

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15638 - L2 Version 2
Chandra X-Ray Center

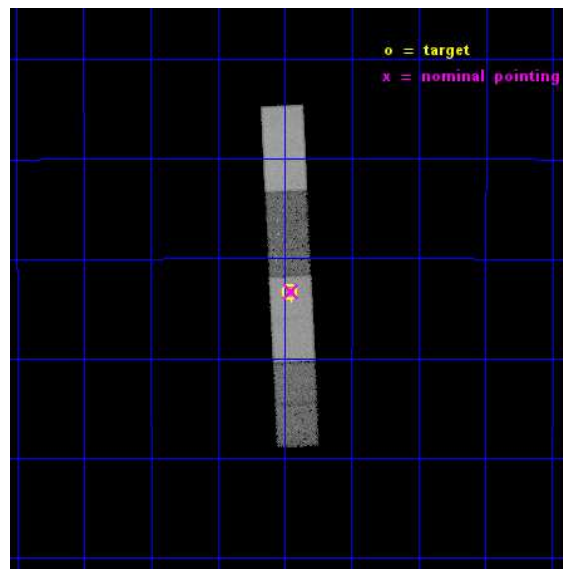
L2 Processing Date : Dec 2 2014

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1 Front

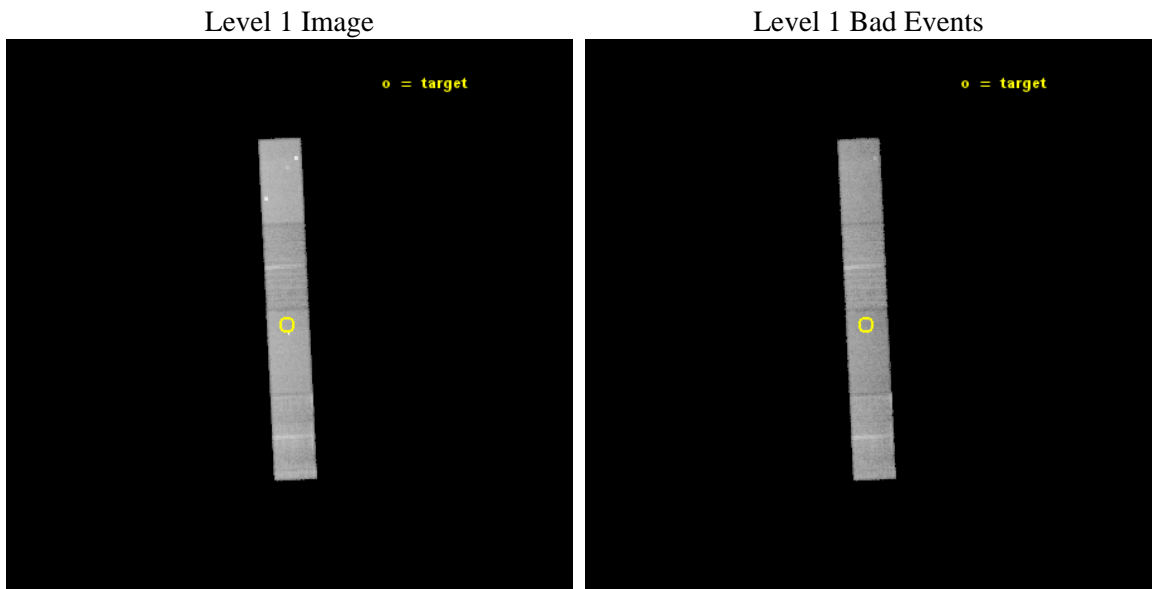
seq_num	501824	Sequence number
obs_id	15638	Observation id
title	A Legacy Study of the Relativistic Shocks of PWNe	Proposal title
observer	Prof. Roger Romani	Principal investigator
object	PSR J1741-2054	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	265.49	Observer's specified target RA [deg]
dec_targ	-20.89	Observer's specified target Dec [deg]
ra_nom	265.48737630449	Nominal RA [deg]
dec_nom	-20.888238615975	Nominal Dec [deg]
roll_nom	87.155697234855	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30071.29978919	Sum of GTIs [s]
livetime	29362.45556772	Livetime [s]
ontime5	30071.29978919	Sum of GTIs [s]
ontime6	30071.29978919	Sum of GTIs [s]
ontime7	30071.29978919	Sum of GTIs [s]
ontime8	30071.29978919	Sum of GTIs [s]
l2events	137288	Number of level 2 events



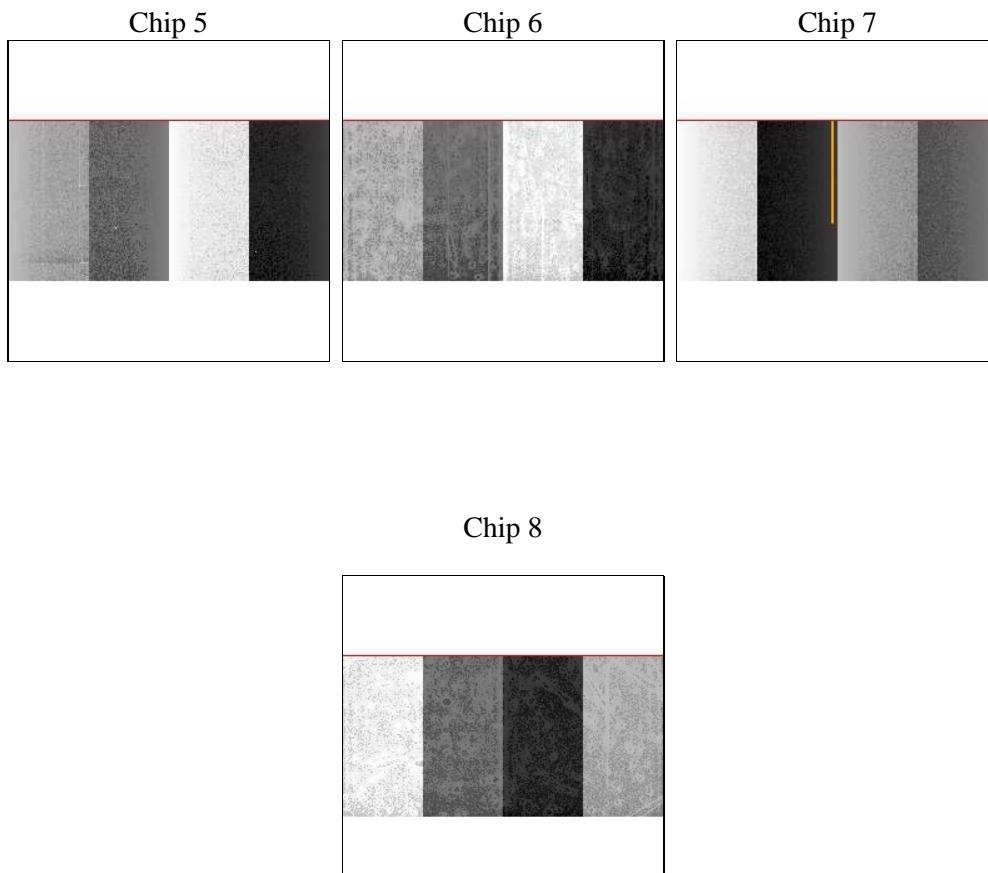
2 OBI

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	Processing system revision	ontime	30071.29978919	Sum of GTIs [s]
caldsver	4.6.4	 	ontime5	30071.29978919	Sum of GTIs [s]
date	2014-12-02T13:31:53	Date and time of file creation	ontime6	30071.29978919	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	30071.29978919	Sum of GTIs [s]
			ontime8	30071.29978919	Sum of GTIs [s]
			l1events	464686	Number of level 1 events

2.1.4 Events

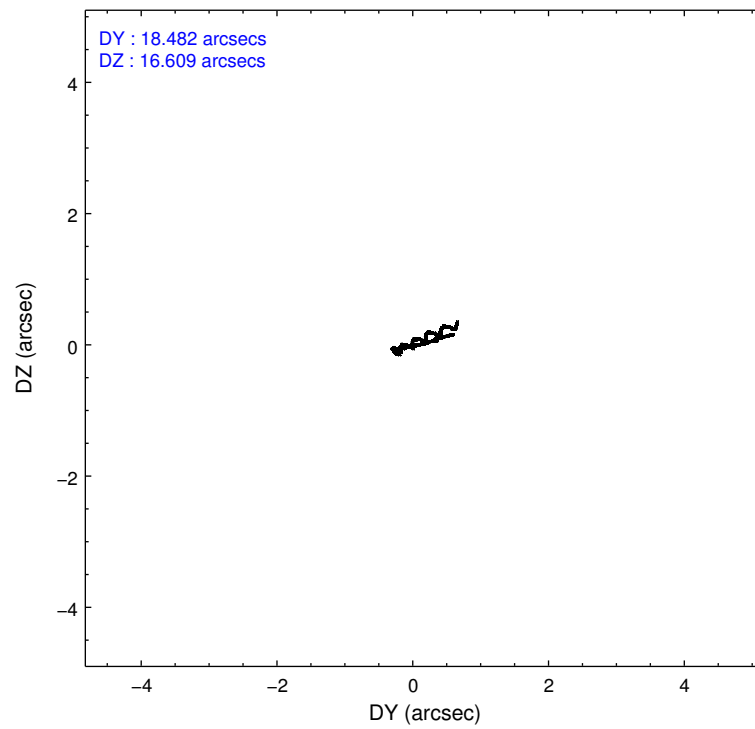
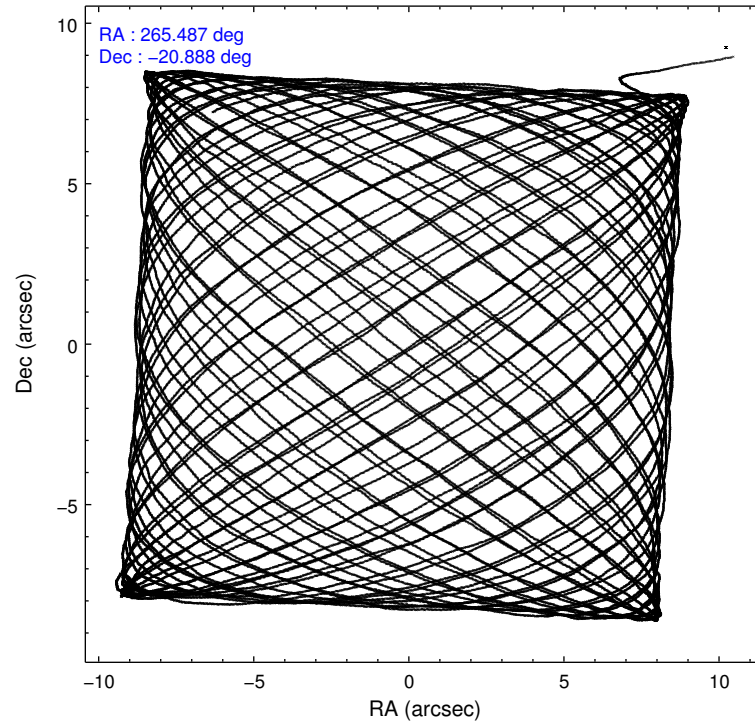
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	143351	88712	115737	116886
rejected events	69796	77407	61364	85821
rejected %	48%	87%	53%	73%

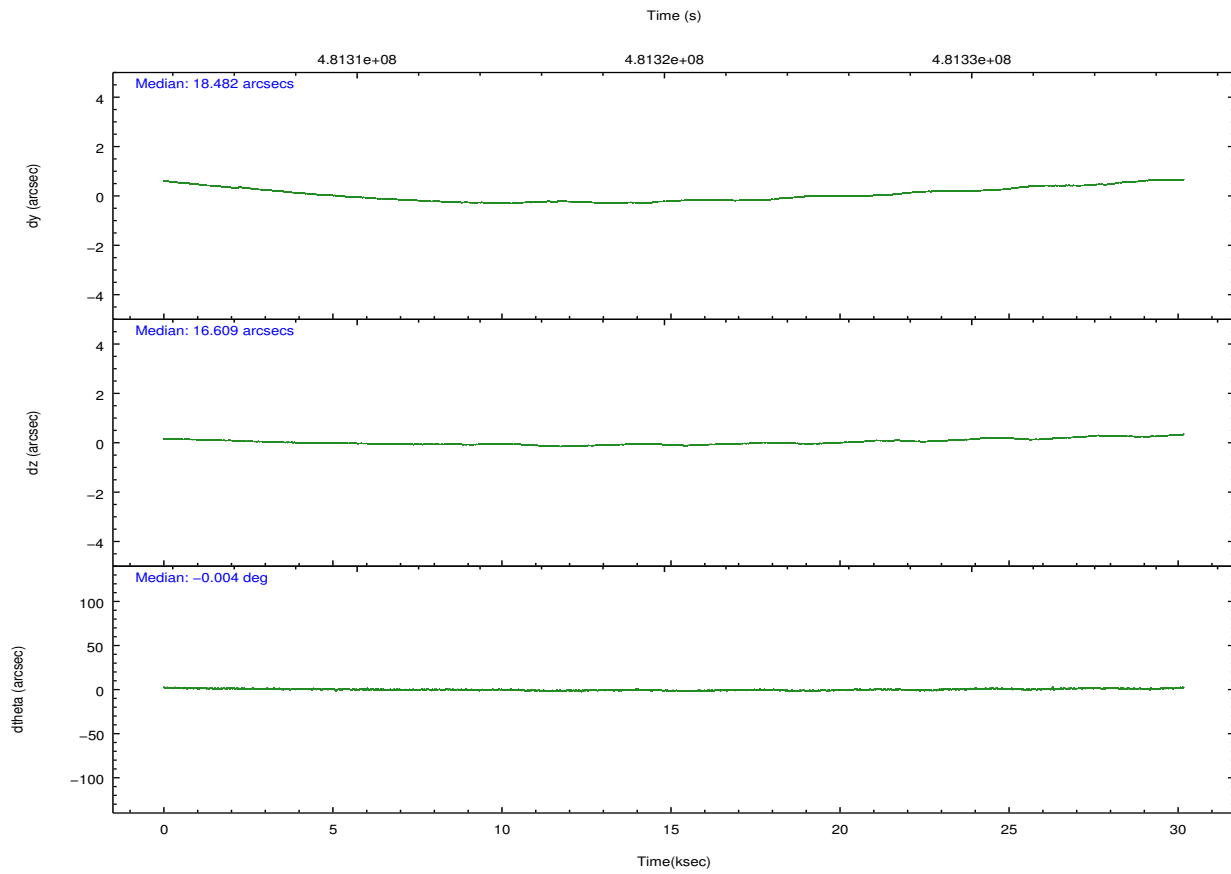
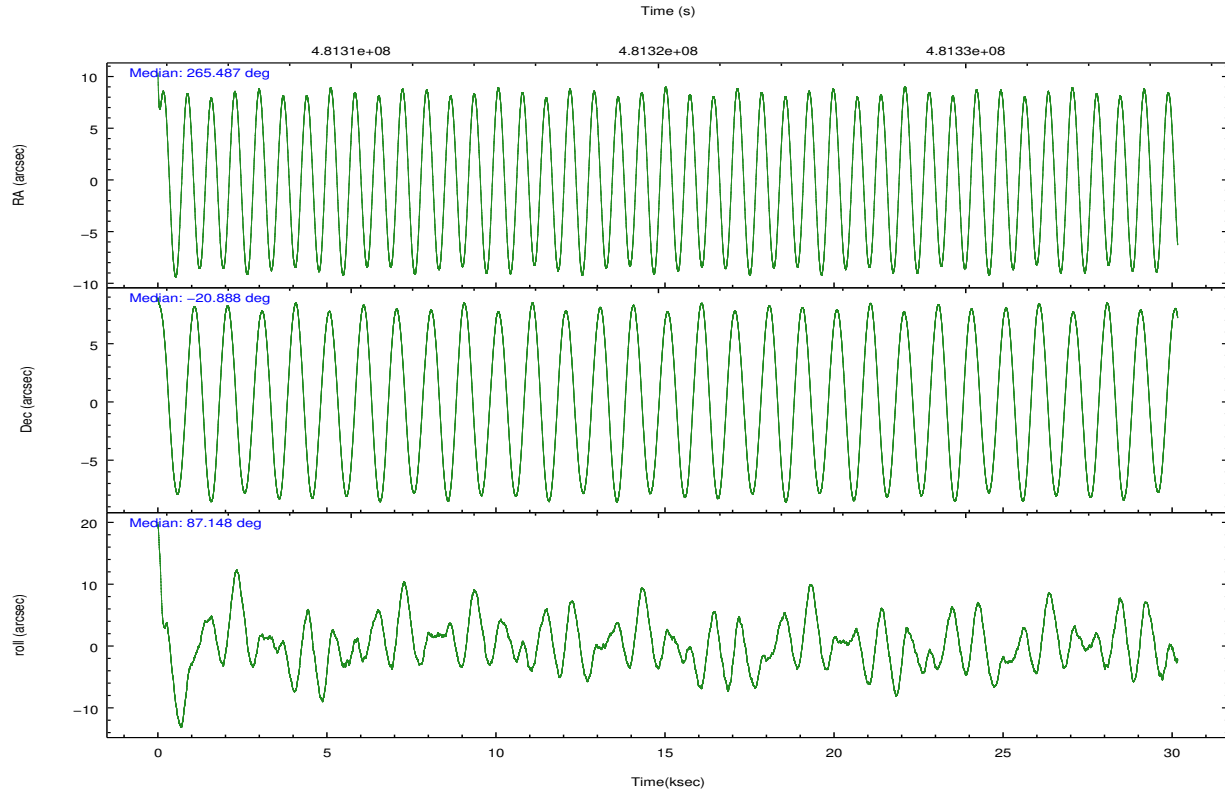
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	12469	4152	6023	8935
	8%	4%	5%	7%
grade 1 events	614	43	138	68
	0%	0%	0%	0%
grade 2 events	20735	2274	11258	7344
	14%	2%	9%	6%
grade 3 events	2927	1296	5359	3192
	2%	1%	4%	2%
grade 4 events	2920	1287	5374	3061
	2%	1%	4%	2%
grade 5 events	11040	4414	11988	6171
	7%	4%	10%	5%
grade 6 events	34515	2297	26364	8534
	24%	2%	22%	7%
grade 7 events	58131	72949	49233	79581
	40%	82%	42%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	265.501071	265.4873763044927	CCD I2 on	N	N
[deg] Pointing Dec	-20.912405	-20.8882386159753	CCD I3 on	N	N
[deg] Pointing Roll	87.003945	87.15569723485513	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	O1	Y
[s] Observation start time (MET)	481305380.184000	481304310.68151	CCD S5 on	N	N
Observation start date	2013-04-02T15:55:13	2013-04-02T15:38:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	481335380.184000	481336650.97078	On-chip summing requested	N	N
Observation end date	2013-04-03T00:15:13	2013-04-03T00:37:30	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect





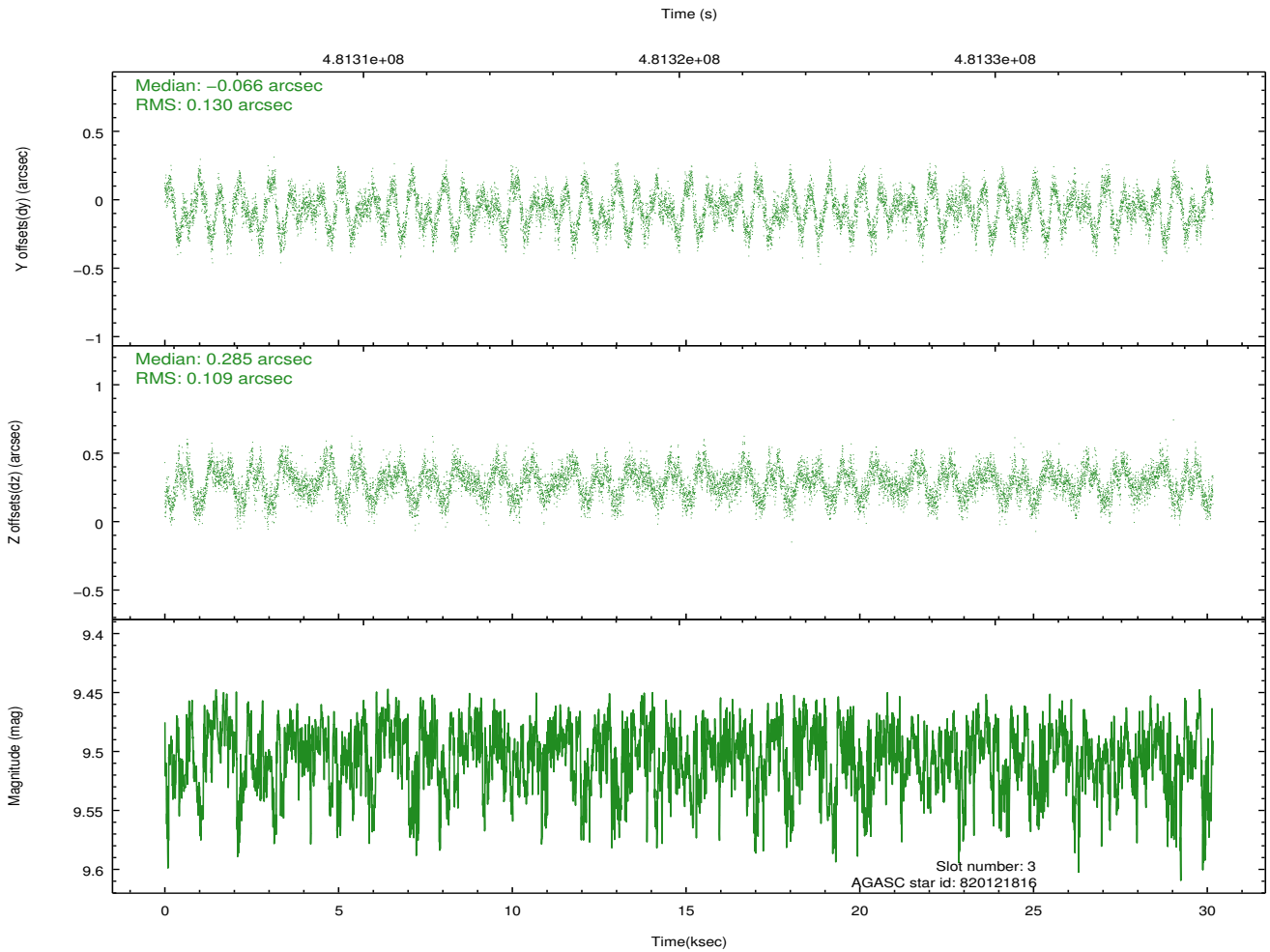
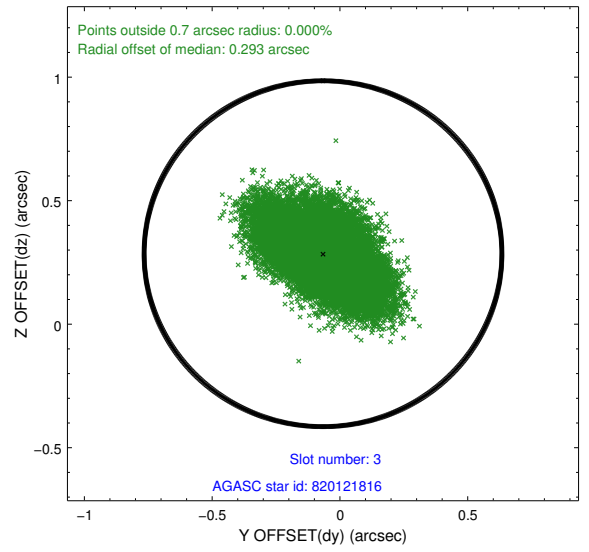
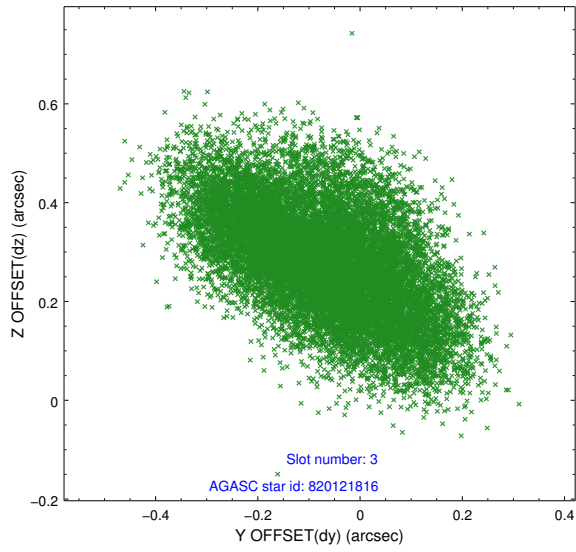
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.03	7357	-0.110	-0.035	0.010	0.016	0.000000	0.000000	-771.74	-1738.10
1	FID		ACIS-S-4	7.11	7357	0.292	0.063	0.010	0.018	0.000000	0.000000	2141.93	170.39
2	FID		ACIS-S-5	7.14	7357	-0.212	-0.019	0.008	0.013	0.000000	0.000000	-1824.57	164.09
3	GUIDE	used	820121816	9.50	14656	-0.066	0.285	0.183	0.293	266.214905	-20.520358	1530.17	-2328.98
4	GUIDE	used	820512256	9.82	14676	-0.080	0.047	0.199	0.322	265.674779	-20.869391	184.94	-575.04
5	GUIDE	used	820519896	9.41	14692	0.384	0.473	0.123	0.193	265.946936	-21.404468	-1692.17	-1584.60
6	GUIDE	used	820522872	8.96	14707	-0.157	-0.173	0.124	0.202	265.213313	-20.864339	121.18	975.70
7	GUIDE	used	820524416	9.54	14657	-0.090	-0.633	0.151	0.242	264.824498	-20.709003	607.26	2313.02

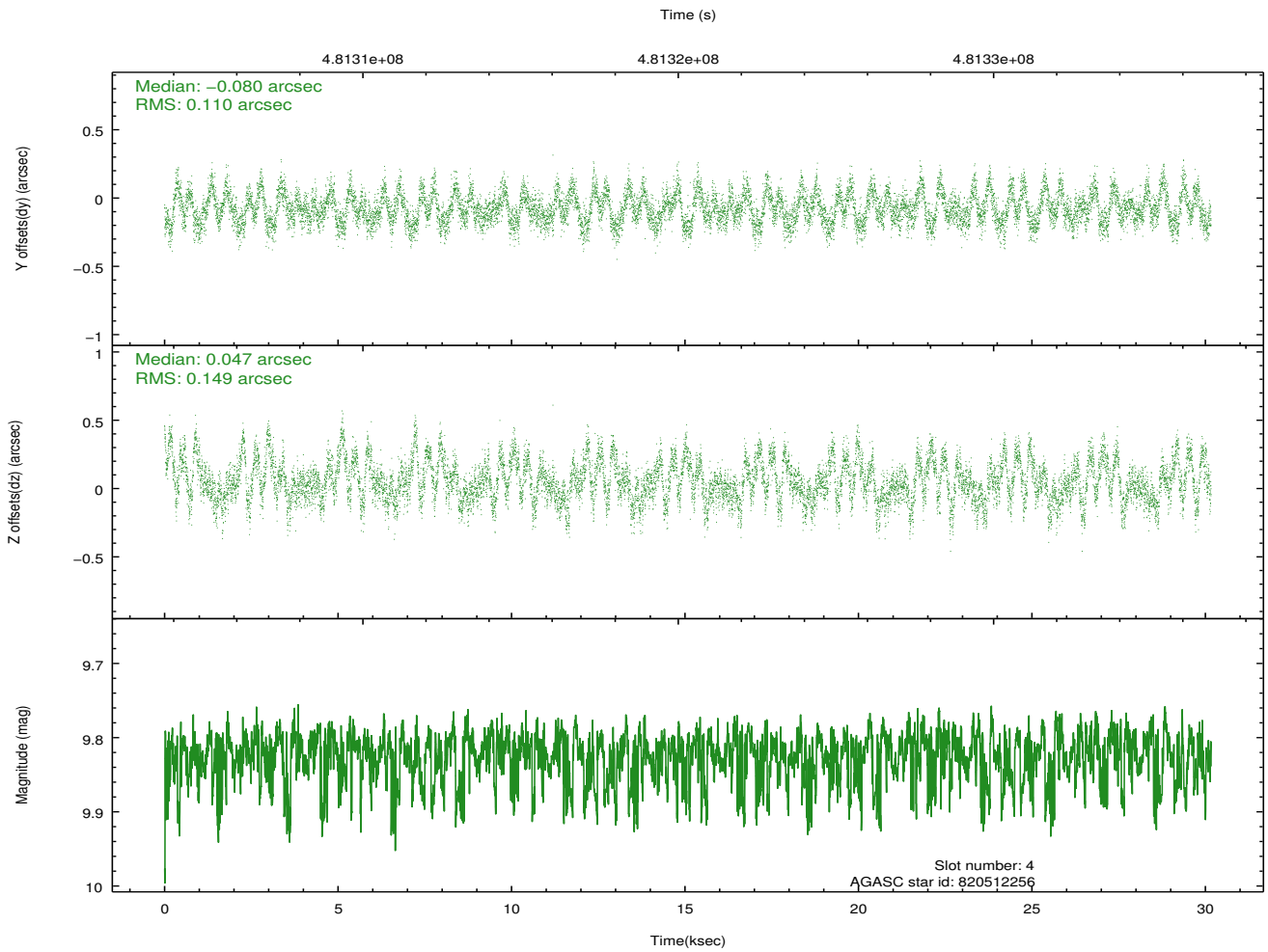
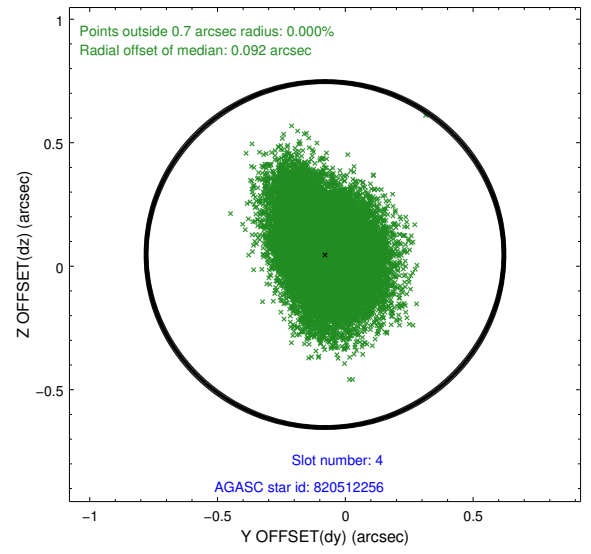
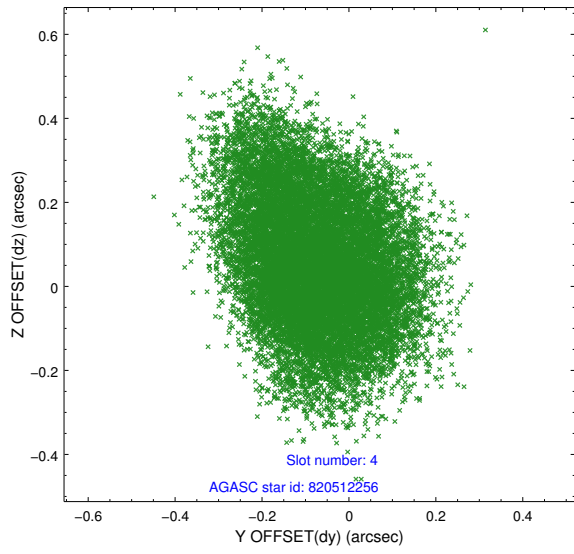
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2.4 Star Slots

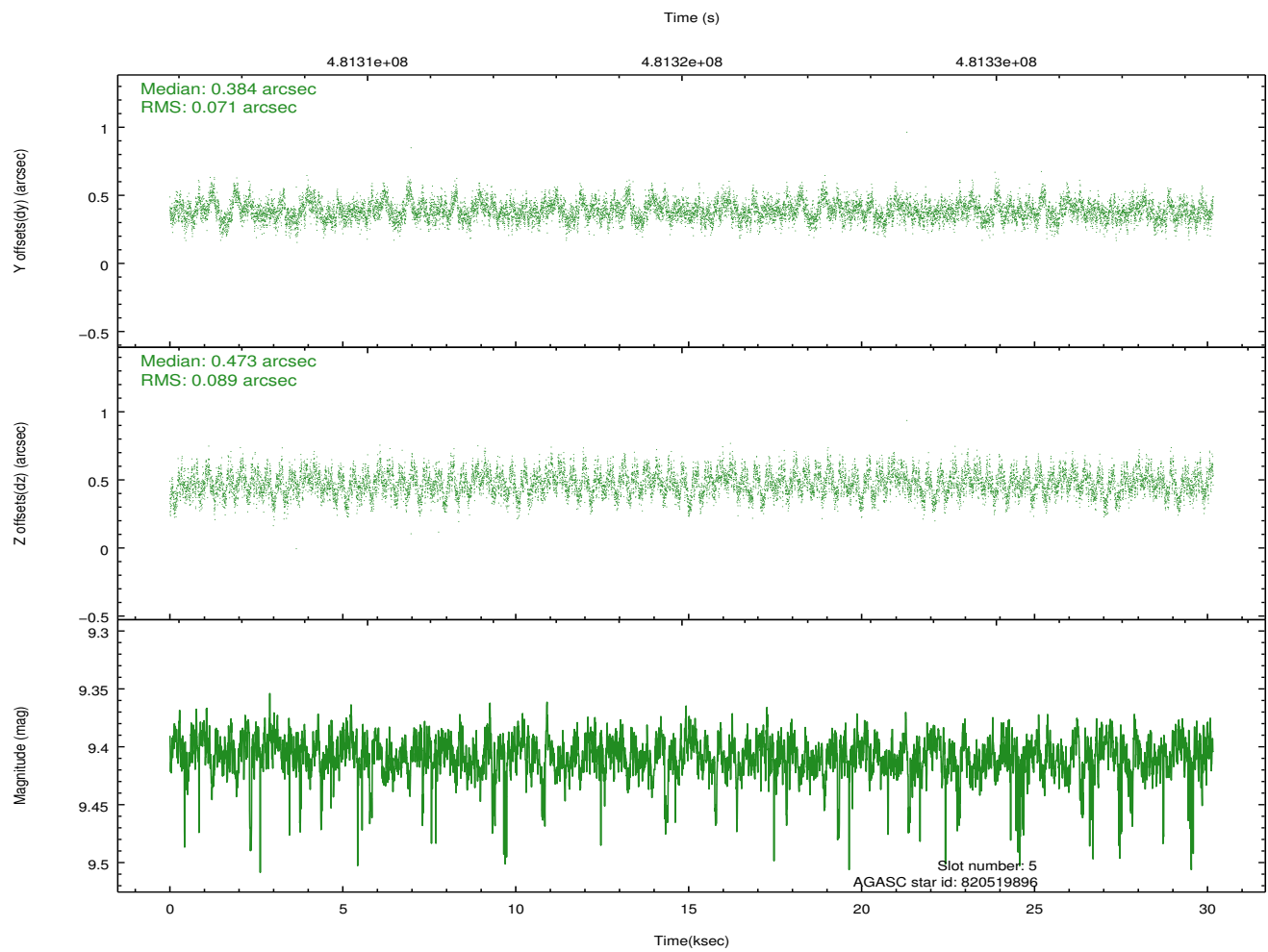
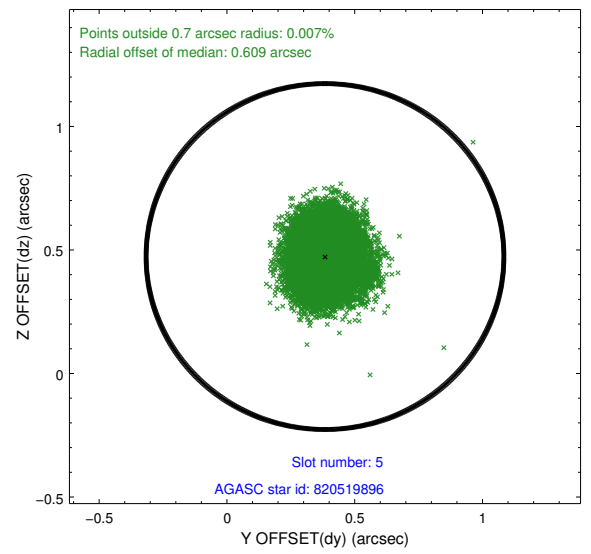
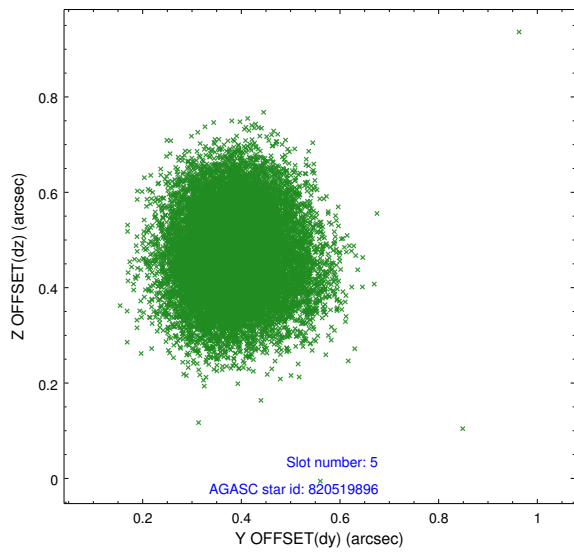
2.4.1 Slot 3



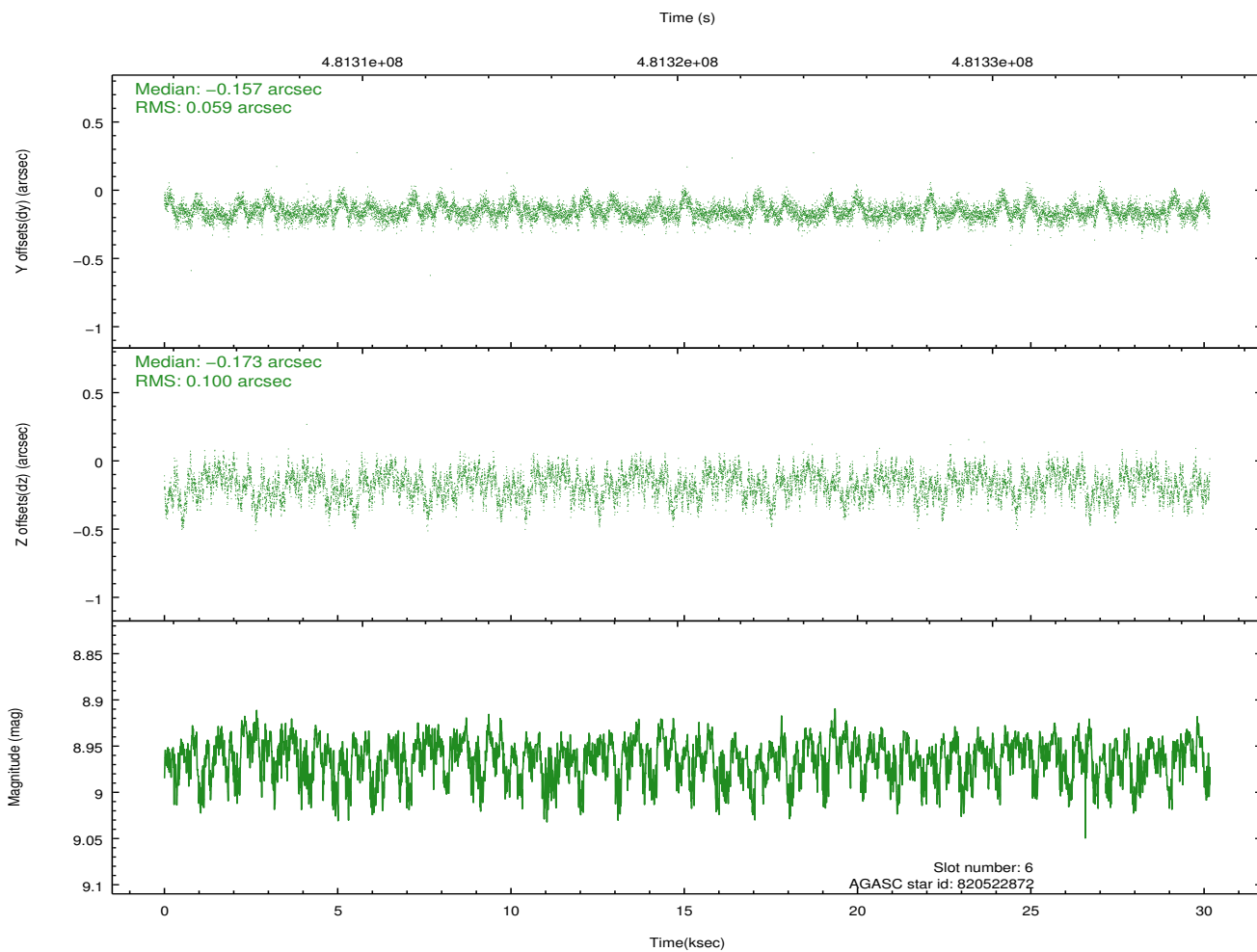
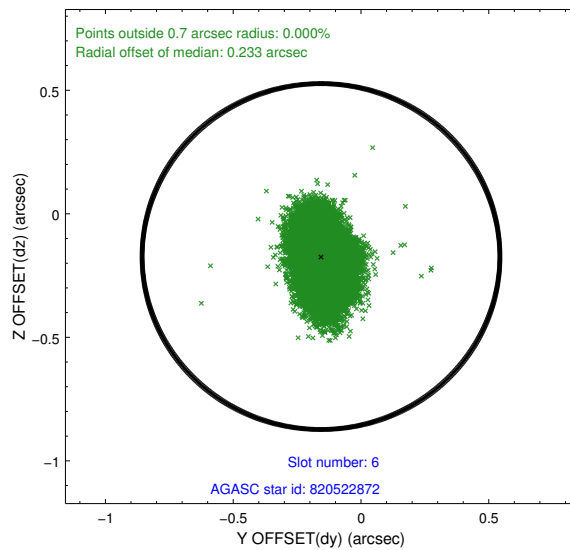
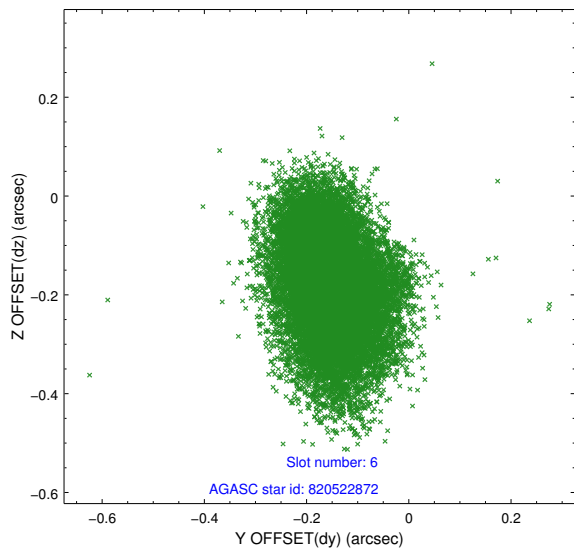
2.4.2 Slot 4



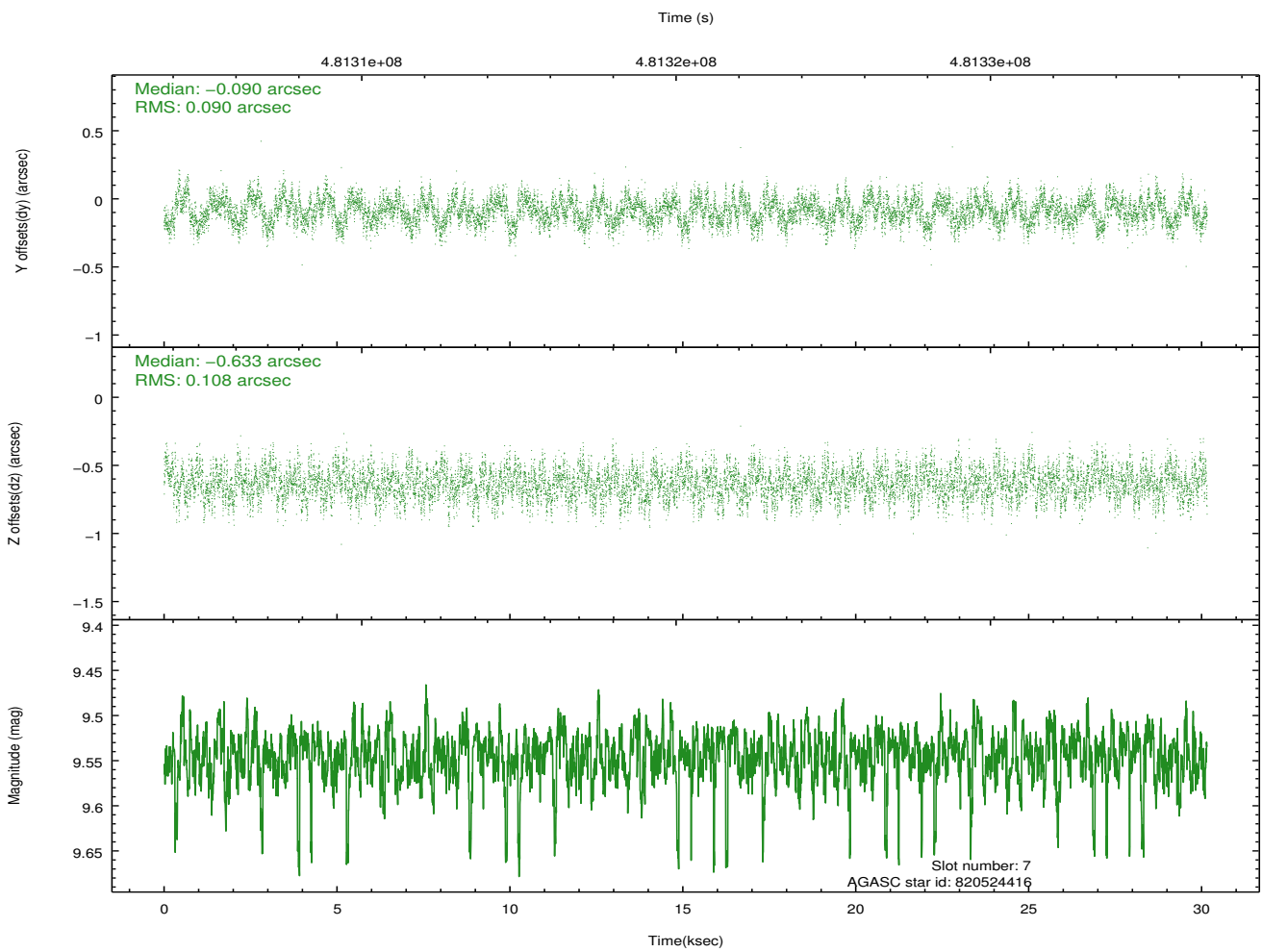
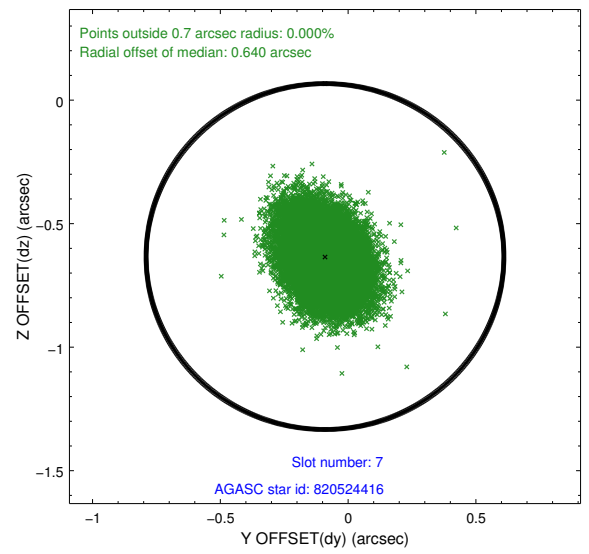
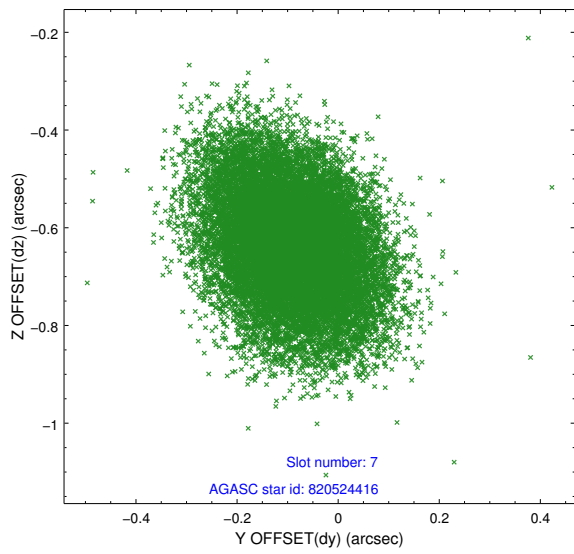
2.4.3 Slot 5



2.4.4 Slot 6

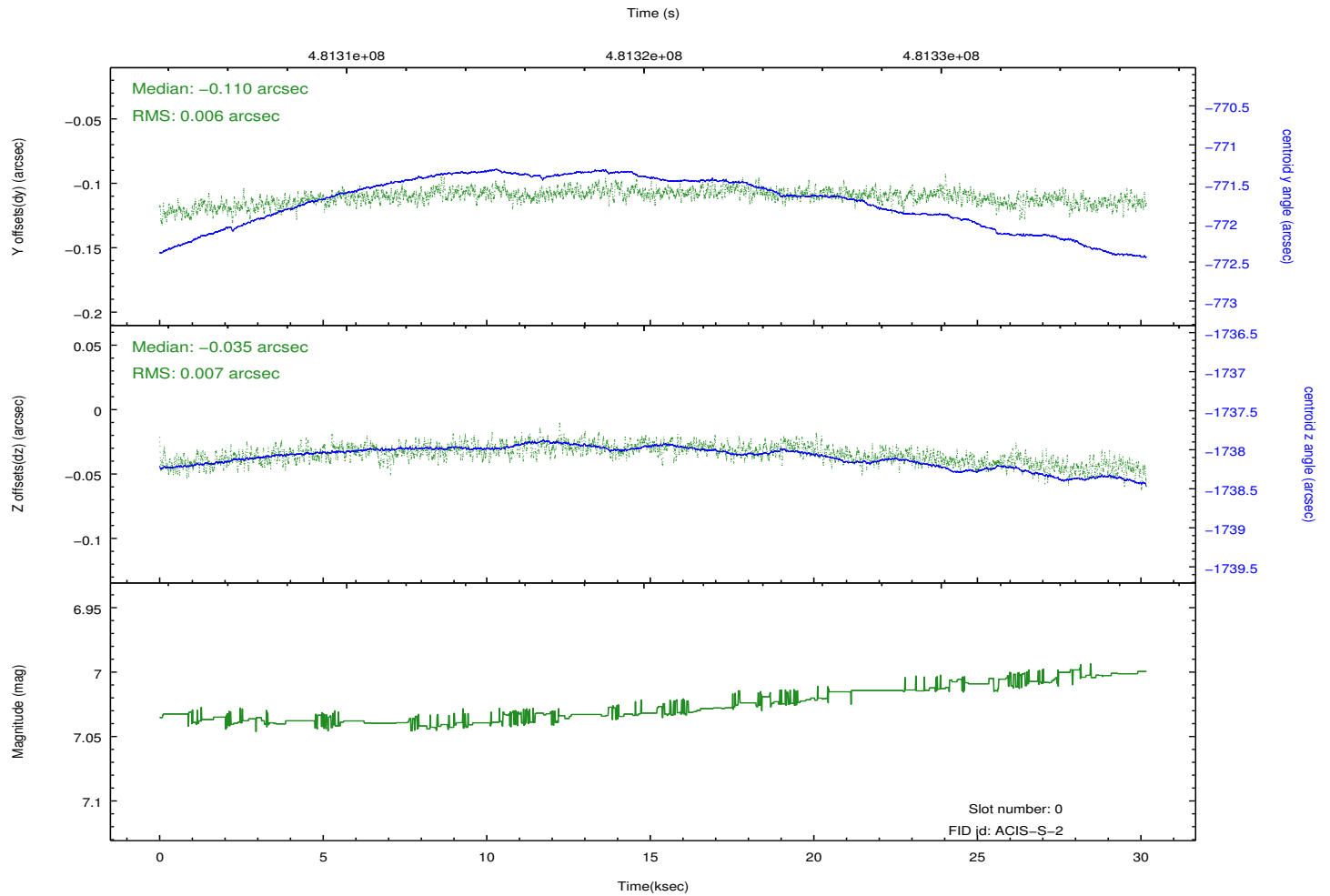
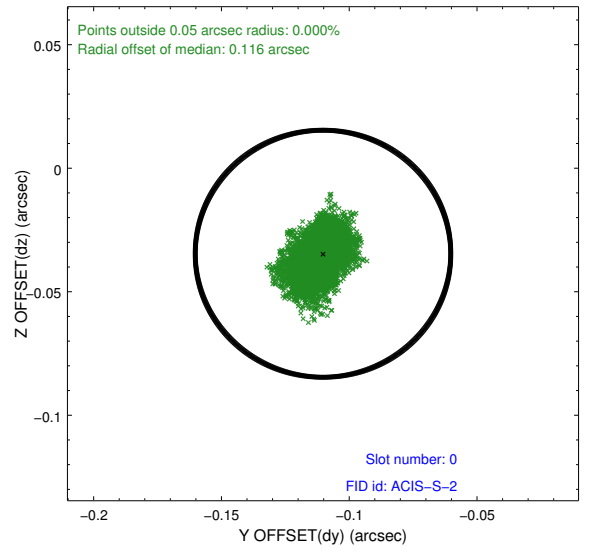
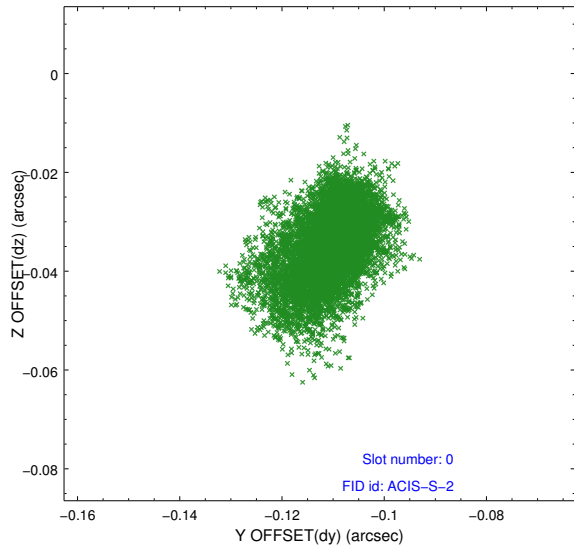


2.4.5 Slot 7

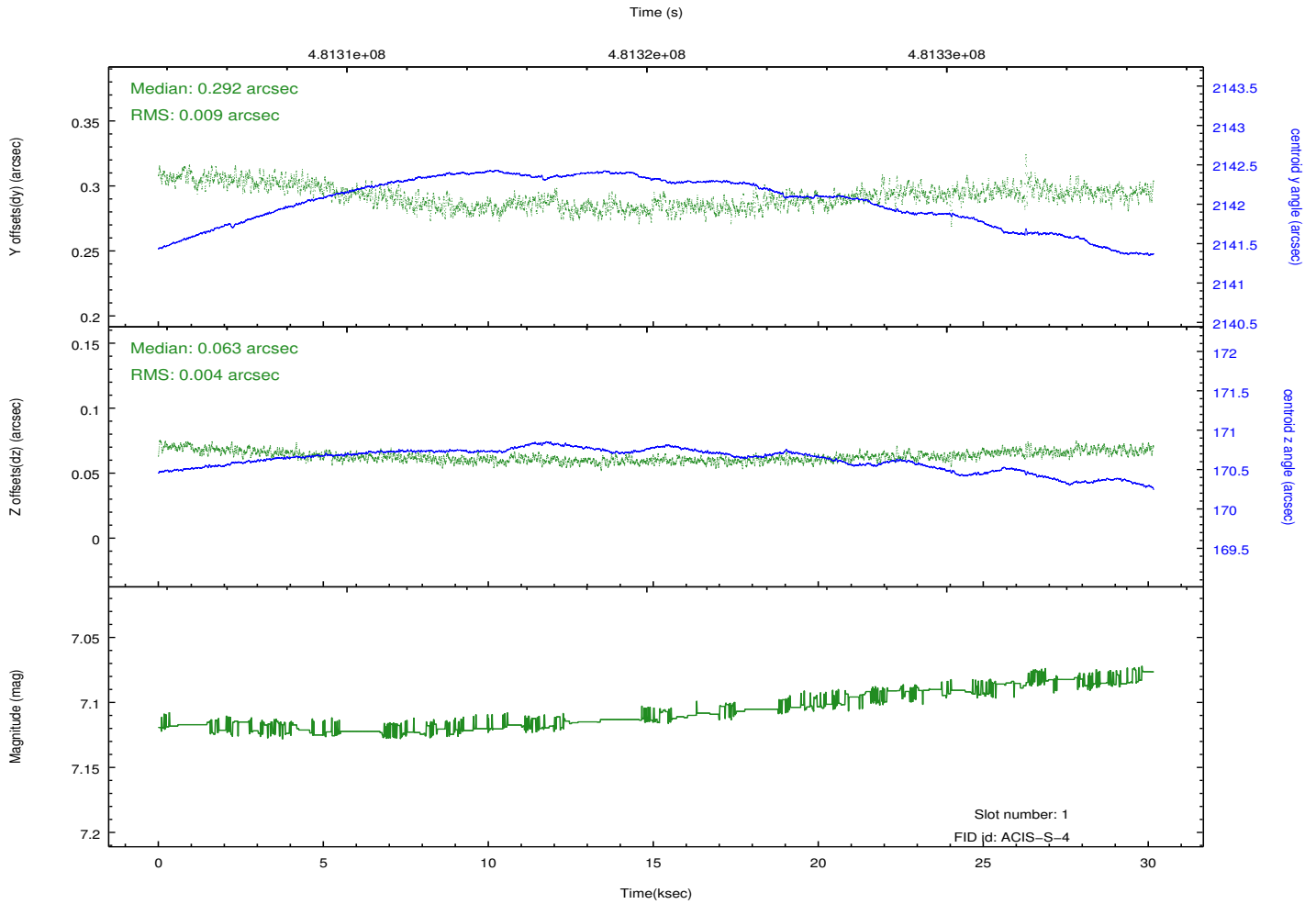
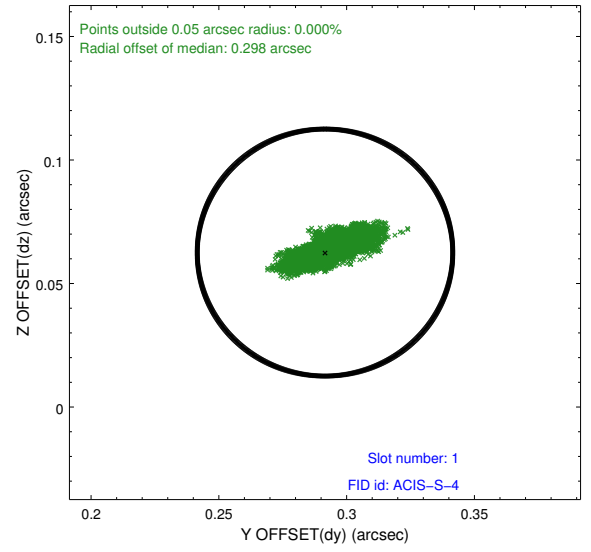
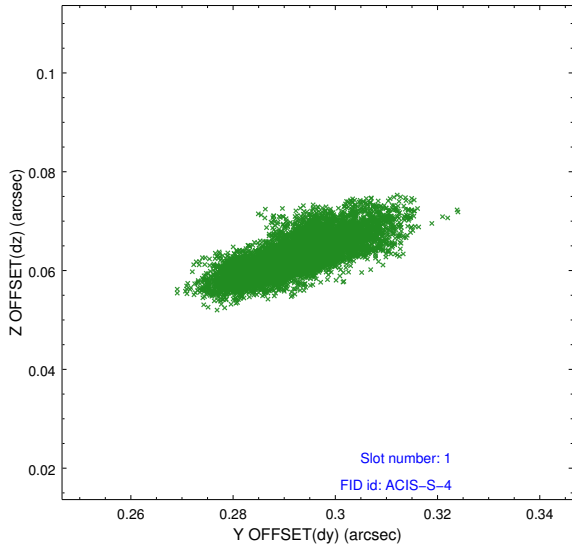


2.5 FID Slots

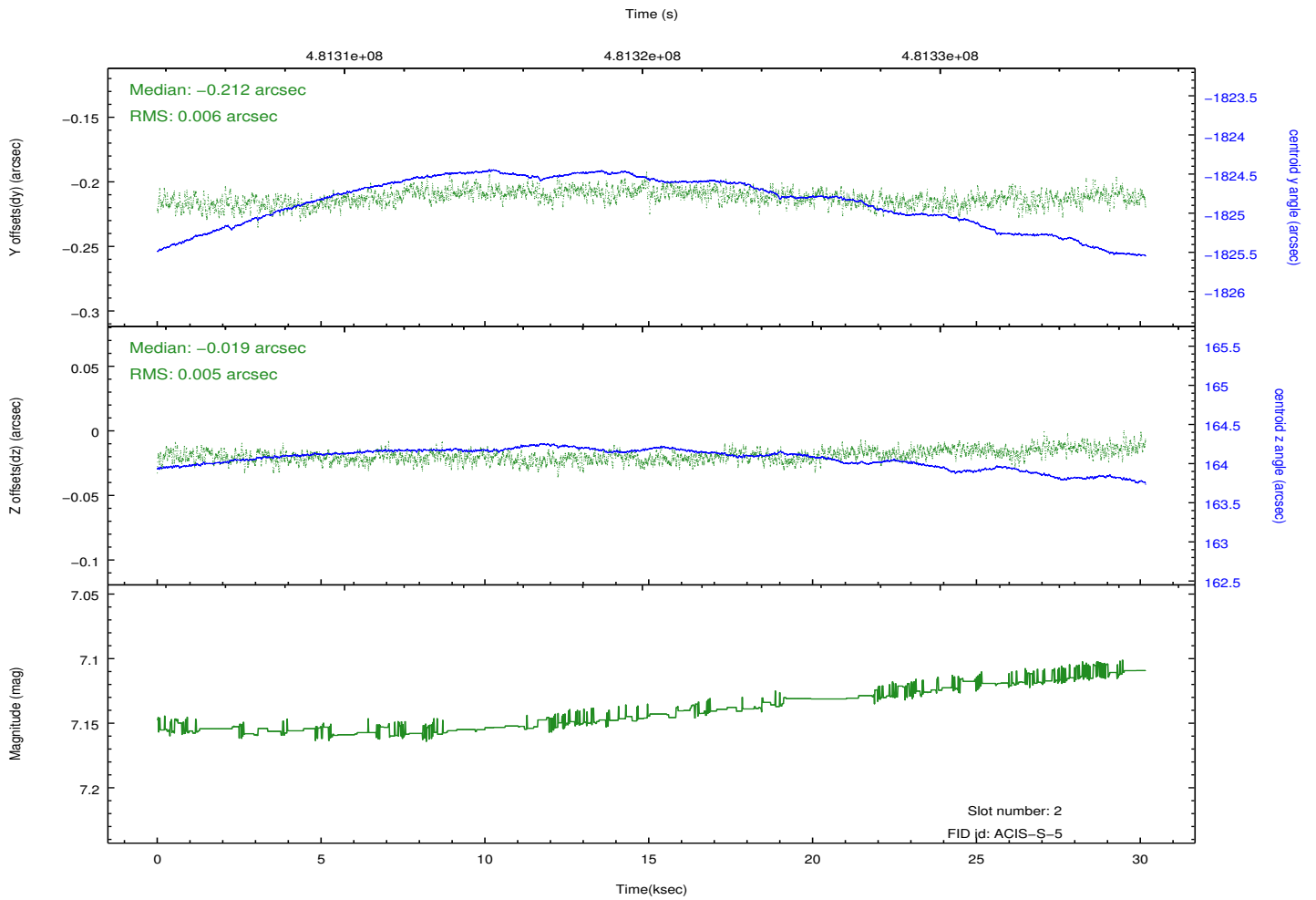
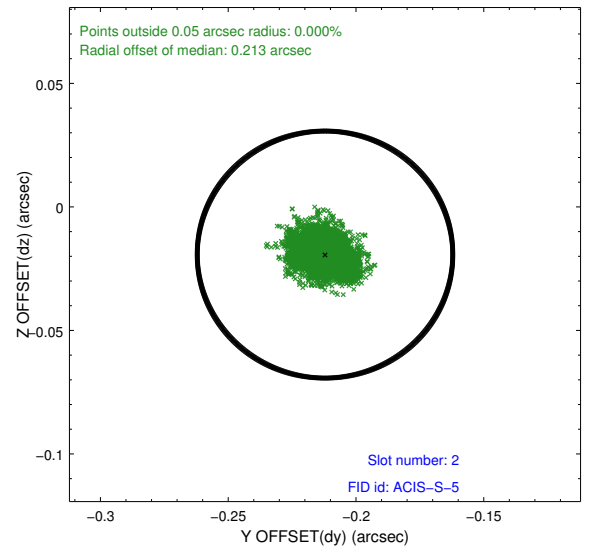
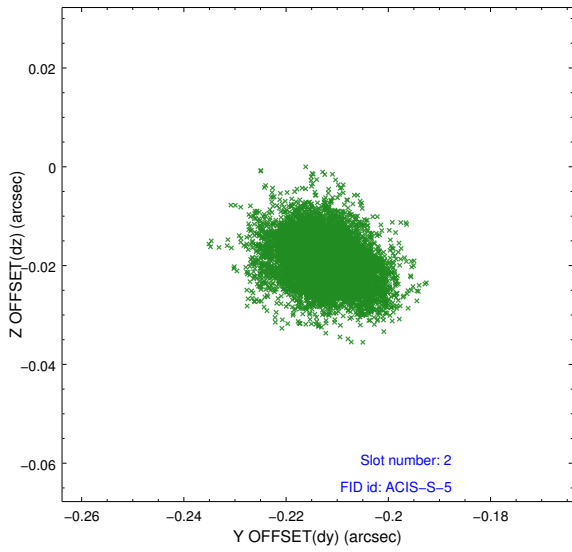
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.07129978919

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.