

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20870 - L2 Version 1
Chandra X-Ray Center

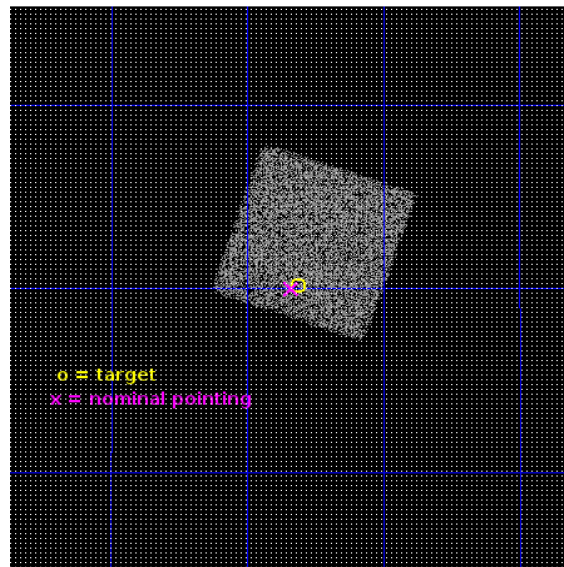
L2 Processing Date : Dec 21 2017

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1 Front

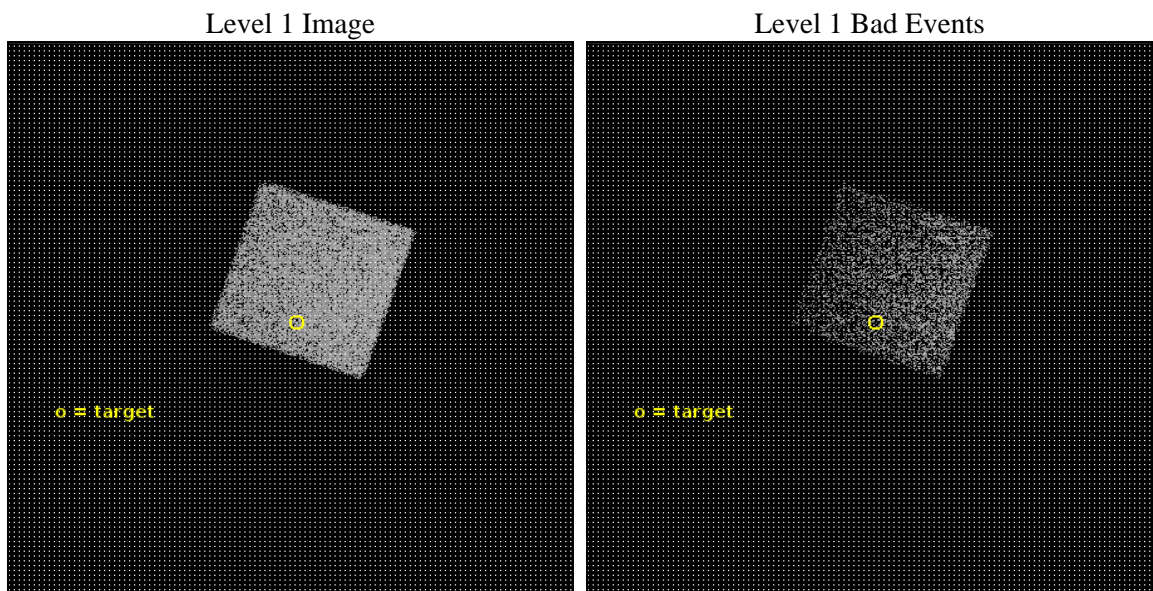
seq_num	201199	Sequence number
obs_id	20870	Observation id
title	Characterizing X-ray driven molecular chemistry in a young protoplanetary disk	Proposal title
observer	Lauren Cleeves	Principal investigator
object	DM Tau	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	68.452917	Observer's specified target RA [deg]
dec_targ	18.169417	Observer's specified target Dec [deg]
ra_nom	68.459369748911	Nominal RA [deg]
dec_nom	18.166480104306	Nominal Dec [deg]
roll_nom	288.93822633341	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	16299	Number of level 2 events



2 OBI

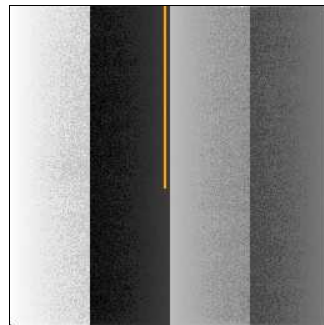
2.1 OBI

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	2017-12-21T19:44:10	Date and time of file creation	l1events	37811	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

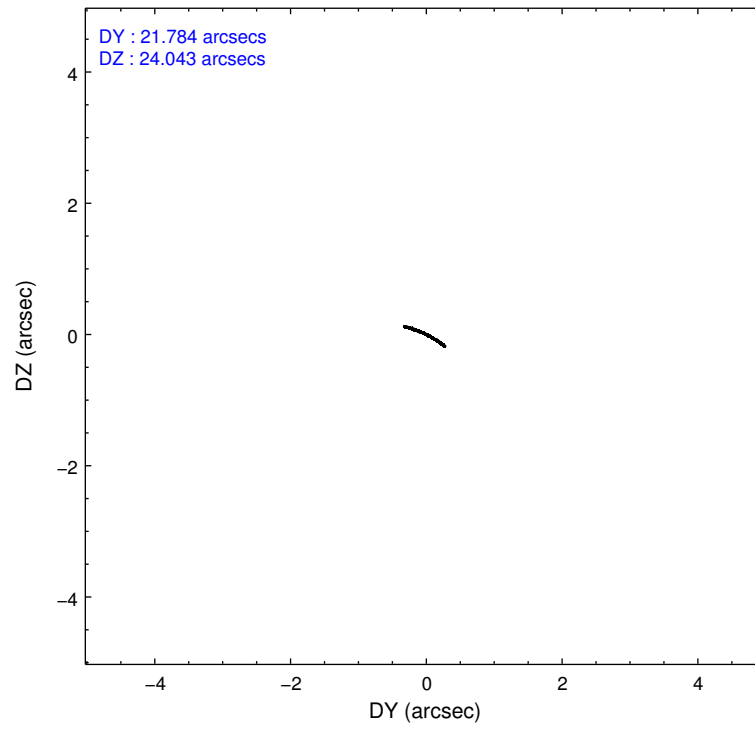
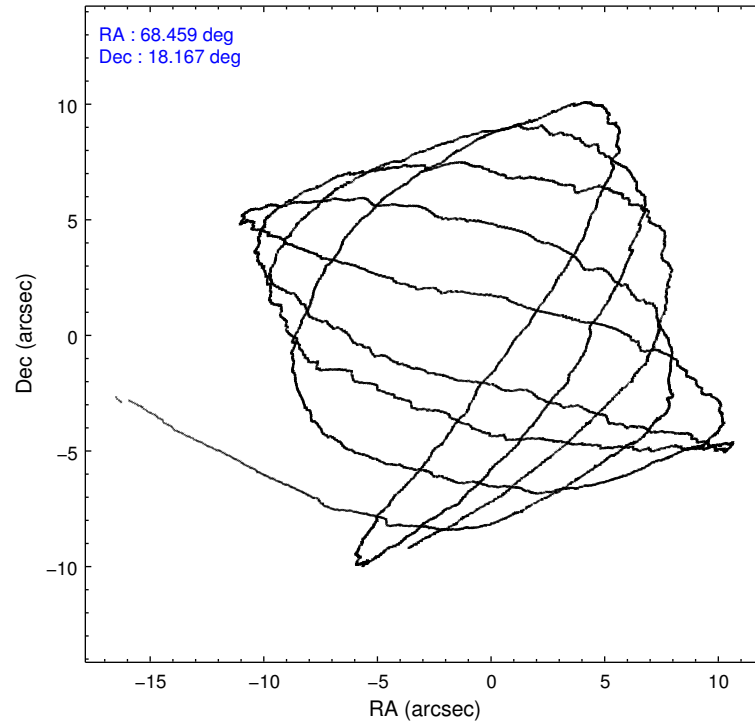
	ccd 7
level 1 events	37811
rejected events	21104
rejected %	55%

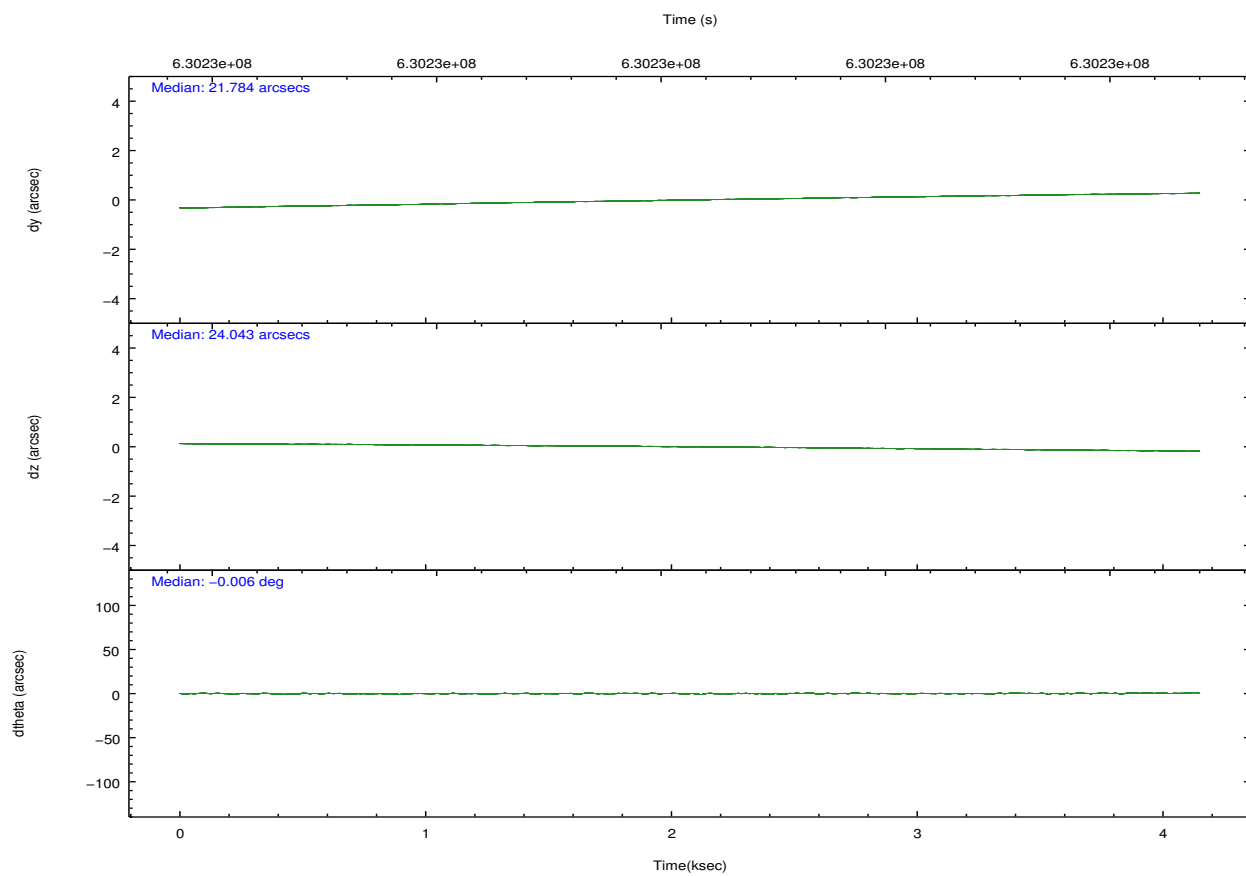
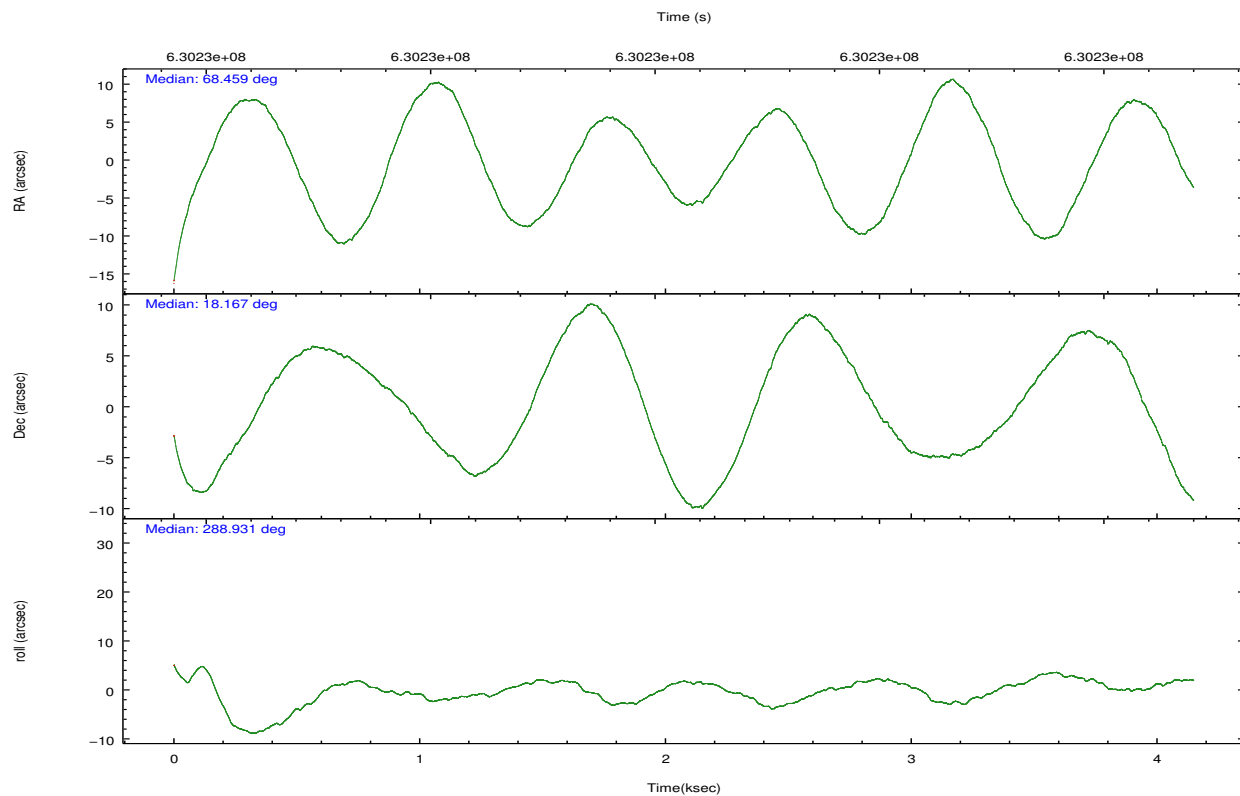
	ccd 7
grade 0 events	1419
	3%
grade 1 events	60
	0%
grade 2 events	3549
	9%
grade 3 events	1329
	3%
grade 4 events	1324
	3%
grade 5 events	3801
	10%
grade 6 events	9099
	24%
grade 7 events	17230
	45%

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	68.437251	68.45936974891063	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.184253	18.16648010430596	Alternating exposures requested	N	N
[deg] Pointing Roll	288.788490	288.9382263334072	[s] Primary exposure time	0.000000	3
[s] Window start time (MET)	630108069.184000	630108069.184000			
[s] Window stop time (MET)	630280869.184000	630280869.184000			
[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)	630226185.184000	630225010.27254			
Observation start date	2017-12-21T06:48:36	2017-12-21T06:30:10			
[s] Observation end time (MET)	630230185.184000	630231702.49793			
Observation end date	2017-12-21T07:55:16	2017-12-21T08:21:42			
Read mode	TIMED	TIMED			

2.3 Aspect



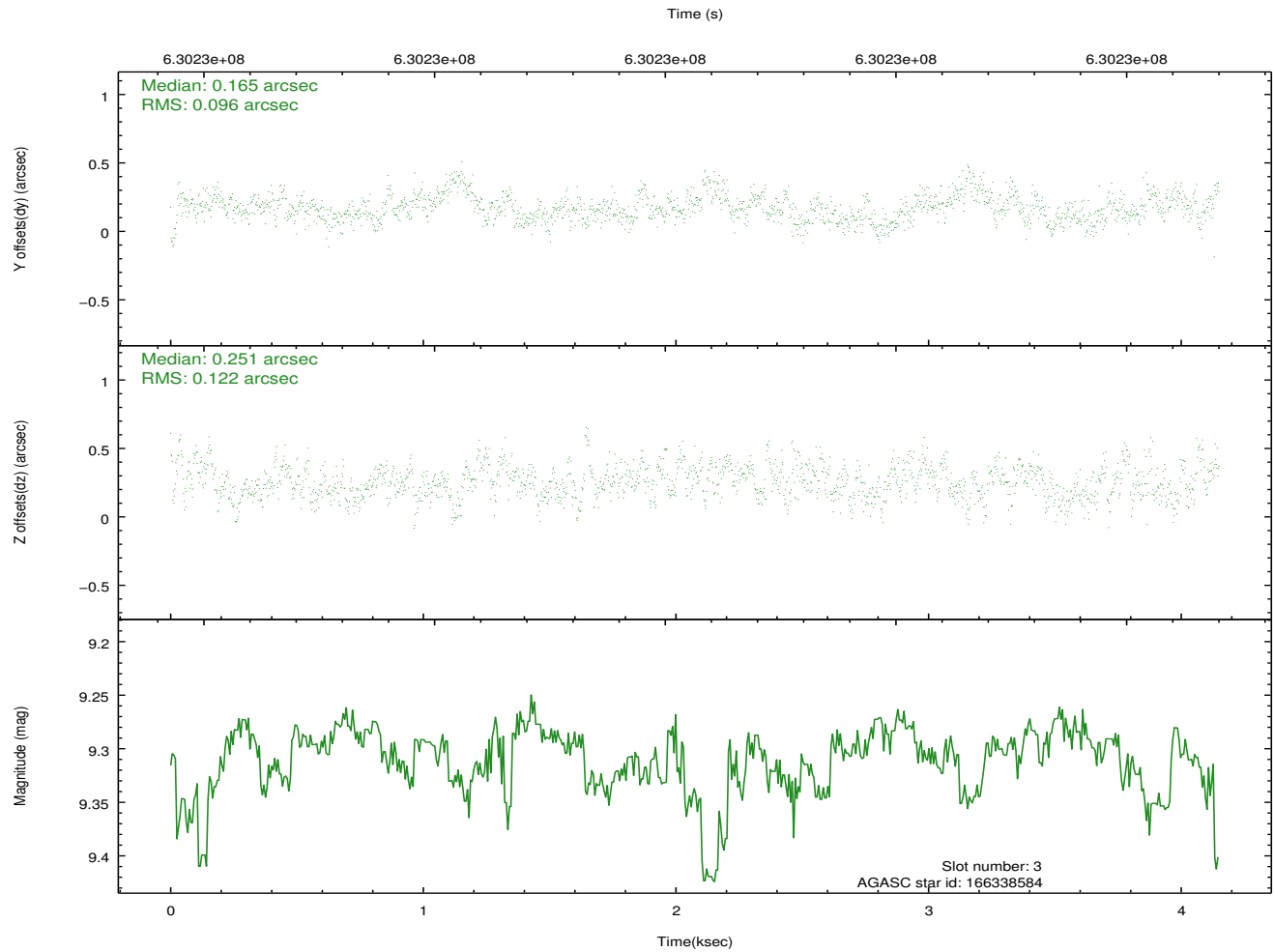
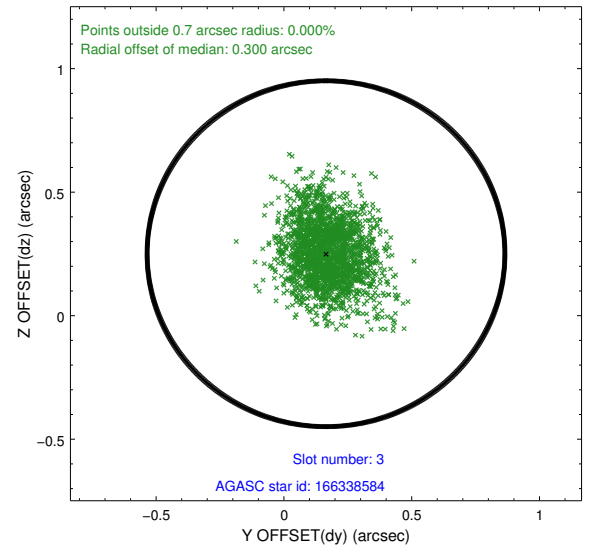
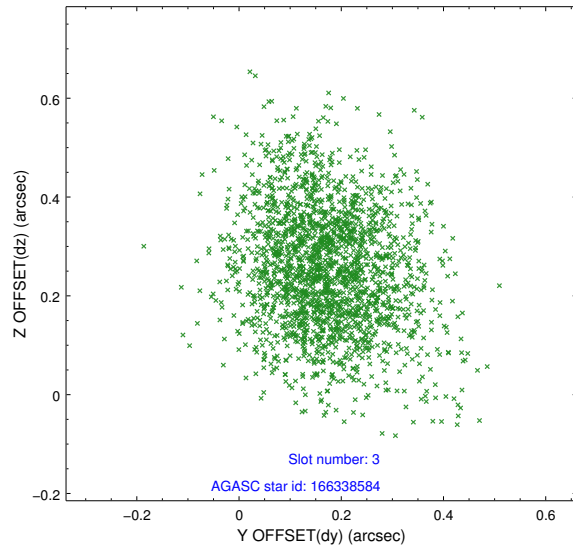


Slot Statistics

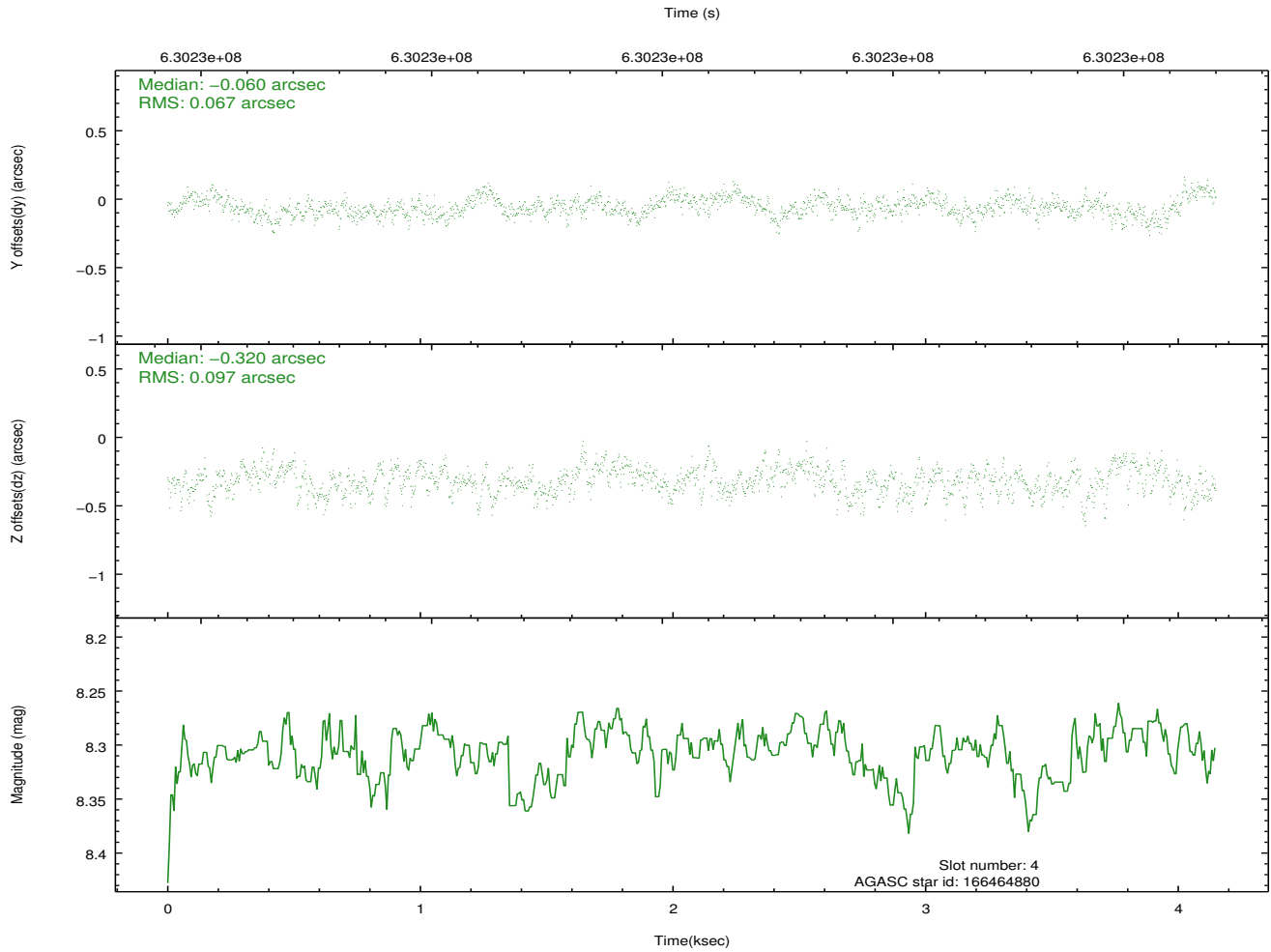
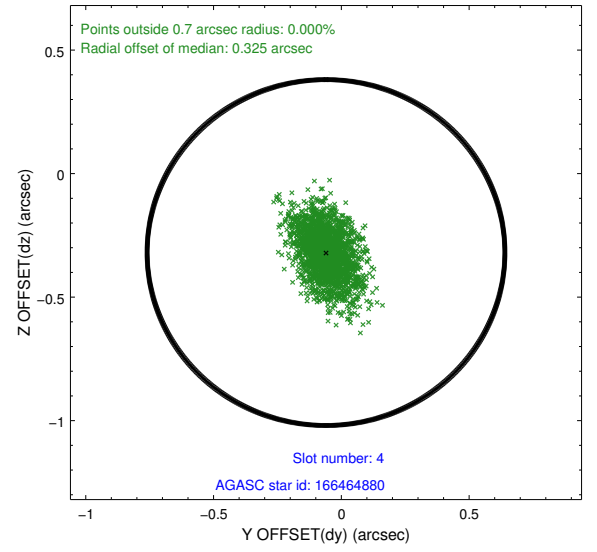
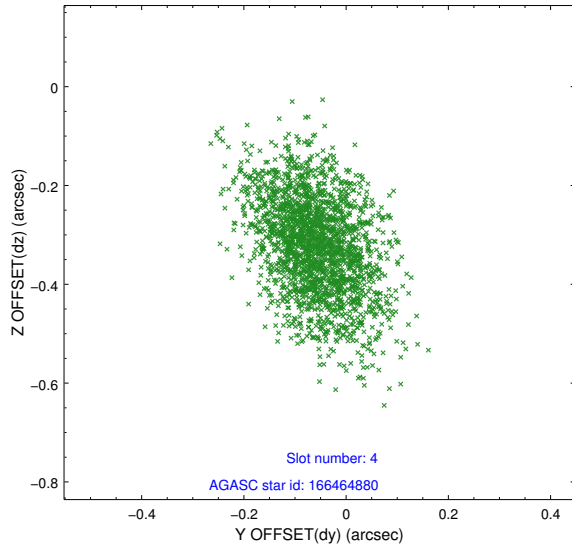
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	1013	-0.242	-0.080	0.011	0.020	0.000000	0.000000	-775.11	-1745.76
1	FID		ACIS-S-4	7.08	1013	0.490	0.139	0.006	0.010	0.000000	0.000000	2138.14	161.47
2	FID		ACIS-S-5	7.10	1013	-0.279	-0.050	0.013	0.021	0.000000	0.000000	-1826.14	156.53
3	GUIDE	used	166338584	9.31	2025	0.165	0.251	0.163	0.272	67.904616	17.709782	1028.29	-2276.77
4	GUIDE	used	166464880	8.30	2025	-0.060	-0.320	0.124	0.206	68.836504	17.817954	1688.41	869.79
5	GUIDE	used	166465472	8.33	2022	-0.014	0.127	0.116	0.206	68.719684	18.413404	-469.87	1179.57
6	GUIDE	used	166468240	9.06	2022	-0.010	0.177	0.215	0.330	68.167699	17.861525	802.32	-1247.91
7	GUIDE	used	166472048	8.57	2024	-0.085	-0.249	0.147	0.244	69.128417	17.932418	1616.99	1949.77

2.4 Star Slots

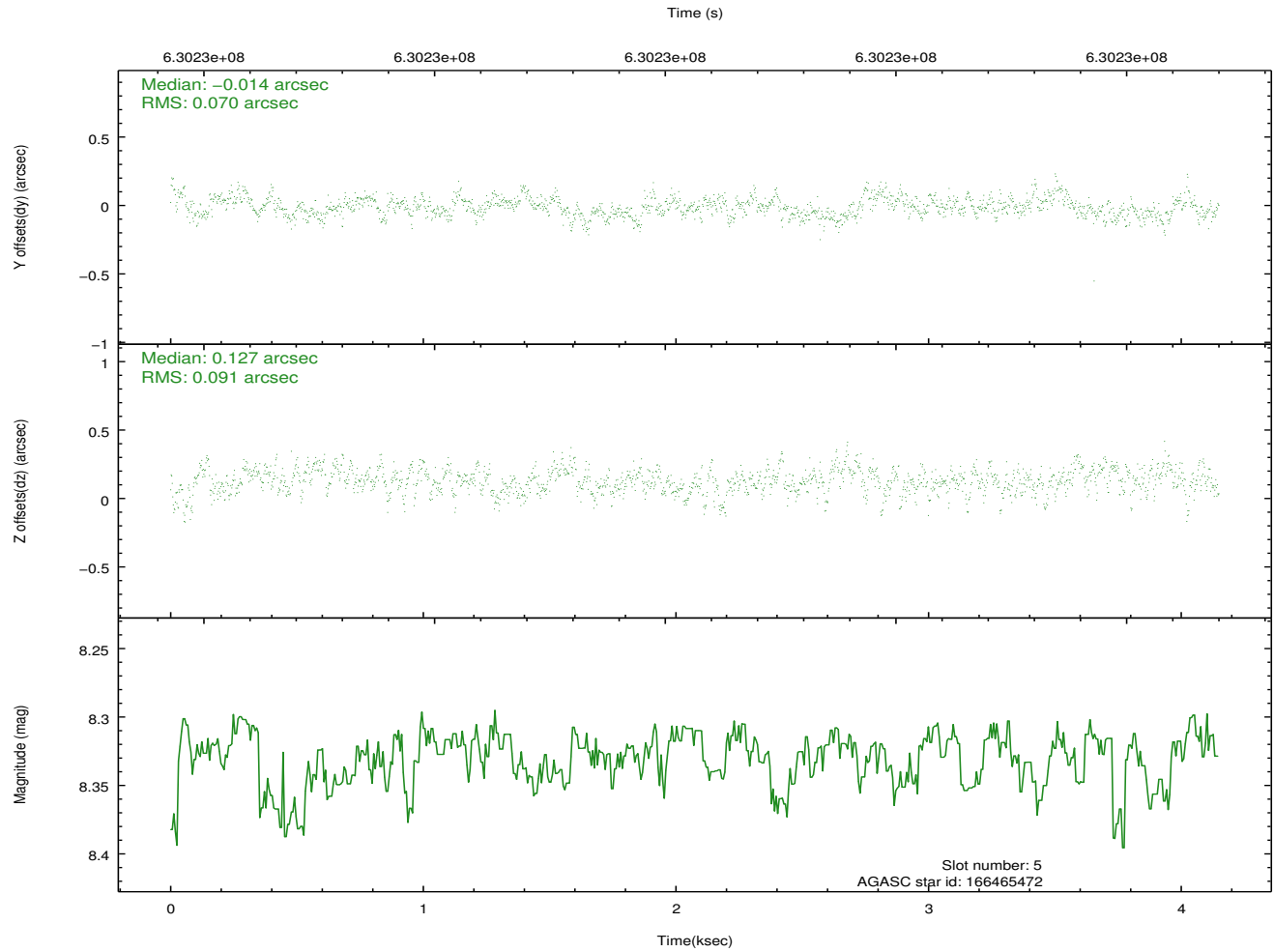
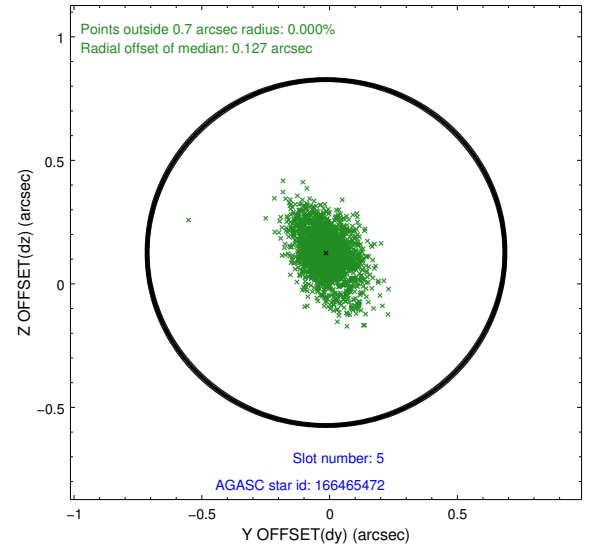
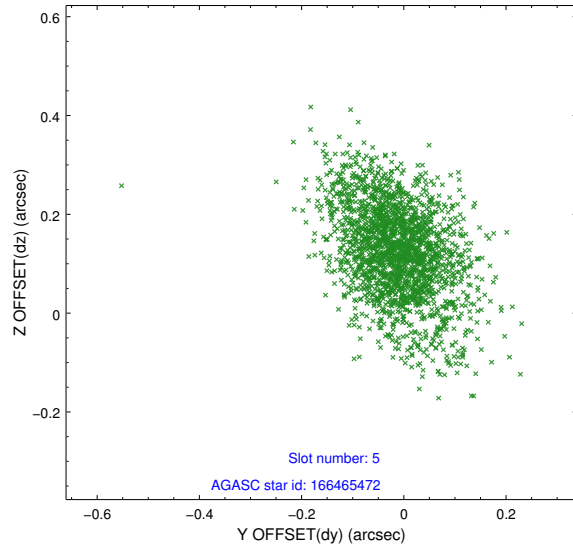
2.4.1 Slot 3



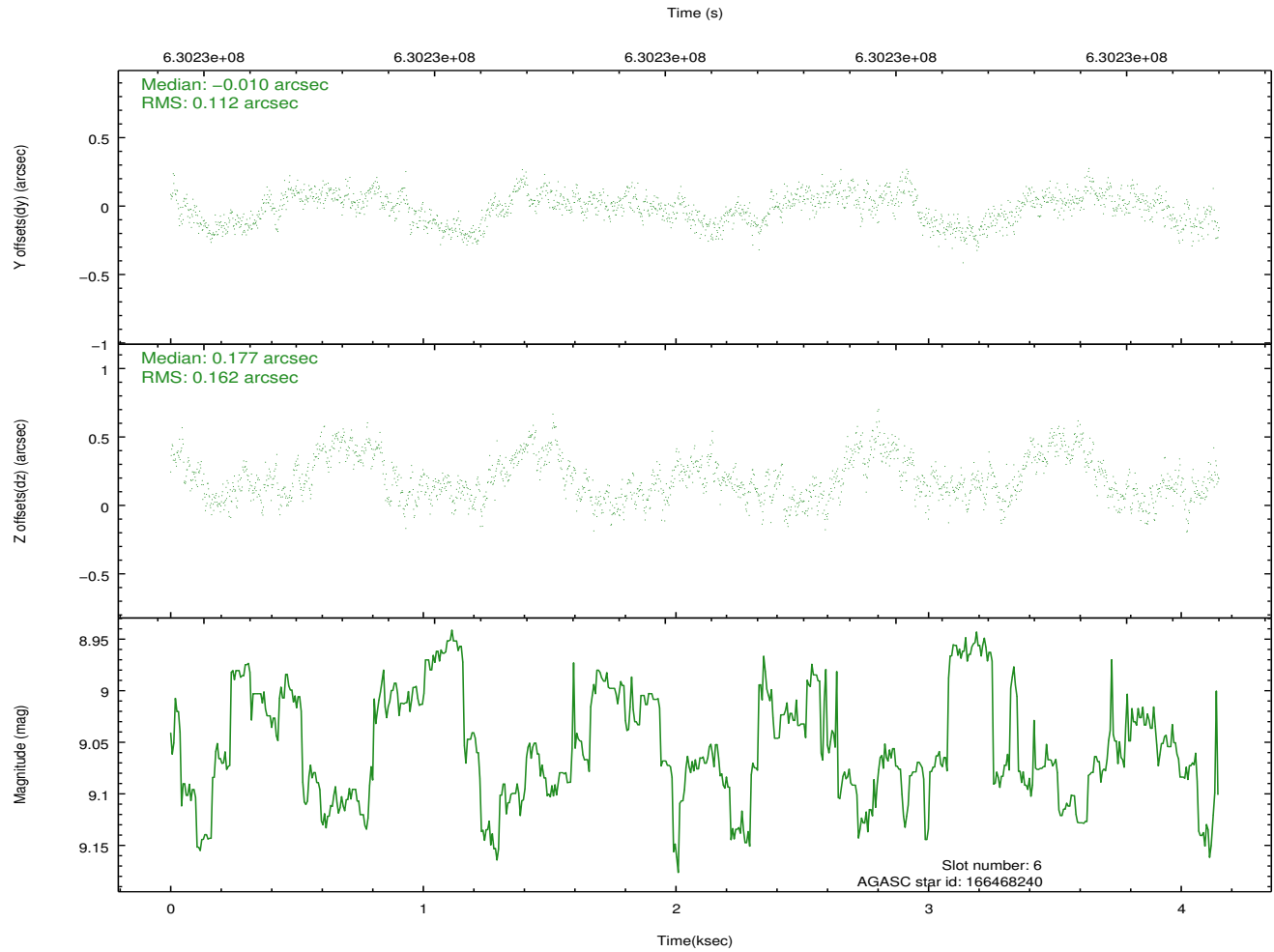
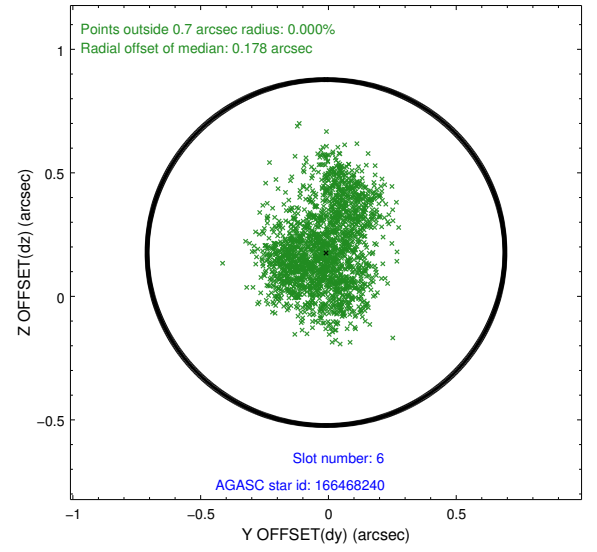
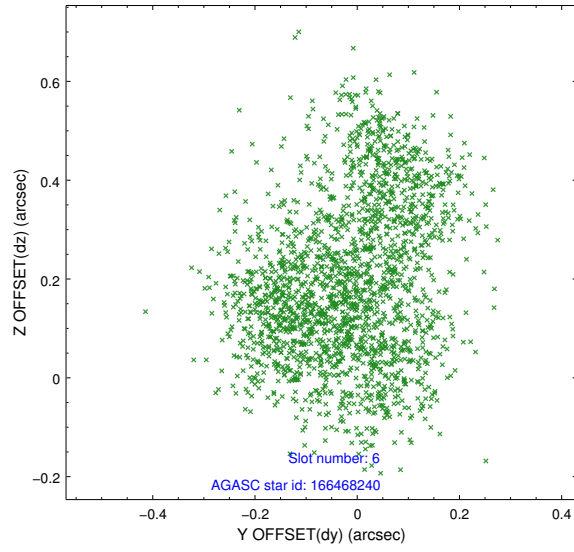
2.4.2 Slot 4



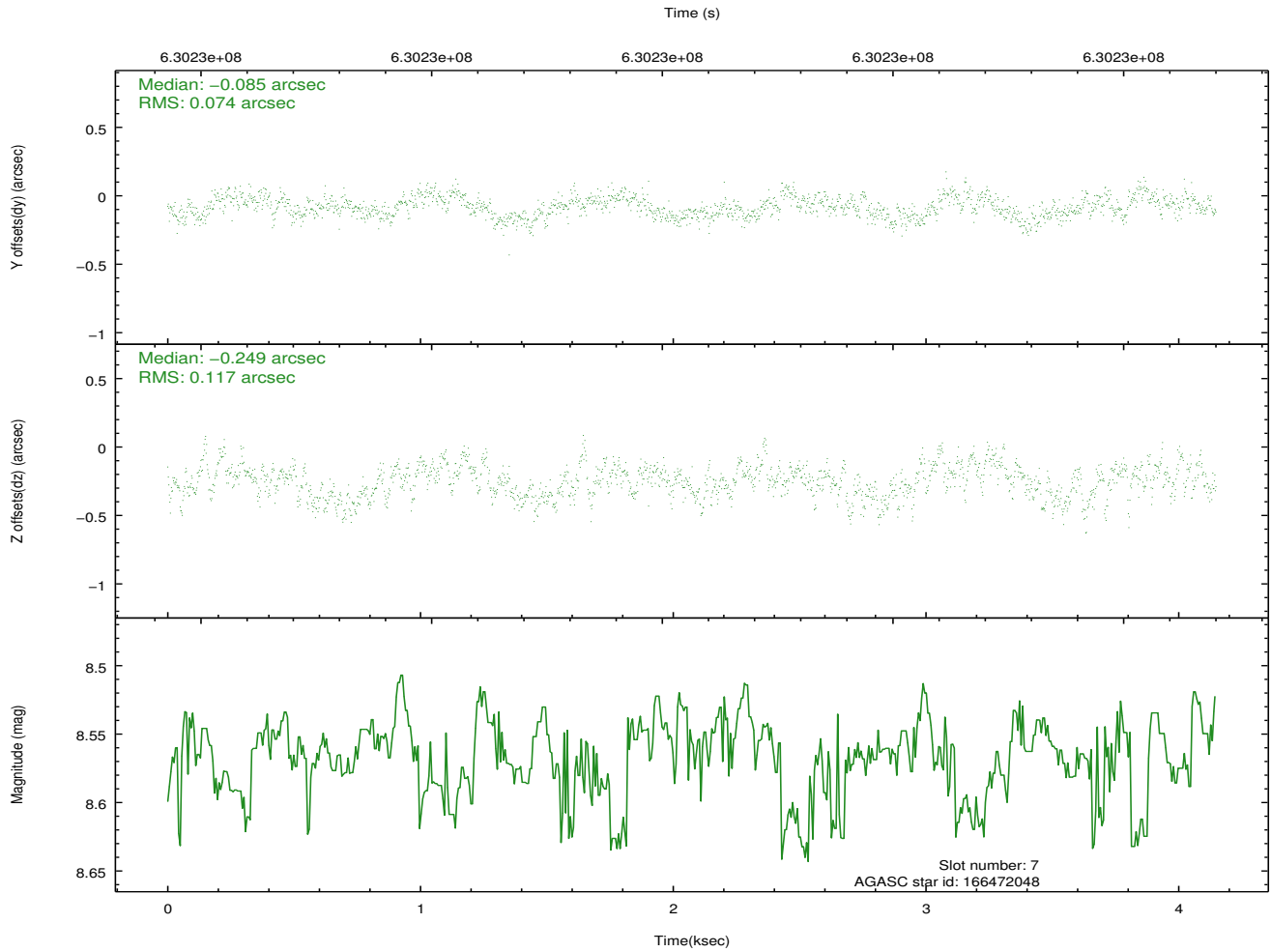
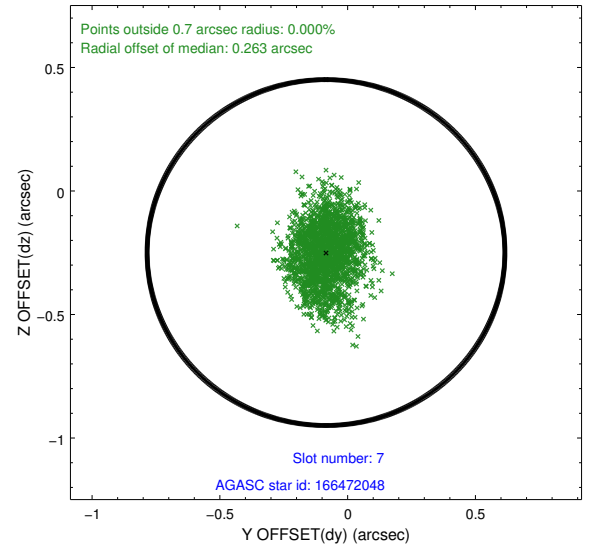
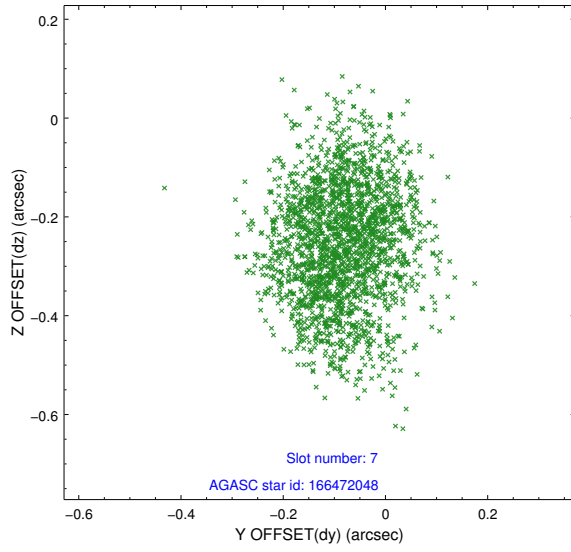
2.4.3 Slot 5



2.4.4 Slot 6

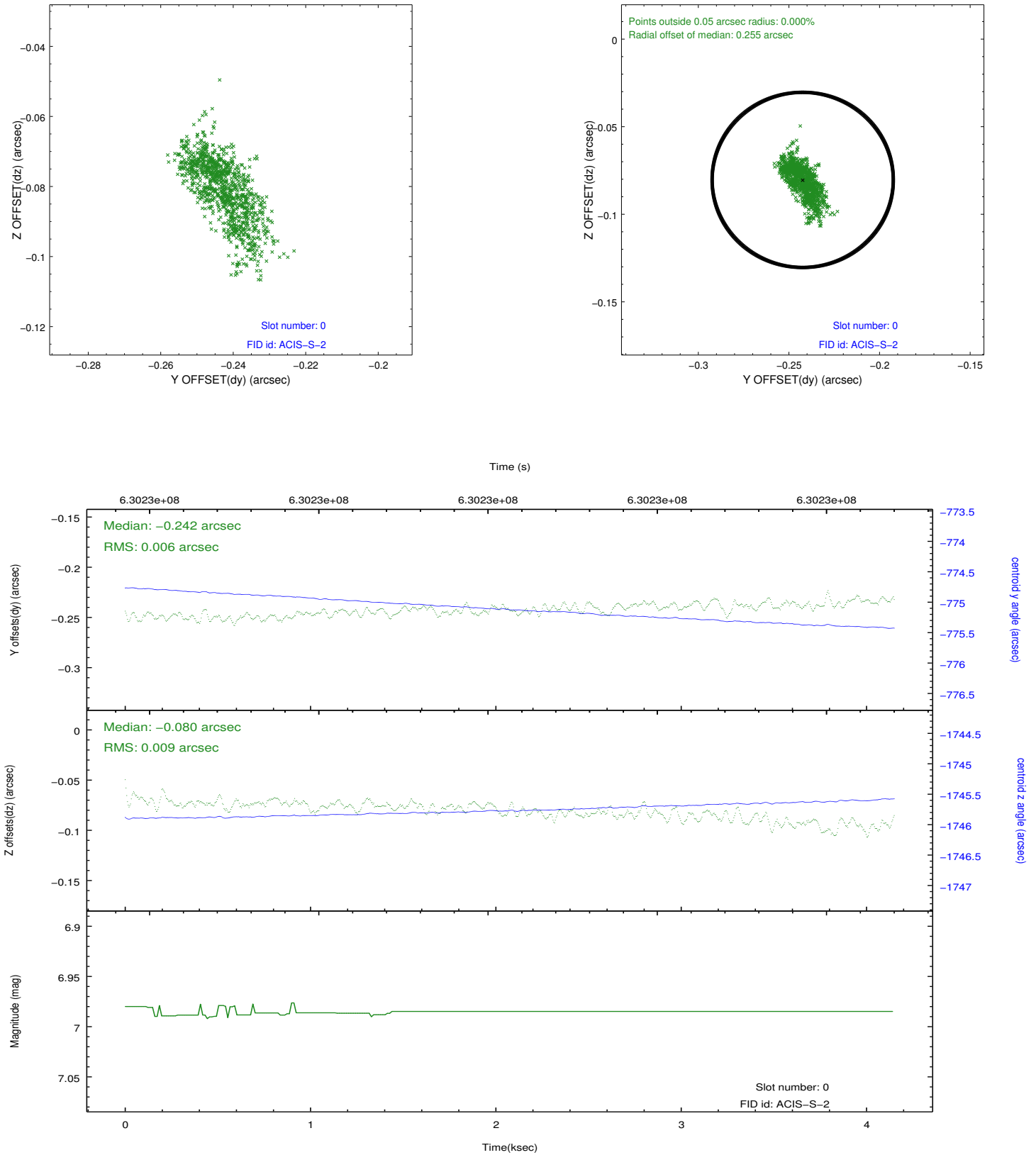


2.4.5 Slot 7

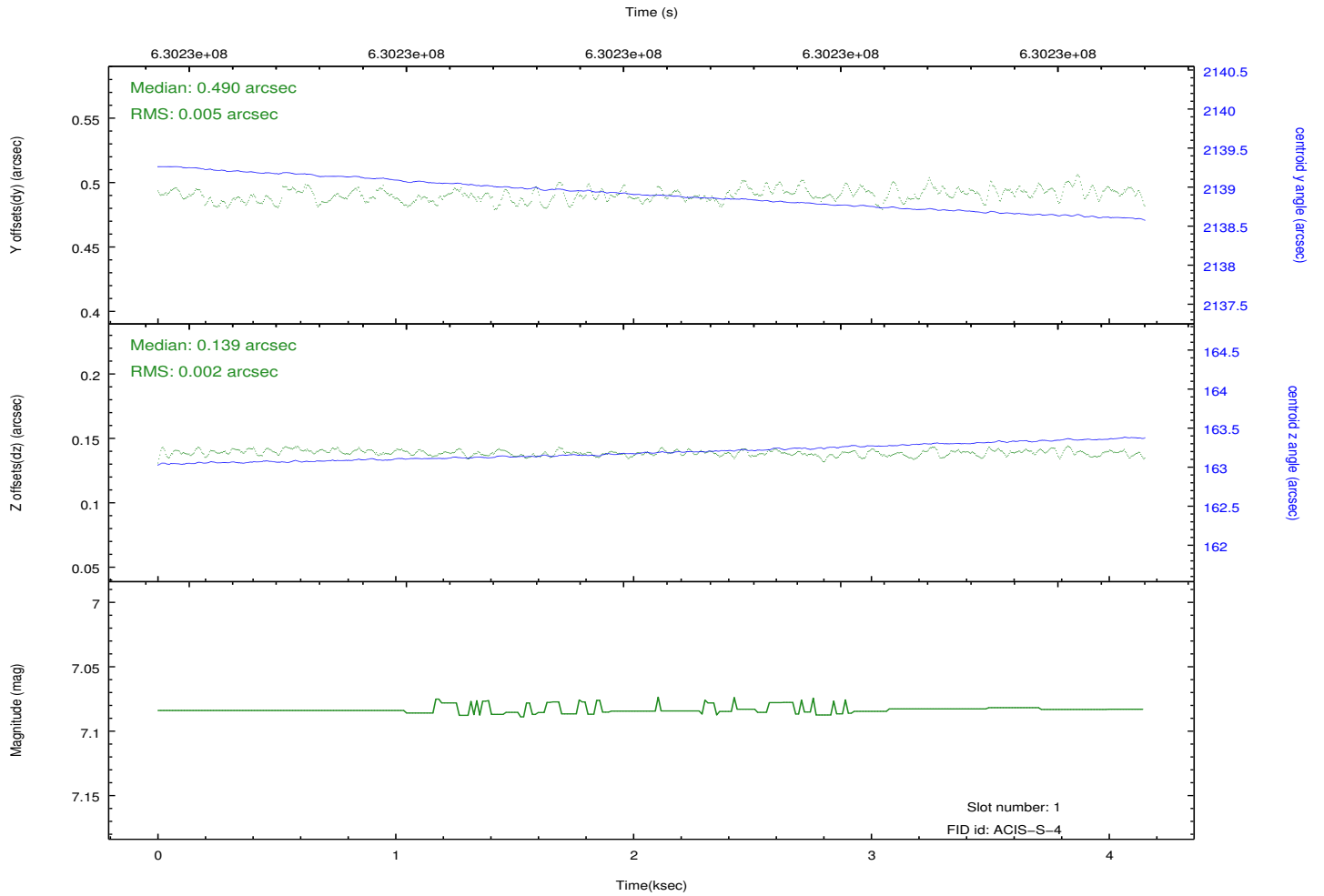
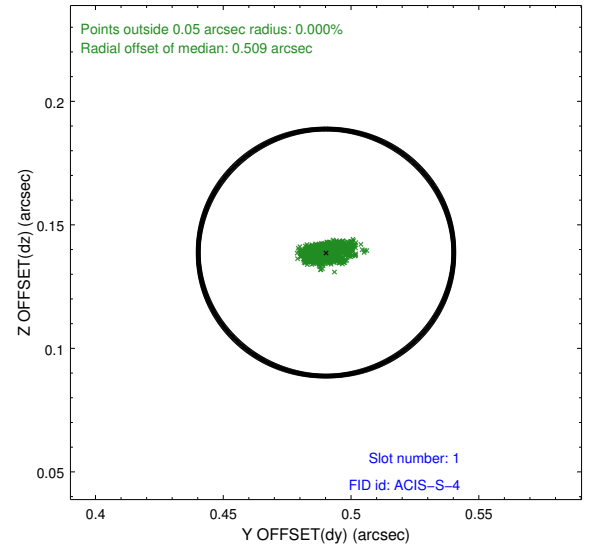
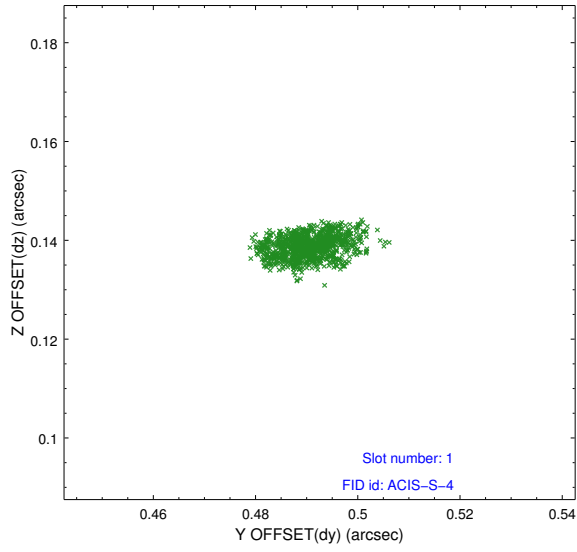


2.5 FID Slots

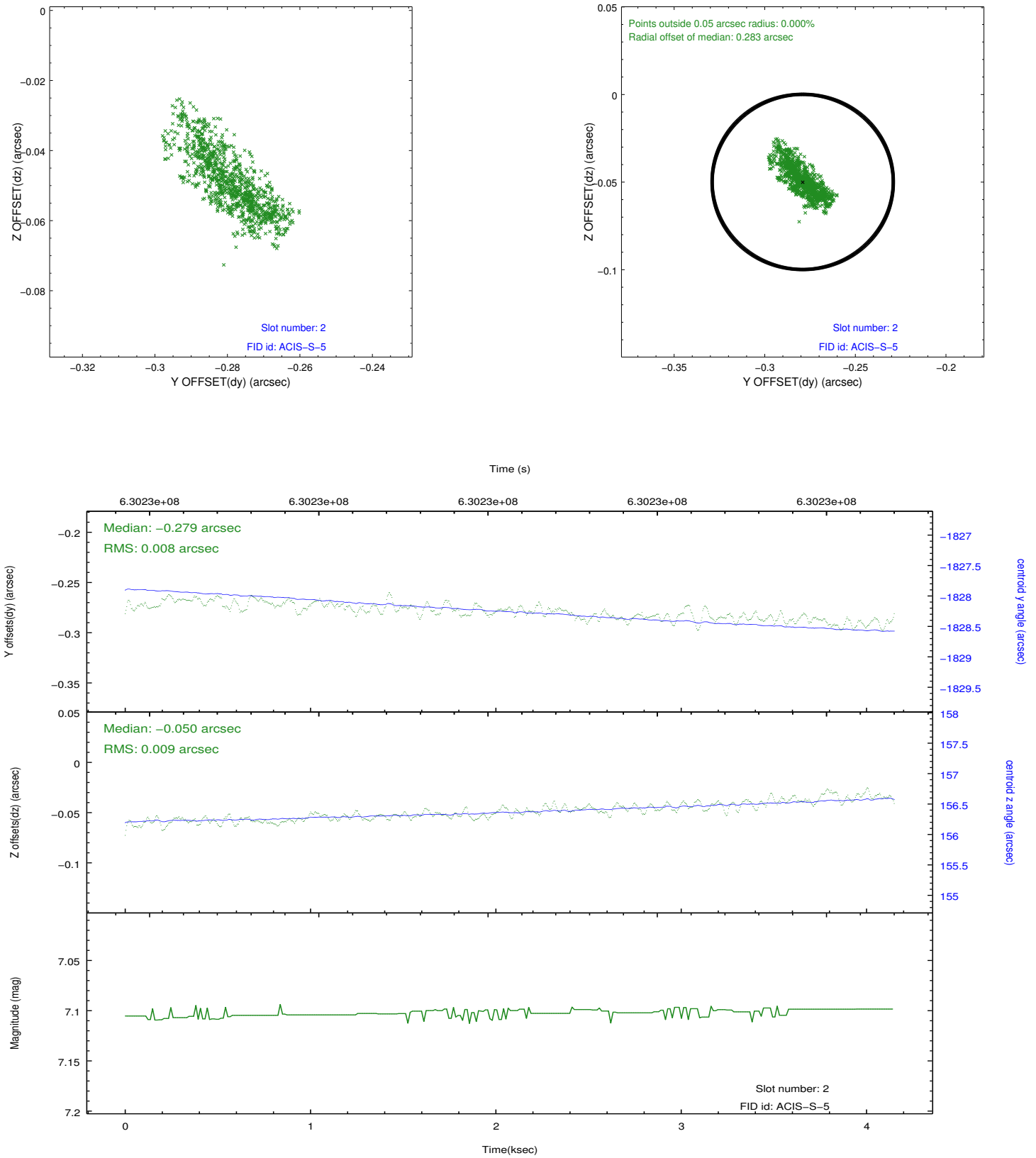
2.5.1 Slot 0



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)	2017.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.092

A.2 Comments

Window preference met.