

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 12981 - L2 Version 2  
Chandra X-Ray Center

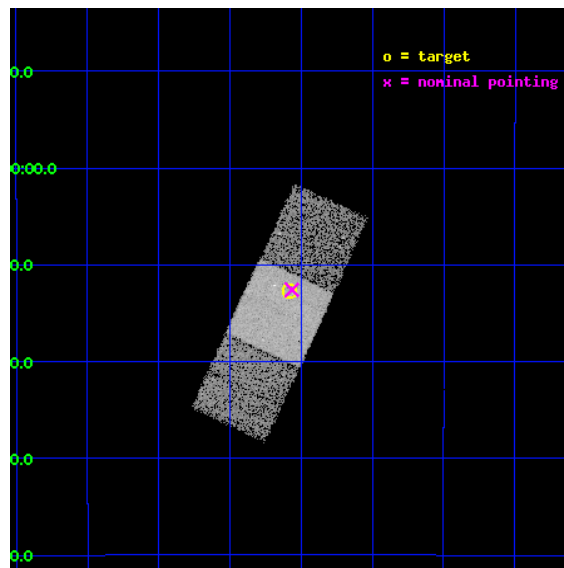
L2 Processing Date : Feb 13 2012

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# 1 Front

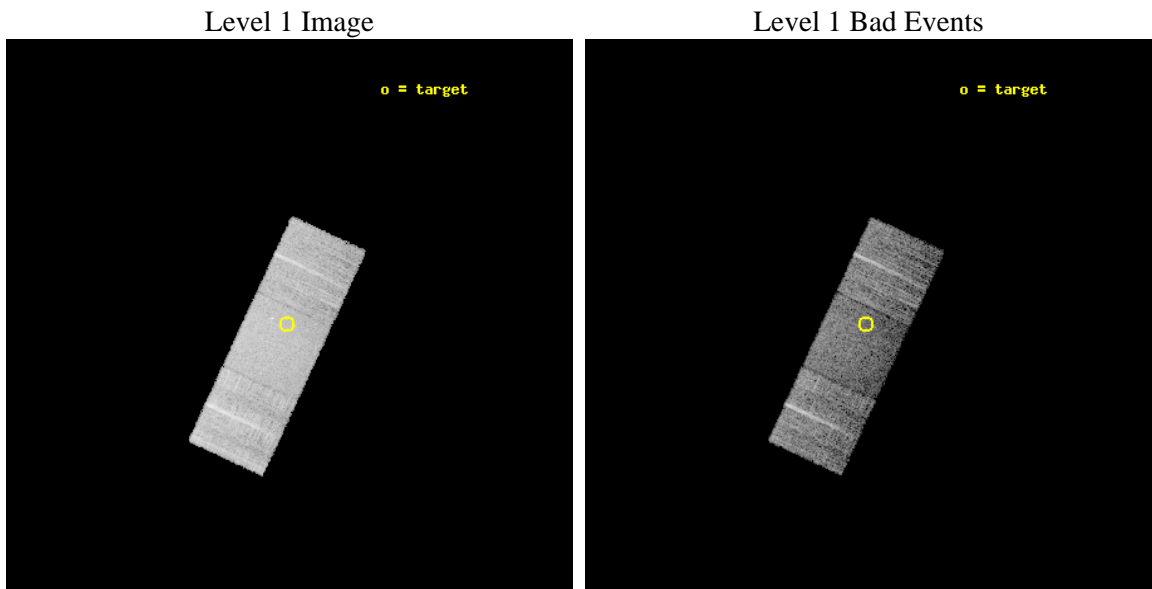
seq_num	600949	Sequence number
obs_id	12981	Observation id
title	Black-hole--galaxy co-evolution at the end of the Hubble sequence	&#160
observer	Prof. Smita Mathur	Principal investigator
object	PGC 3853	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.270417	Observer's specified target RA [deg]
dec_targ	-6.2125	Observer's specified target Dec [deg]
ra_nom	16.266336890197	Nominal RA [deg]
dec_nom	-6.2098123693086	Nominal Dec [deg]
roll_nom	114.92195396859	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9947.092282474	Sum of GTIs [s]
livetime	9817.1261988607	Livetime [s]
ontime6	9947.0512424707	Sum of GTIs [s]
ontime7	9947.092282474	Sum of GTIs [s]
ontime8	9947.0102024674	Sum of GTIs [s]
l2events	45147	Number of level 2 events



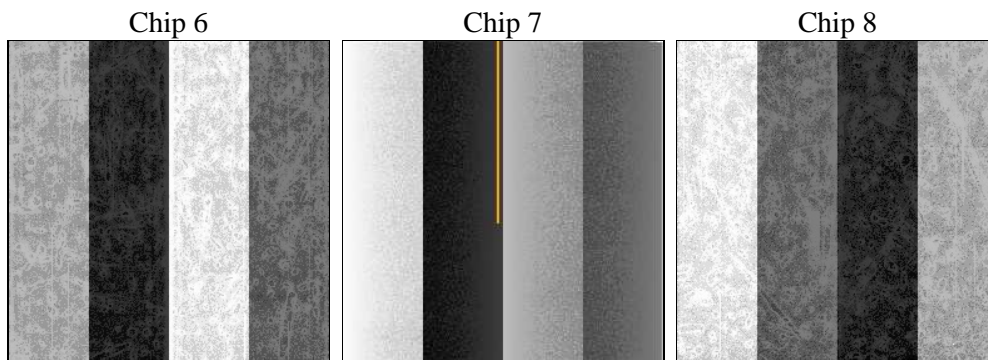
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	9947.092282474	Sum of GTIs [s]
caldsver	4.4.7	&#160	ontime6	9947.0512424707	Sum of GTIs [s]
date	2012-02-13T11:20:56	Date and time of file creation	ontime7	9947.092282474	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	9947.0102024674	Sum of GTIs [s]
			l1events	209381	Number of level 1 events

### 2.1.4 Events

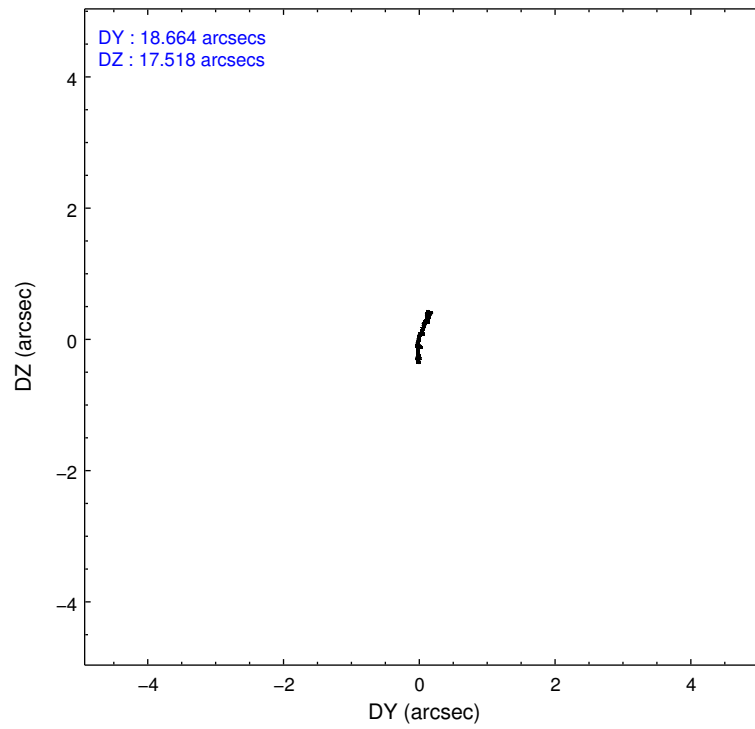
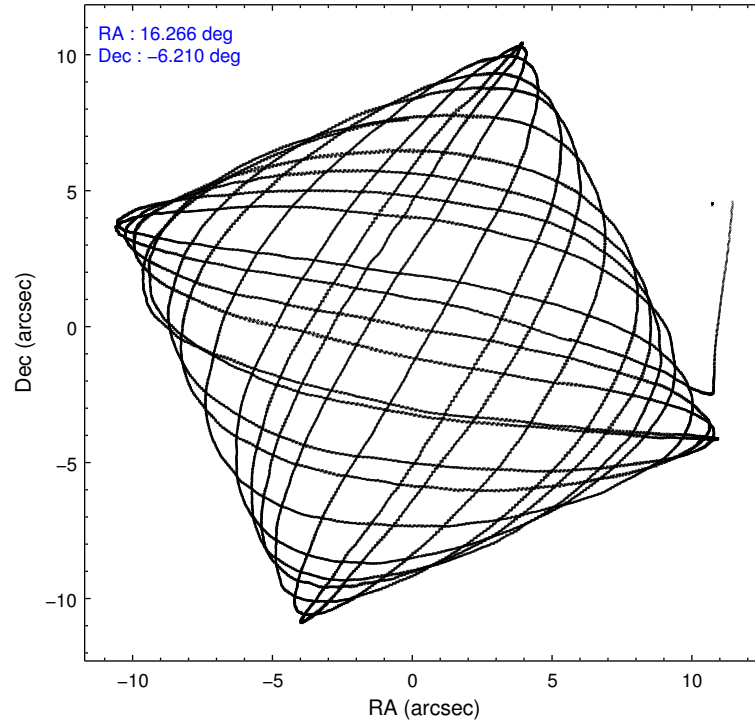
	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	58211	73123	78047
rejected events	51453	40376	57323
rejected %	88%	55%	73%

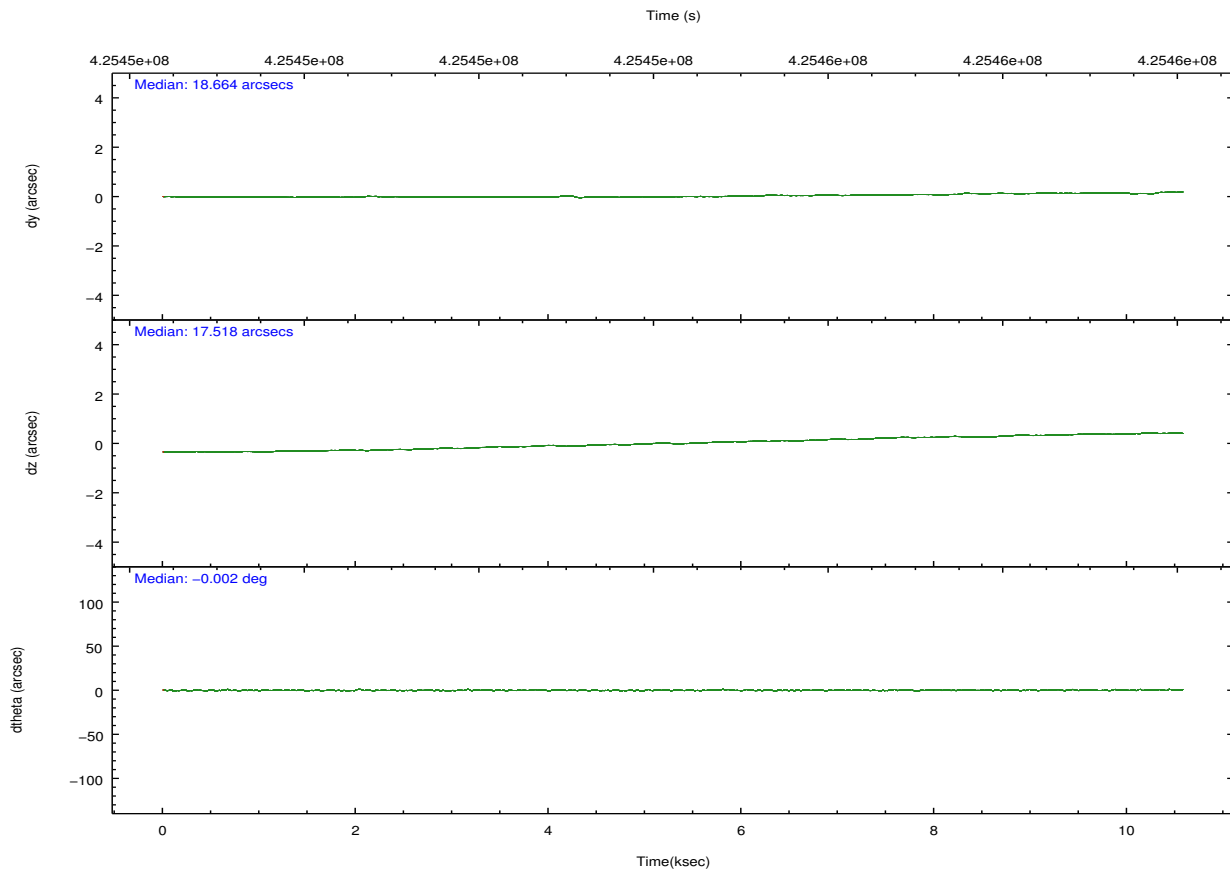
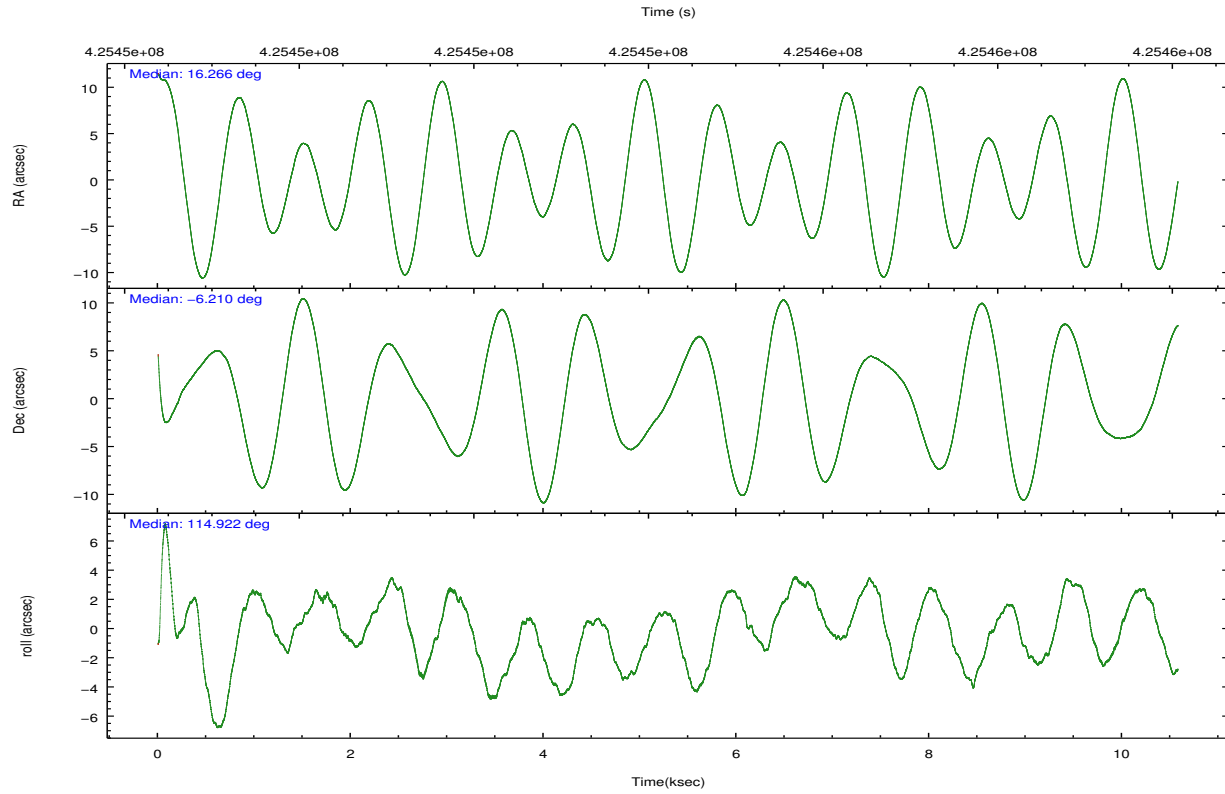
	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	2386	3016	6104
	4%	4%	7%
grade 1 events	31	80	76
	0%	0%	0%
grade 2 events	1497	6811	4715
	2%	9%	6%
grade 3 events	675	2843	2246
	1%	3%	2%
grade 4 events	700	2870	2157
	1%	3%	2%
grade 5 events	2803	7696	4004
	4%	10%	5%
grade 6 events	1501	17222	5503
	2%	23%	7%
grade 7 events	48618	32585	53242
	83%	44%	68%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	16.289059	16.26633689019707	CCD I2 on	N	N
[deg] Pointing Dec	-6.225239	-6.209812369308617	CCD I3 on	N	N
[deg] Pointing Roll	114.767797	114.9219539685892	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	425449514.184000	425447971.11171	CCD S5 on	N	N
Observation start date	2011-06-26T04:24:08	2011-06-26T03:59:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	425459514.184000	425460389.49986	On-chip summing requested	N	N
Observation end date	2011-06-26T07:10:48	2011-06-26T07:26:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



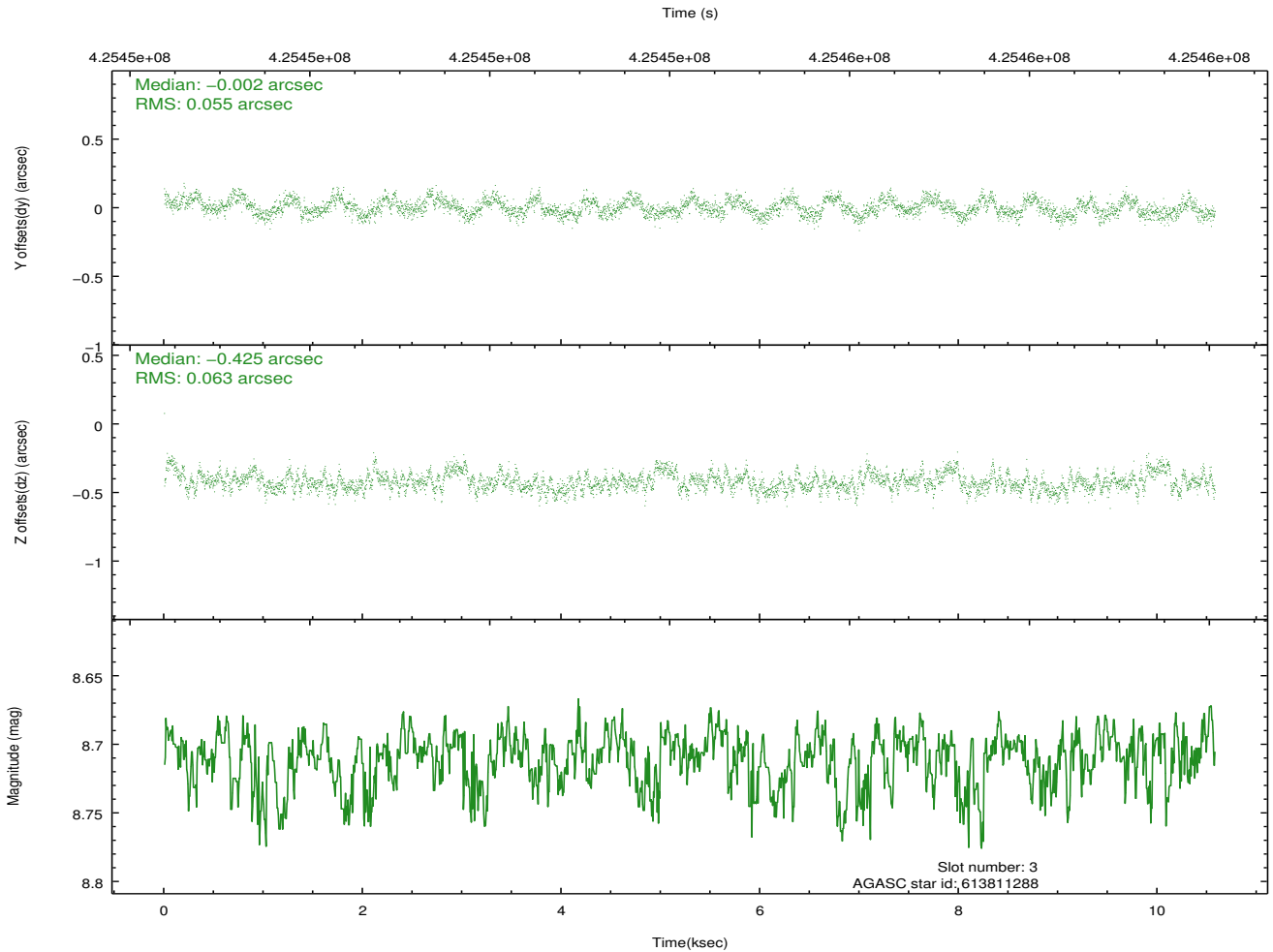
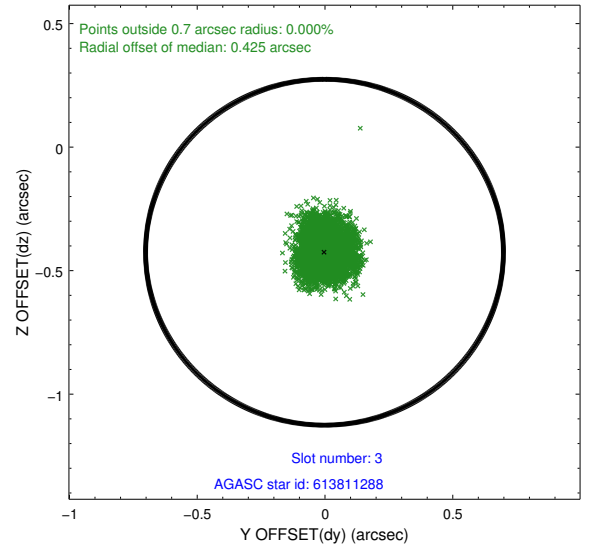
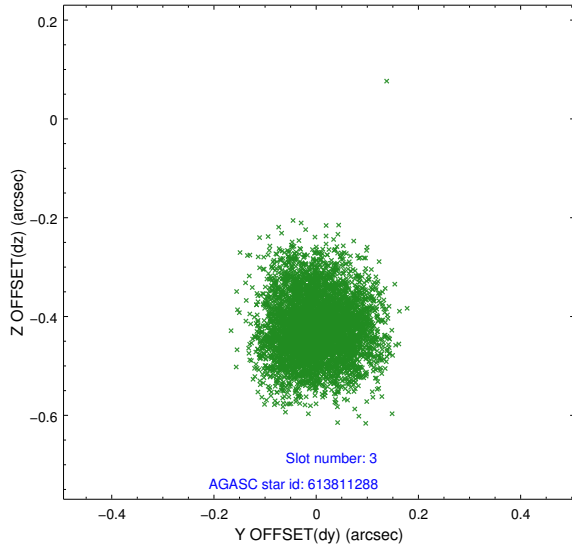


### Slot Statistics

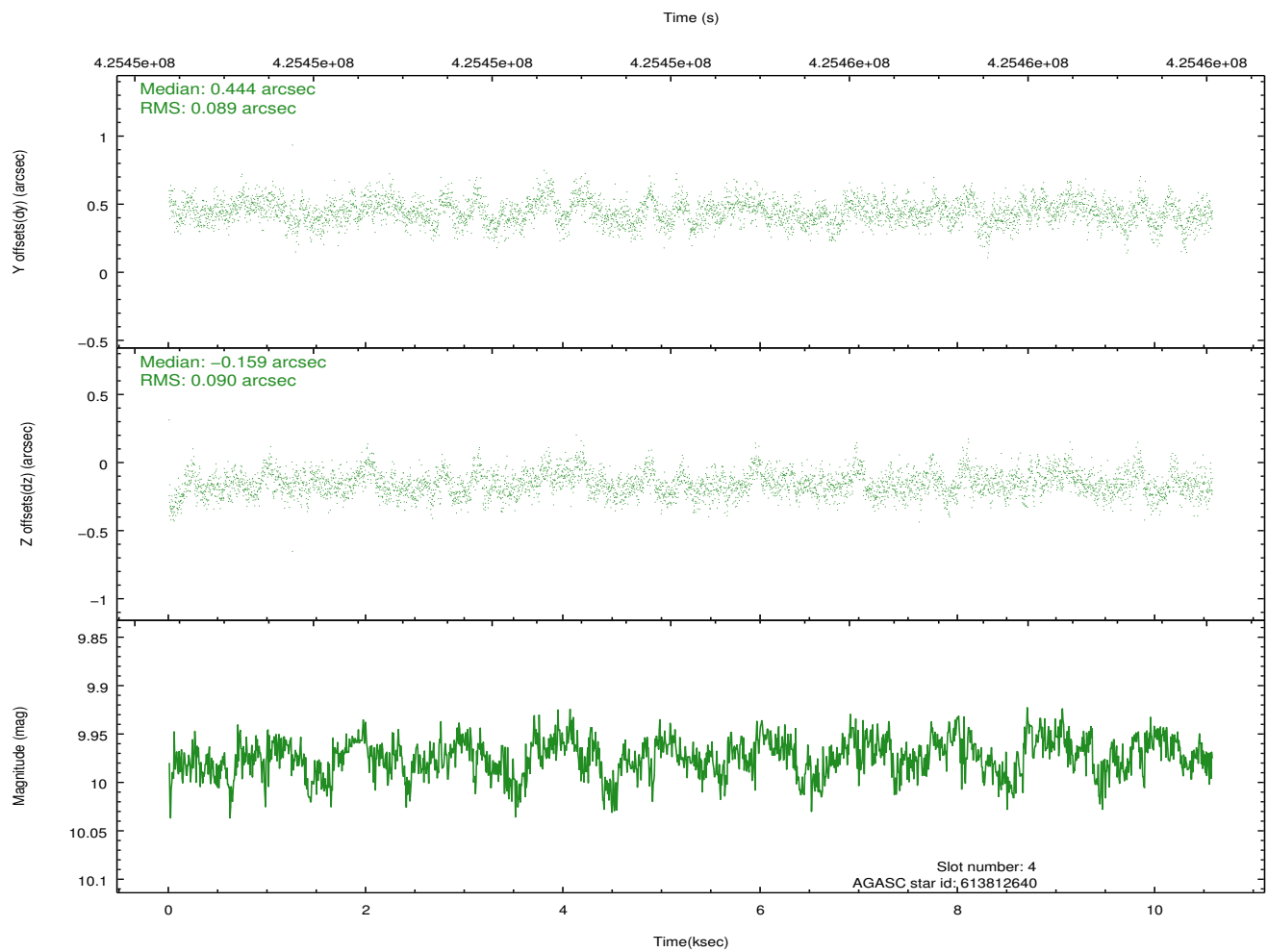
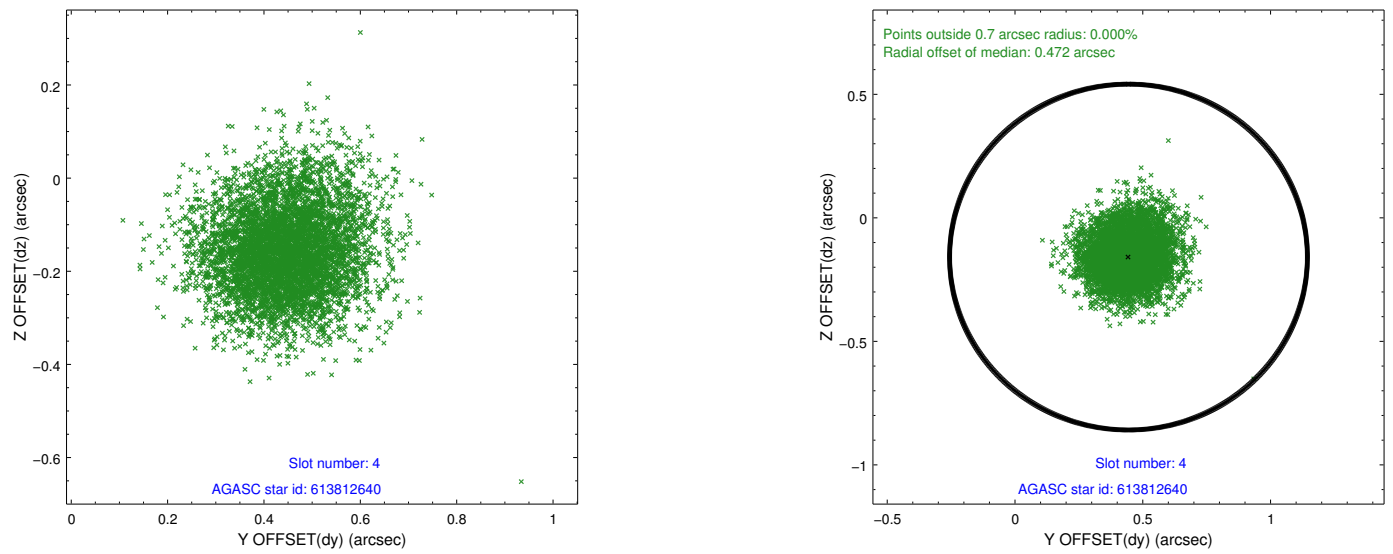
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.89	2581	-0.105	-0.057	0.006	0.011	0.000000	0.000000	-771.93	-1739.00
1	FID	ACIS-S-4	6.97	2581	0.154	0.047	0.008	0.012	0.000000	0.000000	2141.44	168.97
2	FID	ACIS-S-6	7.11	2581	-0.077	0.017	0.009	0.015	0.000000	0.000000	390.79	806.96
3	GUIDE	613811288	8.71	5160	-0.002	-0.425	0.090	0.142	15.835465	-6.542215	-357.43	1951.24
4	GUIDE	613812640	9.97	5154	0.444	-0.159	0.134	0.219	16.448995	-6.706881	-1813.94	207.53
5	GUIDE	613818248	9.30	5159	0.179	0.191	0.119	0.198	16.437908	-5.855982	983.55	-1040.69
6	GUIDE	613822032	10.00	5152	-0.200	0.536	0.167	0.265	16.912670	-6.261479	-1054.63	-1970.59
7	GUIDE	613823928	10.09	5153	-0.419	-0.154	0.198	0.312	15.684461	-5.831022	2194.07	1371.79

## 2.4 Star Slots

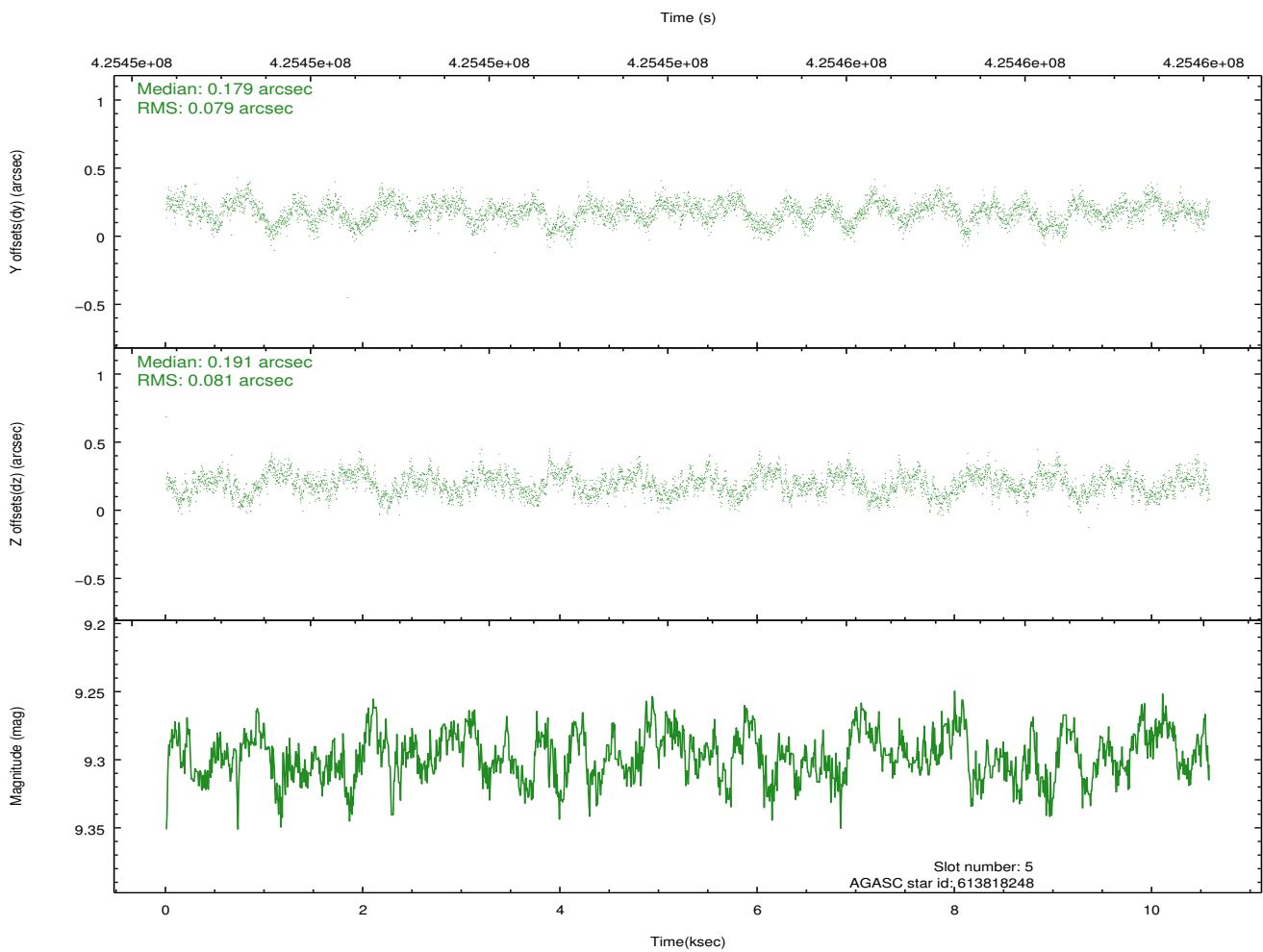
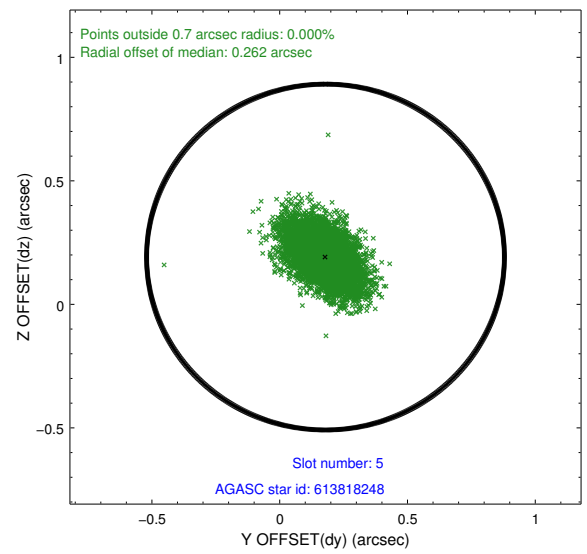
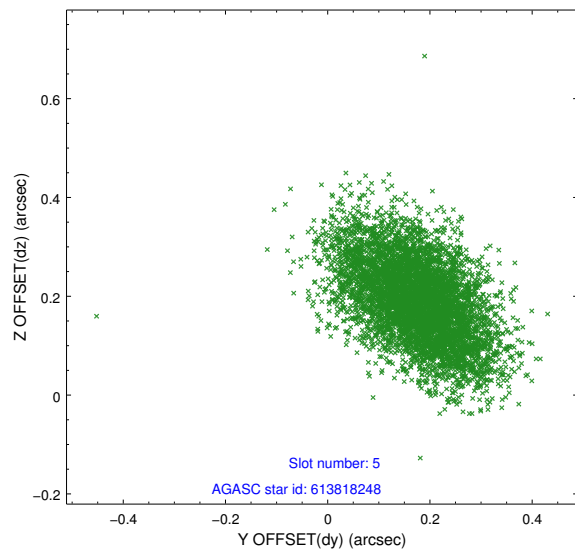
### 2.4.1 Slot 3



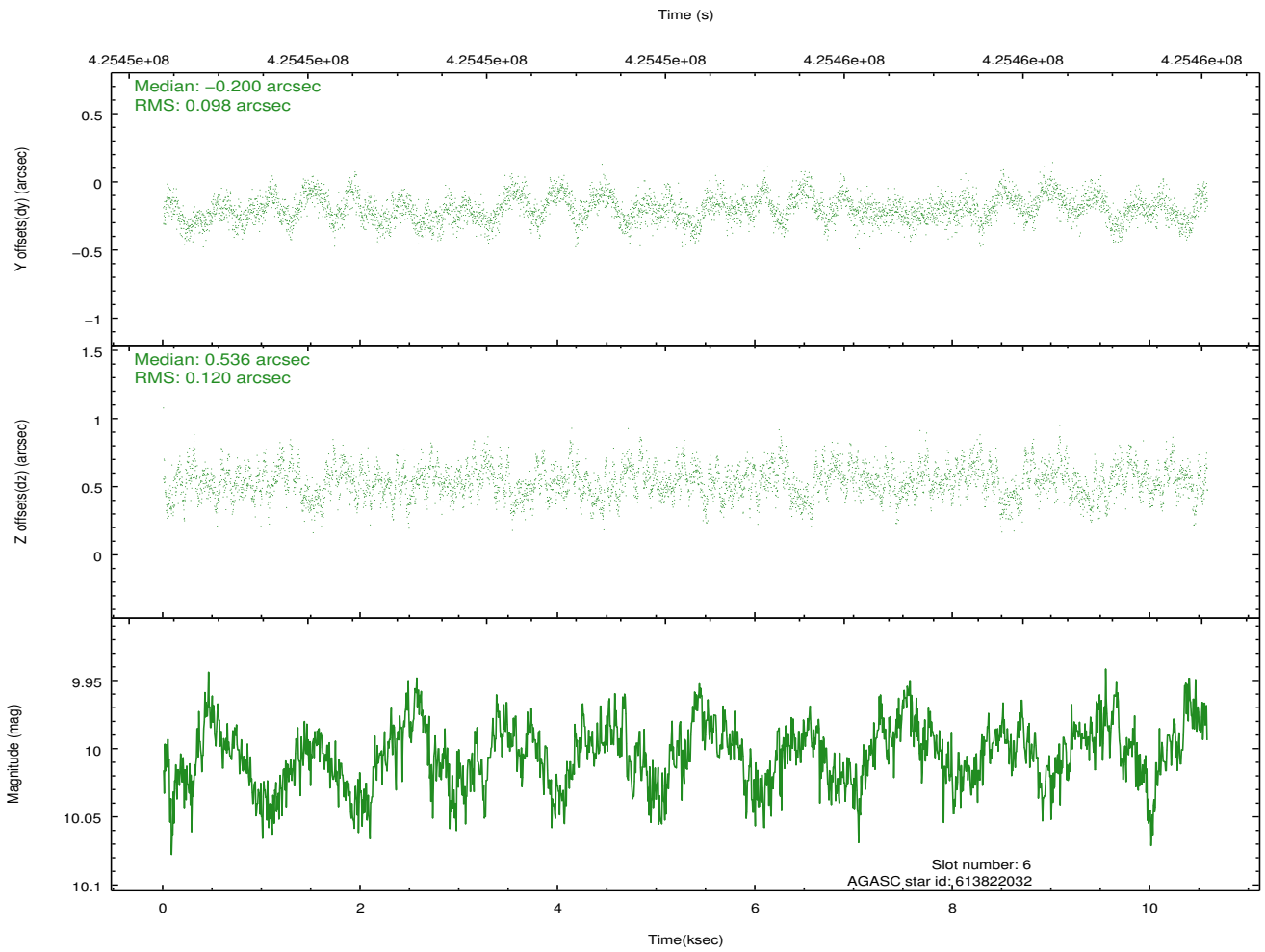
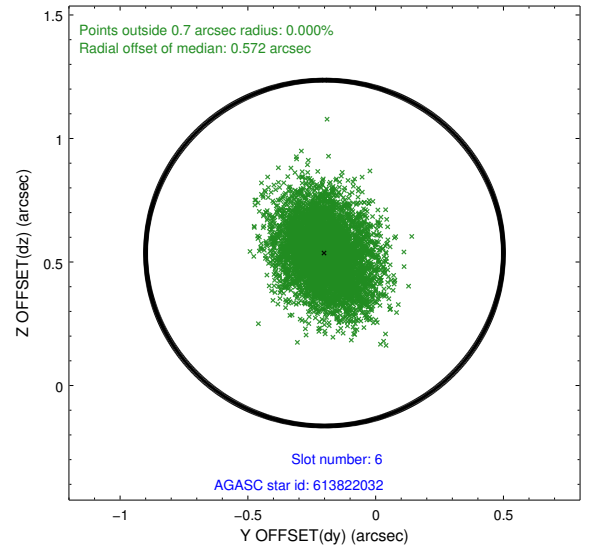
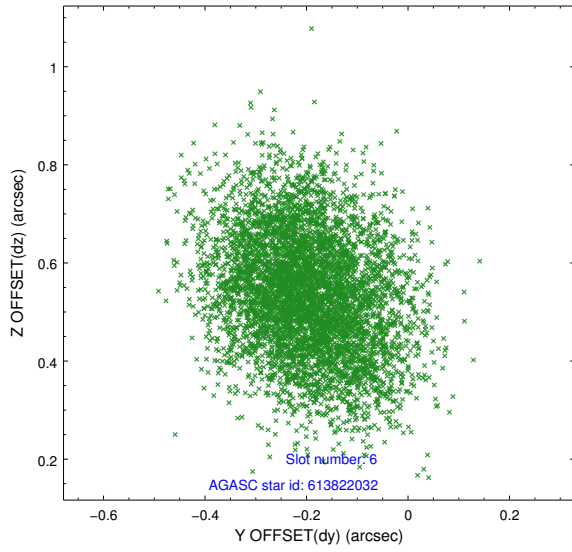
## 2.4.2 Slot 4



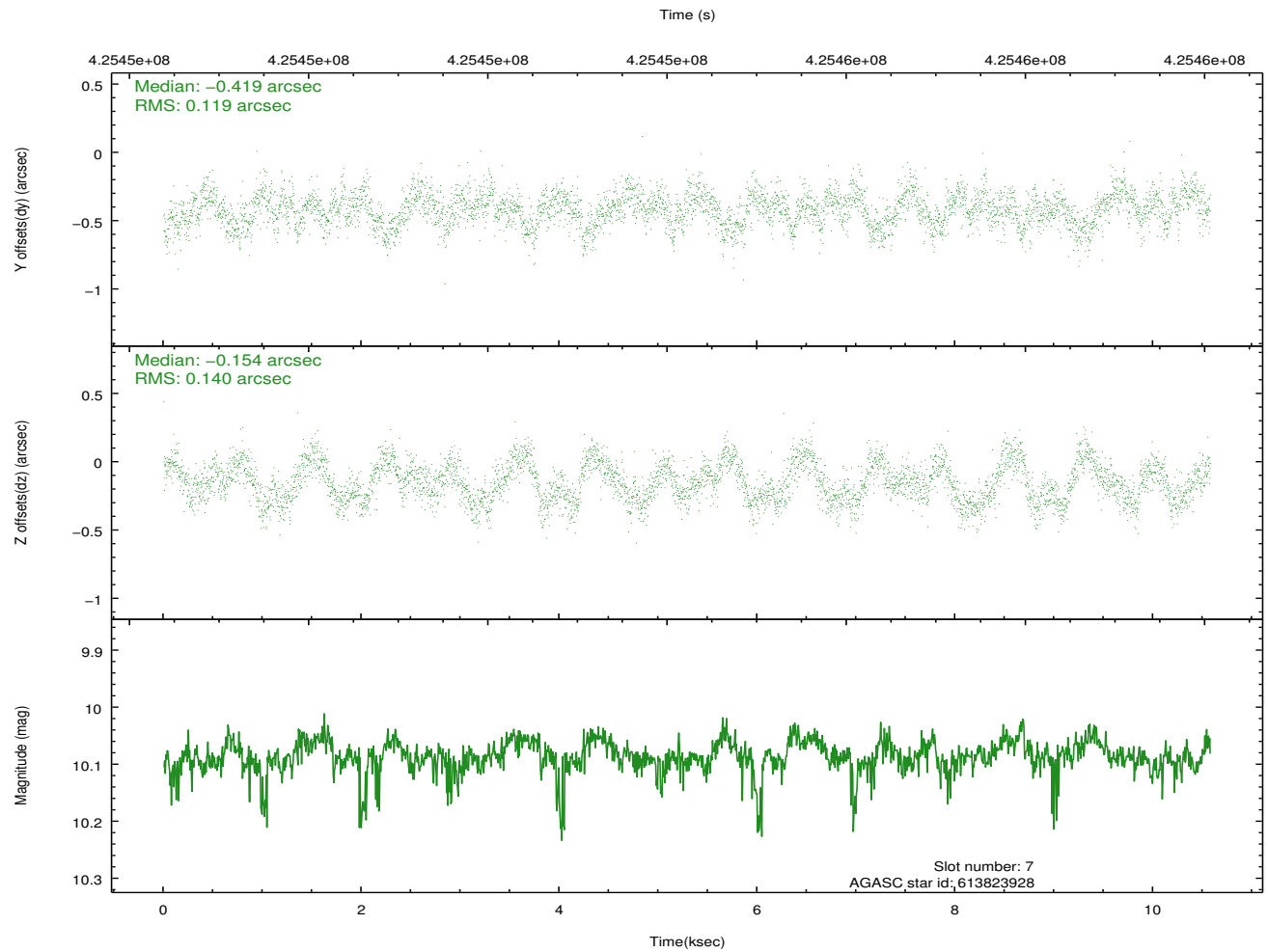
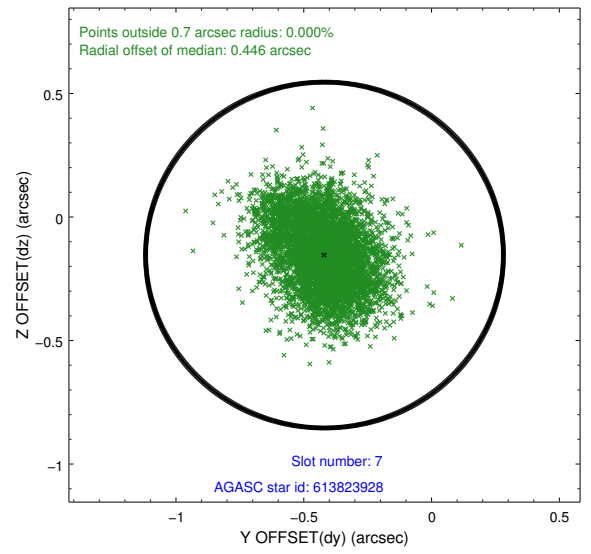
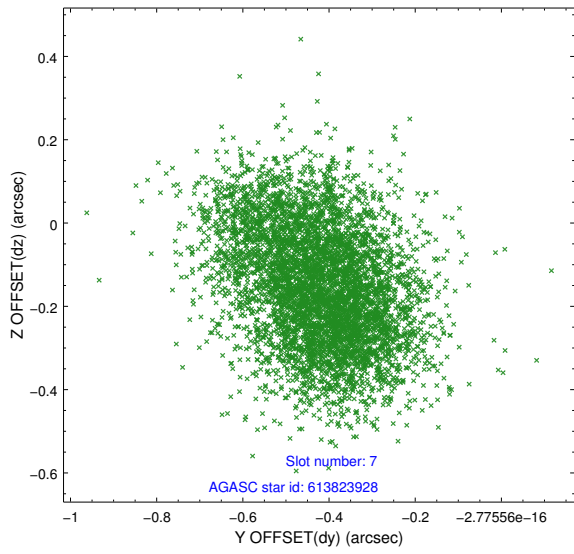
### 2.4.3 Slot 5



### 2.4.4 Slot 6

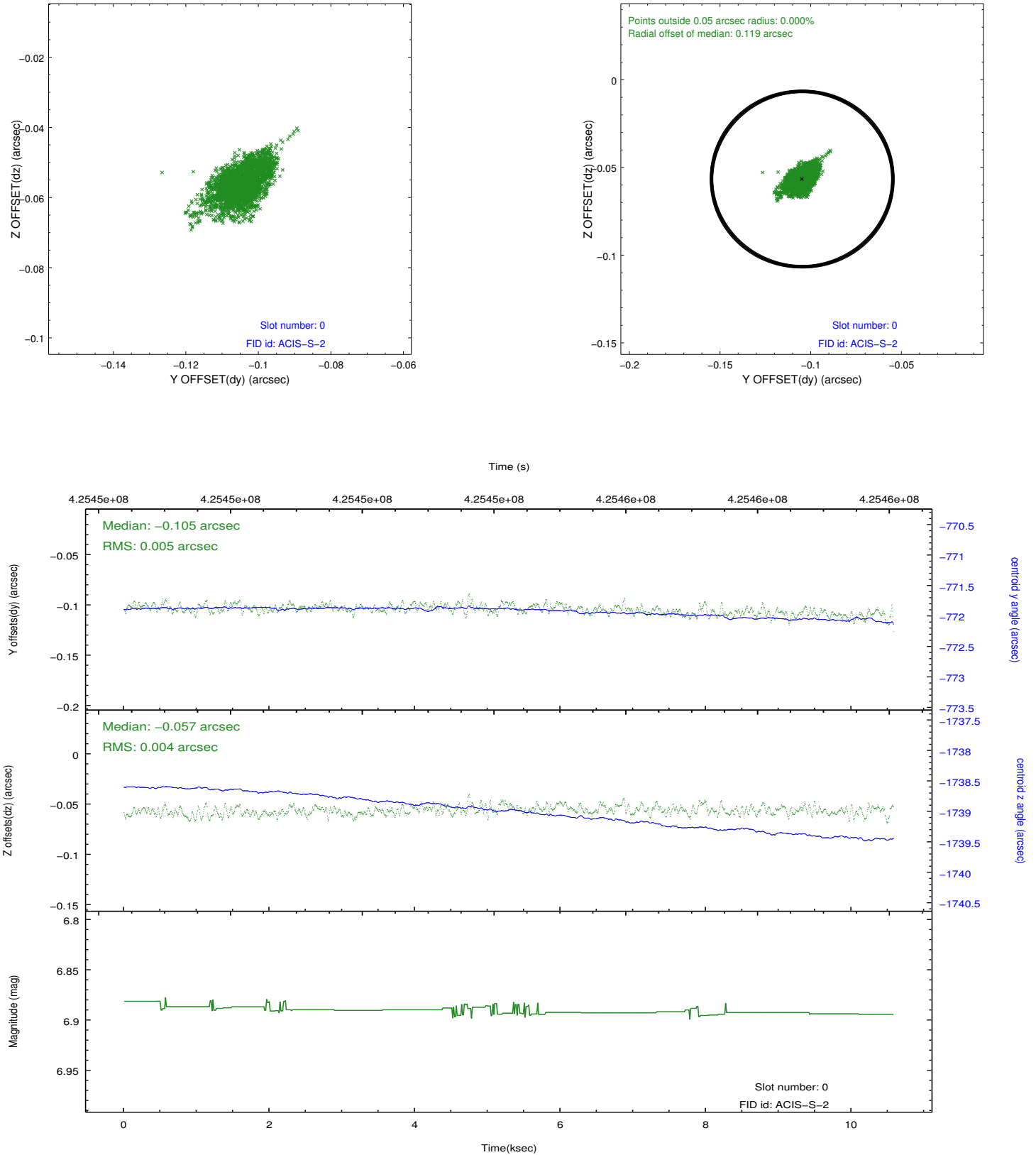


### 2.4.5 Slot 7

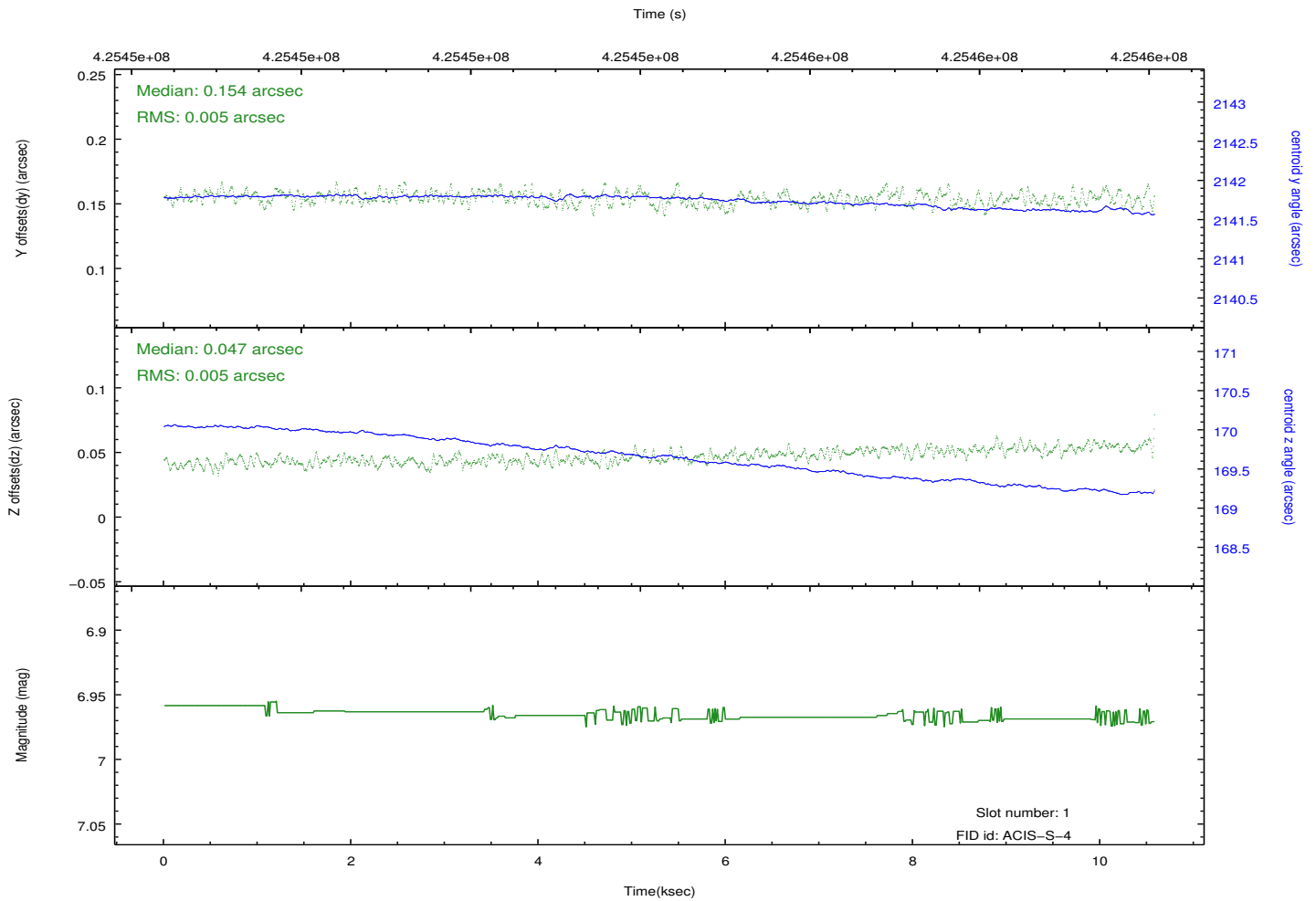
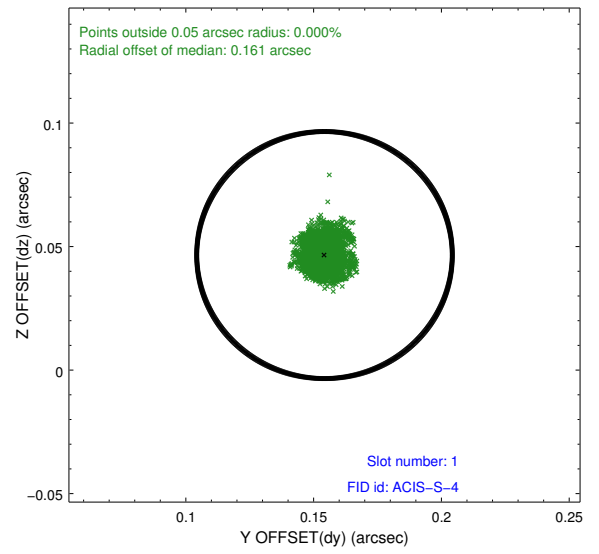
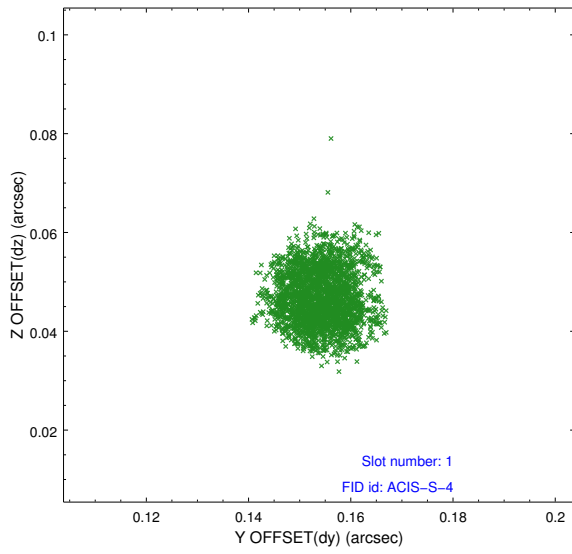


## 2.5 FID Slots

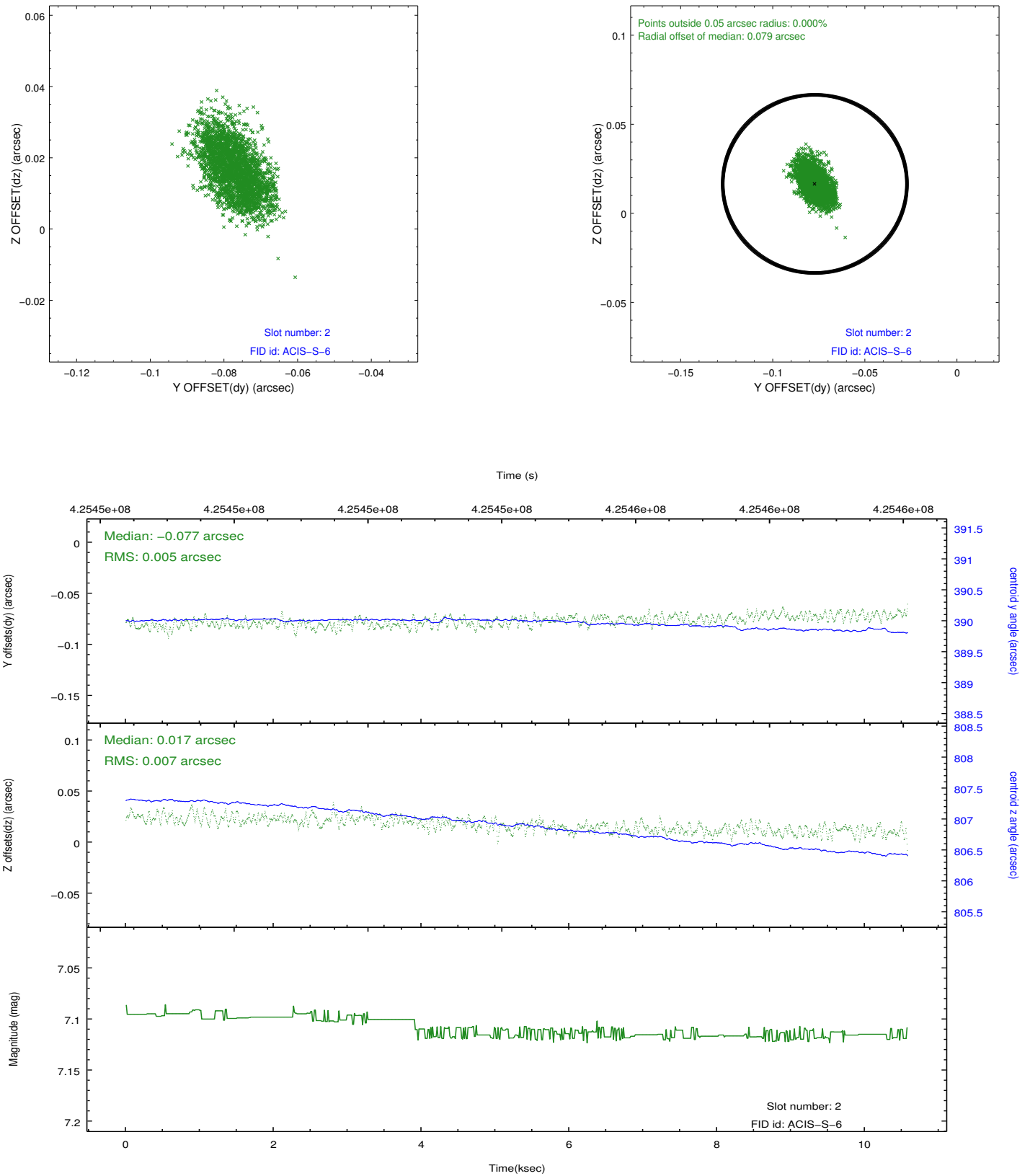
### 2.5.1 Slot 0



## 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)	2012.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9470922890306

## A.2 Comments