

# V&V Reference Report

## L2 ASCDS Version : 8.4.3

Observation 13933 - L2 Version 1  
Chandra X-Ray Center

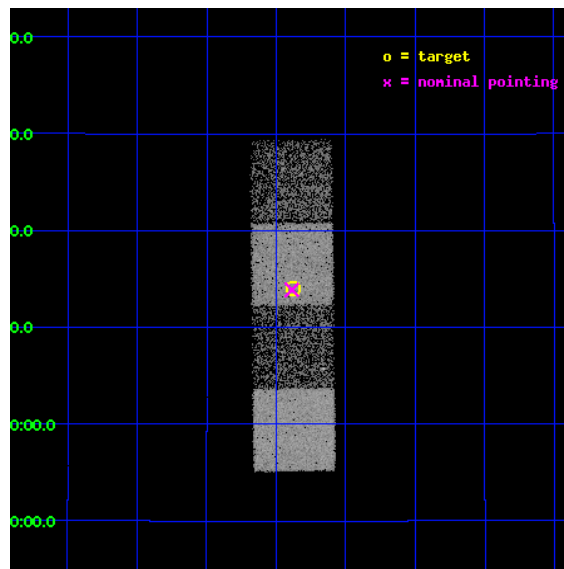
L2 Processing Date : Feb 18 2012

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# 1 Front

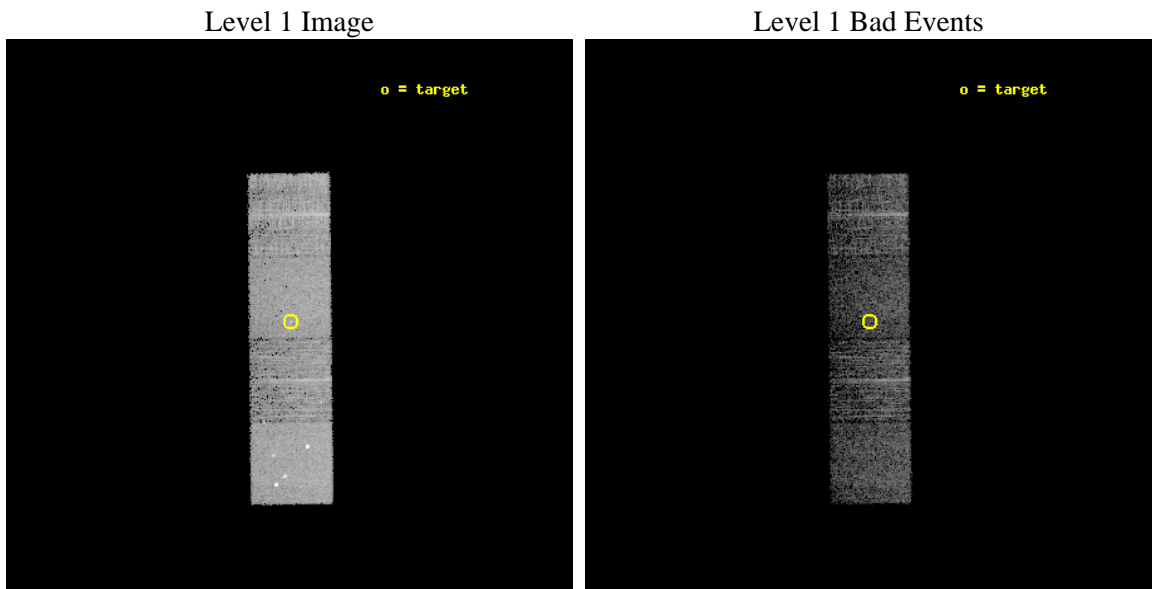
seq_num	702657	Sequence number
obs_id	13933	Observation id
title	Probing the High End of the Quasar Black Hole Mass Function	Propos
observer	Dr. Martin Elvis	Principal investigator
object	SDSS J075952.64+141358.9	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	119.969167	Observer's specified target RA [deg]
dec_targ	14.233056	Observer's specified target Dec [deg]
ra_nom	119.97183534219	Nominal RA [deg]
dec_nom	14.231344168052	Nominal Dec [deg]
roll_nom	269.38648632696	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4770.7850294709	Sum of GTIs [s]
livetime	4708.45121086	Livetime [s]
ontime5	4770.7439894676	Sum of GTIs [s]
ontime6	4770.7029494643	Sum of GTIs [s]
ontime7	4770.7850294709	Sum of GTIs [s]
ontime8	4770.661909461	Sum of GTIs [s]
l2events	43337	Number of level 2 events



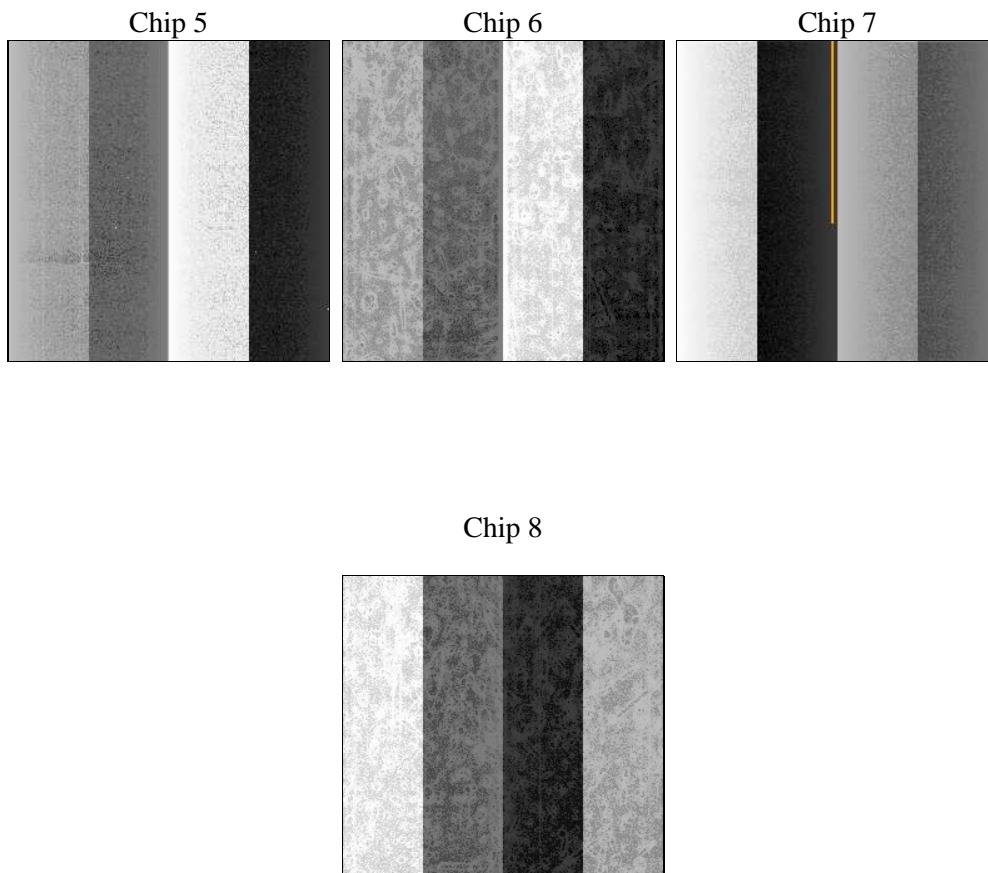
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4700.000000	[s] Scheduled observation exposure time
ascdsver	8.4.3	Processing system revision	ontime	4770.7850294709	Sum of GTIs [s]
caldsver	4.4.8	&#160	ontime5	4770.7439894676	Sum of GTIs [s]
date	2012-02-19T03:37:19	Date and time of file creation	ontime6	4770.7029494643	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	4770.7850294709	Sum of GTIs [s]
			ontime8	4770.661909461	Sum of GTIs [s]
			l1events	150790	Number of level 1 events

### 2.1.4 Events

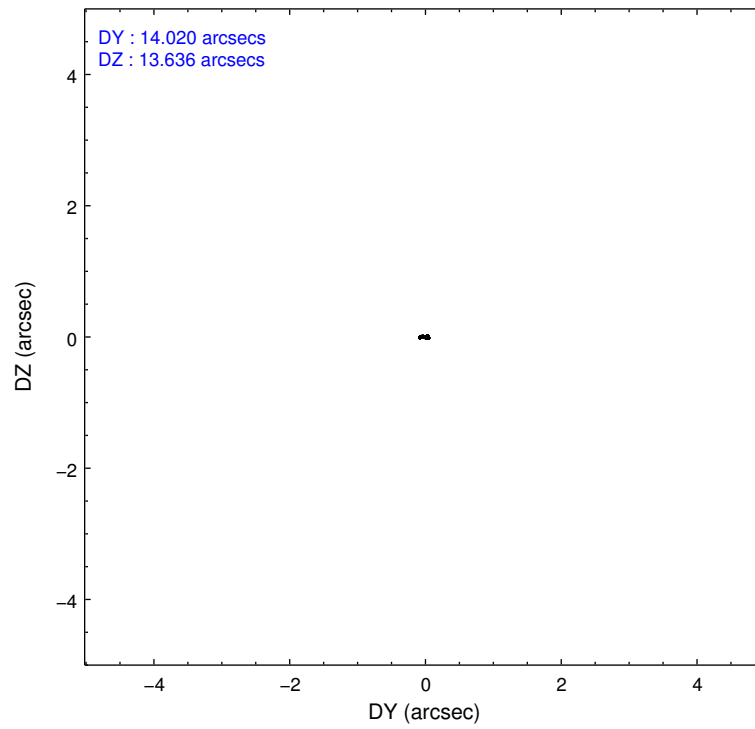
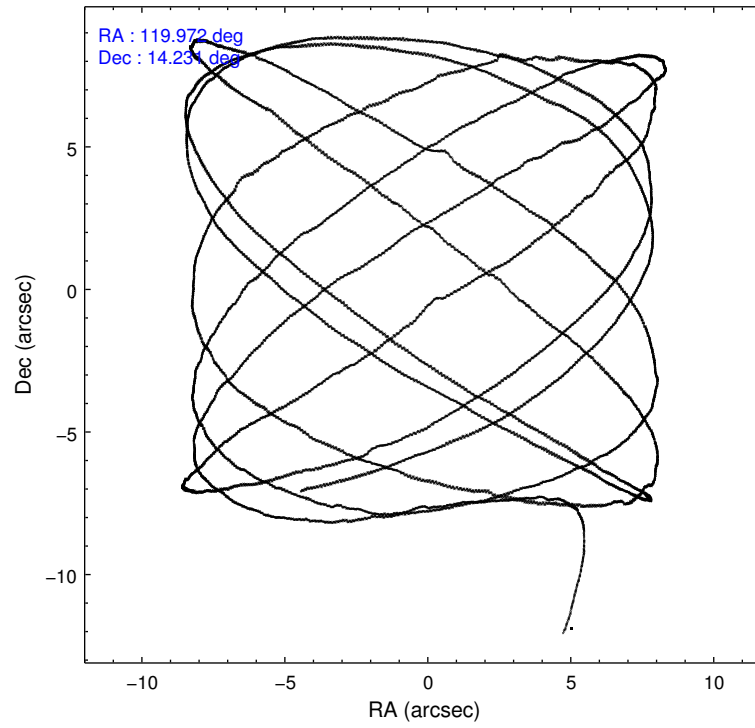
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	48281	28195	37380	36934
rejected events	23264	24723	20680	27529
rejected %	48%	87%	55%	74%

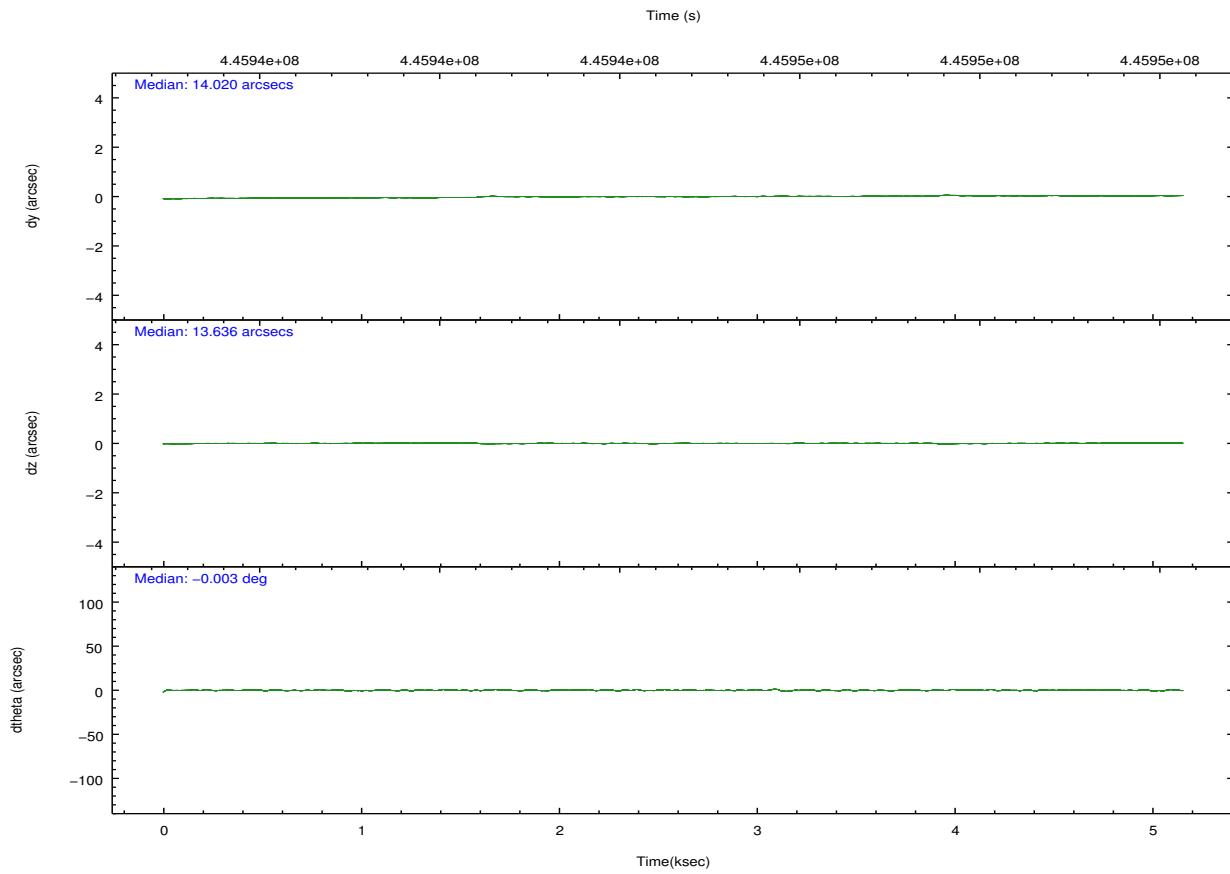
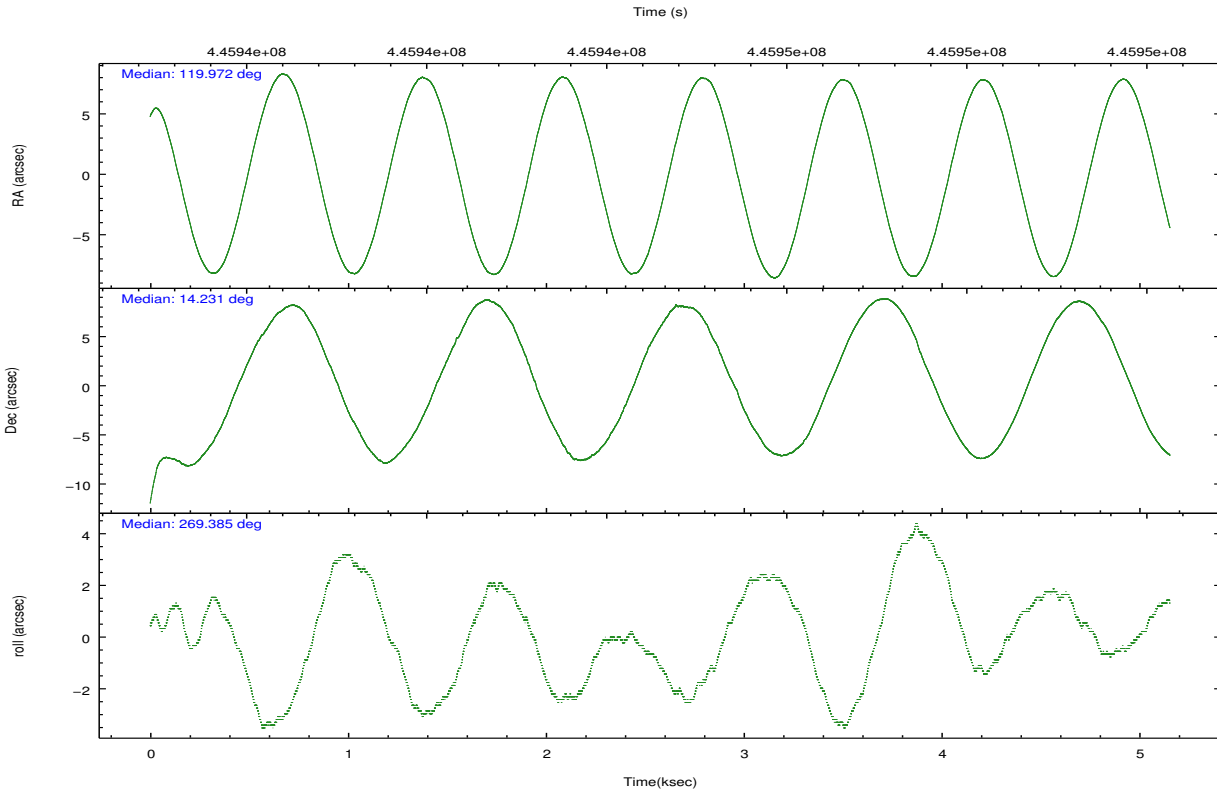
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3792	1236	1555	2630
	7%	4%	4%	7%
grade 1 events	102	13	42	25
	0%	0%	0%	0%
grade 2 events	7820	725	3437	2228
	16%	2%	9%	6%
grade 3 events	800	371	1458	943
	1%	1%	3%	2%
grade 4 events	825	339	1470	972
	1%	1%	3%	2%
grade 5 events	3450	1430	3973	2070
	7%	5%	10%	5%
grade 6 events	11794	805	8793	2635
	24%	2%	23%	7%
grade 7 events	19698	23276	16652	25431
	40%	82%	44%	68%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	119.957611	119.9718353421868	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.255038	14.23134416805166	Alternating exposures requested	N	N
[deg] Pointing Roll	269.233356	269.3864863269613	[s] Primary exposure time	0.000000	3.1
[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)	445943171.184000	445942155.75437			
Observation start date	2012-02-18T09:05:05	2012-02-18T08:49:15			
[s] Observation end time (MET)	445947871.184000	445948757.26722			
Observation end date	2012-02-18T10:23:25	2012-02-18T10:39:17			
Read mode	TIMED	TIMED			

## 2.3 Aspect



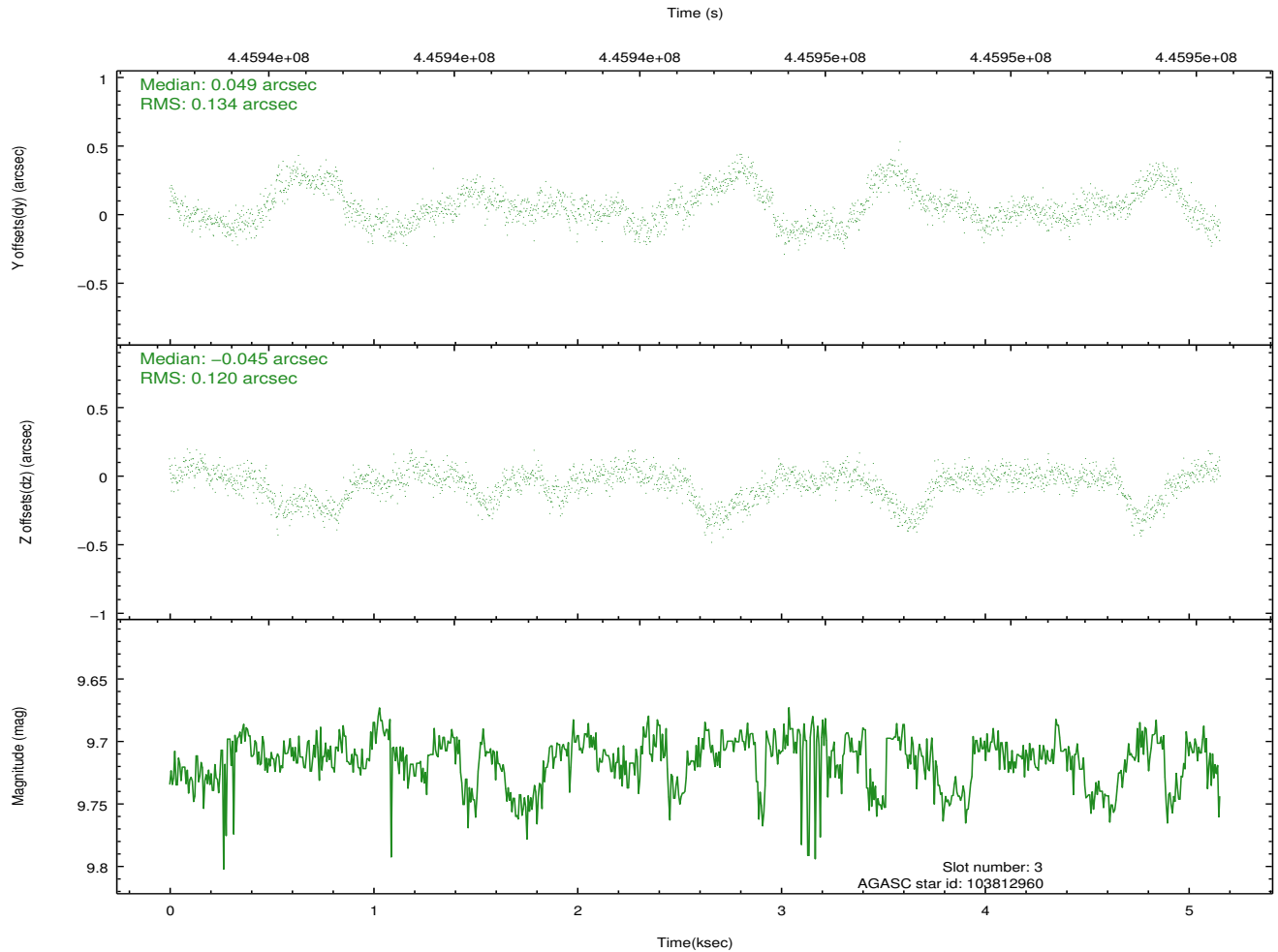
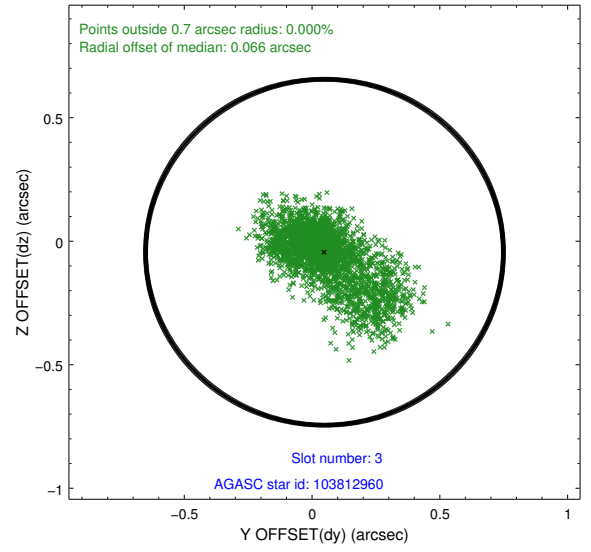
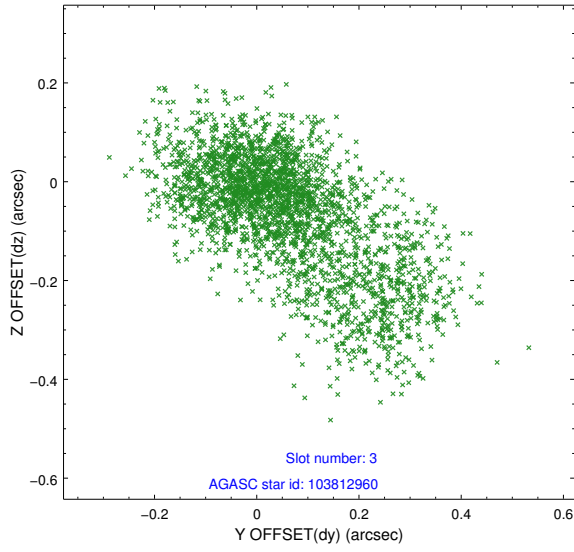


### Slot Statistics

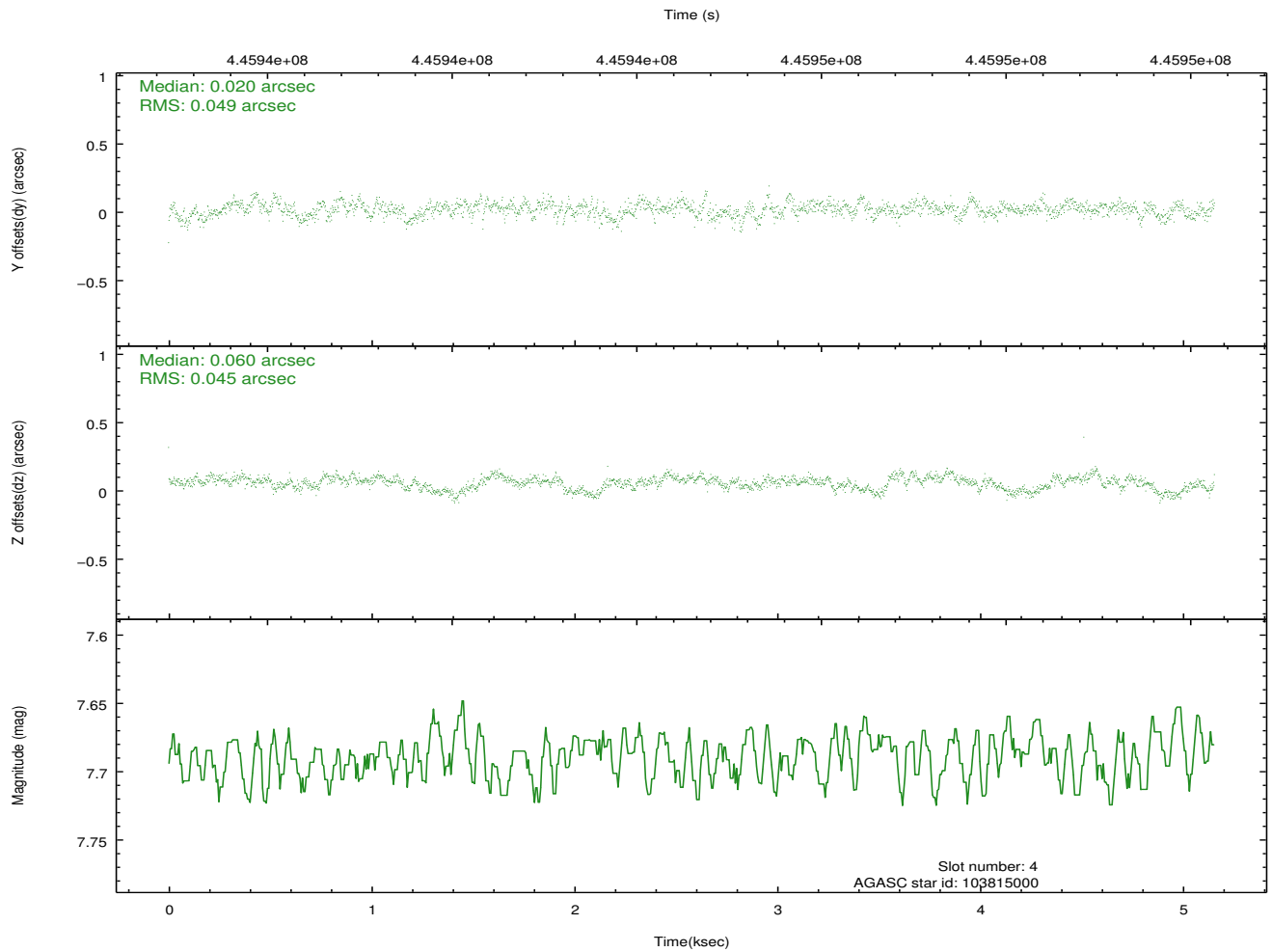
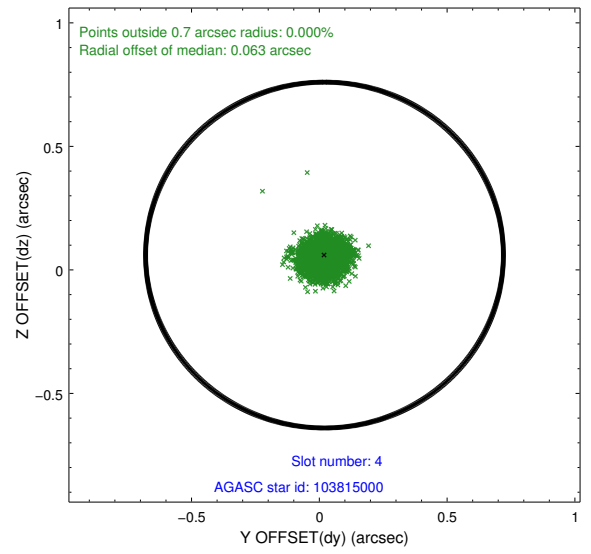
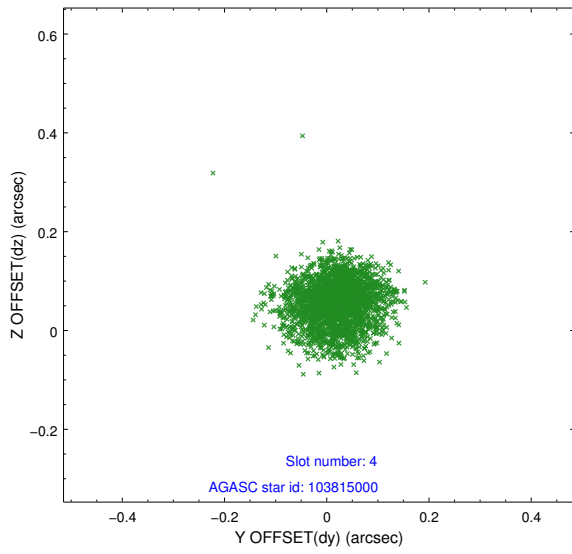
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.96	1258	-0.076	-0.061	0.006	0.010	0.000000	0.000000	-767.05	-1735.03
1	FID	ACIS-S-4	7.05	1258	0.254	0.053	0.005	0.009	0.000000	0.000000	2146.04	172.31
2	FID	ACIS-S-5	7.09	1258	-0.210	0.017	0.006	0.011	0.000000	0.000000	-1818.50	167.34
3	GUIDE	103812960	9.71	2513	0.049	-0.045	0.182	0.340	120.267824	14.688804	-1576.57	1059.32
4	GUIDE	103815000	7.69	2516	0.020	0.060	0.071	0.113	119.850457	13.827567	1543.48	-353.20
5	GUIDE	103815984	8.70	2509	-0.003	-0.068	0.123	0.194	120.197483	14.646954	-1422.04	816.15
6	GUIDE	103818544	8.39	2515	-0.081	-0.069	0.090	0.146	120.397088	14.040563	749.47	1545.25
7	GUIDE	103822016	8.89	2510	0.002	0.149	0.082	0.130	119.817011	14.818568	-2021.14	-515.90

## 2.4 Star Slots

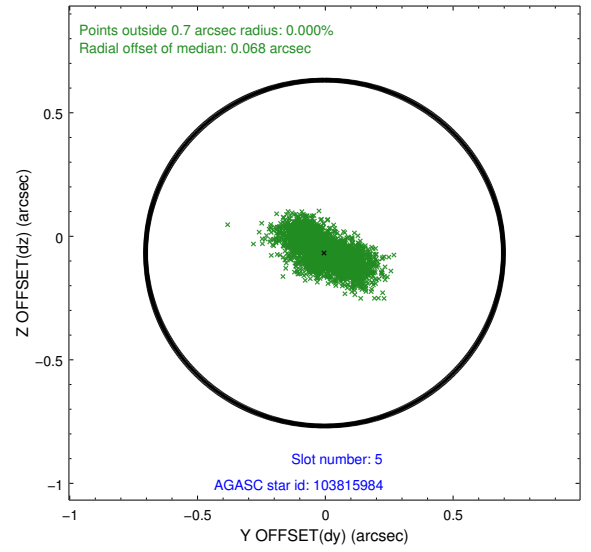
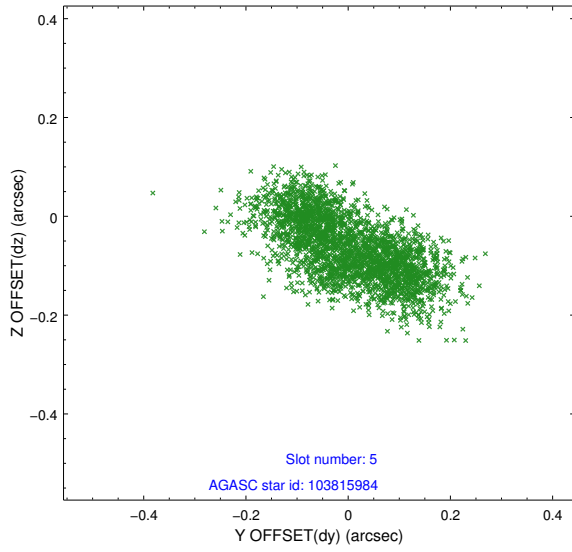
### 2.4.1 Slot 3



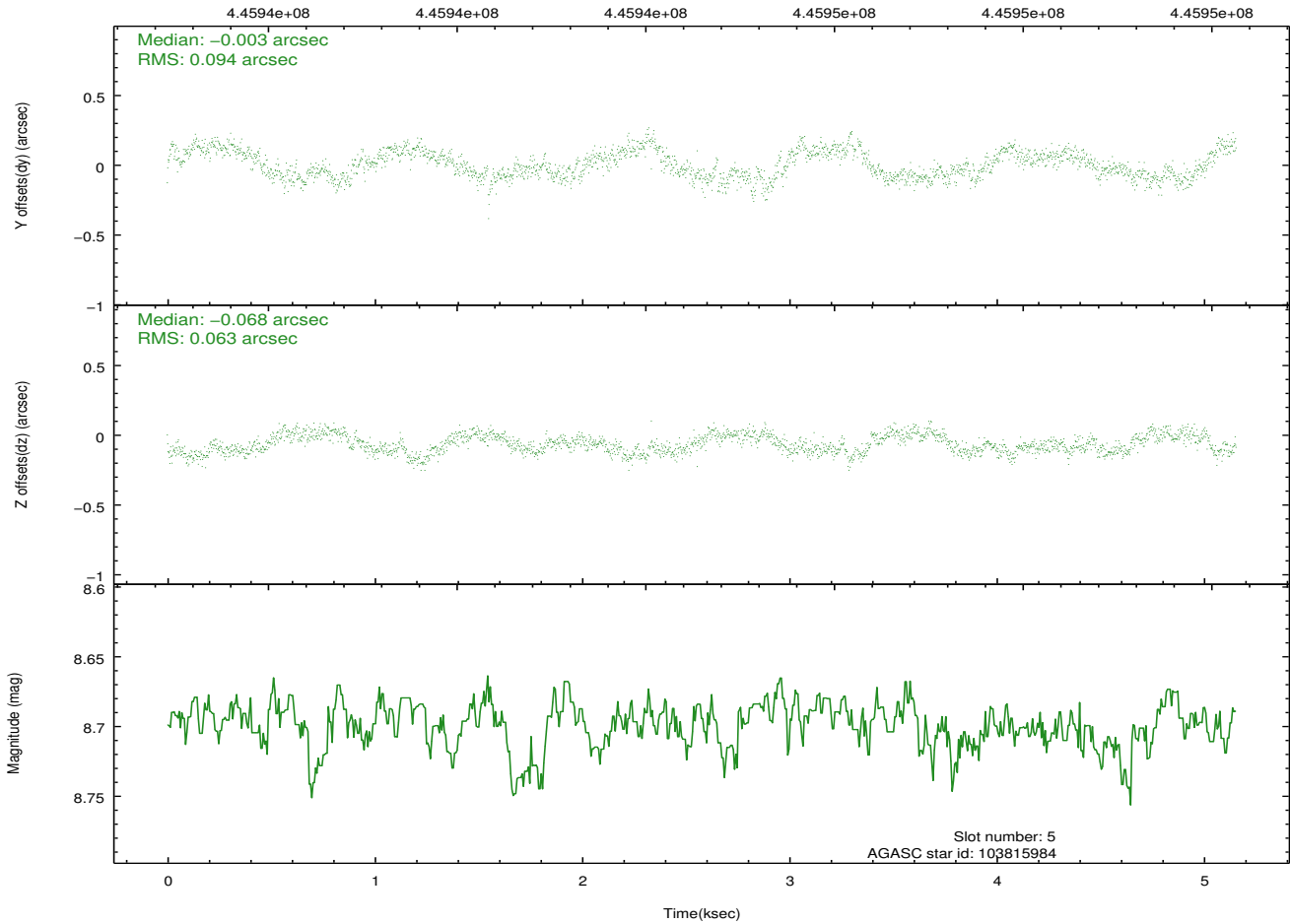
### 2.4.2 Slot 4



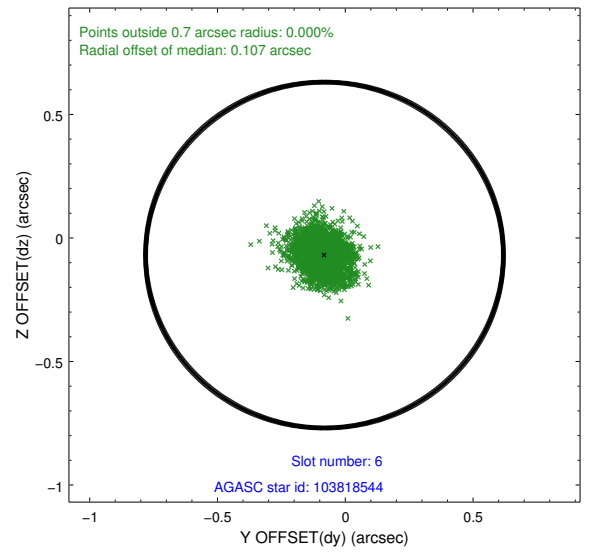
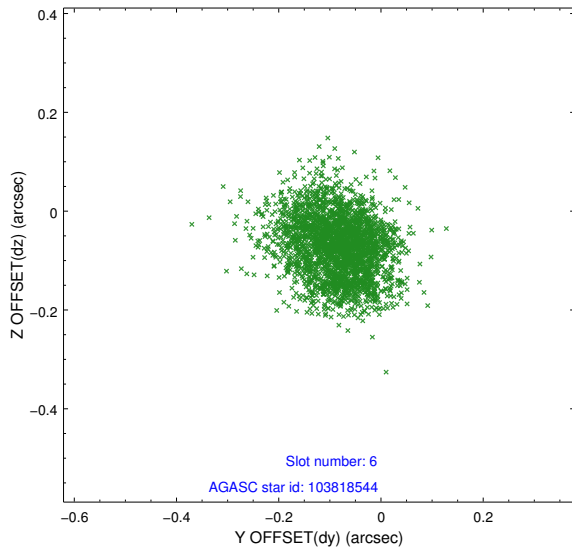
### 2.4.3 Slot 5



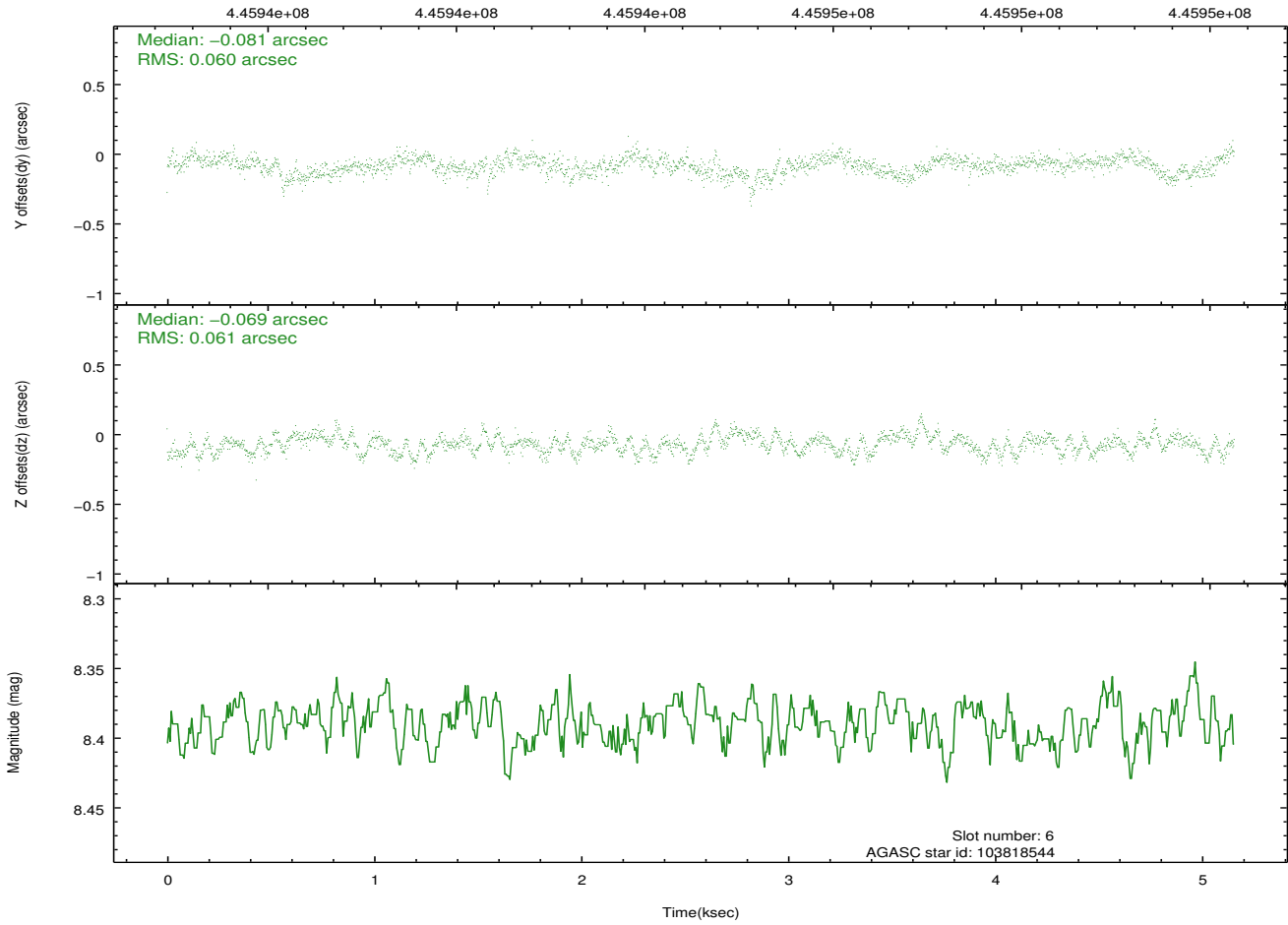
Time (s)



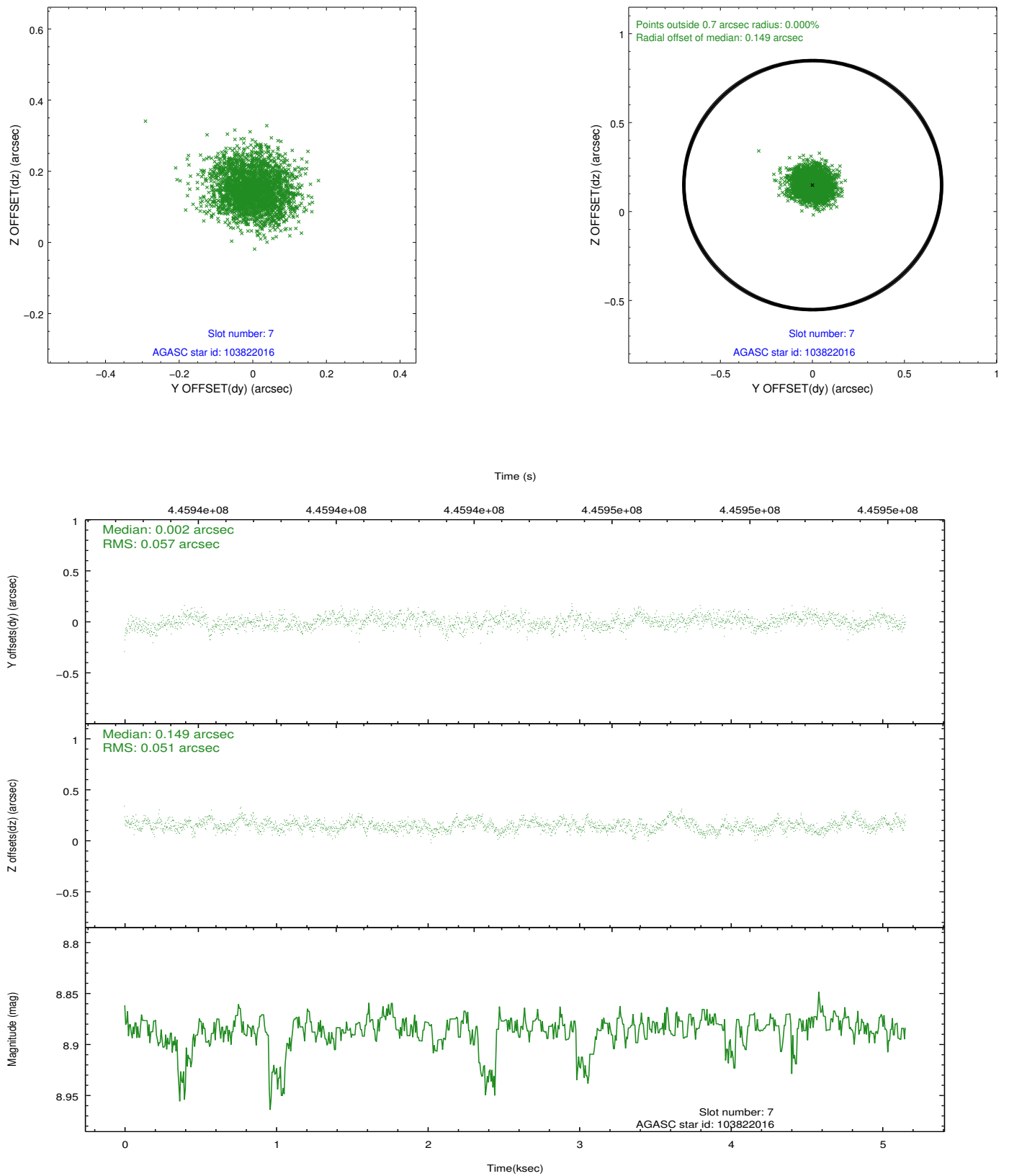
## 2.4.4 Slot 6



Time (s)

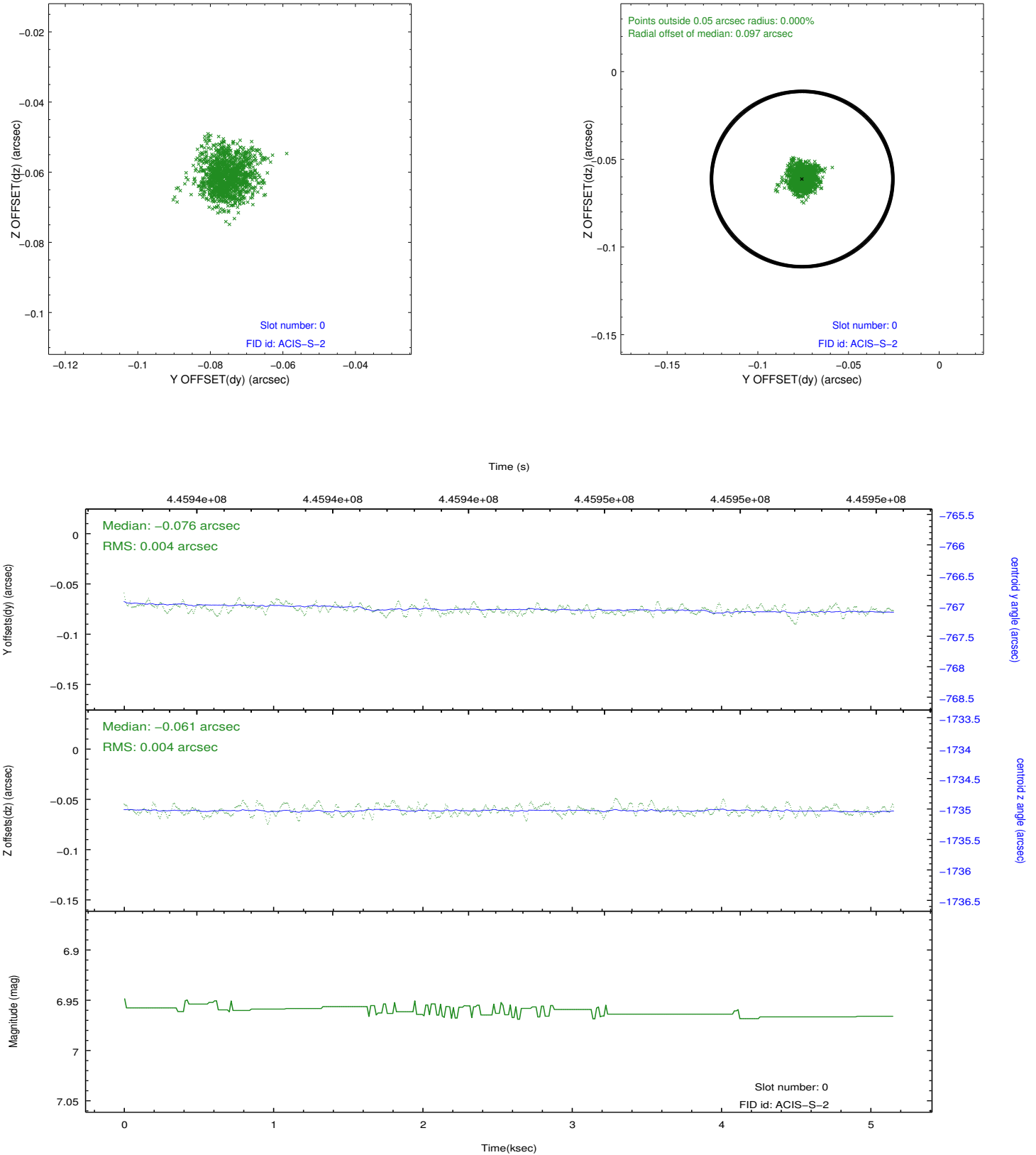


## 2.4.5 Slot 7

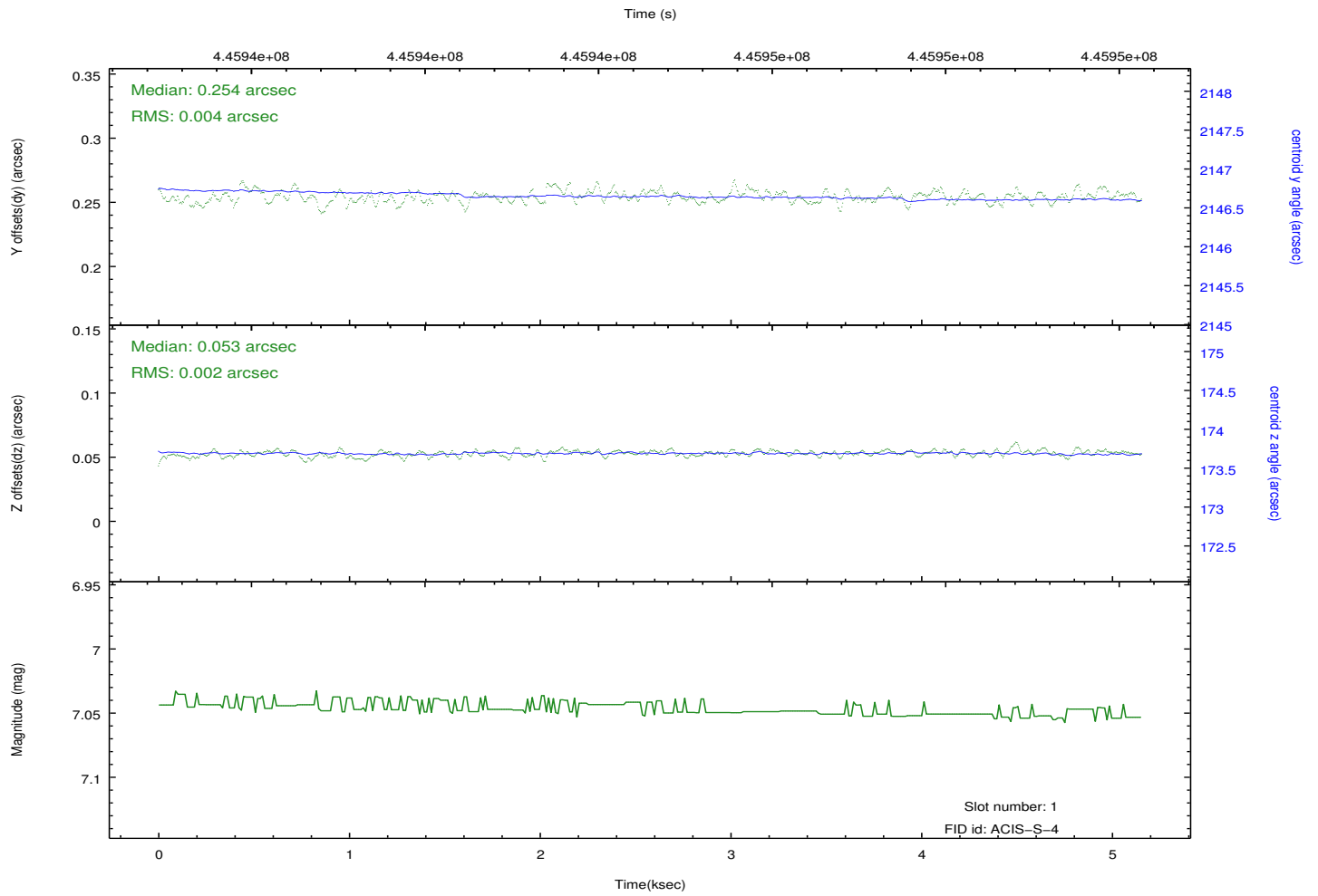
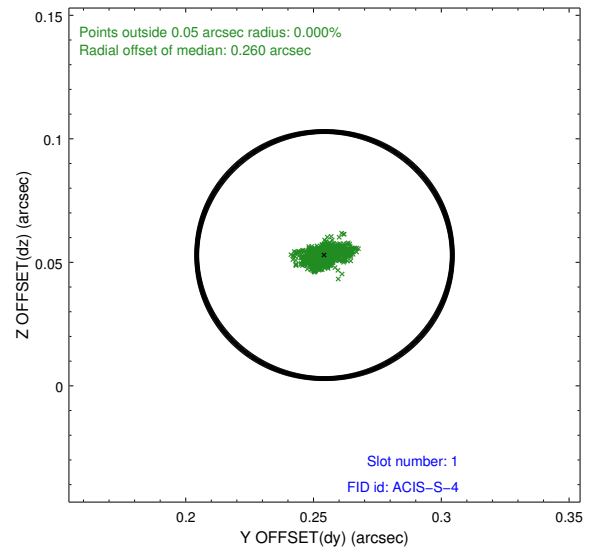
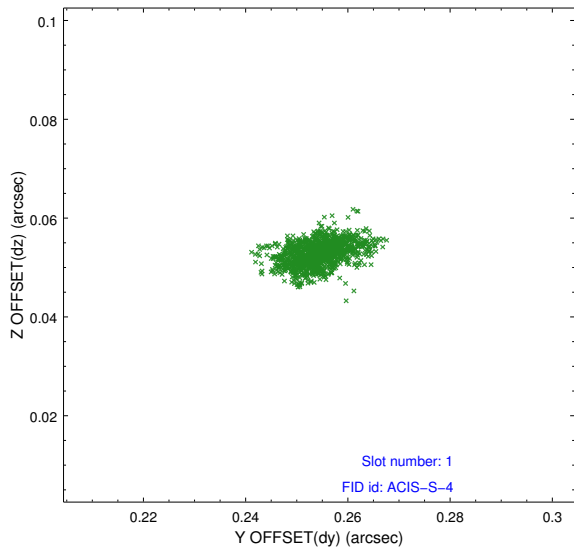


## 2.5 FID Slots

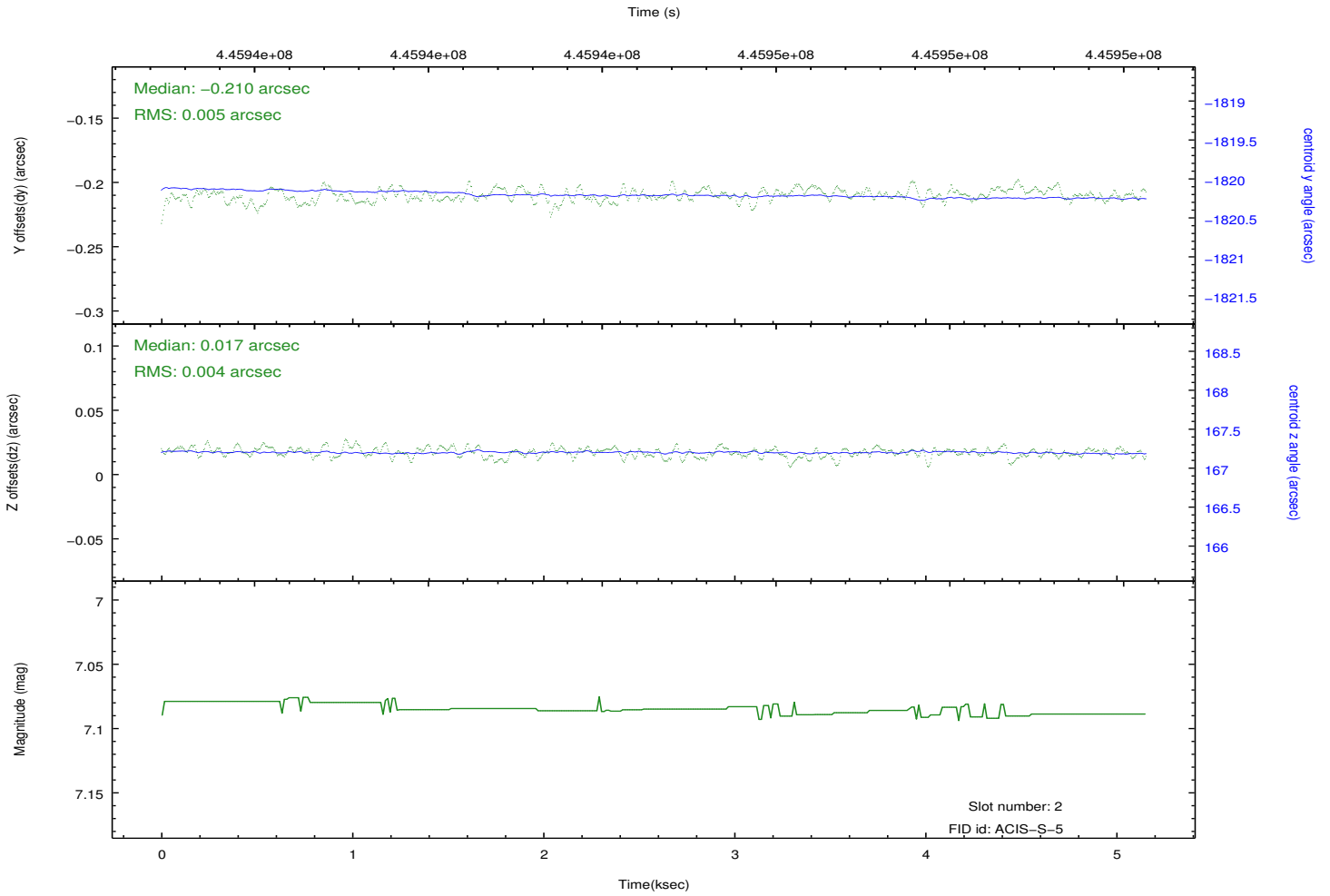
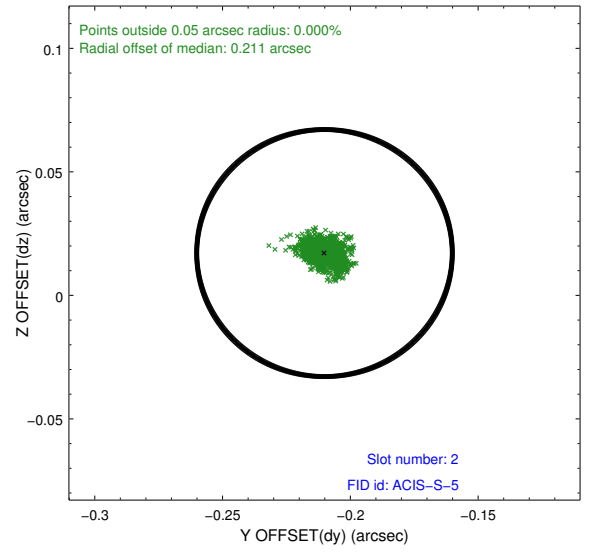
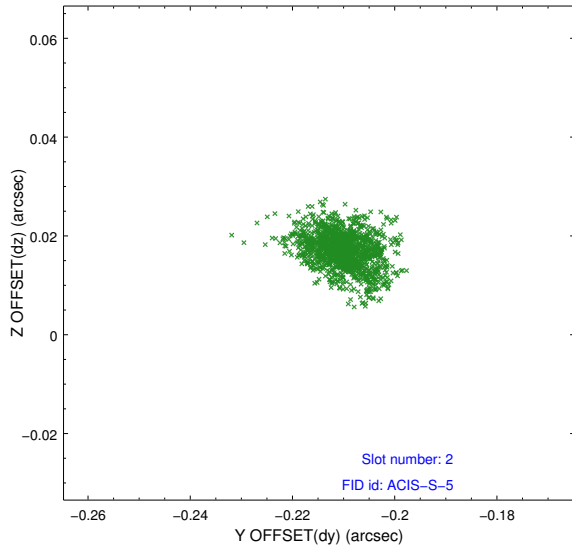
### 2.5.1 Slot 0



## 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)	2012.02.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7707850294709

### A.2 Comments