

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15567 - L2 Version 2
Chandra X-Ray Center

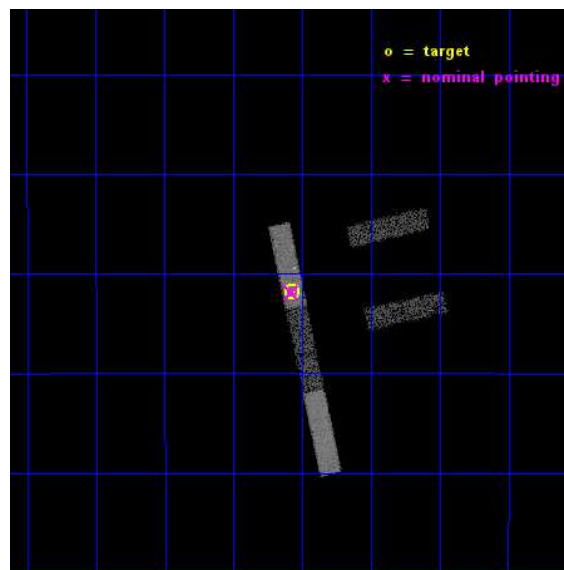
L2 Processing Date : Dec 3 2014

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

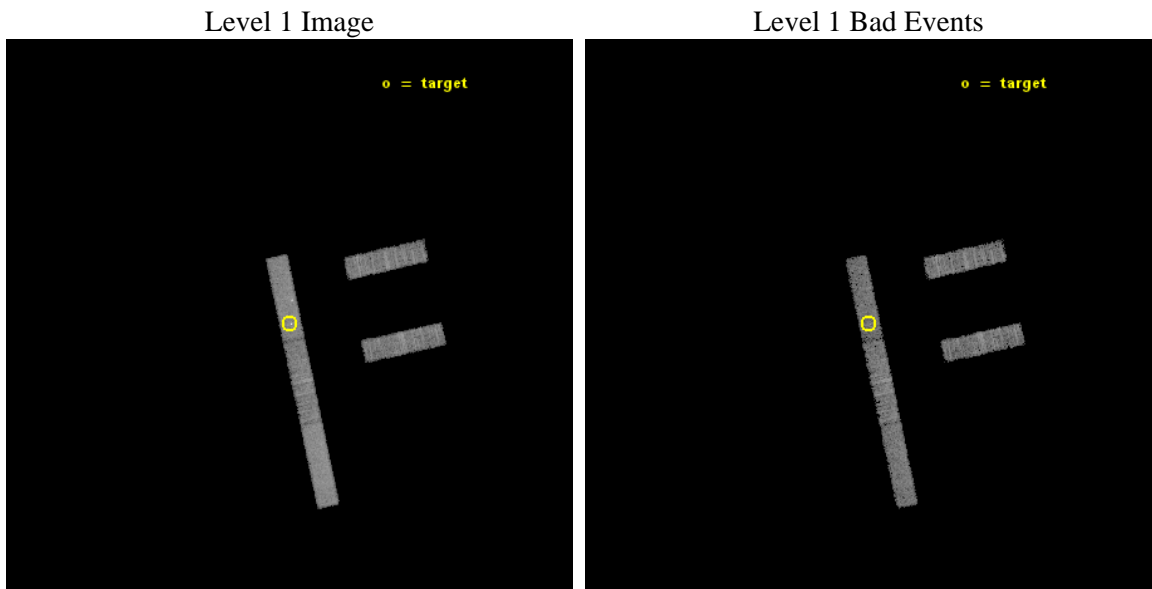
seq_num	200832	Sequence number
obs_id	15567	Observation id
title	Characterizing the X-ray & Stellar Wind Environment in the ~1 Gyr Late Heavy Bombardment System Eta Corvi	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	HD 109085	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	188.0175	Observer's specified target RA [deg]
dec_targ	-16.196	Observer's specified target Dec [deg]
ra_nom	188.01980265832	Nominal RA [deg]
dec_nom	-16.198122981999	Nominal Dec [deg]
roll_nom	257.73898604347	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10072.0	Sum of GTIs [s]
livetime	9674.9404441712	Livetime [s]
ontime2	10070.958979785	Sum of GTIs [s]
ontime3	10072.0	Sum of GTIs [s]
ontime5	10072.0	Sum of GTIs [s]
ontime6	10072.0	Sum of GTIs [s]
ontime7	10072.0	Sum of GTIs [s]
l2events	23767	Number of level 2 events



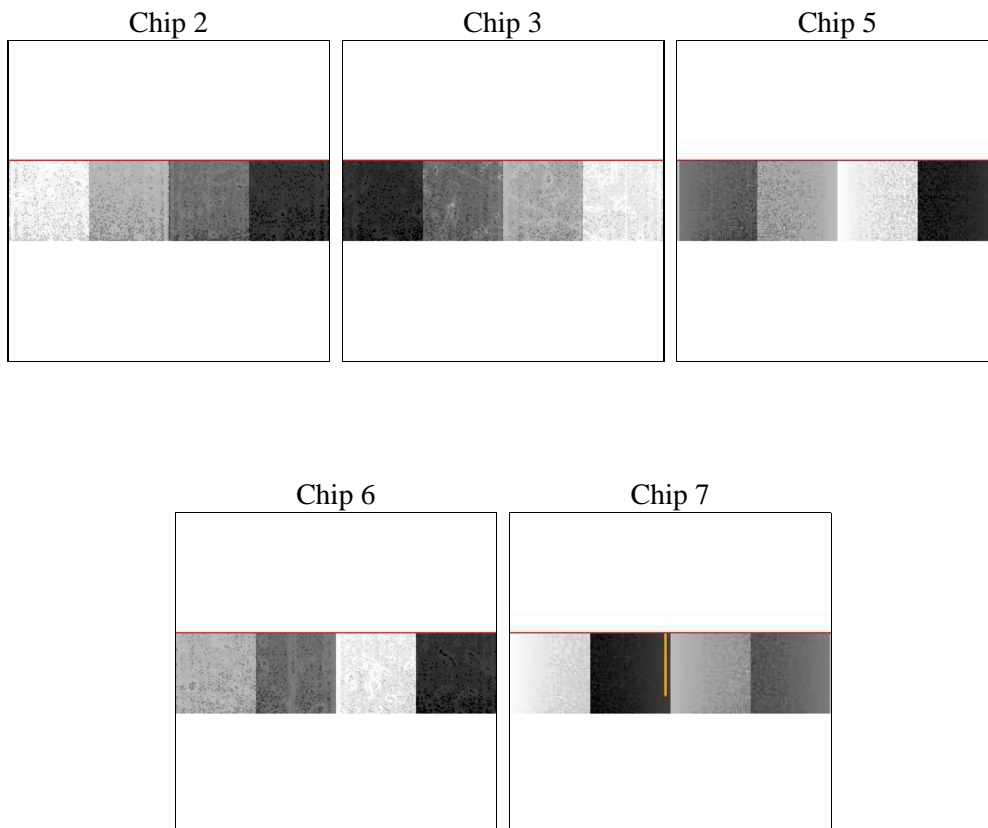
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10072.0	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	10070.958979785	Sum of GTIs [s]
date	2014-12-03T09:03:31	Date and time of file creation	ontime3	10072.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10072.0	Sum of GTIs [s]
			ontime6	10072.0	Sum of GTIs [s]
			ontime7	10072.0	Sum of GTIs [s]
			l1events	82515	Number of level 1 events

2.1.4 Events

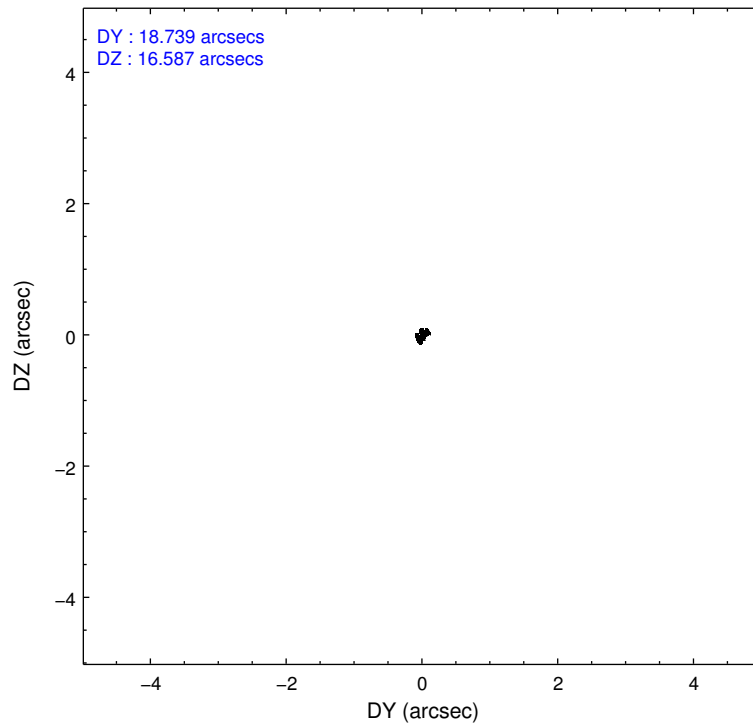
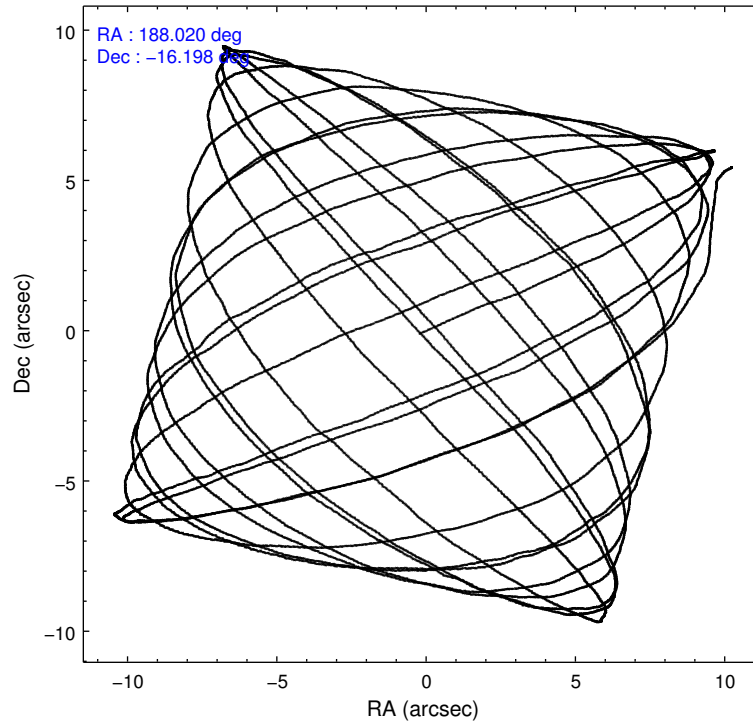
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	13494	13766	21192	14676	19387
rejected events	11752	12213	11042	12738	9486
rejected %	87%	88%	52%	86%	48%

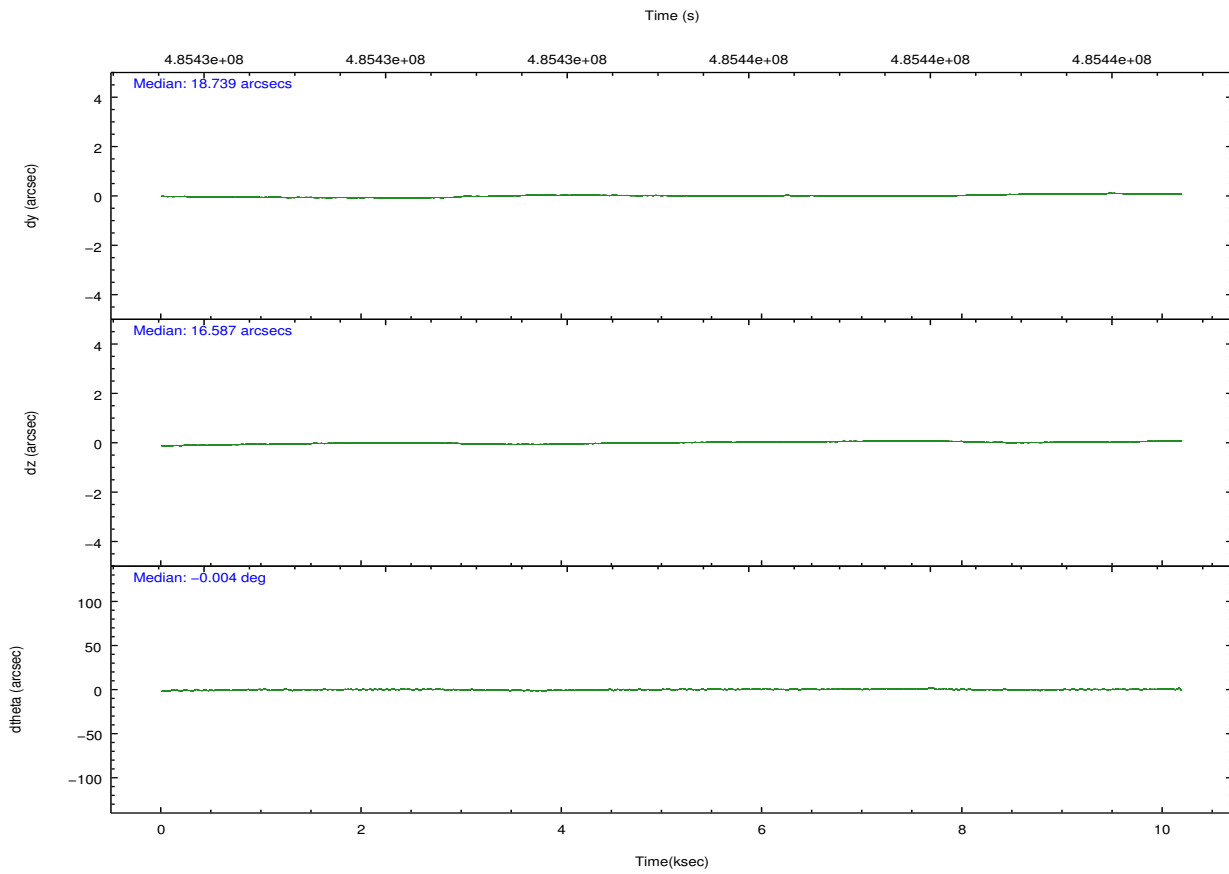
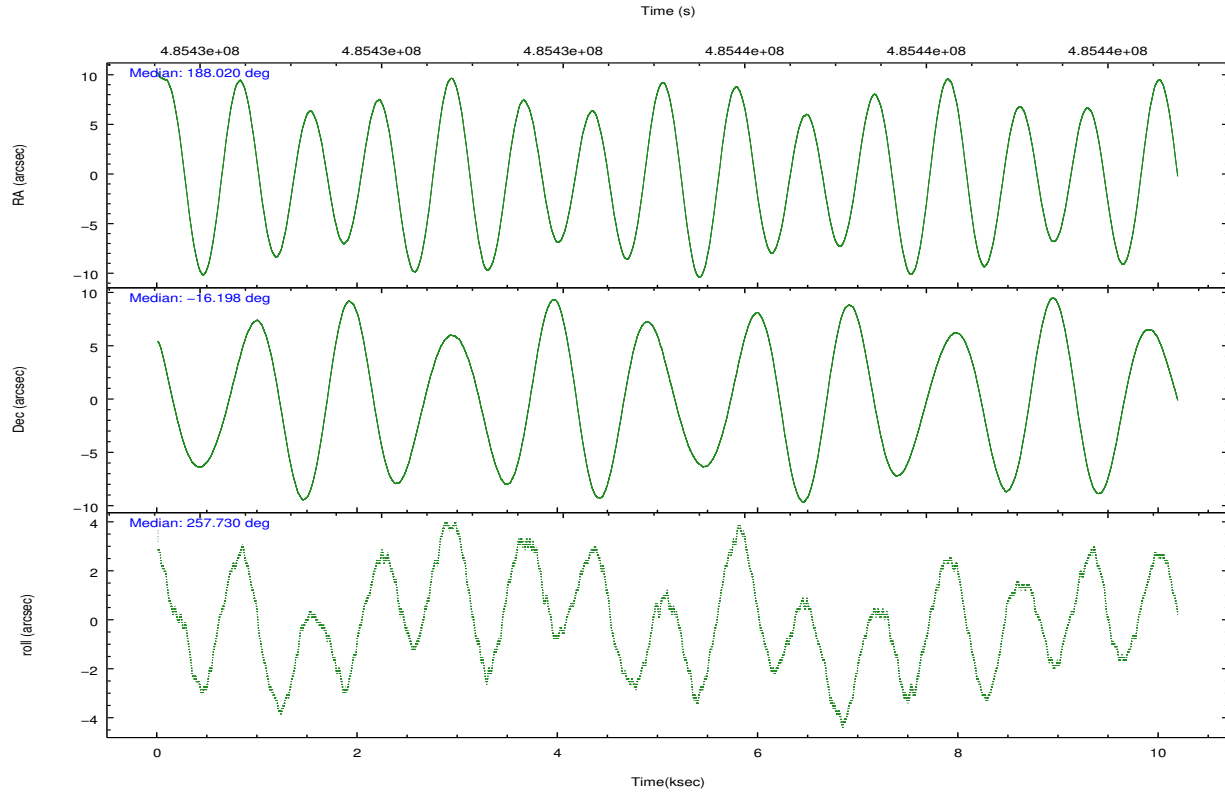
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	571	474	813	631	1523
	4%	3%	3%	4%	7%
grade 1 events	6	2	39	7	25
	0%	0%	0%	0%	0%
grade 2 events	376	321	3064	425	2172
	2%	2%	14%	2%	11%
grade 3 events	210	218	595	276	1030
	1%	1%	2%	1%	5%
grade 4 events	262	231	582	257	1020
	1%	1%	2%	1%	5%
grade 5 events	506	602	1739	695	1795
	3%	4%	8%	4%	9%
grade 6 events	324	309	5097	349	4157
	2%	2%	24%	2%	21%
grade 7 events	11239	11609	9263	12036	7665
	83%	84%	43%	82%	39%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	188.010691	188.0198026583248	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-16.172203	-16.19812298199935	Subarray start row	385	385
[deg] Pointing Roll	257.579812	257.7389860434669	Subarray row count	256	256
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	1
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	485430243.184000	485429173.81745			
Observation start date	2013-05-20T09:42:56	2013-05-20T09:26:13			
[s] Observation end time (MET)	485440243.184000	485441045.8806			
Observation end date	2013-05-20T12:29:36	2013-05-20T12:44:05			
Read mode	TIMED	TIMED			

2.3 Aspect





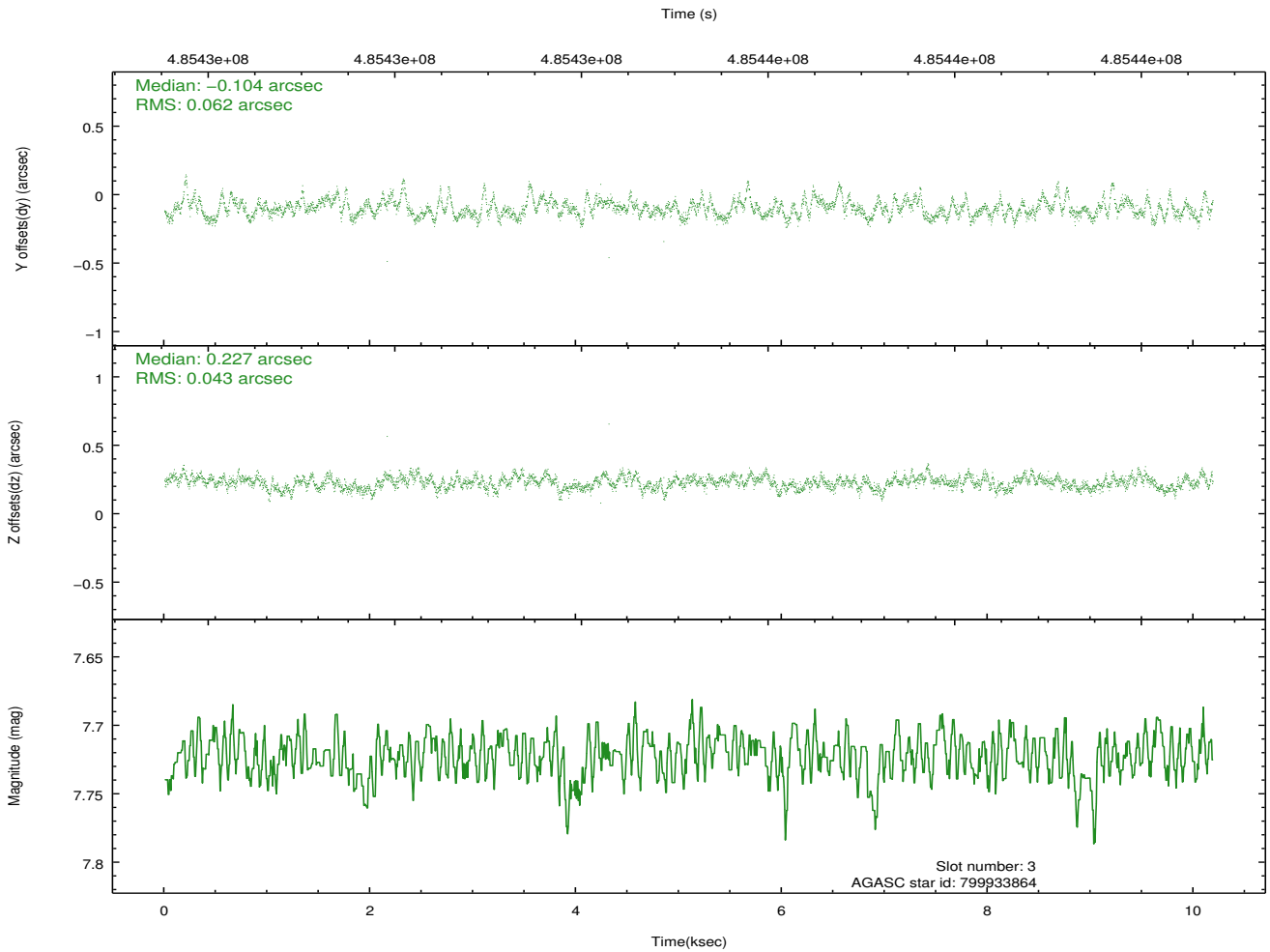
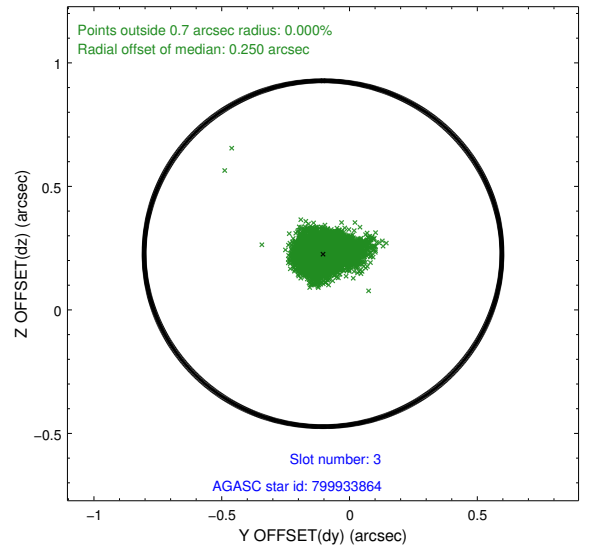
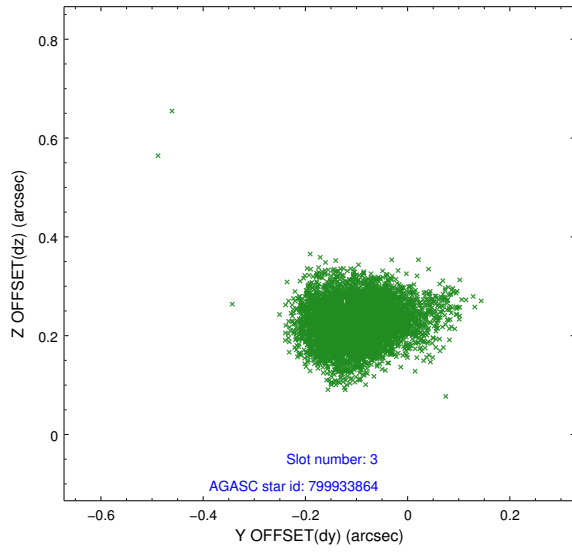
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.97	2484	-0.110	-0.016	0.007	0.011	0.000000	0.000000	-771.93	-1737.96
1	FID		ACIS-S-4	7.04	2484	0.279	0.057	0.006	0.010	0.000000	0.000000	2141.51	170.04
2	FID		ACIS-S-5	7.07	2484	-0.200	-0.033	0.007	0.012	0.000000	0.000000	-1824.19	164.23
3	GUIDE	used	799933864	7.72	4968	-0.104	0.227	0.079	0.129	187.954729	-15.715631	-1562.52	-542.43
4	GUIDE	used	799938928	9.81	4967	0.244	0.056	0.163	0.265	187.528541	-16.643478	2017.69	-1259.30
5	GUIDE	used	799942944	7.37	4969	-0.027	-0.186	0.081	0.119	188.225311	-16.660106	1557.52	1100.39
6	GUIDE	used	799949752	7.81	4969	-0.006	0.028	0.095	0.165	187.267657	-16.392120	1330.96	-2335.88
7	GUIDE	used	799942160	8.03	4966	-0.107	-0.126	0.068	0.110	188.654146	-16.354391	166.12	2311.02

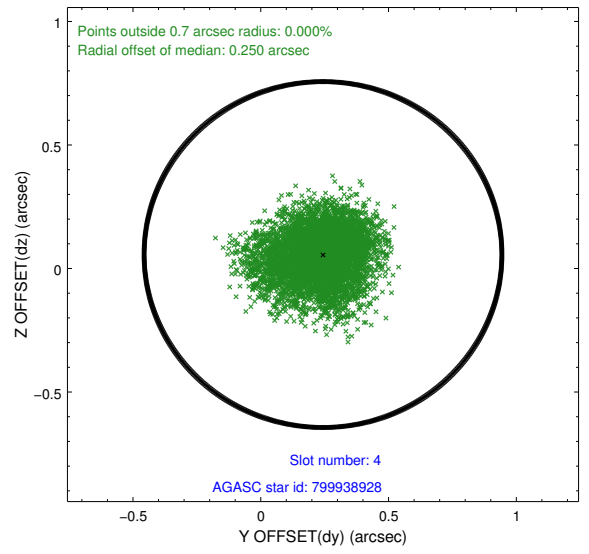
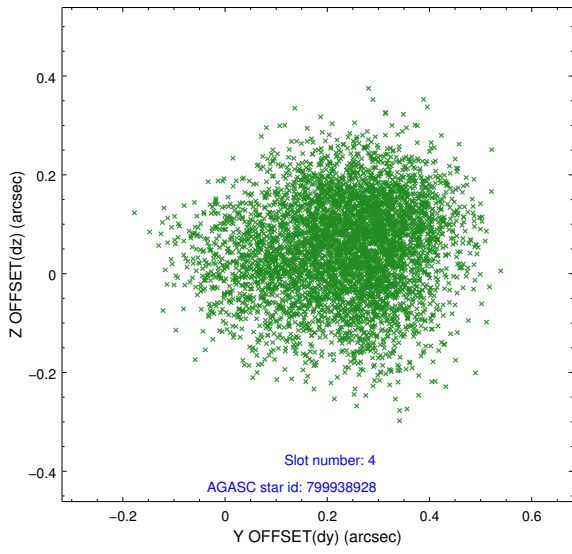
∞

2.4 Star Slots

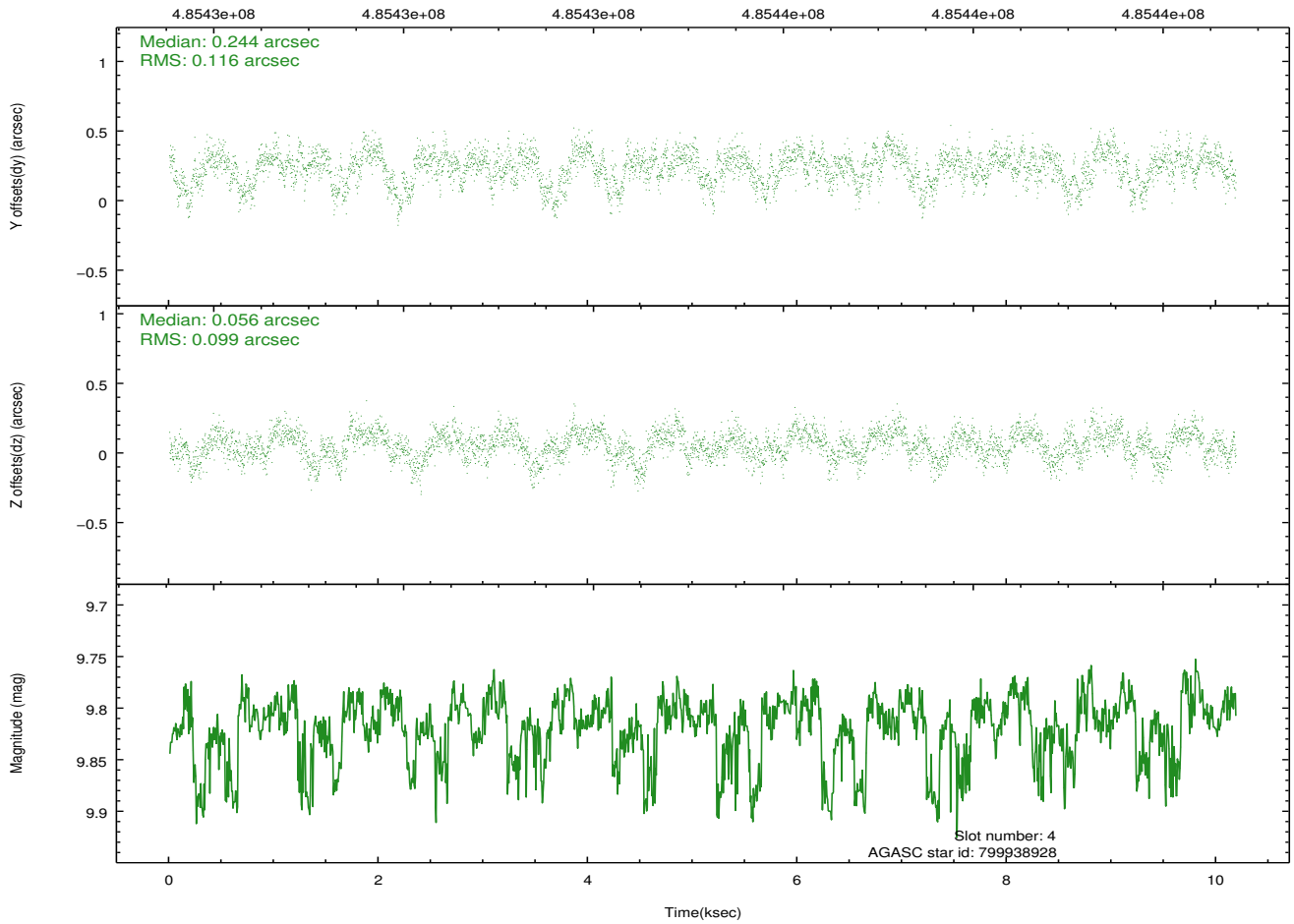
2.4.1 Slot 3



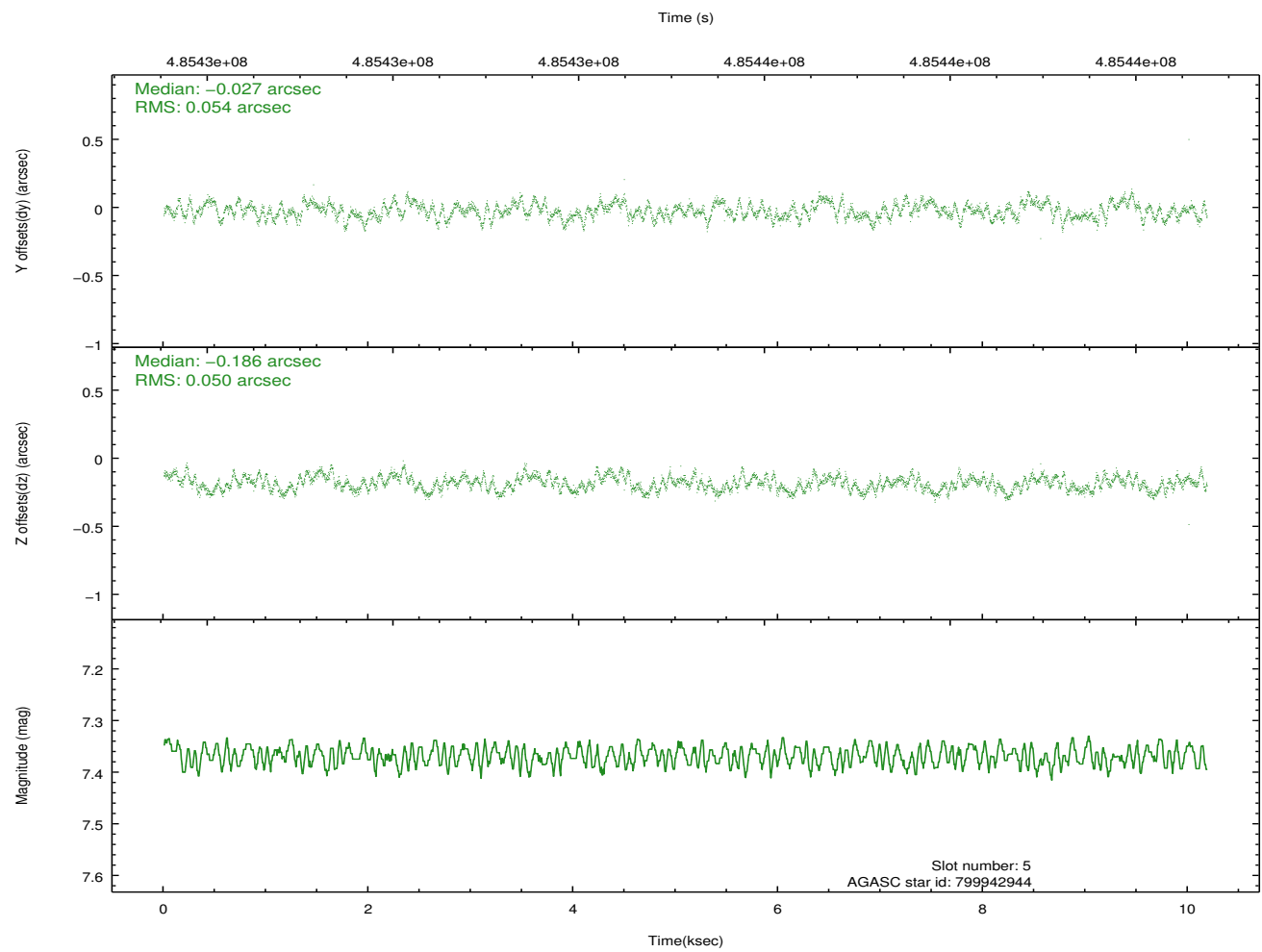
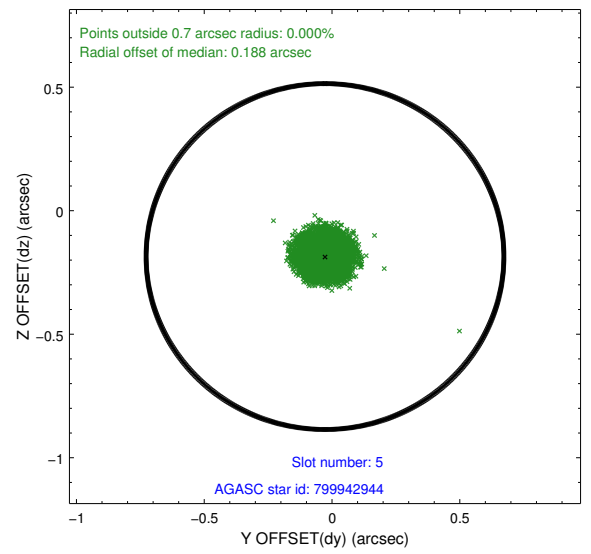
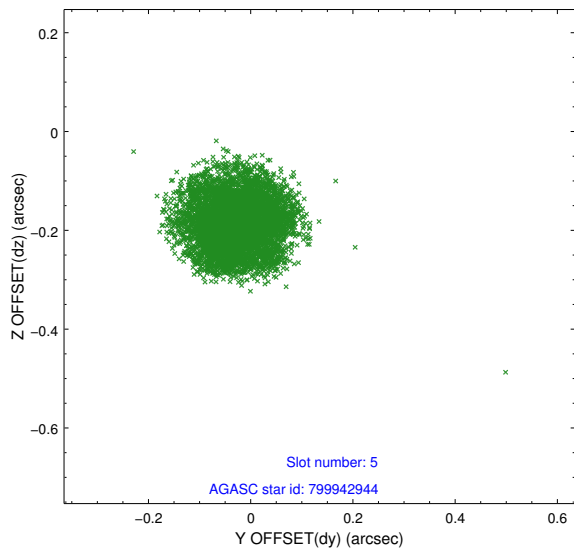
2.4.2 Slot 4



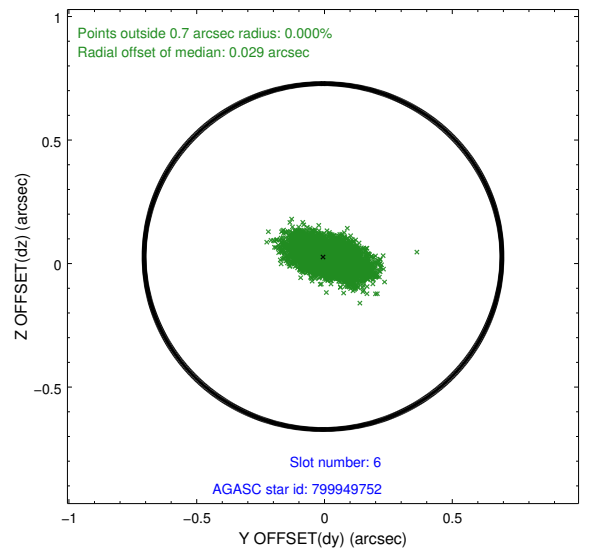
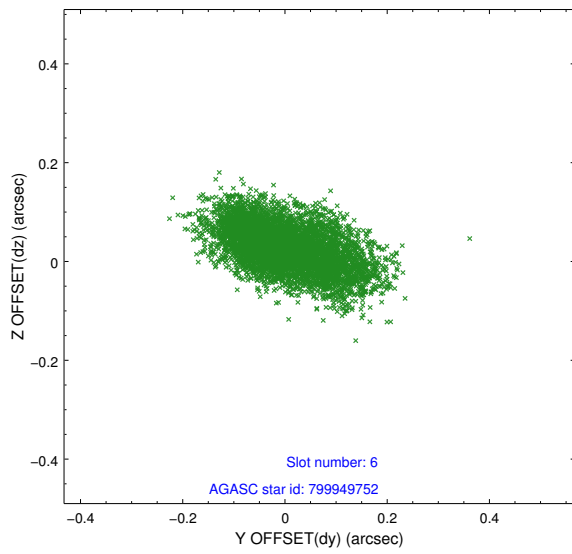
Time (s)



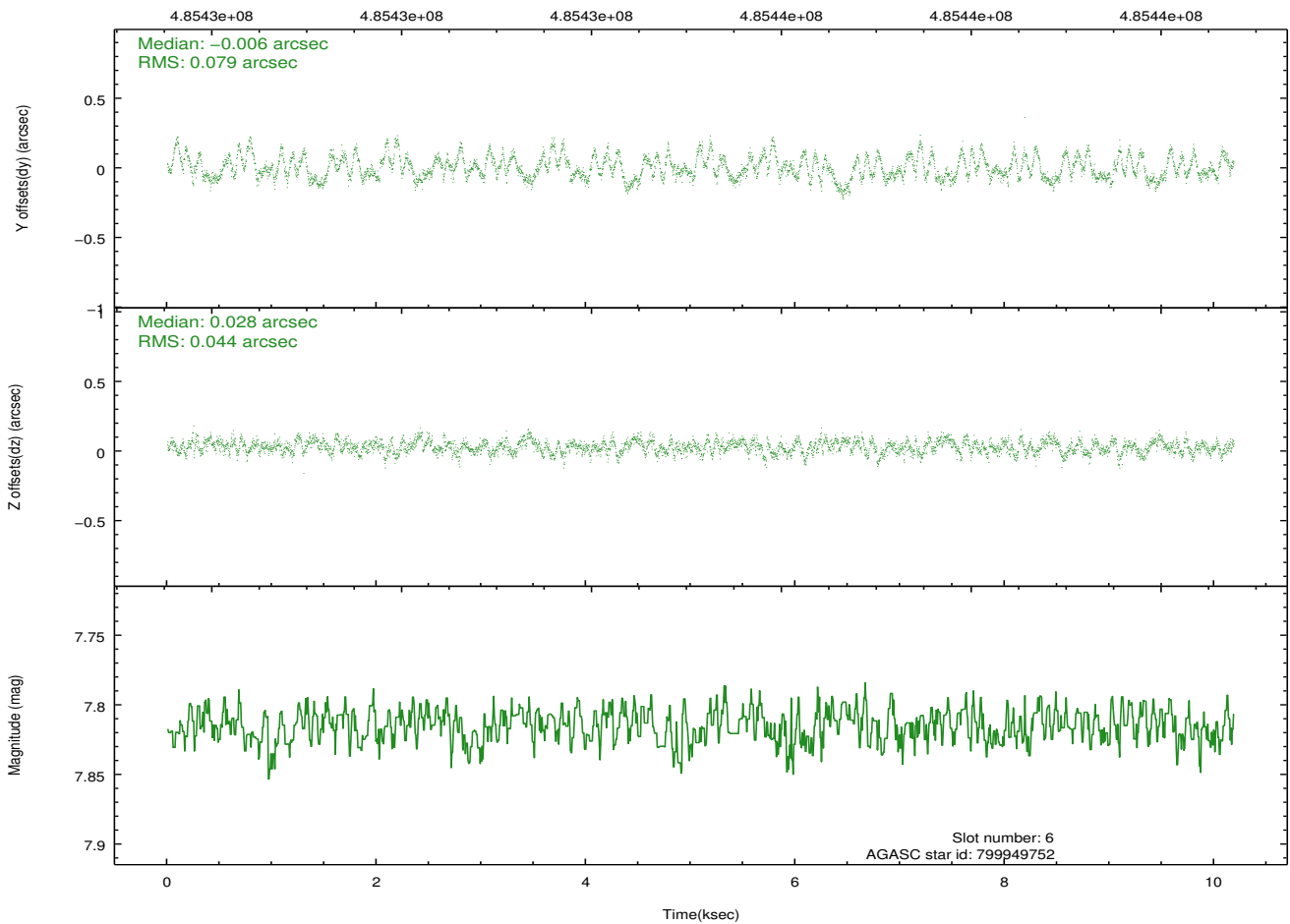
2.4.3 Slot 5



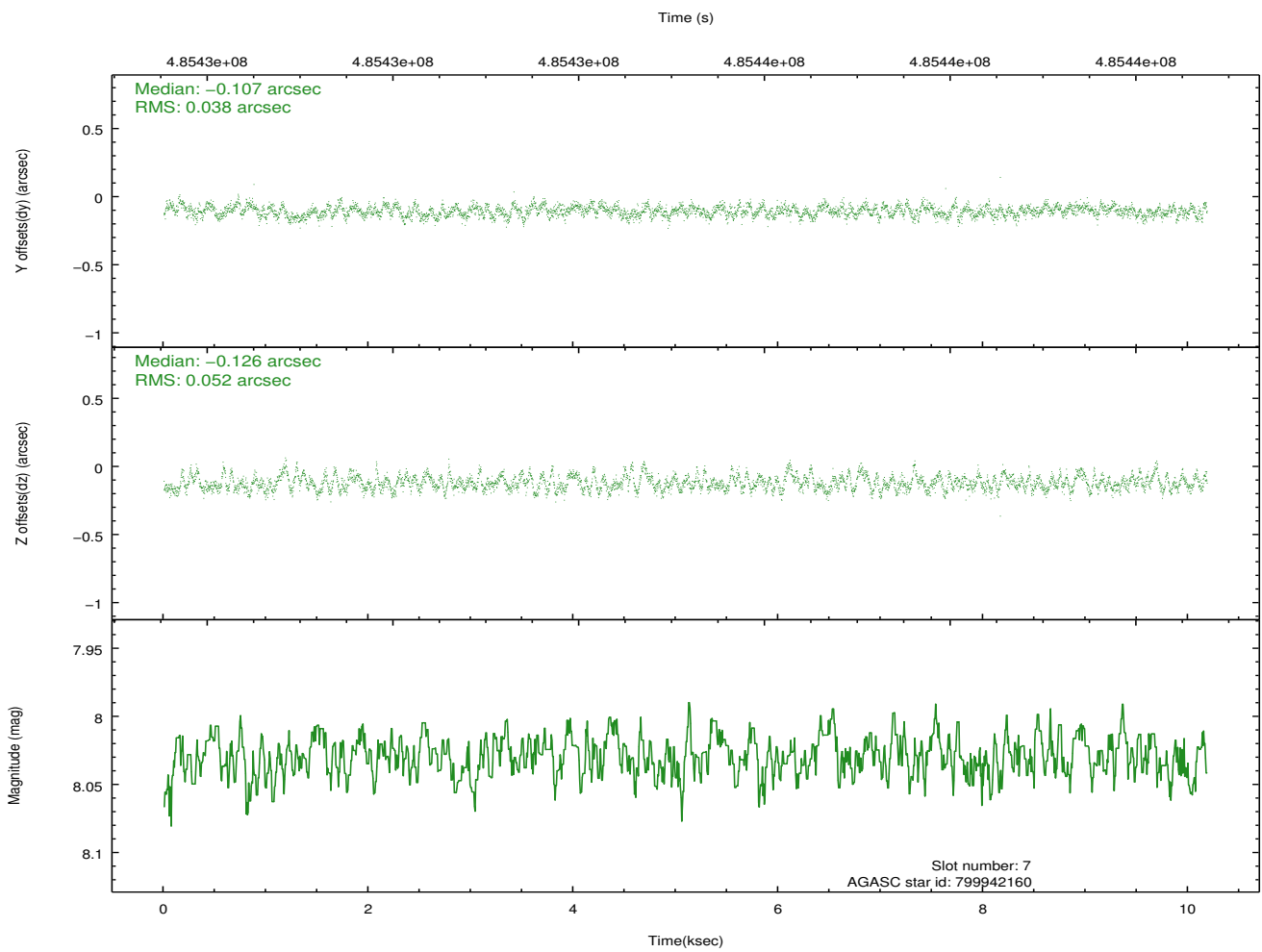
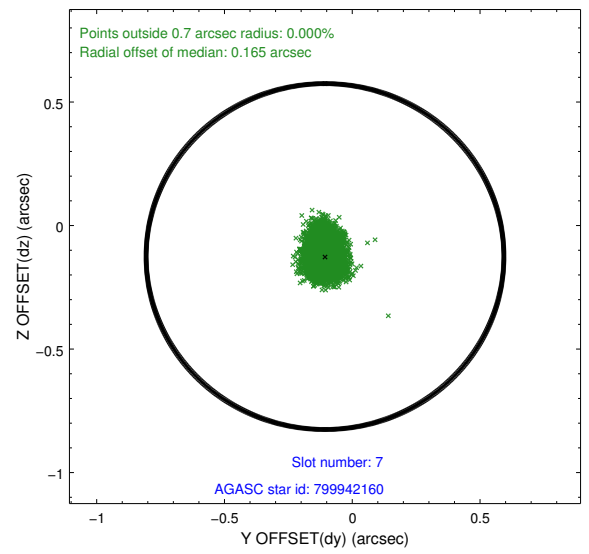
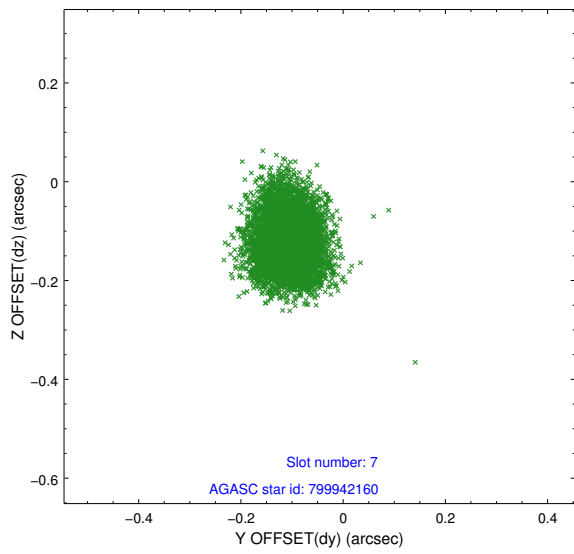
2.4.4 Slot 6



Time (s)

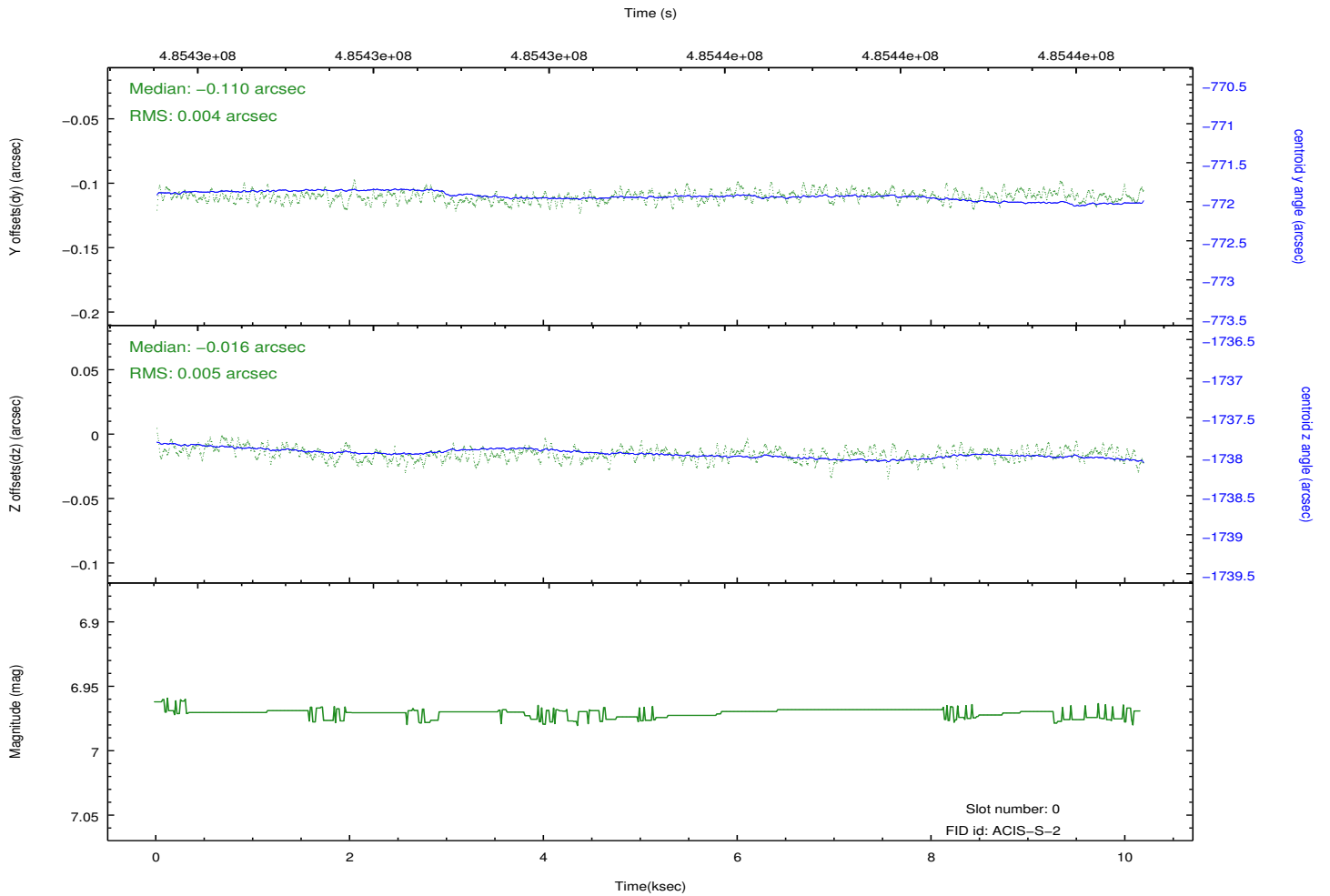
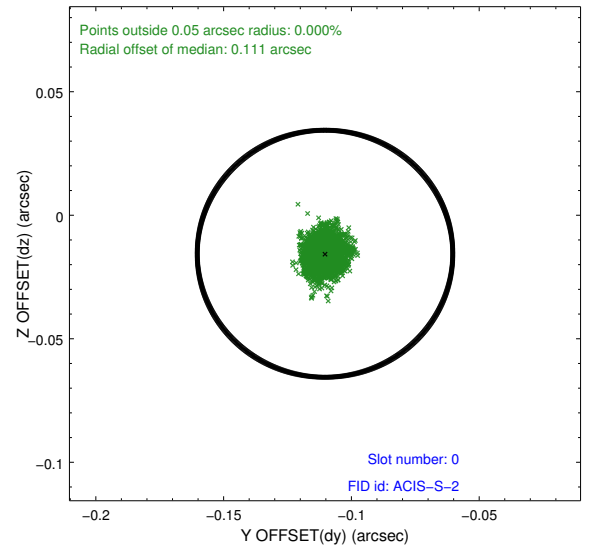
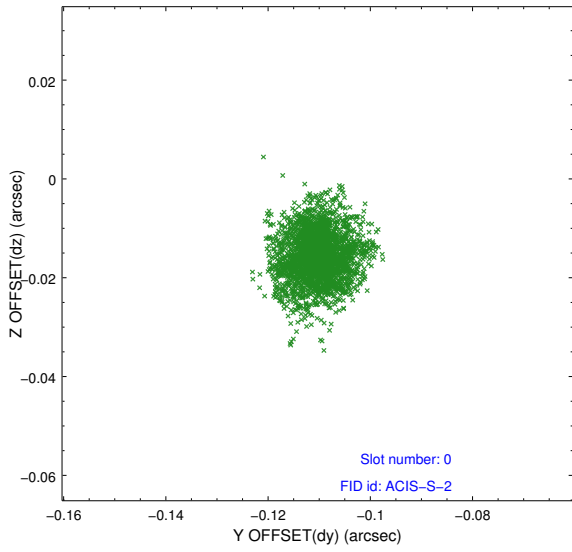


2.4.5 Slot 7

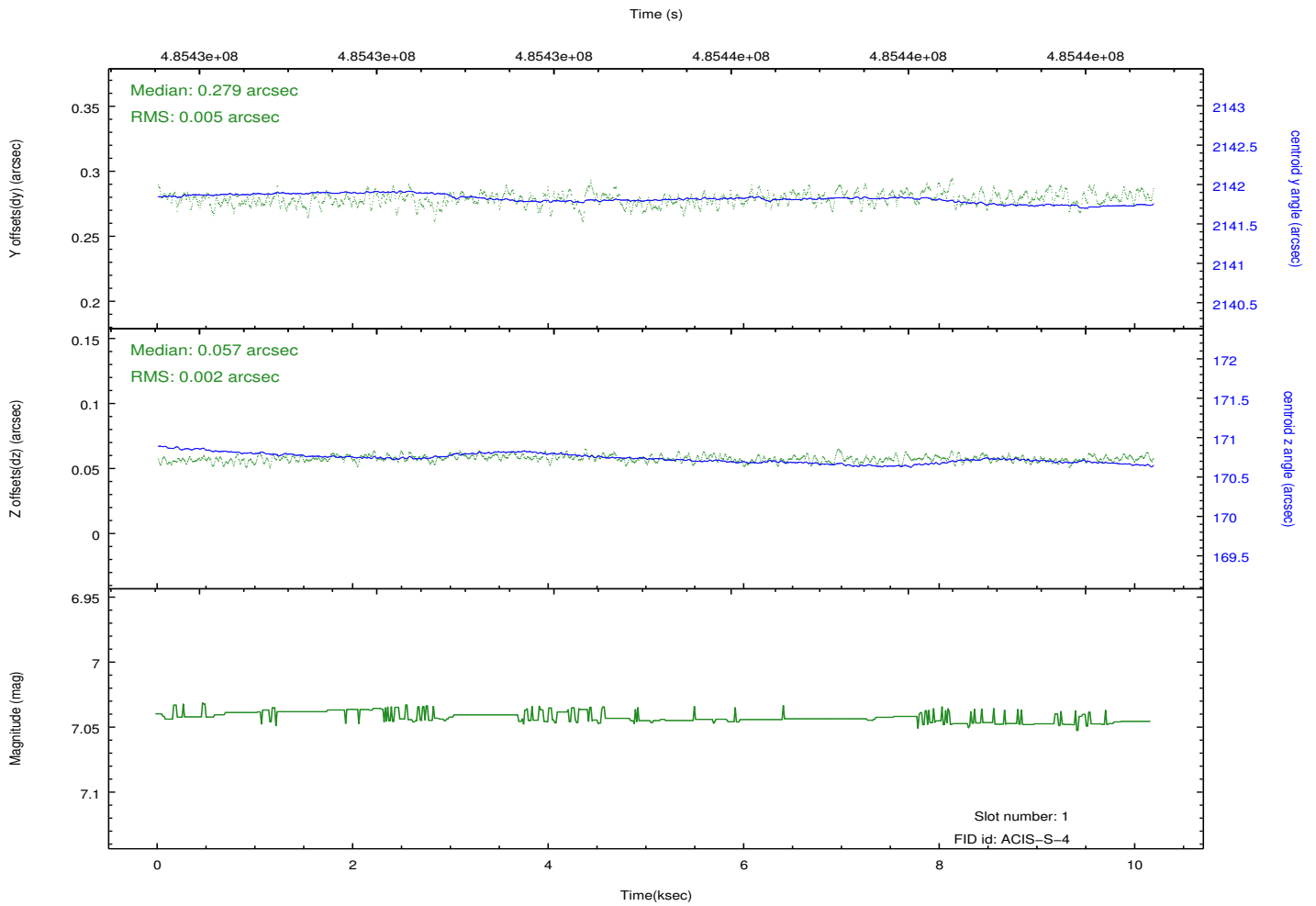
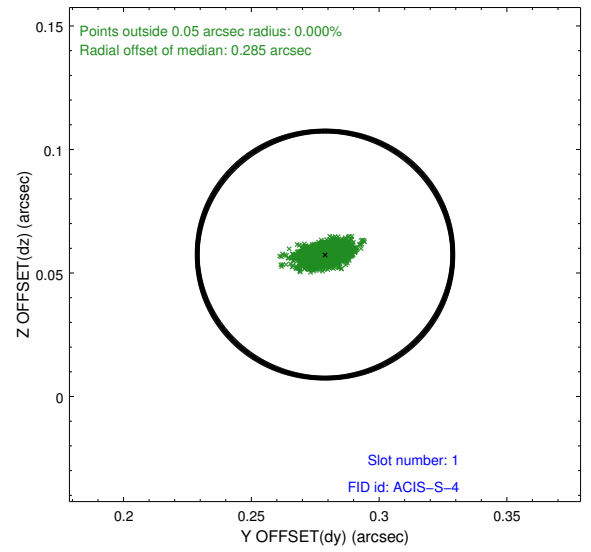
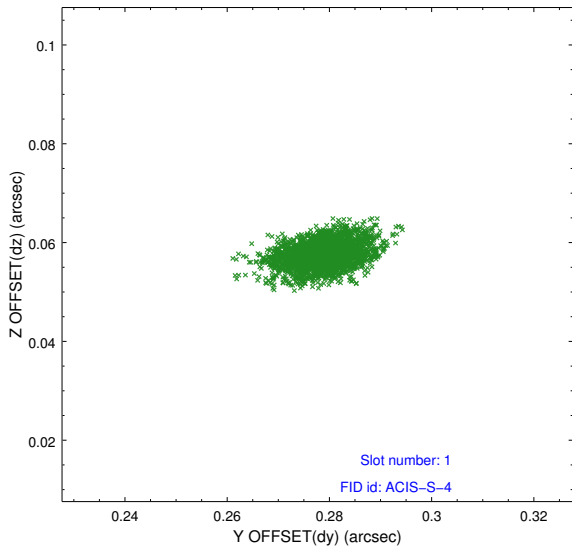


2.5 FID Slots

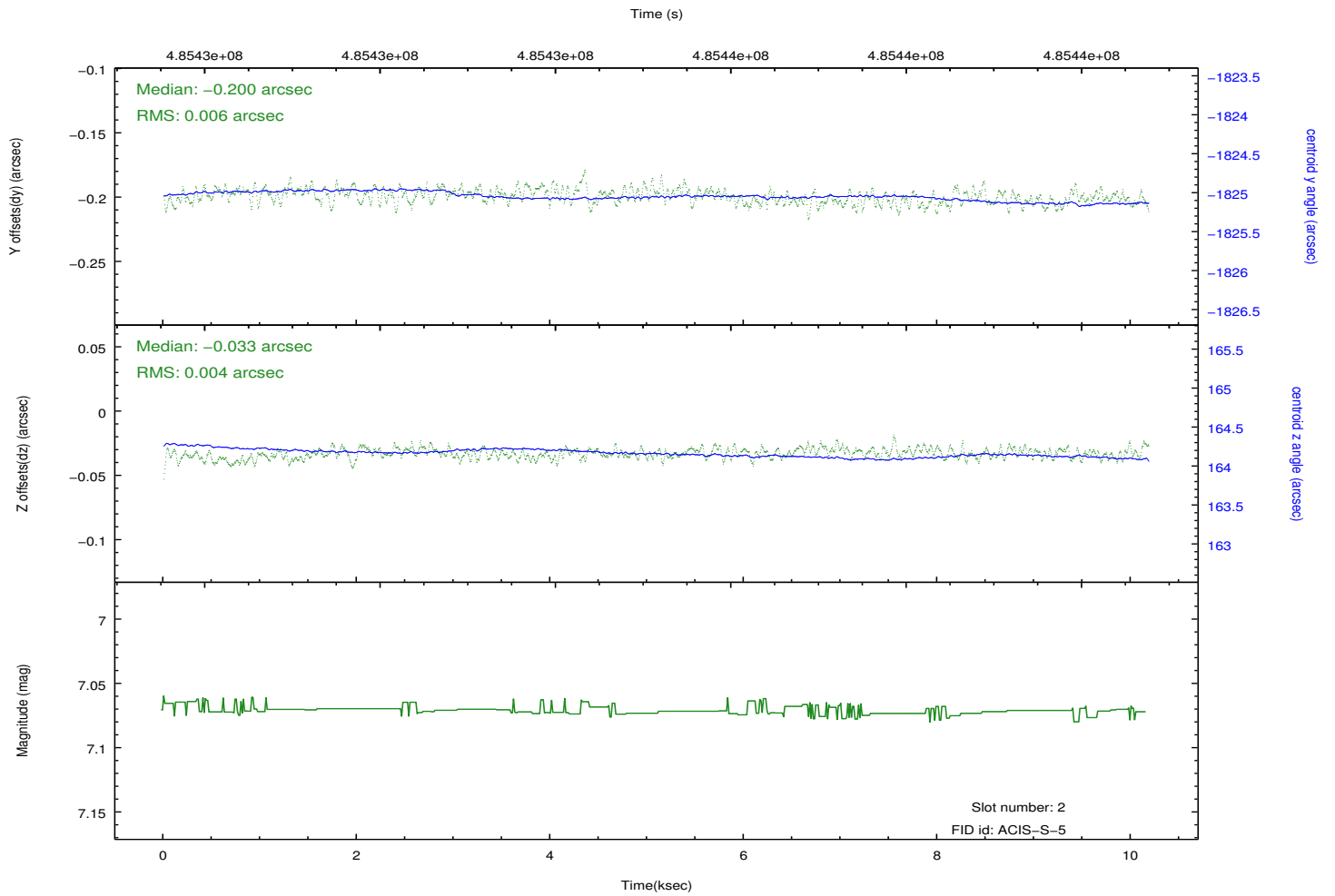
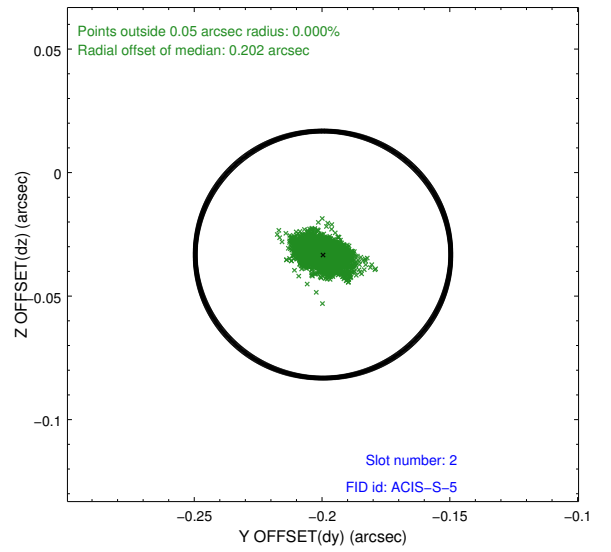
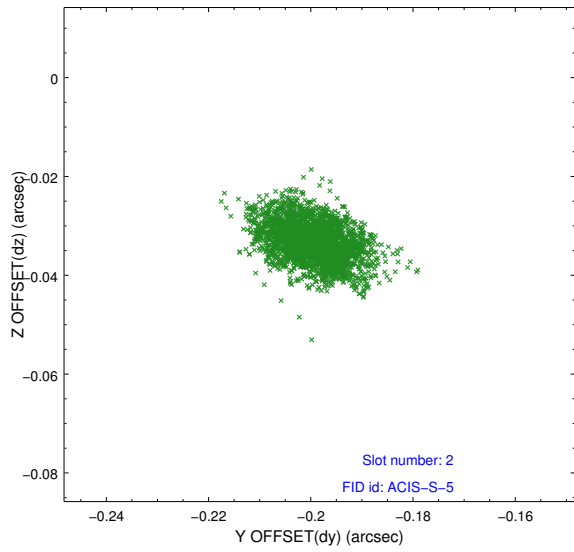
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.072

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.