

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16141 - L2 Version 3
Chandra X-Ray Center

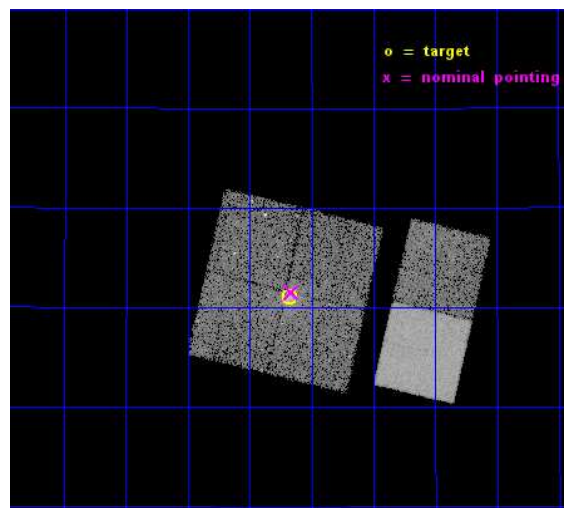
L2 Processing Date : Dec 10 2014

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1 Front

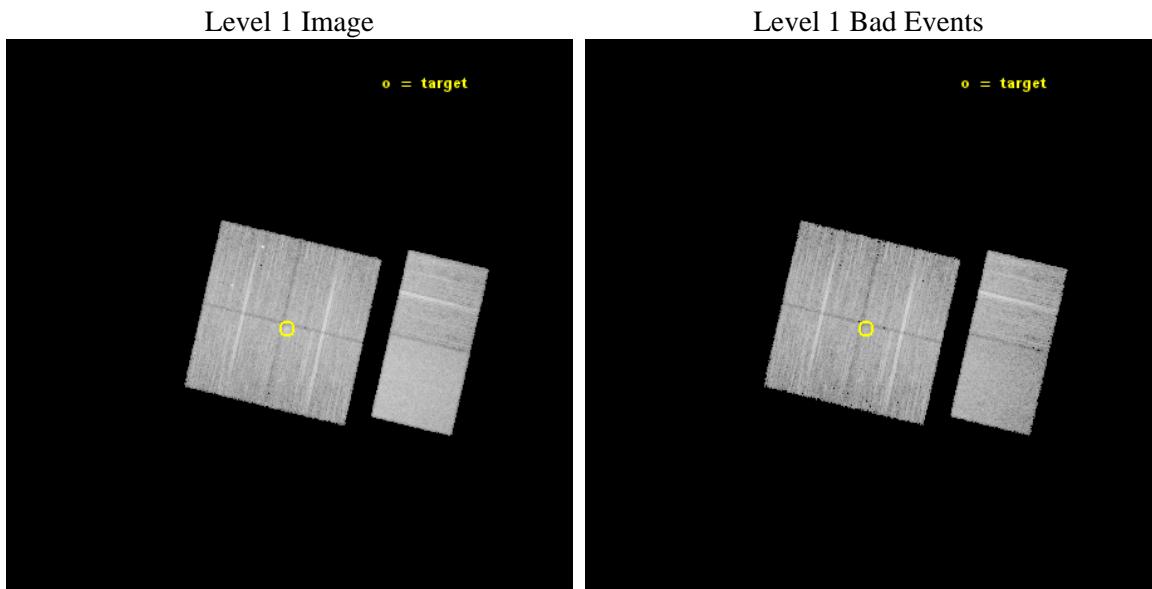
seq_num	801395	Sequence number
obs_id	16141	Observation id
title	Unmasking Galaxy Clusters Masquerading As Quasars	Proposal title
observer	Dr. Megan Donahue	Principal investigator
object	RXJ145611.1+302108	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	224.045417	Observer's specified target RA [deg]
dec_targ	30.35175	Observer's specified target Dec [deg]
ra_nom	224.04068144493	Nominal RA [deg]
dec_nom	30.358678164617	Nominal Dec [deg]
roll_nom	103.24134985297	Nominal Roll [deg]
revision	3	Processing version of data
ontime	19971.040257335	Sum of GTIs [s]
livetime	19718.15492048	Livetime [s]
ontime0	19970.917137325	Sum of GTIs [s]
ontime1	19970.958177328	Sum of GTIs [s]
ontime2	19970.999217331	Sum of GTIs [s]
ontime3	19971.040257335	Sum of GTIs [s]
ontime6	19971.122337341	Sum of GTIs [s]
ontime7	19971.081297338	Sum of GTIs [s]
l2events	100279	Number of level 2 events



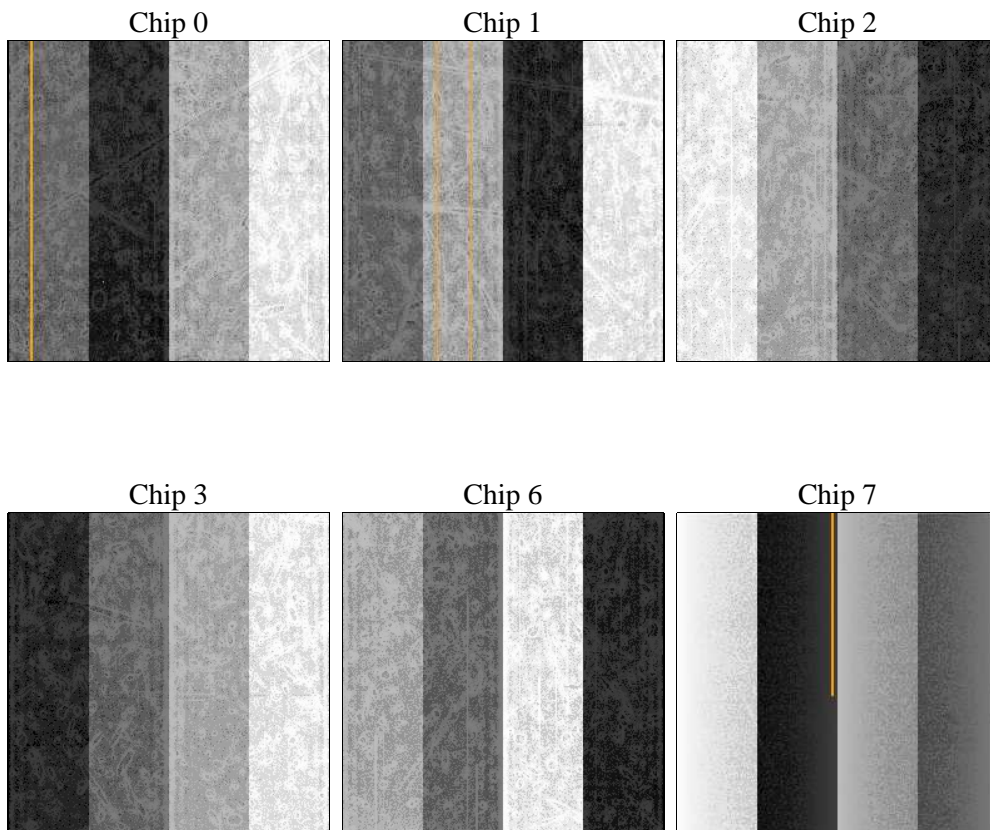
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19971.040257335	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	19970.917137325	Sum of GTIs [s]
date	2014-12-10T16:43:03	Date and time of file creation	ontime1	19970.958177328	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	19970.999217331	Sum of GTIs [s]
			ontime3	19971.040257335	Sum of GTIs [s]
			ontime6	19971.122337341	Sum of GTIs [s]
			ontime7	19971.081297338	Sum of GTIs [s]
			l1events	569742	Number of level 1 events

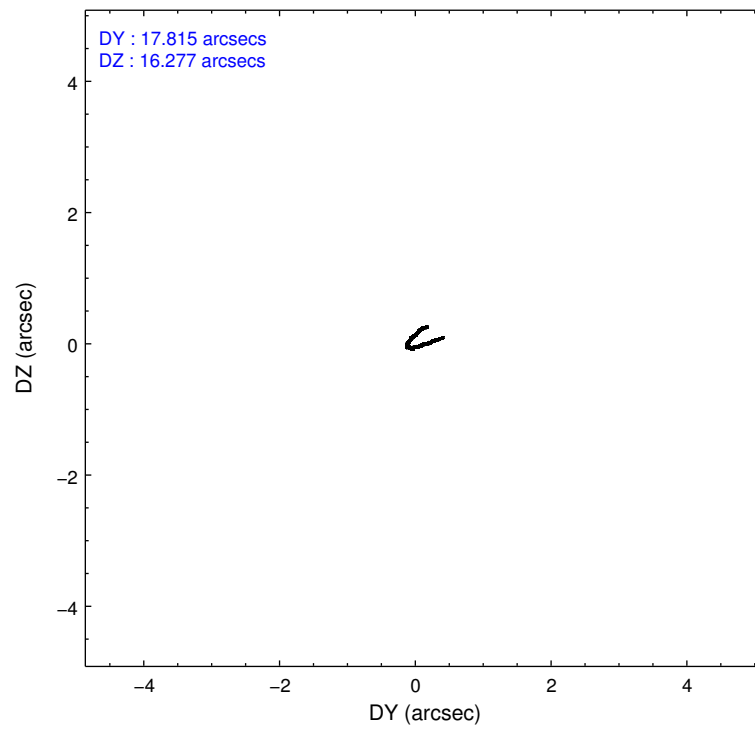
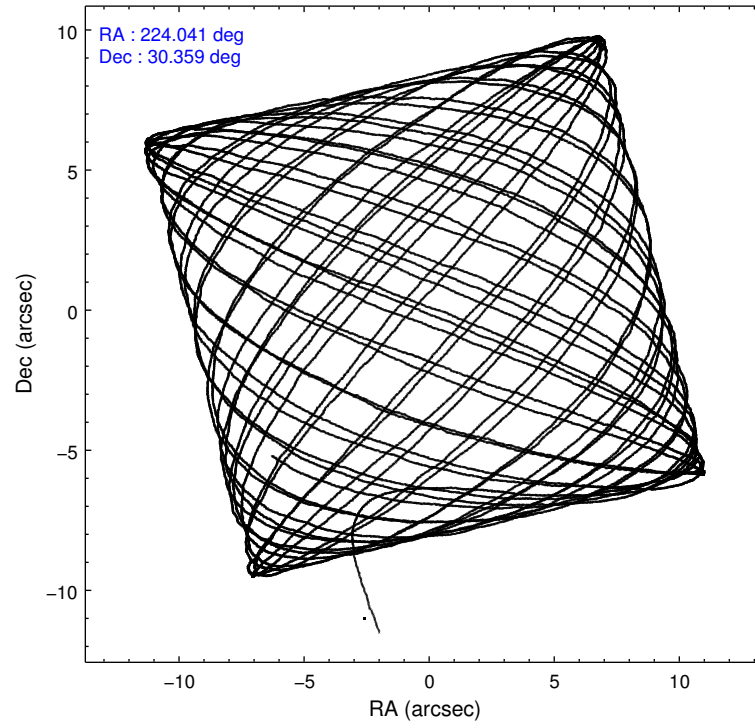
2.1.4 Events

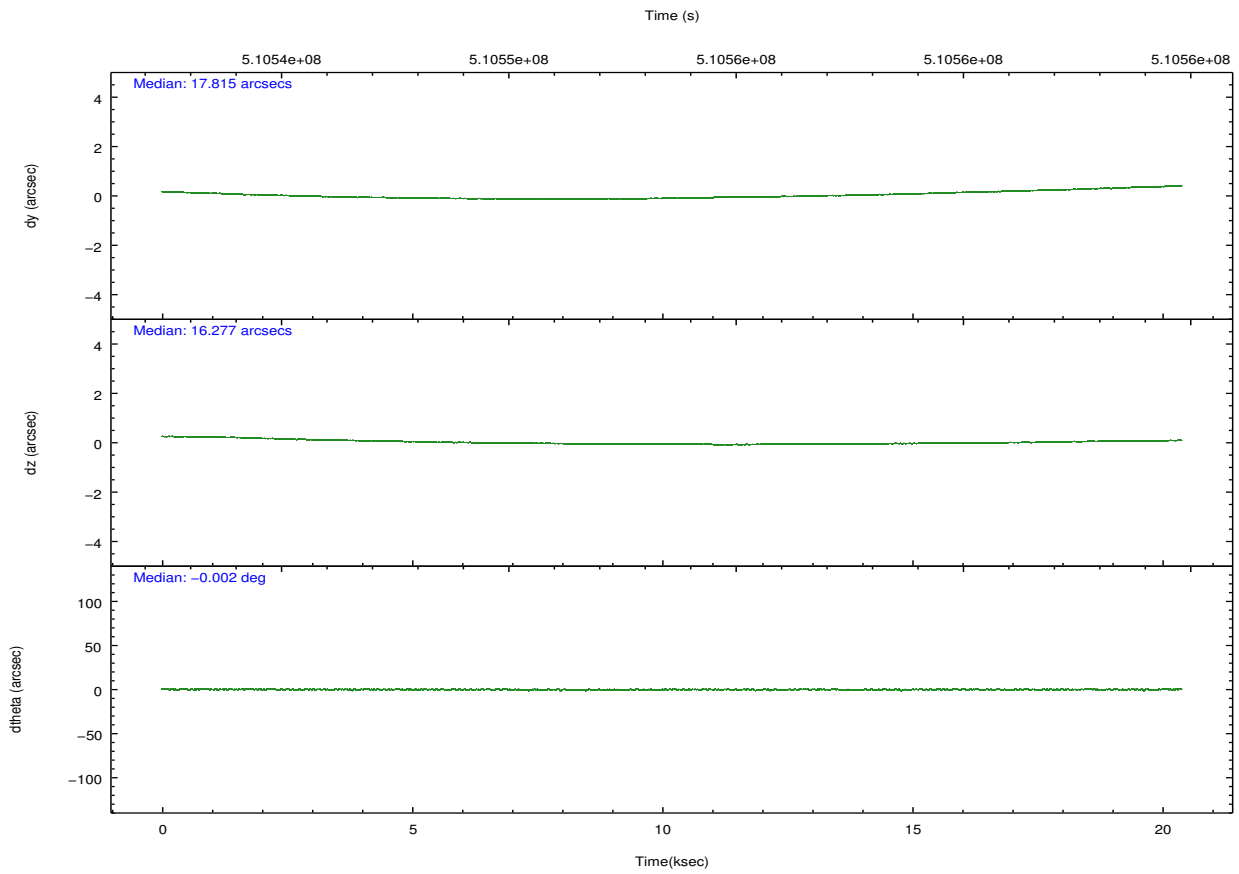
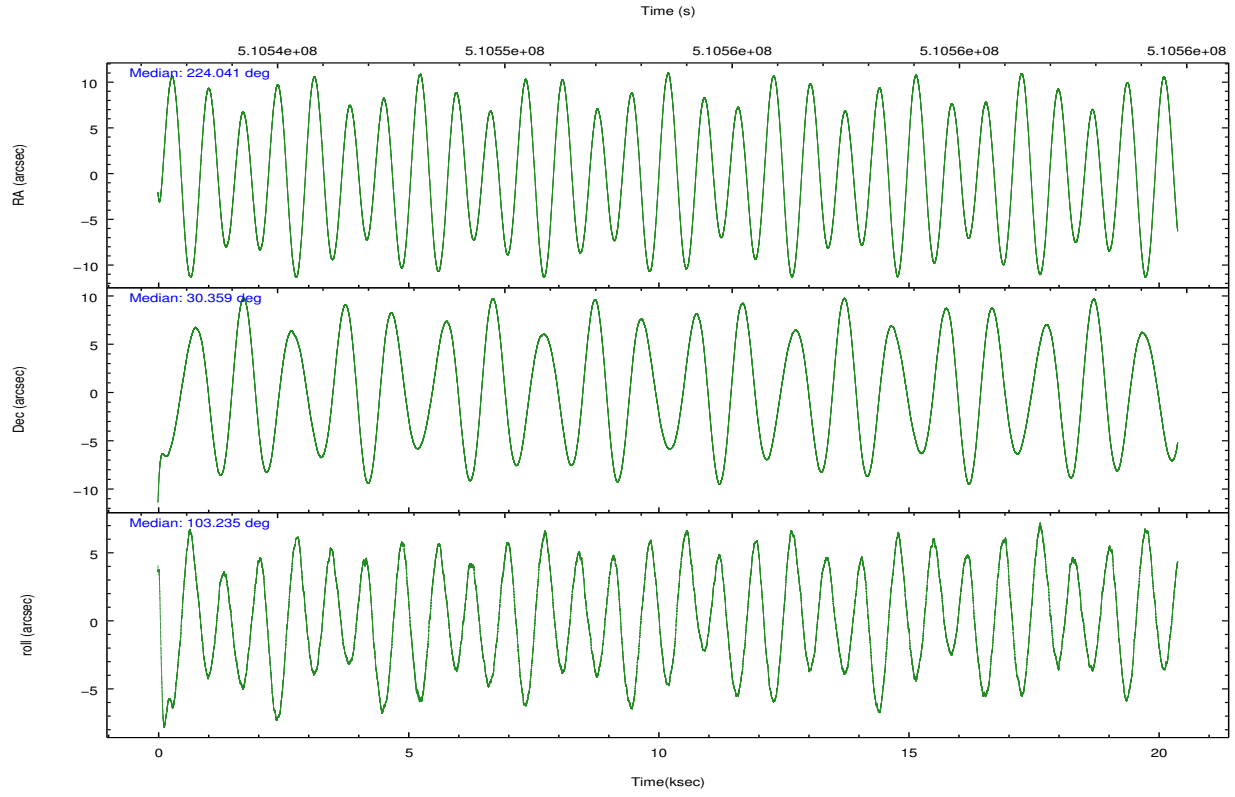
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	84283	85460	90014	90730	94726	124529	grade 0 events	4589	4028	3761	4937	3755	4398
rejected events	72589	73886	79552	78987	83392	71570		5%	4%	4%	5%	3%	3%
rejected %	86%	86%	88%	87%	88%	57%	grade 1 events	44	39	53	55	52	156
								0%	0%	0%	0%	0%	0%
							grade 2 events	2698	2654	2478	2301	2610	10810
								3%	3%	2%	2%	2%	8%
							grade 3 events	1126	1095	1065	1129	1105	4216
								1%	1%	1%	1%	1%	3%
							grade 4 events	1004	1098	1043	1133	1060	4085
								1%	1%	1%	1%	1%	3%
							grade 5 events	4132	4313	4010	4648	4644	12428
								4%	5%	4%	5%	4%	9%
							grade 6 events	2279	2700	2115	2244	2804	29459
								2%	3%	2%	2%	2%	23%
							grade 7 events	68411	69533	75489	74283	78696	58977
								81%	81%	83%	81%	83%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	224.062573	224.0406814449348	CCD I2 on	Y	Y
[deg] Pointing Dec	30.338754	30.35867816461656	CCD I3 on	Y	Y
[deg] Pointing Roll	103.021595	103.2413498529748	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	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	510543763.184000	510542547.46573	CCD S5 on	N	N
Observation start date	2014-03-07T01:41:36	2014-03-07T01:22:27	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	510563763.184000	510564638.77944	On-chip summing requested	N	N
Observation end date	2014-03-07T07:14:56	2014-03-07T07:30:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





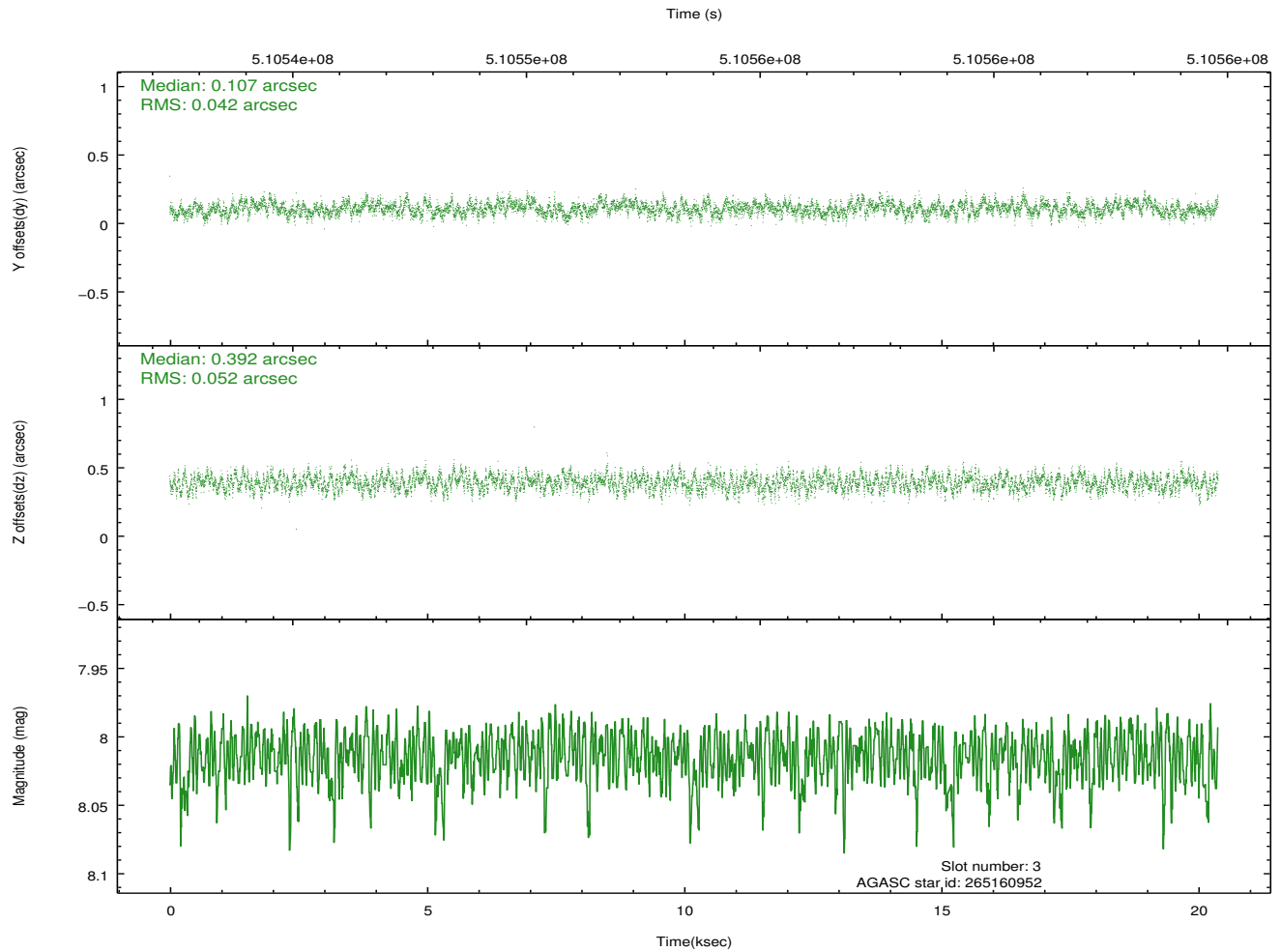
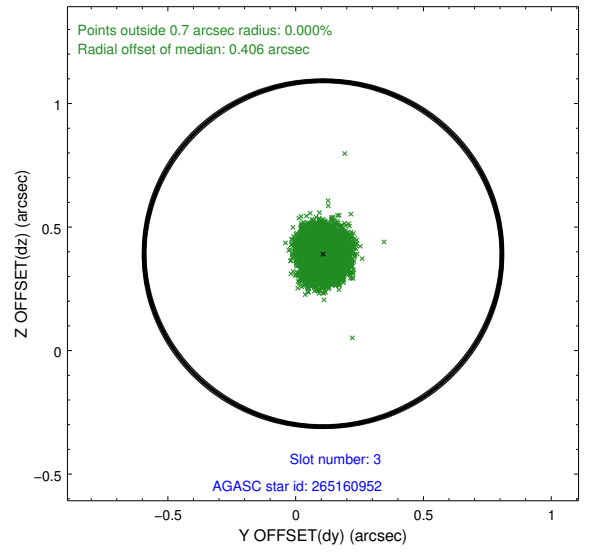
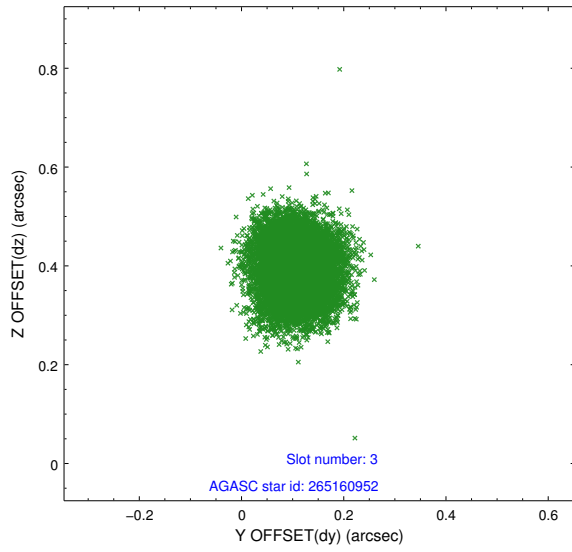
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	4973	0.091	-0.070	0.007	0.012	0.000000	0.000000	921.62	-840.01
1	FID		ACIS-I-5	7.22	4973	-0.300	0.063	0.006	0.011	0.000000	0.000000	-1826.78	1057.52
2	FID		ACIS-I-6	7.23	4972	0.118	0.077	0.007	0.011	0.000000	0.000000	386.99	1702.25
3	GUIDE	used	265160952	8.01	9945	0.107	0.392	0.072	0.114	224.886525	29.867566	-2222.52	-2125.63
4	GUIDE	used	334896376	9.06	9936	0.244	0.196	0.097	0.156	224.466871	30.284306	-471.14	-1180.52
5	GUIDE	used	334897016	9.13	9936	-0.060	-0.133	0.095	0.152	223.839155	30.025888	-939.71	931.96
6	GUIDE	used	334898672	7.06	9946	-0.163	-0.286	0.083	0.137	223.648377	30.063648	-671.47	1480.42
7	GUIDE	used	334899312	9.06	9943	-0.129	-0.169	0.110	0.172	223.895672	30.642420	1182.25	257.84

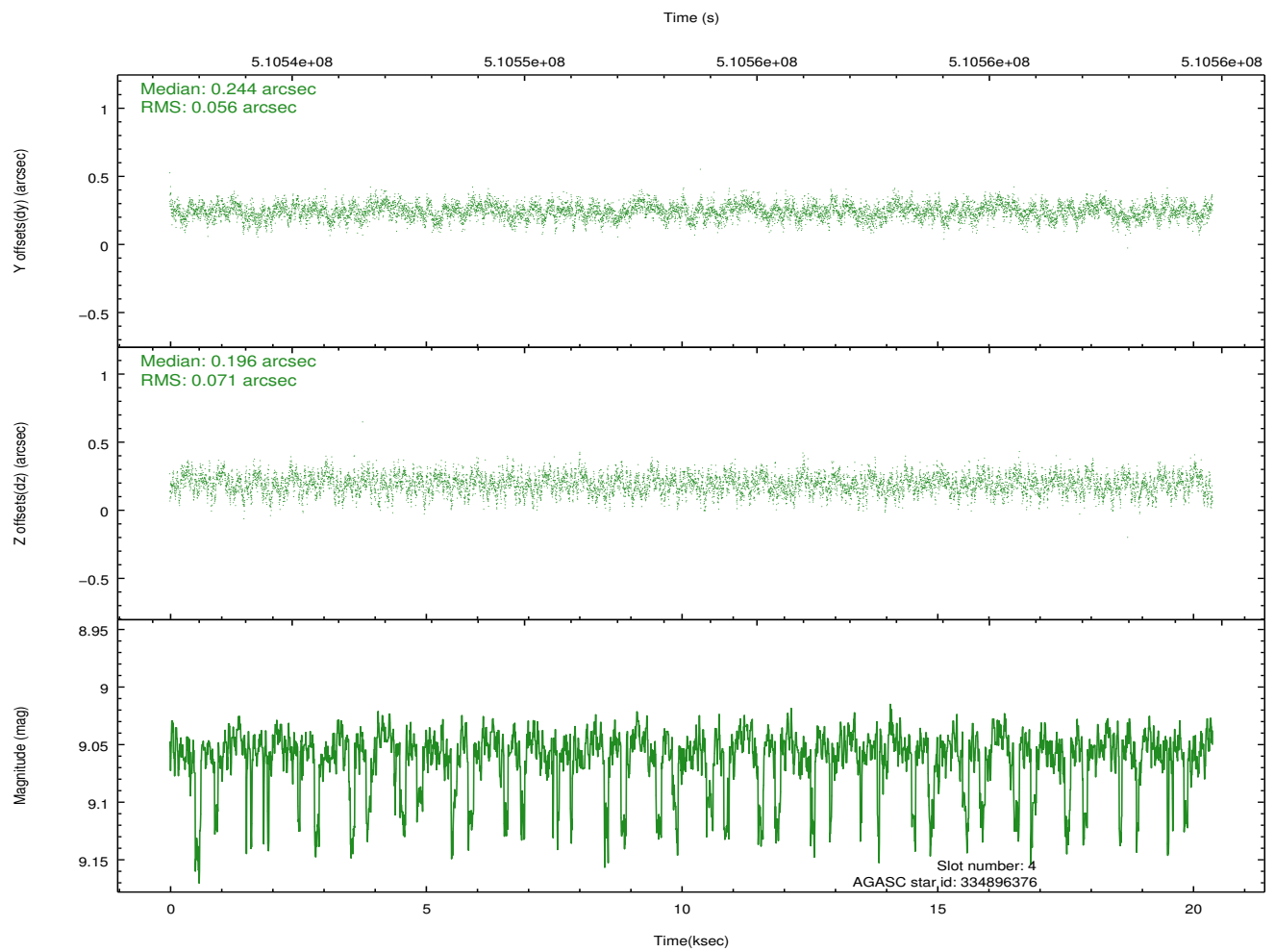
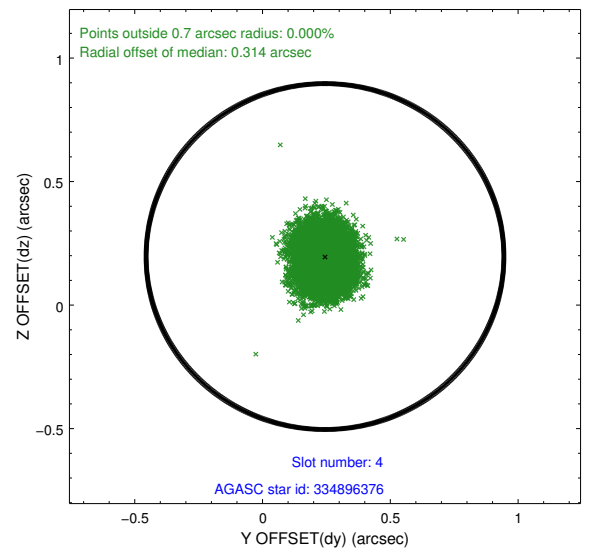
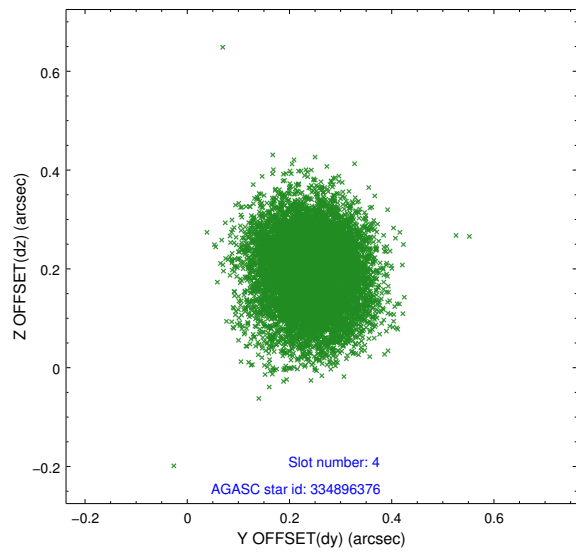
∞

2.4 Star Slots

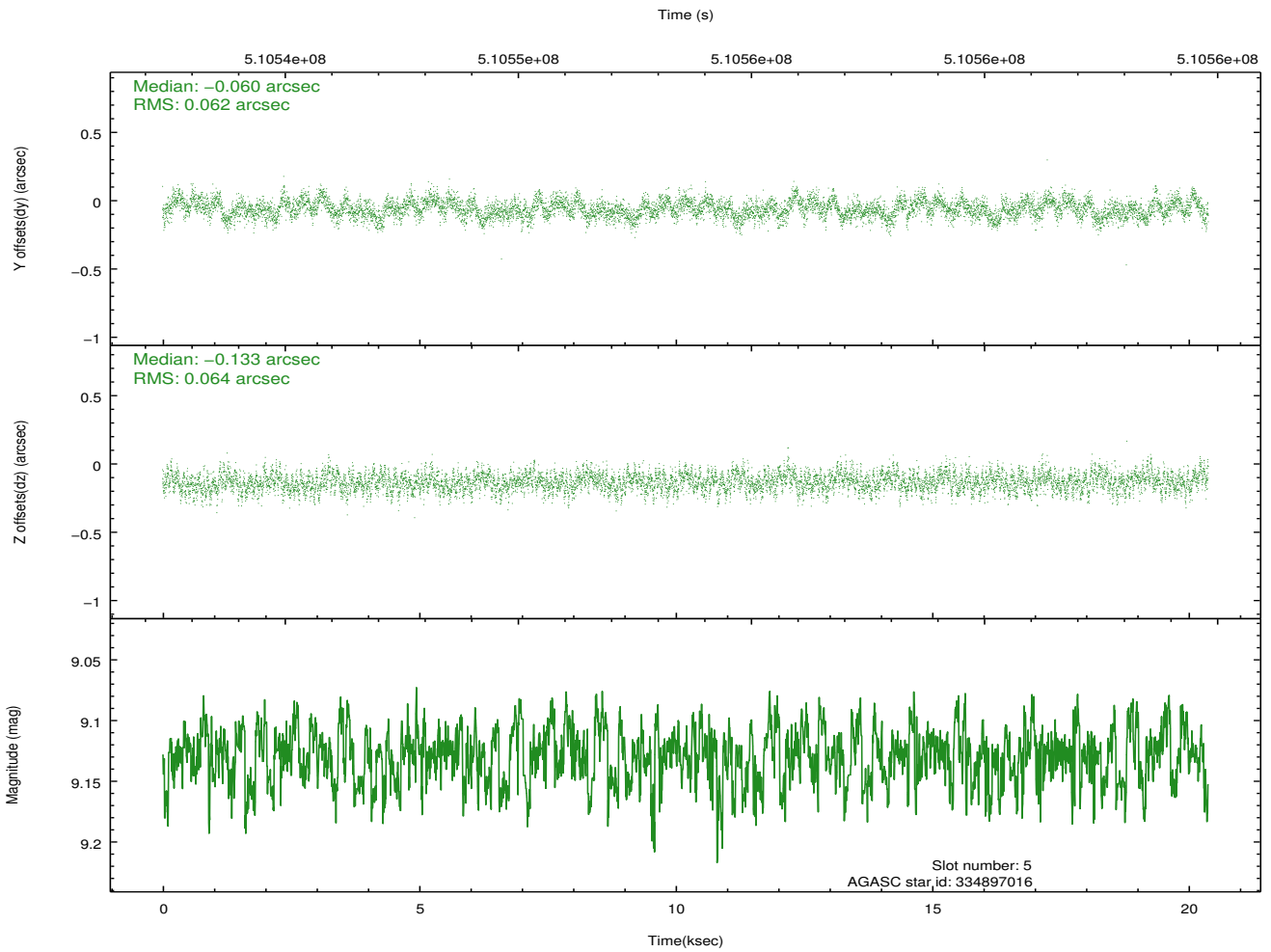
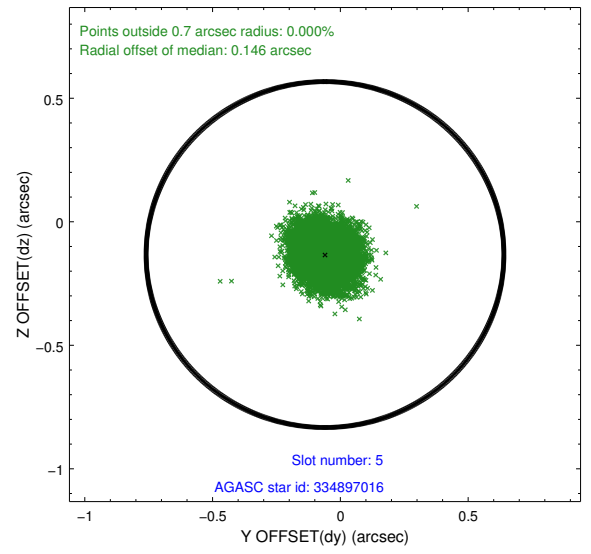
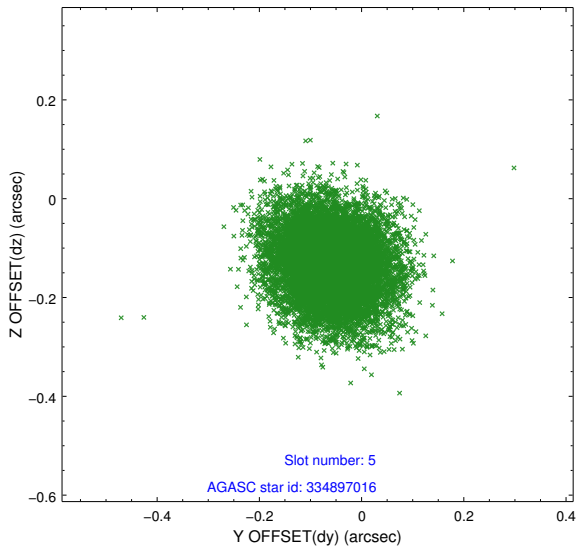
2.4.1 Slot 3



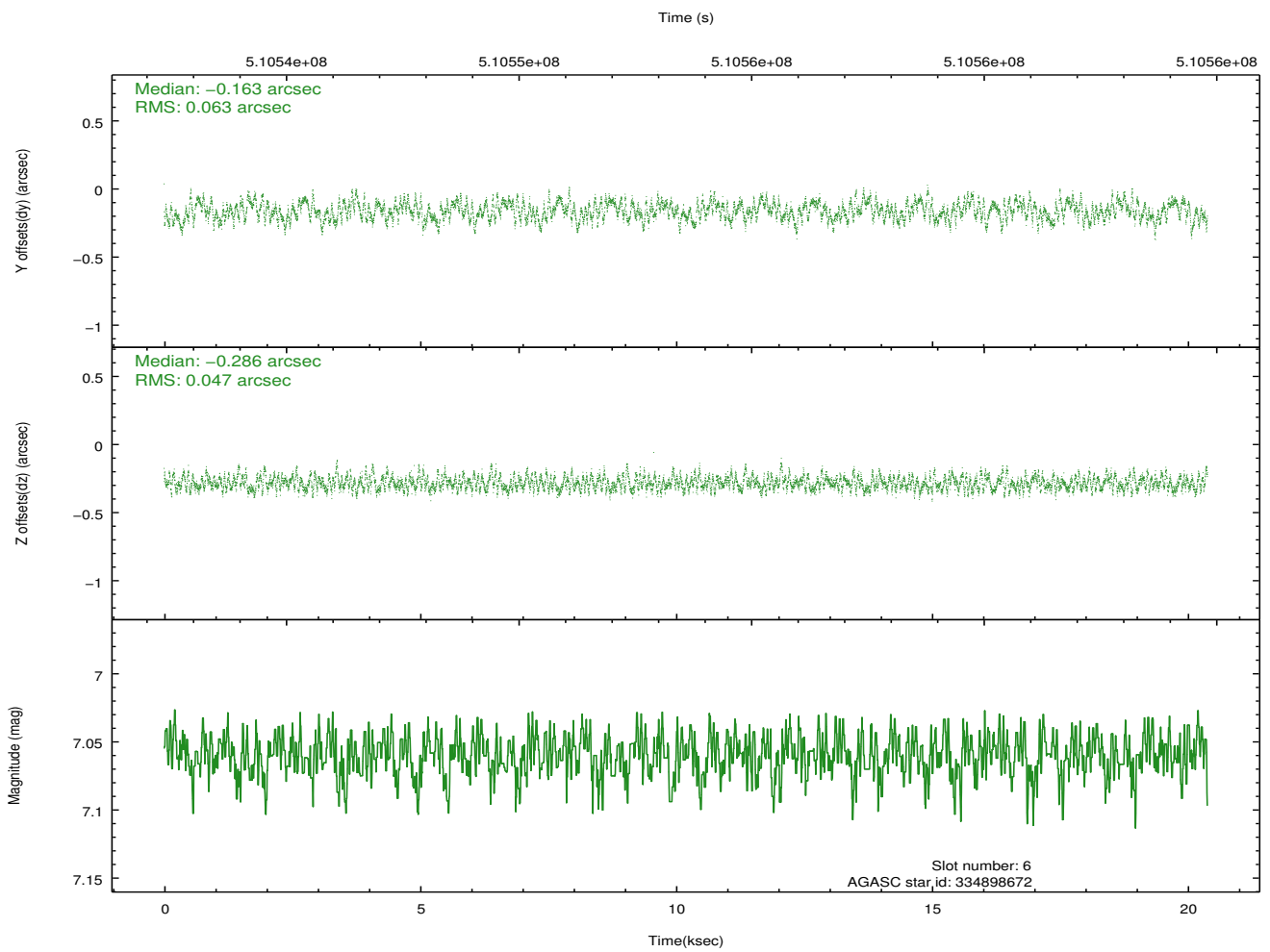
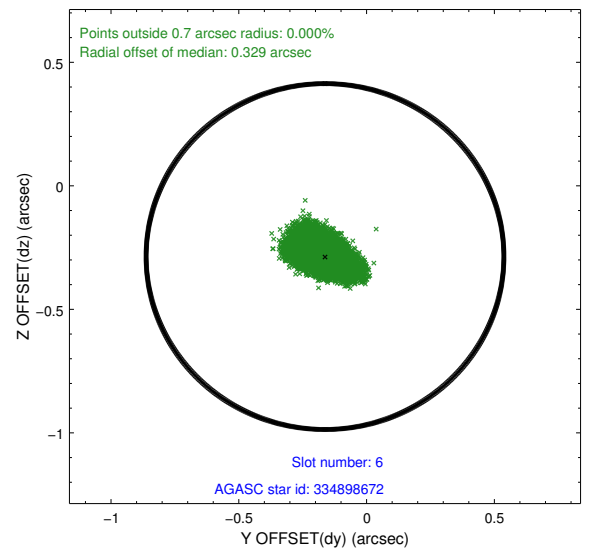
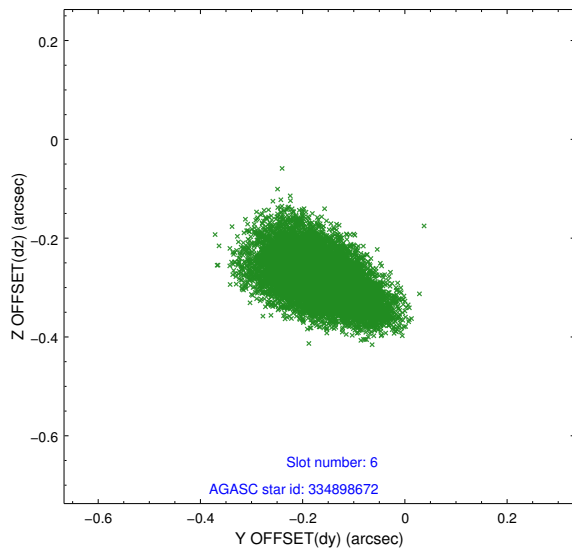
2.4.2 Slot 4



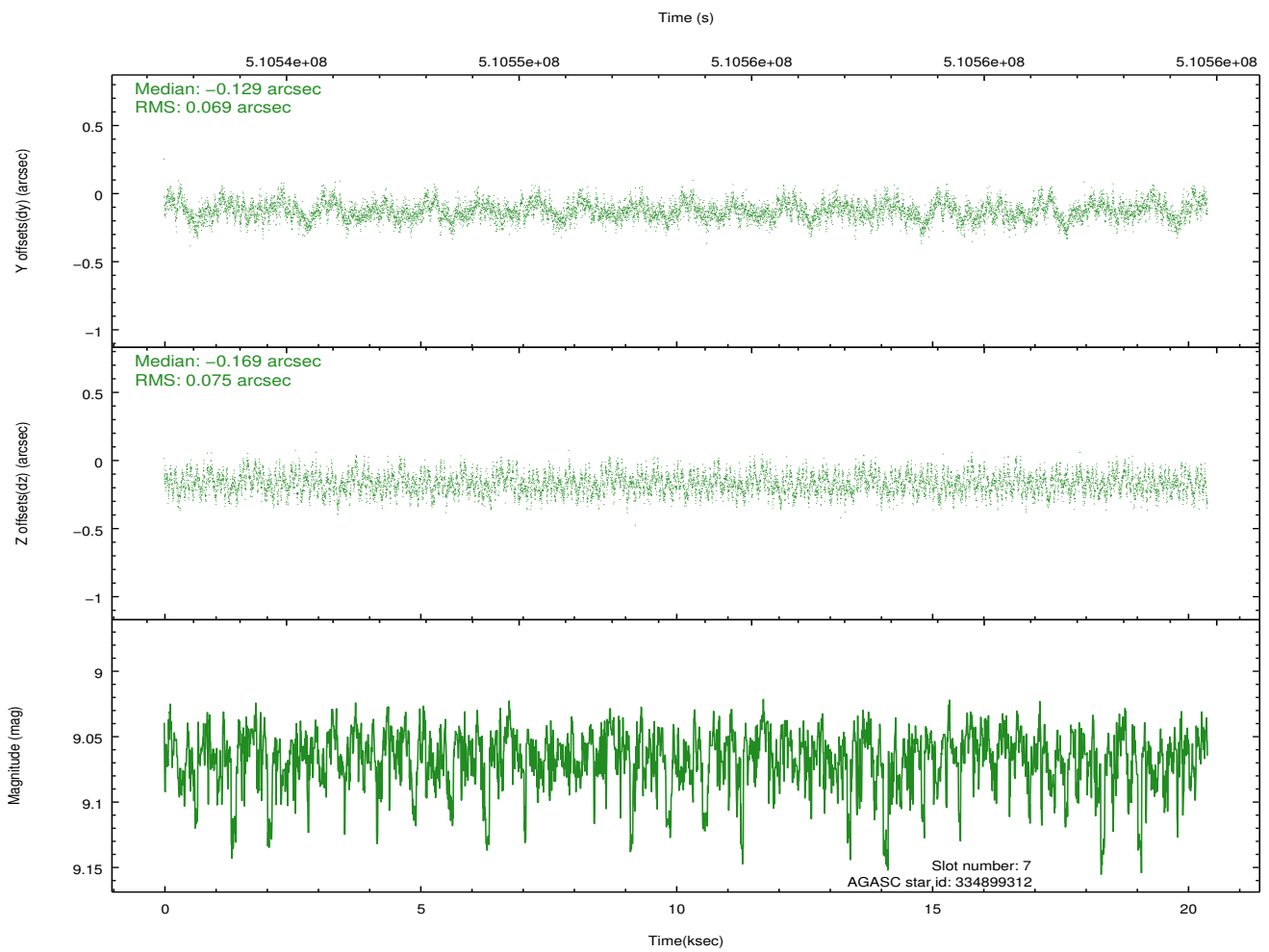
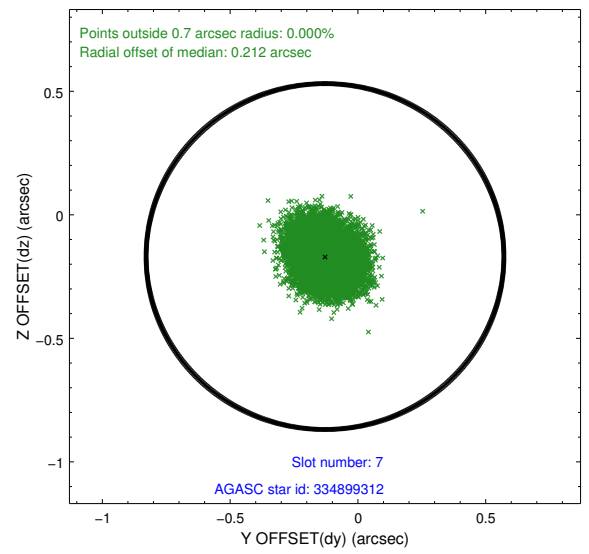
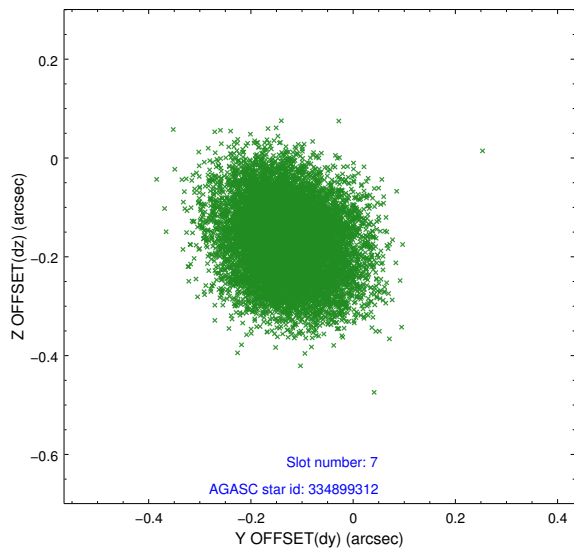
2.4.3 Slot 5



2.4.4 Slot 6

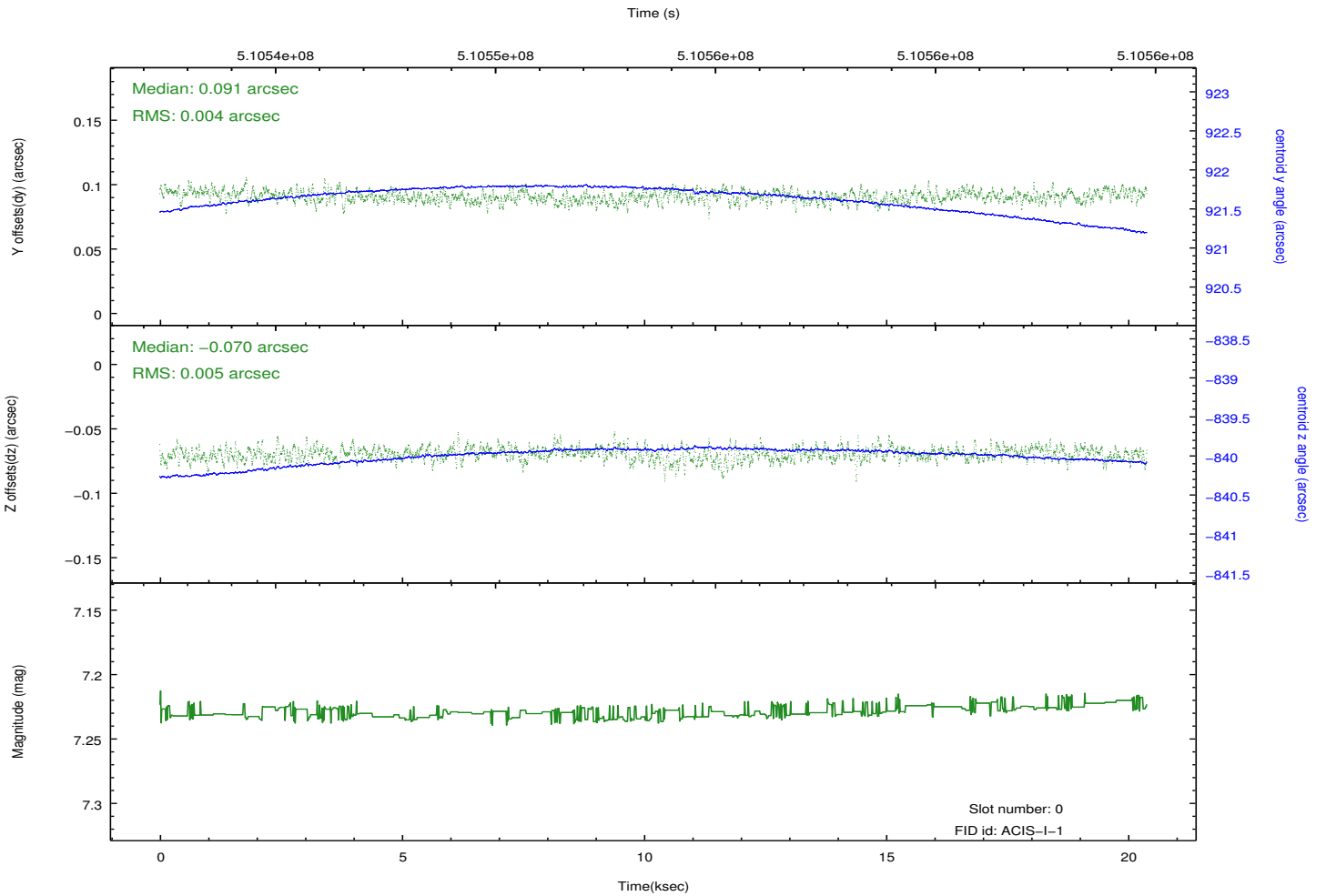
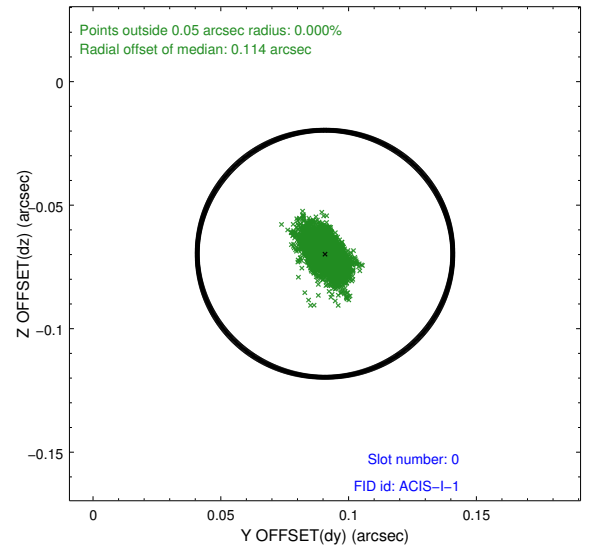
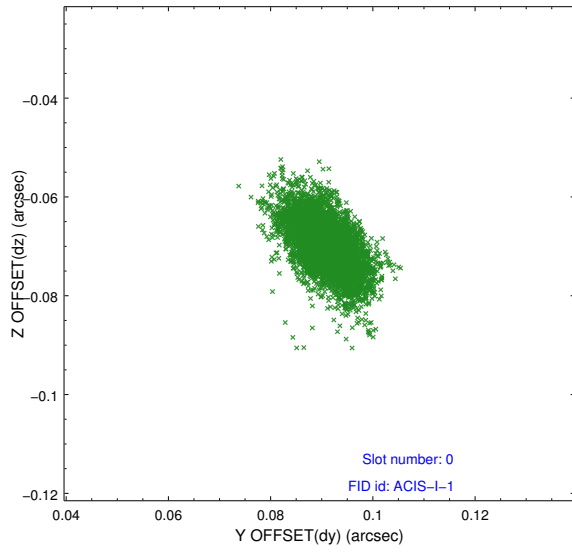


2.4.5 Slot 7

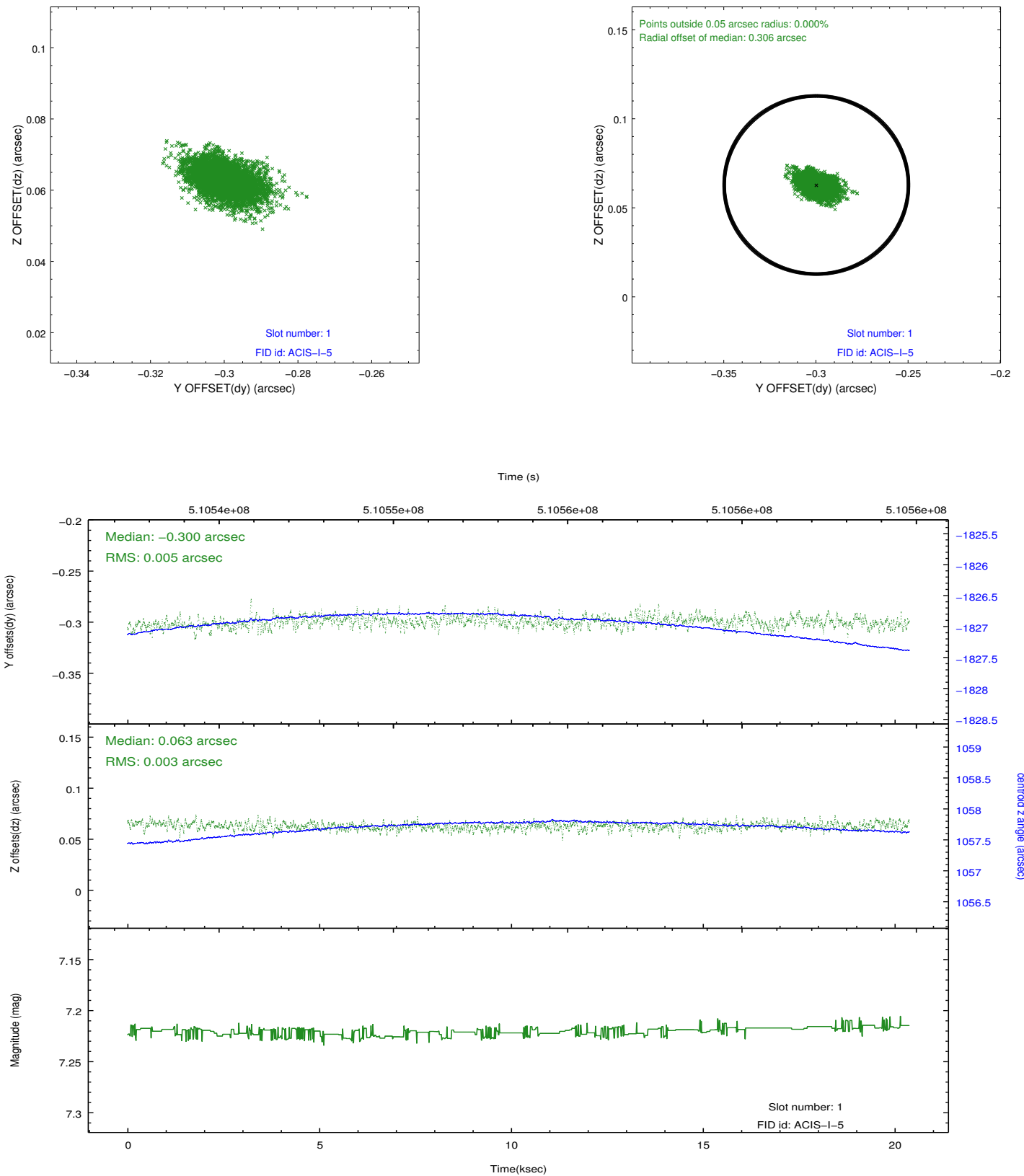


2.5 FID Slots

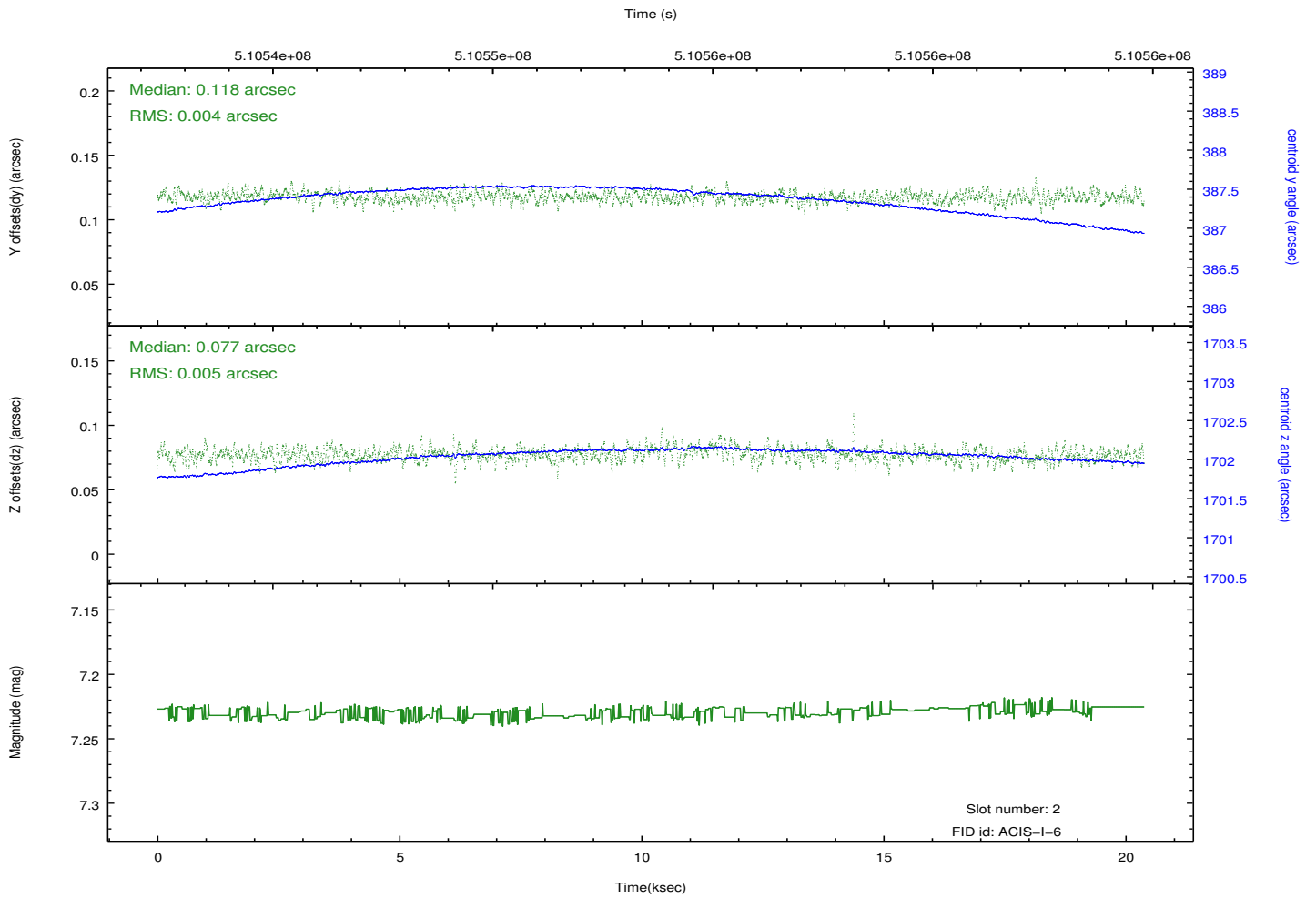
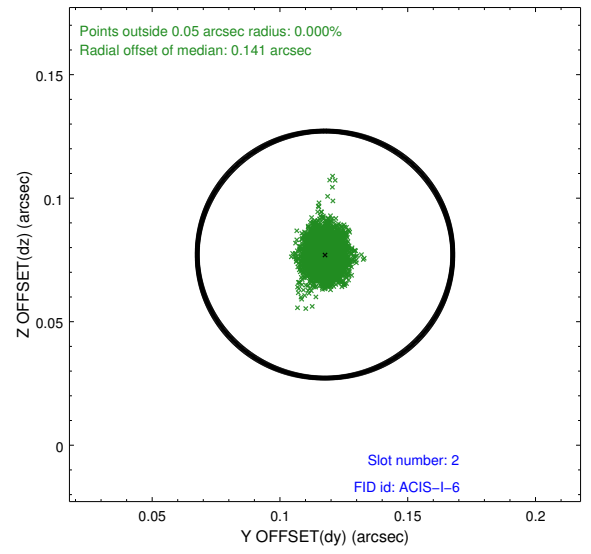
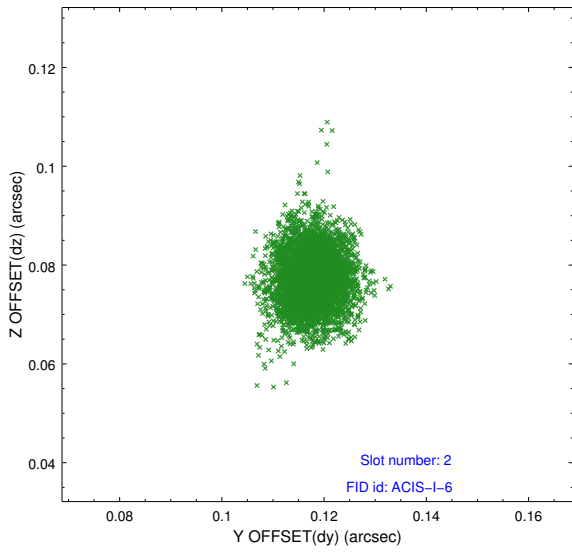
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.971040257335

A.2 Comments

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.