

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19036 - L2 Version 2
Chandra X-Ray Center

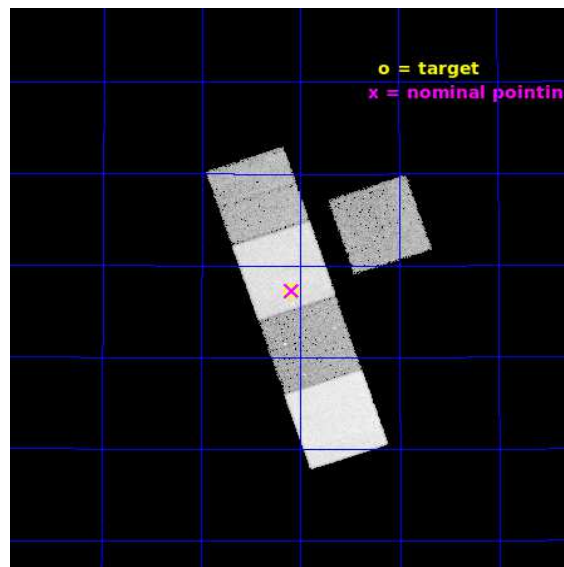
L2 Processing Date : Oct 25 2020

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

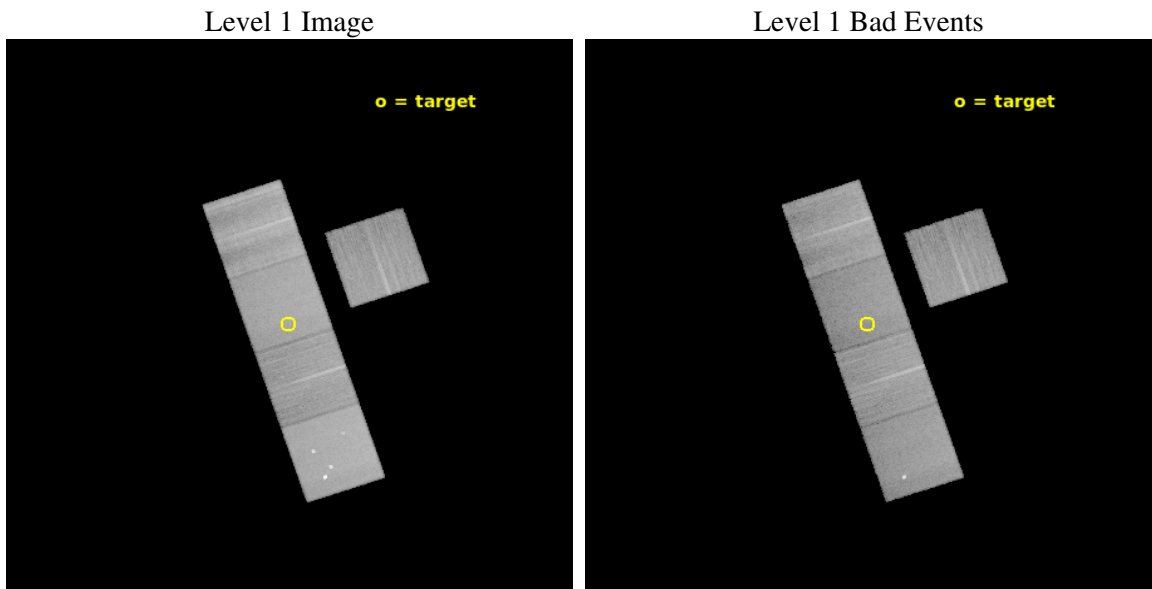
seq_num	502686	Sequence number
obs_id	19036	Observation id
title	Source of Energy and pre-explosion progenitor evolution of Super-luminous Supernovae	Proposal title
observer	RAFFAELLA MARGUTTI	Principal investigator
object	SN2017egm	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	154.773417	Observer's specified target RA [deg]
dec_targ	46.453911	Observer's specified target Dec [deg]
ra_nom	154.77148732469	Nominal RA [deg]
dec_nom	46.454768581466	Nominal Dec [deg]
roll_nom	251.30946827452	Nominal Roll [deg]
revision	2	Processing version of data
ontime	24055.467200279	Sum of GTIs [s]
livetime	23741.16481193	Livetime [s]
ontime3	24052.203110099	Sum of GTIs [s]
ontime5	24055.426160336	Sum of GTIs [s]
ontime6	24049.103249431	Sum of GTIs [s]
ontime7	24055.467200279	Sum of GTIs [s]
ontime8	24045.88018918	Sum of GTIs [s]
l2events	286190	Number of level 2 events



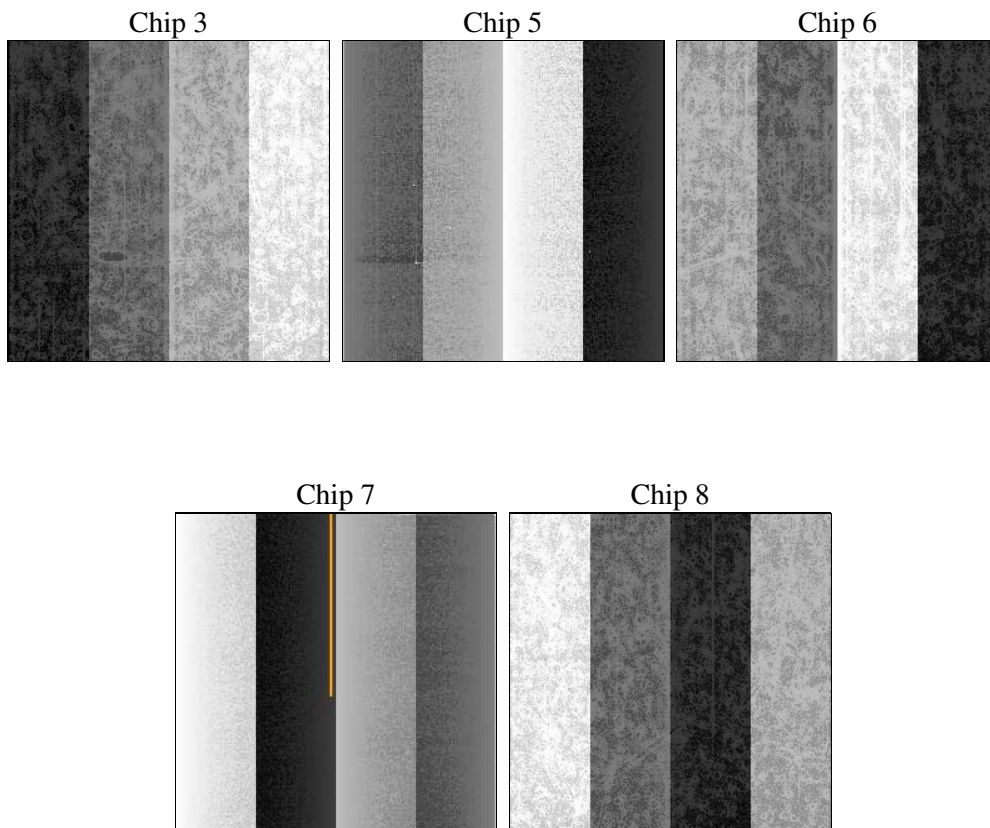
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	24055.467200279	Sum of GTIs [s]
caldbver	4.9.3	 	ontime3	24052.203110099	Sum of GTIs [s]
date	2020-10-26T00:12:09	Date and time of file creation	ontime5	24055.426160336	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	24049.103249431	Sum of GTIs [s]
			ontime7	24055.467200279	Sum of GTIs [s]
			ontime8	24045.88018918	Sum of GTIs [s]
			l1events	1115701	Number of level 1 events

2.1.4 Events

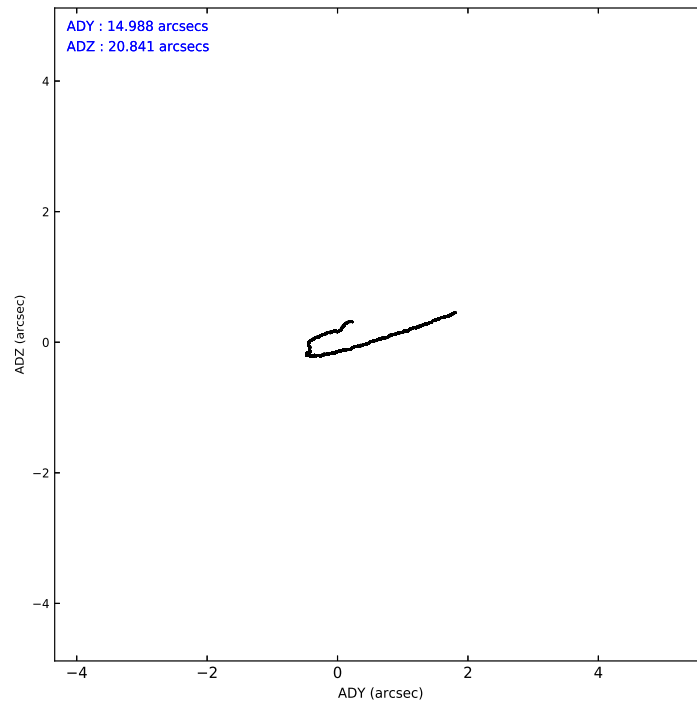
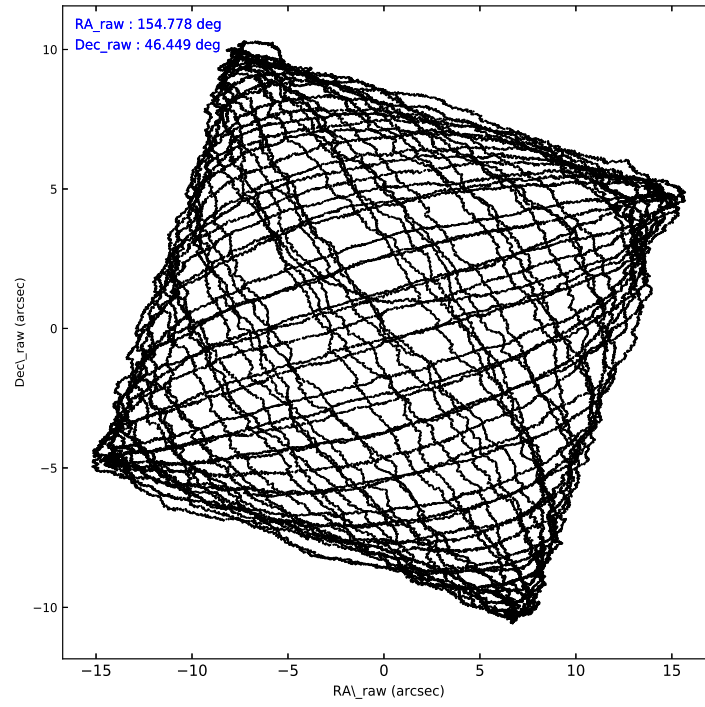
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	169782	291752	184233	228875	241059
rejected events	150445	148018	163652	128330	173384
rejected %	88%	50%	88%	56%	71%

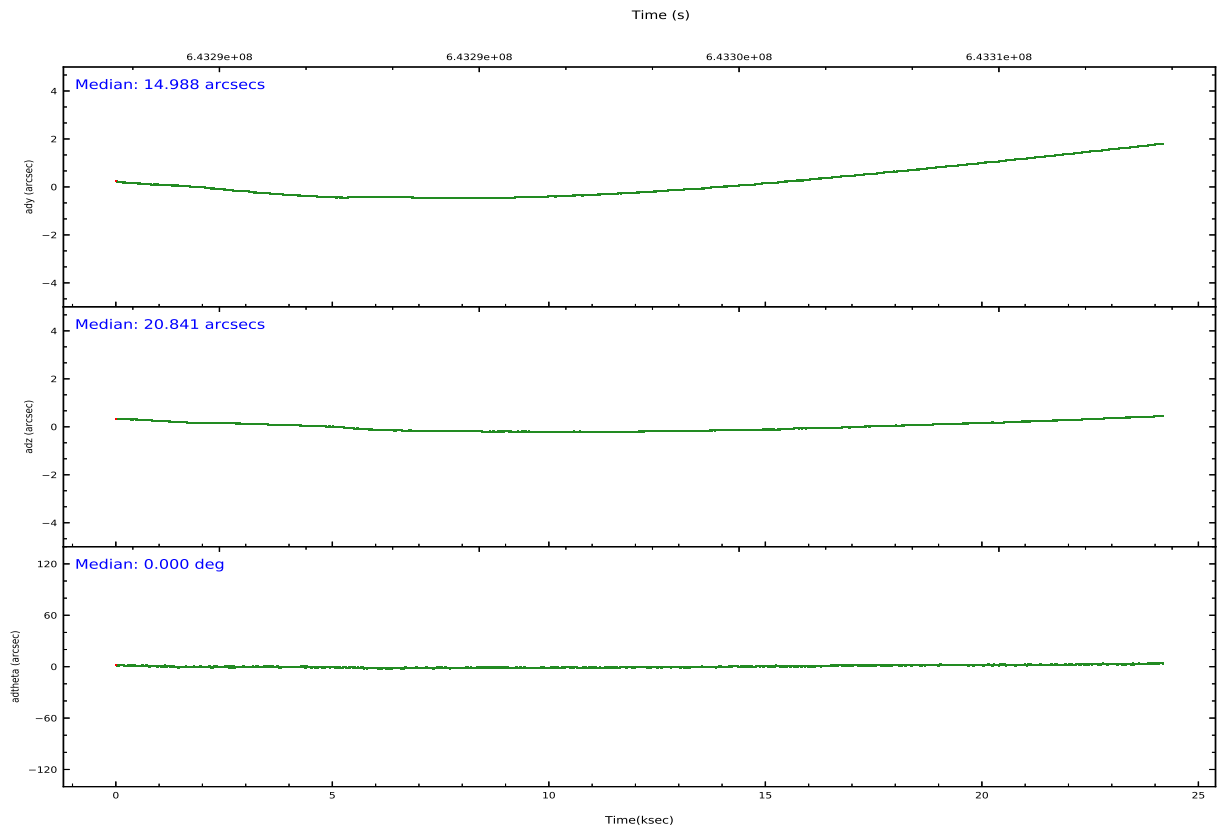
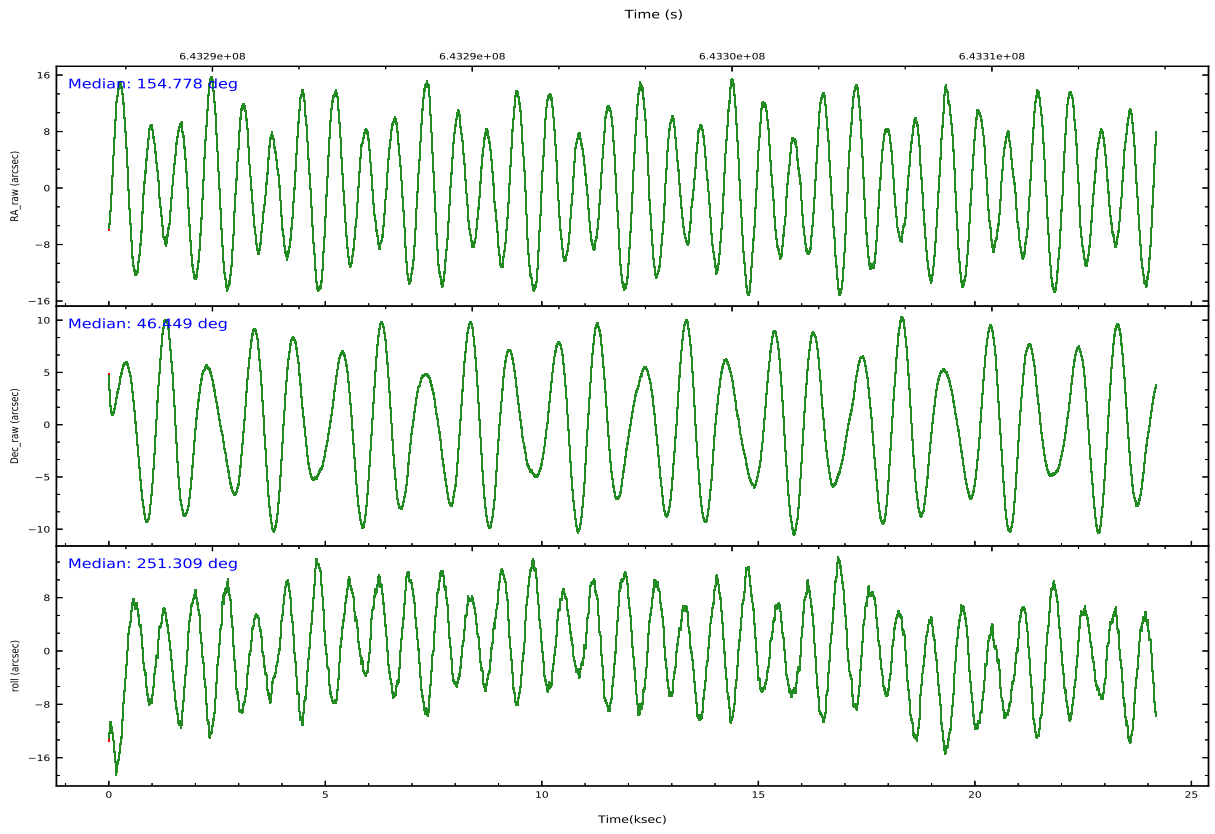
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7392	14053	6977	8643	19692
	4%	4%	3%	3%	8%
grade 1 events	100	570	117	317	200
	0%	0%	0%	0%	0%
grade 2 events	4122	46190	4854	21726	16608
	2%	15%	2%	9%	6%
grade 3 events	1924	4633	1983	8281	6882
	1%	1%	1%	3%	2%
grade 4 events	1925	4334	2026	7923	6480
	1%	1%	1%	3%	2%
grade 5 events	8426	20940	8435	23232	12906
	4%	7%	4%	10%	5%
grade 6 events	3978	74543	4745	53979	18036
	2%	25%	2%	23%	7%
grade 7 events	141915	126489	155096	104774	160255
	83%	43%	84%	45%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	154.769356	154.77148732469	CCD I2 on	N	N
[deg] Pointing Dec	46.475488	46.454768581466	CCD I3 on	O1	Y
[deg] Pointing Roll	251.165839	251.30946827452	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	643285792.184000	643284523.2299	CCD S5 on	N	N
Observation start date	2018-05-21T10:28:43	2018-05-21T10:08:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	643309792.184000	643310647.91895	On-chip summing requested	N	N
Observation end date	2018-05-21T17:08:43	2018-05-21T17:24:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





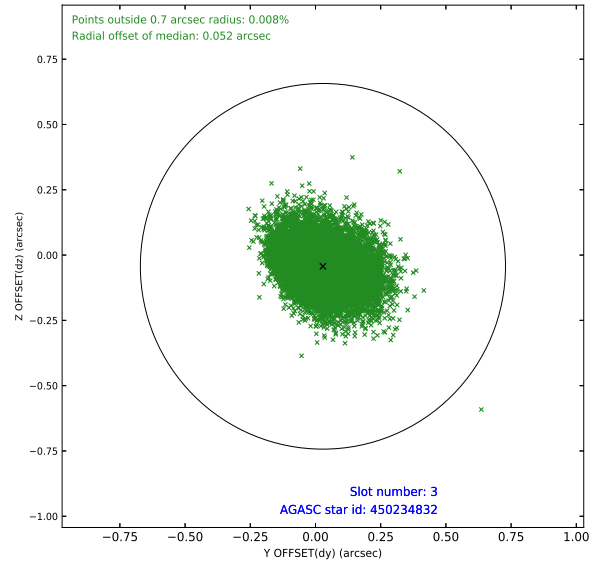
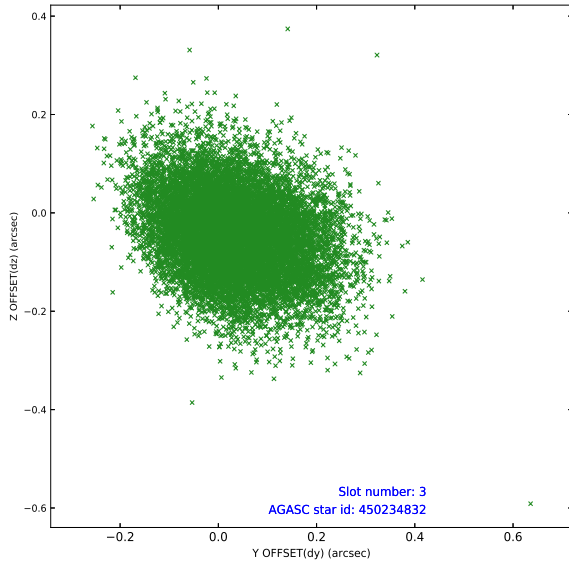
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.07	5900	1.000	0.212	-0.111	0.011	0.042	0.000000	0.000000	927.90	-1738
1	FID		ACIS-S-4	7.10	5900	1.000	0.061	-0.021	0.019	0.048	0.000000	0.000000	2145.40	165
2	FID		ACIS-S-5	7.09	5898	1.000	-0.297	0.143	0.017	0.027	0.000000	0.000000	-1821.13	160
3	GUIDE	used	450234832	8.54	11794	1.000	0.029	-0.043	0.136	0.223	154.248271	46.789392	-656.10	-1581
4	GUIDE	used	450237528	9.31	11786	1.000	0.043	0.044	0.217	0.338	155.230965	45.962739	1371.08	1688
5	GUIDE	used	450238440	7.59	11798	1.000	-0.265	0.032	0.123	0.212	155.317530	46.245836	337.61	1557
6	GUIDE	used	450238744	7.35	11796	1.000	-0.111	-0.139	0.122	0.203	154.081514	46.954078	-1091.50	-2158
7	GUIDE	used	450239752	8.83	11719	1.000	0.315	0.097	0.144	0.235	155.271541	45.685964	2279.18	2112

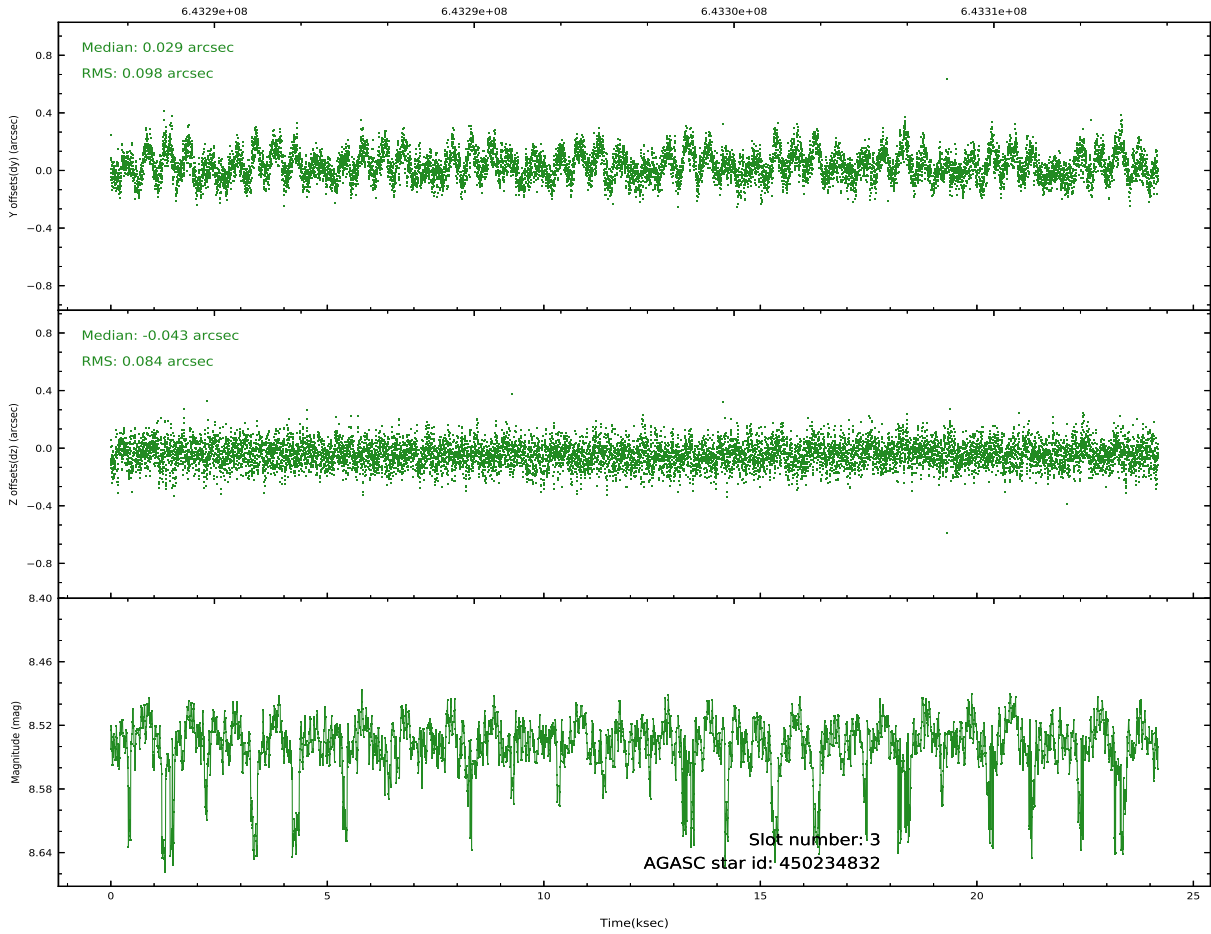
∞

2.4 Star Slots

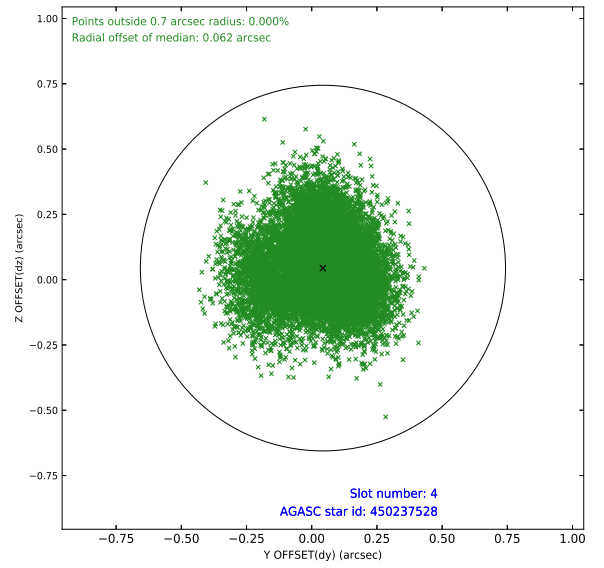
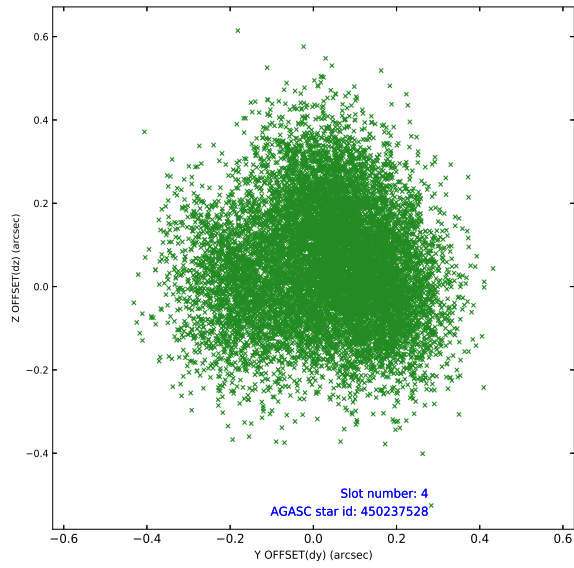
2.4.1 Slot 3



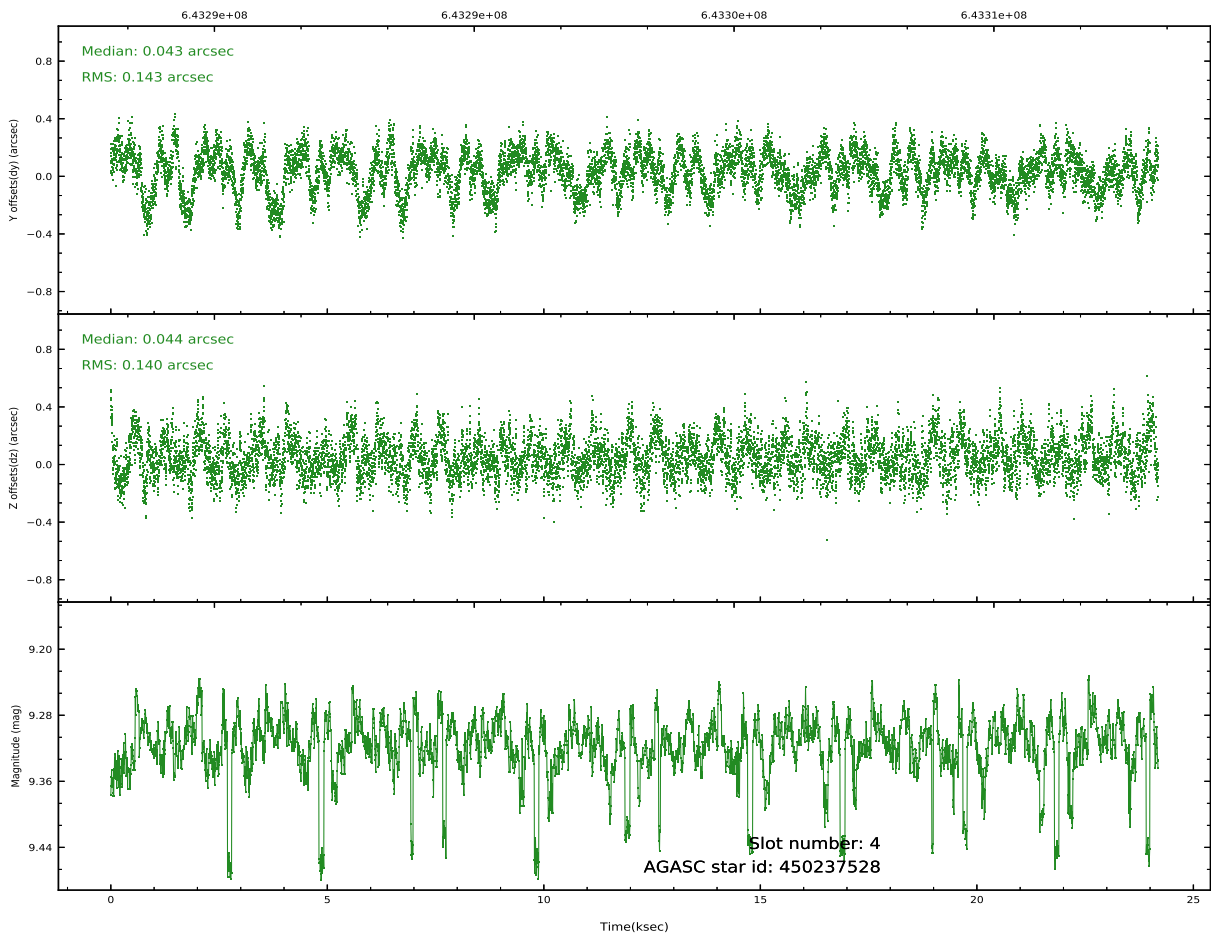
Time (s)



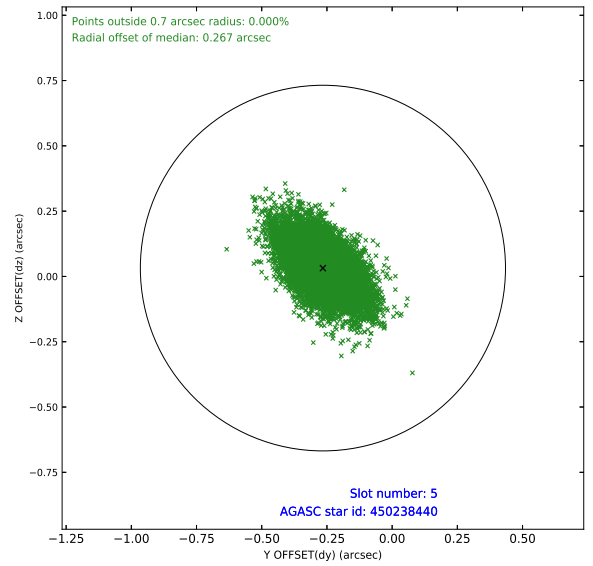
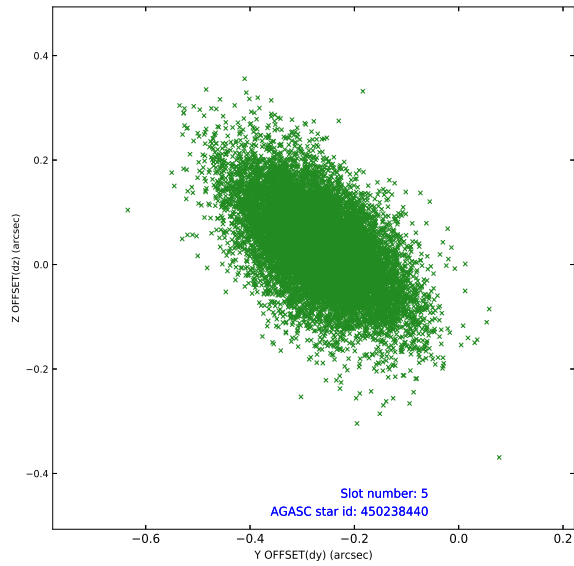
2.4.2 Slot 4



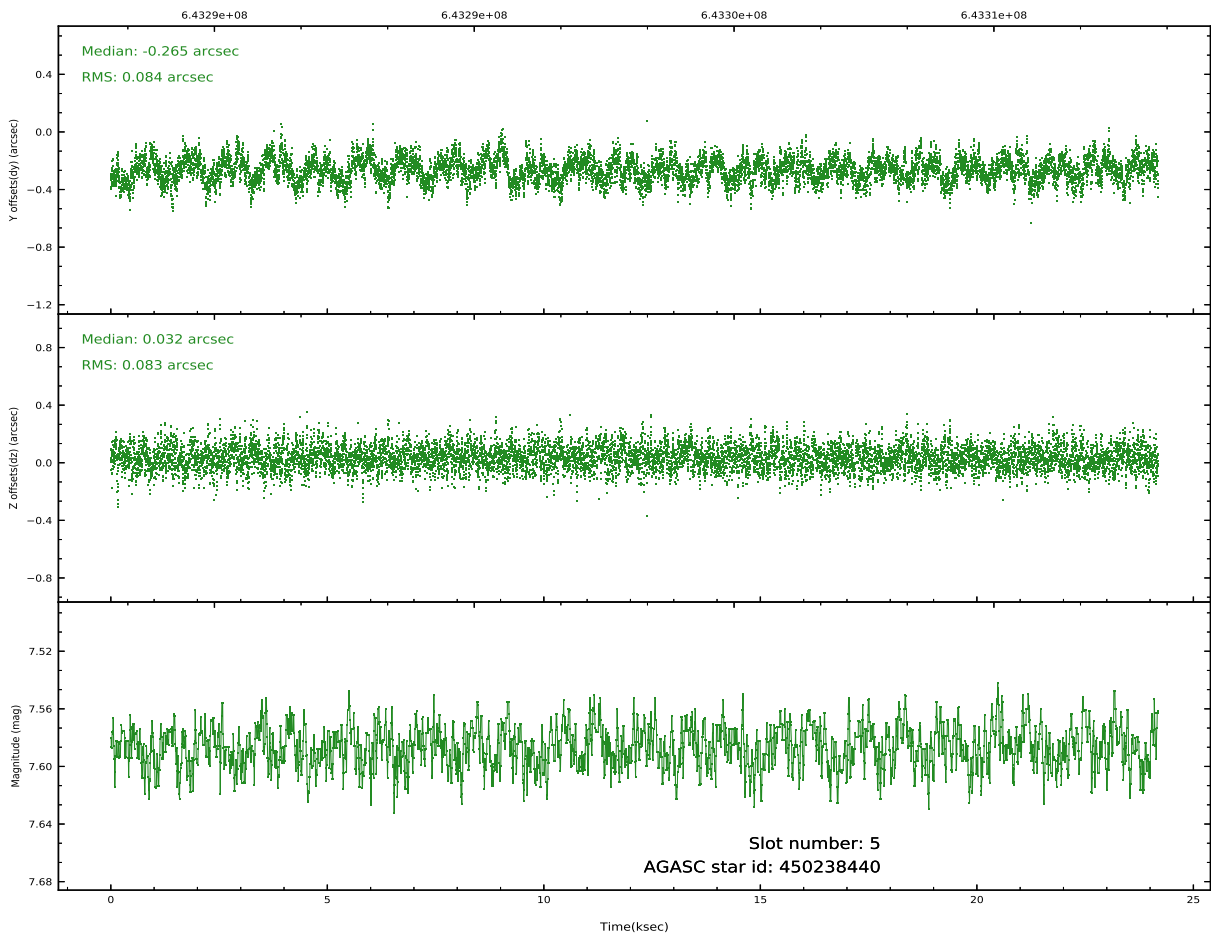
Time (s)



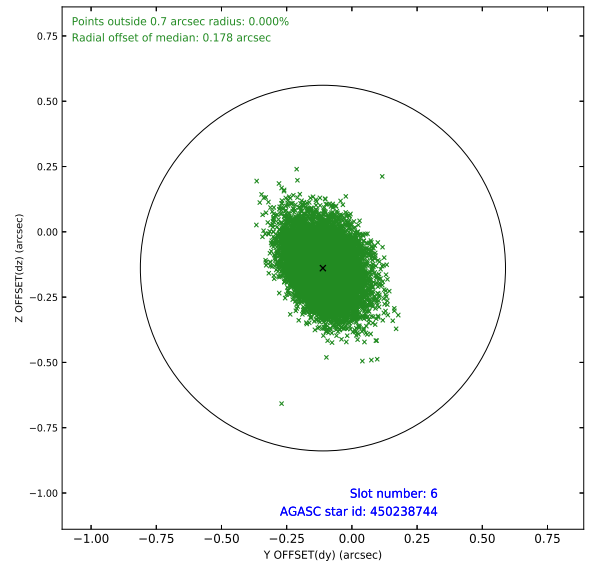
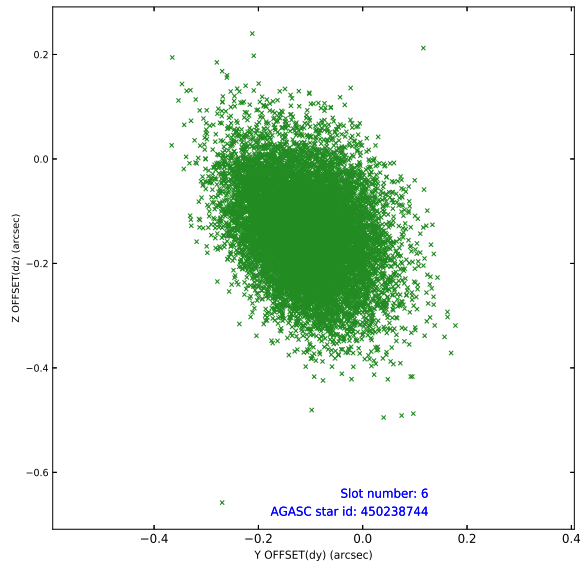
2.4.3 Slot 5



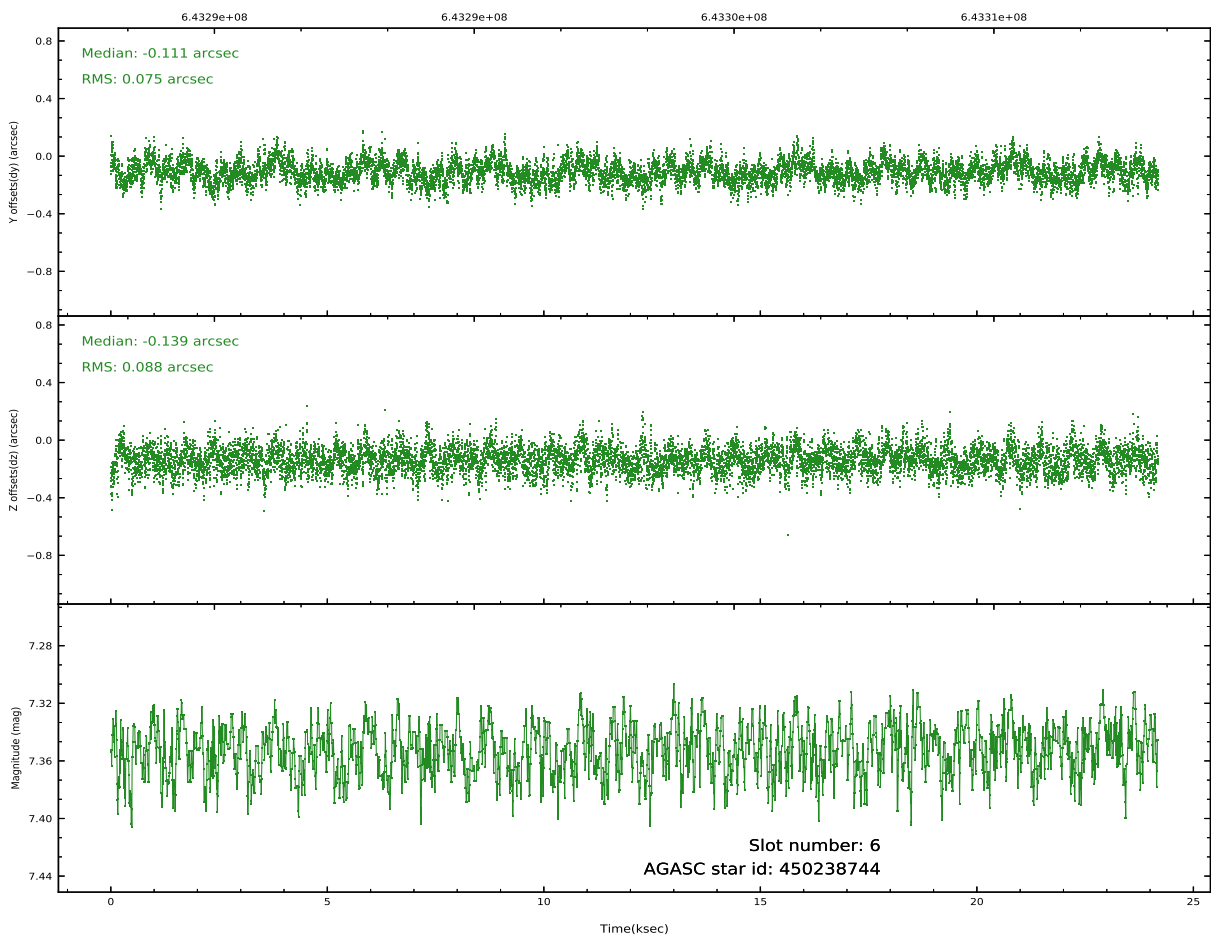
Time (s)



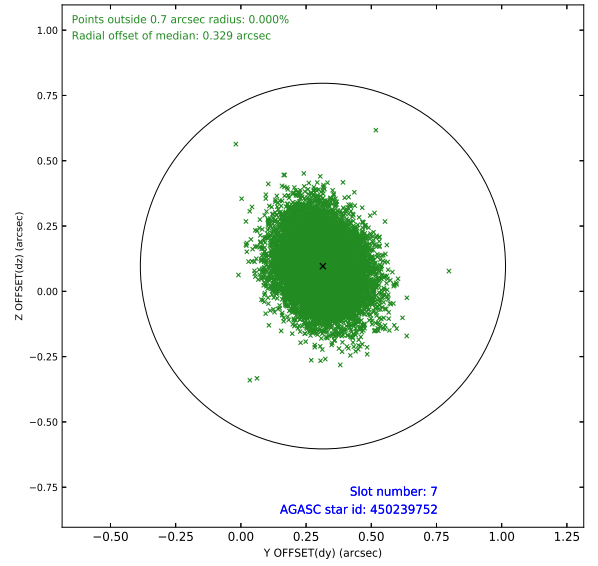
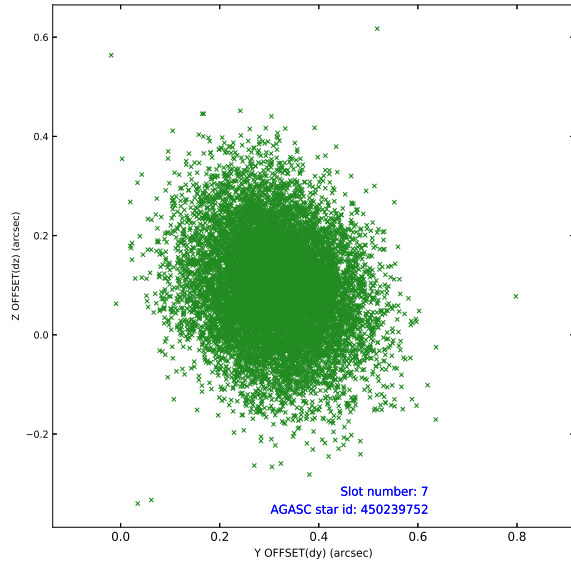
2.4.4 Slot 6



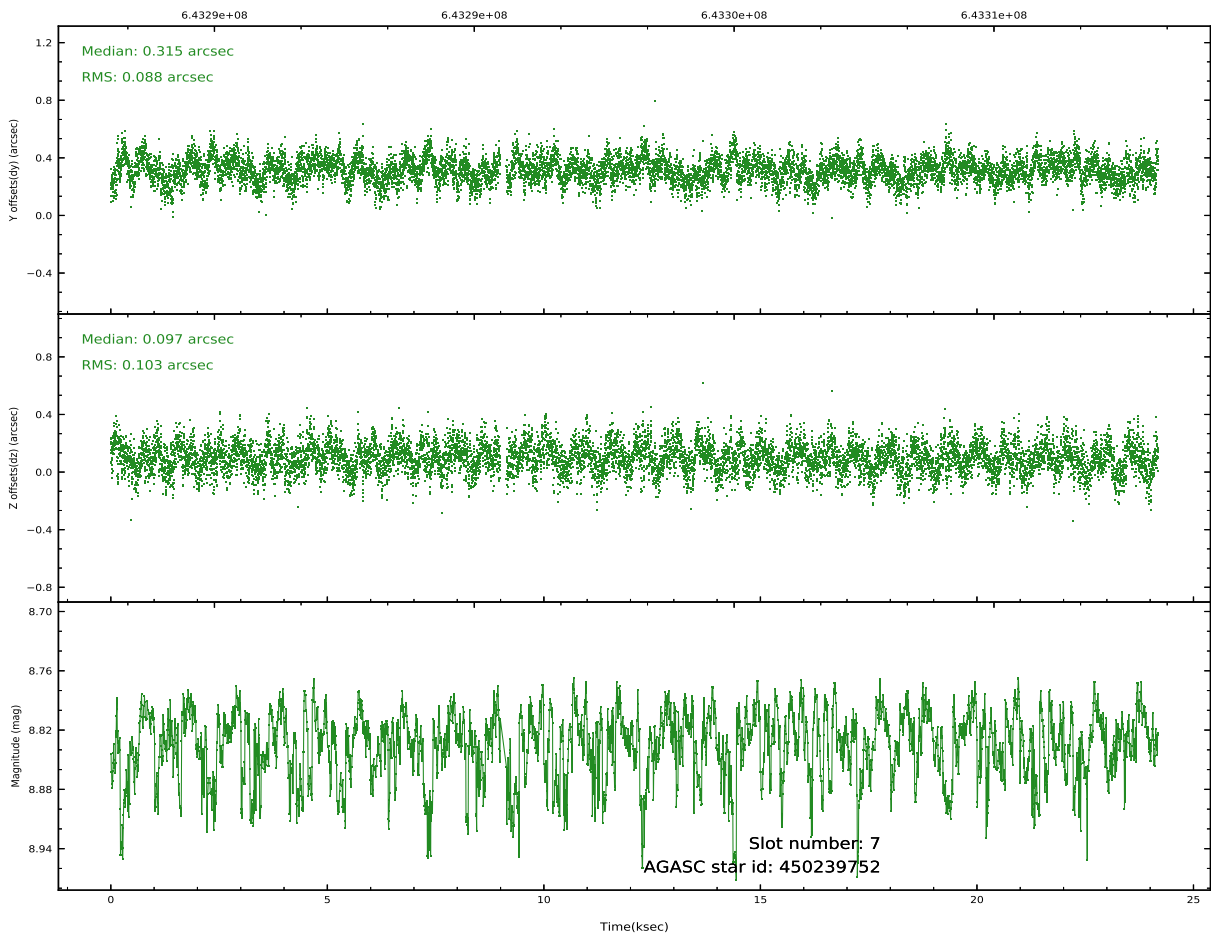
Time (s)



2.4.5 Slot 7

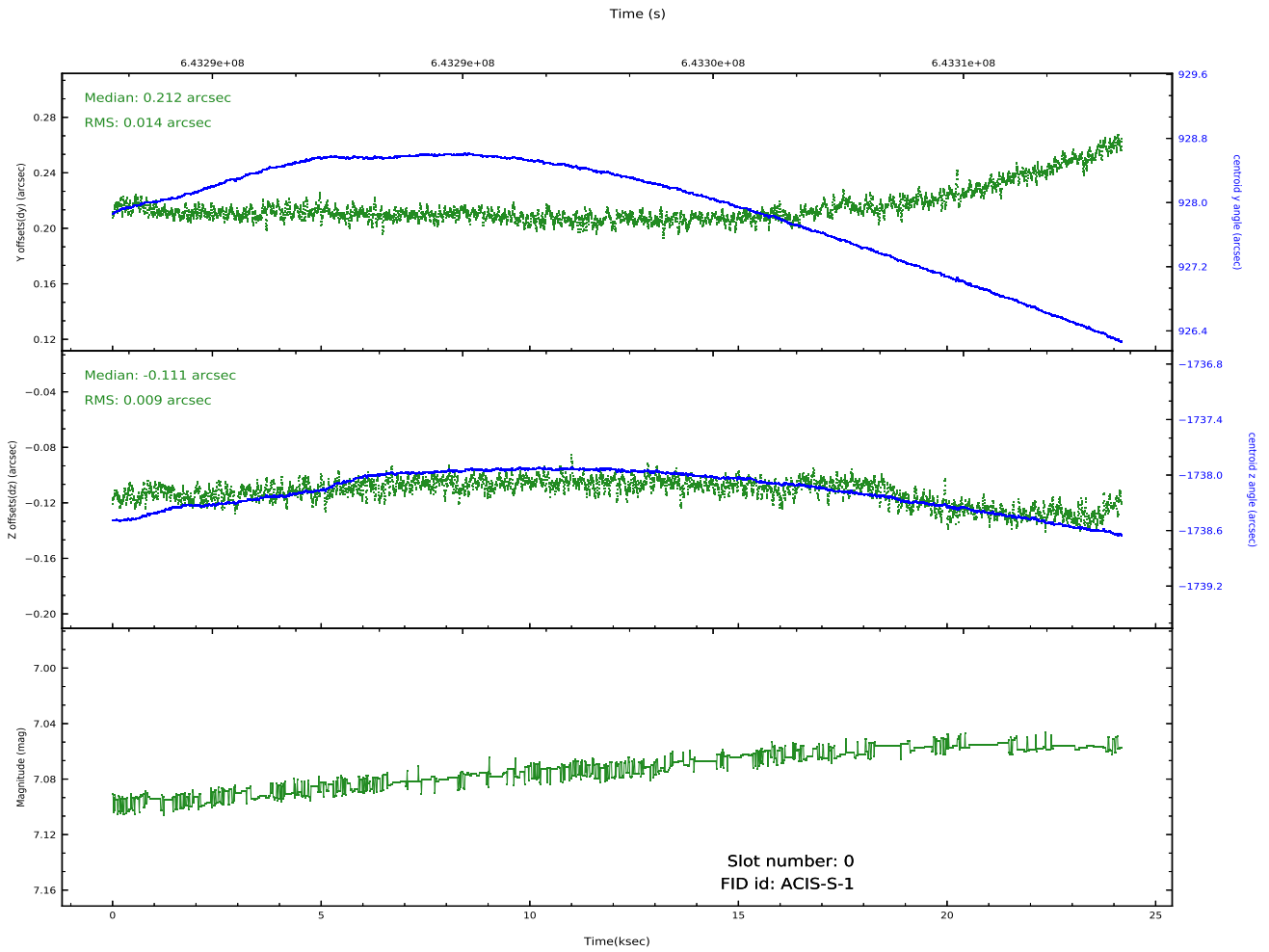
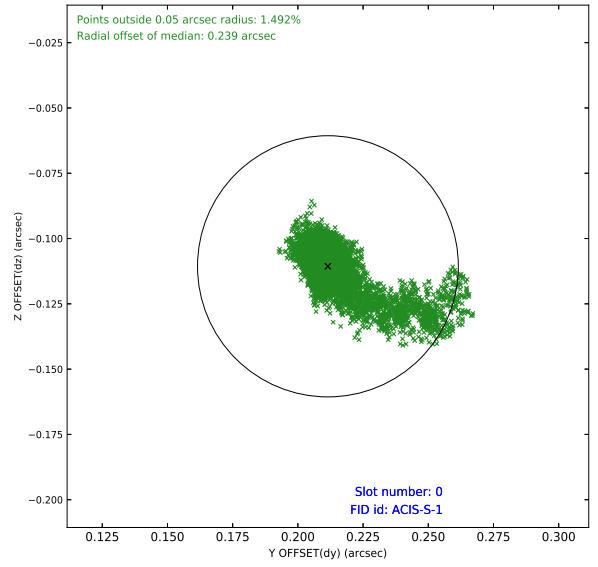
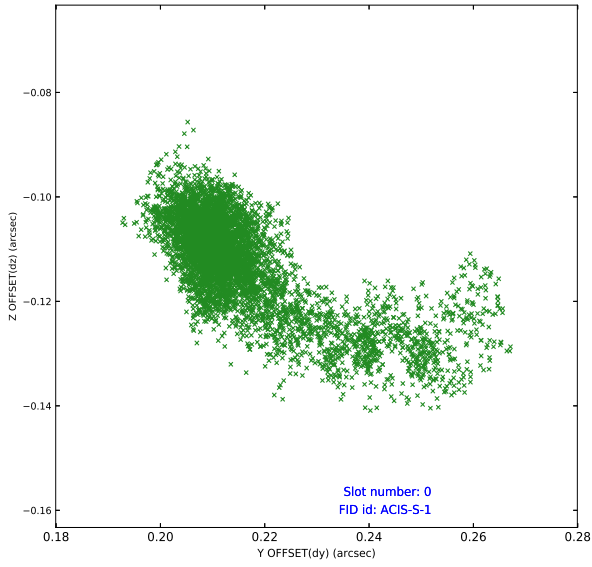


Time (s)

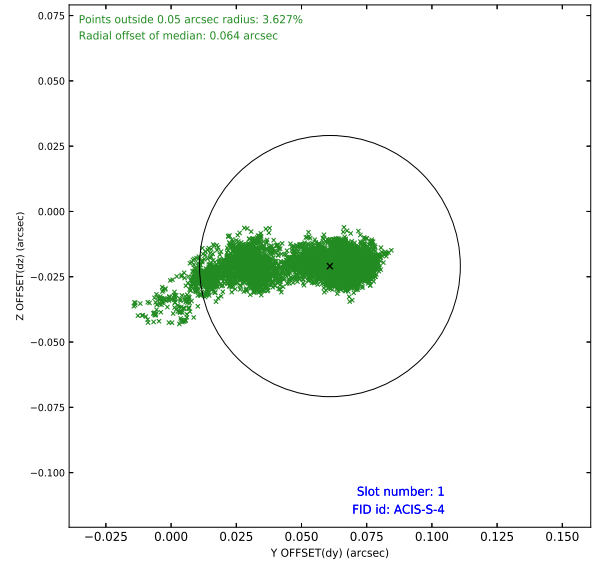
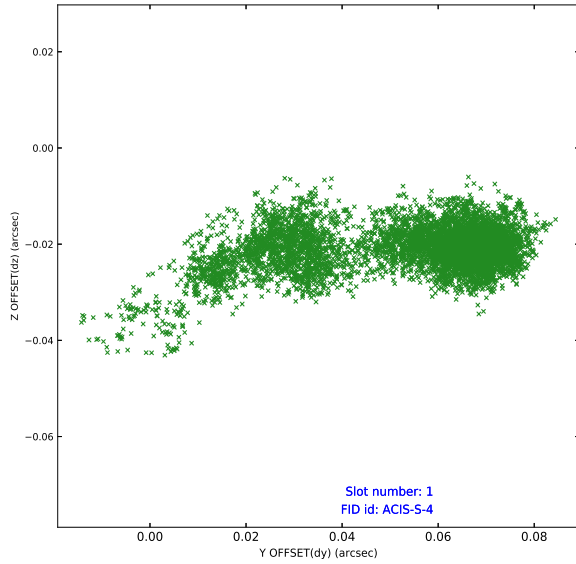


2.5 FID Slots

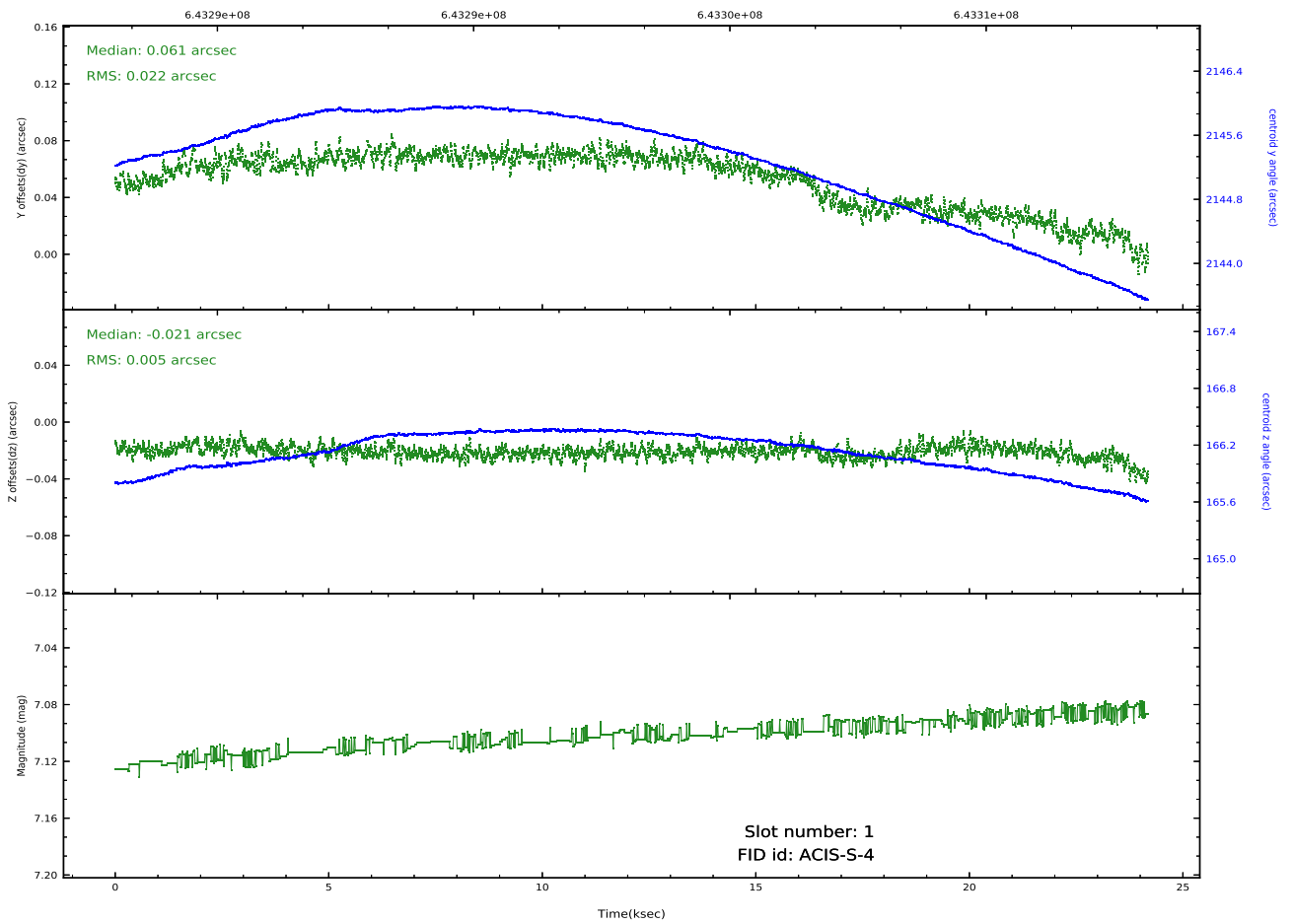
2.5.1 Slot 0



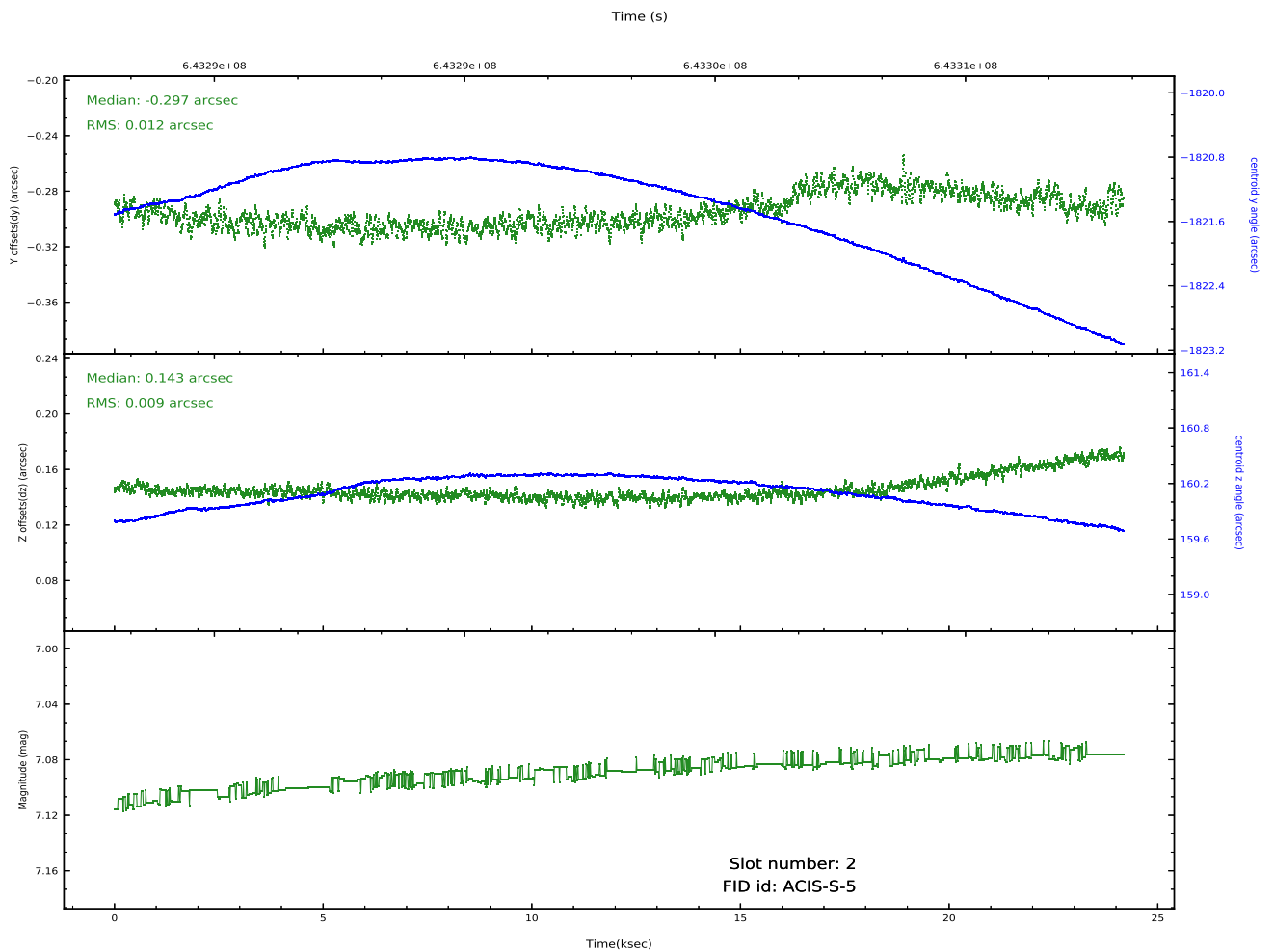
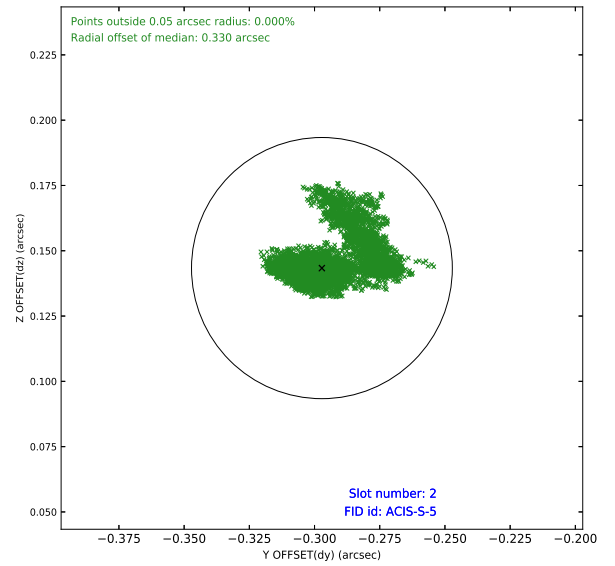
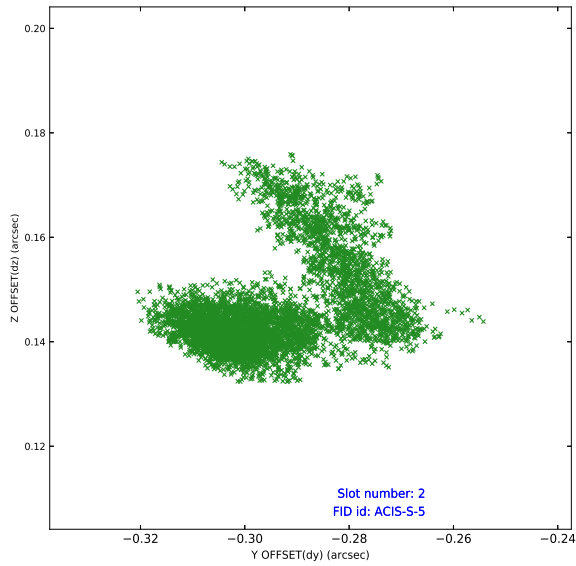
2.5.2 Slot 1



Time (s)



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	24.055467206836

A.2 Comments