

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14962 - L2 Version 2
Chandra X-Ray Center

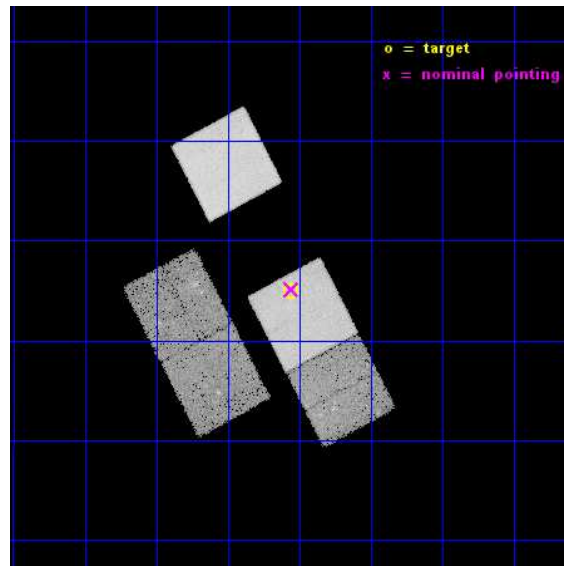
L2 Processing Date : Dec 1 2014

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1 Front

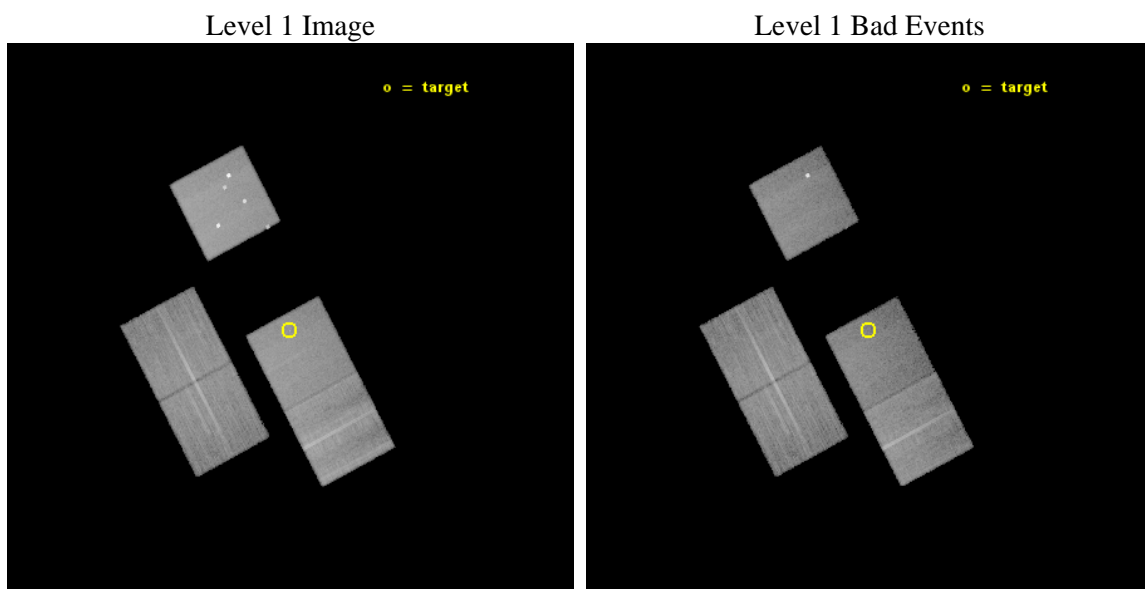
seq_num	702771	Sequence number
obs_id	14962	Observation id
title	Determination of Dark Matter Fractions and M/L in Elliptical Galaxies	Proposal title
observer	Prof. David Pooley	Principal investigator
object	SDSS 1138+0314	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	174.515417	Observer's specified target RA [deg]
dec_targ	3.249472	Observer's specified target Dec [deg]
ra_nom	174.51391093218	Nominal RA [deg]
dec_nom	3.2520859214152	Nominal Dec [deg]
roll_nom	62.156711383989	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32363.54866147	Sum of GTIs [s]
livetime	31940.69507251	Livetime [s]
ontime2	32363.384501457	Sum of GTIs [s]
ontime3	32360.325551093	Sum of GTIs [s]
ontime5	32363.507621467	Sum of GTIs [s]
ontime7	32363.54866147	Sum of GTIs [s]
ontime8	32354.002430677	Sum of GTIs [s]
l2events	258589	Number of level 2 events



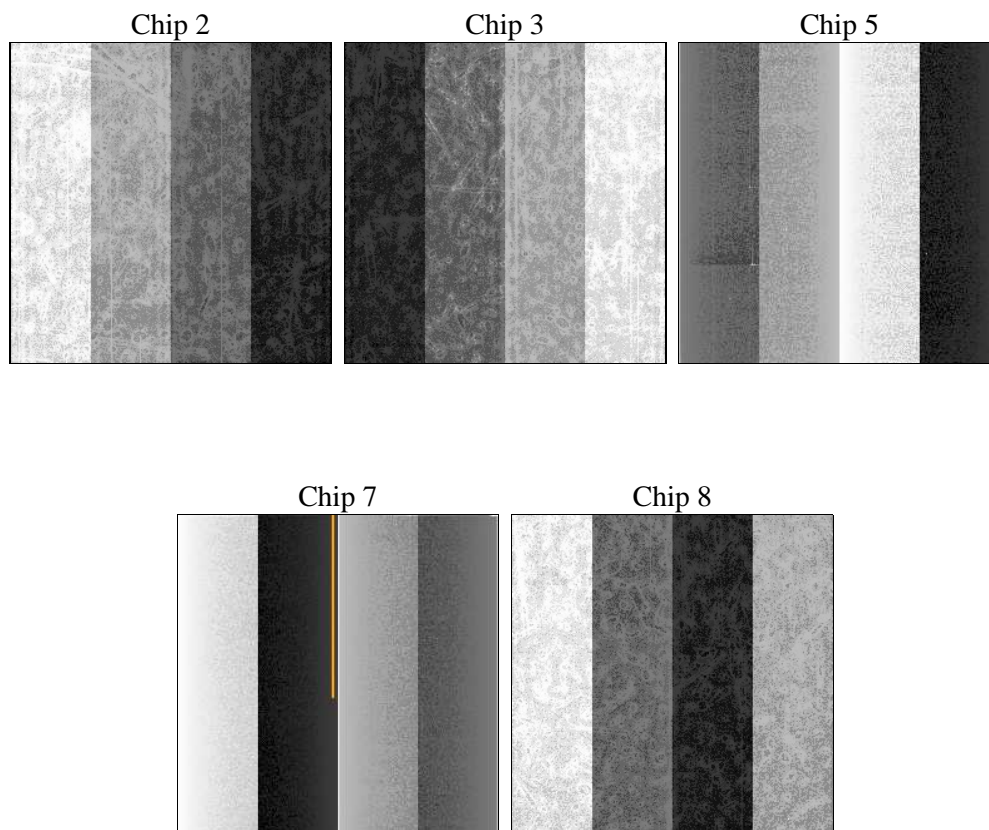
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32300.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	32363.54866147	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	32363.384501457	Sum of GTIs [s]
date	2014-12-01T11:32:35	Date and time of file creation	ontime3	32360.325551093	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	32363.507621467	Sum of GTIs [s]
			ontime7	32363.54866147	Sum of GTIs [s]
			ontime8	32354.002430677	Sum of GTIs [s]
			l1events	1002716	Number of level 1 events

2.1.4 Events

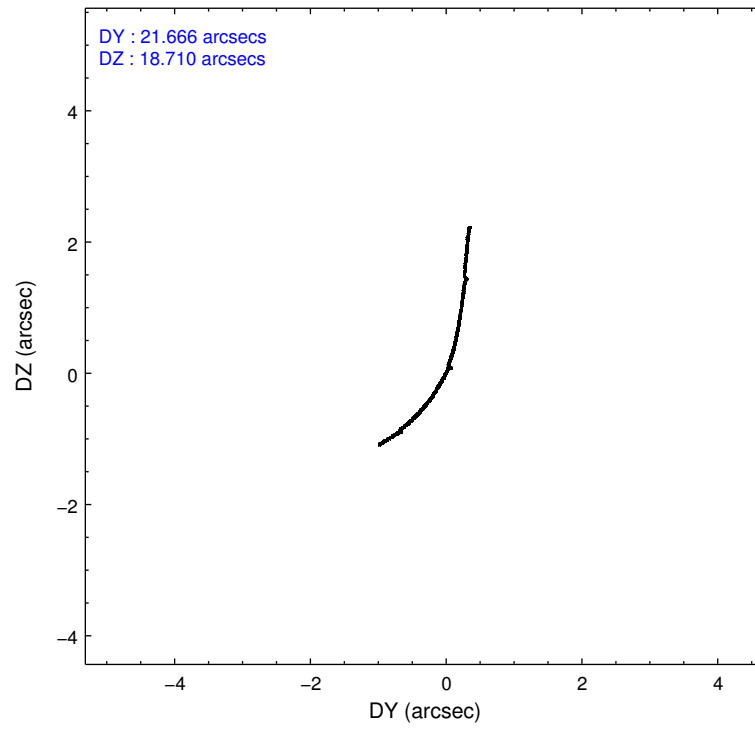
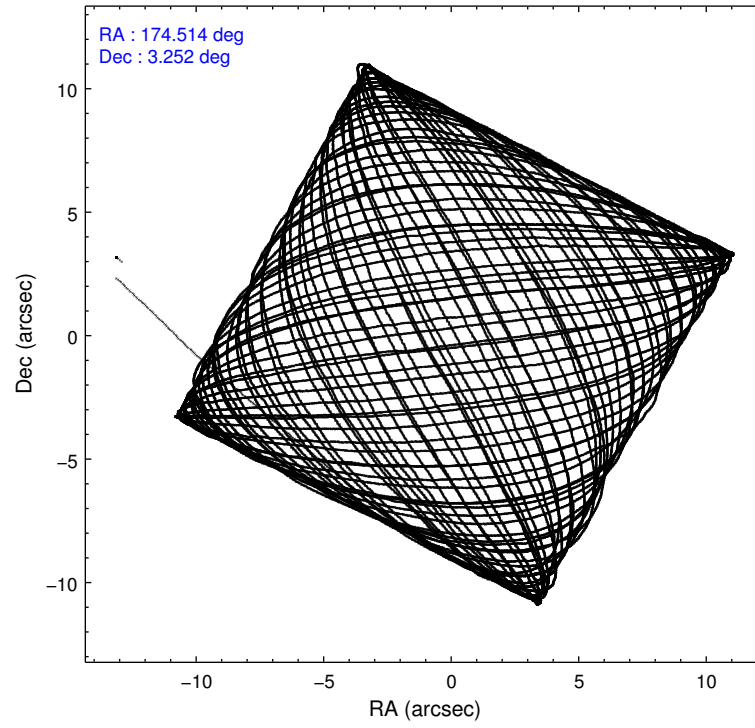
	ccd 2	ccd 3	ccd 5	ccd 7	ccd 8
level 1 events	163784	159462	271386	193479	214605
rejected events	144667	141854	127026	102469	153655
rejected %	88%	88%	46%	52%	71%

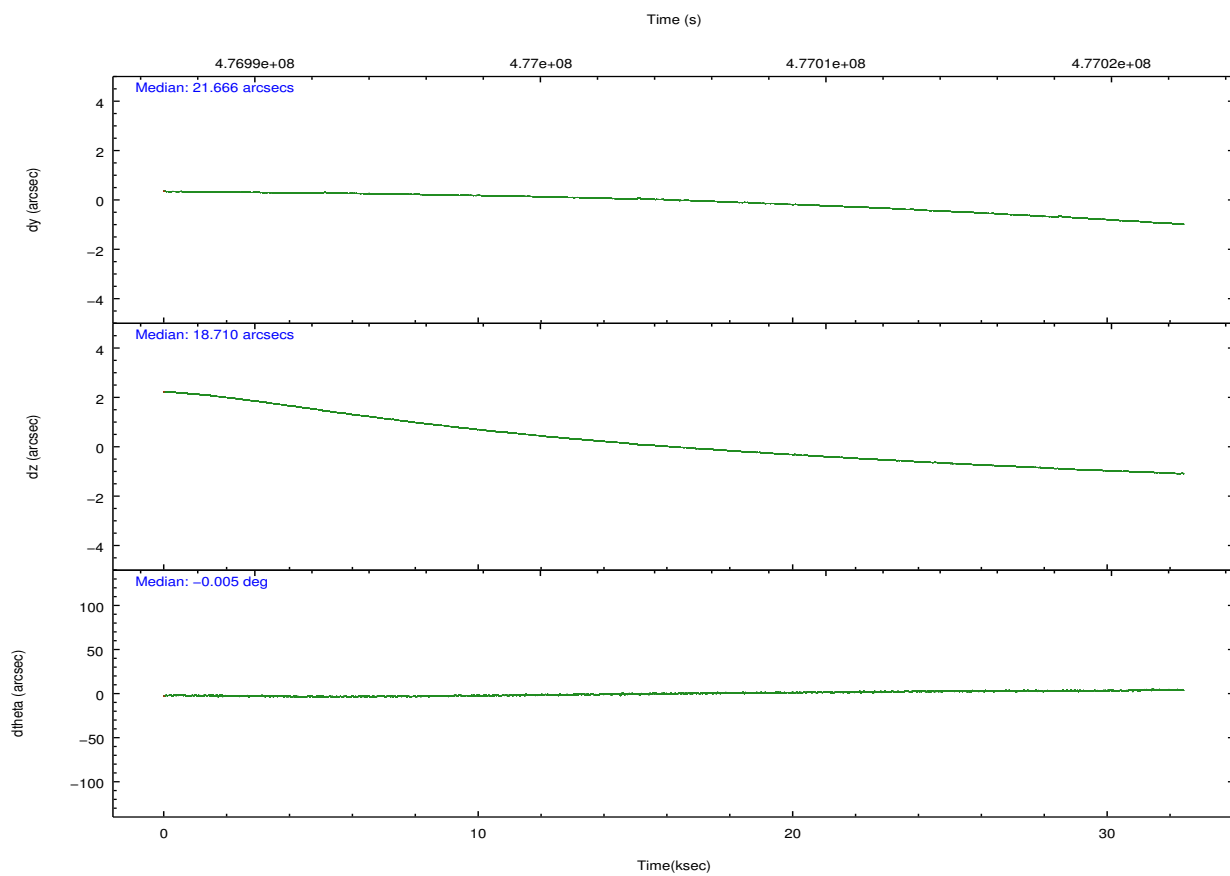
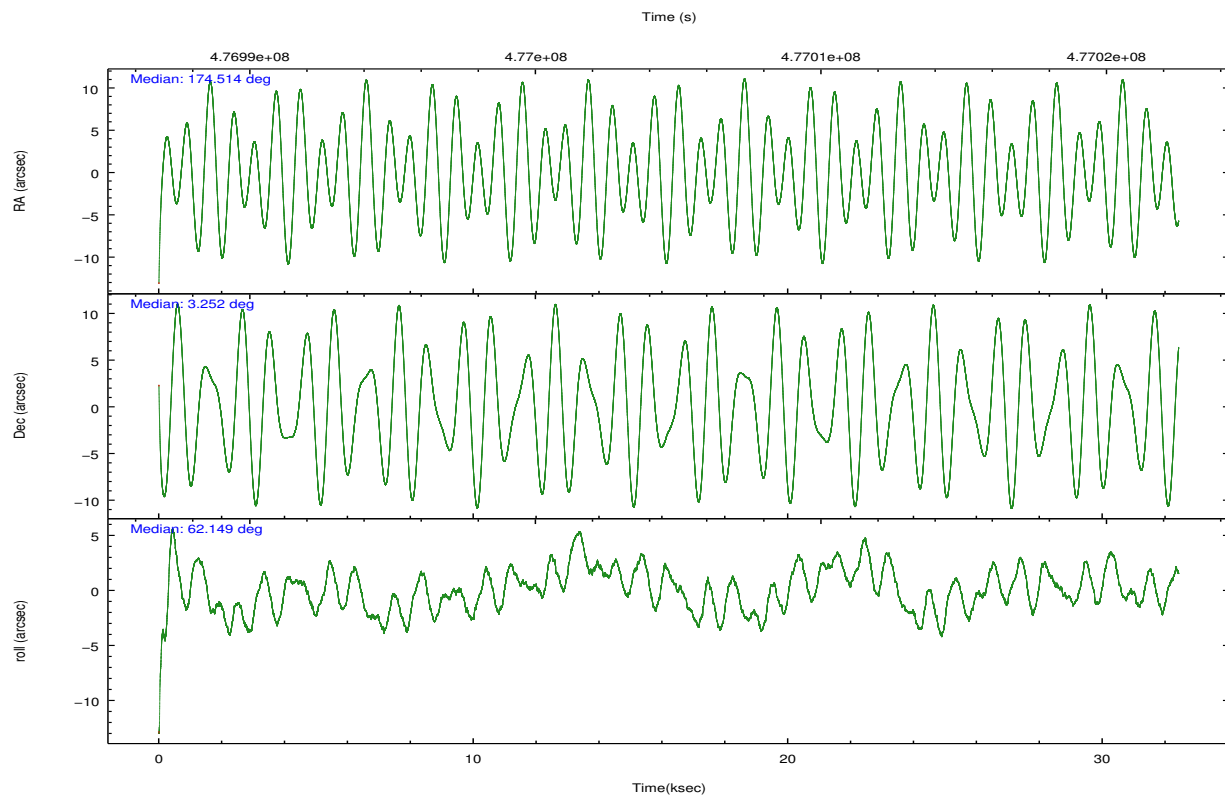
	ccd 2	ccd 3	ccd 5	ccd 7	ccd 8
grade 0 events	7491	6298	24293	8790	17075
	4%	3%	8%	4%	7%
grade 1 events	98	80	572	269	158
	0%	0%	0%	0%	0%
grade 2 events	4473	3977	44399	19298	14192
	2%	2%	16%	9%	6%
grade 3 events	1909	1874	4748	7965	6769
	1%	1%	1%	4%	3%
grade 4 events	1897	1886	4563	7946	6355
	1%	1%	1%	4%	2%
grade 5 events	5853	7282	20899	20378	11191
	3%	4%	7%	10%	5%
grade 6 events	3352	3574	66390	47022	16593
	2%	2%	24%	24%	7%
grade 7 events	138711	134491	105522	81811	142272
	84%	84%	38%	42%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23578	ACIS-23578	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	174.515318	174.5139109321812	CCD I2 on	O5	Y
[deg] Pointing Dec	3.224791	3.252085921415224	CCD I3 on	O4	Y
[deg] Pointing Roll	62.000012	62.15671138398932	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	N
[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)	476988582.184000	476987416.86061	CCD S5 on	N	N
Observation start date	2013-02-11T16:48:35	2013-02-11T16:30:16	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	477020882.184000	477021736.42496	On-chip summing requested	N	N
Observation end date	2013-02-12T01:46:55	2013-02-12T02:02:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



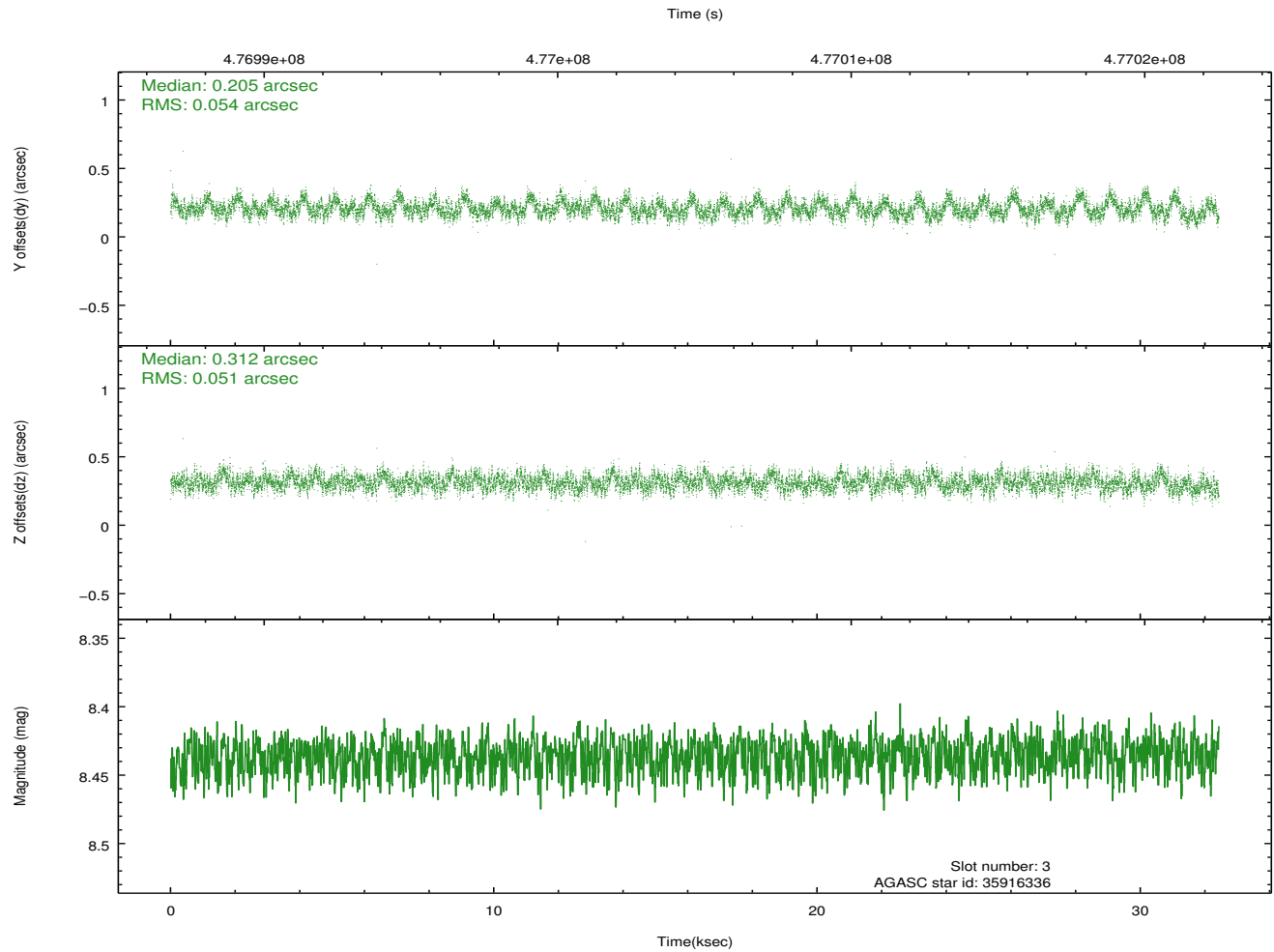
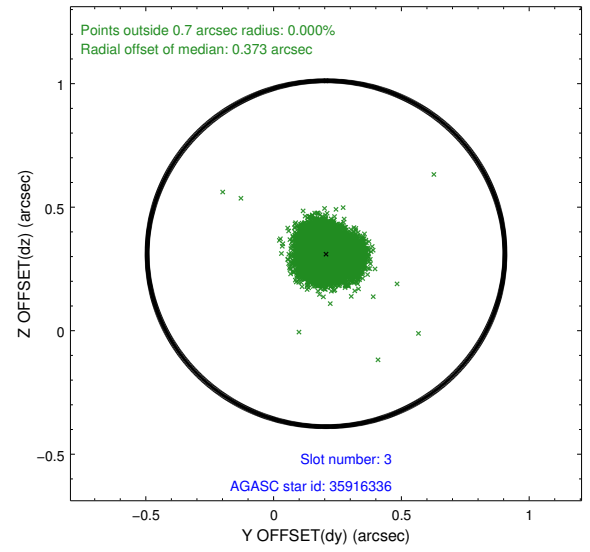
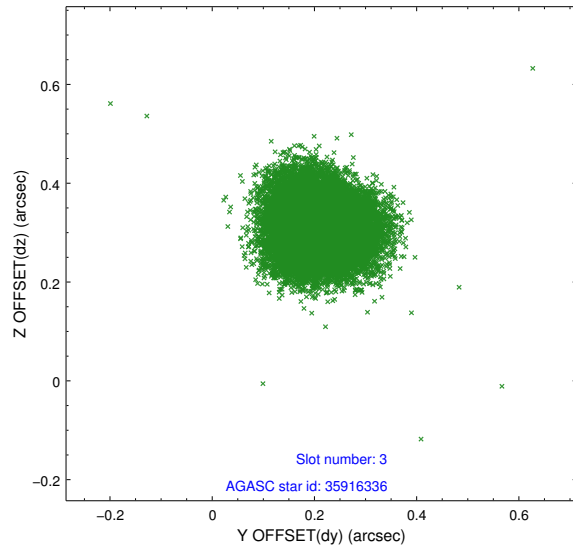


Slot Statistics

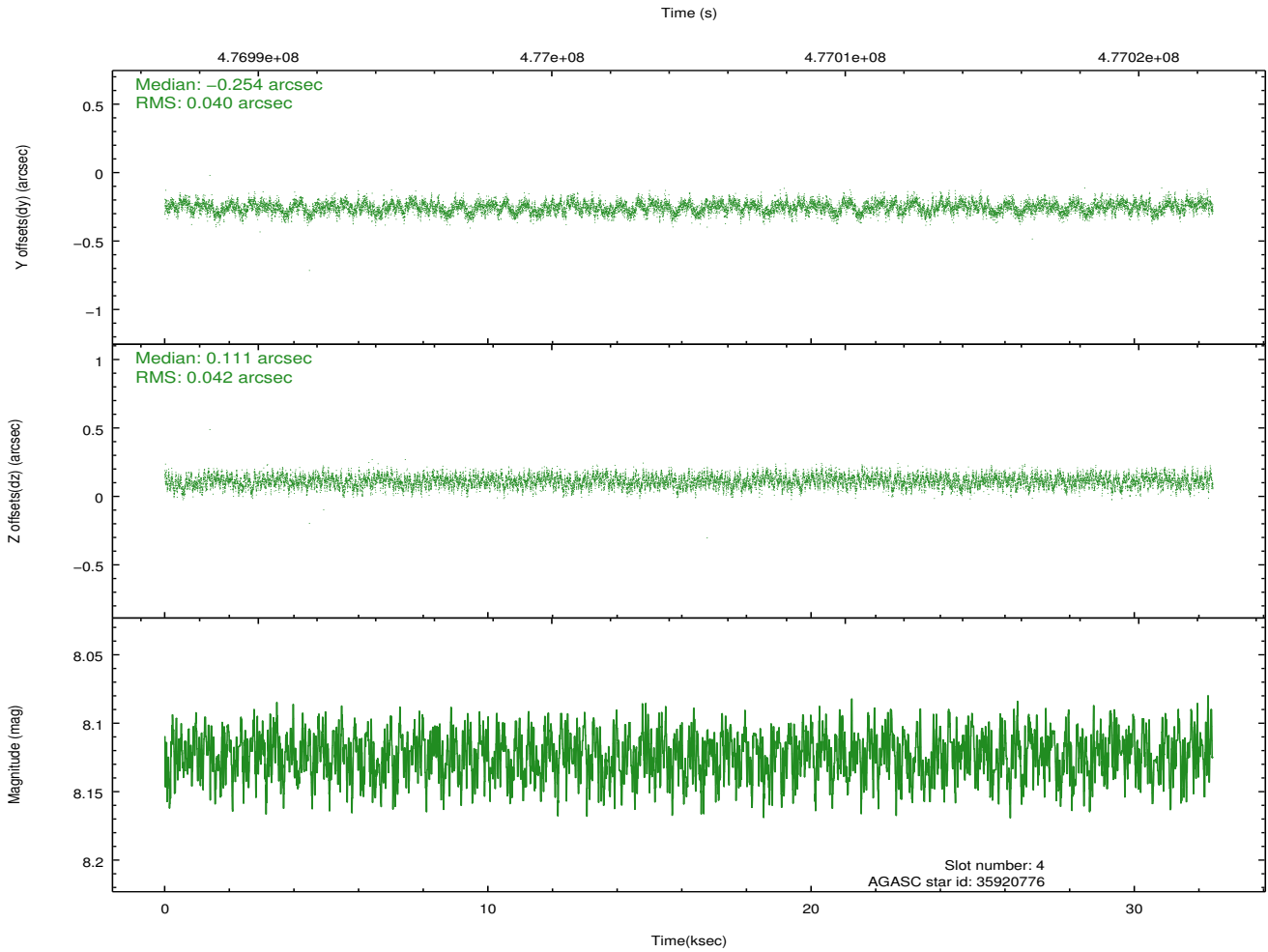
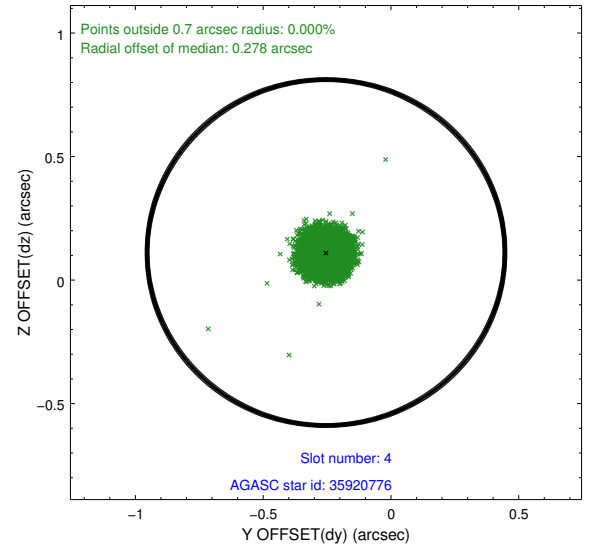
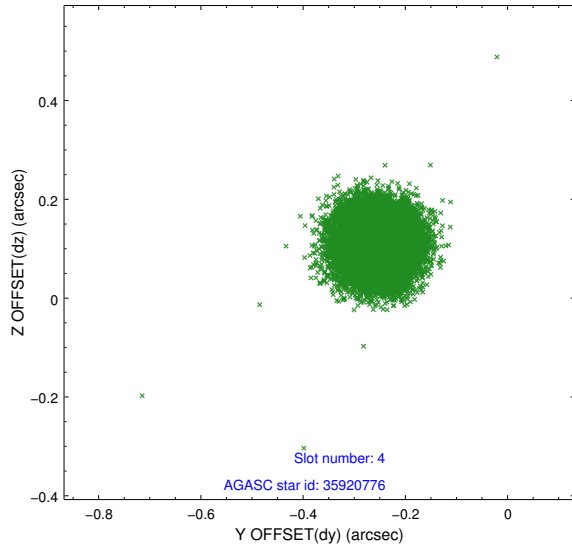
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.04	7909	0.034	0.001	0.018	0.057	0.000000	0.000000	921.37	-1736.00
1	FID		ACIS-S-4	7.04	7910	0.168	-0.012	0.016	0.040	0.000000	0.000000	2138.94	168.10
2	FID		ACIS-S-5	7.08	7909	-0.229	0.024	0.009	0.018	0.000000	0.000000	-1827.69	161.79
3	GUIDE	used	35916336	8.44	15818	0.205	0.312	0.080	0.124	174.868506	2.846561	-605.41	-1756.85
4	GUIDE	used	35920776	8.12	15818	-0.254	0.111	0.062	0.098	174.521142	3.621906	1272.04	653.00
5	GUIDE	used	35922088	9.57	15759	0.052	-0.248	0.192	0.288	174.092517	3.557631	344.82	1904.56
6	GUIDE	used	35922112	7.10	15818	0.130	-0.148	0.075	0.122	174.060884	3.301117	-524.23	1571.41
7	GUIDE	used	36049352	8.53	15778	-0.122	-0.025	0.099	0.165	175.128538	3.654121	2399.94	-1221.10

2.4 Star Slots

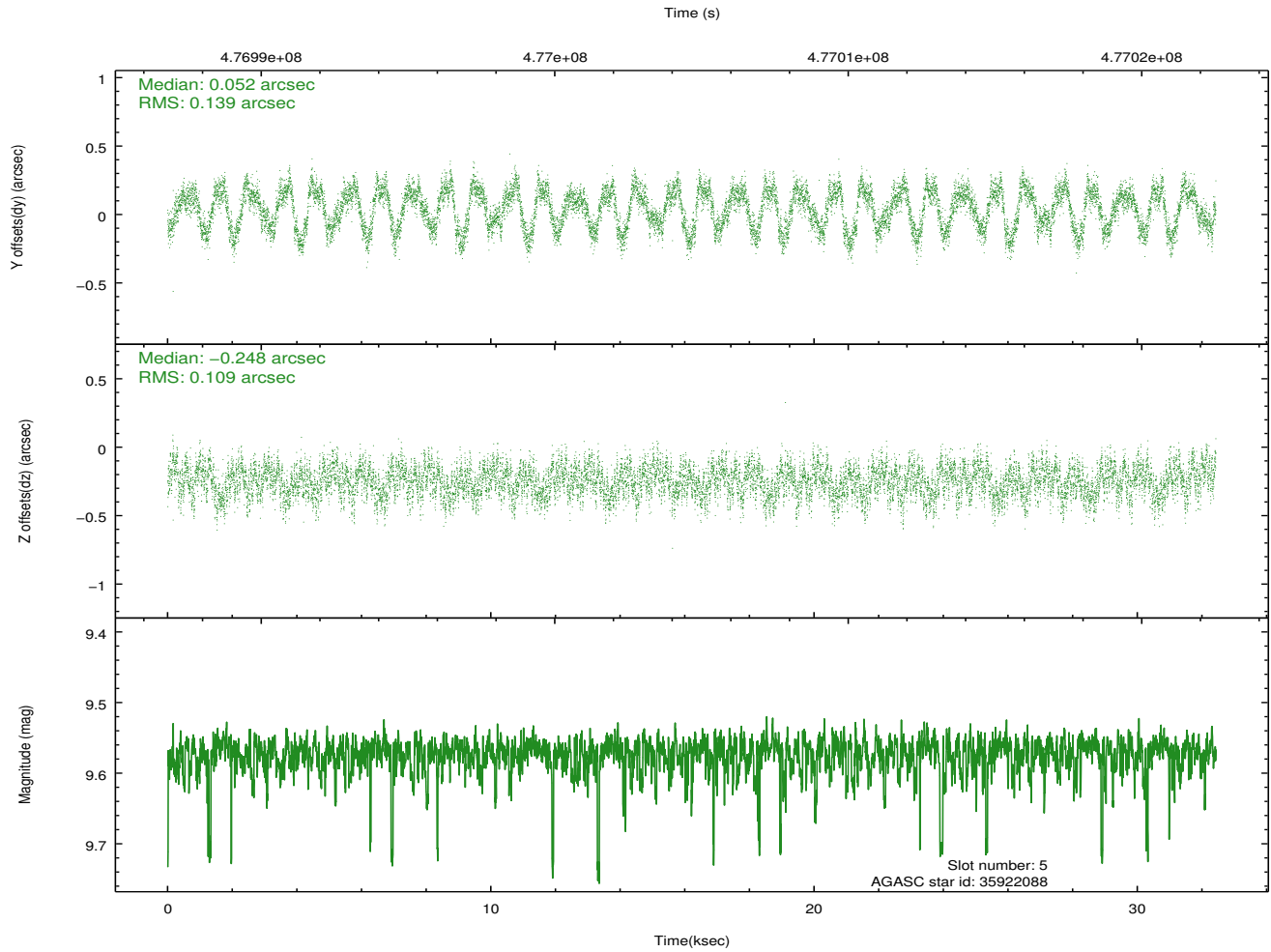
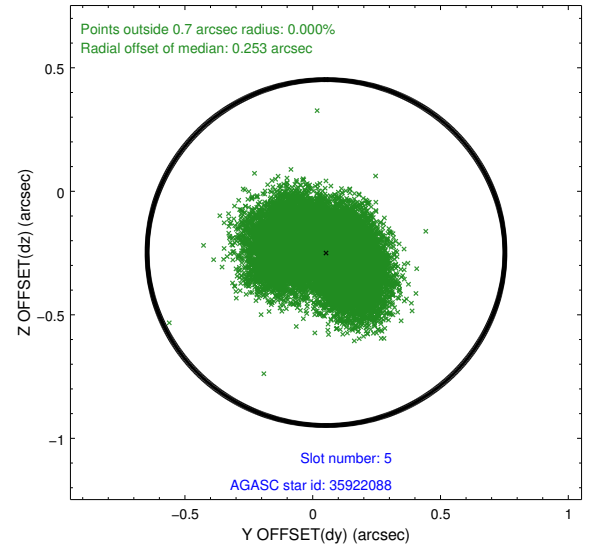
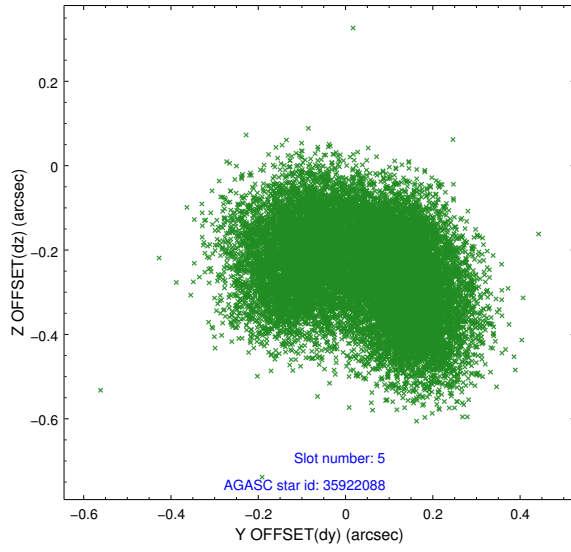
2.4.1 Slot 3



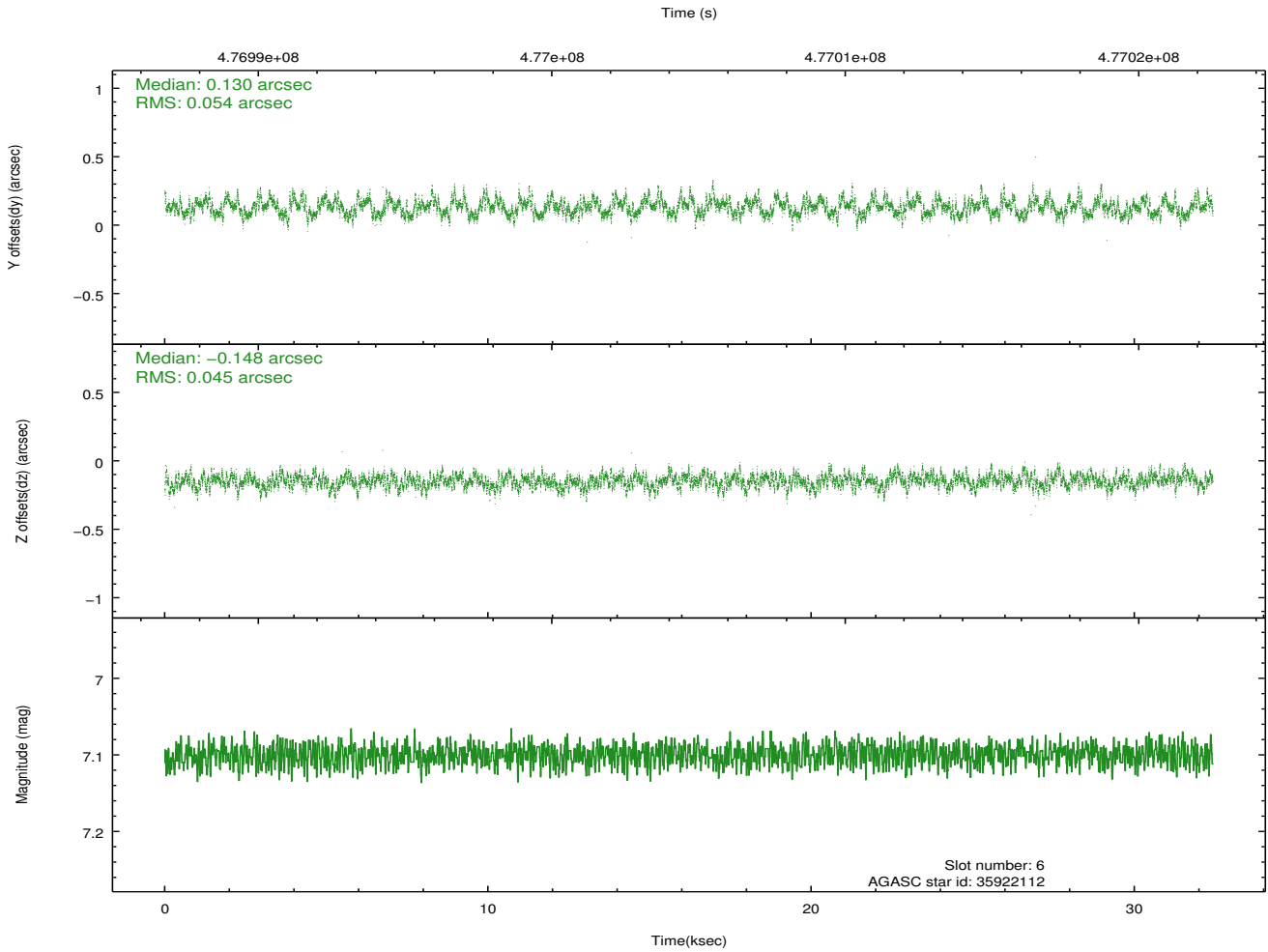
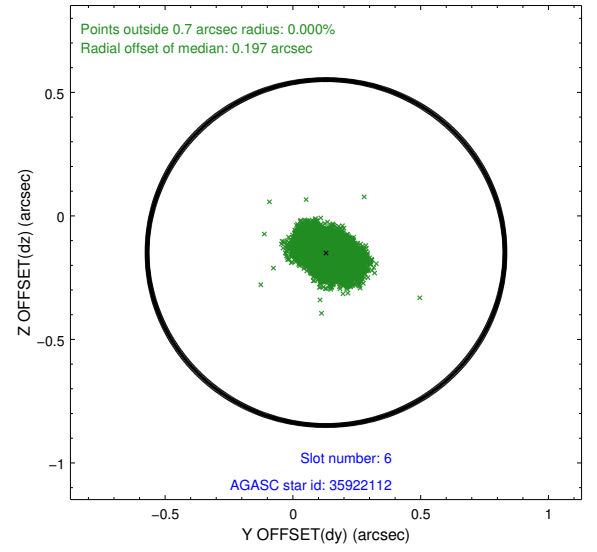
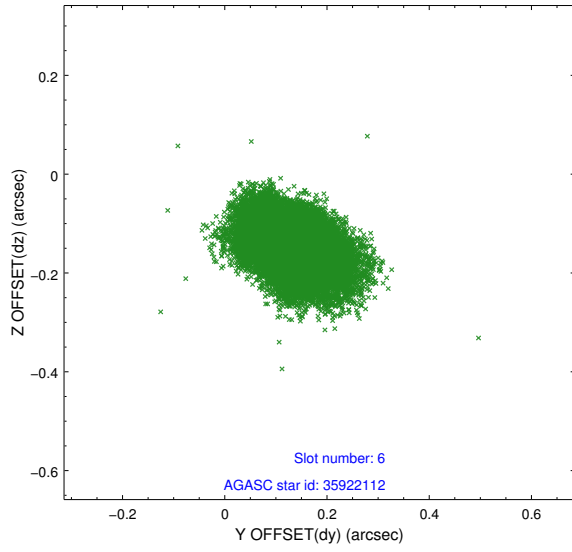
2.4.2 Slot 4



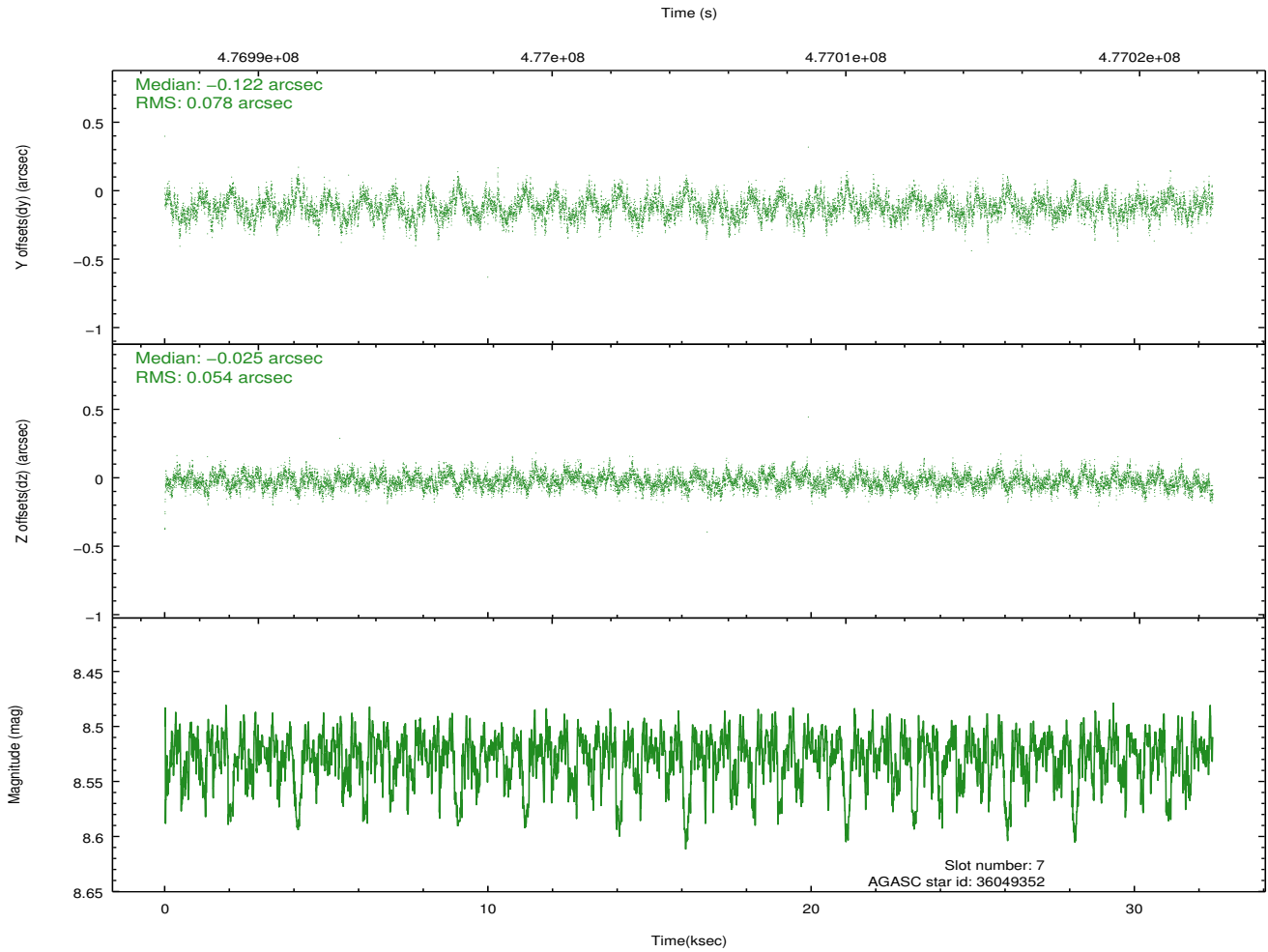
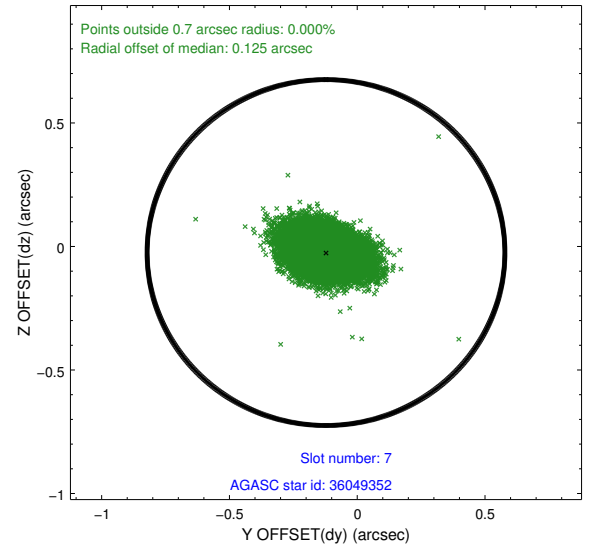
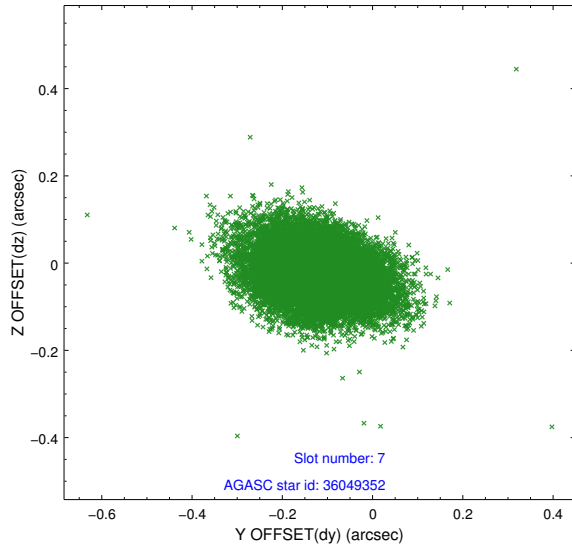
2.4.3 Slot 5



2.4.4 Slot 6

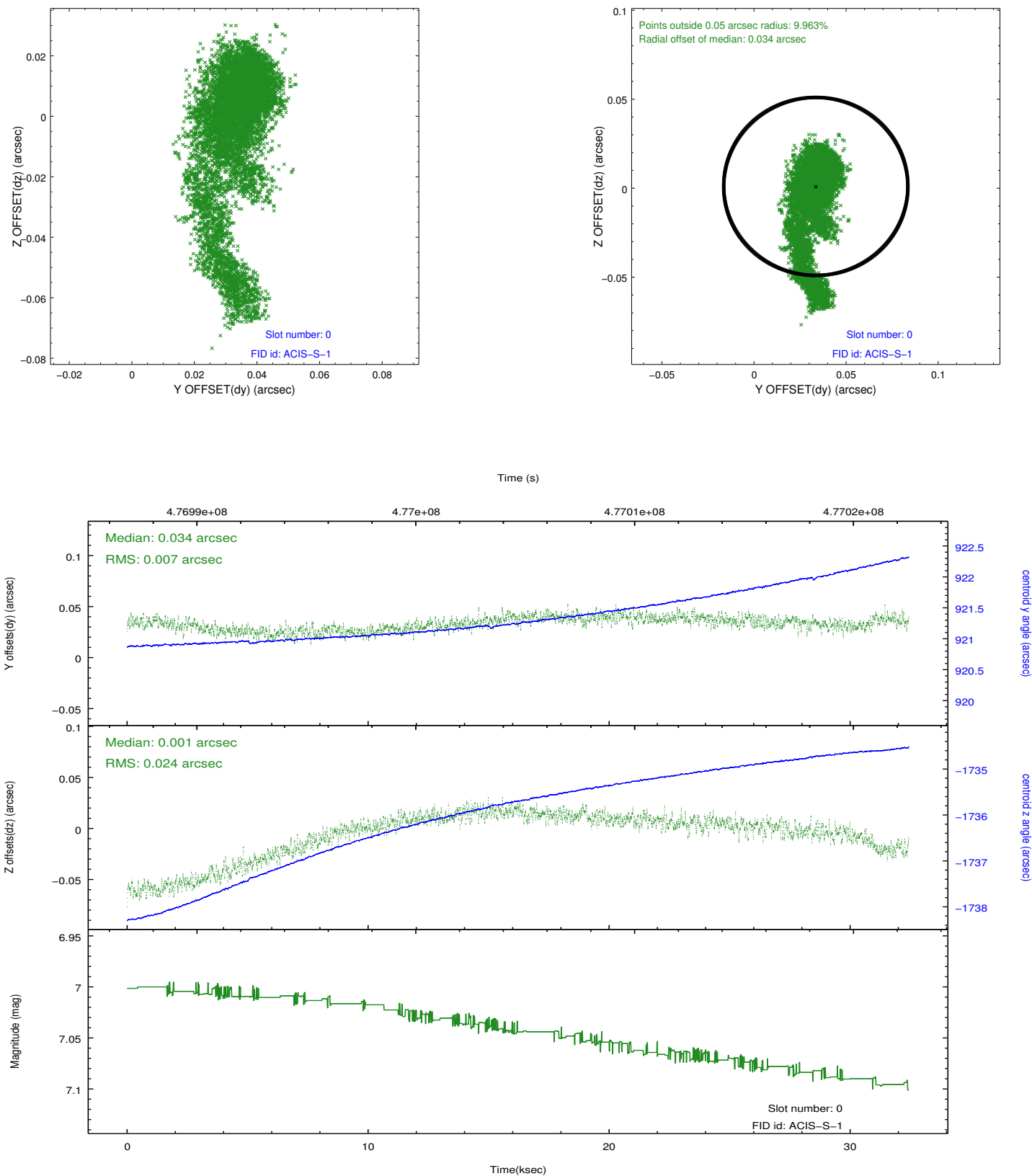


2.4.5 Slot 7

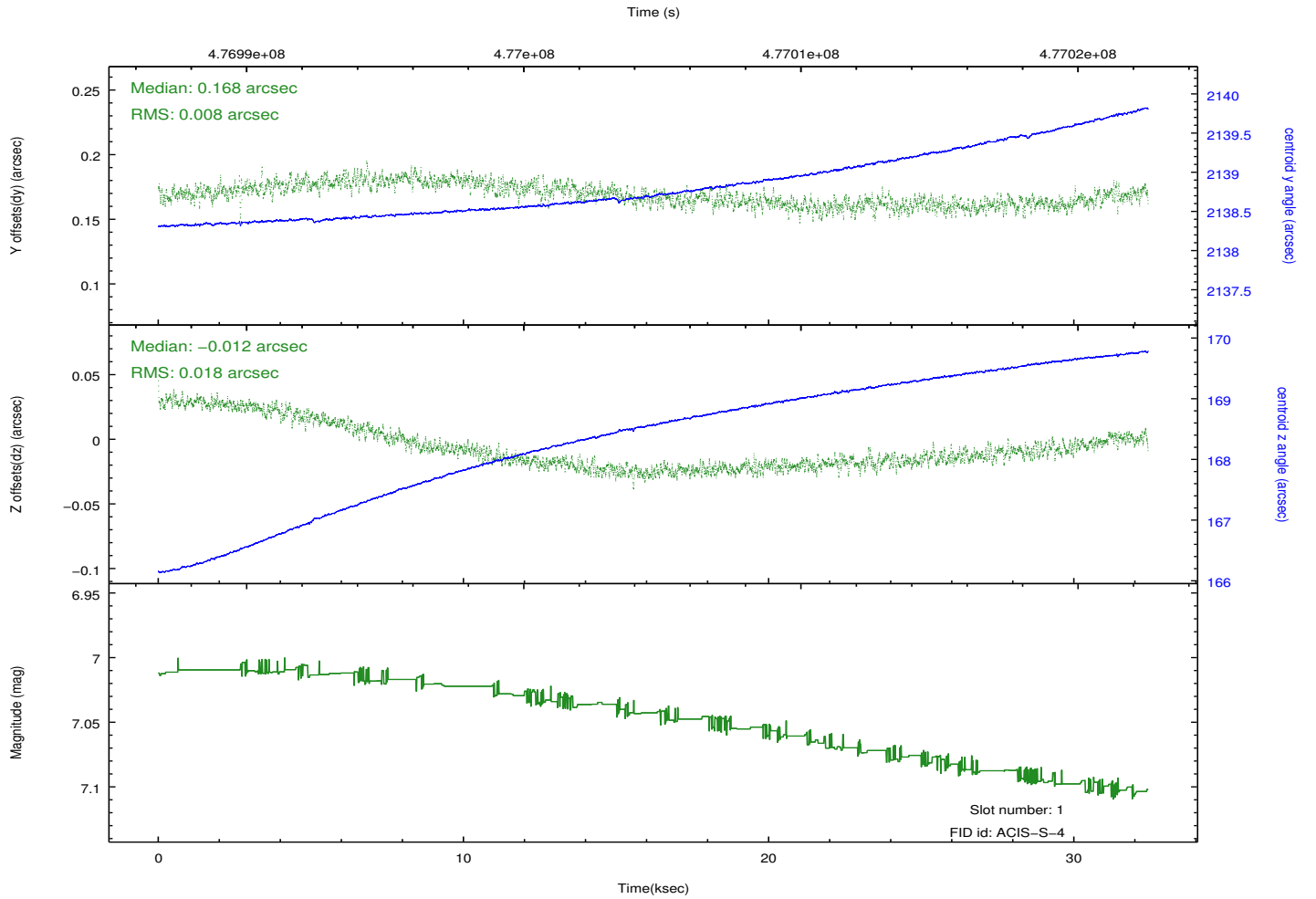
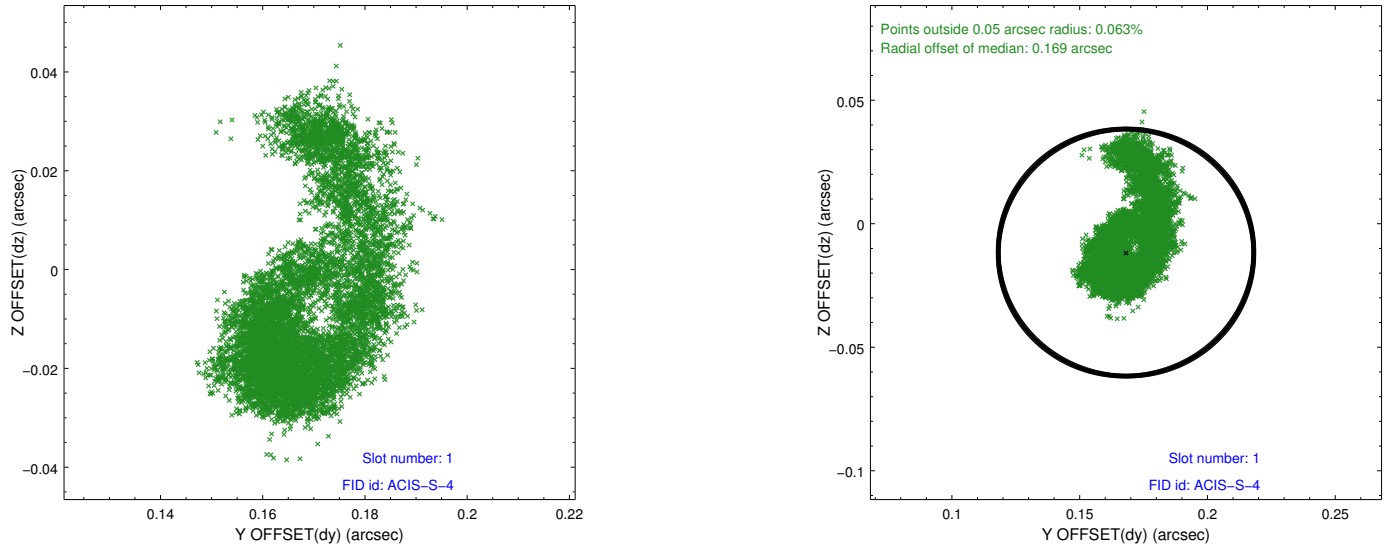


2.5 FID Slots

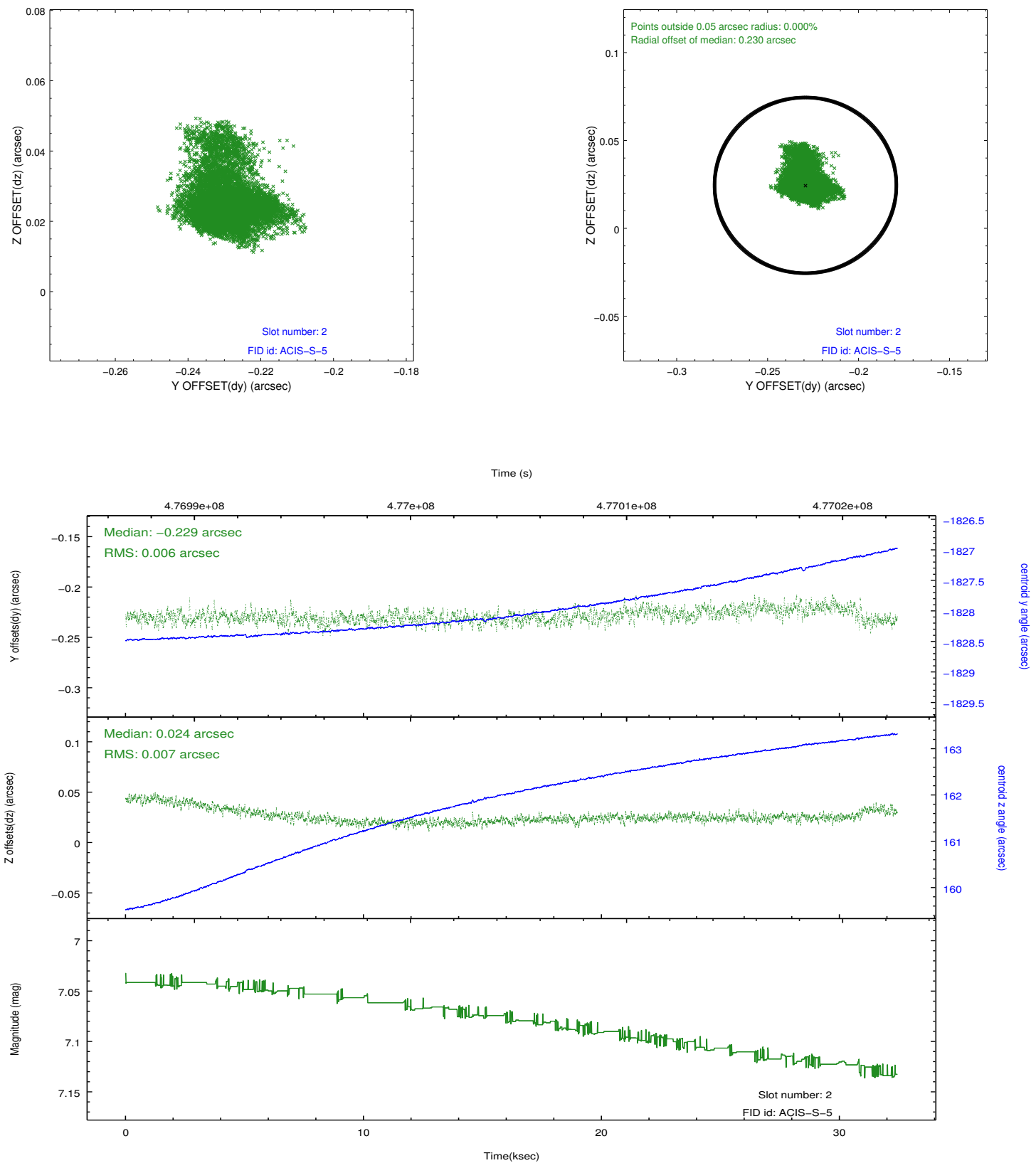
2.5.1 Slot 0



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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.36354866147

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.