

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 14483 - L2 Version 2
Chandra X-Ray Center

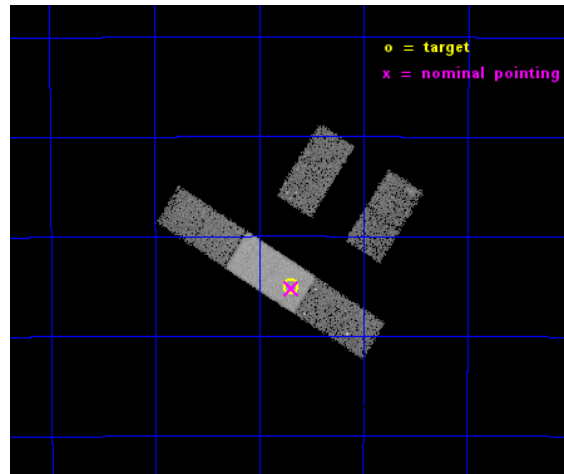
L2 Processing Date : Dec 2 2014

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1 Front

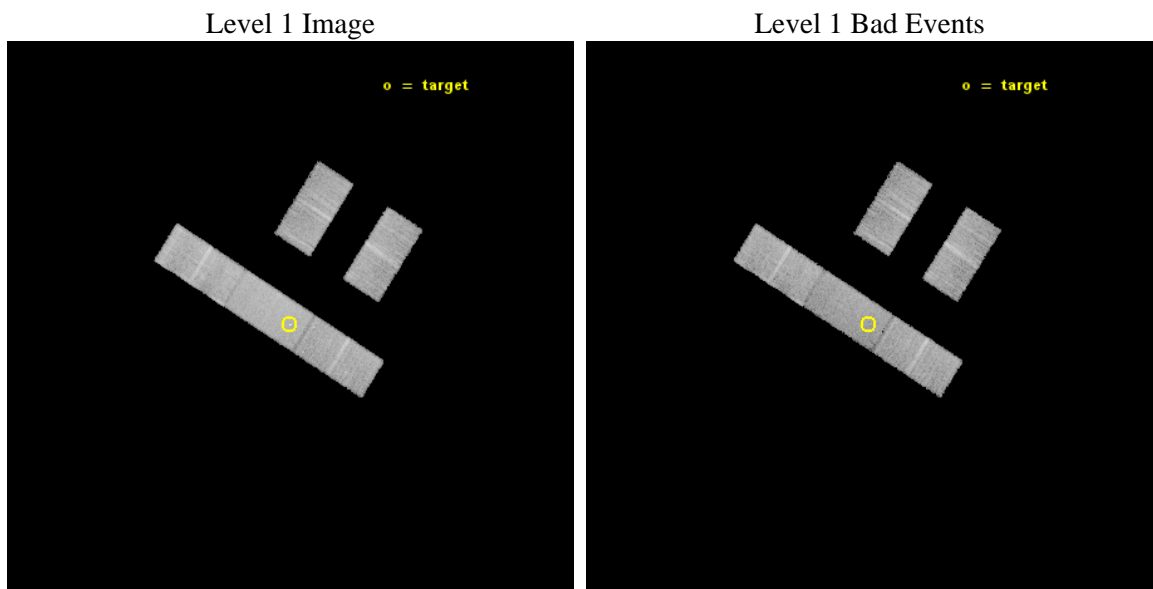
seq_num	702720	Sequence number
obs_id	14483	Observation id
title	ENERGY DEPENDENT X-RAY MICROLENSING AND THE STRUCTURE OF QUASARS	P
observer	Prof. Christopher Kochanek	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.672496702734	Nominal RA [deg]
dec_nom	-43.420853026098	Nominal Dec [deg]
roll_nom	212.49637279887	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19065.344936013	Sum of GTIs [s]
livetime	18615.934379005	Livetime [s]
ontime2	19065.180776	Sum of GTIs [s]
ontime3	19065.262856007	Sum of GTIs [s]
ontime6	19065.30389601	Sum of GTIs [s]
ontime7	19065.344936013	Sum of GTIs [s]
ontime8	19065.221816003	Sum of GTIs [s]
l2events	53606	Number of level 2 events



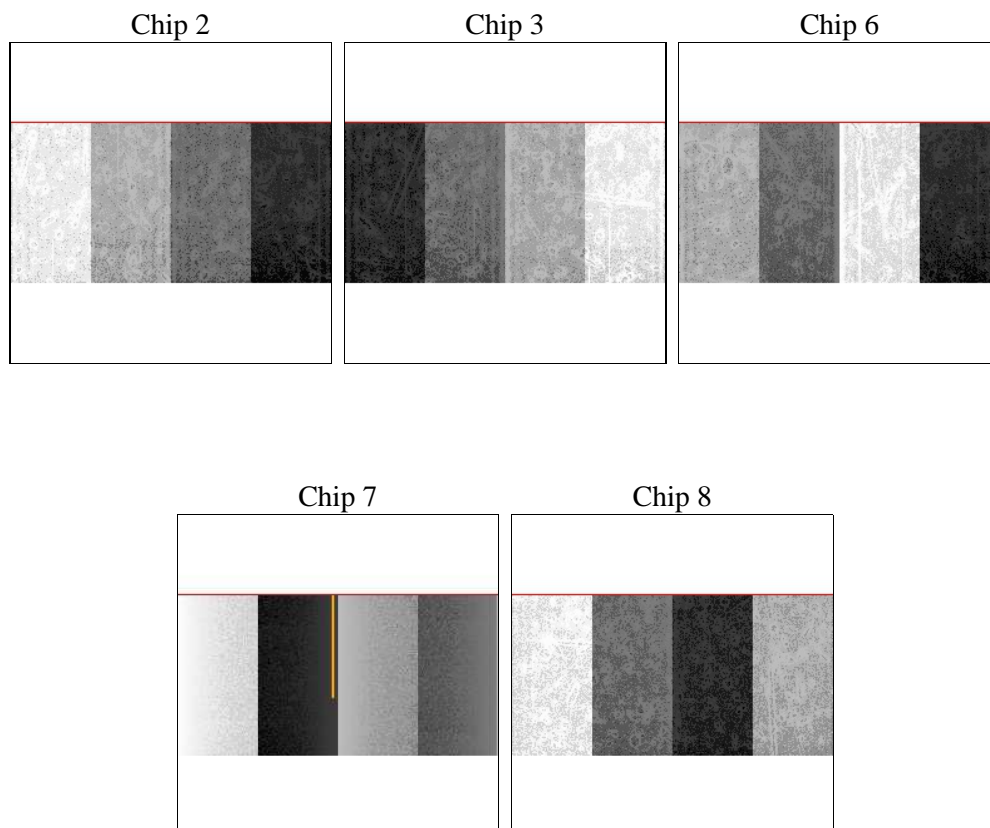
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.536000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	19065.344936013	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	19065.180776	Sum of GTIs [s]
date	2014-12-02T13:54:43	Date and time of file creation	ontime3	19065.262856007	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19065.30389601	Sum of GTIs [s]
			ontime7	19065.344936013	Sum of GTIs [s]
			ontime8	19065.221816003	Sum of GTIs [s]
			l1events	297756	Number of level 1 events

2.1.4 Events

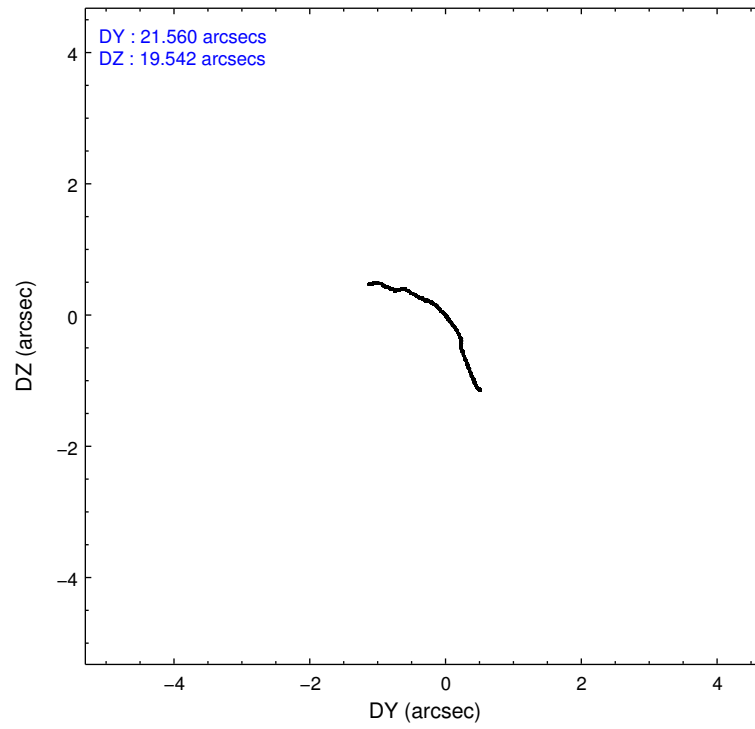
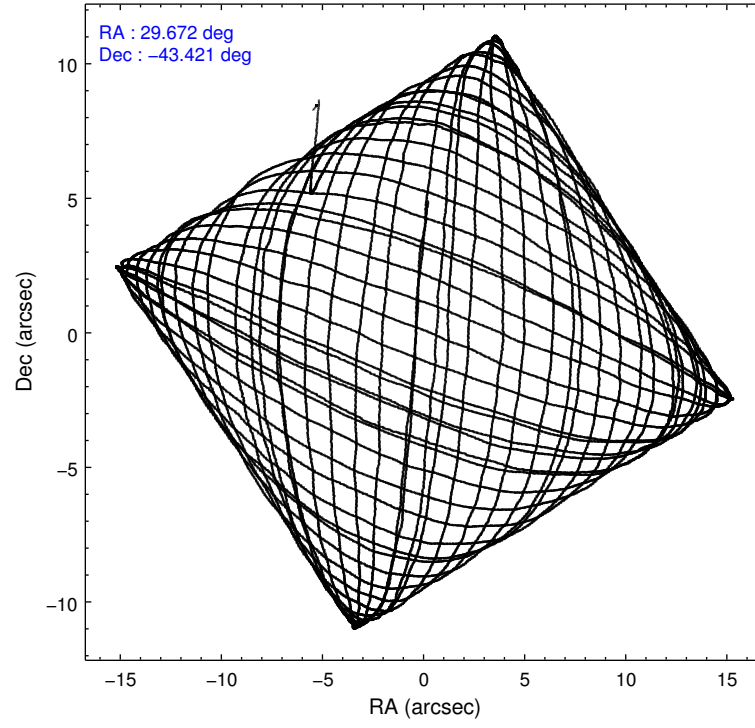
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	52114	50477	54162	70022	70981
rejected events	45917	44392	47235	38267	53193
rejected %	88%	87%	87%	54%	74%

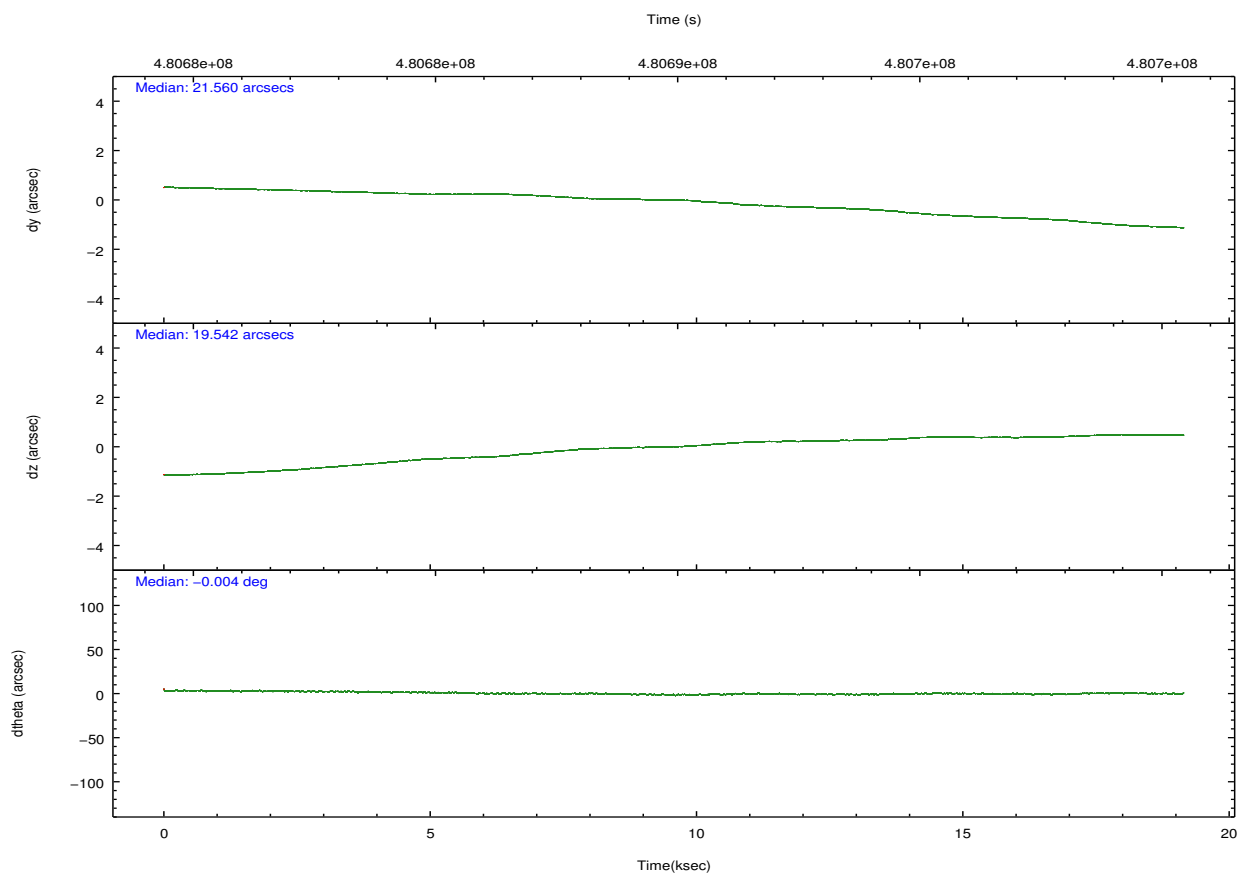
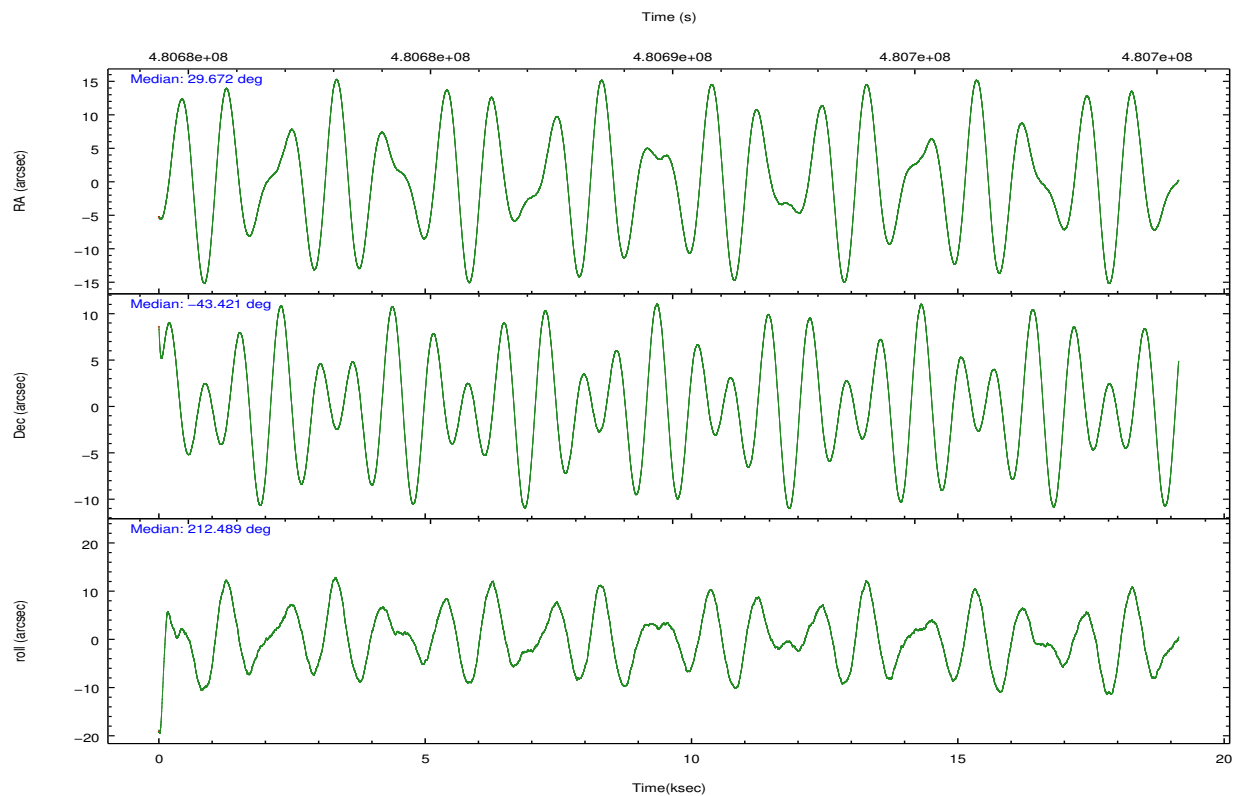
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2096	2061	2343	3217	5086
	4%	4%	4%	4%	7%
grade 1 events	23	25	25	106	45
	0%	0%	0%	0%	0%
grade 2 events	1531	1256	1462	6439	4188
	2%	2%	2%	9%	5%
grade 3 events	759	772	850	3127	1876
	1%	1%	1%	4%	2%
grade 4 events	708	795	812	3053	1787
	1%	1%	1%	4%	2%
grade 5 events	2179	2648	2696	7311	3815
	4%	5%	4%	10%	5%
grade 6 events	1104	1202	1462	15921	4851
	2%	2%	2%	22%	6%
grade 7 events	43714	41718	44512	30848	49333
	83%	82%	82%	44%	69%

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	29.689422	29.6724967027344	CCD I2 on	O4	Y
[deg] Pointing Dec	-43.396426	-43.42085302609772	CCD I3 on	O3	Y
[deg] Pointing Roll	212.351397	212.4963727988661	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)	480680498.184000	480679293.32271	CCD S5 on	N	N
Observation start date	2013-03-26T10:20:31	2013-03-26T10:01:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	480699499.184000	480699724.64882	On-chip summing requested	N	N
Observation end date	2013-03-26T15:37:12	2013-03-26T15:42:04	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



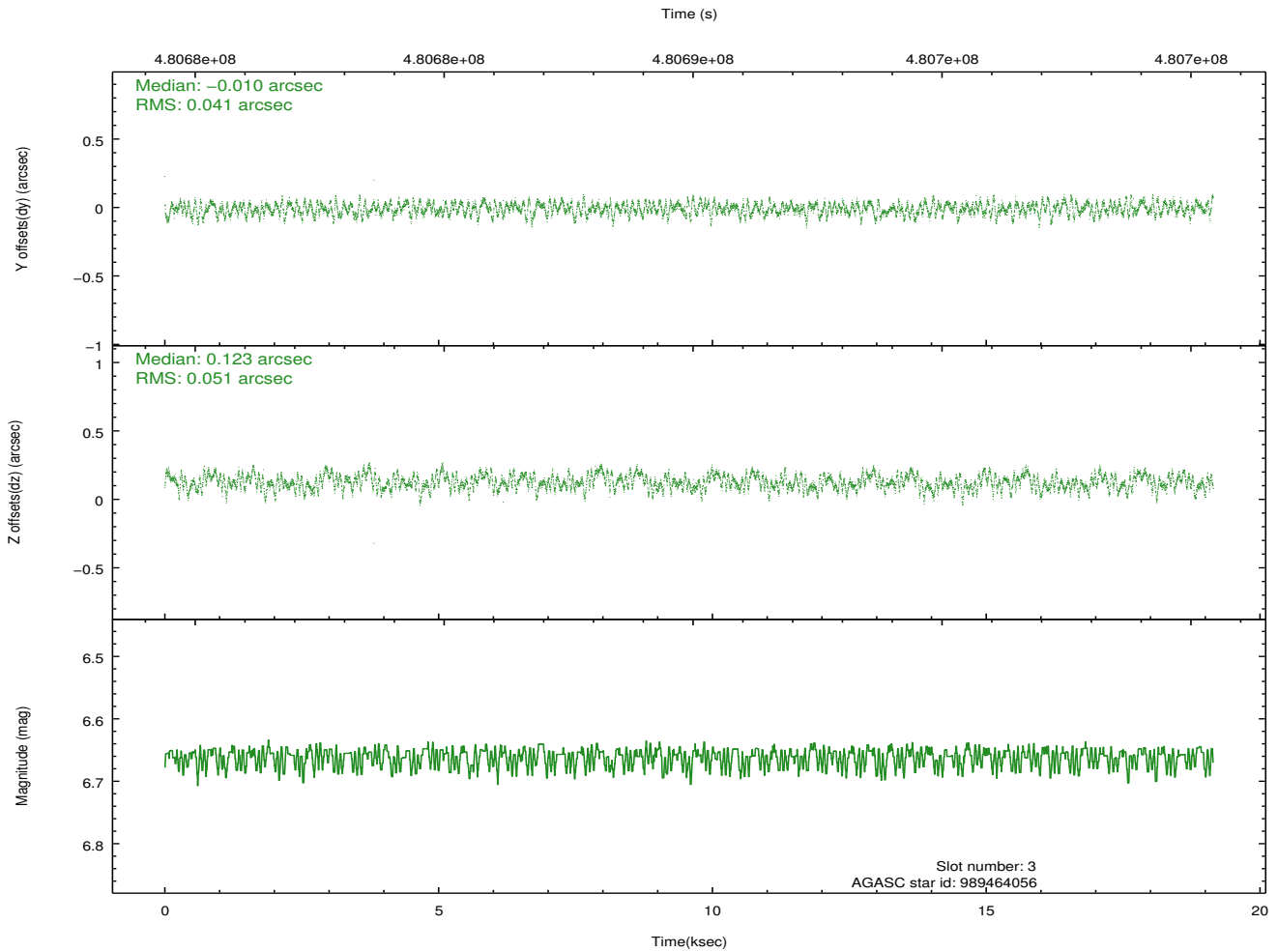
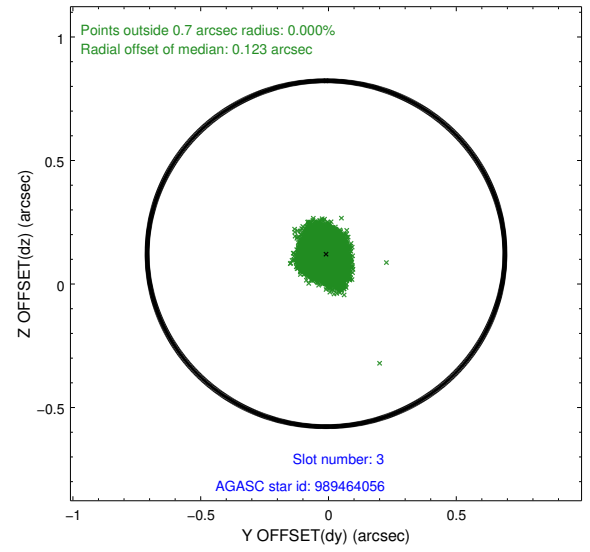
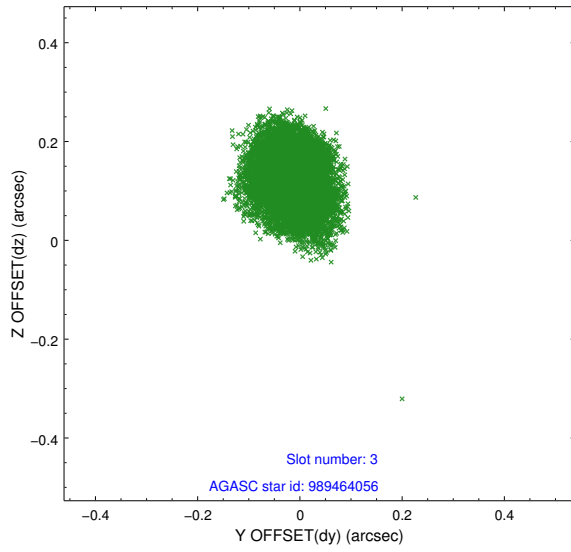


Slot Statistics

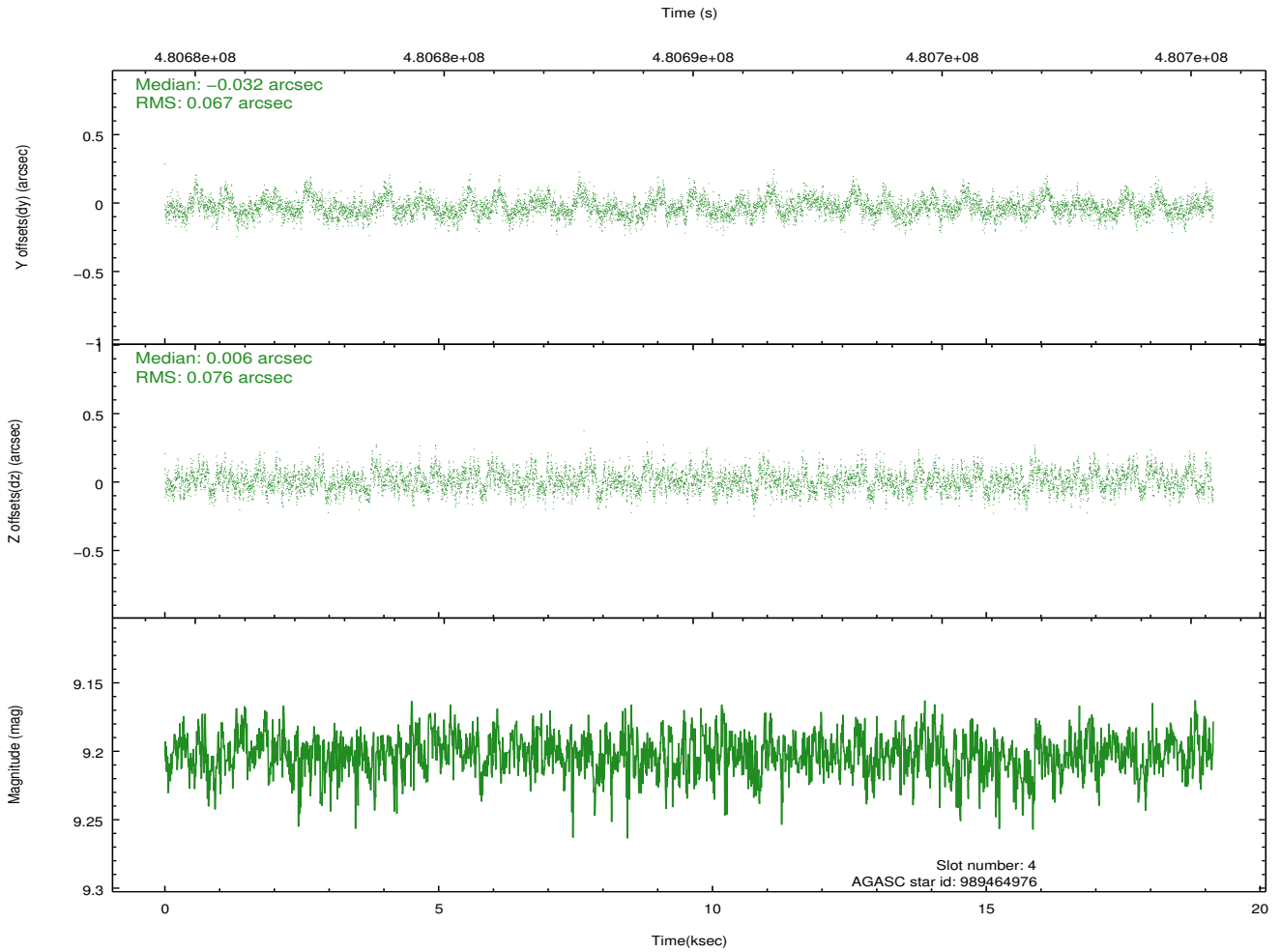
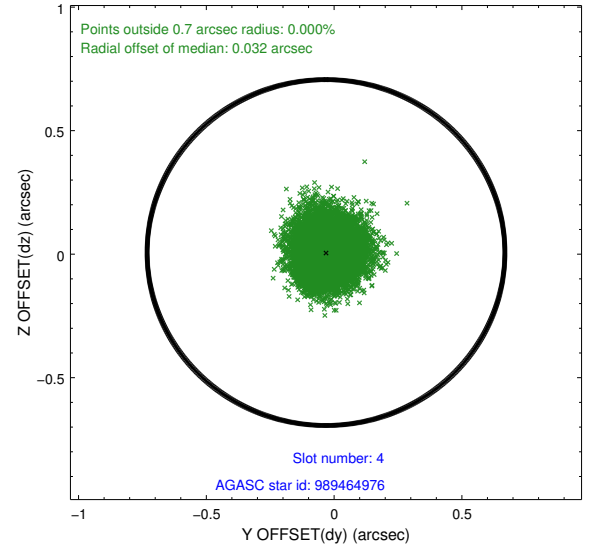
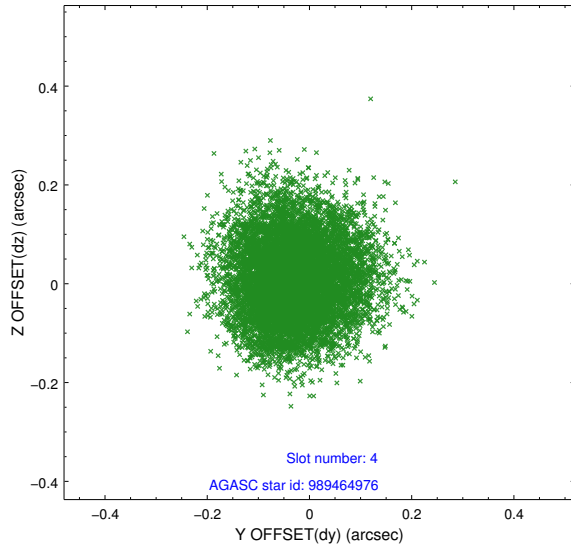
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	4670	-0.131	-0.043	0.024	0.047	0.000000	0.000000	-774.68	-1740.96
1	FID		ACIS-S-4	7.13	4670	0.274	0.075	0.007	0.012	0.000000	0.000000	2138.90	167.43
2	FID		ACIS-S-5	7.16	4670	-0.171	-0.024	0.027	0.053	0.000000	0.000000	-1827.31	161.24
3	GUIDE	used	989464056	6.66	9340	-0.010	0.123	0.071	0.110	29.735893	-42.949136	-964.38	-1294.29
4	GUIDE	used	989464976	9.20	9333	-0.032	0.006	0.110	0.174	28.960994	-43.047006	950.89	-2080.86
5	GUIDE	used	989467528	8.19	9335	-0.021	0.030	0.079	0.124	29.209436	-43.178151	646.29	-1334.30
6	GUIDE	used	989469232	8.78	9338	-0.043	0.044	0.095	0.150	28.685830	-43.208230	1871.29	-1967.53
7	GUIDE	used	990381216	9.47	9307	0.103	-0.204	0.125	0.203	30.795771	-43.607731	-2018.80	2201.76

2.4 Star Slots

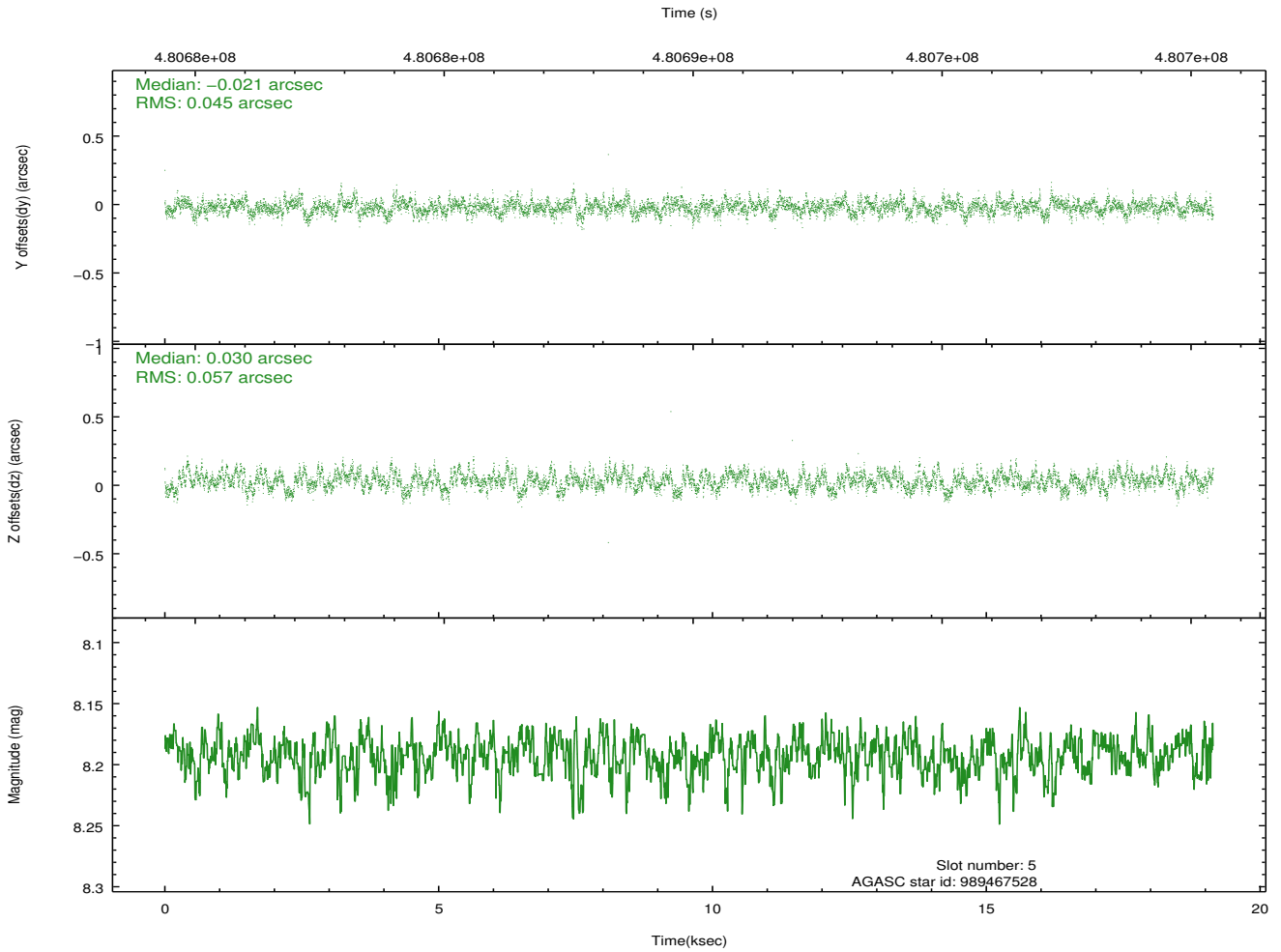
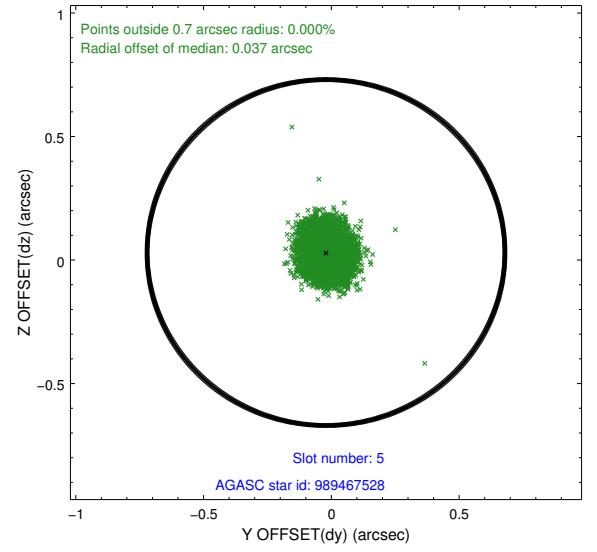
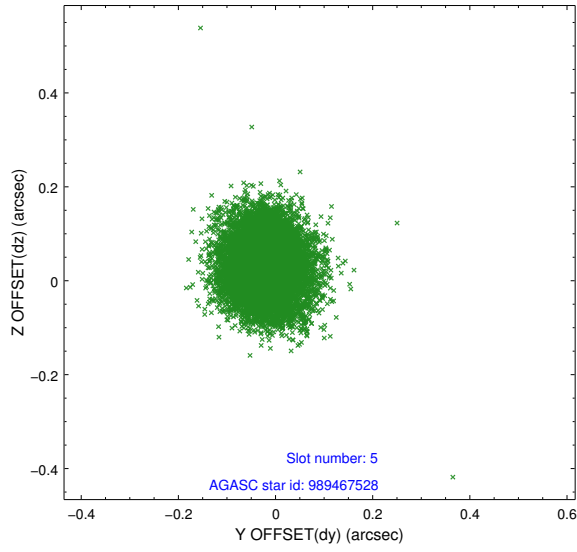
2.4.1 Slot 3



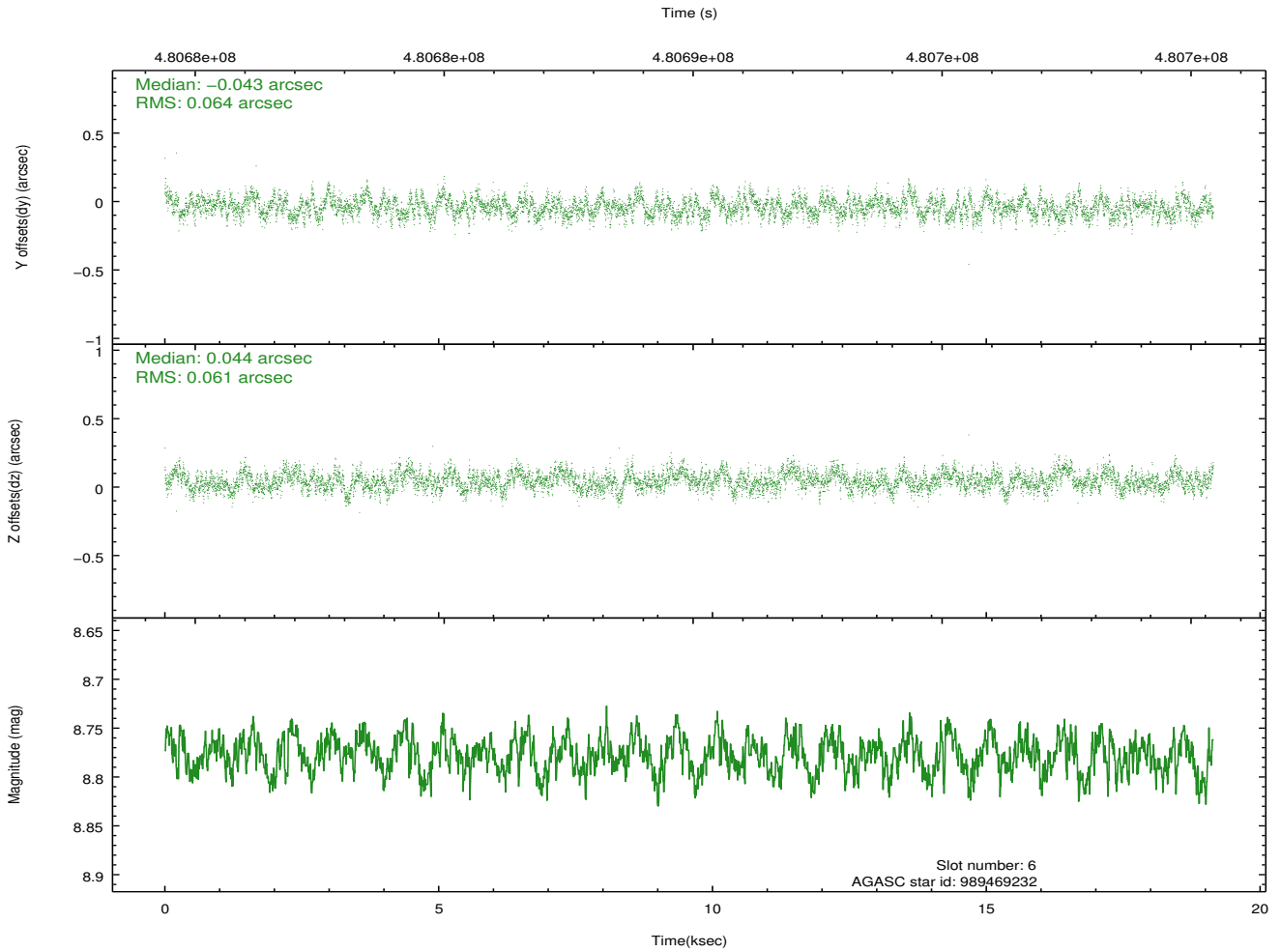
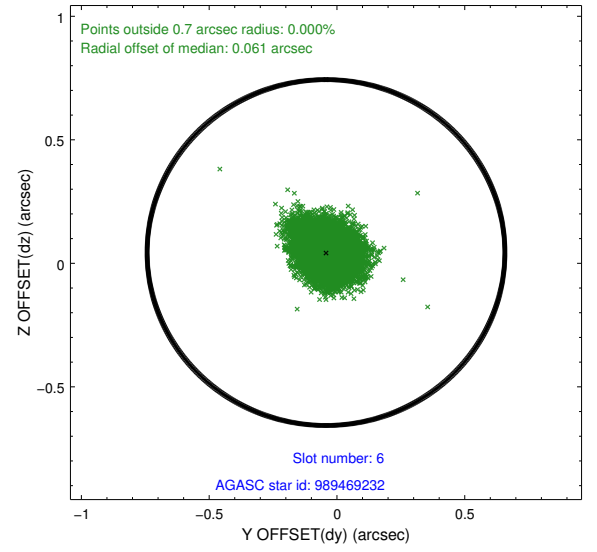
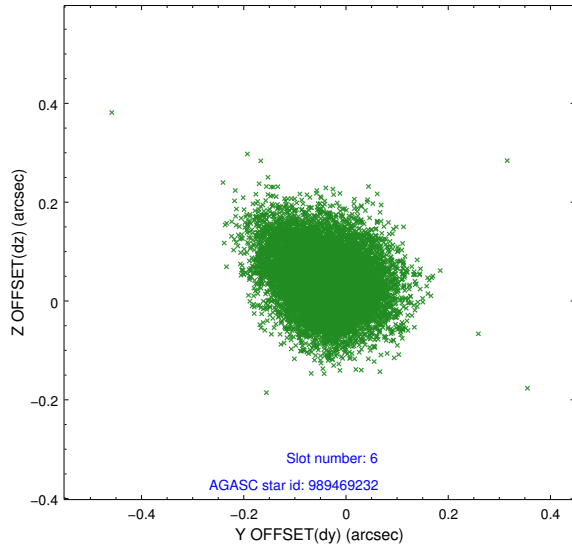
2.4.2 Slot 4



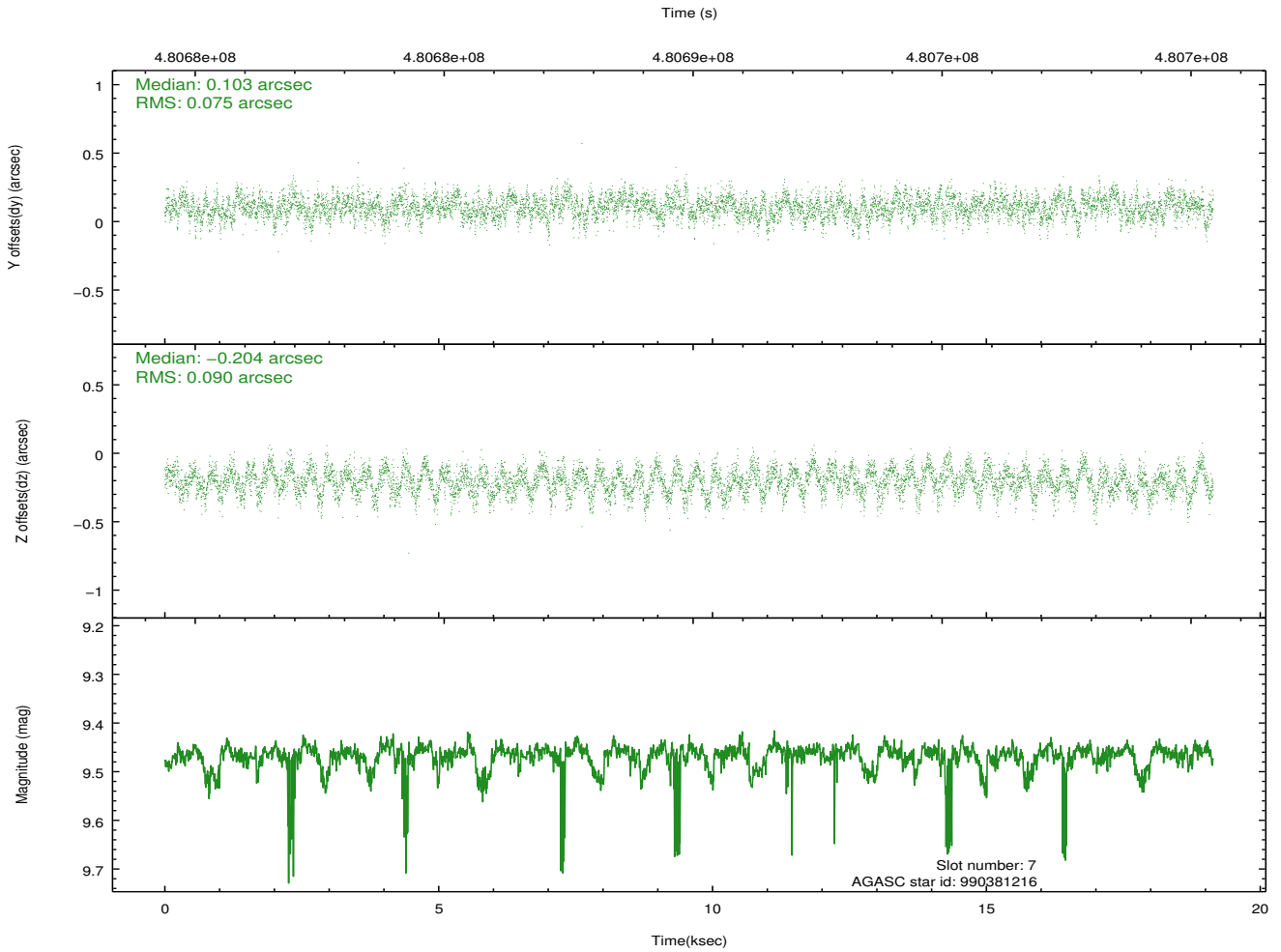
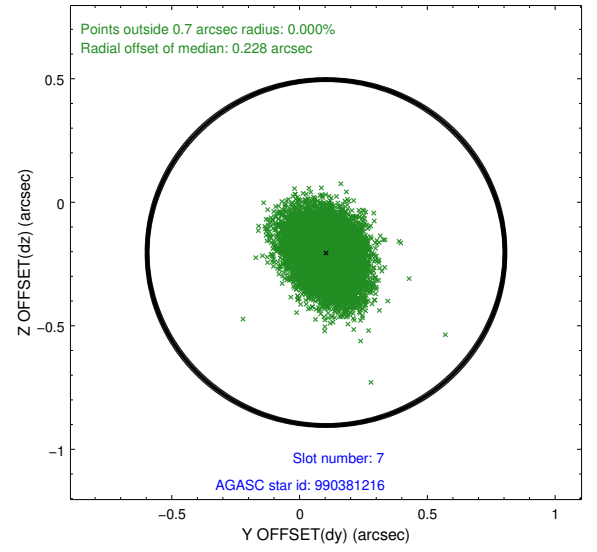
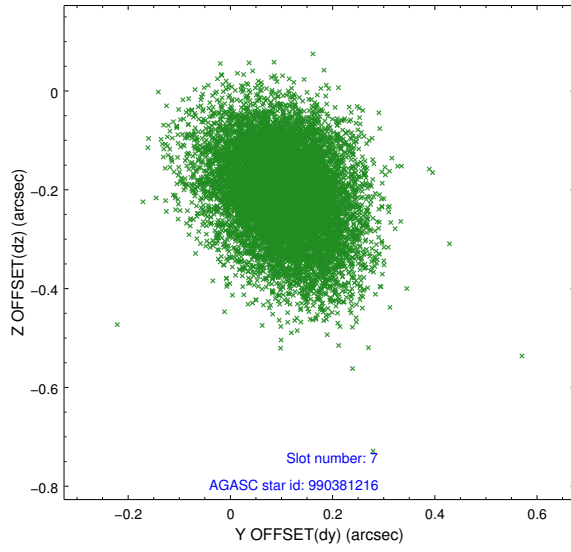
2.4.3 Slot 5



2.4.4 Slot 6

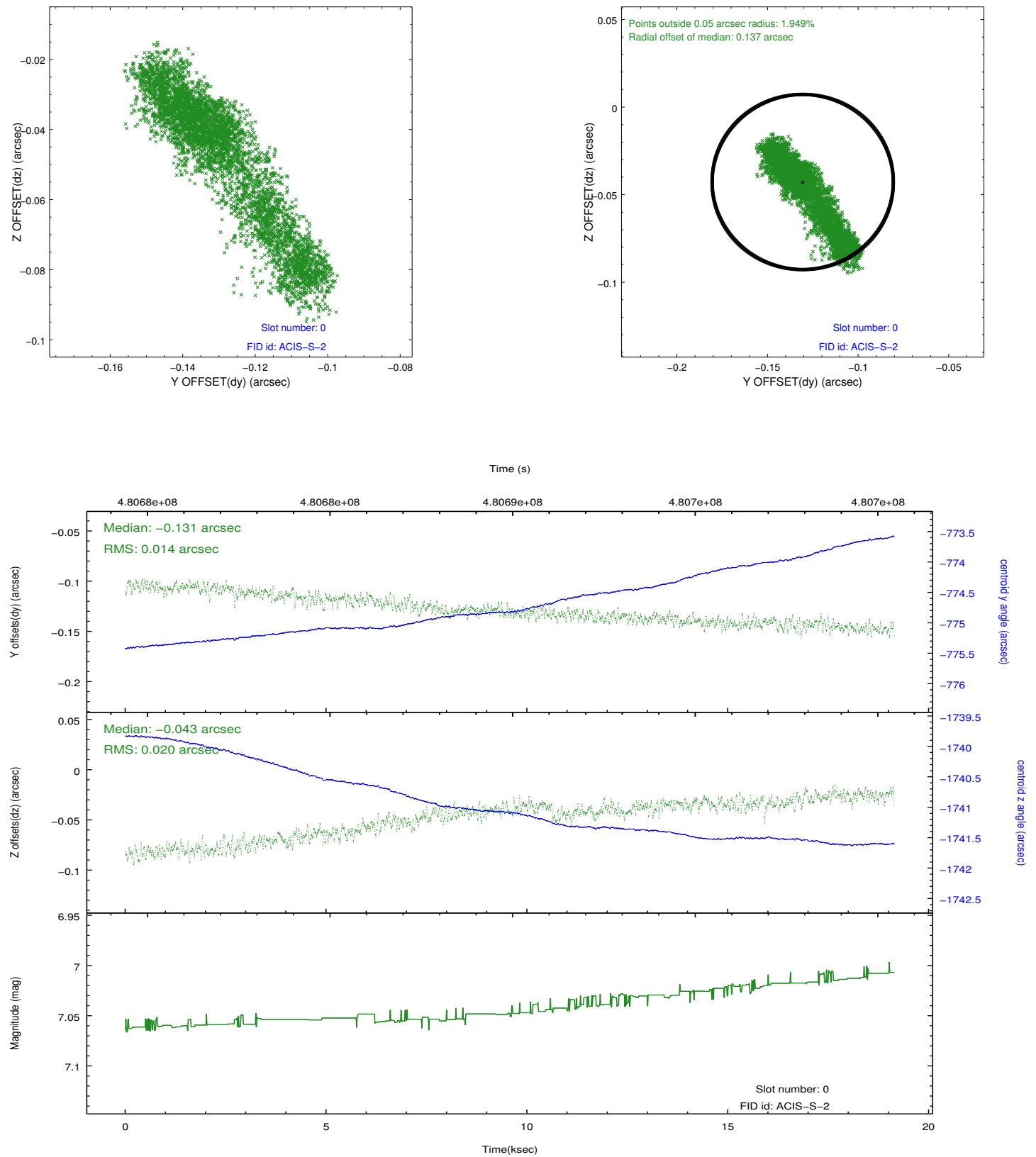


2.4.5 Slot 7

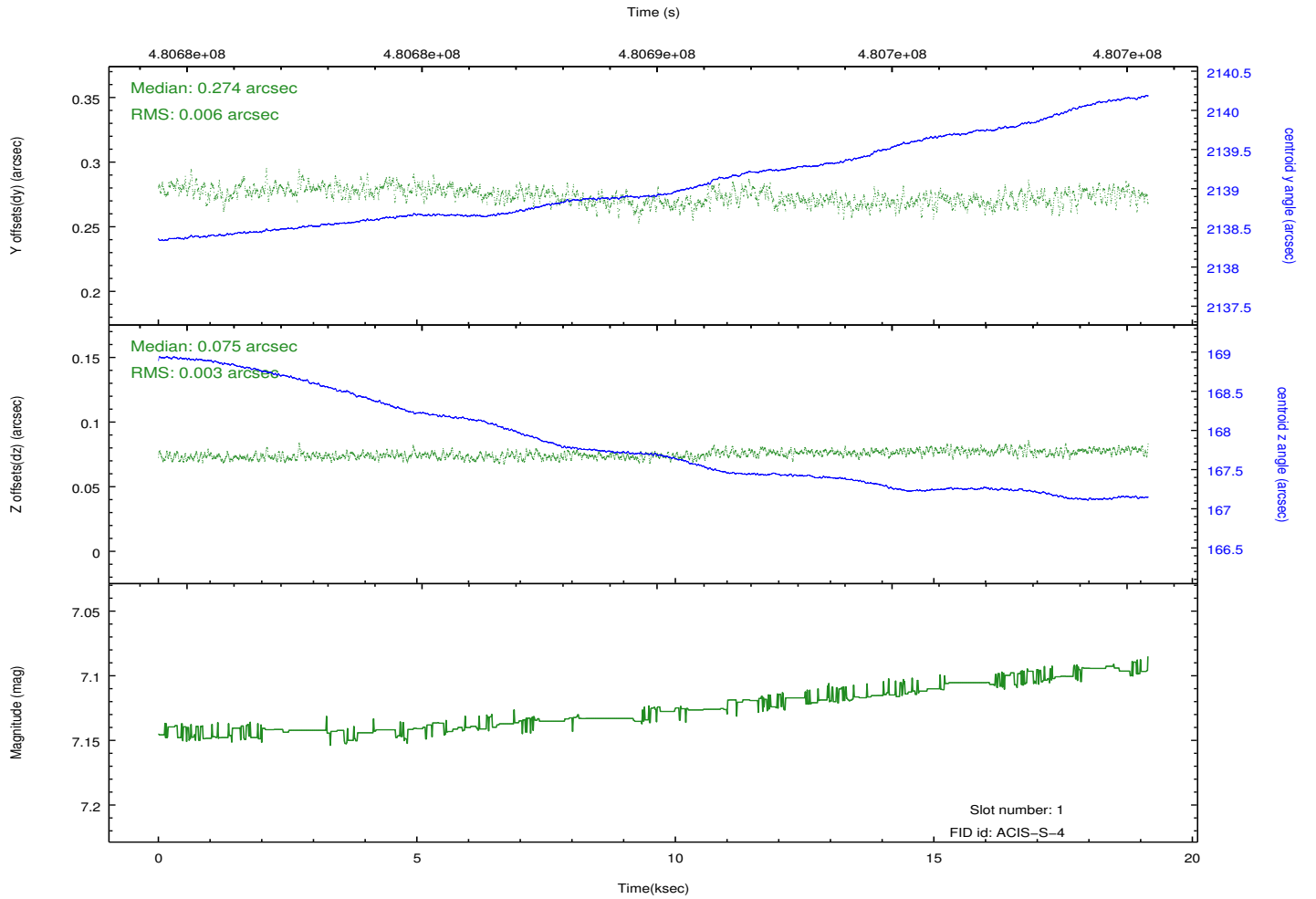
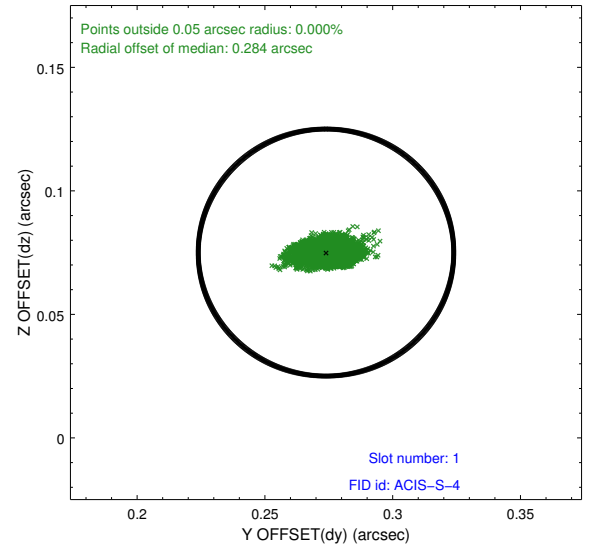
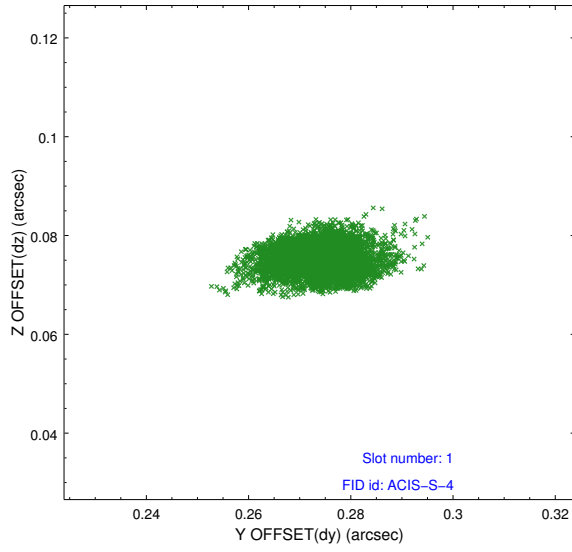


2.5 FID Slots

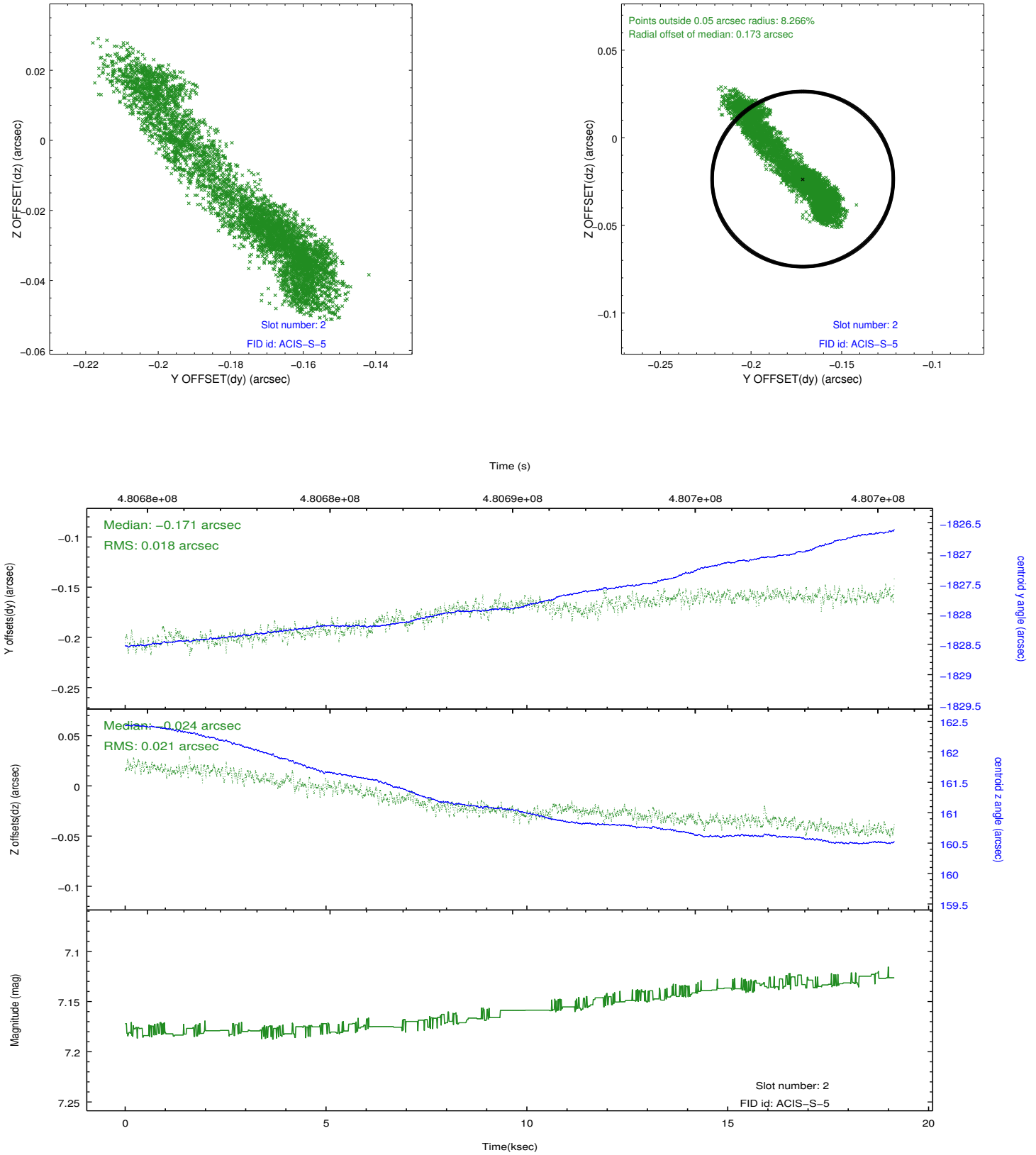
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.065344936013

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.