

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4122 - L2 Version 4
Chandra X-Ray Center

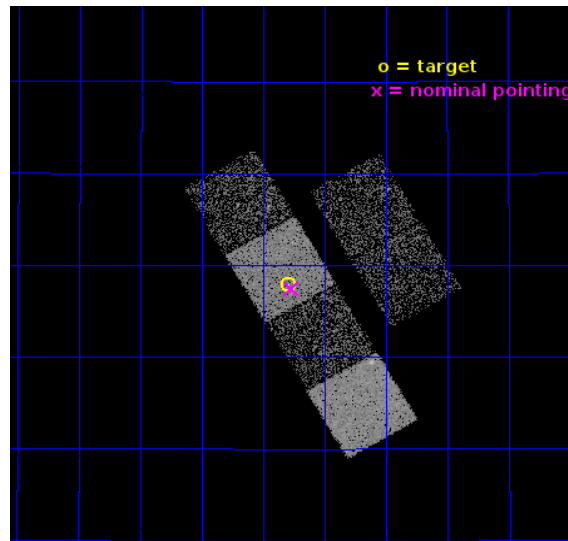
L2 Processing Date : Jul 6 2015

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1 Front

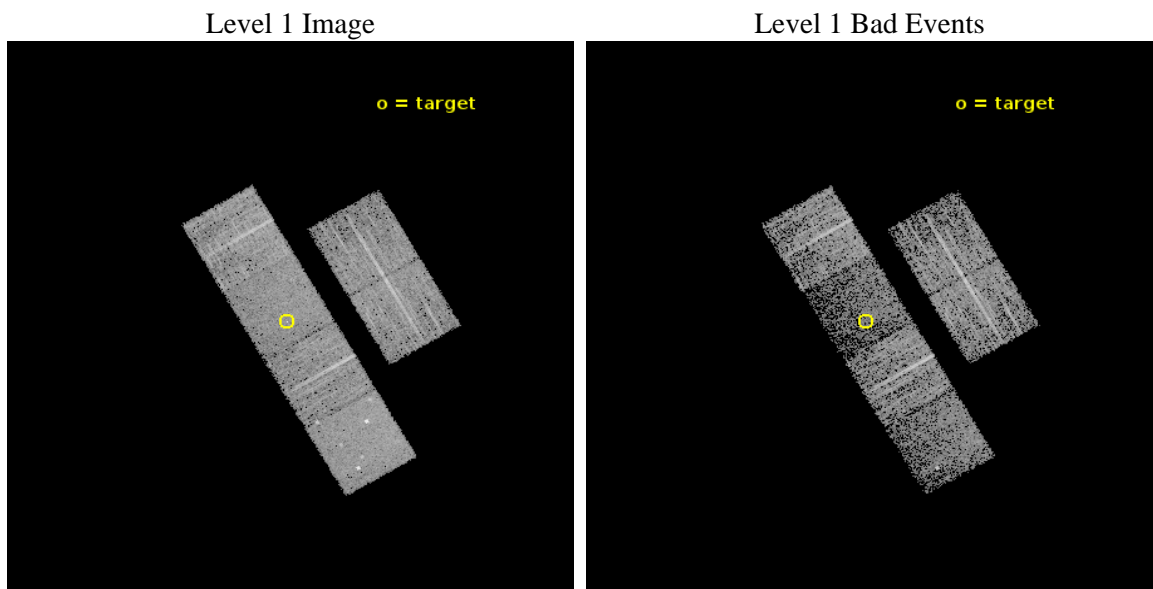
seq_num	700801	Sequence number
obs_id	4122	Observation id
title	WHAT KIND OF JETS DOES NATURE MAKE? X-RAY CHARACTERIZATION OF THE FIRST FLAT SPECTRUM SAMPLE	Proposal title
observer	Dr. Giovanni Fossati	Principal investigator
object	B2 0920+31B	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	140.95	Observer's specified target RA [deg]
dec_targ	31.131639	Observer's specified target Dec [deg]
ra_nom	140.94261869492	Nominal RA [deg]
dec_nom	31.124221498981	Nominal Dec [deg]
roll_nom	239.82886230211	Nominal Roll [deg]
revision	4	Processing version of data
ontime	5151.4186928868	Sum of GTIs [s]
livetime	5086.1883275856	Livetime [s]
ontime2	5148.1777226329	Sum of GTIs [s]
ontime3	5151.4186928868	Sum of GTIs [s]
ontime5	5151.4186928868	Sum of GTIs [s]
ontime6	5151.4186928868	Sum of GTIs [s]
ontime7	5151.4186928868	Sum of GTIs [s]
ontime8	5151.4186928868	Sum of GTIs [s]
l2events	35488	Number of level 2 events



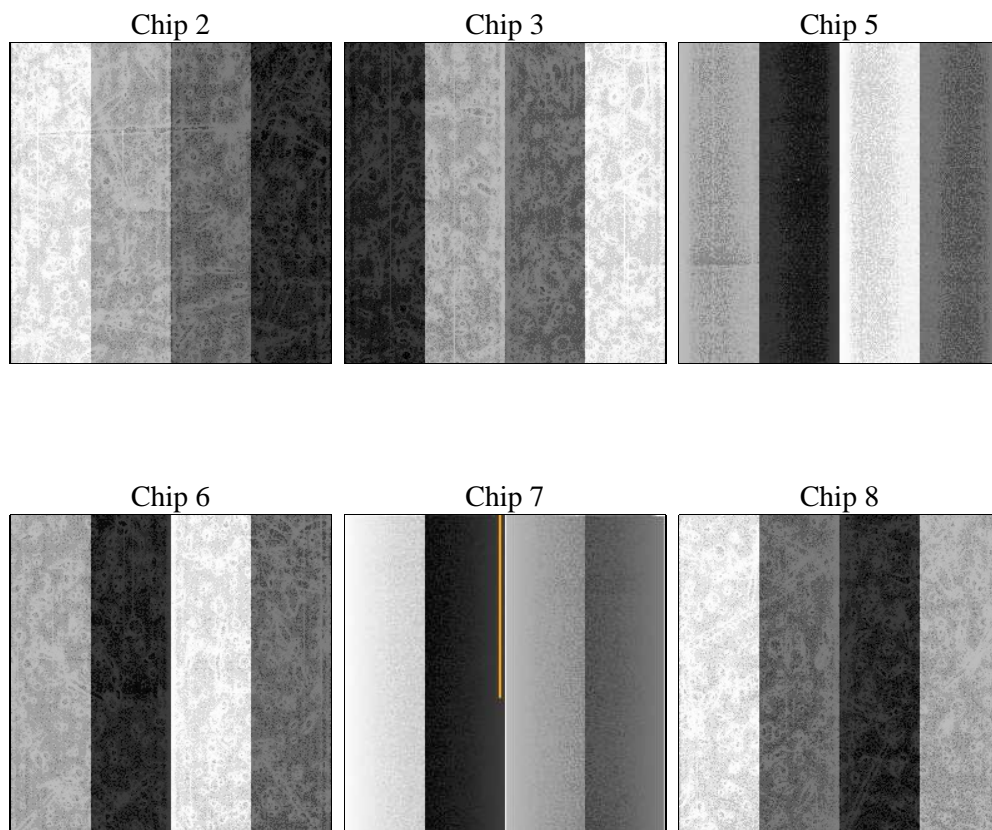
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4	Processing system revision	ontime	5151.4186928868	Sum of GTIs [s]
caldsver	4.6.7	 	ontime2	5148.1777226329	Sum of GTIs [s]
date	2015-07-06T21:11:32	Date and time of file creation	ontime3	5151.4186928868	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	5151.4186928868	Sum of GTIs [s]
			ontime6	5151.4186928868	Sum of GTIs [s]
			ontime7	5151.4186928868	Sum of GTIs [s]
			ontime8	5151.4186928868	Sum of GTIs [s]
			l1events	171143	Number of level 1 events

2.1.4 Events

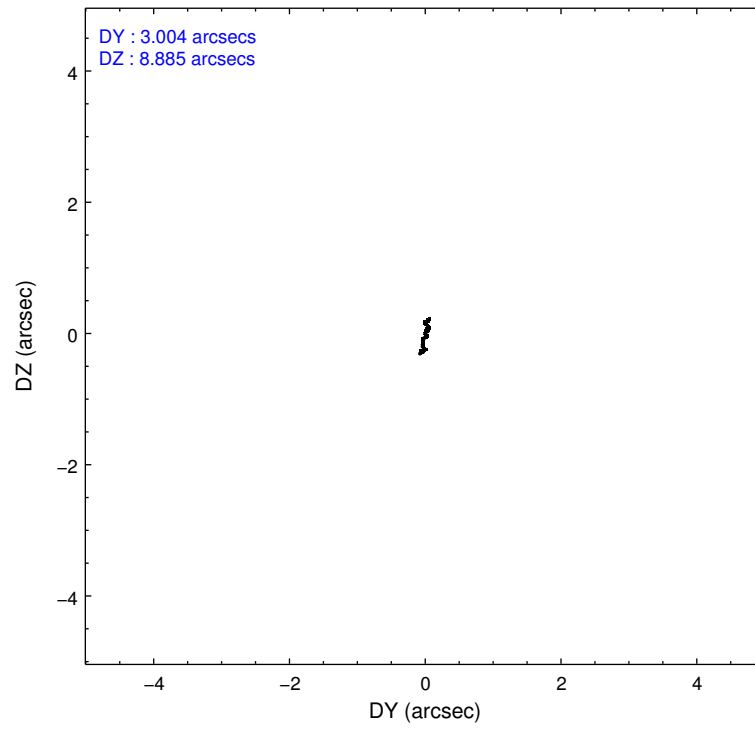
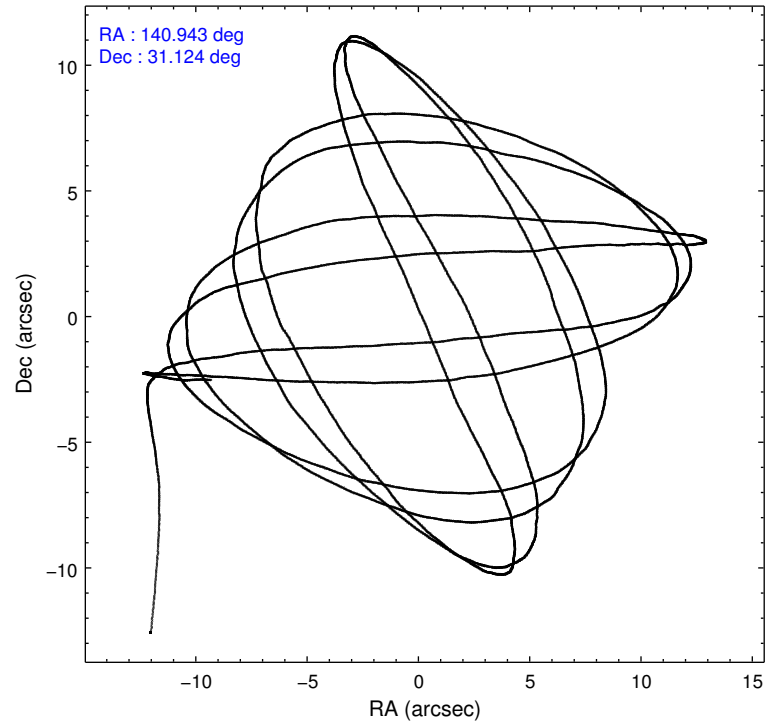
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	28578	25167	32710	27488	24577	32623
rejected events	26045	22864	15254	24833	12554	25773
rejected %	91%	90%	46%	90%	51%	79%

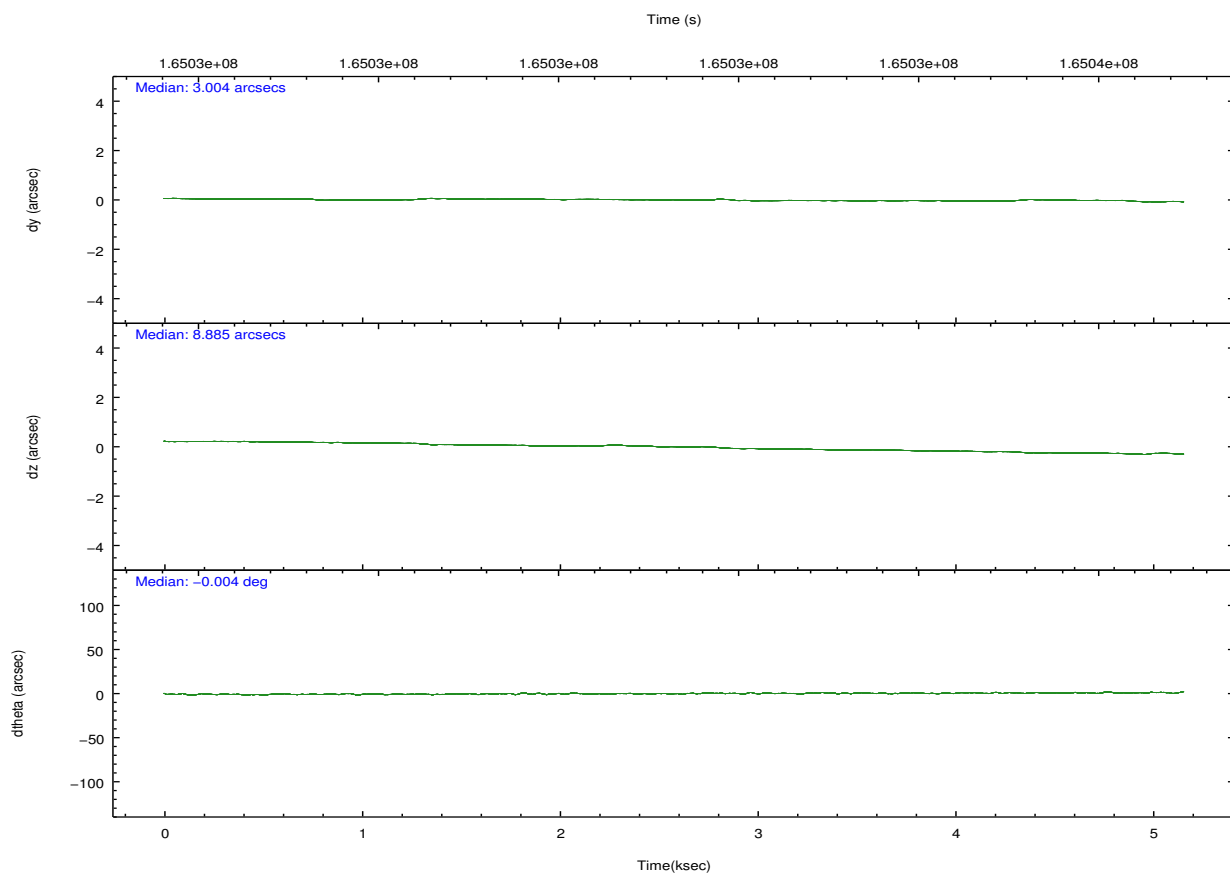
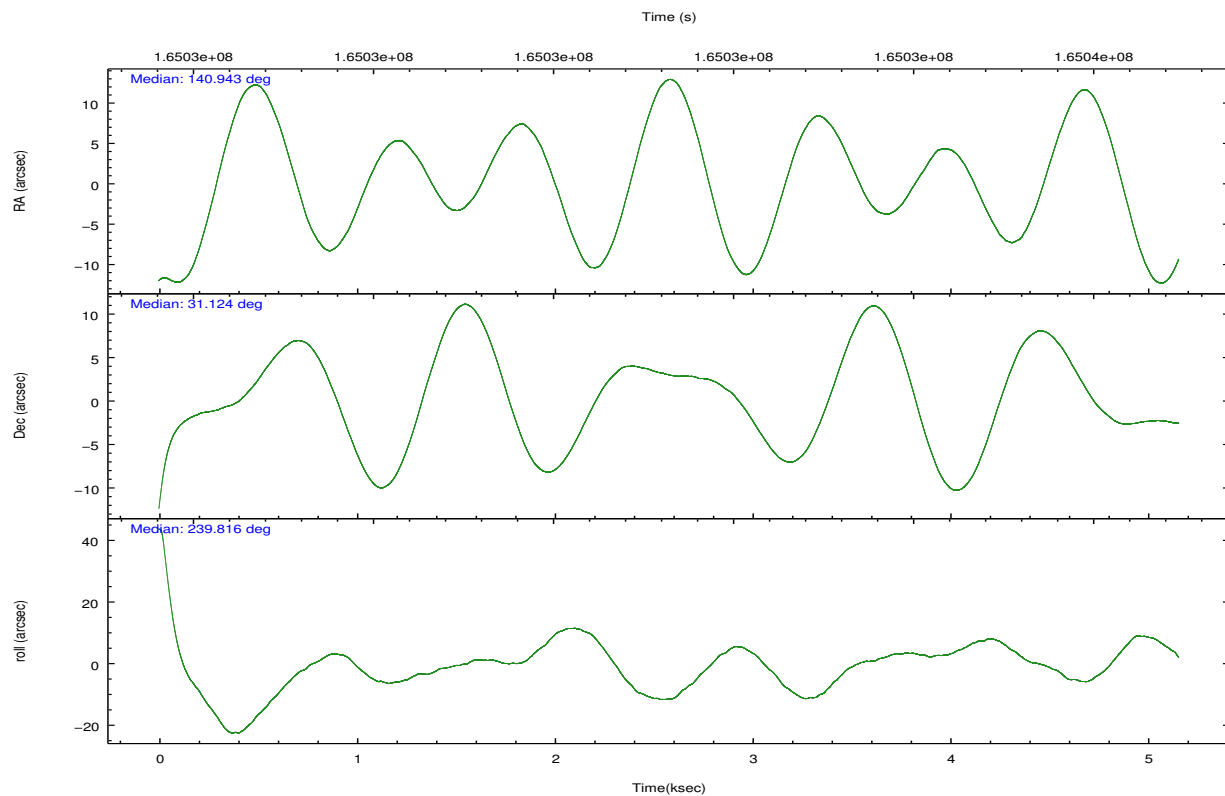
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	956	880	2582	1002	1303	1958
	3%	3%	7%	3%	5%	6%
grade 1 events	15	16	46	15	20	15
	0%	0%	0%	0%	0%	0%
grade 2 events	608	483	5315	567	2501	1580
	2%	1%	16%	2%	10%	4%
grade 3 events	275	261	792	305	1290	772
	0%	1%	2%	1%	5%	2%
grade 4 events	284	265	776	300	1192	677
	0%	1%	2%	1%	4%	2%
grade 5 events	753	811	2656	886	2722	1254
	2%	3%	8%	3%	11%	3%
grade 6 events	441	441	8188	518	5890	1957
	1%	1%	25%	1%	23%	5%
grade 7 events	25246	22010	12355	23895	9659	24410
	88%	87%	37%	86%	39%	74%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	140.942363	140.94261869492	Subarray requested	NONE	NONE
[deg] Pointing Dec	31.151486	31.12422149898116	Alternating exposures requested	N	N
[deg] Pointing Roll	239.672227	239.8288623021083	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	165030216.184000	165029134.29721			
Observation start date	2003-03-26T01:42:32	2003-03-26T01:25:34			
[s] Observation end time (MET)	165035216.184000	165035585.64748			
Observation end date	2003-03-26T03:05:52	2003-03-26T03:13:05			
Read mode	TIMED	TIMED			

2.3 Aspect



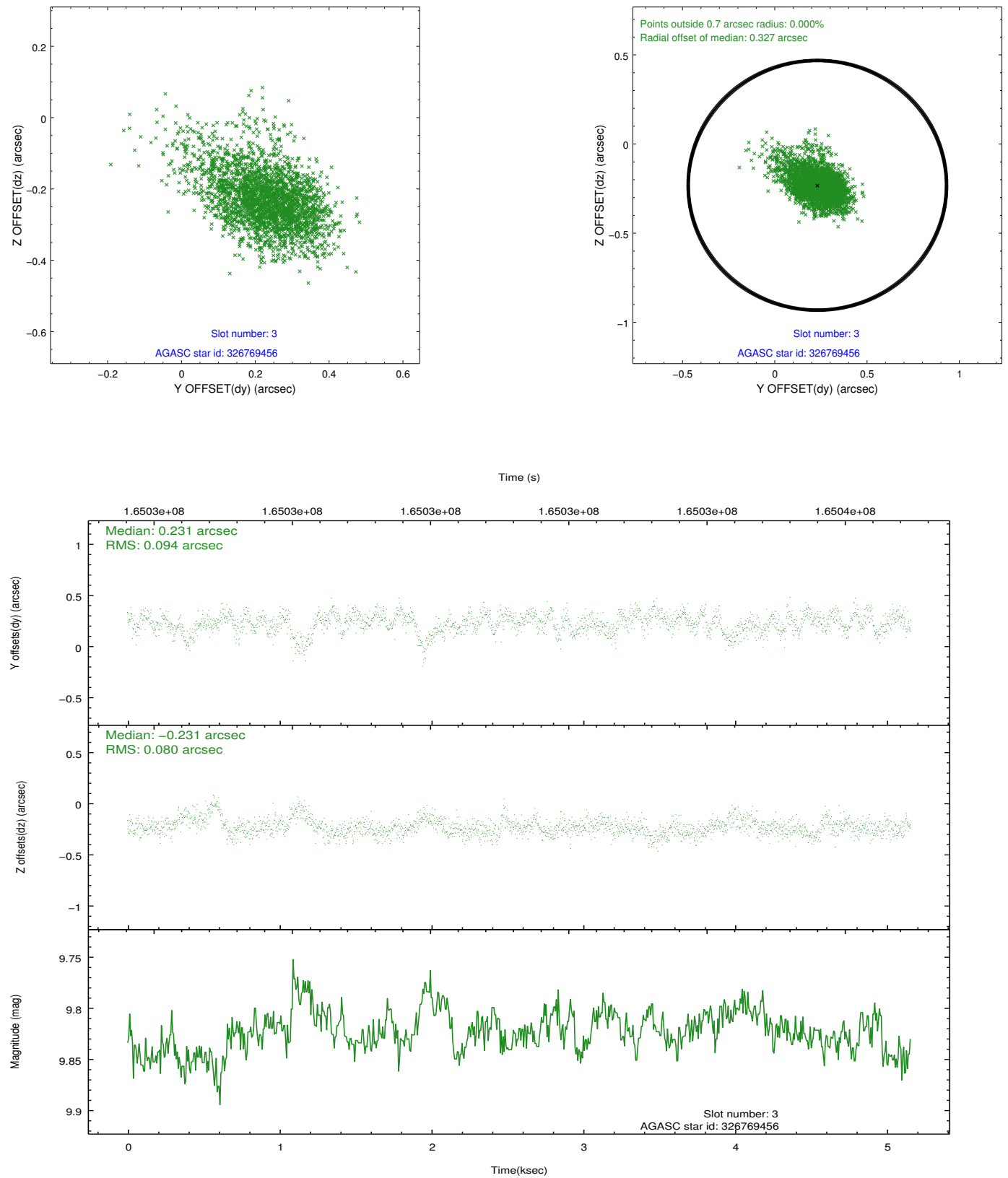


Slot Statistics

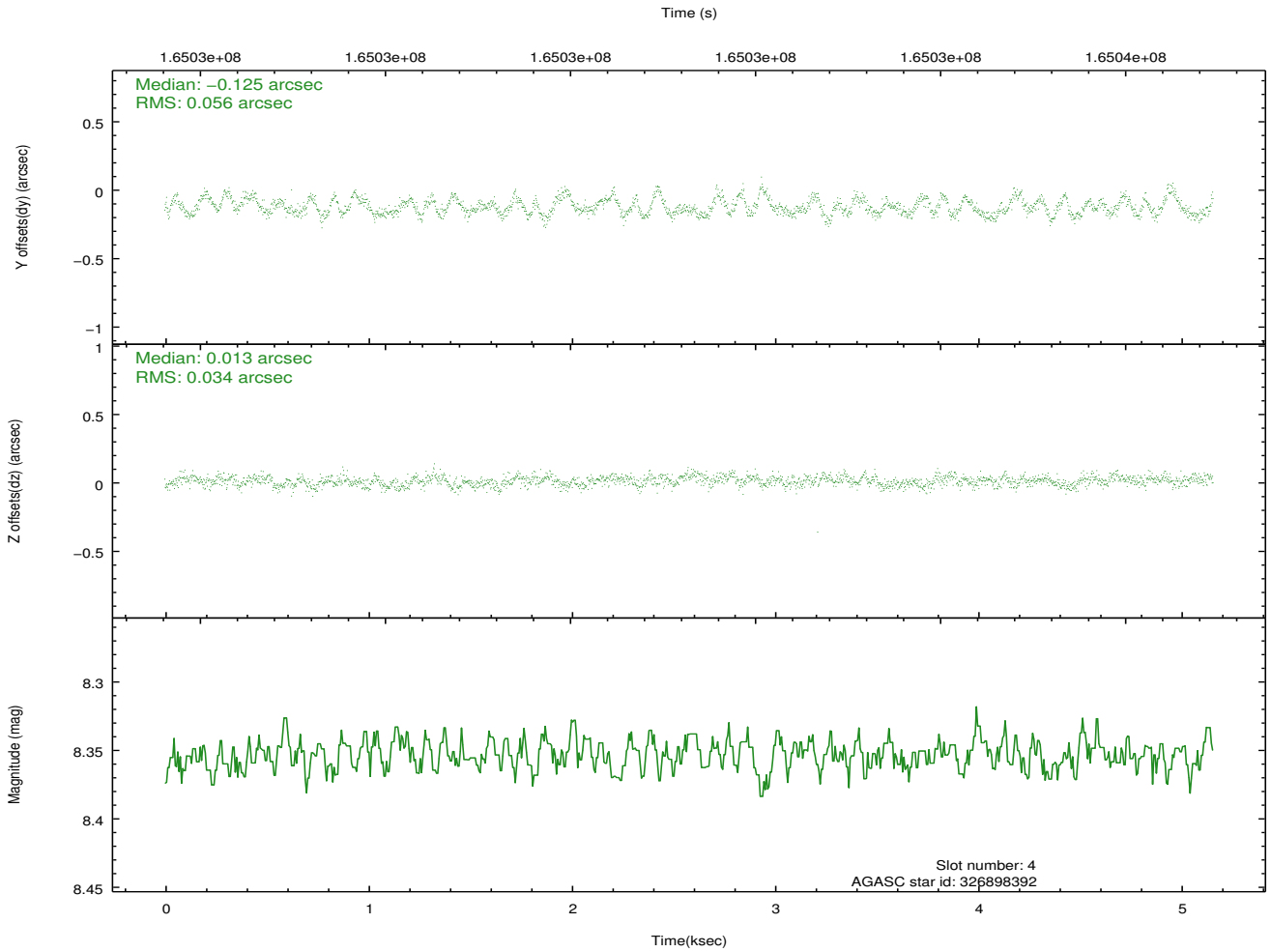
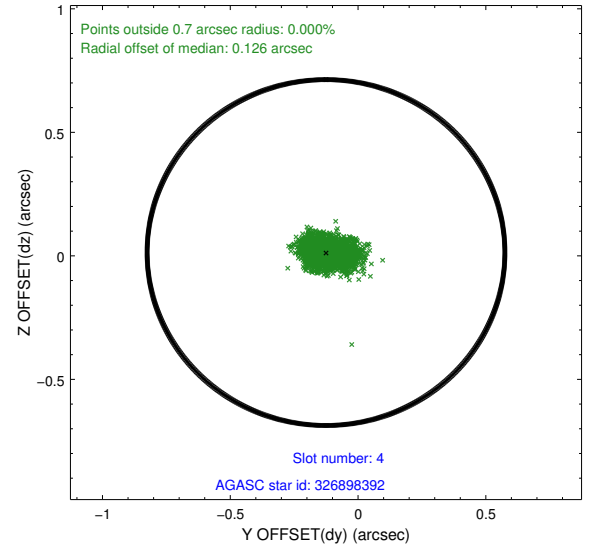
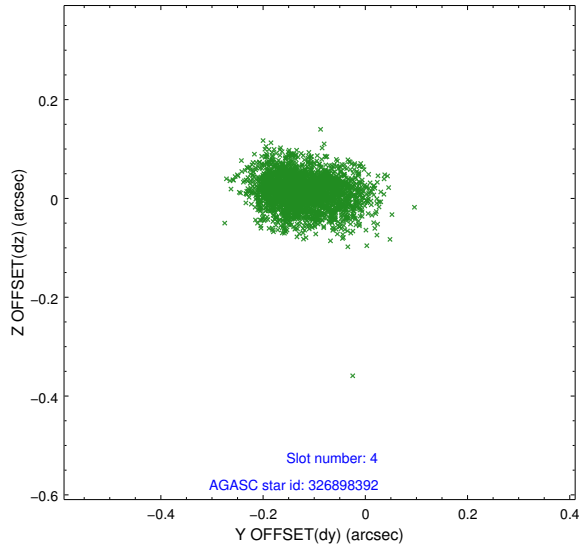
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	1258	-0.027	-0.016	0.008	0.012	0.000000	0.000000	-755.66	-1730.04
1	FID		ACIS-S-4	7.20	1258	0.013	0.018	0.007	0.013	0.000000	0.000000	2157.11	177.27
2	FID		ACIS-S-5	7.24	1258	-0.016	0.008	0.007	0.011	0.000000	0.000000	-1806.99	172.25
3	GUIDE	used	326769456	9.82	2514	0.231	-0.231	0.125	0.226	139.990989	30.956642	2078.49	-2186.67
4	GUIDE	used	326898392	8.35	2517	-0.125	0.013	0.069	0.115	141.640946	31.182886	-1189.52	1796.13
5	GUIDE	used	326901416	9.73	2516	-0.026	0.045	0.105	0.169	141.104707	31.554923	-1505.71	-302.84
6	GUIDE	used	326901944	9.41	2516	-0.064	0.184	0.088	0.138	141.495586	31.315890	-1374.60	1167.85
7	GUIDE	used	326903944	7.62	2516	-0.020	-0.015	0.060	0.095	141.372366	30.493208	1369.13	2348.46

2.4 Star Slots

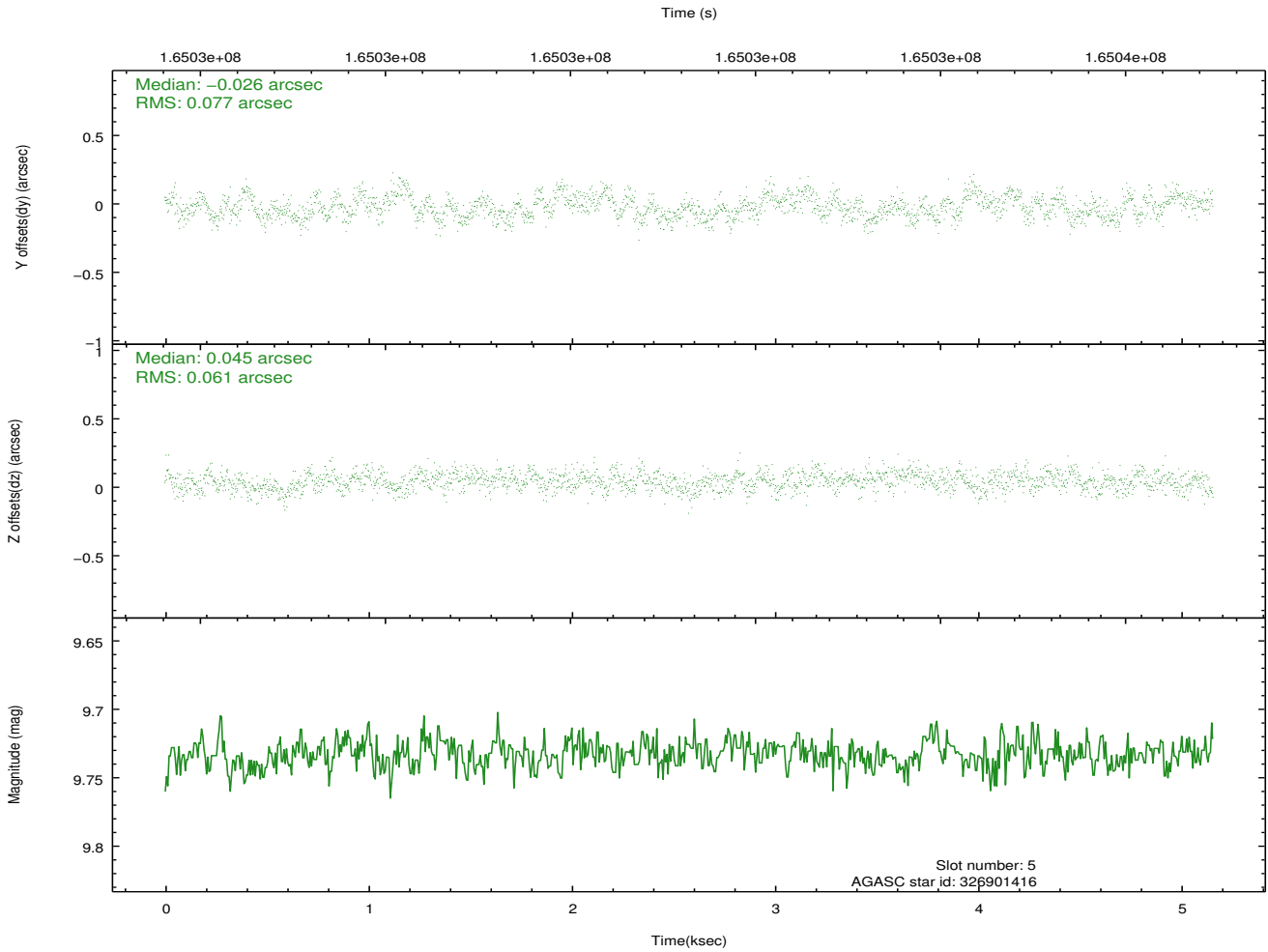
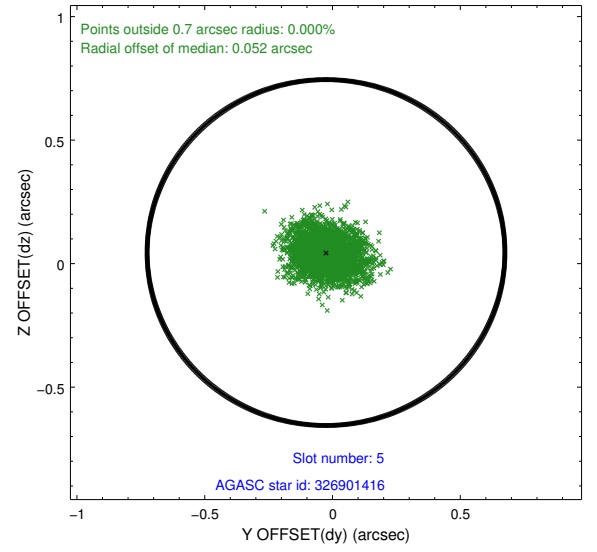
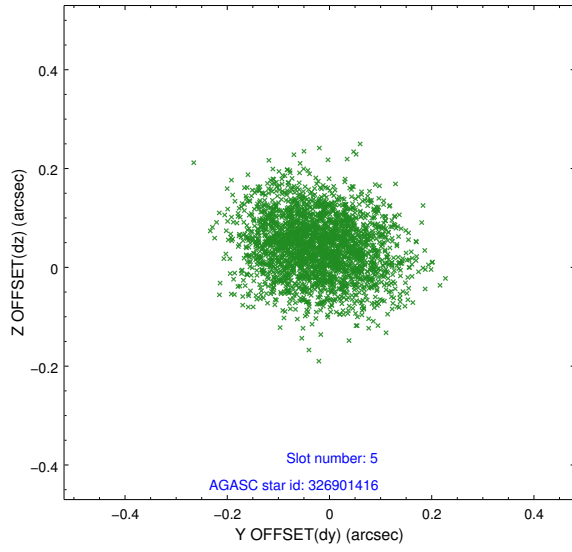
2.4.1 Slot 3



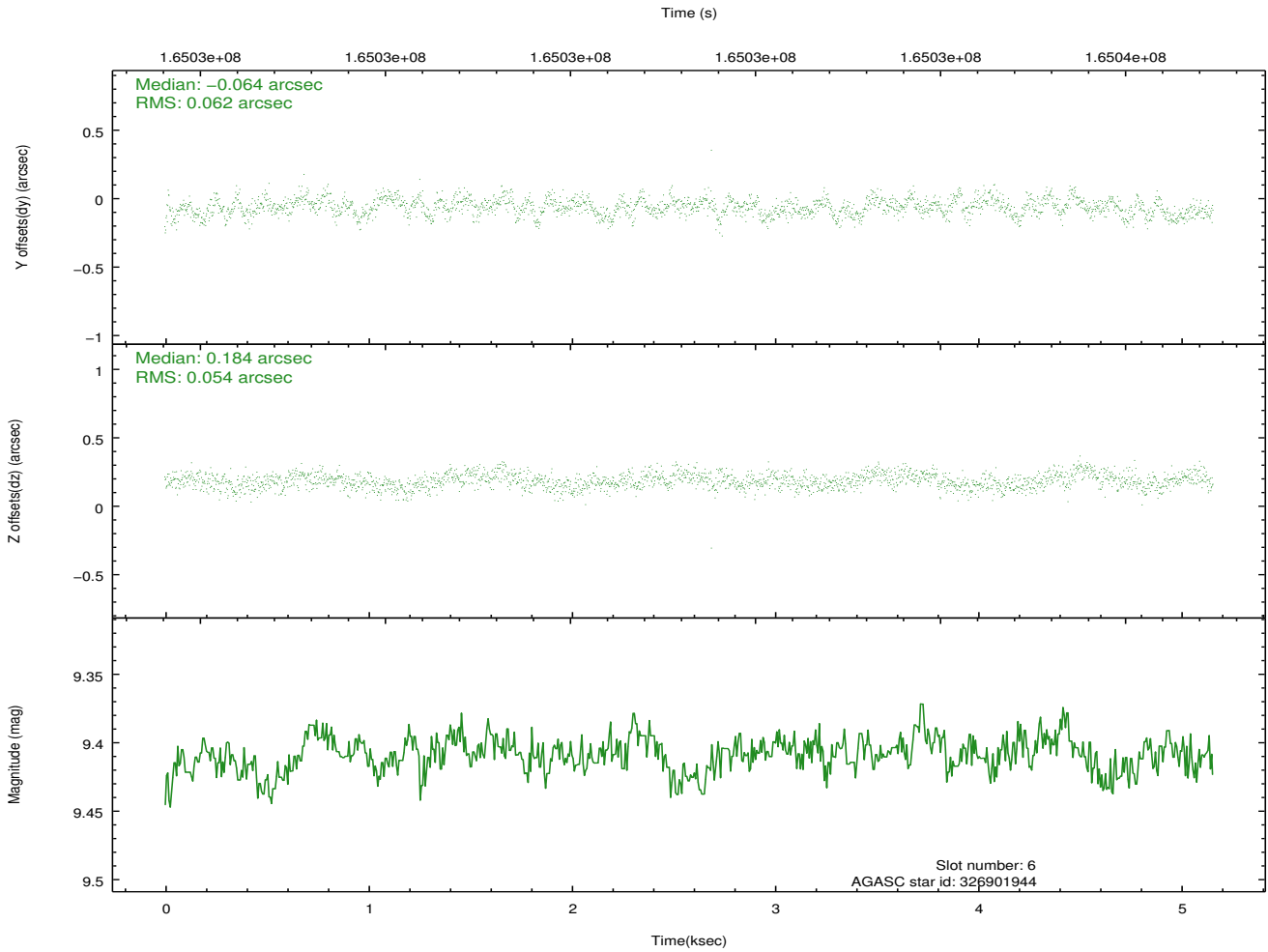
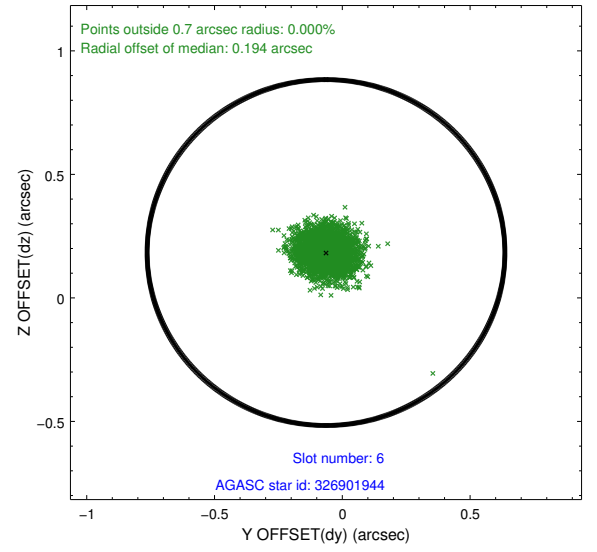
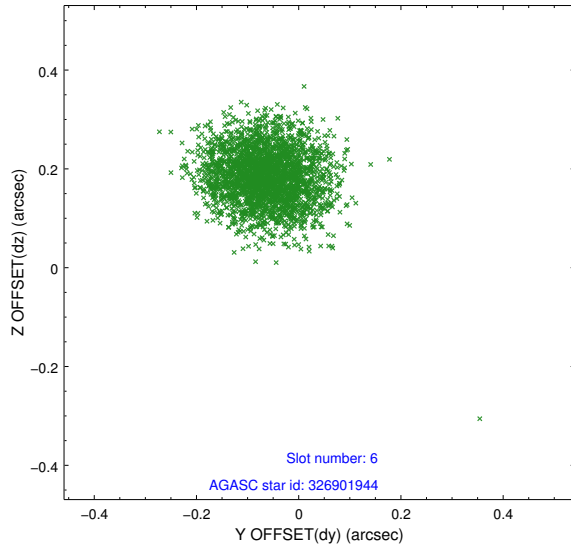
2.4.2 Slot 4



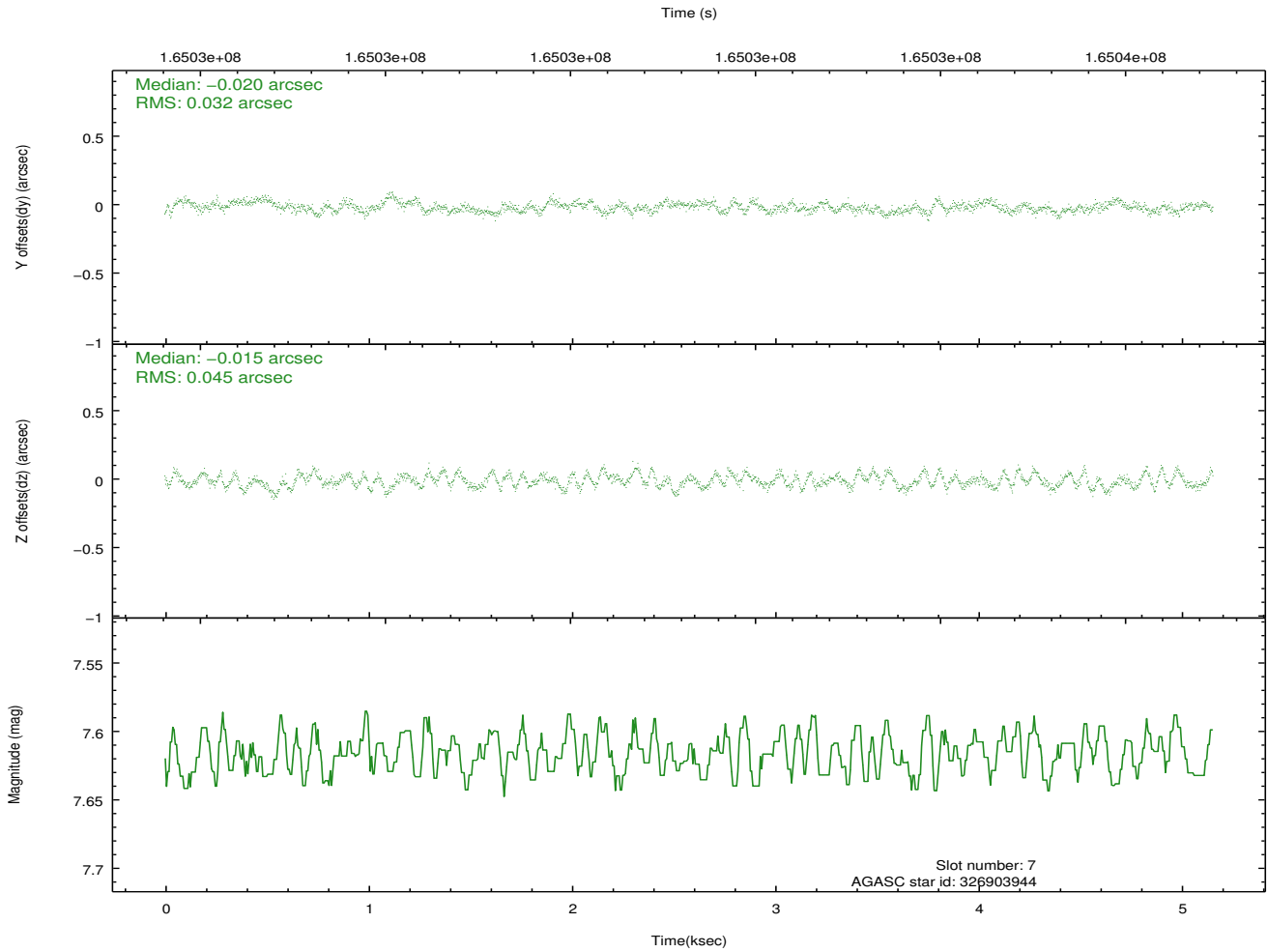
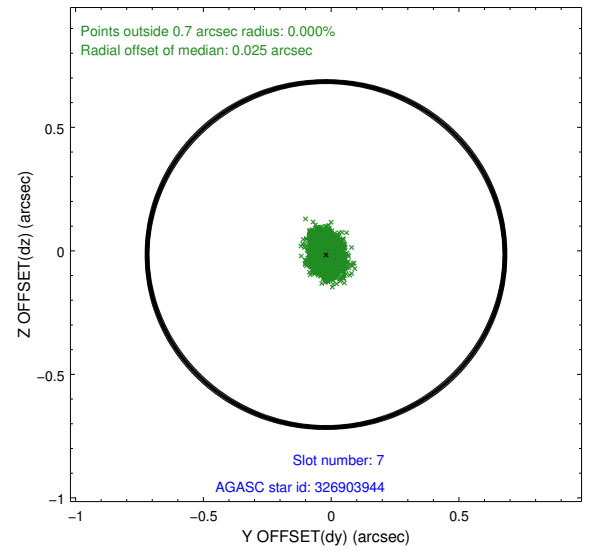
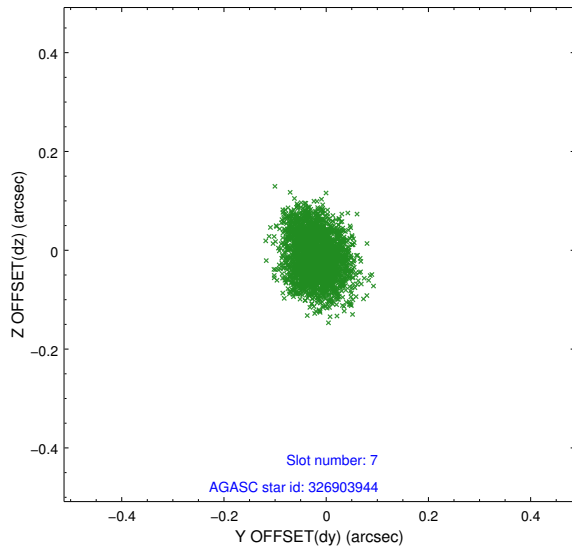
2.4.3 Slot 5



2.4.4 Slot 6

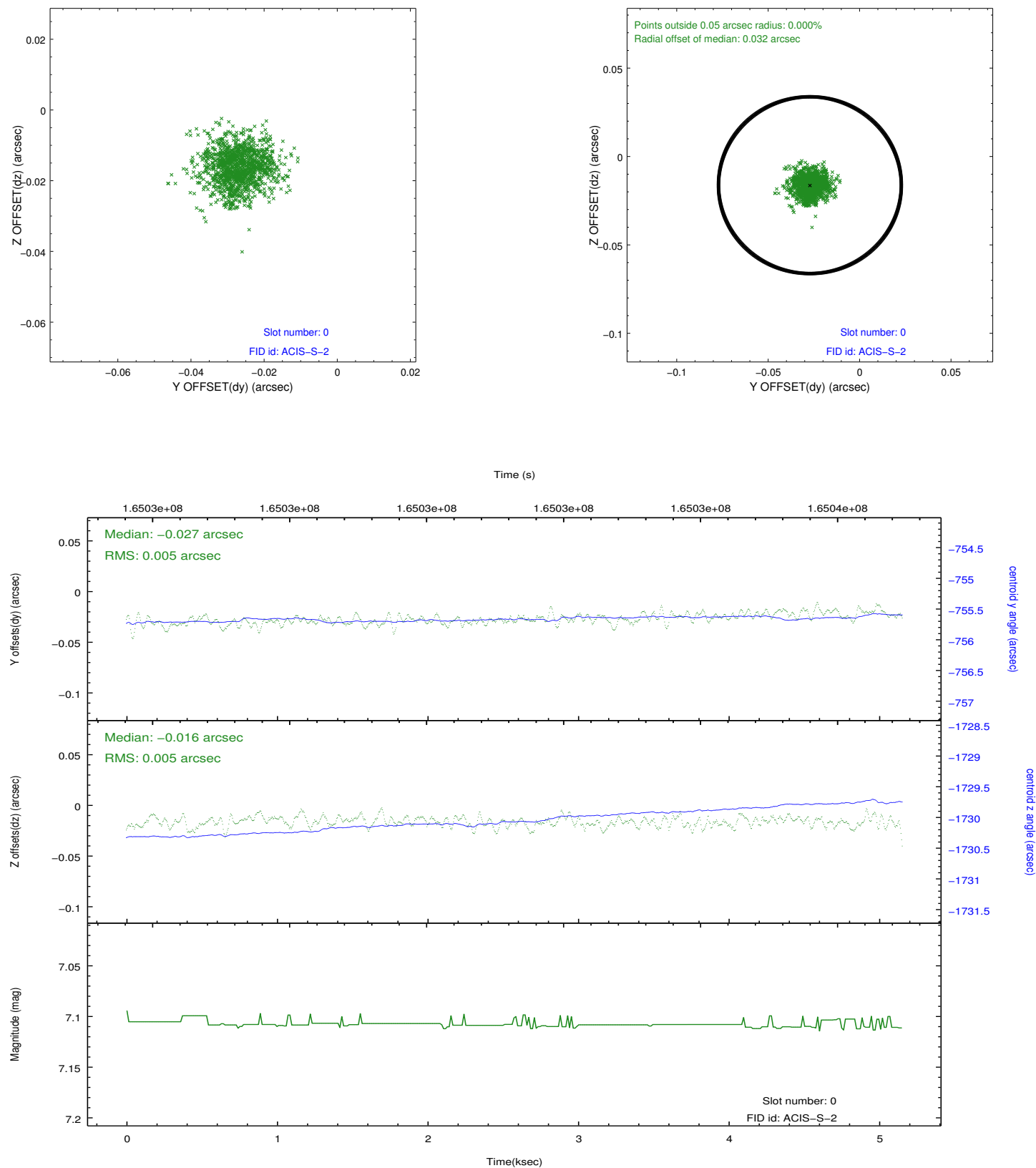


2.4.5 Slot 7

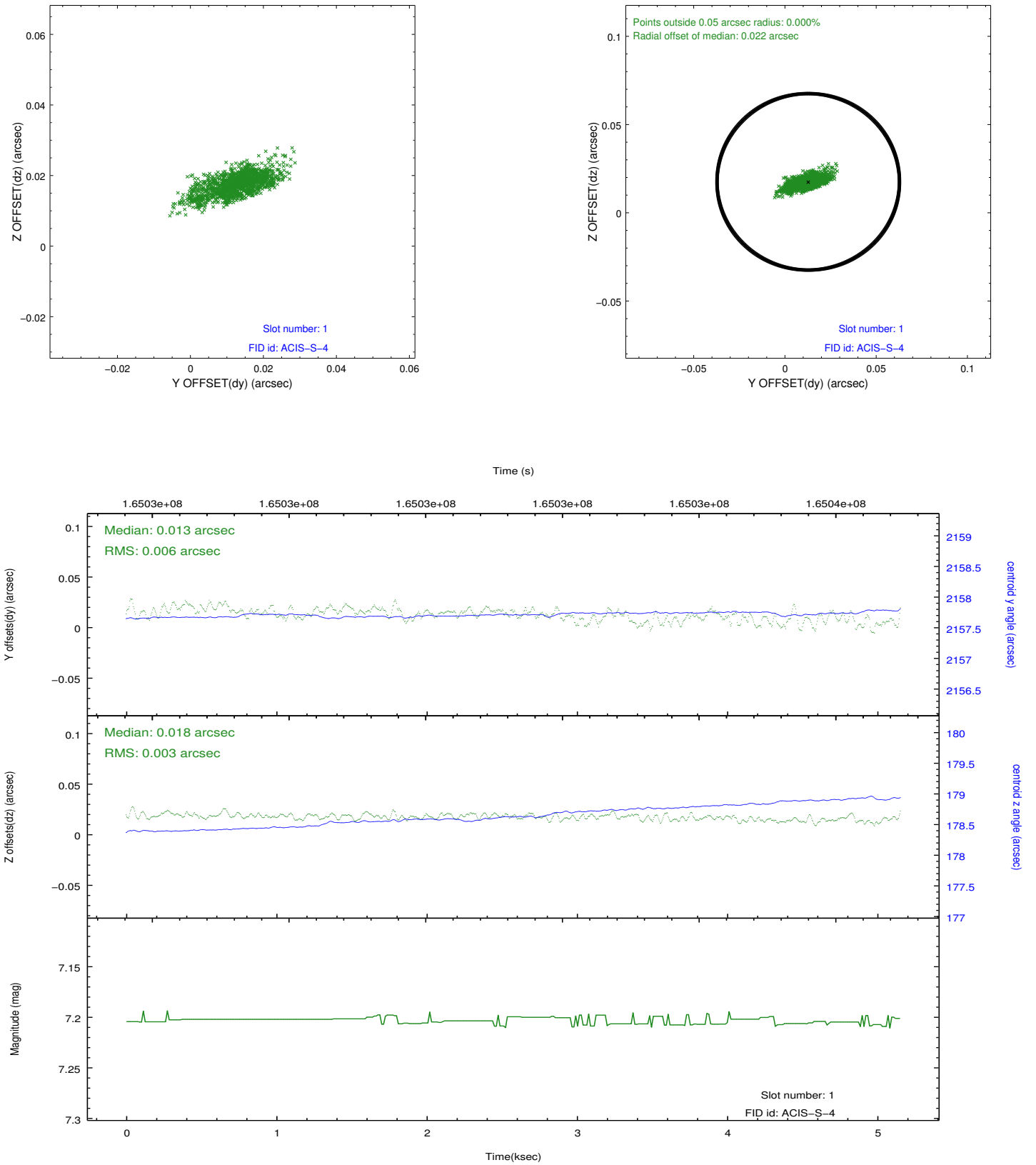


2.5 FID Slots

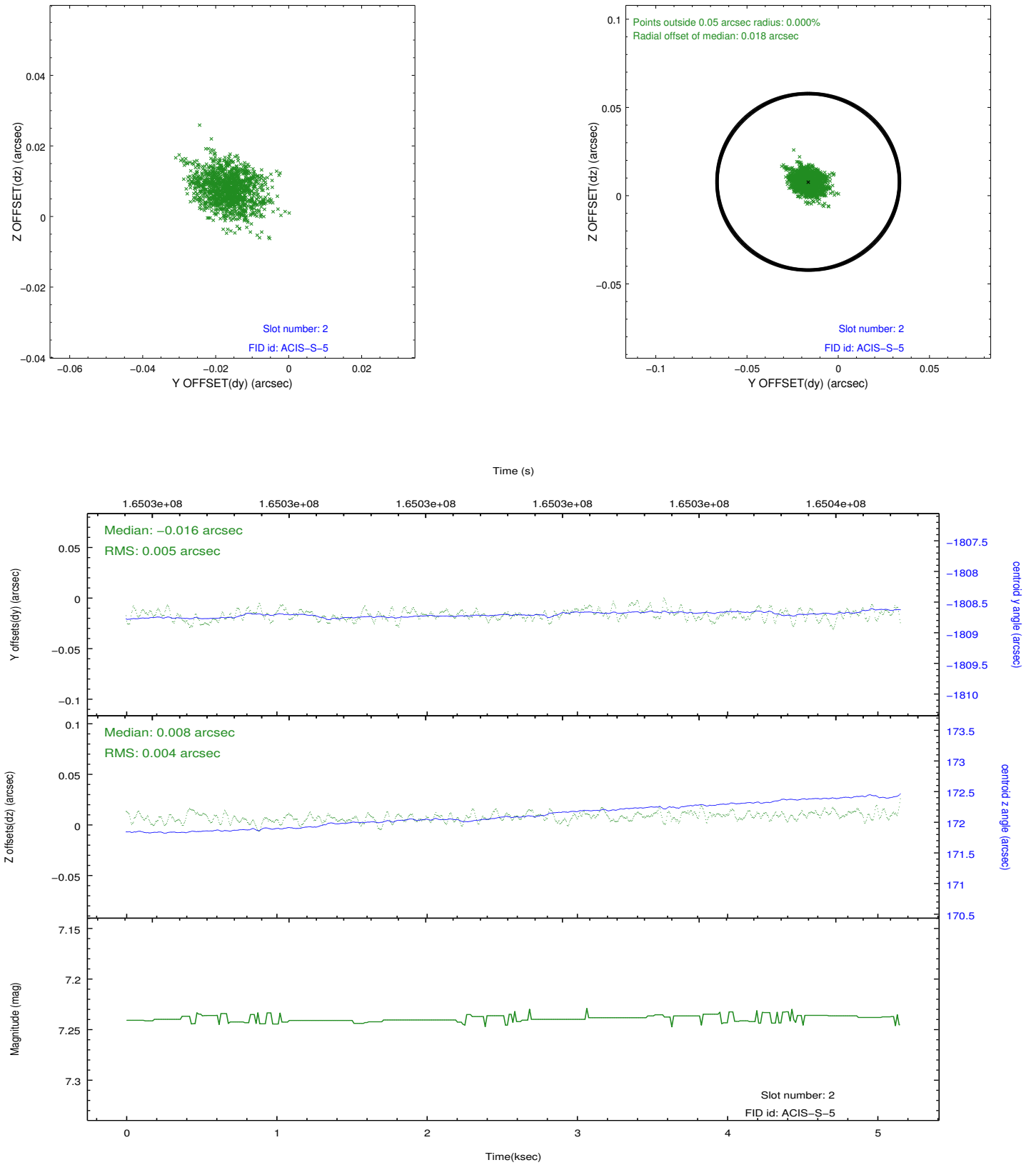
2.5.1 Slot 0



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)	2015.07.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.151

A.2 Comments

Because an aspect solution is determined in a finite time interval, a small number of events registered within the delta time before the first aspect solution do not have proper sky coordinates. We apply a manual workaround to exclude those events with incorrect sky positions until the complete s/w resolution is obtained.