

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 22232 - L2 Version 1
Chandra X-Ray Center

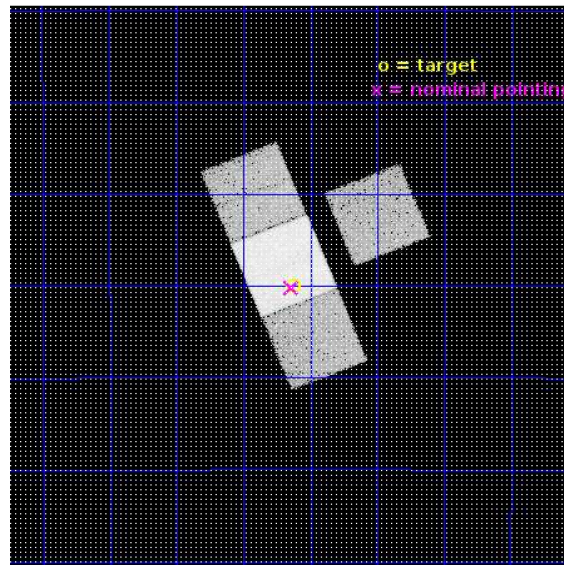
L2 Processing Date : Jun 1 2019

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1 Front

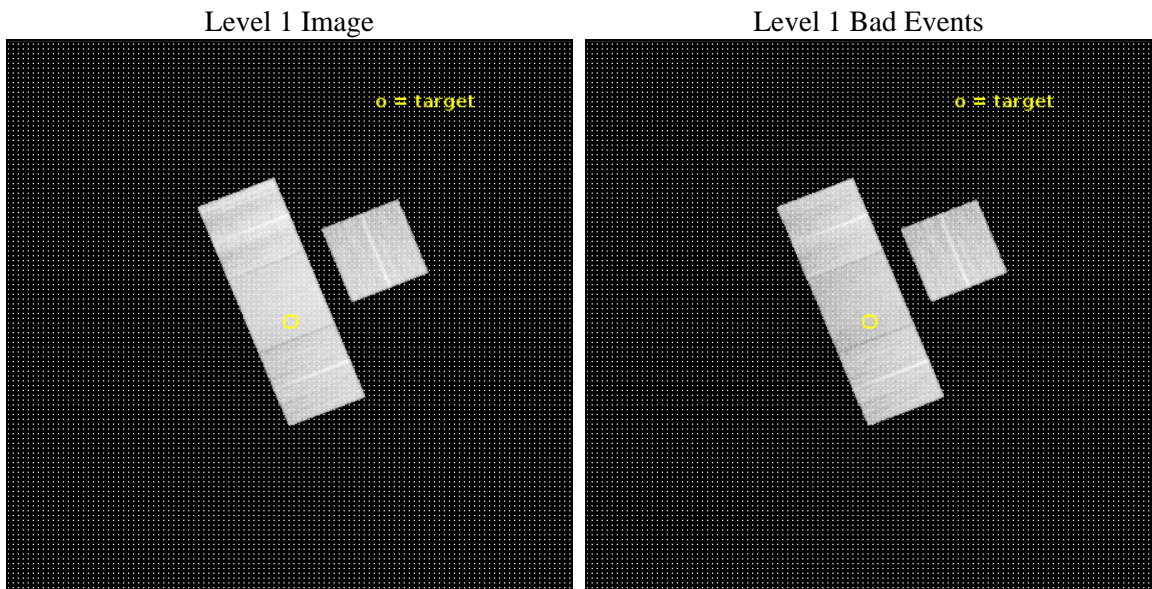
seq_num	703572	Sequence number
obs_id	22232	Observation id
title	Did the first quasars come in pairs? Chandra/ALMA synergistic observations of quasars at $z>6$	Proposal title
observer	Eduardo Banados	Principal investigator
object	P231-20	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	231.657917	Observer's specified target RA [deg]
dec_targ	-20.833972	Observer's specified target Dec [deg]
ra_nom	231.66070029557	Nominal RA [deg]
dec_nom	-20.836594239359	Nominal Dec [deg]
roll_nom	248.15761954926	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22065.800169826	Sum of GTIs [s]
livetime	21777.494246001	Livetime [s]
ontime3	22059.518119454	Sum of GTIs [s]
ontime6	22065.800169826	Sum of GTIs [s]
ontime7	22065.800169826	Sum of GTIs [s]
ontime8	22056.377088428	Sum of GTIs [s]
l2events	141503	Number of level 2 events



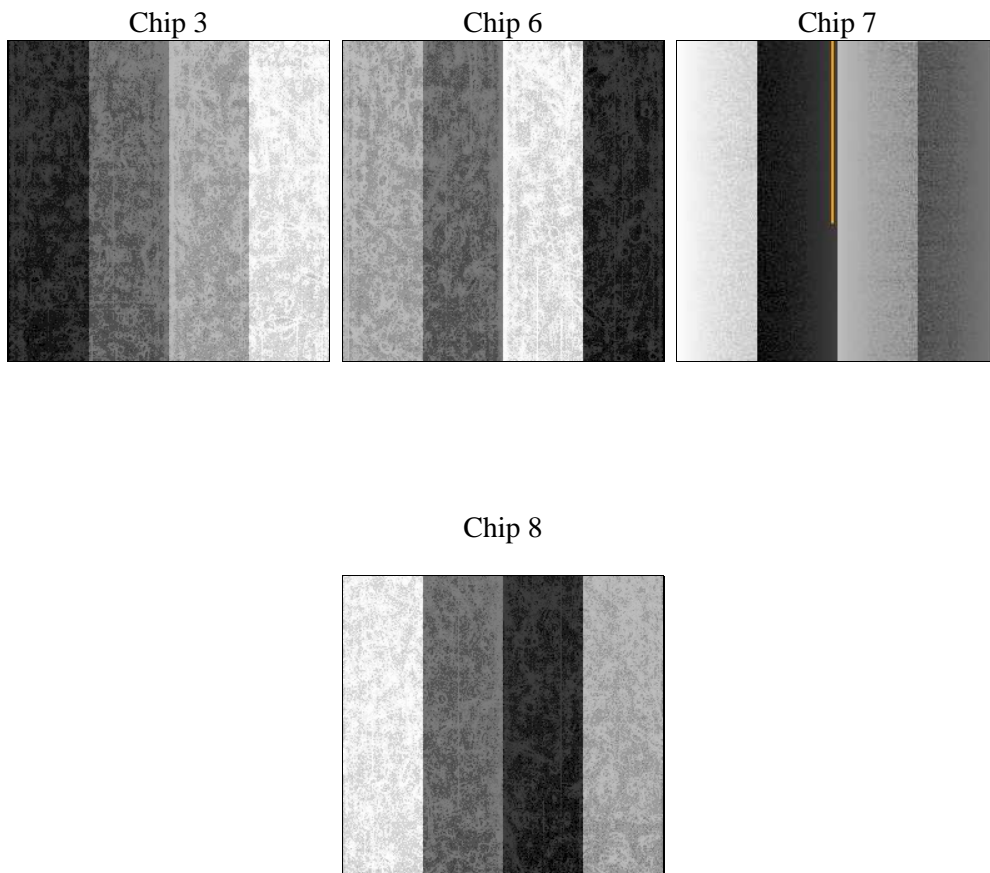
2 OBI

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	4.8.3	 	ontime3	22059.518119454	Sum of GTIs [s]
date	2019-06-01T13:28:28	Date and time of file creation	ontime6	22065.800169826	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	22065.800169826	Sum of GTIs [s]
			ontime8	22056.377088428	Sum of GTIs [s]
			l1events	771979	Number of level 1 events

2.1.4 Events

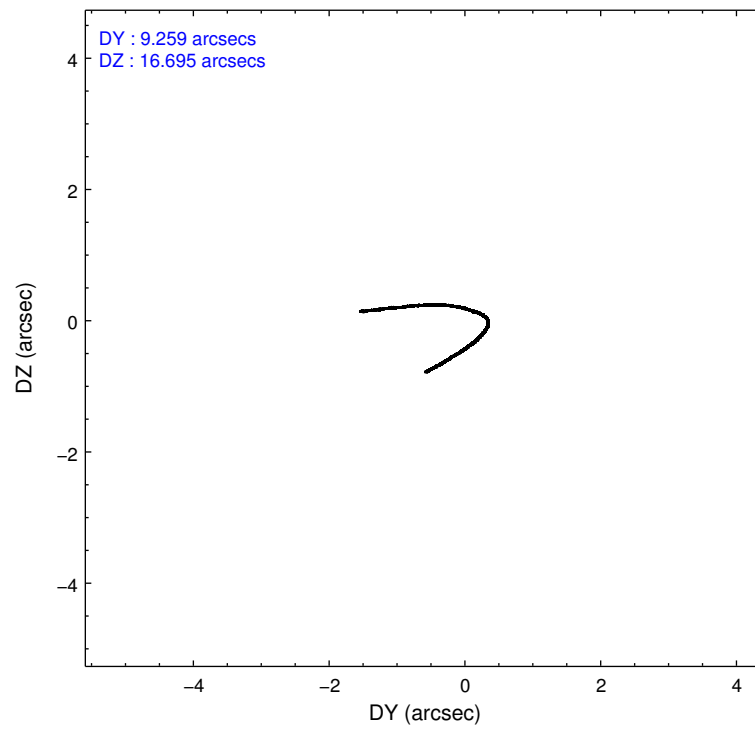
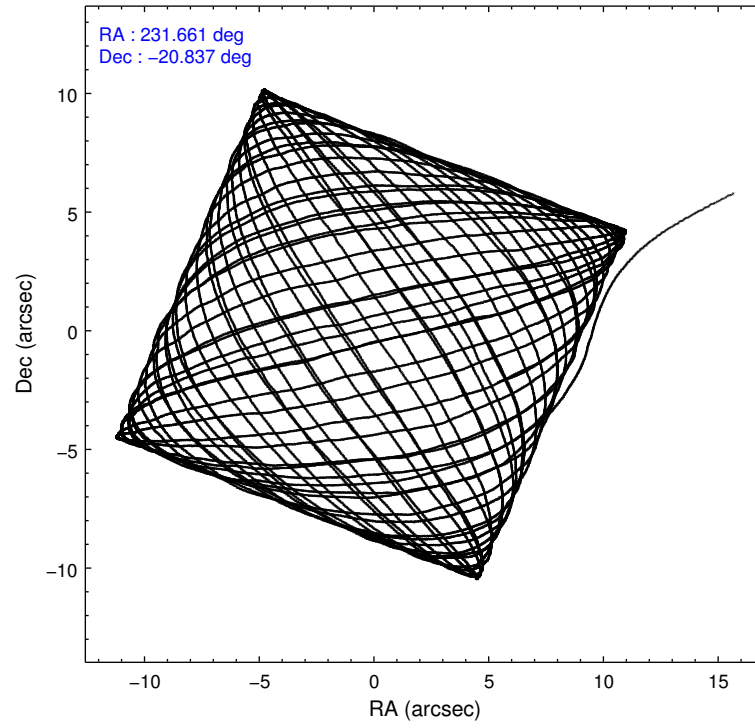
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	158995	173246	215566	224172
rejected events	142514	154018	122111	162425
rejected %	89%	88%	56%	72%

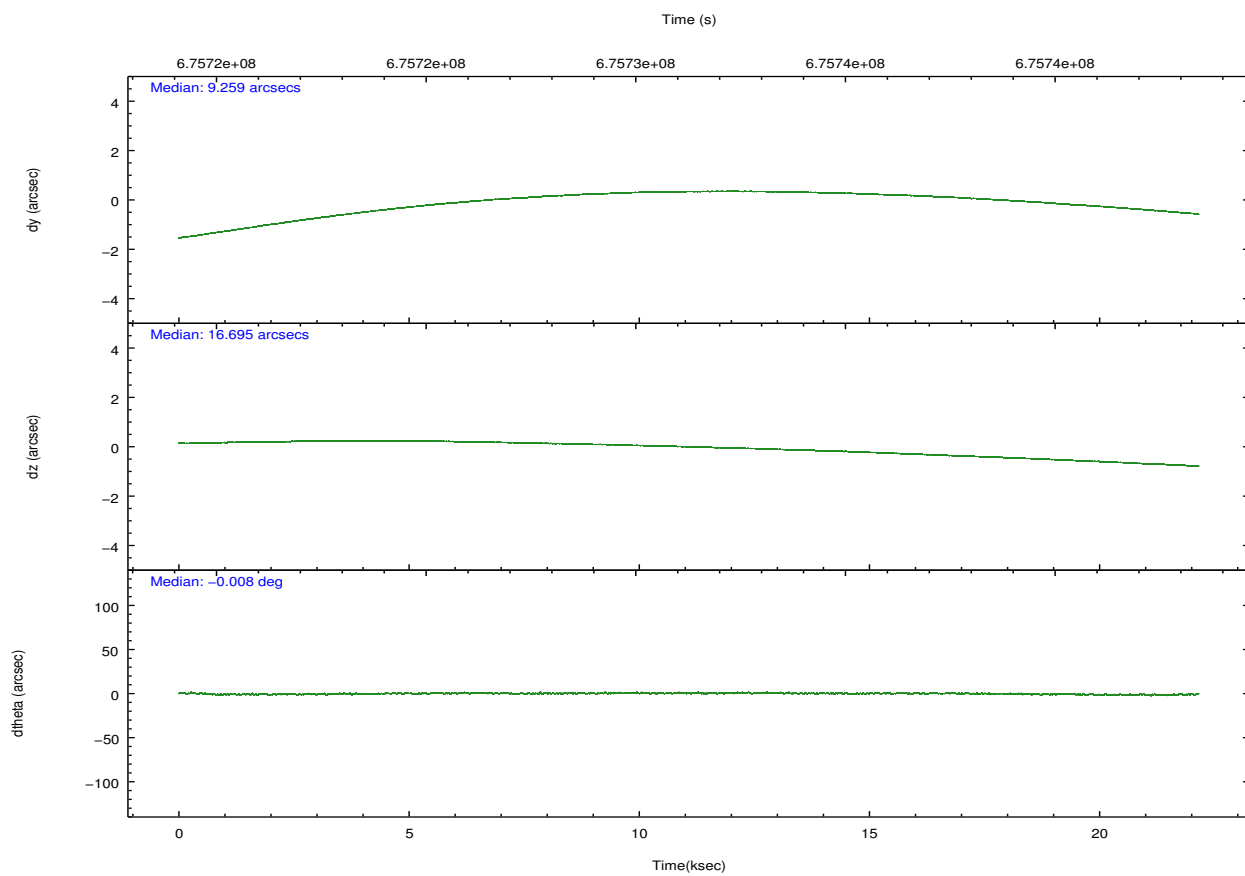
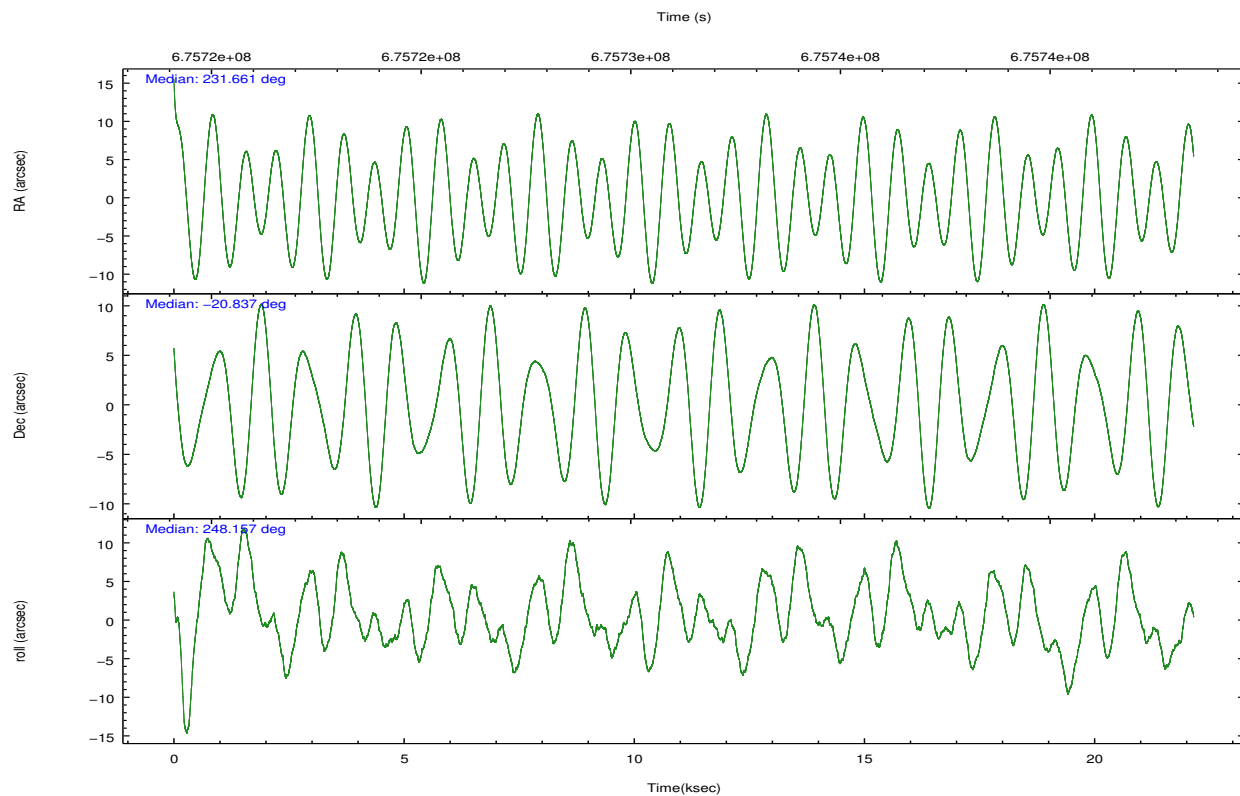
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	5635	6378	7703	16887
	3%	3%	3%	7%
grade 1 events	101	91	310	179
	0%	0%	0%	0%
grade 2 events	3632	4529	20397	15501
	2%	2%	9%	6%
grade 3 events	1811	1918	7208	6252
	1%	1%	3%	2%
grade 4 events	1787	1865	7184	5915
	1%	1%	3%	2%
grade 5 events	7624	7880	21322	12124
	4%	4%	9%	5%
grade 6 events	3620	4546	50985	17208
	2%	2%	23%	7%
grade 7 events	134785	146039	100457	150106
	84%	84%	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	231.656117	231.6607002955738	CCD I2 on	O1	N
[deg] Pointing Dec	-20.809481	-20.83659423935902	CCD I3 on	Y	Y
[deg] Pointing Roll	247.999355	248.1576195492598	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	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	675720340.184000	675719038.42909	CCD S5 on	N	N
Observation start date	2019-05-31T20:04:31	2019-05-31T19:43:58	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	675742340.184000	675743039.31802	On-chip summing requested	N	N
Observation end date	2019-06-01T02:11:11	2019-06-01T02:23:59	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



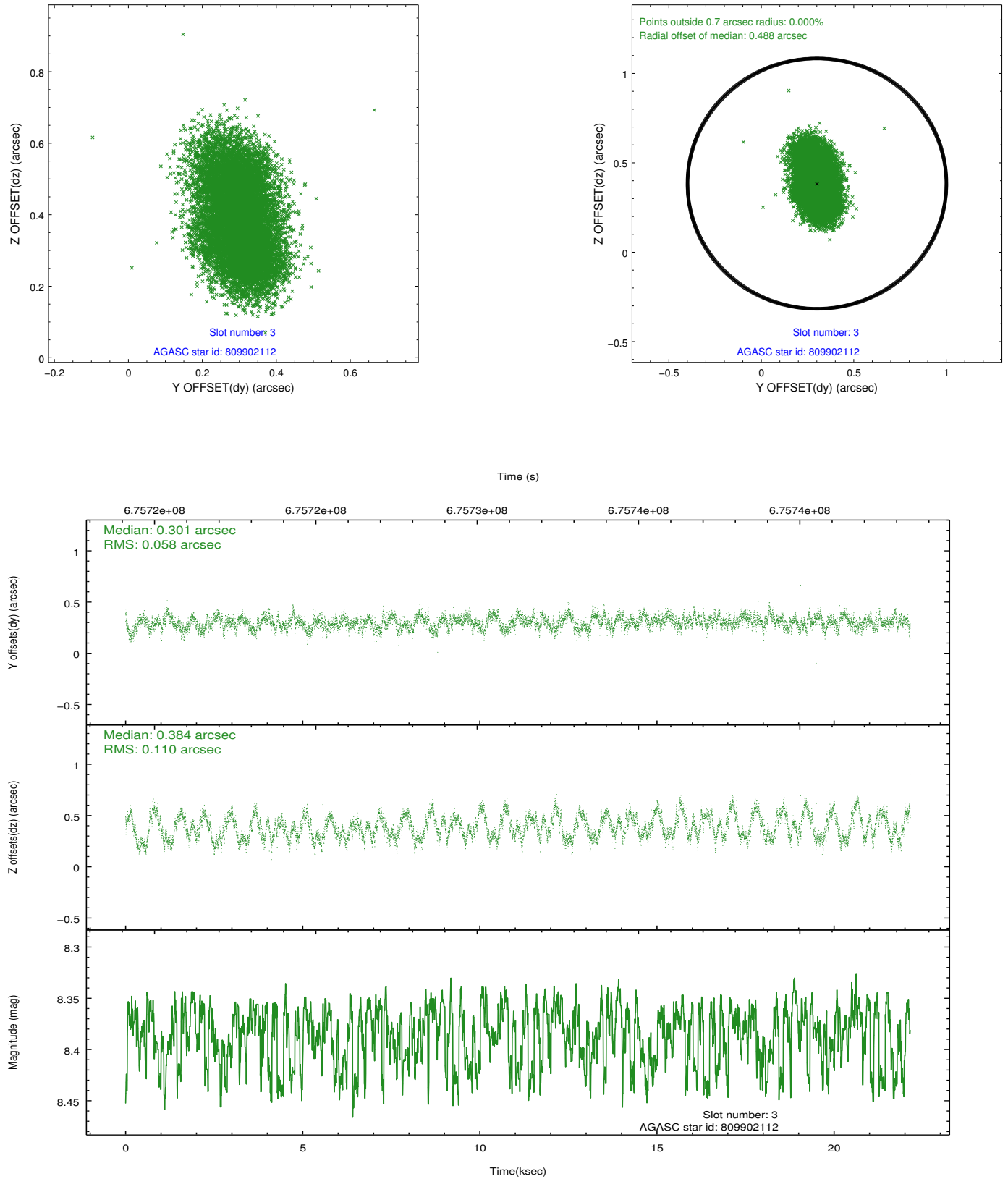


Slot Statistics

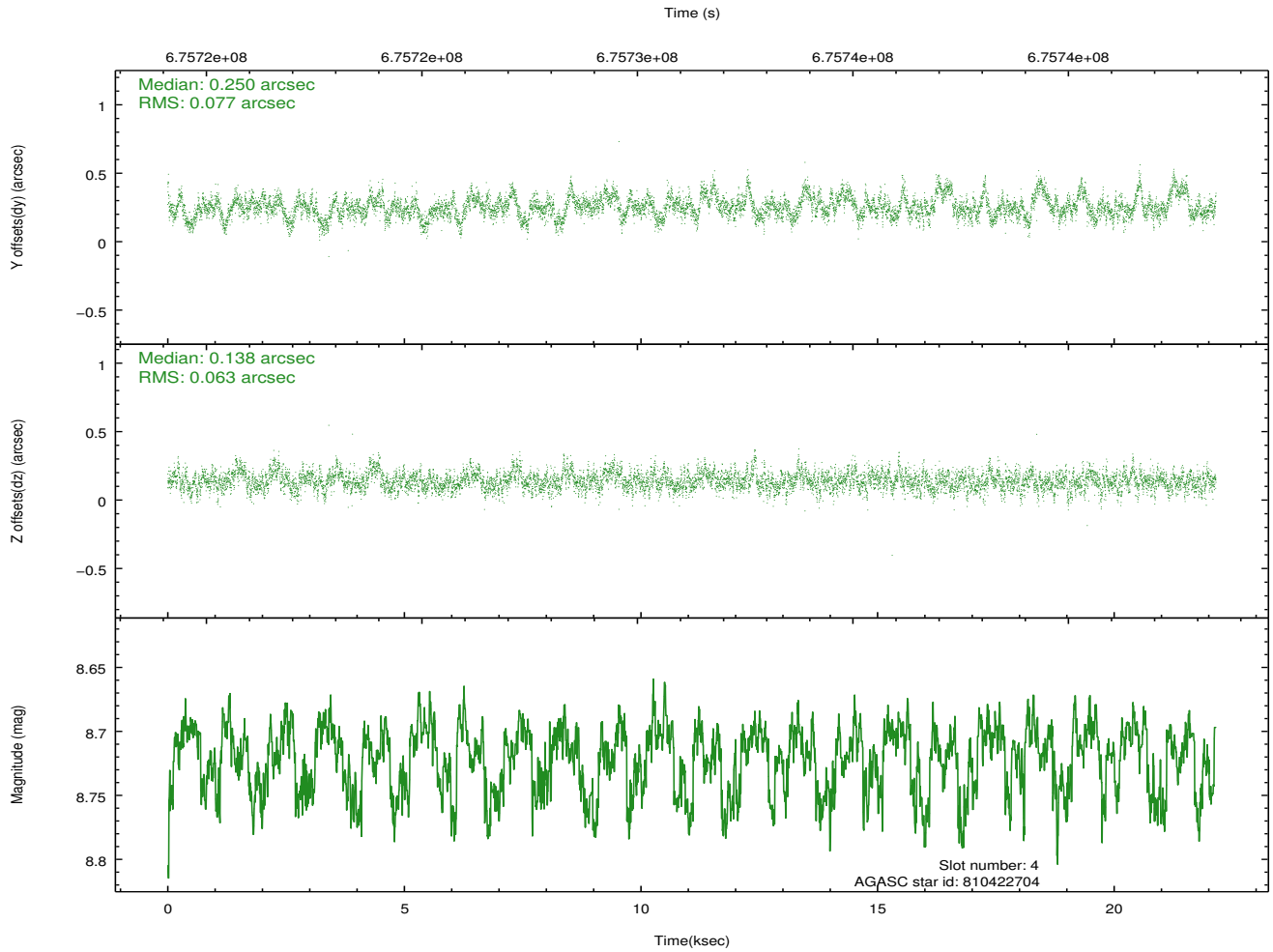
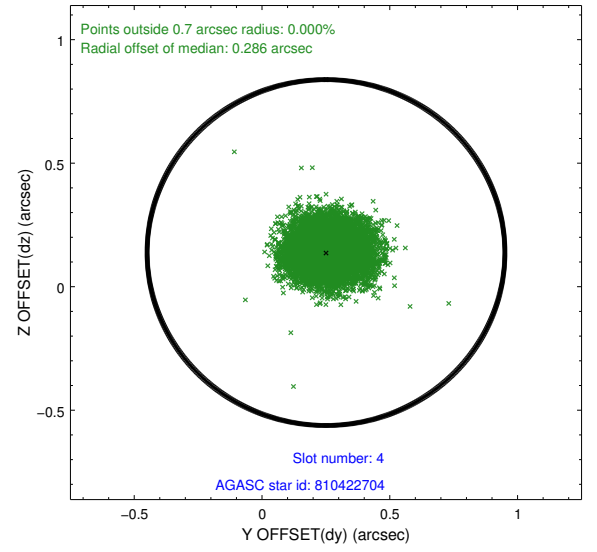
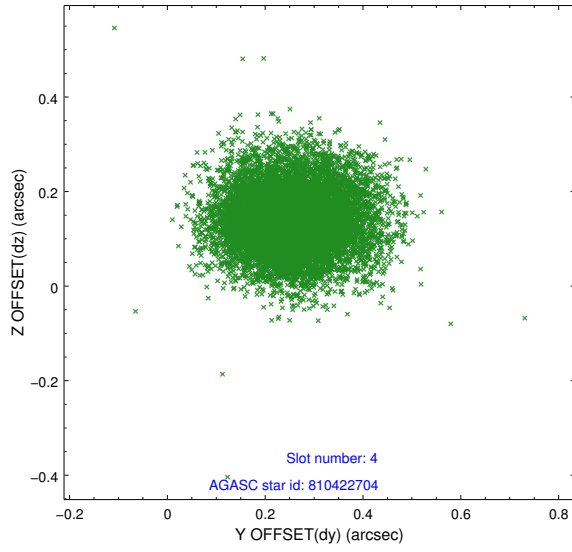
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.12	5403	1.000	0.159	-0.093	0.010	0.020	0.000000	0.000000	934.35	-1733
1	FID		ACIS-S-5	7.14	5403	1.000	-0.426	0.050	0.013	0.078	0.000000	0.000000	-1815.21	163
2	FID		ACIS-S-6	7.29	5402	1.000	0.246	0.053	0.019	0.059	0.000000	0.000000	399.71	808
3	GUIDE	used	809902112	8.38	10800	1.000	0.301	0.384	0.134	0.213	231.645523	-20.497925	-1025.67	-453
4	GUIDE	used	810422704	8.72	10795	1.000	0.250	0.138	0.105	0.175	231.775902	-20.741055	-377.37	282
5	GUIDE	used	810423632	6.78	10807	1.000	-0.004	-0.159	0.080	0.126	231.522346	-21.380235	2073.44	352
6	GUIDE	used	812128128	6.99	10807	1.000	-0.299	-0.266	0.106	0.166	232.077647	-21.209568	807.10	1852
7	GUIDE	used	812134616	9.65	10783	1.000	-0.241	-0.097	0.211	0.329	232.079719	-21.377780	1366.72	2083

2.4 Star Slots

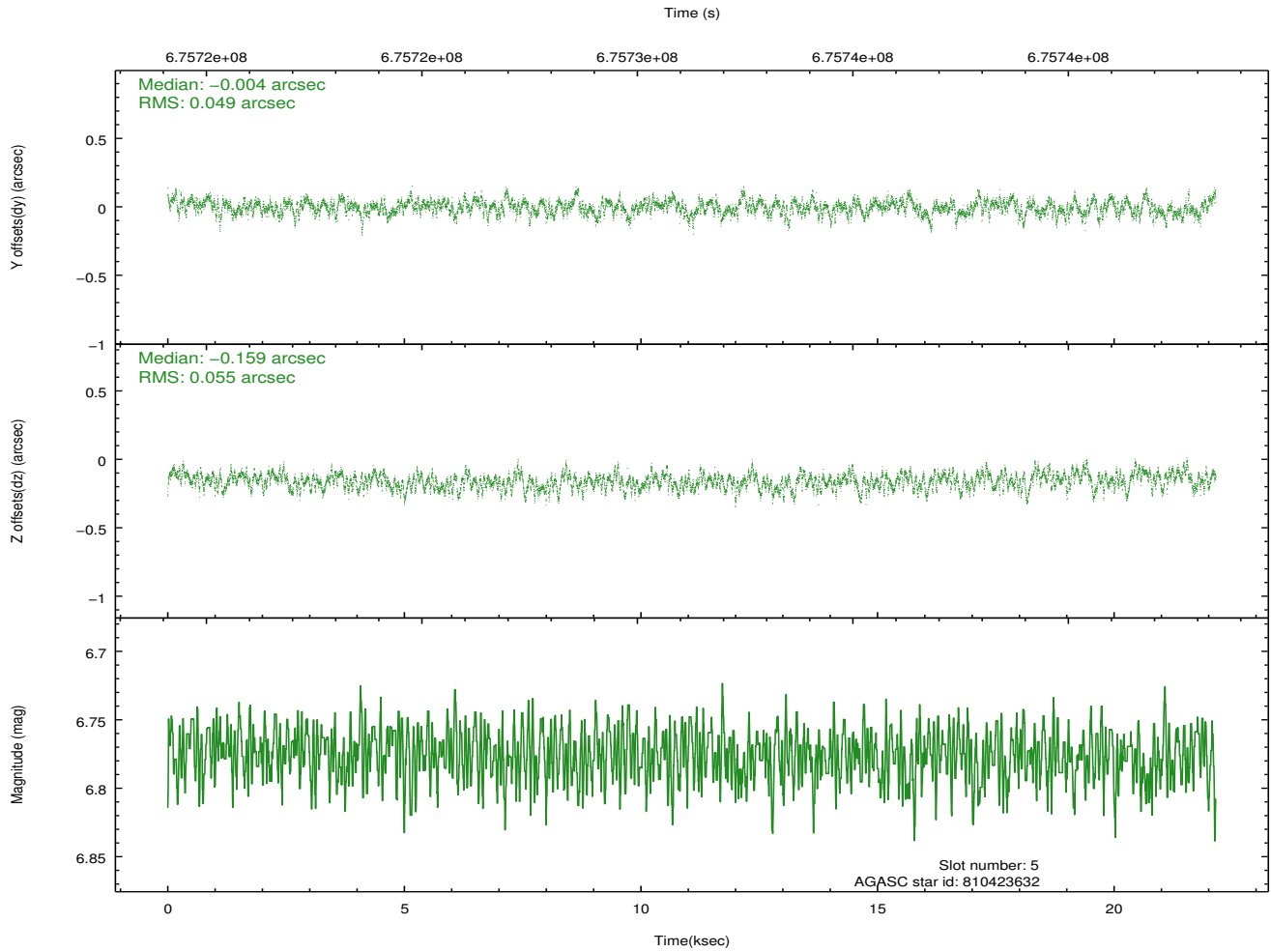
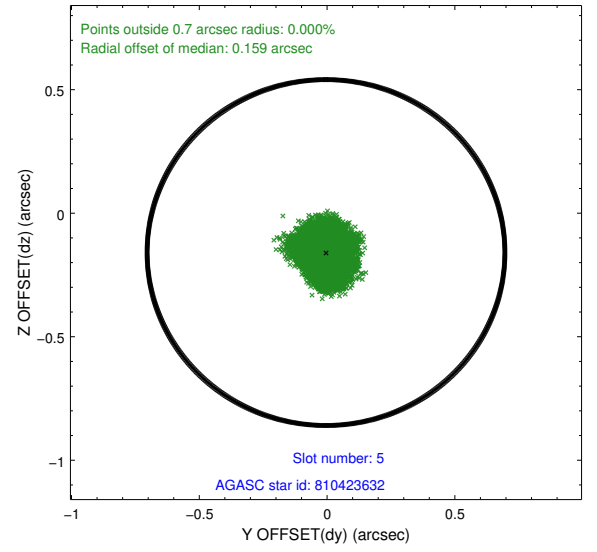
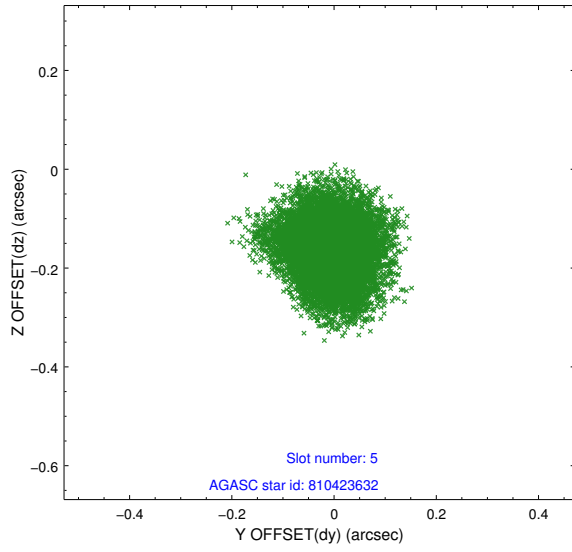
2.4.1 Slot 3



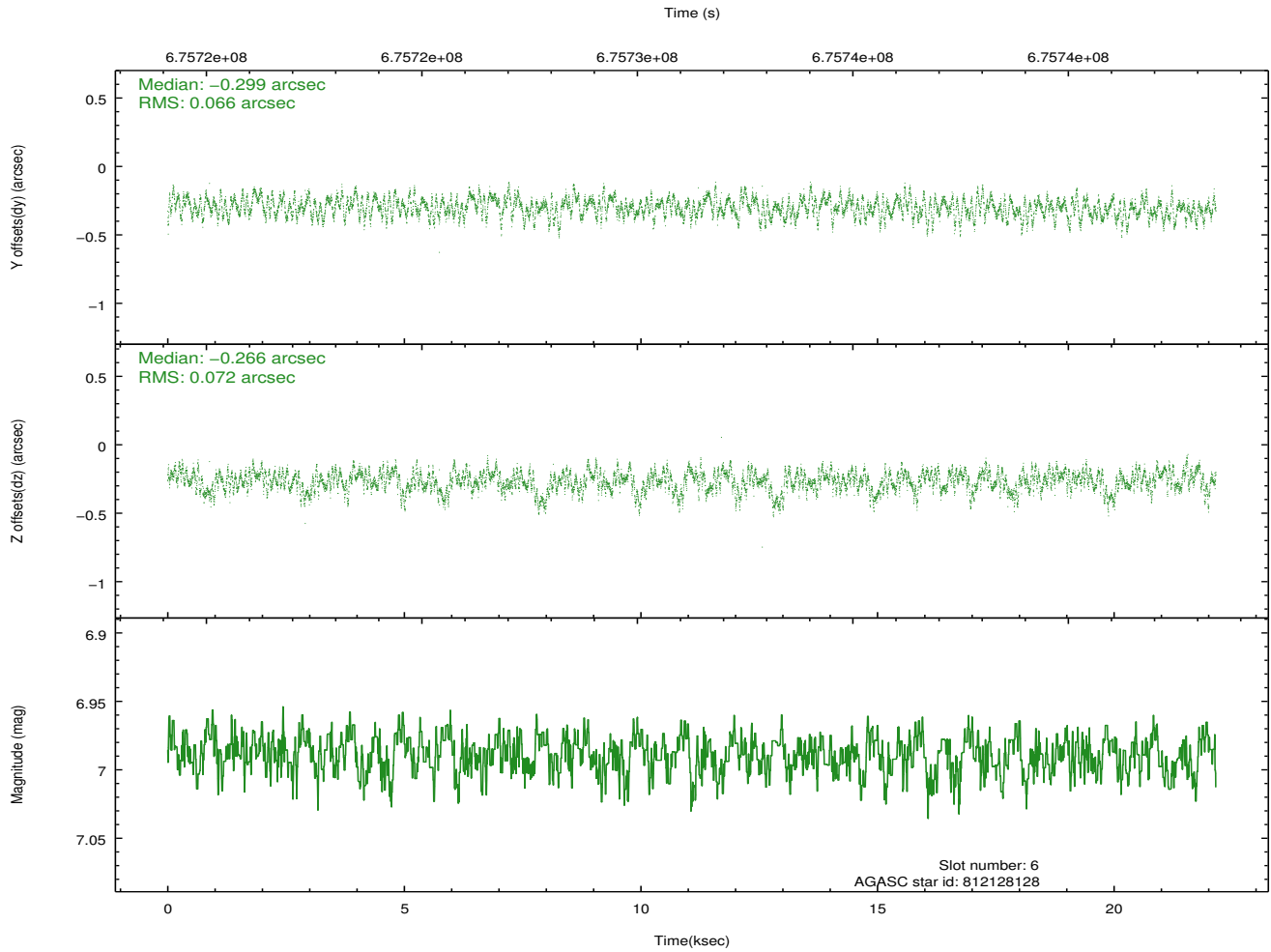
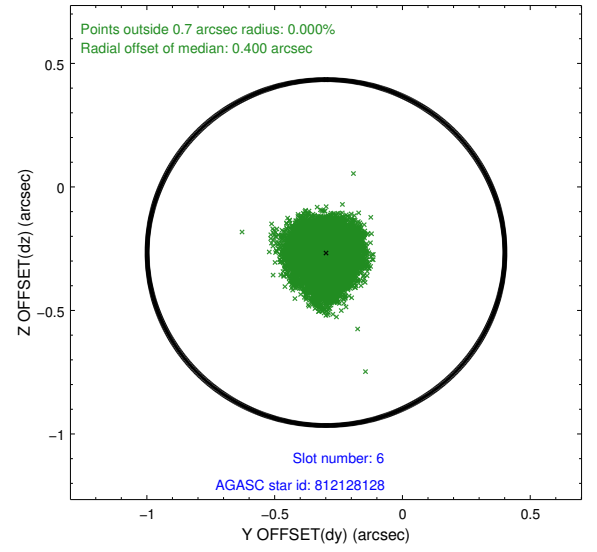
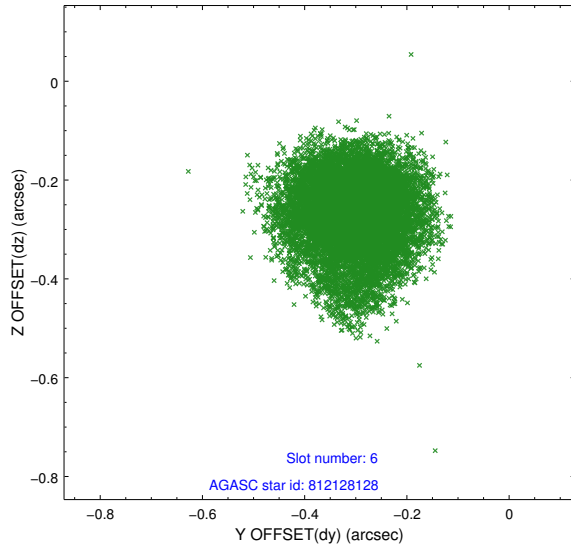
2.4.2 Slot 4



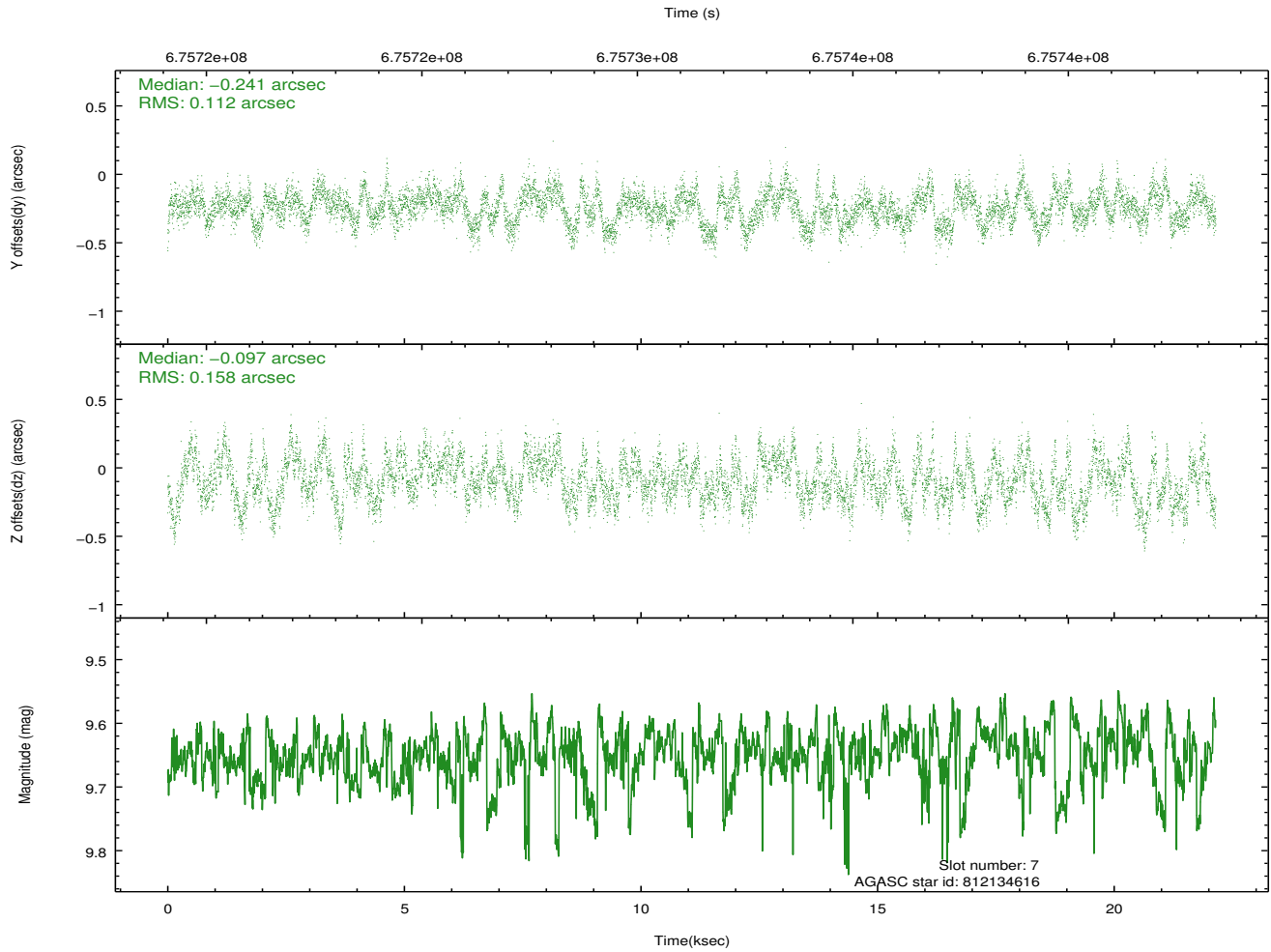
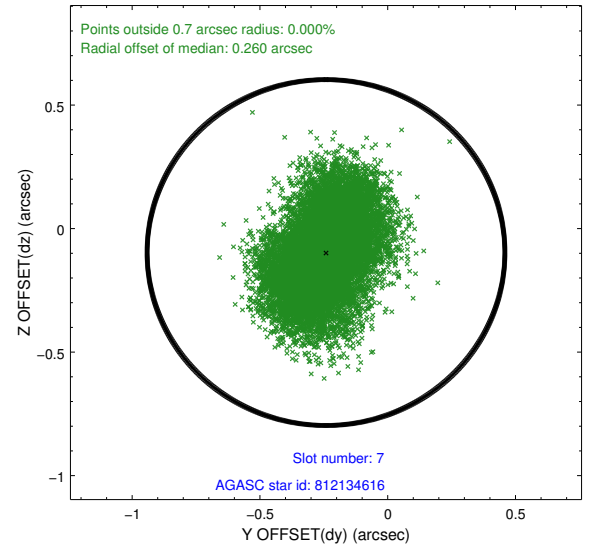
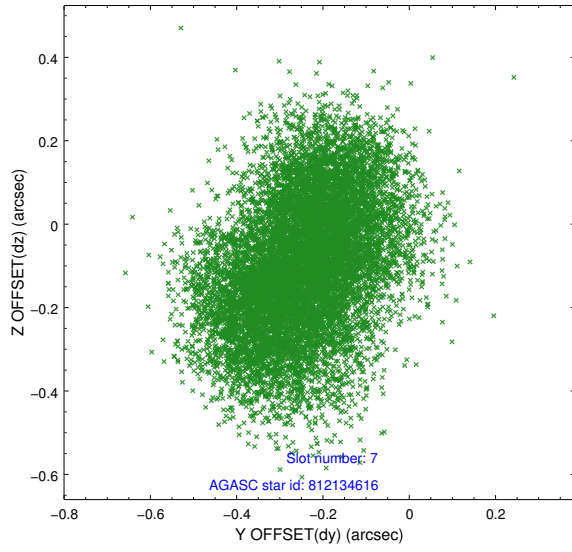
2.4.3 Slot 5



2.4.4 Slot 6

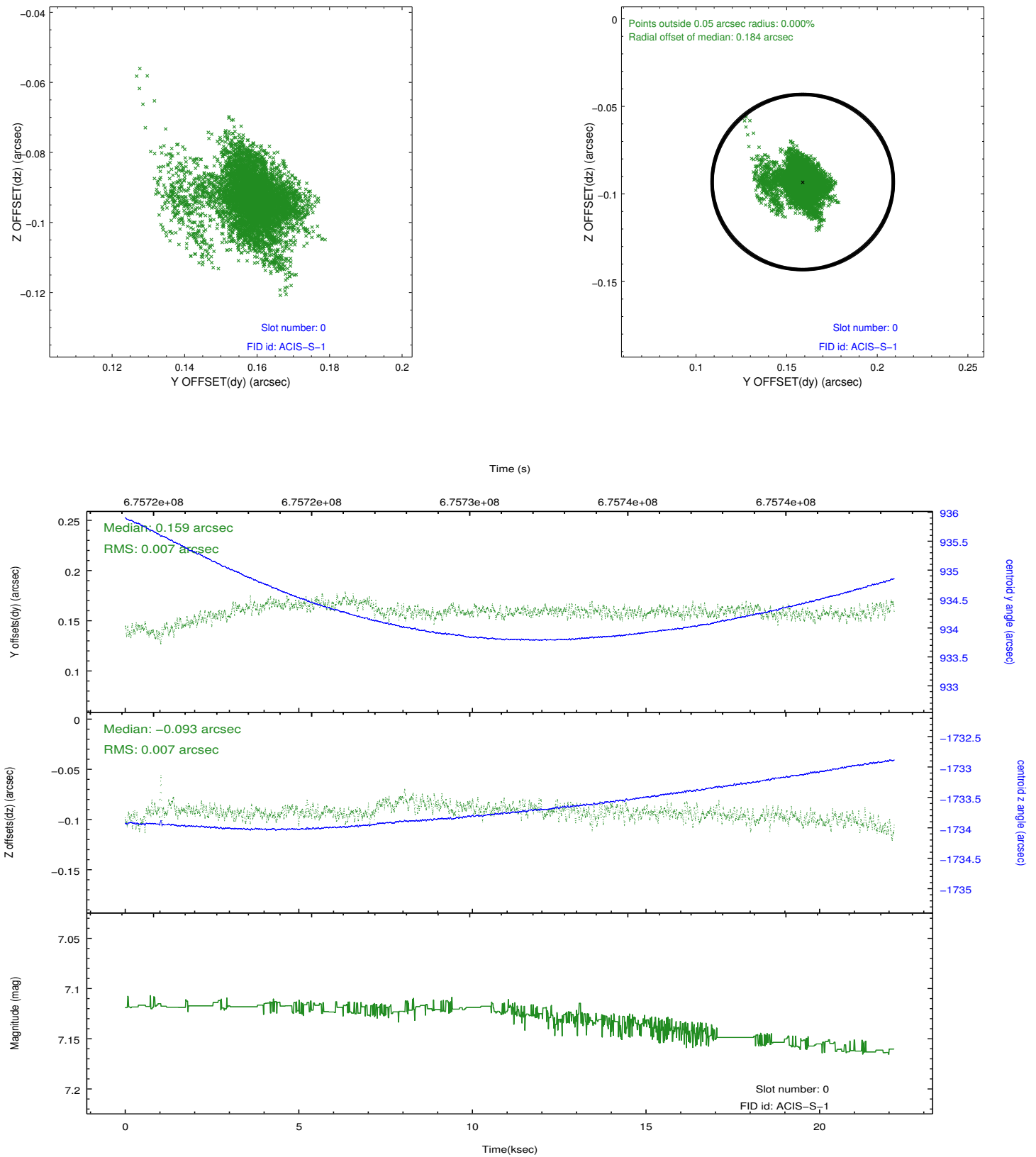


2.4.5 Slot 7

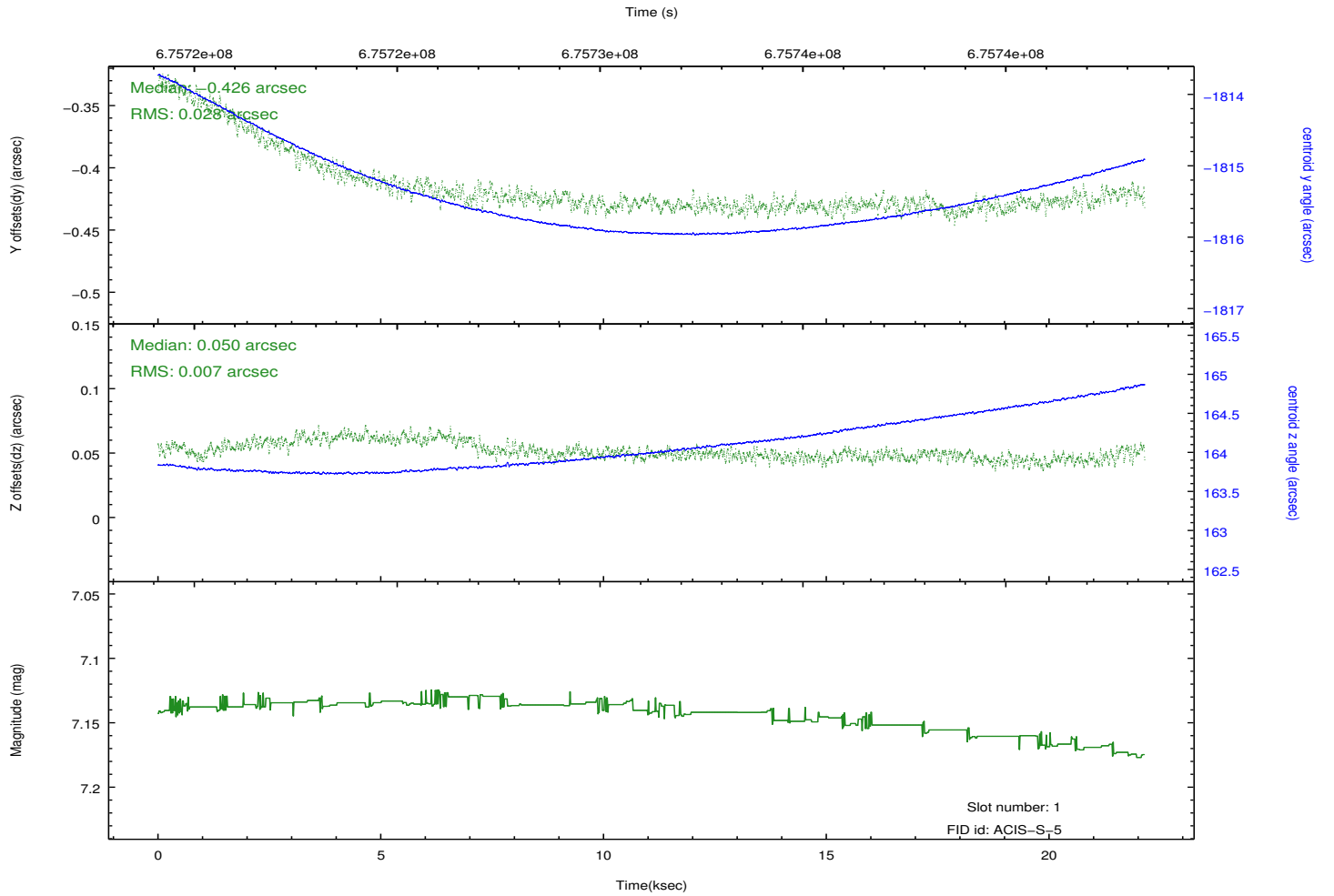
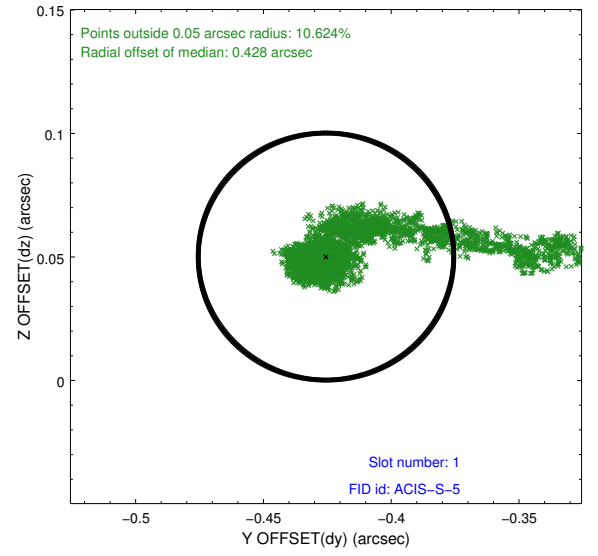
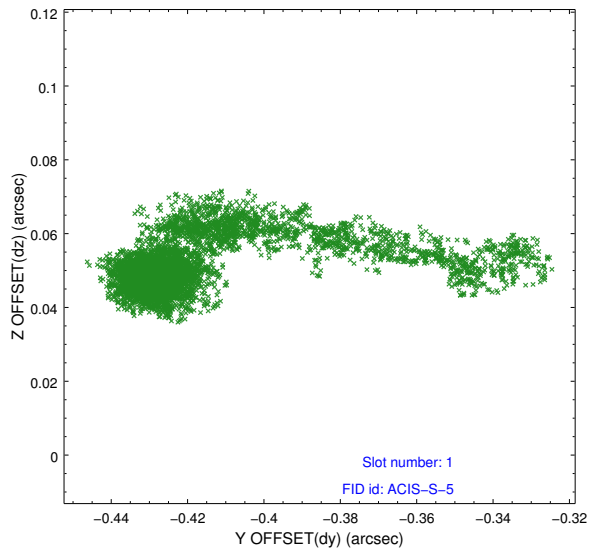


2.5 FID Slots

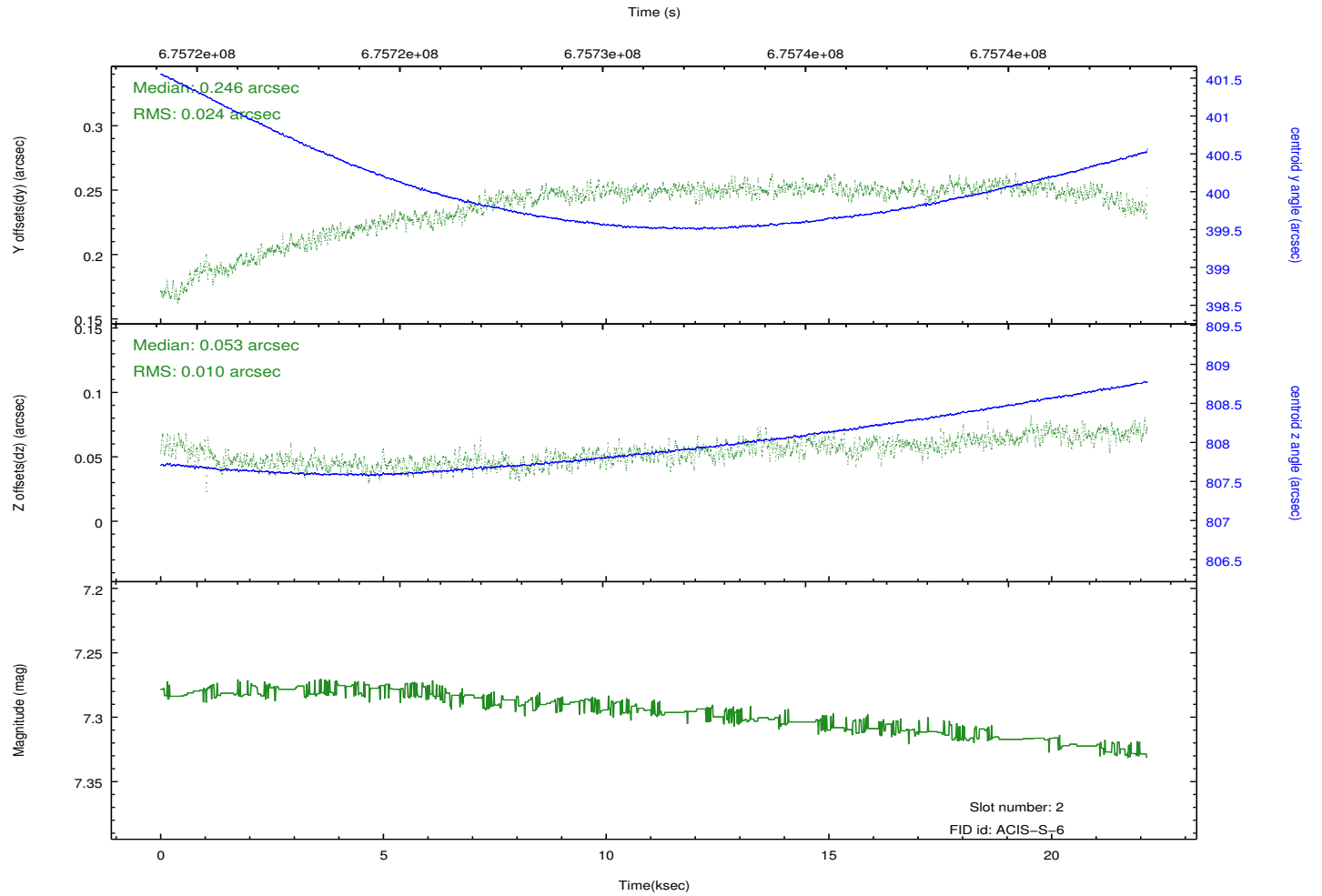
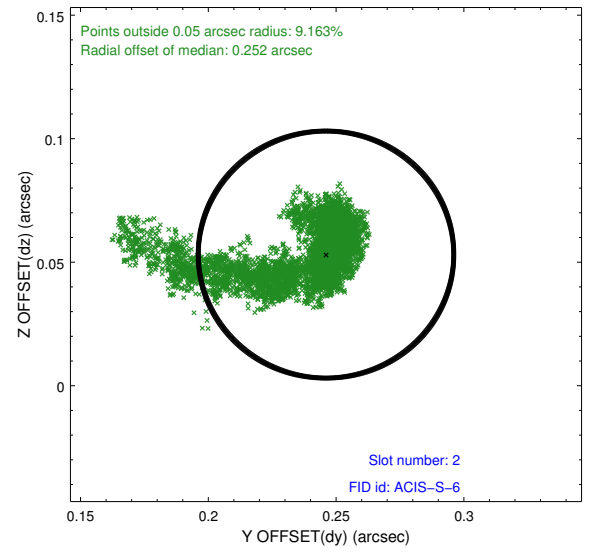
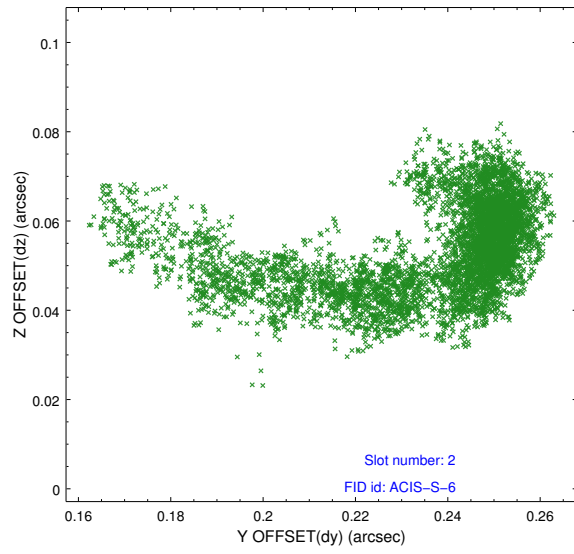
2.5.1 Slot 0



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)	2019.06.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.065800169826

A.2 Comments

One optional chip was dropped.