

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16521 - L2 Version 2
Chandra X-Ray Center

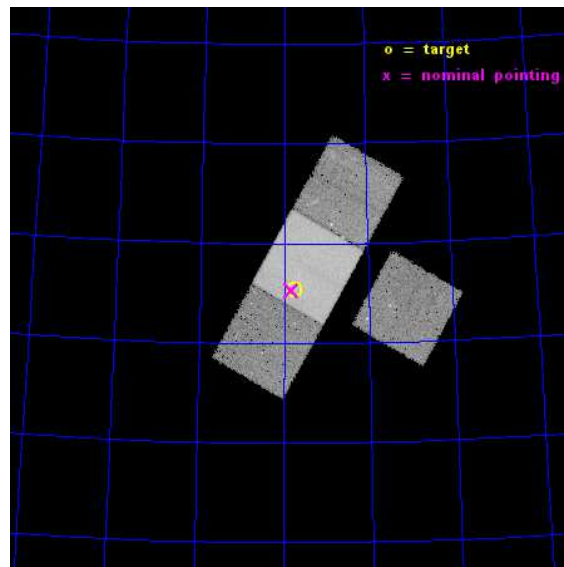
L2 Processing Date : Dec 11 2014

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1 Front

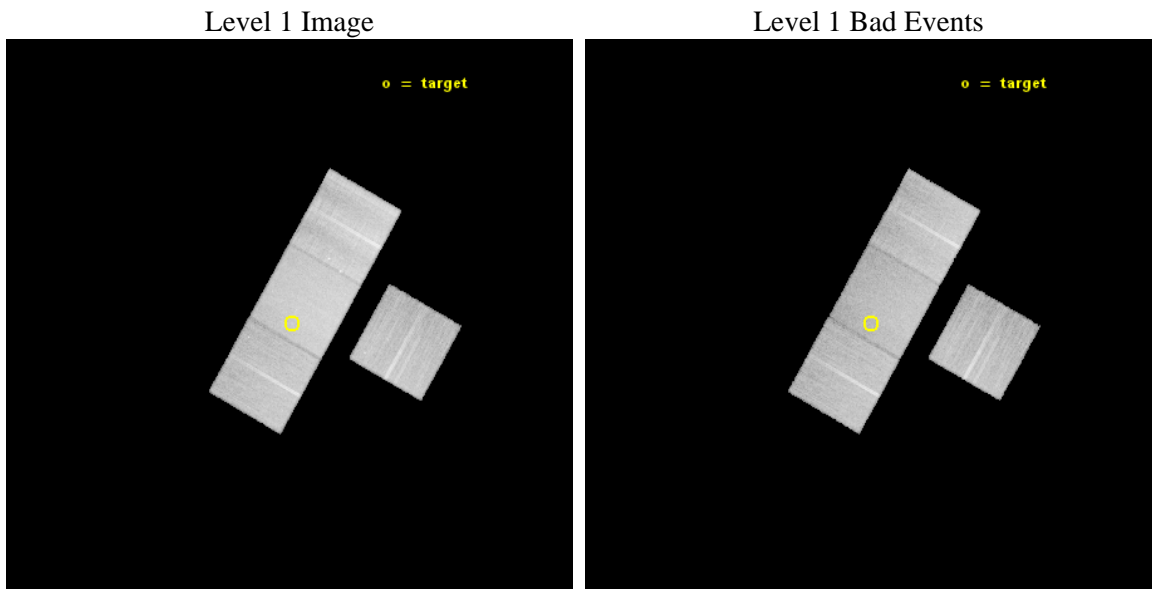
seq_num	702973	Sequence number
obs_id	16521	Observation id
title	Probing dark matter in the luminous radio galaxy 3C220.3 and the structure of the z=2.22 SMG/AGN it is lensing.	Proposal title
observer	Dr Belinda Wilkes	Principal investigator
object	3C 220.3	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	144.849292	Observer's specified target RA [deg]
dec_targ	83.25725	Observer's specified target Dec [deg]
ra_nom	144.89160756124	Nominal RA [deg]
dec_nom	83.255315967236	Nominal Dec [deg]
roll_nom	299.46798915996	Nominal Roll [deg]
revision	2	Processing version of data
ontime	45077.100346684	Sum of GTIs [s]
livetime	44488.134845377	Livetime [s]
ontime3	45077.100346684	Sum of GTIs [s]
ontime6	45077.100346684	Sum of GTIs [s]
ontime7	45077.100346684	Sum of GTIs [s]
ontime8	45073.959356368	Sum of GTIs [s]
l2events	188521	Number of level 2 events



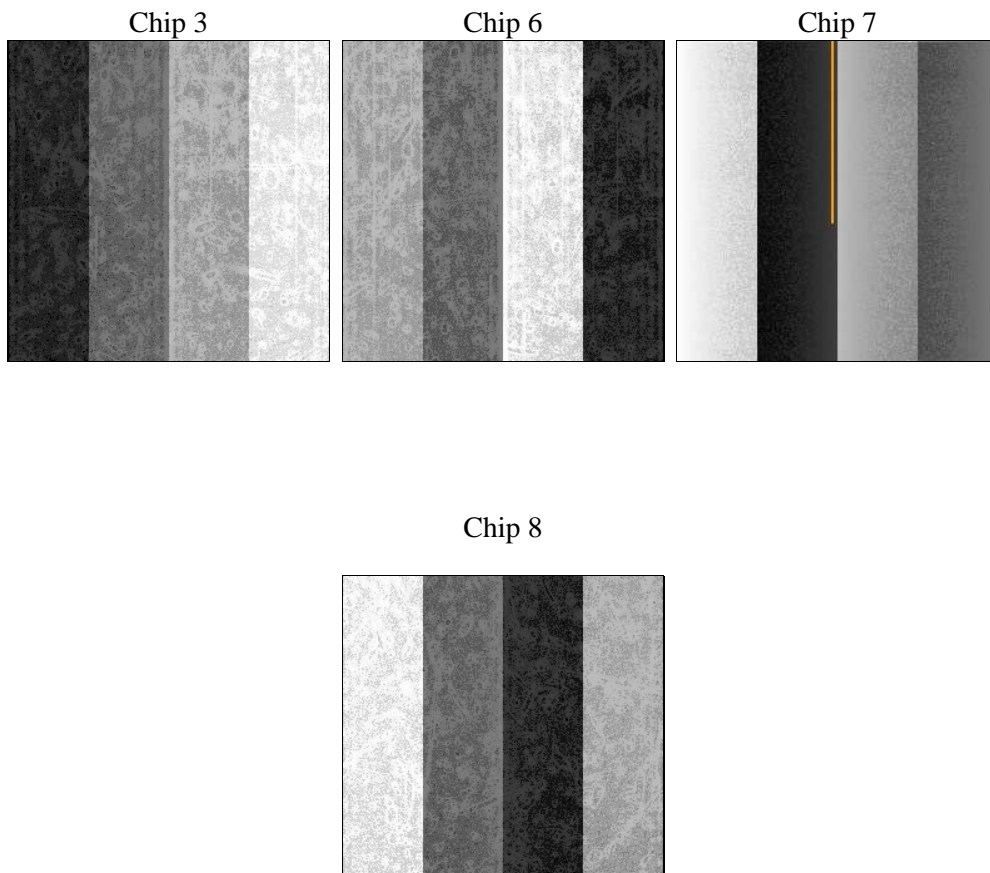
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.808000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	45077.100346684	Sum of GTIs [s]
caldsver	4.6.4	 	ontime3	45077.100346684	Sum of GTIs [s]
date	2014-12-12T03:38:03	Date and time of file creation	ontime6	45077.100346684	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	45077.100346684	Sum of GTIs [s]
			ontime8	45073.959356368	Sum of GTIs [s]
			l1events	952508	Number of level 1 events

2.1.4 Events

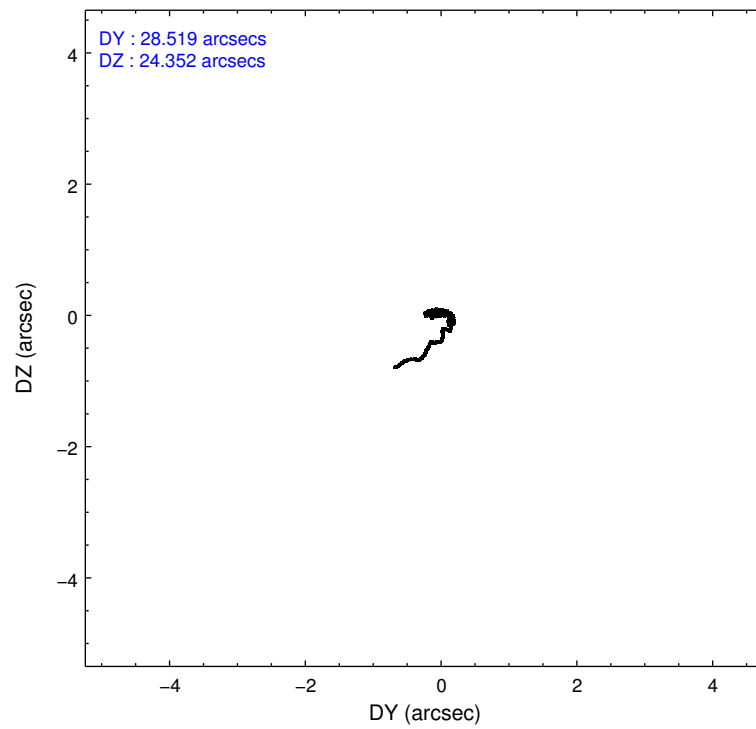
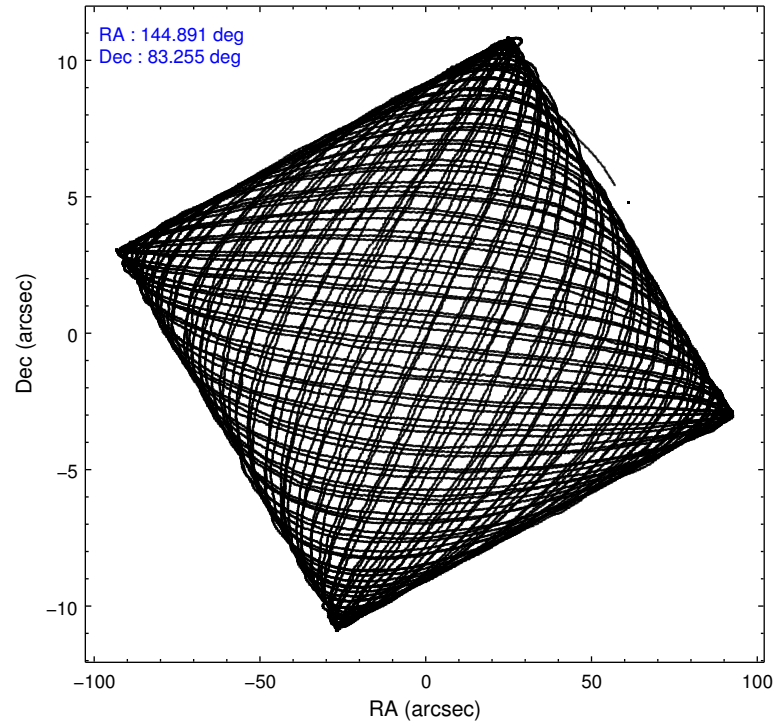
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	192315	205090	276983	278120
rejected events	168654	179655	156612	200613
rejected %	87%	87%	56%	72%

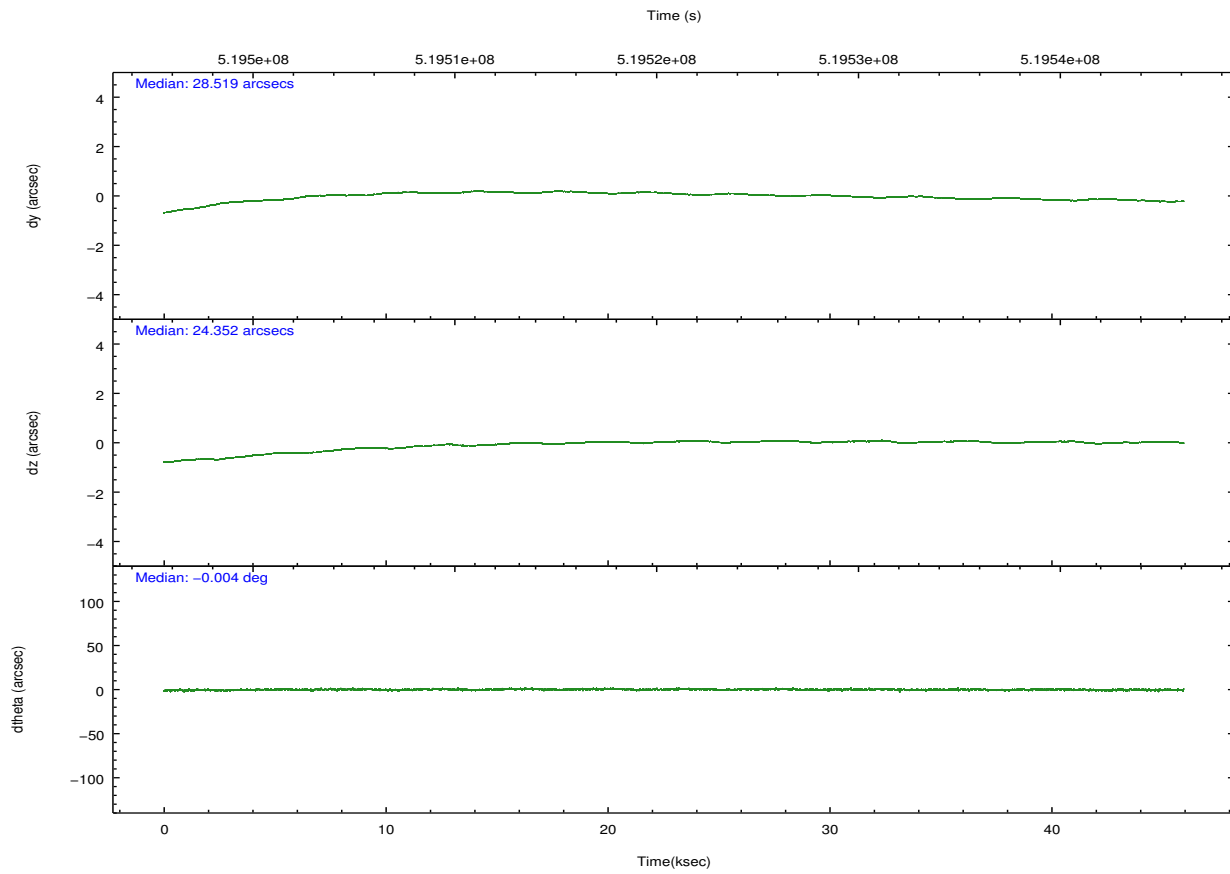
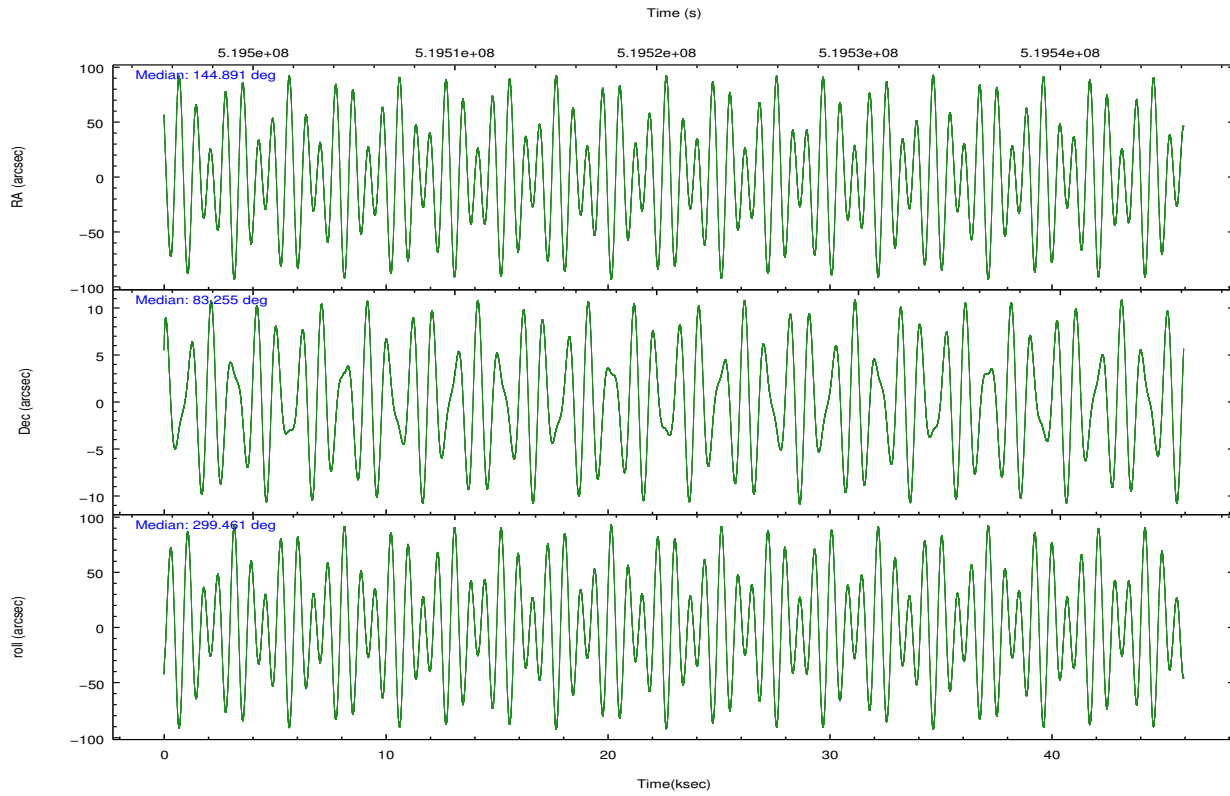
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8724	8610	10627	24136
	4%	4%	3%	8%
grade 1 events	118	111	348	209
	0%	0%	0%	0%
grade 2 events	5086	5875	24610	17947
	2%	2%	8%	6%
grade 3 events	2537	2570	10150	8021
	1%	1%	3%	2%
grade 4 events	2429	2562	10135	7651
	1%	1%	3%	2%
grade 5 events	10825	10960	28438	16017
	5%	5%	10%	5%
grade 6 events	4886	5818	64857	19760
	2%	2%	23%	7%
grade 7 events	157710	168584	127818	184379
	82%	82%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	144.689144	144.8916075612392	CCD I2 on	N	N
[deg] Pointing Dec	83.268861	83.25531596723553	CCD I3 on	O2	Y
[deg] Pointing Roll	299.512422	299.4679891599592	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	519498824.184000	519497418.43495	CCD S5 on	N	N
Observation start date	2014-06-18T17:12:37	2014-06-18T16:50:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	519543824.184000	519544050.30004	On-chip summing requested	N	N
Observation end date	2014-06-19T05:42:37	2014-06-19T05:47:30	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





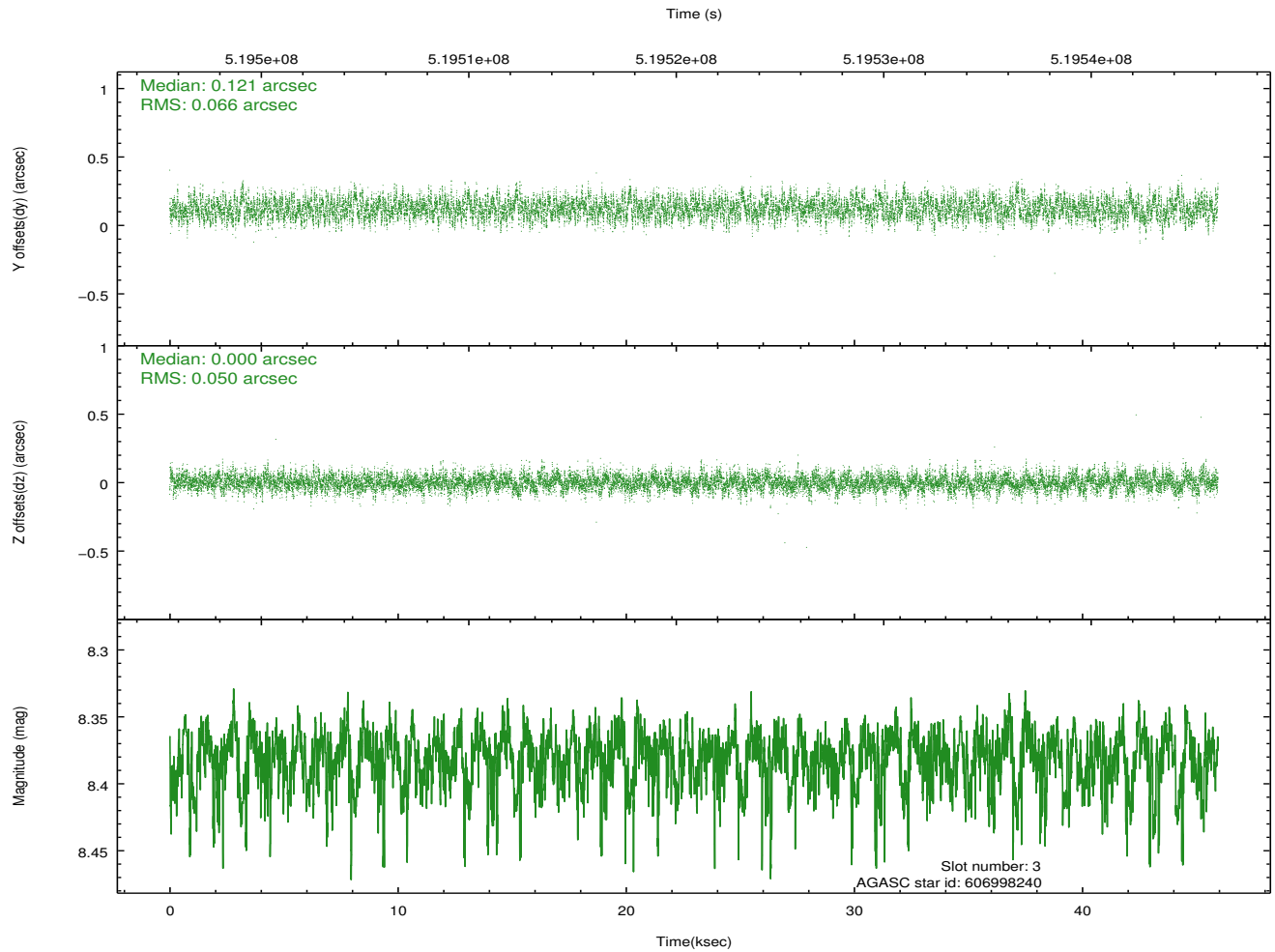
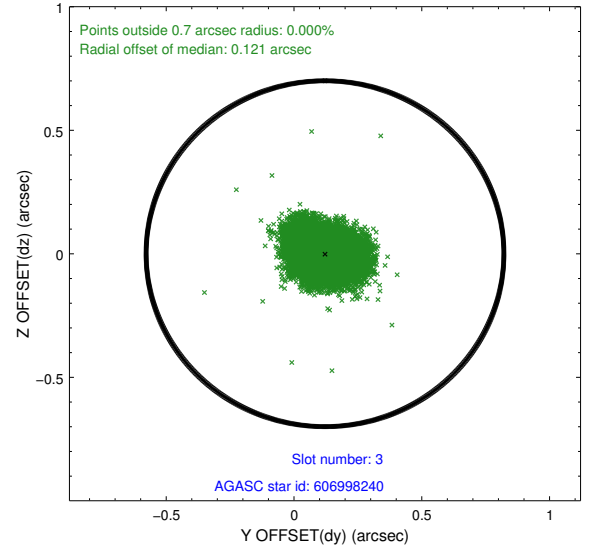
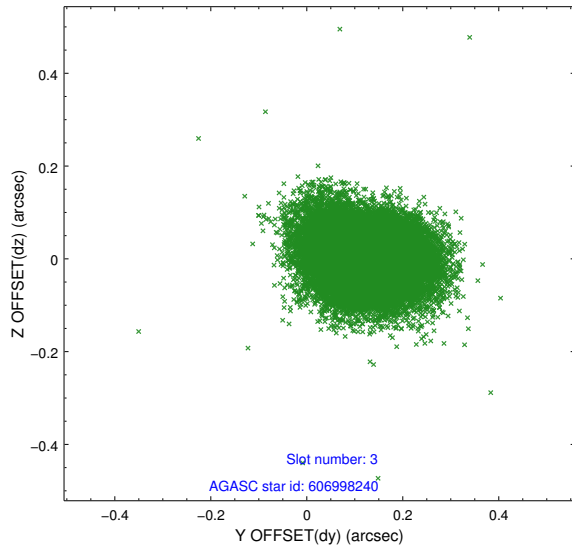
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.02	11207	-0.076	0.014	0.010	0.031	0.000000	0.000000	914.10	-1741.51
1	FID		ACIS-S-4	7.02	11206	0.166	0.040	0.008	0.021	0.000000	0.000000	2131.77	162.66
2	FID		ACIS-S-6	7.16	11207	-0.113	-0.044	0.008	0.014	0.000000	0.000000	380.03	799.95
3	GUIDE	used	606998240	8.38	22402	0.121	0.000	0.088	0.144	142.037328	82.688368	1196.97	-2071.90
4	GUIDE	used	606998600	7.22	22413	-0.089	0.030	0.087	0.134	144.240165	82.925382	977.92	-781.49
5	GUIDE	used	607012224	7.68	22414	0.145	0.199	0.085	0.134	143.315443	83.741617	-1751.60	372.98
6	GUIDE	used	607011680	7.70	22409	0.004	0.109	0.073	0.124	147.023548	83.784890	-1184.64	1715.83
7	GUIDE	used	607003496	8.22	22408	-0.186	-0.346	0.091	0.148	149.989507	83.475683	332.33	2298.24

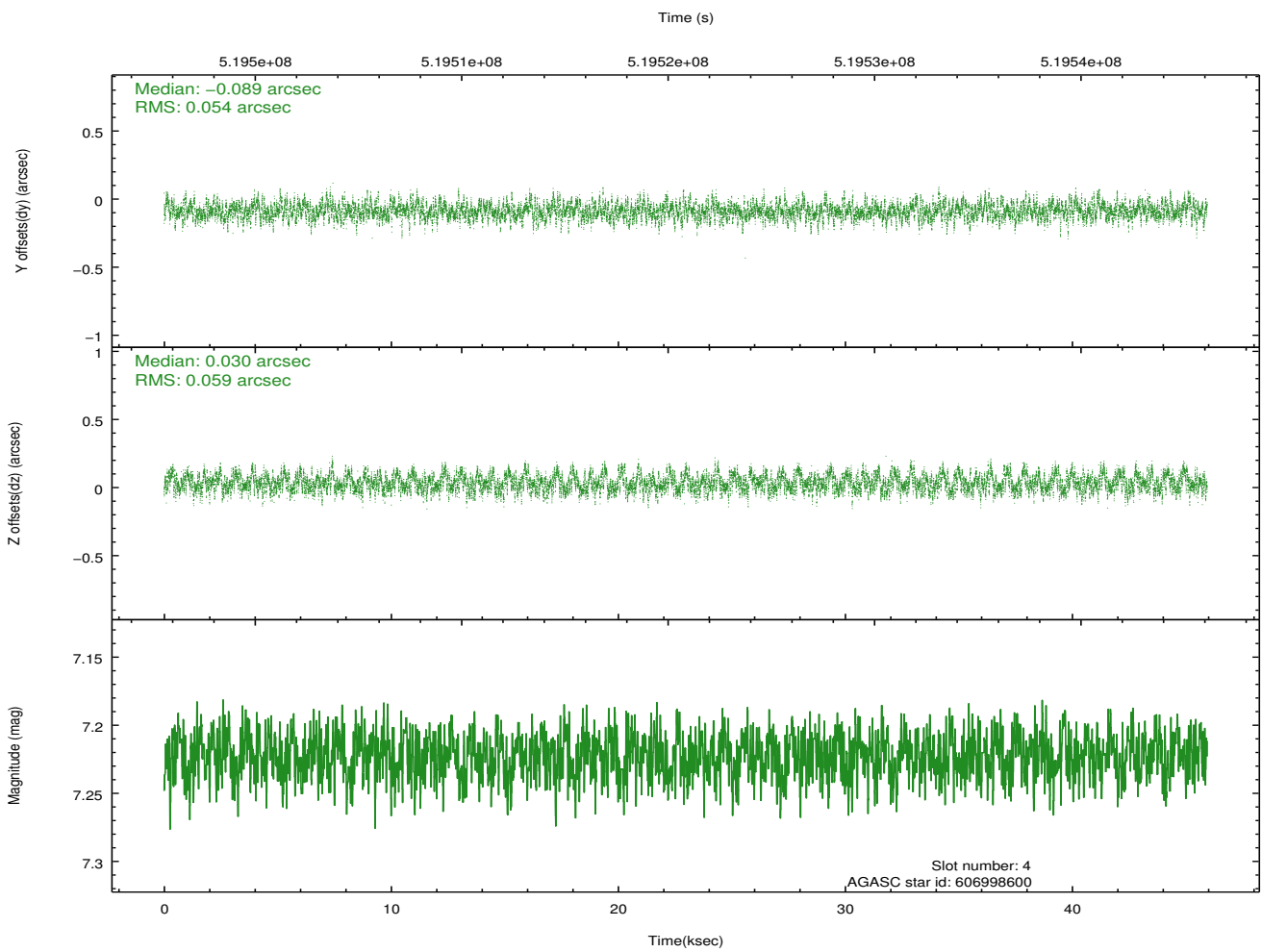
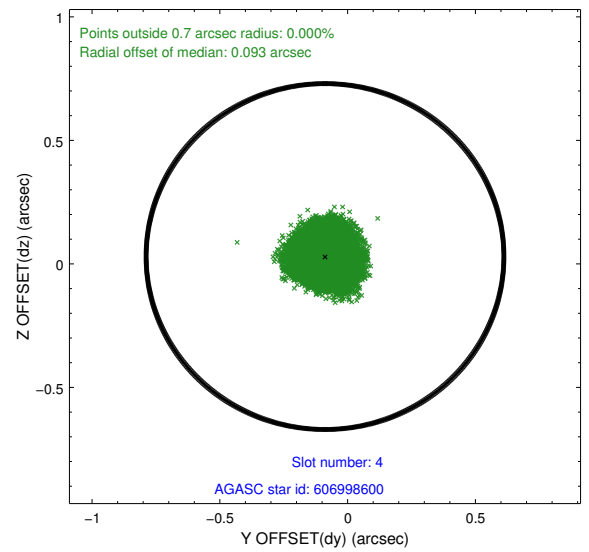
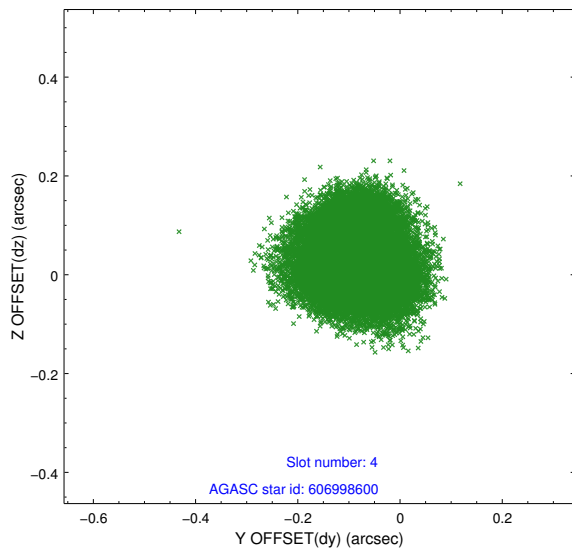
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2.4 Star Slots

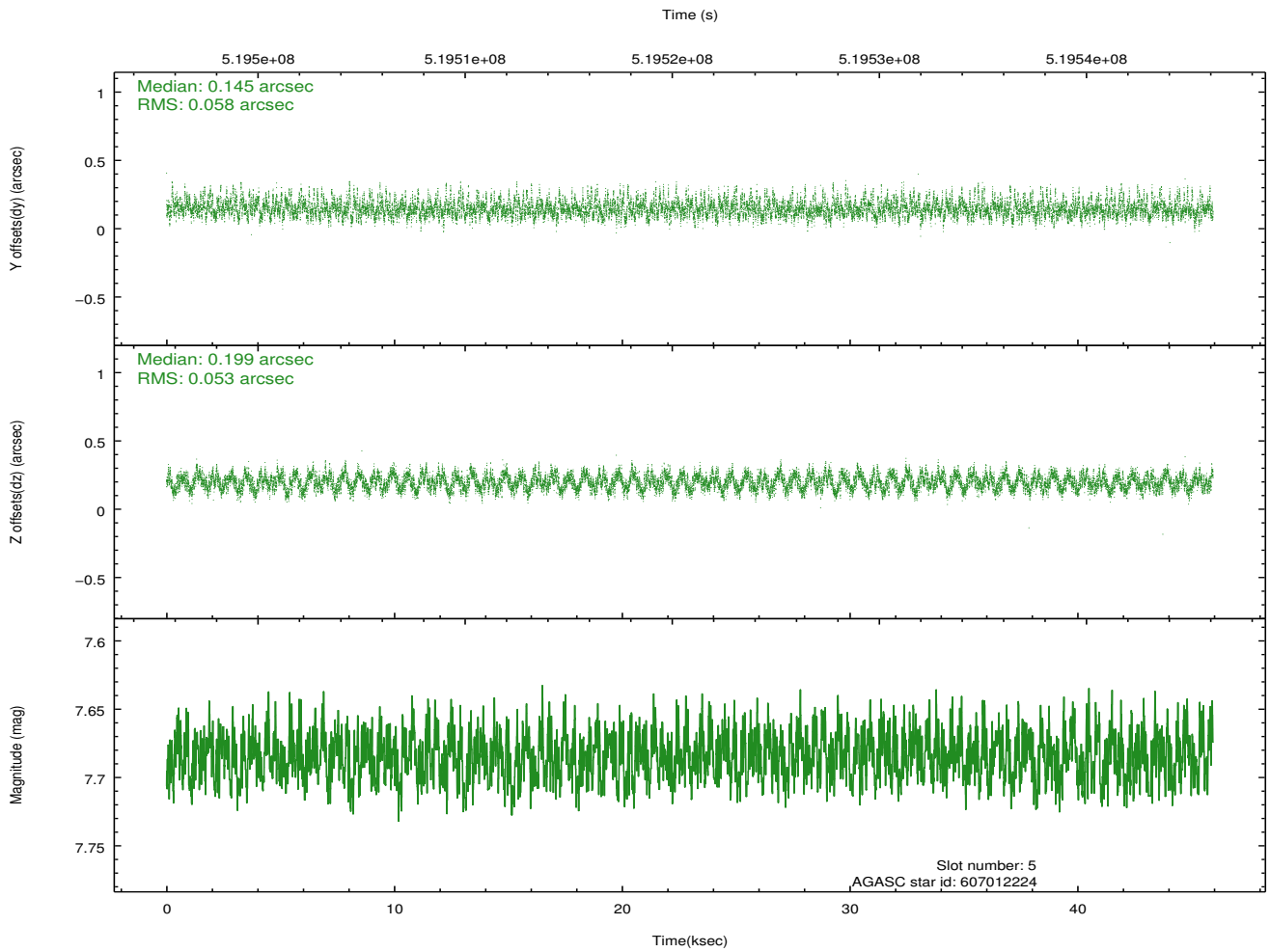
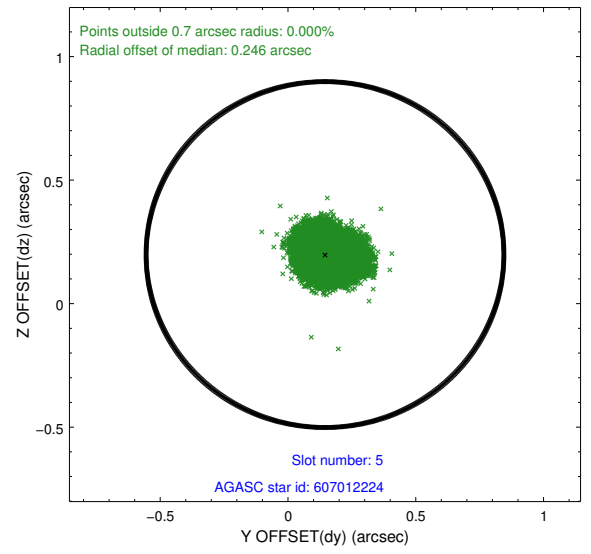
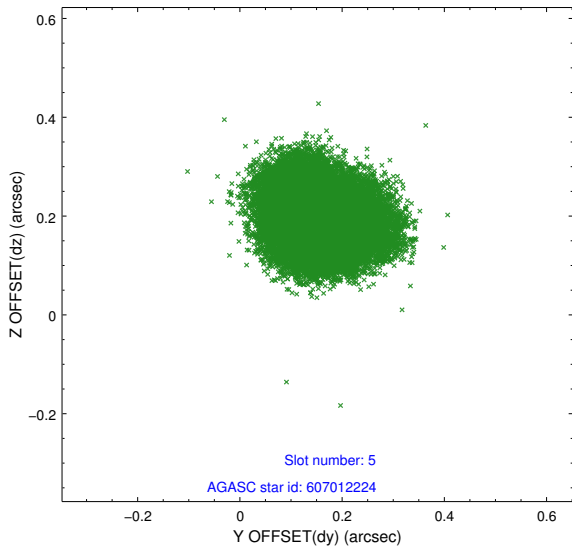
2.4.1 Slot 3



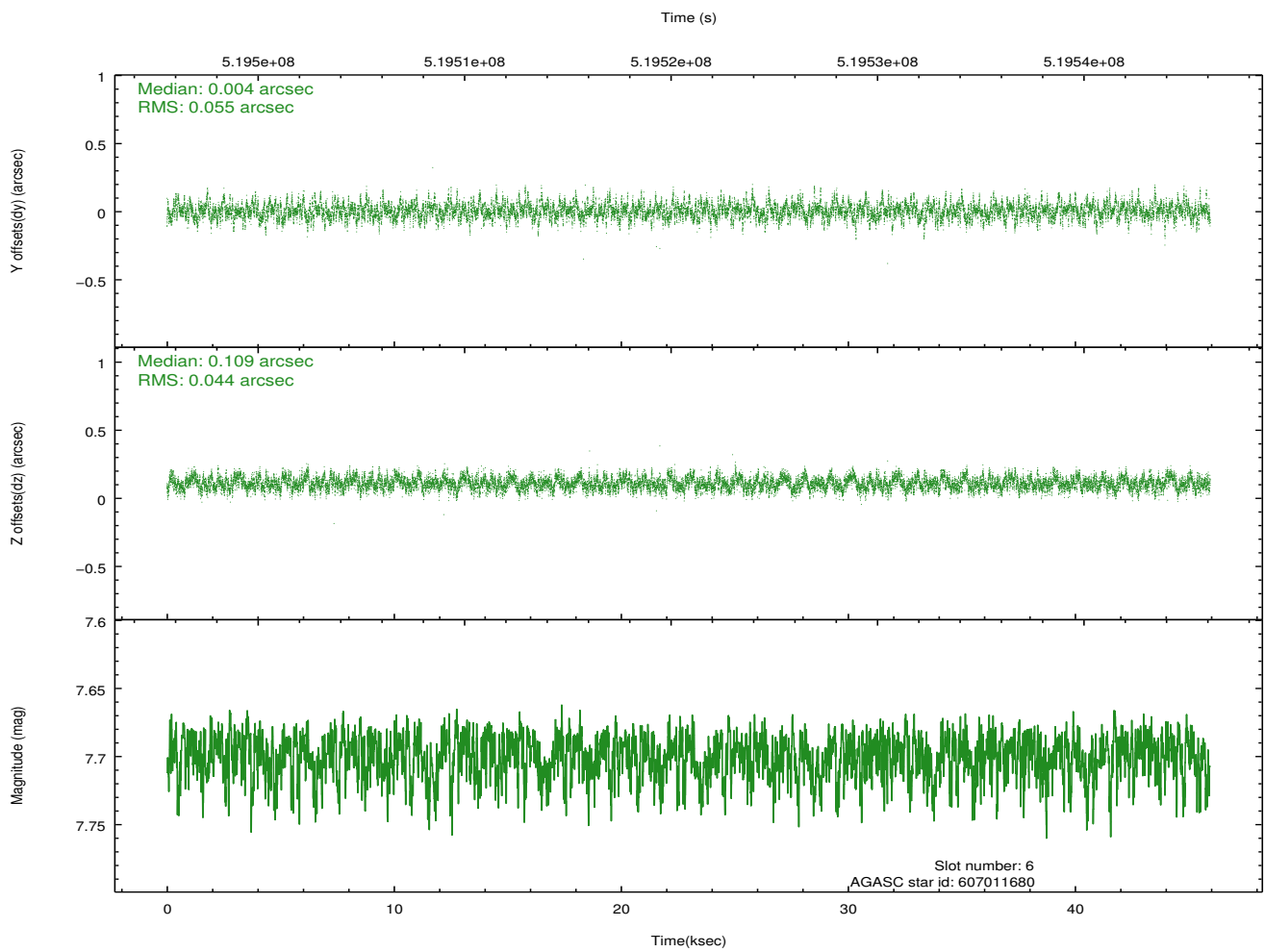
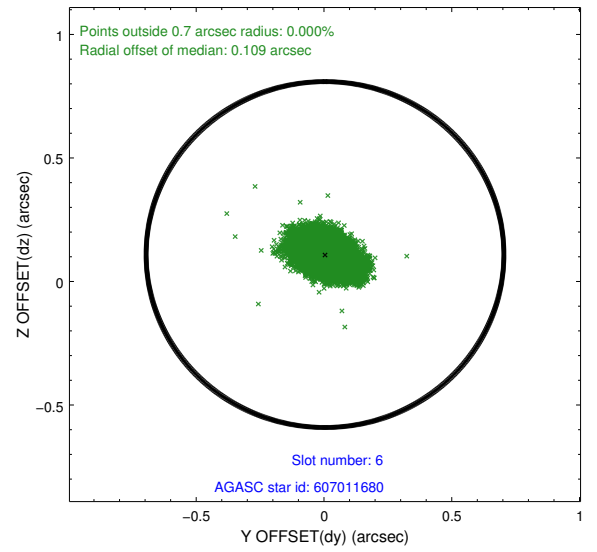
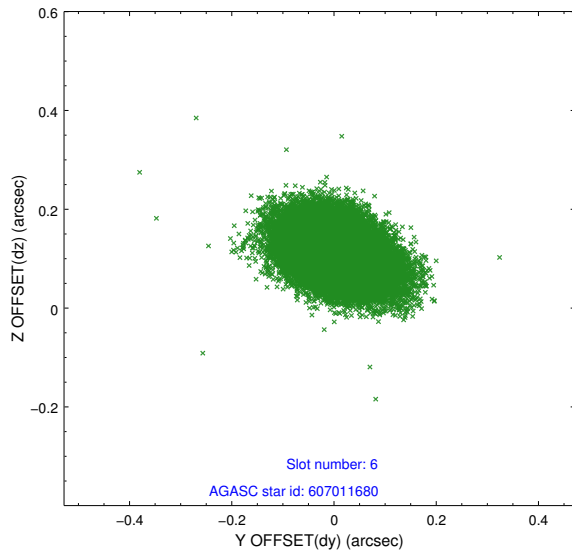
2.4.2 Slot 4



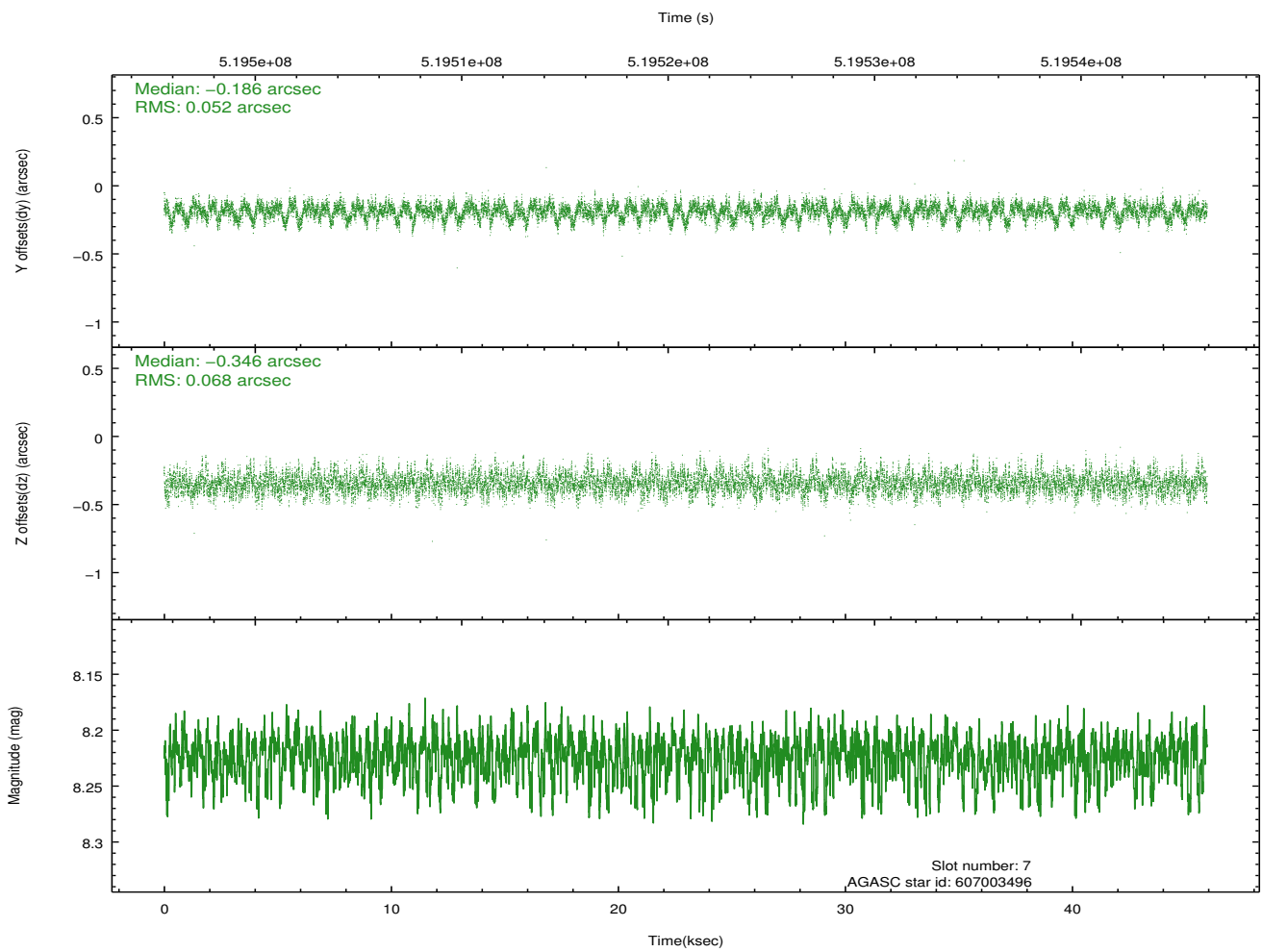
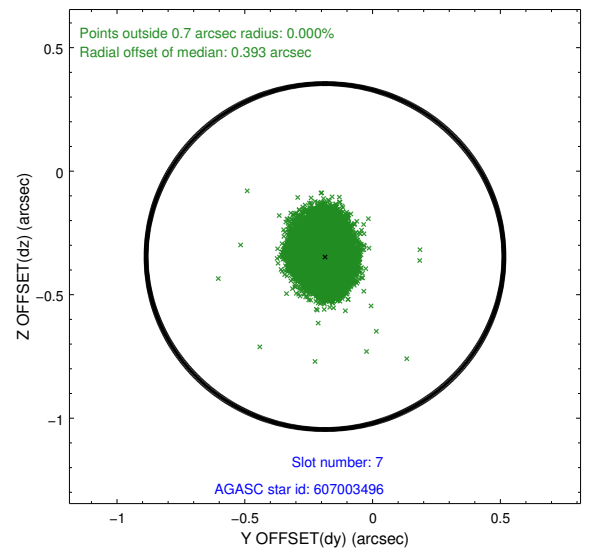
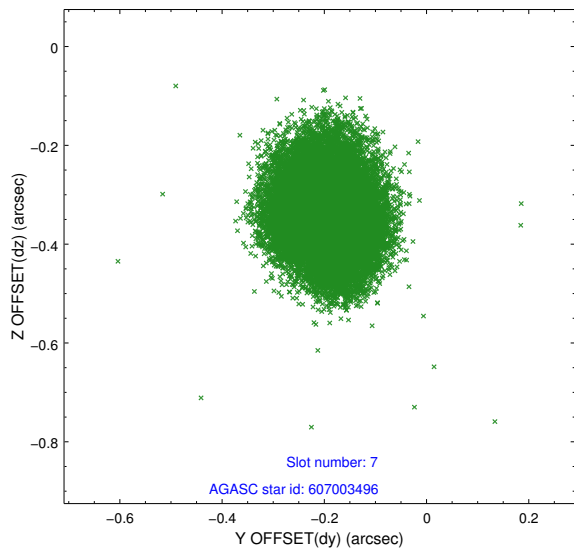
2.4.3 Slot 5



2.4.4 Slot 6

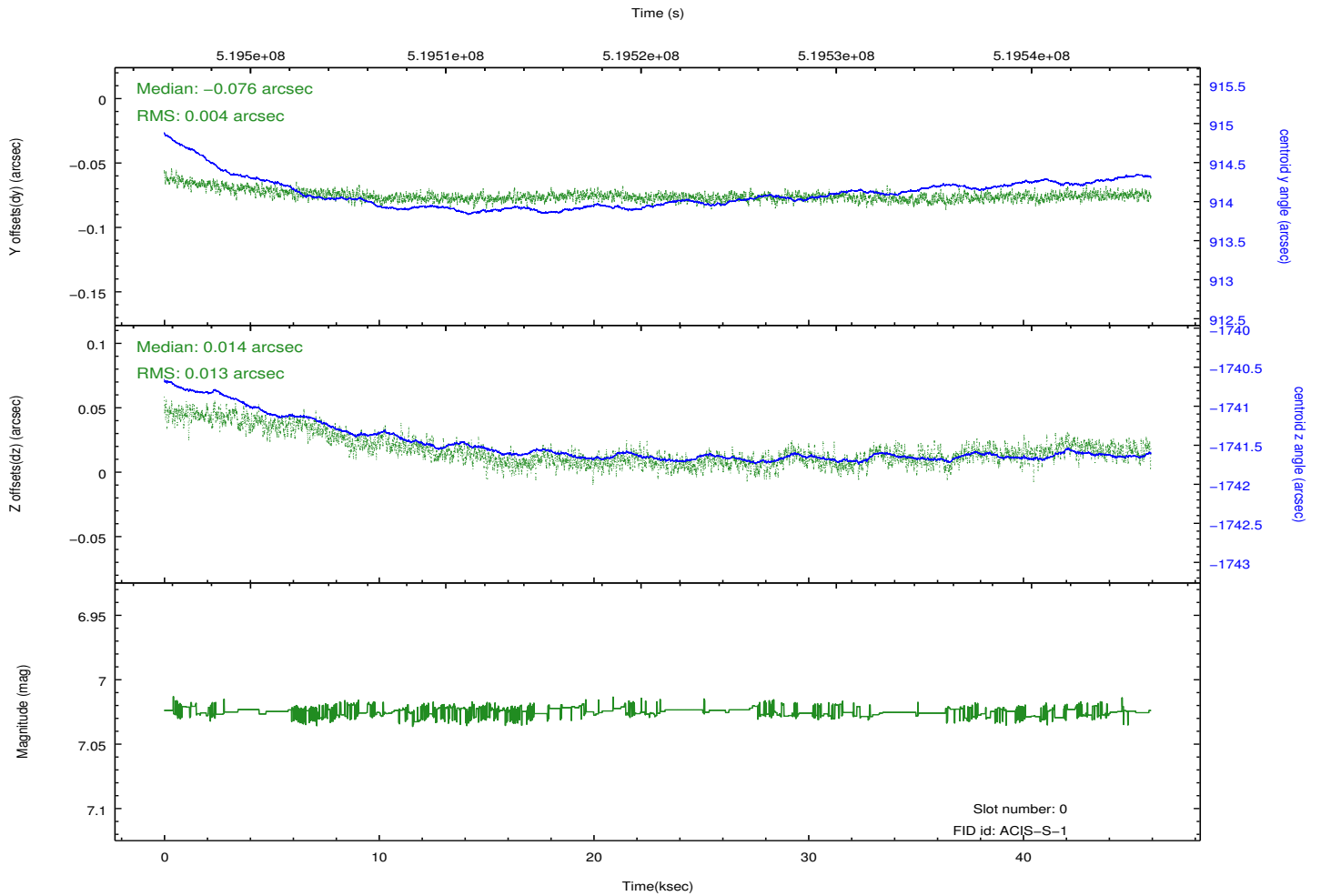
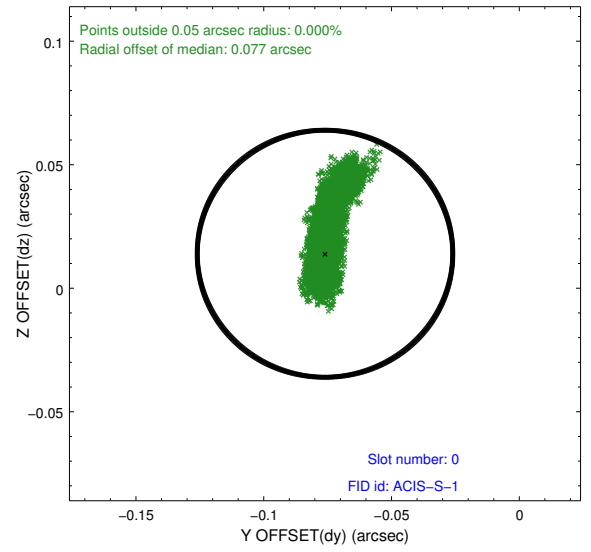
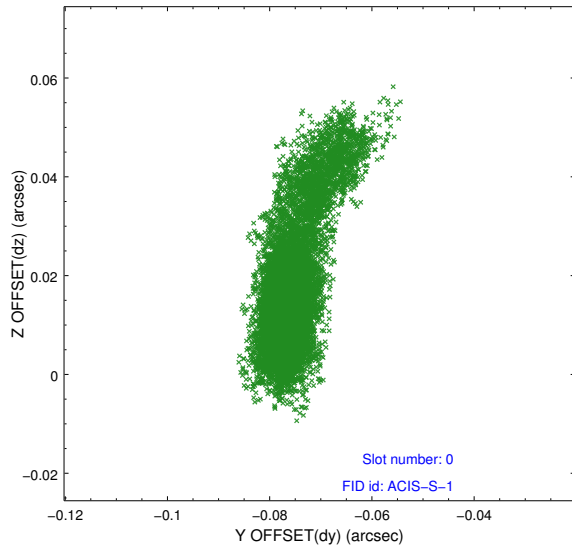


2.4.5 Slot 7

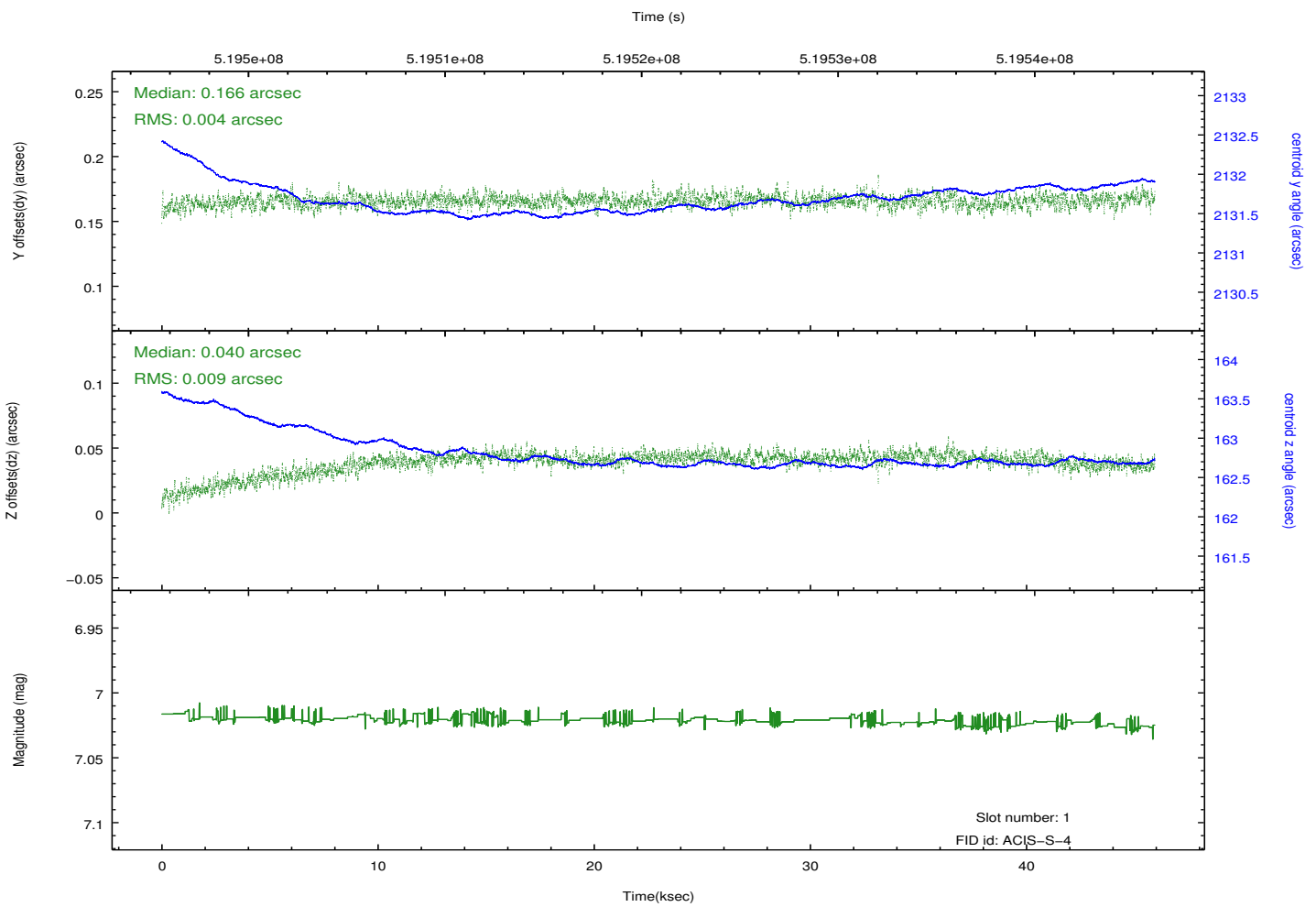
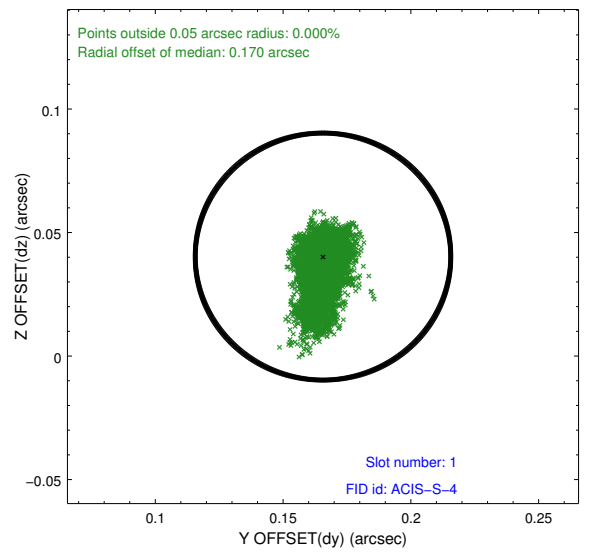
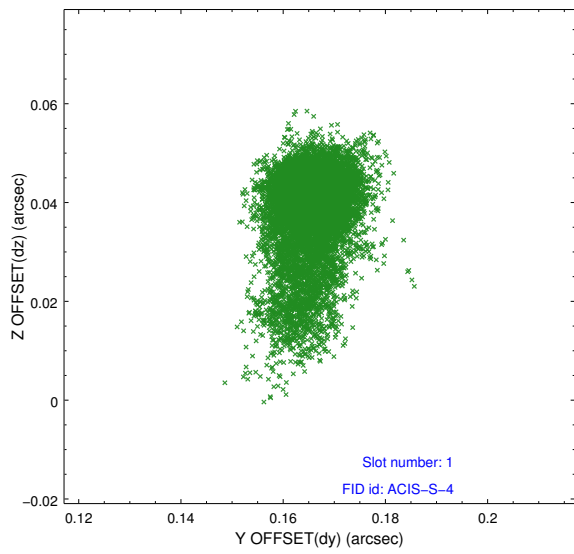


2.5 FID Slots

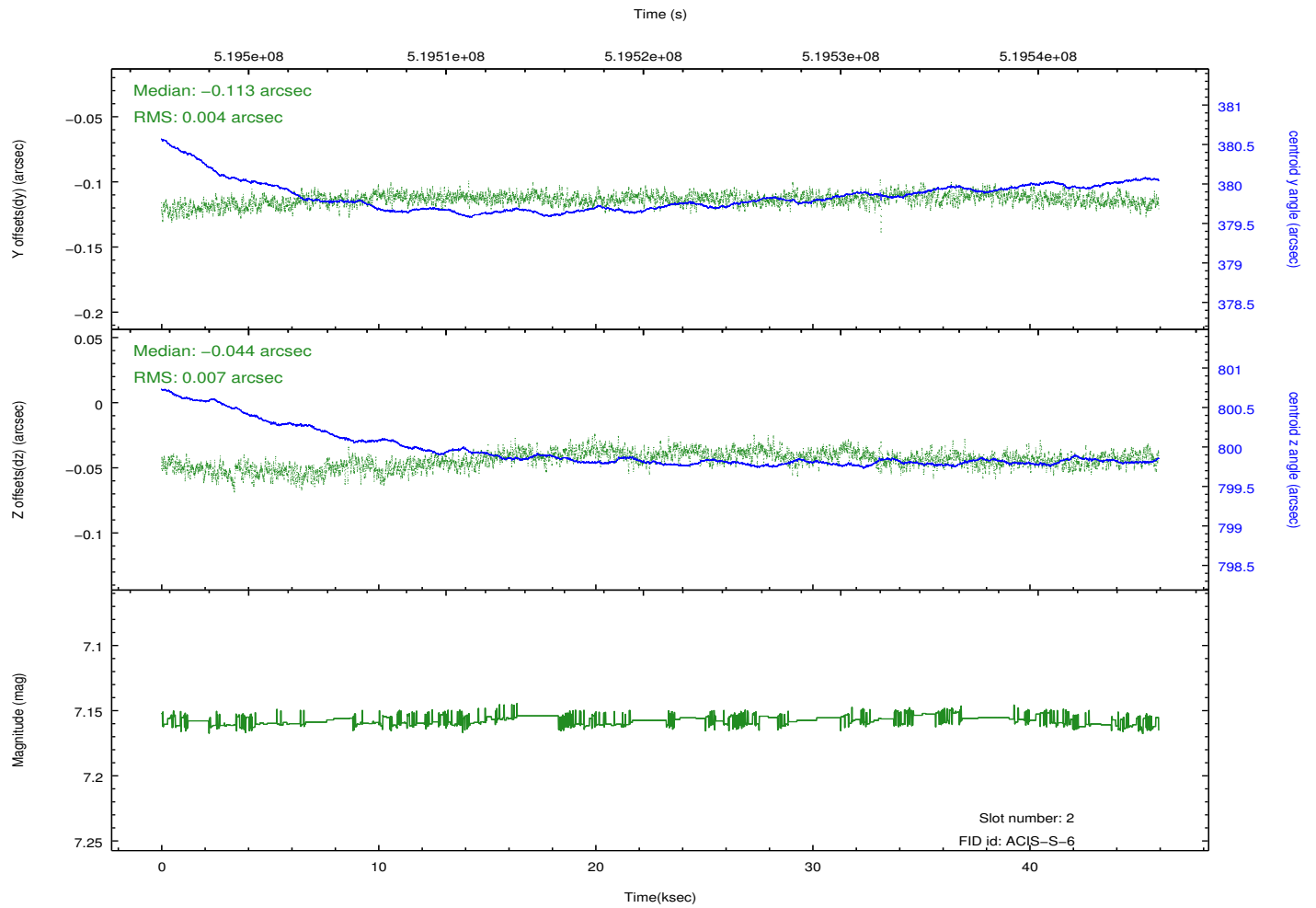
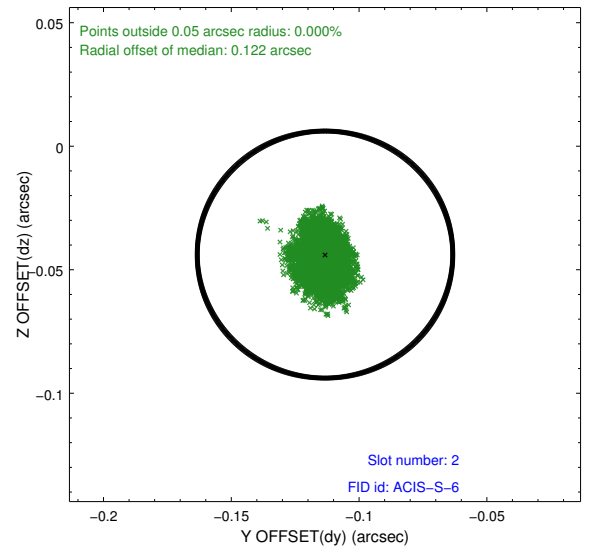
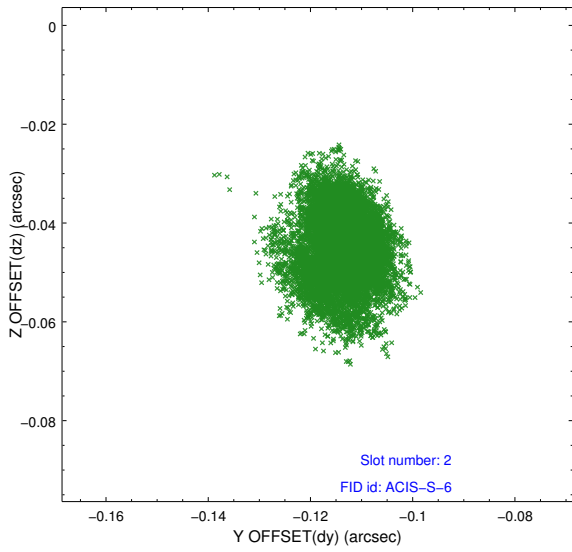
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.077100346684

A.2 Comments

Joint proposal with HST.

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These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.