

V&V Reference Report

L2 ASCDS Version : 10.9.2

Observation 20278 - L2 Version 3
Chandra X-Ray Center

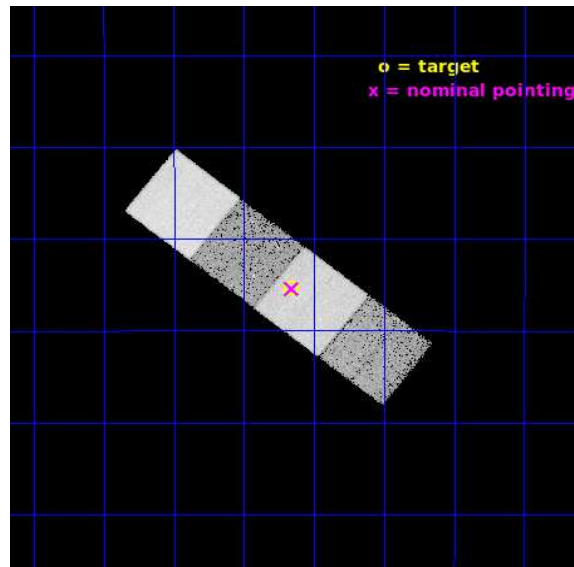
L2 Processing Date : Oct 24 2020

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1 Front

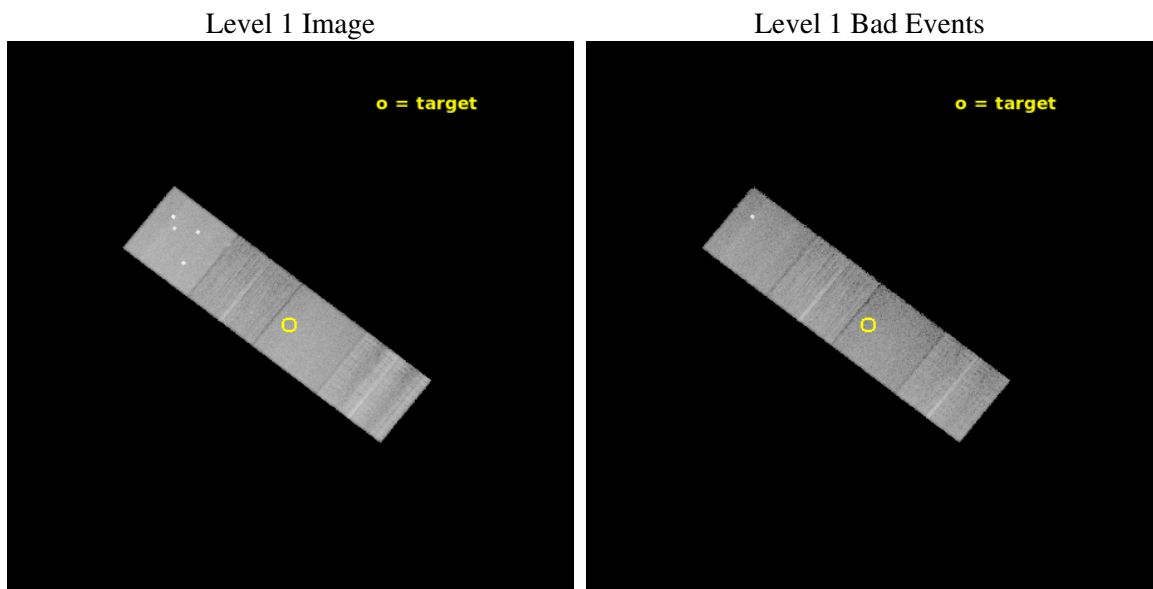
seq_num	502977	Sequence number
obs_id	20278	Observation id
title	Late-time X-rays to map the Zoo of Engine-driven Stellar Explosions	
observer	RAFFAELLA MARGUTTI	Principal investigator
object	GRB171205A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	167.414659	Observer's specified target RA [deg]
dec_targ	-12.588467	Observer's specified target Dec [deg]
ra_nom	167.41458663805	Nominal RA [deg]
dec_nom	-12.590262372475	Nominal Dec [deg]
roll_nom	38.192296575269	Nominal Roll [deg]
revision	3	Processing version of data
ontime	15062.37602818	Sum of GTIs [s]
livetime	14865.574996612	Livetime [s]
ontime5	15062.334988236	Sum of GTIs [s]
ontime6	15062.293948174	Sum of GTIs [s]
ontime7	15062.37602818	Sum of GTIs [s]
ontime8	15059.11185801	Sum of GTIs [s]
l2events	172019	Number of level 2 events



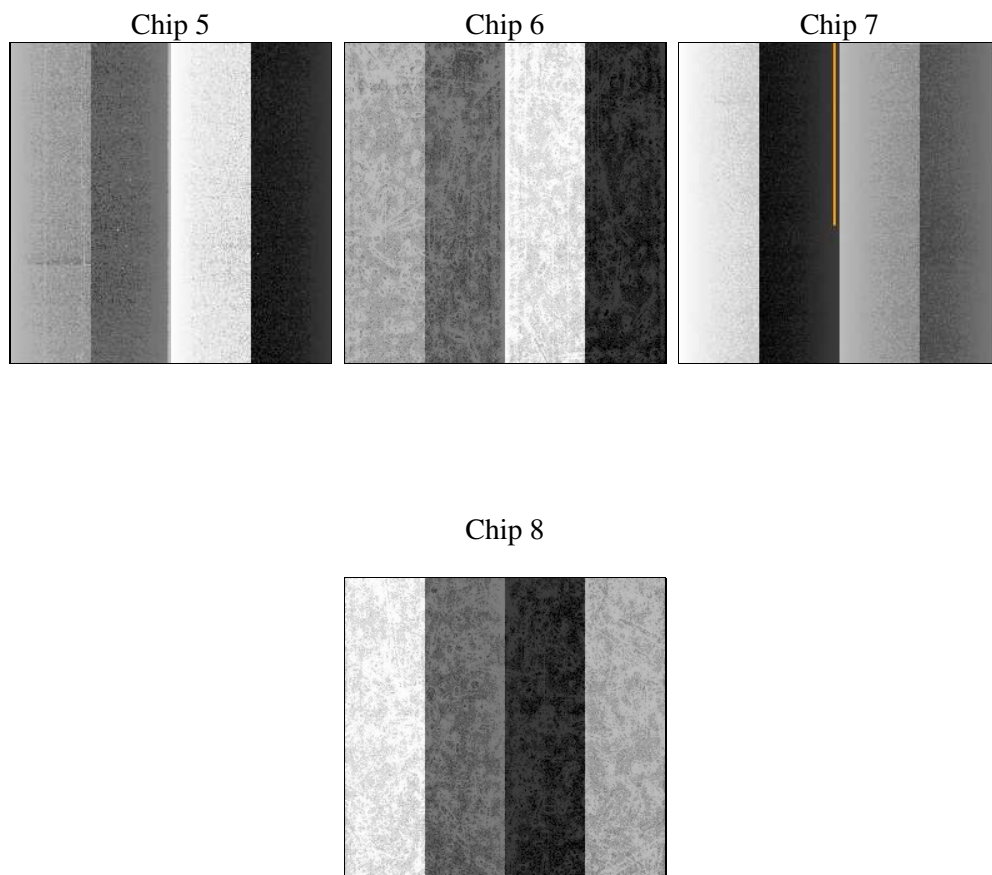
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.9.2	Processing system revision	ontime	15062.37602818	Sum of GTIs [s]
caldbver	4.9.3	 	ontime5	15062.334988236	Sum of GTIs [s]
date	2020-10-24T16:55:52	Date and time of file creation	ontime6	15062.293948174	Sum of GTIs [s]
revision	3	Processing version of data	ontime7	15062.37602818	Sum of GTIs [s]
			ontime8	15059.11185801	Sum of GTIs [s]
			l1events	638742	Number of level 1 events

2.1.4 Events

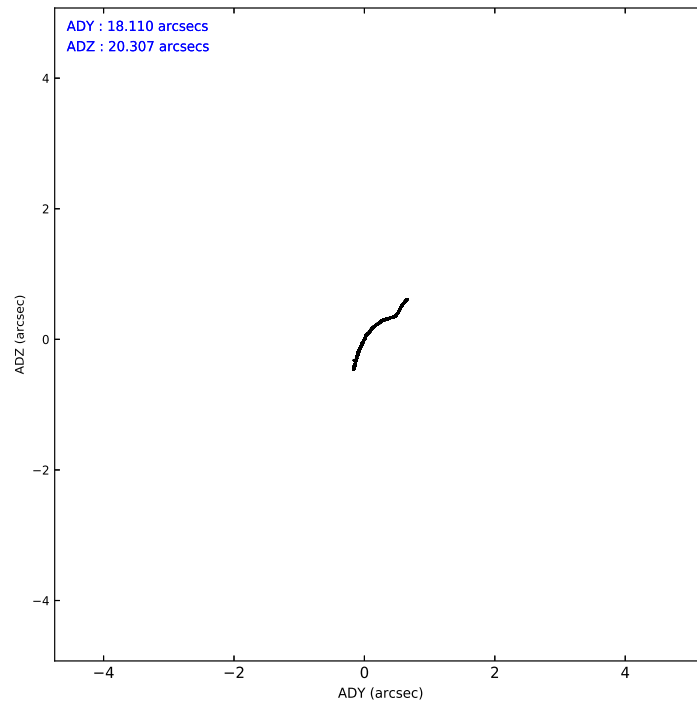
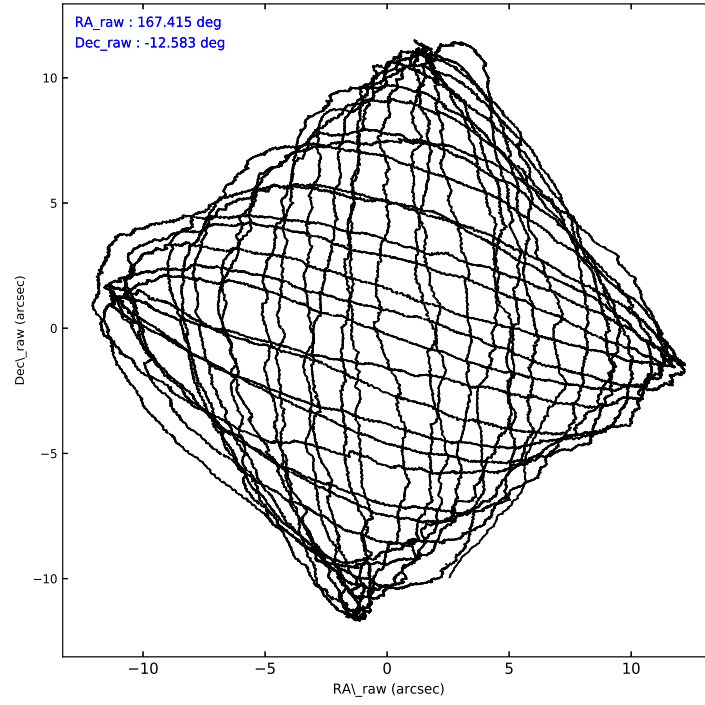
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	196073	119205	147149	176315
rejected events	97713	105548	82132	110645
rejected %	49%	88%	55%	62%

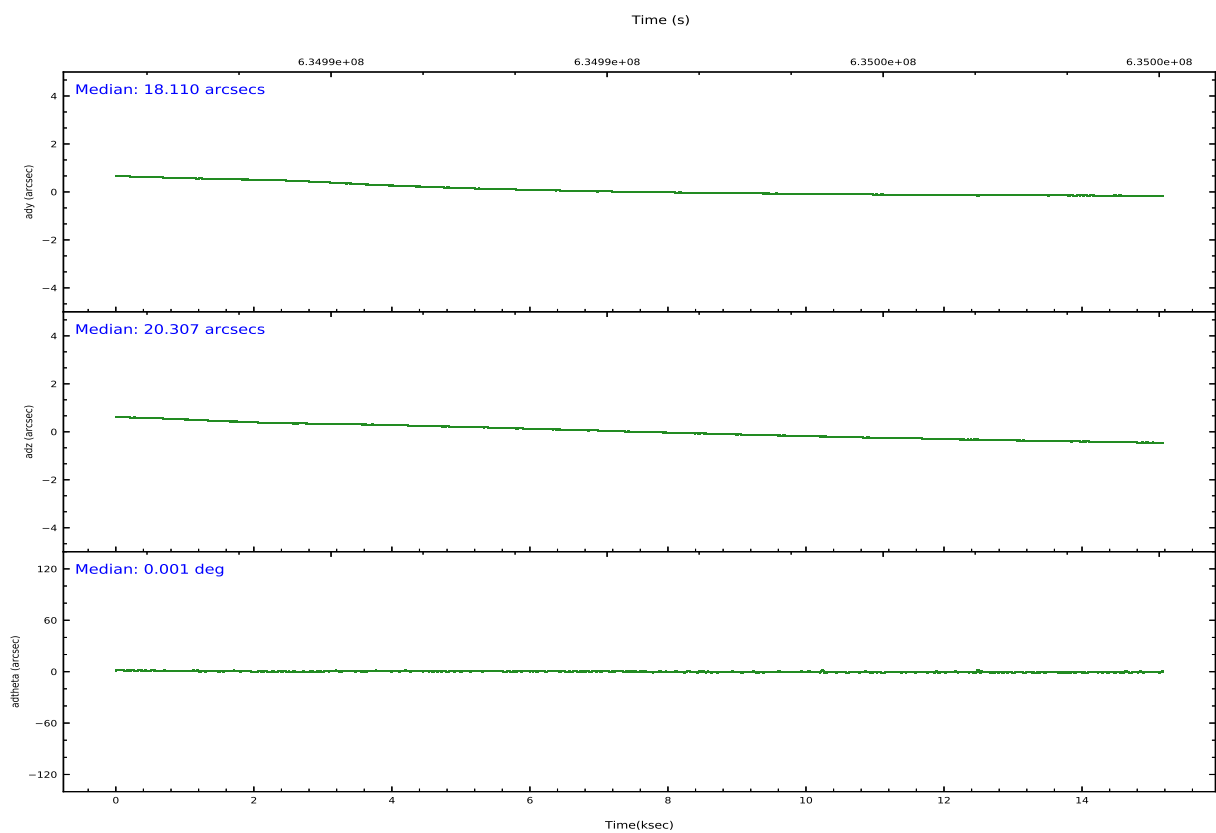
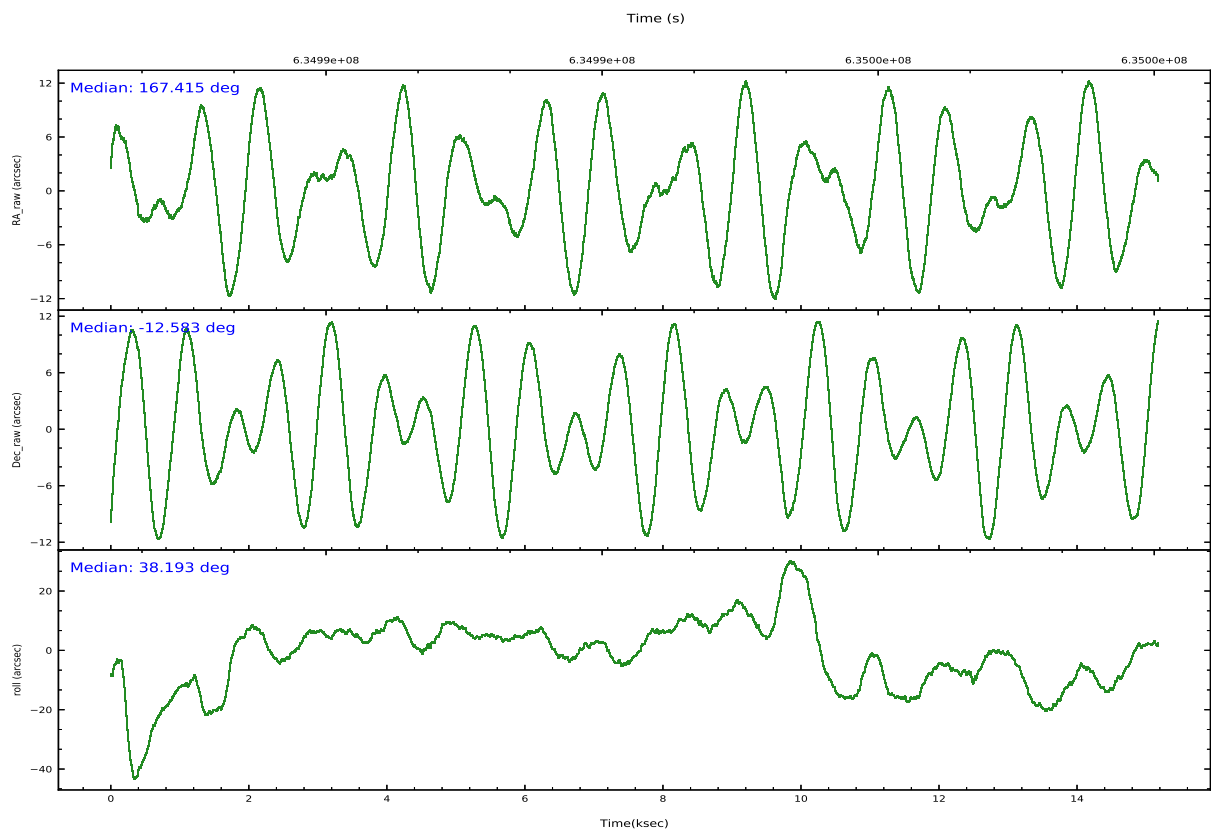
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	14992	4993	5596	23262
	7%	4%	3%	13%
grade 1 events	450	59	225	206
	0%	0%	0%	0%
grade 2 events	29546	3142	14143	10833
	15%	2%	9%	6%
grade 3 events	3171	1214	5307	10076
	1%	1%	3%	5%
grade 4 events	2947	1253	5127	9301
	1%	1%	3%	5%
grade 5 events	12876	5156	14643	8162
	6%	4%	9%	4%
grade 6 events	47749	3063	34869	12214
	24%	2%	23%	6%
grade 7 events	84342	100325	67239	102261
	43%	84%	45%	57%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar version number	8	8
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	167.405035	167.41458663805	CCD I2 on	N	N
[deg] Pointing Dec	-12.607994	-12.590262372475	CCD I3 on	O1	N
[deg] Pointing Roll	38.041713	38.192296575269	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	634985057.184000	634984137.3151	CCD S5 on	N	N
Observation start date	2018-02-14T08:43:08	2018-02-14T08:28:57	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	635000057.184000	635000777.67858	On-chip summing requested	N	N
Observation end date	2018-02-14T12:53:08	2018-02-14T13:06:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



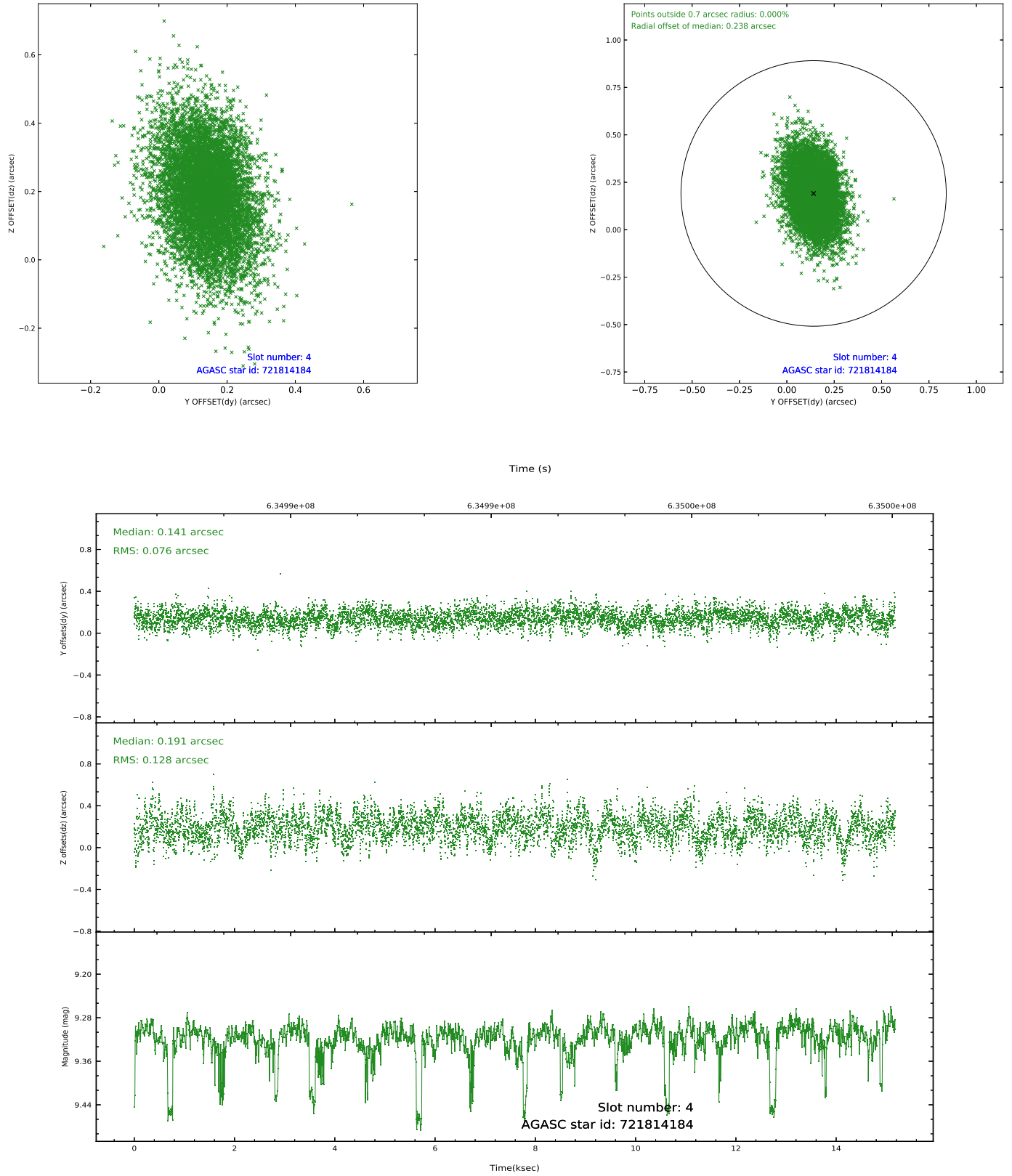


Slot Statistics

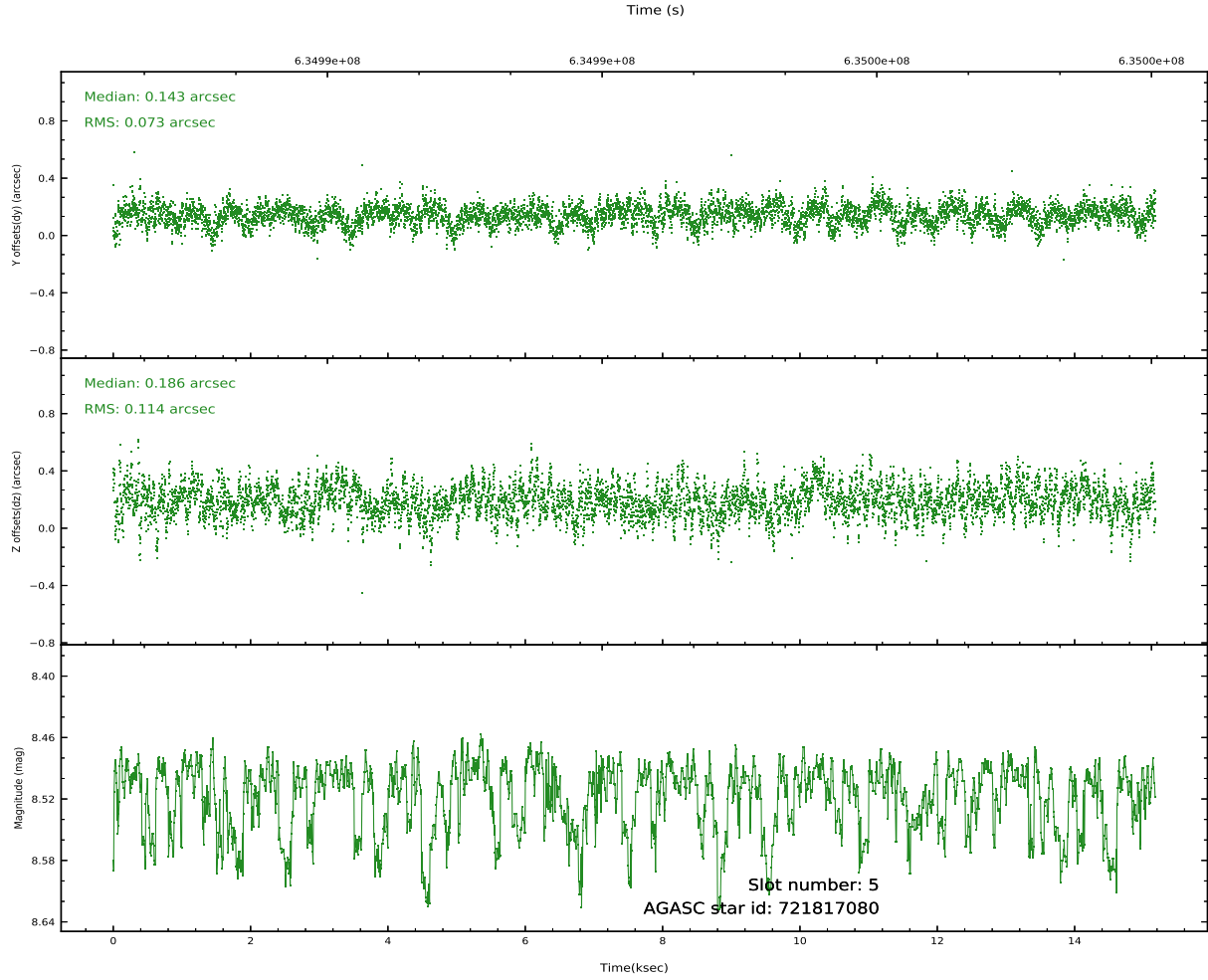
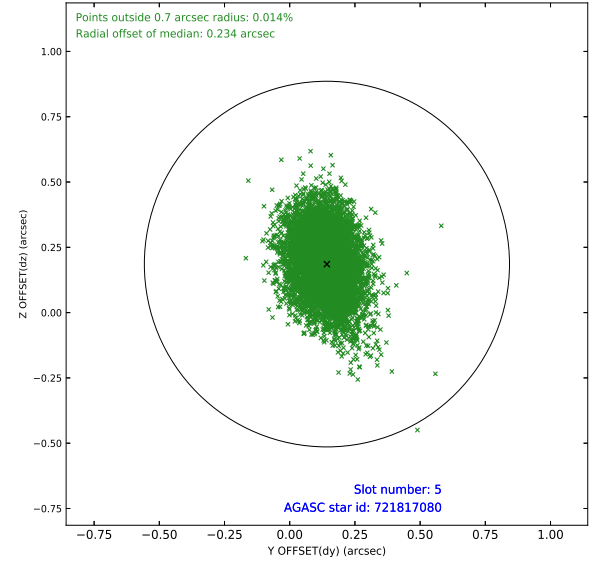
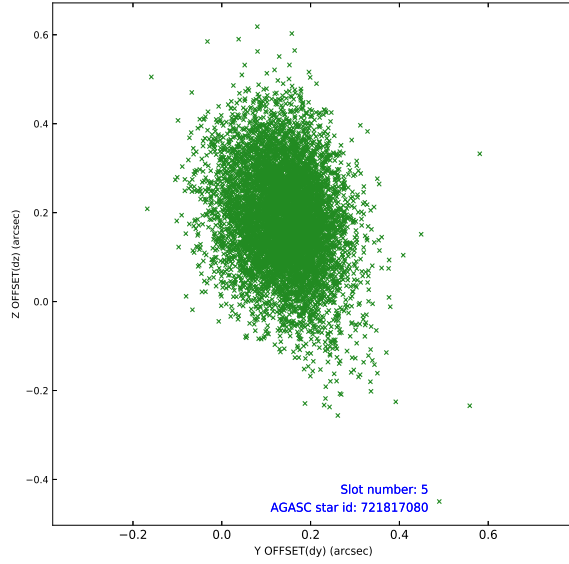
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.06	3702	1.000	0.289	-0.134	0.015	0.023	0.000000	0.000000	924.84	-1737
1	FID		ACIS-S-4	7.09	3702	1.000	0.043	-0.042	0.013	0.019	0.000000	0.000000	2142.38	166
2	FID		ACIS-S-5	7.08	3702	1.000	-0.360	0.188	0.008	0.015	0.000000	0.000000	-1824.08	160
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	721814184	9.32	7393	1.000	0.141	0.191	0.155	0.264	167.601359	-13.175685	-717.48	-2035
5	GUIDE	used	721817080	8.51	7402	1.000	0.143	0.186	0.140	0.242	167.241204	-13.236782	-1849.11	-1429
6	GUIDE	used	721817752	9.07	7392	1.000	-0.101	-0.002	0.172	0.282	168.091075	-12.833193	1395.24	-2124
7	GUIDE	used	721427176	9.29	7393	1.000	-0.185	-0.377	0.160	0.271	167.132963	-11.995350	603.90	2327

2.4 Star Slots

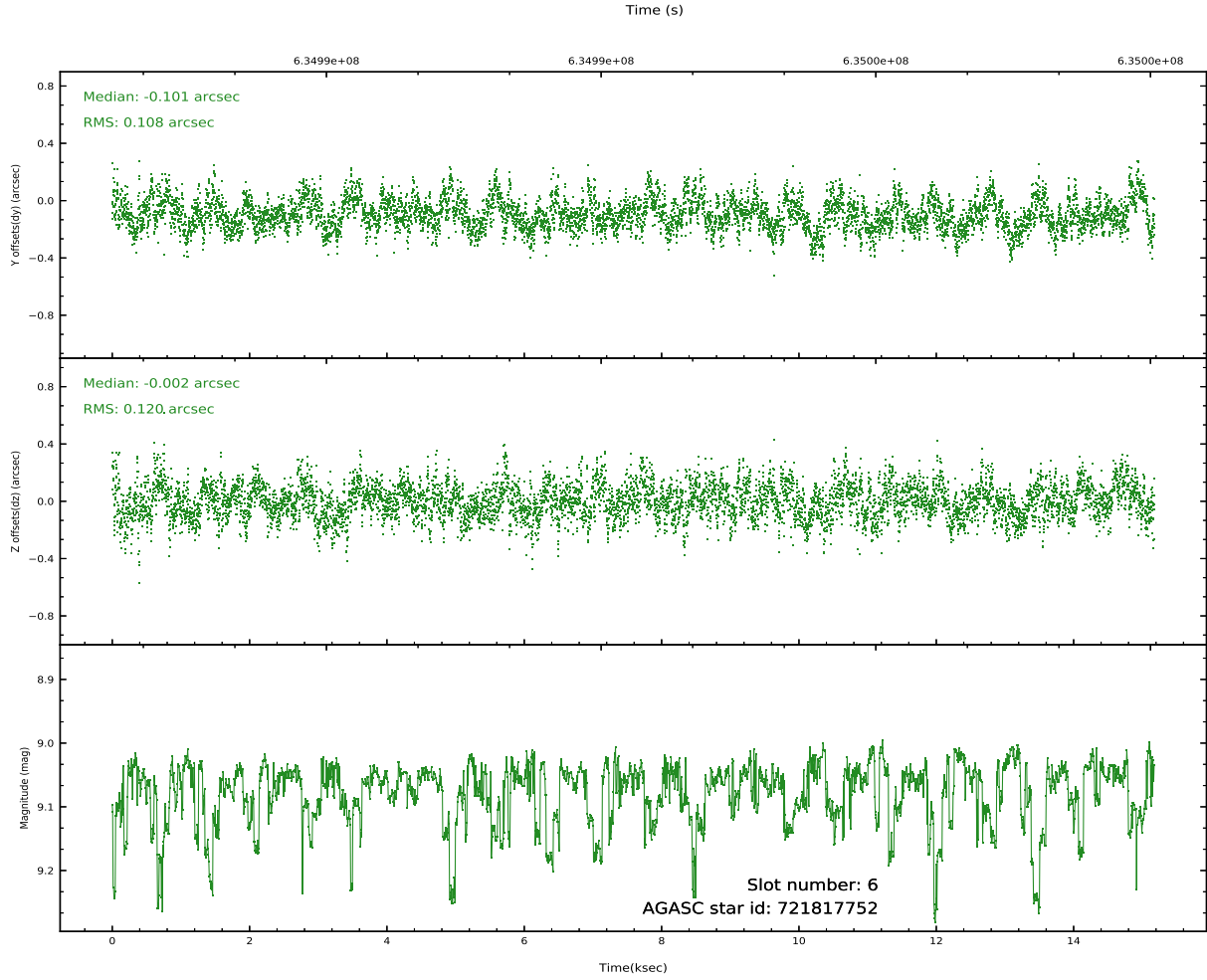
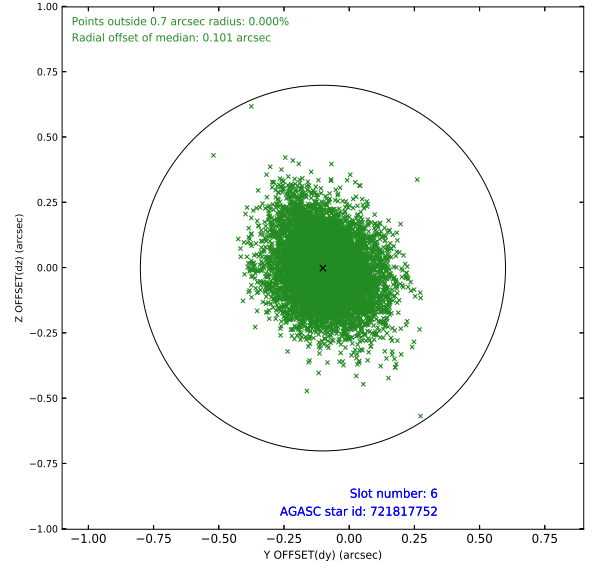
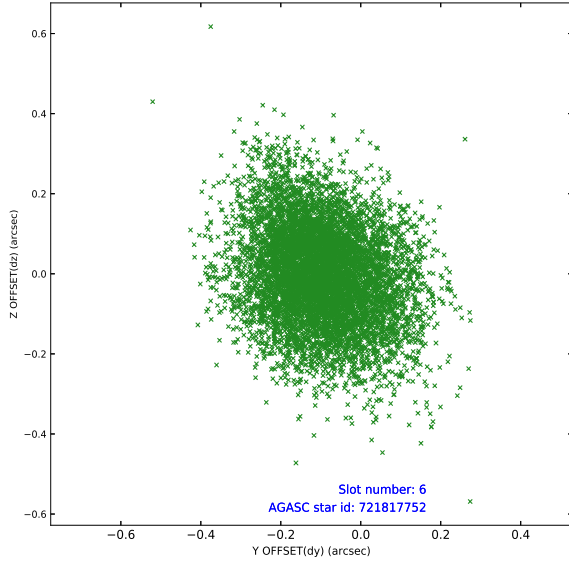
2.4.1 Slot 4



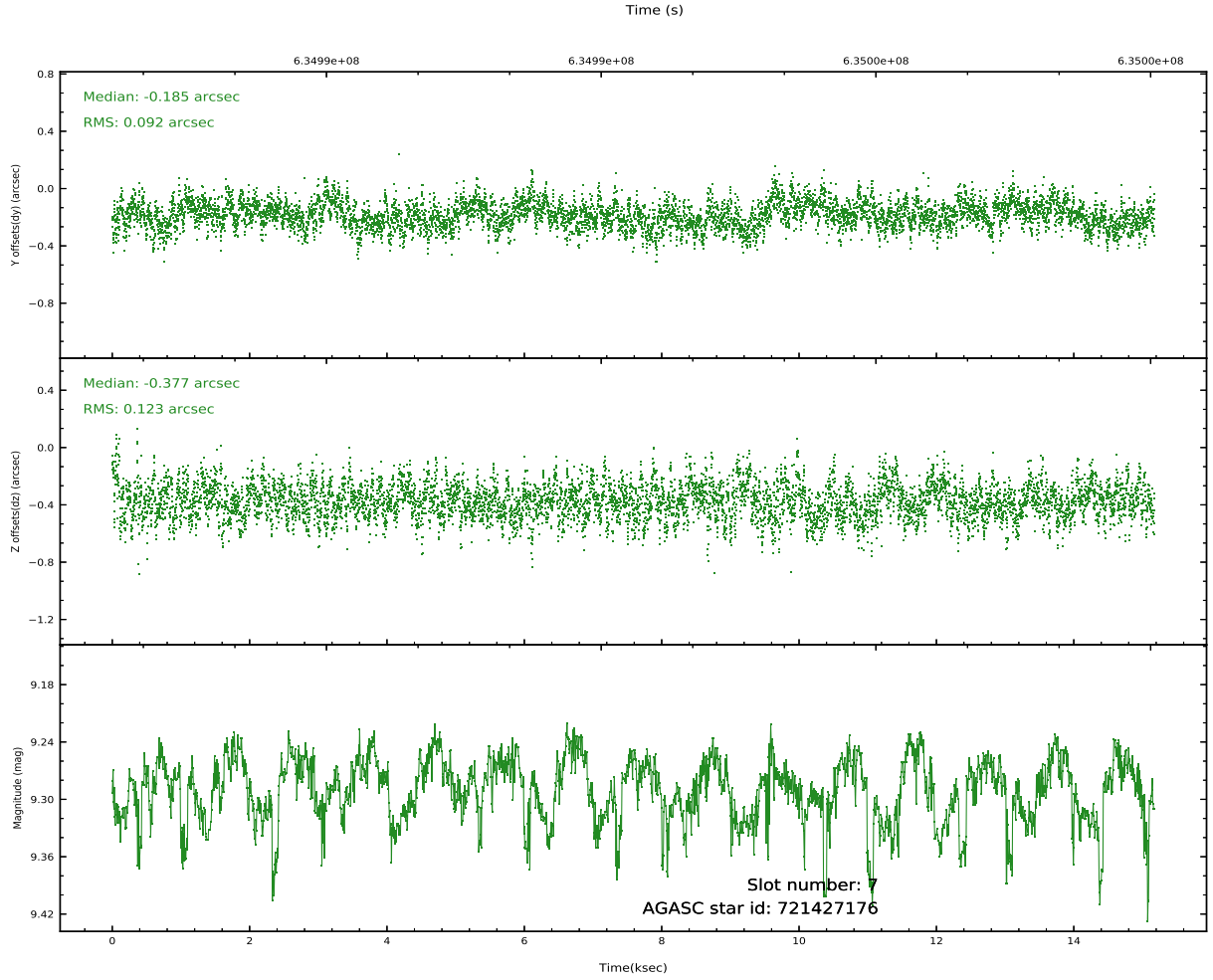
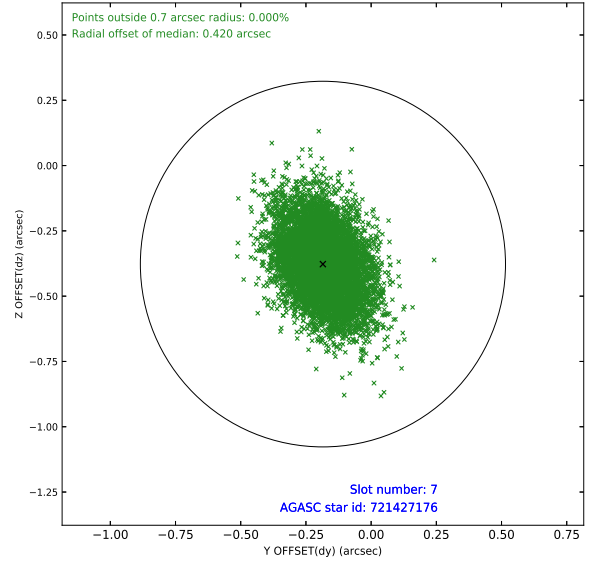
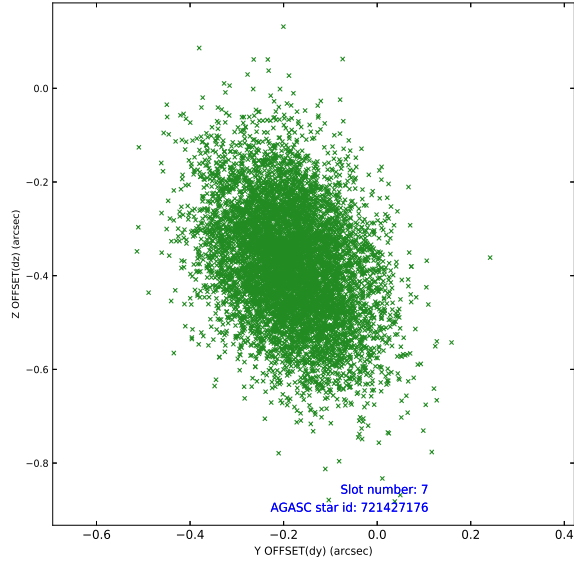
2.4.2 Slot 5



2.4.3 Slot 6

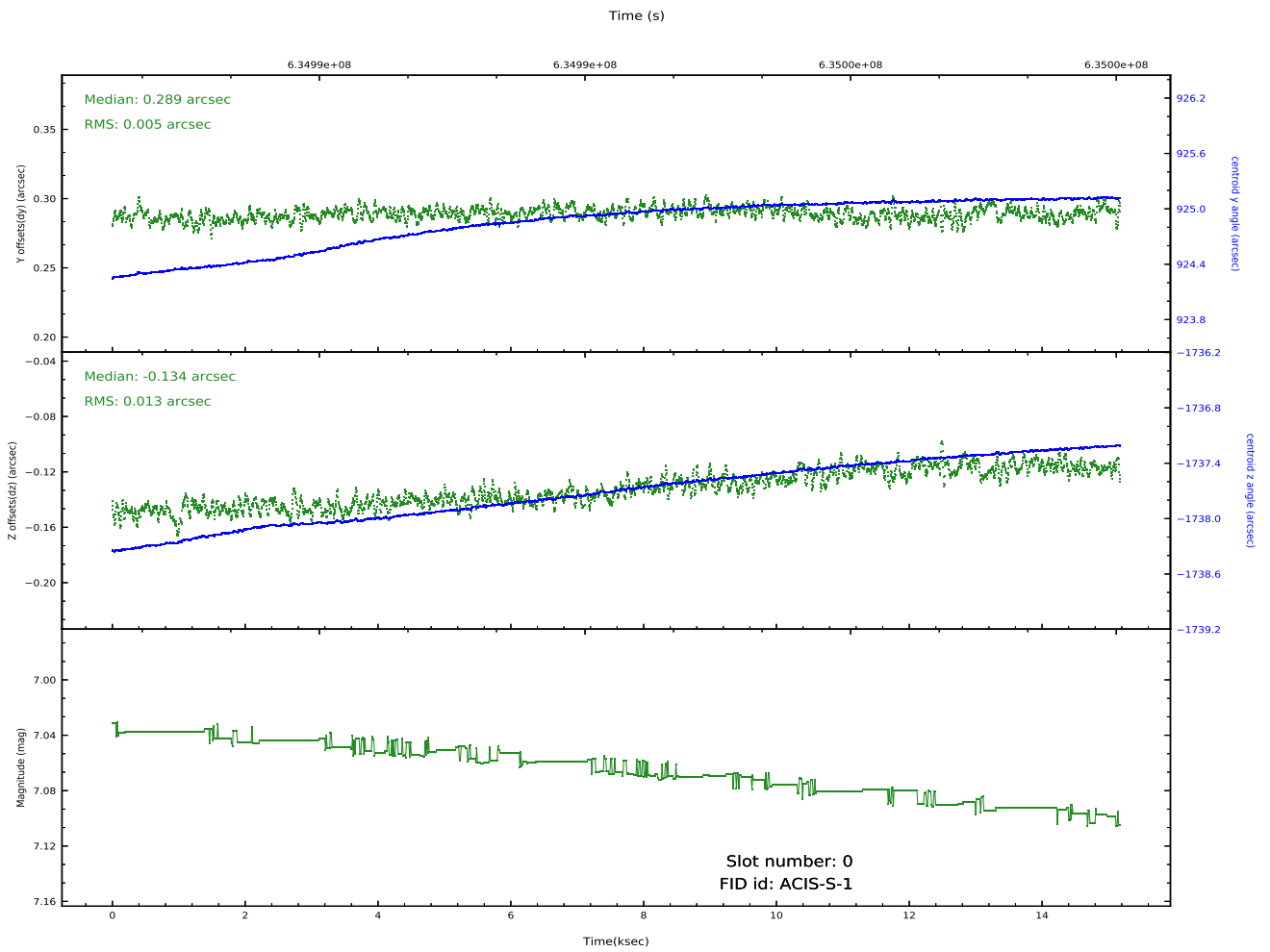
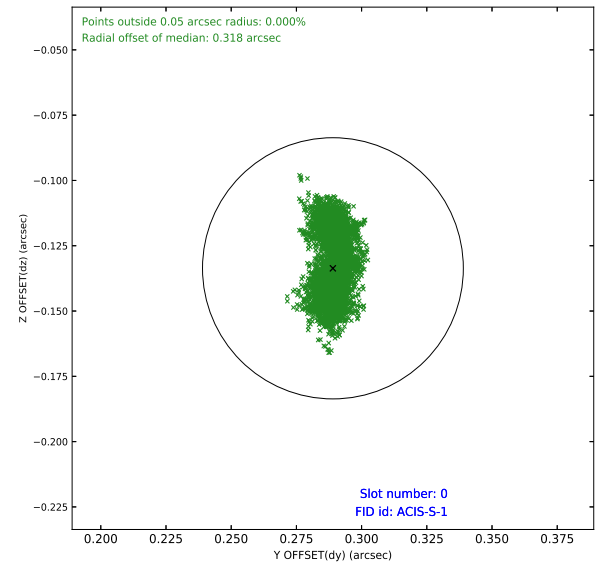
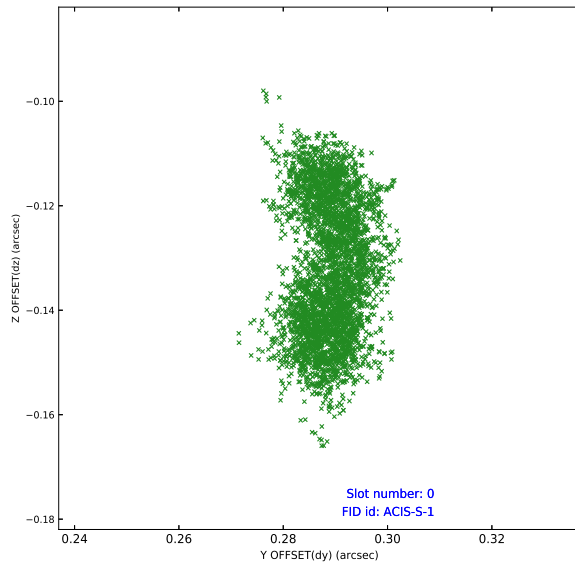


2.4.4 Slot 7

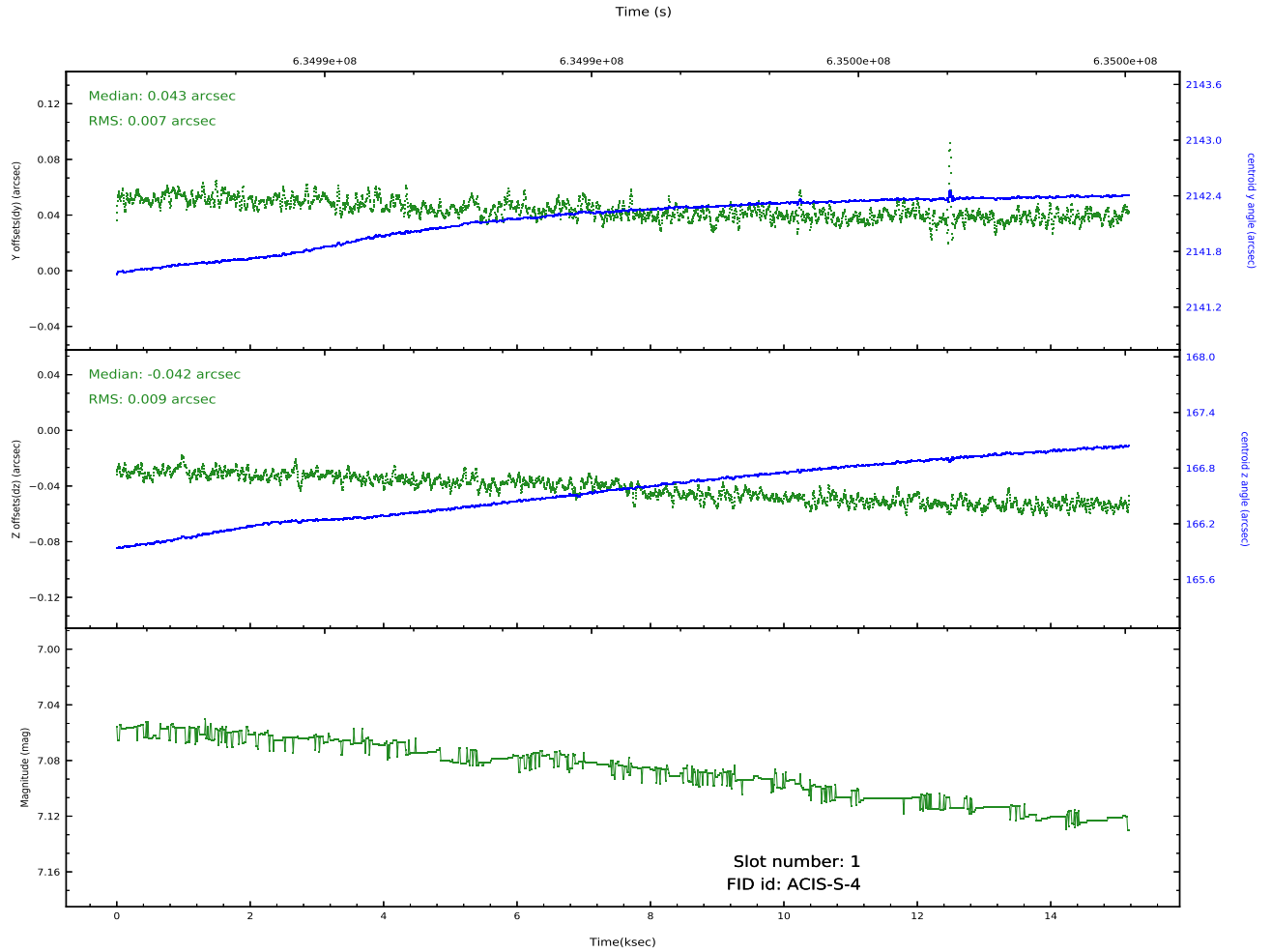
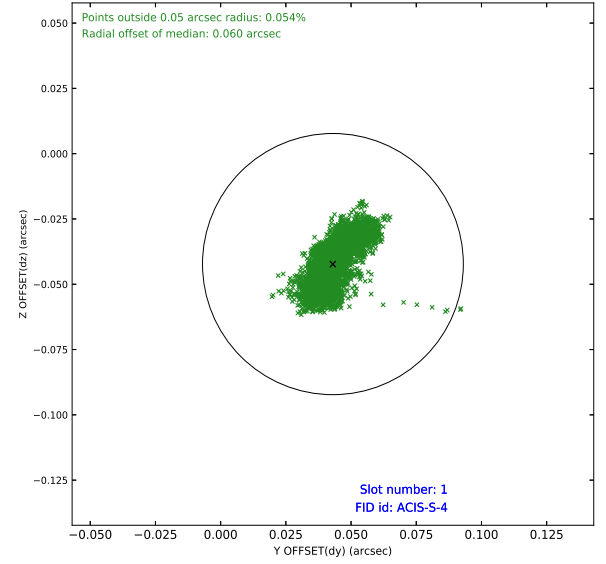
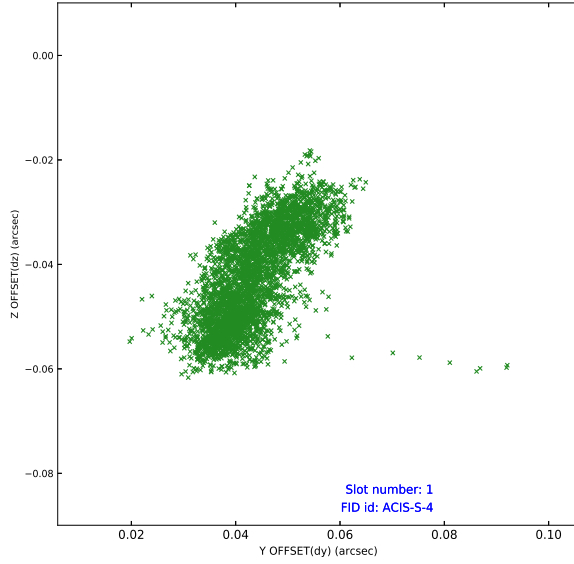


2.5 FID Slots

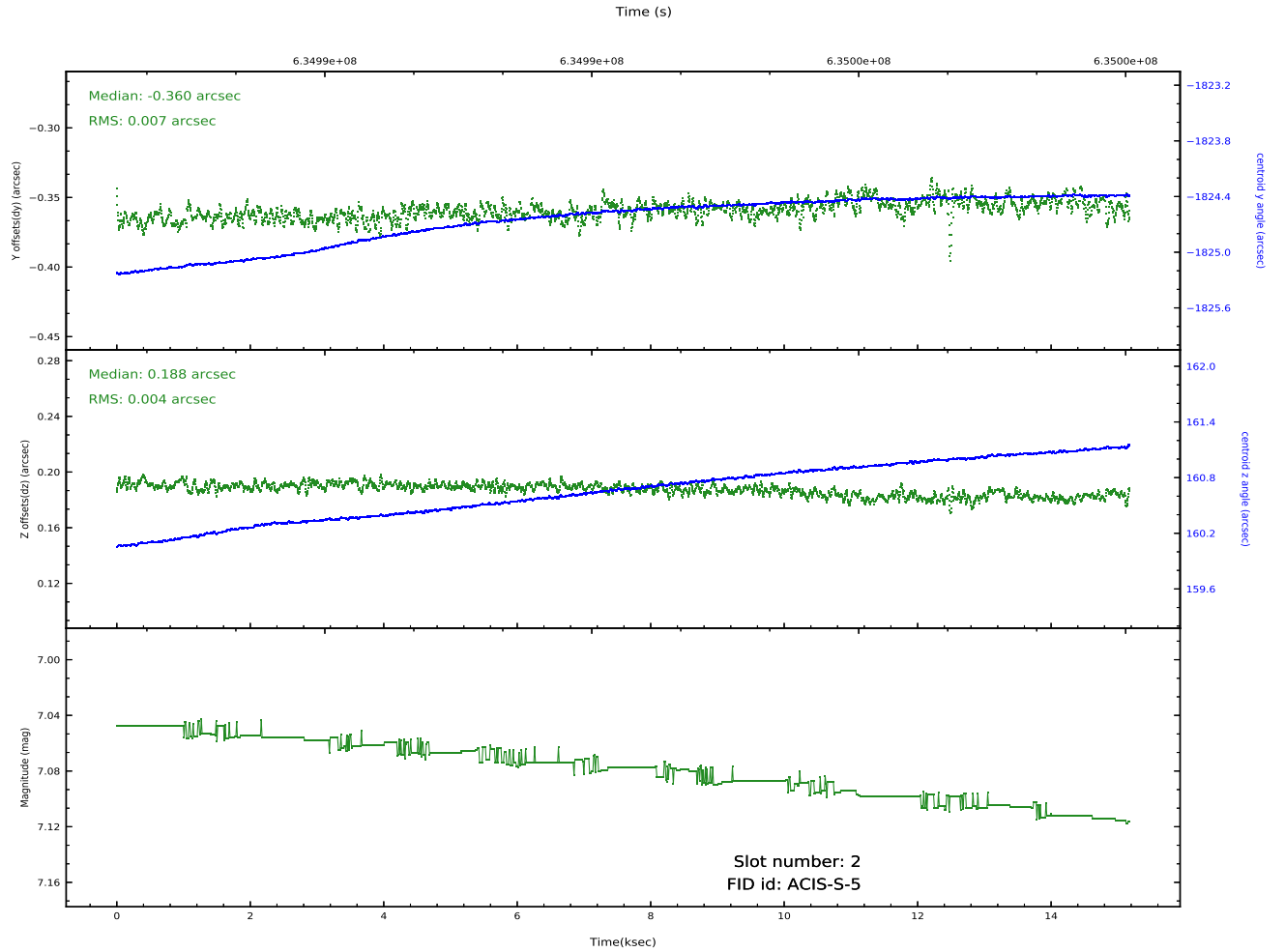
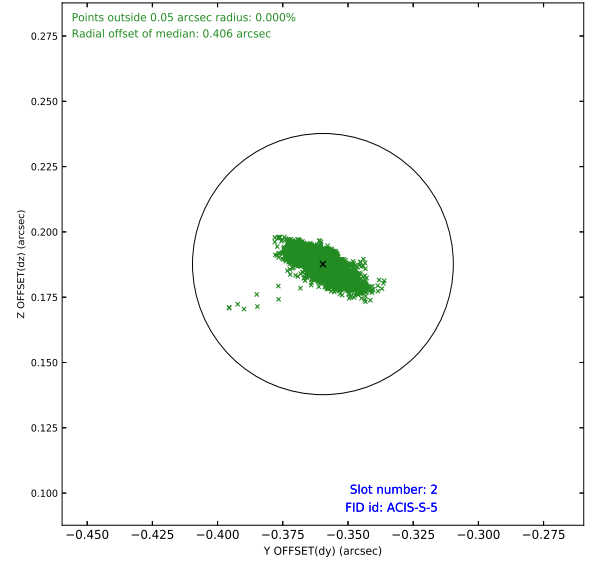
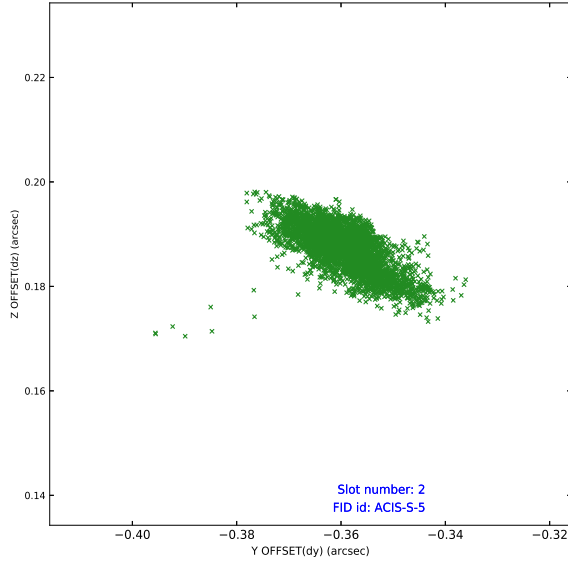
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2020.10.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.062376028895

A.2 Comments

One optional chip was dropped.

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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 slot from the solution.