

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20907 - L2 Version 1
Chandra X-Ray Center

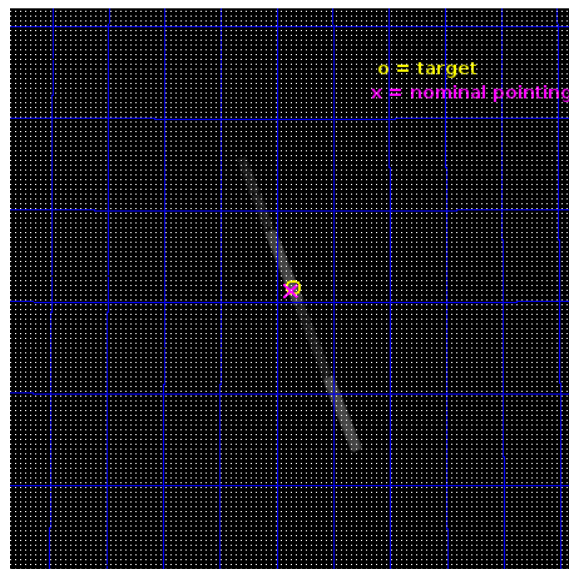
L2 Processing Date : Dec 29 2017

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1 Front

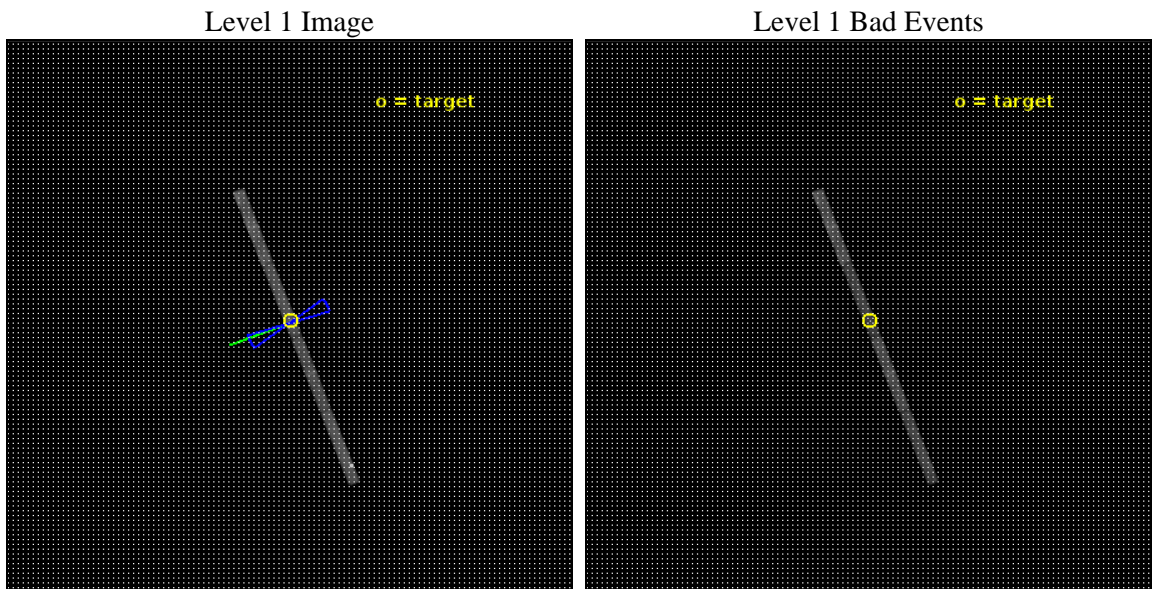
seq_num	703412	Sequence number
obs_id	20907	Observation id
title	The 3C111 Jet: X-ray Variability, Spectrum & Broadband SED	Proposa
observer	Eric Perlman	Principal investigator
object	3C 111	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	64.58875	Observer's specified target RA [deg]
dec_targ	38.026667	Observer's specified target Dec [deg]
ra_nom	64.592272847686	Nominal RA [deg]
dec_nom	38.020898385986	Nominal Dec [deg]
roll_nom	249.15445384398	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30087.601195693	Sum of GTIs [s]
livetime	28161.363904617	Livetime [s]
ontime5	30087.601195693	Sum of GTIs [s]
ontime6	30087.601195693	Sum of GTIs [s]
ontime7	30087.601195693	Sum of GTIs [s]
ontime8	30087.601195693	Sum of GTIs [s]
l2events	83648	Number of level 2 events



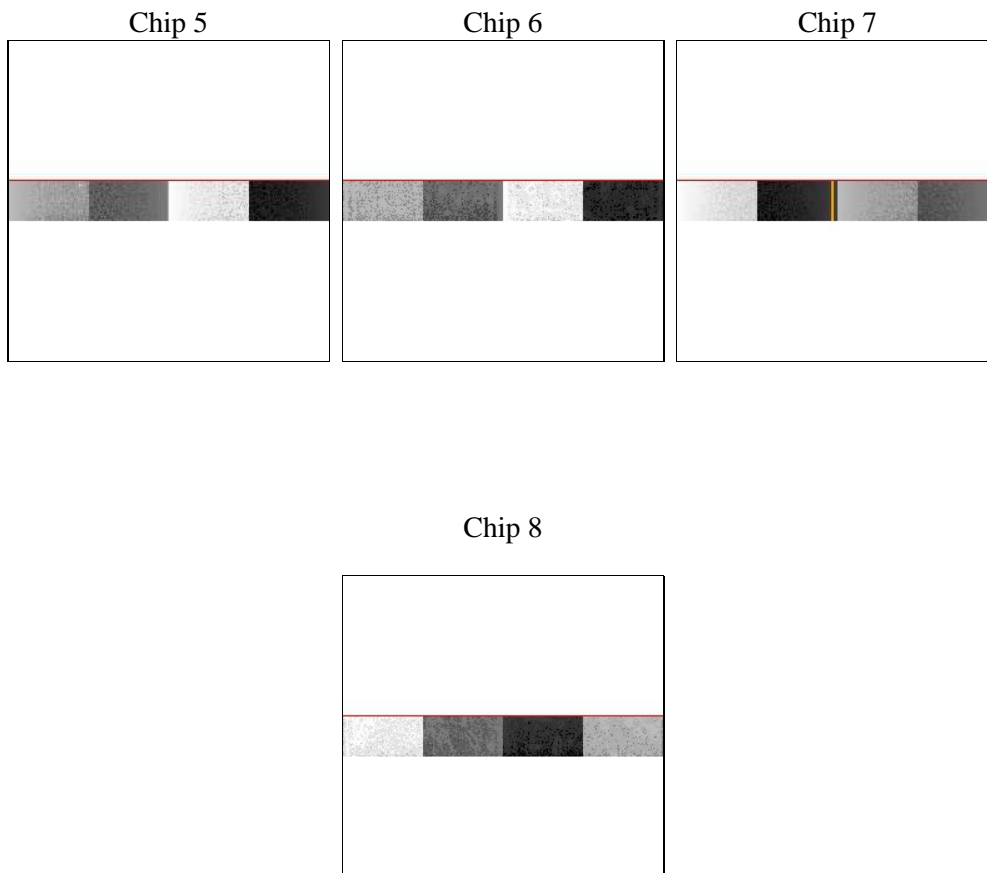
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	30087.601195693	Sum of GTIs [s]
caldsver	4.7.7	 	ontime5	30087.601195693	Sum of GTIs [s]
date	2017-12-29T22:28:51	Date and time of file creation	ontime6	30087.601195693	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30087.601195693	Sum of GTIs [s]
			ontime8	30087.601195693	Sum of GTIs [s]
			l1events	269964	Number of level 1 events

2.1.4 Events

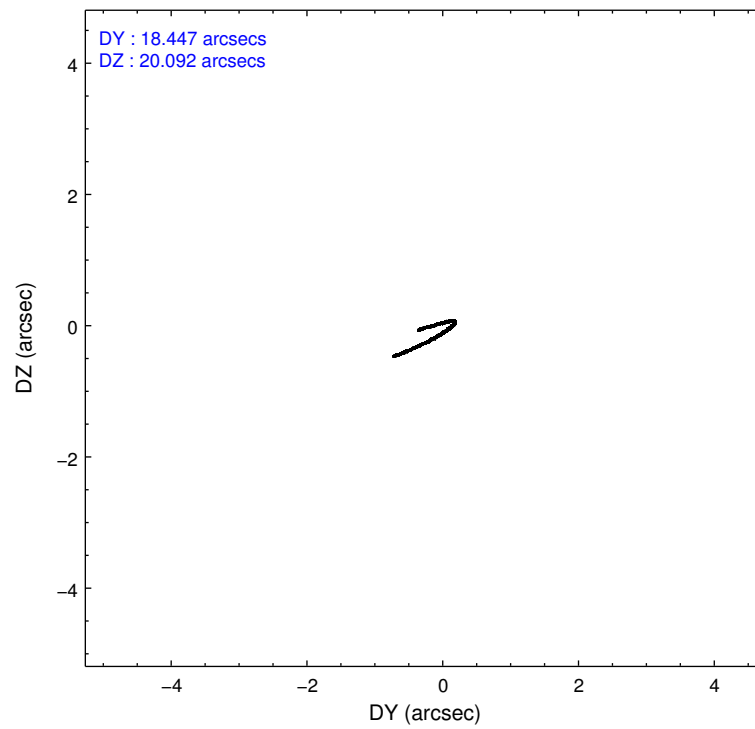
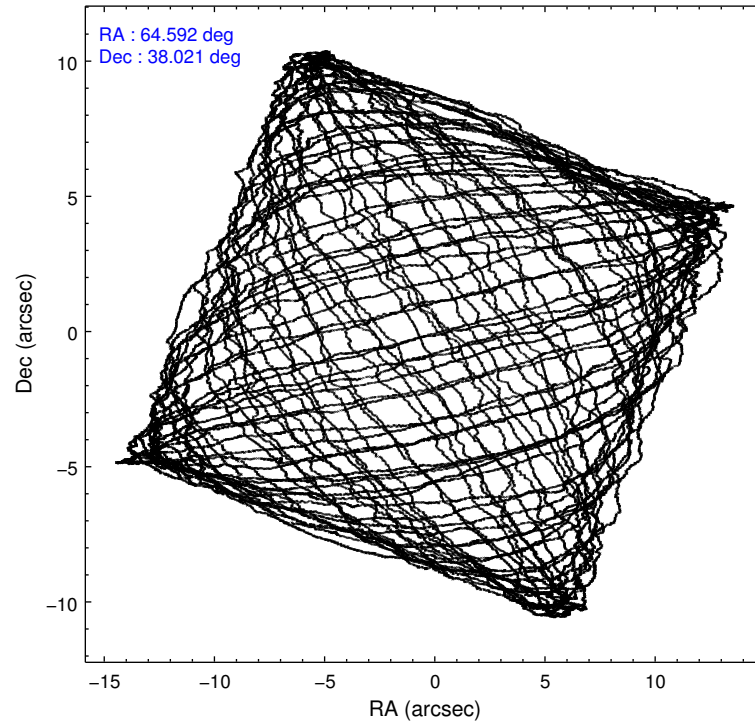
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	91907	36120	90852	51085
rejected events	23788	31926	34279	39748
rejected %	25%	88%	37%	77%

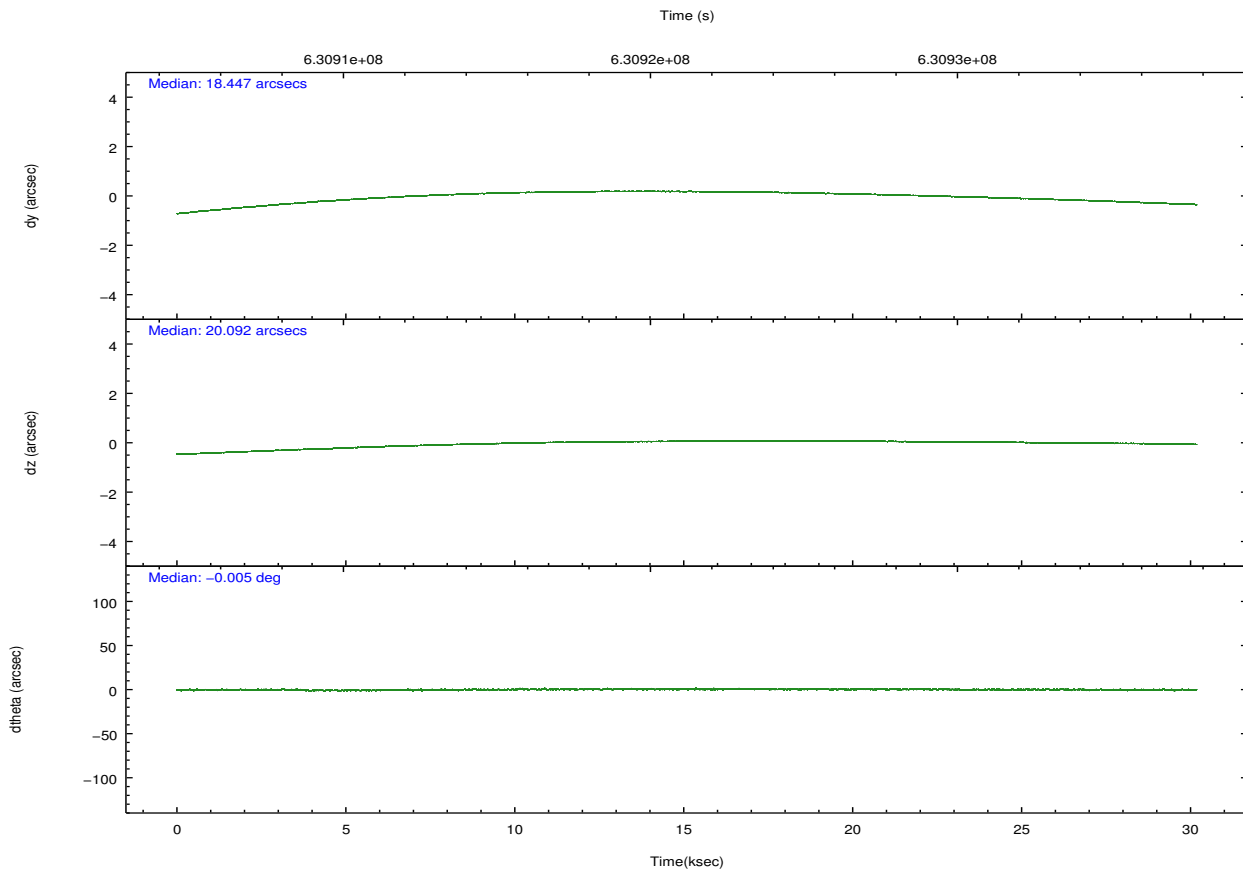
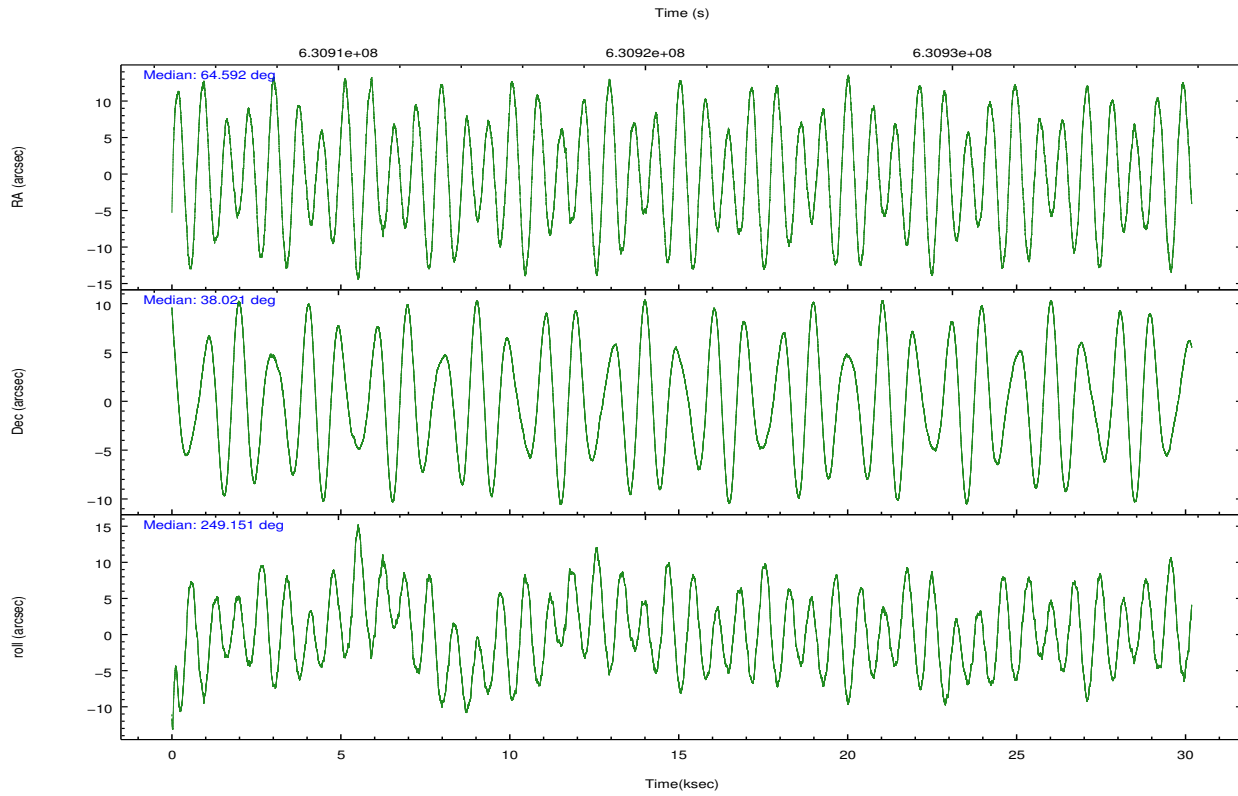
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7403	1175	7911	2537
	8%	3%	8%	4%
grade 1 events	207	12	754	20
	0%	0%	0%	0%
grade 2 events	30039	752	11833	2571
	32%	2%	13%	5%
grade 3 events	1182	706	5970	1265
	1%	1%	6%	2%
grade 4 events	2688	691	5819	1258
	2%	1%	6%	2%
grade 5 events	3382	1320	8048	1879
	3%	3%	8%	3%
grade 6 events	26808	870	25041	3706
	29%	2%	27%	7%
grade 7 events	20198	30594	25476	37849
	21%	84%	28%	74%

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	64.586240	64.59227284768565	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	38.047931	38.02089838598567	Subarray start row	449	449
[deg] Pointing Roll	249.001546	249.1544538439776	Subarray row count	128	128
[deg] Roll angle	63.500000	63.500000	Alternating exposures requested	N	N
[deg] Roll tolerance	10.000000	10.000000	[s] Primary exposure time	0.000000	0.6
Roll constraint allows 180D rotation	Y	Y			
[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)	630906264.184000	630904980.45002			
Observation start date	2017-12-29T03:43:15	2017-12-29T03:23:00			
[s] Observation end time (MET)	630936264.184000	630937129.06441			
Observation end date	2017-12-29T12:03:15	2017-12-29T12:18:49			
Read mode	TIMED	TIMED			

2.3 Aspect





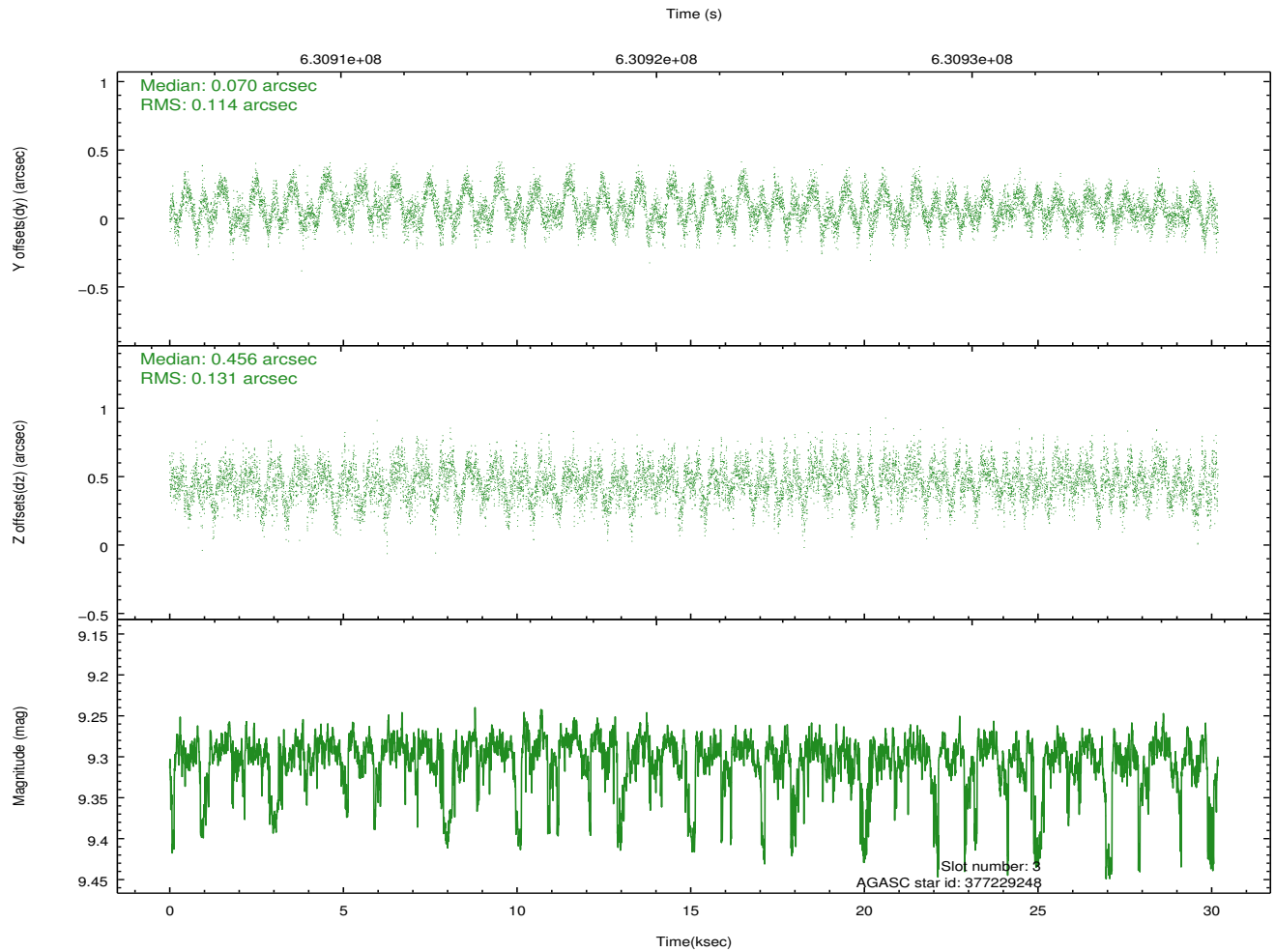
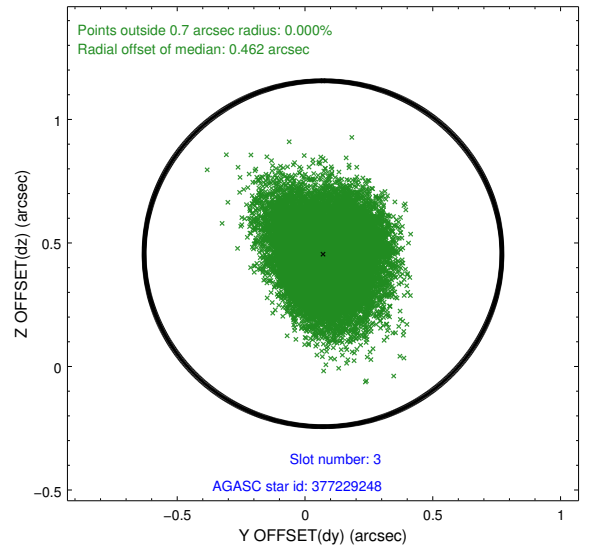
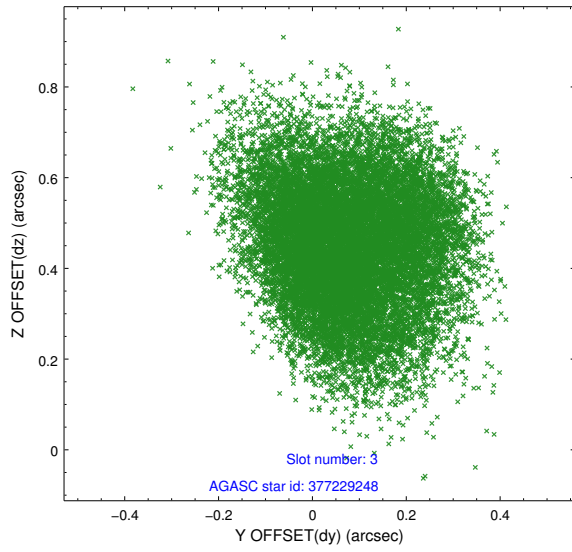
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.09	7361	-0.232	-0.112	0.013	0.023	0.000000	0.000000	-771.64	-1741.68
1	FID		ACIS-S-4	7.19	7362	0.557	0.142	0.009	0.026	0.000000	0.000000	2142.34	167.05
2	FID		ACIS-S-5	7.18	7362	-0.356	-0.020	0.009	0.013	0.000000	0.000000	-1824.56	160.54
3	GUIDE	used	377229248	9.30	14711	0.070	0.456	0.187	0.293	64.421964	38.589680	-1654.91	-1130.10
4	GUIDE	used	377229592	9.04	14703	0.046	-0.085	0.212	0.335	64.771333	38.350817	-1204.87	96.59
5	GUIDE	used	377232992	9.03	14712	0.245	0.088	0.183	0.308	63.776678	37.815935	1596.18	-1853.46
6	GUIDE	used	377363032	9.34	14655	0.157	0.025	0.202	0.317	65.027918	38.365214	-1515.19	753.50
7	GUIDE	used	312349048	6.34	14722	-0.525	-0.468	0.130	0.225	65.050136	37.200711	2367.58	2333.94

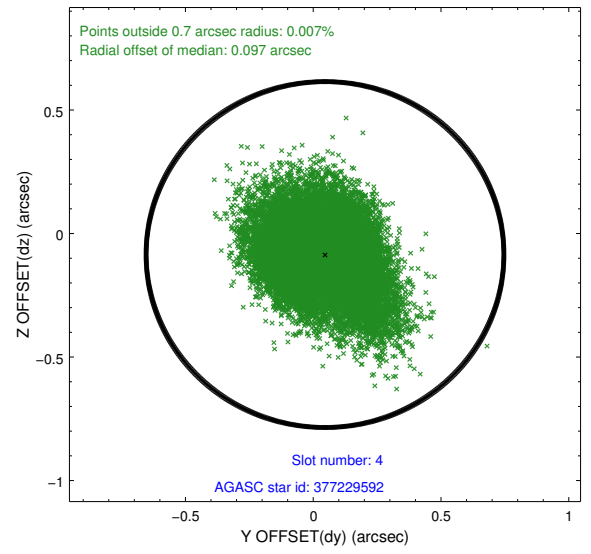
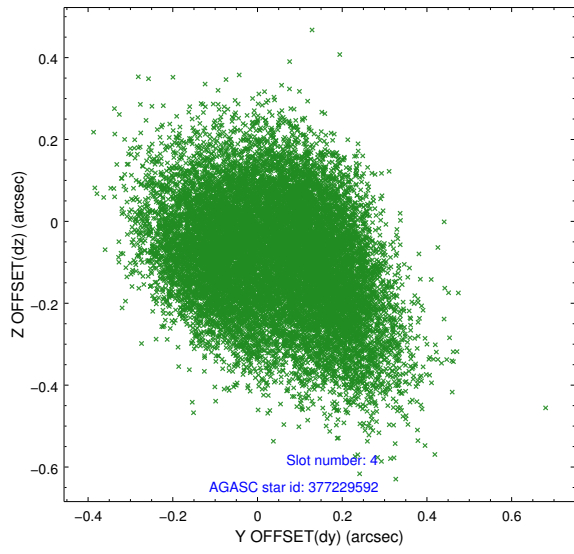
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2.4 Star Slots

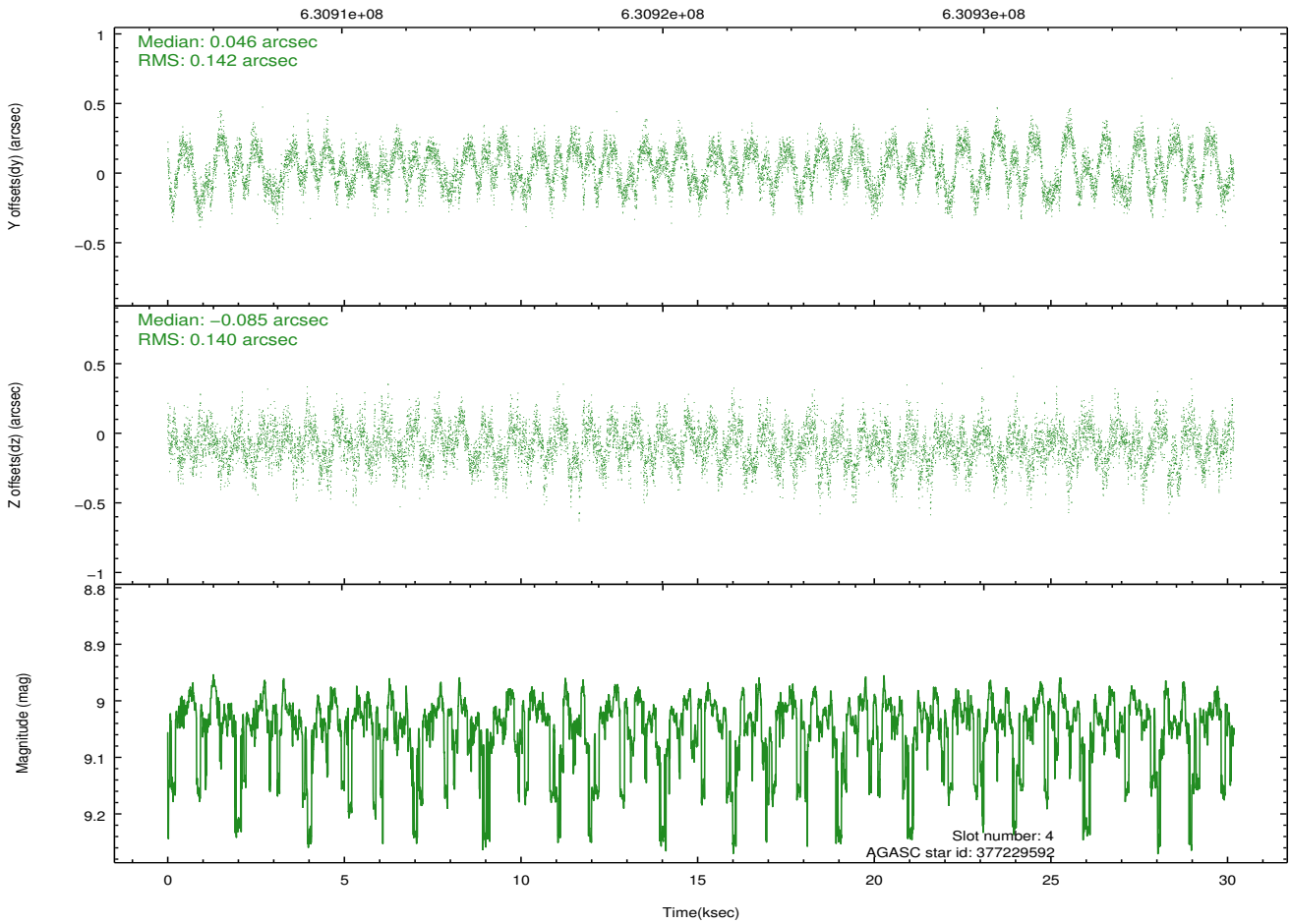
2.4.1 Slot 3



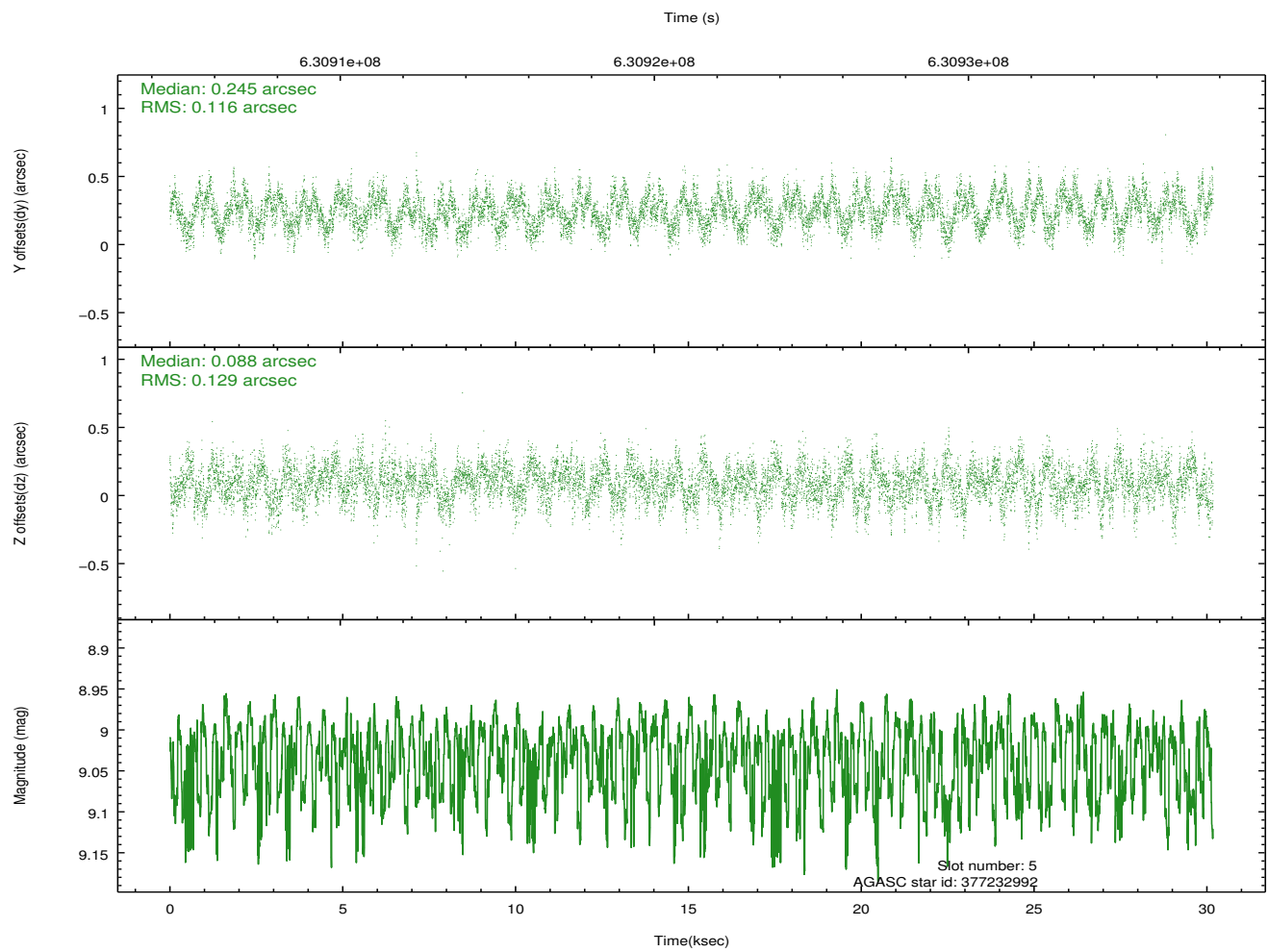
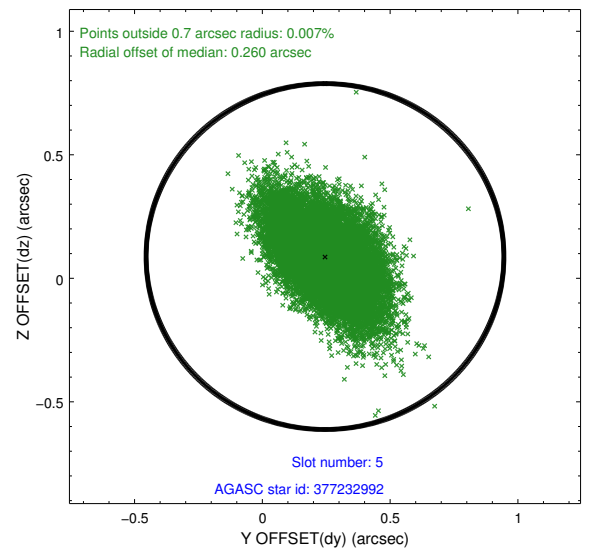
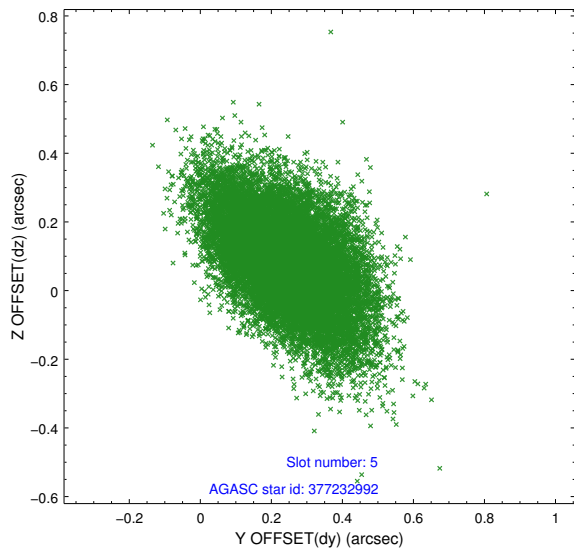
2.4.2 Slot 4



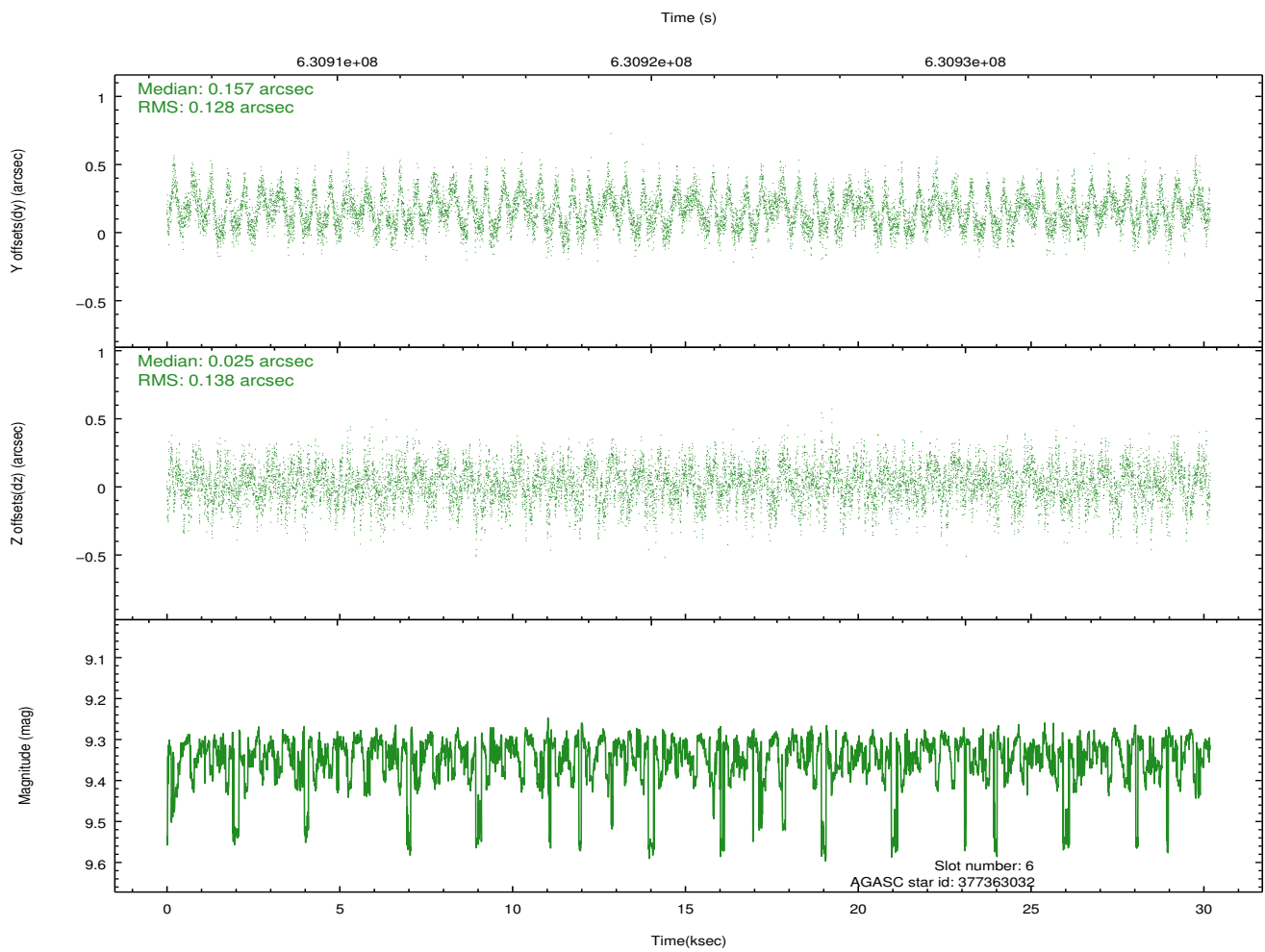
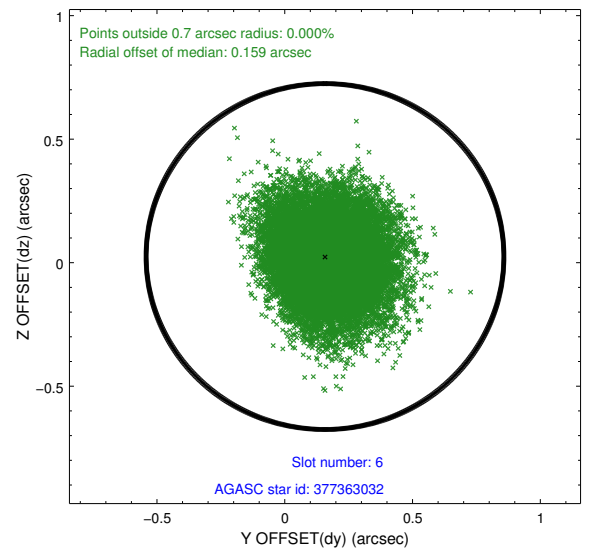
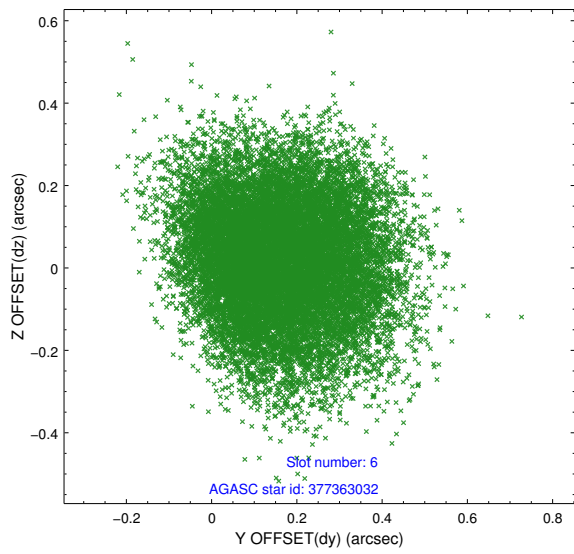
Time (s)



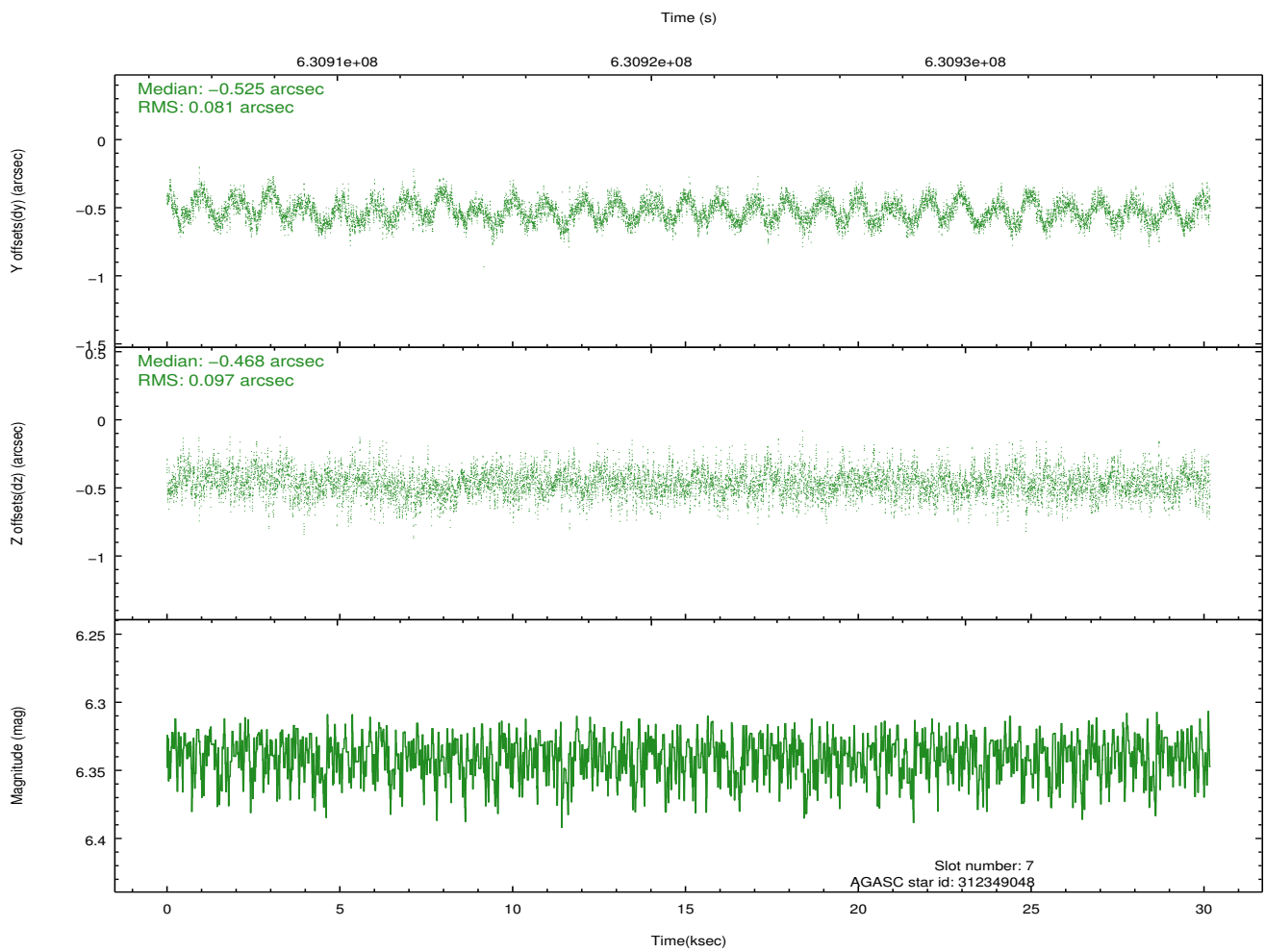
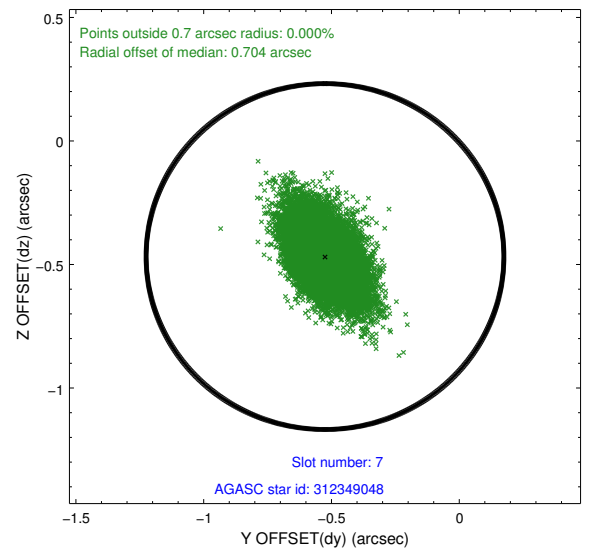
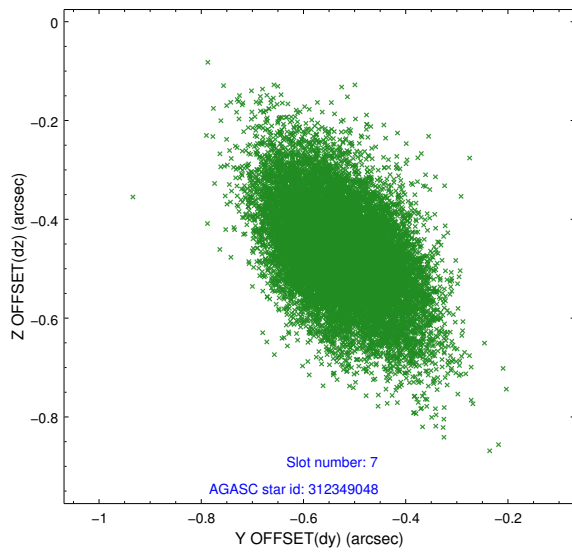
2.4.3 Slot 5



2.4.4 Slot 6

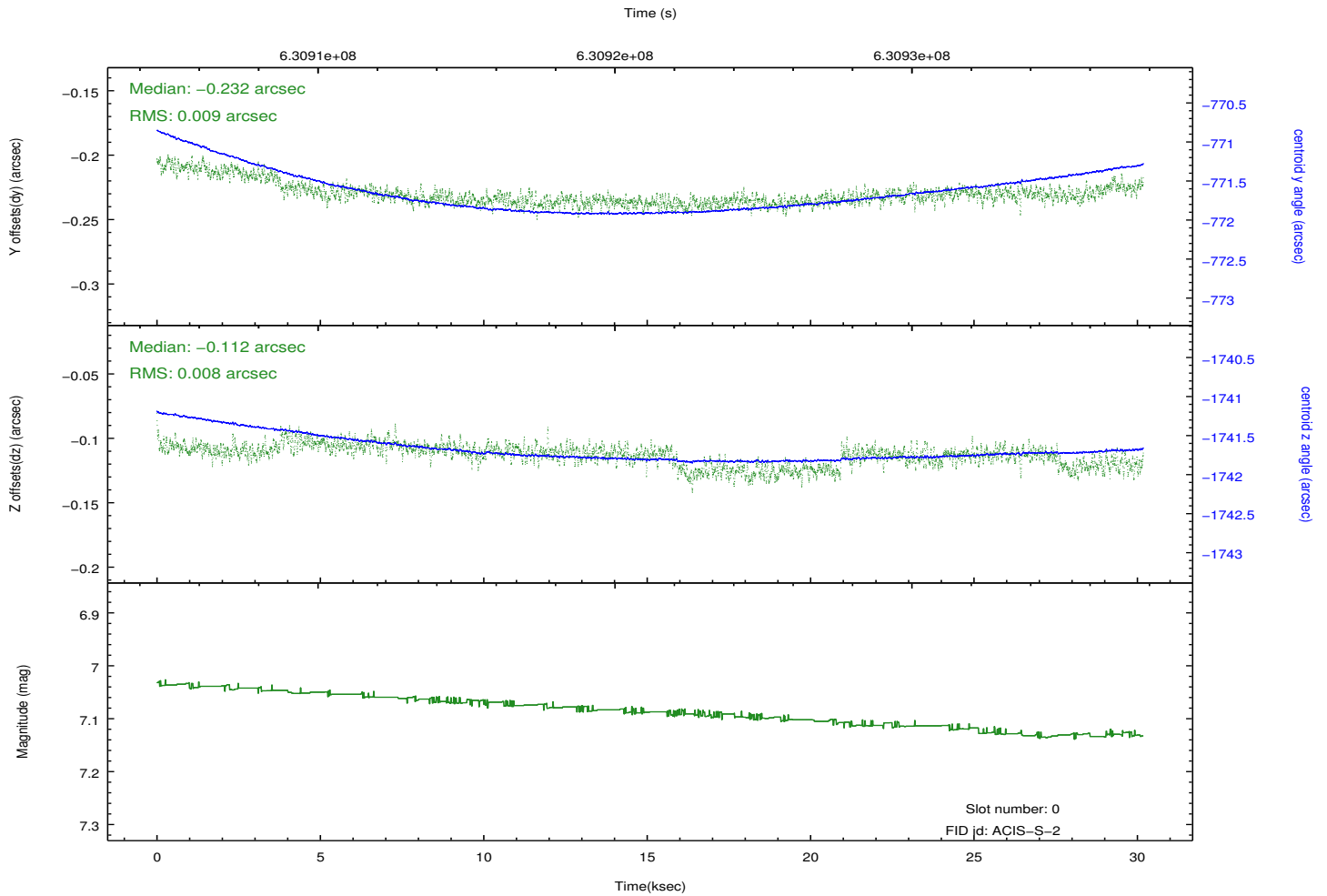
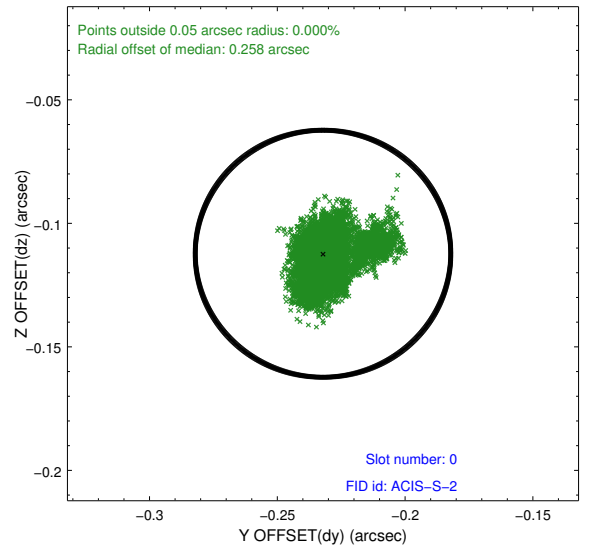
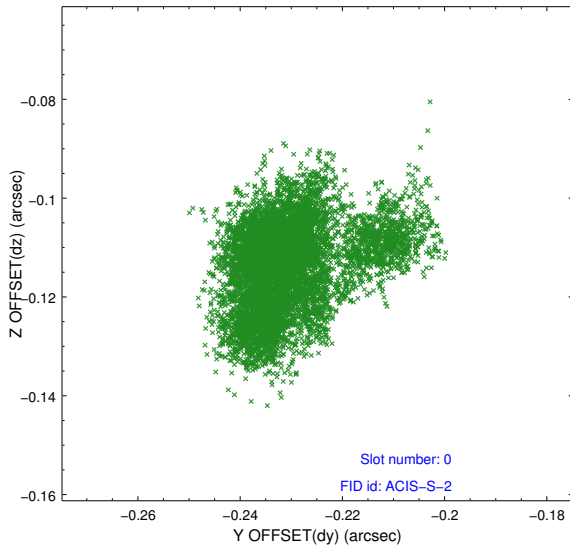


2.4.5 Slot 7

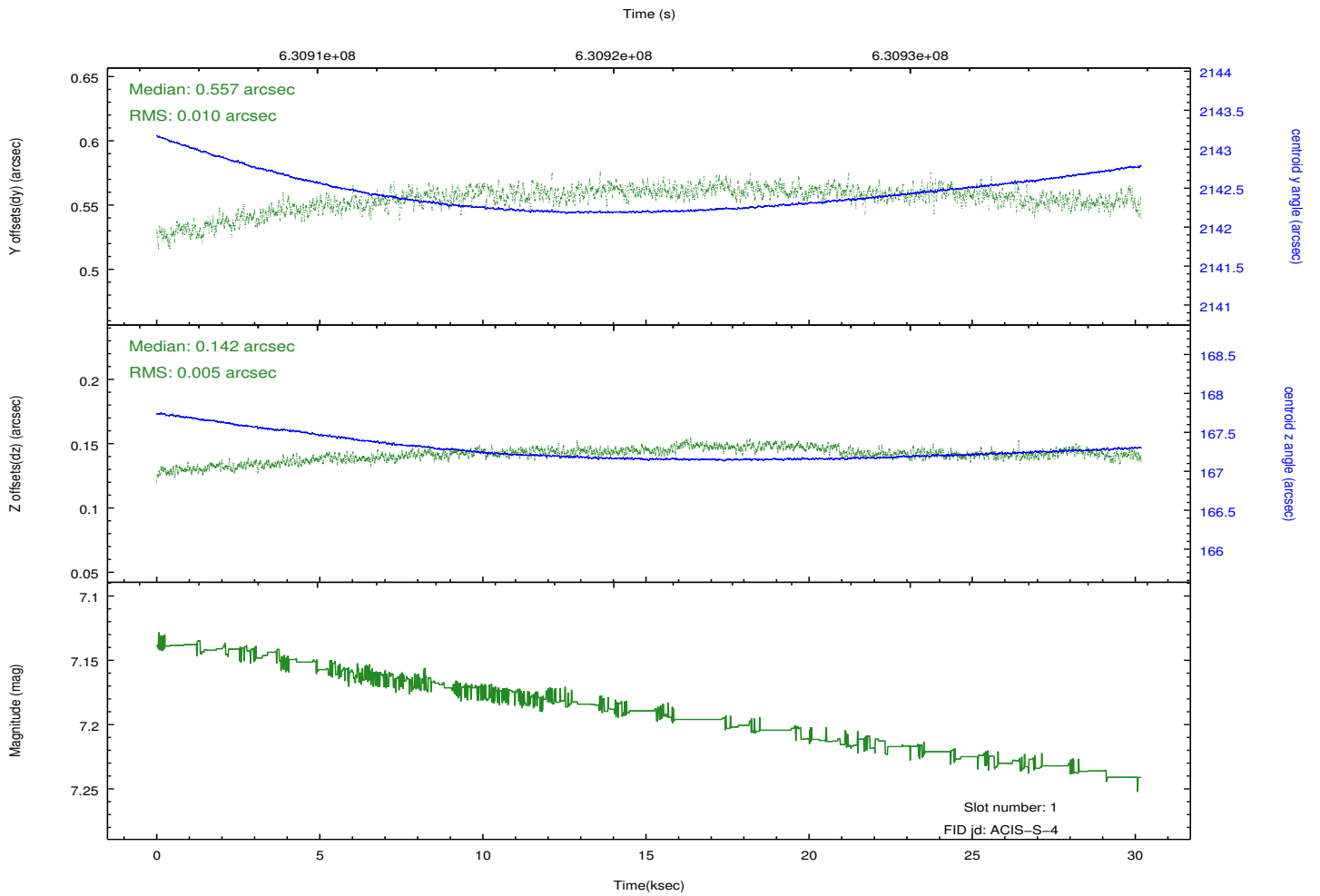
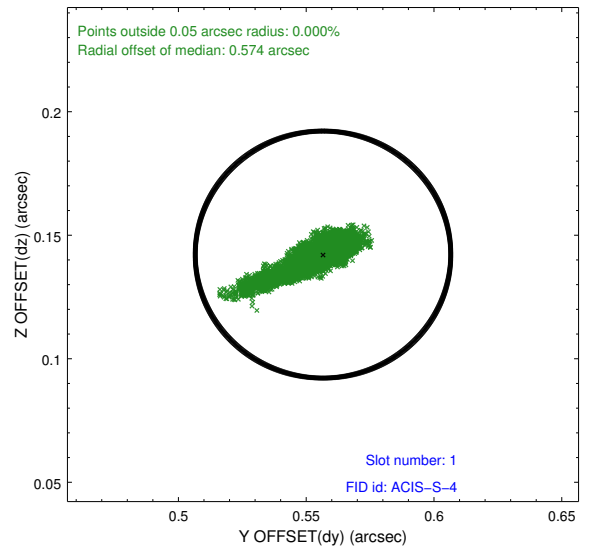
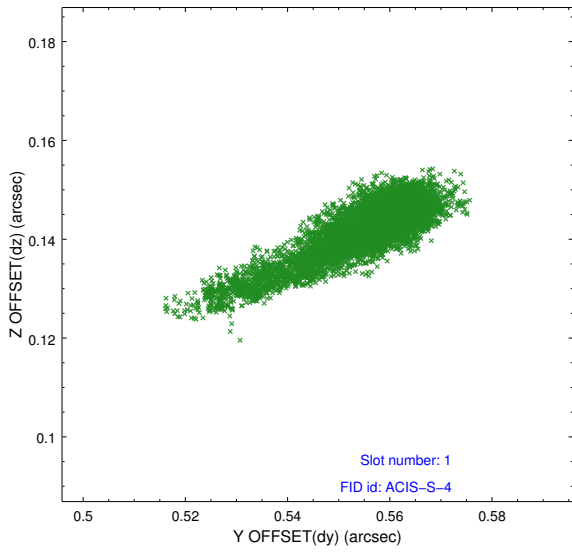


2.5 FID Slots

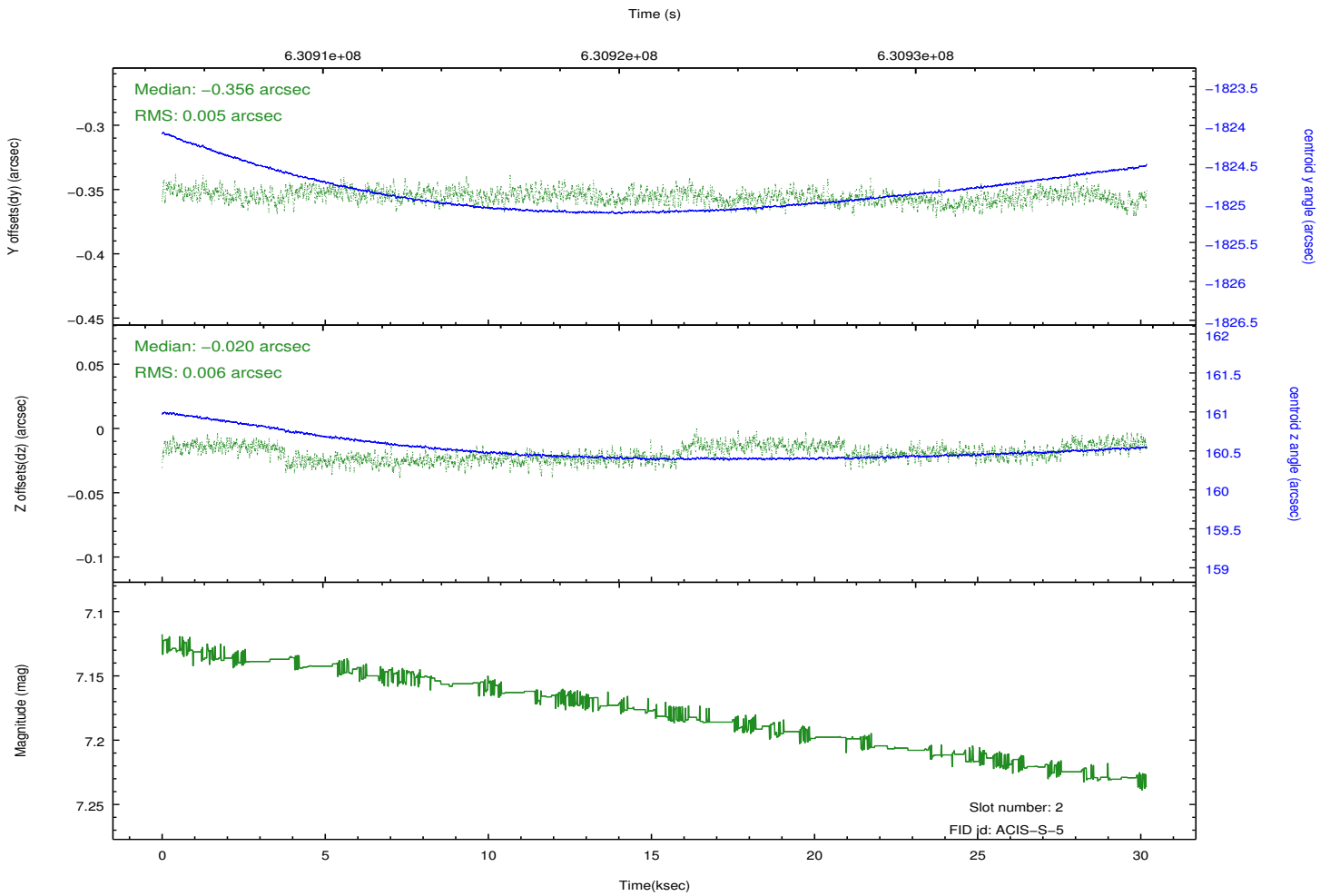
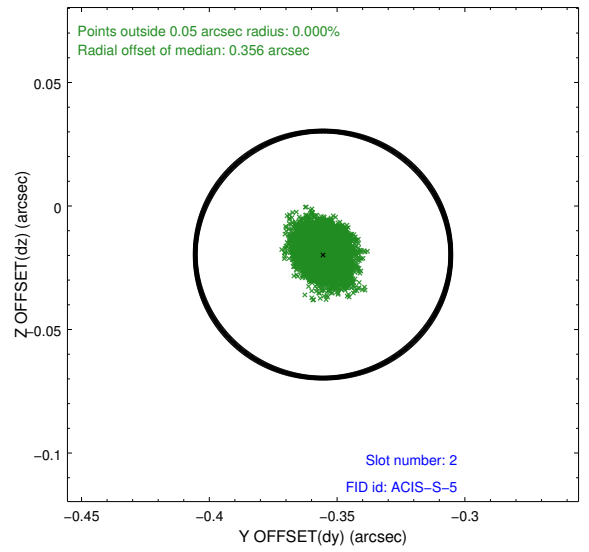
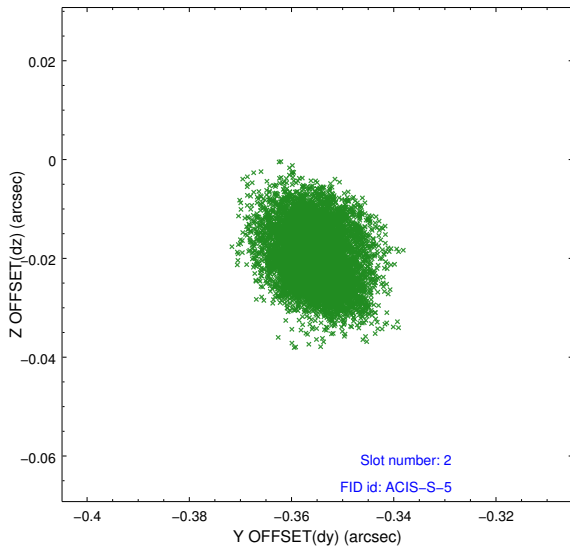
2.5.1 Slot 0



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)	2018.01.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.087601195693

A.2 Comments

Joint proposal with HST and NuSTAR.

Roll preference met.