

# V&V Reference Report

## L2 ASCDS Version : 10.5.1.1

Observation 18779 - L2 Version 1  
Chandra X-Ray Center

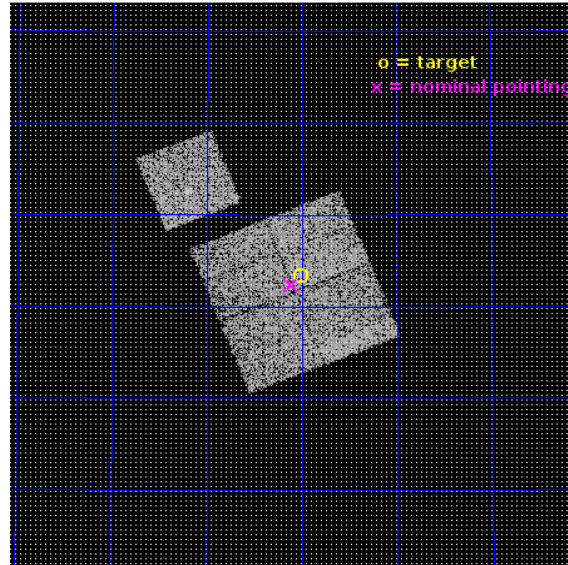
L2 Processing Date : Oct 10 2016

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# 1 Front

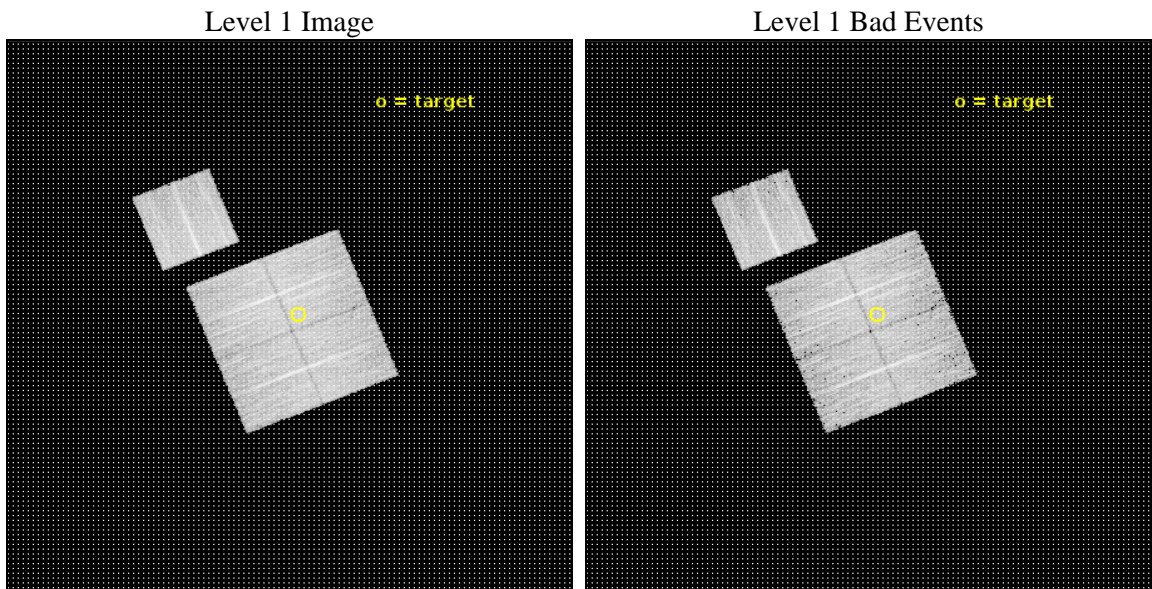
seq_num	801654	Sequence number
obs_id	18779	Observation id
title	Probing the extreme mass peaks at $z>0.7$	Proposal title
observer	Monique ARNAUD	Principal investigator
object	PSZ2 G084.10+58.72	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	222.25255	Observer's specified target RA [deg]
dec_targ	48.556471	Observer's specified target Dec [deg]
ra_nom	222.27711296981	Nominal RA [deg]
dec_nom	48.540047848373	Nominal Dec [deg]
roll_nom	338.19024609341	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10099.75910759	Sum of GTIs [s]
livetime	9967.7983195146	Livetime [s]
ontime0	10096.61813736	Sum of GTIs [s]
ontime1	10102.90007782	Sum of GTIs [s]
ontime2	10102.90007782	Sum of GTIs [s]
ontime3	10099.75910759	Sum of GTIs [s]
ontime6	10102.90007782	Sum of GTIs [s]
l2events	33332	Number of level 2 events



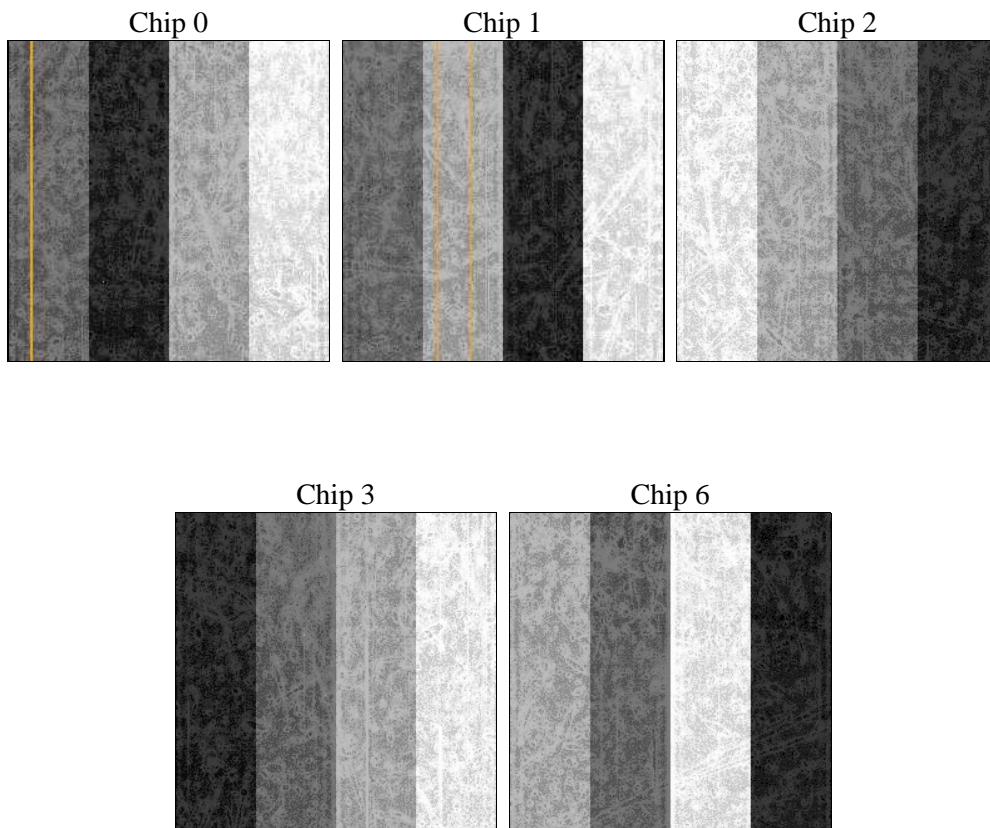
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10028.264000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	10099.75910759	Sum of GTIs [s]
caldsver	4.7.2	&#160	ontime0	10096.61813736	Sum of GTIs [s]
date	2016-10-10T13:47:04	Date and time of file creation	ontime1	10102.90007782	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10102.90007782	Sum of GTIs [s]
			ontime3	10099.75910759	Sum of GTIs [s]
			ontime6	10102.90007782	Sum of GTIs [s]
			l1events	334206	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	63750	63639	68734	69897	68186
rejected events	56018	54988	61062	62024	60450
rejected %	87%	86%	88%	88%	88%

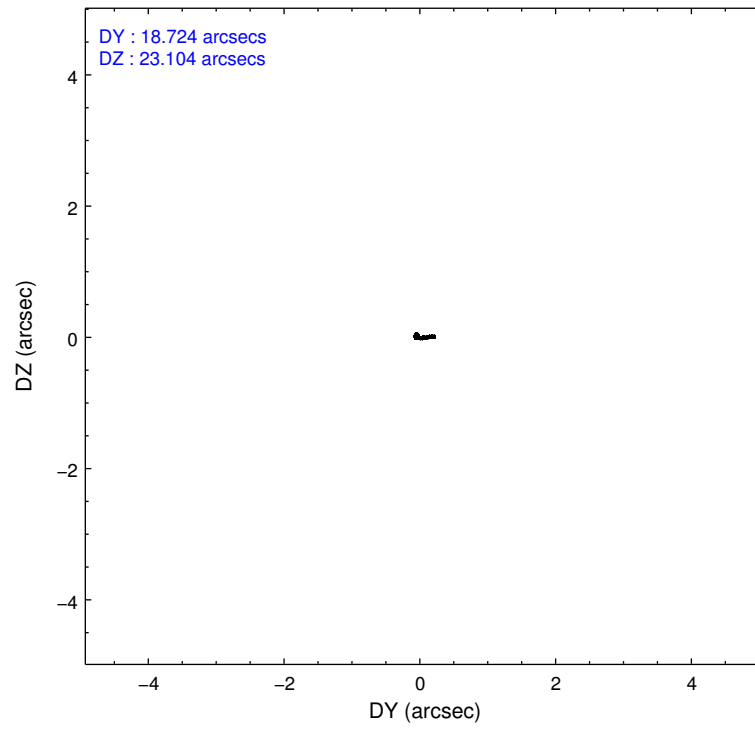
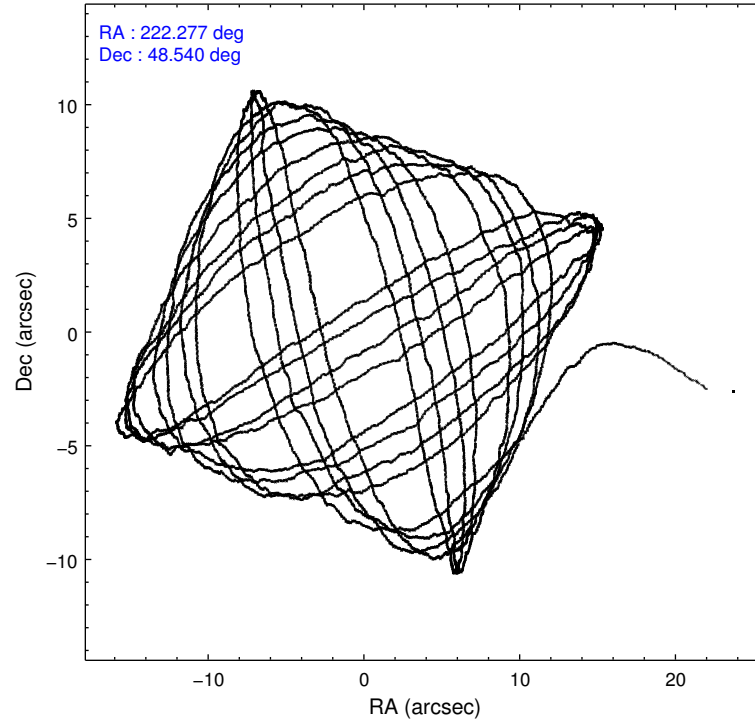
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2639	3036	2790	3115	2632
	4%	4%	4%	4%	3%
grade 1 events	34	34	39	48	38
	0%	0%	0%	0%	0%
grade 2 events	1999	2145	1887	1611	1745
	3%	3%	2%	2%	2%
grade 3 events	789	843	746	827	815
	1%	1%	1%	1%	1%
grade 4 events	744	824	767	736	777
	1%	1%	1%	1%	1%
grade 5 events	2916	3144	2842	3350	3224
	4%	4%	4%	4%	4%
grade 6 events	1566	1804	1486	1585	1775
	2%	2%	2%	2%	2%
grade 7 events	53063	51809	58177	58625	57180
	83%	81%	84%	83%	83%

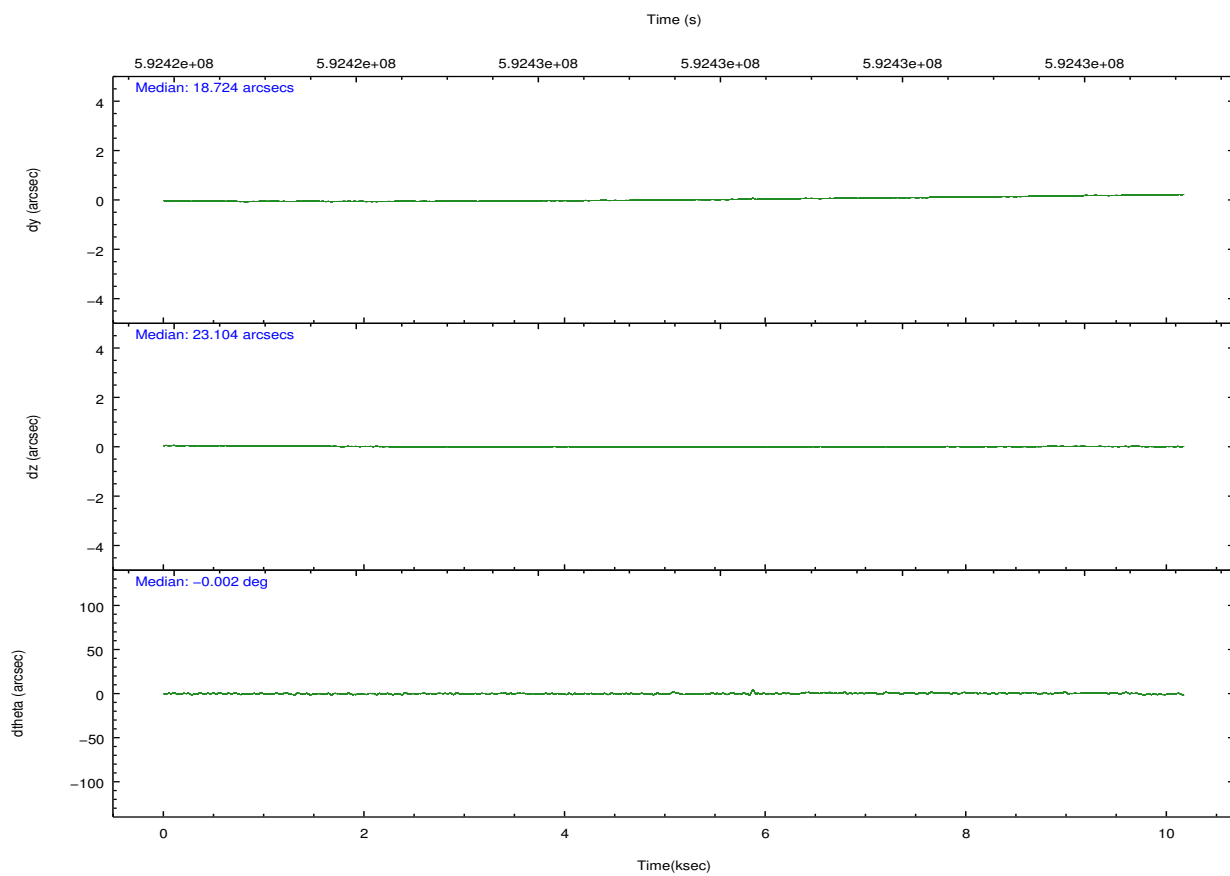
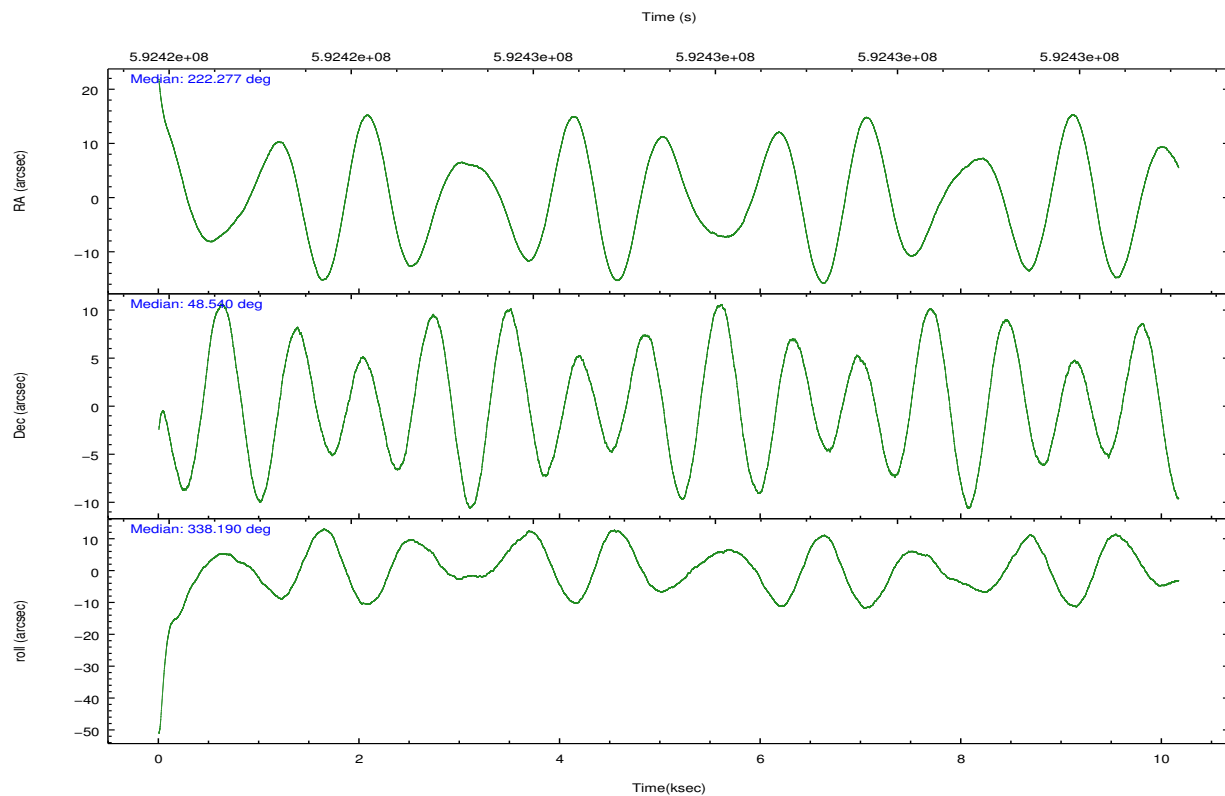


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	222.235818	222.2771129698118	CCD I2 on	Y	Y
[deg] Pointing Dec	48.536033	48.54004784837319	CCD I3 on	Y	Y
[deg] Pointing Roll	338.012535	338.1902460934107	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	592422545.184000	592420761.78547	CCD S5 on	N	N
Observation start date	2016-10-09T17:47:57	2016-10-09T17:19:21	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	592432573.184000	592432802.97366	On-chip summing requested	N	N
Observation end date	2016-10-09T20:35:05	2016-10-09T20:40:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



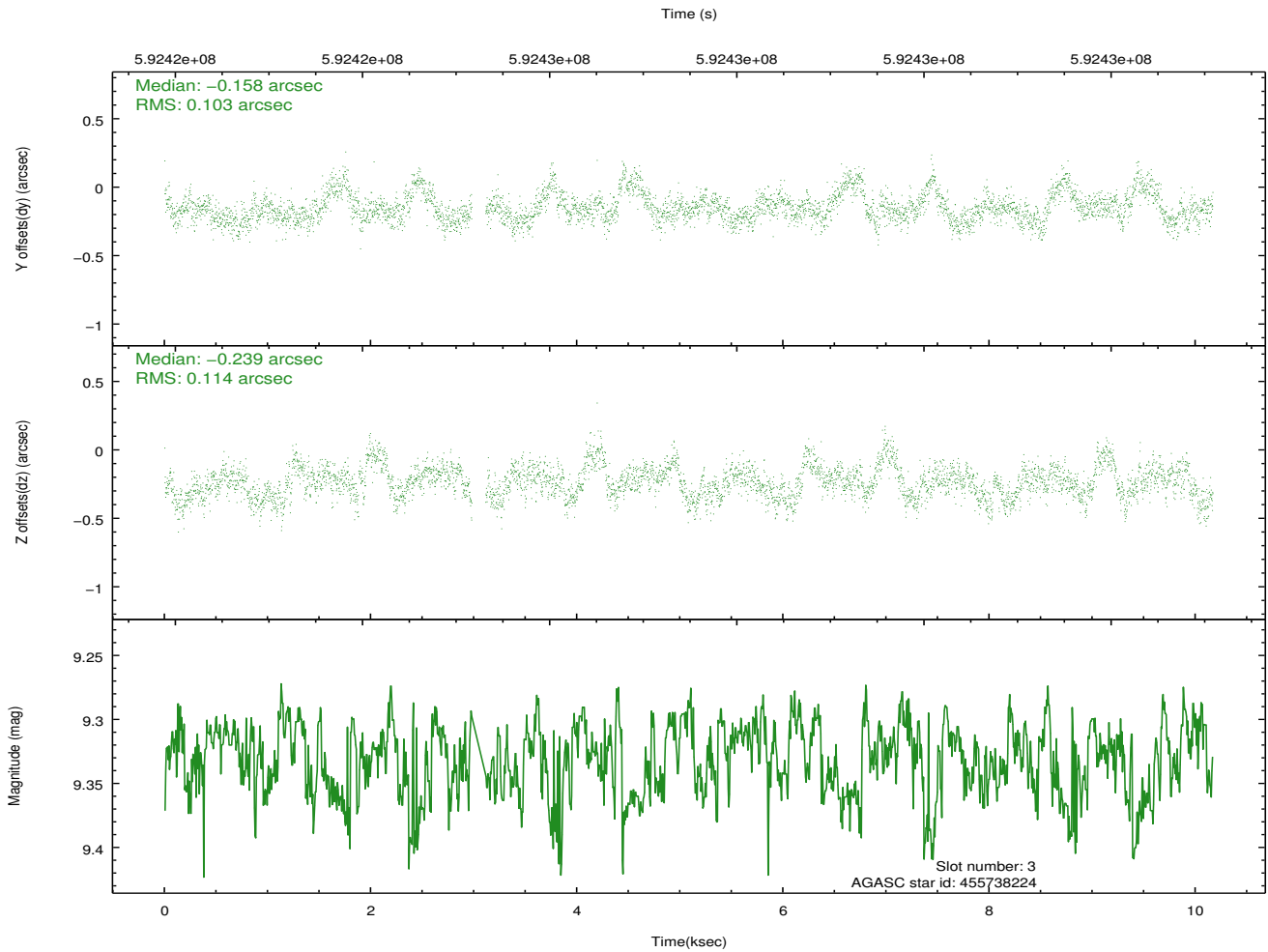
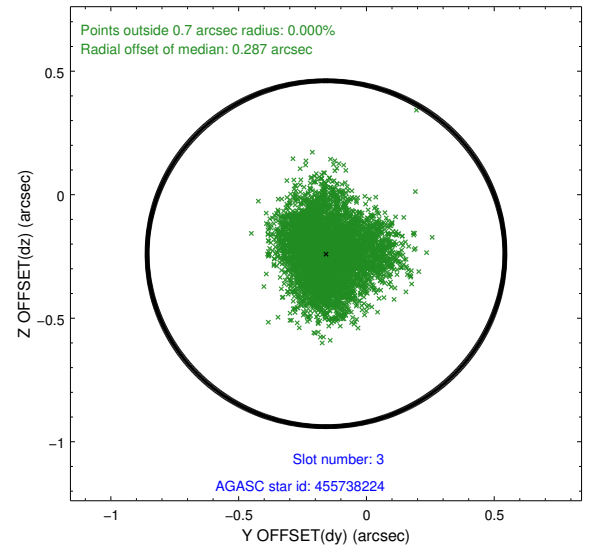
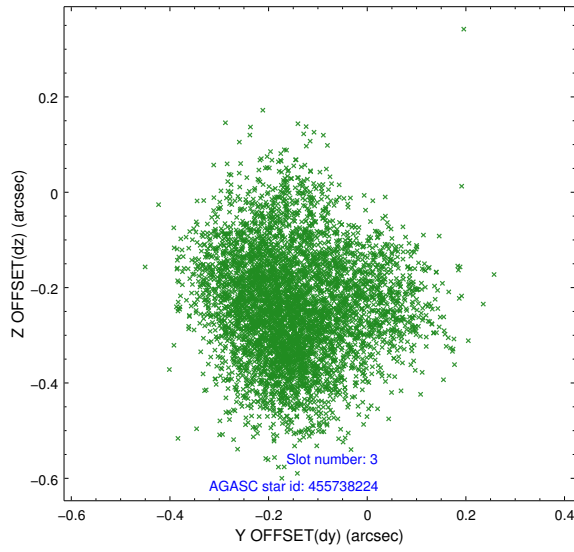


### Slot Statistics

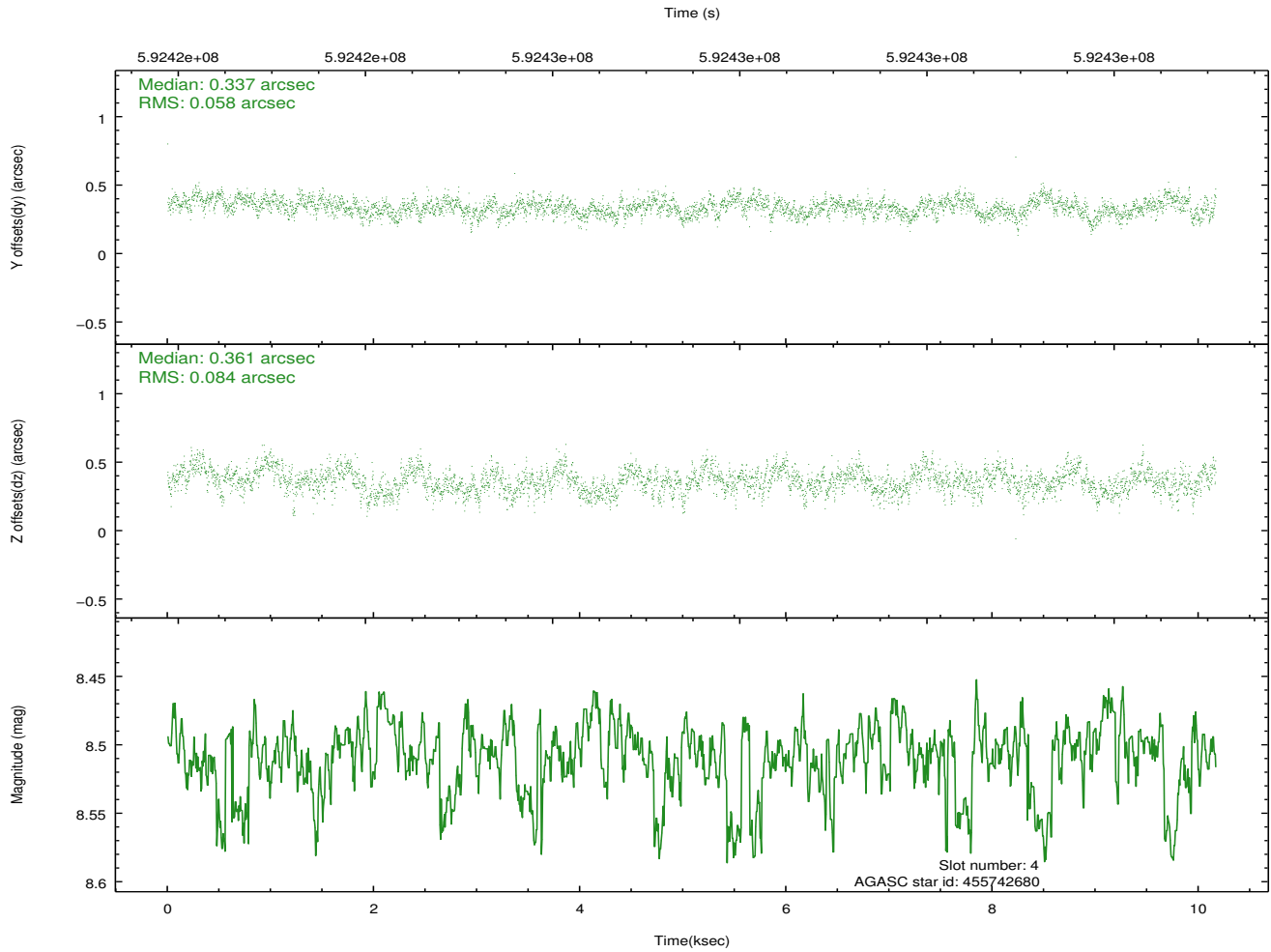
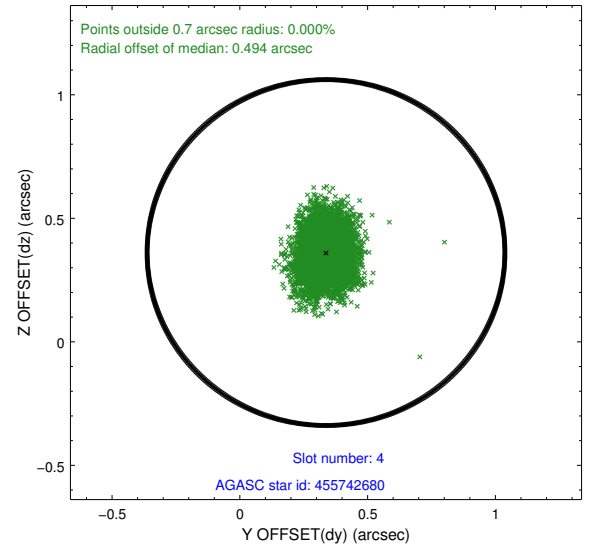
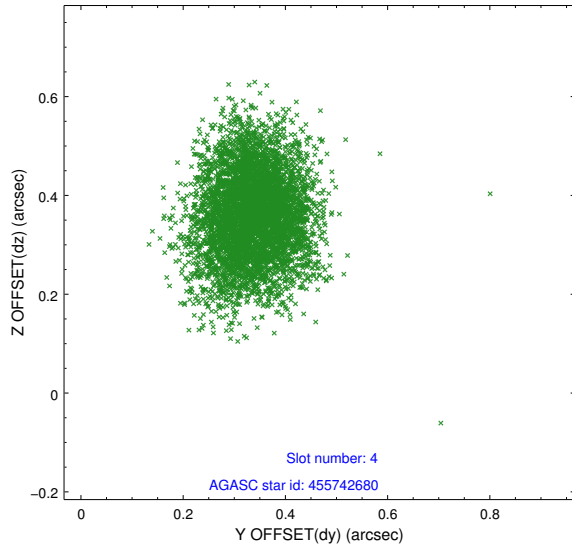
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.98	2479	-0.023	-0.030	0.011	0.020	0.000000	0.000000	-773.61	-853.31
1	FID		ACIS-I-5	7.08	2480	-0.289	-0.012	0.009	0.015	0.000000	0.000000	-1828.19	1050.30
2	FID		ACIS-I-6	7.09	2480	0.218	0.110	0.007	0.012	0.000000	0.000000	385.80	1695.50
3	GUIDE	used	455738224	9.33	4888	-0.158	-0.239	0.167	0.261	223.171552	48.542353	2055.40	868.61
4	GUIDE	used	455742680	8.51	4958	0.337	0.361	0.107	0.178	221.251641	48.201713	-1743.44	-1986.07
5	GUIDE	used	455743856	7.72	4959	-0.330	-0.182	0.109	0.178	223.087116	48.670722	1689.31	1216.37
6	GUIDE	used	455745448	8.40	4961	-0.166	-0.280	0.098	0.160	223.214953	48.468422	2249.26	663.87
7	GUIDE	used	455747520	7.98	4955	0.307	0.335	0.105	0.169	221.848032	47.909366	-22.82	-2439.12

## 2.4 Star Slots

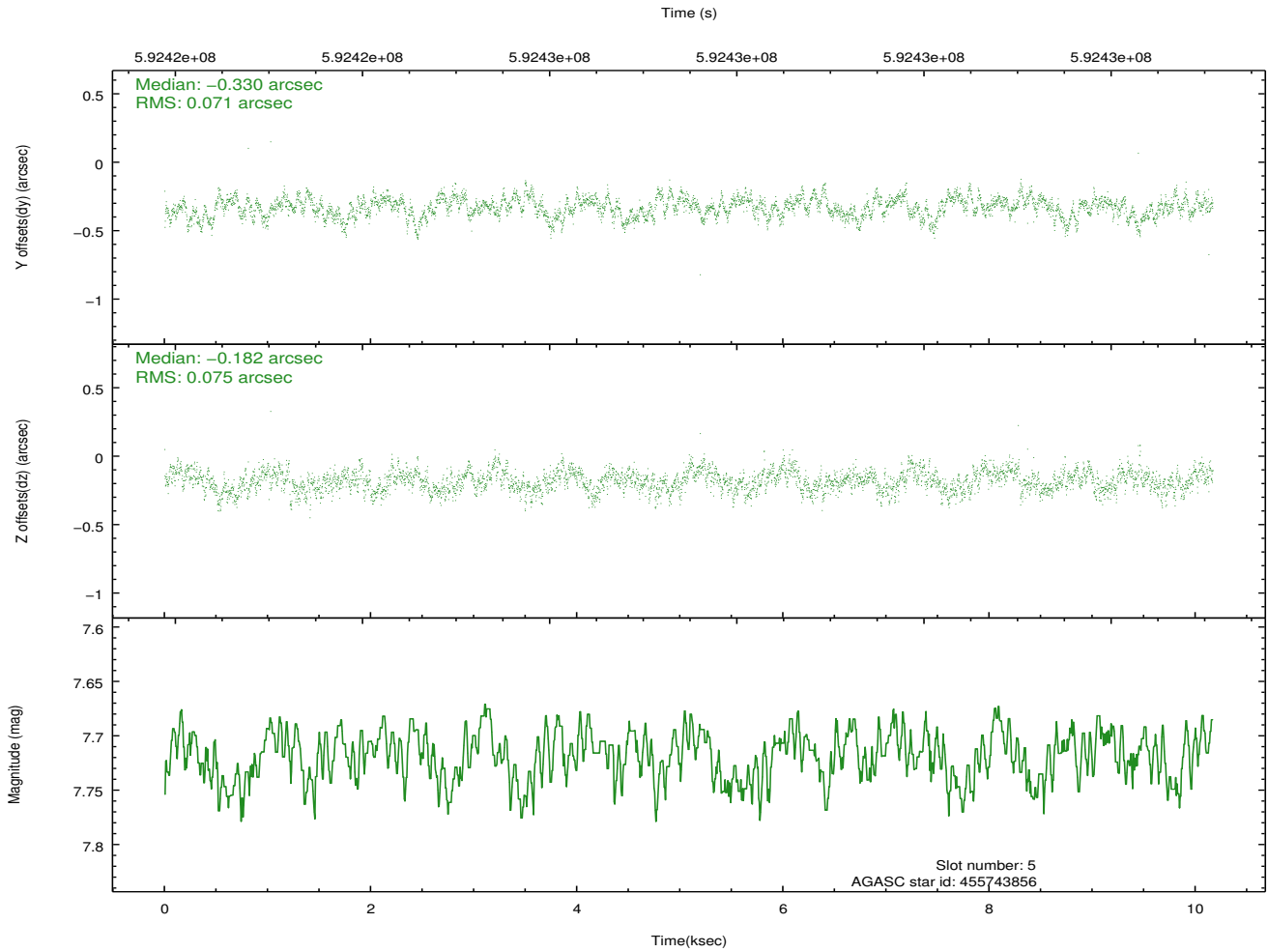
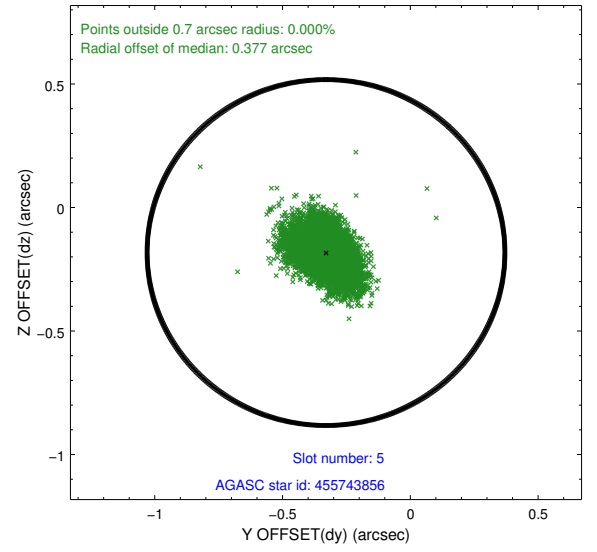
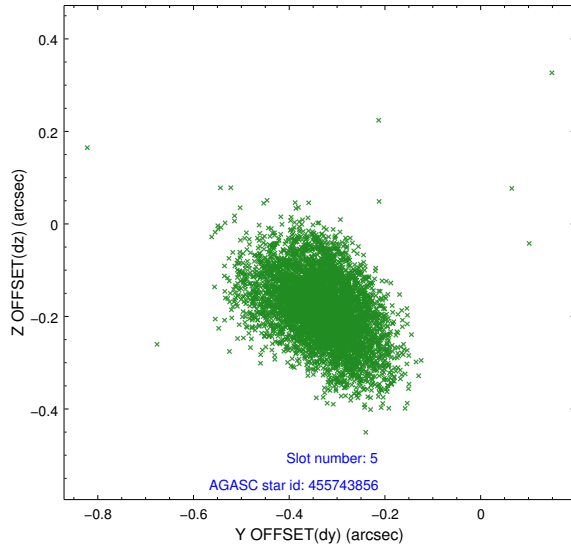
### 2.4.1 Slot 3



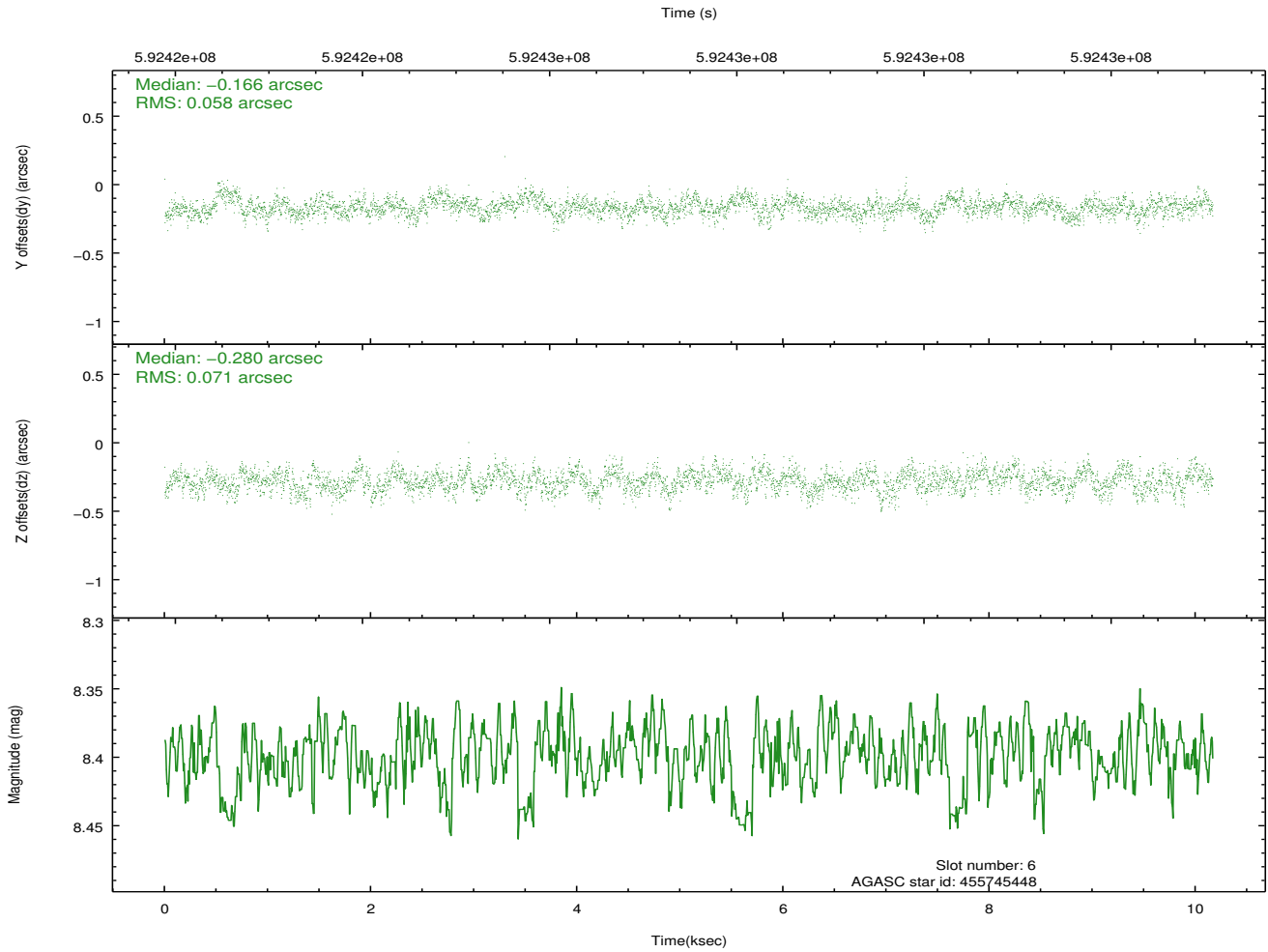
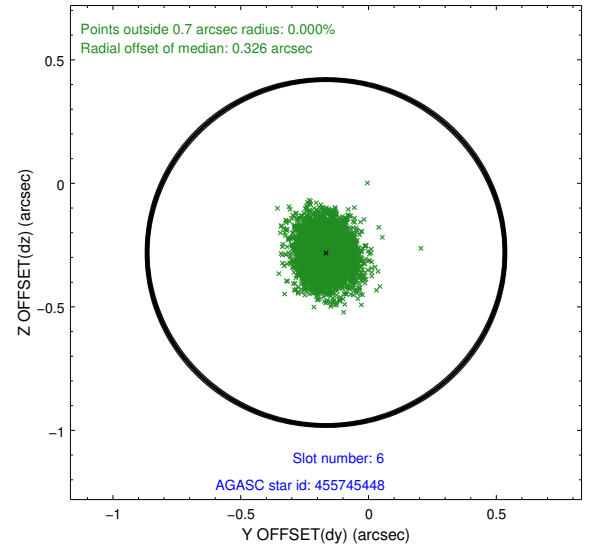
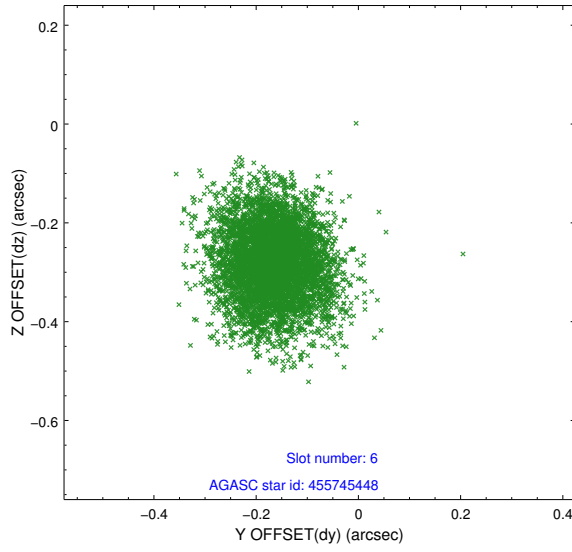
## 2.4.2 Slot 4



### 2.4.3 Slot 5

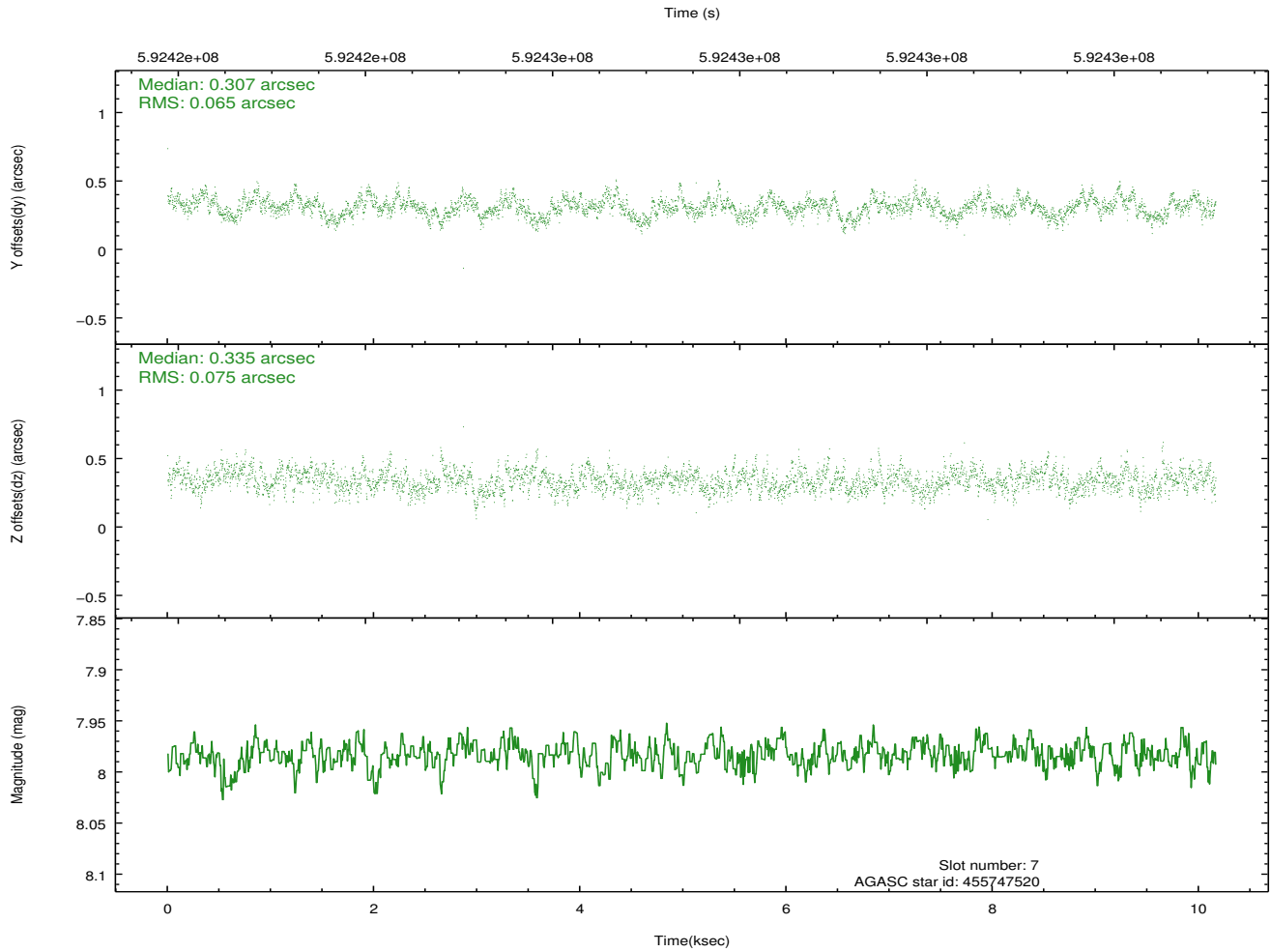
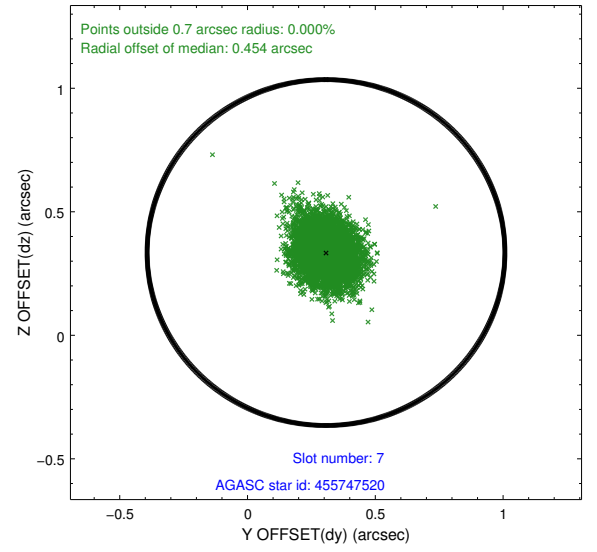
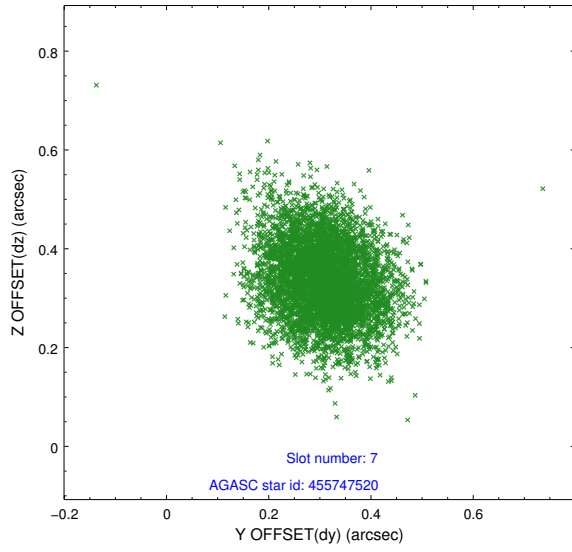


## 2.4.4 Slot 6



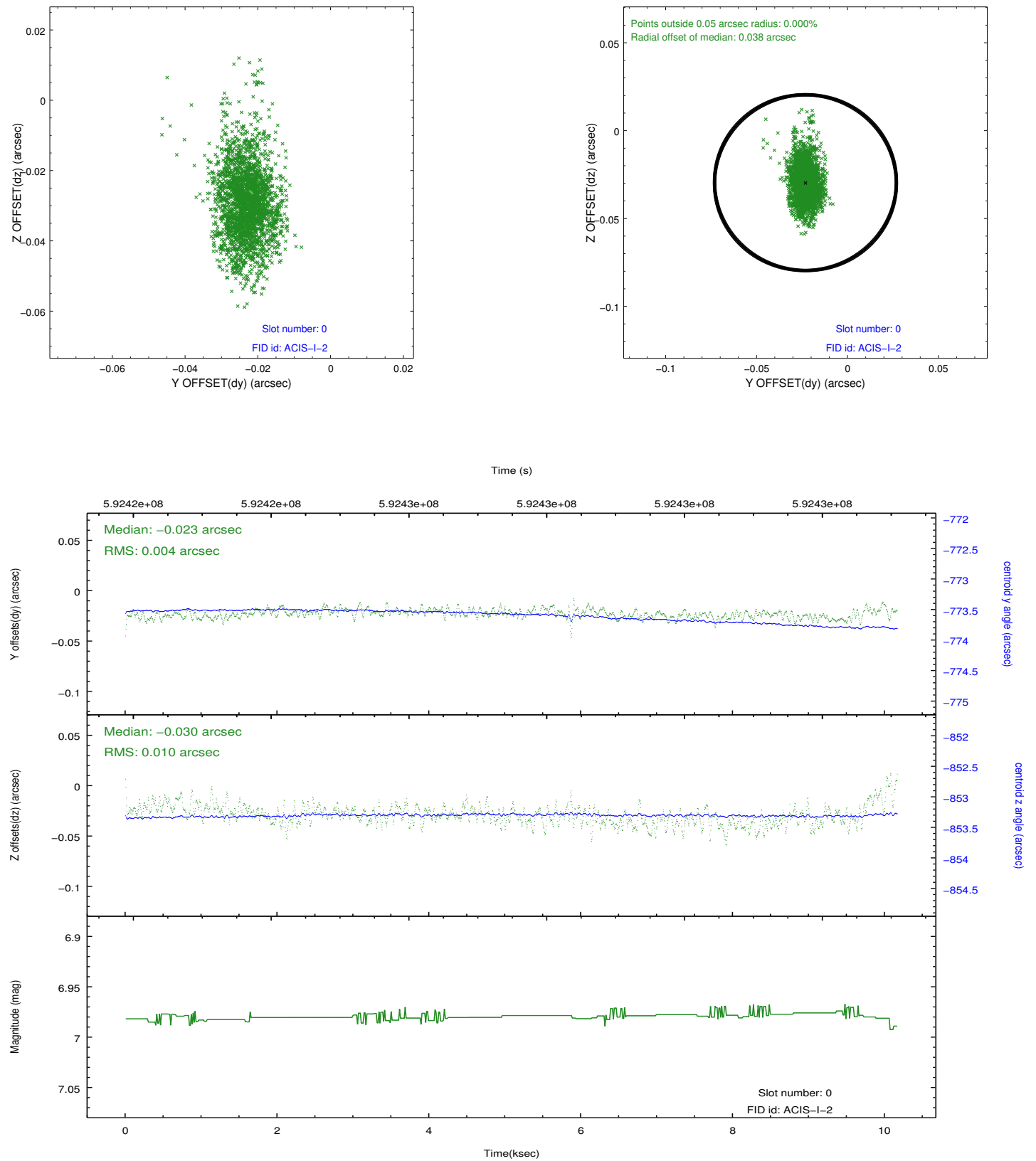


## 2.4.5 Slot 7

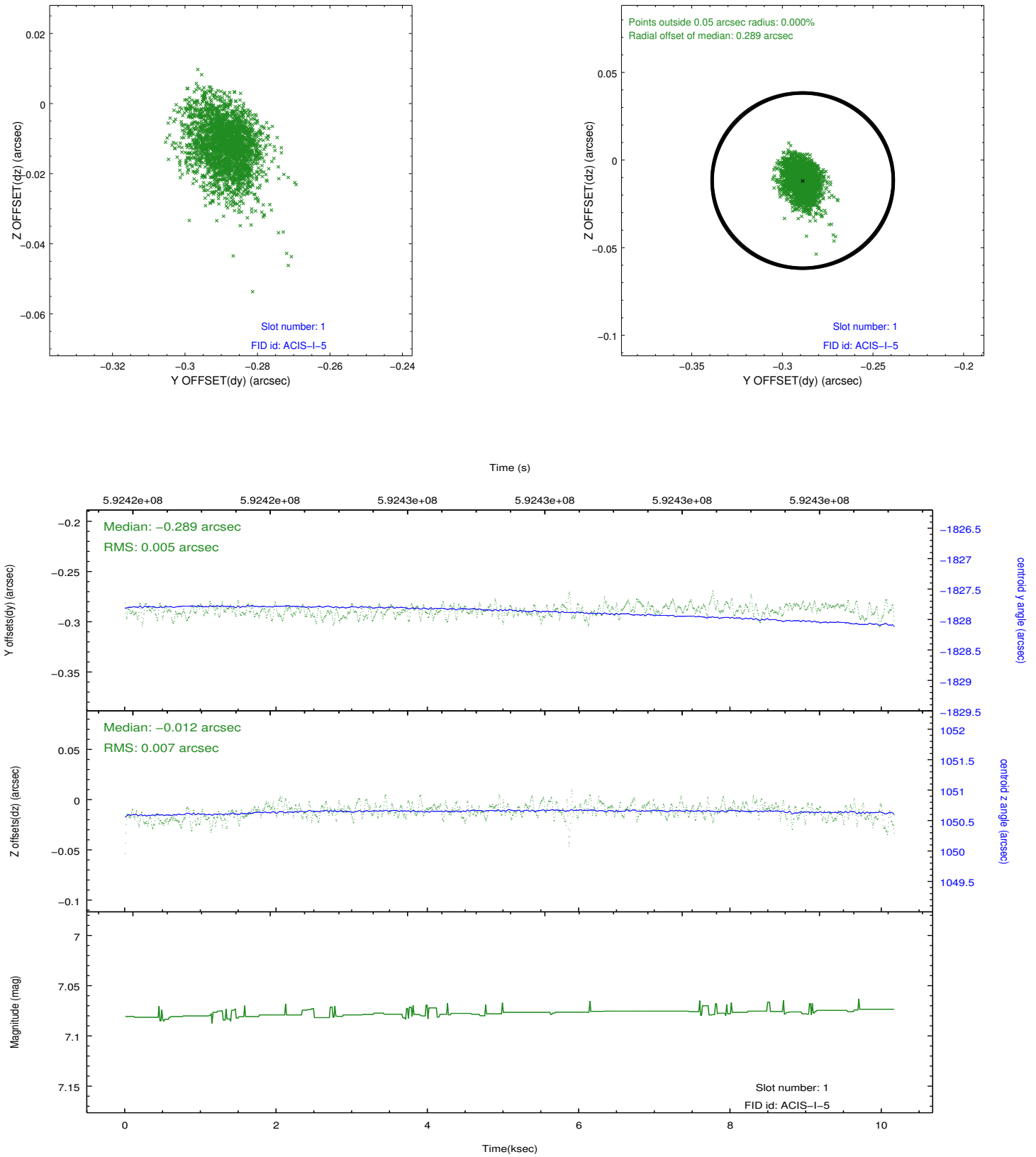


## 2.5 FID Slots

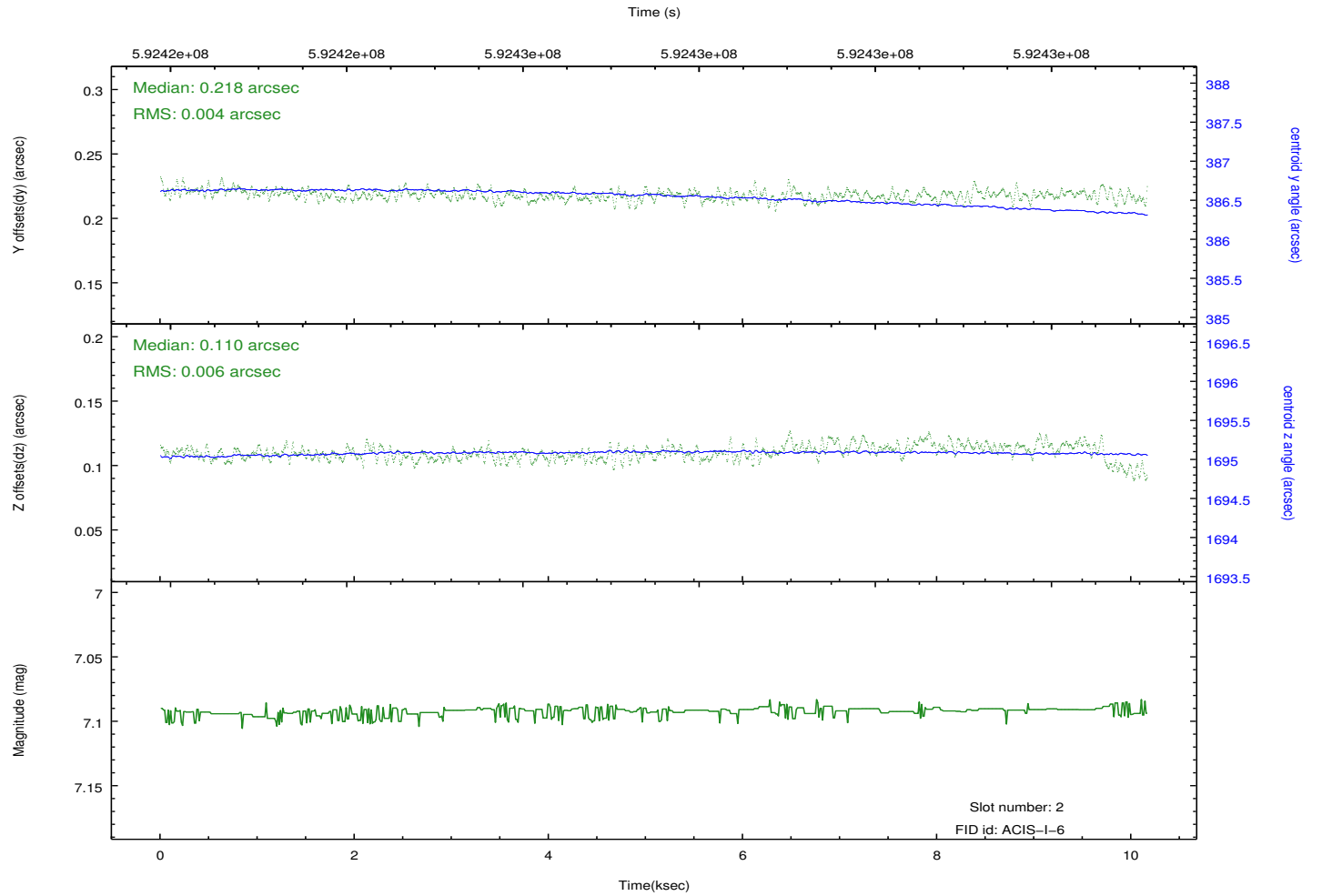
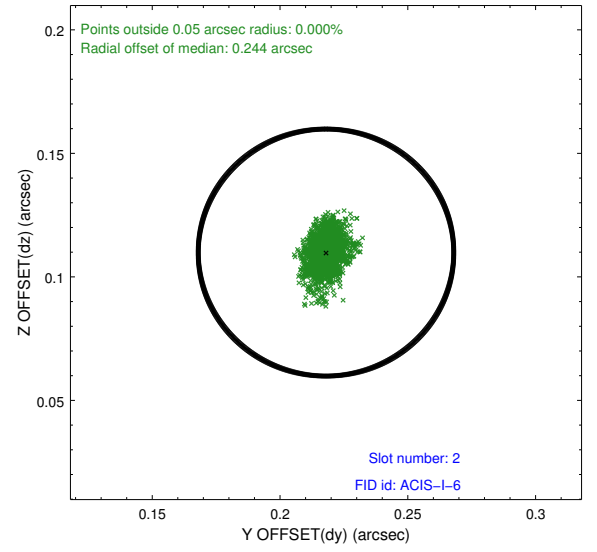
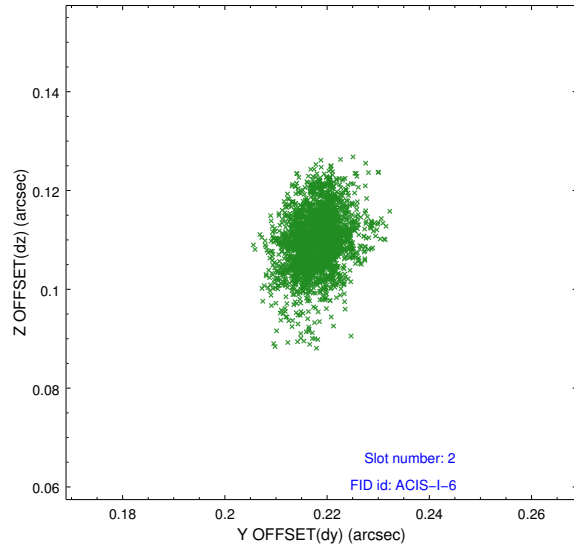
### 2.5.1 Slot 0



## 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)	2016.10.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.09975910759

### A.2 Comments