

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21854 - L2 Version 1
Chandra X-Ray Center

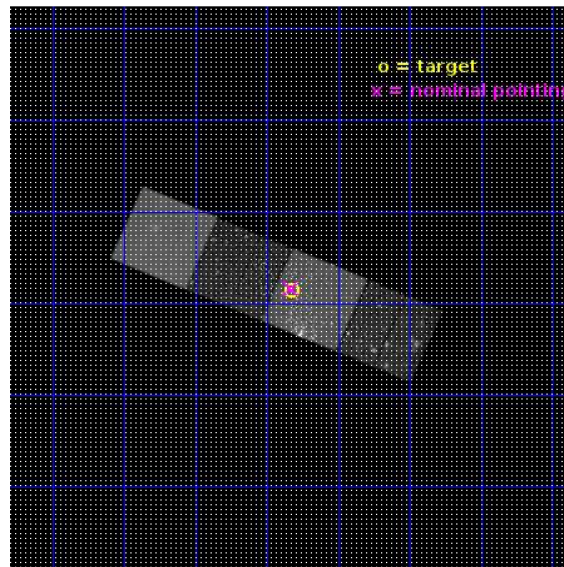
L2 Processing Date : Dec 7 2018

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1 Front

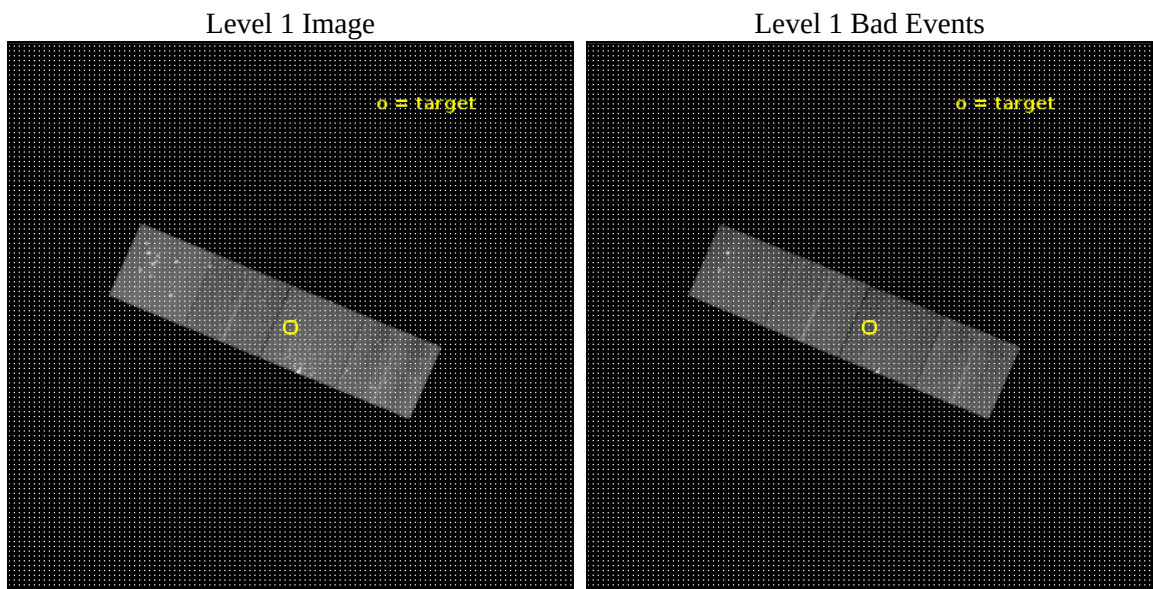
seq_num	201262	Sequence number
obs_id	21854	Observation id
title	Characterizing the X-ray Driven Chemistry of Protoplanetary Disks in Orion	Proposal title
observer	Lauren Cleeves	Principal investigator
object	OMC Disk Sample	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.83125	Observer's specified target RA [deg]
dec_targ	-5.310556	Observer's specified target Dec [deg]
ra_nom	83.831871587684	Nominal RA [deg]
dec_nom	-5.306261187719	Nominal Dec [deg]
roll_nom	23.187908143008	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20058.950196505	Sum of GTIs [s]
livetime	19796.865245003	Livetime [s]
ontime5	20058.909156561	Sum of GTIs [s]
ontime6	20058.868116498	Sum of GTIs [s]
ontime7	20058.950196505	Sum of GTIs [s]
ontime8	20058.827076554	Sum of GTIs [s]
l2events	322039	Number of level 2 events



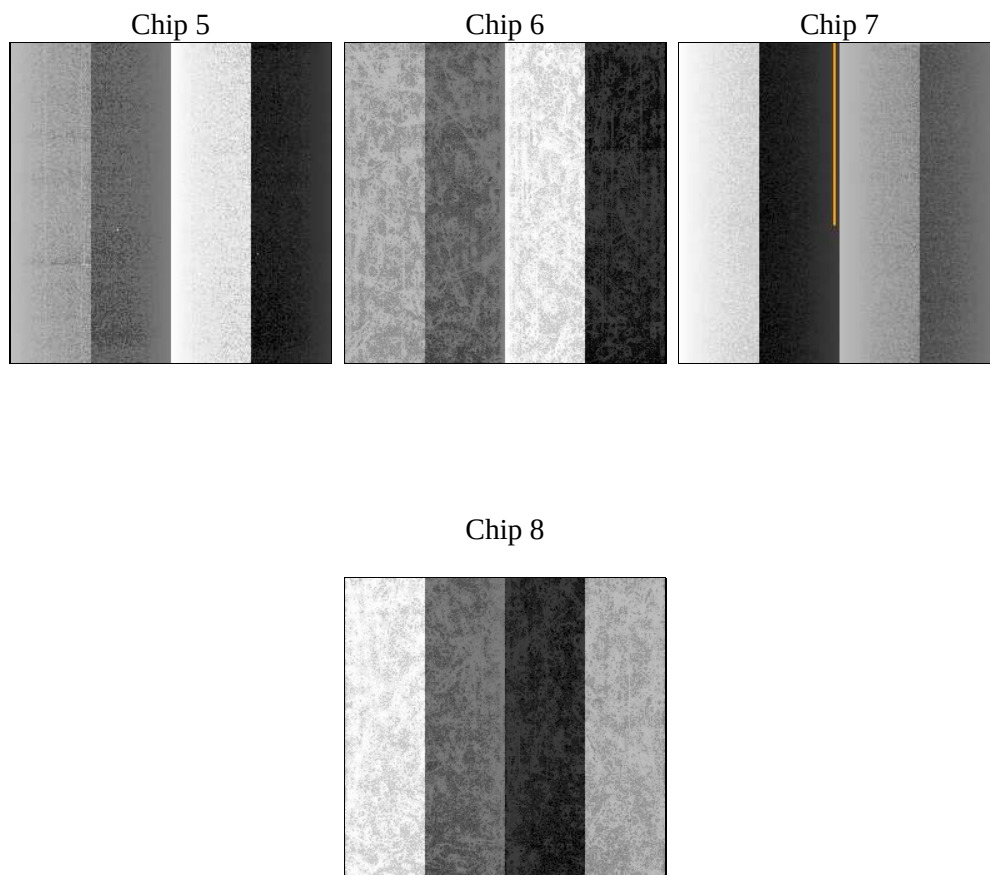
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	20058.950196505	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime5	20058.909156561	Sum of GTIs [s]
date	2018-12-07T07:10:37	Date and time of file creation	ontime6	20058.868116498	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	20058.950196505	Sum of GTIs [s]
			ontime8	20058.827076554	Sum of GTIs [s]
			l1events	952959	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	286460	162011	294529	209959
rejected events	134278	139488	126770	147325
rejected %	46%	86%	43%	70%

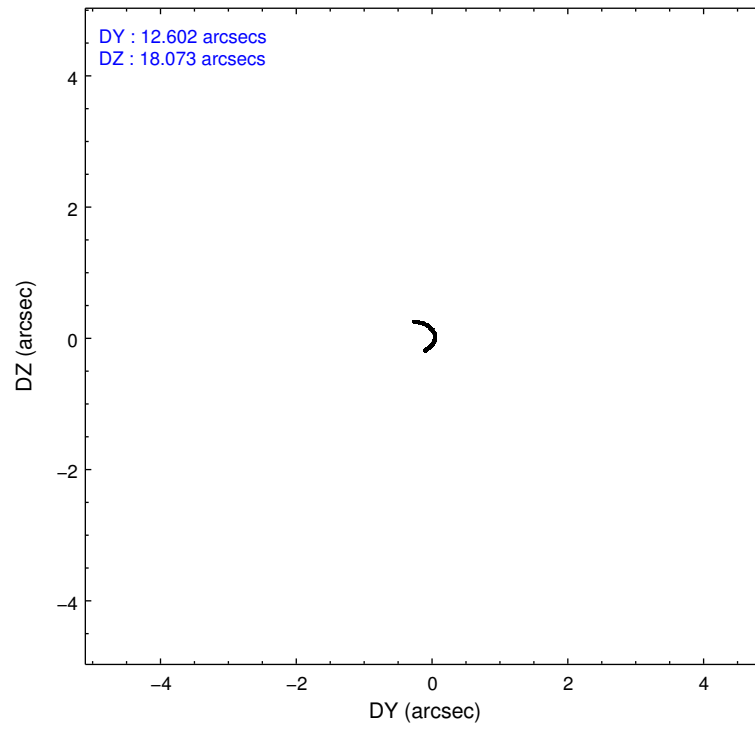
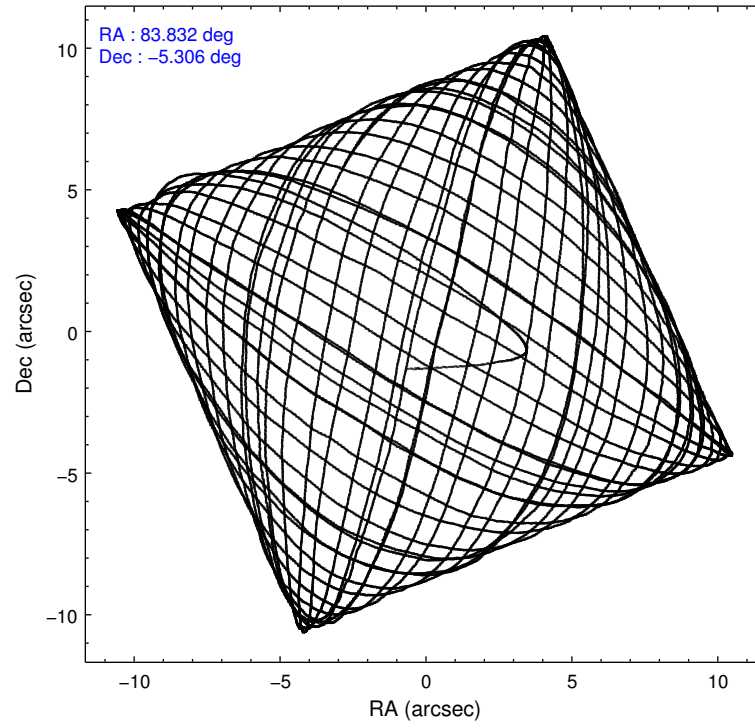
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	34678	9724	23534	23616
	12%	6%	7%	11%
grade 1 events	621	84	1170	205
	0%	0%	0%	0%
grade 2 events	44211	4895	40512	13684
	15%	3%	13%	6%
grade 3 events	4557	1690	14522	5658
	1%	1%	4%	2%
grade 4 events	4216	1807	14755	5398
	1%	1%	5%	2%
grade 5 events	16616	6795	22952	10751
	5%	4%	7%	5%
grade 6 events	64607	4418	74476	14306
	22%	2%	25%	6%
grade 7 events	116954	132598	102608	136341
	40%	81%	34%	64%

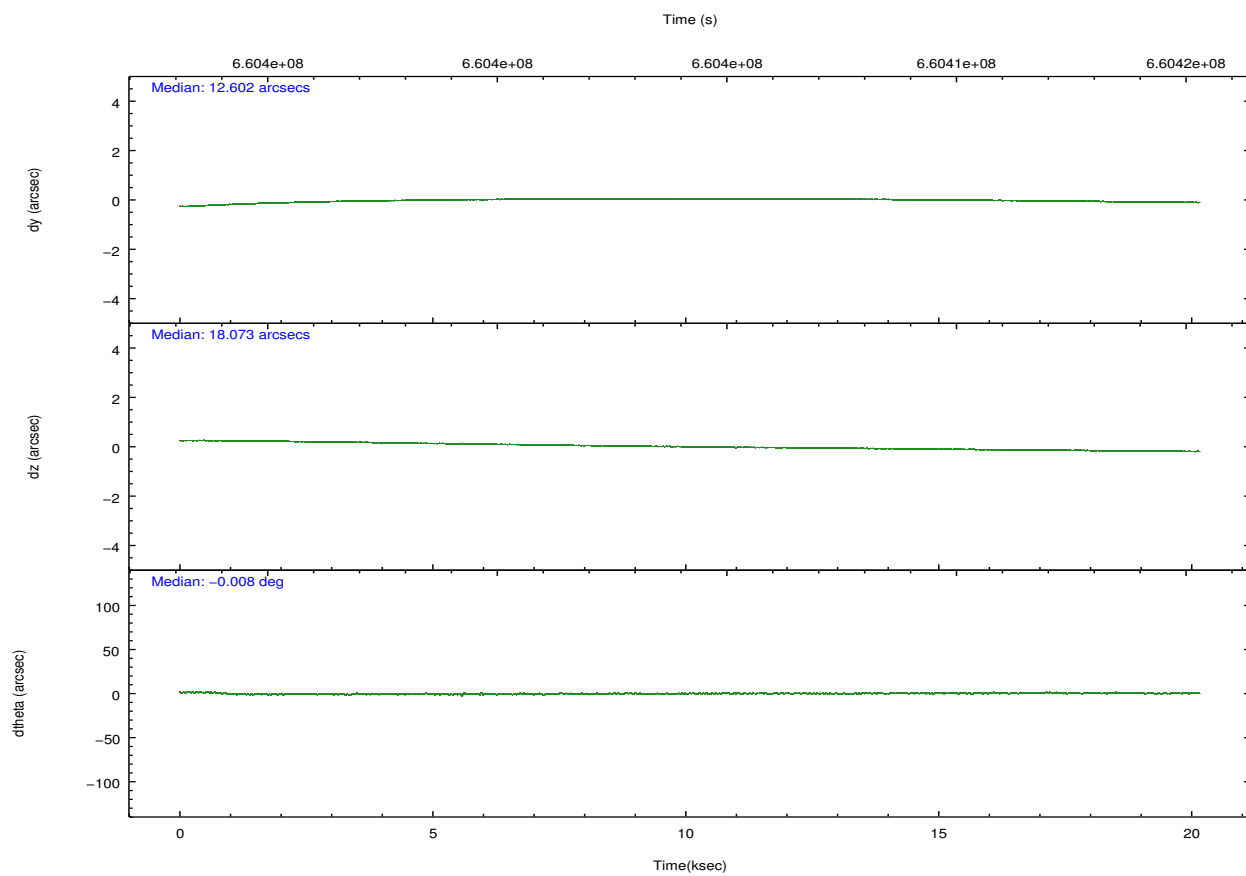
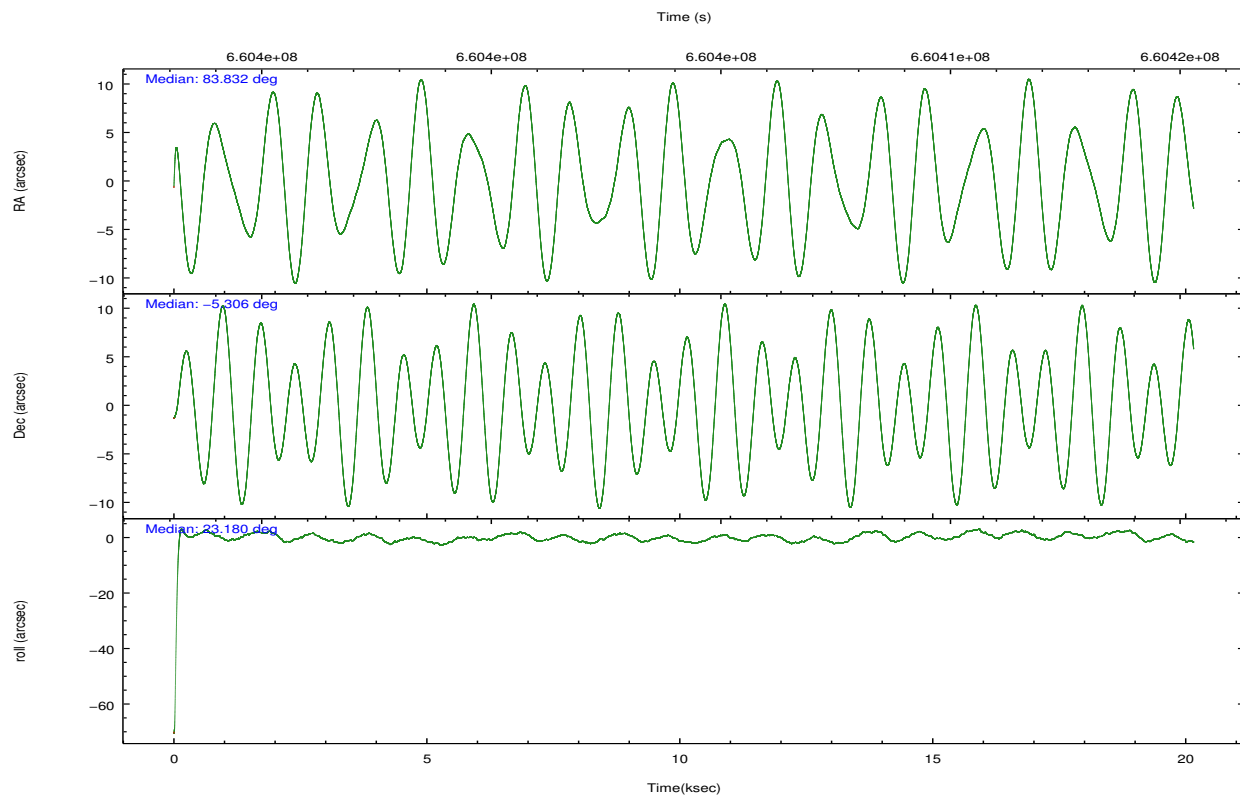
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	83.815656	83.83187158768359
[deg] Pointing Dec	-5.328471	-5.306261187719008
[deg] Pointing Roll	23.029831	23.18790814300809
[s] Window start time (MET)	658627269.184000	658627269.184000
[s] Window stop time (MET)	661219269.184000	661219269.184000
[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)	660394270.184000	660392749.61279
Observation start date	2018-12-05T10:50:01	2018-12-05T10:25:49
[s] Observation end time (MET)	660414270.184000	660415166.8766299
Observation end date	2018-12-05T16:23:21	2018-12-05T16:39:26
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	O1	Y
CCD S2 on	O3	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



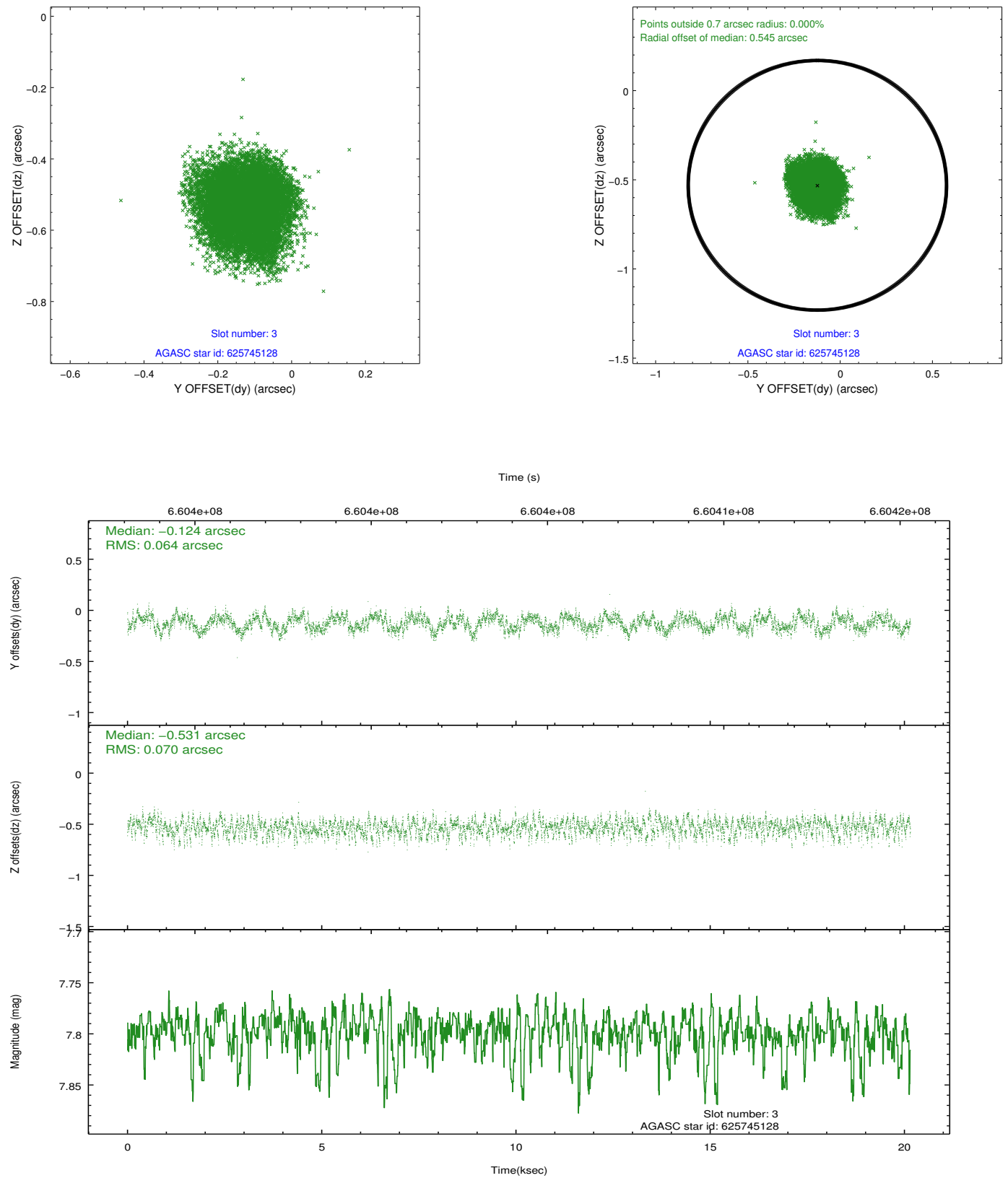


Slot Statistics

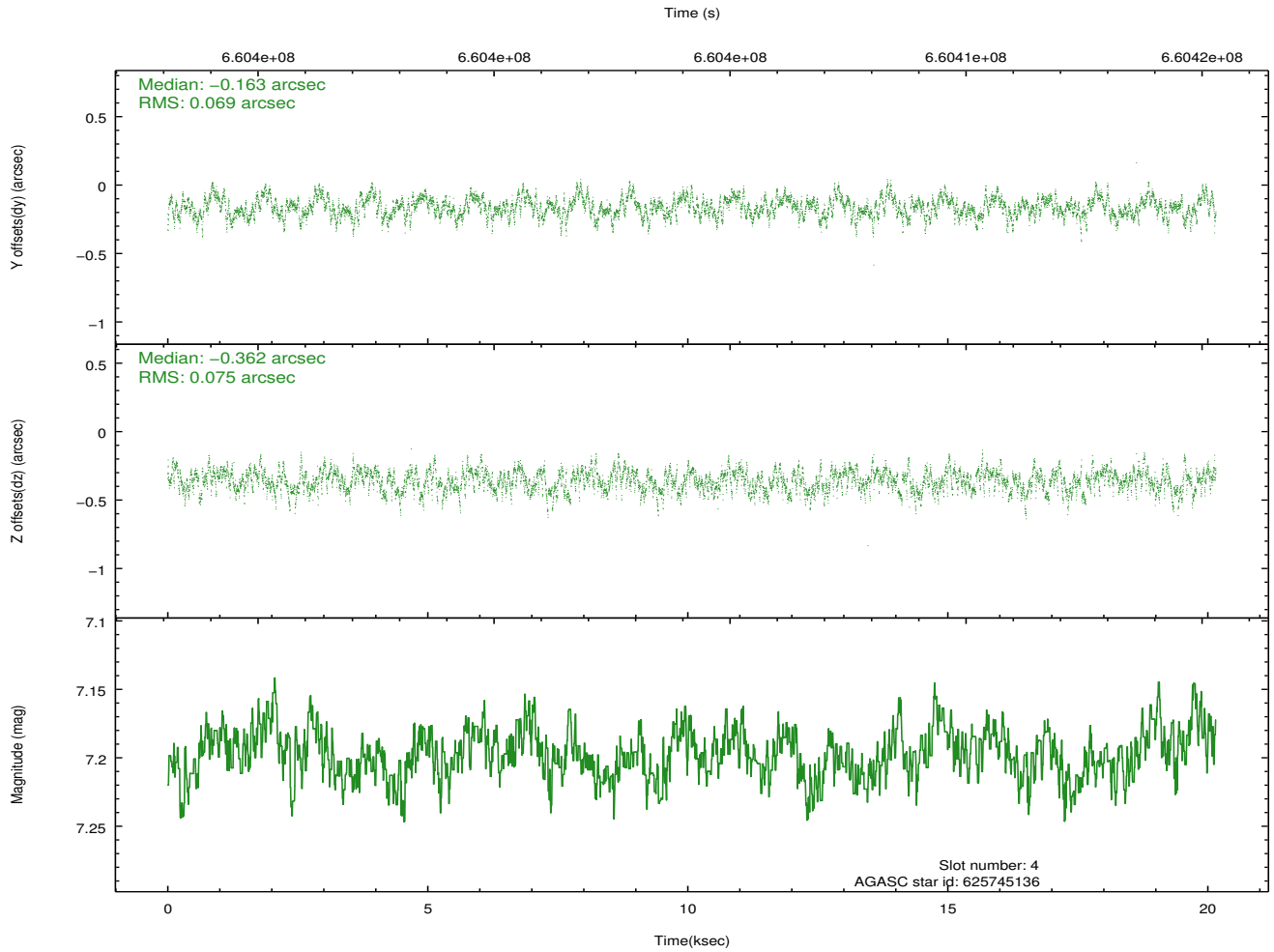
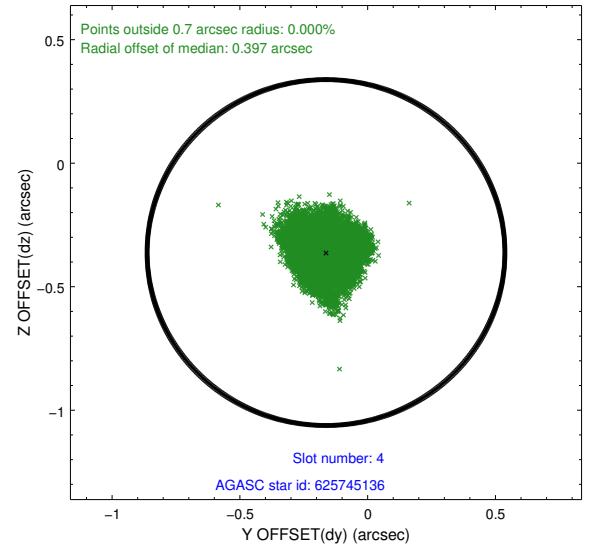
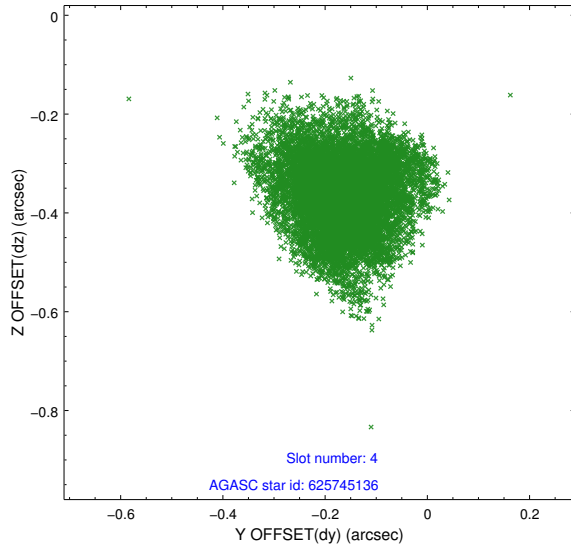
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.16	4917	1.000	0.061	-0.069	0.013	0.023	0.000000	0.000000	930.71	-1735
1	FID		ACIS-S-4	7.19	4917	1.000	0.571	0.024	0.012	0.020	0.000000	0.000000	2148.62	168
2	FID		ACIS-S-5	7.17	4917	1.000	-0.661	0.058	0.022	0.036	0.000000	0.000000	-1818.75	162
3	GUIDE	used	625745128	7.80	9832	1.000	-0.124	-0.531	0.104	0.155	83.769930	-4.731835	689.23	2040
4	GUIDE	used	625745136	7.20	9833	1.000	-0.163	-0.362	0.110	0.171	83.600341	-4.804339	27.48	2038
5	GUIDE	used	626272976	7.94	9831	1.000	0.268	0.580	0.078	0.128	83.795875	-5.926912	-907.19	-1954
6	GUIDE	used	625745144	7.82	9834	1.000	-0.204	-0.365	0.126	0.196	83.888985	-4.837539	933.31	1523
7	GUIDE	used	626272880	7.65	9827	1.000	0.220	0.694	0.089	0.147	83.815609	-6.032748	-991.13	-2332

2.4 Star Slots

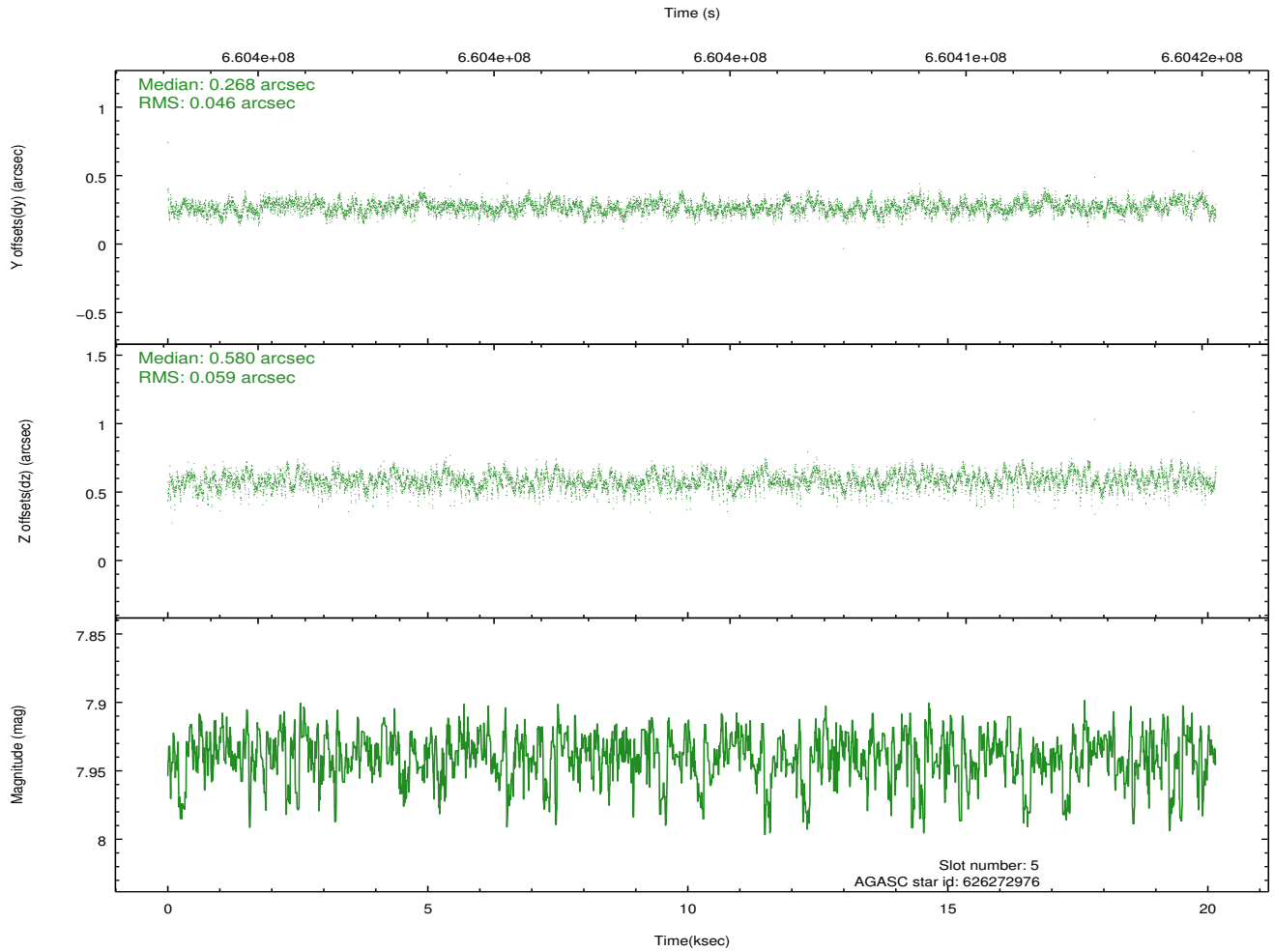
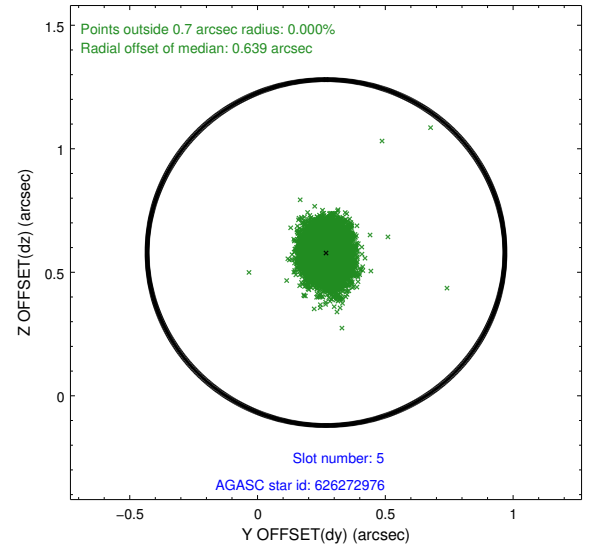
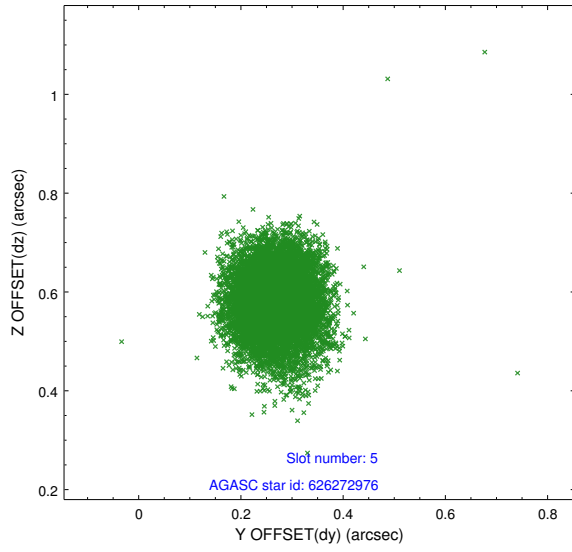
2.4.1 Slot 3



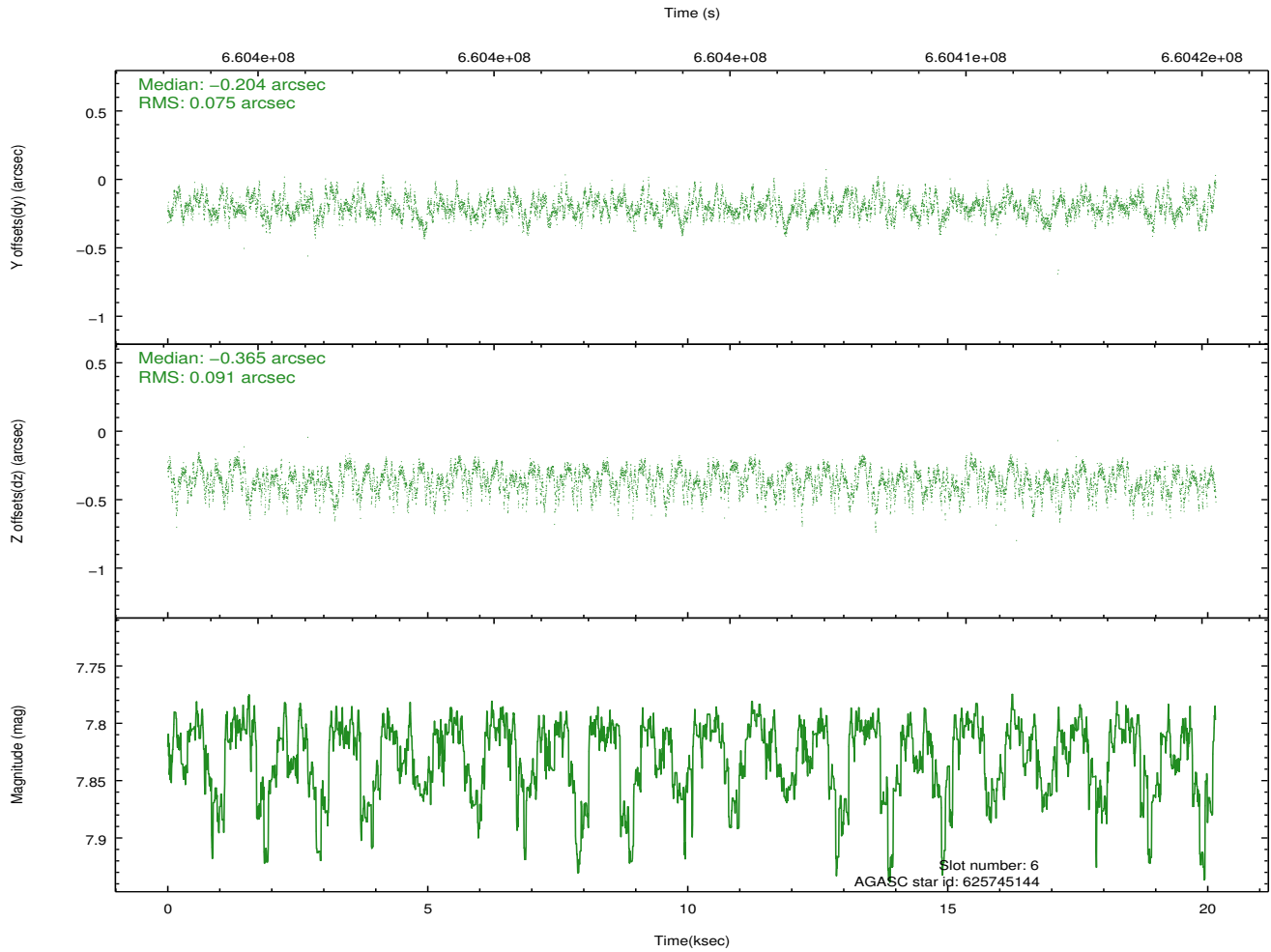
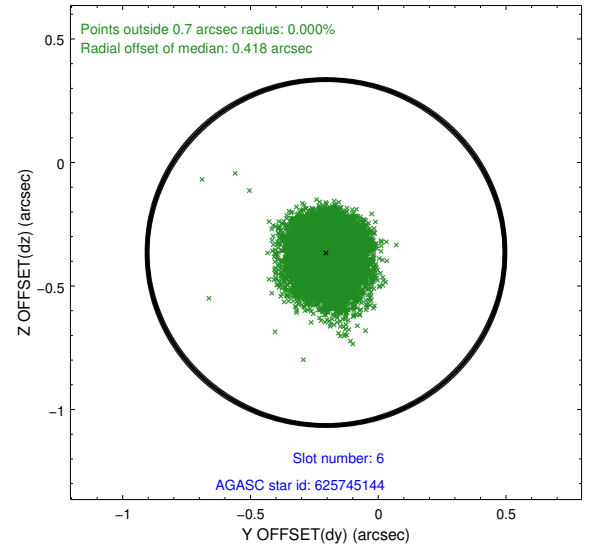
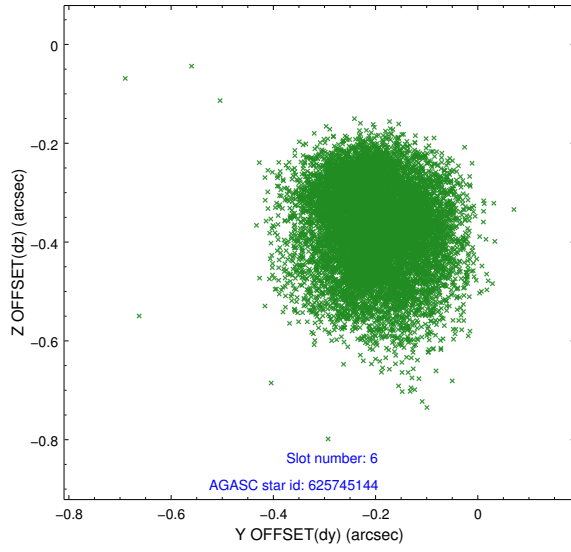
2.4.2 Slot 4



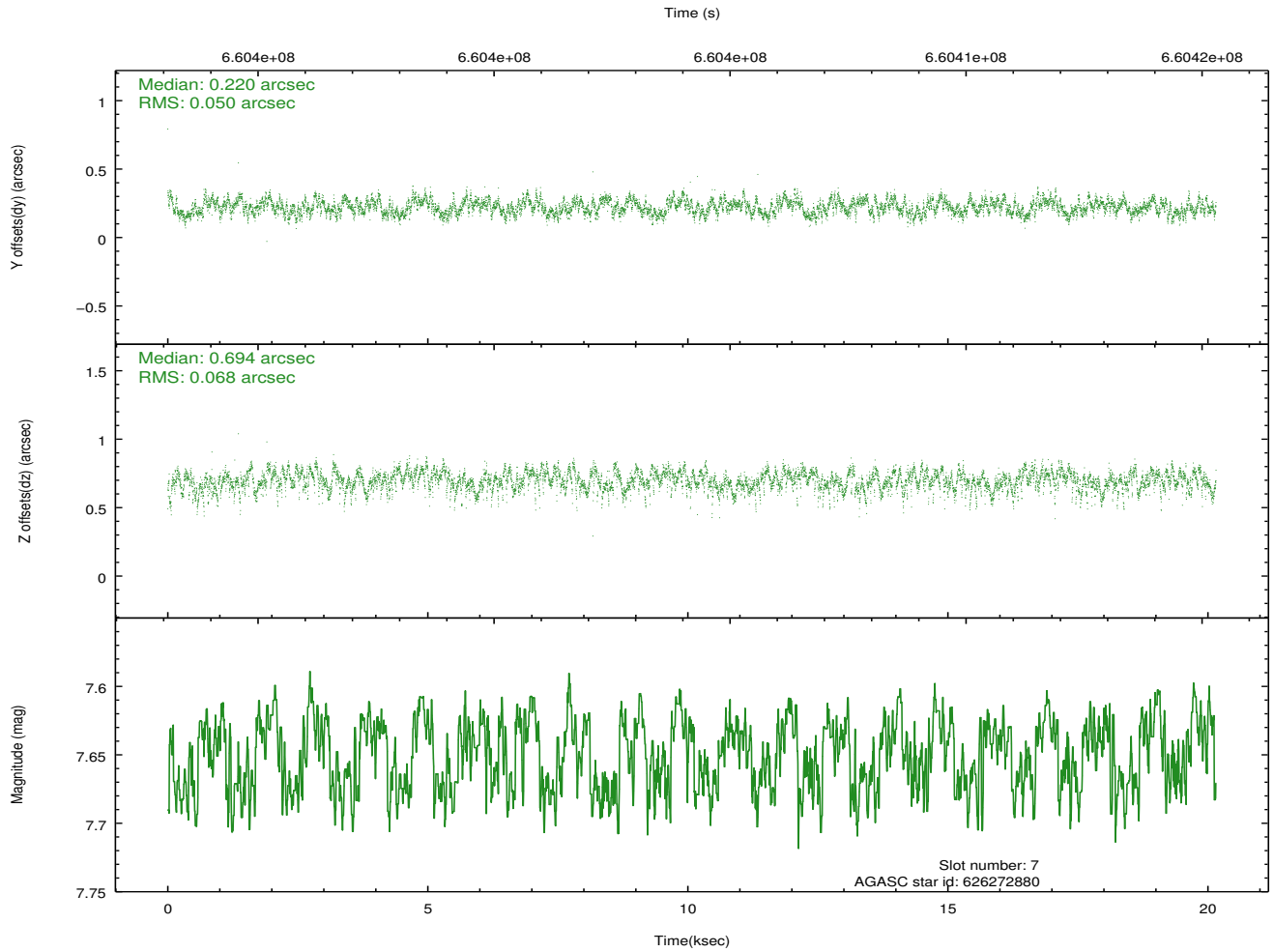
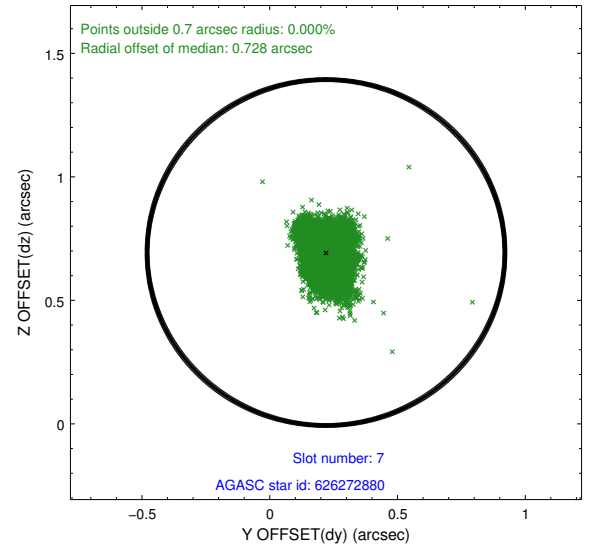
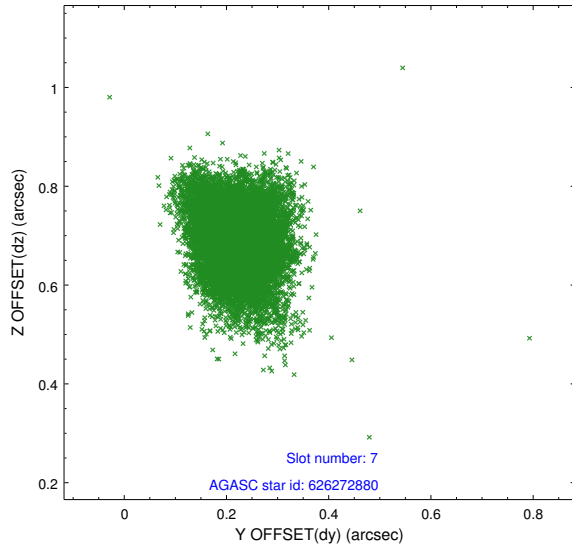
2.4.3 Slot 5



2.4.4 Slot 6

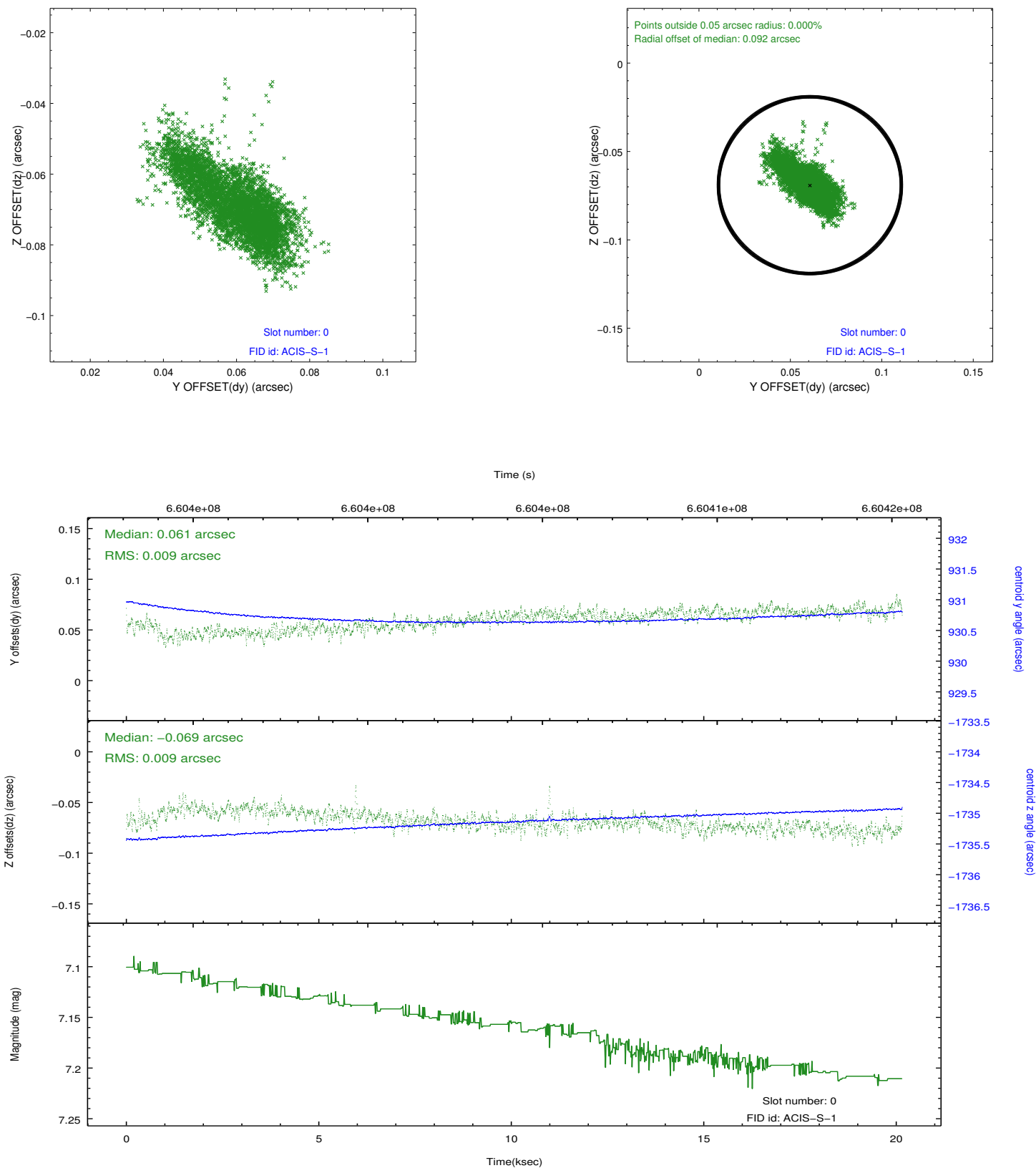


2.4.5 Slot 7

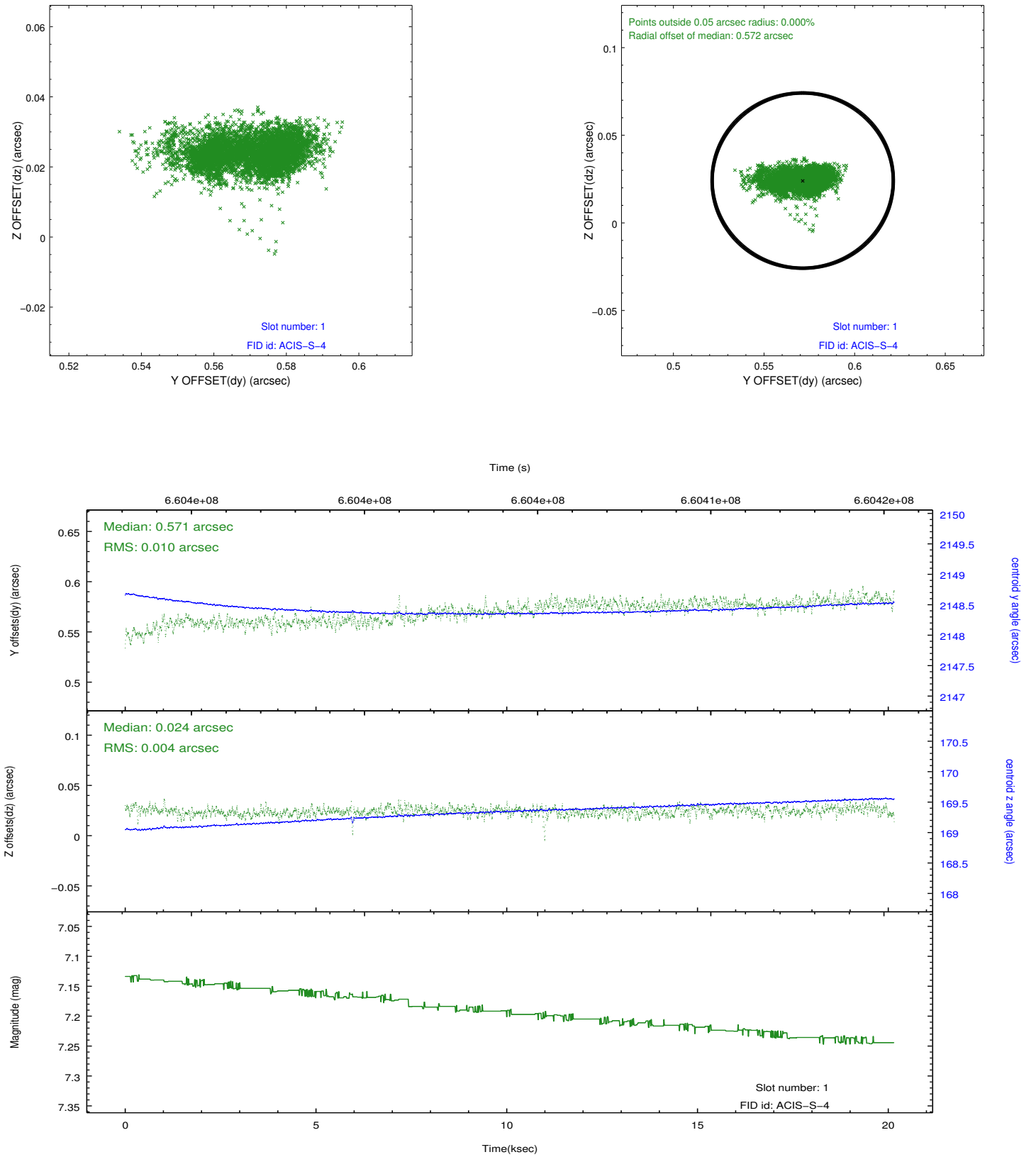


2.5 FID Slots

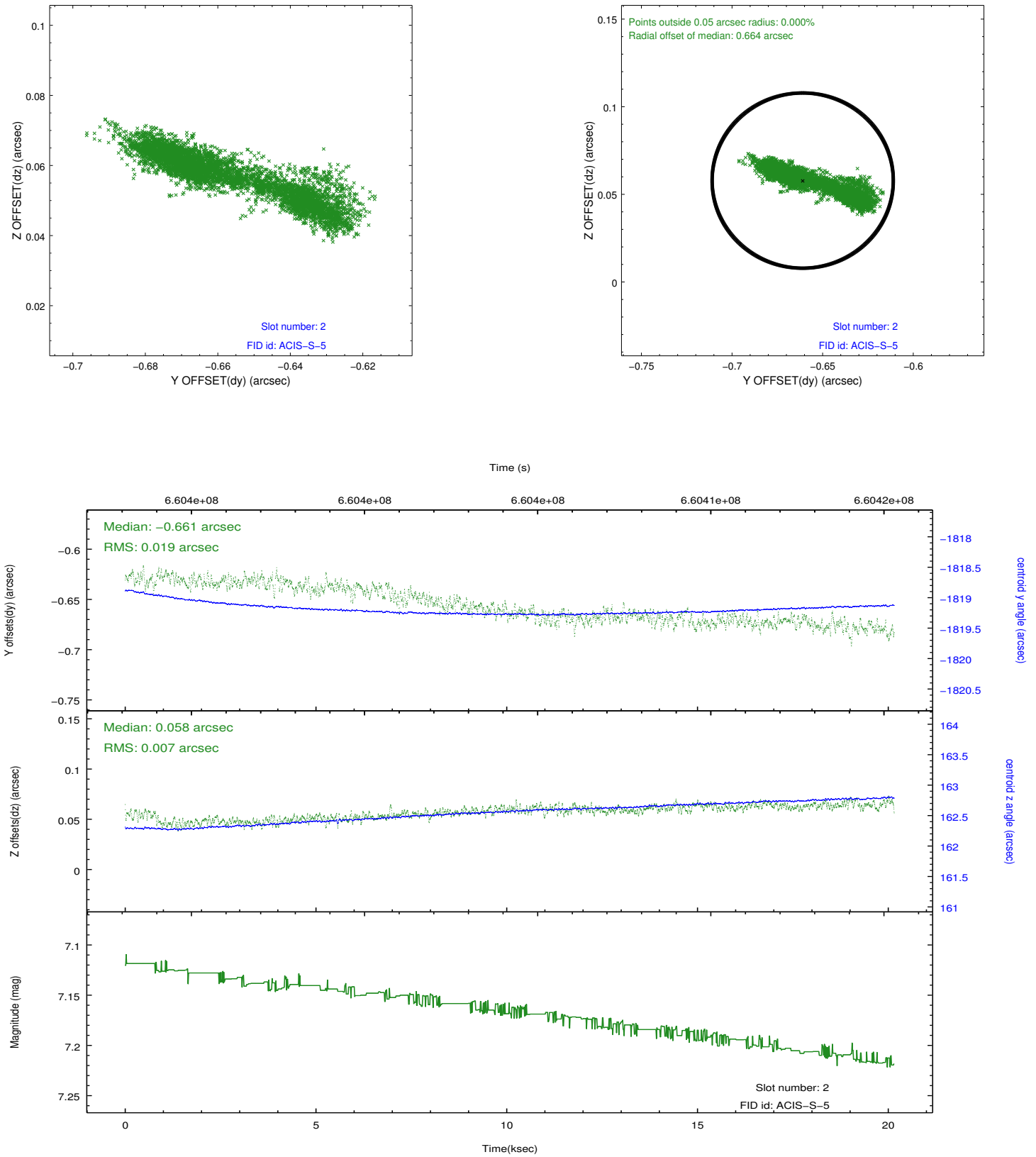
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.058950196505

A.2 Comments

Window constraint met.