

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14958 - L2 Version 2
Chandra X-Ray Center

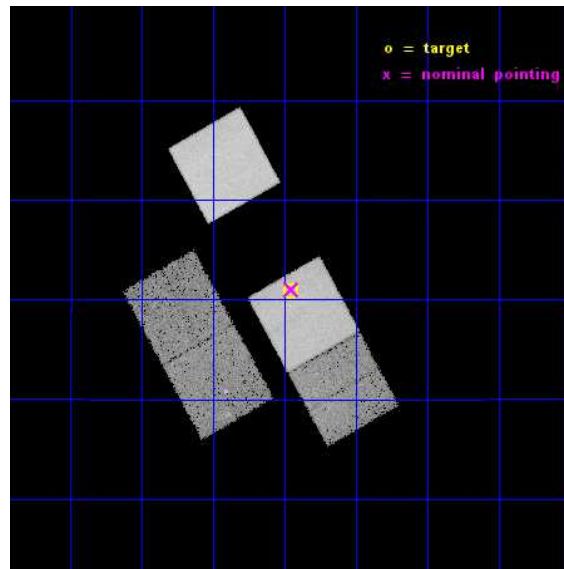
L2 Processing Date : Nov 30 2014

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

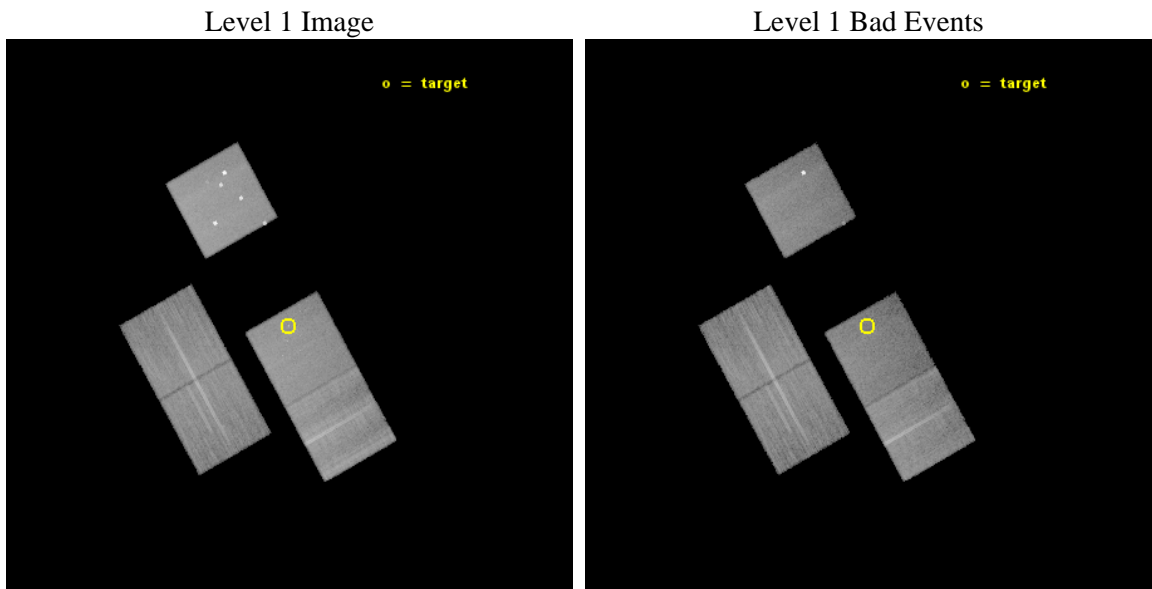
seq_num	702767	Sequence number
obs_id	14958	Observation id
title	Determination of Dark Matter Fractions and M/L in Elliptical Galaxies	Proposal title
observer	Prof. David Pooley	Principal investigator
object	RX J0911+0551	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	137.864583	Observer's specified target RA [deg]
dec_targ	5.847778	Observer's specified target Dec [deg]
ra_nom	137.86313542646	Nominal RA [deg]
dec_nom	5.8504394146837	Nominal Dec [deg]
roll_nom	60.88706154375	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34062.800261974	Sum of GTIs [s]
livetime	33617.744699883	Livetime [s]
ontime2	34056.518130958	Sum of GTIs [s]
ontime3	34059.659201622	Sum of GTIs [s]
ontime5	34062.800261974	Sum of GTIs [s]
ontime7	34062.800261974	Sum of GTIs [s]
ontime8	34059.659211695	Sum of GTIs [s]
l2events	266691	Number of level 2 events



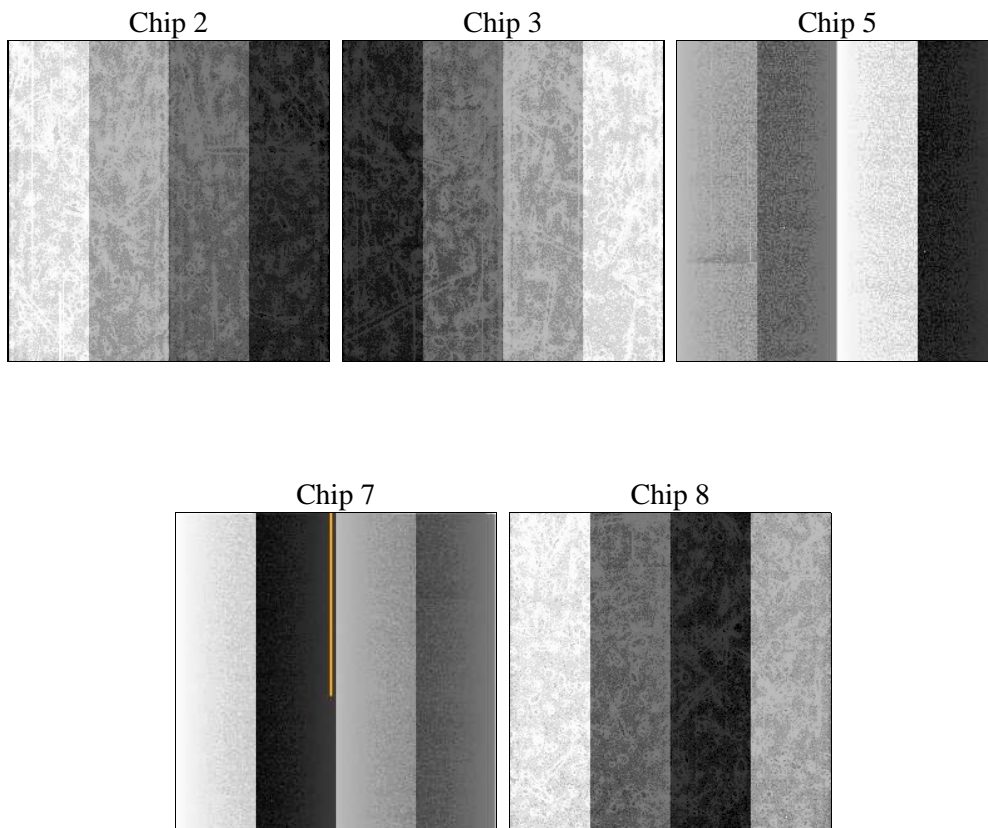
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	34062.800261974	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	34056.518130958	Sum of GTIs [s]
date	2014-12-01T00:49:36	Date and time of file creation	ontime3	34059.659201622	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	34062.800261974	Sum of GTIs [s]
			ontime7	34062.800261974	Sum of GTIs [s]
			ontime8	34059.659211695	Sum of GTIs [s]
			l1events	1038046	Number of level 1 events

2.1.4 Events

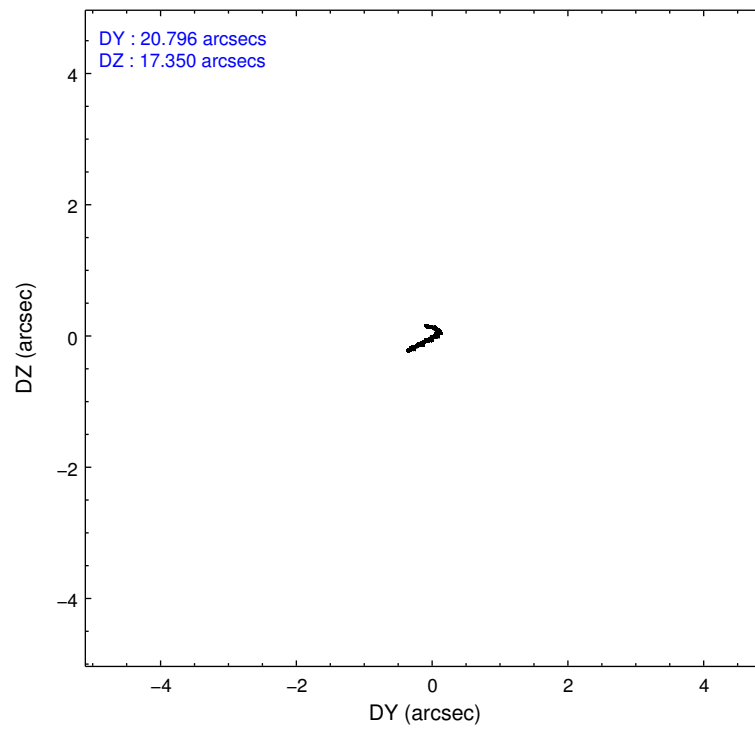
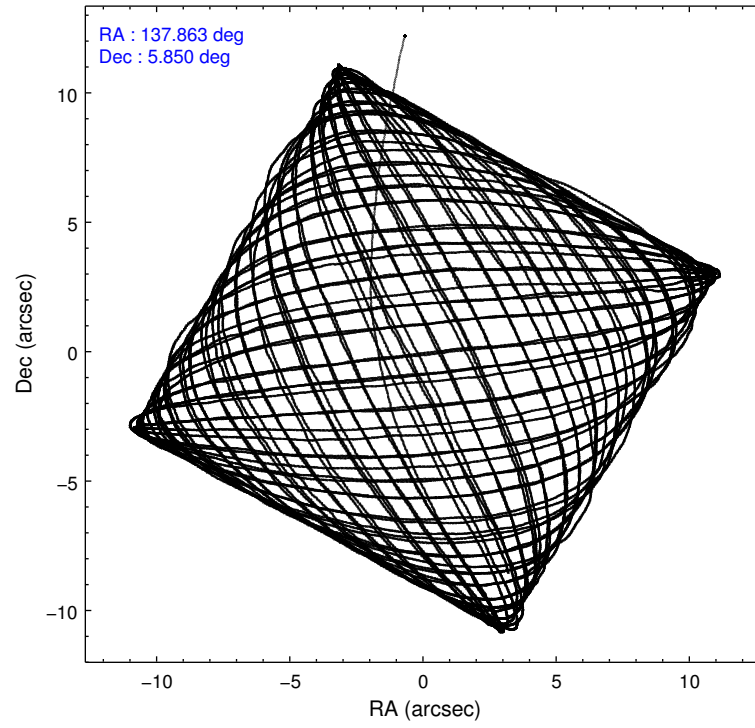
	ccd 2	ccd 3	ccd 5	ccd 7	ccd 8
level 1 events	166410	165969	285389	200498	219780
rejected events	147894	147301	134368	105847	160332
rejected %	88%	88%	47%	52%	72%

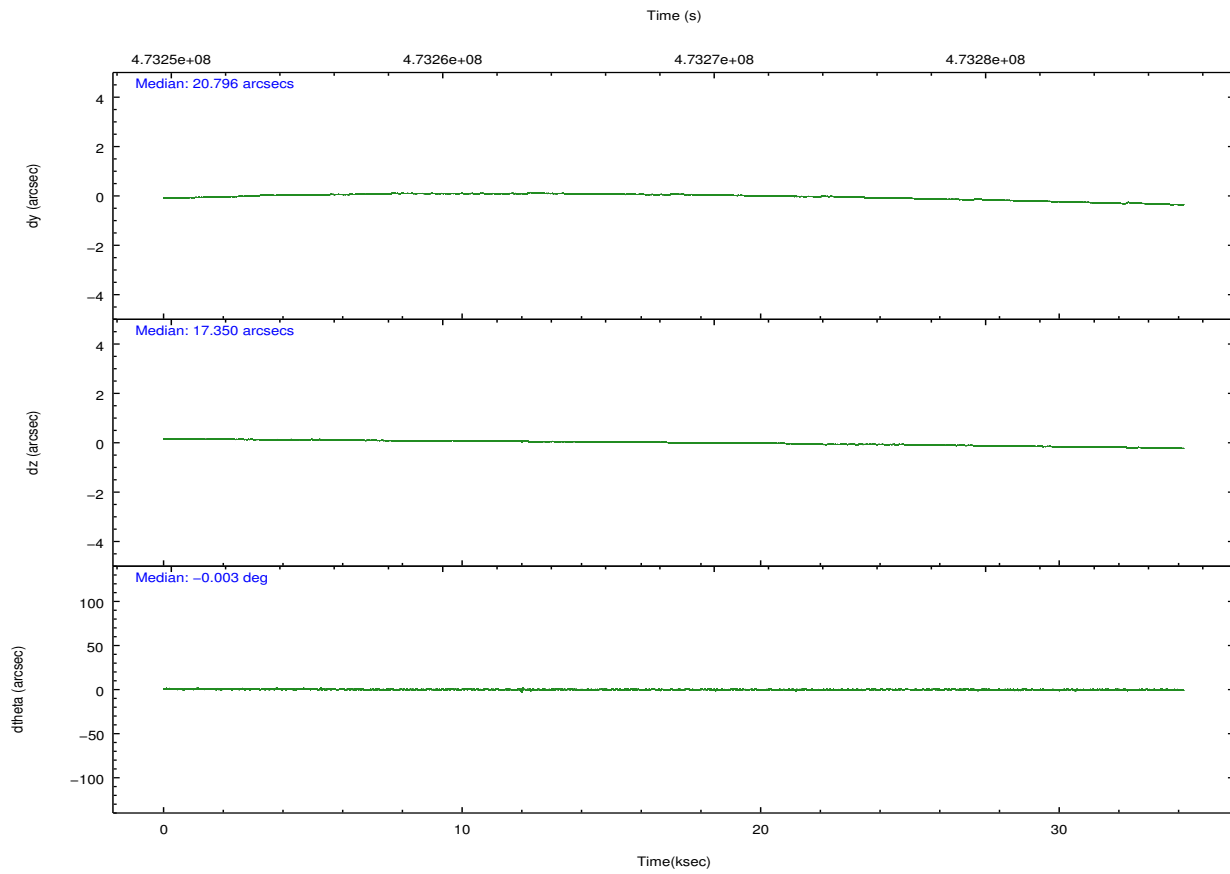
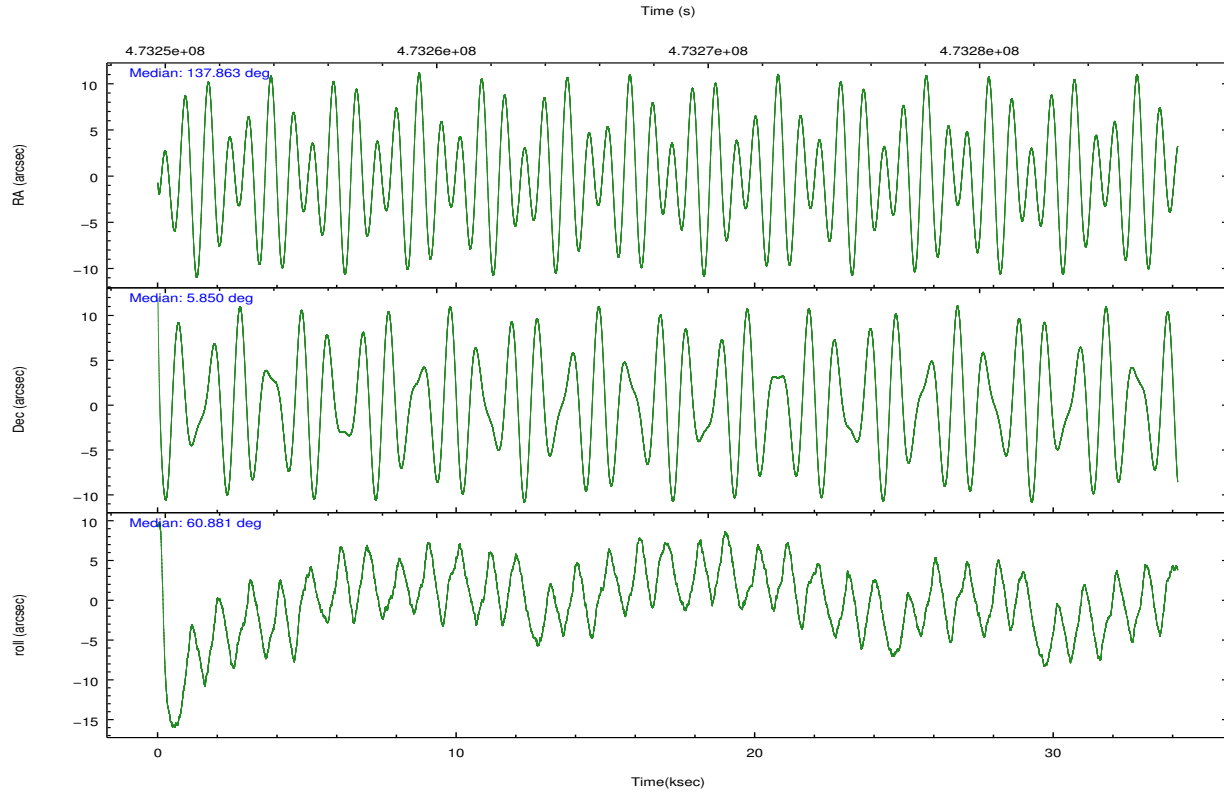
	ccd 2	ccd 3	ccd 5	ccd 7	ccd 8
grade 0 events	6704	6891	29091	9291	16208
	4%	4%	10%	4%	7%
grade 1 events	107	111	651	288	167
	0%	0%	0%	0%	0%
grade 2 events	4602	4159	43059	20525	14844
	2%	2%	15%	10%	6%
grade 3 events	1996	1943	5112	8392	6088
	1%	1%	1%	4%	2%
grade 4 events	1893	1959	4649	8035	5609
	1%	1%	1%	4%	2%
grade 5 events	6198	7616	22667	21089	11612
	3%	4%	7%	10%	5%
grade 6 events	3322	3717	69122	48418	16707
	1%	2%	24%	24%	7%
grade 7 events	141588	139573	111038	84460	148545
	85%	84%	38%	42%	67%

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	137.863939	137.8631354264562	CCD I2 on	O5	Y
[deg] Pointing Dec	5.823115	5.850439414683748	CCD I3 on	O4	Y
[deg] Pointing Roll	60.730354	60.88706154375037	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)	473251594.184000	473250488.57142	CCD S5 on	N	N
Observation start date	2012-12-30T10:45:27	2012-12-30T10:28:08	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	473285594.184000	473286382.02335	On-chip summing requested	N	N
Observation end date	2012-12-30T20:12:07	2012-12-30T20:26:22	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





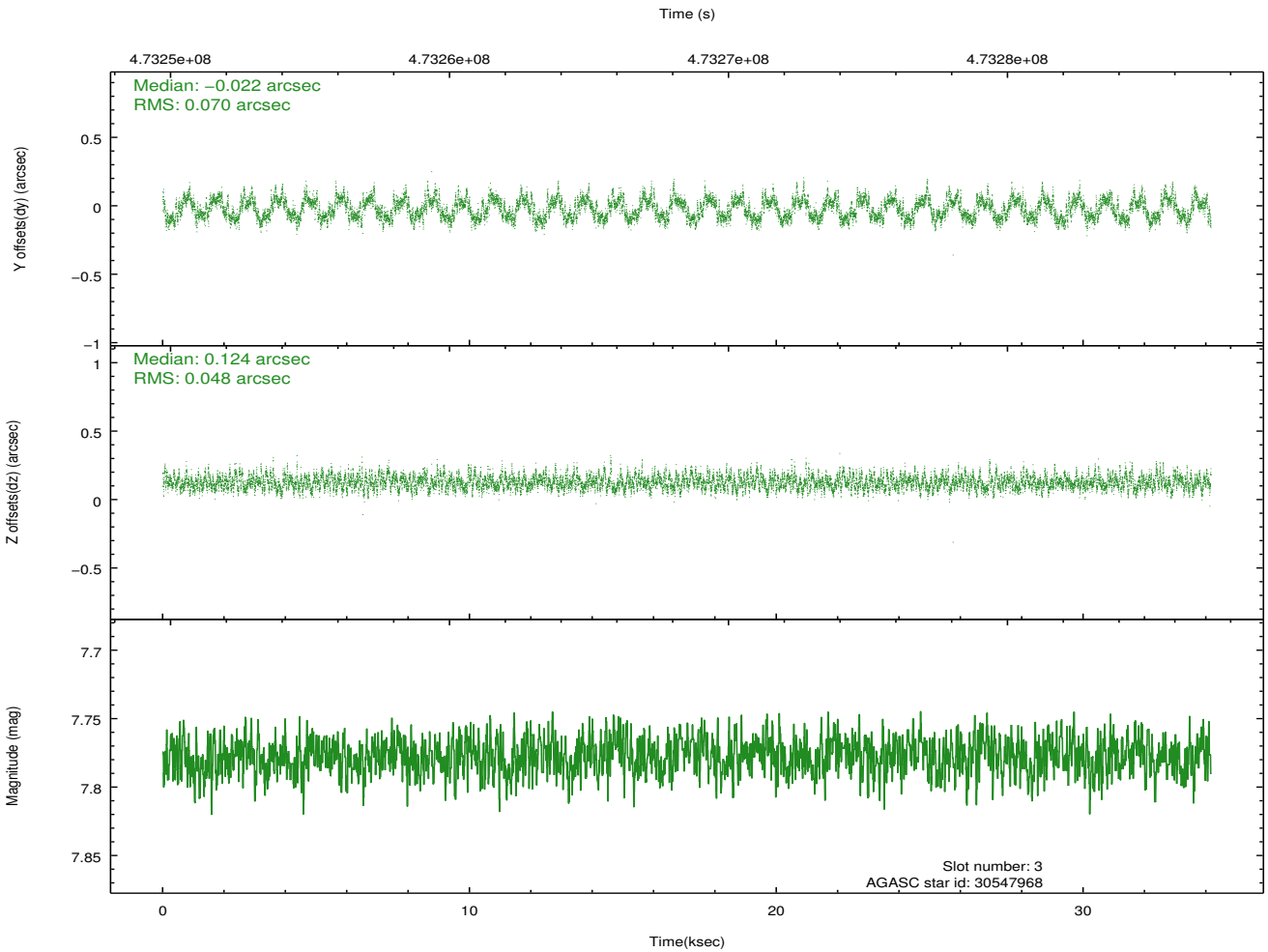
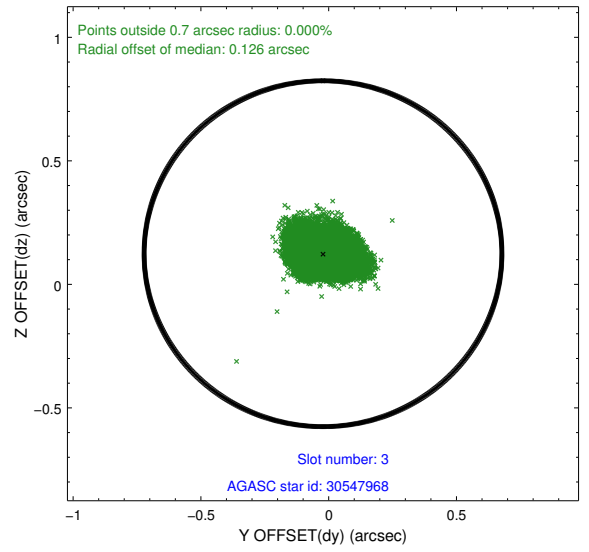
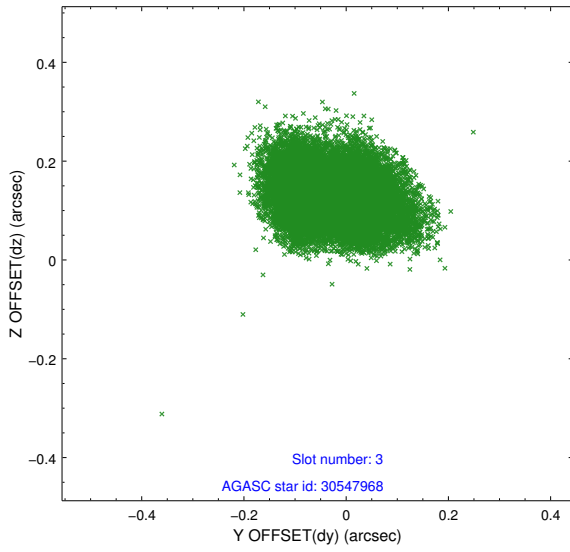
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.01	8331	-0.116	-0.057	0.008	0.013	0.000000	0.000000	-774.03	-1738.77
1	FID		ACIS-S-4	7.11	8331	0.267	0.071	0.006	0.011	0.000000	0.000000	2139.64	169.73
2	FID		ACIS-S-5	7.13	8332	-0.182	-0.006	0.007	0.012	0.000000	0.000000	-1826.85	163.45
3	GUIDE	used	30547968	7.78	16663	-0.022	0.124	0.091	0.141	138.345308	5.815524	820.34	-1516.51
4	GUIDE	used	30549912	8.43	16661	-0.018	-0.120	0.076	0.122	138.400116	5.952578	1346.69	-1446.30
5	GUIDE	used	30551192	6.63	16664	0.156	0.058	0.102	0.157	137.981814	5.468631	-906.54	-991.31
6	GUIDE	used	30552432	9.44	16642	-0.094	-0.176	0.155	0.237	137.688606	6.352959	1357.49	1479.99
7	GUIDE	used	30553392	8.01	16660	-0.020	0.114	0.093	0.150	138.519032	5.919513	1451.34	-1875.42

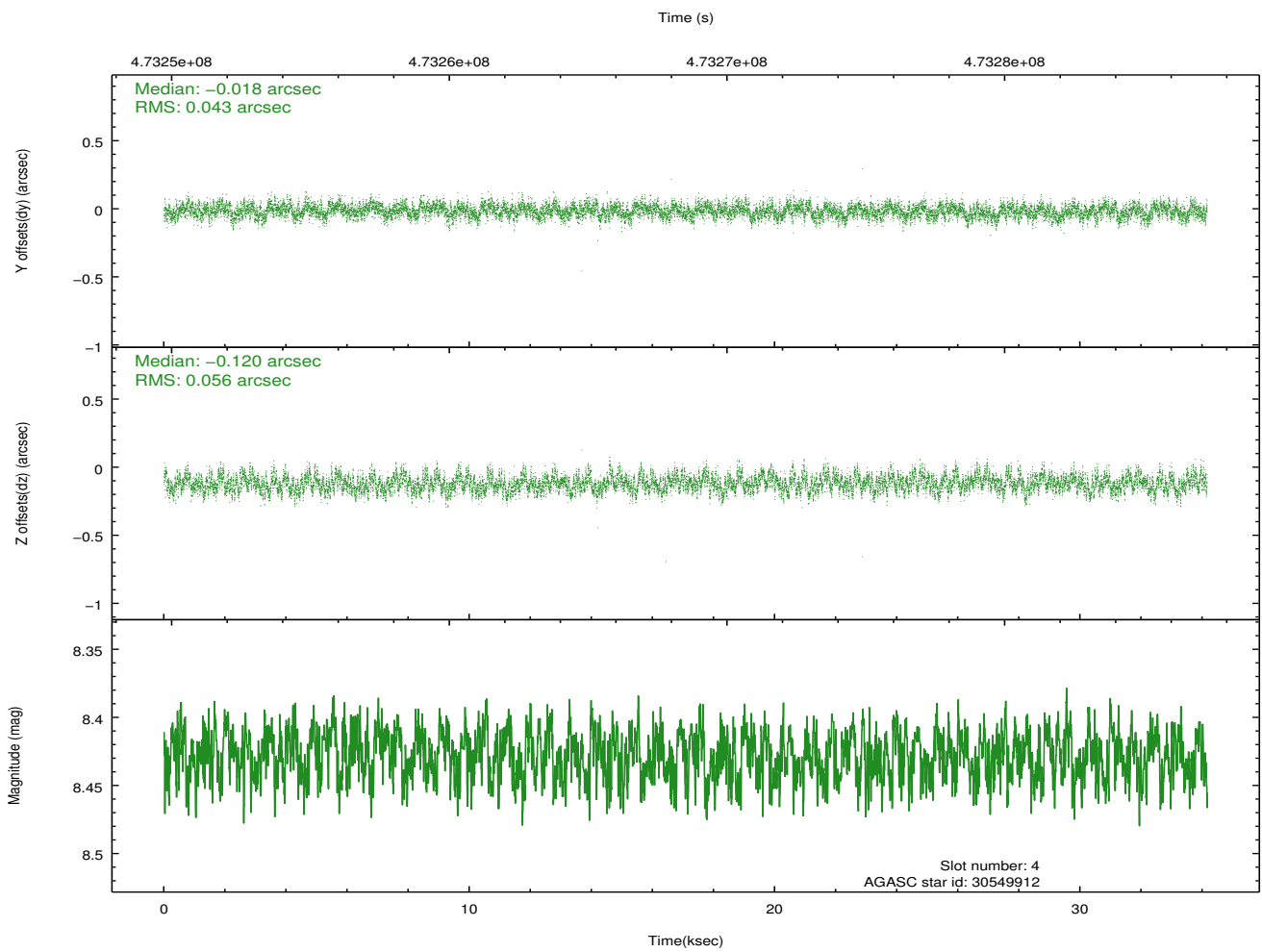
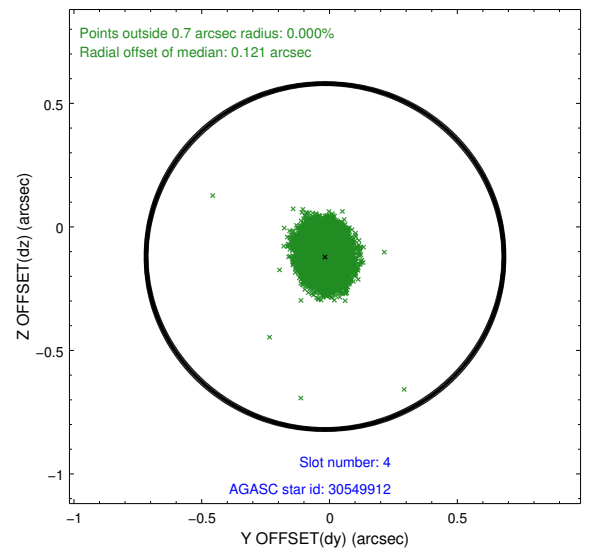
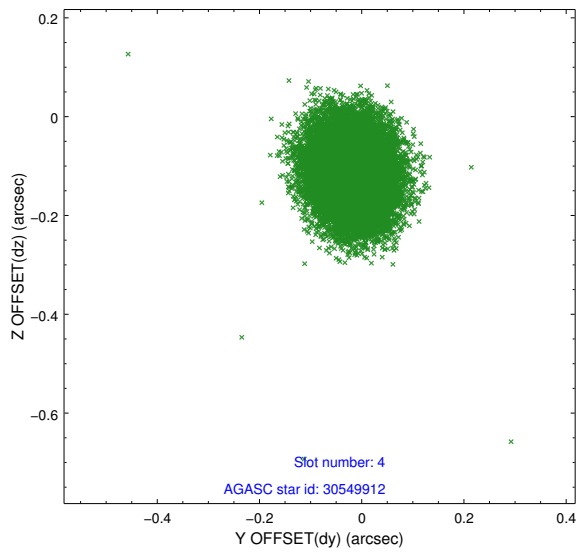
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2.4 Star Slots

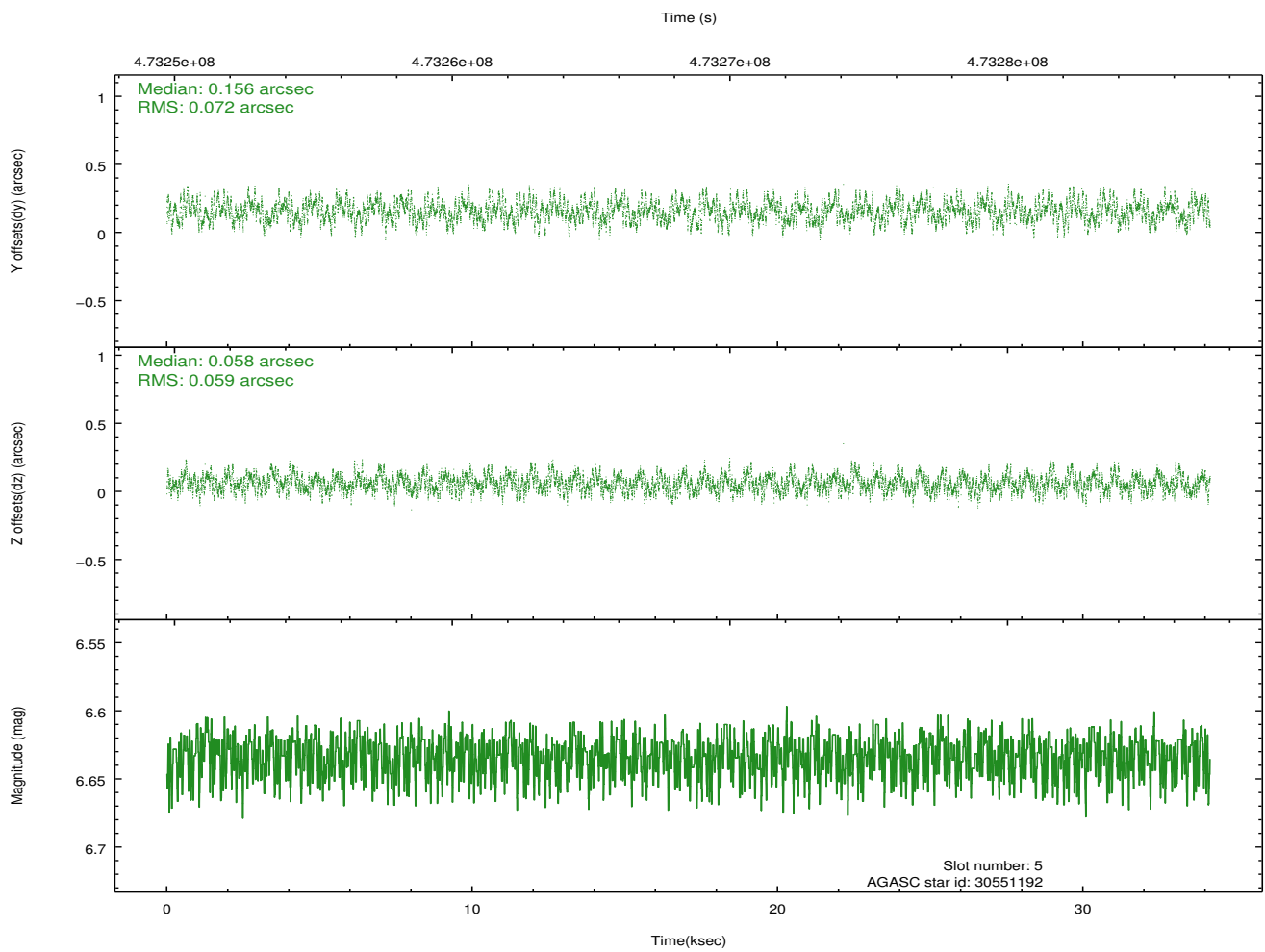
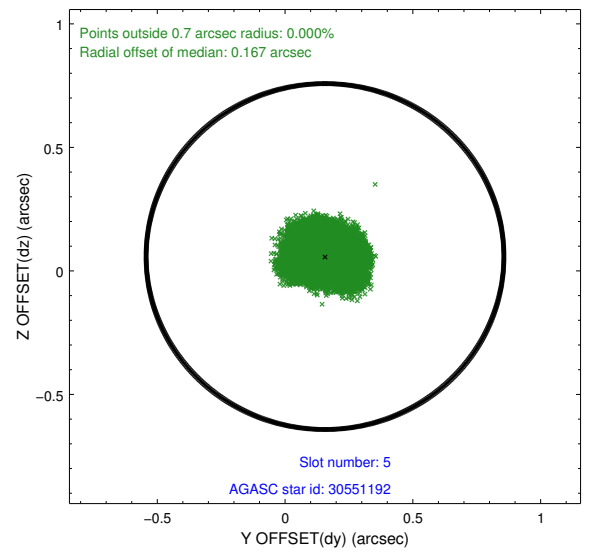
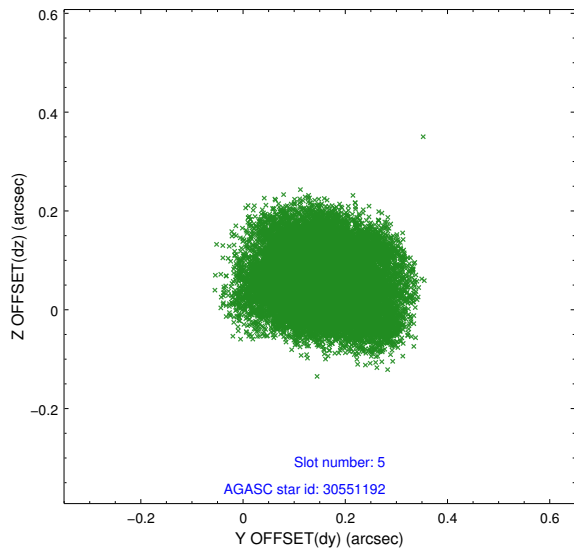
2.4.1 Slot 3



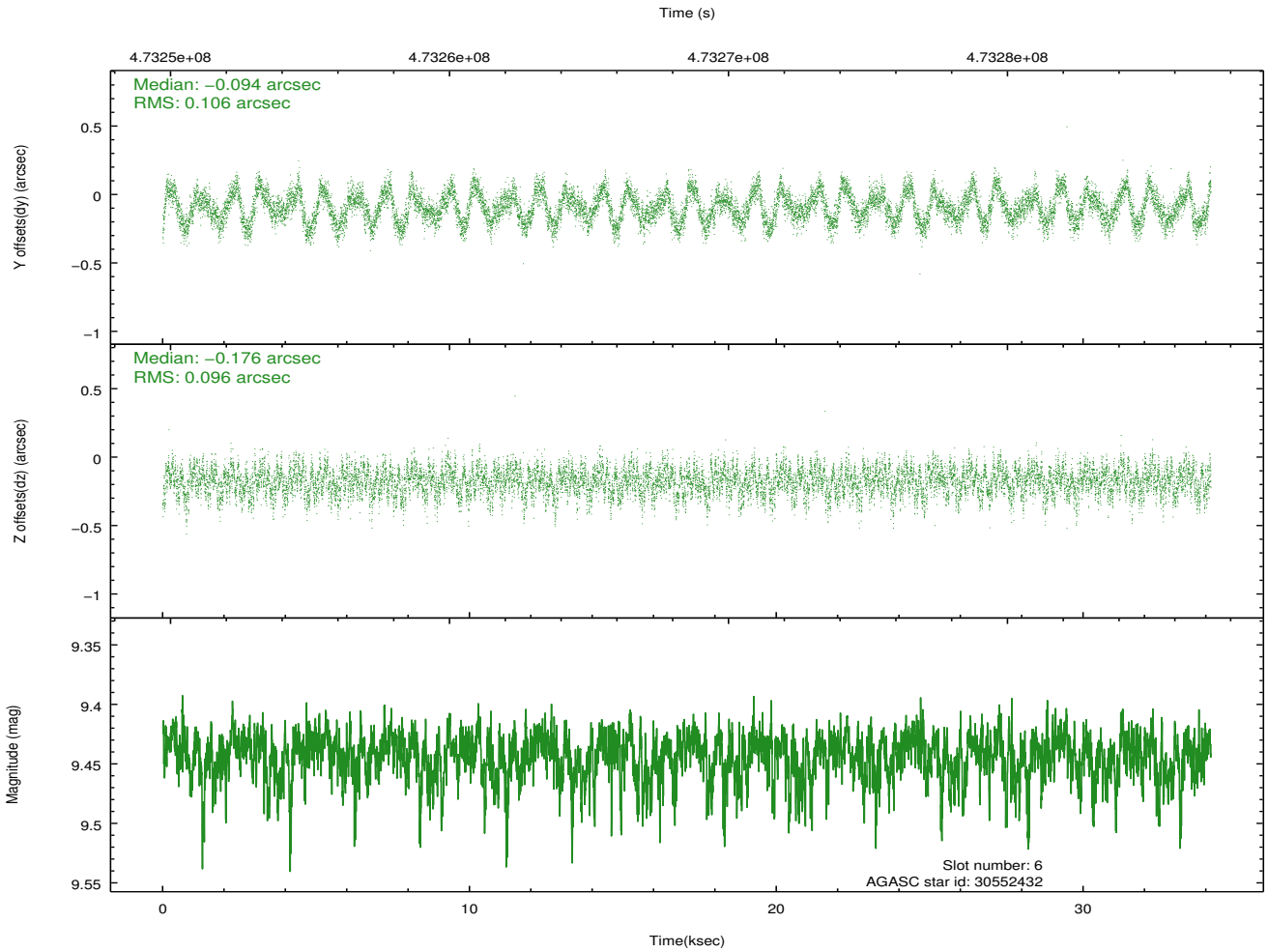
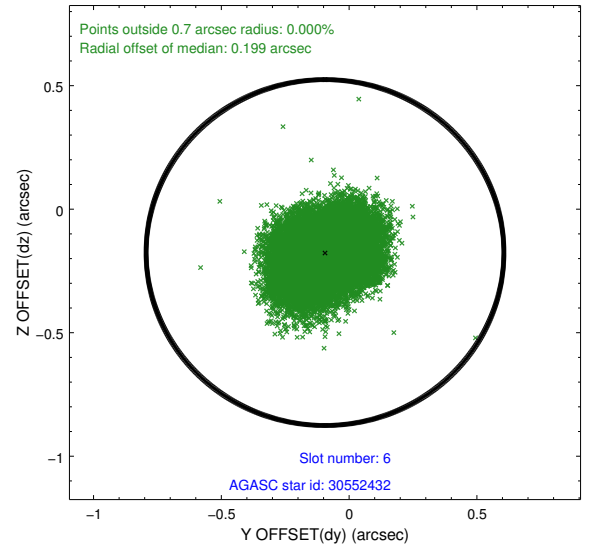
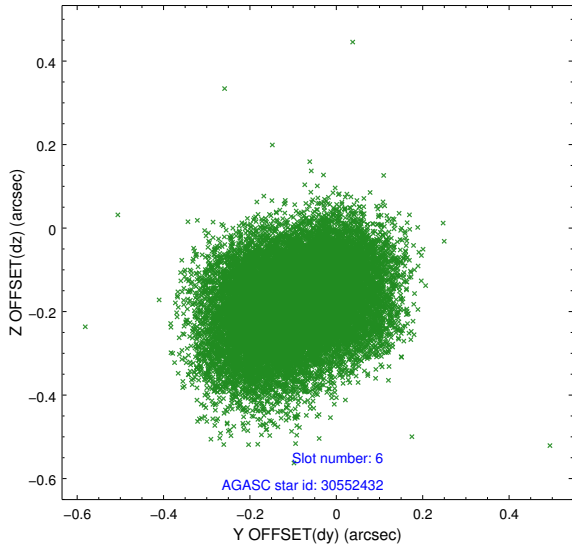
2.4.2 Slot 4



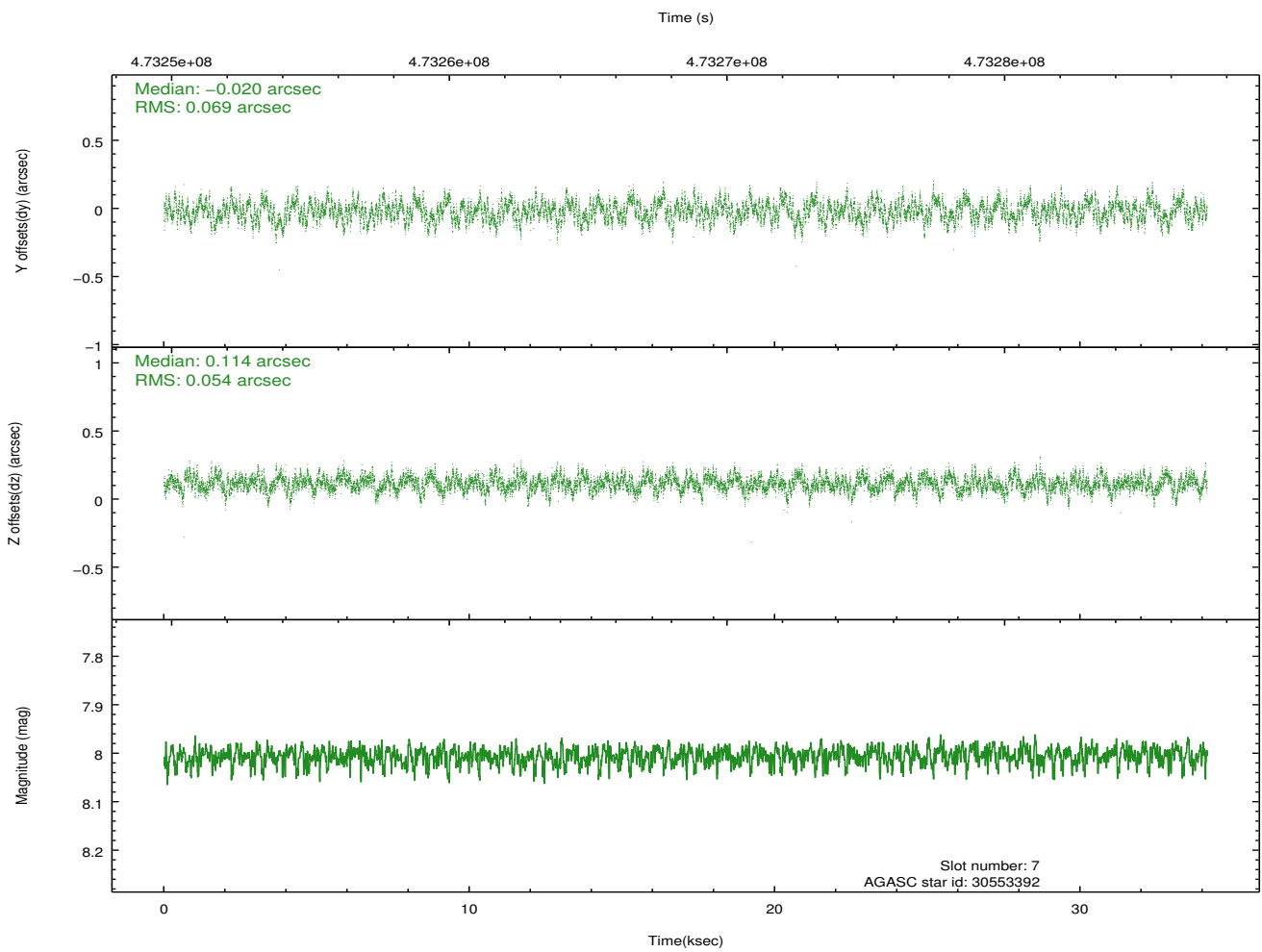
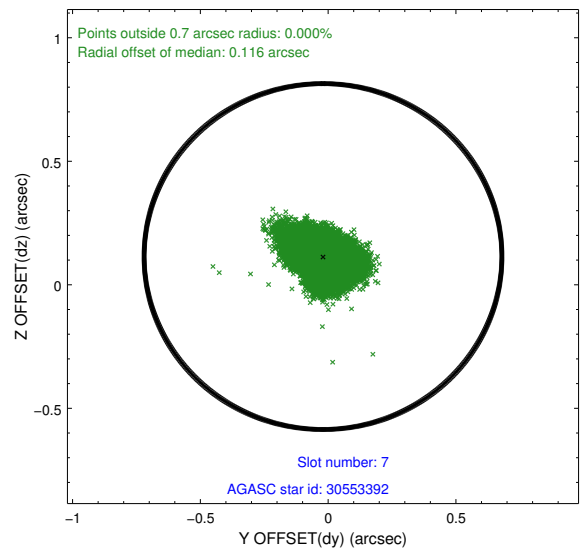
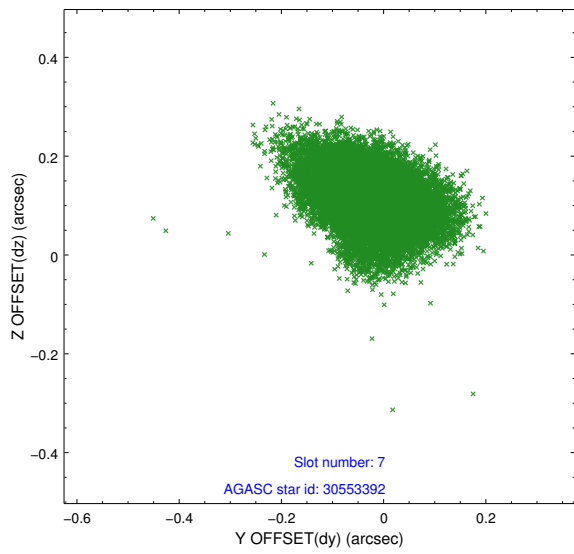
2.4.3 Slot 5



2.4.4 Slot 6

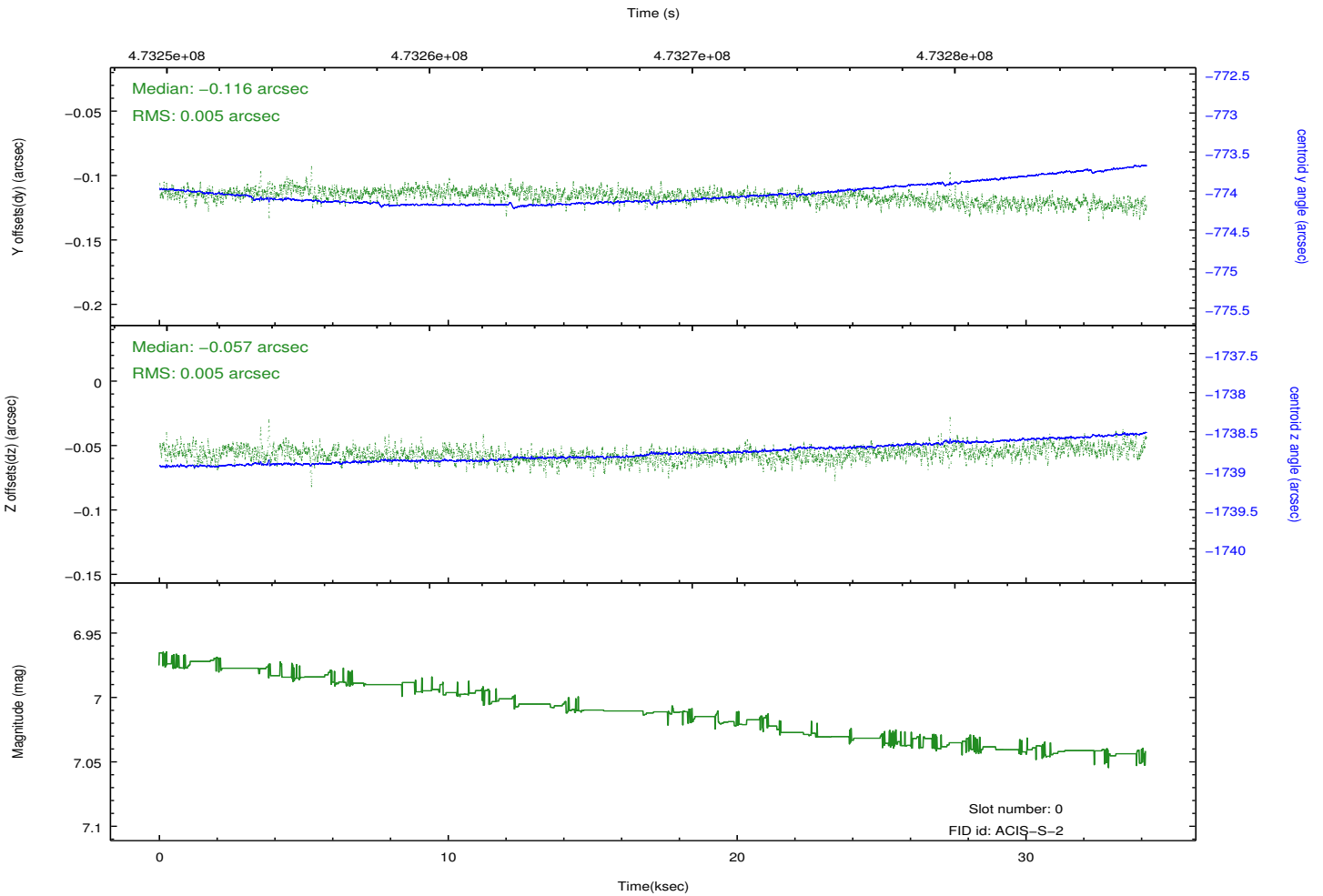
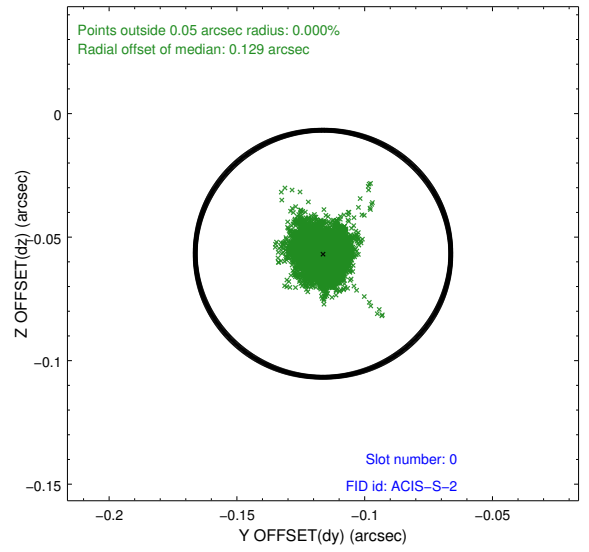
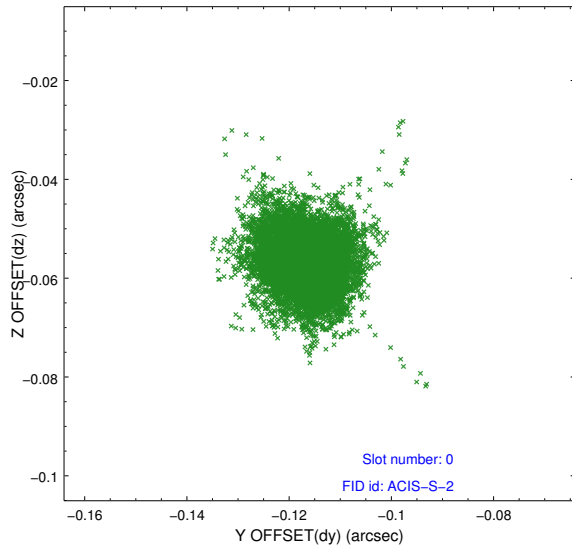


2.4.5 Slot 7

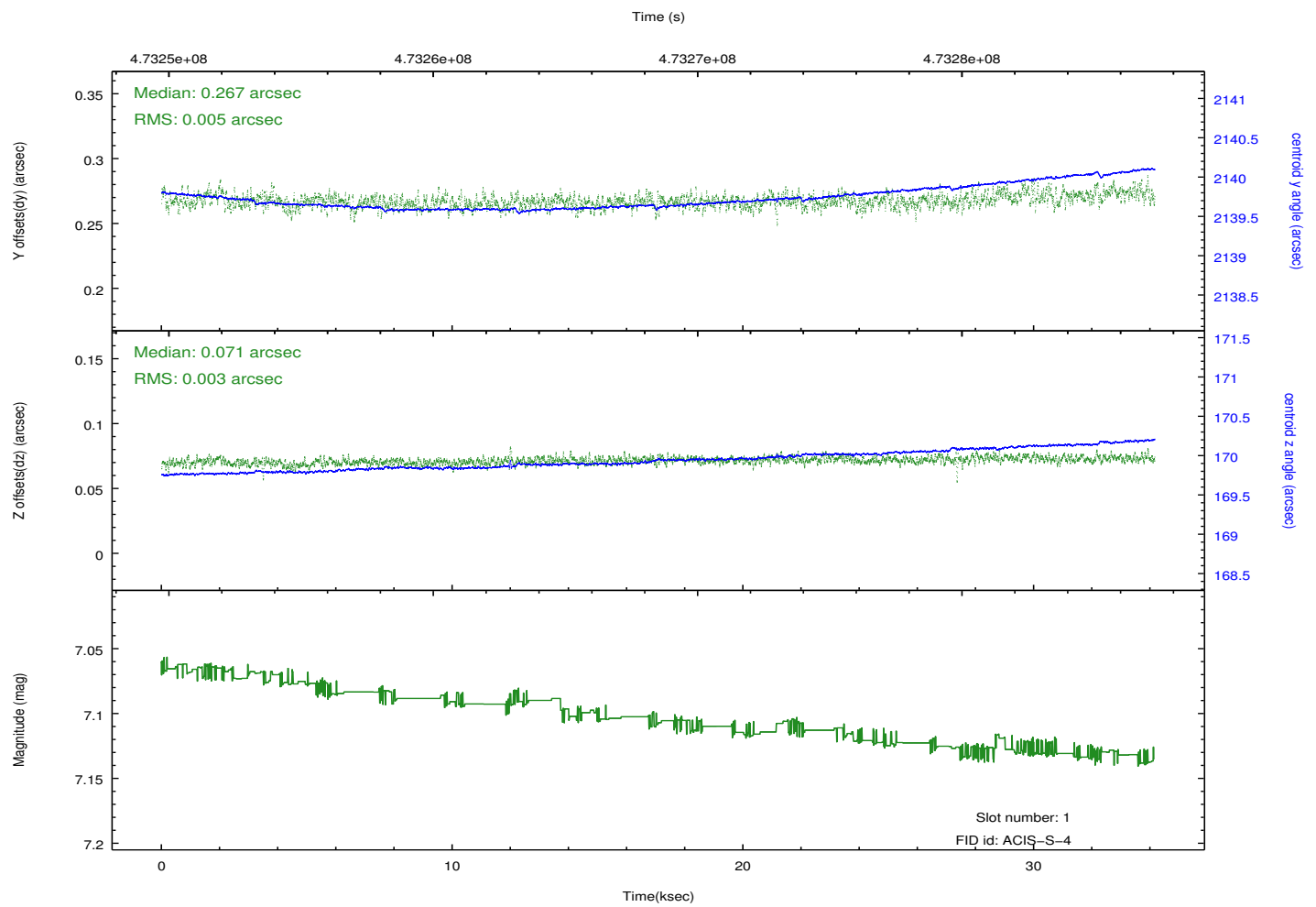
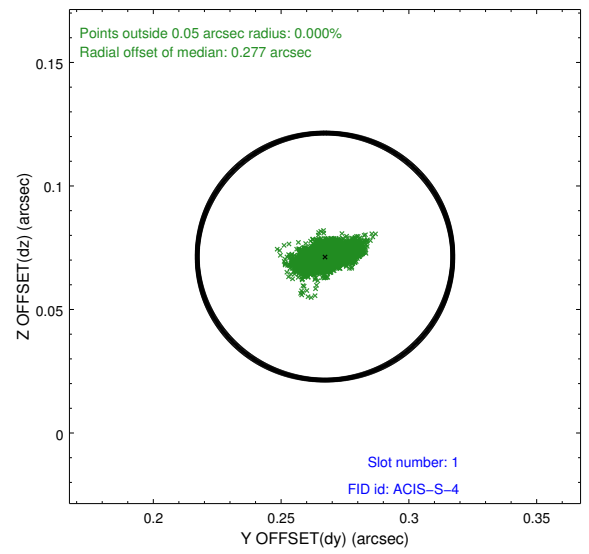
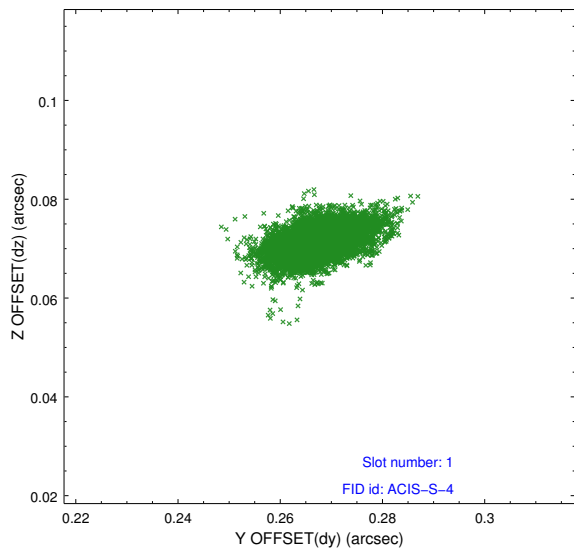


2.5 FID Slots

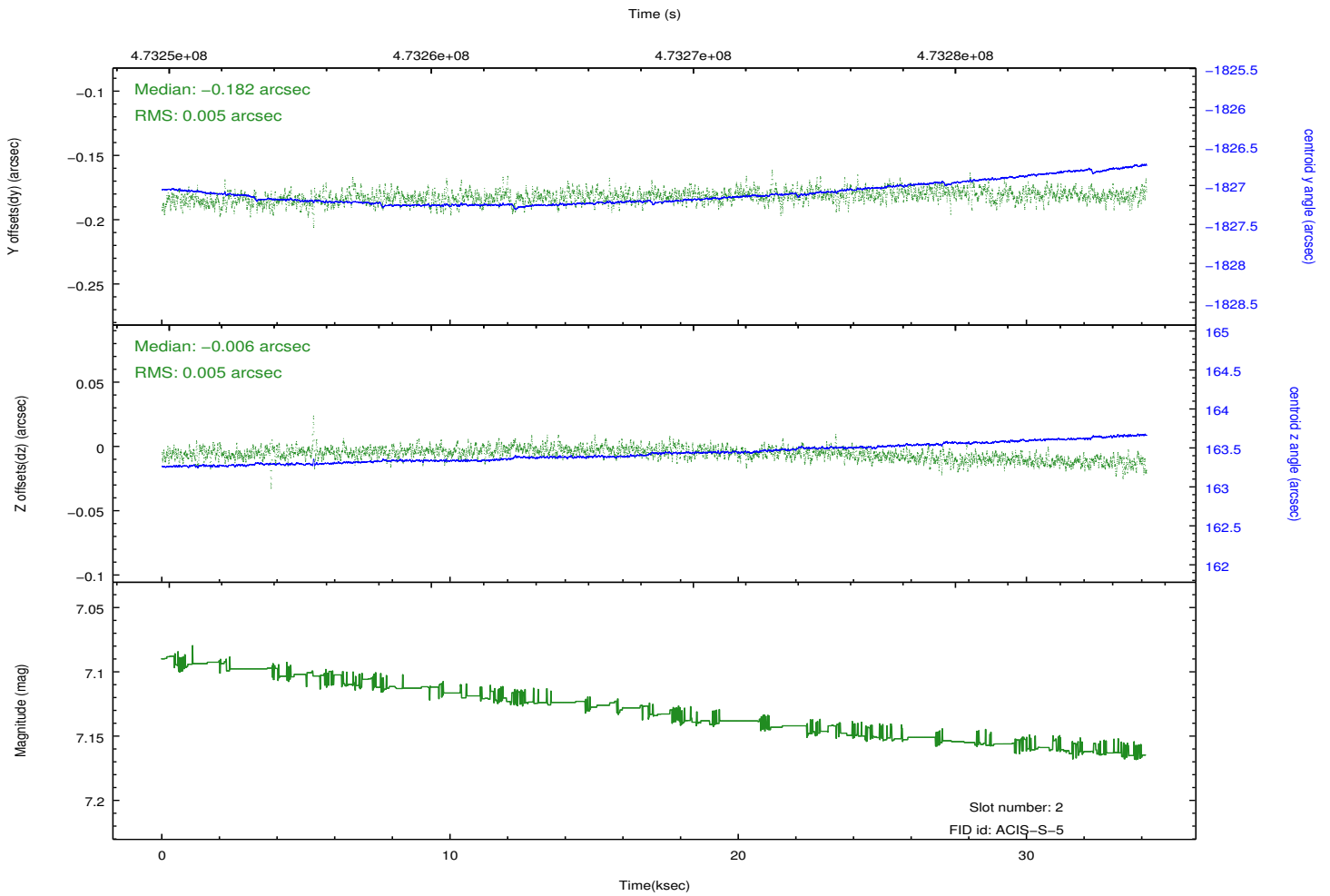
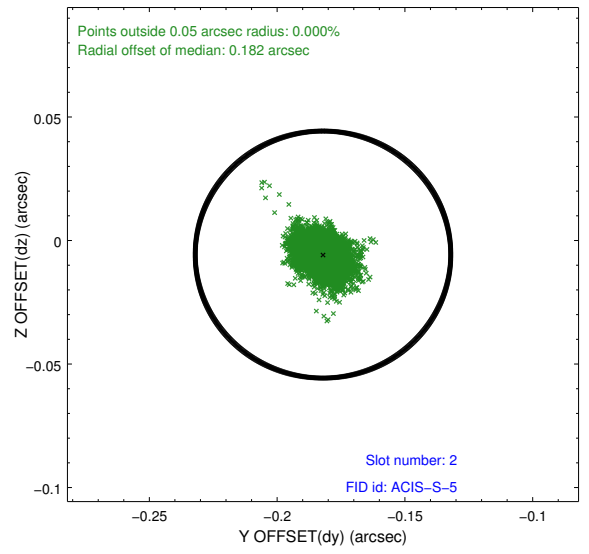
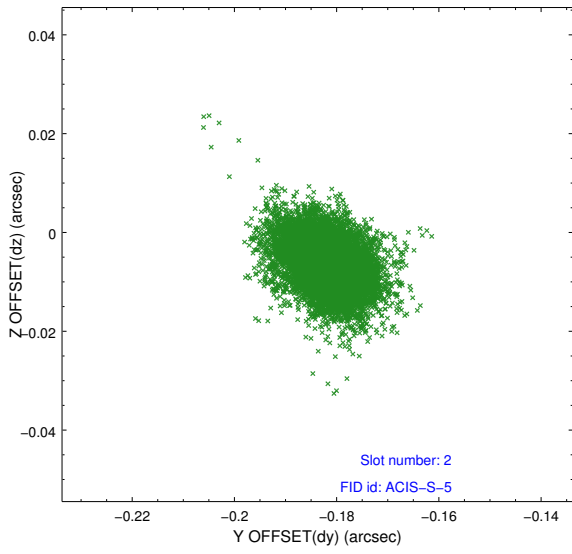
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.062800261974

A.2 Comments

Optional chip S2 was dropped.

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.