

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20599 - L2 Version 2
Chandra X-Ray Center

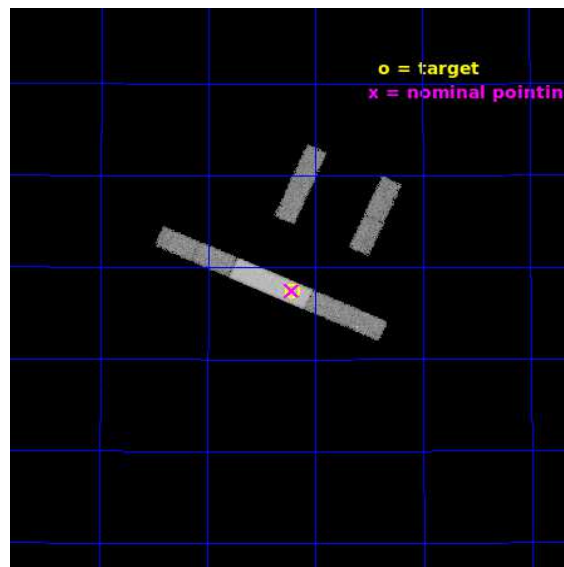
L2 Processing Date : Oct 27 2020

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

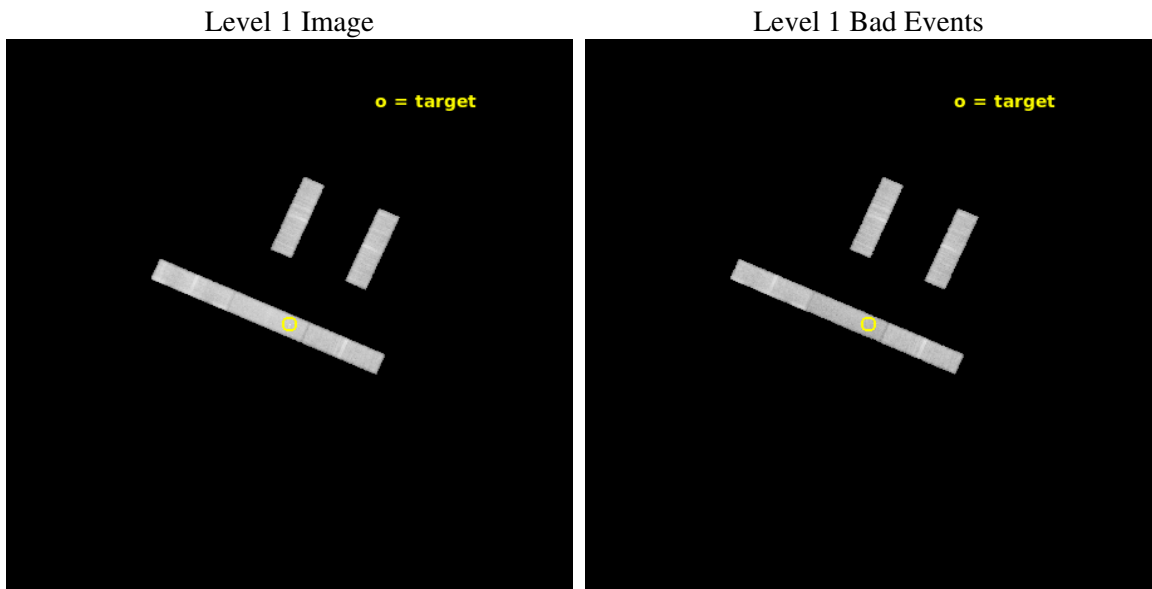
seq_num	402005	Sequence number
obs_id	20599	Observation id
title	Post-periastron behavior of PSR J2032+4127/MT91 213: Outburst, jet, and winds	Proposal title
observer	Wynn Ho	Principal investigator
object	PSR J2032+4127	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.054583	Observer's specified target RA [deg]
dec_targ	41.456778	Observer's specified target Dec [deg]
ra_nom	308.05487671321	Nominal RA [deg]
dec_nom	41.458085906763	Nominal Dec [deg]
roll_nom	203.88930882554	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28871.0	Sum of GTIs [s]
liveltime	27732.844078998	Livetime [s]
ontime2	28871.0	Sum of GTIs [s]
ontime3	28871.0	Sum of GTIs [s]
ontime6	28871.0	Sum of GTIs [s]
ontime7	28871.0	Sum of GTIs [s]
ontime8	28871.0	Sum of GTIs [s]
l2events	62770	Number of level 2 events



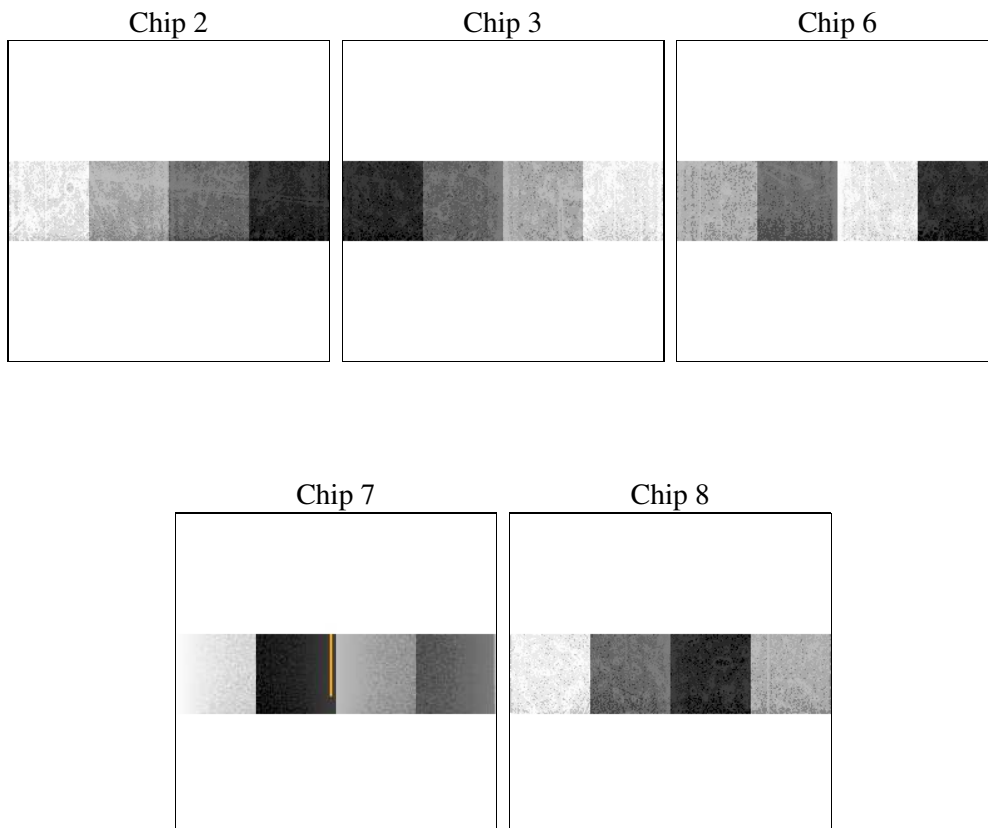
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	28800.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	28871.0	Sum of GTIs [s]
caldbver	4.9.3	 	ontime2	28871.0	Sum of GTIs [s]
date	2020-10-27T08:18:38	Date and time of file creation	ontime3	28871.0	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	28871.0	Sum of GTIs [s]
			ontime7	28871.0	Sum of GTIs [s]
			ontime8	28871.0	Sum of GTIs [s]
			l1events	366048	Number of level 1 events

2.1.4 Events

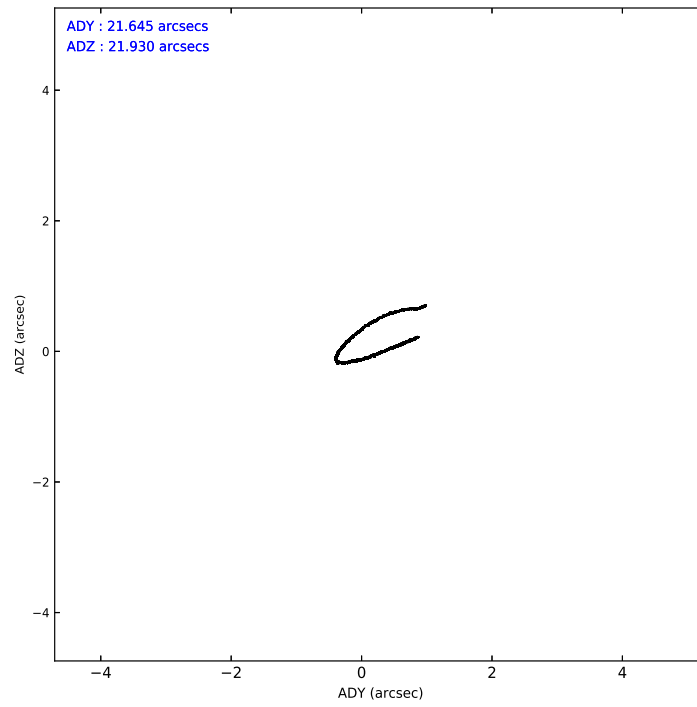
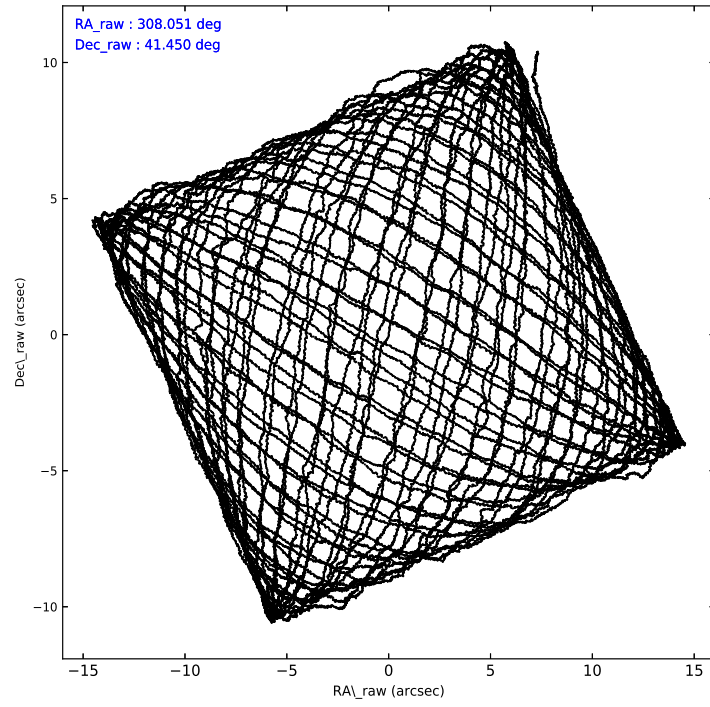
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	63190	64658	67507	80857	89836
rejected events	55992	57519	58933	42969	67475
rejected %	88%	88%	87%	53%	75%

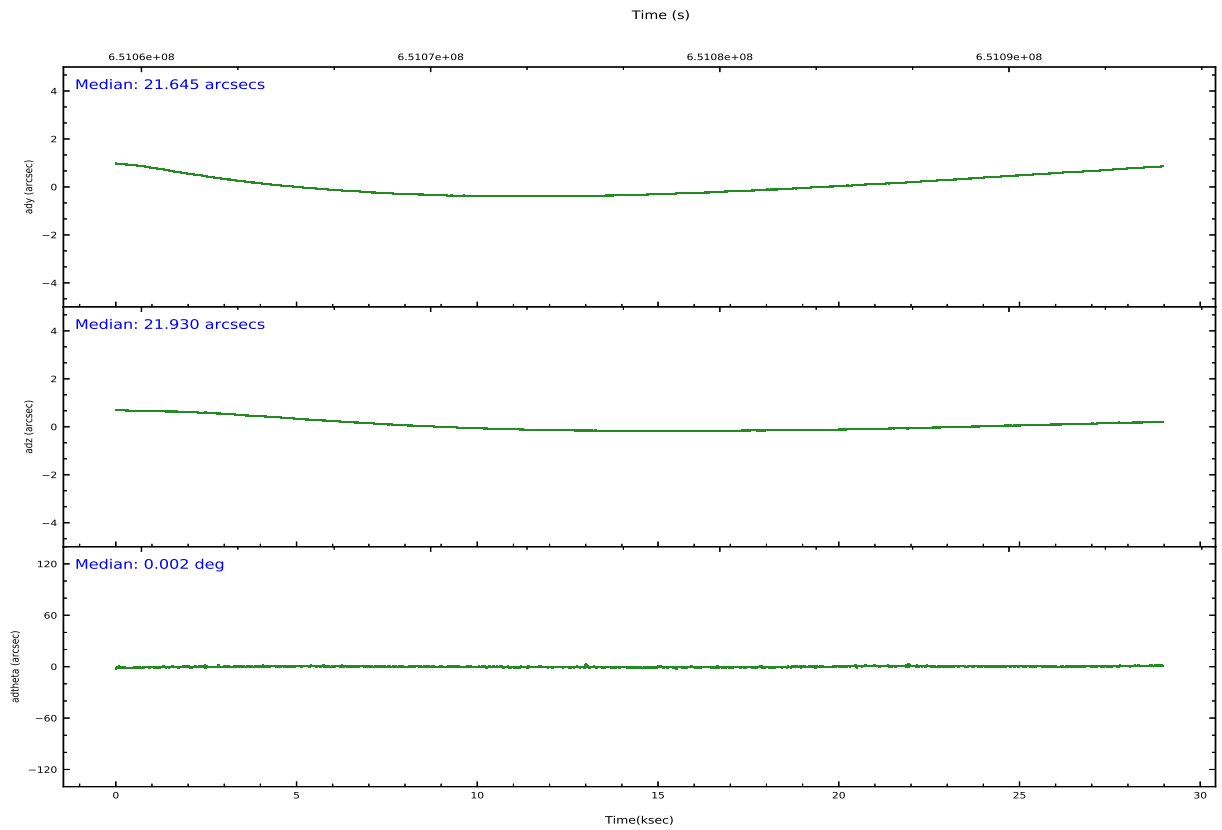
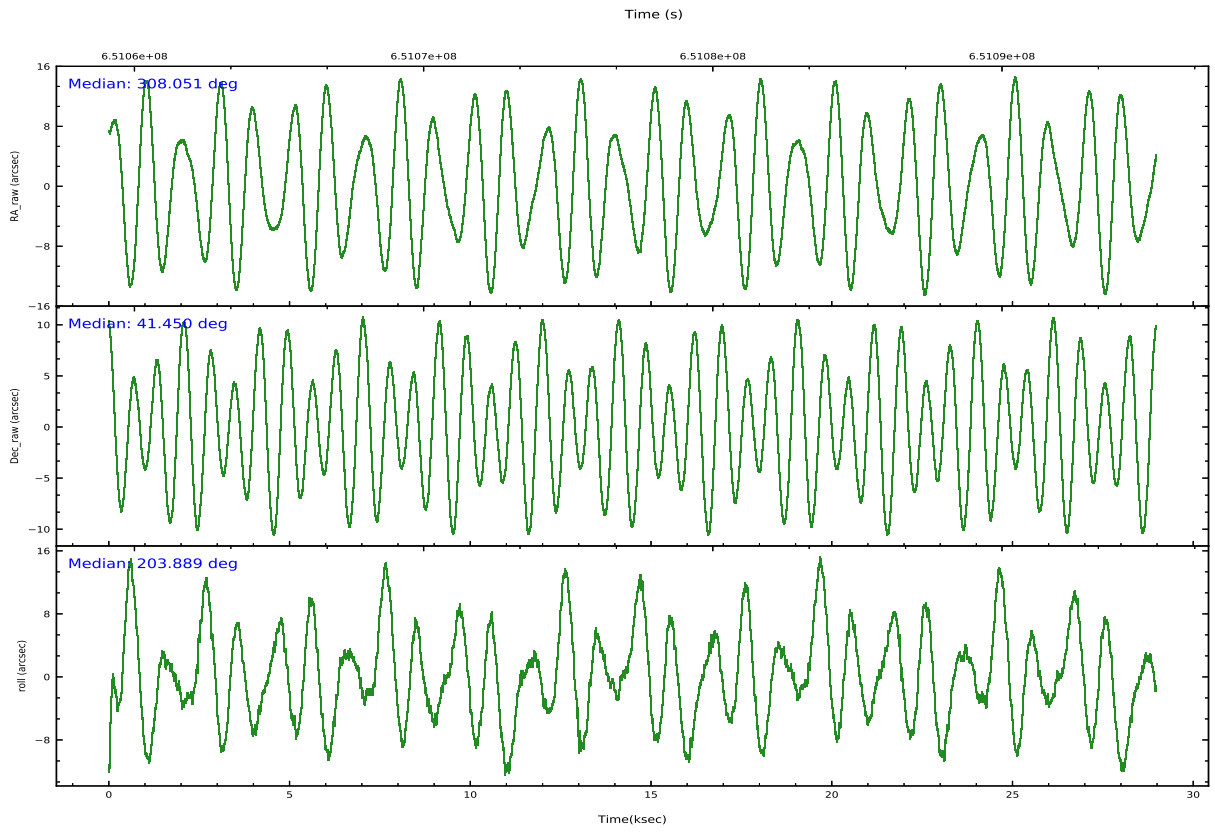
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2372	2328	2994	3990	5912
	3%	3%	4%	4%	6%
grade 1 events	23	27	28	127	52
	0%	0%	0%	0%	0%
grade 2 events	1529	1431	1662	8032	5226
	2%	2%	2%	9%	5%
grade 3 events	961	1021	1112	3868	2448
	1%	1%	1%	4%	2%
grade 4 events	1118	1003	1069	3811	2343
	1%	1%	1%	4%	2%
grade 5 events	2168	2778	2933	8120	4112
	3%	4%	4%	10%	4%
grade 6 events	1219	1356	1737	18188	6456
	1%	2%	2%	22%	7%
grade 7 events	53800	54714	55972	34721	63287
	85%	84%	82%	42%	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	308.071858	308.05487671321	CCD I2 on	O1	Y
[deg] Pointing Dec	41.472162	41.458085906763	CCD I3 on	O2	Y
[deg] Pointing Roll	203.723468	203.88930882554	CCD S0 on	N	N
[s] Window start time (MET)	645926469.184000	645926469.184000	CCD S1 on	N	N
[s] Window stop time (MET)	651110469.184000	651110469.184000	CCD S2 on	Y	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S3 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S4 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S5 on	N	N
[mm] SIM translation stage offset	0	0.00754346686406393	Number of optional ACIS chips dropped	0	0
[s] Observation start time (MET)	651063464.184000	651062617.29056	On-chip summing requested	N	N
Observation start date	2018-08-19T10:56:35	2018-08-19T10:43:37	Subarray requested	CUSTOM	1/4
[s] Observation end time (MET)	651092264.184000	651093053.1298701	Subarray start row	385	385
Observation end date	2018-08-19T18:56:35	2018-08-19T19:10:53	Subarray row count	256	256
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	1

2.3 Aspect





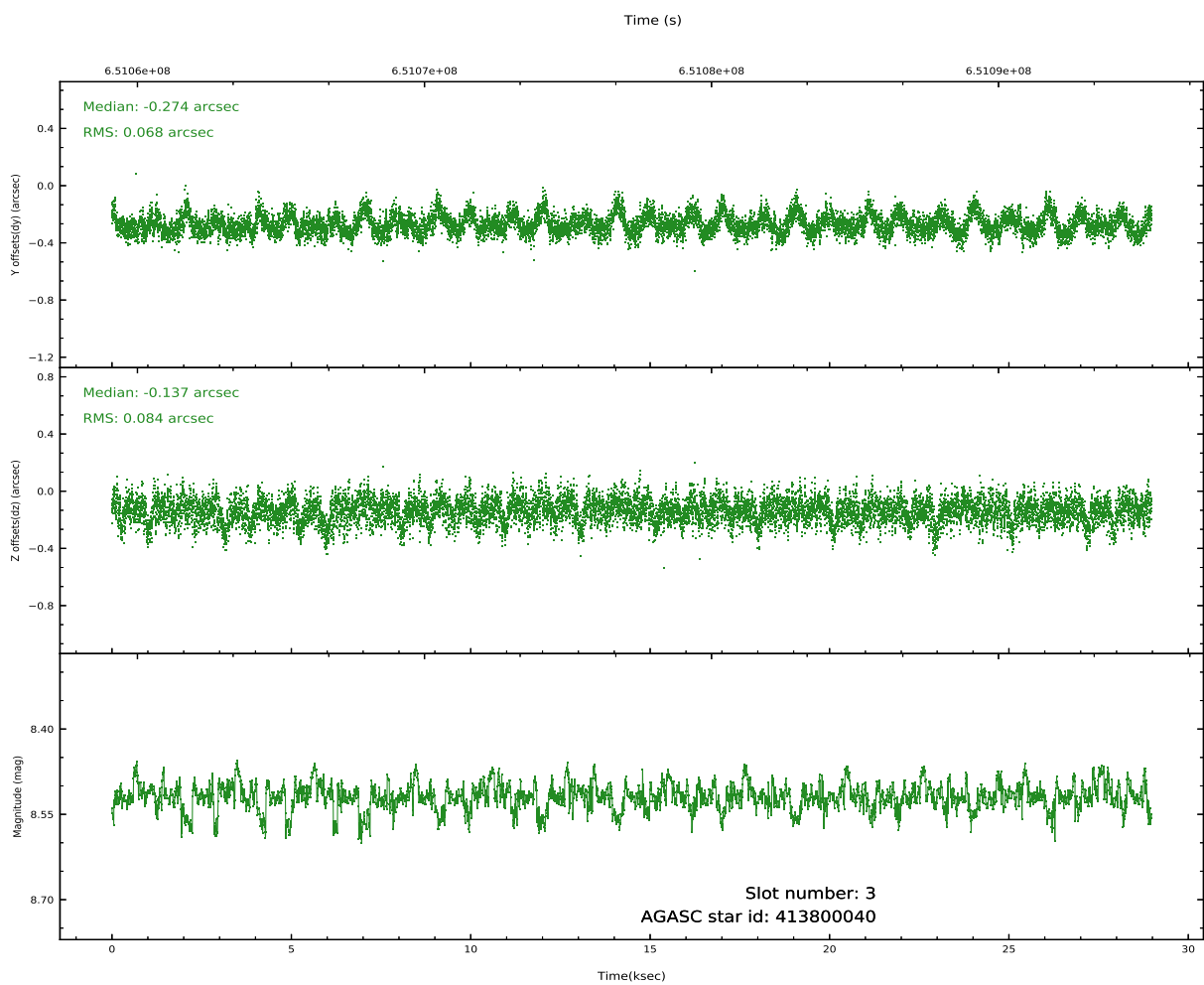
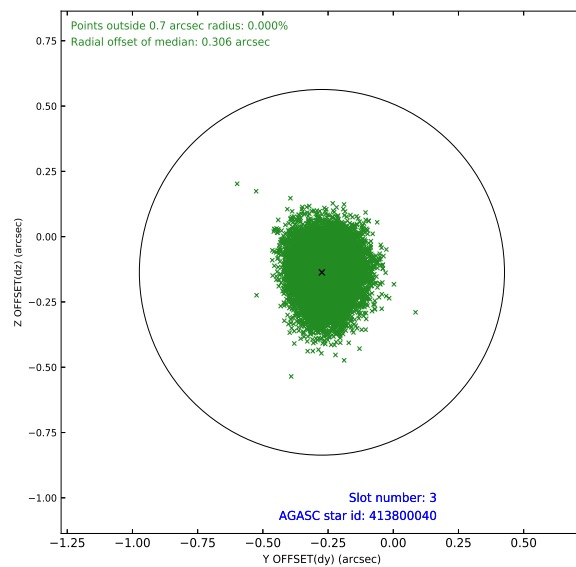
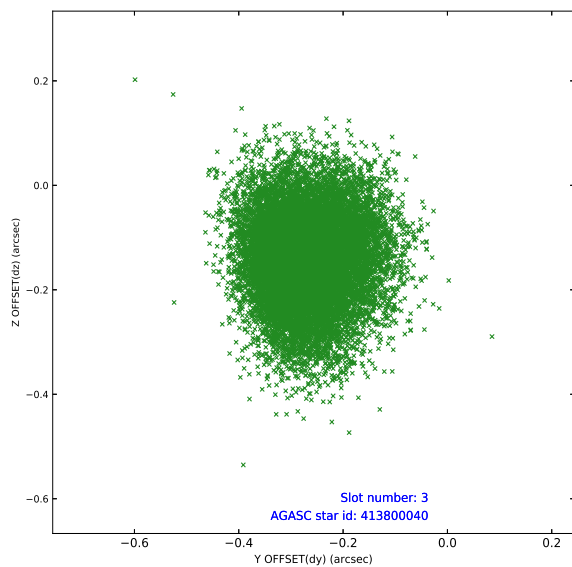
Slot Statistics

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	7.03	7067	1.000	0.065	0.032	0.016	0.024	0.000000	0.000000	-774.99	-1743
1	FID		ACIS-S-4	7.15	7066	1.000	0.037	-0.098	0.014	0.021	0.000000	0.000000	2138.40	164
2	FID		ACIS-S-6	7.30	7067	1.000	-0.130	0.076	0.010	0.016	0.000000	0.000000	387.14	802
3	GUIDE	used	413800040	8.52	14123	1.000	-0.274	-0.137	0.115	0.189	308.324931	40.981886	79.86	1891
4	GUIDE	used	414324232	8.28	14126	1.000	0.061	0.369	0.145	0.219	308.637806	41.996627	-2147.32	-1123
5	GUIDE	used	414326136	7.36	14132	1.000	0.074	-0.136	0.126	0.200	308.256176	41.473642	-457.88	194
6	GUIDE	used	413805792	7.32	14132	1.000	-0.146	-0.309	0.140	0.219	307.778748	40.858024	1619.16	1701
7	GUIDE	used	414324952	8.98	14121	1.000	0.266	0.235	0.222	0.356	307.998954	42.060645	-673.25	-2017

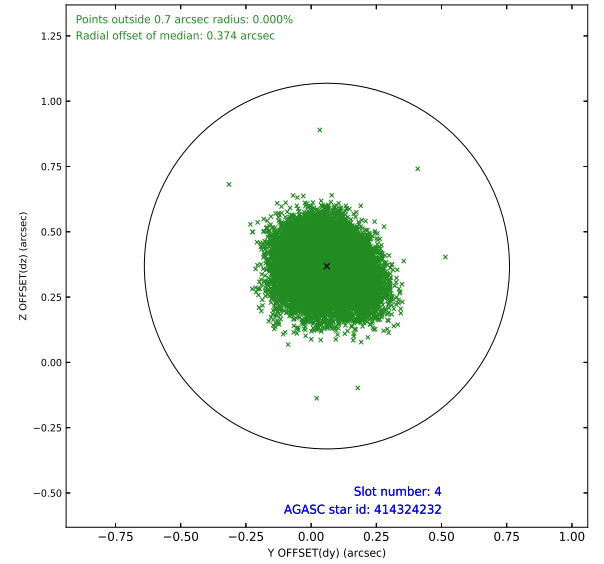
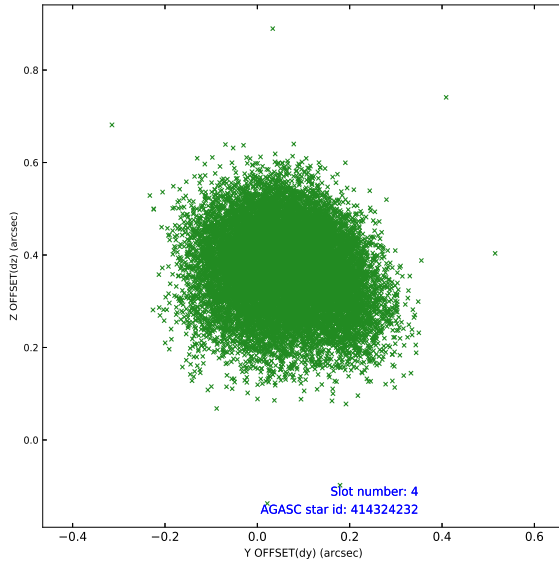
∞

2.4 Star Slots

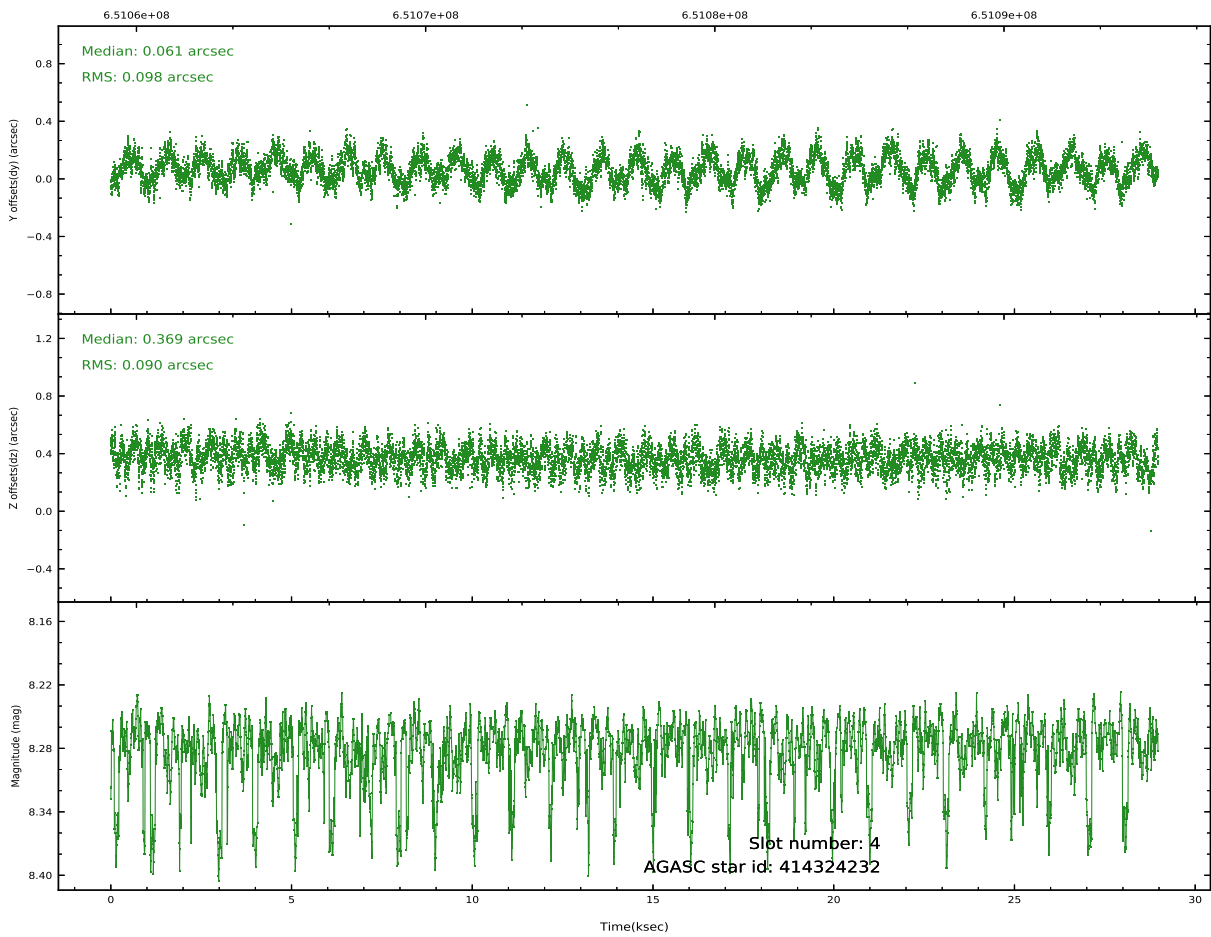
2.4.1 Slot 3



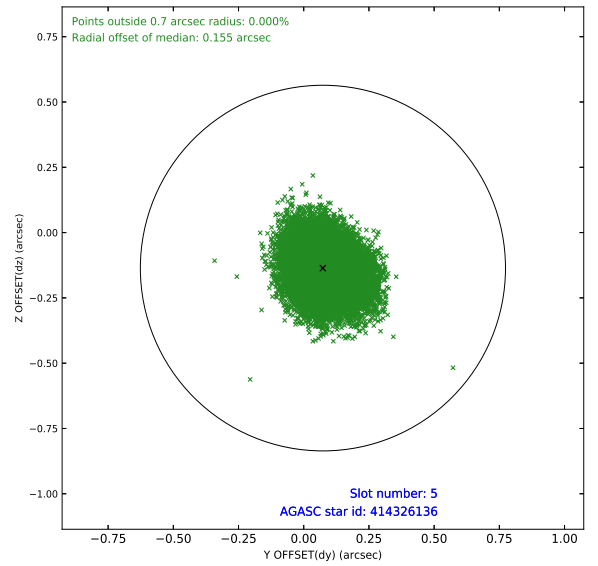
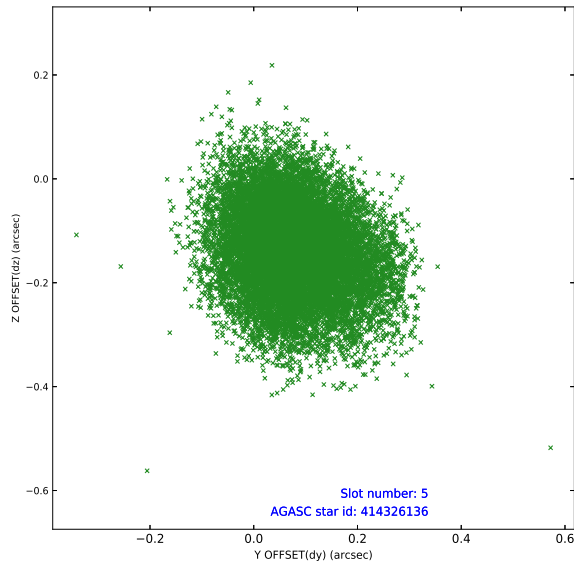
2.4.2 Slot 4



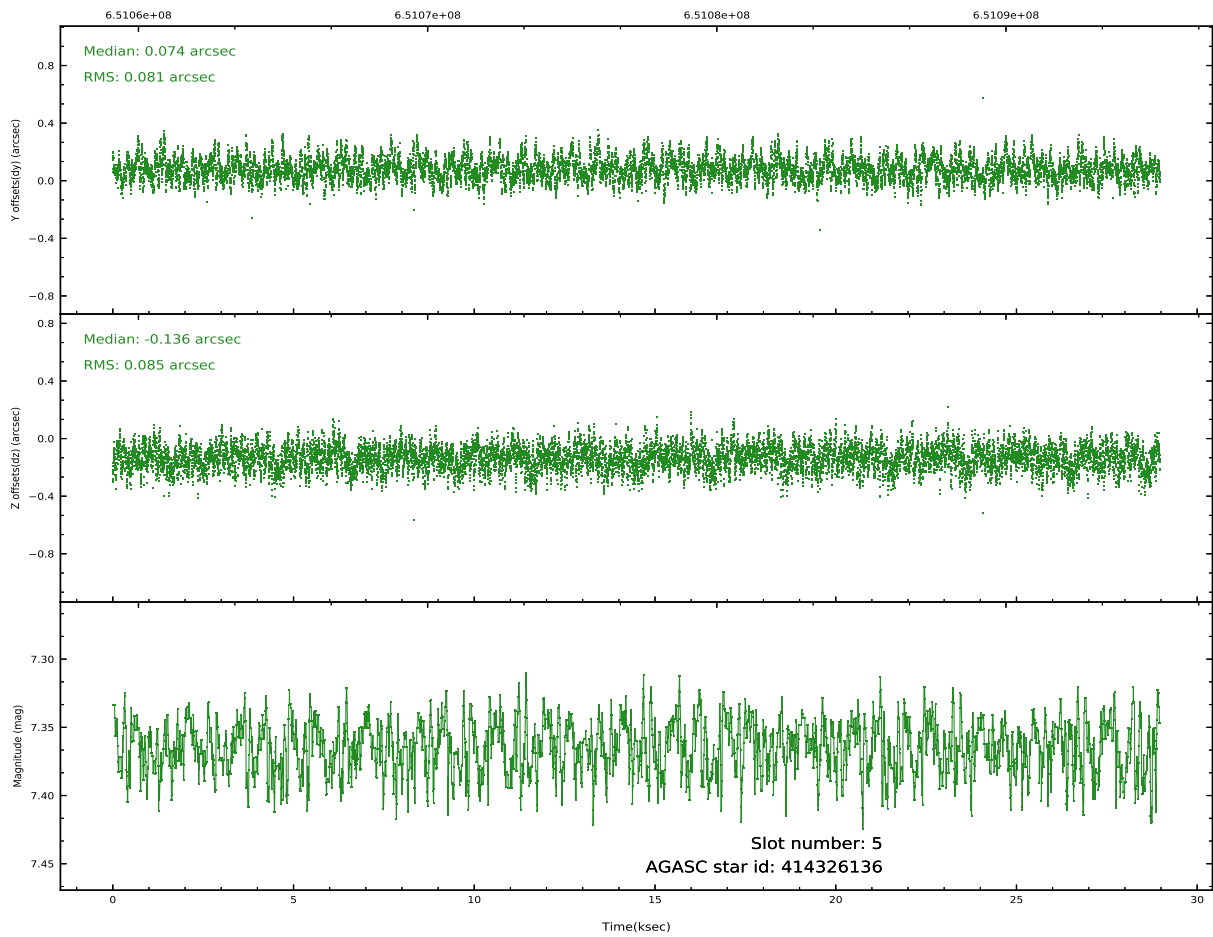
Time (s)



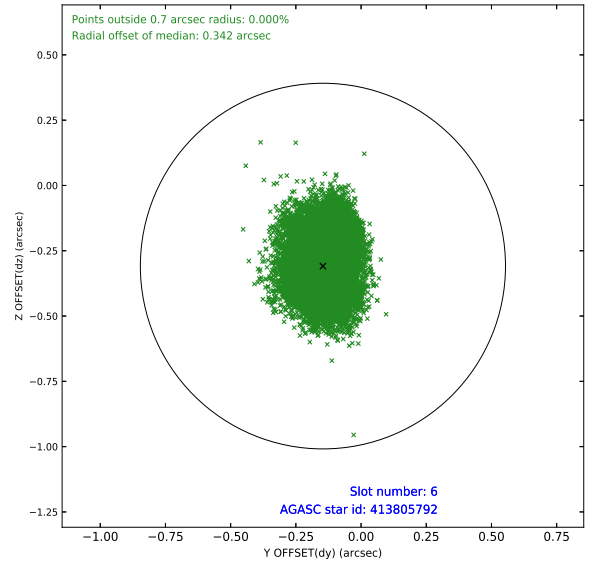
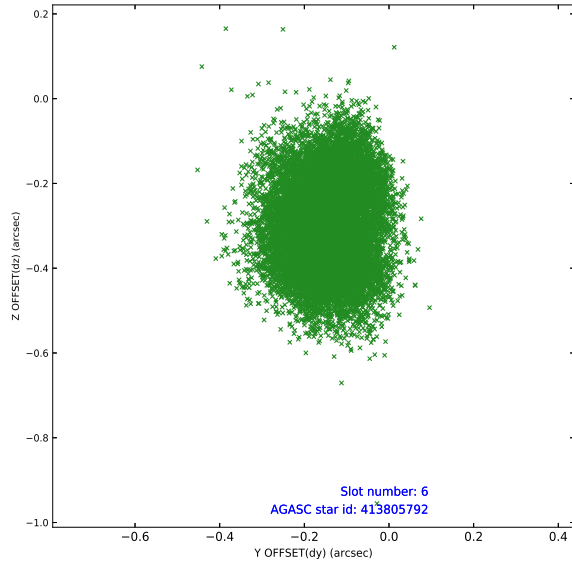
2.4.3 Slot 5



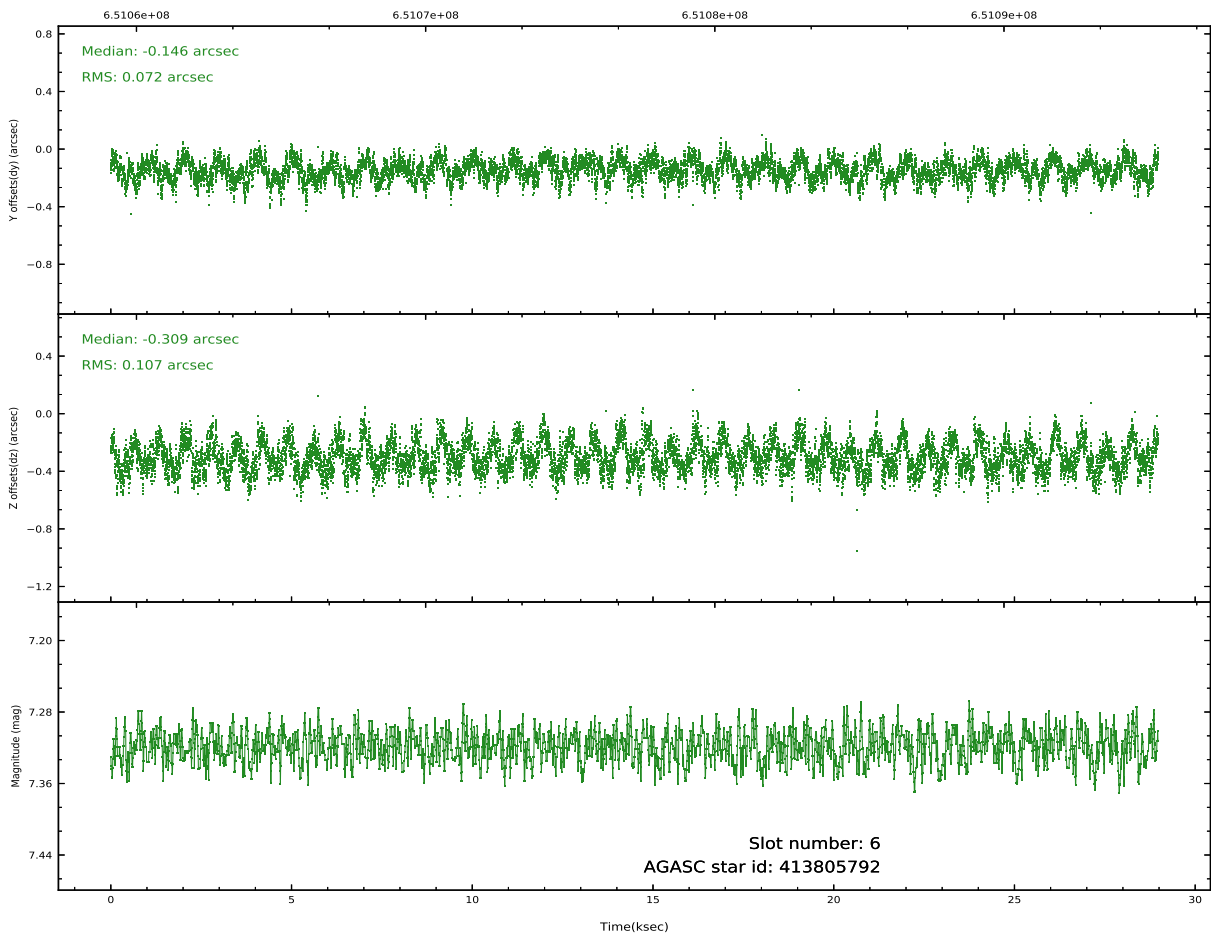
Time (s)



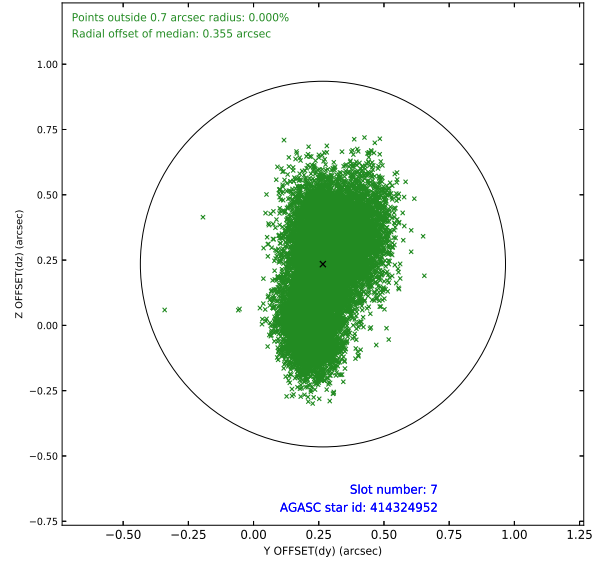
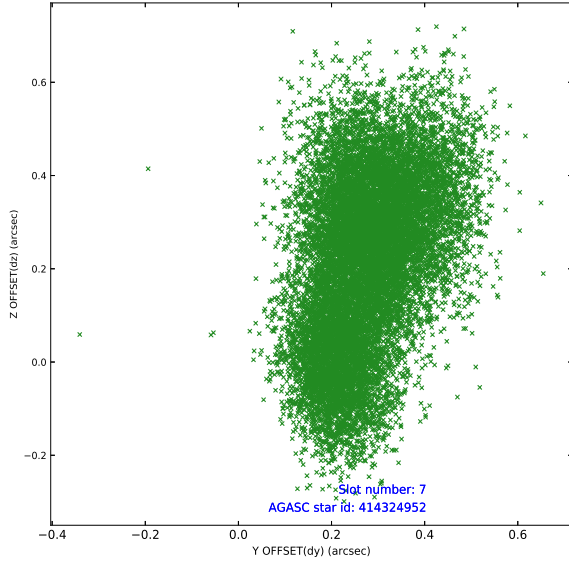
2.4.4 Slot 6



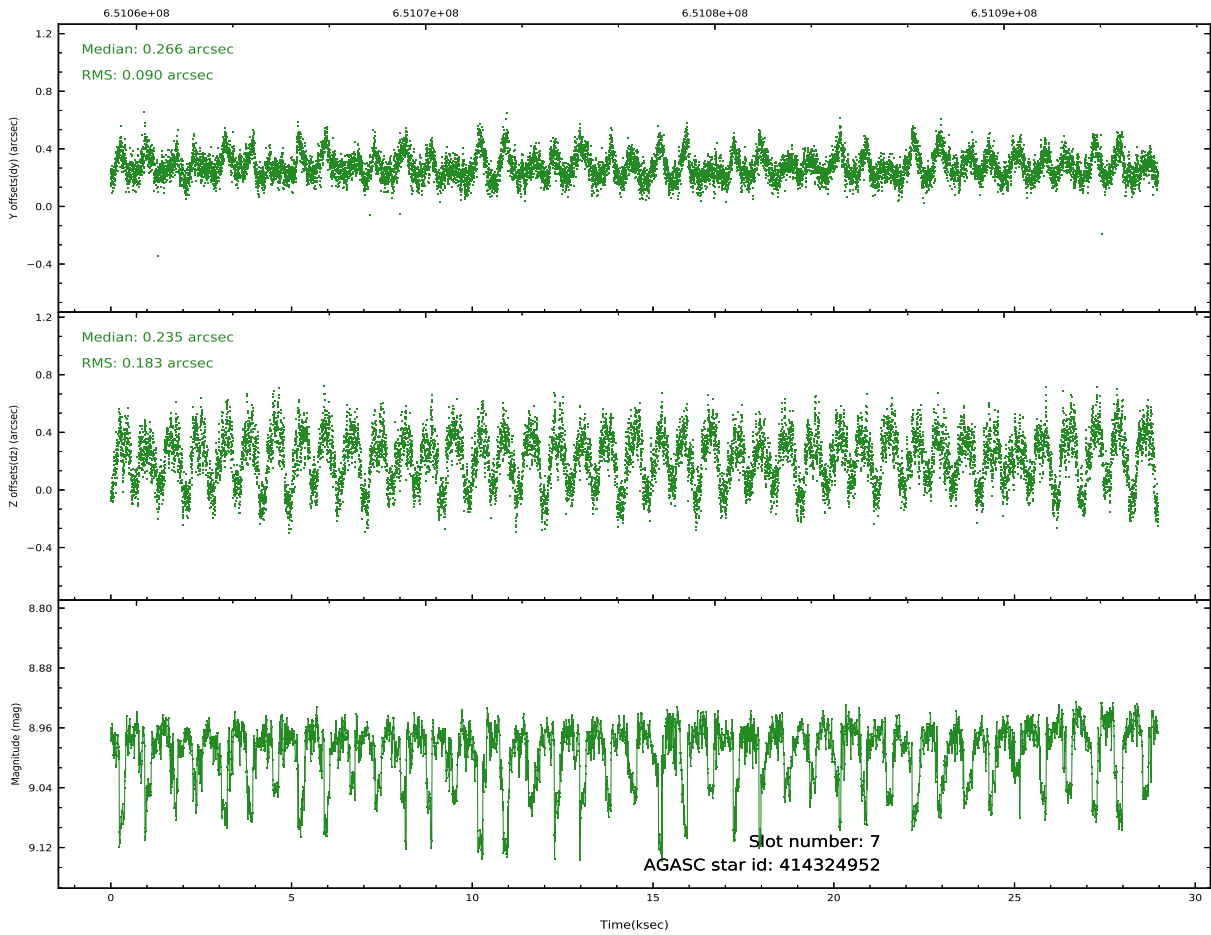
Time (s)



2.4.5 Slot 7

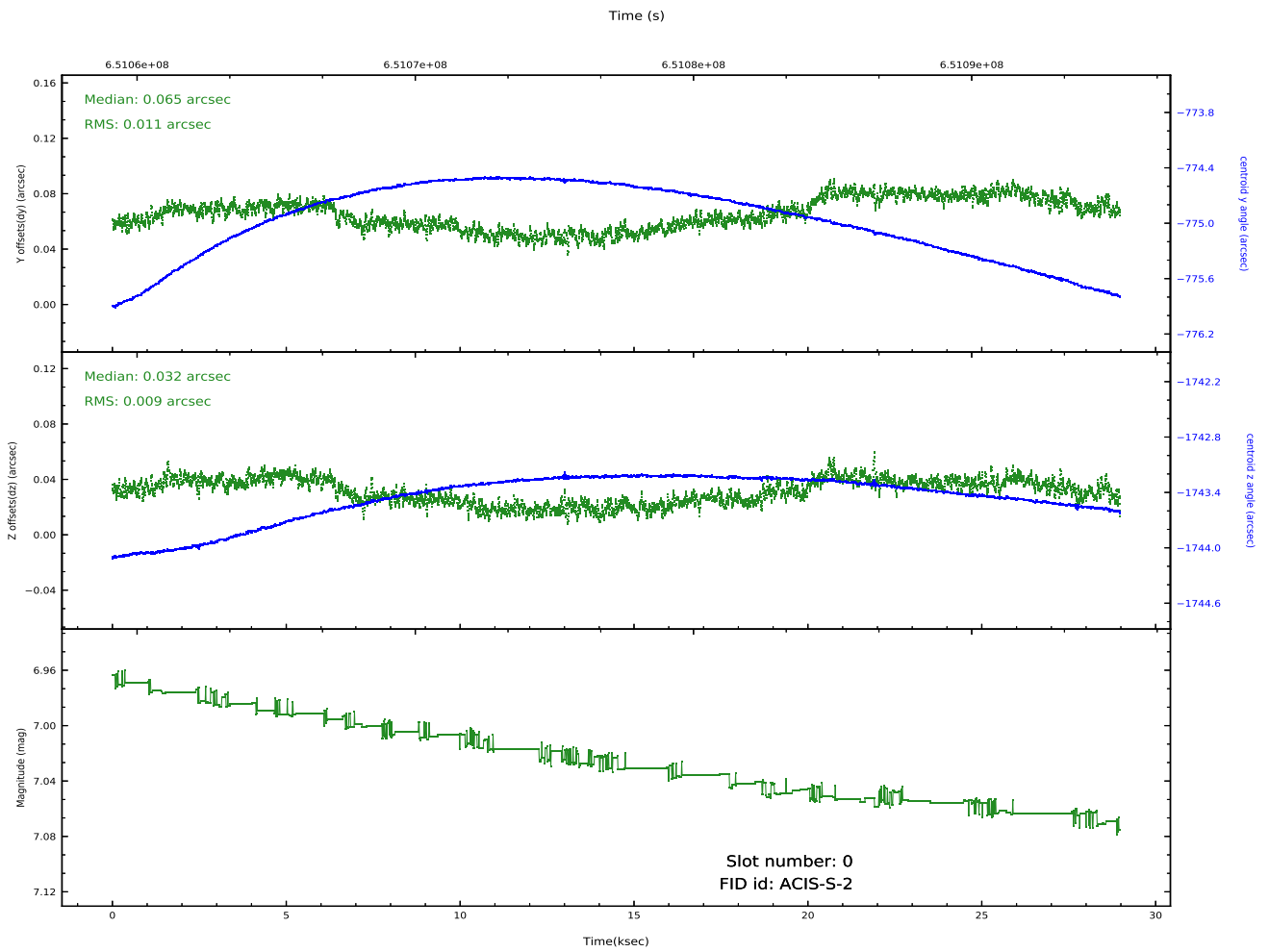
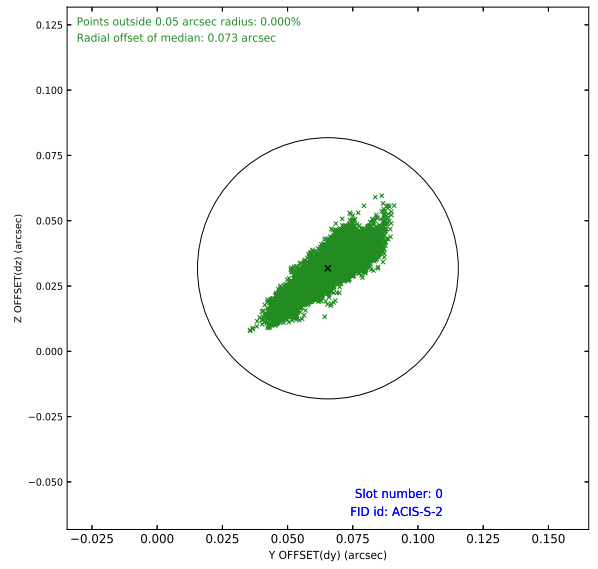
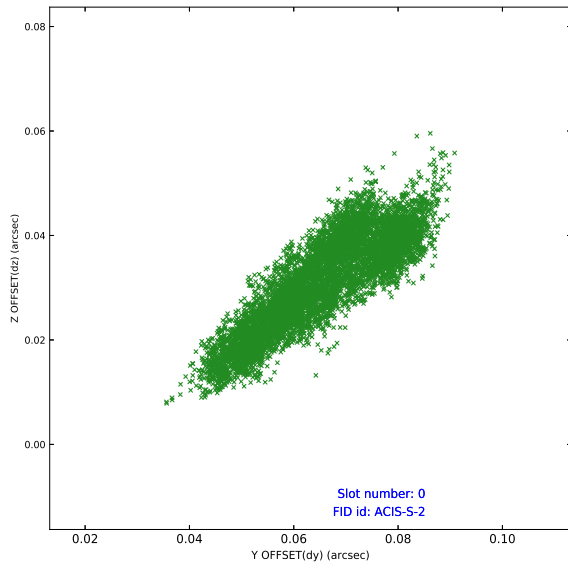


Time (s)

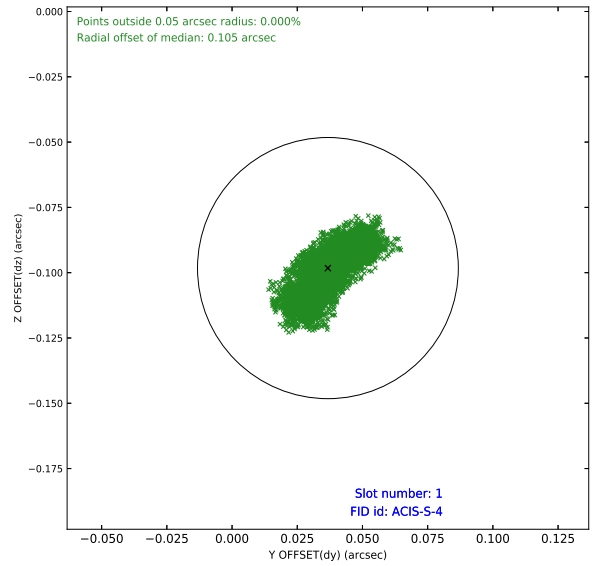
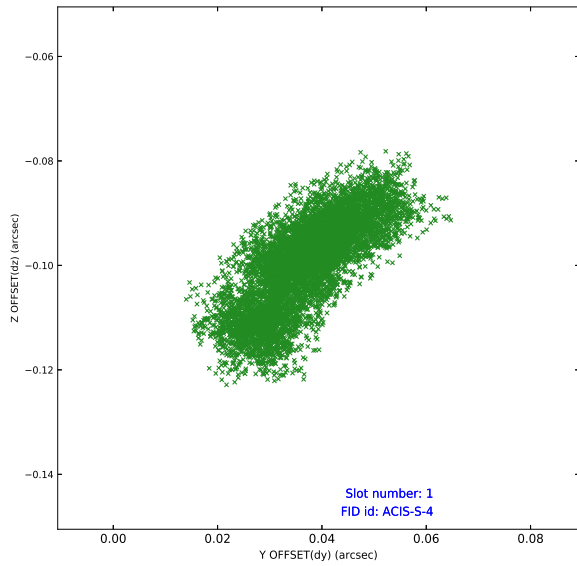


2.5 FID Slots

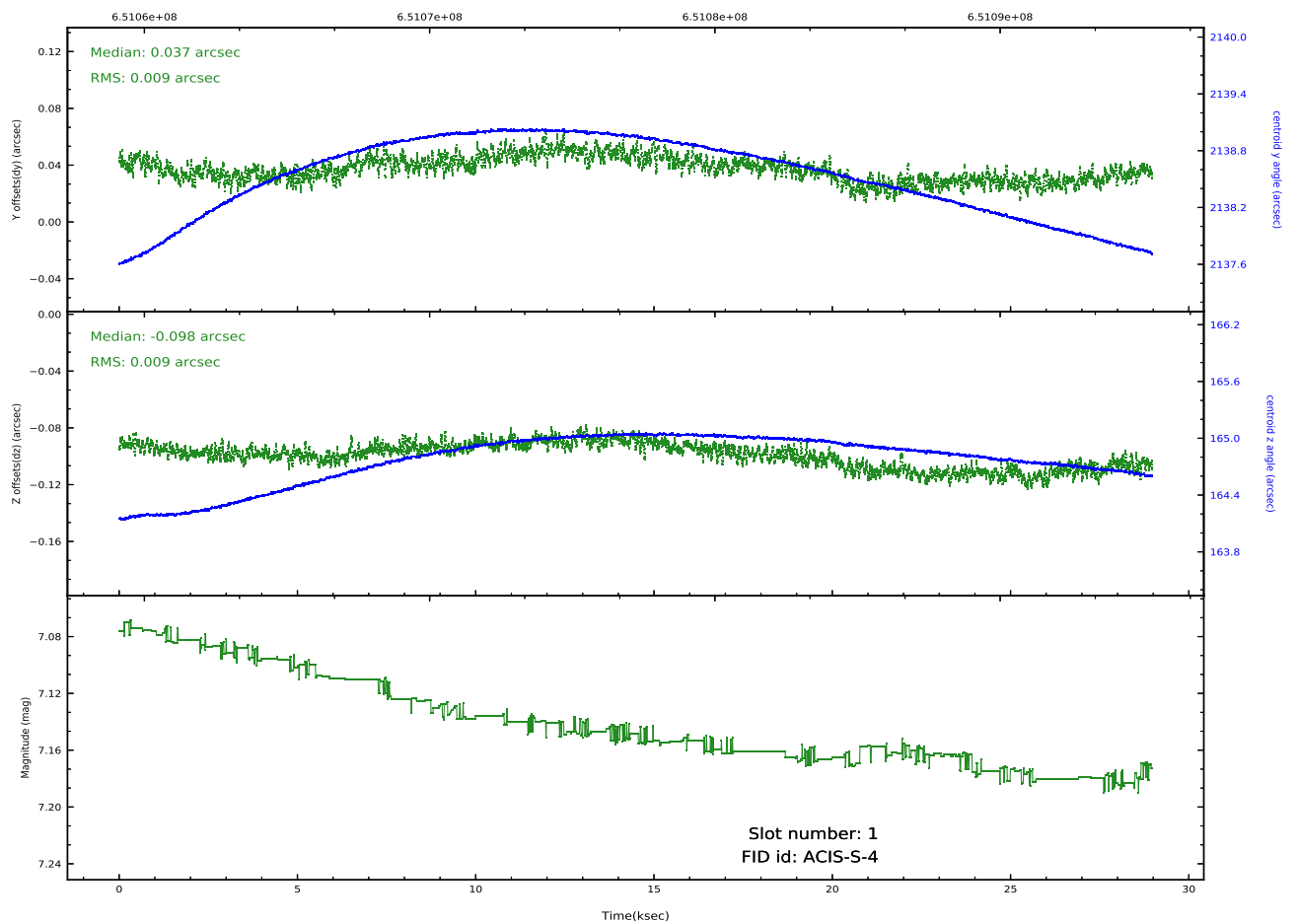
2.5.1 Slot 0



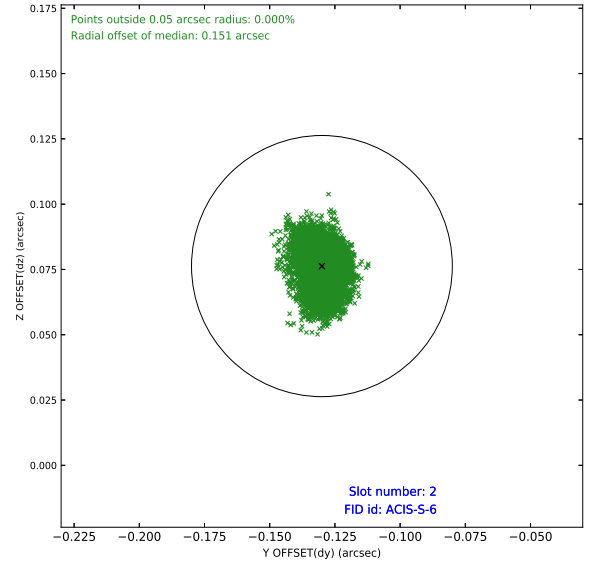
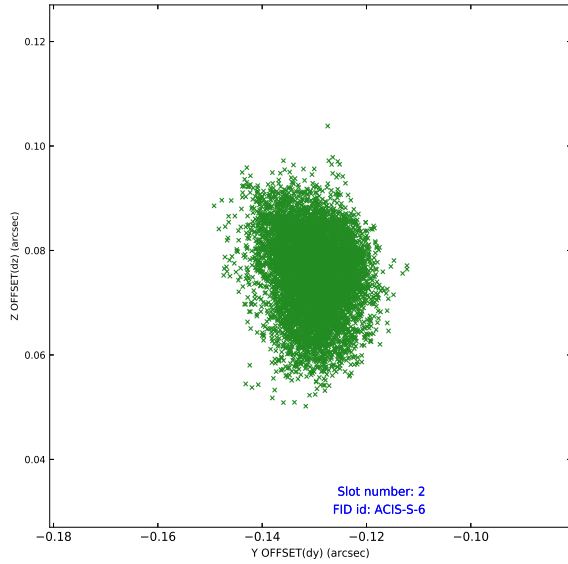
2.5.2 Slot 1



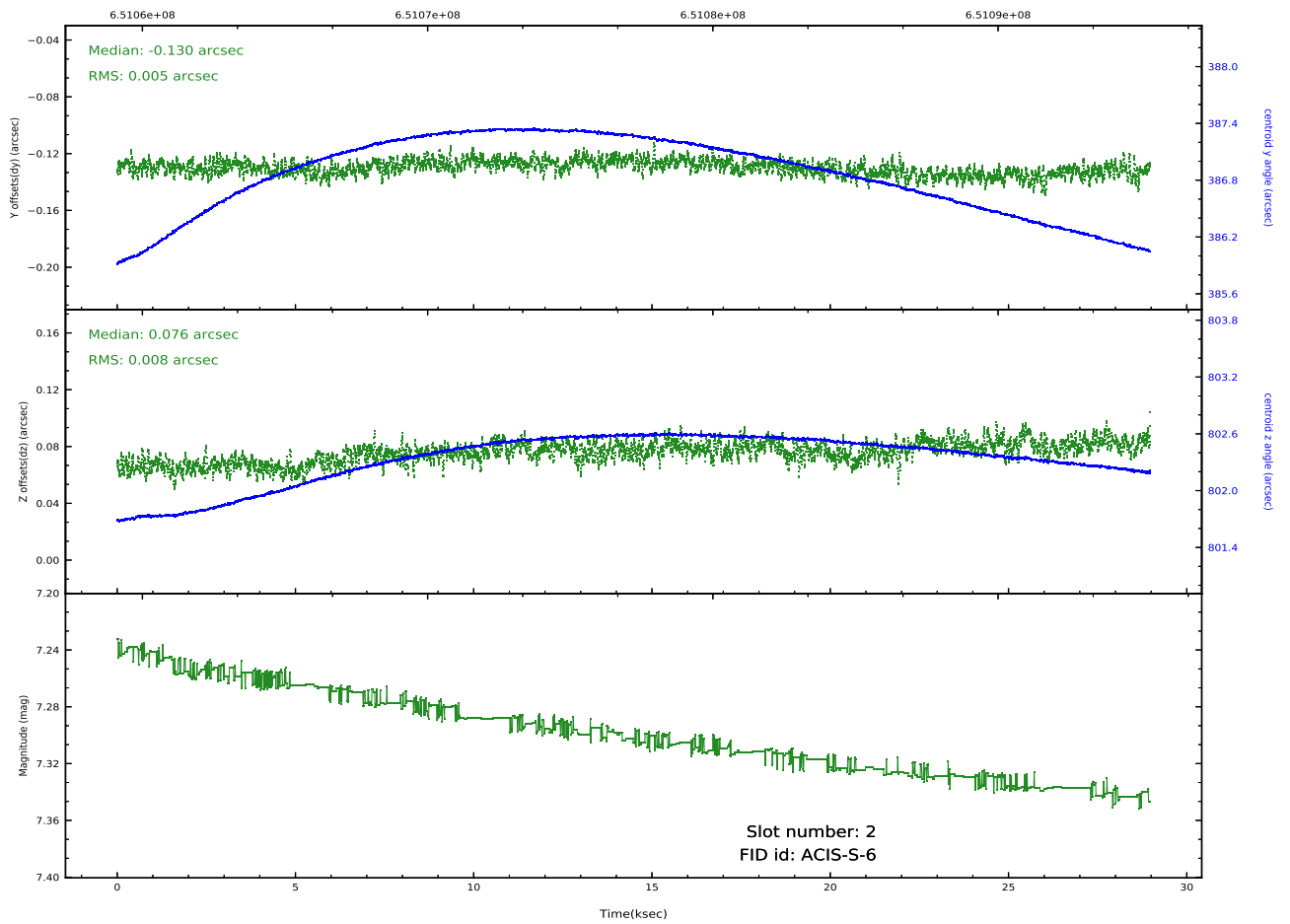
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.871

A.2 Comments

Window constraint was met.