

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21316 - L2 Version 1
Chandra X-Ray Center

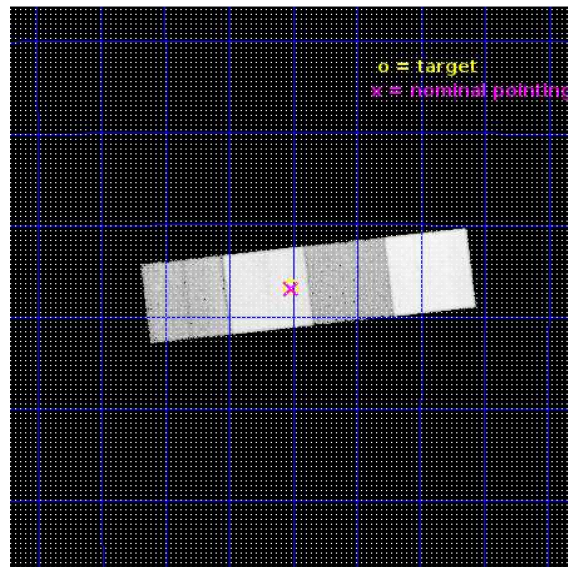
L2 Processing Date : May 24 2019

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1 Front

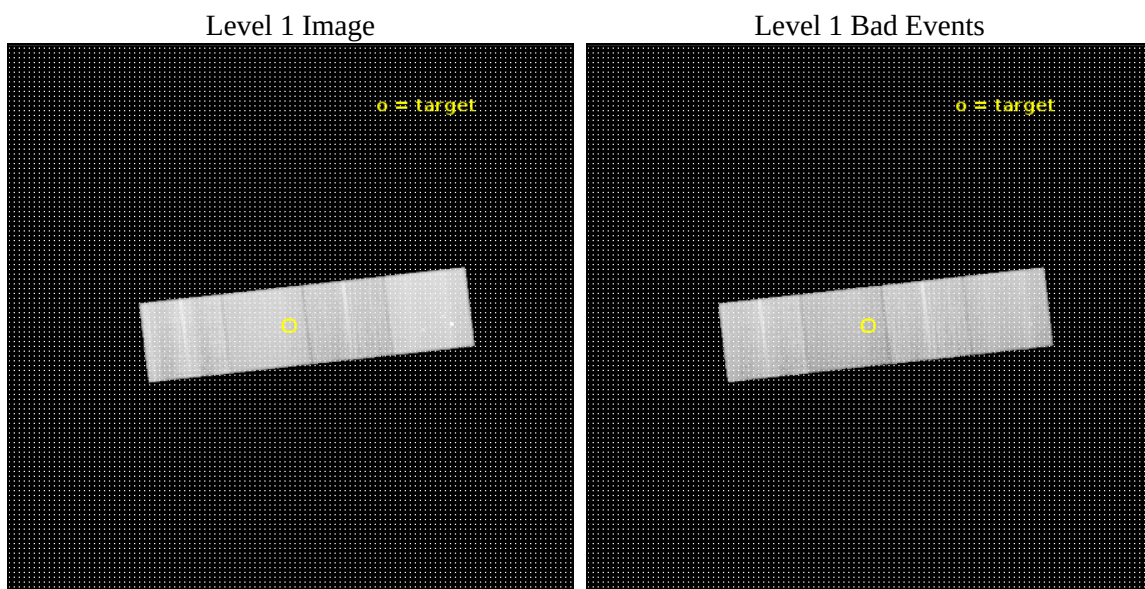
seq_num	503088	Sequence number
obs_id	21316	Observation id
title	Late-time X-rays to map the Zoo of Engine-driven Stellar Explosions	
observer	Aprajita Hajela	Principal investigator
object	GRB190114C	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	54.504962	Observer's specified target RA [deg]
dec_targ	-26.946314	Observer's specified target Dec [deg]
ra_nom	54.503182741829	Nominal RA [deg]
dec_nom	-26.949403007912	Nominal Dec [deg]
roll_nom	173.36445663321	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35057.347062707	Sum of GTIs [s]
livetime	34599.297014489	Livetime [s]
ontime5	35057.306022763	Sum of GTIs [s]
ontime6	35054.123962402	Sum of GTIs [s]
ontime7	35057.347062707	Sum of GTIs [s]
ontime8	35054.082982421	Sum of GTIs [s]
l2events	394808	Number of level 2 events



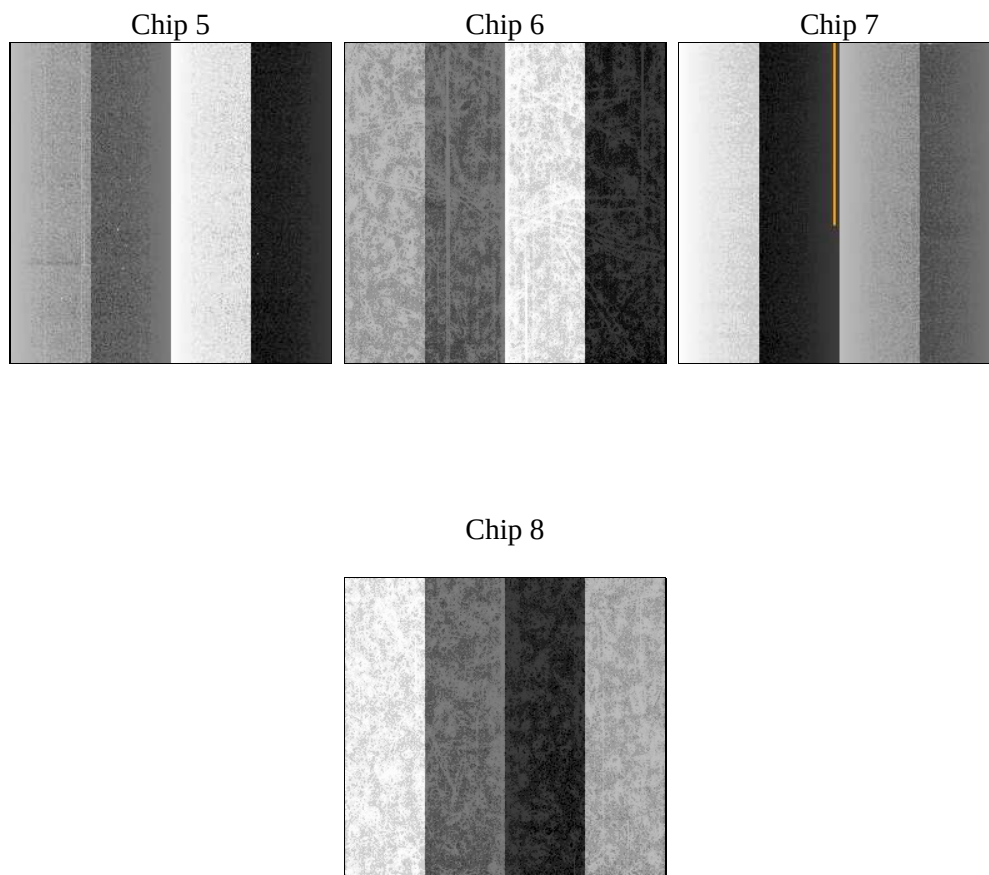
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	35057.347062707	Sum of GTIs [s]
caldsver	4.8.3	 	ontime5	35057.306022763	Sum of GTIs [s]
date	2019-05-24T05:36:18	Date and time of file creation	ontime6	35054.123962402	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	35057.347062707	Sum of GTIs [s]
			ontime8	35054.082982421	Sum of GTIs [s]
			l1events	1385533	Number of level 1 events

2.1.4 Events

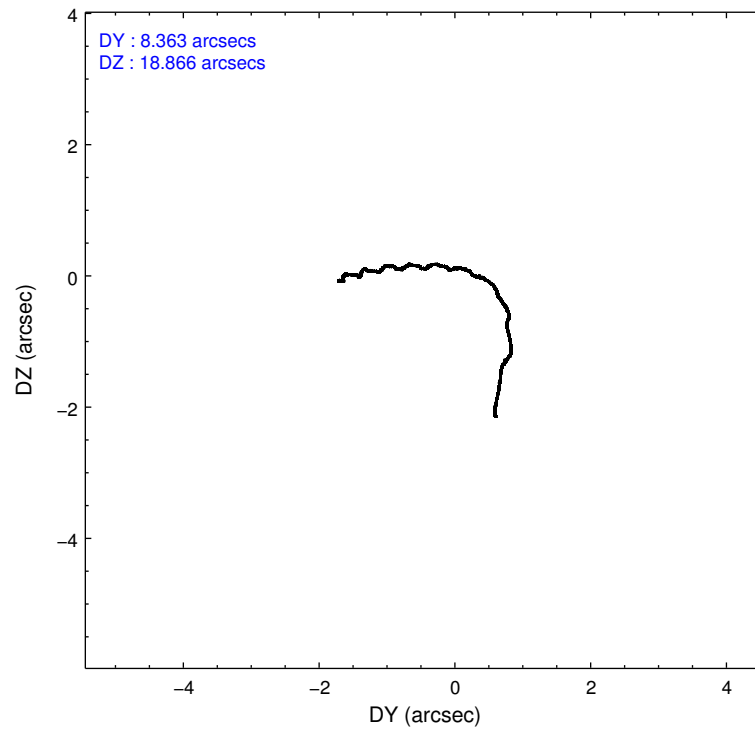
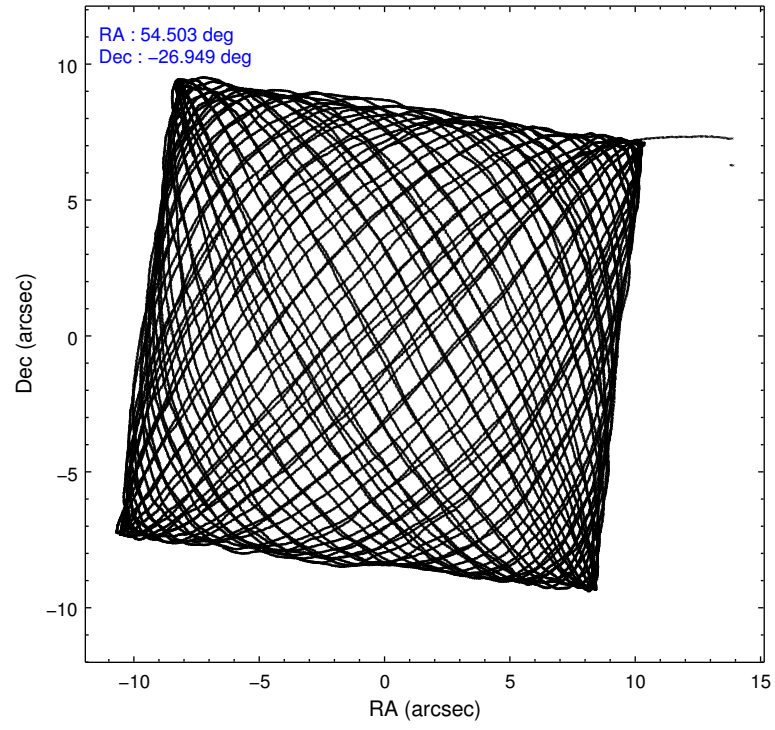
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	421086	274418	337734	352295
rejected events	220230	244283	190917	257447
rejected %	52%	89%	56%	73%

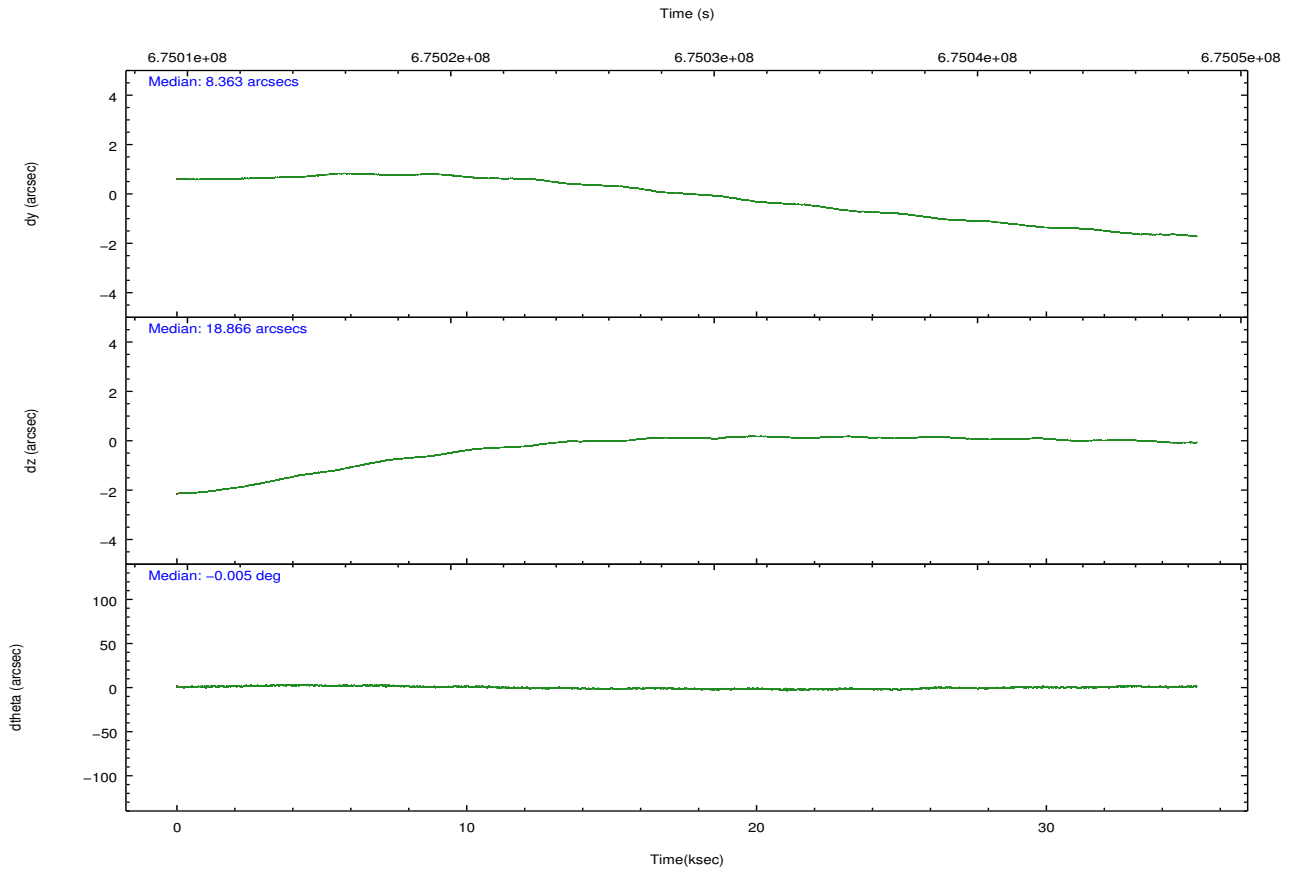
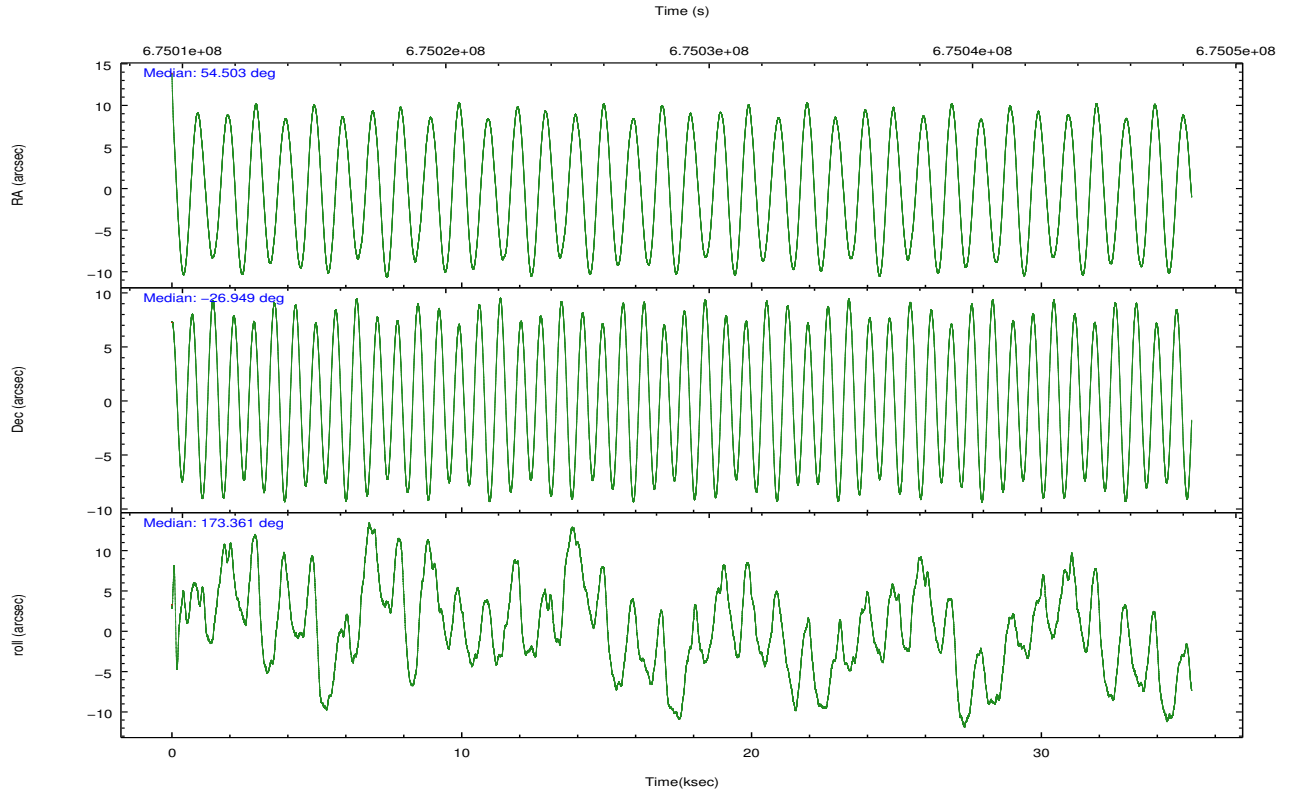
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	12882	9553	12394	27059
	3%	3%	3%	7%
grade 1 events	1445	136	513	290
	0%	0%	0%	0%
grade 2 events	62843	7547	31217	23267
	14%	2%	9%	6%
grade 3 events	6393	2834	11311	9497
	1%	1%	3%	2%
grade 4 events	6182	2754	11274	8918
	1%	1%	3%	2%
grade 5 events	28657	12028	33161	18817
	6%	4%	9%	5%
grade 6 events	112596	7454	80640	26143
	26%	2%	23%	7%
grade 7 events	190088	232112	157224	238304
	45%	84%	46%	67%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	54.531273	54.5031827418294	Subarray requested	NONE	NONE
[deg] Pointing Dec	-26.938173	-26.94940300791236	Alternating exposures requested	N	N
[deg] Pointing Roll	173.220565	173.3644566332096	[s] Primary exposure time	0.000000	3.1
[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)	675011562.184000	675010366.71162			
Observation start date	2019-05-23T15:11:33	2019-05-23T14:52:46			
[s] Observation end time (MET)	675046562.184000	675047676.71385			
Observation end date	2019-05-24T00:54:53	2019-05-24T01:14:36			
Read mode	TIMED	TIMED			

2.3 Aspect



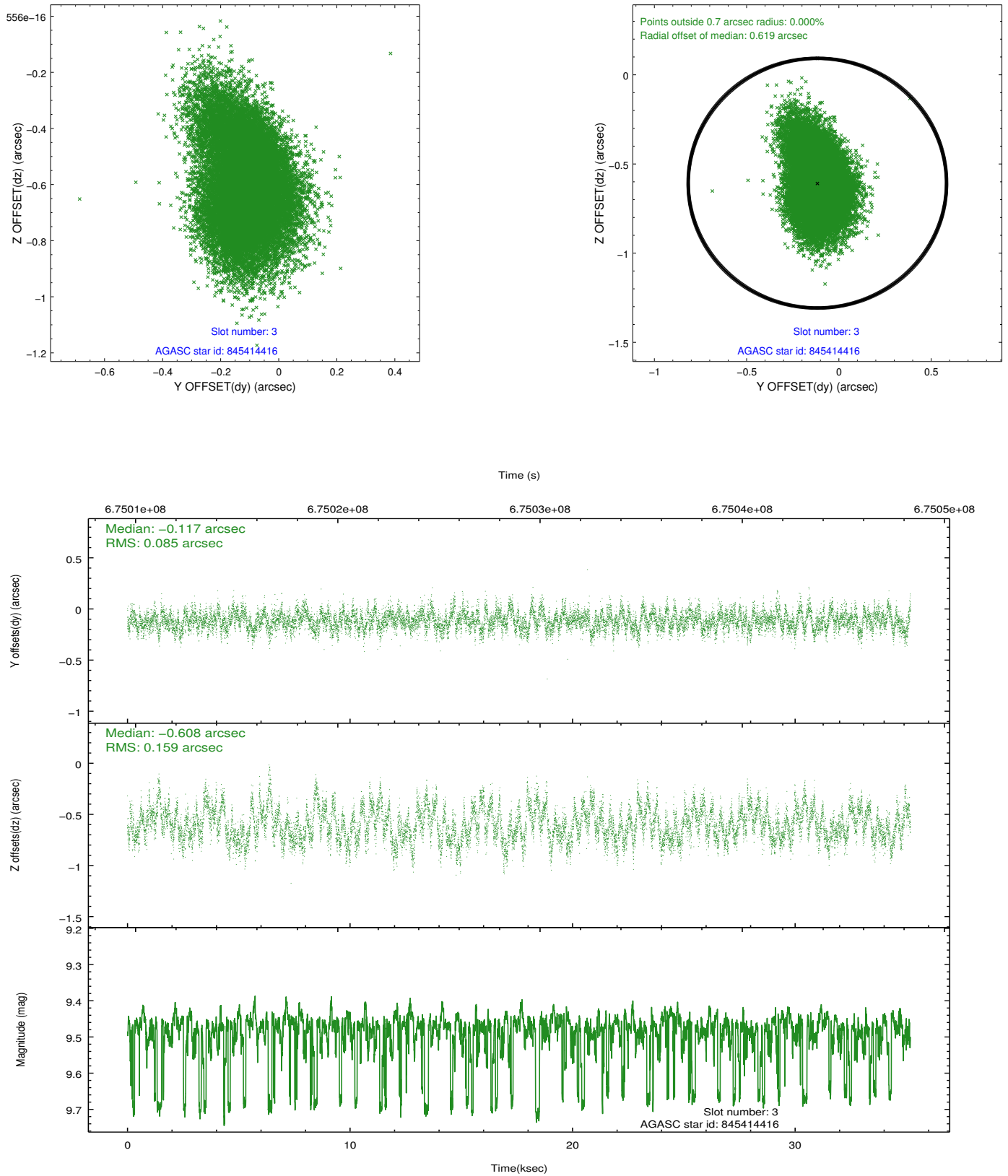


Slot Statistics

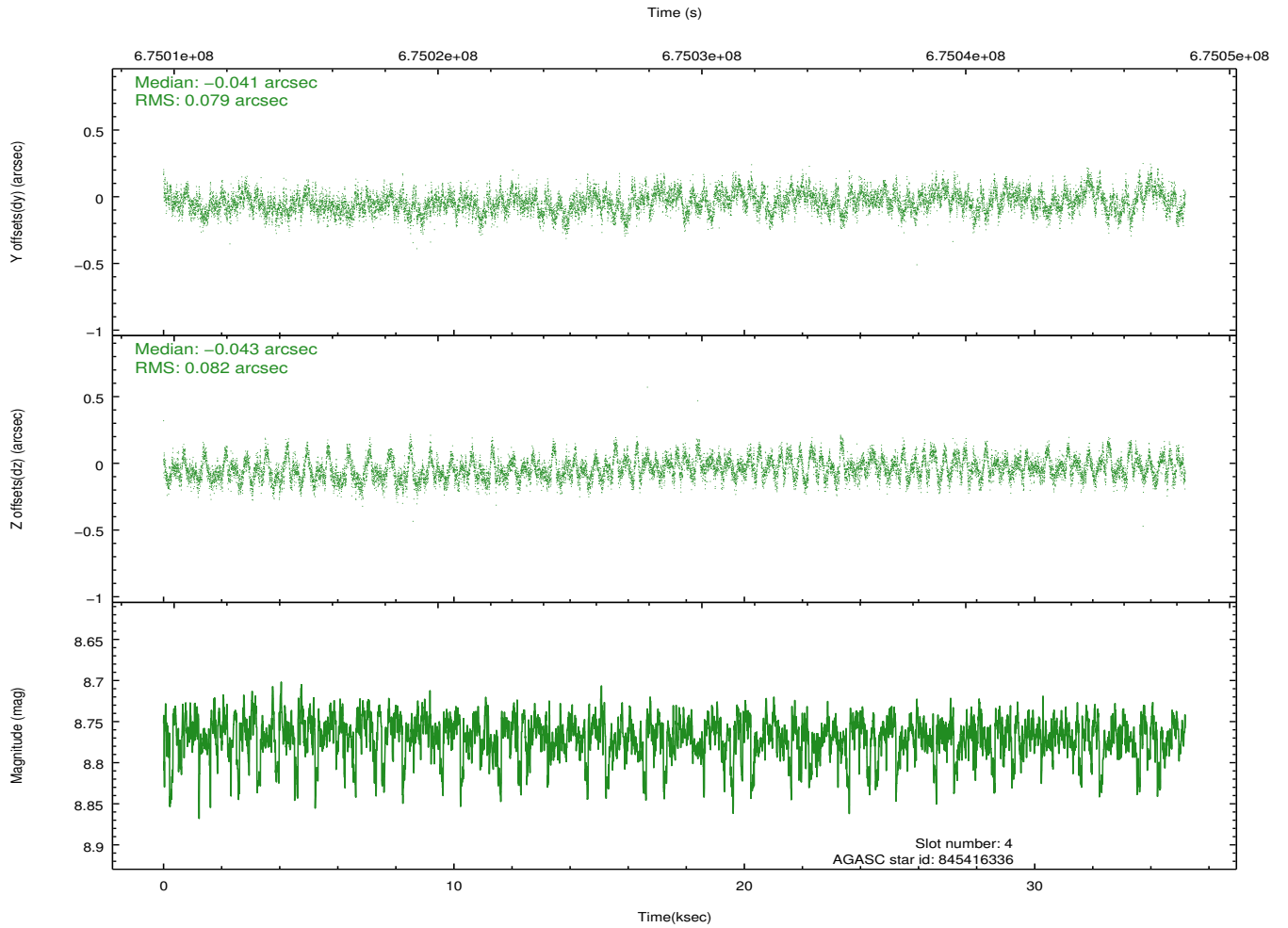
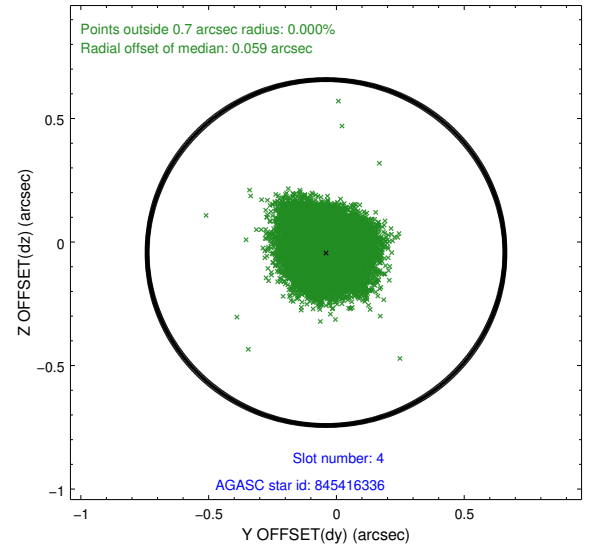
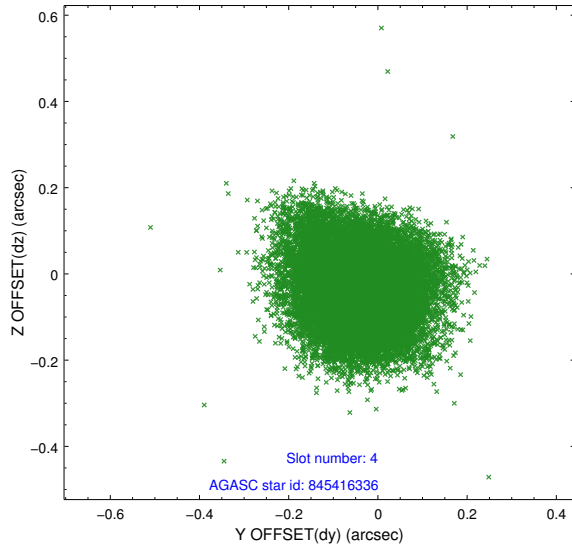
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.05	8583	1.000	-0.254	-0.131	0.022	0.043	0.000000	0.000000	-761.18	-1740
1	FID		ACIS-S-4	7.18	8583	1.000	0.585	0.157	0.053	0.066	0.000000	0.000000	2152.87	168
2	FID		ACIS-S-5	7.17	8582	1.000	-0.364	-0.019	0.061	0.072	0.000000	0.000000	-1814.12	162
3	GUIDE	used	845414416	9.48	17136	1.000	-0.117	-0.608	0.189	0.318	54.588168	-27.488950	-414.27	1947
4	GUIDE	used	845416336	8.77	17155	1.000	-0.041	-0.043	0.122	0.195	53.960749	-26.787384	1884.29	-317
5	GUIDE	used	845416488	9.33	17140	1.000	0.302	0.372	0.226	0.344	54.760774	-26.814417	-678.90	-528
6	GUIDE	used	845417696	9.74	17011	1.000	-0.150	0.278	0.277	0.496	54.588053	-26.366447	61.29	-2064
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

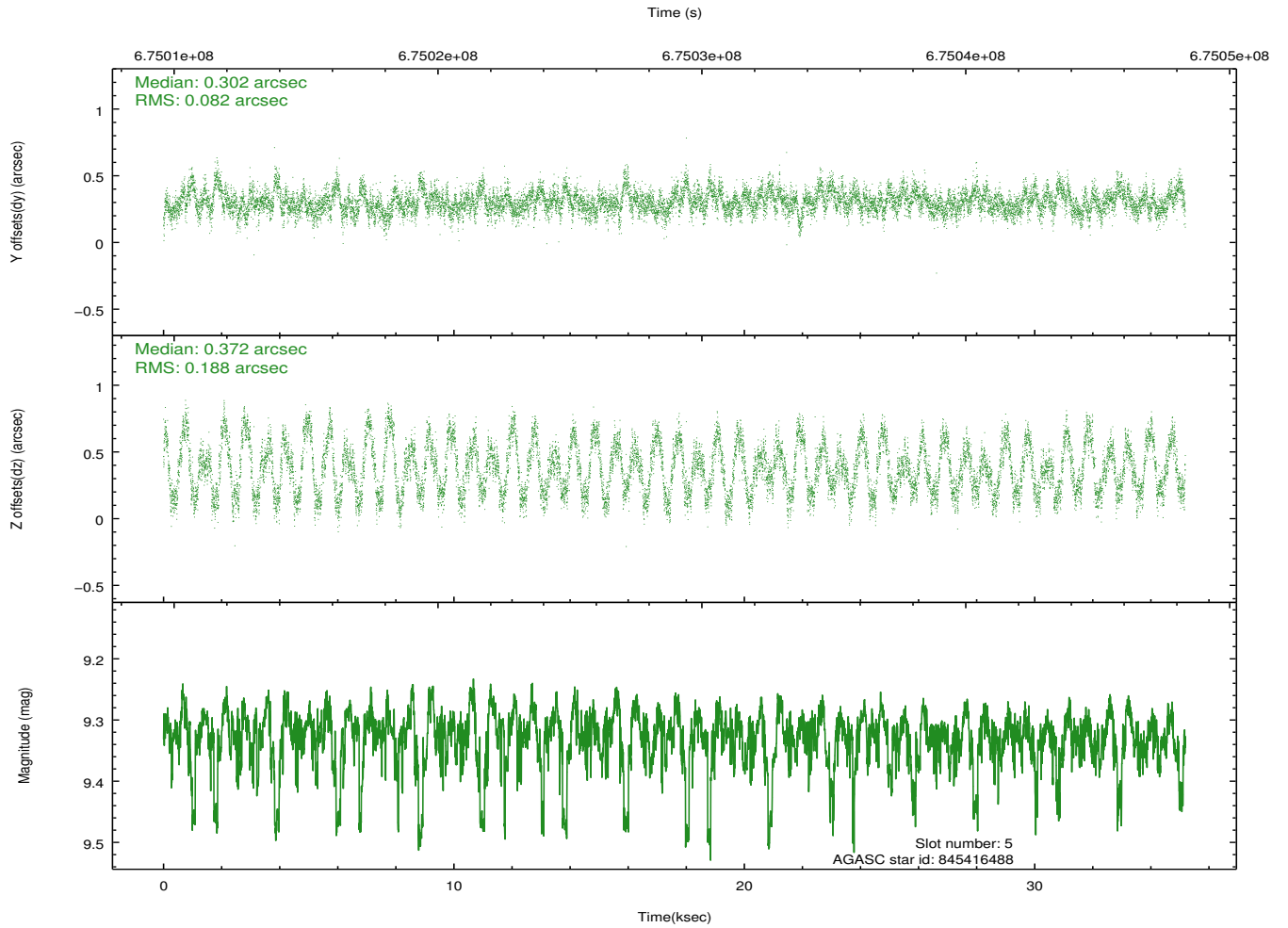
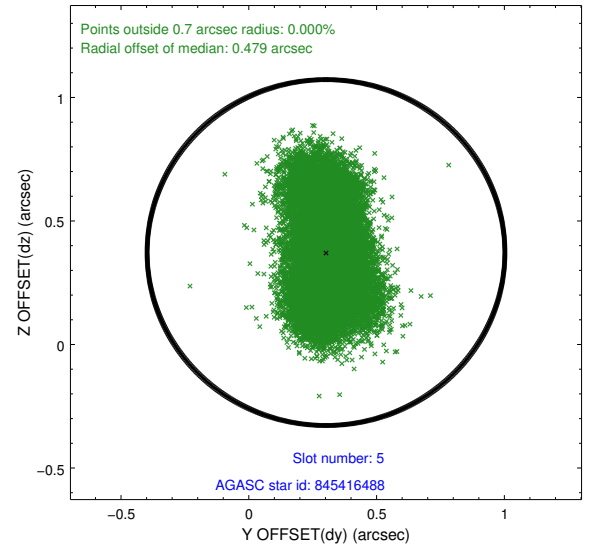
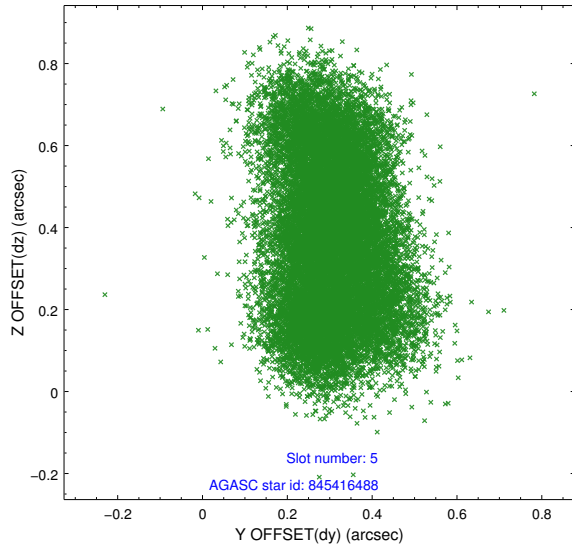
2.4.1 Slot 3



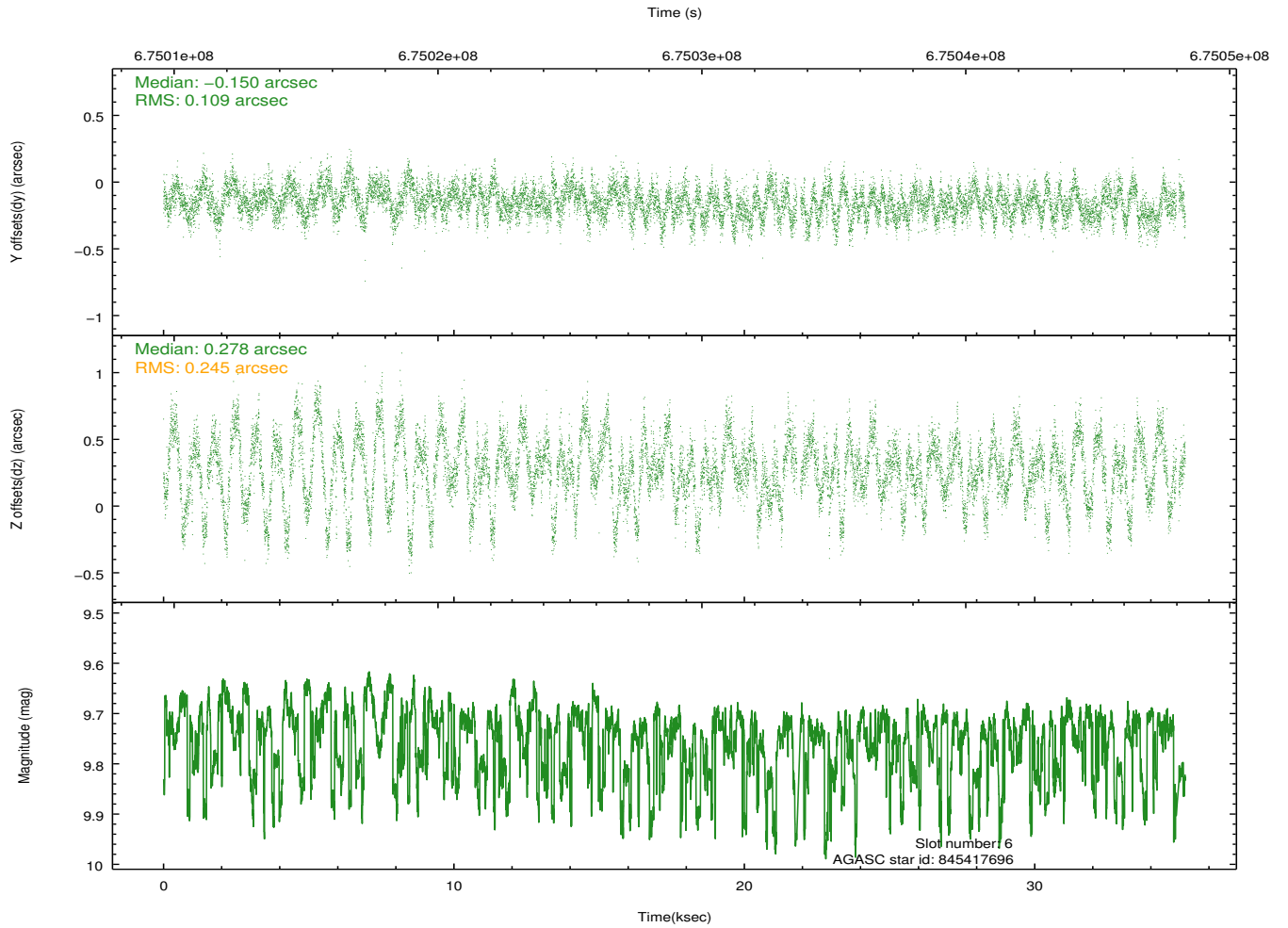
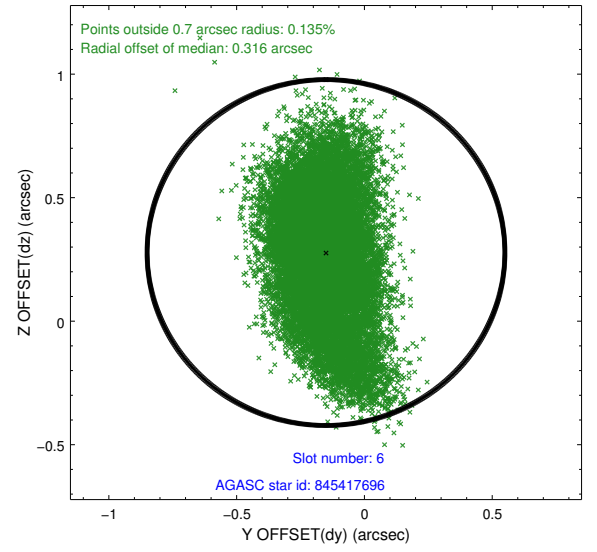
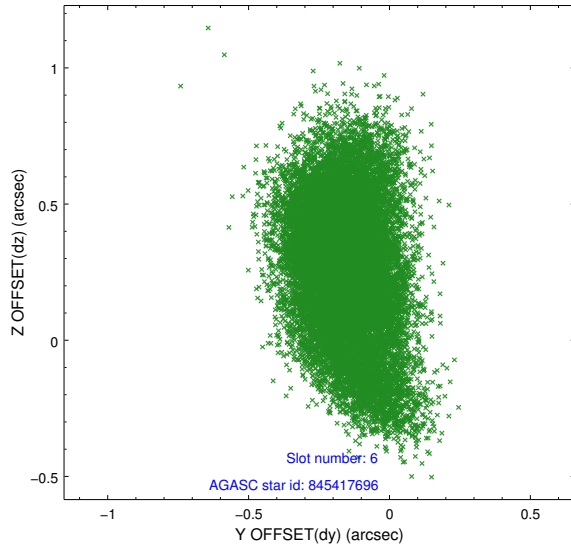
2.4.2 Slot 4



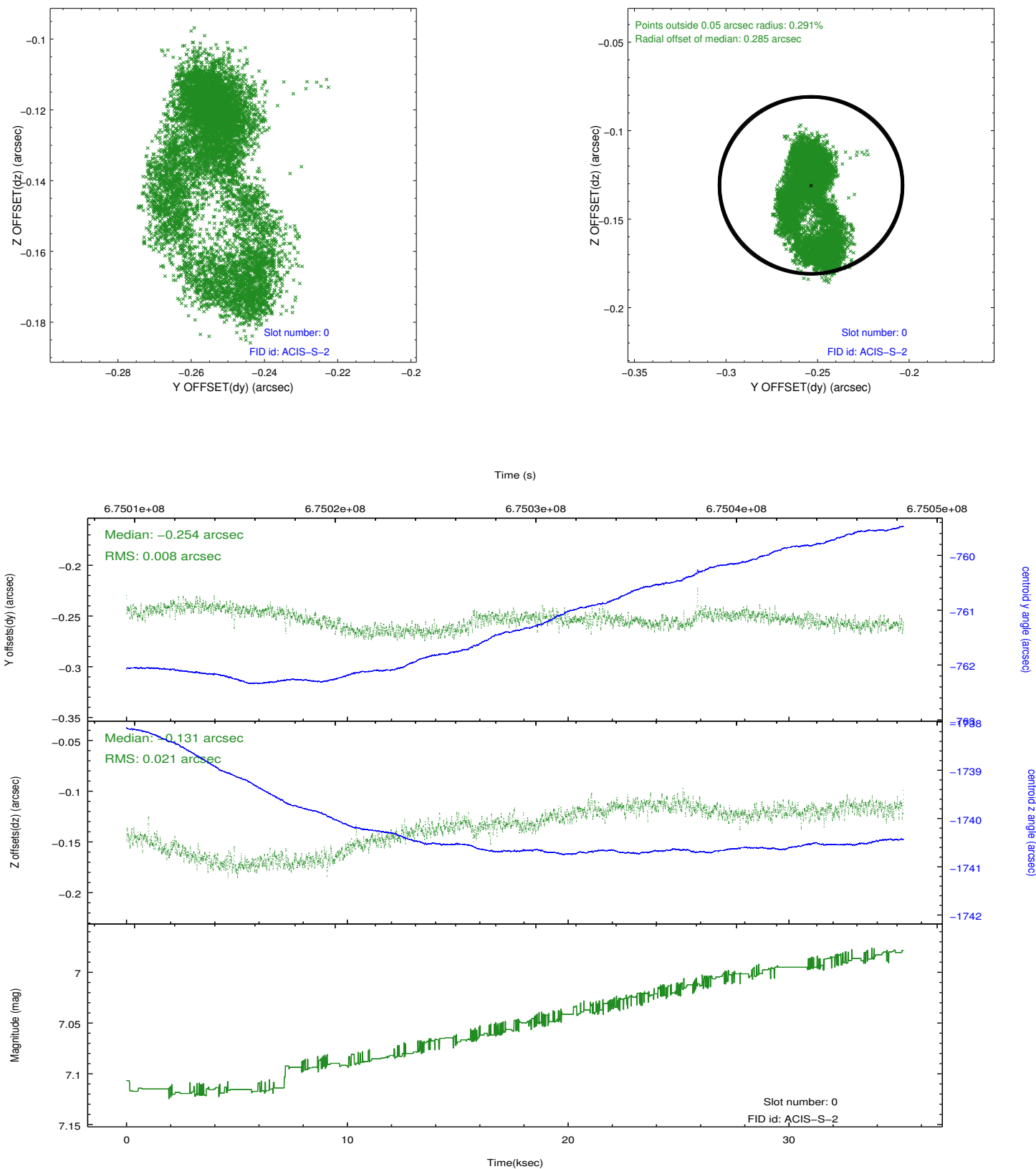
2.4.3 Slot 5



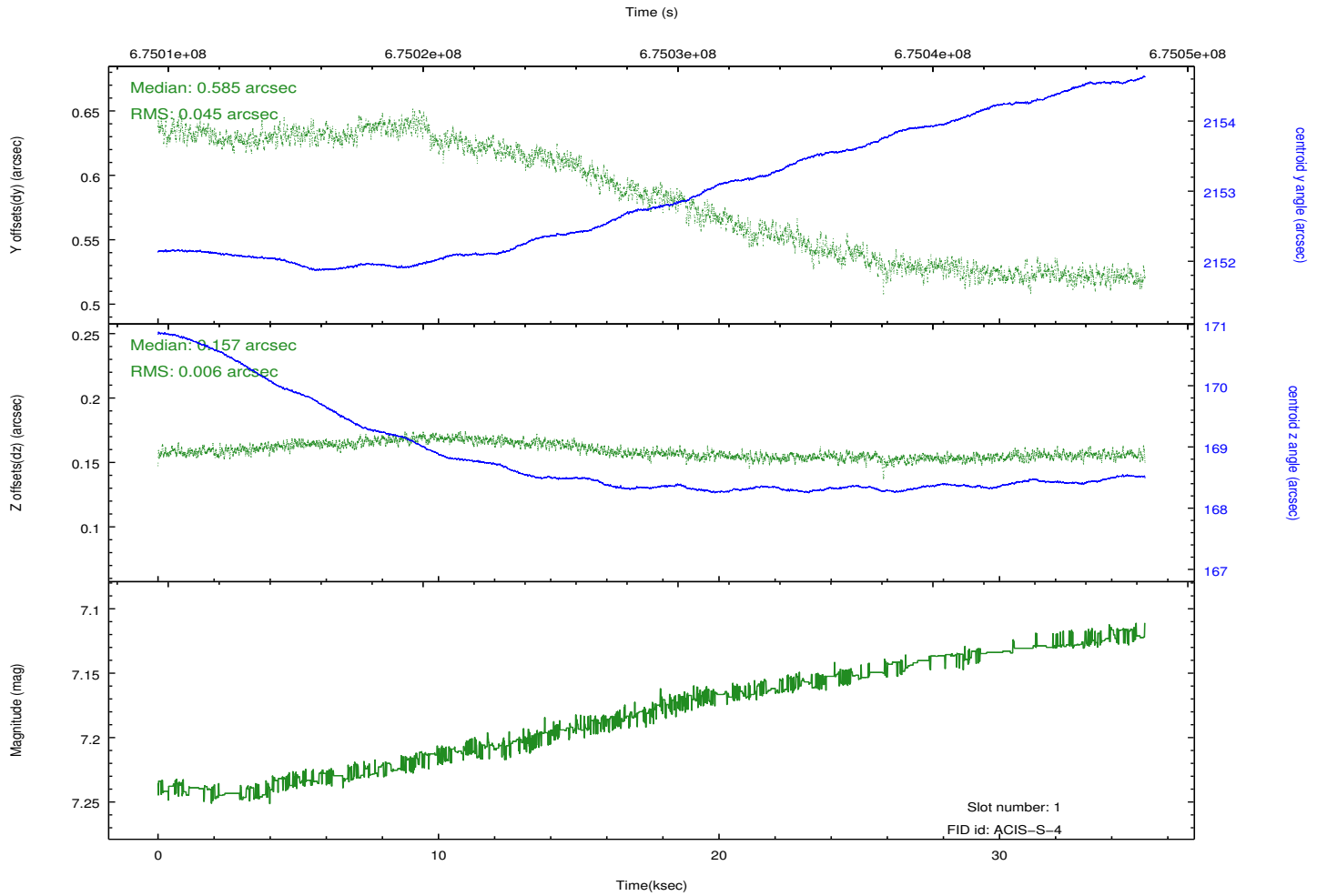
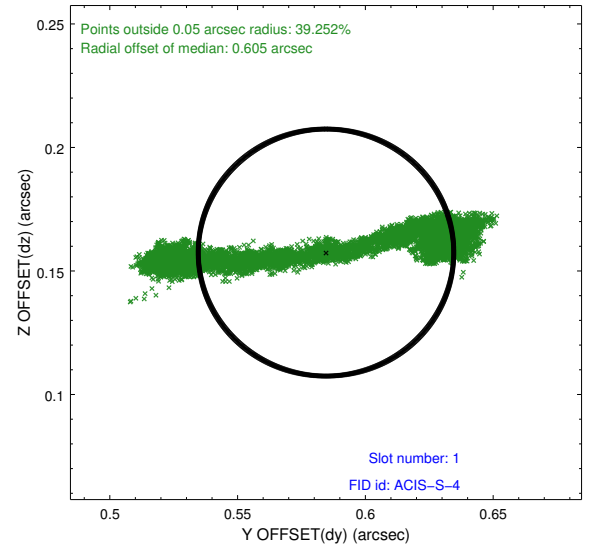
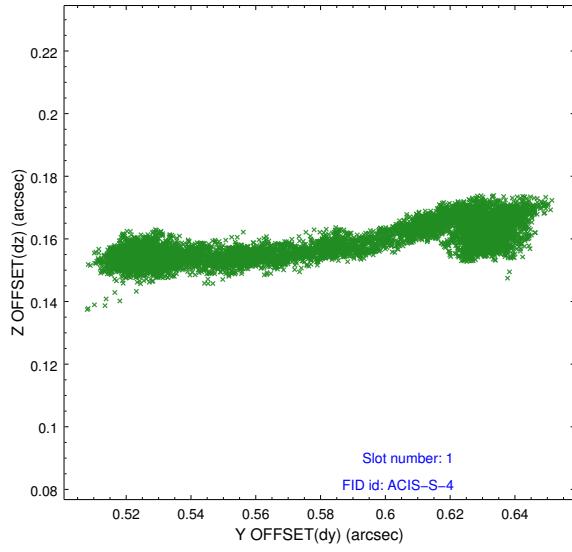
2.4.4 Slot 6



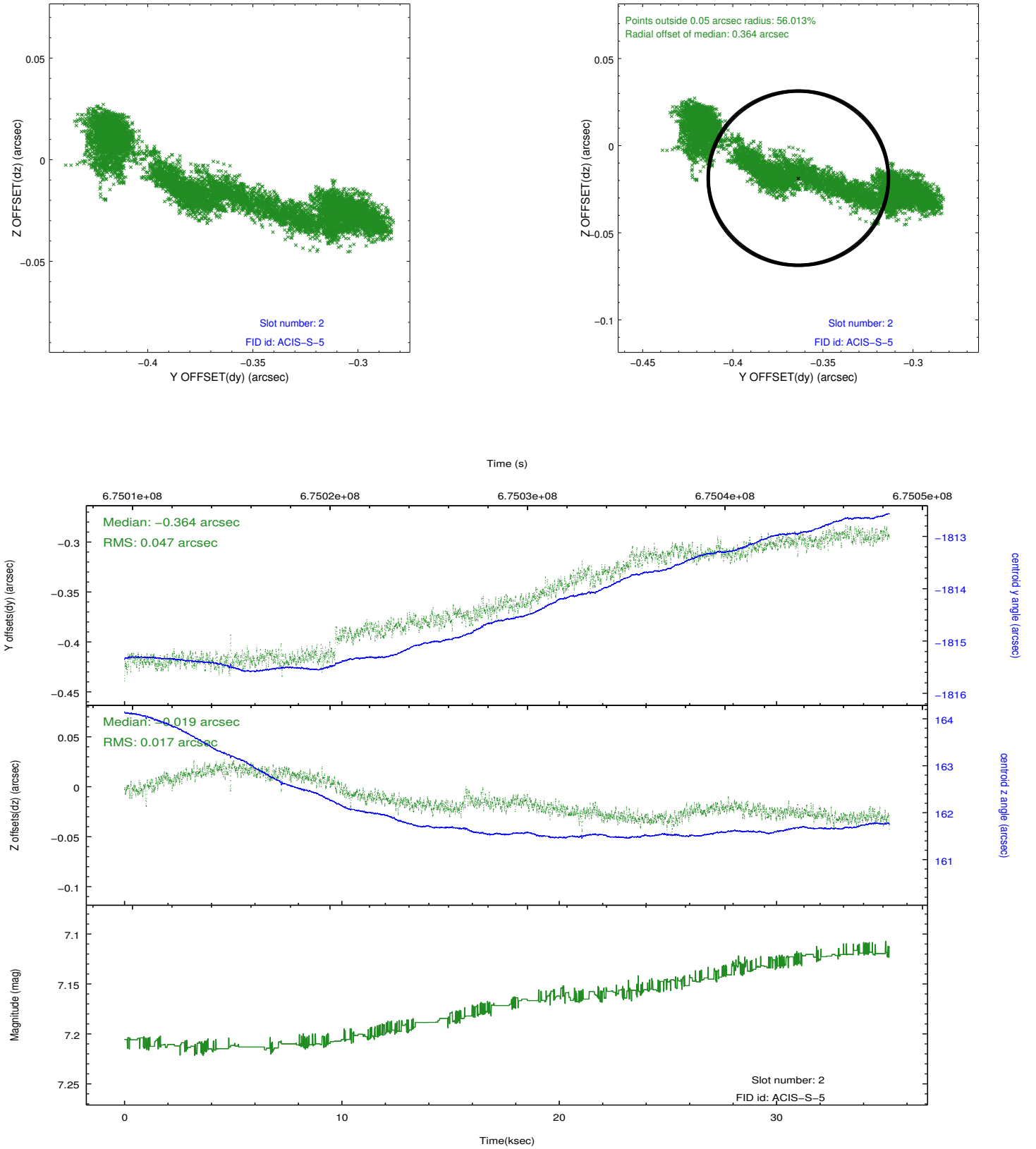
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2019.05.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.057347062707

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.