

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 19353 - L2 Version 3
Chandra X-Ray Center

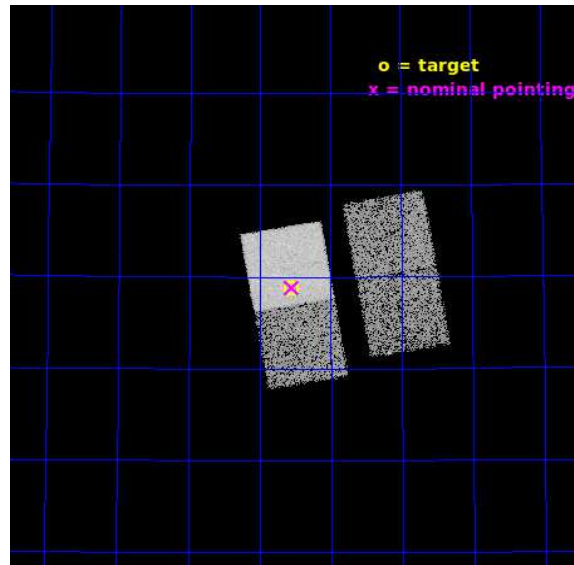
L2 Processing Date : Oct 25 2020

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 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

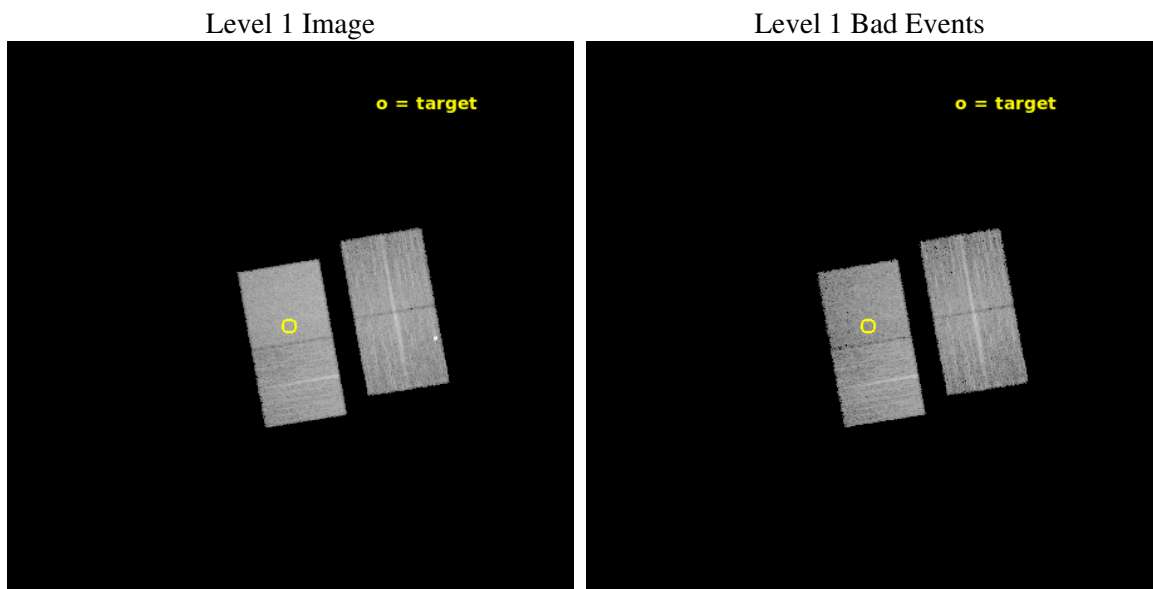
seq_num	601310	Sequence number
obs_id	19353	Observation id
title	A Statistically Complete High Resolution Chandra and Radio (eMERLIN) Survey of the Palomar Nearby Galaxies Sample	Proposal title
observer	Ian McHardy	Principal investigator
object	NGC 2742	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	136.889583	Observer's specified target RA [deg]
dec_targ	60.479278	Observer's specified target Dec [deg]
ra_nom	136.88699235146	Nominal RA [deg]
dec_nom	60.480549151357	Nominal Dec [deg]
roll_nom	260.12298590761	Nominal Roll [deg]
revision	3	Processing version of data
ontime	9907.5599452257	Sum of GTIs [s]
livetime	9778.1103807018	Livetime [s]
ontime2	9907.4368252754	Sum of GTIs [s]
ontime3	9907.4778652191	Sum of GTIs [s]
ontime6	9907.518905282	Sum of GTIs [s]
ontime7	9907.5599452257	Sum of GTIs [s]
l2events	58940	Number of level 2 events



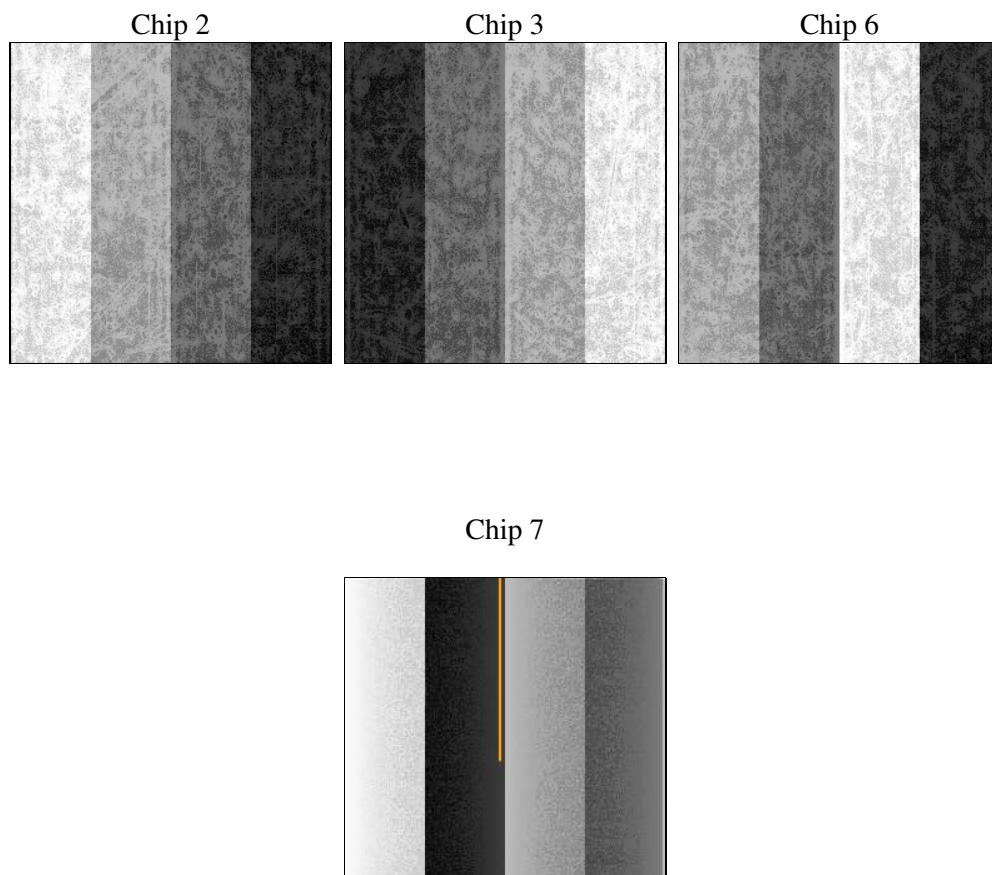
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	9907.5599452257	Sum of GTIs [s]
caldsver	4.9.3	 	ontime2	9907.4368252754	Sum of GTIs [s]
date	2020-10-25T21:33:12	Date and time of file creation	ontime3	9907.4778652191	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	9907.518905282	Sum of GTIs [s]
			ontime7	9907.5599452257	Sum of GTIs [s]
			l1events	307496	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	73332	68530	73683	91951
rejected events	62813	60703	65633	51893
rejected %	85%	88%	89%	56%

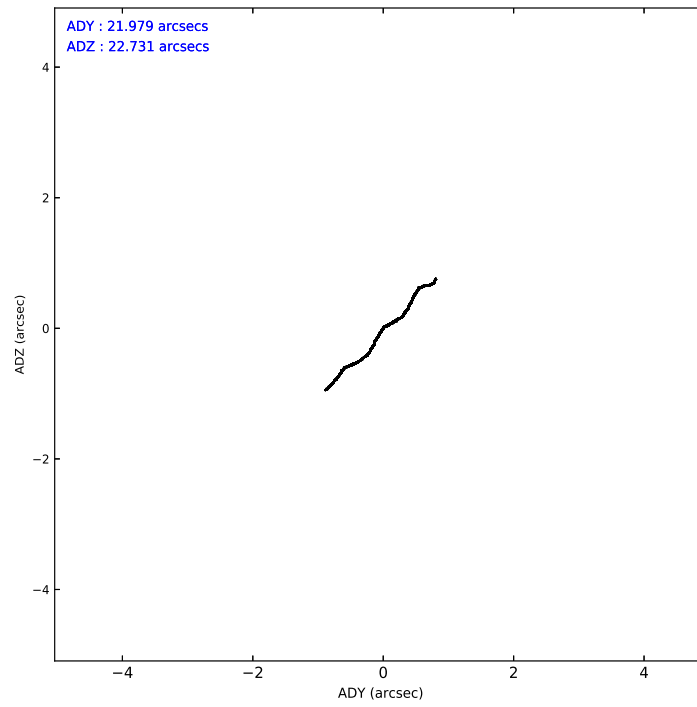
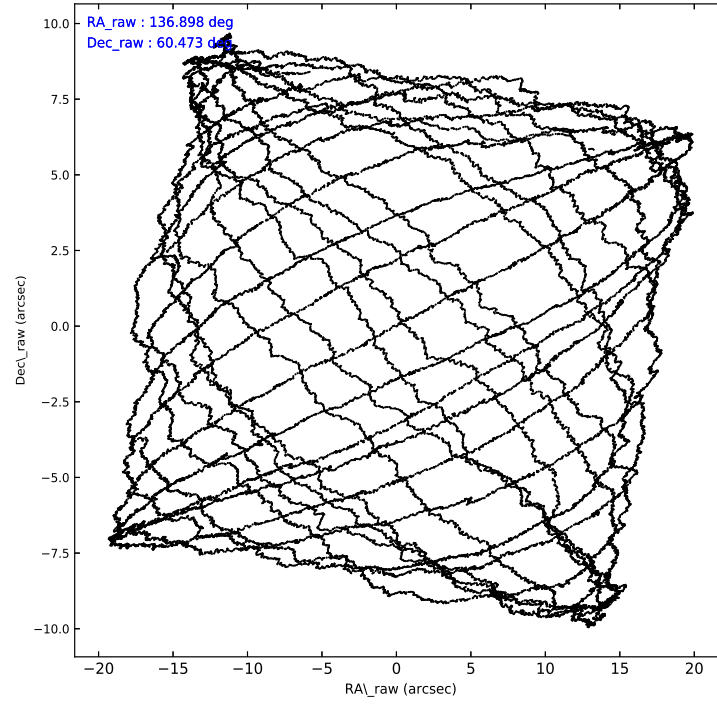
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	5614	2963	2567	3383
	7%	4%	3%	3%
grade 1 events	77	38	38	124
	0%	0%	0%	0%
grade 2 events	1843	1713	1945	8733
	2%	2%	2%	9%
grade 3 events	764	747	815	3167
	1%	1%	1%	3%
grade 4 events	775	835	793	3153
	1%	1%	1%	3%
grade 5 events	2785	3514	3329	9056
	3%	5%	4%	9%
grade 6 events	1529	1572	1937	21644
	2%	2%	2%	23%
grade 7 events	59945	57148	62259	42691
	81%	83%	84%	46%

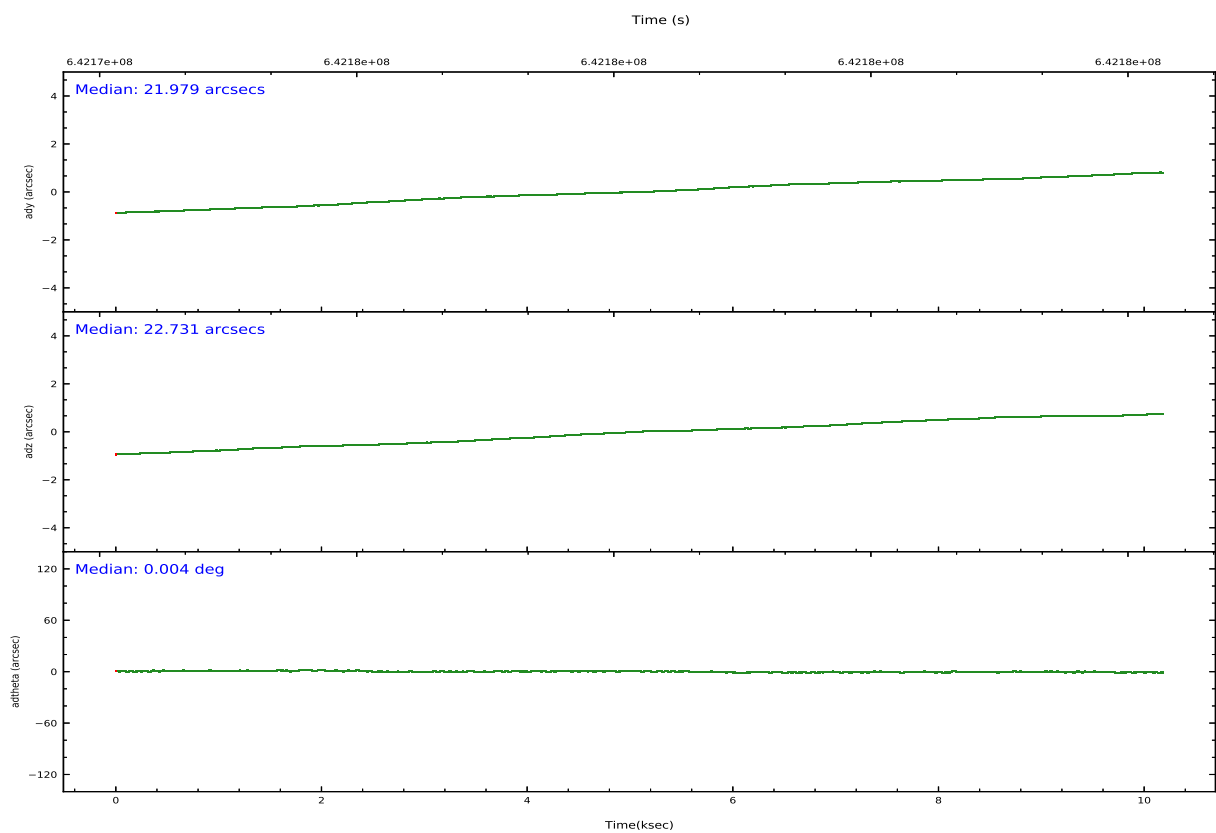
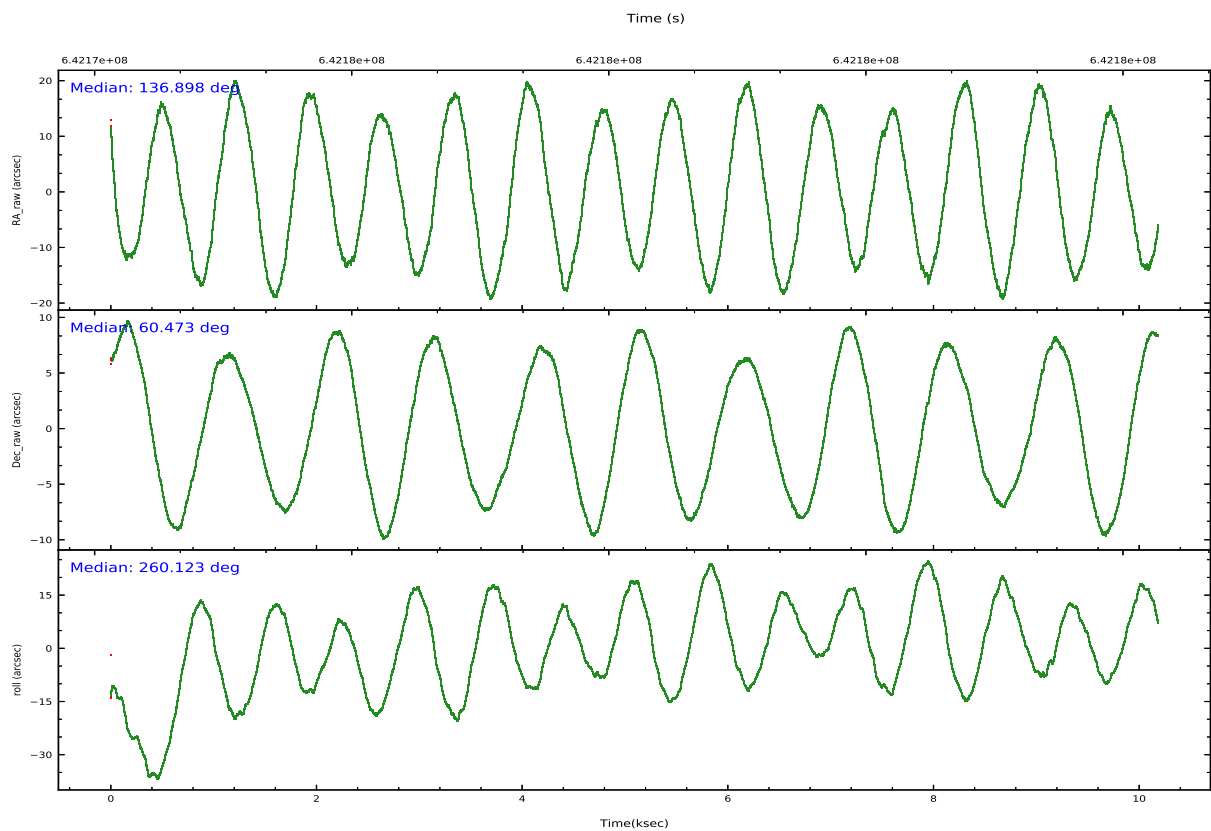
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-2367	ACIS-2367
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	136.878046	136.88699235146
[deg] Pointing Dec	60.498821	60.480549151357
[deg] Pointing Roll	259.990922	260.12298590761
[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)	642172842.184000	642172188.5516599
Observation start date	2018-05-08T13:19:33	2018-05-08T13:09:48
[s] Observation end time (MET)	642182842.184000	642183711.0898401
Observation end date	2018-05-08T16:06:13	2018-05-08T16:21:51
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar version number	8	8
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



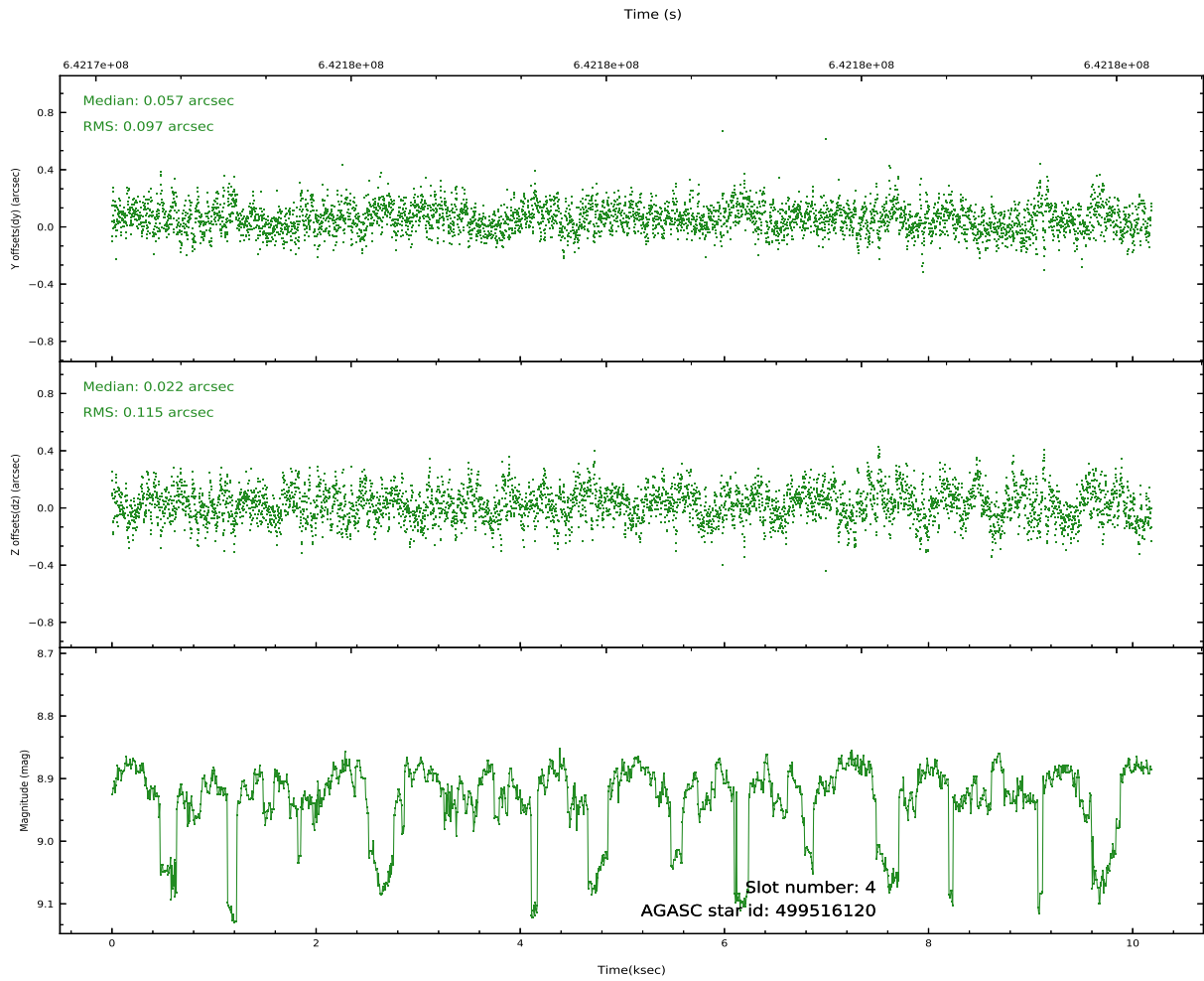
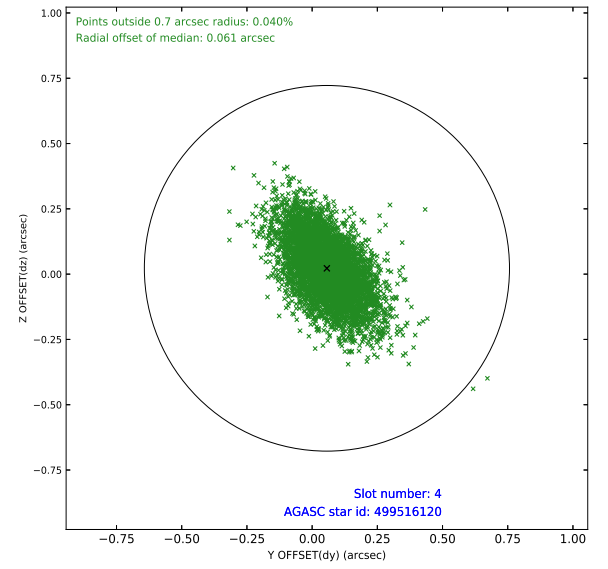
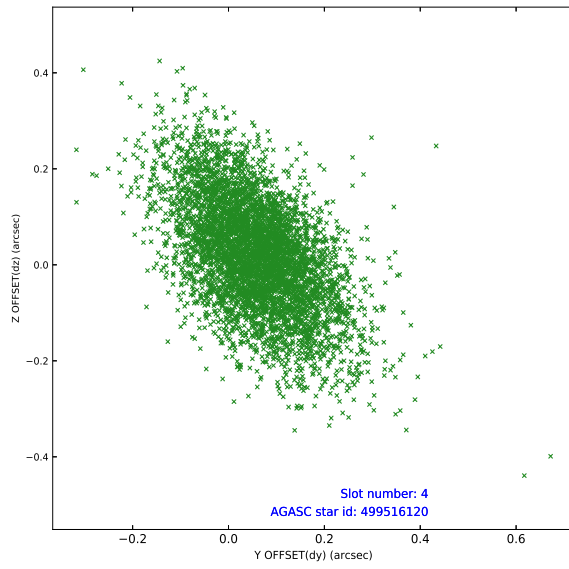


Slot Statistics

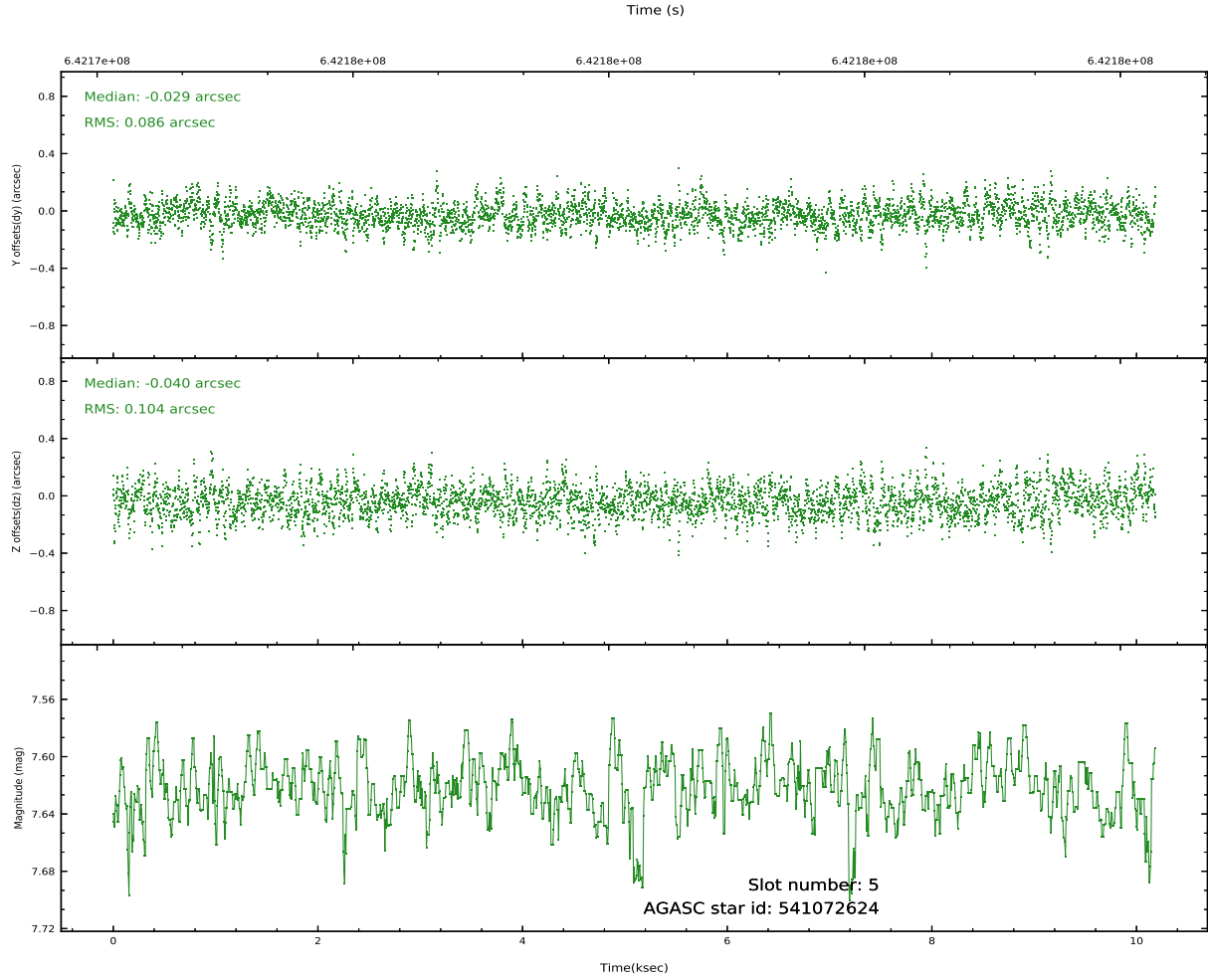
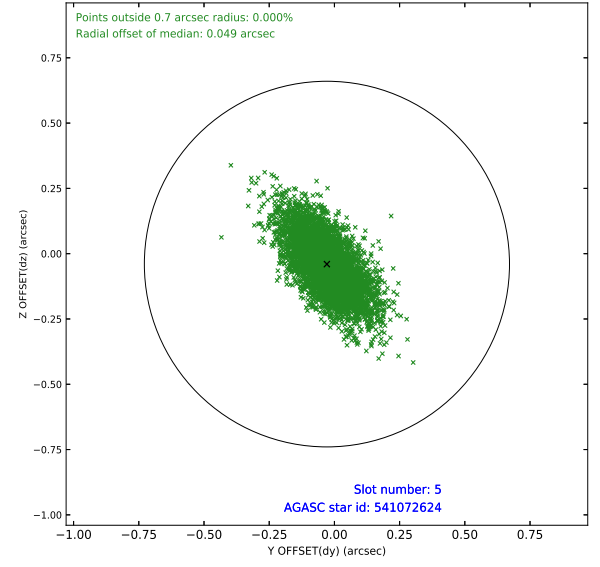
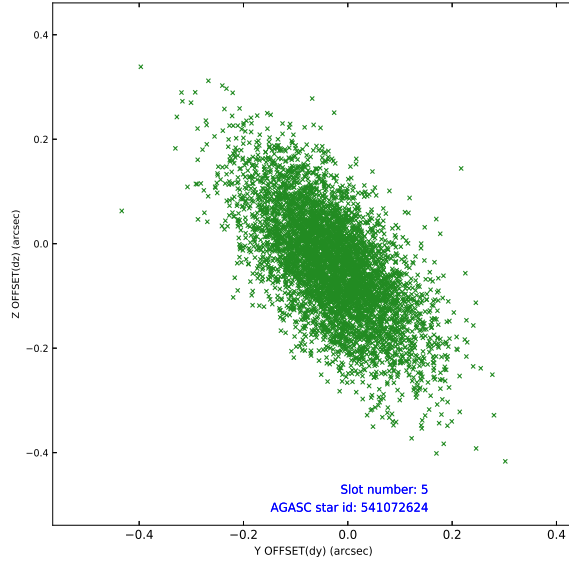
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	2485	1.000	0.172	-0.107	0.015	0.032	0.000000	0.000000	-775.23	-1744
1	FID		ACIS-S-4	7.17	2485	1.000	0.054	-0.054	0.012	0.016	0.000000	0.000000	2137.97	163
2	FID		ACIS-S-5	7.19	2483	1.000	-0.260	0.169	0.017	0.030	0.000000	0.000000	-1827.55	158
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
4	GUIDE	used	499516120	8.92	4964	1.000	0.057	0.022	0.154	0.273	137.443191	59.923128	1859.75	1364
5	GUIDE	used	541072624	7.62	4966	1.000	-0.029	-0.040	0.136	0.250	136.175484	60.990830	-1536.30	-1516
6	GUIDE	used	541074952	7.44	4967	1.000	0.025	0.080	0.134	0.253	136.768753	60.527945	-69.48	-208
7	GUIDE	used	541994976	8.81	4964	1.000	-0.056	-0.059	0.151	0.269	137.516115	60.191829	884.62	1315

2.4 Star Slots

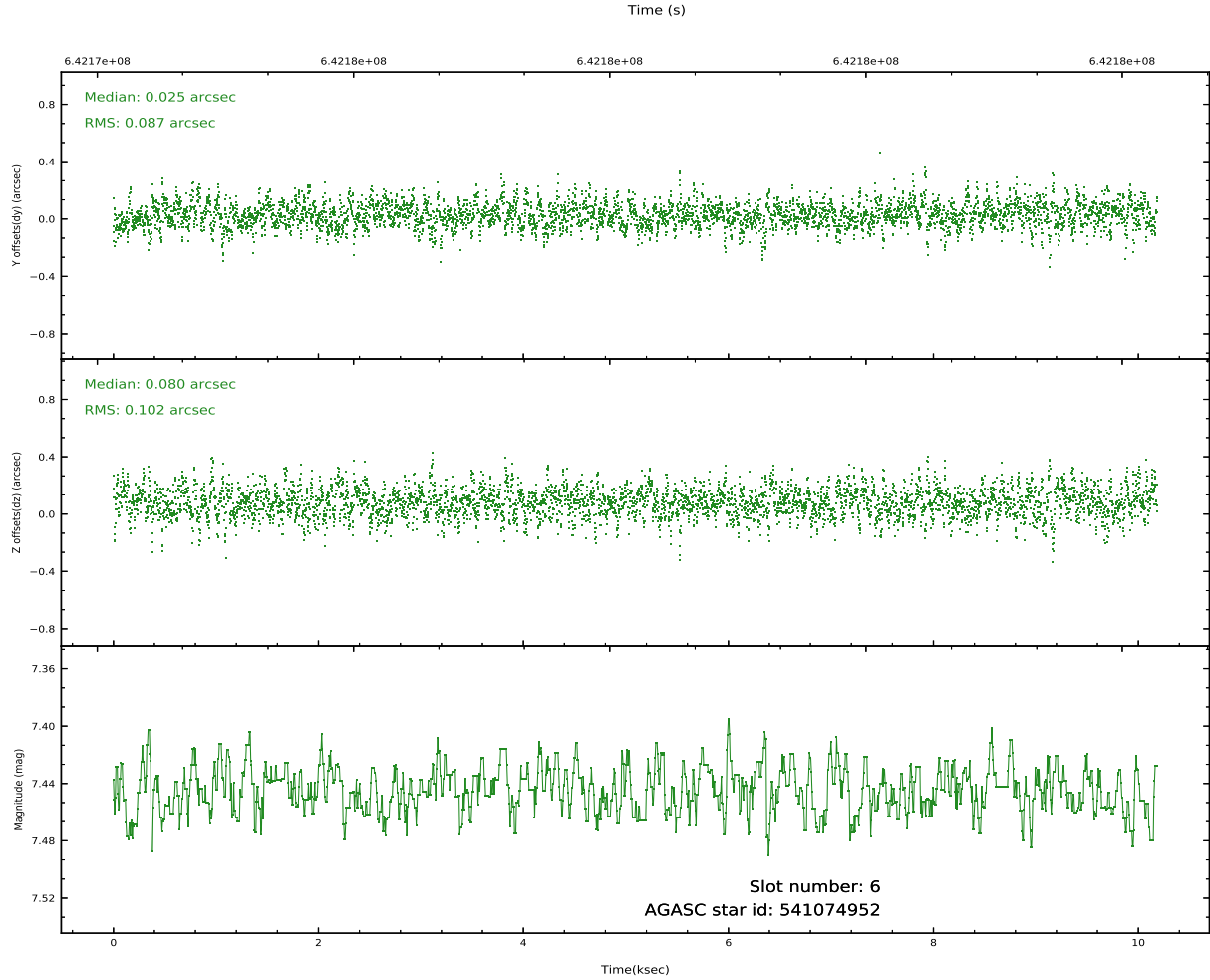
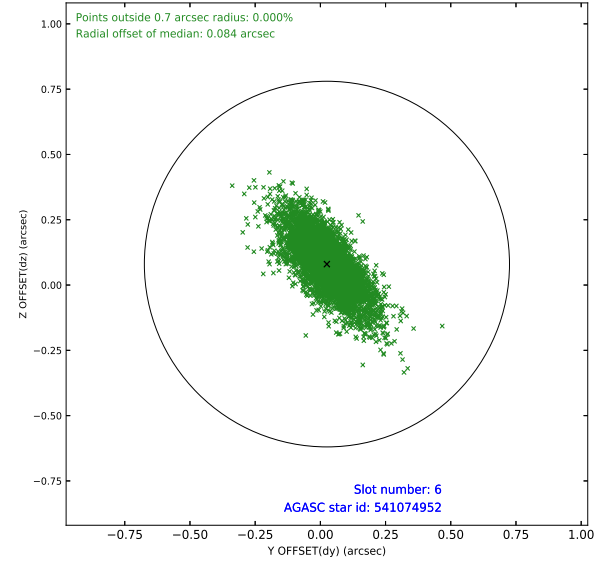
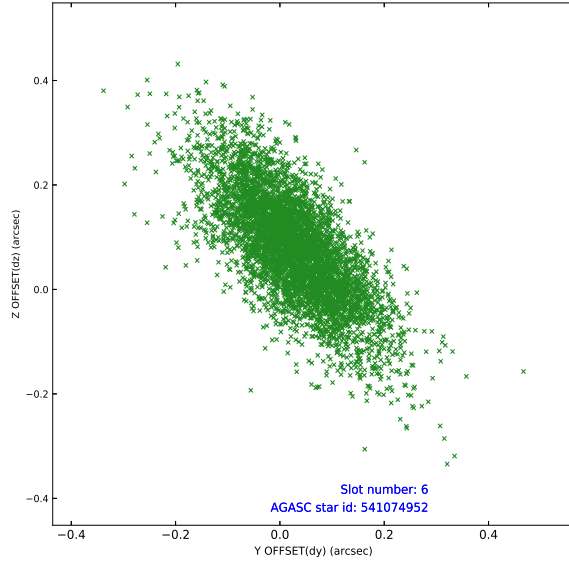
2.4.1 Slot 4



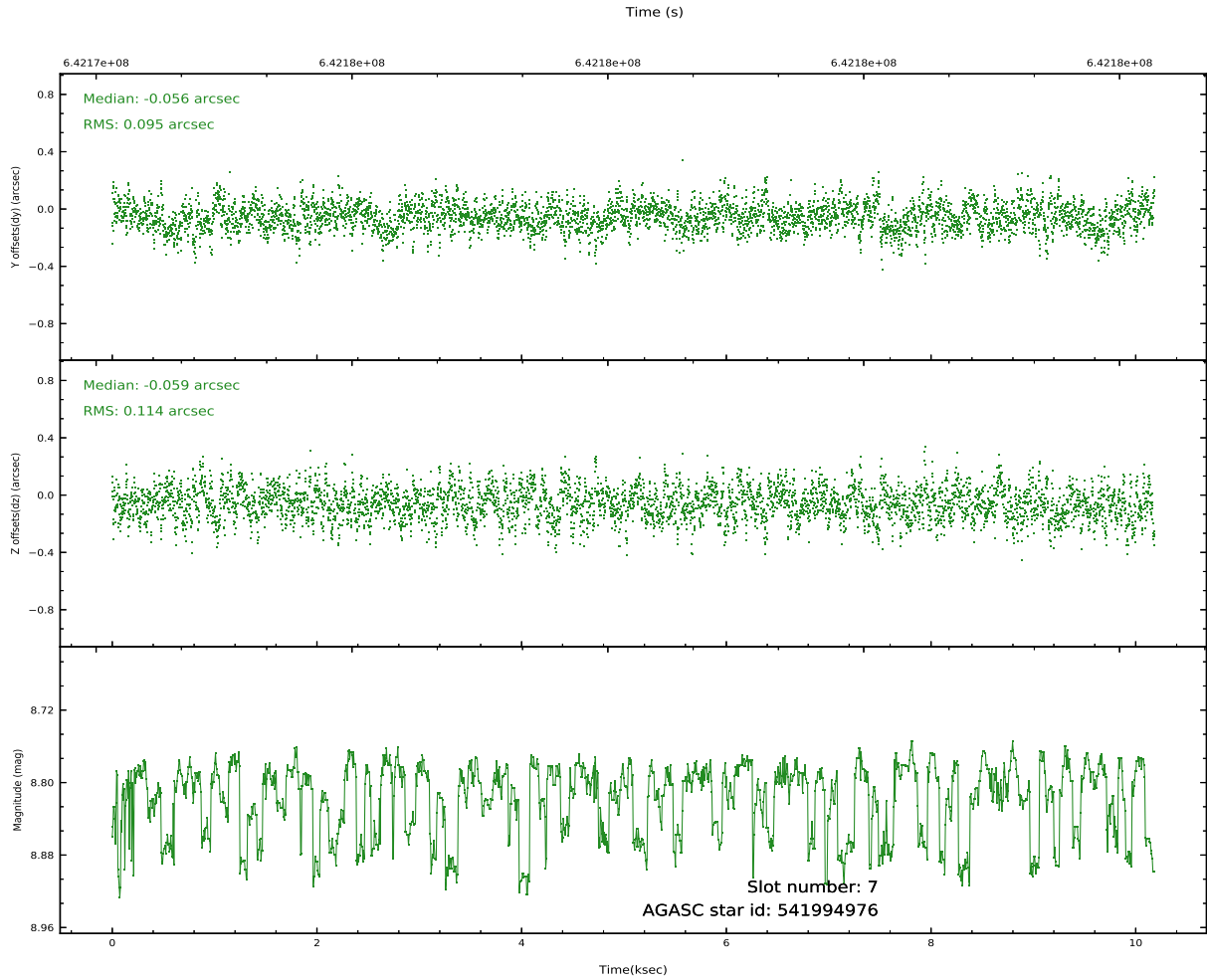
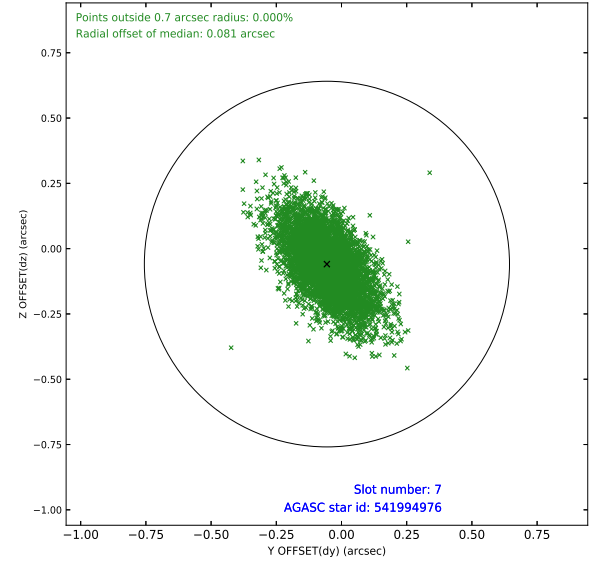
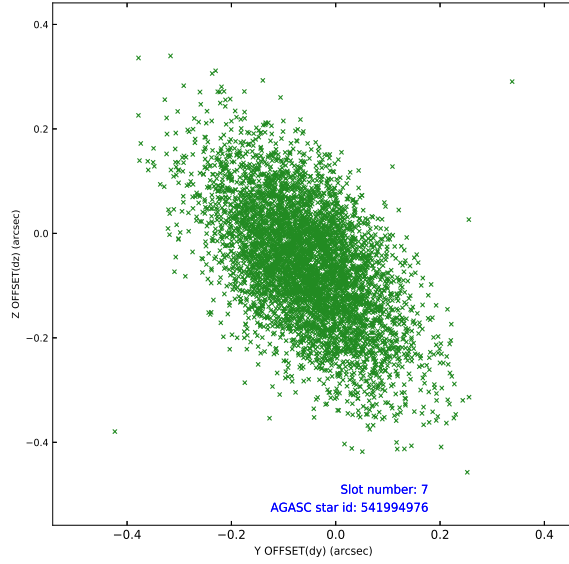
2.4.2 Slot 5



2.4.3 Slot 6

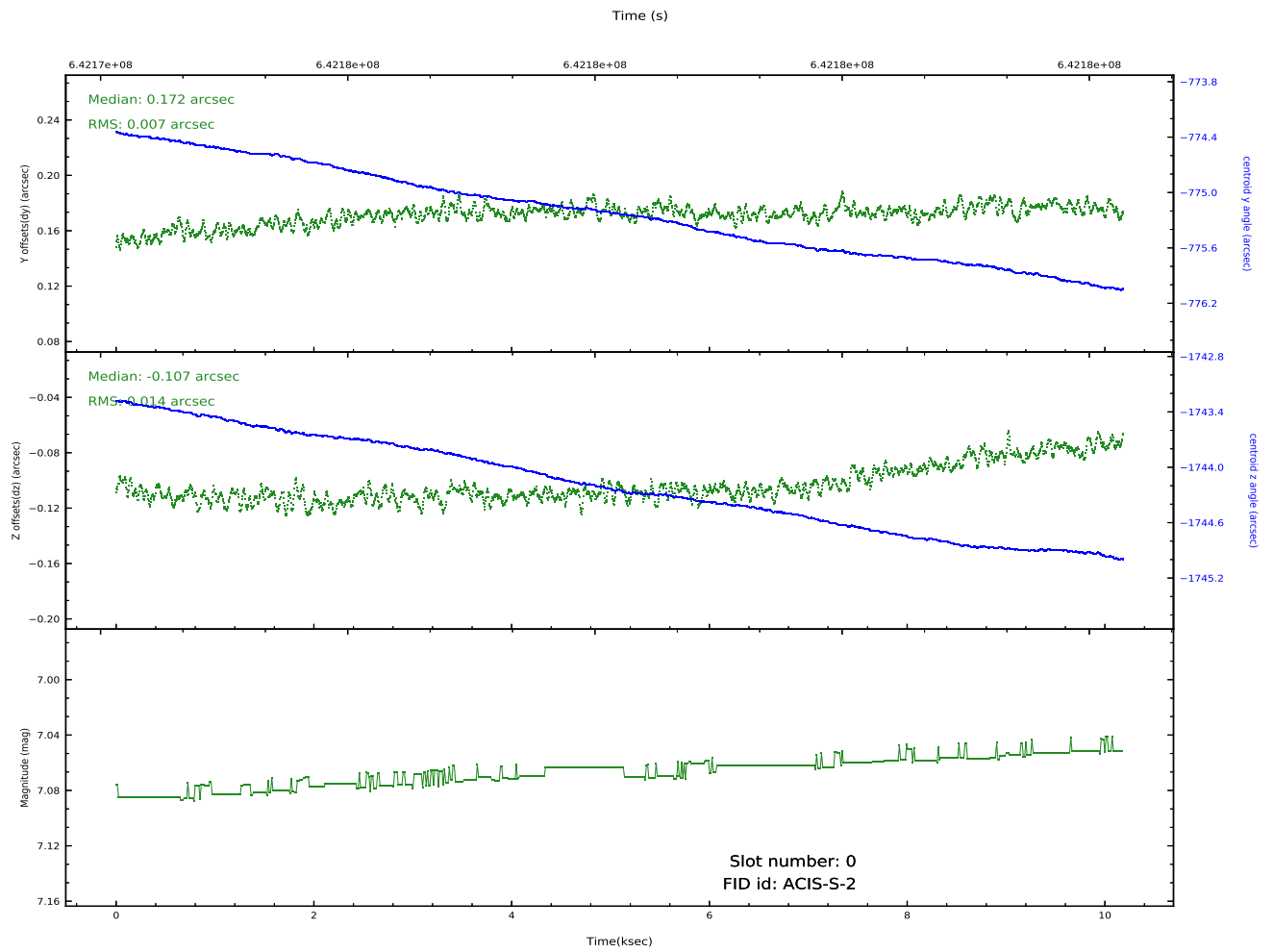
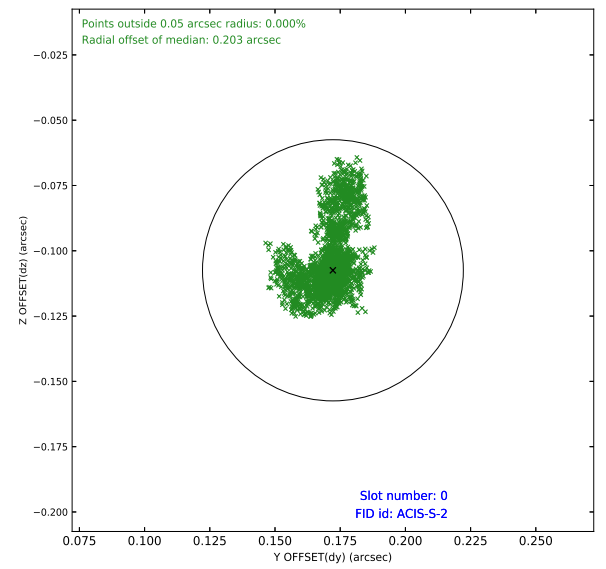
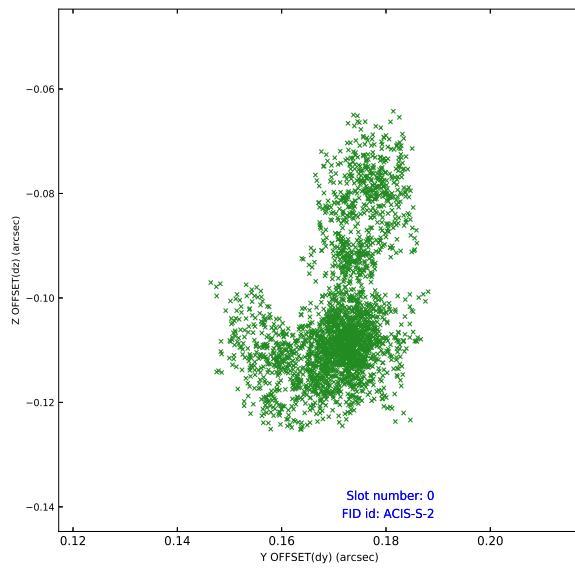


2.4.4 Slot 7

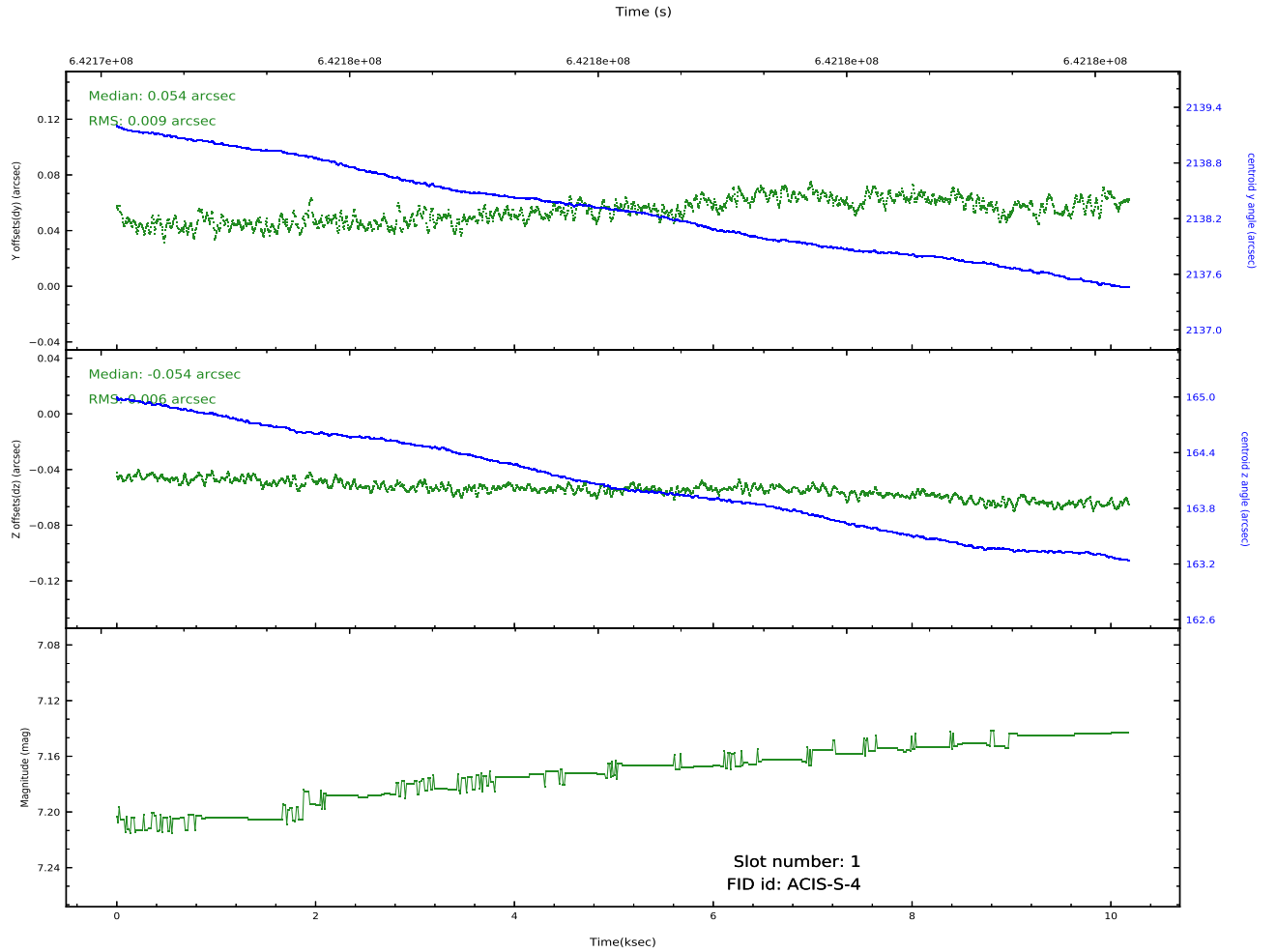
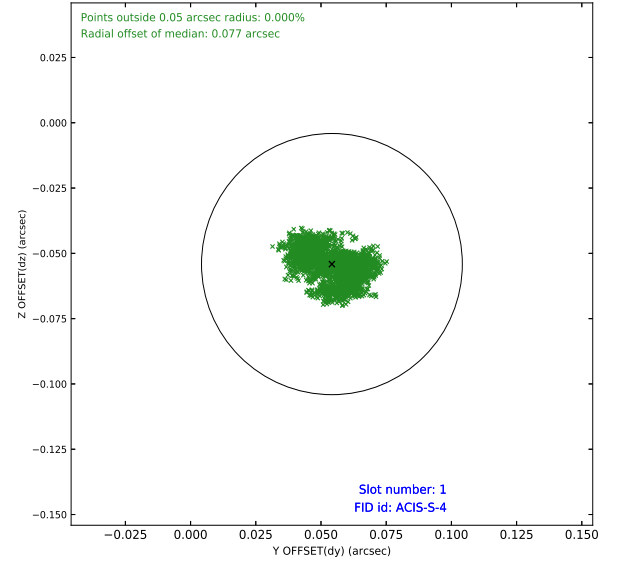
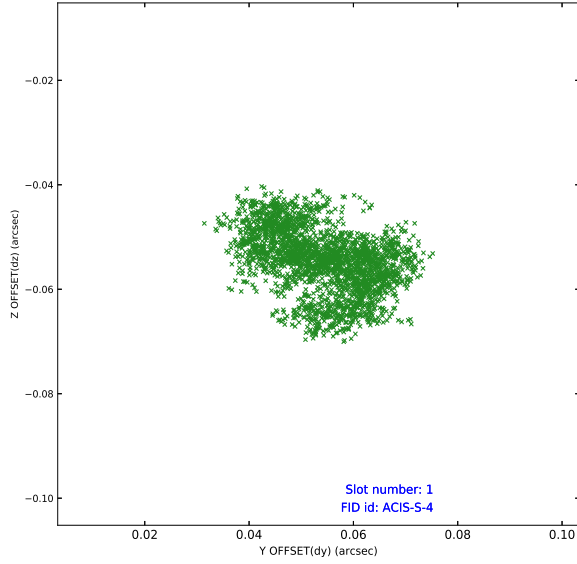


2.5 FID Slots

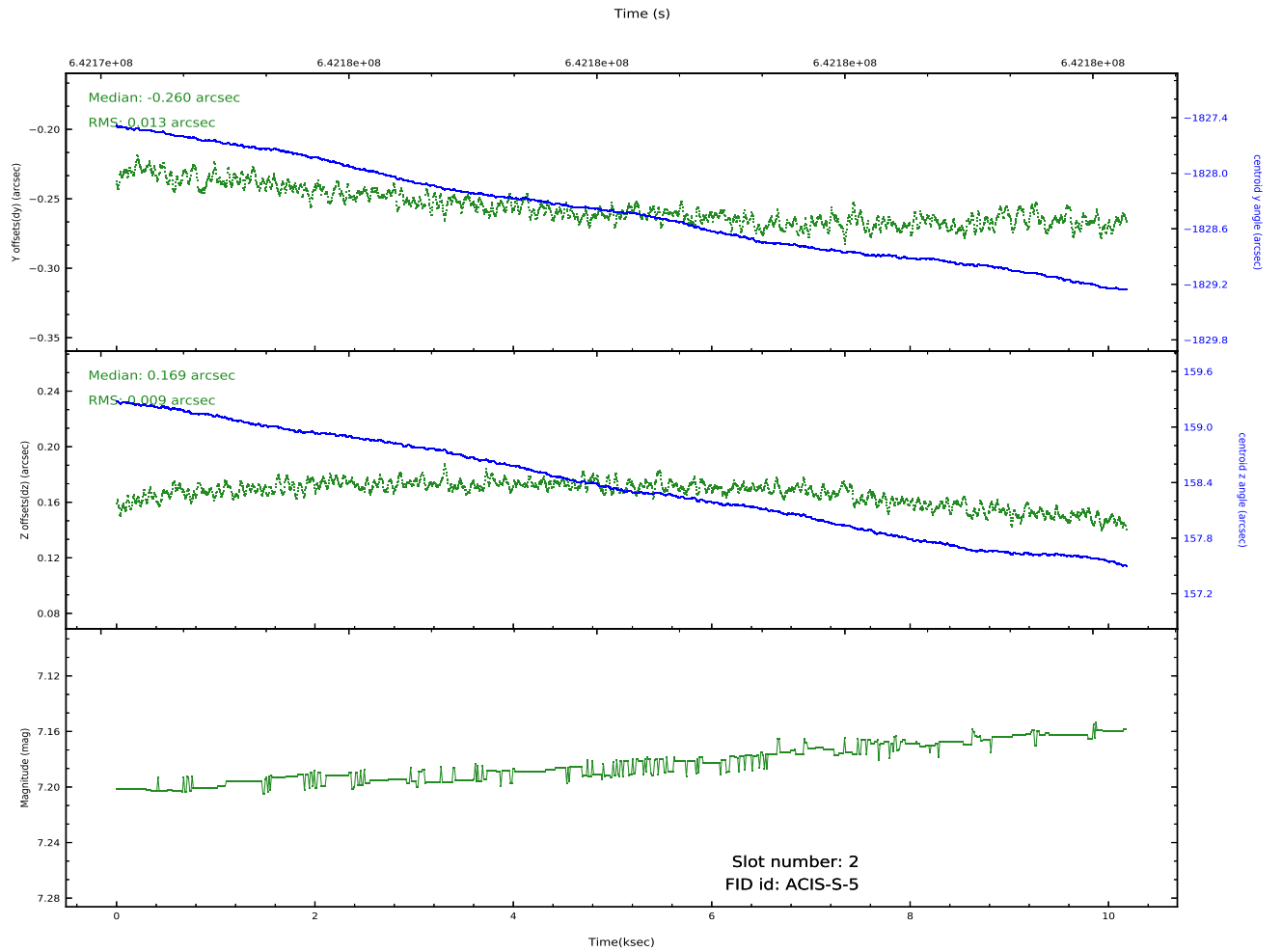
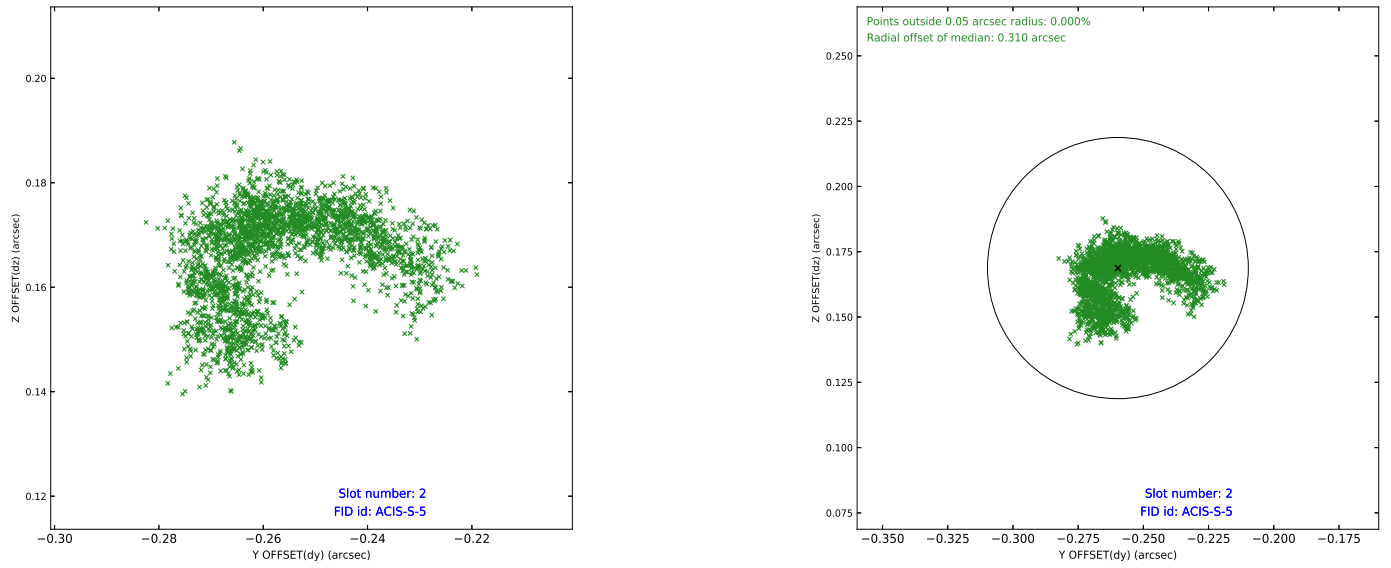
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	9.9075599470139

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.