

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19362 - L2 Version 2
Chandra X-Ray Center

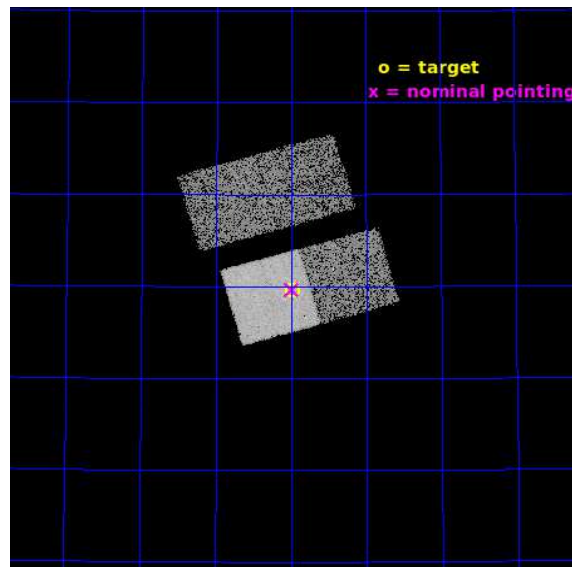
L2 Processing Date : Oct 24 2020

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

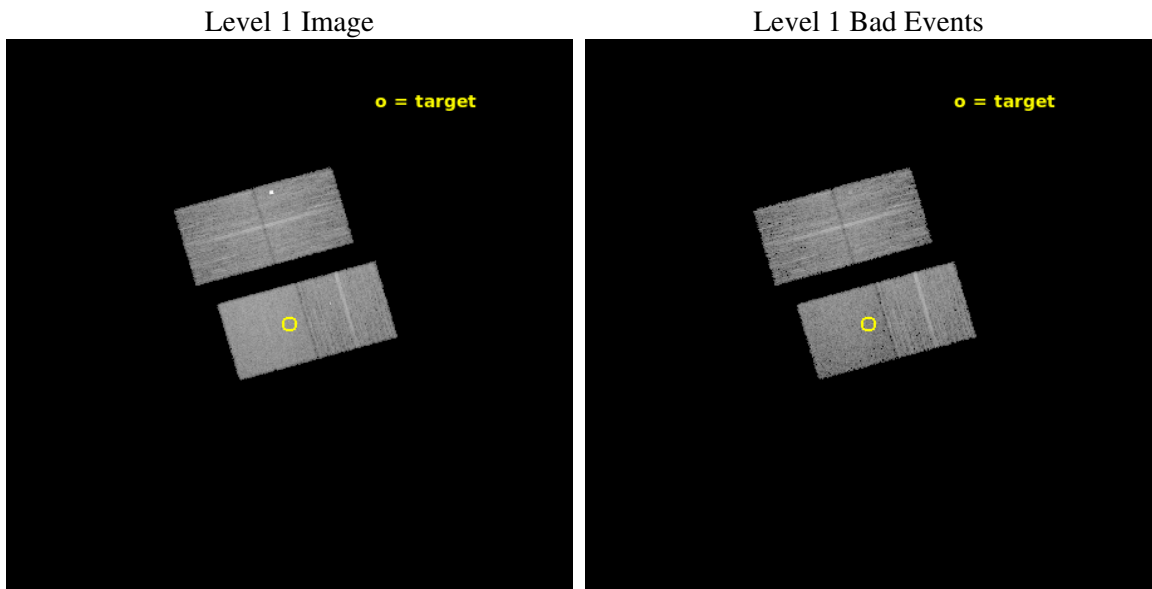
seq_num	601319	Sequence number
obs_id	19362	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 3963	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	178.744583	Observer's specified target RA [deg]
dec_targ	58.493444	Observer's specified target Dec [deg]
ra_nom	178.74729486491	Nominal RA [deg]
dec_nom	58.494356181115	Nominal Dec [deg]
roll_nom	164.05638875489	Nominal Roll [deg]
revision	2	Processing version of data
ontime	8985.4698528051	Sum of GTIs [s]
livetime	8868.0680741716	Livetime [s]
ontime2	8982.2056626081	Sum of GTIs [s]
ontime3	8985.3877727985	Sum of GTIs [s]
ontime6	8985.4288128614	Sum of GTIs [s]
ontime7	8985.4698528051	Sum of GTIs [s]
l2events	53398	Number of level 2 events



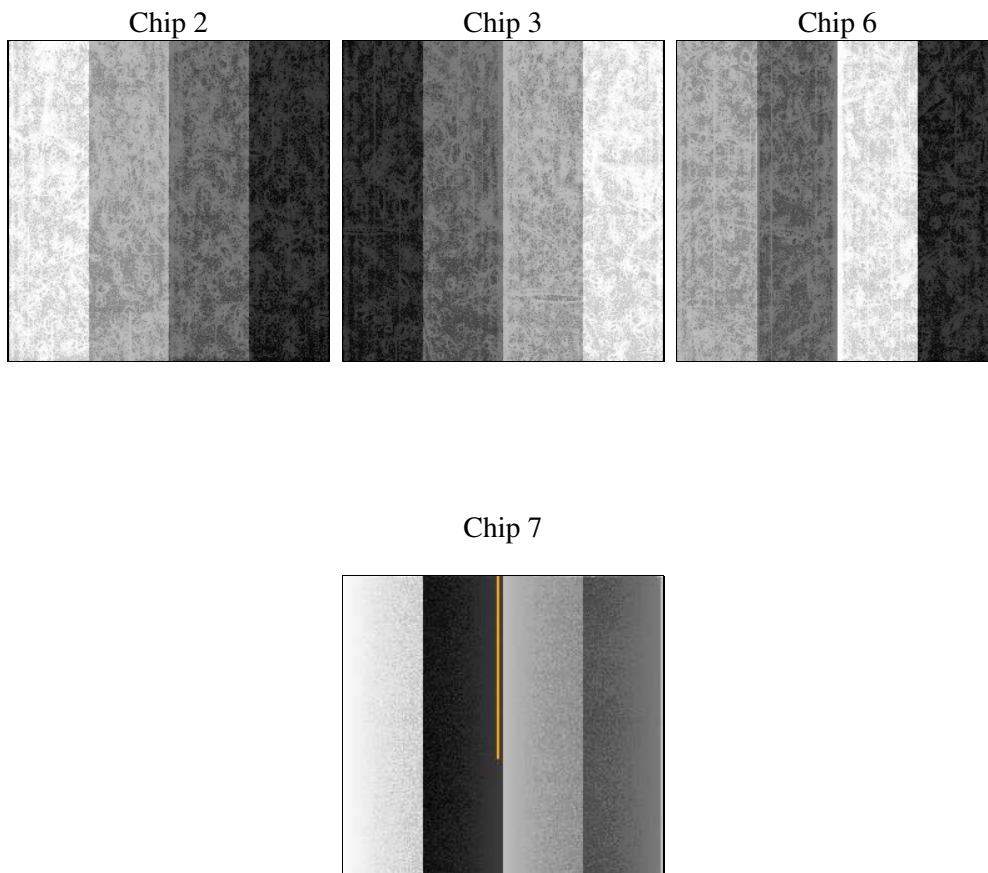
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	8985.4698528051	Sum of GTIs [s]
caldbver	4.9.3	 	ontime2	8982.2056626081	Sum of GTIs [s]
date	2020-10-25T01:43:07	Date and time of file creation	ontime3	8985.3877727985	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	8985.4288128614	Sum of GTIs [s]
			ontime7	8985.4698528051	Sum of GTIs [s]
			l1events	289953	Number of level 1 events

2.1.4 Events

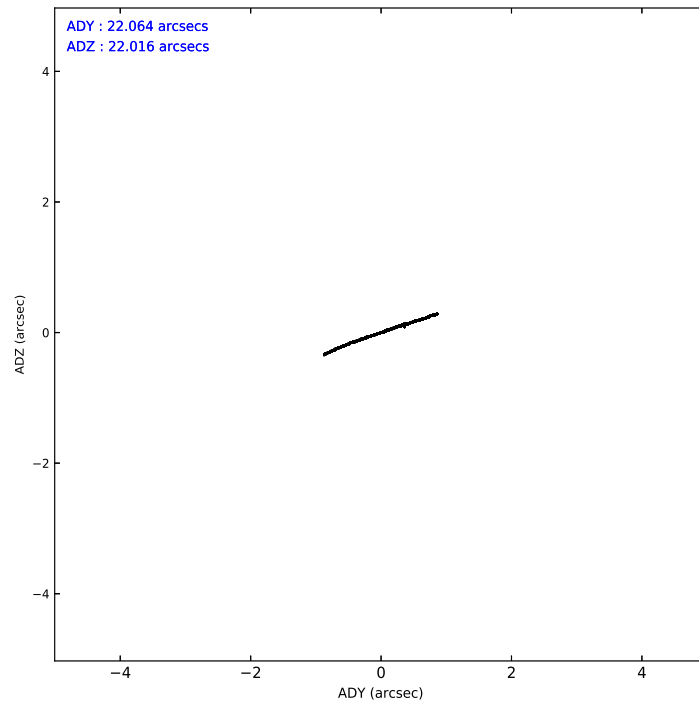
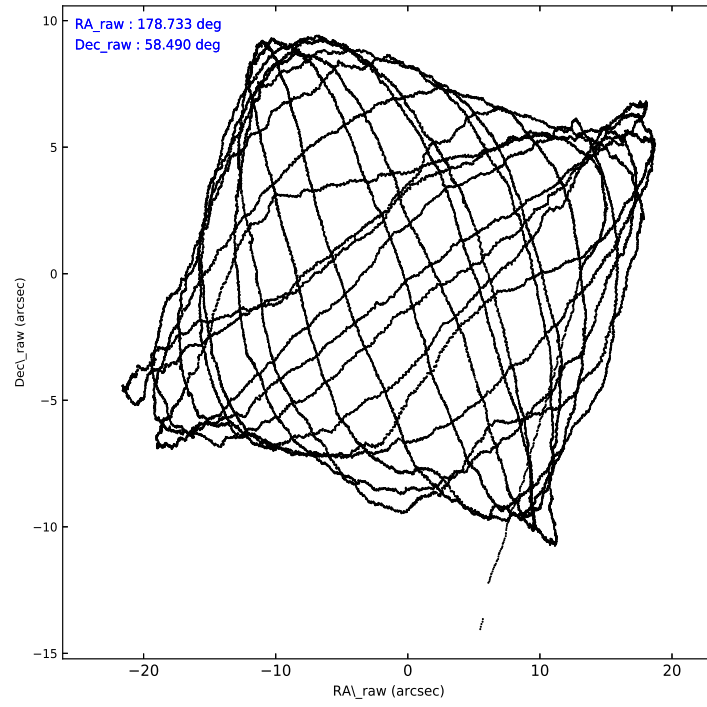
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	73167	63453	68679	84654
rejected events	60962	56834	61097	48266
rejected %	83%	89%	88%	57%

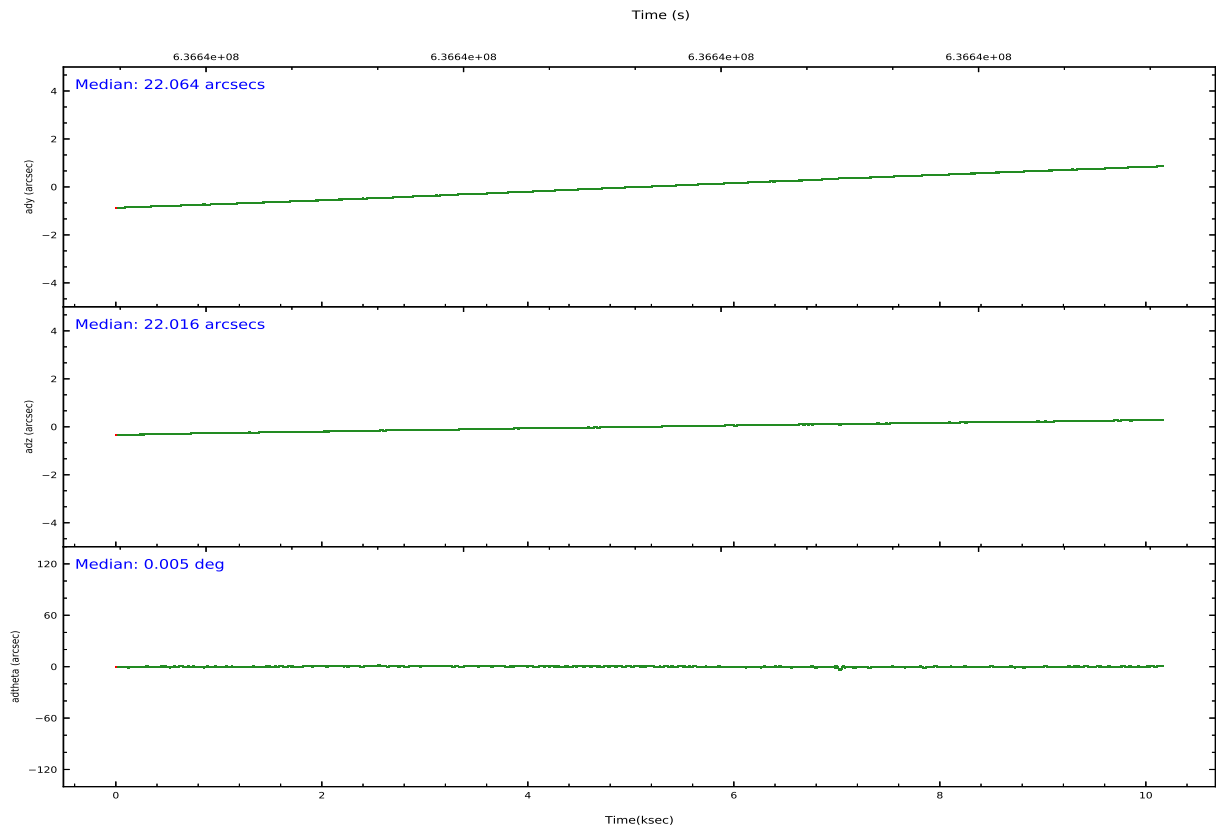
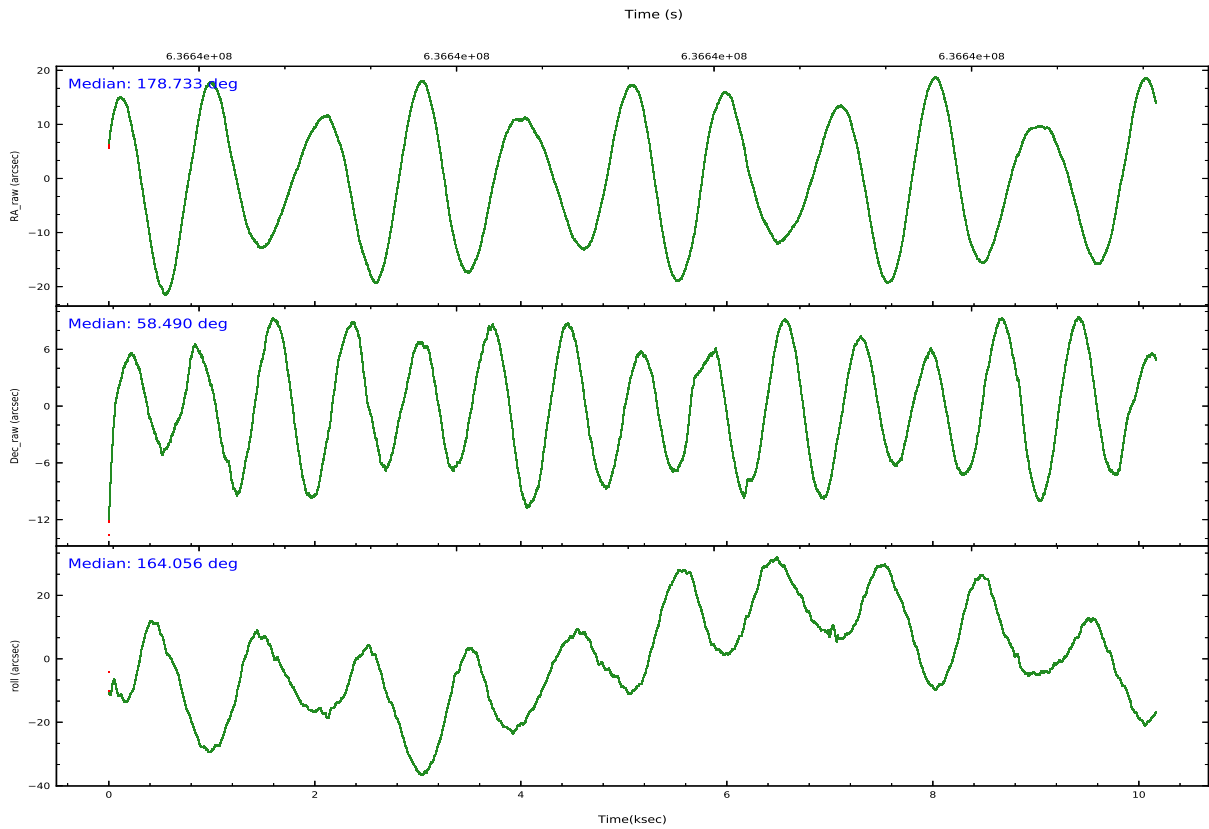
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	2396	2301	2376	2984
	3%	3%	3%	3%
grade 1 events	37	31	35	130
	0%	0%	0%	0%
grade 2 events	6987	1471	1875	7561
	9%	2%	2%	8%
grade 3 events	718	679	663	2877
	0%	1%	0%	3%
grade 4 events	708	713	681	2862
	0%	1%	0%	3%
grade 5 events	2536	2979	2903	8169
	3%	4%	4%	9%
grade 6 events	1397	1455	1987	20104
	1%	2%	2%	23%
grade 7 events	58388	53824	58159	39967
	79%	84%	84%	47%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	178.782989	178.74729486491	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.497048	58.494356181115	Alternating exposures requested	N	N
[deg] Pointing Roll	163.861922	164.05638875489	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	636636792.184000	636635885.44994			
Observation start date	2018-03-05T11:32:03	2018-03-05T11:18:05			
[s] Observation end time (MET)	636646792.184000	636647837.97565			
Observation end date	2018-03-05T14:18:43	2018-03-05T14:37:17			
Read mode	TIMED	TIMED			

2.3 Aspect





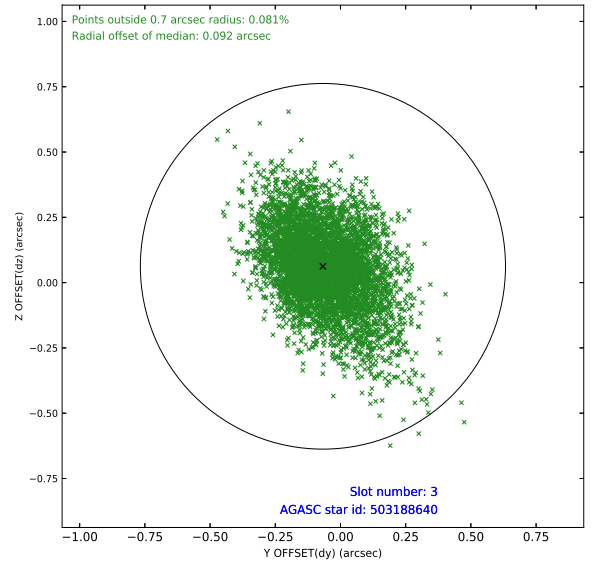
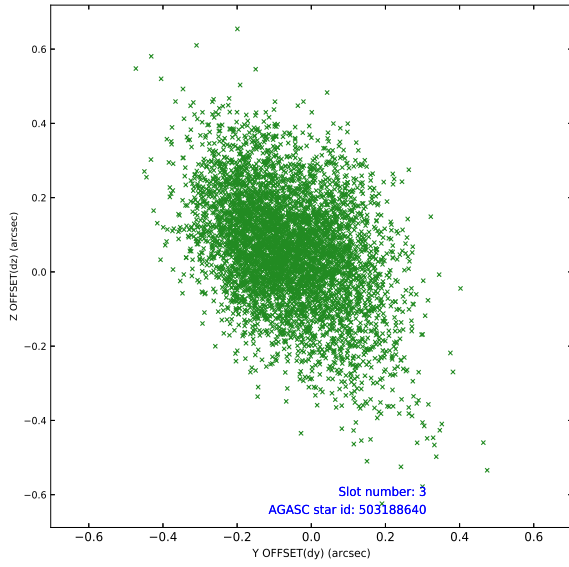
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.12	2481	1.000	0.191	-0.117	0.014	0.026	0.000000	0.000000	-775.31	-1743
1	FID		ACIS-S-4	7.23	2481	1.000	0.035	-0.060	0.017	0.028	0.000000	0.000000	2137.87	164
2	FID		ACIS-S-5	7.23	2481	1.000	-0.255	0.186	0.024	0.033	0.000000	0.000000	-1827.64	159
3	GUIDE	used	503188640	9.39	4955	1.000	-0.067	0.062	0.207	0.356	179.738054	58.155071	-2080.27	667
4	GUIDE	used	503191360	8.89	4956	1.000	-0.116	-0.093	0.183	0.296	178.092424	58.379322	1135.98	763
5	GUIDE	used	503191776	8.02	4960	1.000	-0.115	0.055	0.239	0.347	179.048919	58.169874	-811.39	990
6	GUIDE	used	503191936	9.43	4953	1.000	0.184	-0.083	0.291	0.451	178.377307	58.762288	996.22	-707
7	GUIDE	used	503187960	8.78	4954	1.000	0.135	0.053	0.151	0.251	179.093842	58.476475	-581.96	-92

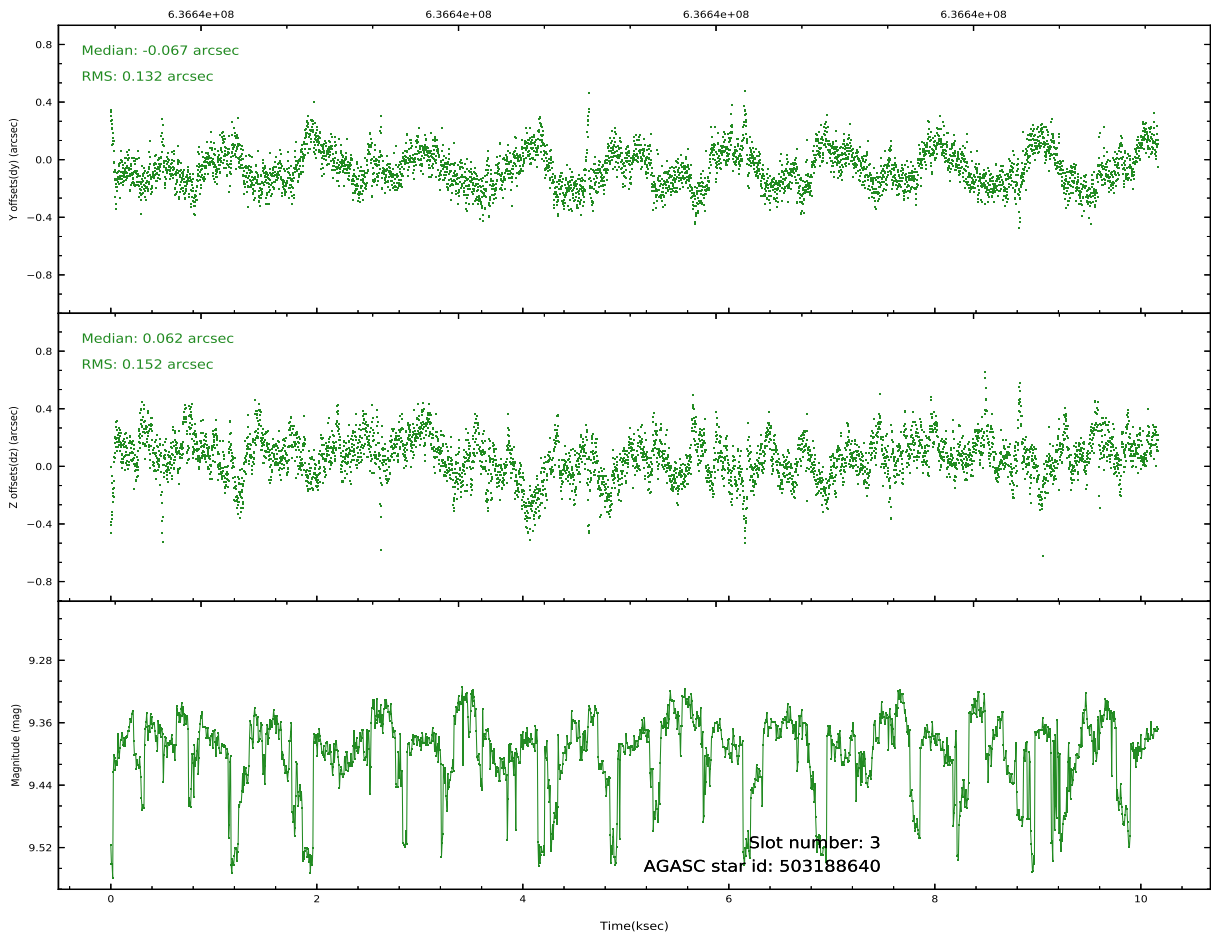
∞

2.4 Star Slots

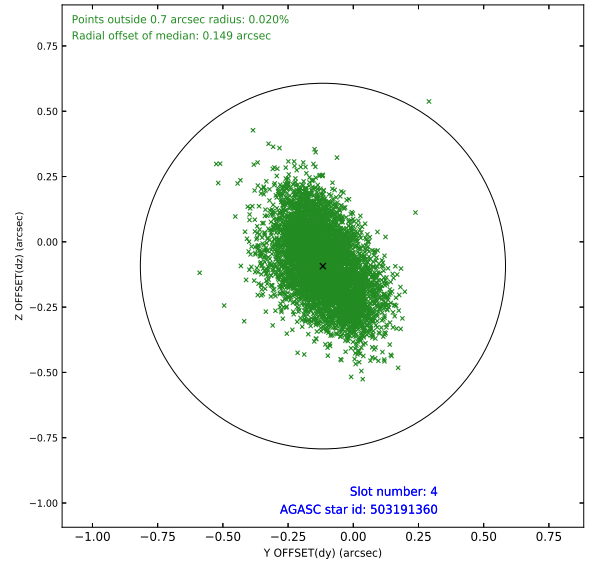
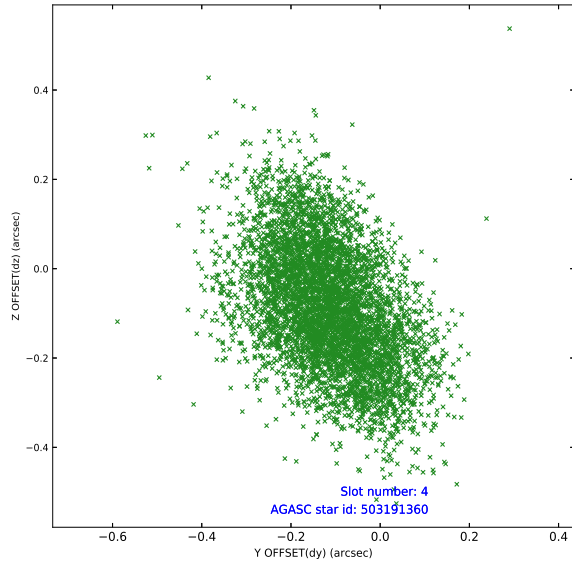
2.4.1 Slot 3



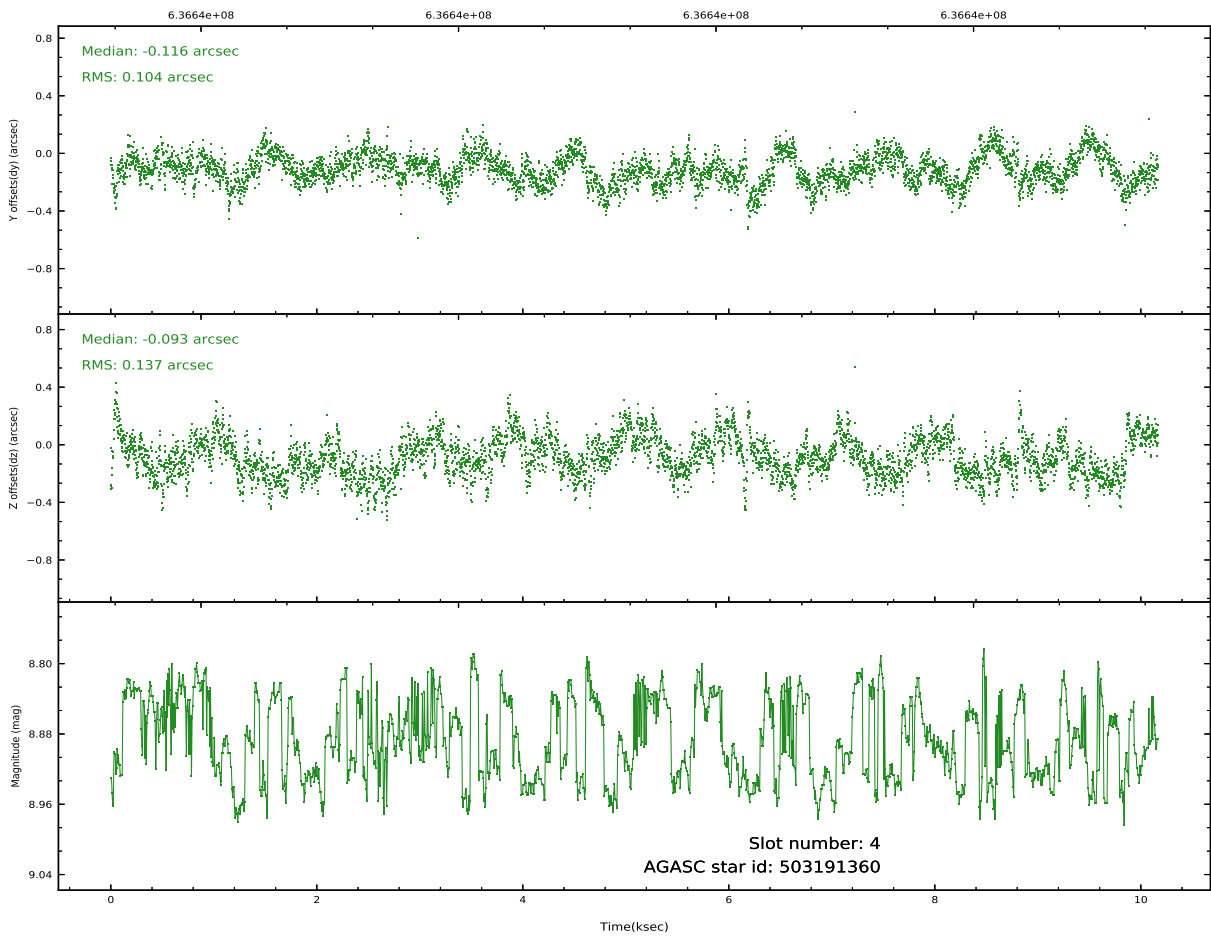
Time (s)



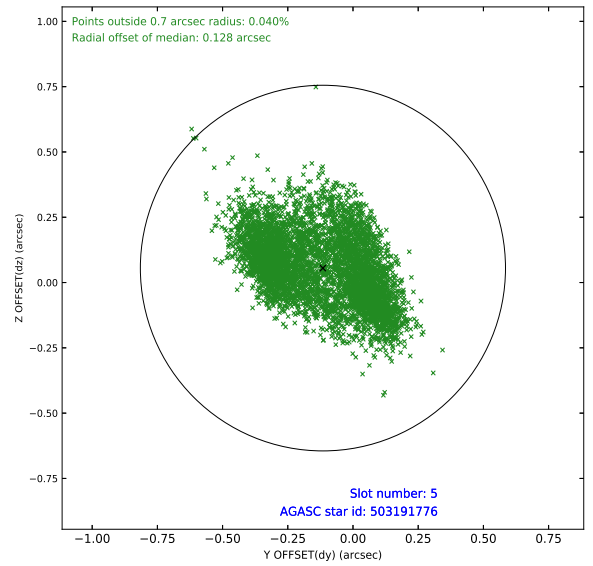
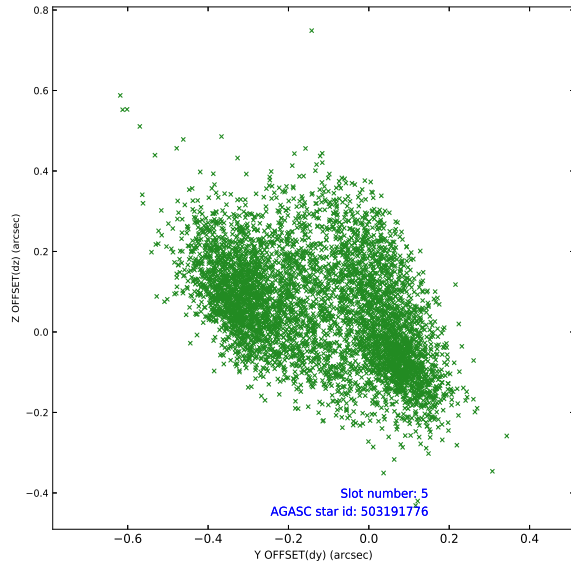
2.4.2 Slot 4



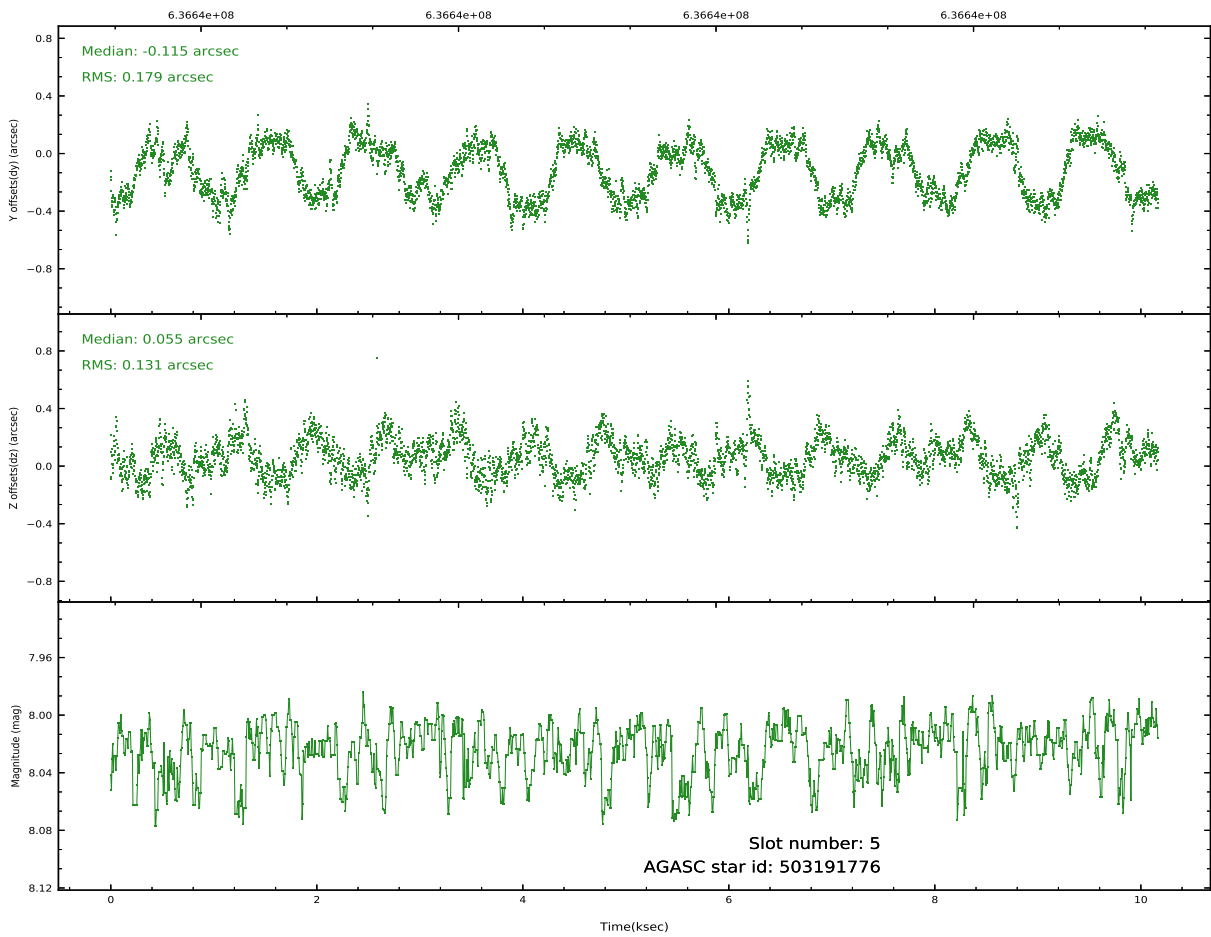
Time (s)



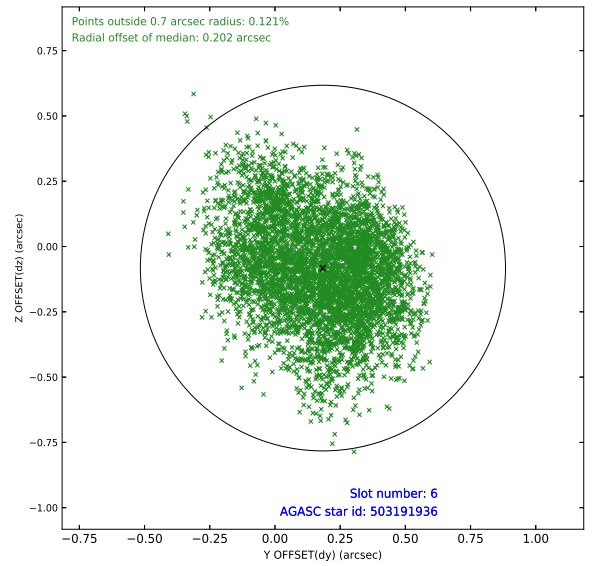
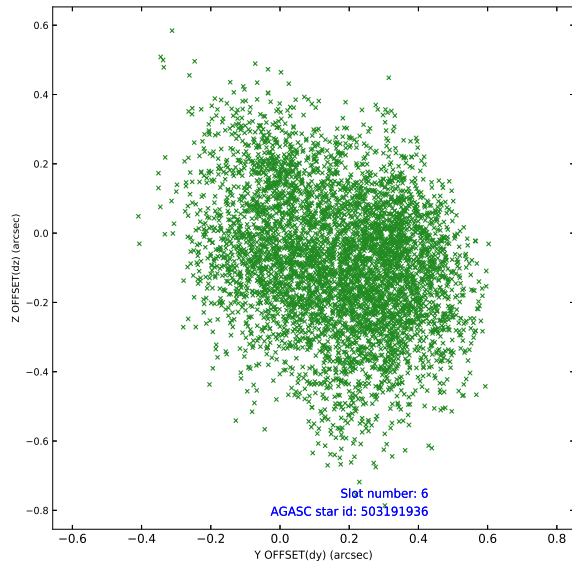
2.4.3 Slot 5



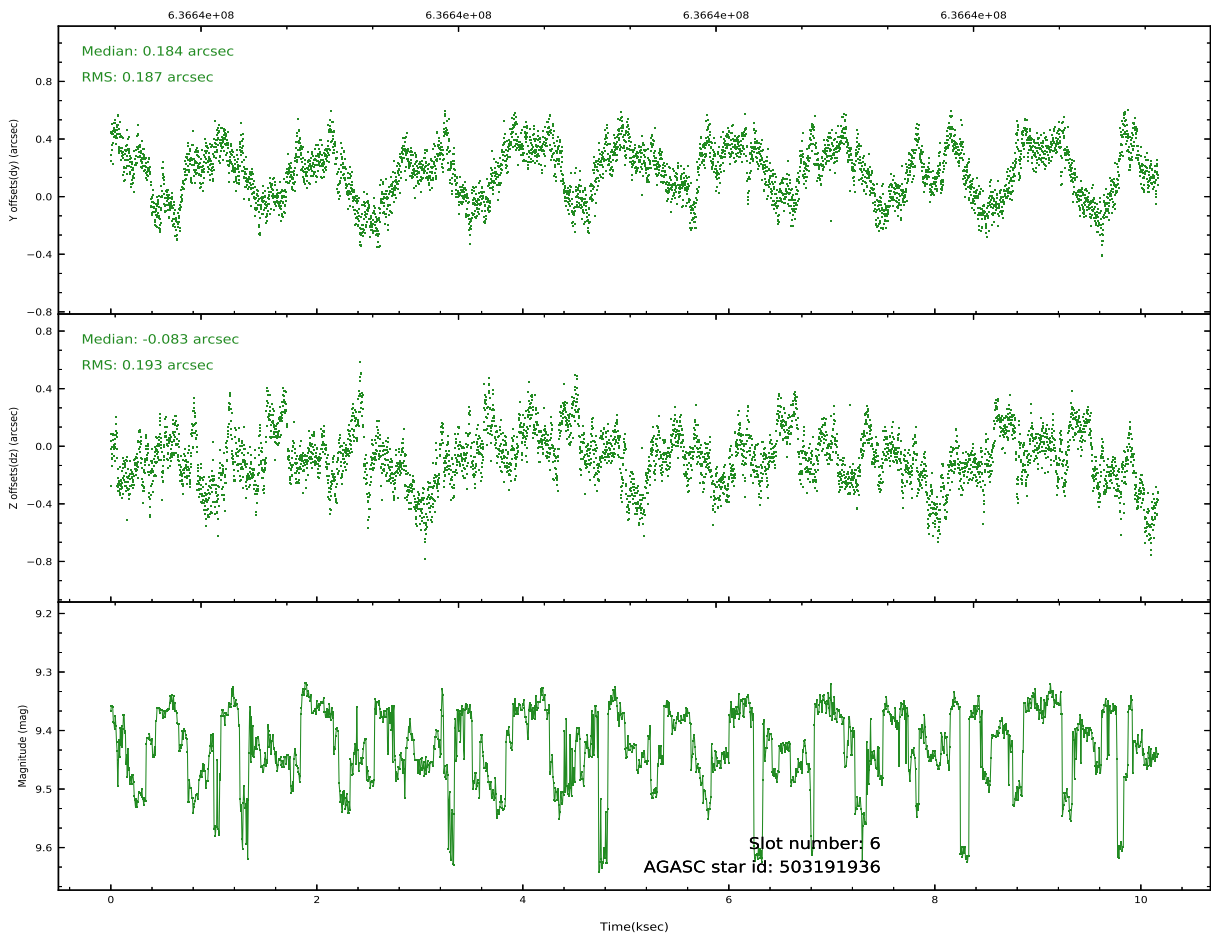
Time (s)



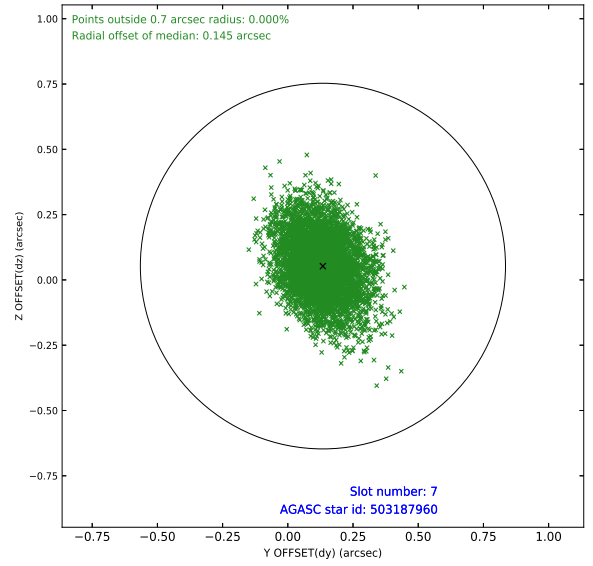
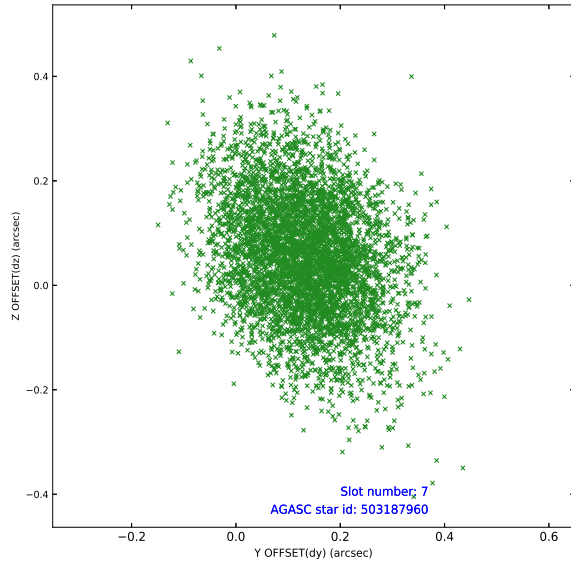
2.4.4 Slot 6



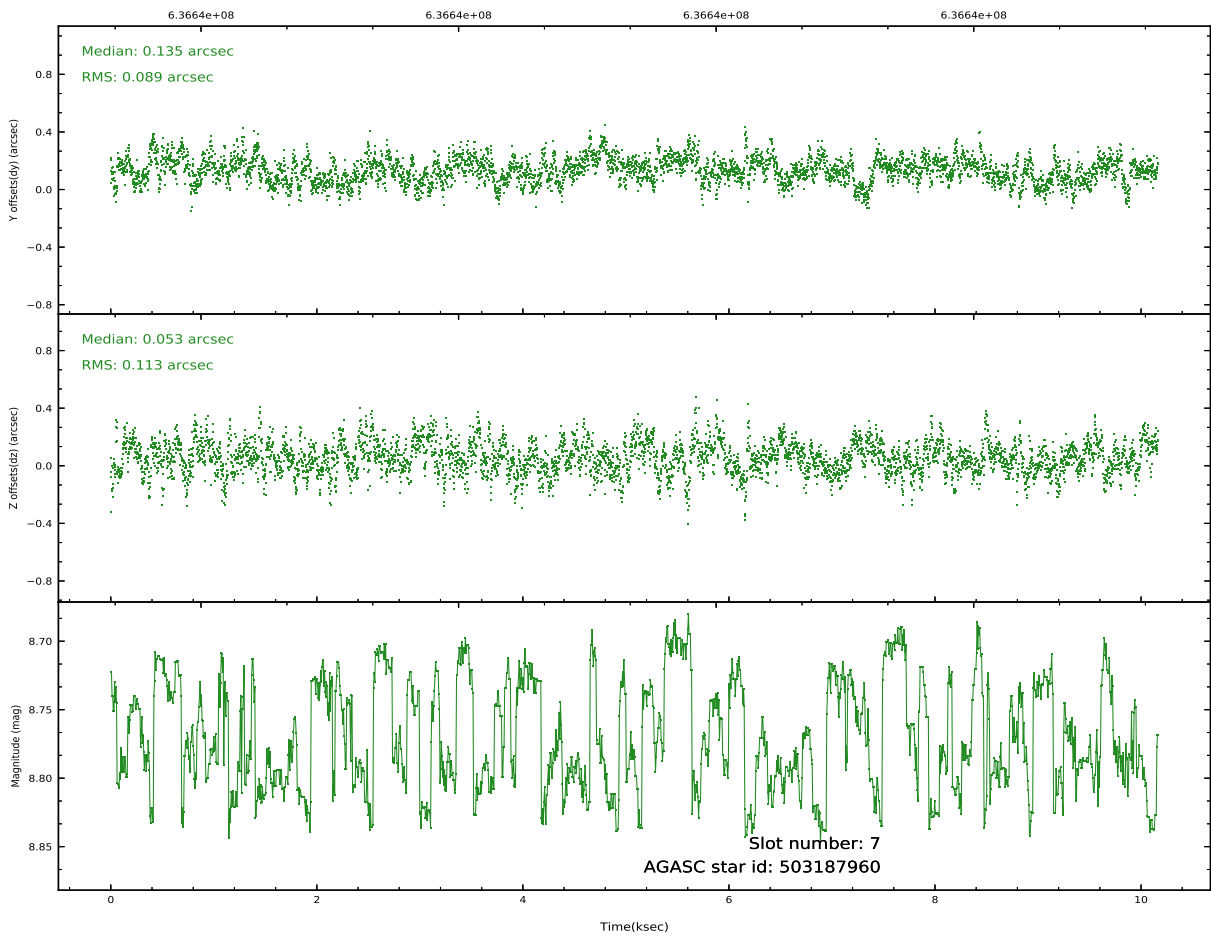
Time (s)



2.4.5 Slot 7

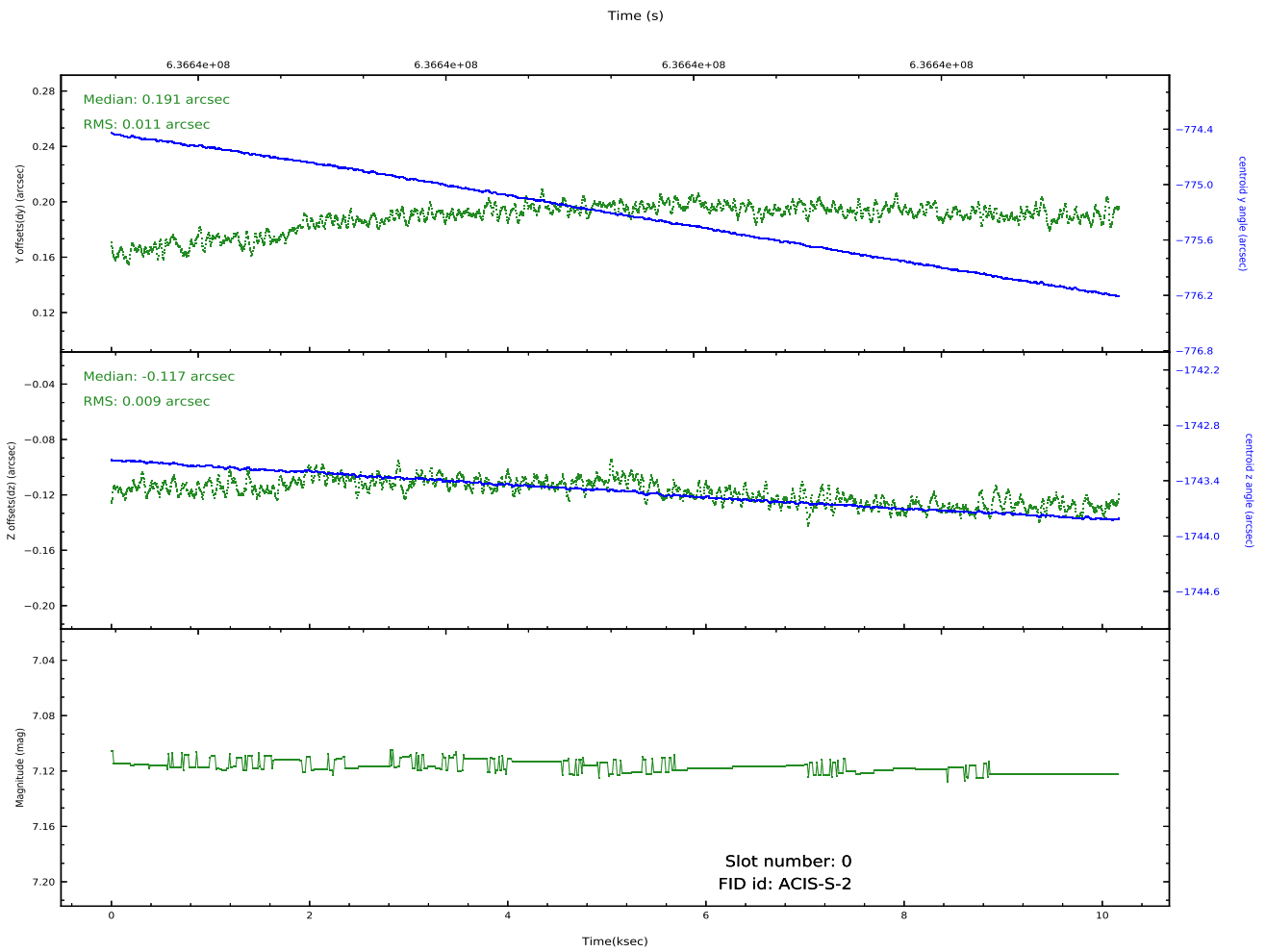
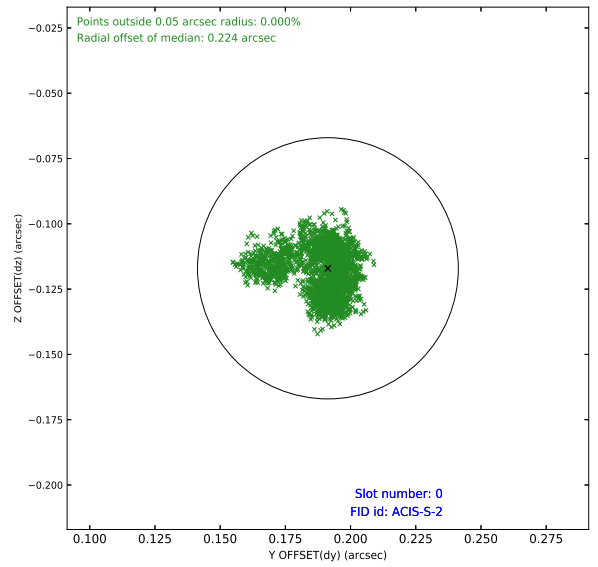
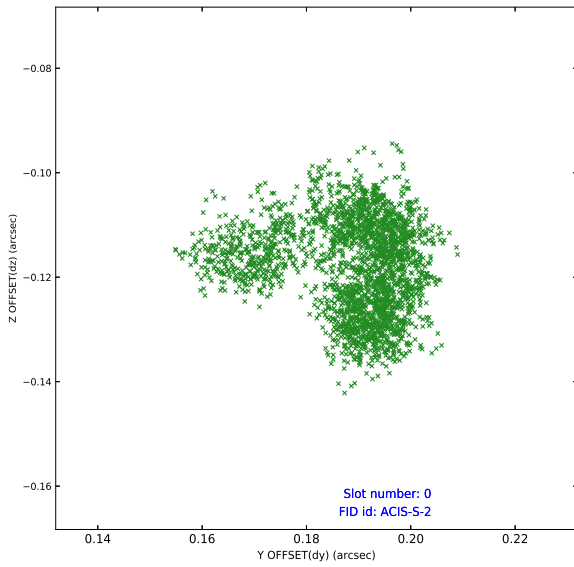


Time (s)

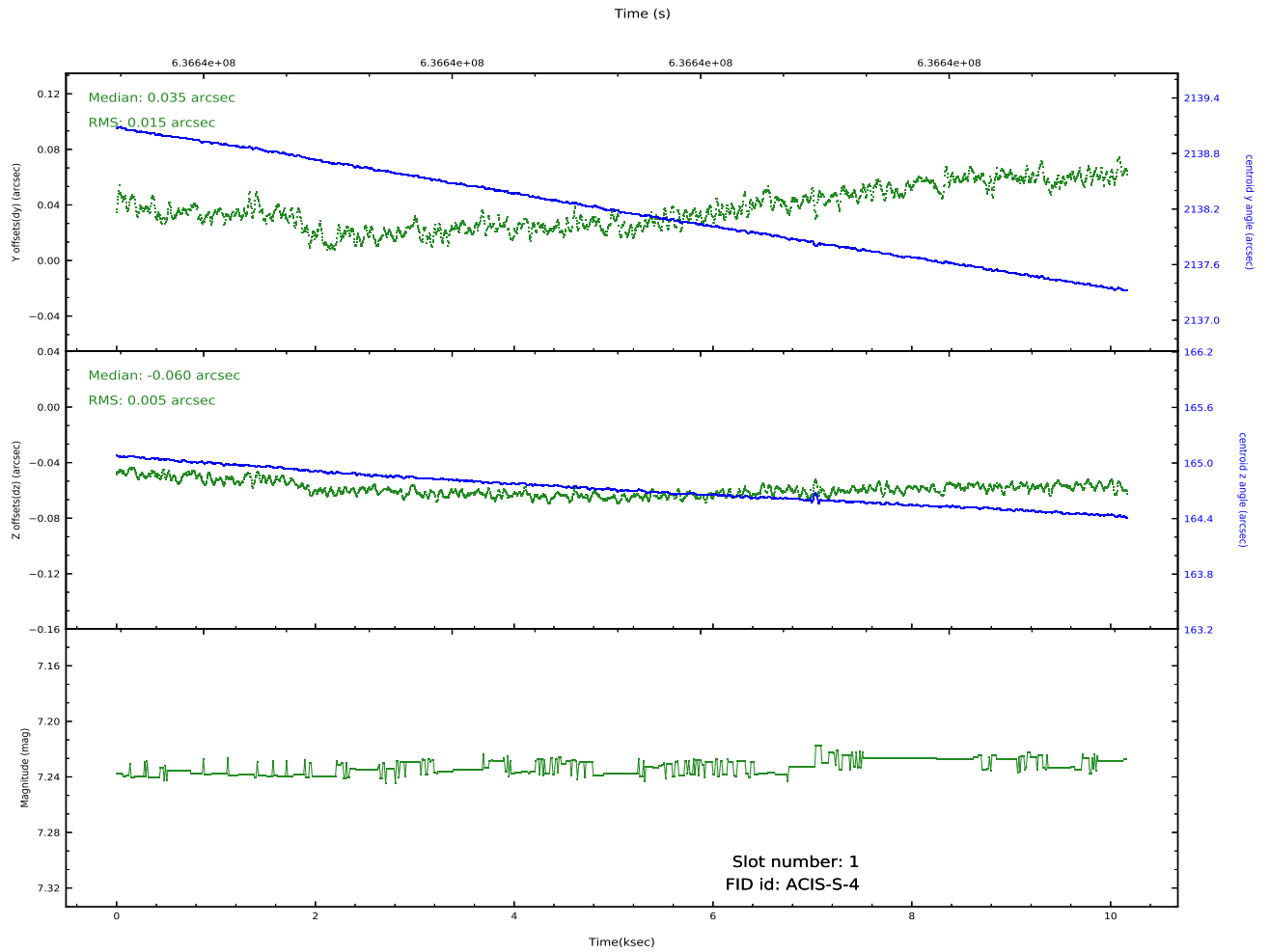
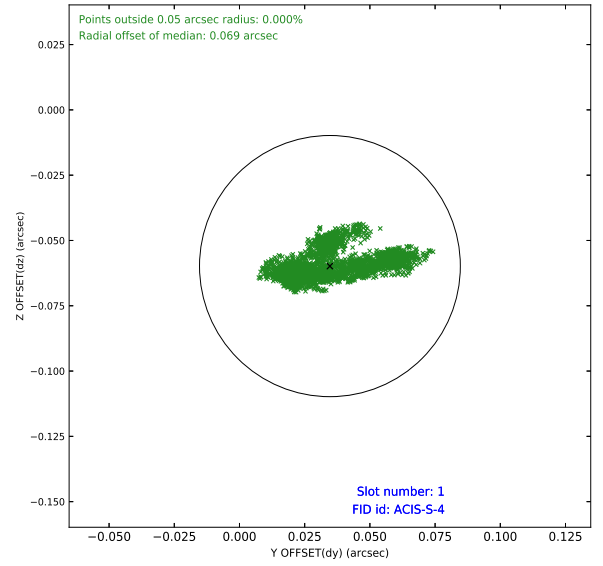
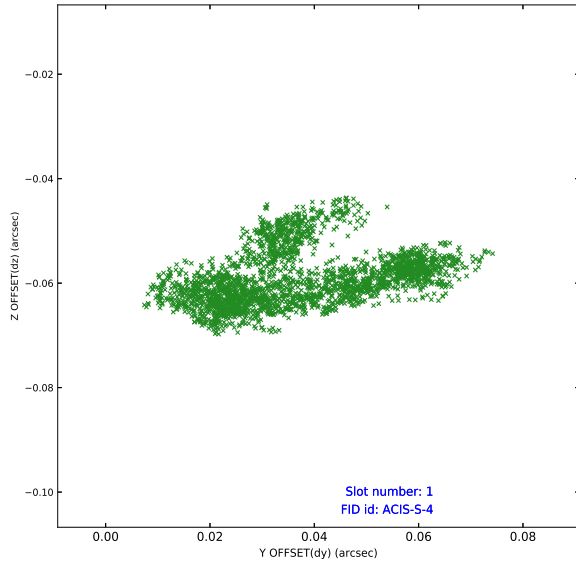


2.5 FID Slots

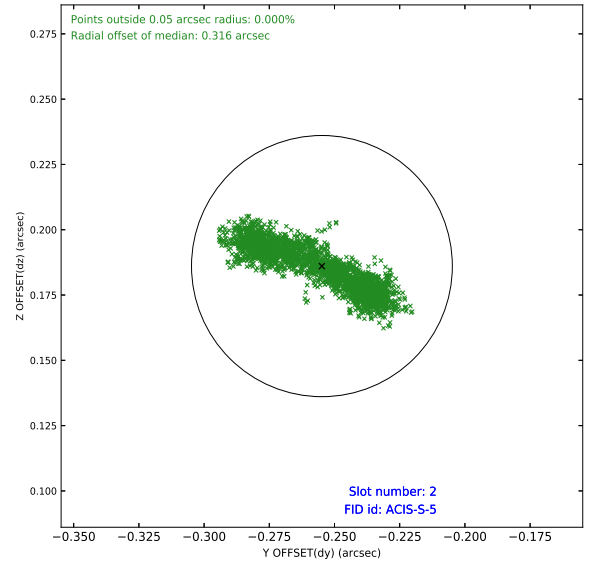
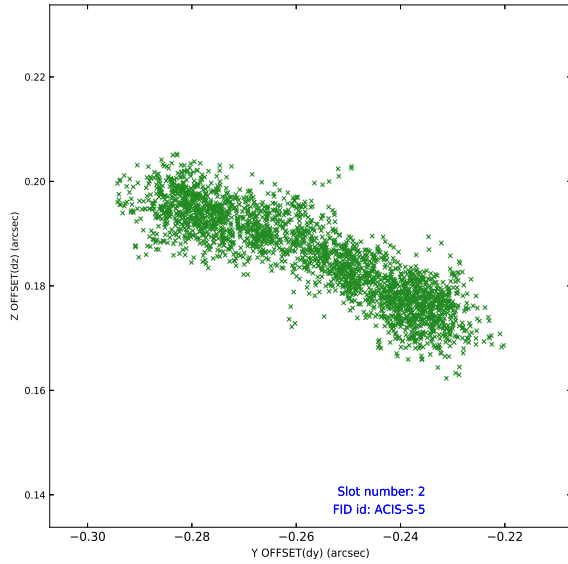
2.5.1 Slot 0



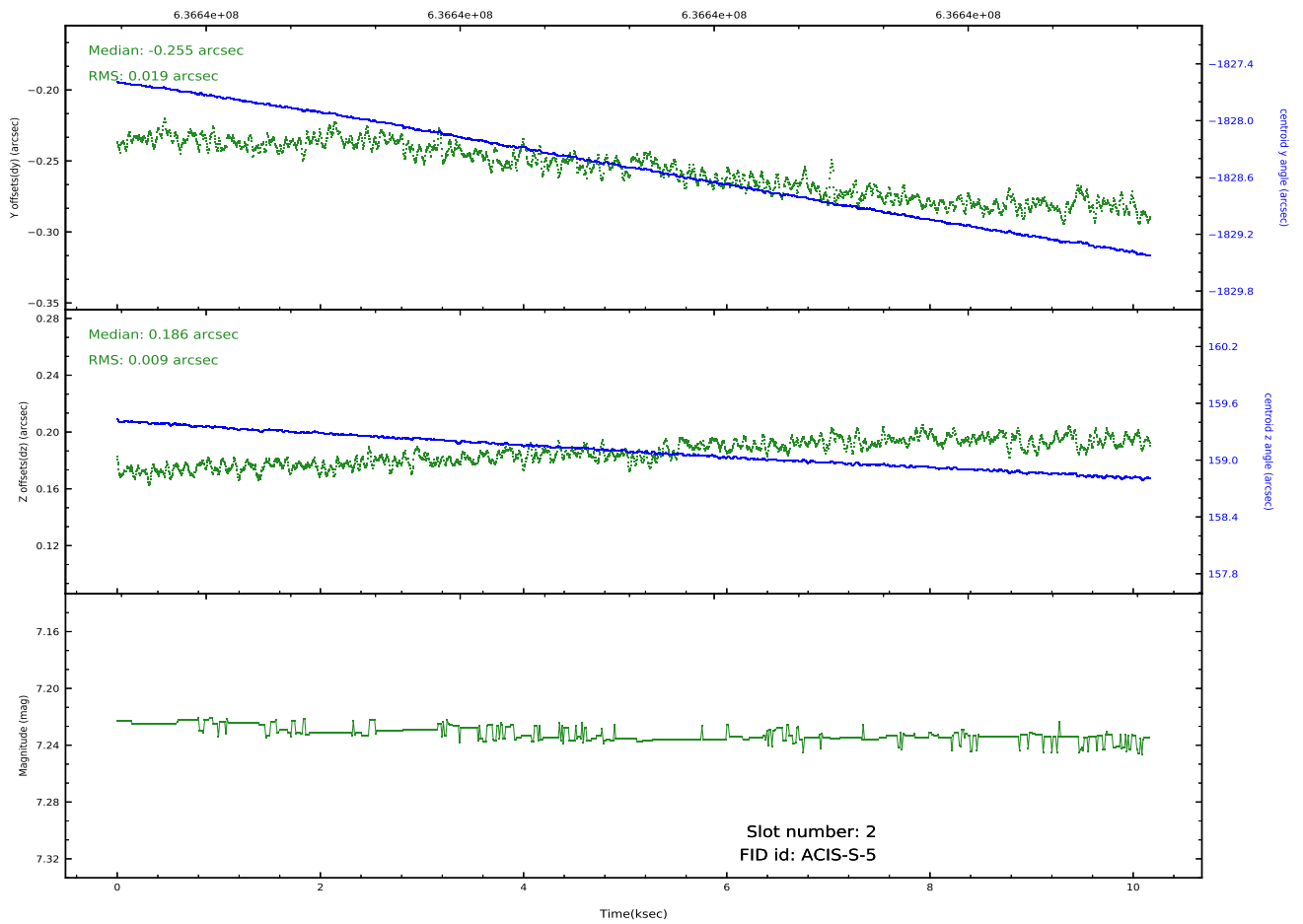
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



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	8.9854698566198

A.2 Comments

This observation was cut short by about 1 ks by an ACIS anomaly. There was an unplanned reset of the Front End Processor which terminated the observation early. This processing of the data includes all available events.