

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23108 - L2 Version 1
Chandra X-Ray Center

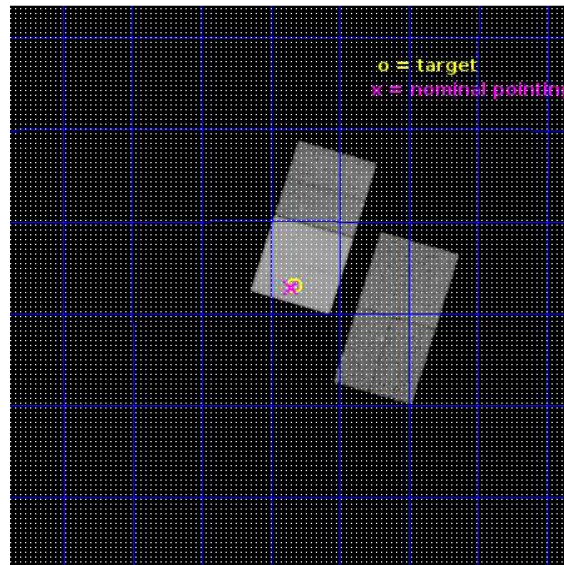
L2 Processing Date : Jan 12 2020

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1 Front

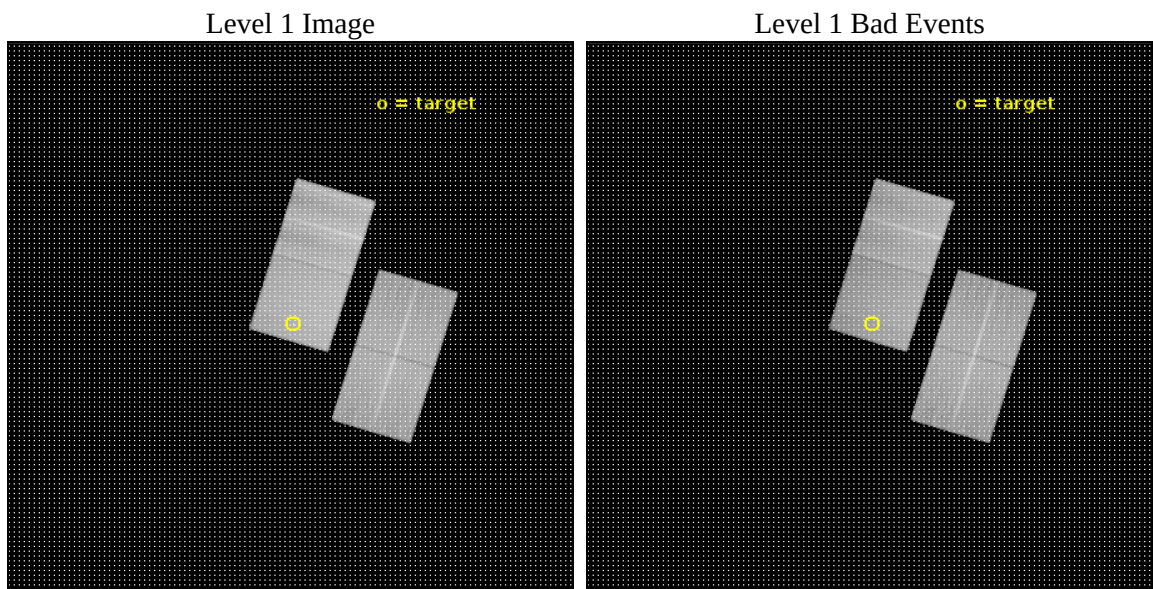
seq_num	300467	Sequence number
obs_id	23108	Observation id
title	UNEXPECTED EARLY PERIASTRON PASSAGE AND ECLIPSE IN THE SYMBIOTIC SYSTEM R AQR	Proposal title
observer	Margarita Karovska	Principal investigator
object	R Aqr	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	355.95625	Observer's specified target RA [deg]
dec_targ	-15.284472	Observer's specified target Dec [deg]
ra_nom	355.96201277072	Nominal RA [deg]
dec_nom	-15.28695757225	Nominal Dec [deg]
roll_nom	286.89541745992	Nominal Roll [deg]
revision	1	Processing version of data
ontime	48112.000370145	Sum of GTIs [s]
livetime	47483.38166577	Livetime [s]
ontime2	48108.859399796	Sum of GTIs [s]
ontime3	48112.000370145	Sum of GTIs [s]
ontime7	48112.000370145	Sum of GTIs [s]
ontime8	48112.000370145	Sum of GTIs [s]
l2events	316293	Number of level 2 events



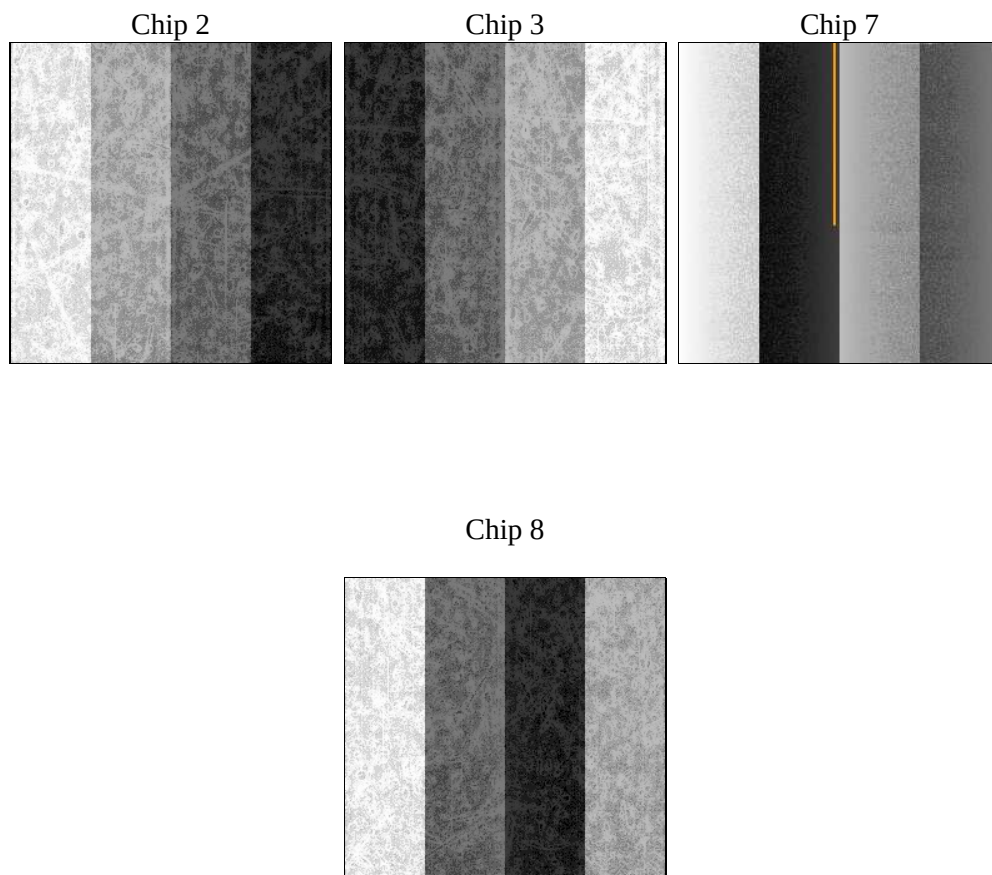
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	48000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	48112.000370145	Sum of GTIs [s]
caldsver	4.8.4.2	 	ontime2	48108.859399796	Sum of GTIs [s]
date	2020-01-12T21:21:30	Date and time of file creation	ontime3	48112.000370145	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	48112.000370145	Sum of GTIs [s]
			ontime8	48112.000370145	Sum of GTIs [s]
			l1events	1707552	Number of level 1 events

2.1.4 Events

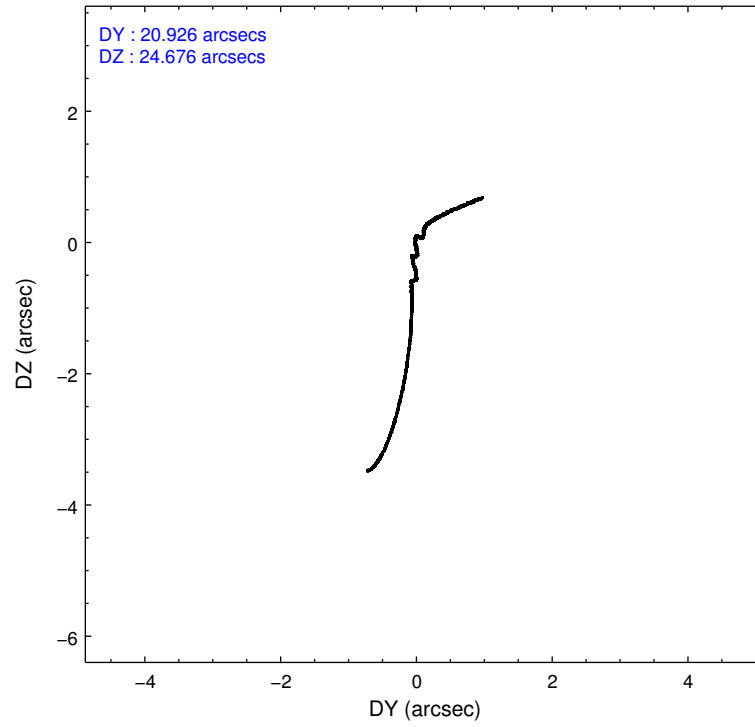
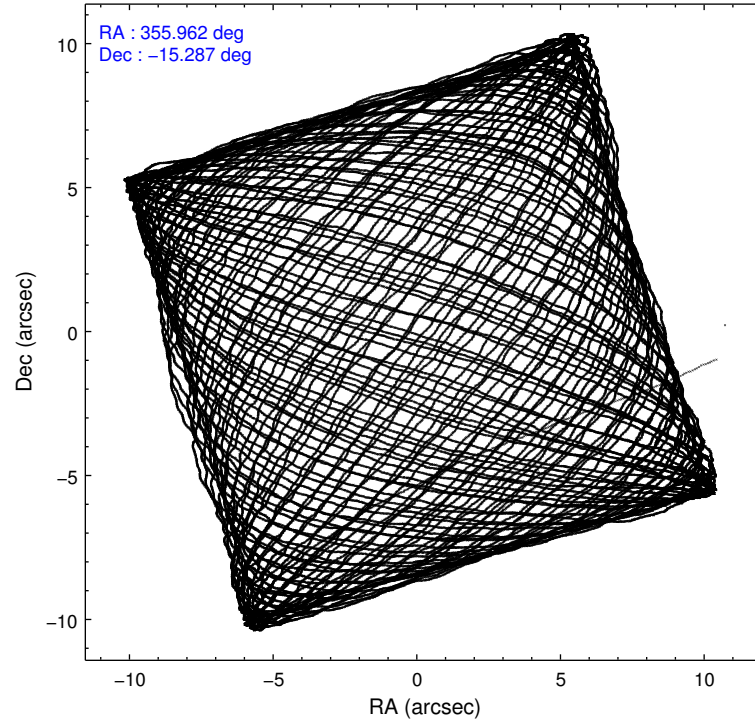
	ccd 2	ccd 3	ccd 7	ccd 8
level 1 events	371816	358752	481299	495685
rejected events	331851	319108	271767	360705
rejected %	89%	88%	56%	72%

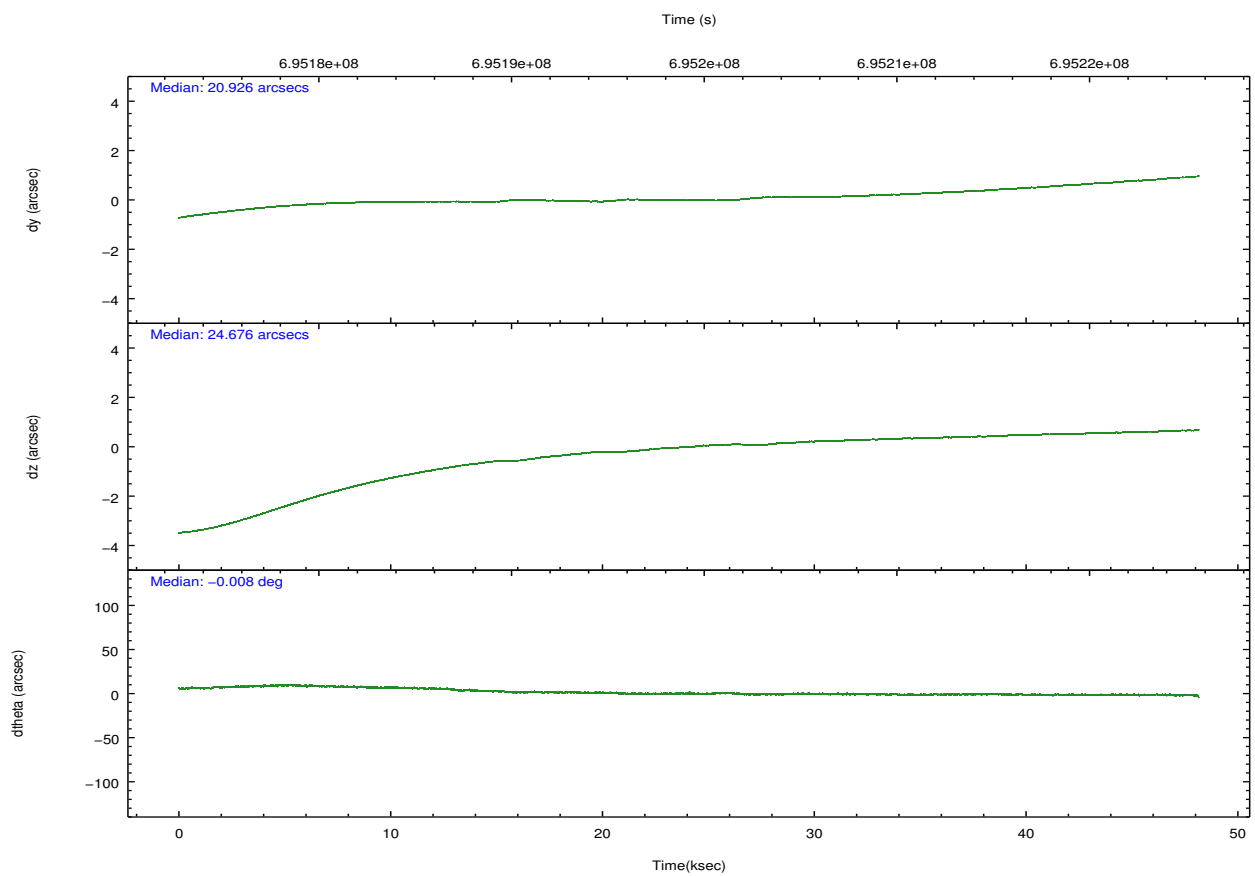
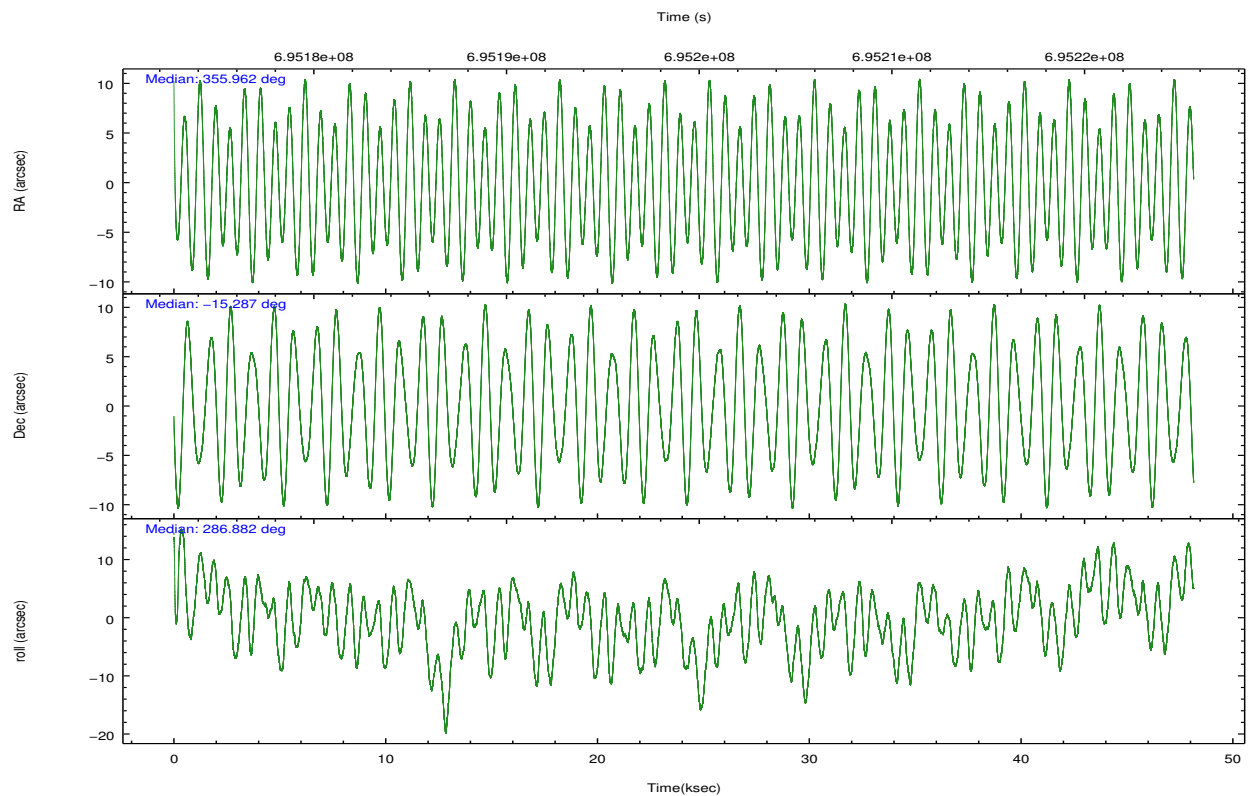
	ccd 2	ccd 3	ccd 7	ccd 8
grade 0 events	14015	14110	18053	38562
	3%	3%	3%	7%
grade 1 events	189	164	710	375
	0%	0%	0%	0%
grade 2 events	10136	8858	44937	33206
	2%	2%	9%	6%
grade 3 events	3822	4170	16418	13460
	1%	1%	3%	2%
grade 4 events	3847	3979	15969	13171
	1%	1%	3%	2%
grade 5 events	14319	17234	46567	26000
	3%	4%	9%	5%
grade 6 events	8147	8528	114171	36586
	2%	2%	23%	7%
grade 7 events	317341	301709	224474	334325
	85%	84%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2378	ACIS-2378	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	355.940986	355.9620127707157	Subarray requested	NONE	NONE
[deg] Pointing Dec	-15.268465	-15.28695757225016	Alternating exposures requested	N	N
[deg] Pointing Roll	286.733248	286.8954174599219	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	692496069.184000	692496069.184000			
[s] Window stop time (MET)	698112069.184000	698112069.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.145094680475			
[mm] SIM translation stage offset	0	0.01257209746719923			
[s] Observation start time (MET)	695175270.184000	695174104.888			
Observation start date	2020-01-12T00:13:21	2020-01-11T23:55:04			
[s] Observation end time (MET)	695223270.184000	695224350.39104			
Observation end date	2020-01-12T13:33:21	2020-01-12T13:52:30			
Read mode	TIMED	TIMED			

2.3 Aspect



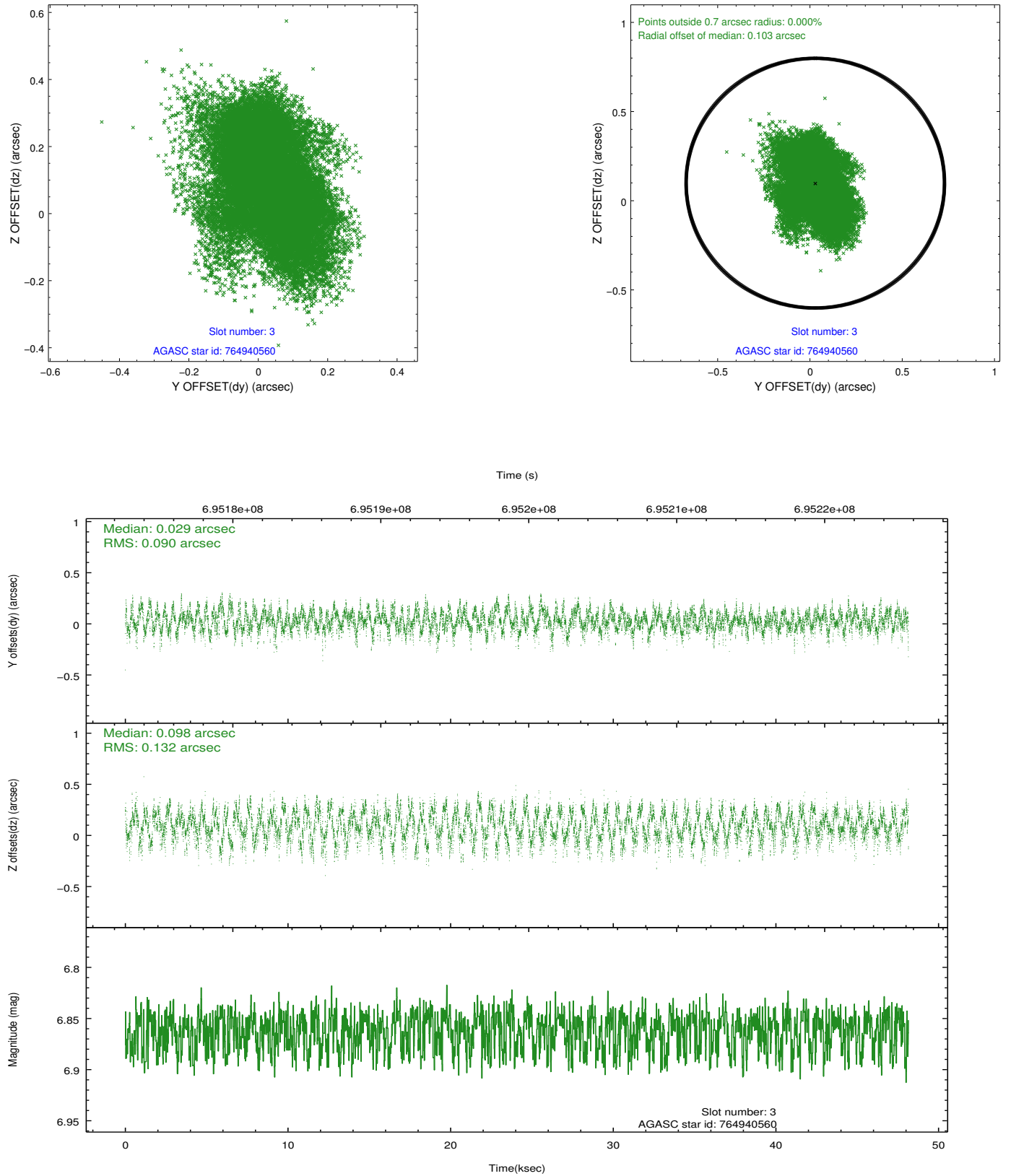


Slot Statistics

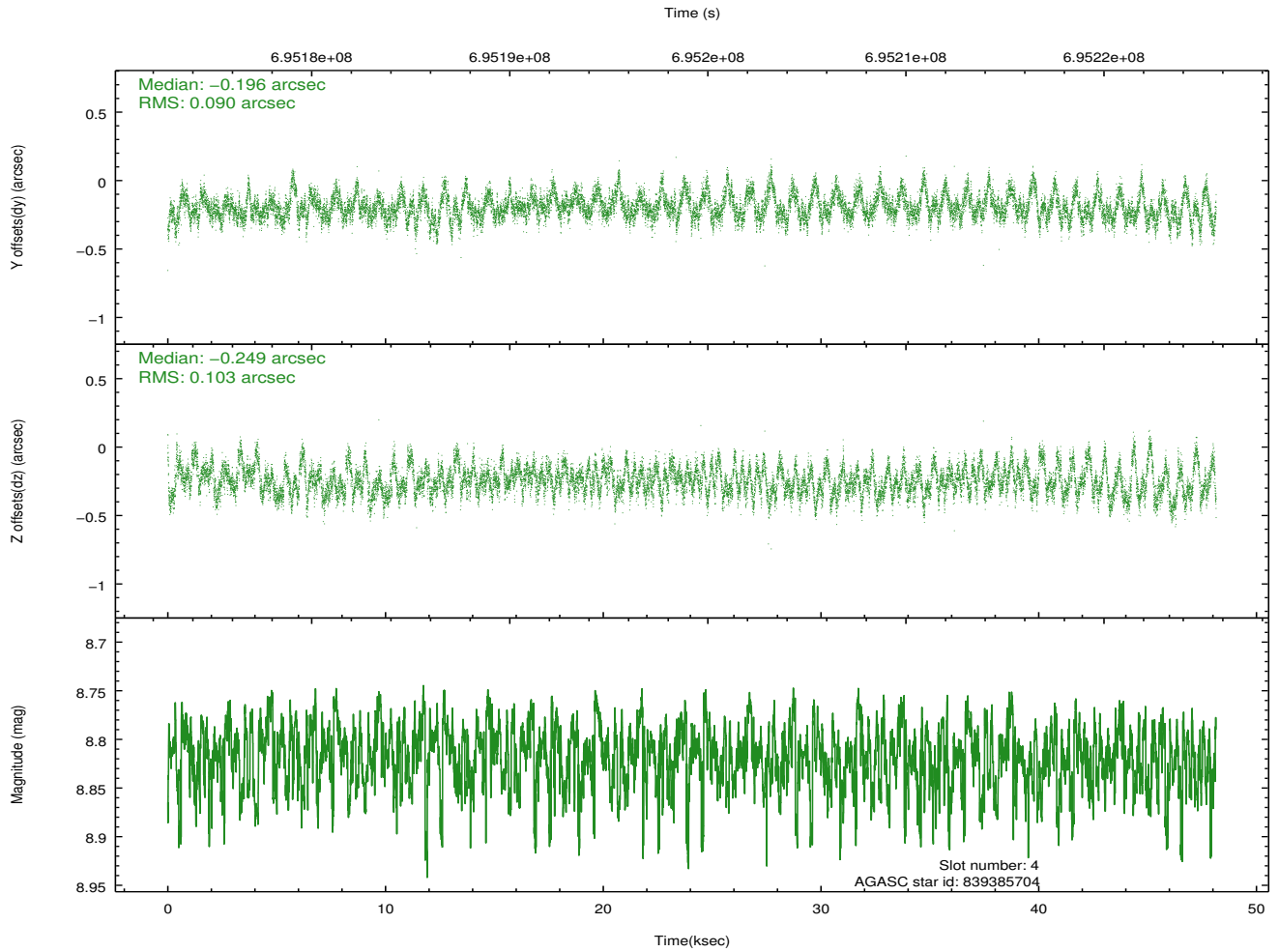
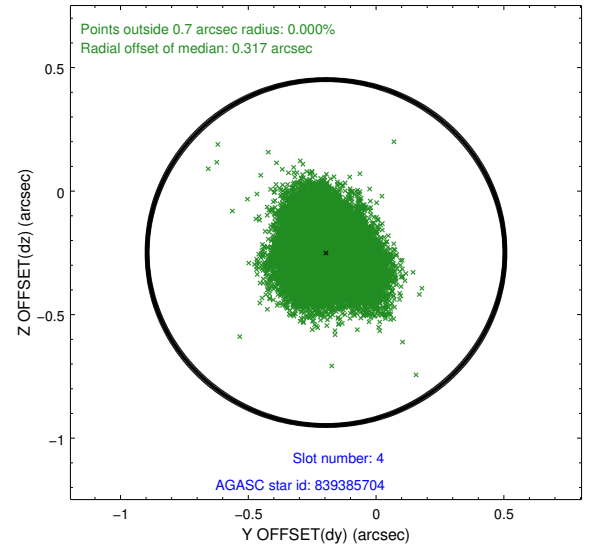
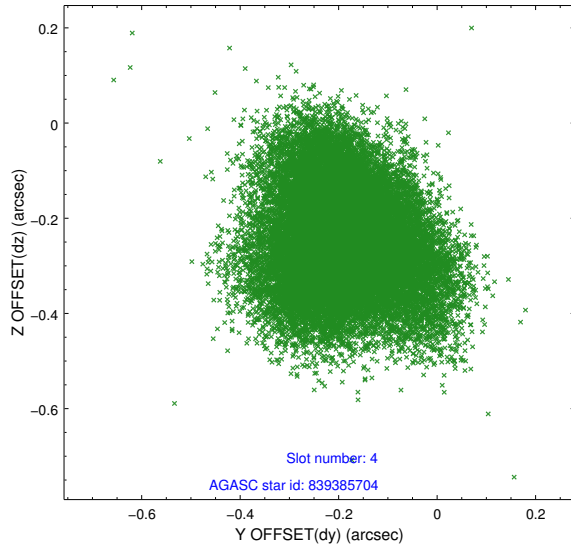
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.14	11744	1.000	-0.392	-0.212	0.037	0.127	0.000000	0.000000	-774.46	-1746
1	FID		ACIS-S-4	7.20	11744	1.000	0.827	0.251	0.016	0.024	0.000000	0.000000	2139.93	163
2	FID		ACIS-S-5	7.21	11742	1.000	-0.464	-0.029	0.034	0.115	0.000000	0.000000	-1827.51	156
3	GUIDE	used	764940560	6.86	23489	1.000	0.029	0.098	0.171	0.274	356.468287	-14.754821	-1240.50	2289
4	GUIDE	used	839385704	8.82	23459	1.000	-0.196	-0.249	0.147	0.235	355.956087	-15.284500	71.19	34
5	GUIDE	used	839386352	9.48	23359	1.000	0.020	0.104	0.211	0.411	355.395782	-15.624441	687.32	-2178
6	GUIDE	used	839386400	9.23	23445	1.000	0.130	0.042	0.251	0.383	356.007432	-15.662506	1425.14	-187
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0

2.4 Star Slots

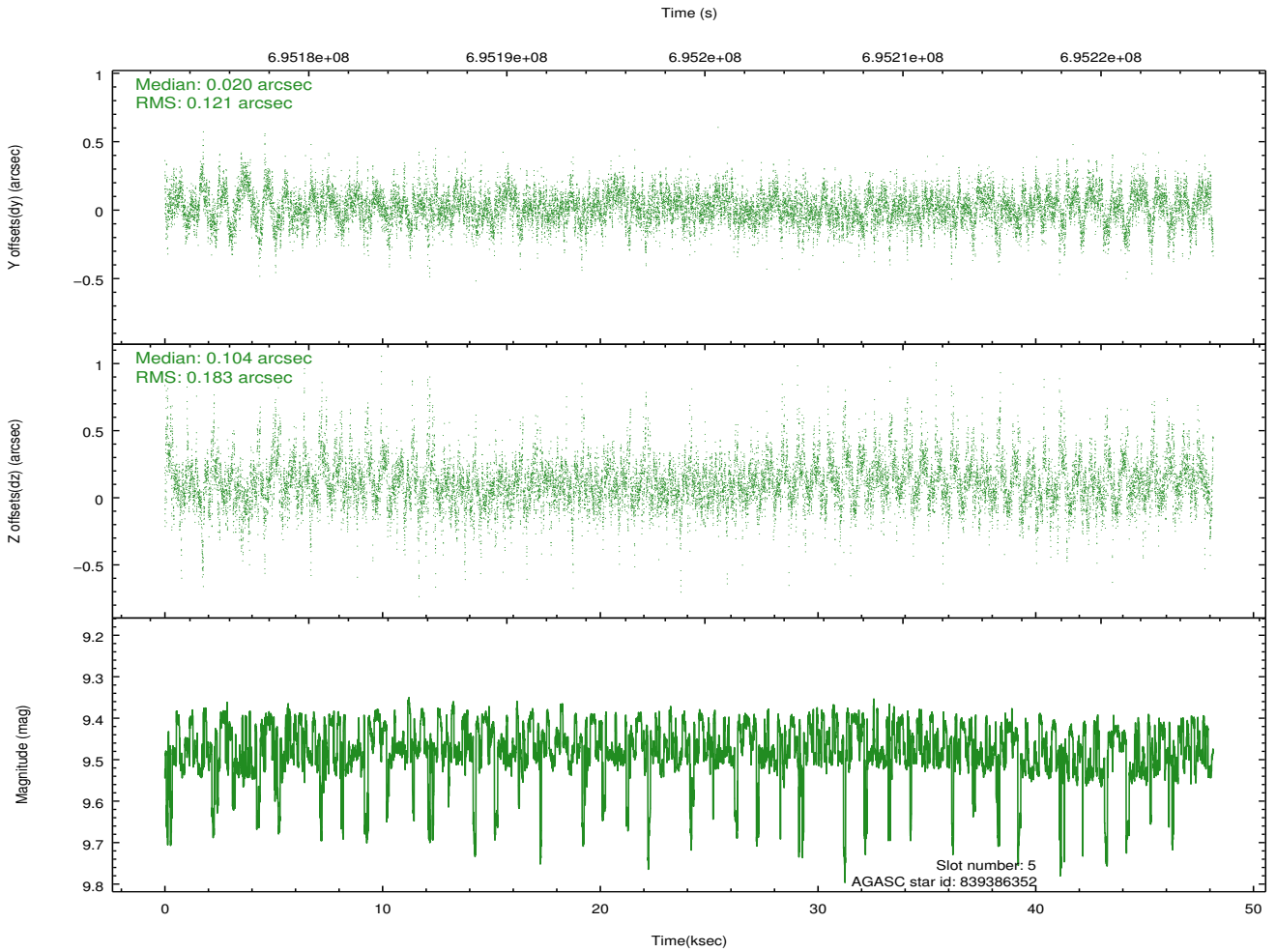
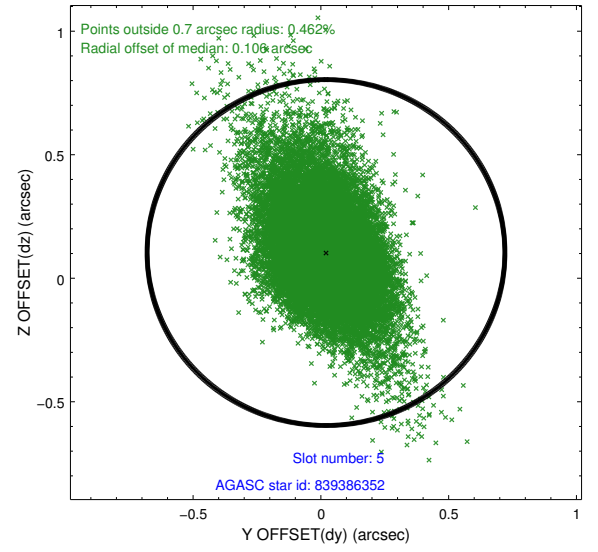
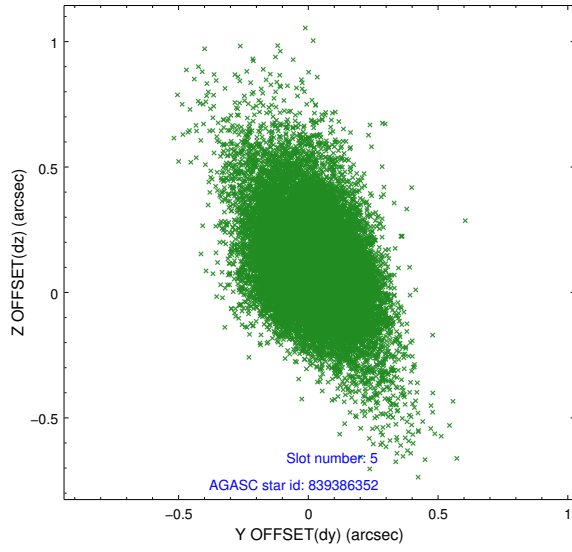
2.4.1 Slot 3



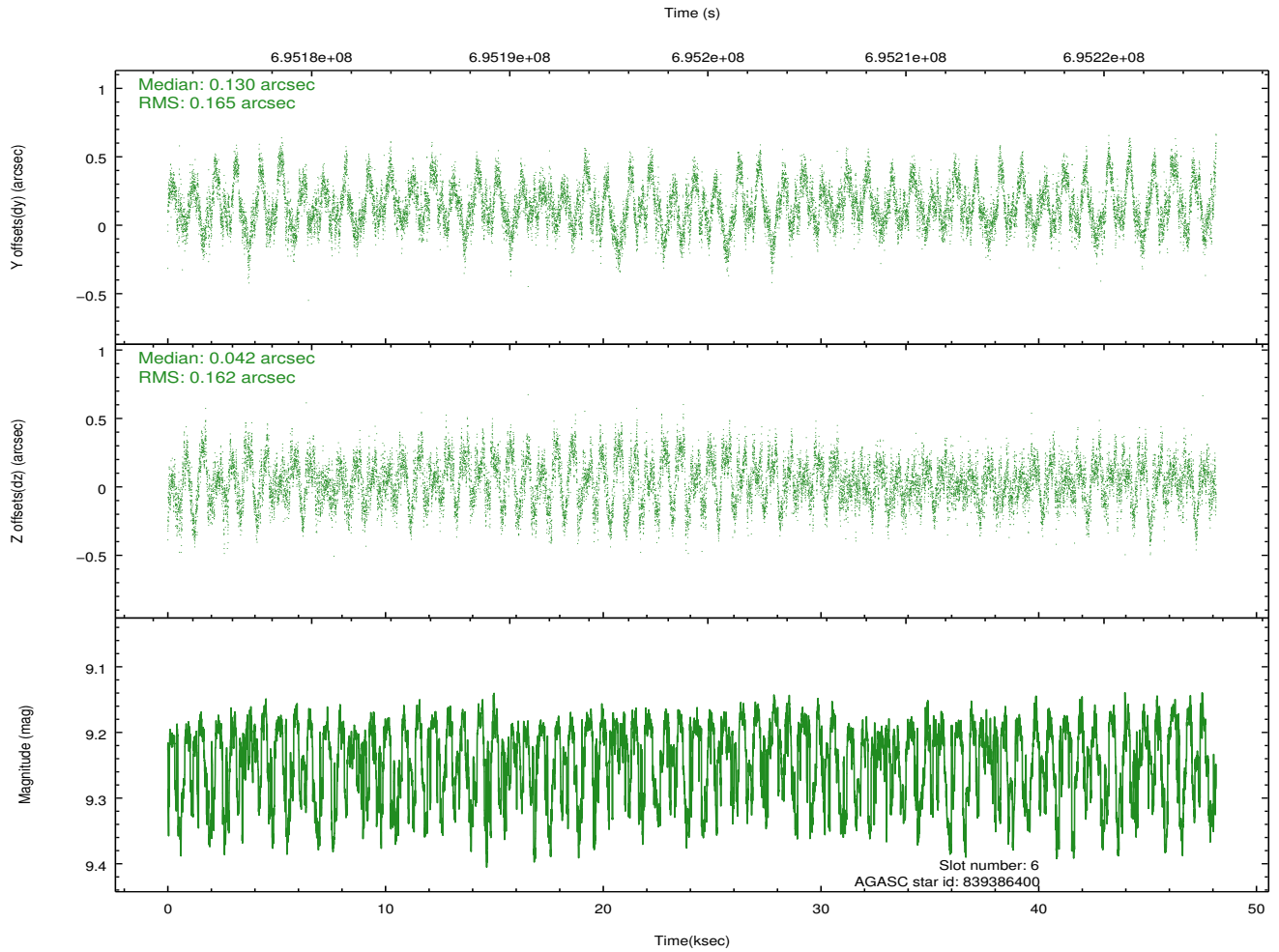
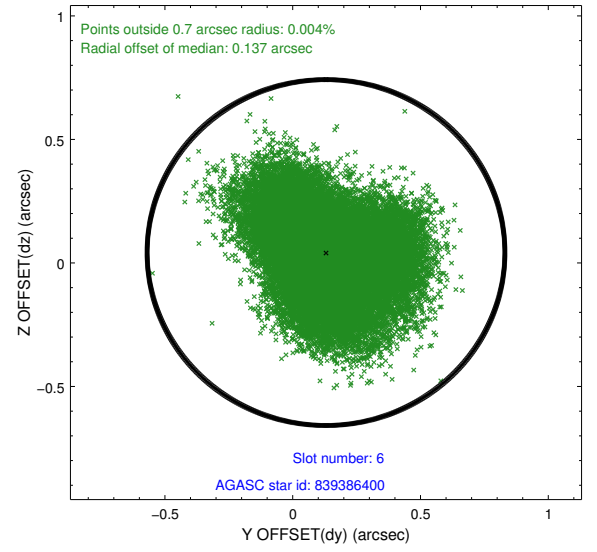
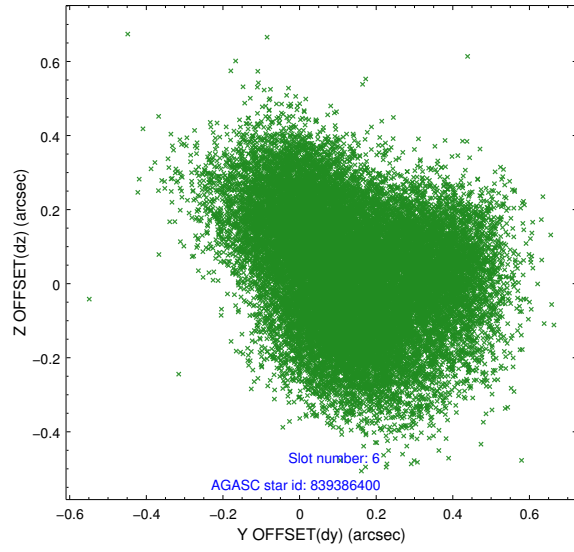
2.4.2 Slot 4



2.4.3 Slot 5

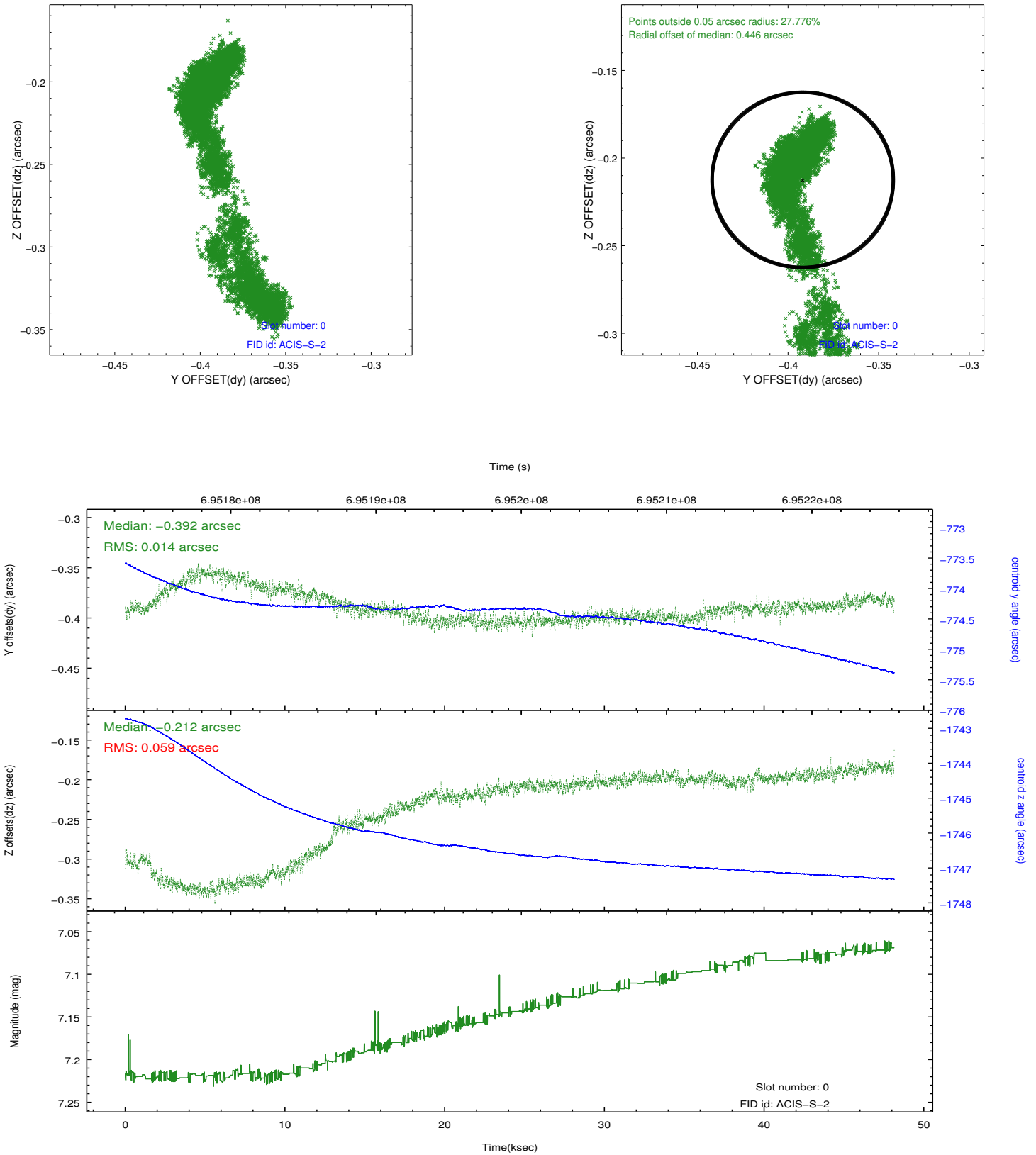


2.4.4 Slot 6

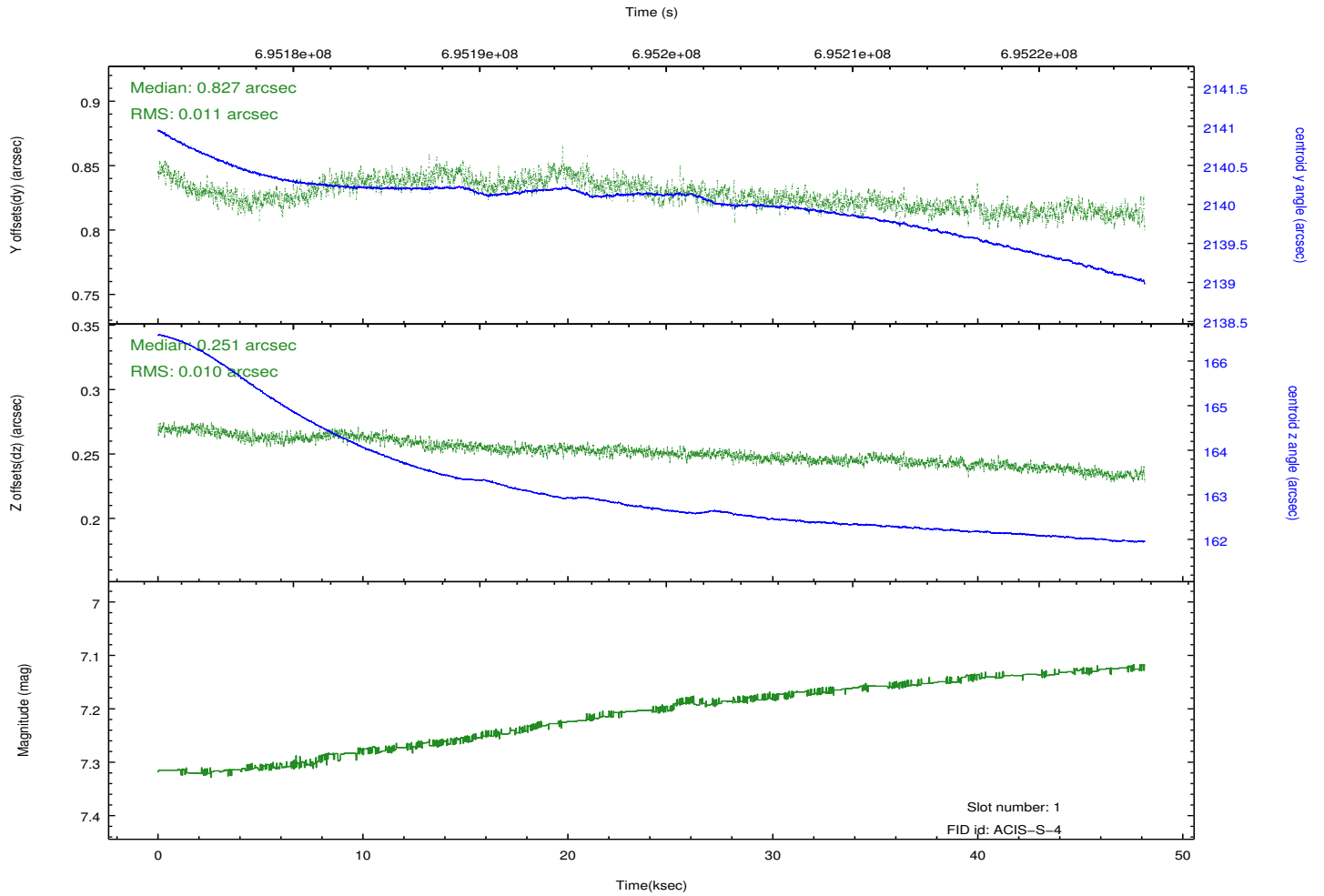
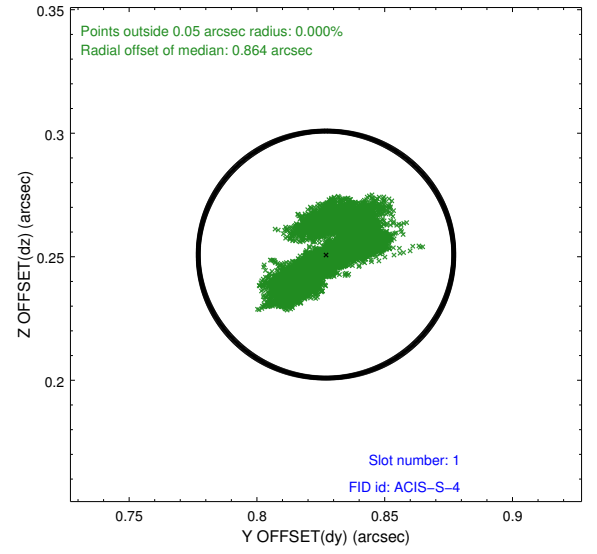
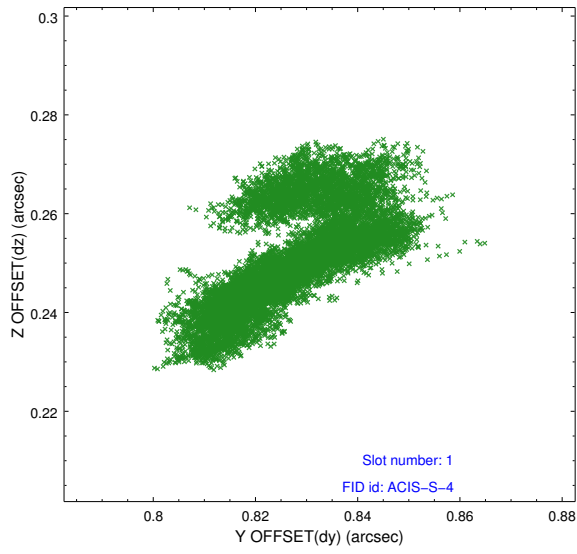


2.5 FID Slots

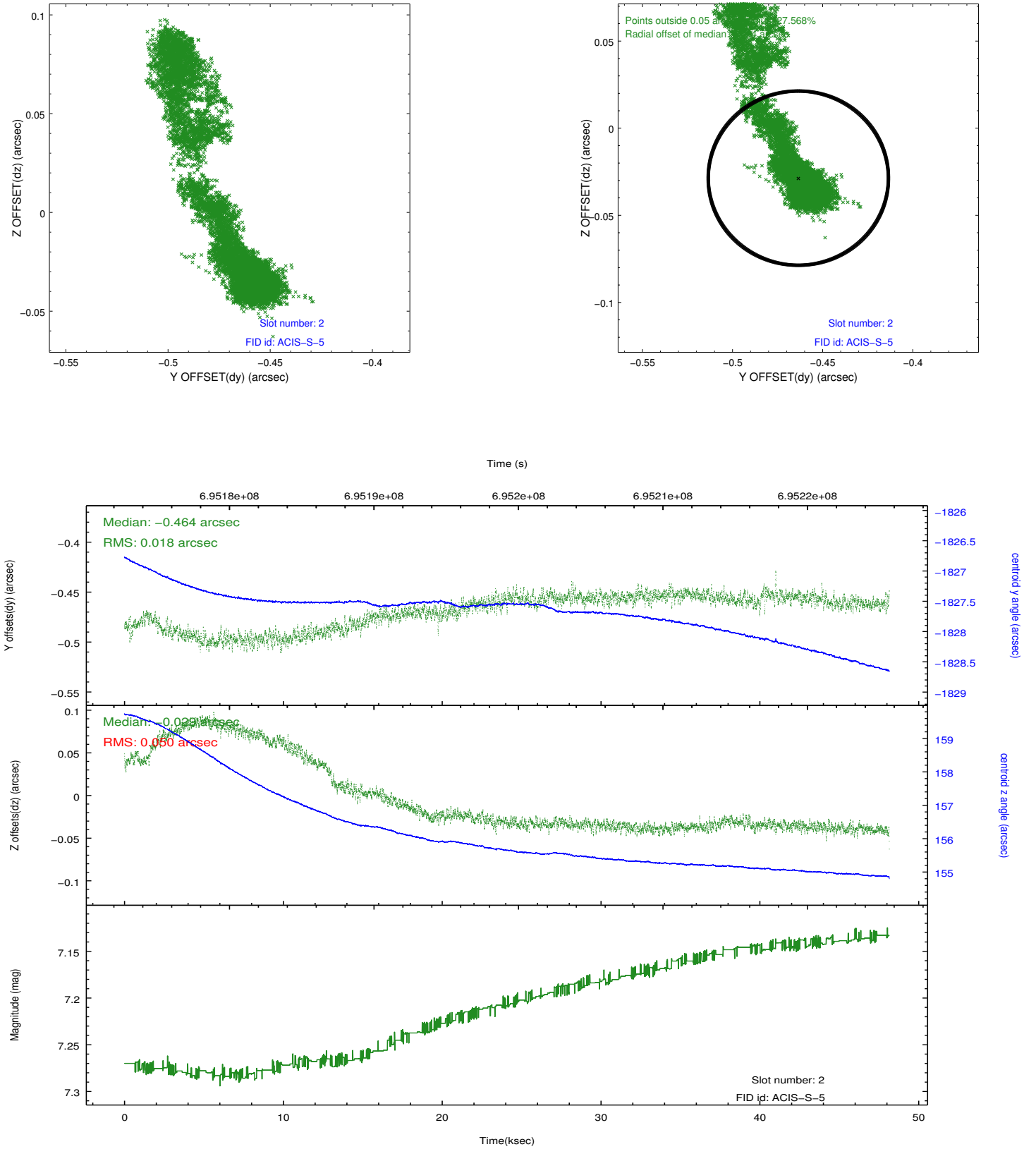
2.5.1 Slot 0



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)	2020.01.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	48.112000370145

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.

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Window constraint met.