

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18445 - L2 Version 1
Chandra X-Ray Center

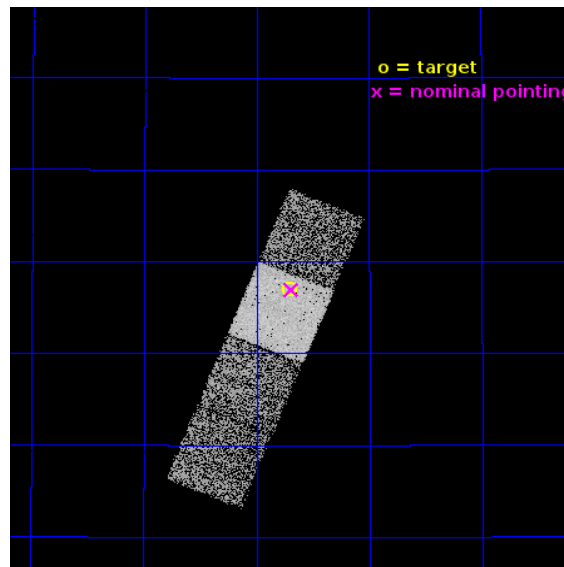
L2 Processing Date : Feb 13 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

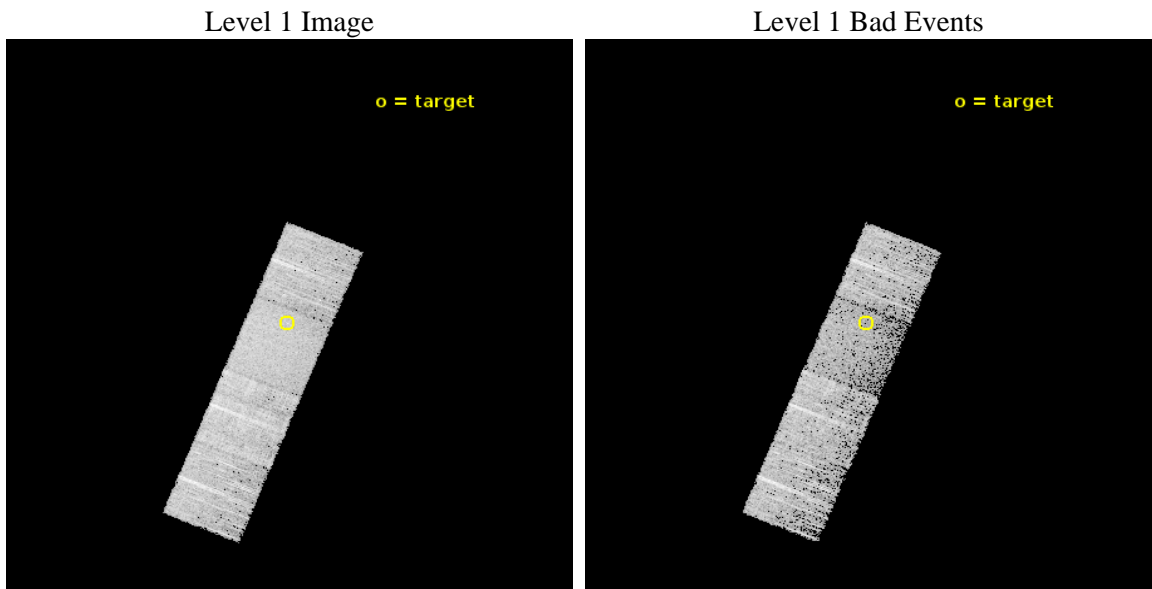
seq_num	703284	Sequence number
obs_id	18445	Observation id
title	Deciphering the X-ray Enhancement of Highly Radio-Loud Quasars in the Early Universe	Proposal title
observer	Dr. Gordon Garmire	Principal investigator
object	SDSS J123142.17+381658.9	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.925833	Observer's specified target RA [deg]
dec_targ	38.283028	Observer's specified target Dec [deg]
ra_nom	187.92293553157	Nominal RA [deg]
dec_nom	38.282257644585	Nominal Dec [deg]
roll_nom	112.24485440317	Nominal Roll [deg]
revision	1	Processing version of data
ontime	6115.1916339397	Sum of GTIs [s]
livetime	6035.2921533037	Livetime [s]
ontime6	6115.150593996	Sum of GTIs [s]
ontime7	6115.1916339397	Sum of GTIs [s]
ontime8	6115.1095539331	Sum of GTIs [s]
ontime9	6115.0685139894	Sum of GTIs [s]
l2events	27940	Number of level 2 events



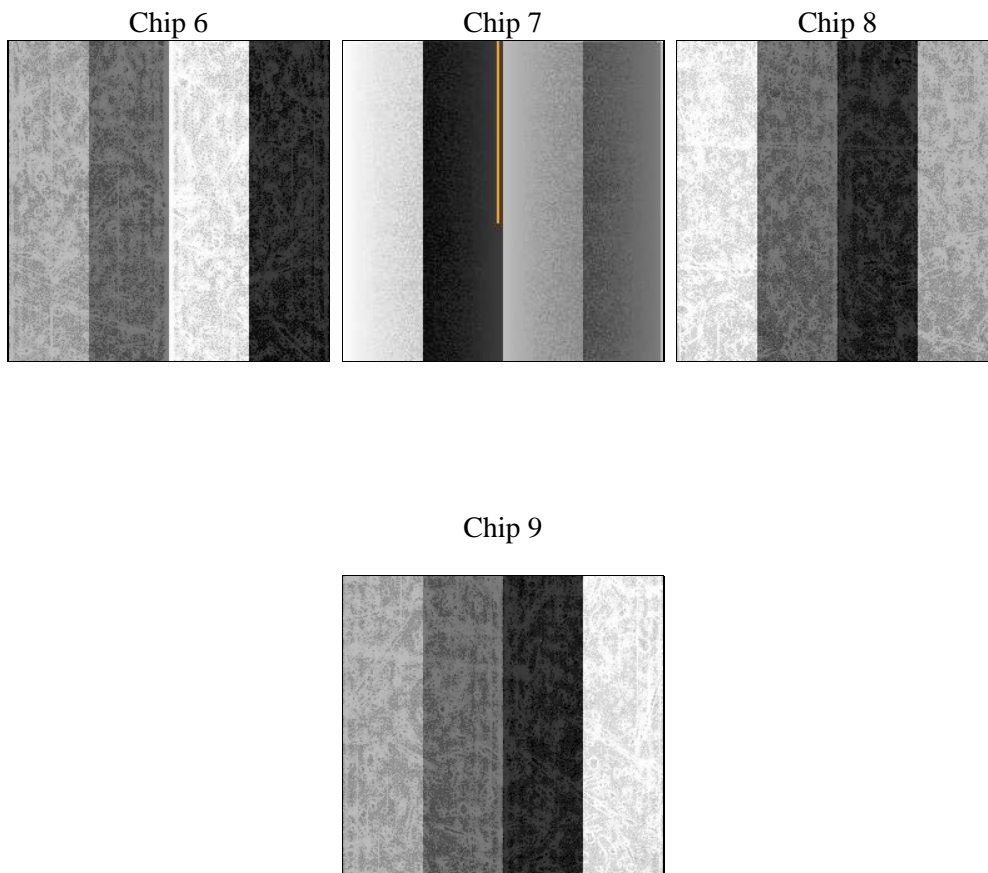
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	6115.1916339397	Sum of GTIs [s]
caldsver	4.7.0	 	ontime6	6115.150593996	Sum of GTIs [s]
date	2016-02-13T18:00:53	Date and time of file creation	ontime7	6115.1916339397	Sum of GTIs [s]
revision	1	Processing version of data	ontime8	6115.1095539331	Sum of GTIs [s]
			ontime9	6115.0685139894	Sum of GTIs [s]
			l1events	153922	Number of level 1 events

2.1.4 Events

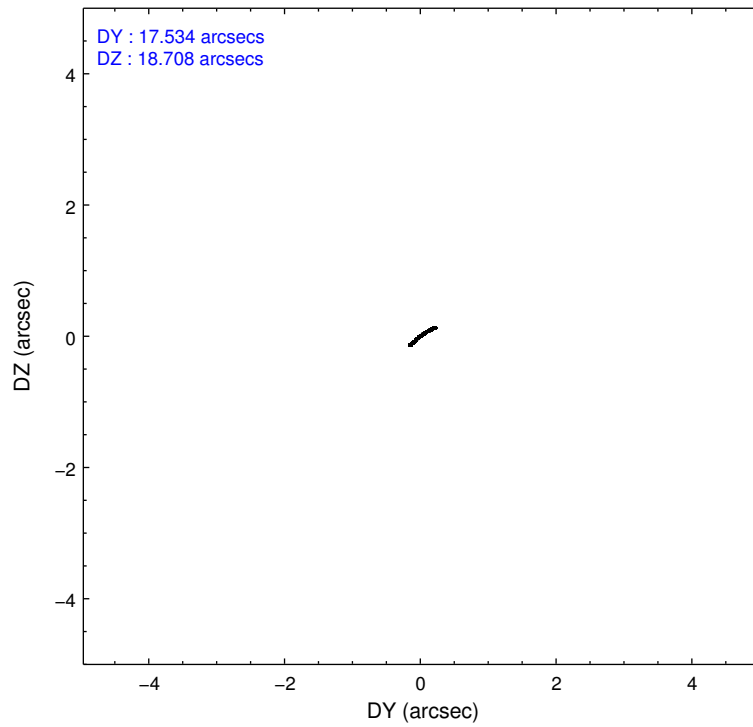
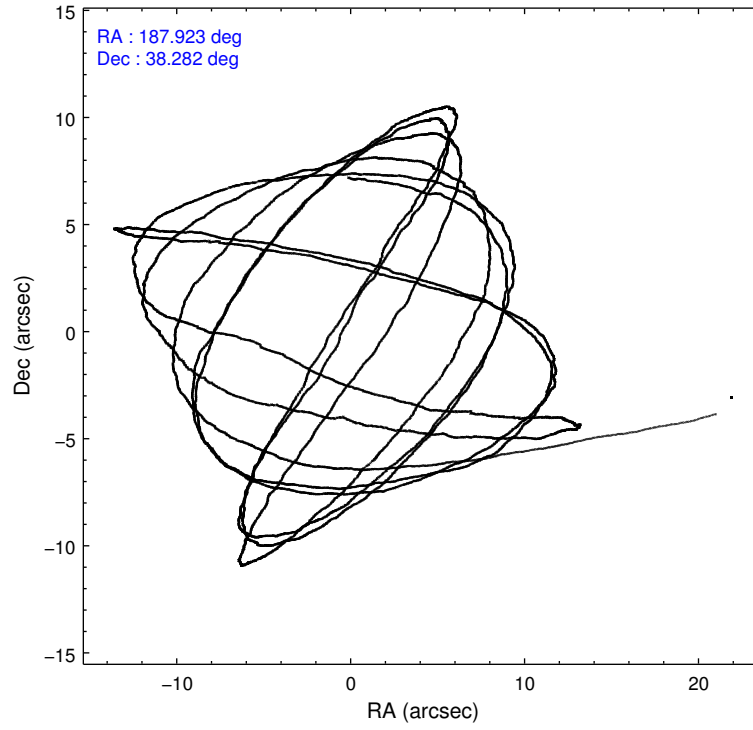
	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	35742	38287	44053	35840
rejected events	31844	20377	33155	31952
rejected %	89%	53%	75%	89%

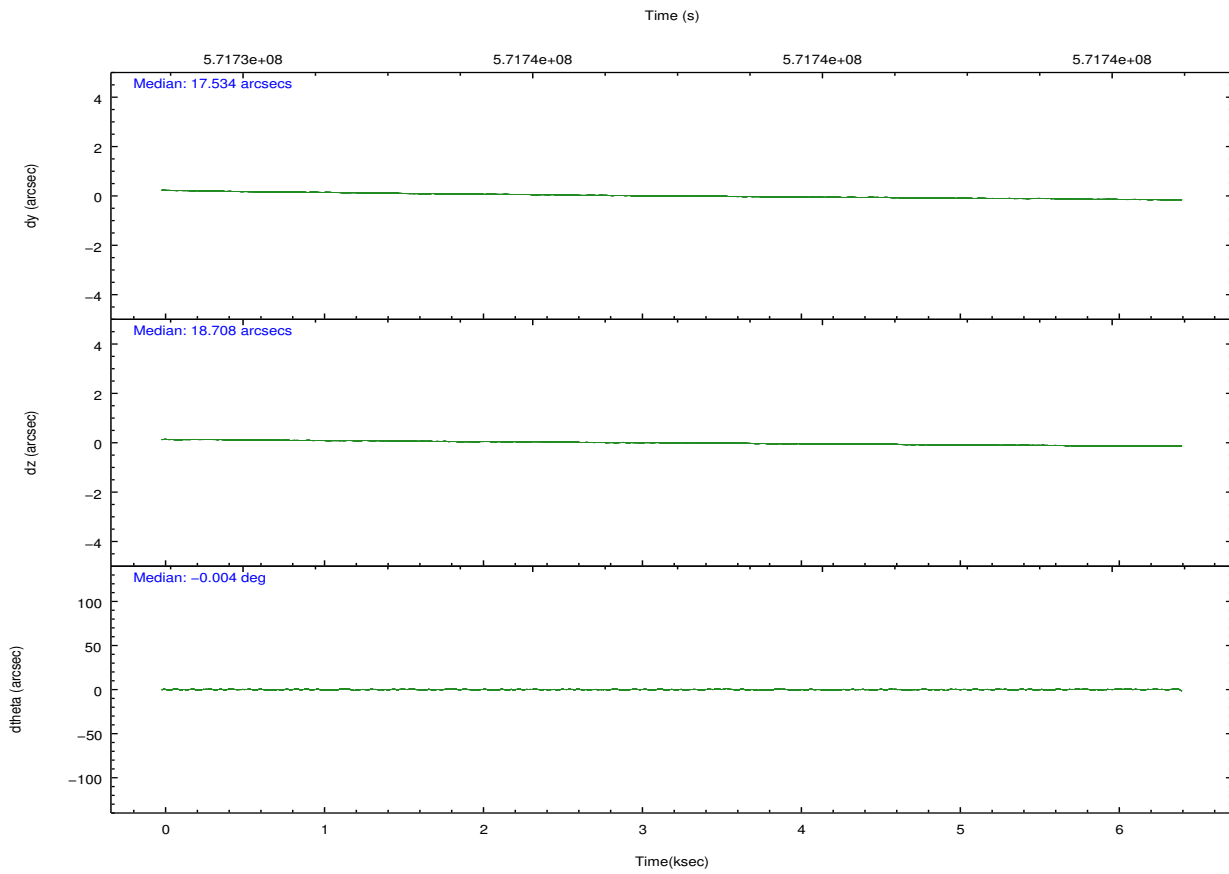
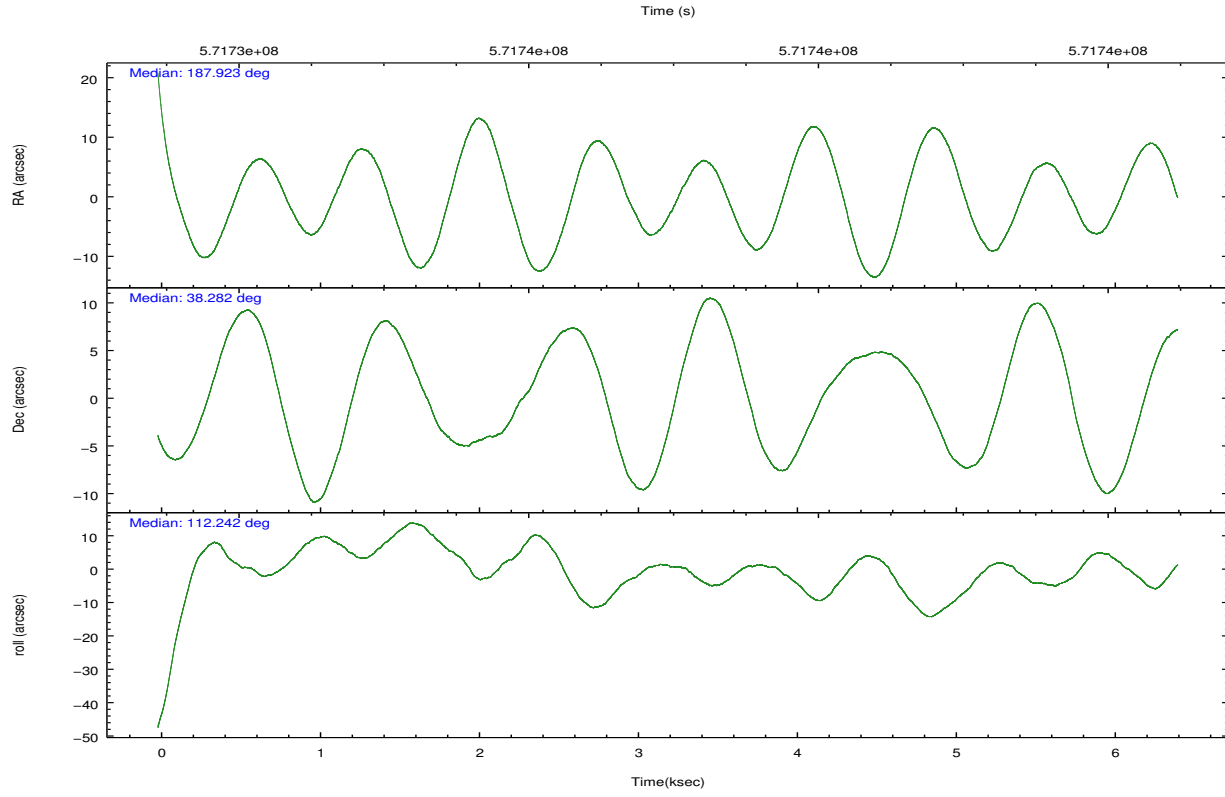
	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	1224	1579	3198	1383
	3%	4%	7%	3%
grade 1 events	11	54	41	18
	0%	0%	0%	0%
grade 2 events	1036	3933	2604	803
	2%	10%	5%	2%
grade 3 events	341	1399	1125	409
	0%	3%	2%	1%
grade 4 events	344	1387	1013	410
	0%	3%	2%	1%
grade 5 events	1348	3754	2088	1587
	3%	9%	4%	4%
grade 6 events	957	9620	2992	885
	2%	25%	6%	2%
grade 7 events	30481	16561	30992	30345
	85%	43%	70%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-6789	ACIS-6789	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	187.950847	187.9229355315674	CCD I2 on	O1	N
[deg] Pointing Dec	38.265770	38.28225764458547	CCD I3 on	O2	N
[deg] Pointing Roll	112.070976	112.2448544031688	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	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	571734154.184000	571733130.82723	CCD S5 on	Y	Y
Observation start date	2016-02-13T07:01:26	2016-02-13T06:45:30	Number of optional ACIS chips dropped	2	2
[s] Observation end time (MET)	571740154.184000	571741163.24019	On-chip summing requested	N	N
Observation end date	2016-02-13T08:41:26	2016-02-13T08:59:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



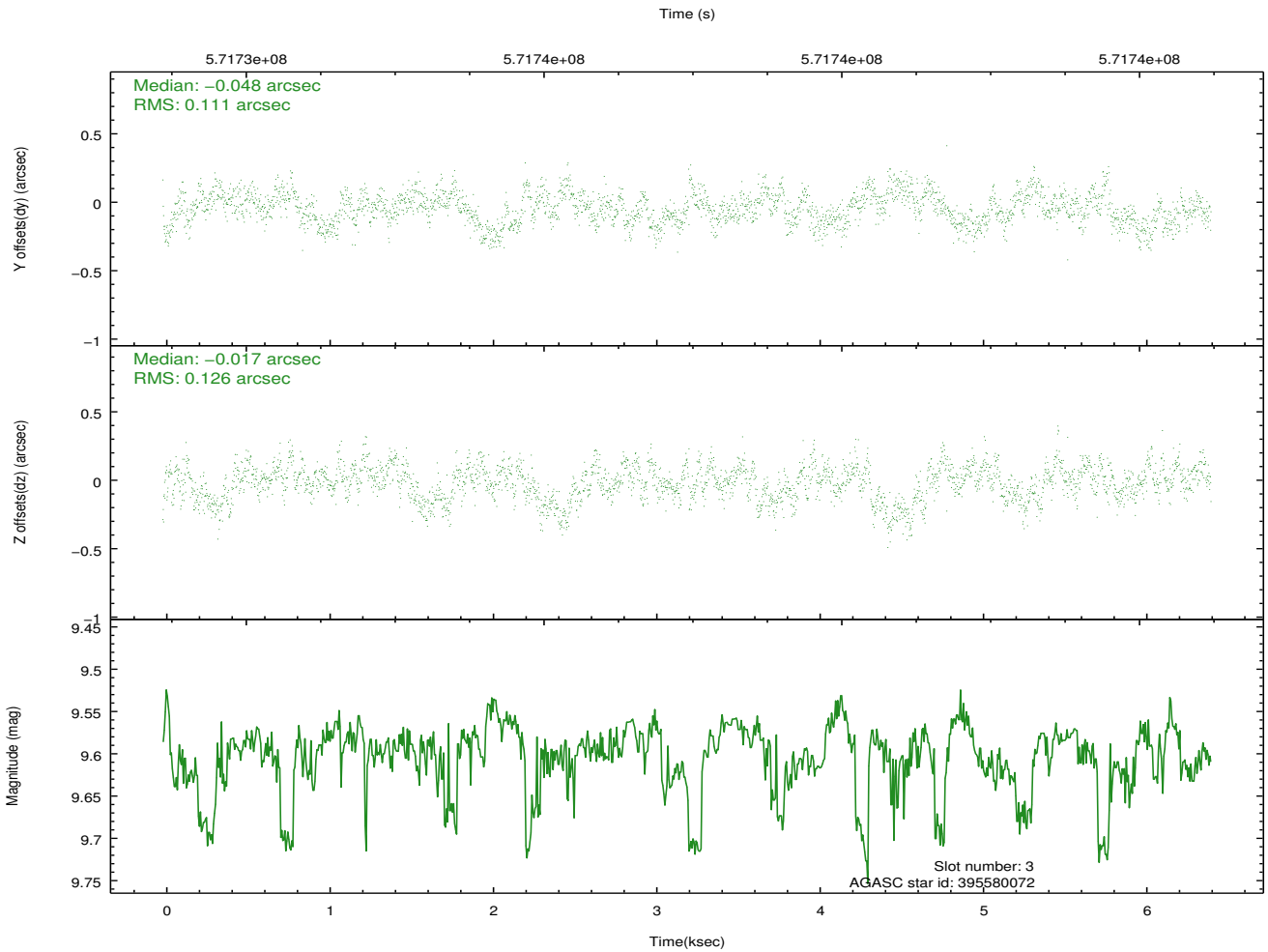
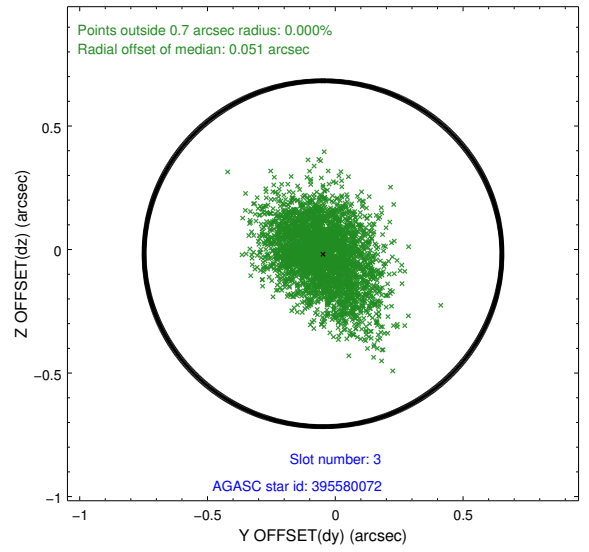
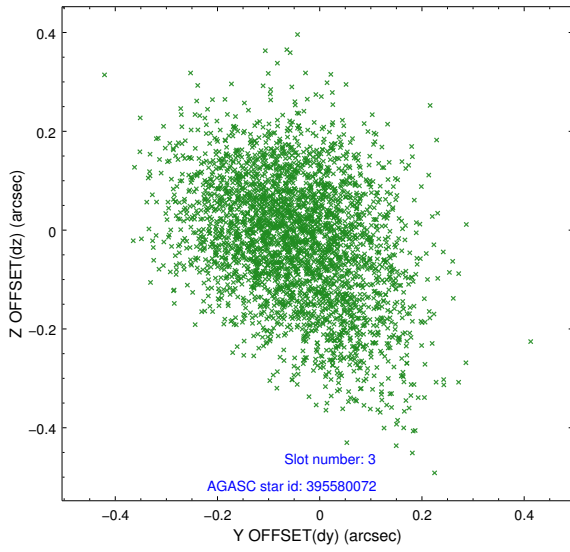


Slot Statistics

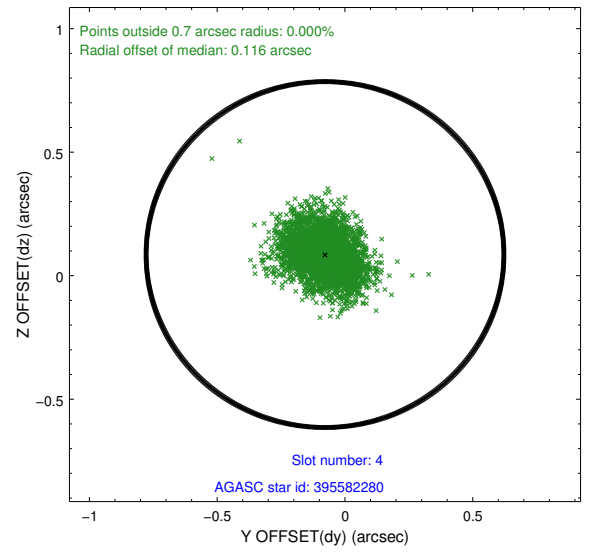
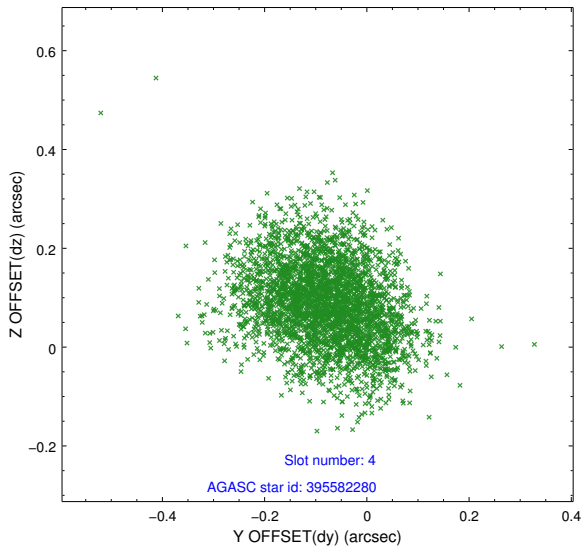
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.15	1565	-0.172	-0.162	0.007	0.012	0.000000	0.000000	-770.74	-1740.35
1	FID		ACIS-S-4	7.25	1565	0.461	0.126	0.007	0.012	0.000000	0.000000	2142.73	167.49
2	FID		ACIS-S-5	7.27	1565	-0.321	0.045	0.007	0.012	0.000000	0.000000	-1822.58	162.10
3	GUIDE	used	395580072	9.60	3128	-0.048	-0.017	0.179	0.293	188.423291	38.866322	1509.74	-2039.22
4	GUIDE	used	395582280	9.22	3128	-0.078	0.086	0.126	0.202	187.799222	38.782761	1885.79	-305.36
5	GUIDE	used	395594056	9.62	3099	-0.004	-0.337	0.186	0.312	187.569263	37.511462	-2104.49	2030.68
6	GUIDE	used	395595208	8.40	3130	-0.047	-0.117	0.116	0.178	187.755738	38.164607	-129.82	649.19
7	GUIDE	used	395595392	9.77	3121	0.195	0.372	0.225	0.352	187.938162	37.763408	-1661.92	713.79

2.4 Star Slots

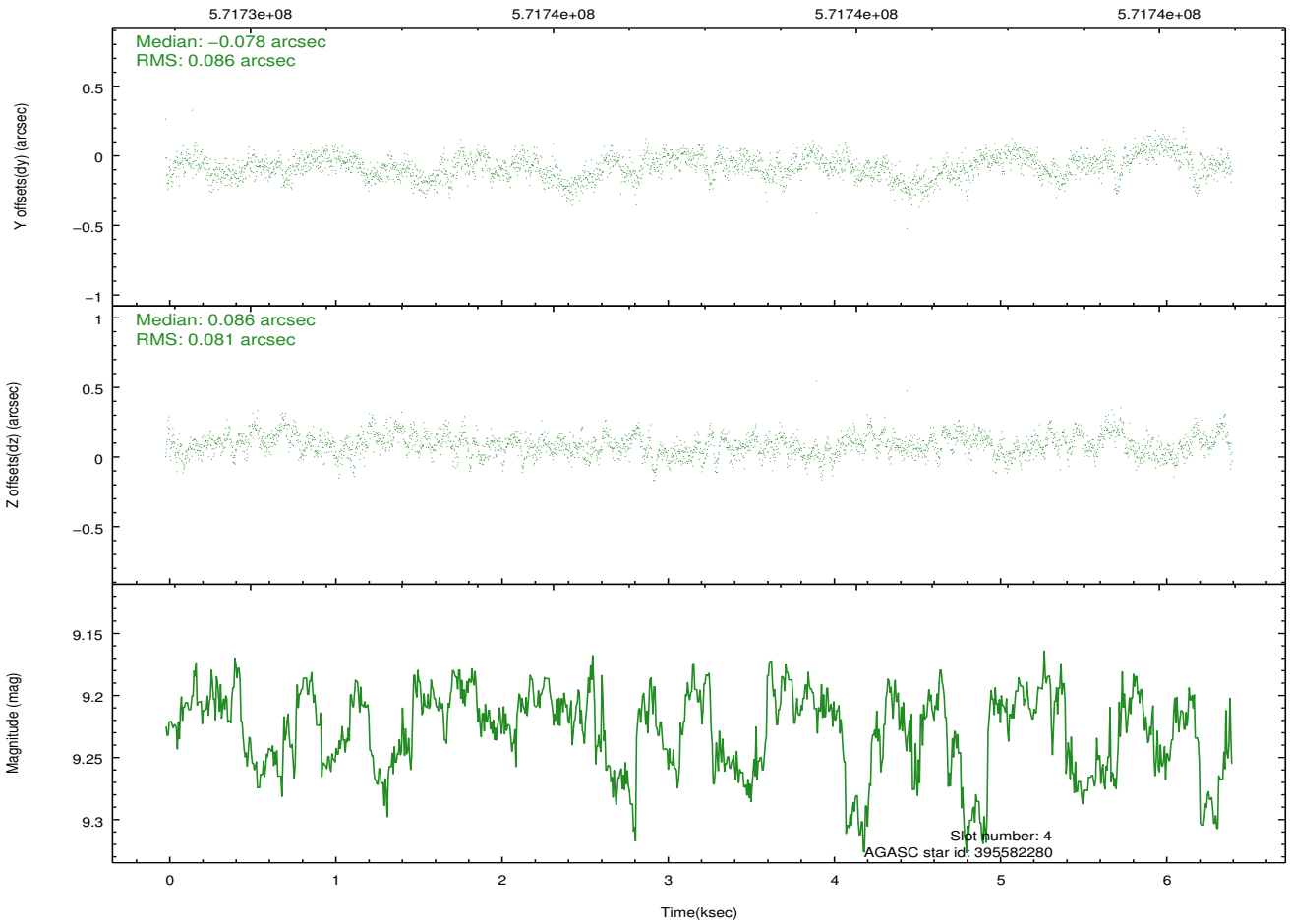
2.4.1 Slot 3



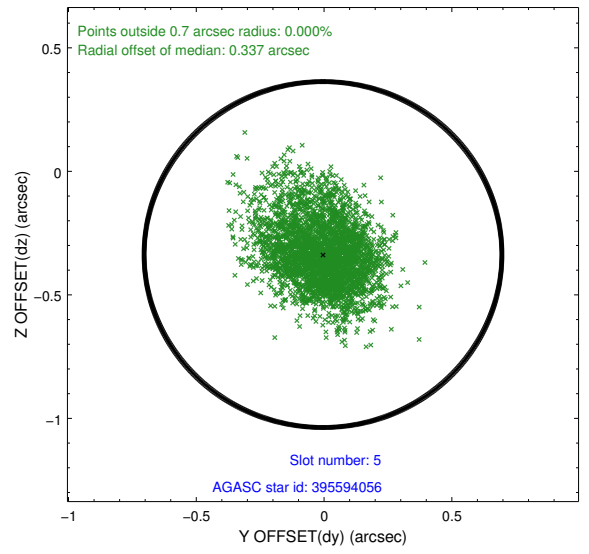
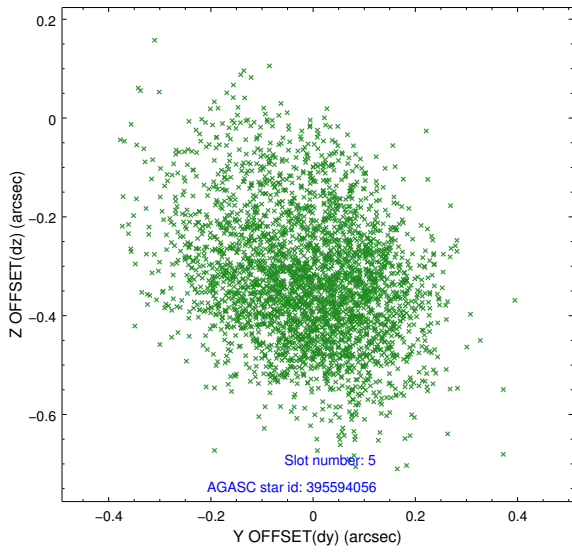
2.4.2 Slot 4



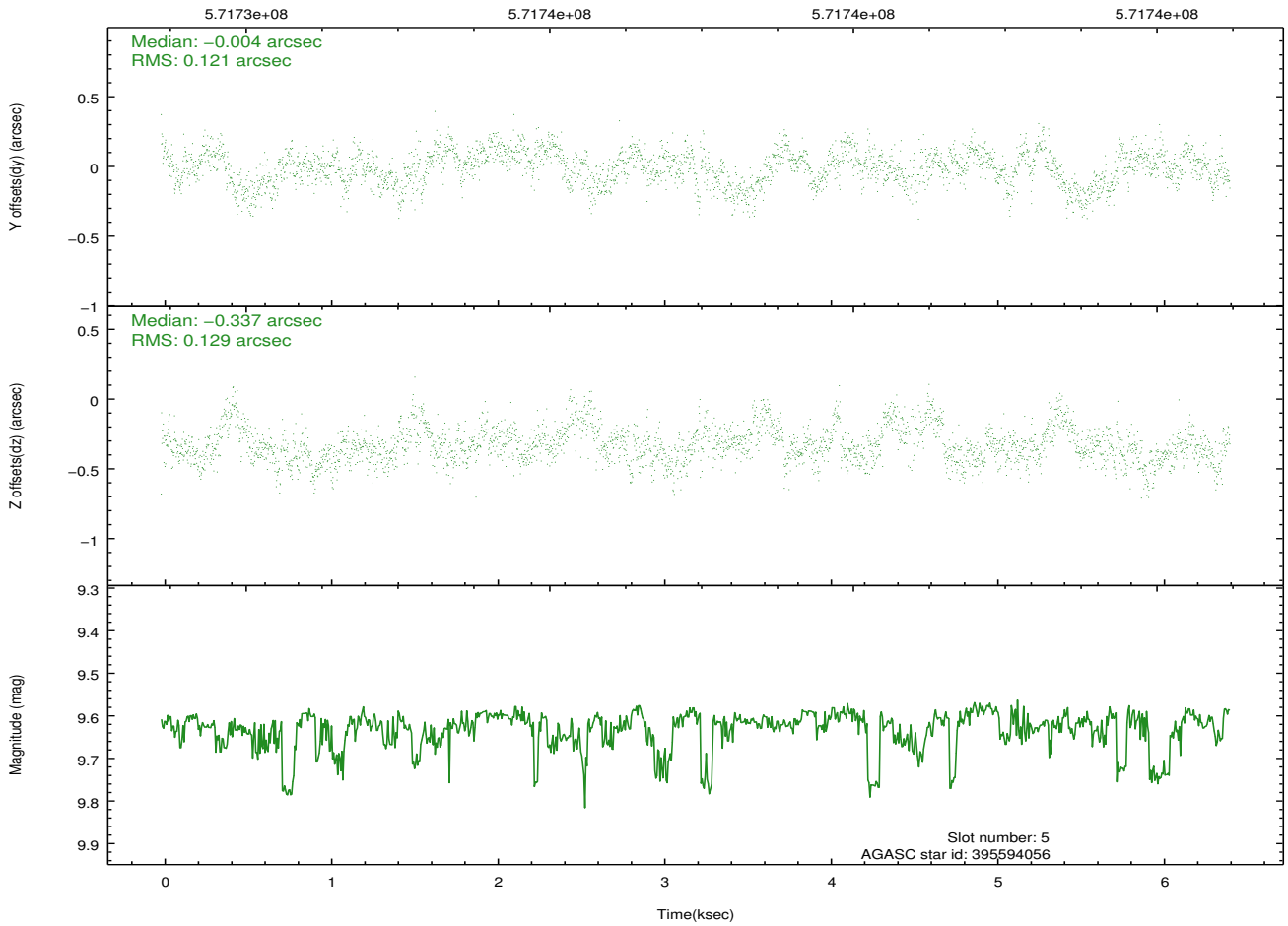
Time (s)



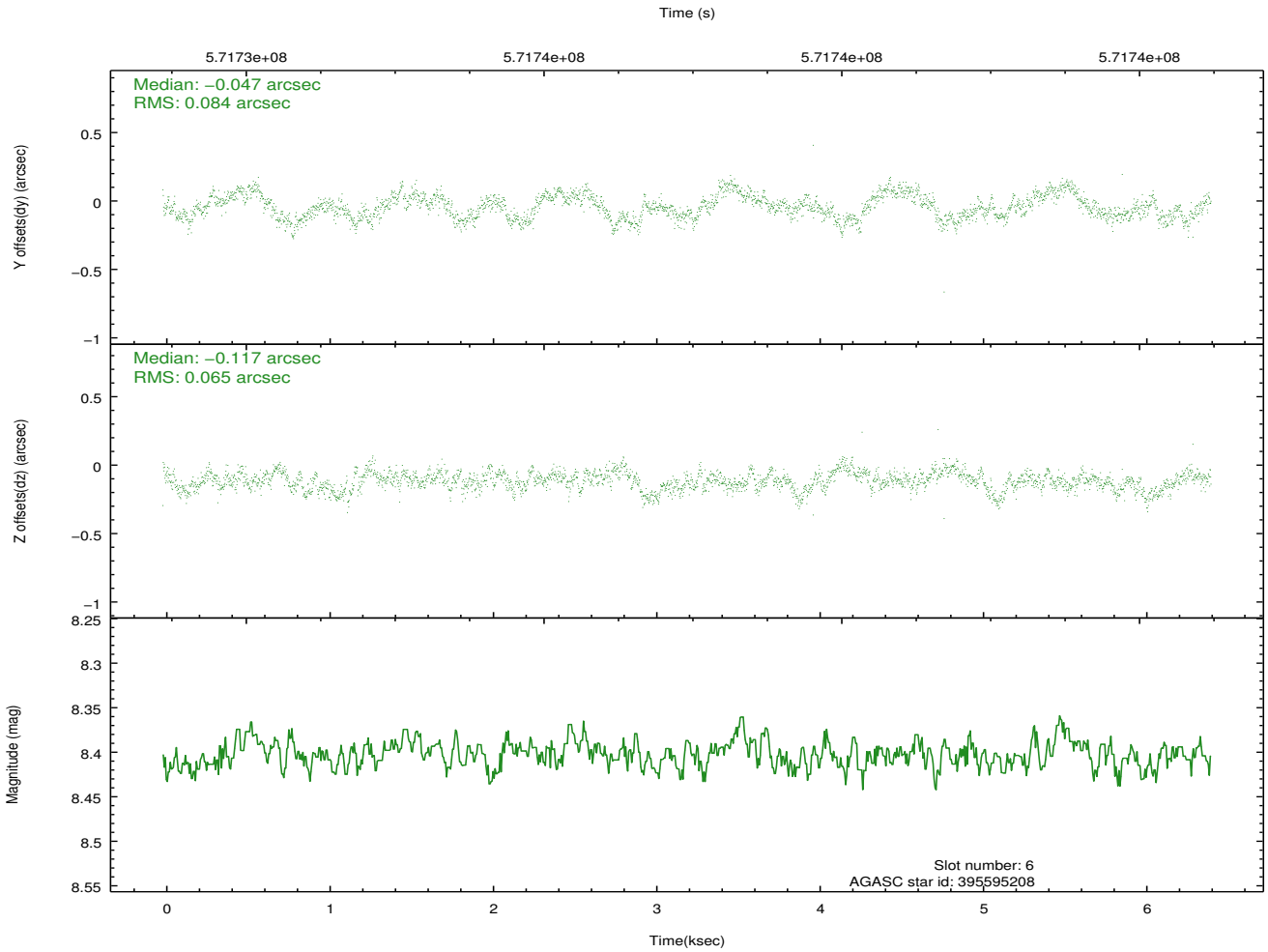
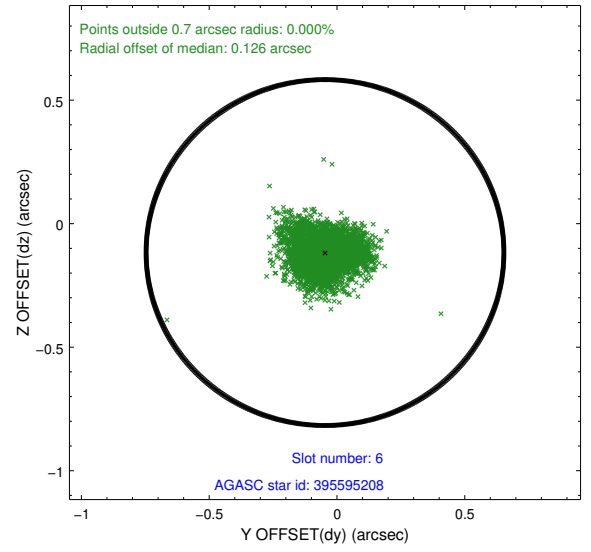
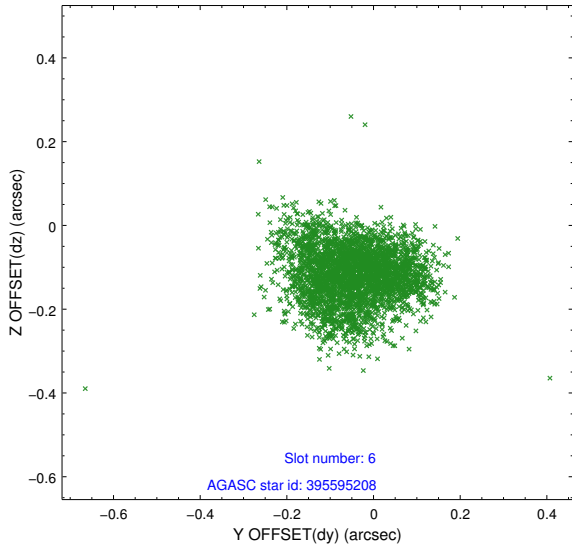
2.4.3 Slot 5



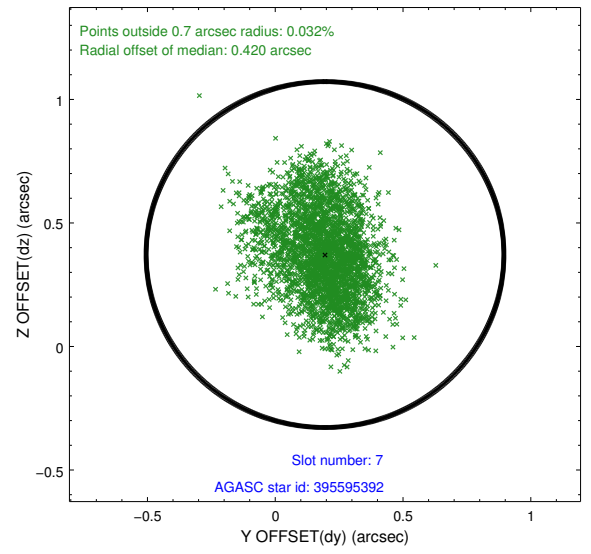
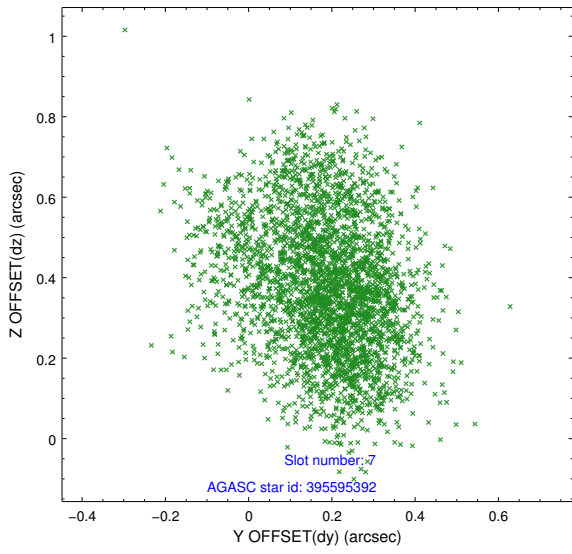
Time (s)



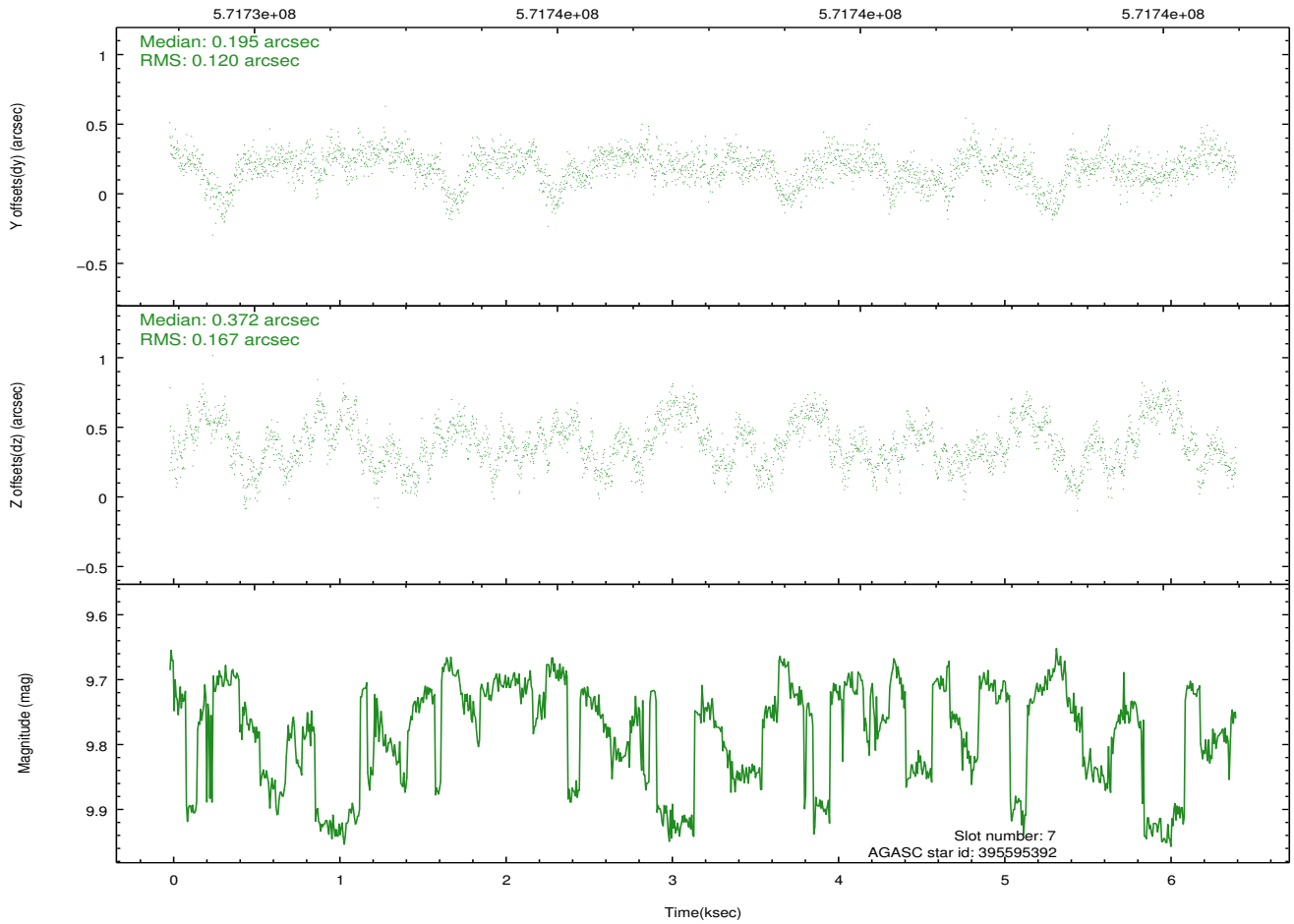
2.4.4 Slot 6



2.4.5 Slot 7

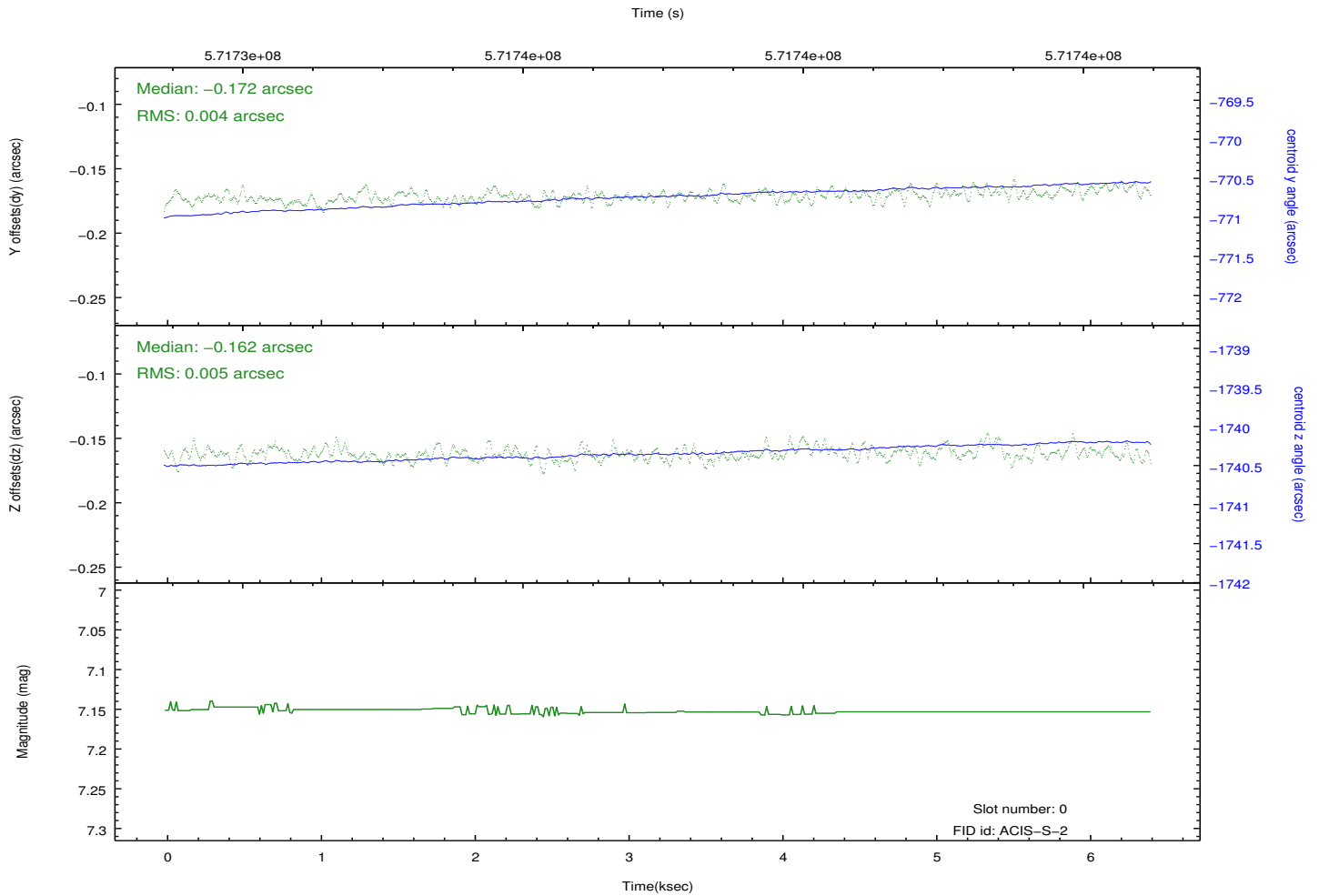
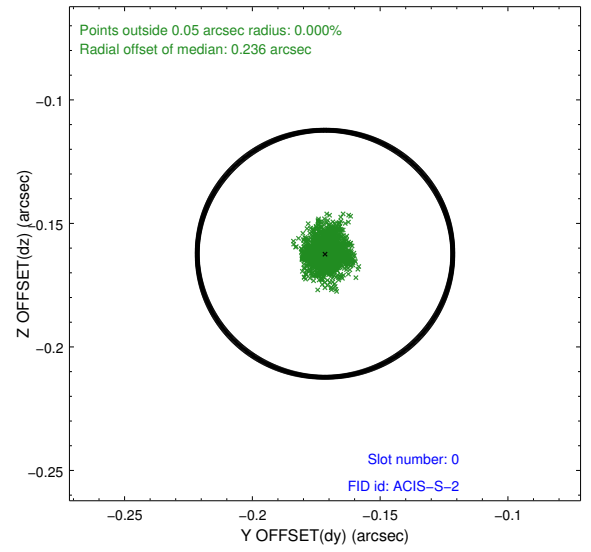
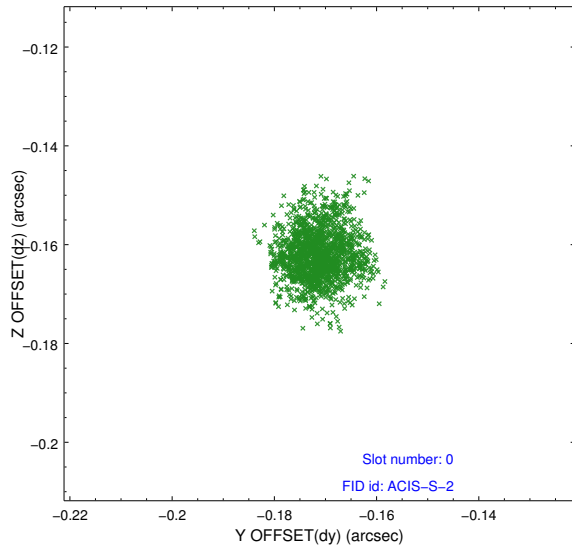


Time (s)

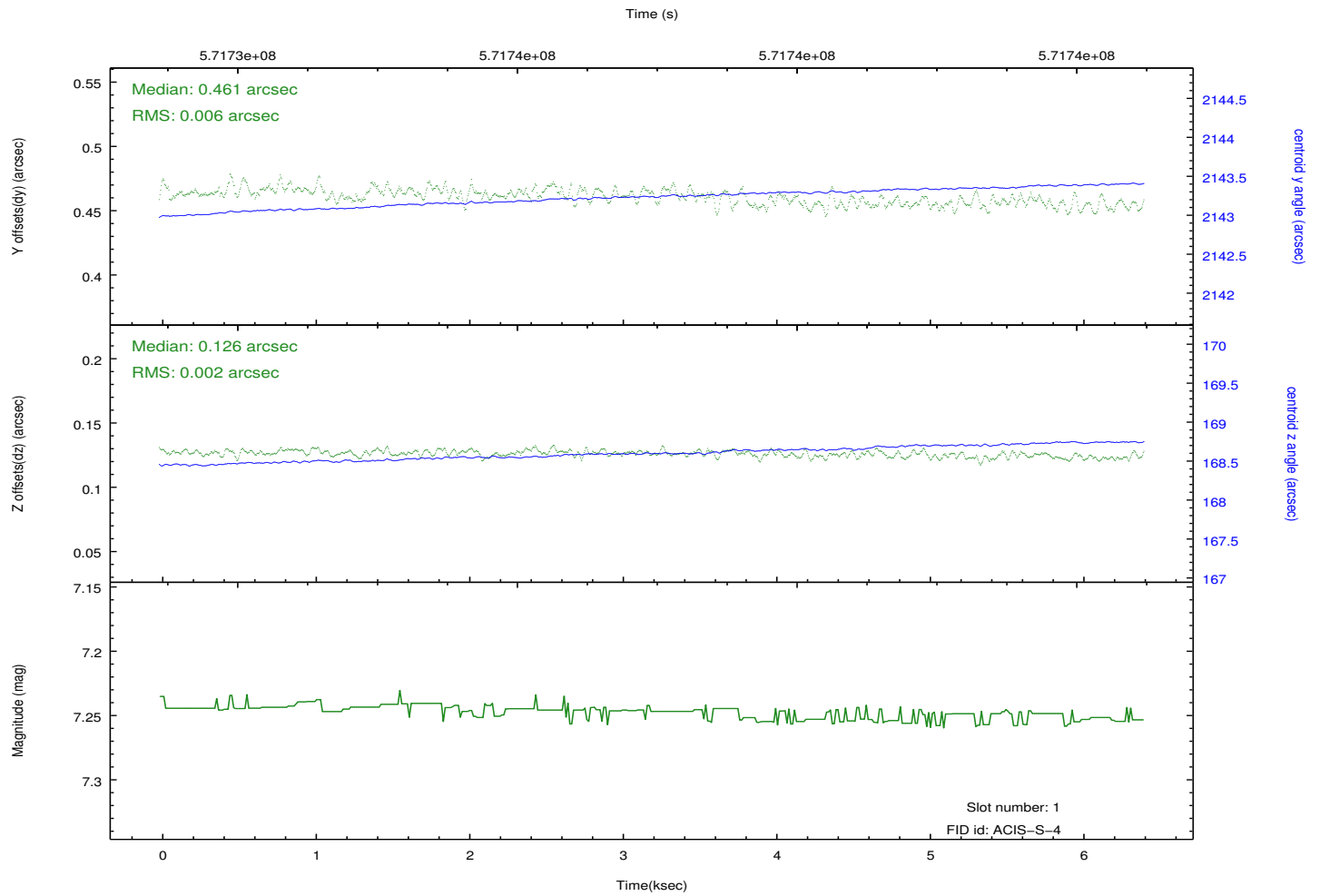
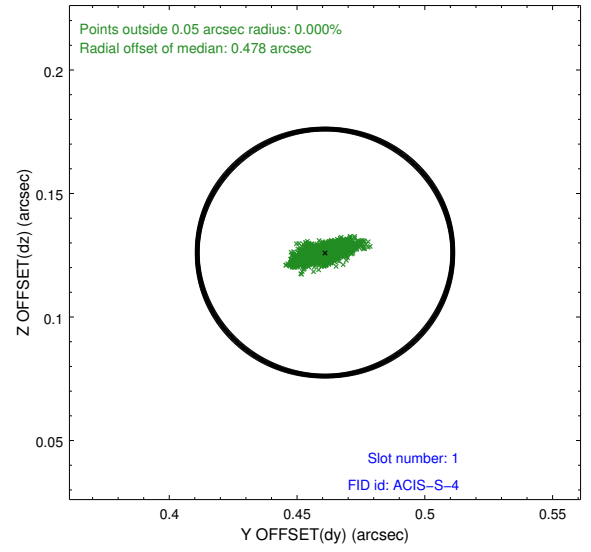
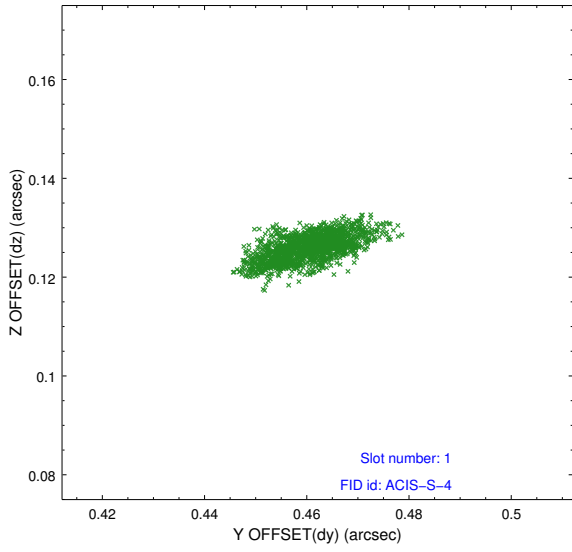


2.5 FID Slots

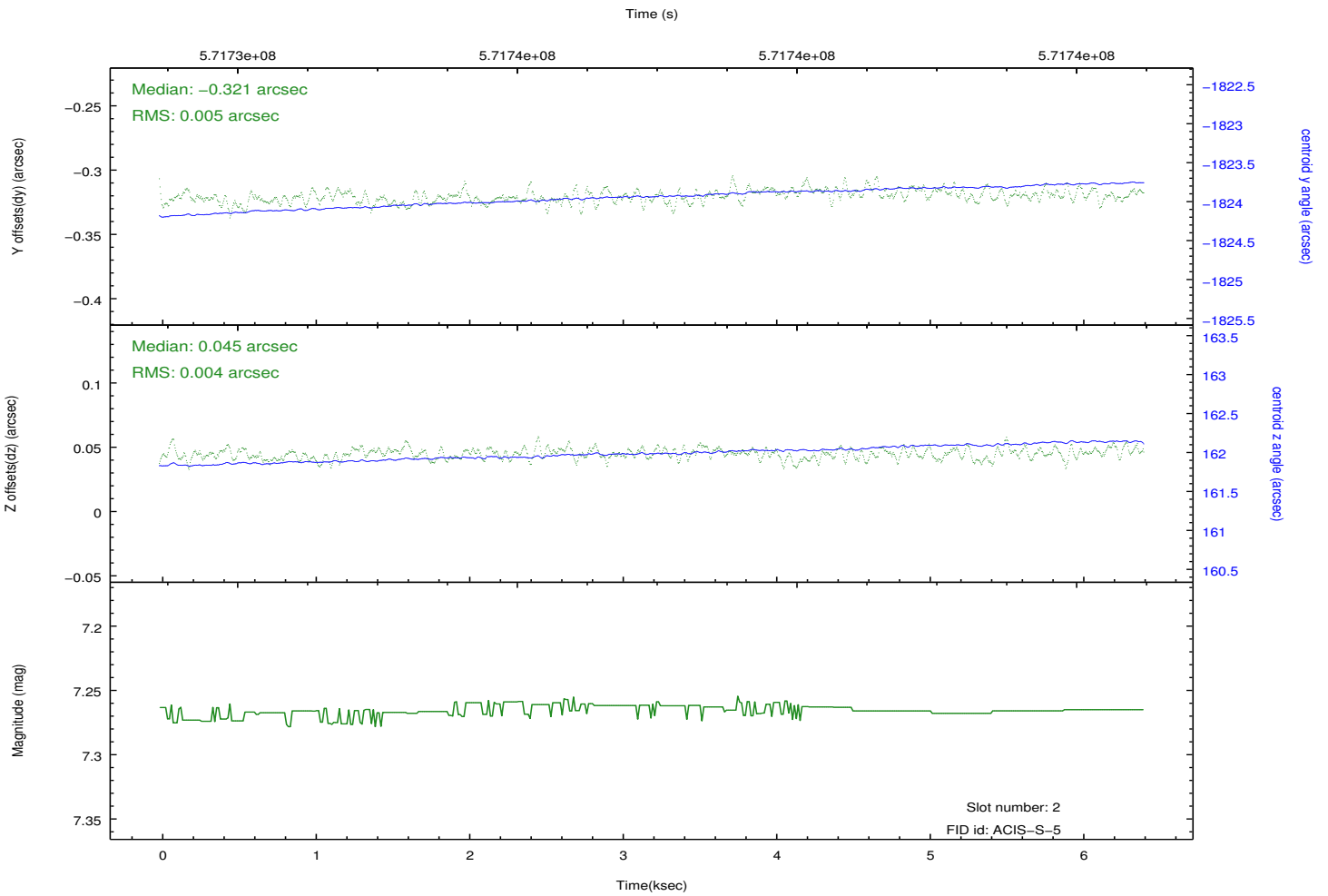
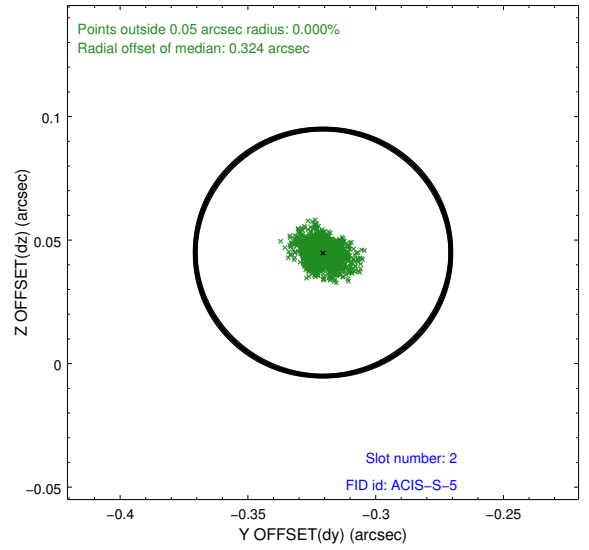
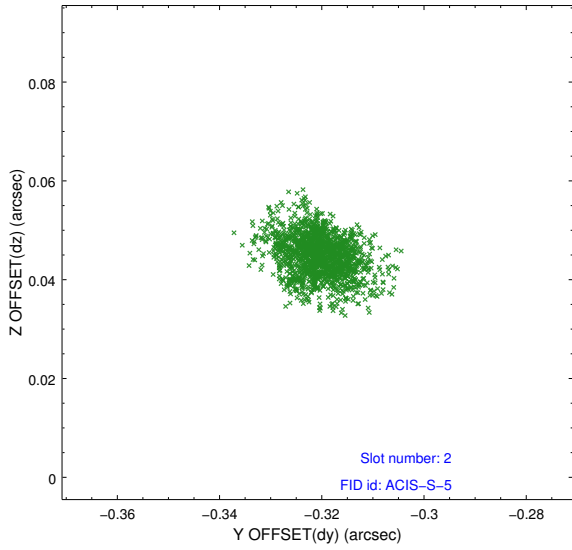
2.5.1 Slot 0



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)	2016.02.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.1151916339397

A.2 Comments

Optional chips I2 and I3 were dropped.