

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16081 - L2 Version 3
Chandra X-Ray Center

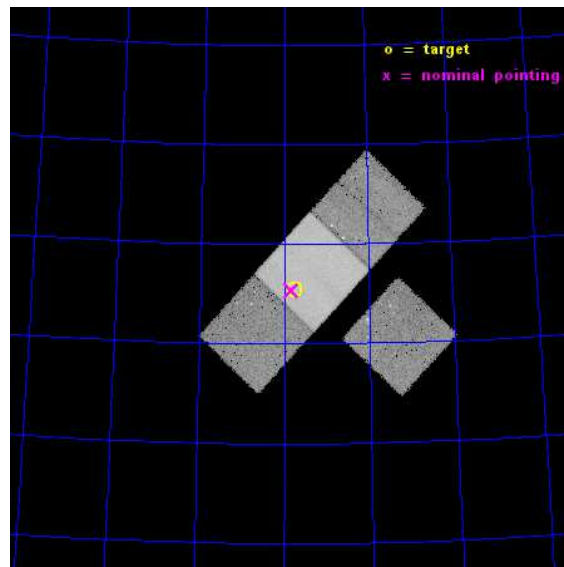
L2 Processing Date : Dec 12 2014

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1 Front

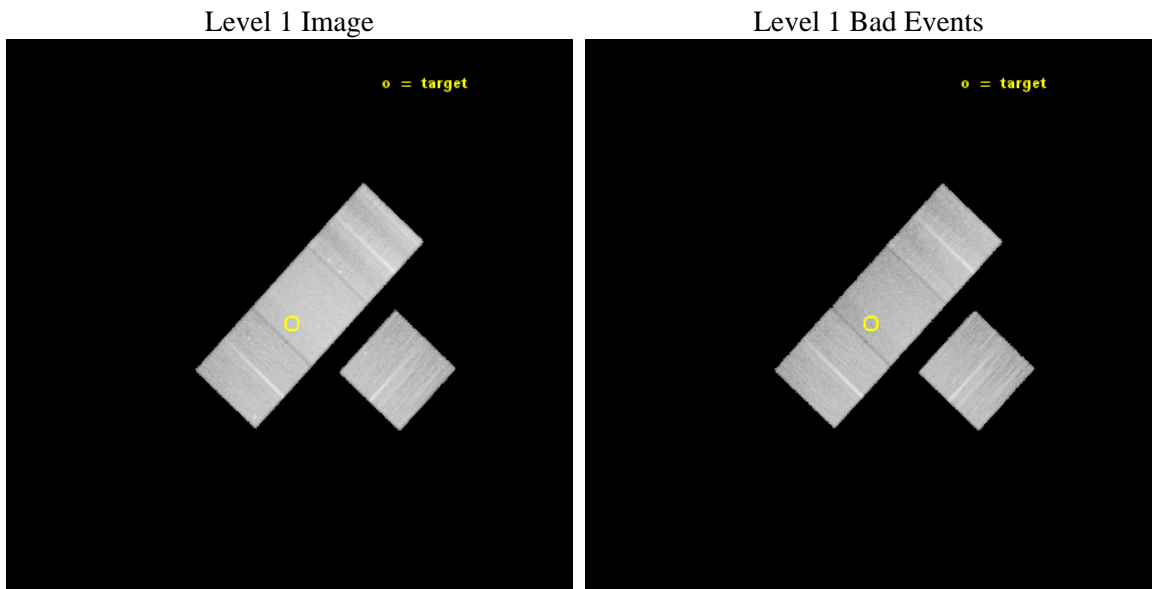
seq_num	702973	Sequence number
obs_id	16081	Observation id
title	Probing dark matter in the luminous radio galaxy 3C220.3 and the structure of the z=2.22 SMG/AGN it is lensing.	Proposal title
observer	Dr Belinda Wilkes	Principal investigator
object	3C 220.3	Source name
dtcycle	0	
cycle	P	events from 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	144.89429084379	Nominal RA [deg]
dec_nom	83.256557038314	Nominal Dec [deg]
roll_nom	313.11194035605	Nominal Roll [deg]
revision	3	Processing version of data
ontime	45079.424996018	Sum of GTIs [s]
livetime	44490.429121456	Livetime [s]
ontime3	45073.06099534	Sum of GTIs [s]
ontime6	45079.383956015	Sum of GTIs [s]
ontime7	45079.424996018	Sum of GTIs [s]
ontime8	45073.019915402	Sum of GTIs [s]
l2events	193268	Number of level 2 events



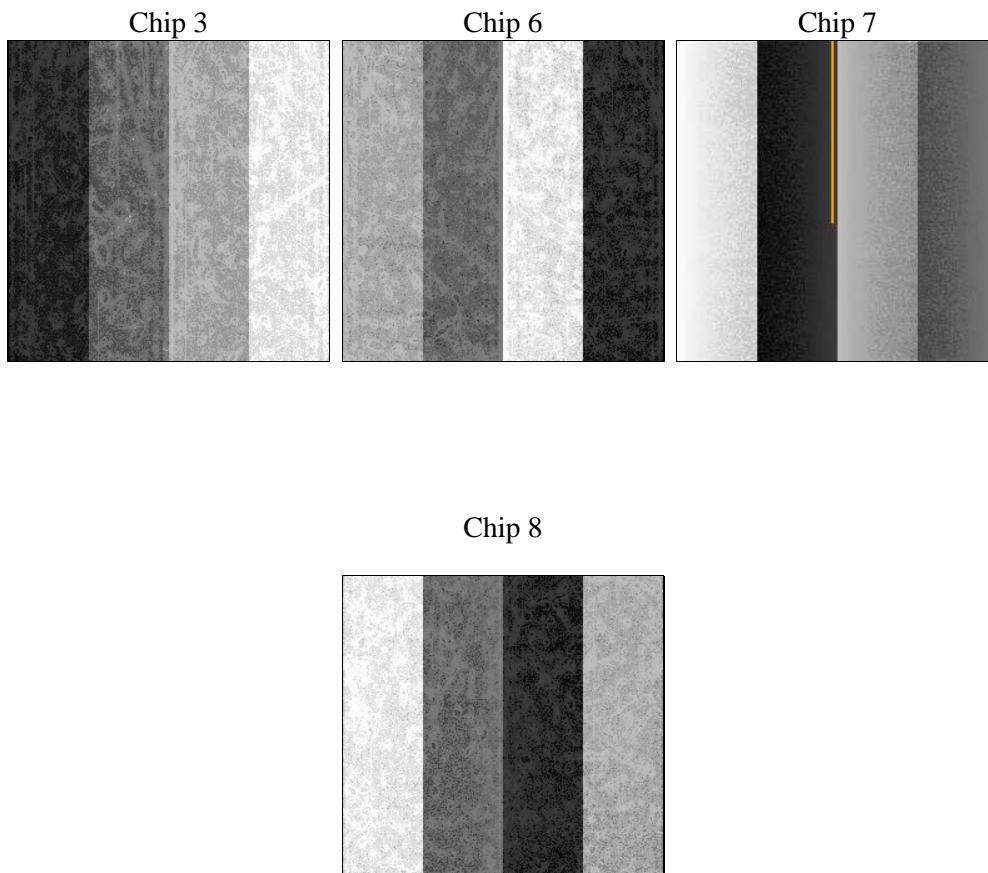
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	45079.424996018	Sum of GTIs [s]
caldsver	4.6.4	 	ontime3	45073.06099534	Sum of GTIs [s]
date	2014-12-12T06:48:00	Date and time of file creation	ontime6	45079.383956015	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	45079.424996018	Sum of GTIs [s]
			ontime8	45073.019915402	Sum of GTIs [s]
			l1events	980918	Number of level 1 events

2.1.4 Events

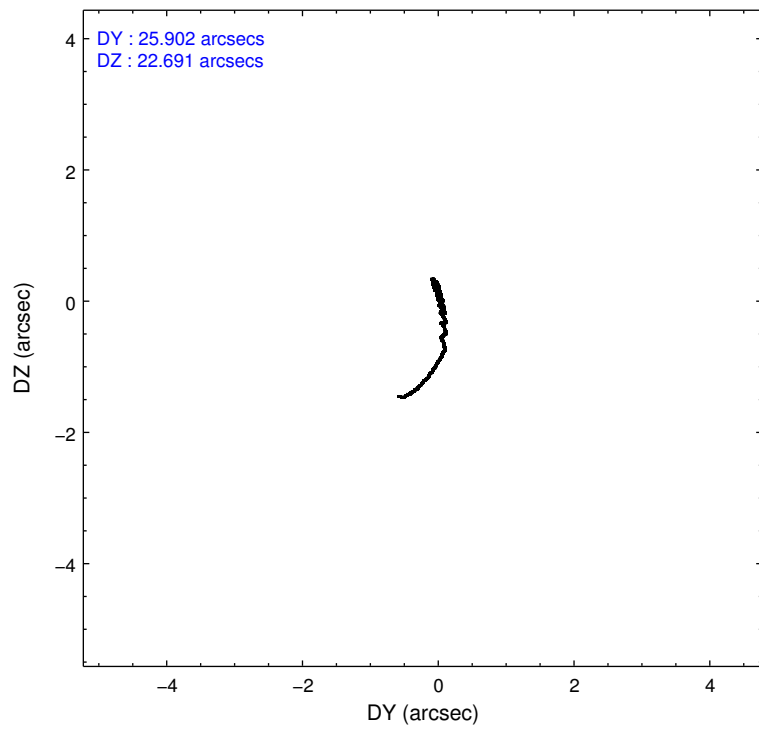
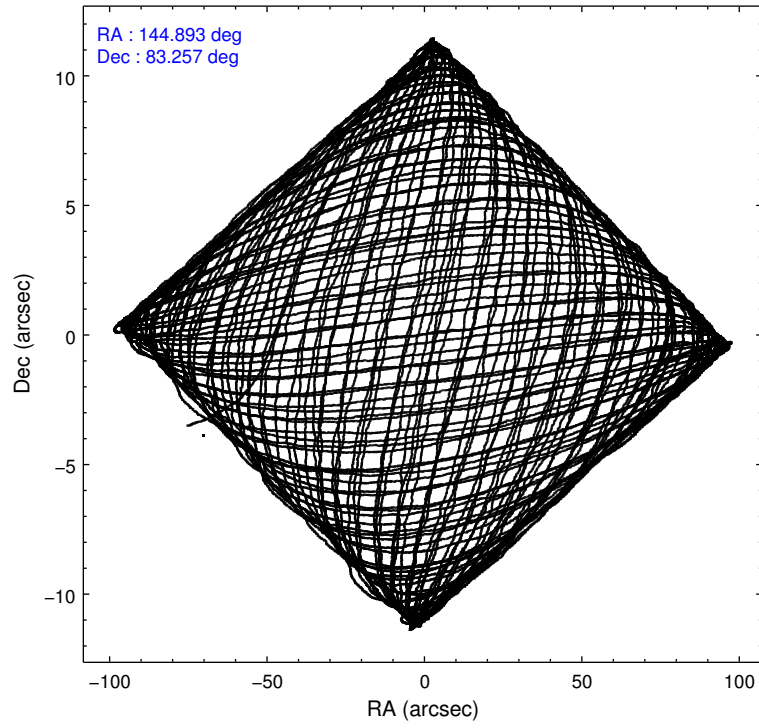
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	203114	217539	285405	274860
rejected events	178857	190935	161168	199321
rejected %	88%	87%	56%	72%

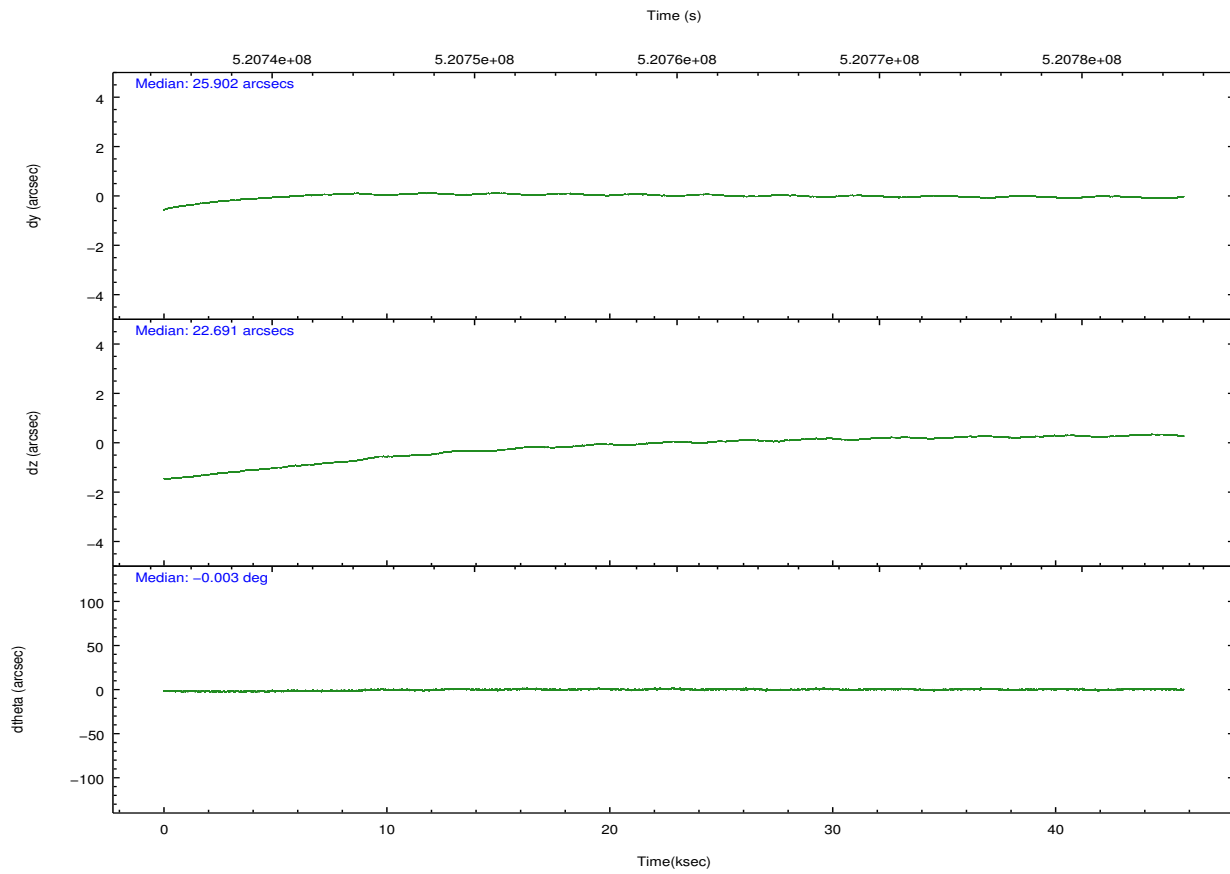
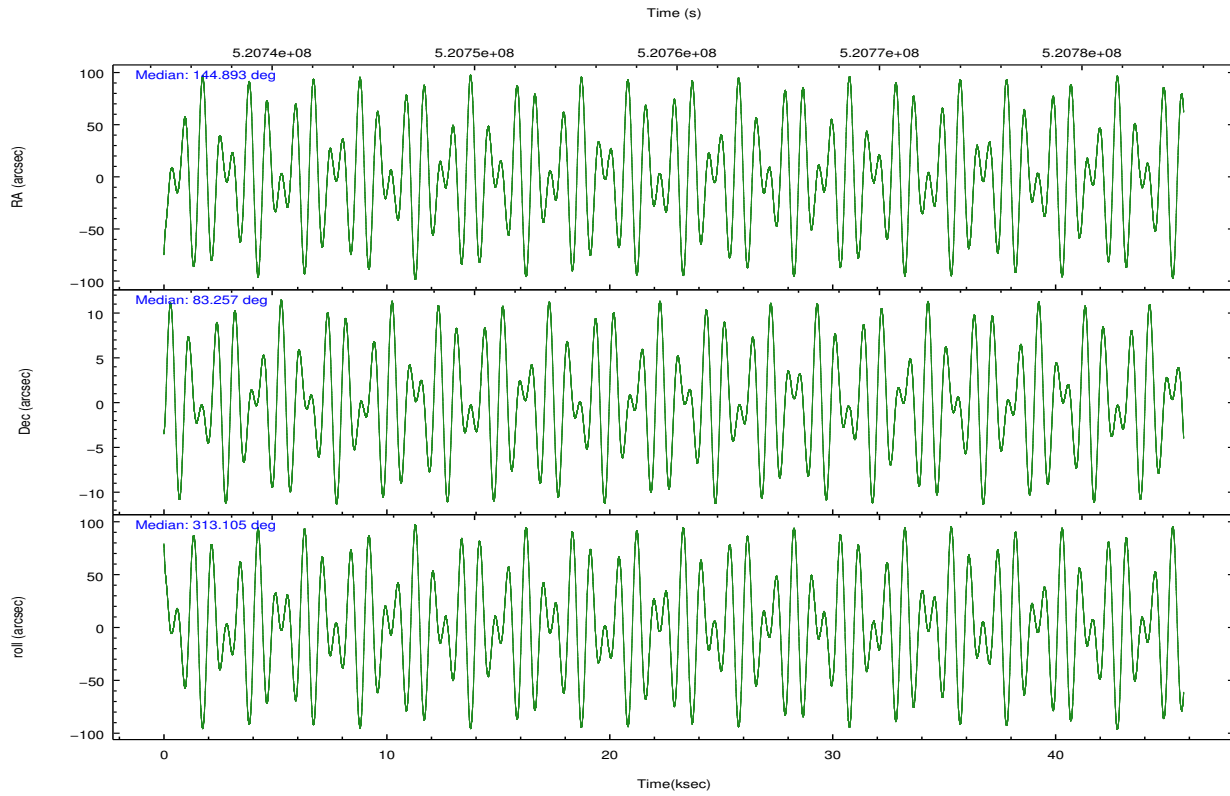
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8824	8906	10895	22921
	4%	4%	3%	8%
grade 1 events	107	107	359	200
	0%	0%	0%	0%
grade 2 events	5310	6589	25449	17678
	2%	3%	8%	6%
grade 3 events	2534	2585	10451	7802
	1%	1%	3%	2%
grade 4 events	2580	2595	10517	7309
	1%	1%	3%	2%
grade 5 events	11184	11385	29542	16064
	5%	5%	10%	5%
grade 6 events	5012	5929	66933	19866
	2%	2%	23%	7%
grade 7 events	167563	179443	131259	183020
	82%	82%	45%	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	144.670383	144.894290843788	CCD I2 on	N	N
[deg] Pointing Dec	83.264083	83.25655703831428	CCD I3 on	O2	Y
[deg] Pointing Roll	313.177681	313.1119403560498	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)	520737704.184000	520736246.31601	CCD S5 on	N	N
Observation start date	2014-07-03T01:20:37	2014-07-03T00:57:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	520782704.184000	520783529.56862	On-chip summing requested	N	N
Observation end date	2014-07-03T13:50:37	2014-07-03T14:05:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





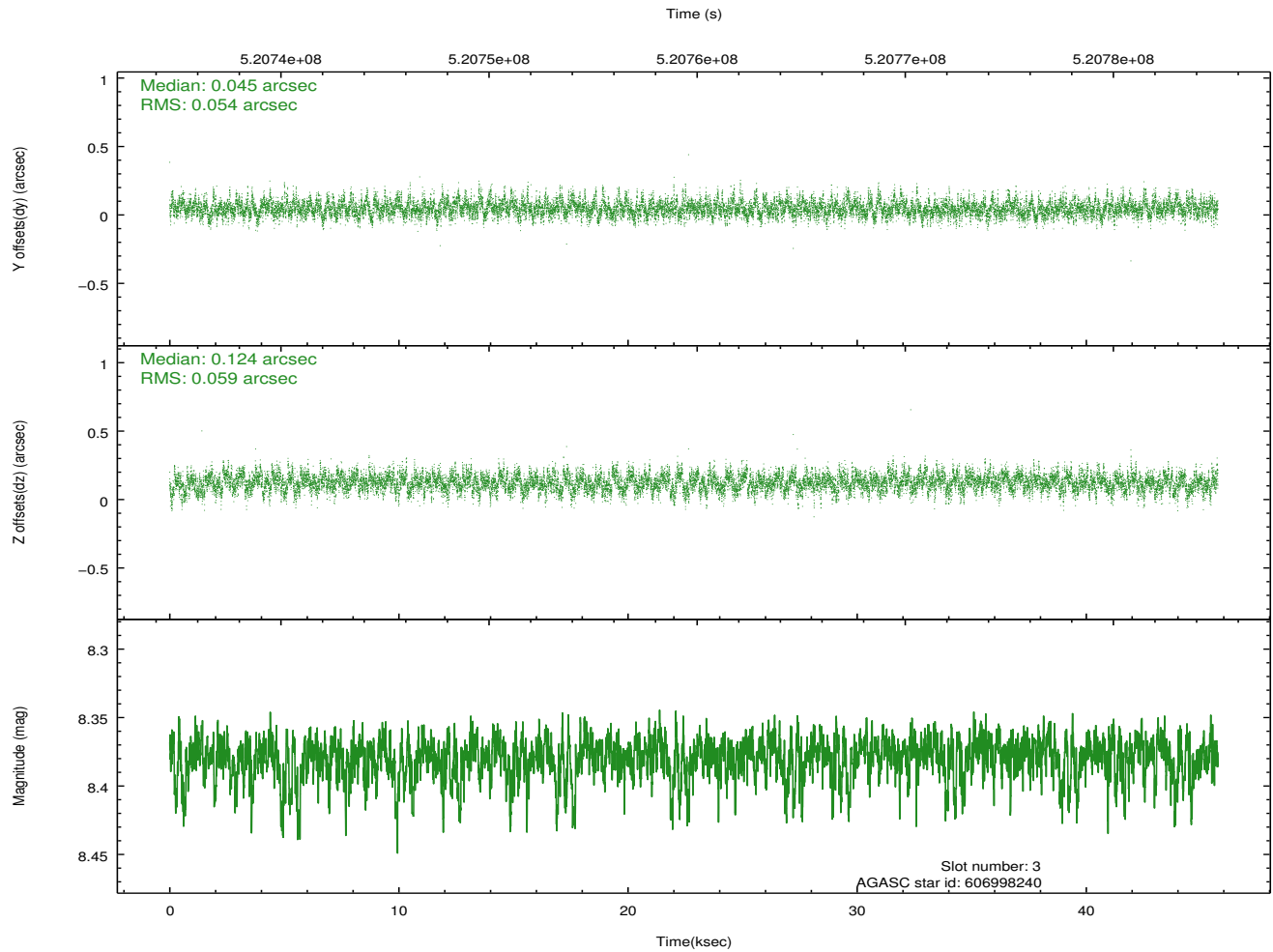
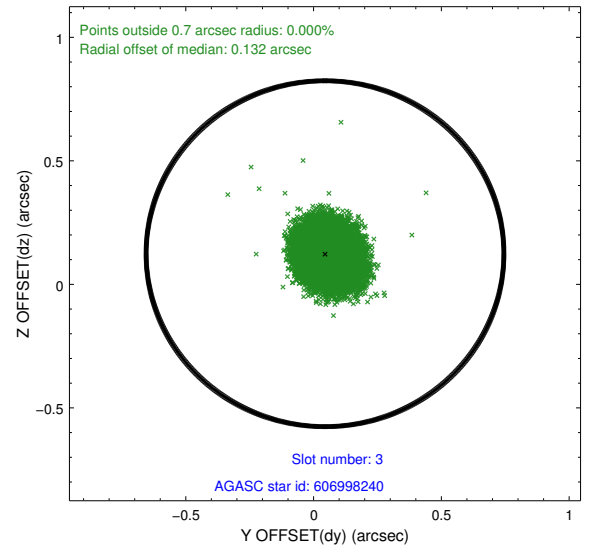
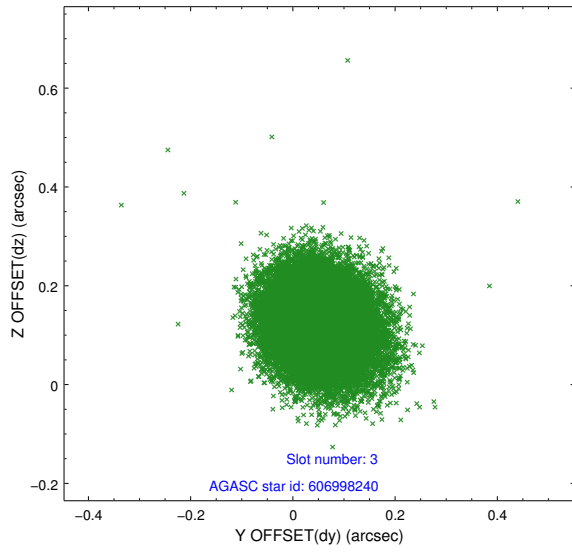
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.87	11158	-0.158	-0.028	0.010	0.034	0.000000	0.000000	-779.33	-1744.09
1	FID		ACIS-S-4	6.96	11157	0.307	0.083	0.008	0.016	0.000000	0.000000	2134.44	164.47
2	FID		ACIS-S-5	7.00	11159	-0.180	-0.047	0.011	0.030	0.000000	0.000000	-1832.18	158.05
3	GUIDE	used	606998240	8.38	22315	0.045	0.124	0.084	0.138	142.037328	82.688368	667.24	-2278.09
4	GUIDE	used	606998600	7.23	22317	-0.050	0.140	0.093	0.148	144.240165	82.925382	758.91	-972.51
5	GUIDE	used	607011680	7.69	22317	0.022	-0.110	0.070	0.114	147.023548	83.784890	-753.35	1964.11
6	GUIDE	used	607012224	7.68	22316	0.175	0.174	0.081	0.135	143.315443	83.741617	-1621.31	793.39
7	GUIDE	used	607003496	8.21	22312	-0.197	-0.328	0.080	0.128	149.989507	83.475683	858.15	2172.42

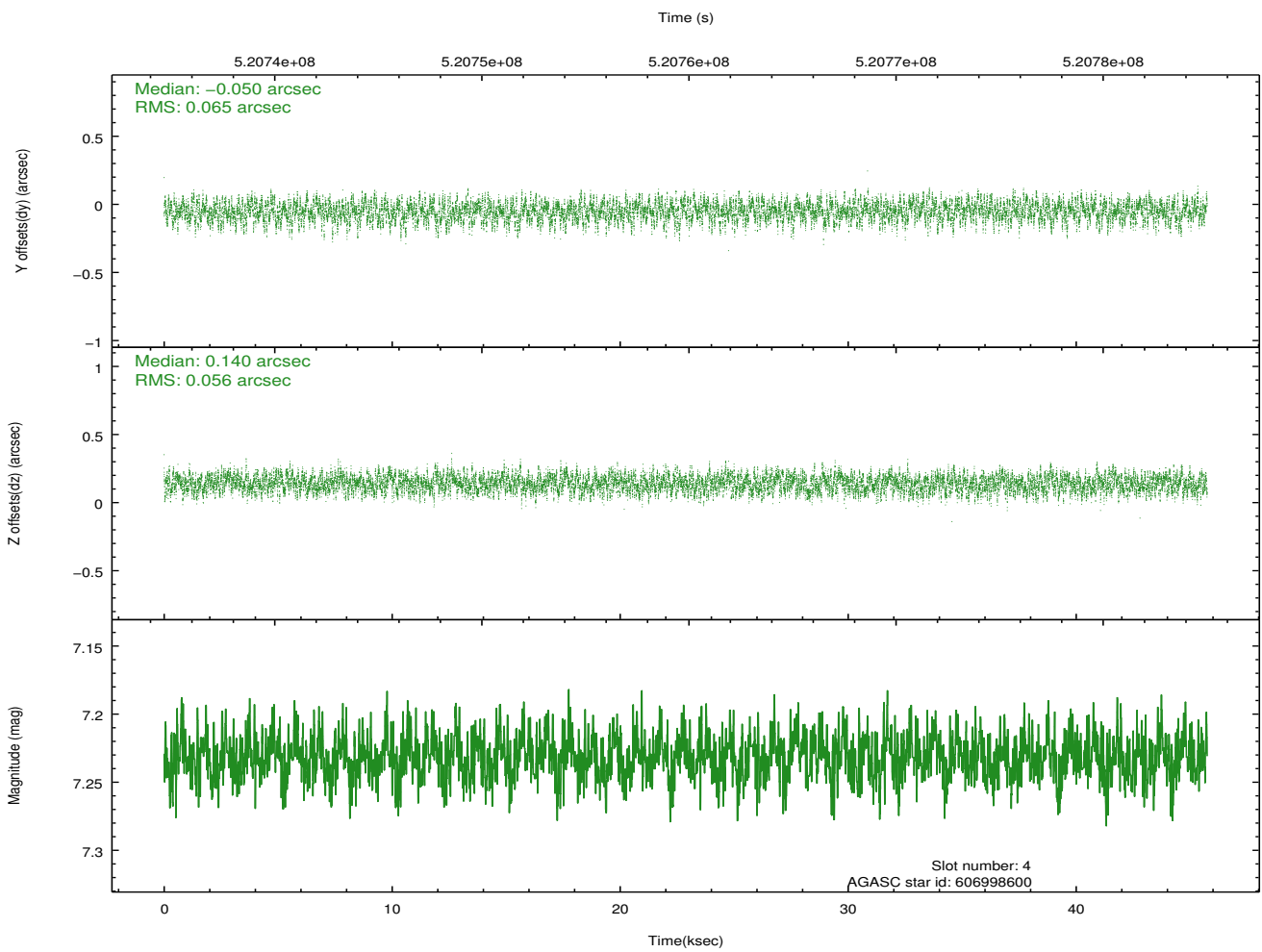
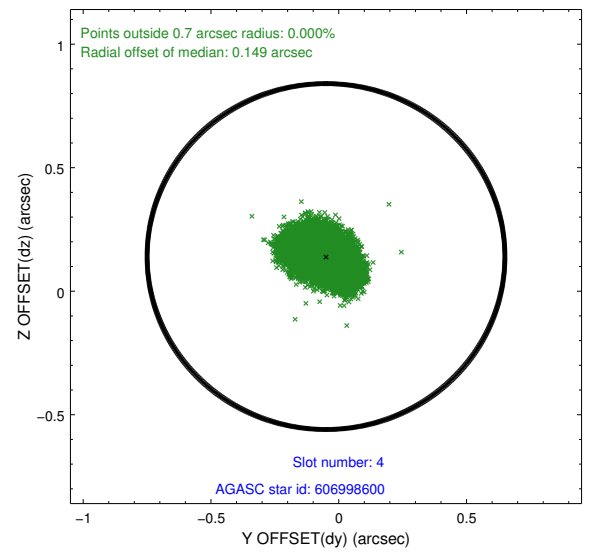
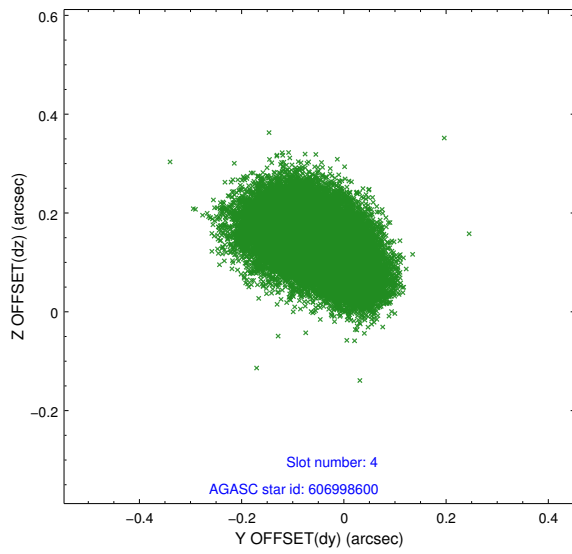
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2.4 Star Slots

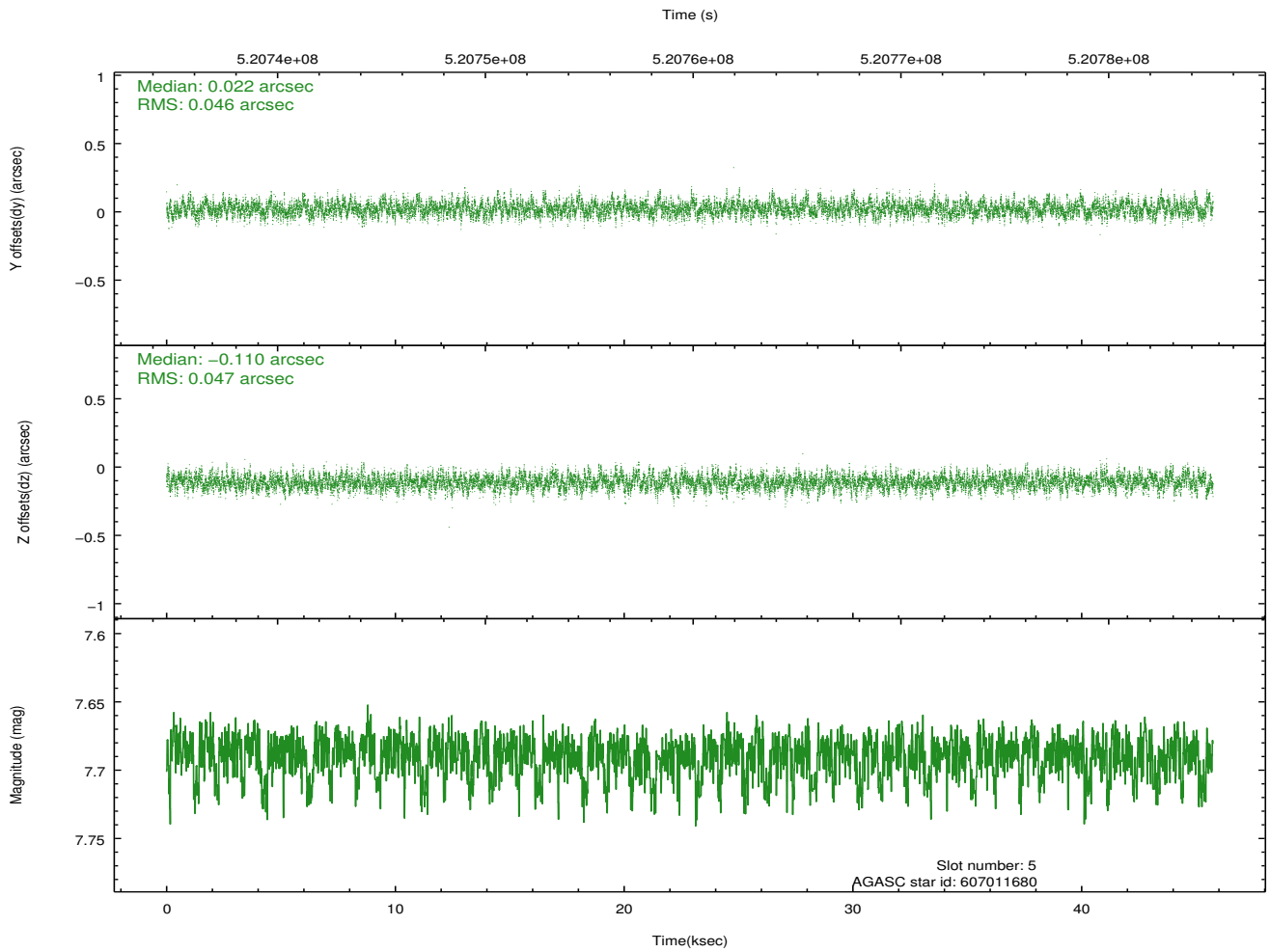
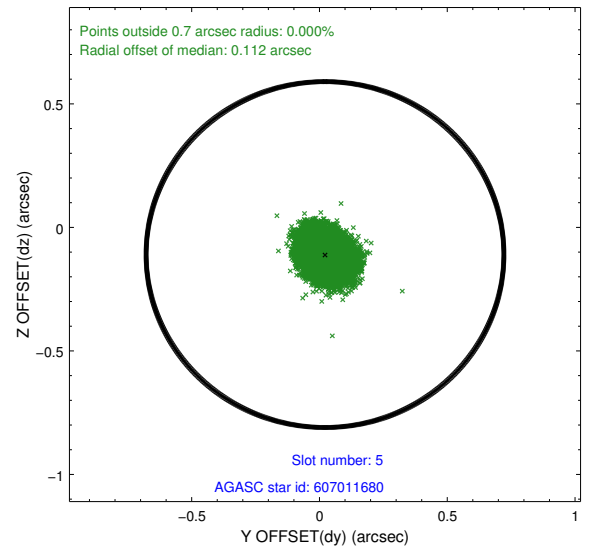
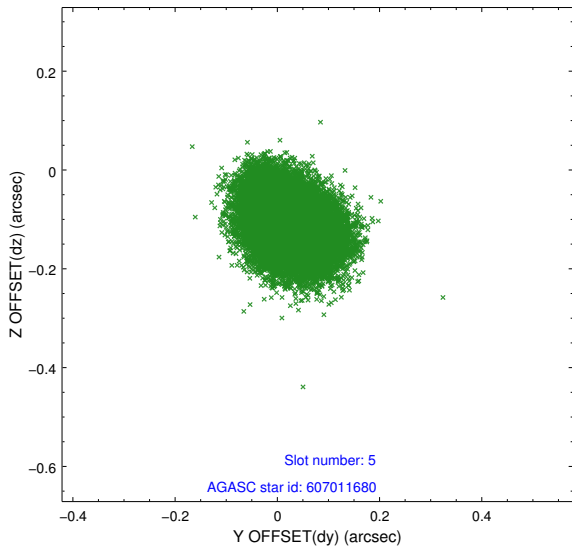
2.4.1 Slot 3



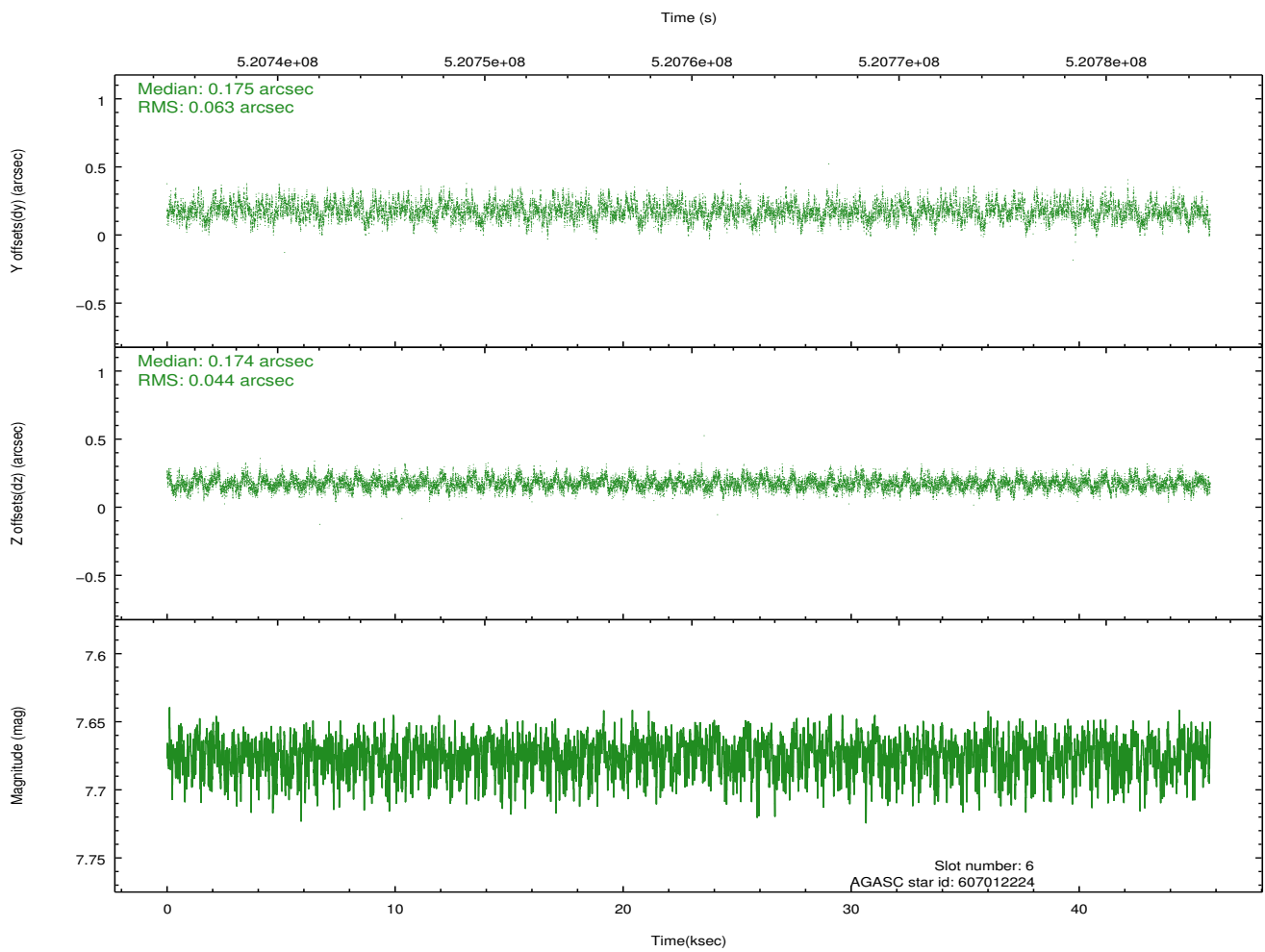
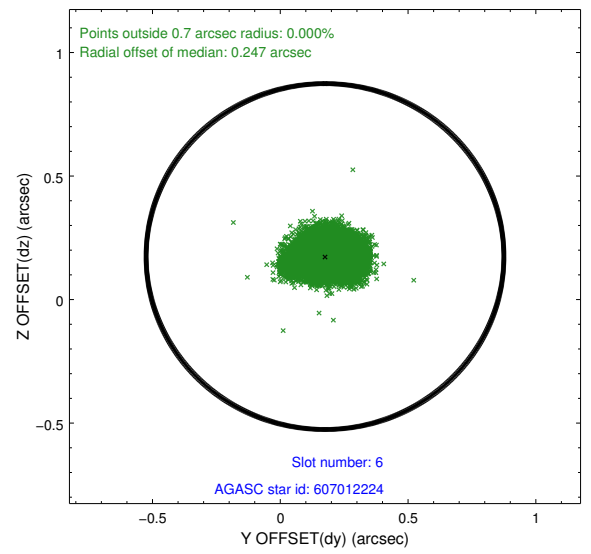
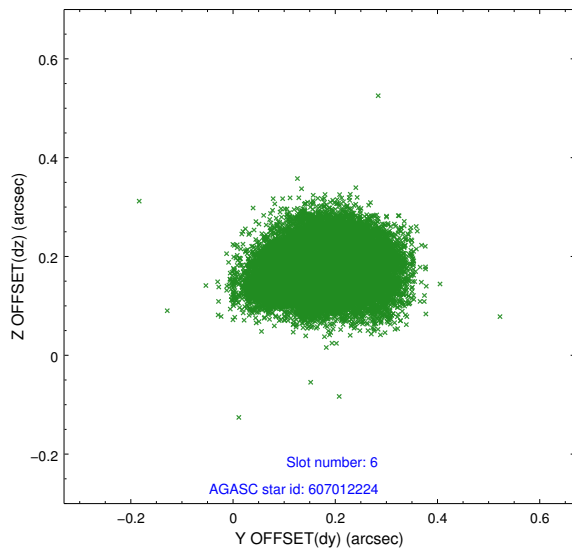
2.4.2 Slot 4



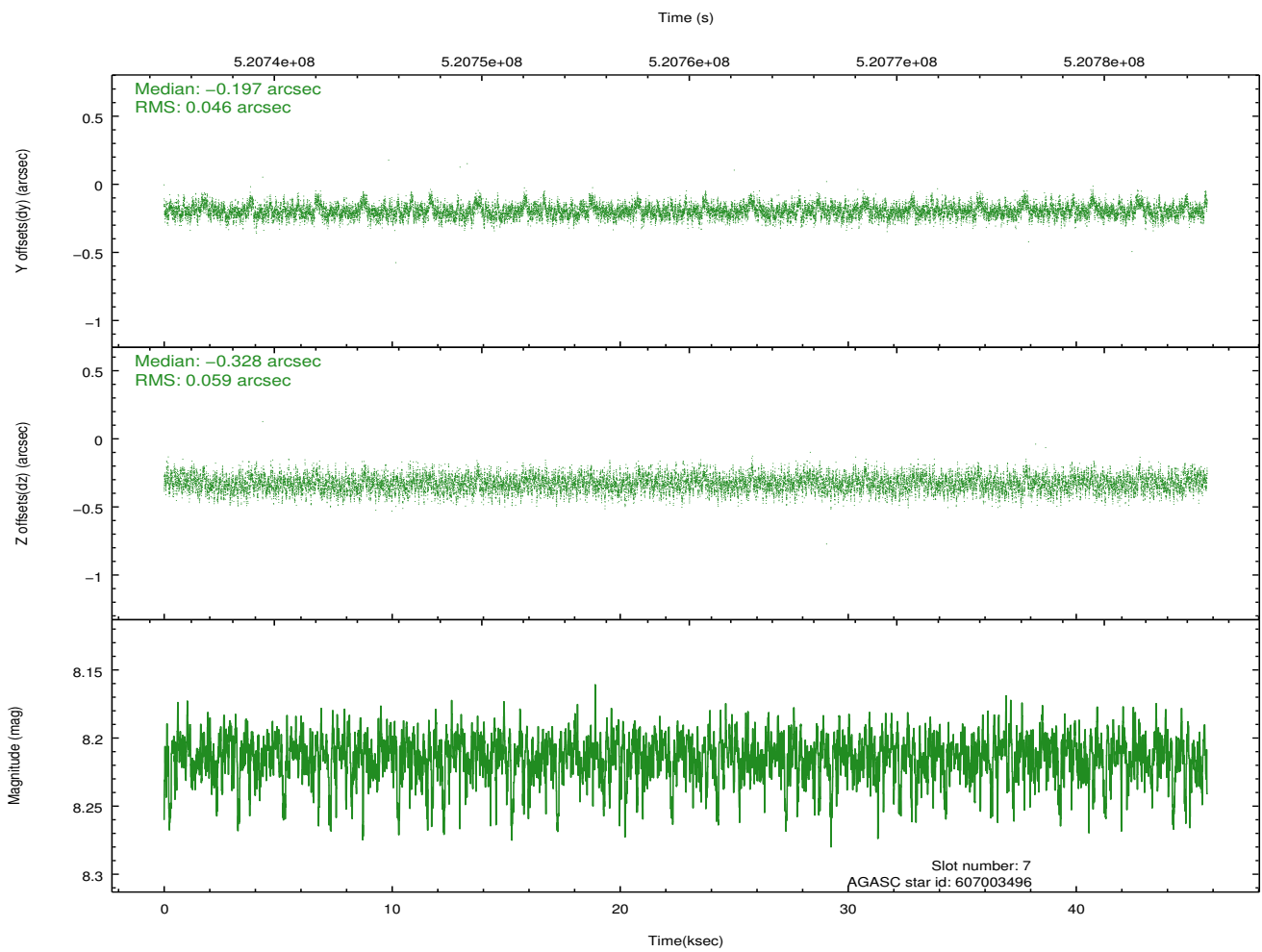
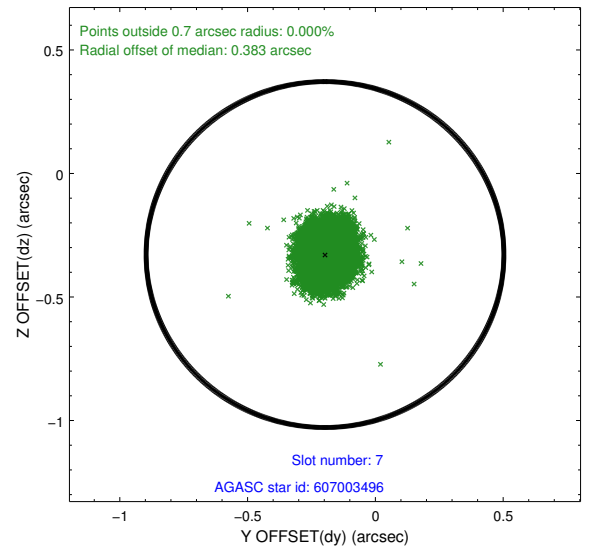
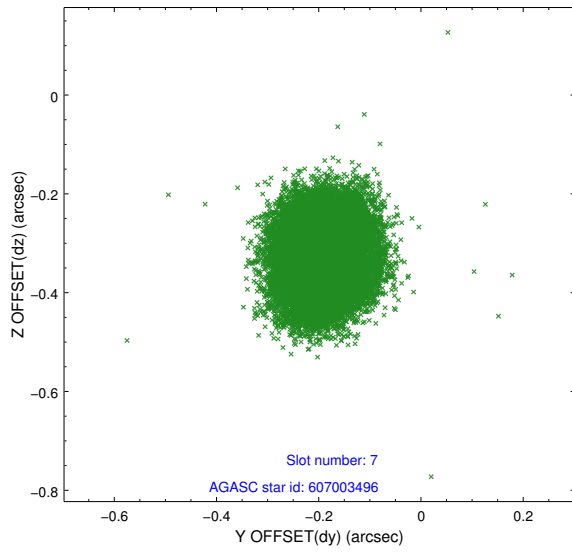
2.4.3 Slot 5



2.4.4 Slot 6

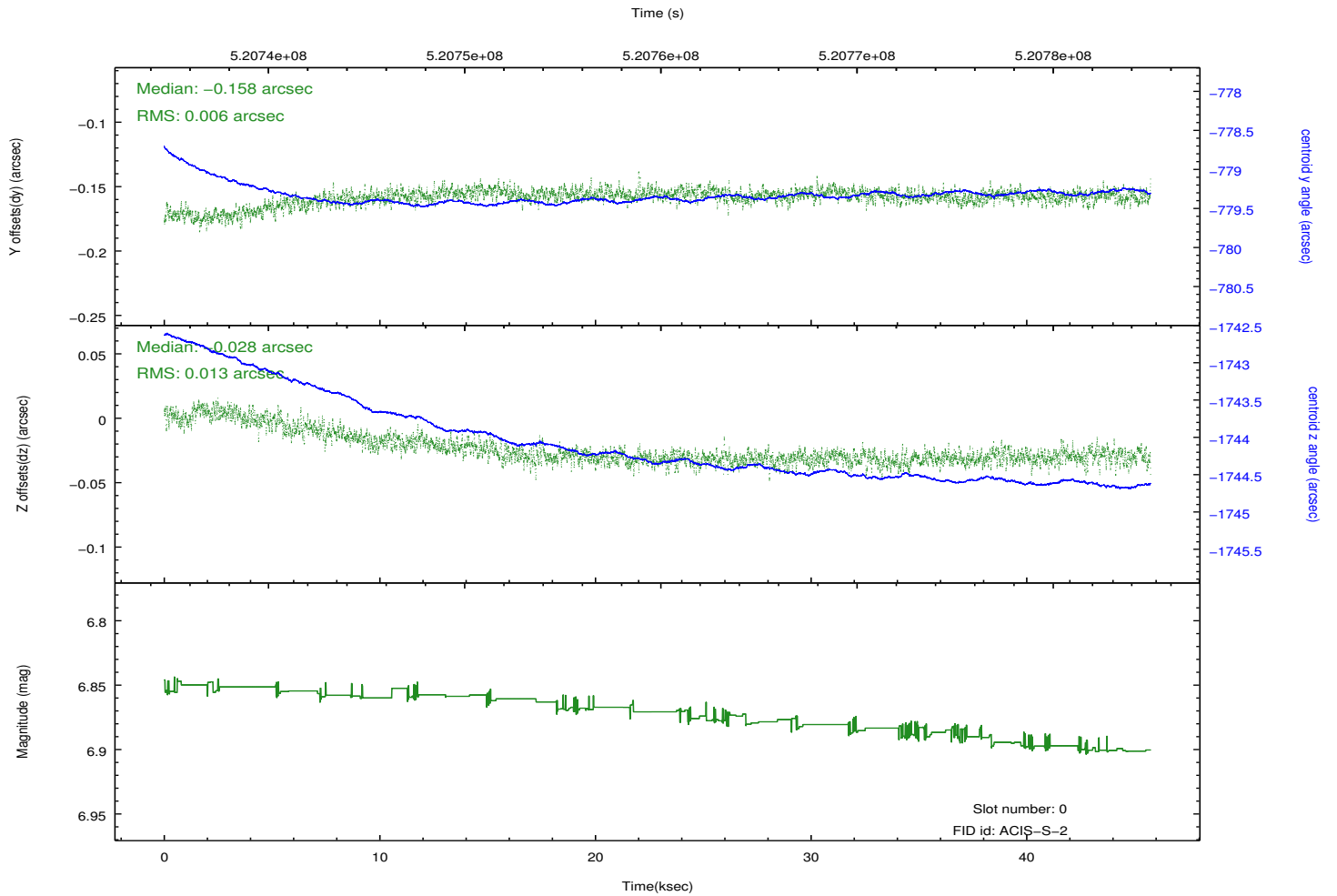
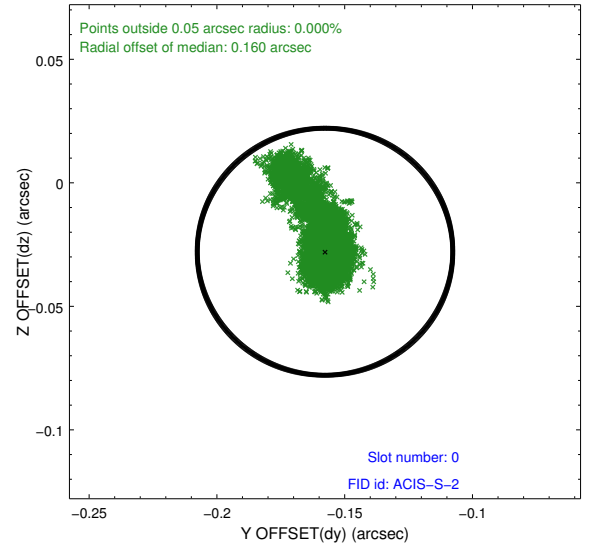
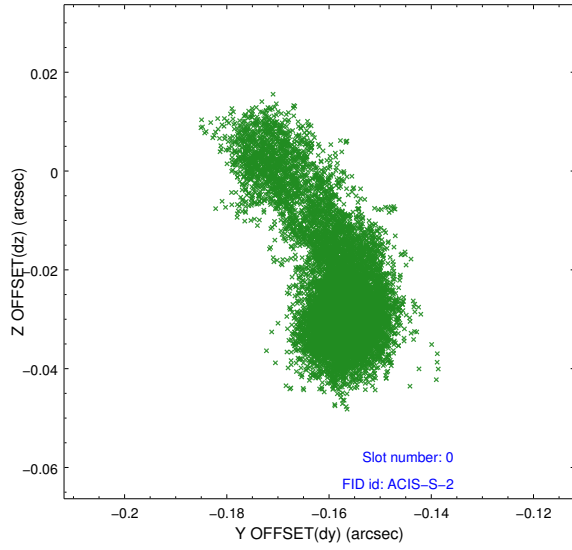


2.4.5 Slot 7

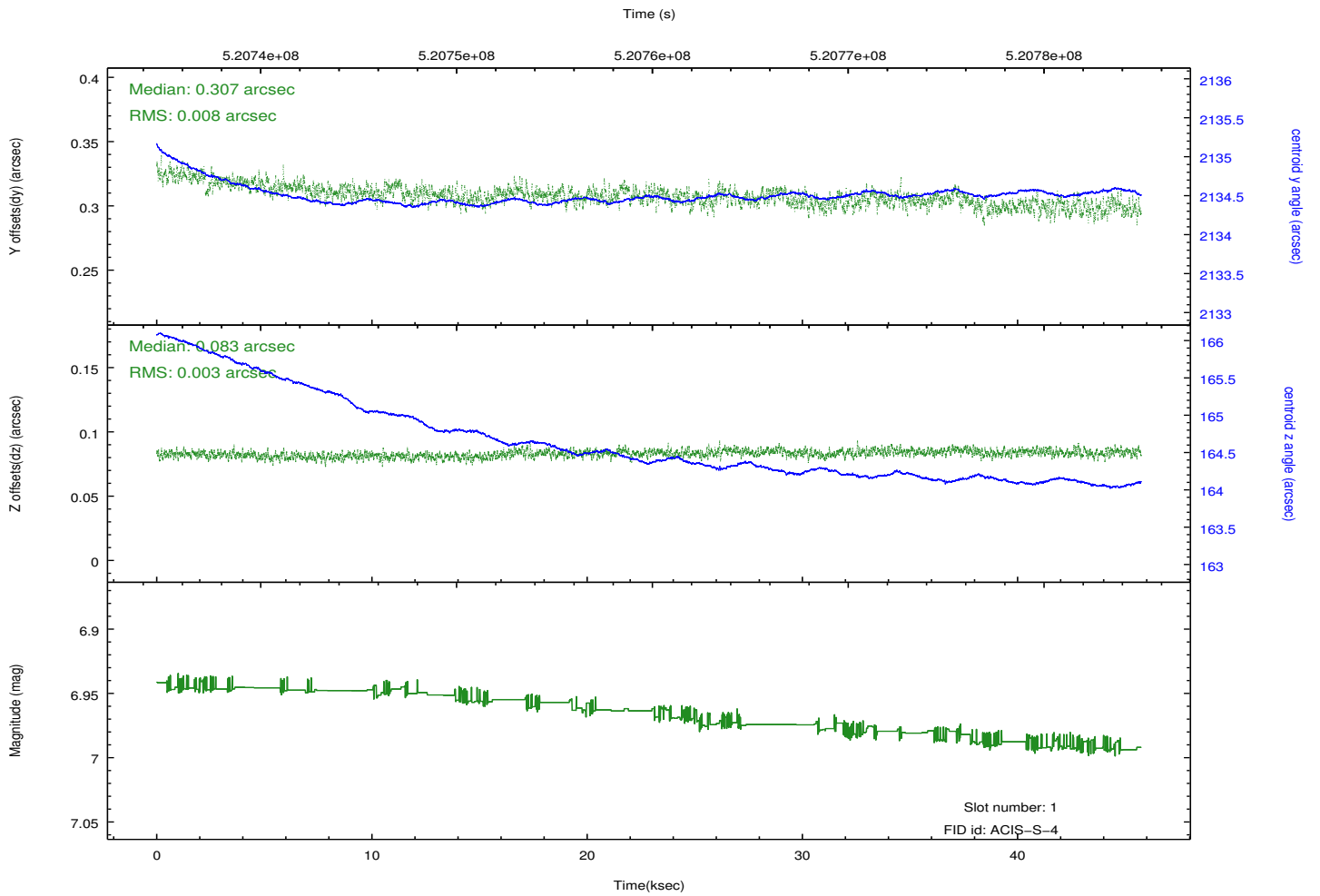
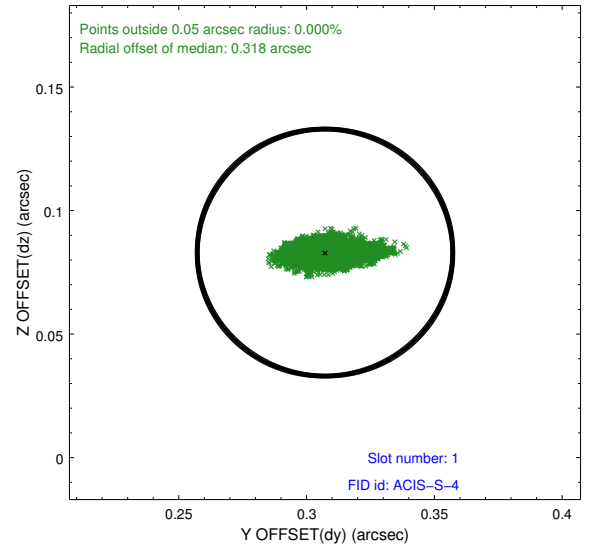
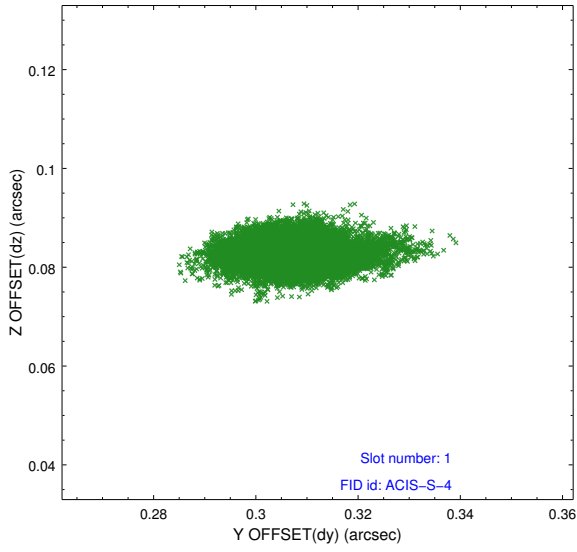


2.5 FID Slots

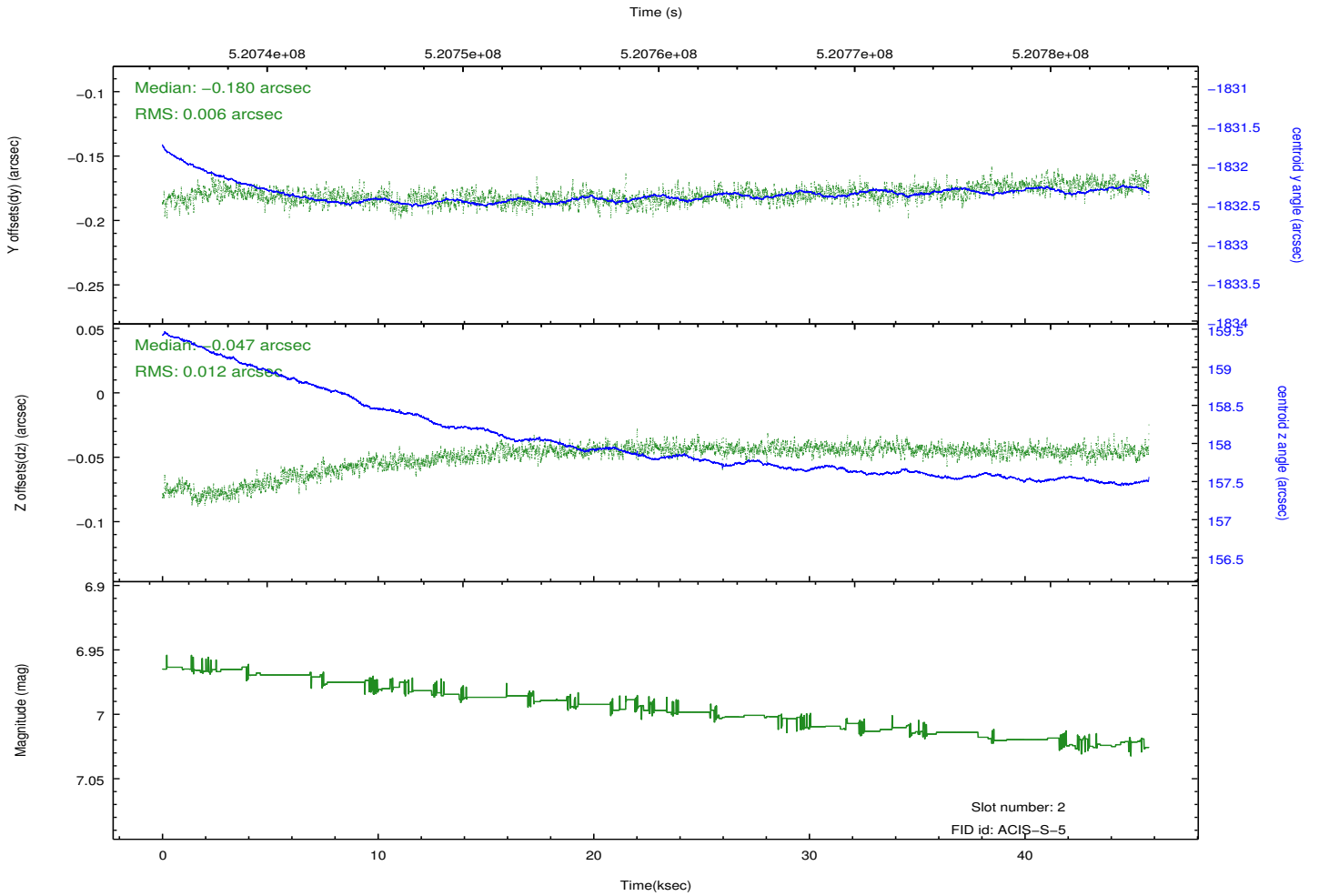
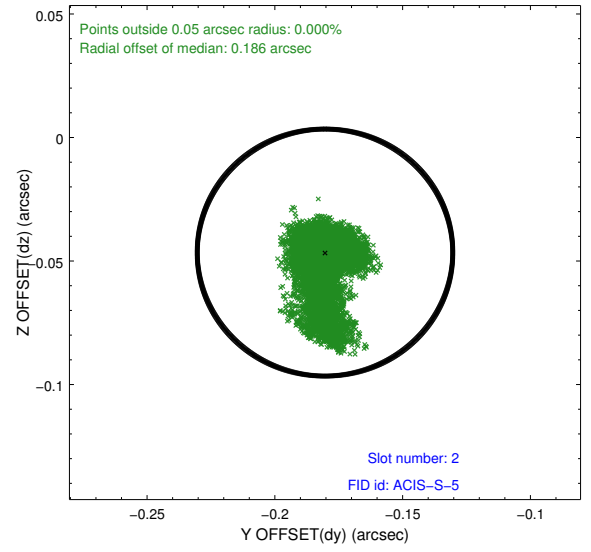
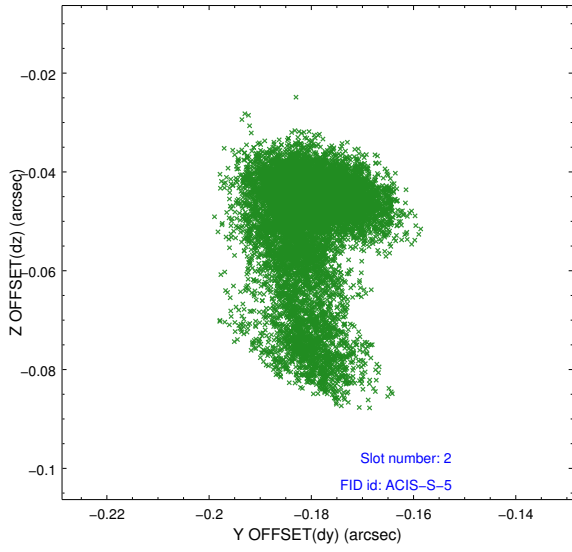
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.079424996018

A.2 Comments

Joint proposal with HST.

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.