

V&V Reference Report

L2 ASCDS Version : 10.9.1

Observation 4949 - L2 Version 4
Chandra X-Ray Center

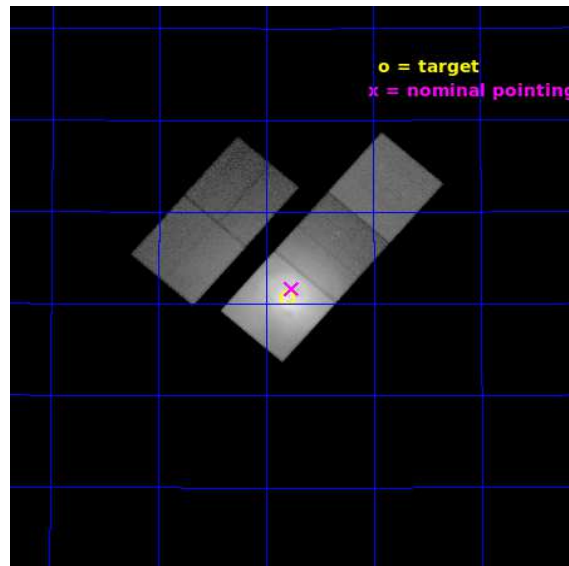
L2 Processing Date : Oct 2 2020

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

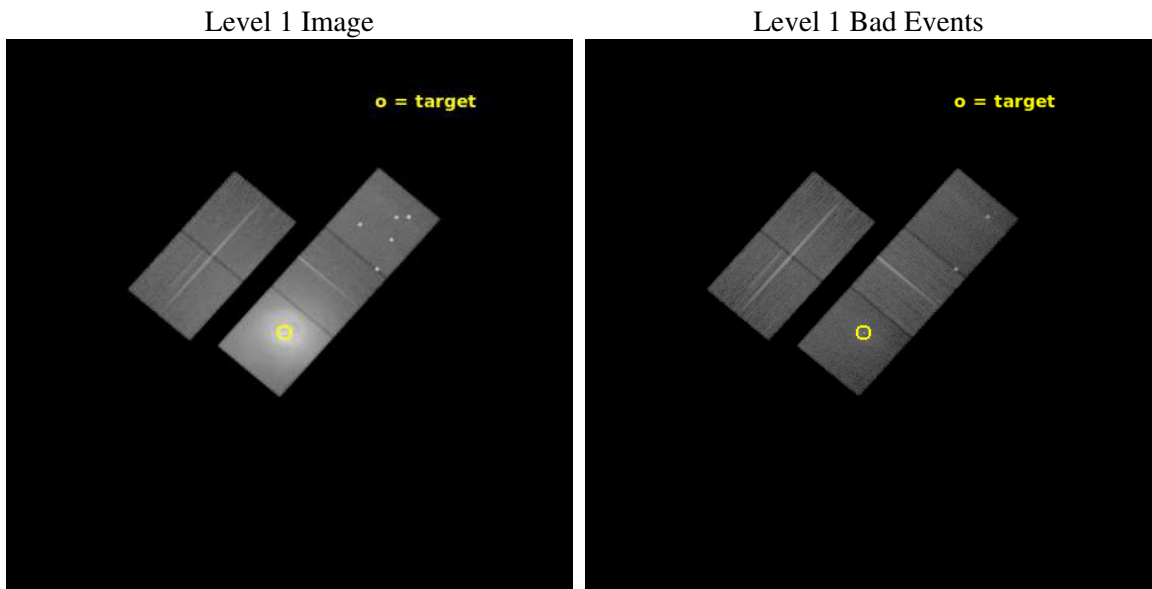
seq_num	800398	Sequence number
obs_id	4949	Observation id
title	A Megasecond Image of the Core of the Perseus Cluster	Proposal tit
observer	Andrew Fabian	Principal investigator
object	Abell 426	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	49.950833	Observer's specified target RA [deg]
dec_targ	41.511722	Observer's specified target Dec [deg]
ra_nom	49.939931688652	Nominal RA [deg]
dec_nom	41.527771828072	Nominal Dec [deg]
roll_nom	130.86717295859	Nominal Roll [deg]
revision	4	Processing version of data
ontime	29771.354796886	Sum of GTIs [s]
liveltime	29382.370129113	Livetime [s]
ontime2	29771.190646768	Sum of GTIs [s]
ontime3	29771.231686771	Sum of GTIs [s]
ontime5	29771.313756883	Sum of GTIs [s]
ontime6	29771.27271688	Sum of GTIs [s]
ontime7	29771.354796886	Sum of GTIs [s]
l2events	2926734	Number of level 2 events



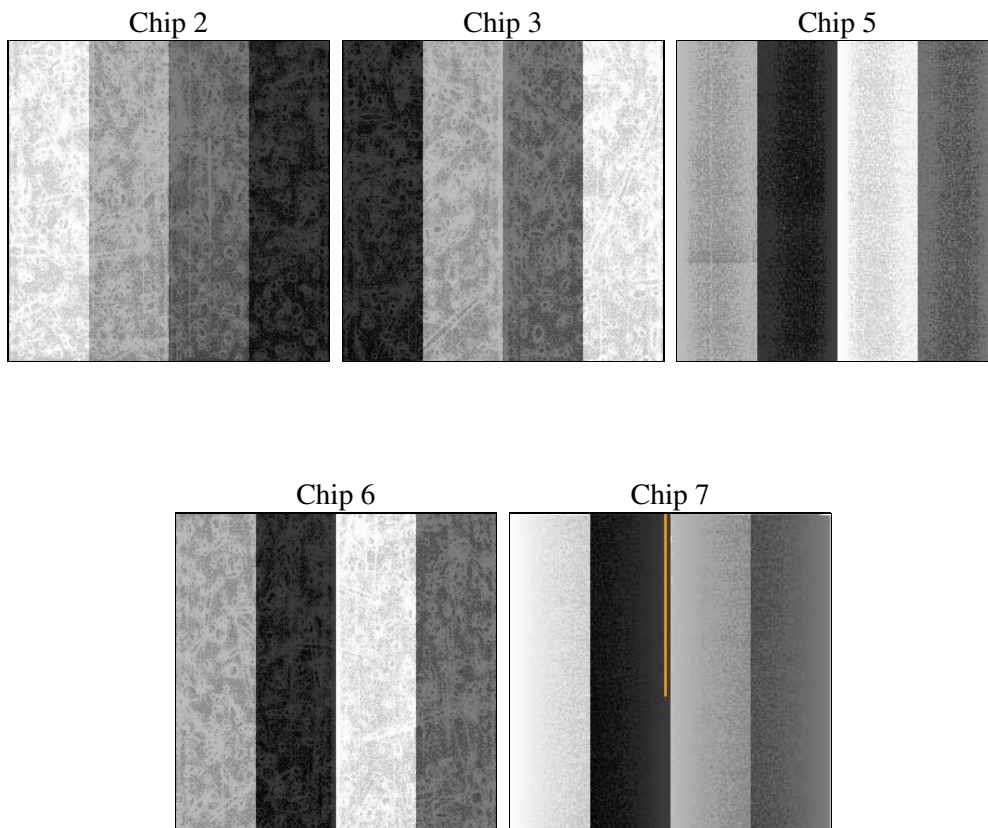
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.1	Processing system revision	ontime	29771.354796886	Sum of GTIs [s]
caldbver	4.9.2	 	ontime2	29771.190646768	Sum of GTIs [s]
date	2020-10-03T00:45:07	Date and time of file creation	ontime3	29771.231686771	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	29771.313756883	Sum of GTIs [s]
			ontime6	29771.27271688	Sum of GTIs [s]
			ontime7	29771.354796886	Sum of GTIs [s]
			l1events	3862201	Number of level 1 events

2.1.4 Events

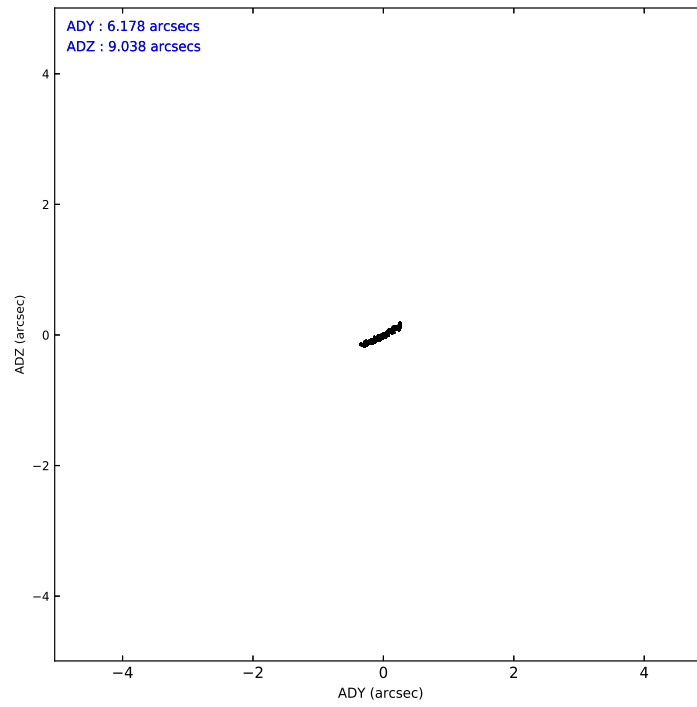
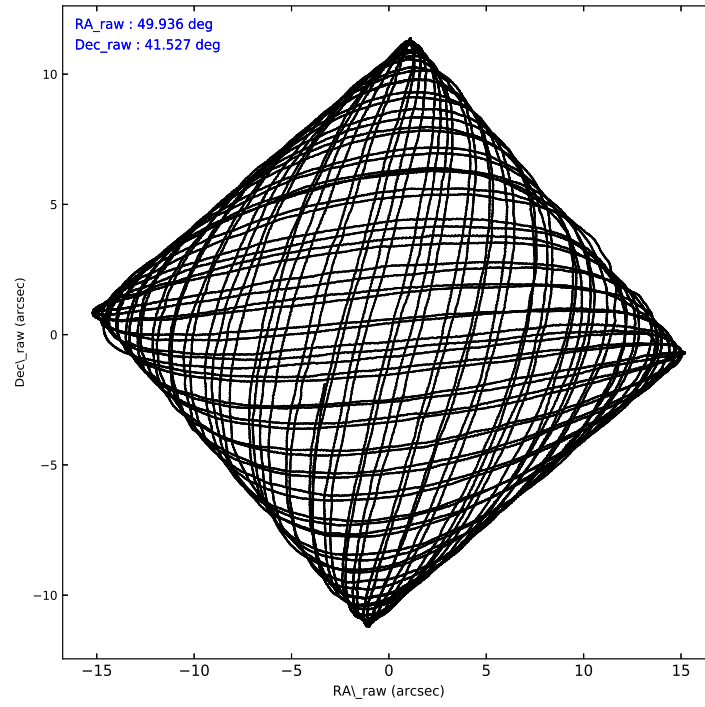
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	266293	314595	344899	481282	2455132
rejected events	185129	184244	135701	186443	146400
rejected %	69%	58%	39%	38%	5%

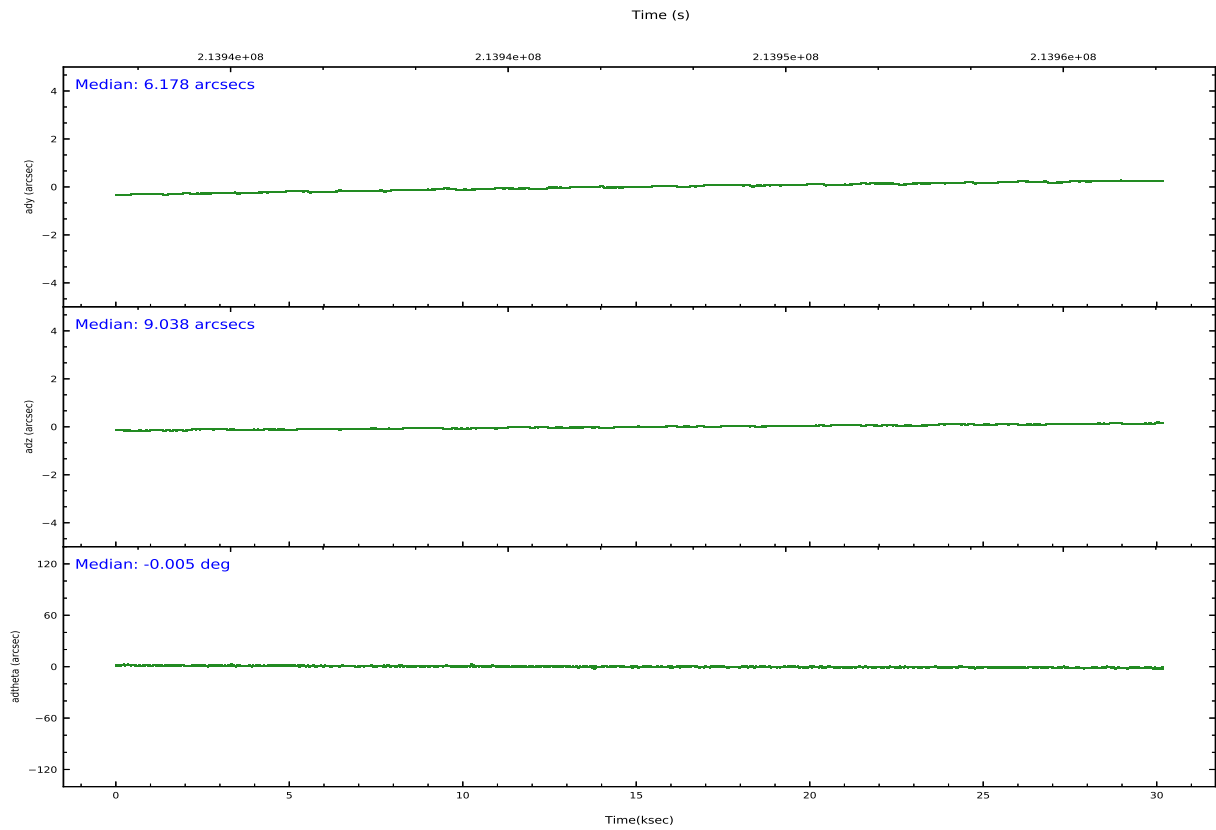
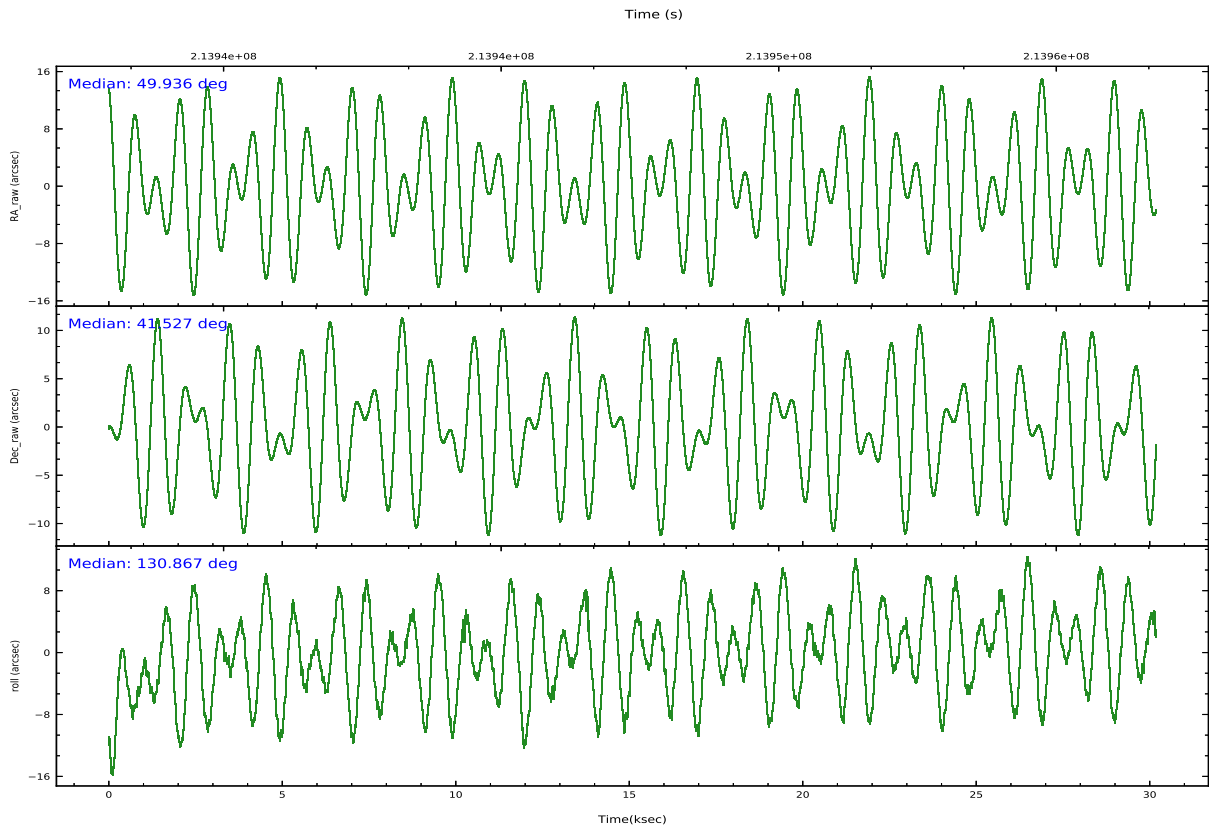
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	57518	97413	53988	228519	633560
	21%	30%	15%	47%	25%
grade 1 events	398	584	2063	1032	1799
	0%	0%	0%	0%	0%
grade 2 events	10609	15097	56055	32705	607468
	3%	4%	16%	6%	24%
grade 3 events	4099	5873	10704	10836	269938
	1%	1%	3%	2%	10%
grade 4 events	4005	5655	10557	10740	265201
	1%	1%	3%	2%	10%
grade 5 events	6584	8024	22567	8707	38659
	2%	2%	6%	1%	1%
grade 6 events	4954	6347	77934	12103	533077
	1%	2%	22%	2%	21%
grade 7 events	178126	175602	111031	176640	105430
	66%	55%	32%	36%	4%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-23567	ACIS-23567	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	49.970225	49.939931688652	Subarray requested	NONE	NONE
[deg] Pointing Dec	41.518857	41.527771828072	Alternating exposures requested	N	N
[deg] Pointing Roll	130.691155	130.86717295859	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	213932878.184000	213932501.93553			
Observation start date	2004-10-12T01:46:54	2004-10-12T01:41:41			
[s] Observation end time (MET)	213962878.184000	213963012.08689			
Observation end date	2004-10-12T10:06:54	2004-10-12T10:10:12			
Read mode	TIMED	TIMED			

2.3 Aspect





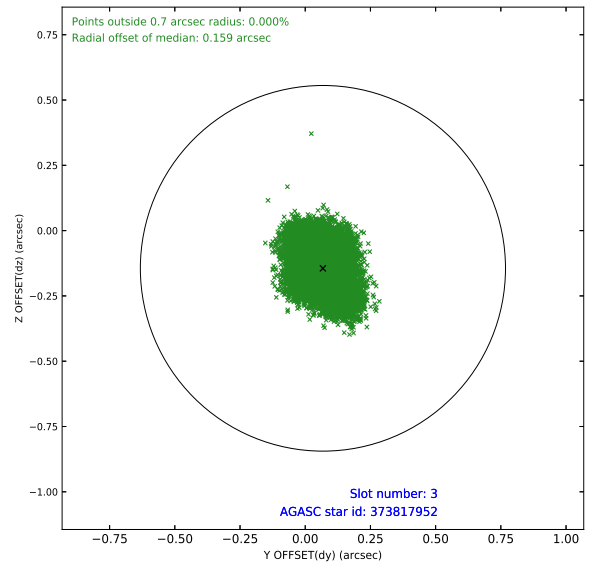
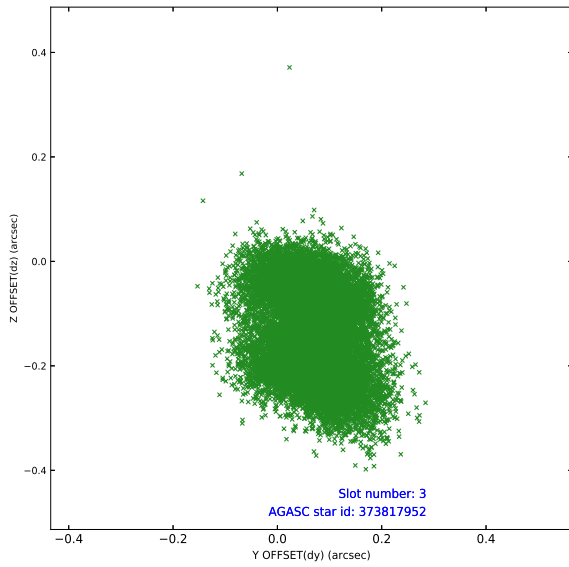
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.19	7363	1.000	0.045	-0.036	0.007	0.012	0.000000	0.000000	937.17	-1725
1	FID		ACIS-S-5	7.24	7363	1.000	-0.117	0.021	0.009	0.016	0.000000	0.000000	-1811.93	171
2	FID		ACIS-S-6	7.35	7362	1.000	0.051	0.027	0.008	0.014	0.000000	0.000000	402.68	815
3	GUIDE	used	373817952	8.72	14724	1.000	0.068	-0.144	0.118	0.174	49.913424	40.978510	-1374.23	1385
4	GUIDE	used	373826120	8.90	14711	1.000	0.012	-0.047	0.071	0.116	49.738165	41.186341	-497.14	1256
5	GUIDE	used	374352808	8.78	14719	1.000	-0.104	0.066	0.079	0.130	49.969955	42.208621	1883.62	-1617
6	GUIDE	used	376057824	8.35	14724	1.000	-0.014	0.089	0.075	0.117	50.665569	41.926280	-95.95	-2373
7	GUIDE	used	374345008	9.37	14648	1.000	0.044	0.033	0.114	0.185	48.768668	41.619367	2399.42	2201

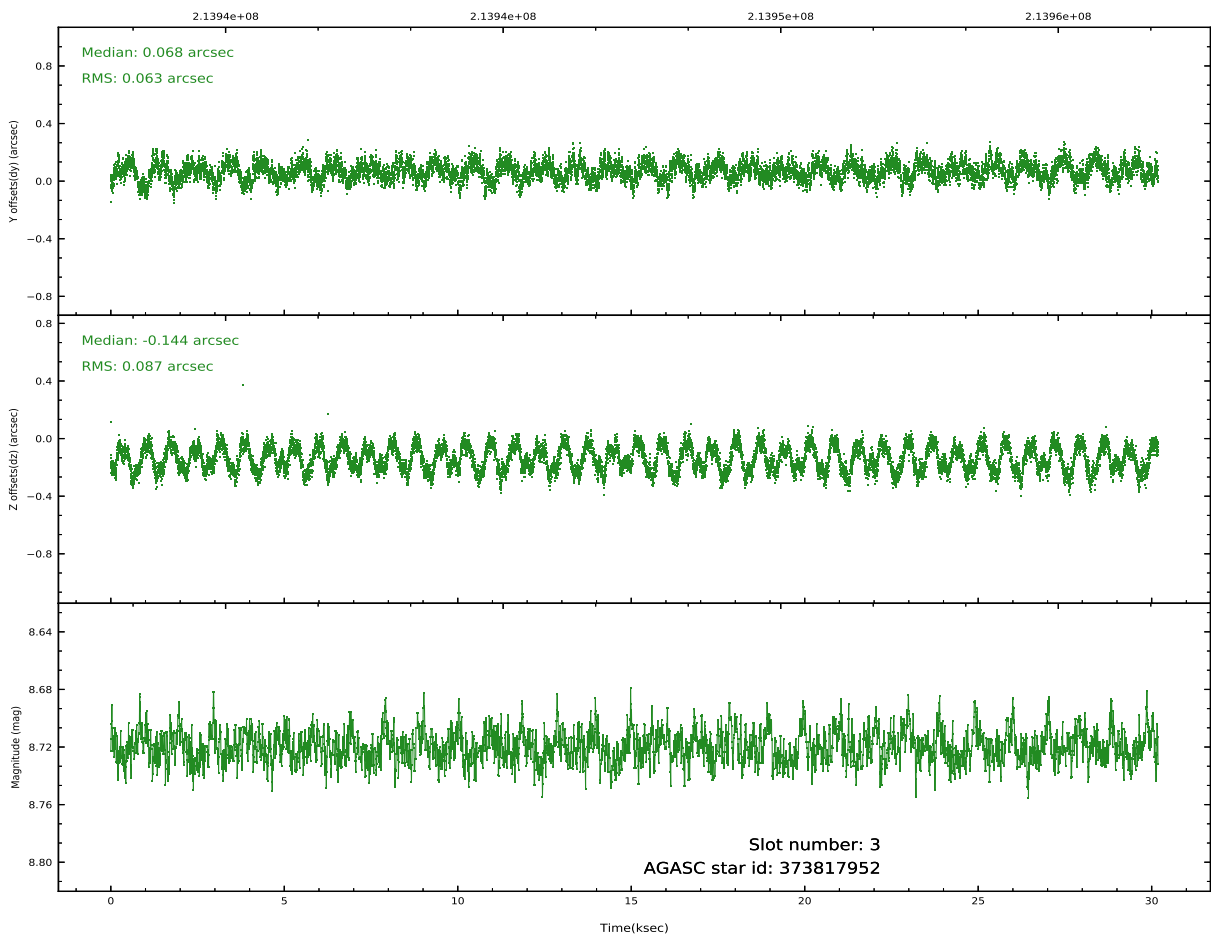
∞

2.4 Star Slots

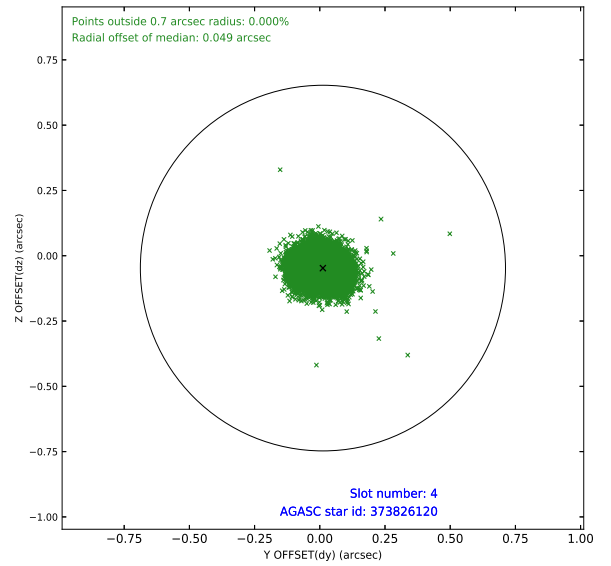
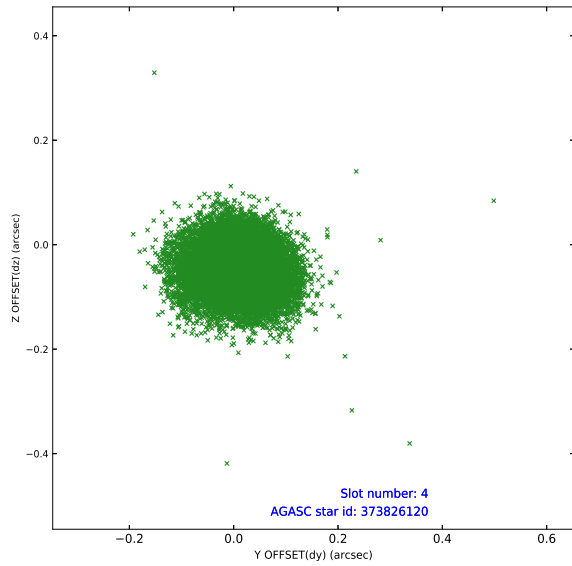
2.4.1 Slot 3



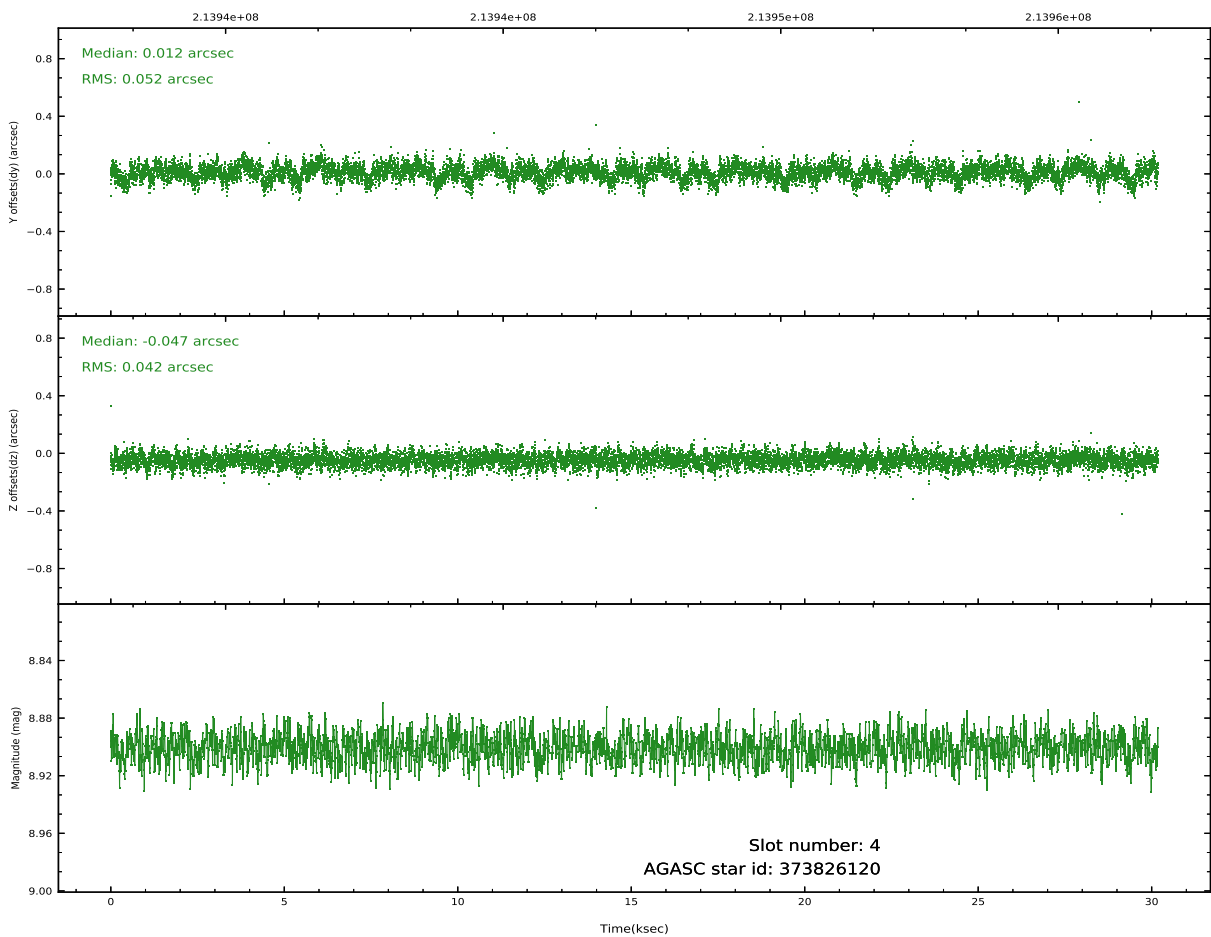
Time (s)



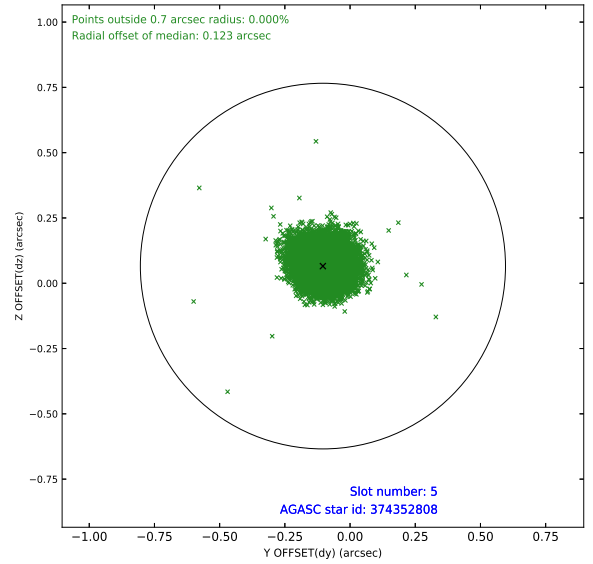
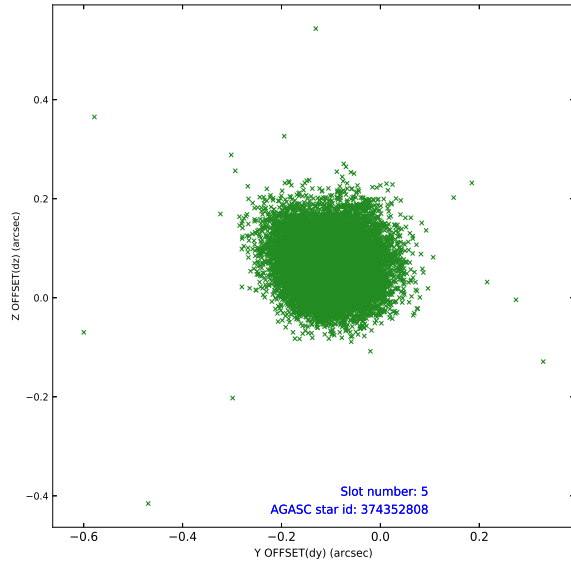
2.4.2 Slot 4



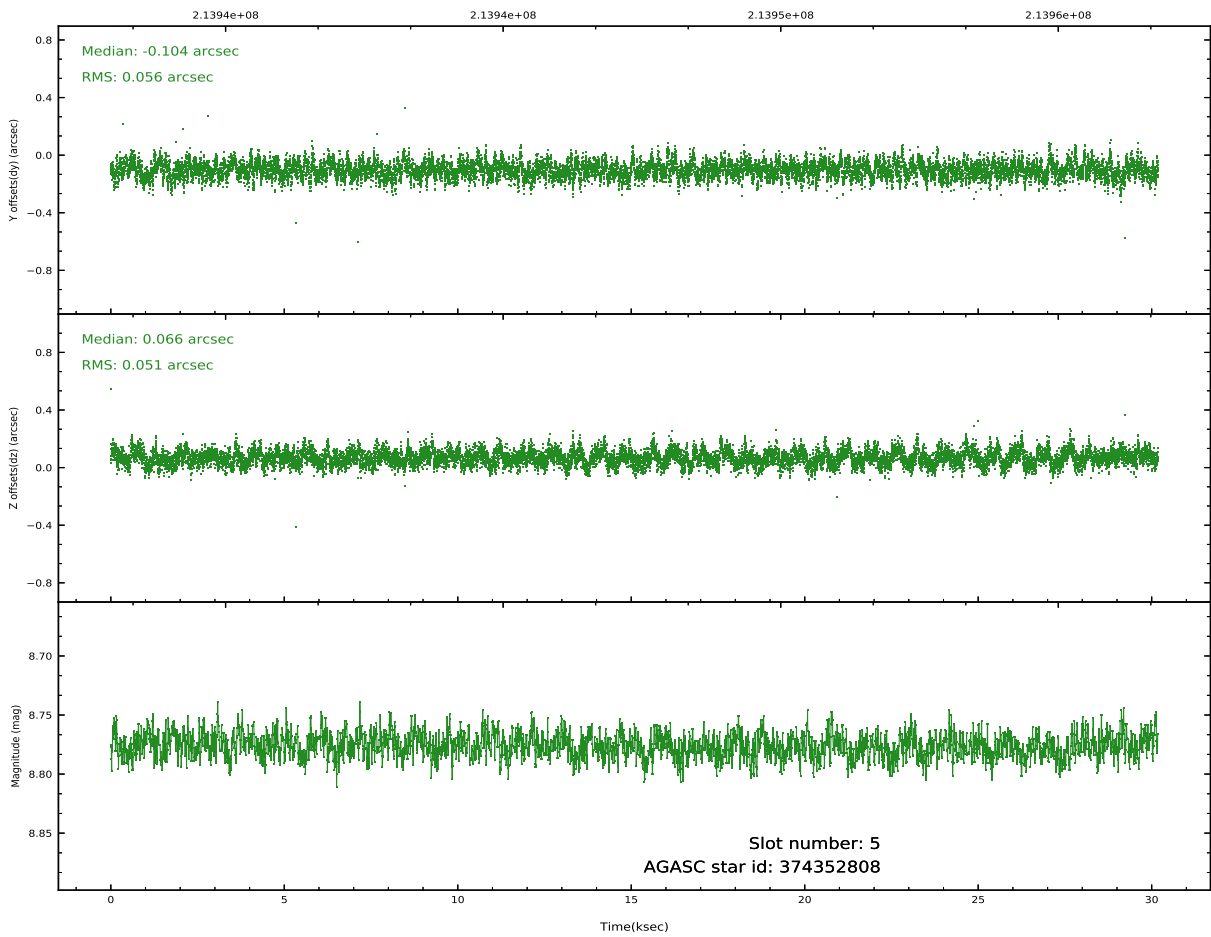
Time (s)



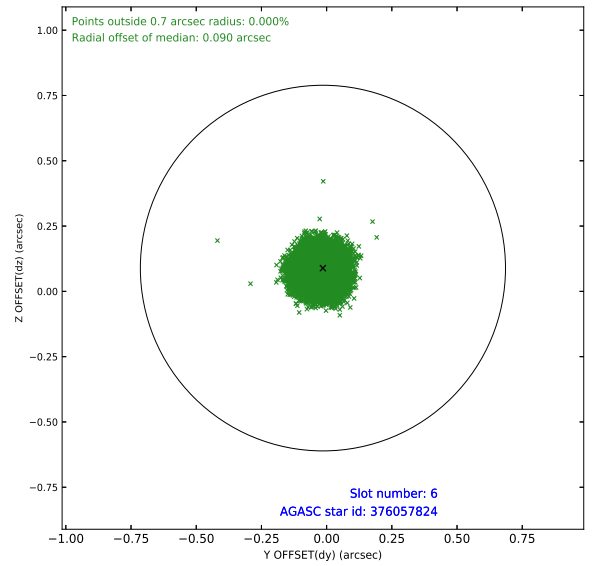
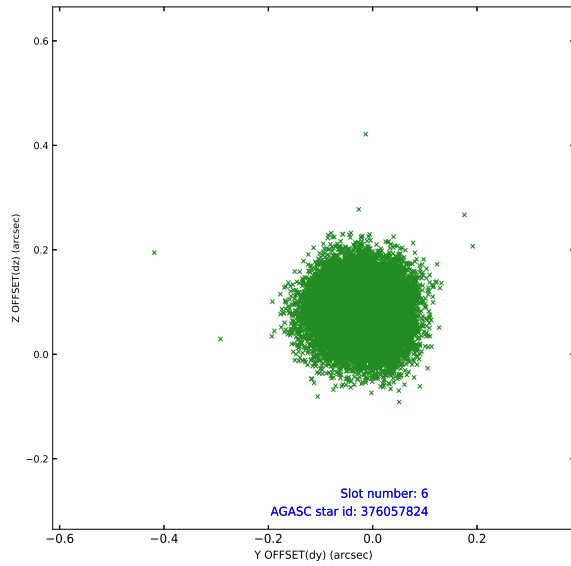
2.4.3 Slot 5



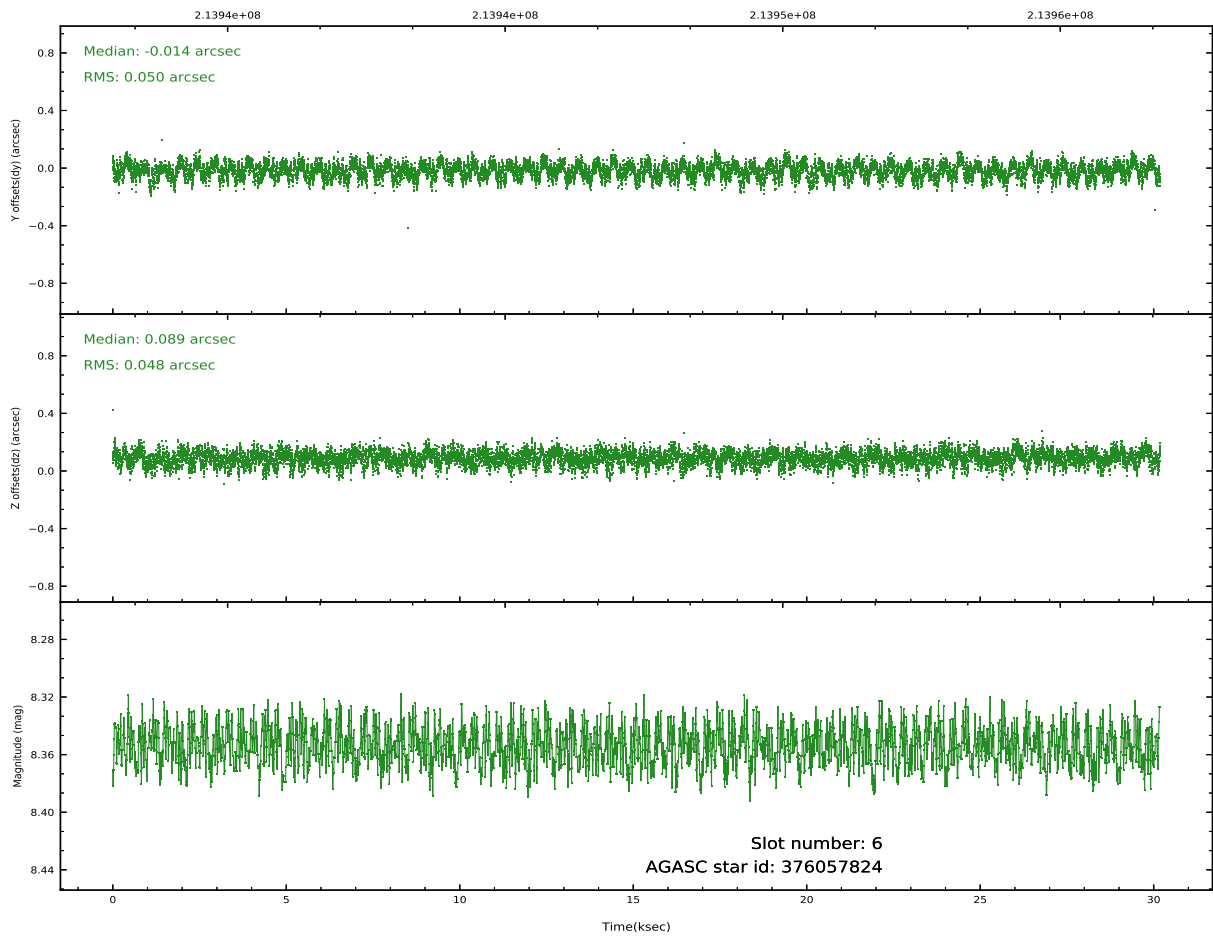
Time (s)



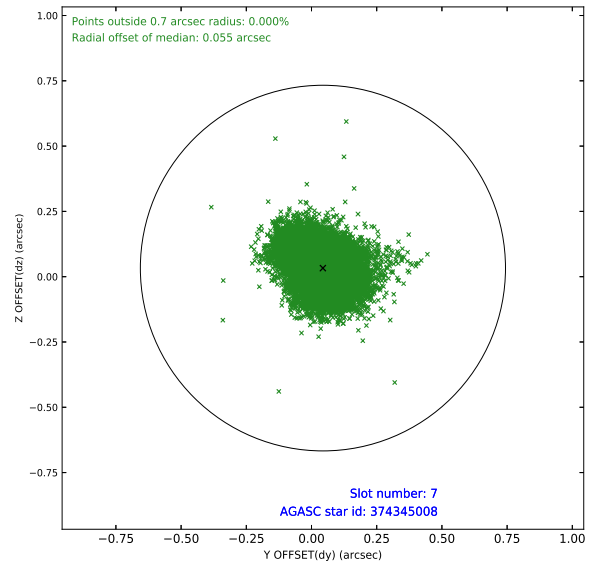
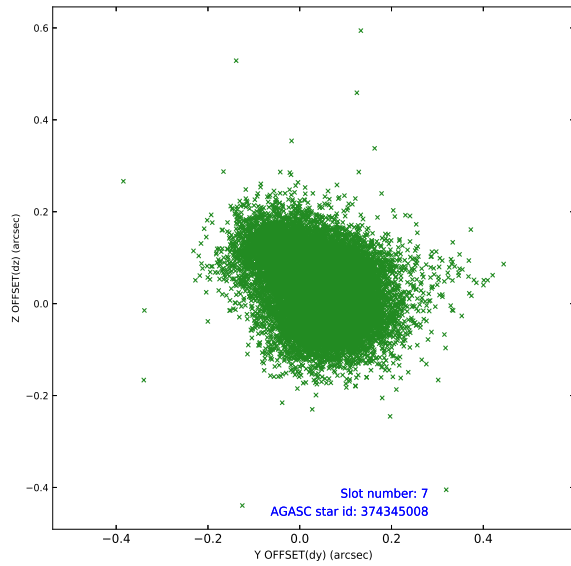
2.4.4 Slot 6



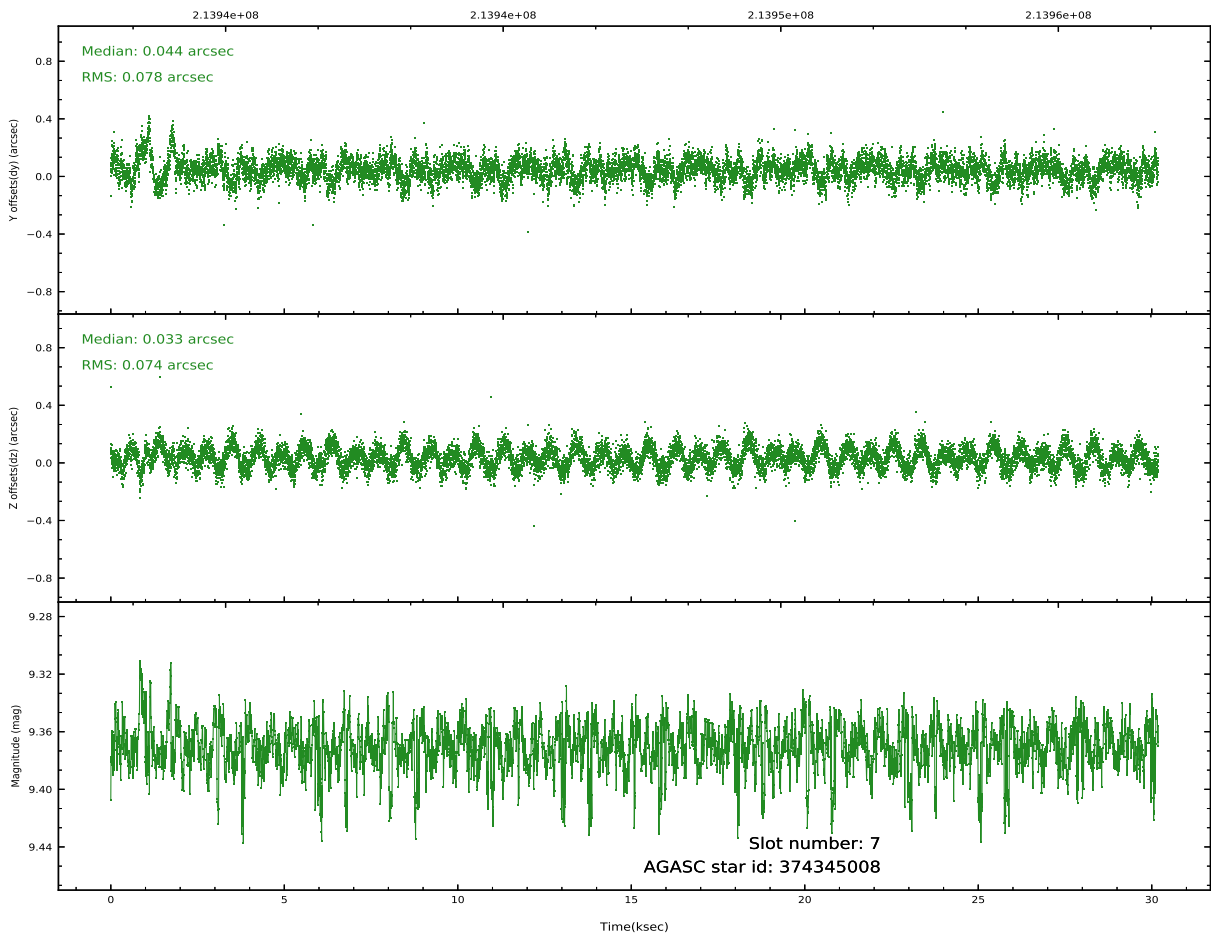
Time (s)



2.4.5 Slot 7

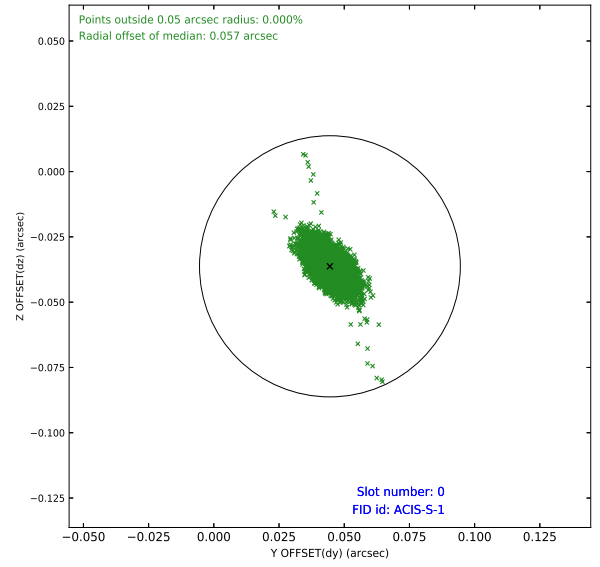
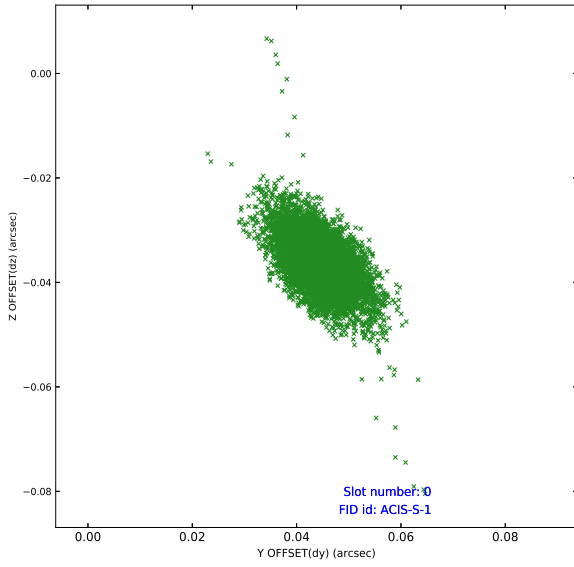


Time (s)

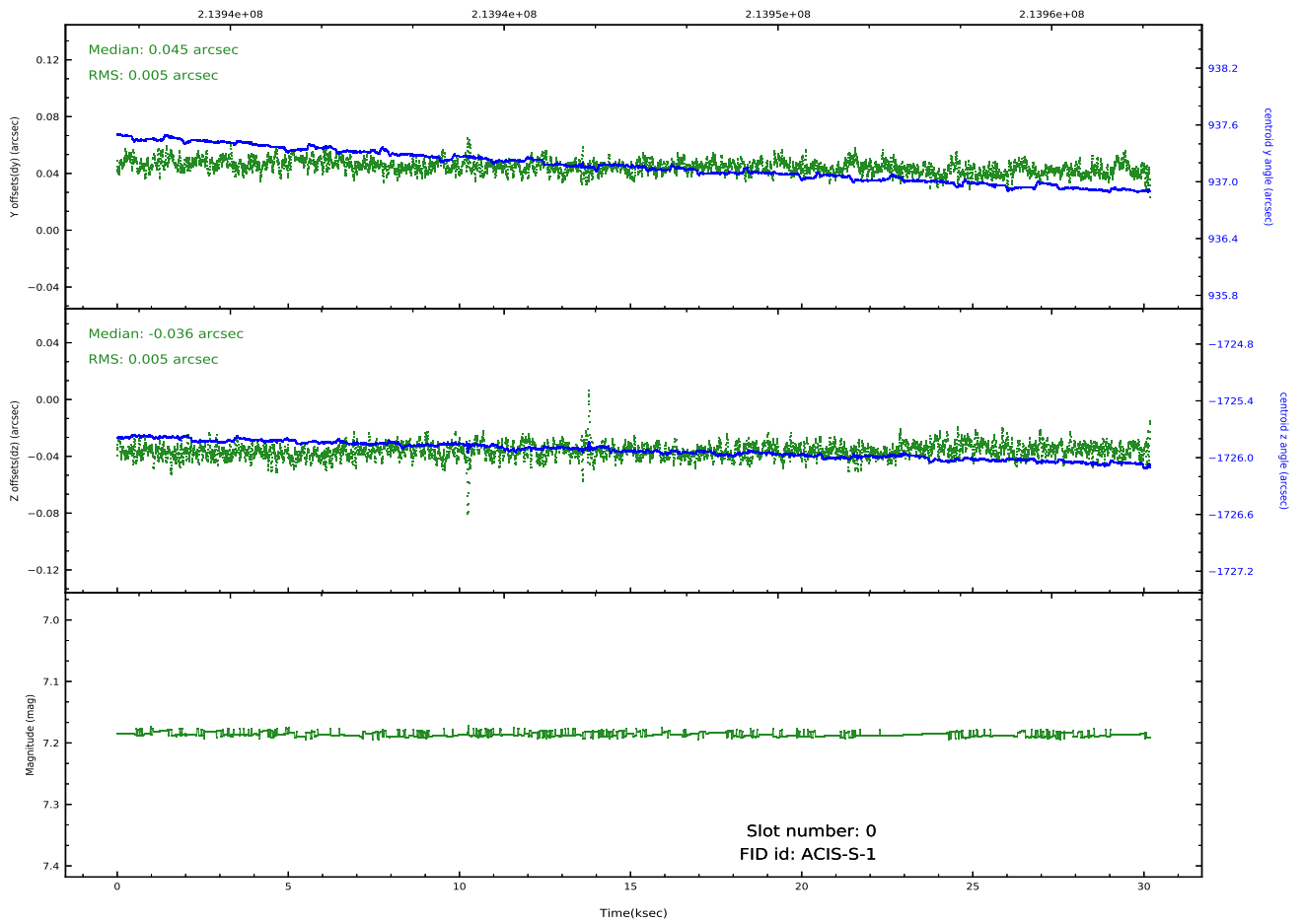


2.5 FID Slots

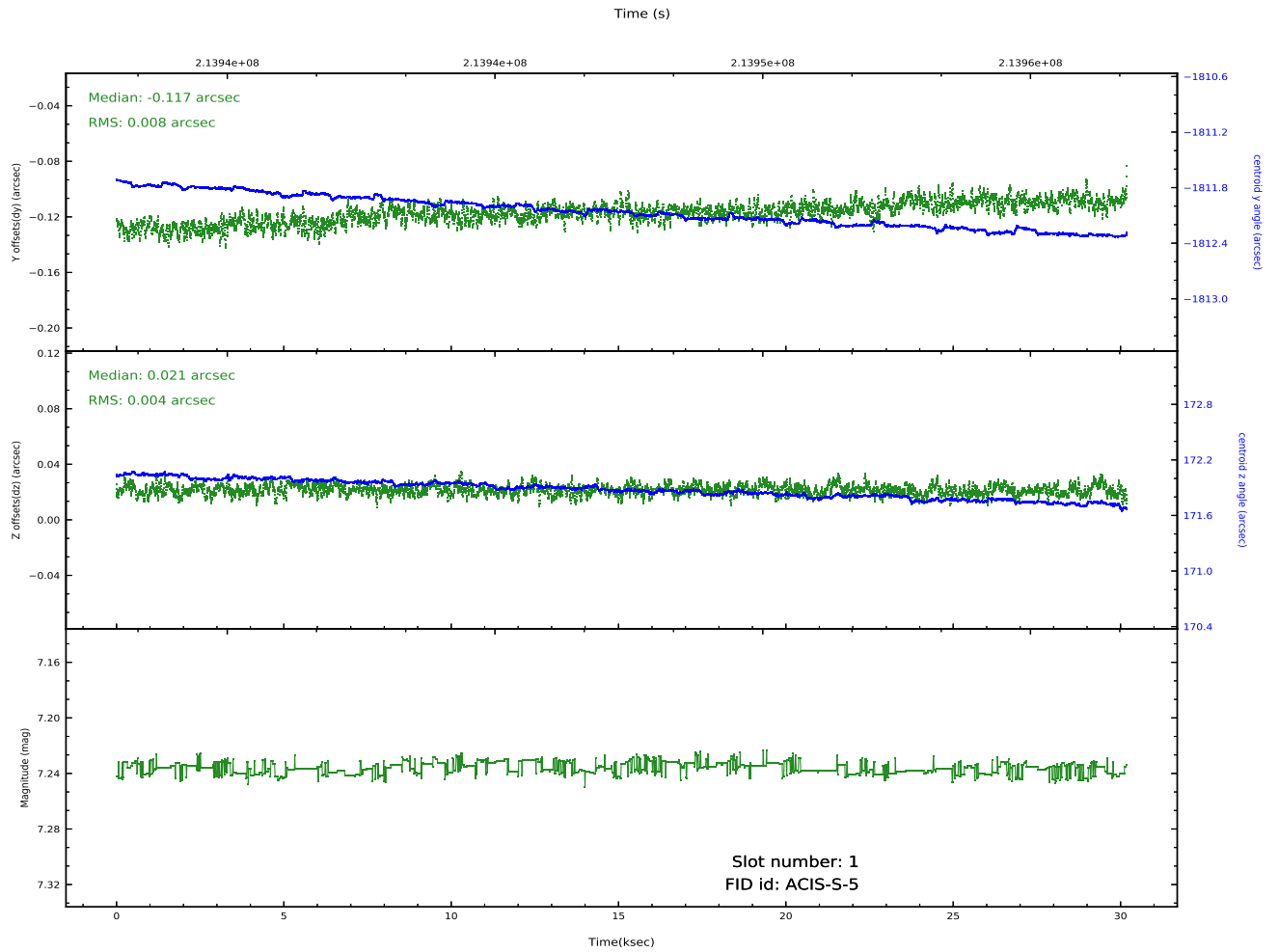
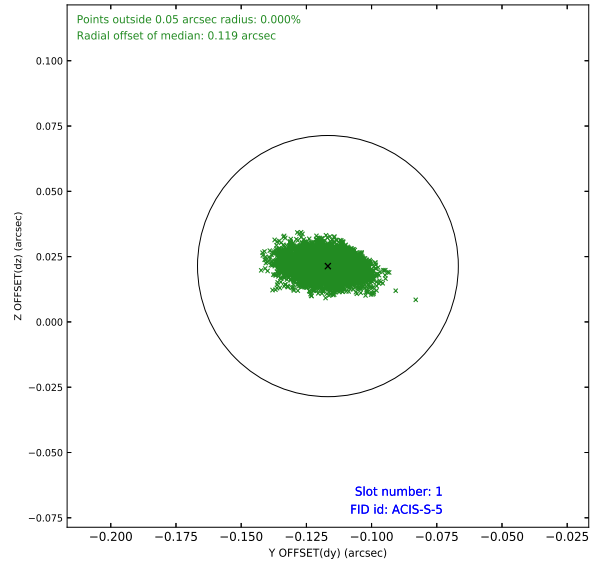
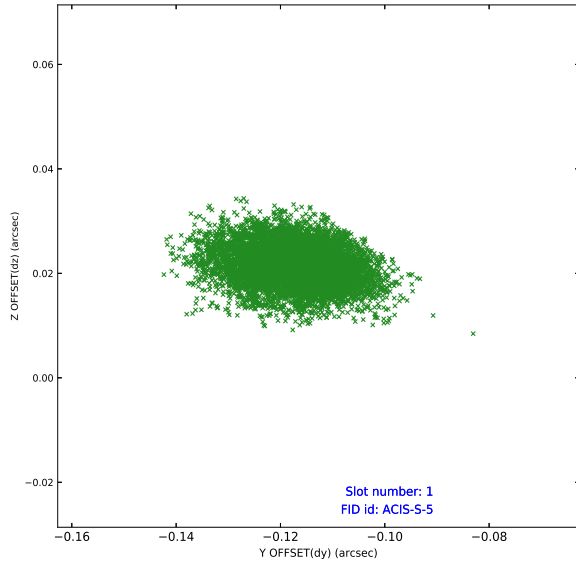
2.5.1 Slot 0



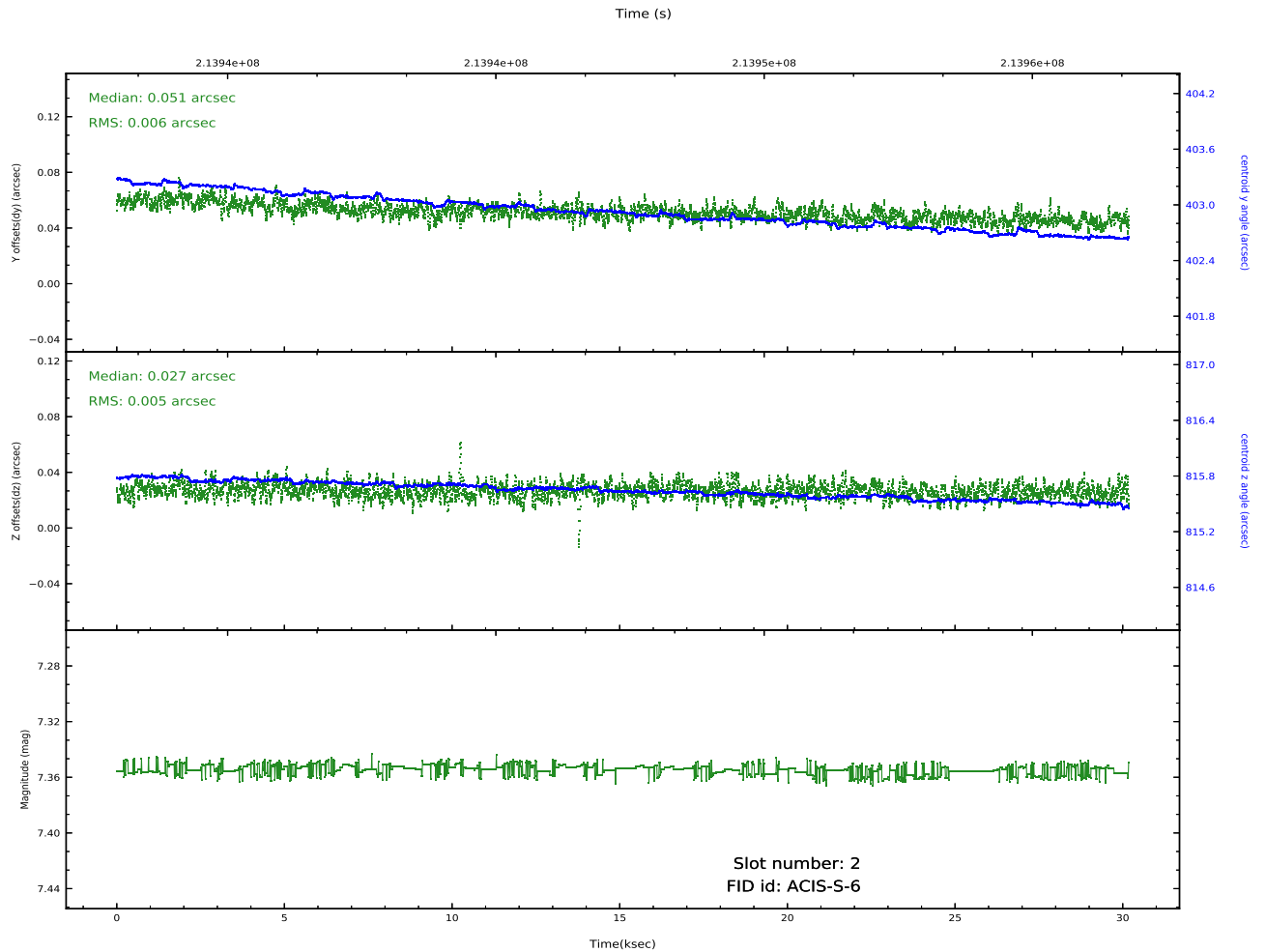
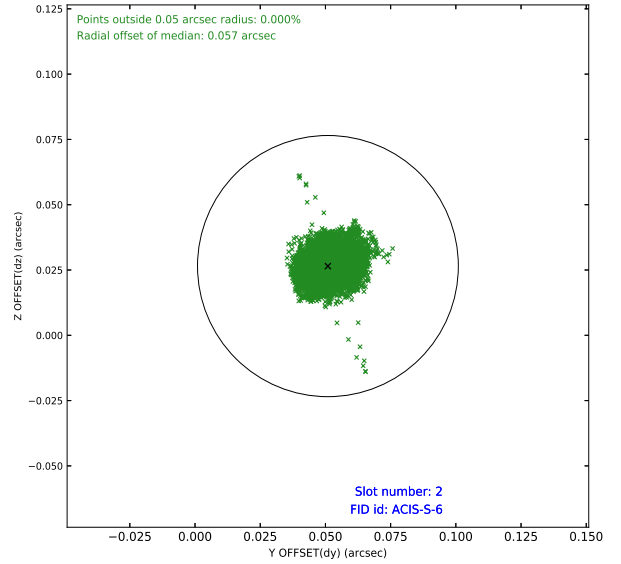
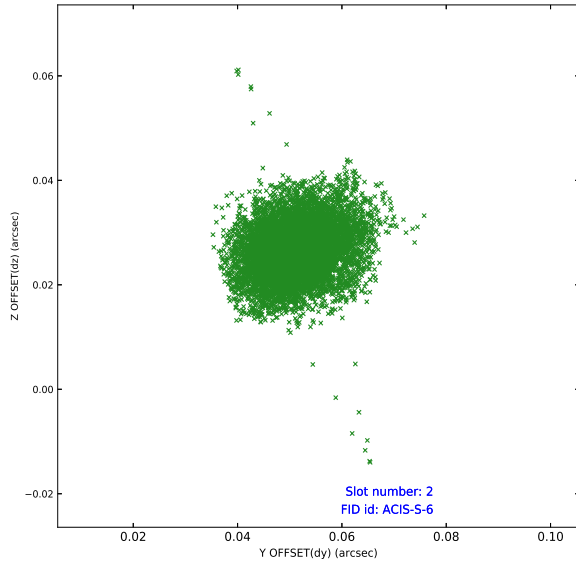
Time (s)



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)	2020.10.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.772

A.2 Comments