

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20419 - L2 Version 2
Chandra X-Ray Center

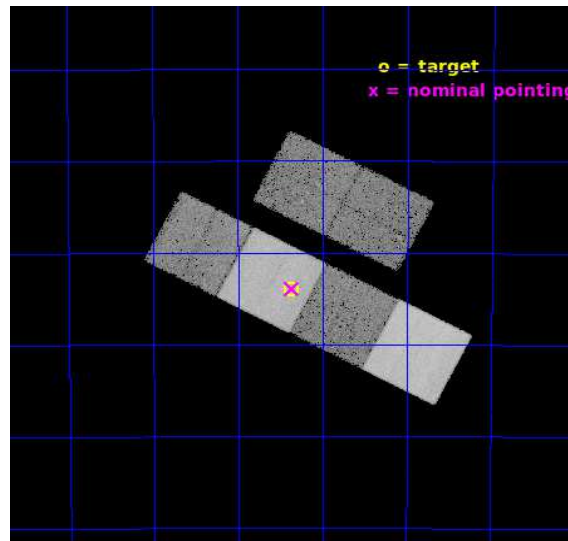
L2 Processing Date : Oct 25 2020

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1 Front

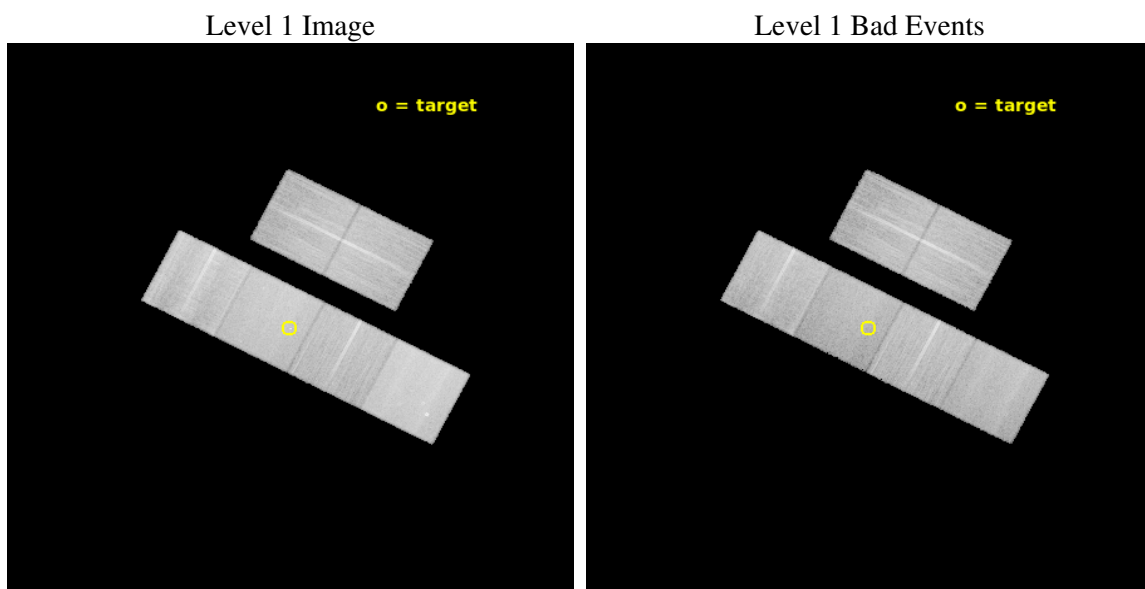
seq_num	703524	Sequence number
obs_id	20419	Observation id
title	Chandra Observations of Three Newly Discovered Quadruply Gravitationally Lensed Quasars	Proposal title
observer	David Pooley	Principal investigator
object	DES J0408-5354	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	62.09125	Observer's specified target RA [deg]
dec_targ	-53.900278	Observer's specified target Dec [deg]
ra_nom	62.090702176686	Nominal RA [deg]
dec_nom	-53.898859892943	Nominal Dec [deg]
roll_nom	207.33722325865	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23939.200356722	Sum of GTIs [s]
livetime	23636.067787349	Livetime [s]
ontime2	23939.200356722	Sum of GTIs [s]
ontime3	23939.200356722	Sum of GTIs [s]
ontime5	23939.200356722	Sum of GTIs [s]
ontime6	23939.200356722	Sum of GTIs [s]
ontime7	23939.200356722	Sum of GTIs [s]
ontime8	23939.200356722	Sum of GTIs [s]
l2events	289178	Number of level 2 events



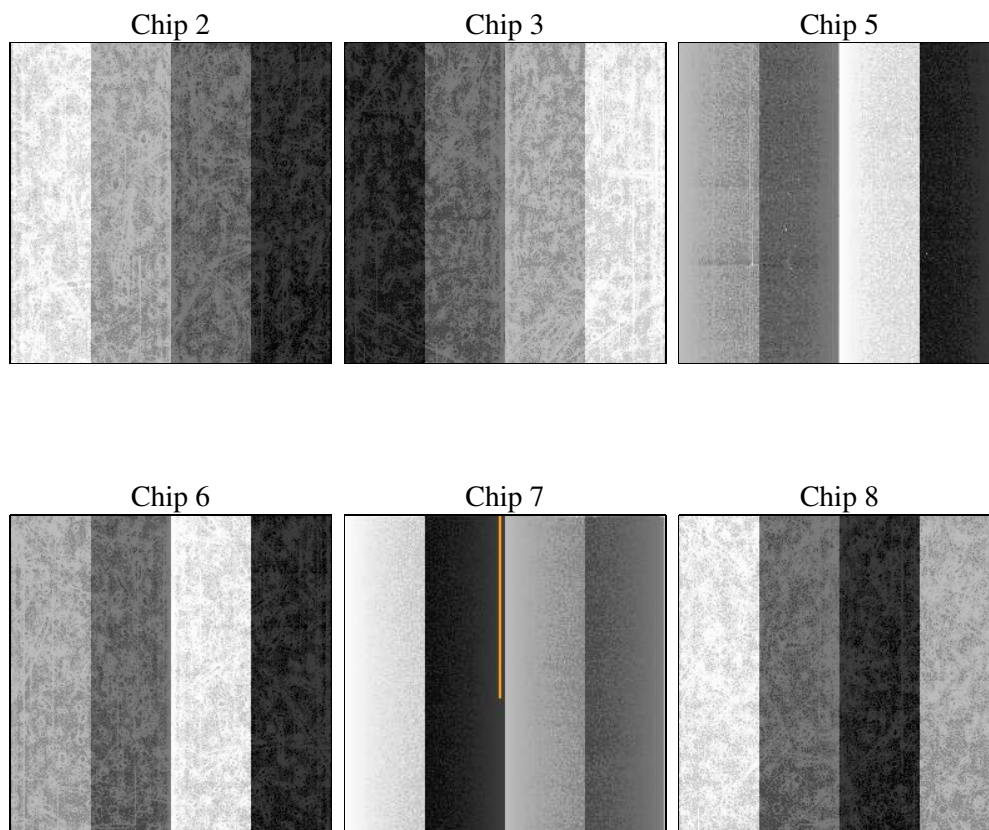
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23991.313000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	23939.200356722	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	23939.200356722	Sum of GTIs [s]
date	2020-10-25T15:56:10	Date and time of file creation	ontime3	23939.200356722	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	23939.200356722	Sum of GTIs [s]
			ontime6	23939.200356722	Sum of GTIs [s]
			ontime7	23939.200356722	Sum of GTIs [s]
			ontime8	23939.200356722	Sum of GTIs [s]
			l1events	1269217	Number of level 1 events

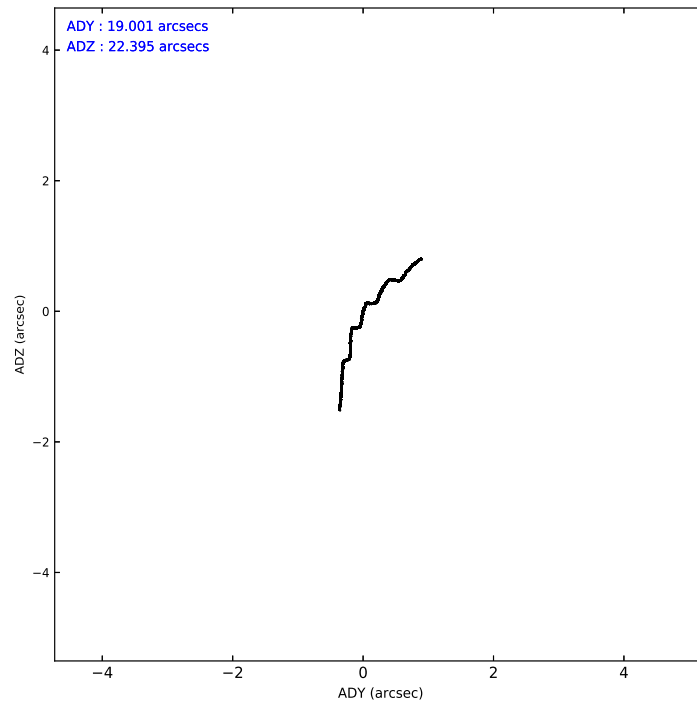
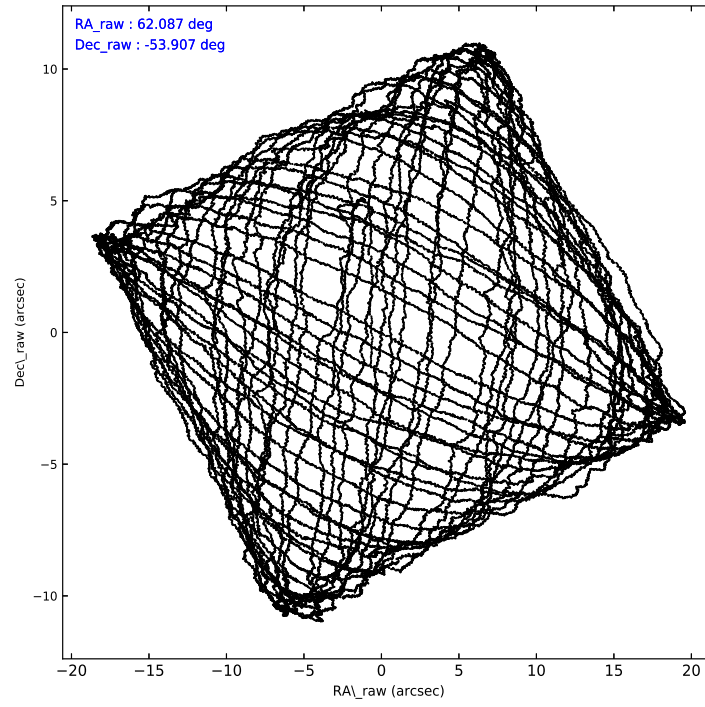
2.1.4 Events

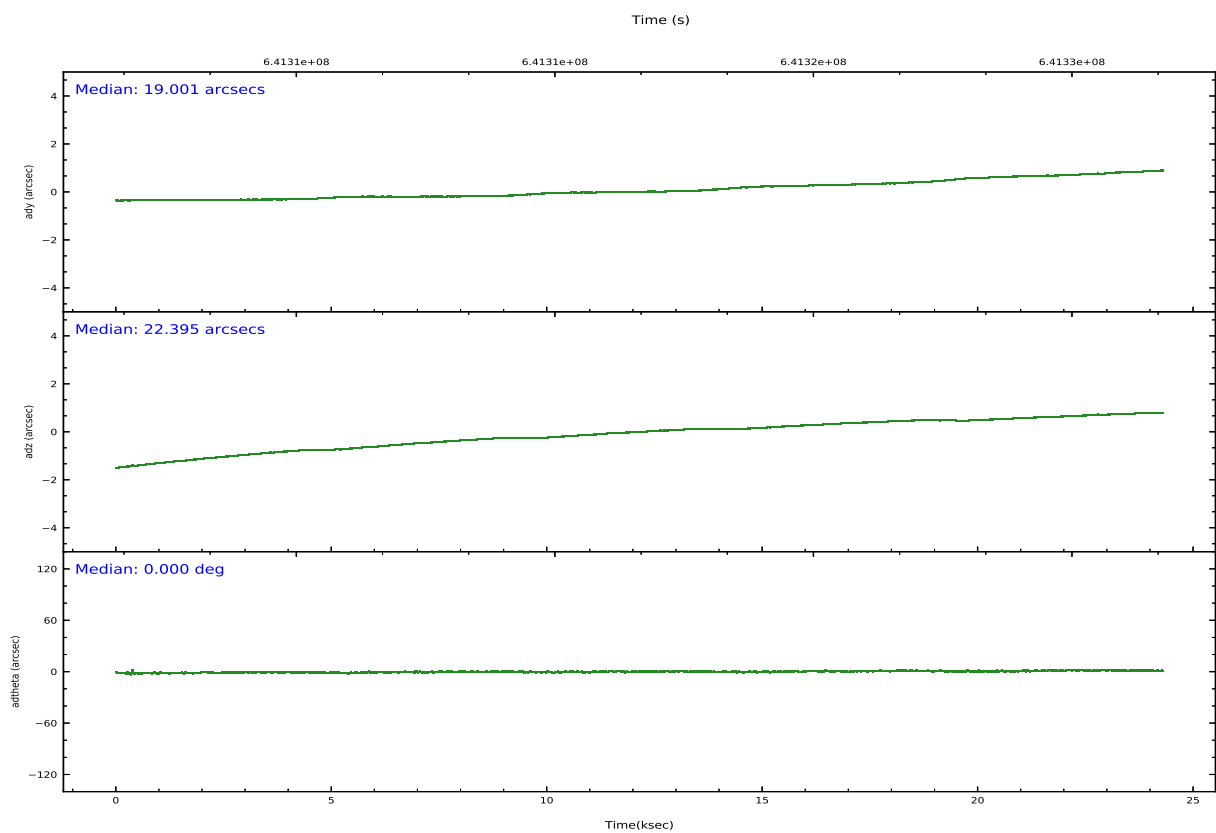
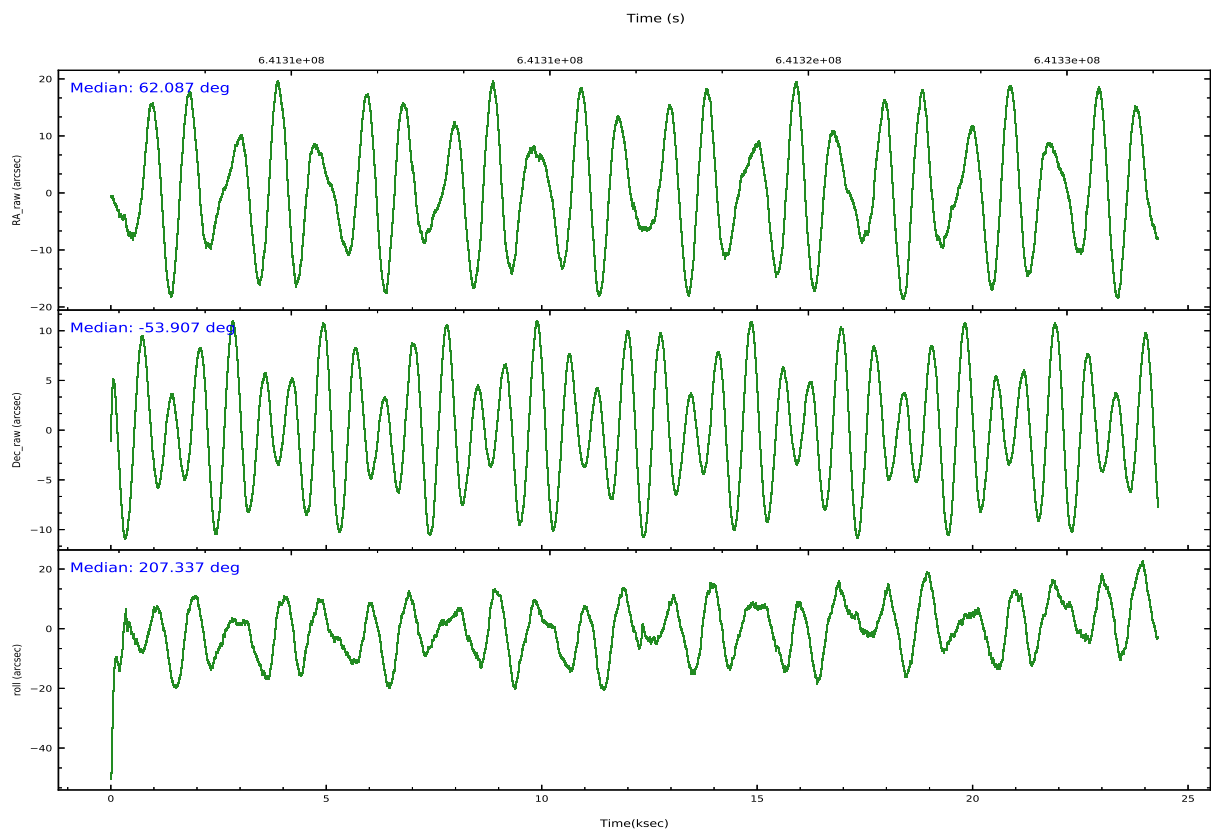
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	185609	171097	274012	184479	223226	230794	grade 0 events	6554	6682	7657	5891	8221	16819
rejected events	166919	152949	143190	165171	125181	171910		3%	3%	2%	3%	3%	7%
rejected %	89%	89%	52%	89%	56%	74%	grade 1 events	102	105	758	88	332	197
								0%	0%	0%	0%	0%	0%
							grade 2 events	4718	3890	41277	4788	20655	14730
								2%	2%	15%	2%	9%	6%
							grade 3 events	1847	1938	3889	1828	7962	5811
								0%	1%	1%	0%	3%	2%
							grade 4 events	1821	1811	3823	1849	7854	5301
								0%	1%	1%	1%	3%	2%
							grade 5 events	6789	7801	18357	7916	22129	12055
								3%	4%	6%	4%	9%	5%
							grade 6 events	3755	3831	74197	4955	53369	16242
								2%	2%	27%	2%	23%	7%
							grade 7 events	160023	145039	124054	157164	102704	159639
								86%	84%	45%	85%	46%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-235678	ACIS-235678	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	62.112007	62.090702176686	CCD I2 on	O1	Y
[deg] Pointing Dec	-53.883778	-53.898859892943	CCD I3 on	O2	Y
[deg] Pointing Roll	207.197571	207.33722325865	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	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	O4	Y
[s] Observation start time (MET)	641304126.184000	641303093.05033	CCD S5 on	N	N
Observation start date	2018-04-28T12:00:57	2018-04-28T11:44:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	641328117.184000	641329025.55186	On-chip summing requested	N	N
Observation end date	2018-04-28T18:40:48	2018-04-28T18:57:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



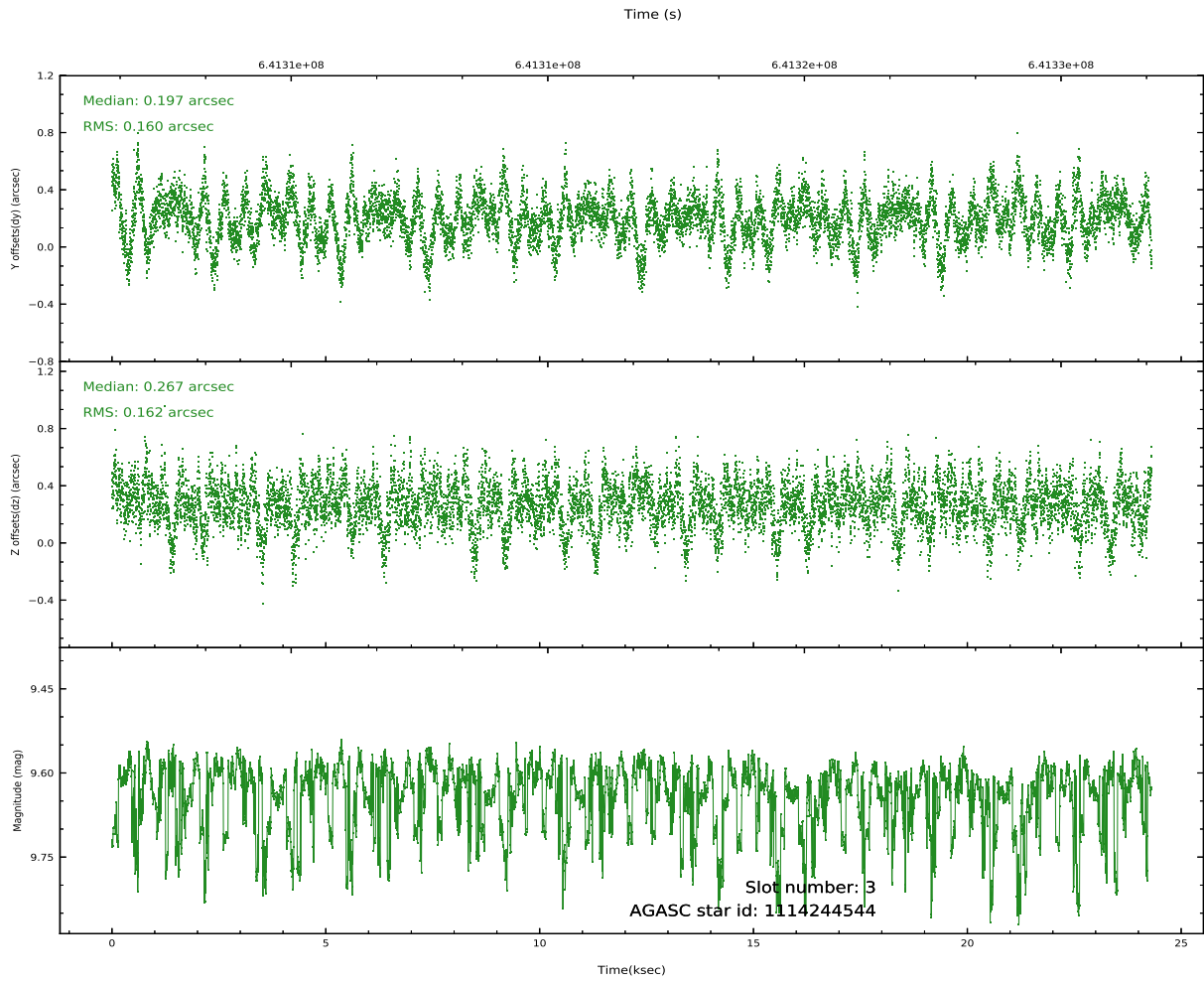
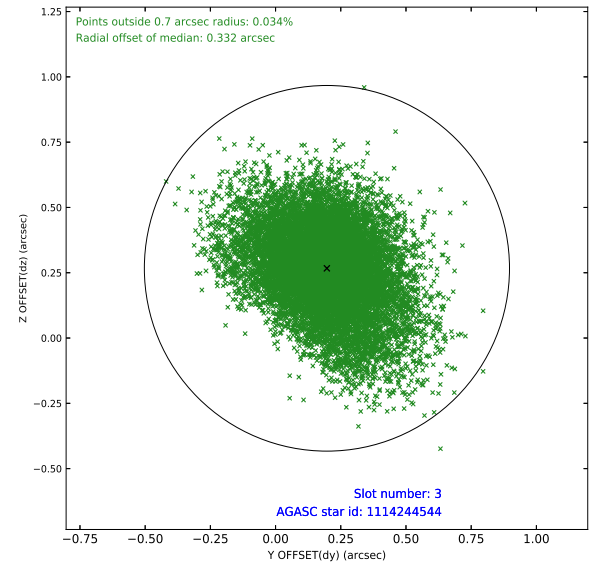
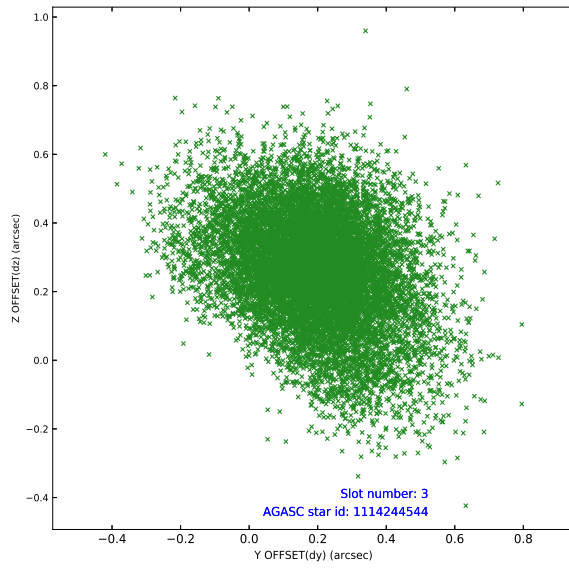


Slot Statistics

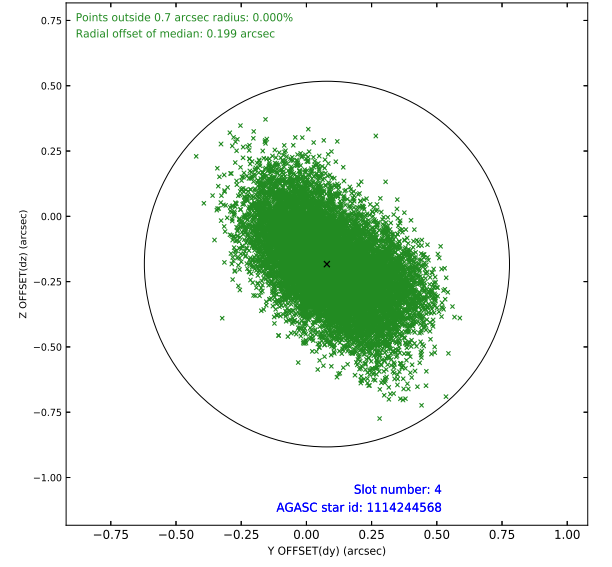
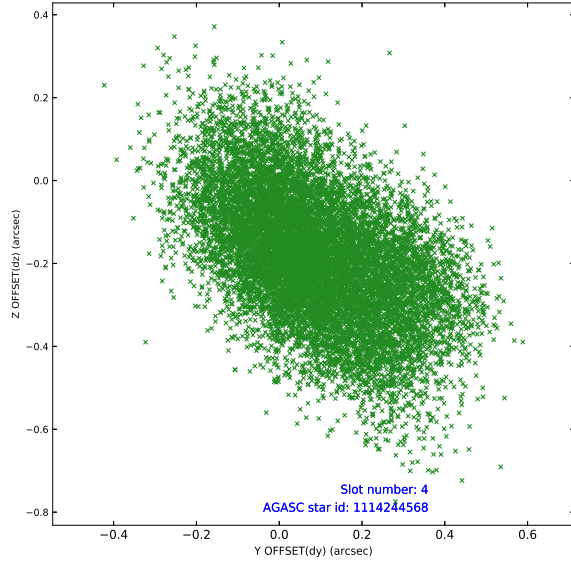
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	5929	1.000	0.301	-0.164	0.048	0.069	0.000000	0.000000	923.96	-1739
1	FID		ACIS-S-5	7.21	5928	1.000	-0.258	0.243	0.025	0.044	0.000000	0.000000	-1825.32	158
2	FID		ACIS-S-6	7.36	5929	1.000	-0.064	-0.067	0.026	0.060	0.000000	0.000000	389.28	801
3	GUIDE	used	1114244544	9.63	11834	1.000	0.197	0.267	0.238	0.406	62.028182	-53.779283	-11.48	-412
4	GUIDE	used	1114244568	9.62	11838	1.000	0.079	-0.183	0.238	0.387	61.731131	-53.994385	900.24	-12
5	GUIDE	used	1114245584	9.57	11836	1.000	-0.138	-0.063	0.194	0.315	61.424578	-54.197229	1806.94	348
6	GUIDE	used	1114375288	9.50	11839	1.000	-0.037	0.049	0.286	0.500	63.251405	-54.017832	-1914.54	1547
7	GUIDE	used	1114377944	8.71	11850	1.000	-0.101	-0.070	0.137	0.227	62.786550	-54.039339	-1009.13	1155

2.4 Star Slots

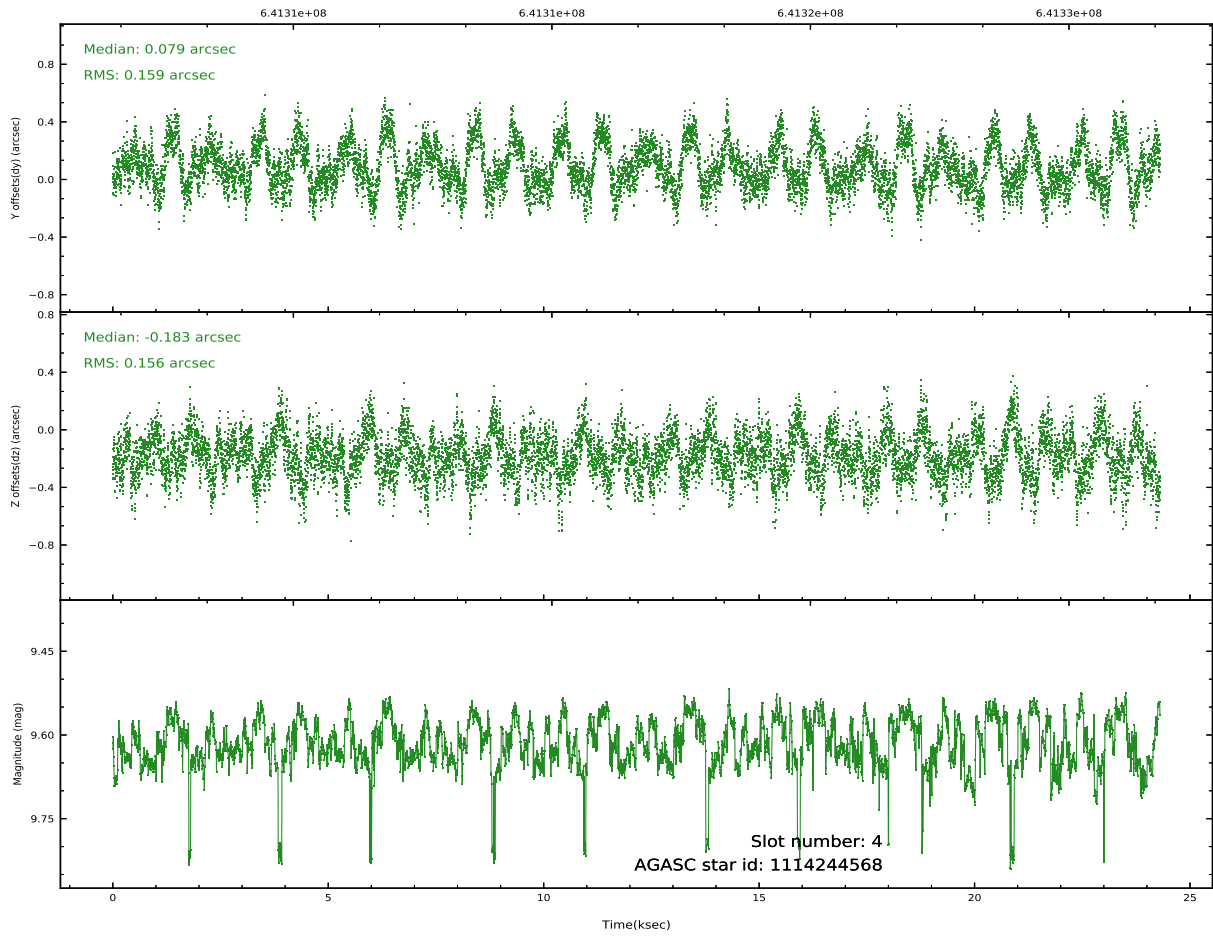
2.4.1 Slot 3



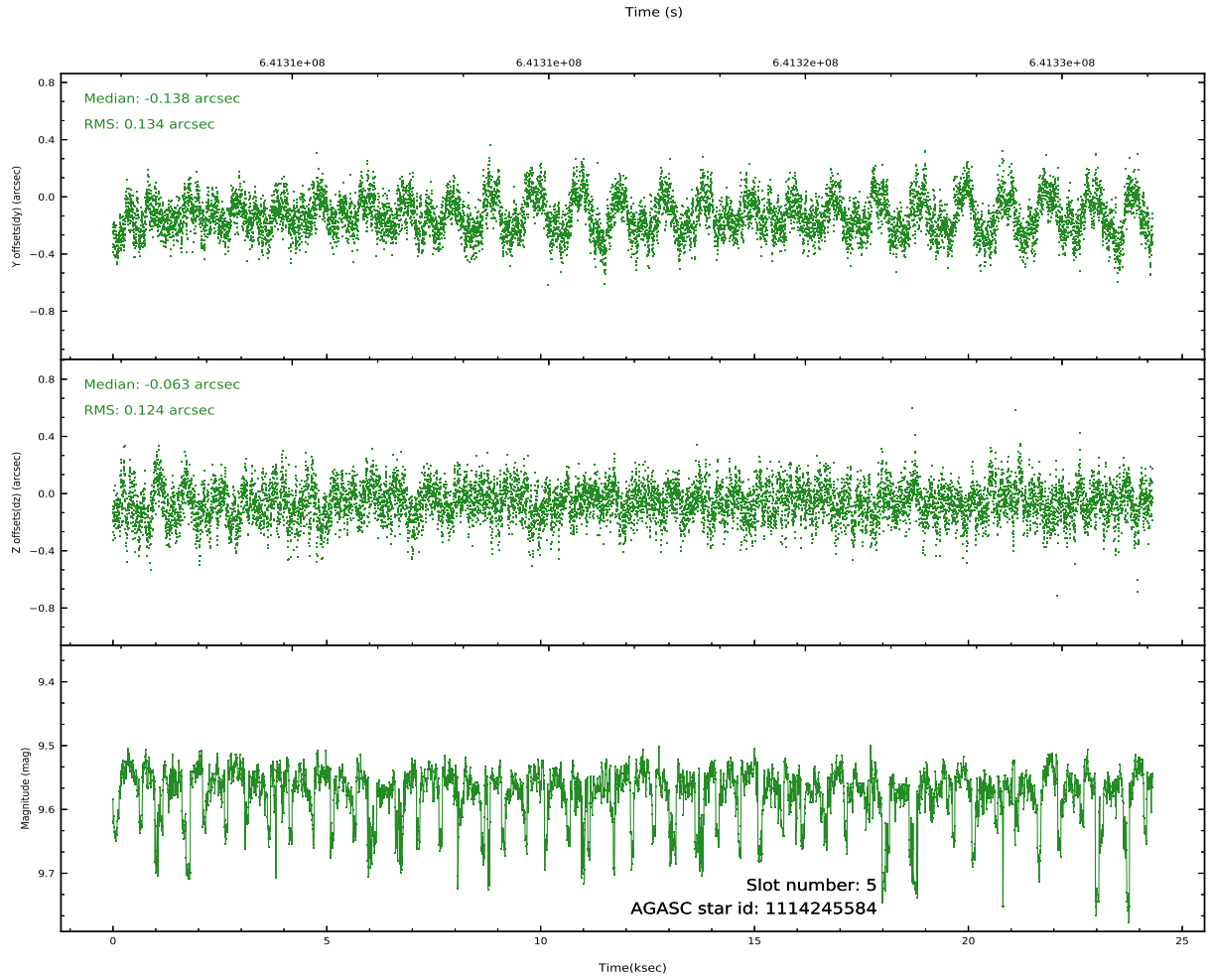
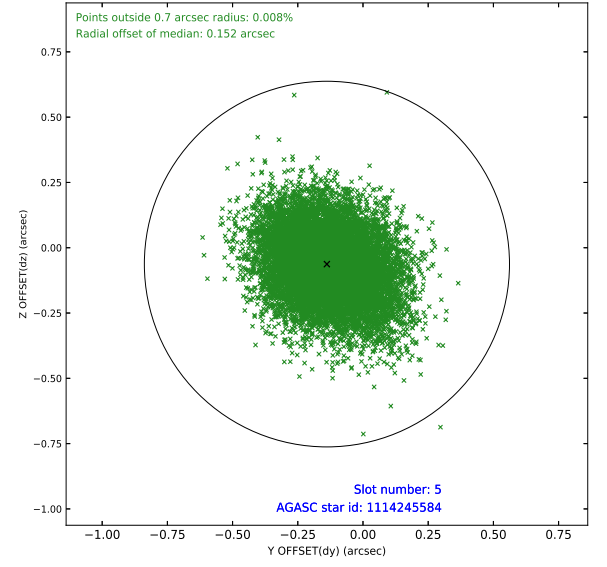
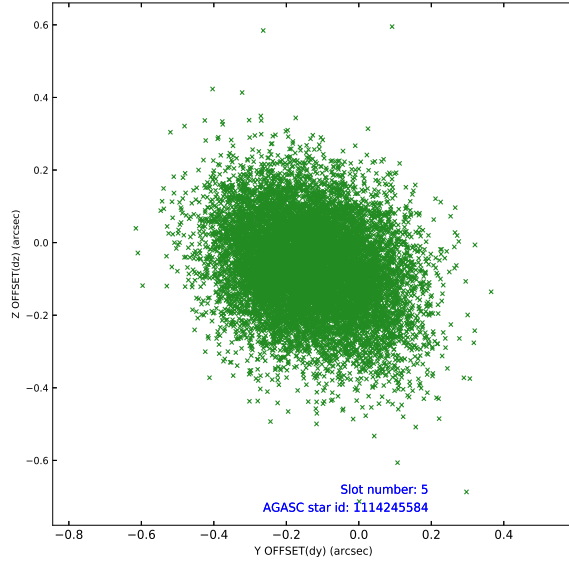
2.4.2 Slot 4



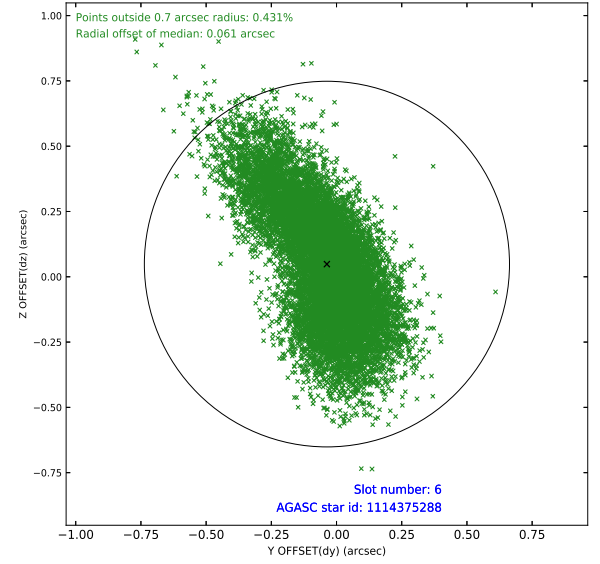
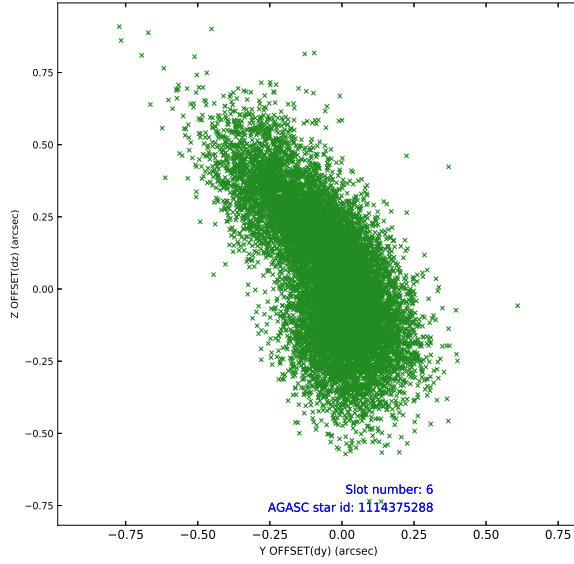
Time (s)



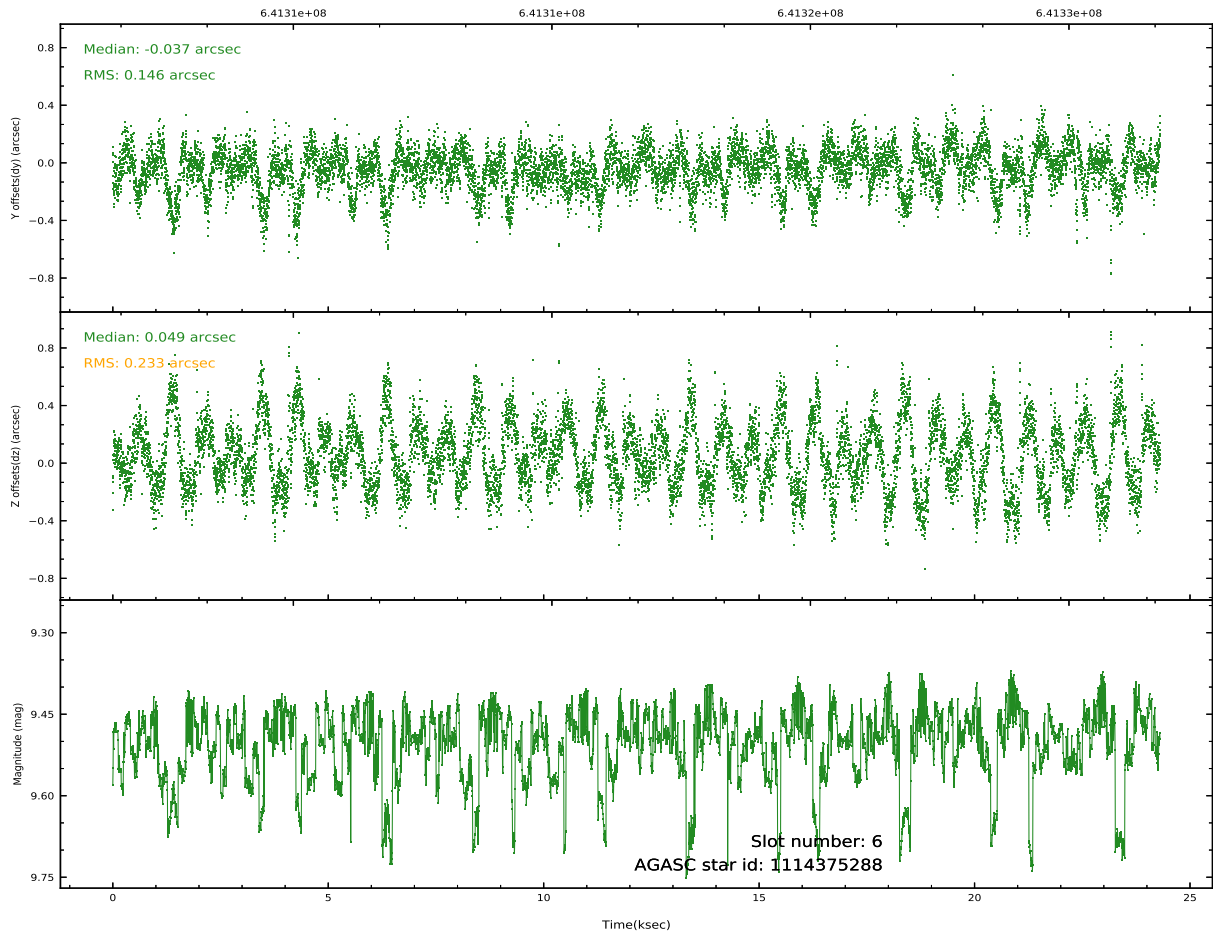
2.4.3 Slot 5



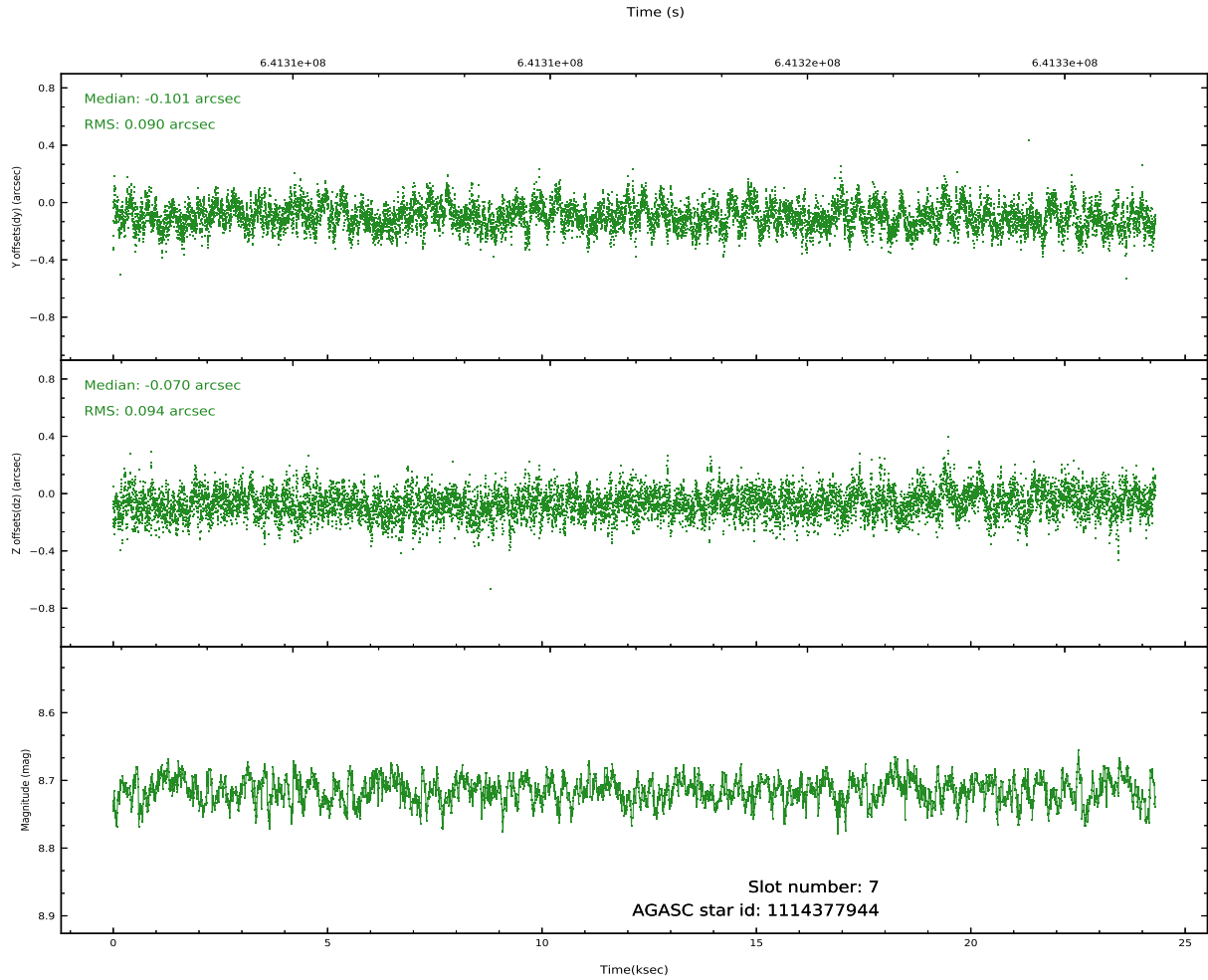
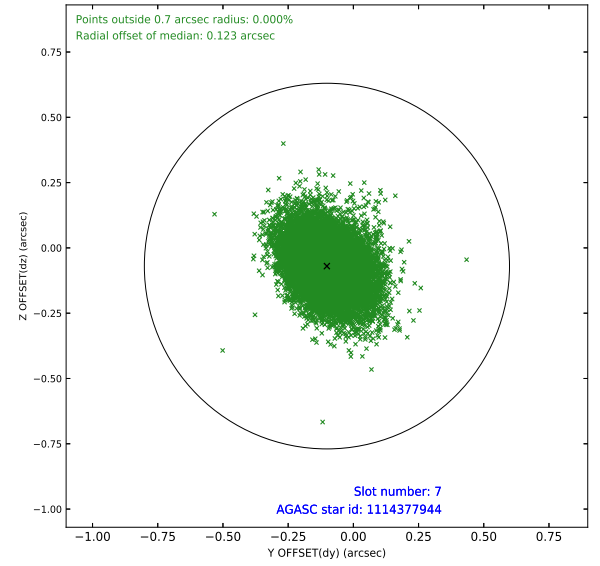
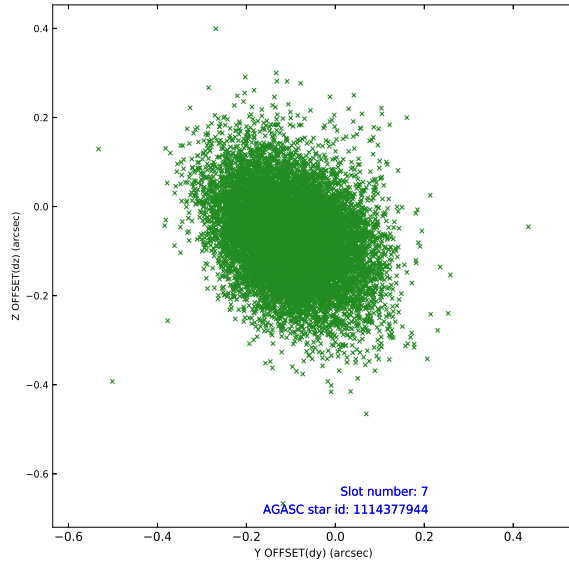
2.4.4 Slot 6



Time (s)

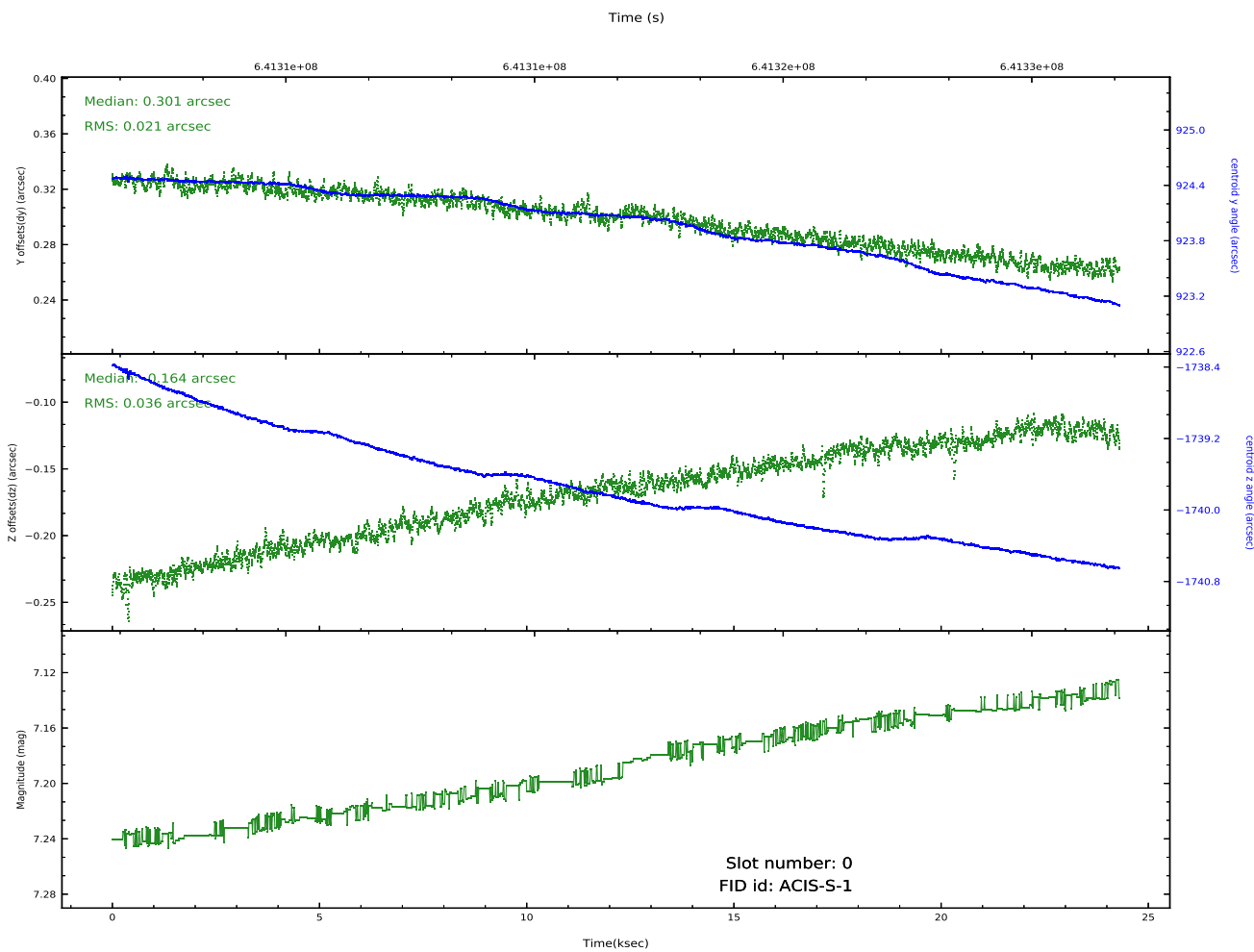
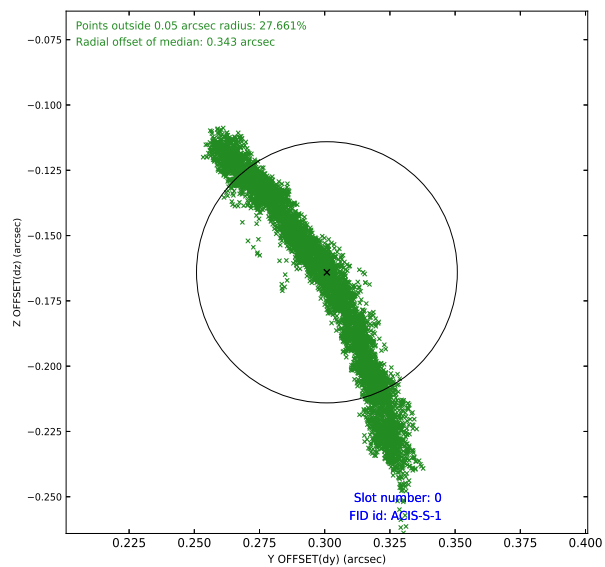
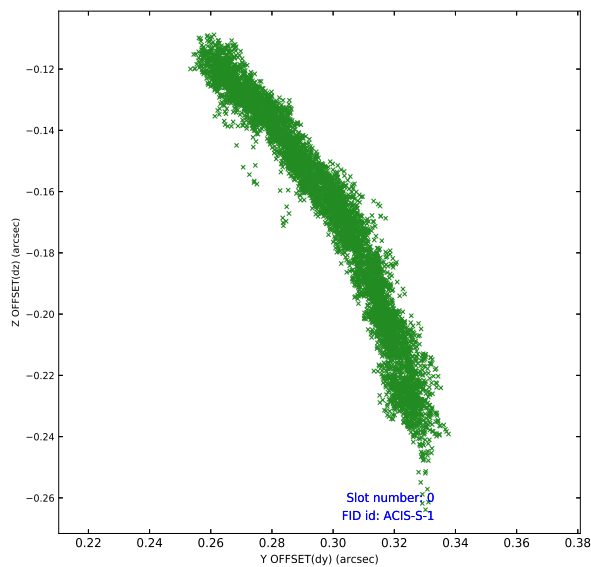


2.4.5 Slot 7

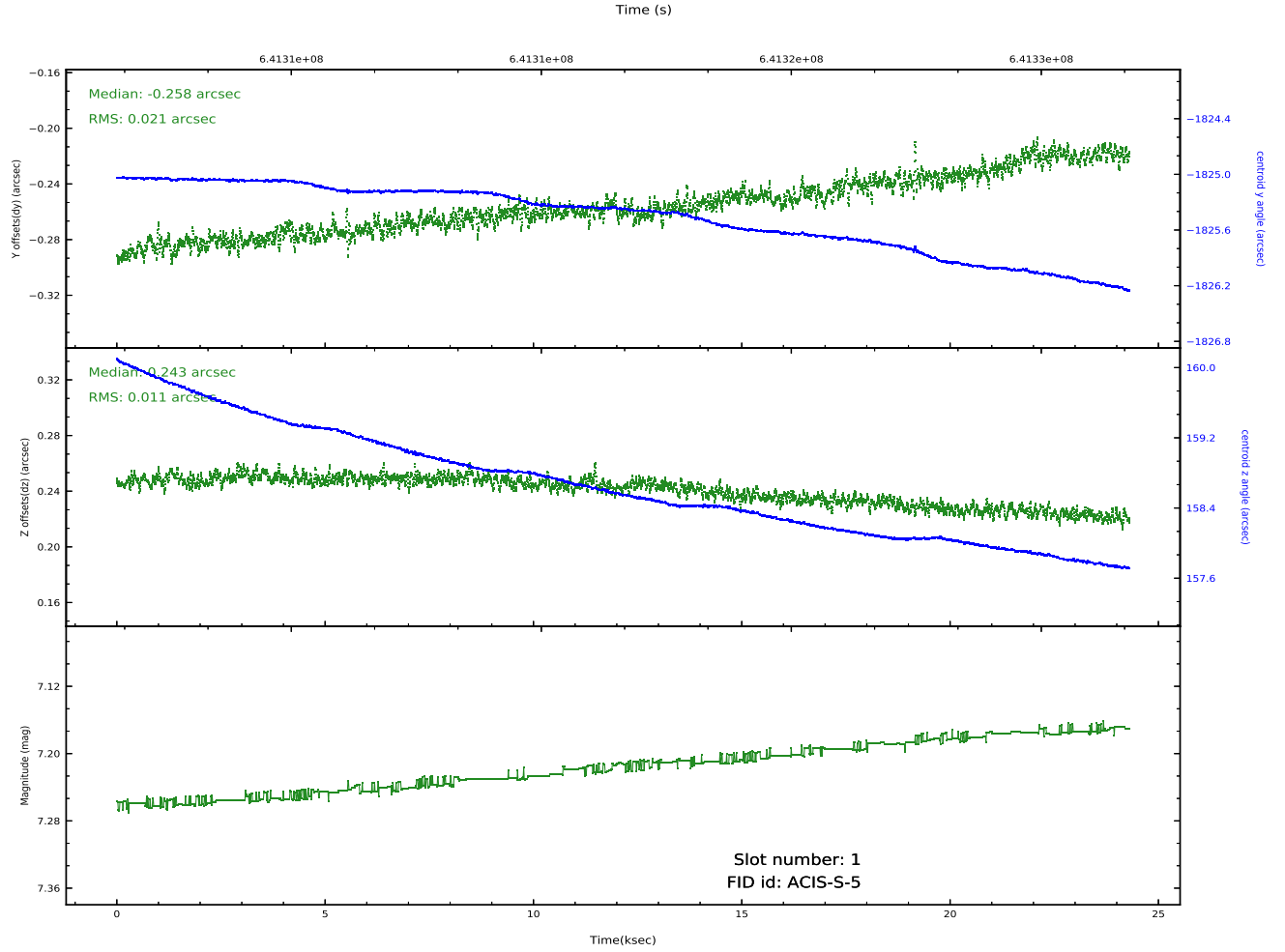
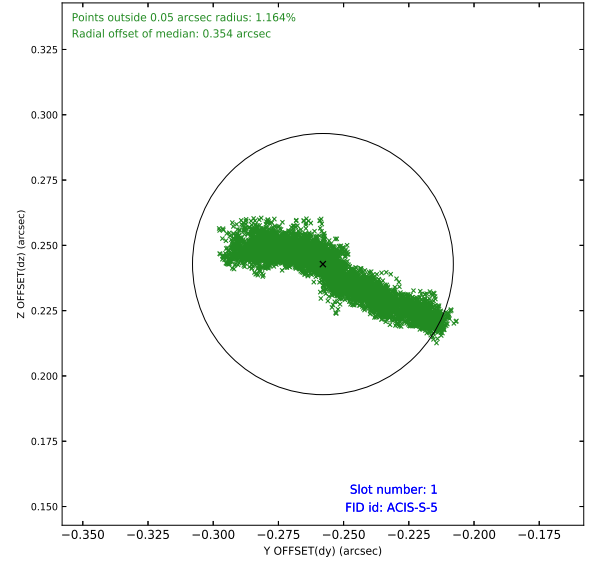
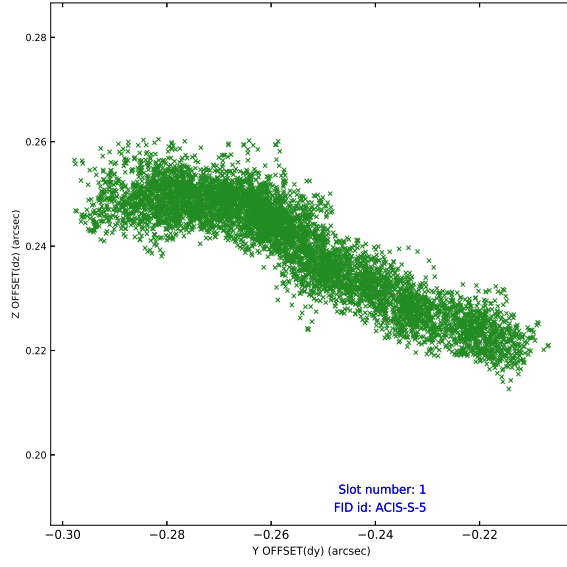


2.5 FID Slots

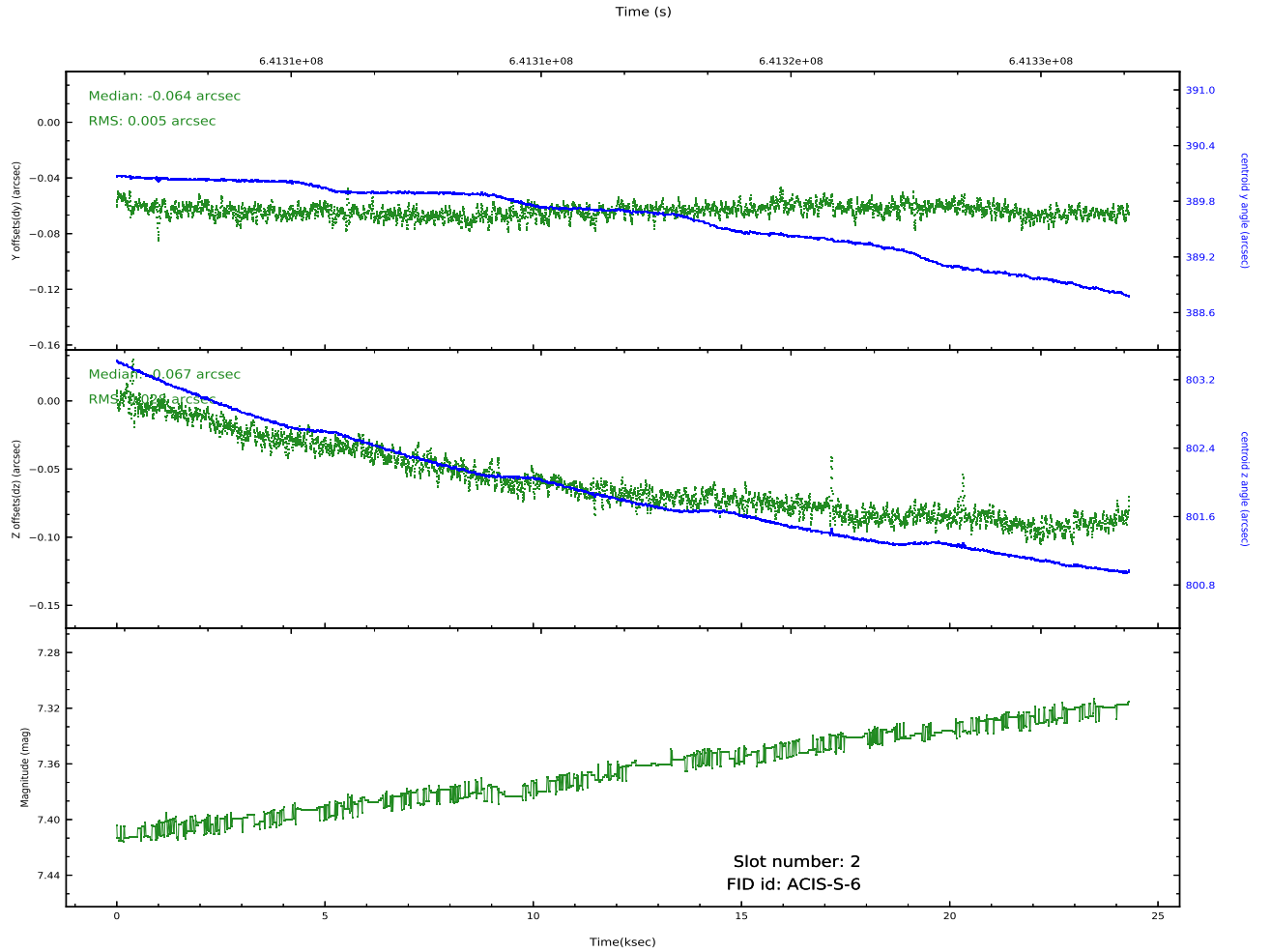
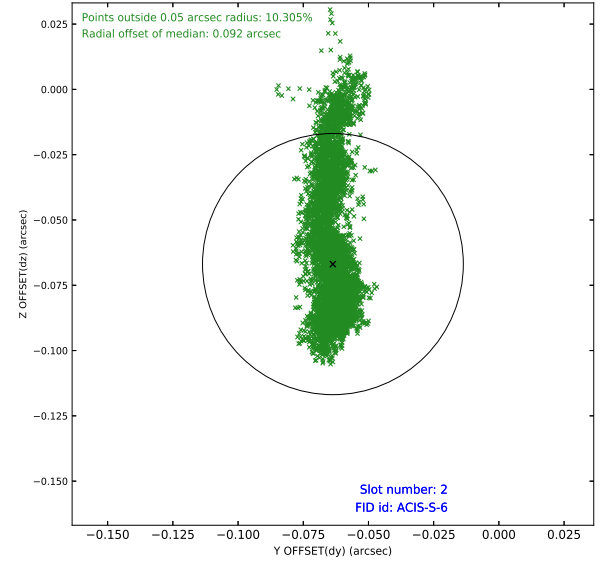
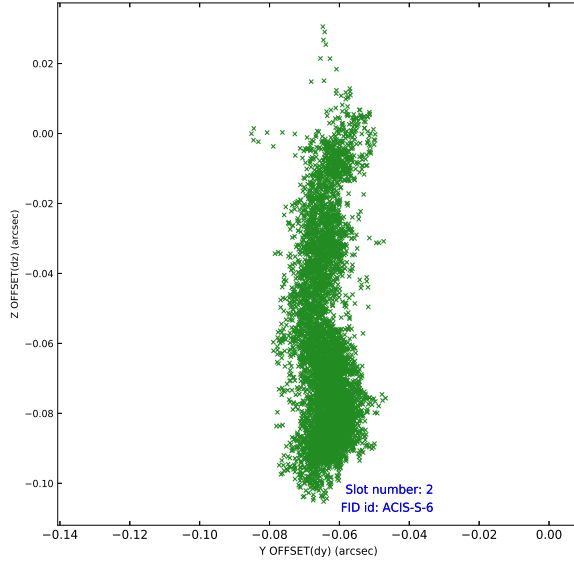
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.939200356722

A.2 Comments