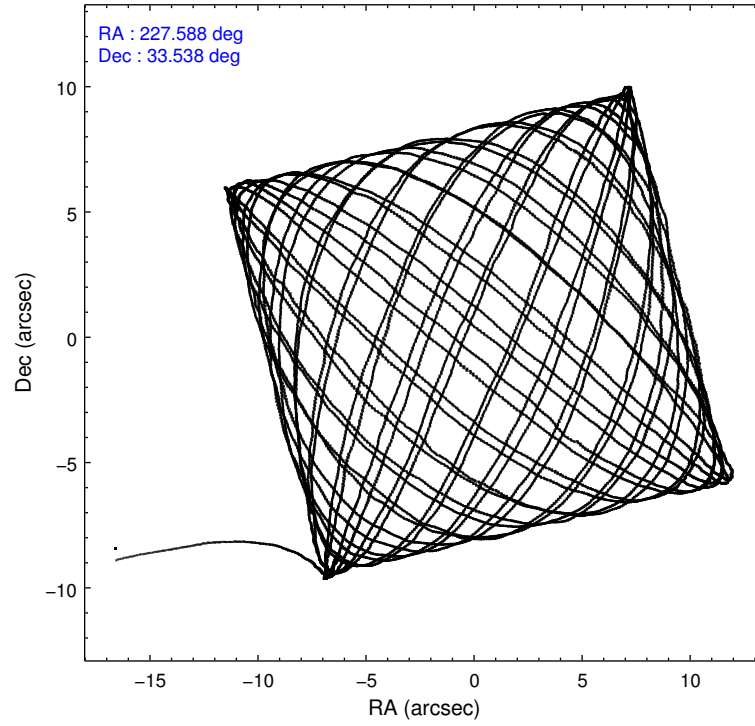
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	108350	114420	125980	136536	116919
rejected events	94321	95485	106789	102312	103279
rejected %	87%	83%	84%	74%	88%

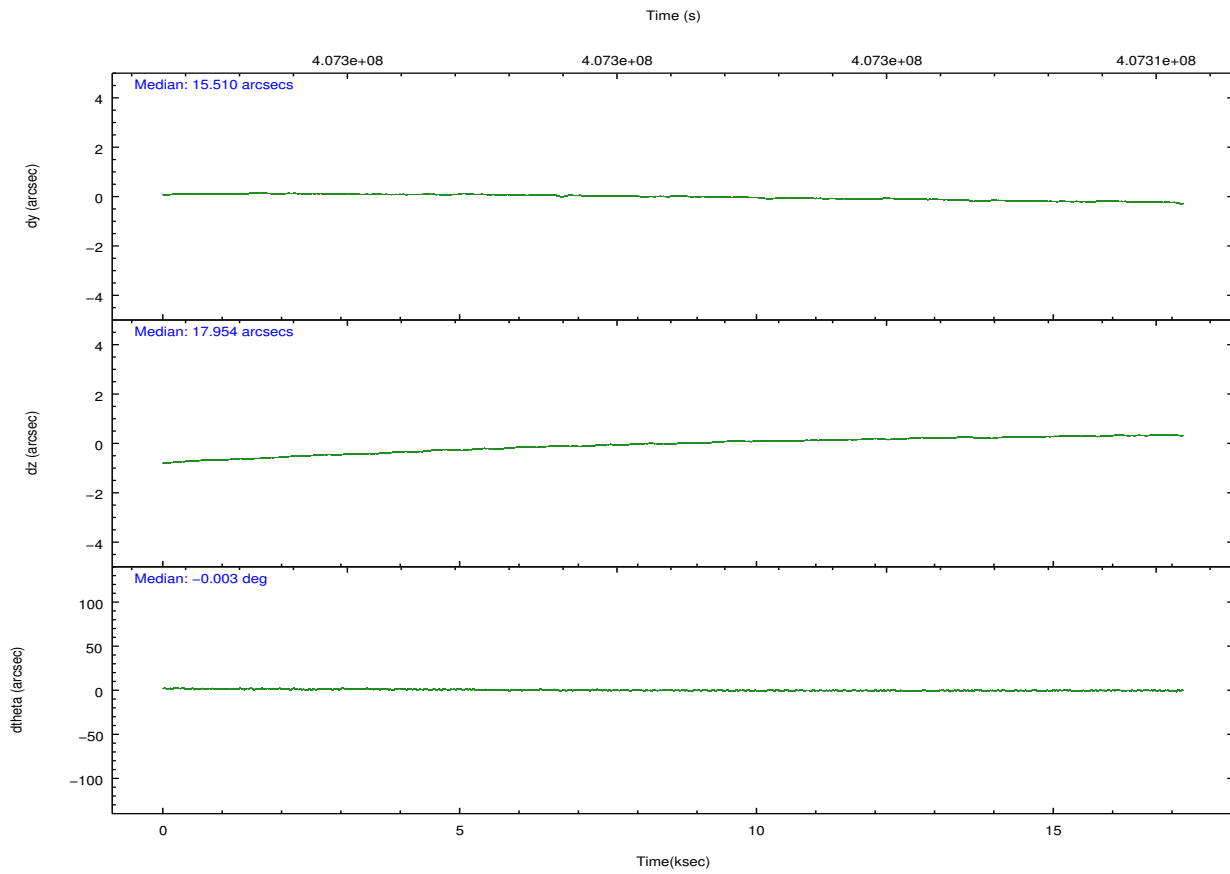
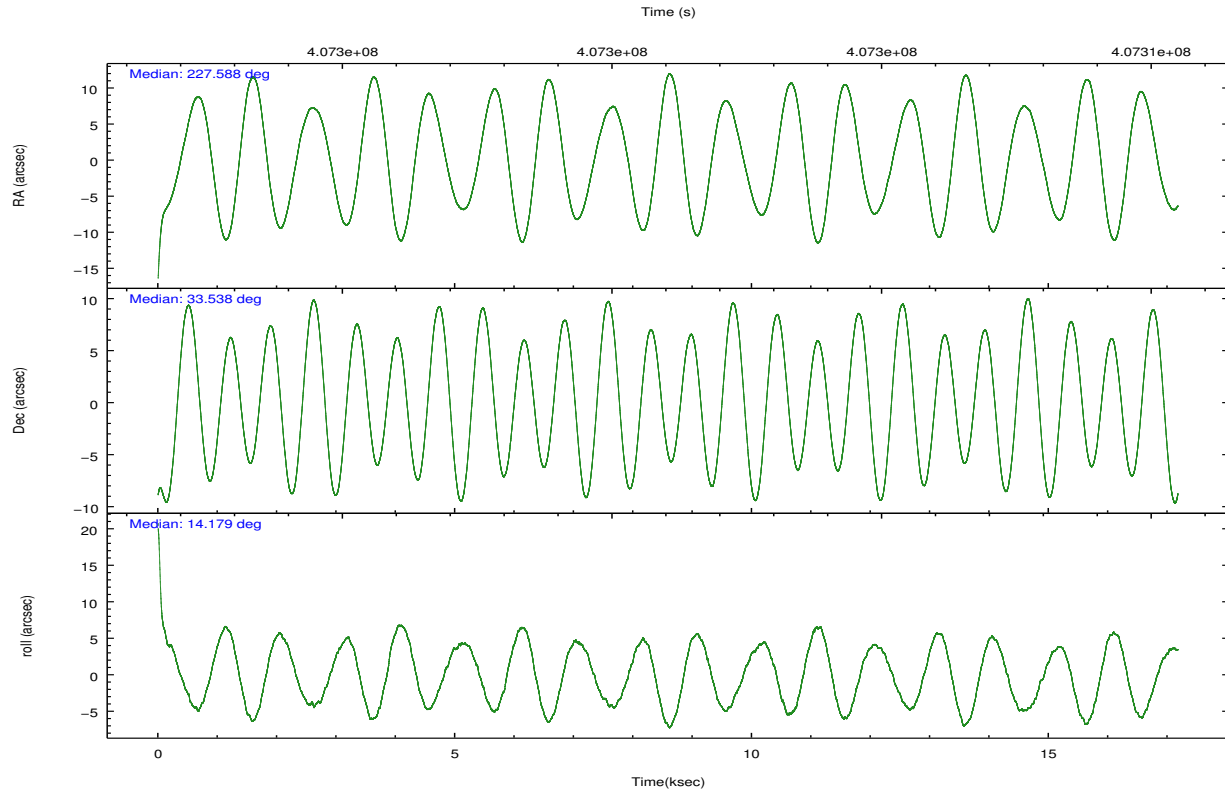
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5219	8640	9754	22147	4810
	4%	7%	7%	16%	4%
grade 1 events	82	71	171	170	81
	0%	0%	0%	0%	0%
grade 2 events	3405	3868	3735	4932	3039
	3%	3%	2%	3%	2%
grade 3 events	1433	1692	1552	2027	1442
	1%	1%	1%	1%	1%
grade 4 events	1383	1605	1586	2000	1406
	1%	1%	1%	1%	1%
grade 5 events	4981	5298	4946	5741	5368
	4%	4%	3%	4%	4%
grade 6 events	2593	3136	2573	3125	2946
	2%	2%	2%	2%	2%
grade 7 events	89254	90110	101663	96394	97827
	82%	78%	80%	70%	83%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	227.564811	227.5883419696606	CCD I2 on	Y	Y
[deg] Pointing Dec	33.519132	33.53835146164415	CCD I3 on	Y	Y
[deg] Pointing Roll	13.995034	14.19072565313034	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.592463	-225.5818545406617	CCD S3 on	N	N
[mm] SIM translation stage offset	-8	-8.010598462268035	CCD S4 on	N	N
[s] Observation start time (MET)	407292633.184000	407291441.50862	CCD S5 on	N	N
Observation start date	2010-11-28T00:49:27	2010-11-28T00:30:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	407309633.184000	407309766.97206	On-chip summing requested	N	N
Observation end date	2010-11-28T05:32:47	2010-11-28T05:36:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



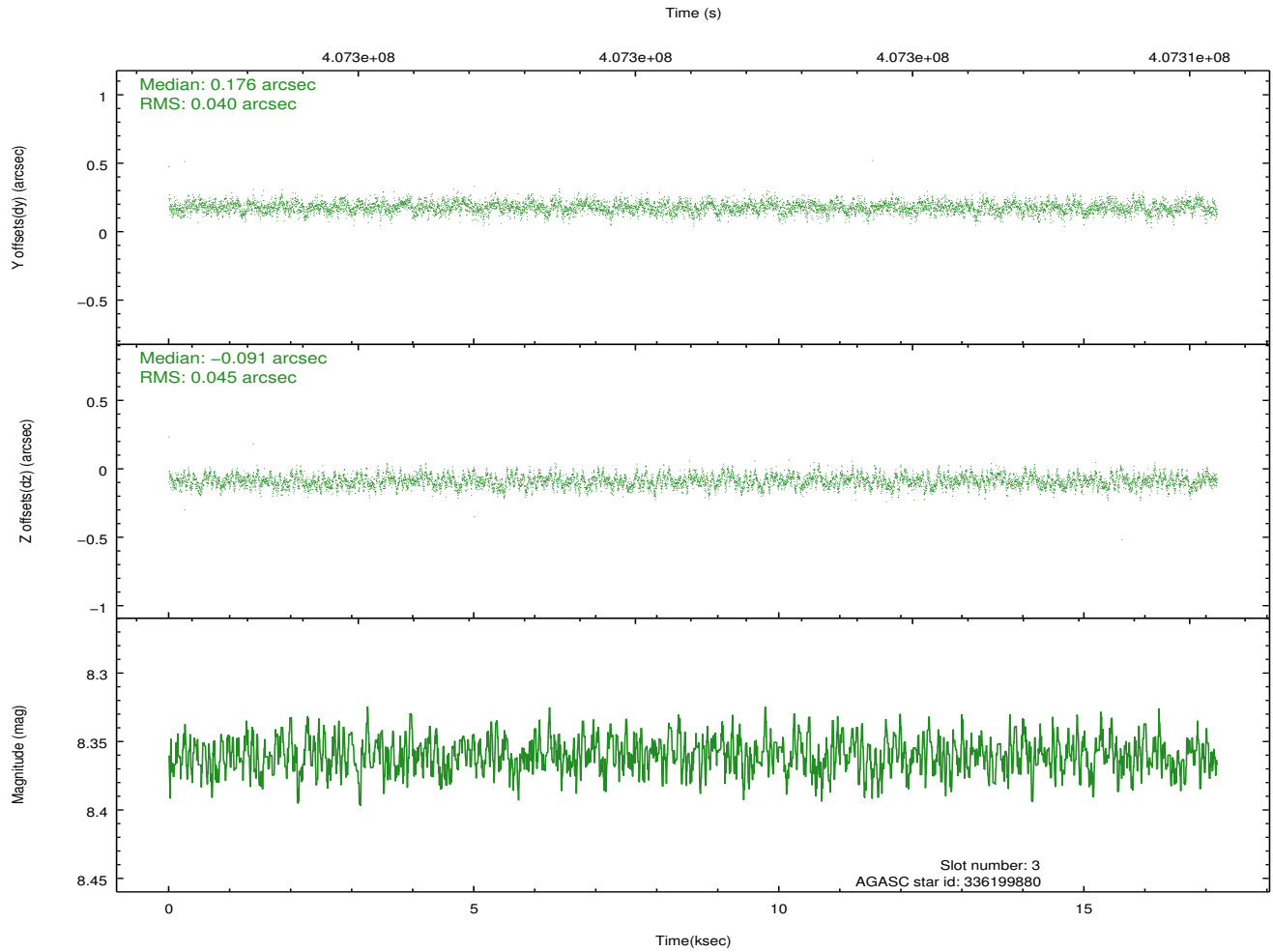
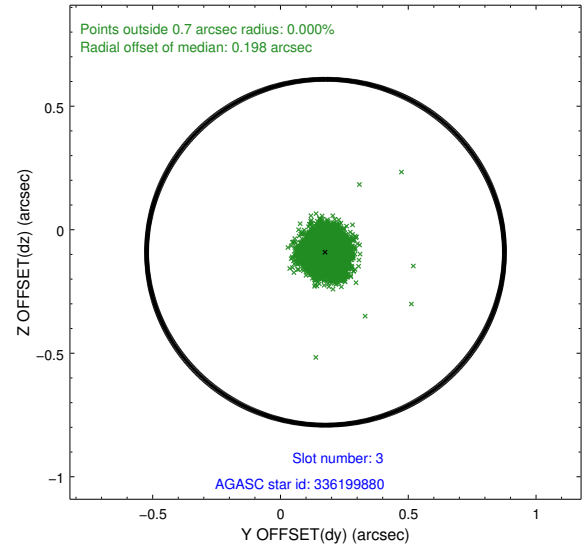
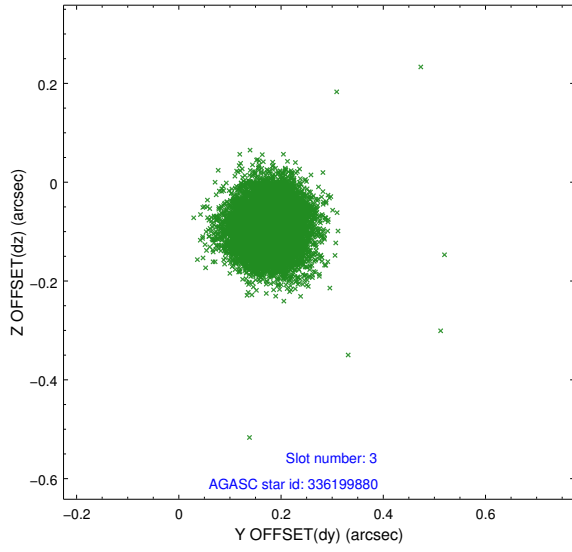


### Slot Statistics

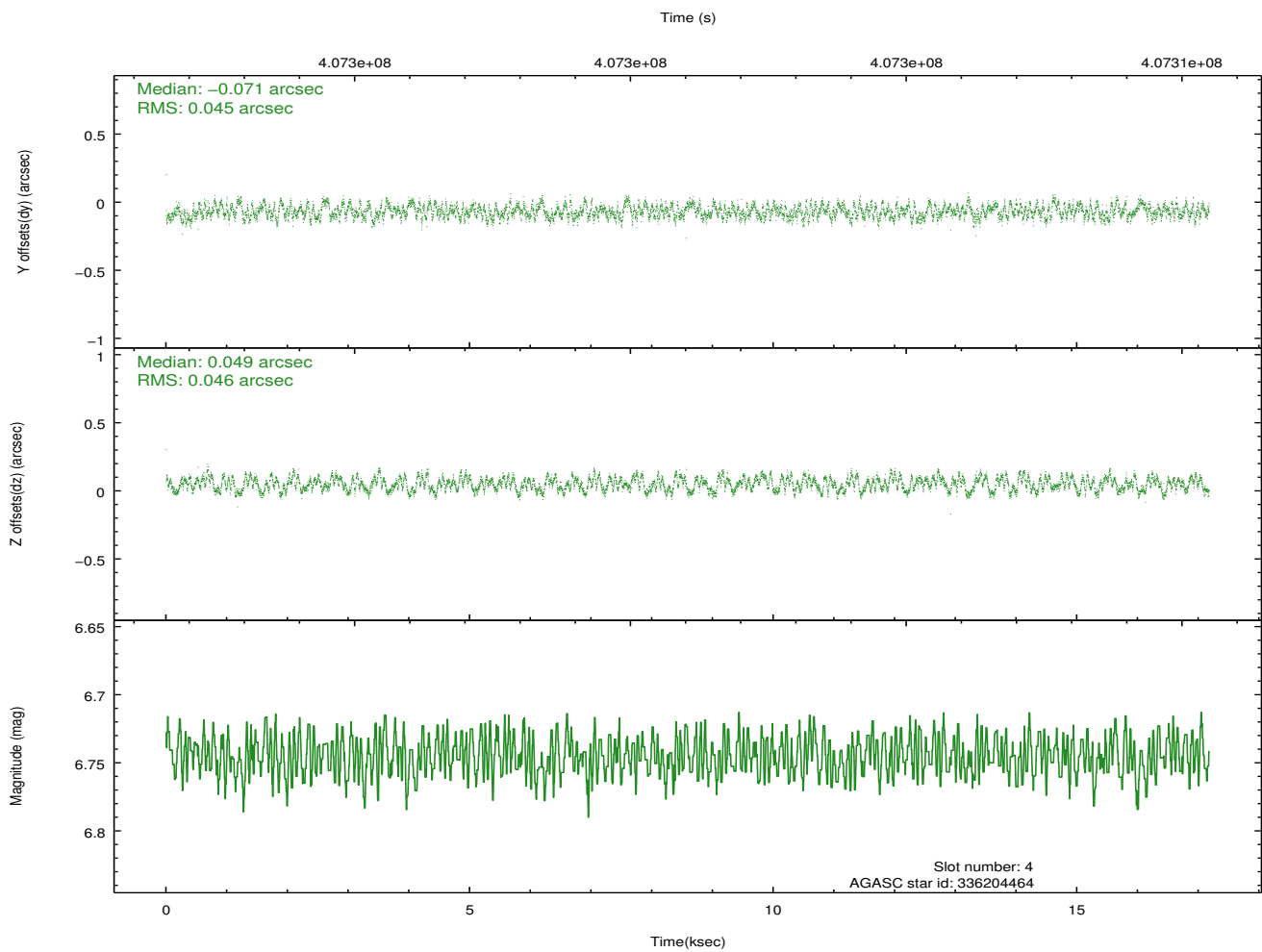
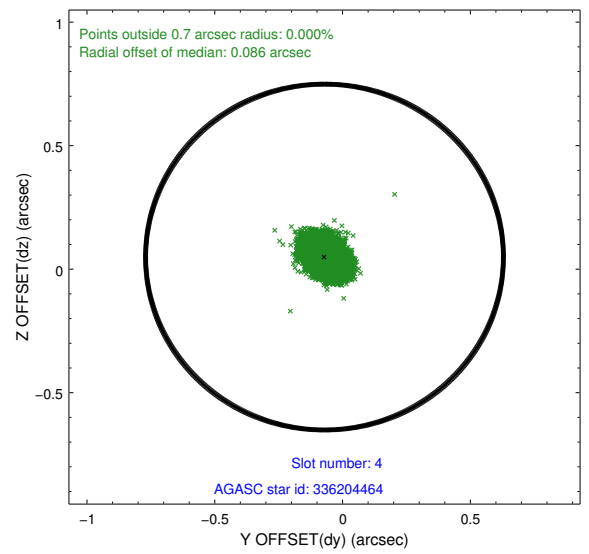
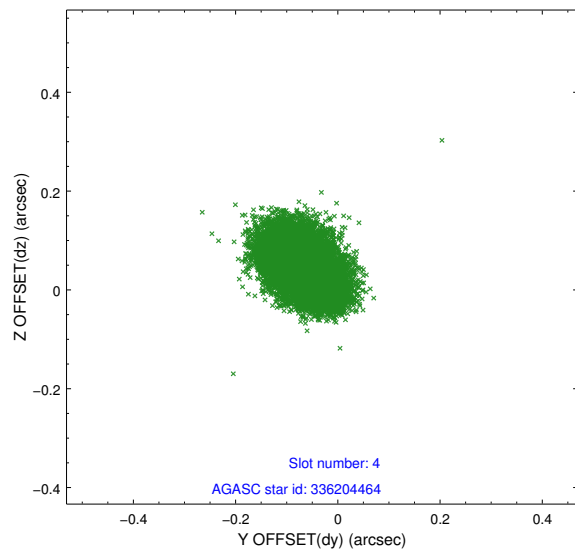
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.01	4189	0.111	-0.067	0.013	0.030	0.000000	0.000000	923.93	-1006.07
1	FID	ACIS-I-5	7.01	4190	-0.264	0.097	0.011	0.021	0.000000	0.000000	-1824.44	891.40
2	FID	ACIS-I-6	7.03	4190	0.060	0.041	0.013	0.019	0.000000	0.000000	389.13	1536.15
3	GUIDE	336199880	8.36	8378	0.176	-0.091	0.064	0.100	227.783989	33.320747	468.05	-851.38
4	GUIDE	336204464	6.75	8381	-0.071	0.049	0.070	0.104	227.662063	33.078883	-97.81	-1608.35
5	GUIDE	336204600	6.98	8378	-0.103	0.204	0.063	0.101	227.238782	33.265363	-1172.63	-647.02
6	GUIDE	336207352	7.56	8380	-0.024	-0.099	0.061	0.099	226.776230	33.965033	-1894.37	2135.44
7	GUIDE	336207928	9.08	8374	0.016	-0.060	0.095	0.152	227.107778	33.476608	-1368.23	186.40

## 2.4 Star Slots

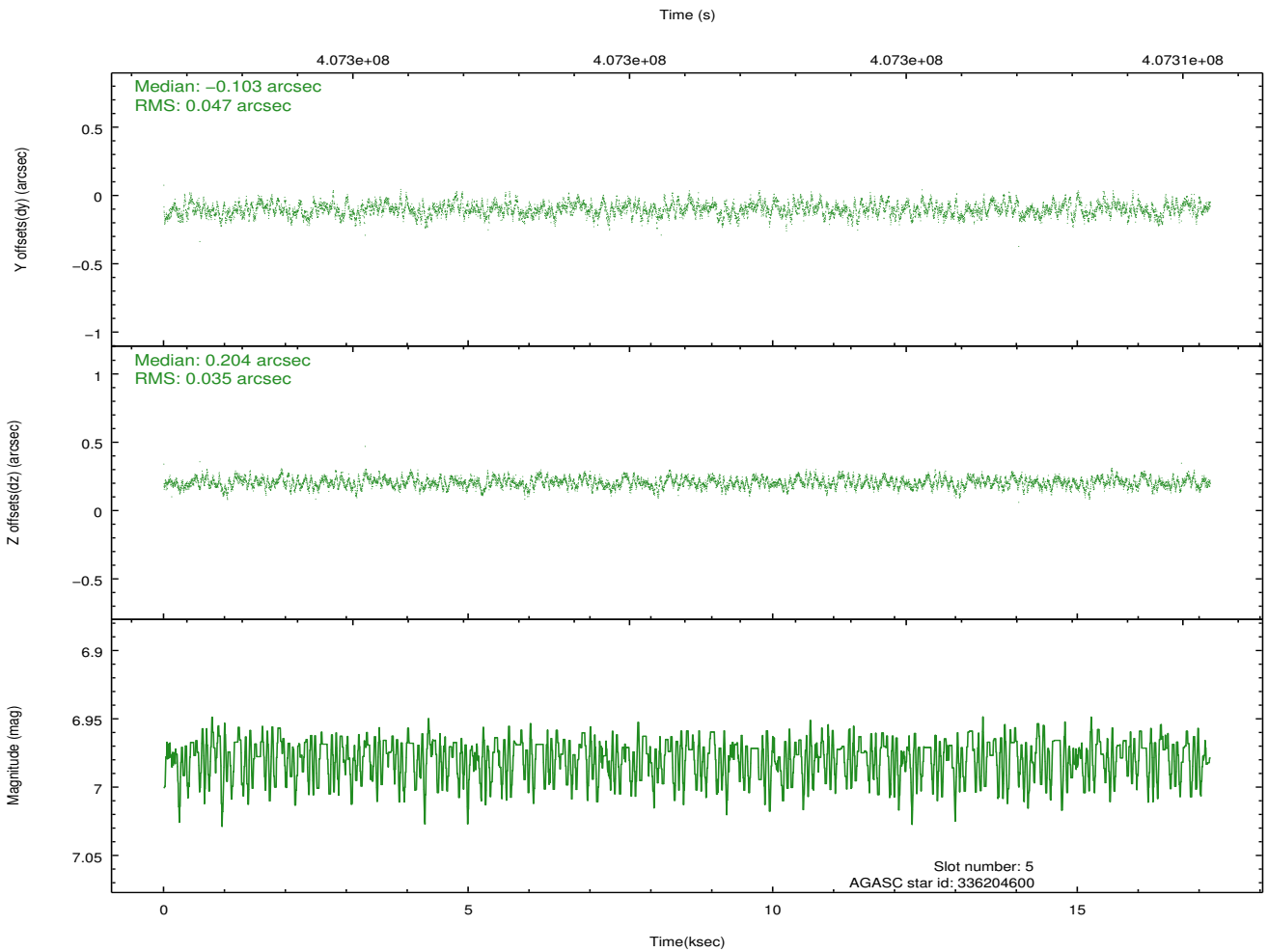
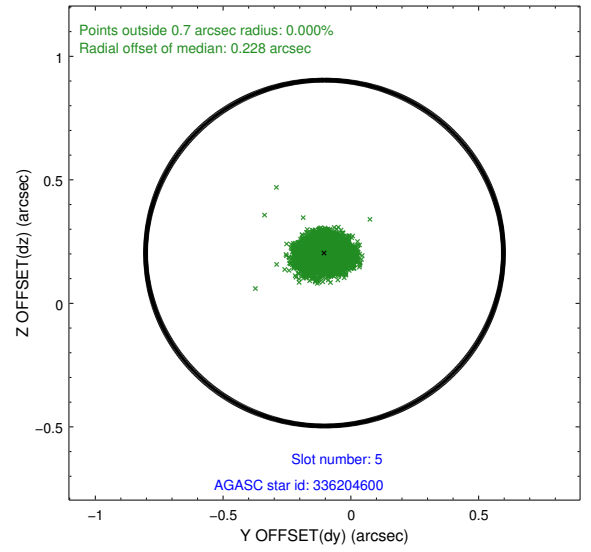
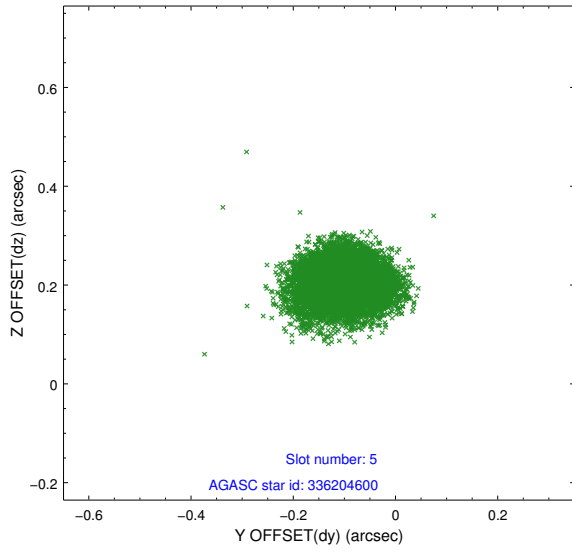
### 2.4.1 Slot 3



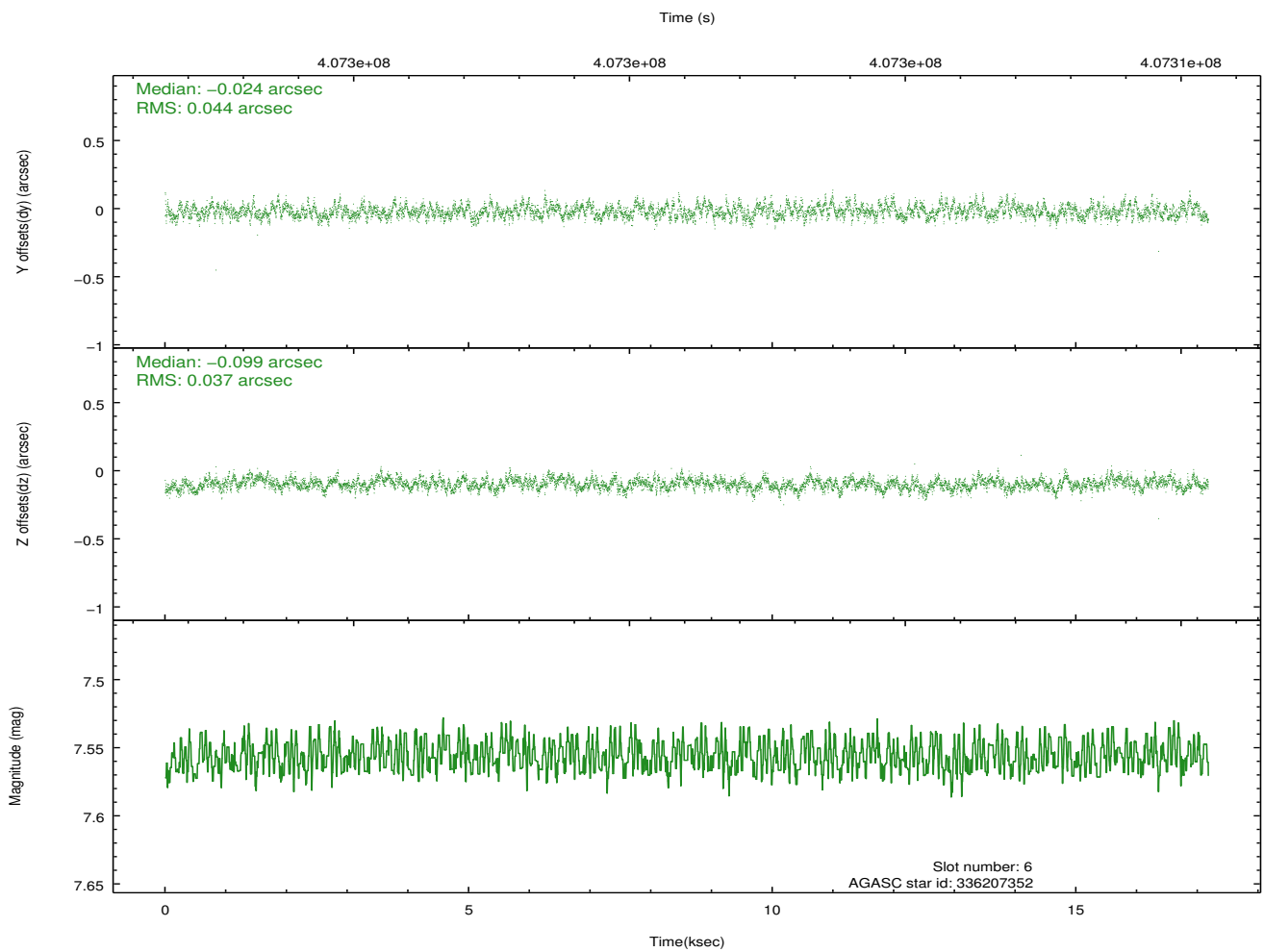
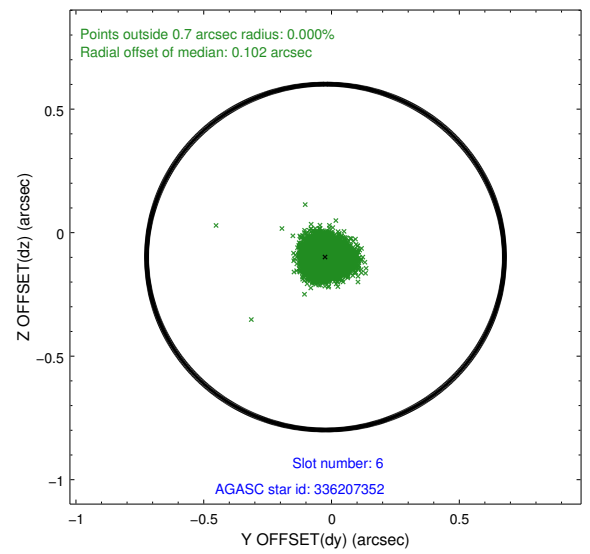
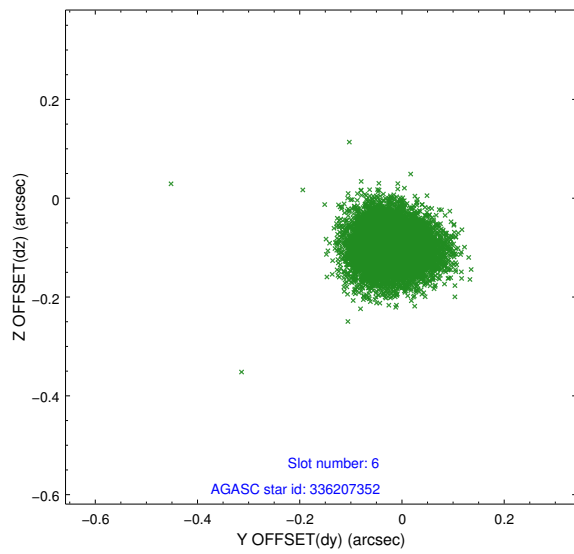
## 2.4.2 Slot 4



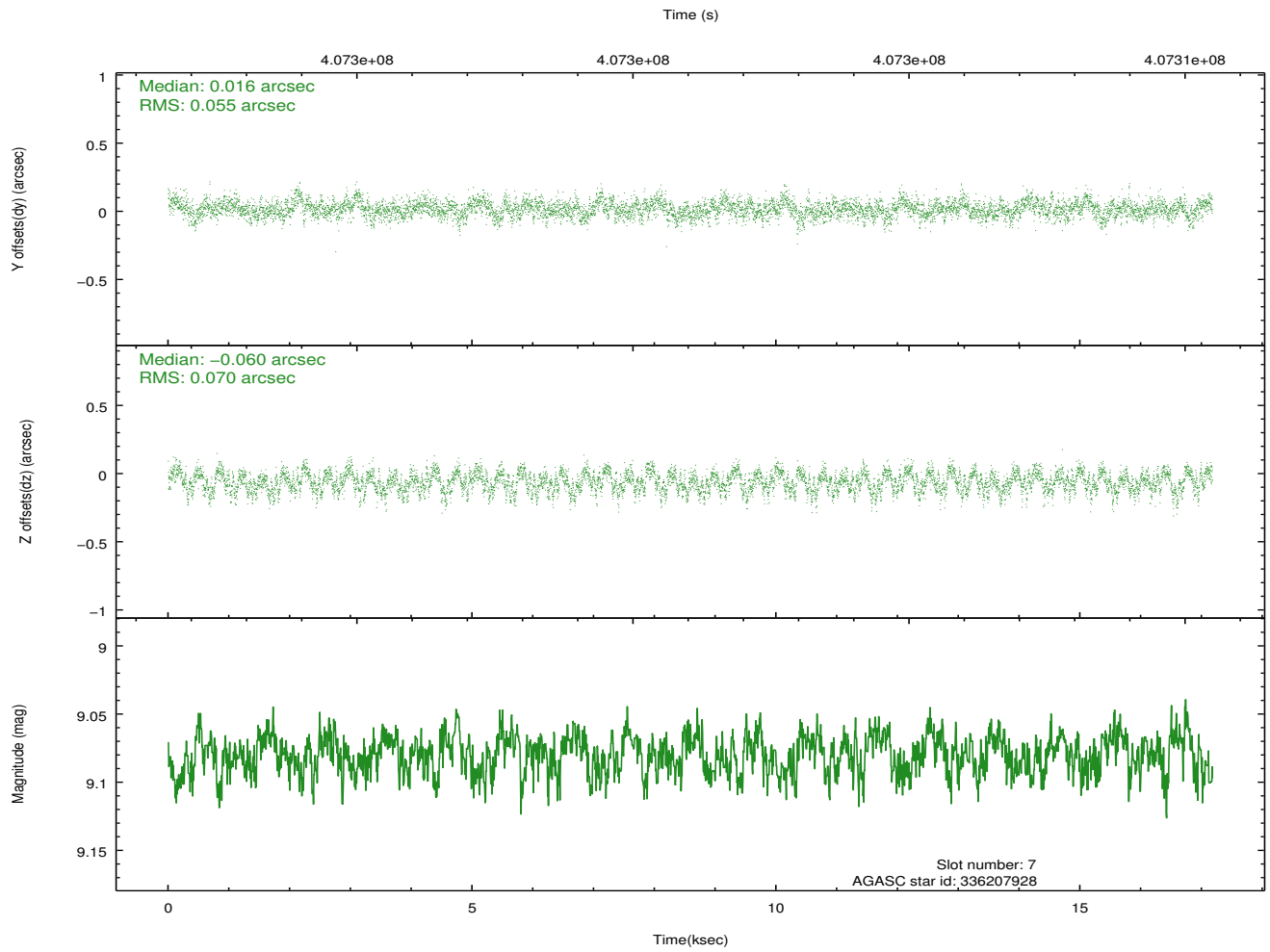
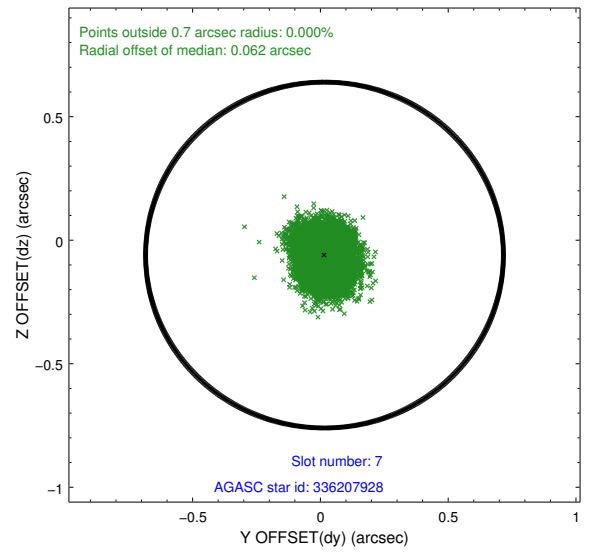
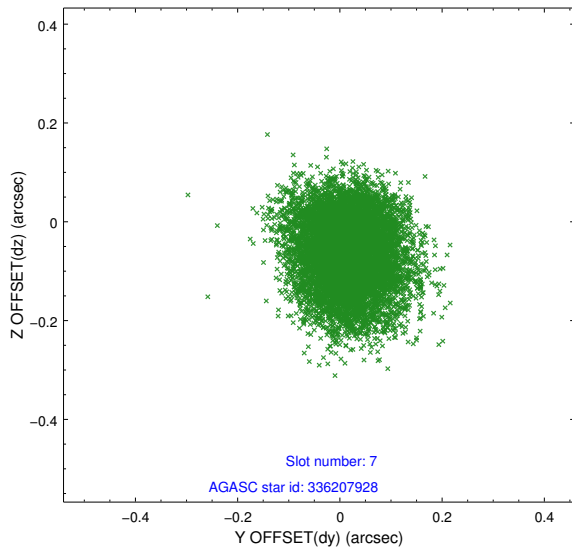
### 2.4.3 Slot 5



## 2.4.4 Slot 6

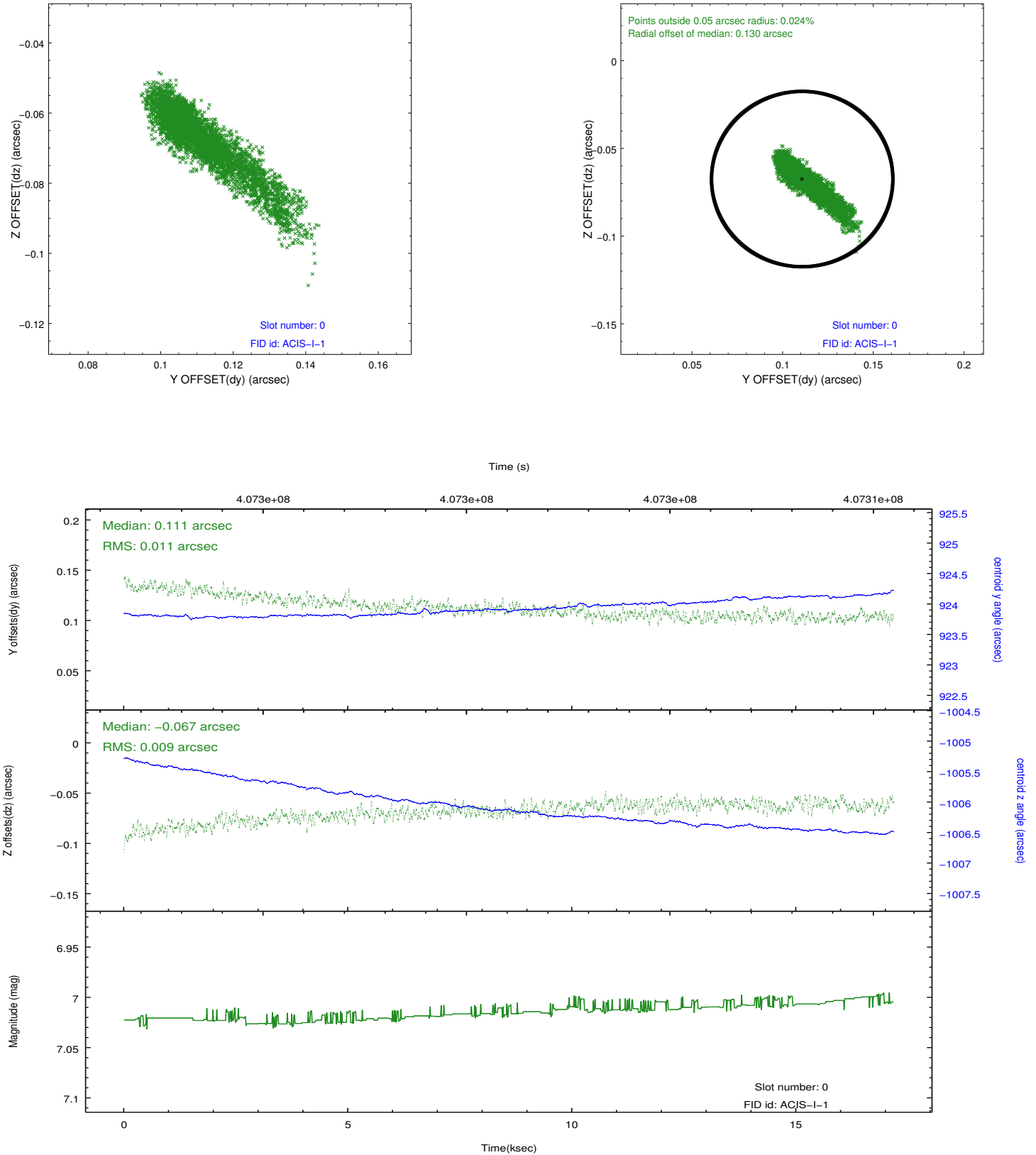


### 2.4.5 Slot 7

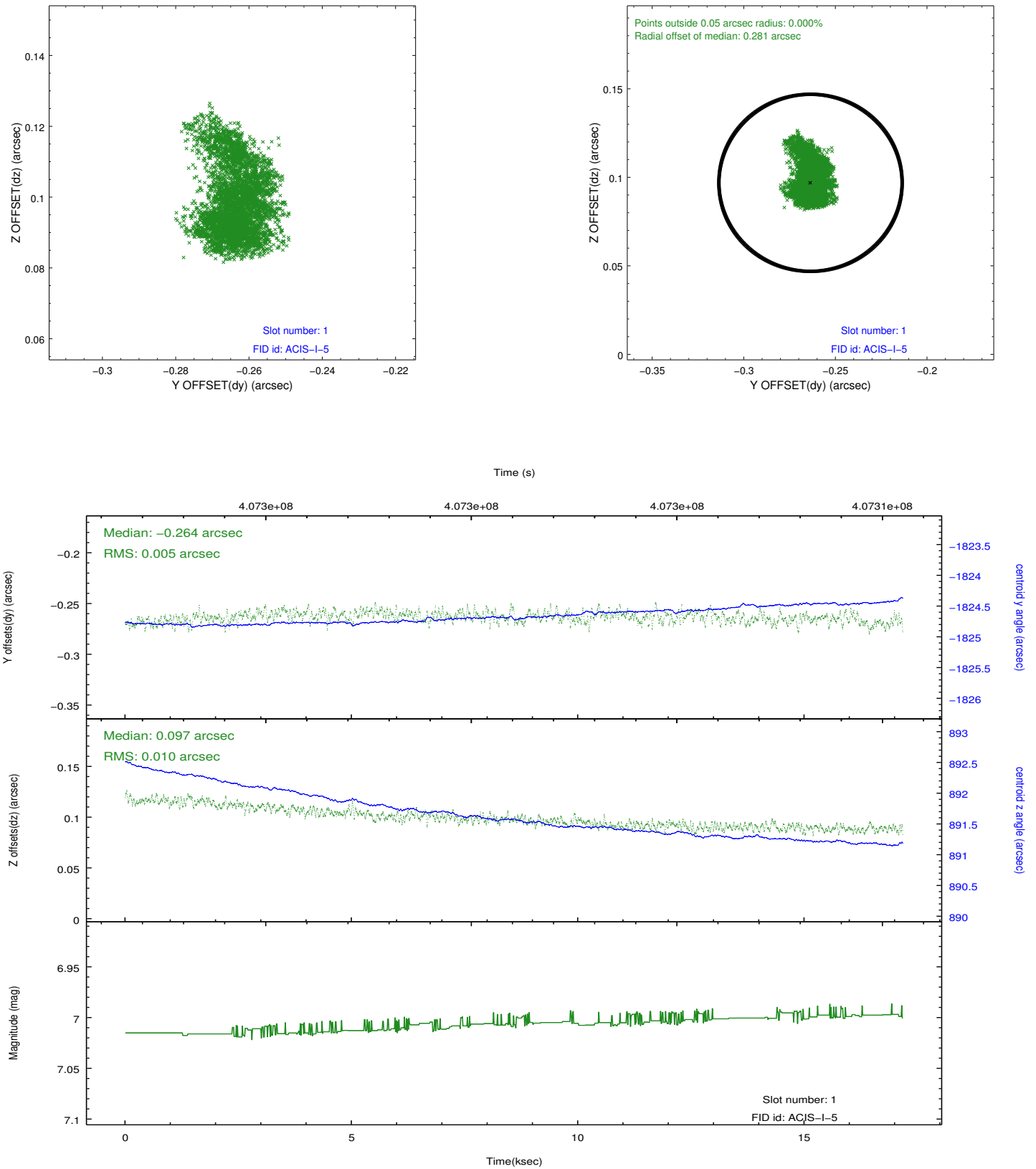


## 2.5 FID Slots

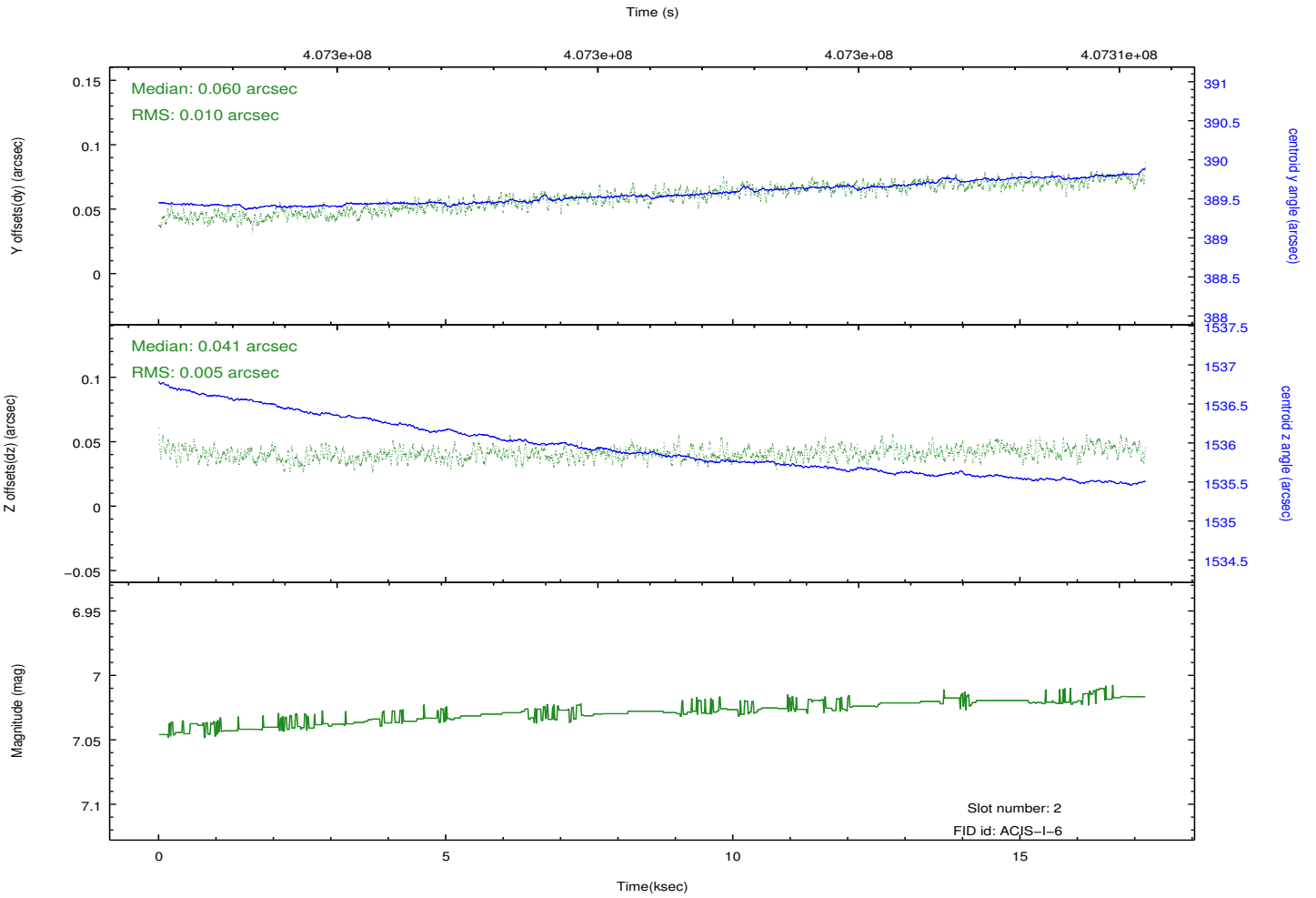
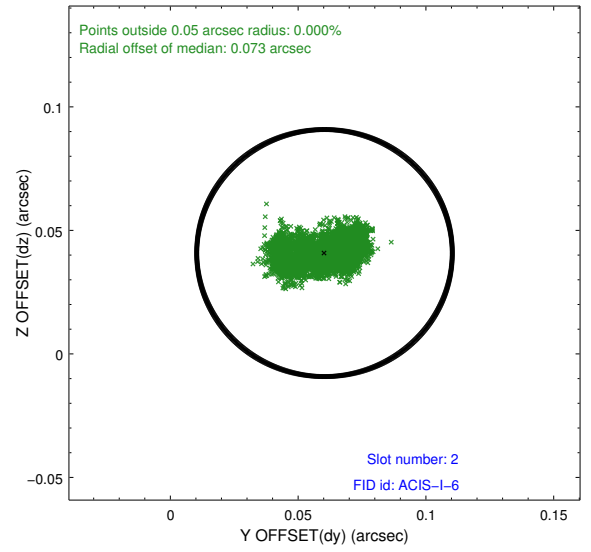
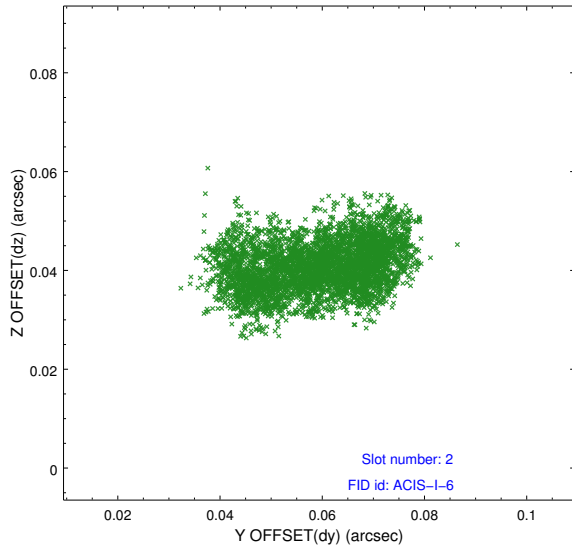
### 2.5.1 Slot 0



## 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	17.053100131154

## A.2 Comments