

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21855 - L2 Version 1
Chandra X-Ray Center

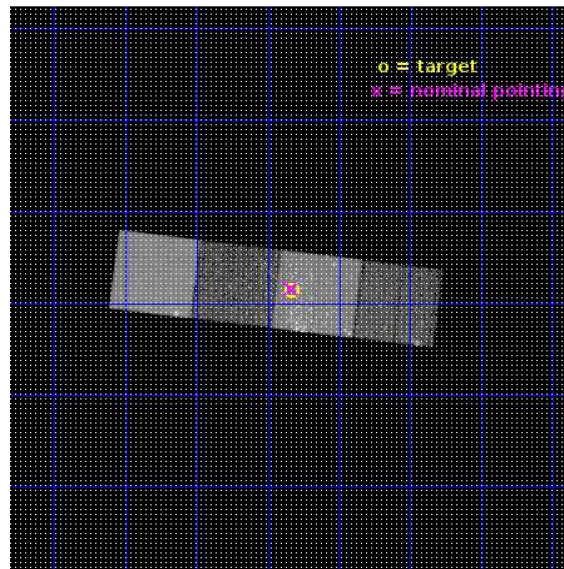
L2 Processing Date : Dec 12 2018

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1 Front

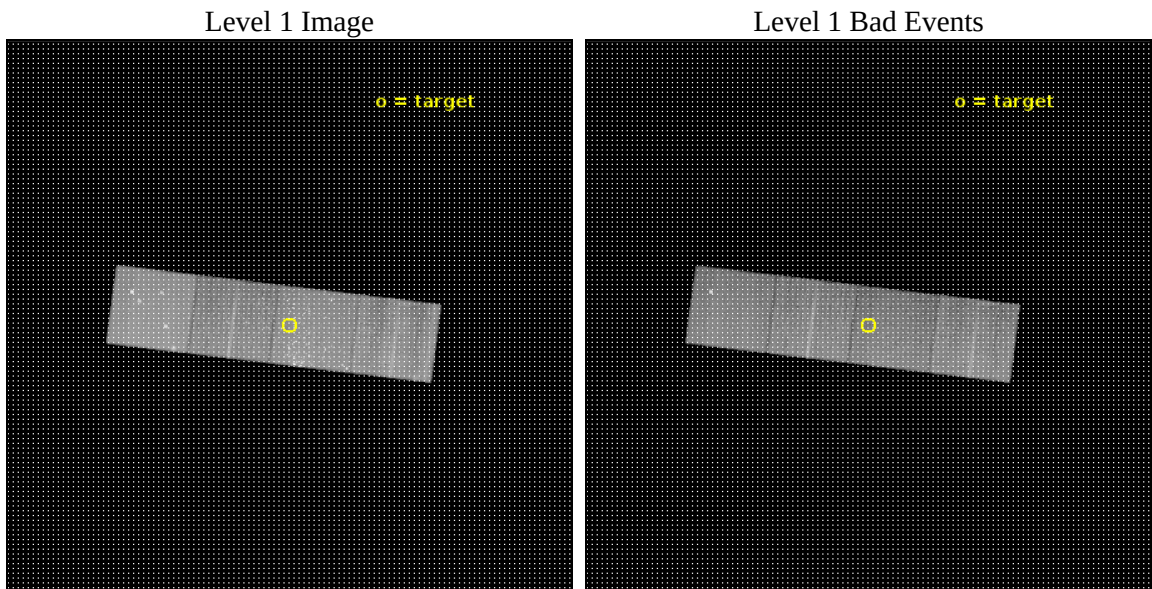
seq_num	201263	Sequence number
obs_id	21855	Observation id
title	Characterizing the X-ray Driven Chemistry of Protoplanetary Disks in Orion	Proposal title
observer	Lauren Cleeves	Principal investigator
object	OMC Disk Sample	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.83125	Observer's specified target RA [deg]
dec_targ	-5.310556	Observer's specified target Dec [deg]
ra_nom	83.833469333575	Nominal RA [deg]
dec_nom	-5.3063270728228	Nominal Dec [deg]
roll_nom	7.1568383601883	Nominal Roll [deg]
revision	1	Processing version of data
ontime	20171.700155258	Sum of GTIs [s]
livetime	19908.14204254	Livetime [s]
ontime5	20171.700155258	Sum of GTIs [s]
ontime6	20171.700155258	Sum of GTIs [s]
ontime7	20171.700155258	Sum of GTIs [s]
ontime8	20171.700155258	Sum of GTIs [s]
l2events	287039	Number of level 2 events



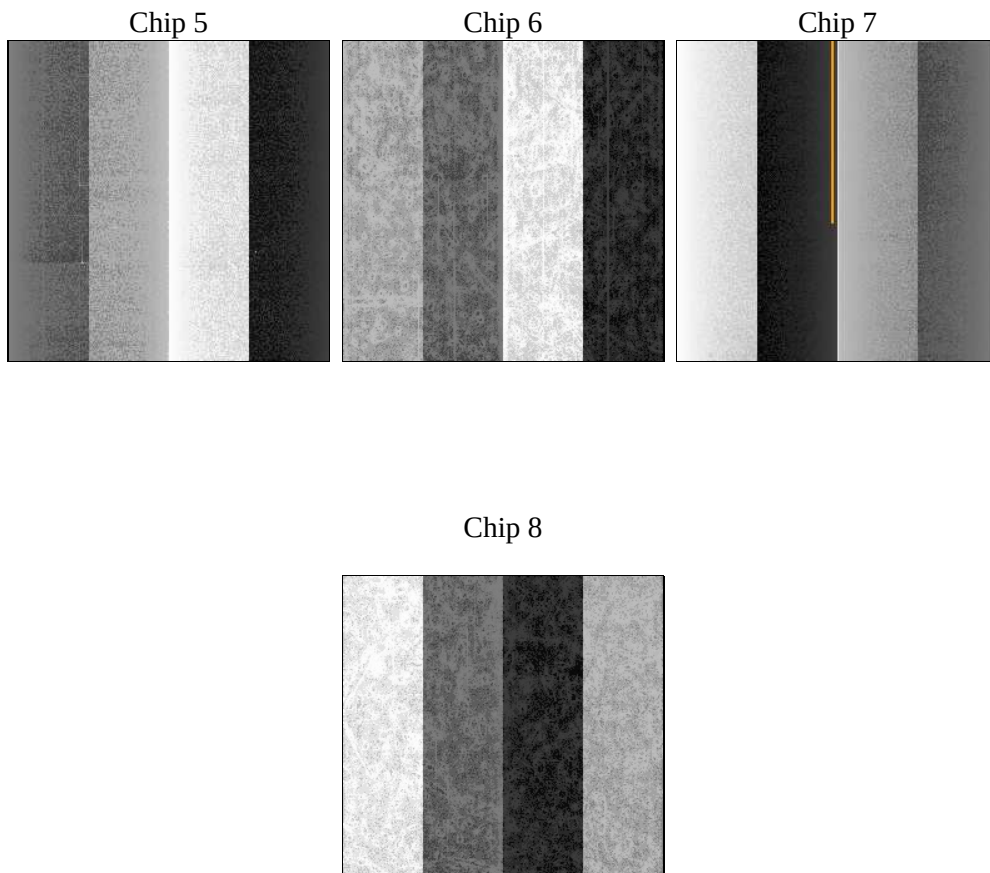
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20110.414000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	20171.700155258	Sum of GTIs [s]
caldbver	4.8.0.1	 	ontime5	20171.700155258	Sum of GTIs [s]
date	2018-12-12T09:46:27	Date and time of file creation	ontime6	20171.700155258	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	20171.700155258	Sum of GTIs [s]
			ontime8	20171.700155258	Sum of GTIs [s]
			l1events	860817	Number of level 1 events

2.1.4 Events

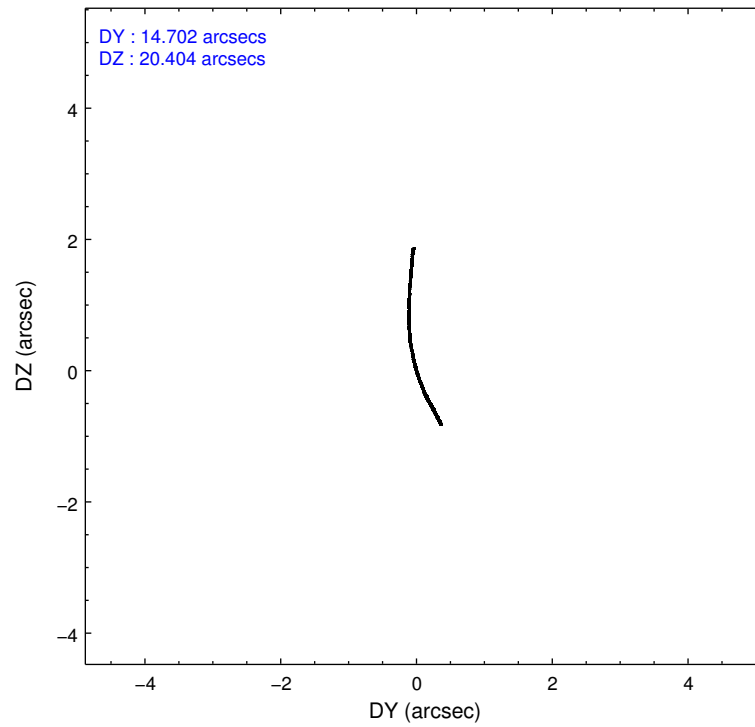
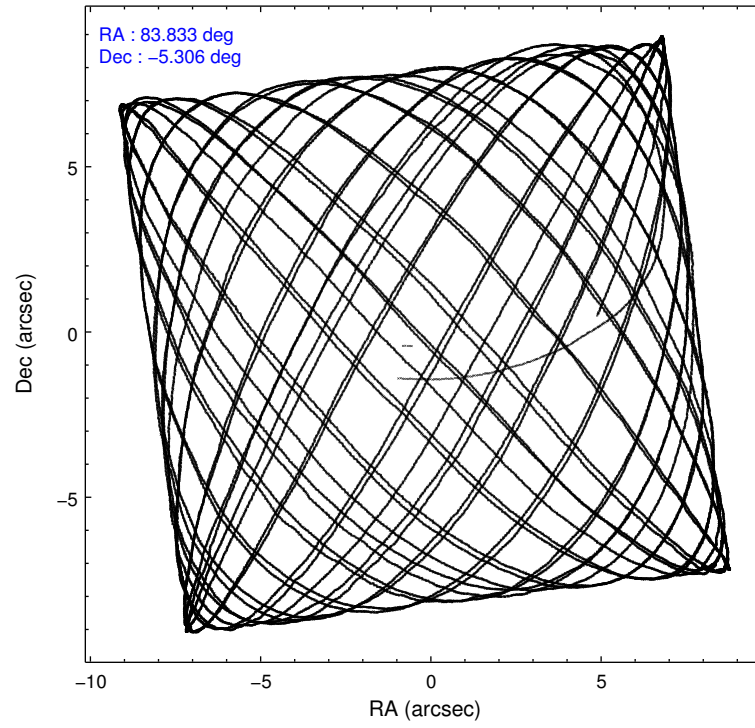
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	254517	157361	248900	200039
rejected events	128636	135851	110303	142715
rejected %	50%	86%	44%	71%

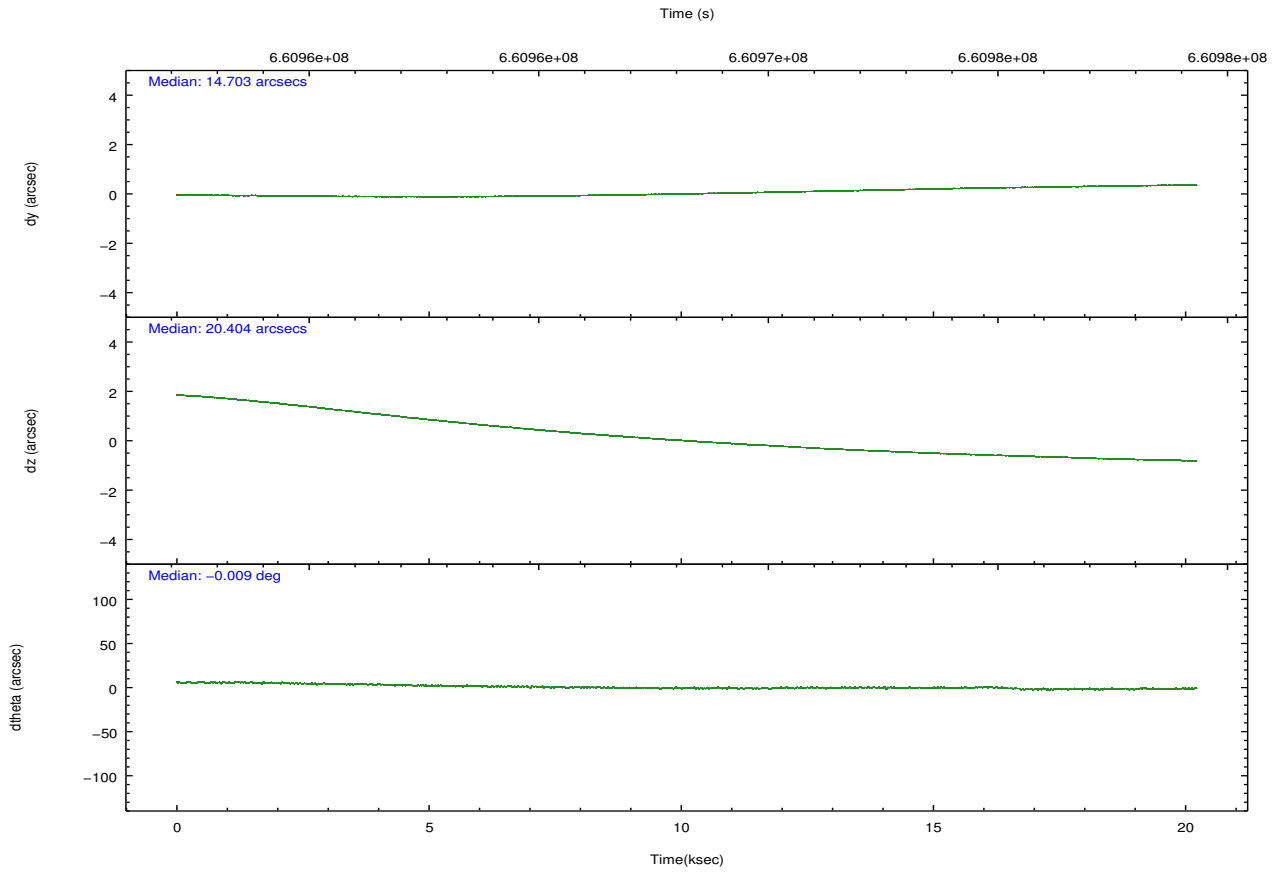
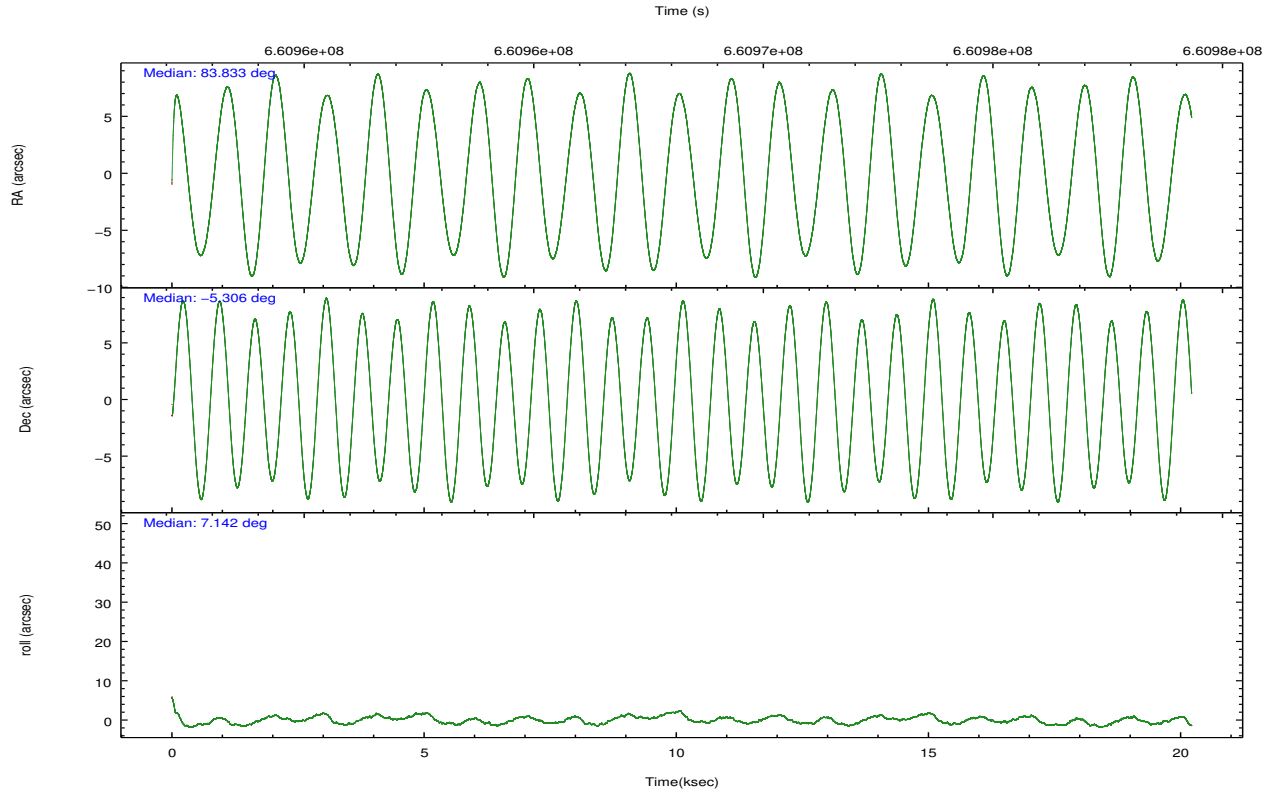
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	16563	9082	18805	16895
	6%	5%	7%	8%
grade 1 events	518	96	470	165
	0%	0%	0%	0%
grade 2 events	38710	4563	32384	14018
	15%	2%	13%	7%
grade 3 events	3783	1821	12653	5741
	1%	1%	5%	2%
grade 4 events	3518	1829	12344	5323
	1%	1%	4%	2%
grade 5 events	16829	6873	20098	10586
	6%	4%	8%	5%
grade 6 events	63348	4231	62453	15396
	24%	2%	25%	7%
grade 7 events	111248	128866	89693	131915
	43%	81%	36%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	83.811718	83.8334693335748	CCD I2 on	N	N
[deg] Pointing Dec	-5.323222	-5.306327072822777	CCD I3 on	N	N
[deg] Pointing Roll	6.998196	7.15683836018826	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	660958239.184000	660956944.49641	CCD S5 on	N	N
Observation start date	2018-12-11T23:29:30	2018-12-11T23:09:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	660978350.184000	660979297.69775	On-chip summing requested	N	N
Observation end date	2018-12-12T05:04:41	2018-12-12T05:21:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



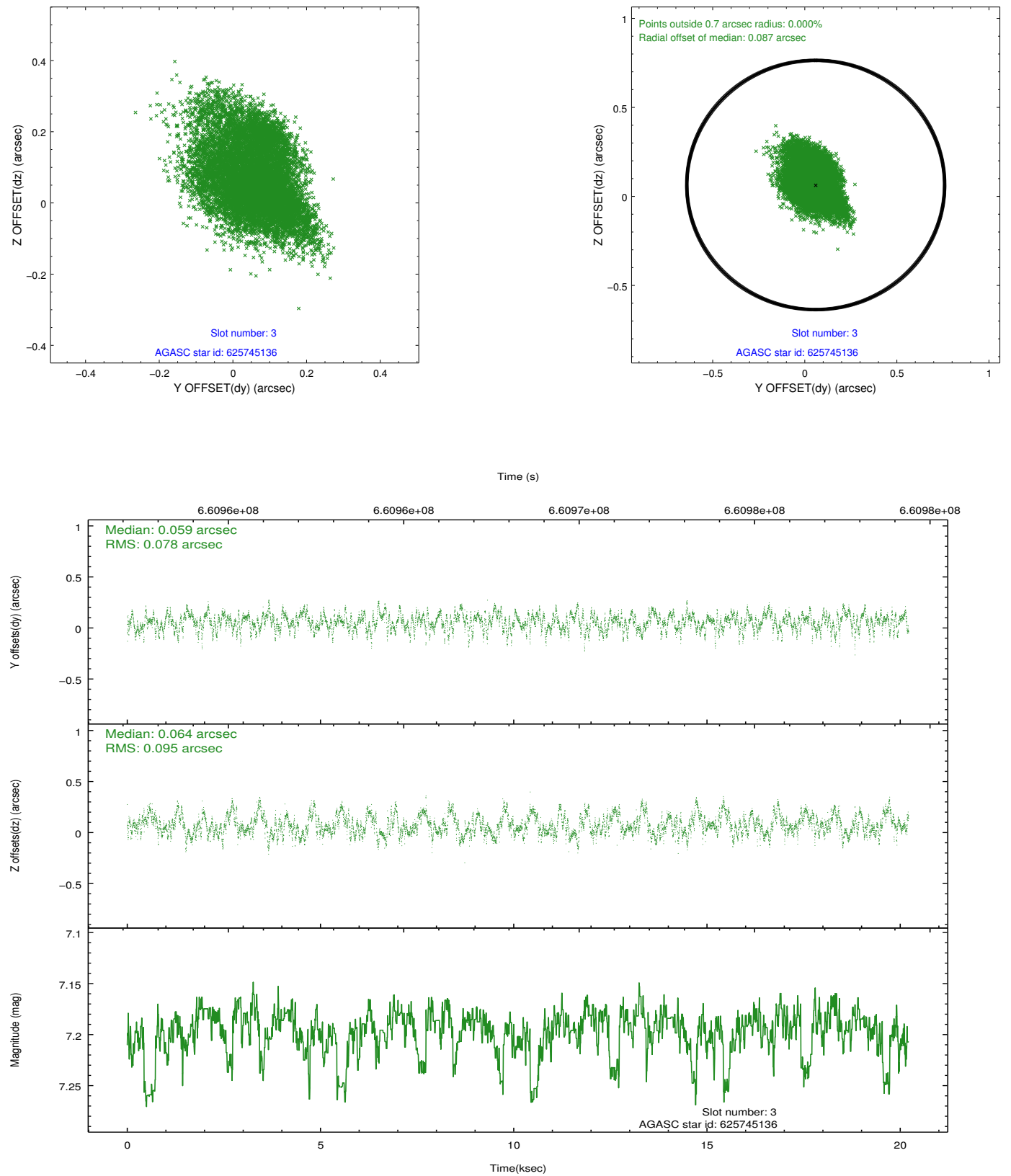


Slot Statistics

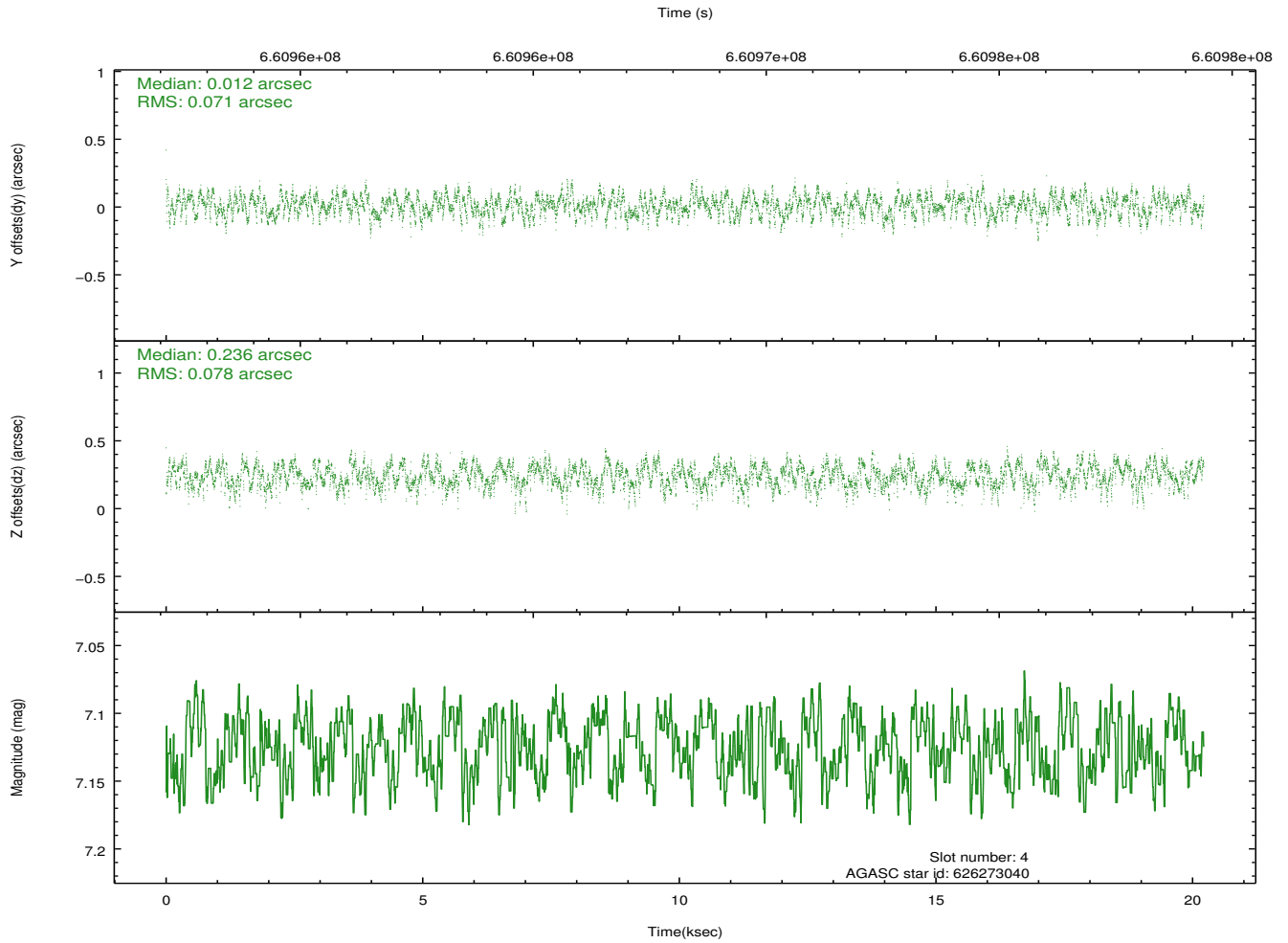
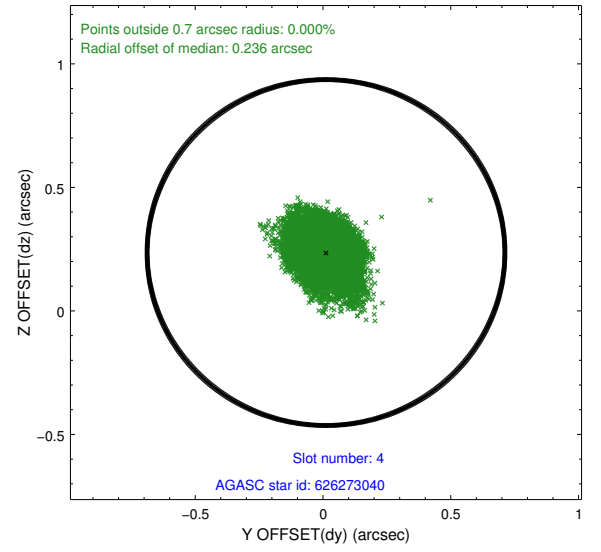
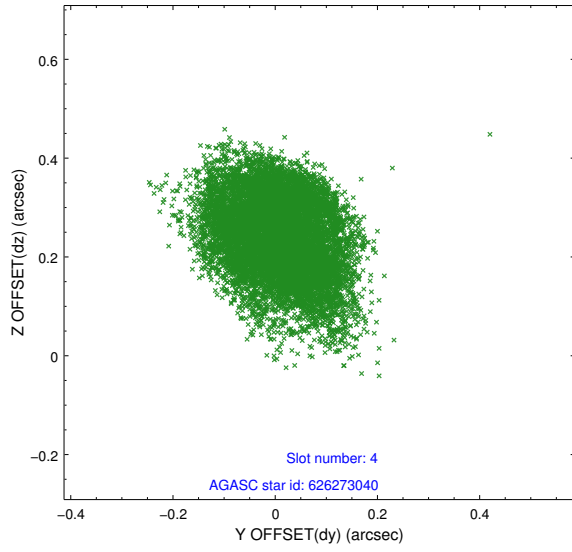
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-4	7.10	4932	1.000	0.559	0.025	0.019	0.027	0.000000	0.000000	2146.17	166
1	FID		ACIS-S-5	7.08	4932	1.000	-0.692	-0.011	0.021	0.033	0.000000	0.000000	-1821.03	159
2	FID		ACIS-S-6	7.22	4932	1.000	0.102	-0.000	0.014	0.021	0.000000	0.000000	393.72	803
3	GUIDE	used	625745136	7.20	9863	1.000	0.059	0.064	0.131	0.216	83.600341	-4.804339	-525.17	1945
4	GUIDE	used	626273040	7.13	9864	1.000	0.012	0.236	0.114	0.175	84.062610	-5.647920	750.07	-1269
5	GUIDE	used	625745128	7.79	9861	1.000	0.066	-0.205	0.126	0.198	83.769930	-4.731835	110.28	2130
6	GUIDE	used	625745144	7.85	9859	1.000	-0.105	-0.167	0.091	0.147	83.888985	-4.837539	487.71	1701
7	GUIDE	used	626272760	6.64	9861	1.000	-0.017	0.061	0.133	0.274	84.363987	-5.938389	1693.67	-2439

2.4 Star Slots

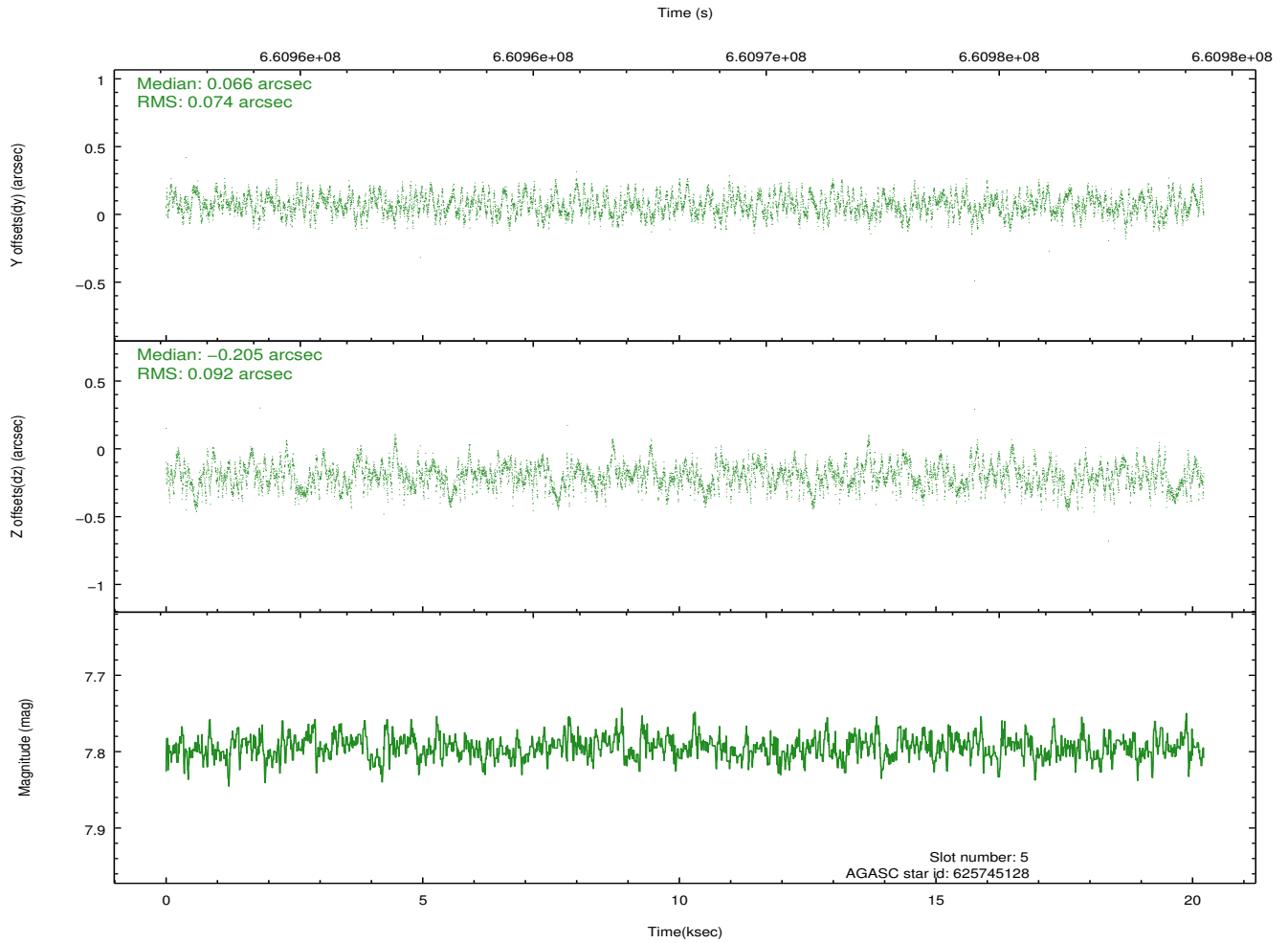
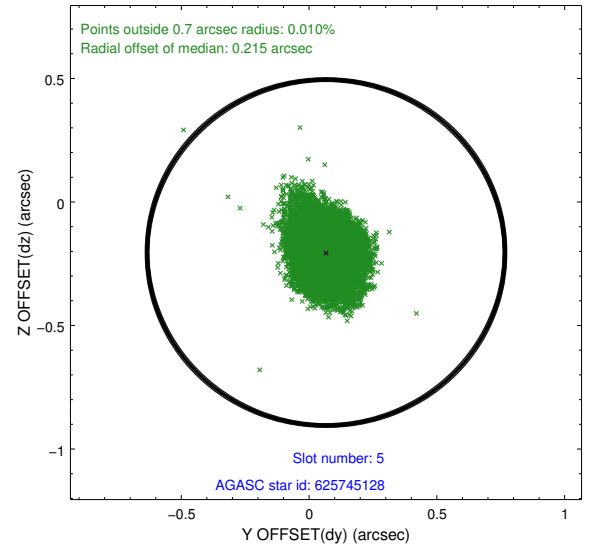
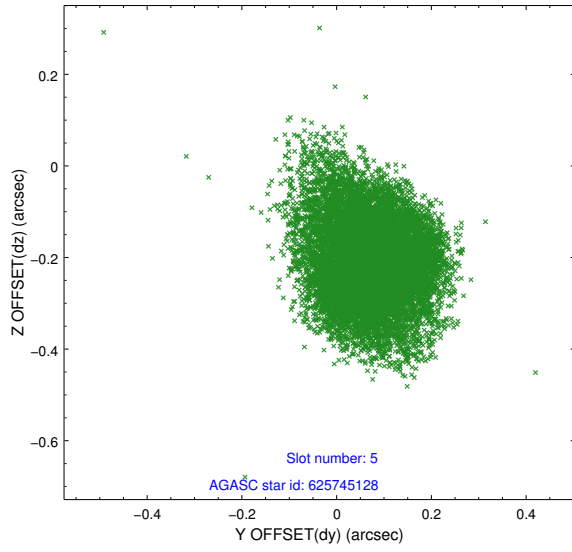
2.4.1 Slot 3



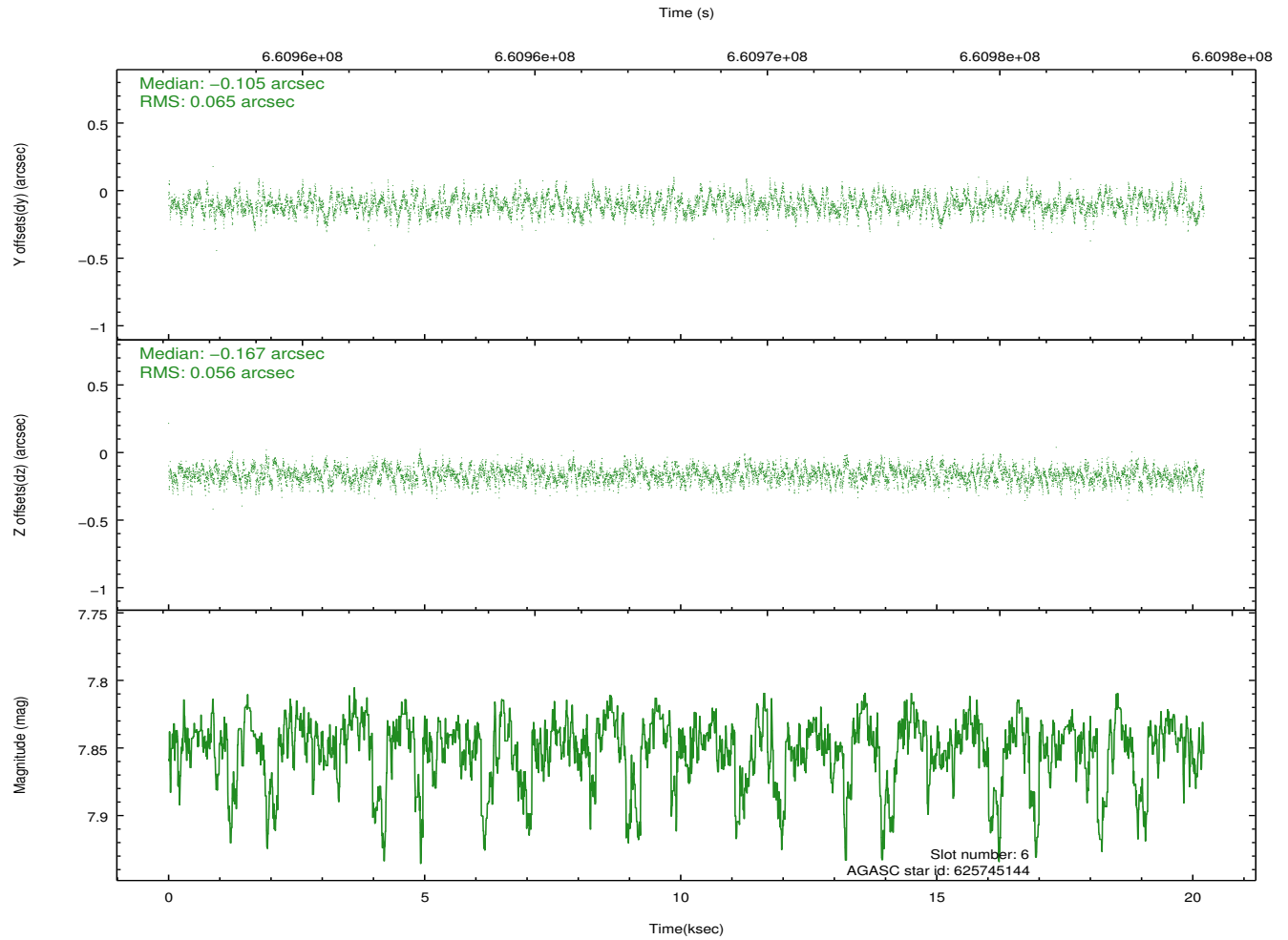
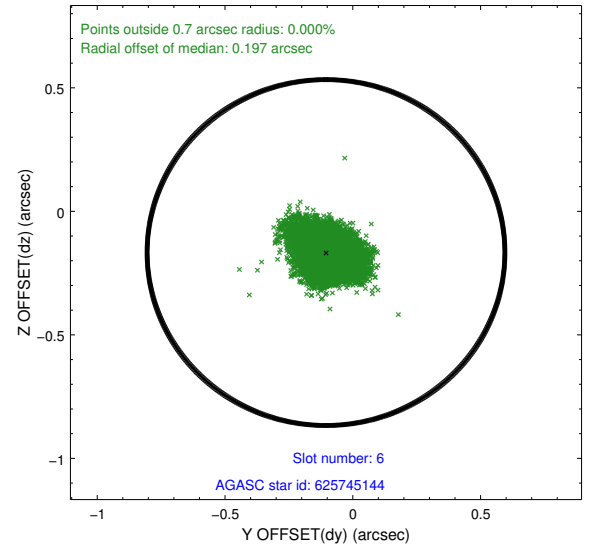
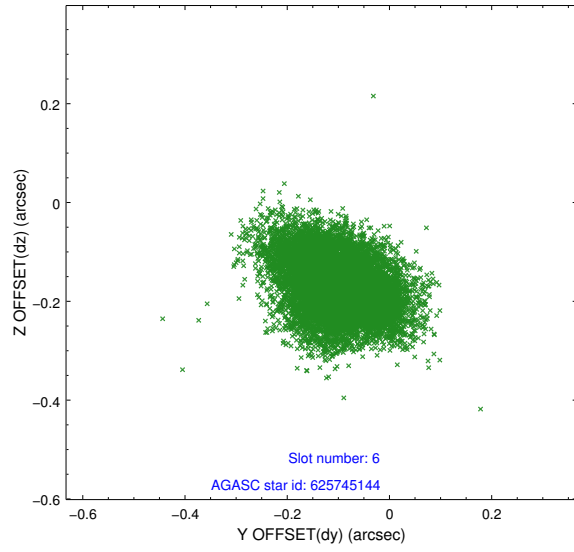
2.4.2 Slot 4



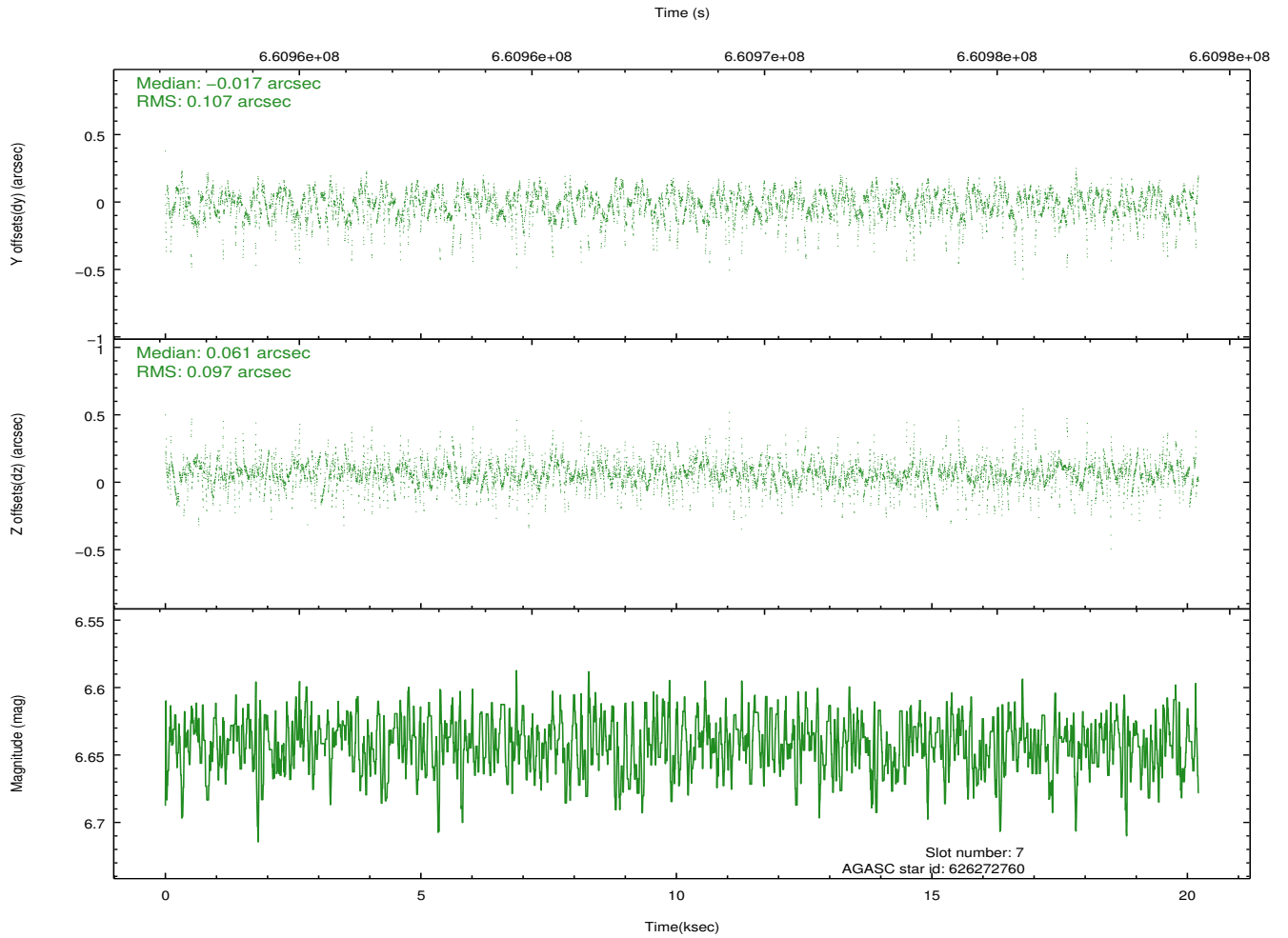
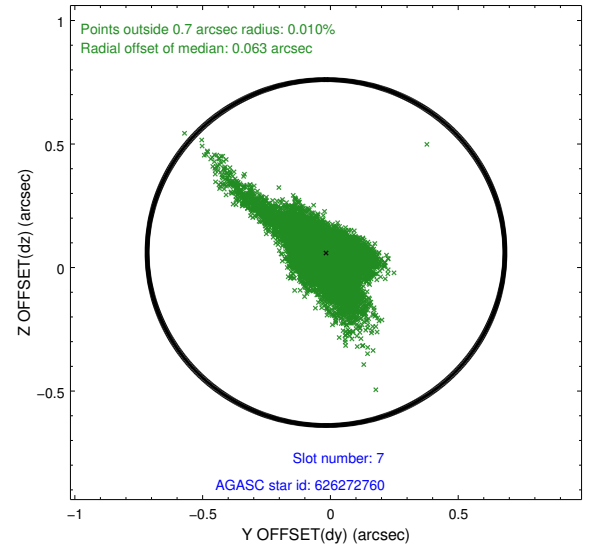
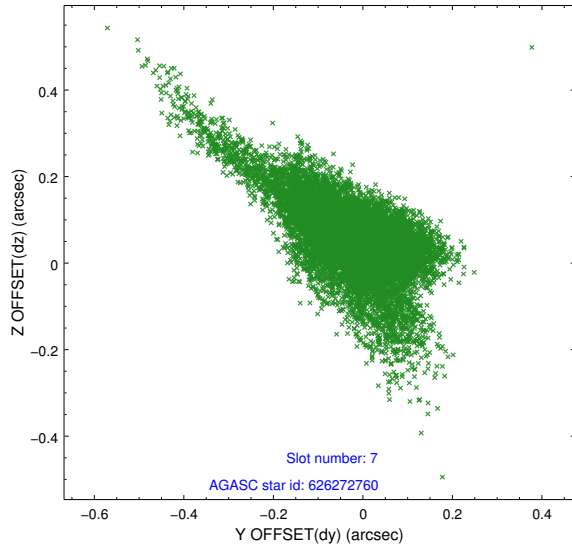
2.4.3 Slot 5



2.4.4 Slot 6

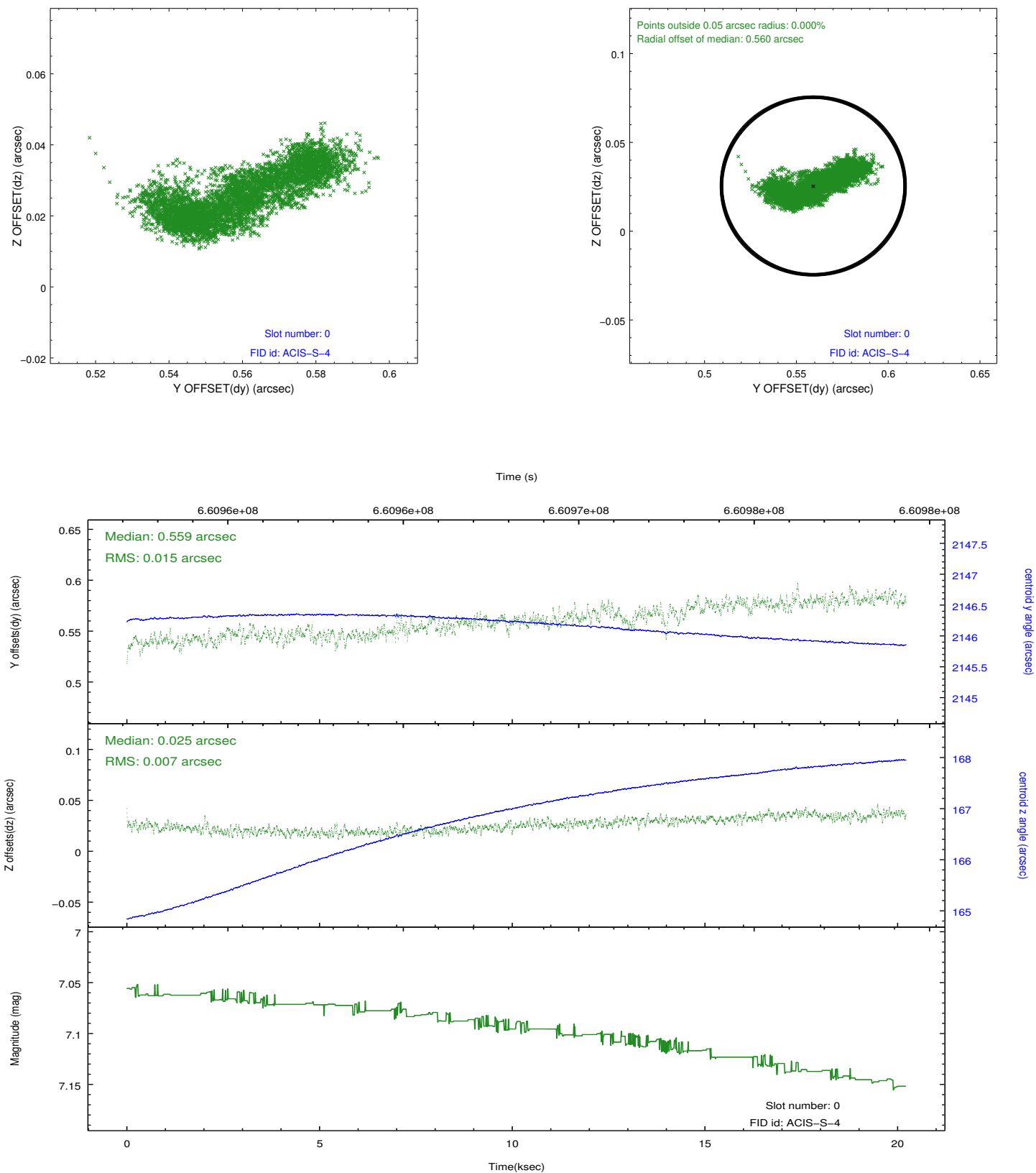


2.4.5 Slot 7

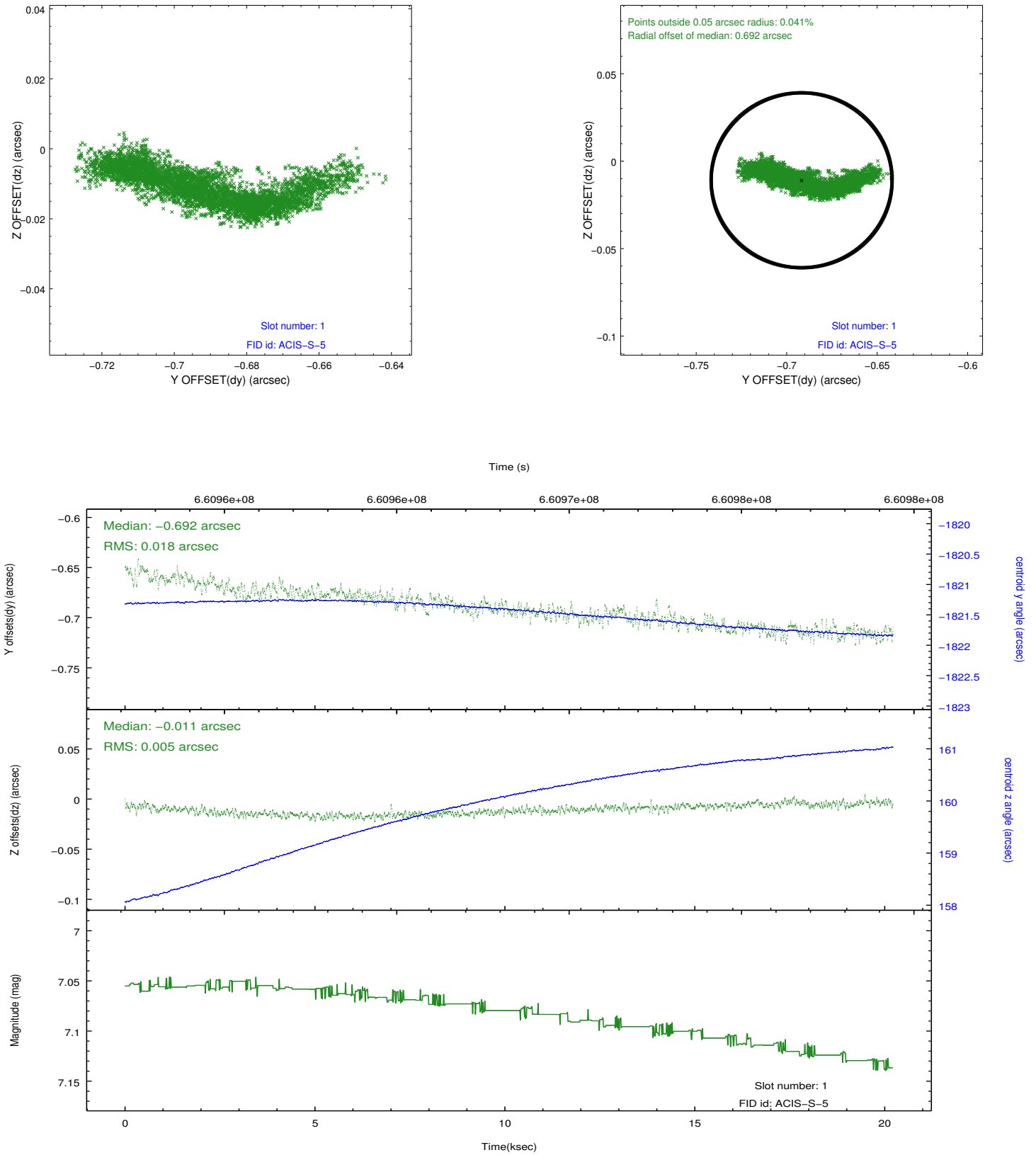


2.5 FID Slots

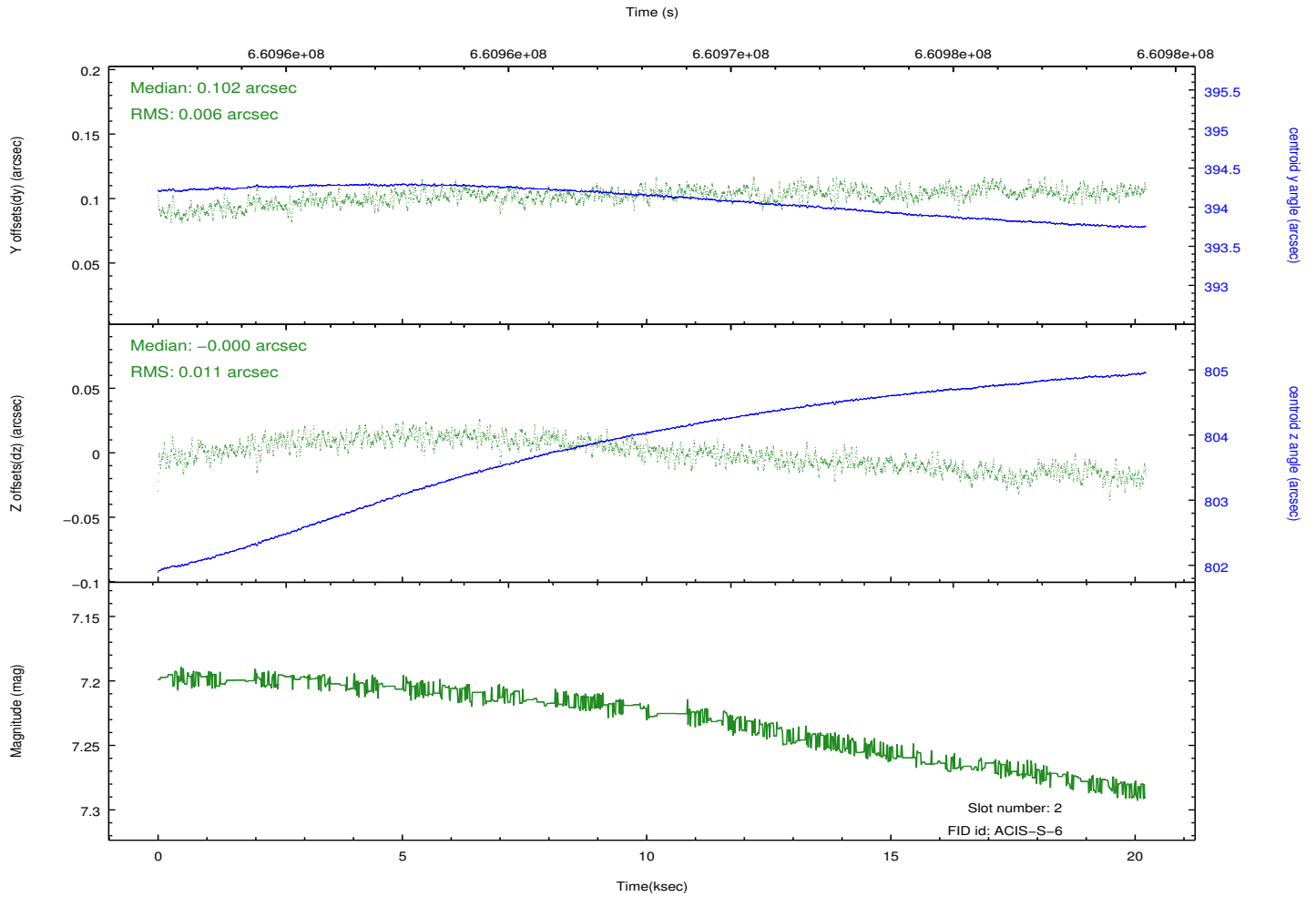
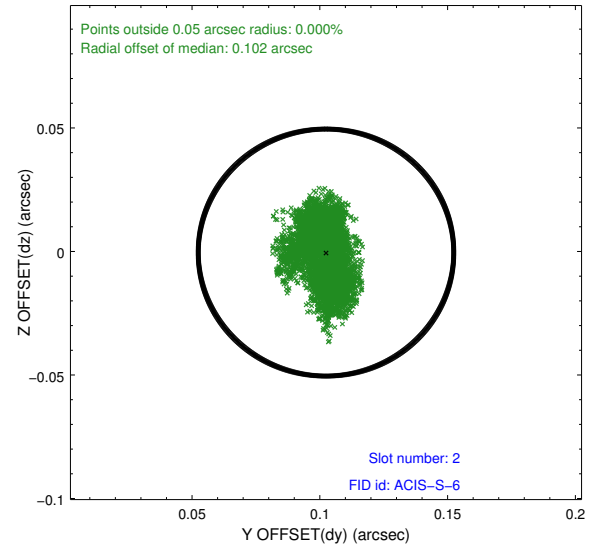
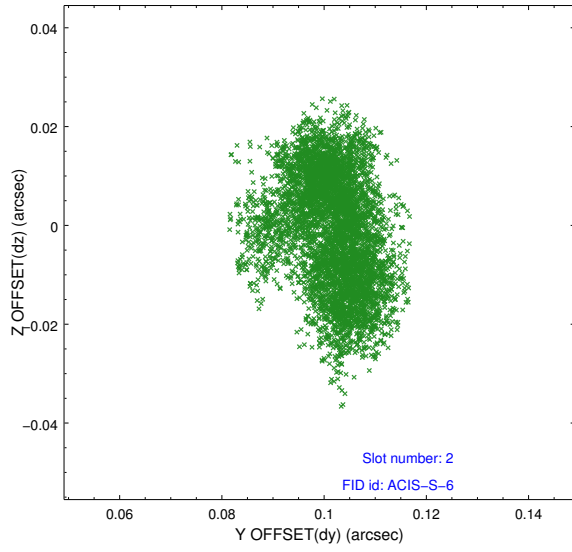
2.5.1 Slot 0



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)	2018.12.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.171700155258

A.2 Comments

Monitor constraint met.