

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 436 - L2 Version 3  
Chandra X-Ray Center

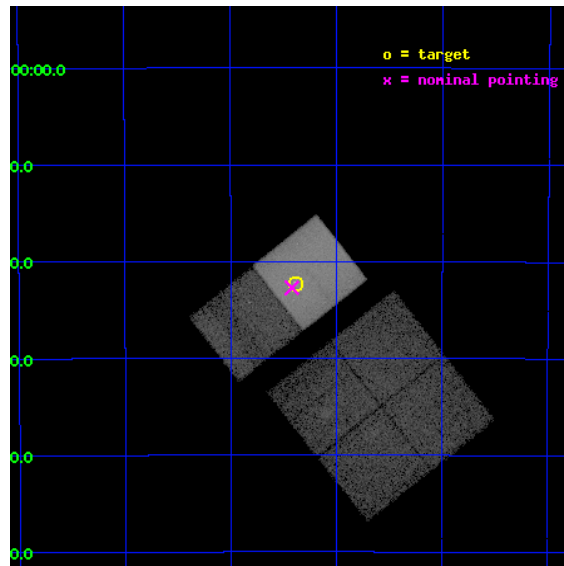
L2 Processing Date : Sep 2 2012

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# 1 Front

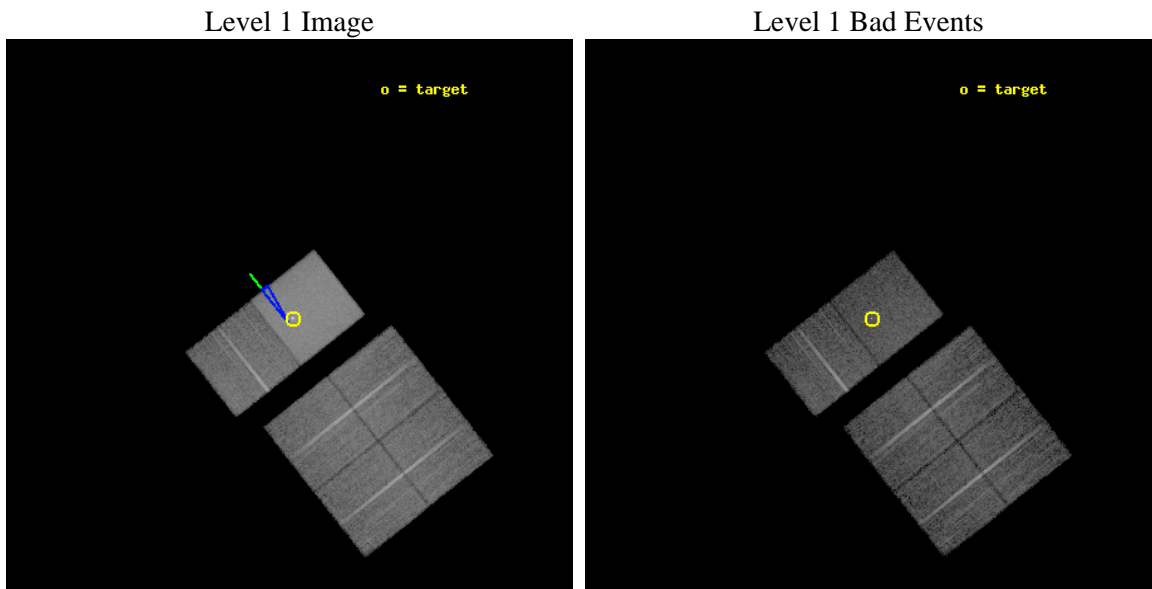
seq_num	700108	Sequence number
obs_id	436	Observation id
title	EXTENDED X-RAY EMISSION AROUND NEARBY SEYFERTS	Proposal title
observer	Dr. Stephen Murray	Principal investigator
object	NGC 7582	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	349.596667	Observer's specified target RA [deg]
dec_targ	-42.371389	Observer's specified target Dec [deg]
ra_nom	349.60550814627	Nominal RA [deg]
dec_nom	-42.378827636324	Nominal Dec [deg]
roll_nom	321.66262843791	Nominal Roll [deg]
revision	3	Processing version of data
ontime	13616.000012666	Sum of GTIs [s]
livetime	13443.586021935	Livetime [s]
ontime0	13616.000012666	Sum of GTIs [s]
ontime1	13616.000012666	Sum of GTIs [s]
ontime2	13616.000012666	Sum of GTIs [s]
ontime3	13612.759052426	Sum of GTIs [s]
ontime6	13616.000012666	Sum of GTIs [s]
ontime7	13616.000012666	Sum of GTIs [s]
l2events	200506	Number of level 2 events



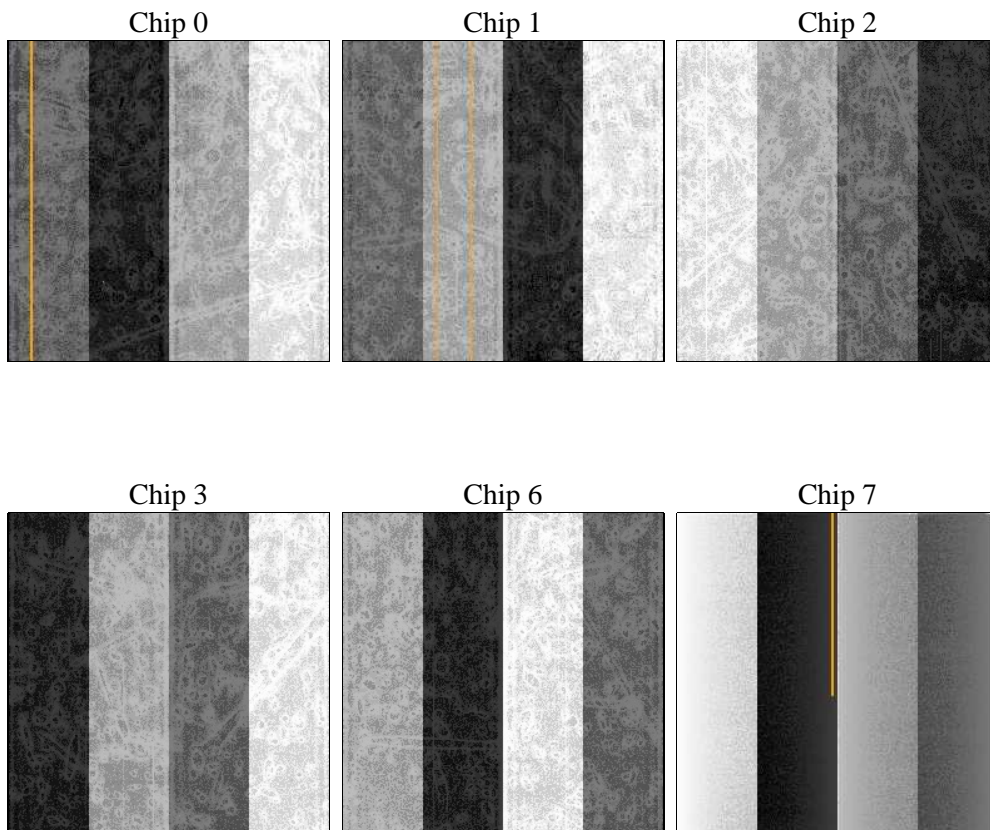
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13703.267000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	13616.000012666	Sum of GTIs [s]
caldbver	4.5.1.1	&#160	ontime0	13616.000012666	Sum of GTIs [s]
date	2012-09-02T09:44:13	Date and time of file creation	ontime1	13616.000012666	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	13616.000012666	Sum of GTIs [s]
			ontime3	13612.759052426	Sum of GTIs [s]
			ontime6	13616.000012666	Sum of GTIs [s]
			ontime7	13616.000012666	Sum of GTIs [s]
			l1events	628278	Number of level 1 events

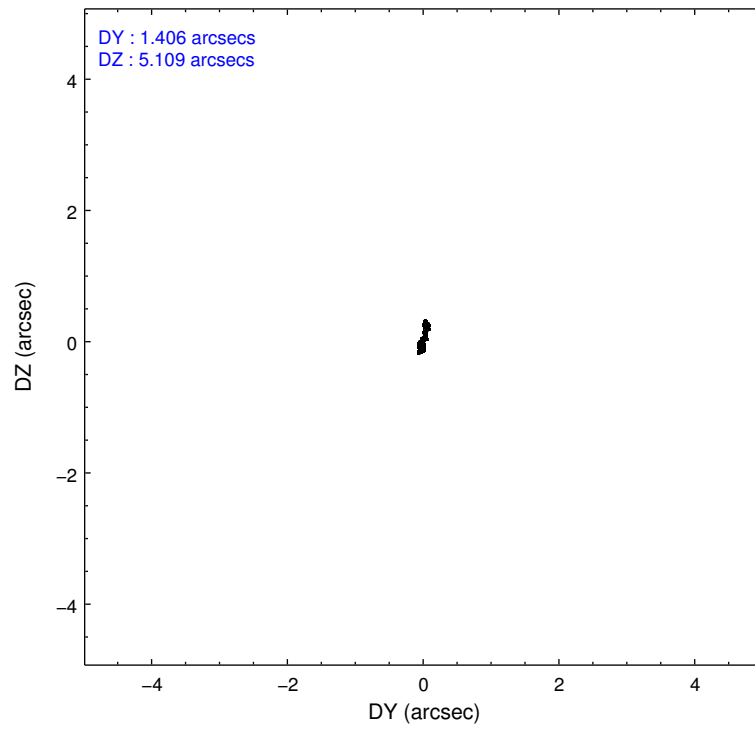
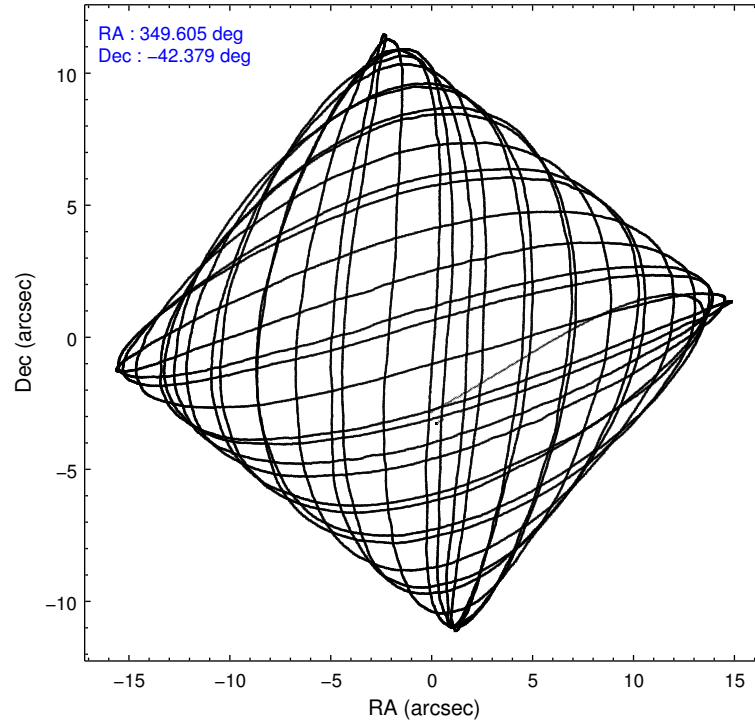
### 2.1.4 Events

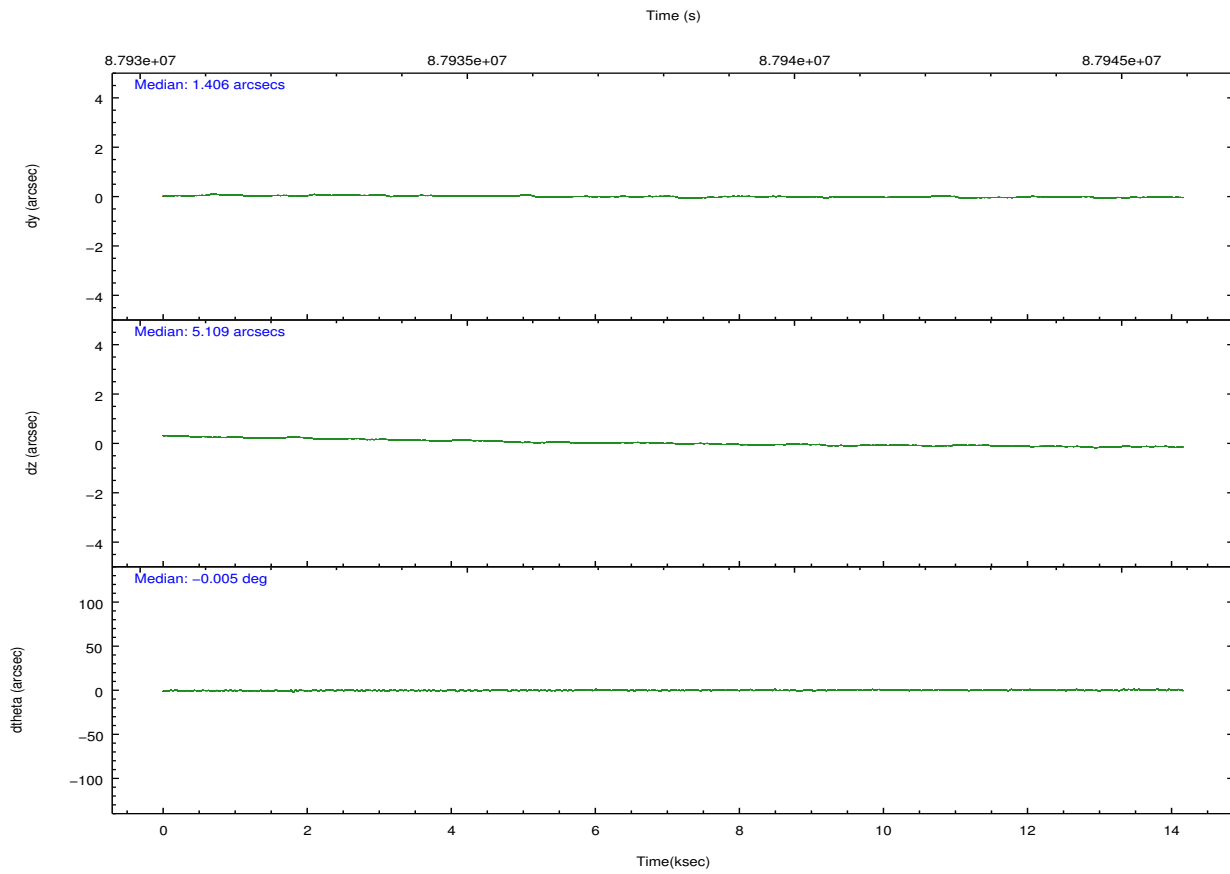
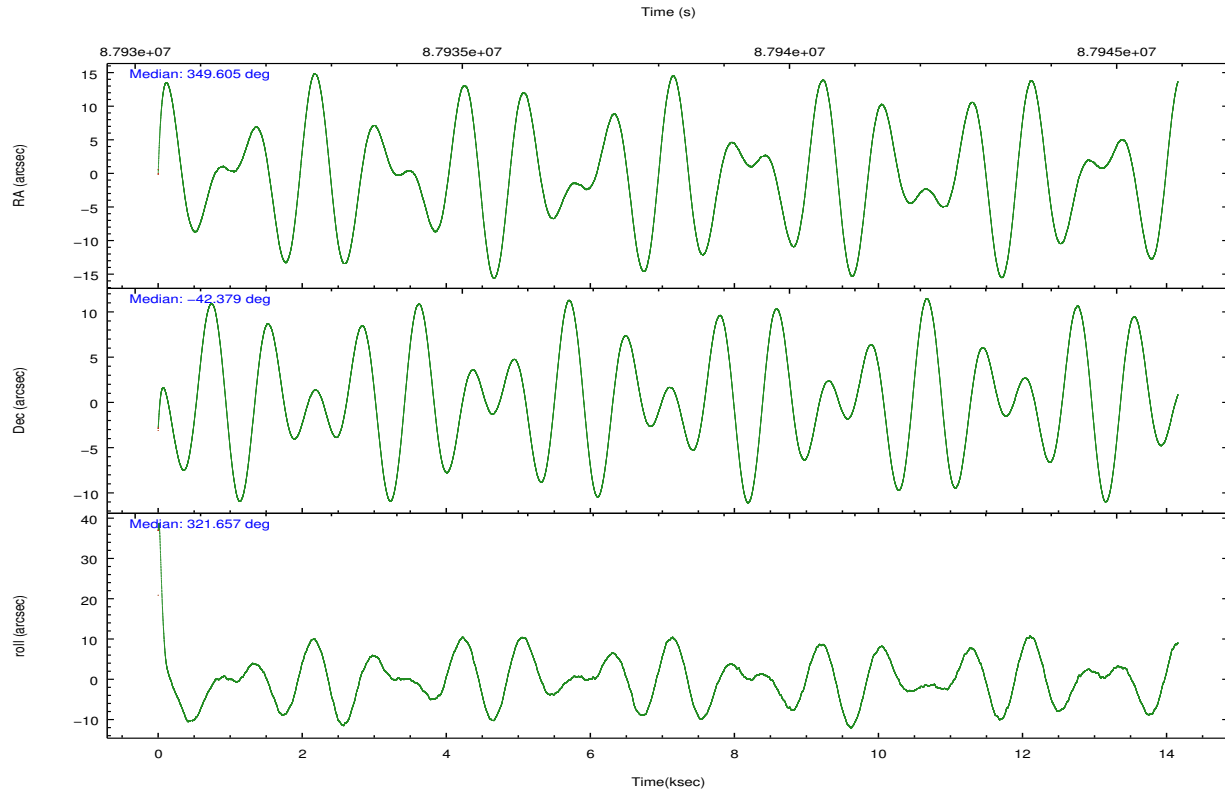
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	84594	81019	87851	89303	92247	193264	grade 0 events	8533	8574	8393	8362	11730	16860
rejected events	69341	65387	73035	74635	73156	61787		10%	10%	9%	9%	12%	8%
rejected %	81%	80%	83%	83%	79%	31%	grade 1 events	77	64	49	69	57	142
								0%	0%	0%	0%	0%	0%
							grade 2 events	2808	2927	2747	2648	3176	24689
								3%	3%	3%	2%	3%	12%
							grade 3 events	1001	1163	986	973	1072	10932
								1%	1%	1%	1%	1%	5%
							grade 4 events	1024	1051	964	980	1160	10944
								1%	1%	1%	1%	1%	5%
							grade 5 events	2880	3002	2669	3006	3290	10398
								3%	3%	3%	3%	3%	5%
							grade 6 events	1891	1921	1729	1705	1958	68079
								2%	2%	1%	1%	2%	35%
							grade 7 events	66380	62317	70314	71560	69804	51220
								78%	76%	80%	80%	75%	26%

## 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	349.568806	349.6055081462741	Subarray requested	NONE	NONE
[deg] Pointing Dec	-42.375031	-42.37882763632389	Alternating exposures requested	N	N
[deg] Pointing Roll	321.481220	321.6626284379085	[s] Primary exposure time	0.000000	3.2
[deg] Roll angle	325.000000	325.000000			
[deg] Roll tolerance	5.000000	5.000000			
Roll constraint allows 180D rotation	N	N			
[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)	87931519.184000	87930420.343798			
Observation start date	2000-10-14T17:24:15	2000-10-14T17:07:00			
[s] Observation end time (MET)	87945222.184000	87945537.044369			
Observation end date	2000-10-14T21:12:38	2000-10-14T21:18:57			
Read mode	TIMED	TIMED			

## 2.3 Aspect



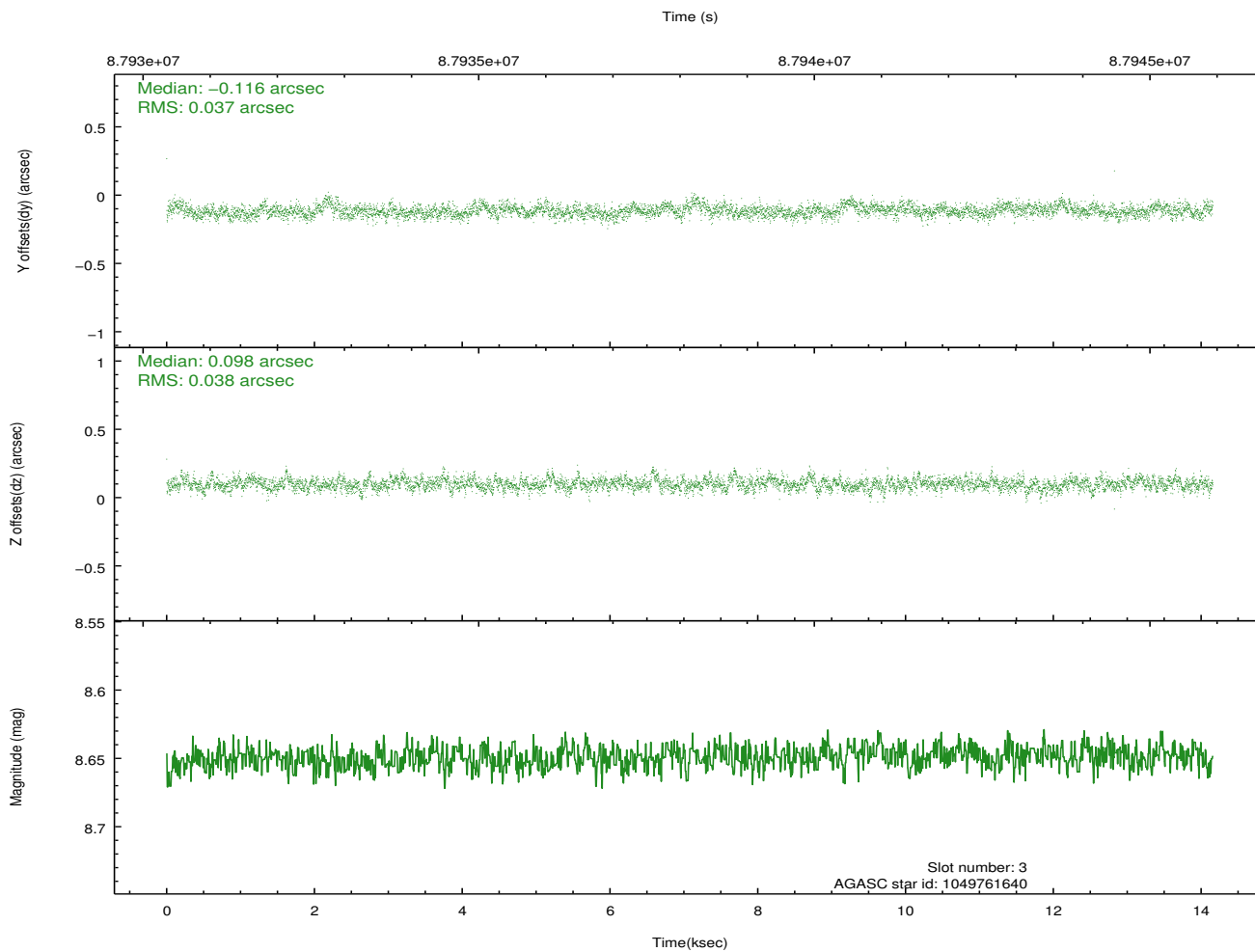
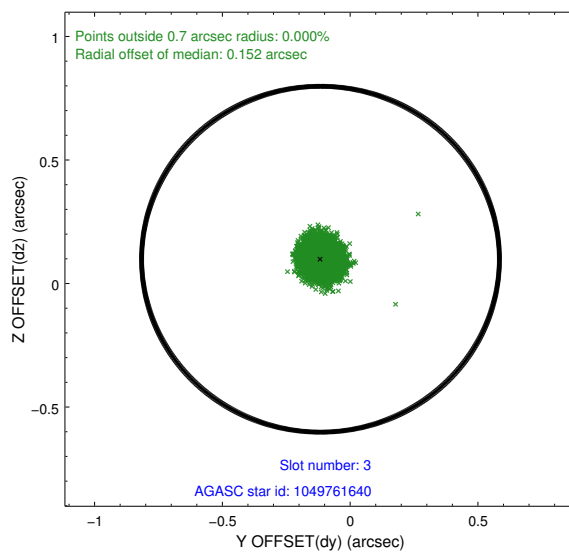
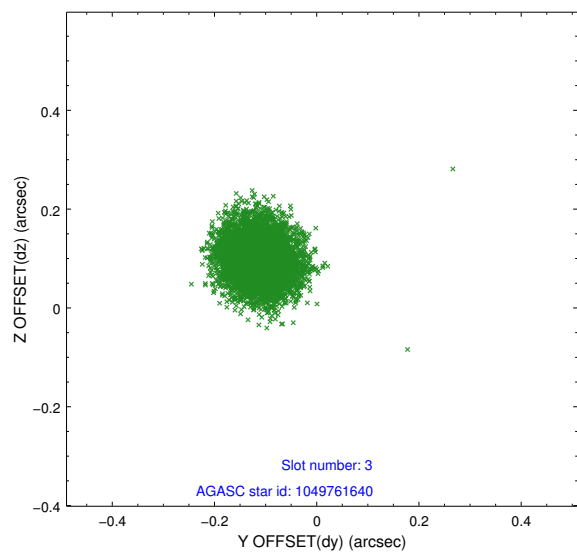


### Slot Statistics

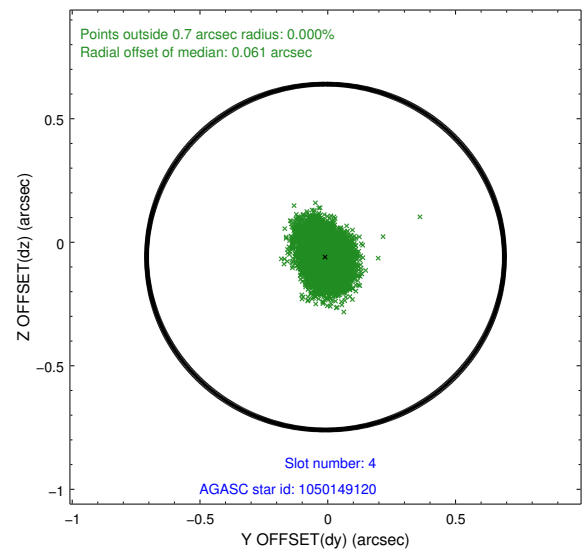
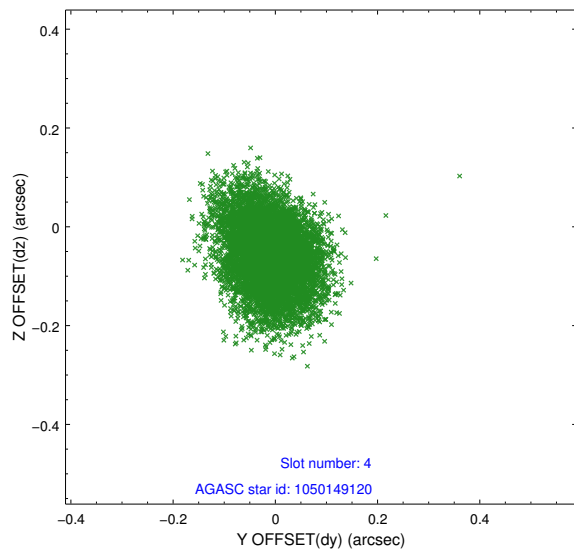
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.36	3454	-0.054	-0.019	0.009	0.014	0.000000	0.000000	59.15	-1855.33
1	FID	ACIS-S-4	7.21	3454	-0.002	0.038	0.007	0.011	0.000000	0.000000	2159.35	181.92
2	FID	ACIS-S-5	7.23	3454	0.028	-0.009	0.007	0.012	0.000000	0.000000	-1806.40	175.92
3	GUIDE	1049761640	8.65	6906	-0.116	0.098	0.056	0.093	349.142415	-42.207499	-1261.97	-238.20
4	GUIDE	1050149120	9.14	6904	-0.009	-0.060	0.087	0.141	348.946168	-42.587694	-809.12	-1631.40
5	GUIDE	1050158072	9.11	6900	-0.037	-0.037	0.108	0.171	348.738453	-42.733577	-905.76	-2385.81
6	GUIDE	1050149848	10.20	6902	0.029	-0.123	0.164	0.258	349.007658	-42.828628	-137.49	-2204.33
7	GUIDE	1051067360	10.06	6904	0.144	0.126	0.131	0.200	350.420093	-42.504159	2065.82	1034.77

## 2.4 Star Slots

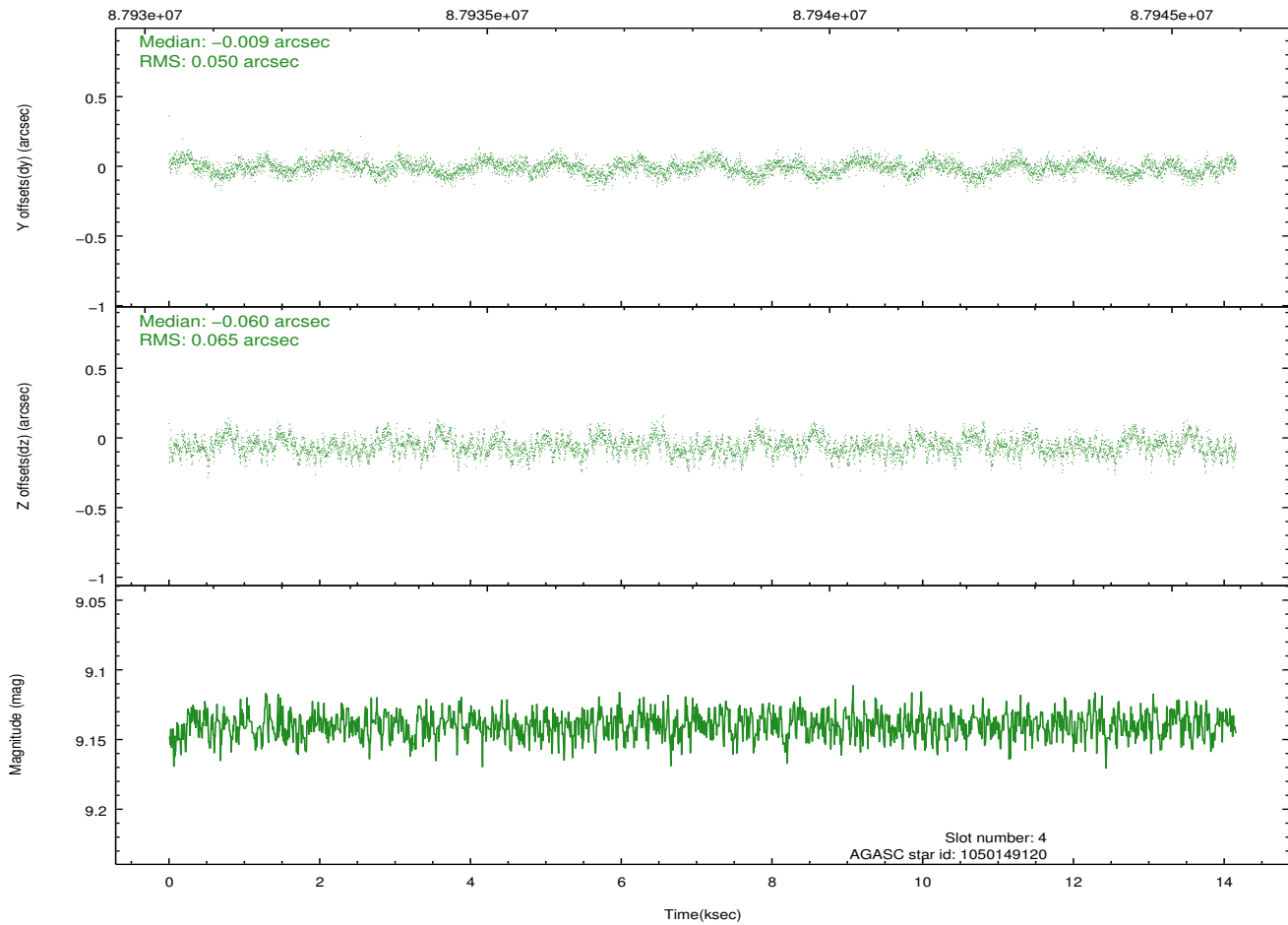
### 2.4.1 Slot 3



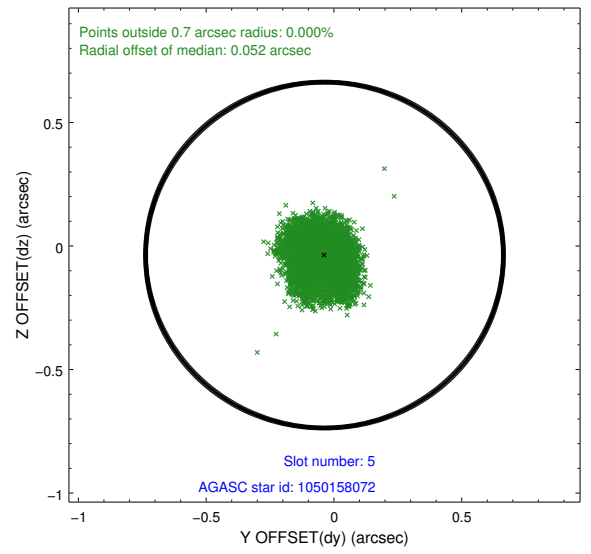
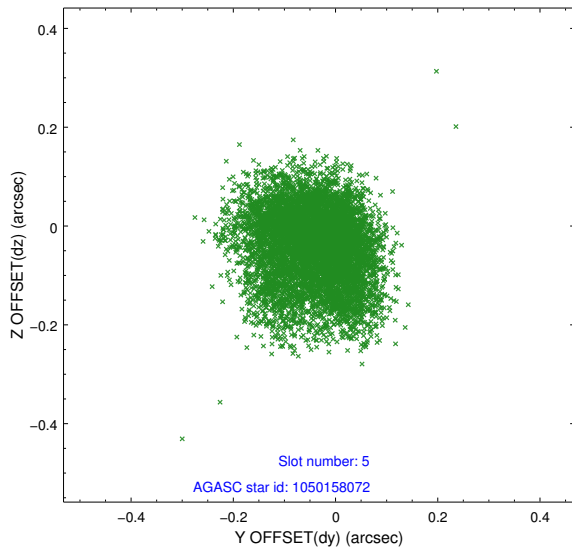
## 2.4.2 Slot 4



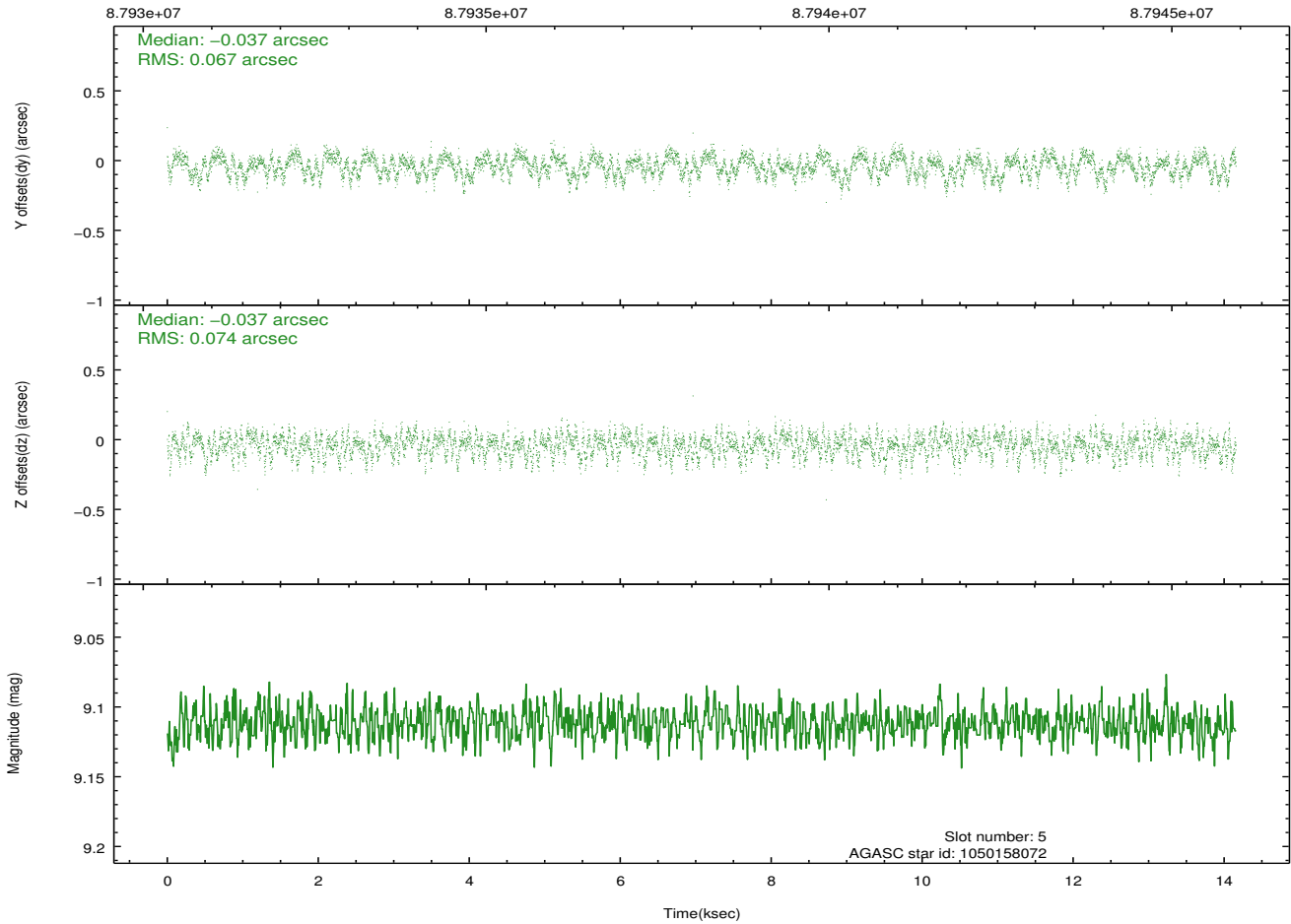
Time (s)



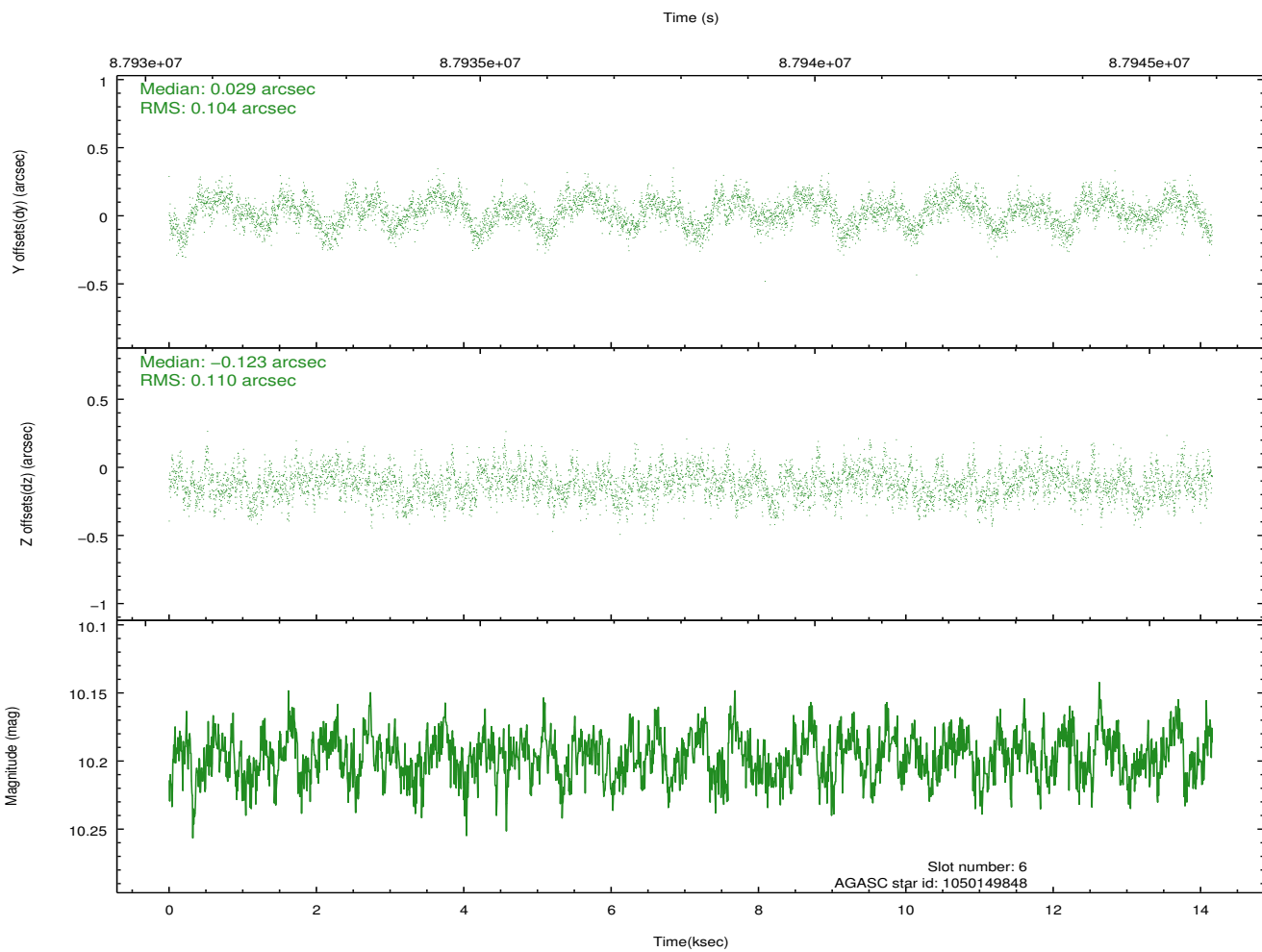
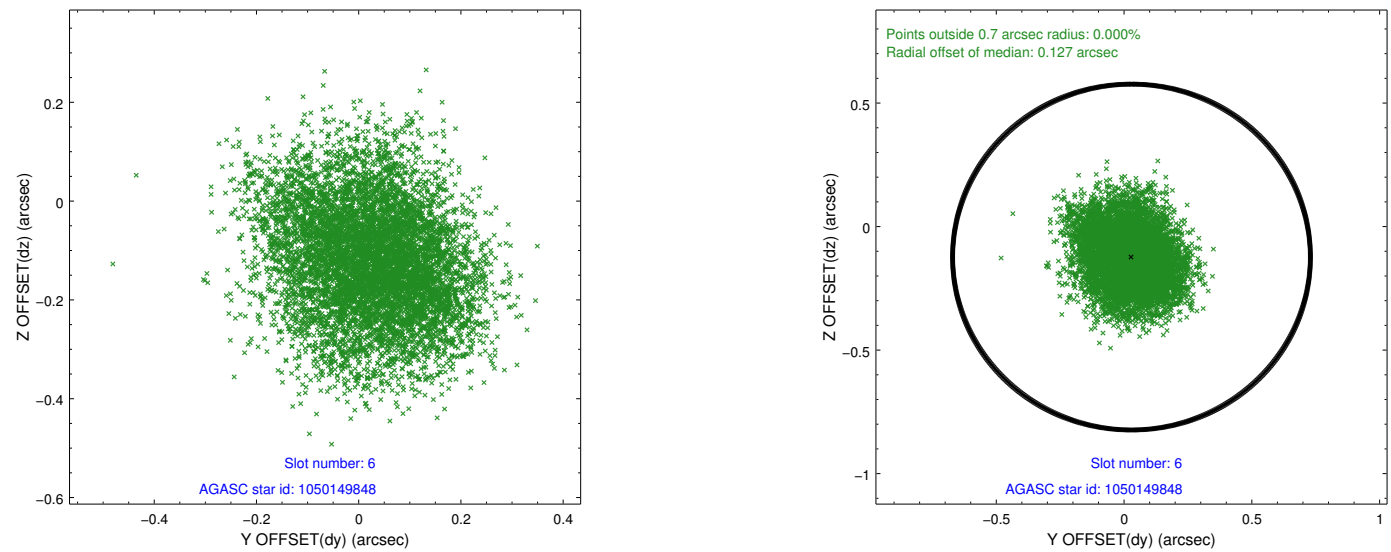
### 2.4.3 Slot 5



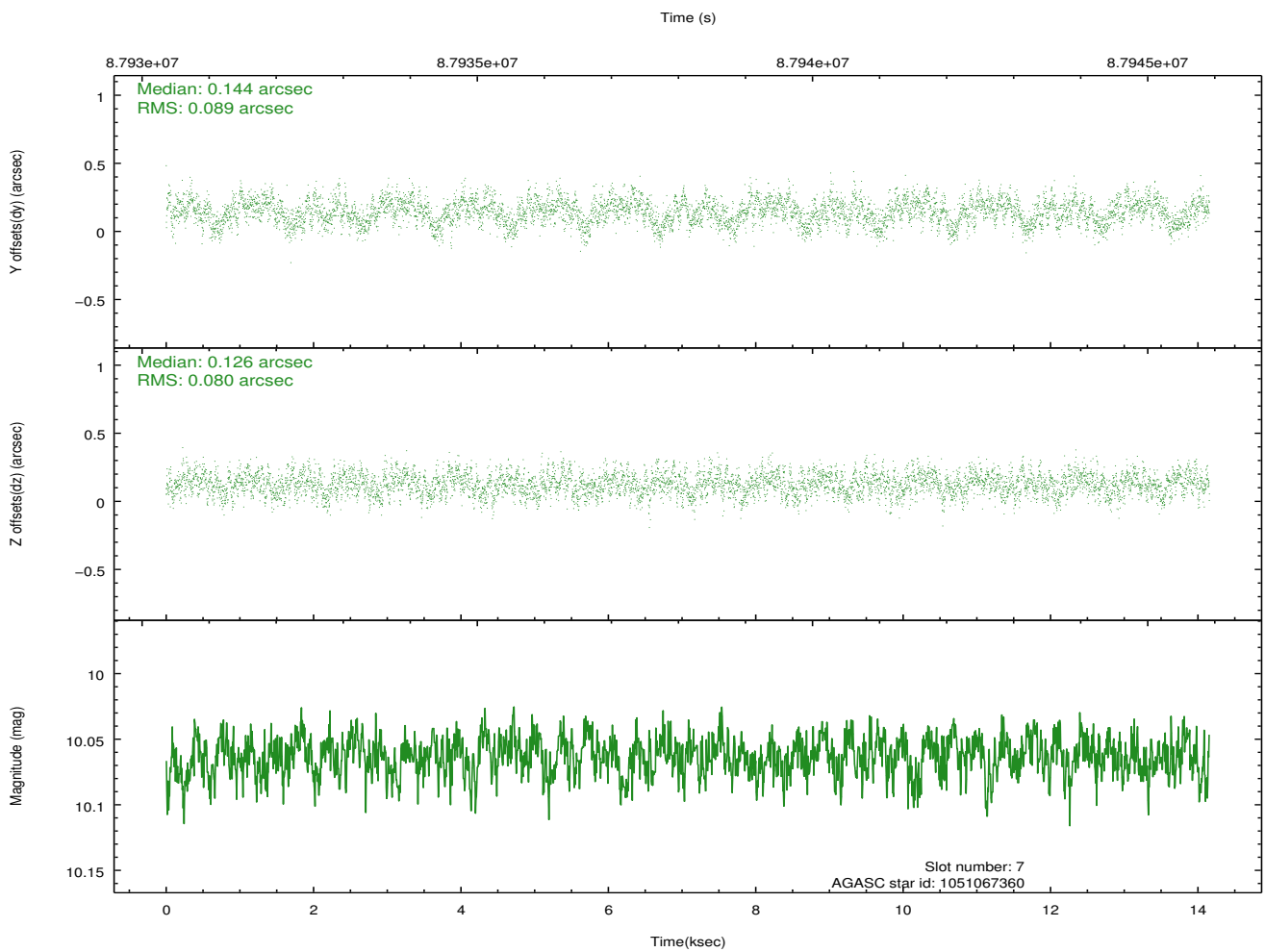
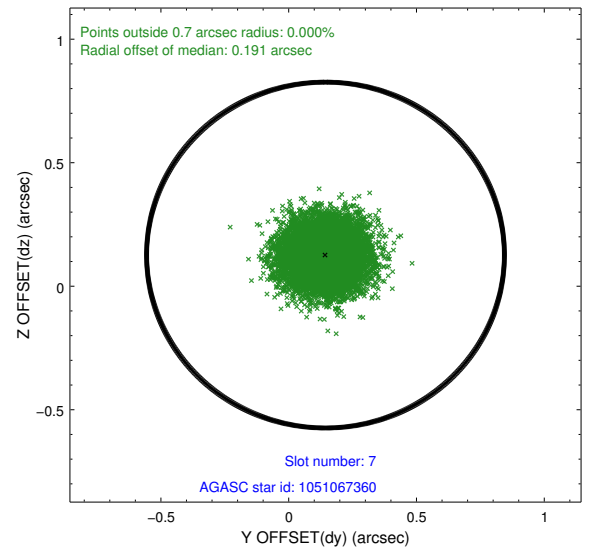
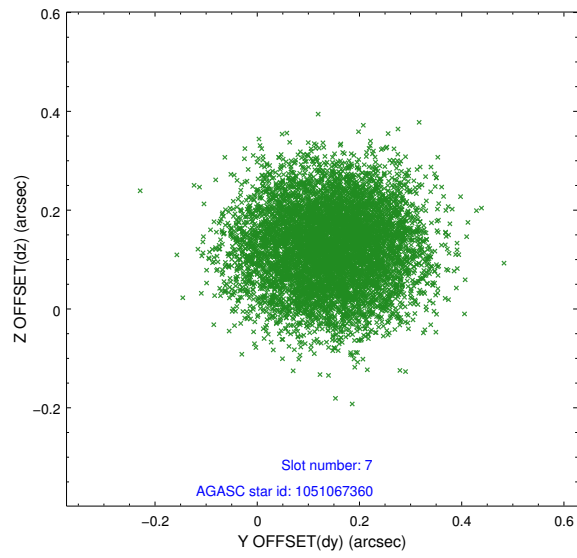
Time (s)



## 2.4.4 Slot 6

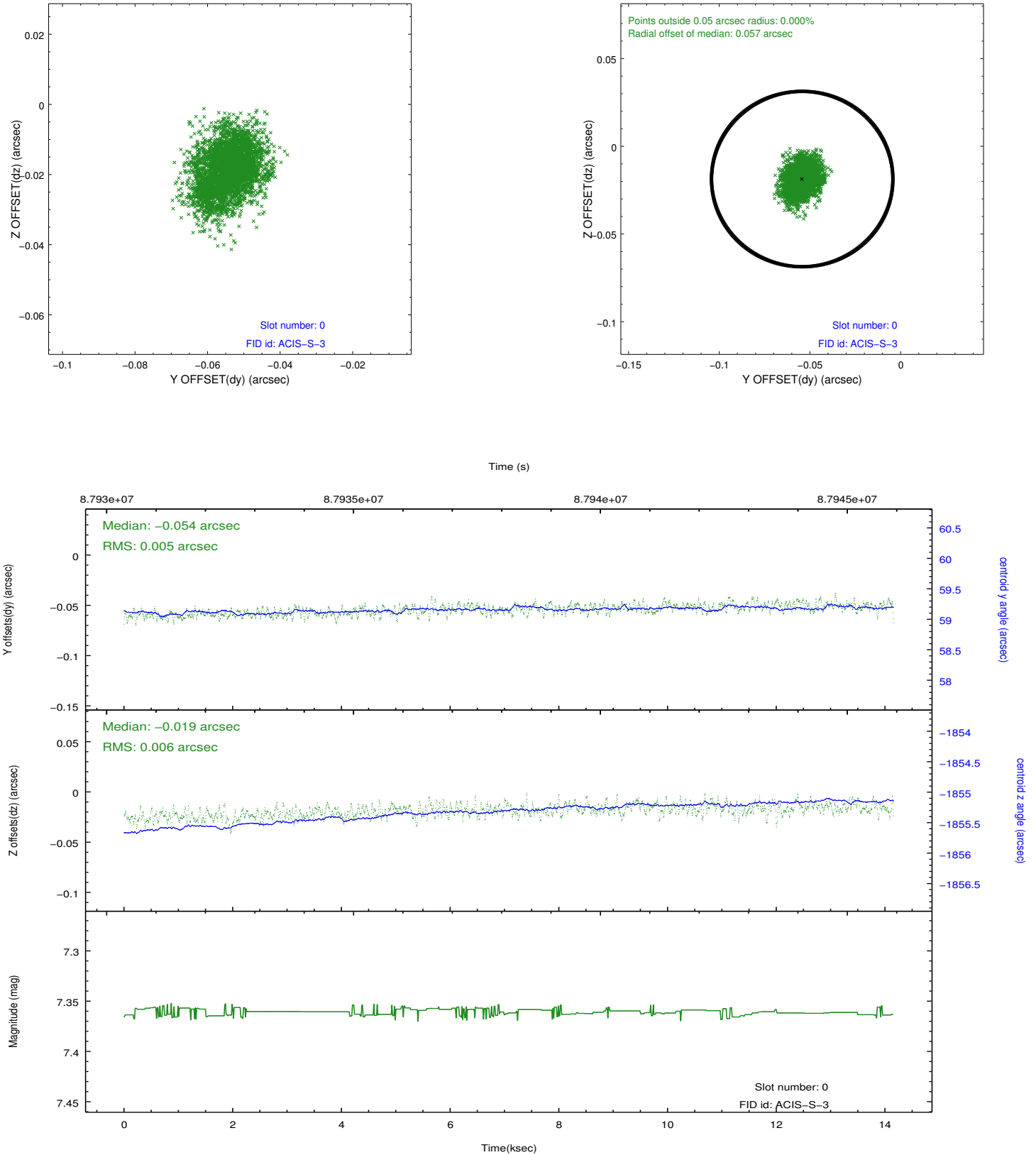


### 2.4.5 Slot 7

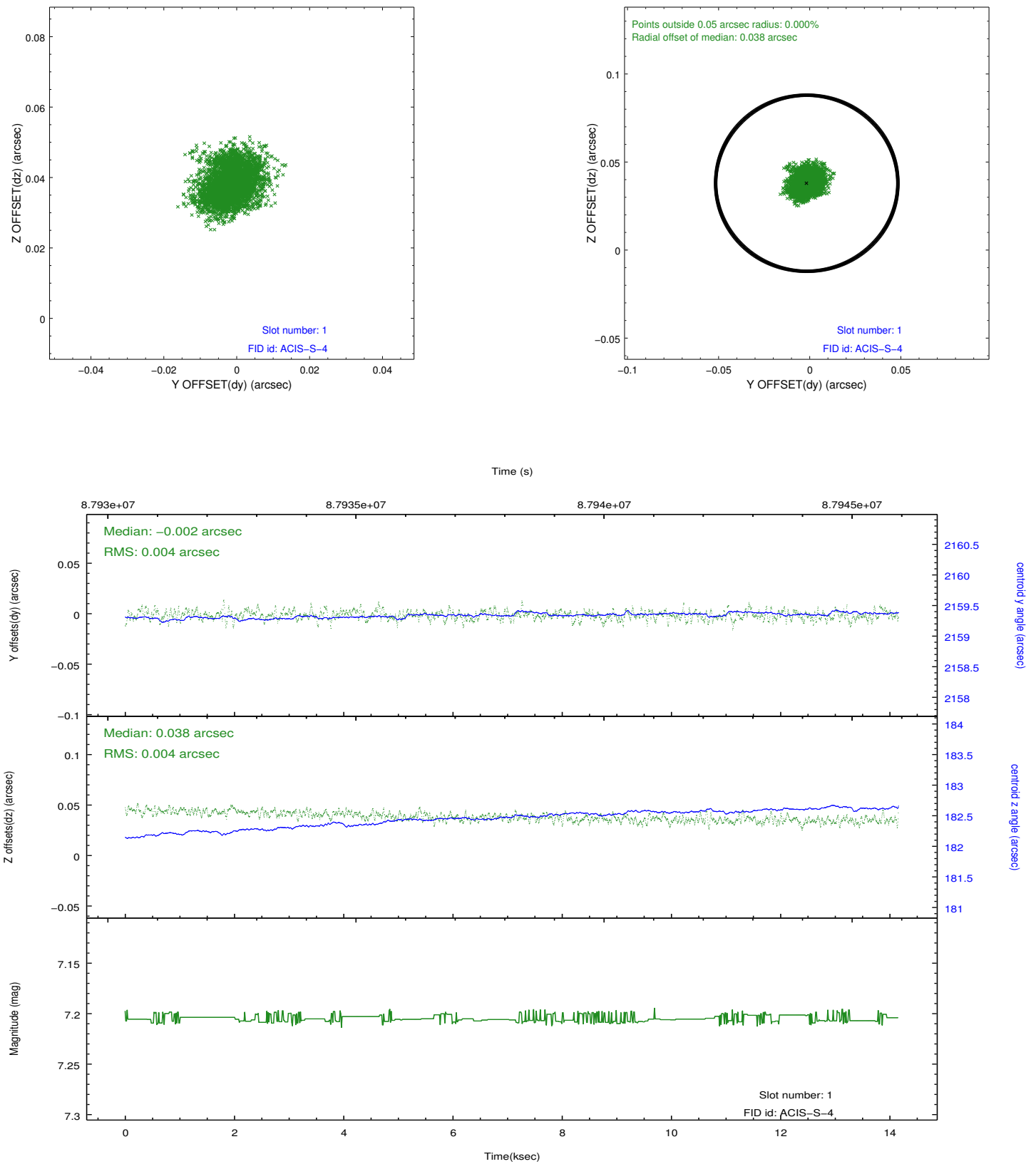


## 2.5 FID Slots

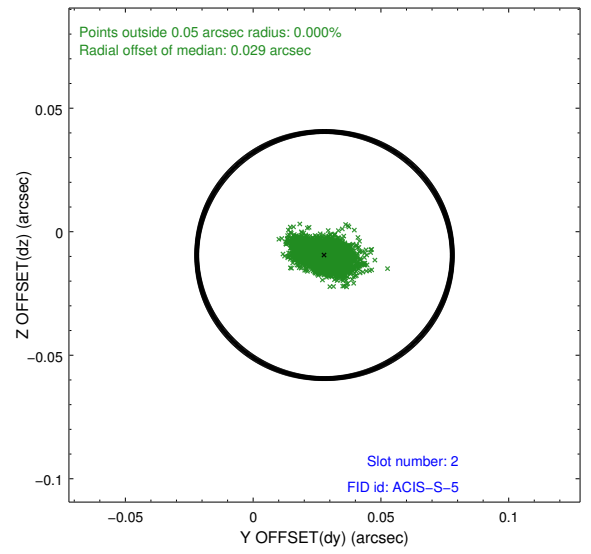
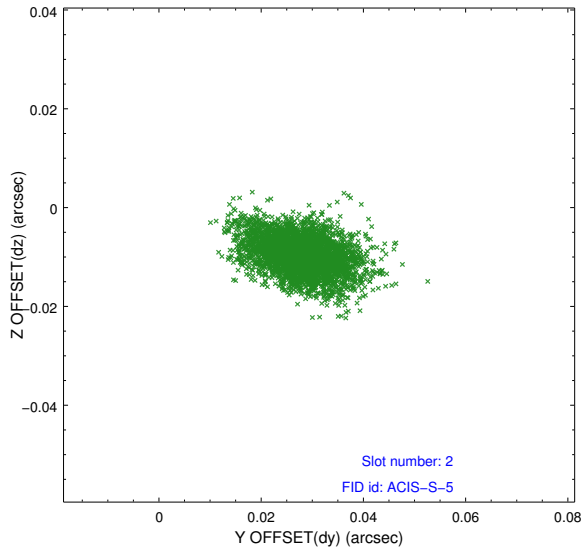
### 2.5.1 Slot 0



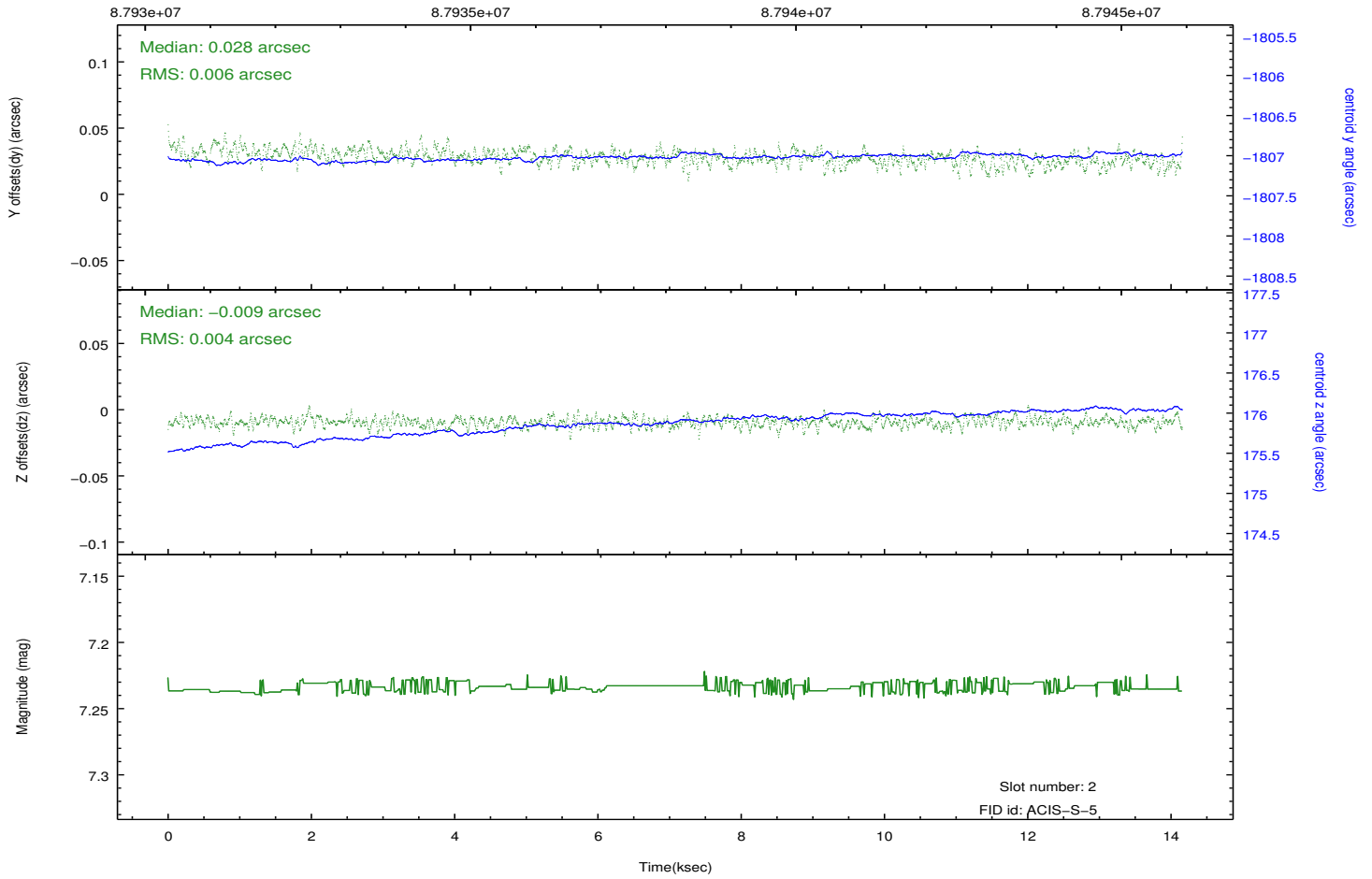
## 2.5.2 Slot 1



### 2.5.3 Slot 2



Time (s)



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.09.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.619

## A.2 Comments

Roll constraint met.