

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19419 - L2 Version 3
Chandra X-Ray Center

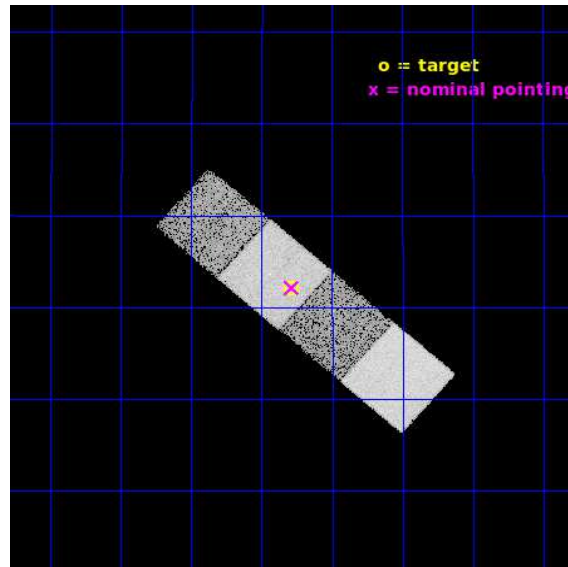
L2 Processing Date : Oct 25 2020

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1 Front

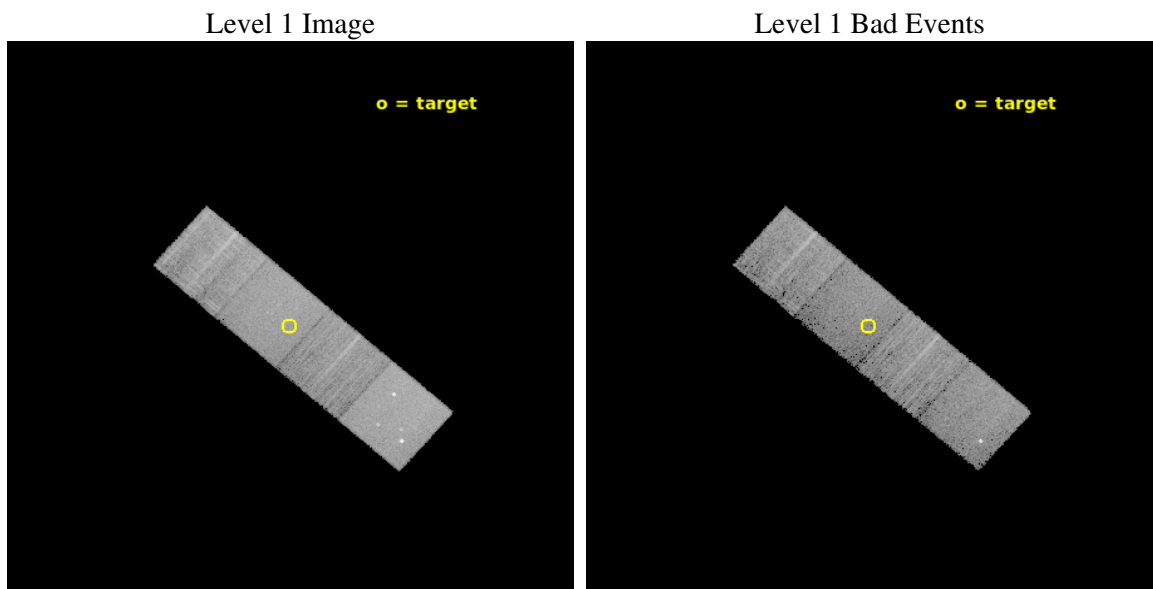
seq_num	601376	Sequence number
obs_id	19419	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4330	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.821667	Observer's specified target RA [deg]
dec_targ	11.367972	Observer's specified target Dec [deg]
ra_nom	185.82136394291	Nominal RA [deg]
dec_nom	11.36917559557	Nominal Dec [deg]
roll_nom	221.07158219921	Nominal Roll [deg]
revision	3	Processing version of data
ontime	8063.1000621319	Sum of GTIs [s]
livetime	7957.7497238522	Livetime [s]
ontime5	8063.1000621319	Sum of GTIs [s]
ontime6	8063.1000621319	Sum of GTIs [s]
ontime7	8063.1000621319	Sum of GTIs [s]
ontime8	8063.1000621319	Sum of GTIs [s]
l2events	95835	Number of level 2 events



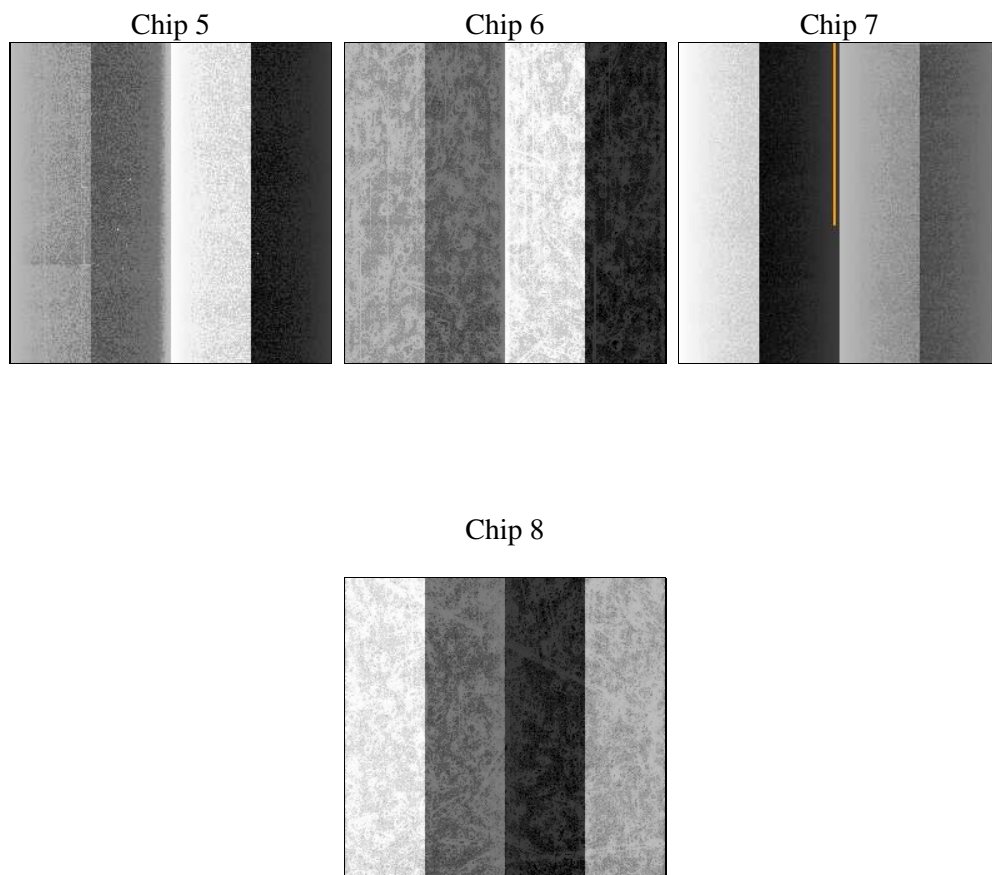
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8063.1000621319	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	8063.1000621319	Sum of GTIs [s]
date	2020-10-25T12:44:06	Date and time of file creation	ontime6	8063.1000621319	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	8063.1000621319	Sum of GTIs [s]
			ontime8	8063.1000621319	Sum of GTIs [s]
			l1events	328011	Number of level 1 events

2.1.4 Events

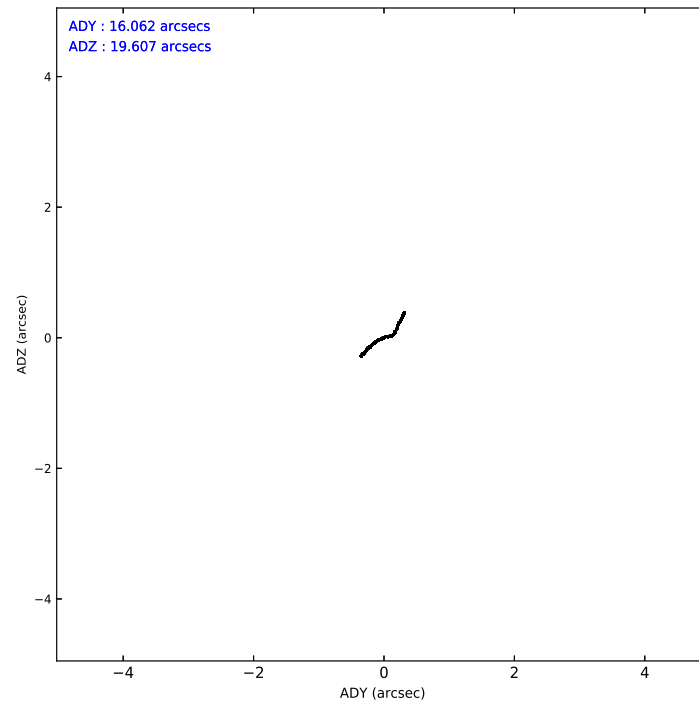
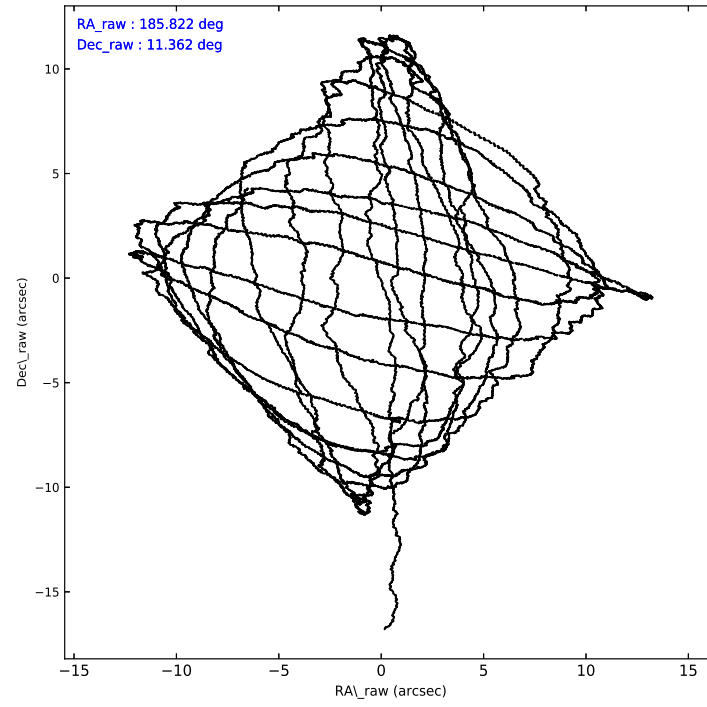
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	102930	62550	80079	82452
rejected events	52359	54433	44321	58675
rejected %	50%	87%	55%	71%

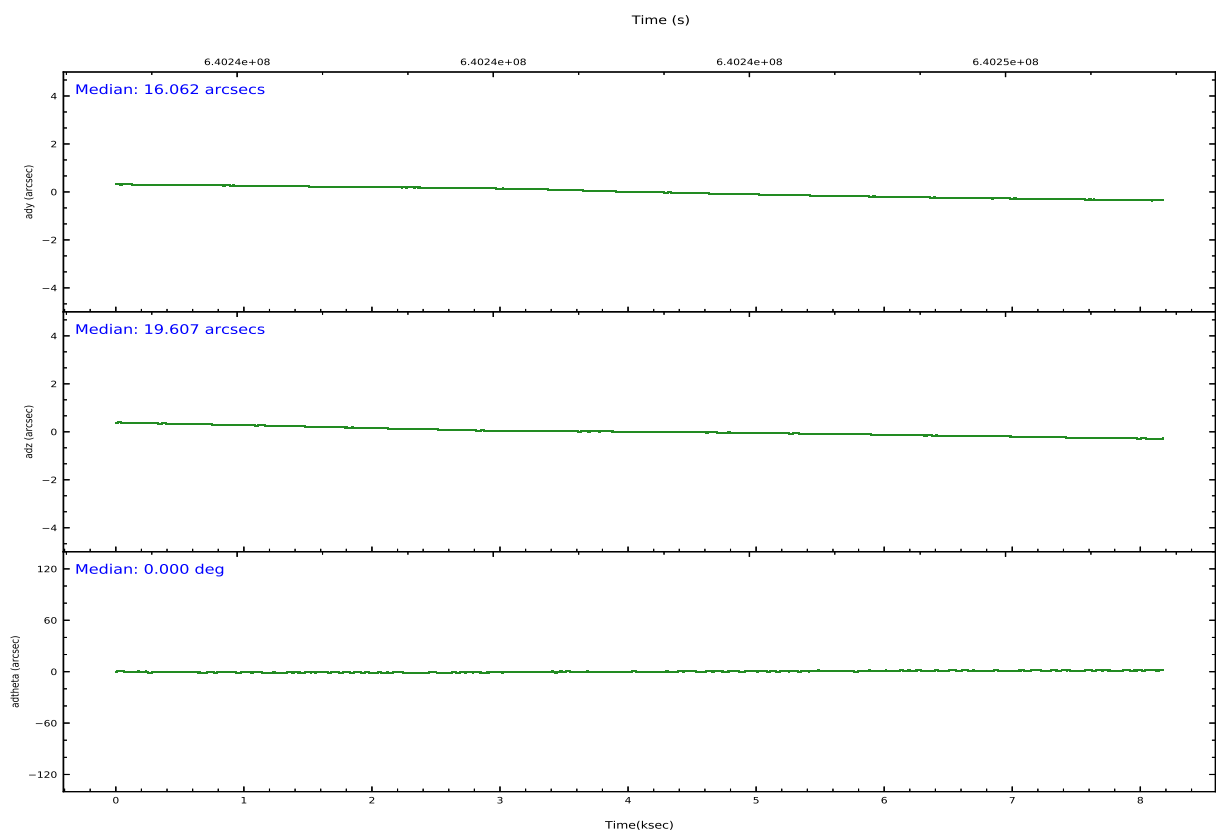
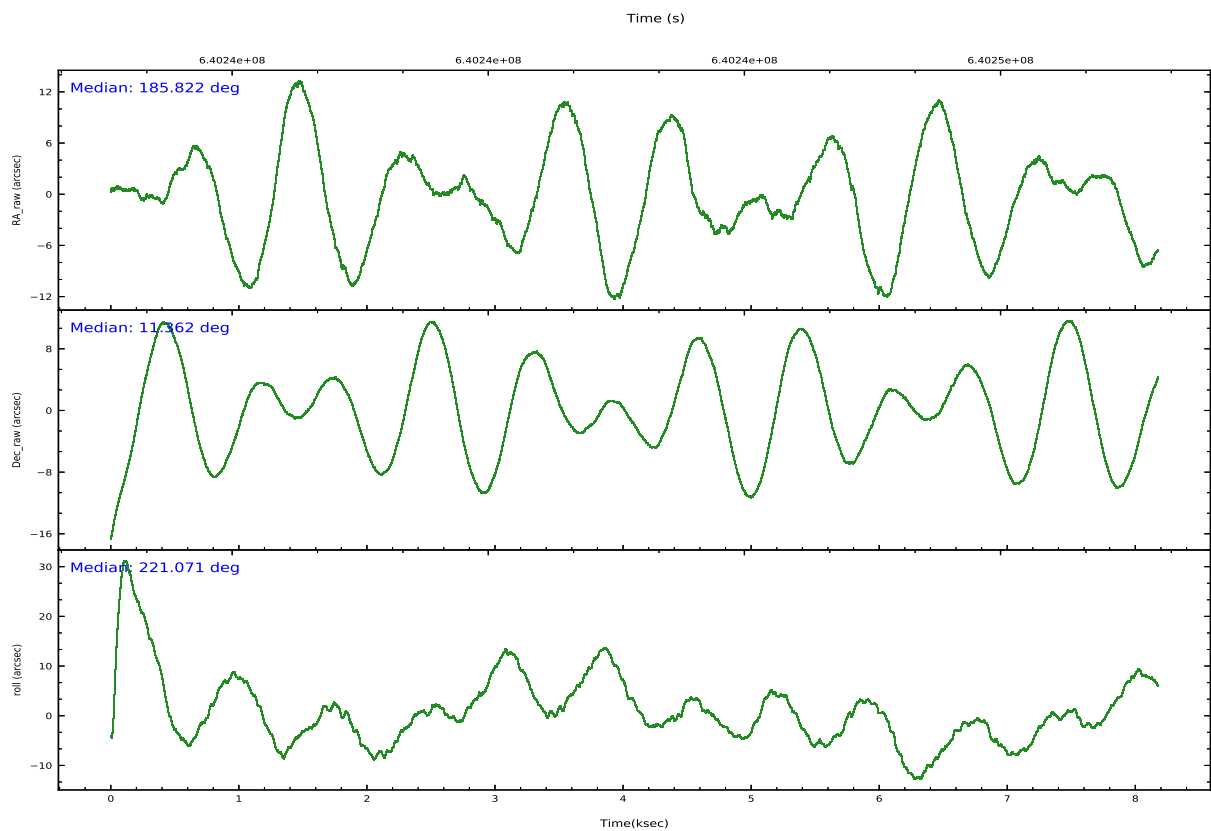
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	5580	2910	3245	7376
	5%	4%	4%	8%
grade 1 events	214	38	109	65
	0%	0%	0%	0%
grade 2 events	16060	1861	7595	5534
	15%	2%	9%	6%
grade 3 events	1498	754	2843	2554
	1%	1%	3%	3%
grade 4 events	1485	718	2919	2337
	1%	1%	3%	2%
grade 5 events	7110	2874	7792	4379
	6%	4%	9%	5%
grade 6 events	25998	1877	19190	6000
	25%	3%	23%	7%
grade 7 events	44985	51518	36386	54207
	43%	82%	45%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
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	185.830270	185.82136394291	Subarray requested	NONE	NONE
[deg] Pointing Dec	11.387977	11.36917559557	Alternating exposures requested	N	N
[deg] Pointing Roll	220.913117	221.07158219921	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	640239230.184000	640238388.07496			
Observation start date	2018-04-16T04:12:41	2018-04-16T03:59:48			
[s] Observation end time (MET)	640247230.184000	640248483.81305			
Observation end date	2018-04-16T06:26:01	2018-04-16T06:48:03			
Read mode	TIMED	TIMED			

2.3 Aspect



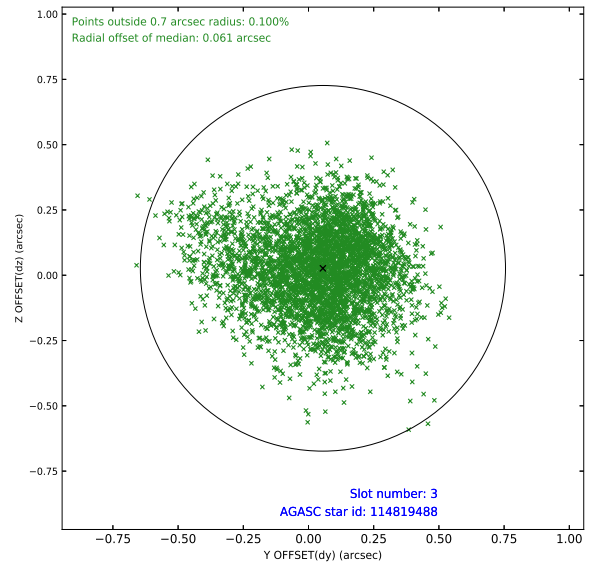
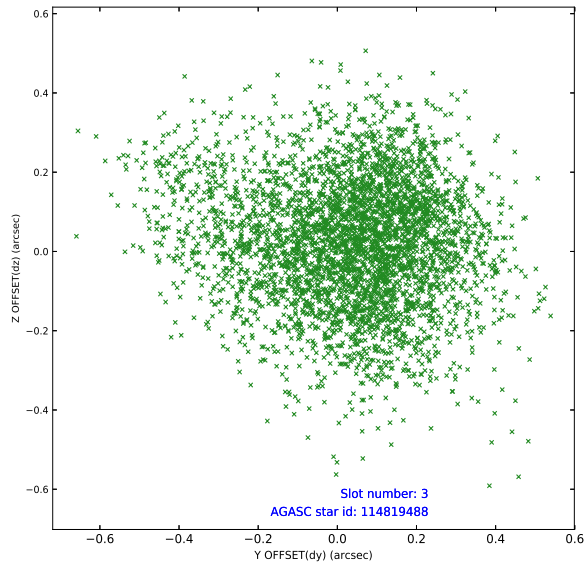


Slot Statistics

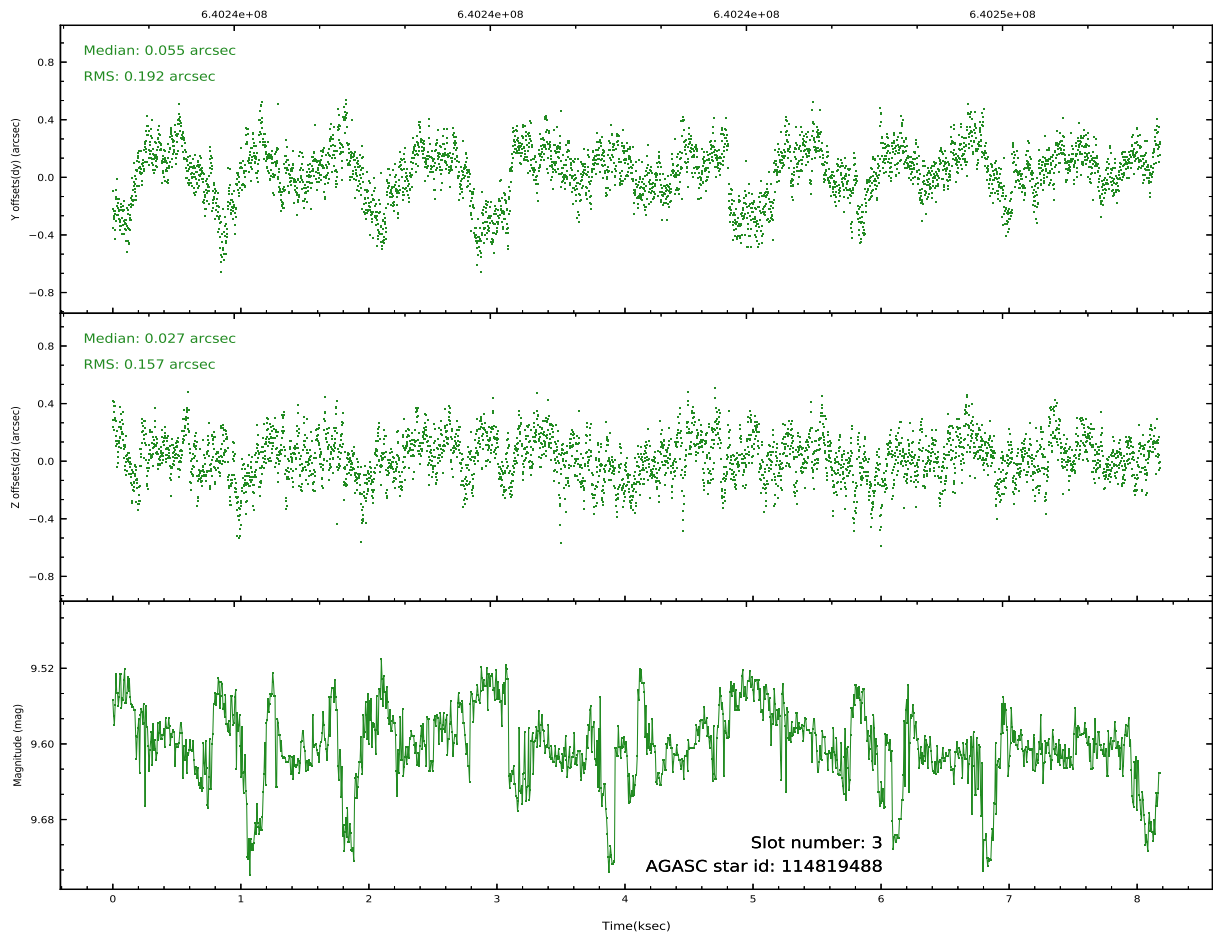
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.04	1994	1.000	0.234	-0.088	0.016	0.026	0.000000	0.000000	927.04	-1736
1	FID		ACIS-S-4	7.07	1995	1.000	0.067	-0.046	0.010	0.017	0.000000	0.000000	2144.83	166
2	FID		ACIS-S-5	7.05	1994	1.000	-0.328	0.147	0.009	0.015	0.000000	0.000000	-1821.34	161
3	GUIDE	used	114819488	9.60	3990	1.000	0.055	0.027	0.258	0.447	185.439323	11.182195	1528.33	-344
4	GUIDE	used	114819496	8.70	3990	1.000	-0.007	-0.011	0.166	0.303	185.927253	11.920483	-1512.75	-1225
5	GUIDE	used	114819552	8.91	3988	1.000	0.101	-0.105	0.168	0.295	185.130690	11.375327	1893.88	-1585
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	114823144	9.21	3984	1.000	-0.125	0.102	0.203	0.336	185.759442	11.403801	152.39	-207

2.4 Star Slots

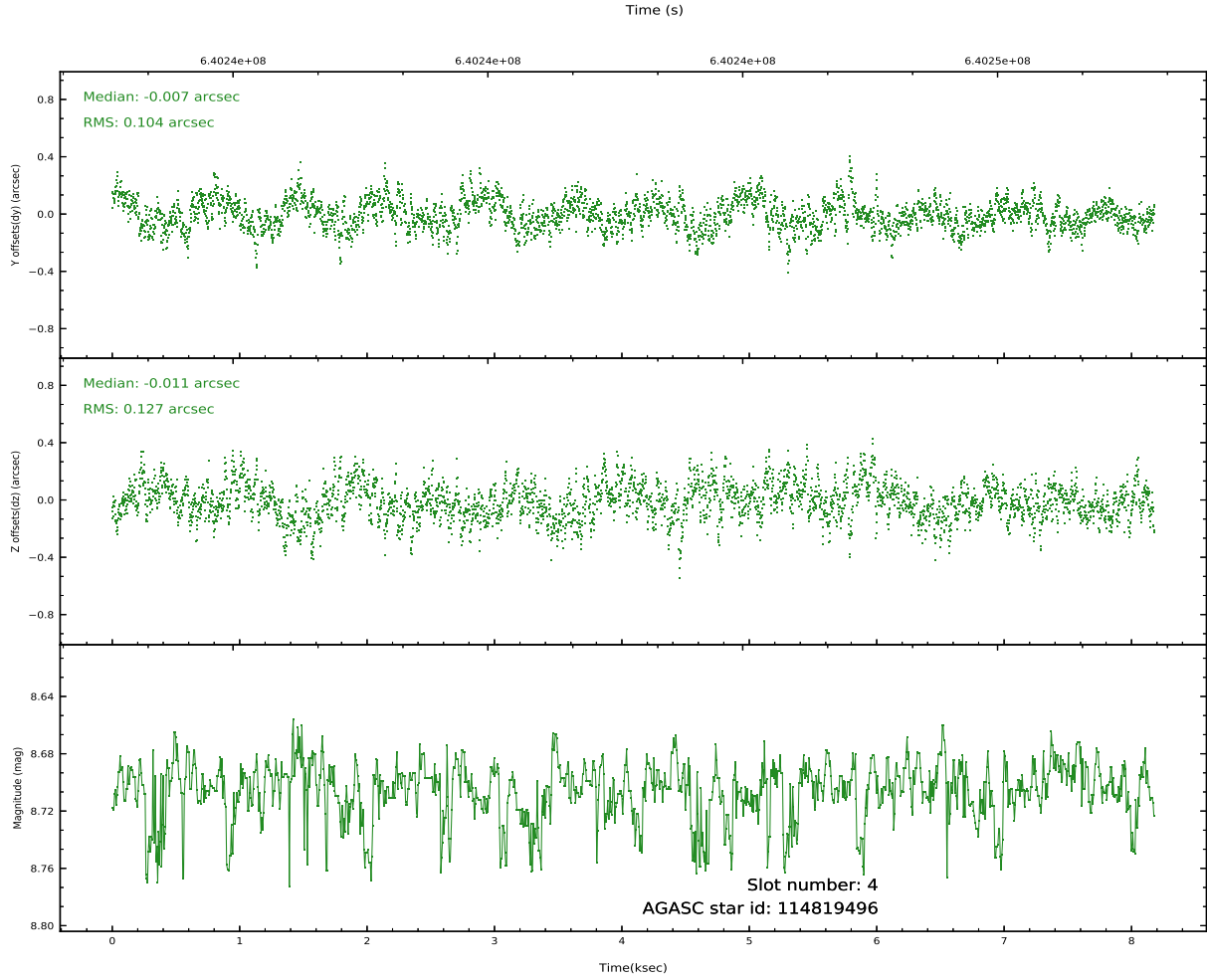
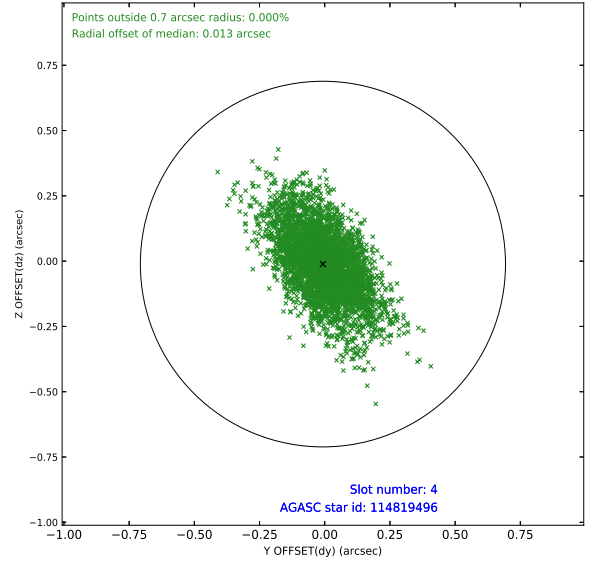
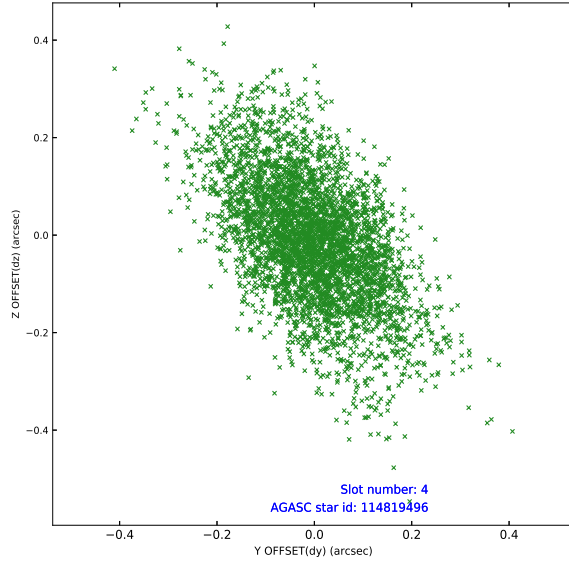
2.4.1 Slot 3



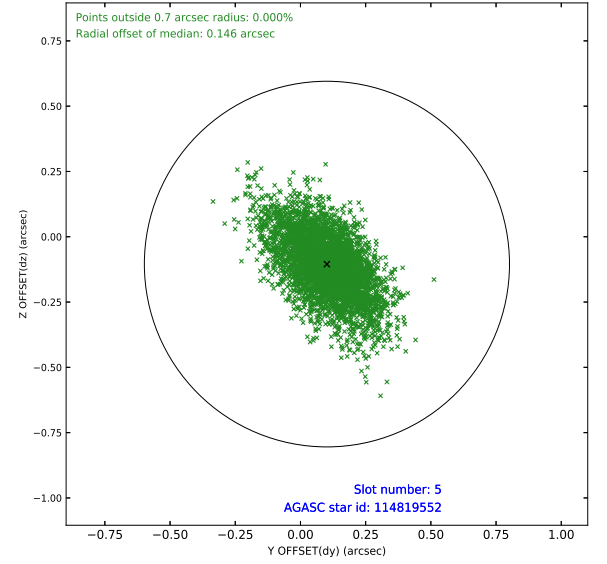
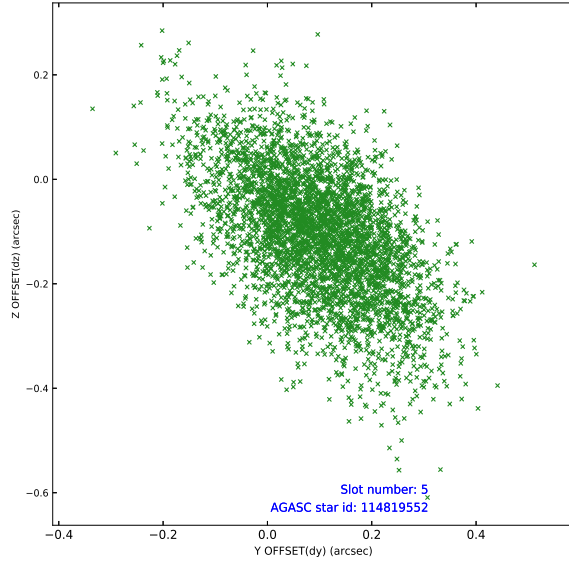
Time (s)



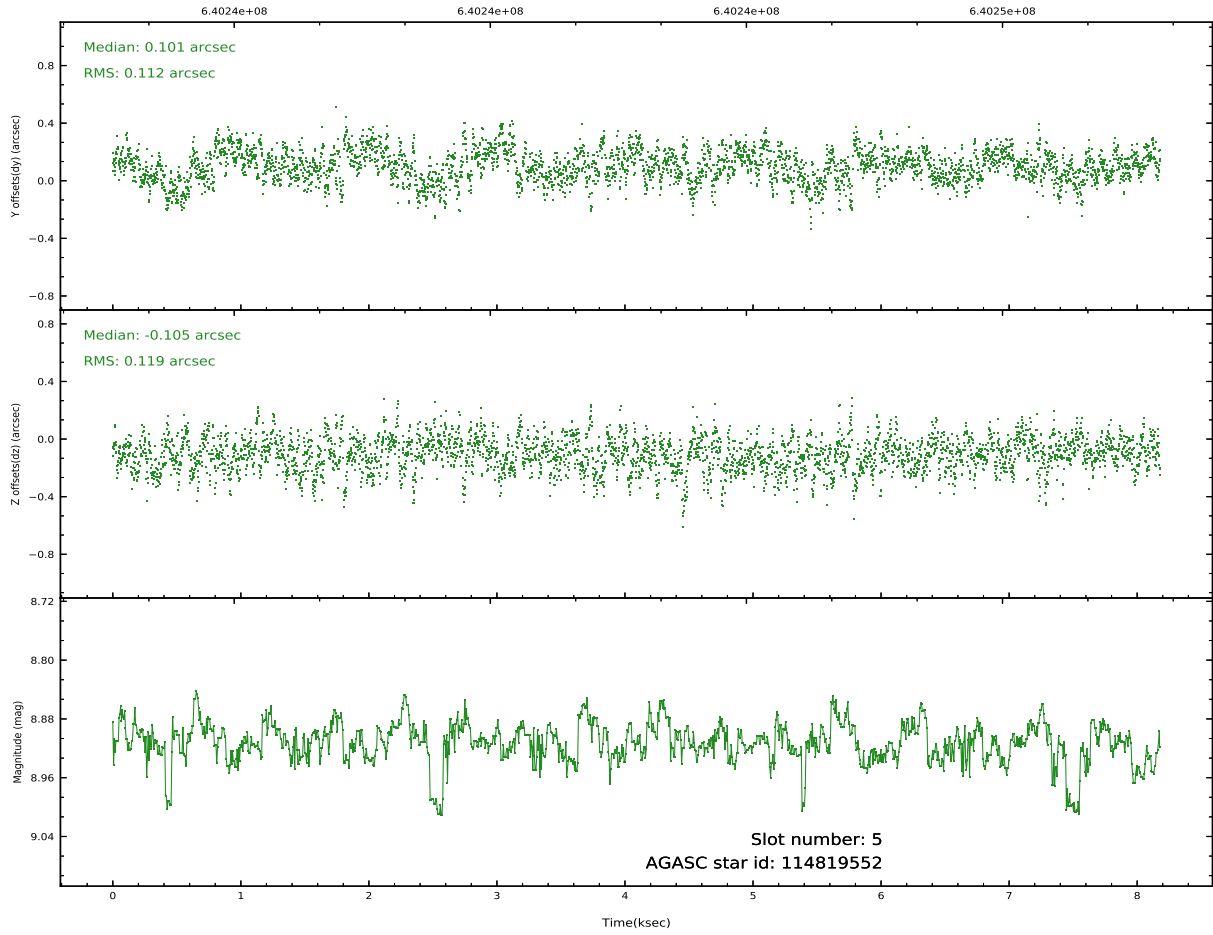
2.4.2 Slot 4



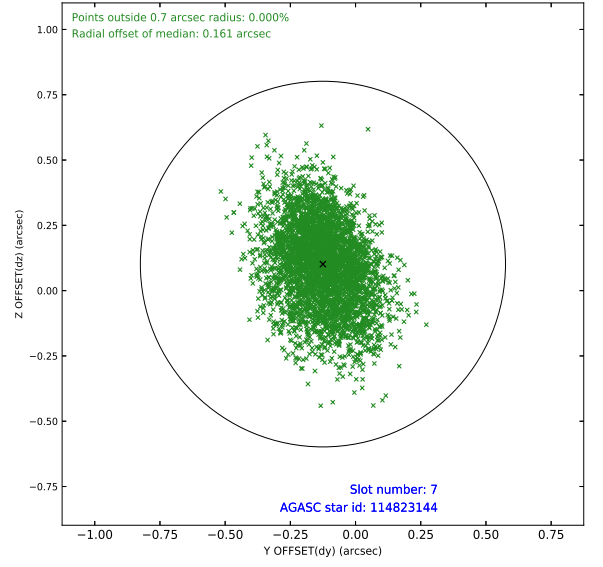
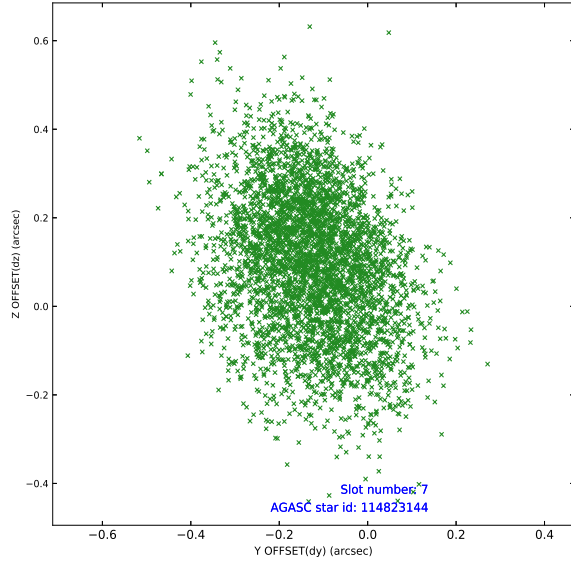
2.4.3 Slot 5



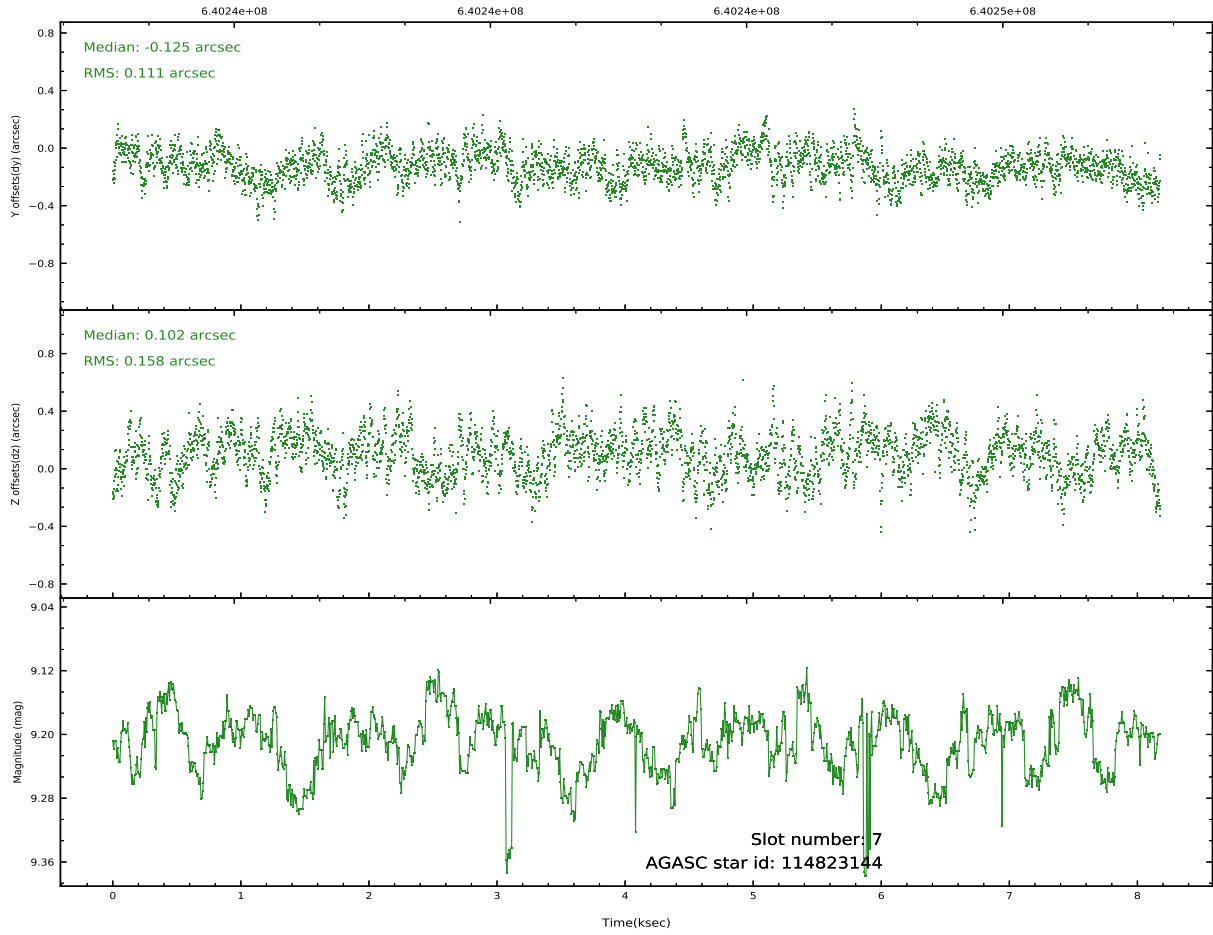
Time (s)



2.4.4 Slot 7

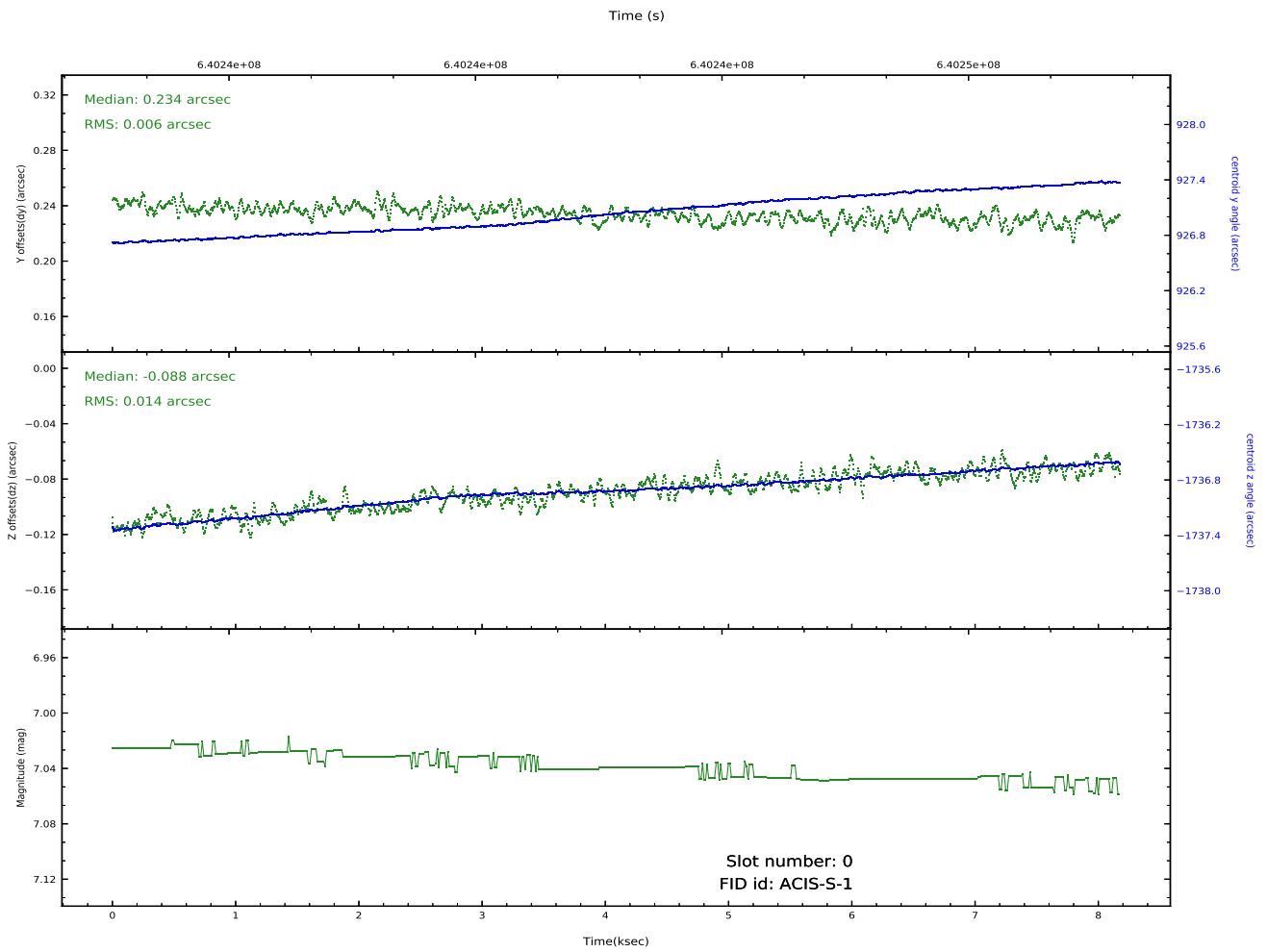
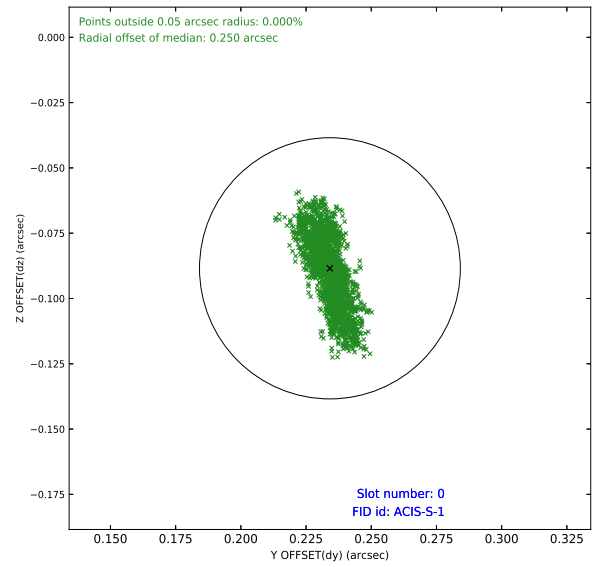
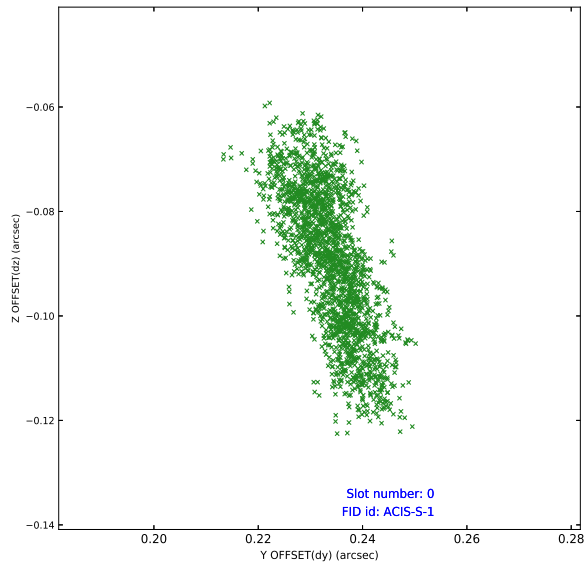


Time (s)

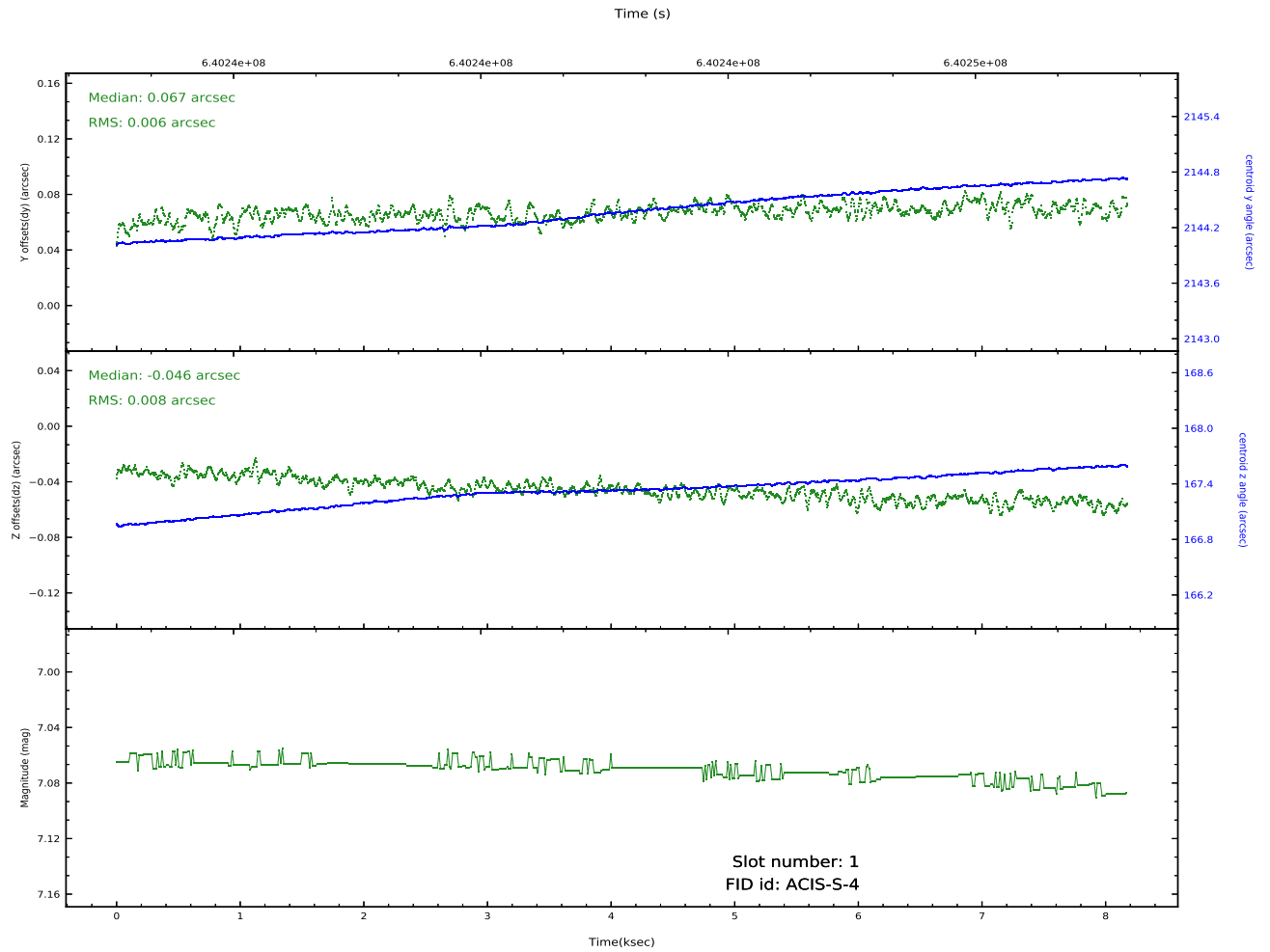
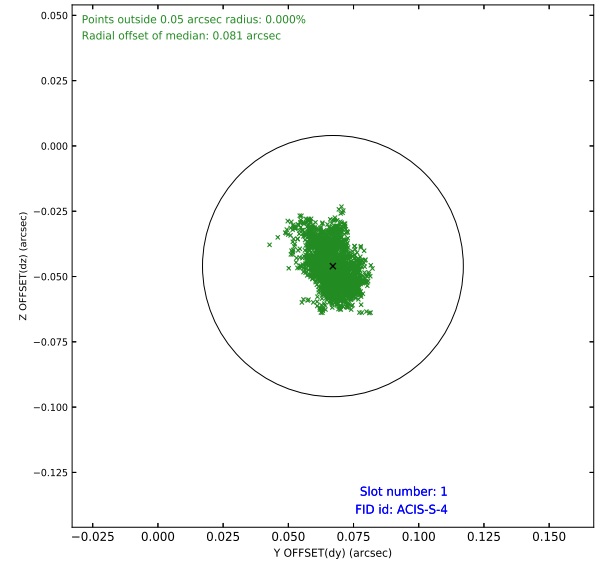
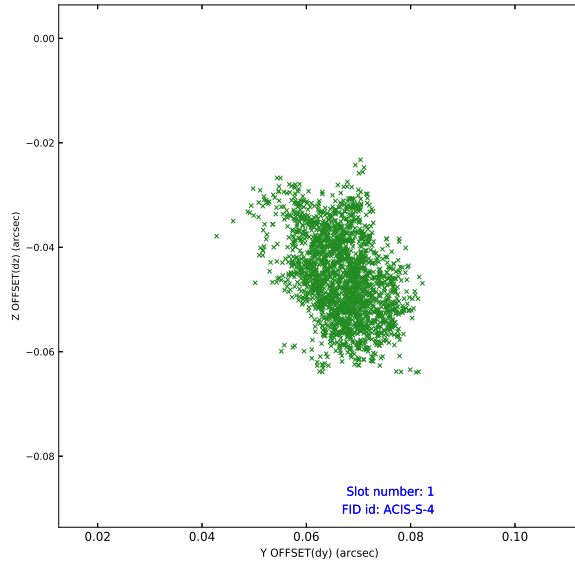


2.5 FID Slots

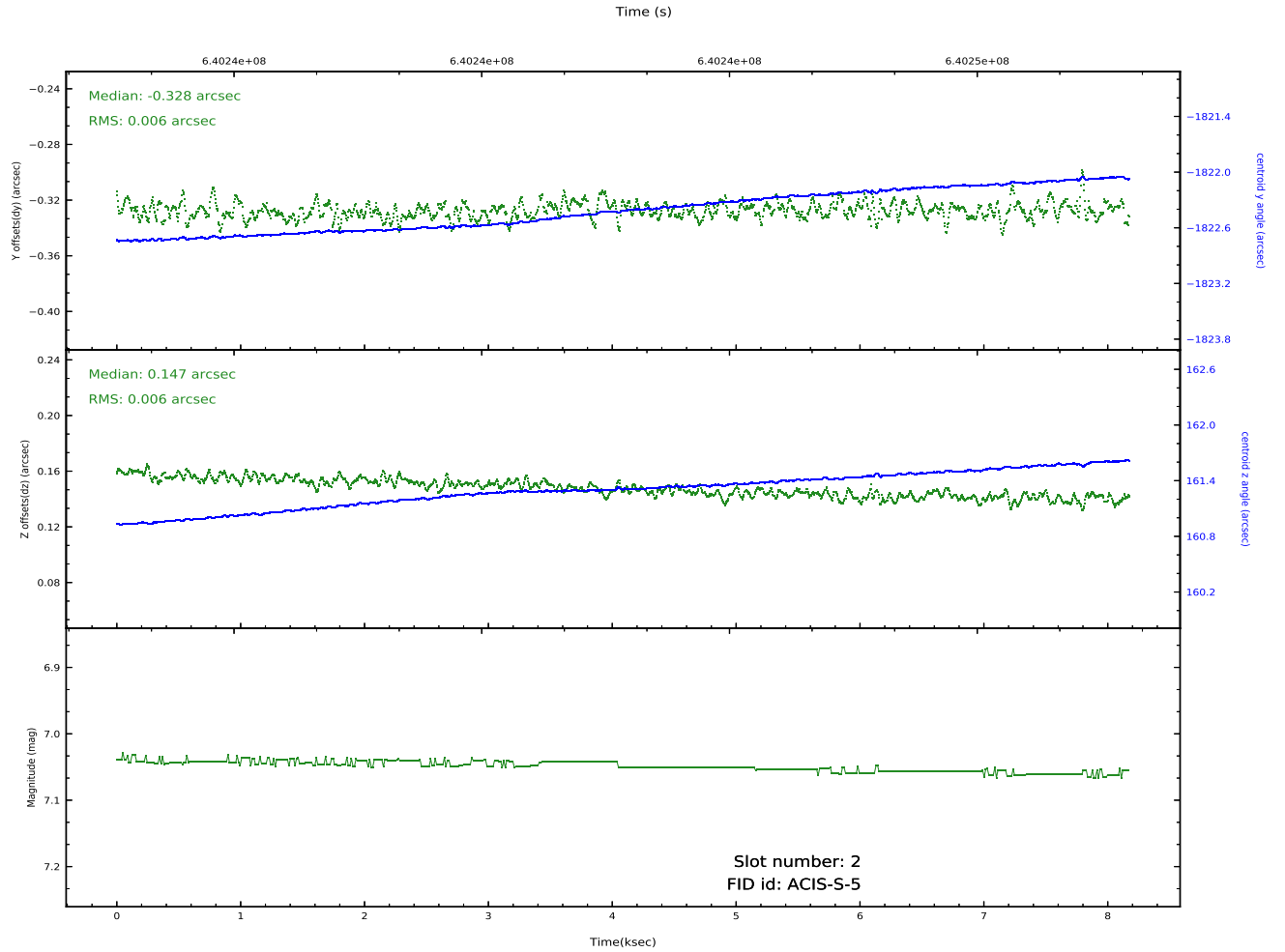
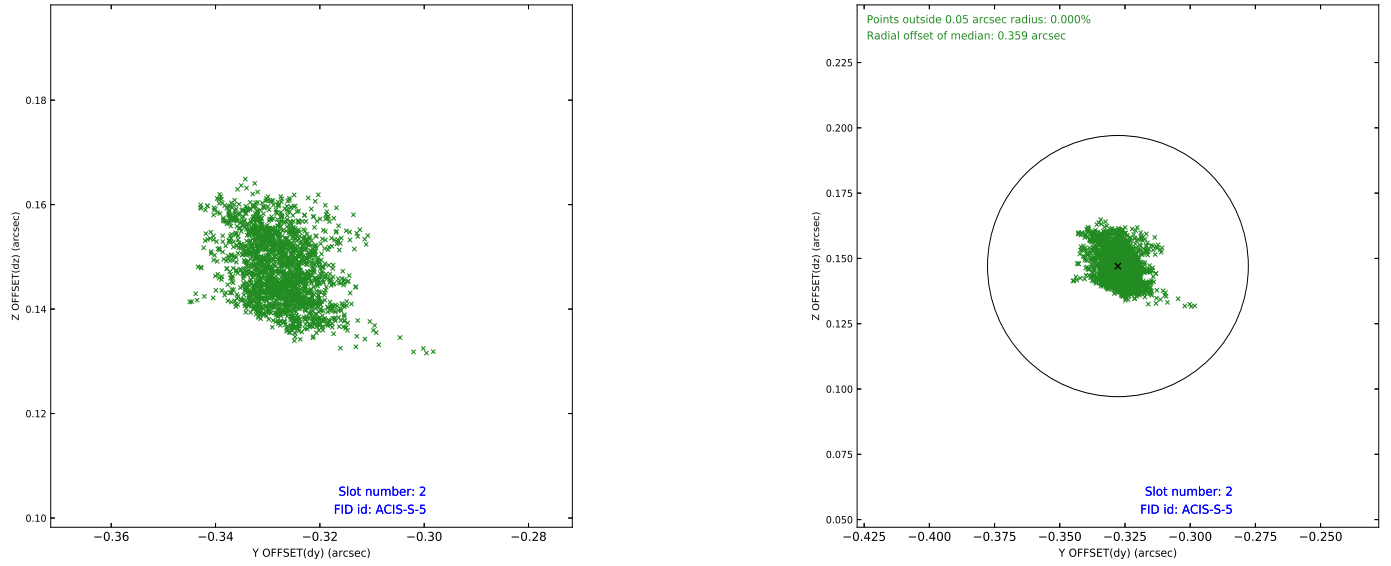
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.0631000621319

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.