

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 18273 - L2 Version 2
Chandra X-Ray Center

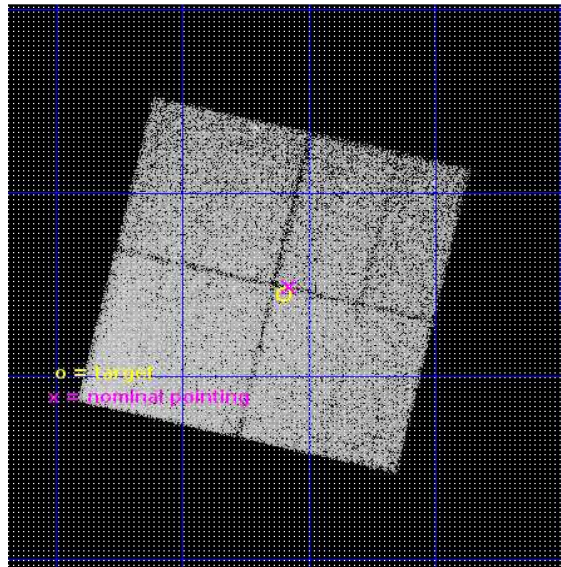
L2 Processing Date : Feb 16 2017

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

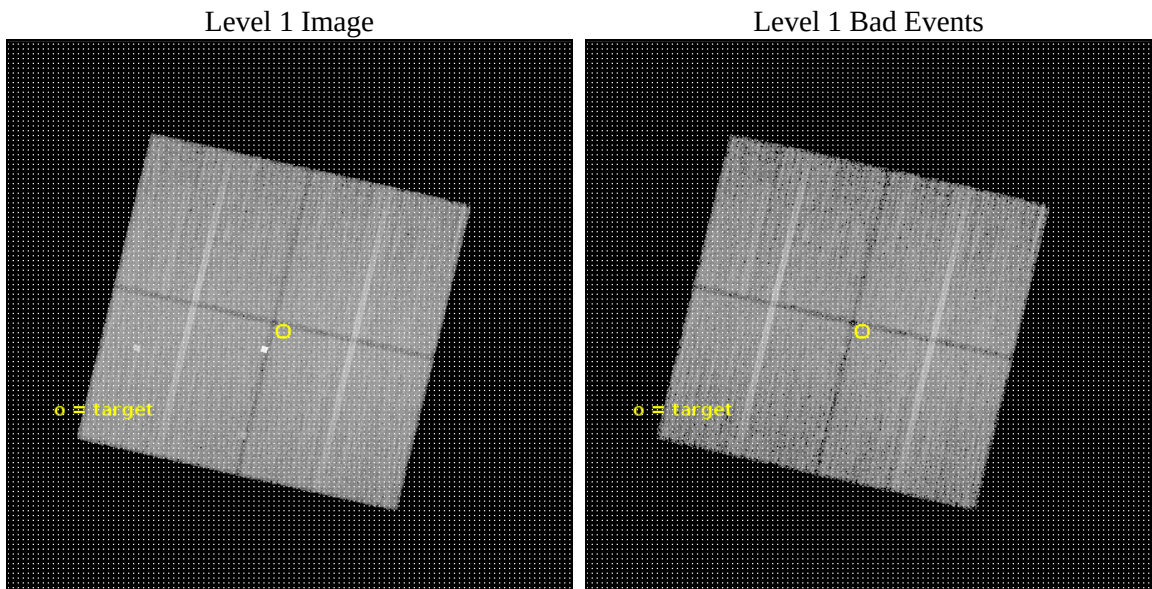
seq_num	801595	Sequence number
obs_id	18273	Observation id
title	Probing ICM on mean free path scales	Proposal title
observer	Irina Zhuravleva	Principal investigator
object	Coma cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	194.649583	Observer's specified target RA [deg]
dec_targ	28.074806	Observer's specified target Dec [deg]
ra_nom	194.64397236861	Nominal RA [deg]
dec_nom	28.081491443689	Nominal Dec [deg]
roll_nom	103.21133867208	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28693.559160709	Sum of GTIs [s]
livetime	28318.656686384	Livetime [s]
ontime0	28693.482927322	Sum of GTIs [s]
ontime1	28693.524027824	Sum of GTIs [s]
ontime2	28696.700220823	Sum of GTIs [s]
ontime3	28693.559160709	Sum of GTIs [s]
l2events	161310	Number of level 2 events



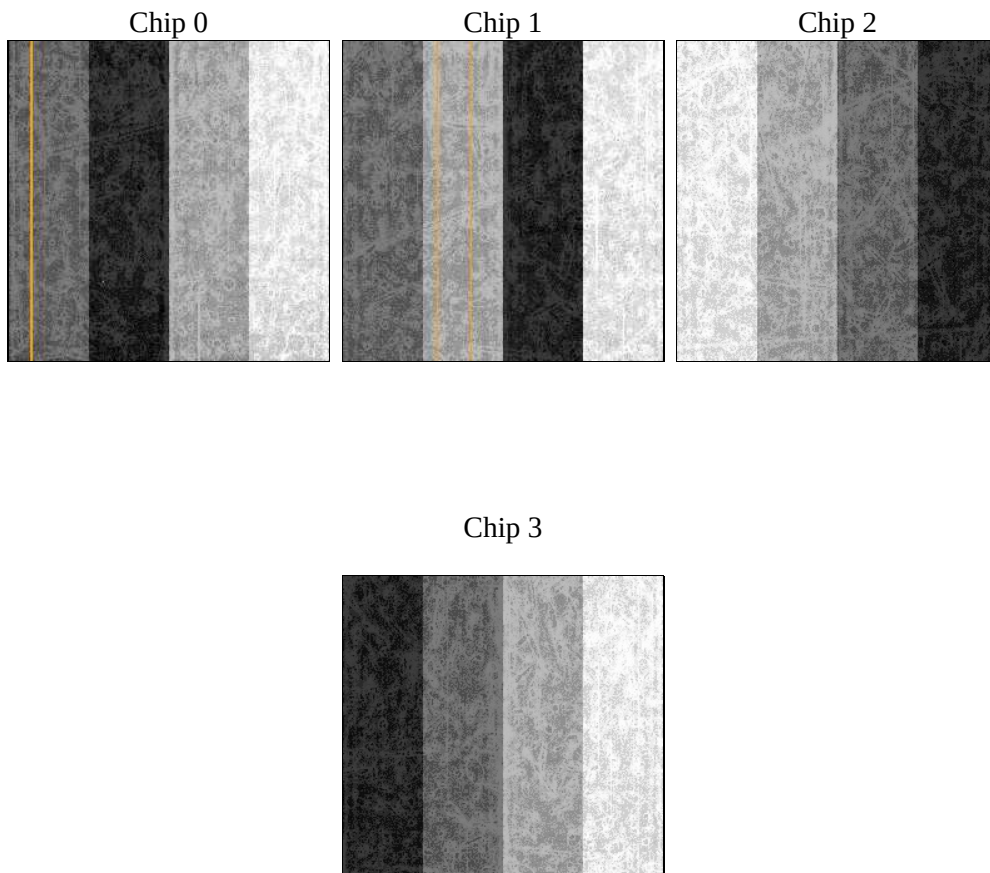
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28800.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	28693.559160709	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	28693.482927322	Sum of GTIs [s]
date	2017-02-16T21:01:50	Date and time of file creation	ontime1	28693.524027824	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28696.700220823	Sum of GTIs [s]
			ontime3	28693.559160709	Sum of GTIs [s]
			l1events	913010	Number of level 1 events

2.1.4 Events

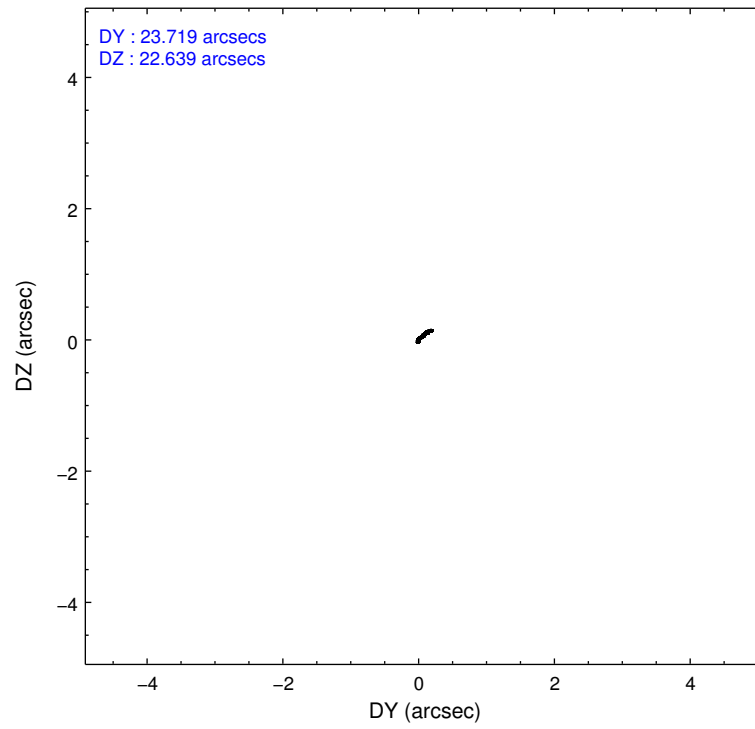
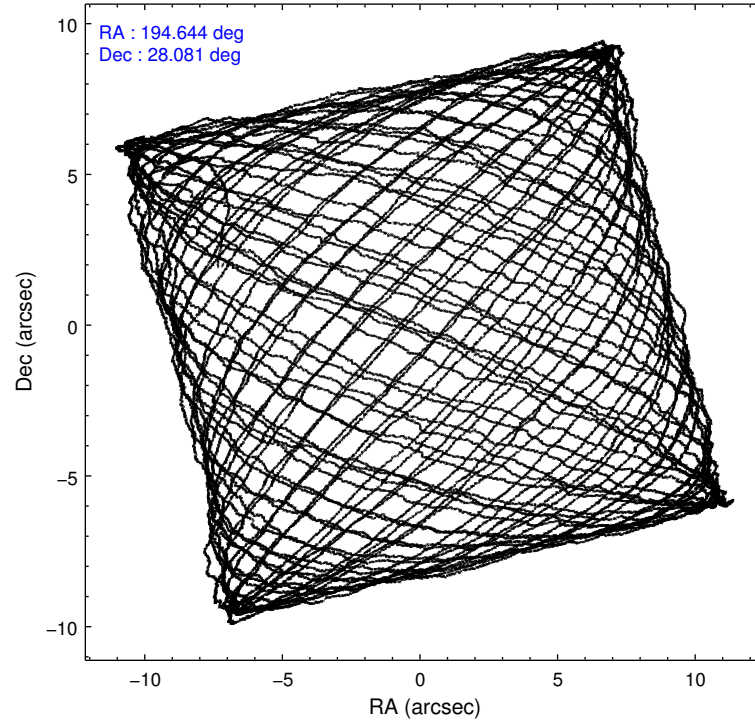
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	208030	250274	226506	228200
rejected events	170377	173231	193633	184854
rejected %	81%	69%	85%	81%

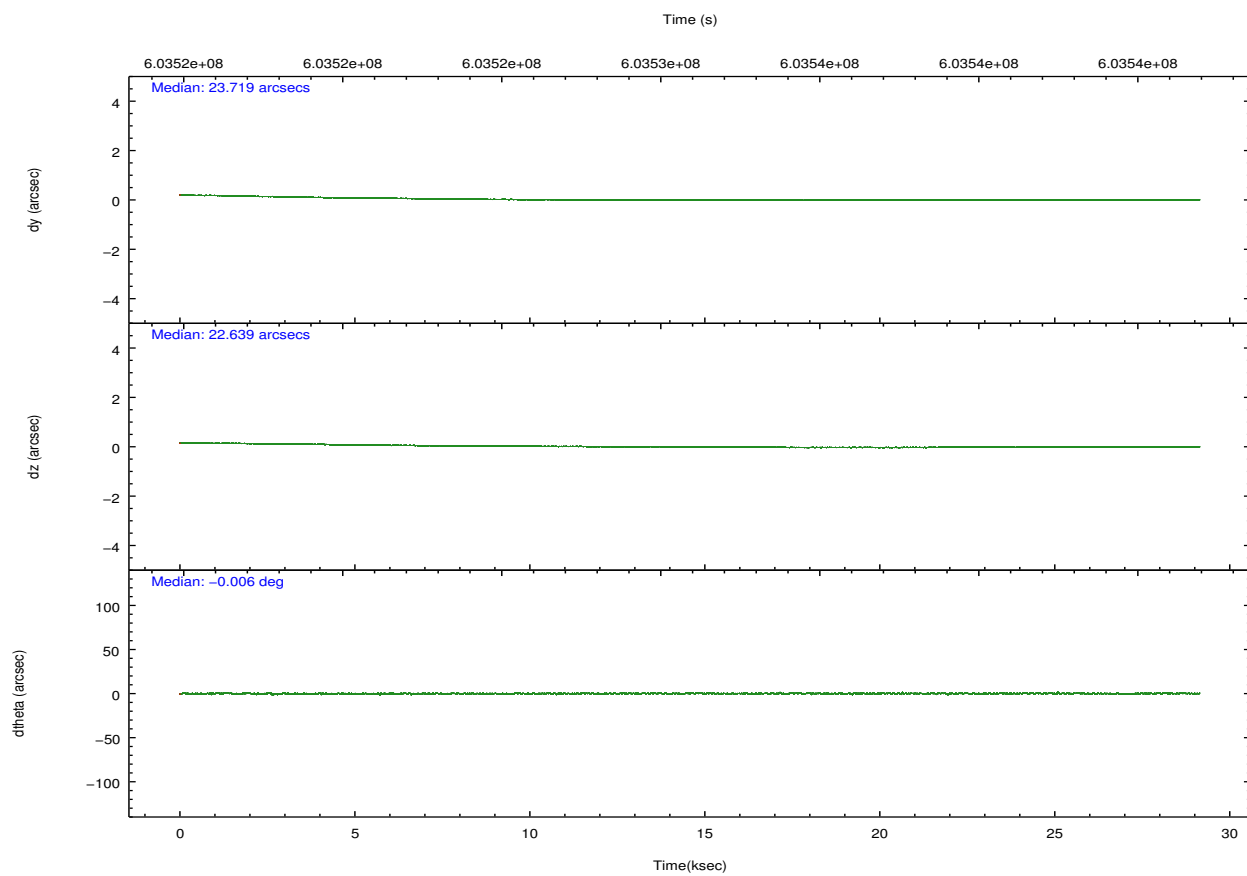
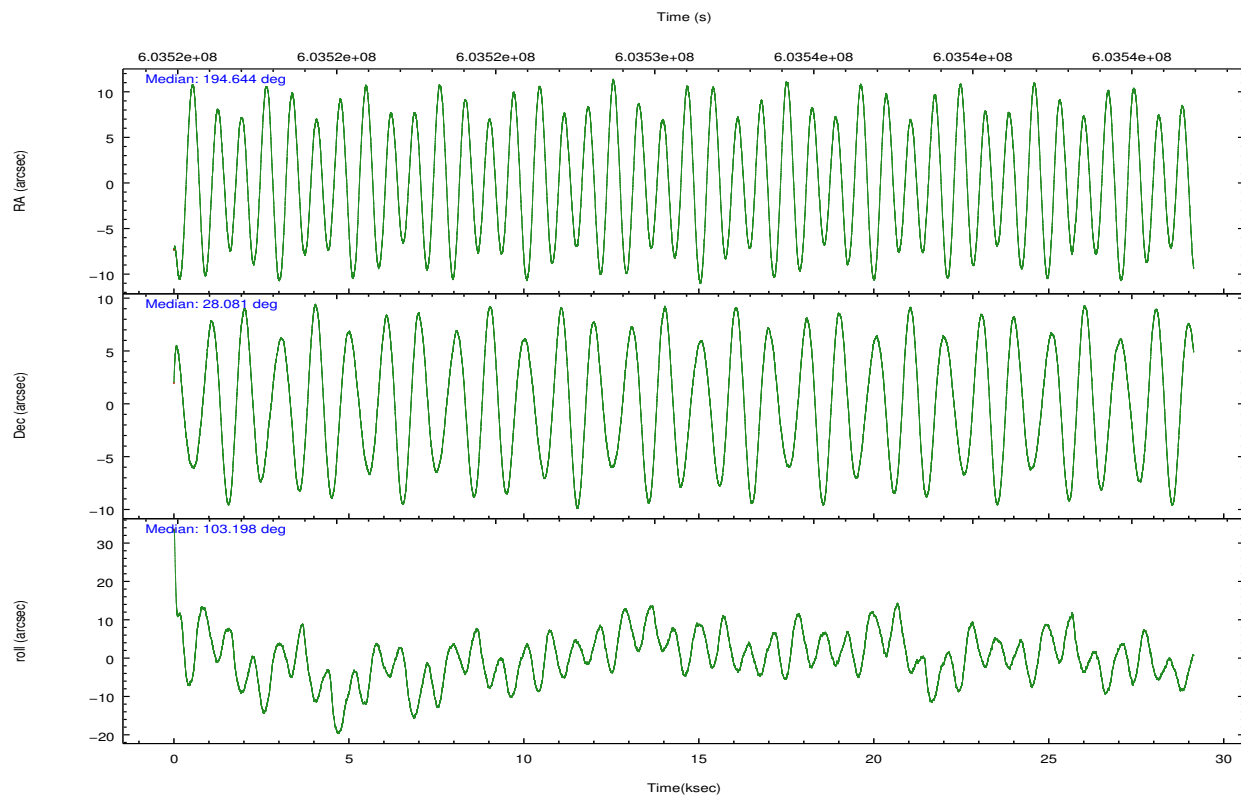
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	19511	50121	16807	24982
	9%	20%	7%	10%
grade 1 events	171	352	152	195
	0%	0%	0%	0%
grade 2 events	7218	11835	6216	7043
	3%	4%	2%	3%
grade 3 events	2870	3804	2554	2958
	1%	1%	1%	1%
grade 4 events	2662	3889	2690	3071
	1%	1%	1%	1%
grade 5 events	8767	9030	7859	9829
	4%	3%	3%	4%
grade 6 events	5397	7404	4618	5302
	2%	2%	2%	2%
grade 7 events	161434	163839	185610	174820
	77%	65%	81%	76%

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	194.665482	194.6439723686073	Subarray requested	NONE	NONE
[deg] Pointing Dec	28.061439	28.08149144368858	Alternating exposures requested	N	N
[deg] Pointing Roll	102.992518	103.2113386720794	[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)	603516682.184000	603515728.35167			
Observation start date	2017-02-15T03:30:13	2017-02-15T03:15:28			
[s] Observation end time (MET)	603545482.184000	603545975.07842			
Observation end date	2017-02-15T11:30:13	2017-02-15T11:39:35			
Read mode	TIMED	TIMED			

2.3 Aspect



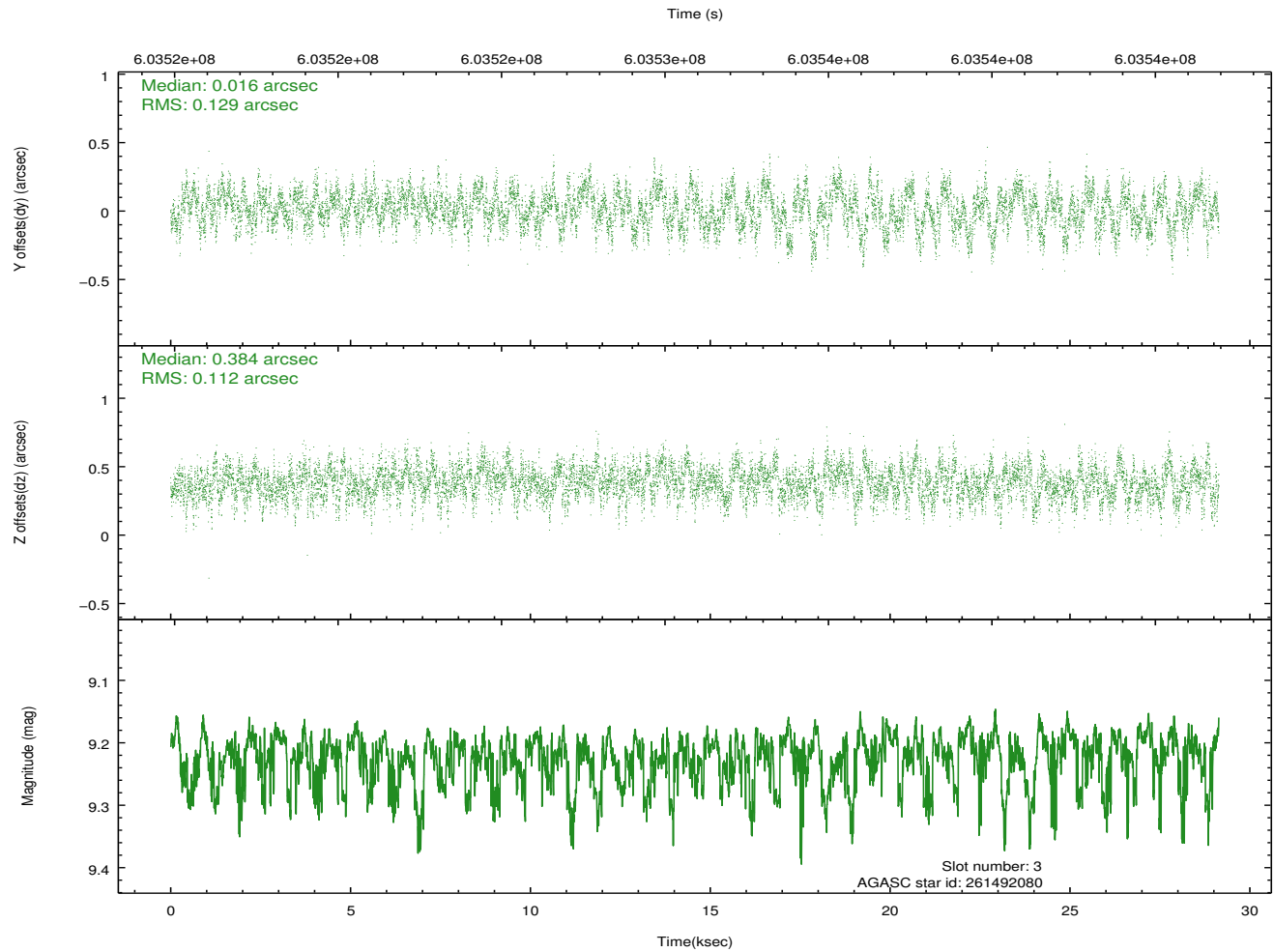
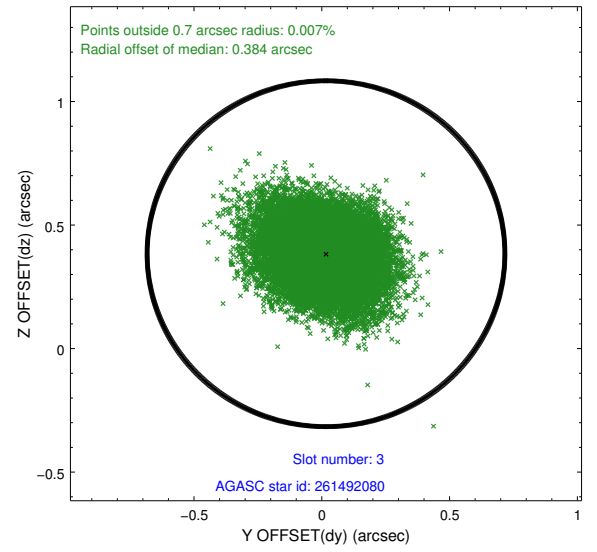
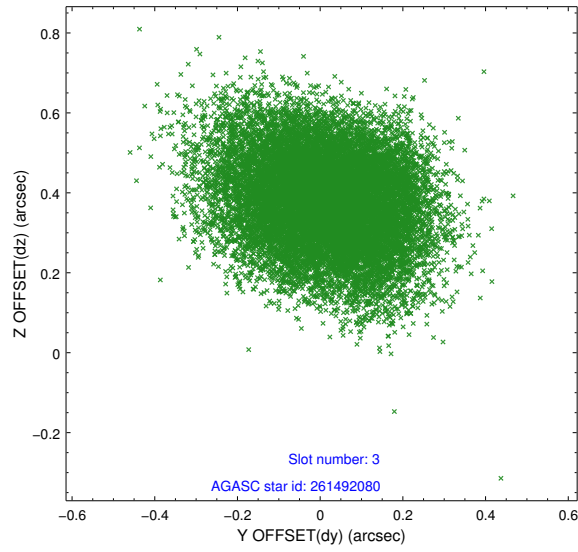


Slot Statistics

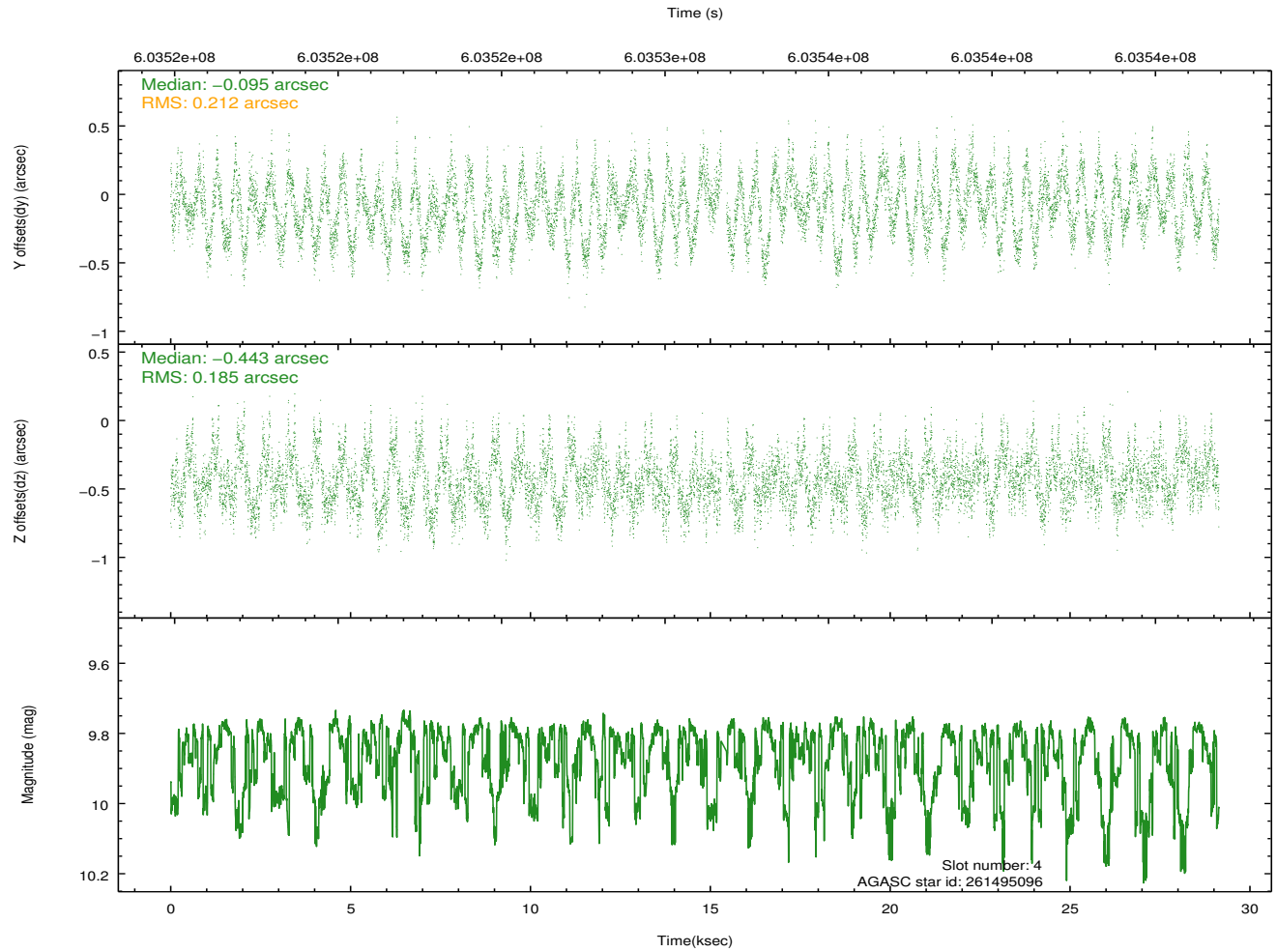
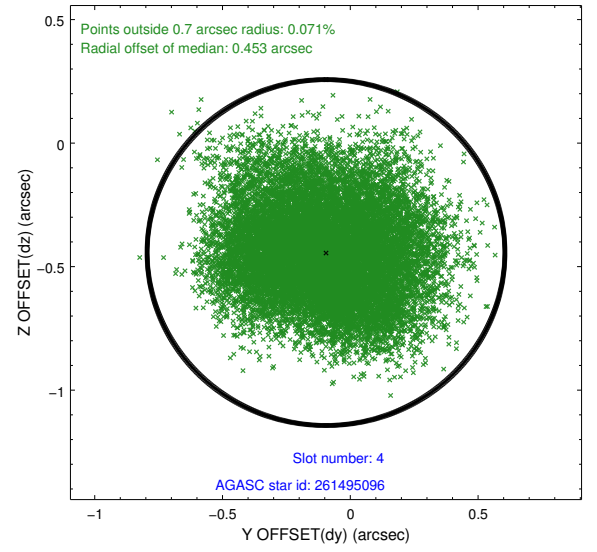
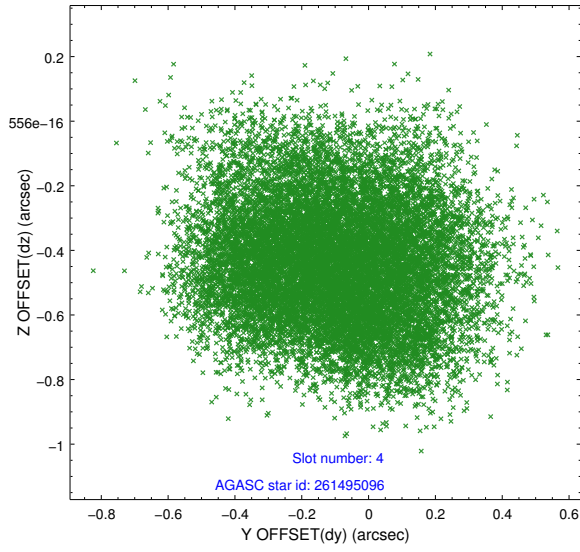
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.24	7108	0.095	-0.031	0.008	0.014	0.000000	0.000000	915.63	-846.42
1	FID		ACIS-I-5	7.23	7107	-0.439	0.037	0.006	0.011	0.000000	0.000000	-1833.11	1050.89
2	FID		ACIS-I-6	7.25	7107	0.252	0.064	0.008	0.013	0.000000	0.000000	381.05	1695.68
3	GUIDE	used	261492080	9.22	14196	0.016	0.384	0.183	0.294	194.976344	28.631585	1780.94	-1418.07
4	GUIDE	used	261495096	9.86	14099	-0.095	-0.443	0.309	0.465	194.411078	28.430653	1477.14	486.30
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	261502496	7.35	14214	0.023	0.050	0.142	0.226	194.887297	28.065668	-142.47	-690.06
7	GUIDE	used	261505232	9.72	14189	0.066	-0.002	0.216	0.344	194.216553	27.802521	-586.09	1601.41

2.4 Star Slots

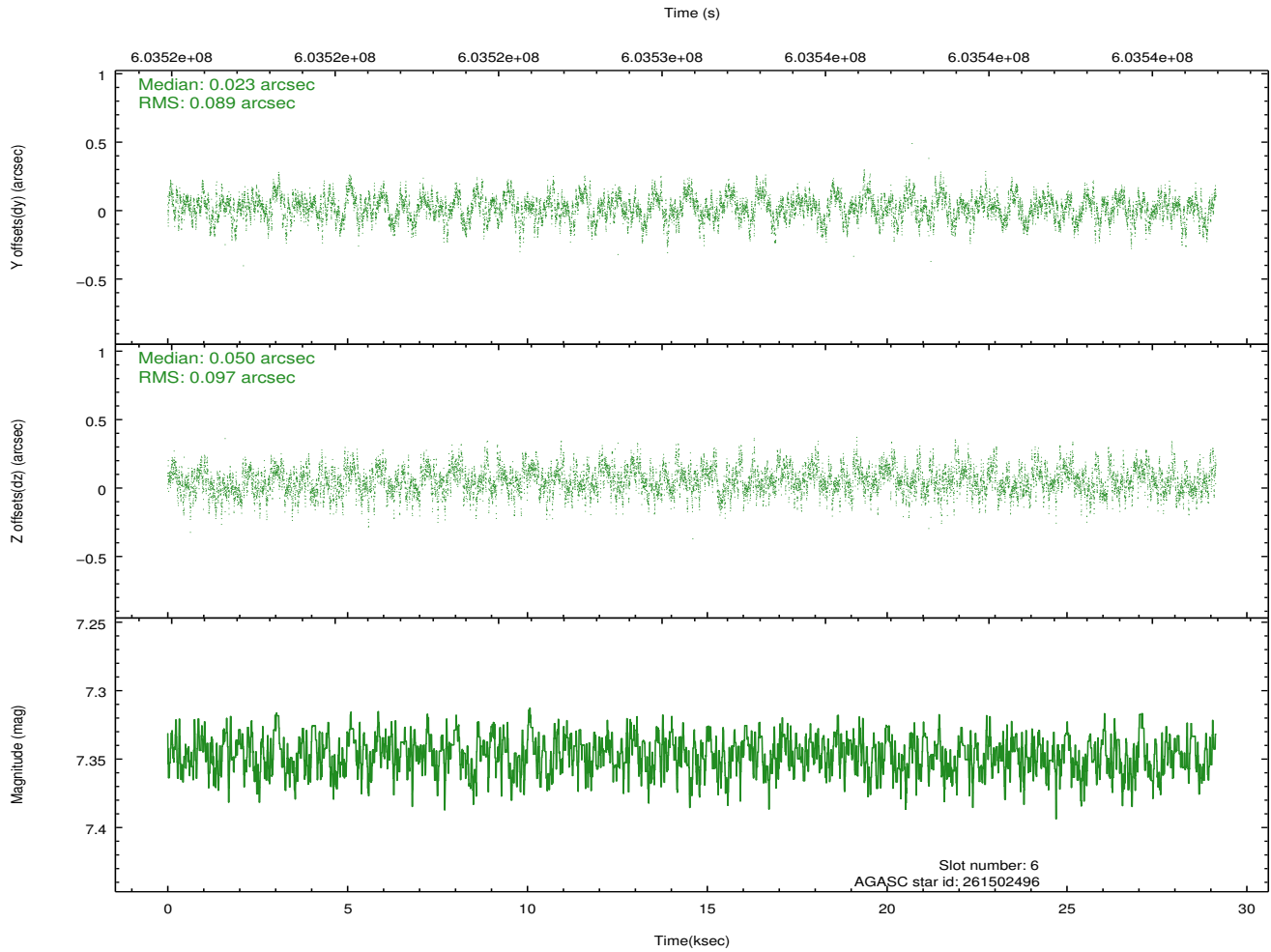
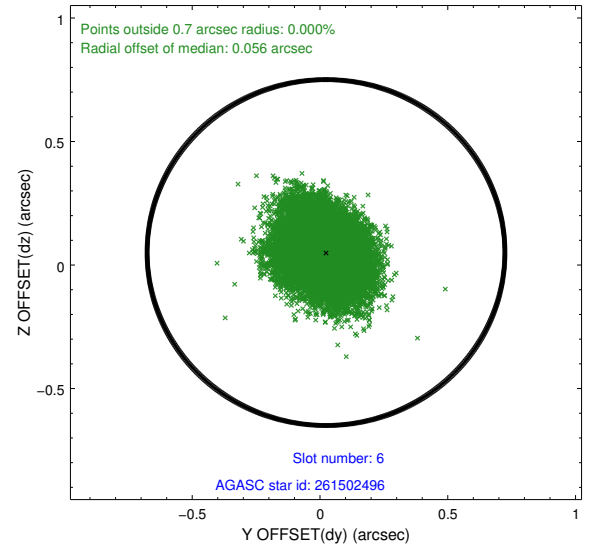
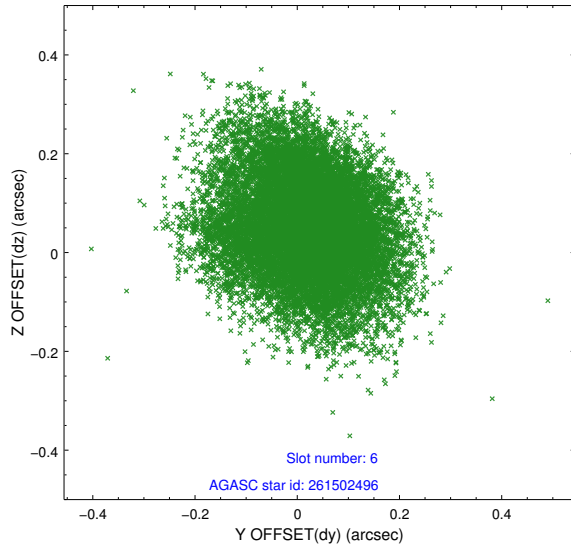
2.4.1 Slot 3



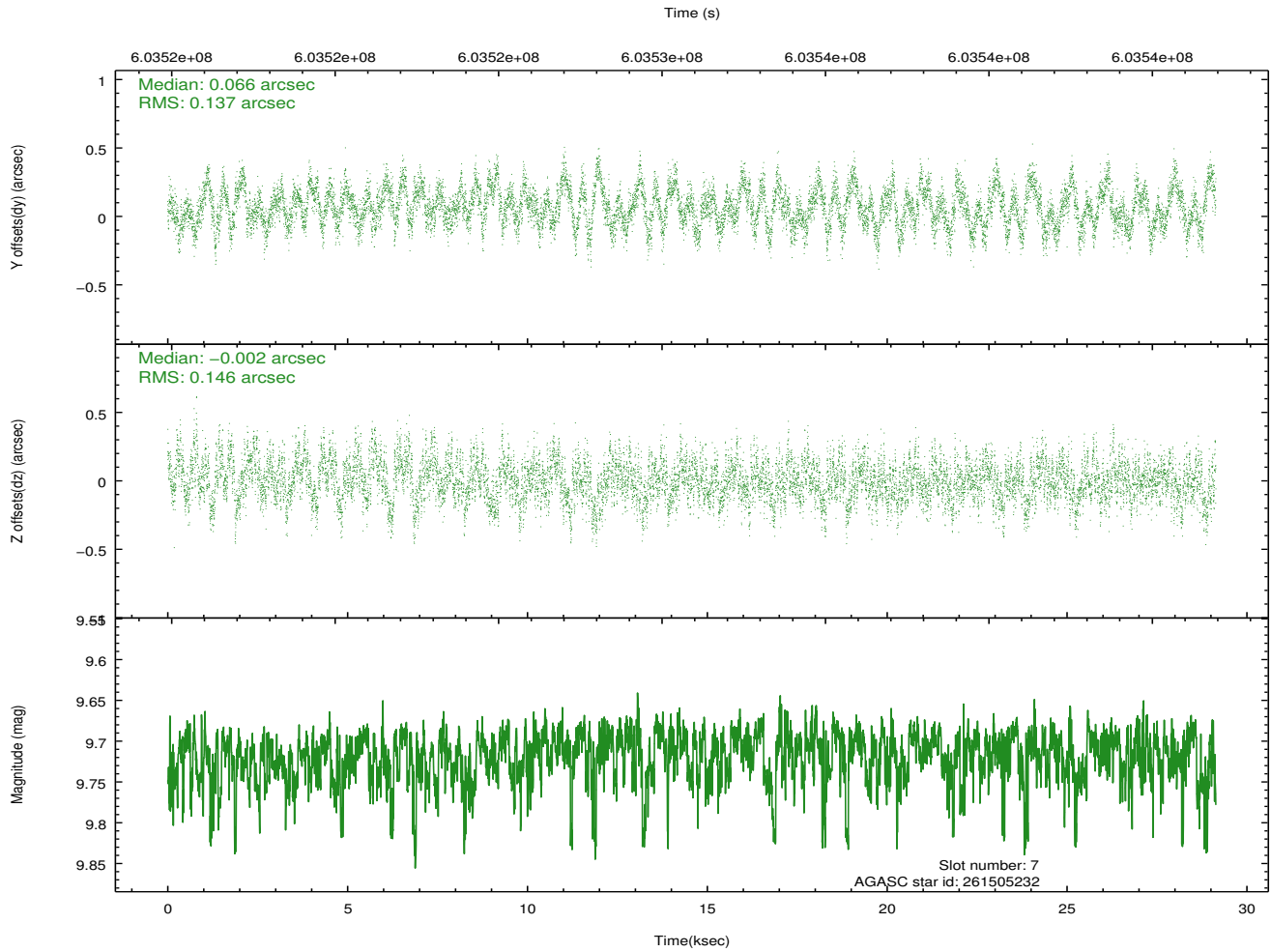
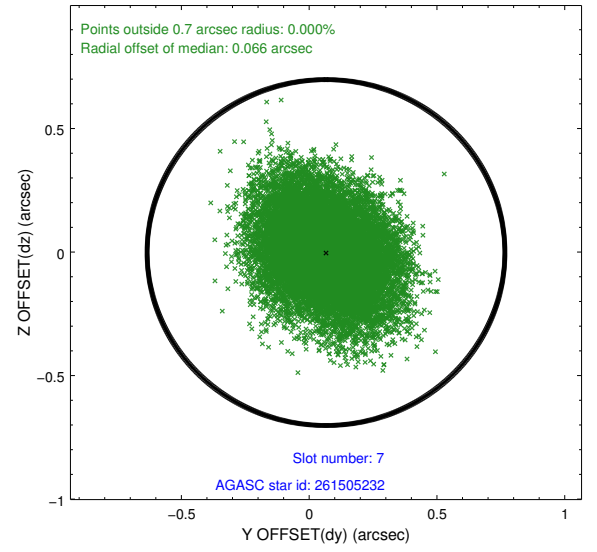
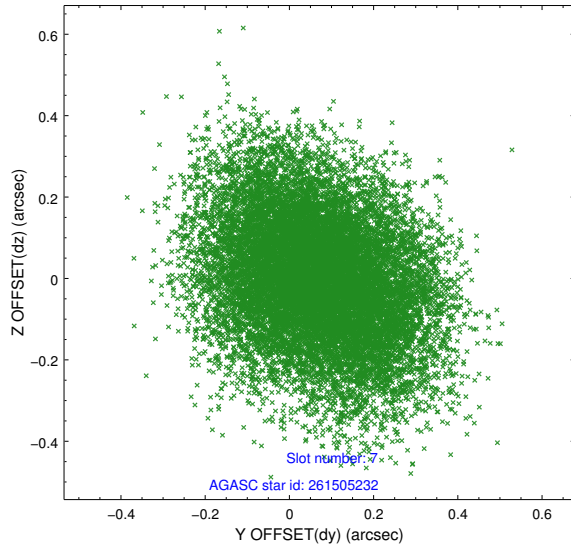
2.4.2 Slot 4



2.4.3 Slot 6

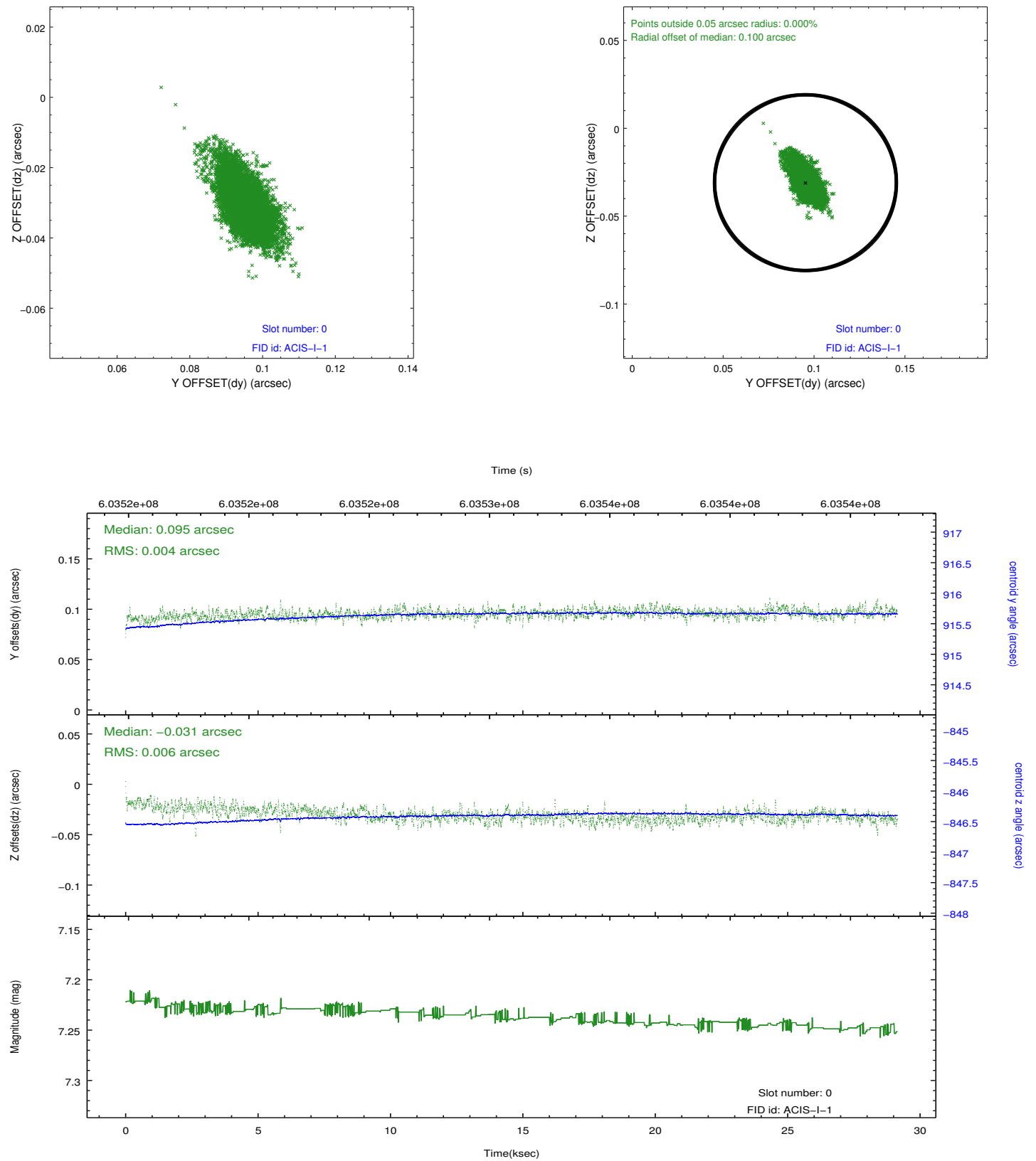


2.4.4 Slot 7

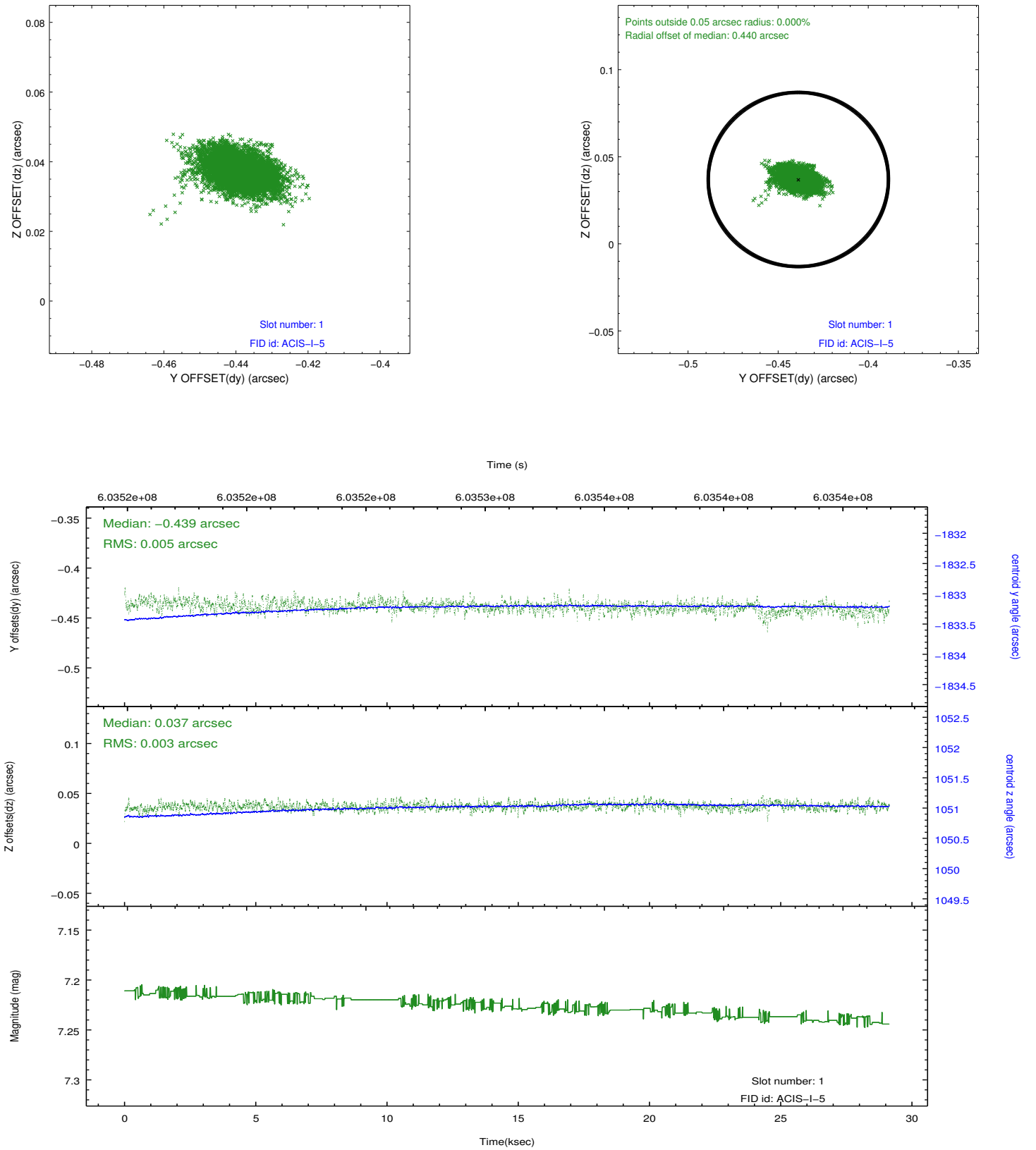


2.5 FID Slots

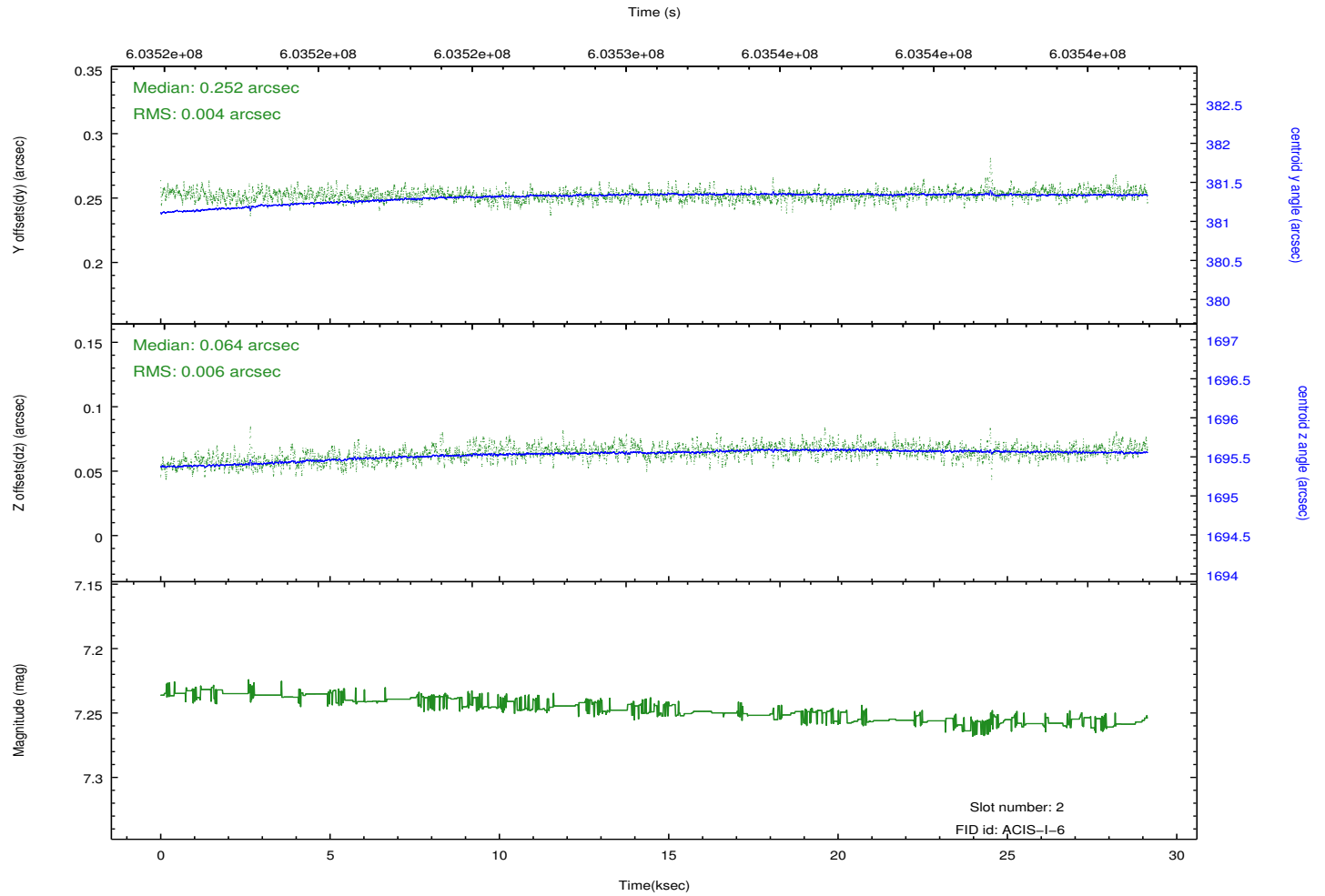
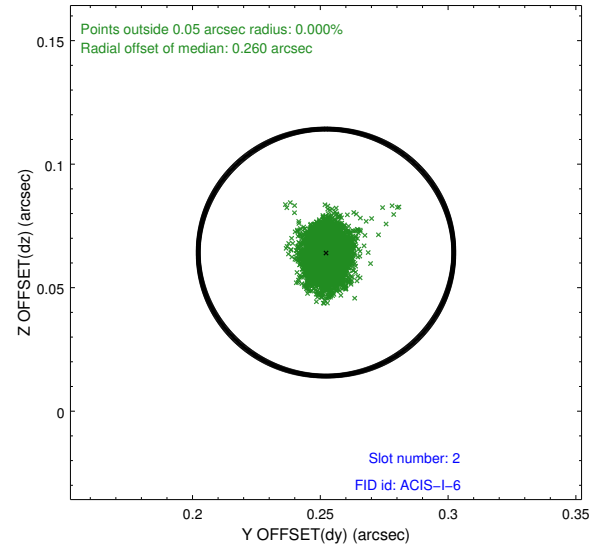
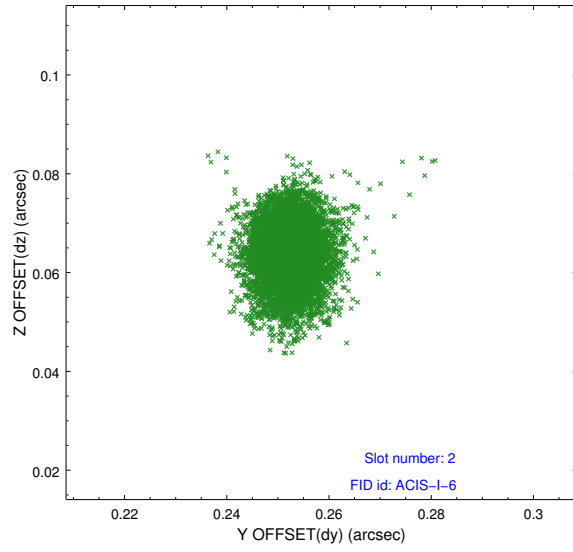
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.02.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.693559160709

A.2 Comments

The guide star in slot 5 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.