

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19998 - L2 Version 2
Chandra X-Ray Center

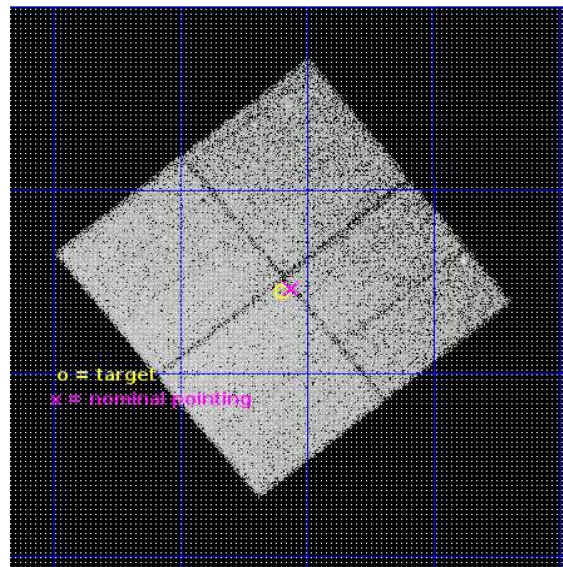
L2 Processing Date : Mar 17 2017

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1 Front

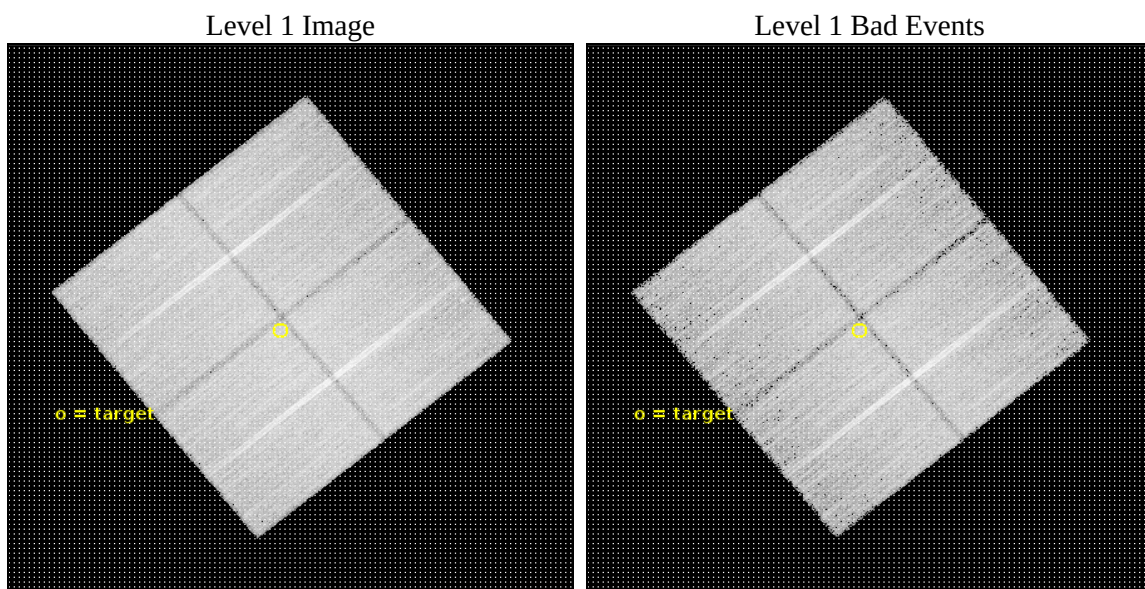
seq_num	801595	Sequence number
obs_id	19998	Observation id
title	Probing ICM on mean free path scales	Proposal title
observer	Irina Zhuravleva	Principal investigator
object	Coma cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.649583	Observer's specified target RA [deg]
dec_targ	28.074806	Observer's specified target Dec [deg]
ra_nom	194.64017531047	Nominal RA [deg]
dec_nom	28.07707196169	Nominal Dec [deg]
roll_nom	141.21310460191	Nominal Roll [deg]
revision	2	Processing version of data
ontime	32072.559176683	Sum of GTIs [s]
livetime	31653.507579565	Livetime [s]
ontime0	32075.700246811	Sum of GTIs [s]
ontime1	32075.700246811	Sum of GTIs [s]
ontime2	32069.418096423	Sum of GTIs [s]
ontime3	32072.559176683	Sum of GTIs [s]
l2events	171008	Number of level 2 events



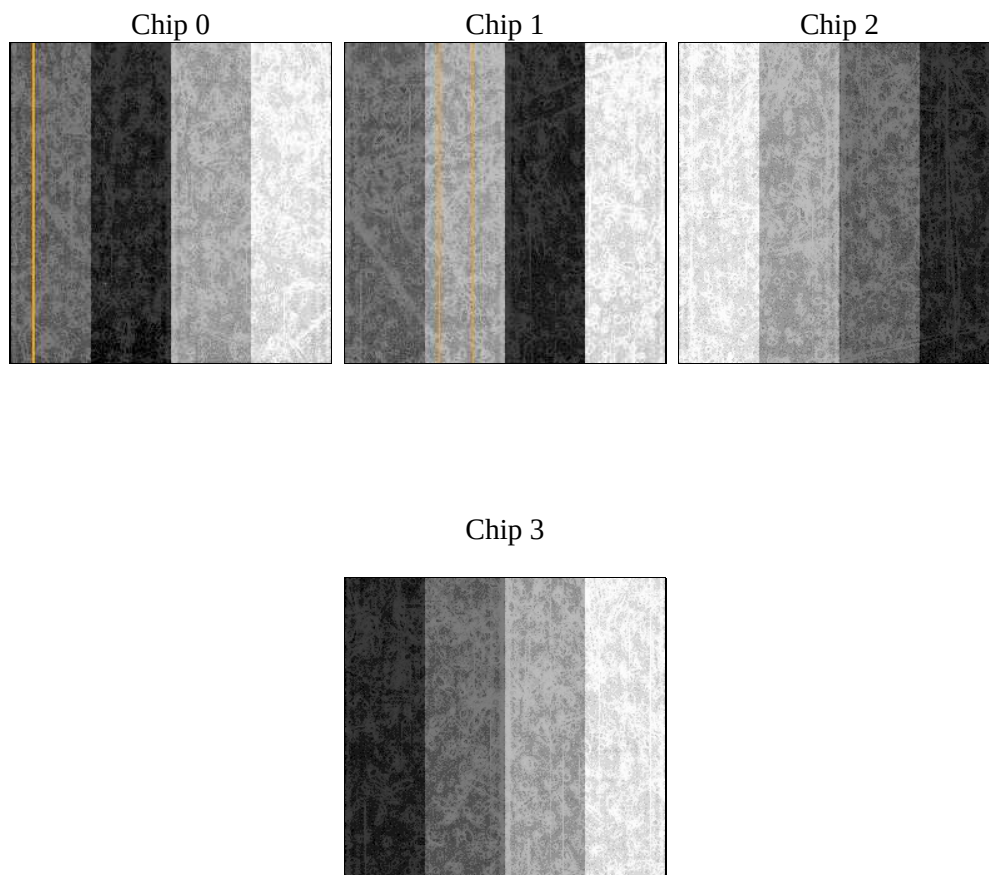
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	32072.559176683	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	32075.700246811	Sum of GTIs [s]
date	2017-03-17T16:04:27	Date and time of file creation	ontime1	32075.700246811	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	32069.418096423	Sum of GTIs [s]
			ontime3	32072.559176683	Sum of GTIs [s]
			l1events	1004306	Number of level 1 events

2.1.4 Events

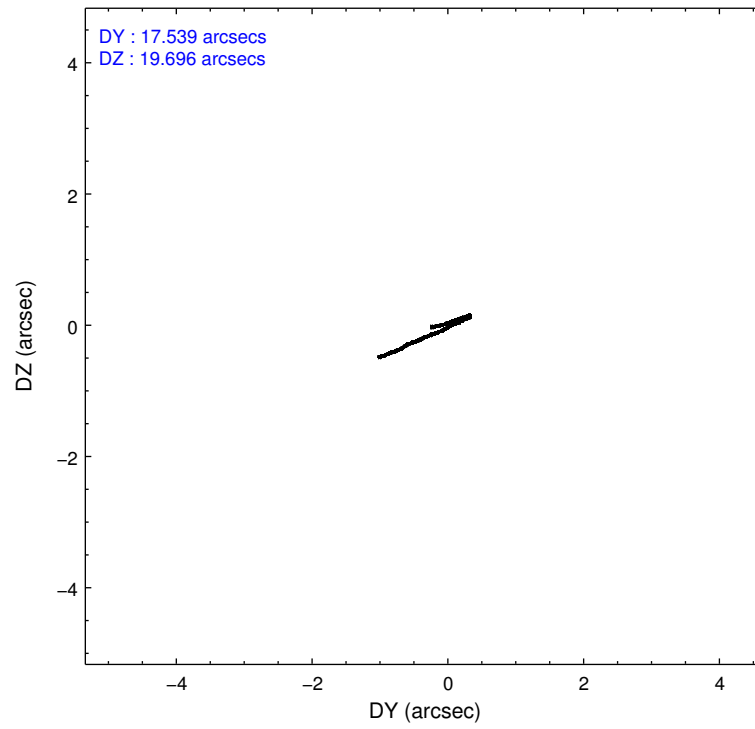
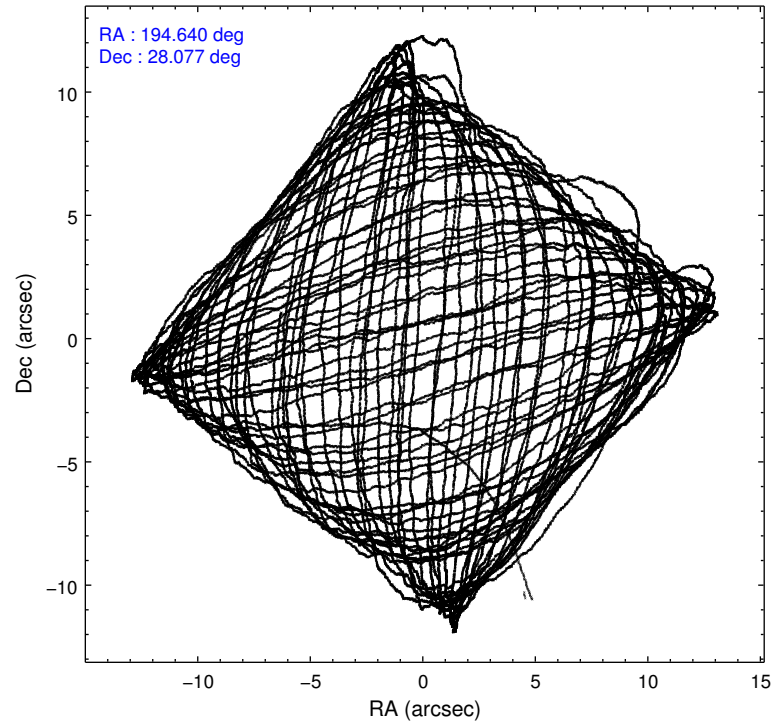
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	229334	253731	253661	267580
rejected events	192812	194295	215006	209916
rejected %	84%	76%	84%	78%

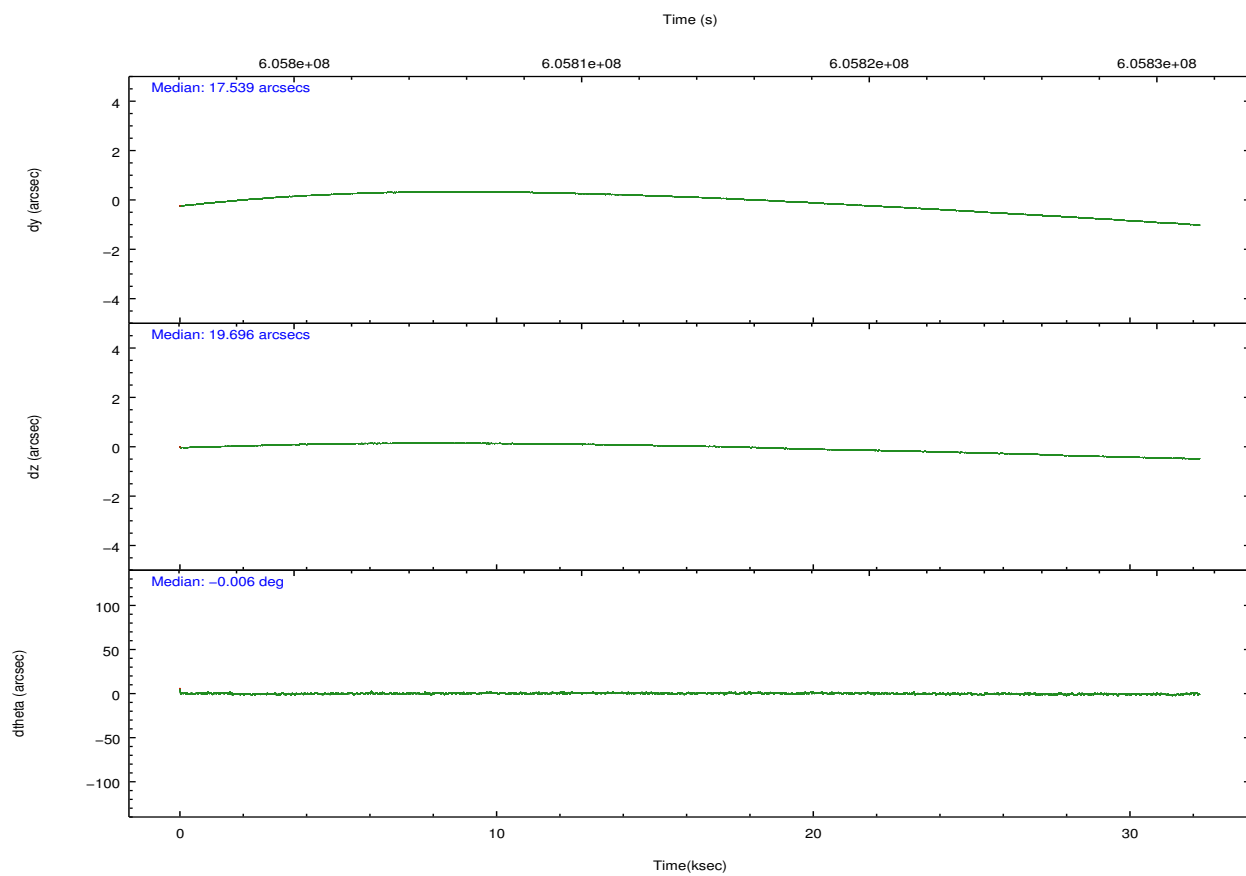
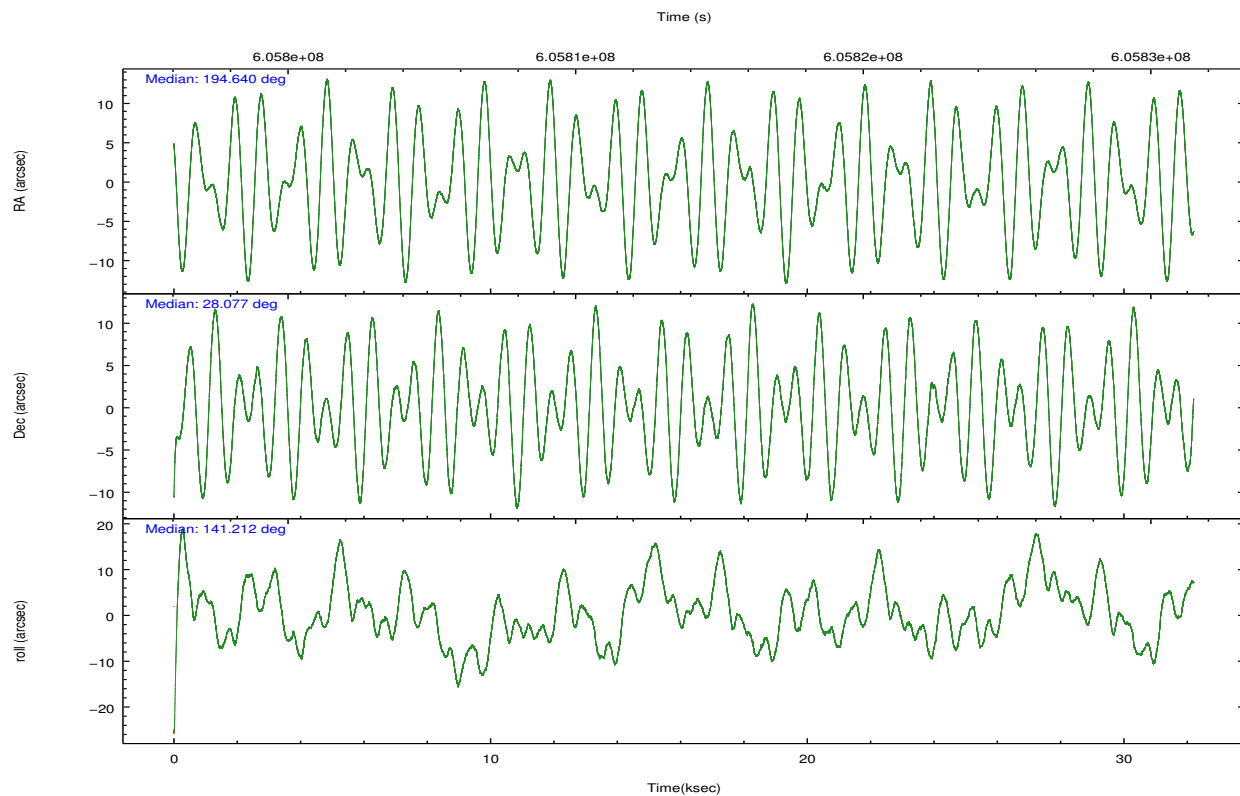
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	17489	33506	20274	34964
	7%	13%	7%	13%
grade 1 events	178	235	193	269
	0%	0%	0%	0%
grade 2 events	7592	10691	7282	8817
	3%	4%	2%	3%
grade 3 events	2957	3738	2847	3760
	1%	1%	1%	1%
grade 4 events	2817	3698	2971	3846
	1%	1%	1%	1%
grade 5 events	9365	9928	8966	11024
	4%	3%	3%	4%
grade 6 events	5675	7817	5287	6285
	2%	3%	2%	2%
grade 7 events	183261	184118	205841	198615
	79%	72%	81%	74%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	194.671119	194.640175310472	Subarray requested	NONE	NONE
[deg] Pointing Dec	28.072967	28.07707196169006	Alternating exposures requested	N	N
[deg] Pointing Roll	140.989872	141.2131046019074	[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)	605797862.184000	605796977.19644			
Observation start date	2017-03-13T13:09:53	2017-03-13T12:56:17			
[s] Observation end time (MET)	605829862.184000	605831258.83593			
Observation end date	2017-03-13T22:03:13	2017-03-13T22:27:38			
Read mode	TIMED	TIMED			

2.3 Aspect



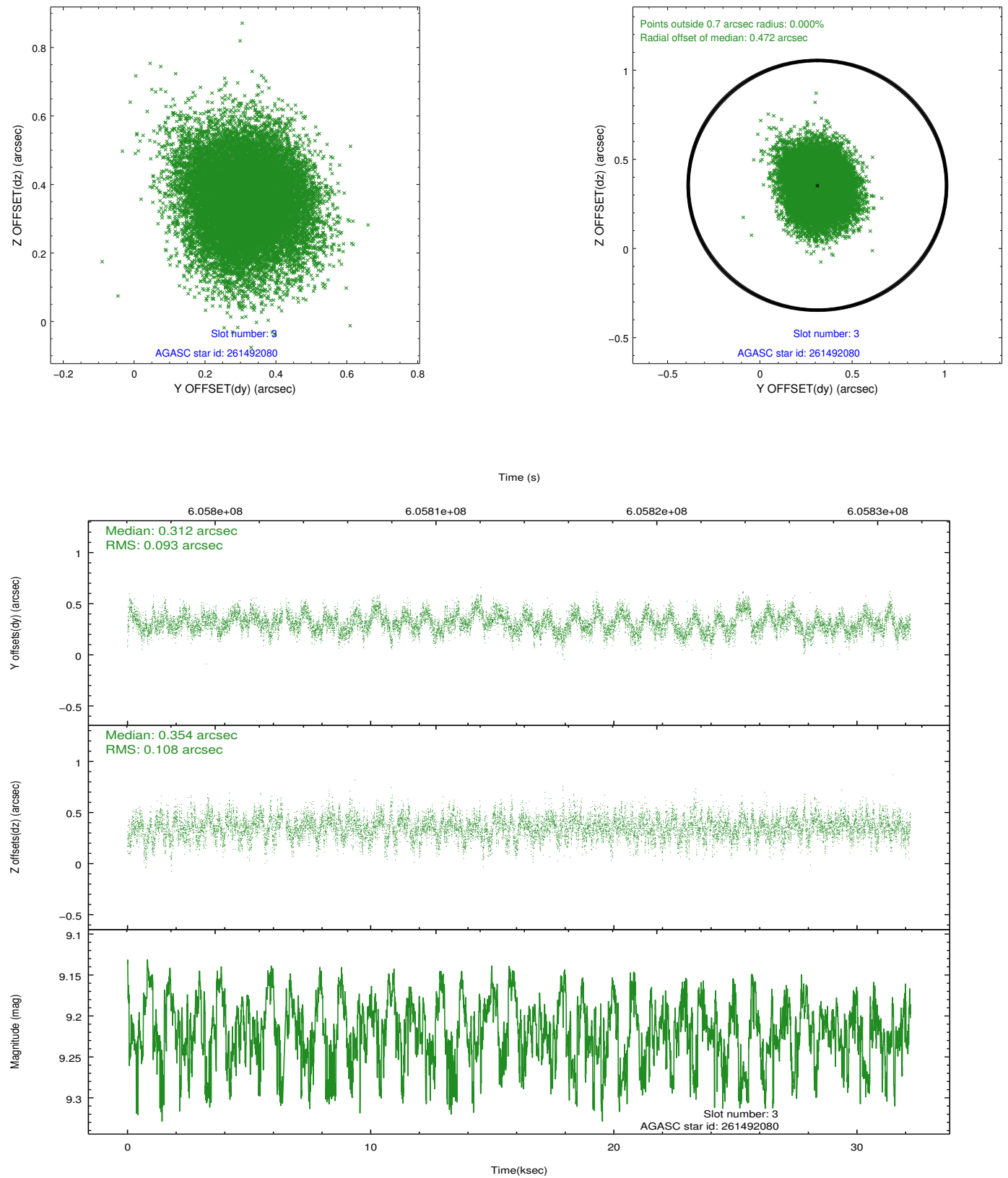


Slot Statistics

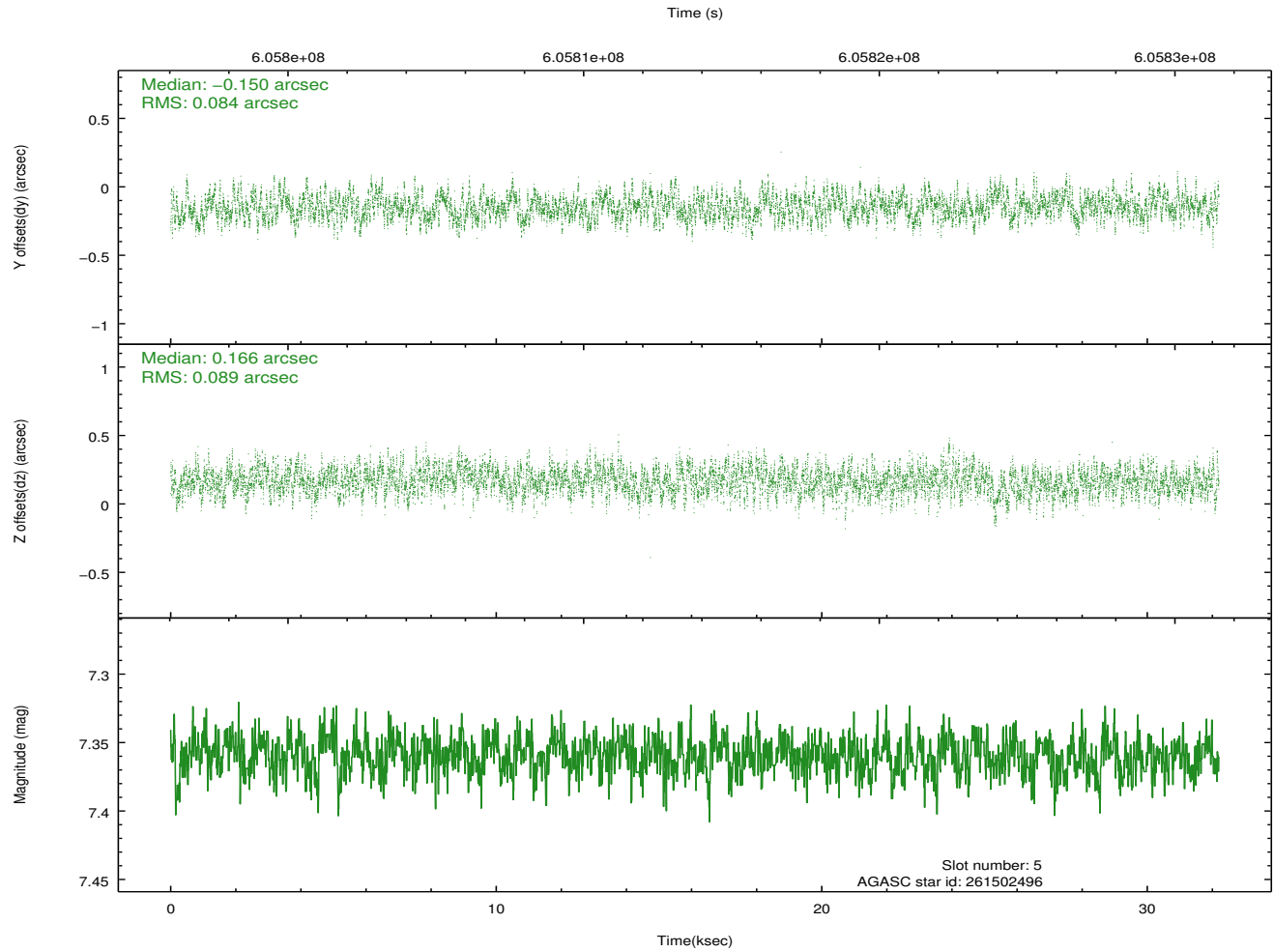
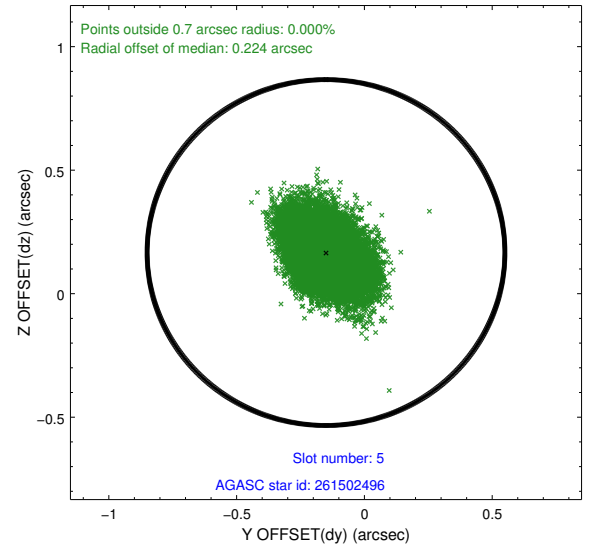
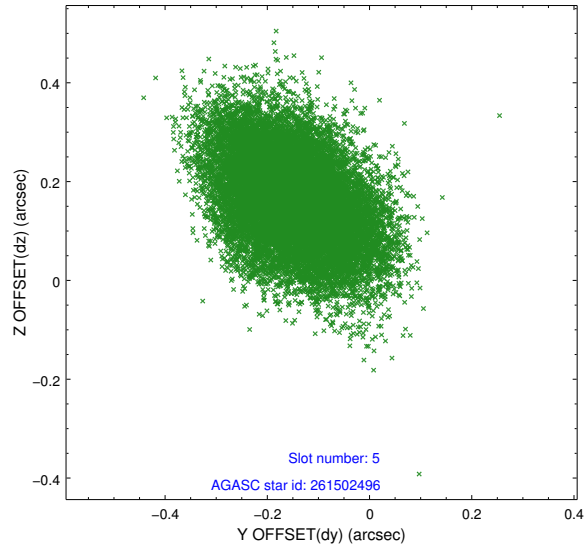
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	7854	-0.072	-0.052	0.014	0.026	0.000000	0.000000	921.96	-843.33
1	FID		ACIS-I-4	7.17	7854	0.497	0.095	0.013	0.024	0.000000	0.000000	2142.46	1056.67
2	FID		ACIS-I-5	7.22	7851	-0.523	0.028	0.008	0.015	0.000000	0.000000	-1826.56	1054.24
3	GUIDE	used	261492080	9.22	15624	0.312	0.354	0.152	0.245	194.976344	28.631585	518.07	-2170.34
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	261502496	7.36	15708	-0.150	0.166	0.130	0.211	194.887297	28.065668	-549.40	-412.34
6	GUIDE	used	261505760	9.78	15678	-0.076	-0.255	0.246	0.381	193.736841	27.992885	2134.10	2084.50
7	GUIDE	used	261505808	9.32	15689	-0.090	-0.264	0.186	0.286	193.710324	27.913269	2021.21	2361.21

2.4 Star Slots

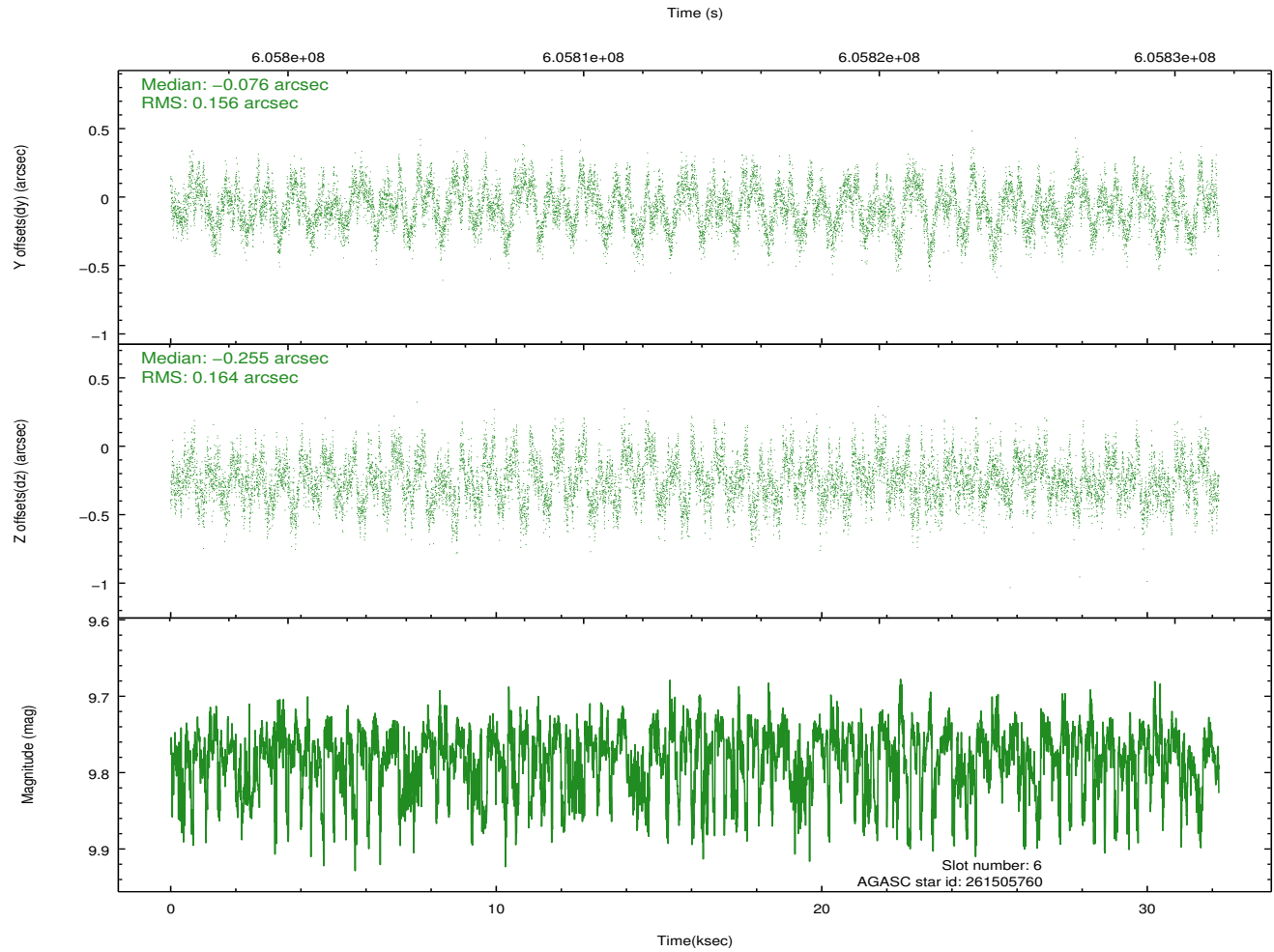
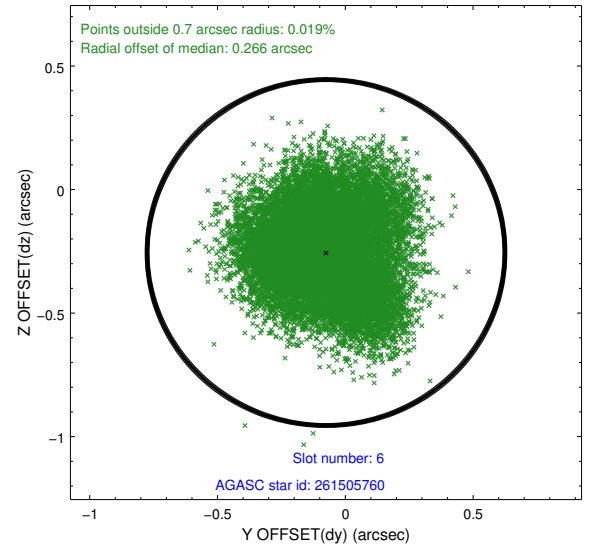
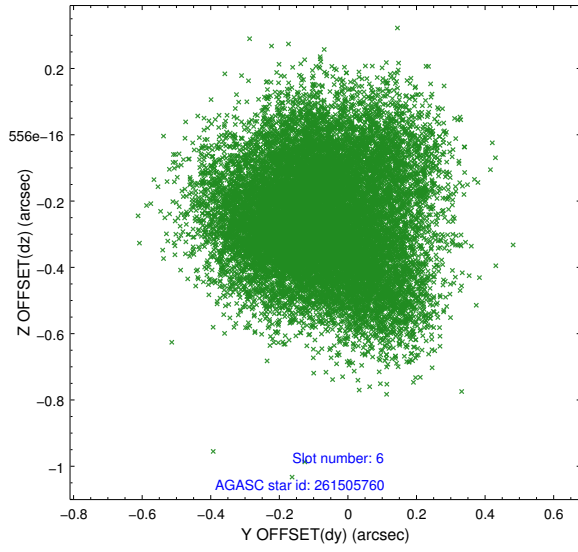
2.4.1 Slot 3



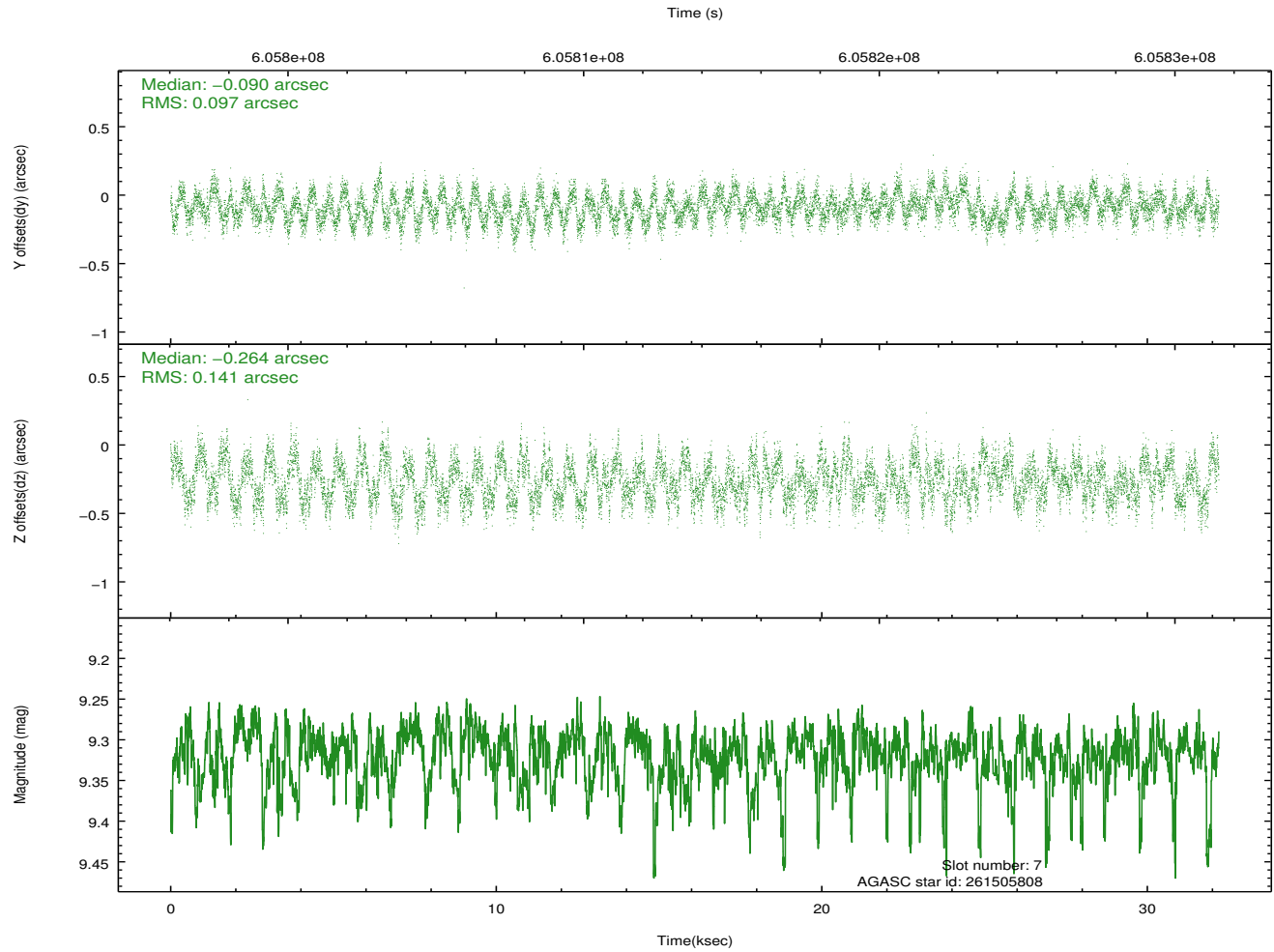
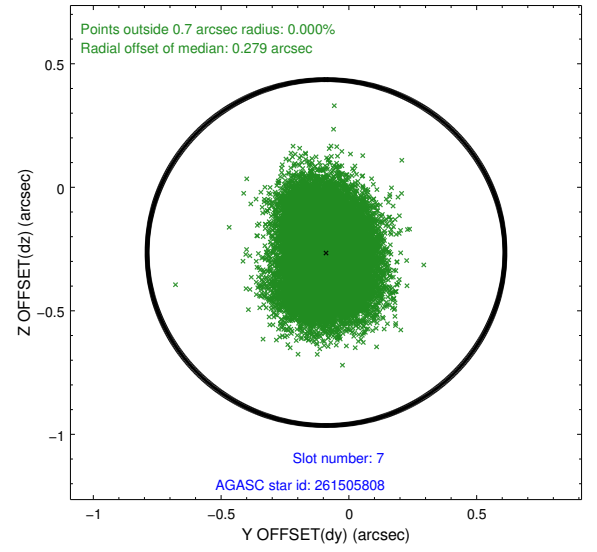
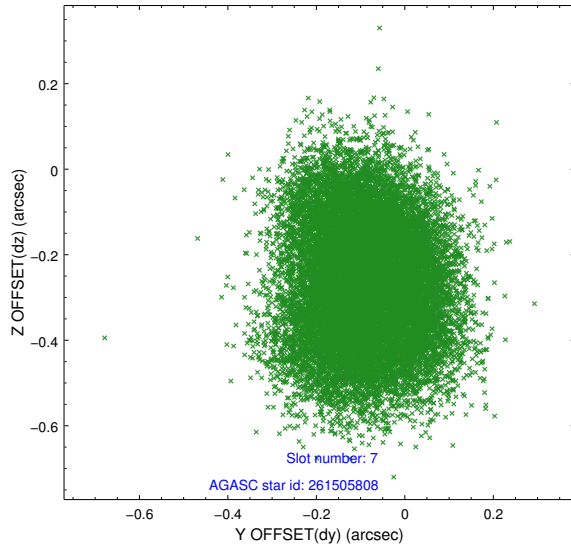
2.4.2 Slot 5



2.4.3 Slot 6

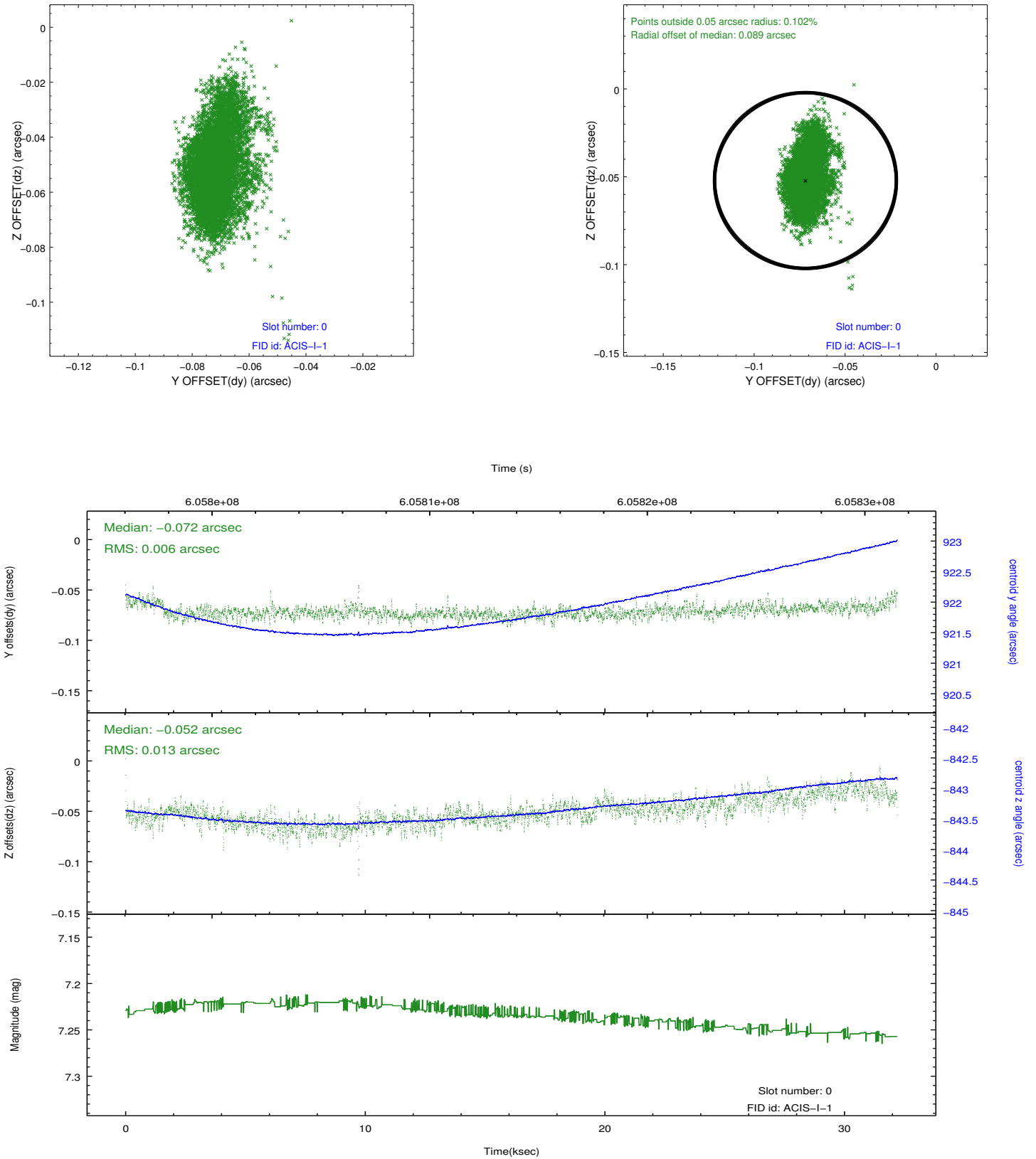


2.4.4 Slot 7

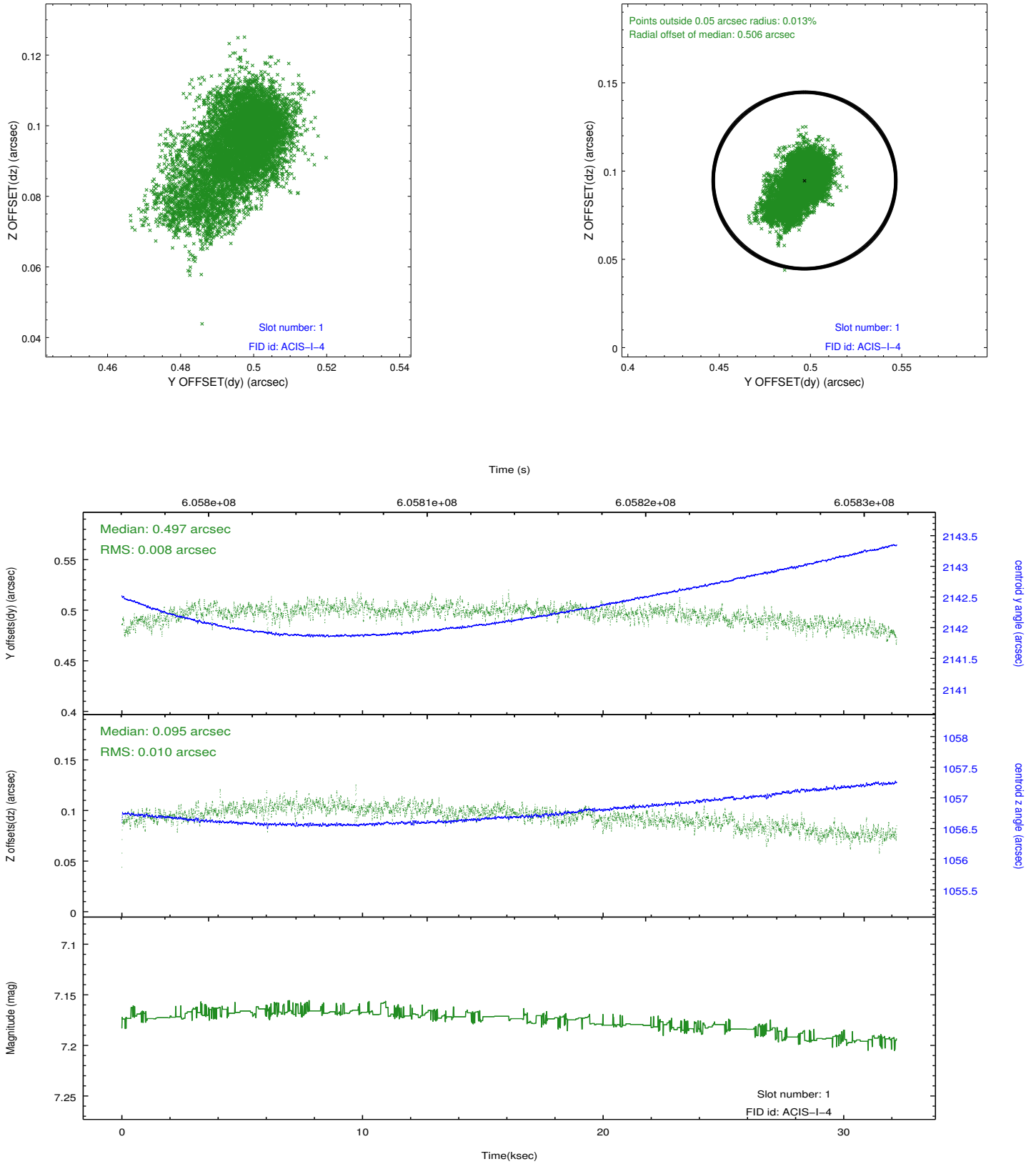


2.5 FID Slots

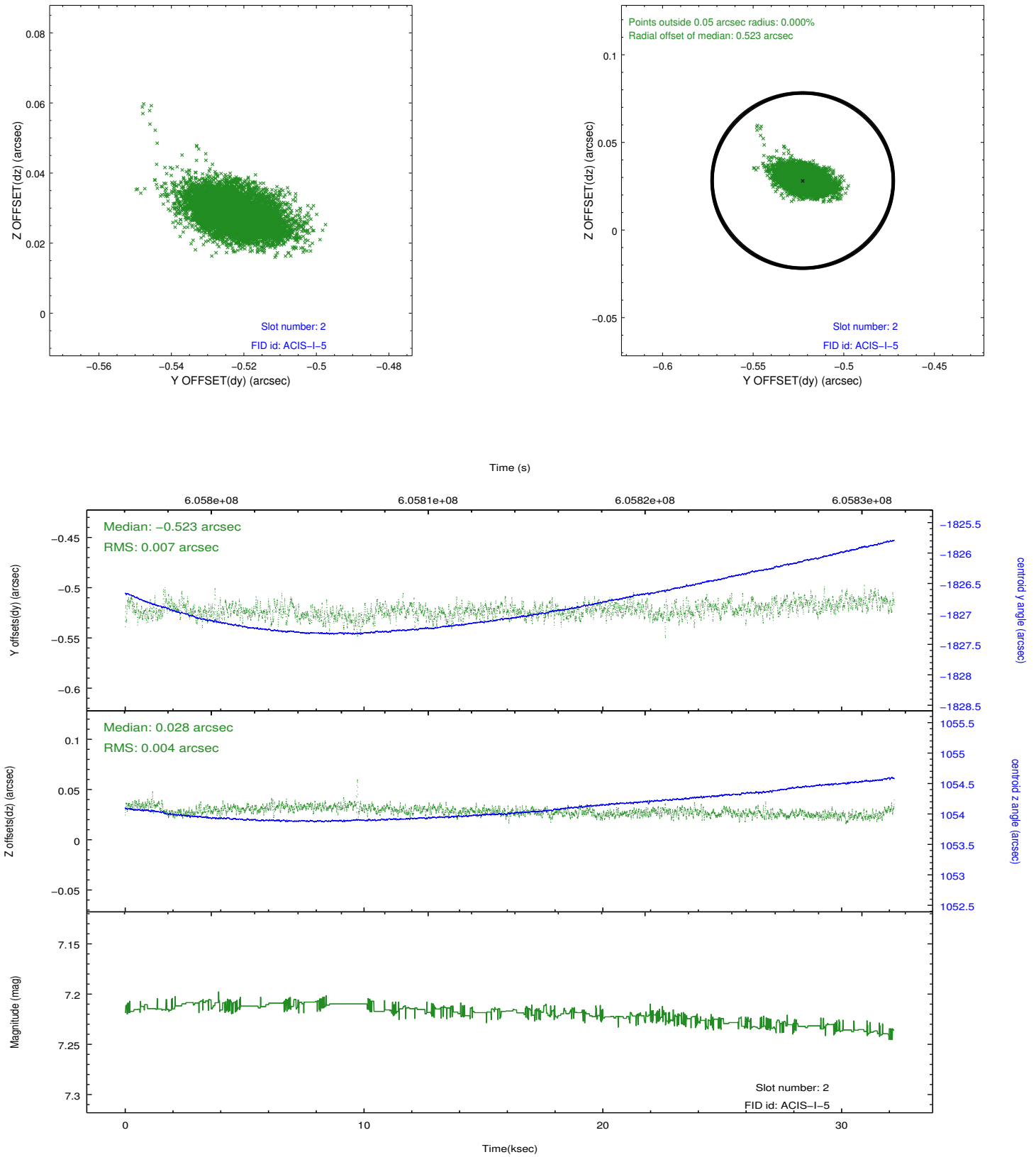
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.03.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.072559176683

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.