

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4467 - L2 Version 4
Chandra X-Ray Center

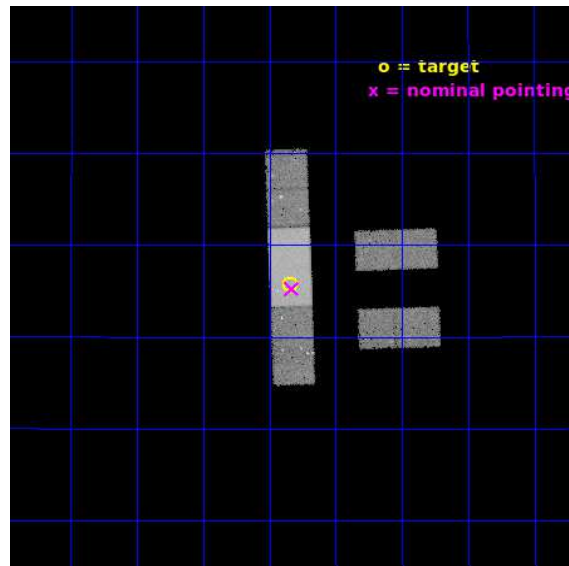
L2 Processing Date : Sep 23 2020

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1 Front

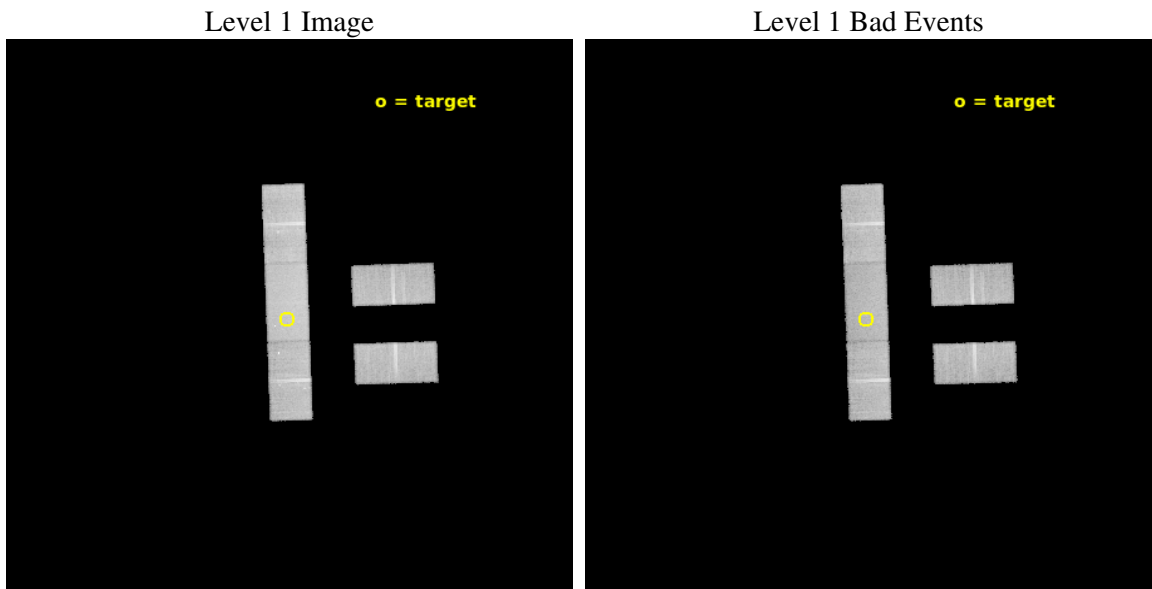
seq_num	100050	Sequence number
obs_id	4467	Observation id
title	SEARCH FOR X-RAYS FROM SATURNIAN SYSTEM	Proposal title
observer	DR. J WAITE	Principal investigator
object	SATURN	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.33575	Observer's specified target RA [deg]
dec_targ	22.59524	Observer's specified target Dec [deg]
ra_nom	98.332582017453	Nominal RA [deg]
dec_nom	22.587868149491	Nominal Dec [deg]
roll_nom	268.03549111523	Nominal Roll [deg]
revision	4	Processing version of data
ontime	37180.699739277	Sum of GTIs [s]
livetime	36304.271904592	Livetime [s]
ontime2	37180.699739277	Sum of GTIs [s]
ontime3	37180.699739277	Sum of GTIs [s]
ontime6	37178.958719164	Sum of GTIs [s]
ontime7	37180.699739277	Sum of GTIs [s]
ontime8	37180.699739277	Sum of GTIs [s]
l2events	113284	Number of level 2 events



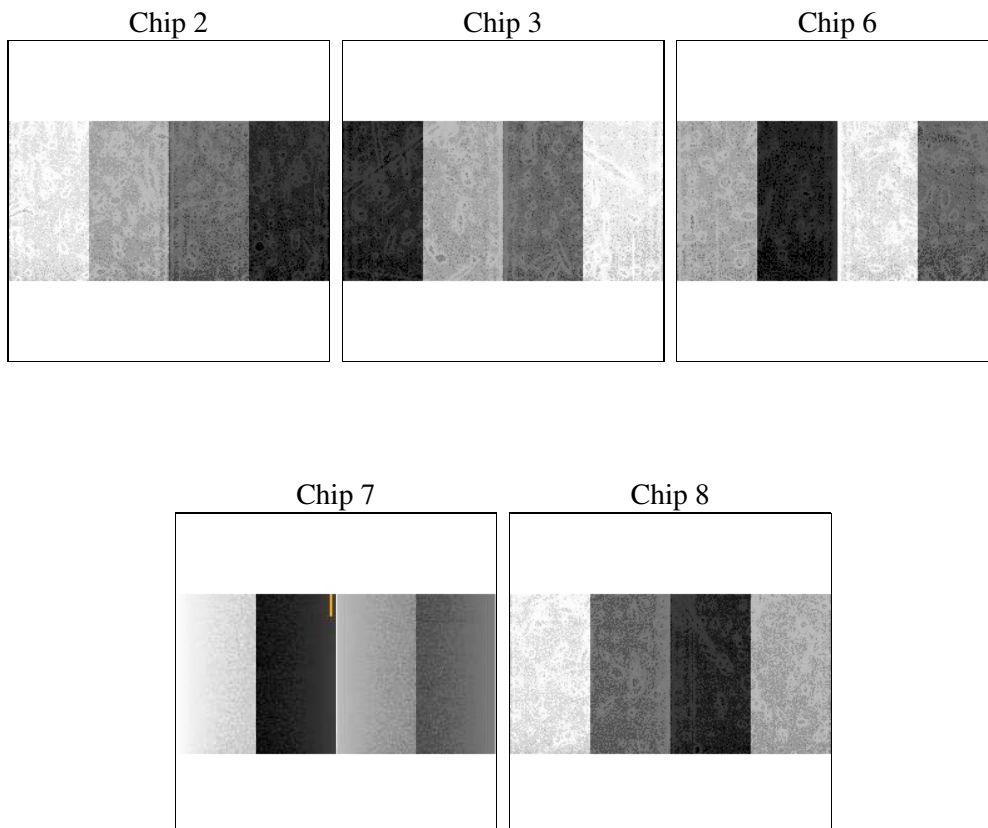
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	37000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	37180.699739277	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	37180.699739277	Sum of GTIs [s]
date	2020-09-23T15:57:04	Date and time of file creation	ontime3	37180.699739277	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	37178.958719164	Sum of GTIs [s]
			ontime7	37180.699739277	Sum of GTIs [s]
			ontime8	37180.699739277	Sum of GTIs [s]
			l1events	657824	Number of level 1 events

2.1.4 Events

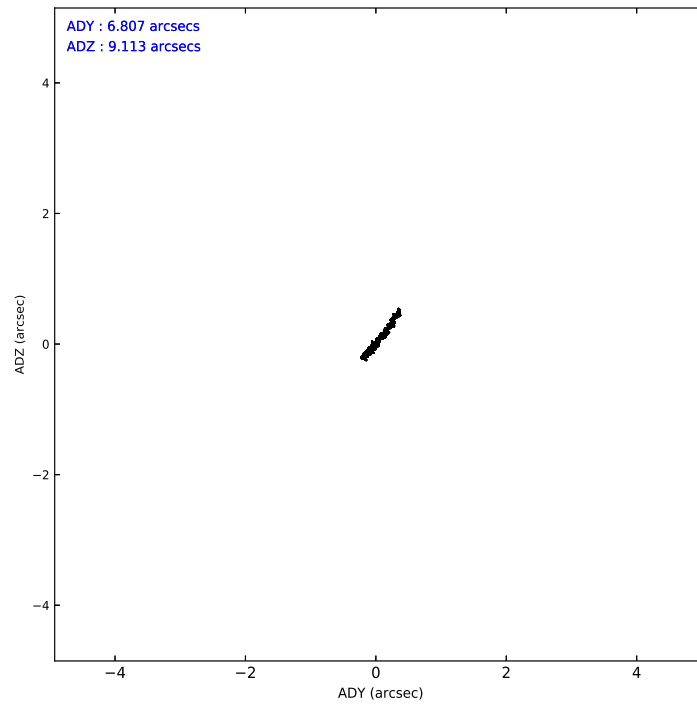
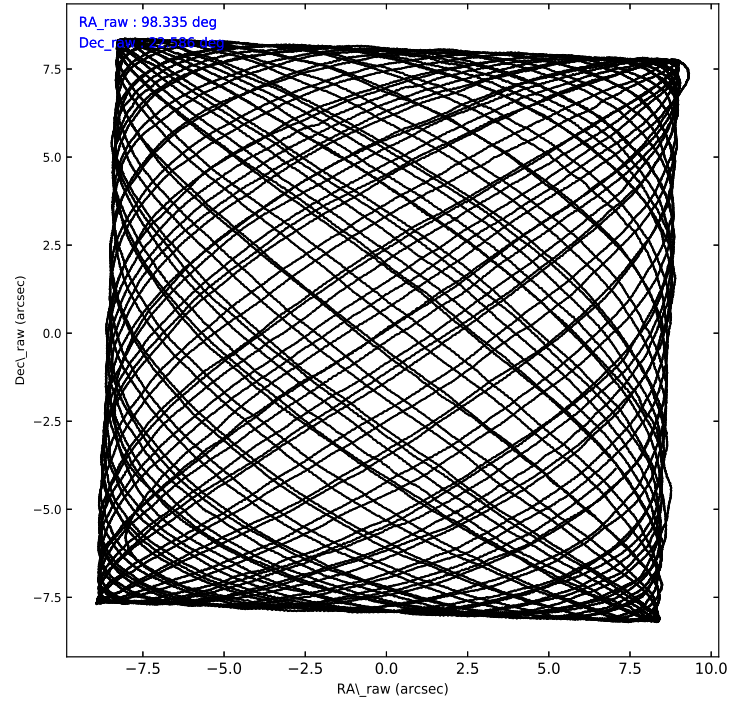
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	114695	112456	124953	154651	151069
rejected events	100830	98789	108779	91176	120737
rejected %	87%	87%	87%	58%	79%

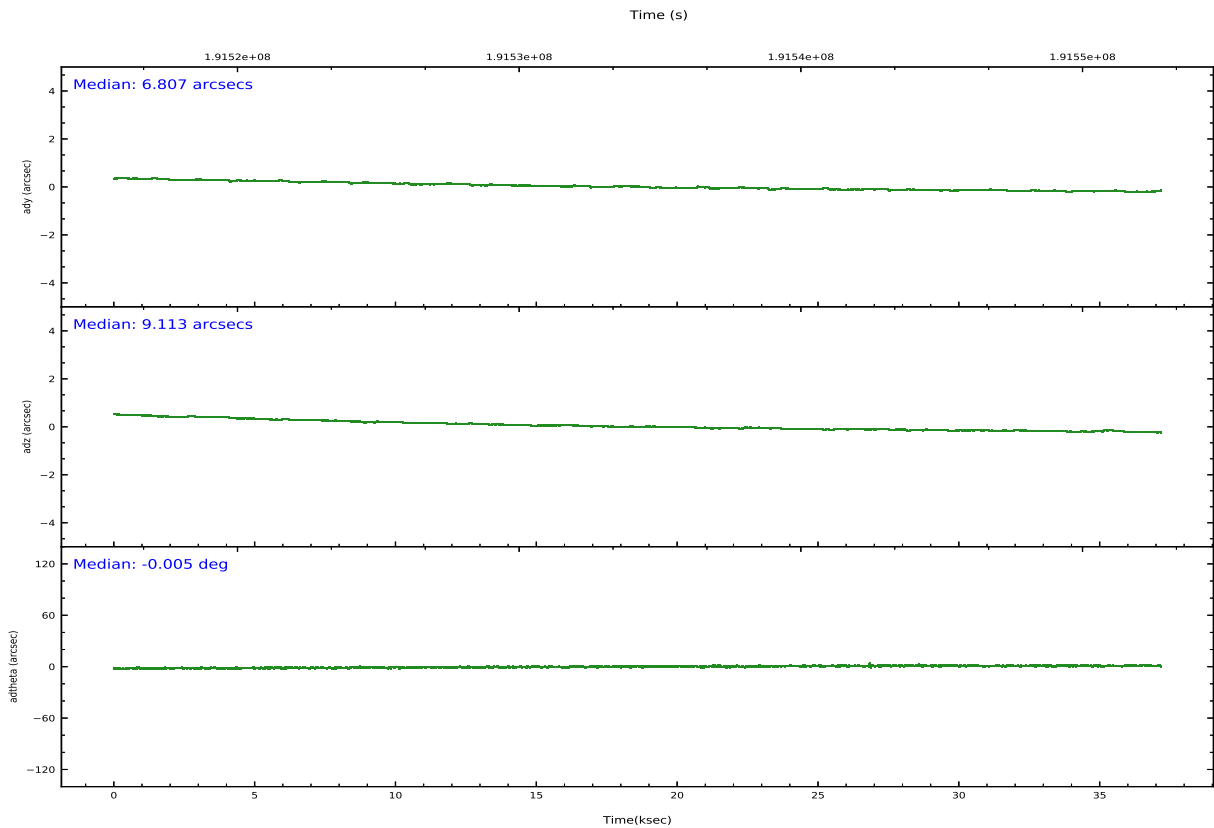
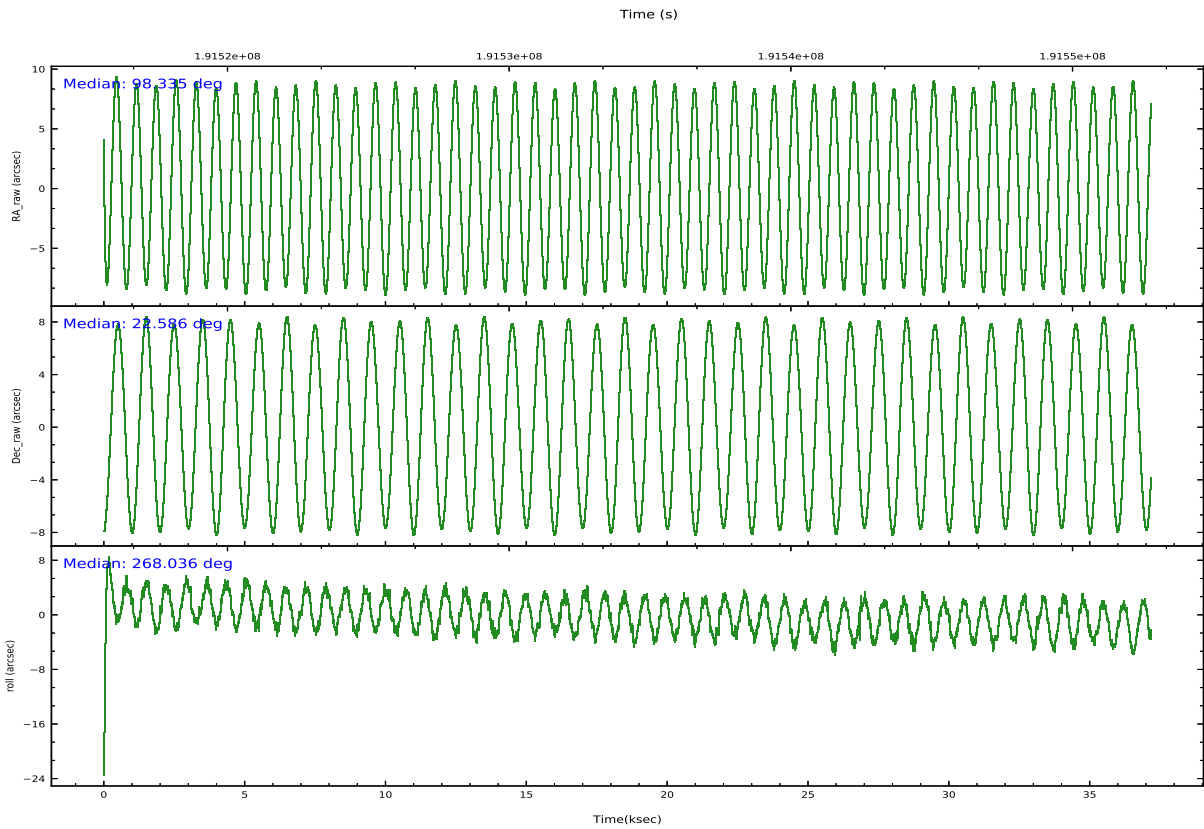
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6028	5783	7274	6263	10151
	5%	5%	5%	4%	6%
grade 1 events	43	55	49	146	76
	0%	0%	0%	0%	0%
grade 2 events	2689	2614	2882	12905	6440
	2%	2%	2%	8%	4%
grade 3 events	1618	1638	1776	6229	3385
	1%	1%	1%	4%	2%
grade 4 events	1624	1585	1657	6253	3048
	1%	1%	1%	4%	2%
grade 5 events	4238	4952	5411	14683	6741
	3%	4%	4%	9%	4%
grade 6 events	2146	2257	2835	32801	7731
	1%	2%	2%	21%	5%
grade 7 events	96309	93572	103069	75371	113497
	83%	83%	82%	48%	75%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23678	ACIS-23678	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	98.321182	98.33258201745301	Subarray requested	CUSTOM	1/2
[deg] Pointing Dec	22.609648	22.587868149491	Subarray start row	257	257
[deg] Pointing Roll	267.878936	268.03549111523	Subarray row count	512	512
[s] Window start time (MET)	191462464.184000	191462464.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	191894464.184000	191894464.184000	[s] Primary exposure time	0.000000	1.7
[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)	191515792.184000	191514698.26935			
Observation start date	2004-01-26T14:48:48	2004-01-26T14:31:38			
[s] Observation end time (MET)	191552792.184000	191553167.54603			
Observation end date	2004-01-27T01:05:28	2004-01-27T01:12:47			
Read mode	TIMED	TIMED			

2.3 Aspect





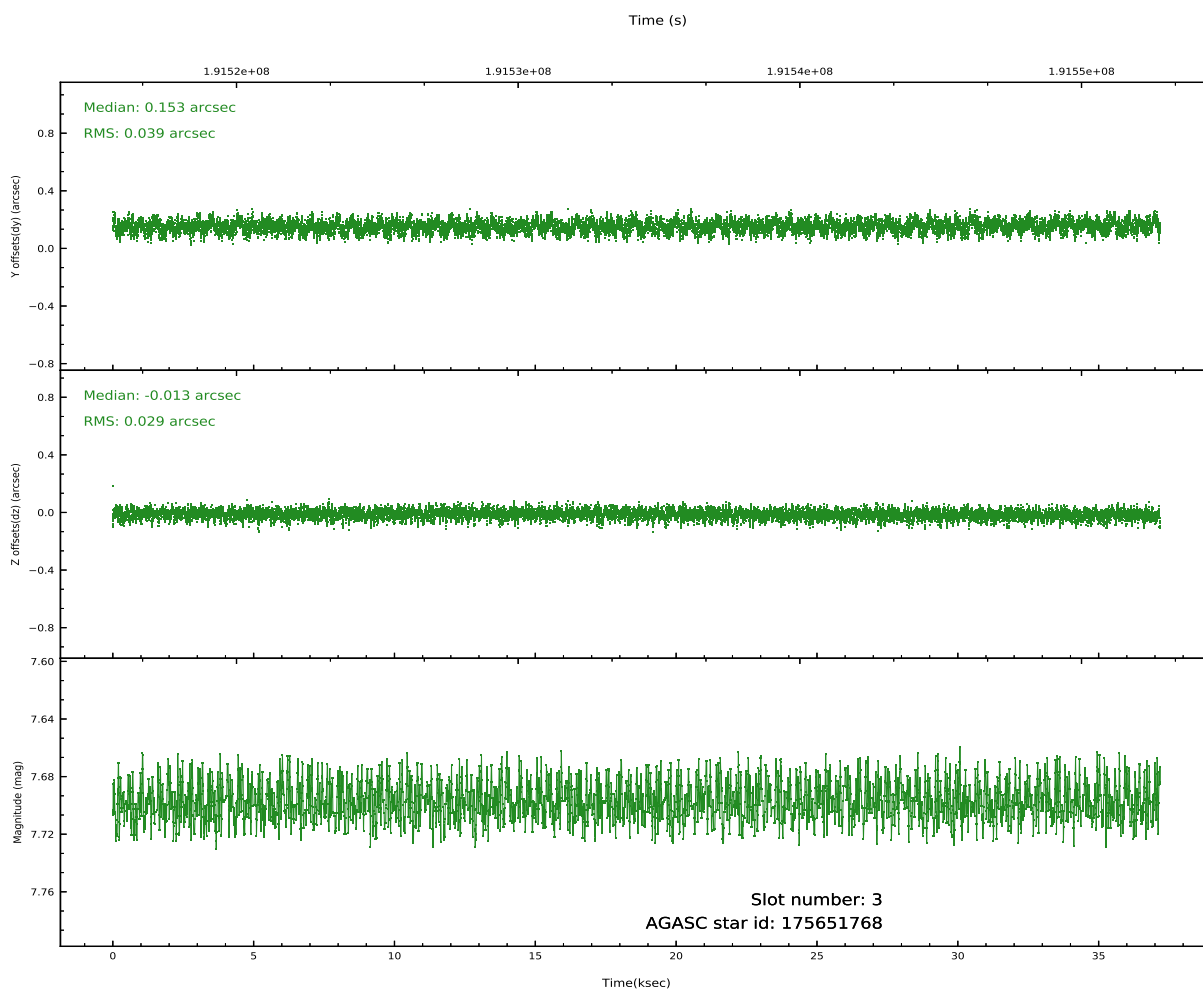
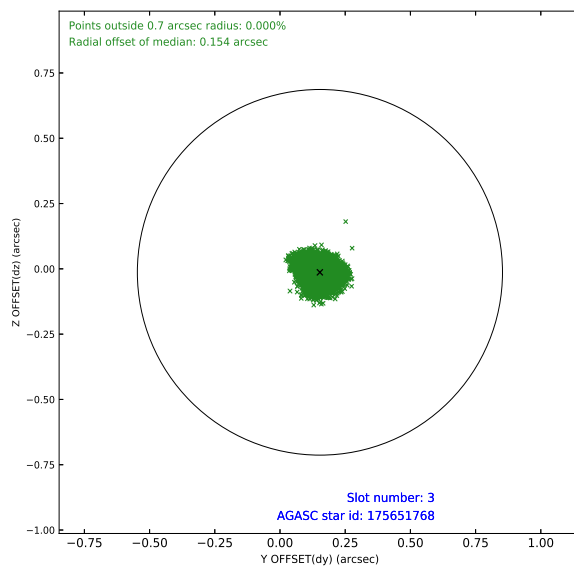
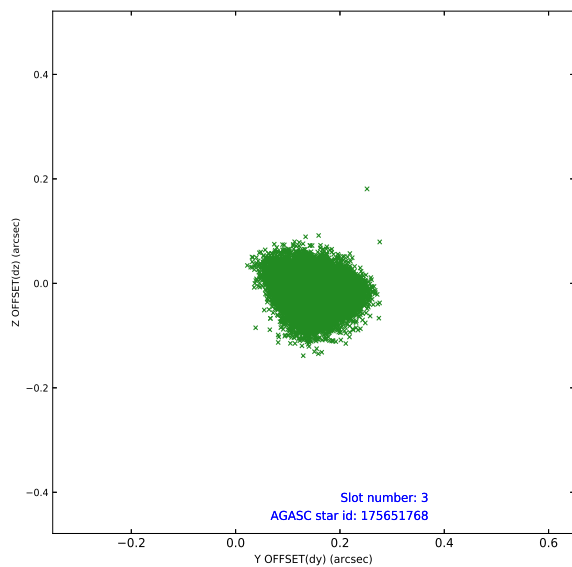
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-1	7.18	9068	1.000	0.084	-0.015	0.007	0.013	0.000000	0.000000	936.54	-1726
1	FID		ACIS-S-2	7.10	9069	1.000	-0.049	-0.042	0.008	0.014	0.000000	0.000000	-759.48	-1730
2	FID		ACIS-S-5	7.23	9070	1.000	-0.058	0.064	0.009	0.015	0.000000	0.000000	-1812.77	171
3	GUIDE	used	175651768	7.70	18137	1.000	0.153	-0.013	0.053	0.084	97.997709	22.185726	1564.23	-1020
4	GUIDE	used	175786368	8.38	18137	1.000	0.045	0.042	0.046	0.075	98.615171	22.043265	2000.68	1056
5	GUIDE	used	246297664	8.10	18138	1.000	-0.101	-0.101	0.054	0.086	98.363620	23.178719	-2052.26	64
6	GUIDE	used	175780728	7.52	18136	1.000	0.143	-0.002	0.048	0.078	98.529568	22.124139	1720.82	759
7	GUIDE	used	246298968	7.28	18138	1.000	-0.240	0.079	0.051	0.081	98.169451	23.118407	-1811.81	-569

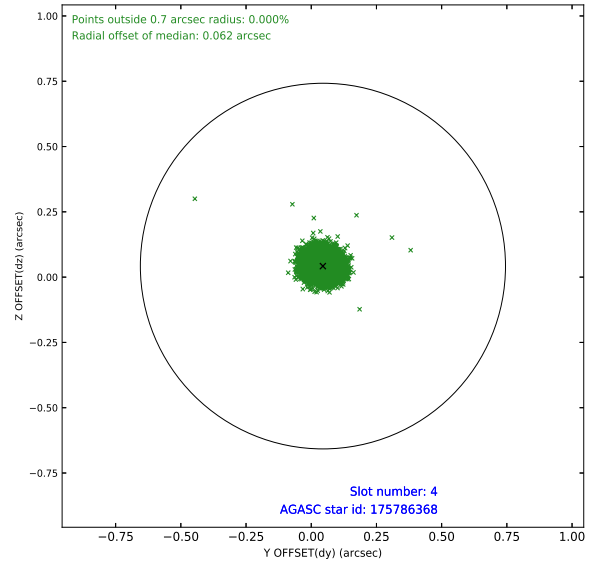
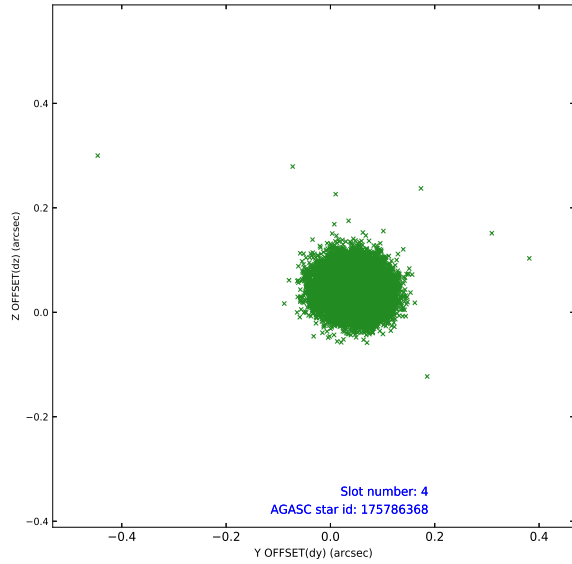
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2.4 Star Slots

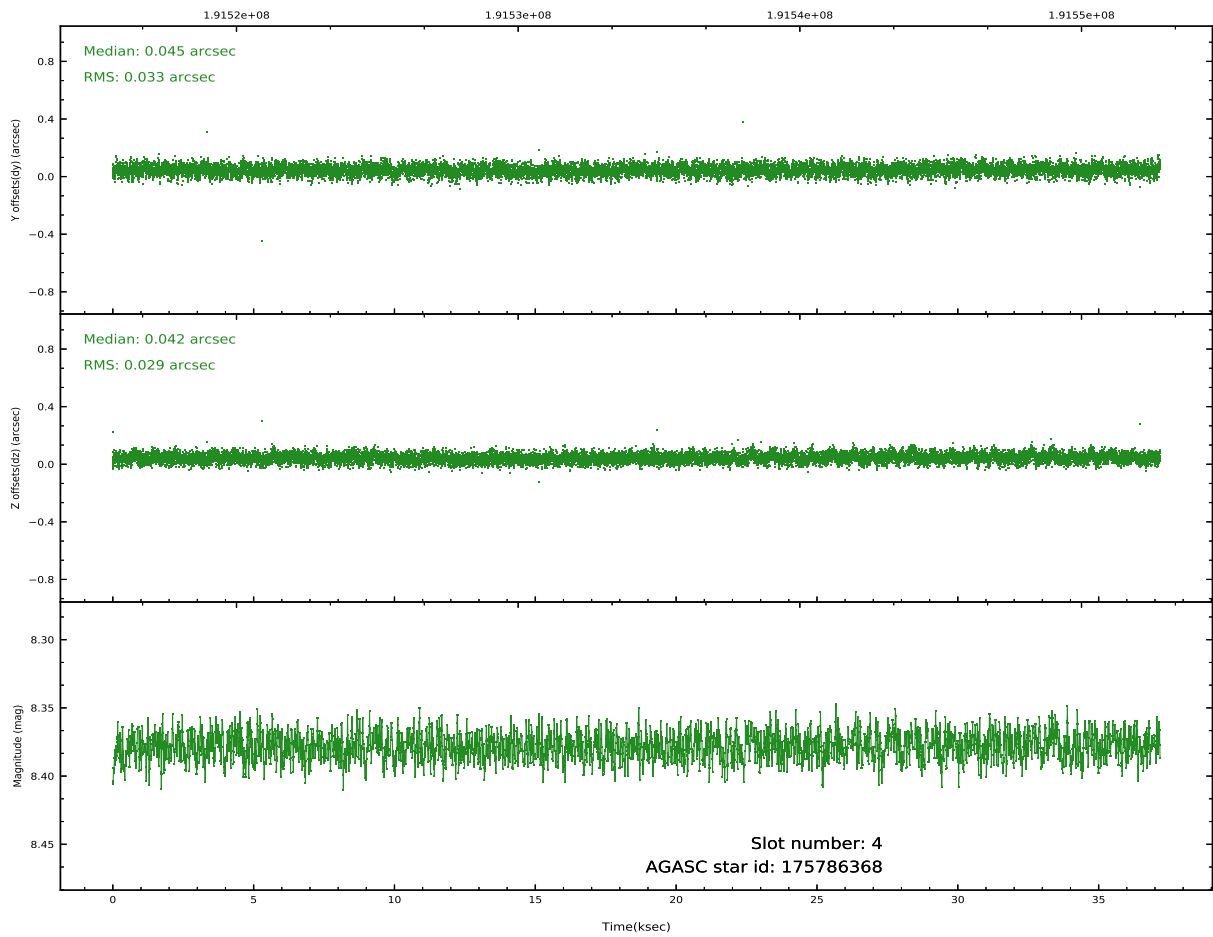
2.4.1 Slot 3



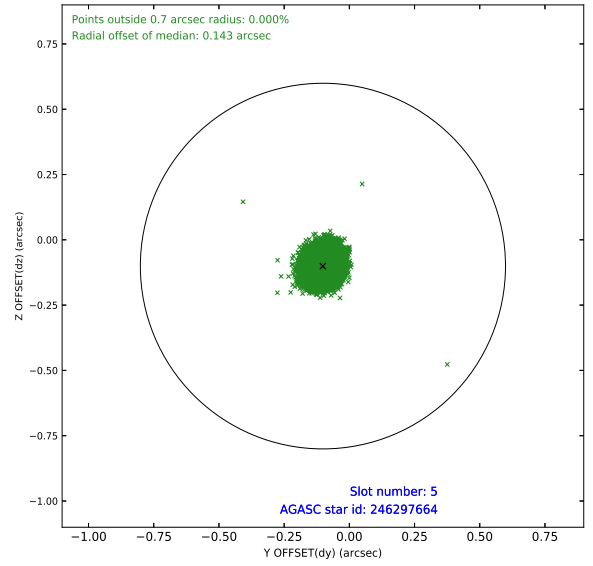
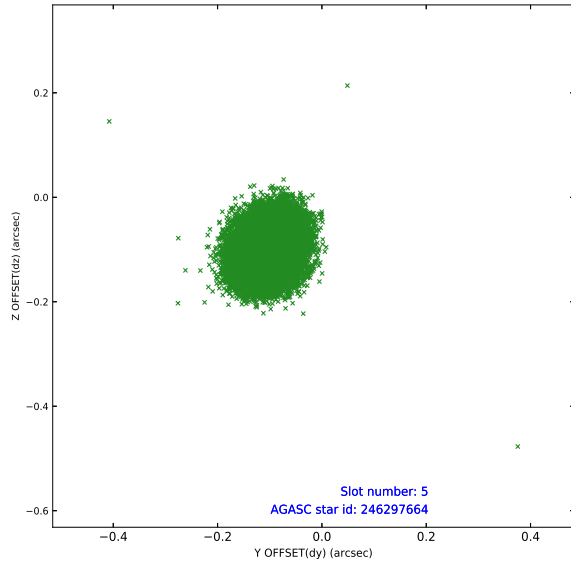
2.4.2 Slot 4



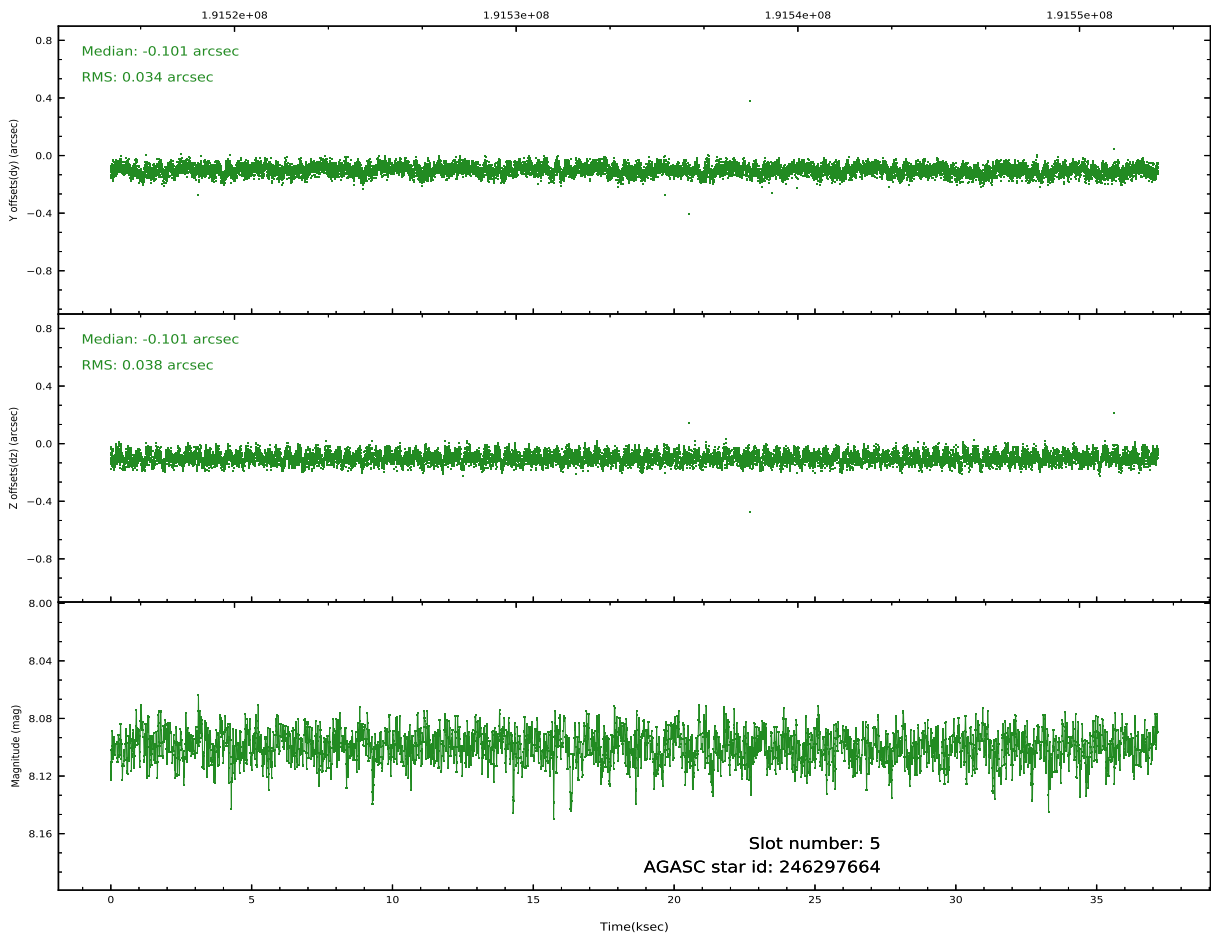
Time (s)



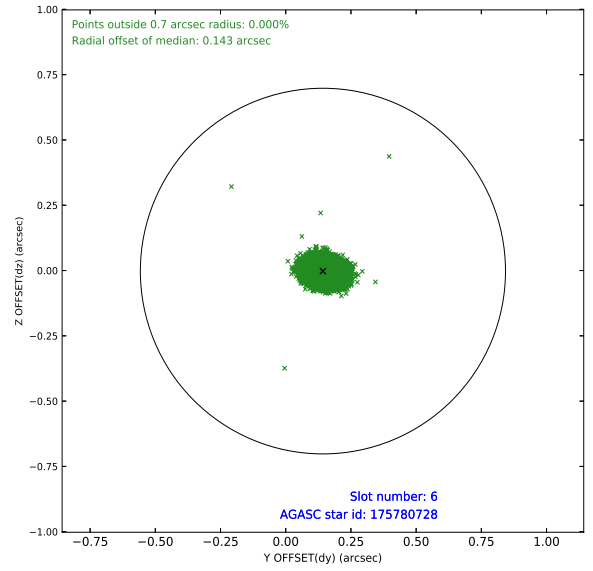
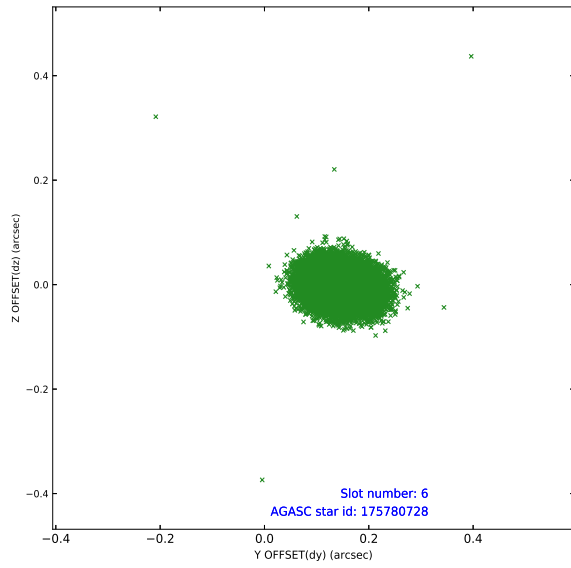
2.4.3 Slot 5



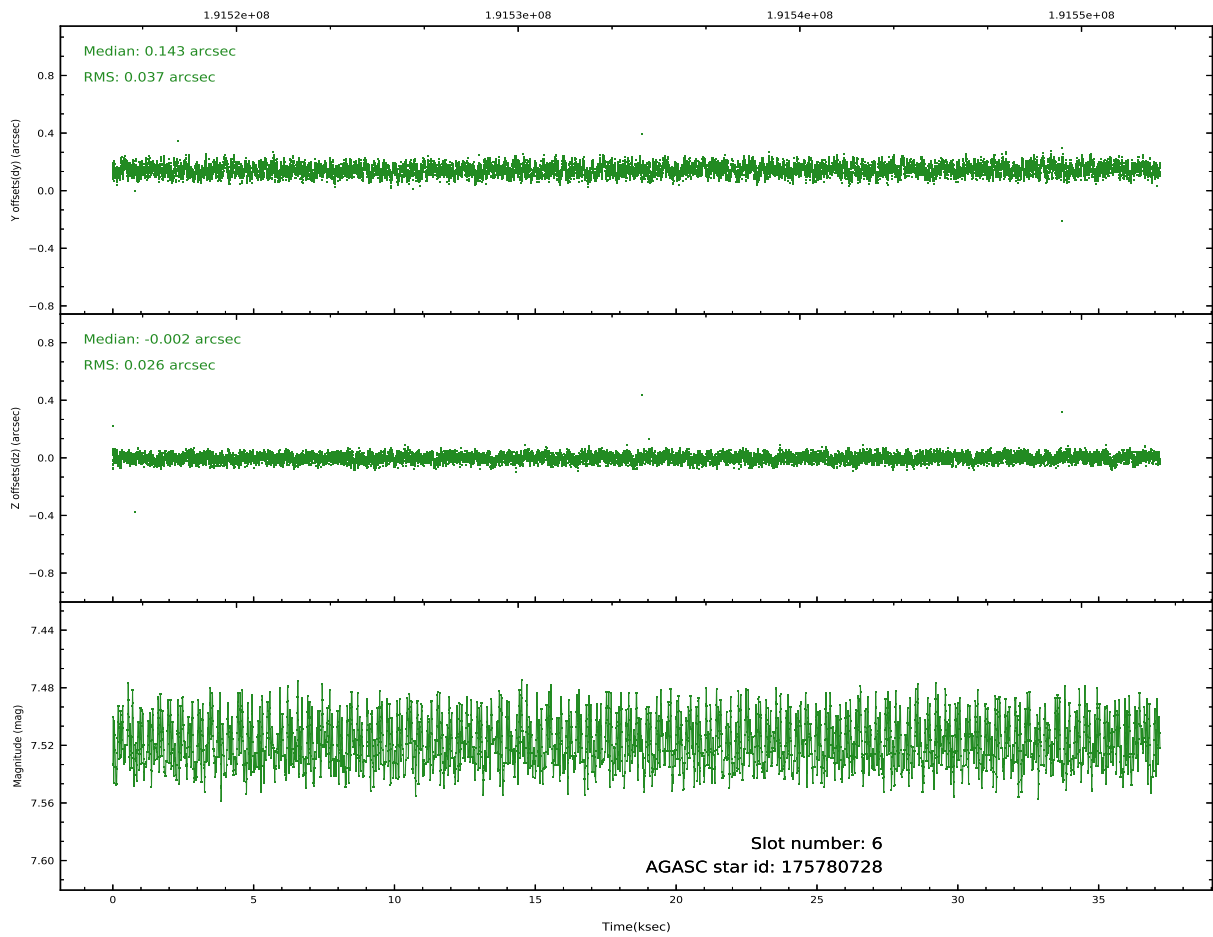
Time (s)



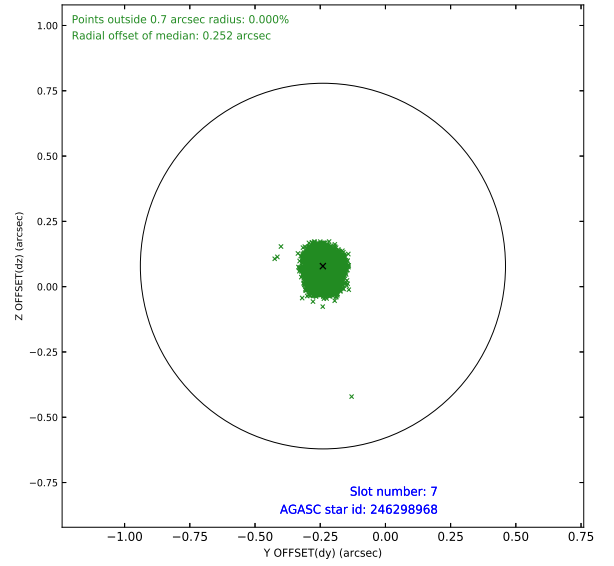
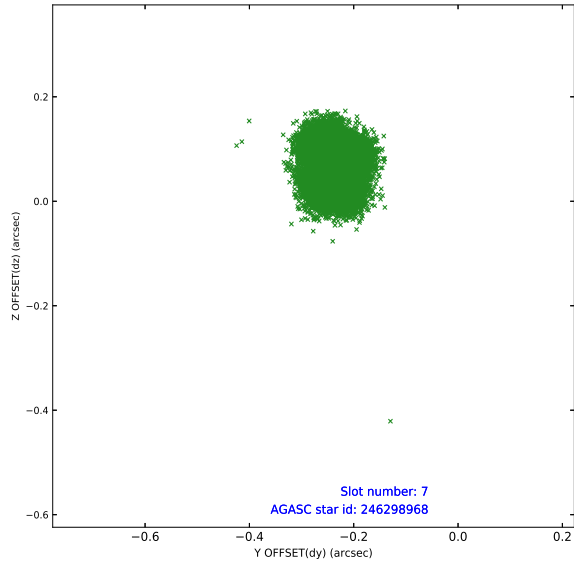
2.4.4 Slot 6



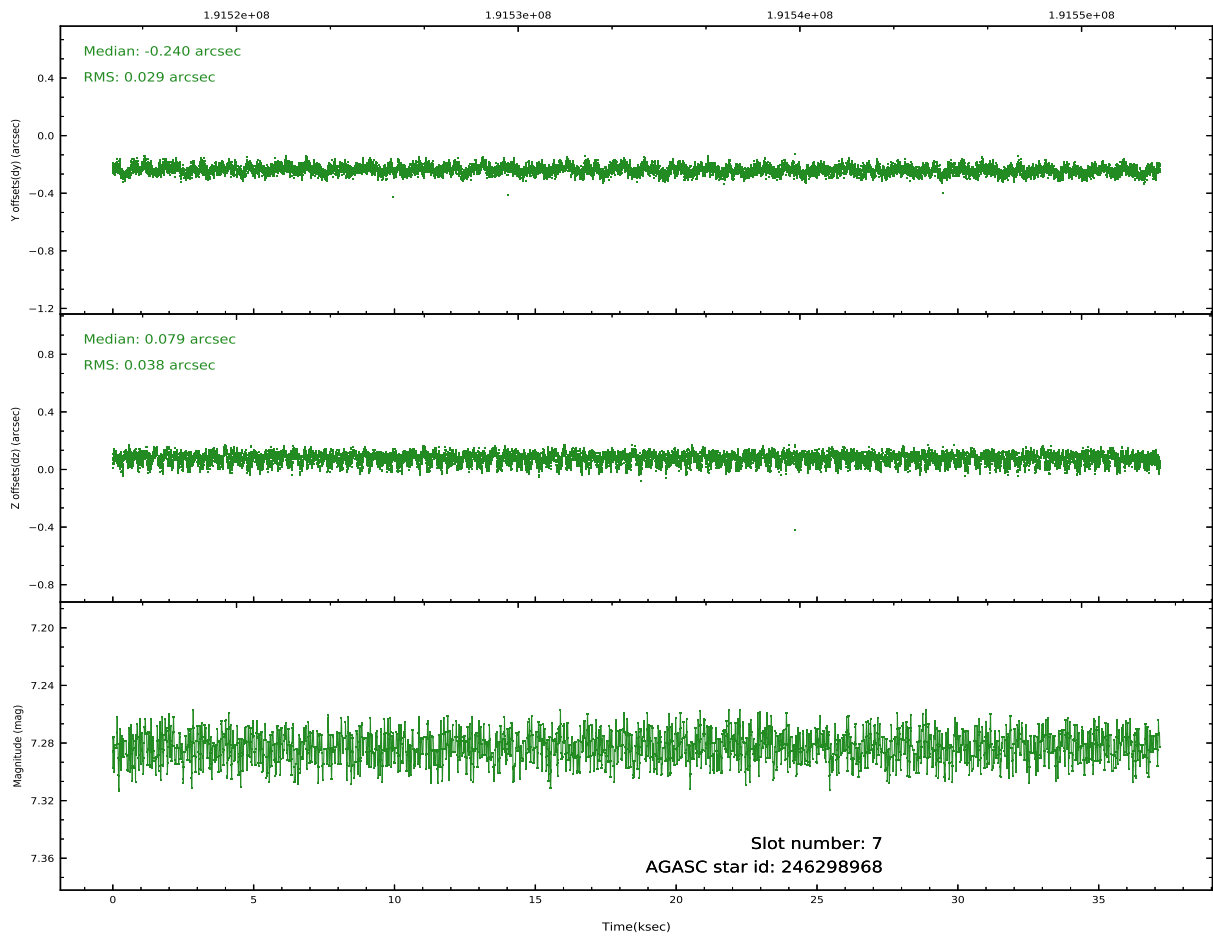
Time (s)



2.4.5 Slot 7

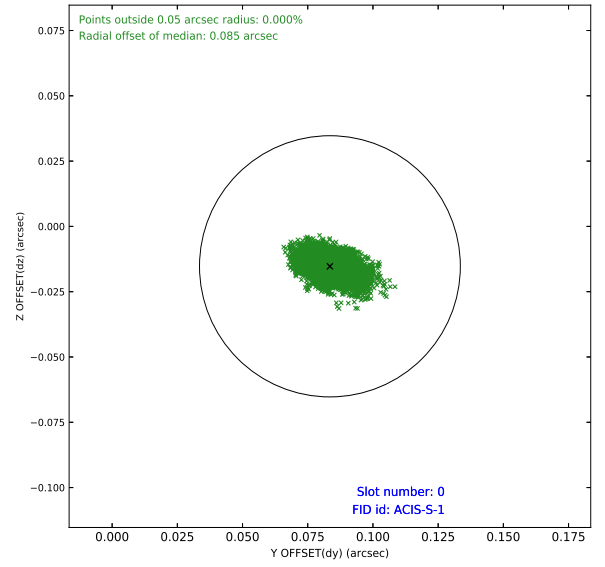
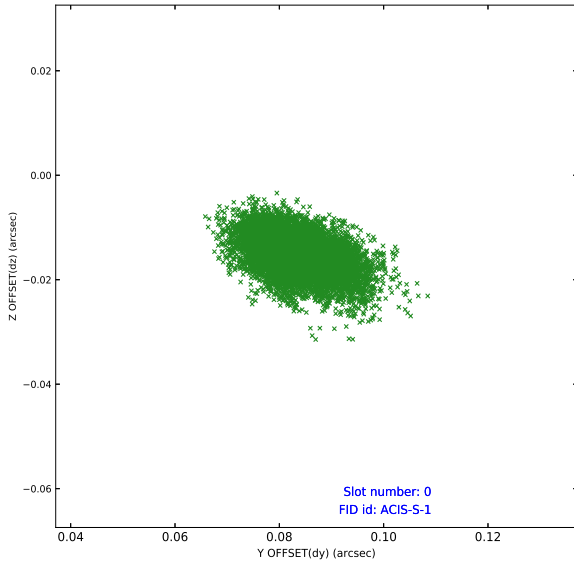


Time (s)

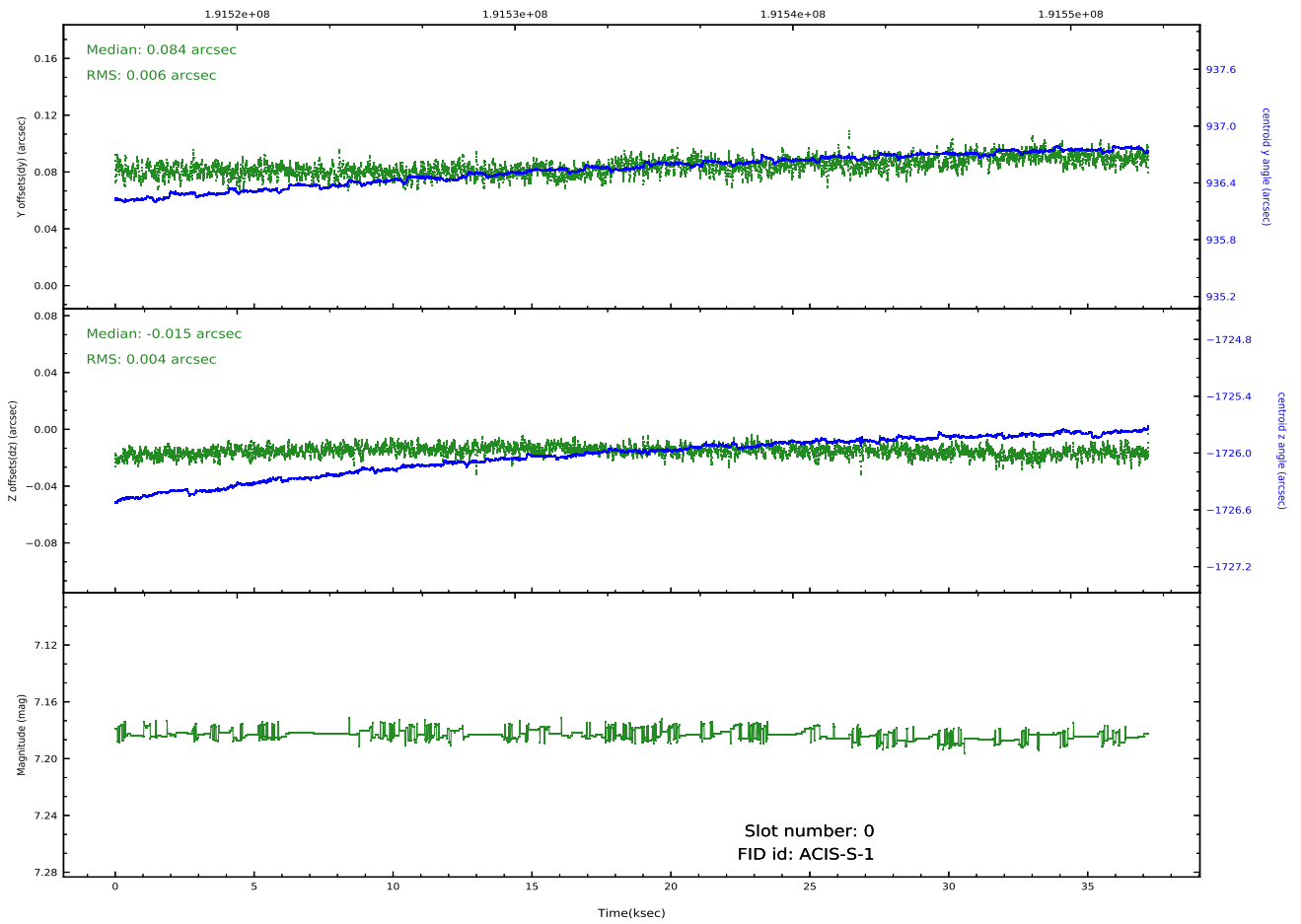


2.5 FID Slots

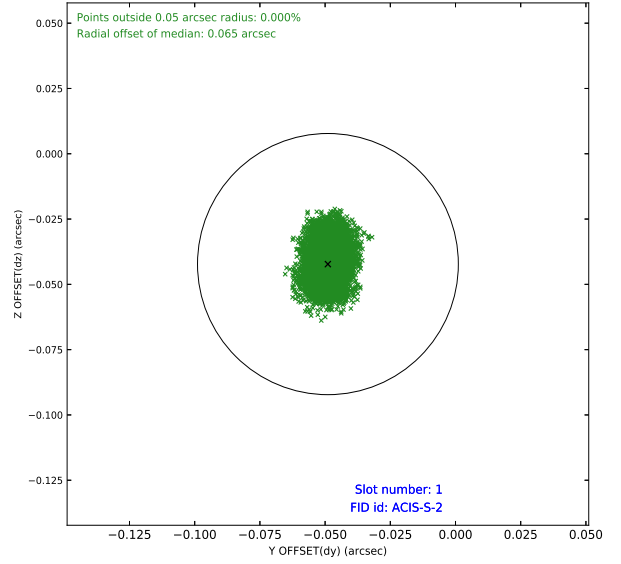
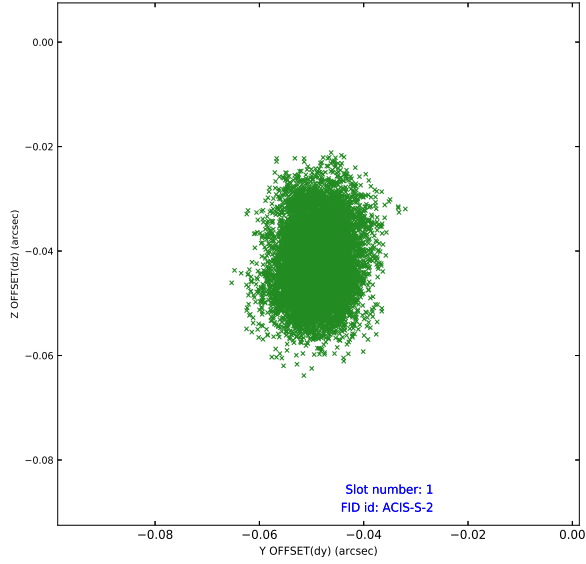
2.5.1 Slot 0



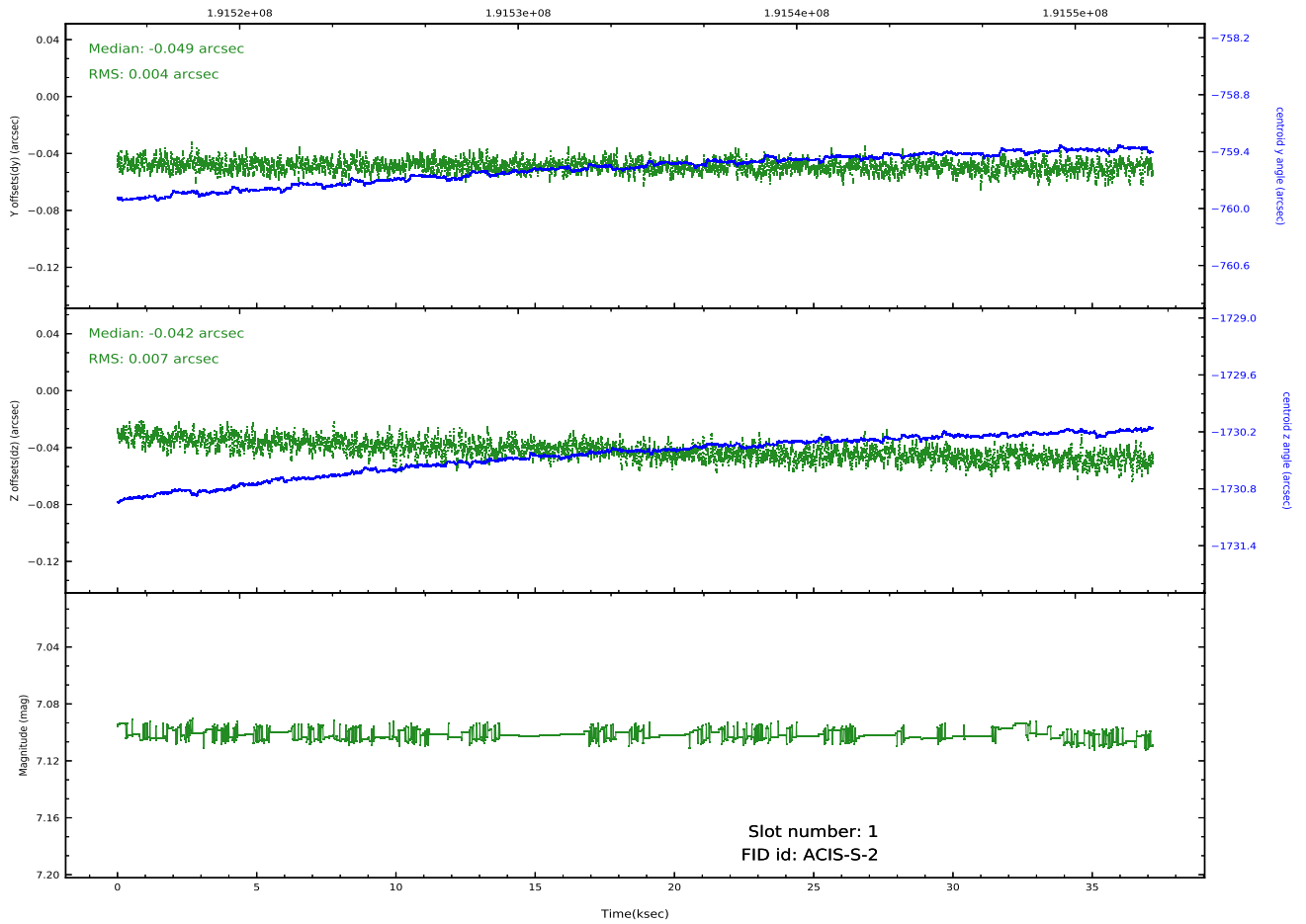
Time (s)



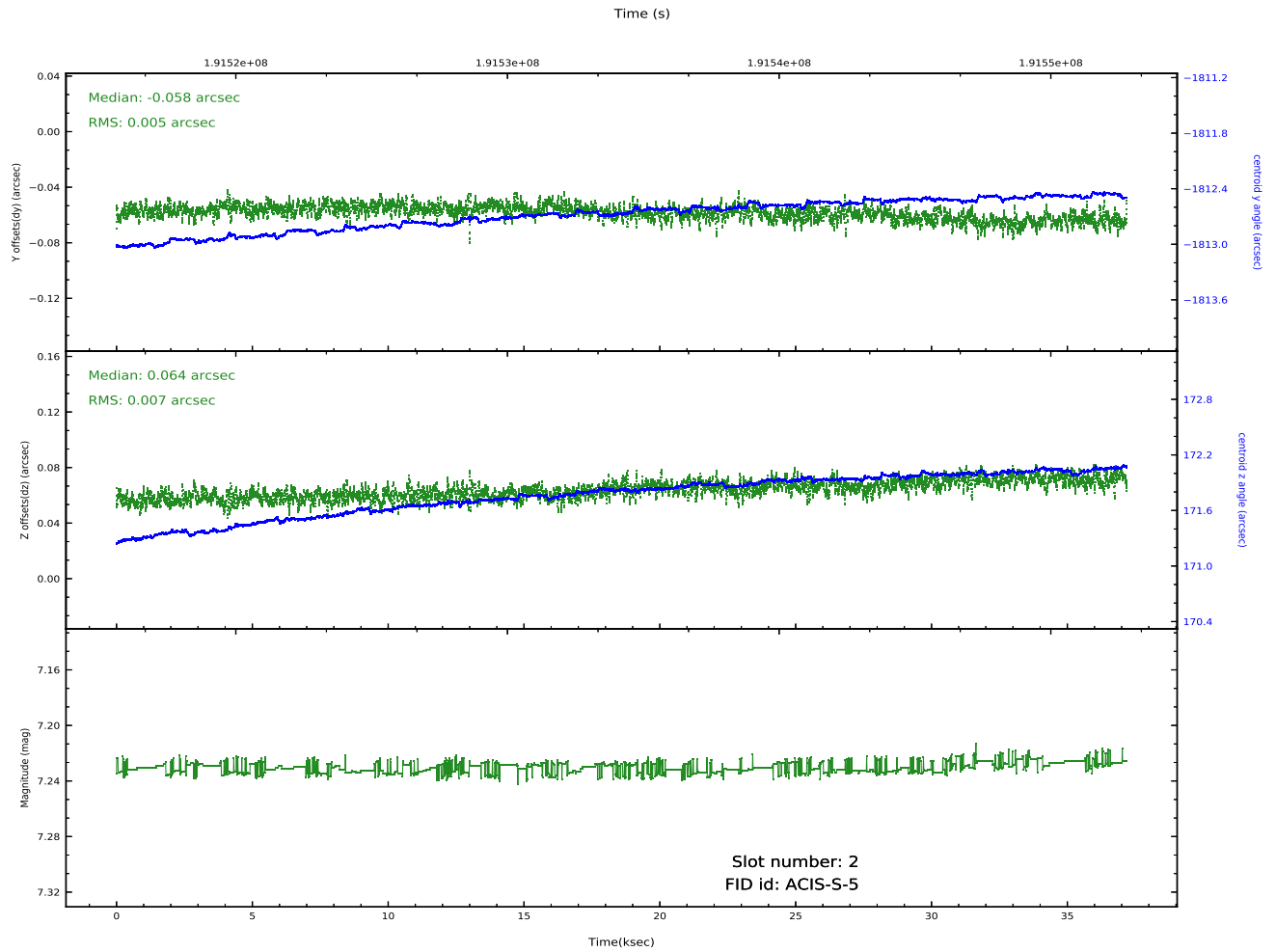
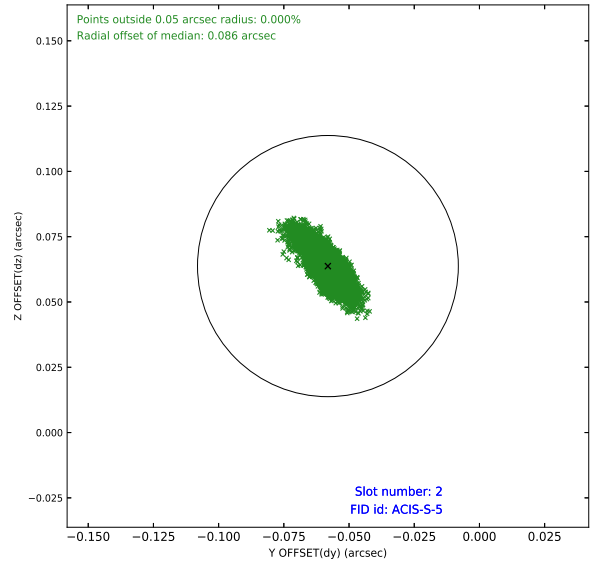
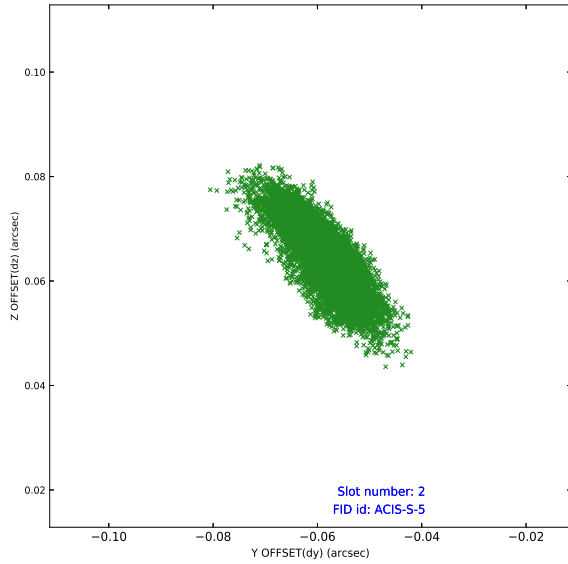
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.09.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	37.18

A.2 Comments

Window constraint met.

This is an observation of a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.