

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3946 - L2 Version 3  
Chandra X-Ray Center

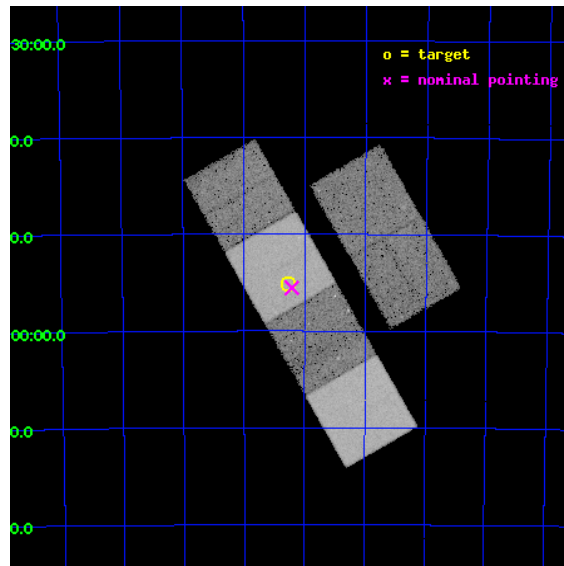
L2 Processing Date : Oct 26 2012

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# 1 Front

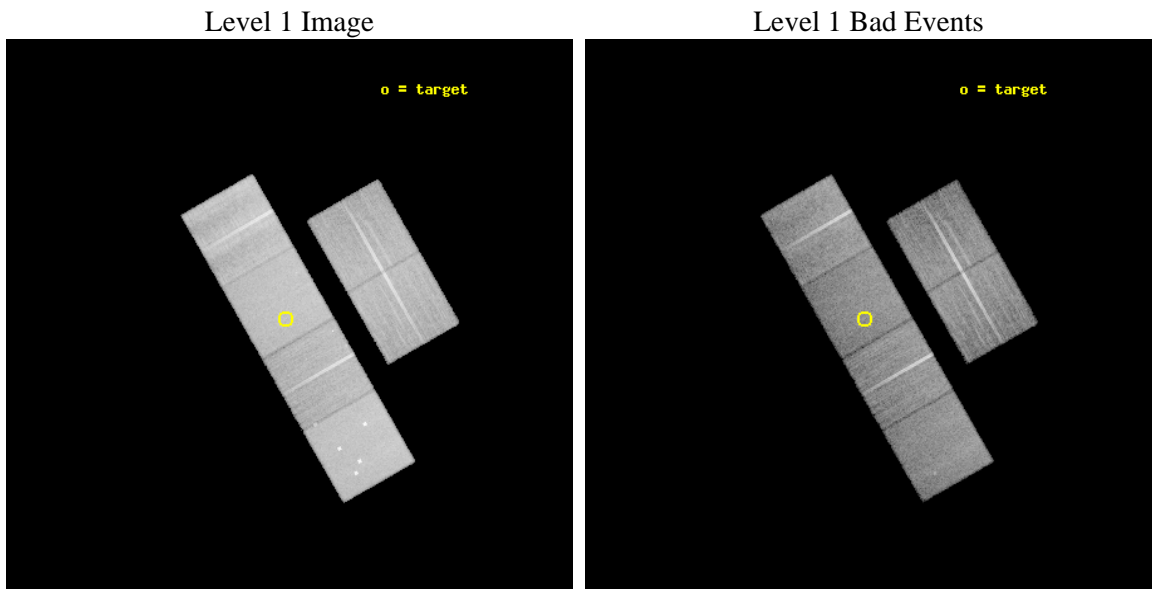
seq_num	600320	Sequence number
obs_id	3946	Observation id
title	CHANDRA OBSERVATIONS OF RICH LMC STAR CLUSTERS	Proposal title
observer	Dr Andrea Prestwich	Principal investigator
object	NGC 1831	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	76.566667	Observer's specified target RA [deg]
dec_targ	-64.918333	Observer's specified target Dec [deg]
ra_nom	76.552075695867	Nominal RA [deg]
dec_nom	-64.925755411651	Nominal Dec [deg]
roll_nom	240.19447900114	Nominal Roll [deg]
revision	3	Processing version of data
ontime	25247.999905944	Sum of GTIs [s]
livetime	24928.294528614	Livetime [s]
ontime2	25247.999905944	Sum of GTIs [s]
ontime3	25247.999905944	Sum of GTIs [s]
ontime5	25247.999905944	Sum of GTIs [s]
ontime6	25247.999905944	Sum of GTIs [s]
ontime7	25247.999905944	Sum of GTIs [s]
ontime8	25247.999905944	Sum of GTIs [s]
l2events	262449	Number of level 2 events



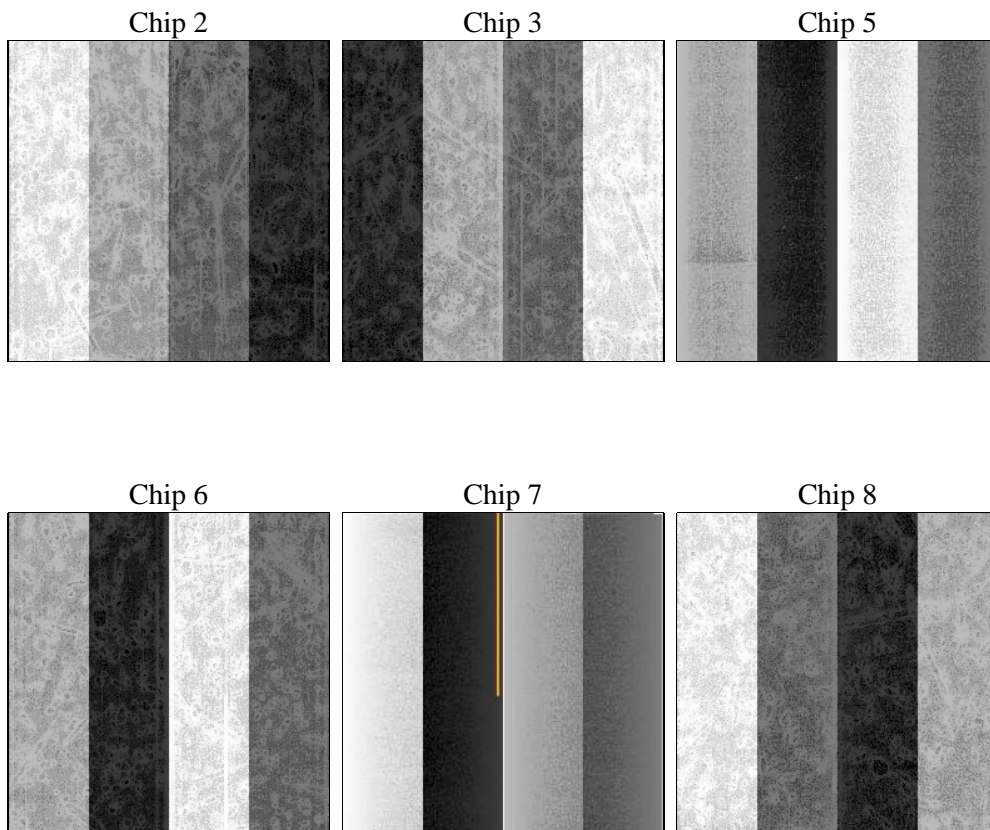
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25350.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	25247.999905944	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	25247.999905944	Sum of GTIs [s]
date	2012-10-26T02:11:23	Date and time of file creation	ontime3	25247.999905944	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	25247.999905944	Sum of GTIs [s]
			ontime6	25247.999905944	Sum of GTIs [s]
			ontime7	25247.999905944	Sum of GTIs [s]
			ontime8	25247.999905944	Sum of GTIs [s]
			l1events	1184390	Number of level 1 events

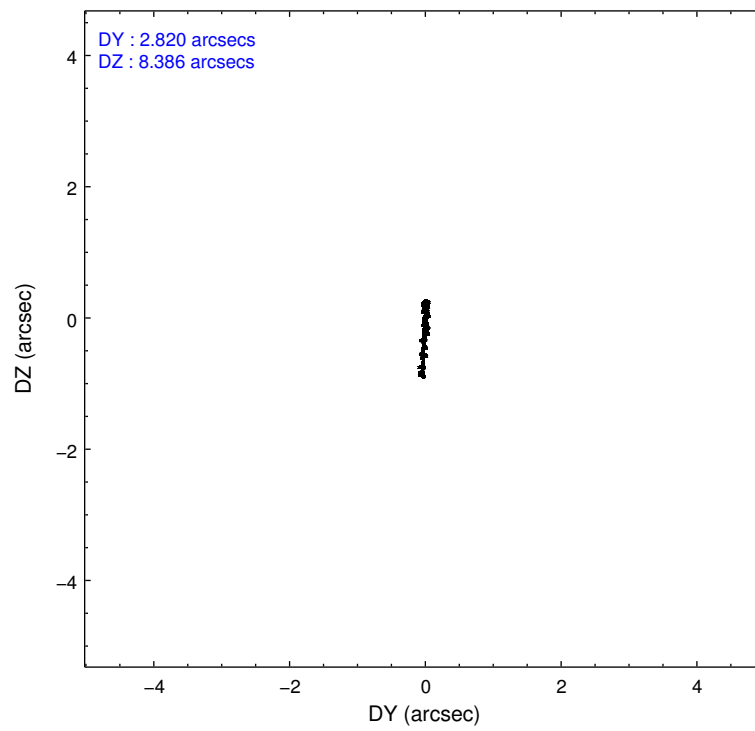
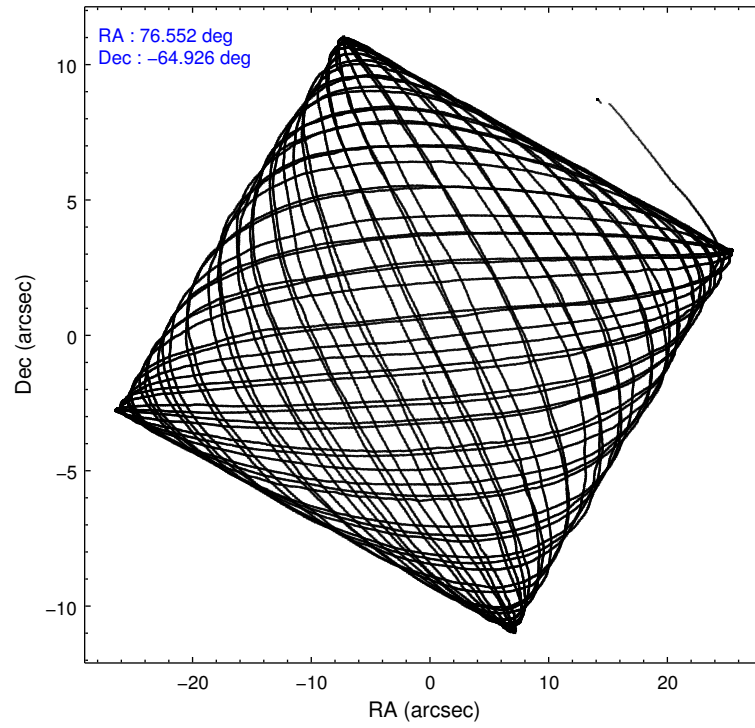
### 2.1.4 Events

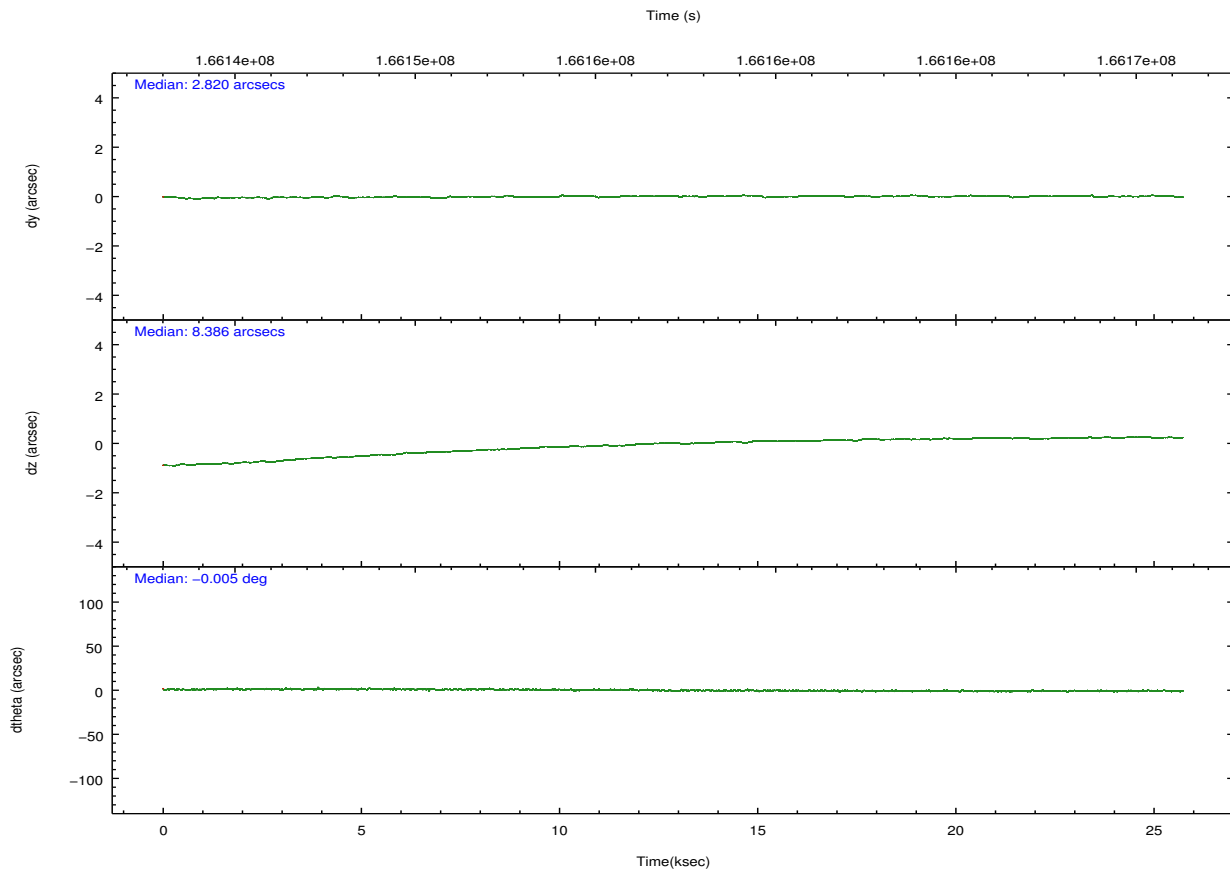
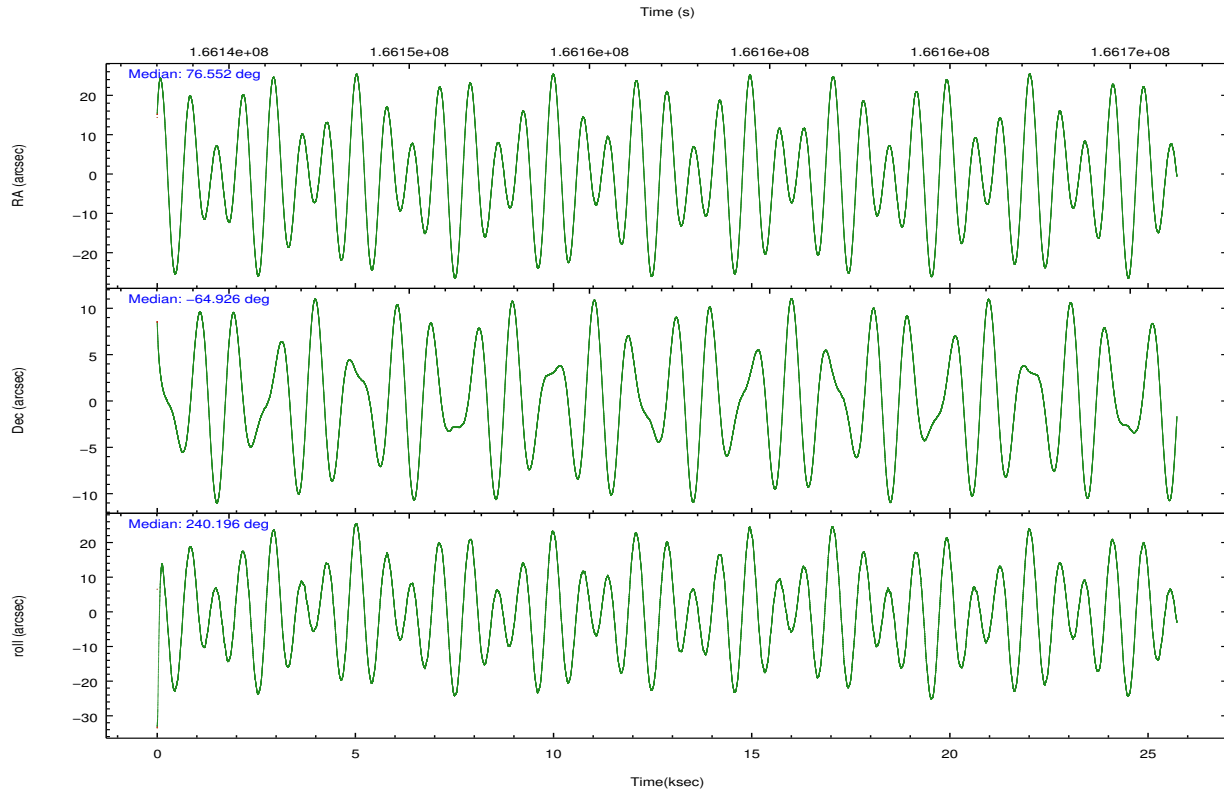
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	169059	159127	242960	168938	216340	227966	grade 0 events	9193	8457	14666	8776	8359	20500
rejected events	148474	139655	130542	147731	126521	164427		5%	5%	6%	5%	3%	8%
rejected %	87%	87%	53%	87%	58%	72%	grade 1 events	117	85	286	82	215	204
								0%	0%	0%	0%	0%	0%
							grade 2 events	4189	3791	31896	4510	17748	11614
								2%	2%	13%	2%	8%	5%
							grade 3 events	1835	1859	4666	1984	8193	8501
								1%	1%	1%	1%	3%	3%
							grade 4 events	1922	1863	4336	1916	7948	8077
								1%	1%	1%	1%	3%	3%
							grade 5 events	6202	6656	17515	7233	20761	9593
								3%	4%	7%	4%	9%	4%
							grade 6 events	3447	3504	56870	4023	47576	14850
								2%	2%	23%	2%	21%	6%
							grade 7 events	142154	132912	112725	140414	105540	154627
								84%	83%	46%	83%	48%	67%

## 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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	76.550949	76.55207569586734	Subarray requested	NONE	NONE
[deg] Pointing Dec	-64.898534	-64.92575541165145	Alternating exposures requested	N	N
[deg] Pointing Roll	240.036849	240.1944790011436	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	166144667.184000	166143608.13171			
Observation start date	2003-04-07T23:16:43	2003-04-07T23:00:08			
[s] Observation end time (MET)	166170017.184000	166170846.99536			
Observation end date	2003-04-08T06:19:13	2003-04-08T06:34:06			
Read mode	TIMED	TIMED			

## 2.3 Aspect



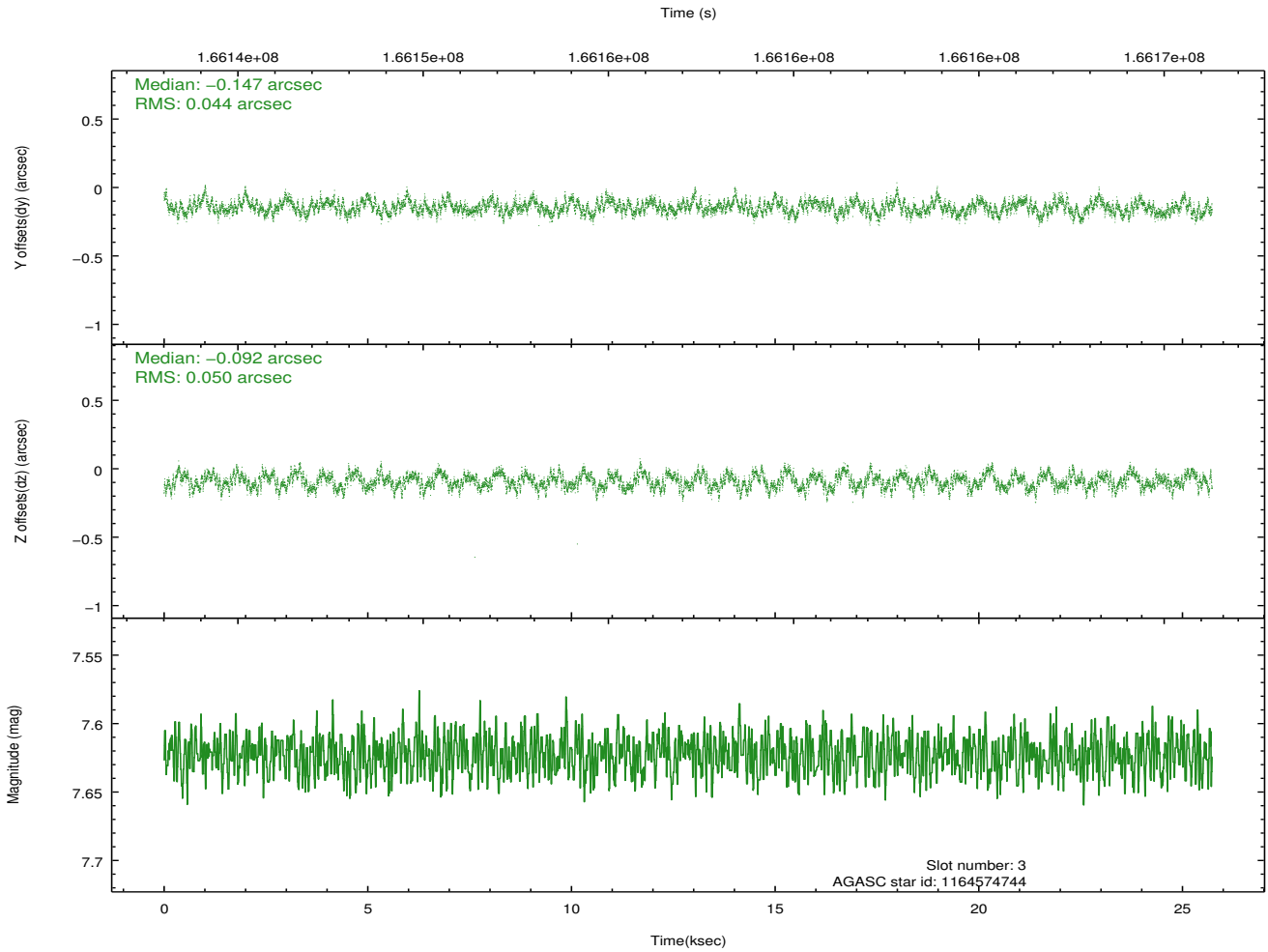
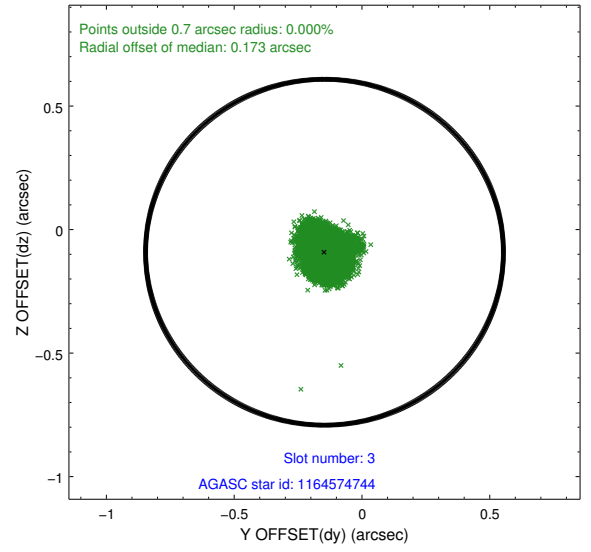
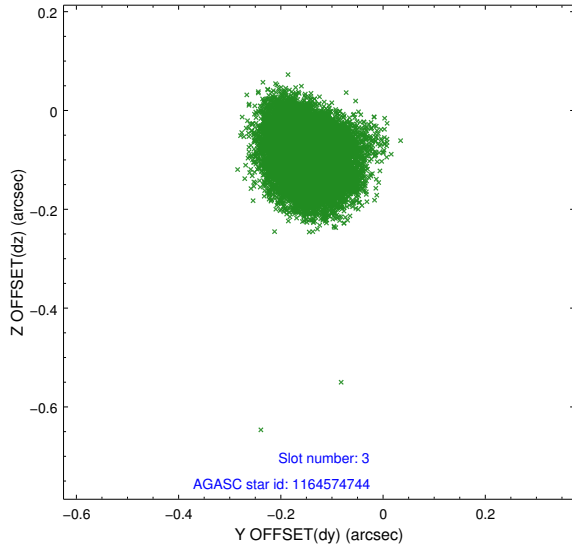


### Slot Statistics

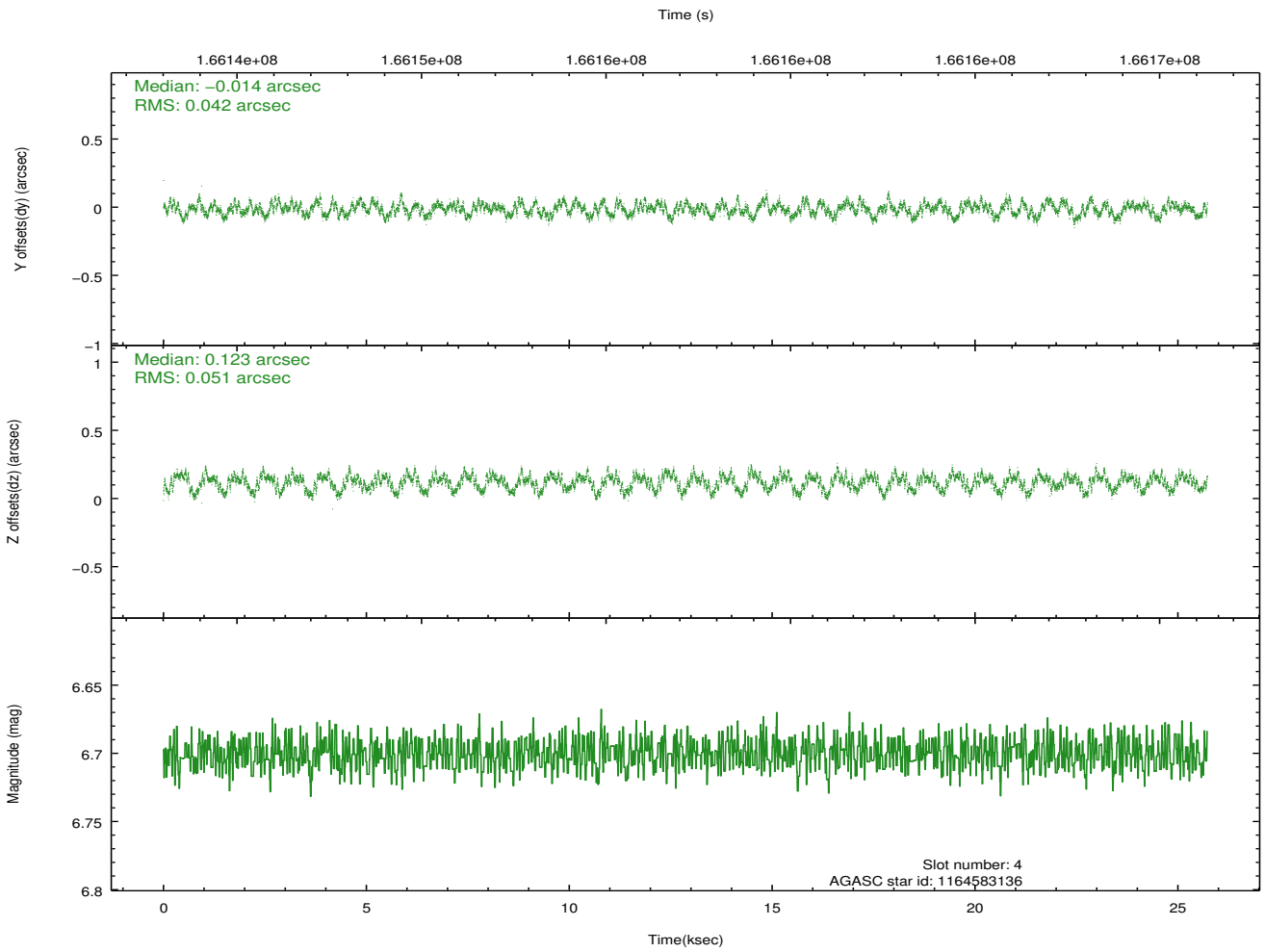
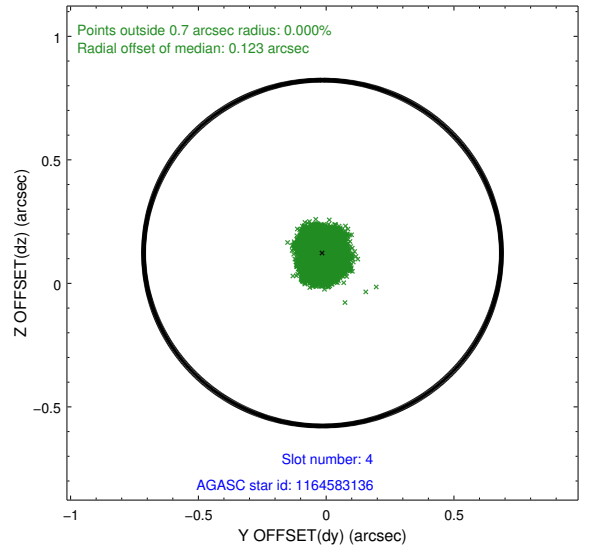
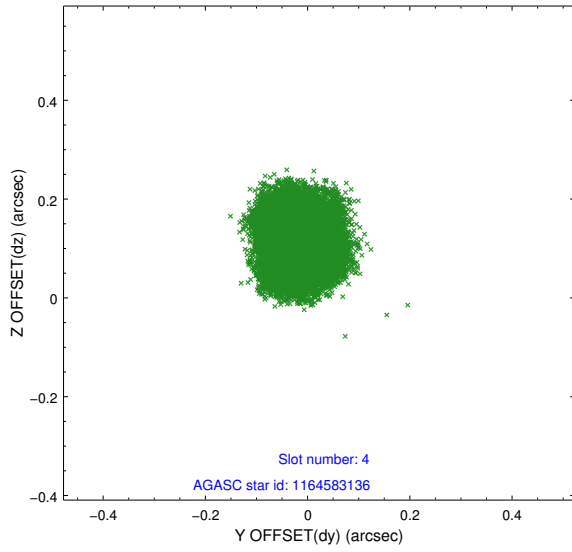
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	6276	0.040	-0.005	0.017	0.037	0.000000	0.000000	940.61	-1725.10
1	FID	ACIS-S-5	7.24	6276	-0.035	0.047	0.007	0.012	0.000000	0.000000	-1808.38	172.42
2	FID	ACIS-S-6	7.36	6275	-0.026	-0.029	0.013	0.036	0.000000	0.000000	406.00	816.42
3	GUIDE	1164574744	7.62	12552	-0.147	-0.092	0.073	0.112	76.661951	-65.376194	1406.72	1003.17
4	GUIDE	1164583136	6.70	12552	-0.014	0.123	0.073	0.108	75.985782	-65.012124	787.00	-538.11
5	GUIDE	1164707656	8.64	12551	0.144	0.046	0.079	0.128	77.518451	-65.044112	-269.81	1540.60
6	GUIDE	1164706480	8.63	12550	0.080	-0.025	0.072	0.110	77.431137	-64.386256	-2273.44	270.71
7	GUIDE	1164715680	9.41	12543	-0.061	-0.041	0.106	0.166	77.504019	-65.546102	1319.58	2400.26

## 2.4 Star Slots

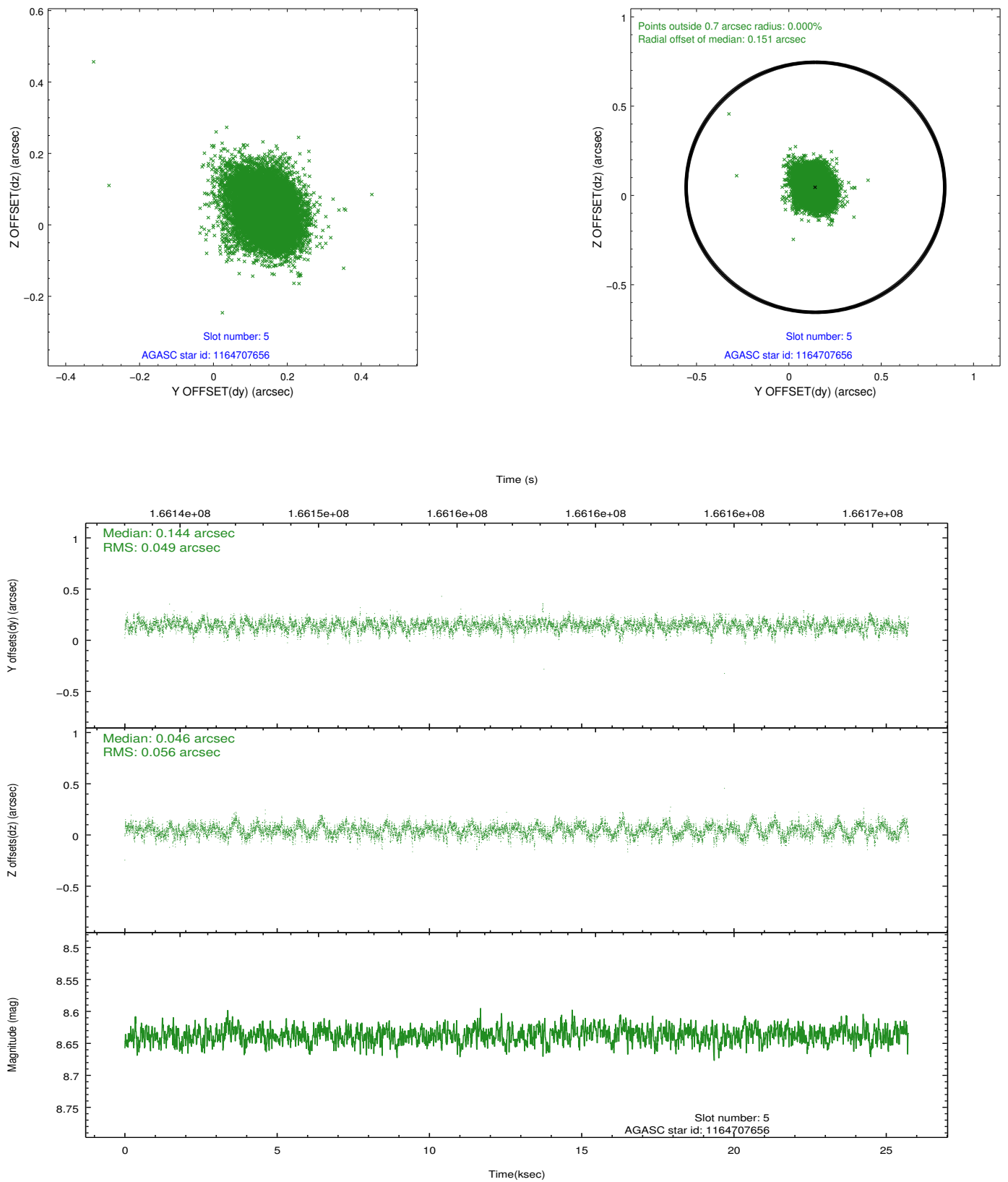
### 2.4.1 Slot 3



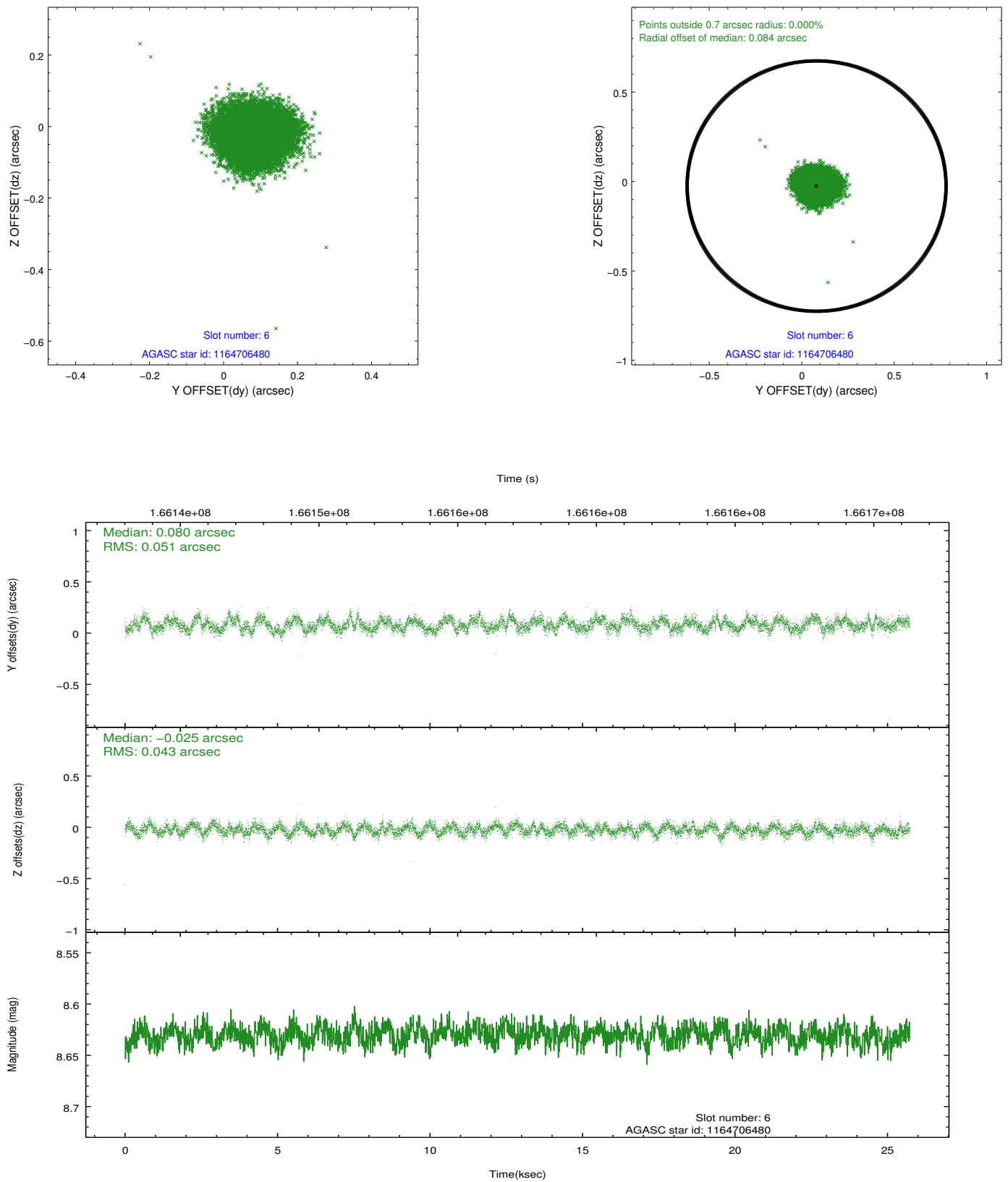
### 2.4.2 Slot 4



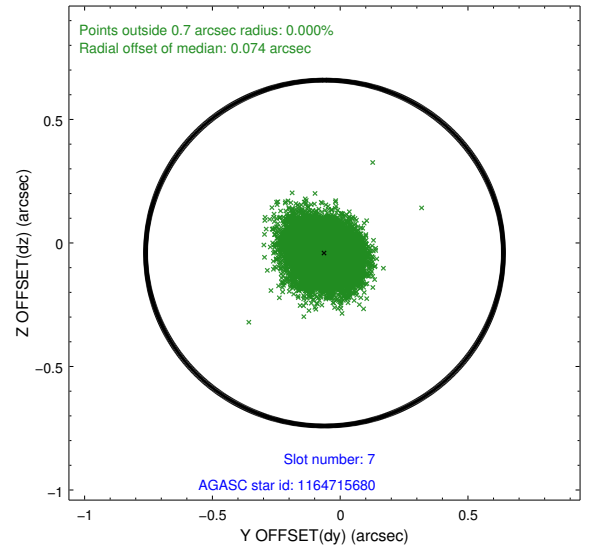
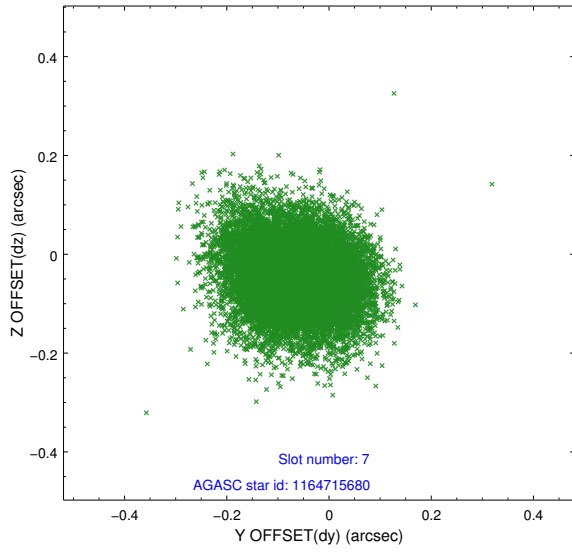
### 2.4.3 Slot 5



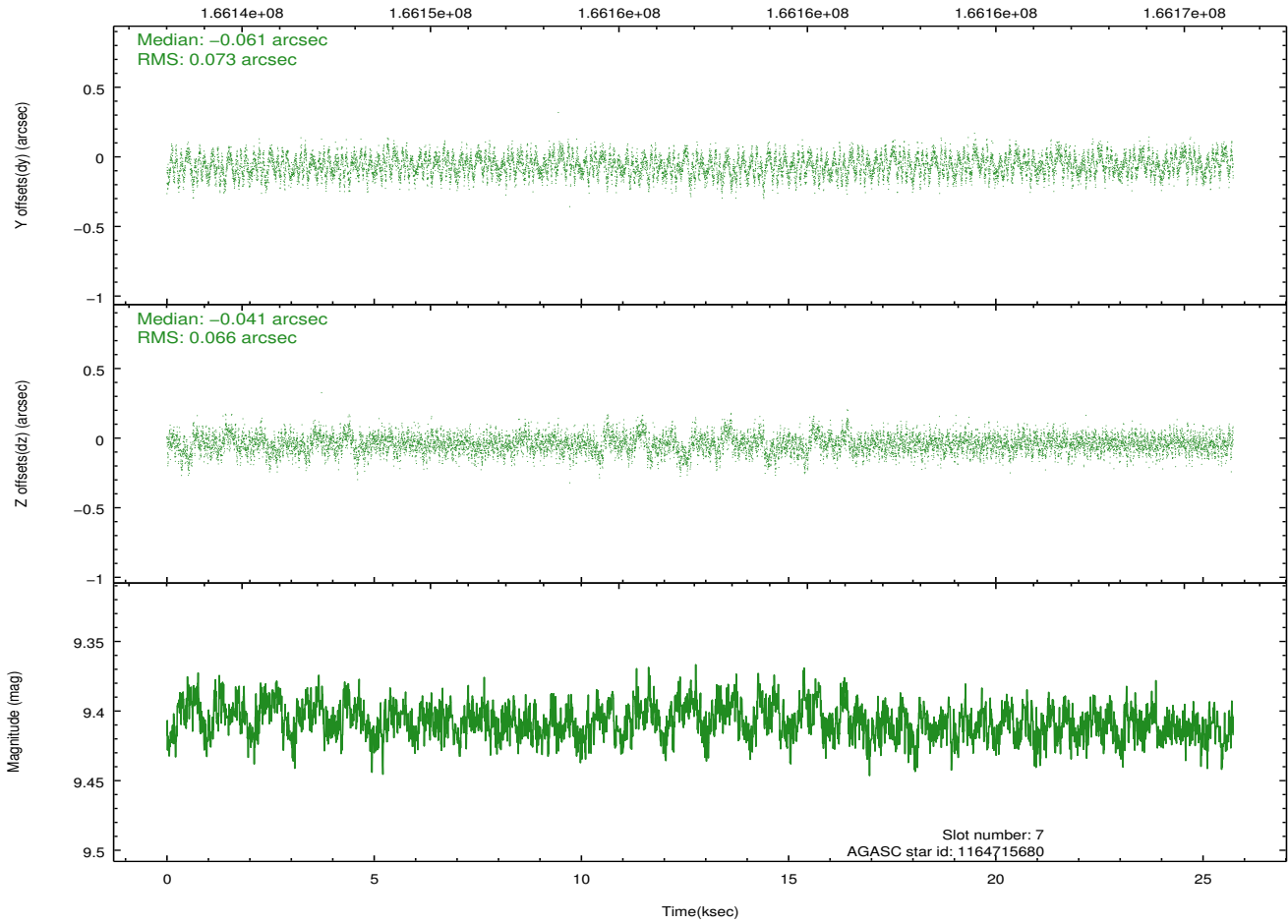
## 2.4.4 Slot 6



## 2.4.5 Slot 7

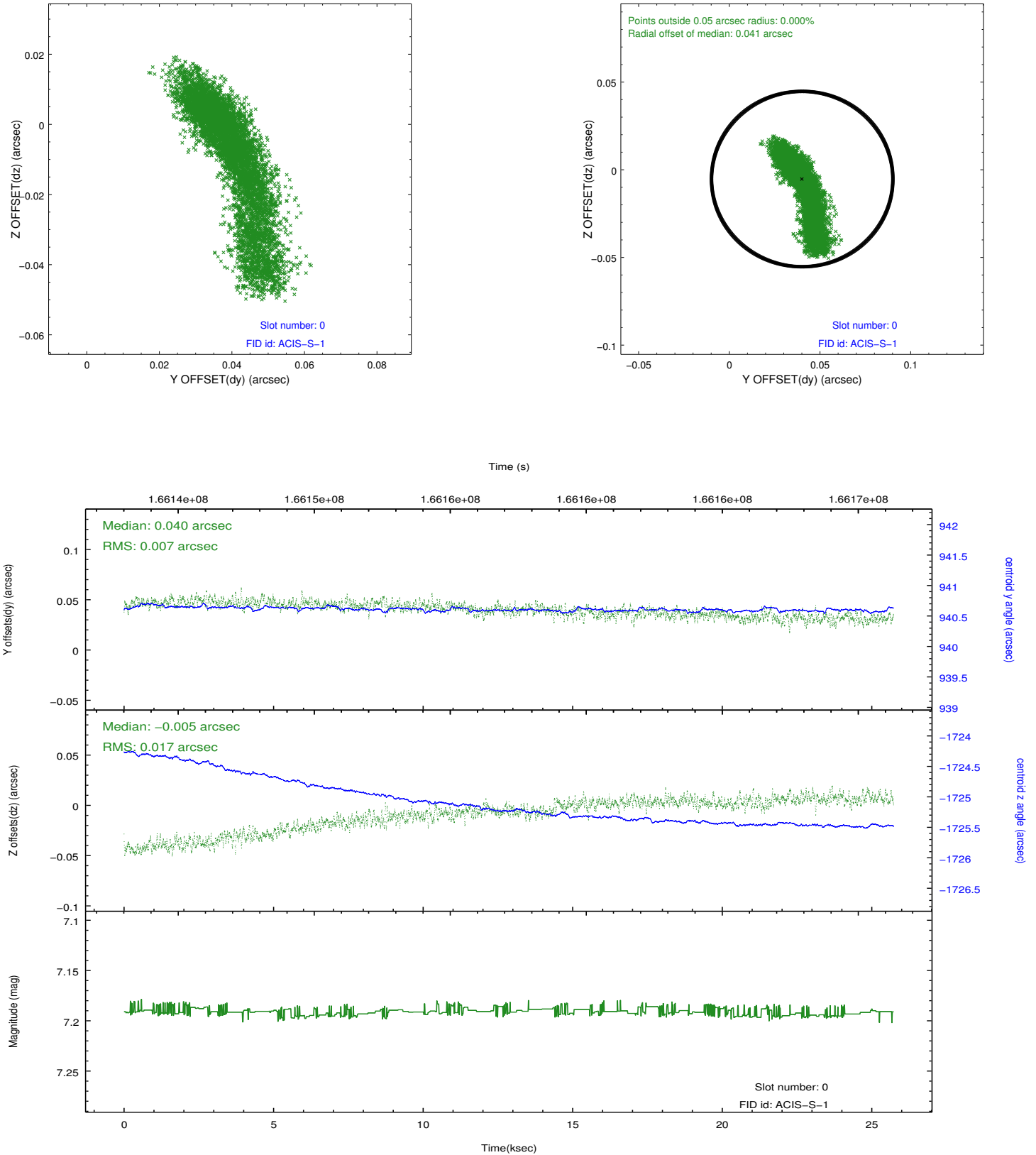


Time (s)

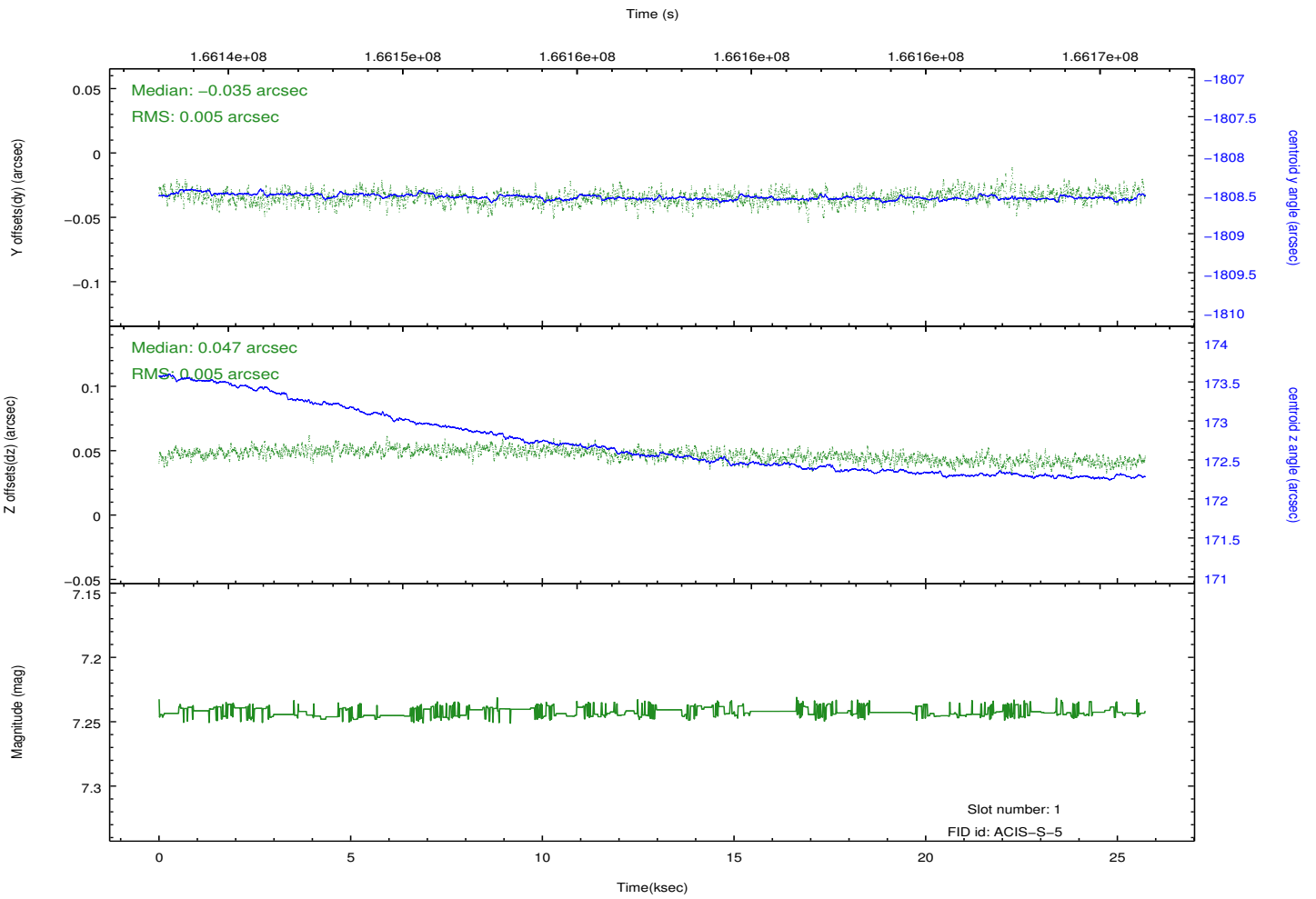
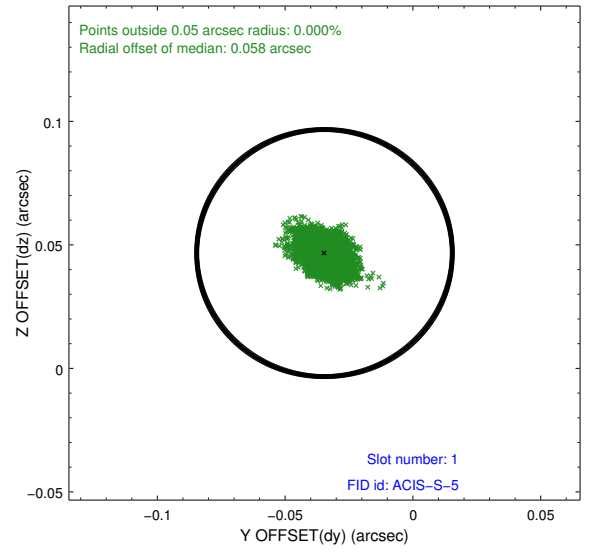
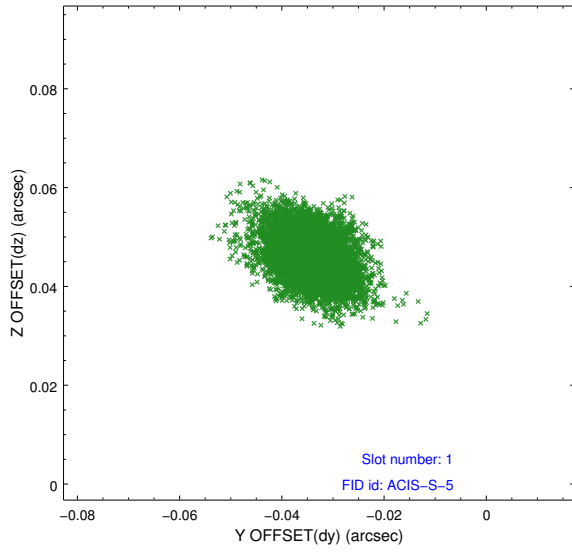


## 2.5 FID Slots

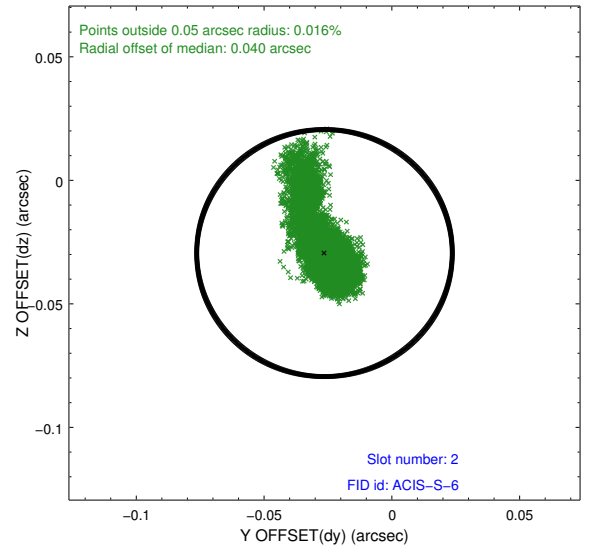
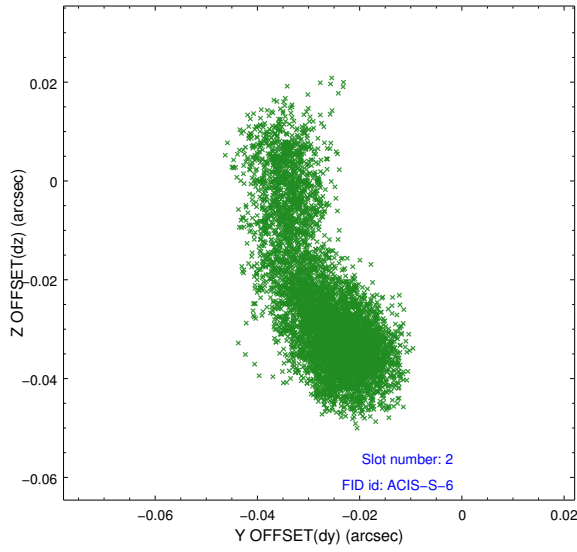
### 2.5.1 Slot 0



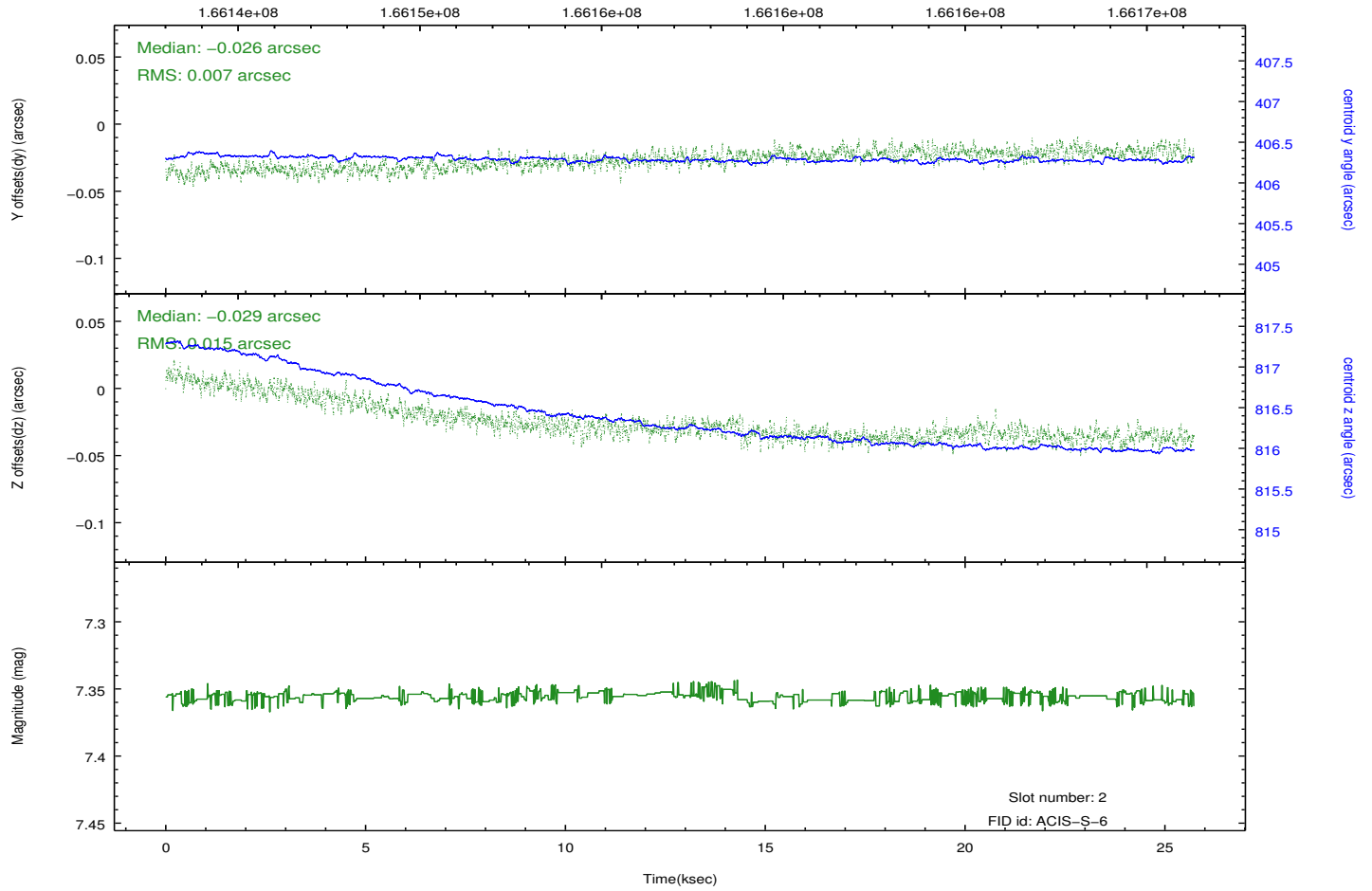
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.11.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.251

## A.2 Comments