

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 21949 - L2 Version 1
Chandra X-Ray Center

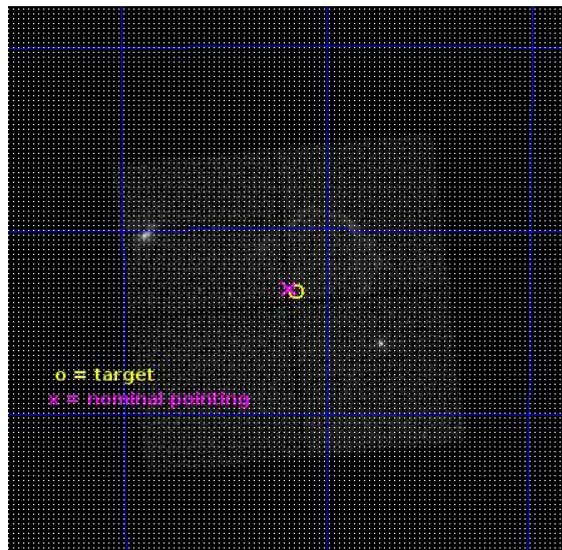
L2 Processing Date : Dec 21 2018

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1 Front

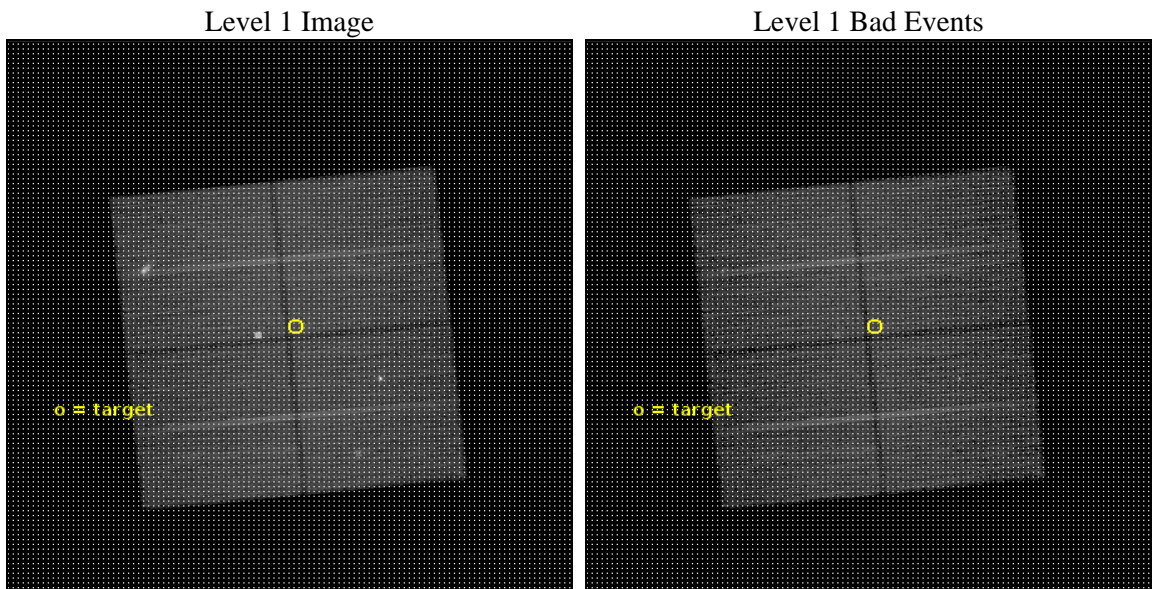
seq_num	503032	Sequence number
obs_id	21949	Observation id
title	Resolving the Shell of the Superbubble 30 Doradus C with Chandra	P
observer	Laura Lopez	Principal investigator
object	30 Doradus C	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.072917	Observer's specified target RA [deg]
dec_targ	-69.222944	Observer's specified target Dec [deg]
ra_nom	84.090836124666	Nominal RA [deg]
dec_nom	-69.220302816244	Nominal Dec [deg]
roll_nom	354.22542008902	Nominal Roll [deg]
revision	1	Processing version of data
ontime	28073.600216031	Sum of GTIs [s]
livetime	27706.797961725	Livetime [s]
ontime0	28070.459205866	Sum of GTIs [s]
ontime1	28073.600216031	Sum of GTIs [s]
ontime2	28073.600216031	Sum of GTIs [s]
ontime3	28073.600216031	Sum of GTIs [s]
l2events	116791	Number of level 2 events



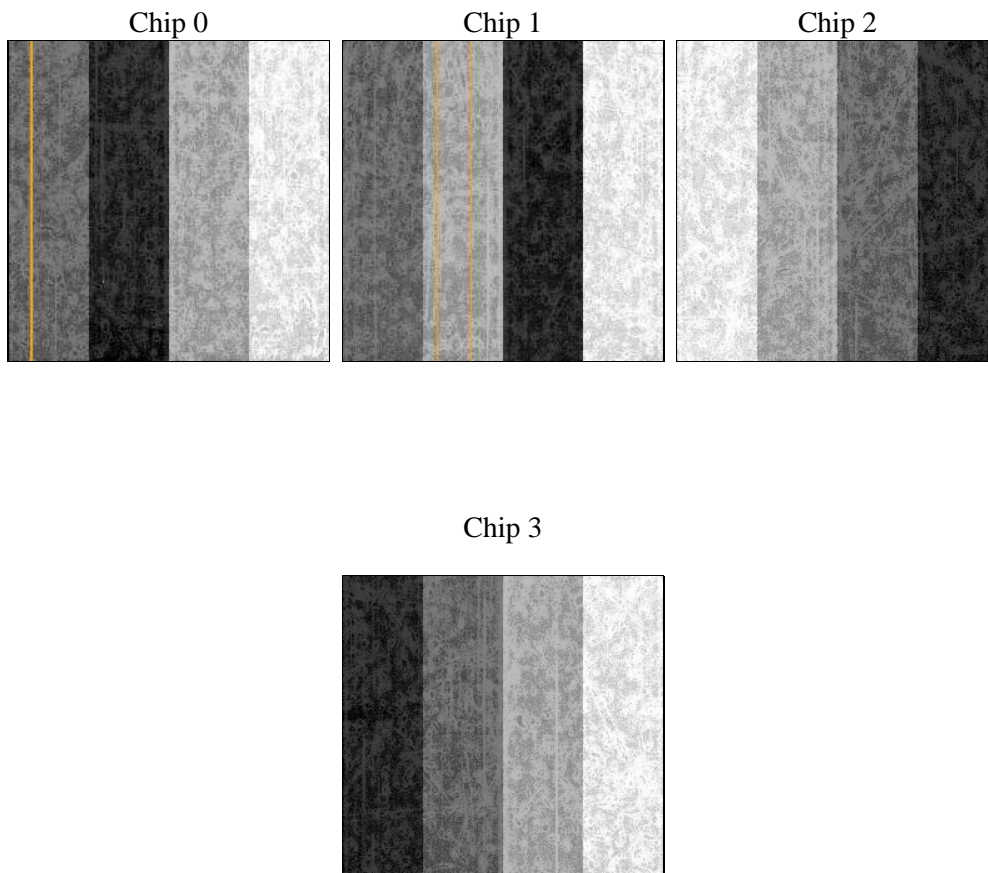
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	28073.600216031	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	28070.459205866	Sum of GTIs [s]
date	2018-12-22T01:27:10	Date and time of file creation	ontime1	28073.600216031	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	28073.600216031	Sum of GTIs [s]
			ontime3	28073.600216031	Sum of GTIs [s]
			l1events	899836	Number of level 1 events

2.1.4 Events

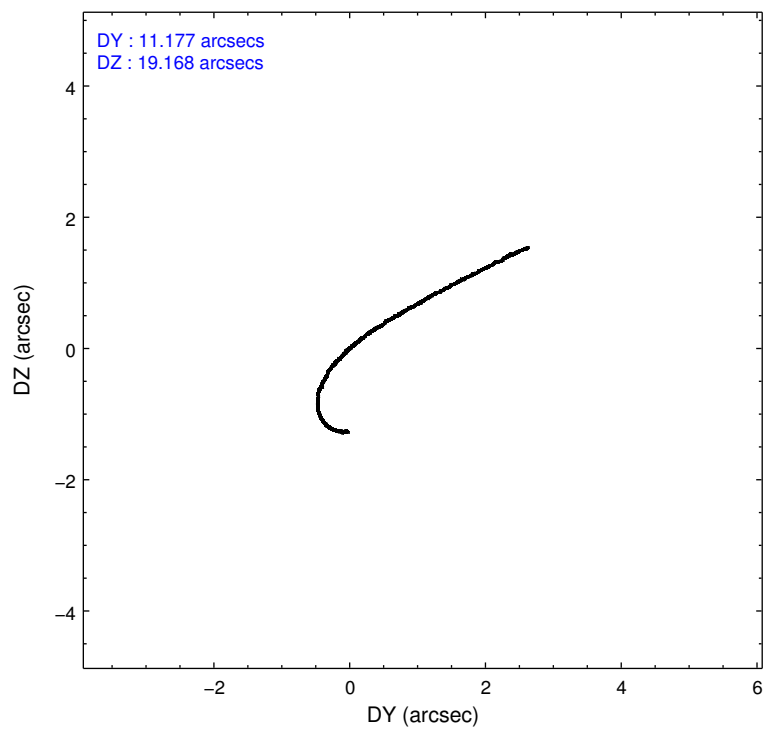
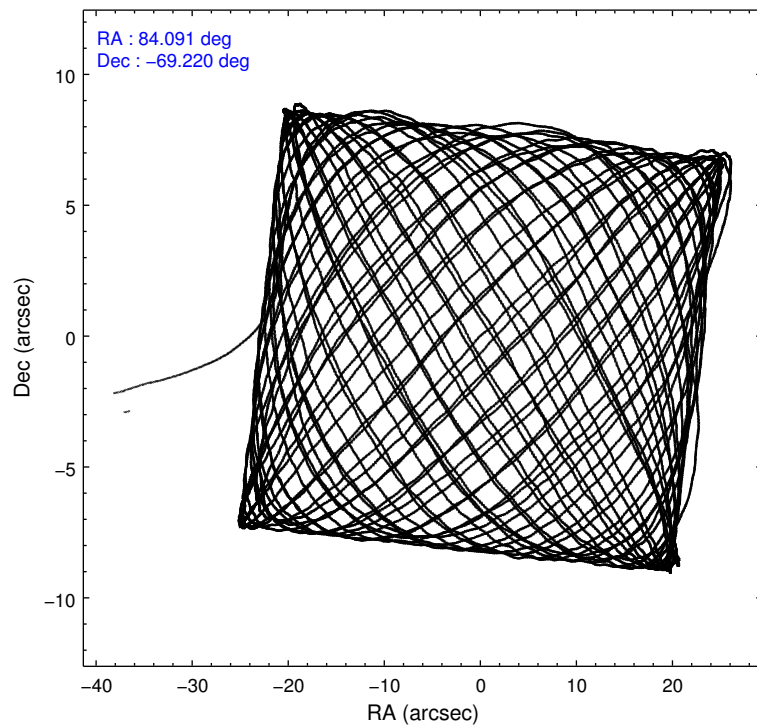
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	198741	226123	257436	217536
rejected events	173046	179152	202156	190155
rejected %	87%	79%	78%	87%

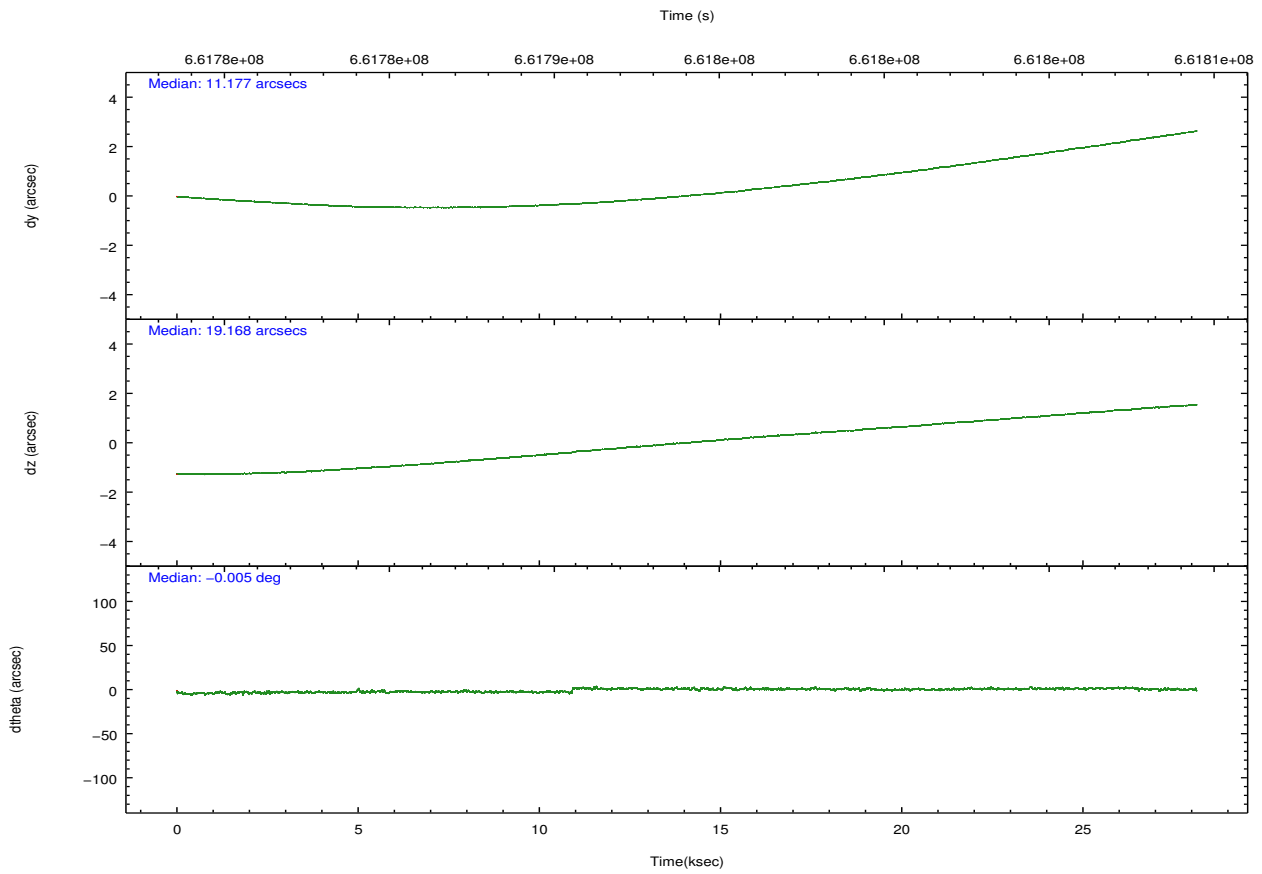
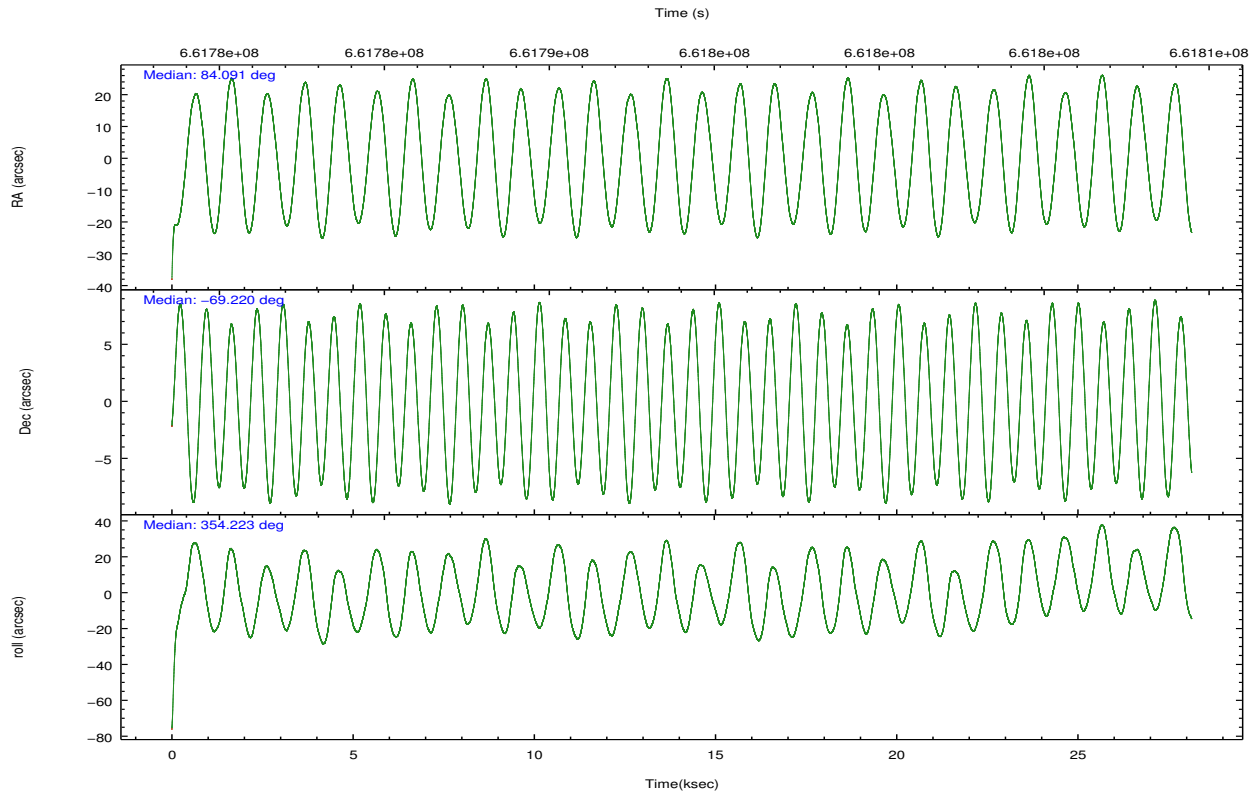
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9800	24782	29001	12129
	4%	10%	11%	5%
grade 1 events	86	877	268	135
	0%	0%	0%	0%
grade 2 events	6149	9514	15534	5308
	3%	4%	6%	2%
grade 3 events	2303	3029	2889	2497
	1%	1%	1%	1%
grade 4 events	2324	3029	2889	2519
	1%	1%	1%	1%
grade 5 events	8777	9397	8405	9739
	4%	4%	3%	4%
grade 6 events	5121	6625	4979	4931
	2%	2%	1%	2%
grade 7 events	164181	168870	193471	180278
	82%	74%	75%	82%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	84.019997	84.09083612466637	Subarray requested	NONE	NONE
[deg] Pointing Dec	-69.231727	-69.220302816244	Alternating exposures requested	N	N
[deg] Pointing Roll	353.950522	354.2254200890169	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	661780076.184000	661778961.74542			
Observation start date	2018-12-21T11:46:47	2018-12-21T11:29:21			
[s] Observation end time (MET)	661808076.184000	661808947.60971			
Observation end date	2018-12-21T19:33:27	2018-12-21T19:49:07			
Read mode	TIMED	TIMED			

2.3 Aspect





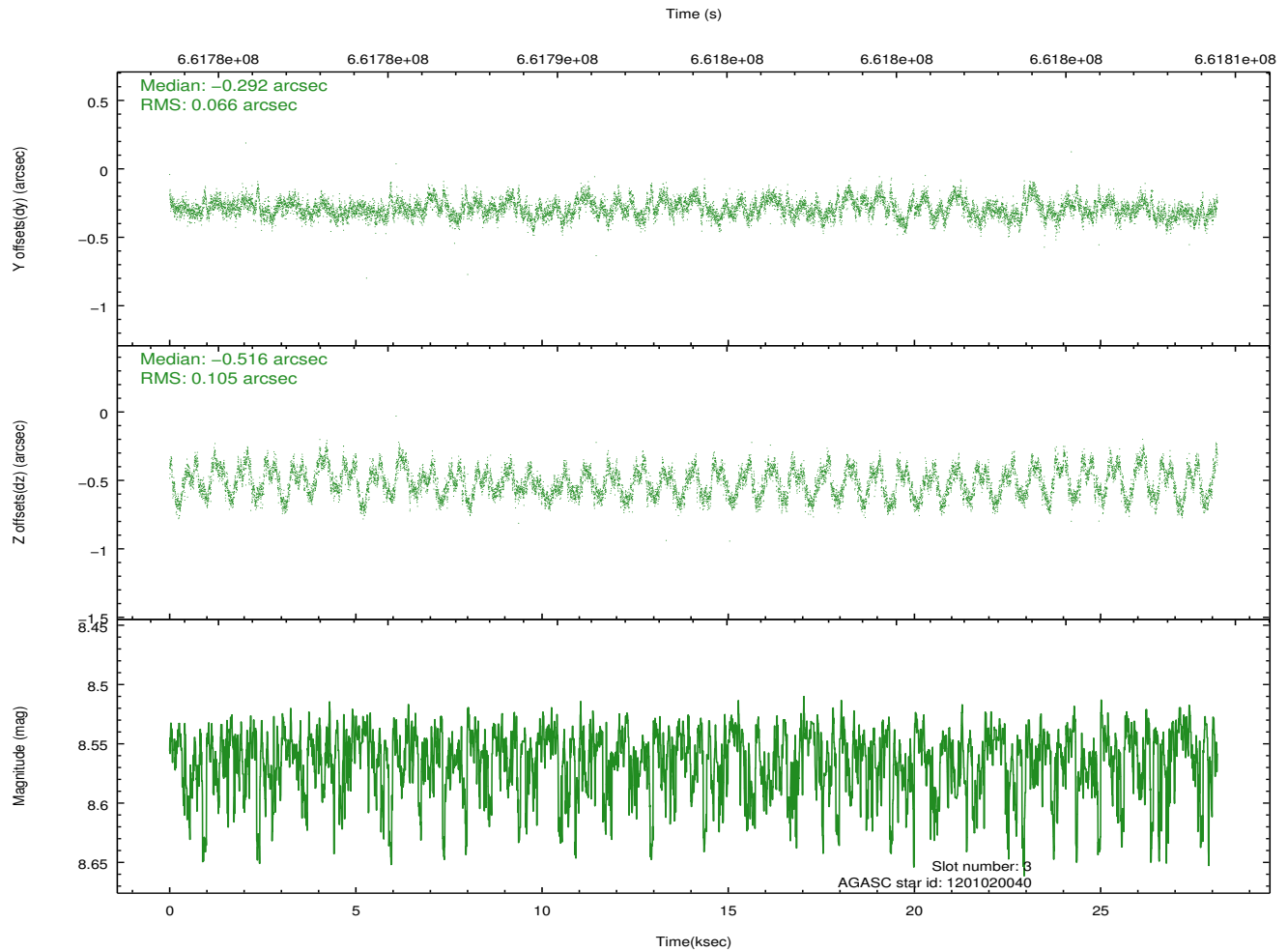
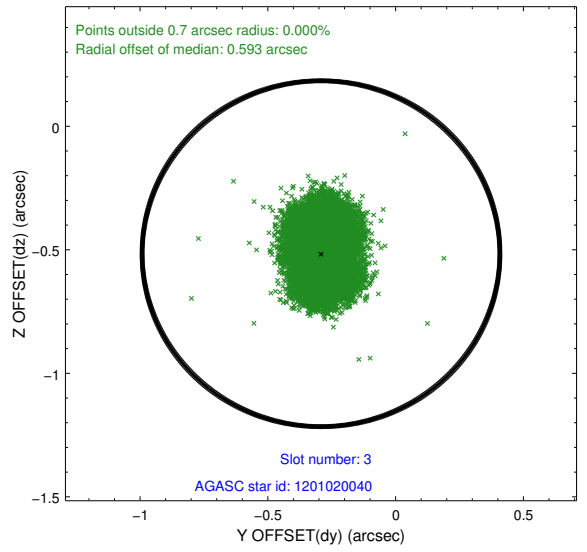
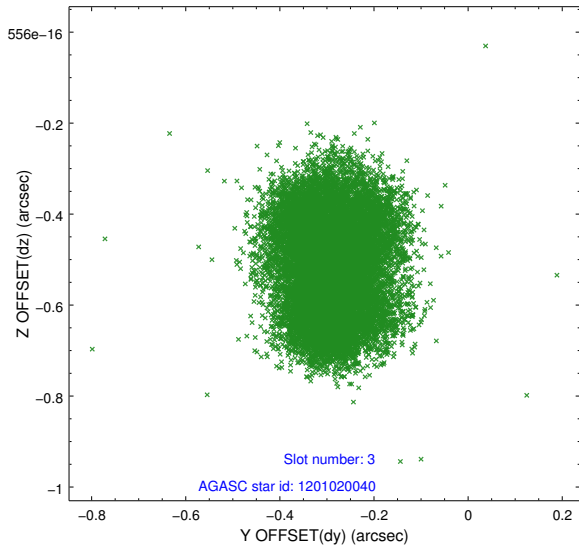
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-2	7.14	6863	1.000	-0.370	-0.065	0.047	0.091	0.000000	0.000000	-766.57	-849
1	FID		ACIS-I-4	7.20	6864	1.000	0.731	0.204	0.029	0.037	0.000000	0.000000	2148.44	1057
2	FID		ACIS-I-5	7.25	6863	1.000	-0.453	-0.067	0.033	0.050	0.000000	0.000000	-1820.48	1054
3	GUIDE	used	1201020040	8.56	13719	1.000	-0.292	-0.516	0.136	0.201	85.379163	-68.879396	1621.57	1427
4	GUIDE	used	1201540776	9.50	13647	1.000	0.082	0.417	0.222	0.397	85.107945	-69.858480	1580.82	-2112
5	GUIDE	used	1201019672	6.80	13726	1.000	-0.321	-0.466	0.114	0.185	85.312192	-68.770187	1501.89	1811
6	GUIDE	used	1201410616	9.26	13713	1.000	0.527	0.951	0.177	0.286	82.516808	-69.784406	-1646.35	-2197
7	GUIDE	used	1200884248	9.42	13705	1.000	0.004	-0.367	0.160	0.276	83.880915	-68.565170	-434.21	2366

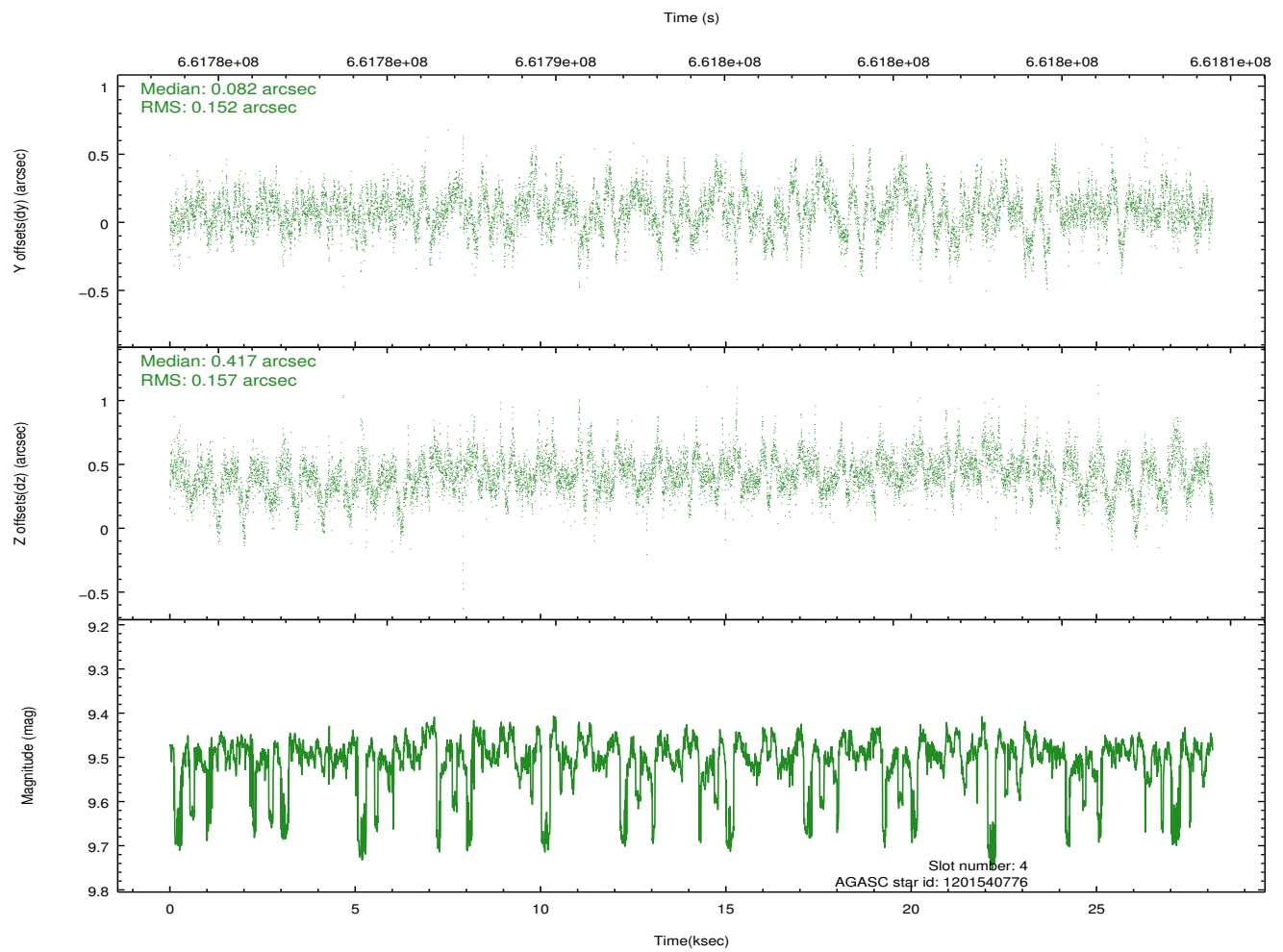
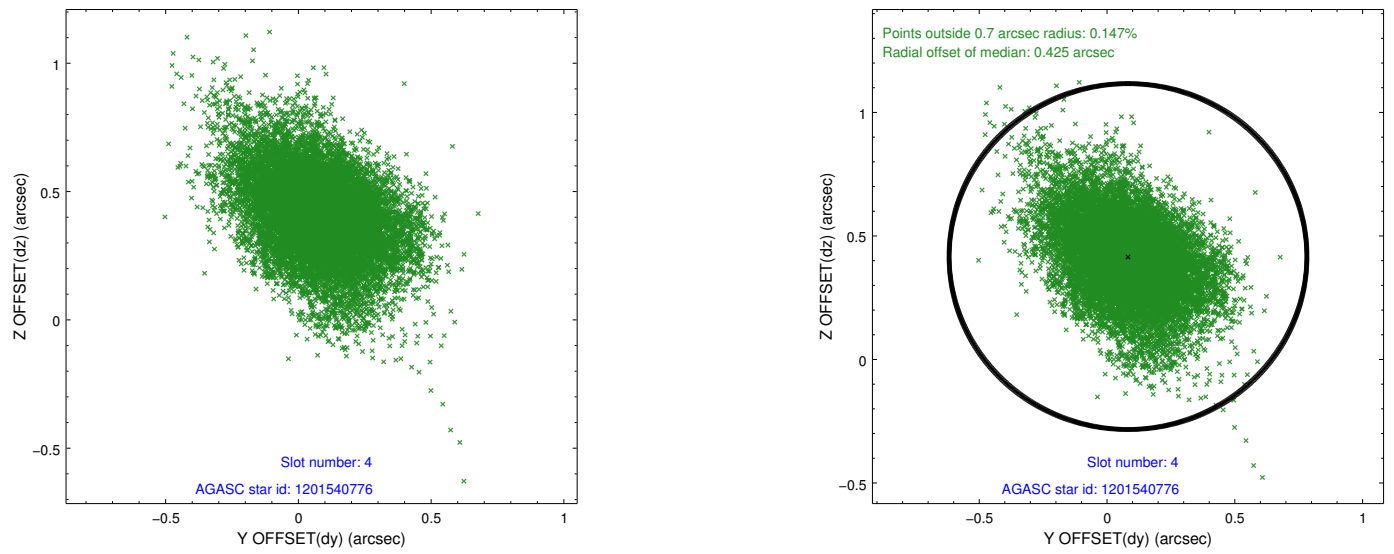
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2.4 Star Slots

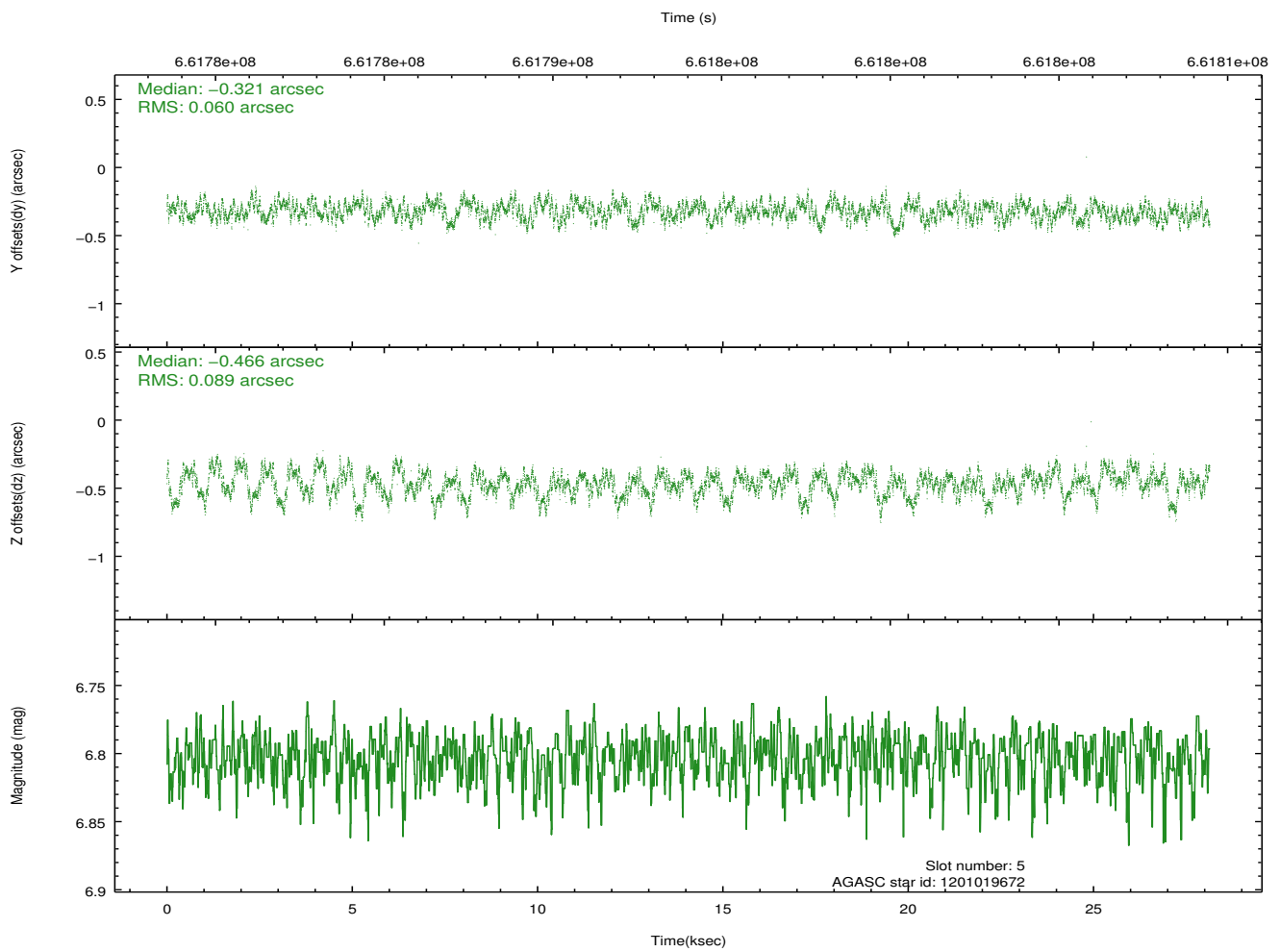
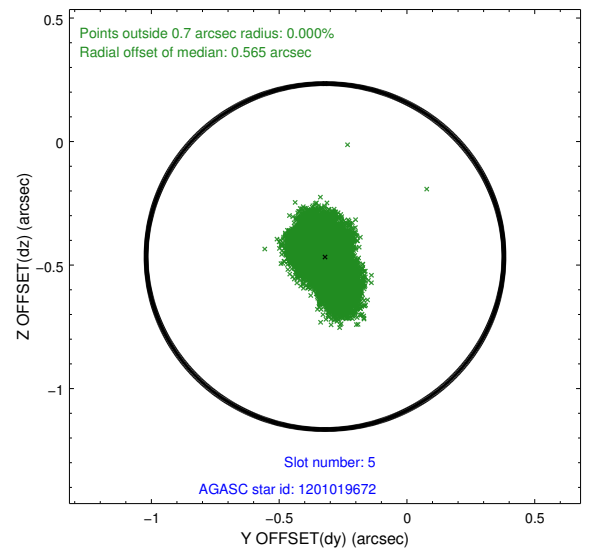
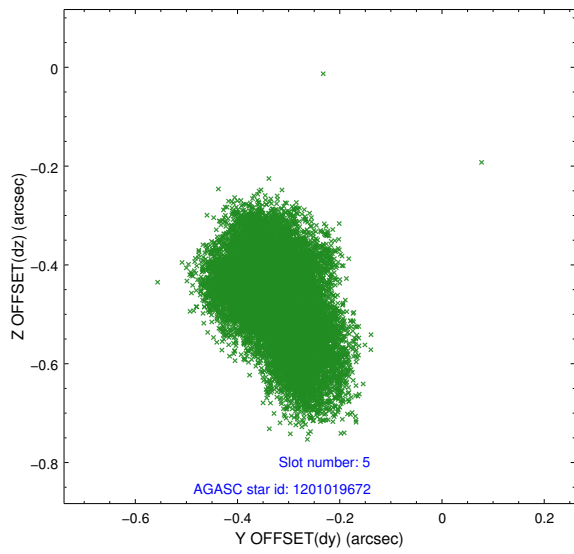
2.4.1 Slot 3



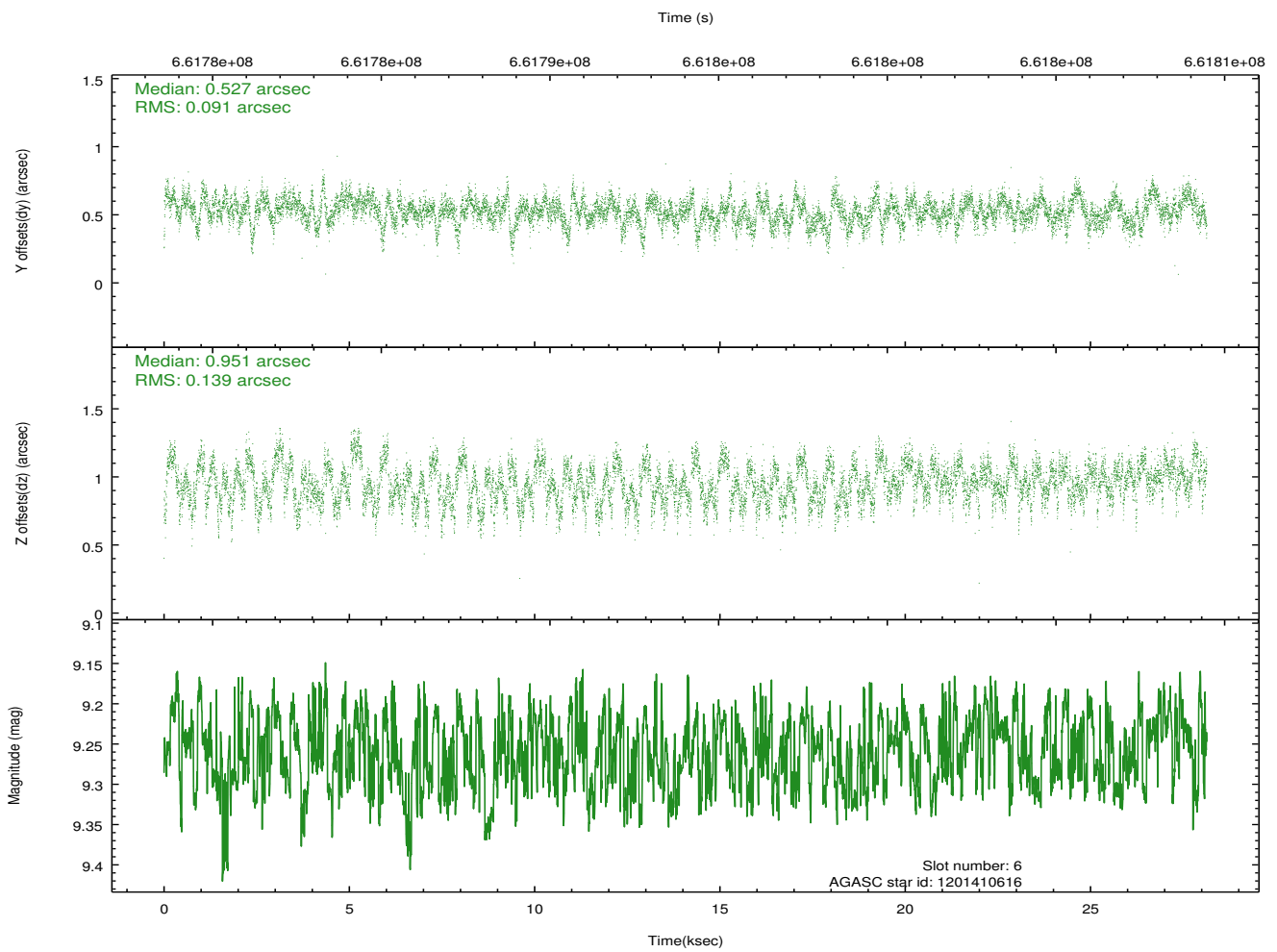
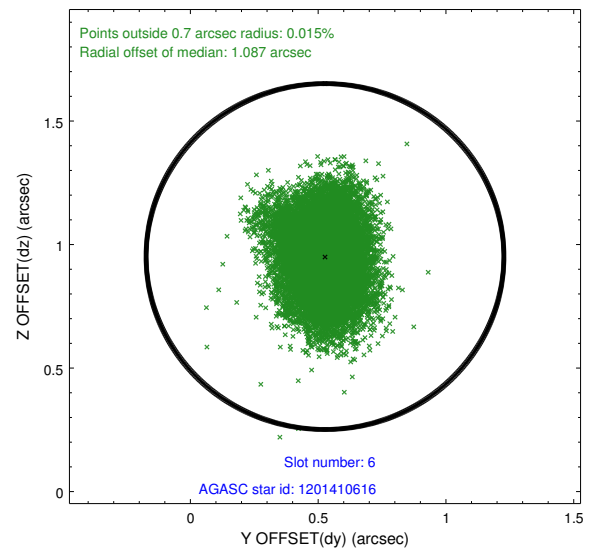
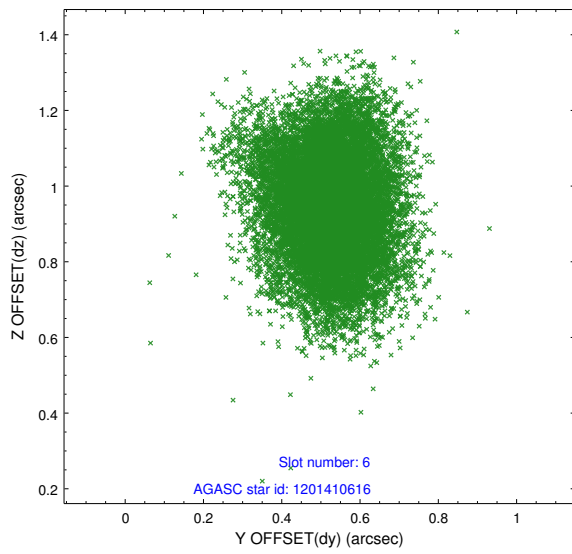
2.4.2 Slot 4



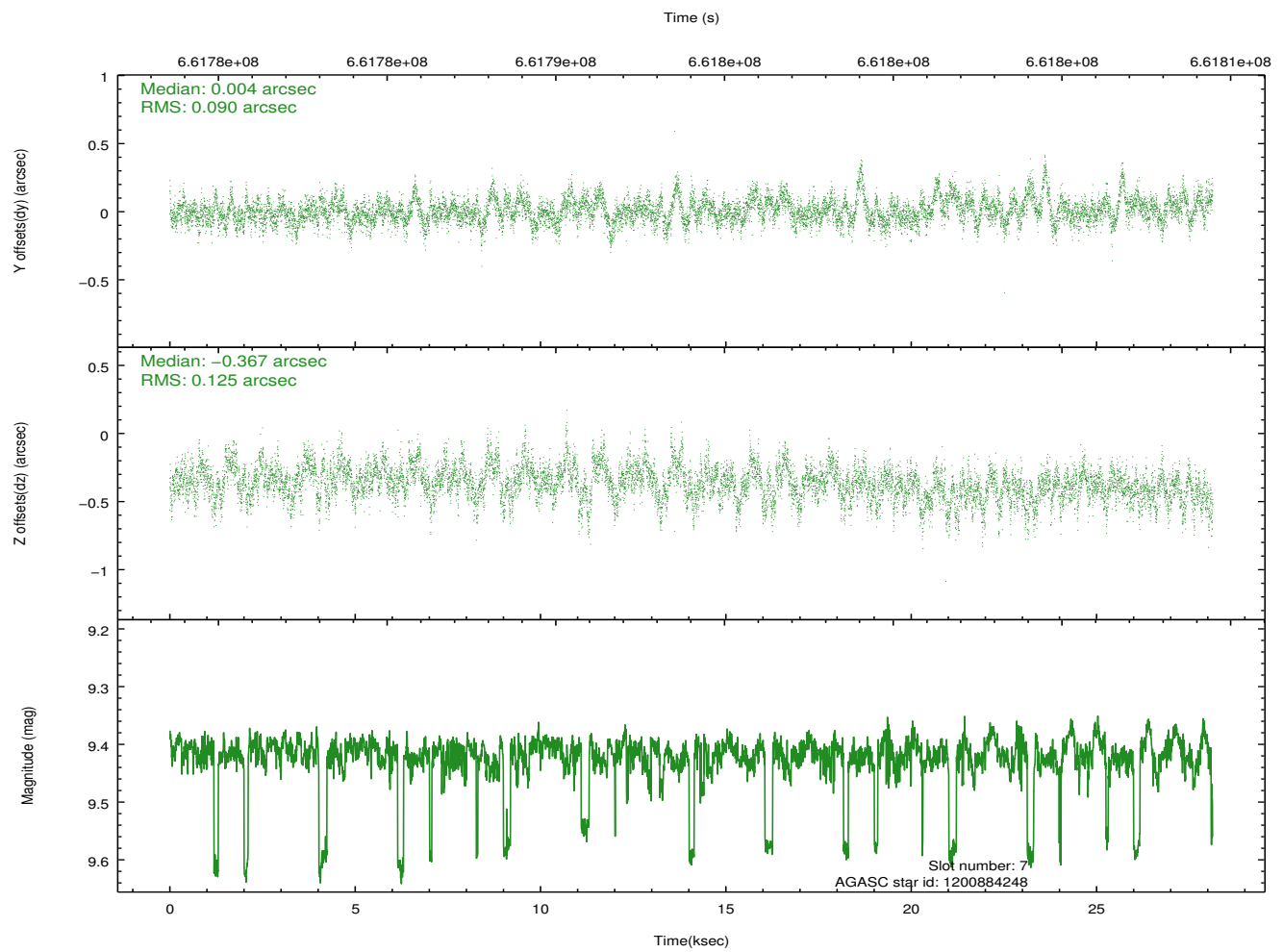
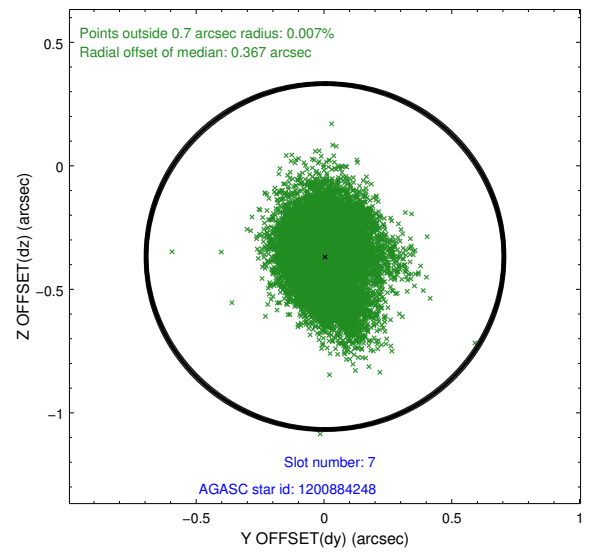
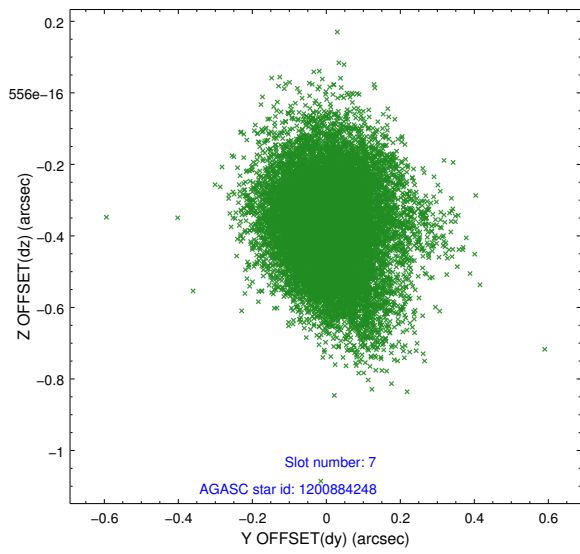
2.4.3 Slot 5



2.4.4 Slot 6

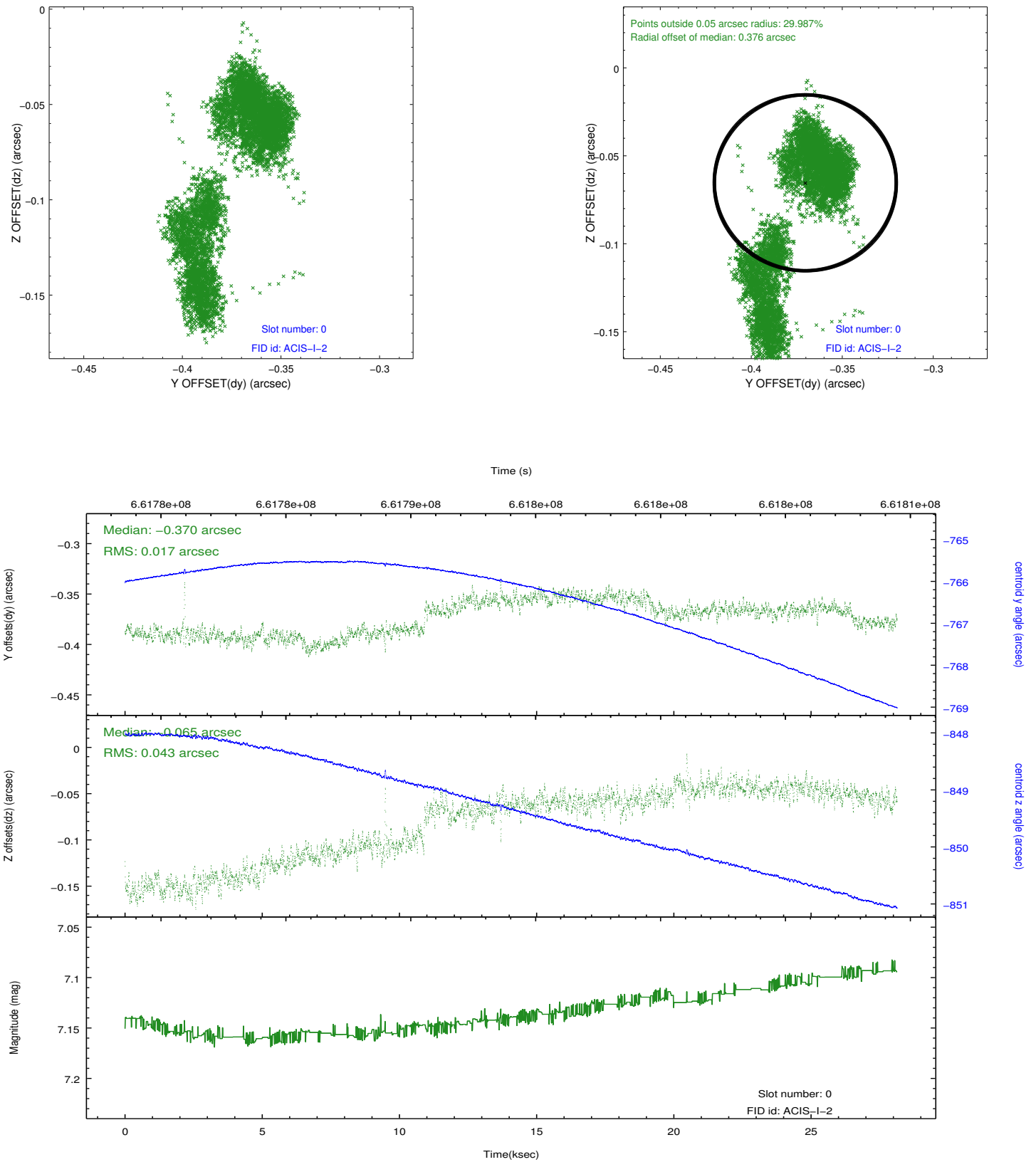


2.4.5 Slot 7

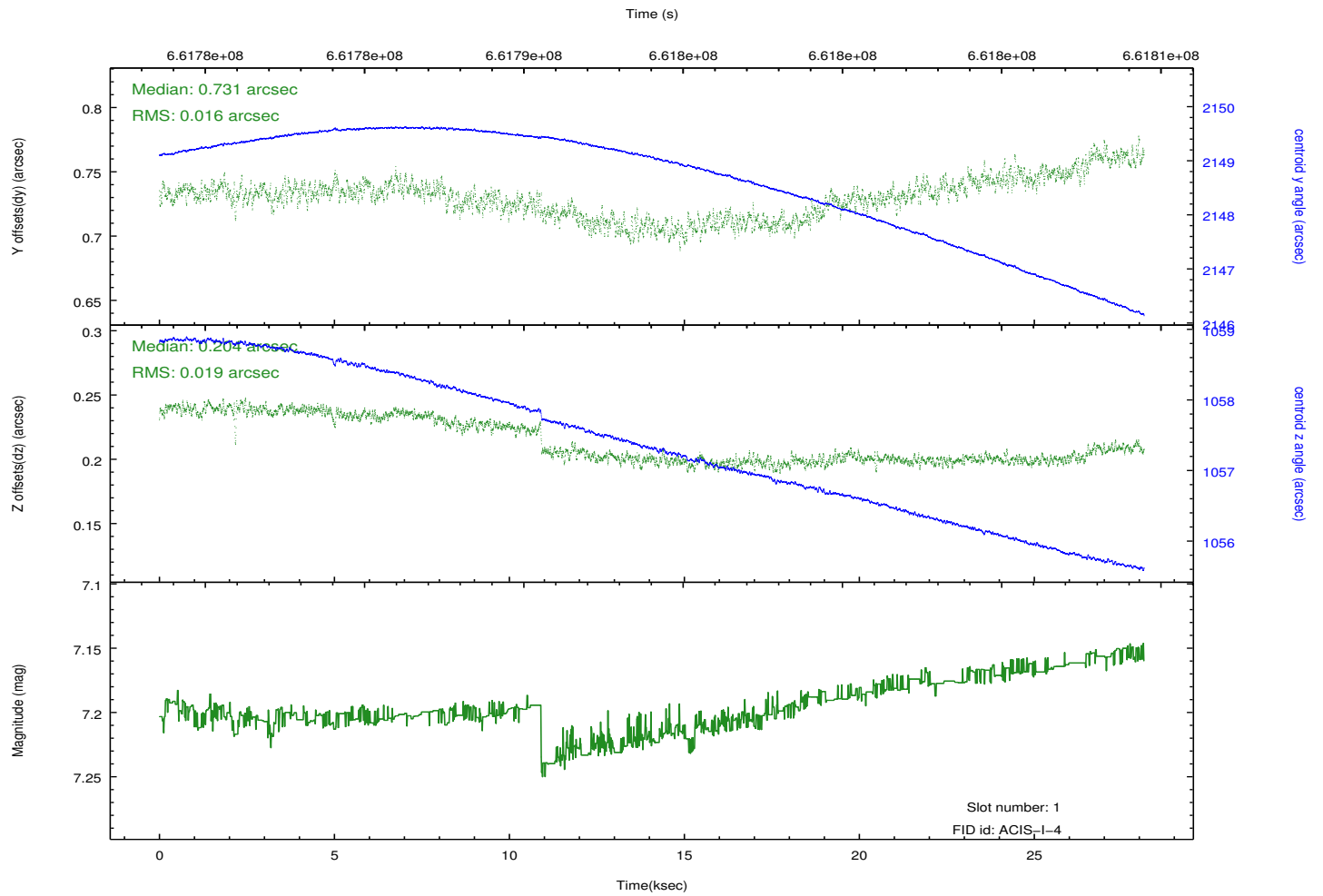
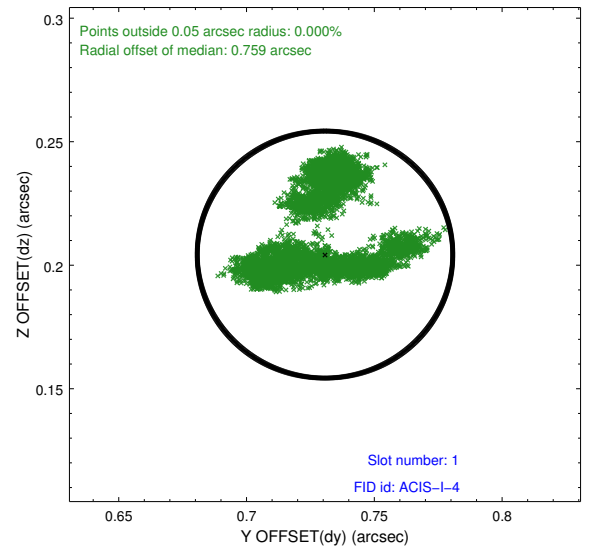
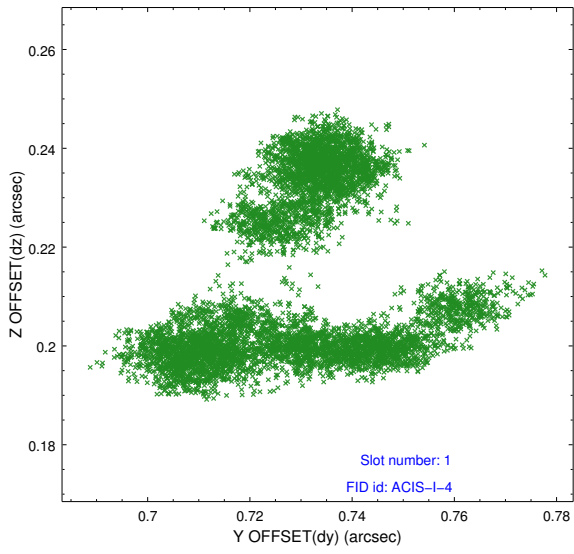


2.5 FID Slots

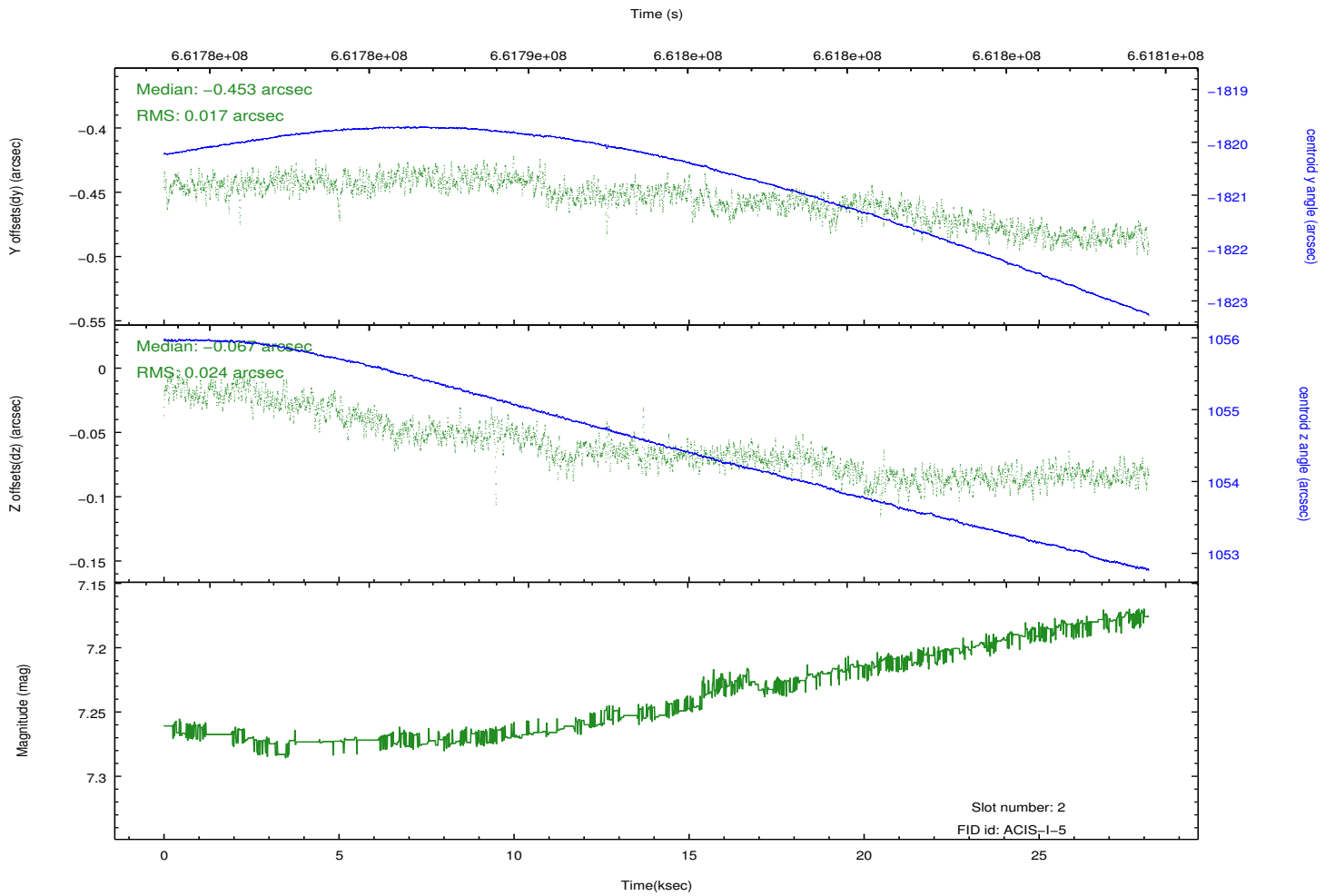
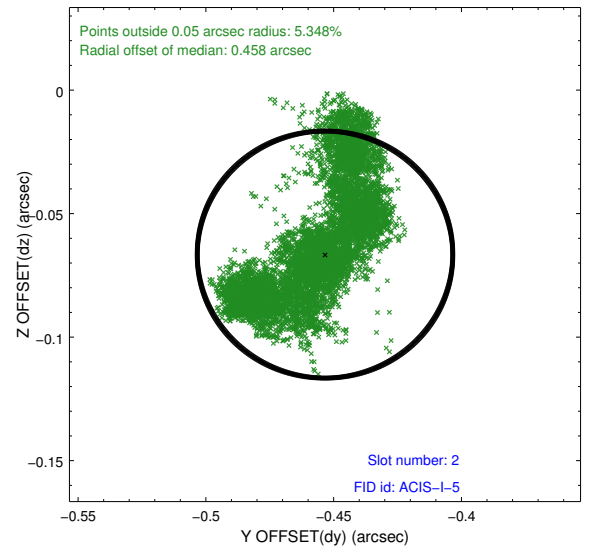
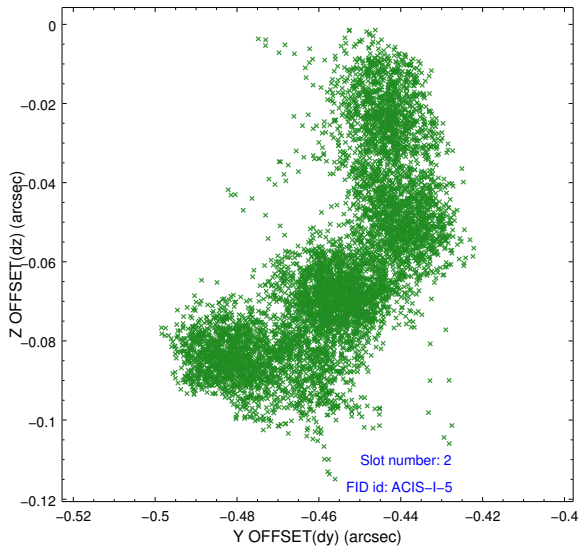
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	David Huenemoerder
V&V Date (YYYY-MM-DD)	2018.12.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.073600216031

A.2 Comments

Comments for Obi 0

The ACIS focal plane temperature is warmer than -114.0 C degrees during the interval 661780001.80 - 661786784.60 (MET s) of this observation. The ACIS spectral response calibration for the front-illuminated chips is less accurate at these warmer temperatures than it is at -115.0 C. The back-illuminated chips are not affected at the focal plane temperatures recorded for this observation. Users whose science objectives depend on the most accurate spectral response (e.g., fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.