

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 21880 - L2 Version 1
Chandra X-Ray Center

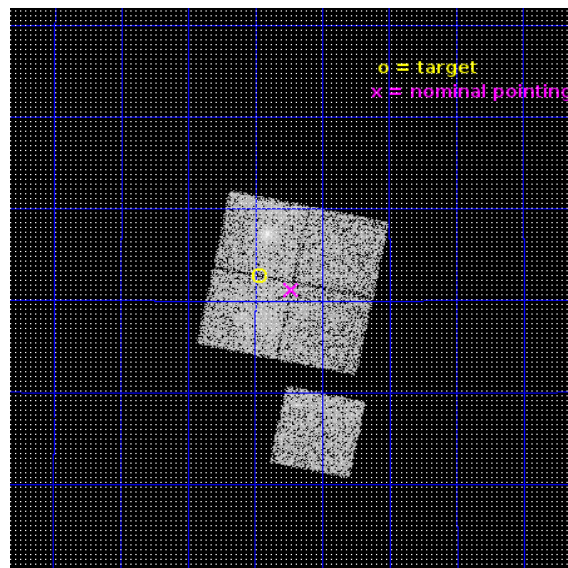
L2 Processing Date : Oct 9 2018

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1 Front

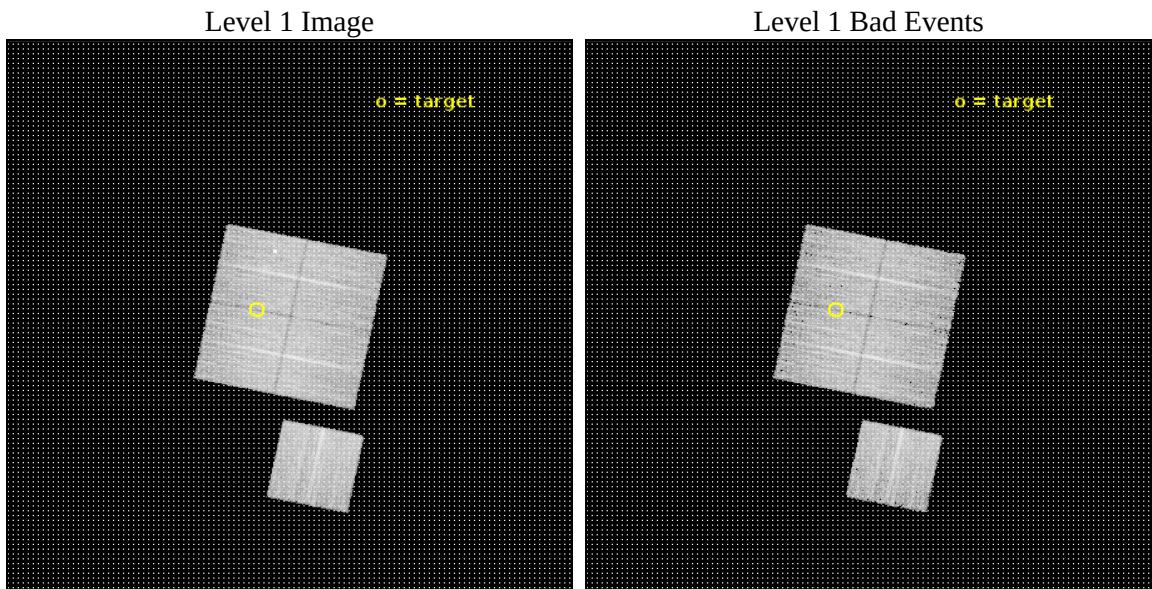
seq_num	801818	Sequence number
obs_id	21880	Observation id
title	Deep Chandra Observations of the Shock Front and Faint Filament in the Pre-Merger Cluster Abell 98	Proposal title
observer	Scott Randall	Principal investigator
object	Abell 98	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.615833	Observer's specified target RA [deg]
dec_targ	20.544667	Observer's specified target Dec [deg]
ra_nom	11.557269138054	Nominal RA [deg]
dec_nom	20.519890079695	Nominal Dec [deg]
roll_nom	191.66024469259	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10068.800077558	Sum of GTIs [s]
livetime	9937.2437920015	Livetime [s]
ontime0	10068.800077558	Sum of GTIs [s]
ontime1	10068.800077558	Sum of GTIs [s]
ontime2	10068.800077558	Sum of GTIs [s]
ontime3	10068.800077558	Sum of GTIs [s]
ontime6	10065.659027338	Sum of GTIs [s]
l2events	38557	Number of level 2 events



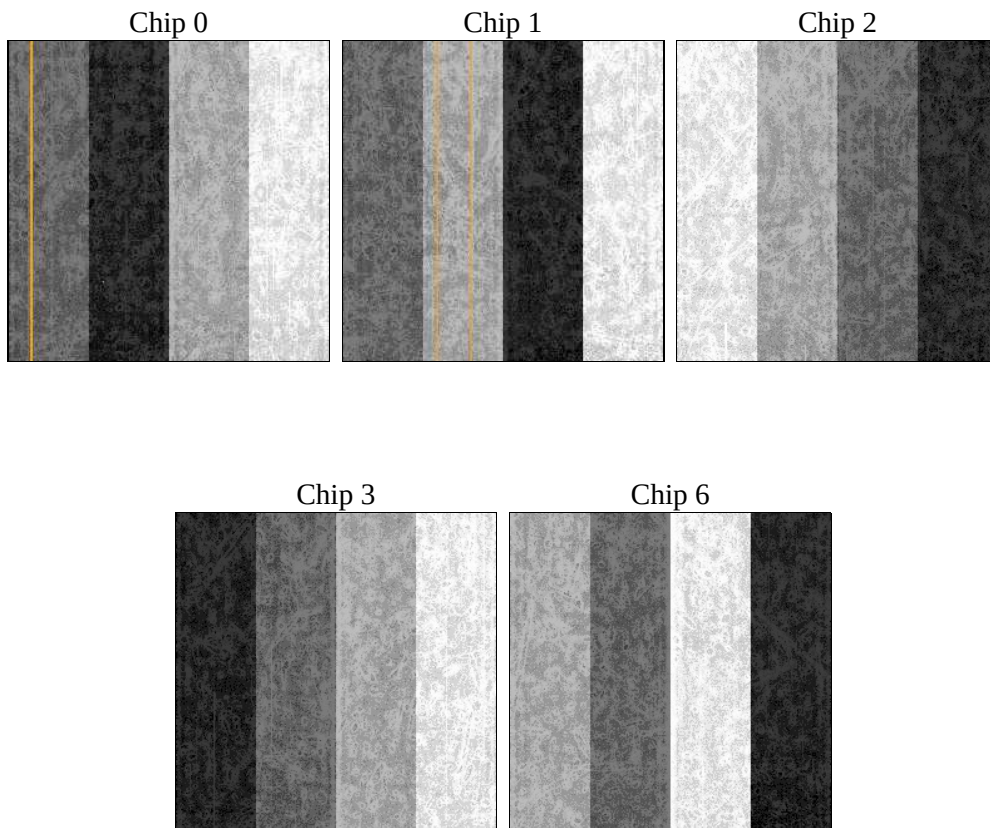
2 OBI

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	10.6.4.1	Processing system revision	ontime	10068.800077558	Sum of GTIs [s]
caldbver	4.8.0	 	ontime0	10068.800077558	Sum of GTIs [s]
date	2018-10-09T14:58:27	Date and time of file creation	ontime1	10068.800077558	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10068.800077558	Sum of GTIs [s]
			ontime3	10068.800077558	Sum of GTIs [s]
			ontime6	10065.659027338	Sum of GTIs [s]
			l1events	368481	Number of level 1 events

2.1.4 Events

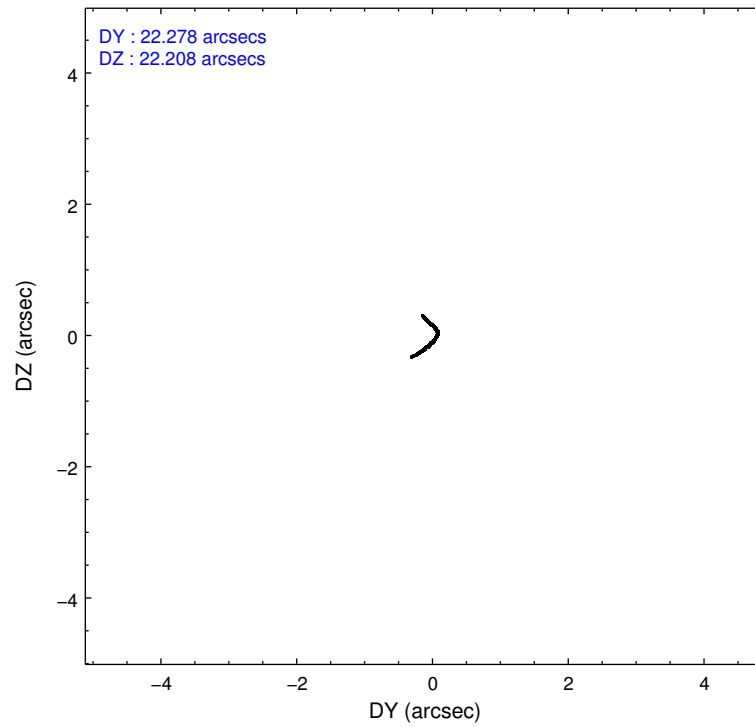
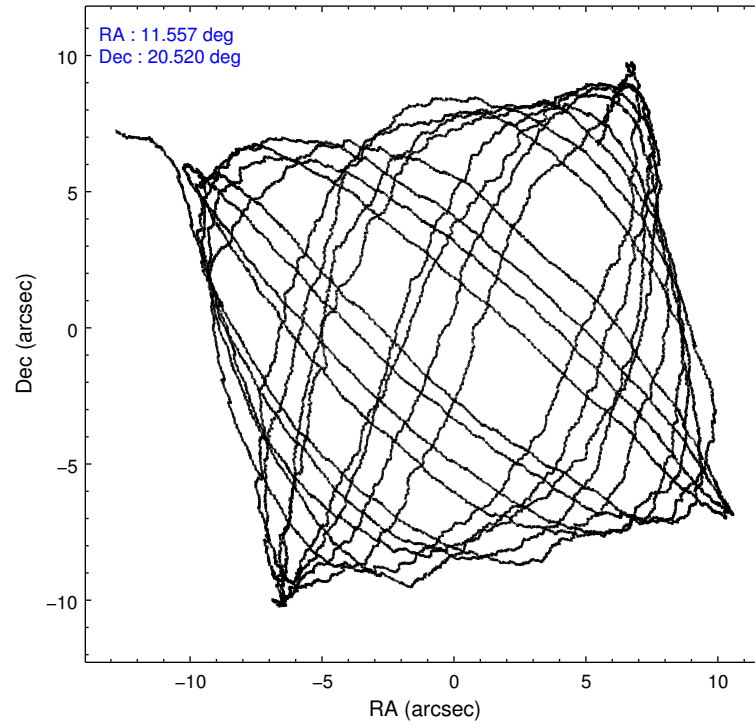
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	67860	73533	74496	74939	77653
rejected events	59410	61877	66079	65699	69120
rejected %	87%	84%	88%	87%	89%

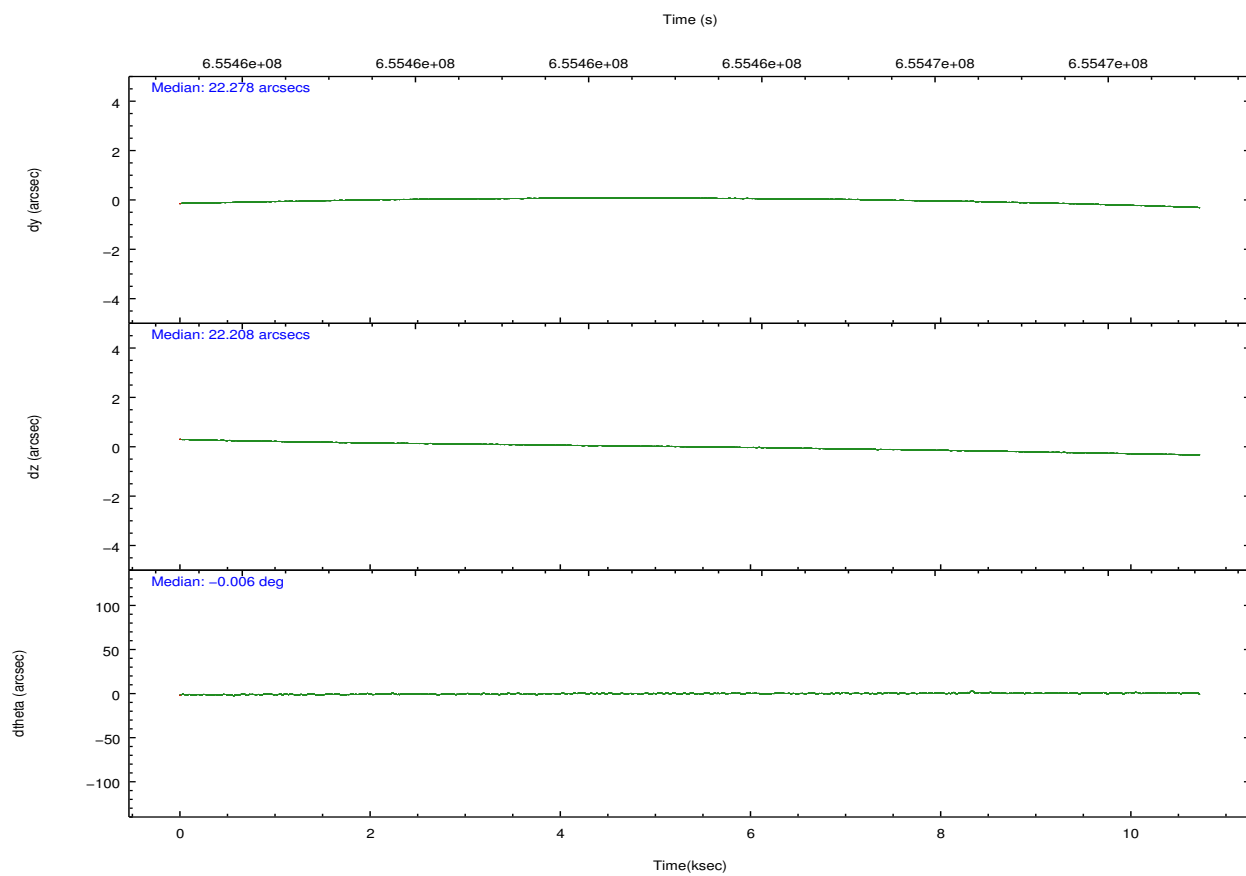
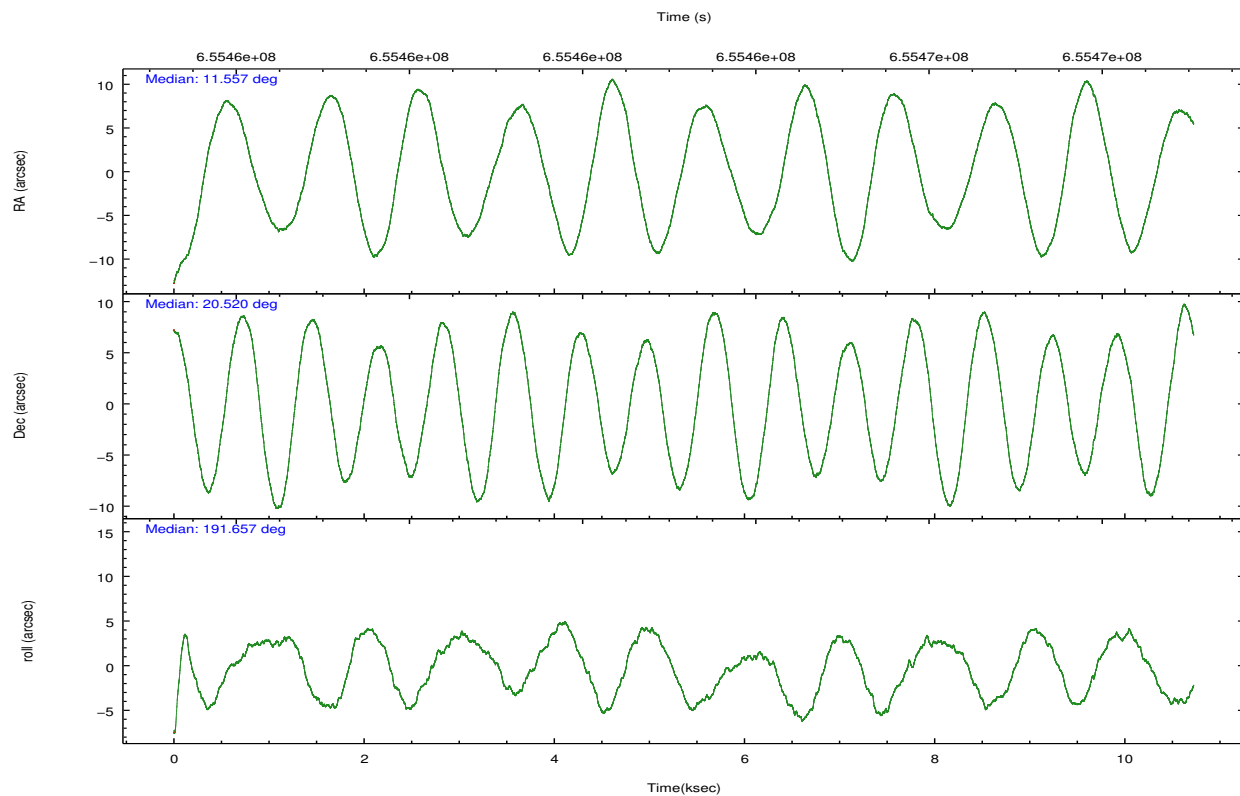
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2870	5290	3081	3830	2860
	4%	7%	4%	5%	3%
grade 1 events	48	33	40	45	32
	0%	0%	0%	0%	0%
grade 2 events	2132	2496	2107	1892	2012
	3%	3%	2%	2%	2%
grade 3 events	863	904	801	897	742
	1%	1%	1%	1%	0%
grade 4 events	801	898	801	918	810
	1%	1%	1%	1%	1%
grade 5 events	3265	3370	3060	3609	3455
	4%	4%	4%	4%	4%
grade 6 events	1789	2079	1632	1709	2115
	2%	2%	2%	2%	2%
grade 7 events	56092	58463	62974	62039	65627
	82%	79%	84%	82%	84%

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	11.579229	11.5572691380535	CCD I2 on	Y	Y
[deg] Pointing Dec	20.538293	20.51989007969522	CCD I3 on	Y	Y
[deg] Pointing Roll	191.443874	191.6602446925903	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)	655458530.184000	655457411.65163	CCD S5 on	N	N
Observation start date	2018-10-09T07:47:41	2018-10-09T07:30:11	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	655468530.184000	655469596.33986	On-chip summing requested	N	N
Observation end date	2018-10-09T10:34:21	2018-10-09T10:53:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



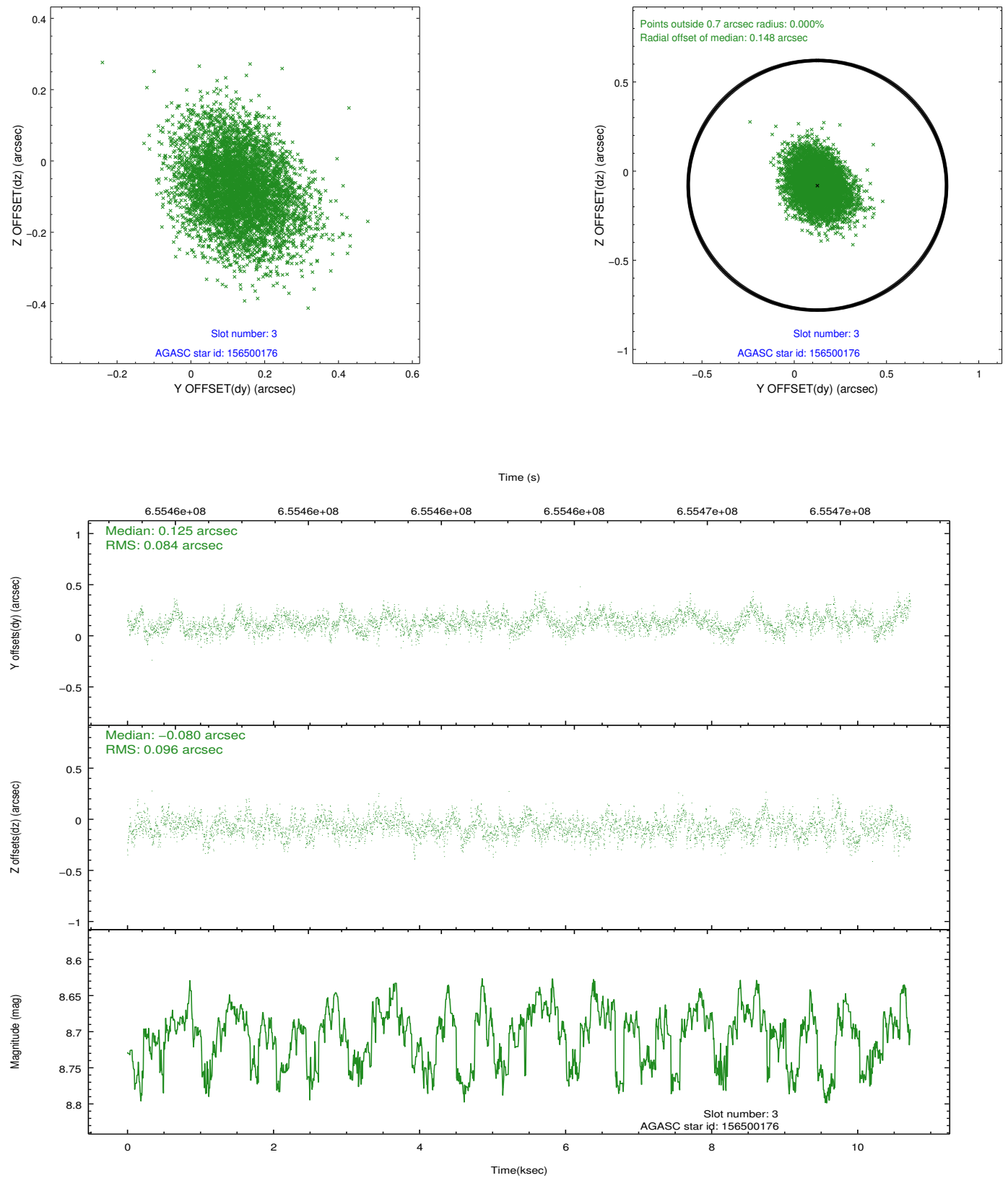


Slot Statistics

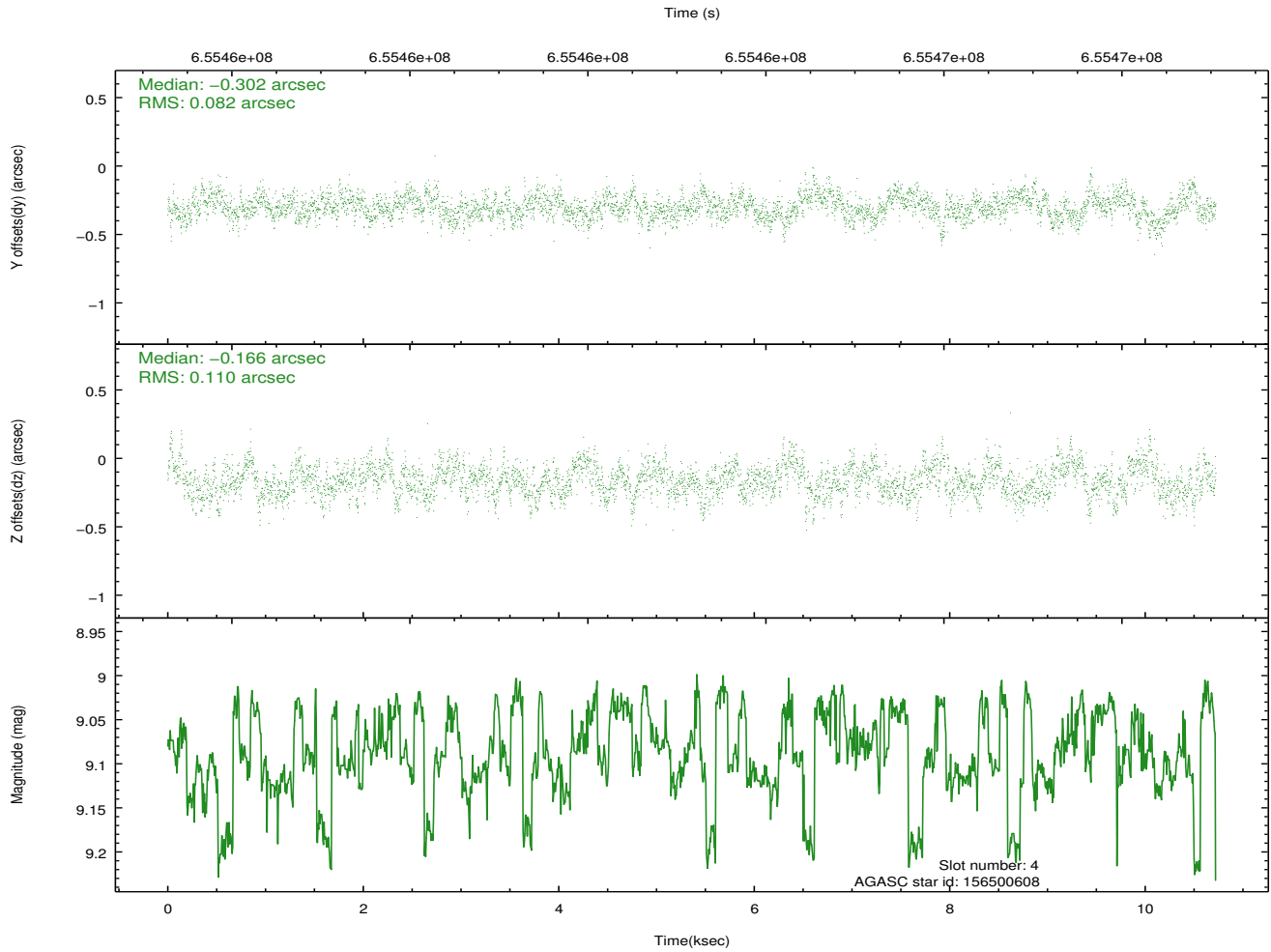
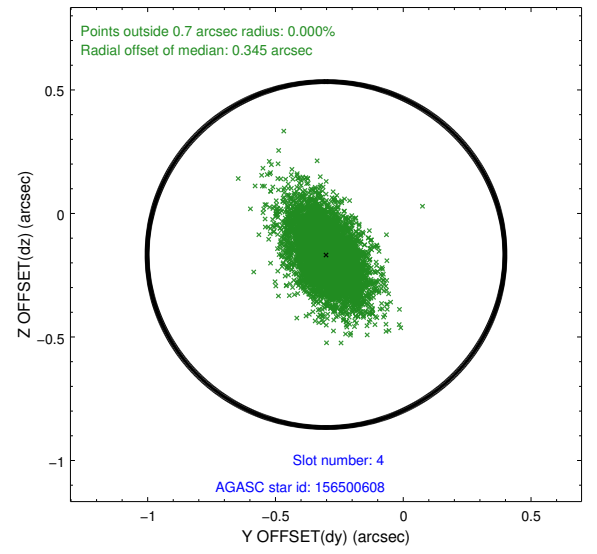
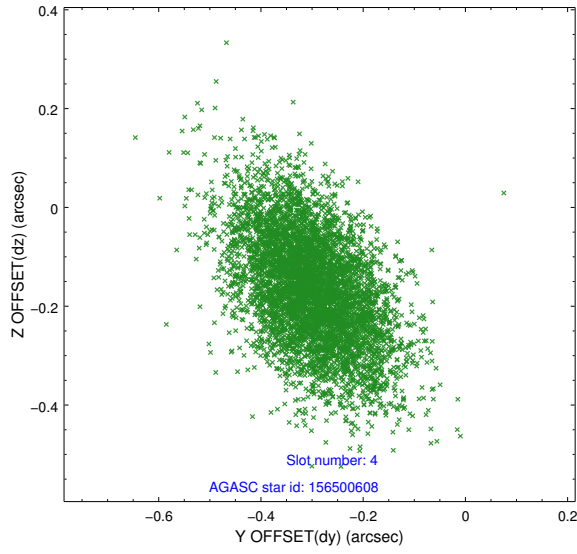
id	status	used	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.19	2616	1.000	0.087	-0.041	0.015	0.023	0.000000	0.000000	917.16 -845
1	FID		ACIS-I-5	7.16	2615	1.000	-0.429	0.028	0.009	0.015	0.000000	0.000000	-1831.34 1051
2	FID		ACIS-I-6	7.19	2616	1.000	0.251	0.083	0.013	0.021	0.000000	0.000000	382.15 1696
3	GUIDE	used	156500176	8.70	5229	1.000	0.125	-0.080	0.134	0.219	11.171670	20.448926	1409.56 43
4	GUIDE	used	156500608	9.09	5228	1.000	-0.302	-0.166	0.141	0.246	11.245383	20.021682	1475.29 1598
5	GUIDE	used	156501376	6.70	5230	1.000	0.352	0.564	0.130	0.211	11.978451	20.925347	-1594.51 -1099
6	GUIDE	used	156504744	9.28	5226	1.000	-0.078	-0.308	0.166	0.267	11.771228	20.412855	-545.40 570
7	GUIDE	used	156509336	7.43	5229	1.000	-0.095	-0.022	0.138	0.229	12.201488	20.214746	-1830.10 1555

2.4 Star Slots

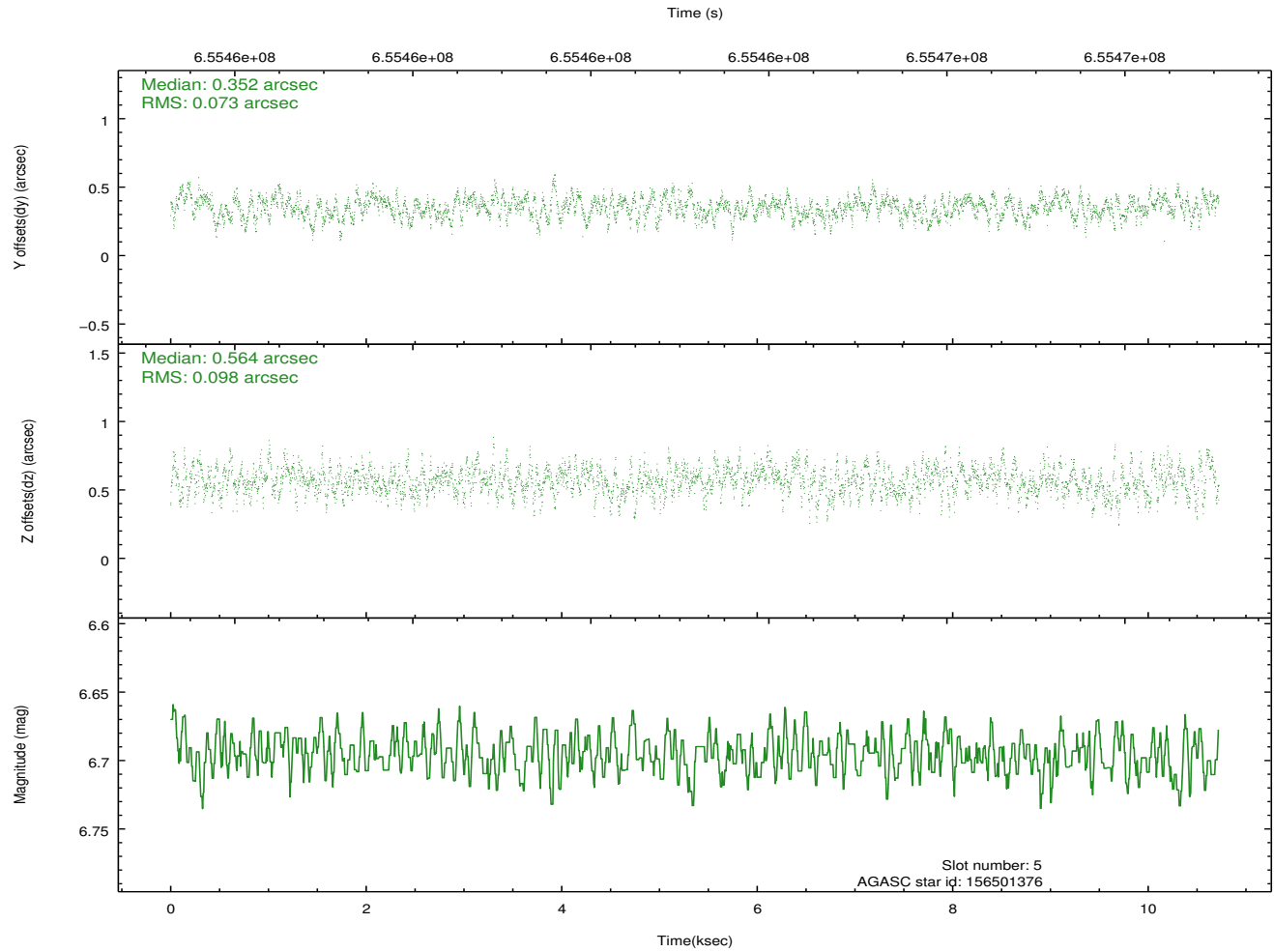
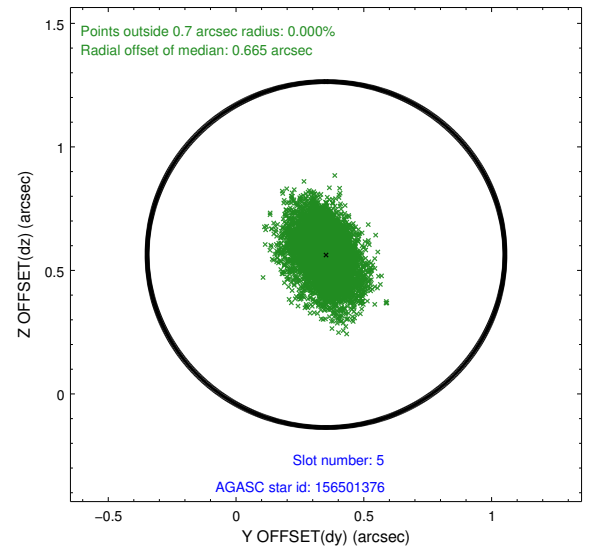
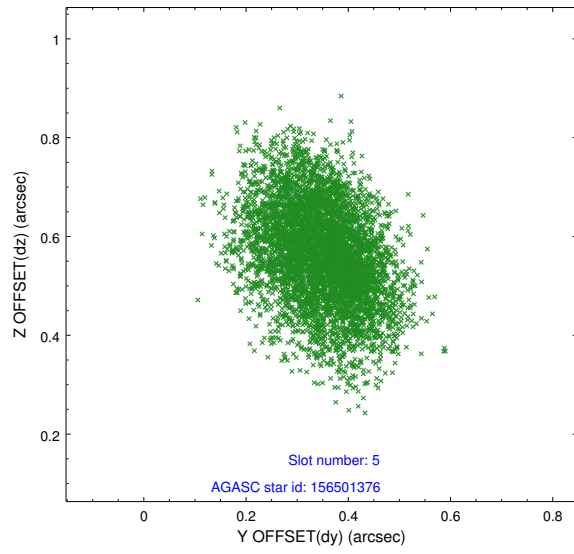
2.4.1 Slot 3



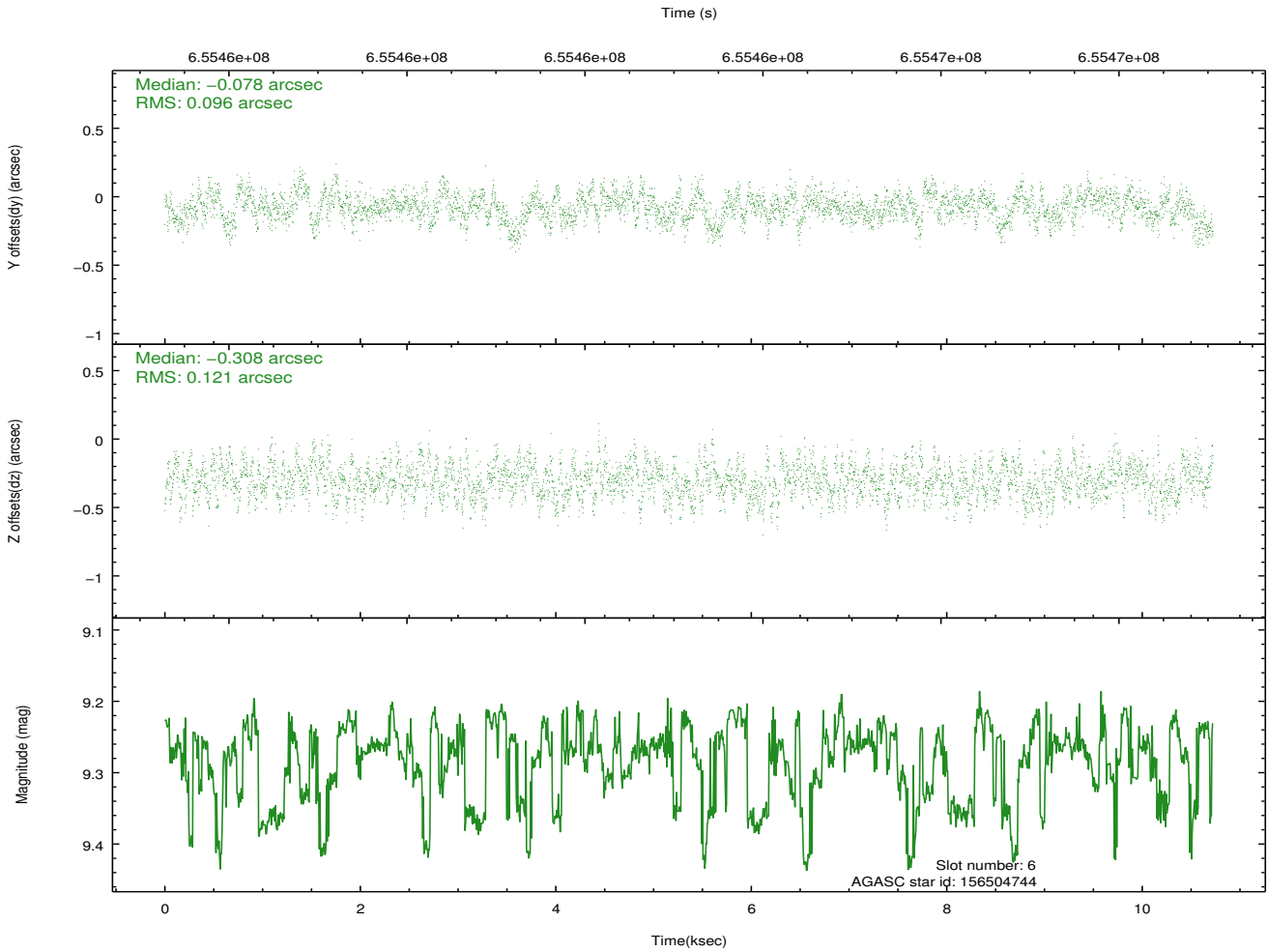
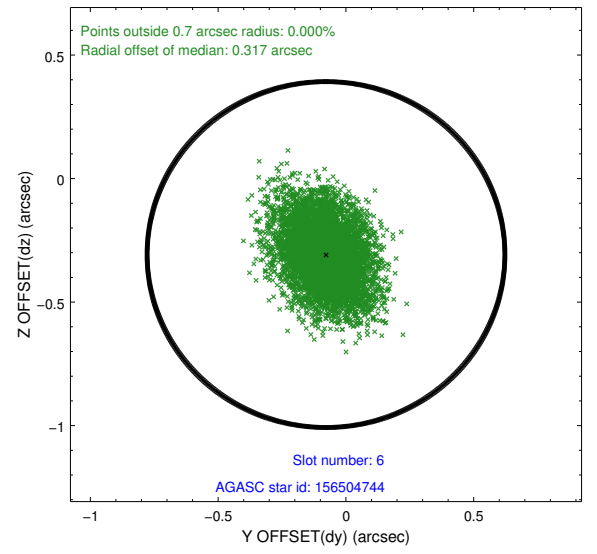
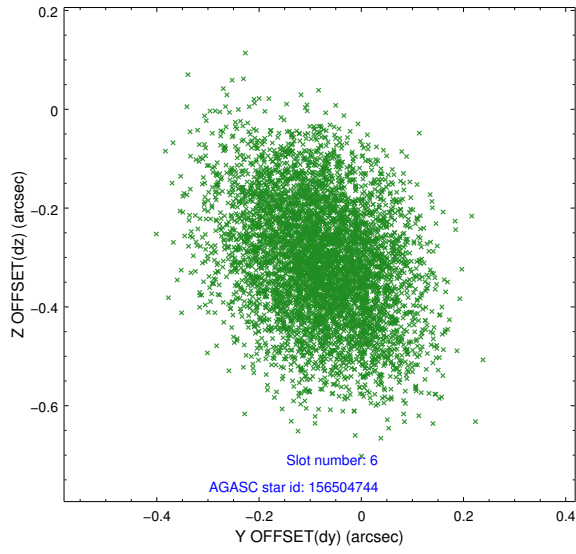
2.4.2 Slot 4



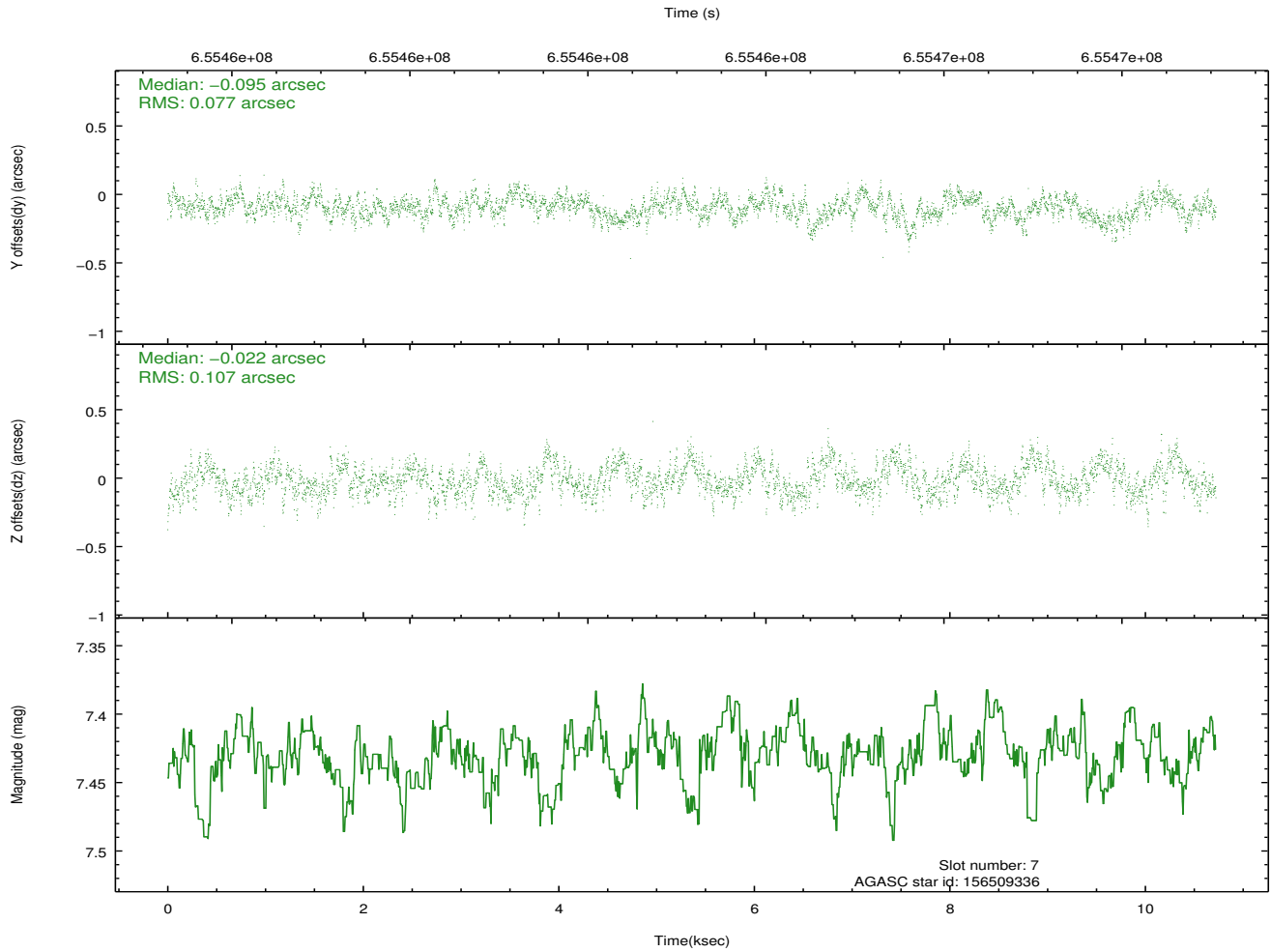
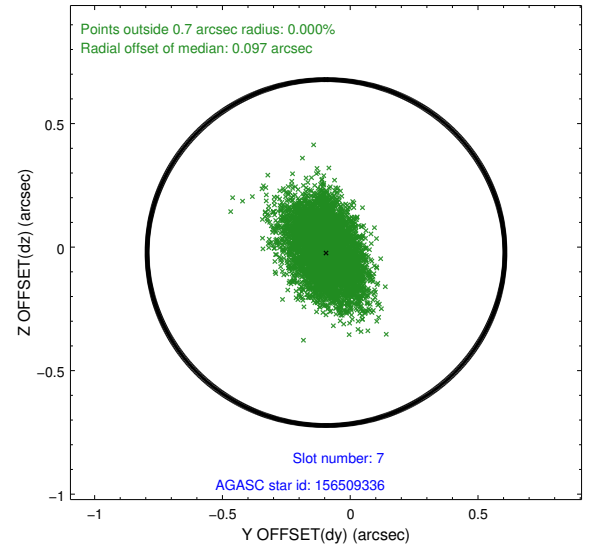
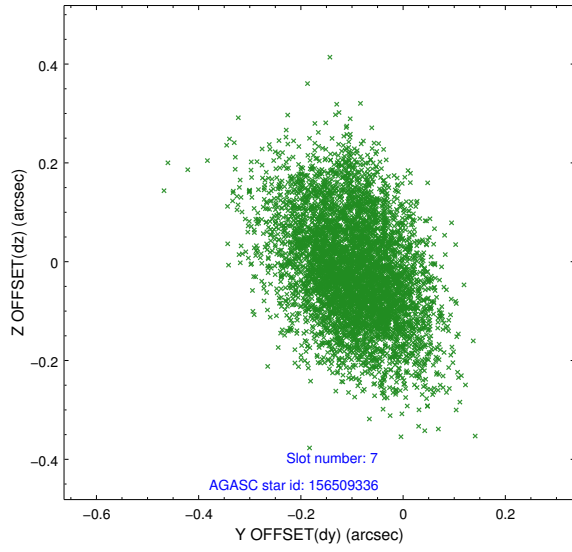
2.4.3 Slot 5



2.4.4 Slot 6

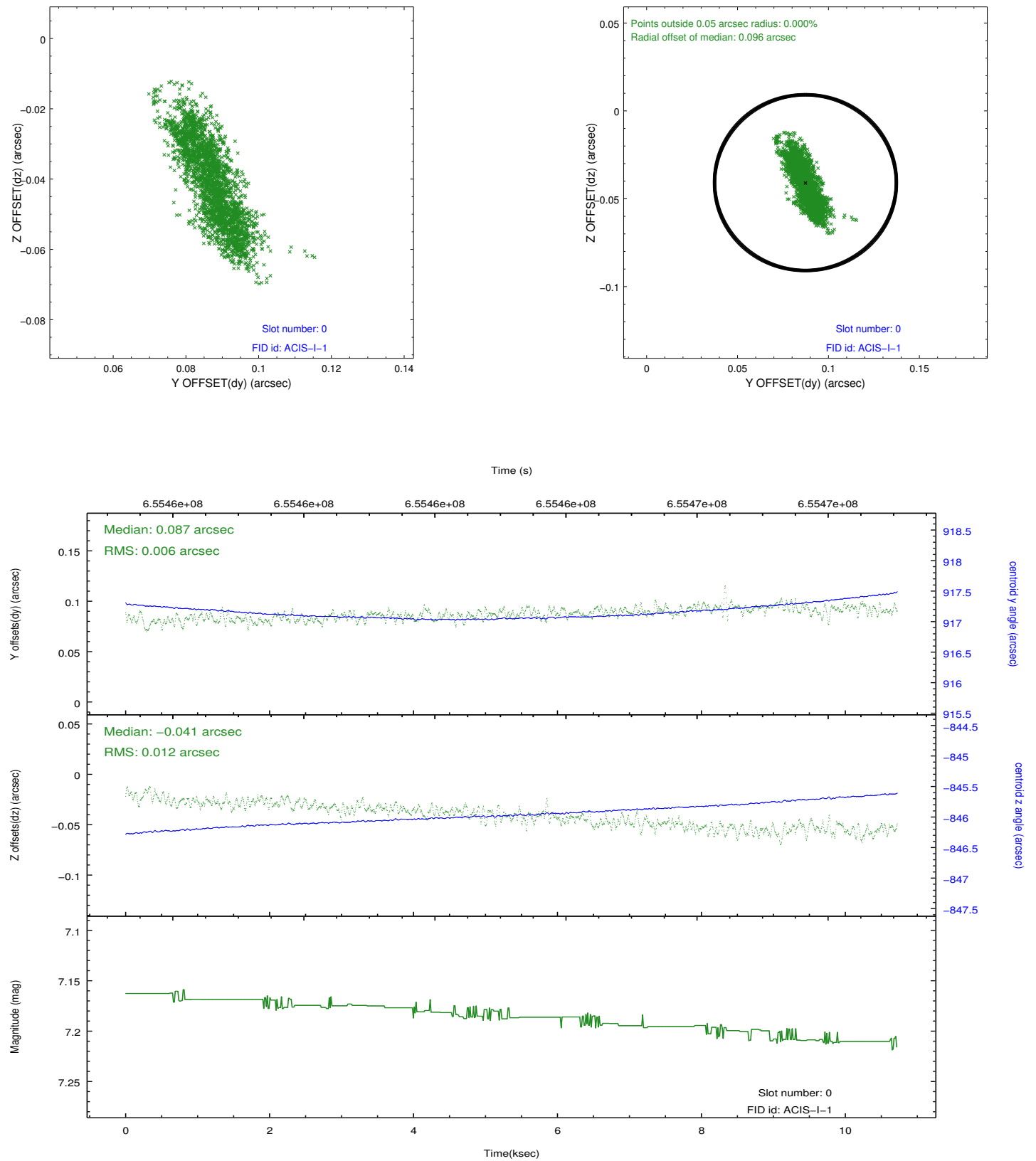


2.4.5 Slot 7

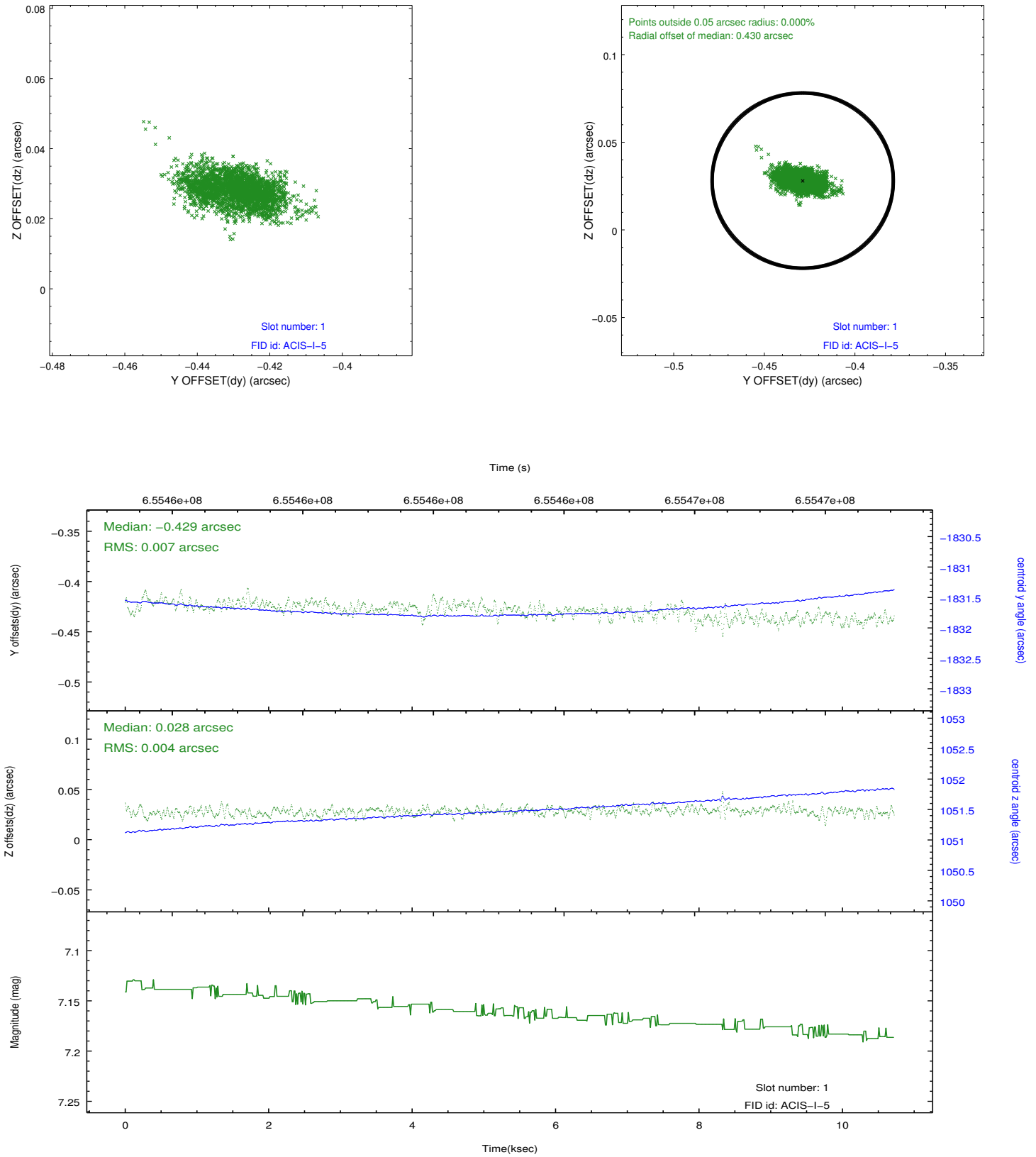


2.5 FID Slots

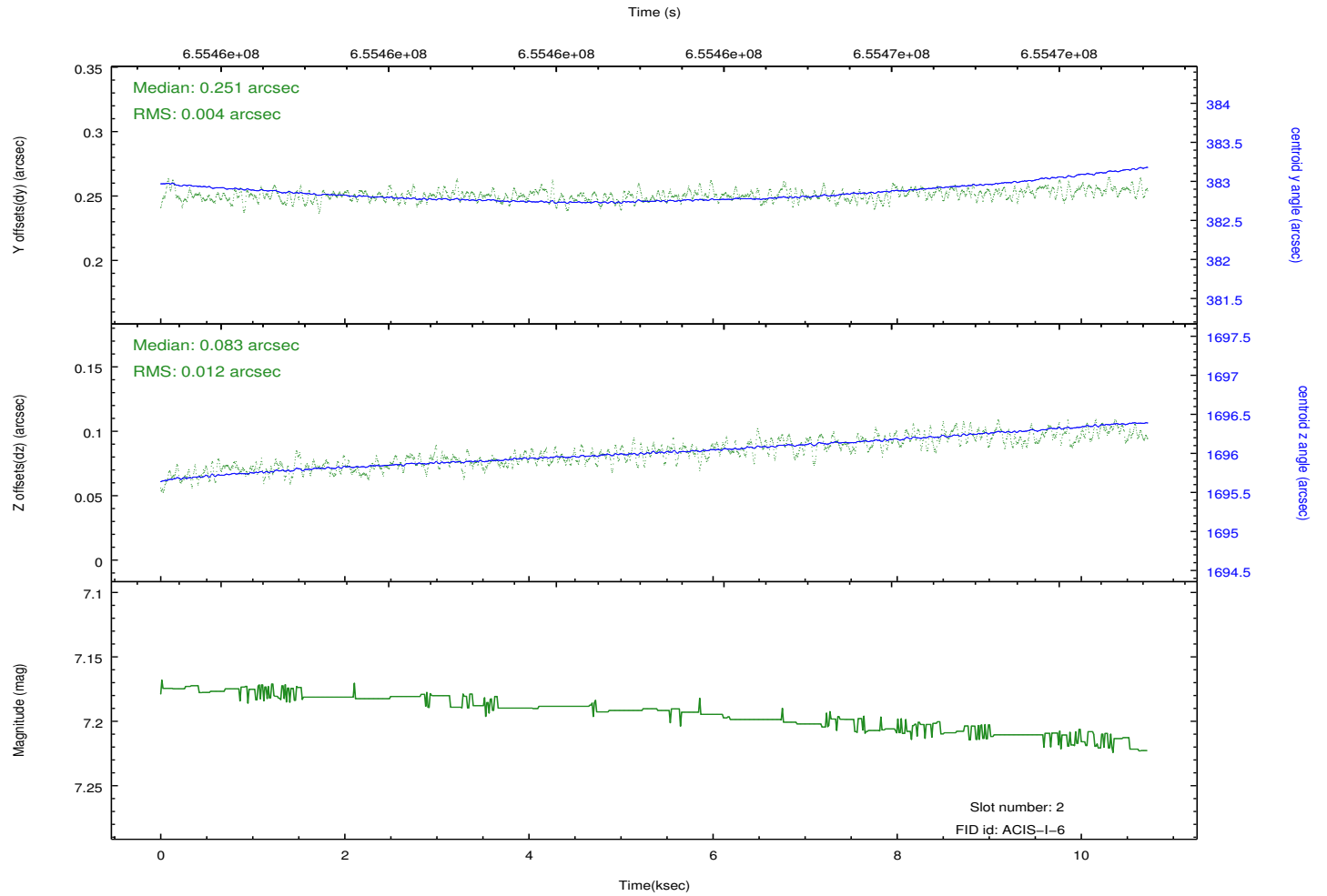
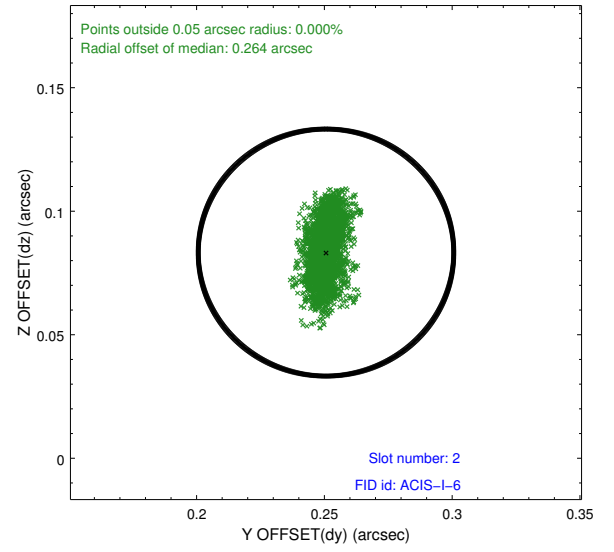
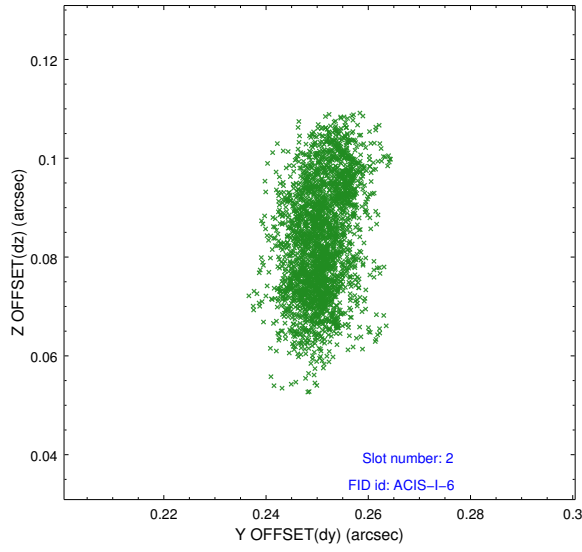
2.5.1 Slot 0



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)	2018.10.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.068800077558

A.2 Comments