

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 19630 - L2 Version 1
Chandra X-Ray Center

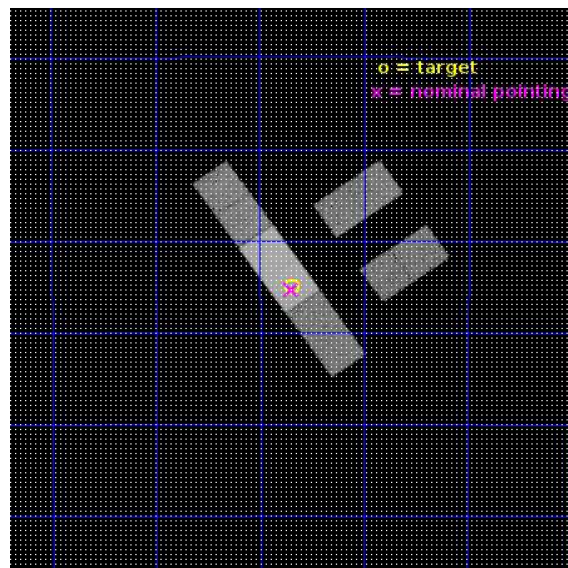
L2 Processing Date : Mar 9 2019

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1 Front

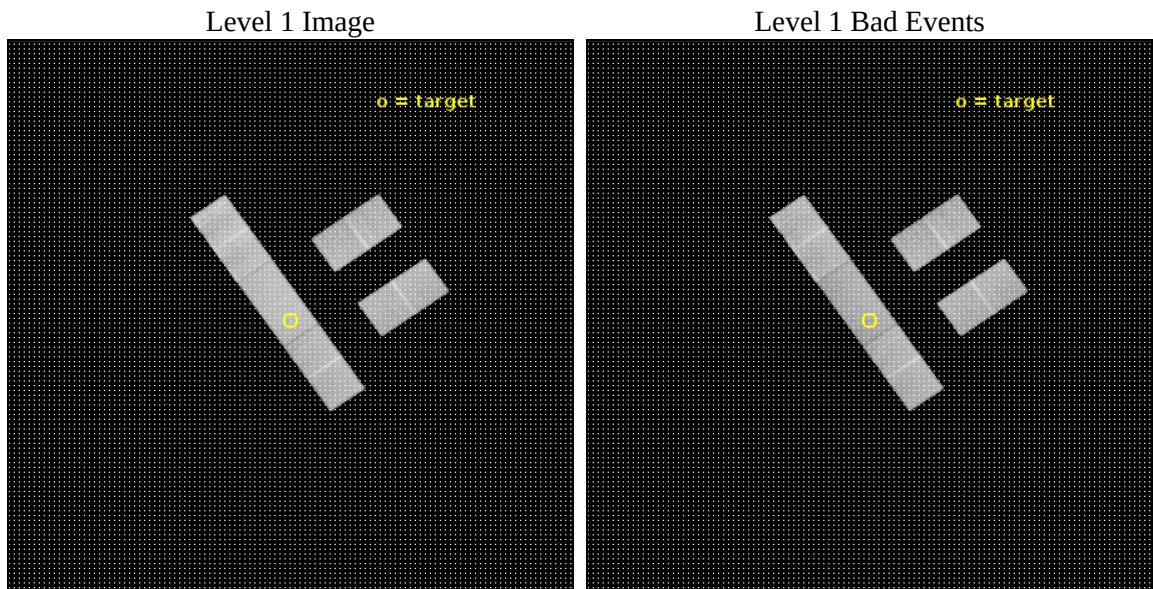
seq_num	703427	Sequence number
obs_id	19630	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	QJ0158-4325	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	29.6725	Observer's specified target RA [deg]
dec_targ	-43.417833	Observer's specified target Dec [deg]
ra_nom	29.674769382322	Nominal RA [deg]
dec_nom	-43.422372967072	Nominal Dec [deg]
roll_nom	235.22312644118	Nominal Roll [deg]
revision	1	Processing version of data
ontime	34057.800955296	Sum of GTIs [s]
livetime	33254.98645867	Livetime [s]
ontime2	34056.013321877	Sum of GTIs [s]
ontime3	34056.059935212	Sum of GTIs [s]
ontime6	34057.800955296	Sum of GTIs [s]
ontime7	34057.800955296	Sum of GTIs [s]
ontime8	34057.795382023	Sum of GTIs [s]
l2events	133932	Number of level 2 events



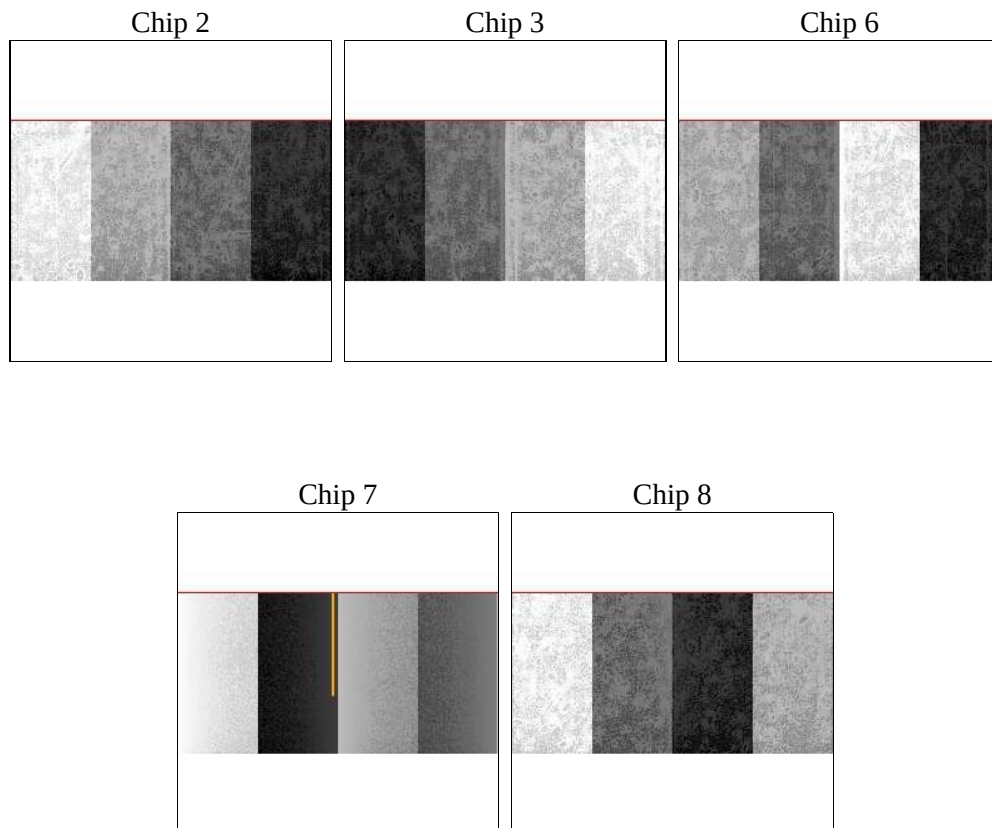
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	34057.800955296	Sum of GTIs [s]
caldsver	4.8.2	 	ontime2	34056.013321877	Sum of GTIs [s]
date	2019-03-09T15:04:24	Date and time of file creation	ontime3	34056.059935212	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	34057.800955296	Sum of GTIs [s]
			ontime7	34057.800955296	Sum of GTIs [s]
			ontime8	34057.795382023	Sum of GTIs [s]
			l1events	793729	Number of level 1 events

2.1.4 Events

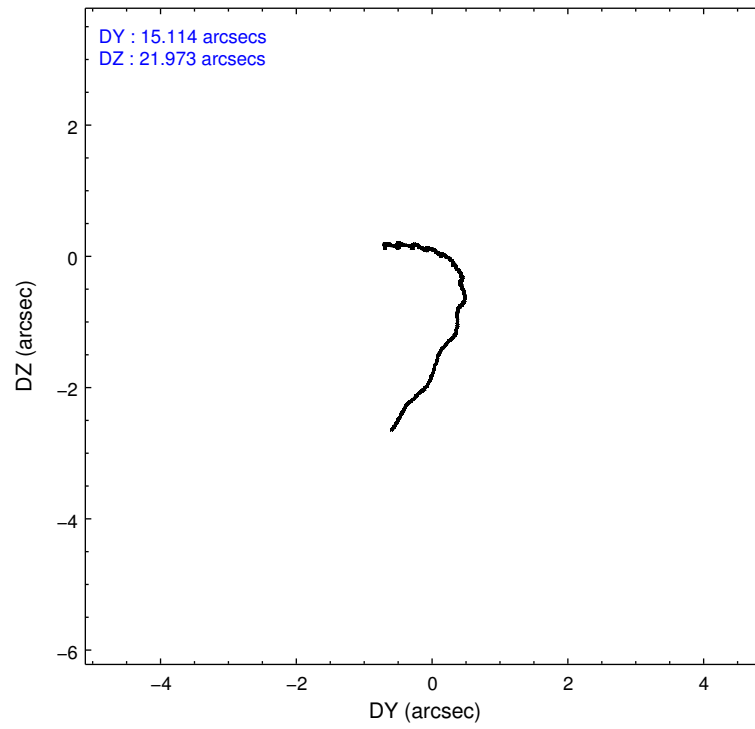
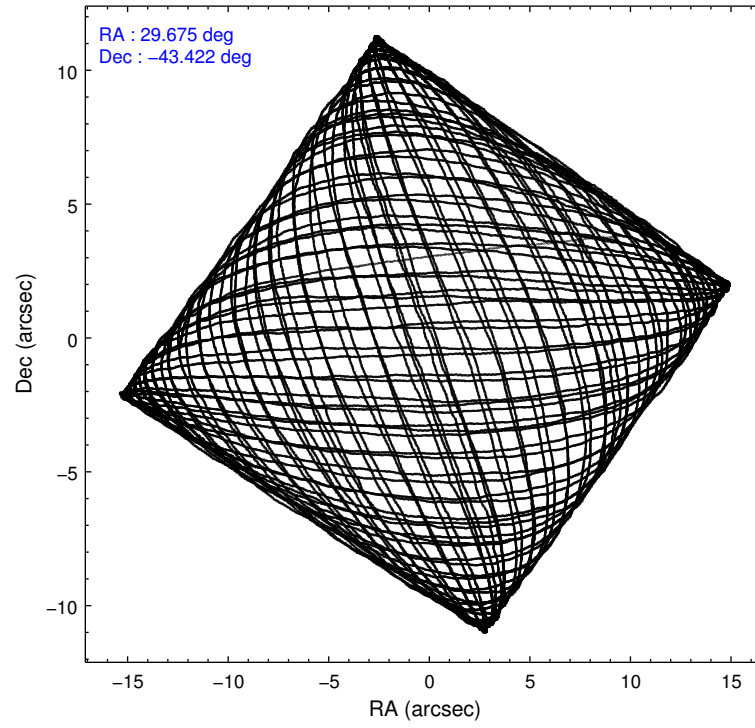
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	139552	139118	144333	176255	194471
rejected events	124333	123662	127755	96773	143667
rejected %	89%	88%	88%	54%	73%

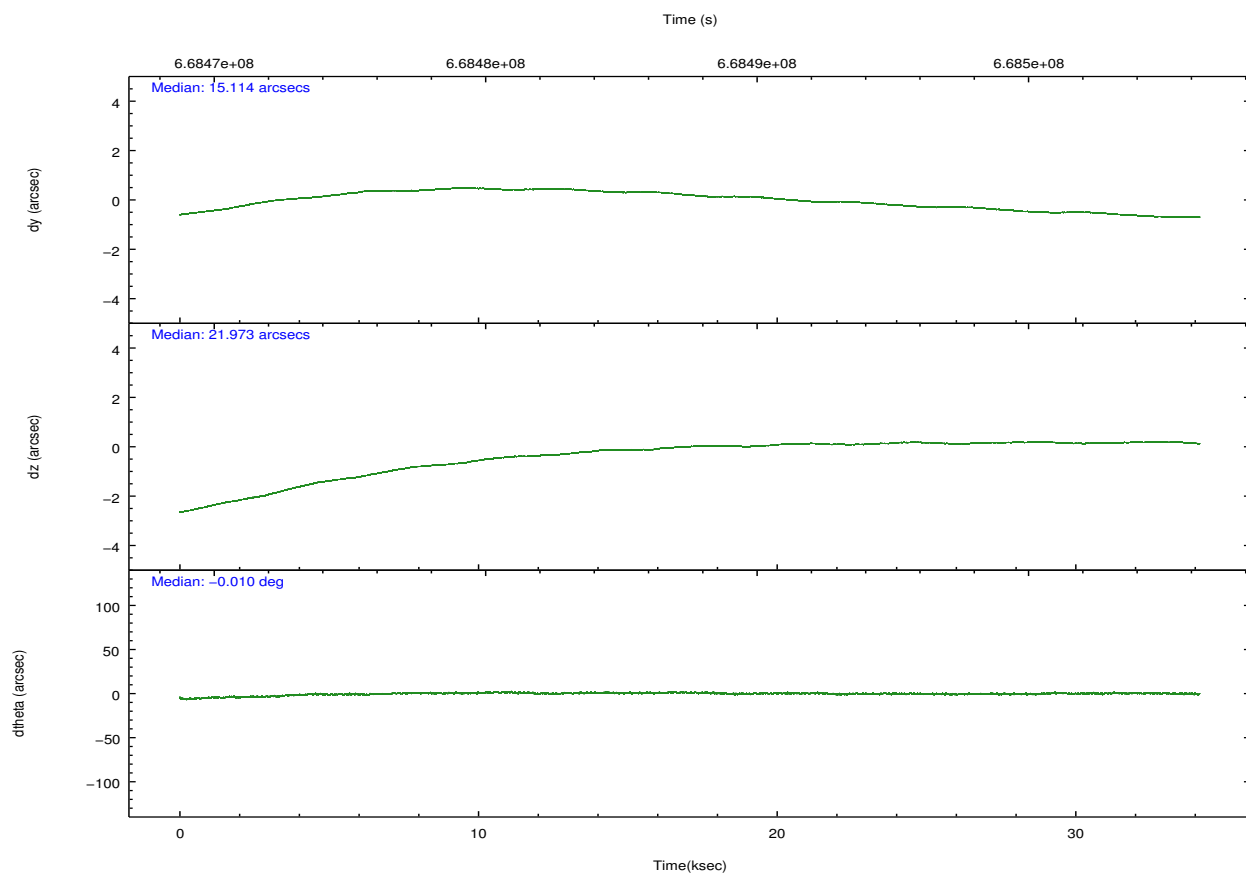
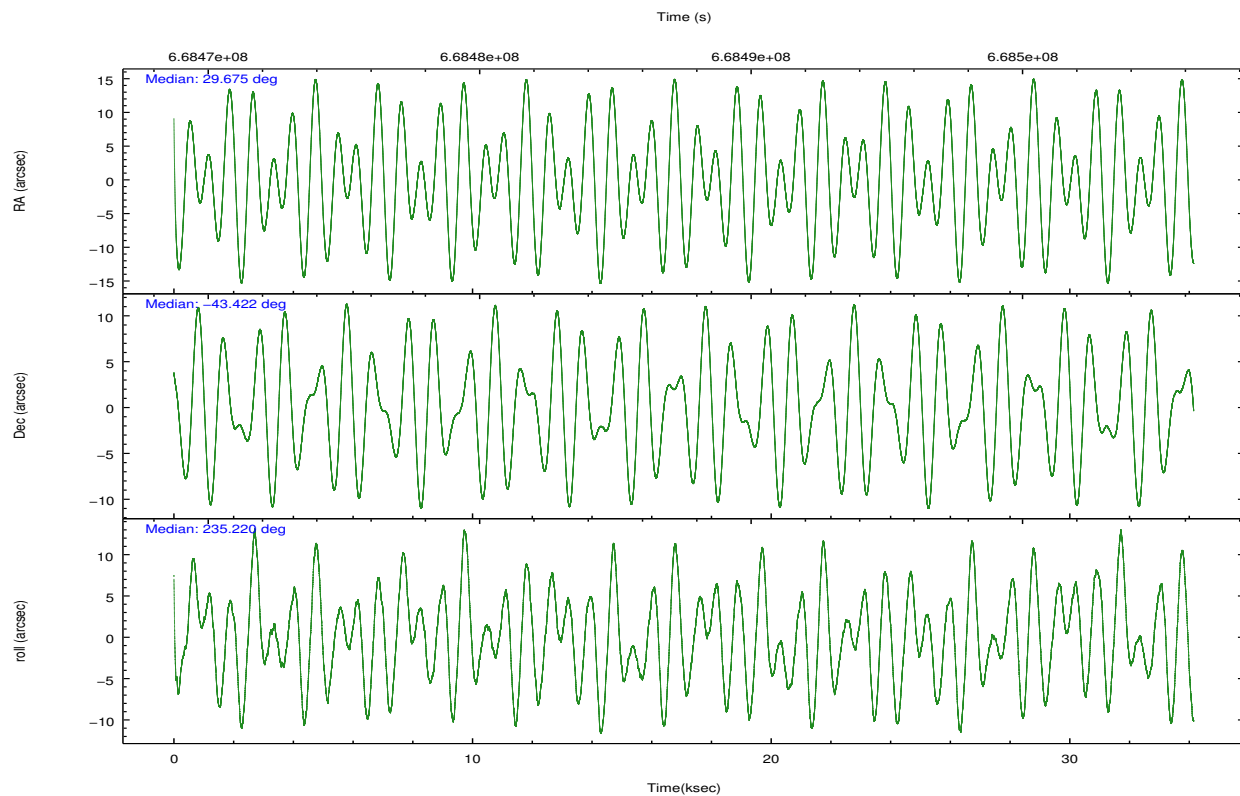
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	5045	5489	5185	7609	14375
	3%	3%	3%	4%	7%
grade 1 events	66	56	63	260	91
	0%	0%	0%	0%	0%
grade 2 events	3649	3147	3721	17075	11888
	2%	2%	2%	9%	6%
grade 3 events	1833	1879	1944	7241	5492
	1%	1%	1%	4%	2%
grade 4 events	1787	1768	1918	7312	5027
	1%	1%	1%	4%	2%
grade 5 events	5217	6342	6371	18323	9705
	3%	4%	4%	10%	4%
grade 6 events	2907	3175	3813	40252	14025
	2%	2%	2%	22%	7%
grade 7 events	119048	117262	121318	78183	133868
	85%	84%	84%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	29.677434	29.67476938232164	CCD I2 on	O1	Y
[deg] Pointing Dec	-43.395007	-43.42237296707228	CCD I3 on	O2	Y
[deg] Pointing Roll	235.068324	235.2231264411798	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	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	O3	Y
[s] Observation start time (MET)	668470589.184000	668469326.25754	CCD S5 on	N	N
Observation start date	2019-03-08T22:15:20	2019-03-08T21:55:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	668504589.184000	668505117.20968	On-chip summing requested	N	N
Observation end date	2019-03-09T07:42:00	2019-03-09T07:51:57	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	Subarray start row	257	257
			Subarray row count	512	512
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1.7

2.3 Aspect



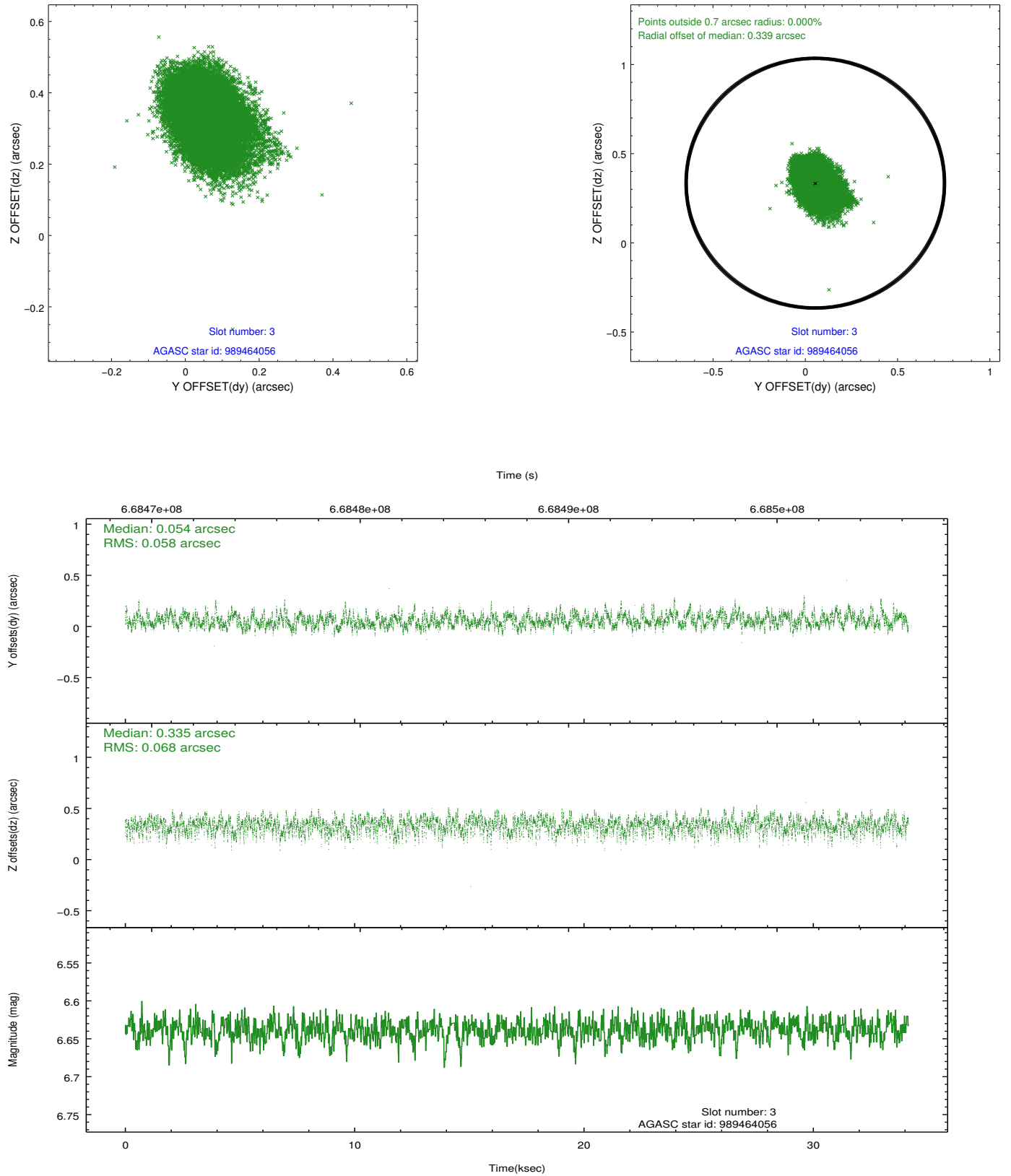


Slot Statistics

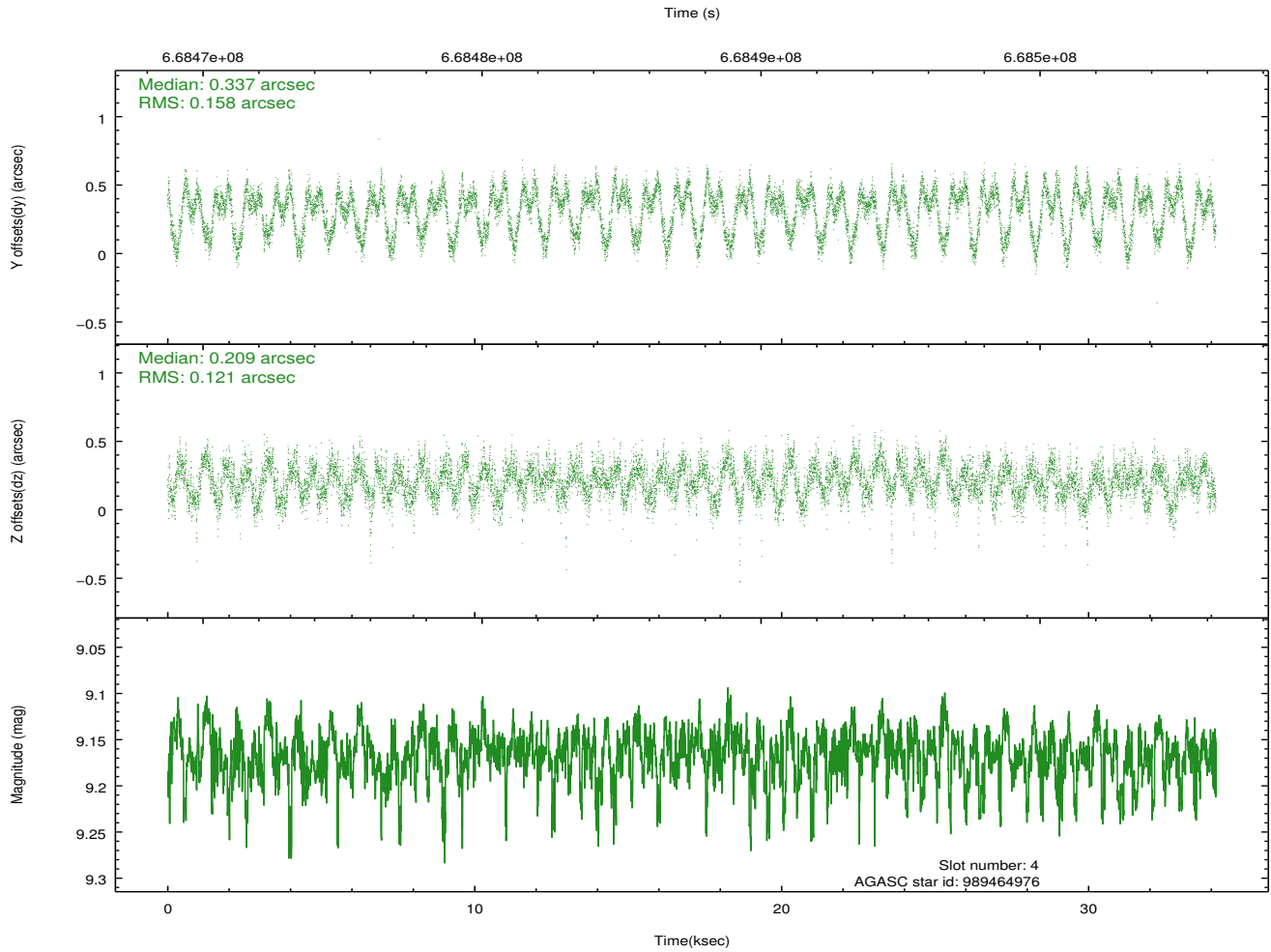
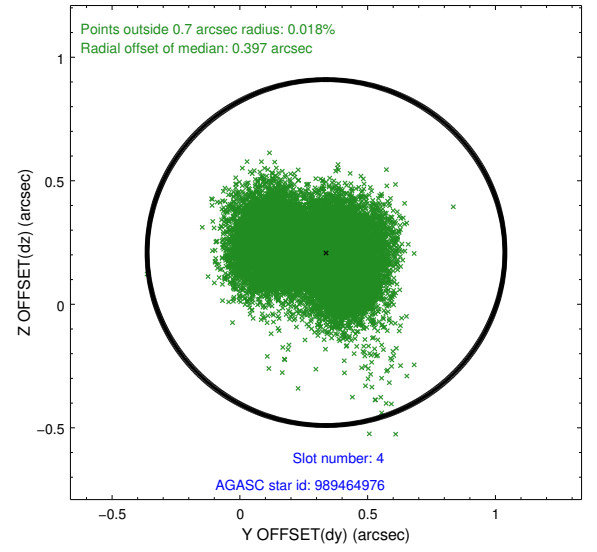
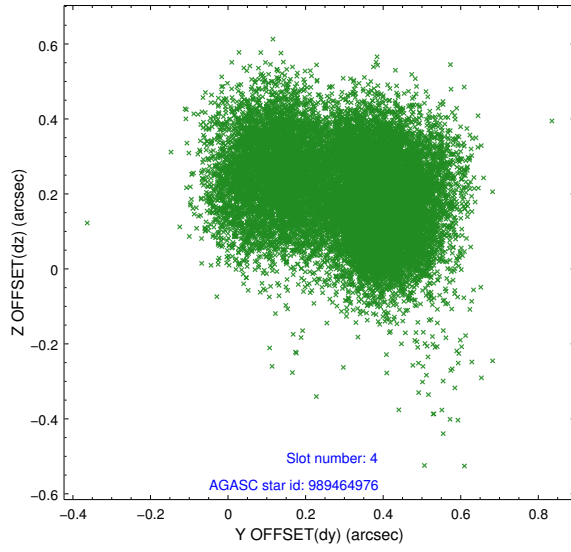
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.15	8329	1.000	0.390	-0.077	0.020	0.038	0.000000	0.000000	928.53	-1738
1	FID		ACIS-S-2	7.06	8329	1.000	-0.224	-0.120	0.013	0.032	0.000000	0.000000	-767.96	-1743
2	FID		ACIS-S-5	7.15	8328	1.000	-0.193	0.201	0.021	0.030	0.000000	0.000000	-1821.39	158
3	GUIDE	used	989464056	6.64	16658	1.000	0.054	0.335	0.095	0.153	29.735893	-42.949136	-1403.27	-791
4	GUIDE	used	989464976	9.17	16638	1.000	0.337	0.209	0.214	0.339	28.960994	-43.047006	59.59	-2257
5	GUIDE	used	989467528	8.20	16649	1.000	0.202	0.123	0.110	0.192	29.209436	-43.178151	66.89	-1450
6	GUIDE	used	989470432	9.26	16637	1.000	-0.321	-0.087	0.206	0.324	29.550844	-43.446971	343.66	-163
7	GUIDE	used	989470600	9.36	16637	1.000	-0.252	-0.583	0.200	0.331	29.755442	-43.921156	1436.98	1252

2.4 Star Slots

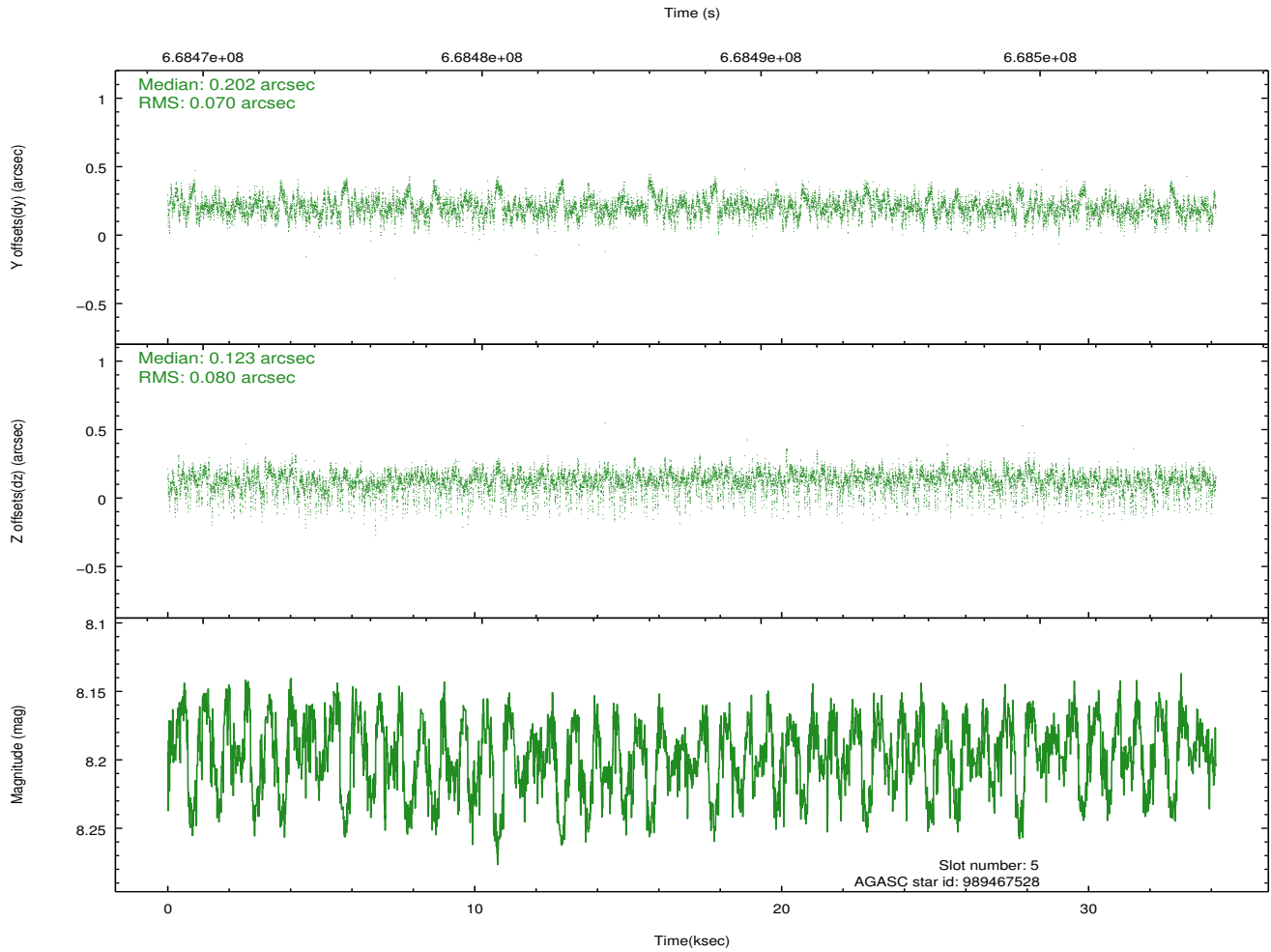
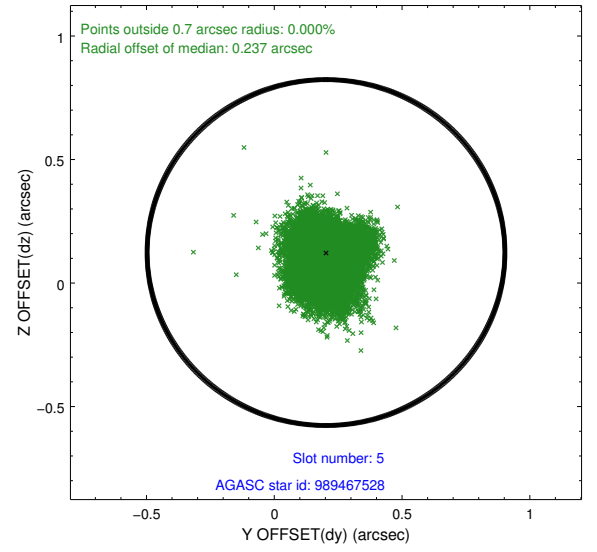
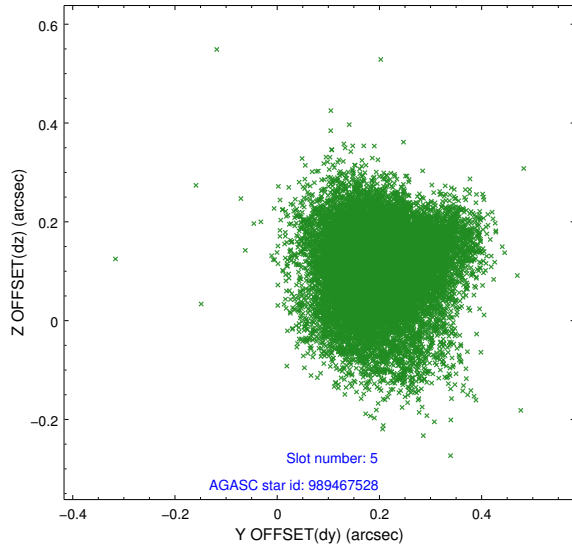
2.4.1 Slot 3



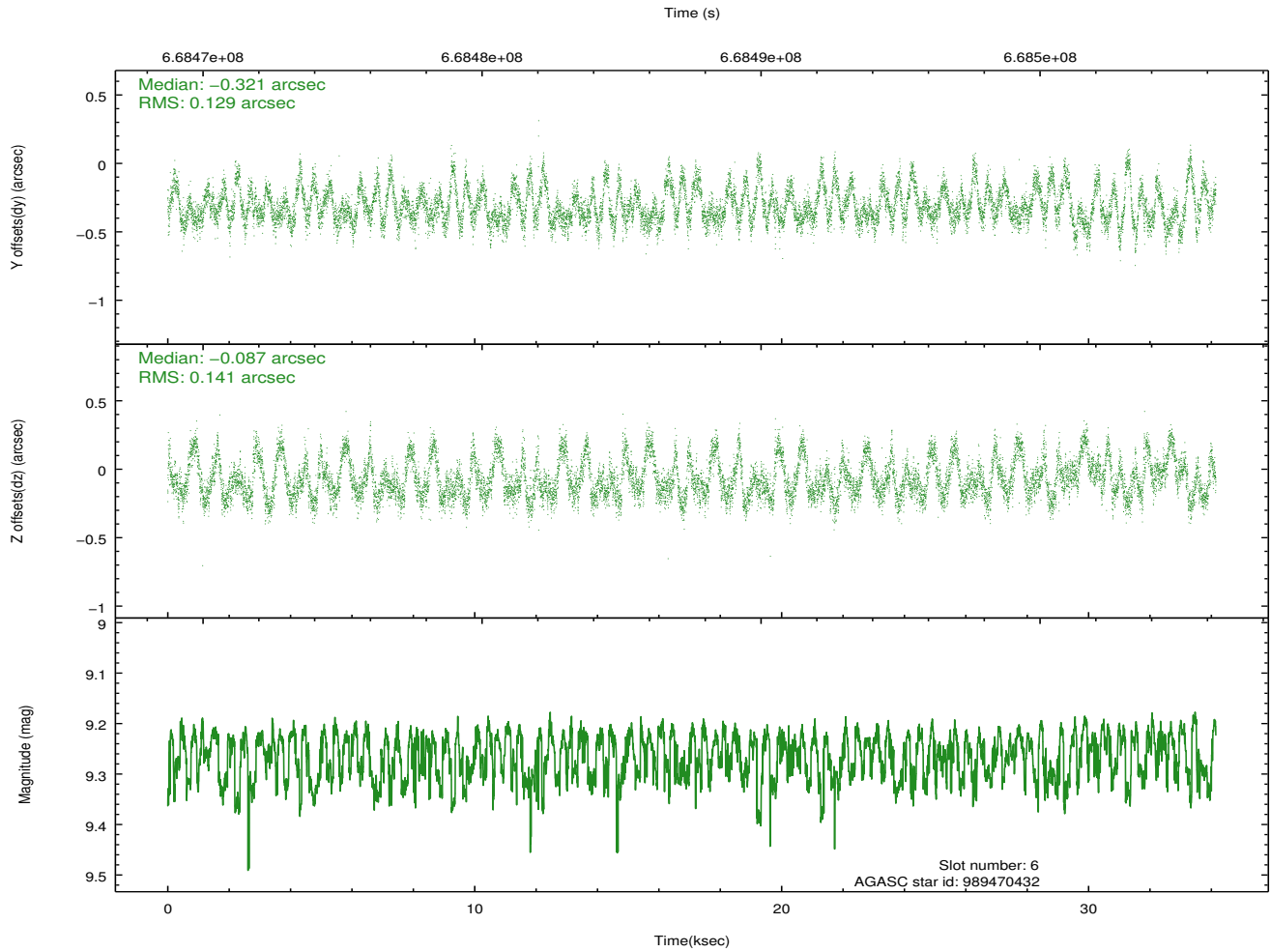
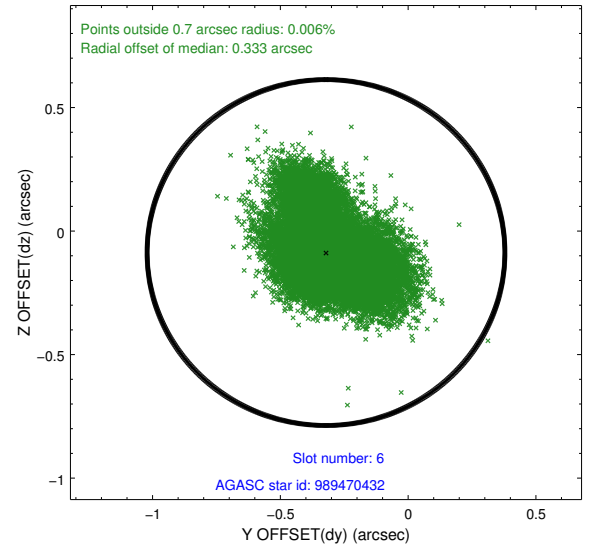
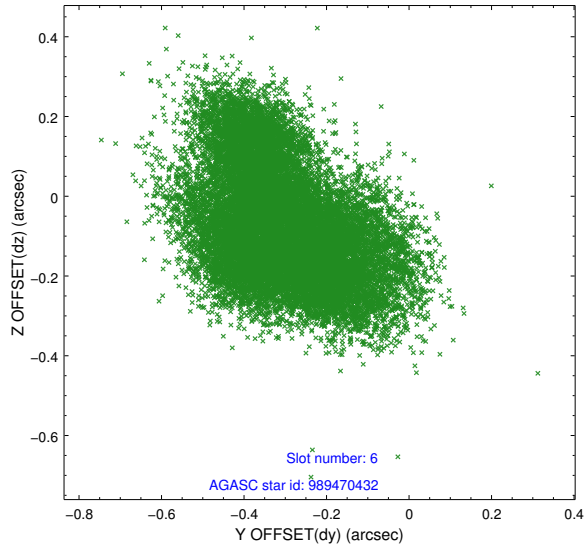
2.4.2 Slot 4



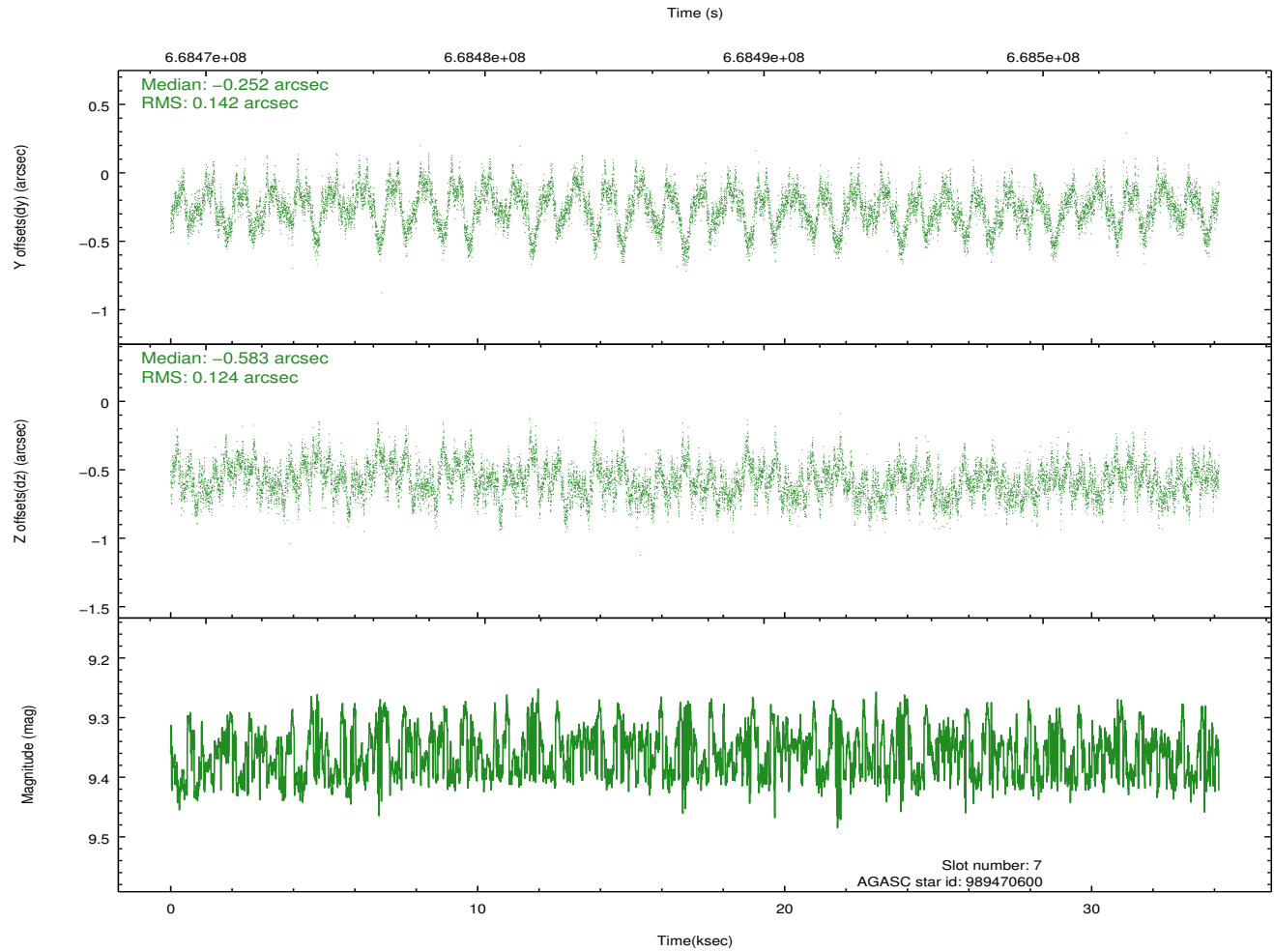
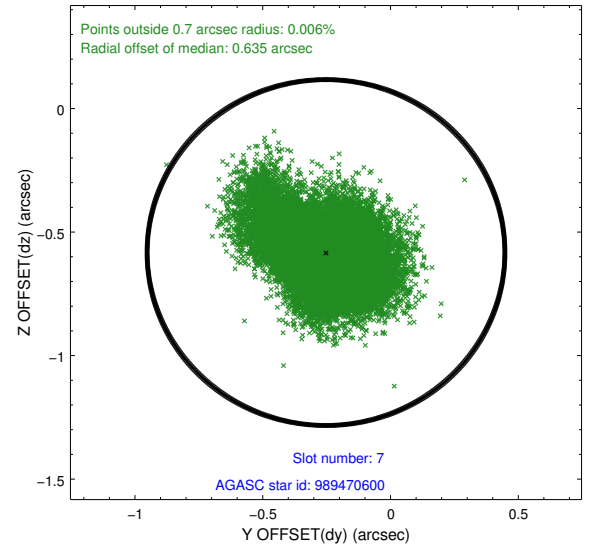
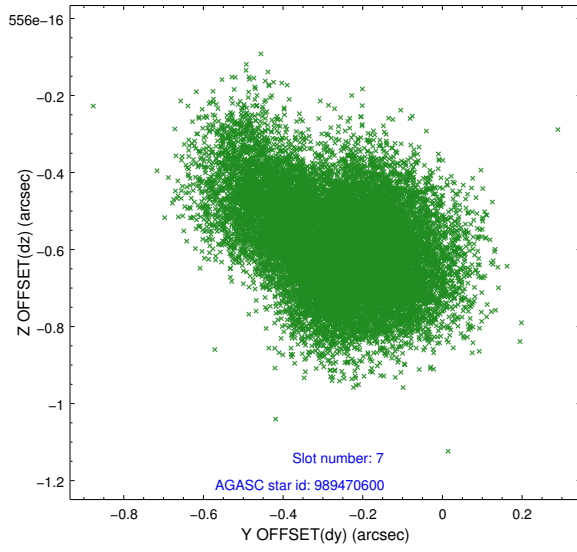
2.4.3 Slot 5



2.4.4 Slot 6

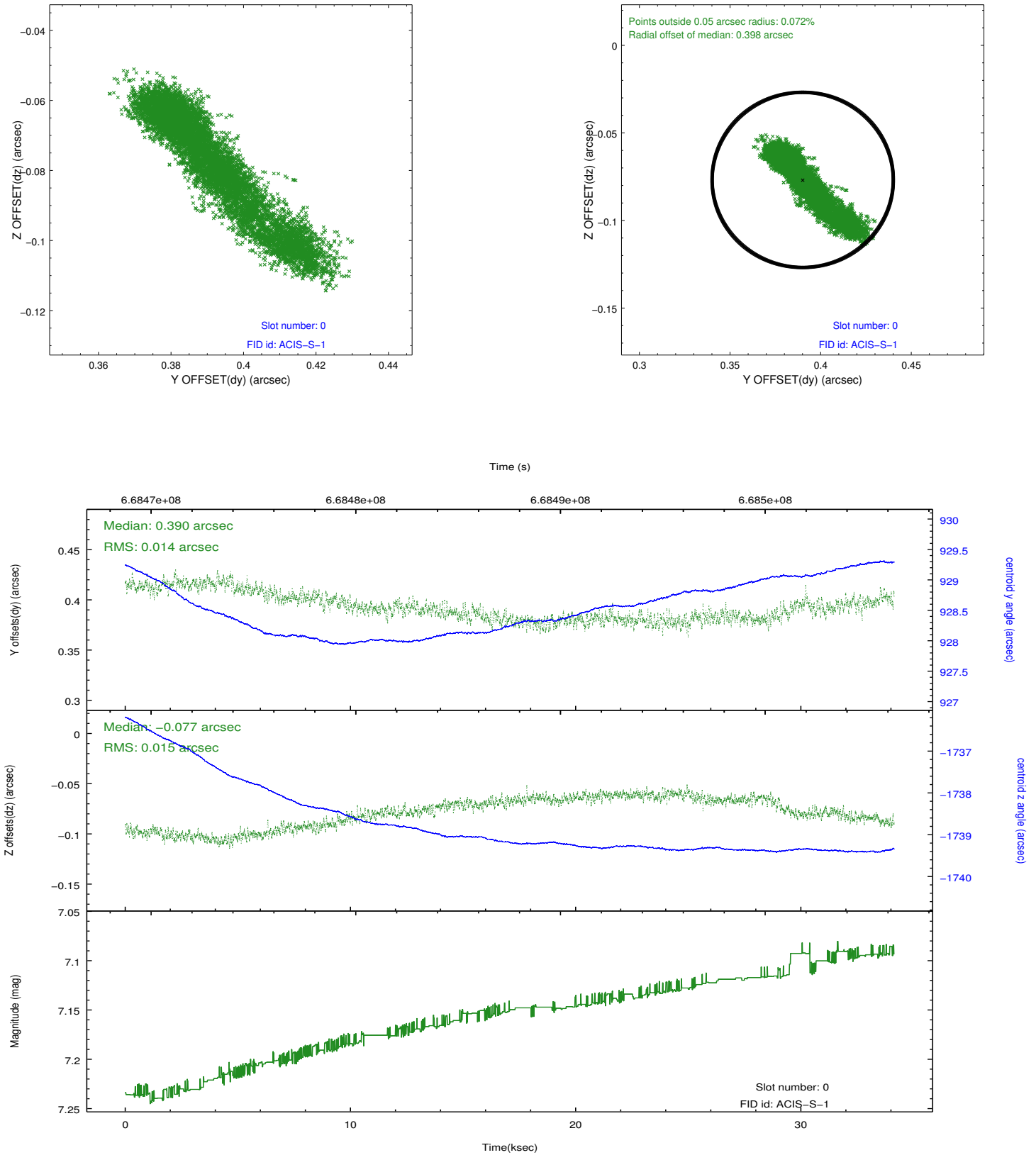


2.4.5 Slot 7

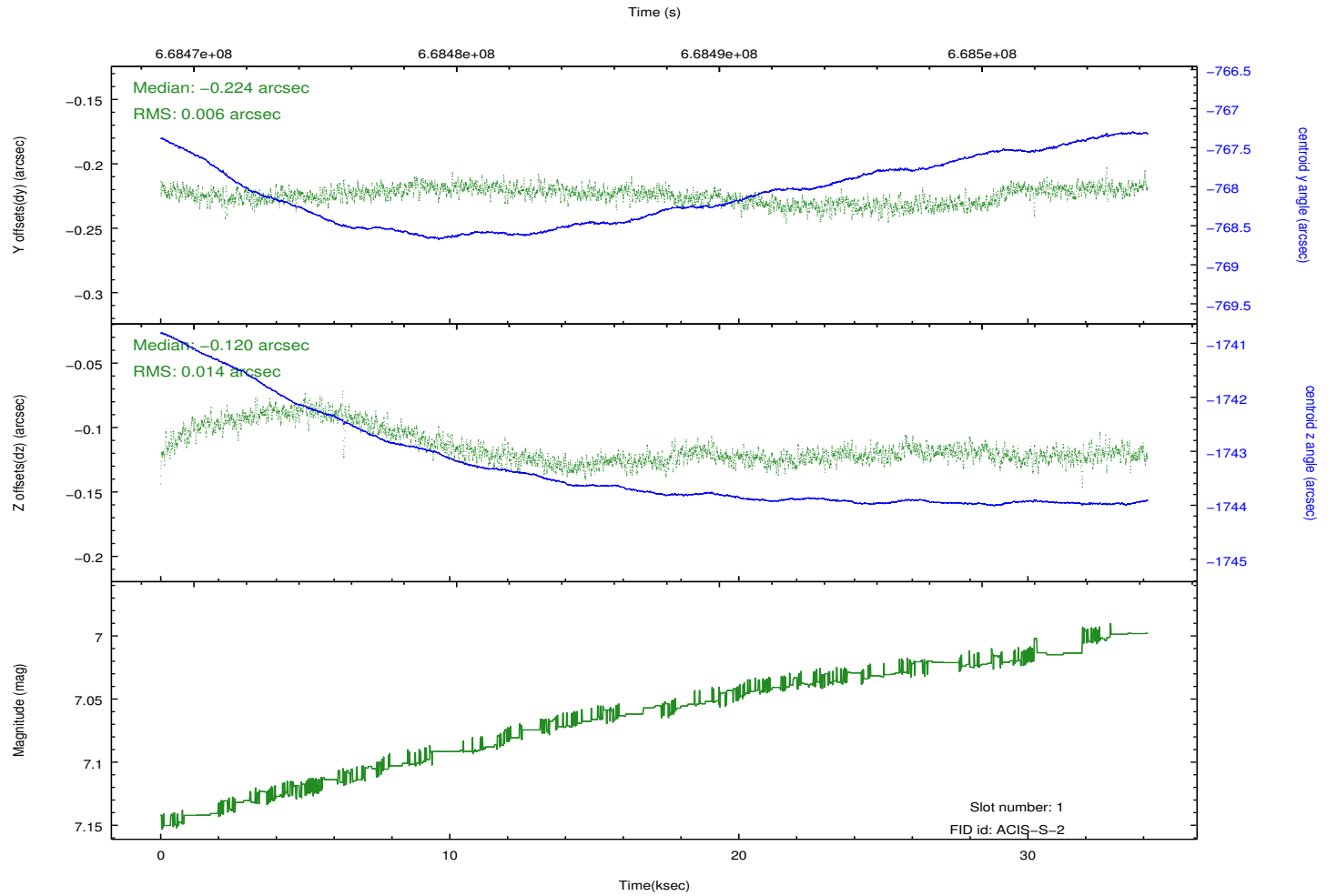
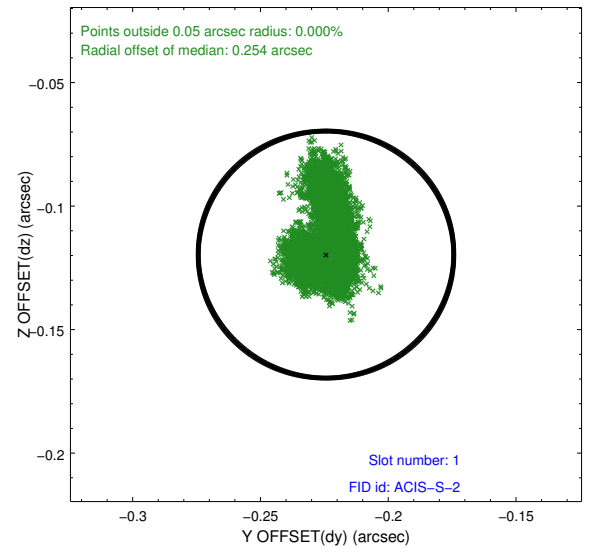
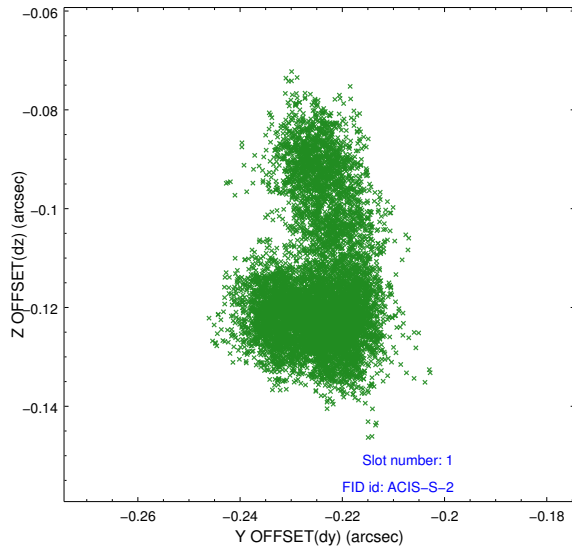


2.5 FID Slots

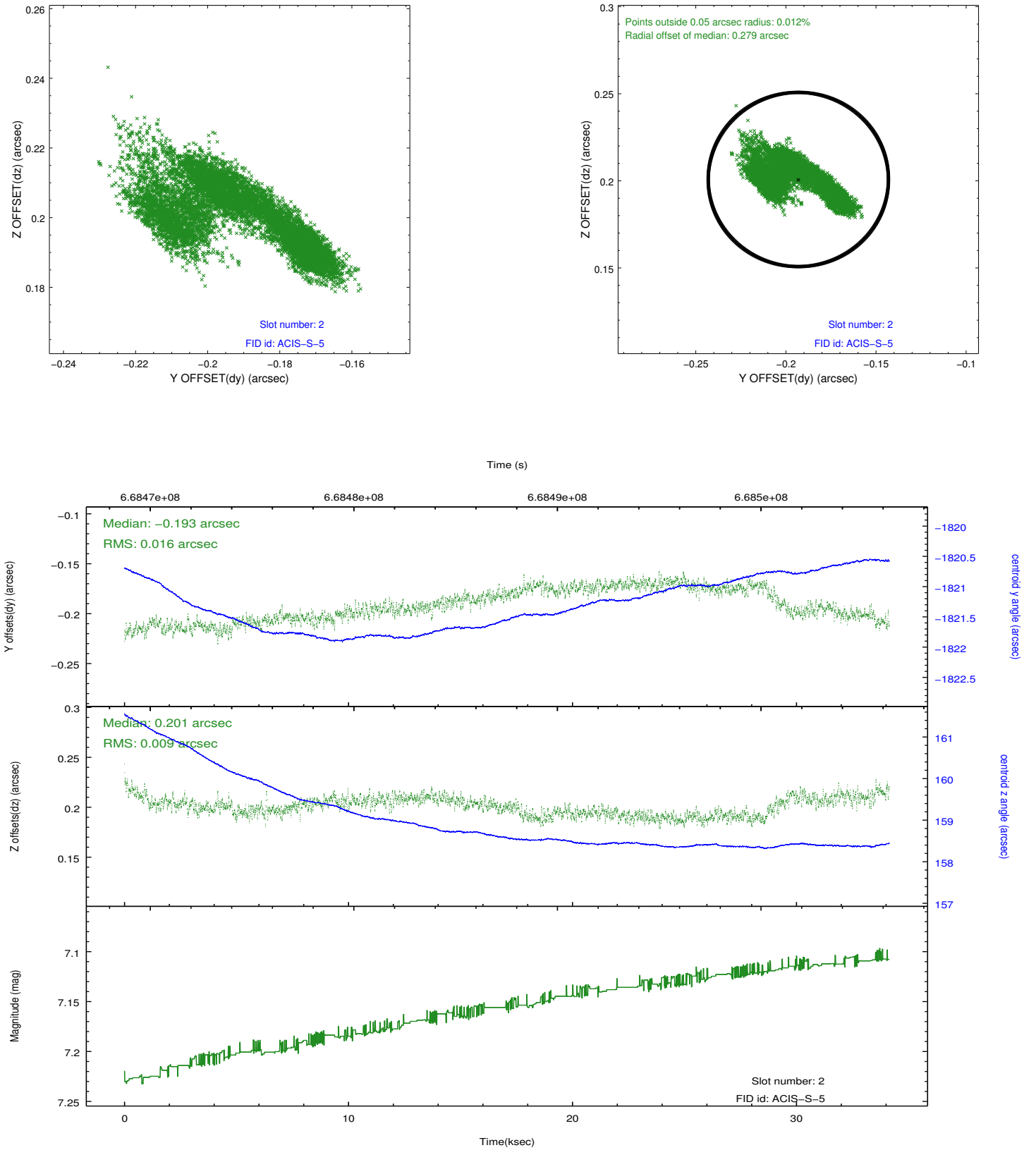
2.5.1 Slot 0



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)	2019.03.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.057800955296

A.2 Comments