

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14971 - L2 Version 2
Chandra X-Ray Center

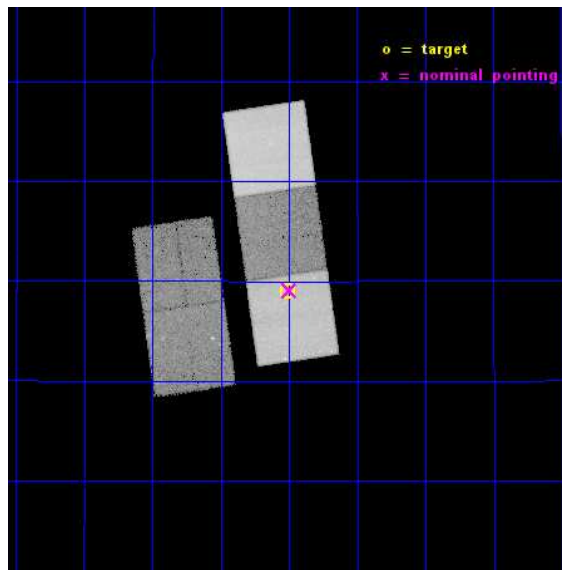
L2 Processing Date : Nov 30 2014

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1 Front

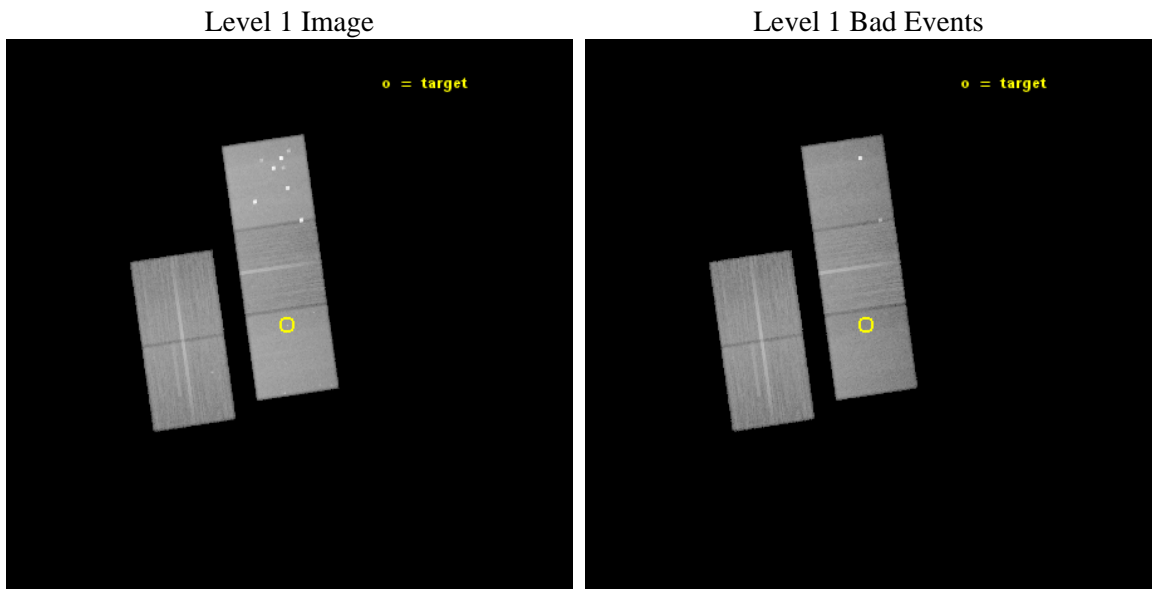
seq_num	702780	Sequence number
obs_id	14971	Observation id
title	The Hierarchical Assembly of Massive Black Holes: Identifying Kpc-Scale Triple AGNs with Chandra, HST, and EVLA	Proposal title
observer	Dr. Xin Liu	Principal investigator
object	SDSSJ1027+1749	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	156.751667	Observer's specified target RA [deg]
dec_targ	17.816944	Observer's specified target Dec [deg]
ra_nom	156.7491283483	Nominal RA [deg]
dec_nom	17.818091138032	Nominal Dec [deg]
roll_nom	81.755020003408	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50068.10038507	Sum of GTIs [s]
livetime	49413.92379394	Livetime [s]
ontime2	50064.86555624	Sum of GTIs [s]
ontime3	50068.047636628	Sum of GTIs [s]
ontime5	50068.10038507	Sum of GTIs [s]
ontime6	50064.947636247	Sum of GTIs [s]
ontime7	50068.10038507	Sum of GTIs [s]
l2events	443555	Number of level 2 events



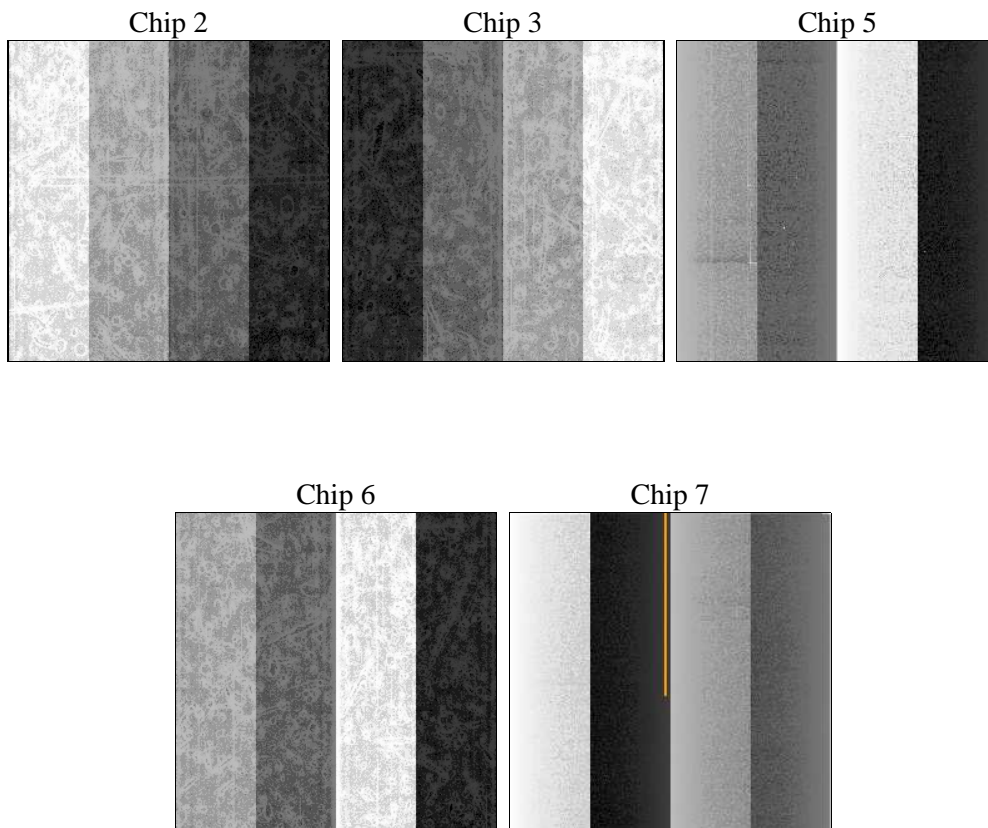
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	50068.10038507	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	50064.86555624	Sum of GTIs [s]
date	2014-12-01T03:33:40	Date and time of file creation	ontime3	50068.047636628	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	50068.10038507	Sum of GTIs [s]
			ontime6	50064.947636247	Sum of GTIs [s]
			ontime7	50068.10038507	Sum of GTIs [s]
			l1events	1715432	Number of level 1 events

2.1.4 Events

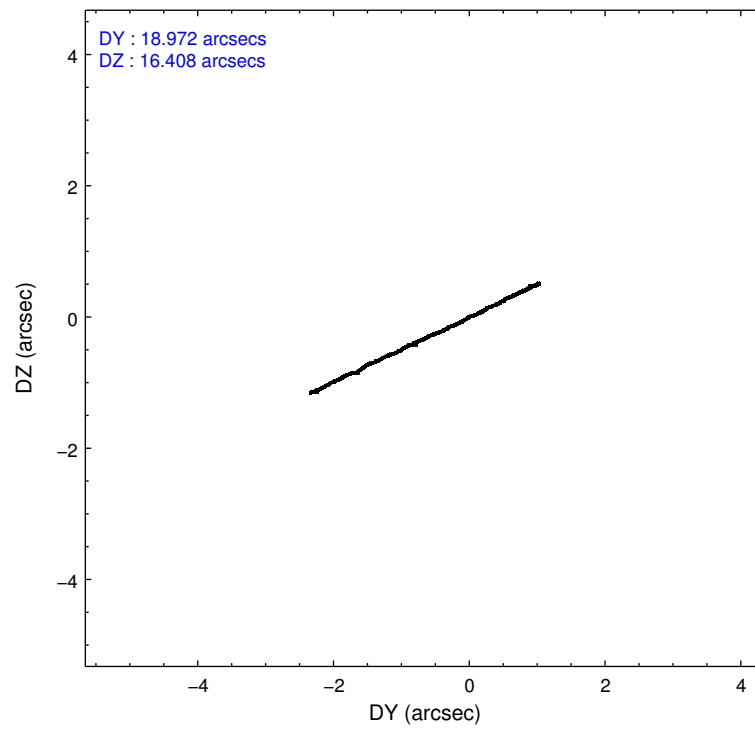
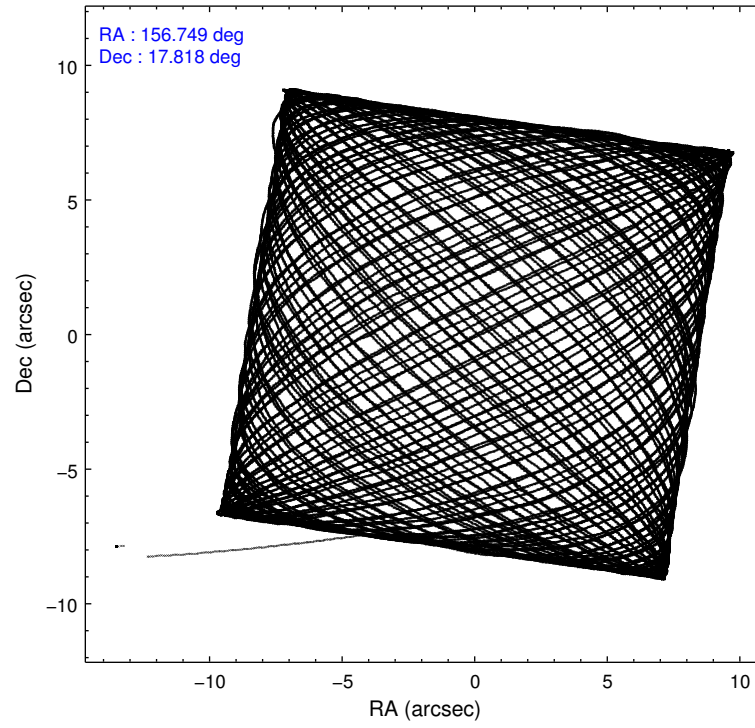
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	270510	272313	518167	280568	373874
rejected events	240536	241959	249269	247878	212451
rejected %	88%	88%	48%	88%	56%

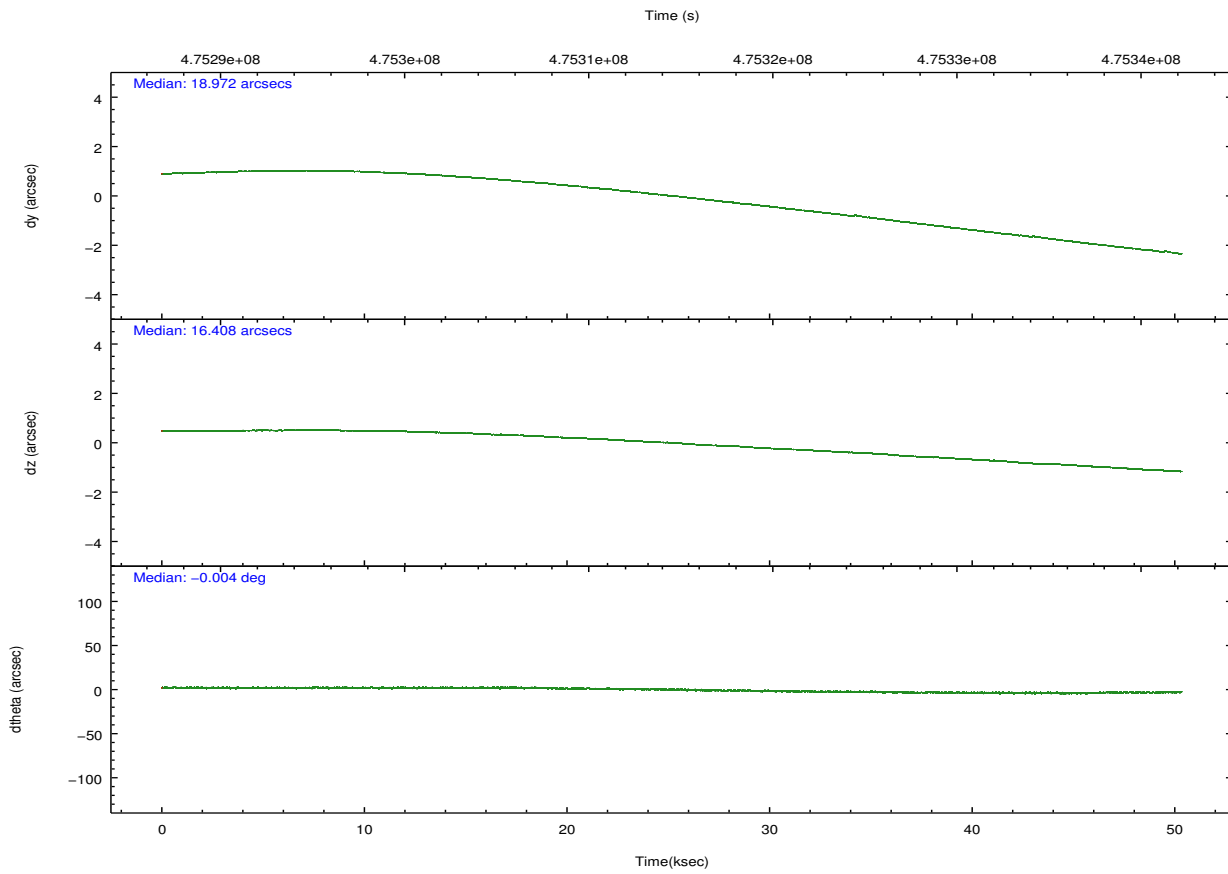
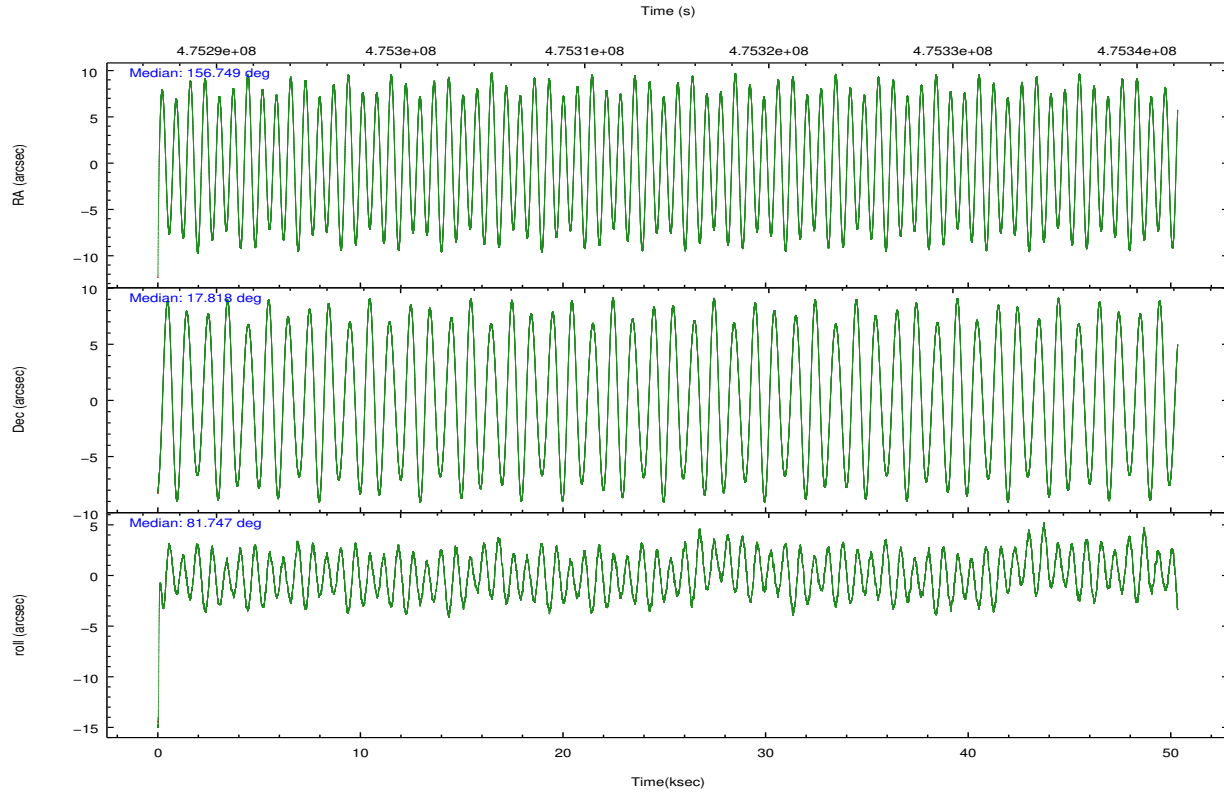
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	10443	10704	56327	10819	14016
	3%	3%	10%	3%	3%
grade 1 events	170	150	916	136	418
	0%	0%	0%	0%	0%
grade 2 events	7154	6523	72163	7442	32735
	2%	2%	13%	2%	8%
grade 3 events	3215	3242	7792	3307	13477
	1%	1%	1%	1%	3%
grade 4 events	3169	3307	6957	3304	13173
	1%	1%	1%	1%	3%
grade 5 events	11819	13916	35368	13976	37765
	4%	5%	6%	4%	10%
grade 6 events	5996	6582	125677	7819	88034
	2%	2%	24%	2%	23%
grade 7 events	228544	227889	212967	233765	174256
	84%	83%	41%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	156.760138	156.7491283483007	CCD I2 on	Y	Y
[deg] Pointing Dec	17.792839	17.81809113803242	CCD I3 on	Y	Y
[deg] Pointing Roll	81.595036	81.75502000340752	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	N	N
[s] Observation start time (MET)	475289684.184000	475288659.15632	CCD S5 on	N	N
Observation start date	2013-01-23T00:53:37	2013-01-23T00:37:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	475339684.184000	475340620.50912	On-chip summing requested	N	N
Observation end date	2013-01-23T14:46:57	2013-01-23T15:03:40	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





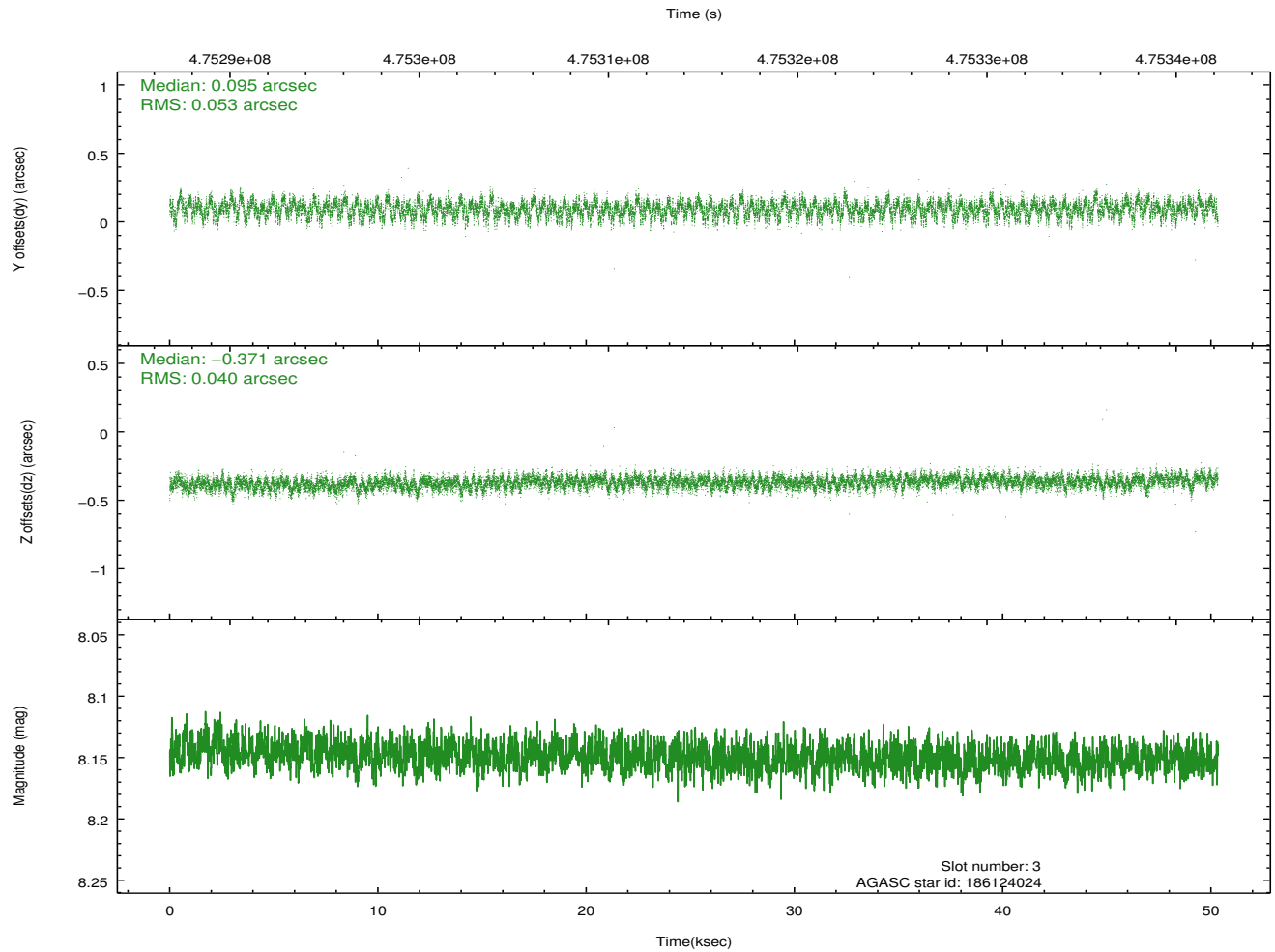
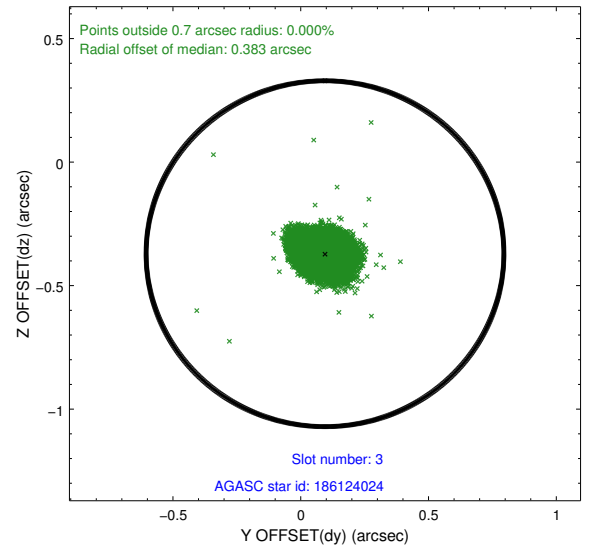
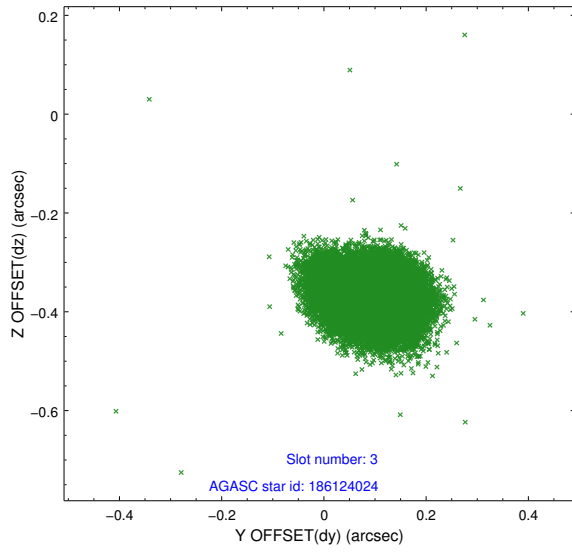
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.06	12278	-0.129	-0.037	0.014	0.024	0.000000	0.000000	-771.96	-1737.69
1	FID		ACIS-S-4	7.13	12276	0.295	0.073	0.019	0.035	0.000000	0.000000	2141.75	170.91
2	FID		ACIS-S-5	7.17	12278	-0.198	-0.027	0.016	0.034	0.000000	0.000000	-1824.89	164.47
3	GUIDE	used	186124024	8.15	24549	0.095	-0.371	0.071	0.114	156.041264	17.463282	-1530.29	2269.16
4	GUIDE	used	186124248	7.06	24555	0.127	0.467	0.091	0.140	157.181150	17.133495	-2134.43	-1778.81
5	GUIDE	used	186523576	7.84	24552	-0.097	0.182	0.074	0.116	157.236114	18.086736	1286.91	-1456.08
6	GUIDE	used	186524120	7.88	24549	0.059	-0.025	0.060	0.104	156.292810	17.527699	-1176.94	1447.93
7	GUIDE	used	186523312	8.40	24535	-0.189	-0.255	0.112	0.188	156.148158	17.917316	139.59	2139.96

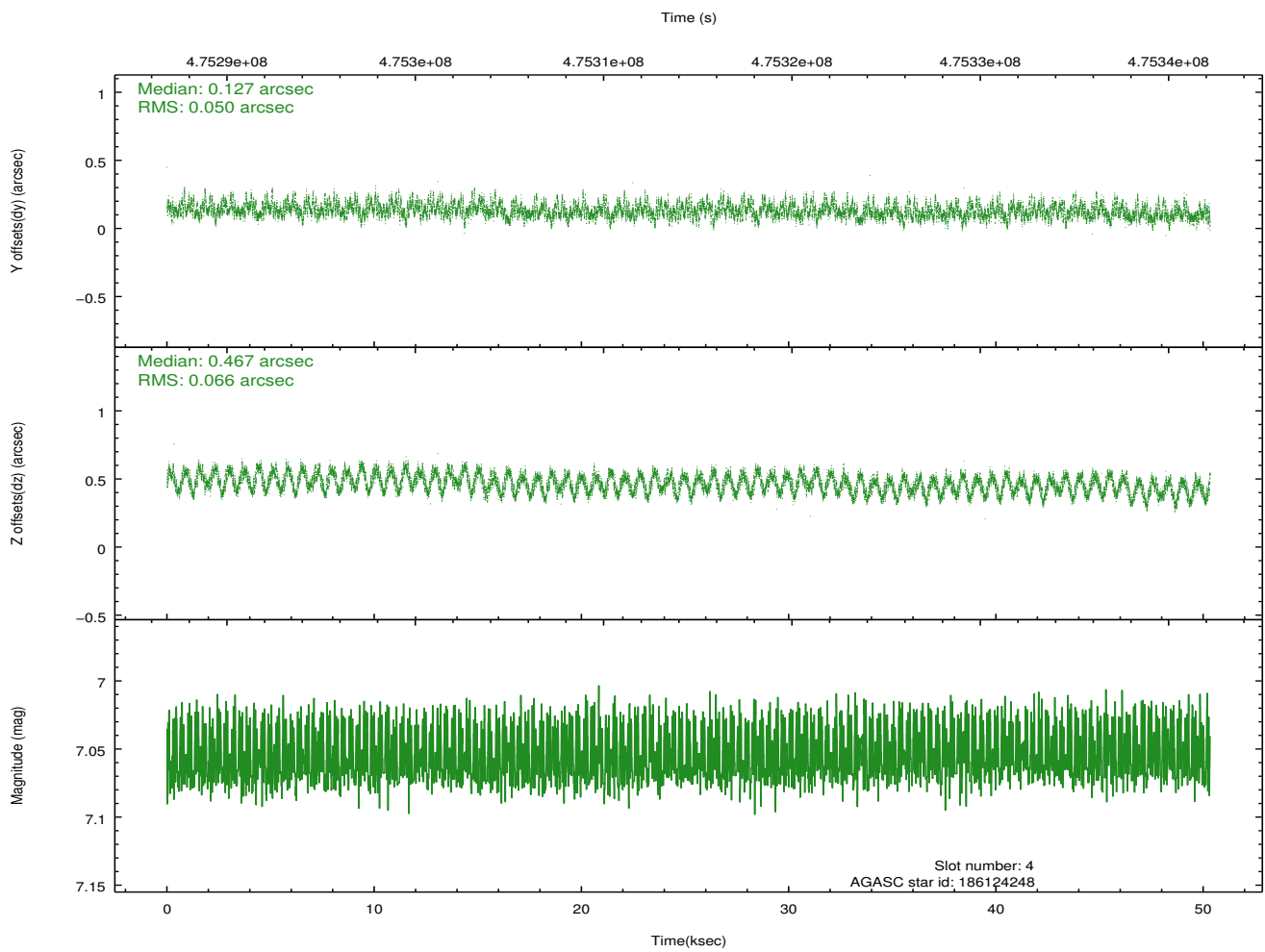
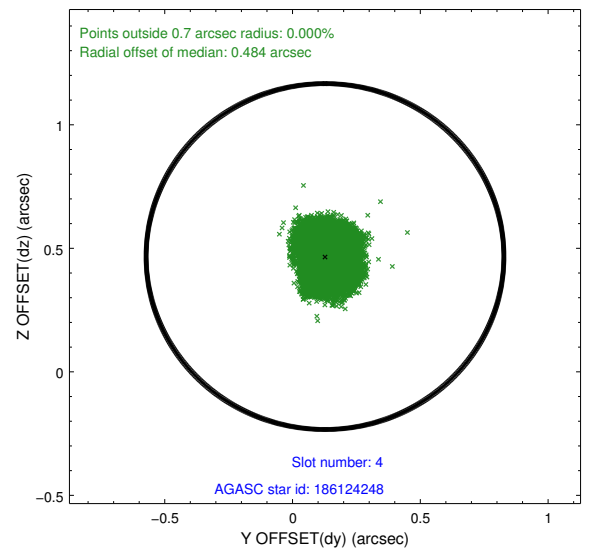
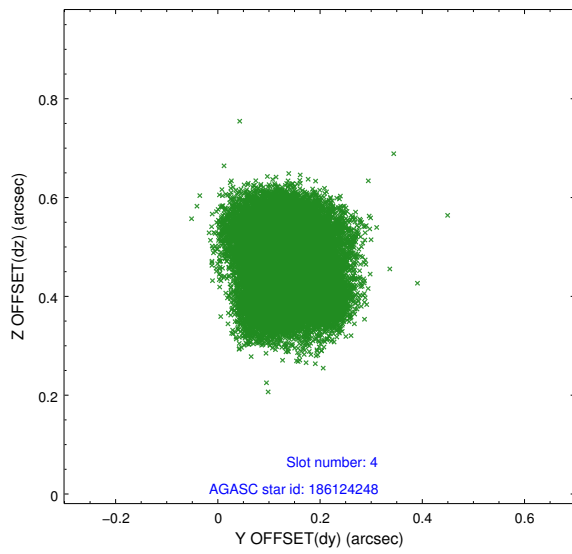
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2.4 Star Slots

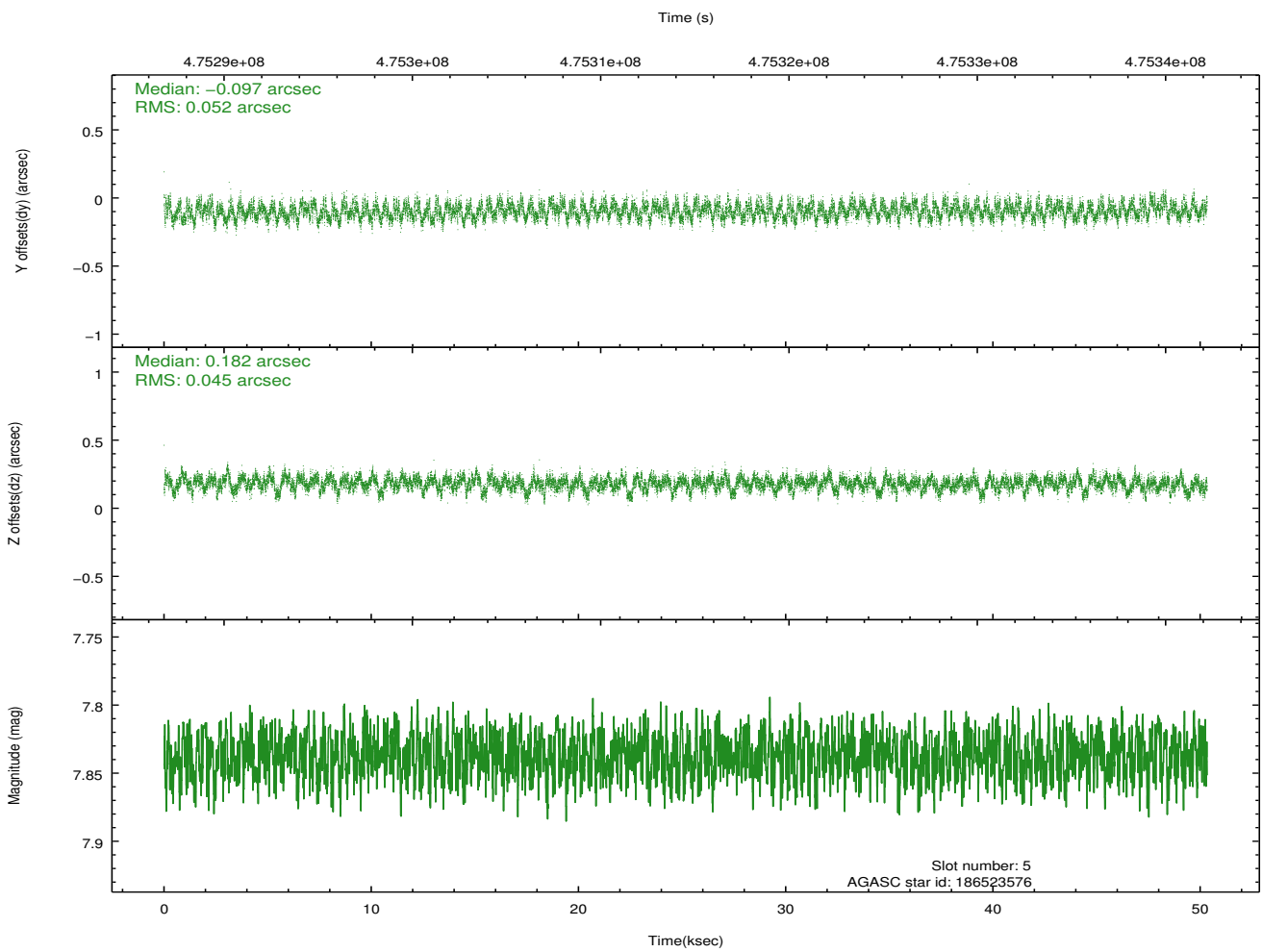
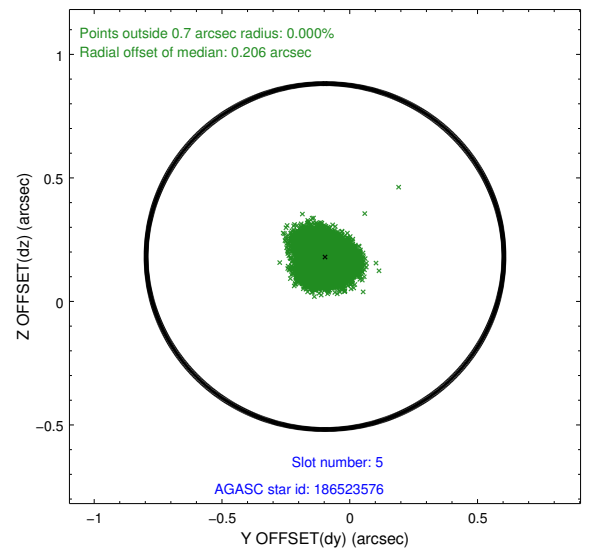
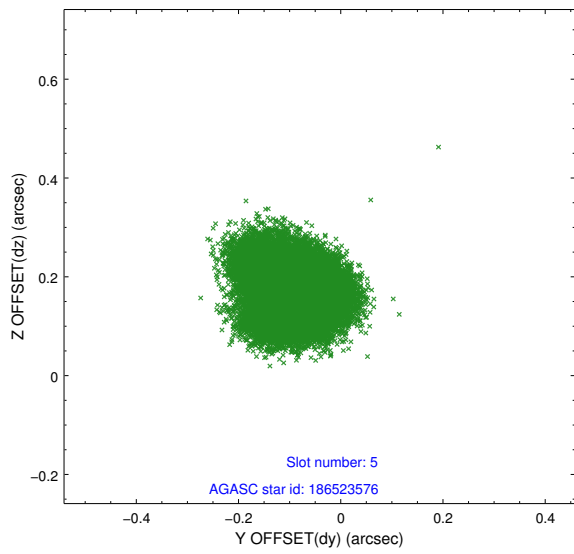
2.4.1 Slot 3



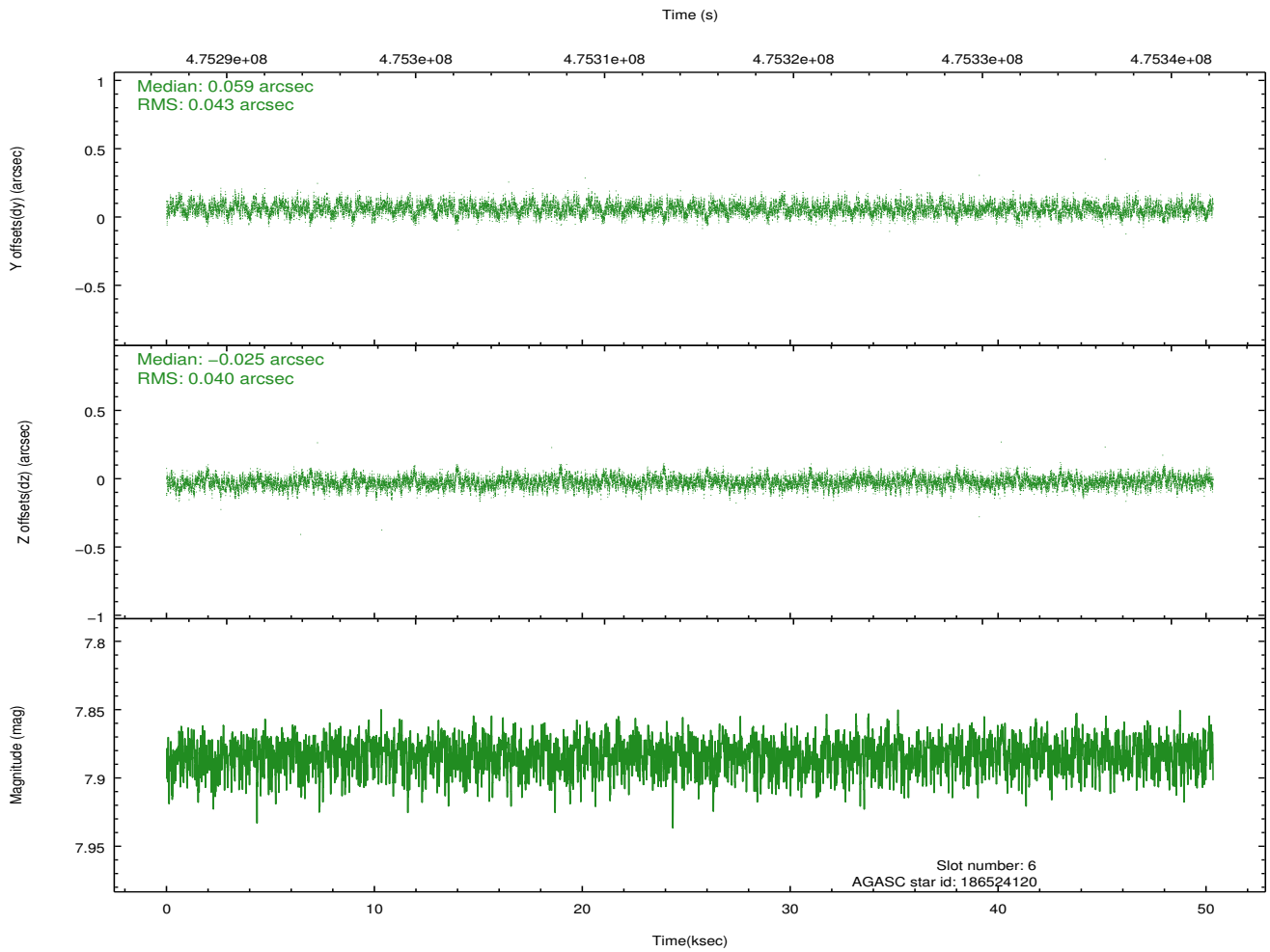
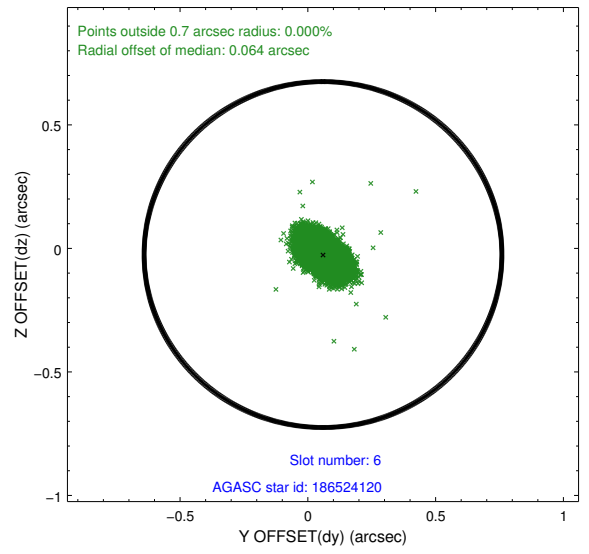
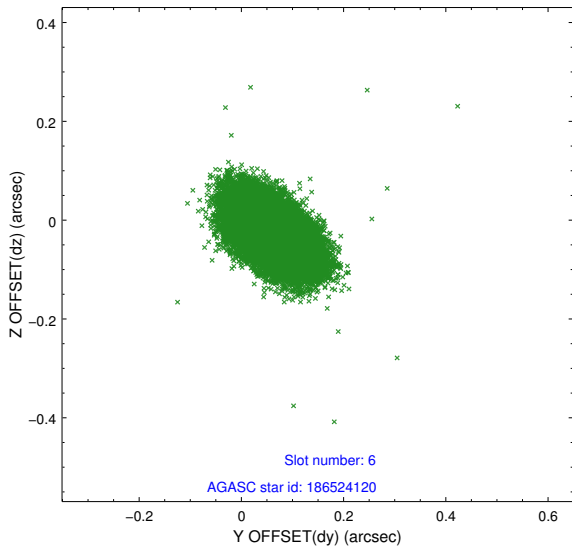
2.4.2 Slot 4



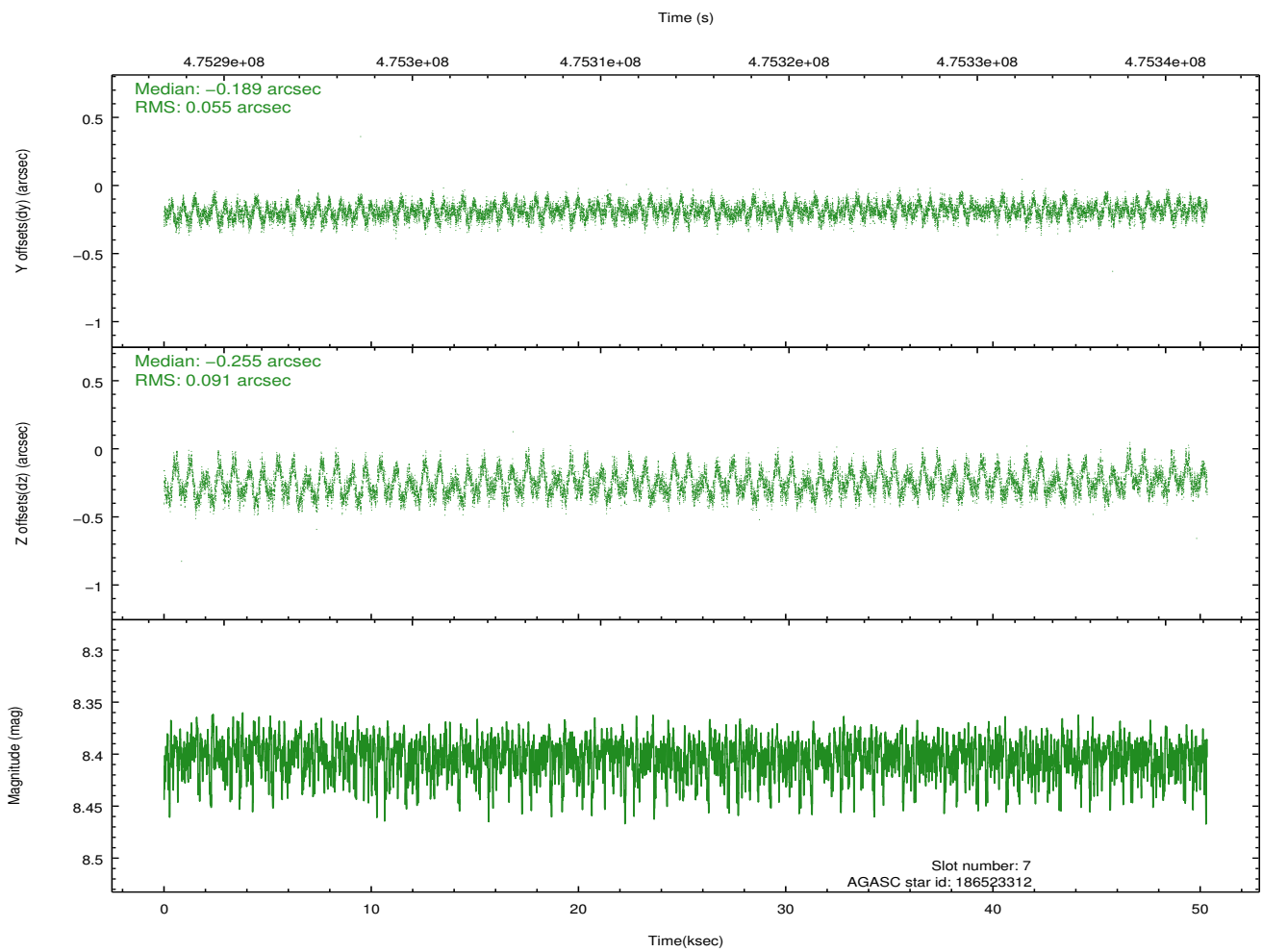
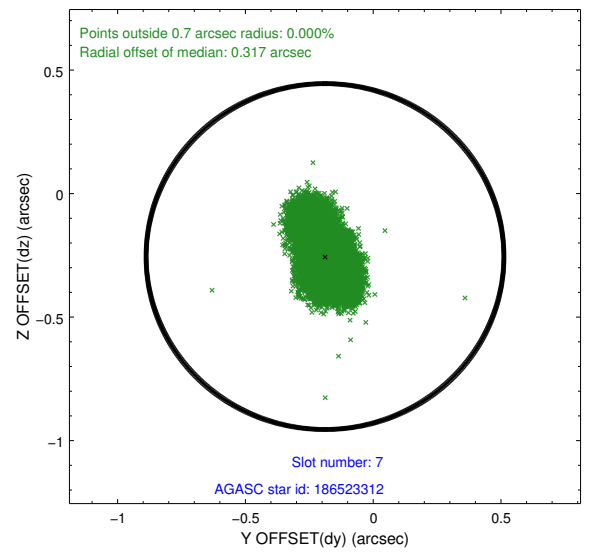
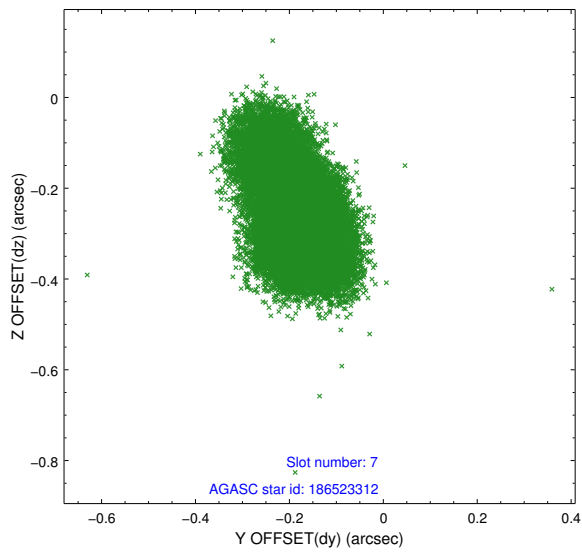
2.4.3 Slot 5



2.4.4 Slot 6

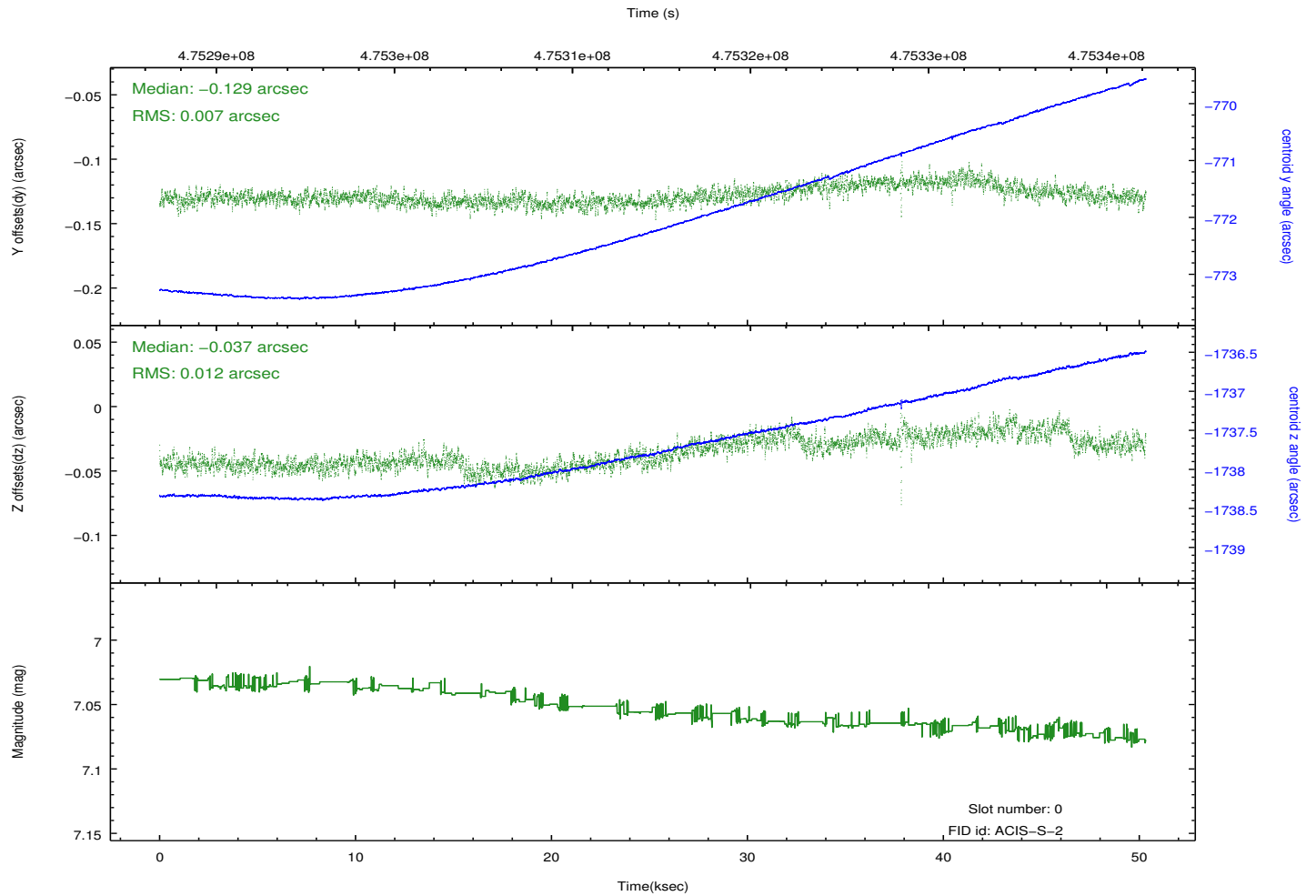
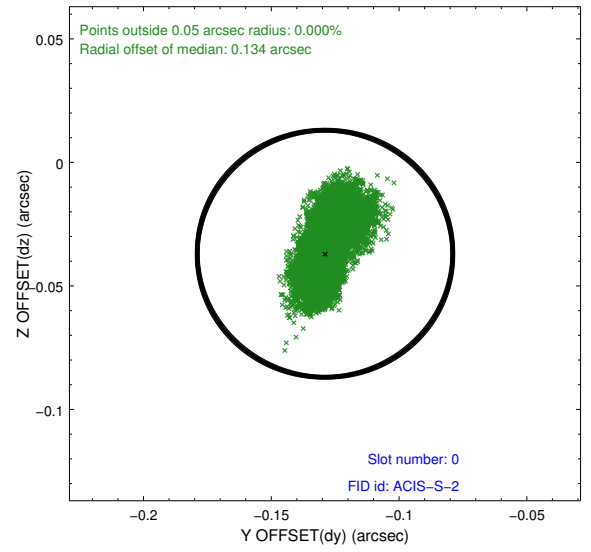
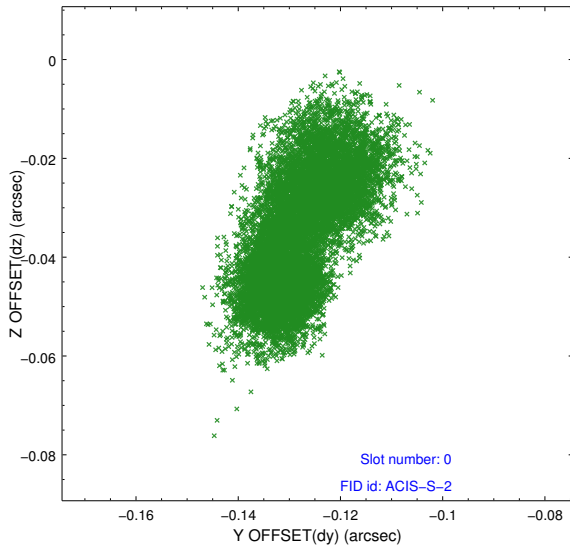


2.4.5 Slot 7

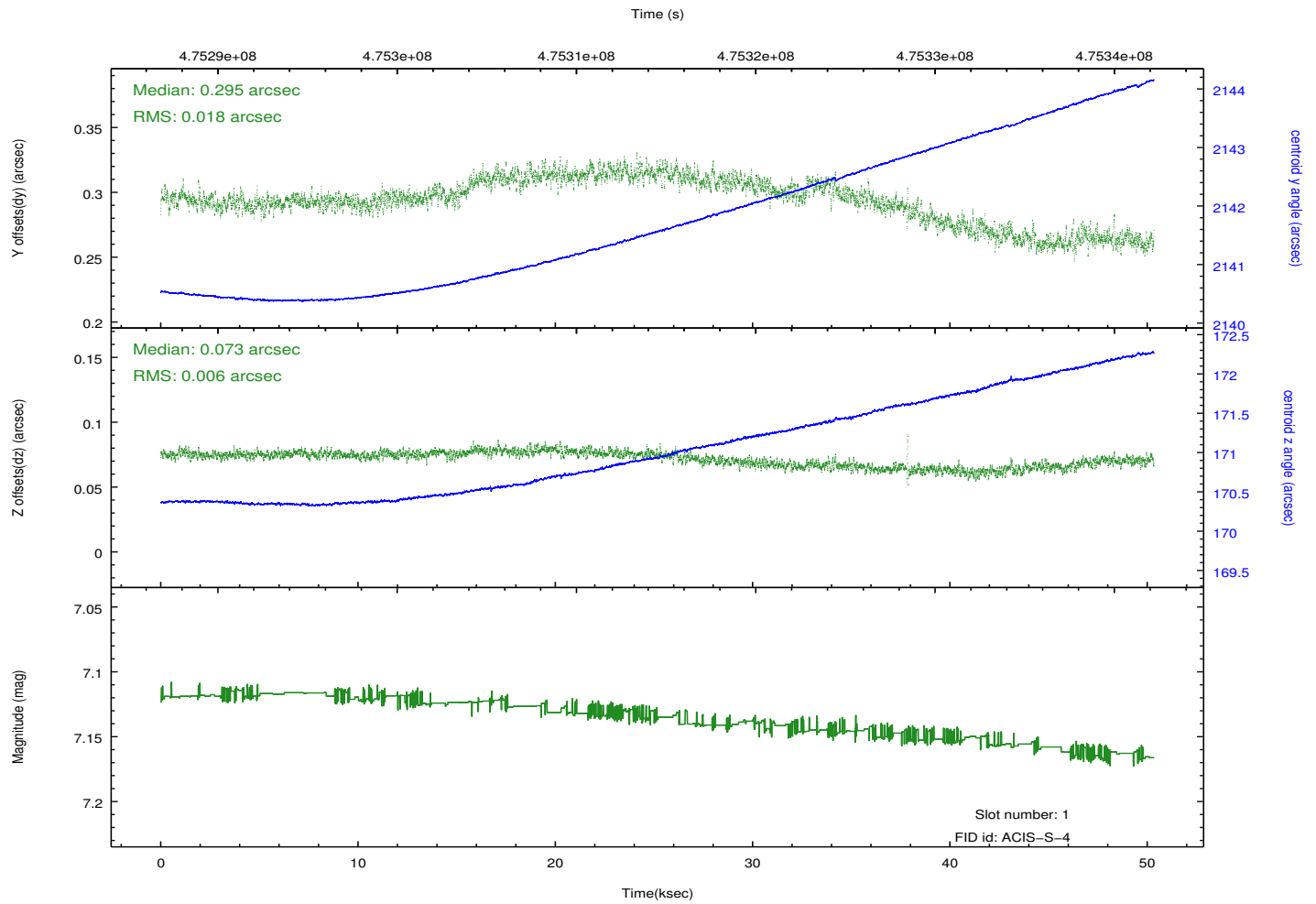
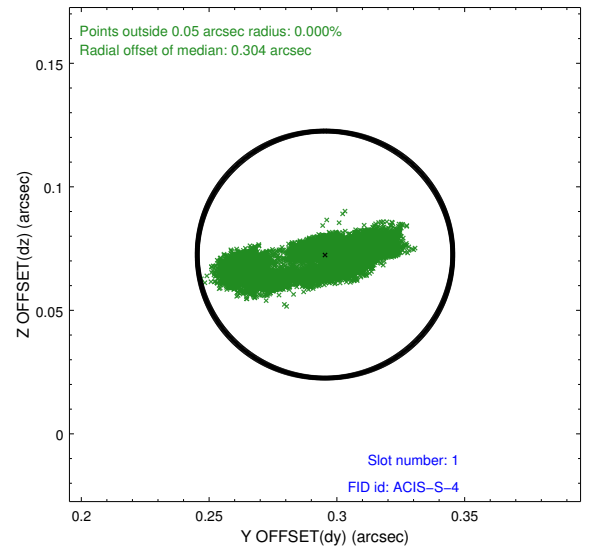
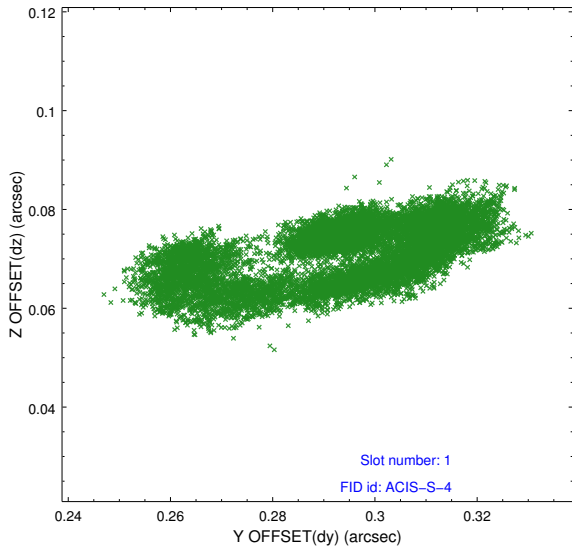


2.5 FID Slots

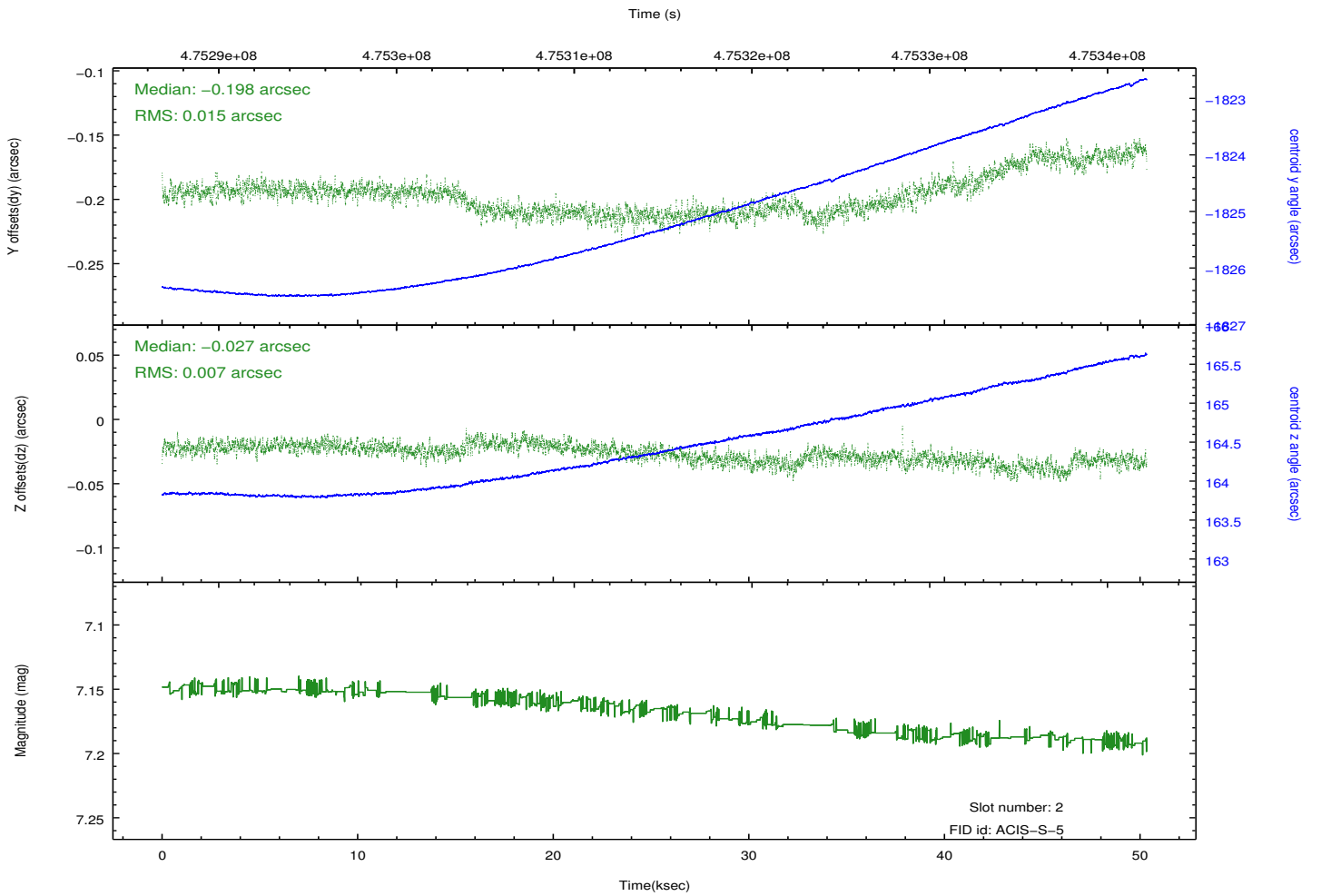
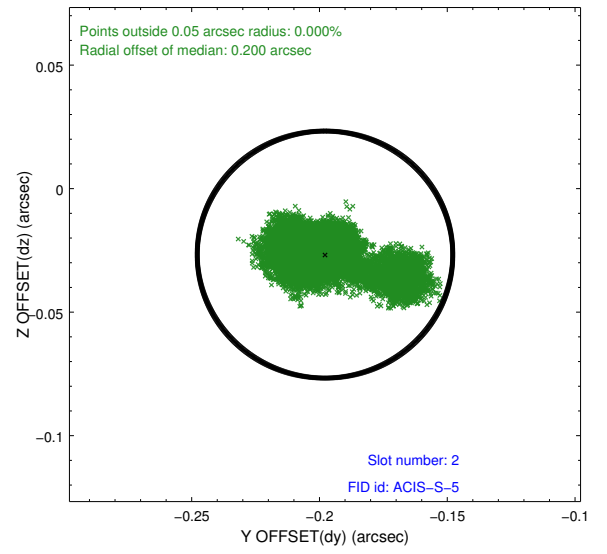
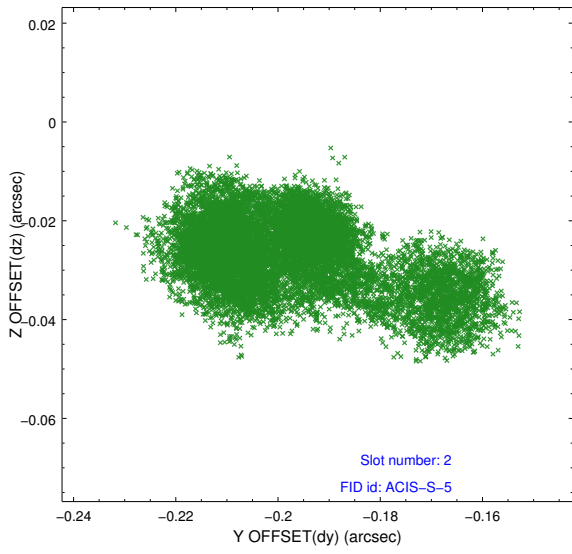
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.06810038507

A.2 Comments

Joint proposal with HST and NRAO.

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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.