

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22231 - L2 Version 1
Chandra X-Ray Center

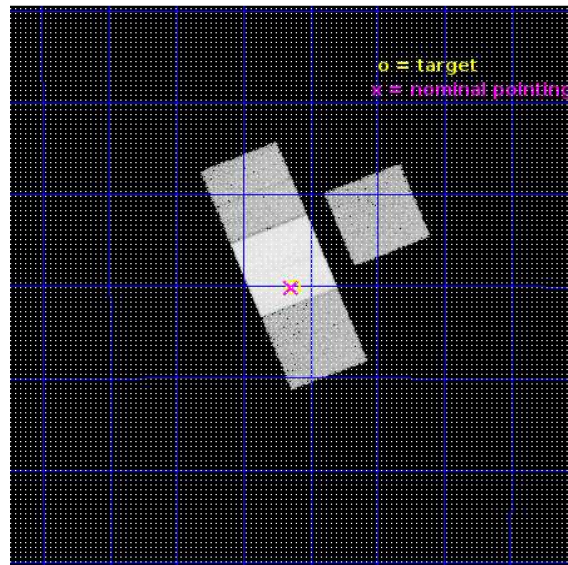
L2 Processing Date : May 31 2019

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1 Front

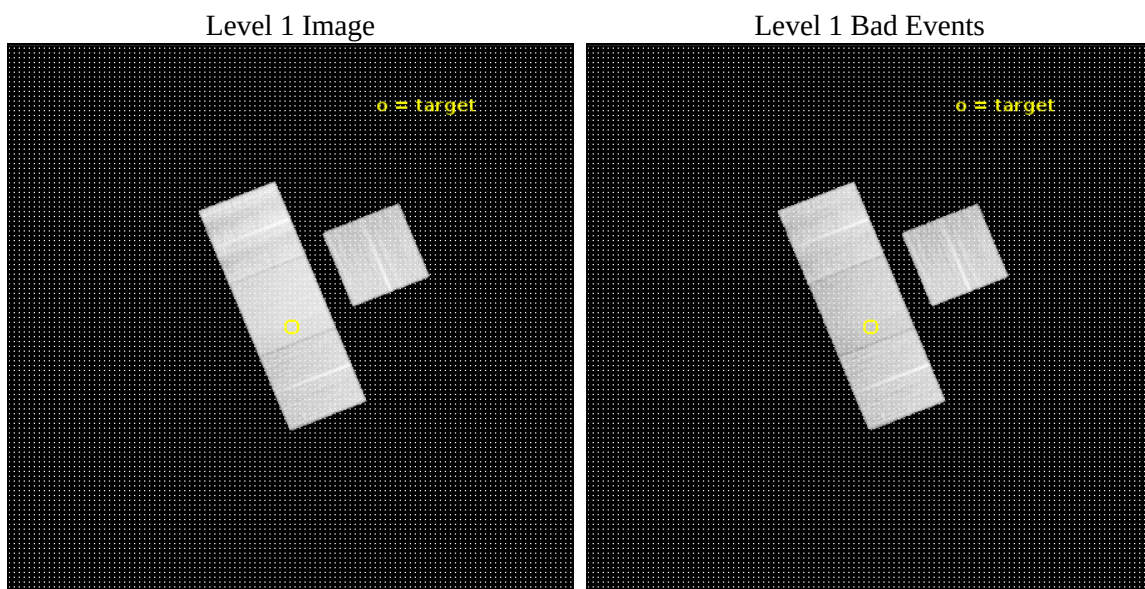
seq_num	703572	Sequence number
obs_id	22231	Observation id
title	Did the first quasars come in pairs? Chandra/ALMA synergistic observations of quasars at $z>6$	Proposal title
observer	Eduardo Banados	Principal investigator
object	P231-20	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	231.657917	Observer's specified target RA [deg]
dec_targ	-20.833972	Observer's specified target Dec [deg]
ra_nom	231.66063448969	Nominal RA [deg]
dec_nom	-20.836156067413	Nominal Dec [deg]
roll_nom	248.1575886355	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30066.299890399	Sum of GTIs [s]
livetime	29673.461547843	Livetime [s]
ontime3	30066.217810392	Sum of GTIs [s]
ontime6	30066.258850455	Sum of GTIs [s]
ontime7	30066.299890399	Sum of GTIs [s]
ontime8	30063.035710096	Sum of GTIs [s]
l2events	196578	Number of level 2 events



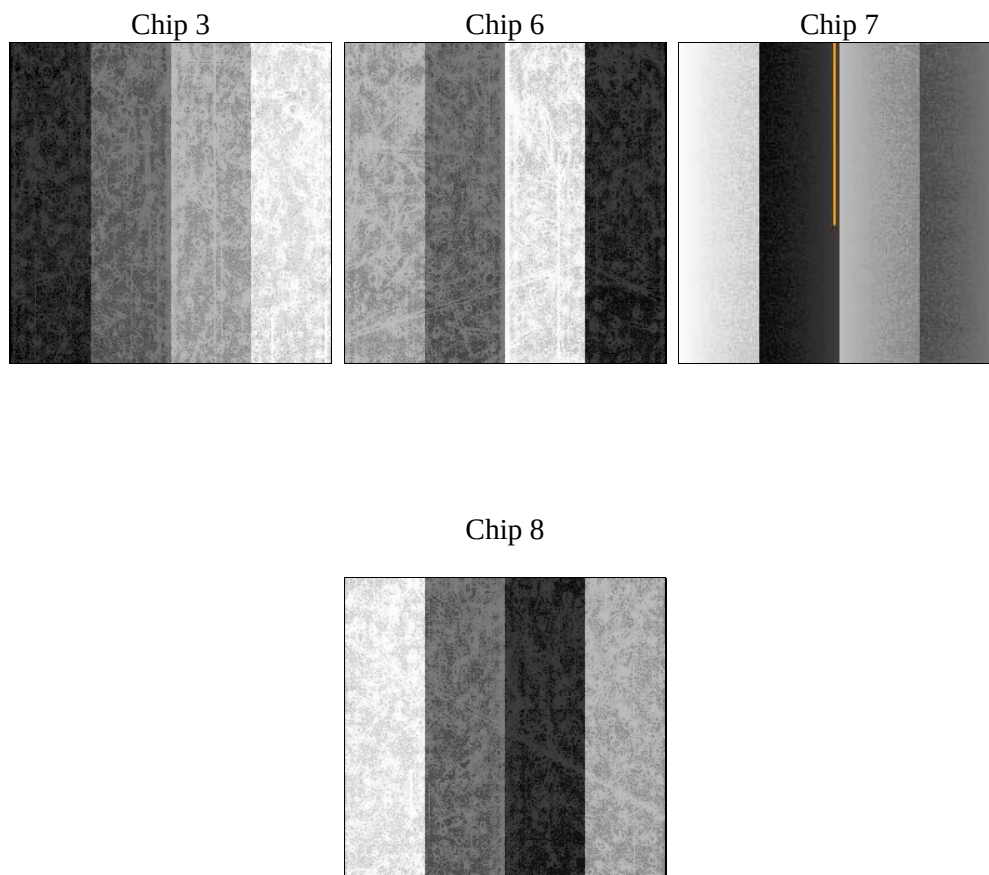
2 OBI

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	10.7.1	Processing system revision	ontime	30066.299890399	Sum of GTIs [s]
caldbver	4.8.3	 	ontime3	30066.217810392	Sum of GTIs [s]
date	2019-05-31T18:08:00	Date and time of file creation	ontime6	30066.258850455	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30066.299890399	Sum of GTIs [s]
			ontime8	30063.035710096	Sum of GTIs [s]
			l1events	1034524	Number of level 1 events

2.1.4 Events

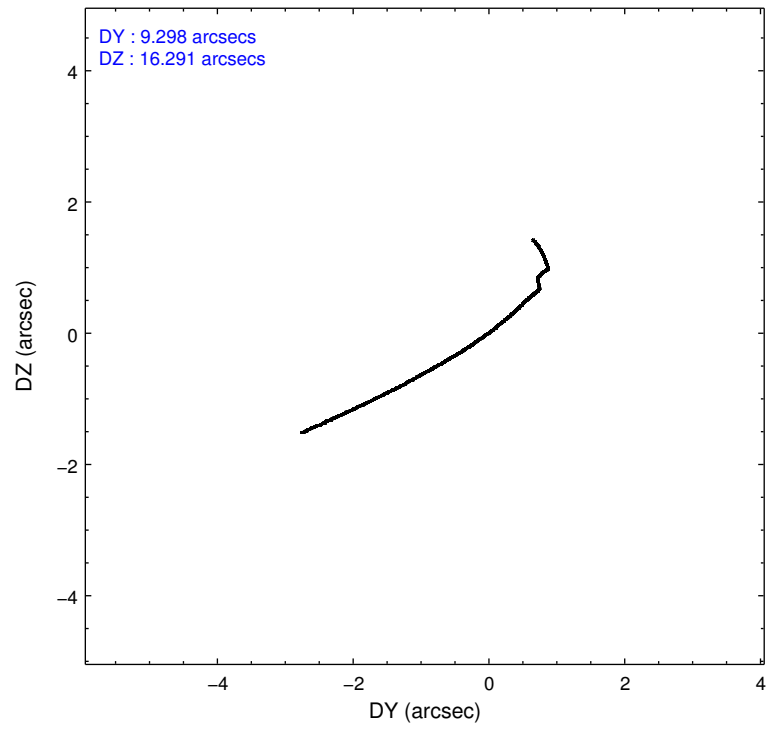
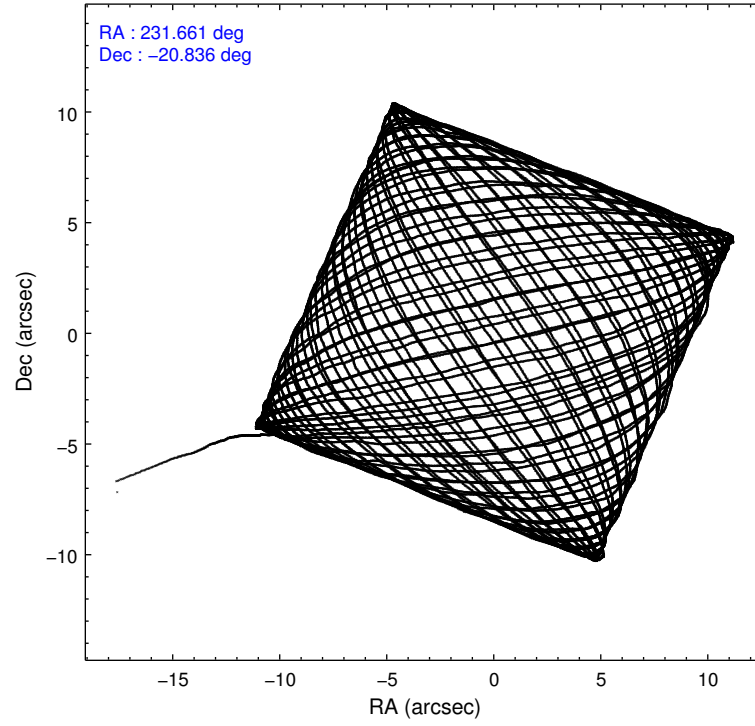
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	216127	228606	295593	294198
rejected events	192396	202400	166906	211446
rejected %	89%	88%	56%	71%

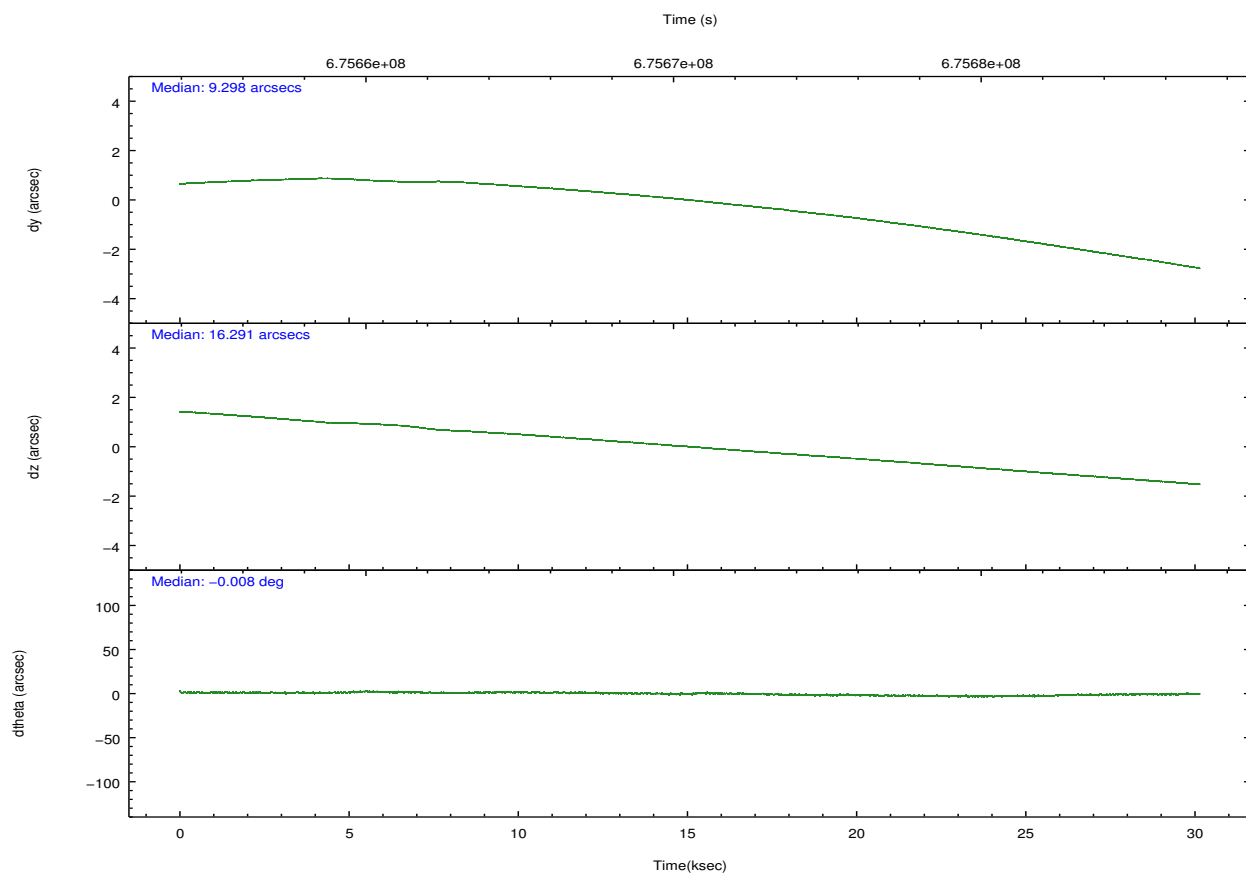
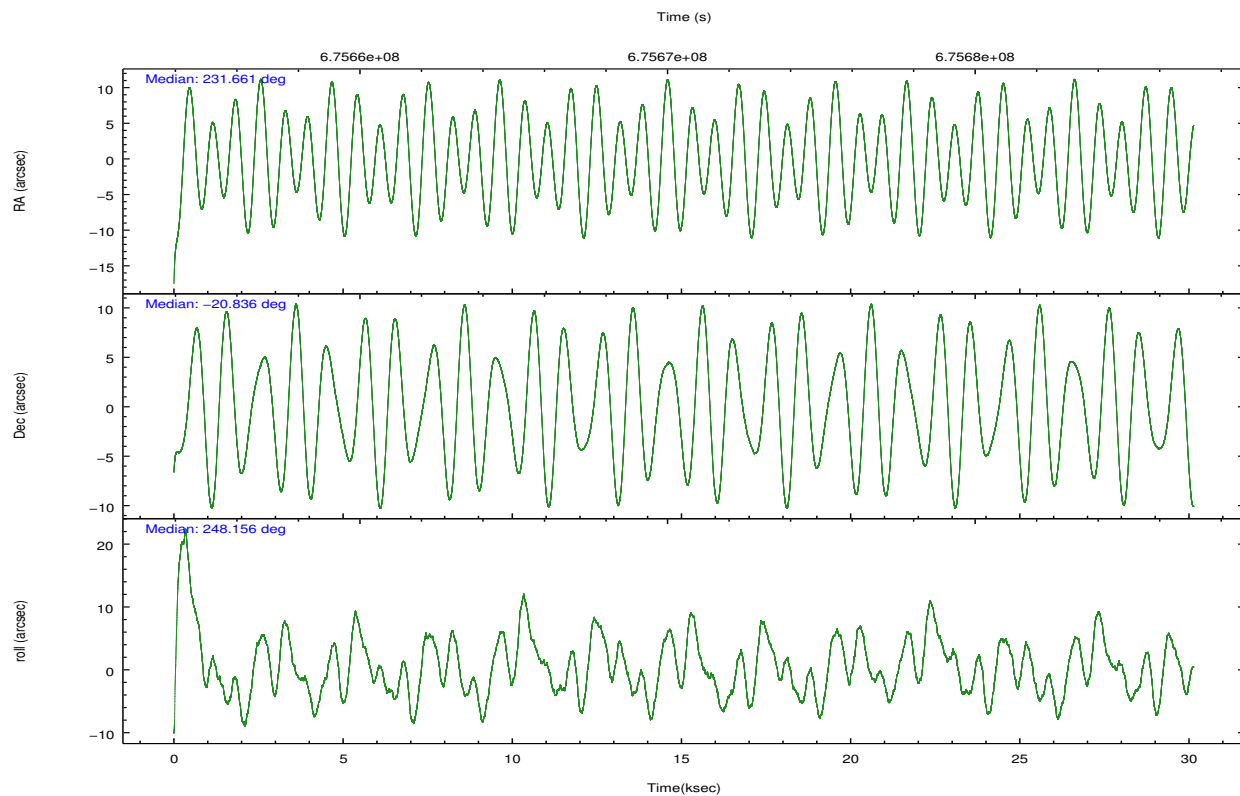
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8384	8706	10727	22567
	3%	3%	3%	7%
grade 1 events	150	250	448	247
	0%	0%	0%	0%
grade 2 events	5171	6203	27905	20661
	2%	2%	9%	7%
grade 3 events	2619	2606	10120	8626
	1%	1%	3%	2%
grade 4 events	2456	2555	10079	8093
	1%	1%	3%	2%
grade 5 events	10674	11020	29363	16523
	4%	4%	9%	5%
grade 6 events	5108	6141	69880	22818
	2%	2%	23%	7%
grade 7 events	181565	191125	137071	194663
	84%	83%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	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	231.656093	231.6606344896931	CCD I2 on	O1	N
[deg] Pointing Dec	-20.809032	-20.83615606741265	CCD I3 on	Y	Y
[deg] Pointing Roll	247.999356	248.1575886354993	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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)	675655616.184000	675654320.43771	CCD S5 on	N	N
Observation start date	2019-05-31T02:05:47	2019-05-31T01:45:20	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	675685616.184000	675686676.61465	On-chip summing requested	N	N
Observation end date	2019-05-31T10:25:47	2019-05-31T10:44:36	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



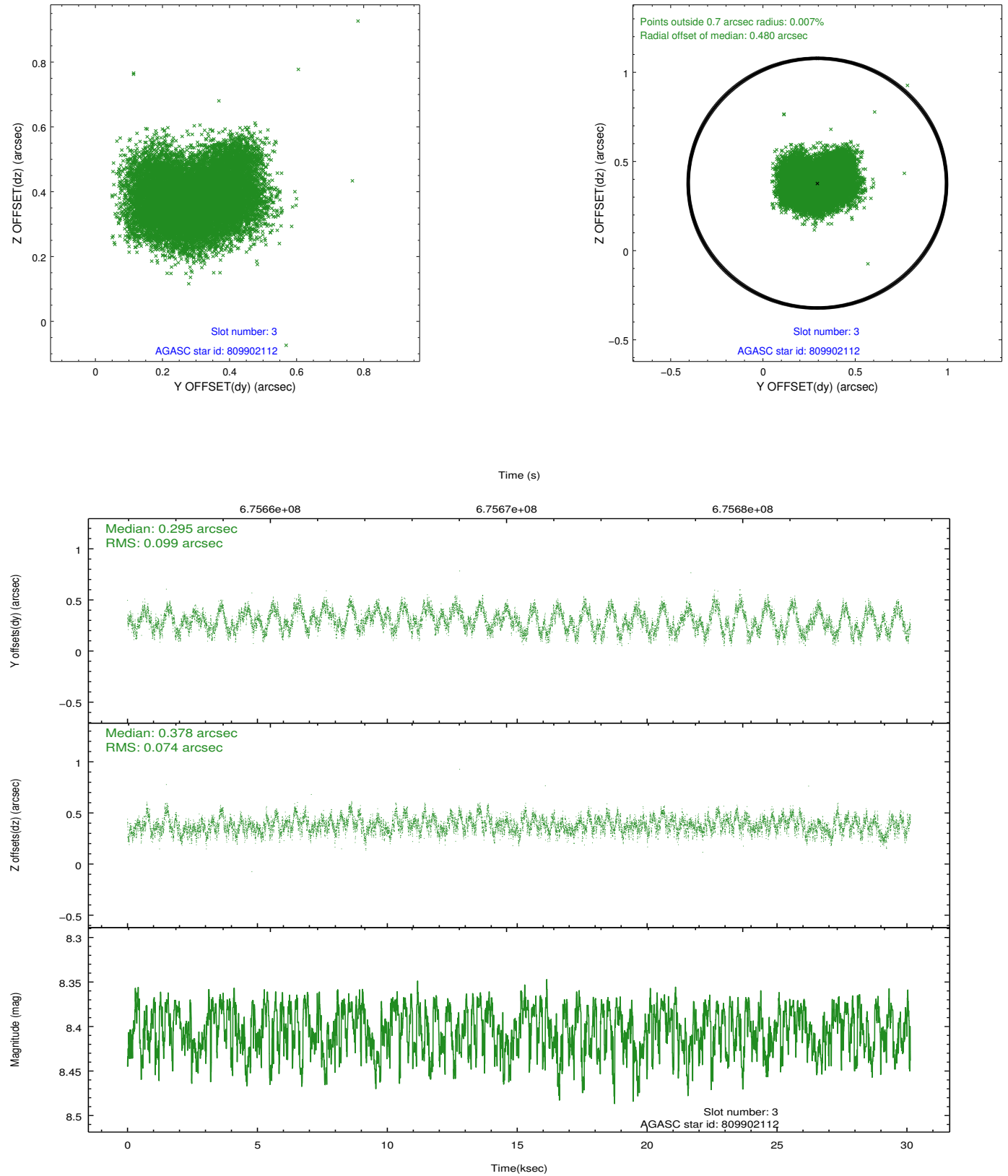


Slot Statistics

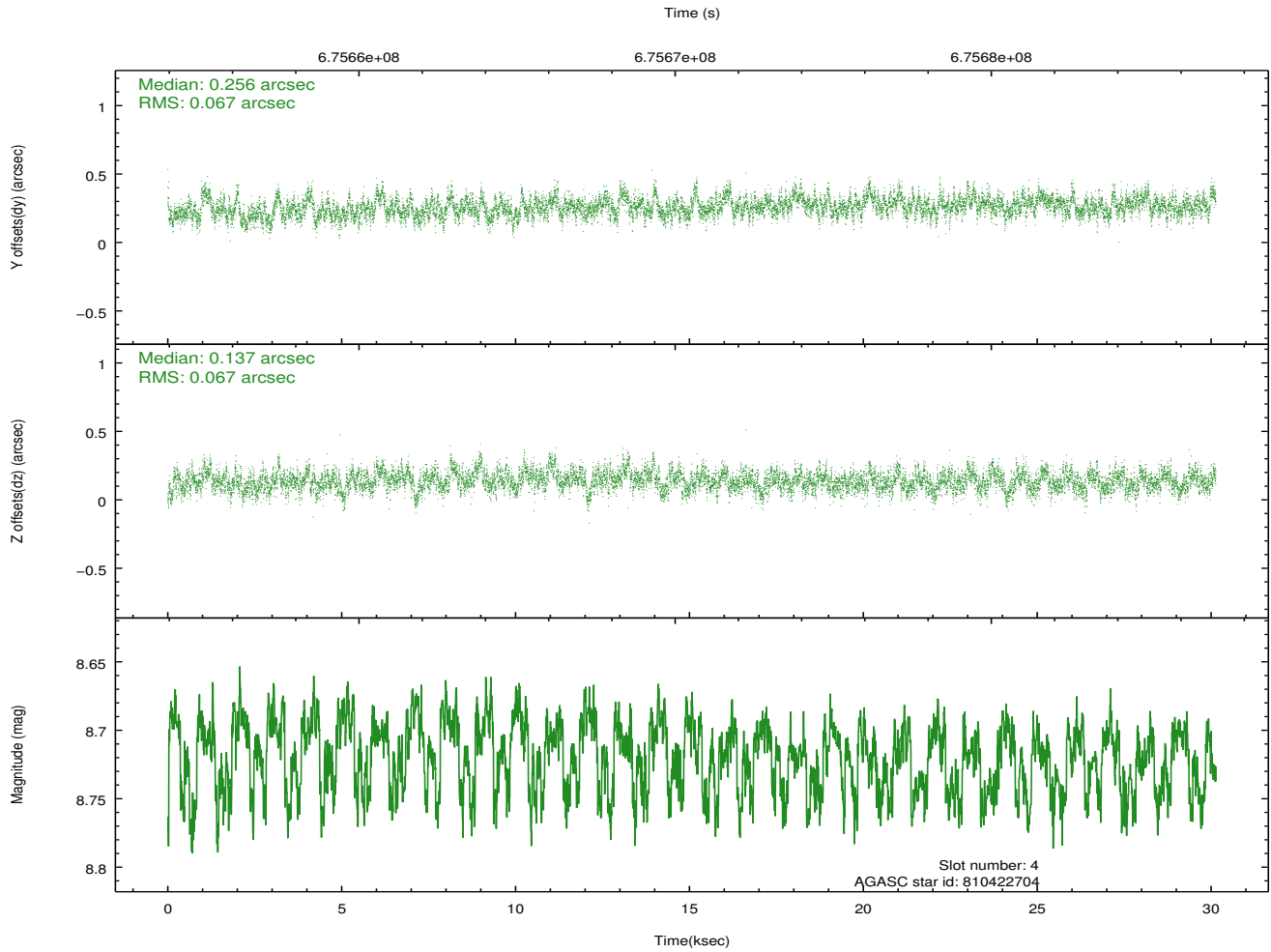
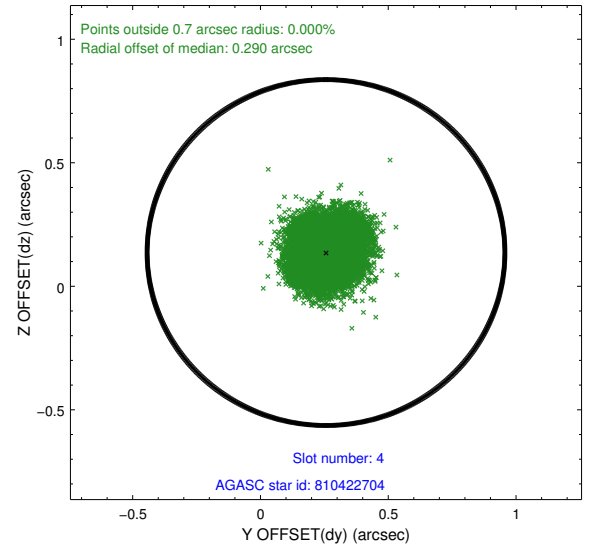
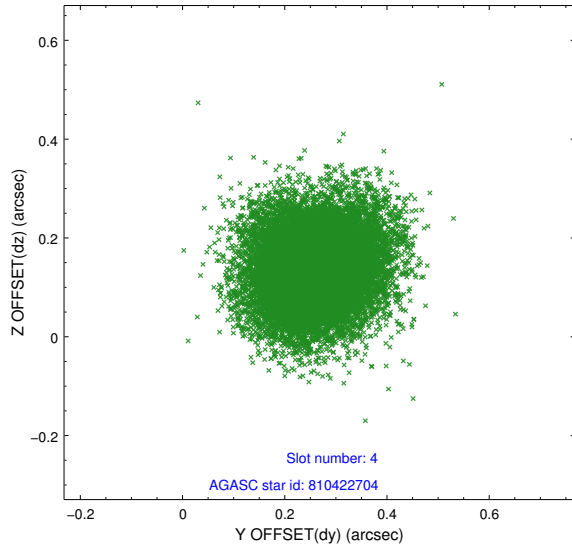
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.04	7351	1.000	0.145	-0.069	0.028	0.058	0.000000	0.000000	934.48	-1733
1	FID		ACIS-S-5	7.04	7351	1.000	-0.401	0.043	0.021	0.100	0.000000	0.000000	-1815.08	164
2	FID		ACIS-S-6	7.20	7350	1.000	0.234	0.042	0.030	0.052	0.000000	0.000000	399.94	808
3	GUIDE	used	809902112	8.40	14695	1.000	0.295	0.378	0.137	0.206	231.645523	-20.497925	-1024.27	-452
4	GUIDE	used	810422704	8.72	14694	1.000	0.256	0.137	0.101	0.165	231.775902	-20.741055	-375.95	282
5	GUIDE	used	810423632	6.78	14702	1.000	-0.009	-0.169	0.085	0.144	231.522346	-21.380235	2074.83	353
6	GUIDE	used	812128128	7.00	14701	1.000	-0.346	-0.262	0.113	0.187	232.077647	-21.209568	808.37	1852
7	GUIDE	used	812134616	9.66	14684	1.000	-0.196	-0.084	0.222	0.353	232.079719	-21.377780	1368.09	2084

2.4 Star Slots

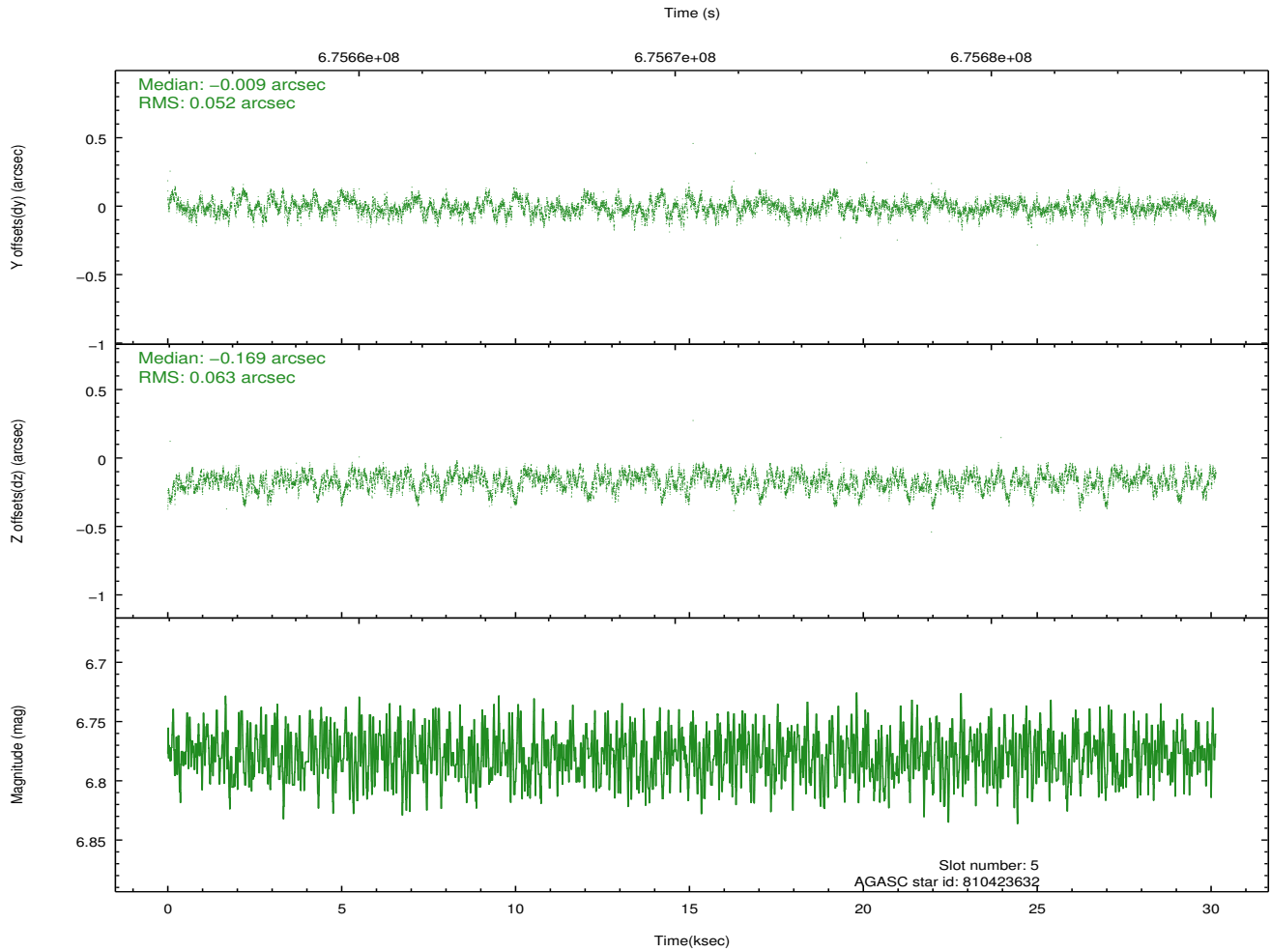
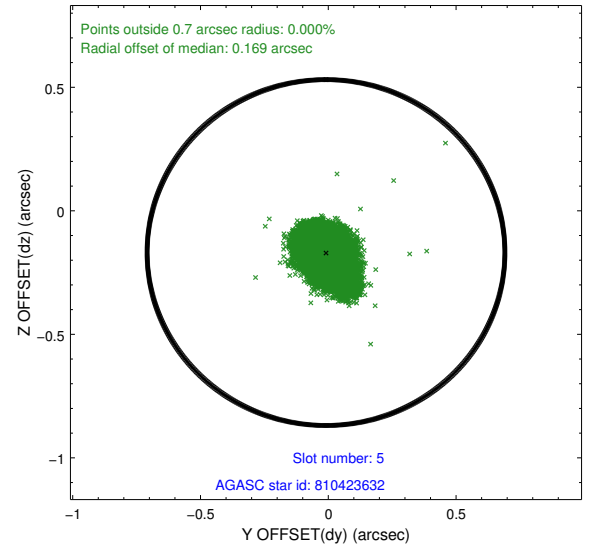
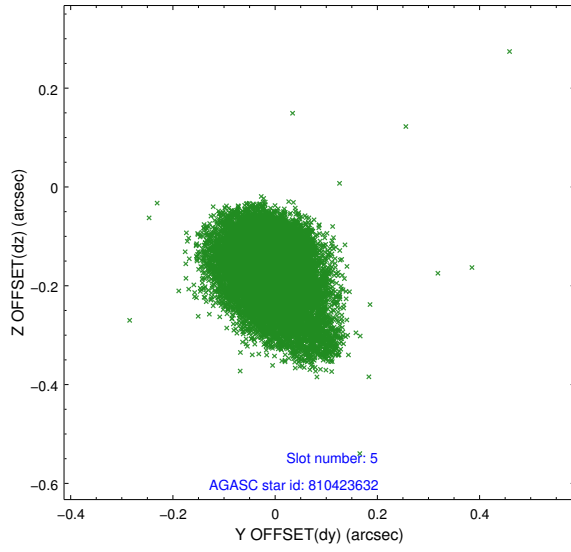
2.4.1 Slot 3



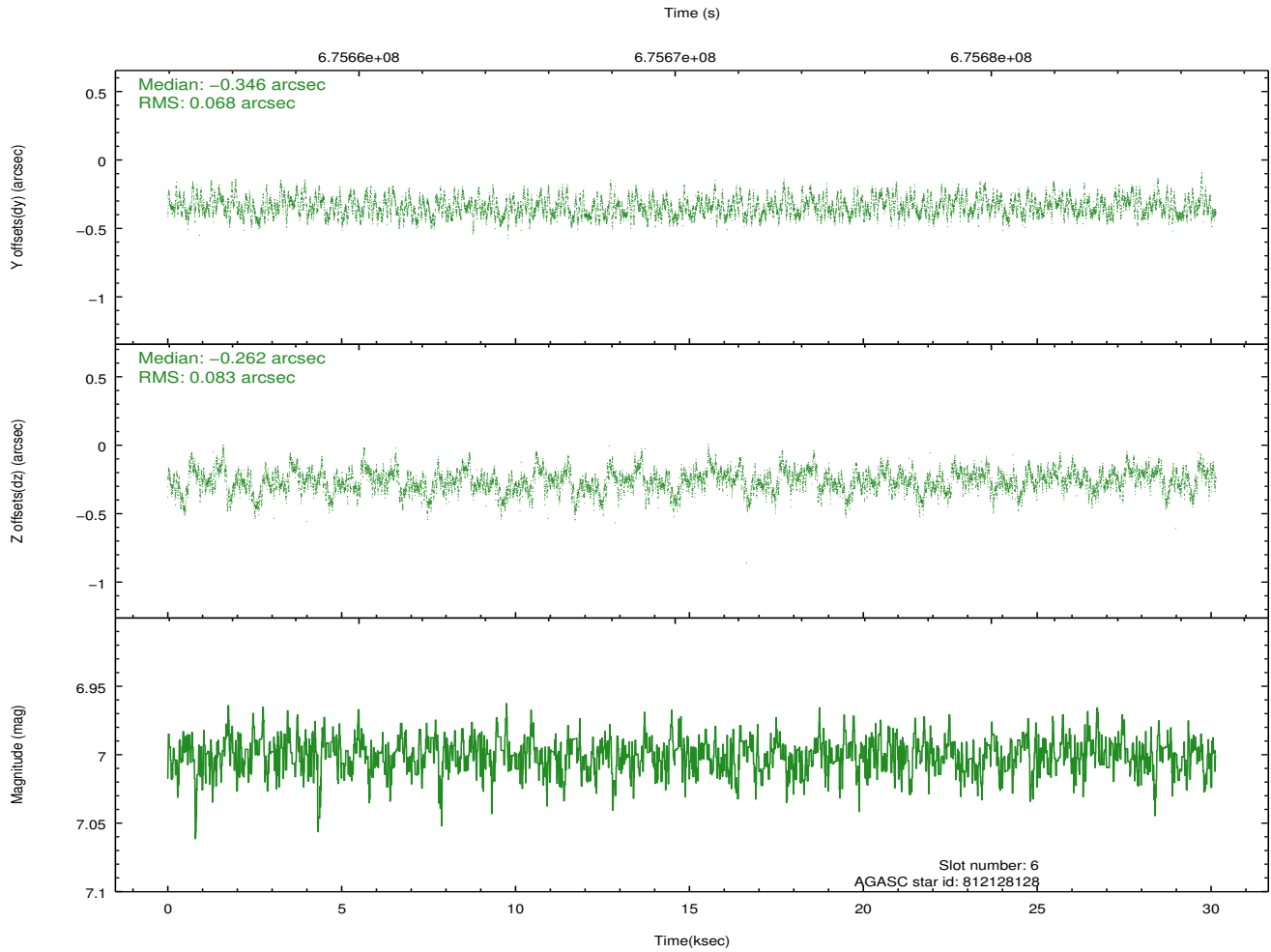
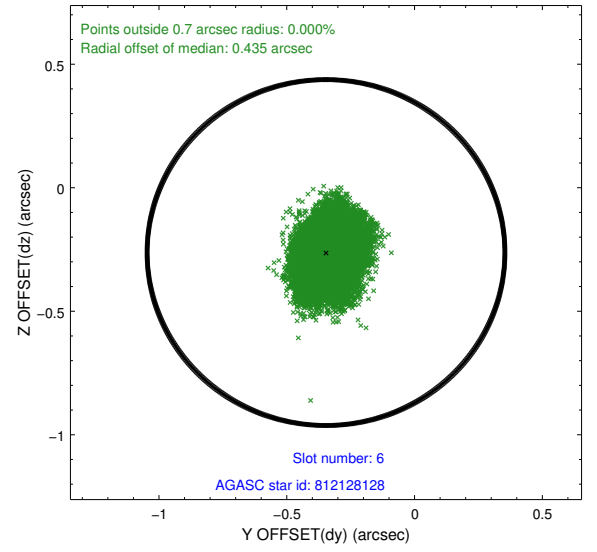
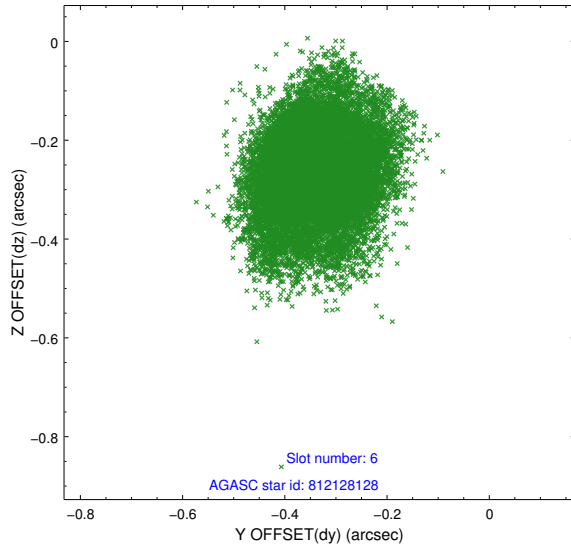
2.4.2 Slot 4



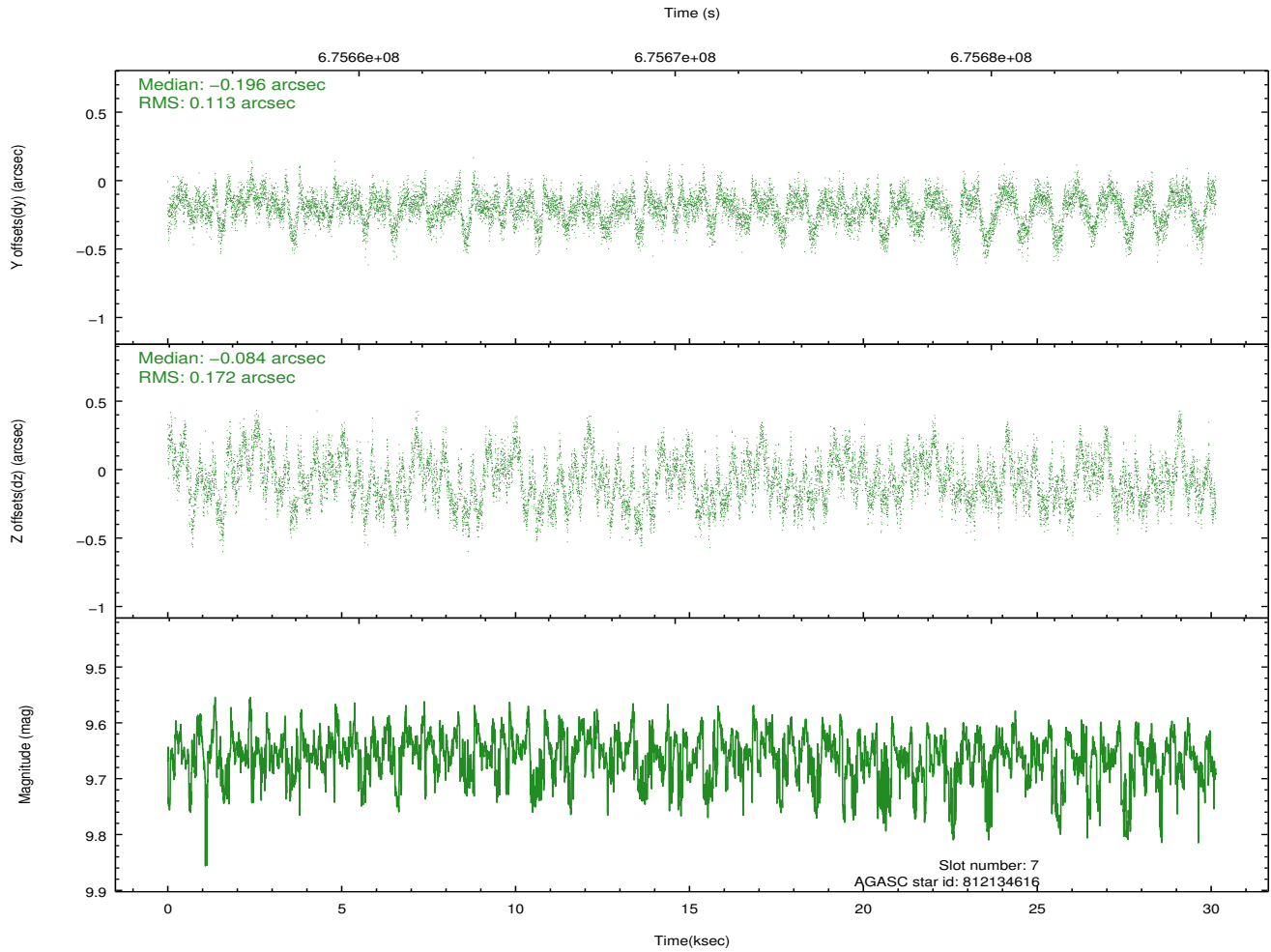
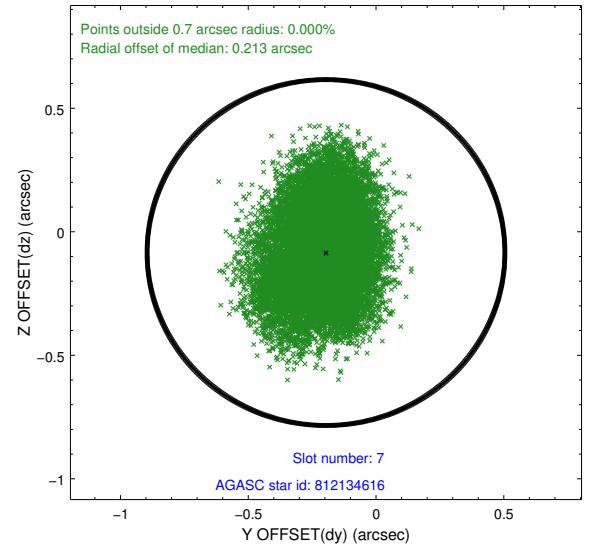
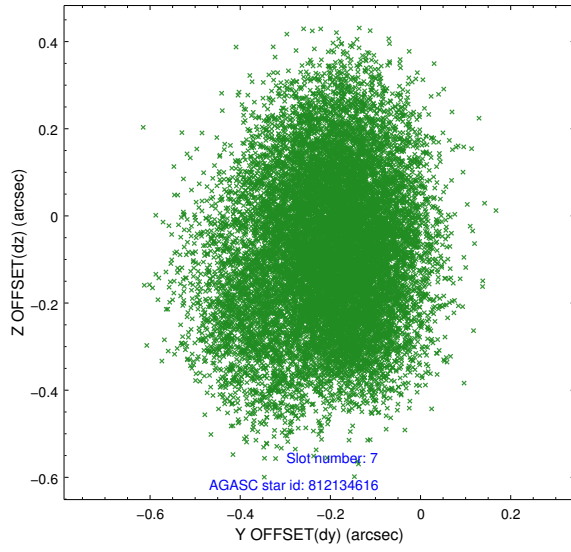
2.4.3 Slot 5



2.4.4 Slot 6

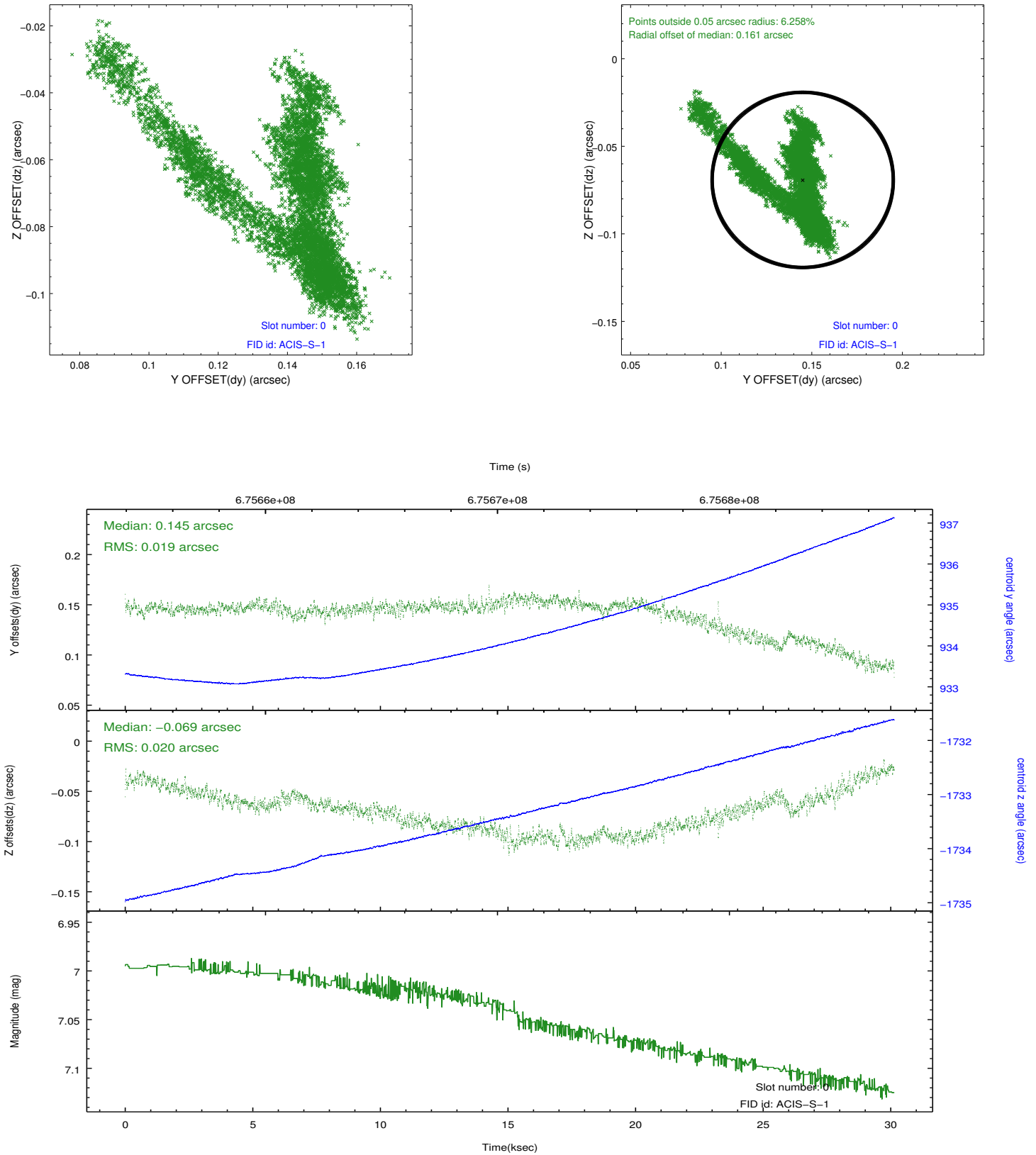


2.4.5 Slot 7

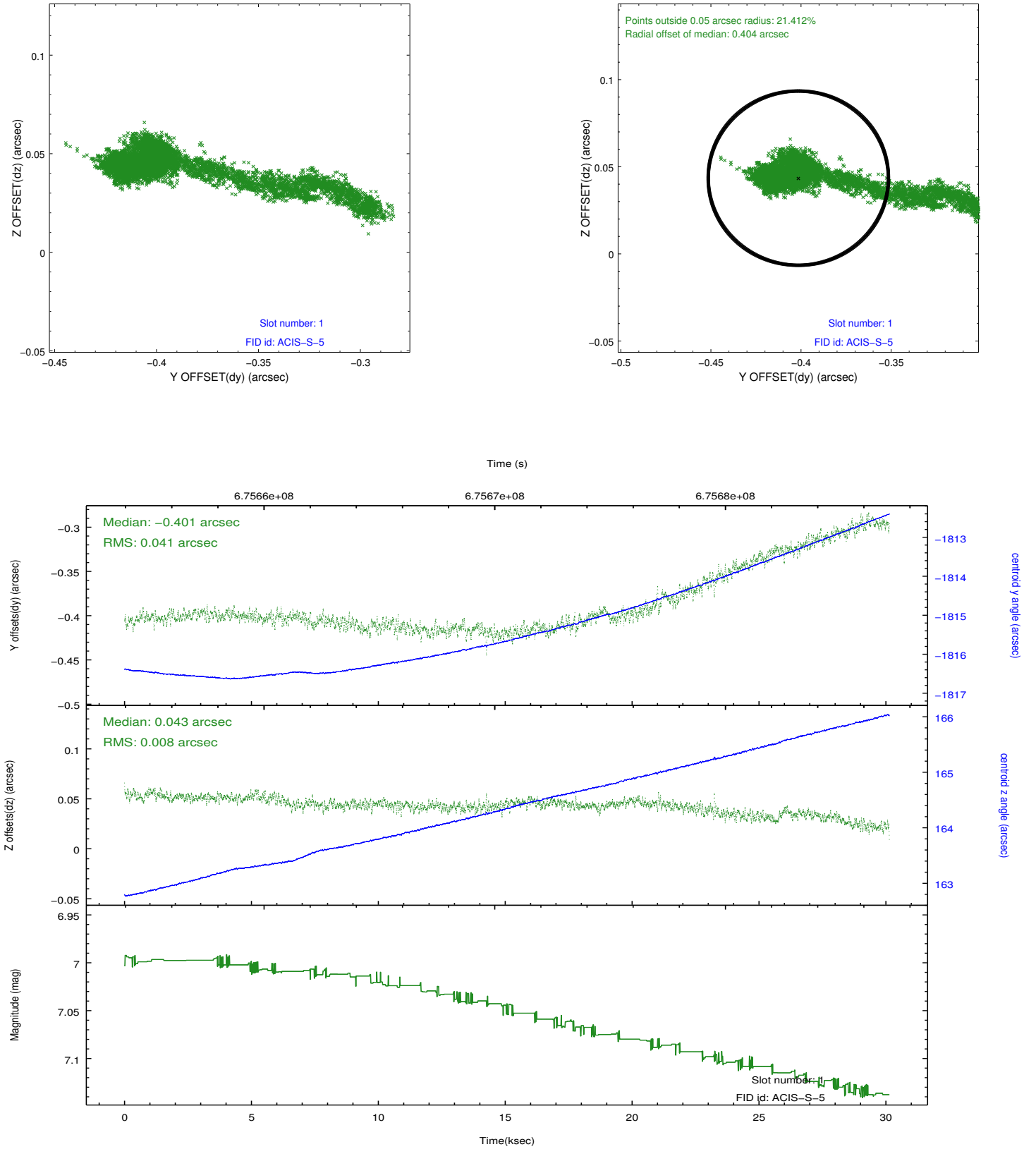


2.5 FID Slots

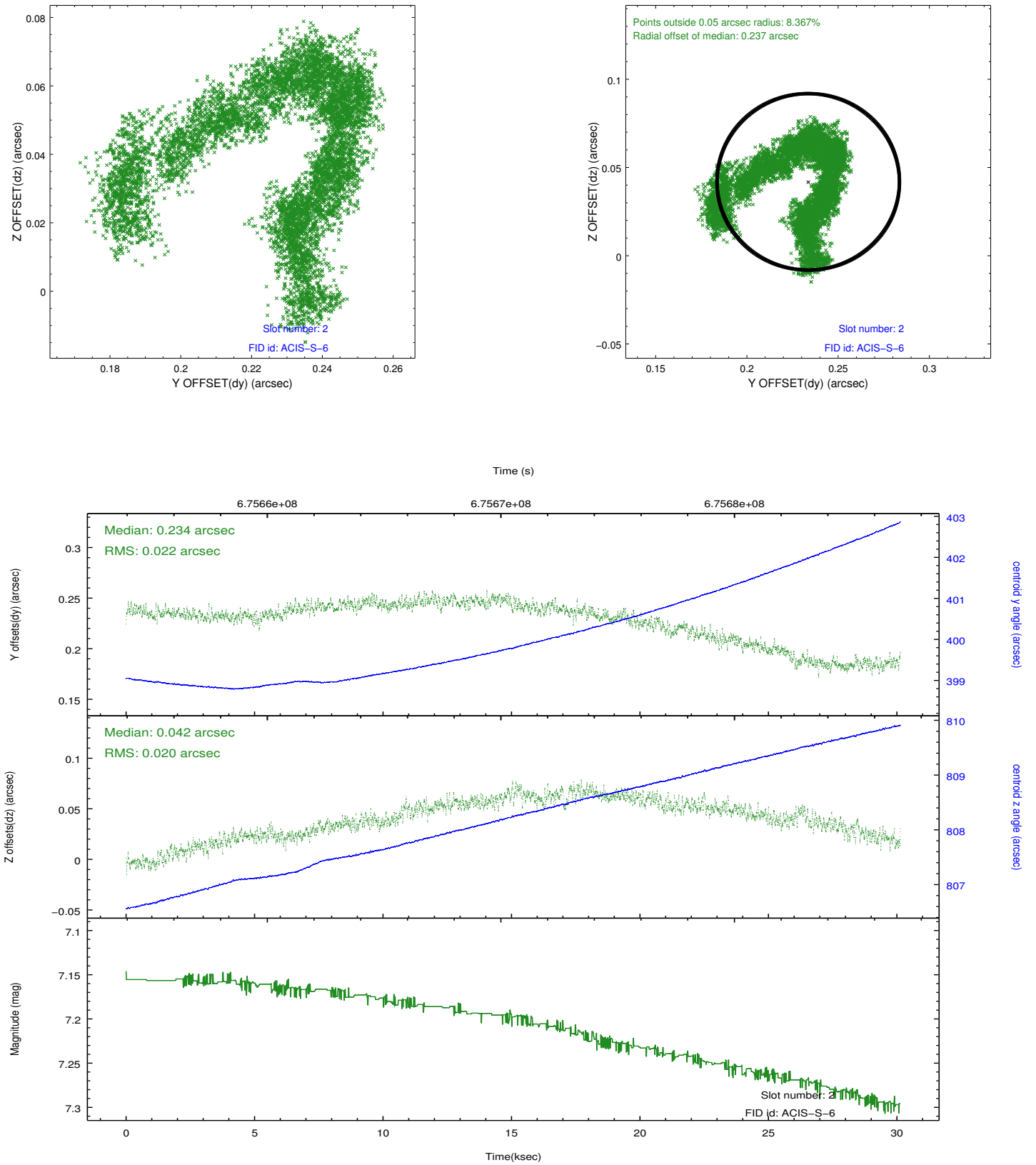
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.05.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.066299890399

A.2 Comments

One optional chip was dropped.