

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11228 - L2 Version 2  
Chandra X-Ray Center

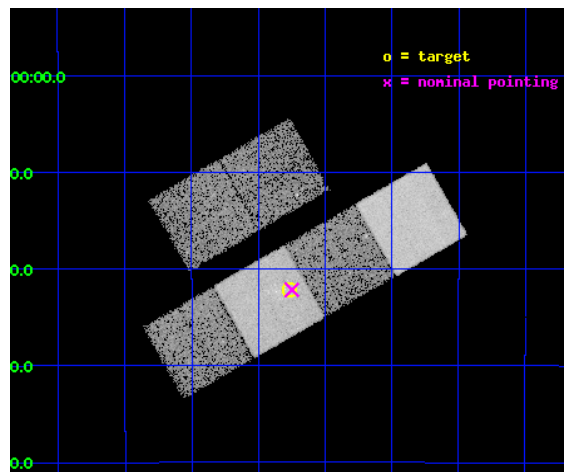
L2 Processing Date : Jun 30 2012

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# 1 Front

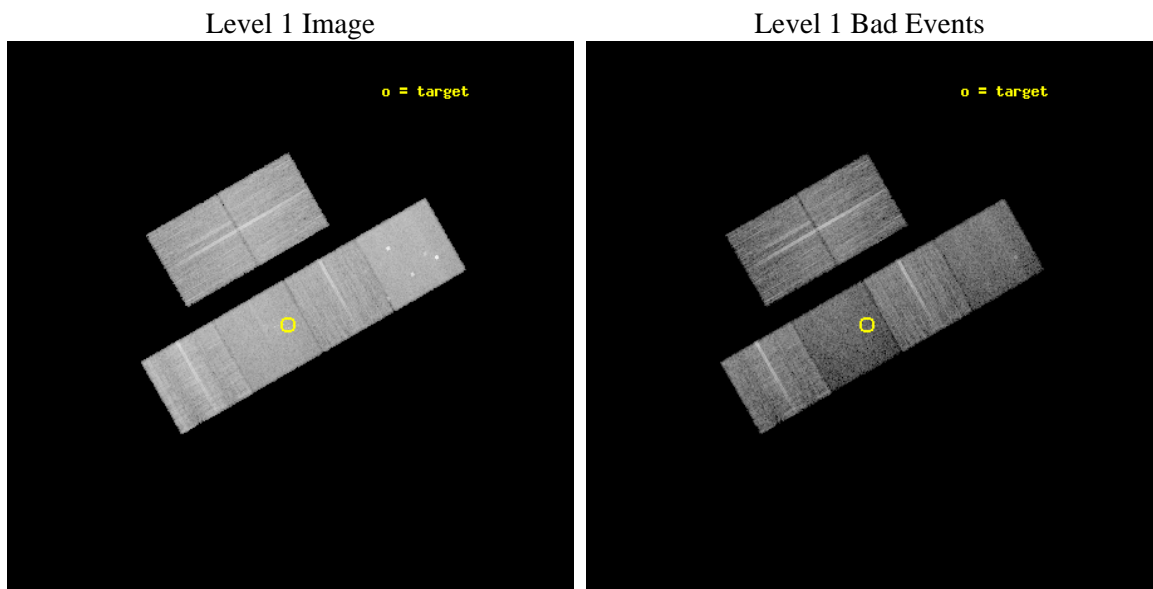
seq_num	501313	Sequence number
obs_id	11228	Observation id
title	Catching up to the Hydrogen Envelope: Late-time X-ray Observations of Type Ib/c SNe	Proposal title
observer	Prof. David Pooley	Principal investigator
object	SN 1999ec	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	94.0675	Observer's specified target RA [deg]
dec_targ	-21.369389	Observer's specified target Dec [deg]
ra_nom	94.062300258824	Nominal RA [deg]
dec_nom	-21.369530396484	Nominal Dec [deg]
roll_nom	150.23214881324	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13045.234356105	Sum of GTIs [s]
livetime	12880.047743791	Livetime [s]
ontime2	13042.034415781	Sum of GTIs [s]
ontime3	13045.111236095	Sum of GTIs [s]
ontime5	13045.193316102	Sum of GTIs [s]
ontime6	13045.152276099	Sum of GTIs [s]
ontime7	13045.234356105	Sum of GTIs [s]
ontime8	13045.070196092	Sum of GTIs [s]
l2events	141830	Number of level 2 events



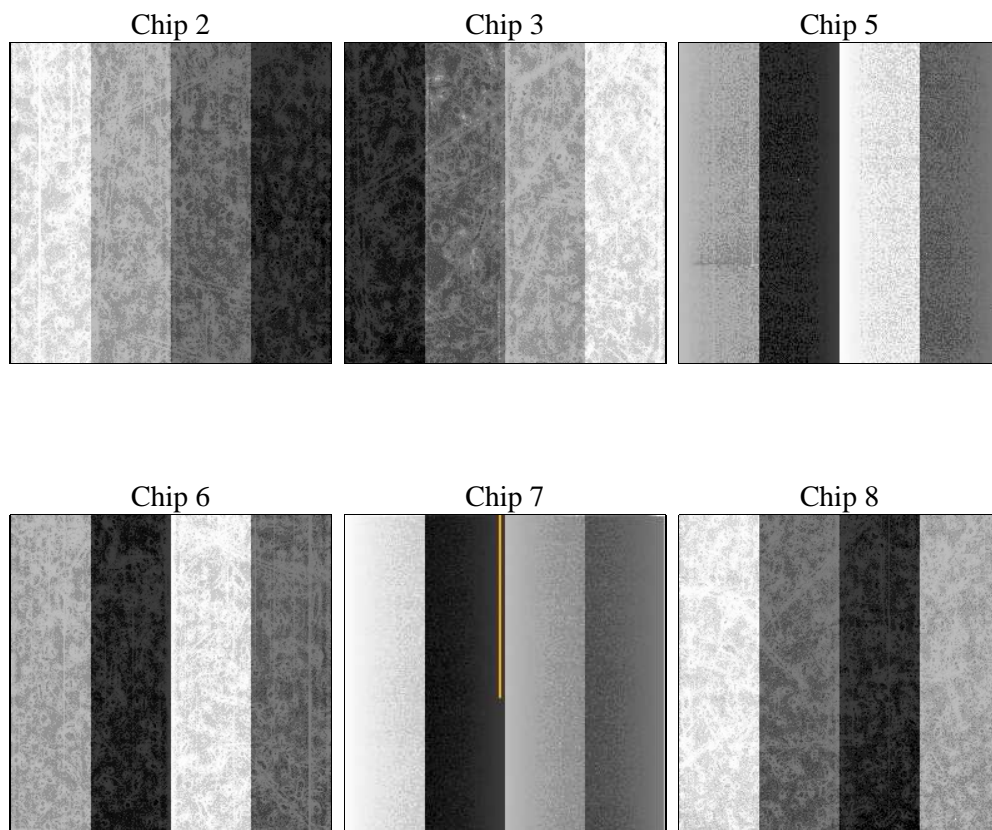
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	13045.234356105	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	13042.034415781	Sum of GTIs [s]
date	2012-06-30T13:39:04	Date and time of file creation	ontime3	13045.111236095	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	13045.193316102	Sum of GTIs [s]
			ontime6	13045.152276099	Sum of GTIs [s]
			ontime7	13045.234356105	Sum of GTIs [s]
			ontime8	13045.070196092	Sum of GTIs [s]
			l1events	622813	Number of level 1 events

### 2.1.4 Events

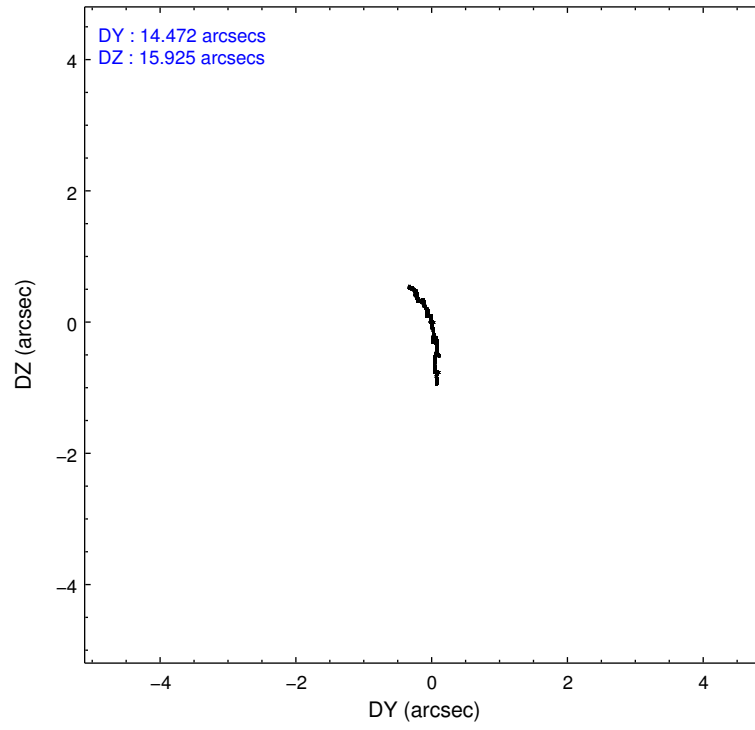
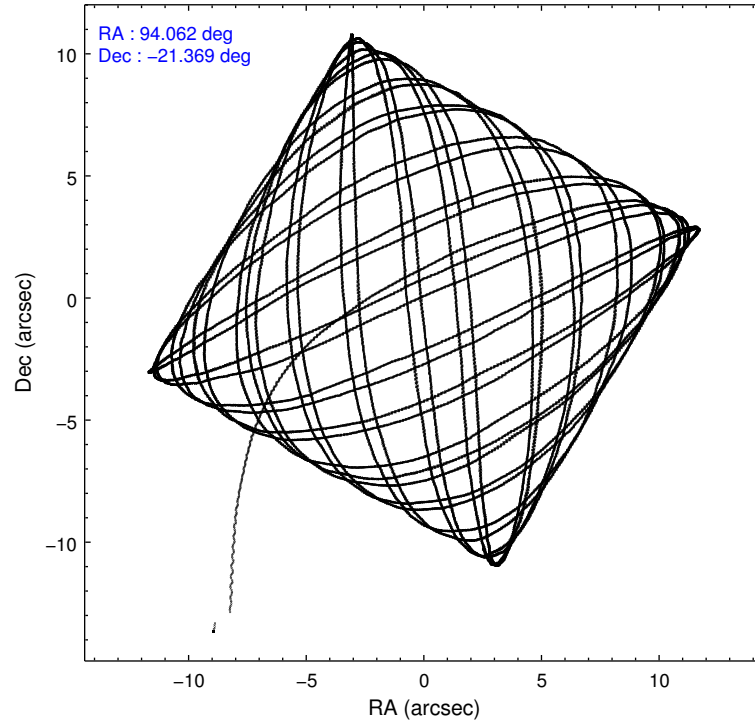
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	101068	88673	127811	93393	96663	115205	grade 0 events	3630	3322	8709	3704	5035	8466
rejected events	91284	79673	59956	83276	48850	84371		3%	3%	6%	3%	5%	7%
rejected %	90%	89%	46%	89%	50%	73%	grade 1 events	55	46	457	51	144	84
								0%	0%	0%	0%	0%	0%
							grade 2 events	2393	1954	20227	2350	10442	7304
								2%	2%	15%	2%	10%	6%
							grade 3 events	992	976	2723	1053	4474	3367
								0%	1%	2%	1%	4%	2%
							grade 4 events	1094	957	2649	1027	4320	3270
								1%	1%	2%	1%	4%	2%
							grade 5 events	2981	3442	9860	3411	10320	5440
								2%	3%	7%	3%	10%	4%
							grade 6 events	1680	1796	33585	1989	23561	8444
								1%	2%	26%	2%	24%	7%
							grade 7 events	88243	76180	49601	79808	38367	78830
								87%	85%	38%	85%	39%	68%

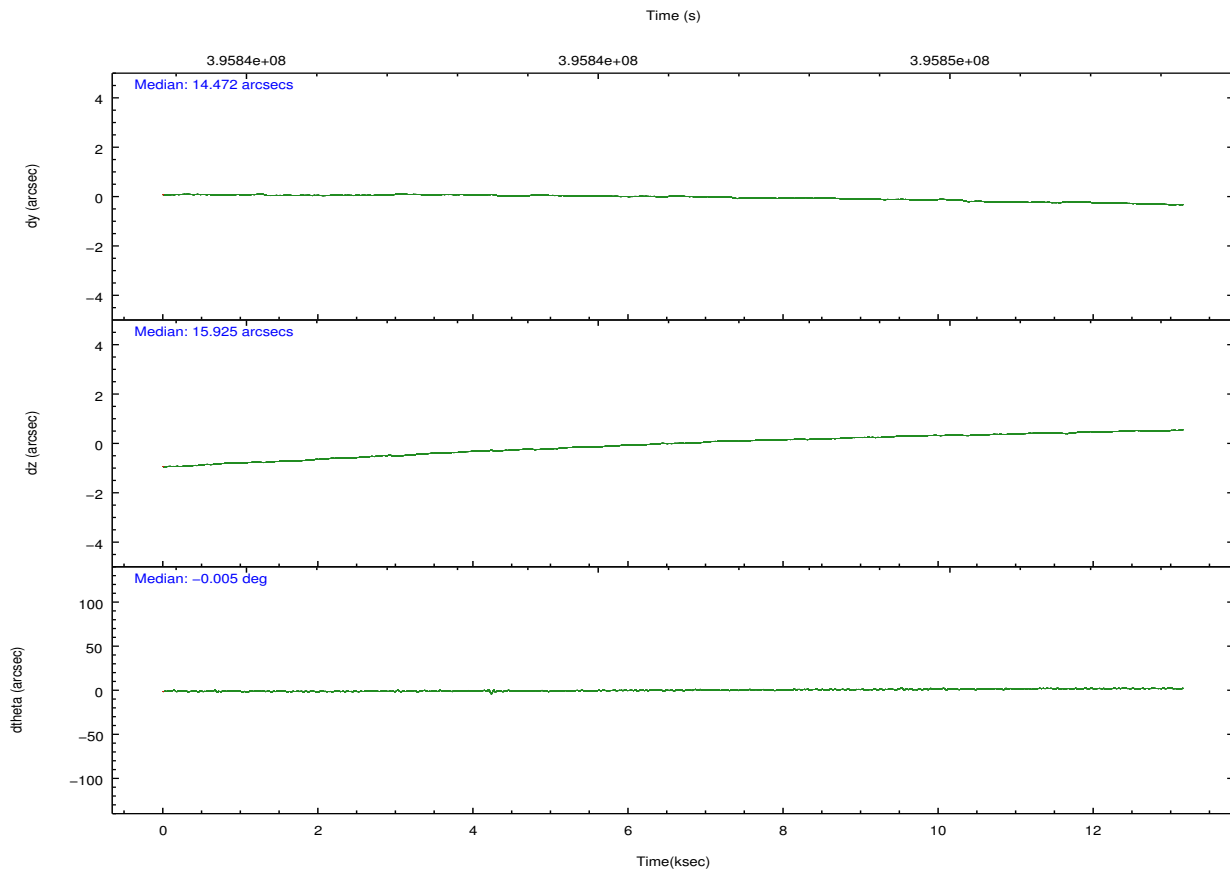
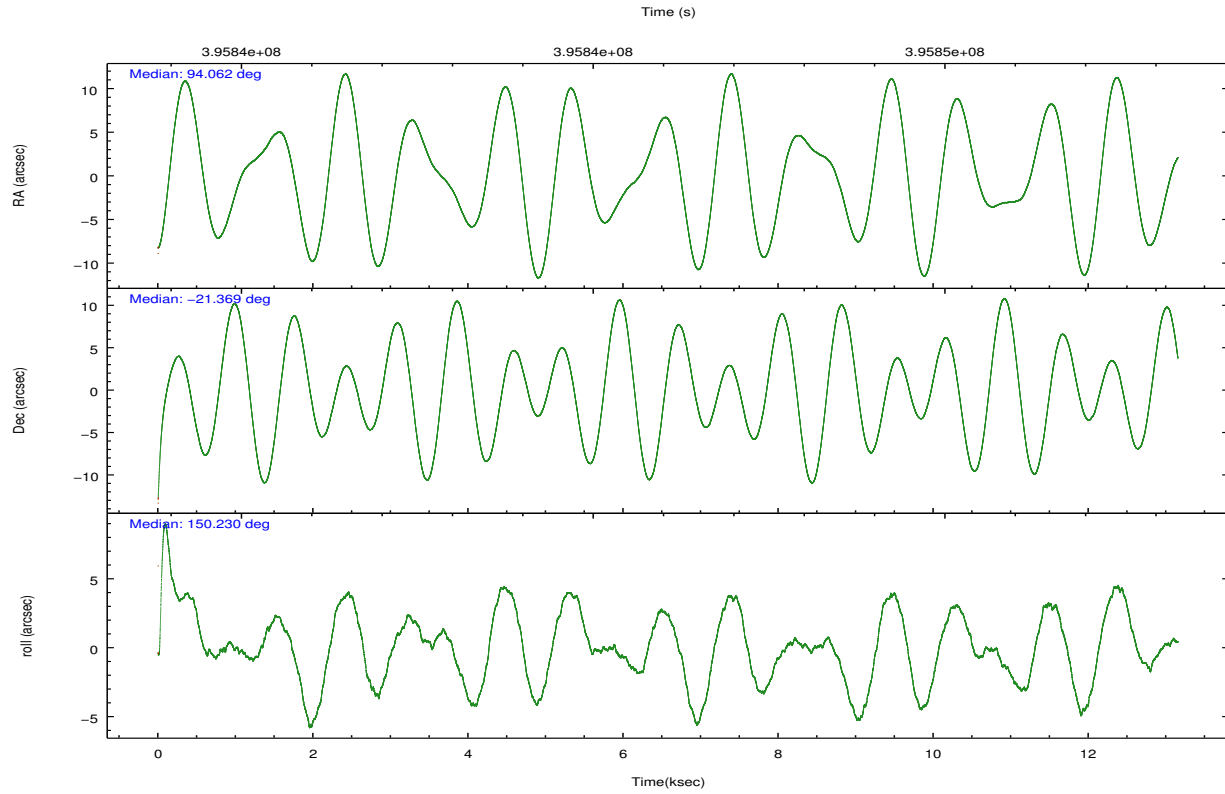


## 2.2 Compared Parameters

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	94.091656	94.06230025882387	CCD I2 on	O2	Y
[deg] Pointing Dec	-21.369066	-21.3695303964838	CCD I3 on	O3	Y
[deg] Pointing Roll	150.086228	150.2321488132427	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	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	Y	Y
[s] Observation start time (MET)	395839645.184000	395838339.48316	CCD S5 on	N	N
Observation start date	2010-07-18T11:26:19	2010-07-18T11:05:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	395852645.184000	395852832.4714	On-chip summing requested	N	N
Observation end date	2010-07-18T15:02:59	2010-07-18T15:07:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



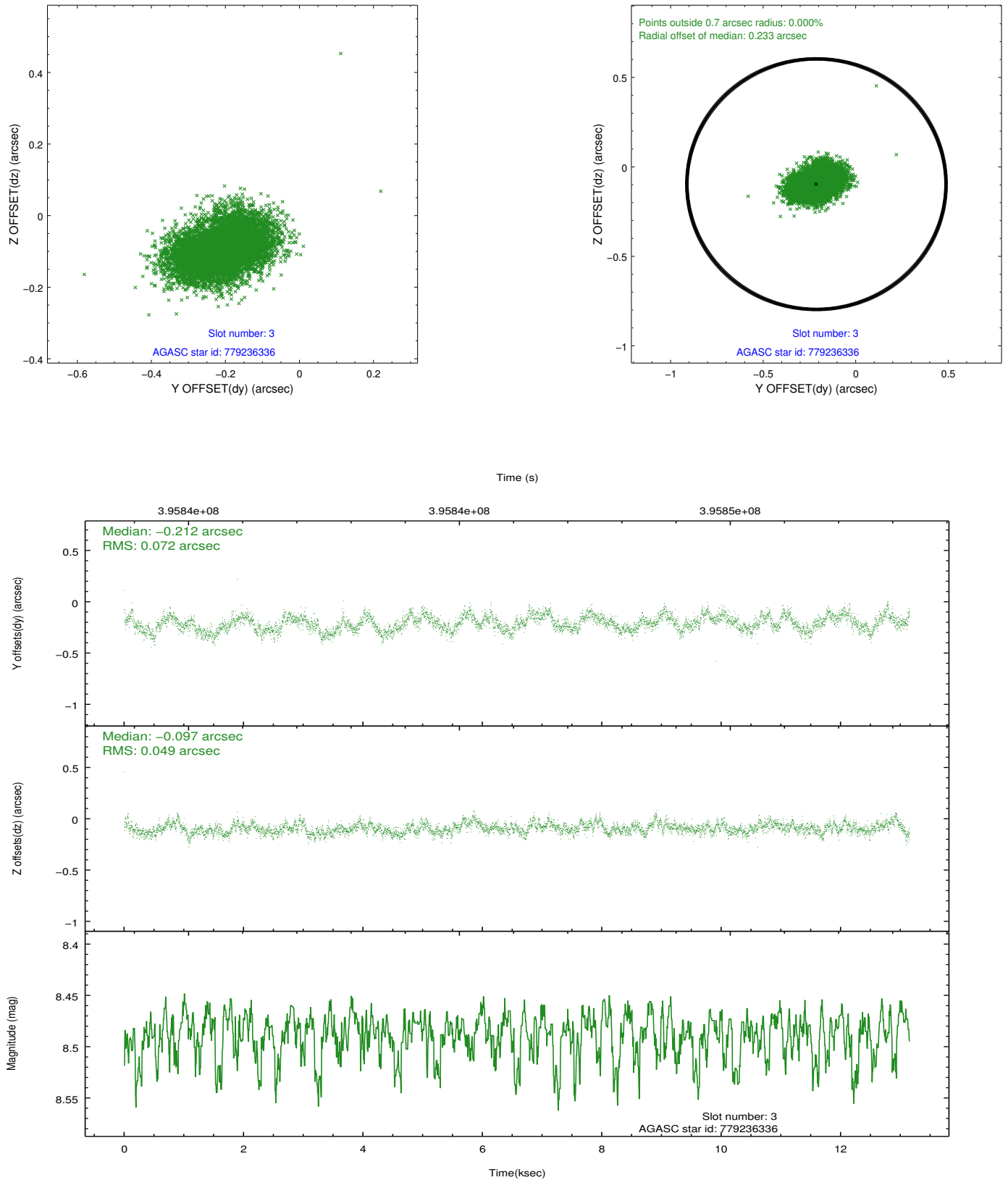


### Slot Statistics

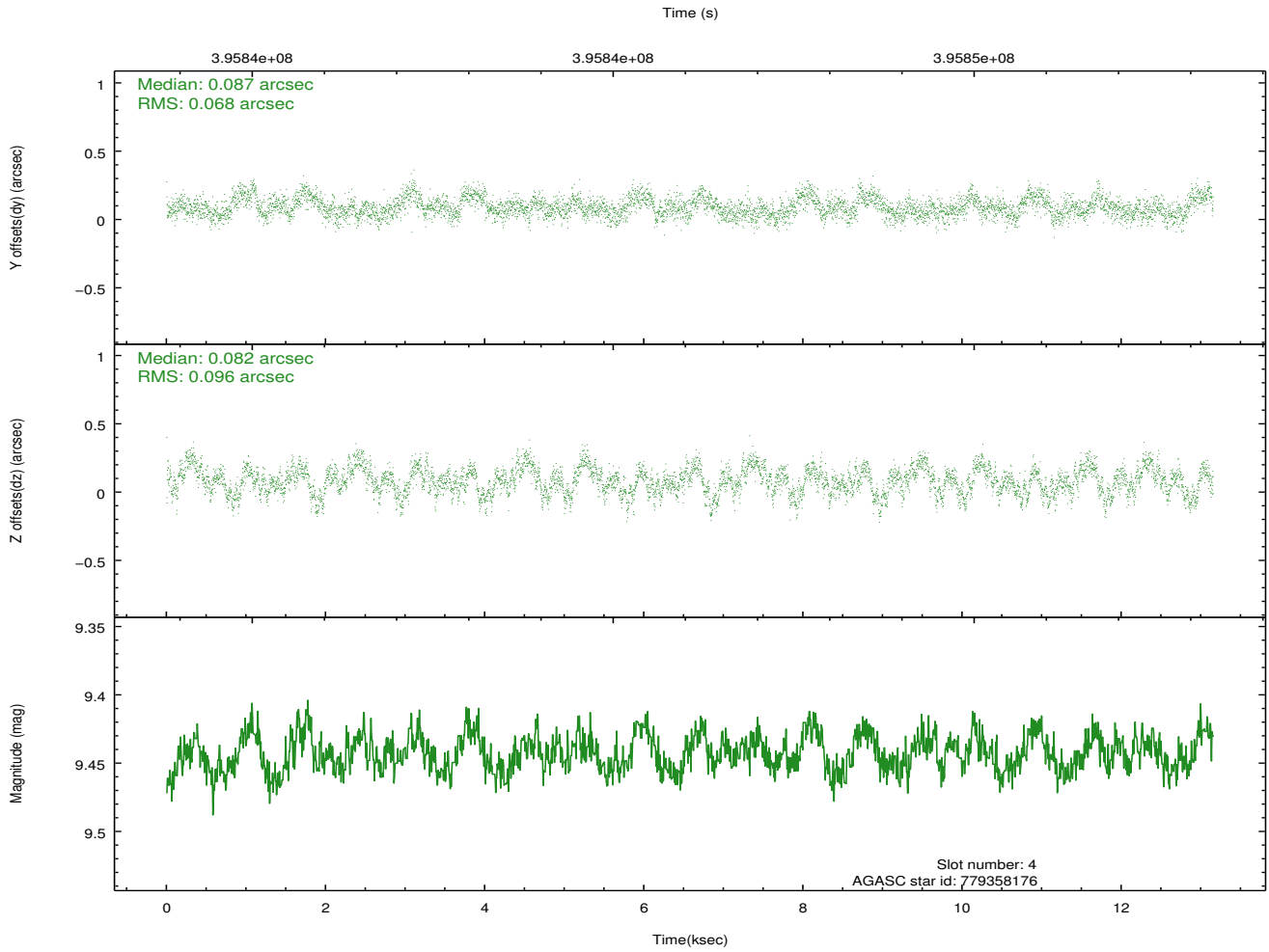
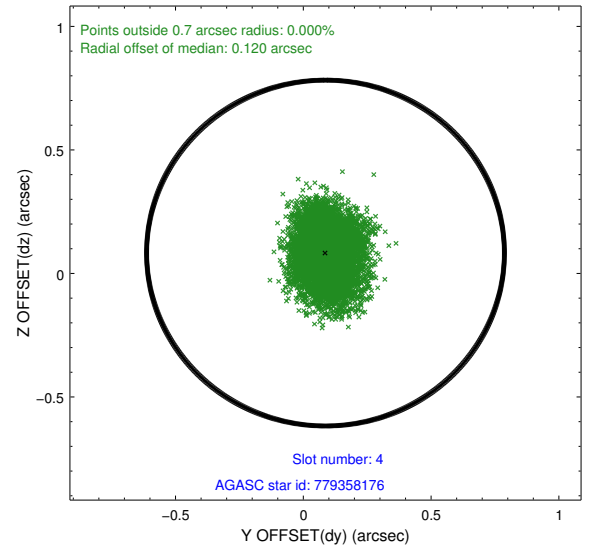
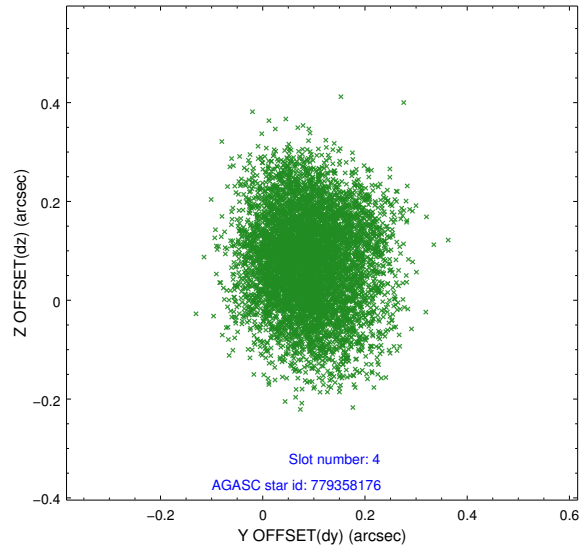
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	3209	0.039	-0.070	0.030	0.058	0.000000	0.000000	928.69	-1732.89
1	FID	ACIS-S-4	7.03	3209	0.148	0.032	0.011	0.024	0.000000	0.000000	2146.41	170.98
2	FID	ACIS-S-5	7.06	3209	-0.216	0.049	0.024	0.037	0.000000	0.000000	-1819.96	165.00
3	GUIDE	779236336	8.49	6411	-0.212	-0.097	0.093	0.148	93.367583	-21.267018	2285.87	898.14
4	GUIDE	779358176	9.44	6412	0.087	0.082	0.126	0.202	94.586415	-21.338741	-1384.22	-919.29
5	GUIDE	779358672	7.88	6416	-0.019	0.026	0.064	0.101	94.260885	-21.171994	-138.80	-897.84
6	GUIDE	779372064	8.56	6414	0.061	-0.159	0.074	0.120	94.417701	-21.758407	-1644.73	672.43
7	GUIDE	779361672	9.57	6410	0.081	0.152	0.116	0.184	94.824322	-21.217774	-1862.45	-1692.92

## 2.4 Star Slots

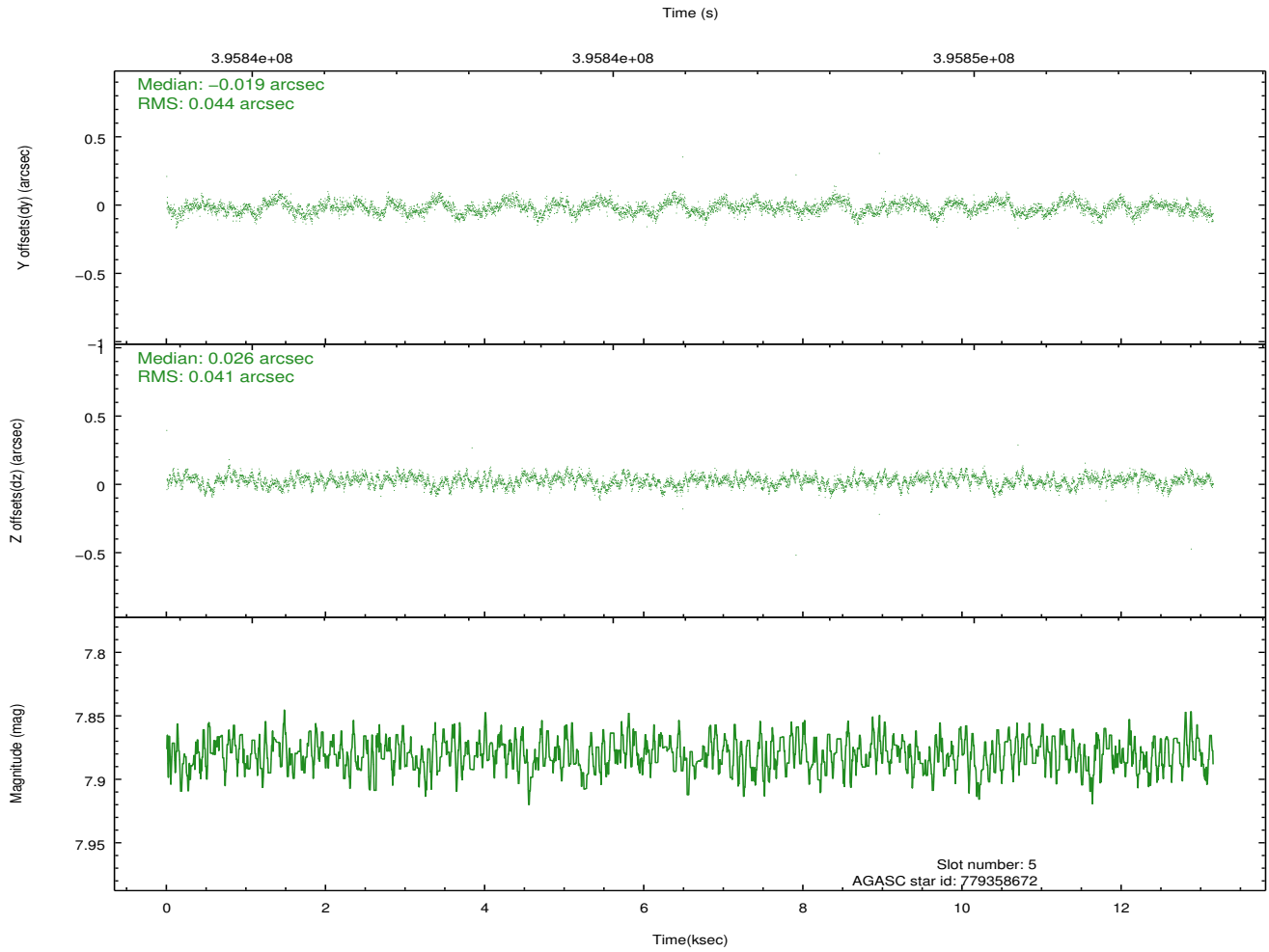
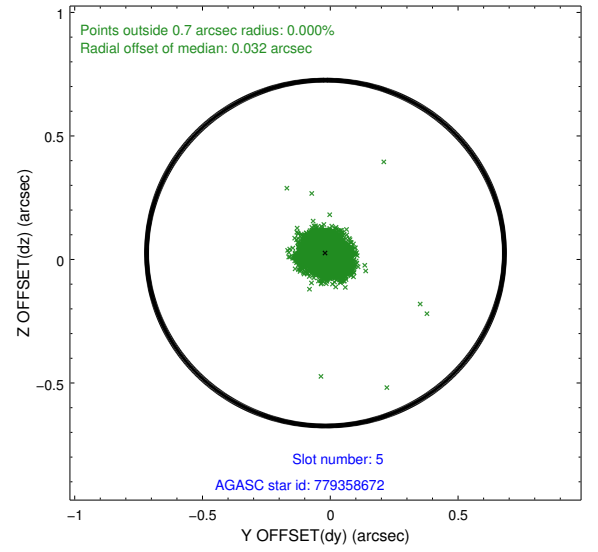
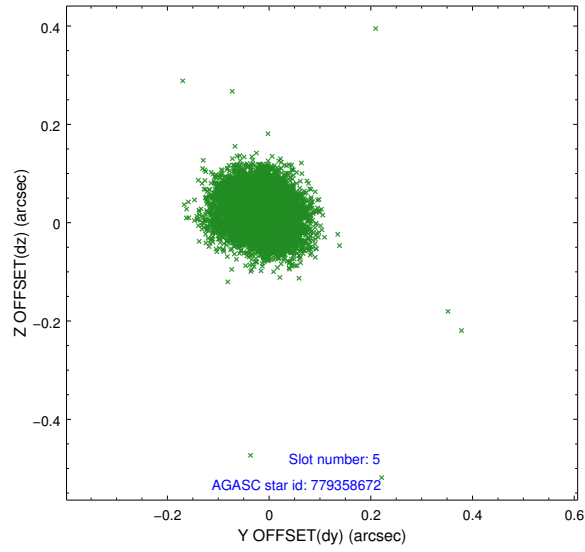
### 2.4.1 Slot 3



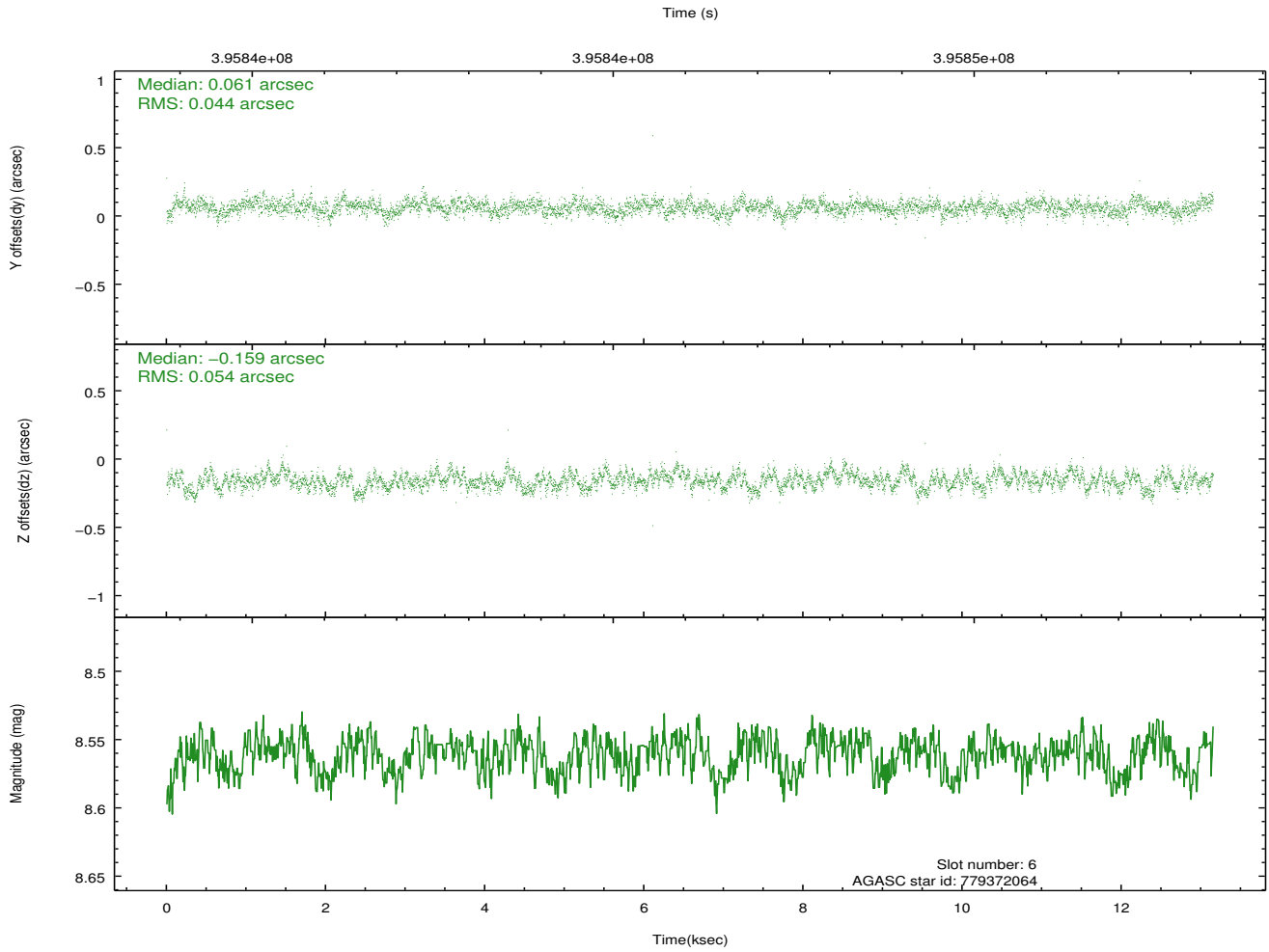
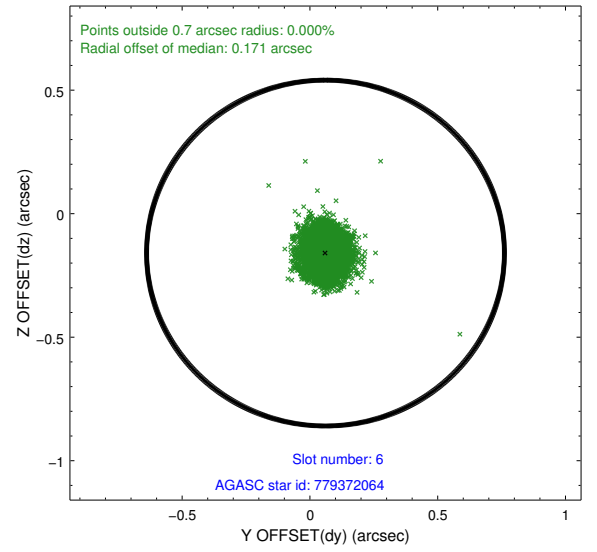
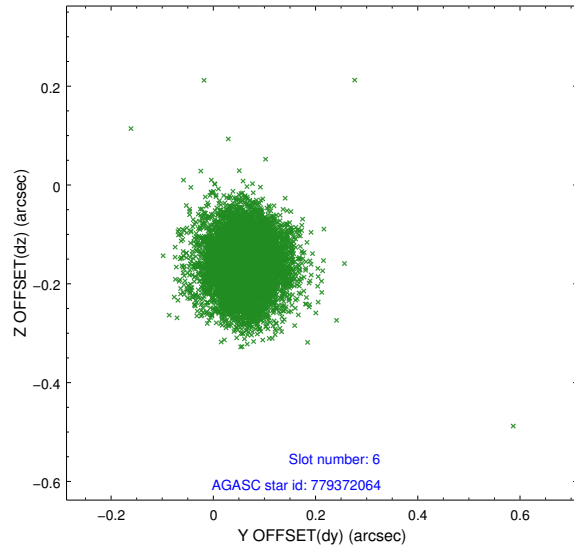
## 2.4.2 Slot 4



### 2.4.3 Slot 5

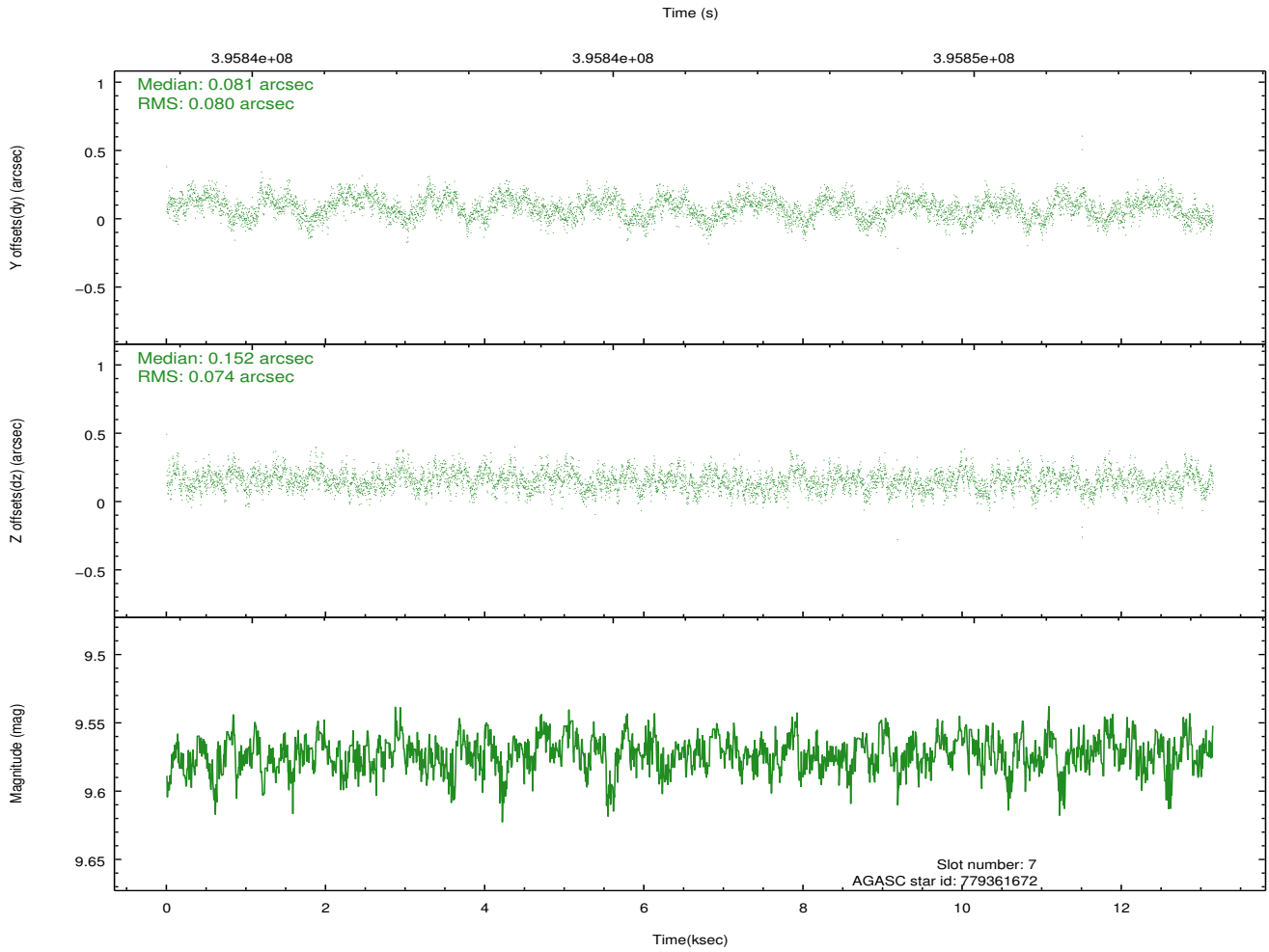
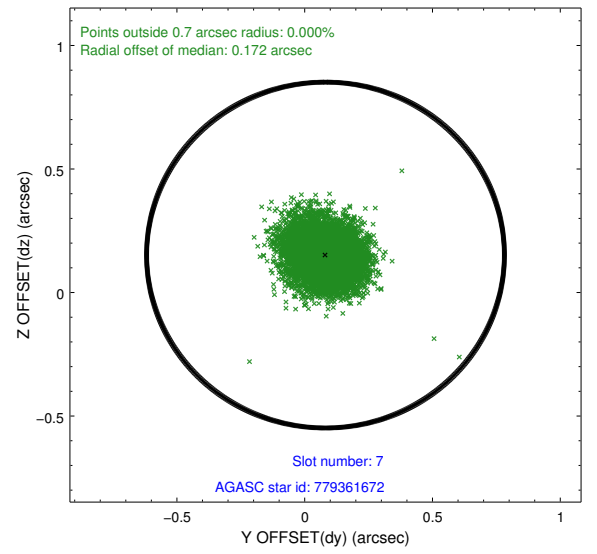
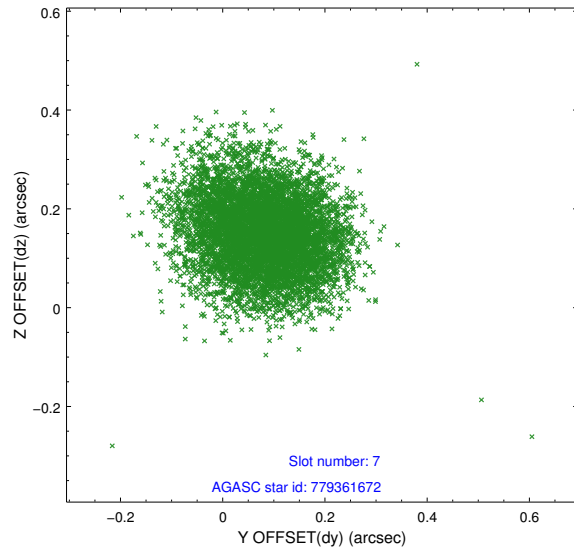


## 2.4.4 Slot 6



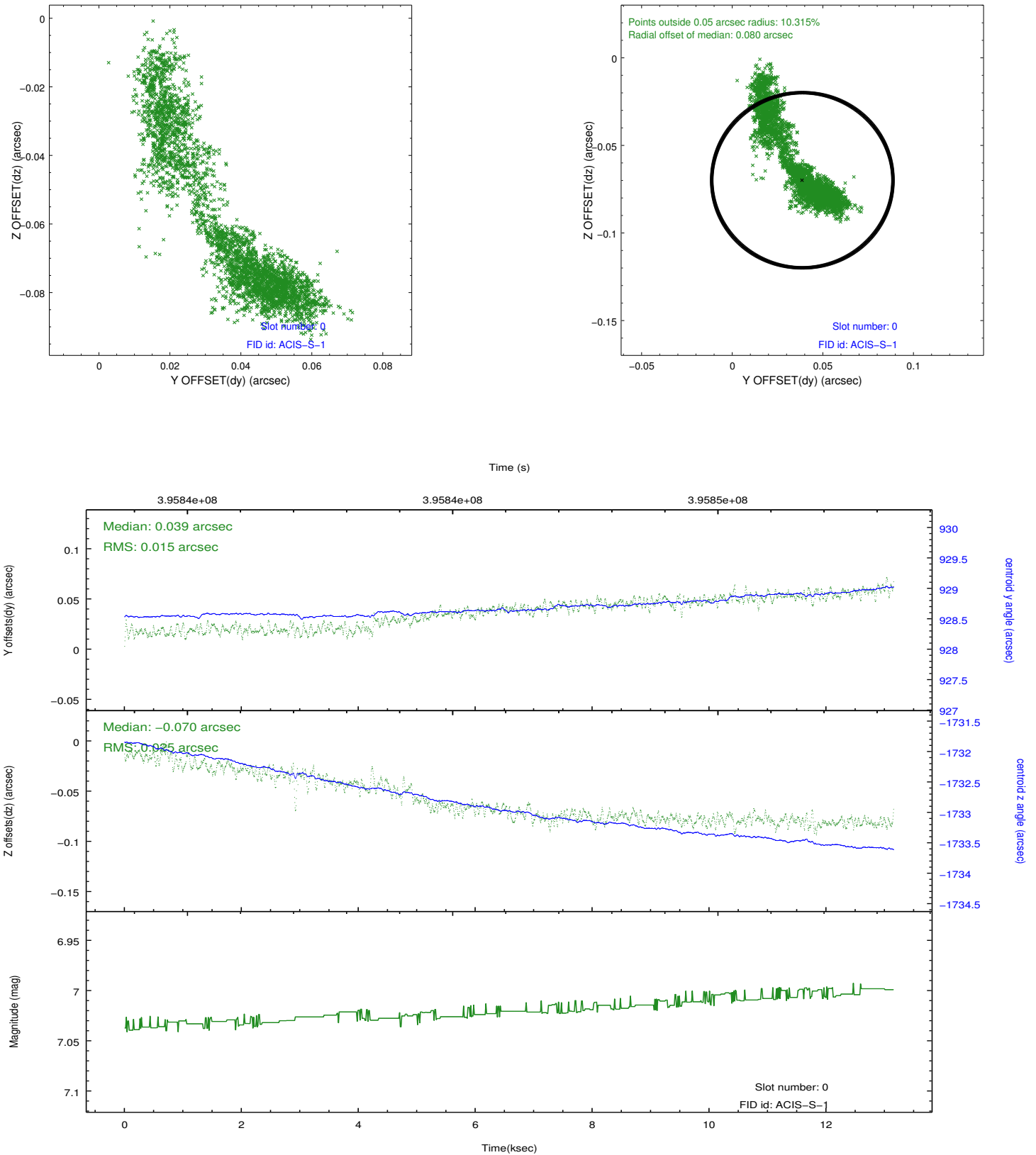


## 2.4.5 Slot 7

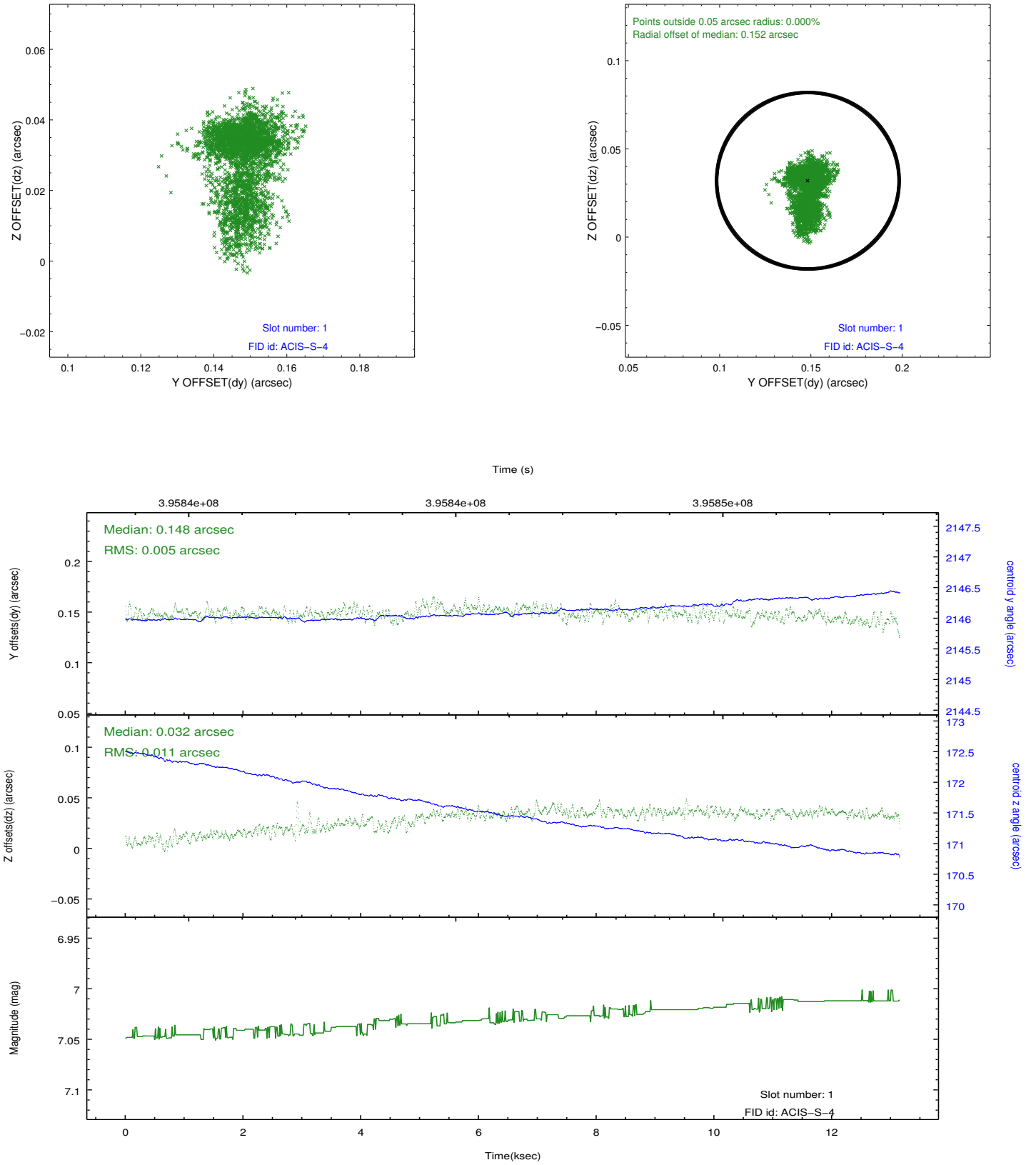


## 2.5 FID Slots

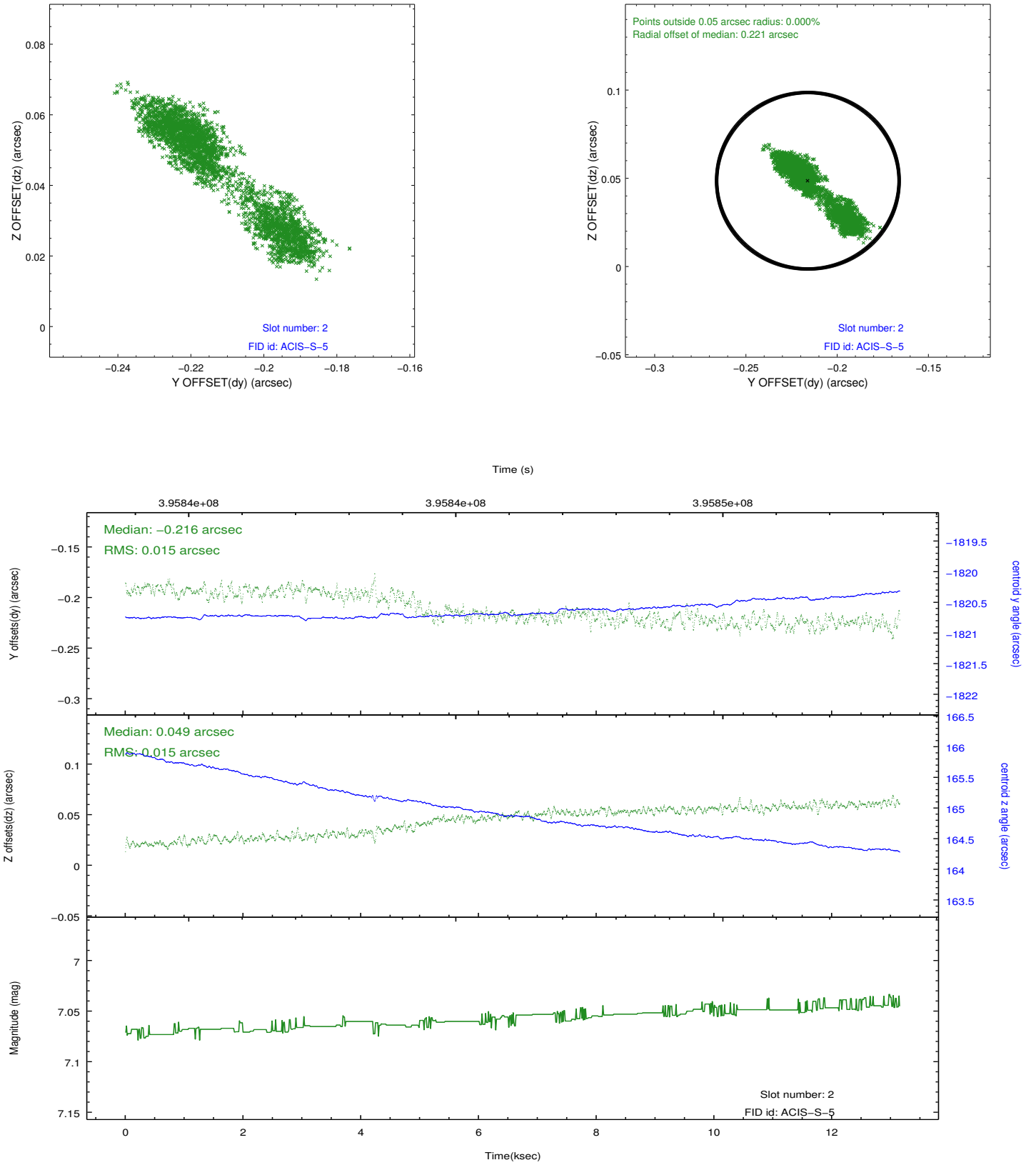
### 2.5.1 Slot 0



## 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)	2012.07.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.045234357238

### A.2 Comments