

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20290 - L2 Version 2
Chandra X-Ray Center

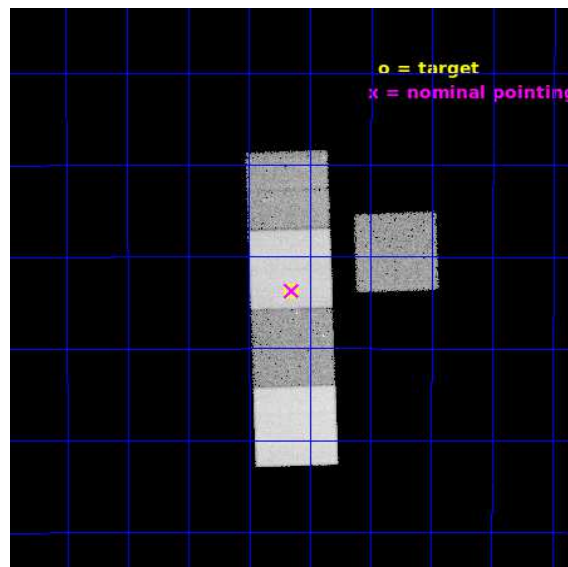
L2 Processing Date : Oct 27 2020

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1 Front

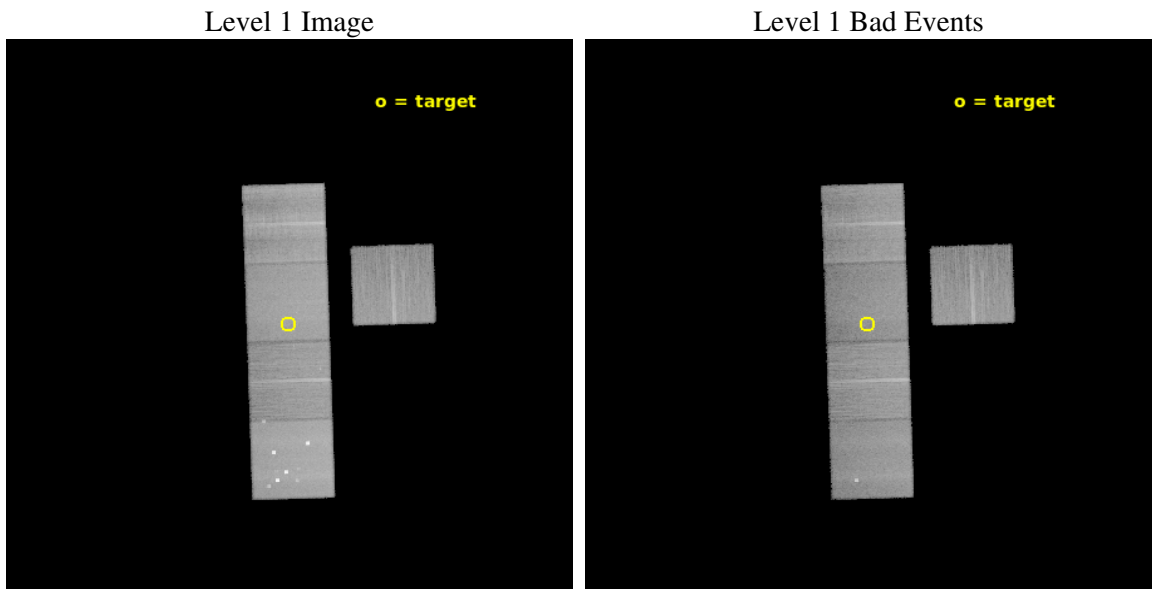
seq_num	502989	Sequence number
obs_id	20290	Observation id
title	Source of Energy and pre-explosion progenitor evolution of Super-luminous Supernovae	Proposal title
observer	RAFFAELLA MARGUTTI	Principal investigator
object	SN2018bsz	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	242.413333	Observer's specified target RA [deg]
dec_targ	-32.062561	Observer's specified target Dec [deg]
ra_nom	242.41205852607	Nominal RA [deg]
dec_nom	-32.061759909507	Nominal Dec [deg]
roll_nom	268.14501811442	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26263.200202107	Sum of GTIs [s]
liveltime	25920.05215678	Livetime [s]
ontime3	26260.05913198	Sum of GTIs [s]
ontime5	26263.200202107	Sum of GTIs [s]
ontime6	26260.059141874	Sum of GTIs [s]
ontime7	26263.200202107	Sum of GTIs [s]
ontime8	26256.917991281	Sum of GTIs [s]
l2events	313591	Number of level 2 events



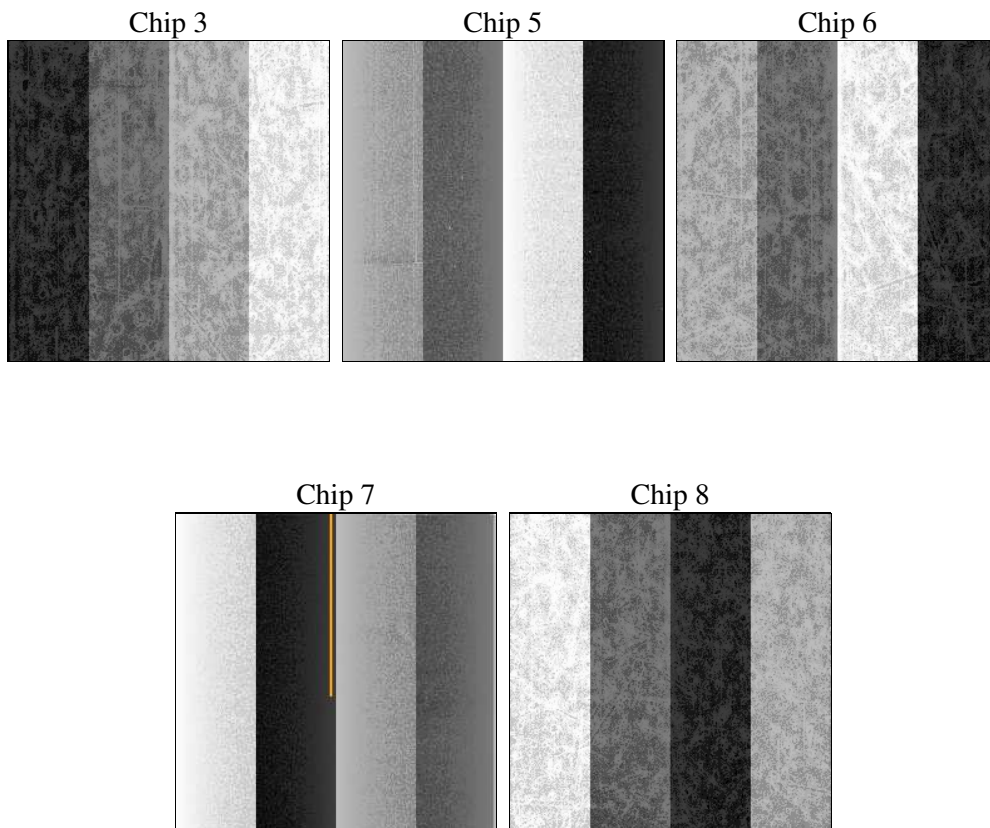
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26213.882000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	26263.200202107	Sum of GTIs [s]
caldbver	4.9.3	 	ontime3	26260.05913198	Sum of GTIs [s]
date	2020-10-27T05:27:11	Date and time of file creation	ontime5	26263.200202107	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	26260.059141874	Sum of GTIs [s]
			ontime7	26263.200202107	Sum of GTIs [s]
			ontime8	26256.917991281	Sum of GTIs [s]
			l1events	1285157	Number of level 1 events

2.1.4 Events

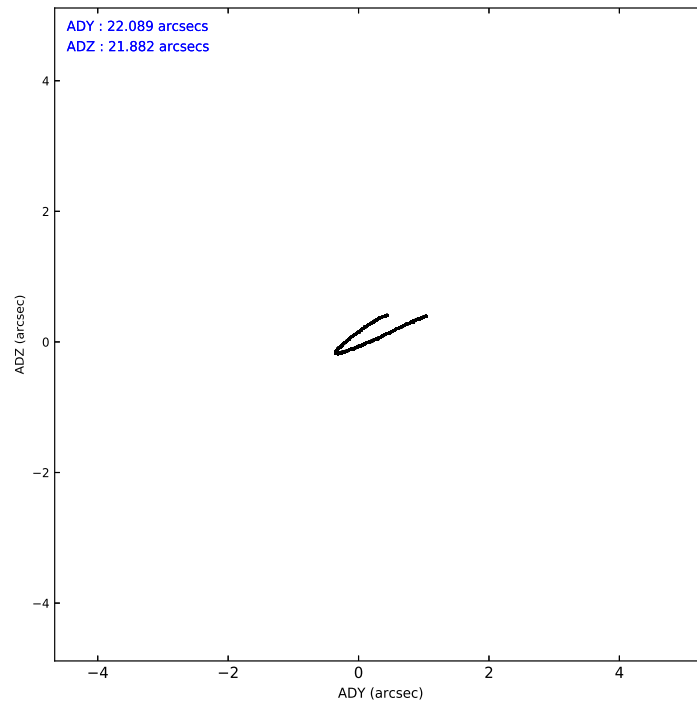
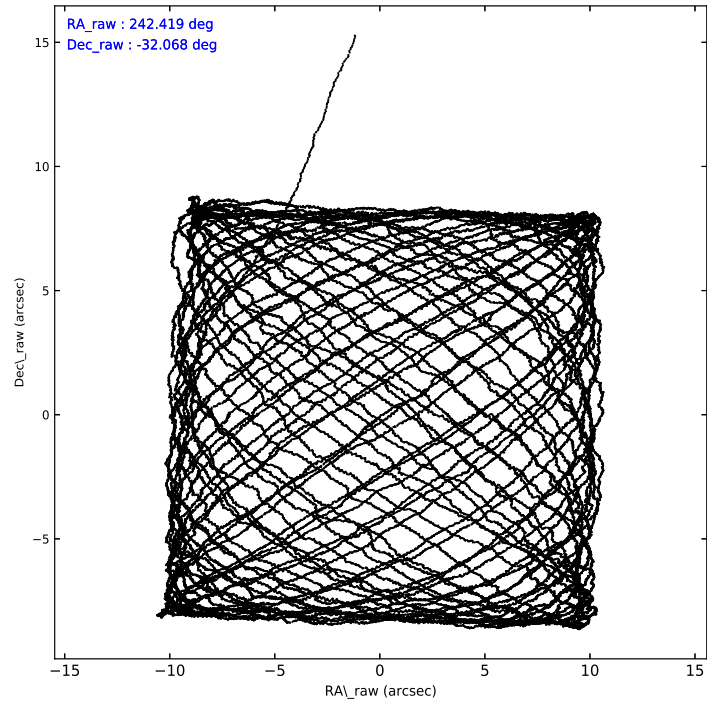
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	198971	351735	211714	258318	264419
rejected events	178734	168781	188519	146969	196786
rejected %	89%	47%	89%	56%	74%

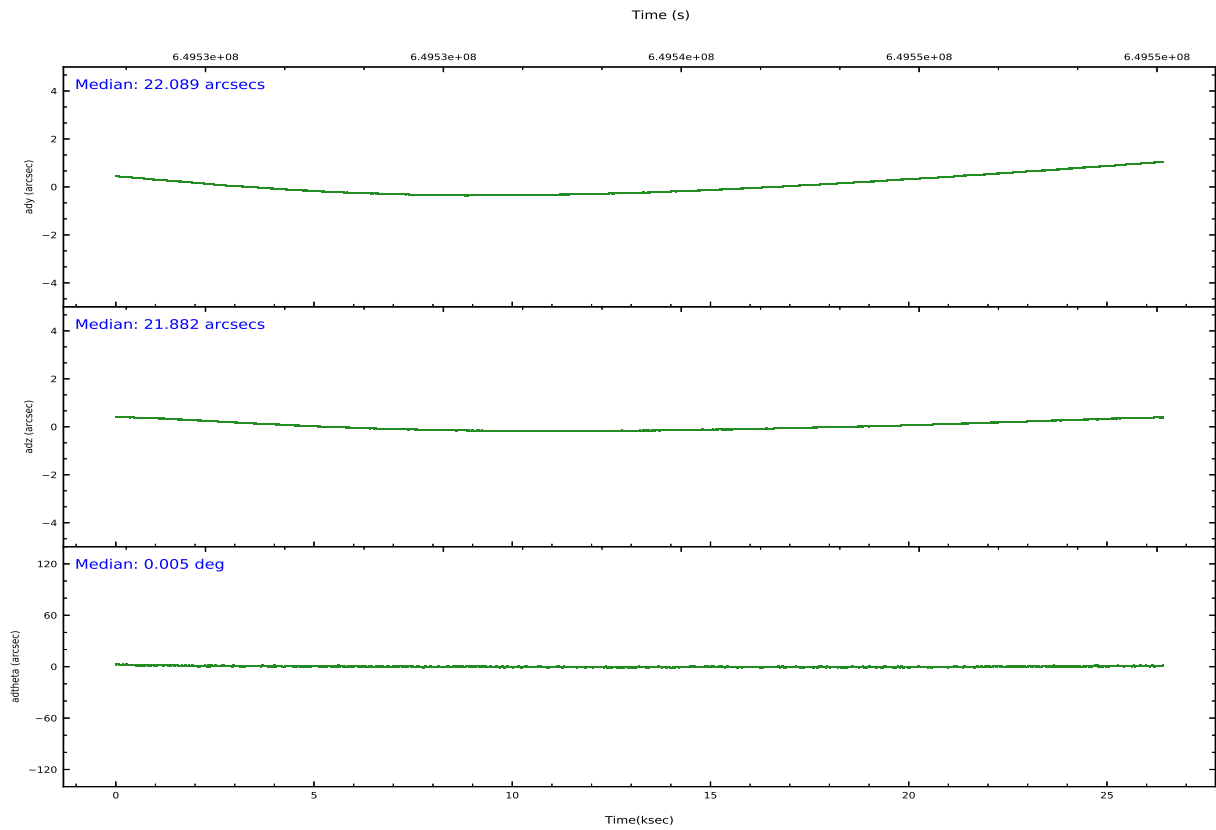
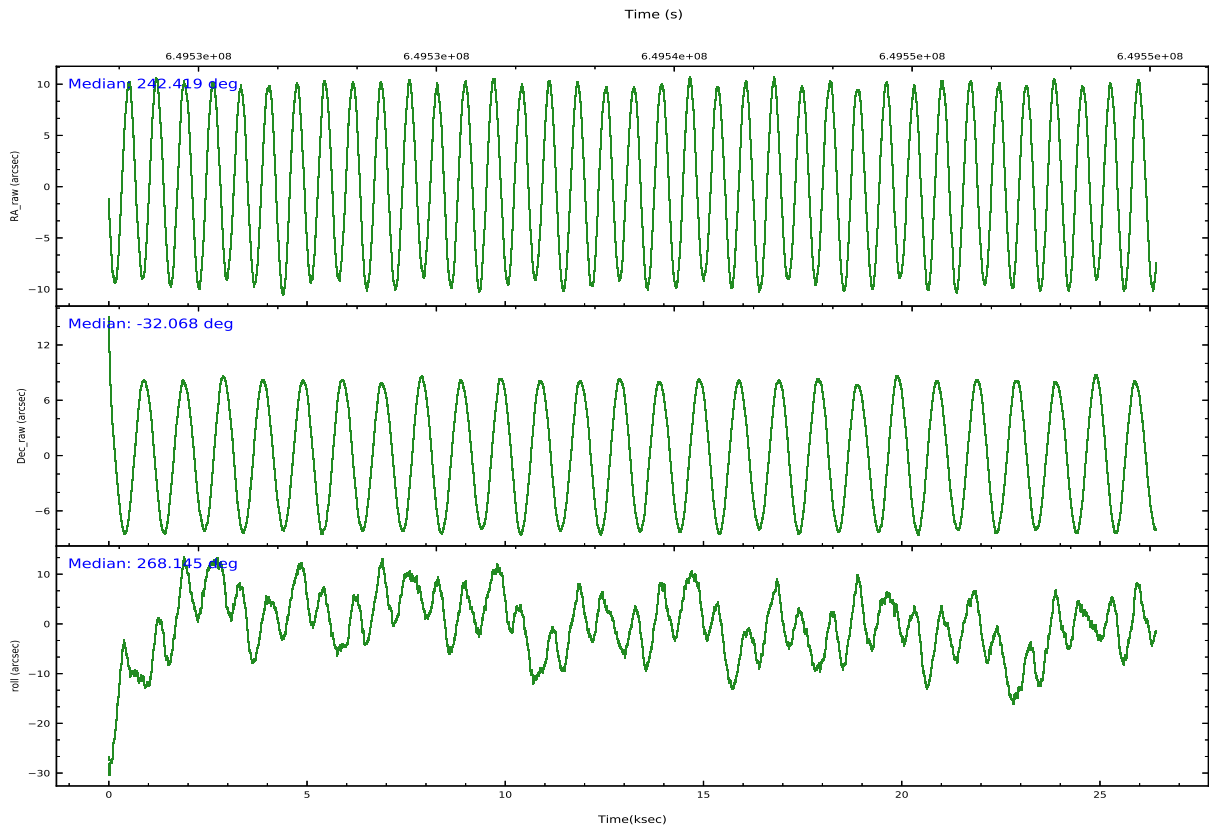
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7164	35293	7543	9231	18808
	3%	10%	3%	3%	7%
grade 1 events	104	2856	99	377	195
	0%	0%	0%	0%	0%
grade 2 events	4347	53127	5763	23403	16564
	2%	15%	2%	9%	6%
grade 3 events	2160	4720	2058	8643	6958
	1%	1%	0%	3%	2%
grade 4 events	2057	4484	2054	8577	6417
	1%	1%	0%	3%	2%
grade 5 events	9077	20601	8835	25283	13997
	4%	5%	4%	9%	5%
grade 6 events	4509	85348	5780	61505	18894
	2%	24%	2%	23%	7%
grade 7 events	169553	145306	179582	121299	182586
	85%	41%	84%	46%	69%

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	242.403645	242.41205852607	CCD I2 on	N	N
[deg] Pointing Dec	-32.044304	-32.061759909507	CCD I3 on	O1	Y
[deg] Pointing Roll	267.994857	268.14501811442	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	649525941.184000	649524821.99931	CCD S5 on	N	N
Observation start date	2018-08-01T15:51:12	2018-08-01T15:33:41	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	649552155.184000	649552816.28847	On-chip summing requested	N	N
Observation end date	2018-08-01T23:08:06	2018-08-01T23:20:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





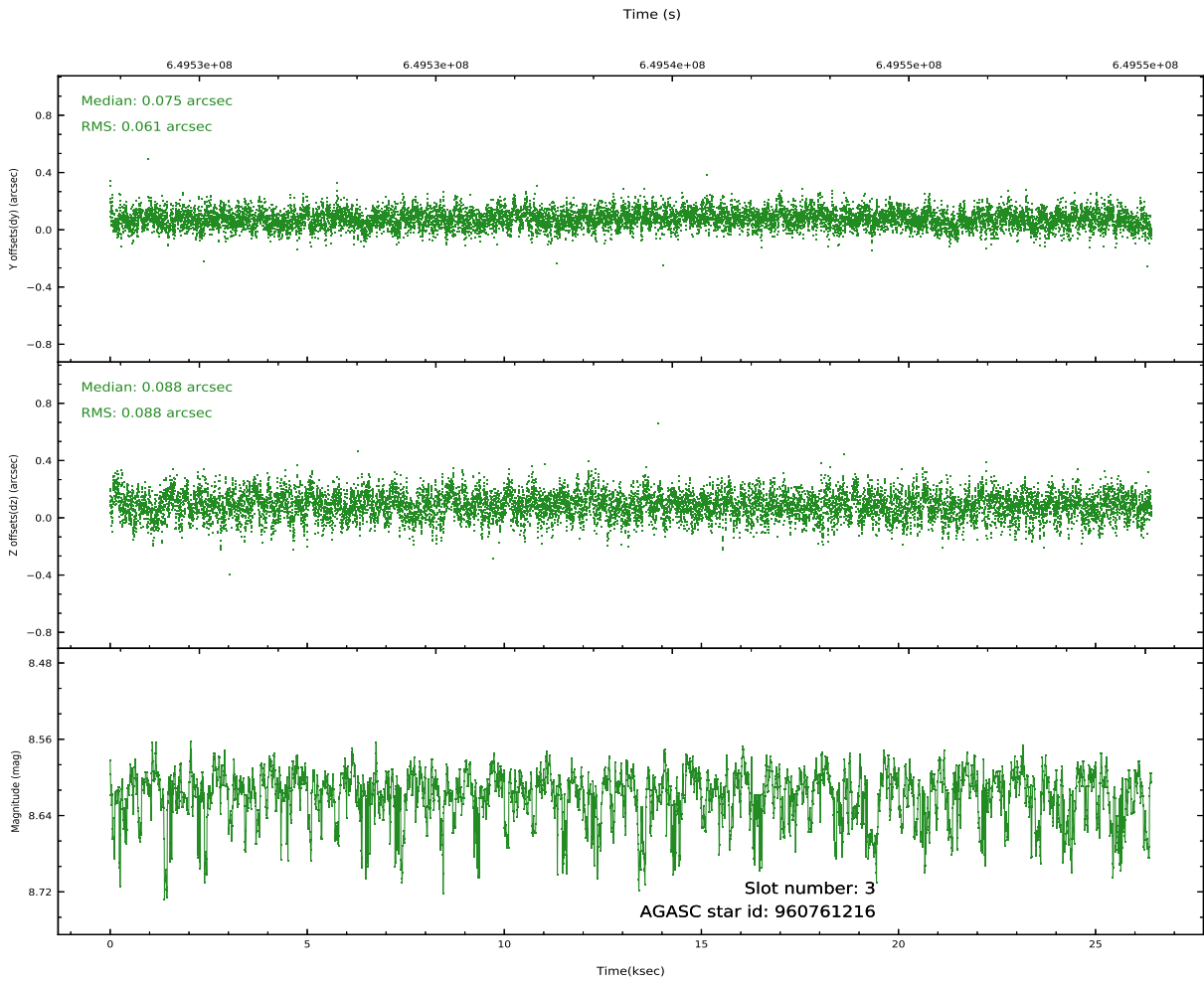
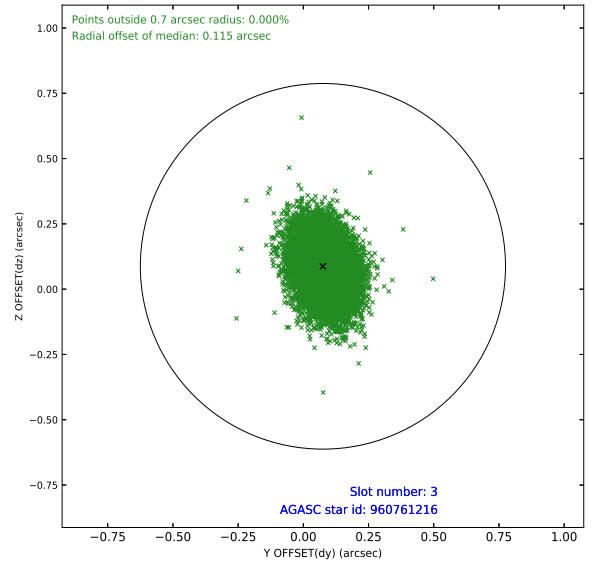
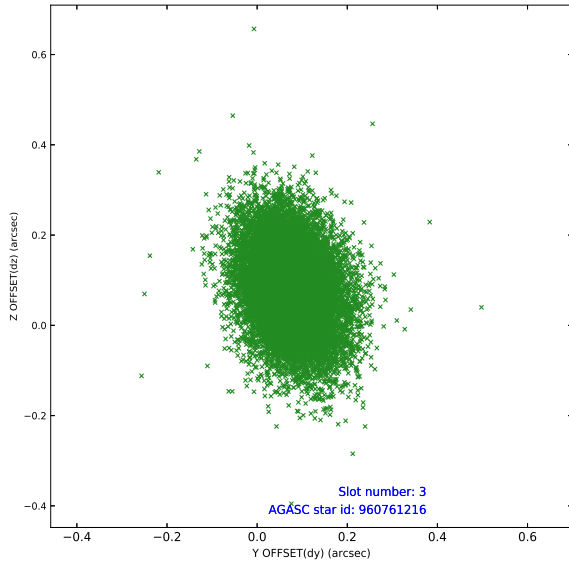
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.11	6444	1.000	0.183	-0.116	0.010	0.016	0.000000	0.000000	-775.46	-1743
1	FID		ACIS-S-4	7.22	6443	1.000	0.056	-0.057	0.011	0.023	0.000000	0.000000	2137.96	164
2	FID		ACIS-S-5	7.22	6444	1.000	-0.271	0.182	0.015	0.026	0.000000	0.000000	-1828.31	159
3	GUIDE	used	960761216	8.61	12883	1.000	0.075	0.088	0.112	0.190	241.893335	-31.552444	-1709.79	-1626
4	GUIDE	used	960774896	8.93	12874	1.000	-0.086	0.085	0.139	0.227	242.047204	-31.608274	-1528.55	-1146
5	GUIDE	used	961285656	7.59	12887	1.000	0.068	-0.058	0.136	0.225	242.296346	-32.100333	219.11	-319
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	962465648	9.16	12865	1.000	-0.057	-0.116	0.174	0.274	243.185818	-31.846141	-788.27	2365

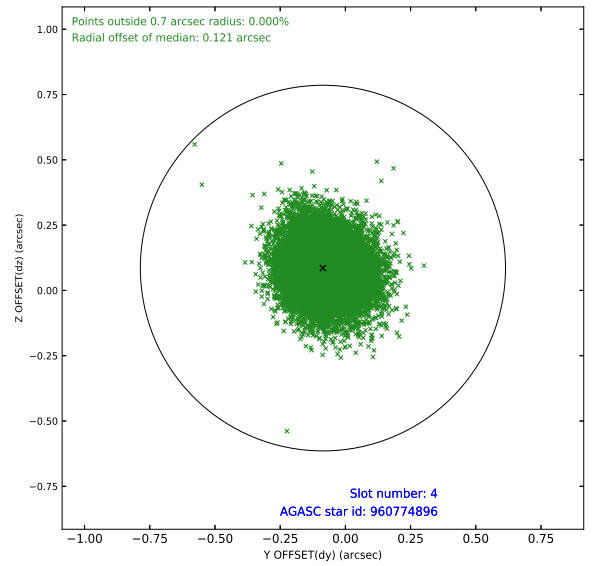
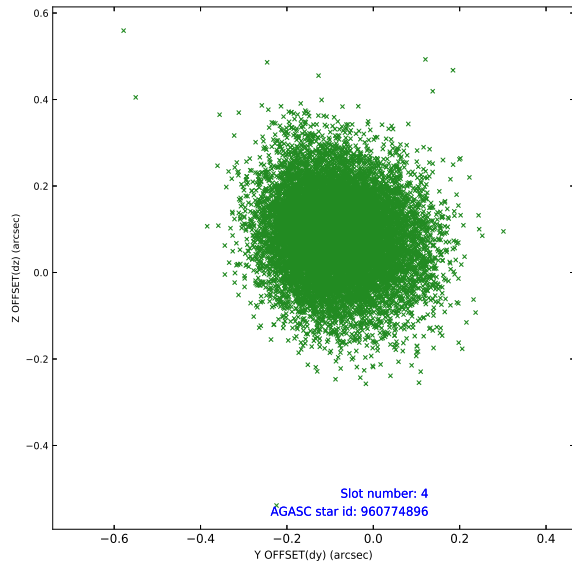
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2.4 Star Slots

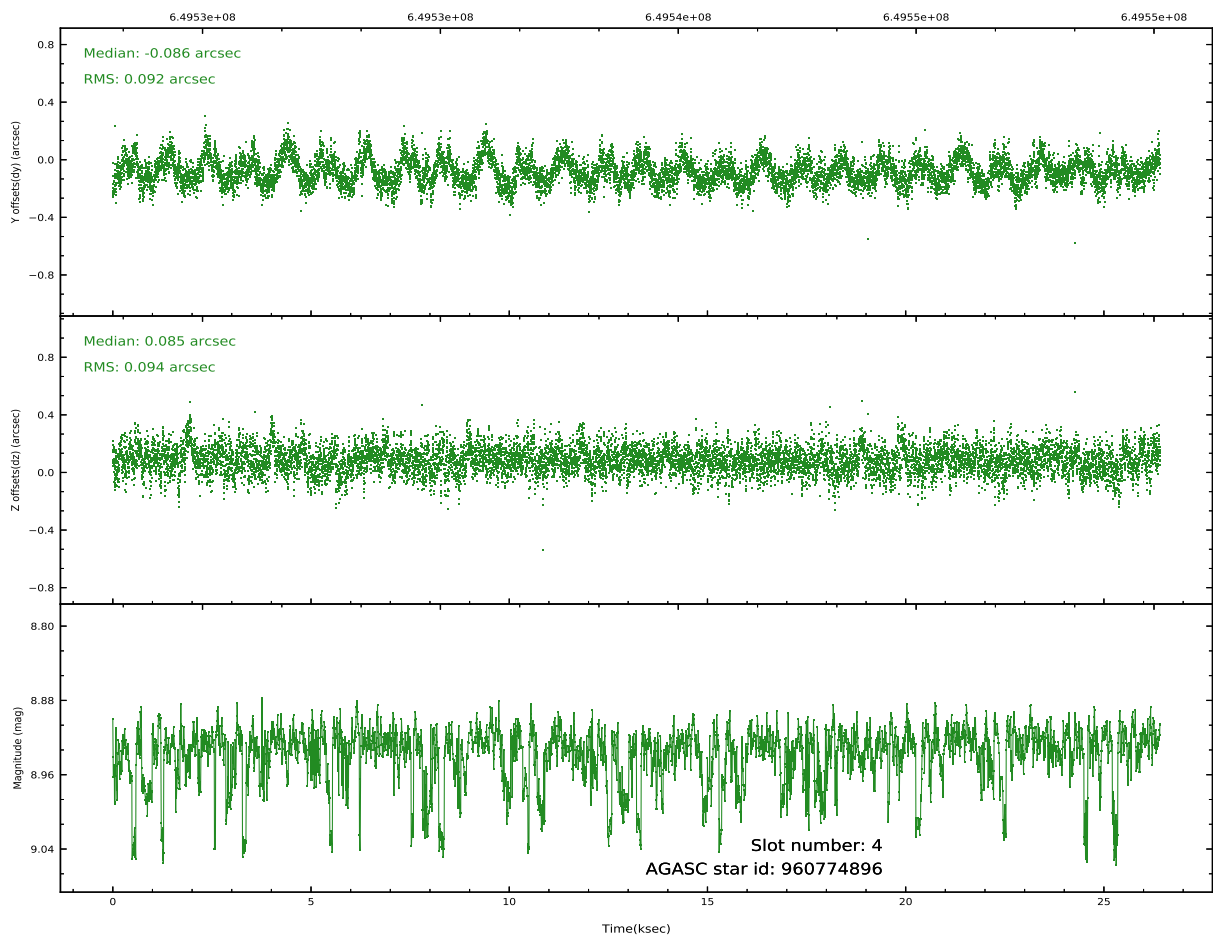
2.4.1 Slot 3



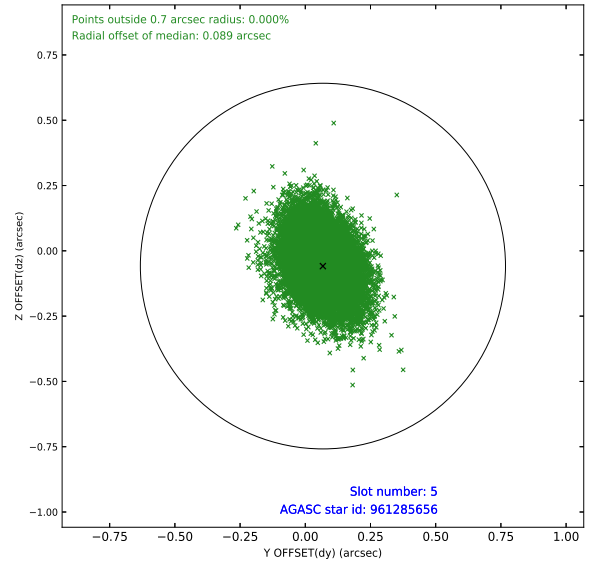
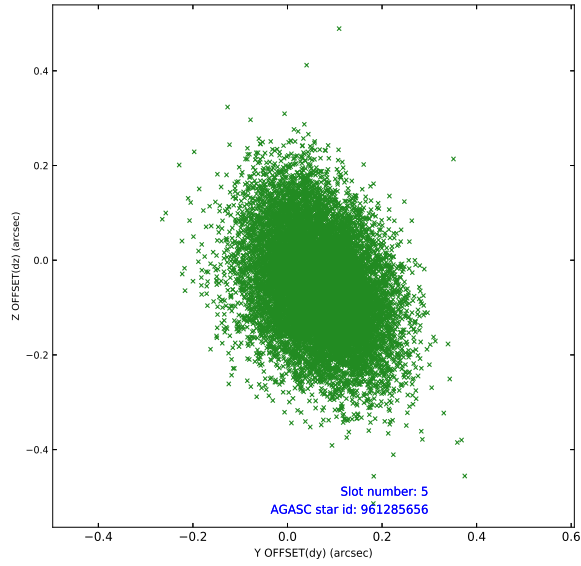
2.4.2 Slot 4



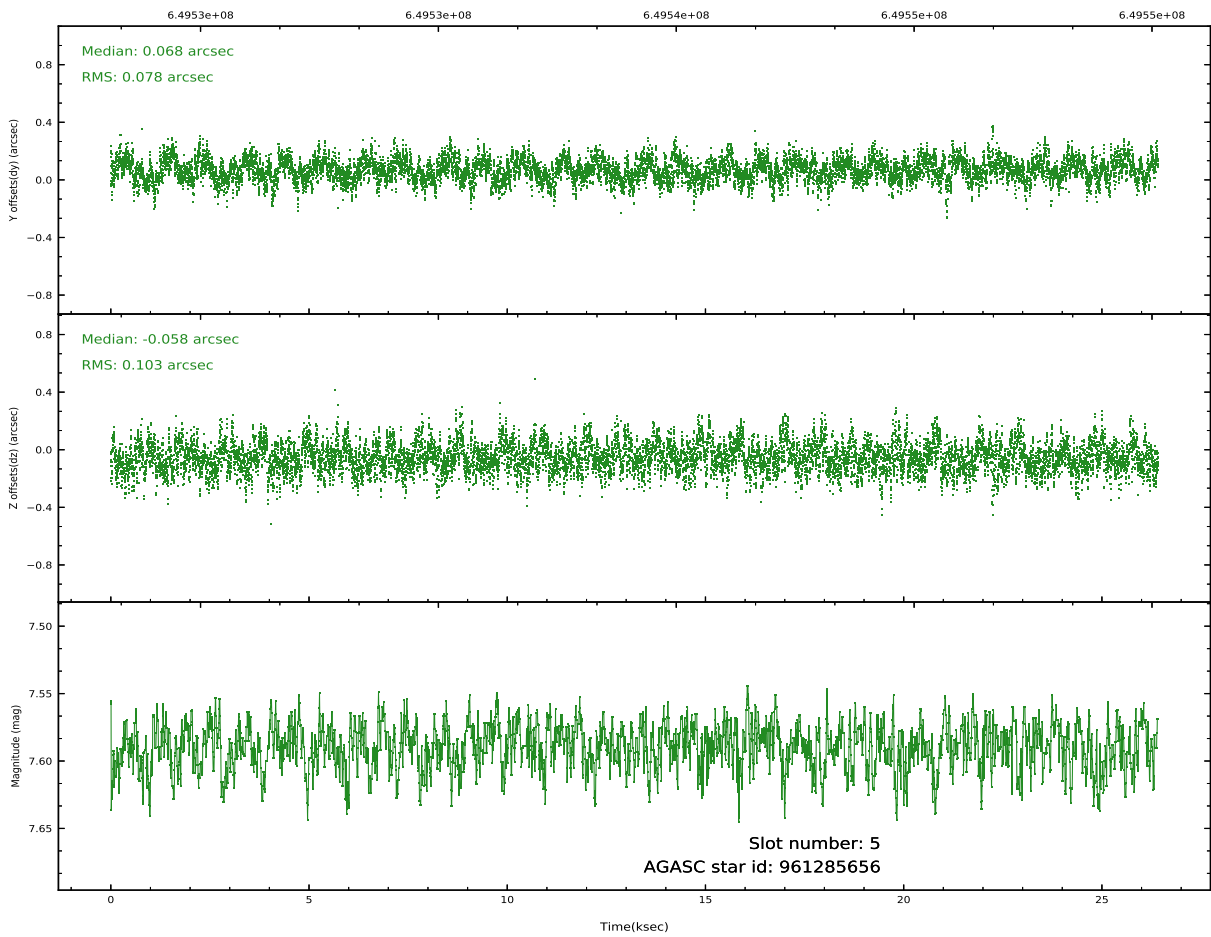
Time (s)



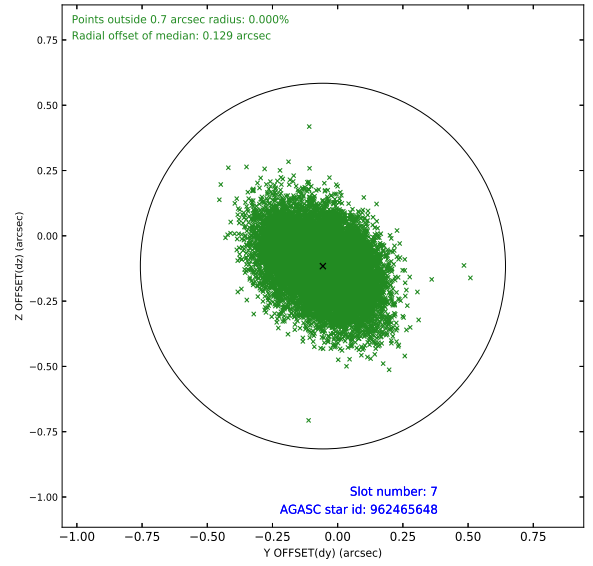
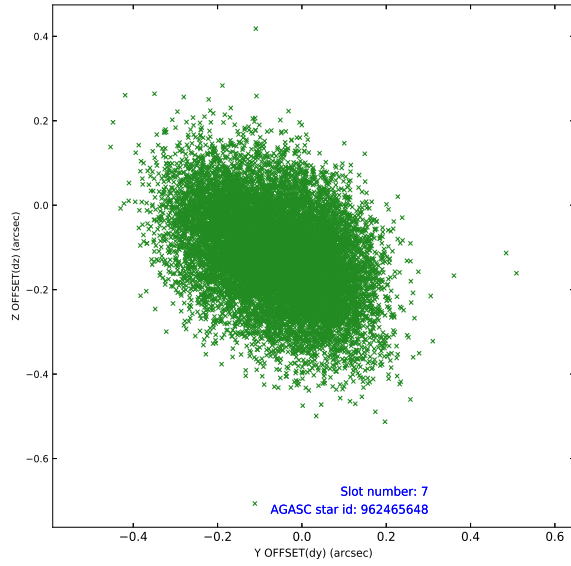
2.4.3 Slot 5



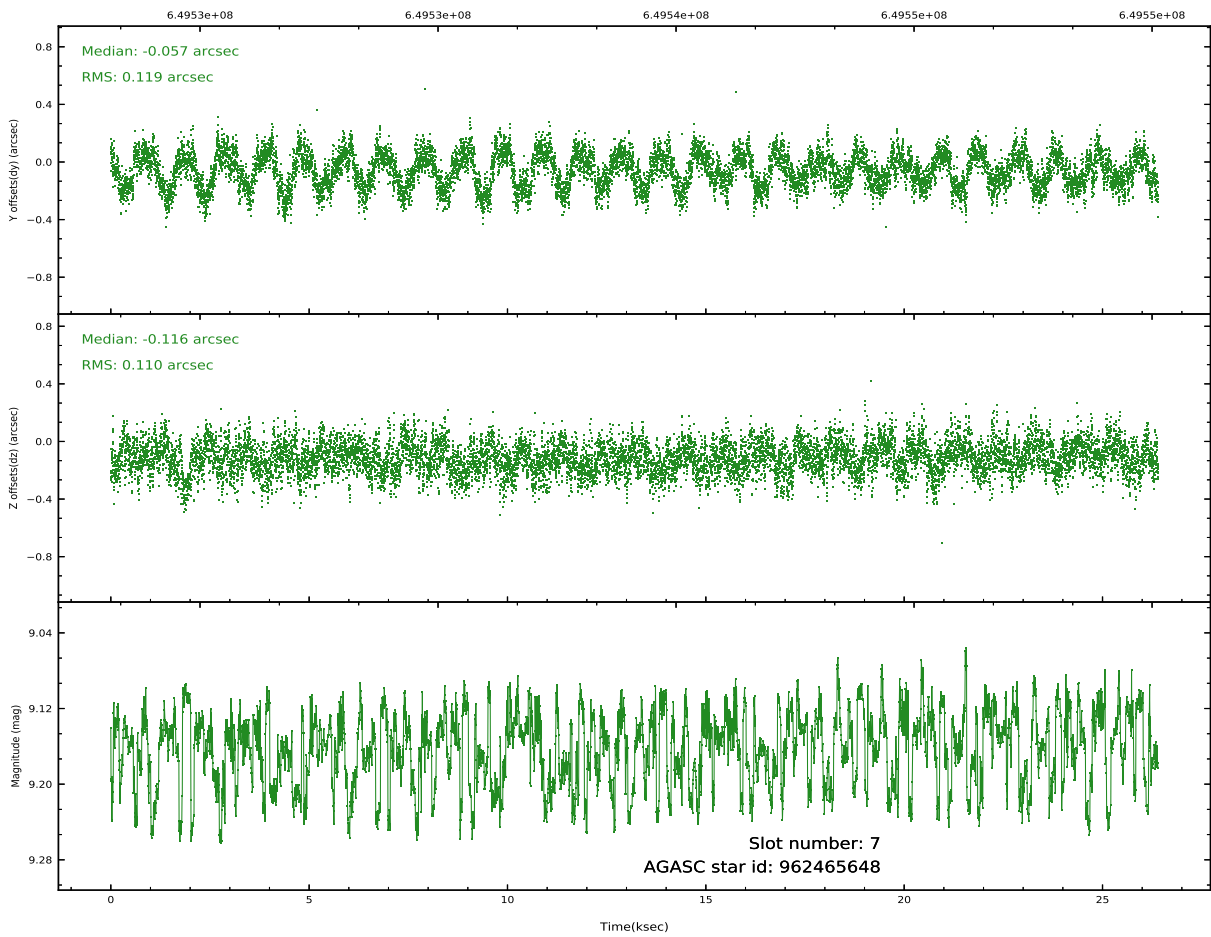
Time (s)



2.4.4 Slot 7

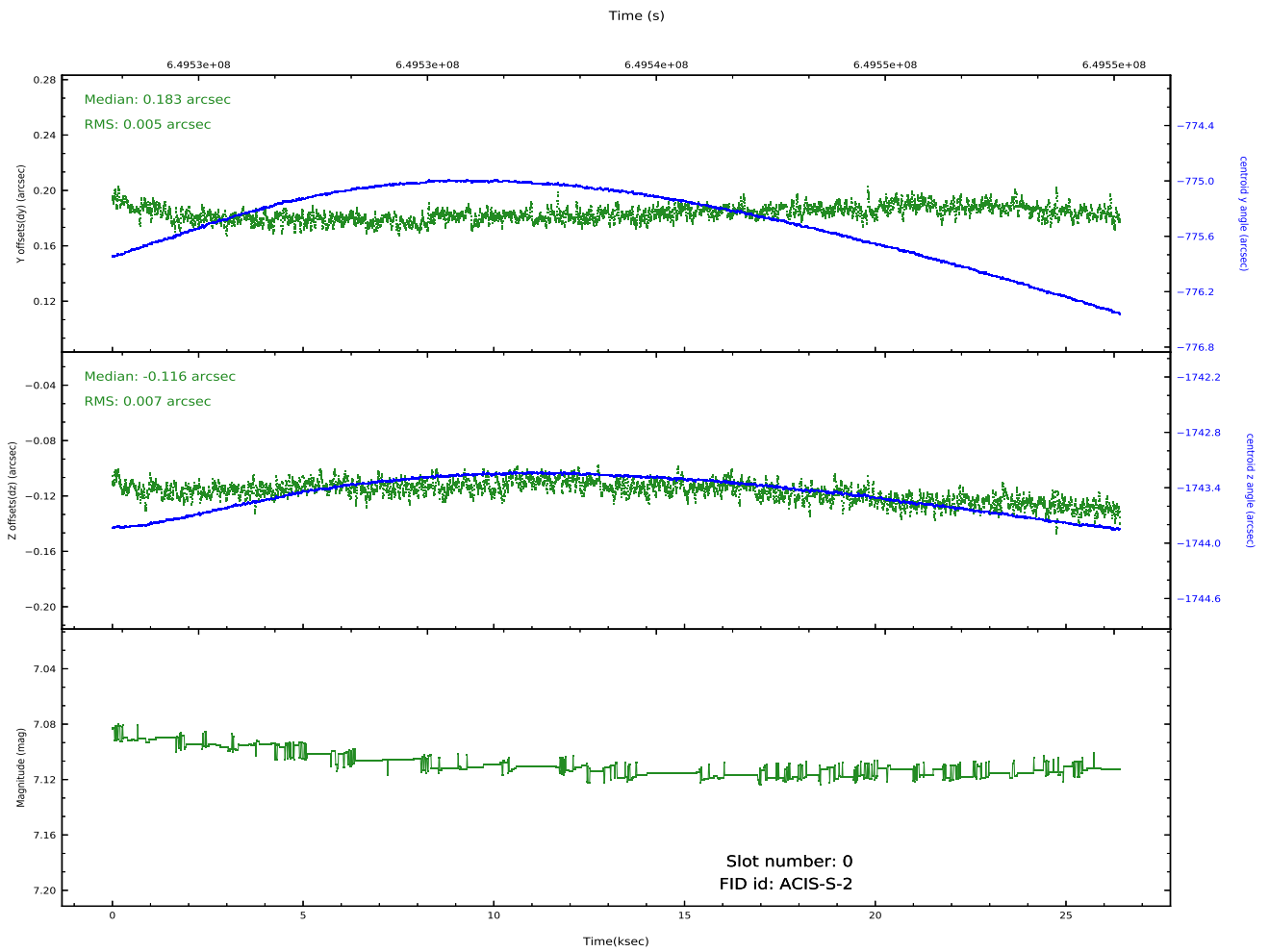
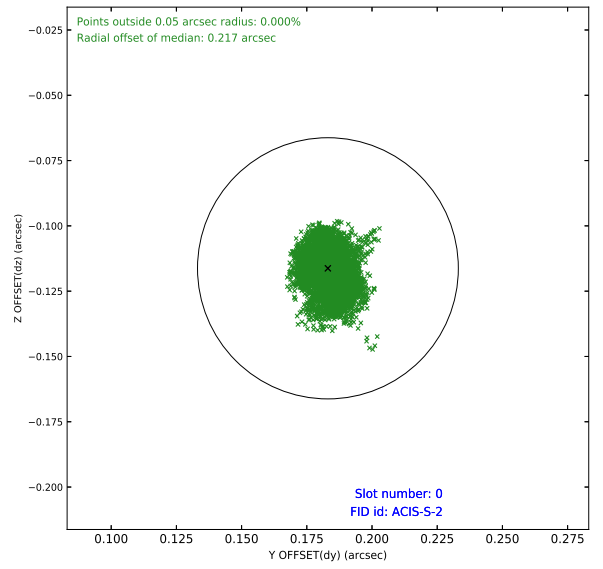
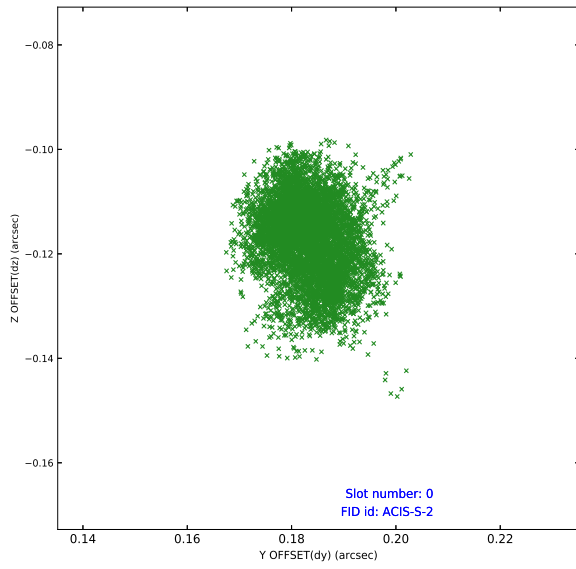


Time (s)

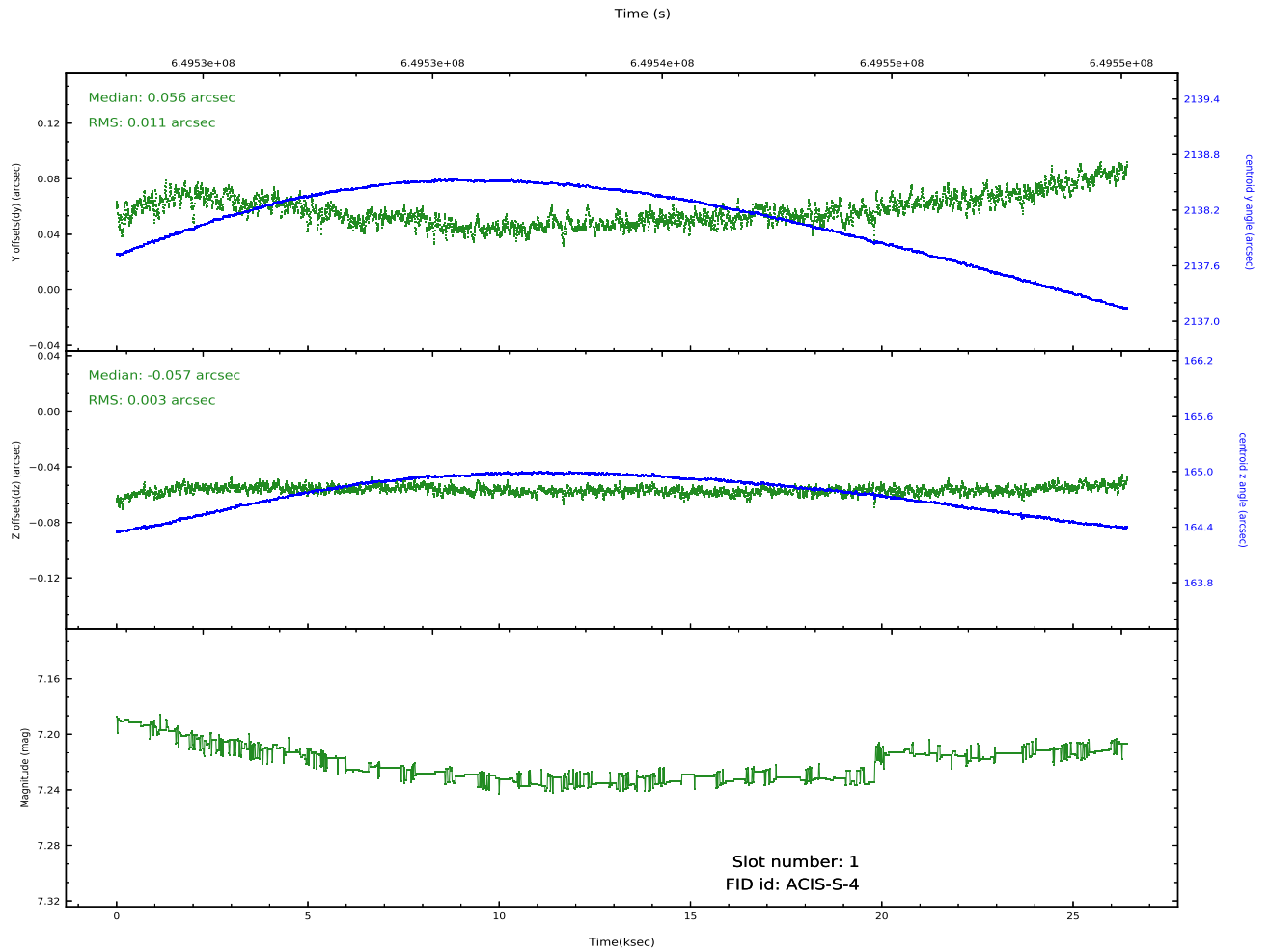
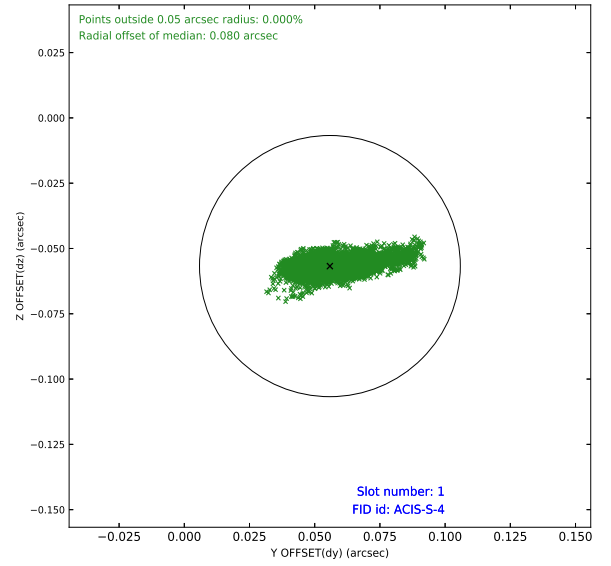
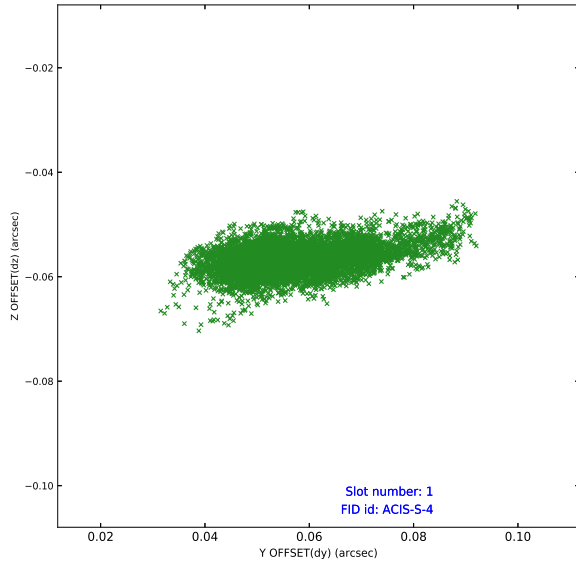


2.5 FID Slots

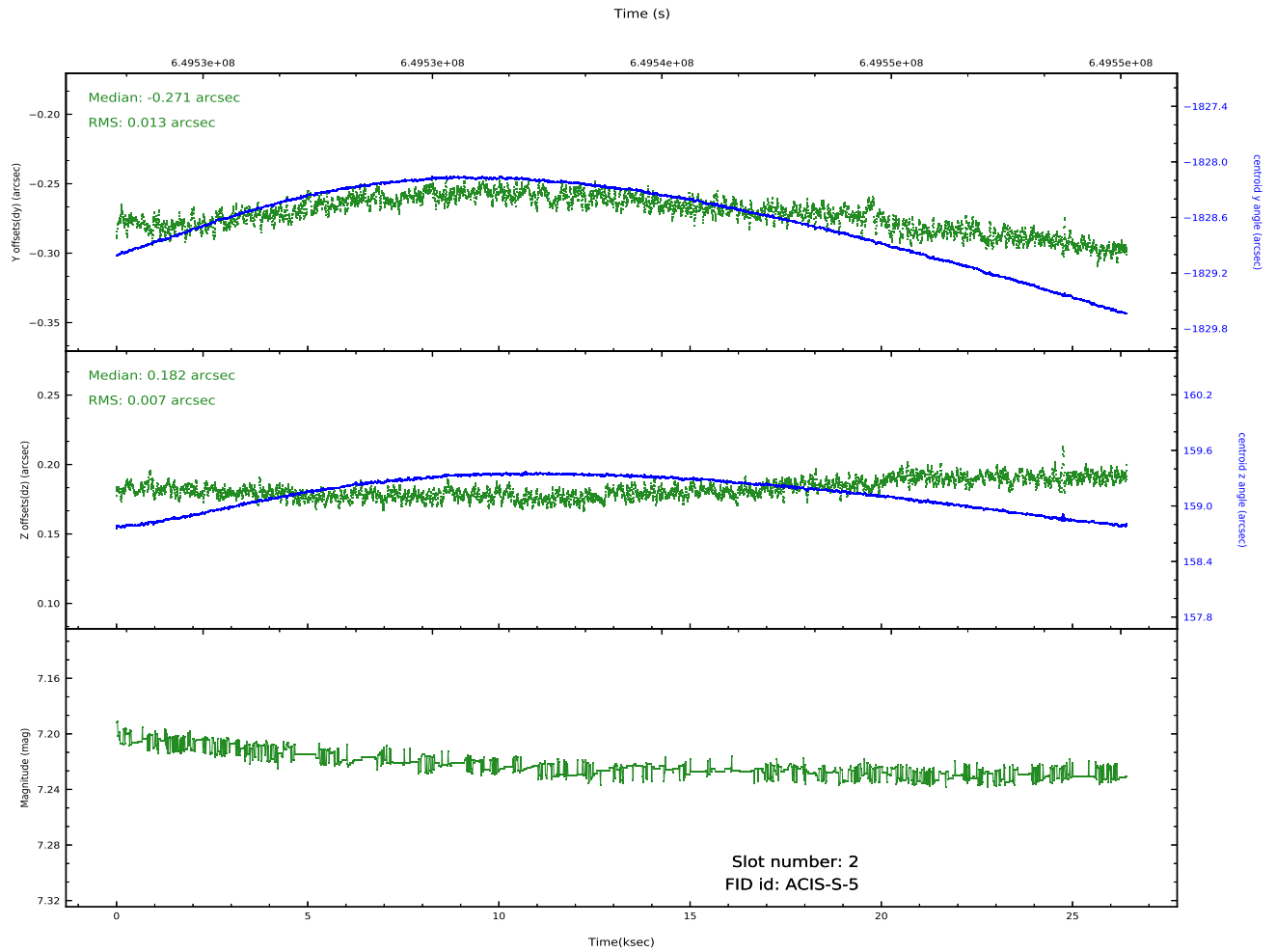
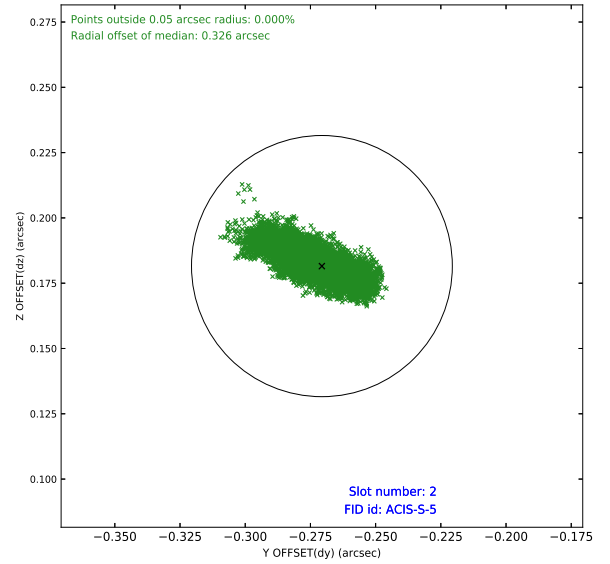
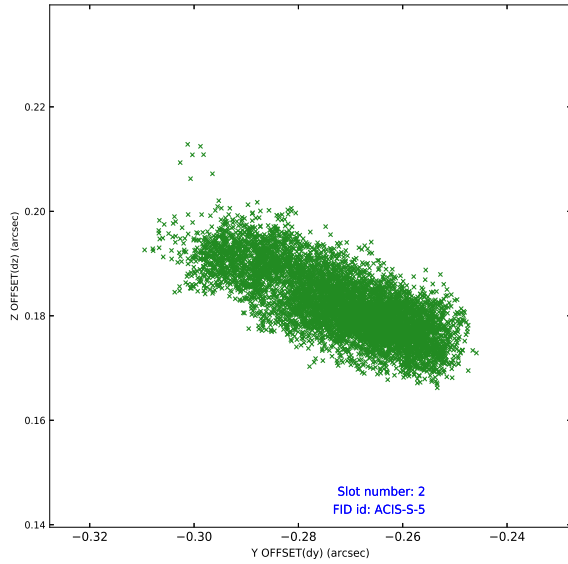
2.5.1 Slot 0



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)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	26.263200202107

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 guide star from the solution.