

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 14500 - L2 Version 2
Chandra X-Ray Center

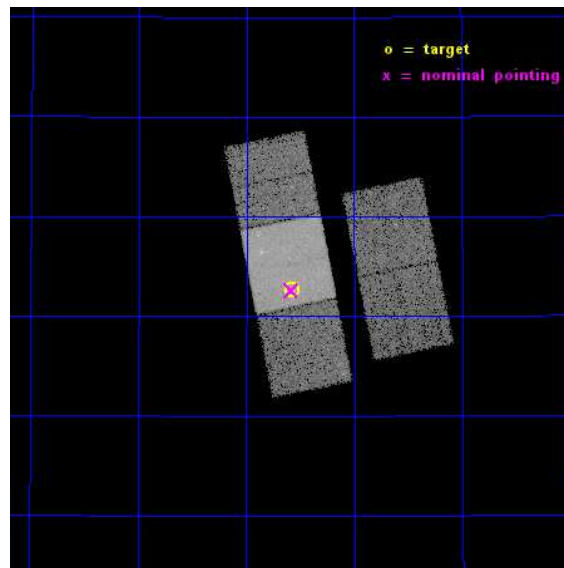
L2 Processing Date : Dec 11 2014

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1 Front

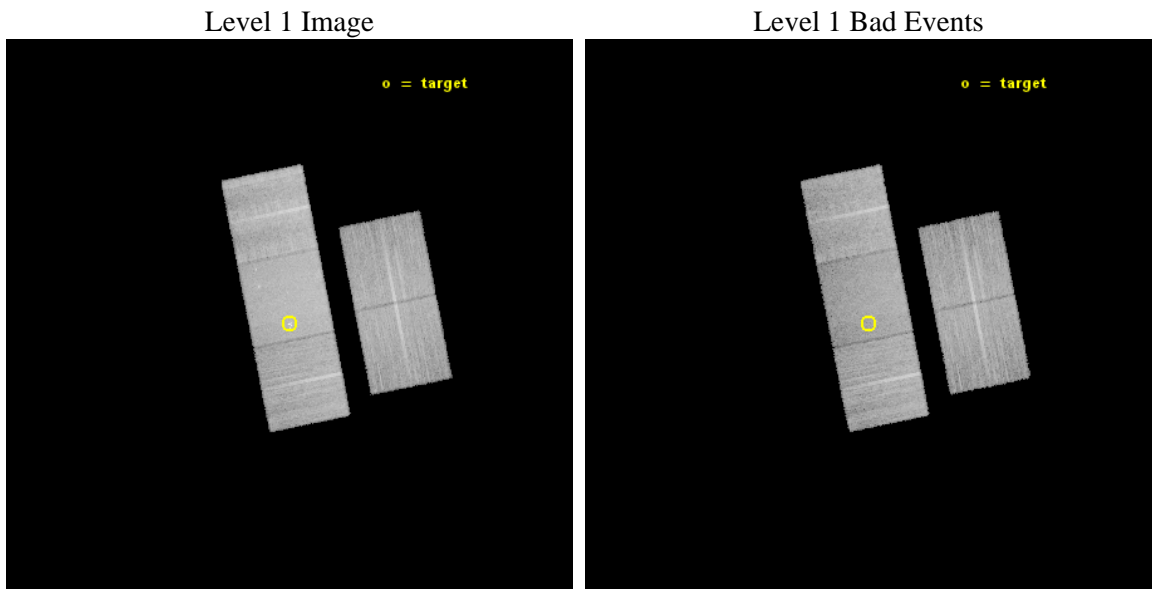
seq_num	702737	Sequence number
obs_id	14500	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14538579267	Nominal RA [deg]
dec_nom	41.210114293597	Nominal Dec [deg]
roll_nom	258.6005429813	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25066.600192785	Sum of GTIs [s]
livetime	24739.086607504	Livetime [s]
ontime2	25066.600192785	Sum of GTIs [s]
ontime3	25066.600192785	Sum of GTIs [s]
ontime6	25066.600192785	Sum of GTIs [s]
ontime7	25066.600192785	Sum of GTIs [s]
ontime8	25063.459222436	Sum of GTIs [s]
l2events	122469	Number of level 2 events



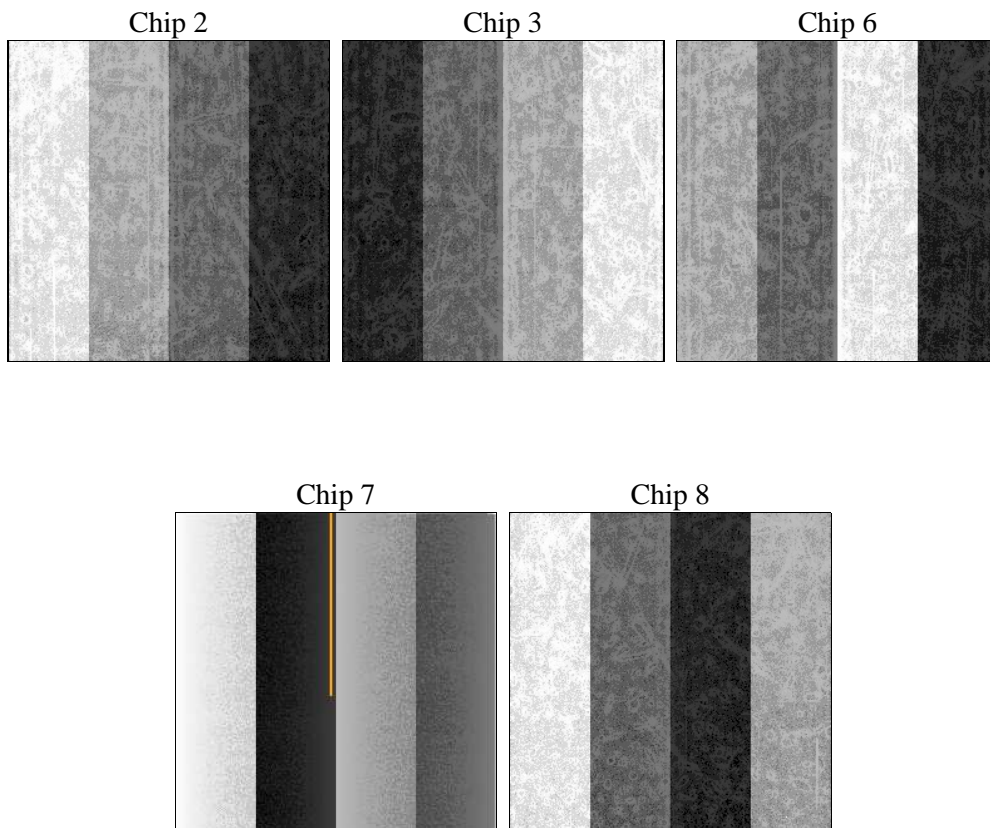
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	25066.600192785	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	25066.600192785	Sum of GTIs [s]
date	2014-12-12T01:29:06	Date and time of file creation	ontime3	25066.600192785	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25066.600192785	Sum of GTIs [s]
			ontime7	25066.600192785	Sum of GTIs [s]
			ontime8	25063.459222436	Sum of GTIs [s]
			l1events	685277	Number of level 1 events

2.1.4 Events

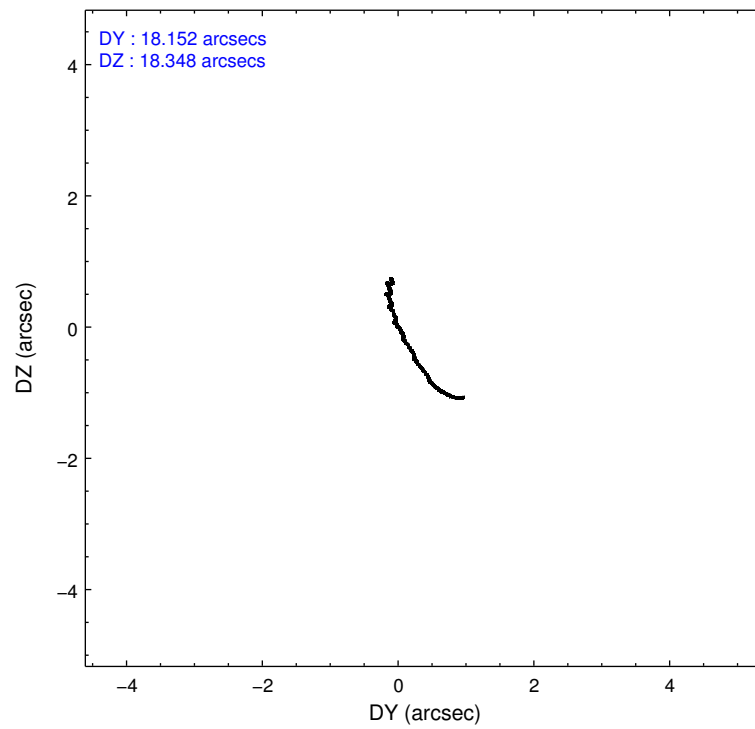
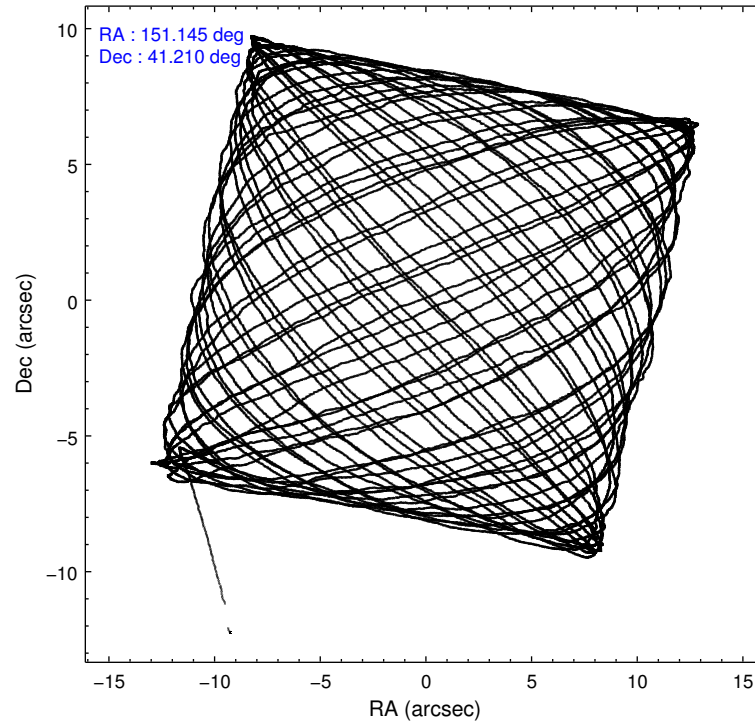
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	116285	116189	126422	167639	158742
rejected events	102989	102916	111705	94362	116519
rejected %	88%	88%	88%	56%	73%

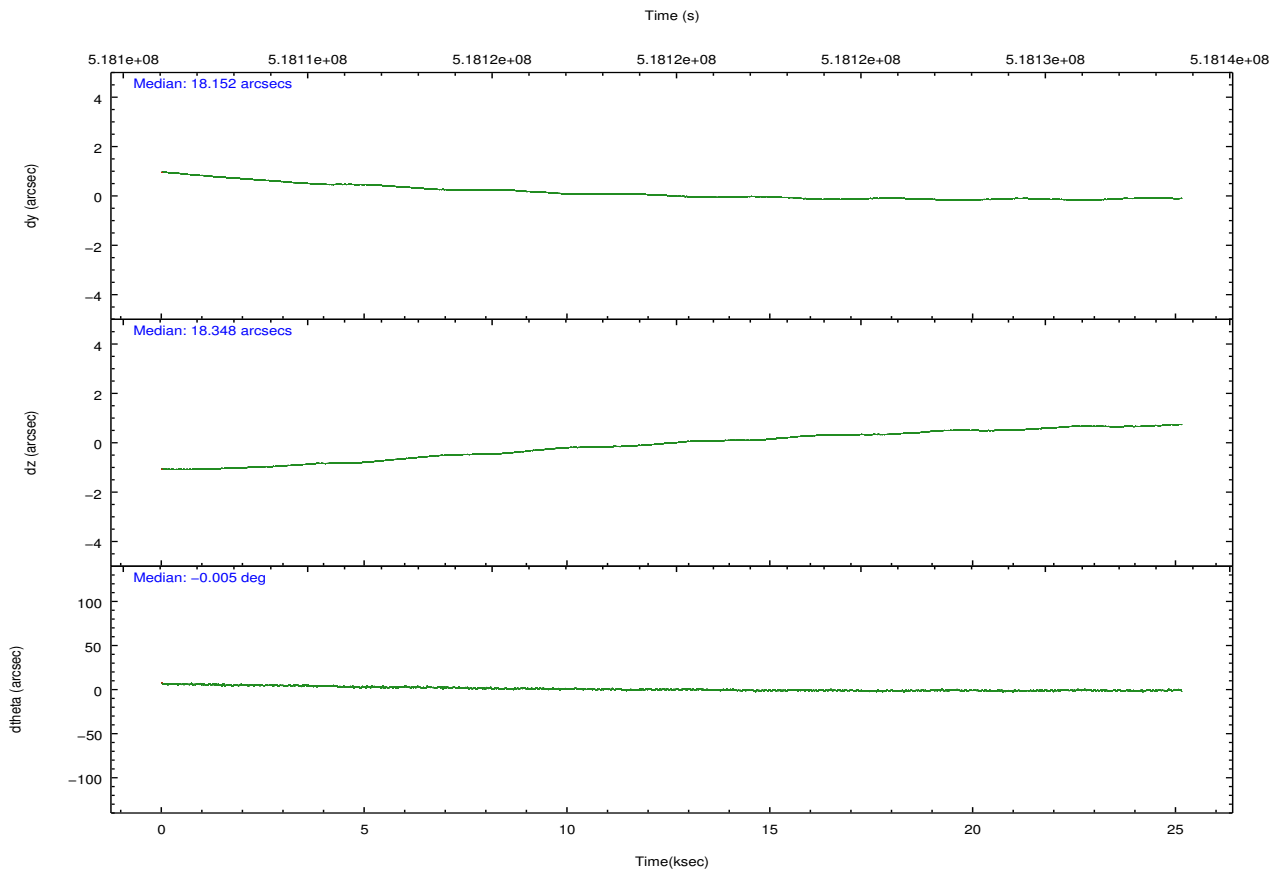
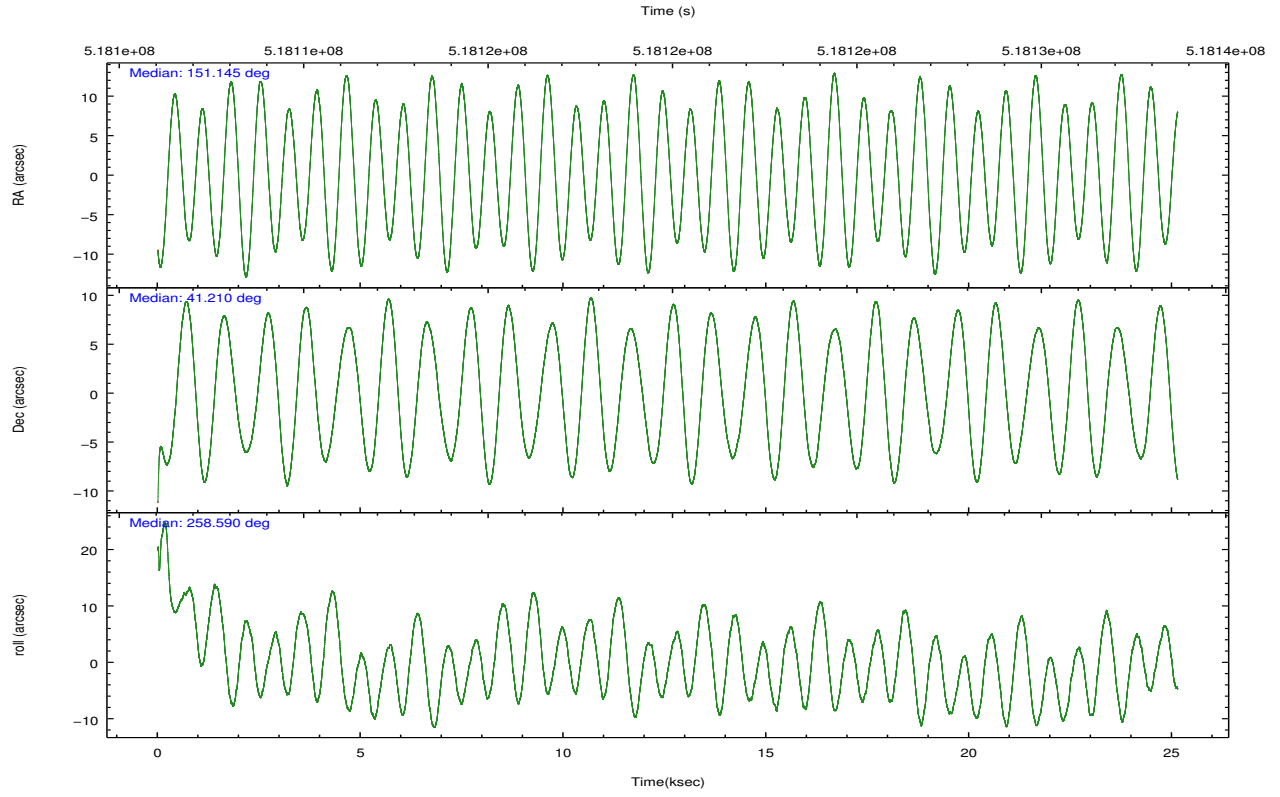
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4668	4543	4843	6973	12332
	4%	3%	3%	4%	7%
grade 1 events	52	87	55	201	122
	0%	0%	0%	0%	0%
grade 2 events	3194	2868	3399	14911	9956
	2%	2%	2%	8%	6%
grade 3 events	1388	1437	1530	6177	4530
	1%	1%	1%	3%	2%
grade 4 events	1414	1517	1445	6002	4147
	1%	1%	1%	3%	2%
grade 5 events	5109	6387	6321	16875	9389
	4%	5%	4%	10%	5%
grade 6 events	2632	2911	3503	39222	11259
	2%	2%	2%	23%	7%
grade 7 events	97828	96439	105326	77278	107007
	84%	83%	83%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	151.133330	151.1453857926686	CCD I2 on	O4	Y
[deg] Pointing Dec	41.235921	41.21011429359661	CCD I3 on	O3	Y
[deg] Pointing Roll	258.451861	258.6005429813007	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	O1	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	O2	Y
[s] Observation start time (MET)	518107449.184000	518106264.78301	CCD S5 on	N	N
Observation start date	2014-06-02T14:43:02	2014-06-02T14:24:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	518132449.184000	518133847.53453	On-chip summing requested	N	N
Observation end date	2014-06-02T21:39:42	2014-06-02T22:04:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





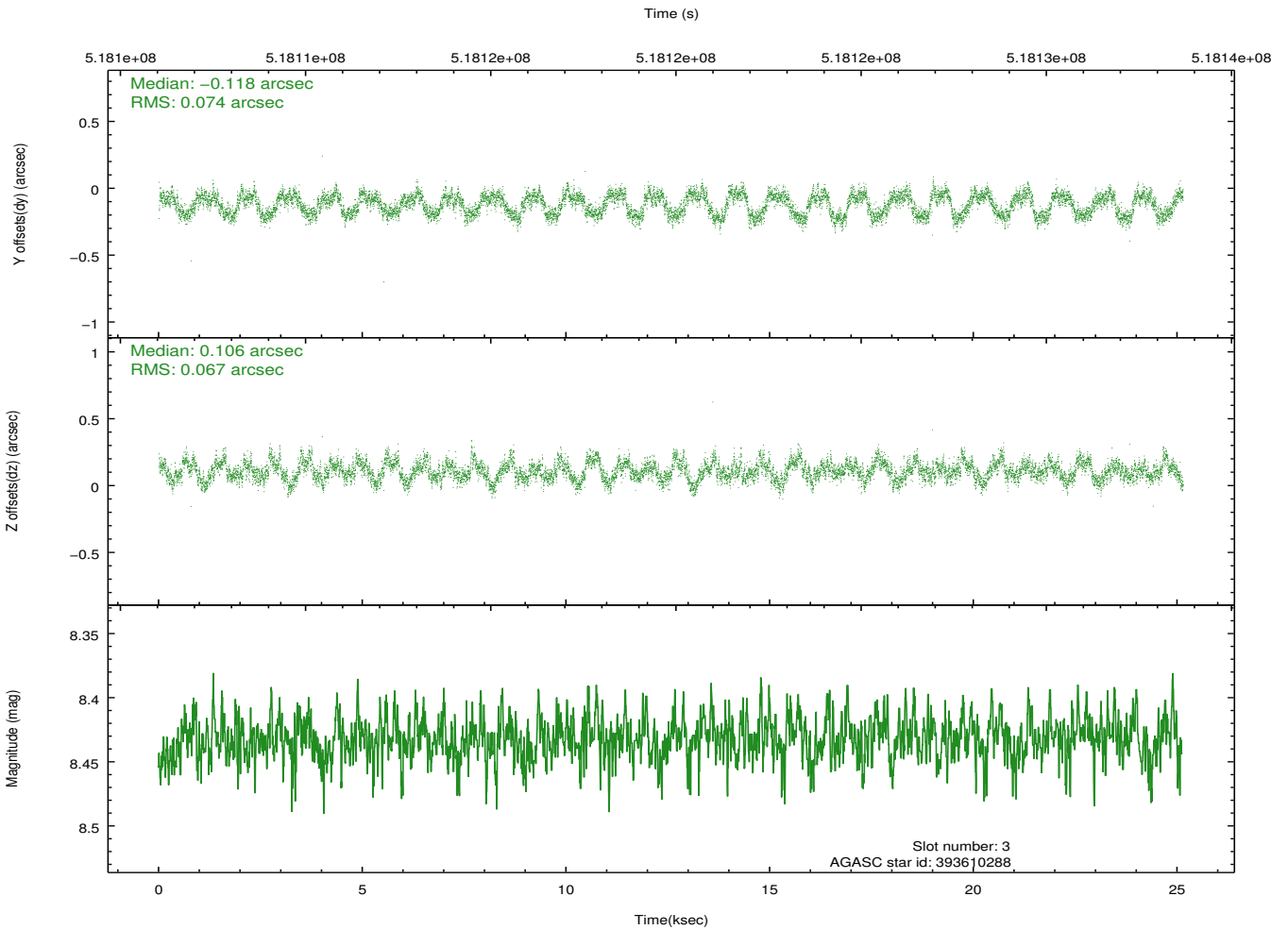
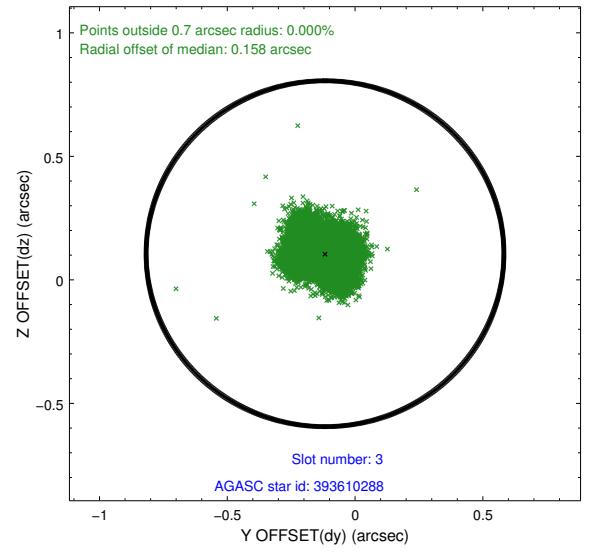
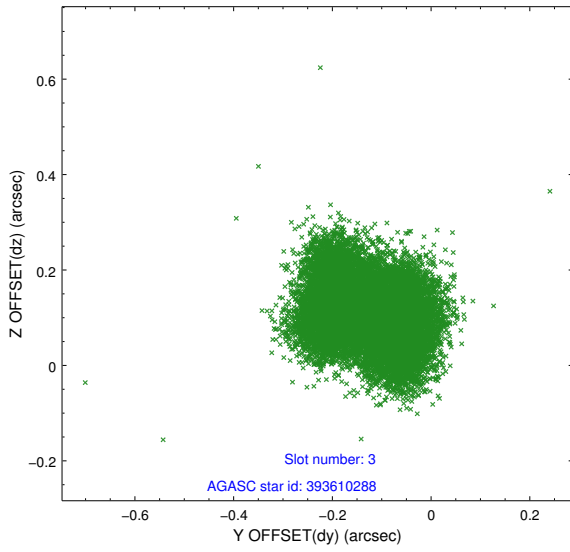
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.12	6132	0.151	0.016	0.015	0.044	0.000000	0.000000	924.81	-1735.30
1	FID		ACIS-S-2	7.04	6132	-0.183	-0.038	0.007	0.011	0.000000	0.000000	-771.36	-1739.99
2	FID		ACIS-S-6	7.25	6131	0.012	0.027	0.014	0.046	0.000000	0.000000	390.31	805.95
3	GUIDE	used	393610288	8.43	12260	-0.118	0.106	0.109	0.162	151.538899	41.090404	290.95	1181.29
4	GUIDE	used	393613624	8.50	12253	-0.064	-0.121	0.076	0.124	151.136661	40.665270	2011.15	420.58
5	GUIDE	used	393616408	9.04	12251	0.100	0.047	0.096	0.158	150.713966	41.346840	-166.20	-1190.82
6	GUIDE	used	393616816	8.42	12252	0.013	-0.005	0.084	0.137	151.562975	40.925077	860.19	1367.32
7	GUIDE	used	393619280	9.39	12255	0.076	-0.043	0.158	0.255	150.915222	40.640455	2220.30	-154.33

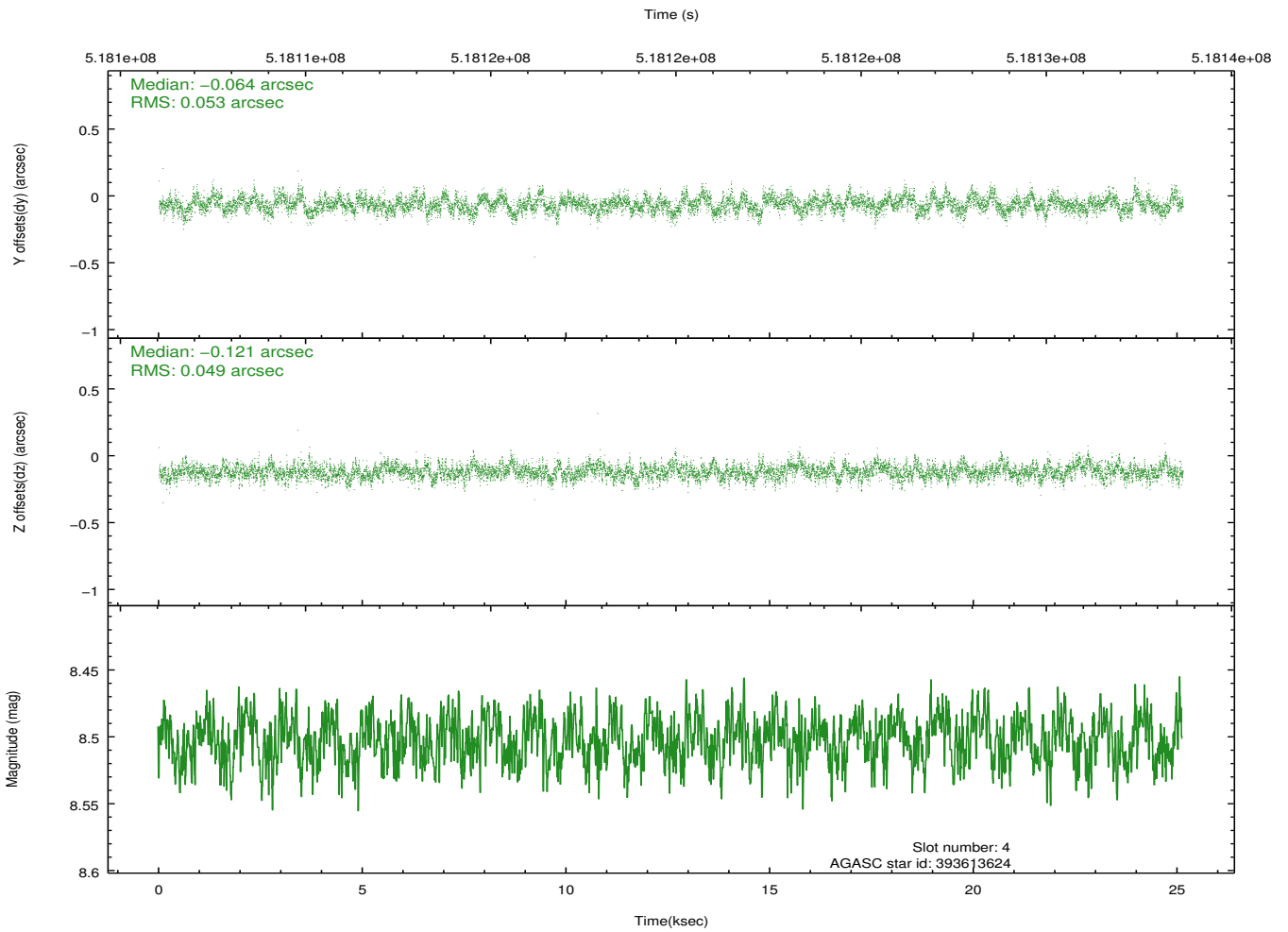
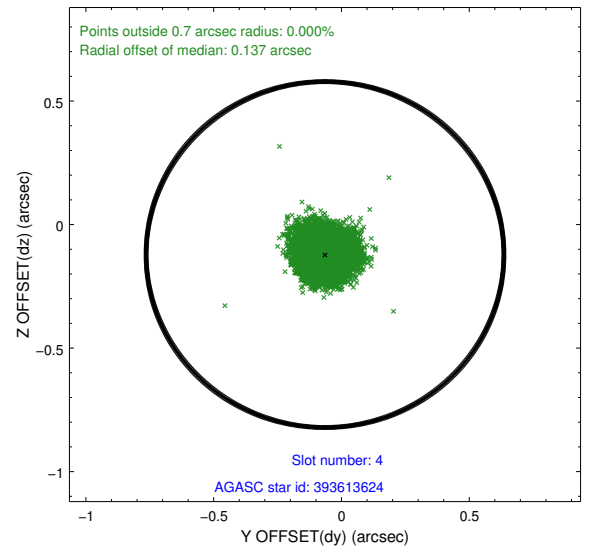
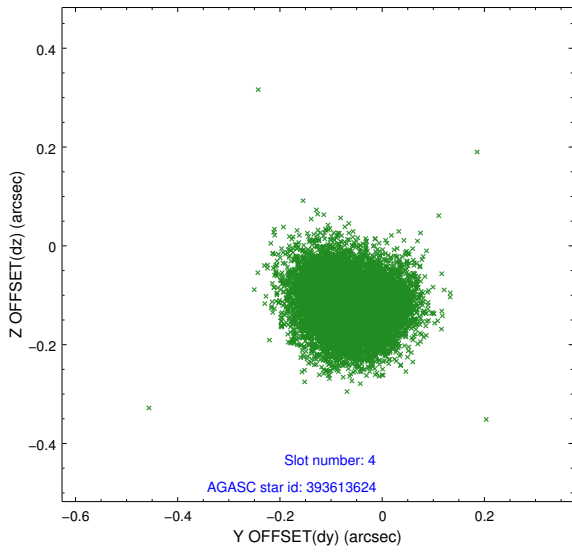
∞

2.4 Star Slots

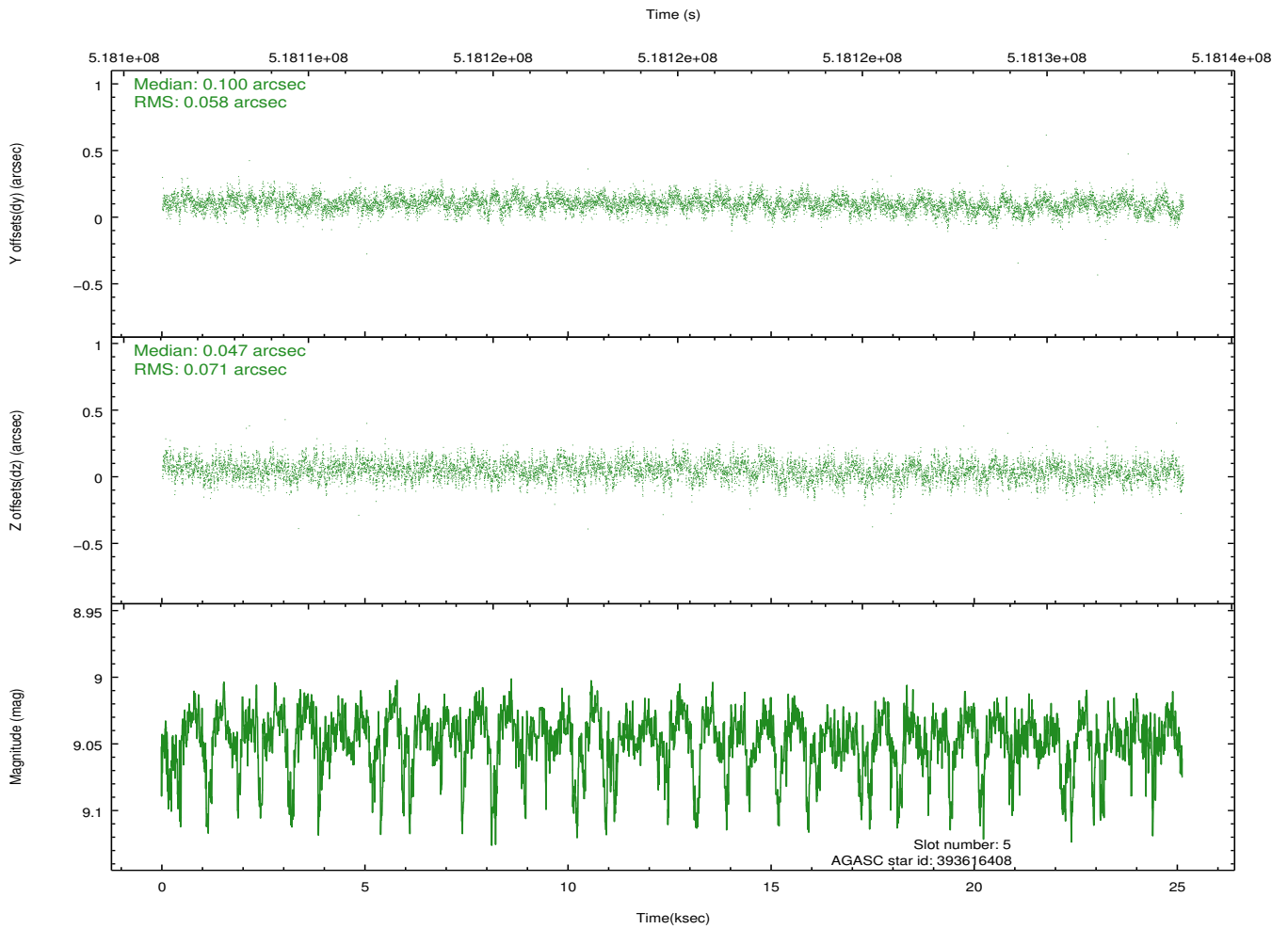
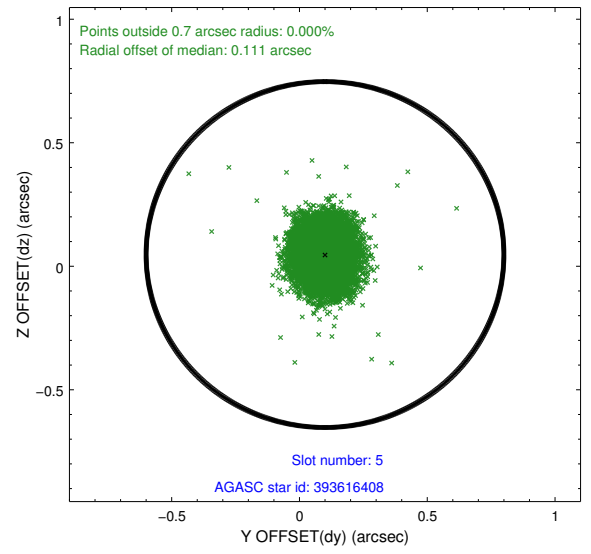
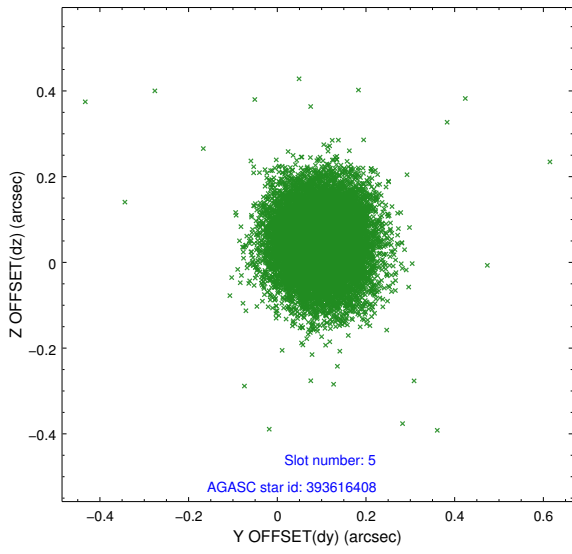
2.4.1 Slot 3



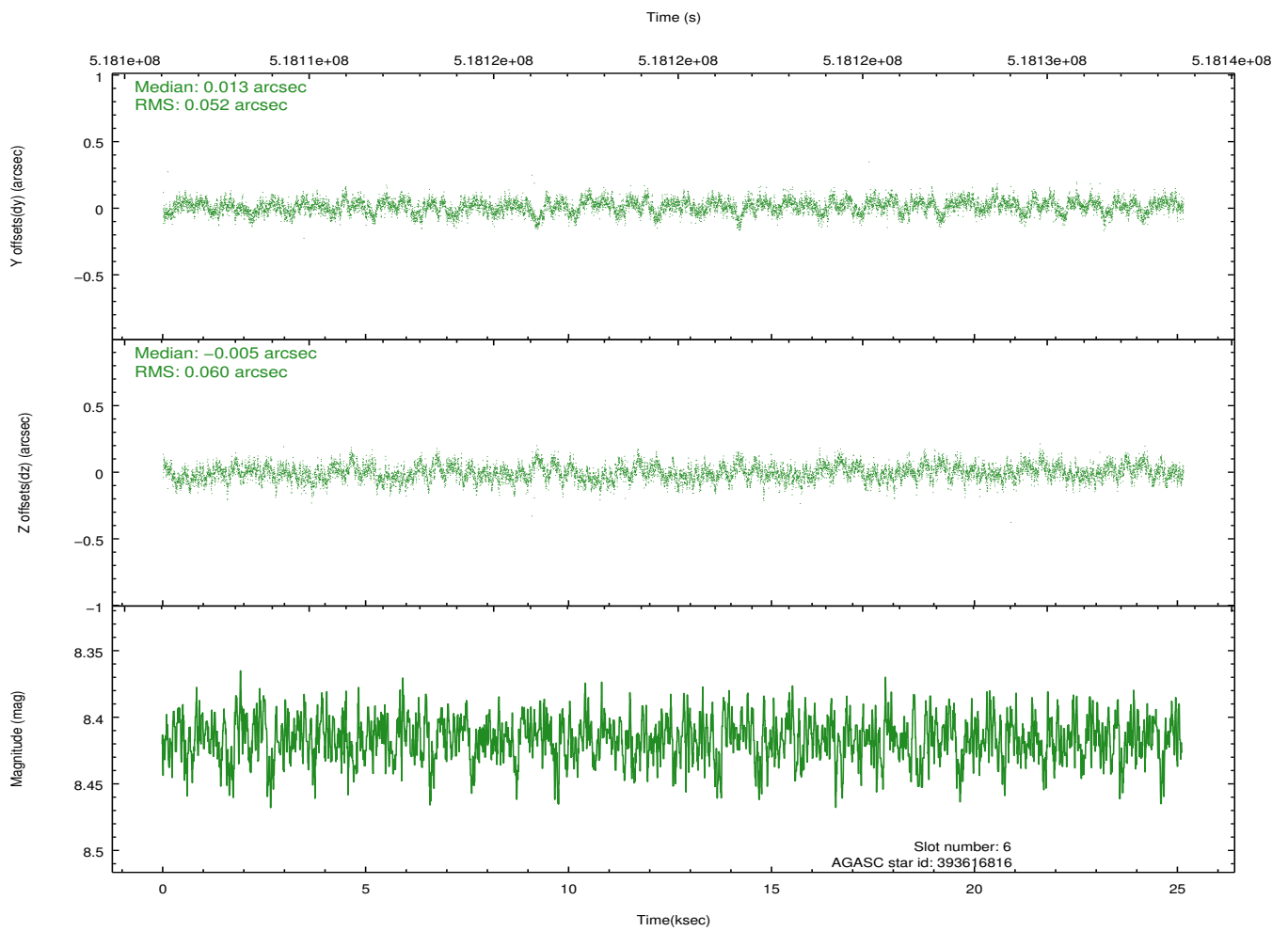
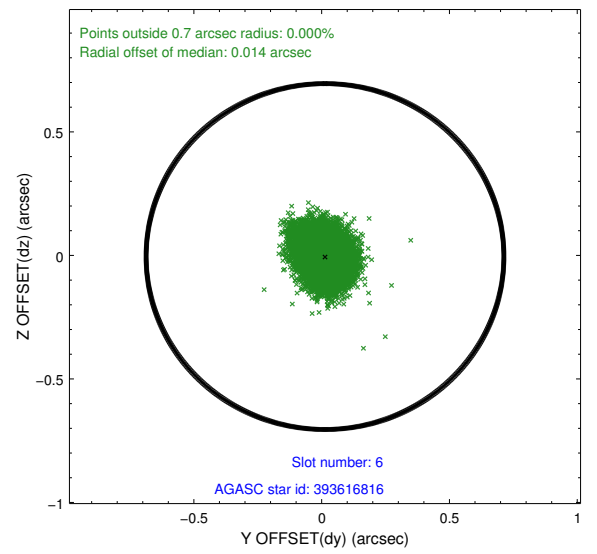
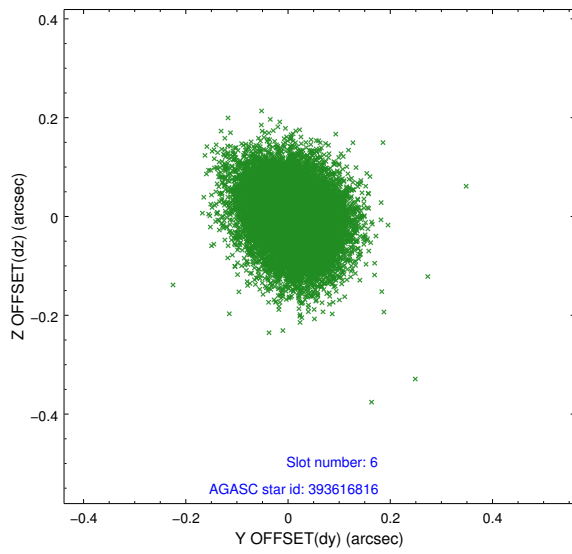
2.4.2 Slot 4



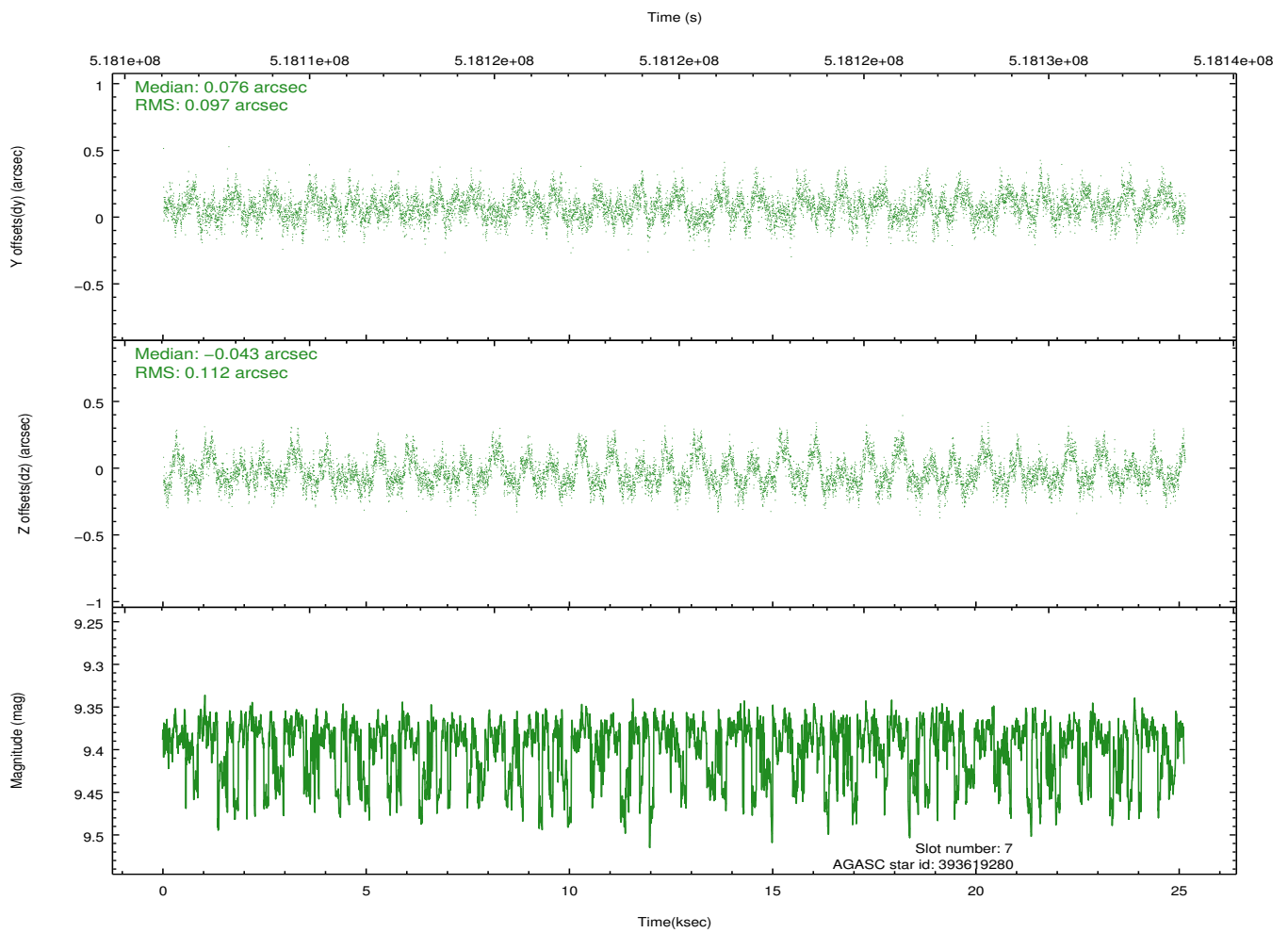
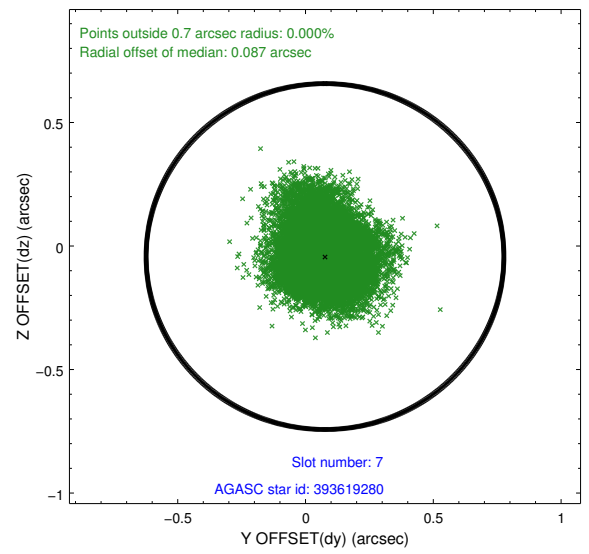
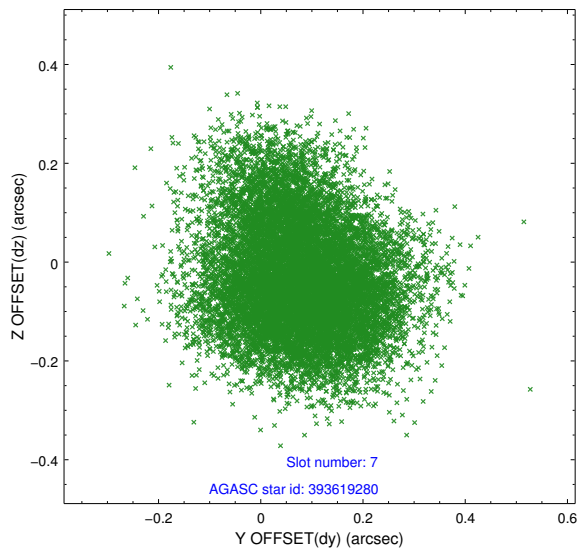
2.4.3 Slot 5



2.4.4 Slot 6

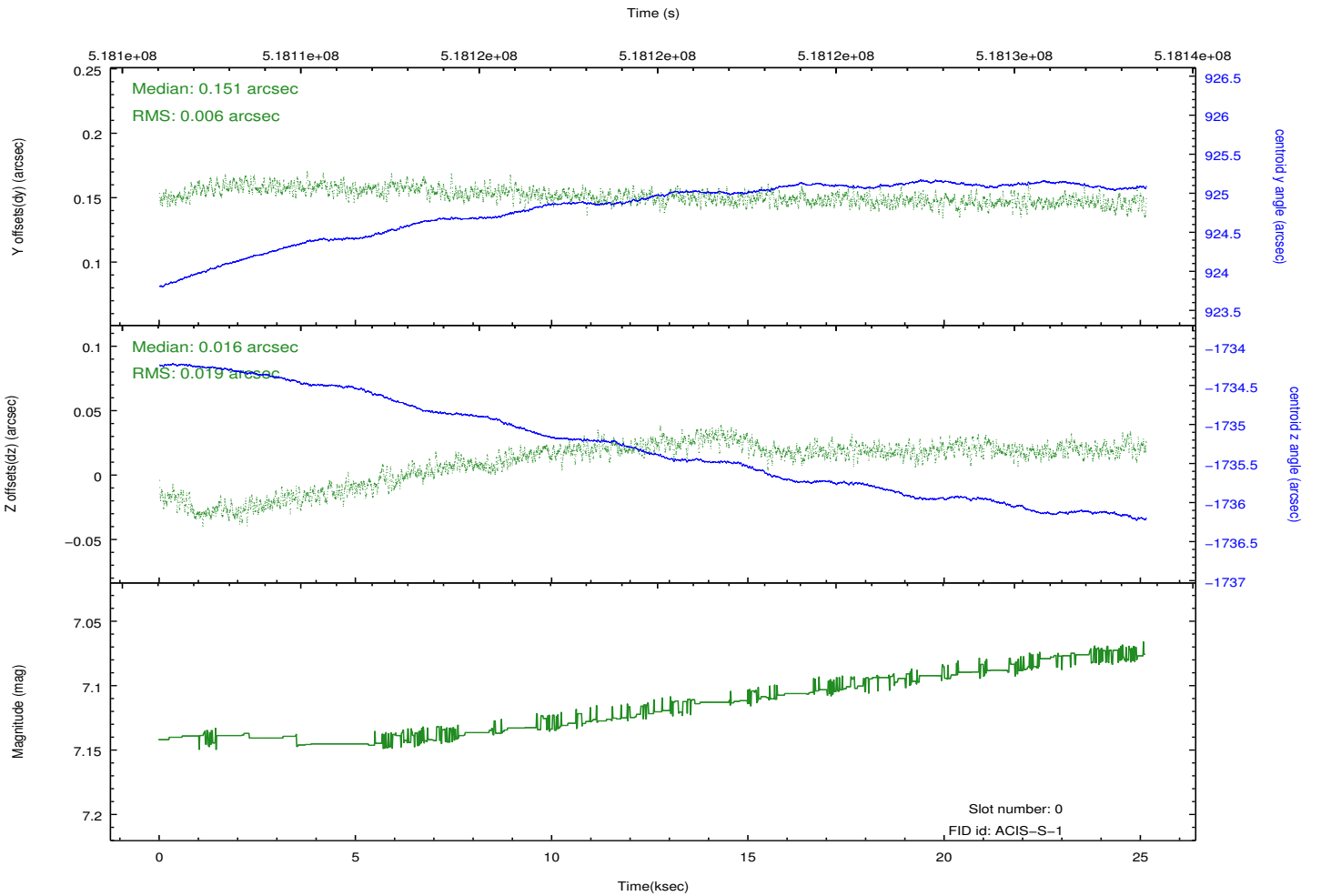
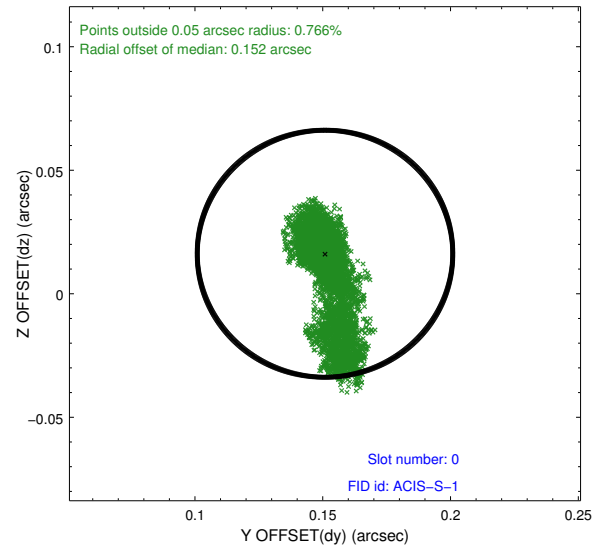
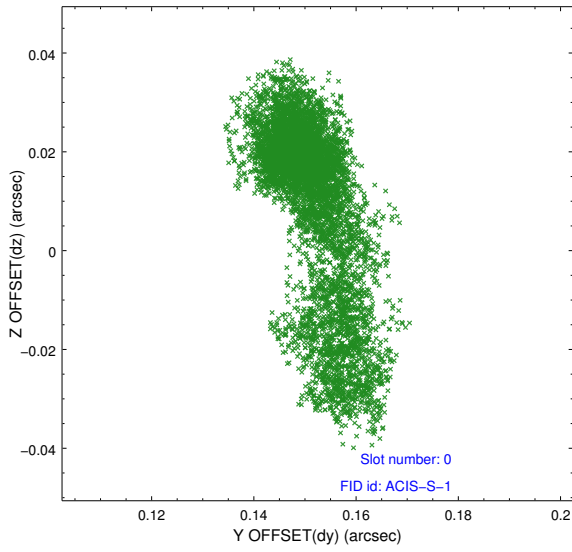


2.4.5 Slot 7

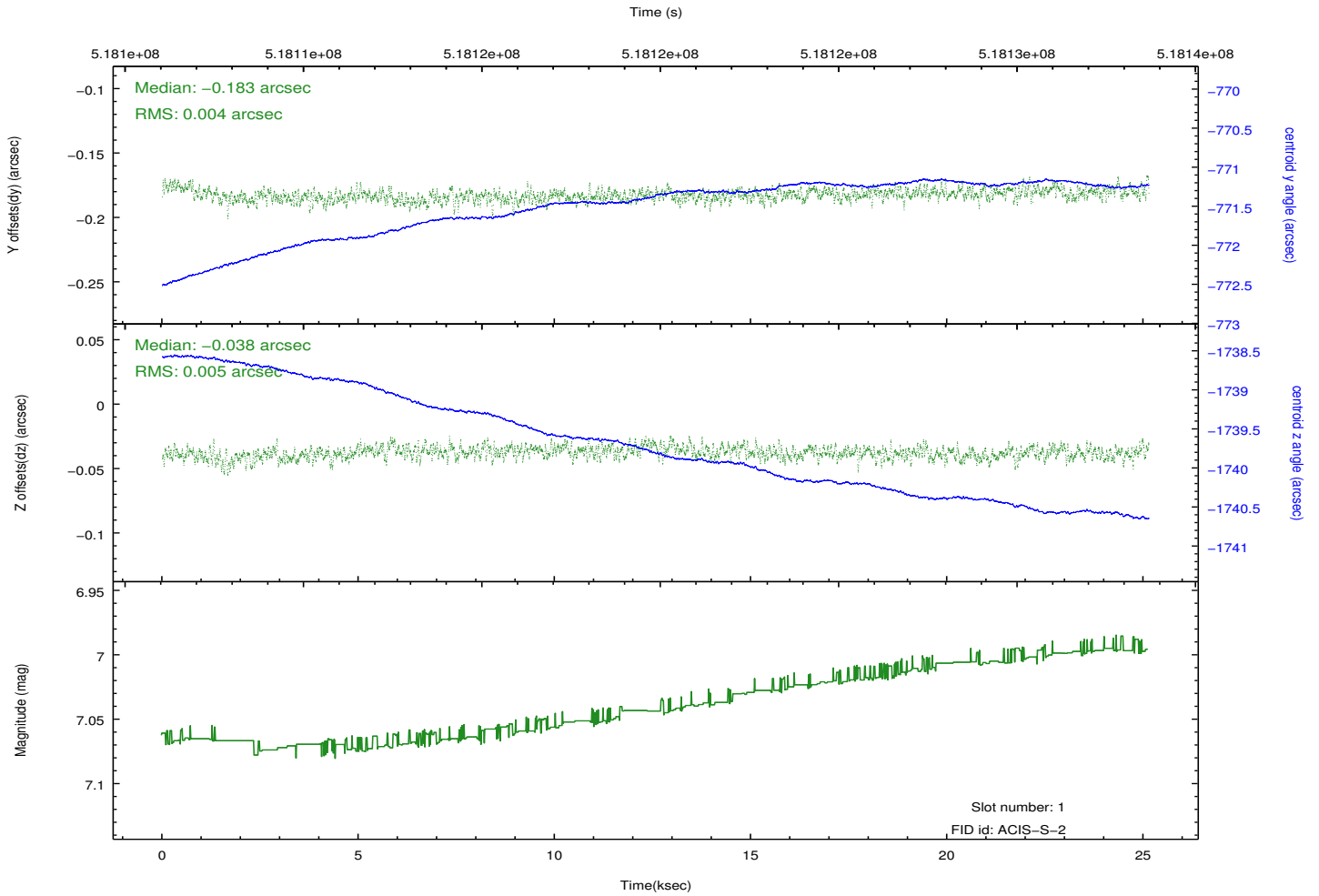
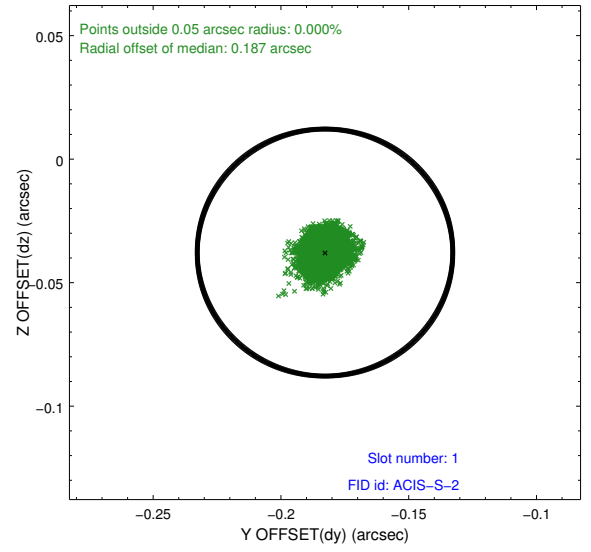
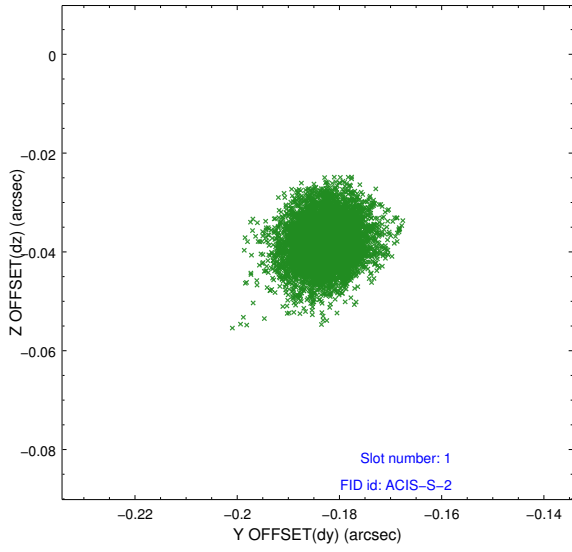


2.5 FID Slots

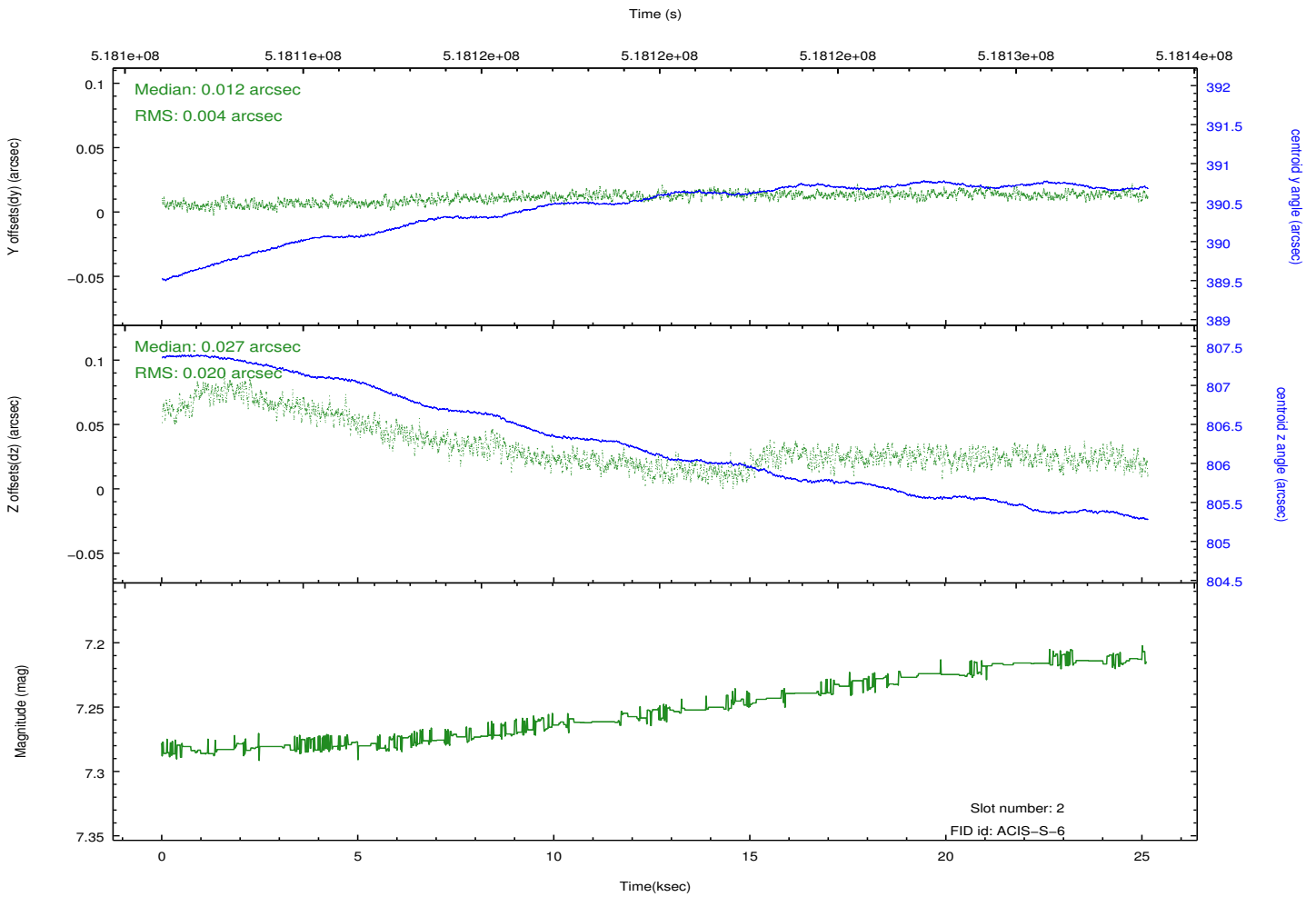
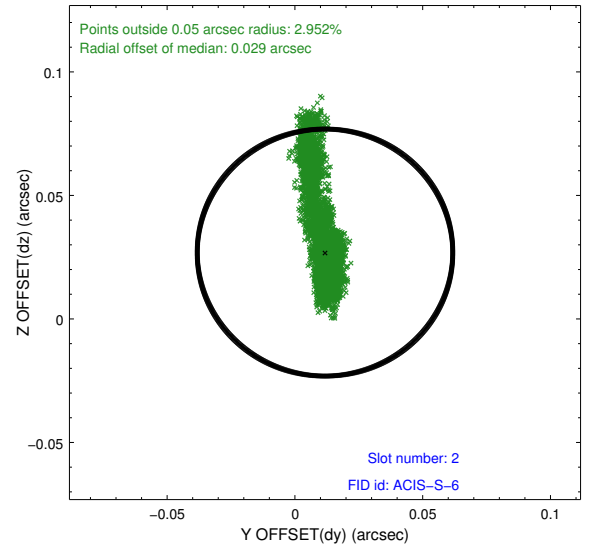
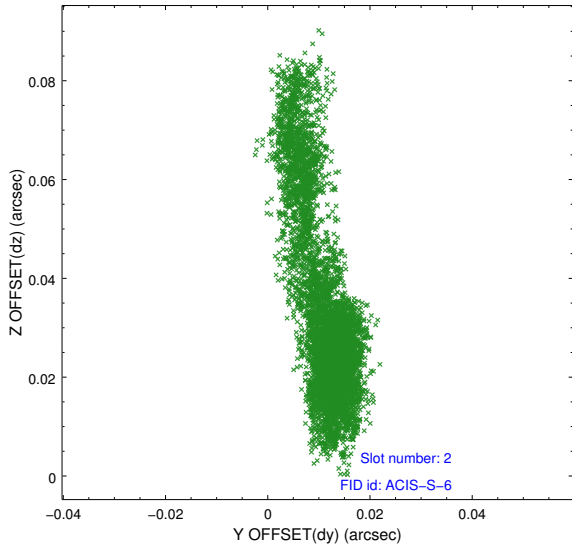
2.5.1 Slot 0



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	25.066600192785

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.