

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20376 - L2 Version 2
Chandra X-Ray Center

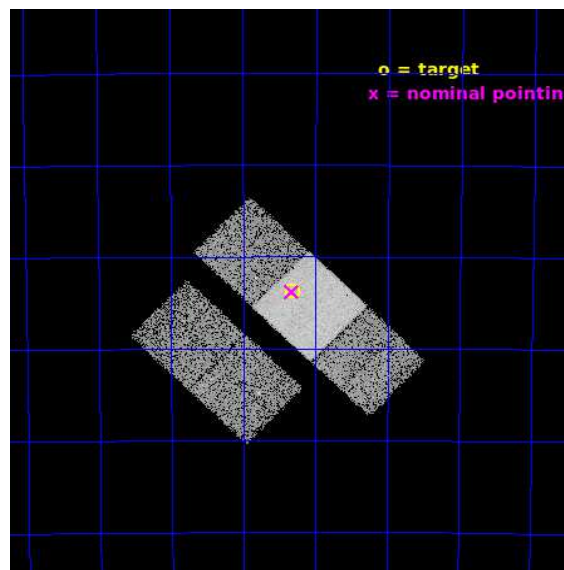
L2 Processing Date : Oct 26 2020

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1 Front

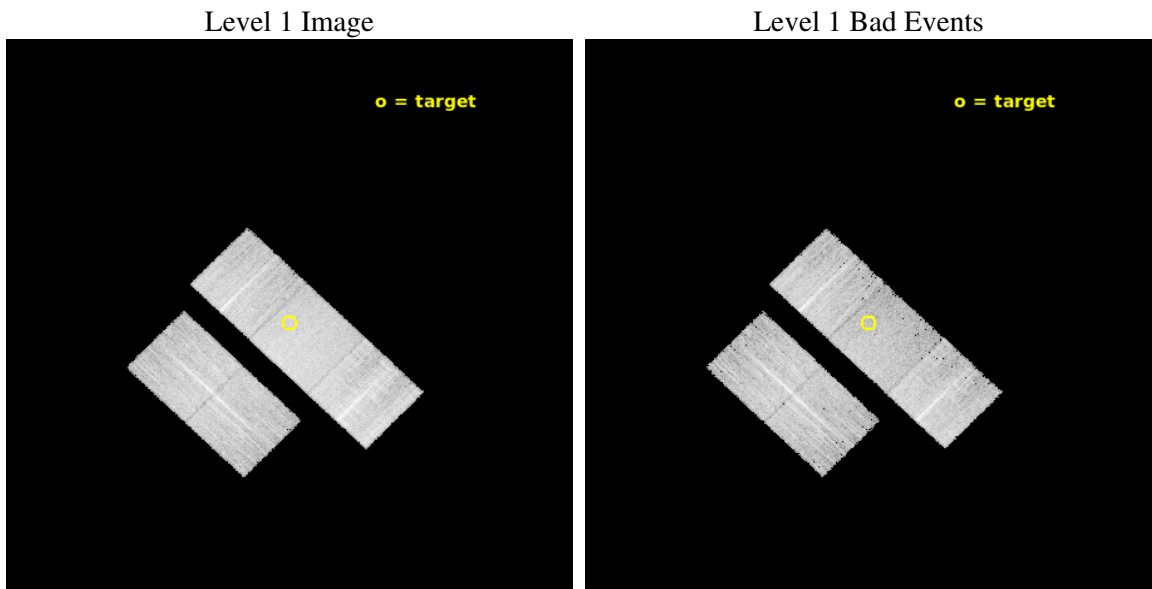
seq_num	703481	Sequence number
obs_id	20376	Observation id
title	HEAVILY REDDENED, LUMINOUS TYPE 1 QSOs: A TRANSITION POPULATION EMERGING FROM THE DUST	Proposal title
observer	Enrico Piconcelli	Principal investigator
object	VHSJ2101-5943	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	315.33125	Observer's specified target RA [deg]
dec_targ	-59.729111	Observer's specified target Dec [deg]
ra_nom	315.3316272834	Nominal RA [deg]
dec_nom	-59.730136927293	Nominal Dec [deg]
roll_nom	44.251251423982	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9053.918032527	Sum of GTIs [s]
livetime	8935.6219280345	Livetime [s]
ontime2	9053.7538725138	Sum of GTIs [s]
ontime3	9053.8359525204	Sum of GTIs [s]
ontime6	9053.8769925833	Sum of GTIs [s]
ontime7	9053.918032527	Sum of GTIs [s]
ontime8	9053.7949125767	Sum of GTIs [s]
l2events	63360	Number of level 2 events



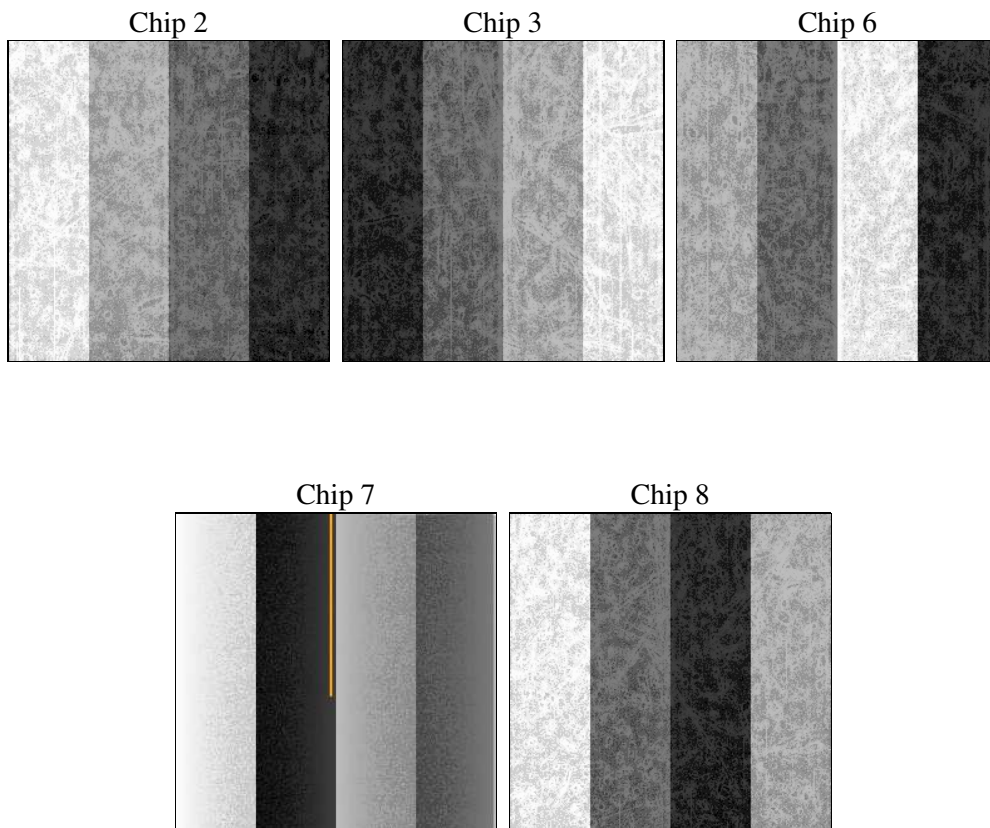
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	9053.918032527	Sum of GTIs [s]
caldbver	4.9.3	 	ontime2	9053.7538725138	Sum of GTIs [s]
date	2020-10-26T17:09:45	Date and time of file creation	ontime3	9053.8359525204	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	9053.8769925833	Sum of GTIs [s]
			ontime7	9053.918032527	Sum of GTIs [s]
			ontime8	9053.7949125767	Sum of GTIs [s]
			l1events	392716	Number of level 1 events

2.1.4 Events

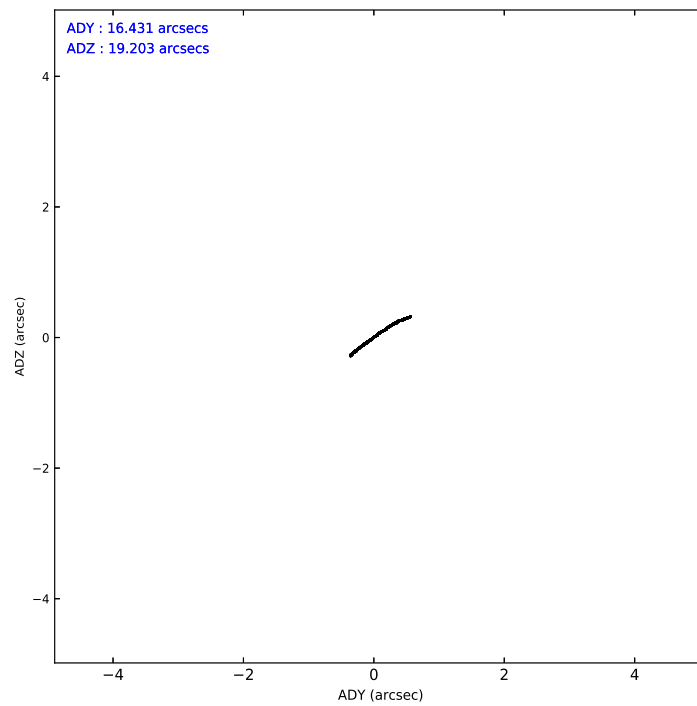
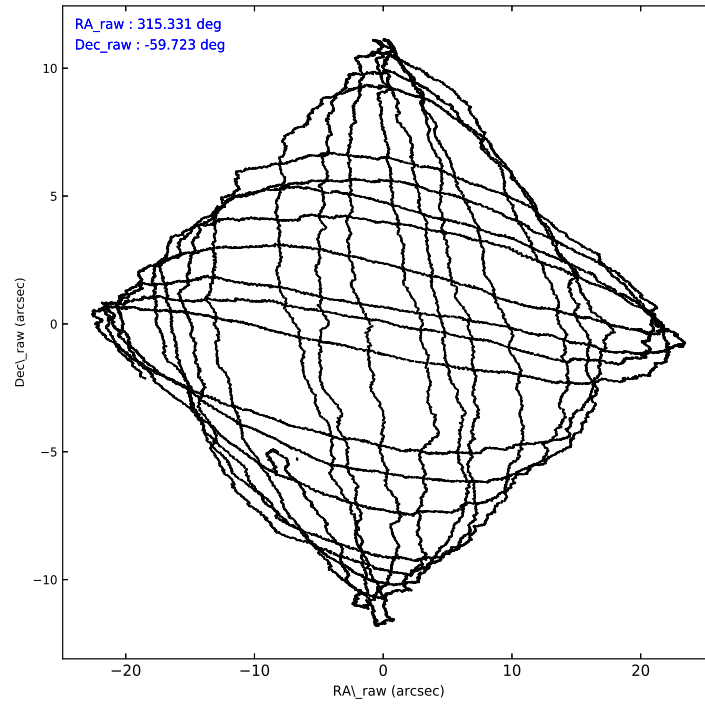
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	70238	66176	74281	89023	92998
rejected events	63146	59106	66452	50911	70016
rejected %	89%	89%	89%	57%	75%

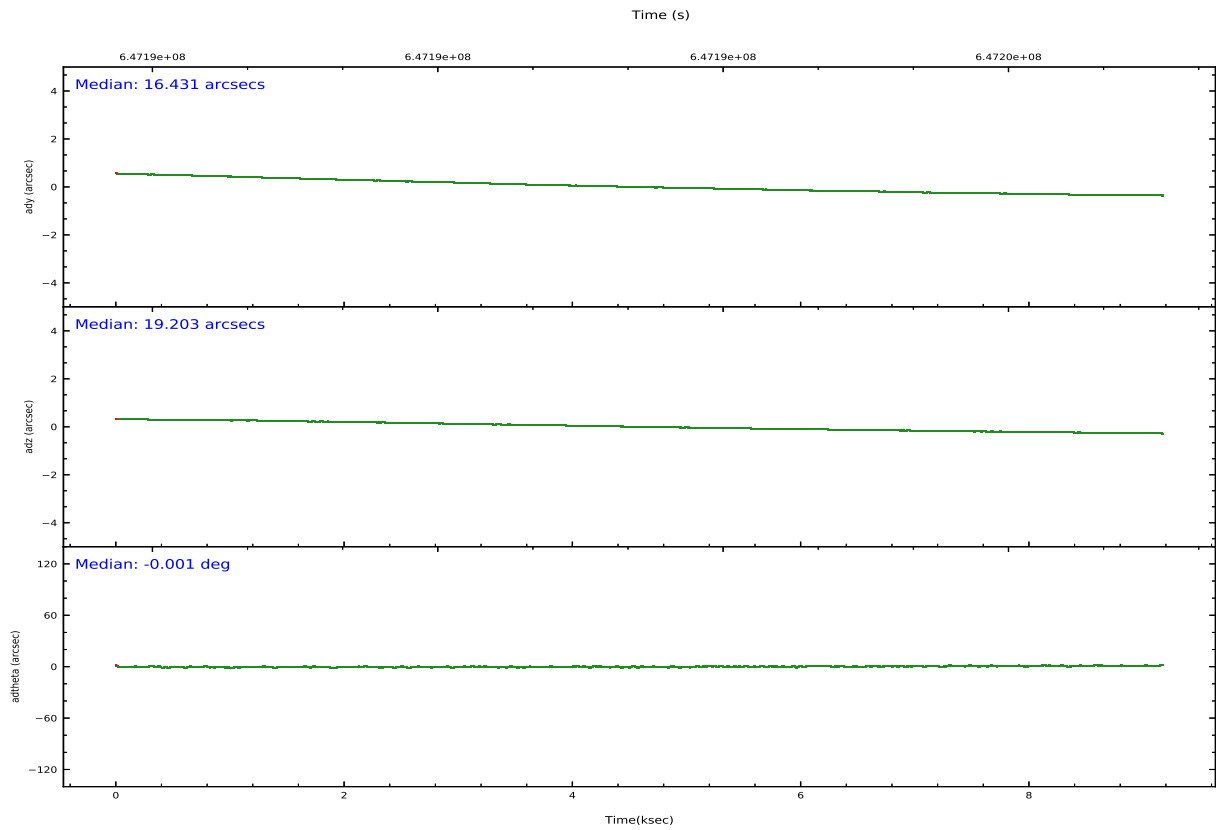
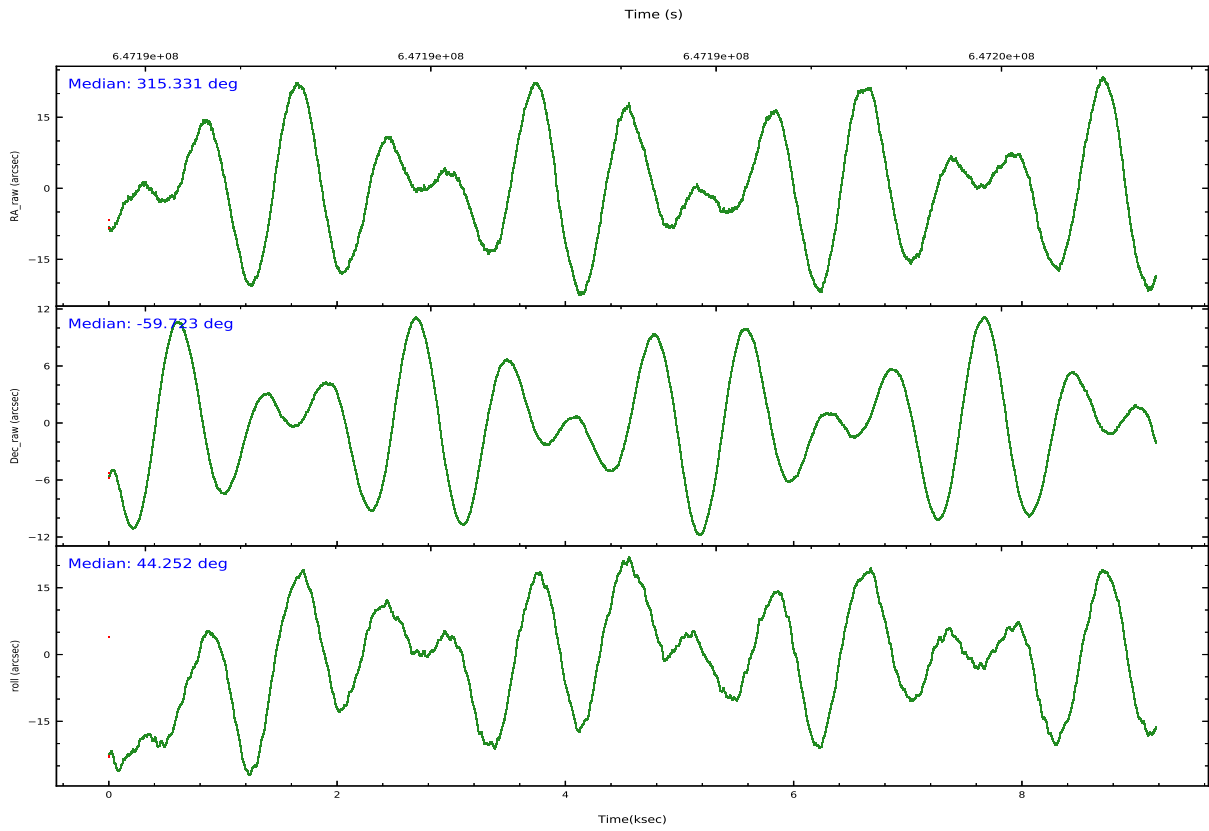
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2520	2486	2336	3164	6253
	3%	3%	3%	3%	6%
grade 1 events	35	37	30	122	71
	0%	0%	0%	0%	0%
grade 2 events	1653	1498	2040	7818	5887
	2%	2%	2%	8%	6%
grade 3 events	728	753	677	2956	2261
	1%	1%	0%	3%	2%
grade 4 events	723	740	696	2980	2094
	1%	1%	0%	3%	2%
grade 5 events	2554	3115	3101	8571	4825
	3%	4%	4%	9%	5%
grade 6 events	1475	1599	2092	21219	6496
	2%	2%	2%	23%	6%
grade 7 events	60550	55948	63309	42193	65111
	86%	84%	85%	47%	70%

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	315.316882	315.3316272834	CCD I2 on	O1	Y
[deg] Pointing Dec	-59.749312	-59.730136927293	CCD I3 on	O2	Y
[deg] Pointing Roll	44.084962	44.251251423982	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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	O3	Y
[s] Observation start time (MET)	647187355.184000	647186267.44824	CCD S5 on	N	N
Observation start date	2018-07-05T14:14:46	2018-07-05T13:57:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	647196355.184000	647197236.48639	On-chip summing requested	N	N
Observation end date	2018-07-05T16:44:46	2018-07-05T17:00:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





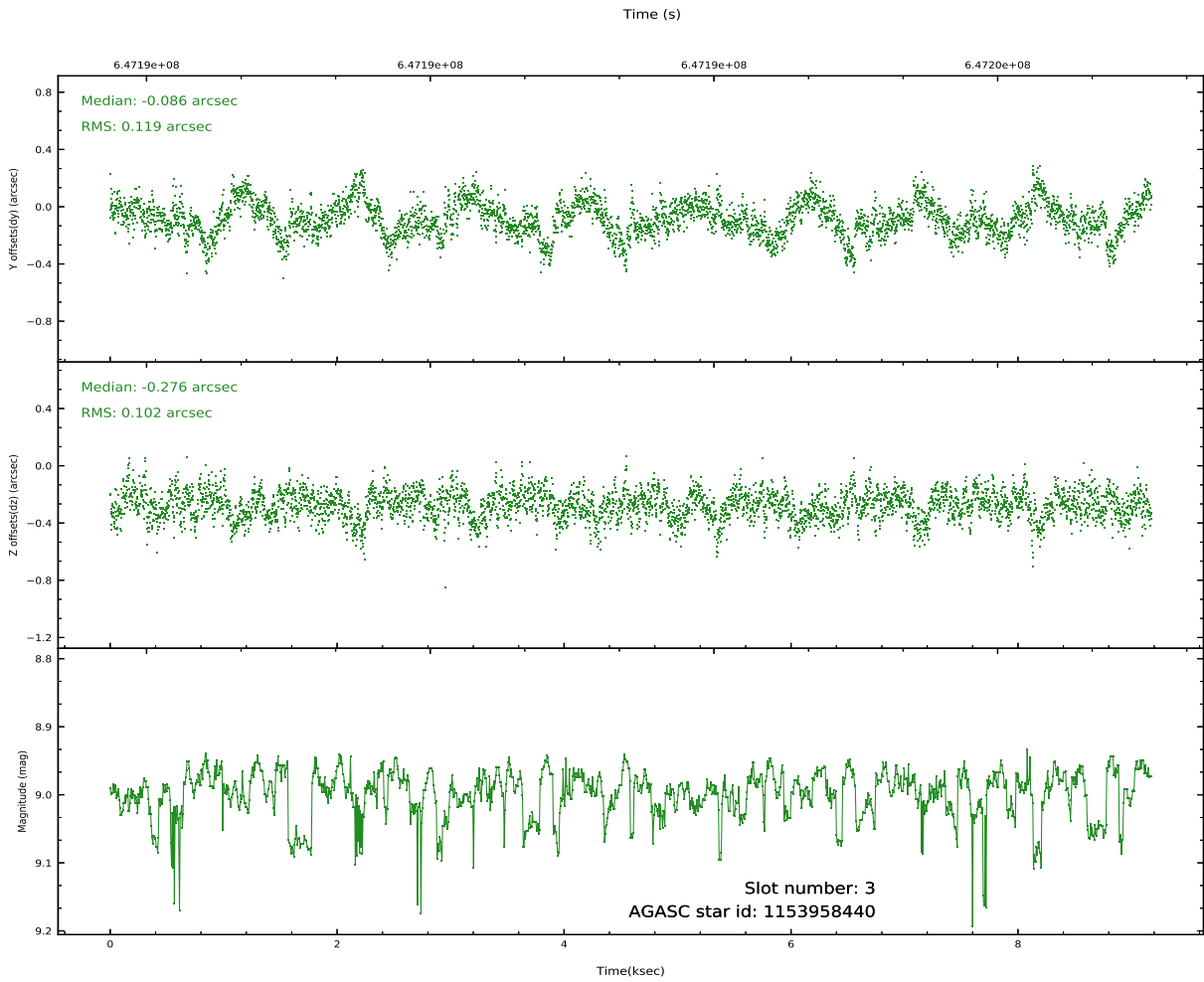
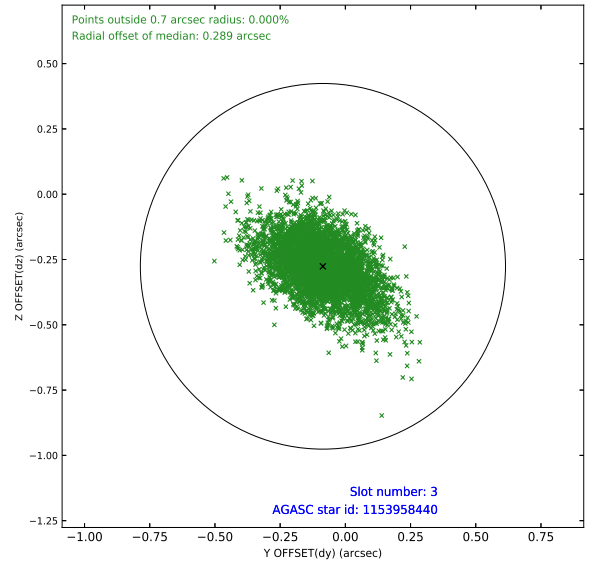
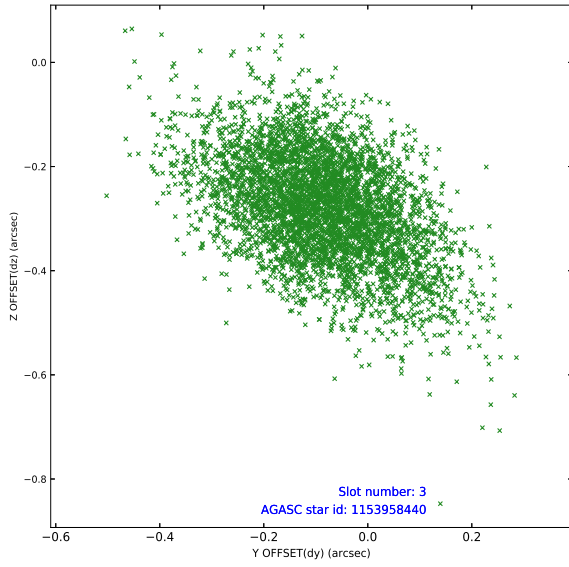
Slot Statistics

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-1	7.22	2239	1.000	0.274	-0.140	0.018	0.030	0.000000	0.000000	926.71	-1736
1	FID		ACIS-S-5	7.22	2238	1.000	-0.253	0.221	0.010	0.018	0.000000	0.000000	-1822.35	160
2	FID		ACIS-S-6	7.39	2239	1.000	-0.043	-0.067	0.015	0.023	0.000000	0.000000	391.49	805
3	GUIDE	used	1153958440	8.99	4467	1.000	-0.086	-0.276	0.162	0.280	316.186059	-59.292827	2283.80	60
4	GUIDE	used	1192889488	9.36	4472	1.000	-0.215	-0.106	0.162	0.278	314.752414	-60.130427	-1683.48	-284
5	GUIDE	used	1192895312	9.36	4465	1.000	-0.062	0.212	0.176	0.307	316.427572	-60.084285	582.19	-2265
6	GUIDE	used	1154097536	8.77	4471	1.000	0.189	0.030	0.138	0.243	316.742212	-59.535633	2385.84	-1278
7	GUIDE	used	1192887832	9.53	4470	1.000	0.171	0.148	0.199	0.320	315.641429	-60.543237	-1575.47	-2454

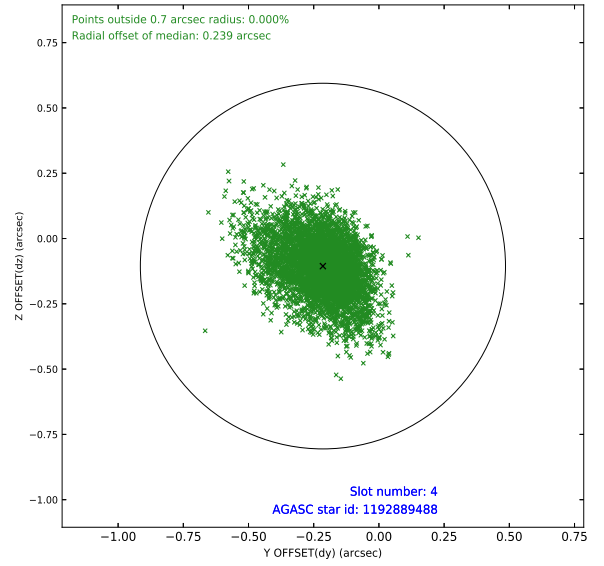
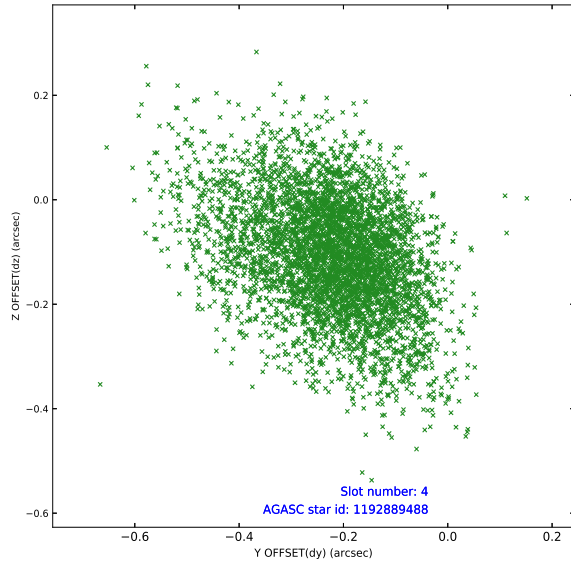
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2.4 Star Slots

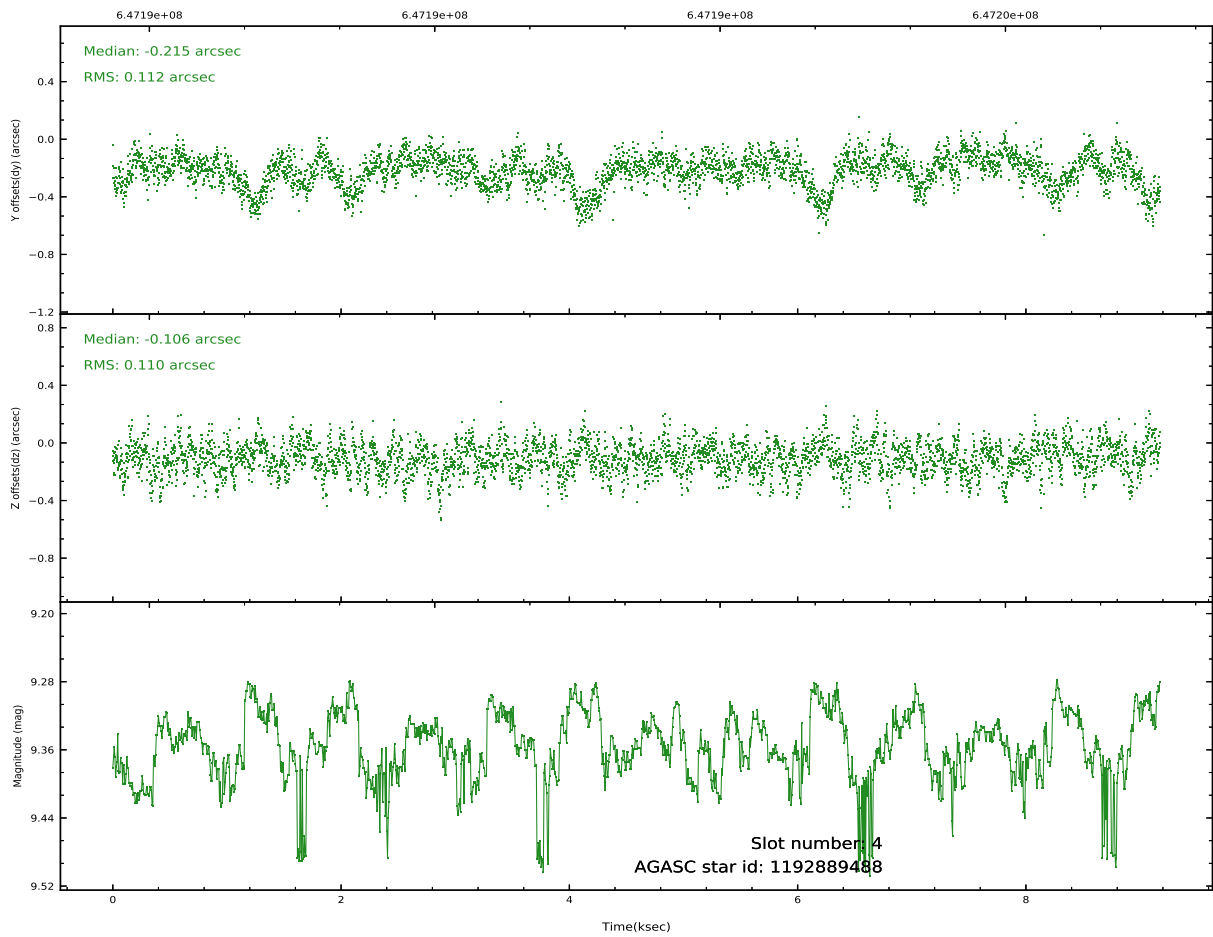
2.4.1 Slot 3



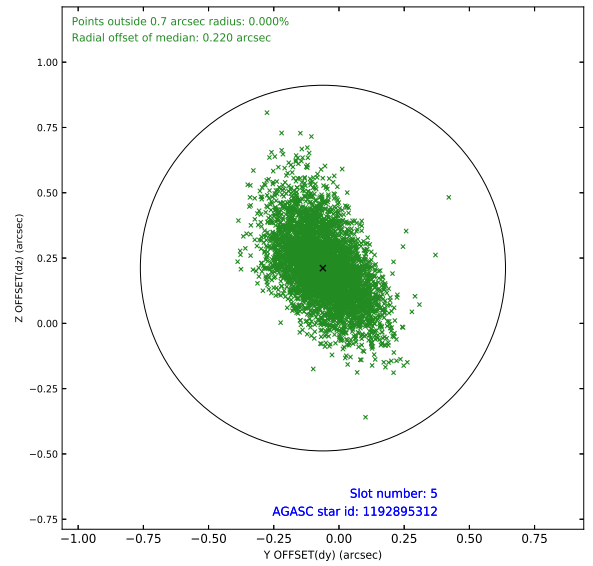
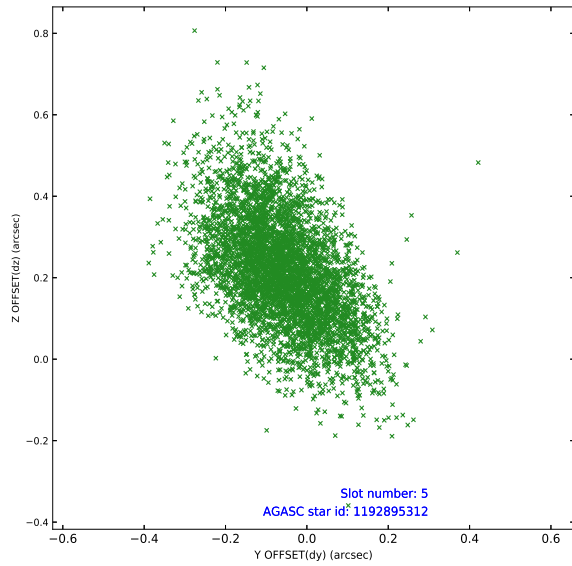
2.4.2 Slot 4



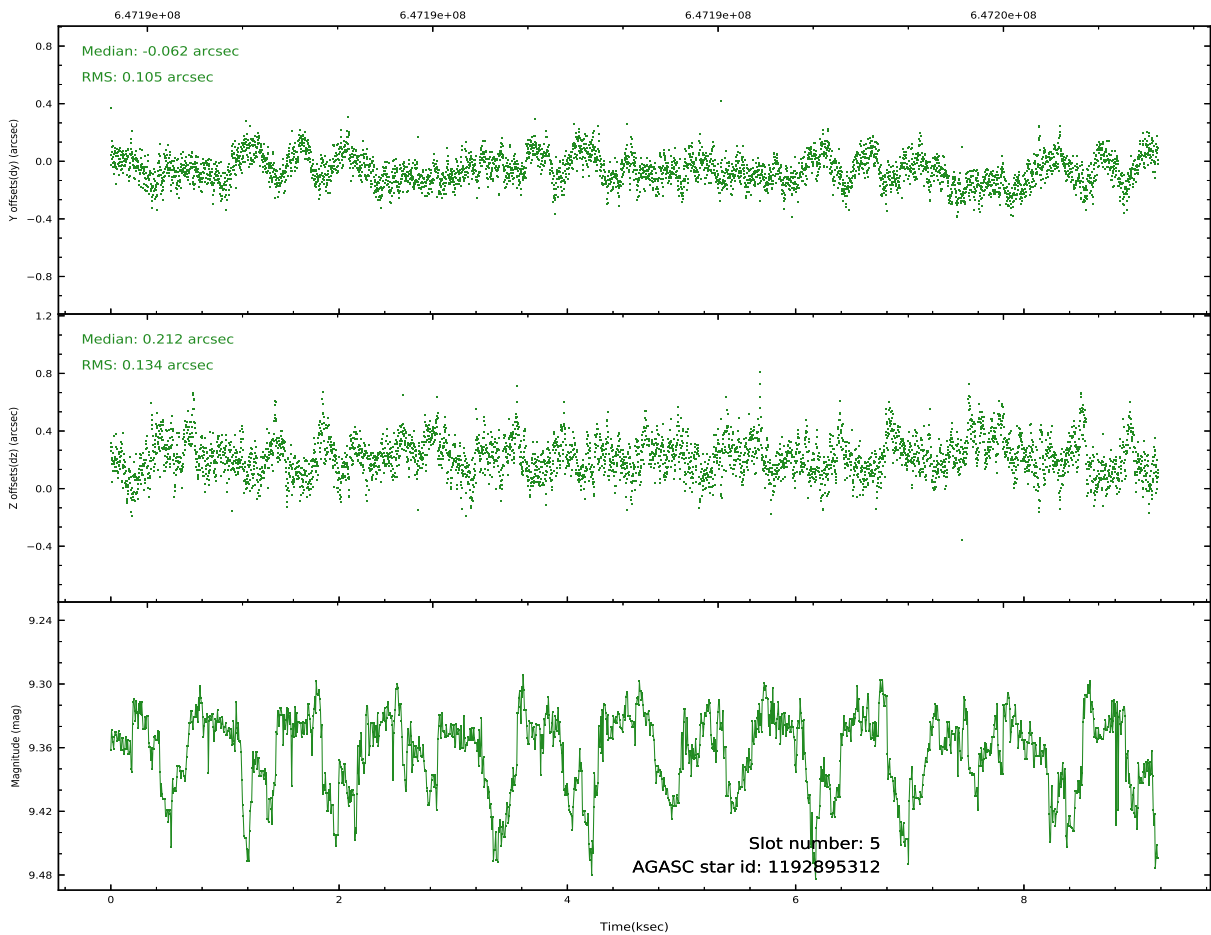
Time (s)



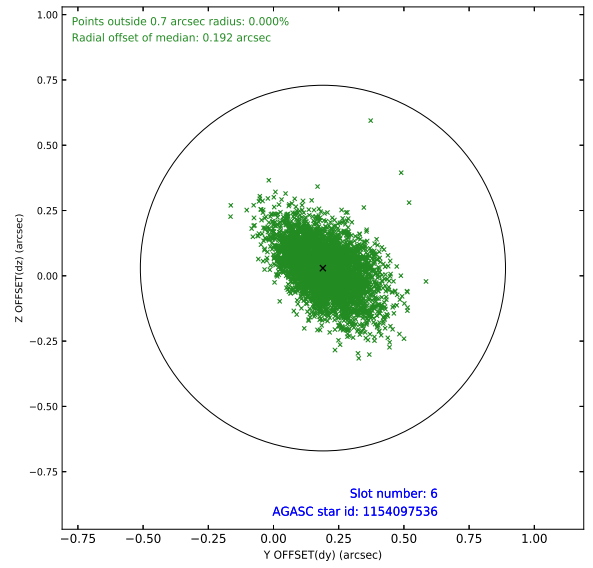
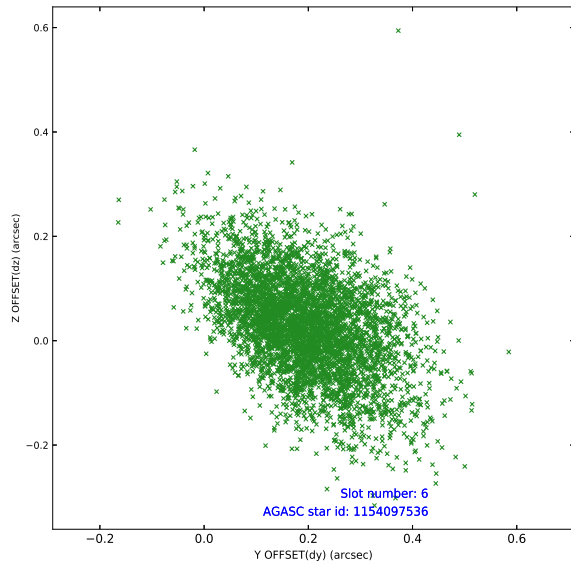
2.4.3 Slot 5



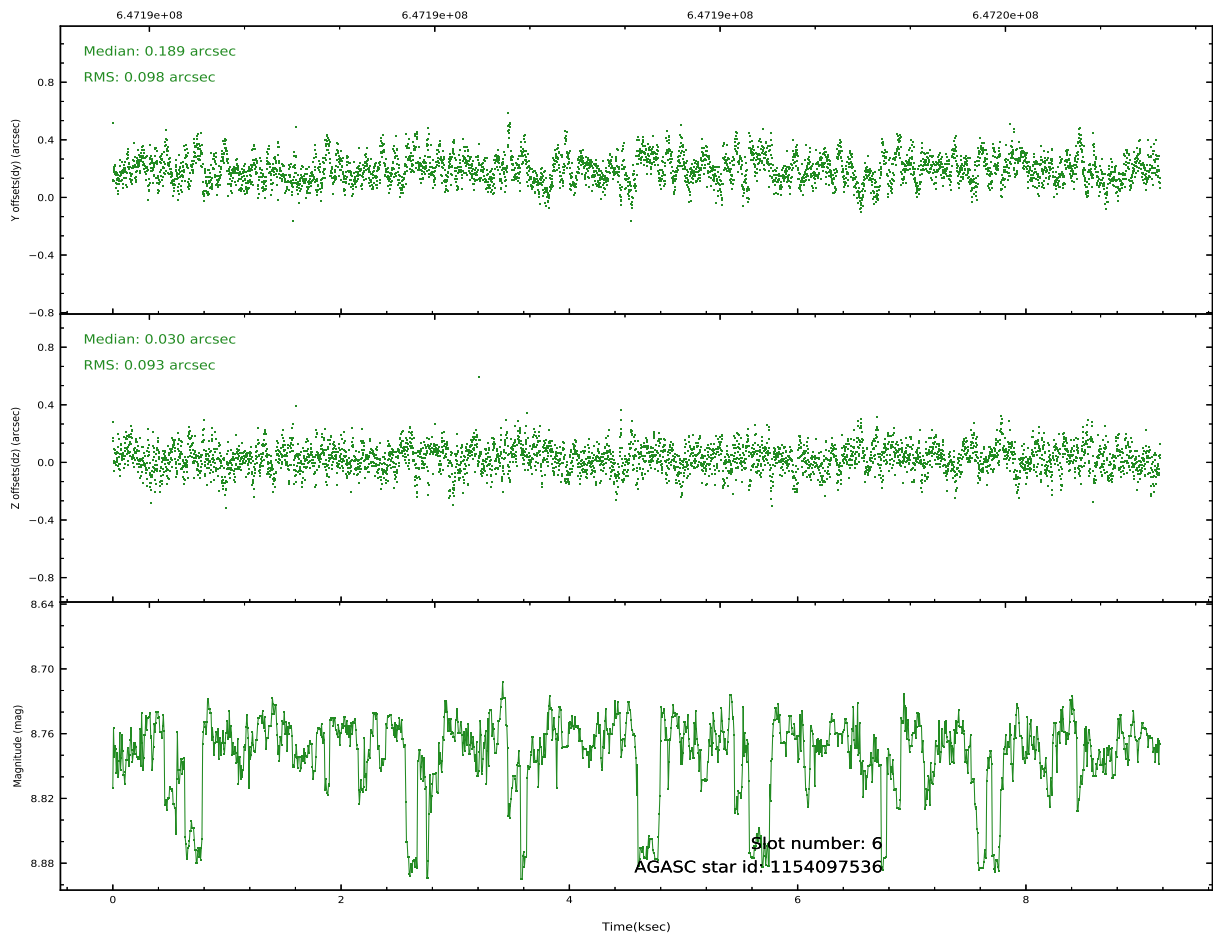
Time (s)



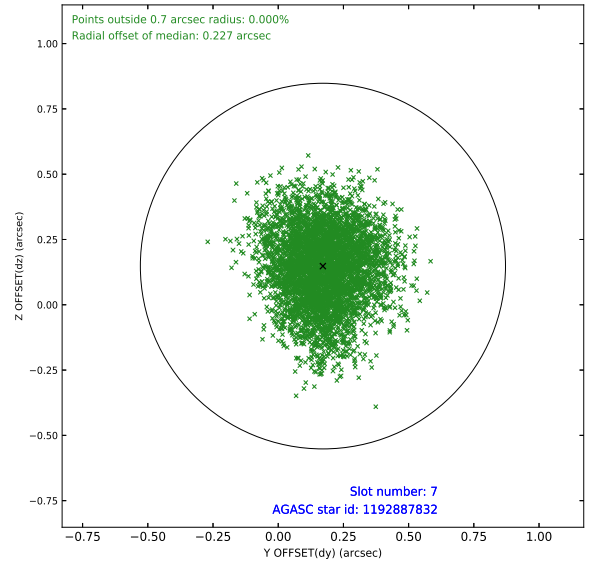
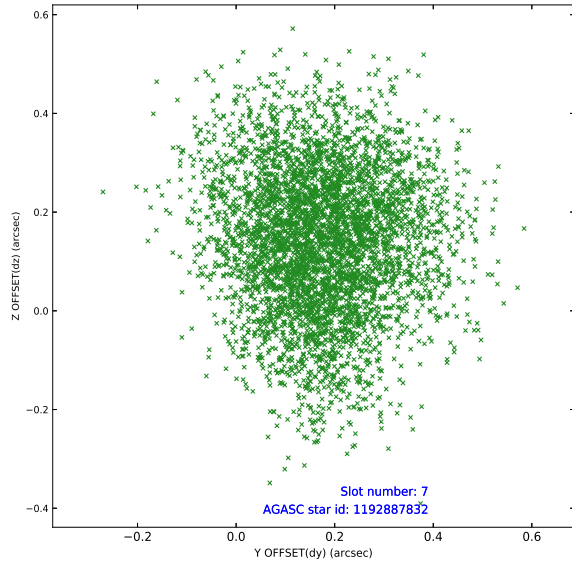
2.4.4 Slot 6



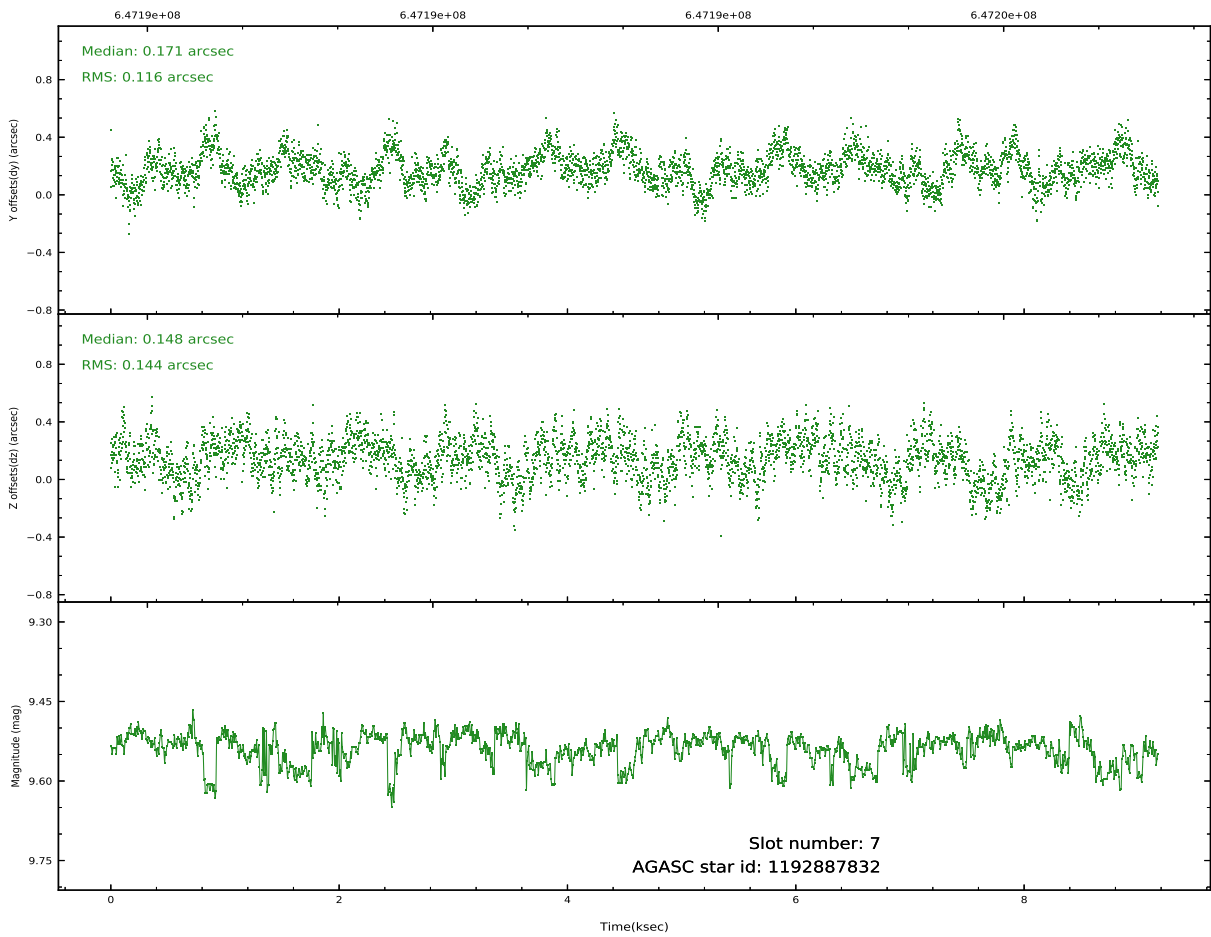
Time (s)



2.4.5 Slot 7

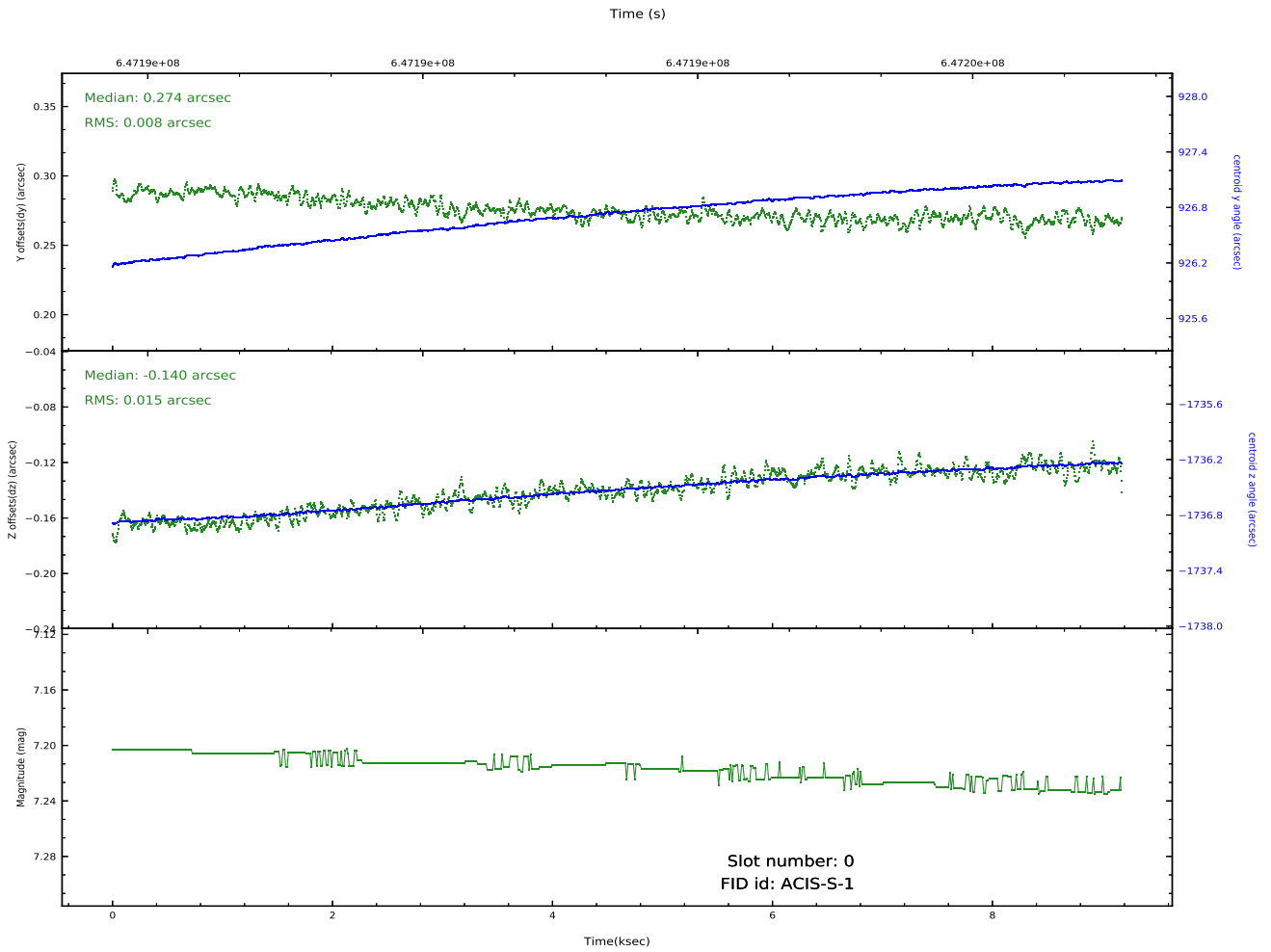
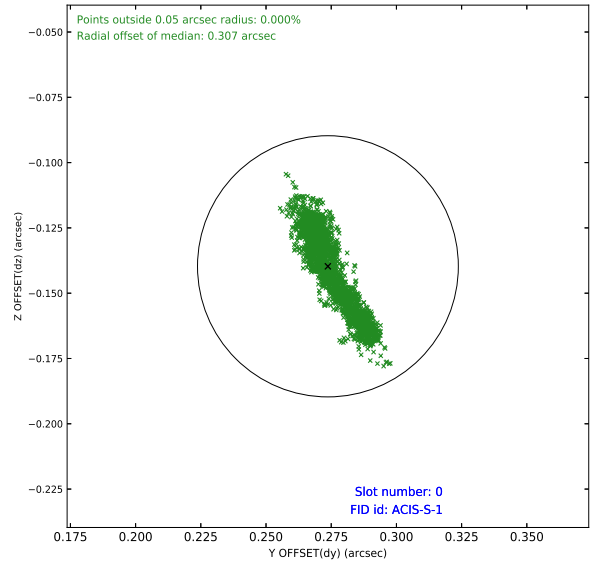
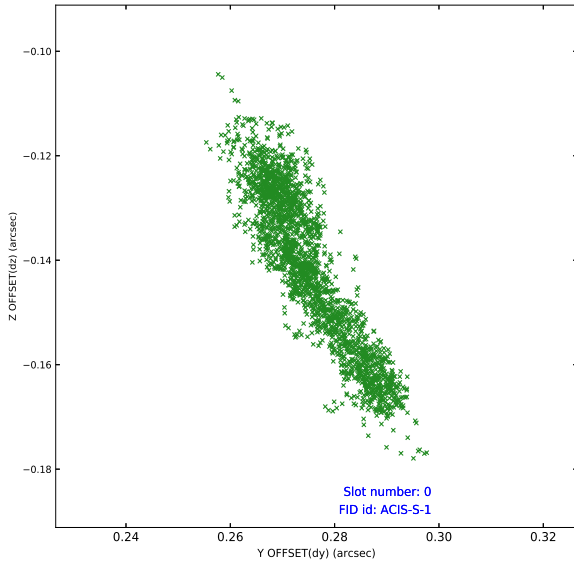


Time (s)

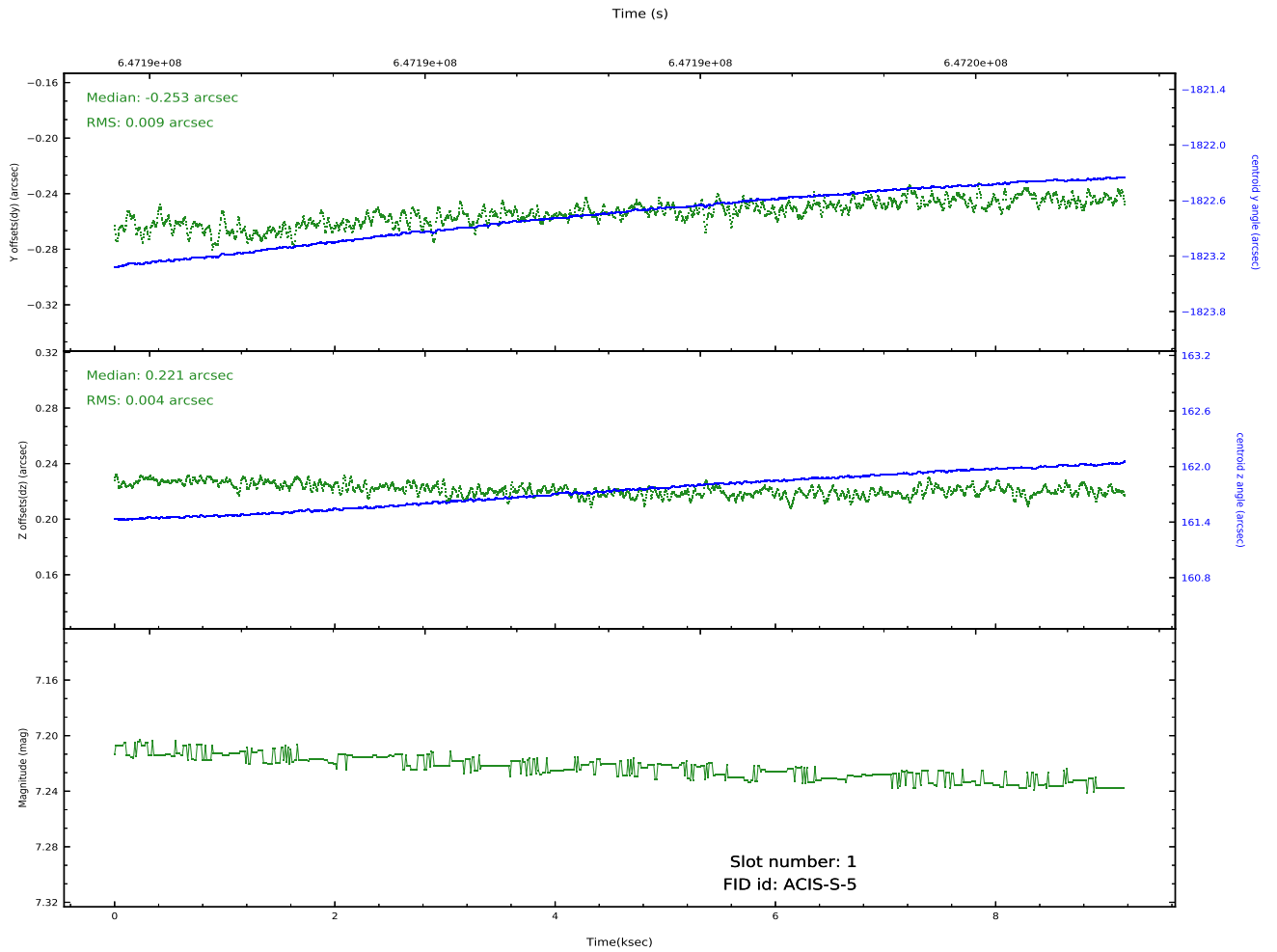
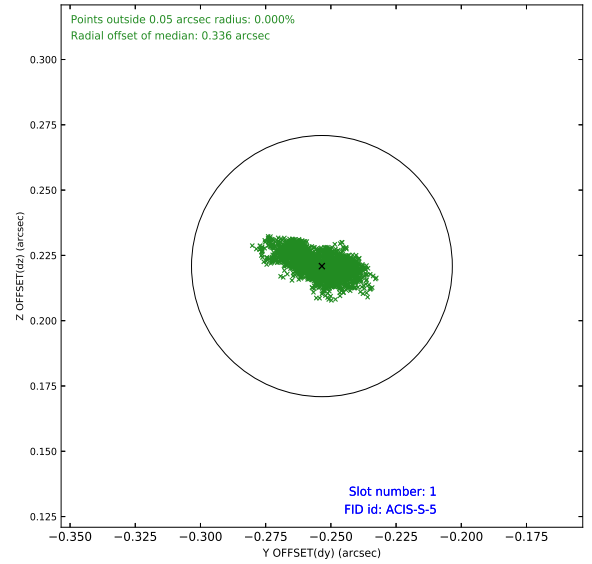
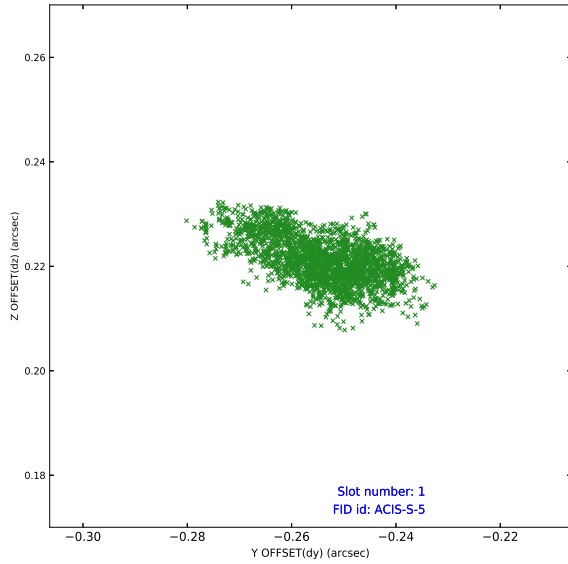


2.5 FID Slots

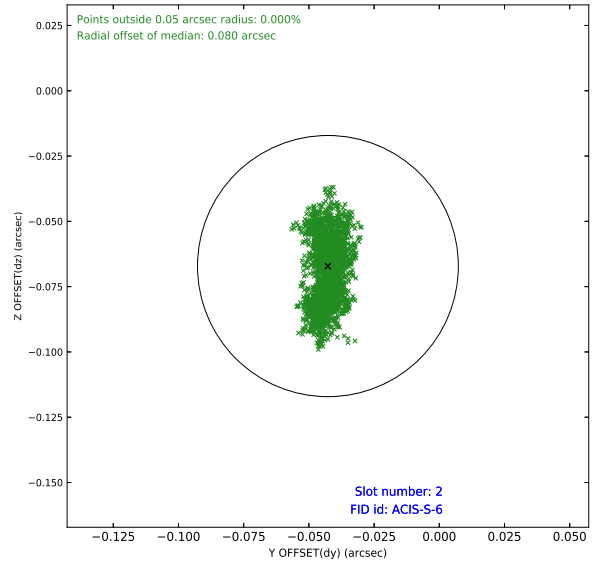
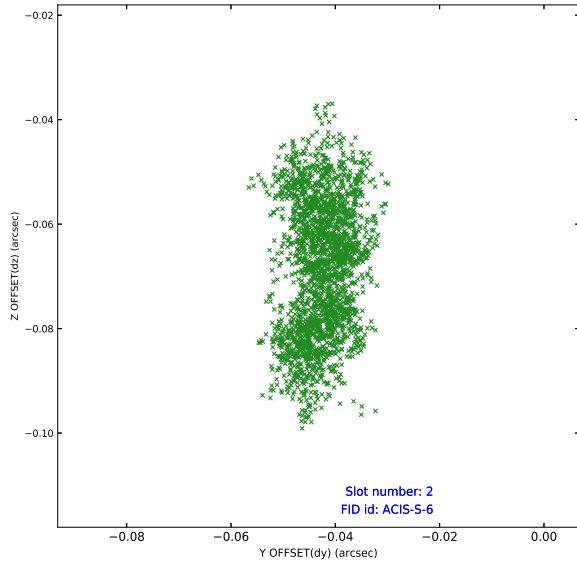
2.5.1 Slot 0



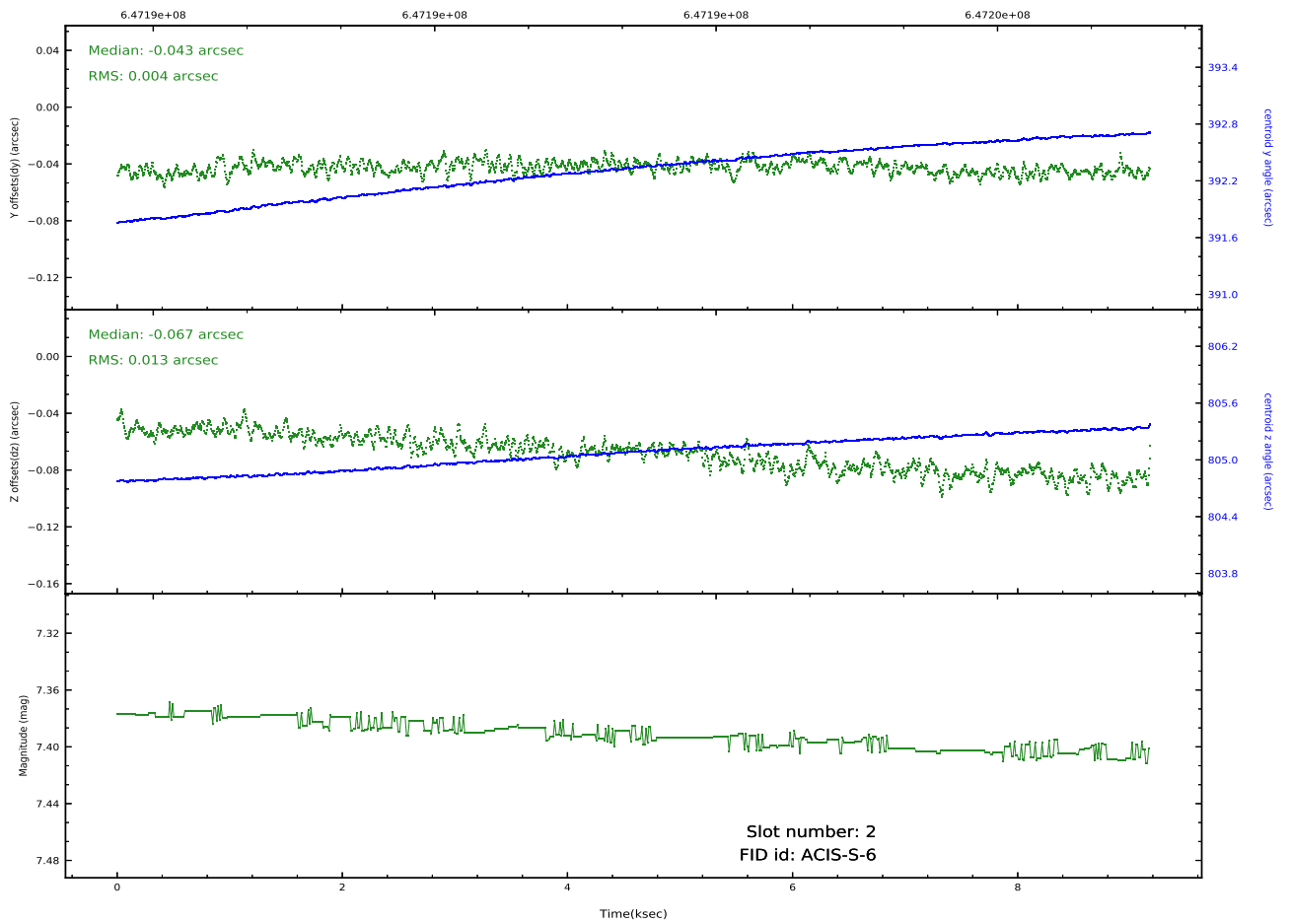
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0539180363417

A.2 Comments