

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15757 - L2 Version 2
Chandra X-Ray Center

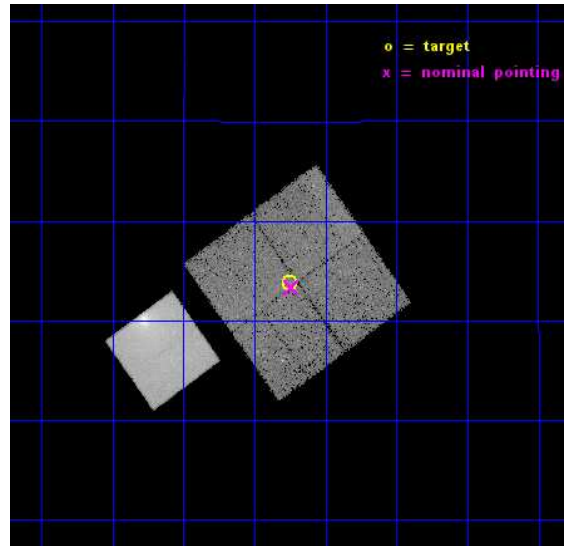
L2 Processing Date : Dec 10 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

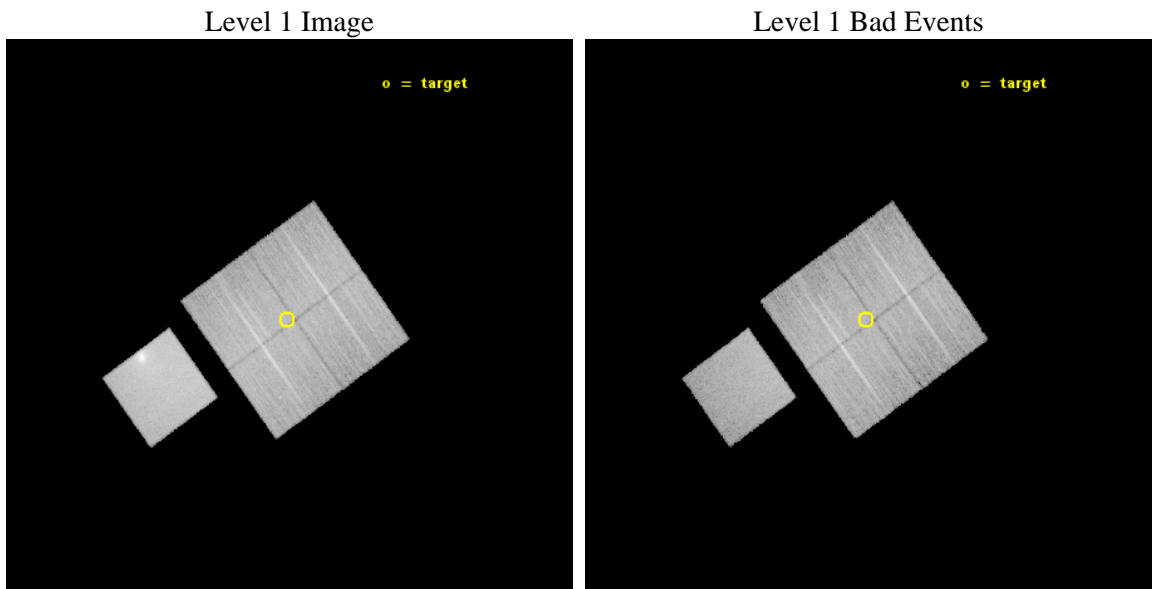
seq_num	401554	Sequence number
obs_id	15757	Observation id
title	Searching for a Metallicity Effect in Field X-ray Binaries	Proposa
observer	Prof. Thomas Maccarone	Principal investigator
object	NGC 4472 Halo-2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.1875	Observer's specified target RA [deg]
dec_targ	8.063333	Observer's specified target Dec [deg]
ra_nom	187.18491245568	Nominal RA [deg]
dec_nom	8.0556602287765	Nominal Dec [deg]
roll_nom	234.20904442313	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30069.963318646	Sum of GTIs [s]
livetime	29677.077110703	Livetime [s]
ontime0	30069.840198636	Sum of GTIs [s]
ontime1	30069.881238639	Sum of GTIs [s]
ontime2	30069.922278643	Sum of GTIs [s]
ontime3	30069.963318646	Sum of GTIs [s]
ontime7	30070.000231266	Sum of GTIs [s]
l2events	181564	Number of level 2 events



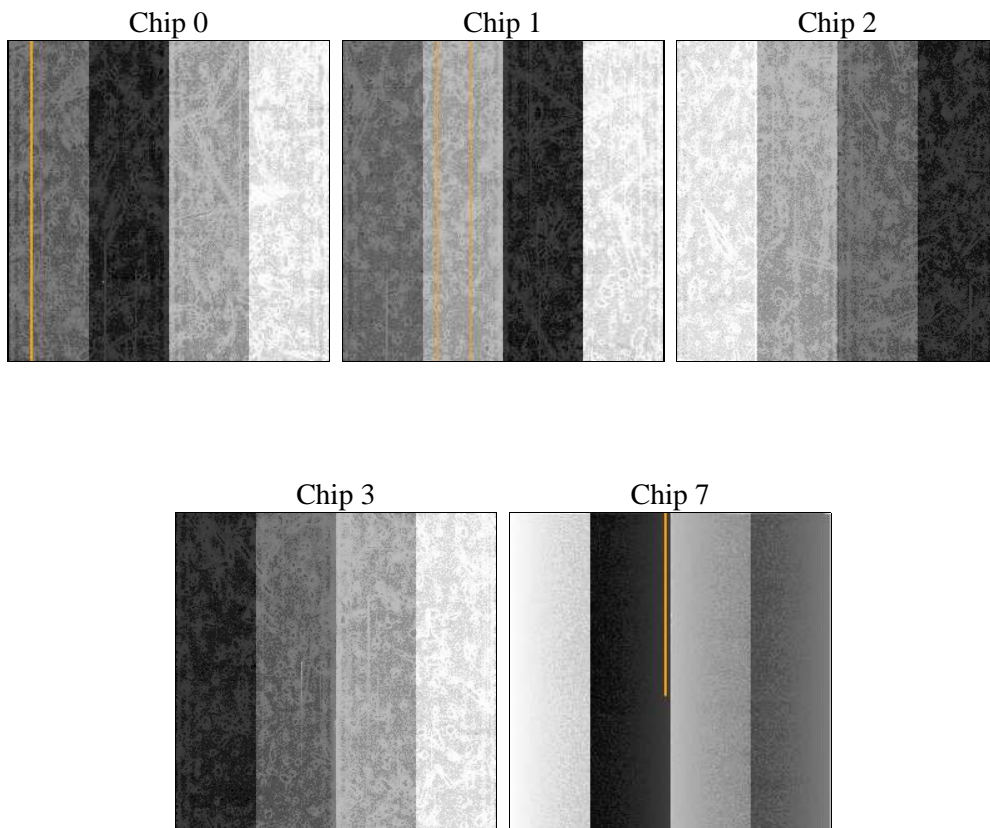
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	30069.963318646	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	30069.840198636	Sum of GTIs [s]
date	2014-12-11T02:46:55	Date and time of file creation	ontime1	30069.881238639	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30069.922278643	Sum of GTIs [s]
			ontime3	30069.963318646	Sum of GTIs [s]
			ontime7	30070.000231266	Sum of GTIs [s]
			l1events	780863	Number of level 1 events

2.1.4 Events

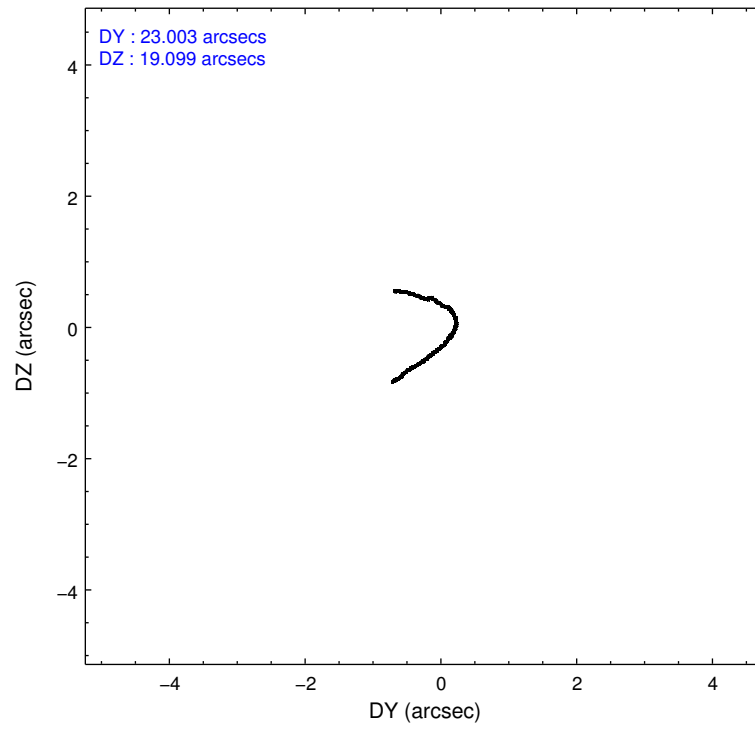
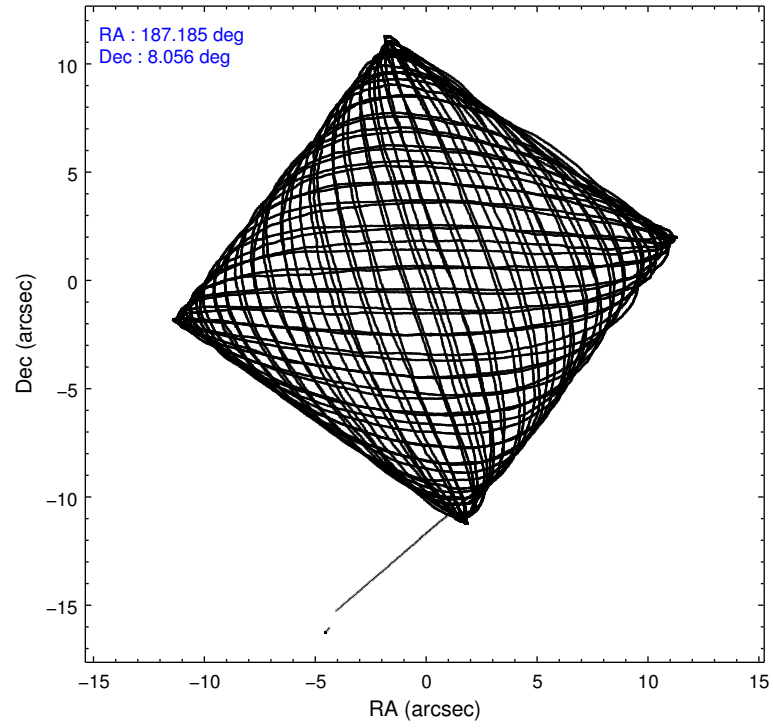
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	129330	133962	143070	140593	233908
rejected events	111314	114325	125104	122984	112079
rejected %	86%	85%	87%	87%	47%

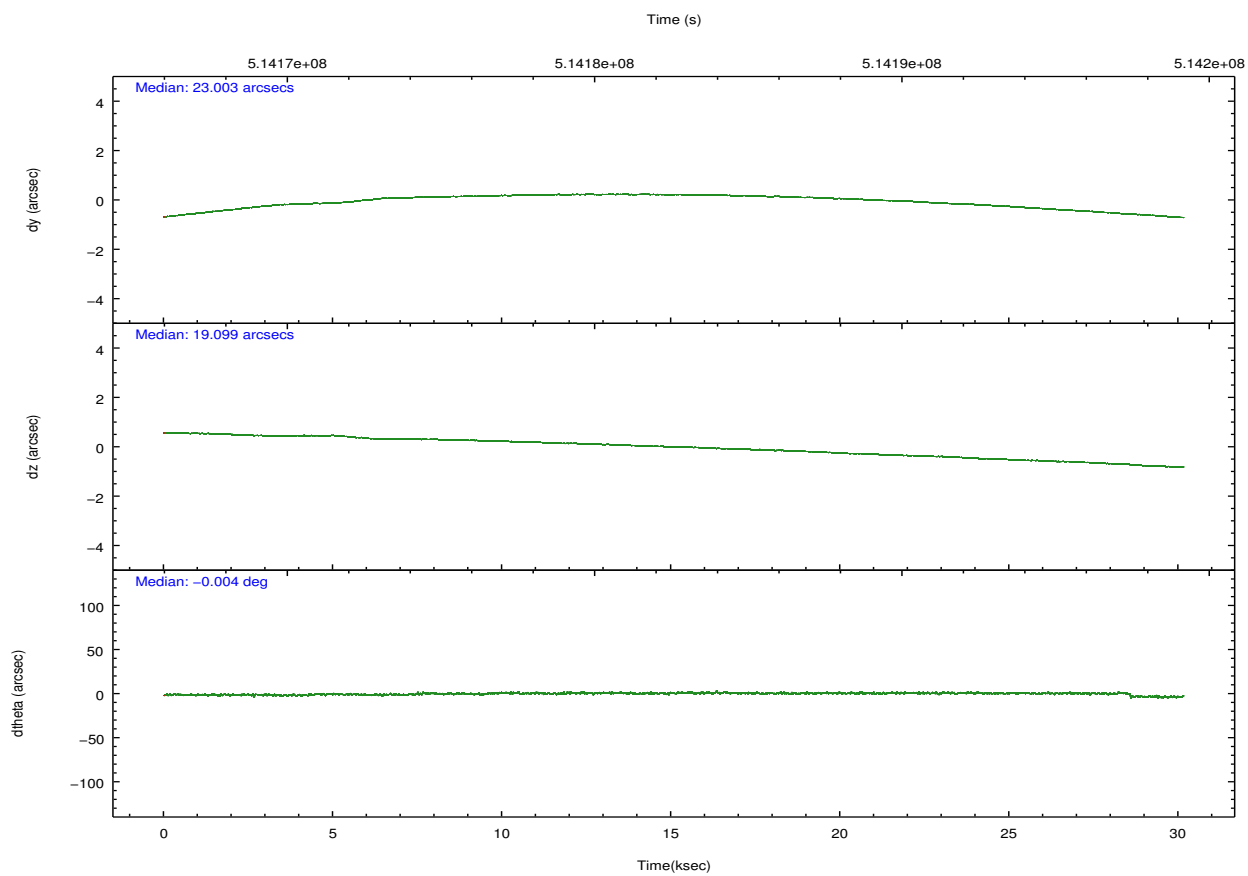
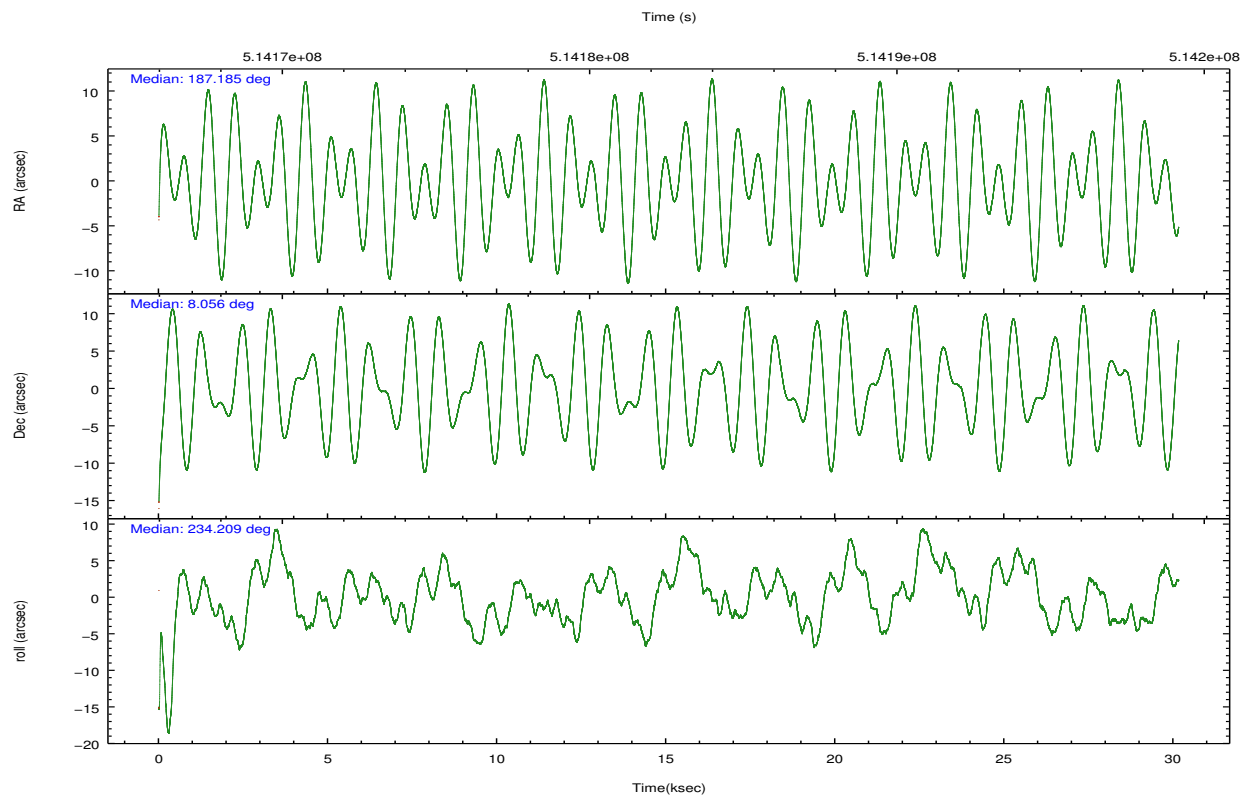
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	6625	7214	7075	6756	19272
	5%	5%	4%	4%	8%
grade 1 events	72	80	71	85	240
	0%	0%	0%	0%	0%
grade 2 events	4419	4713	4192	3787	27543
	3%	3%	2%	2%	11%
grade 3 events	1779	1818	1704	1772	11650
	1%	1%	1%	1%	4%
grade 4 events	1750	1874	1721	1832	11678
	1%	1%	1%	1%	4%
grade 5 events	6855	7236	6445	7840	20626
	5%	5%	4%	5%	8%
grade 6 events	3453	4025	3280	3465	51716
	2%	3%	2%	2%	22%
grade 7 events	104377	107002	118582	115056	91183
	80%	79%	82%	81%	38%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	187.187606	187.1849124556822	CCD I2 on	Y	Y
[deg] Pointing Dec	8.083033	8.05566022877651	CCD I3 on	Y	Y
[deg] Pointing Roll	233.999988	234.2090444231341	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	N
[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)	514167661.184000	514166538.17799	CCD S5 on	N	N
Observation start date	2014-04-18T00:19:54	2014-04-18T00:02:18	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	514197661.184000	514198449.50475	On-chip summing requested	N	N
Observation end date	2014-04-18T08:39:54	2014-04-18T08:54:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



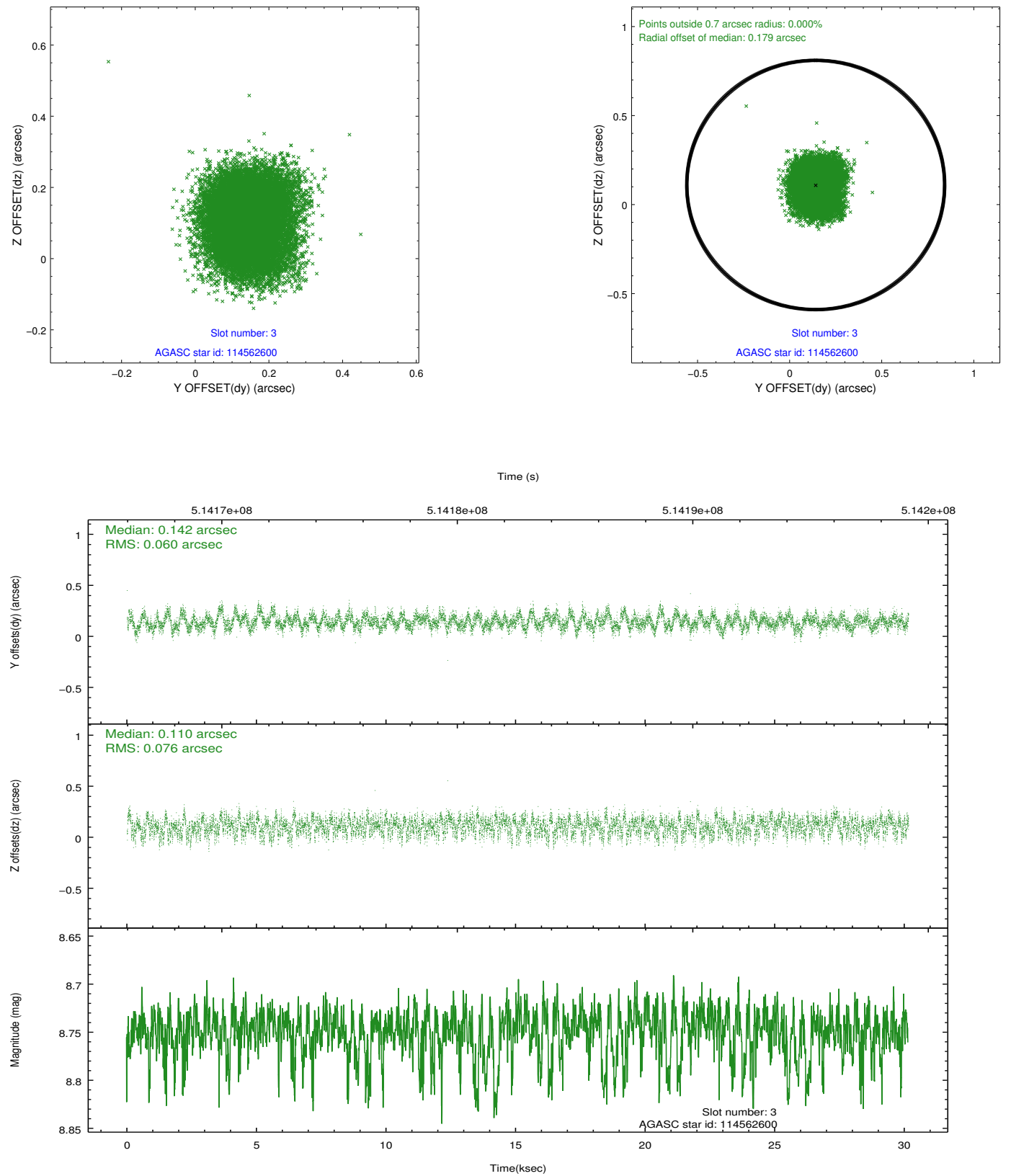


Slot Statistics

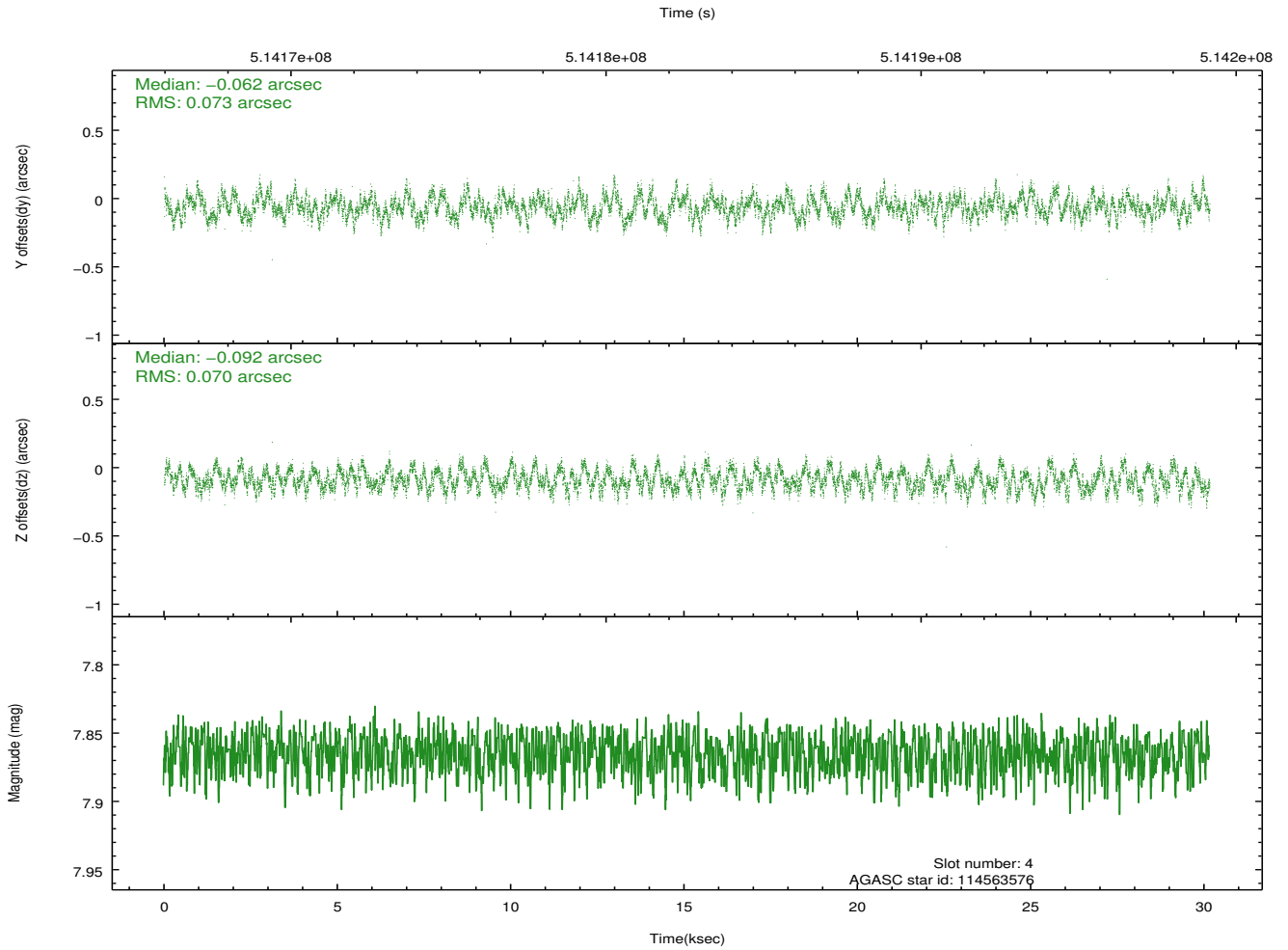
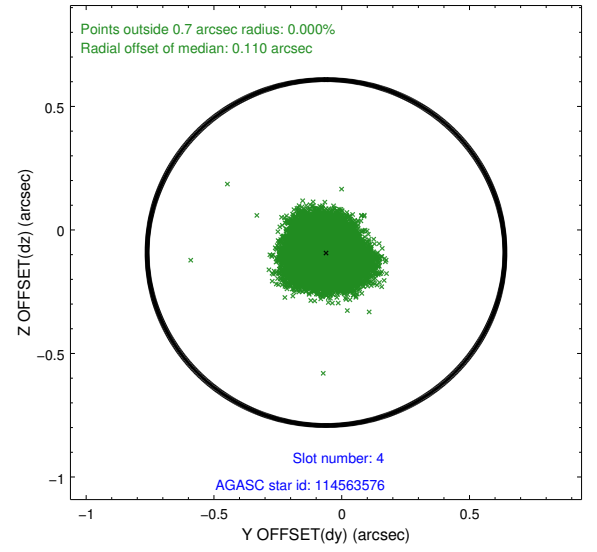
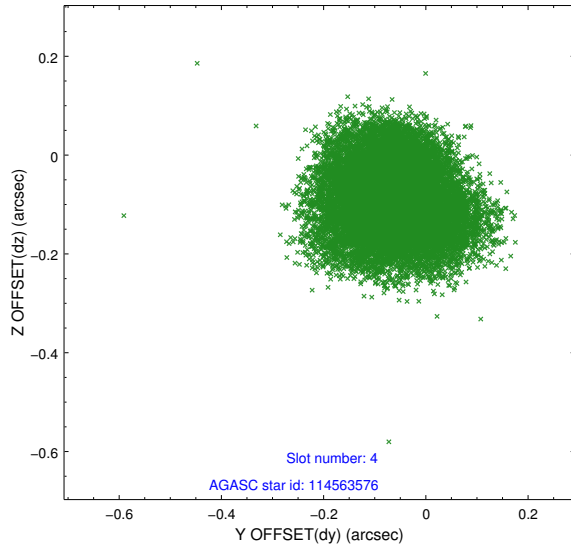
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.94	7355	-0.131	-0.080	0.012	0.026	0.000000	0.000000	-777.94	-849.23
1	FID		ACIS-I-4	6.99	7355	0.336	0.096	0.009	0.021	0.000000	0.000000	2136.47	1057.20
2	FID		ACIS-I-5	7.02	7356	-0.307	0.053	0.010	0.023	0.000000	0.000000	-1831.93	1054.93
3	GUIDE	used	114562600	8.75	14706	0.142	0.110	0.105	0.164	186.973653	8.898661	-1927.89	-2341.78
4	GUIDE	used	114563576	7.86	14709	-0.062	-0.092	0.111	0.167	186.867039	8.012388	878.19	-775.89
5	GUIDE	used	114563648	9.76	14697	0.015	0.054	0.226	0.344	187.009208	7.938475	795.25	-208.76
6	GUIDE	used	114565080	10.13	14491	-0.018	0.025	0.293	0.476	186.537681	7.759404	2304.29	-1191.65
7	GUIDE	used	114565400	6.33	14711	-0.079	-0.078	0.098	0.159	186.925333	8.610343	-986.78	-1870.83

2.4 Star Slots

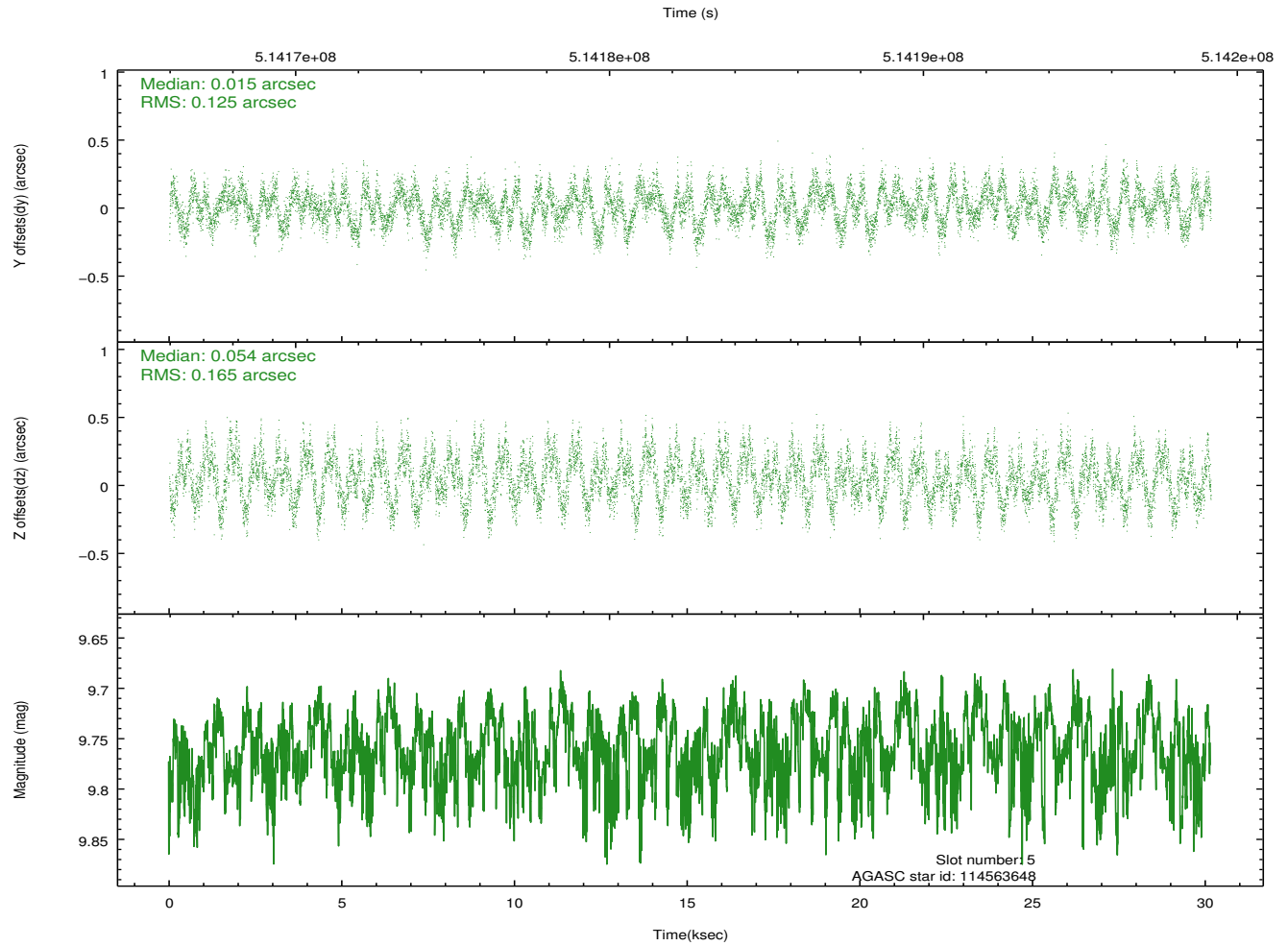
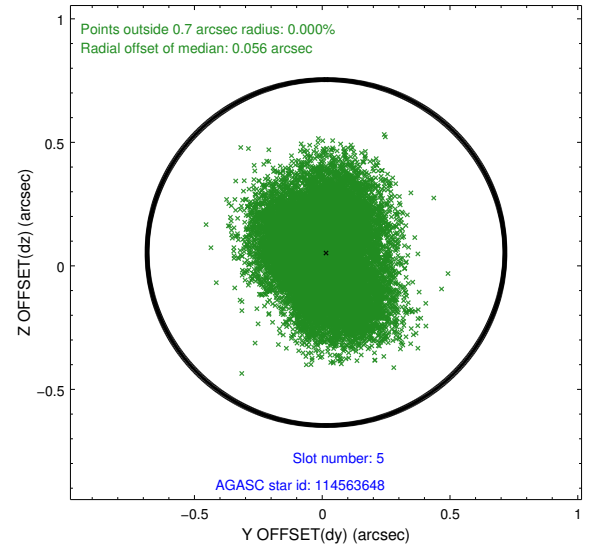
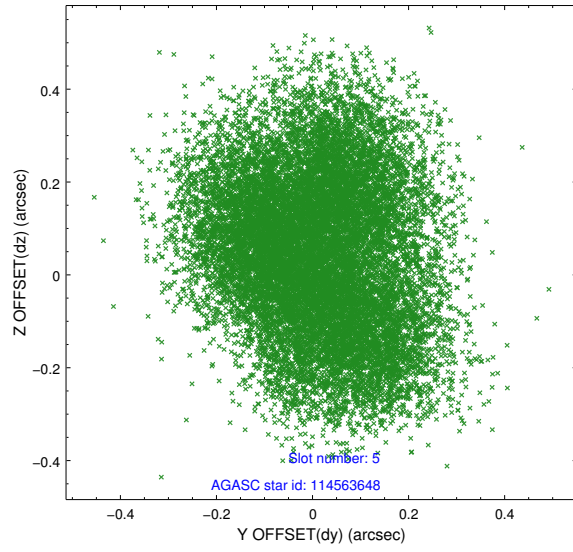
2.4.1 Slot 3



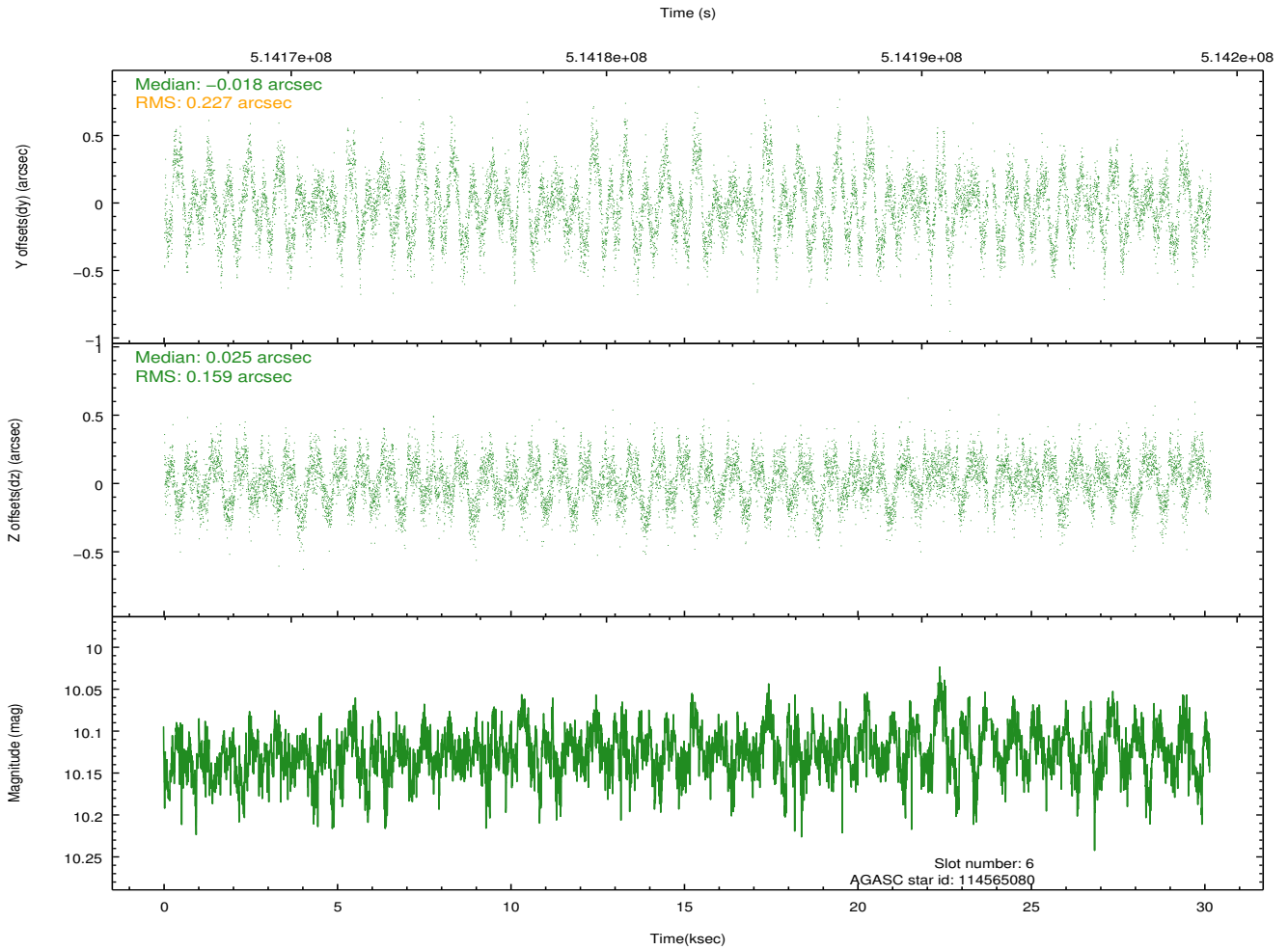
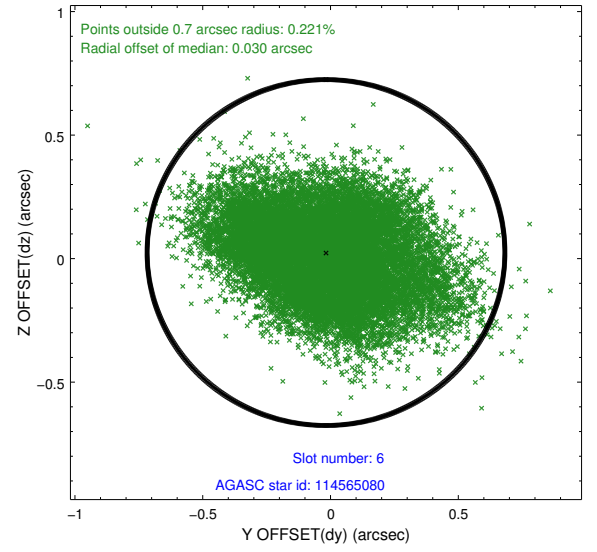
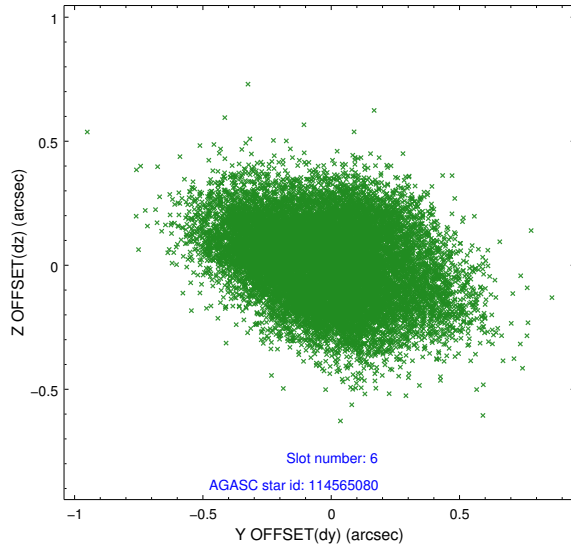
2.4.2 Slot 4



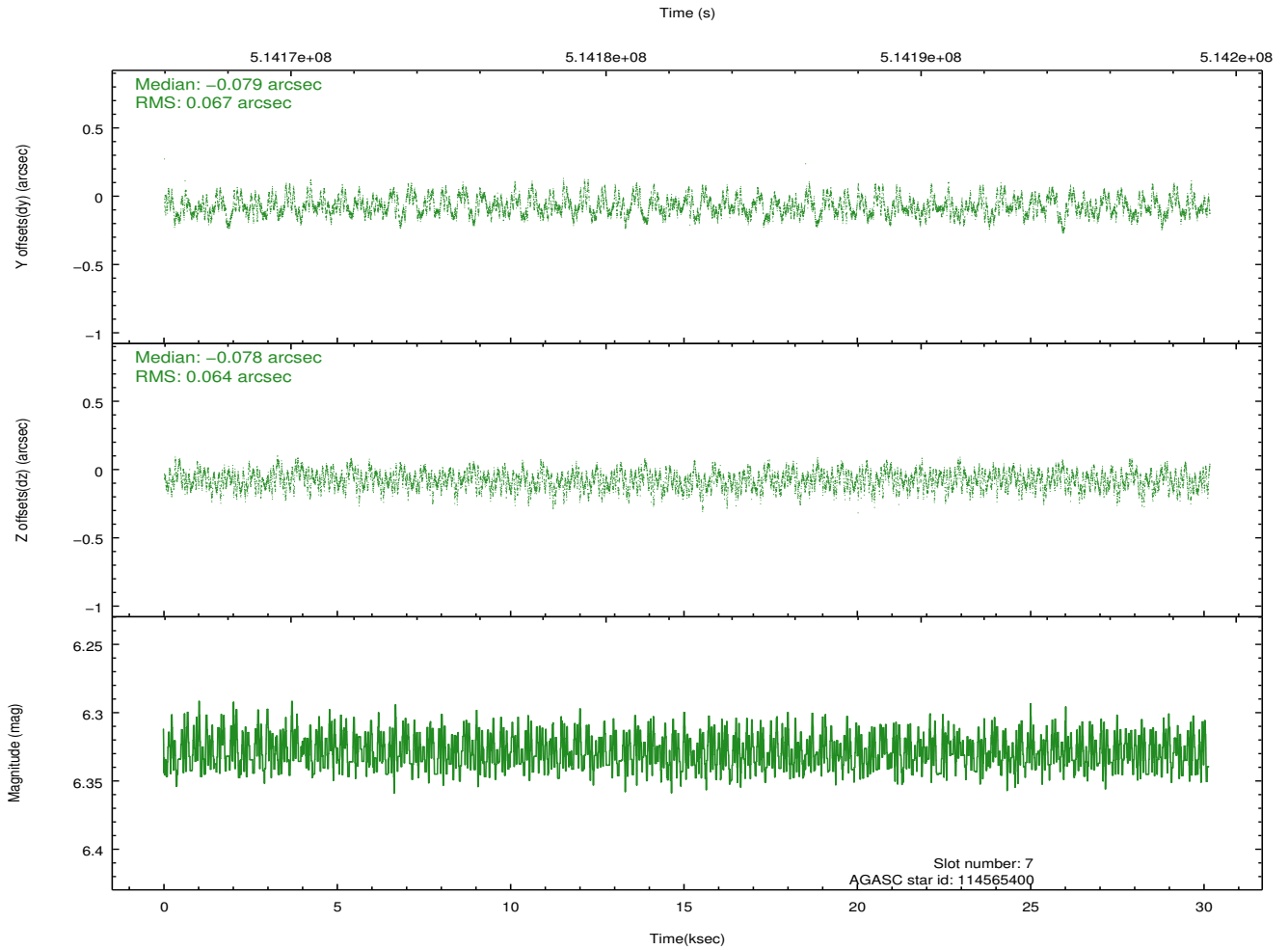
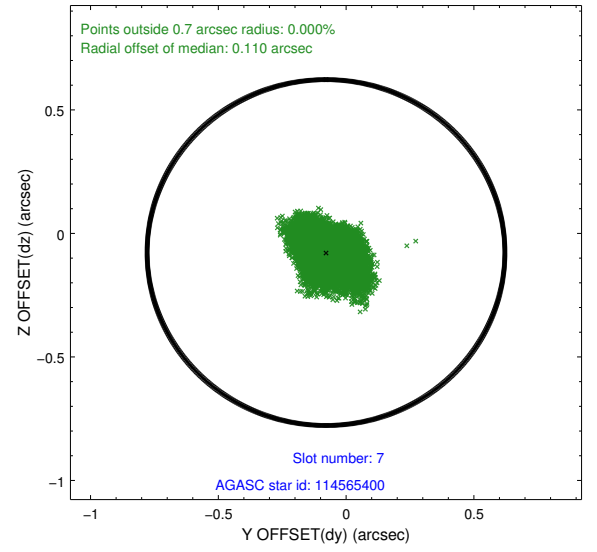
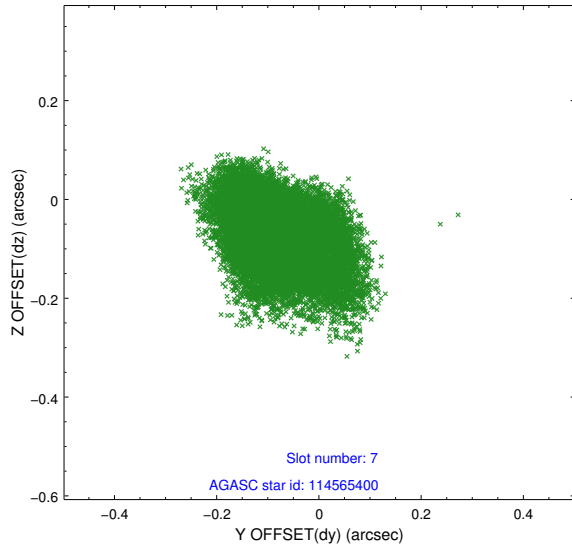
2.4.3 Slot 5



2.4.4 Slot 6

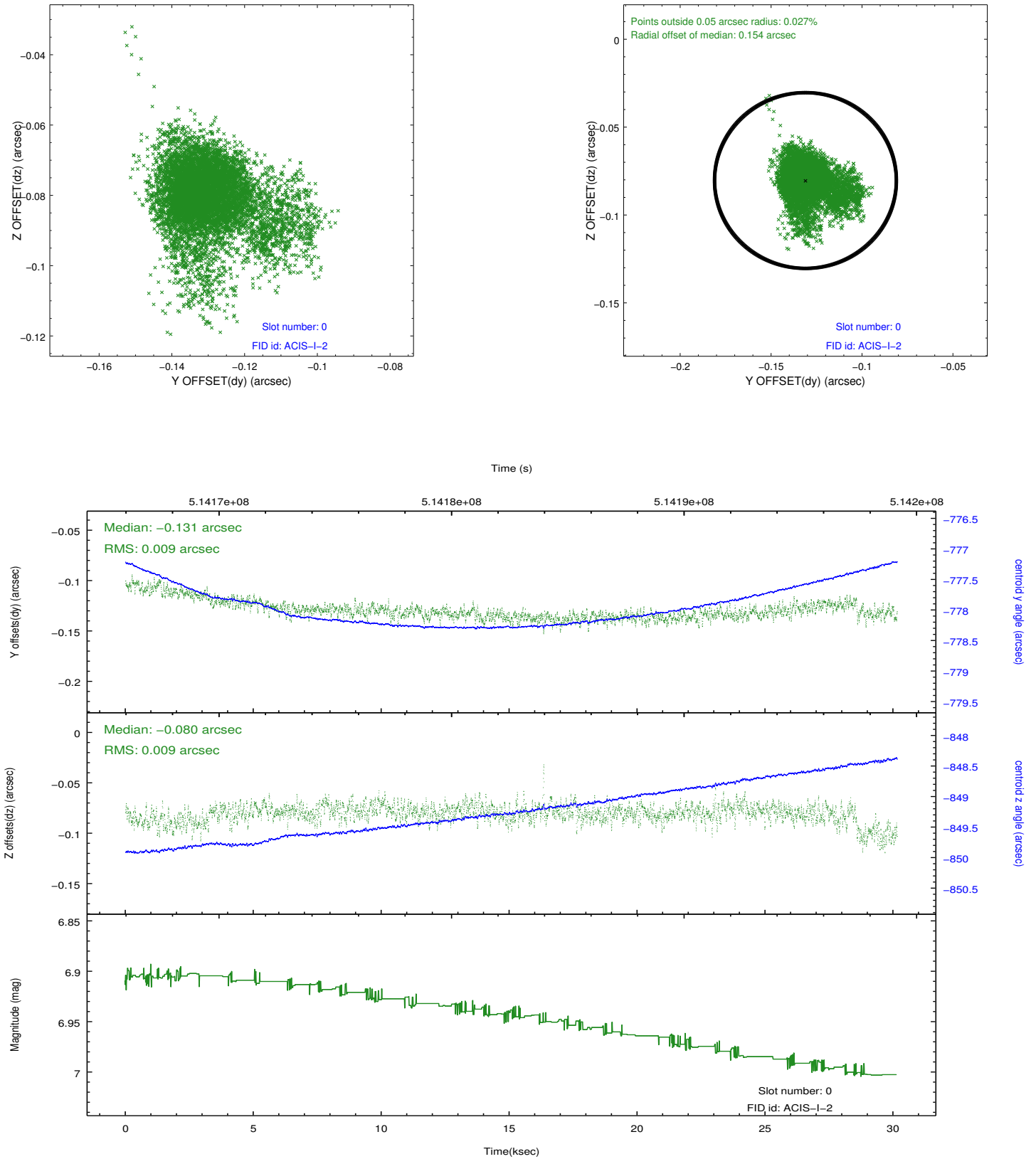


2.4.5 Slot 7

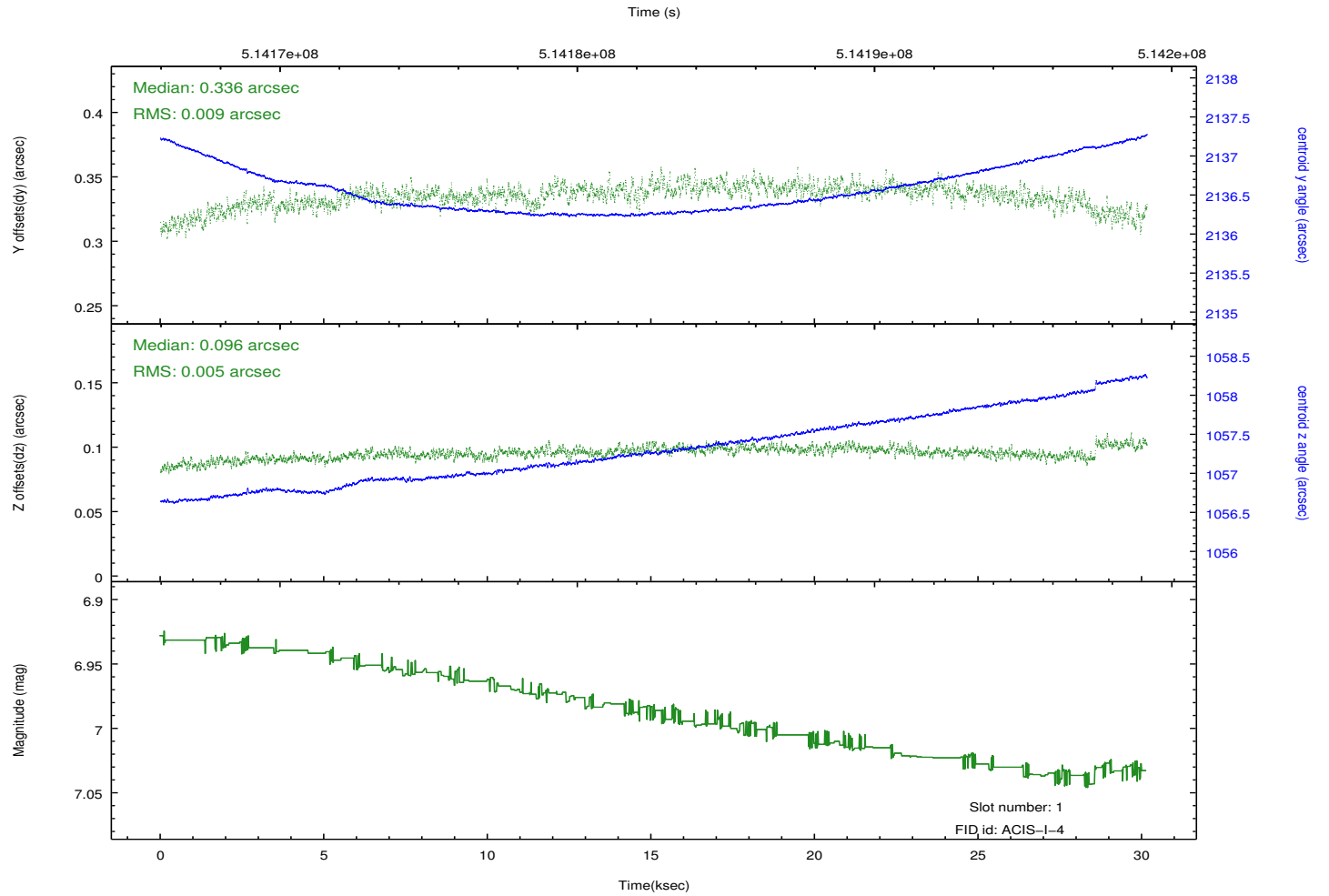
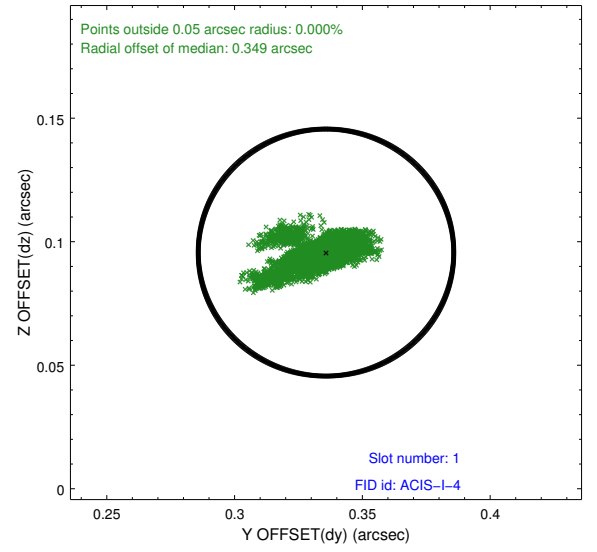
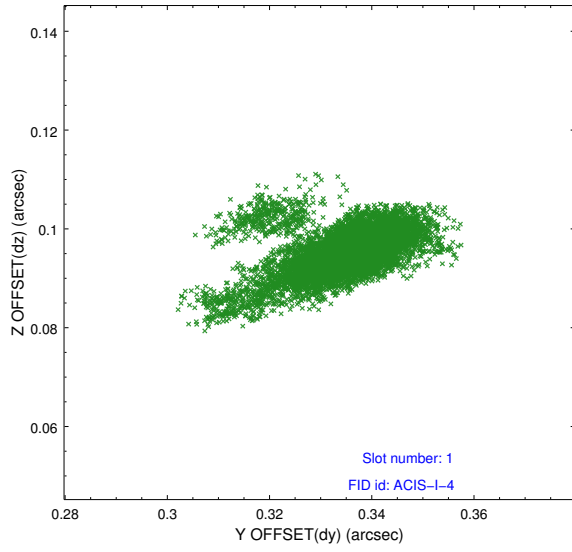


2.5 FID Slots

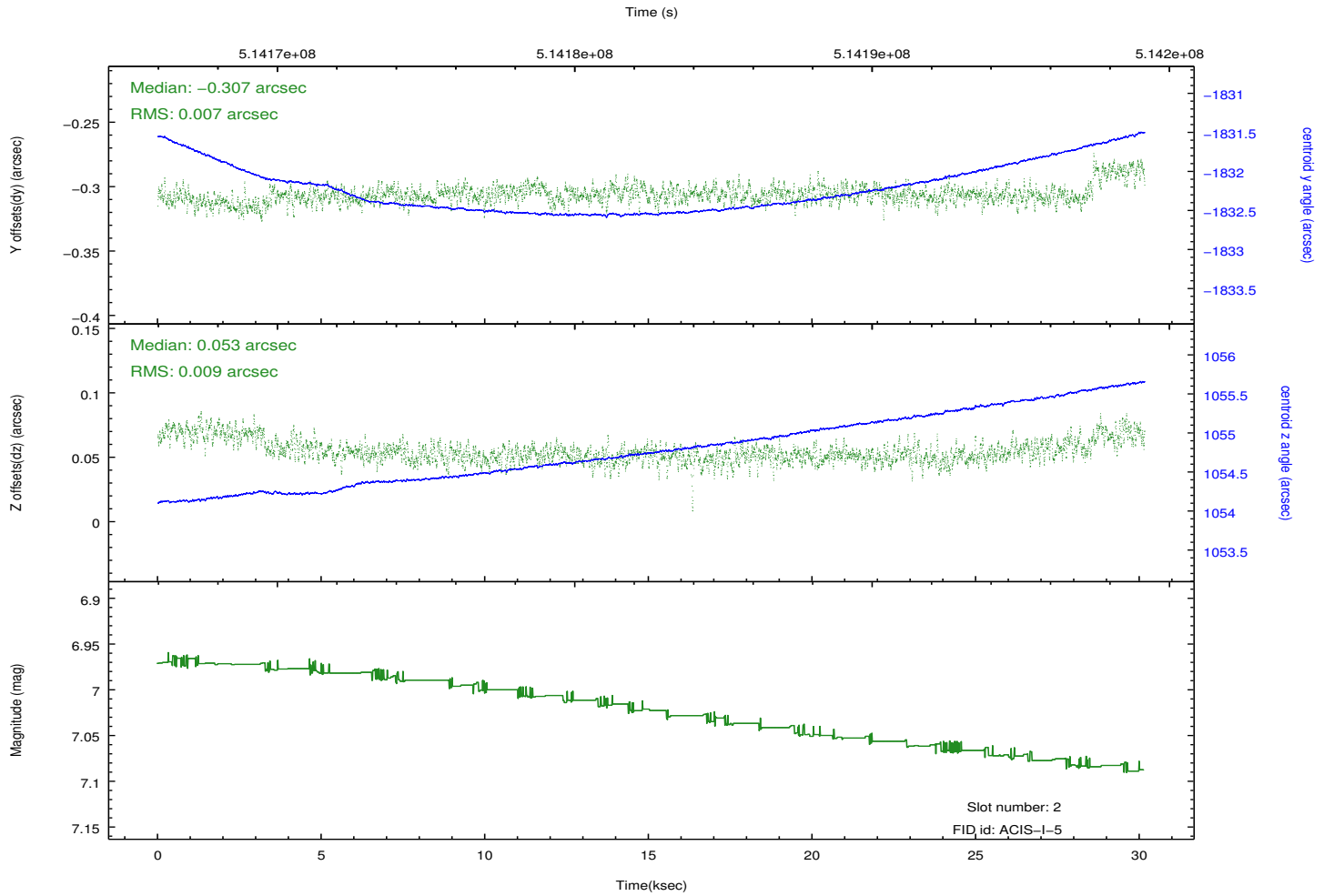
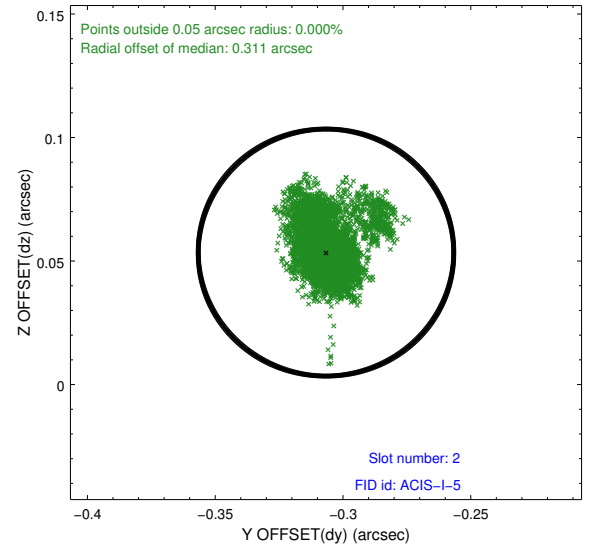
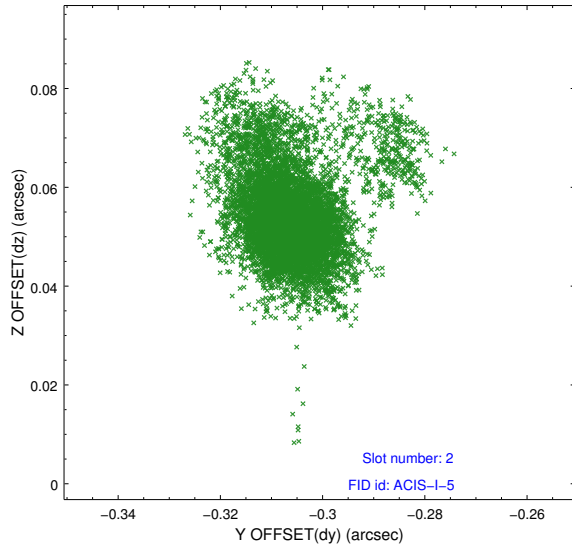
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.069963318646

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.