

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 7209 - L2 Version 3
Chandra X-Ray Center

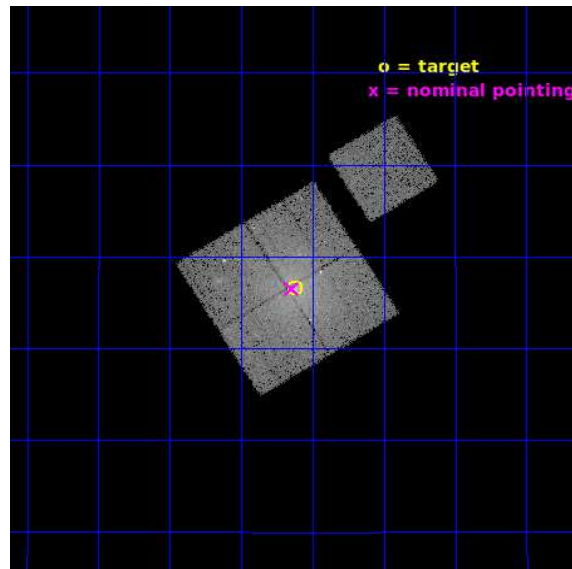
L2 Processing Date : Oct 11 2020

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

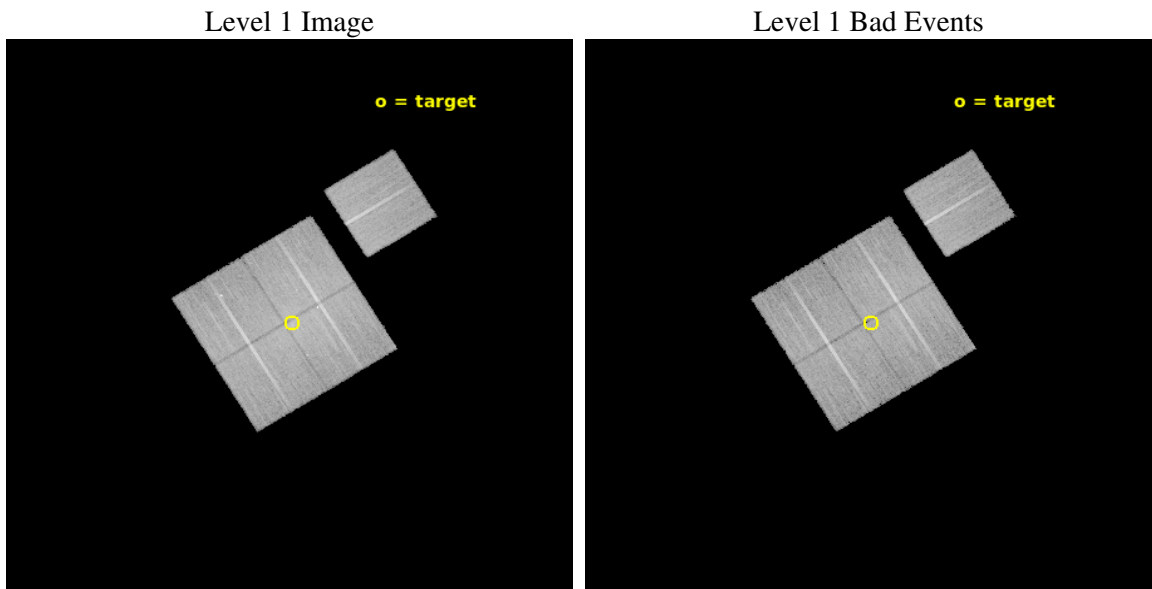
seq_num	800521	Sequence number
obs_id	7209	Observation id
title	Entropy in low mass galaxy clusters out to moderate radii	Proposal
observer	Dr Edward Lloyd-Davies	Principal investigator
object	Abell 539	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	79.155833	Observer's specified target RA [deg]
dec_targ	6.442111	Observer's specified target Dec [deg]
ra_nom	79.161096127069	Nominal RA [deg]
dec_nom	6.4417137243222	Nominal Dec [deg]
roll_nom	58.206685647217	Nominal Roll [deg]
revision	3	Processing version of data
ontime	18835.55897361	Sum of GTIs [s]
livetime	18589.458529083	Livetime [s]
ontime0	18838.699963748	Sum of GTIs [s]
ontime1	18838.699963748	Sum of GTIs [s]
ontime2	18832.418003231	Sum of GTIs [s]
ontime3	18835.55897361	Sum of GTIs [s]
ontime6	18835.558973461	Sum of GTIs [s]
l2events	93935	Number of level 2 events



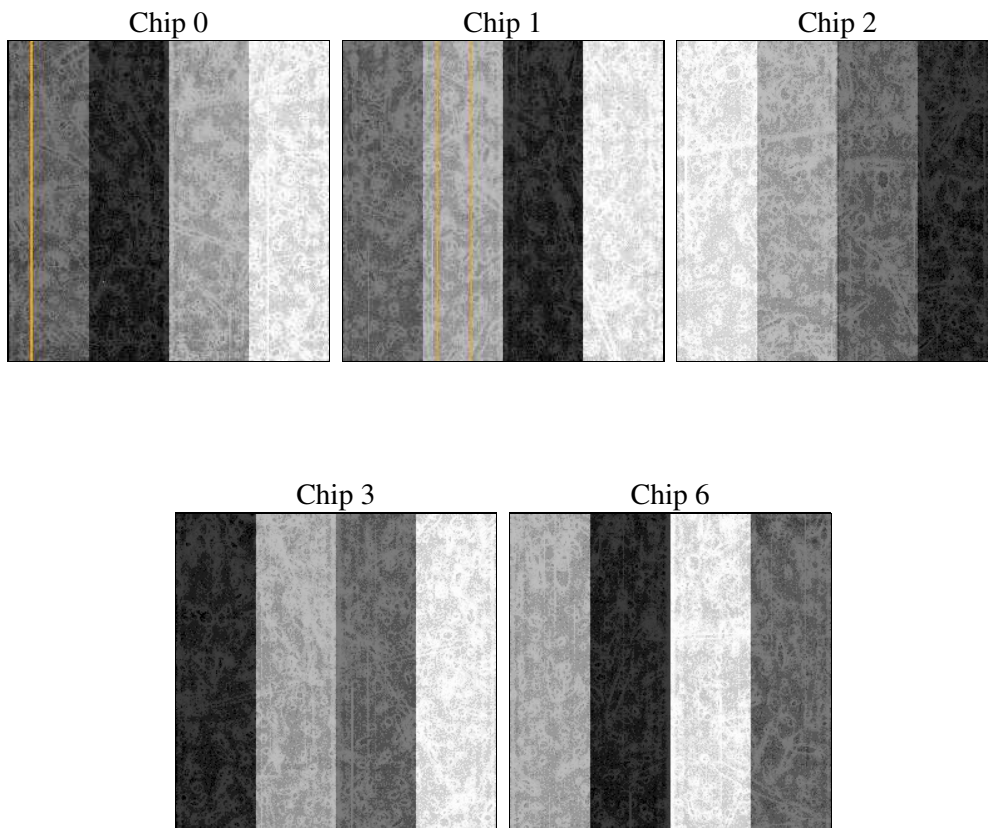
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18700.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	18835.55897361	Sum of GTIs [s]
caldbver	4.9.2	 	ontime0	18838.699963748	Sum of GTIs [s]
date	2020-10-11T16:03:47	Date and time of file creation	ontime1	18838.699963748	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	18832.418003231	Sum of GTIs [s]
			ontime3	18835.55897361	Sum of GTIs [s]
			ontime6	18835.558973461	Sum of GTIs [s]
			l1events	673191	Number of level 1 events

2.1.4 Events

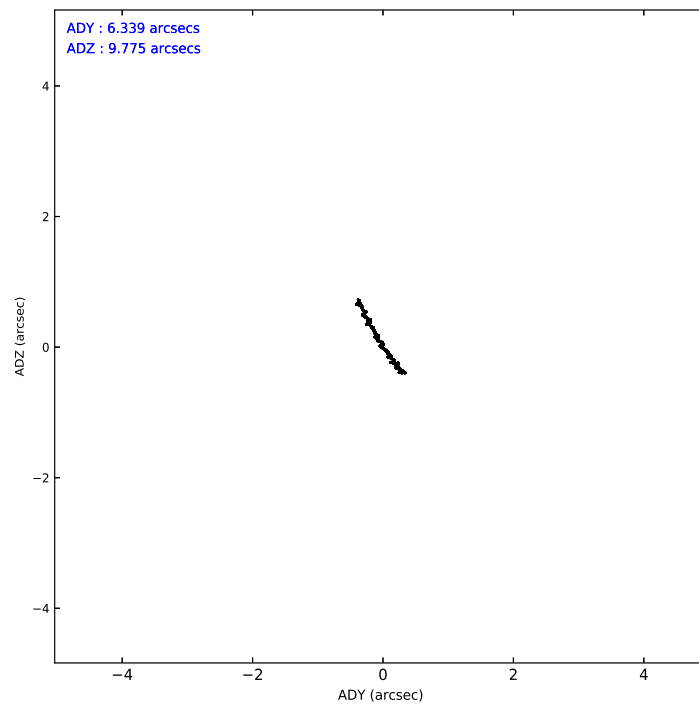
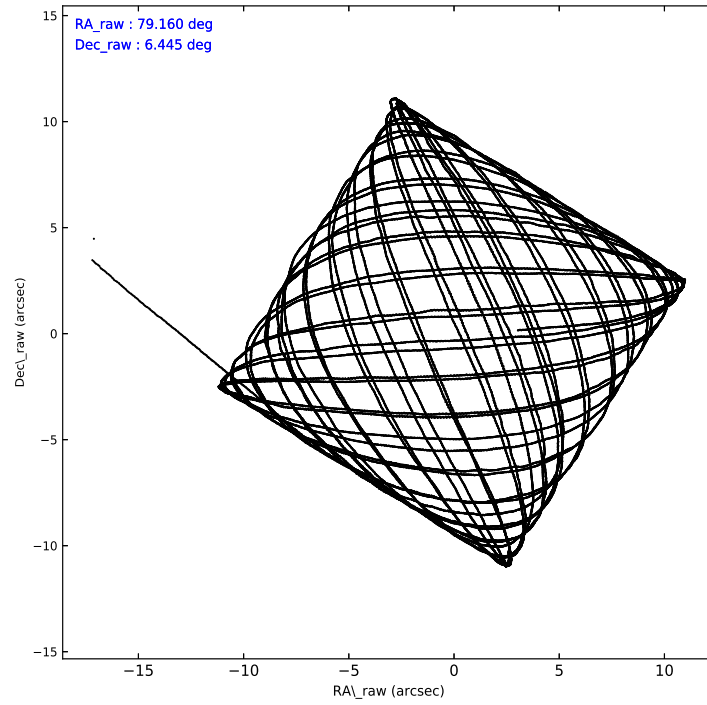
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	129514	129825	145196	141864	126792
rejected events	108465	106403	121874	115552	113566
rejected %	83%	81%	83%	81%	89%

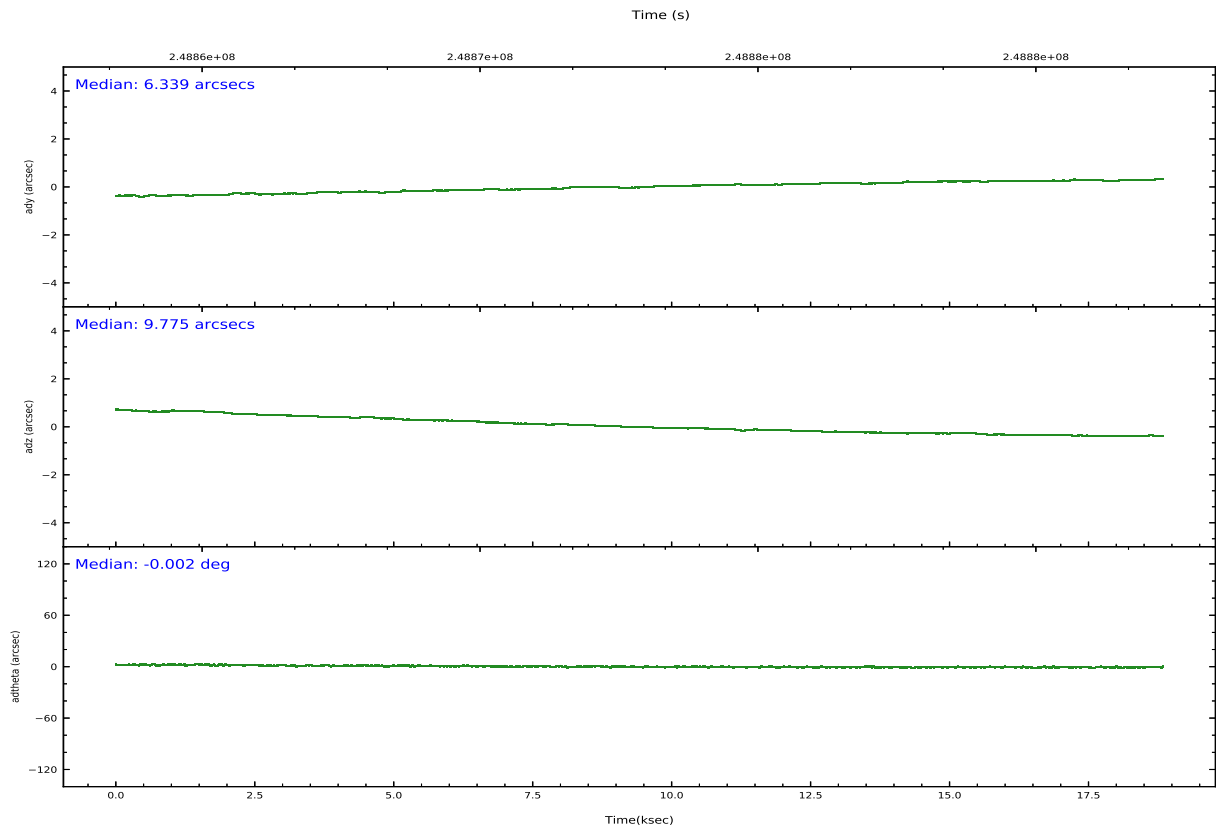
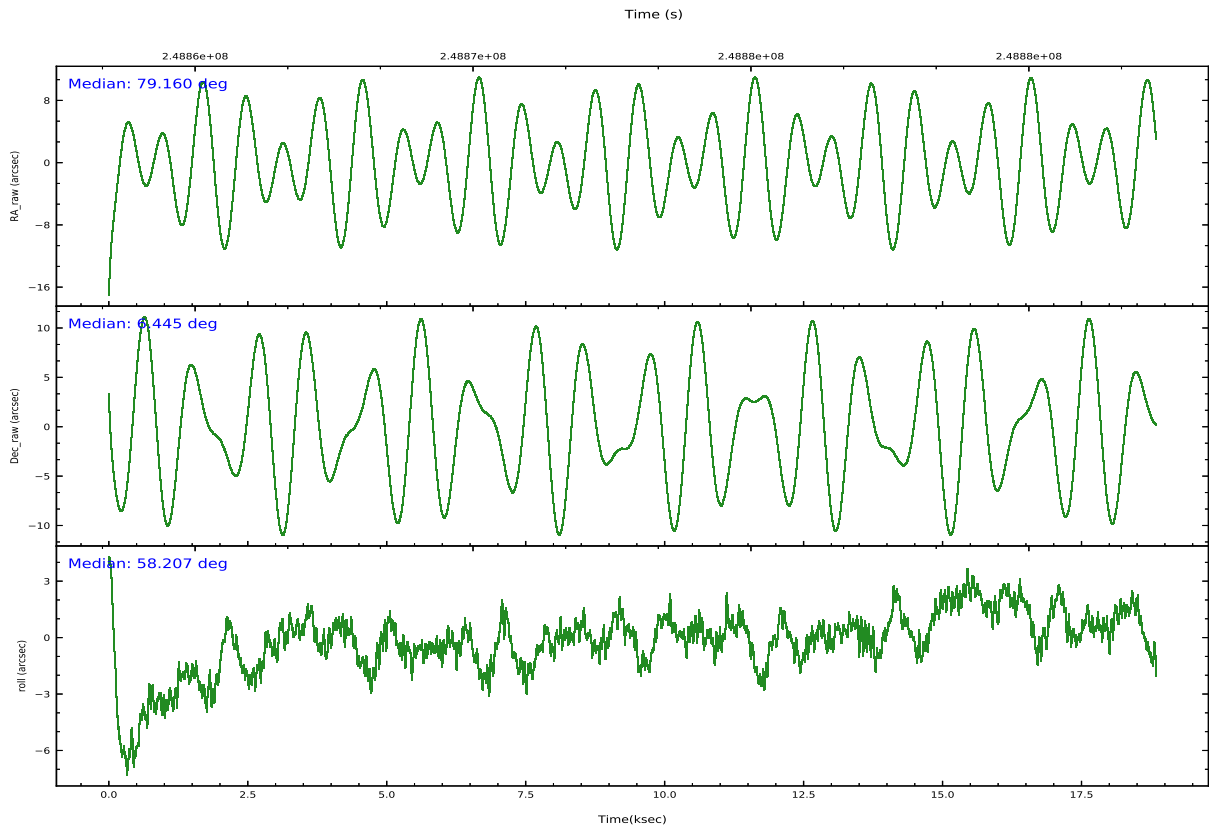
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11746	12896	13876	16374	4972
	9%	9%	9%	11%	3%
grade 1 events	95	94	119	162	69
	0%	0%	0%	0%	0%
grade 2 events	3760	4061	3913	3979	2840
	2%	3%	2%	2%	2%
grade 3 events	1743	1904	1751	1729	1484
	1%	1%	1%	1%	1%
grade 4 events	1509	1792	1643	1863	1424
	1%	1%	1%	1%	1%
grade 5 events	4362	4928	3949	5201	4970
	3%	3%	2%	3%	3%
grade 6 events	2519	3044	2436	2642	2688
	1%	2%	1%	1%	2%
grade 7 events	103780	101106	117509	109914	108345
	80%	77%	80%	77%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	79.158898	79.161096127069	Subarray requested	NONE	NONE
[deg] Pointing Dec	6.417410	6.4417137243222	Alternating exposures requested	N	N
[deg] Pointing Roll	57.999657	58.206685647217	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	248863591.184000	248862515.53703			
Observation start date	2005-11-20T08:45:27	2005-11-20T08:28:35			
[s] Observation end time (MET)	248882291.184000	248883124.70048			
Observation end date	2005-11-20T13:57:07	2005-11-20T14:12:04			
Read mode	TIMED	TIMED			

2.3 Aspect





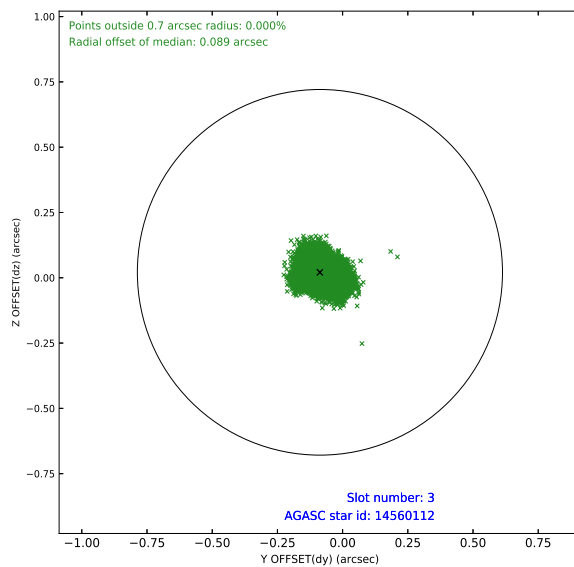
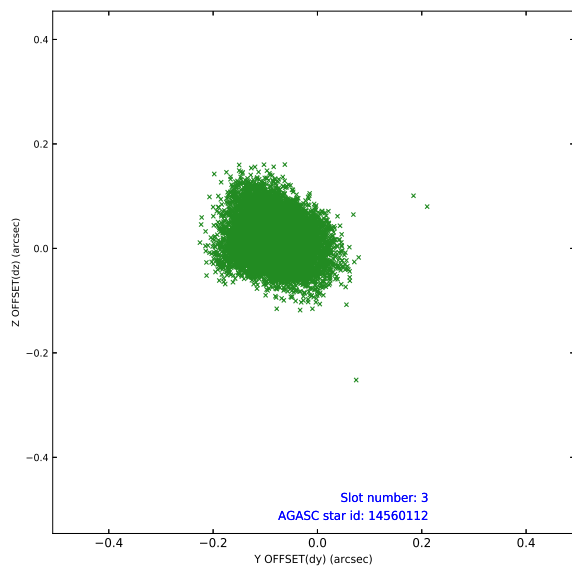
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.24	4596	1.000	0.014	-0.006	0.019	0.032	0.000000	0.000000	933.39	-833
1	FID		ACIS-I-5	7.23	4597	1.000	-0.192	0.022	0.009	0.016	0.000000	0.000000	-1814.82	1064
2	FID		ACIS-I-6	7.25	4596	1.000	0.086	0.054	0.013	0.020	0.000000	0.000000	398.76	1708
3	GUIDE	used	14560112	7.85	9190	1.000	-0.087	0.021	0.068	0.108	78.743343	6.264544	-1254.23	969
4	GUIDE	used	14692840	7.93	9183	1.000	-0.054	0.068	0.053	0.085	79.616121	6.746510	1871.62	-757
5	GUIDE	used	14693112	9.18	9185	1.000	0.047	0.035	0.084	0.140	79.337646	6.030080	-842.70	-1281
6	GUIDE	used	14686528	8.49	9190	1.000	0.014	-0.097	0.076	0.121	78.860852	7.055515	1384.20	2120
7	GUIDE	used	14688808	9.53	9186	1.000	0.079	-0.025	0.086	0.140	78.822413	6.172596	-1384.80	554

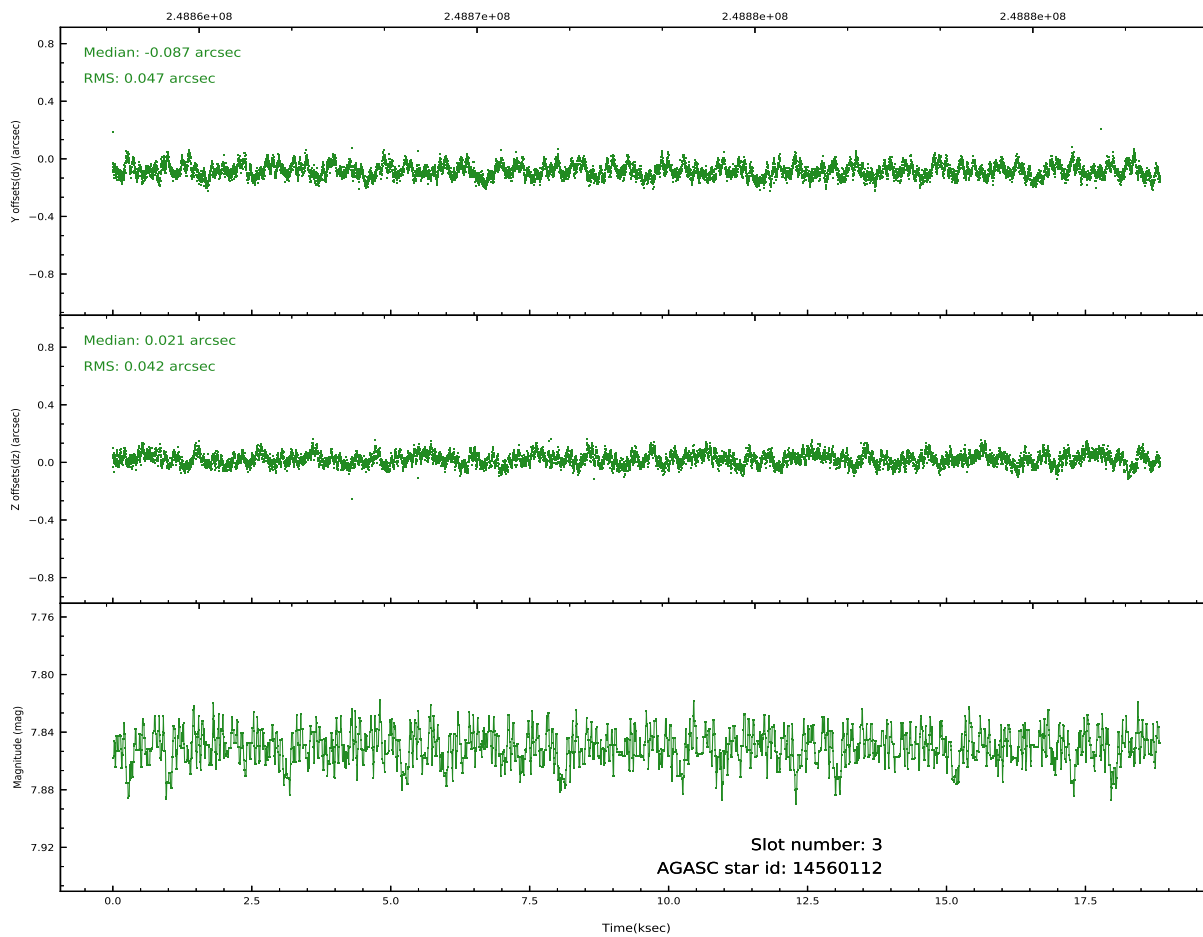
∞

2.4 Star Slots

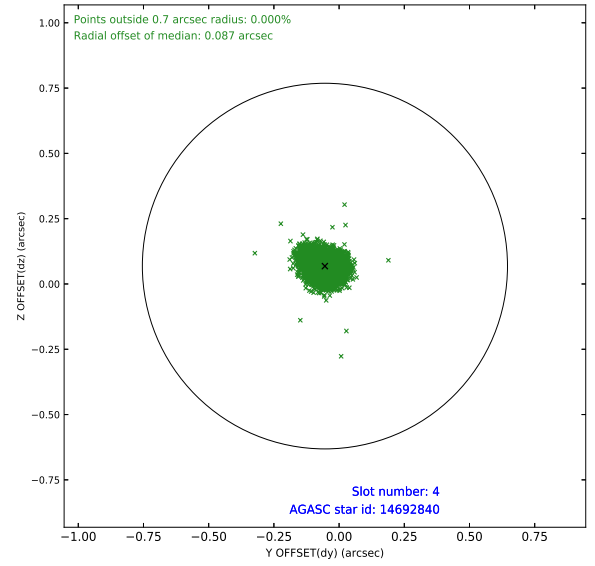
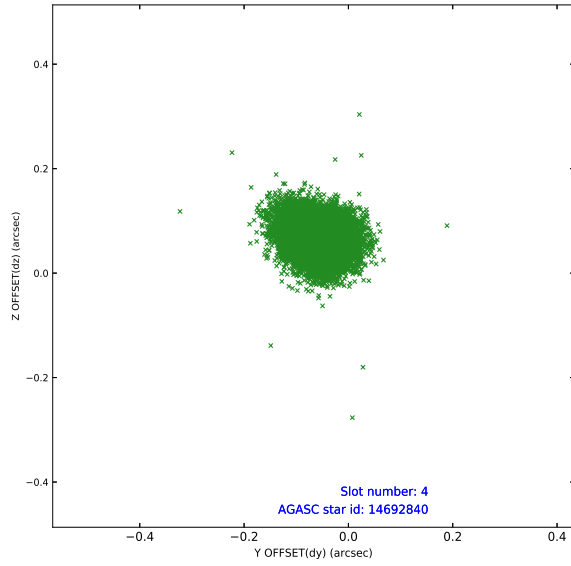
2.4.1 Slot 3



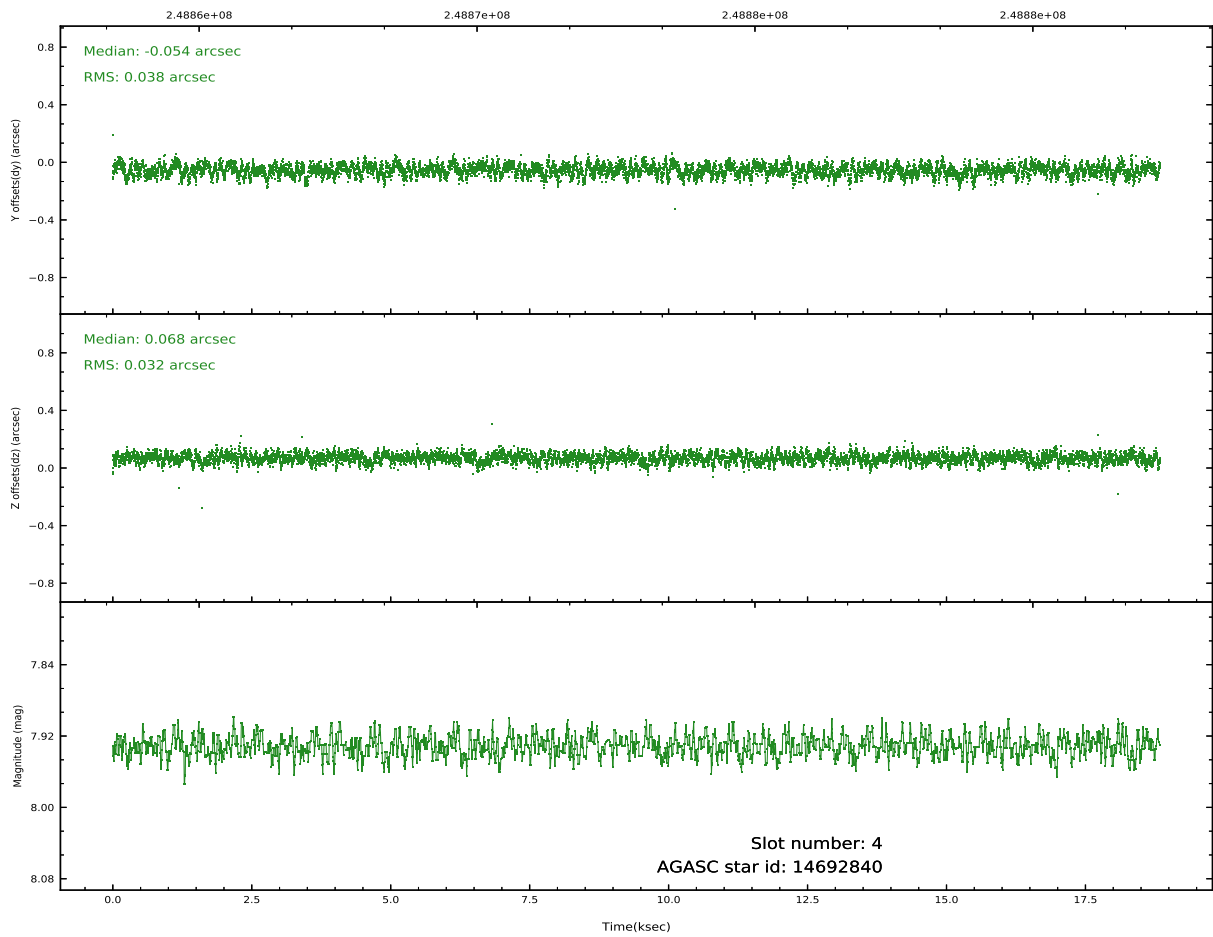
Time (s)



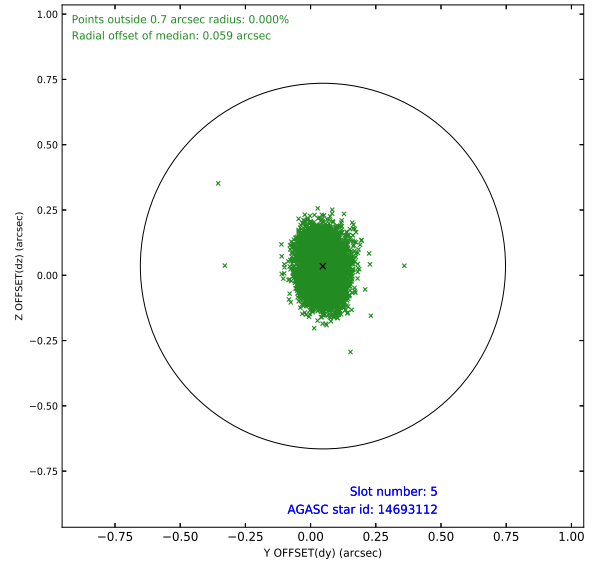
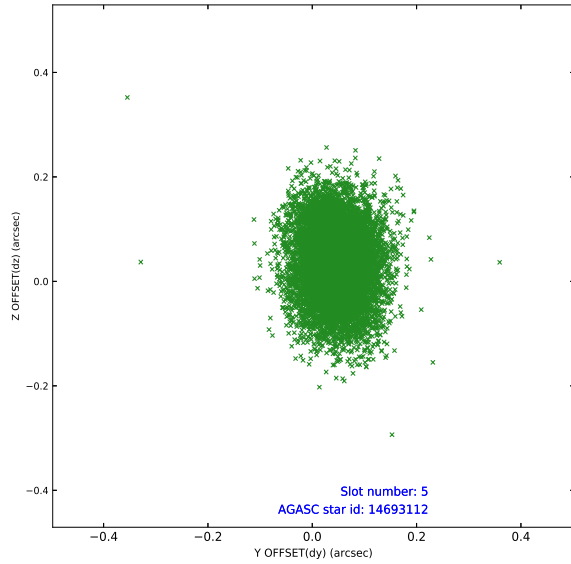
2.4.2 Slot 4



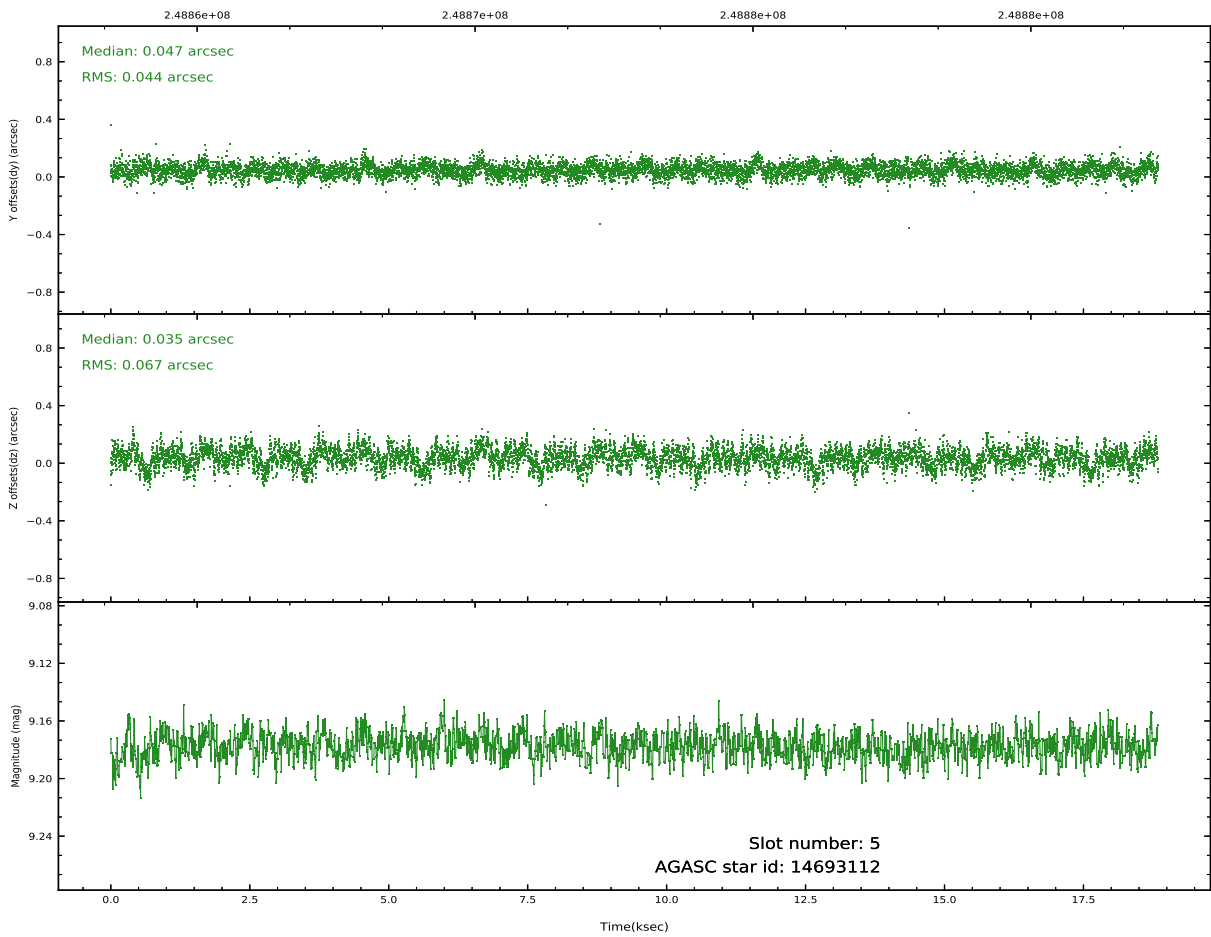
Time (s)



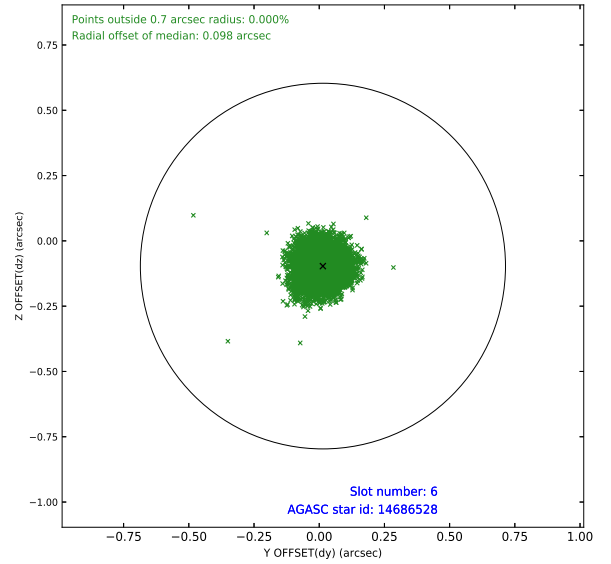
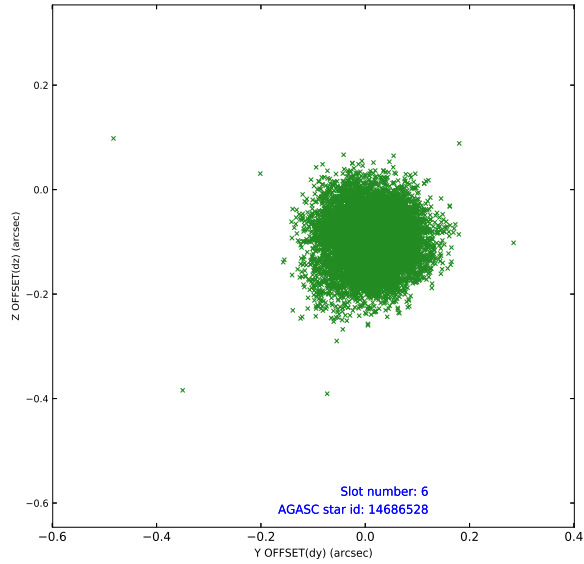
2.4.3 Slot 5



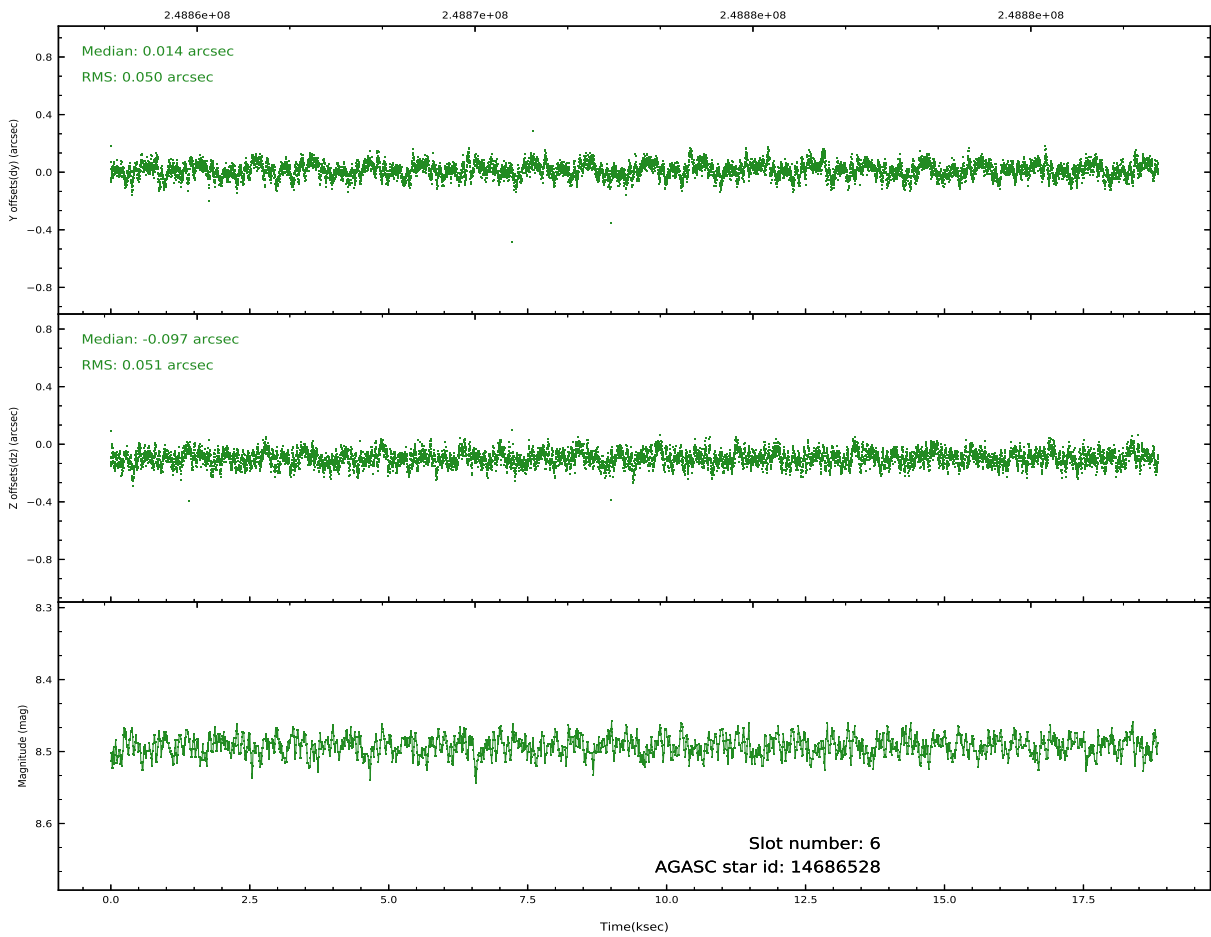
Time (s)



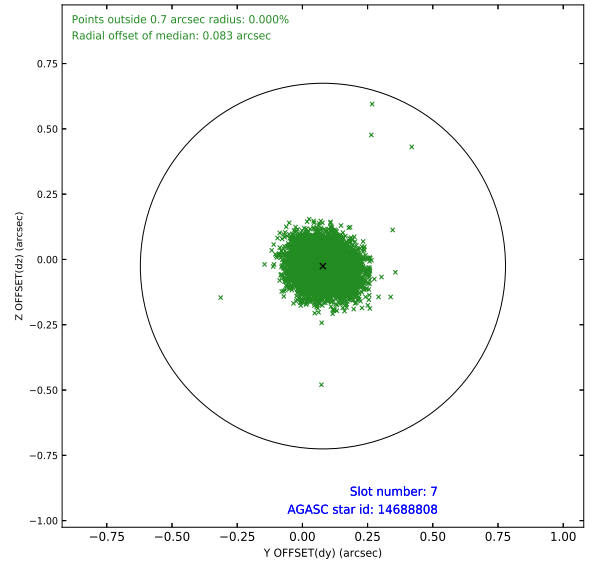
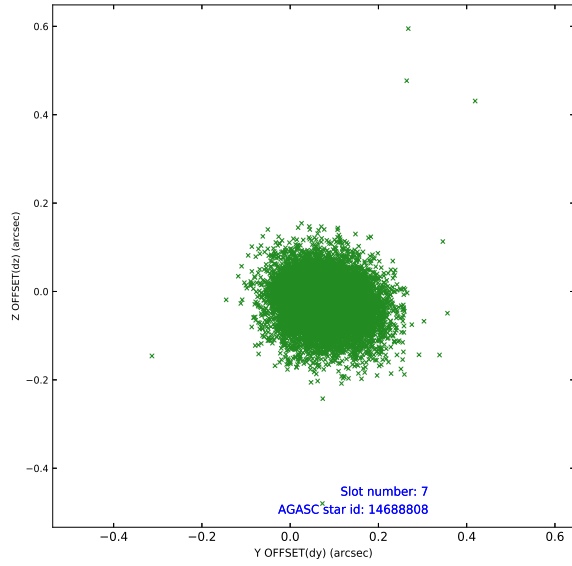
2.4.4 Slot 6



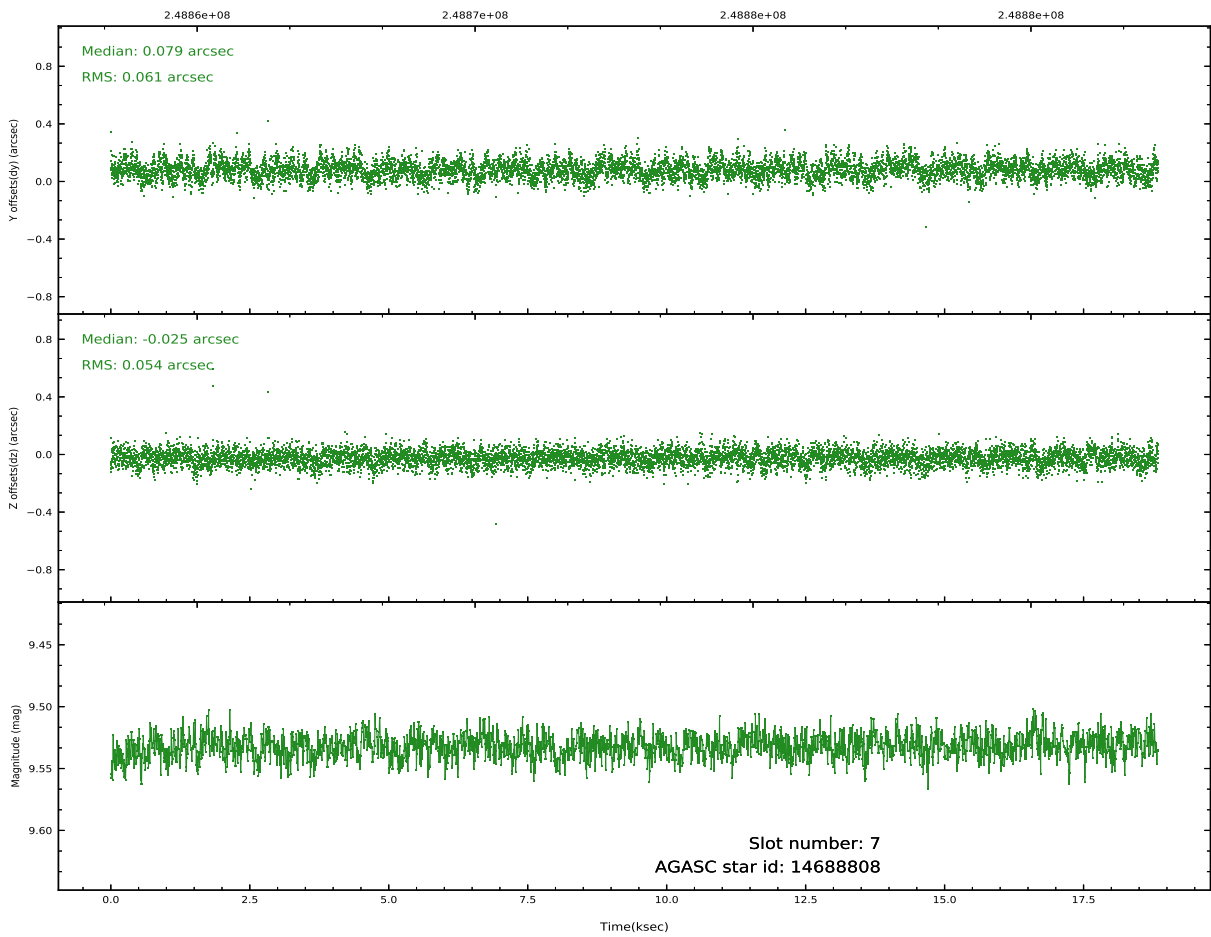
Time (s)



2.4.5 Slot 7

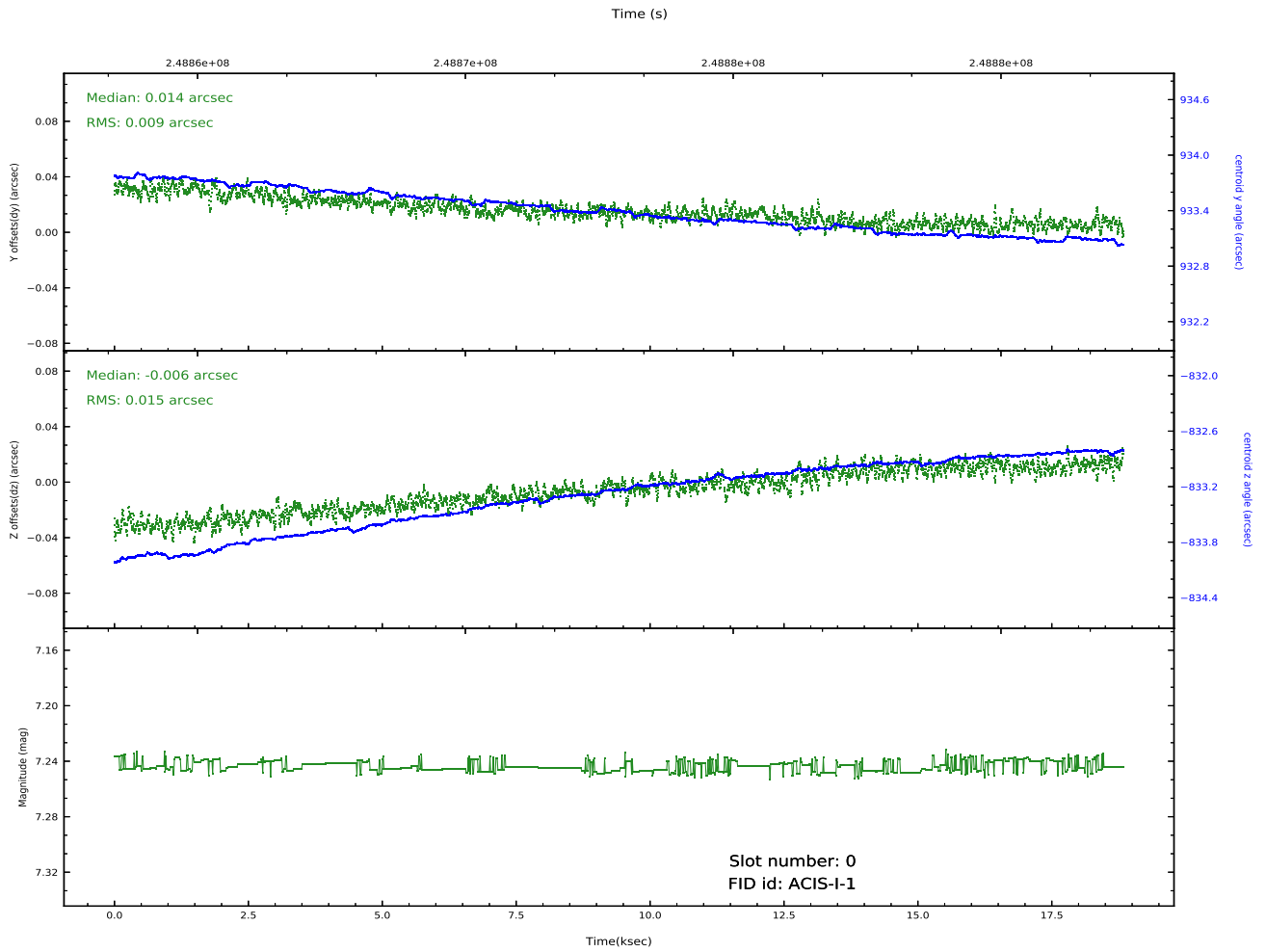
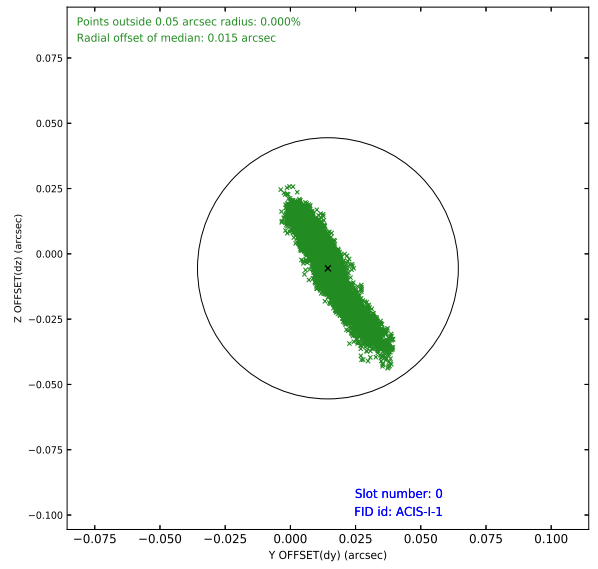
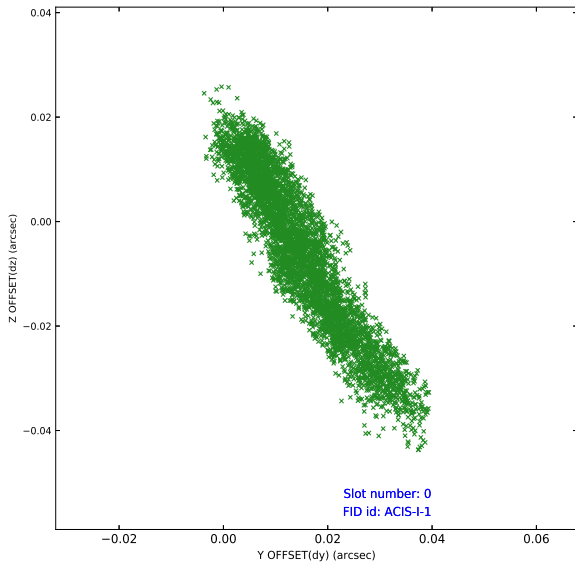


Time (s)

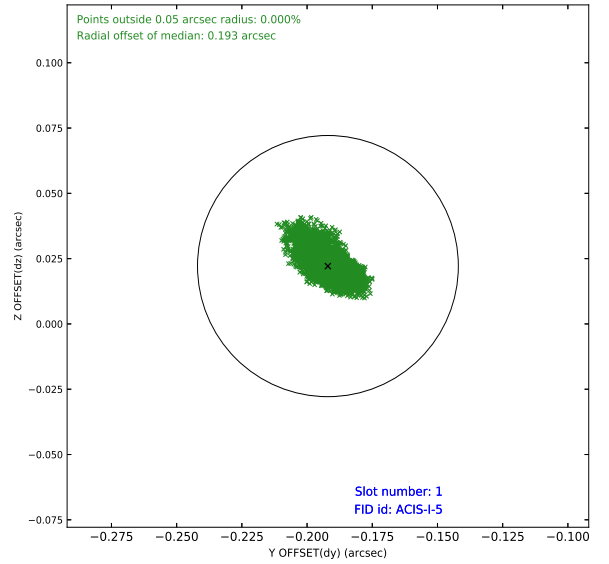
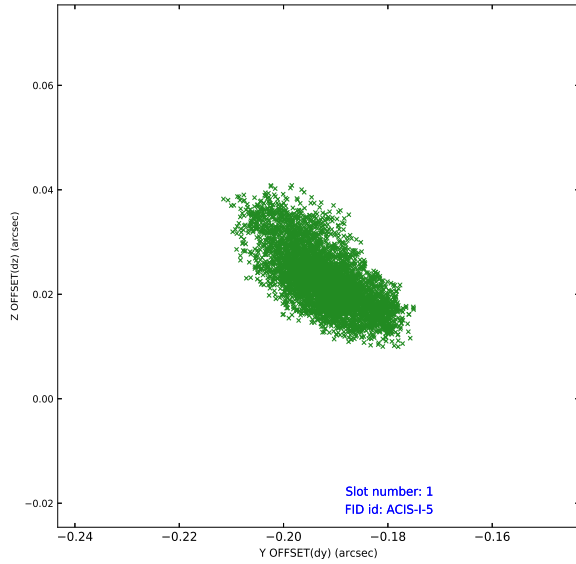


2.5 FID Slots

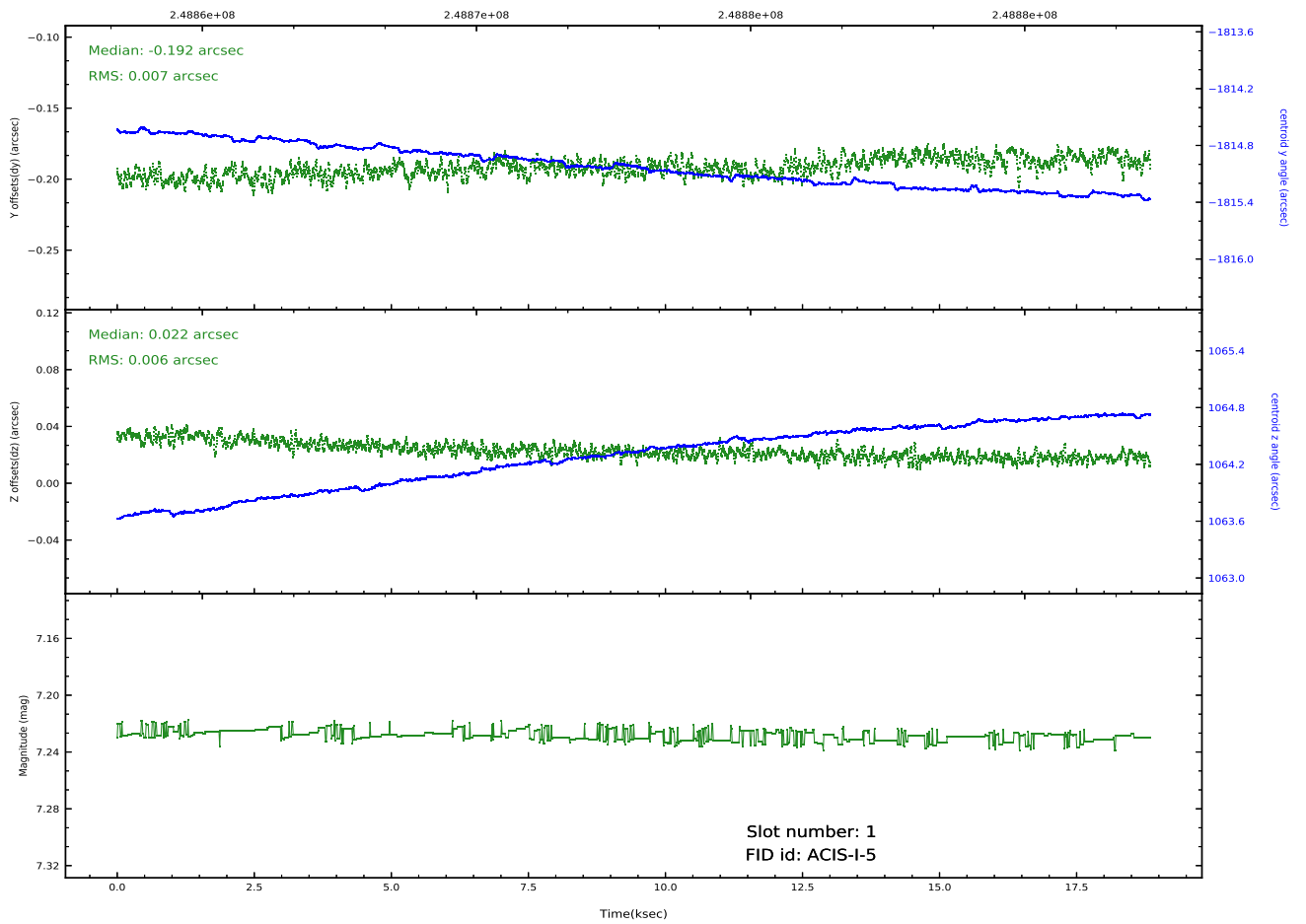
2.5.1 Slot 0



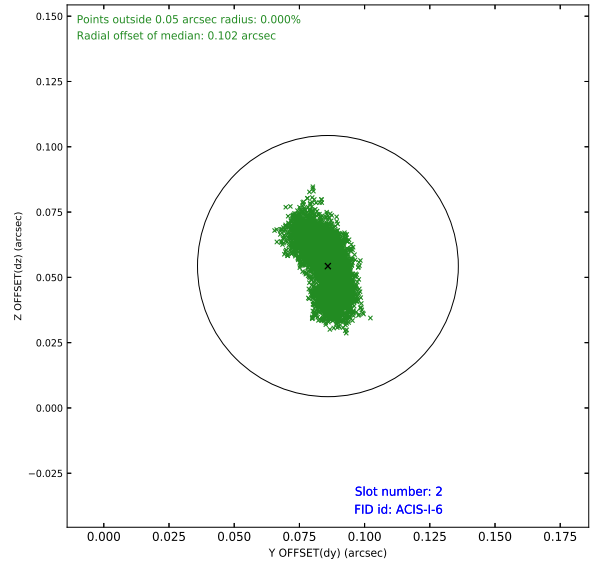
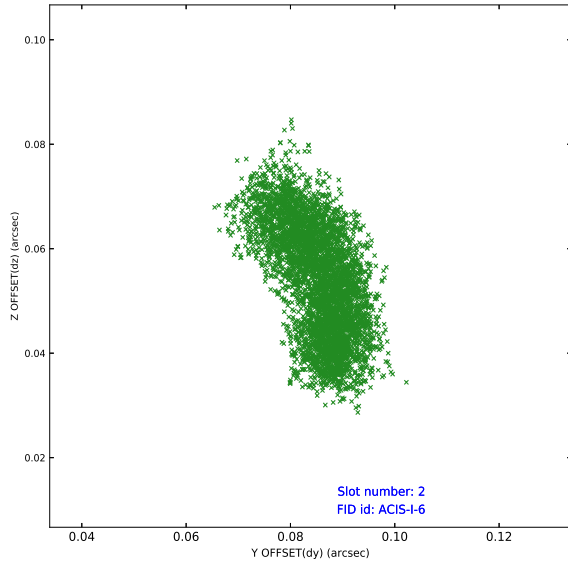
2.5.2 Slot 1



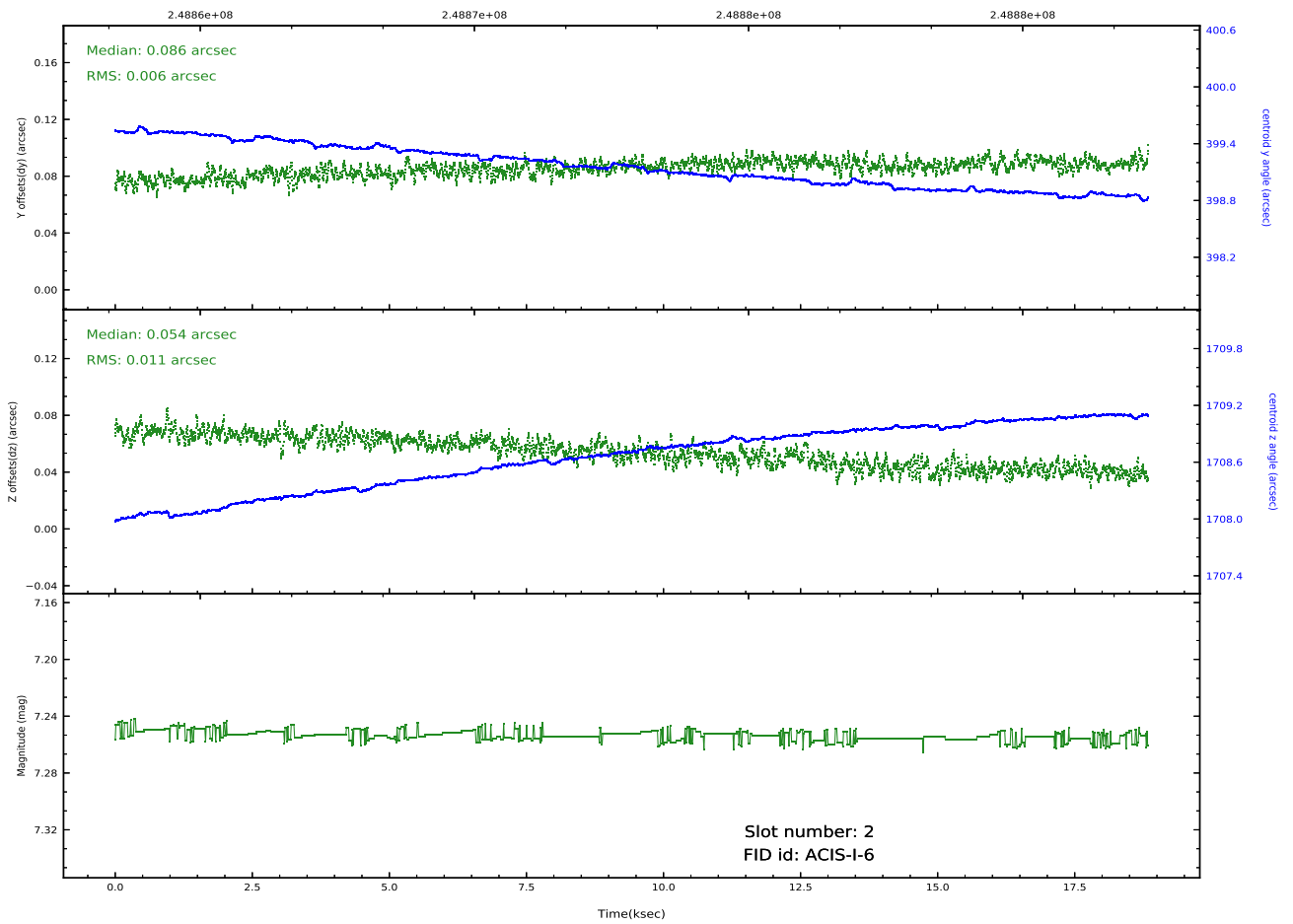
Time (s)



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2020.10.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.83555

A.2 Comments