

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 15266 - L2 Version 1  
Chandra X-Ray Center

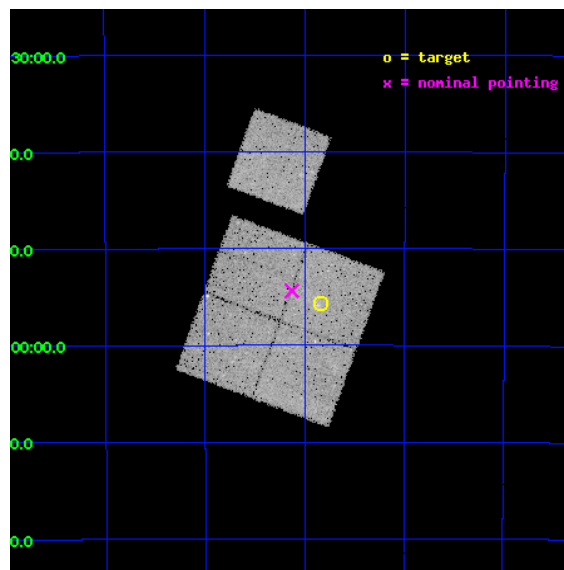
L2 Processing Date : Aug 15 2012

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# 1 Front

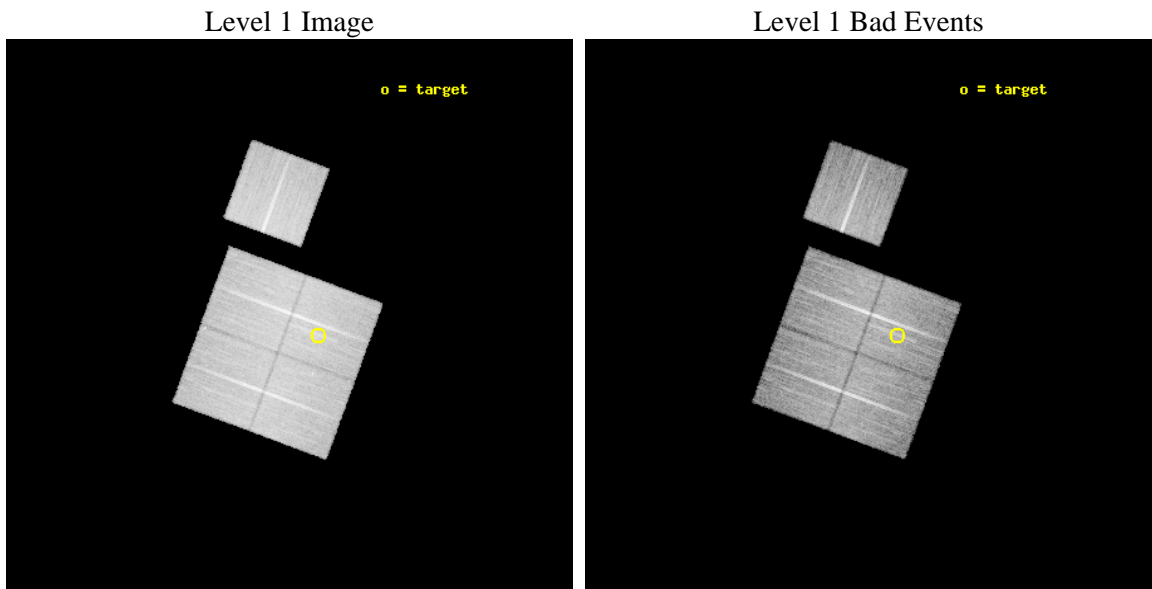
seq_num	801148	Sequence number
obs_id	15266	Observation id
title	Cosmology and Cluster Evolution from the 80 Most Massive Clusters in 2000 deg <sup>2</sup> from the South Pole Telescope Survey	Proposal title
observer	Dr Bradford Benson	Principal investigator
object	SPT-CLJ2236-4555	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	339.21	Observer's specified target RA [deg]
dec_targ	-45.9271	Observer's specified target Dec [deg]
ra_nom	339.2822248158	Nominal RA [deg]
dec_nom	-45.906199717431	Nominal Dec [deg]
roll_nom	20.260552064168	Nominal Roll [deg]
revision	1	Processing version of data
ontime	36087.100277543	Sum of GTIs [s]
livetime	35615.59574548	Livetime [s]
ontime0	36080.818246782	Sum of GTIs [s]
ontime1	36087.100277543	Sum of GTIs [s]
ontime2	36087.100277543	Sum of GTIs [s]
ontime3	36087.100277543	Sum of GTIs [s]
ontime6	36087.100277543	Sum of GTIs [s]
l2events	91787	Number of level 2 events



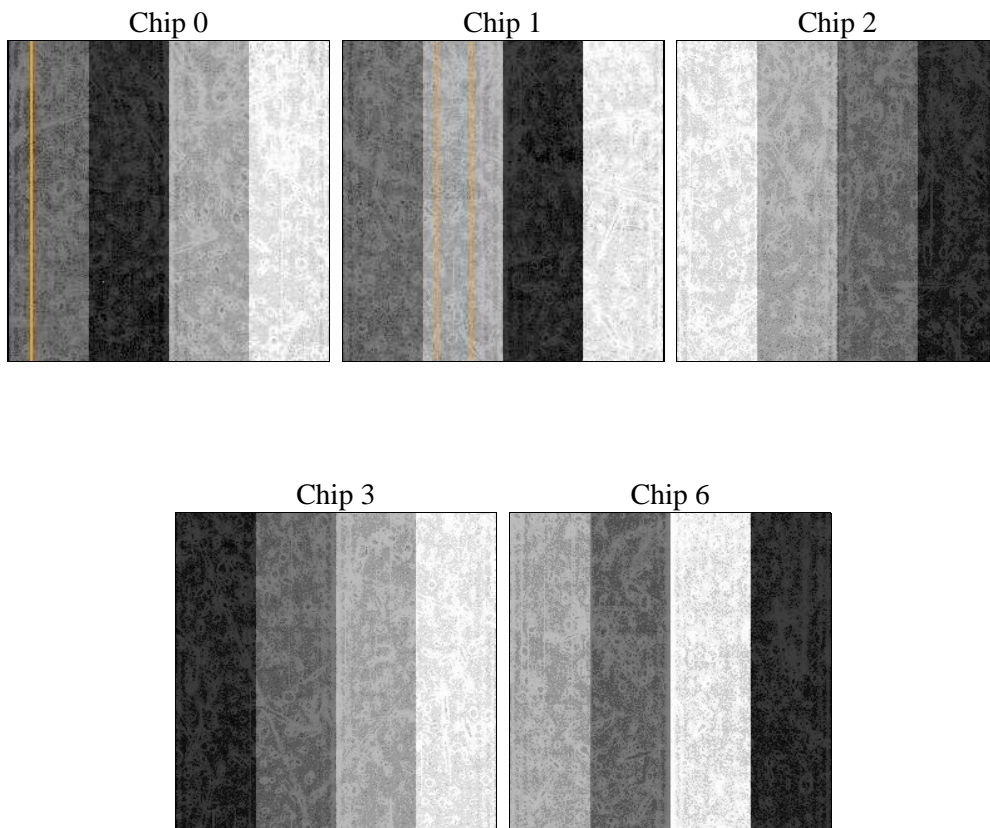
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	36087.100277543	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	36080.818246782	Sum of GTIs [s]
date	2012-08-16T00:16:06	Date and time of file creation	ontime1	36087.100277543	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	36087.100277543	Sum of GTIs [s]
			ontime3	36087.100277543	Sum of GTIs [s]
			ontime6	36087.100277543	Sum of GTIs [s]
			l1events	864574	Number of level 1 events

### 2.1.4 Events

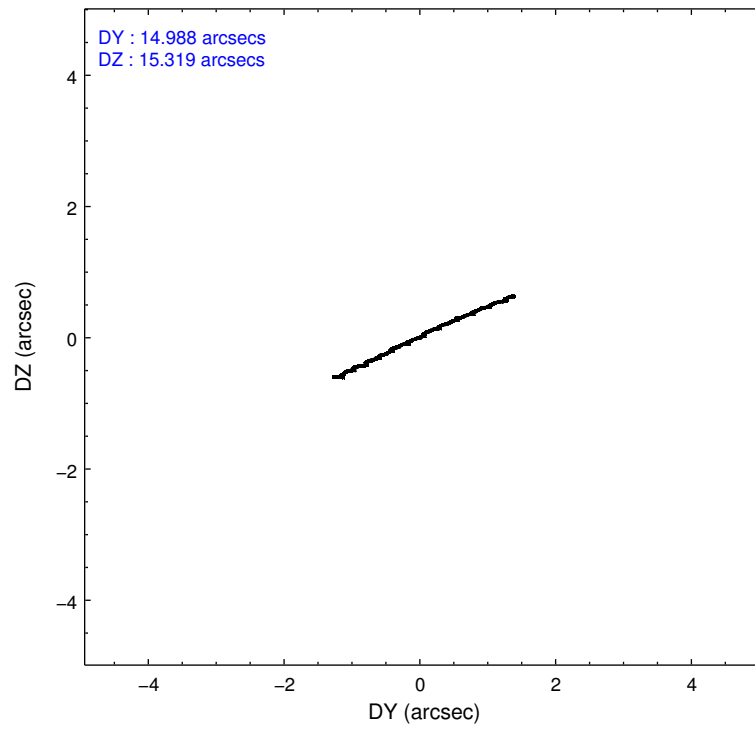
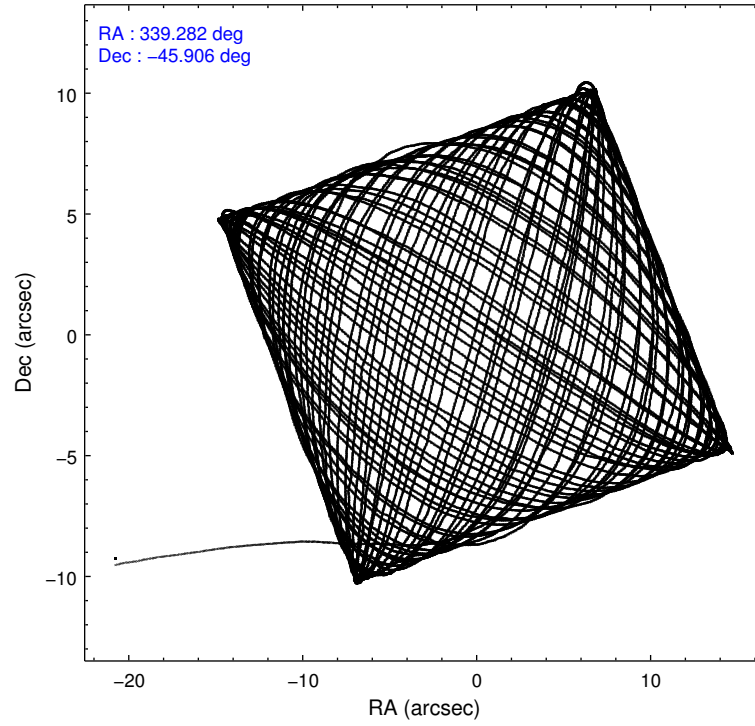
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	162581	169445	179796	174252	178500
rejected events	140963	146028	159087	153473	156542
rejected %	86%	86%	88%	88%	87%

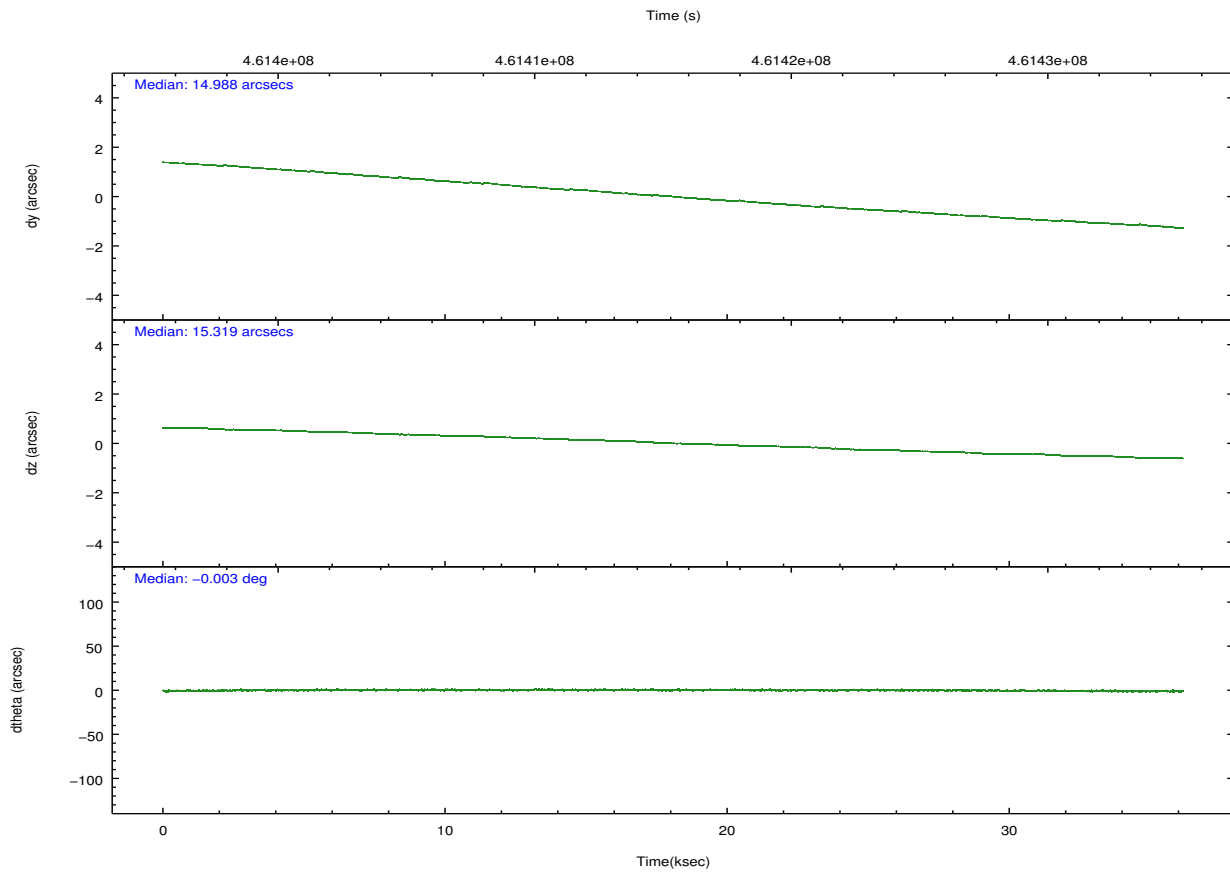
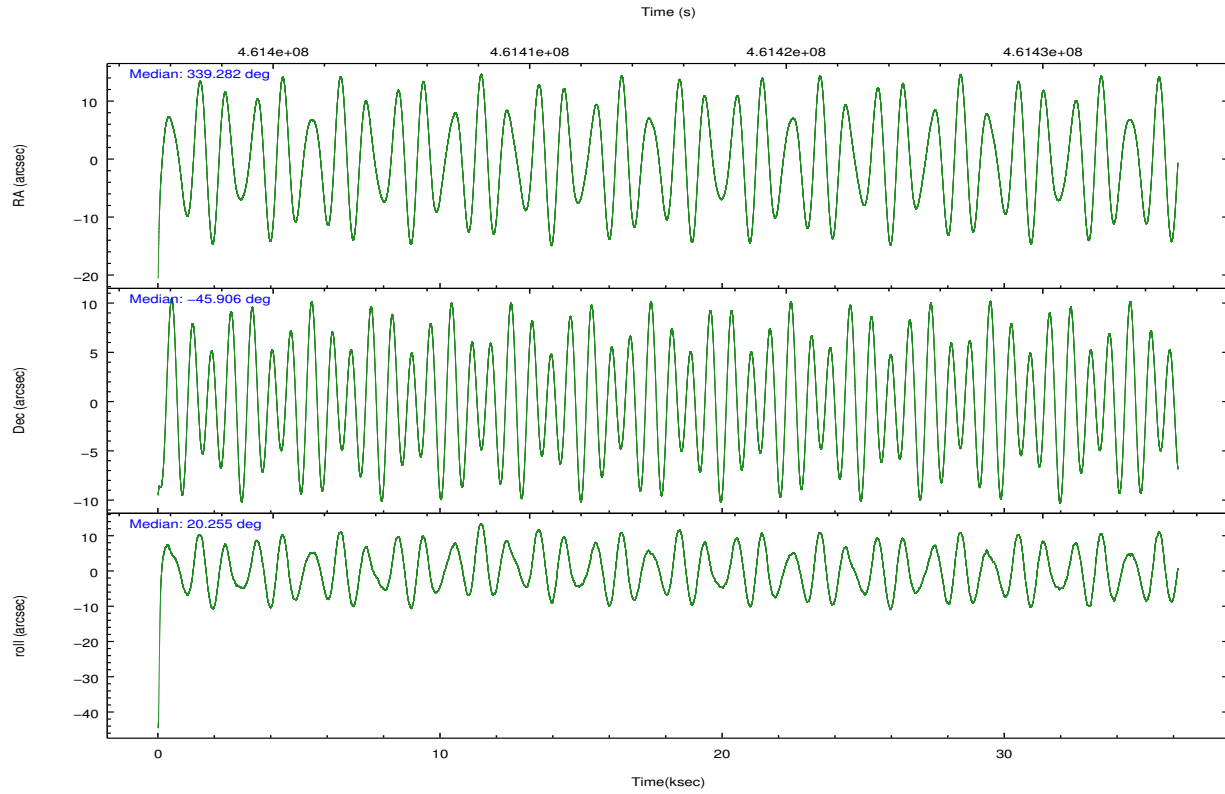
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	7554	8374	7321	7427	7536
	4%	4%	4%	4%	4%
grade 1 events	100	86	125	115	93
	0%	0%	0%	0%	0%
grade 2 events	5247	5296	5113	4762	4948
	3%	3%	2%	2%	2%
grade 3 events	2378	2349	2084	2156	2277
	1%	1%	1%	1%	1%
grade 4 events	2170	2378	2104	2195	2152
	1%	1%	1%	1%	1%
grade 5 events	8556	8921	7799	9352	9113
	5%	5%	4%	5%	5%
grade 6 events	4270	5020	4090	4239	5047
	2%	2%	2%	2%	2%
grade 7 events	132306	137021	151160	144006	147334
	81%	80%	84%	82%	82%

## 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	339.257086	339.2822248158017	CCD I2 on	Y	Y
[deg] Pointing Dec	-45.927414	-45.9061997174308	CCD I3 on	Y	Y
[deg] Pointing Roll	20.033812	20.26055206416801	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	461397469.184000	461395721.28496	CCD S5 on	N	N
Observation start date	2012-08-15T05:56:42	2012-08-15T05:28:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	461433469.184000	461433922.5245	On-chip summing requested	N	N
Observation end date	2012-08-15T15:56:42	2012-08-15T16:05:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect





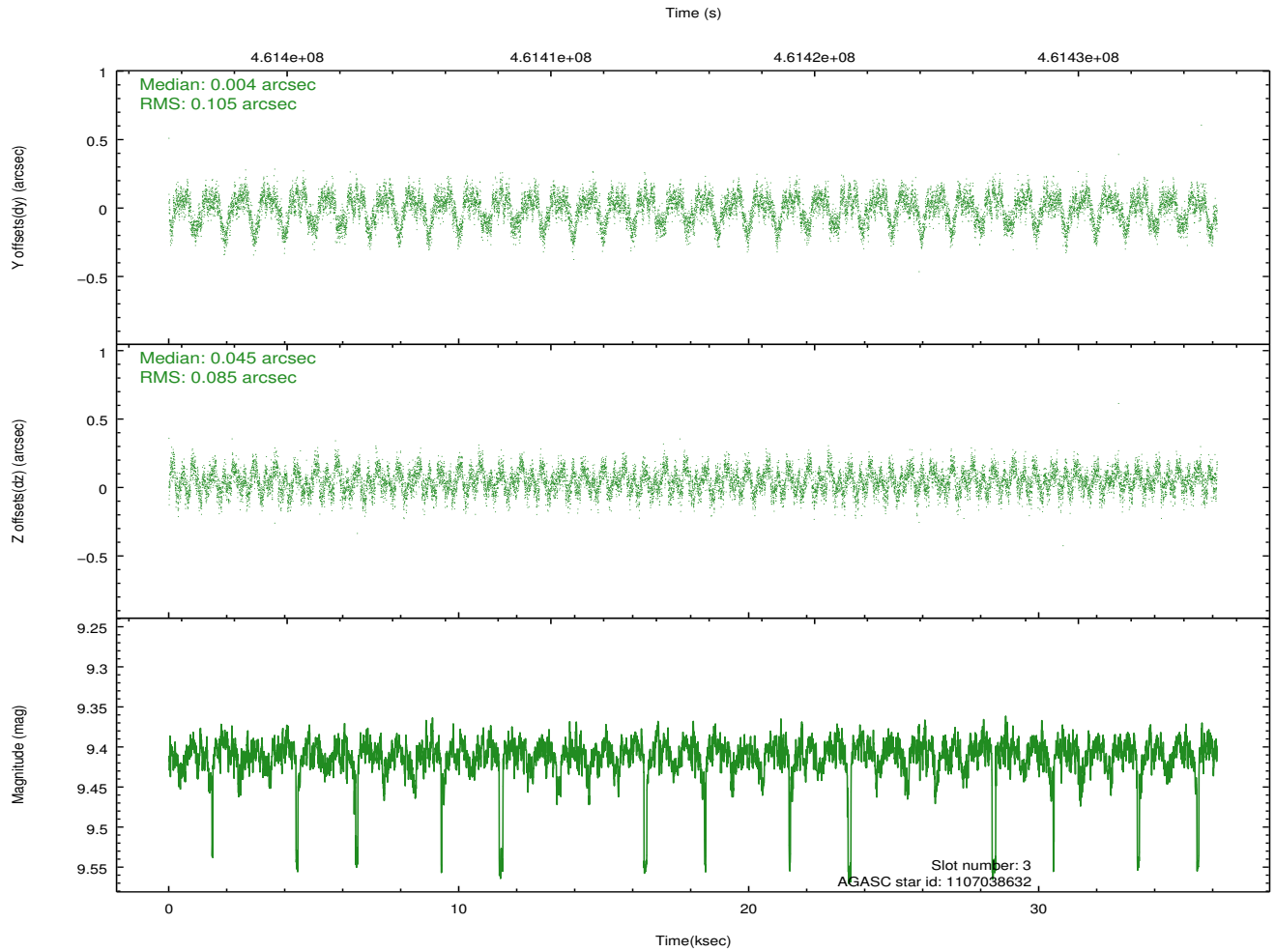
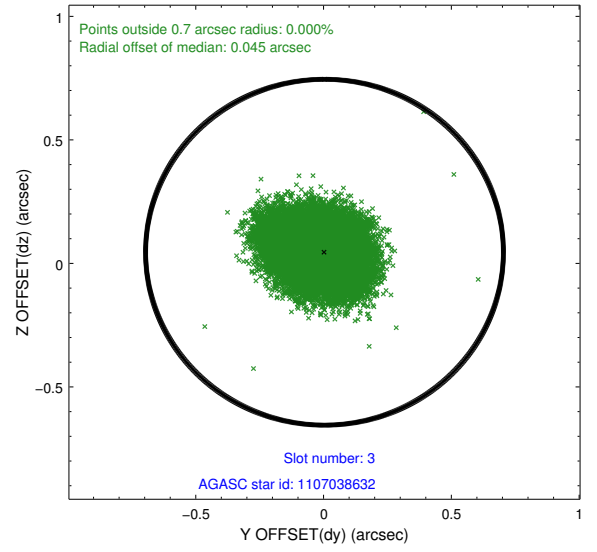
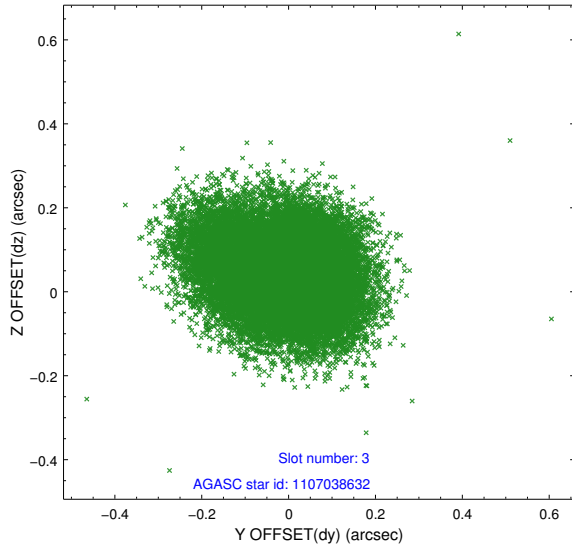
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.12	8817	0.143	-0.119	0.025	0.040	0.000000	0.000000	924.47	-998.13
1	FID	ACIS-I-5	7.11	8817	-0.336	0.100	0.018	0.029	0.000000	0.000000	-1824.13	899.51
2	FID	ACIS-I-6	7.12	8815	0.105	0.089	0.020	0.039	0.000000	0.000000	389.89	1544.08
3	GUIDE	1107038632	9.41	17583	0.004	0.045	0.145	0.229	339.933443	-46.000331	1496.97	-832.49
4	GUIDE	1107040400	8.83	17625	-0.018	-0.032	0.126	0.201	340.244581	-46.201992	1969.32	-1786.37
5	GUIDE	1107043216	9.06	17619	0.133	0.207	0.100	0.162	339.154589	-46.459613	-894.46	-1713.25
6	GUIDE	1107044288	9.51	17596	-0.107	-0.261	0.150	0.227	339.195865	-45.354685	560.65	1989.59
7	GUIDE	1107045064	8.02	17624	0.017	0.047	0.072	0.120	338.698960	-45.784562	-1141.30	958.86

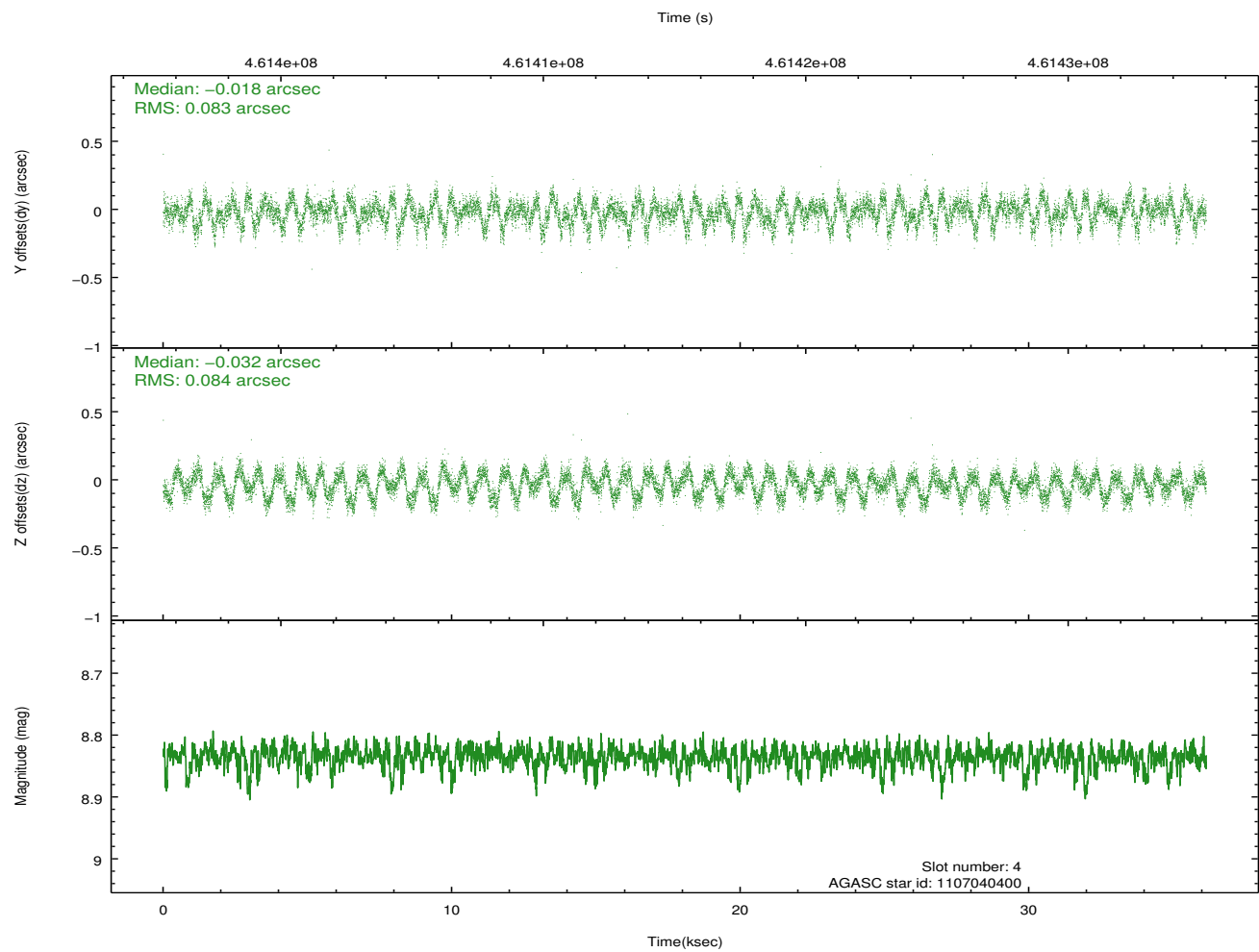
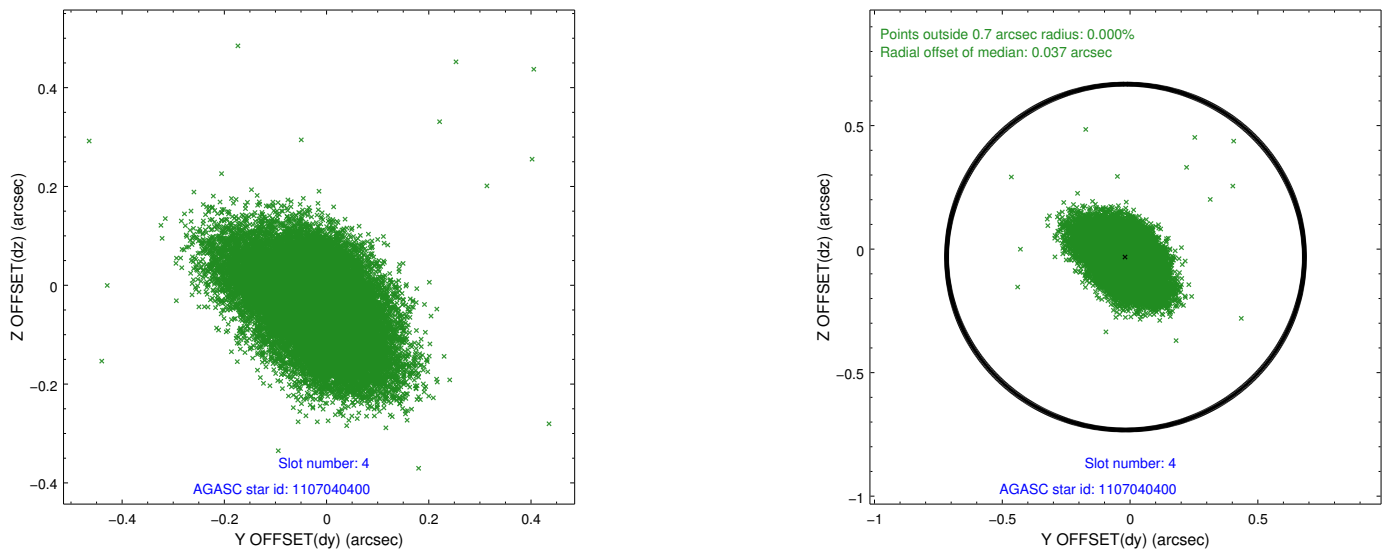
∞

## 2.4 Star Slots

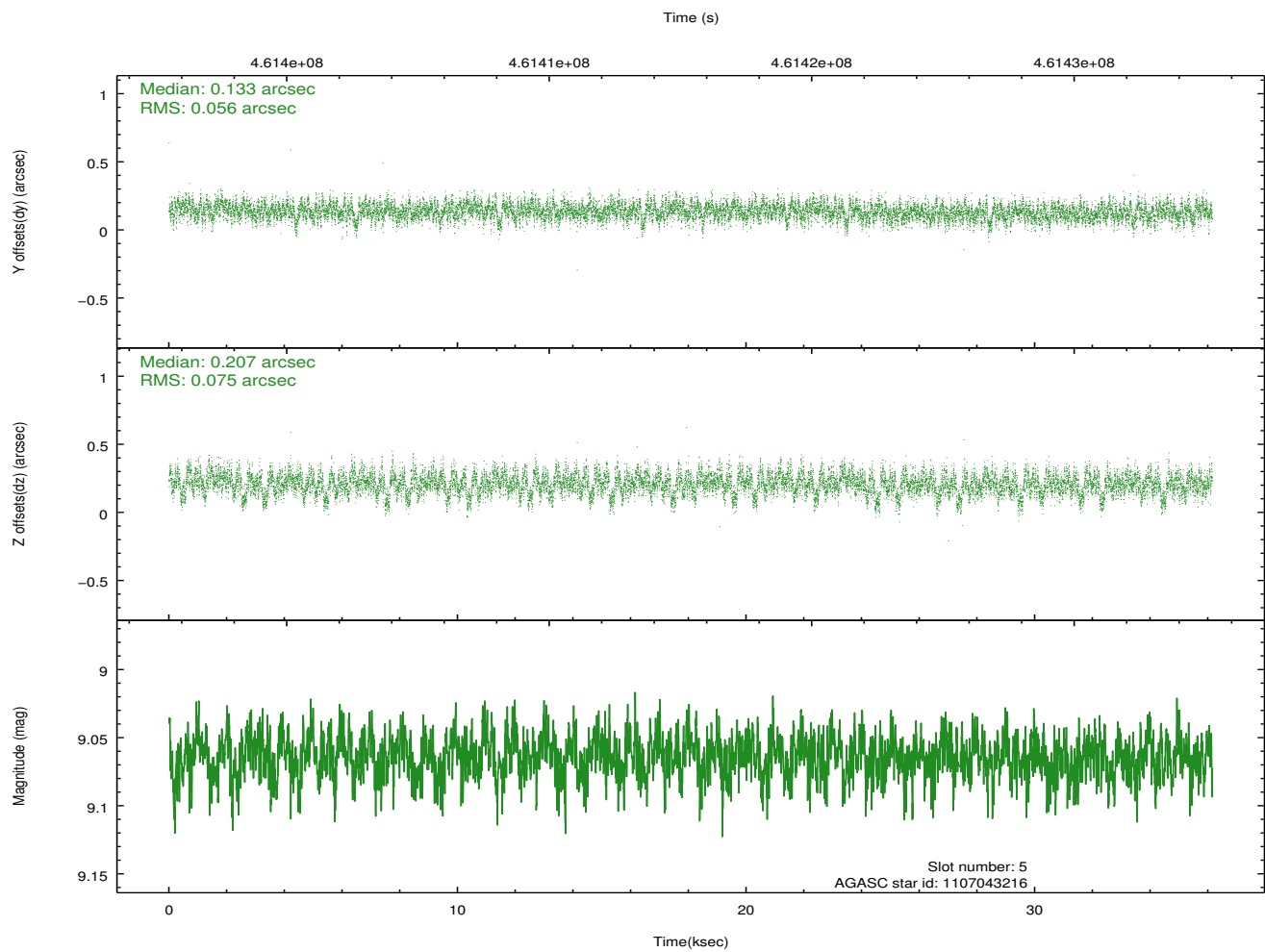
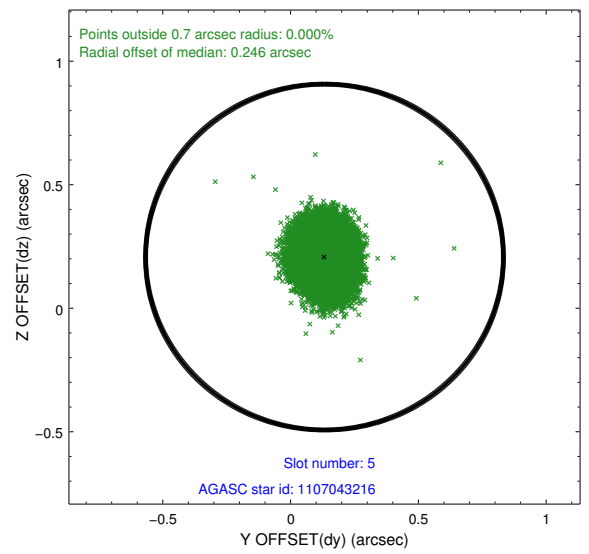
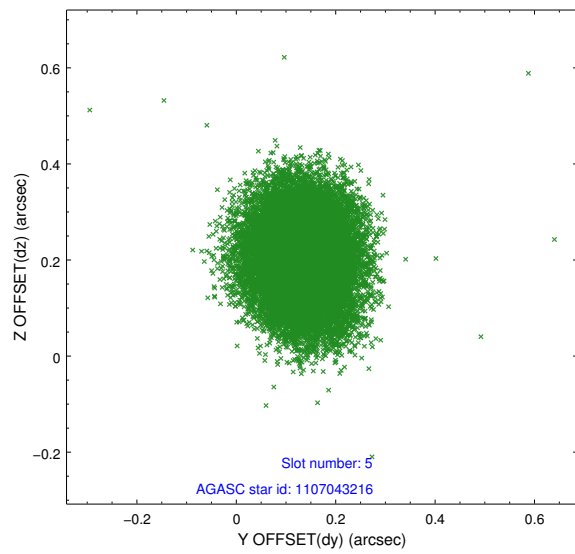
### 2.4.1 Slot 3



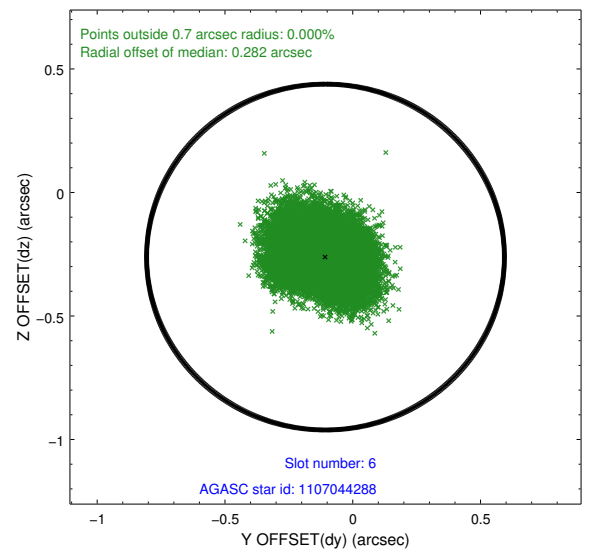
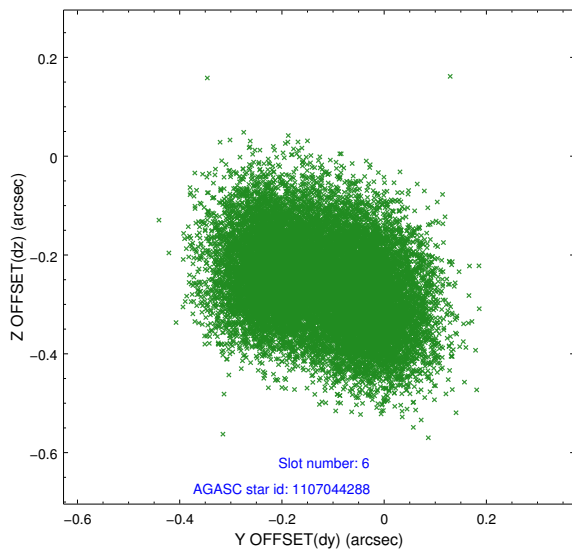
## 2.4.2 Slot 4



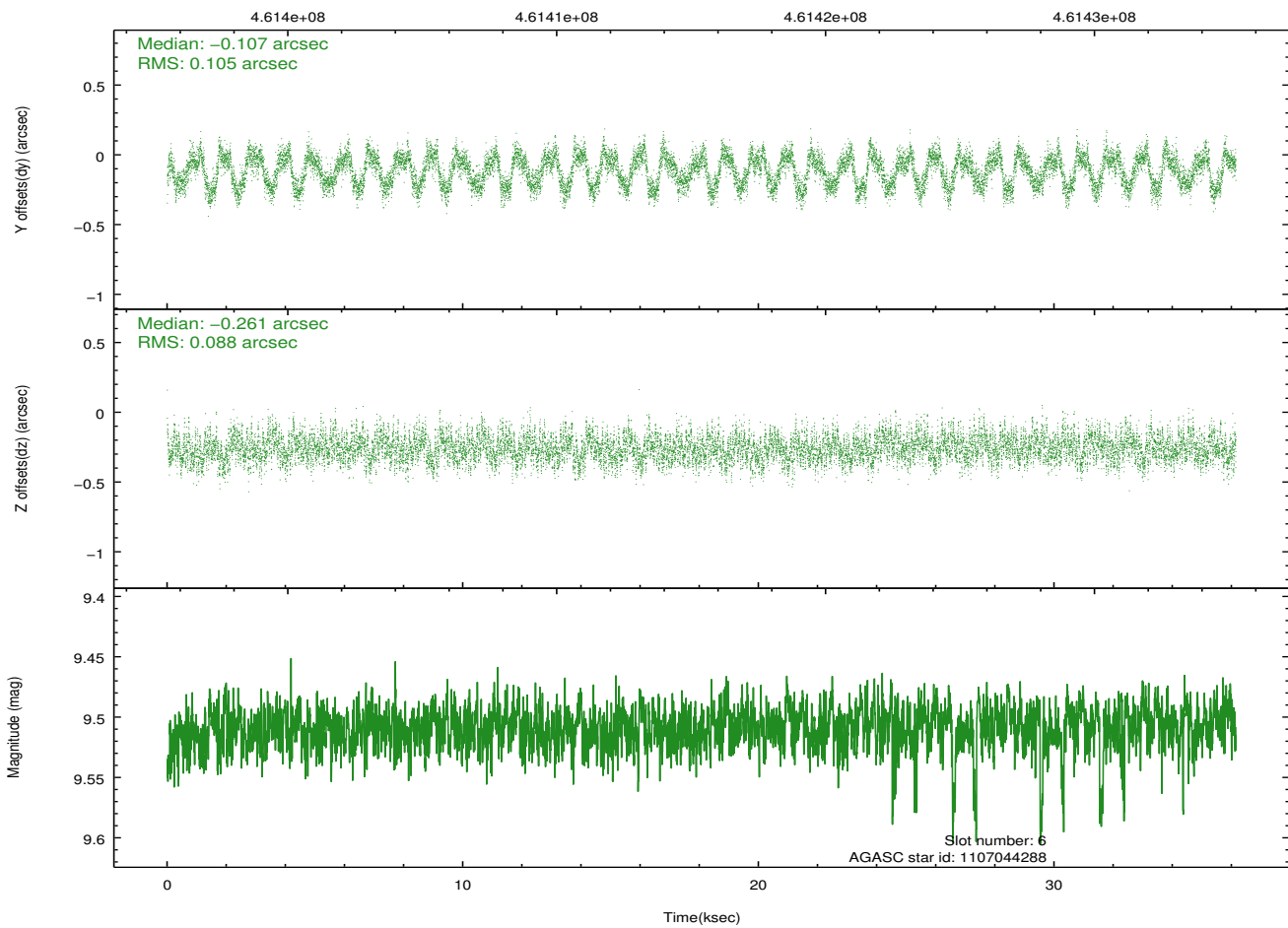
### 2.4.3 Slot 5



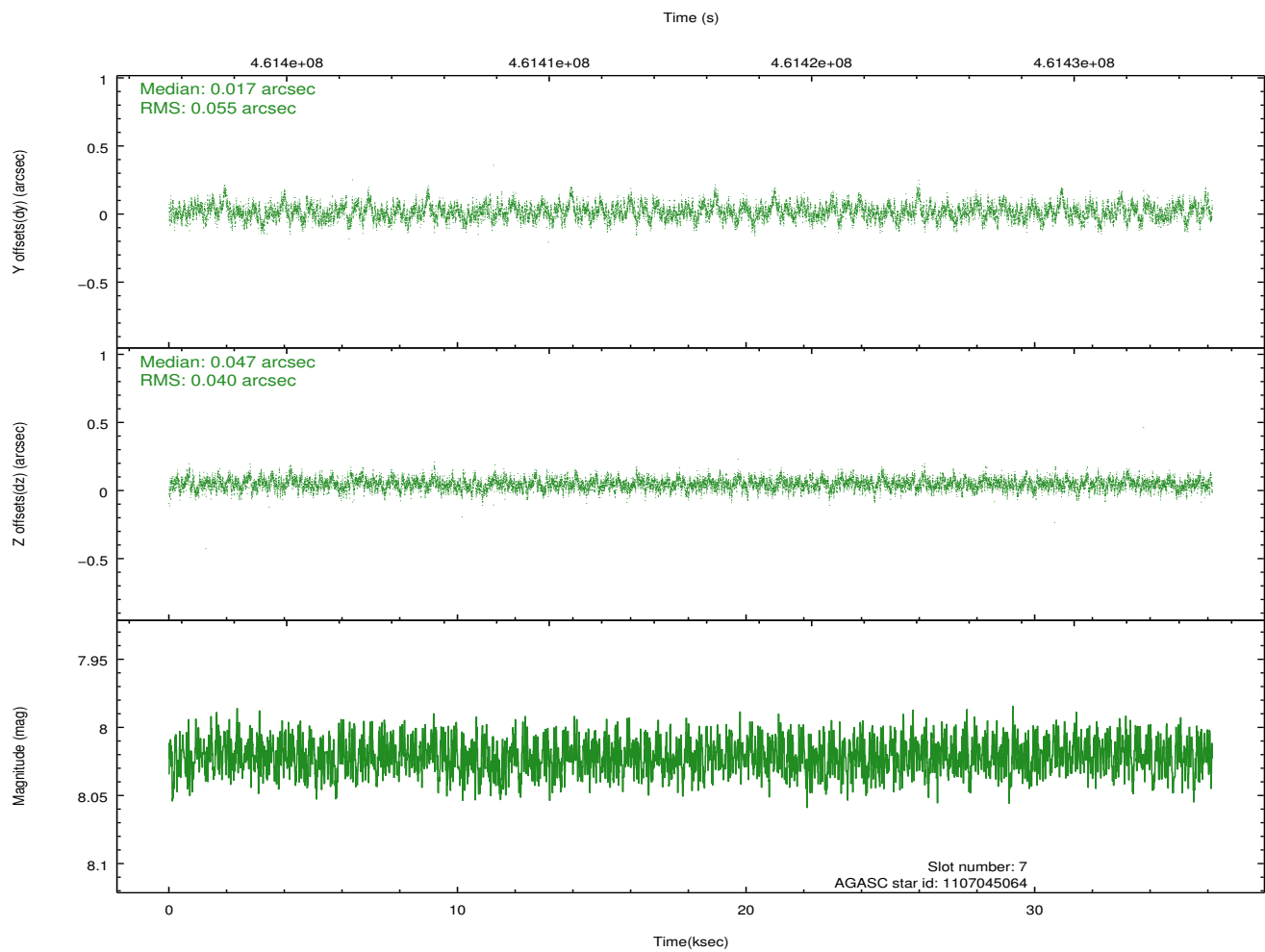
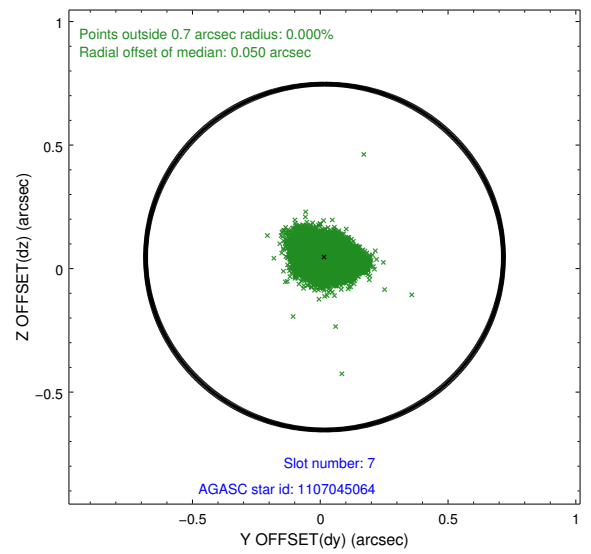
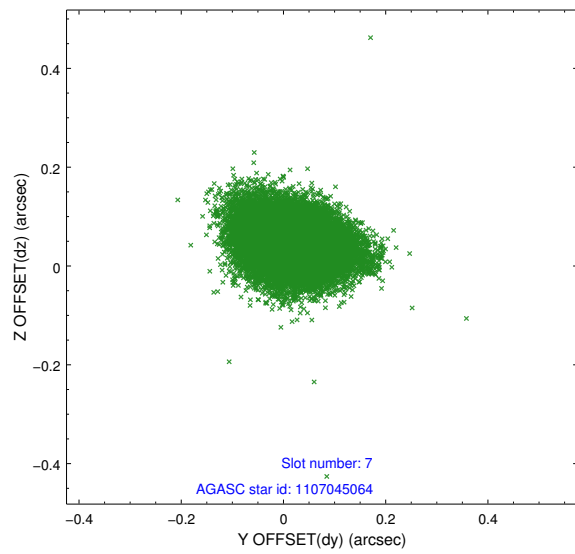
## 2.4.4 Slot 6



Time (s)

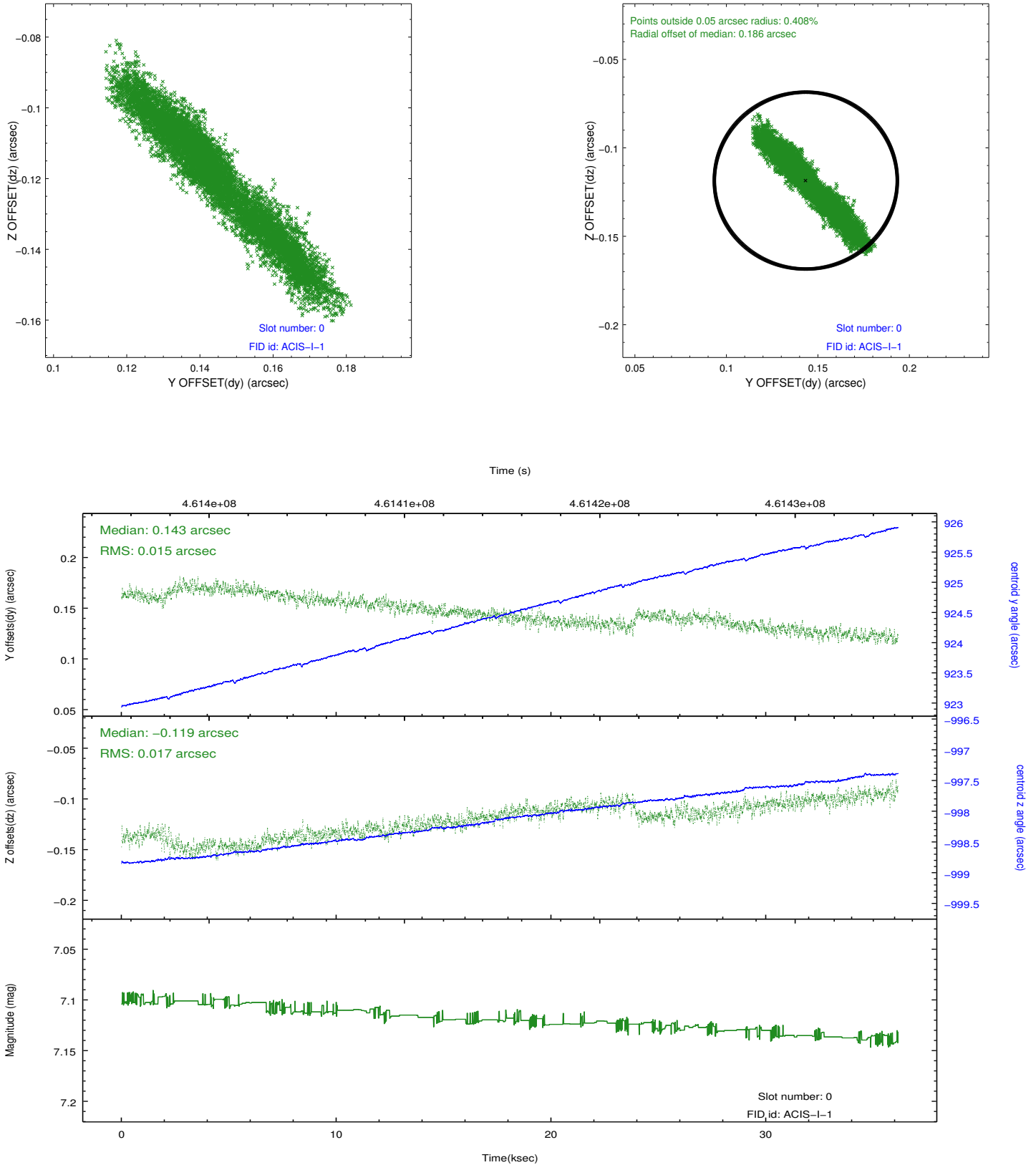


## 2.4.5 Slot 7

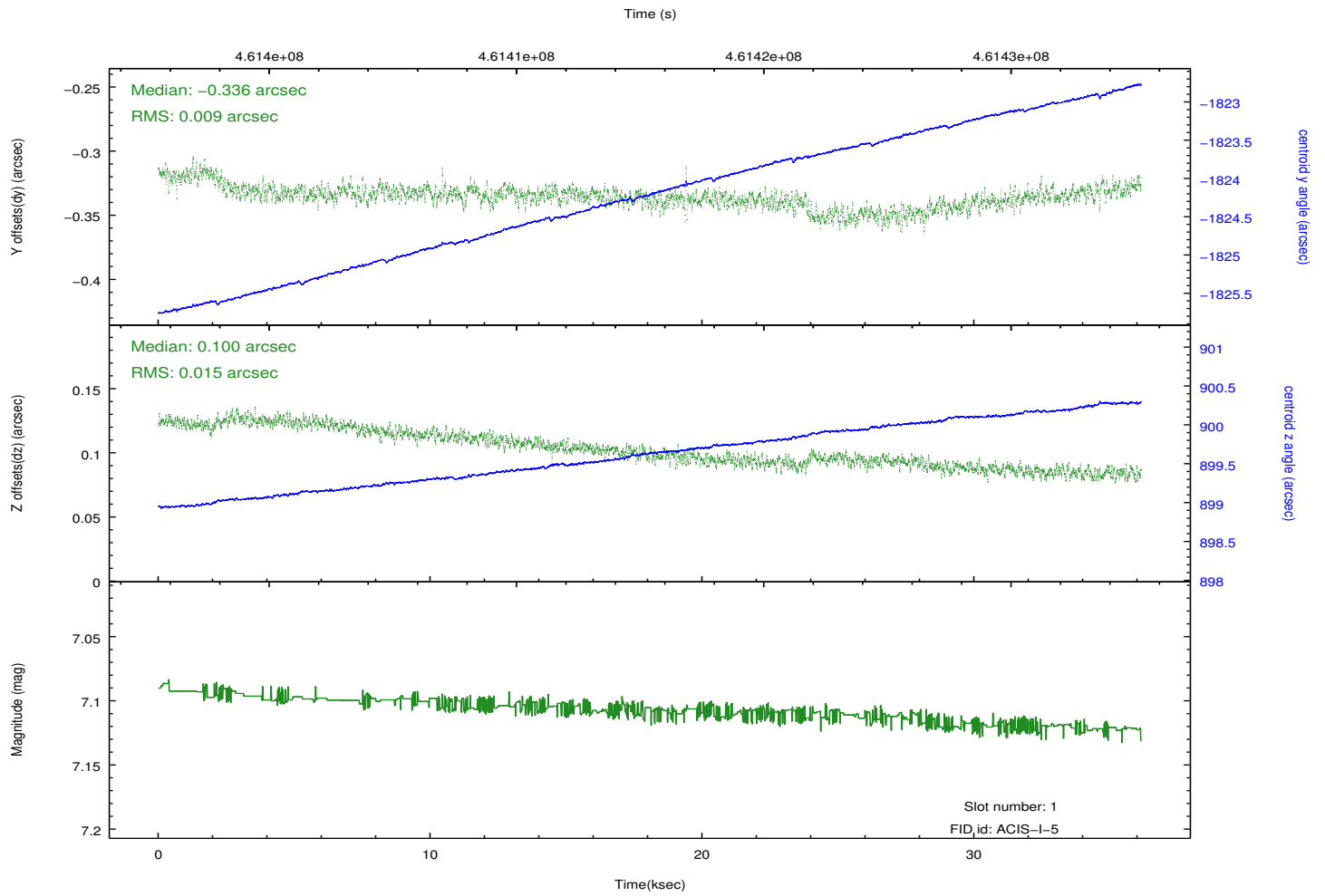
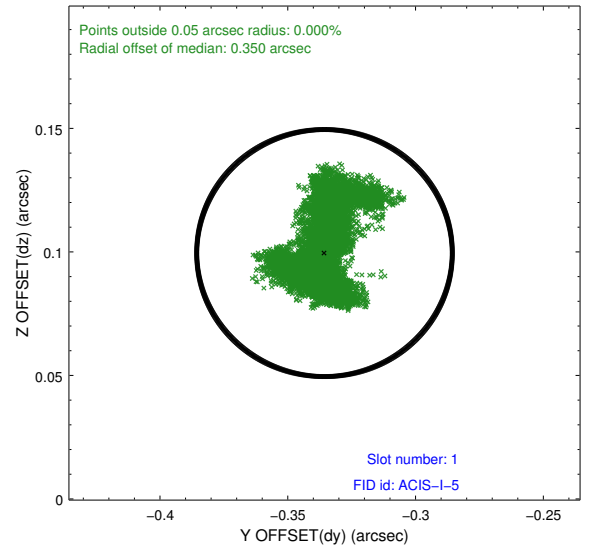
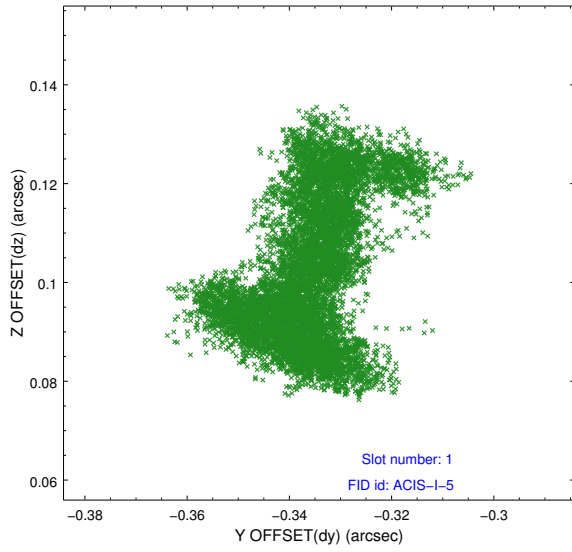


## 2.5 FID Slots

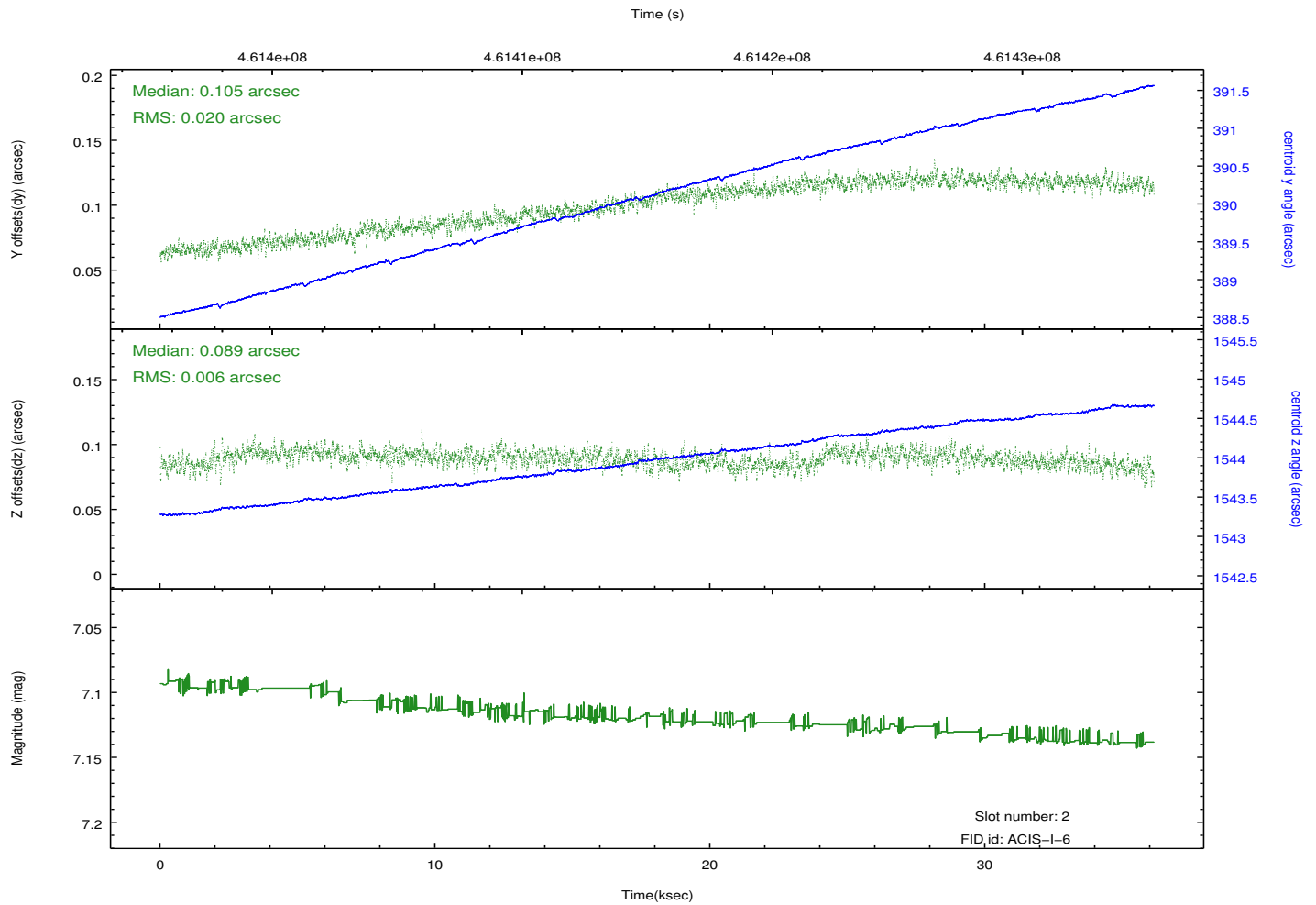
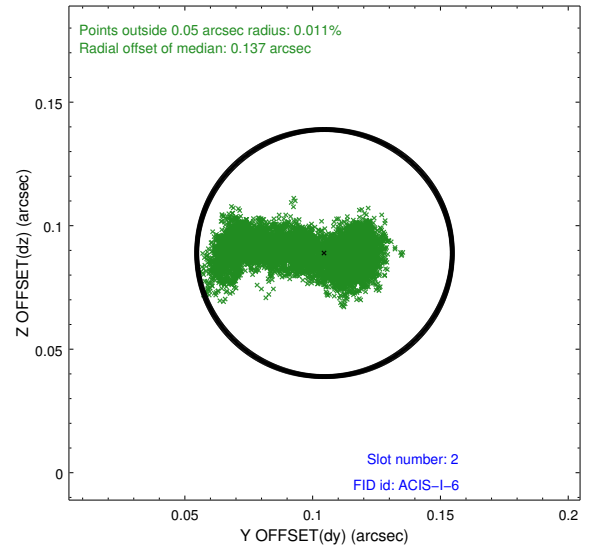
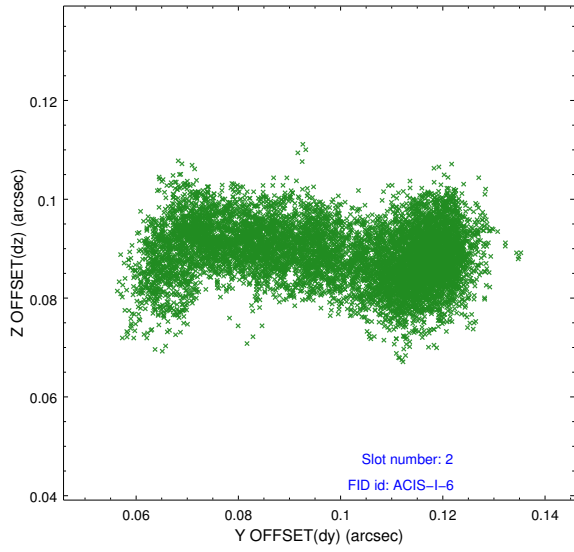
### 2.5.1 Slot 0



## 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)	2012.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.087100277543

## A.2 Comments