

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22214 - L2 Version 3
Chandra X-Ray Center

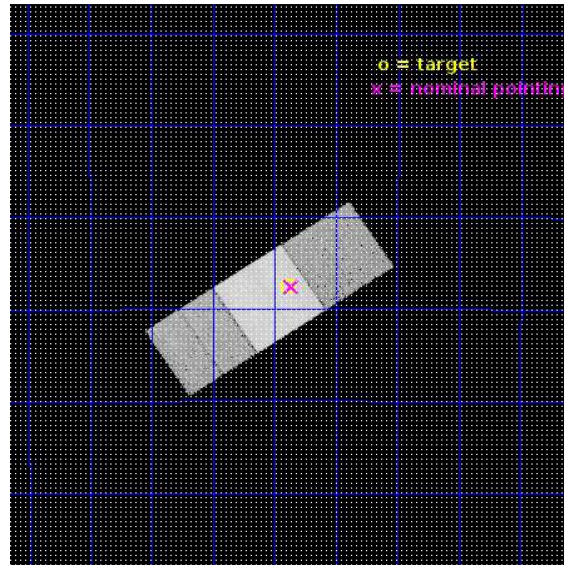
L2 Processing Date : May 20 2019

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1 Front

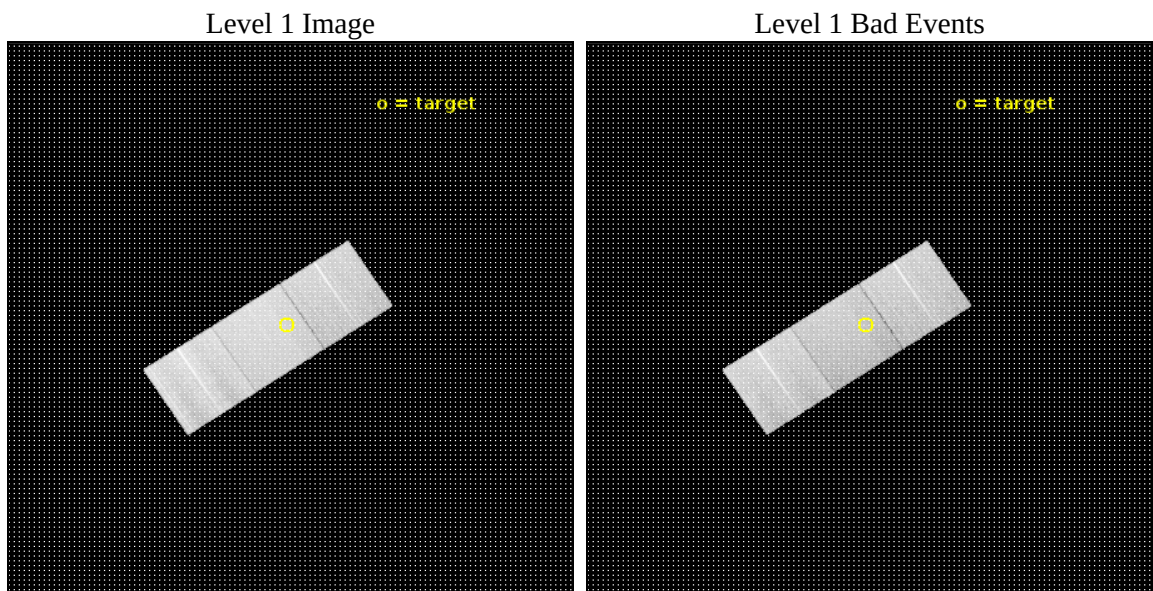
seq_num	703503	Sequence number
obs_id	22214	Observation id
title	A Reliable X-ray View of the First Quasars	Proposal title
observer	William Brandt	Principal investigator
object	VIK J0109-3047	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	17.47125	Observer's specified target RA [deg]
dec_targ	-30.790639	Observer's specified target Dec [deg]
ra_nom	17.465883114541	Nominal RA [deg]
dec_nom	-30.792400884669	Nominal Dec [deg]
roll_nom	146.65381054465	Nominal Roll [deg]
revision	3	Processing version of data
ontime	29927.005428314	Sum of GTIs [s]
livetime	29535.987070452	Livetime [s]
ontime6	29926.964388371	Sum of GTIs [s]
ontime7	29927.005428314	Sum of GTIs [s]
ontime8	29914.359157562	Sum of GTIs [s]
l2events	165924	Number of level 2 events



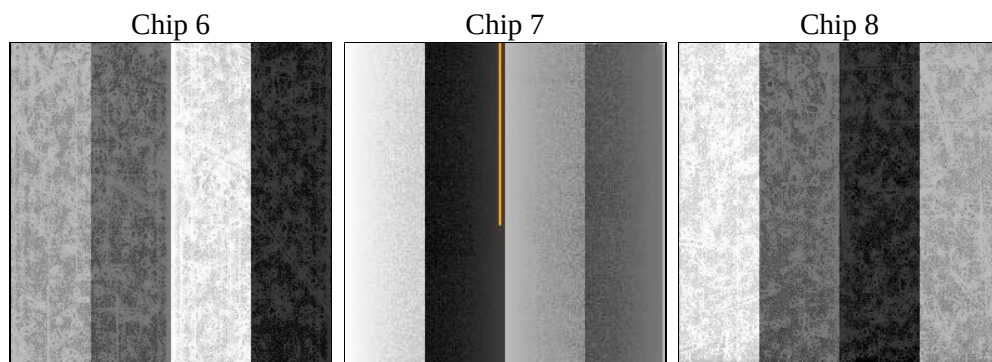
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	29927.005428314	Sum of GTIs [s]
caldsver	4.8.2	 	ontime6	29926.964388371	Sum of GTIs [s]
date	2019-05-20T20:55:38	Date and time of file creation	ontime7	29927.005428314	Sum of GTIs [s]
revision	3	Processing version of data	ontime8	29914.359157562	Sum of GTIs [s]
			l1events	783292	Number of level 1 events

2.1.4 Events

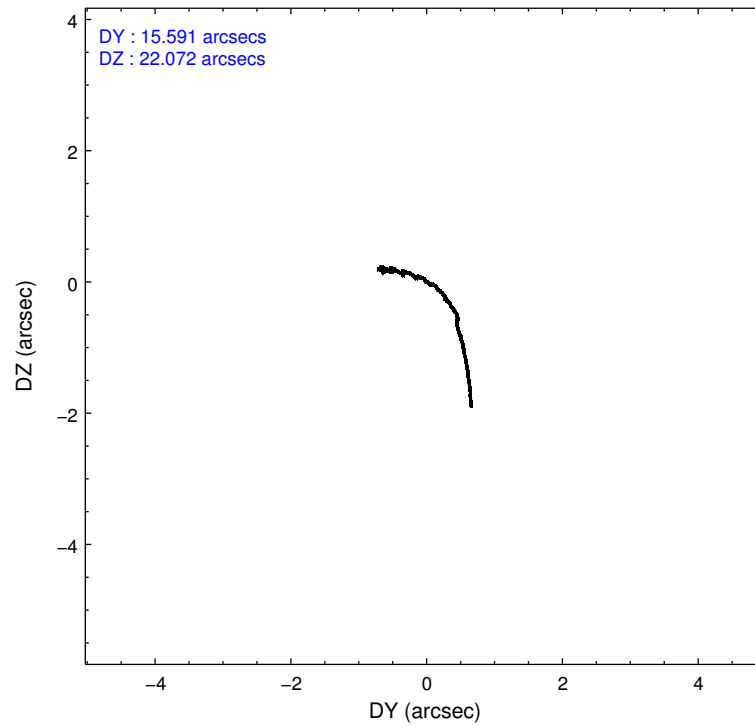
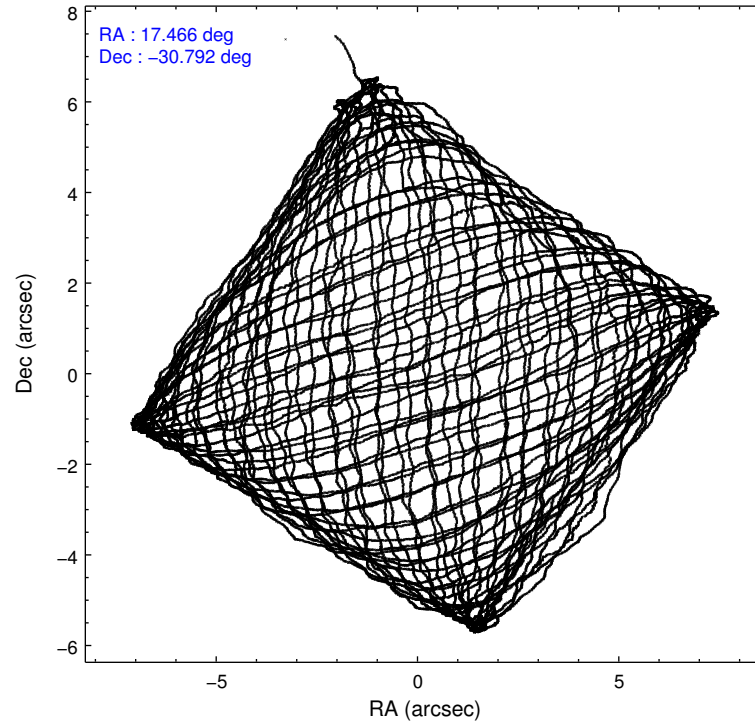
	ccd 6	ccd 7	ccd 8
level 1 events	218732	276447	288113
rejected events	193838	155766	210470
rejected %	88%	56%	73%

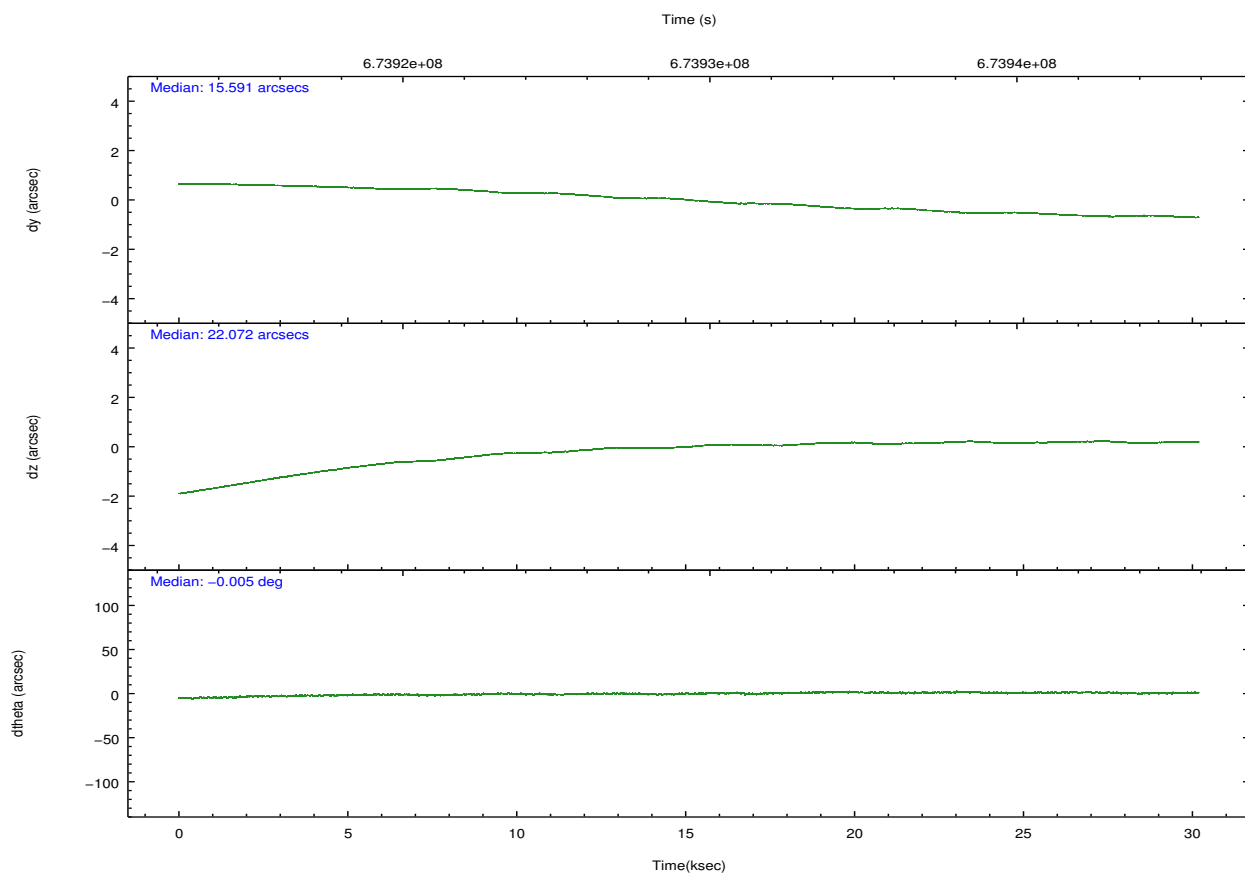
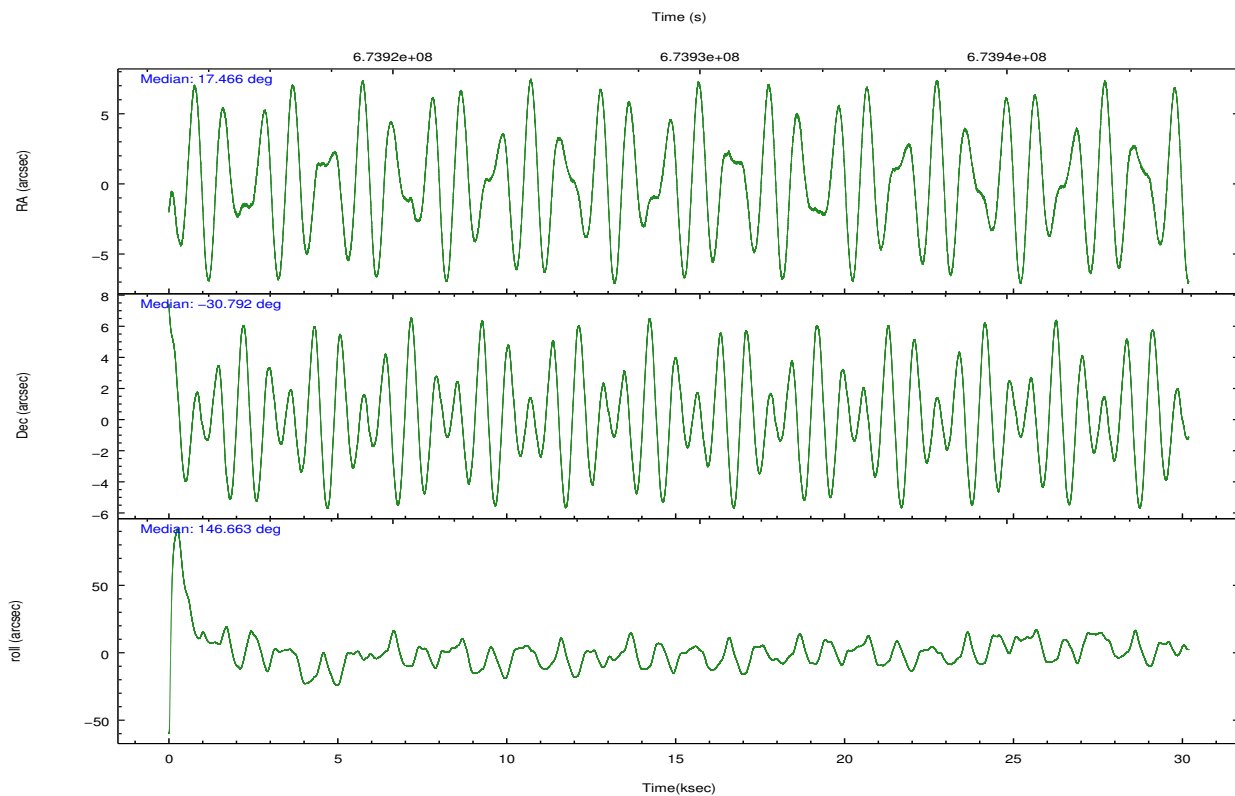
	ccd 6	ccd 7	ccd 8
grade 0 events	7831	10305	22261
	3%	3%	7%
grade 1 events	94	431	247
	0%	0%	0%
grade 2 events	6357	25500	18831
	2%	9%	6%
grade 3 events	2224	9457	8060
	1%	3%	2%
grade 4 events	2203	9128	7525
	1%	3%	2%
grade 5 events	9625	27020	15164
	4%	9%	5%
grade 6 events	6282	66303	21000
	2%	23%	7%
grade 7 events	184116	128303	195025
	84%	46%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	17.497800	17.46588311454142	Subarray requested	NONE	NONE
[deg] Pointing Dec	-30.793644	-30.79240088466864	Alternating exposures requested	N	N
[deg] Pointing Roll	146.513590	146.6538105446457	[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)	673914423.184000	673913546.9458899			
Observation start date	2019-05-10T22:25:54	2019-05-10T22:12:26			
[s] Observation end time (MET)	673944423.184000	673944650.0602601			
Observation end date	2019-05-11T06:45:54	2019-05-11T06:50:50			
Read mode	TIMED	TIMED			

2.3 Aspect



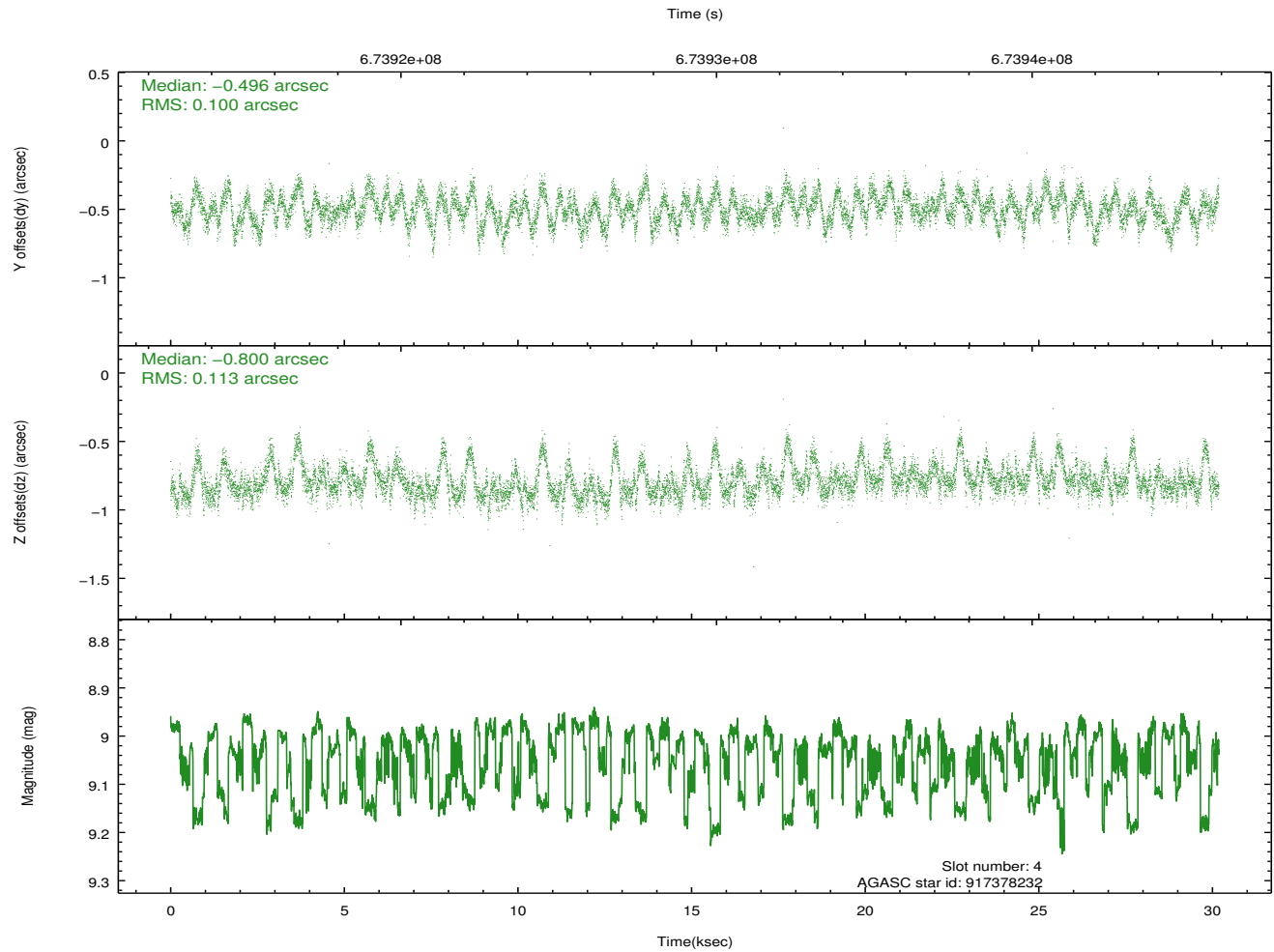
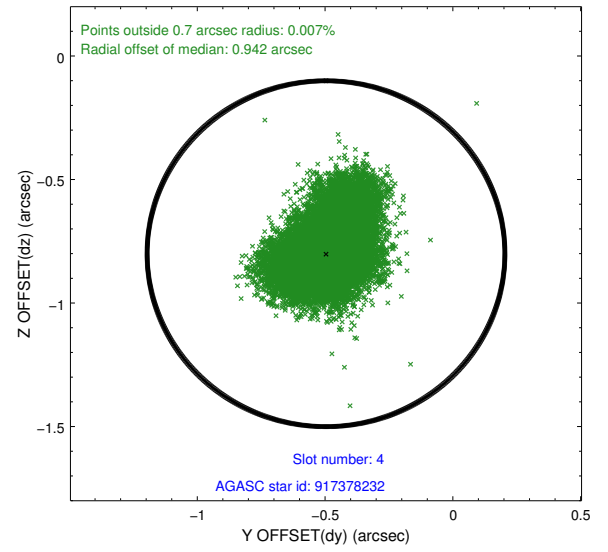
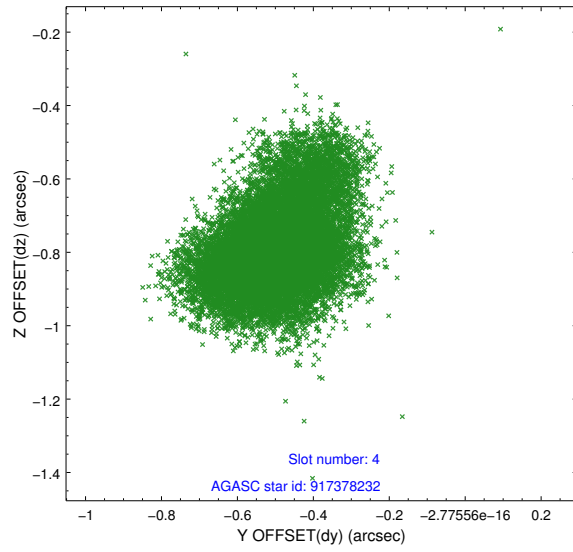


Slot Statistics

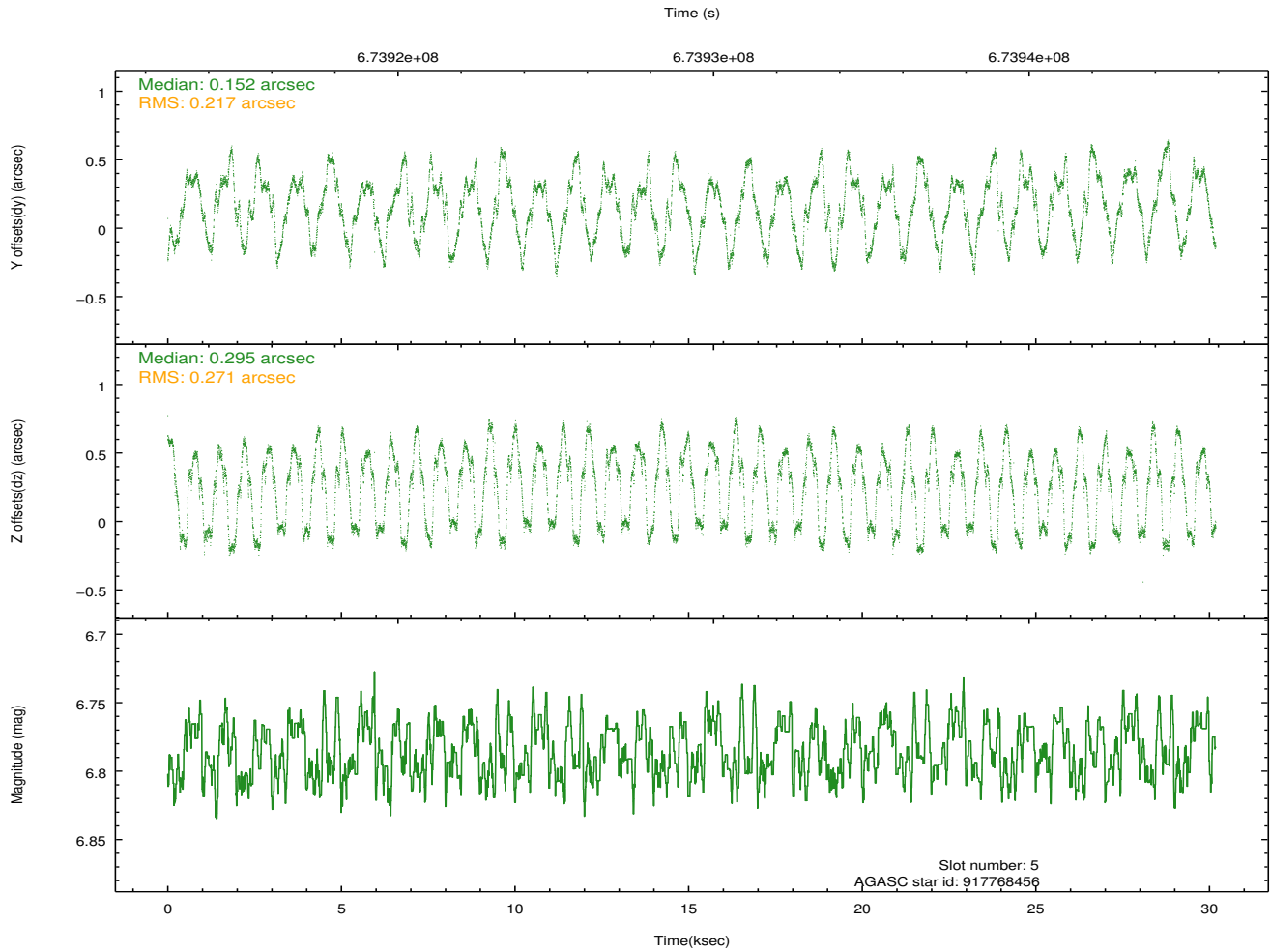
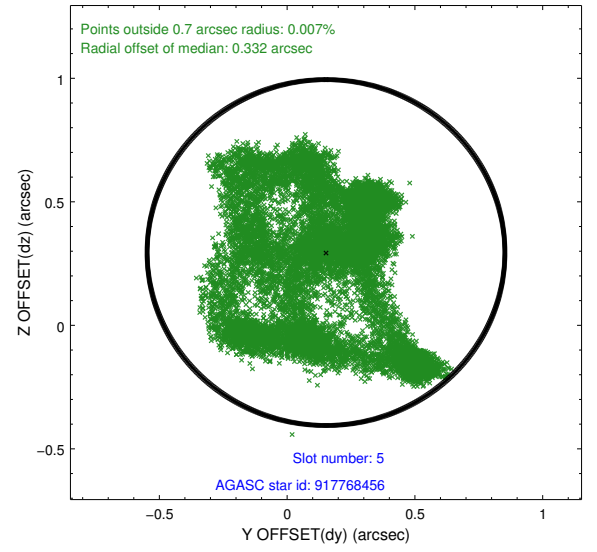
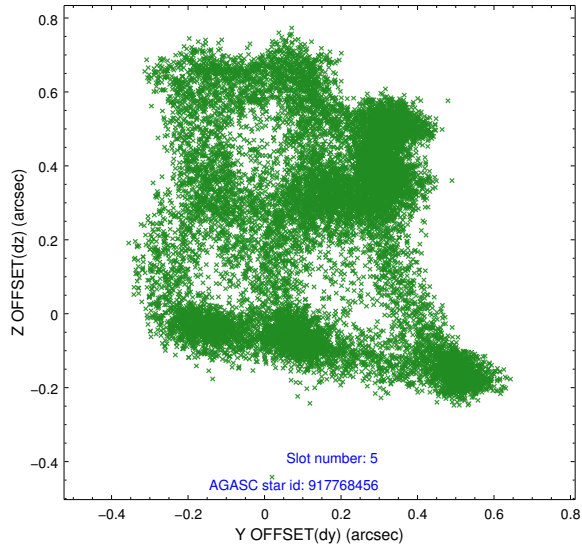
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.11	7363	1.000	-0.334	-0.236	0.018	0.026	0.000000	0.000000	-768.85	-1743
1	FID		ACIS-S-4	7.23	7361	1.000	0.769	0.226	0.018	0.049	0.000000	0.000000	2145.46	165
2	FID		ACIS-S-5	7.20	7363	1.000	-0.465	0.019	0.018	0.037	0.000000	0.000000	-1821.78	158
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	917378232	9.04	14708	1.000	-0.496	-0.800	0.157	0.273	17.241463	-30.929276	386.88	844
5	GUIDE	used	917768456	6.79	14726	1.000	0.152	0.295	0.393	0.571	18.097153	-30.802130	-1565.21	-991
6	GUIDE	used	917773912	9.35	14707	1.000	0.389	0.518	0.448	0.612	18.253947	-30.450654	-1279.32	-2317
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

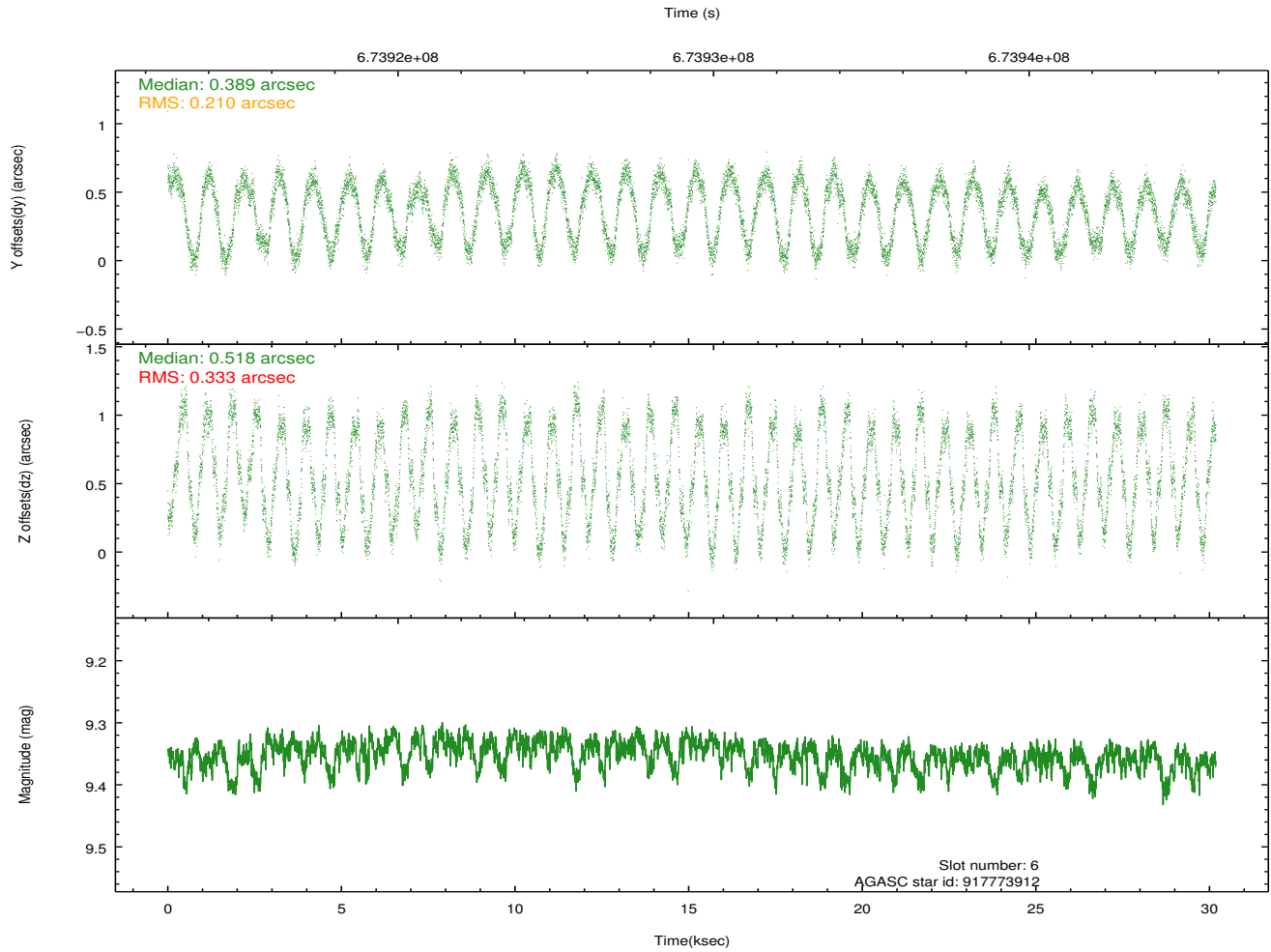
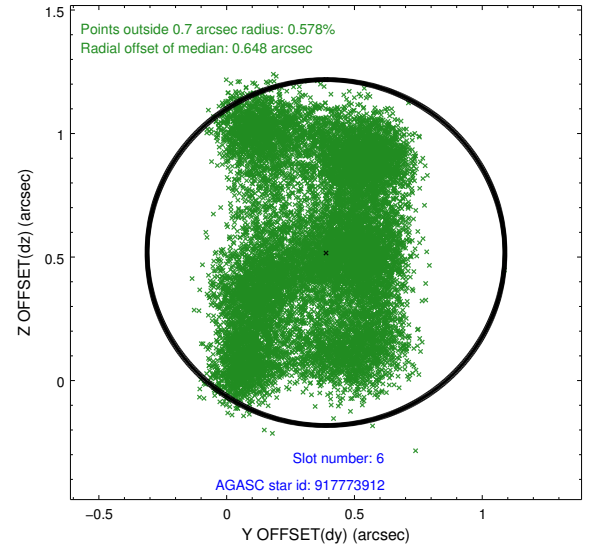
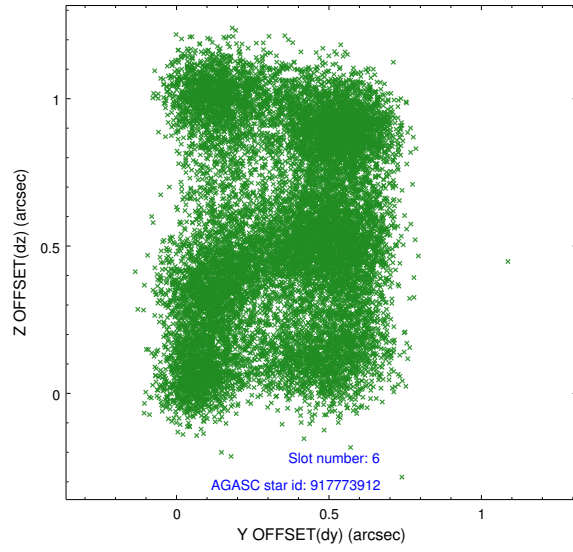
2.4.1 Slot 4



2.4.2 Slot 5

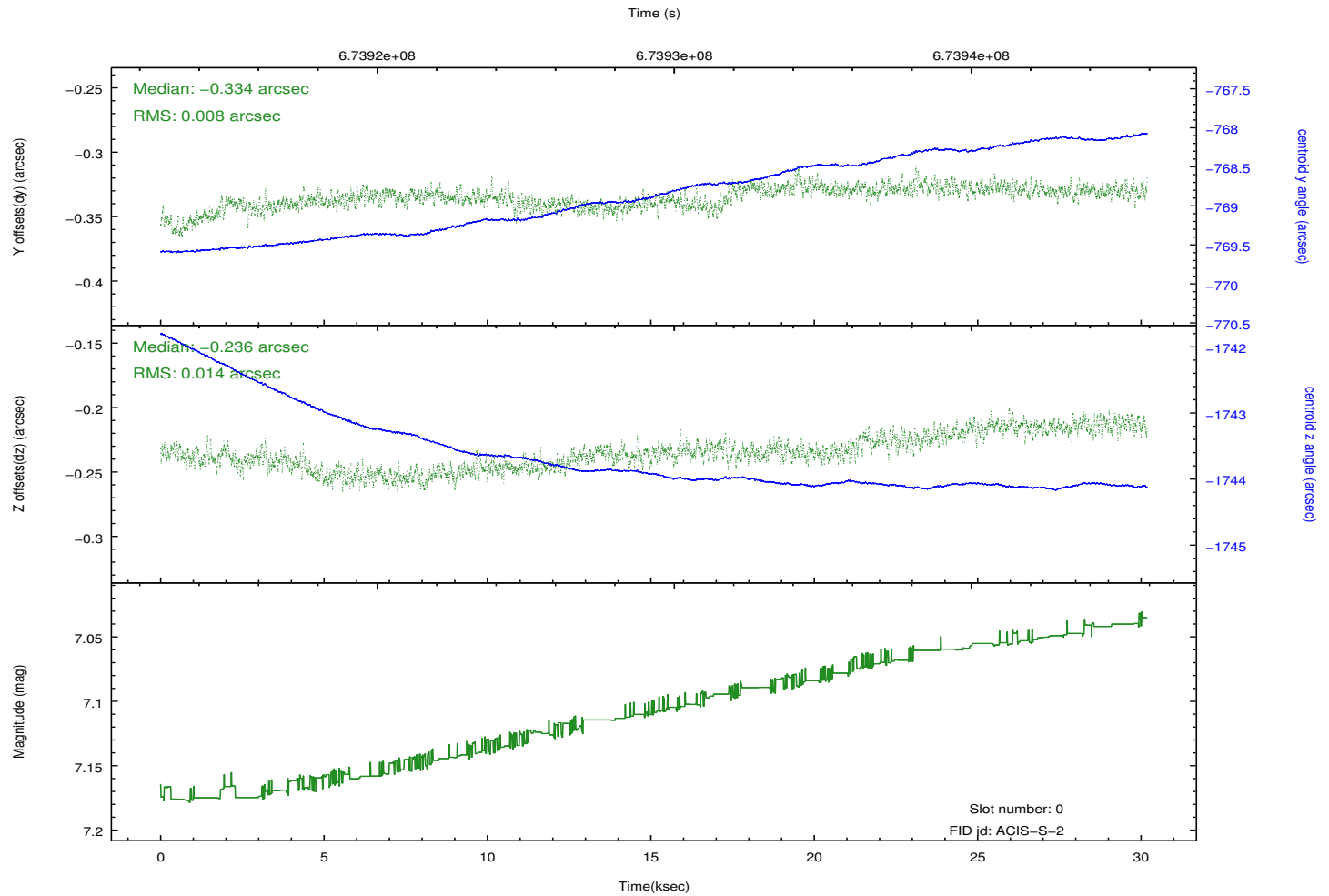
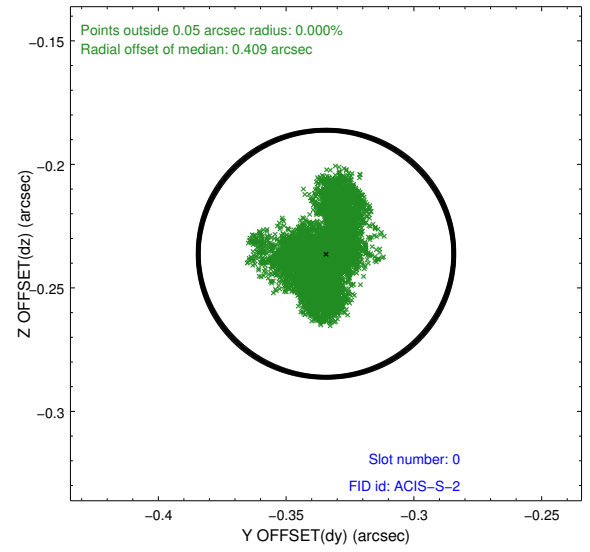
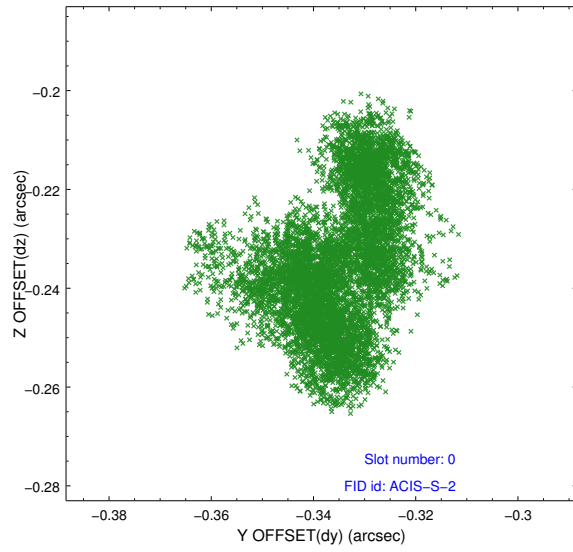


2.4.3 Slot 6

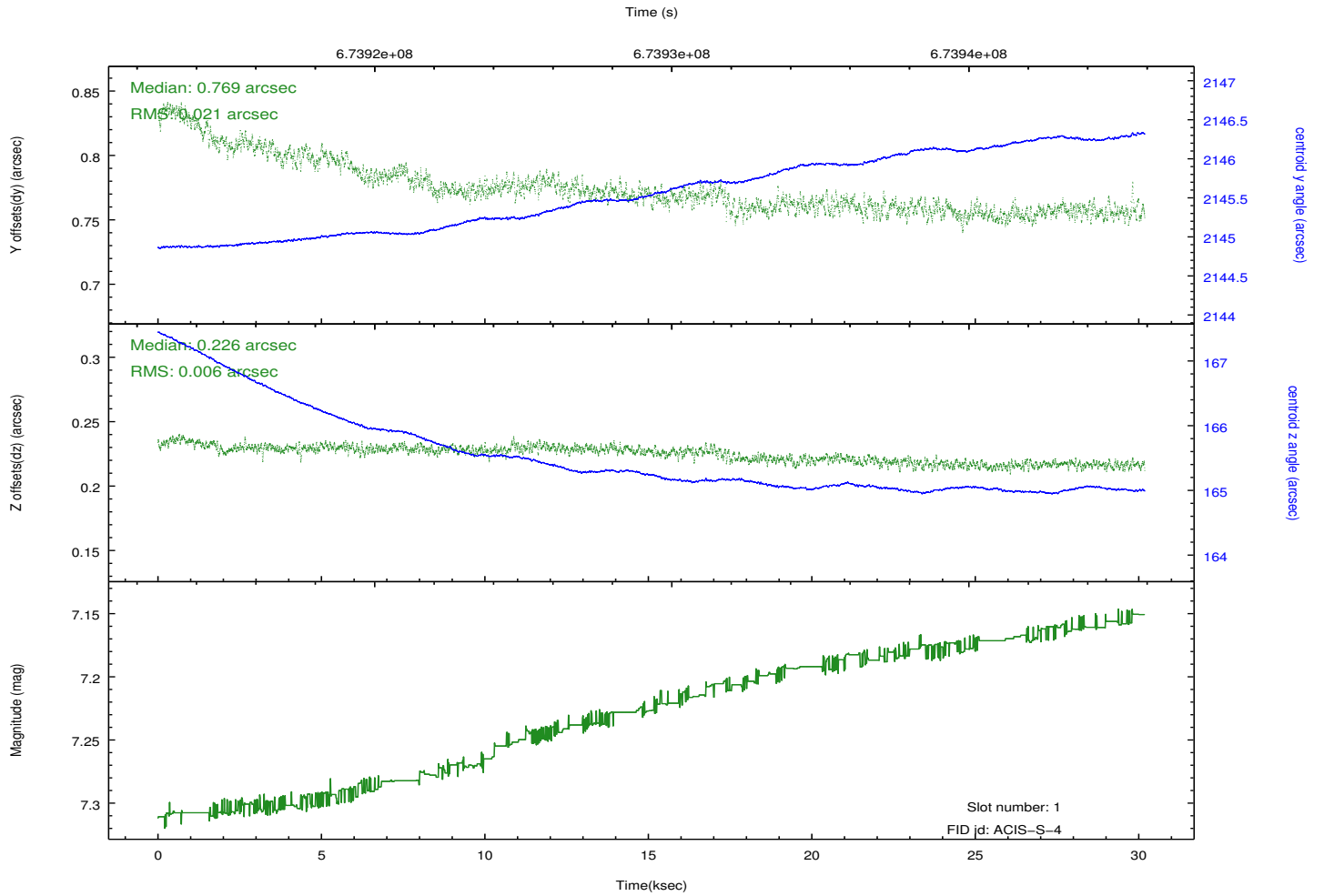
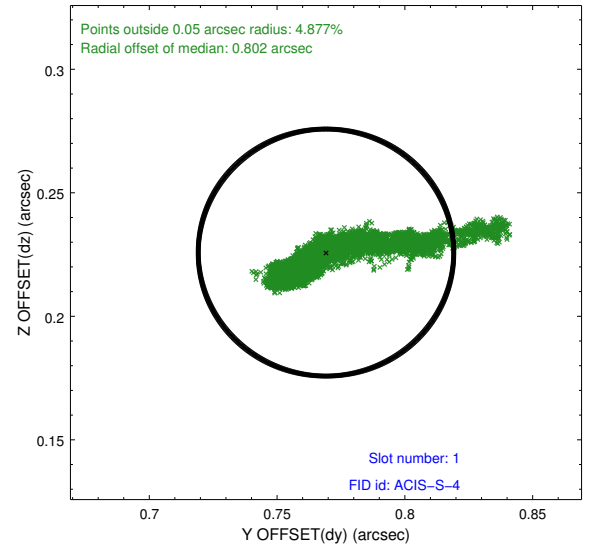
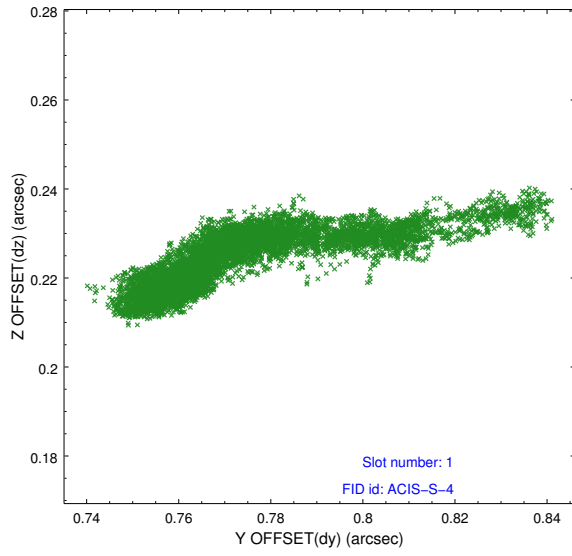


2.5 FID Slots

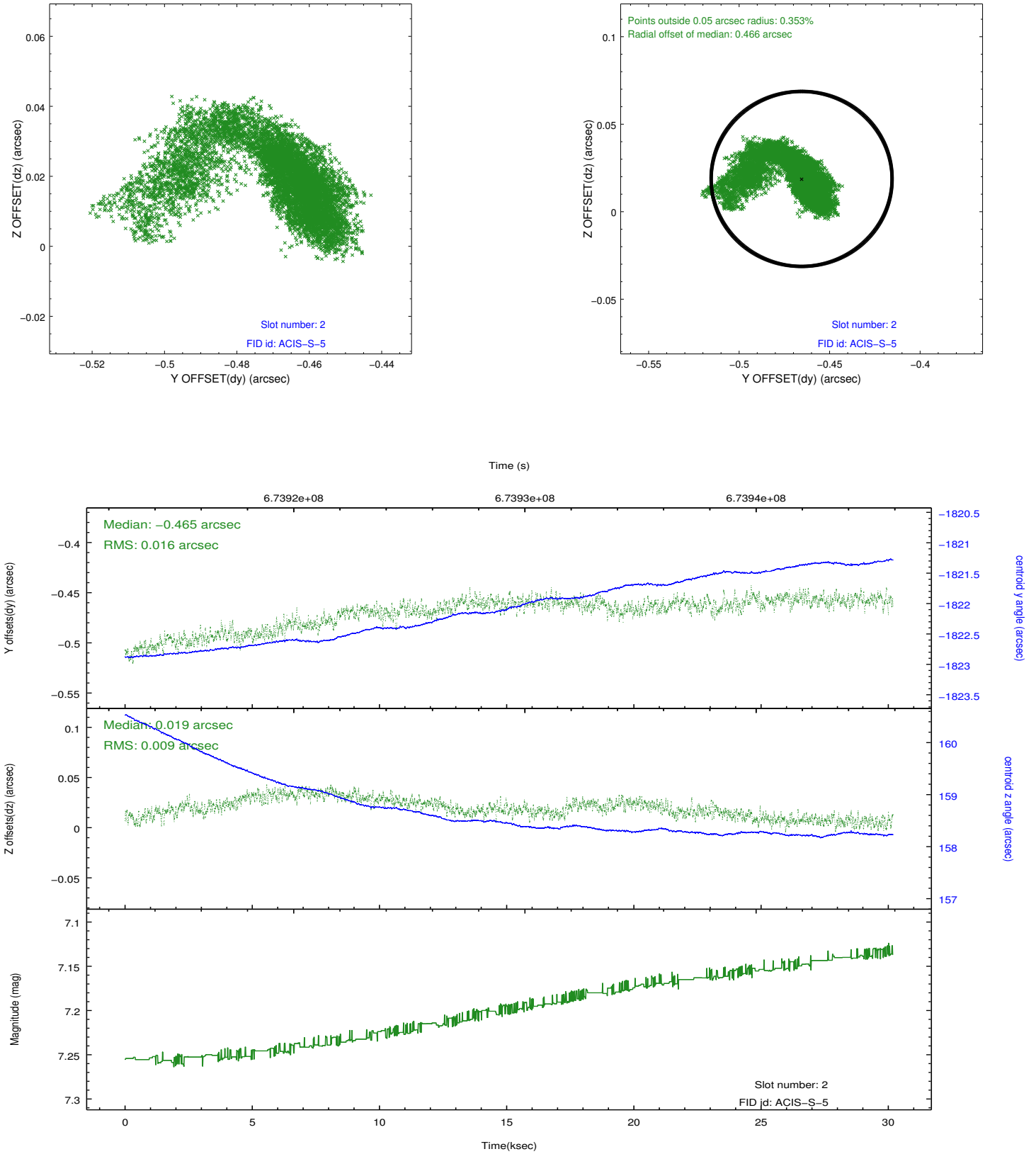
2.5.1 Slot 0



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)	2019.05.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.927005428314

A.2 Comments

The guide stars in slots 3 and 7 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these guide stars from the solution.