

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23073 - L2 Version 1
Chandra X-Ray Center

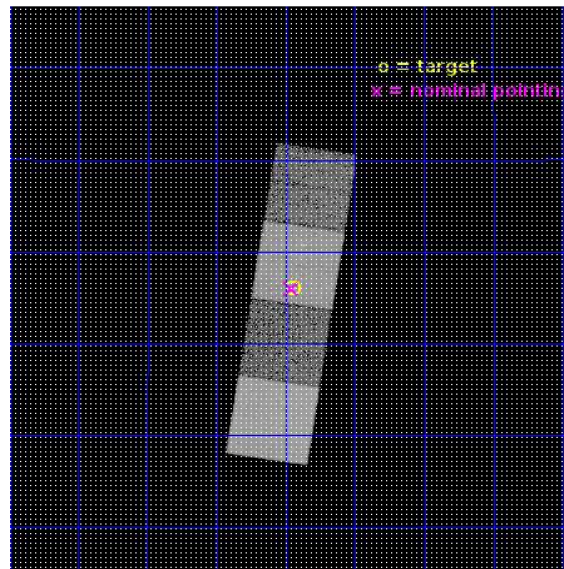
L2 Processing Date : Nov 10 2019

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1 Front

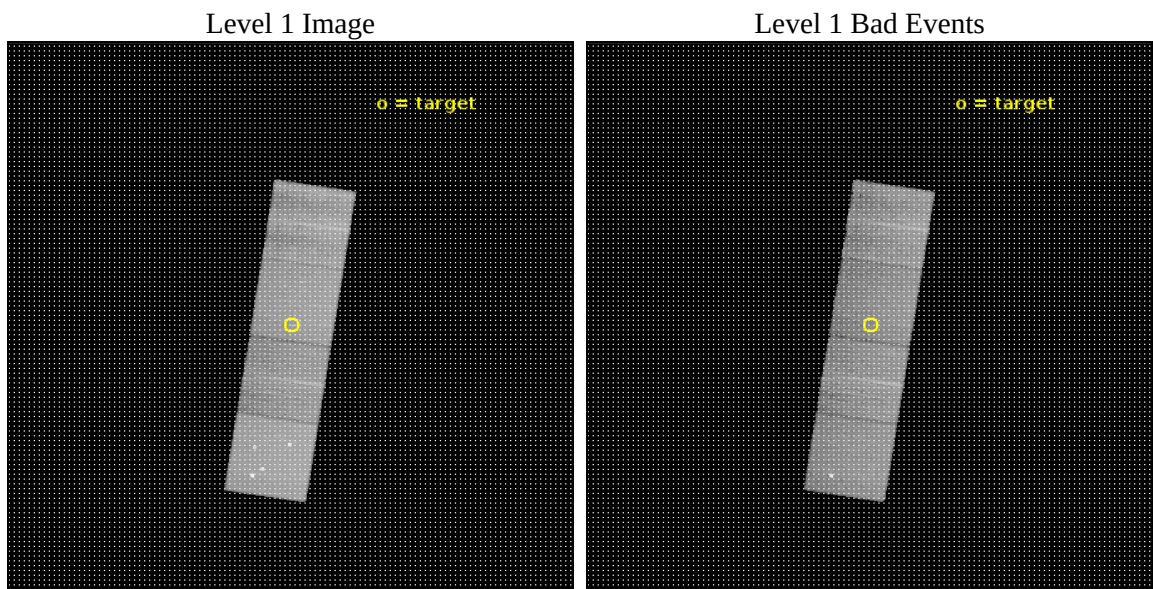
seq_num	704029	Sequence number
obs_id	23073	Observation id
title	Calibration of the quasar Hubble diagram with z	Proposal title
observer	Francesca Civano	Principal investigator
object	SDSSJ013756.50+145606.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	24.485449	Observer's specified target RA [deg]
dec_targ	14.935116	Observer's specified target Dec [deg]
ra_nom	24.489942846848	Nominal RA [deg]
dec_nom	14.933124084697	Nominal Dec [deg]
roll_nom	278.8339957026	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15061.970912337	Sum of GTIs [s]
livetime	14865.175173906	Livetime [s]
ontime5	15061.929872394	Sum of GTIs [s]
ontime6	15061.888832331	Sum of GTIs [s]
ontime7	15061.970912337	Sum of GTIs [s]
ontime8	15061.847792387	Sum of GTIs [s]
l2events	176927	Number of level 2 events



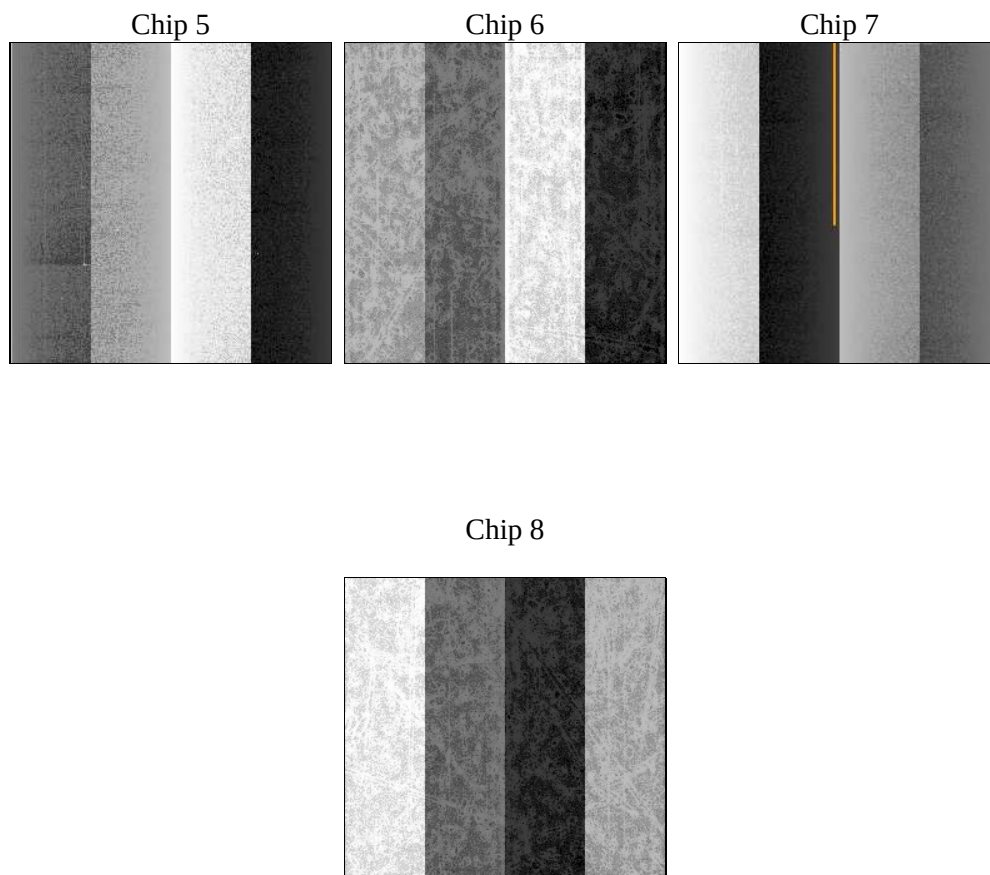
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	15061.970912337	Sum of GTIs [s]
caldsver	4.8.4.2	 	ontime5	15061.929872394	Sum of GTIs [s]
date	2019-11-10T15:00:21	Date and time of file creation	ontime6	15061.888832331	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	15061.970912337	Sum of GTIs [s]
			ontime8	15061.847792387	Sum of GTIs [s]
			l1events	620144	Number of level 1 events

2.1.4 Events

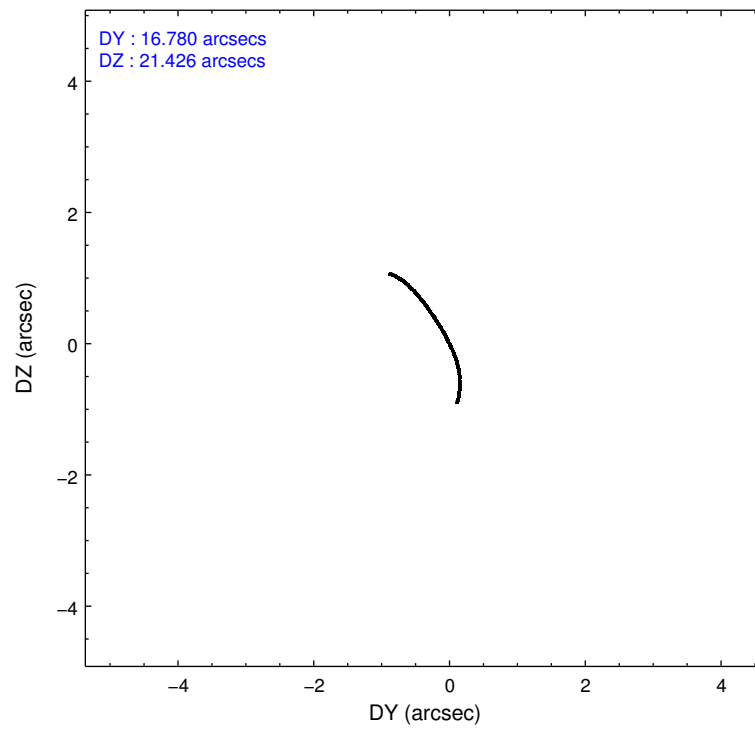
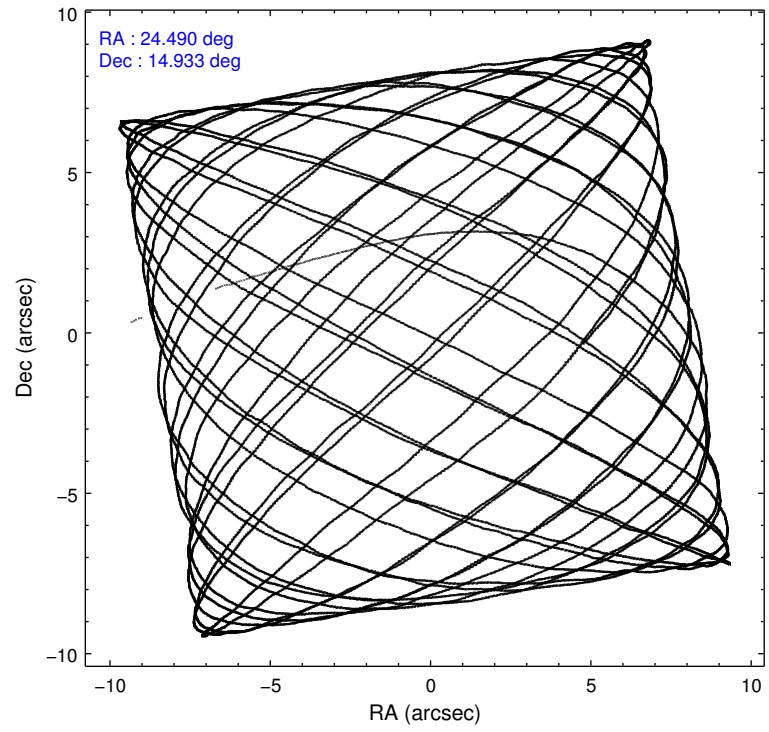
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	199369	117223	152115	151437
rejected events	100540	103906	84991	108411
rejected %	50%	88%	55%	71%

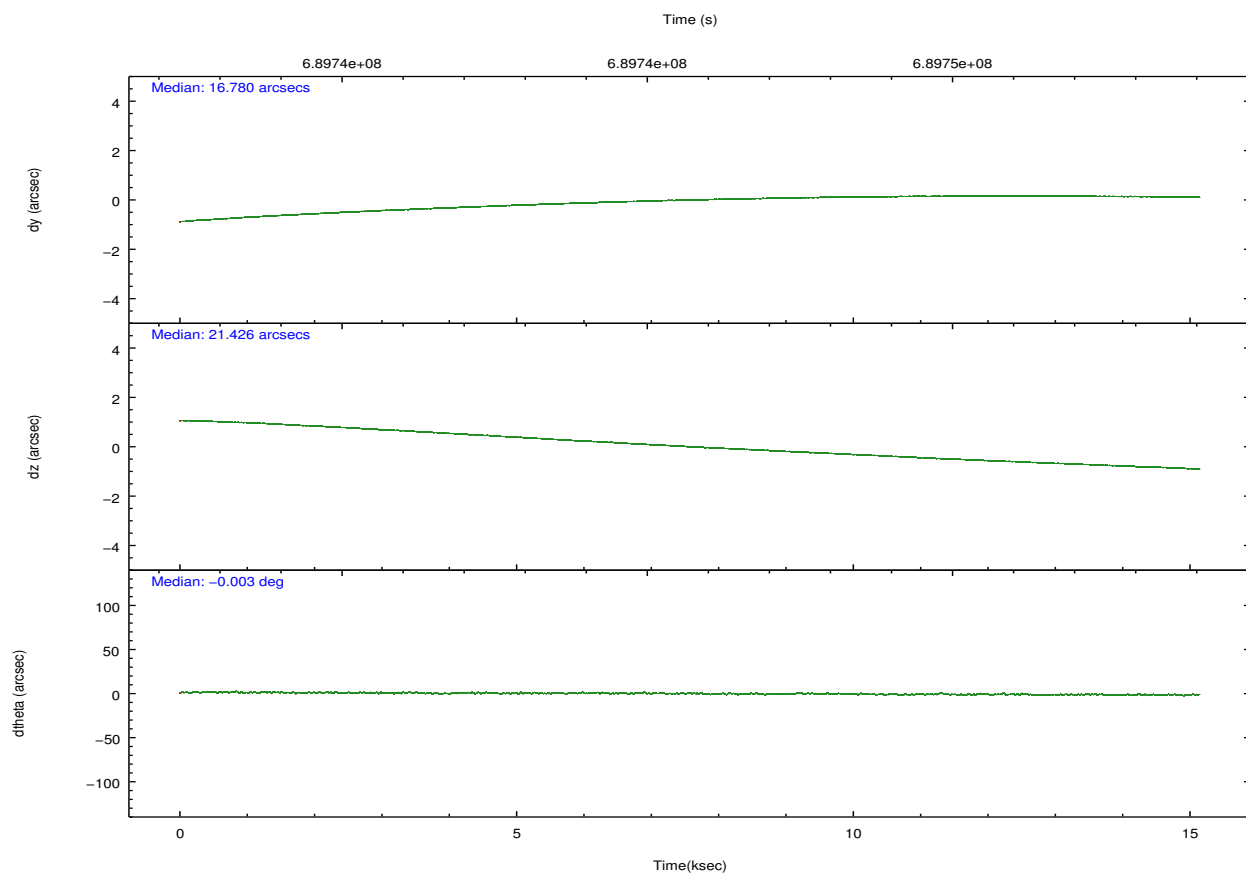
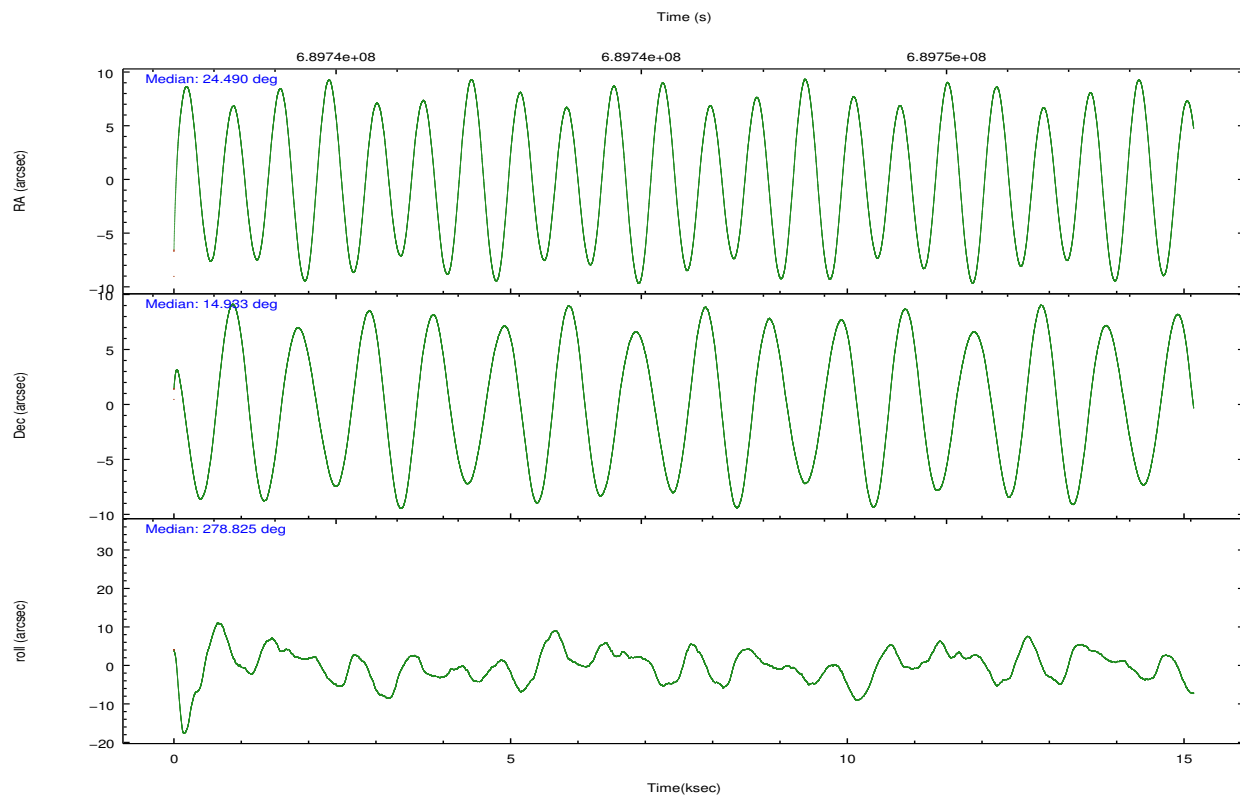
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	14330	4426	5832	12190
	7%	3%	3%	8%
grade 1 events	462	62	232	114
	0%	0%	0%	0%
grade 2 events	29993	3158	14760	10555
	15%	2%	9%	6%
grade 3 events	2864	1267	5273	4384
	1%	1%	3%	2%
grade 4 events	2800	1297	5218	4289
	1%	1%	3%	2%
grade 5 events	13223	5564	15026	8460
	6%	4%	9%	5%
grade 6 events	48887	3171	36065	11616
	24%	2%	23%	7%
grade 7 events	86810	98278	69709	99829
	43%	83%	45%	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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	24.471799	24.48994284684824	Subarray requested	NONE	NONE
[deg] Pointing Dec	14.954261	14.93312408469735	Alternating exposures requested	N	N
[deg] Pointing Roll	278.682027	278.833995702597	[s] Primary exposure time	0.000000	3.1
[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)	689738270.184000	689736999.23462			
Observation start date	2019-11-10T01:56:41	2019-11-10T01:36:39			
[s] Observation end time (MET)	689753270.184000	689753817.94814			
Observation end date	2019-11-10T06:06:41	2019-11-10T06:16:57			
Read mode	TIMED	TIMED			

2.3 Aspect



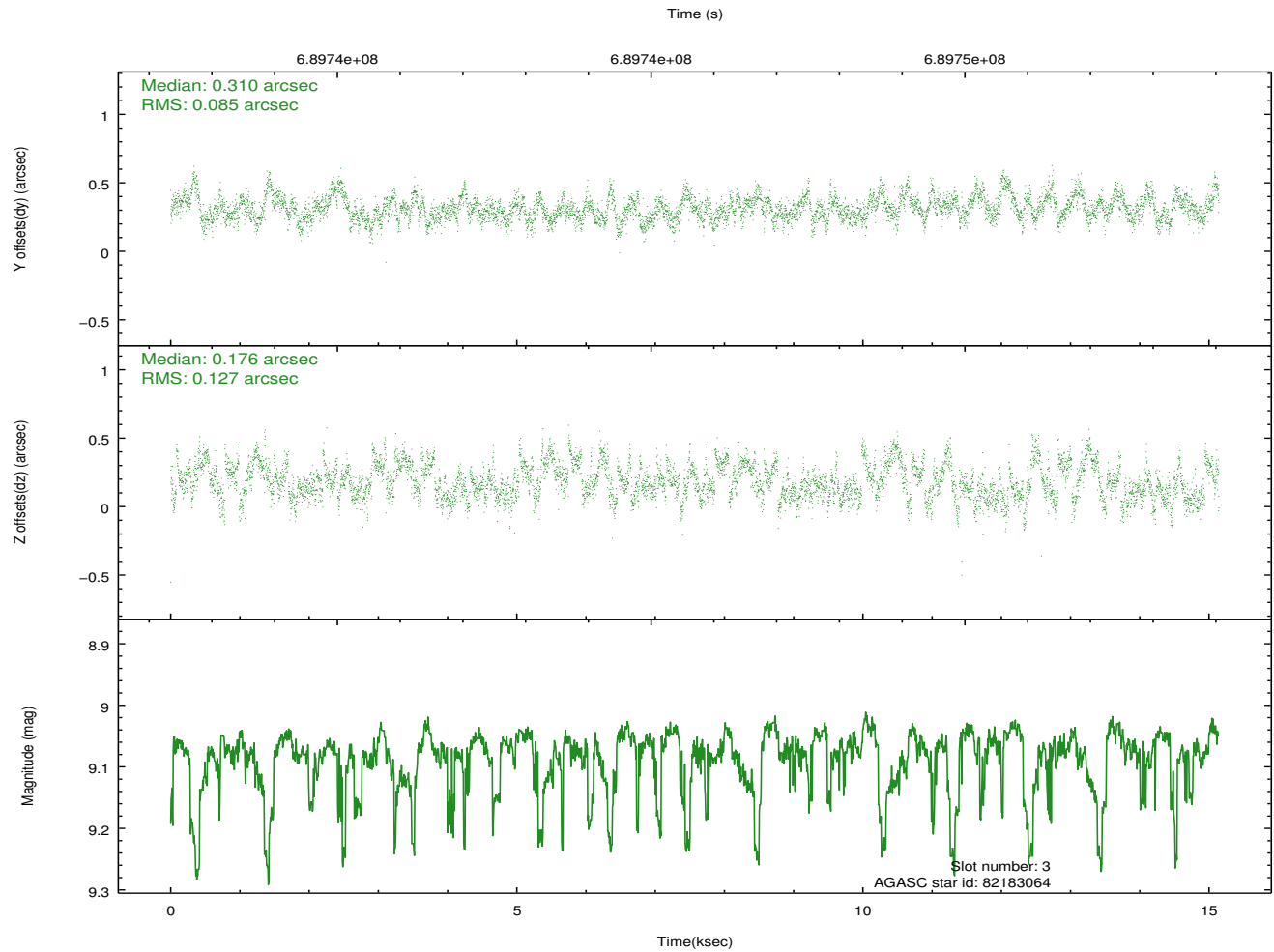
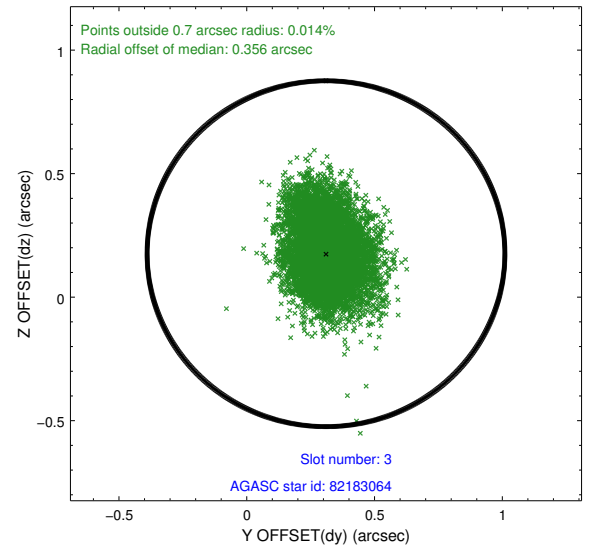
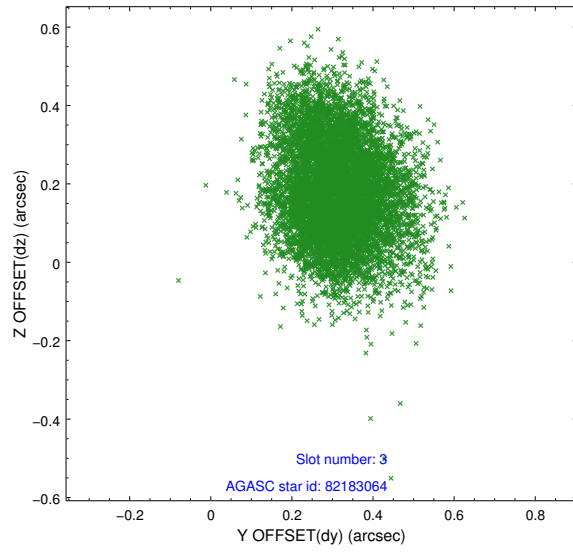


Slot Statistics

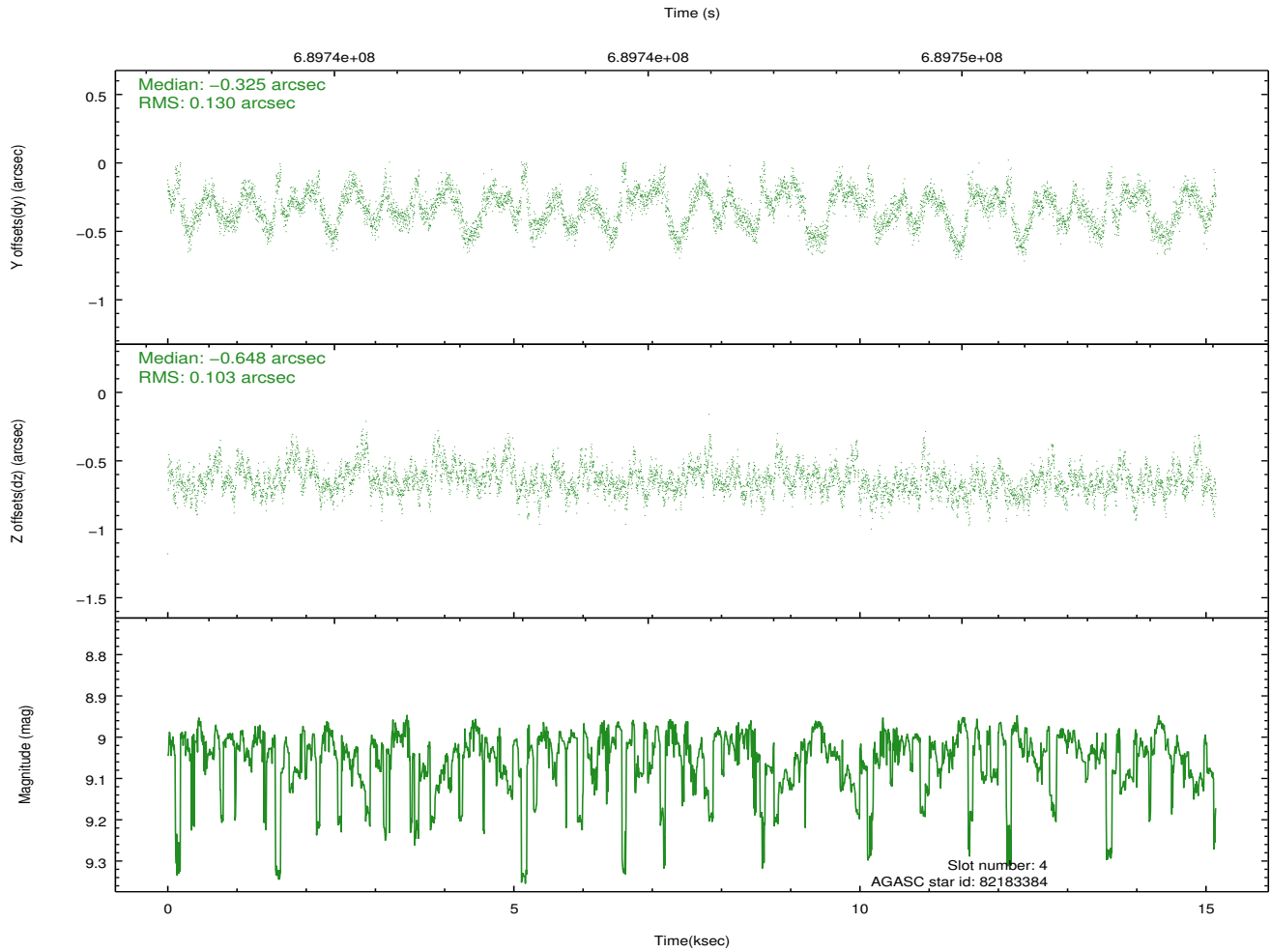
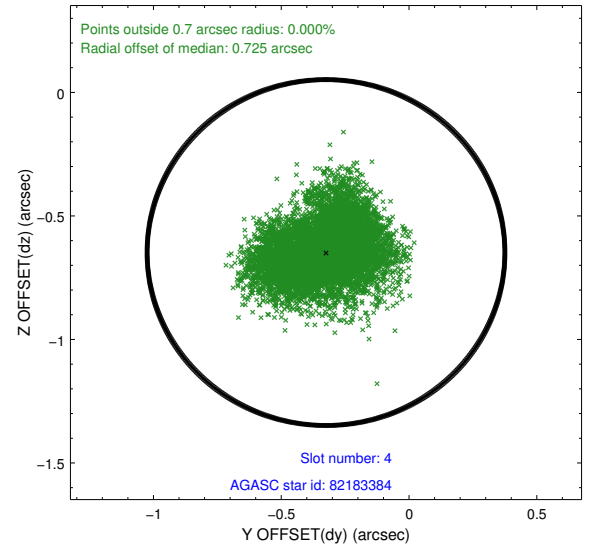
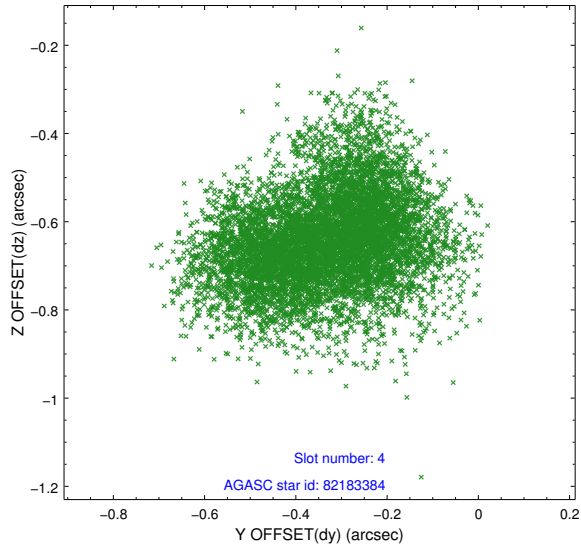
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-3	7.24	3694	1.000	0.050	-0.155	0.019	0.049	0.000000	0.000000	43.54	-1872
1	FID		ACIS-S-5	7.09	3694	1.000	-0.377	-0.008	0.012	0.019	0.000000	0.000000	-1823.07	158
2	FID		ACIS-S-6	7.28	3694	1.000	0.303	0.174	0.029	0.058	0.000000	0.000000	391.94	803
3	GUIDE	used	82183064	9.08	7380	1.000	0.310	0.176	0.163	0.262	23.866444	14.948729	-299.30	-2083
4	GUIDE	used	82183384	9.04	7371	1.000	-0.325	-0.648	0.180	0.281	25.051295	14.472533	2016.70	1735
5	GUIDE	used	82186424	6.71	7388	1.000	0.042	-0.018	0.099	0.173	23.943517	14.661425	763.52	-1976
6	GUIDE	used	157029352	8.99	7380	1.000	0.167	0.588	0.229	0.355	23.764744	15.271289	-1501.41	-2253
7	GUIDE	used	157954272	8.68	7382	1.000	-0.206	-0.101	0.181	0.285	24.932144	15.423798	-1431.19	1834

2.4 Star Slots

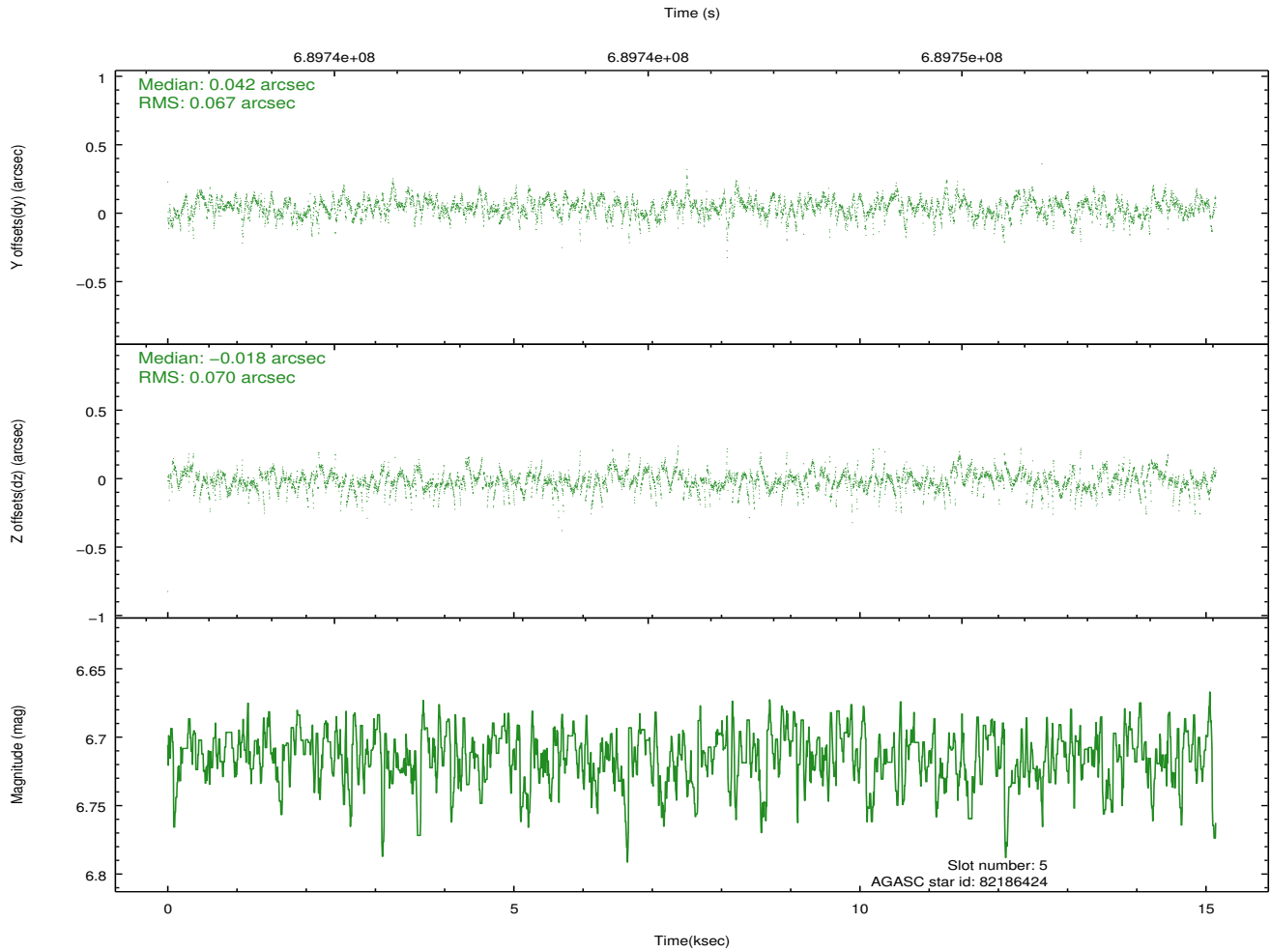
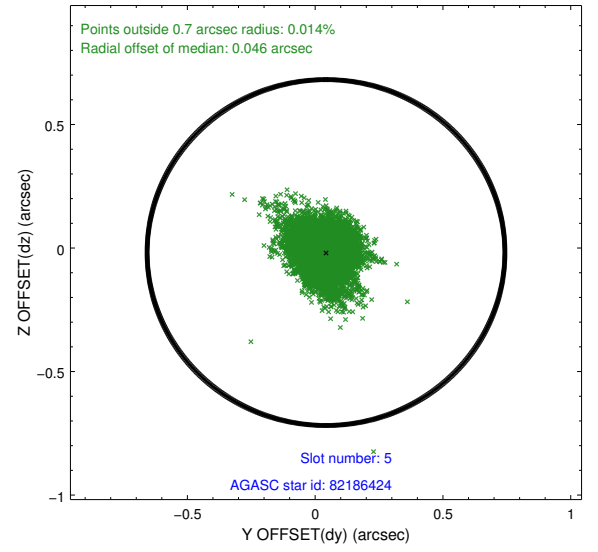
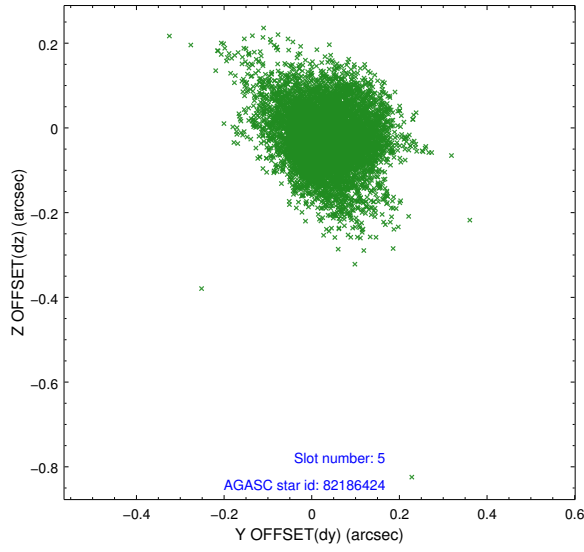
2.4.1 Slot 3



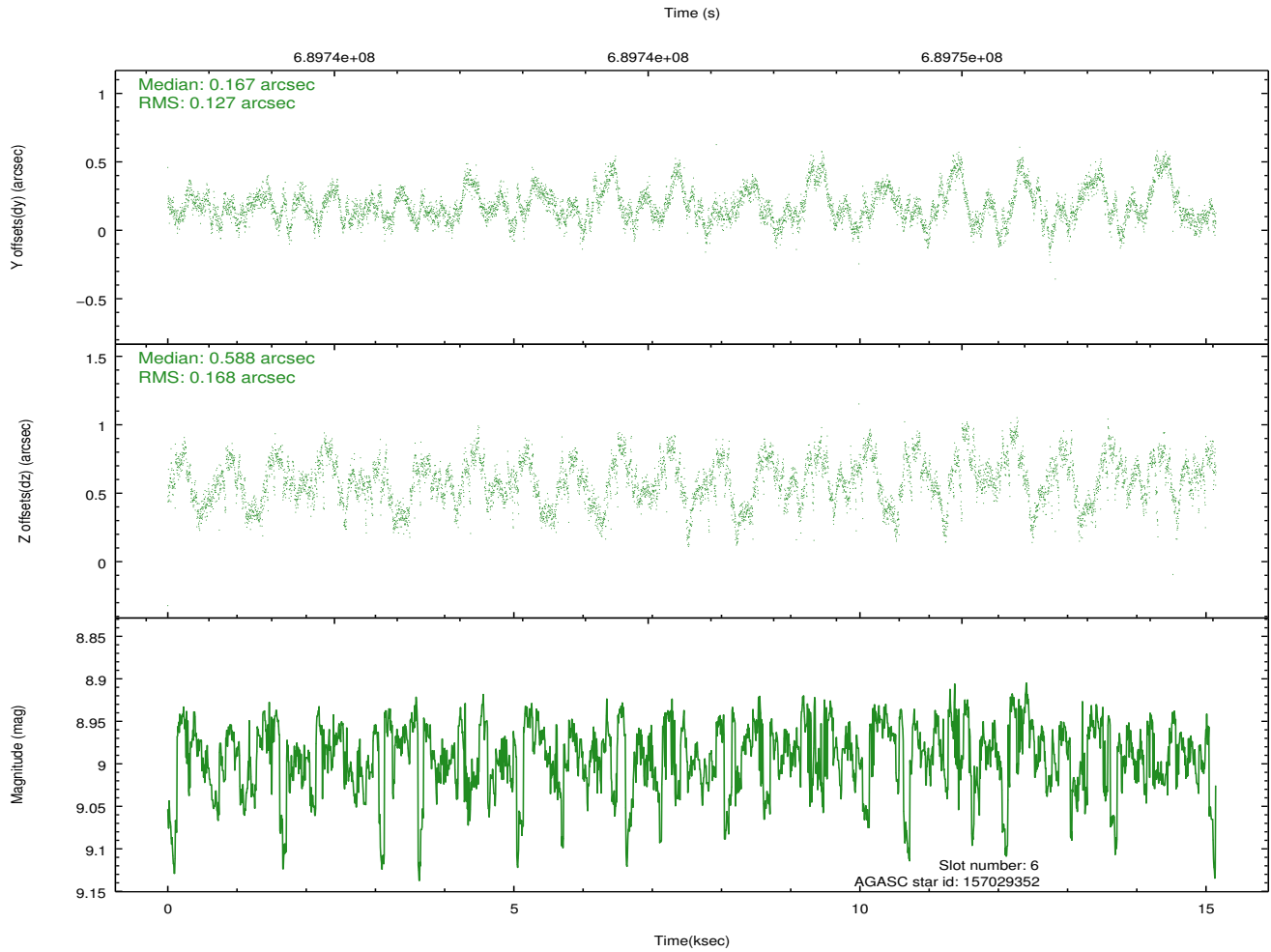
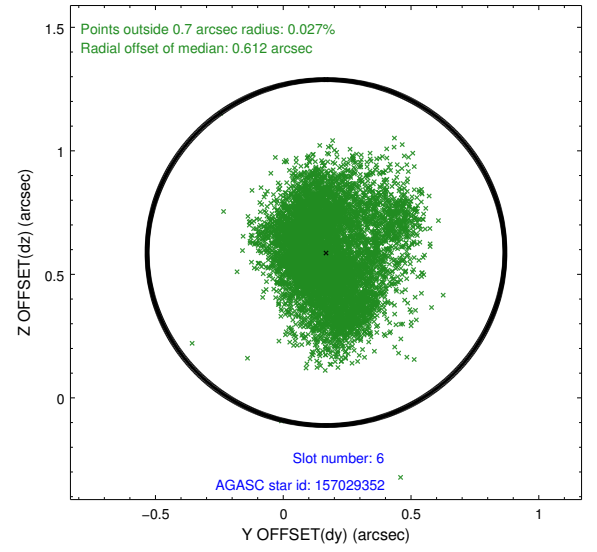
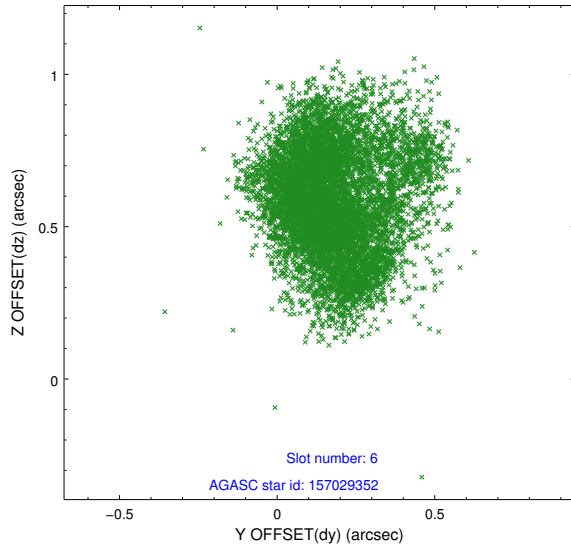
2.4.2 Slot 4



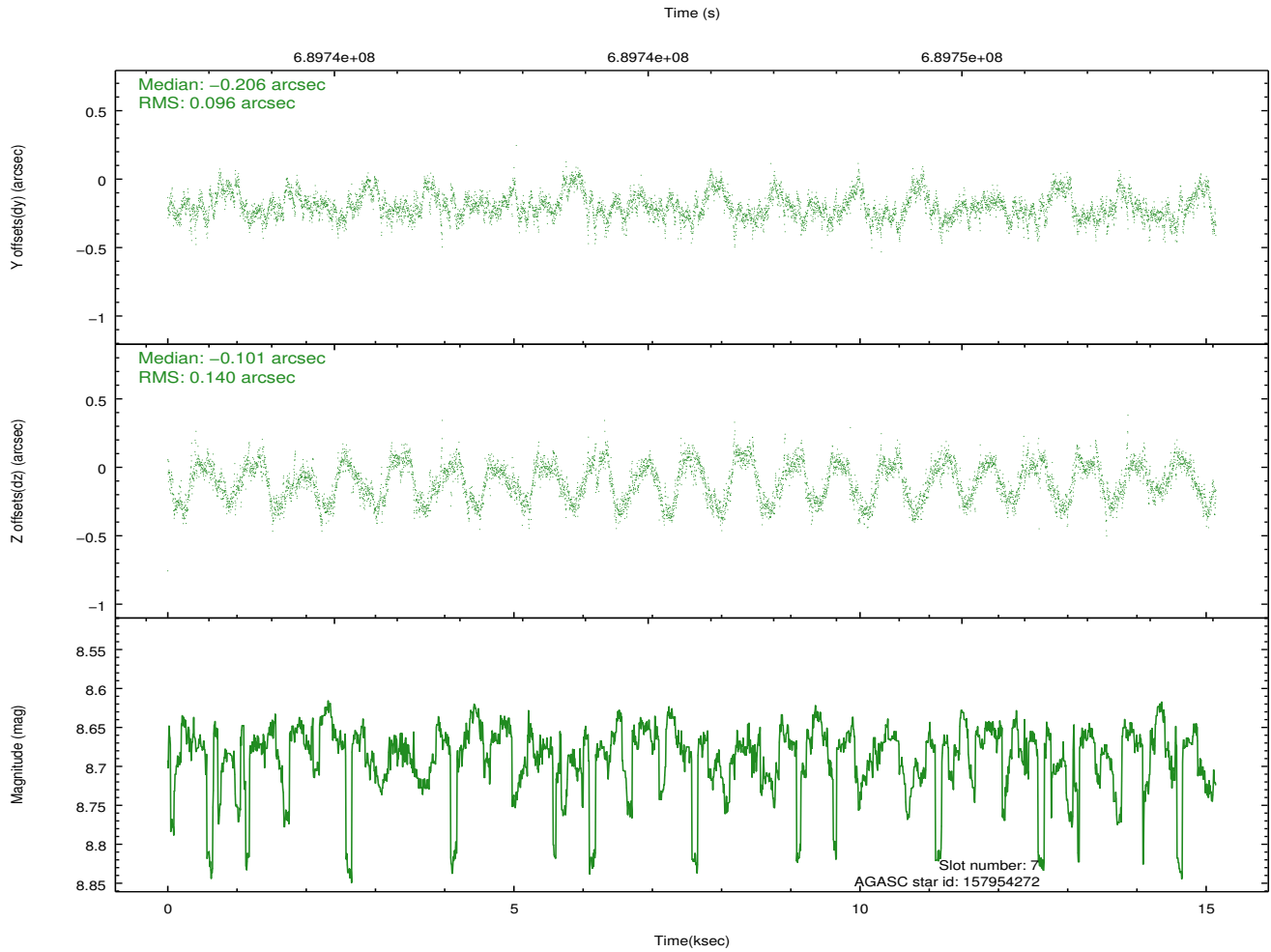
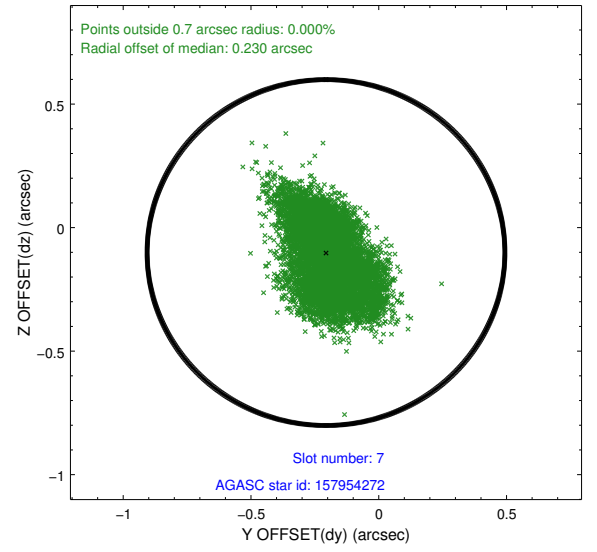
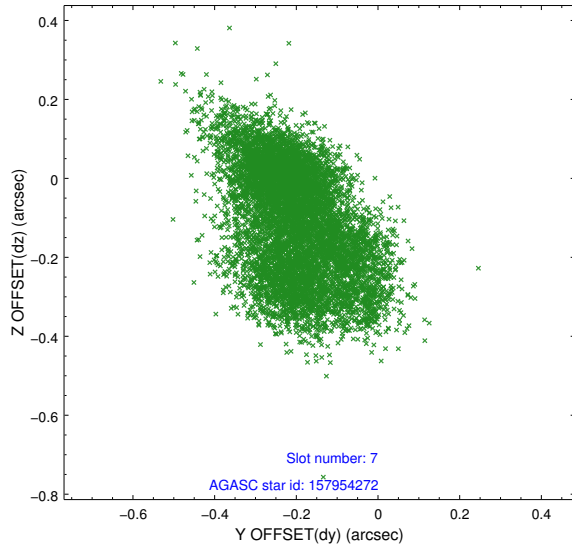
2.4.3 Slot 5



2.4.4 Slot 6

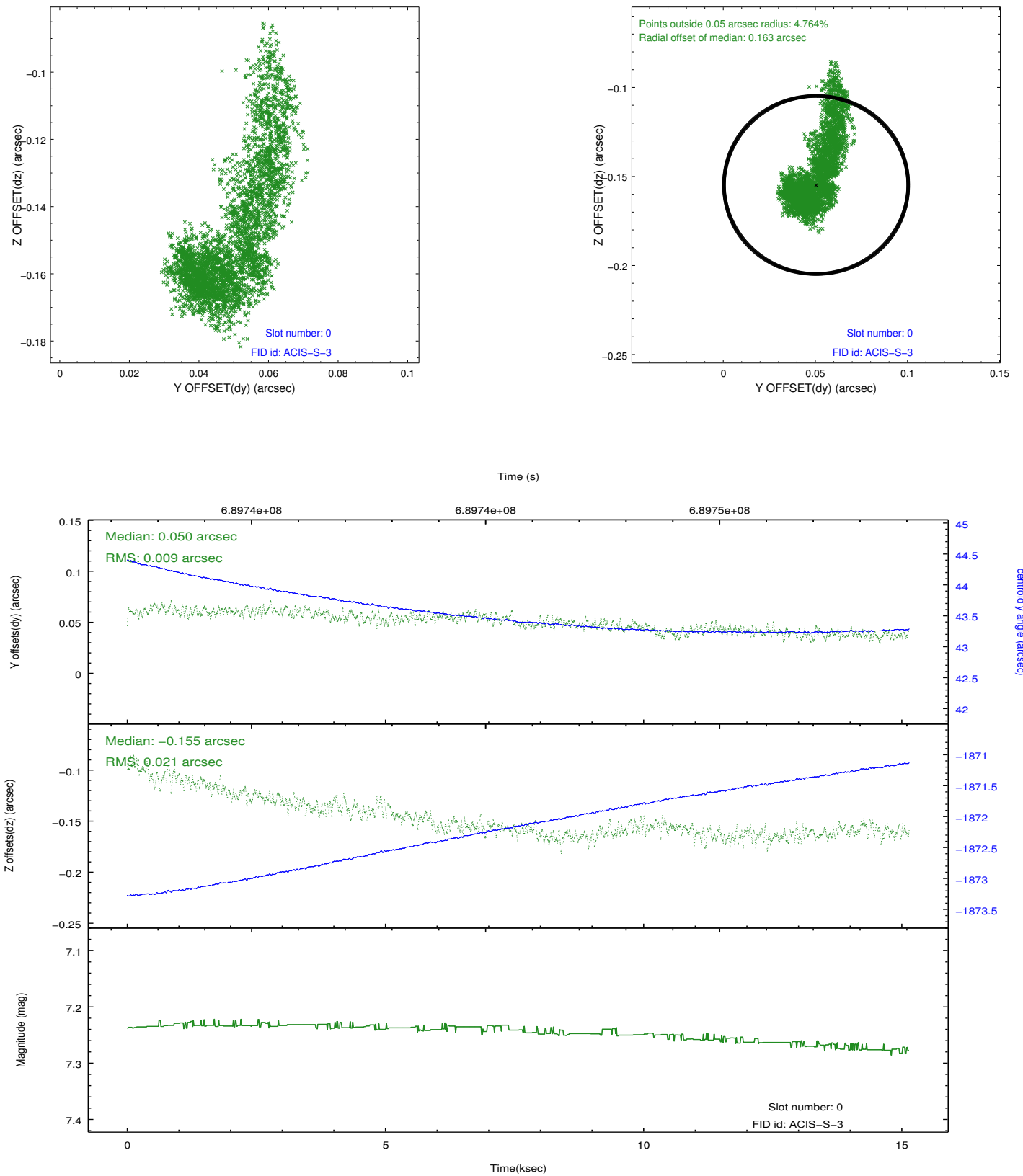


2.4.5 Slot 7

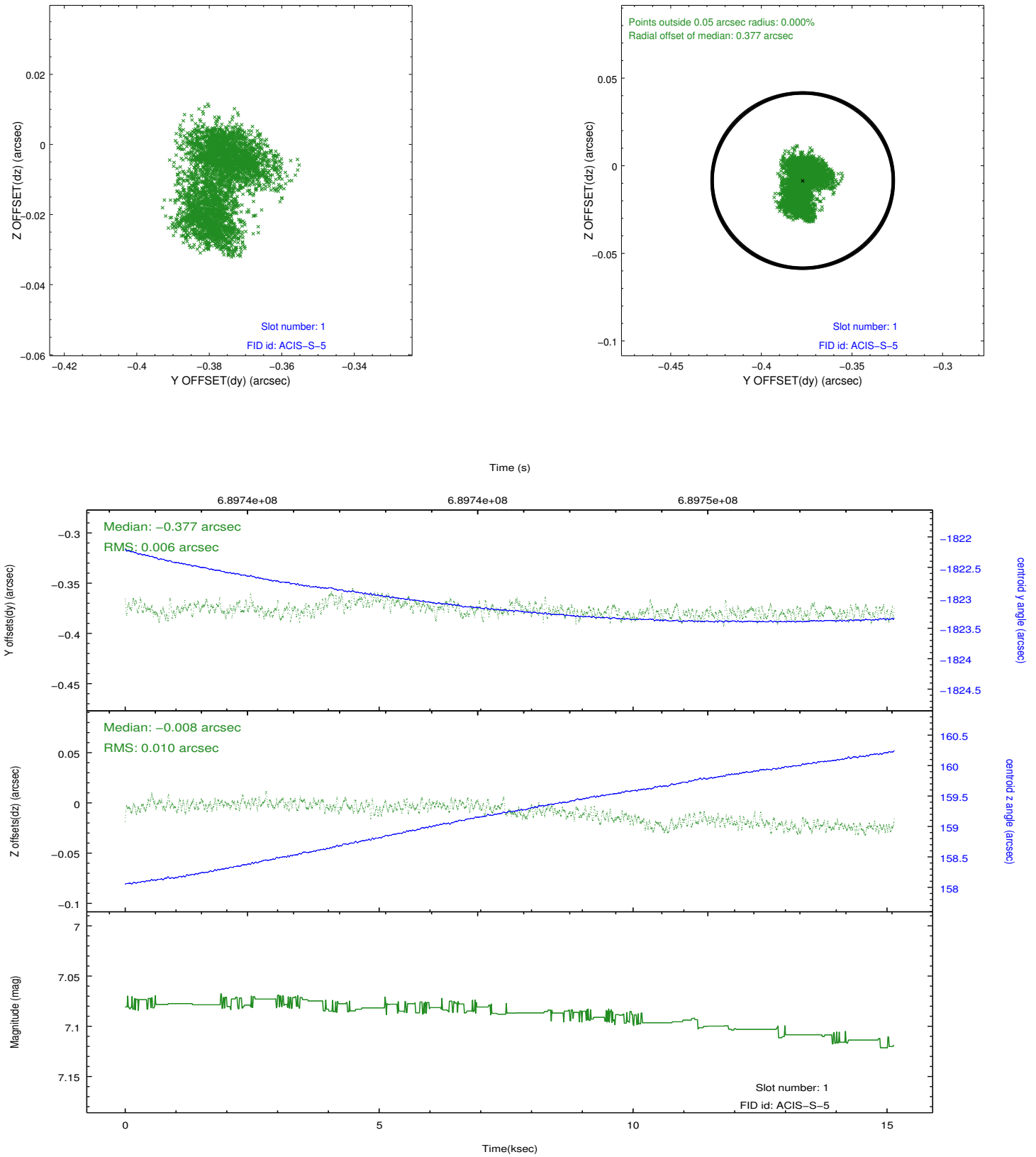


2.5 FID Slots

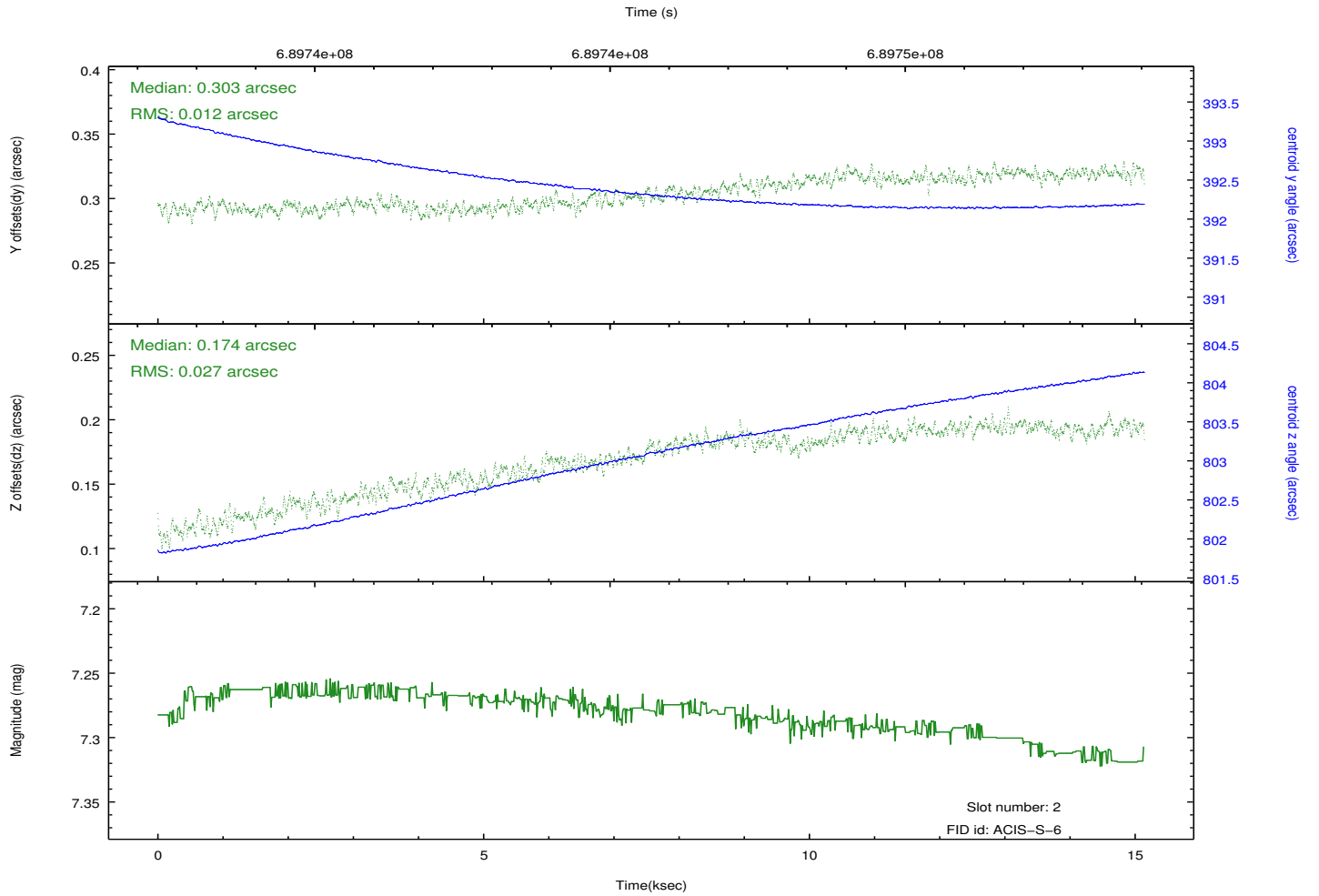
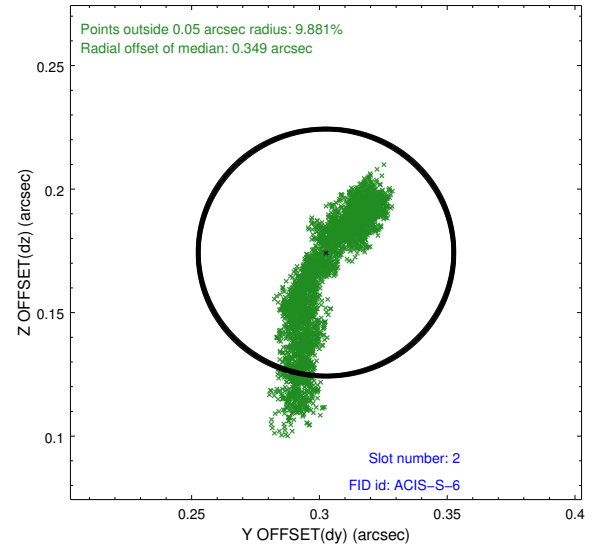
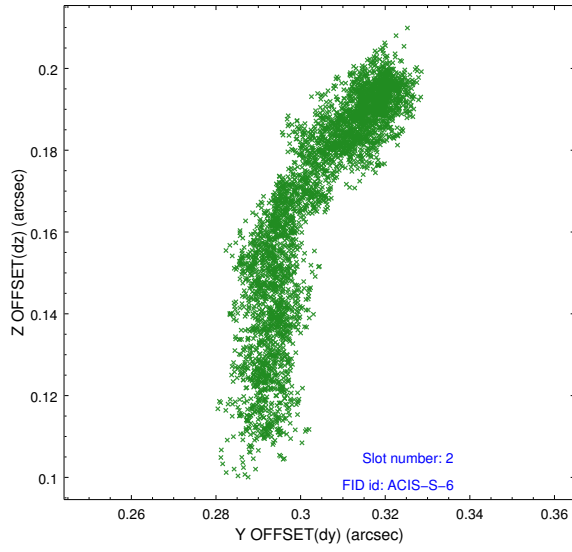
2.5.1 Slot 0



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)	2019.11.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.061970912337

A.2 Comments