

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 16227 - L2 Version 2
Chandra X-Ray Center

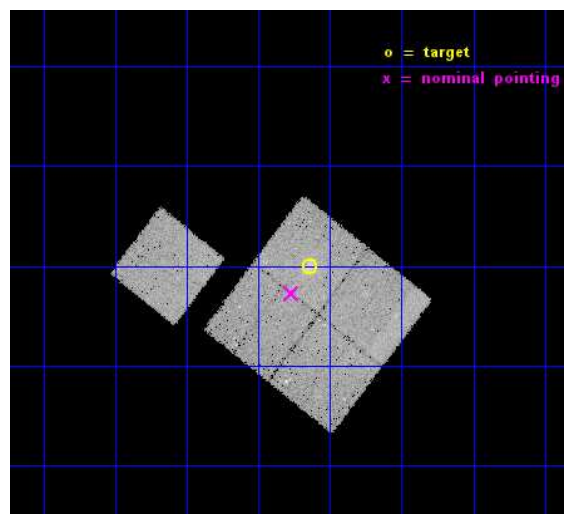
L2 Processing Date : Dec 7 2014

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1 Front

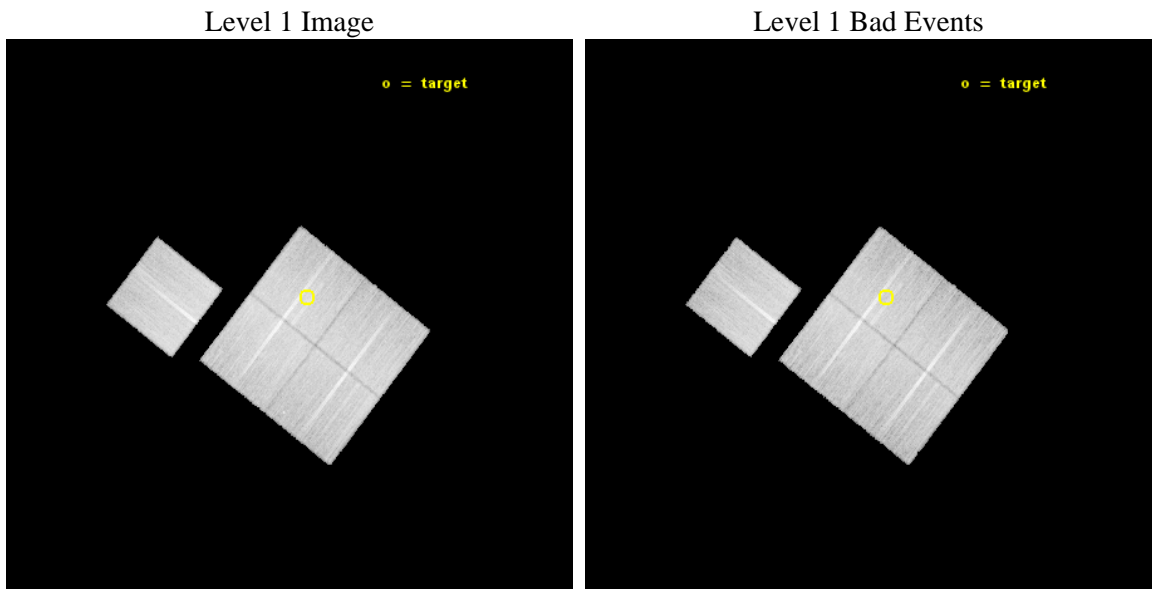
seq_num	801411	Sequence number
obs_id	16227	Observation id
title	Chandra Observations of a Complete Sample of SZE Clusters from ACT	
observer	Prof. John Hughes	Principal investigator
object	ACT-CL_J0059-0049	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	14.785417	Observer's specified target RA [deg]
dec_targ	-0.834944	Observer's specified target Dec [deg]
ra_nom	14.817272656167	Nominal RA [deg]
dec_nom	-0.87905656853977	Nominal Dec [deg]
roll_nom	307.87071836174	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40079.523596704	Sum of GTIs [s]
livetime	39555.855114797	Livetime [s]
ontime0	40079.400476694	Sum of GTIs [s]
ontime1	40082.582616985	Sum of GTIs [s]
ontime2	40082.623627067	Sum of GTIs [s]
ontime3	40079.523596704	Sum of GTIs [s]
ontime6	40082.500456512	Sum of GTIs [s]
l2events	111083	Number of level 2 events



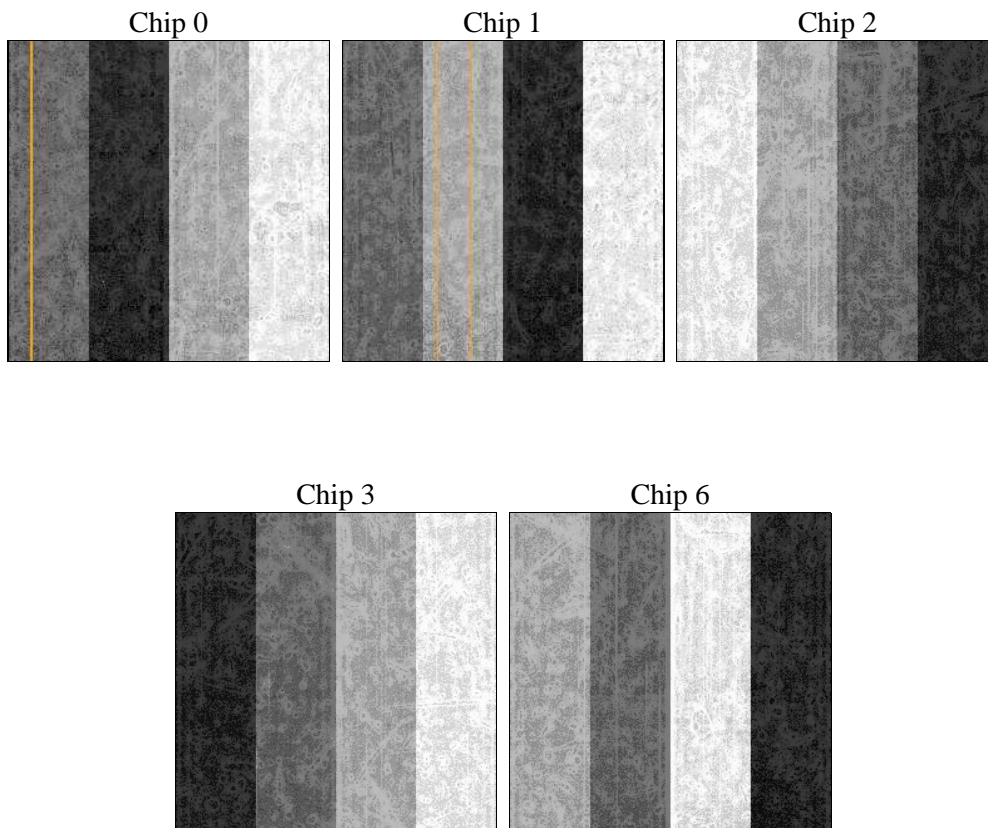
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	40079.523596704	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	40079.400476694	Sum of GTIs [s]
date	2014-12-07T19:59:07	Date and time of file creation	ontime1	40082.582616985	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	40082.623627067	Sum of GTIs [s]
			ontime3	40079.523596704	Sum of GTIs [s]
			ontime6	40082.500456512	Sum of GTIs [s]
			l1events	1020592	Number of level 1 events

2.1.4 Events

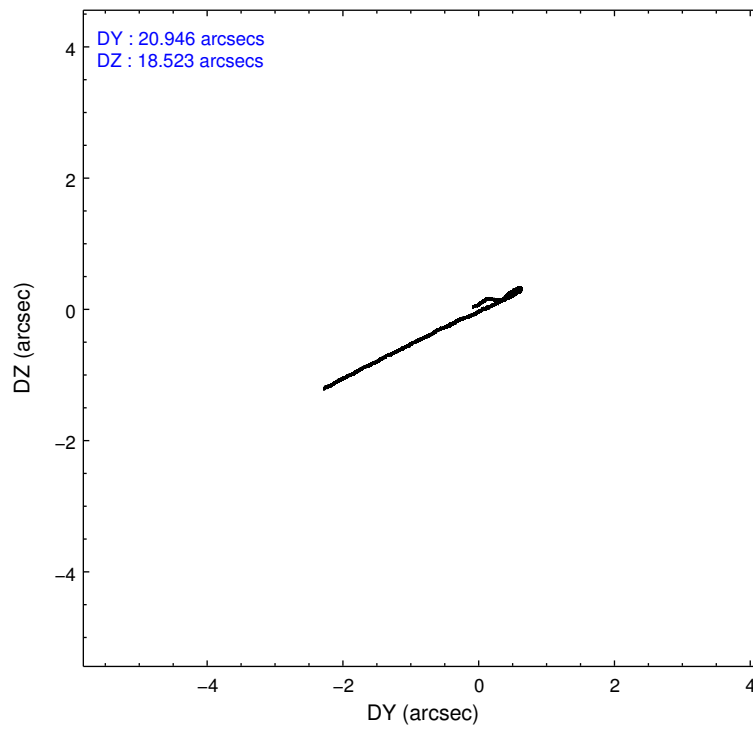
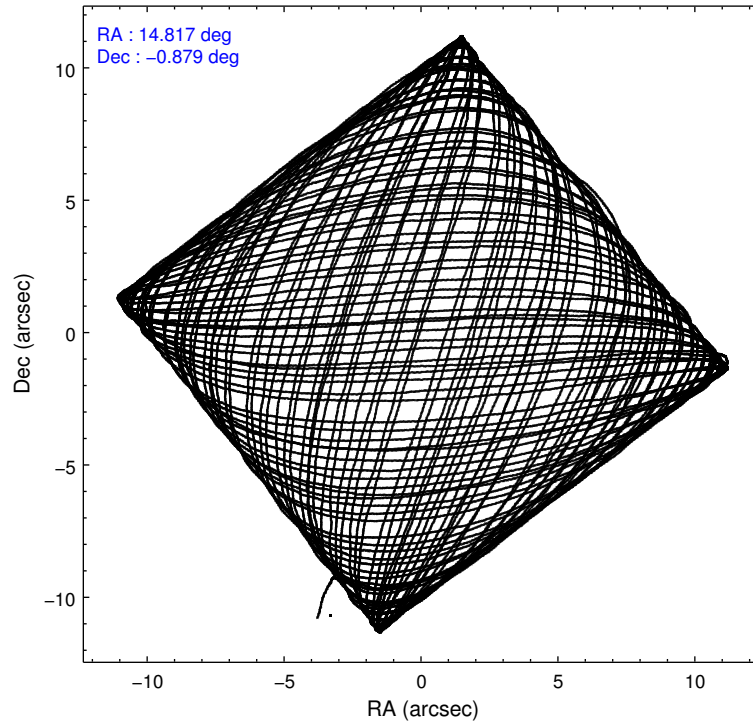
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	185466	193672	217300	206610	217544
rejected events	158480	165347	190159	180617	189962
rejected %	85%	85%	87%	87%	87%

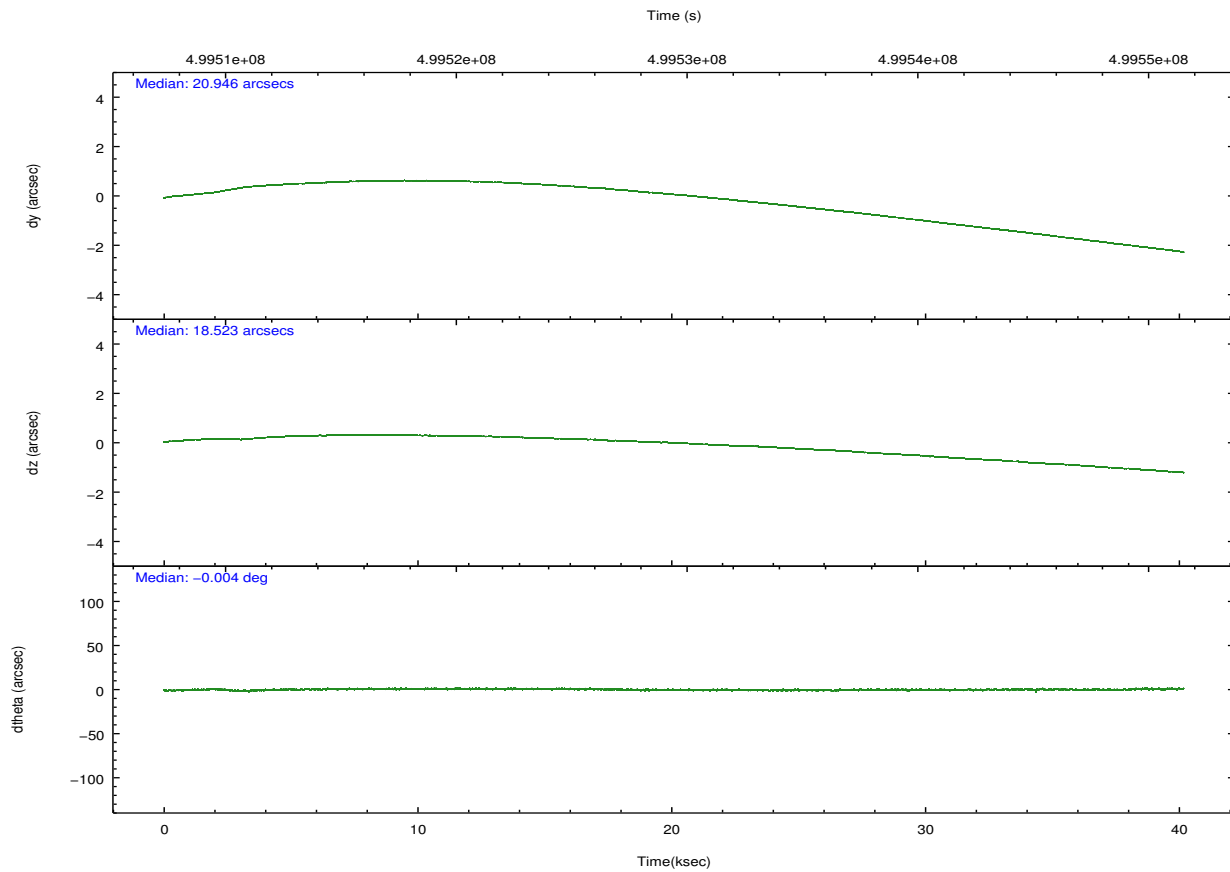
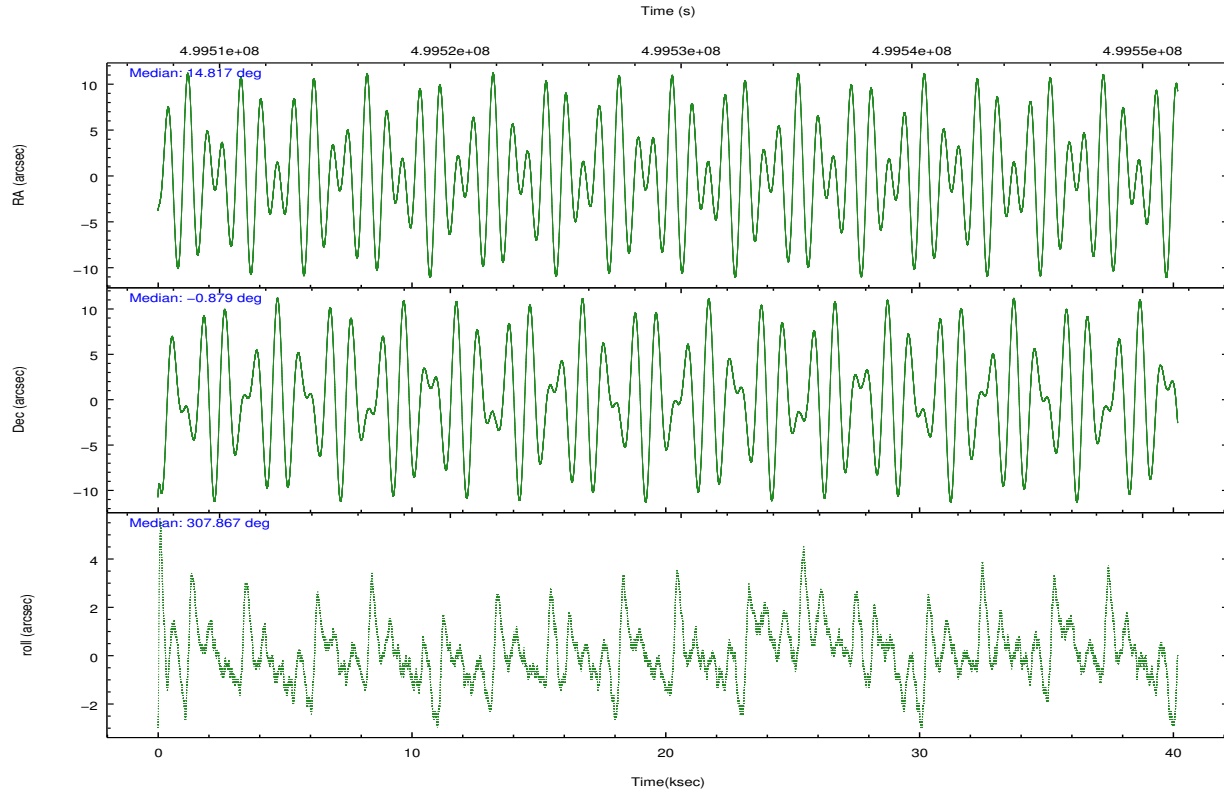
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	10833	10554	10871	10731	10937
	5%	5%	5%	5%	5%
grade 1 events	118	120	133	139	132
	0%	0%	0%	0%	0%
grade 2 events	6333	6640	6325	5439	6103
	3%	3%	2%	2%	2%
grade 3 events	2460	2647	2421	2456	2556
	1%	1%	1%	1%	1%
grade 4 events	2356	2711	2818	2474	2399
	1%	1%	1%	1%	1%
grade 5 events	9136	9731	8612	10709	10301
	4%	5%	3%	5%	4%
grade 6 events	5004	5774	4711	4893	5587
	2%	2%	2%	2%	2%
grade 7 events	149226	155495	181409	169769	179529
	80%	80%	83%	82%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	14.791757	14.81727265616721	CCD I2 on	Y	Y
[deg] Pointing Dec	-0.868795	-0.8790565685397747	CCD I3 on	Y	Y
[deg] Pointing Roll	307.661647	307.8707183617424	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	-225.792463	-225.7829997647864	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.8	-7.809453238143249	CCD S4 on	N	N
[s] Observation start time (MET)	499509513.184000	499508491.04717	CCD S5 on	N	N
Observation start date	2013-10-30T08:37:26	2013-10-30T08:21:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	499549513.184000	499551004.9745	On-chip summing requested	N	N
Observation end date	2013-10-30T19:44:06	2013-10-30T20:10:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





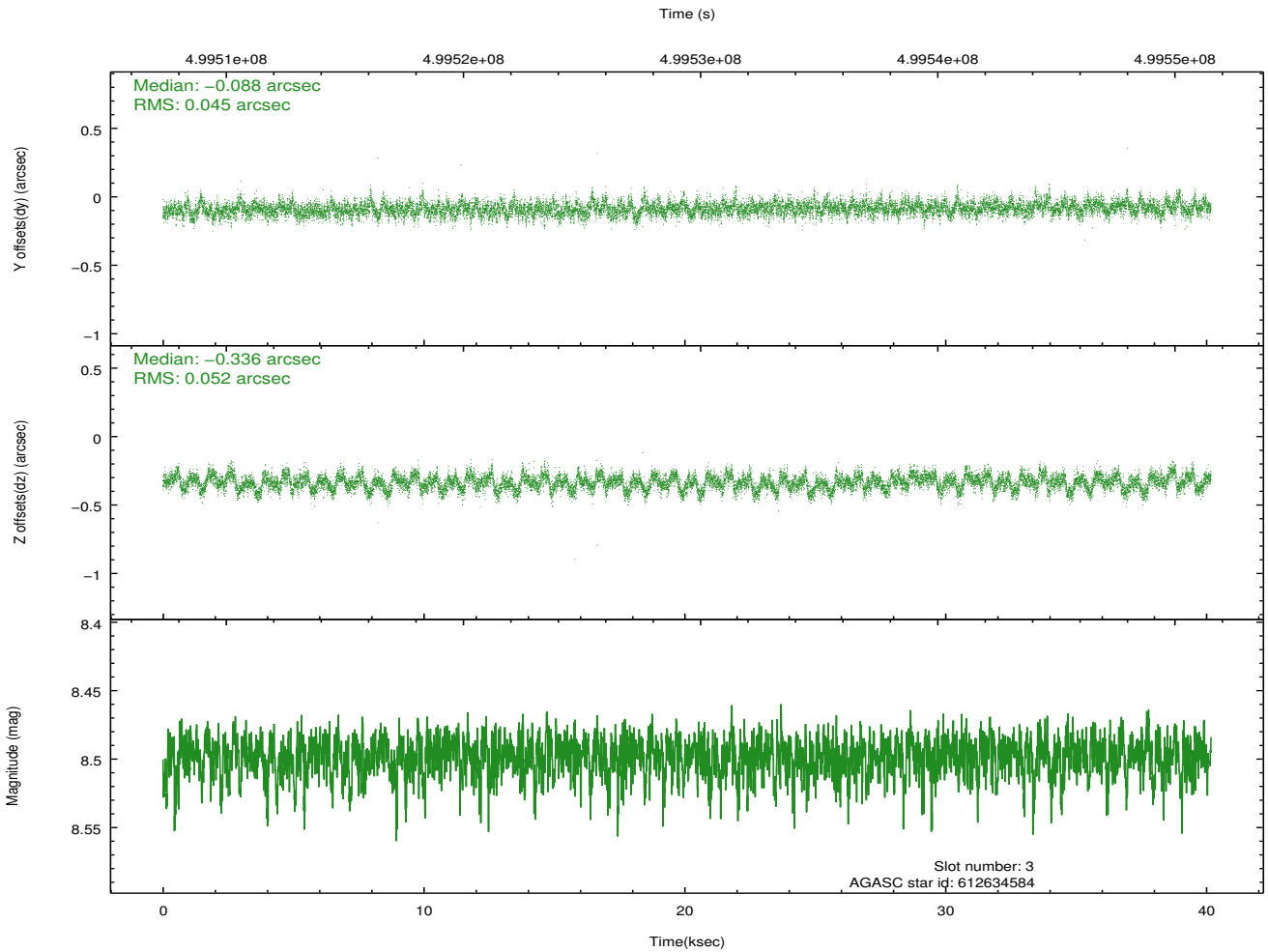
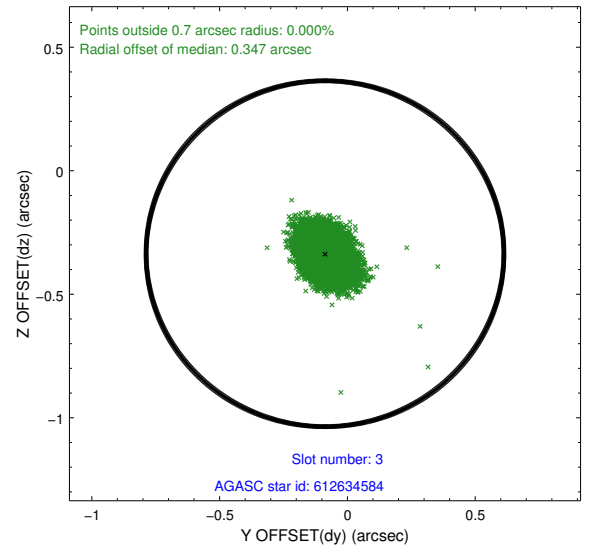
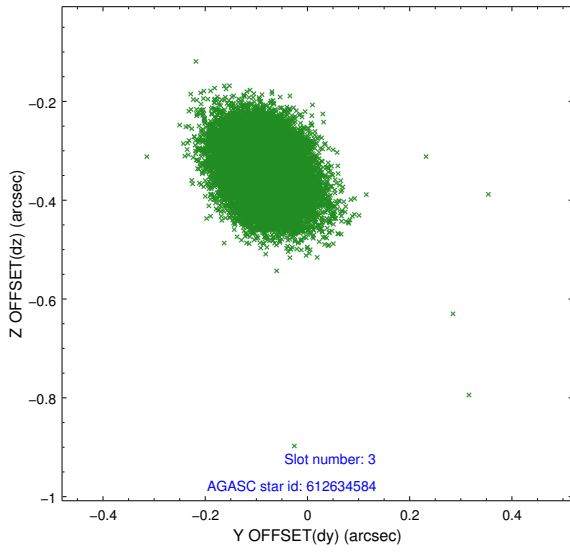
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	9800	0.138	-0.113	0.018	0.032	0.000000	0.000000	918.72	-1002.42
1	FID		ACIS-I-5	7.10	9800	-0.336	0.096	0.009	0.014	0.000000	0.000000	-1829.94	895.13
2	FID		ACIS-I-6	7.12	9800	0.106	0.088	0.016	0.029	0.000000	0.000000	384.10	1539.75
3	GUIDE	used	612634584	8.50	19599	-0.088	-0.336	0.073	0.120	14.779562	-0.145020	-2089.38	1557.16
4	GUIDE	used	612638048	8.80	19596	0.103	0.095	0.083	0.131	13.944560	-0.794877	-2073.05	-2251.40
5	GUIDE	used	613556608	8.47	19595	-0.286	-0.241	0.098	0.150	15.206904	-1.021924	1349.62	846.19
6	GUIDE	used	612634776	9.30	19575	0.250	0.450	0.120	0.190	14.252004	-0.472149	-2316.81	-665.16
7	GUIDE	used	613559664	9.24	19582	0.018	0.031	0.106	0.174	15.022890	-1.524679	2377.74	-783.63

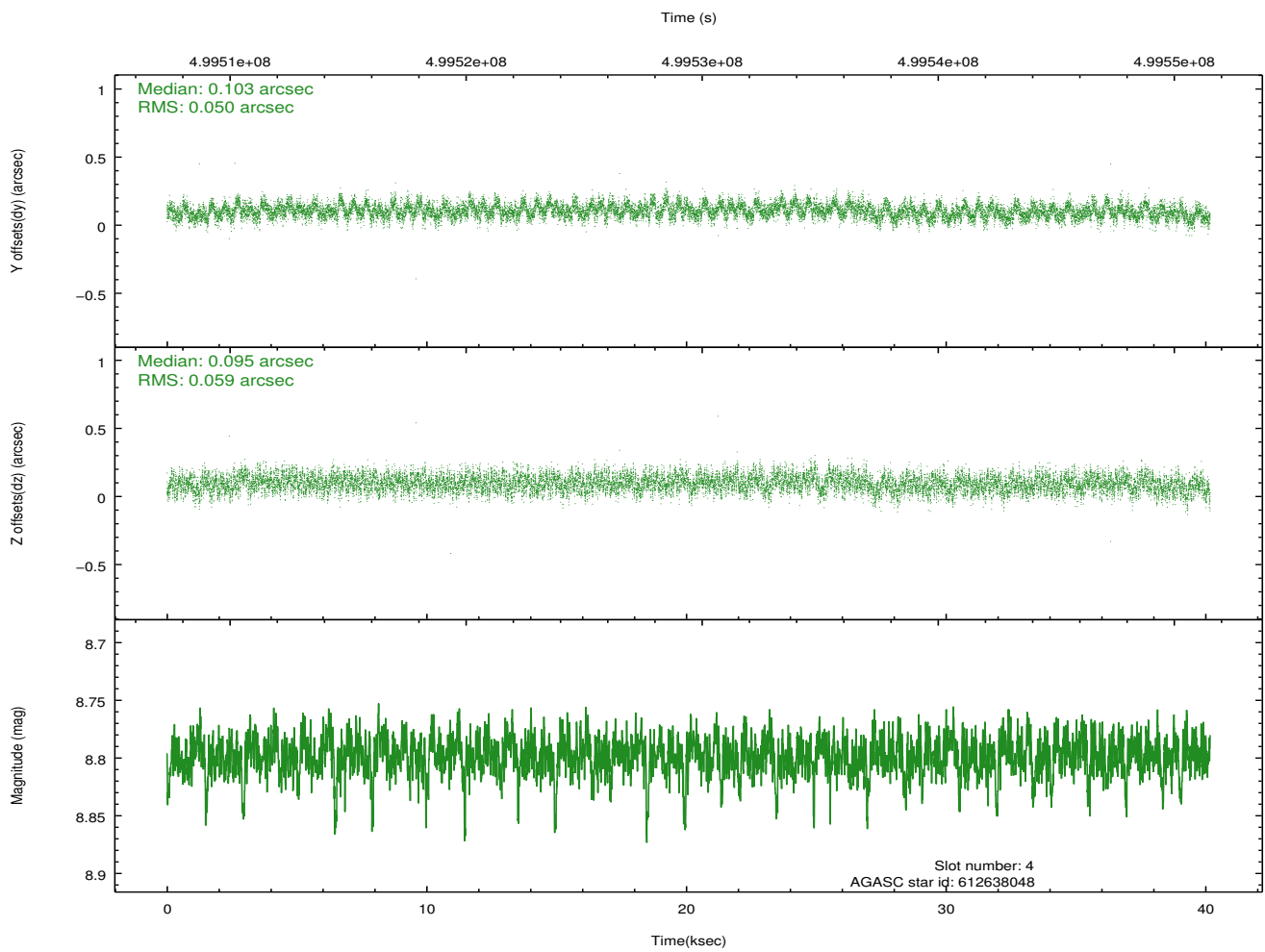
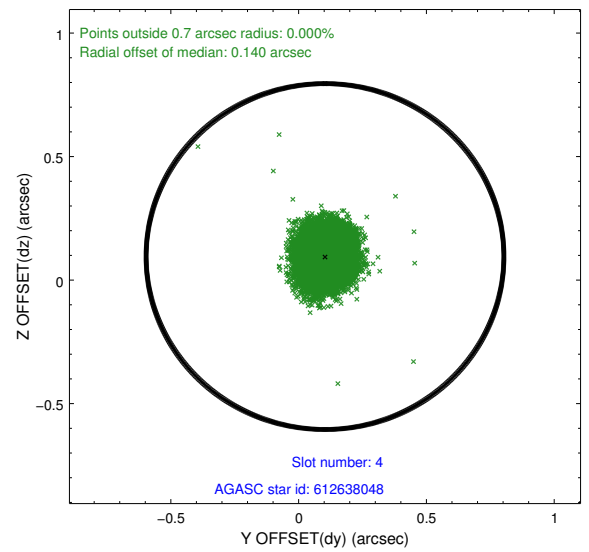
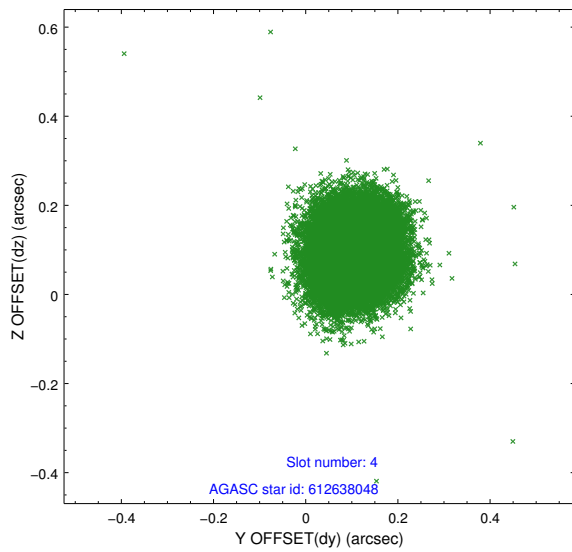
∞

2.4 Star Slots

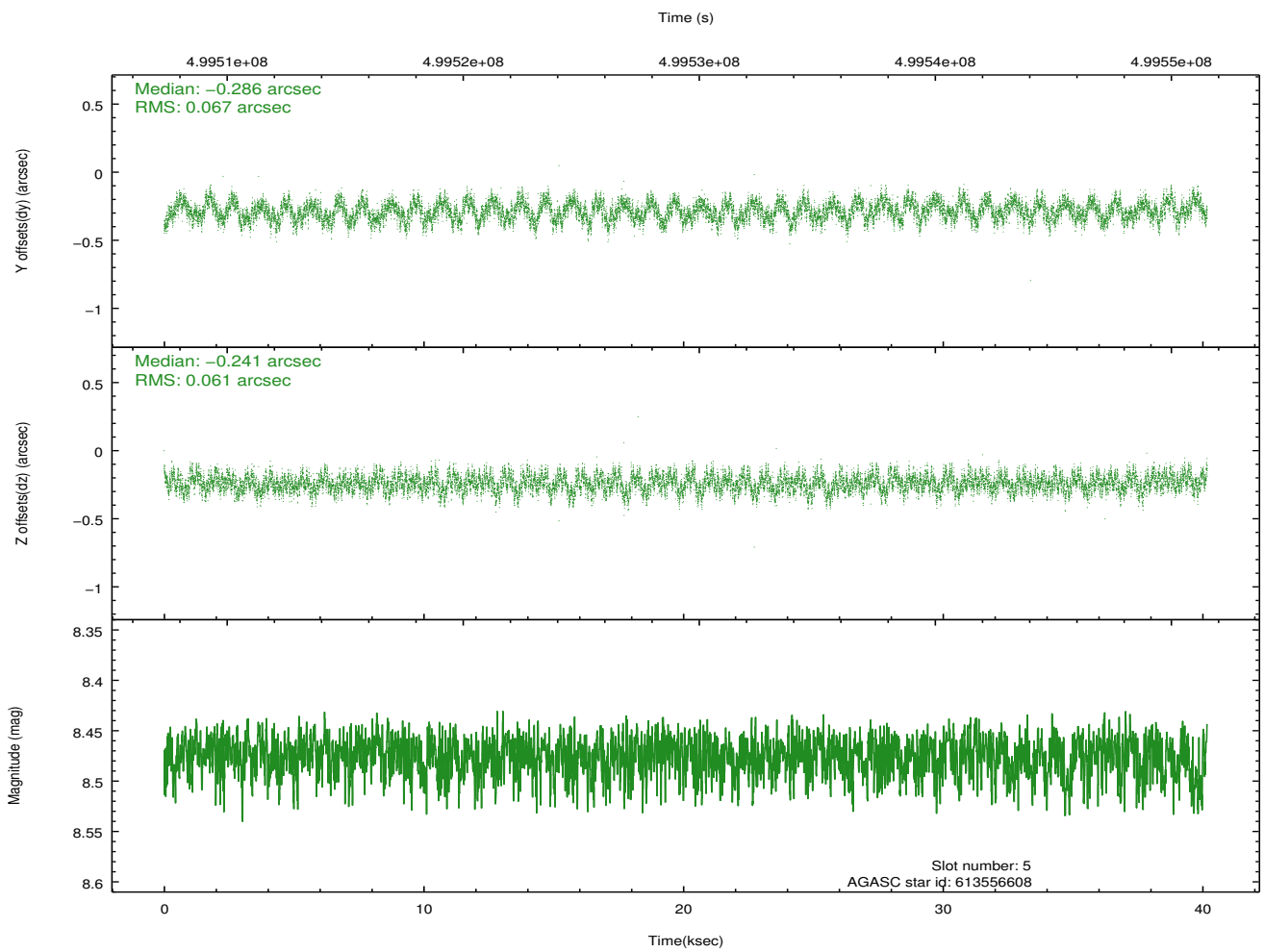
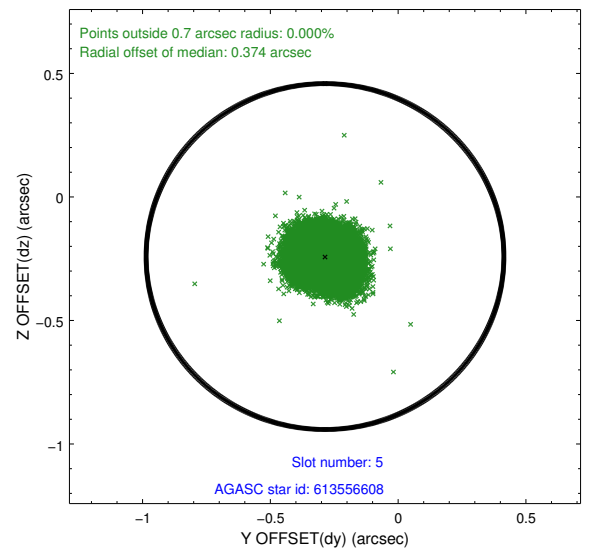
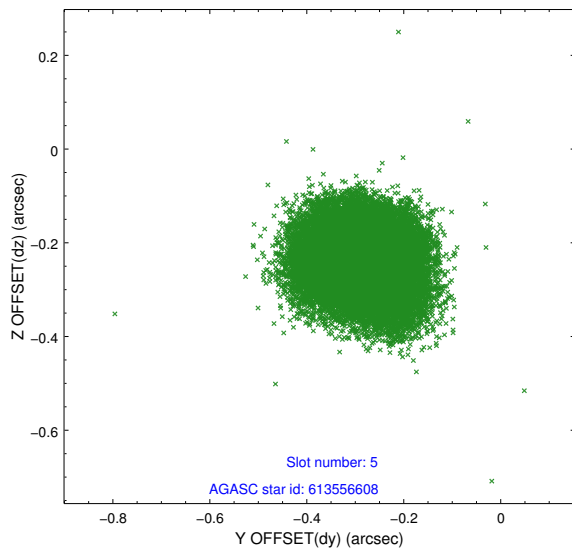
2.4.1 Slot 3



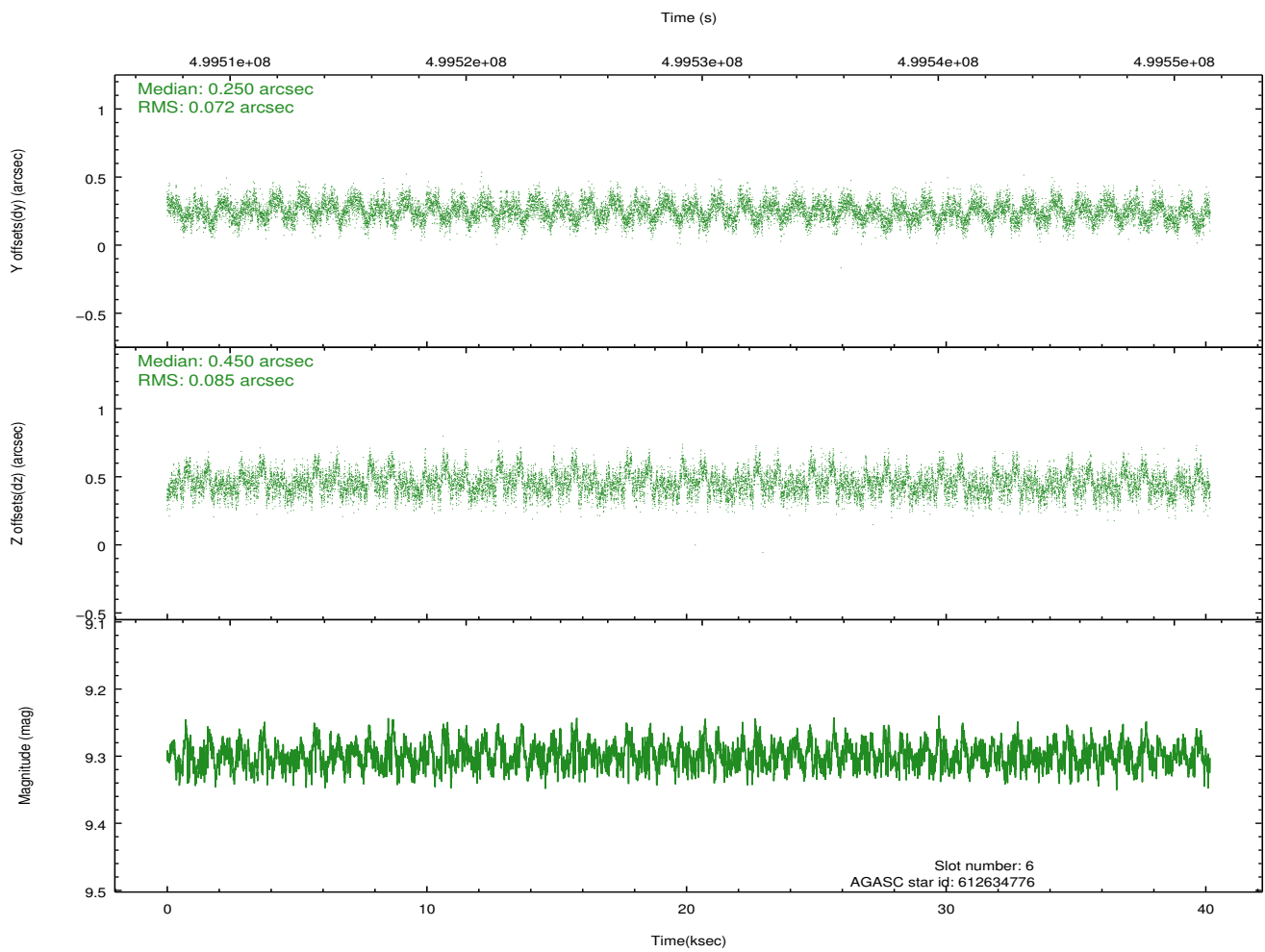
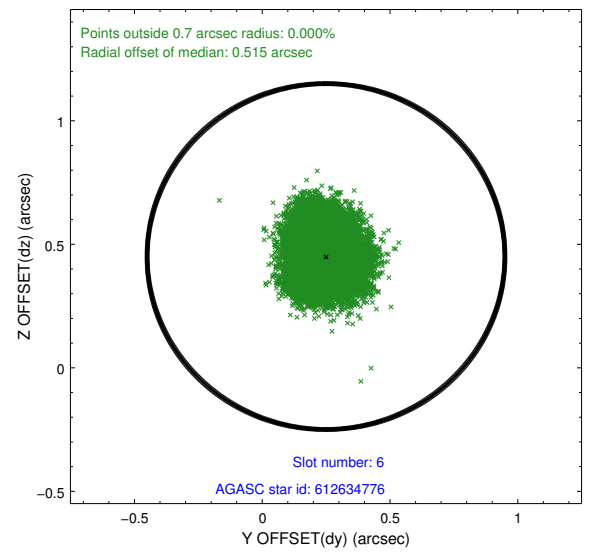
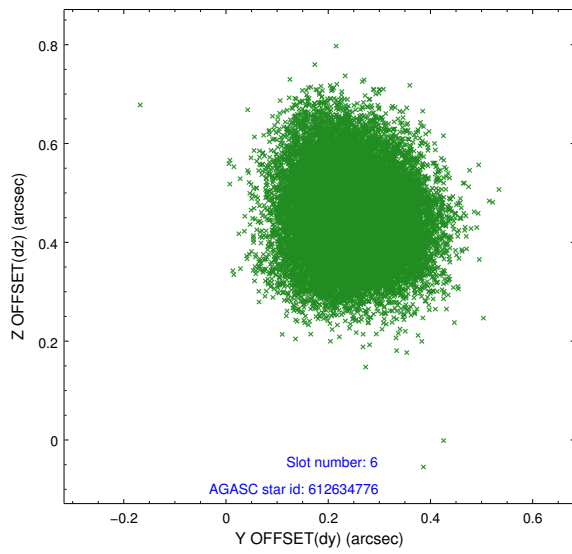
2.4.2 Slot 4



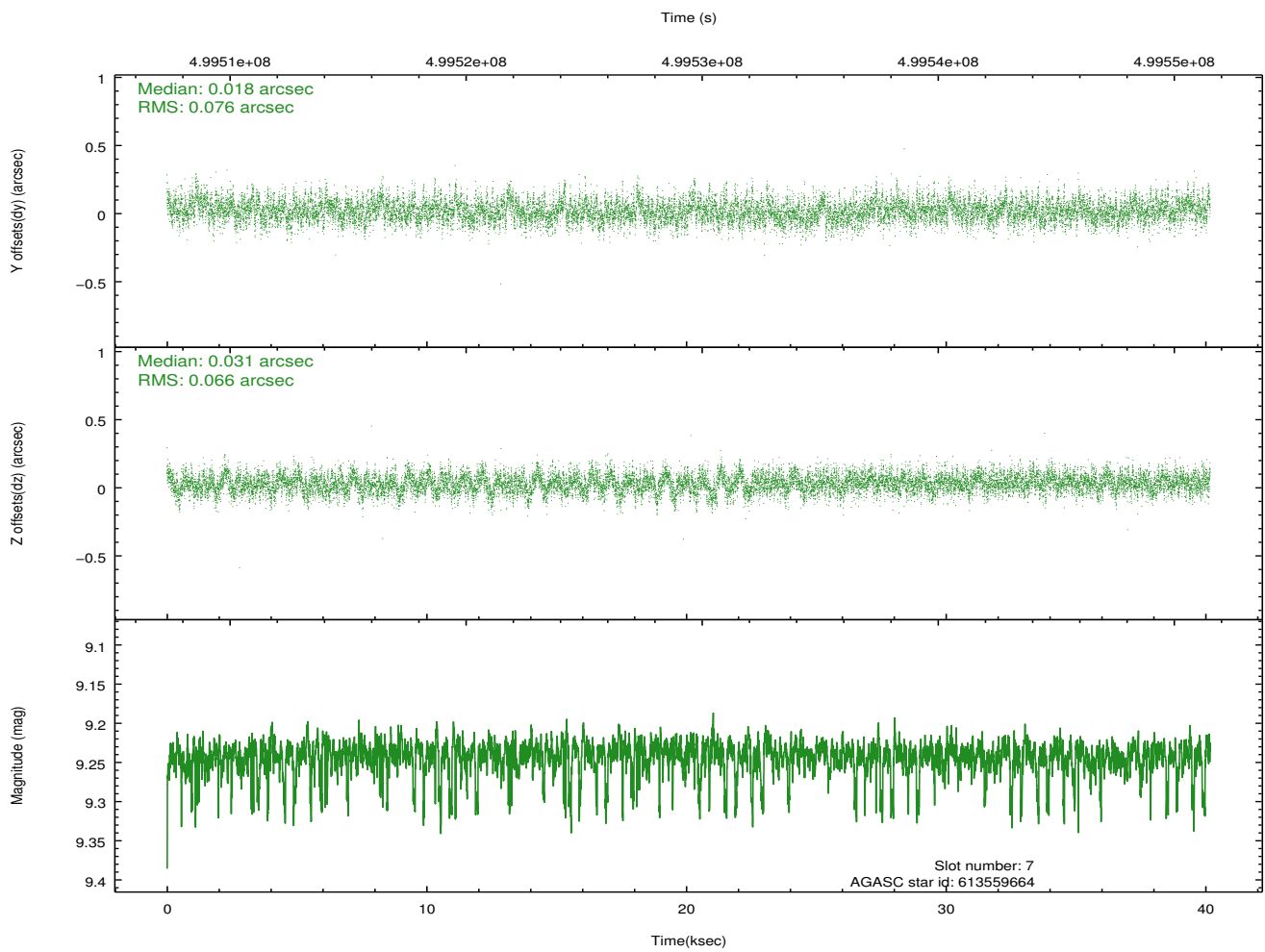
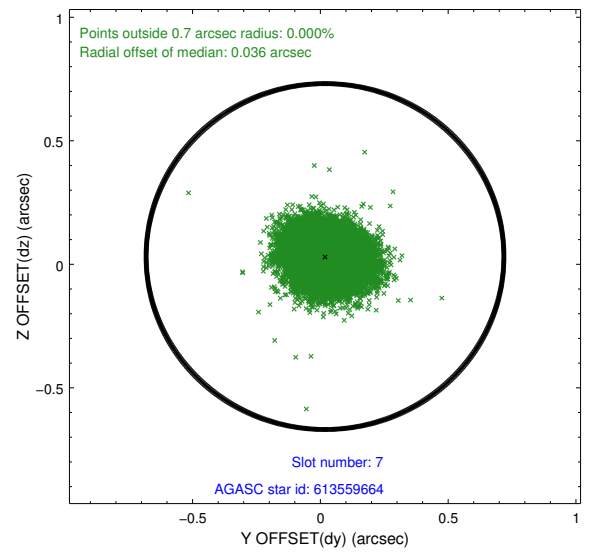
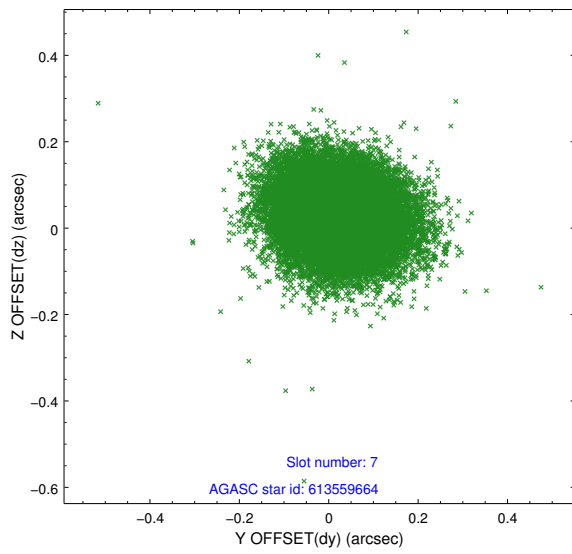
2.4.3 Slot 5



2.4.4 Slot 6

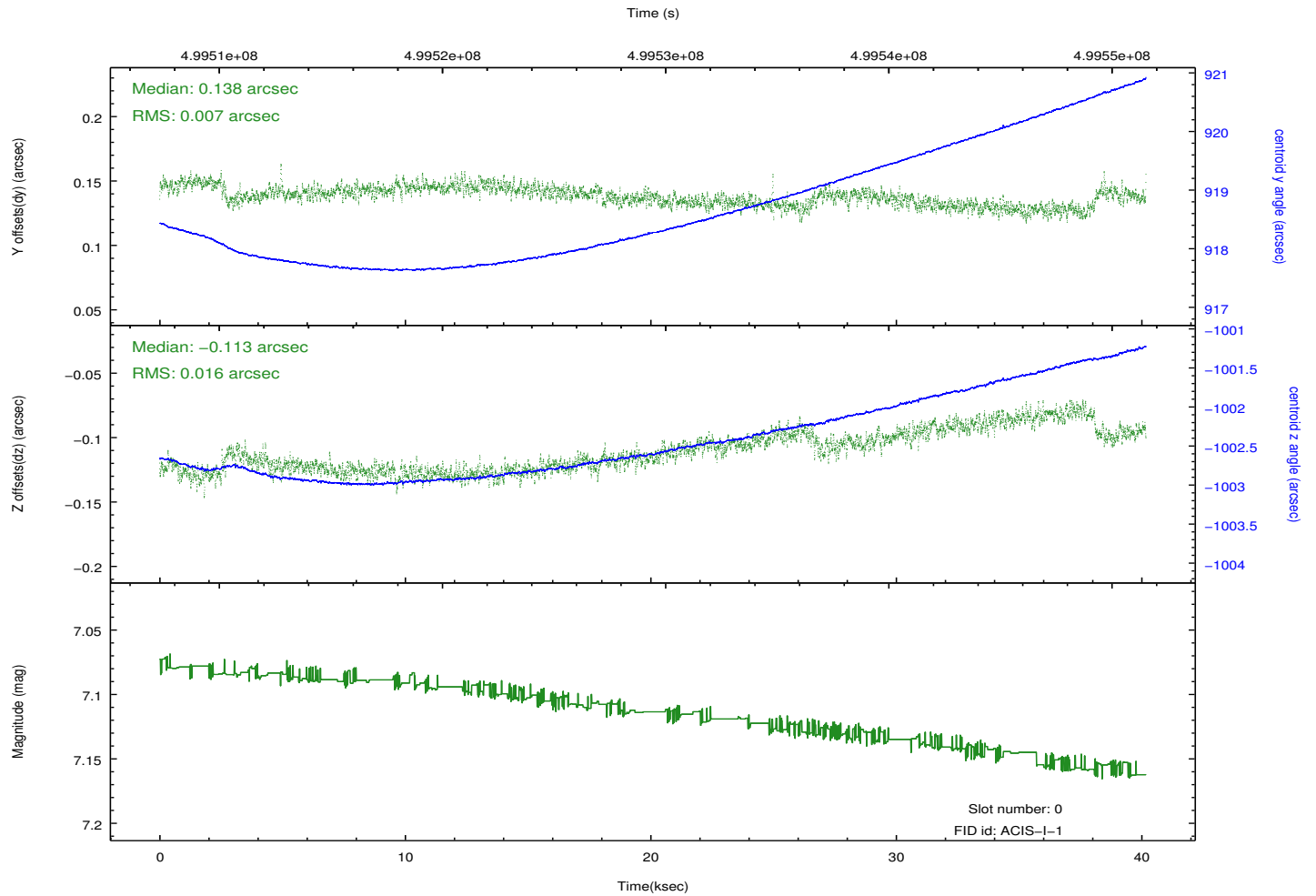
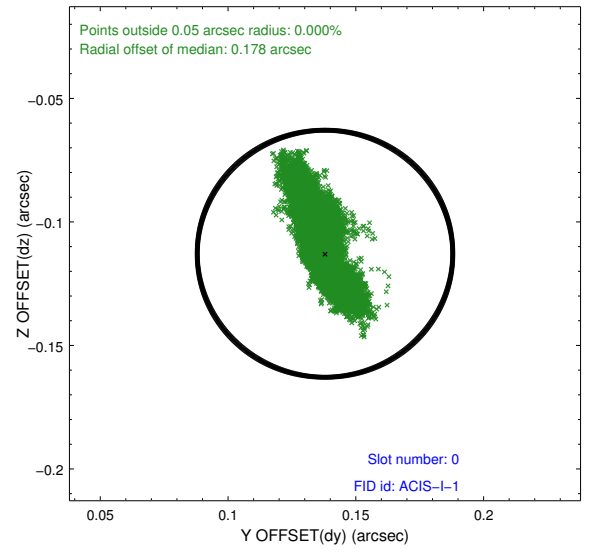
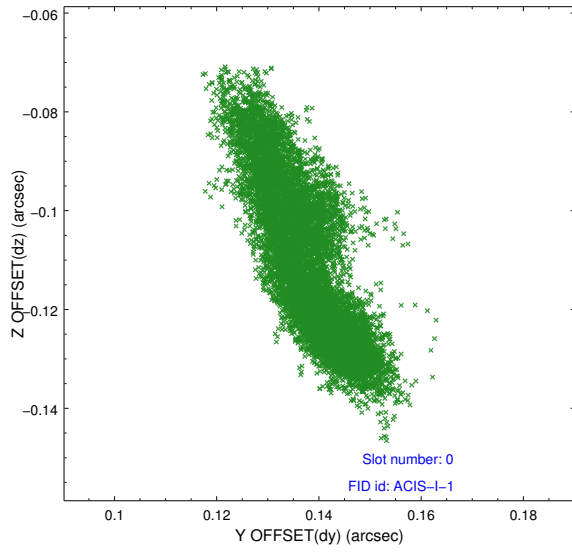


2.4.5 Slot 7

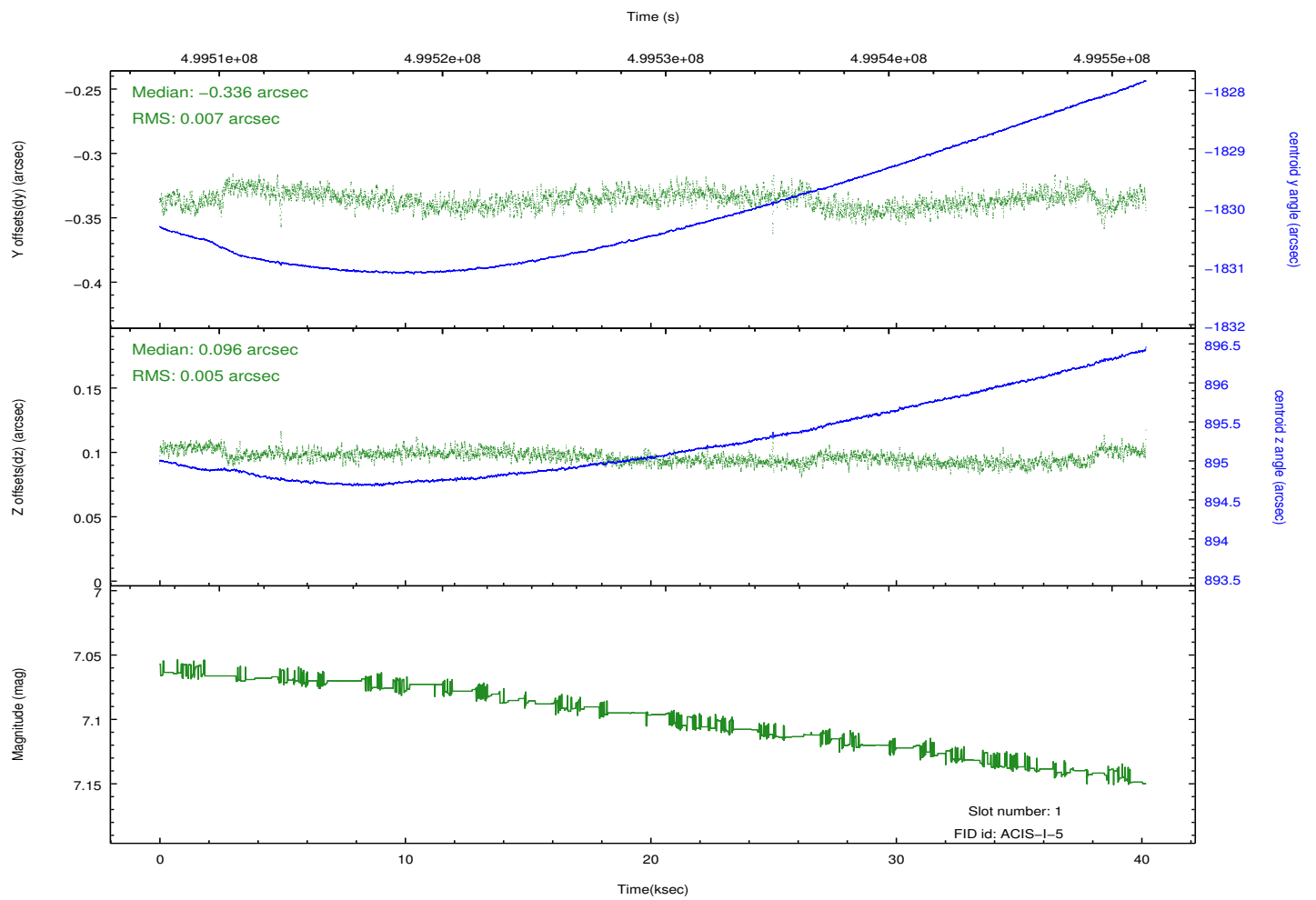
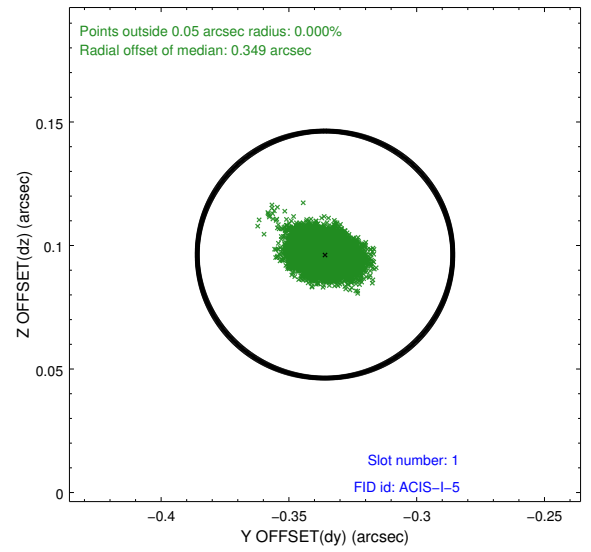
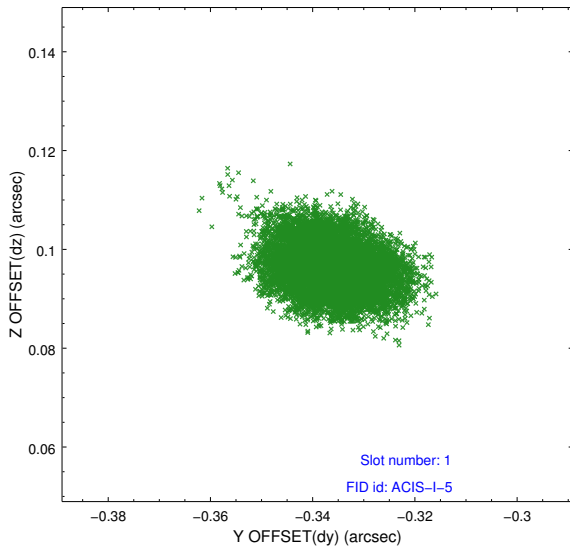


2.5 FID Slots

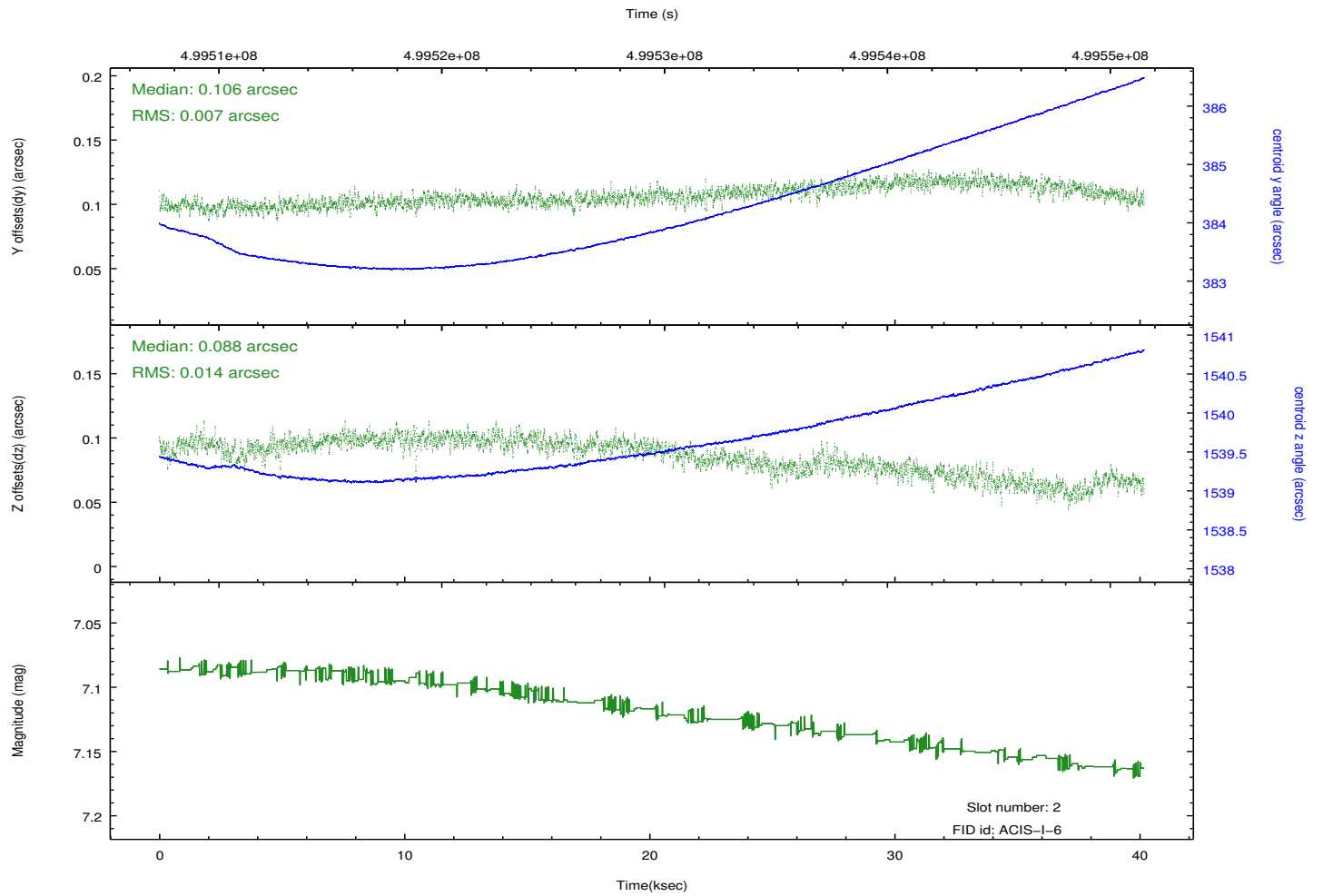
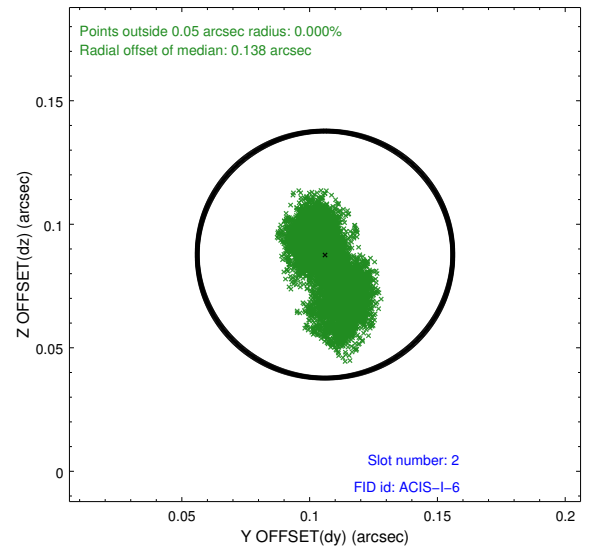
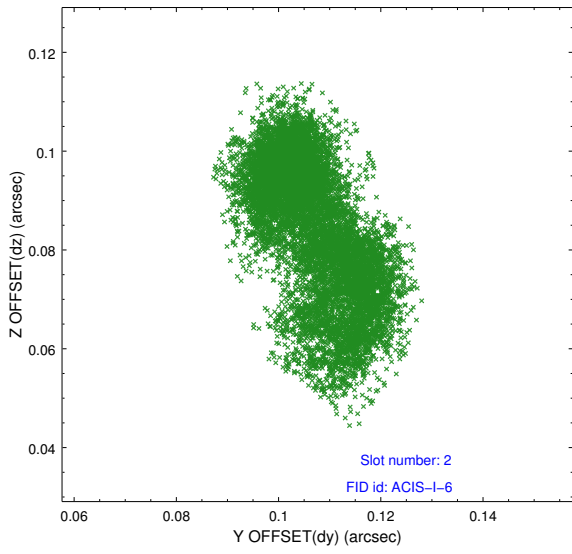
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.079523596704

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.