

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19405 - L2 Version 3
Chandra X-Ray Center

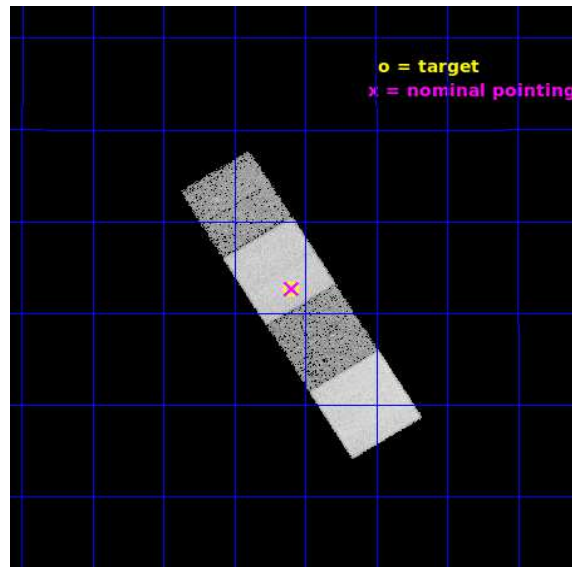
L2 Processing Date : Oct 25 2020

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1 Front

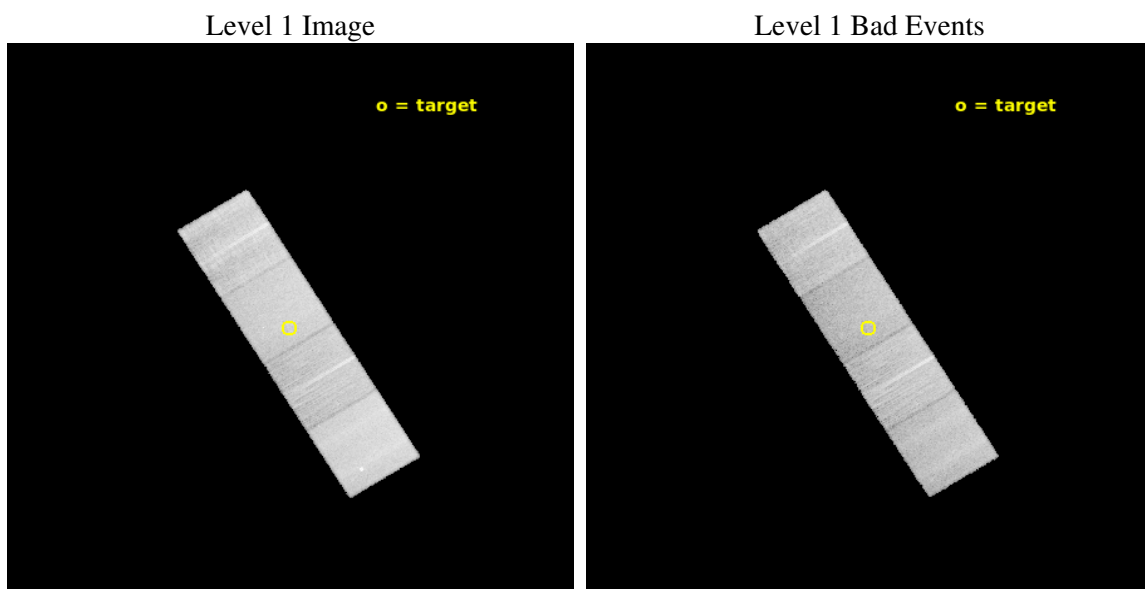
seq_num	601362	Sequence number
obs_id	19405	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4307	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.52375	Observer's specified target RA [deg]
dec_targ	9.043639	Observer's specified target Dec [deg]
ra_nom	185.52345688333	Nominal RA [deg]
dec_nom	9.0449511010036	Nominal Dec [deg]
roll_nom	238.15643685811	Nominal Roll [deg]
revision	3	Processing version of data
ontime	14907.900114775	Sum of GTIs [s]
livetime	14713.117424739	Livetime [s]
ontime5	14907.900114775	Sum of GTIs [s]
ontime6	14904.759054422	Sum of GTIs [s]
ontime7	14907.900114775	Sum of GTIs [s]
ontime8	14898.476944089	Sum of GTIs [s]
l2events	162174	Number of level 2 events



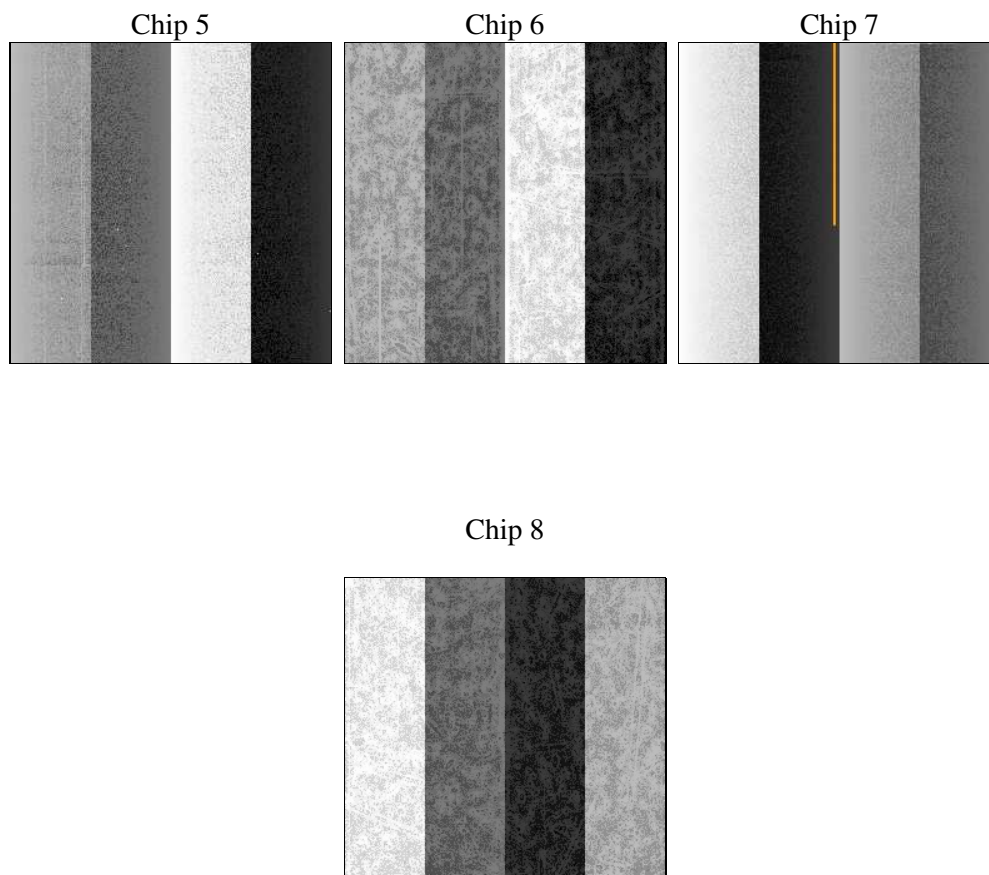
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	14907.900114775	Sum of GTIs [s]
caldsver	4.9.3	 	ontime5	14907.900114775	Sum of GTIs [s]
date	2020-10-25T22:33:53	Date and time of file creation	ontime6	14904.759054422	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	14907.900114775	Sum of GTIs [s]
			ontime8	14898.476944089	Sum of GTIs [s]
			l1events	580450	Number of level 1 events

2.1.4 Events

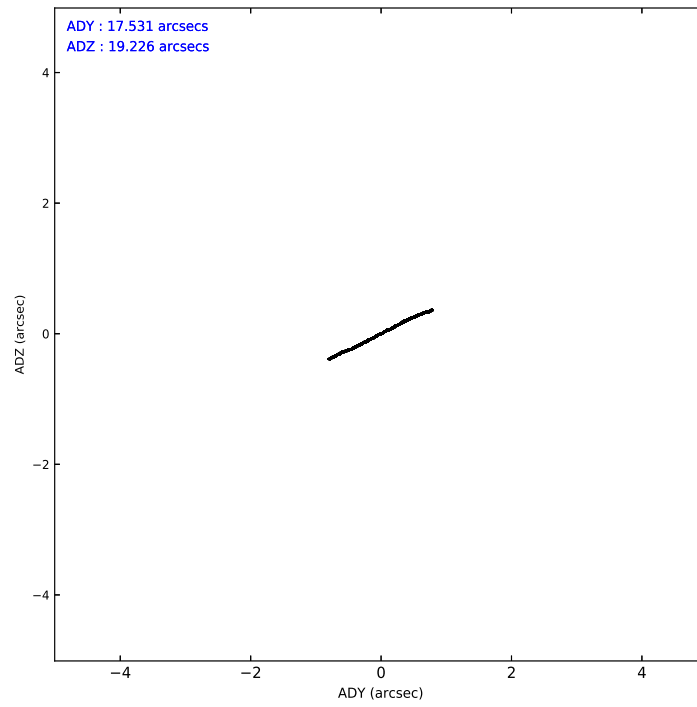
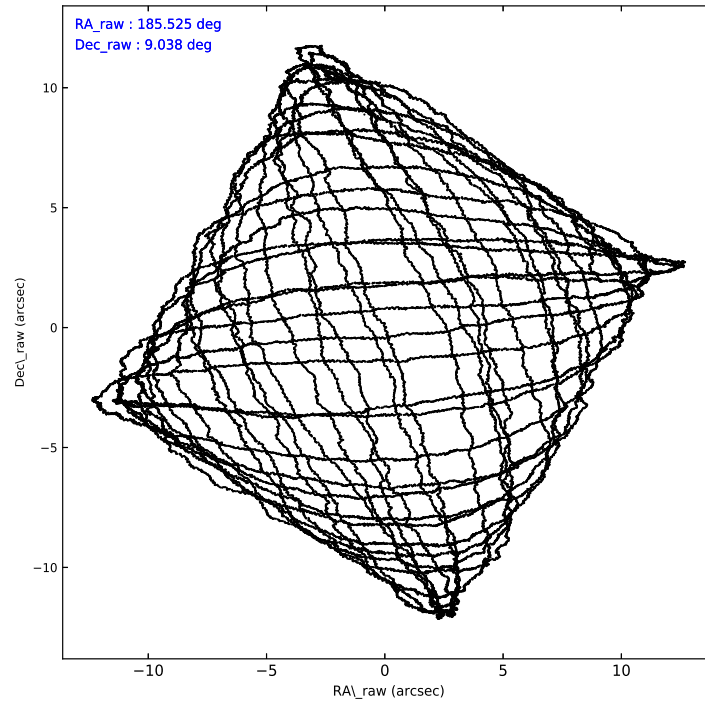
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	175316	116253	142229	146652
rejected events	93188	103783	80600	110791
rejected %	53%	89%	56%	75%

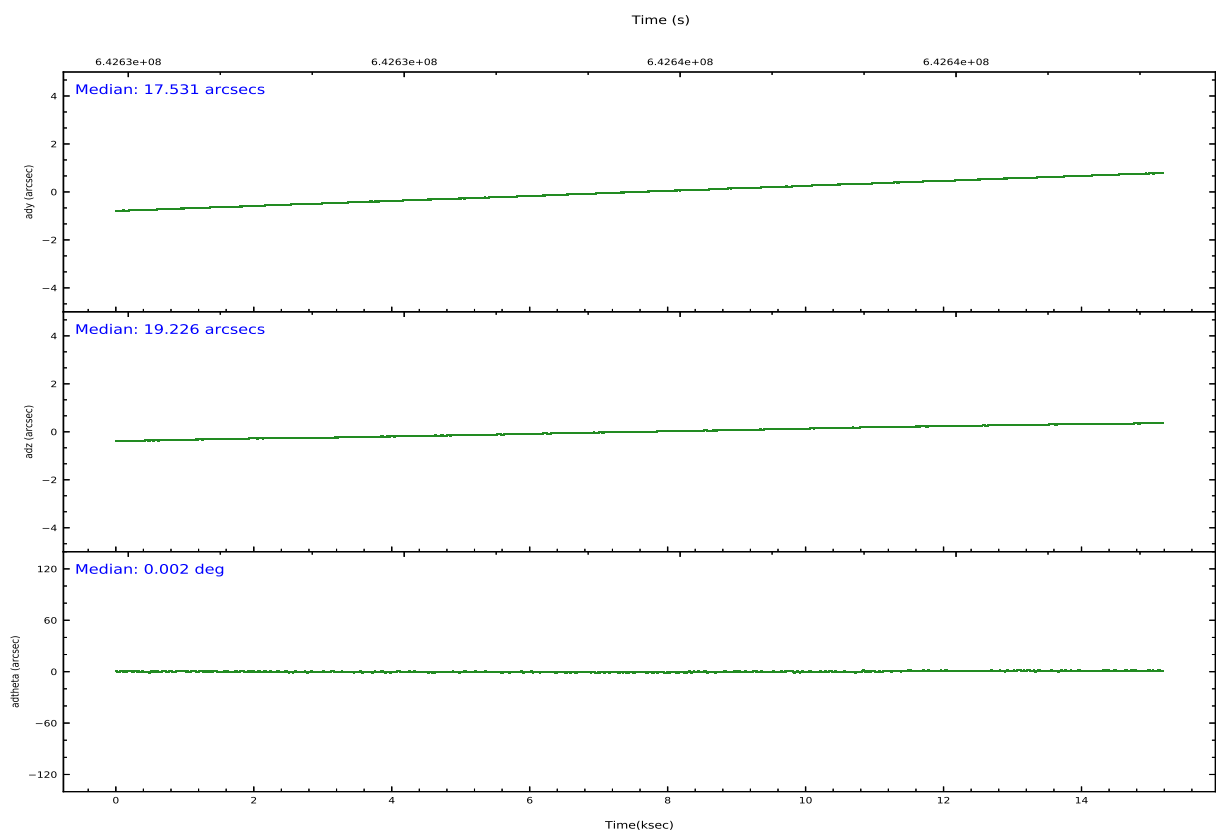
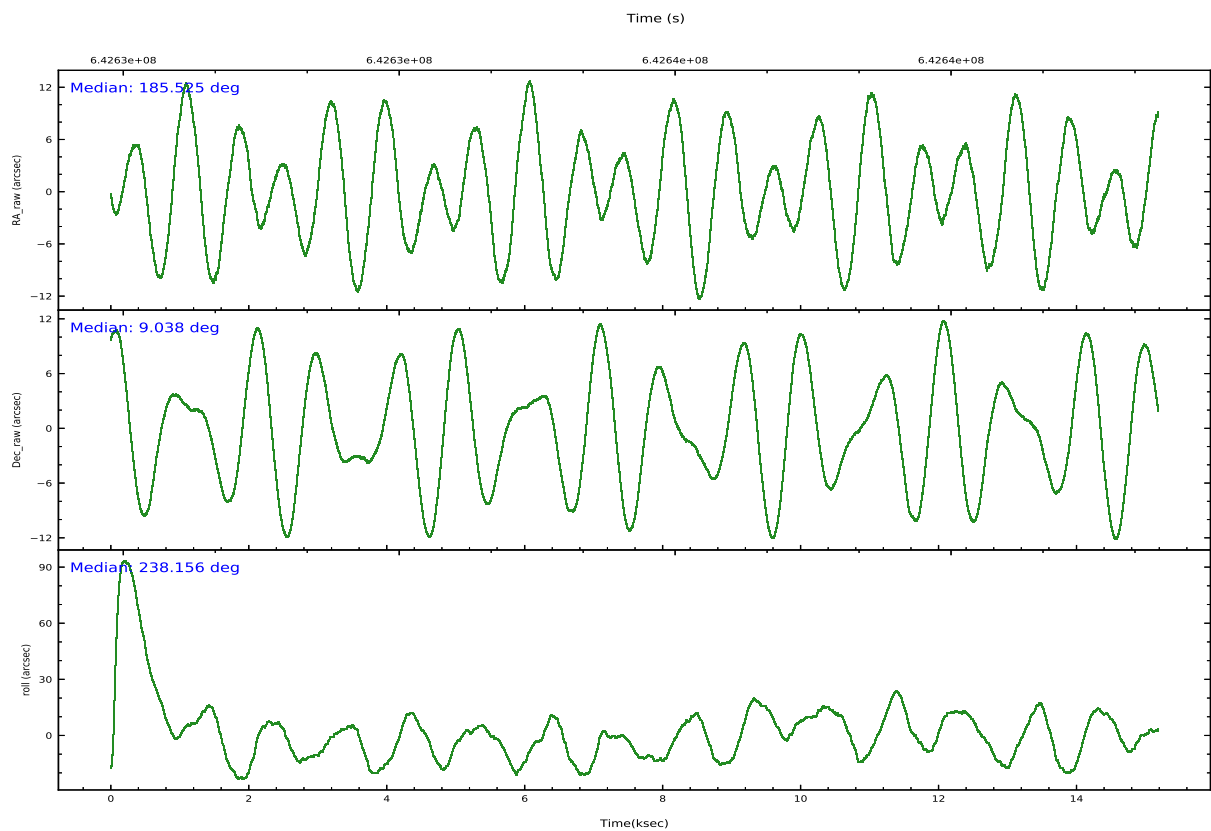
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	4534	3761	5199	9986
	2%	3%	3%	6%
grade 1 events	466	49	192	102
	0%	0%	0%	0%
grade 2 events	25365	3265	12615	8730
	14%	2%	8%	5%
grade 3 events	2391	1122	4898	3874
	1%	0%	3%	2%
grade 4 events	2342	1063	4785	3512
	1%	0%	3%	2%
grade 5 events	11101	4745	13981	7421
	6%	4%	9%	5%
grade 6 events	47547	3271	34158	9767
	27%	2%	24%	6%
grade 7 events	81570	98977	66401	103260
	46%	85%	46%	70%

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	185.525945	185.52345688333	Subarray requested	NONE	NONE
[deg] Pointing Dec	9.065138	9.044951101003599	Alternating exposures requested	N	N
[deg] Pointing Roll	238.006328	238.15643685811	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	642628001.184000	642627589.92857			
Observation start date	2018-05-13T19:45:32	2018-05-13T19:39:49			
[s] Observation end time (MET)	642643001.184000	642643803.89203			
Observation end date	2018-05-13T23:55:32	2018-05-14T00:10:03			
Read mode	TIMED	TIMED			

2.3 Aspect



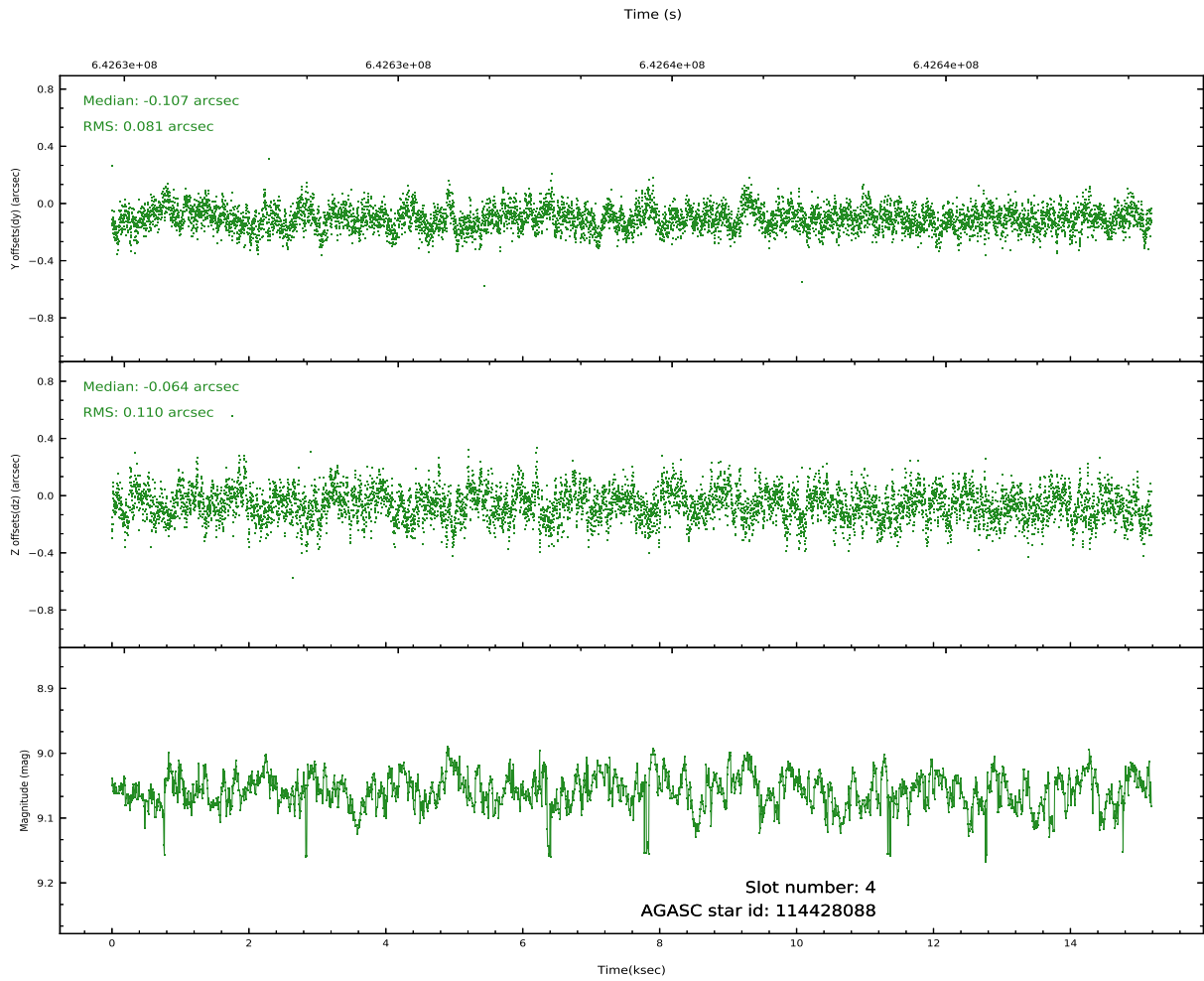
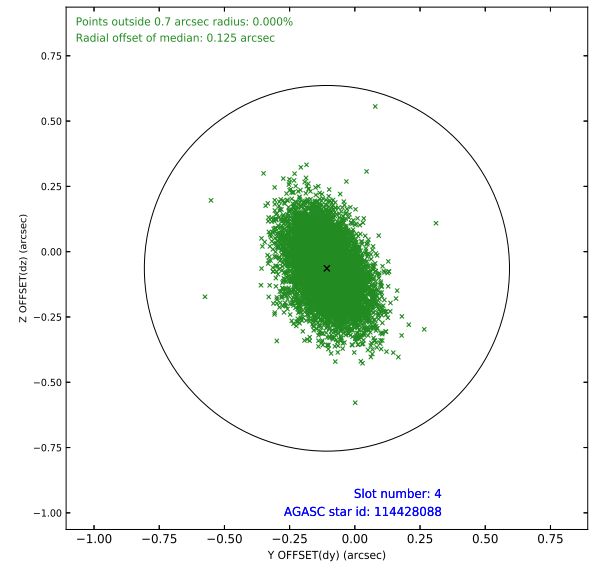
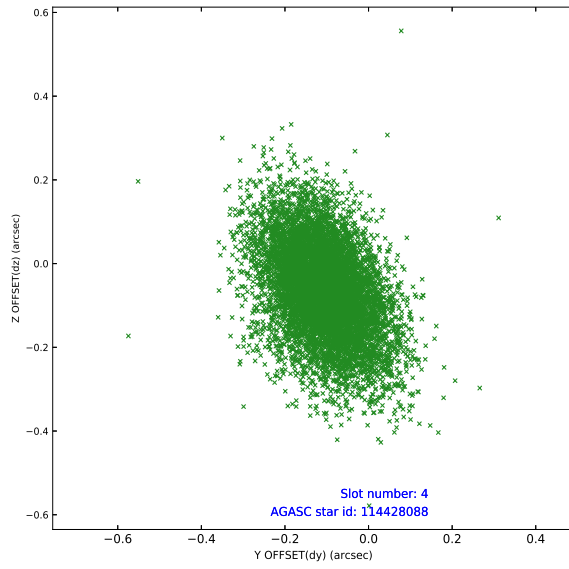


Slot Statistics

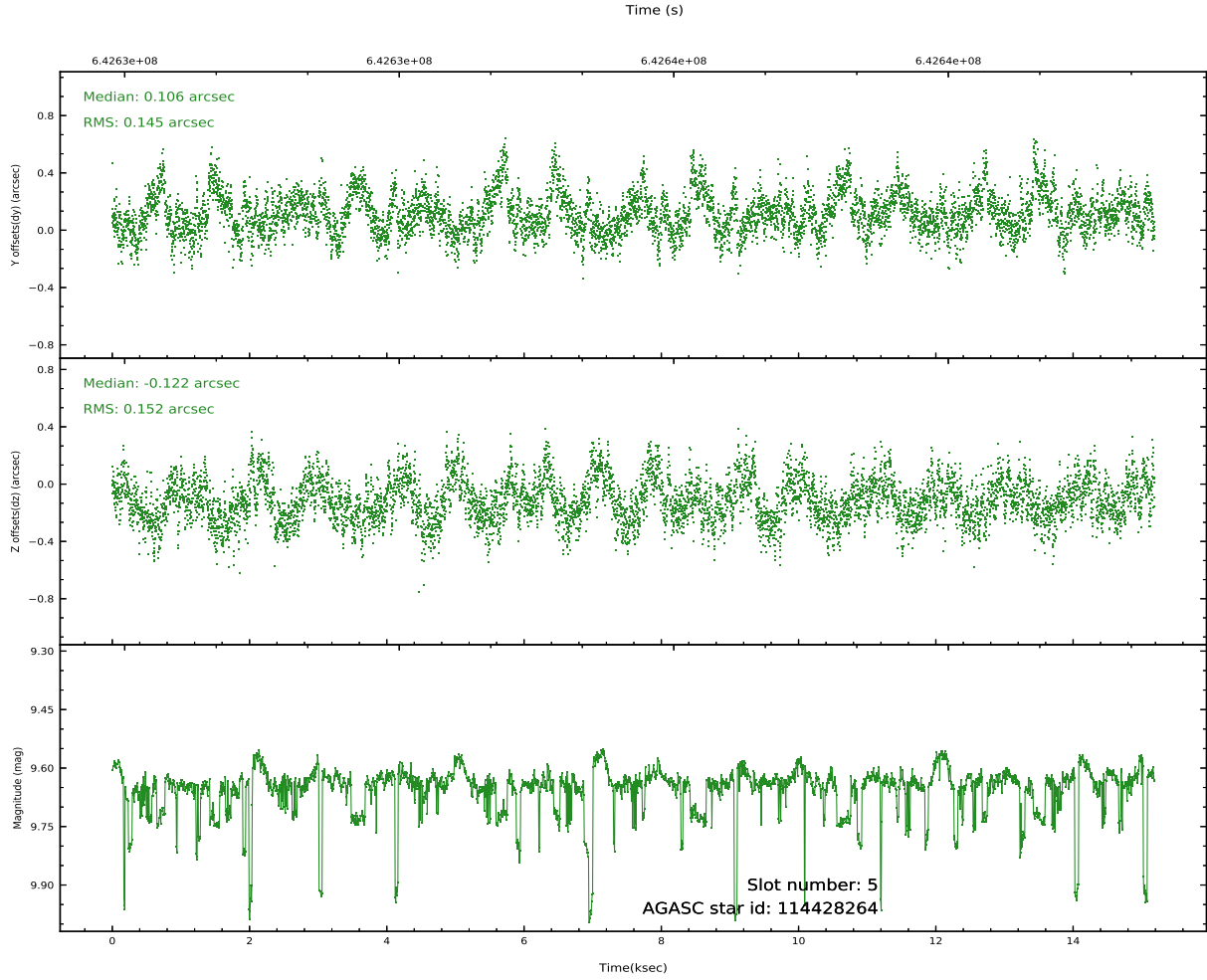
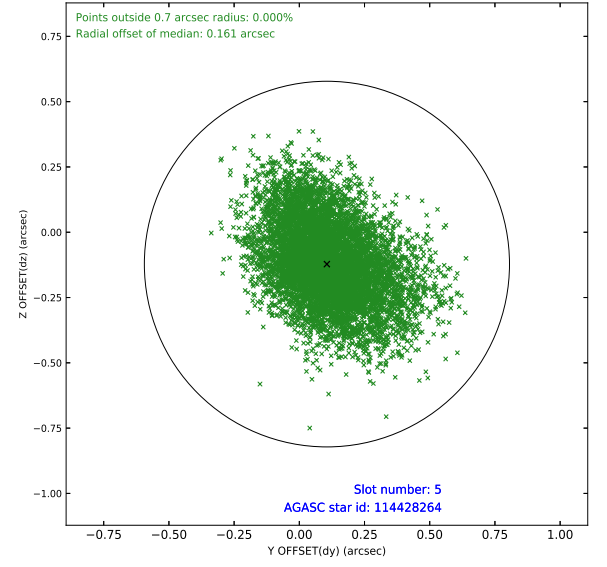
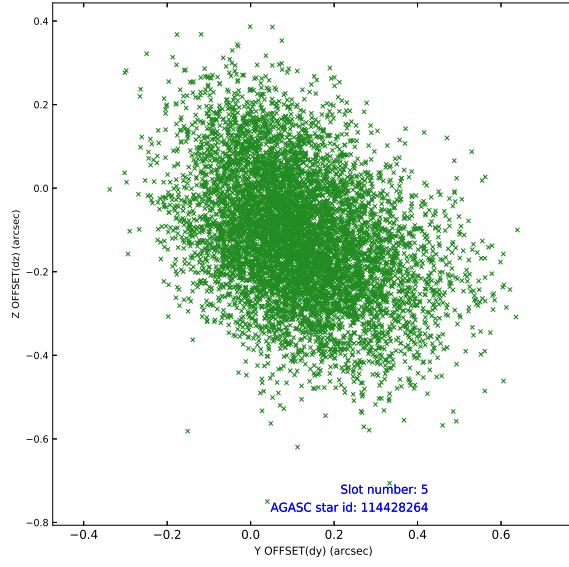
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.16	3704	1.000	0.110	-0.130	0.011	0.019	0.000000	0.000000	-770.65	-1740
1	FID		ACIS-S-4	7.27	3703	1.000	0.163	-0.018	0.008	0.015	0.000000	0.000000	2142.75	167
2	FID		ACIS-S-5	7.25	3704	1.000	-0.305	0.156	0.010	0.015	0.000000	0.000000	-1823.33	161
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	114428088	9.06	7392	1.000	-0.107	-0.064	0.142	0.243	185.114749	9.175334	437.71	-1449
5	GUIDE	used	114428264	9.64	7322	1.000	0.106	-0.122	0.222	0.370	184.910279	8.814217	1925.77	-1380
6	GUIDE	used	114428472	9.32	7396	1.000	0.017	0.138	0.186	0.310	185.686963	8.270901	2121.89	2001
7	GUIDE	used	114430640	8.88	7397	1.000	-0.012	0.043	0.130	0.222	185.276838	9.371034	-464.34	-1333

2.4 Star Slots

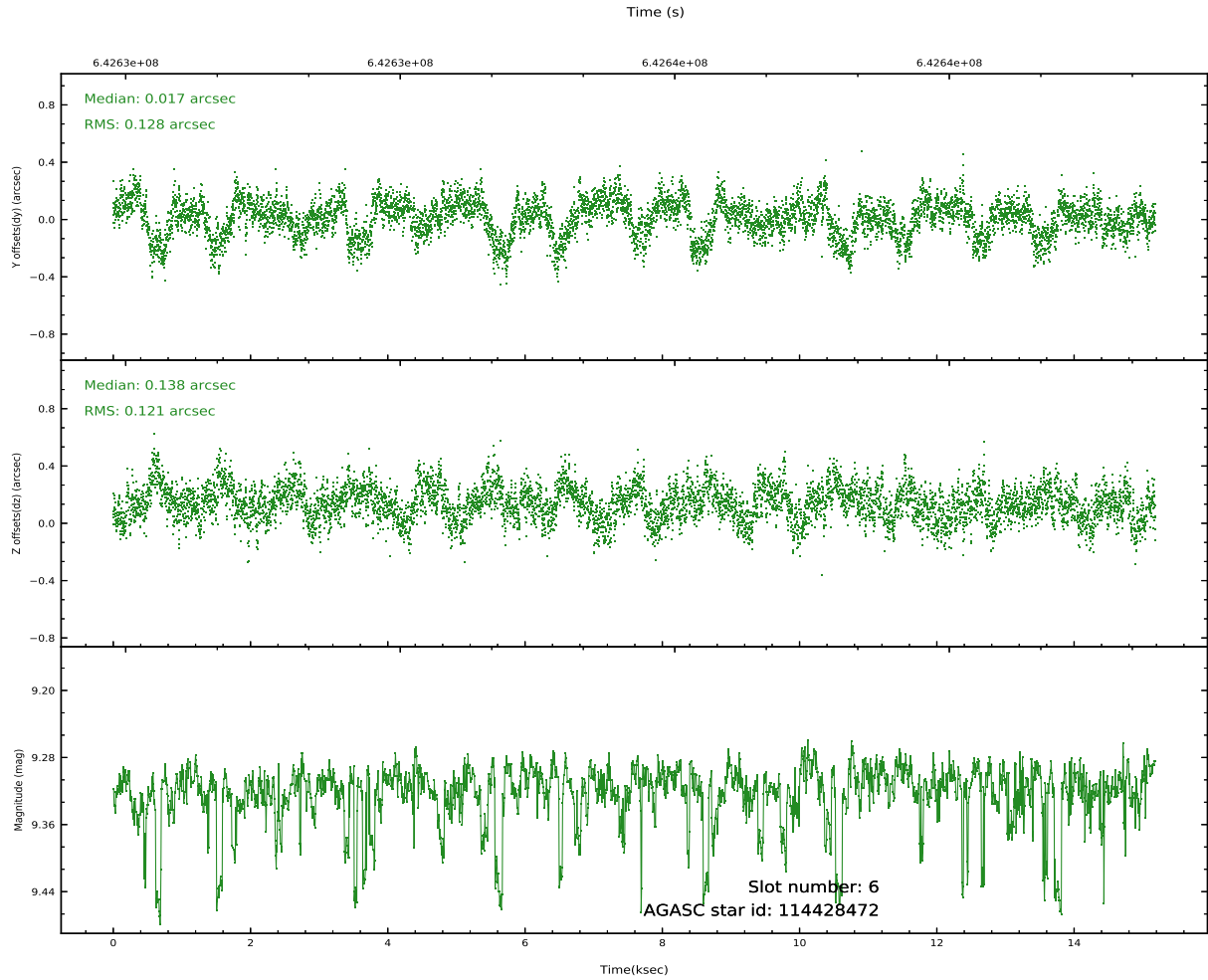
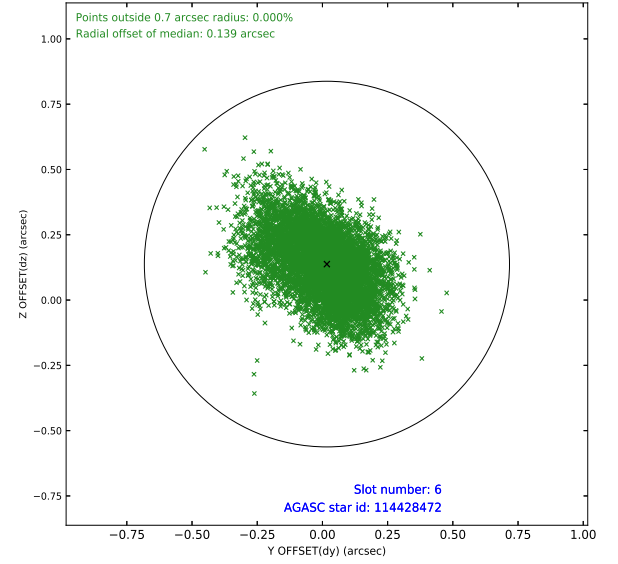
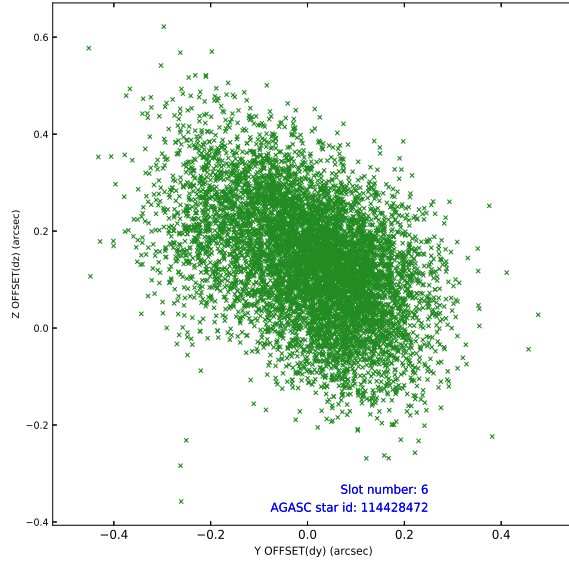
2.4.1 Slot 4



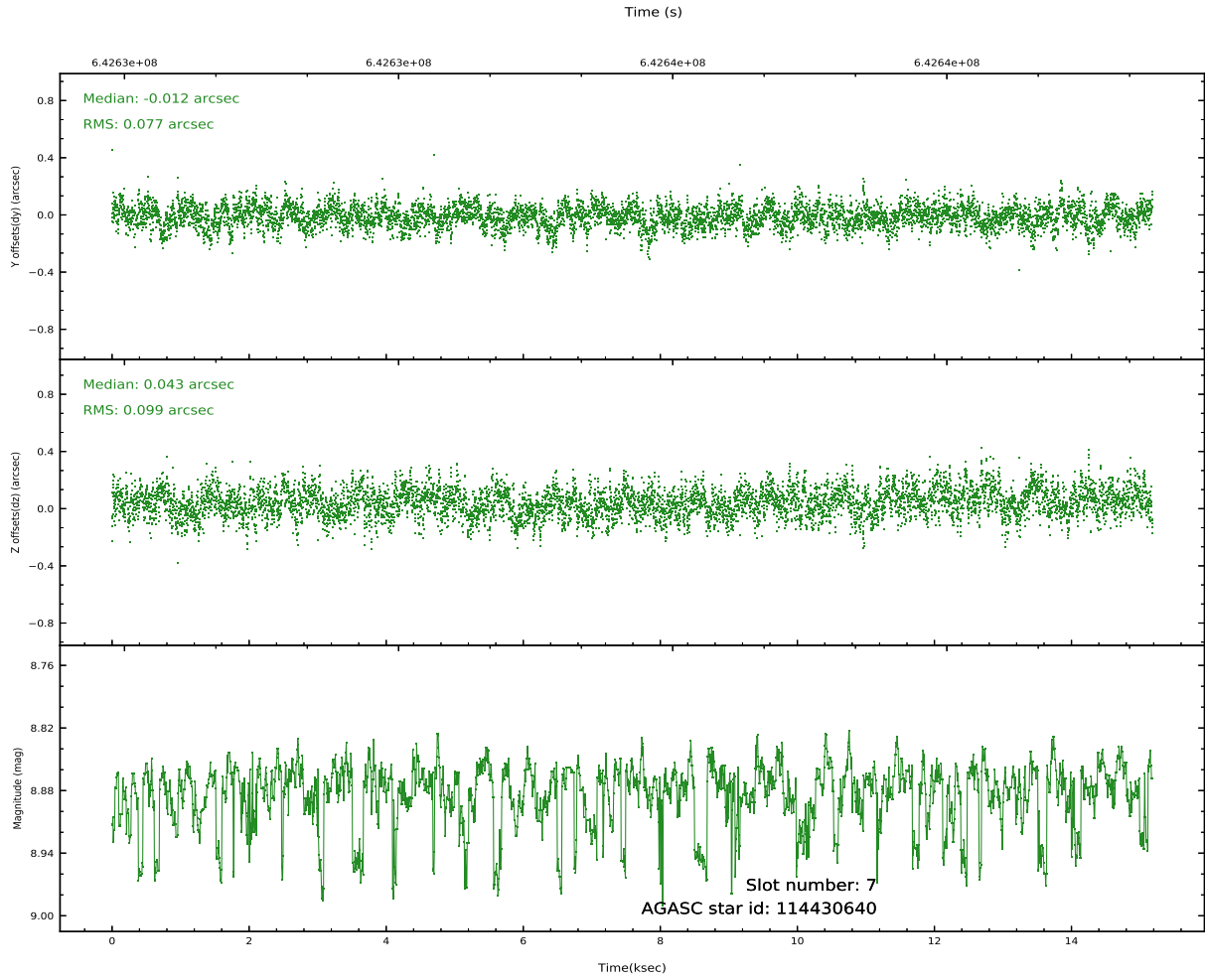
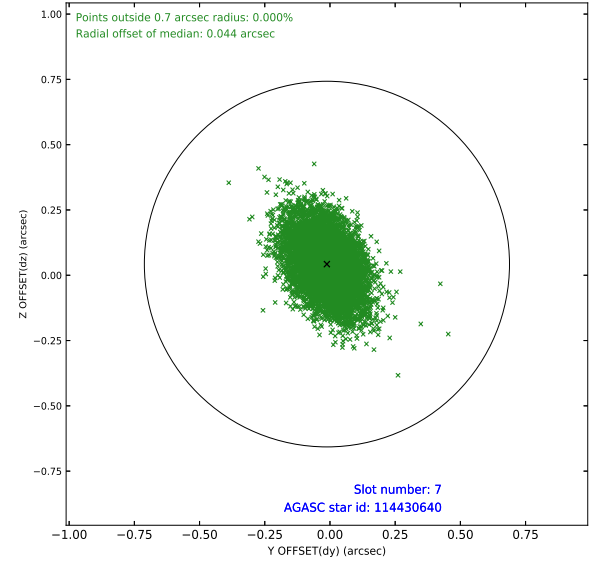
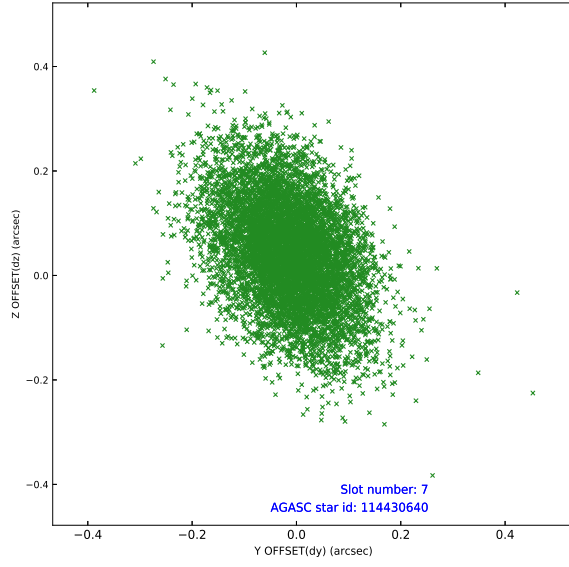
2.4.2 Slot 5



2.4.3 Slot 6

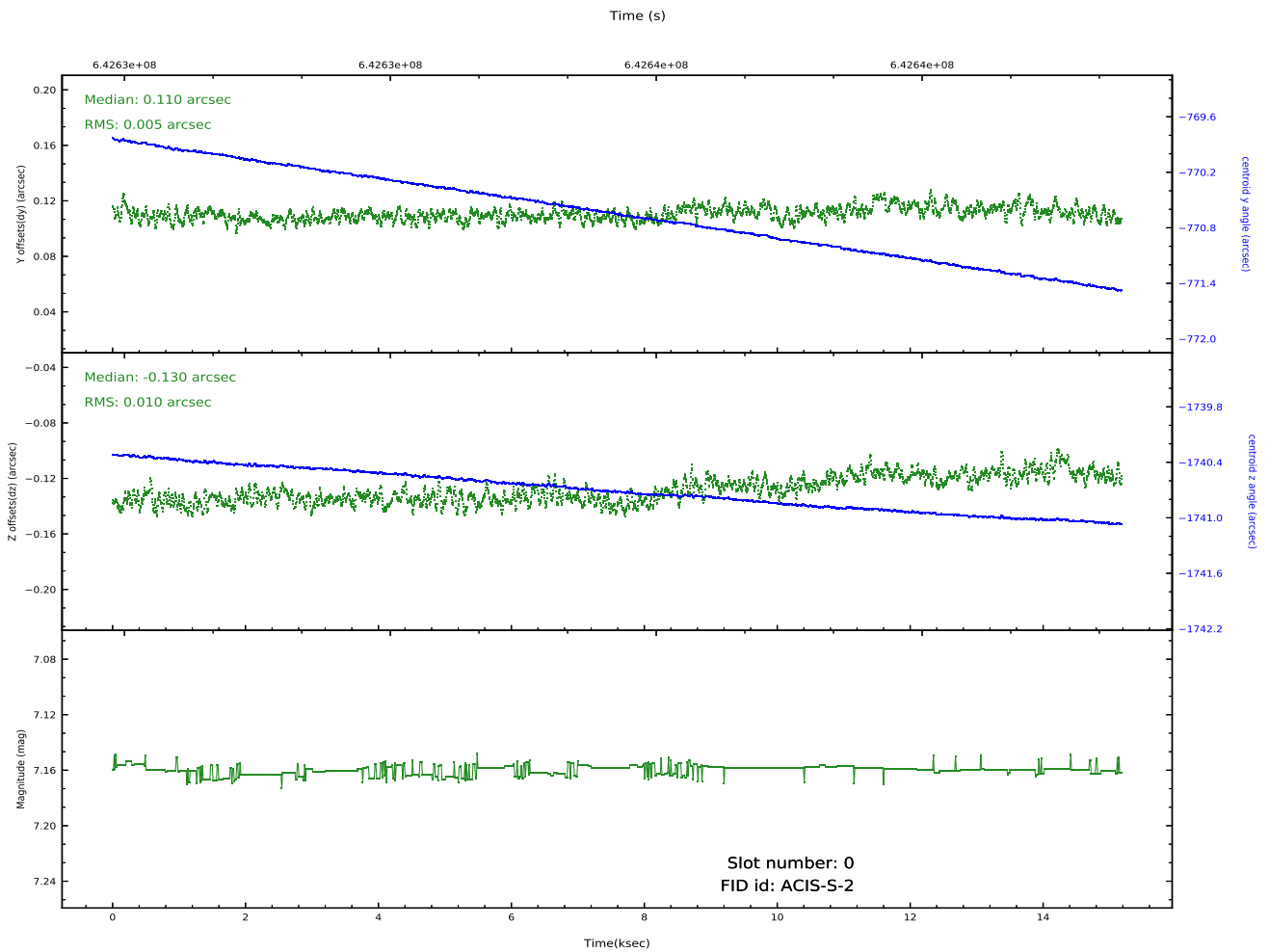
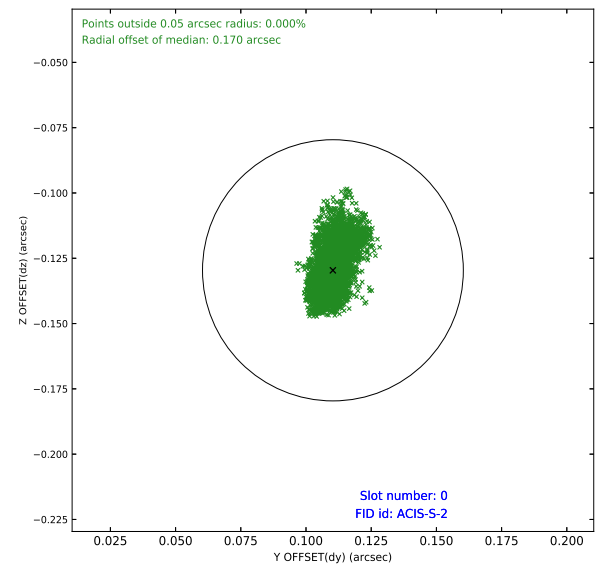
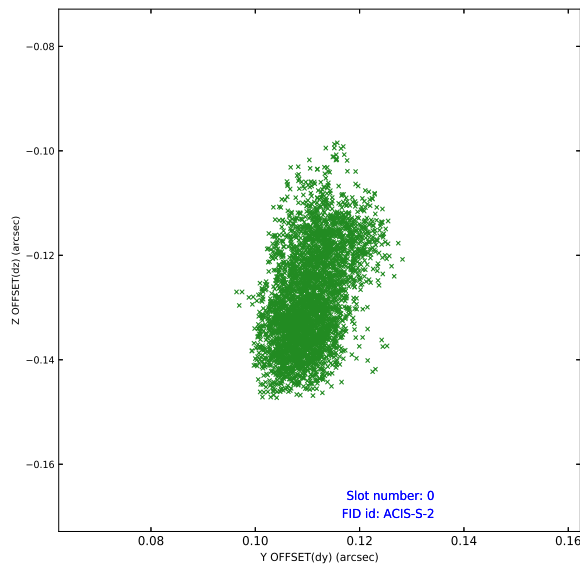


2.4.4 Slot 7

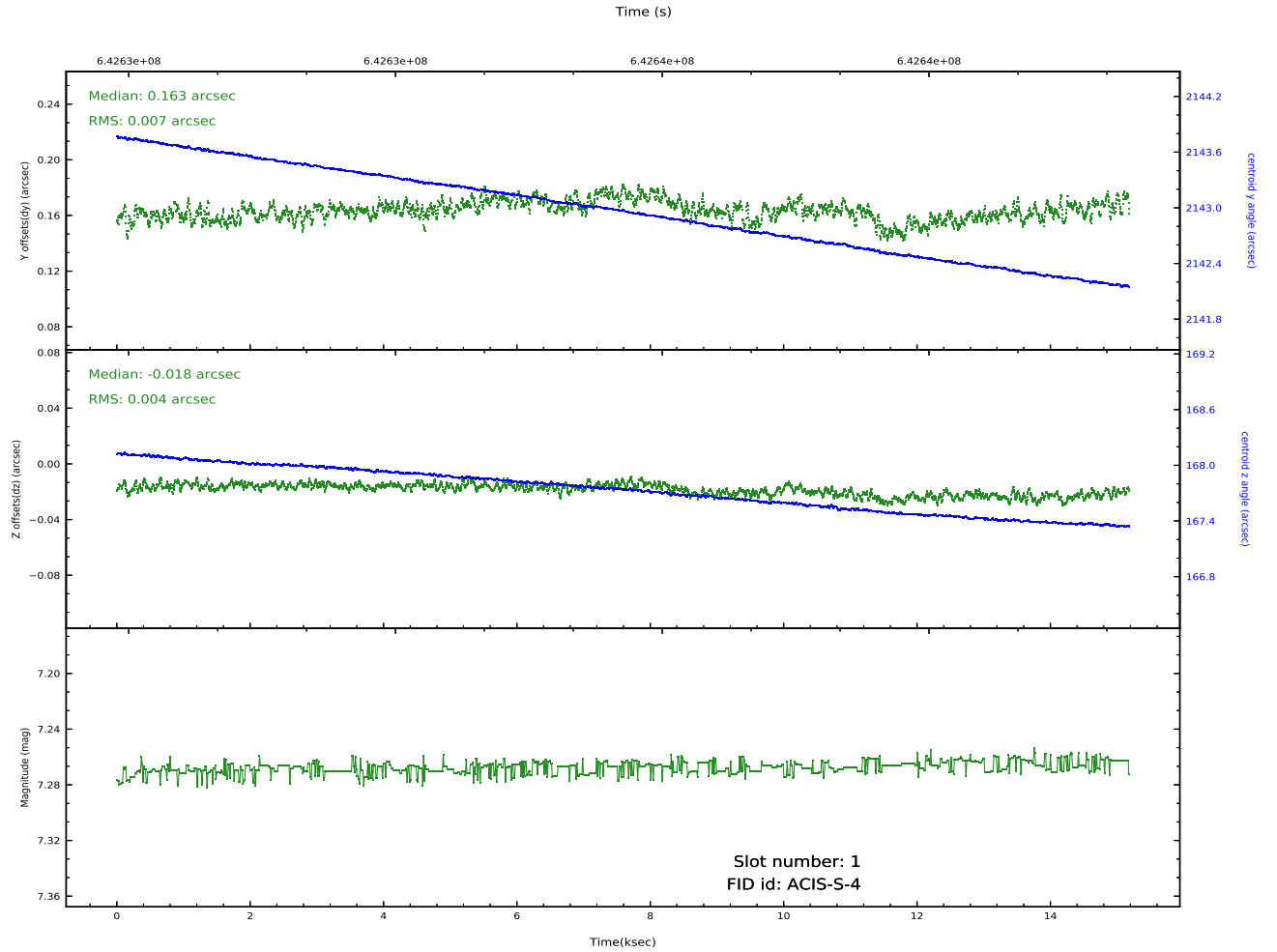
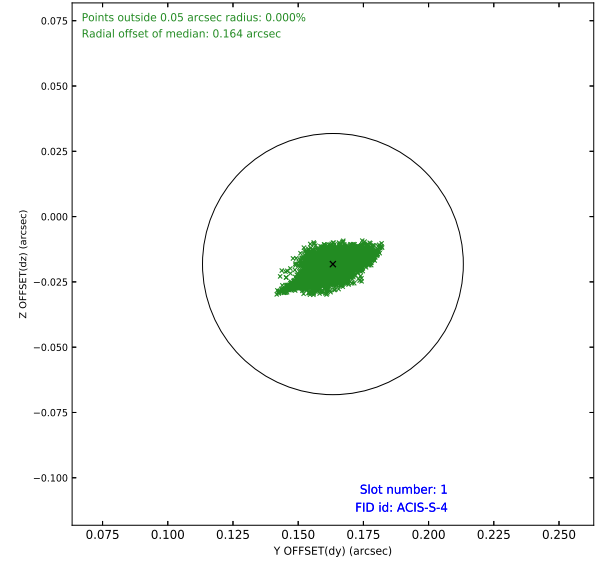
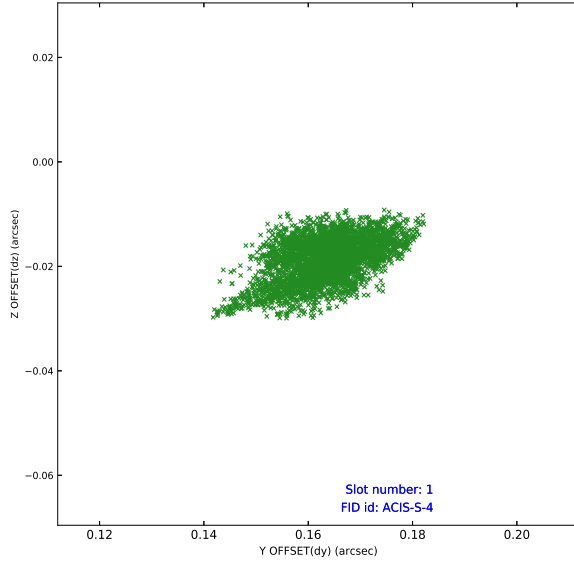


2.5 FID Slots

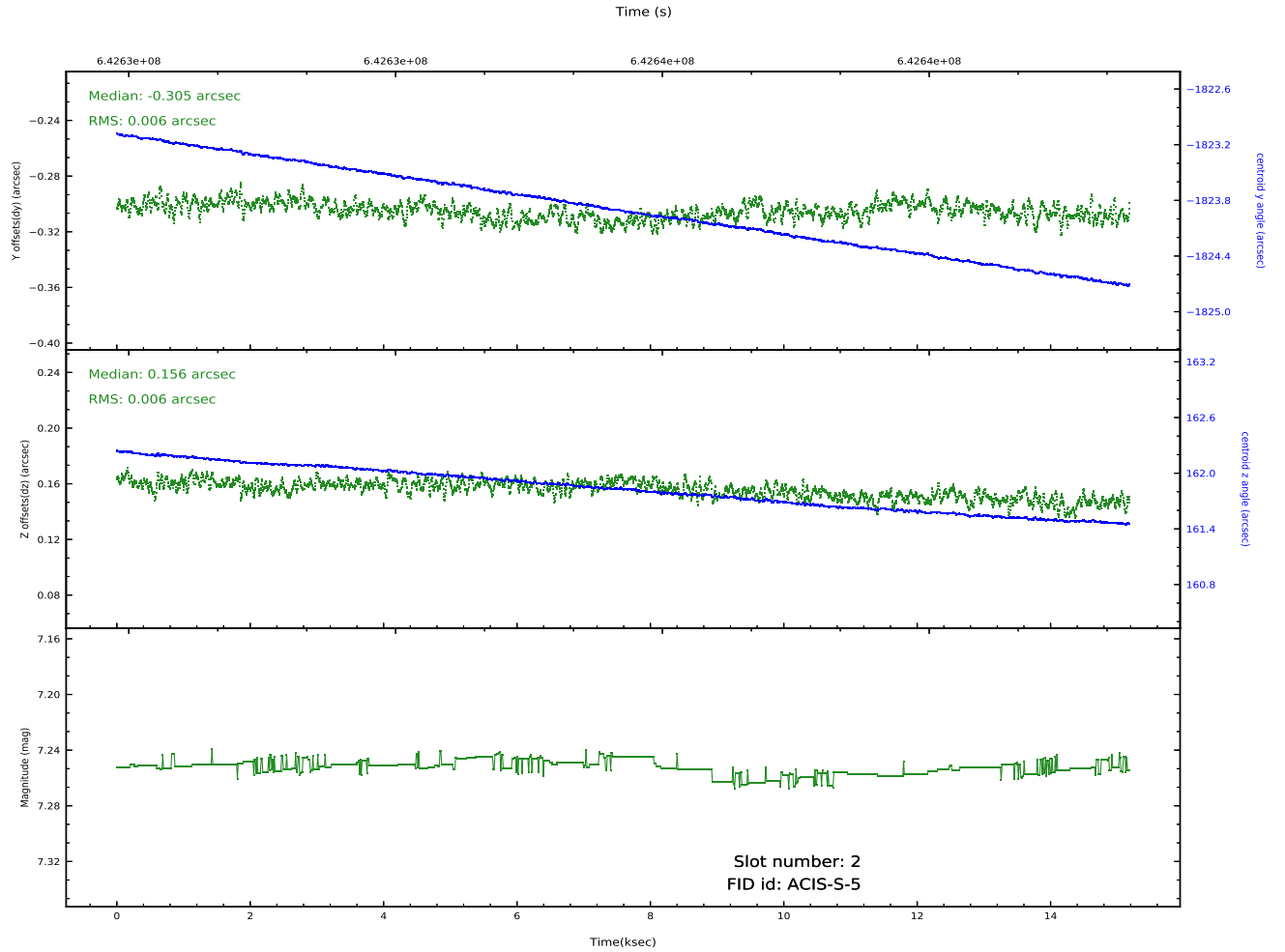
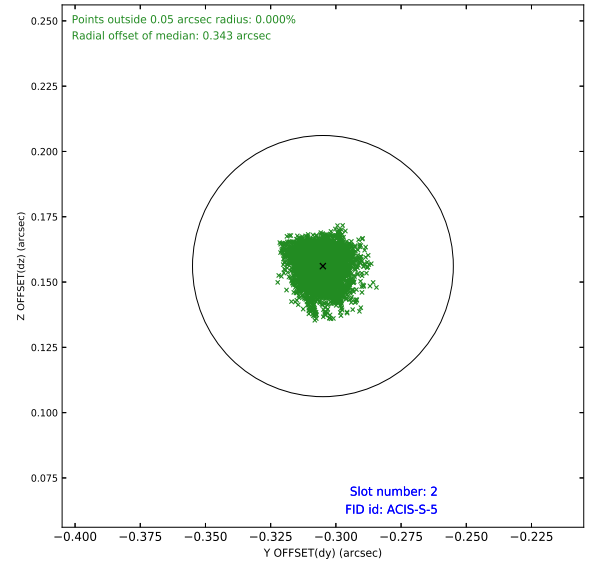
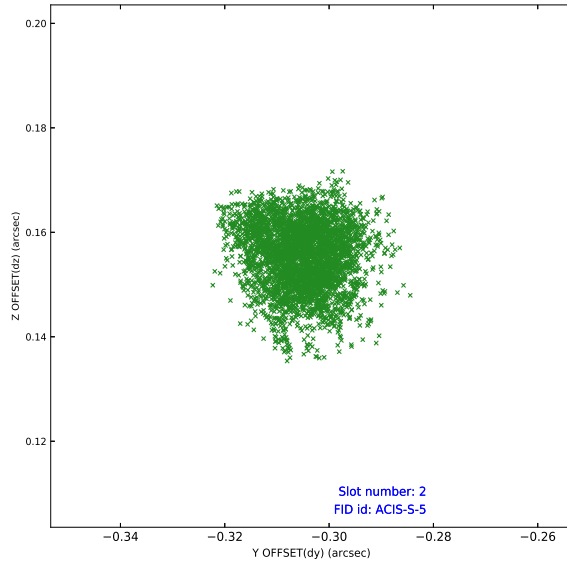
2.5.1 Slot 0



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)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.907900114775

A.2 Comments

The guide star in slot 3 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.