

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 4498 - L2 Version 3  
Chandra X-Ray Center

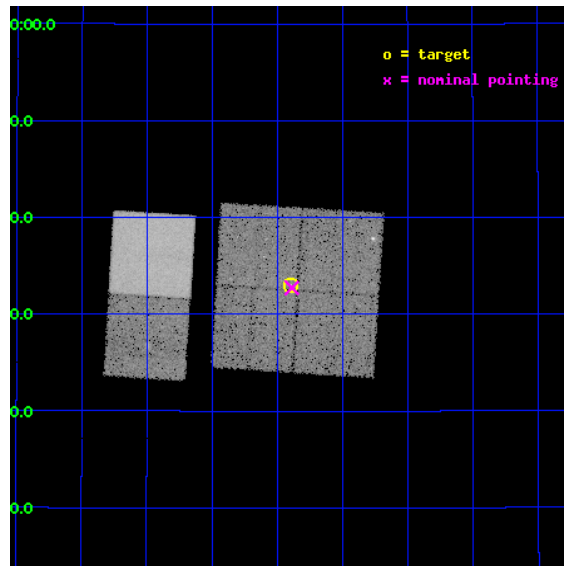
L2 Processing Date : Nov 9 2012

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# 1 Front

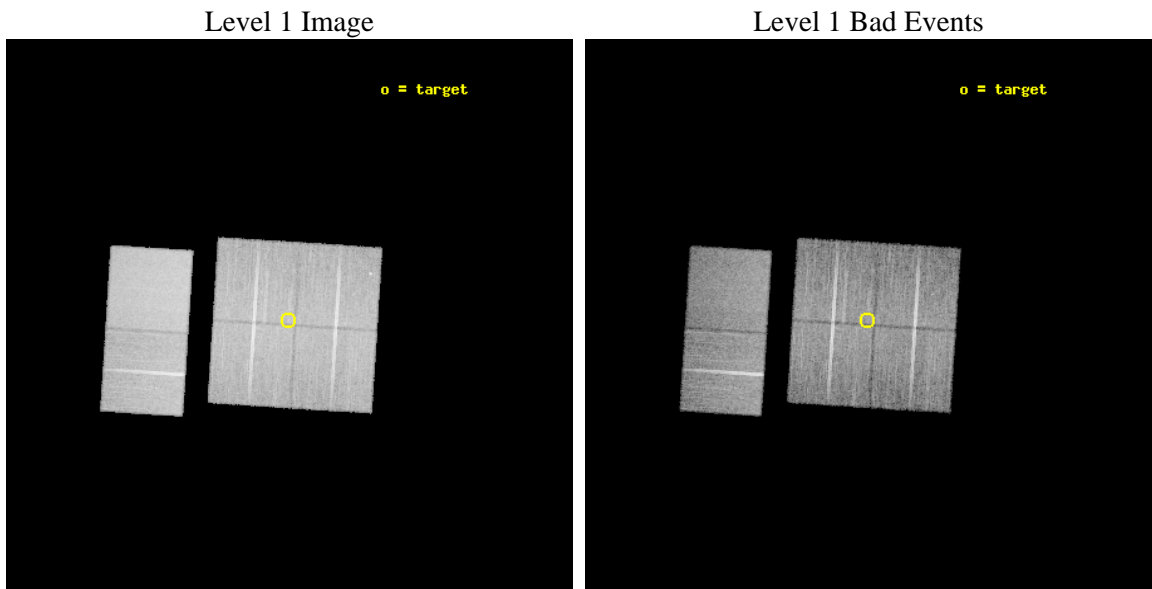
seq_num	200267	Sequence number
obs_id	4498	Observation id
title	Exploring X-rays in protostellar jets	Proposal title
observer	Dr. Bo Reipurth	Principal investigator
object	HH 184	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	67.34875	Observer's specified target RA [deg]
dec_targ	24.55	Observer's specified target Dec [deg]
ra_nom	67.347084179929	Nominal RA [deg]
dec_nom	24.545602441747	Nominal Dec [deg]
roll_nom	273.64650423489	Nominal Roll [deg]
revision	3	Processing version of data
ontime	24963.199907005	Sum of GTIs [s]
livetime	24647.100838748	Livetime [s]
ontime0	24963.183672279	Sum of GTIs [s]
ontime1	24959.958996356	Sum of GTIs [s]
ontime2	24963.199907005	Sum of GTIs [s]
ontime3	24963.199907005	Sum of GTIs [s]
ontime6	24963.199907005	Sum of GTIs [s]
ontime7	24963.199907005	Sum of GTIs [s]
l2events	161634	Number of level 2 events



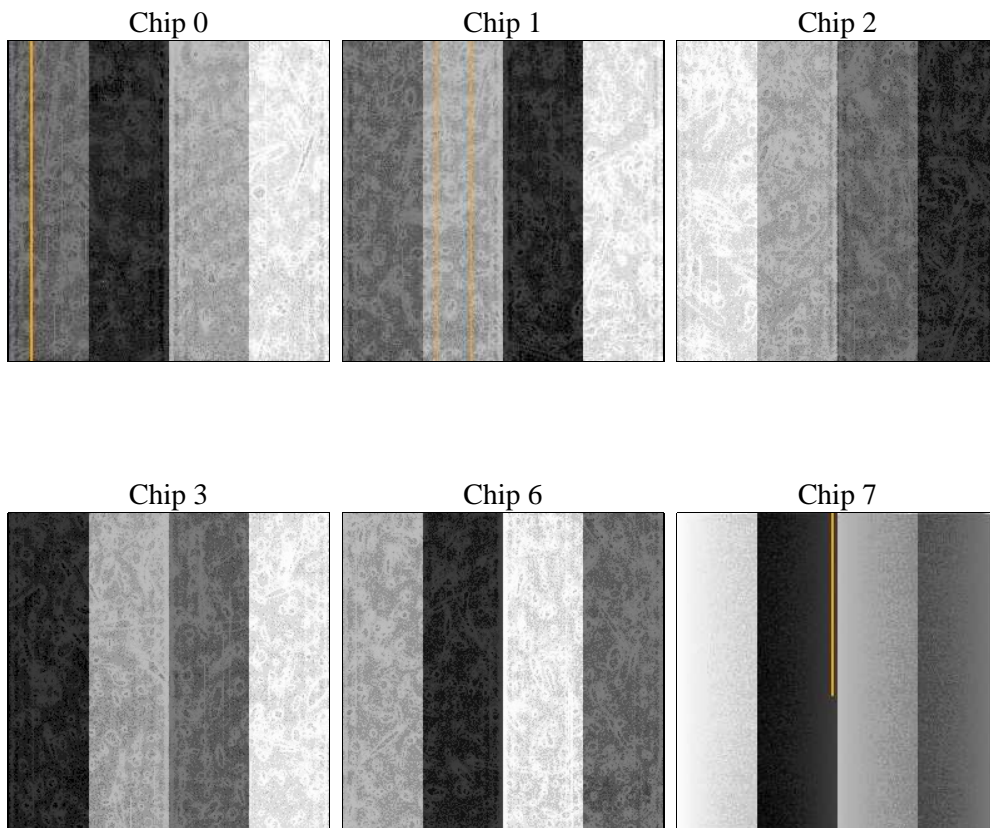
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	24963.199907005	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime0	24963.183672279	Sum of GTIs [s]
date	2012-11-09T16:05:20	Date and time of file creation	ontime1	24959.958996356	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	24963.199907005	Sum of GTIs [s]
			ontime3	24963.199907005	Sum of GTIs [s]
			ontime6	24963.199907005	Sum of GTIs [s]
			ontime7	24963.199907005	Sum of GTIs [s]
			l1events	945980	Number of level 1 events

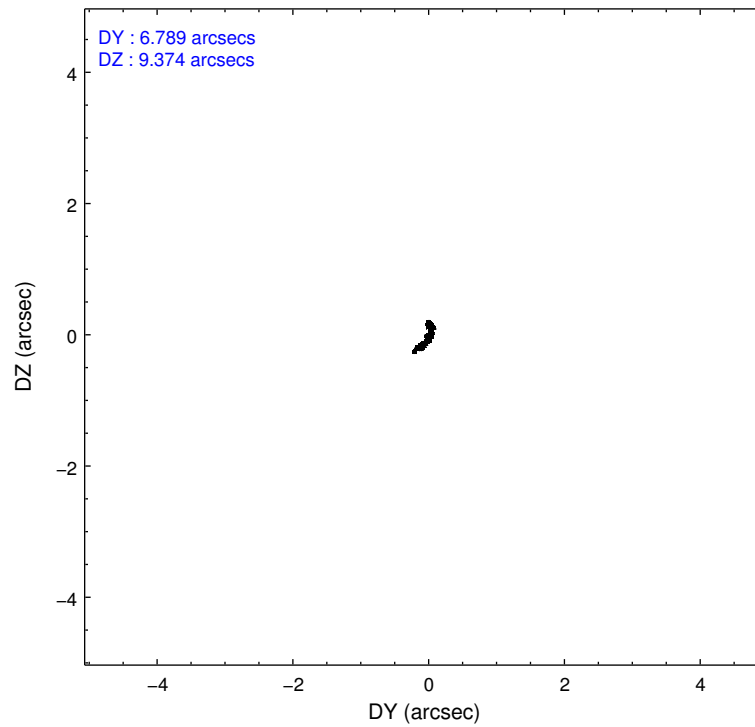
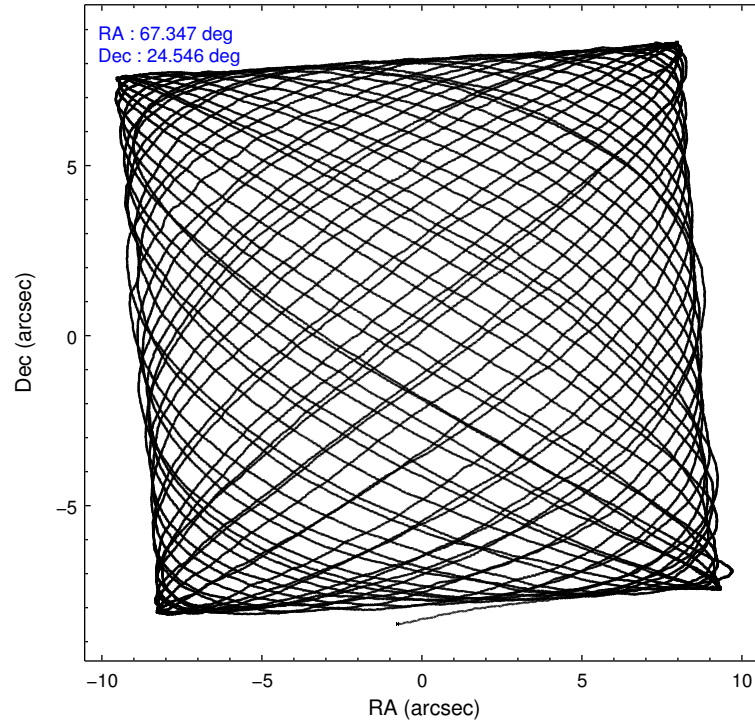
### 2.1.4 Events

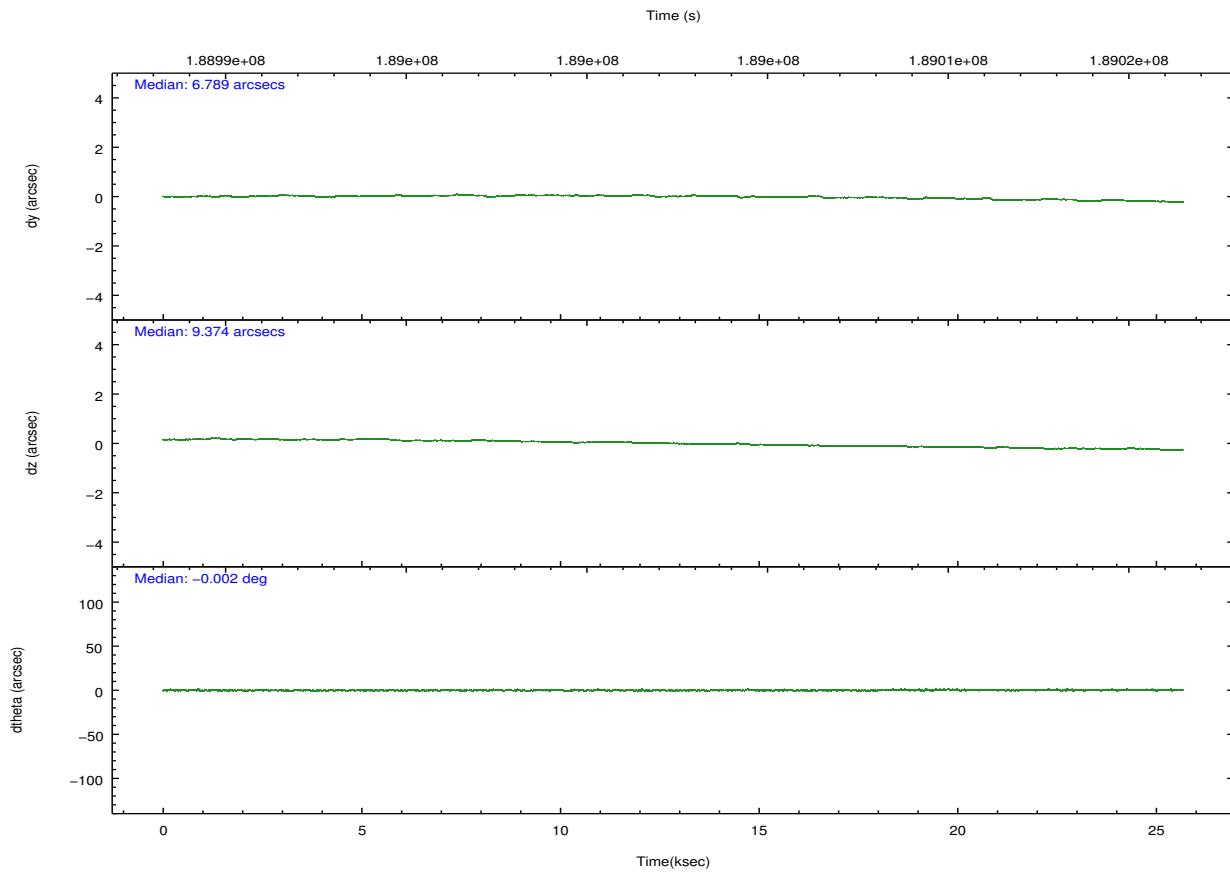
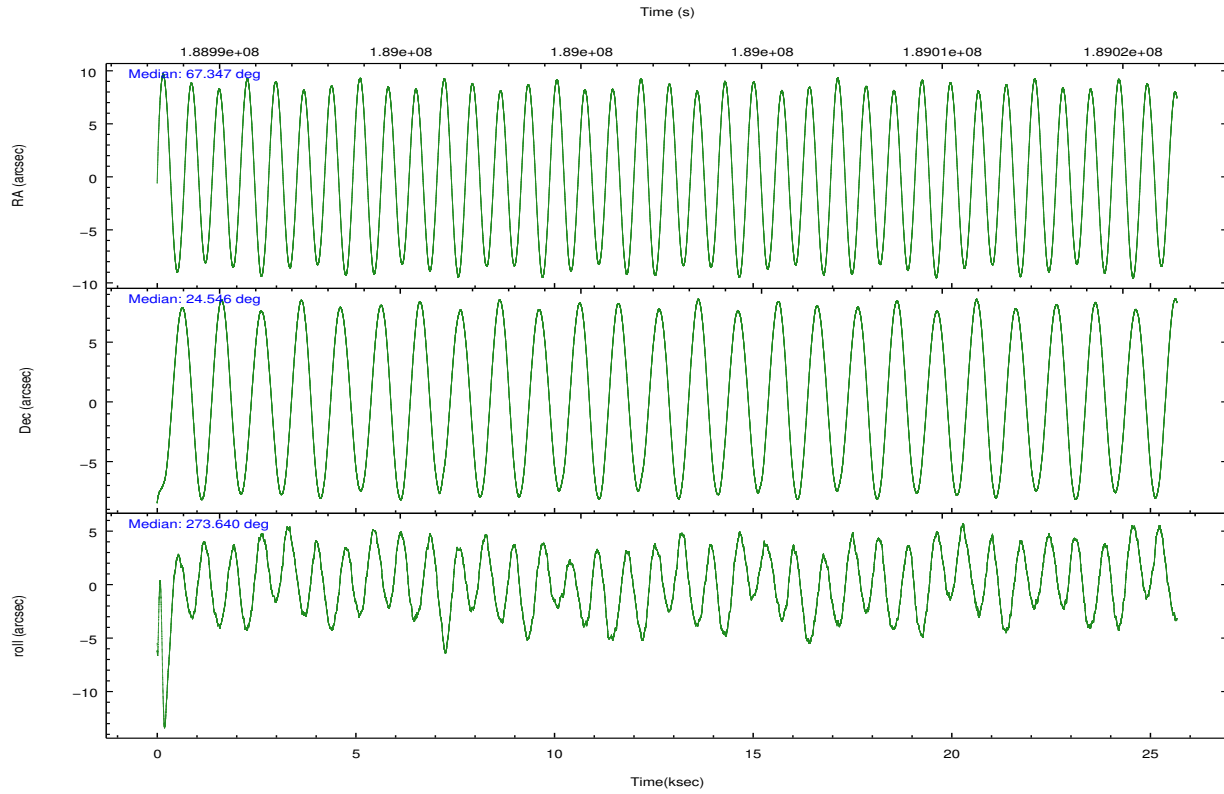
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	138305	143510	148360	149216	158929	207660	grade 0 events	7583	7873	7661	7607	7115	7326
rejected events	120167	123818	130605	131491	140705	122888		5%	5%	5%	5%	4%	3%
rejected %	86%	86%	88%	88%	88%	59%	grade 1 events	92	78	80	73	89	208
								0%	0%	0%	0%	0%	0%
							grade 2 events	3745	4162	3545	3439	3775	16727
								2%	2%	2%	2%	2%	8%
							grade 3 events	1812	1919	1786	1730	1914	7493
								1%	1%	1%	1%	1%	3%
							grade 4 events	1688	1878	1745	1753	1700	7547
								1%	1%	1%	1%	1%	3%
							grade 5 events	6333	6632	5994	6853	7502	20290
								4%	4%	4%	4%	4%	9%
							grade 6 events	3317	3863	3025	3201	3726	45701
								2%	2%	2%	2%	2%	22%
							grade 7 events	113735	117105	124524	124560	133108	102368
								82%	81%	83%	83%	83%	49%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	67.330282	67.34708417992894	Subarray requested	NONE	NONE
[deg] Pointing Dec	24.568359	24.54560244174742	Alternating exposures requested	N	N
[deg] Pointing Roll	273.444810	273.6465042348937	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	188990220.184000	188989017.18433			
Observation start date	2003-12-28T09:15:56	2003-12-28T08:56:57			
[s] Observation end time (MET)	189015220.184000	189016679.88553			
Observation end date	2003-12-28T16:12:36	2003-12-28T16:37:59			
Read mode	TIMED	TIMED			

## 2.3 Aspect



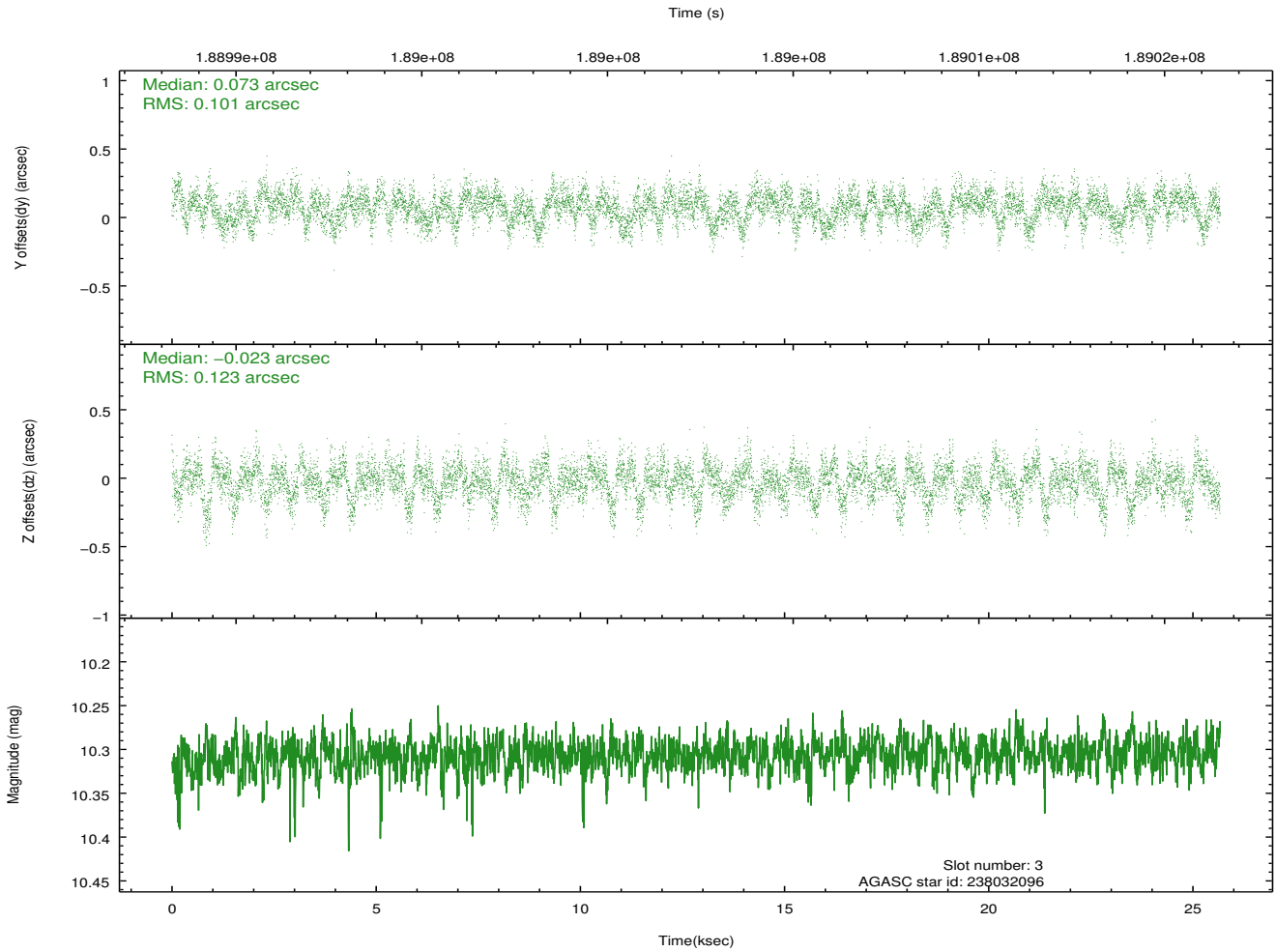
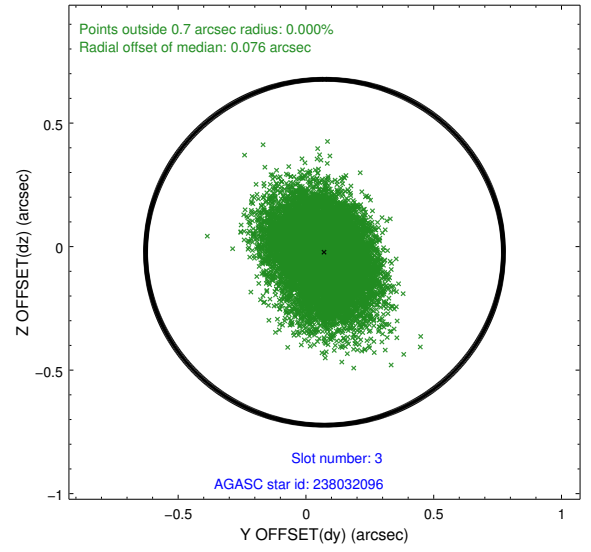
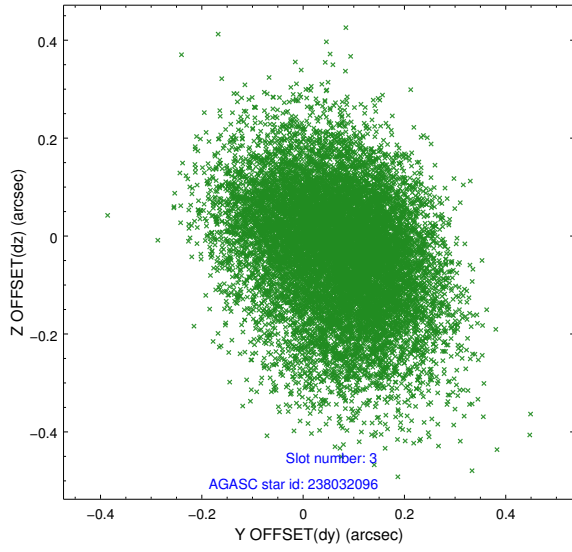


### Slot Statistics

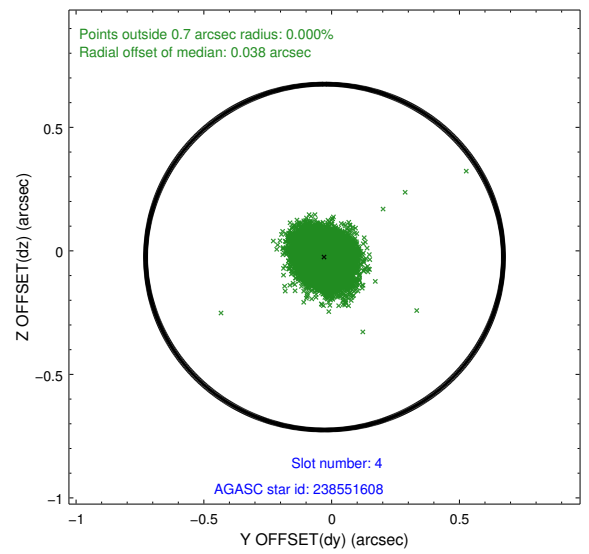
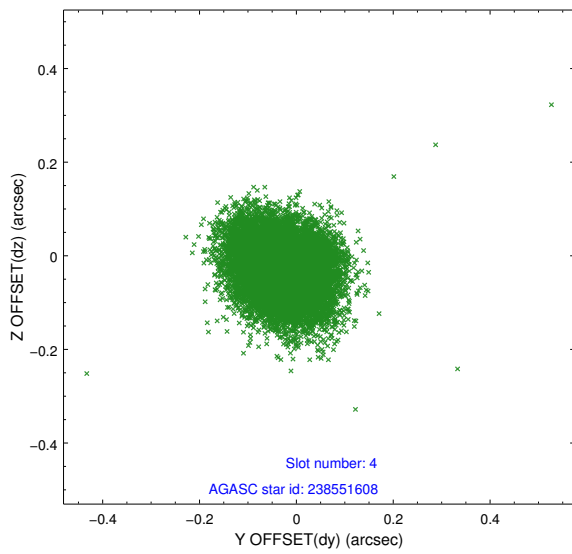
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	6258	-0.011	0.050	0.007	0.012	0.000000	0.000000	932.92	-832.77
1	FID	ACIS-I-5	7.23	6259	-0.130	0.024	0.006	0.010	0.000000	0.000000	-1815.26	1064.63
2	FID	ACIS-I-6	7.26	6260	0.050	-0.003	0.008	0.014	0.000000	0.000000	398.39	1709.24
3	GUIDE	238032096	10.31	12346	0.073	-0.023	0.168	0.277	66.802029	24.369947	606.29	-1771.52
4	GUIDE	238551608	9.01	12519	-0.028	-0.025	0.081	0.131	66.891877	25.061588	-1860.14	-1320.43
5	GUIDE	239731088	7.49	12521	-0.058	-0.010	0.050	0.082	67.084109	24.117817	1570.00	-904.50
6	GUIDE	239731296	8.83	12518	0.033	0.004	0.063	0.105	67.110301	24.149622	1461.38	-811.64
7	GUIDE	240262776	8.52	12518	-0.023	0.062	0.083	0.140	67.818644	25.030457	-1567.21	1690.13

## 2.4 Star Slots

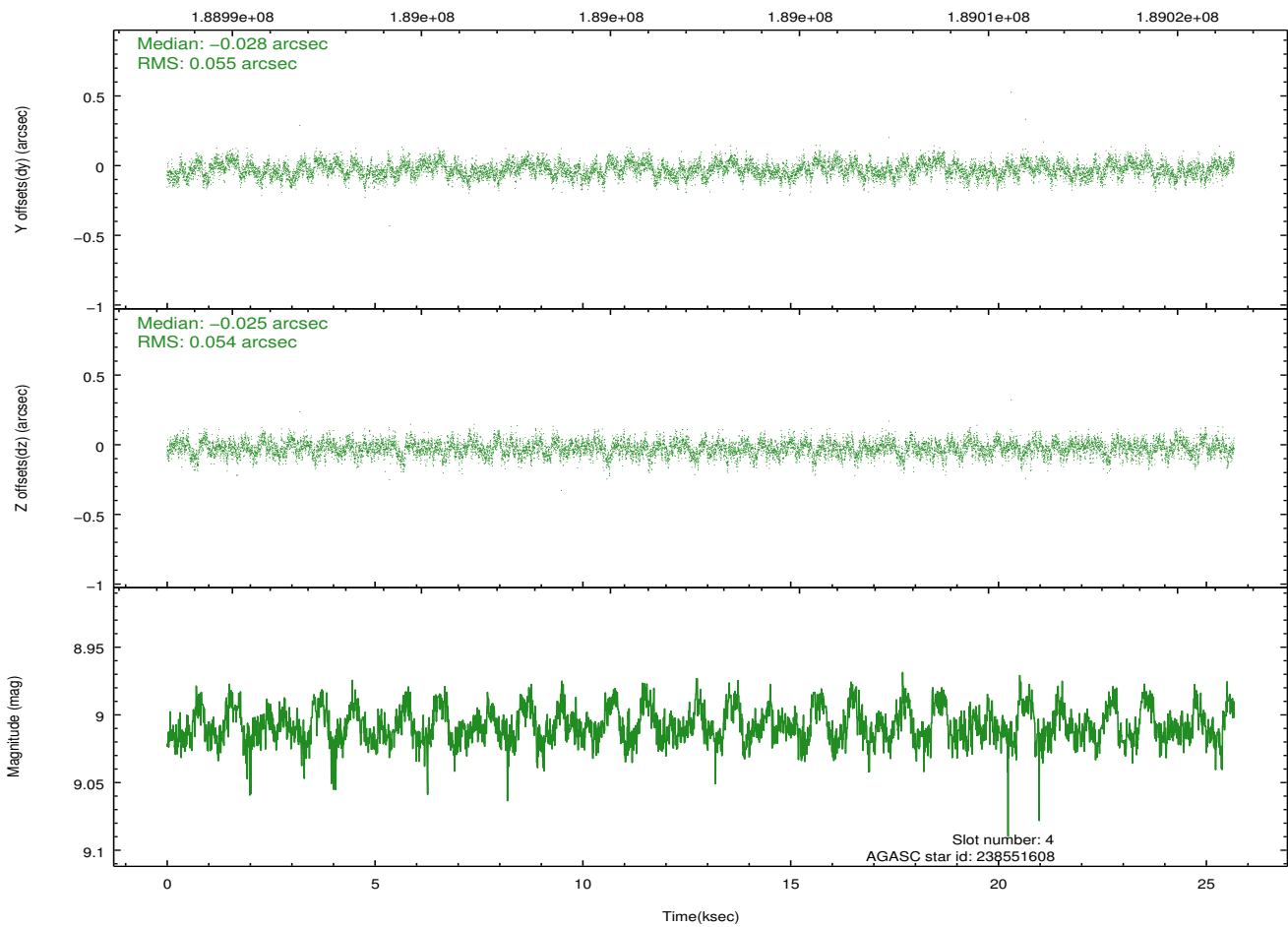
### 2.4.1 Slot 3



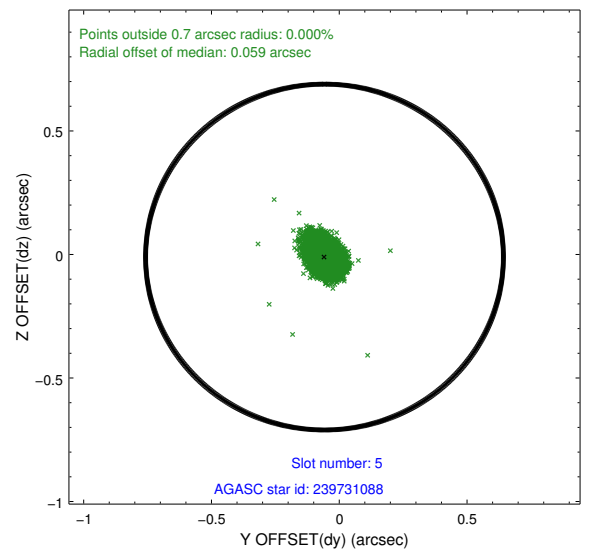
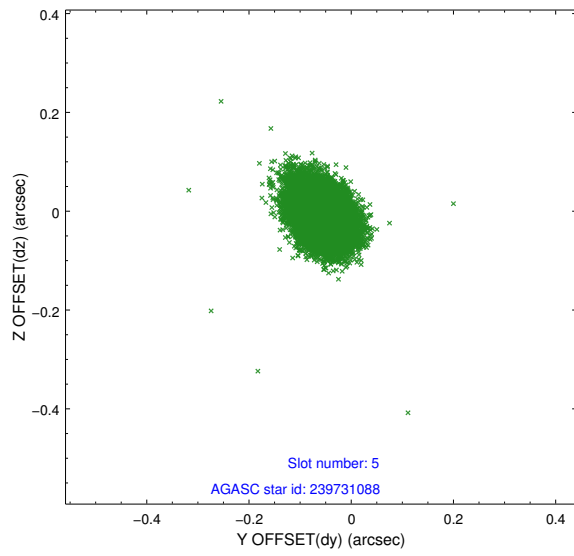
## 2.4.2 Slot 4



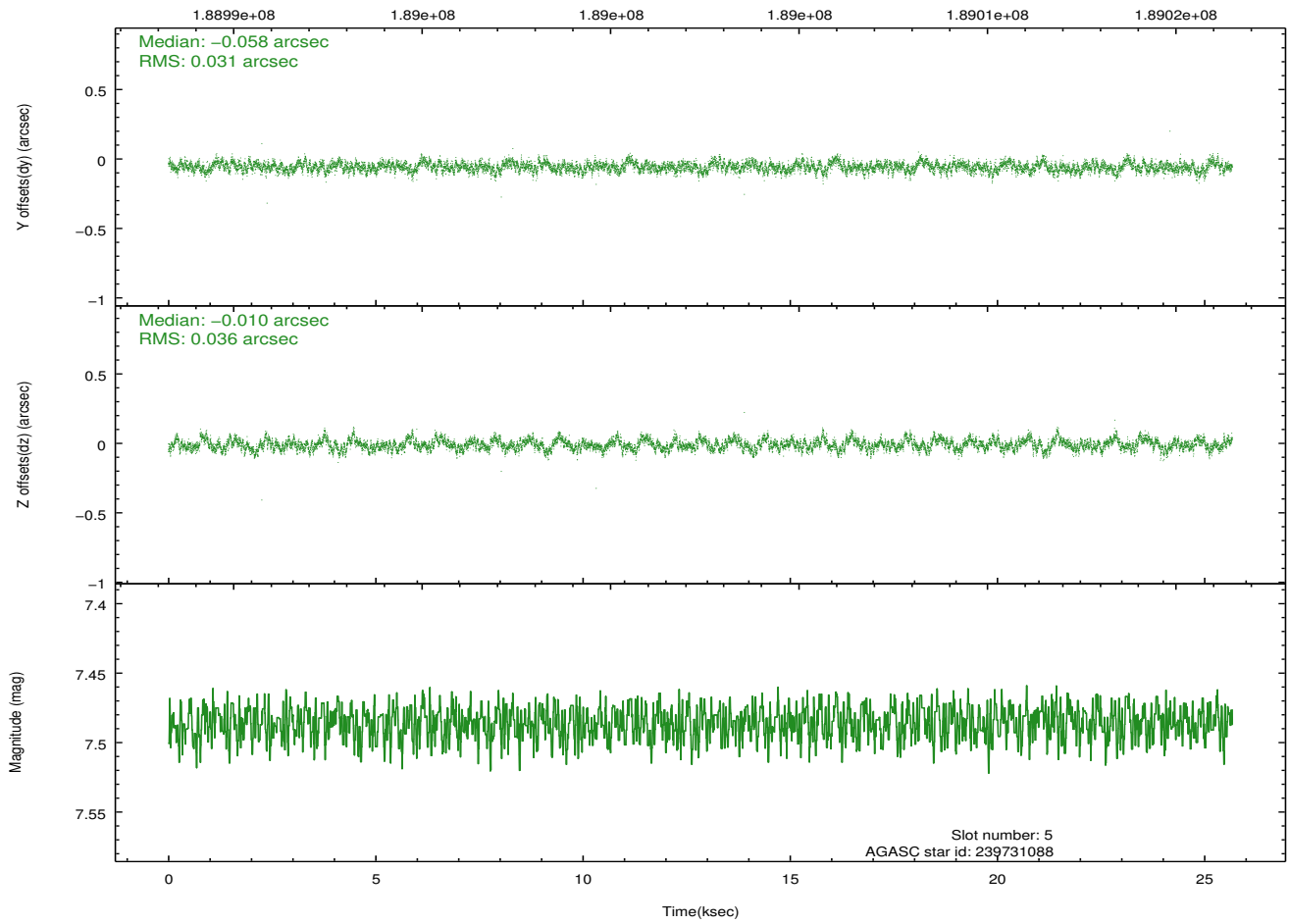
Time (s)



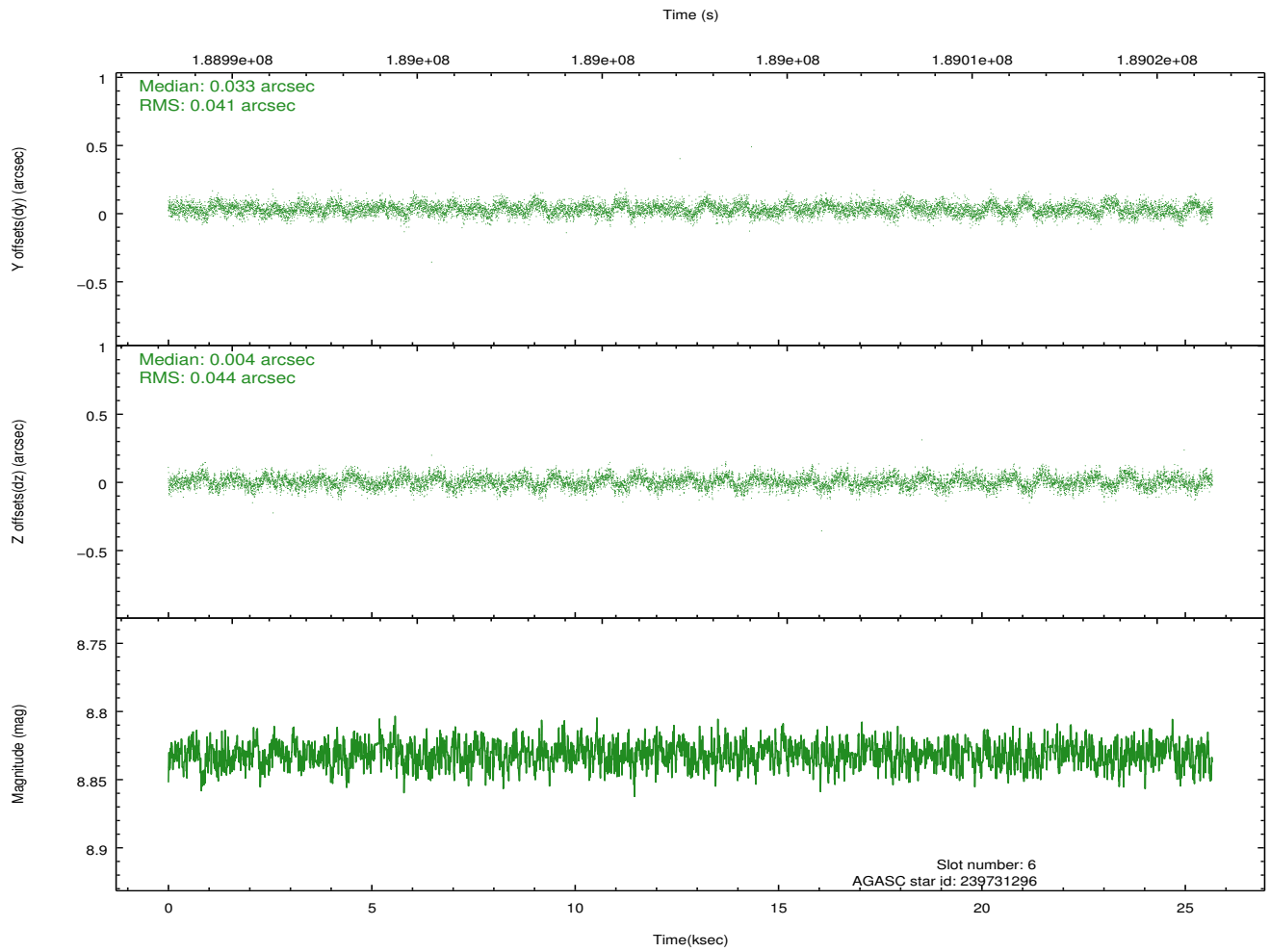
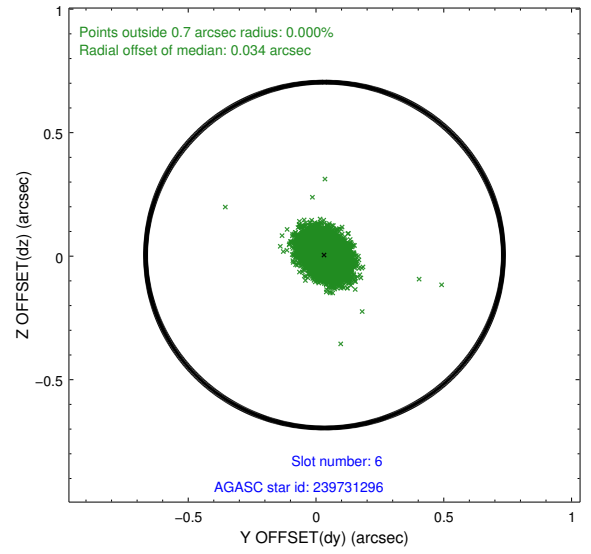
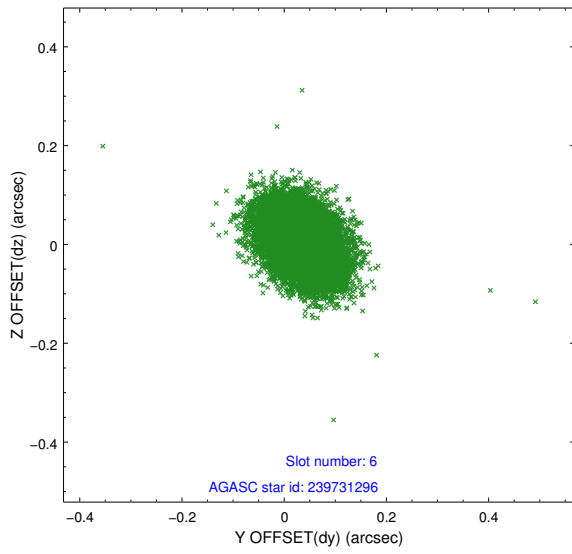
### 2.4.3 Slot 5



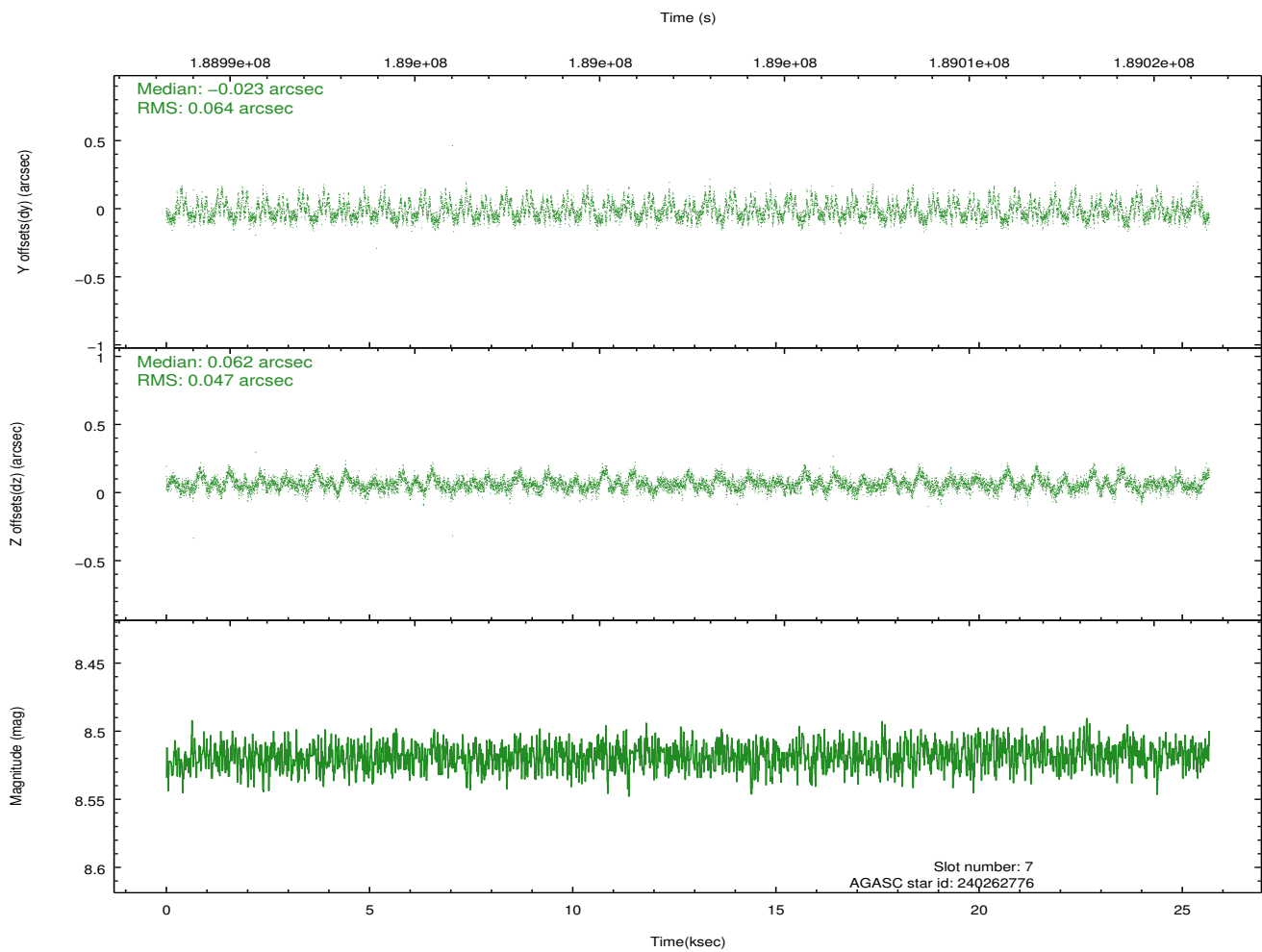
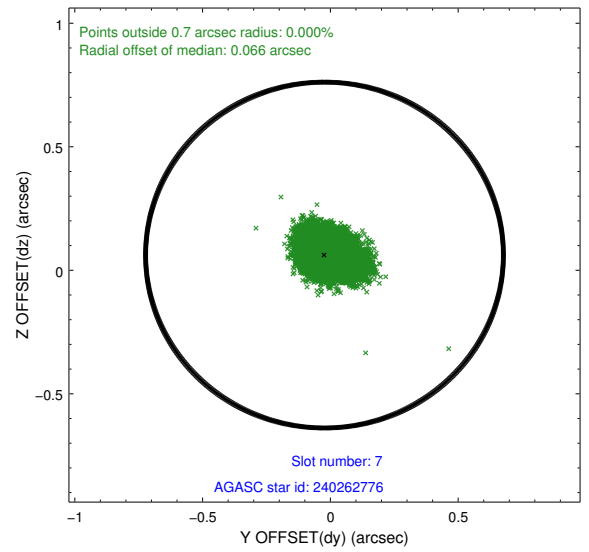
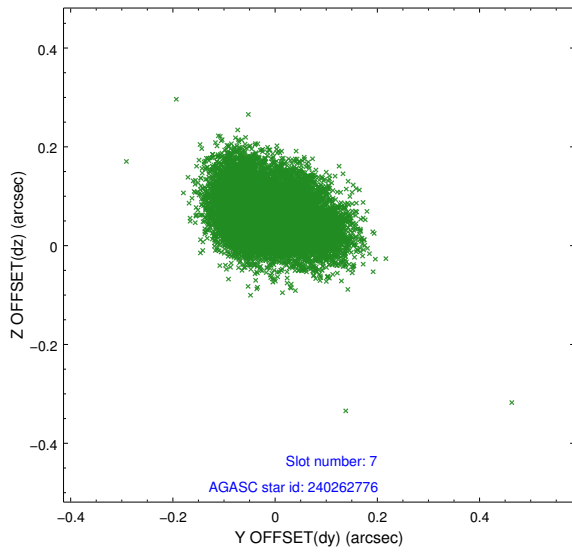
Time (s)



### 2.4.4 Slot 6

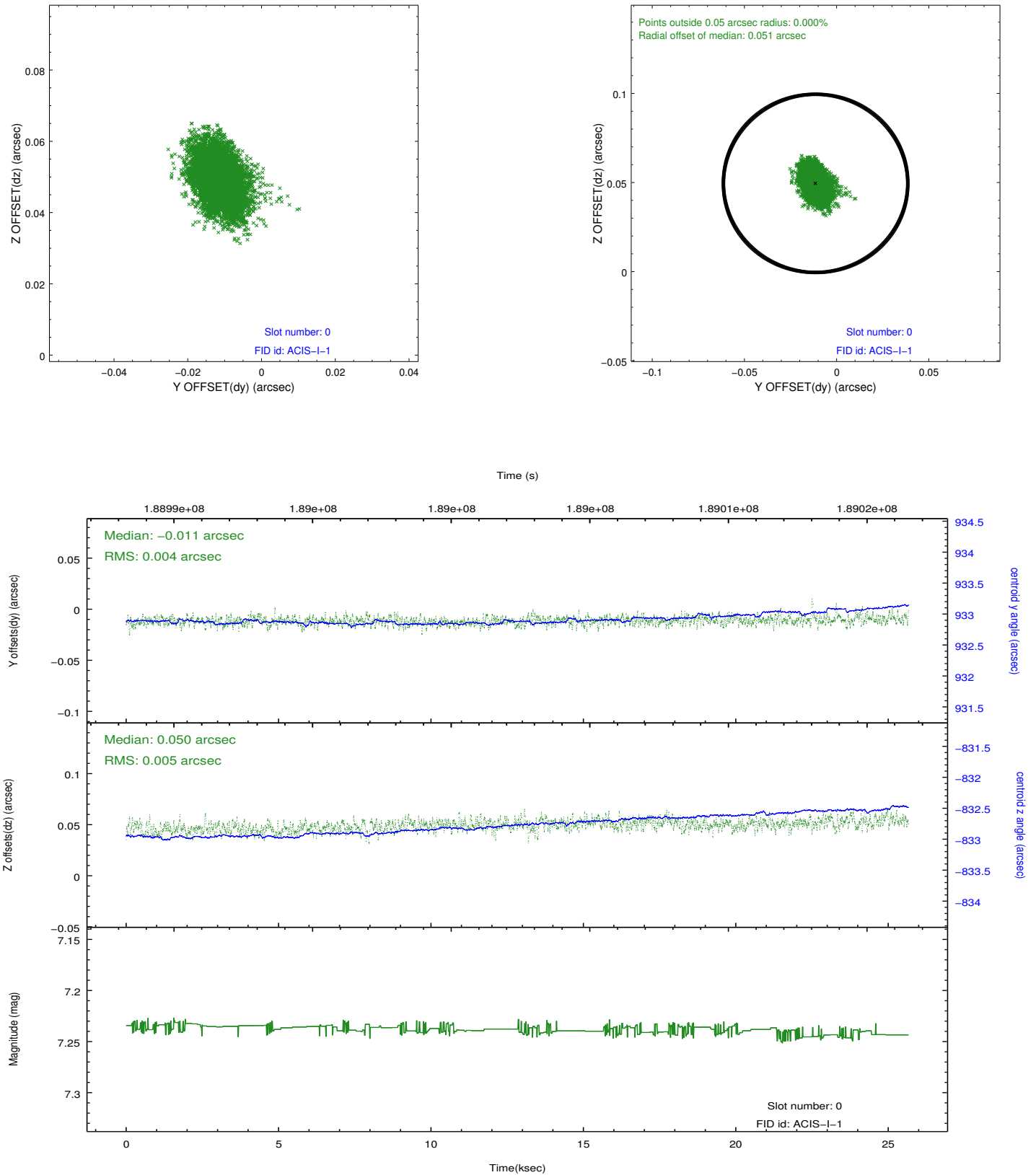


## 2.4.5 Slot 7

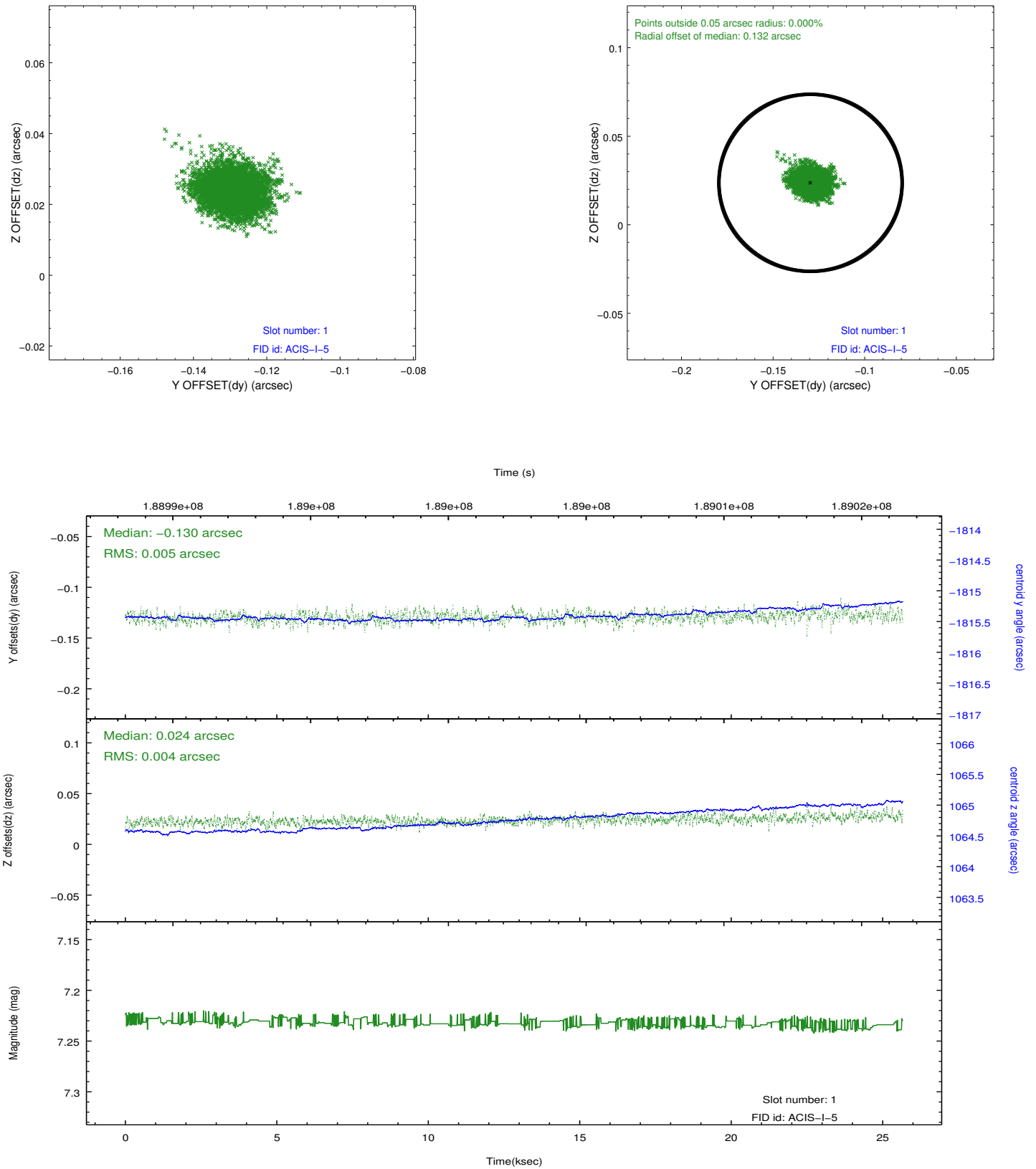


## 2.5 FID Slots

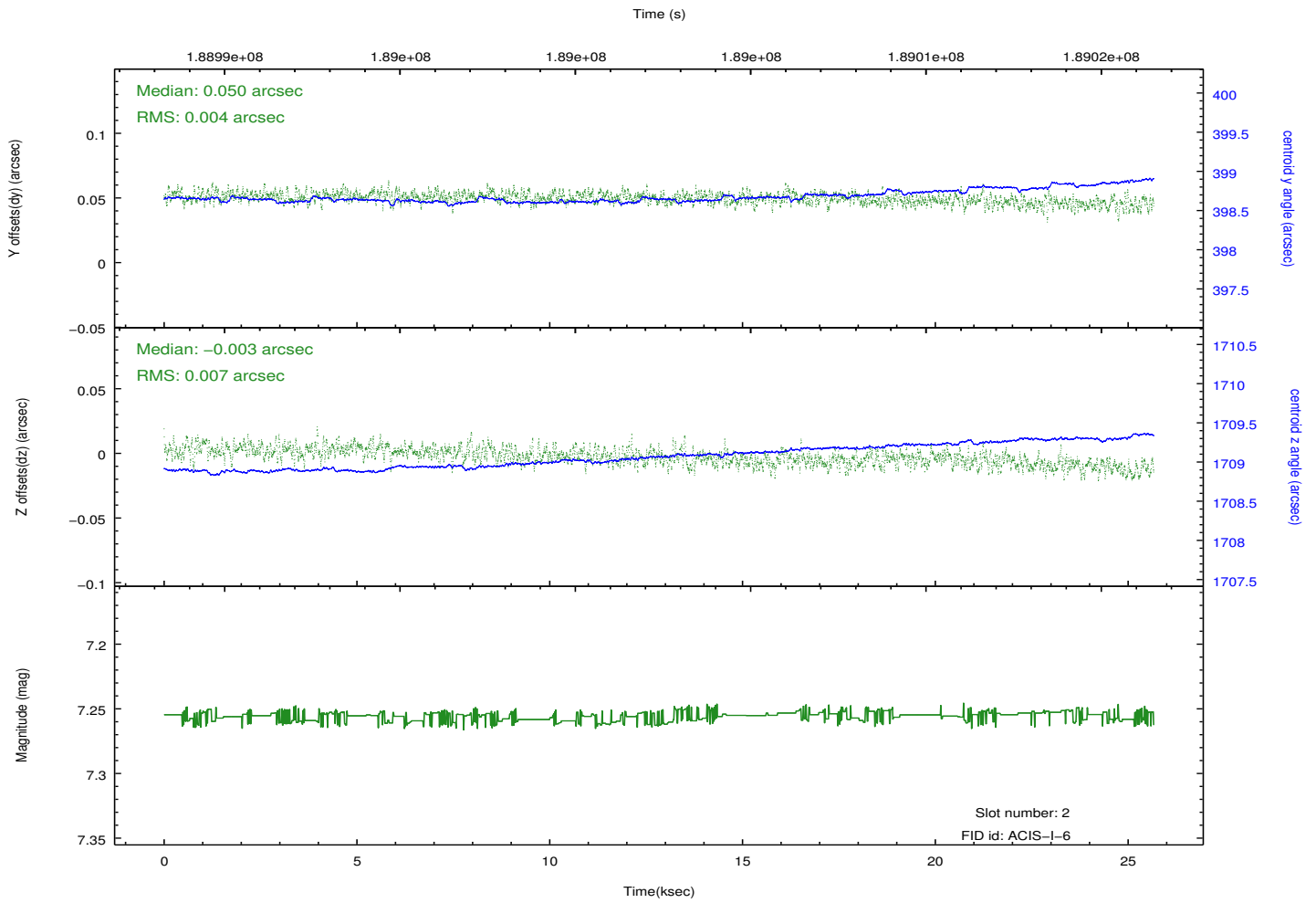
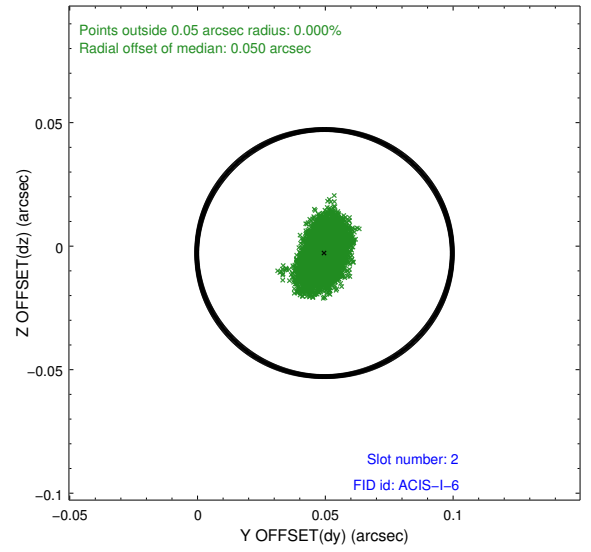
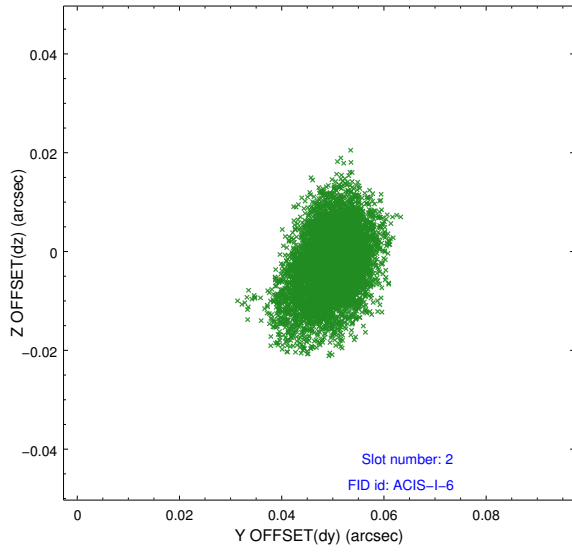
### 2.5.1 Slot 0



## 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)	2012.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.966

## A.2 Comments

On day 356 at about 00:30, the OBA heater stuck in the 'on' position. This situation affected obsid 4901 and all subsequent observations to this point. The result of this anomaly could be a displacement of the target on the chip in the z direction. The displacement will be small because everything is still within spec, but the target may be spatially displaced, have a different point spread function, or trail across the chip.