

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 2793 - L2 Version 3  
Chandra X-Ray Center

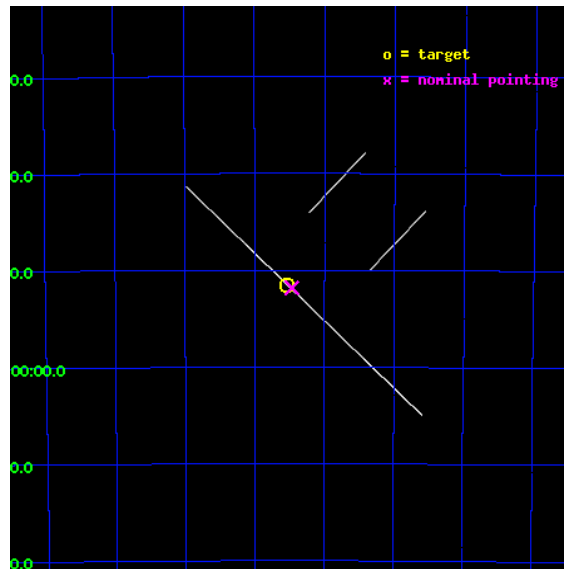
L2 Processing Date : Oct 14 2012

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# 1 Front

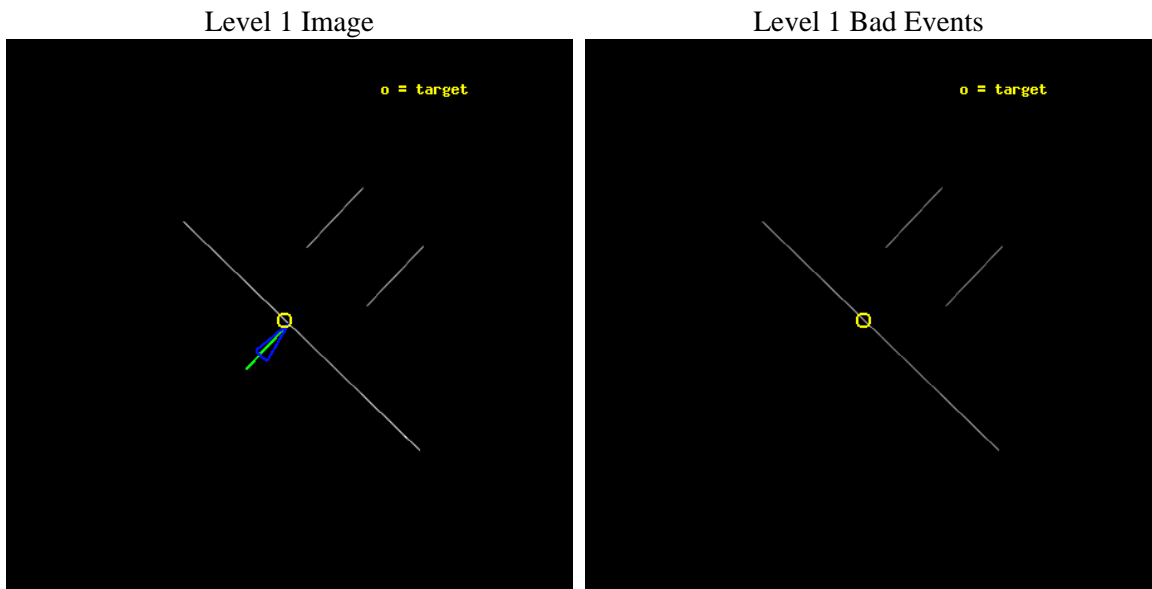
seq_num	500243	Sequence number
obs_id	2793	Observation id
title	IMAGING AND TIMING STUDIES OF THE VERY ENERGETIC PSR J1420-6048	Pr
observer	Prof. Roger Romani	Principal investigator
object	PSR J1420-6048	Source name
ra_targ	214.883333	Observer's specified target RA [deg]
dec_targ	-60.858333	Observer's specified target Dec [deg]
ra_nom	214.86671808685	Nominal RA [deg]
dec_nom	-60.863697905814	Nominal Dec [deg]
roll_nom	223.69680669278	Nominal Roll [deg]
revision	3	Processing version of data
ontime	31156.579256684	Sum of GTIs [s]
livetime	31034.873868962	Livetime [s]
ontime2	31158.040020764	Sum of GTIs [s]
ontime3	31158.041633666	Sum of GTIs [s]
ontime5	31158.039684206	Sum of GTIs [s]
ontime6	31159.5	Sum of GTIs [s]
ontime7	31156.579256684	Sum of GTIs [s]
ontime8	31158.039683819	Sum of GTIs [s]
l2events	357242	Number of level 2 events



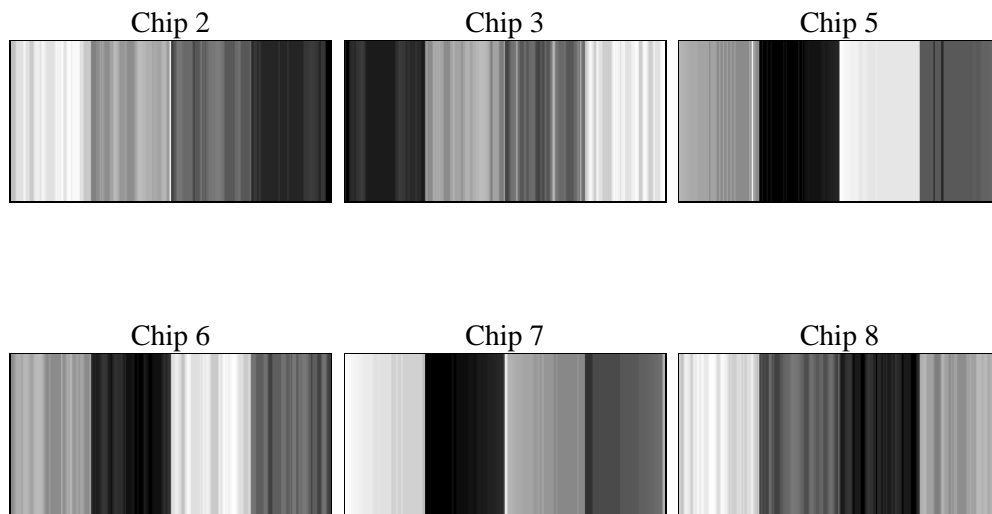
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30100.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	31156.579256684	Sum of GTIs [s]
caldbver	4.5.2	&#160	ontime2	31158.040020764	Sum of GTIs [s]
date	2012-10-14T19:16:37	Date and time of file creation	ontime3	31158.041633666	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	31158.039684206	Sum of GTIs [s]
			ontime6	31159.5	Sum of GTIs [s]
			ontime7	31156.579256684	Sum of GTIs [s]
			ontime8	31158.039683819	Sum of GTIs [s]
			l1events	558473	Number of level 1 events

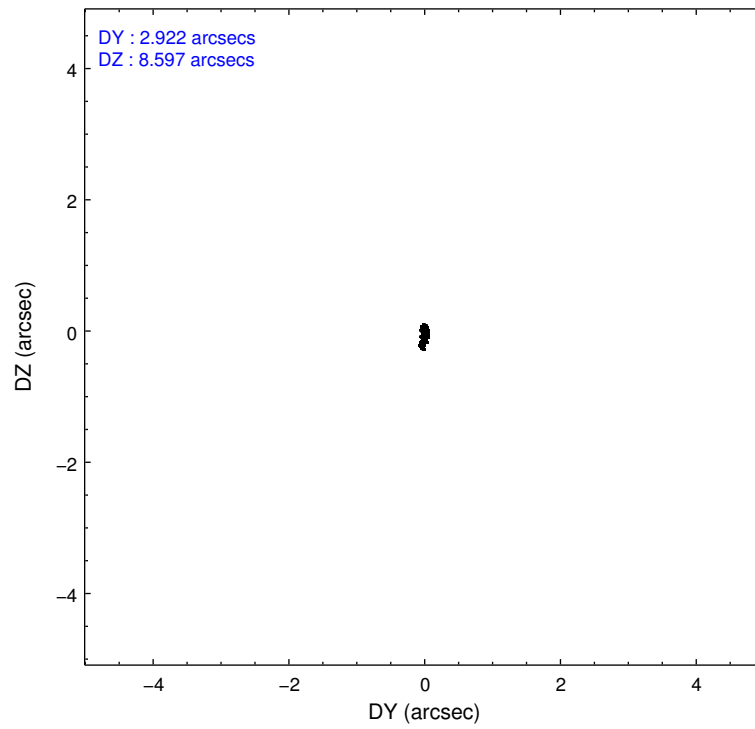
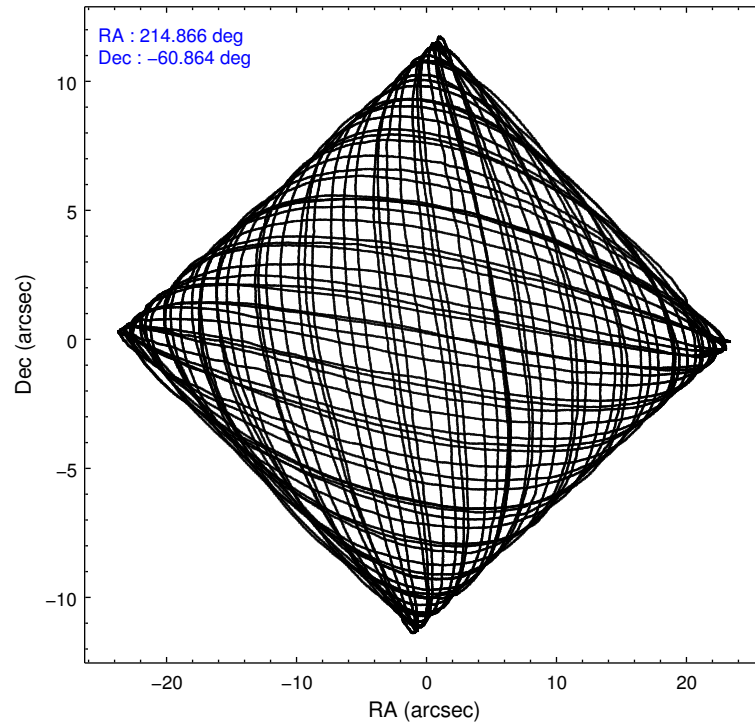
### 2.1.4 Events

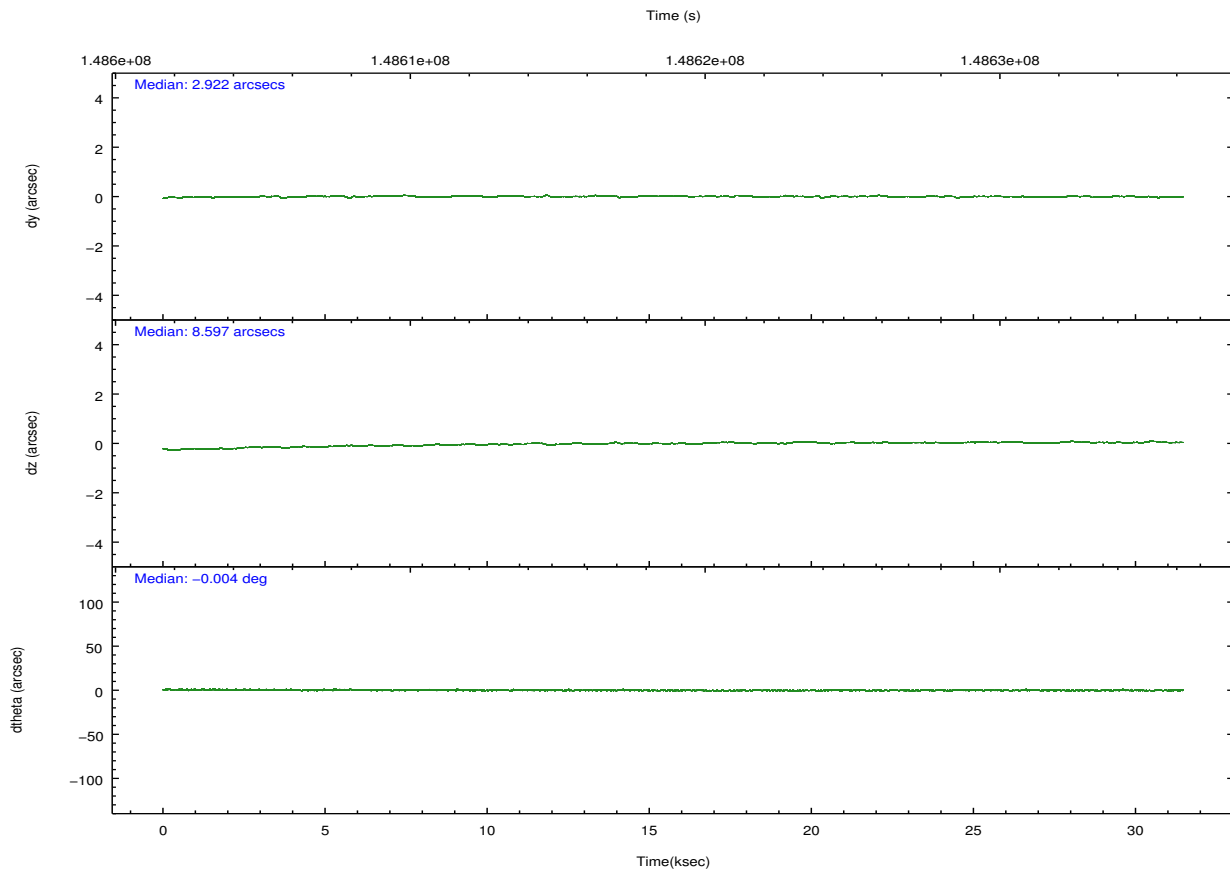
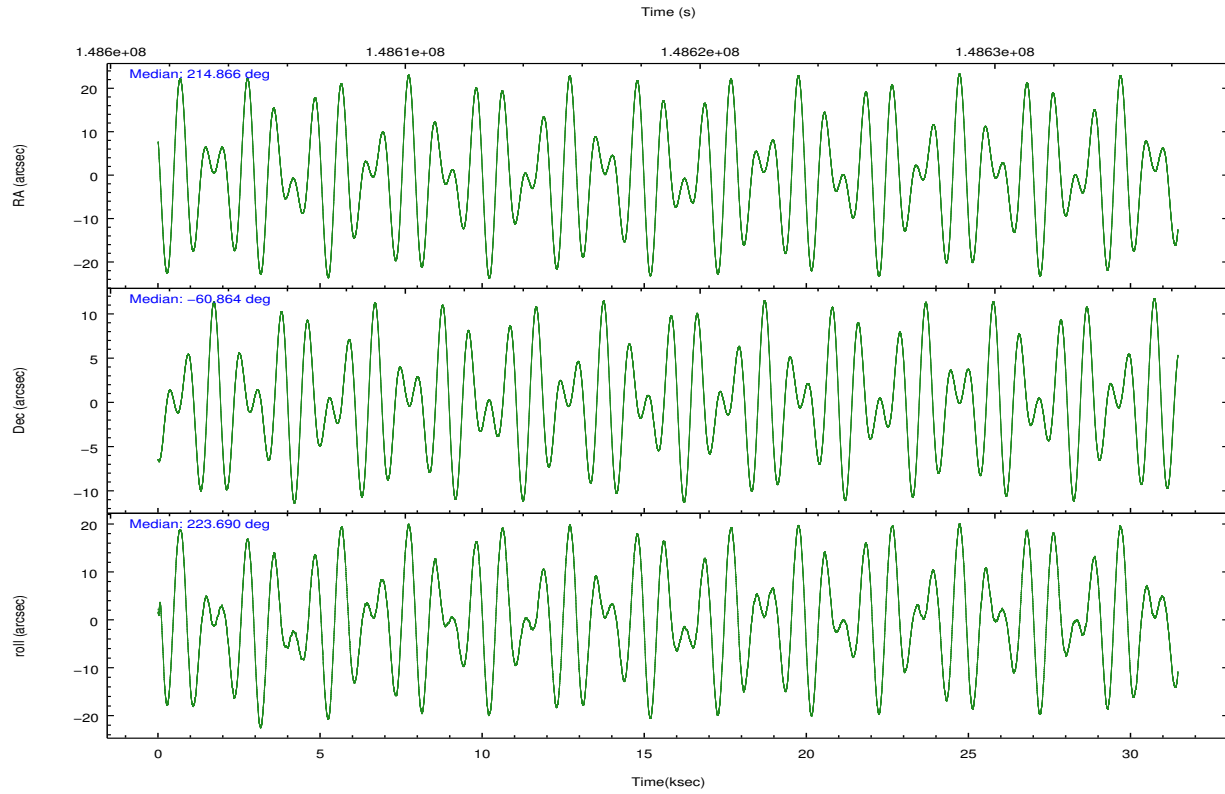
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	40133	42342	215886	49859	128280	81973	grade 0 events	4879	4666	62486	4986	10304	12993
rejected events	6764	7609	18246	8225	21697	11430		12%	11%	28%	10%	8%	15%
rejected %	16%	17%	8%	16%	16%	13%	grade 1 events	179	148	331	127	317	297
								0%	0%	0%	0%	0%	0%
							grade 2 events	12986	12800	51769	18575	26323	22513
								32%	30%	23%	37%	20%	27%
							grade 3 events	4433	5436	3960	4656	7968	8150
								11%	12%	1%	9%	6%	9%
							grade 4 events	4429	4556	3780	4527	7820	7905
								11%	10%	1%	9%	6%	9%
							grade 5 events	6576	7453	17881	8094	21349	11126
								16%	17%	8%	16%	16%	13%
							grade 6 events	6651	7283	75679	8894	54199	18989
								16%	17%	35%	17%	42%	23%
							grade 7 events	0	0	0	0	0	0
								0%	0%	0%	0%	0%	0%

## 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	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	214.881753	214.8667180868525	Subarray requested	NONE	NONE
[deg] Pointing Dec	-60.837446	-60.86369790581415	Alternating exposures requested	N	N
[deg] Pointing Roll	223.553309	223.6968066927766	[s] Primary exposure time	0.000000	0
[deg] Roll angle	220.000000	220.000000			
[deg] Roll tolerance	10.000000	10.000000			
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)	148604546.184000	148603000.72373			
Observation start date	2002-09-16T23:01:22	2002-09-16T22:36:40			
[s] Observation end time (MET)	148634646.184000	148636228.15011			
Observation end date	2002-09-17T07:23:02	2002-09-17T07:50:28			
Read mode	CONTINUOUS	CONTINUOUS			

## 2.3 Aspect



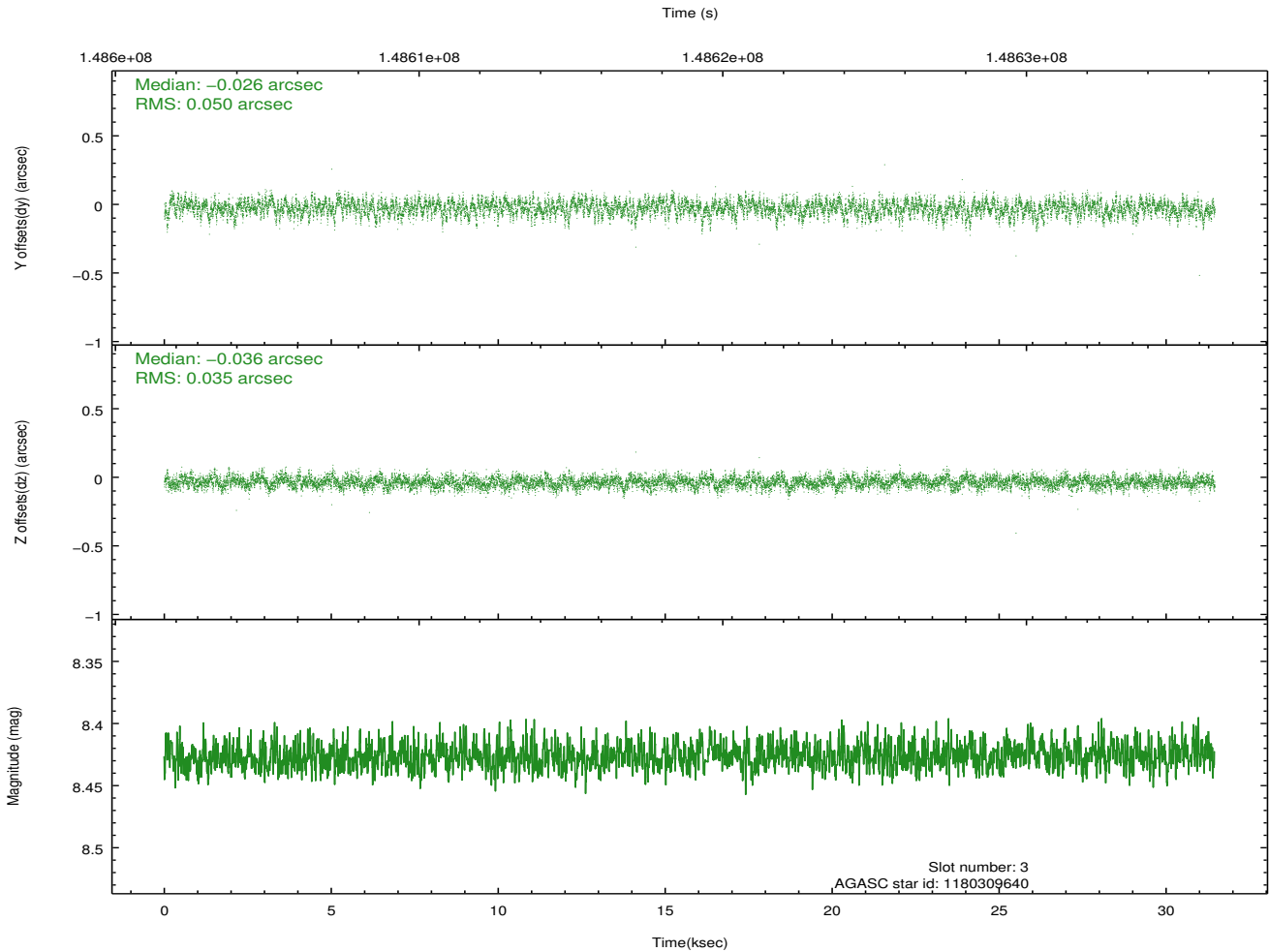
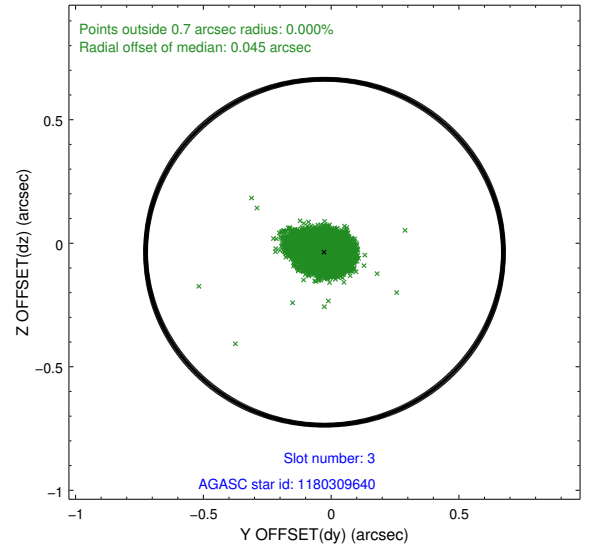
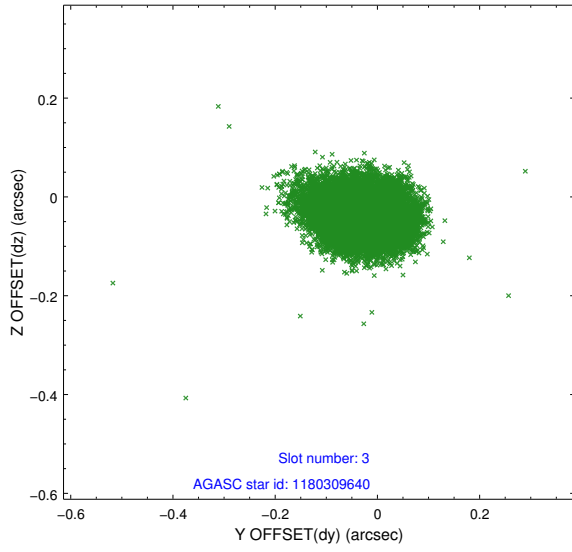


### Slot Statistics

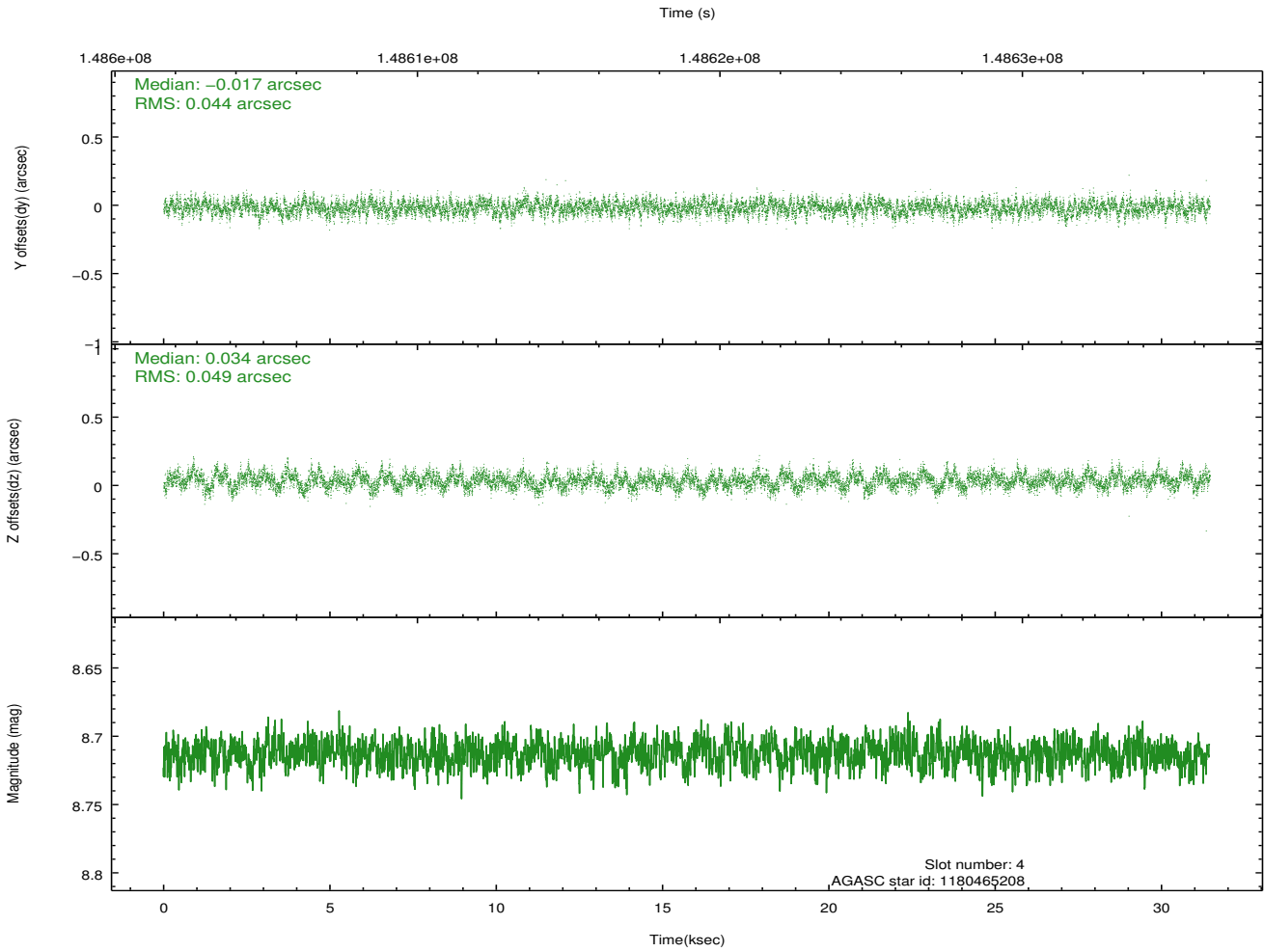
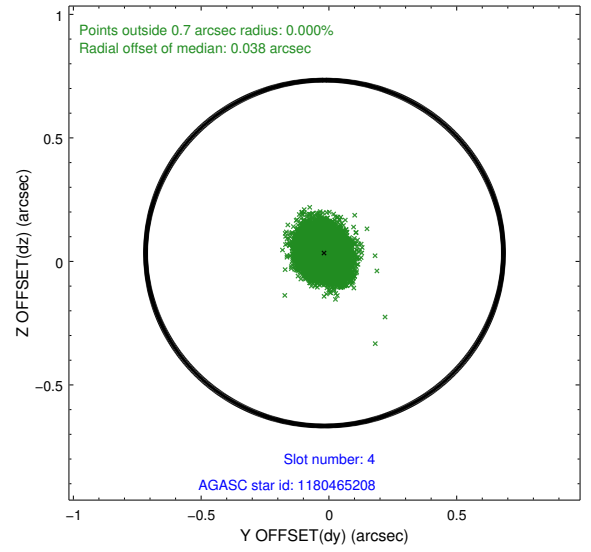
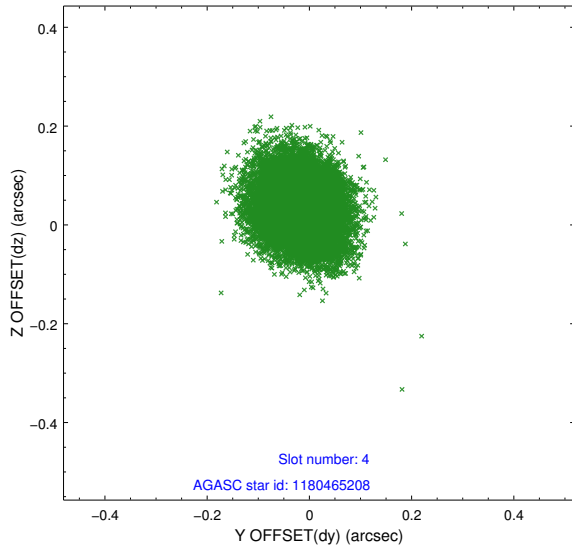
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	7672	-0.015	-0.007	0.007	0.011	0.000000	0.000000	-755.59	-1729.78
1	FID	ACIS-S-4	7.20	7672	-0.009	0.009	0.005	0.010	0.000000	0.000000	2157.68	178.64
2	FID	ACIS-S-5	7.24	7671	-0.007	0.007	0.007	0.011	0.000000	0.000000	-1808.33	172.40
3	GUIDE	1180309640	8.43	15341	-0.026	-0.036	0.064	0.106	213.569198	-60.971155	2009.08	-1213.51
4	GUIDE	1180465208	8.71	15339	-0.017	0.034	0.070	0.114	215.460543	-60.837299	-733.38	702.96
5	GUIDE	1180309912	8.94	15335	0.110	-0.064	0.093	0.147	213.452545	-60.931679	2064.13	-1455.92
6	GUIDE	1180463728	9.28	15335	-0.003	0.096	0.081	0.133	215.636137	-60.878148	-851.93	1022.91
7	GUIDE	1180469776	9.40	15330	-0.063	-0.028	0.108	0.170	216.482615	-60.942296	-1745.41	2227.32

## 2.4 Star Slots

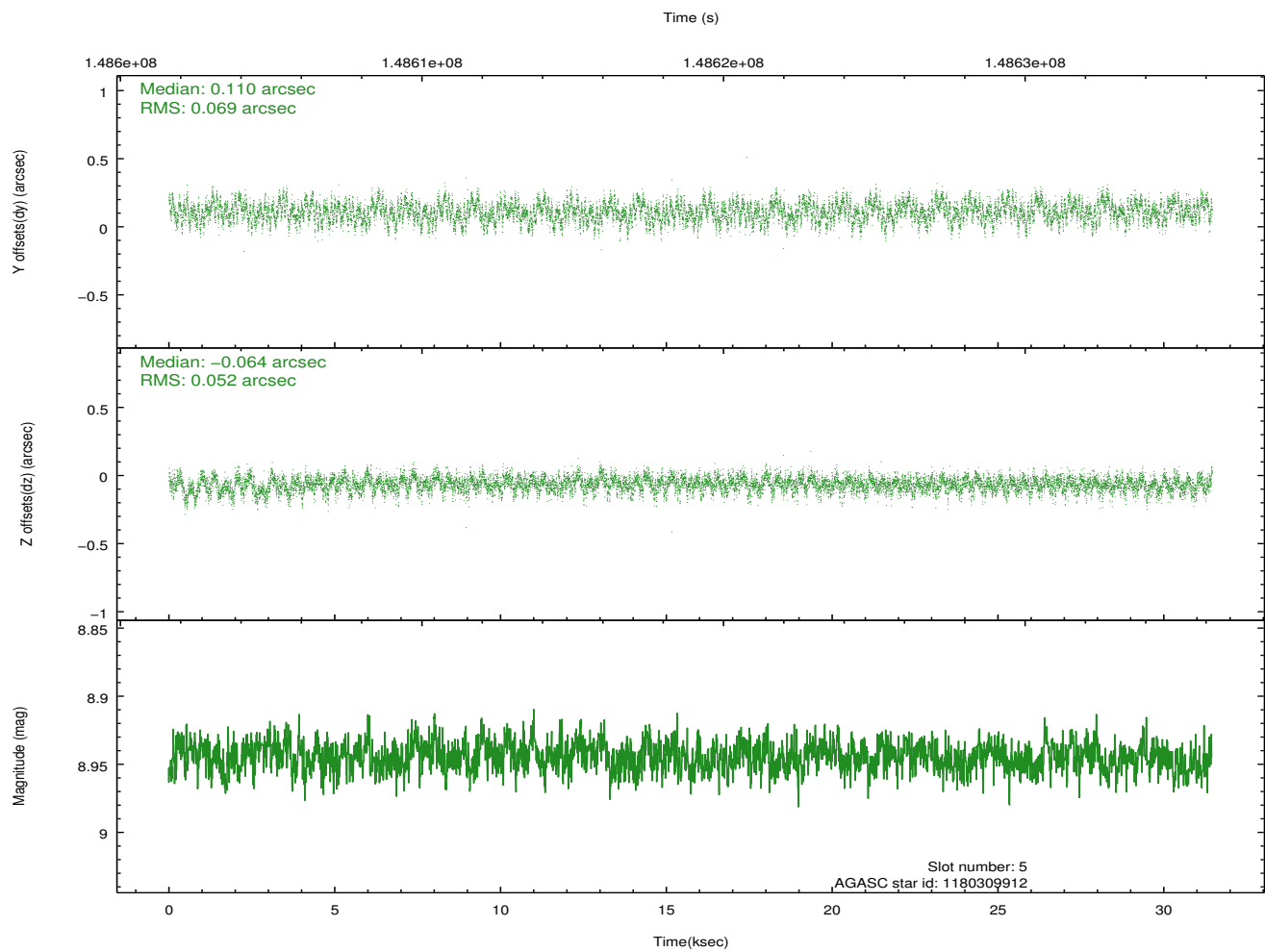
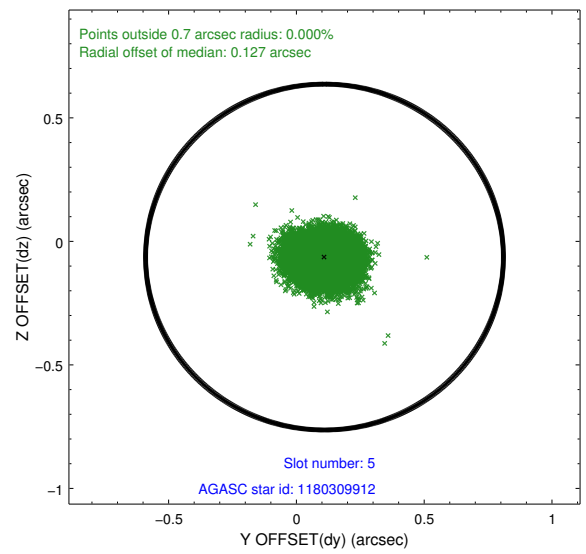
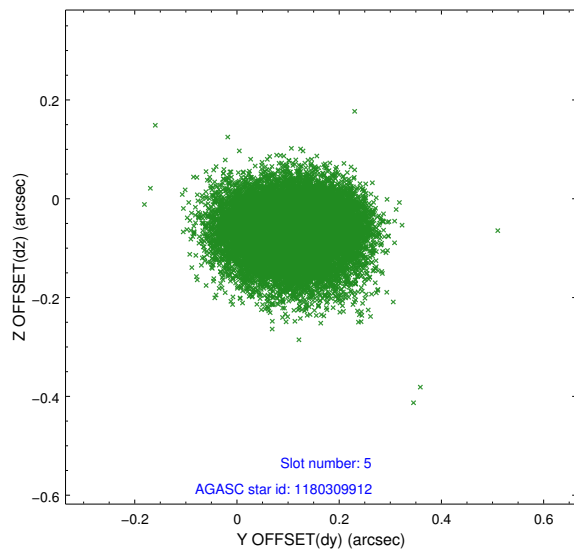
### 2.4.1 Slot 3



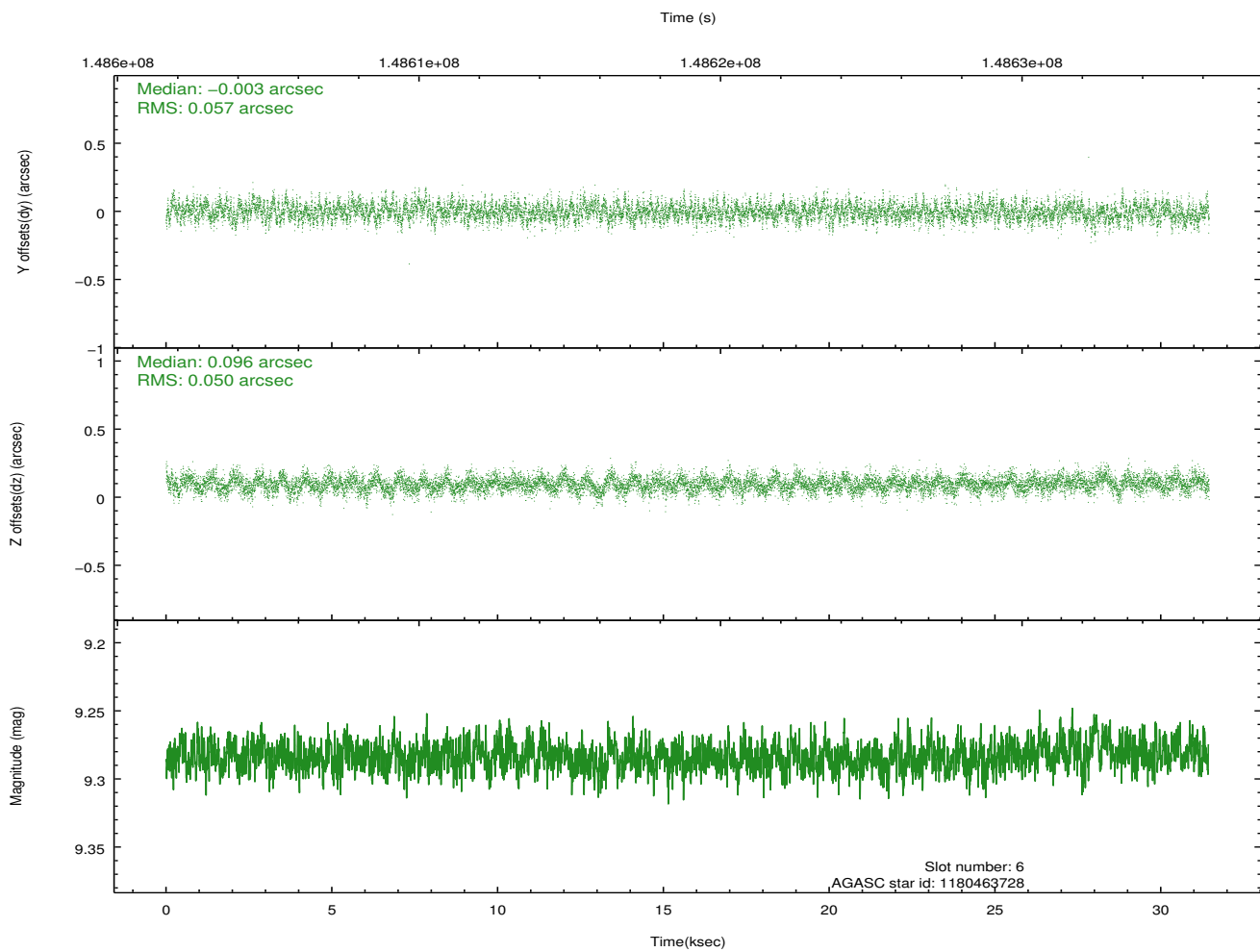
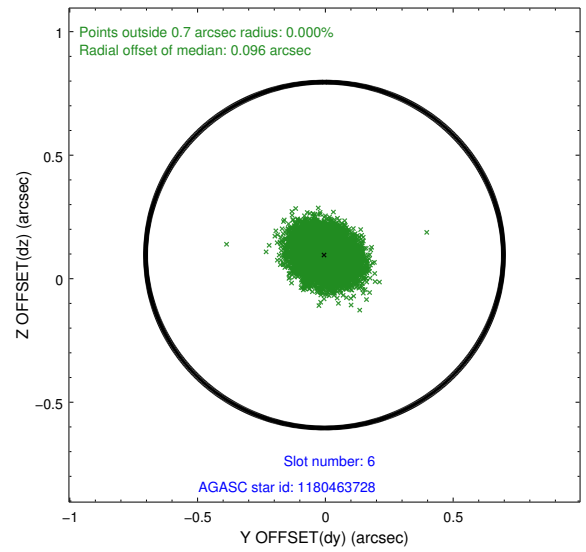
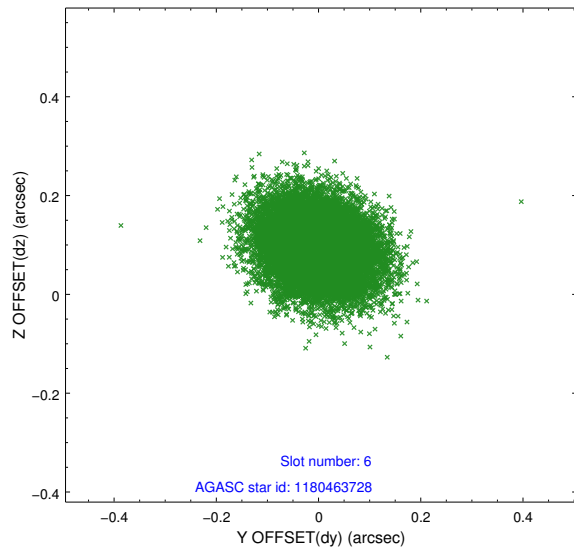
### 2.4.2 Slot 4



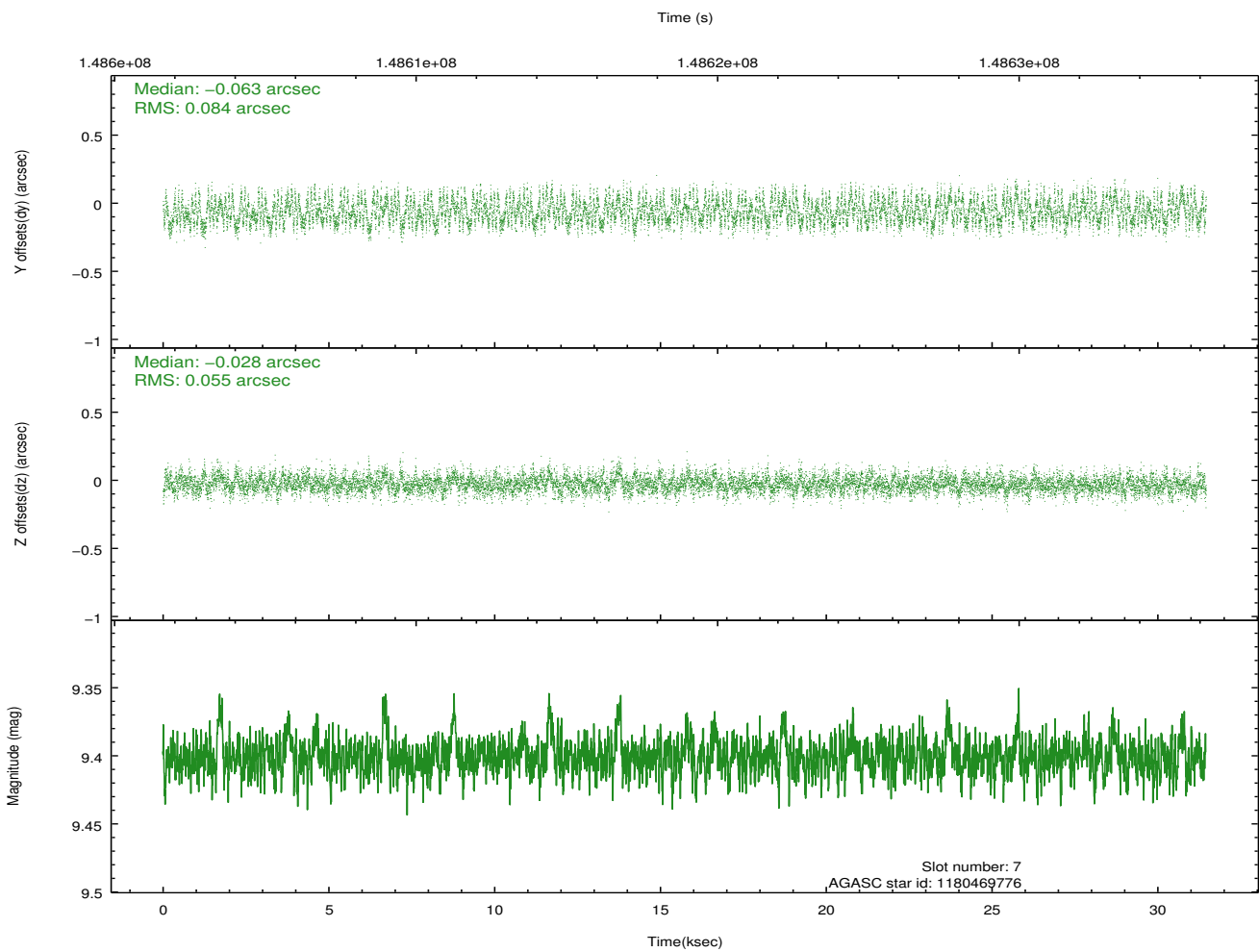
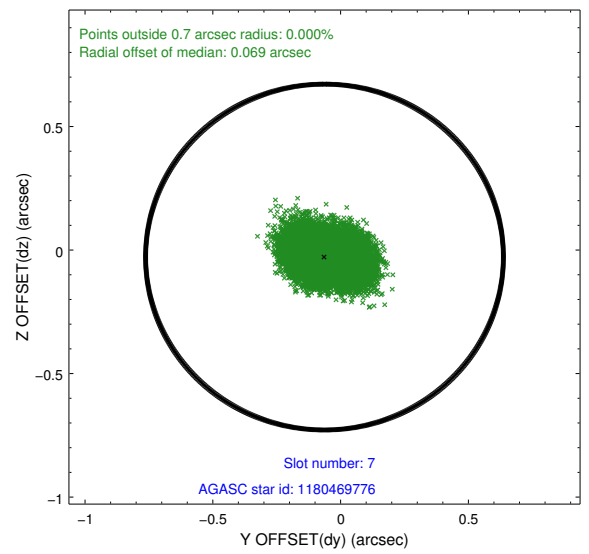
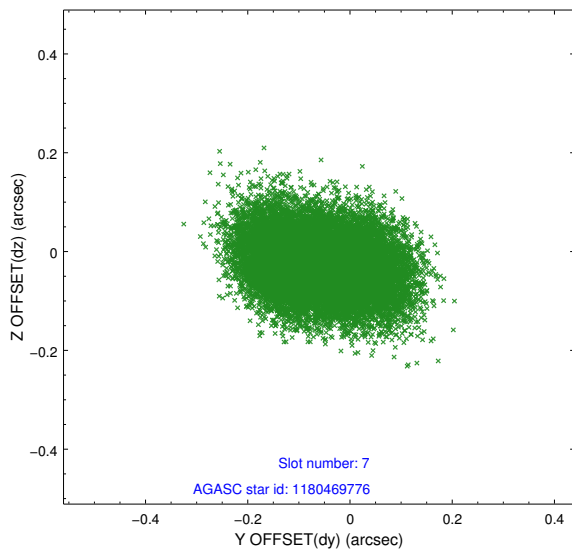
### 2.4.3 Slot 5



## 2.4.4 Slot 6

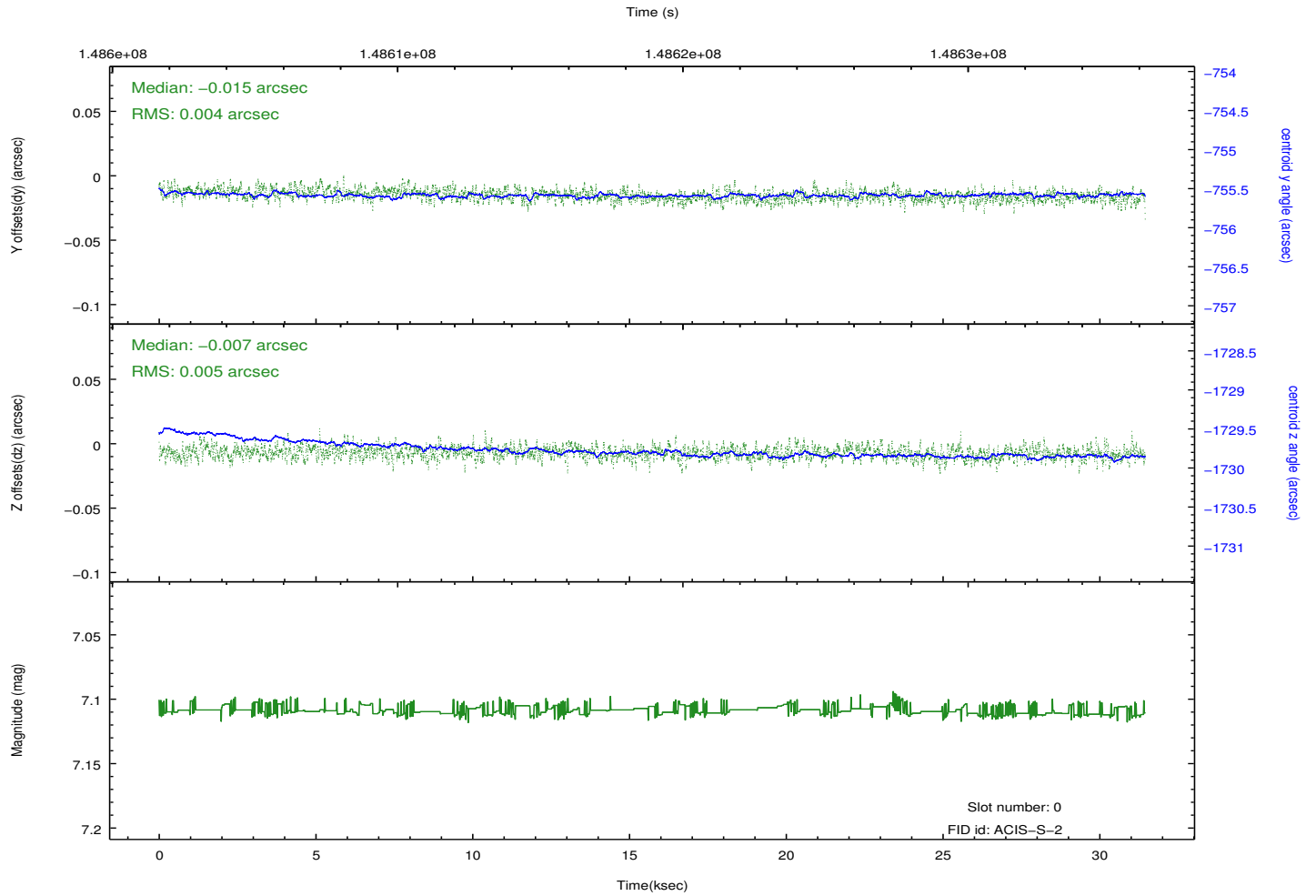
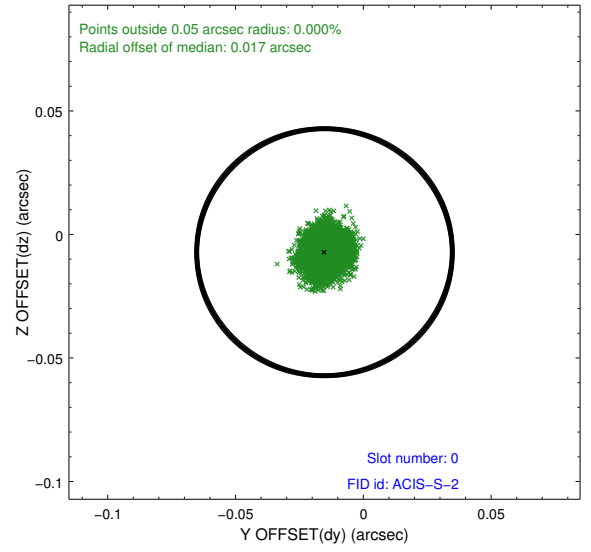
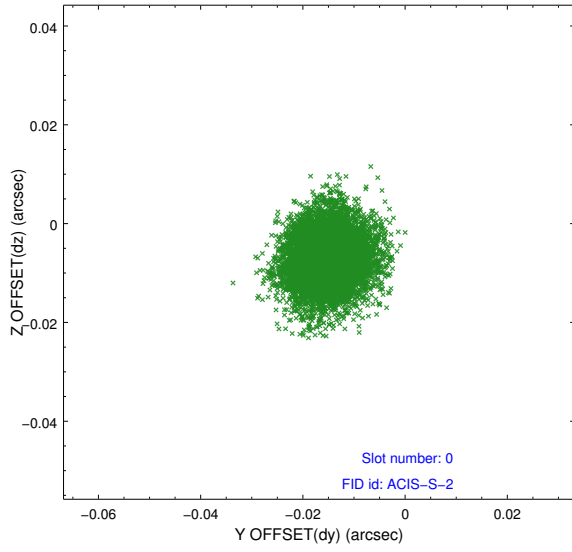


## 2.4.5 Slot 7

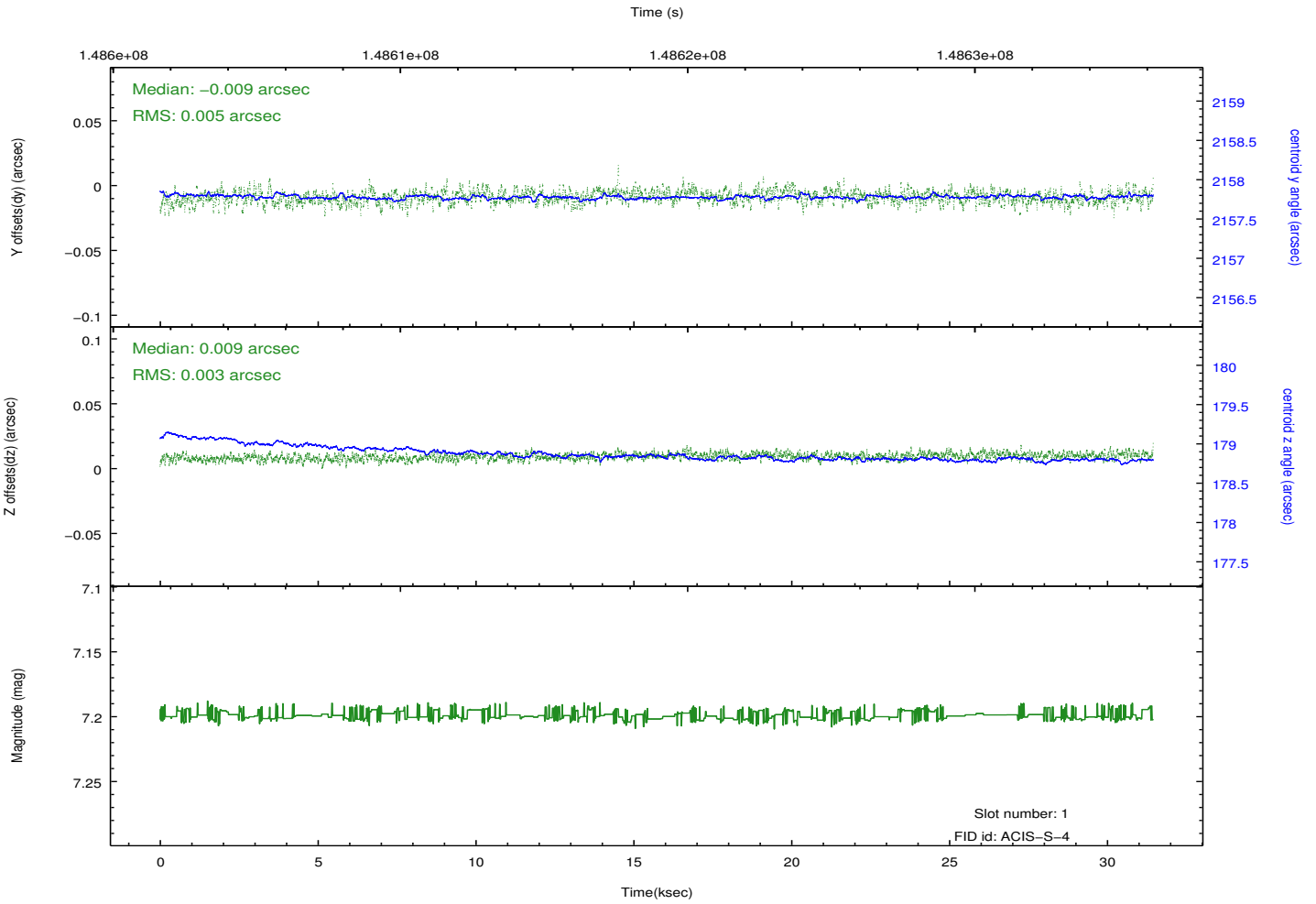
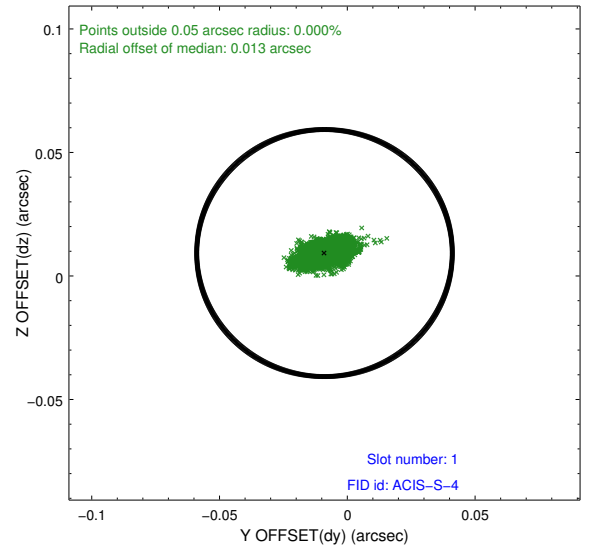
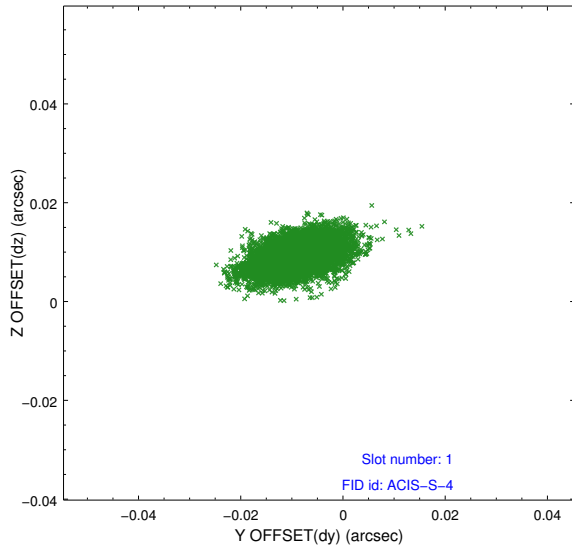


## 2.5 FID Slots

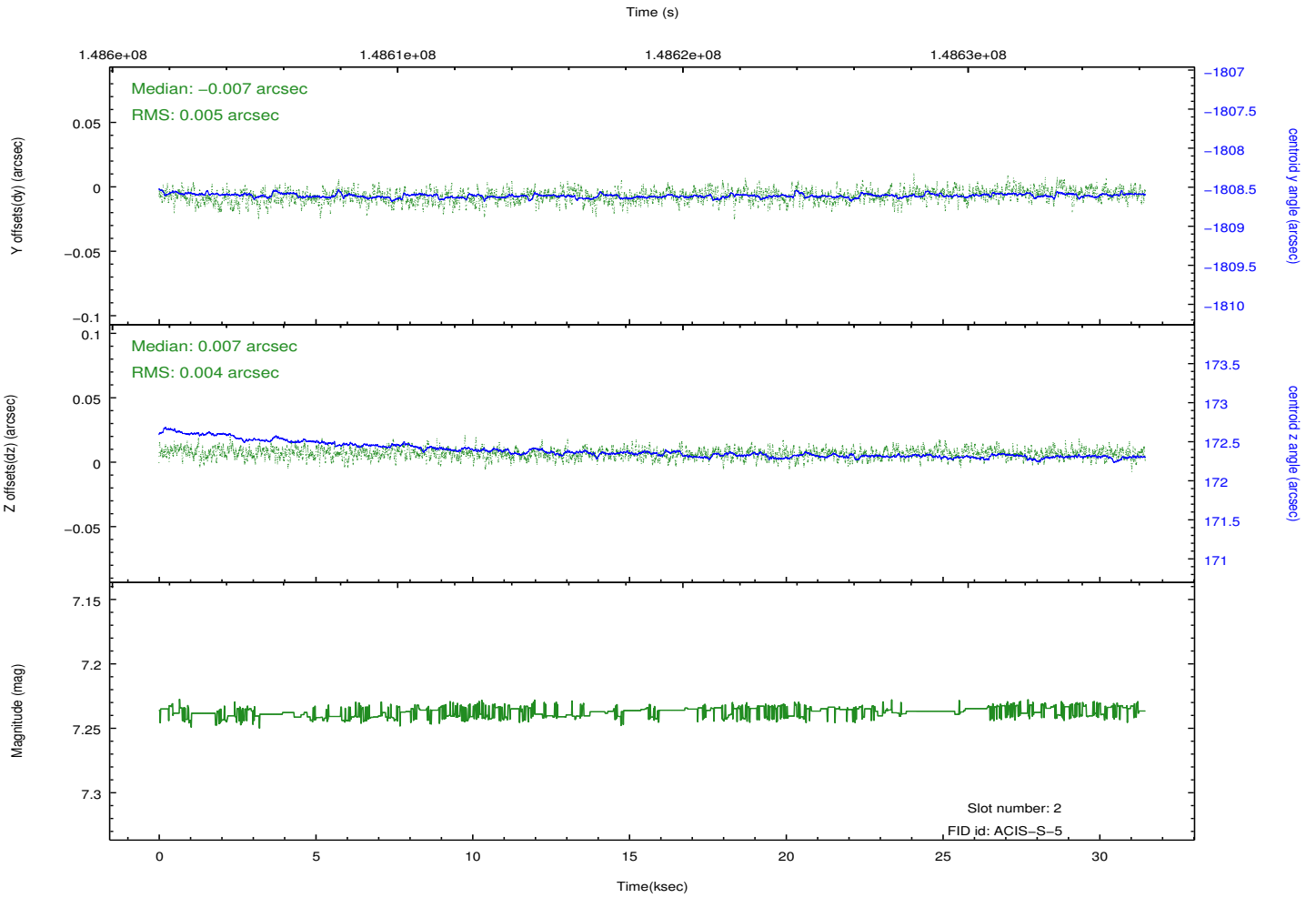
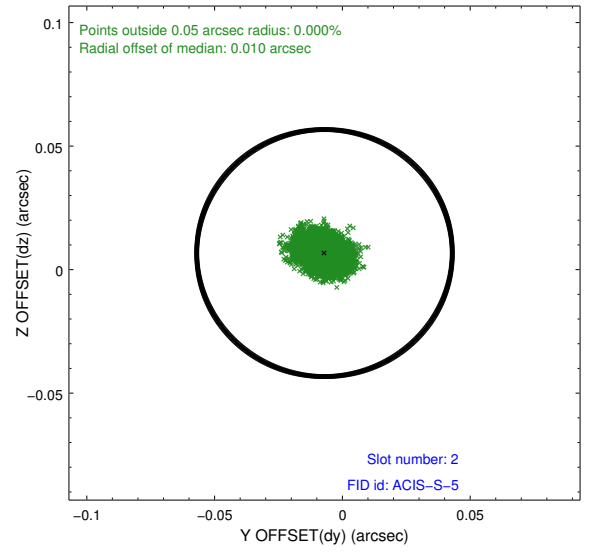
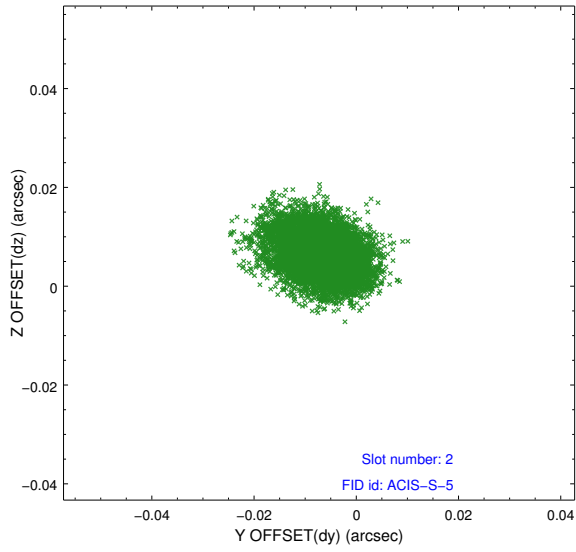
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.10.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.159

## A.2 Comments