

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 17635 - L2 Version 1  
Chandra X-Ray Center

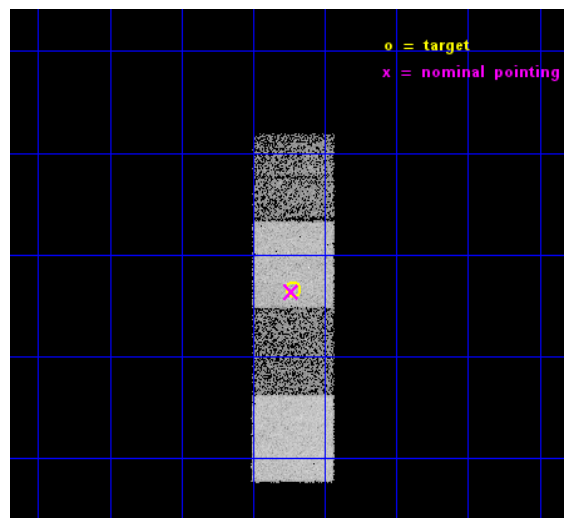
L2 Processing Date : Mar 23 2015

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# 1 Front

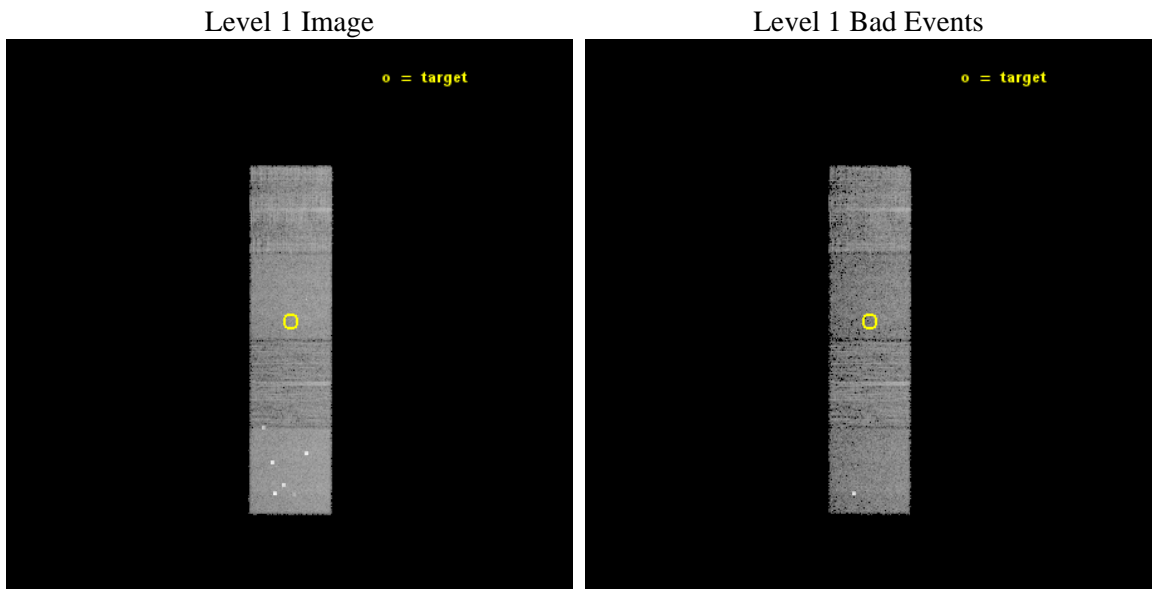
seq_num	703087	Sequence number
obs_id	17635	Observation id
title	X-ray observations of the nuclear activity in strongly lensed star forming galaxies at redshift >1.5	Proposal title
observer	Dr Marcella Massardi	Principal investigator
object	HATLASJ091043.0-000322	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.679583	Observer's specified target RA [deg]
dec_targ	-0.056361	Observer's specified target Dec [deg]
ra_nom	137.68301646482	Nominal RA [deg]
dec_nom	-0.060566256592404	Nominal Dec [deg]
roll_nom	270.15663597277	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9861.1000759602	Sum of GTIs [s]
livetime	9732.2575438315	Livetime [s]
ontime5	9861.1000759602	Sum of GTIs [s]
ontime6	9861.1000759602	Sum of GTIs [s]
ontime7	9861.1000759602	Sum of GTIs [s]
ontime8	9857.958995223	Sum of GTIs [s]
l2events	66960	Number of level 2 events



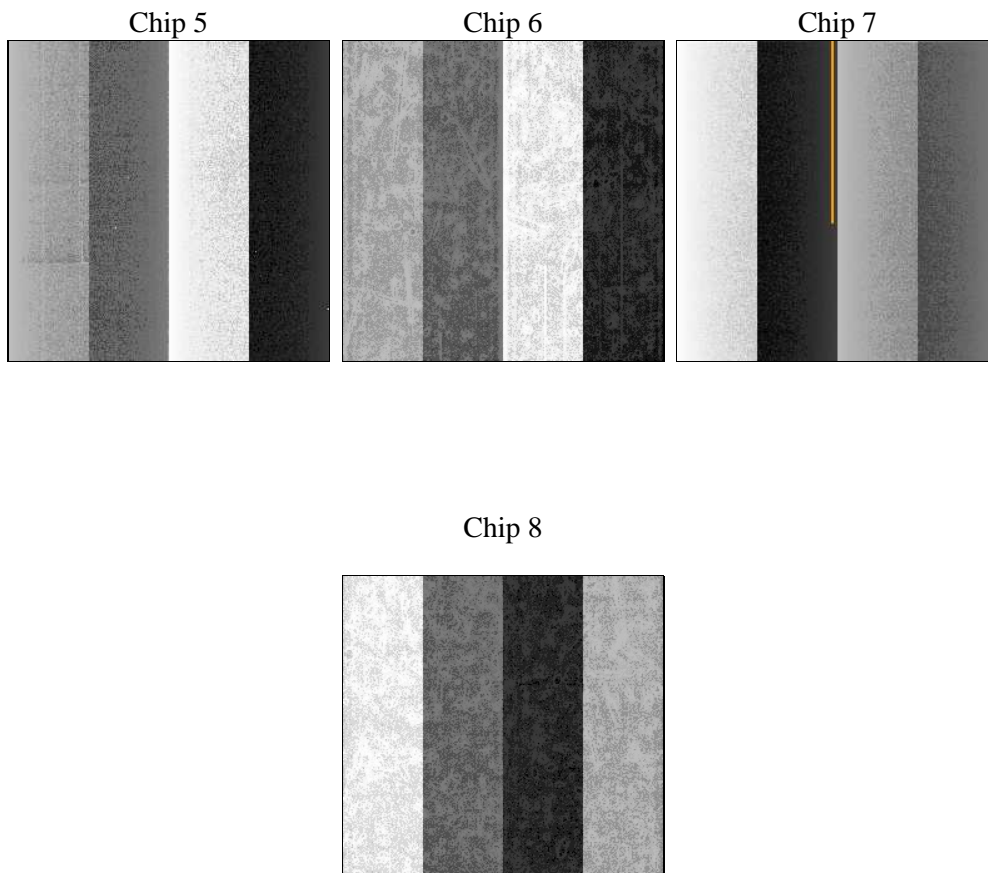
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9800.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	9861.1000759602	Sum of GTIs [s]
caldbver	4.6.7	&#160	ontime5	9861.1000759602	Sum of GTIs [s]
date	2015-03-23T14:43:01	Date and time of file creation	ontime6	9861.1000759602	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	9861.1000759602	Sum of GTIs [s]
			ontime8	9857.958995223	Sum of GTIs [s]
			l1events	247210	Number of level 1 events

### 2.1.4 Events

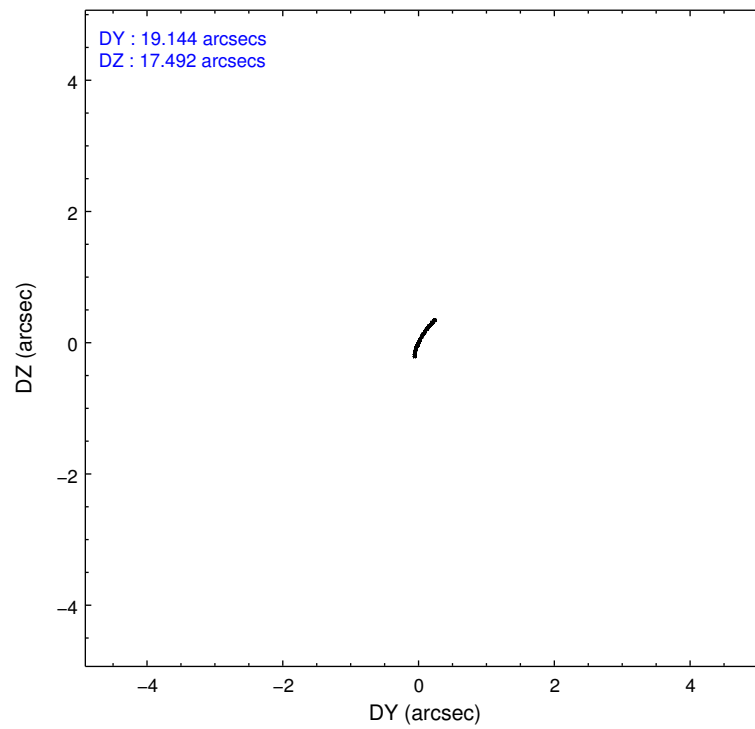
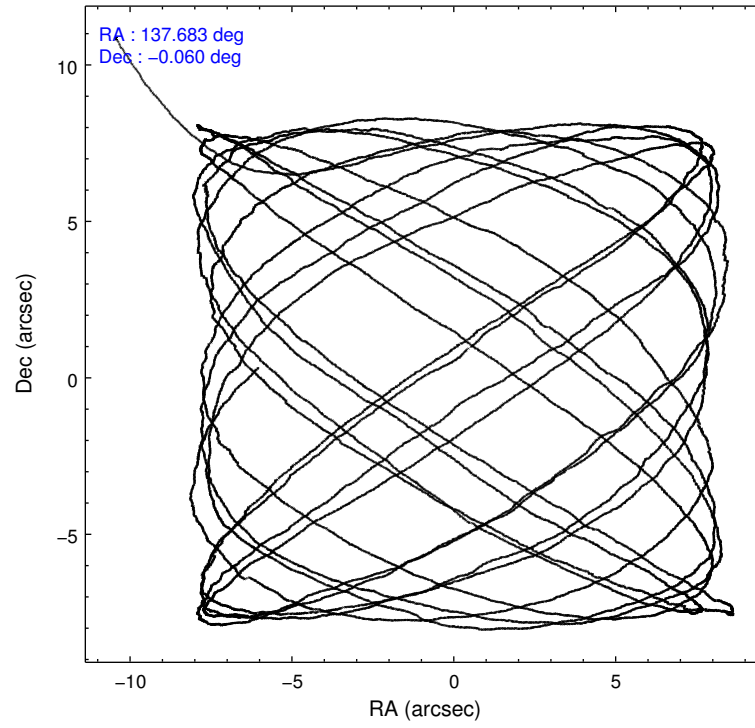
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	82779	45347	59602	59482
rejected events	39914	40117	34052	44380
rejected %	48%	88%	57%	74%

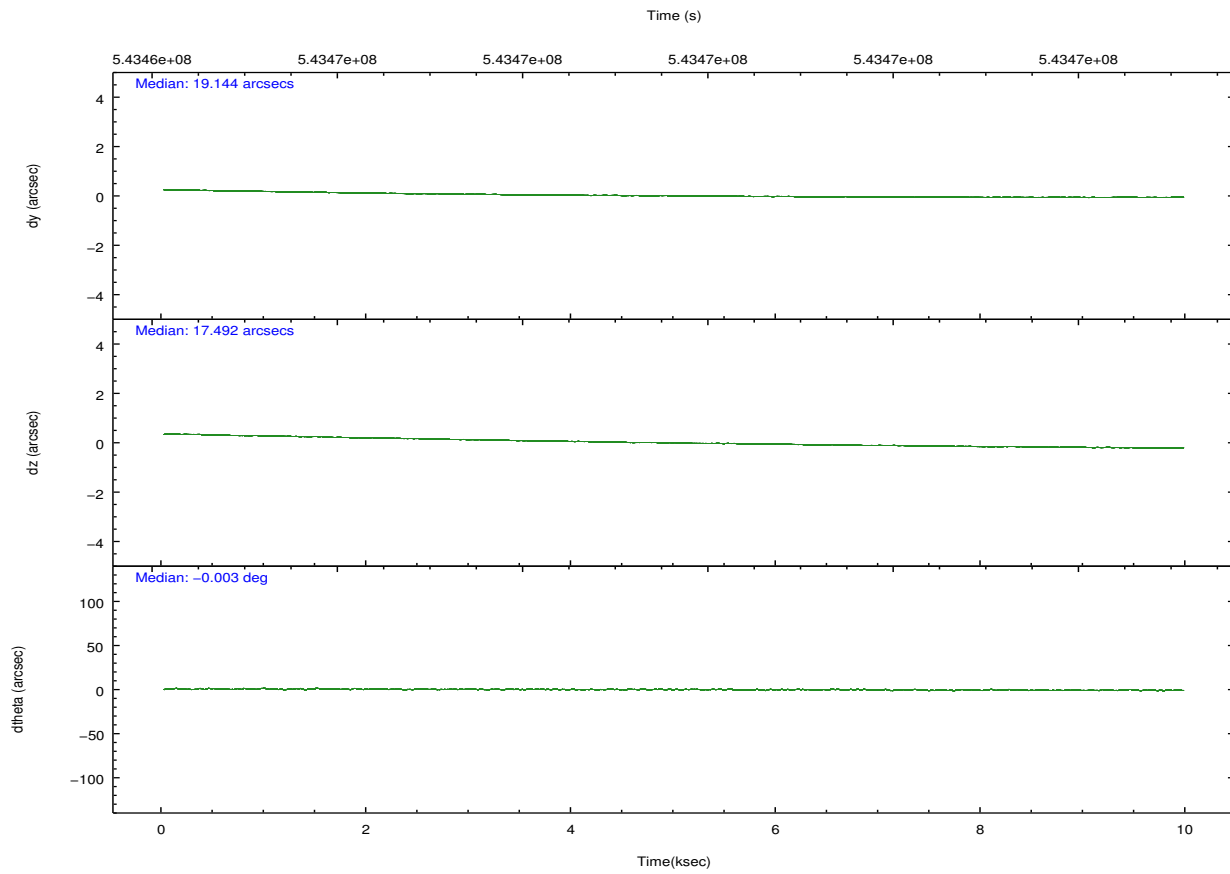
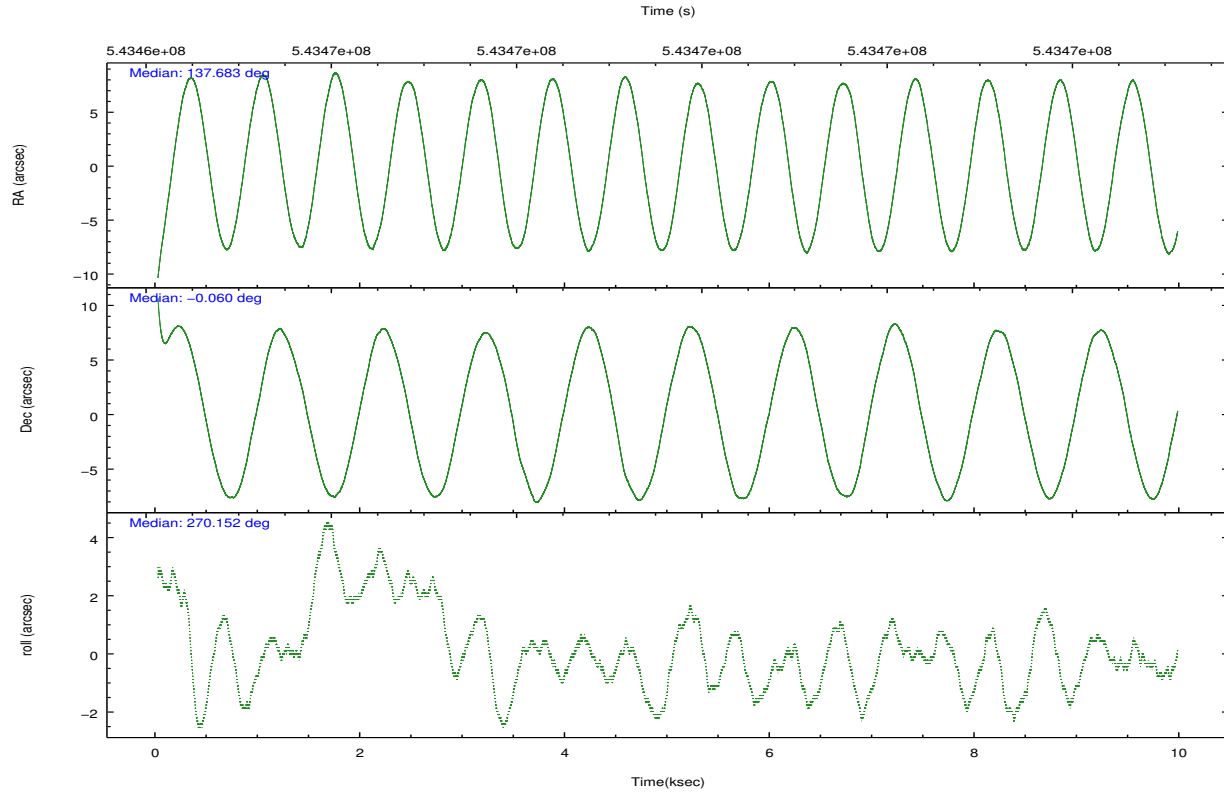
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	10010	1767	2224	3930
	12%	3%	3%	6%
grade 1 events	167	15	72	43
	0%	0%	0%	0%
grade 2 events	11692	1186	5186	3810
	14%	2%	8%	6%
grade 3 events	1270	556	2056	1521
	1%	1%	3%	2%
grade 4 events	1053	517	2048	1445
	1%	1%	3%	2%
grade 5 events	5703	2175	6010	3428
	6%	4%	10%	5%
grade 6 events	18857	1206	14048	4397
	22%	2%	23%	7%
grade 7 events	34027	37925	27958	40908
	41%	83%	46%	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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	137.668915	137.6830164648154	Subarray requested	NONE	NONE
[deg] Pointing Dec	-0.037024	-0.06056625659240431	Alternating exposures requested	N	N
[deg] Pointing Roll	270.000002	270.1566359727657	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	543464829.184000	543463346.05591			
Observation start date	2015-03-23T02:26:02	2015-03-23T02:02:26			
[s] Observation end time (MET)	543474629.184000	543475870.53161			
Observation end date	2015-03-23T05:09:22	2015-03-23T05:31:10			
Read mode	TIMED	TIMED			

## 2.3 Aspect





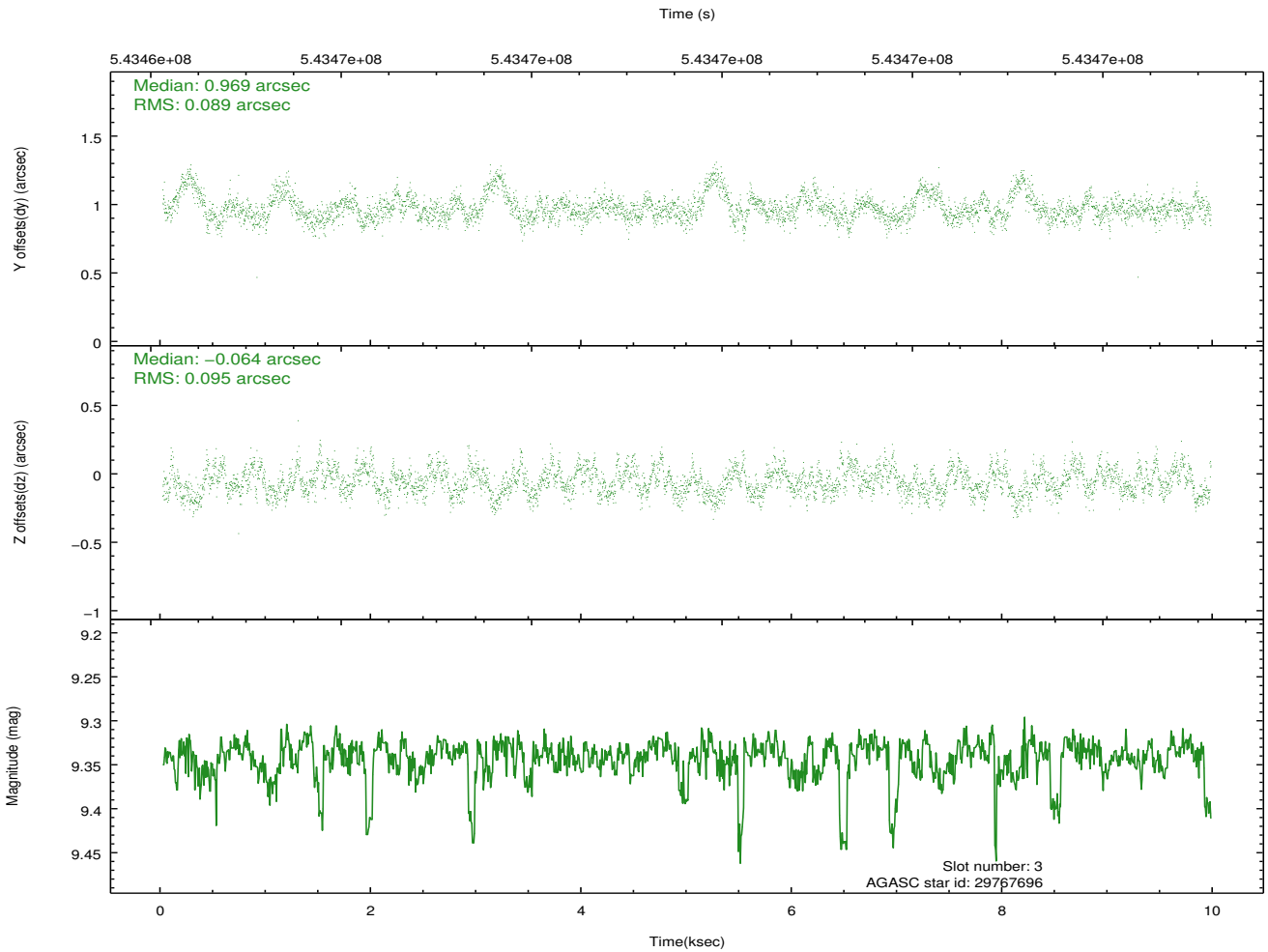
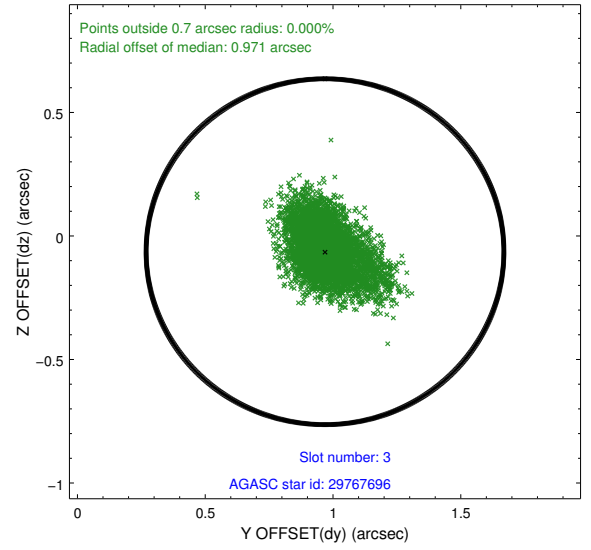
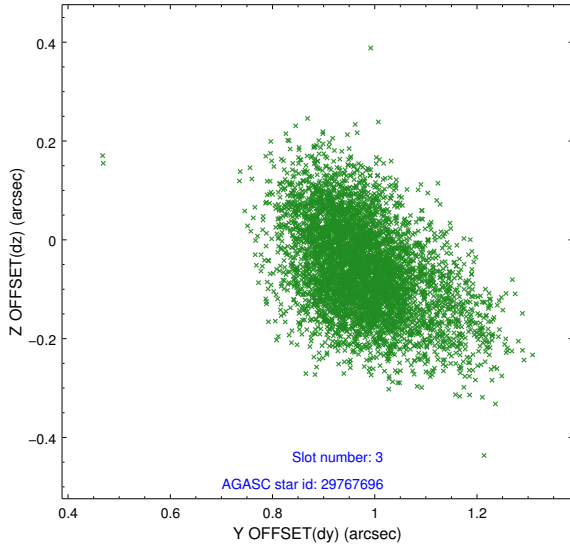
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	2430	-0.123	-0.082	0.010	0.016	0.000000	0.000000	-772.41	-1738.98
1	FID		ACIS-S-4	7.22	2430	0.351	0.081	0.006	0.011	0.000000	0.000000	2141.13	169.07
2	FID		ACIS-S-5	7.24	2430	-0.259	0.009	0.008	0.013	0.000000	0.000000	-1824.68	163.34
3	GUIDE	used	29767696	9.34	4858	0.969	-0.064	0.135	0.233	138.209489	0.322162	-1291.71	1946.18
4	GUIDE	used	29771592	8.43	4860	-0.448	-0.167	0.073	0.123	138.099870	0.425130	-1664.04	1551.82
5	GUIDE	used	639504336	8.95	4857	-0.504	-0.019	0.096	0.155	138.065907	-0.435662	1434.61	1429.74
6	GUIDE	used	639508320	9.36	4859	-0.020	0.230	0.192	0.294	137.148148	-0.283173	887.28	-1874.32
7	GUIDE	used	639508480	8.58	4857	0.014	0.016	0.129	0.192	137.375691	-0.398425	1304.65	-1055.51

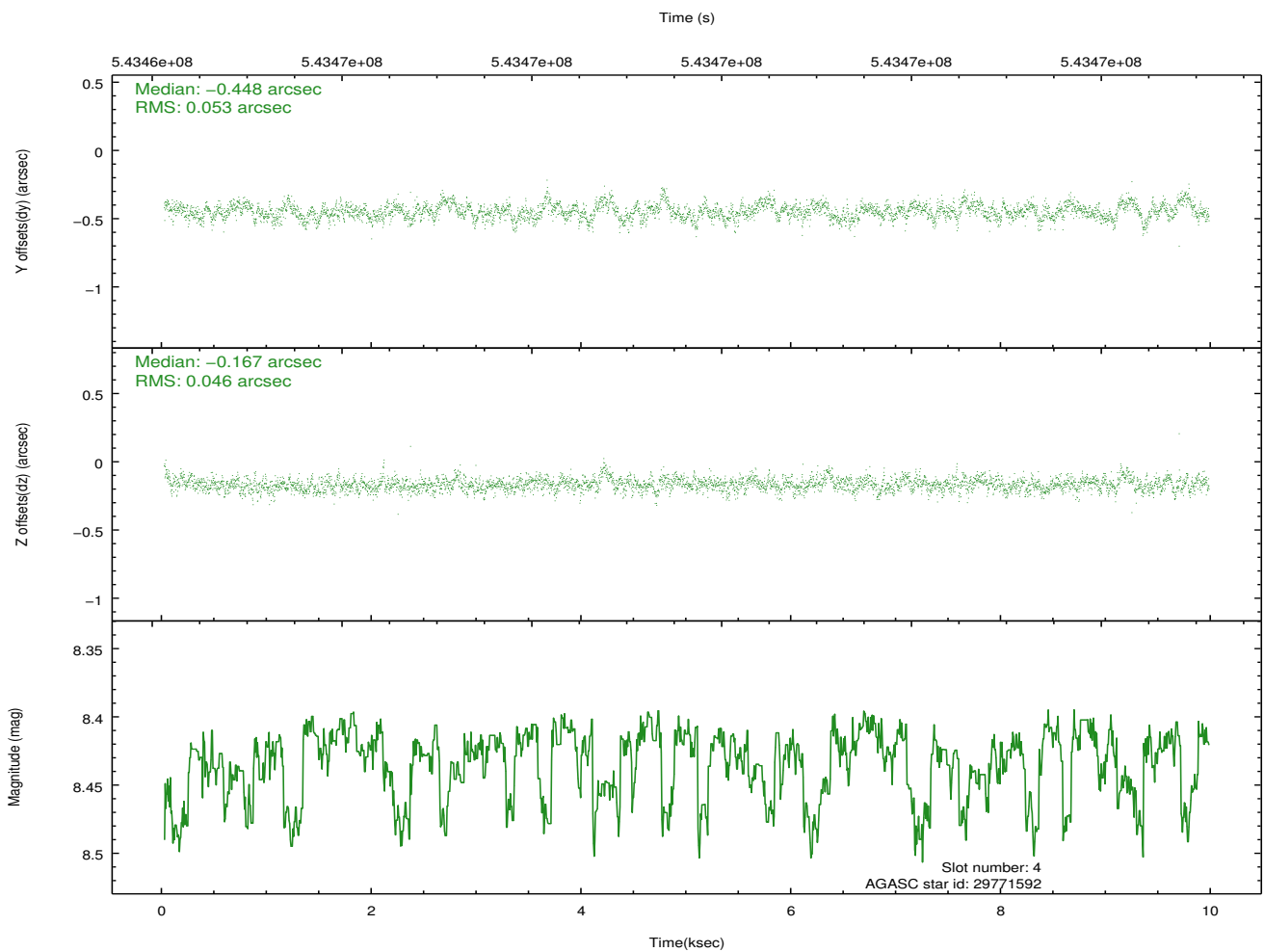
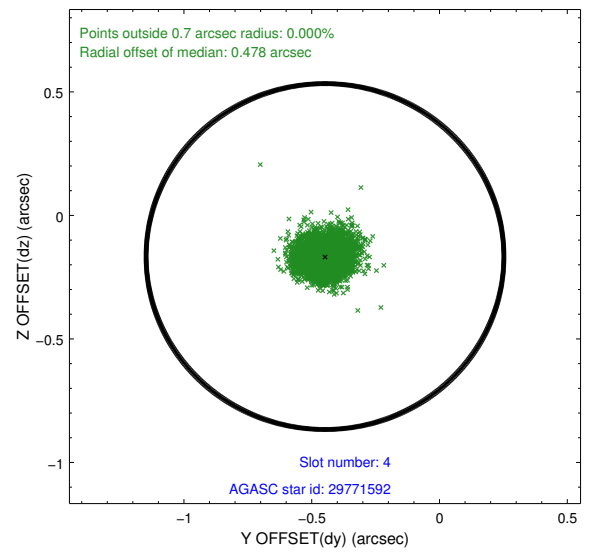
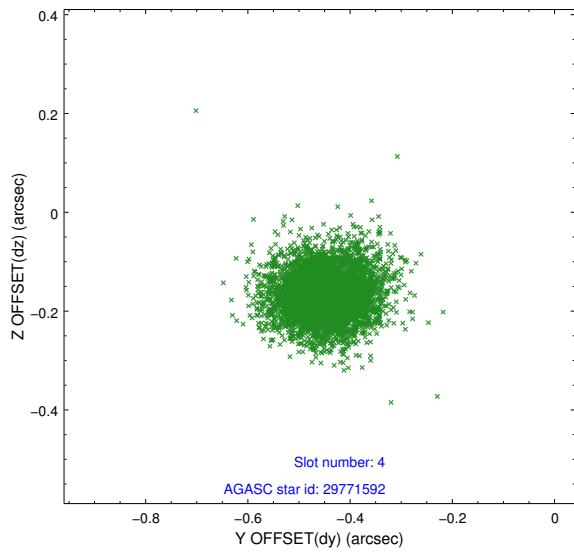
∞

## 2.4 Star Slots

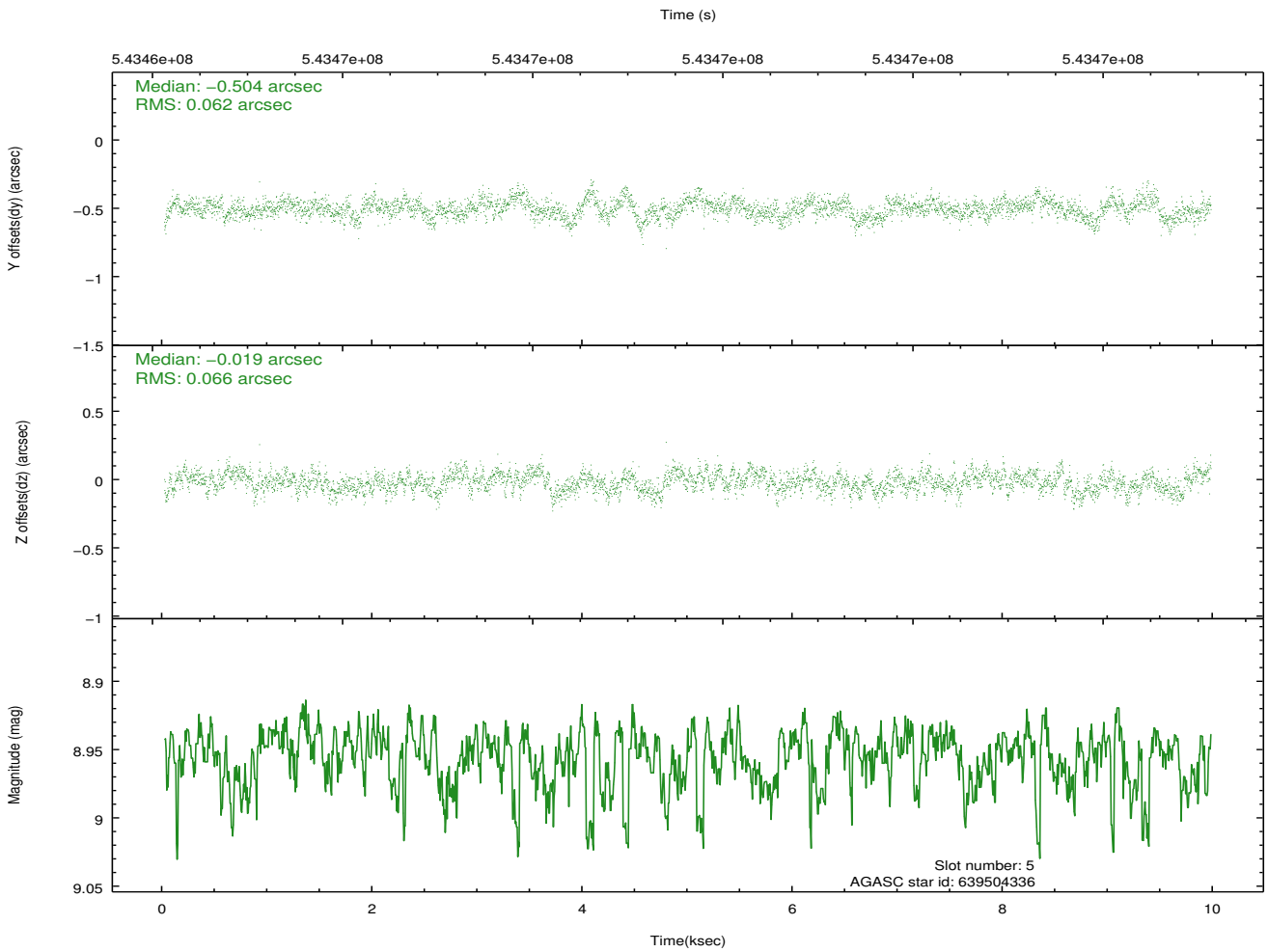
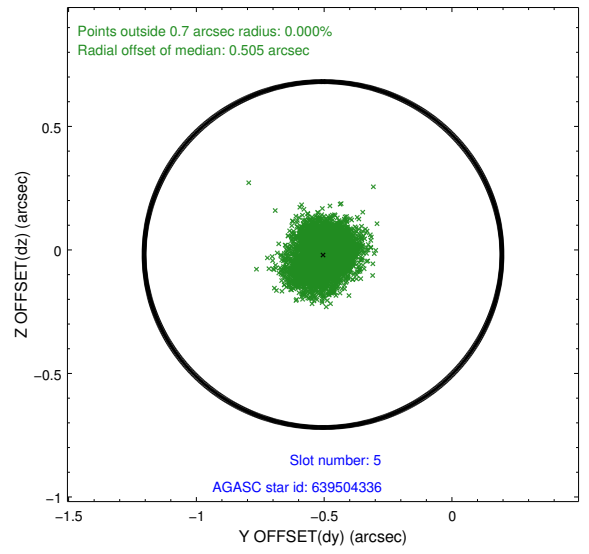
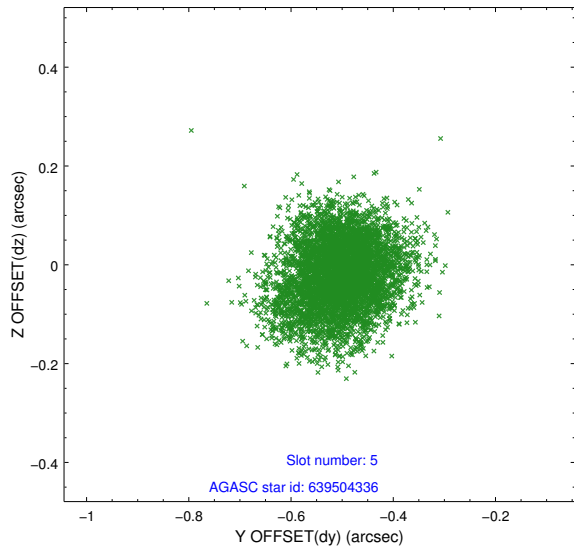
### 2.4.1 Slot 3



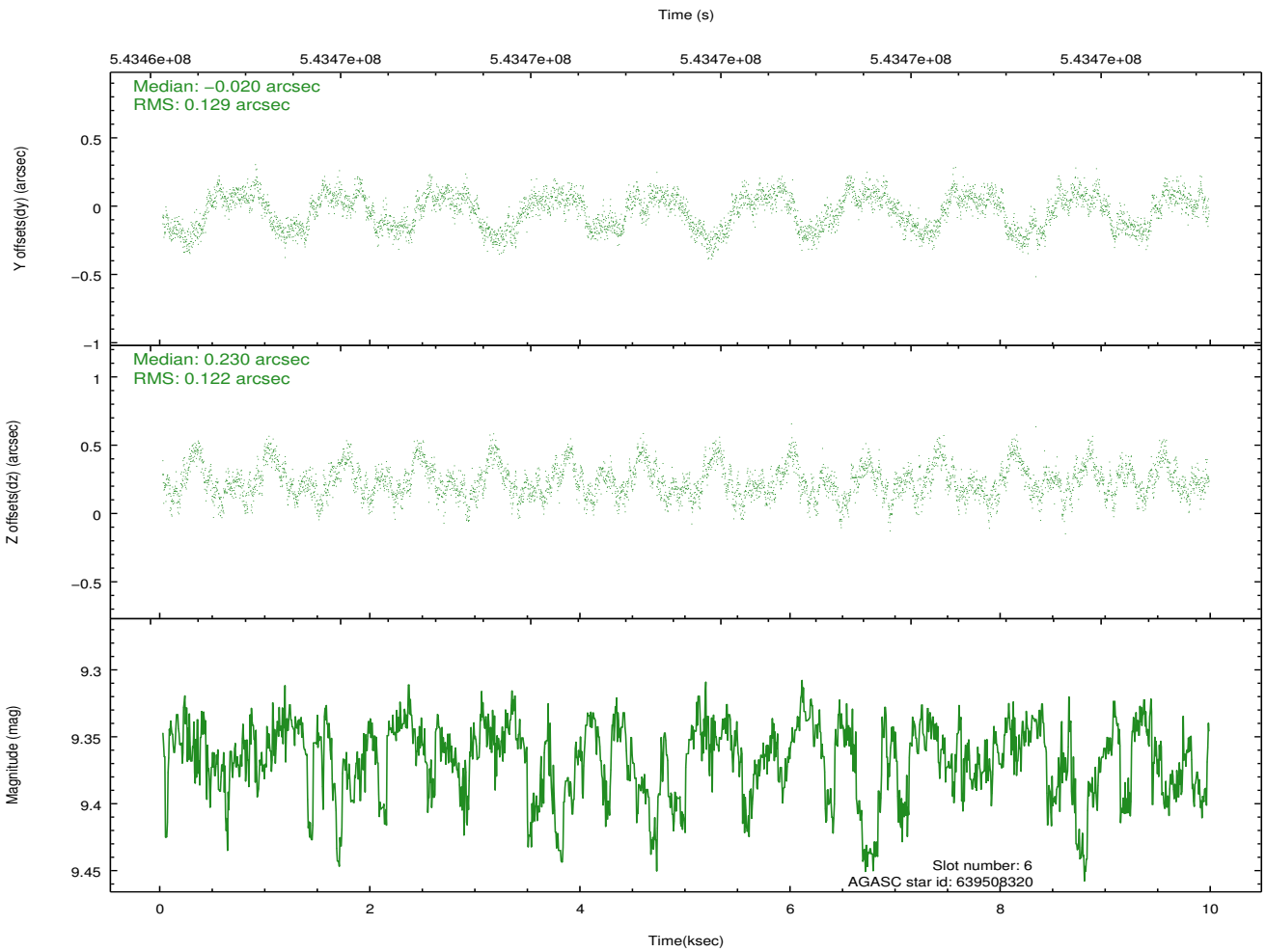
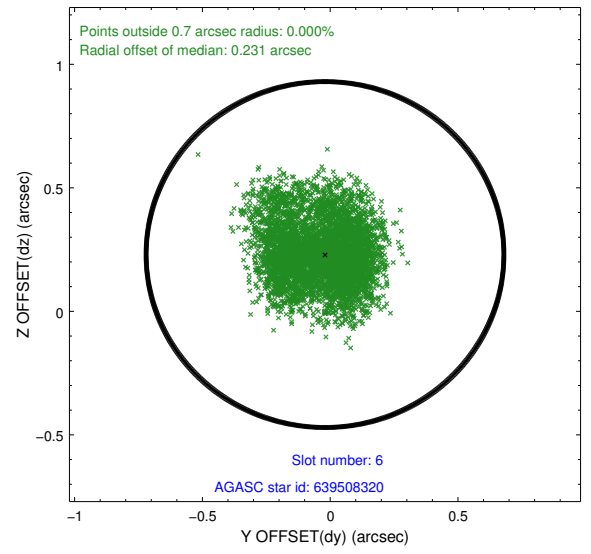
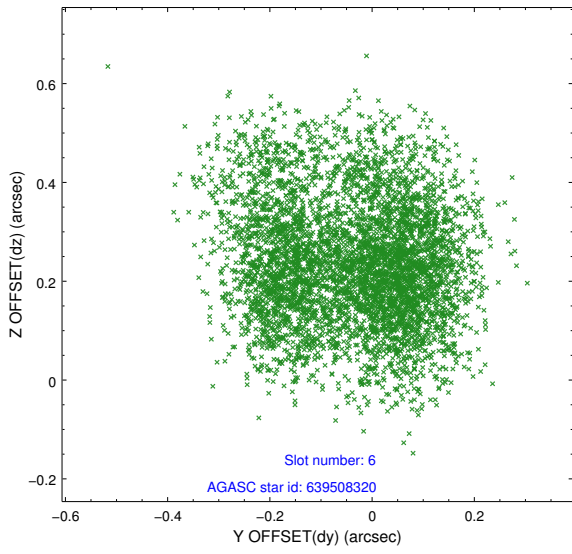
## 2.4.2 Slot 4



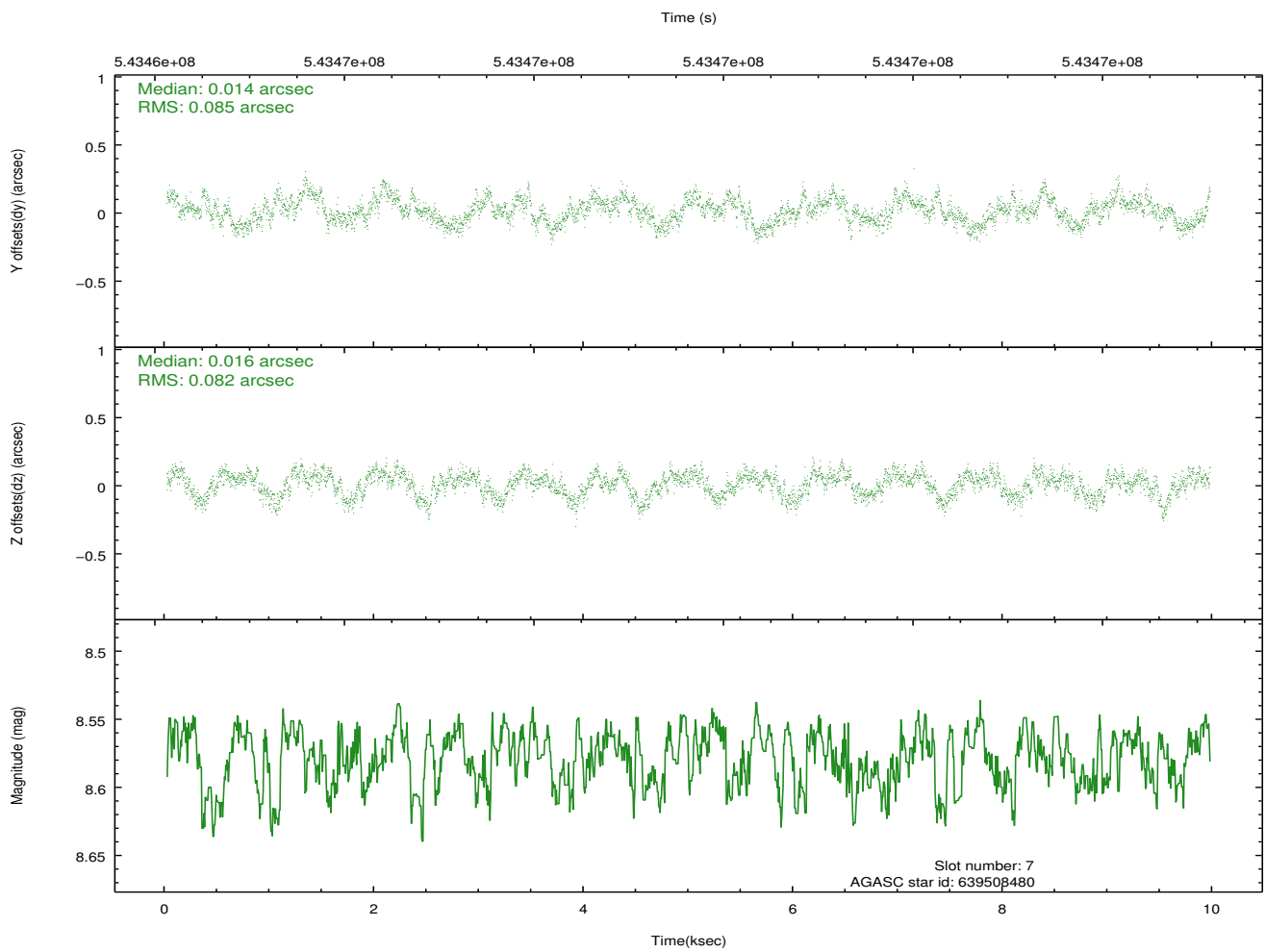
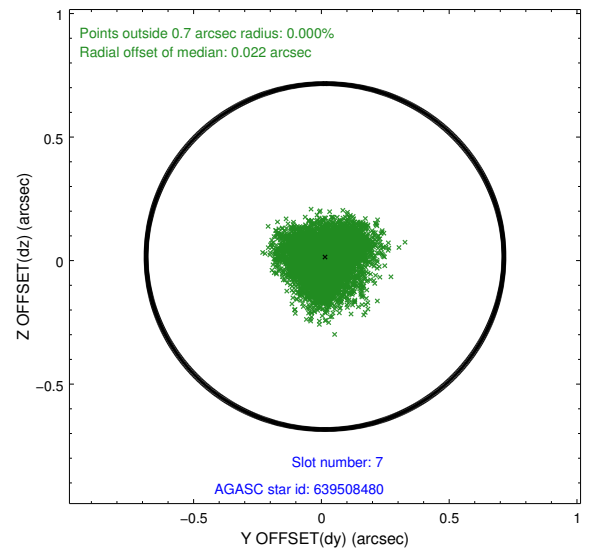
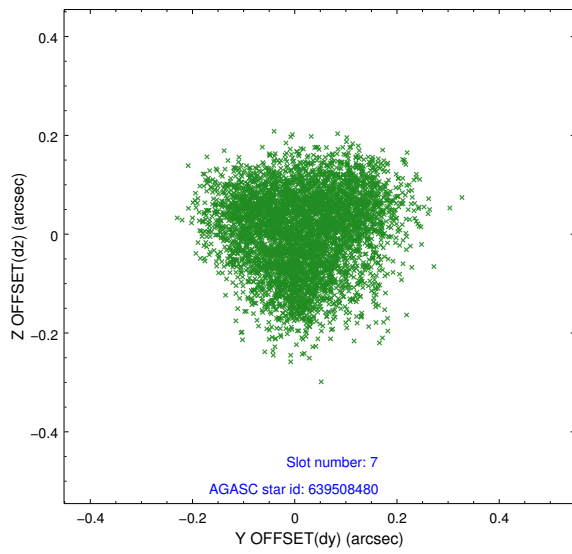
### 2.4.3 Slot 5



### 2.4.4 Slot 6

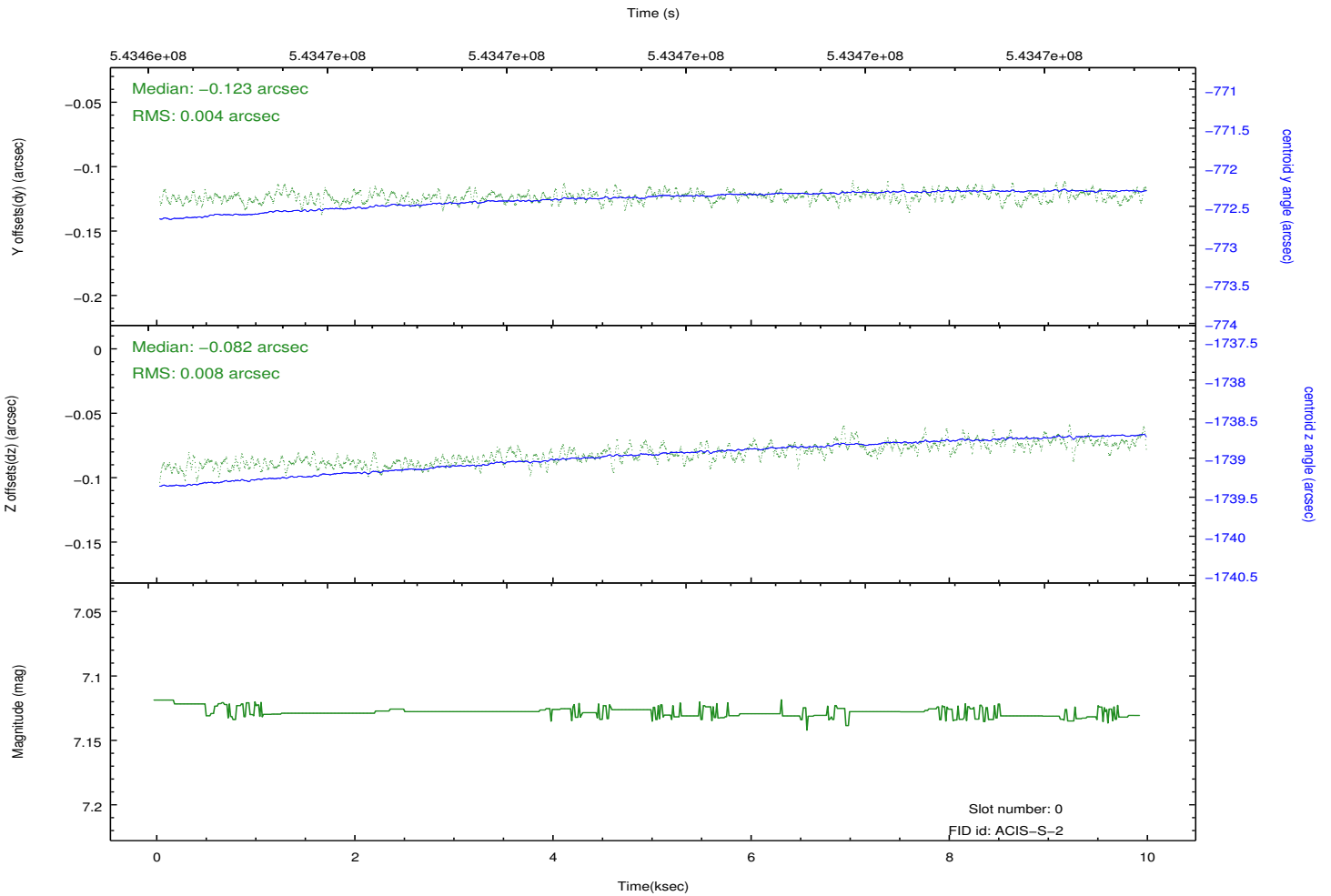
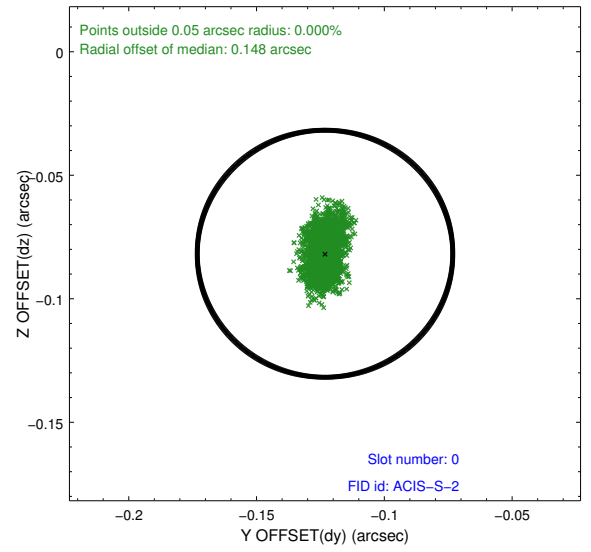
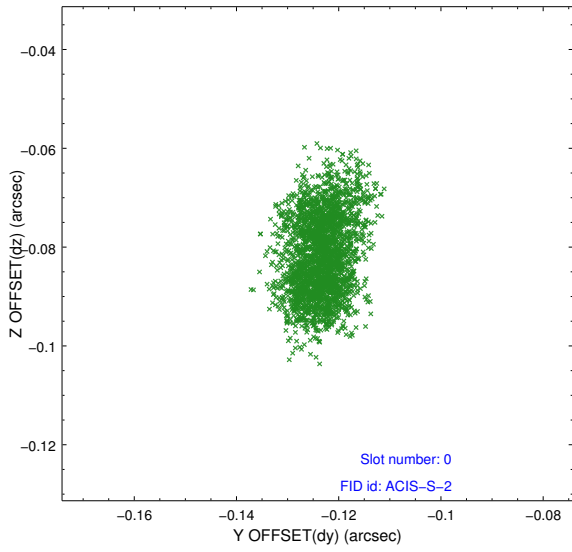


## 2.4.5 Slot 7

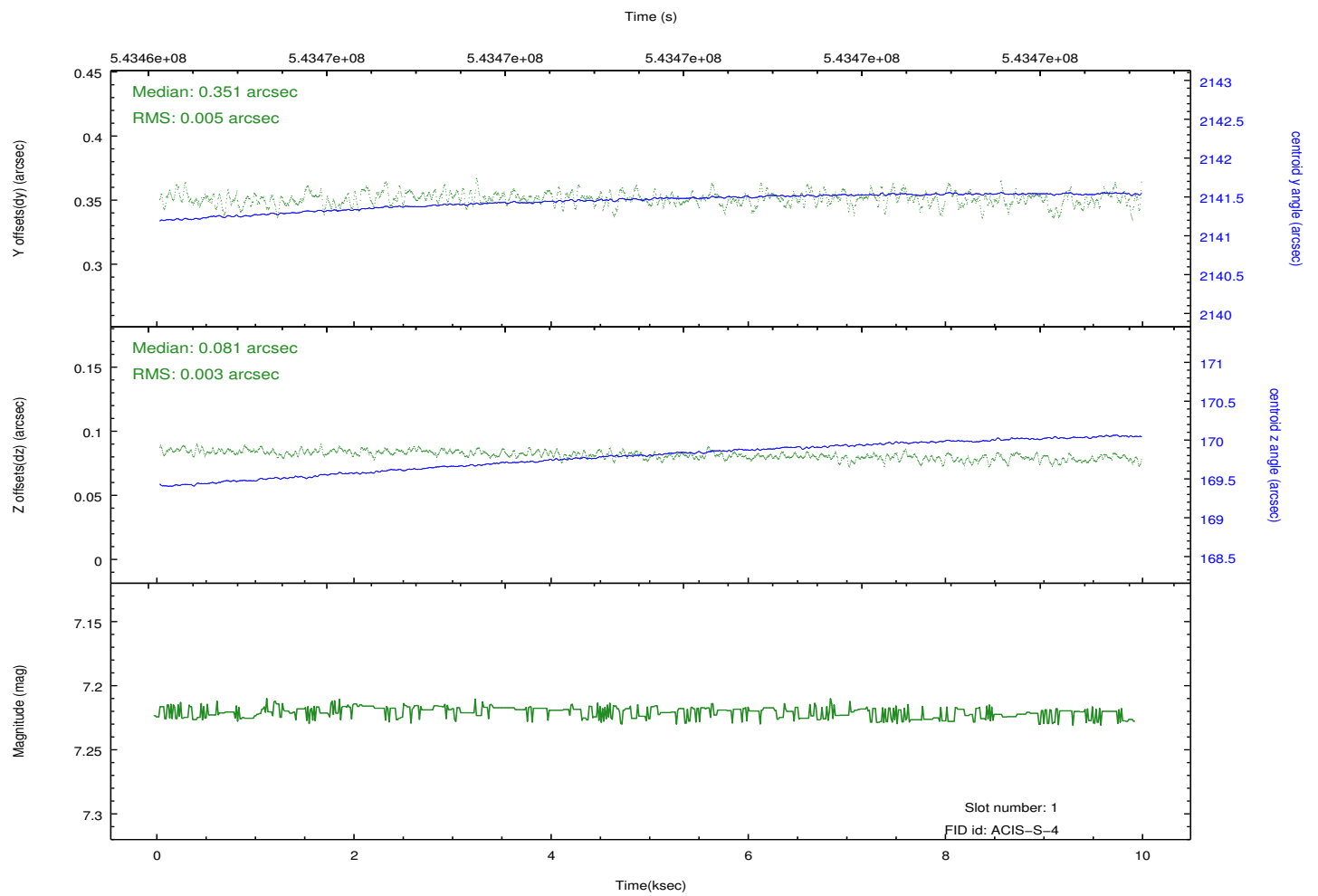
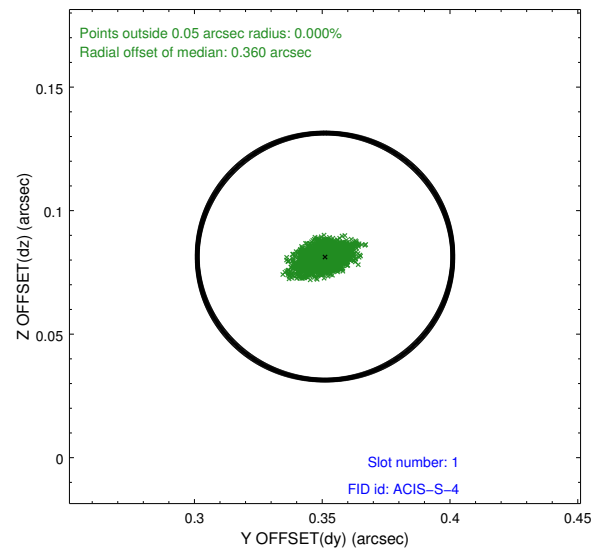
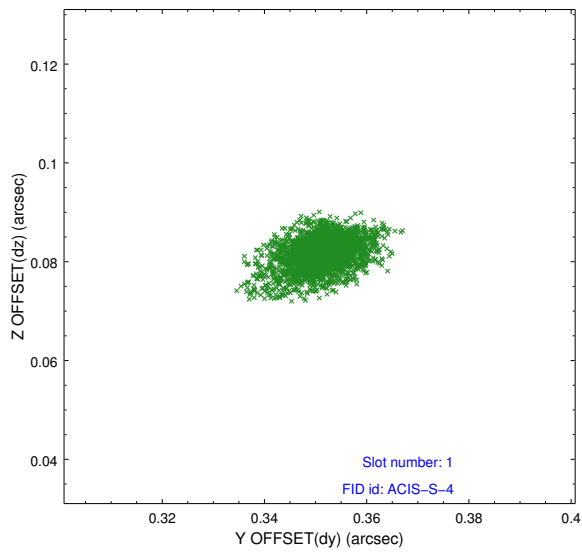


## 2.5 FID Slots

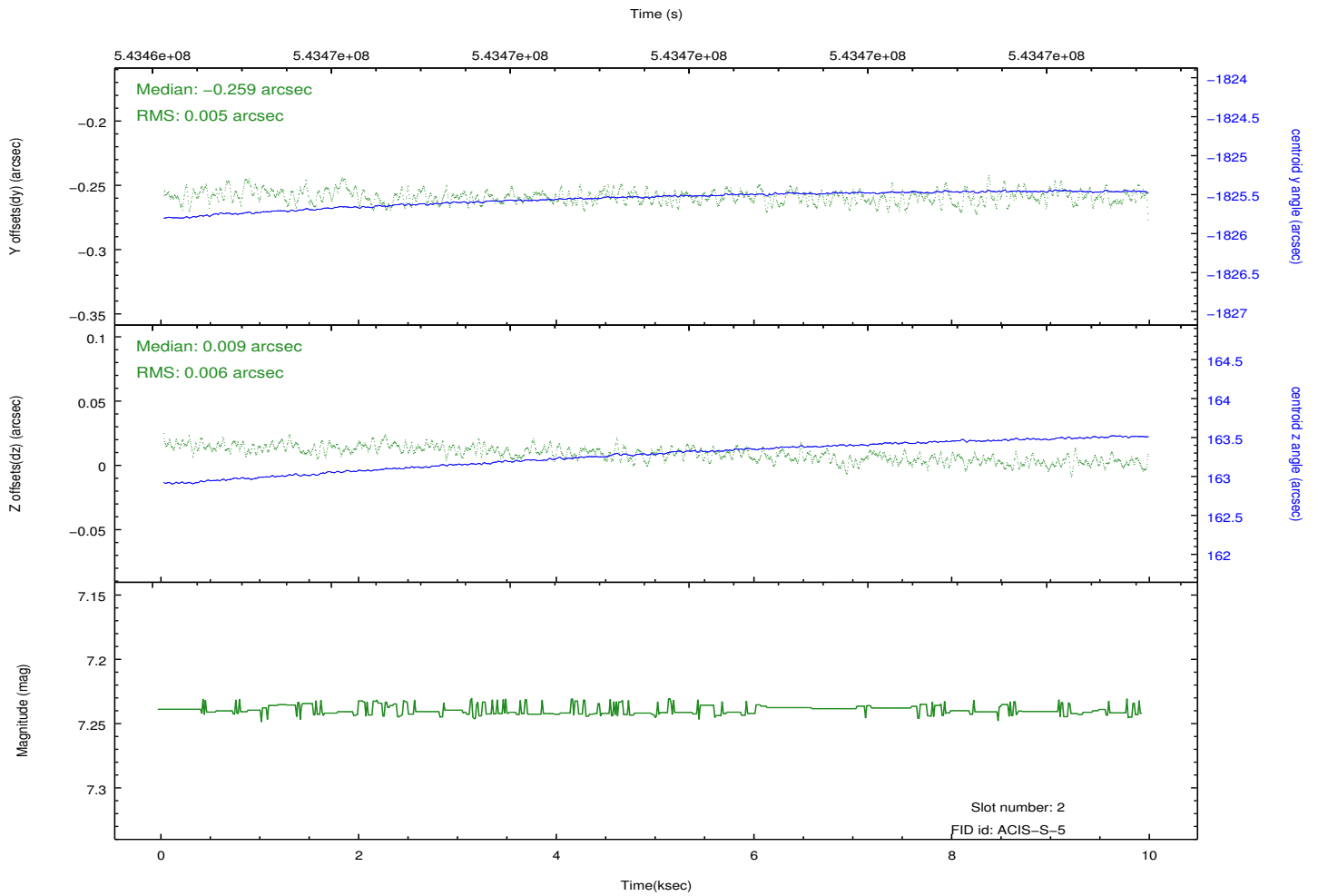
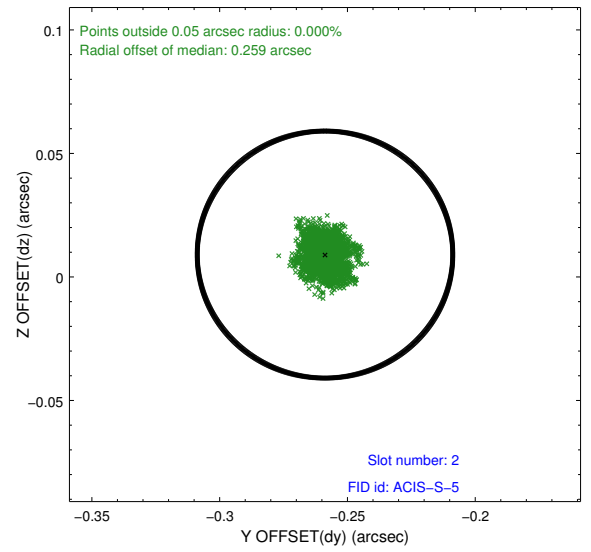
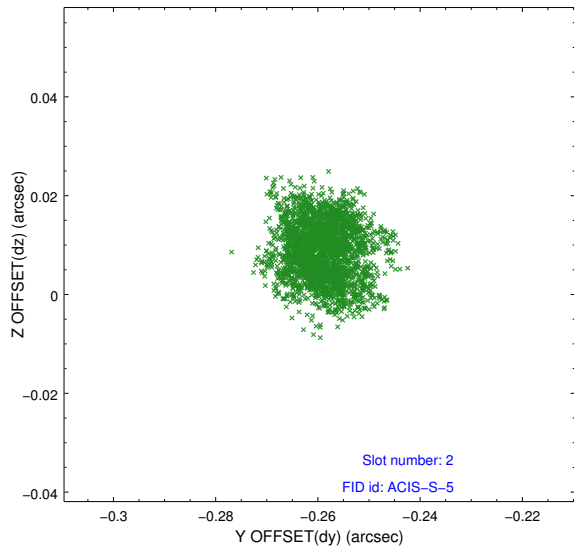
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## **A Summary**

### **A.1 Status**

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.03.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.8611000759602

### **A.2 Comments**