

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20869 - L2 Version 1
Chandra X-Ray Center

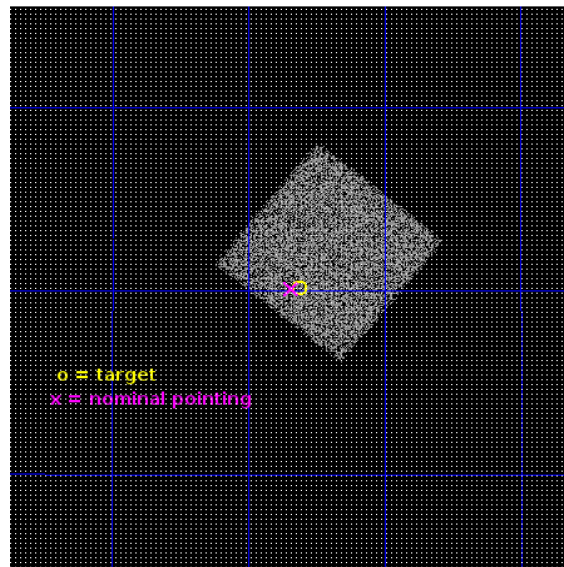
L2 Processing Date : Dec 14 2017

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 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

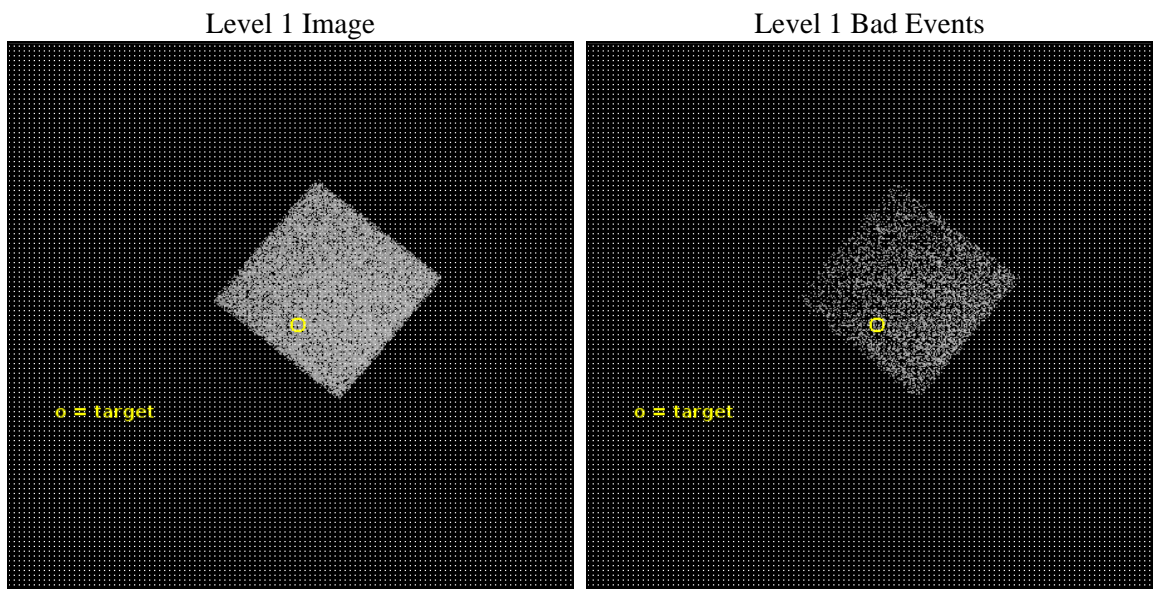
seq_num	201198	Sequence number
obs_id	20869	Observation id
title	Characterizing X-ray driven molecular chemistry in a young protoplanetary disk	Proposal title
observer	Lauren Cleeves	Principal investigator
object	DM Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.452917	Observer's specified target RA [deg]
dec_targ	18.169417	Observer's specified target Dec [deg]
ra_nom	68.4605140316	Nominal RA [deg]
dec_nom	18.168530385958	Nominal Dec [deg]
roll_nom	309.15437897048	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4092.0	Sum of GTIs [s]
livetime	4036.7768921159	Livetime [s]
ontime7	4092.0	Sum of GTIs [s]
l2events	16232	Number of level 2 events



2 OBI

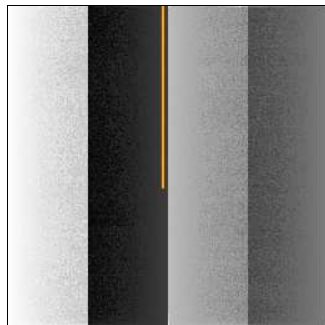
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	4092.0	Sum of GTIs [s]
caldsver	4.7.7	 	ontime7	4092.0	Sum of GTIs [s]
date	2017-12-14T19:24:07	Date and time of file creation	l1events	37179	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

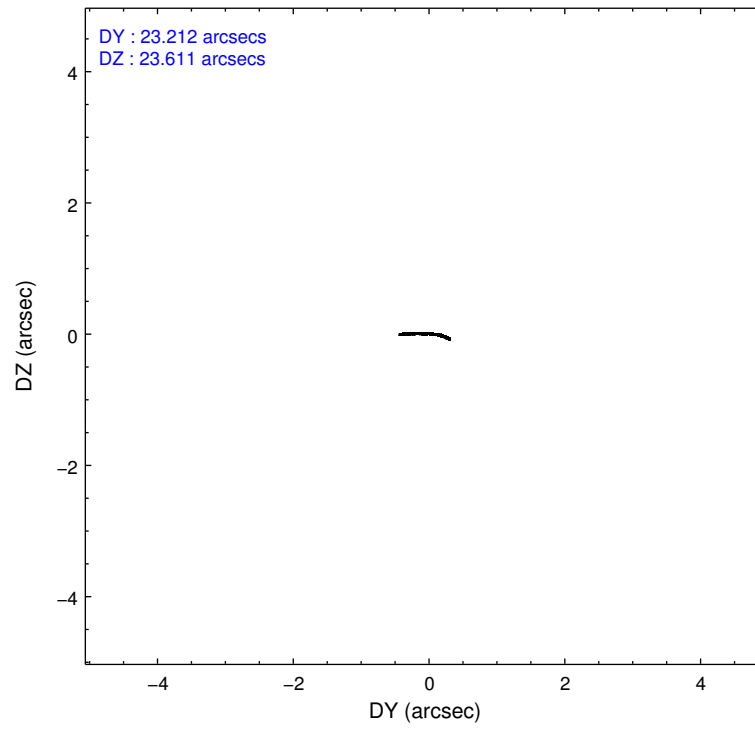
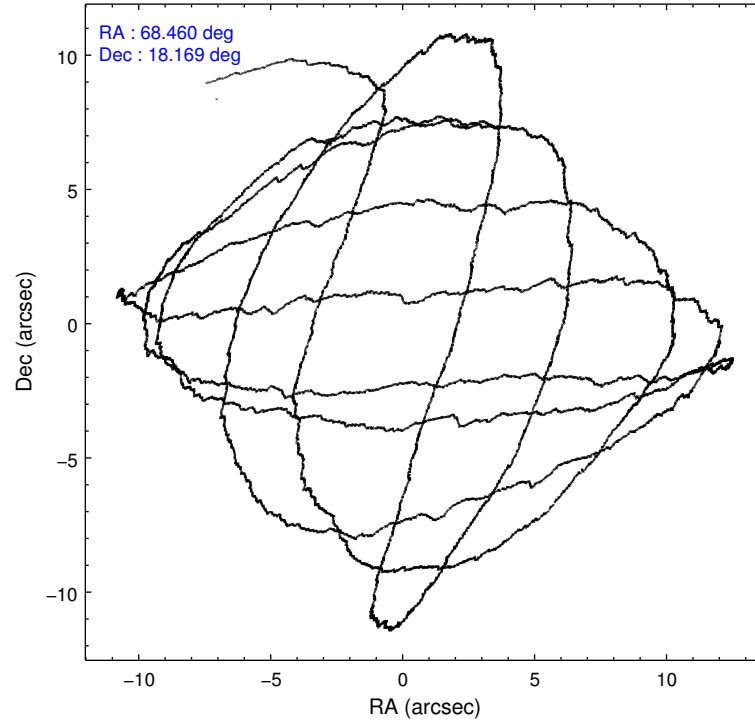
	ccd 7
level 1 events	37179
rejected events	20553
rejected %	55%

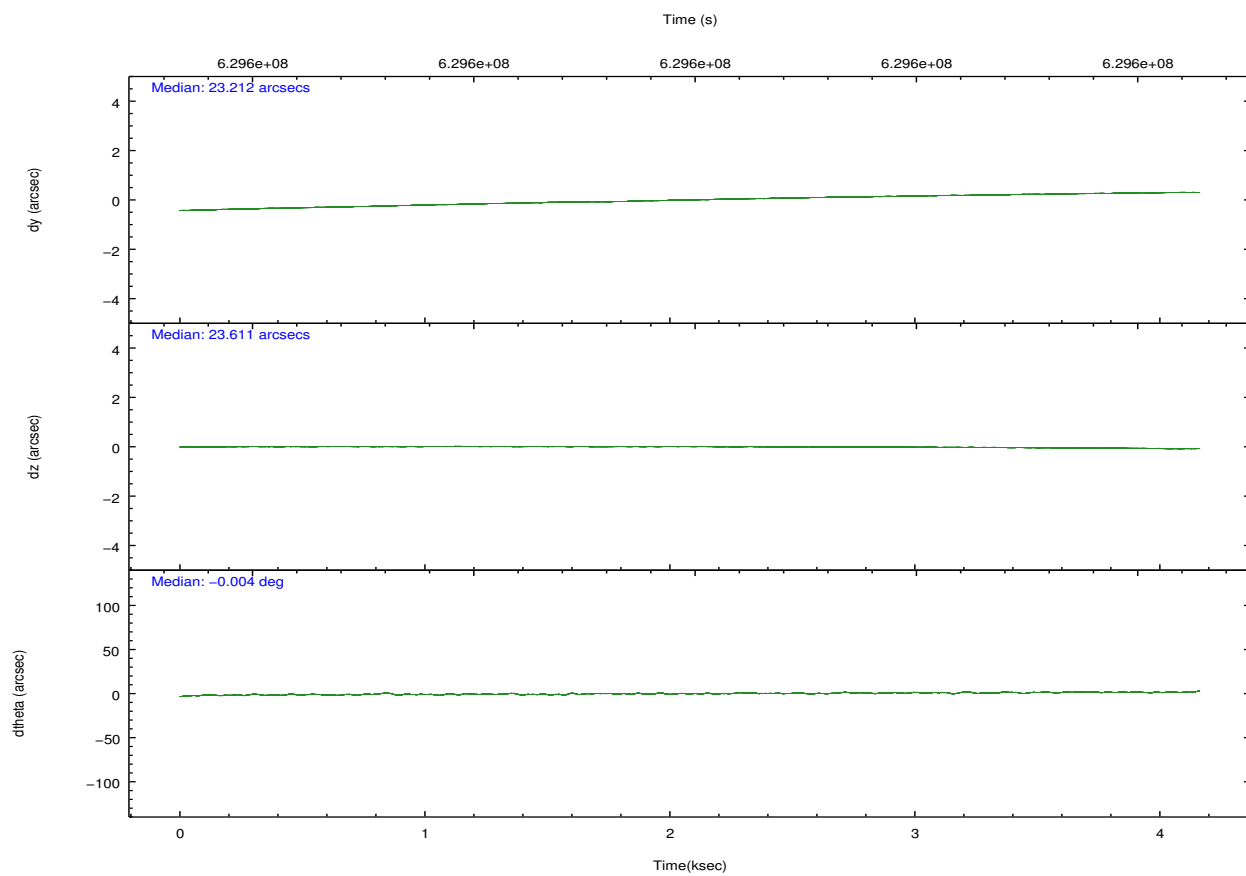
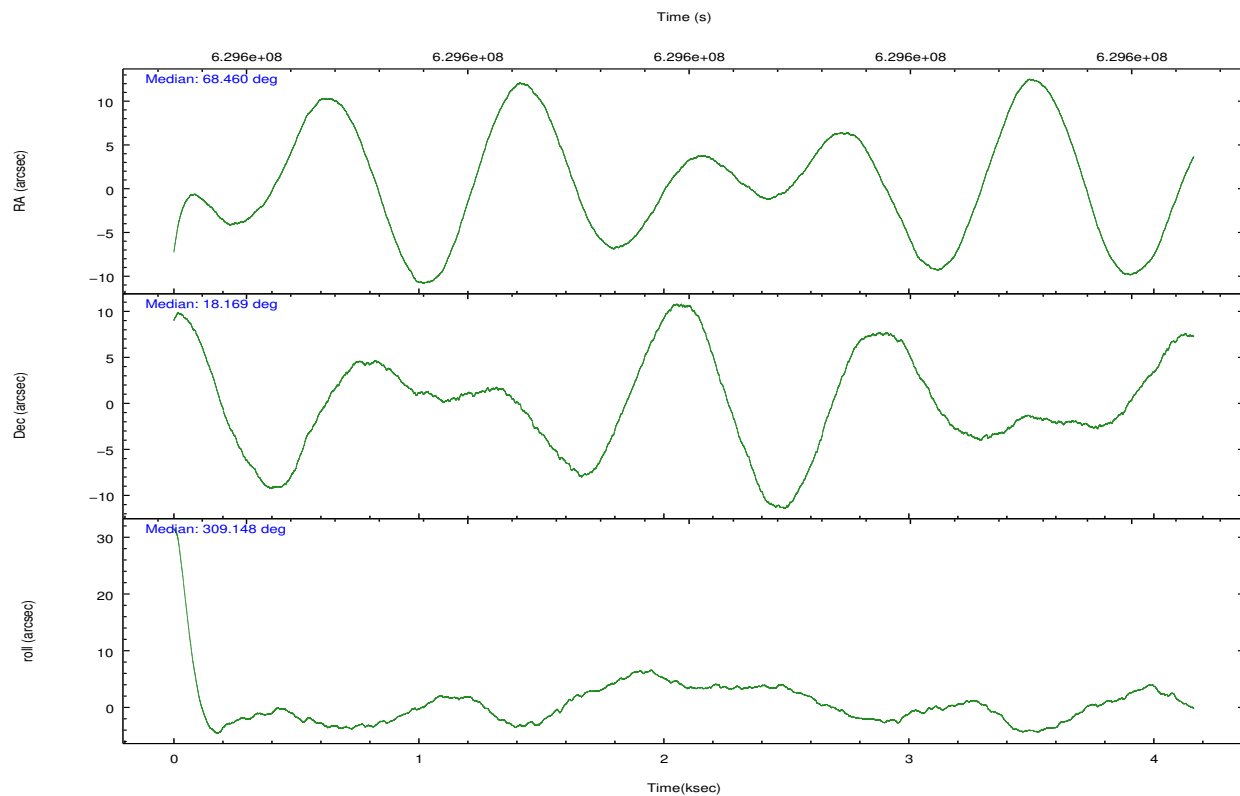
	ccd 7
grade 0 events	1448
	3%
grade 1 events	47
	0%
grade 2 events	3502
	9%
grade 3 events	1341
	3%
grade 4 events	1373
	3%
grade 5 events	3766
	10%
grade 6 events	8967
	24%
grade 7 events	16735
	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	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	68.433466	68.46051403159998	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.177916	18.16853038595789	Alternating exposures requested	N	N
[deg] Pointing Roll	309.006070	309.1543789704808	[s] Primary exposure time	0.000000	3
[s] Window start time (MET)	629503269.184000	629503269.184000			
[s] Window stop time (MET)	629676069.184000	629676069.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	629597073.184000	629595877.02307			
Observation start date	2017-12-14T00:03:24	2017-12-13T23:44:37			
[s] Observation end time (MET)	629601073.184000	629601844.57342			
Observation end date	2017-12-14T01:10:04	2017-12-14T01:24:04			
Read mode	TIMED	TIMED			

2.3 Aspect



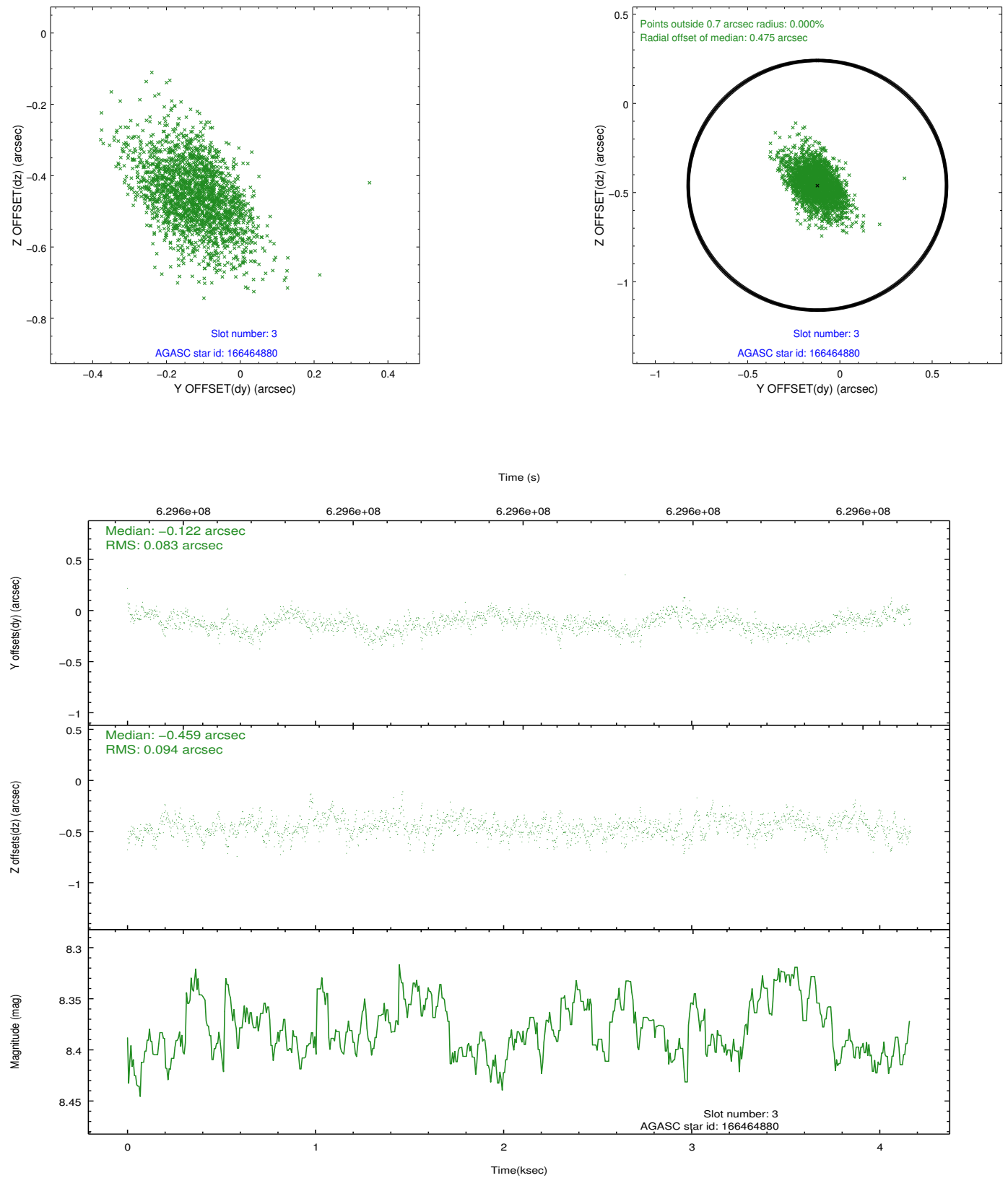


Slot Statistics

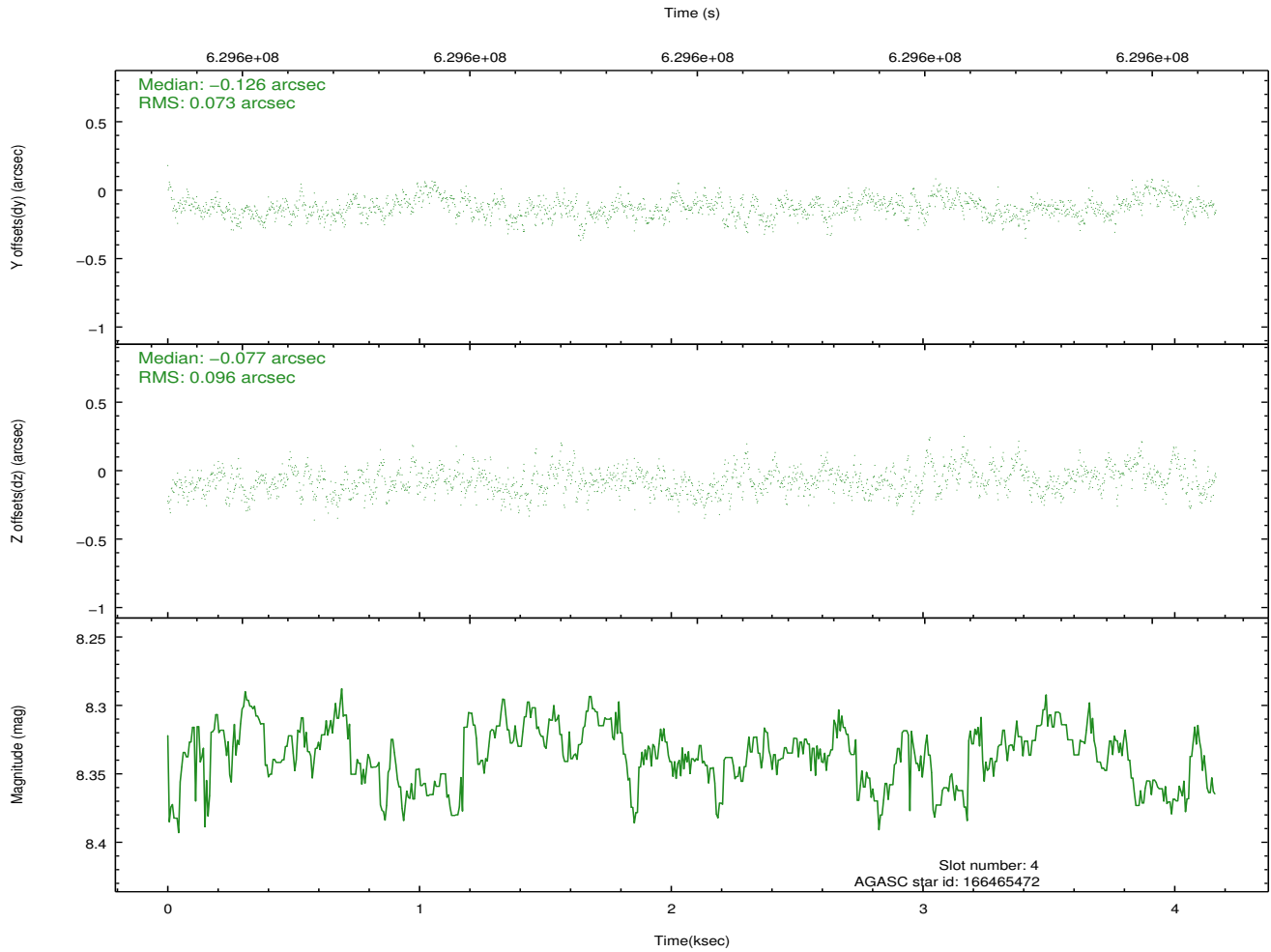
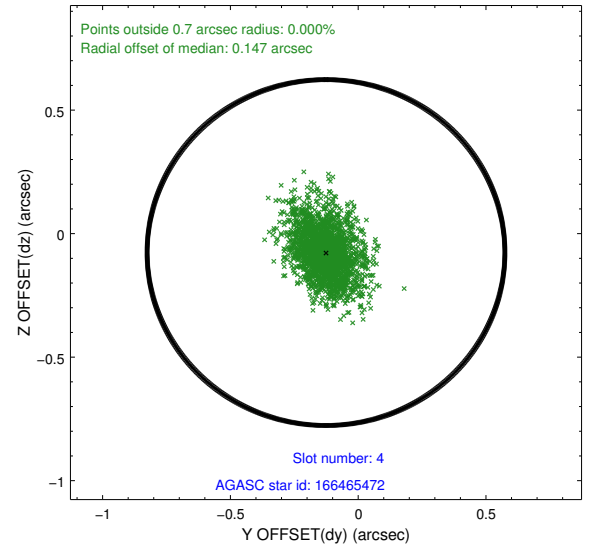
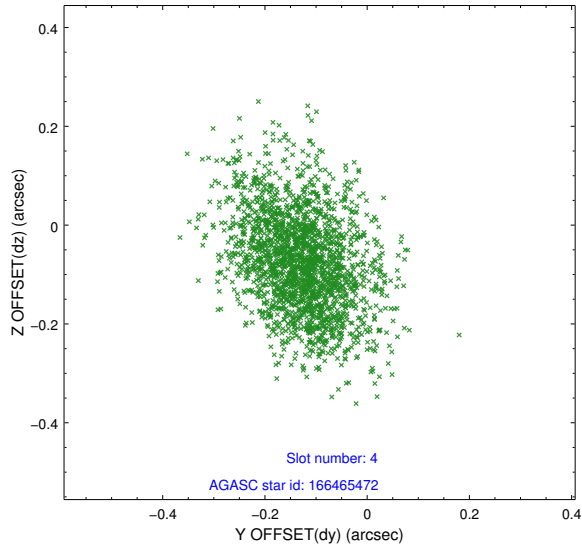
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.11	1016	0.193	0.092	0.007	0.012	0.000000	0.000000	919.79	-1740.72
1	FID		ACIS-S-2	7.03	1016	-0.303	-0.171	0.008	0.012	0.000000	0.000000	-775.79	-1747.04
2	FID		ACIS-S-6	7.30	1016	0.089	0.083	0.007	0.011	0.000000	0.000000	384.72	799.07
3	GUIDE	used	166464880	8.38	2032	-0.122	-0.459	0.129	0.226	68.836504	17.817954	1875.93	258.75
4	GUIDE	used	166465472	8.34	2028	-0.126	-0.077	0.127	0.213	68.719684	18.413404	-42.40	1294.10
5	GUIDE	used	166468240	9.03	2025	0.102	0.345	0.152	0.251	68.167699	17.861525	312.70	-1423.11
6	GUIDE	used	166472048	8.56	2031	-0.127	-0.260	0.156	0.251	69.128417	17.932418	2182.19	1295.81
7	GUIDE	used	166338584	9.31	2027	0.285	0.451	0.192	0.329	67.904616	17.709782	170.19	-2465.91

2.4 Star Slots

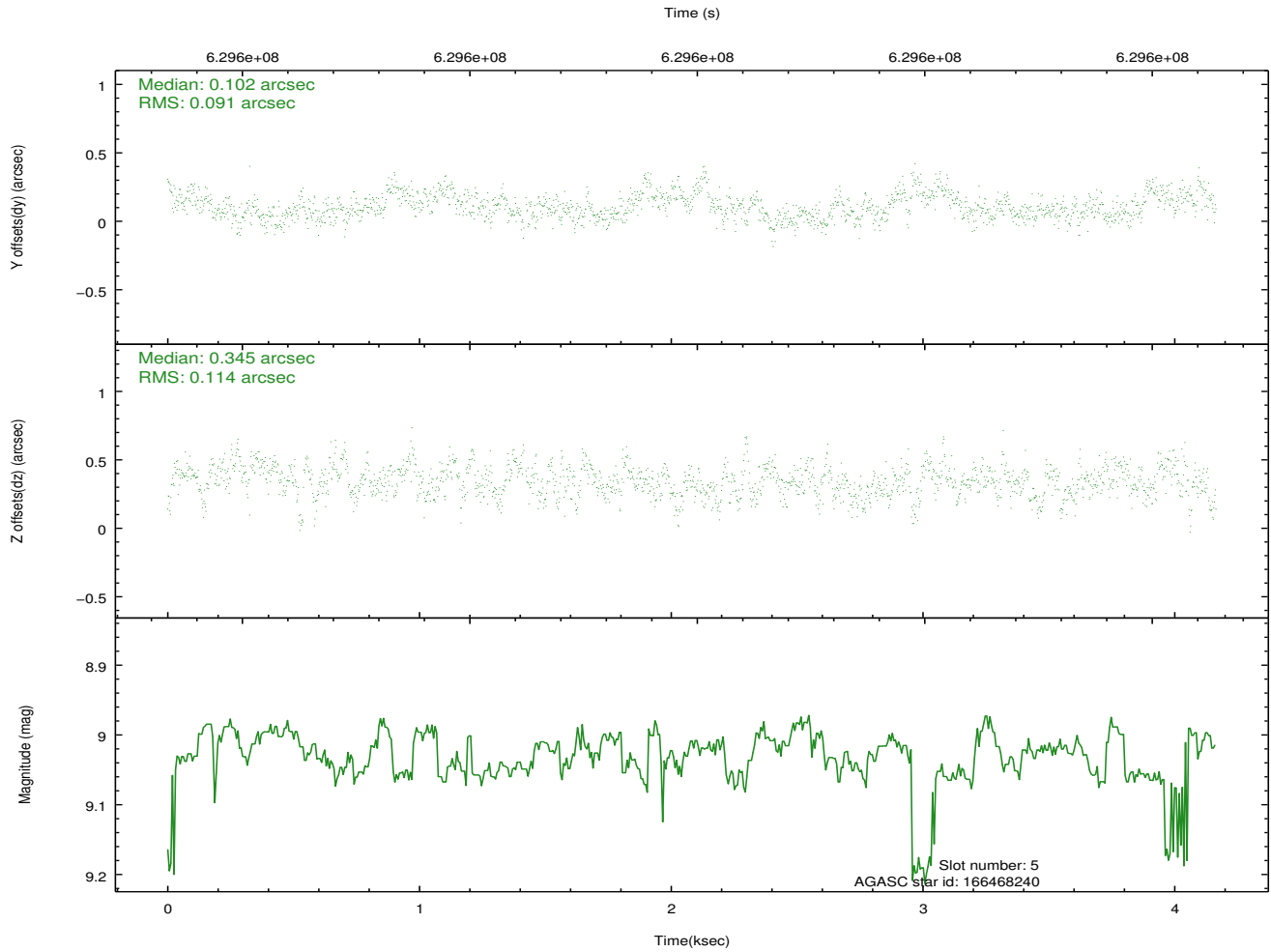
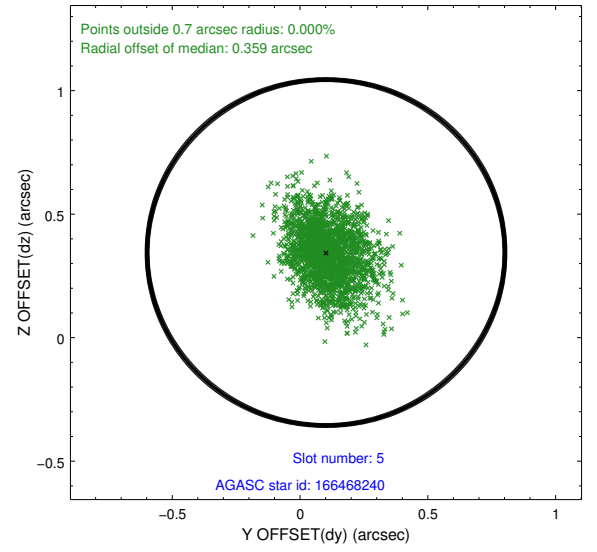
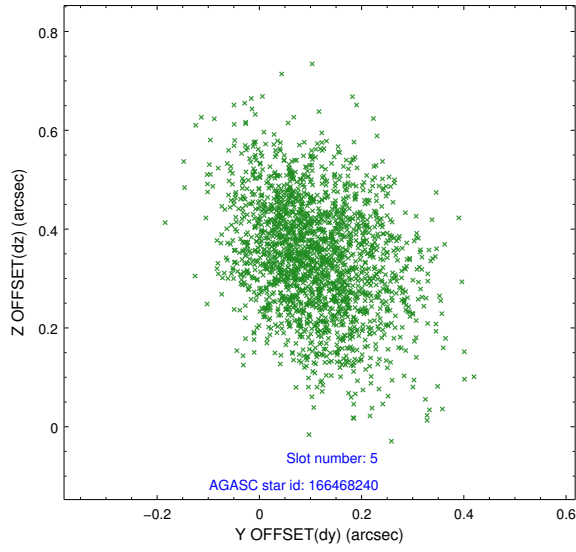
2.4.1 Slot 3



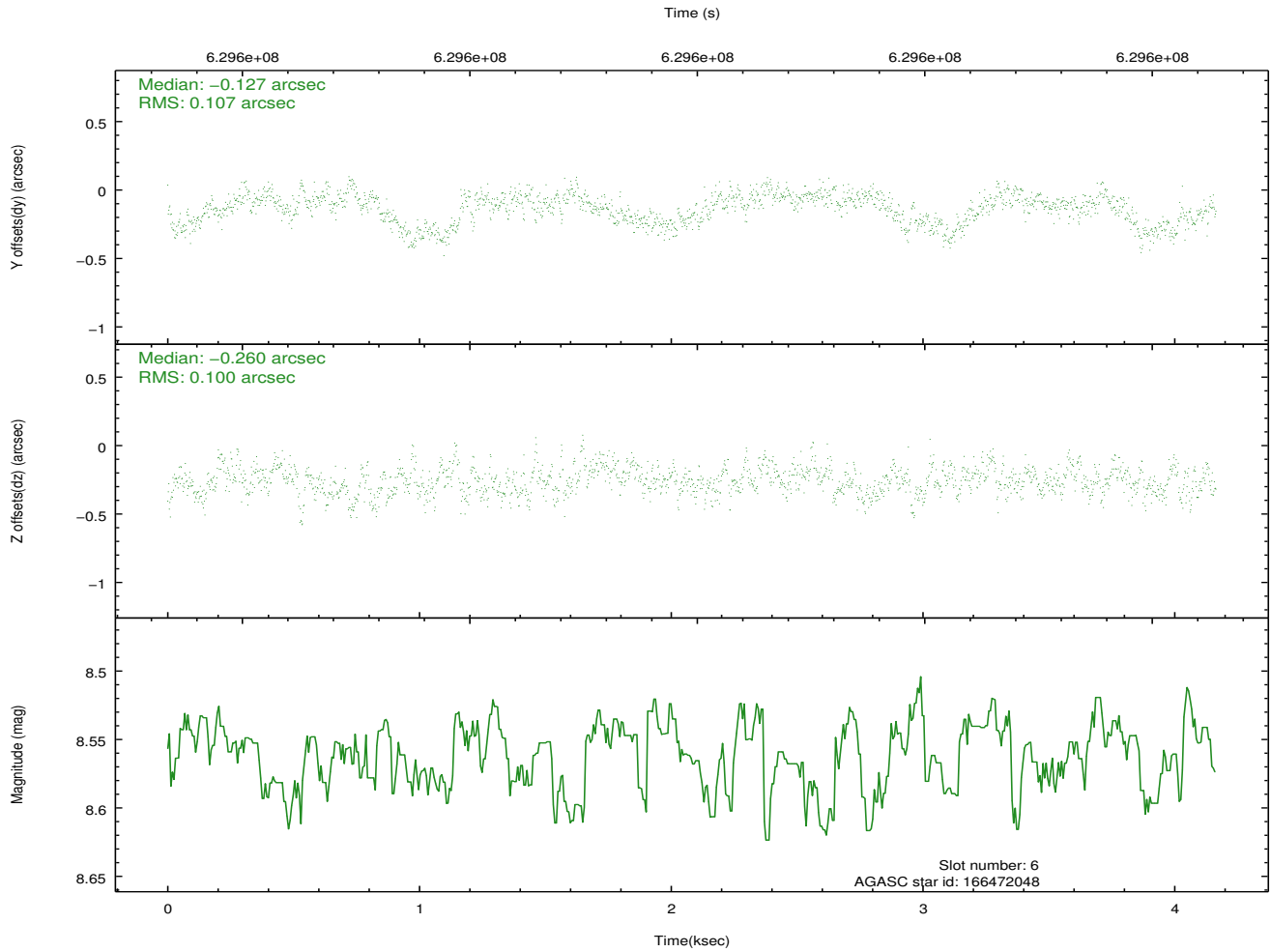
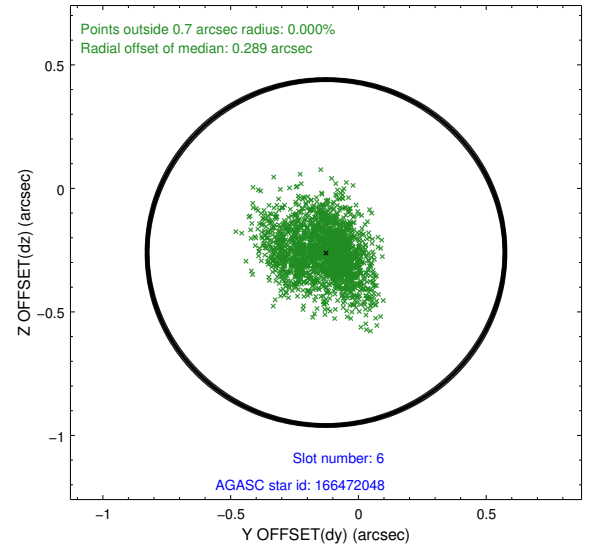
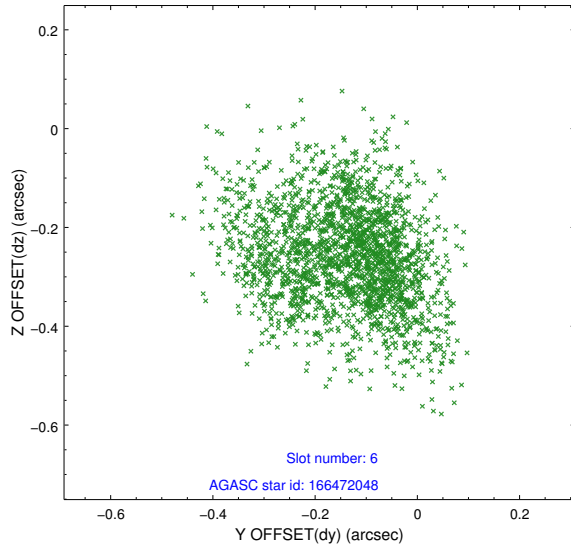
2.4.2 Slot 4



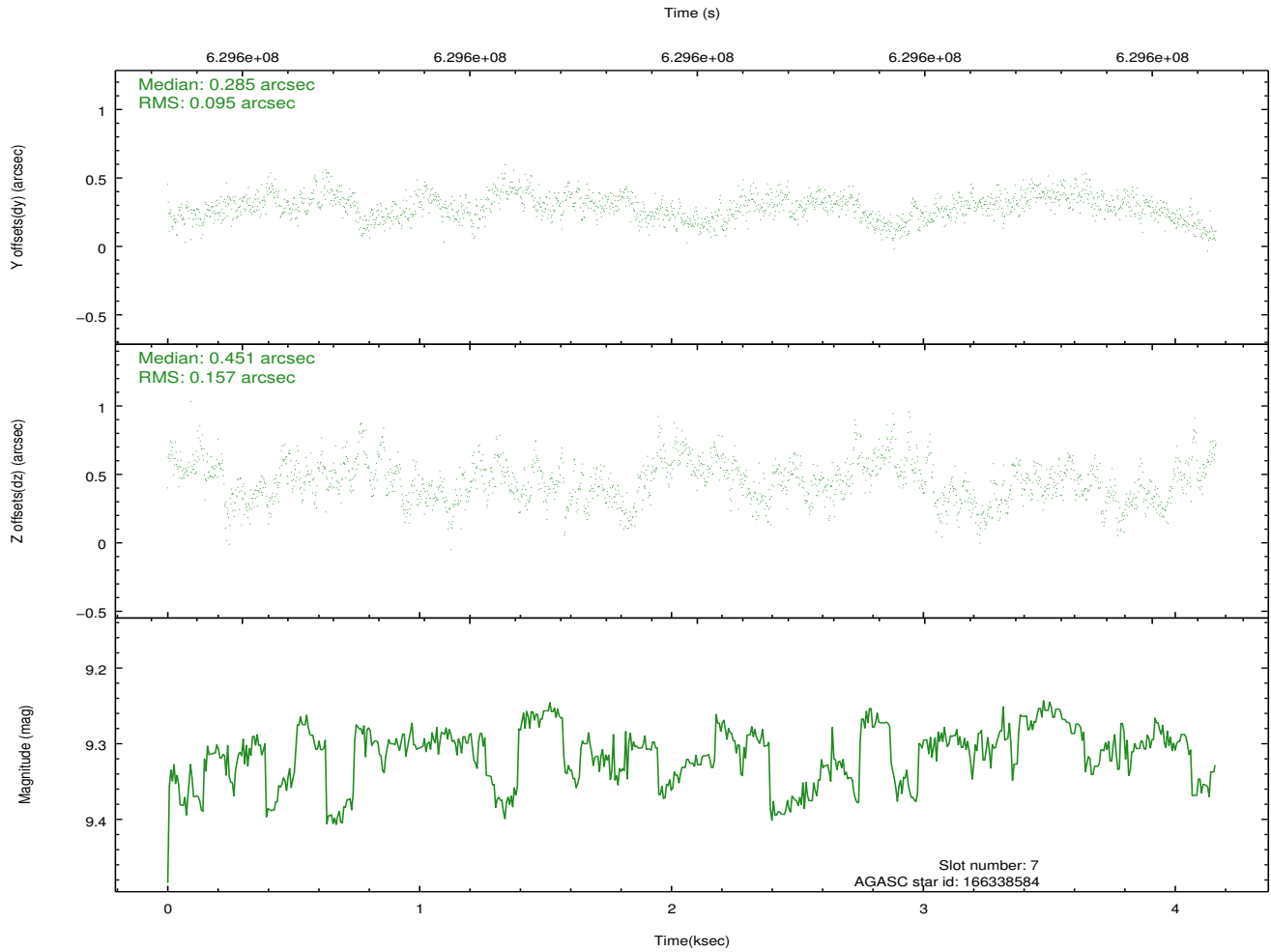
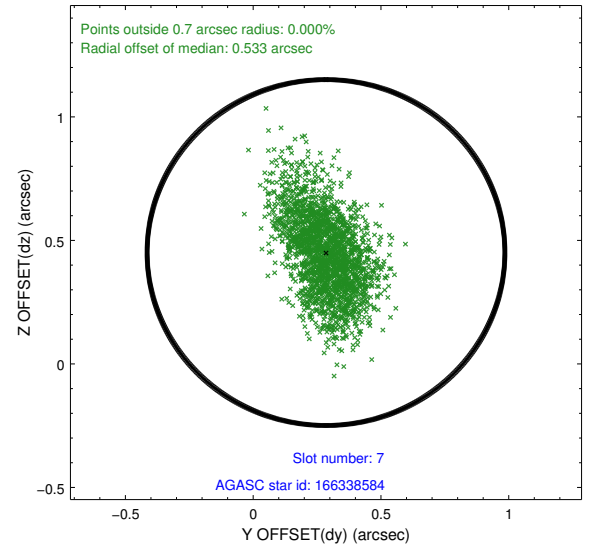
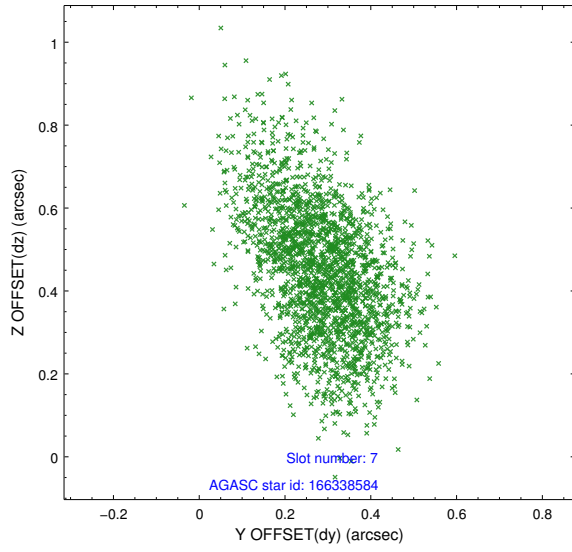
2.4.3 Slot 5



2.4.4 Slot 6

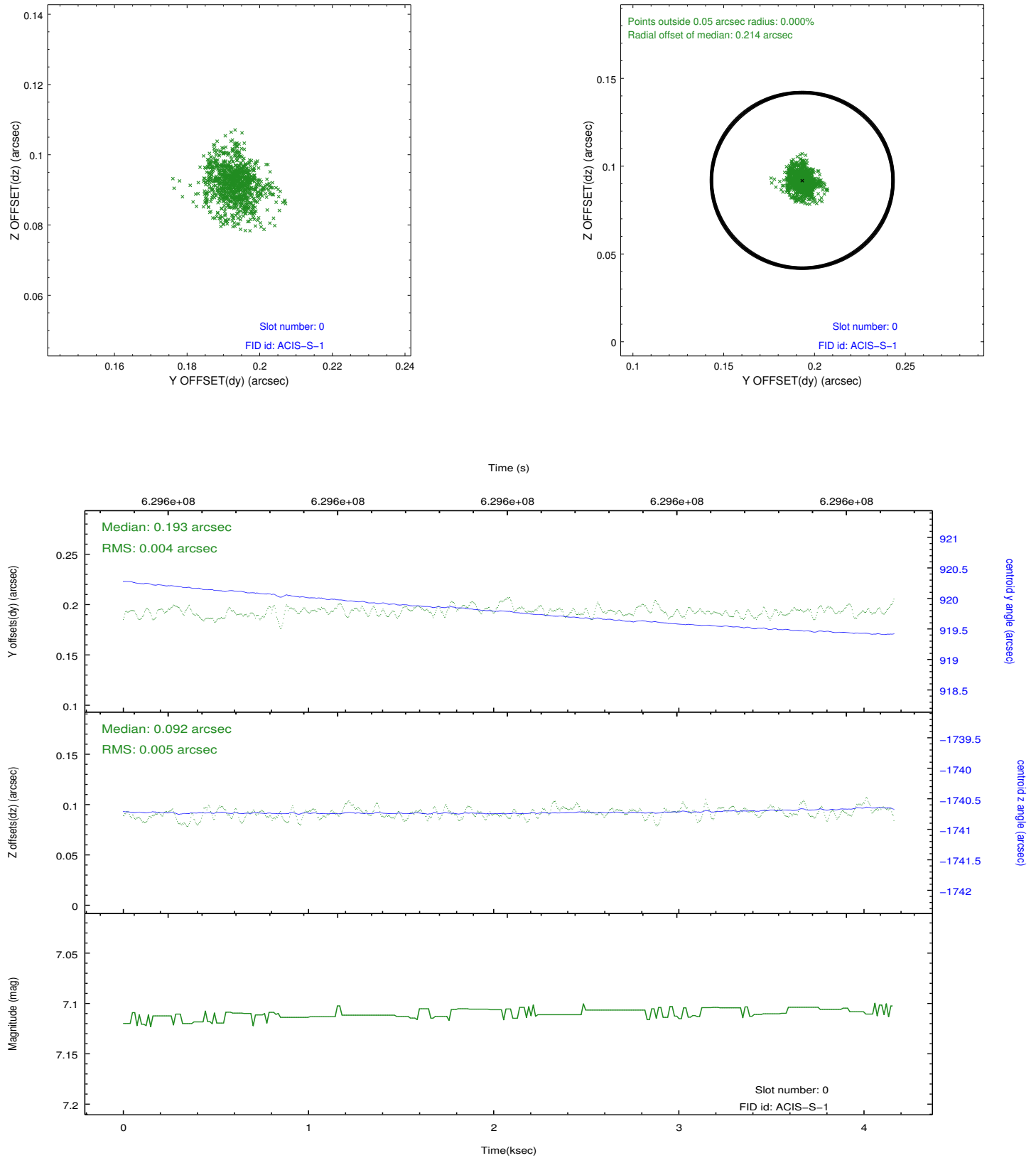


2.4.5 Slot 7

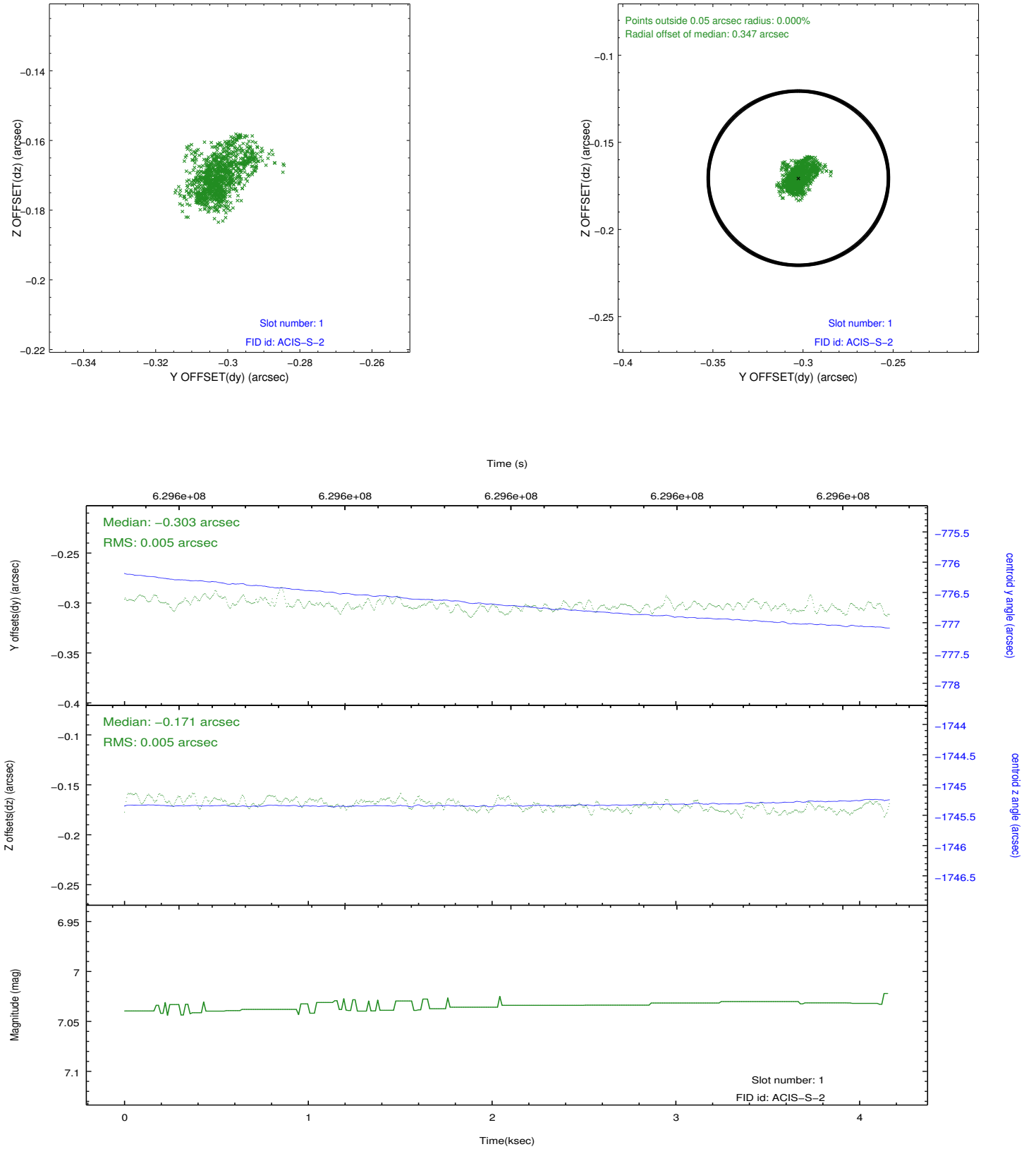


2.5 FID Slots

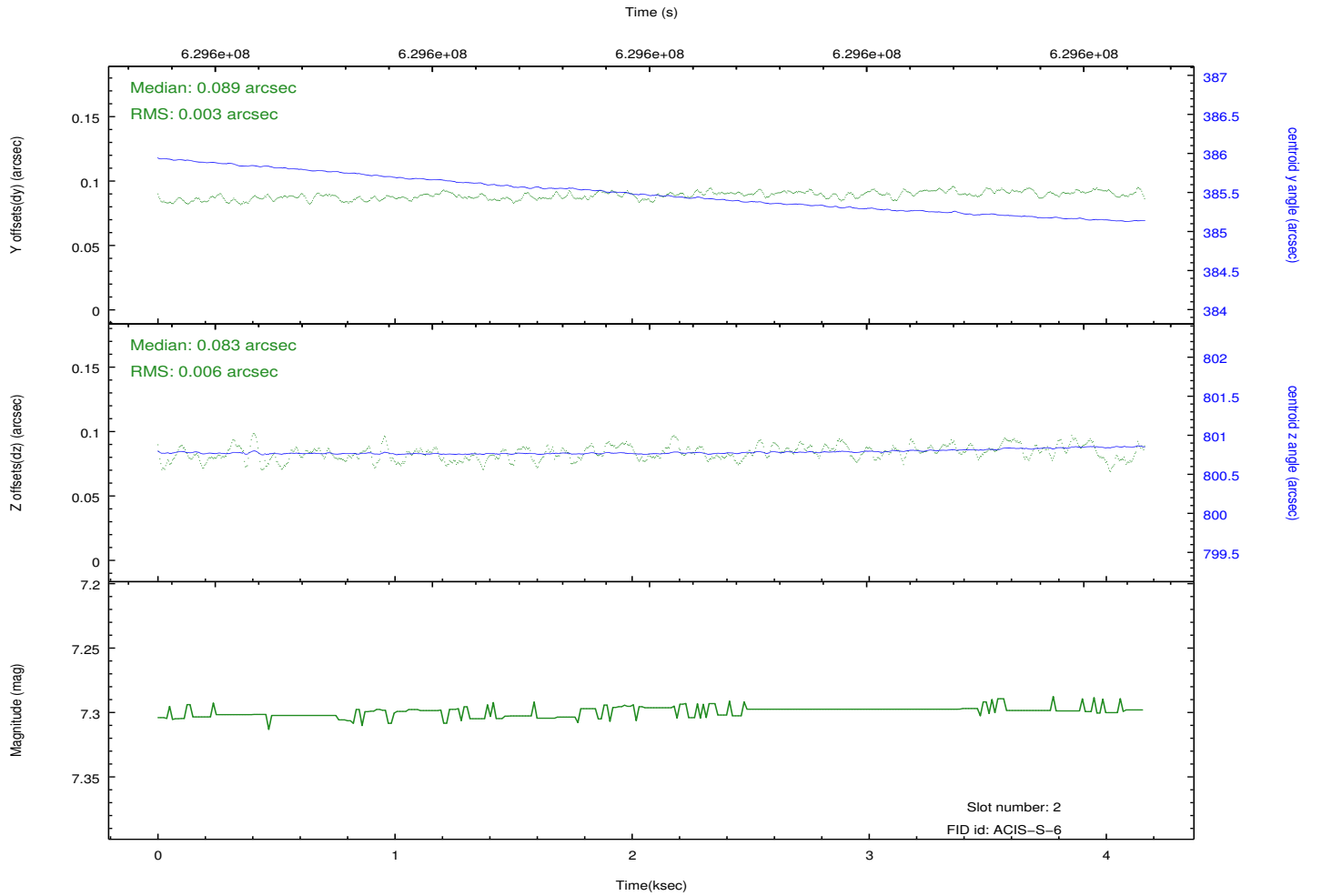
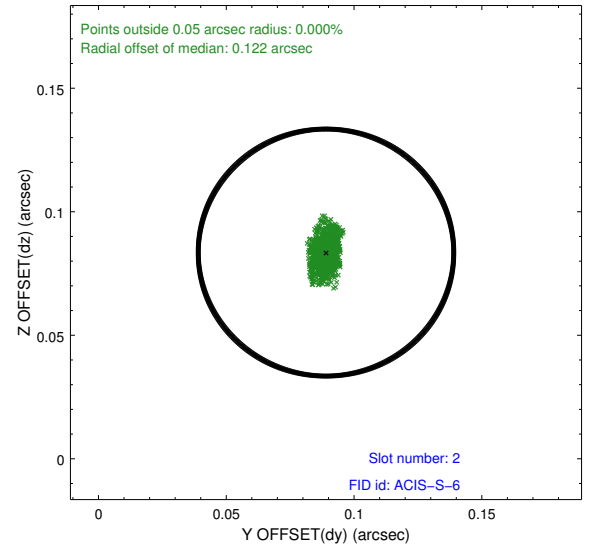
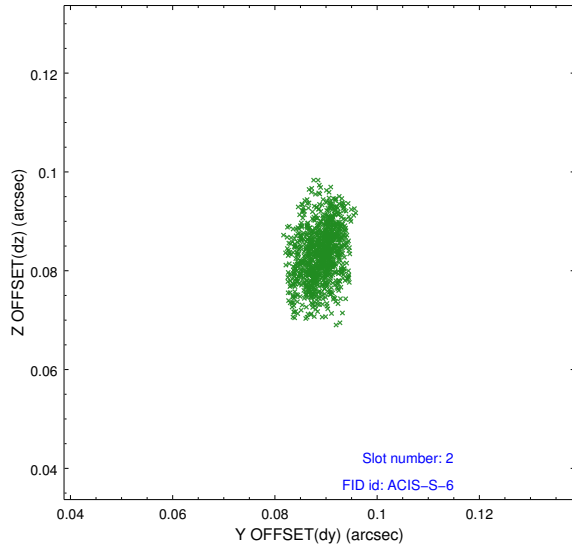
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.12.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.092

A.2 Comments

Window preference met.