

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14495 - L2 Version 2
Chandra X-Ray Center

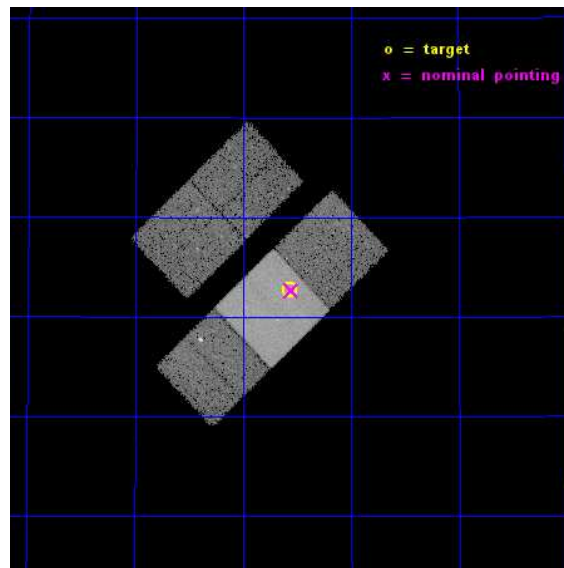
L2 Processing Date : Dec 1 2014

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1 Front

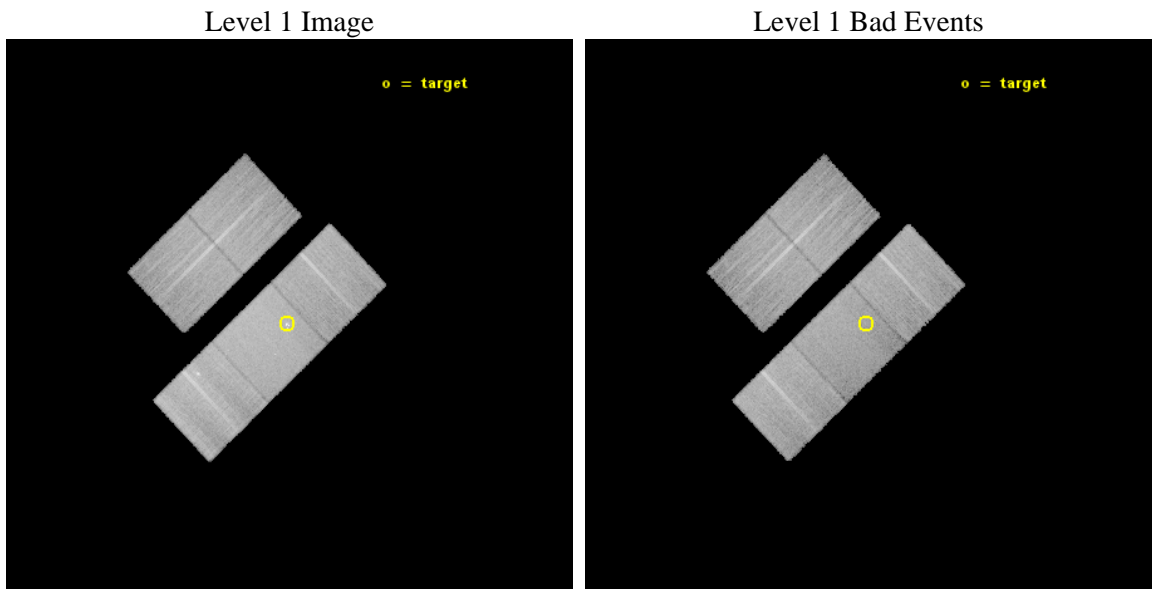
seq_num	702732	Sequence number
obs_id	14495	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.13857559734	Nominal RA [deg]
dec_nom	41.21150545911	Nominal Dec [deg]
roll_nom	136.11845335697	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25065.435410559	Sum of GTIs [s]
livetime	24737.937044015	Livetime [s]
ontime2	25065.271250546	Sum of GTIs [s]
ontime3	25065.353330553	Sum of GTIs [s]
ontime6	25062.253310204	Sum of GTIs [s]
ontime7	25065.435410559	Sum of GTIs [s]
ontime8	25062.171260178	Sum of GTIs [s]
l2events	135228	Number of level 2 events



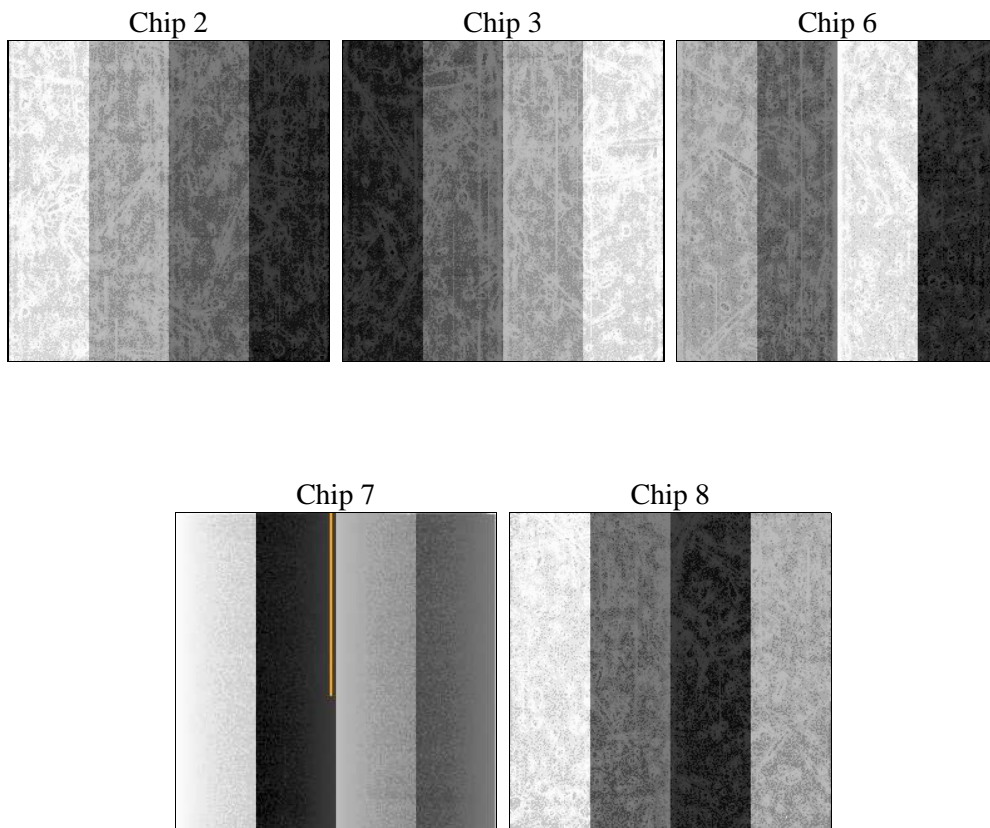
2 OBI

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	Processing system revision	ontime	25065.435410559	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	25065.271250546	Sum of GTIs [s]
date	2014-12-01T12:05:31	Date and time of file creation	ontime3	25065.353330553	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25062.253310204	Sum of GTIs [s]
			ontime7	25065.435410559	Sum of GTIs [s]
			ontime8	25062.171260178	Sum of GTIs [s]
			l1events	772111	Number of level 1 events

2.1.4 Events

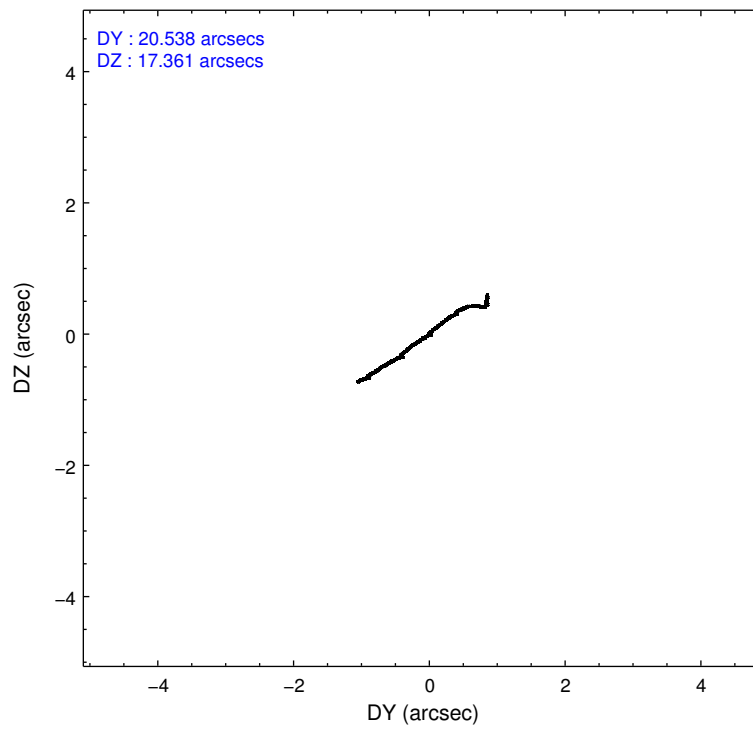
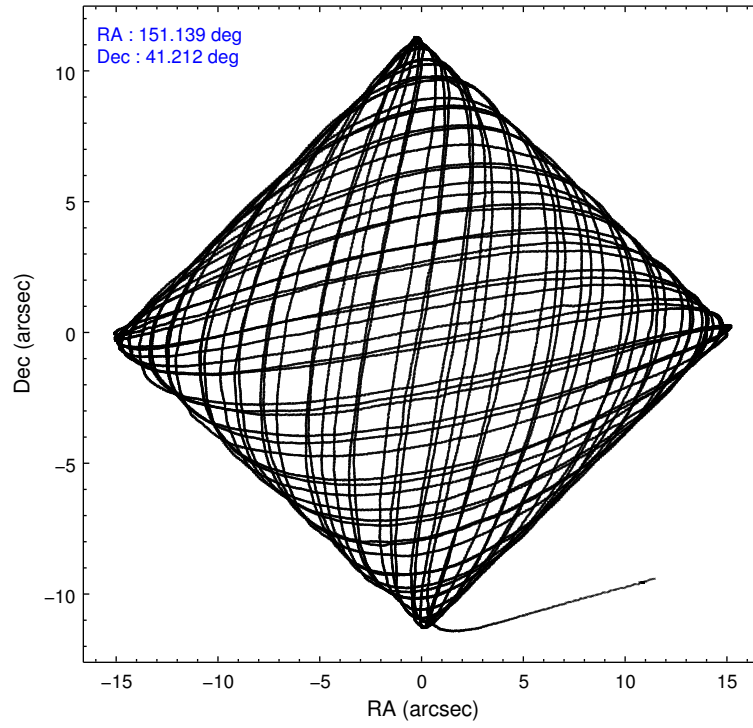
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	132284	132820	141597	184404	181006
rejected events	117459	118028	125079	103386	133576
rejected %	88%	88%	88%	56%	73%

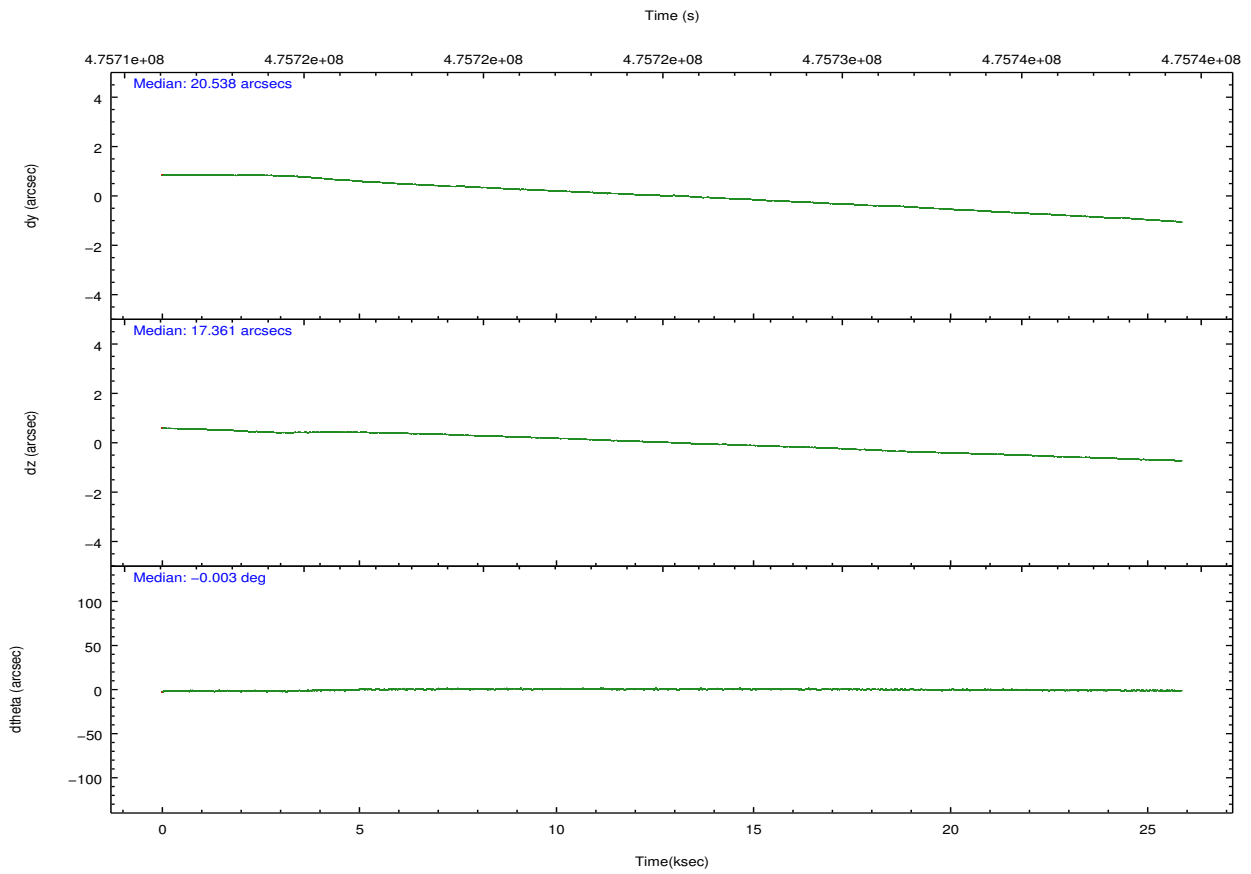
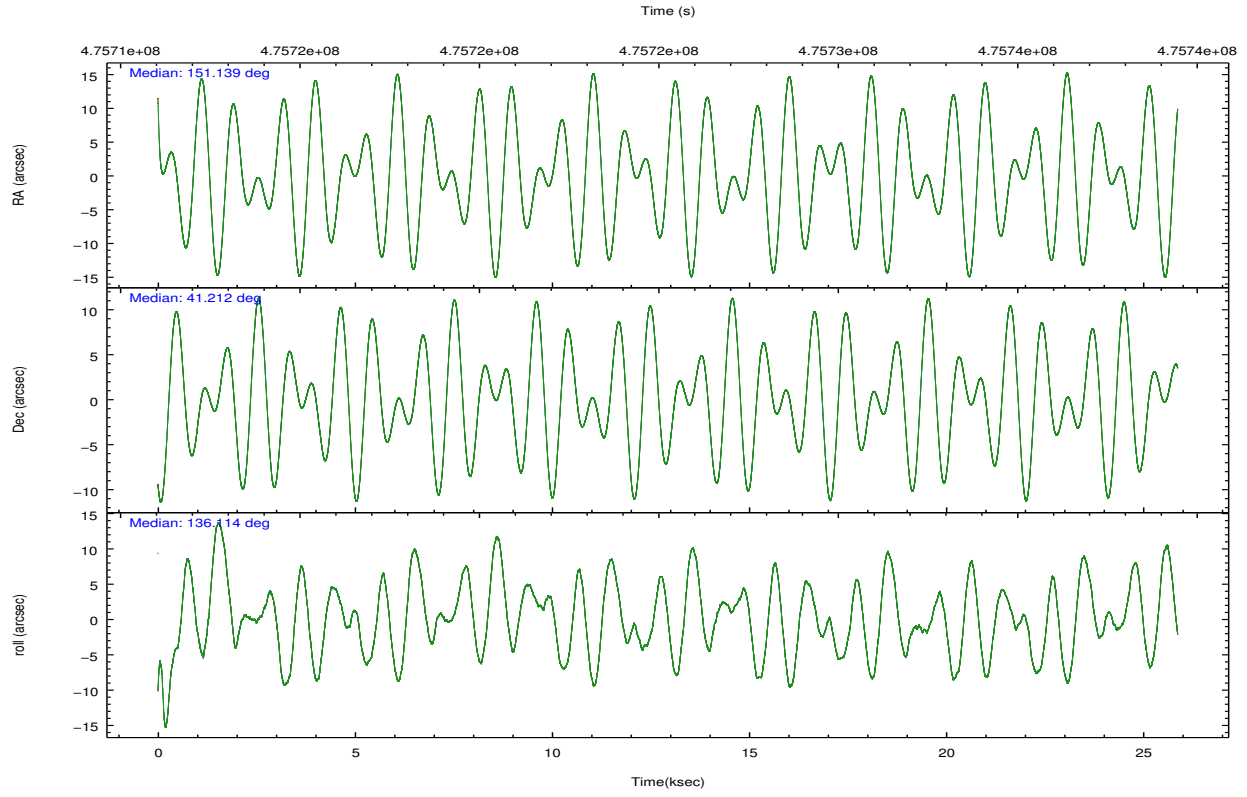
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	5237	5144	5496	7650	13447
	3%	3%	3%	4%	7%
grade 1 events	81	104	76	226	127
	0%	0%	0%	0%	0%
grade 2 events	3614	3245	3781	16815	11072
	2%	2%	2%	9%	6%
grade 3 events	1538	1597	1723	6864	5071
	1%	1%	1%	3%	2%
grade 4 events	1551	1682	1663	6698	4807
	1%	1%	1%	3%	2%
grade 5 events	5724	7138	7044	18603	10122
	4%	5%	4%	10%	5%
grade 6 events	2890	3127	3858	42997	13066
	2%	2%	2%	23%	7%
grade 7 events	111649	110783	117956	84551	123294
	84%	83%	83%	45%	68%

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	151.173988	151.1385755973449	CCD I2 on	O4	Y
[deg] Pointing Dec	41.205300	41.21150545910993	CCD I3 on	O3	Y
[deg] Pointing Roll	135.938496	136.1184533569725	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O2	Y
[s] Observation start time (MET)	475713182.184000	475711143.1667	CCD S5 on	N	N
Observation start date	2013-01-27T22:31:55	2013-01-27T21:59:03	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	475738182.184000	475738643.40569	On-chip summing requested	N	N
Observation end date	2013-01-28T05:28:35	2013-01-28T05:37:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





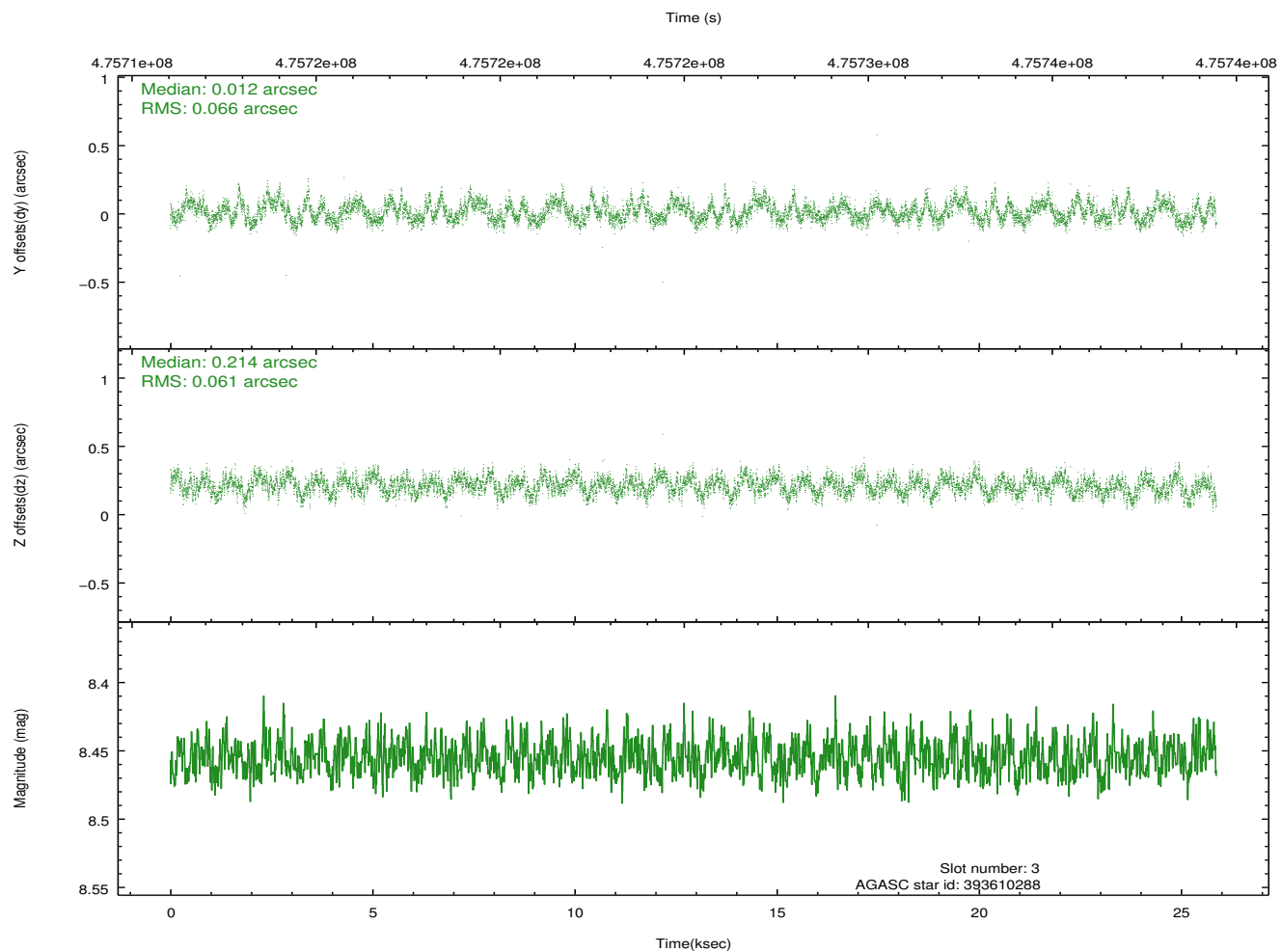
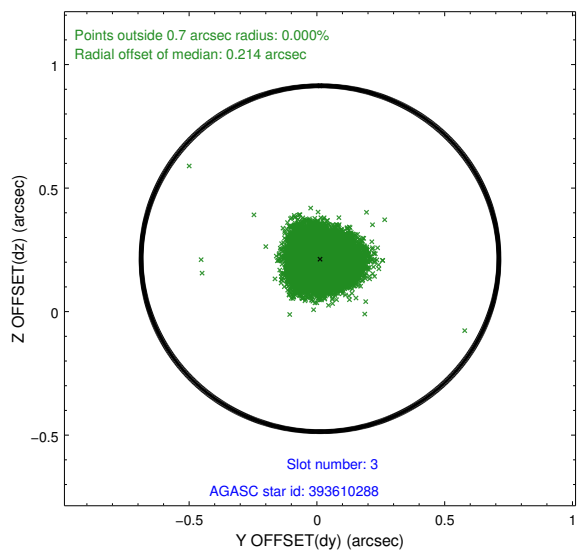
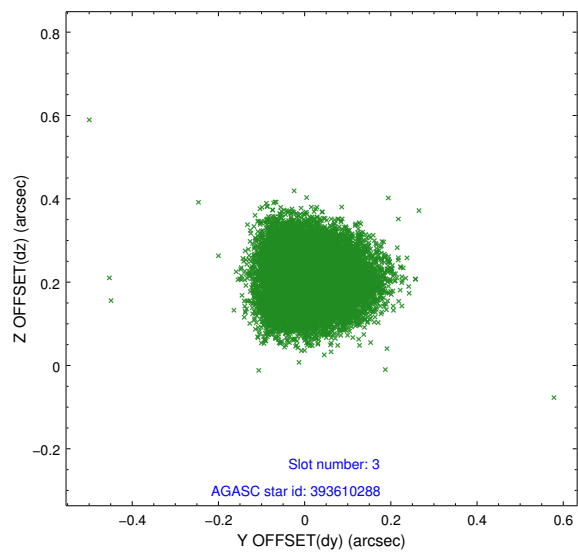
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	6311	-0.116	-0.047	0.018	0.025	0.000000	0.000000	-773.79	-1738.81
1	FID		ACIS-S-4	7.07	6311	0.254	0.068	0.013	0.035	0.000000	0.000000	2139.84	169.61
2	FID		ACIS-S-5	7.09	6308	-0.172	-0.013	0.018	0.028	0.000000	0.000000	-1826.52	163.40
3	GUIDE	used	393610288	8.46	12616	0.012	0.214	0.097	0.147	151.538899	41.090404	-996.82	-391.37
4	GUIDE	used	393613624	8.51	12620	-0.186	-0.247	0.075	0.118	151.136661	40.665270	-1279.14	1467.75
5	GUIDE	used	393616408	9.03	12563	-0.014	-0.044	0.097	0.157	150.713966	41.346840	1249.88	496.46
6	GUIDE	used	393616688	8.98	12556	0.227	0.200	0.121	0.189	151.530834	40.712712	-1931.32	596.00
7	GUIDE	used	393619280	9.38	12578	-0.038	-0.123	0.130	0.207	150.915222	40.640455	-906.20	1952.93

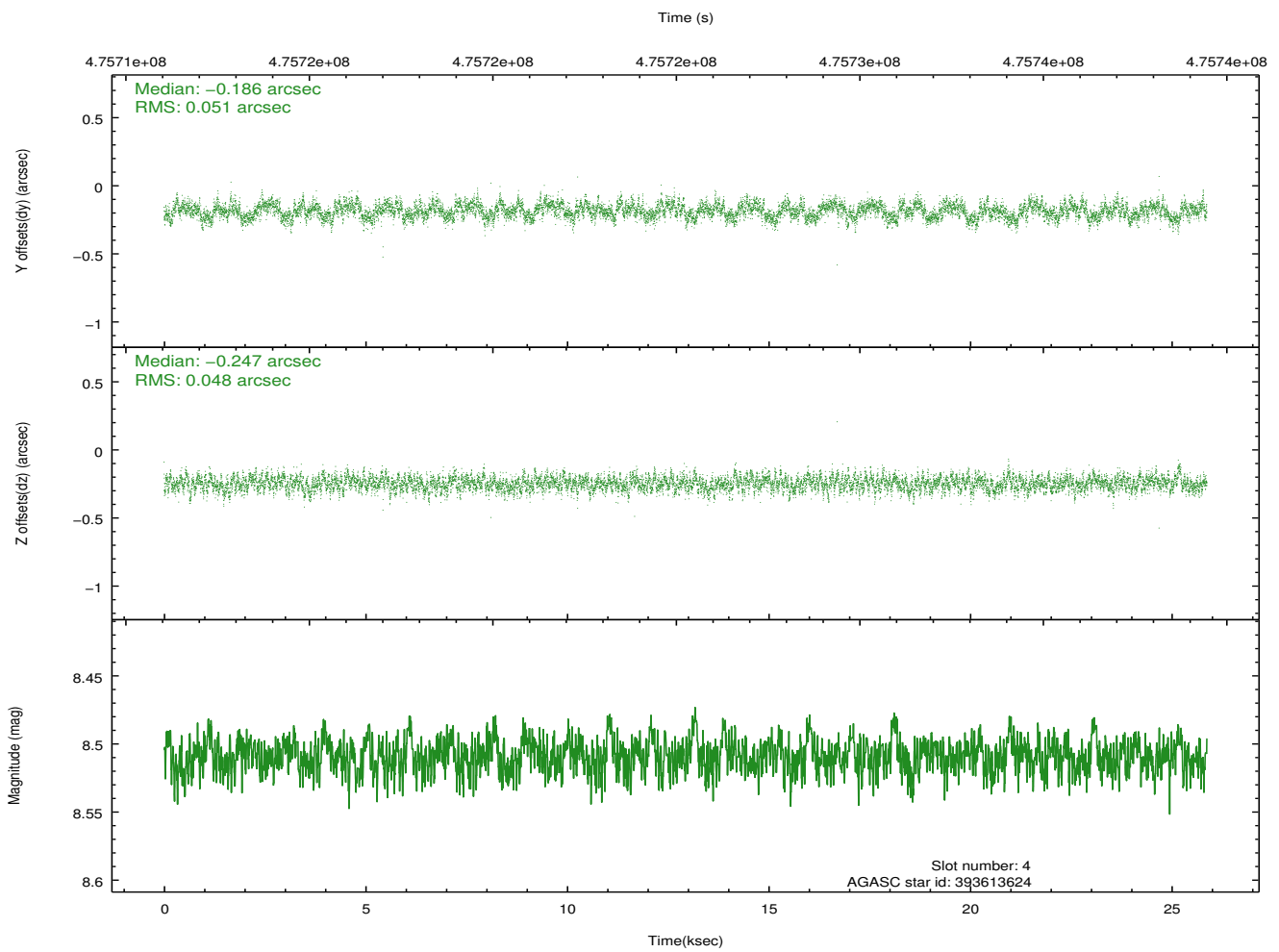
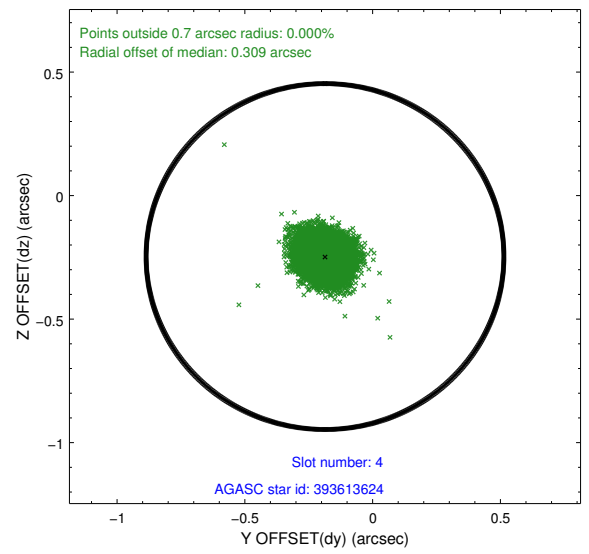
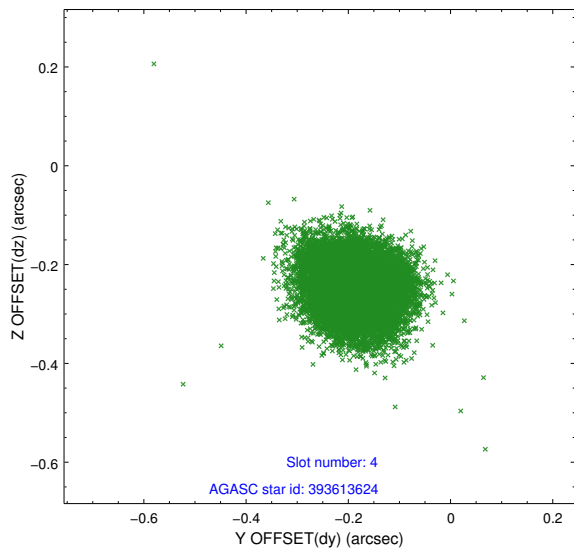
∞

2.4 Star Slots

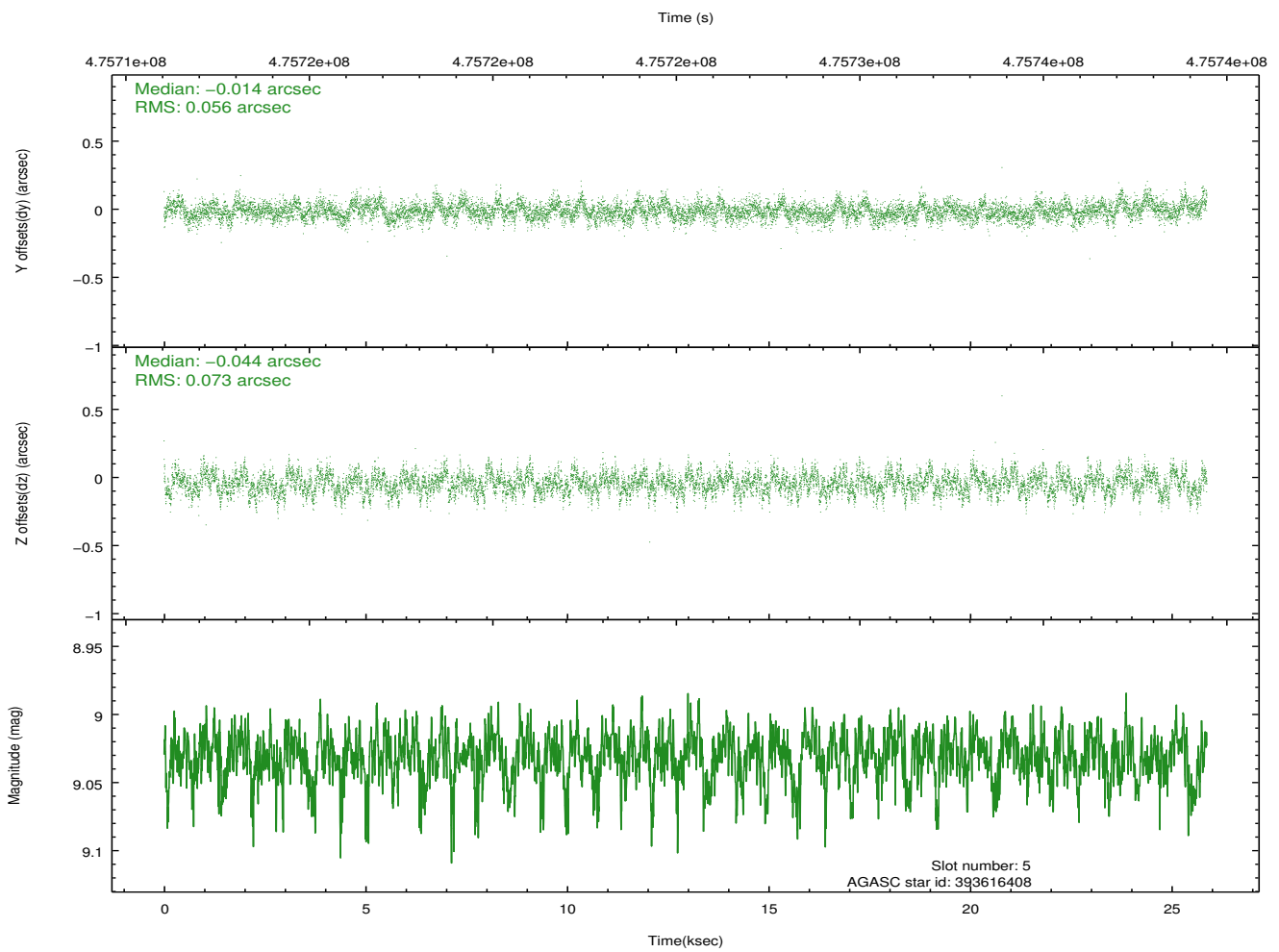
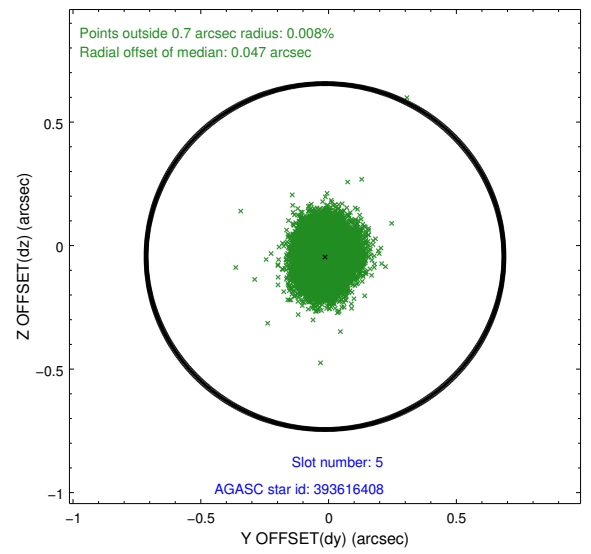
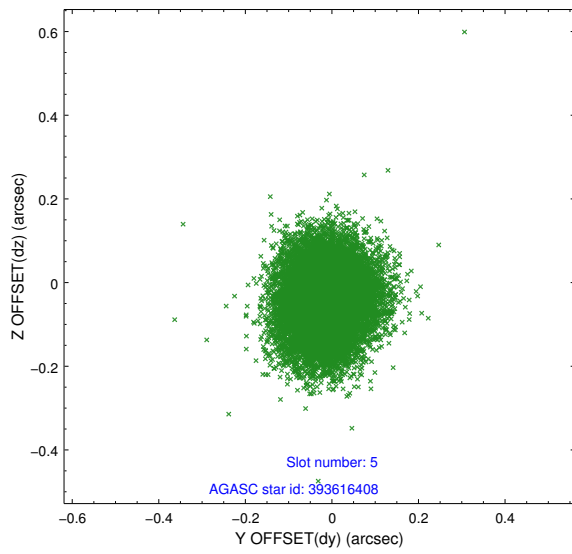
2.4.1 Slot 3



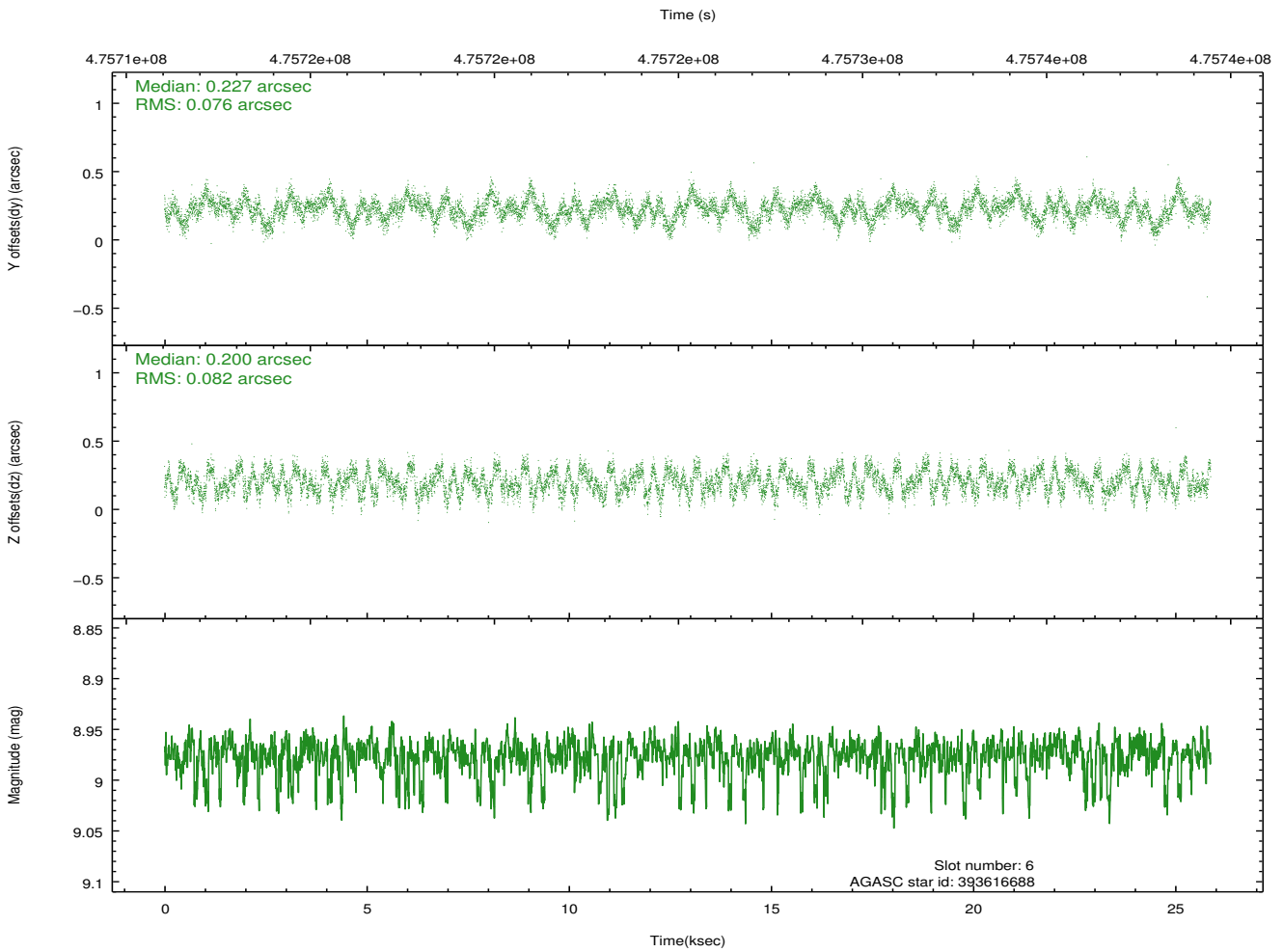
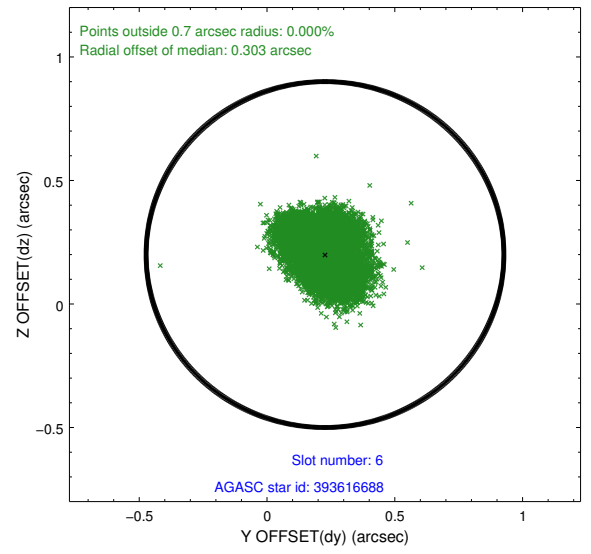
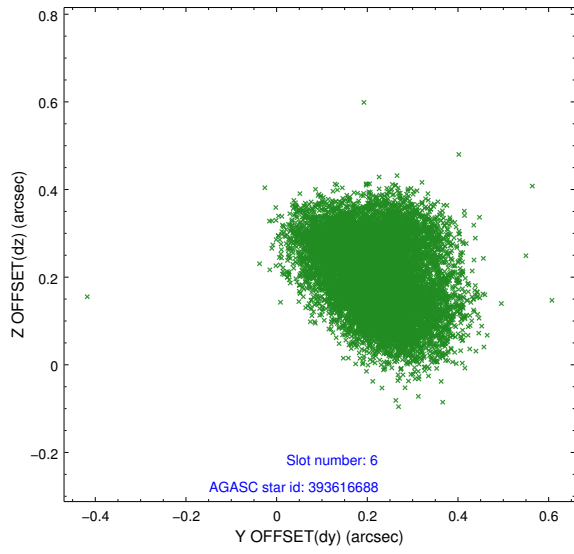
2.4.2 Slot 4



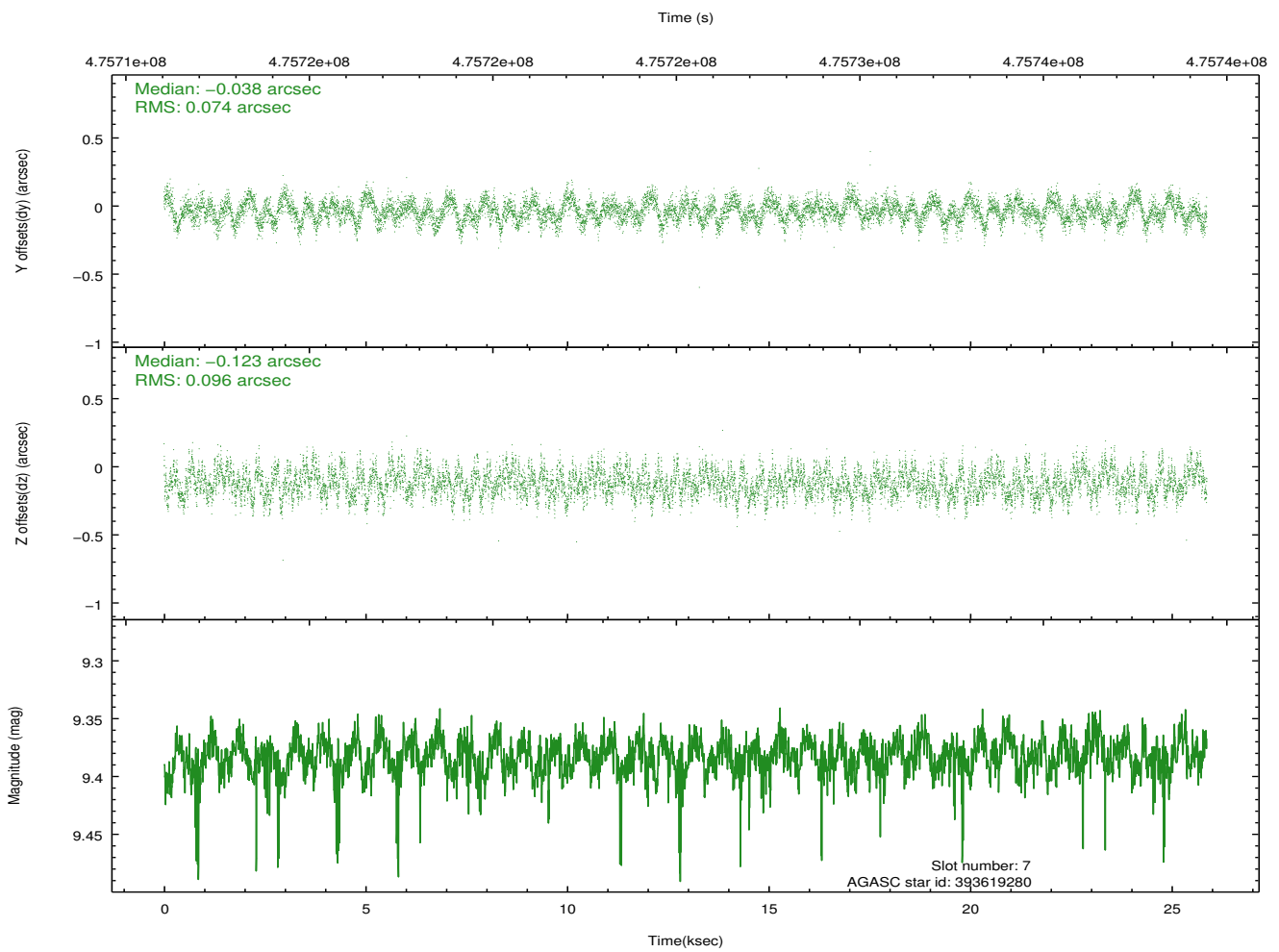
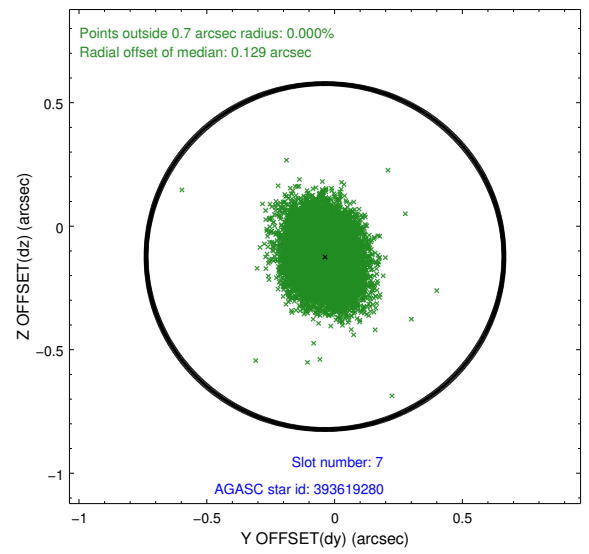
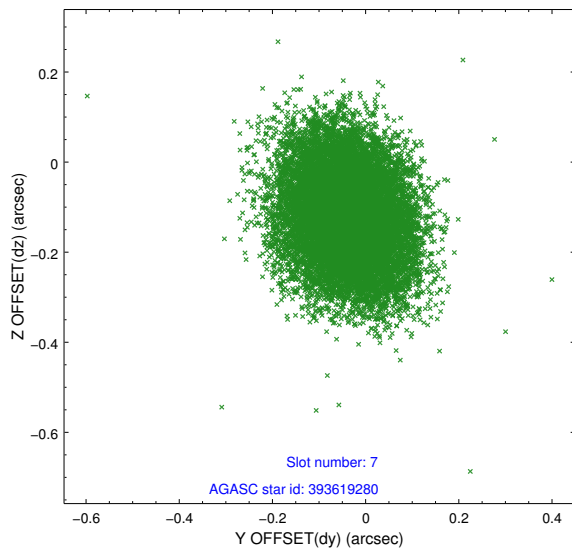
2.4.3 Slot 5



2.4.4 Slot 6

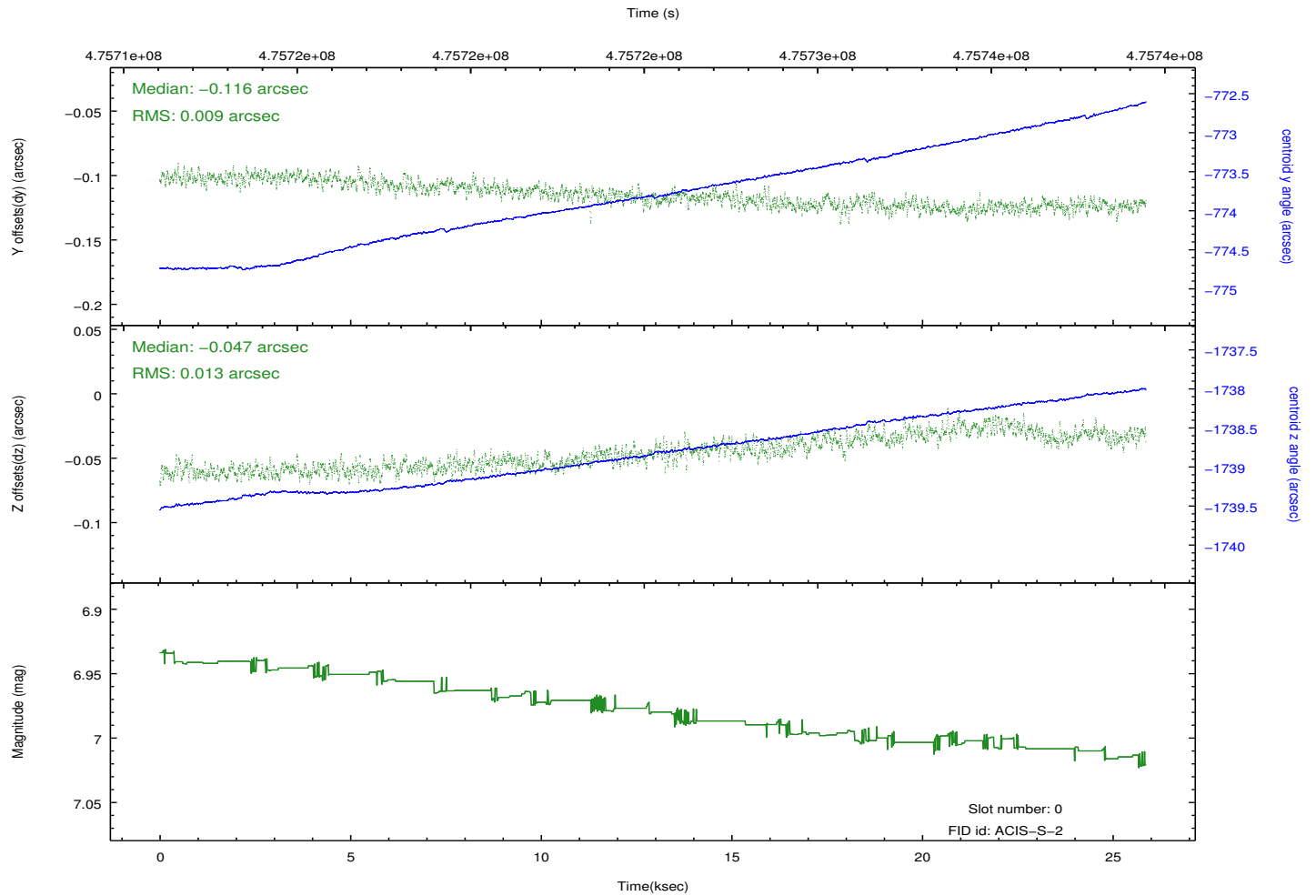
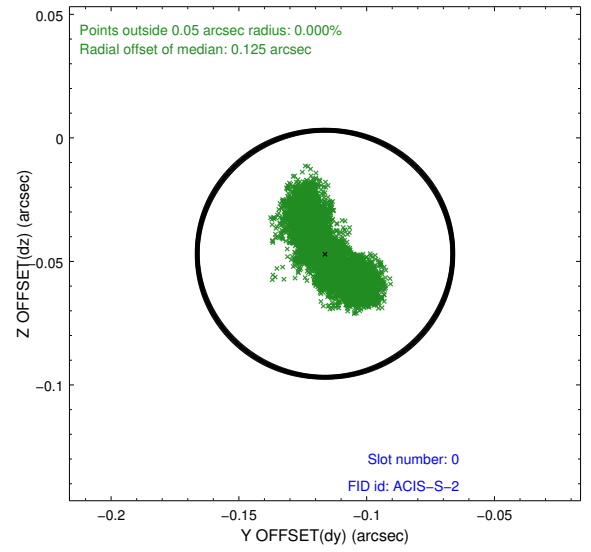
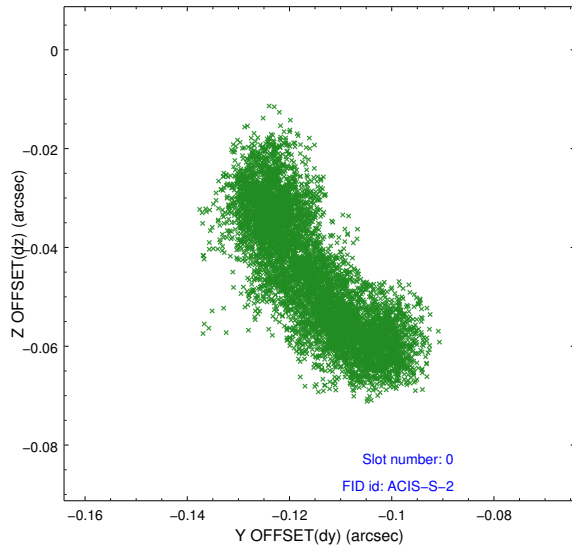


2.4.5 Slot 7

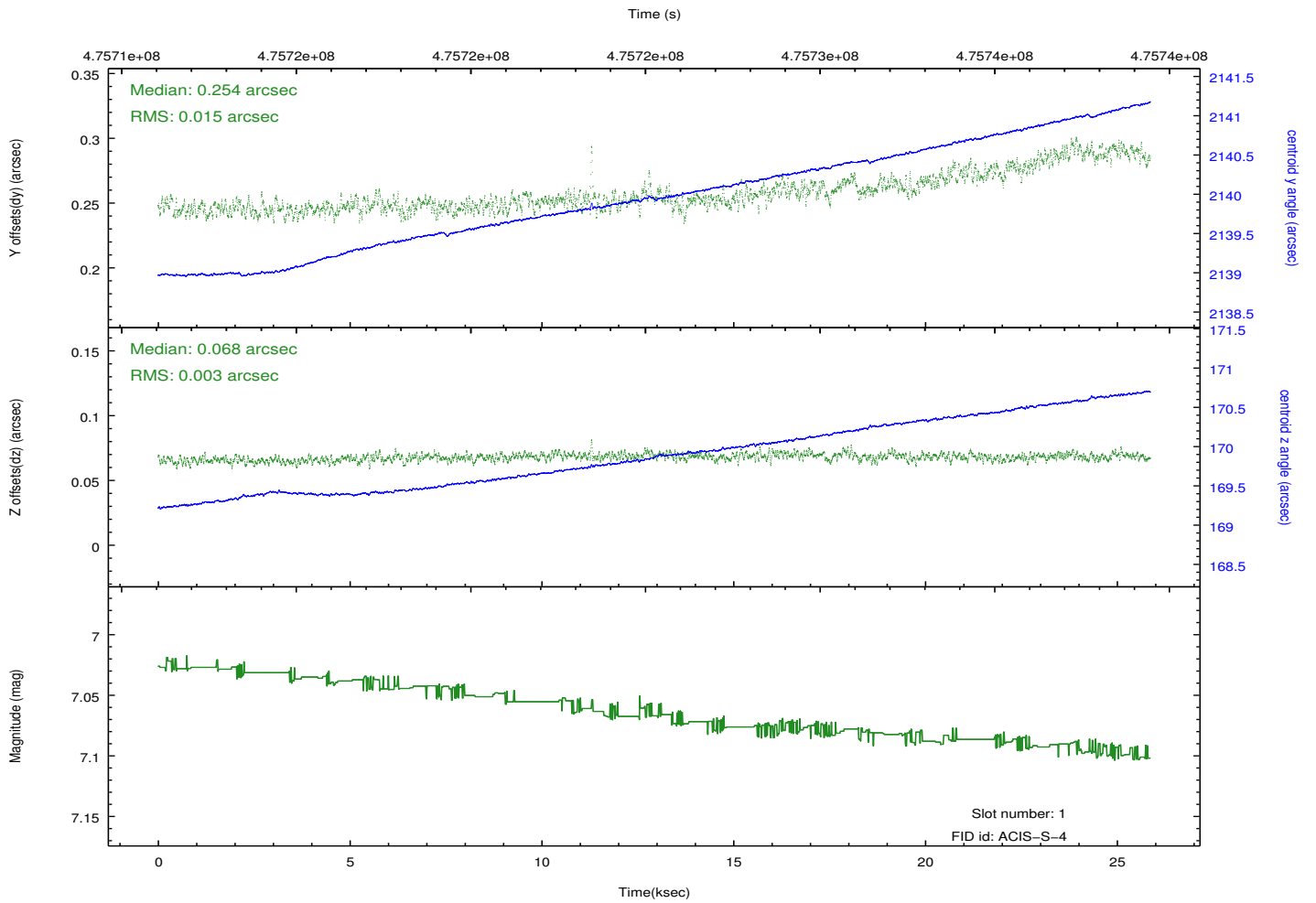
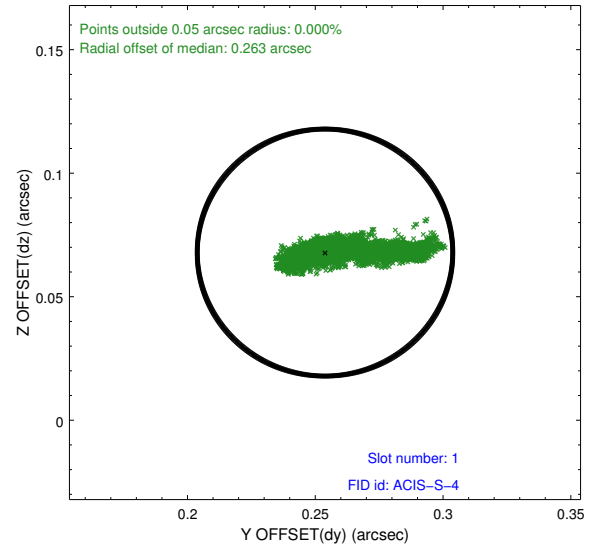
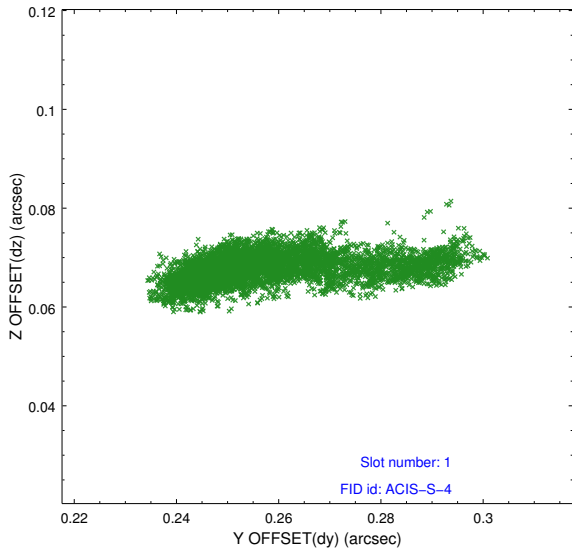


2.5 FID Slots

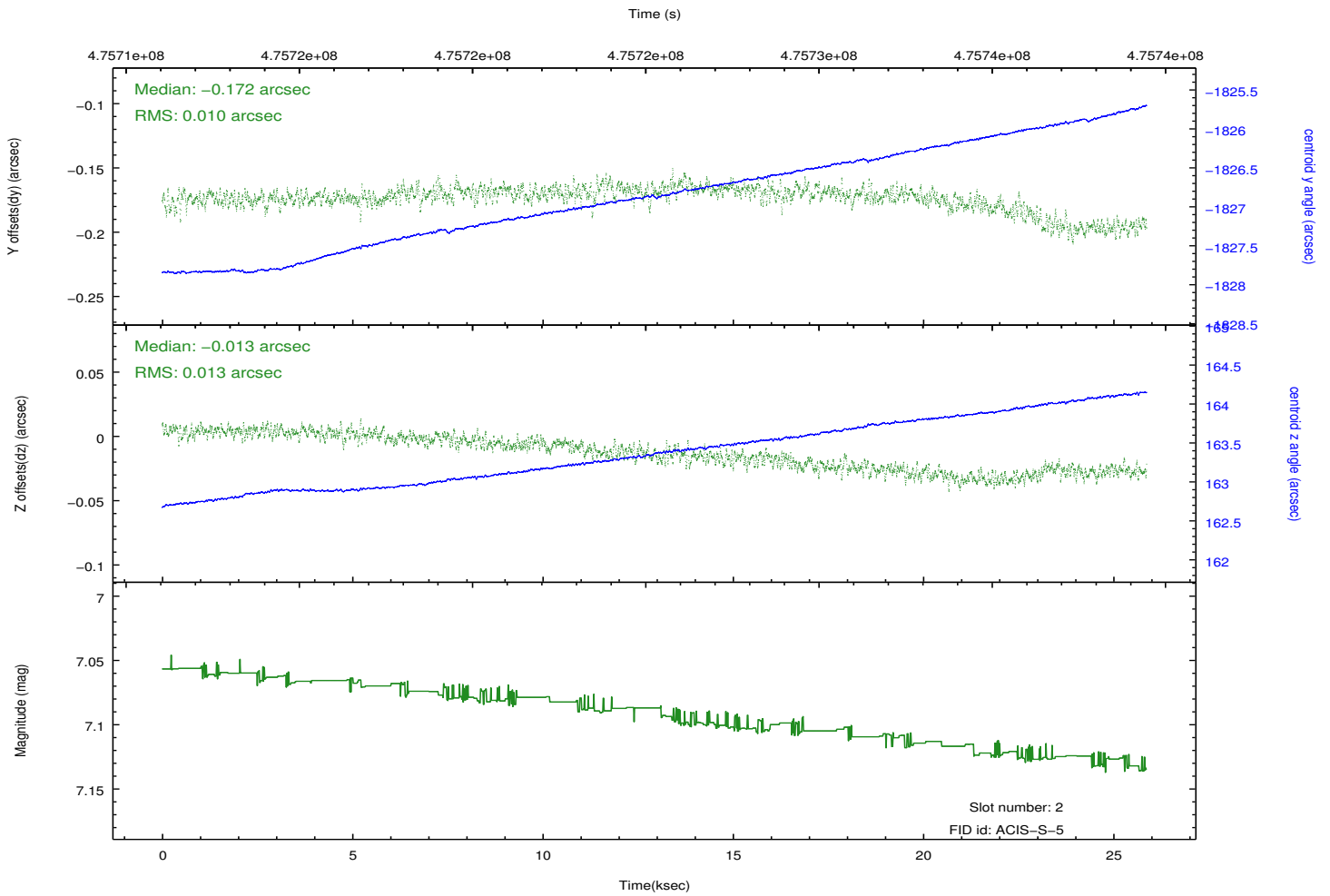
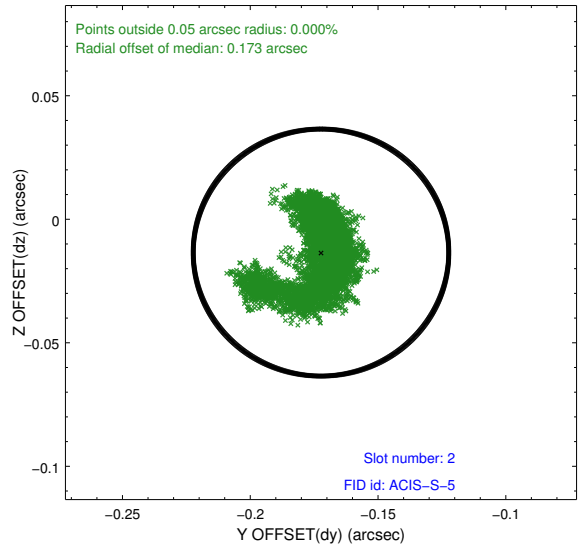
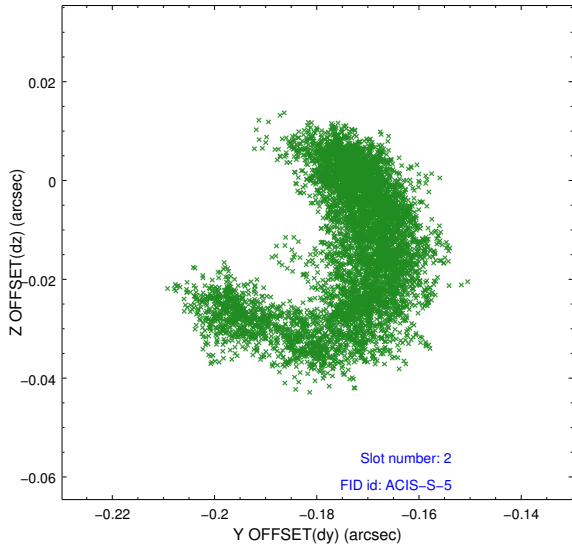
2.5.1 Slot 0



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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.065435410559

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.