

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 795 - L2 Version 5
Chandra X-Ray Center

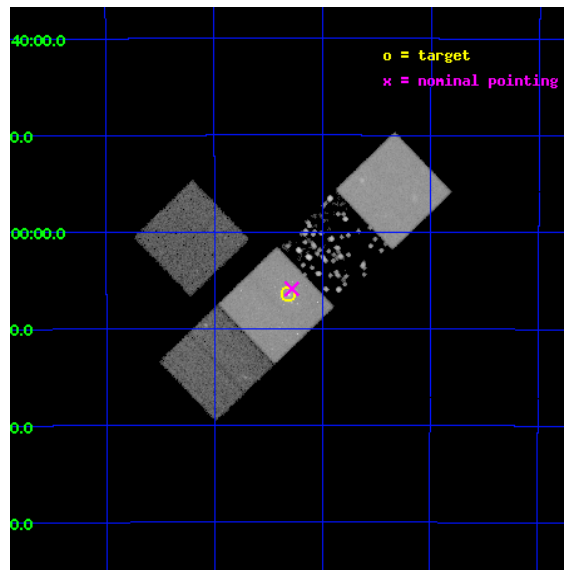
L2 Processing Date : Aug 31 2012

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1 Front

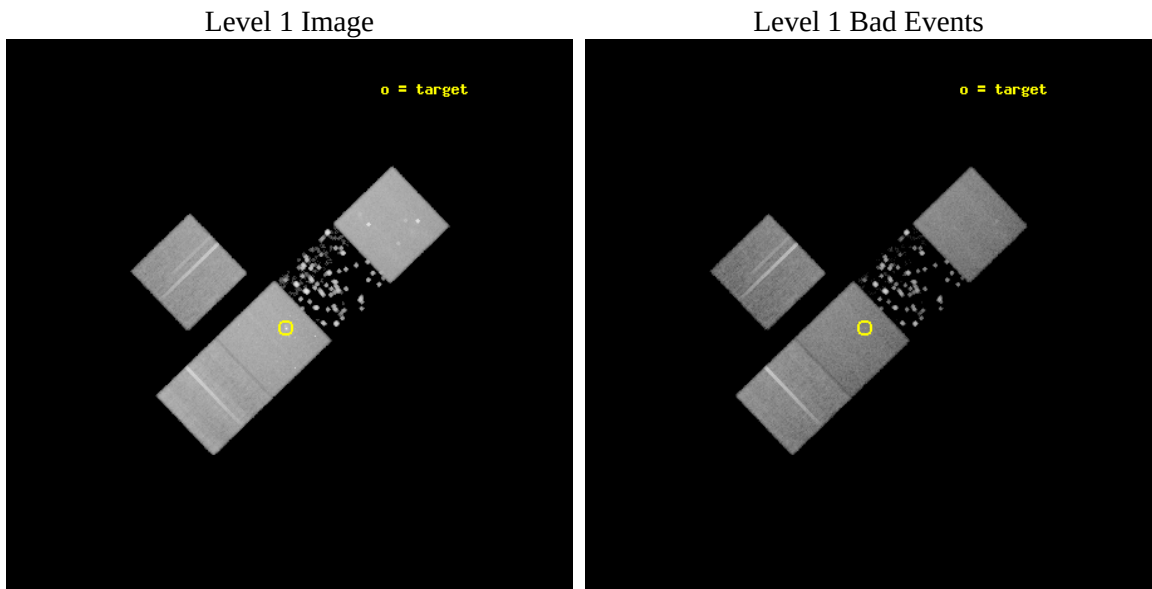
seq_num	600098	Sequence number
obs_id	795	Observation id
title	THE IMPORTANCE OF LOW MASS X-RAY BINARIES TO THE X-RAY EMISSION FROM SA GALAXY BULGES	Proposal title
observer	Professor JIMMY IRWIN	Principal investigator
object	NGC 1291	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.328333	Observer's specified target RA [deg]
dec_targ	-41.106361	Observer's specified target Dec [deg]
ra_nom	49.320652033683	Nominal RA [deg]
dec_nom	-41.098252910037	Nominal Dec [deg]
roll_nom	136.09354189625	Nominal Roll [deg]
revision	5	Processing version of data
ontime	39668.954137415	Sum of GTIs [s]
livetime	39166.64195435	Livetime [s]
ontime3	33877.238898307	Sum of GTIs [s]
ontime5	39668.913097411	Sum of GTIs [s]
ontime6	18696.605049655	Sum of GTIs [s]
ontime7	39668.954137415	Sum of GTIs [s]
ontime8	38320.55120042	Sum of GTIs [s]
l2events	365679	Number of level 2 events



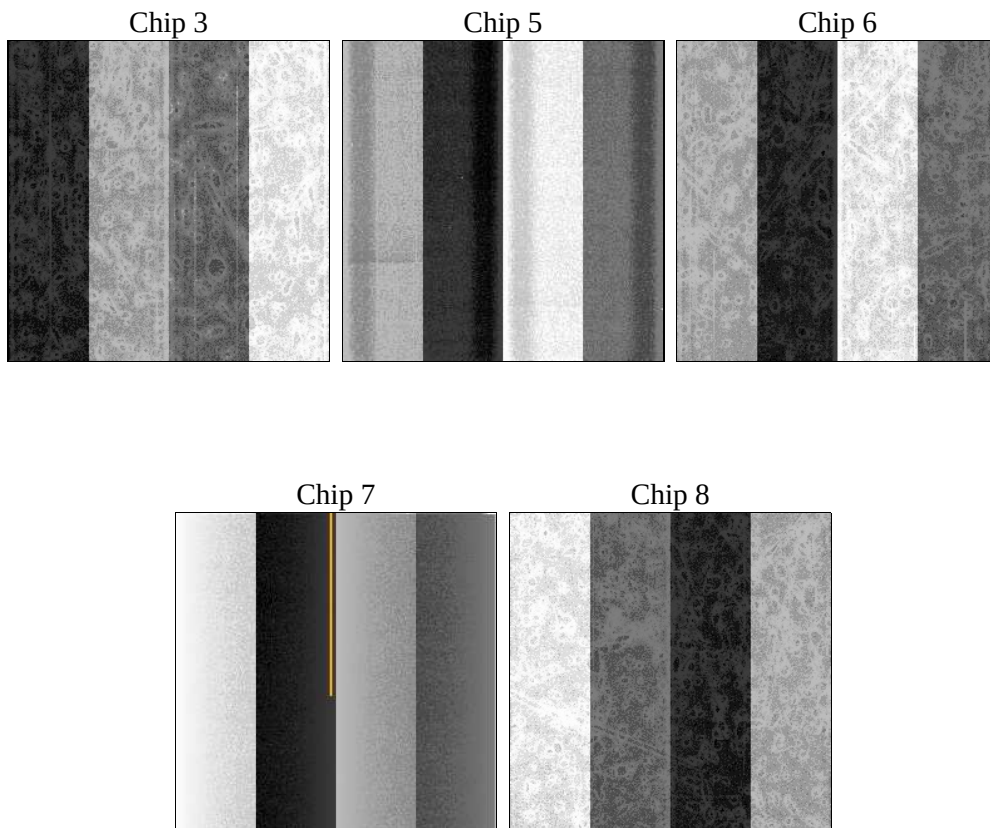
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	39500.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	39668.954137415	Sum of GTIs [s]
caldsver	4.5.1.1	 	ontime3	33877.238898307	Sum of GTIs [s]
date	2012-08-31T06:41:07	Date and time of file creation	ontime5	39668.913097411	Sum of GTIs [s]
revision	5	Processing version of data	ontime6	18696.605049655	Sum of GTIs [s]
			ontime7	39668.954137415	Sum of GTIs [s]
			ontime8	38320.55120042	Sum of GTIs [s]
			l1events	7090976	Number of level 1 events

2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	215030	343077	5905347	319398	308124
rejected events	191668	179894	36739	174749	244104
rejected %	89%	52%	0%	54%	79%

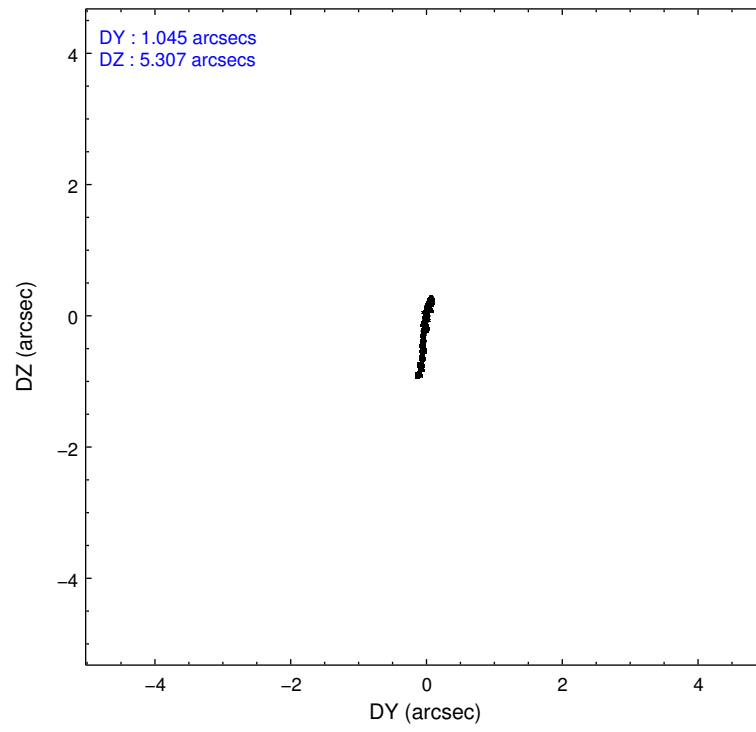
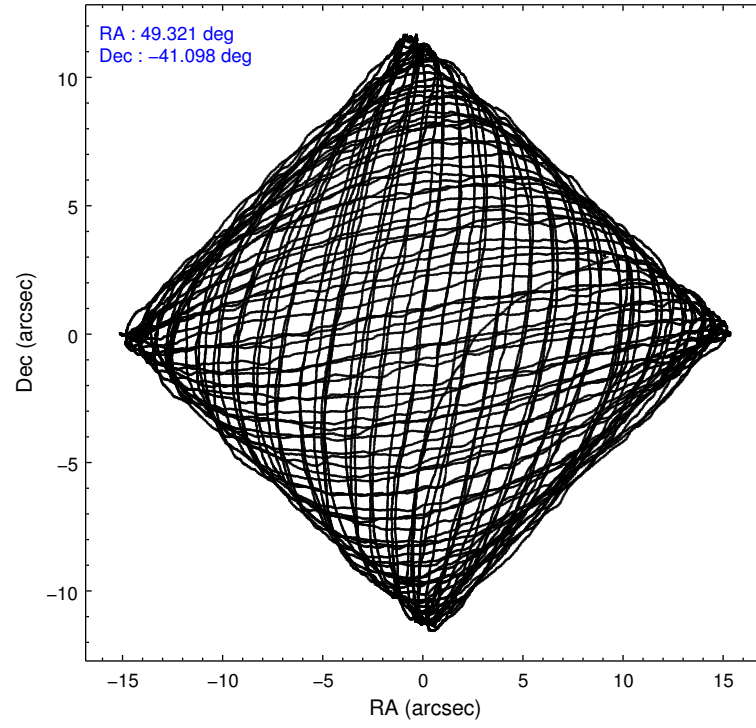
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	10006	20996	5860969	17094	20961
	4%	6%	99%	5%	6%
grade 1 events	90	628	8298	318	178
	0%	0%	0%	0%	0%
grade 2 events	4693	45363	2852	29024	12915
	2%	13%	0%	9%	4%
grade 3 events	2235	7435	2143	13288	7781
	1%	2%	0%	4%	2%
grade 4 events	2312	7426	1541	13303	7008
	1%	2%	0%	4%	2%
grade 5 events	7448	25430	4681	29372	11782
	3%	7%	0%	9%	3%
grade 6 events	4116	81975	2126	71951	15359
	1%	23%	0%	22%	4%
grade 7 events	184130	153824	22737	145048	232140
	85%	44%	0%	45%	75%

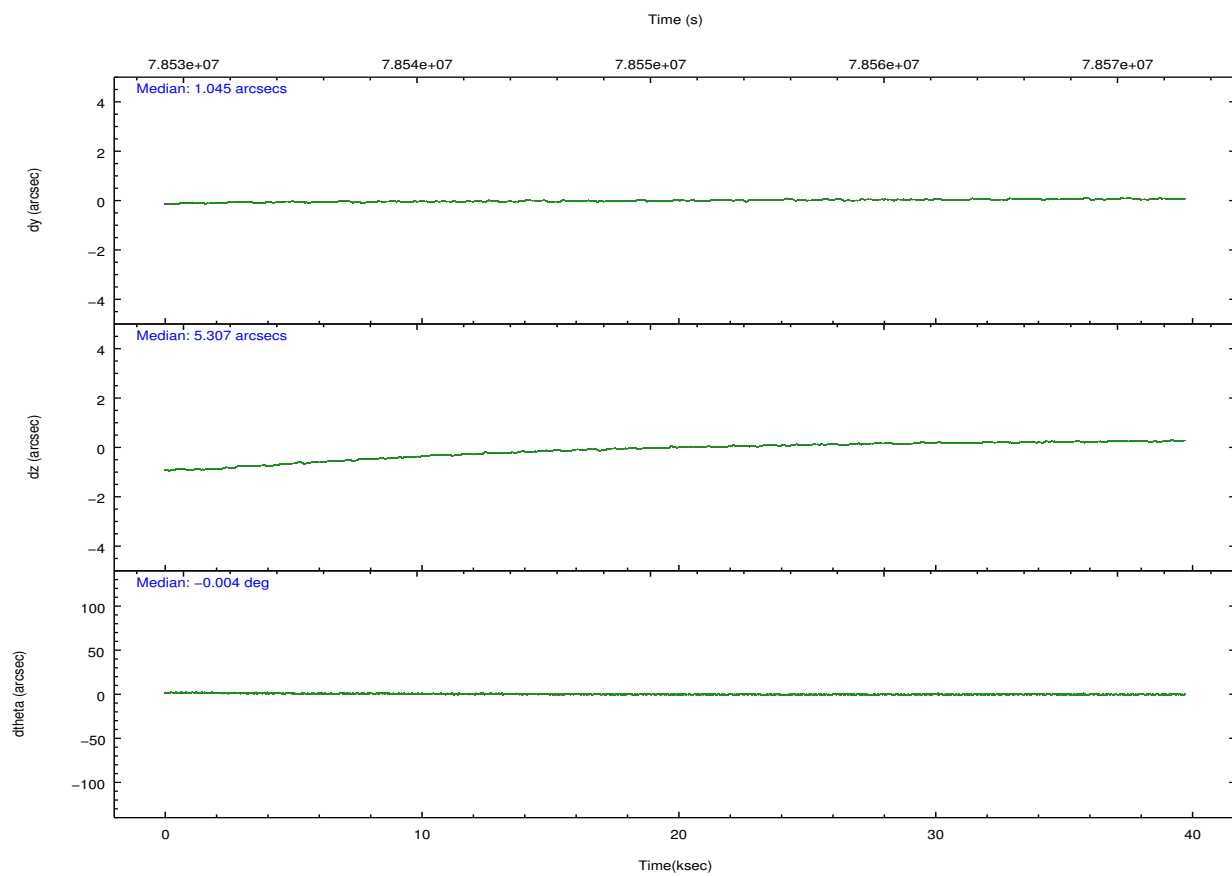
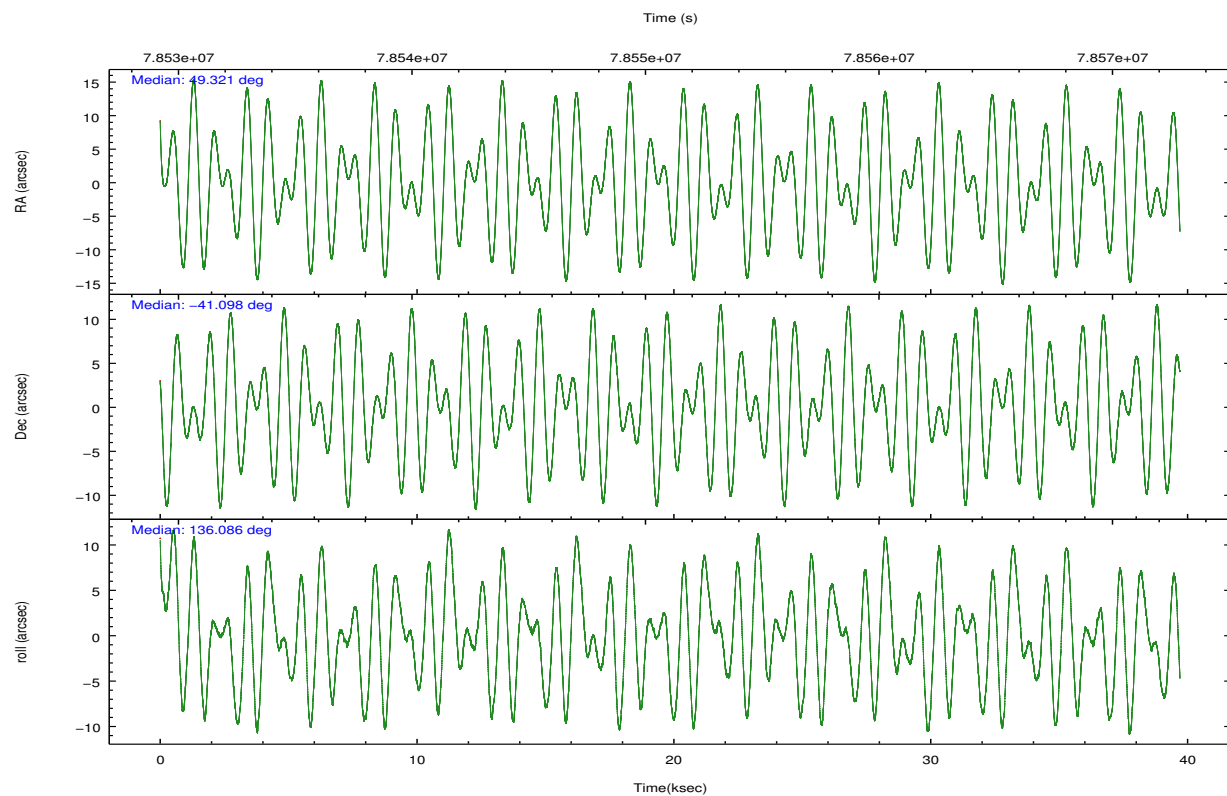
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-35678	ACIS-35678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	49.355981	49.32065203368342
[deg] Pointing Dec	-41.104719	-41.09825291003701
[deg] Pointing Roll	135.960138	136.0935418962476
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	78531401.184000	78530393.55492701
Observation start date	2000-06-27T22:15:37	2000-06-27T21:59:53
[s] Observation end time (MET)	78570901.184000	78571377.15643799
Observation end date	2000-06-28T09:13:57	2000-06-28T09:22:57
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



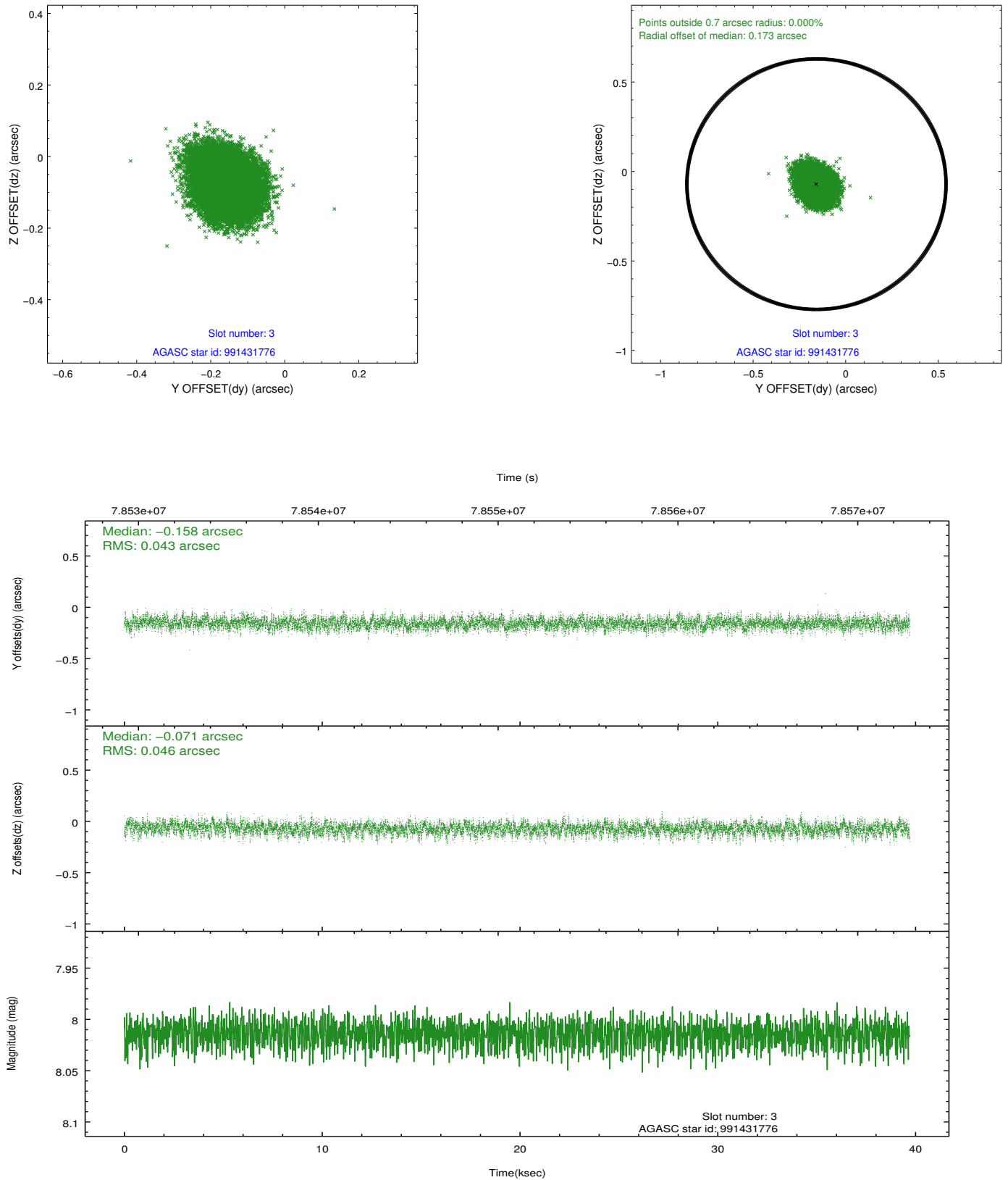


Slot Statistics

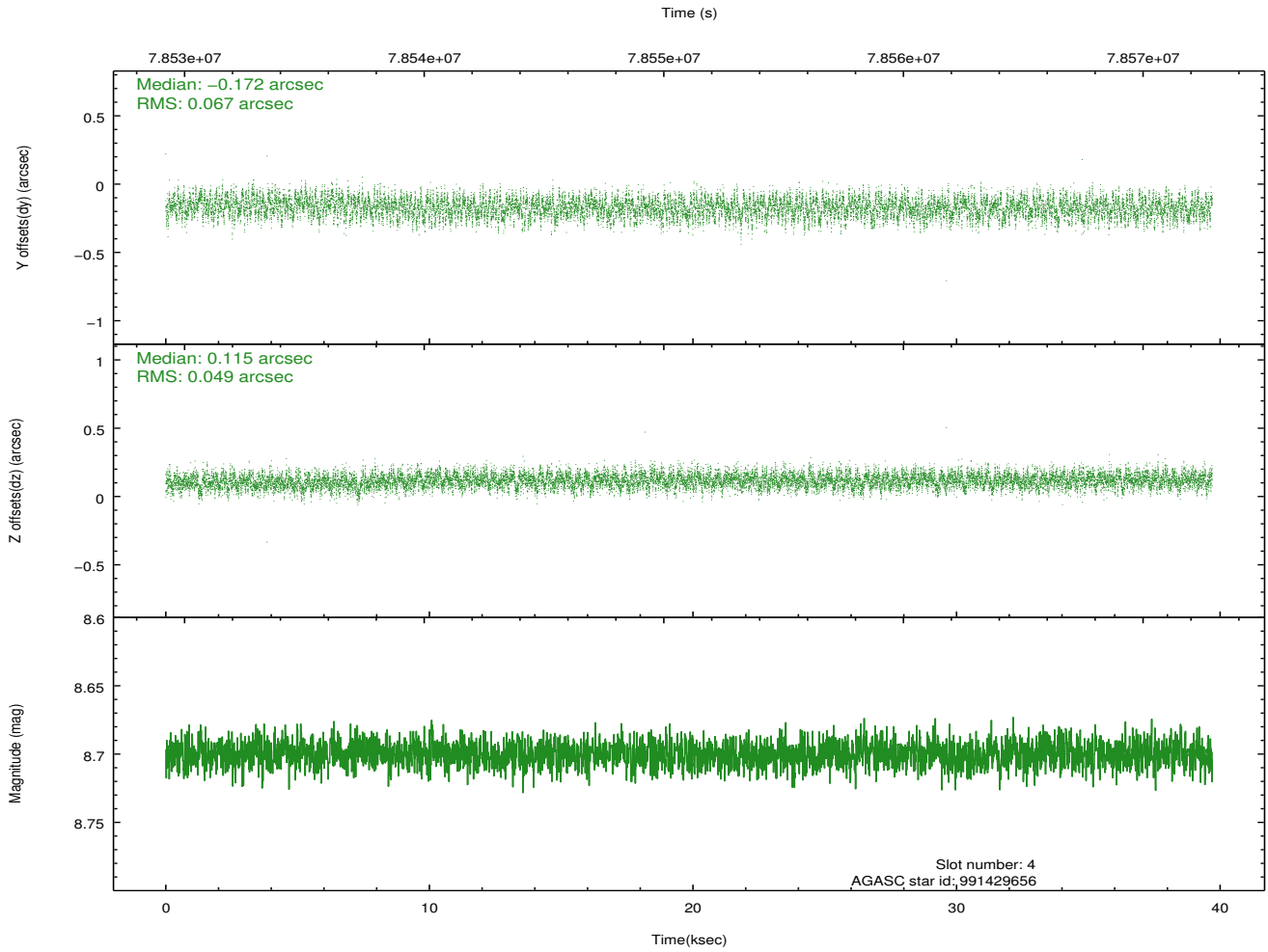
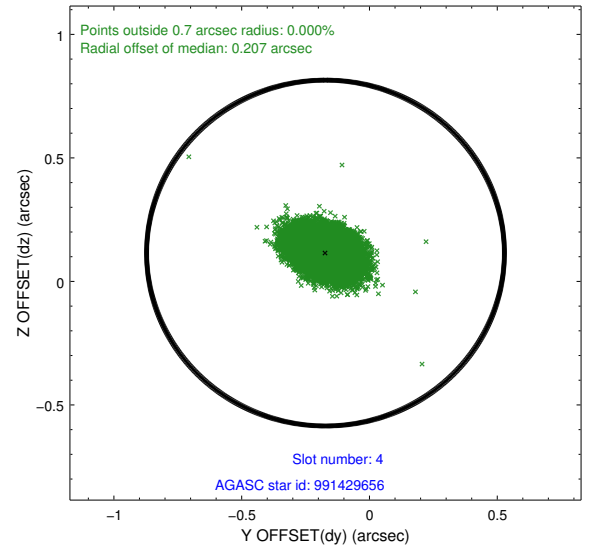
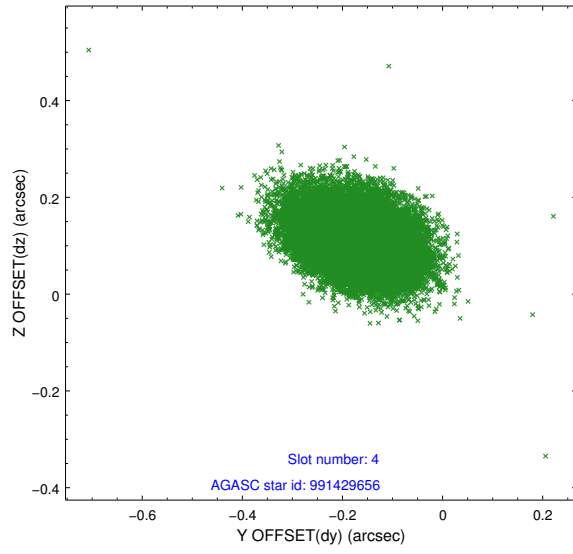
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	9684	-0.036	0.003	0.010	0.030	0.000000	0.000000	-753.66	-1726.30
1	FID	ACIS-S-4	7.21	9683	-0.006	0.017	0.008	0.037	0.000000	0.000000	2159.64	182.19
2	FID	ACIS-S-5	7.23	9684	0.011	-0.011	0.011	0.041	0.000000	0.000000	-1806.44	175.85
3	GUIDE	991431776	8.01	19366	-0.158	-0.071	0.067	0.111	48.819128	-41.230215	727.31	1338.23
4	GUIDE	991429656	8.70	19365	-0.172	0.115	0.088	0.143	49.345871	-40.469939	1608.57	-1623.28
5	GUIDE	992353200	9.17	19361	0.098	0.133	0.076	0.125	50.276402	-41.162632	-1947.00	-1575.14
6	GUIDE	991431272	10.43	19345	0.139	-0.065	0.133	0.219	49.440709	-41.283139	-611.42	302.09
7	GUIDE	991431552	10.44	19353	0.095	-0.113	0.139	0.228	49.452439	-41.408810	-948.39	605.61

2.4 Star Slots

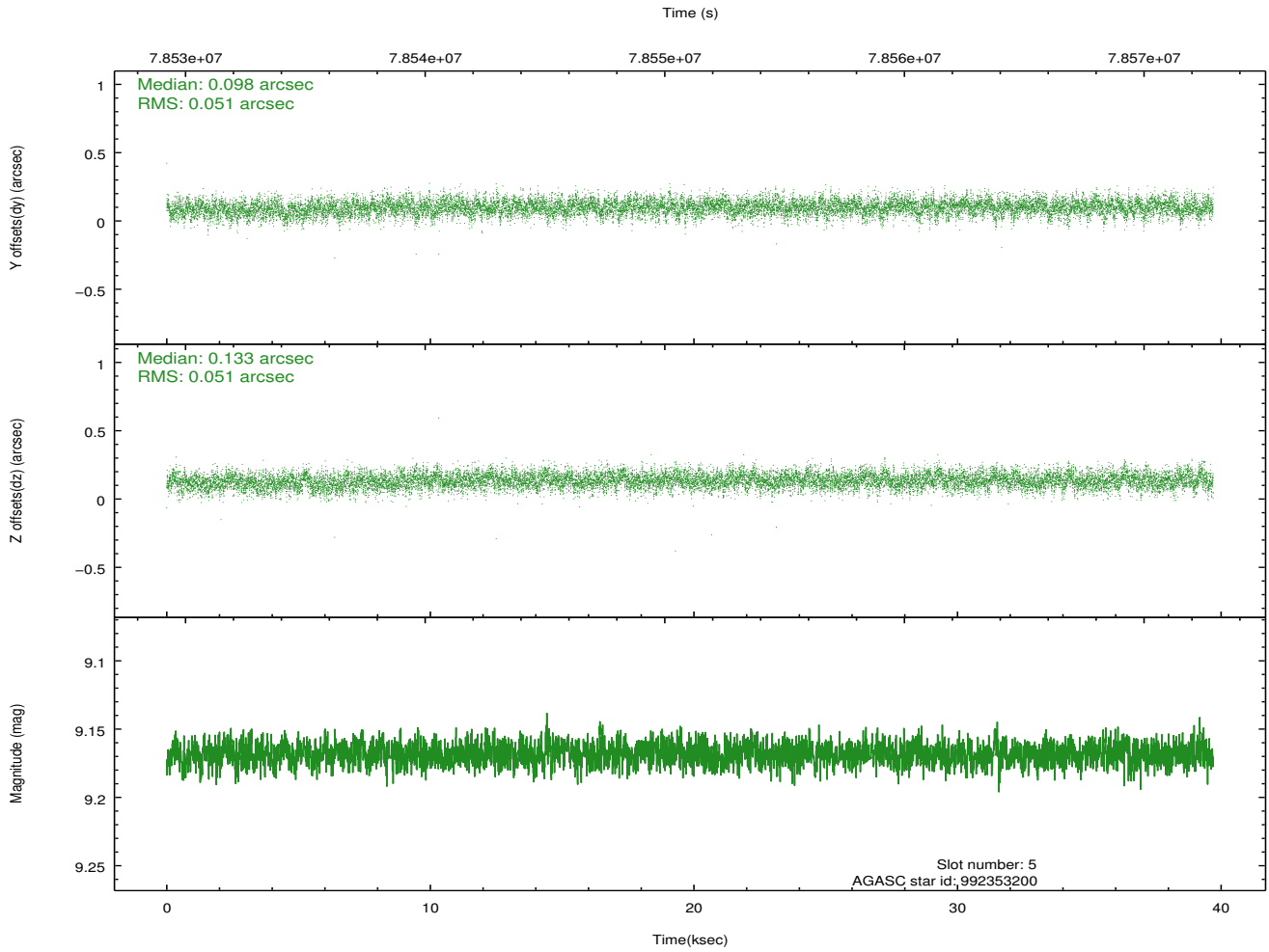
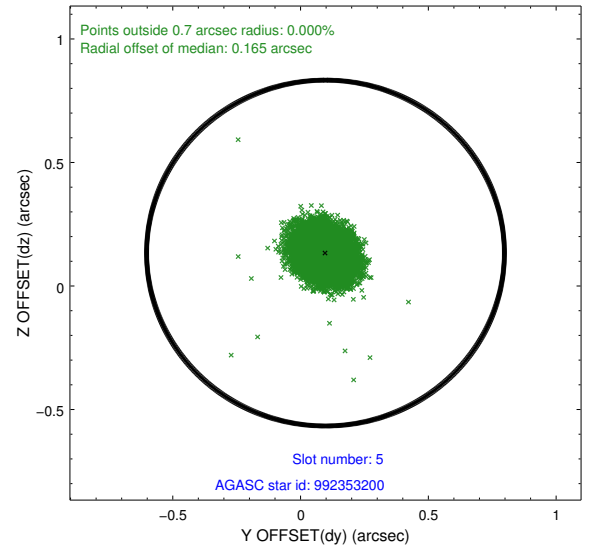
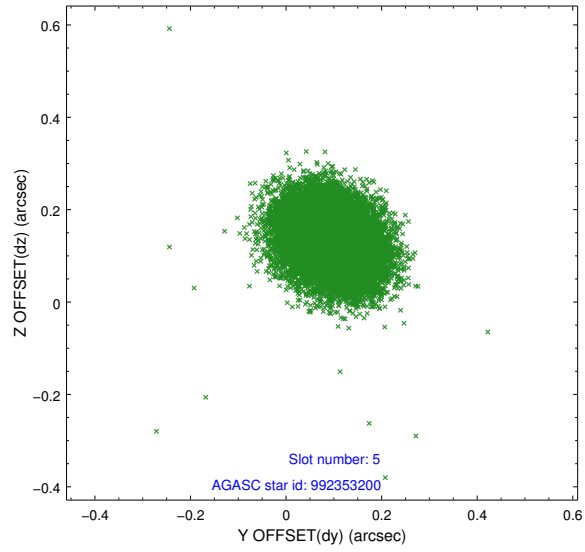
2.4.1 Slot 3



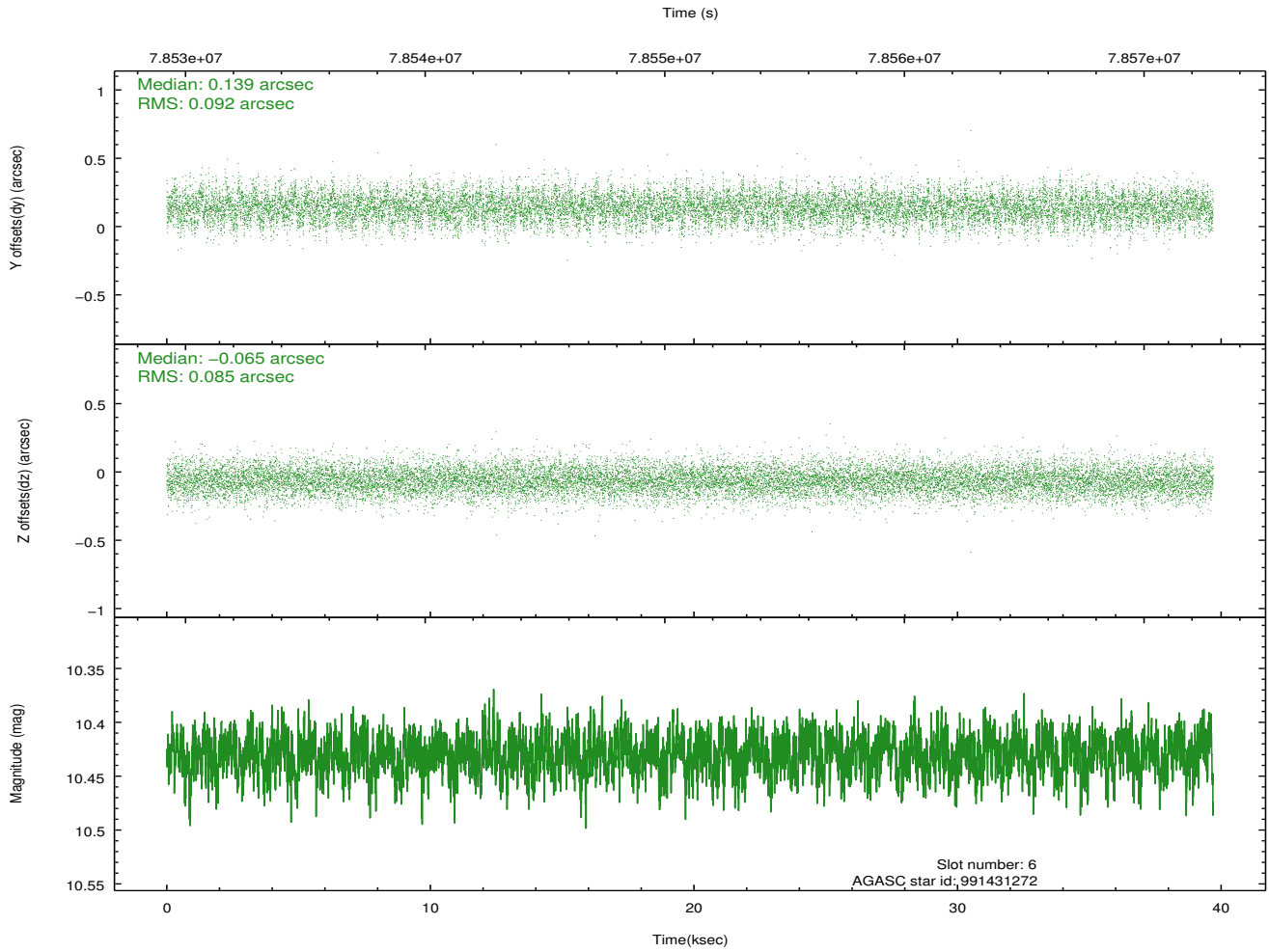
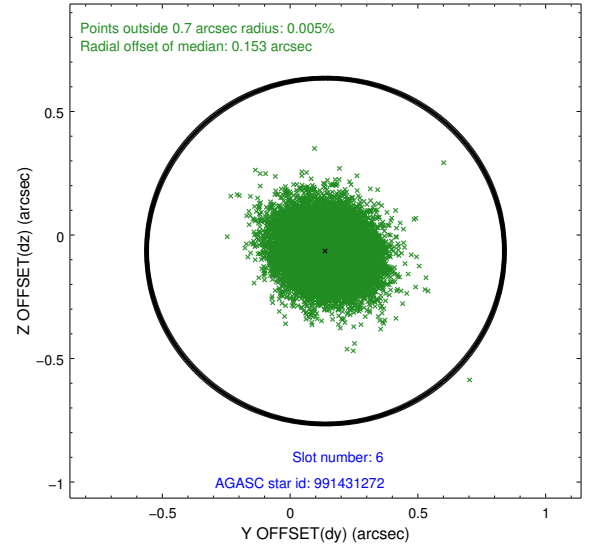
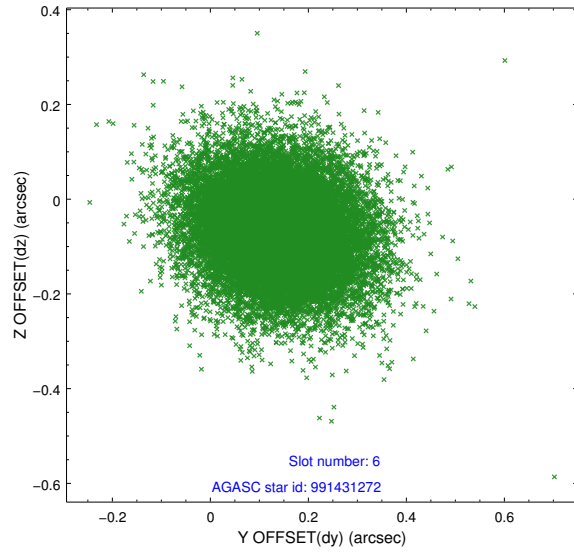
2.4.2 Slot 4



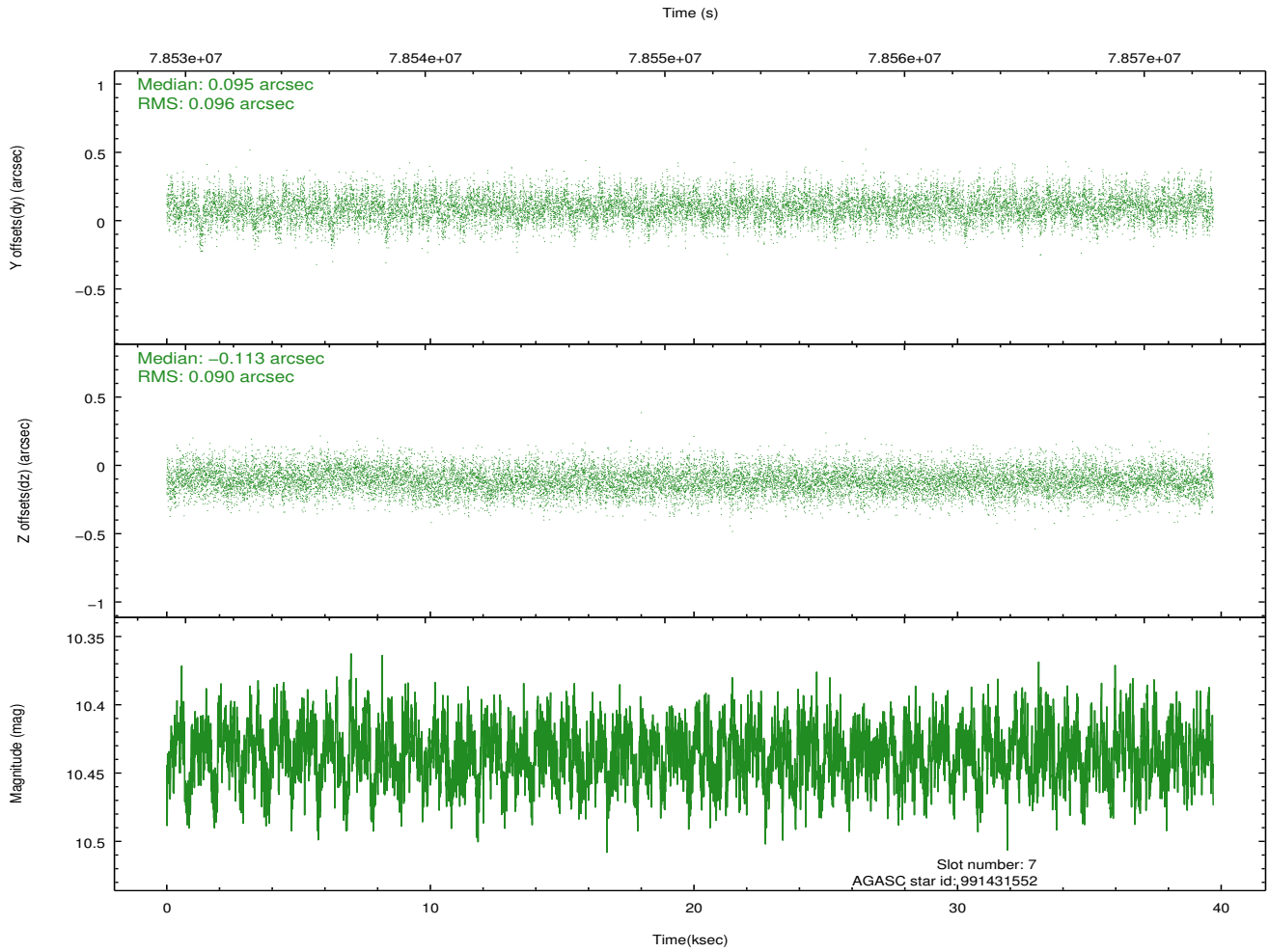
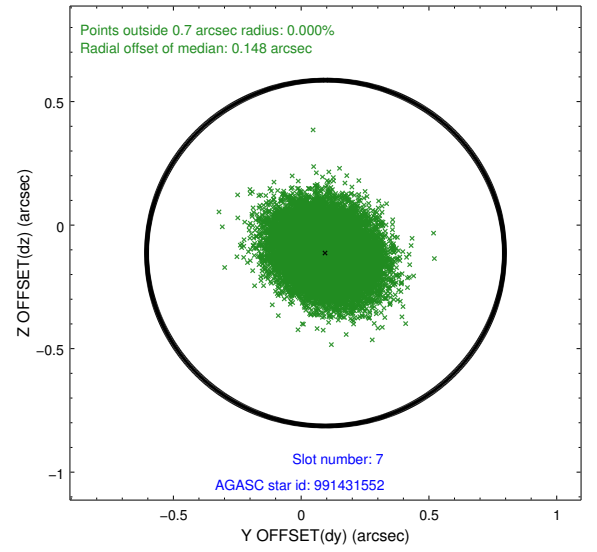
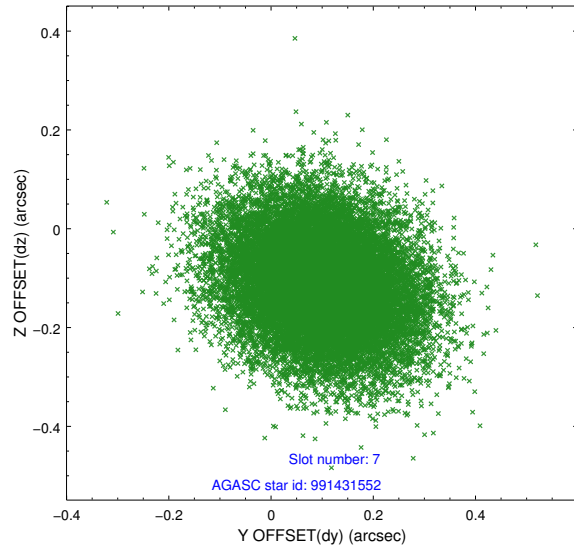
2.4.3 Slot 5



2.4.4 Slot 6

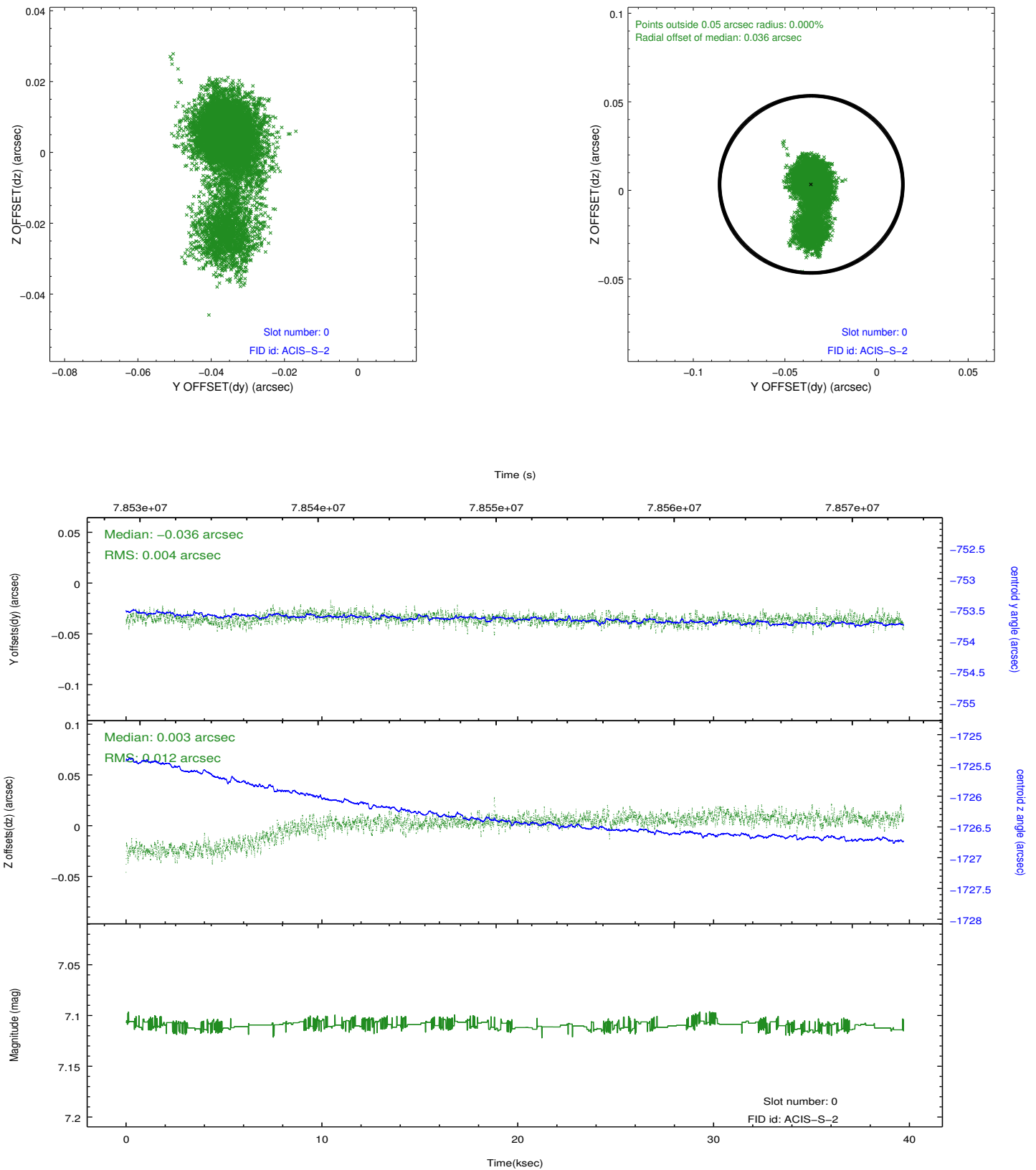


2.4.5 Slot 7

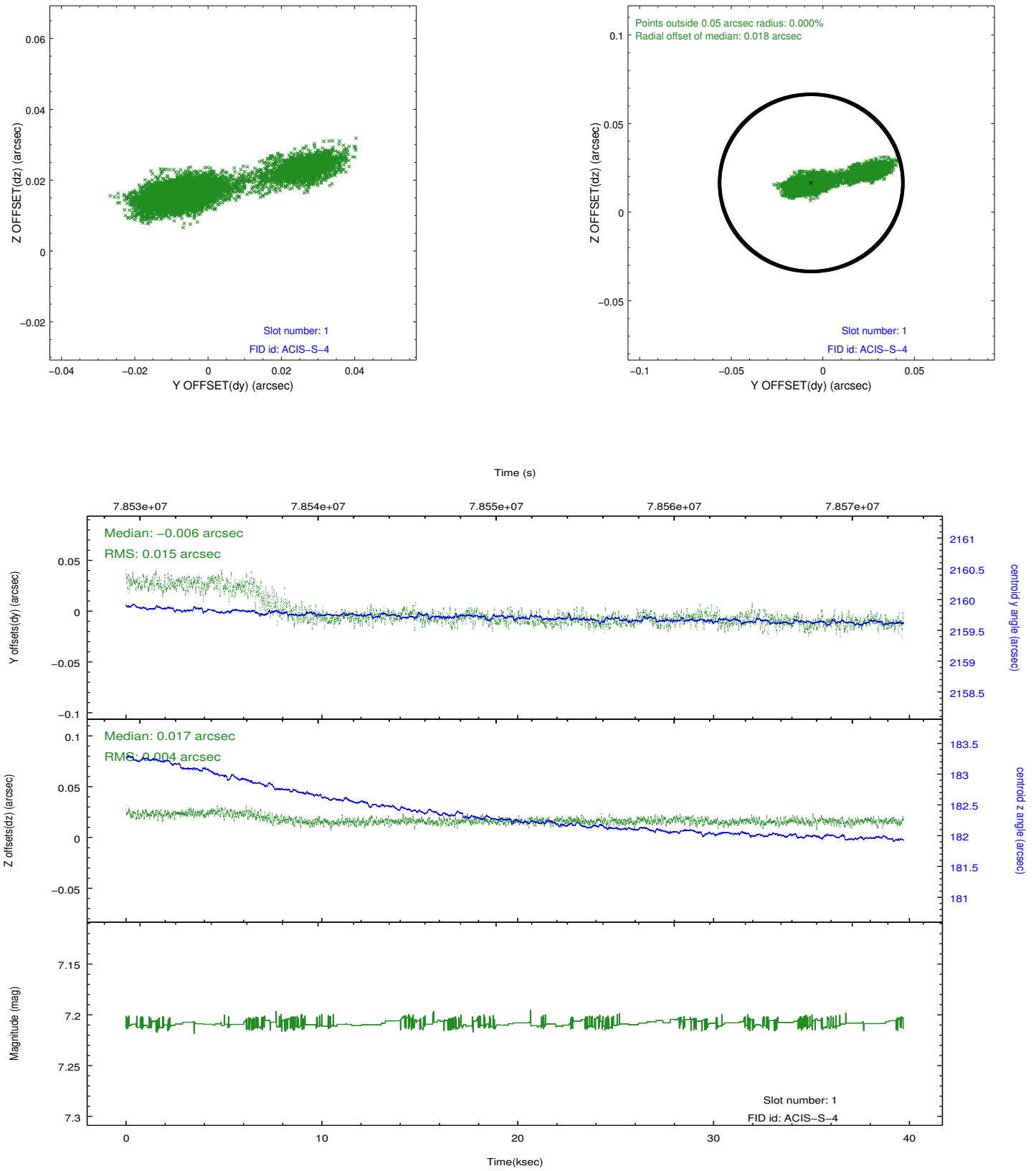


2.5 FID Slots

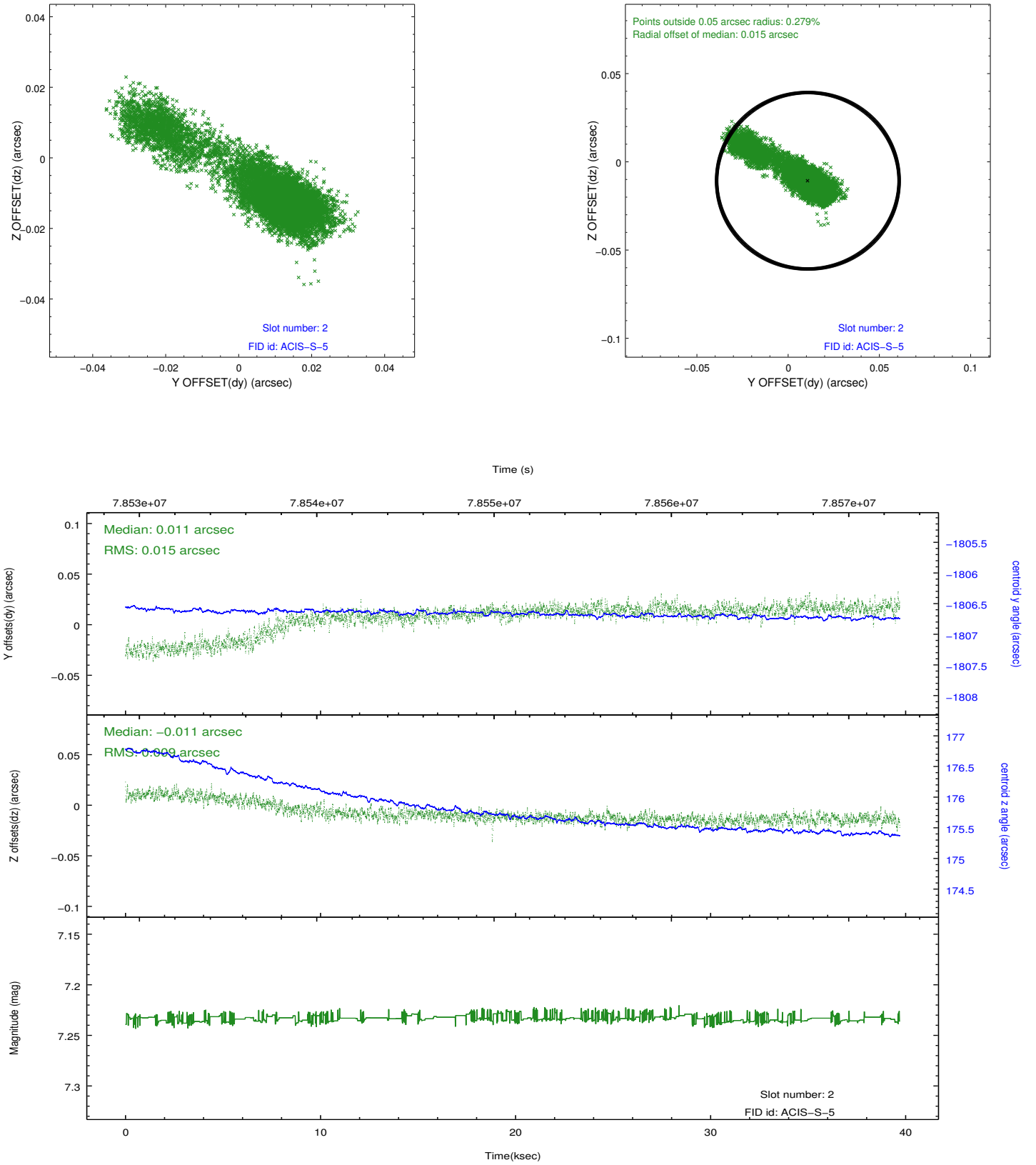
2.5.1 Slot 0



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)	2012.09.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.67

A.2 Comments

An ACIS Threshold-Plane Anomaly occurred during this observation. The flight s/w is intended to delay 'start events' until after 'end bias dump'. For some unknown reason, it occasionally fails to do so, and if the overlap lasts for more than a minute or so, one or more FEPs experience a firmware latch-up that renders them useless until they are power cycled. The anomaly occurred for chip S2 only. No event data were recorded for this chip; the bright pixels on this chip are due to previously known hot pixels. The target and aim point were not affected by this anomaly.

=====

The bias map for CCD_ID = 7 was incomplete because of data gaps in telemetry. The bias map for chip 7 was reconstructed using scaled data from a comparable bias map for another observation to fill the data gaps. The region affected is bounded by the sky coordinates:
(49.25128,-41.10976),(49.38496,-41.20652),(49.38609,-41.20564),(49.25241,-41.10887)