

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19600 - L2 Version 2
Chandra X-Ray Center

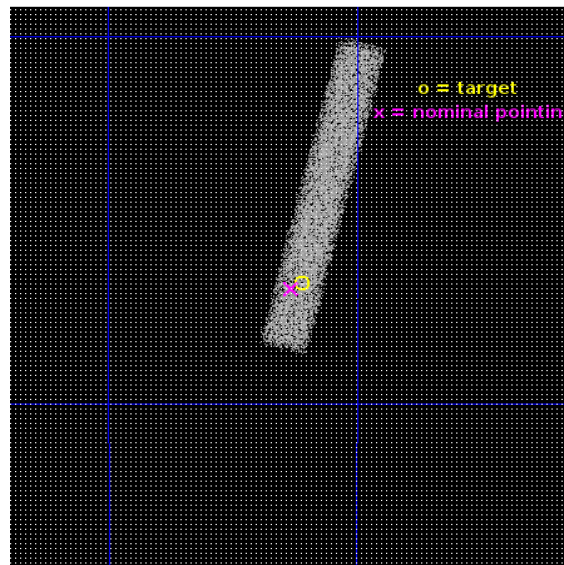
L2 Processing Date : Jul 6 2017

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1 Front

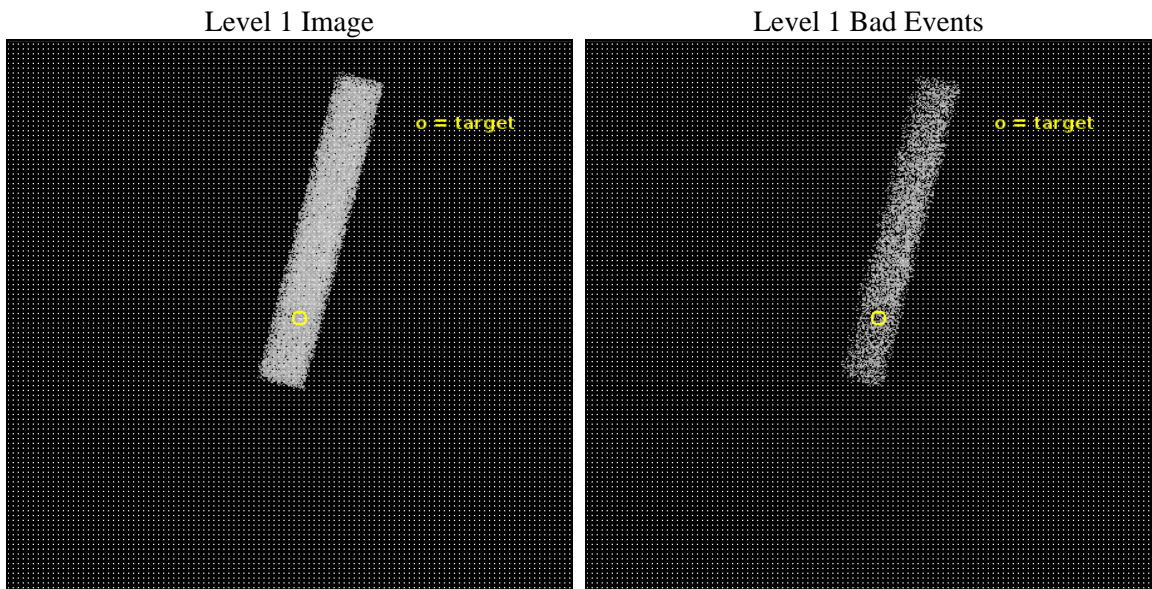
seq_num	401877	Sequence number
obs_id	19600	Observation id
title	Crust cooling of accretion-heated neutron stars	Proposal title
observer	Rudy Wijnands	Principal investigator
object	MXB 1659-298	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	255.52725	Observer's specified target RA [deg]
dec_targ	-29.945581	Observer's specified target Dec [deg]
ra_nom	255.5328242695	Nominal RA [deg]
dec_nom	-29.947877524948	Nominal Dec [deg]
roll_nom	284.15942372265	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29615.047152638	Sum of GTIs [s]
livetime	26859.284557082	Livetime [s]
ontime7	29615.047152638	Sum of GTIs [s]
l2events	17526	Number of level 2 events



2 OBI

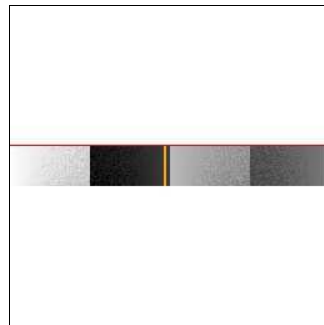
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29545.656000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	29615.047152638	Sum of GTIs [s]
caldbver	4.7.5	 	ontime7	29615.047152638	Sum of GTIs [s]
date	2017-07-06T21:34:12	Date and time of file creation	l1events	36929	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

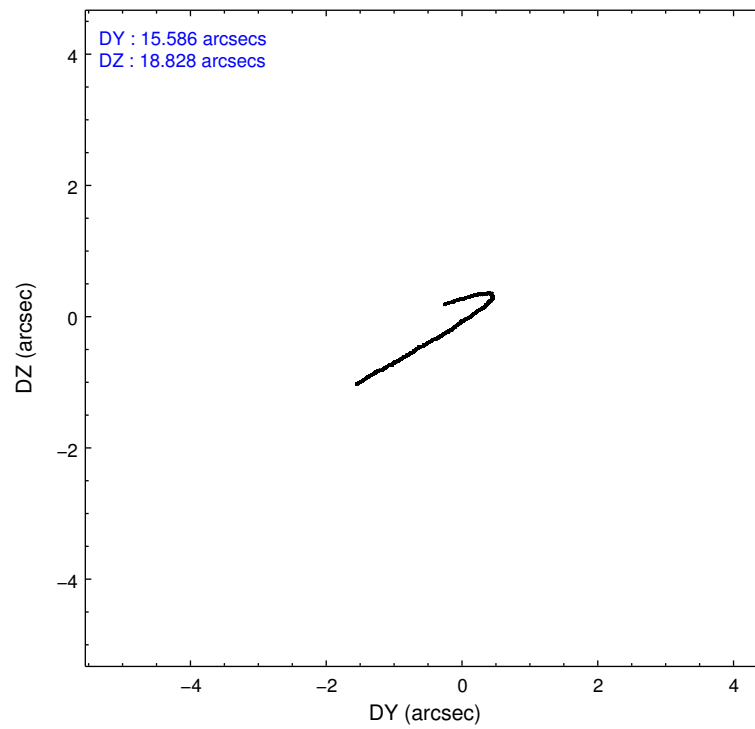
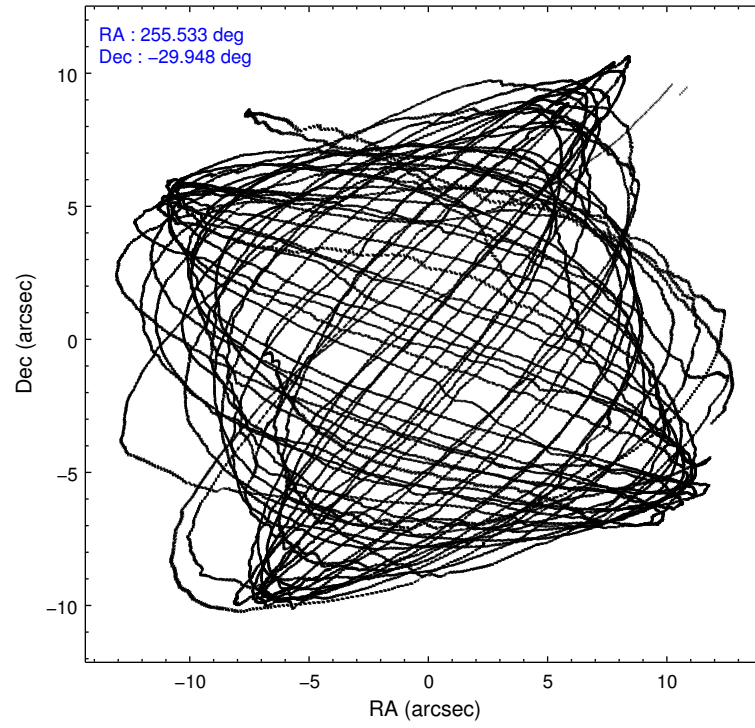
	ccd 7
level 1 events	36929
rejected events	18625
rejected %	50%

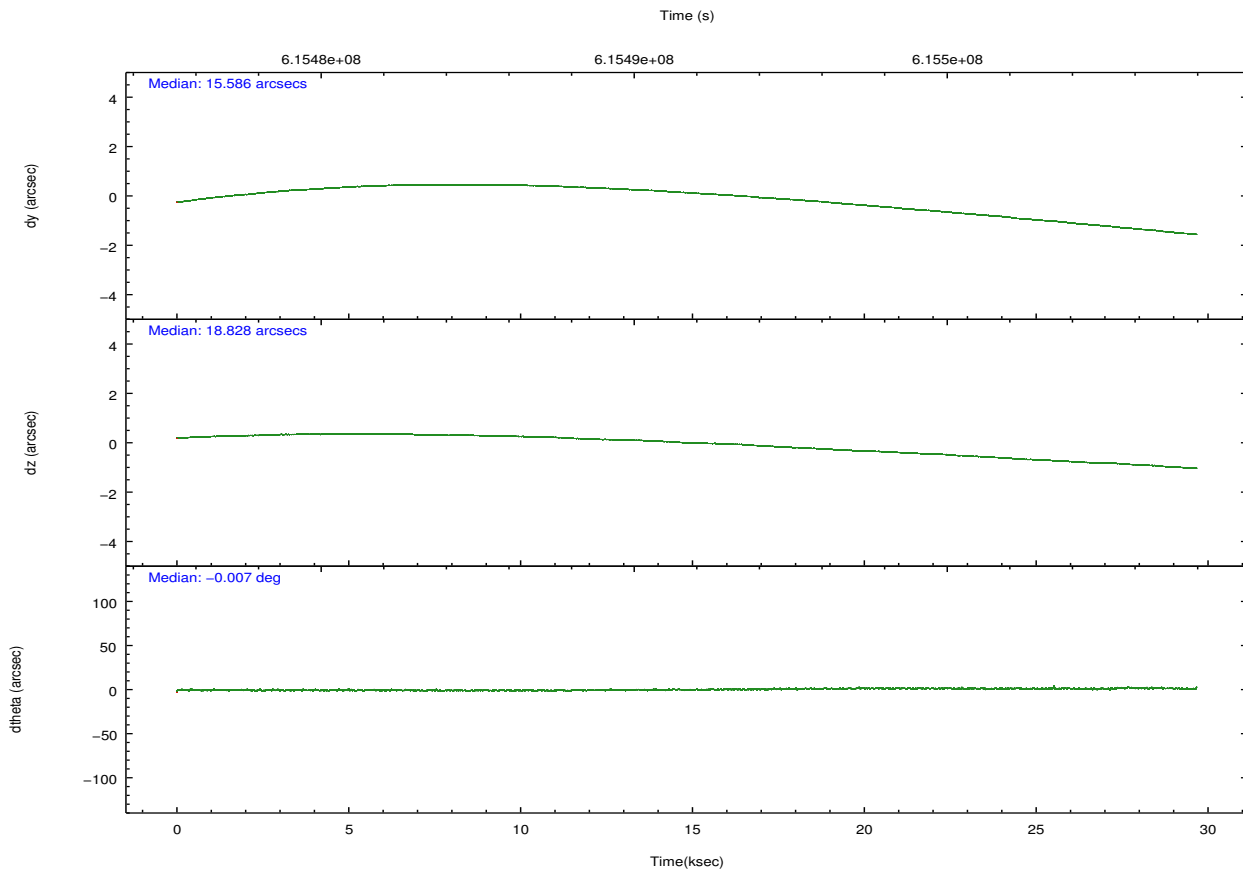
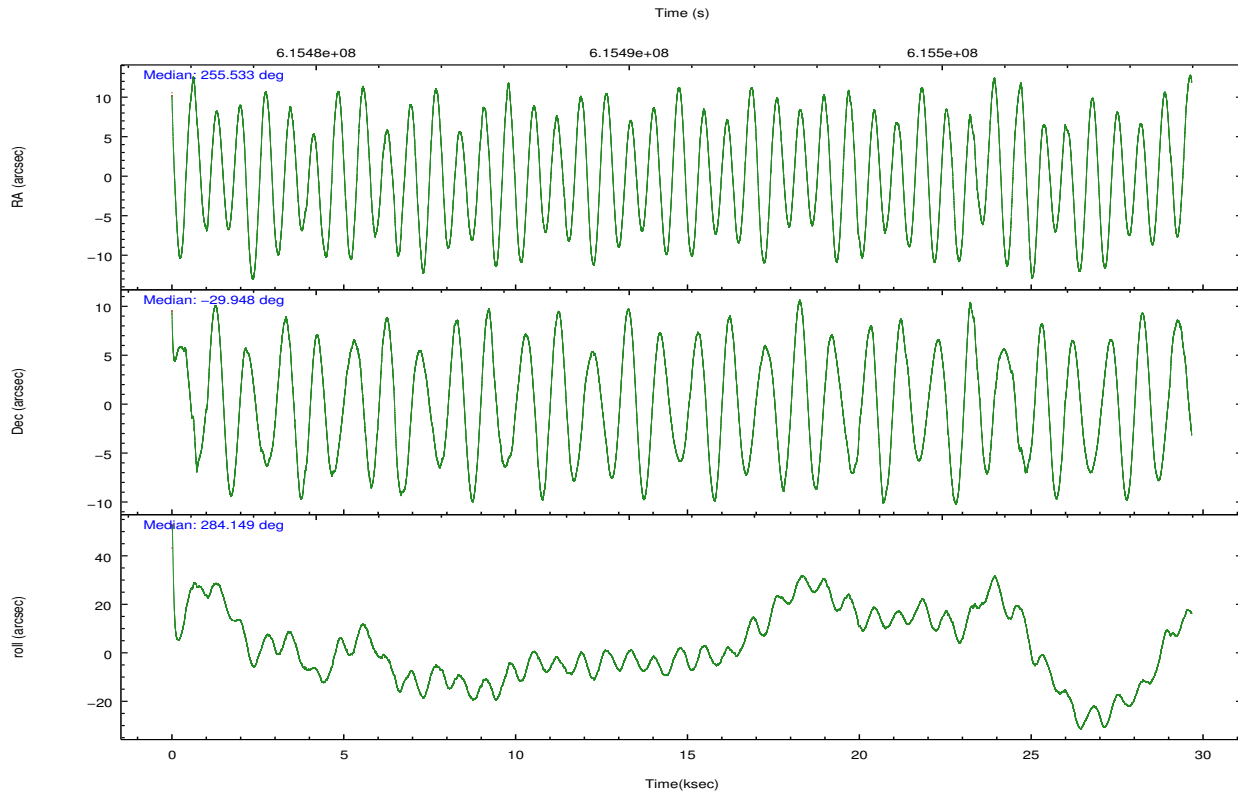
	ccd 7
grade 0 events	1840
	4%
grade 1 events	44
	0%
grade 2 events	3522
	9%
grade 3 events	2434
	6%
grade 4 events	2300
	6%
grade 5 events	3721
	10%
grade 6 events	8208
	22%
grade 7 events	14860
	40%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	255.510464	255.5328242695008	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-29.928461	-29.94787752494777	Subarray start row	449	449
[deg] Pointing Roll	283.991618	284.1594237226495	Subarray row count	128	128
[s] Window start time (MET)	615427269.184000	615427269.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	618105669.184000	618105669.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	615476970.184000	615475682.2216901			
Observation start date	2017-07-03T13:48:21	2017-07-03T13:28:02			
[s] Observation end time (MET)	615506516.184000	615506732.5484999			
Observation end date	2017-07-03T22:00:47	2017-07-03T22:05:32			
Read mode	TIMED	TIMED			

2.3 Aspect



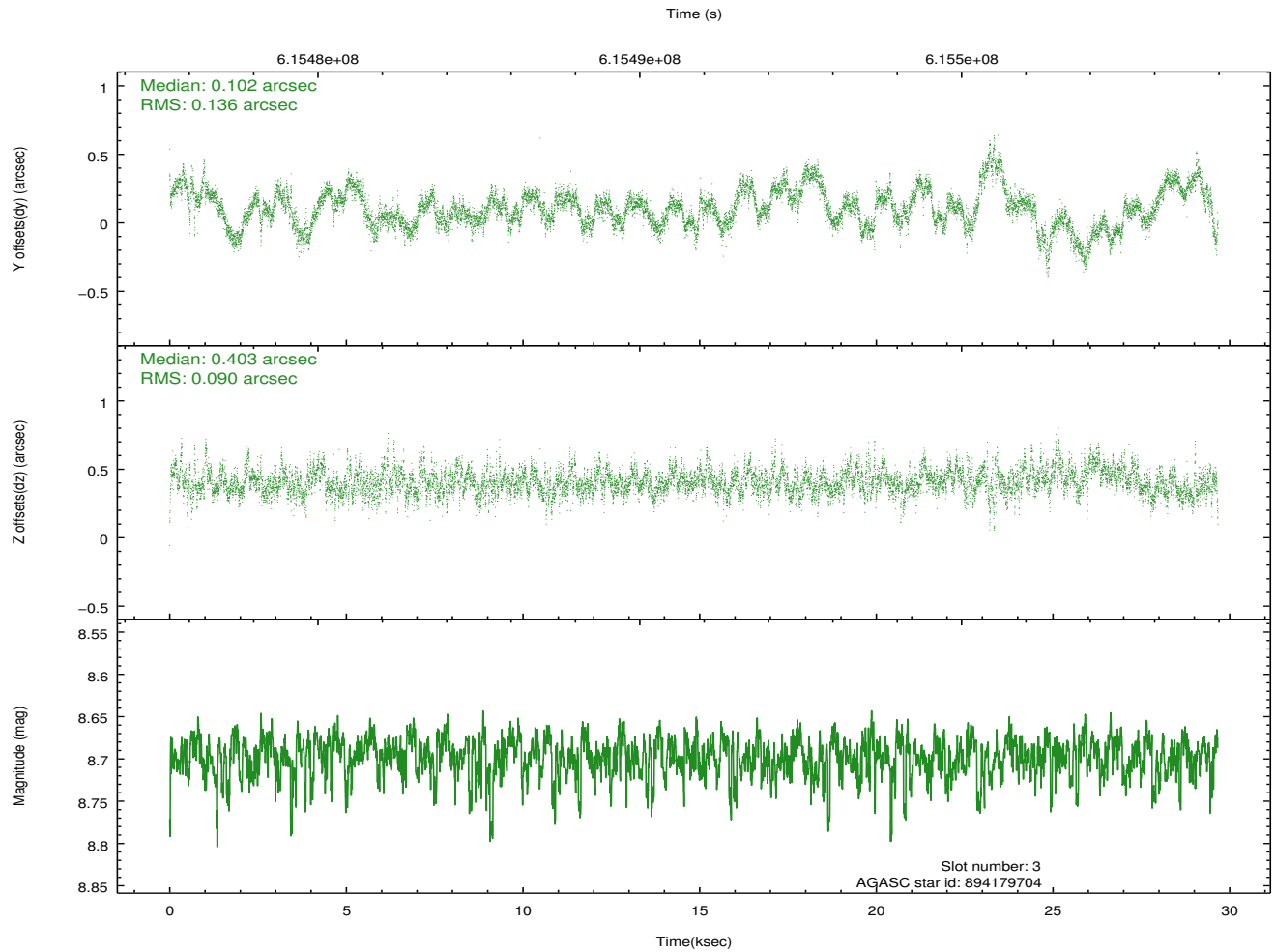
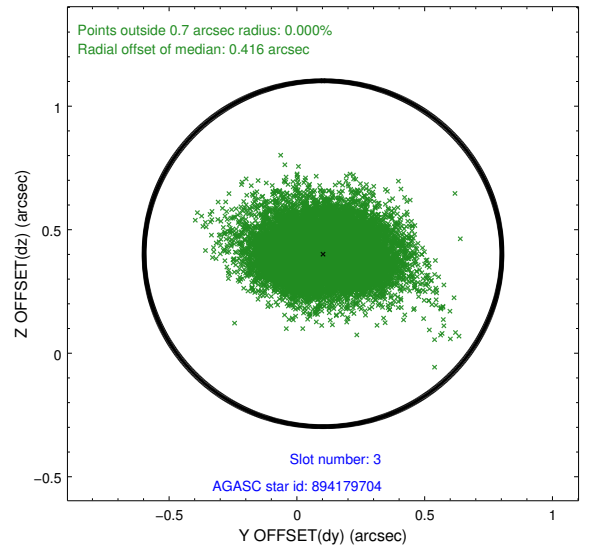
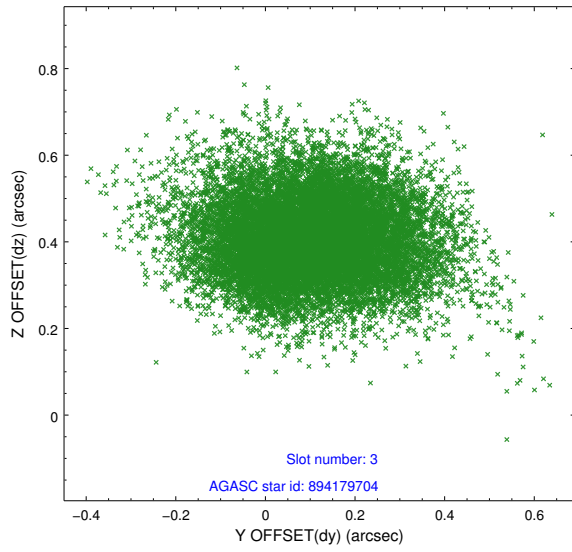


Slot Statistics

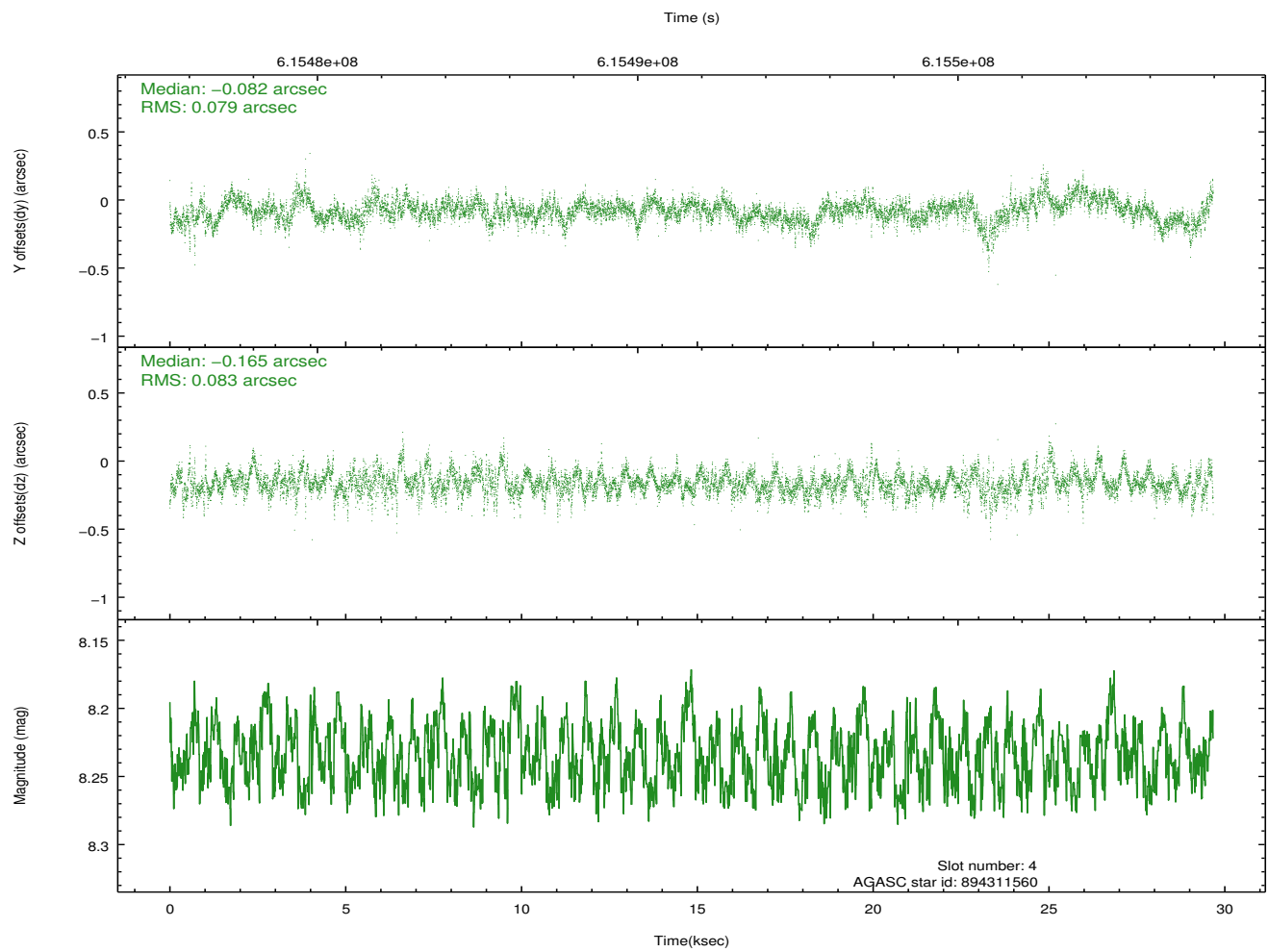
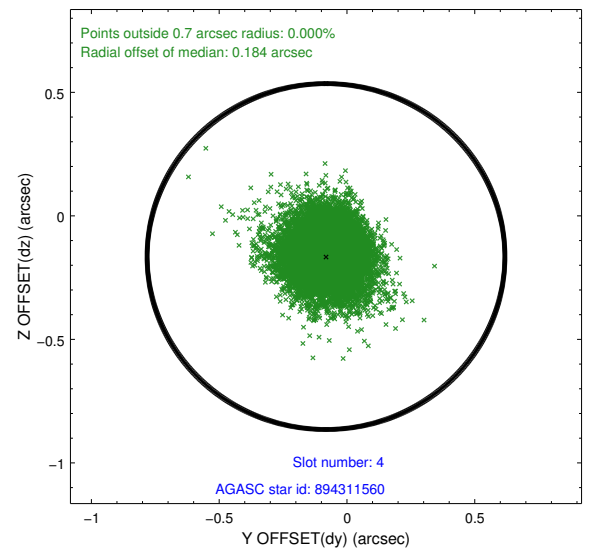
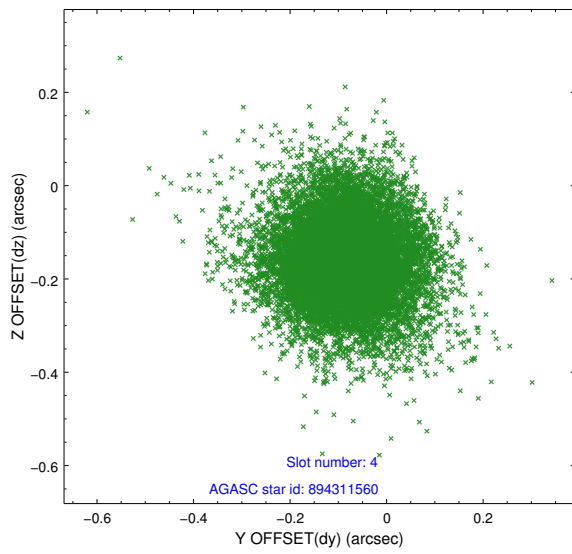
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.16	7236	0.136	-0.038	0.014	0.043	0.000000	0.000000	927.86	-1735.83
1	FID		ACIS-S-5	7.18	7237	-0.311	0.069	0.015	0.047	0.000000	0.000000	-1821.61	161.67
2	FID		ACIS-S-6	7.33	7236	0.154	-0.020	0.014	0.023	0.000000	0.000000	393.27	805.70
3	GUIDE	used	894179704	8.70	14460	0.102	0.403	0.170	0.290	254.813840	-29.808957	-936.23	-2008.62
4	GUIDE	used	894311560	8.23	14465	-0.082	-0.165	0.118	0.204	255.968048	-29.561250	-933.48	1709.03
5	GUIDE	used	894314544	8.54	14466	0.124	-0.065	0.109	0.187	255.921805	-29.699914	-484.81	1446.66
6	GUIDE	used	964690752	8.77	14462	-0.144	-0.177	0.129	0.233	255.992274	-30.082811	905.24	1321.51
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

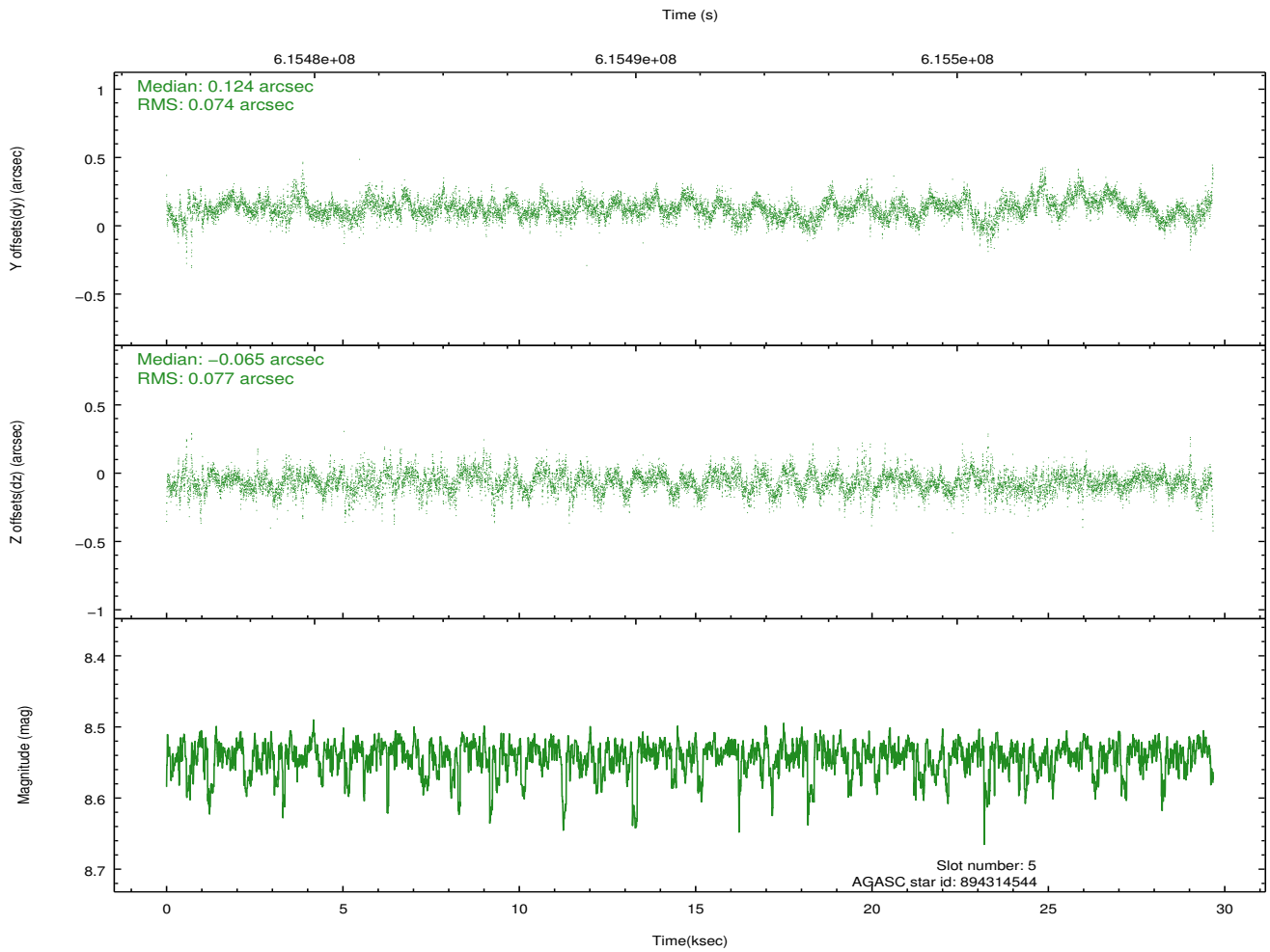
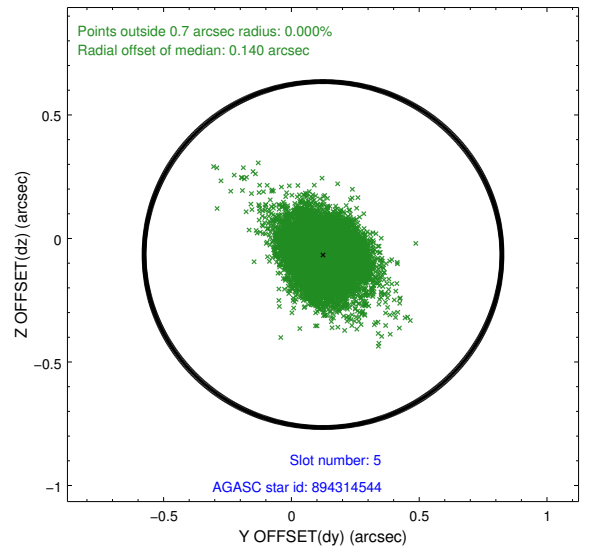
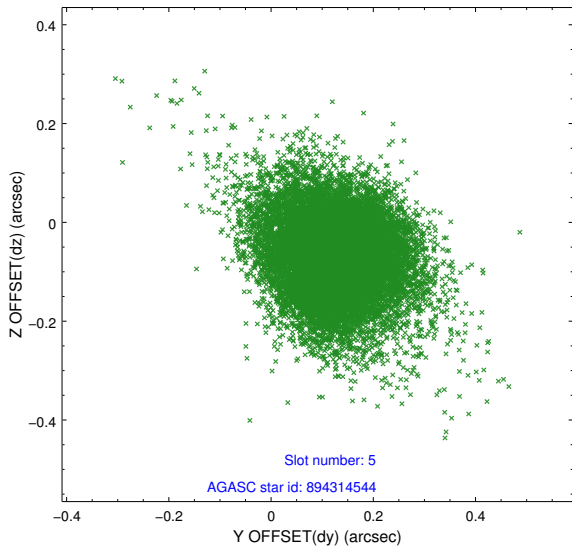
2.4.1 Slot 3



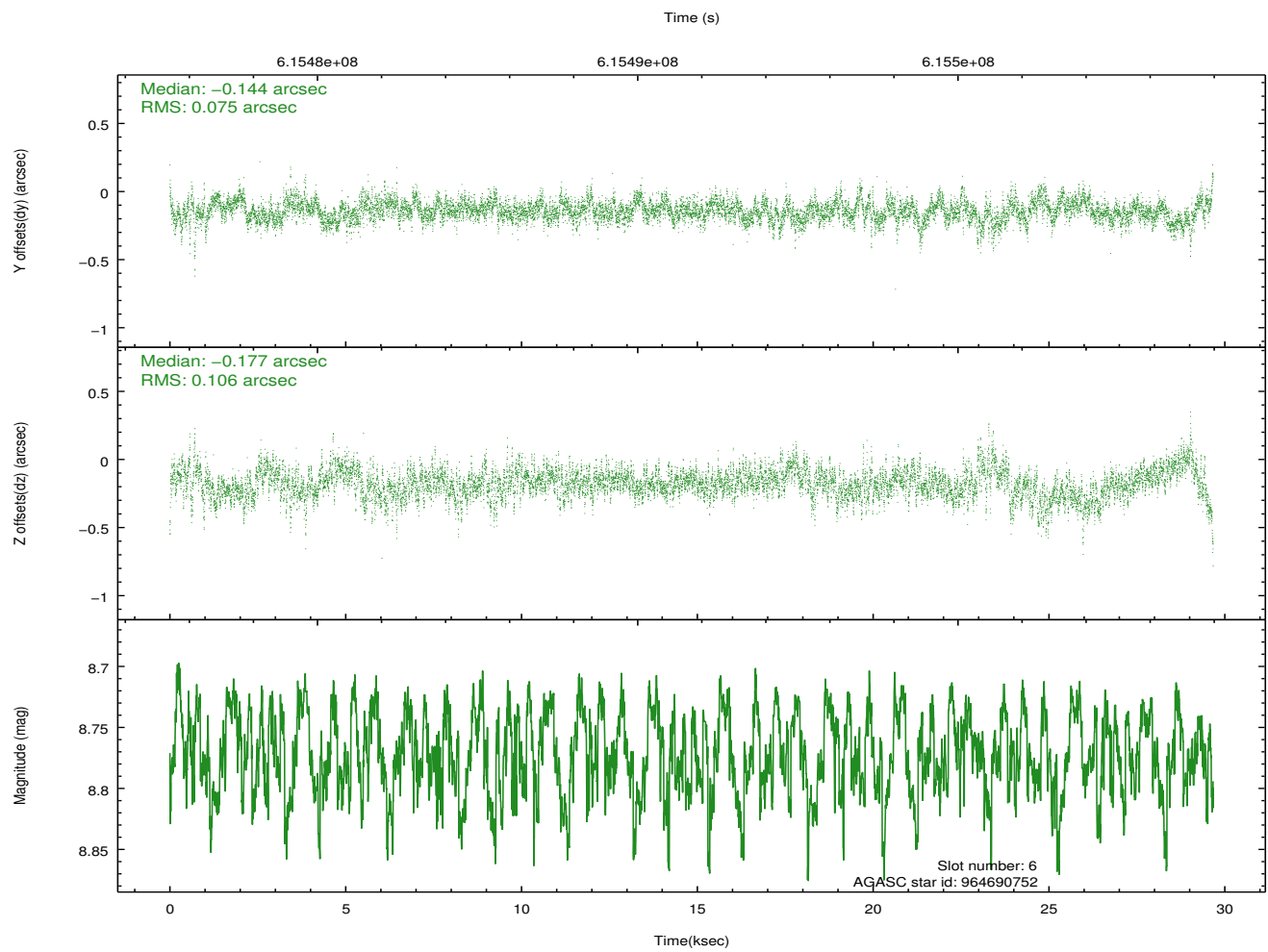
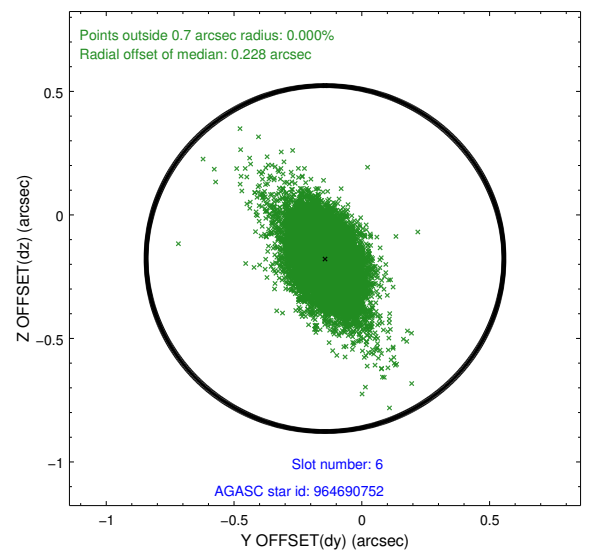
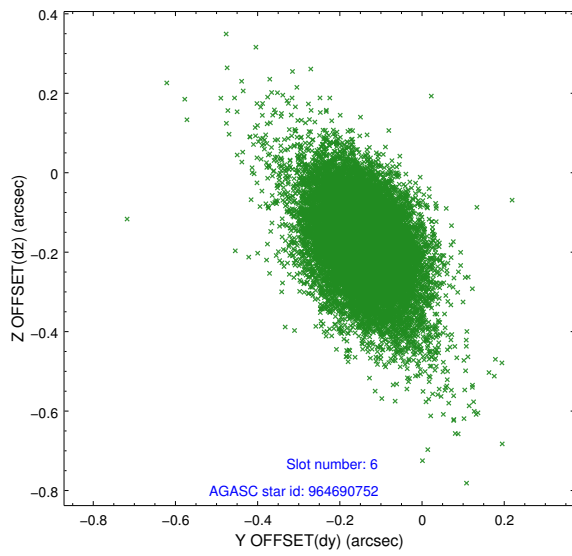
2.4.2 Slot 4



2.4.3 Slot 5

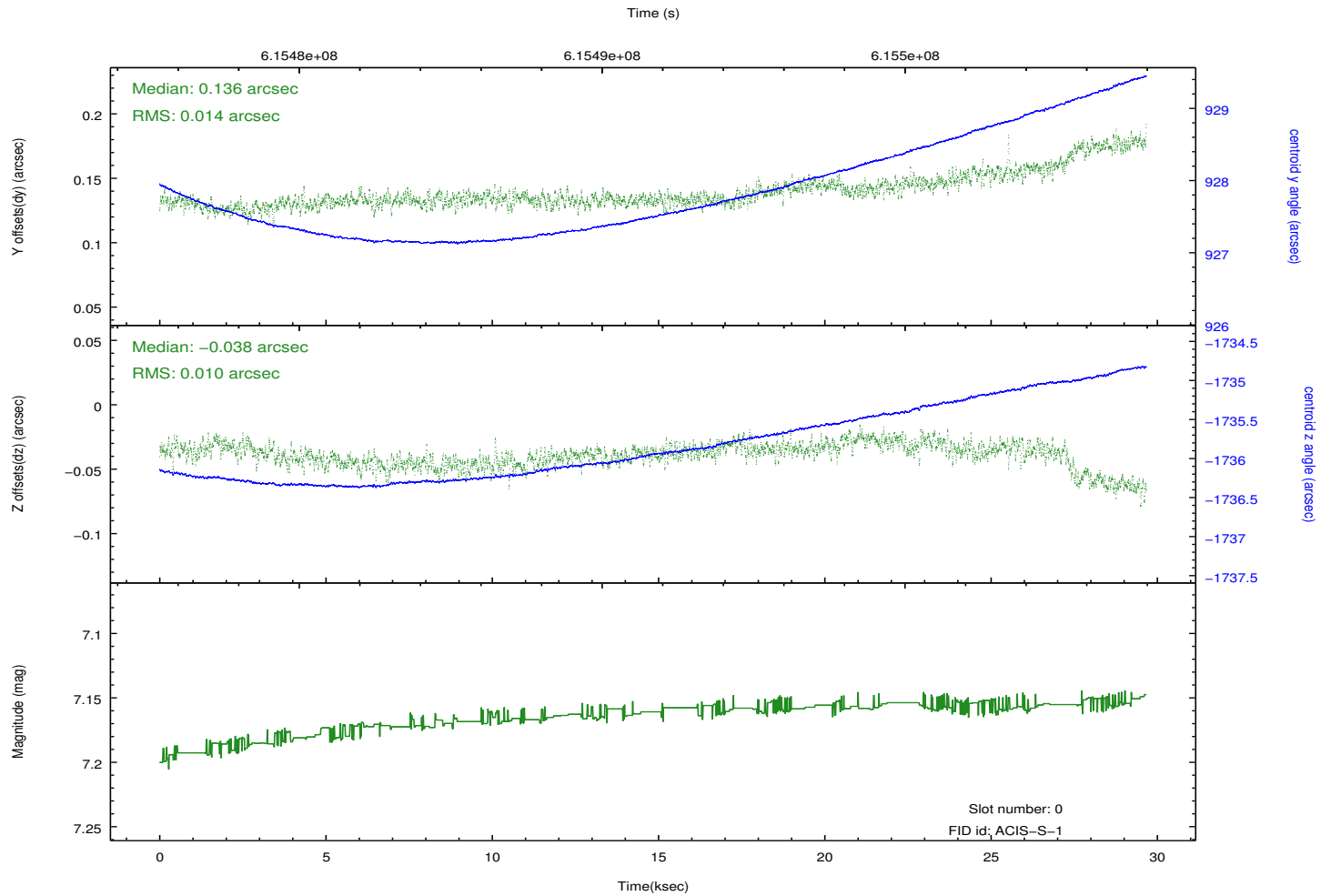
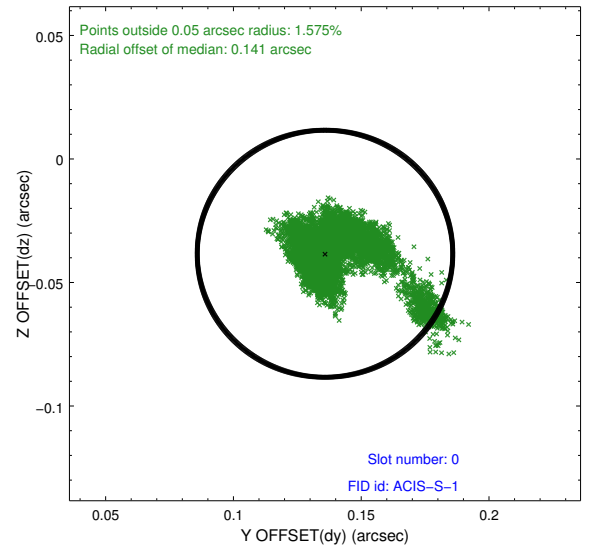
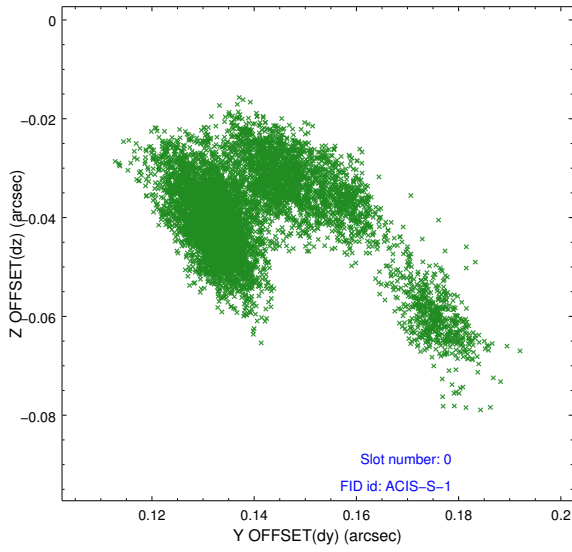


2.4.4 Slot 6

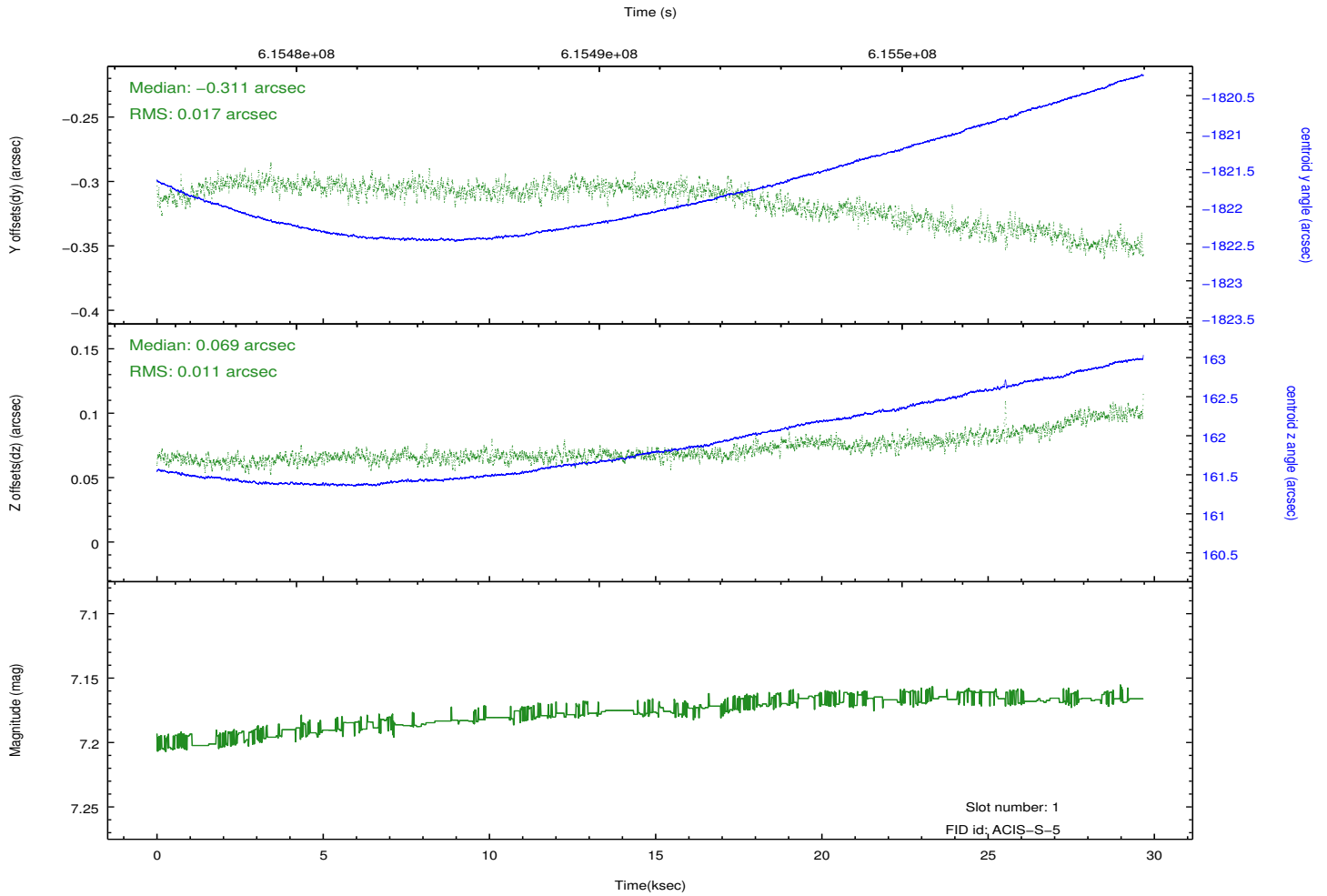
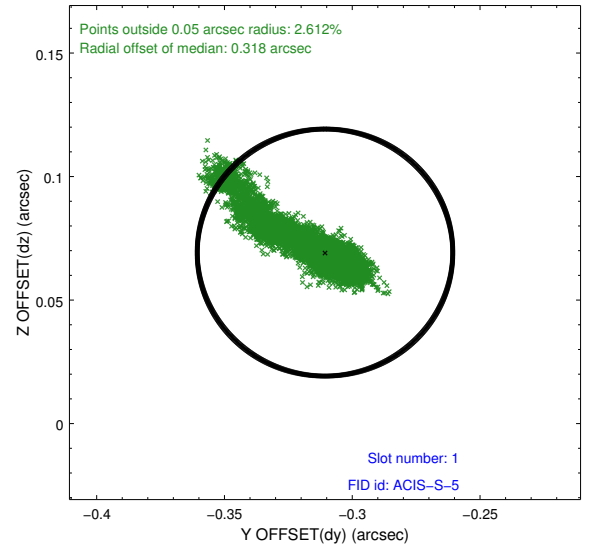
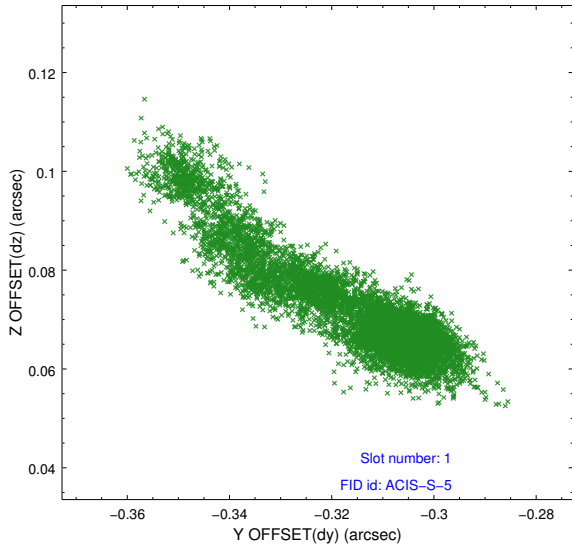


2.5 FID Slots

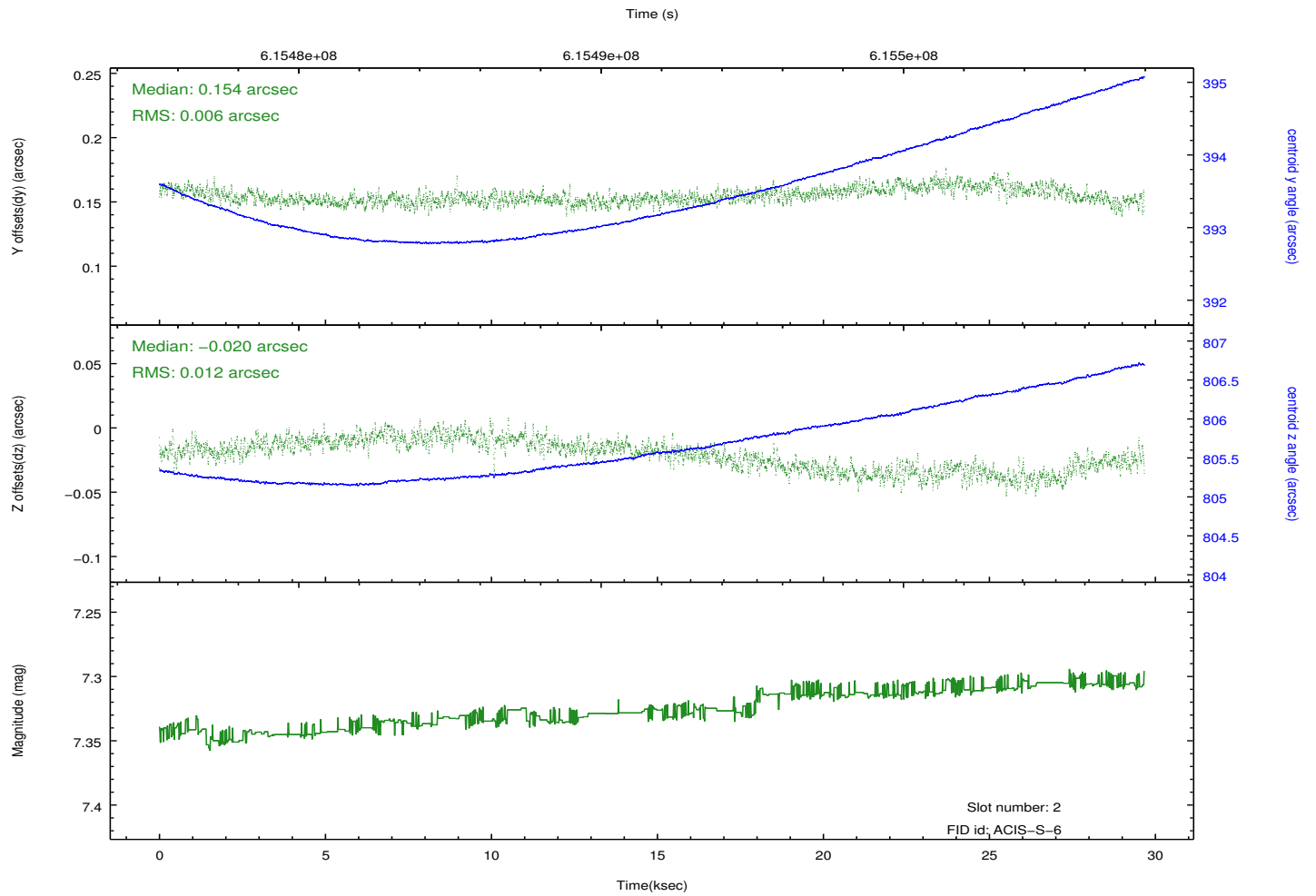
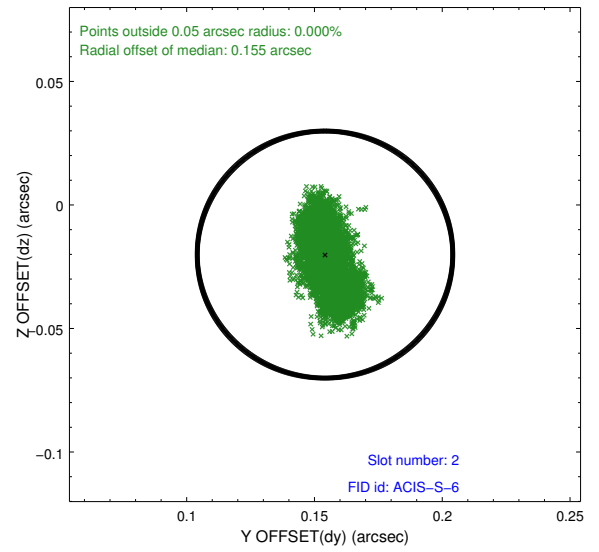
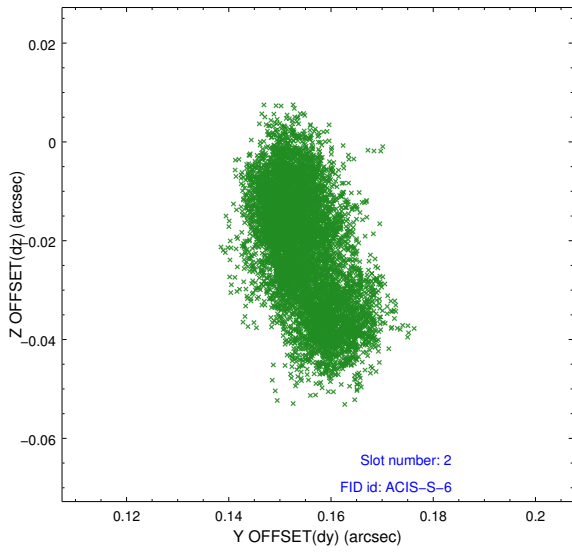
2.5.1 Slot 0



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)	2017.07.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.615047152638

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.

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Window constraint met.