

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22054 - L2 Version 1
Chandra X-Ray Center

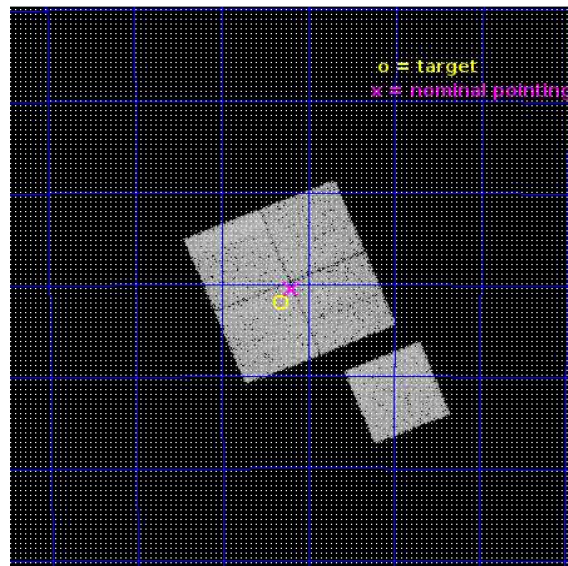
L2 Processing Date : Mar 25 2019

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1 Front

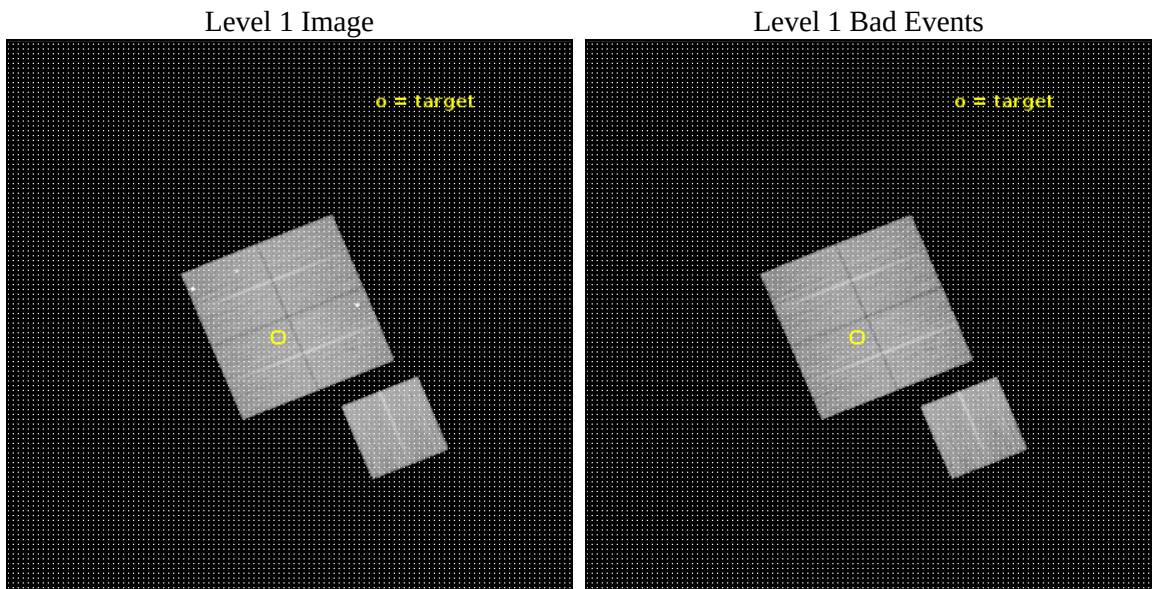
seq_num	801837	Sequence number
obs_id	22054	Observation id
title	Studying the Progenitors of Our Favorite Clusters at $z > 1$	Proposa
observer	Michael McDonald	Principal investigator
object	SPT-CLJ2259-5301	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	344.83	Observer's specified target RA [deg]
dec_targ	-53.033	Observer's specified target Dec [deg]
ra_nom	344.79912821191	Nominal RA [deg]
dec_nom	-53.007652788424	Nominal Dec [deg]
roll_nom	157.75765357361	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22065.800169826	Sum of GTIs [s]
livetime	21777.494246001	Livetime [s]
ontime0	22062.659079552	Sum of GTIs [s]
ontime1	22053.236268401	Sum of GTIs [s]
ontime2	22062.659109592	Sum of GTIs [s]
ontime3	22065.800169826	Sum of GTIs [s]
ontime6	22062.659199357	Sum of GTIs [s]
l2events	80522	Number of level 2 events



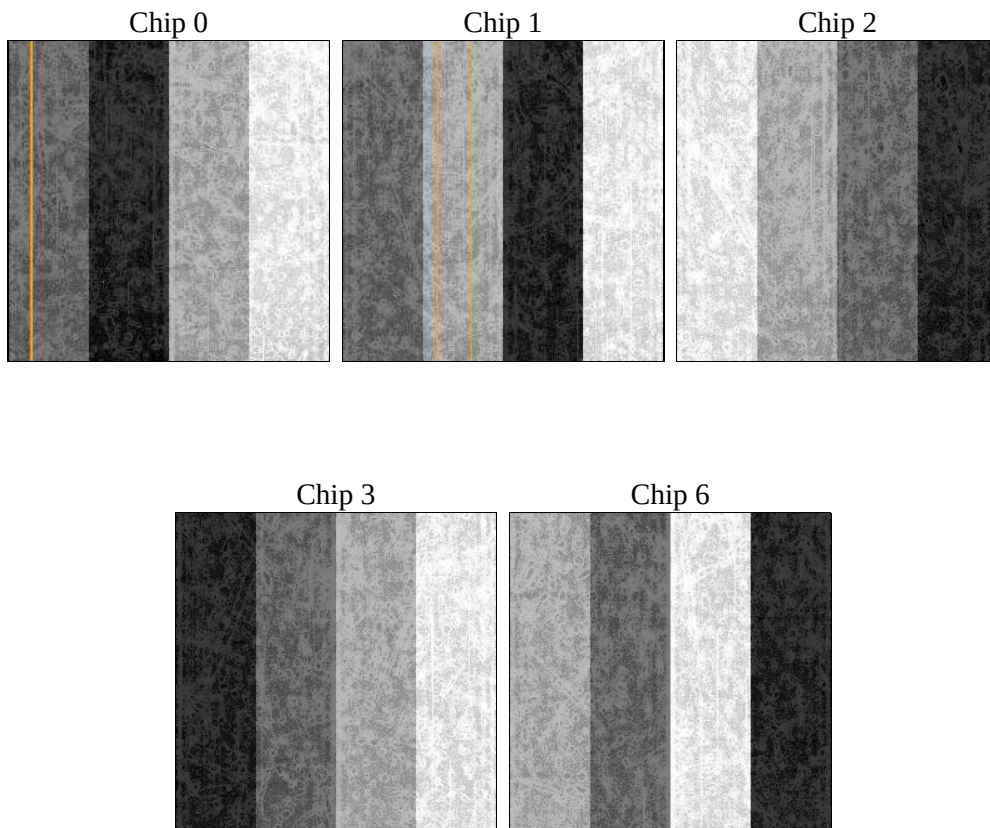
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22000.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	22065.800169826	Sum of GTIs [s]
caldsver	4.8.2	 	ontime0	22062.659079552	Sum of GTIs [s]
date	2019-03-25T16:32:15	Date and time of file creation	ontime1	22053.236268401	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	22062.659109592	Sum of GTIs [s]
			ontime3	22065.800169826	Sum of GTIs [s]
			ontime6	22062.659199357	Sum of GTIs [s]
			l1events	871569	Number of level 1 events

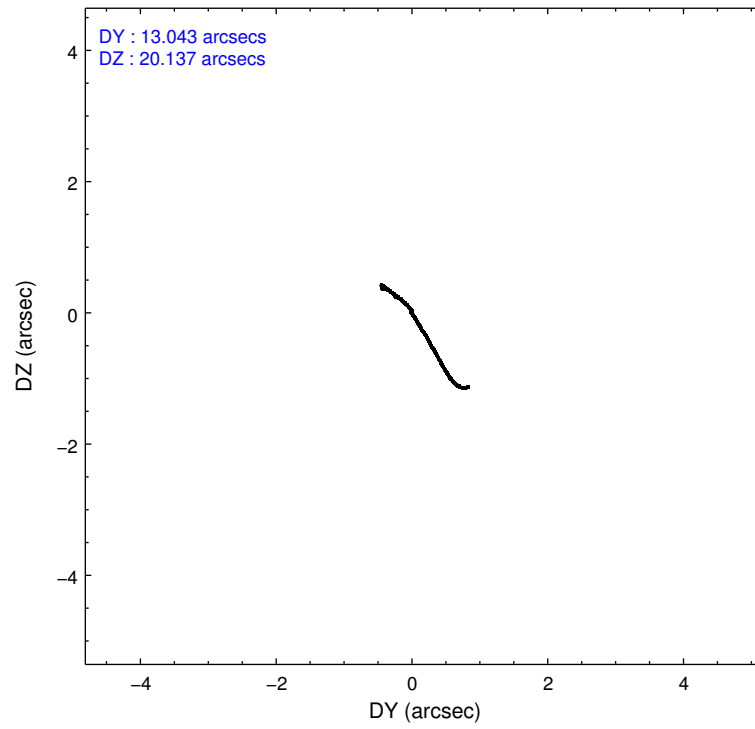
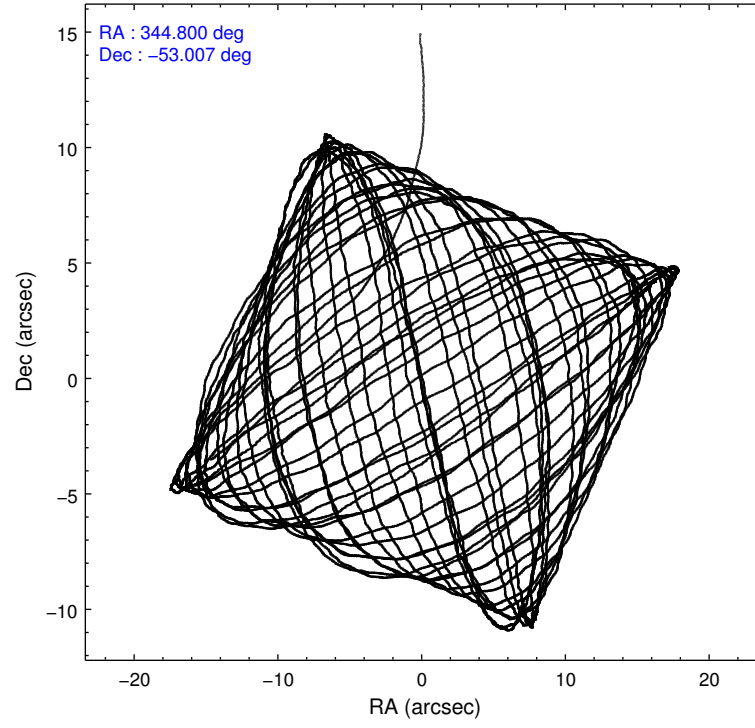
2.1.4 Events

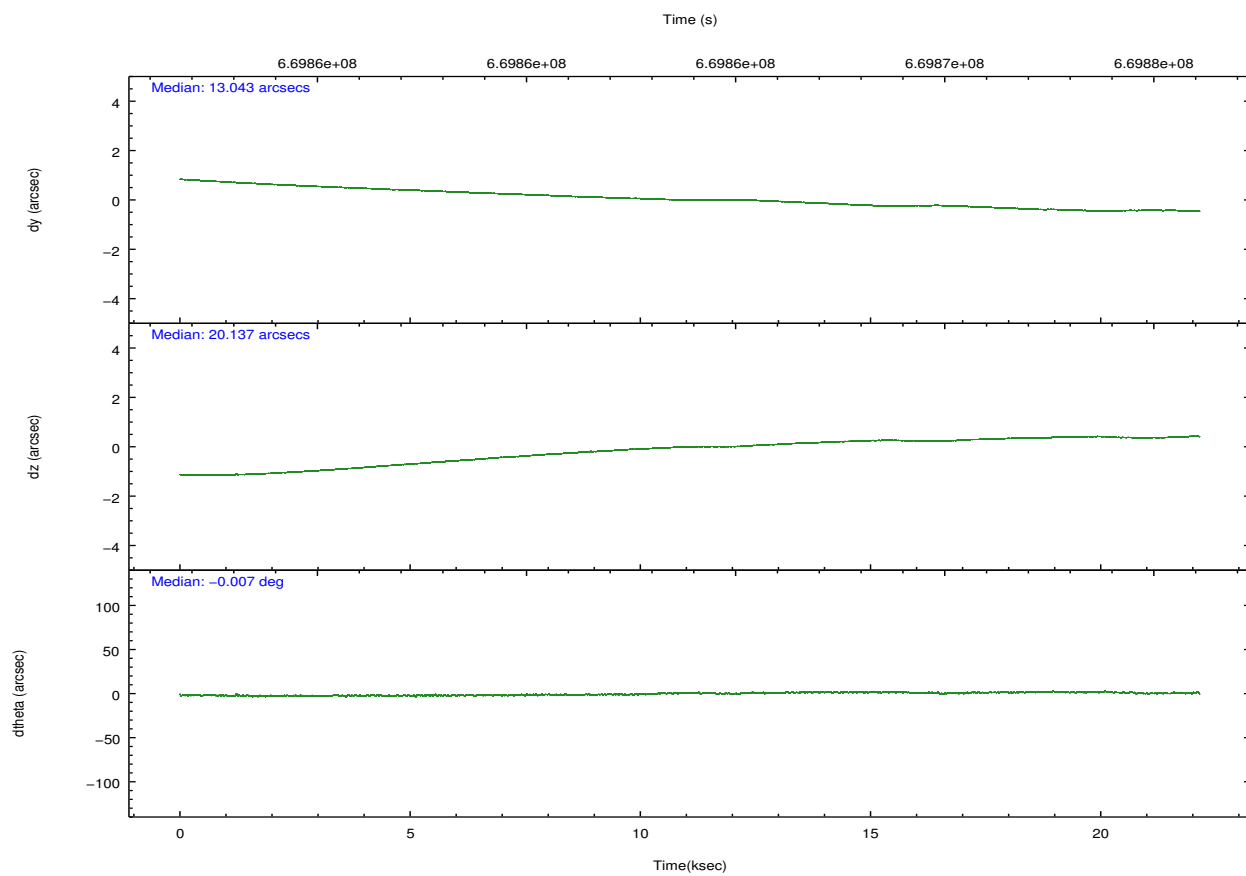
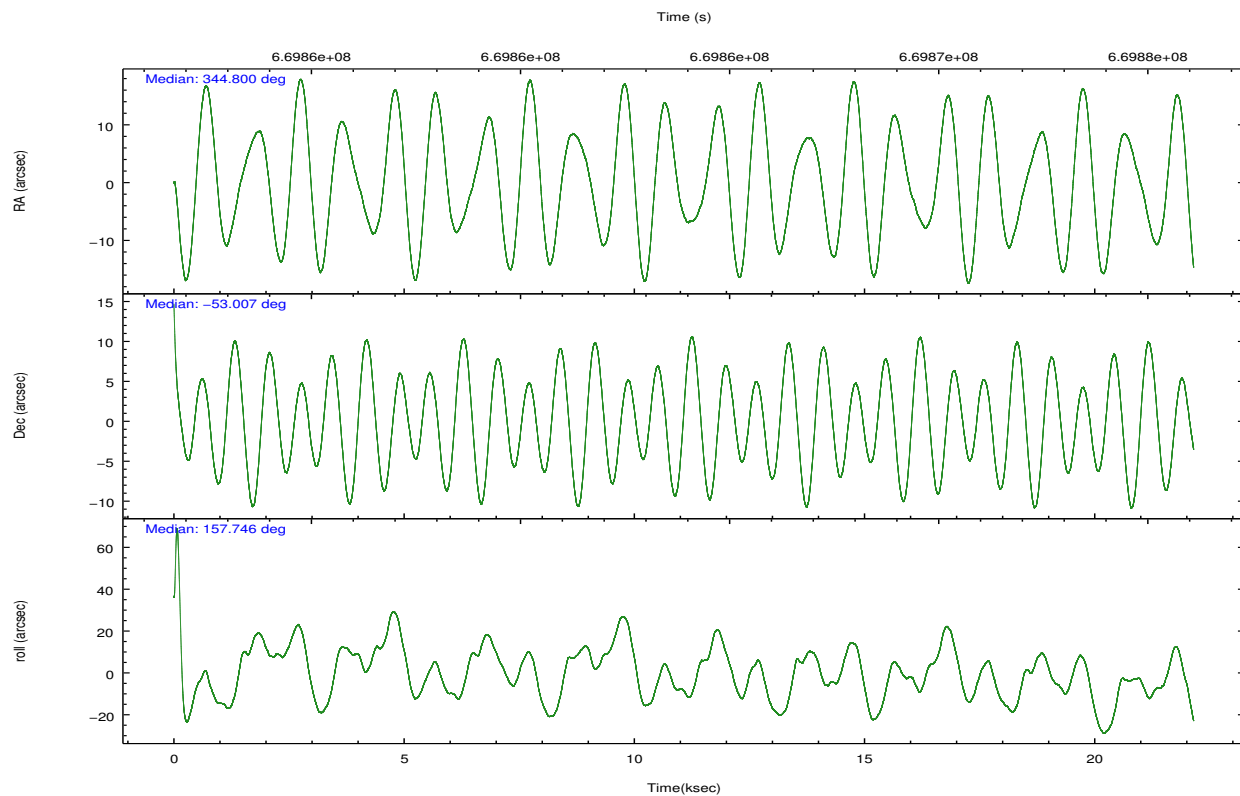
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	159527	174394	183977	173470	180201	grade 0 events	6284	14721	11327	6490	6099
rejected events	140599	145307	160706	155427	161043		3%	8%	6%	3%	3%
rejected %	88%	83%	87%	89%	89%	grade 1 events	95	124	119	88	66
							0%	0%	0%	0%	0%
						grade 2 events	4835	5874	4573	3885	4656
							3%	3%	2%	2%	2%
						grade 3 events	1940	1798	1749	1892	1867
							1%	1%	0%	1%	1%
						grade 4 events	1800	1908	1874	1819	1772
							1%	1%	1%	1%	0%
						grade 5 events	7227	7116	6737	8113	7642
							4%	4%	3%	4%	4%
						grade 6 events	4073	4794	3753	3961	4768
							2%	2%	2%	2%	2%
						grade 7 events	133273	138059	153845	147222	153331
							83%	79%	83%	84%	85%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	344.844558	344.7991282119103	CCD I2 on	Y	Y
[deg] Pointing Dec	-53.003829	-53.00765278842358	CCD I3 on	Y	Y
[deg] Pointing Roll	157.585273	157.7576535736105	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	669852992.184000	669851711.5527	CCD S5 on	N	N
Observation start date	2019-03-24T22:15:23	2019-03-24T21:55:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	669874992.184000	669875968.17915	On-chip summing requested	N	N
Observation end date	2019-03-25T04:22:03	2019-03-25T04:39:28	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



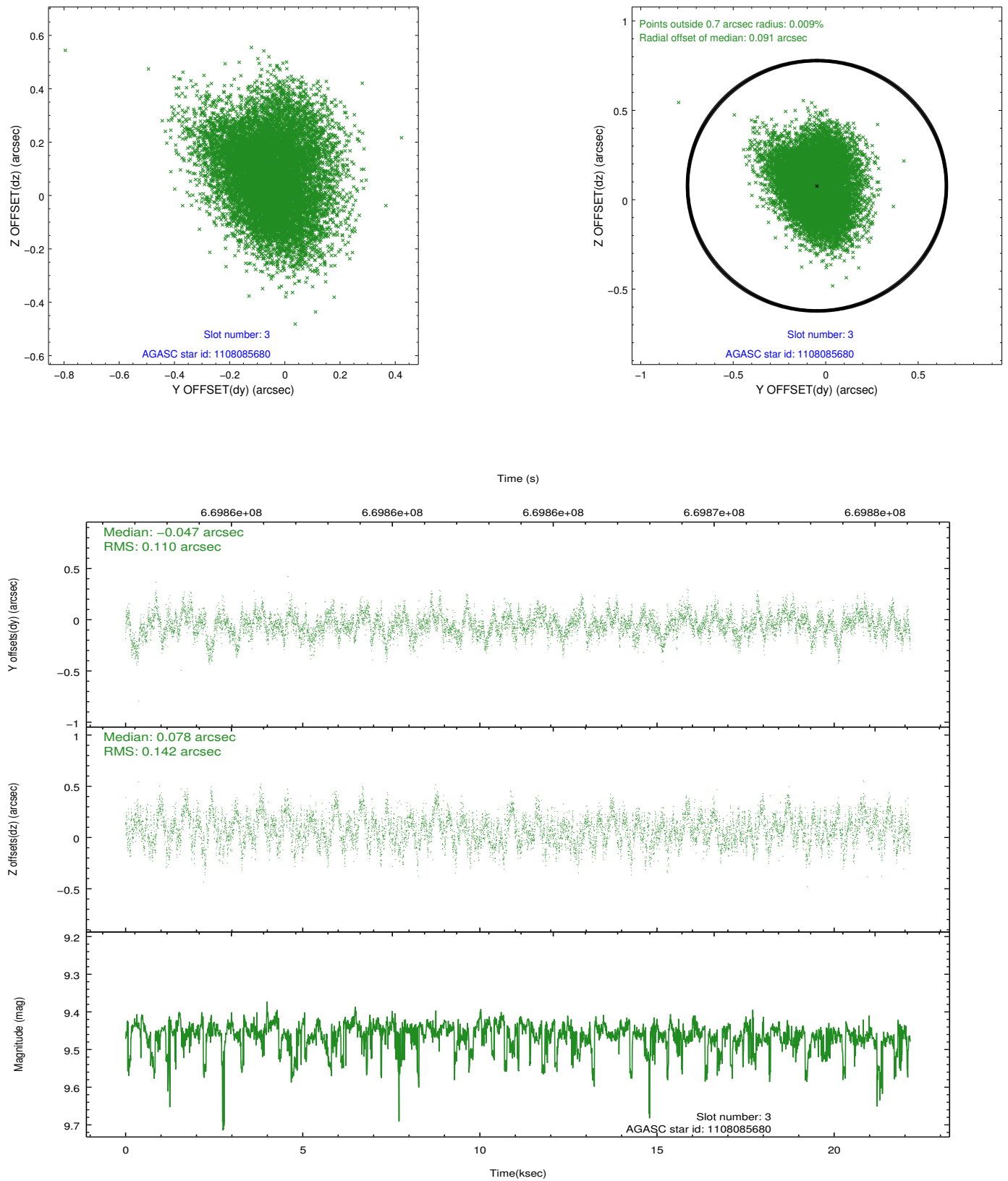


Slot Statistics

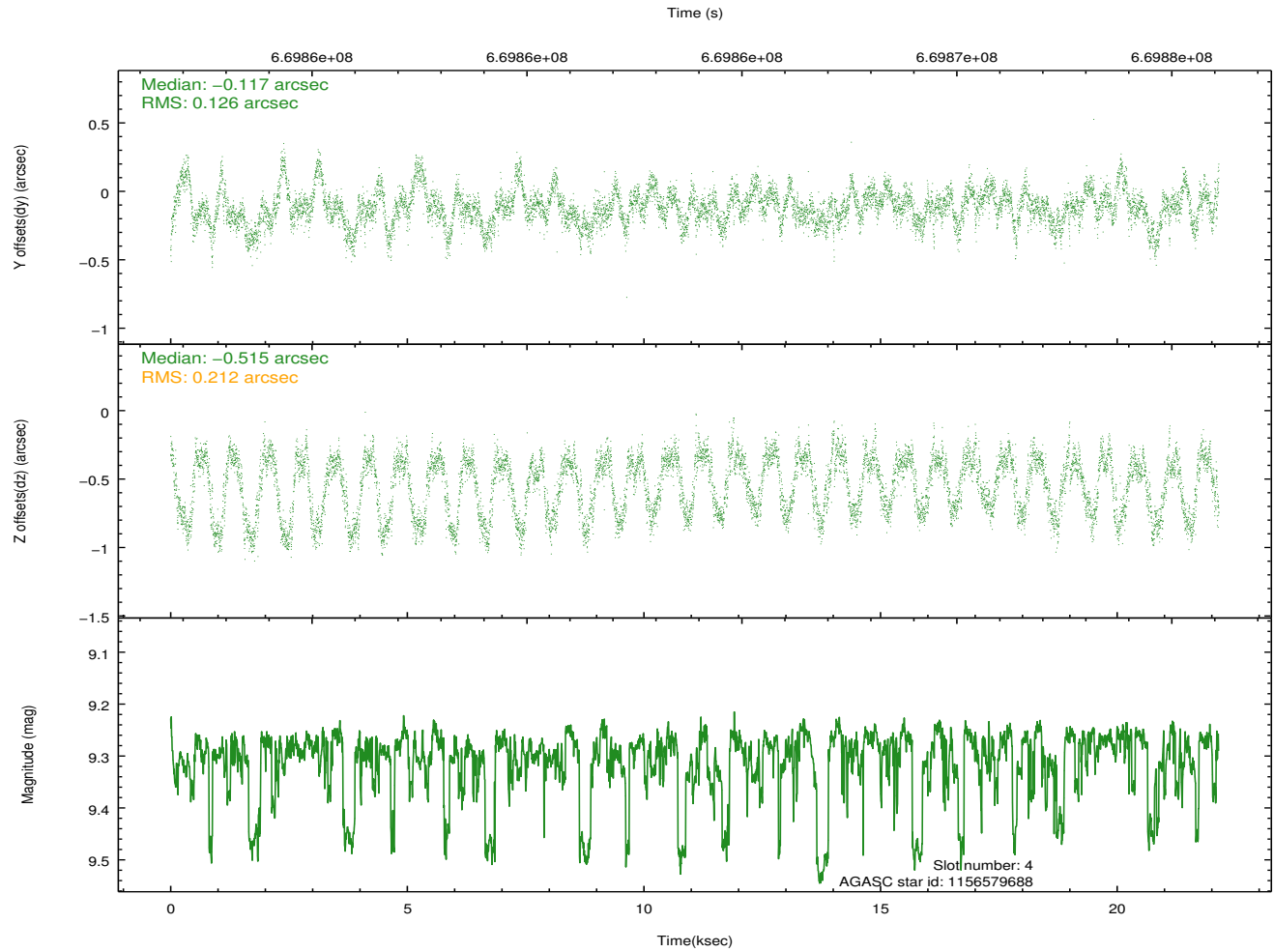
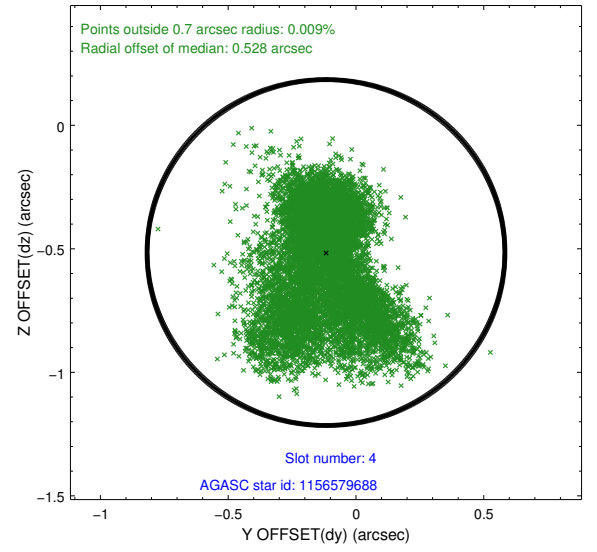
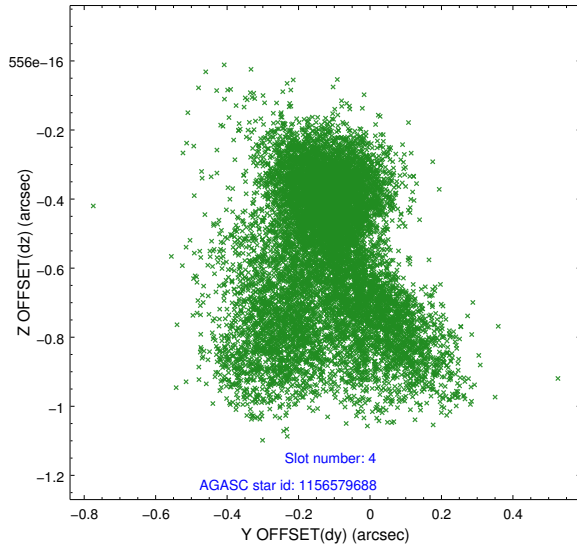
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.18	5403	1.000	0.084	-0.077	0.029	0.051	0.000000	0.000000	926.56	-843
1	FID		ACIS-I-5	7.17	5402	1.000	-0.470	0.003	0.014	0.020	0.000000	0.000000	-1822.18	1053
2	FID		ACIS-I-6	7.19	5402	1.000	0.294	0.140	0.021	0.038	0.000000	0.000000	391.93	1698
3	GUIDE	used	1108085680	9.46	10782	1.000	-0.047	0.078	0.193	0.312	345.144566	-52.439600	166.53	-2126
4	GUIDE	used	1156579688	9.30	10793	1.000	-0.117	-0.515	0.258	0.445	344.832962	-53.359427	-464.92	1193
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
6	GUIDE	used	1156580872	7.18	10803	1.000	-0.061	0.146	0.124	0.187	345.684447	-52.965335	-1635.04	-812
7	GUIDE	used	1156581376	8.96	10791	1.000	0.229	0.338	0.132	0.213	345.778087	-52.647374	-1399.96	-1950

2.4 Star Slots

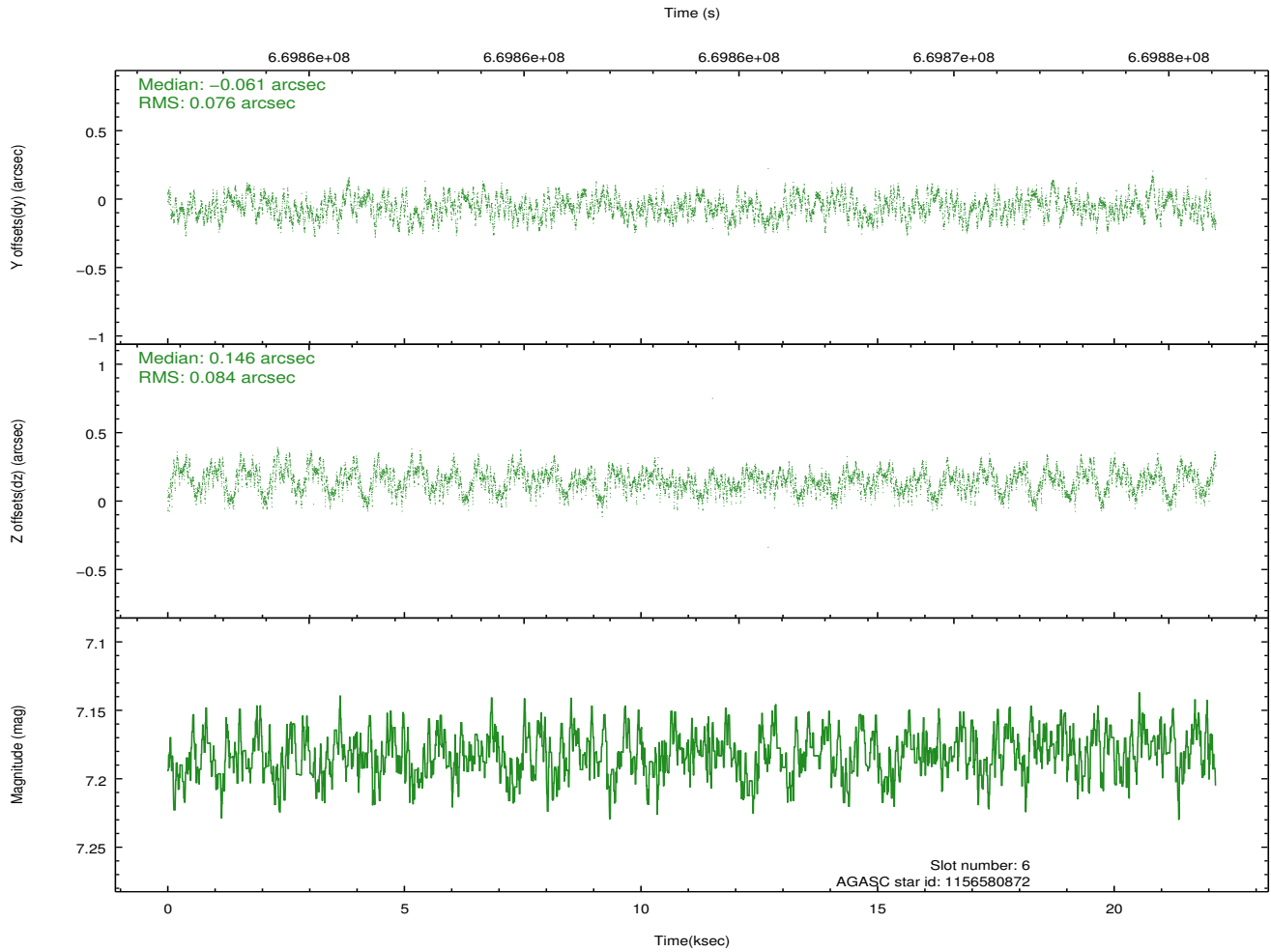
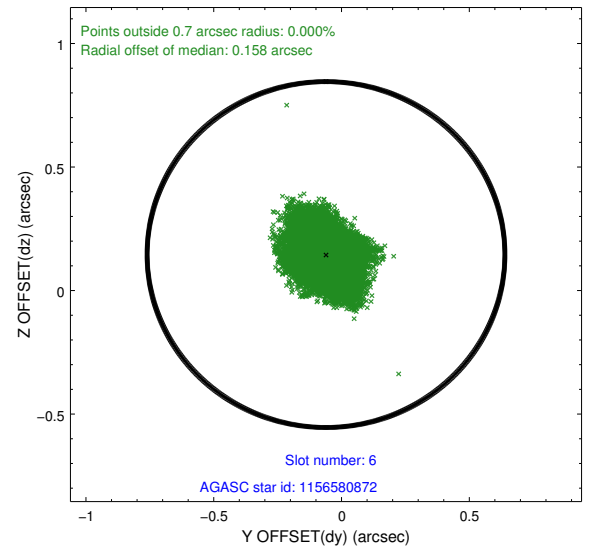
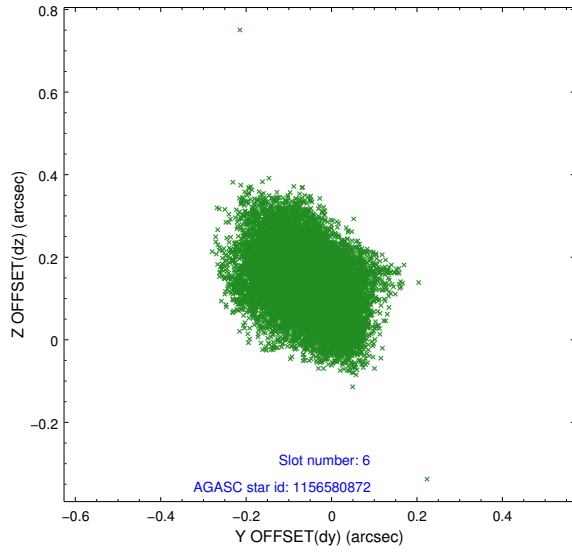
2.4.1 Slot 3



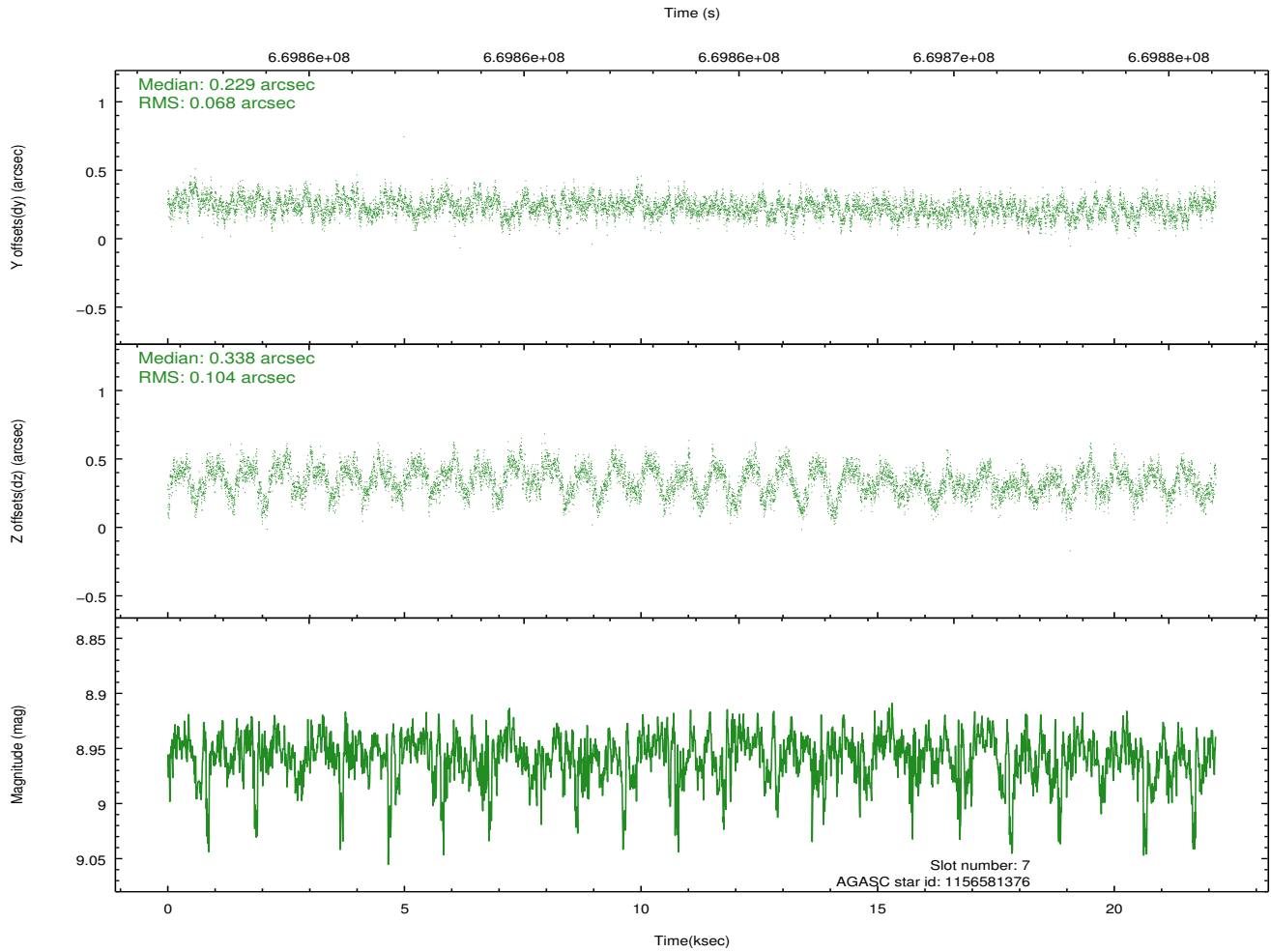
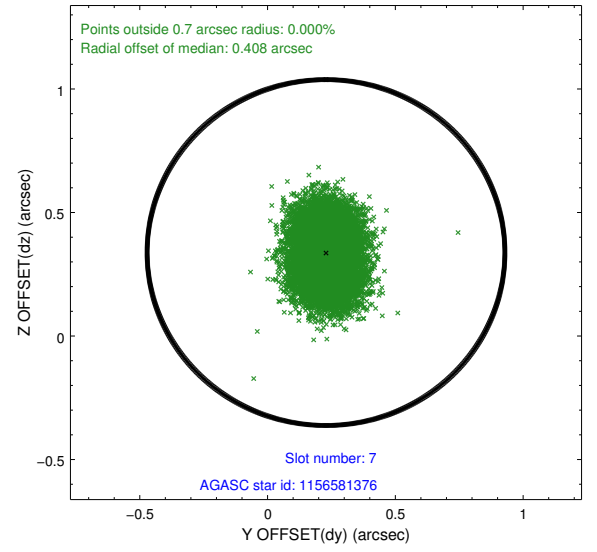
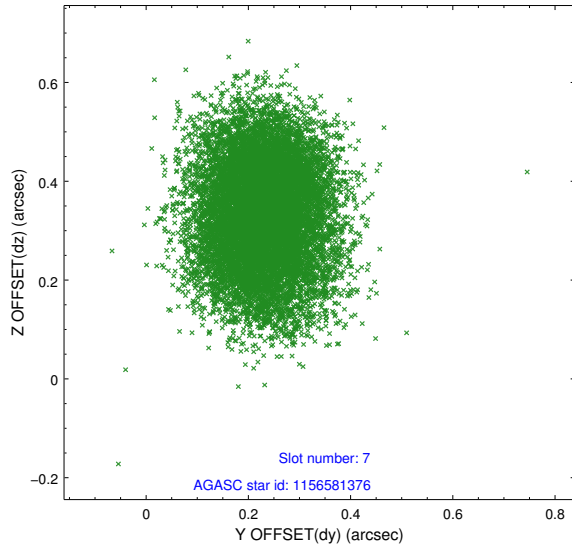
2.4.2 Slot 4



2.4.3 Slot 6

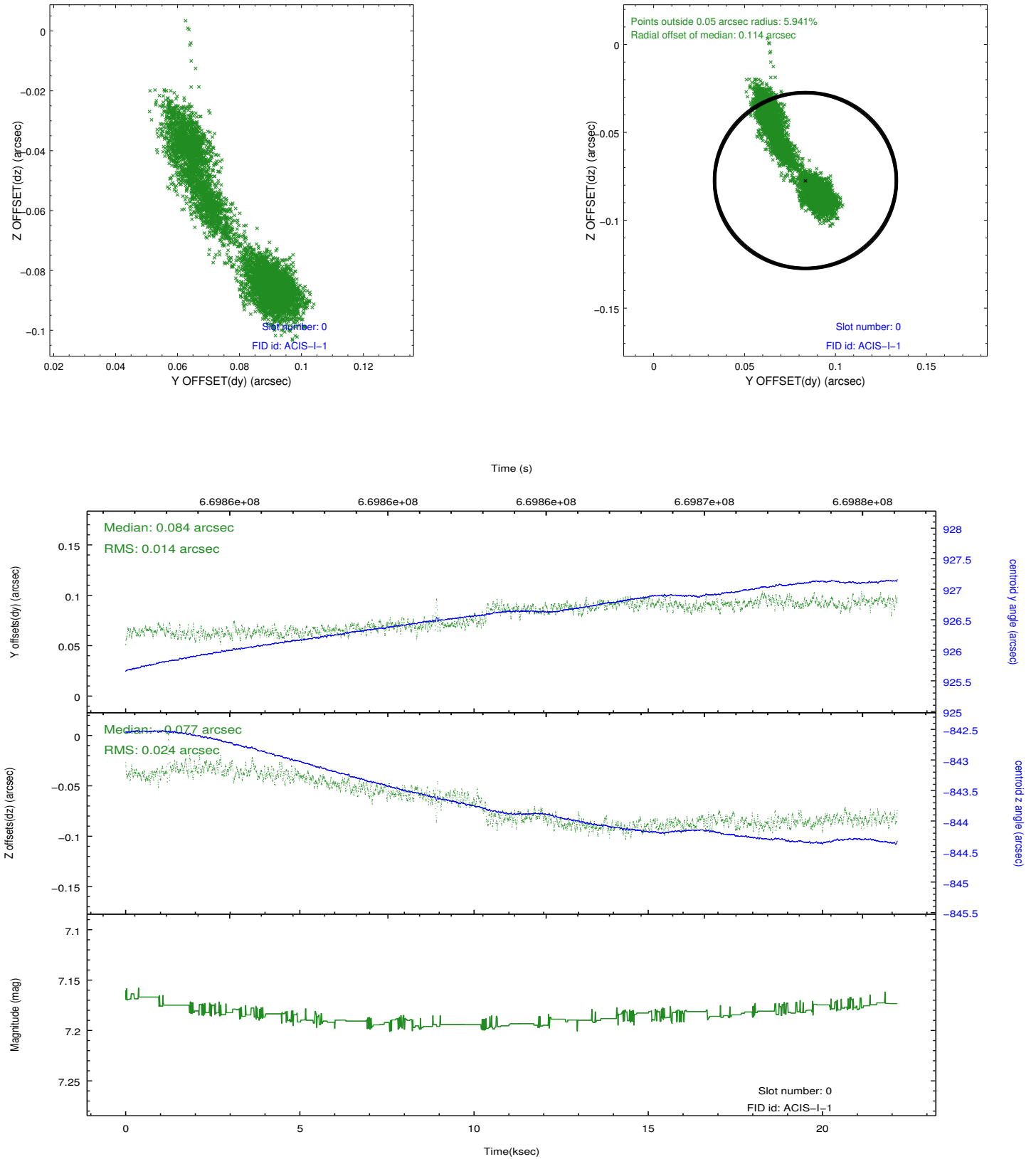


2.4.4 Slot 7

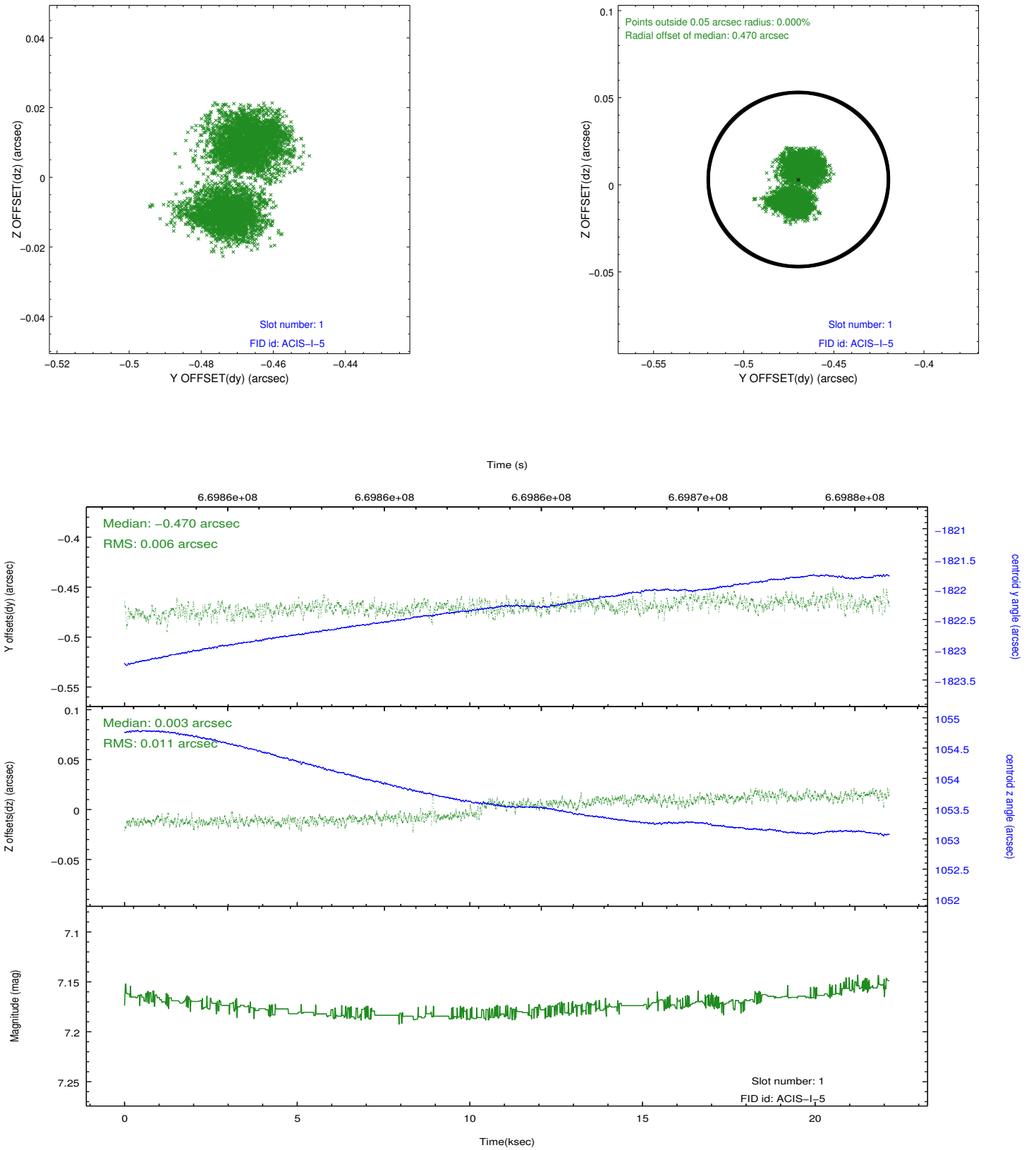


2.5 FID Slots

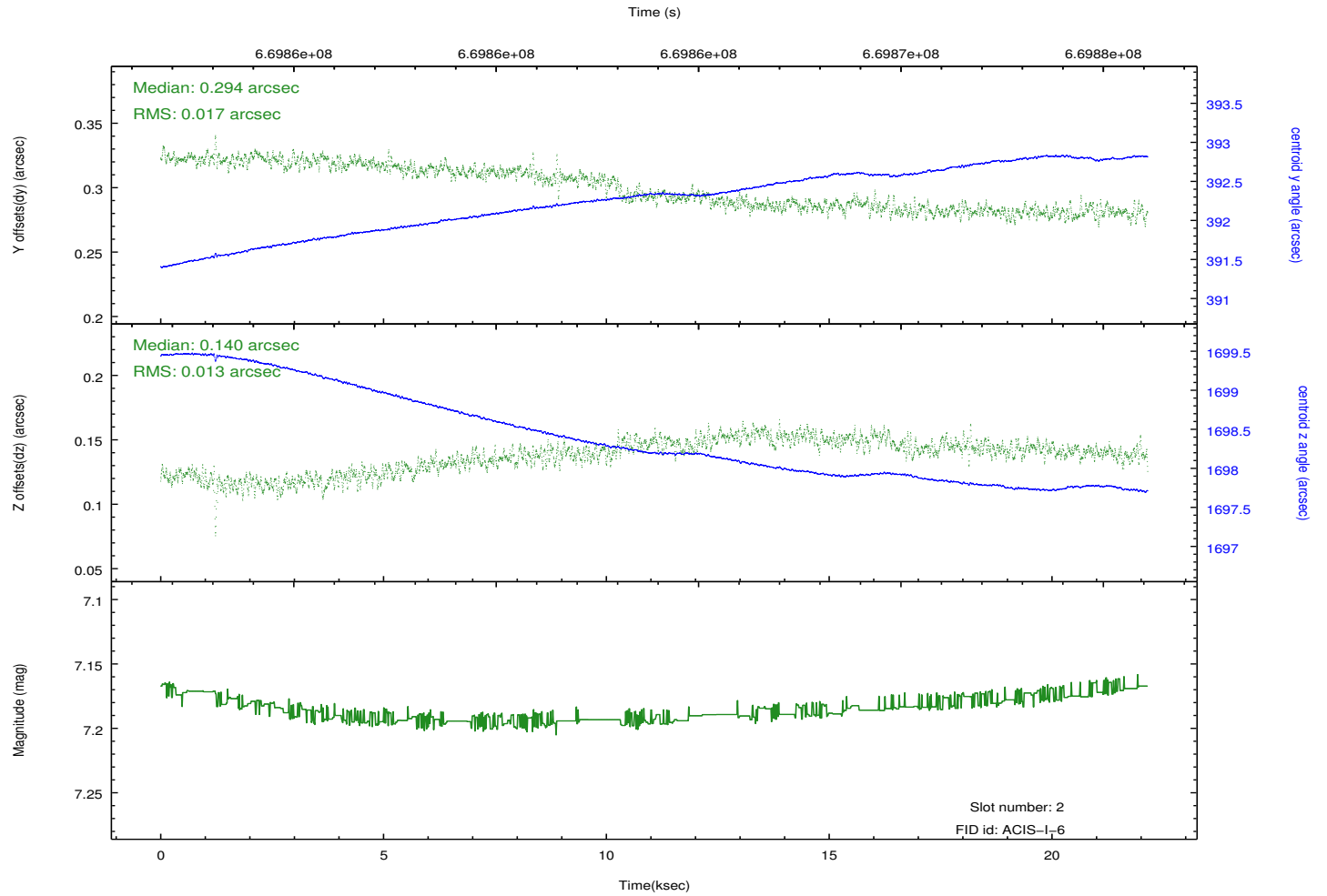
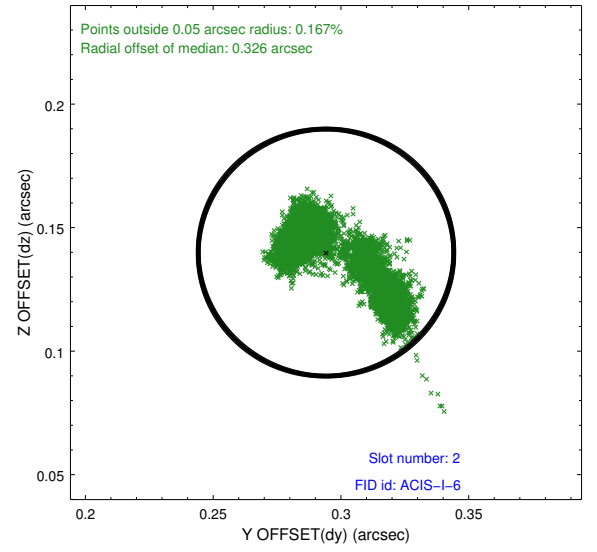
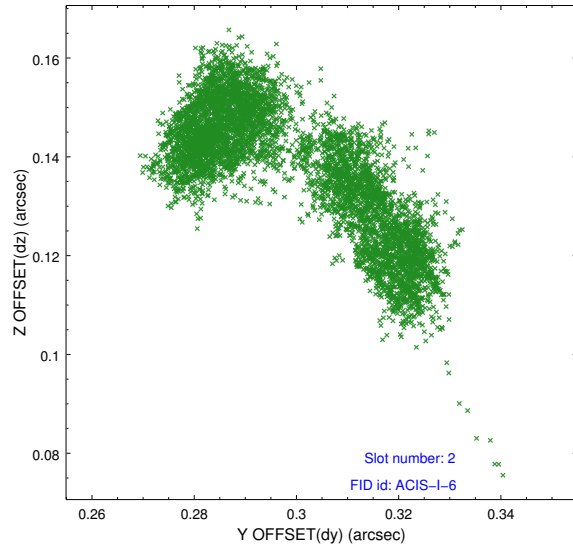
2.5.1 Slot 0



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)	2019.03.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.065800169826

A.2 Comments

The guide star in slot 5 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.