

V&V Reference Report

L2 ASCDS Version : 10.7.1

Observation 20929 - L2 Version 1
Chandra X-Ray Center

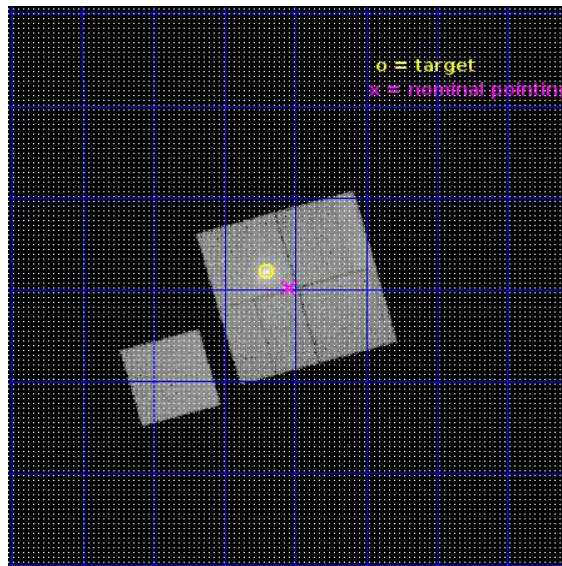
L2 Processing Date : Jun 1 2019

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1 Front

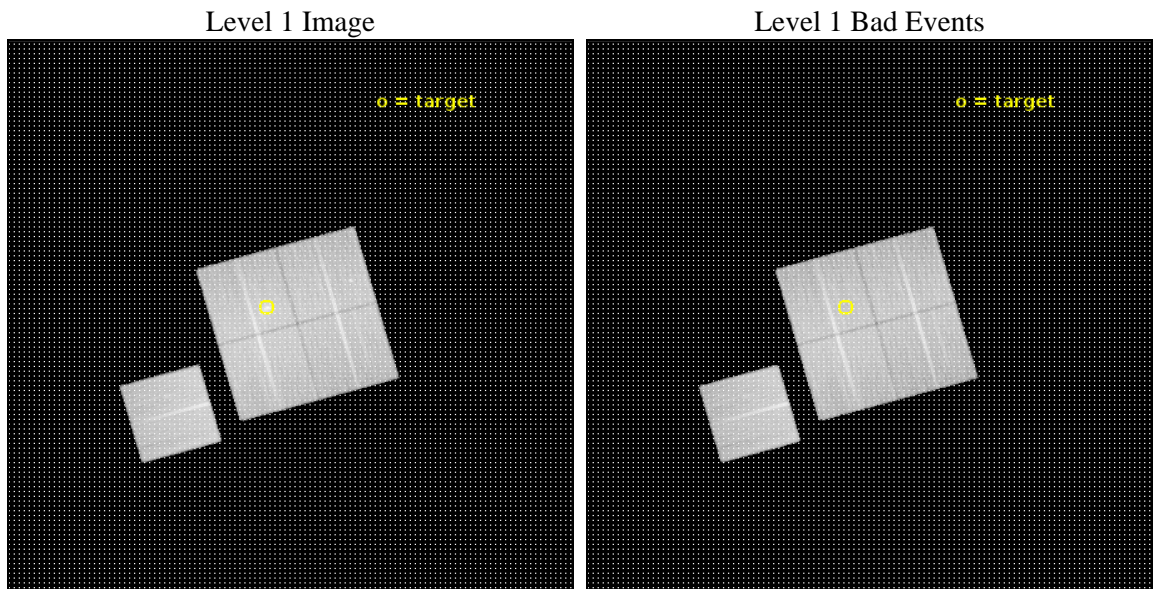
seq_num	801754	Sequence number
obs_id	20929	Observation id
title	Measuring the mass distribution with unprecedented accuracy: the CLASH cluster MACSJ1206	Proposal title
observer	Stefano Ettori	Principal investigator
object	MACS J1206-0847	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	181.550417	Observer's specified target RA [deg]
dec_targ	-8.800917	Observer's specified target Dec [deg]
ra_nom	181.51018480731	Nominal RA [deg]
dec_nom	-8.8301346867305	Nominal Dec [deg]
roll_nom	254.20254155542	Nominal Roll [deg]
revision	1	Processing version of data
ontime	42462.594756126	Sum of GTIs [s]
livetime	41907.78969513	Livetime [s]
ontime0	42462.471636653	Sum of GTIs [s]
ontime1	42459.371656299	Sum of GTIs [s]
ontime2	42459.412666202	Sum of GTIs [s]
ontime3	42462.594756126	Sum of GTIs [s]
ontime6	42465.571636558	Sum of GTIs [s]
l2events	166887	Number of level 2 events



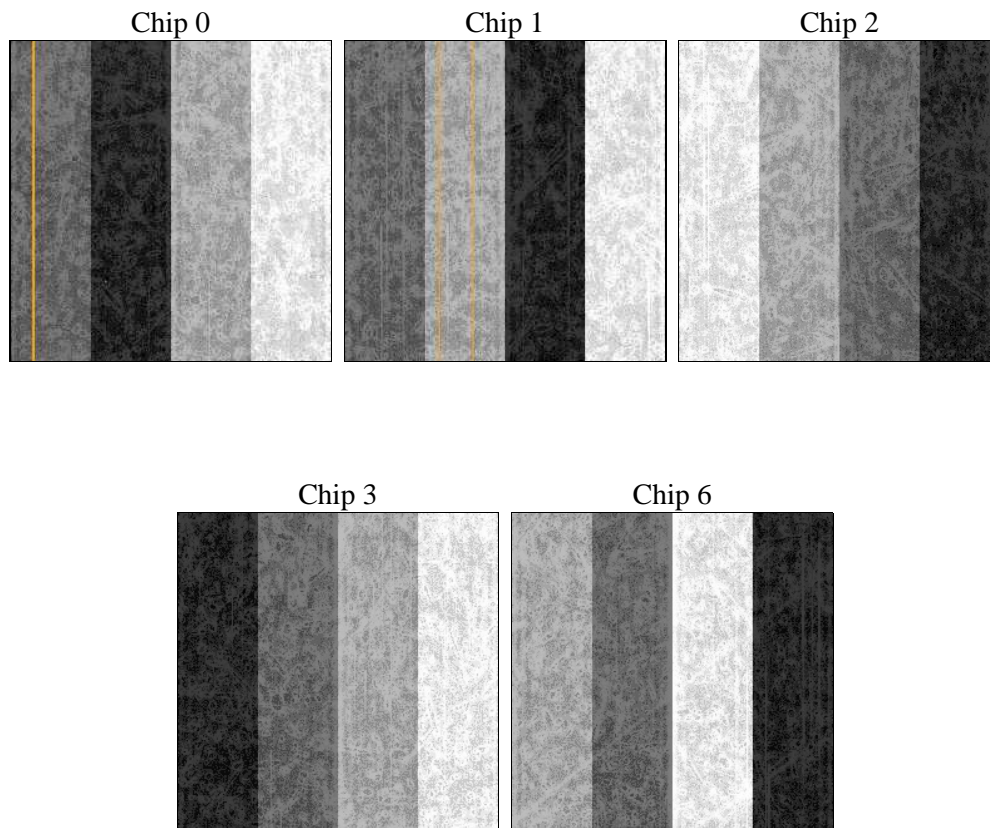
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	42400.000000	[s] Scheduled observation exposure time
ascdsver	10.7.1	Processing system revision	ontime	42462.594756126	Sum of GTIs [s]
caldbver	4.8.3	 	ontime0	42462.471636653	Sum of GTIs [s]
date	2019-06-01T20:50:09	Date and time of file creation	ontime1	42459.371656299	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	42459.412666202	Sum of GTIs [s]
			ontime3	42462.594756126	Sum of GTIs [s]
			ontime6	42465.571636558	Sum of GTIs [s]
			l1events	1627371	Number of level 1 events

2.1.4 Events

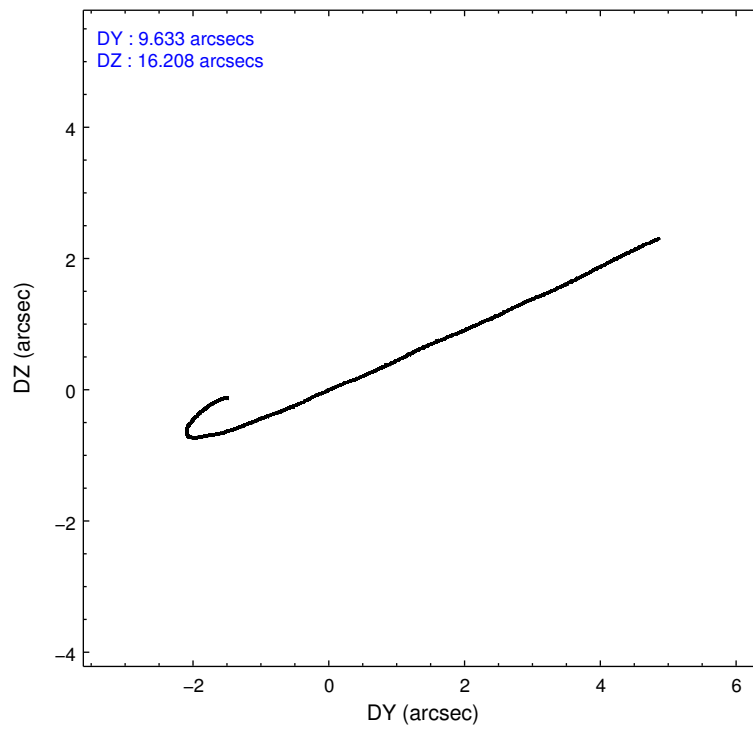
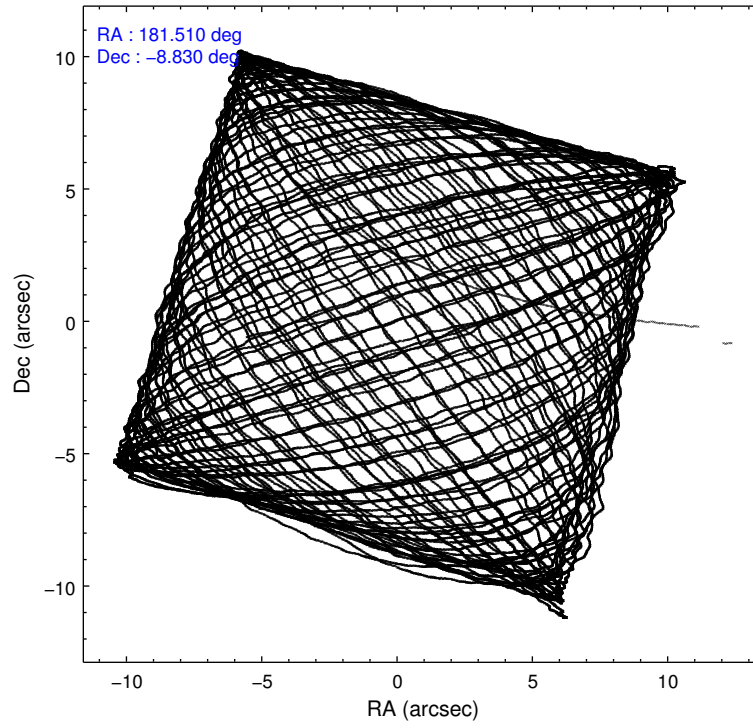
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	297170	310566	338871	339949	340815
rejected events	261868	270645	303963	290882	304407
rejected %	88%	87%	89%	85%	89%

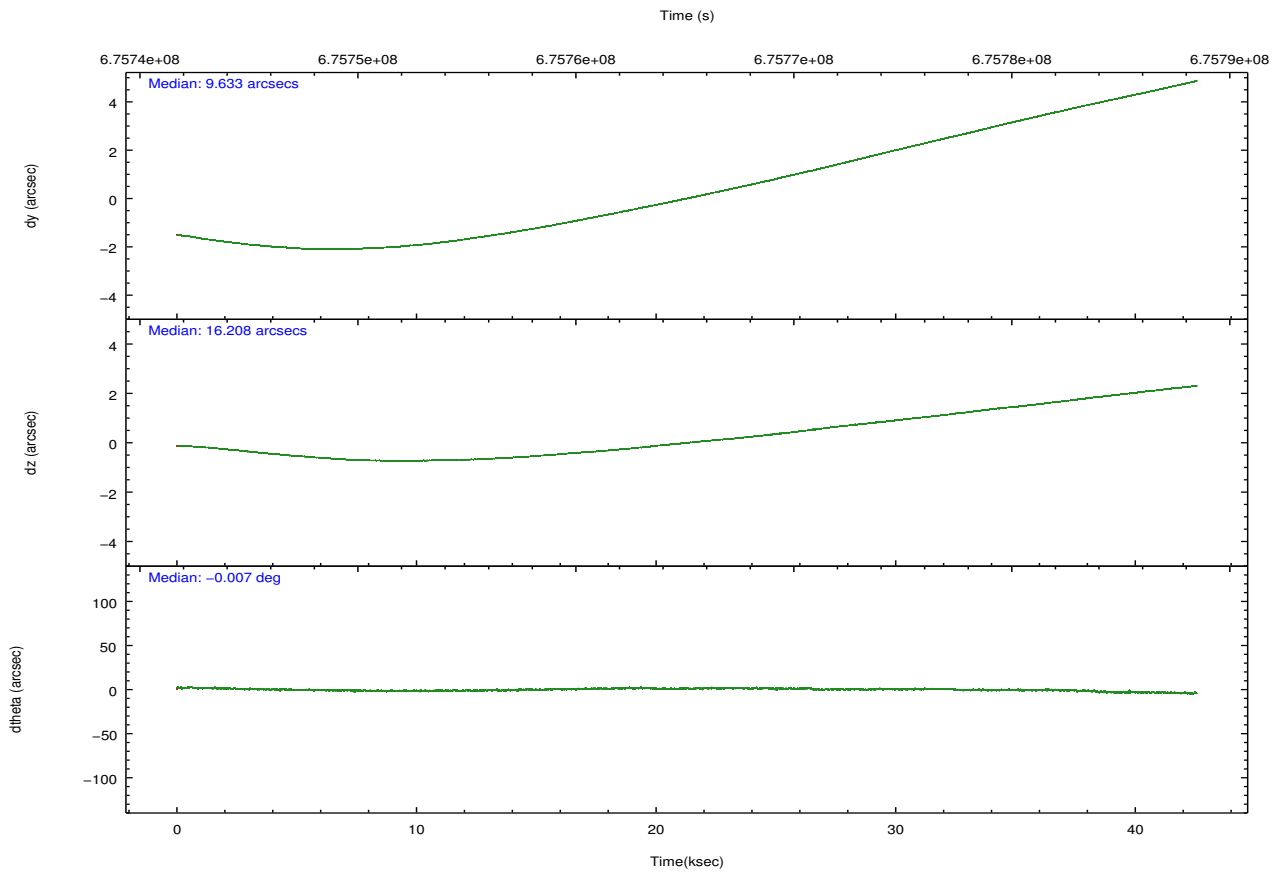
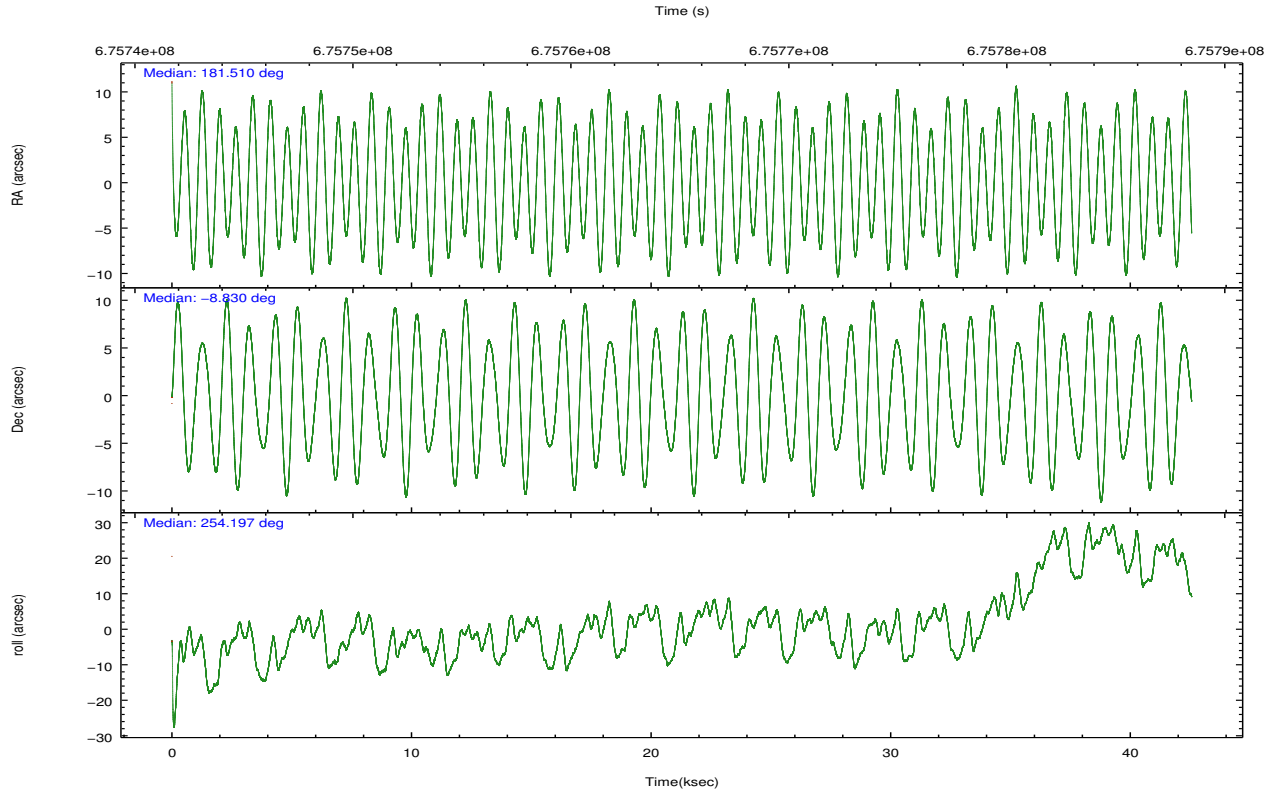
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	11383	12730	12642	23960	11301
	3%	4%	3%	7%	3%
grade 1 events	171	150	215	250	153
	0%	0%	0%	0%	0%
grade 2 events	9063	11009	8334	9043	9241
	3%	3%	2%	2%	2%
grade 3 events	3688	3514	3368	3971	3349
	1%	1%	0%	1%	0%
grade 4 events	3353	3327	3441	4087	3236
	1%	1%	1%	1%	0%
grade 5 events	13230	13439	12593	15373	14053
	4%	4%	3%	4%	4%
grade 6 events	7816	9341	7127	8008	9283
	2%	3%	2%	2%	2%
grade 7 events	248466	257056	291151	275257	290199
	83%	82%	85%	80%	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	181.503234	181.5101848073057	CCD I2 on	Y	Y
[deg] Pointing Dec	-8.803421	-8.83013468673046	CCD I3 on	Y	Y
[deg] Pointing Roll	253.992786	254.2025415554178	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	675743980.184000	675743039.31802	CCD S5 on	N	N
Observation start date	2019-06-01T02:38:31	2019-06-01T02:23:59	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	675786380.184000	675787057.94566	On-chip summing requested	N	N
Observation end date	2019-06-01T14:25:11	2019-06-01T14:37:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





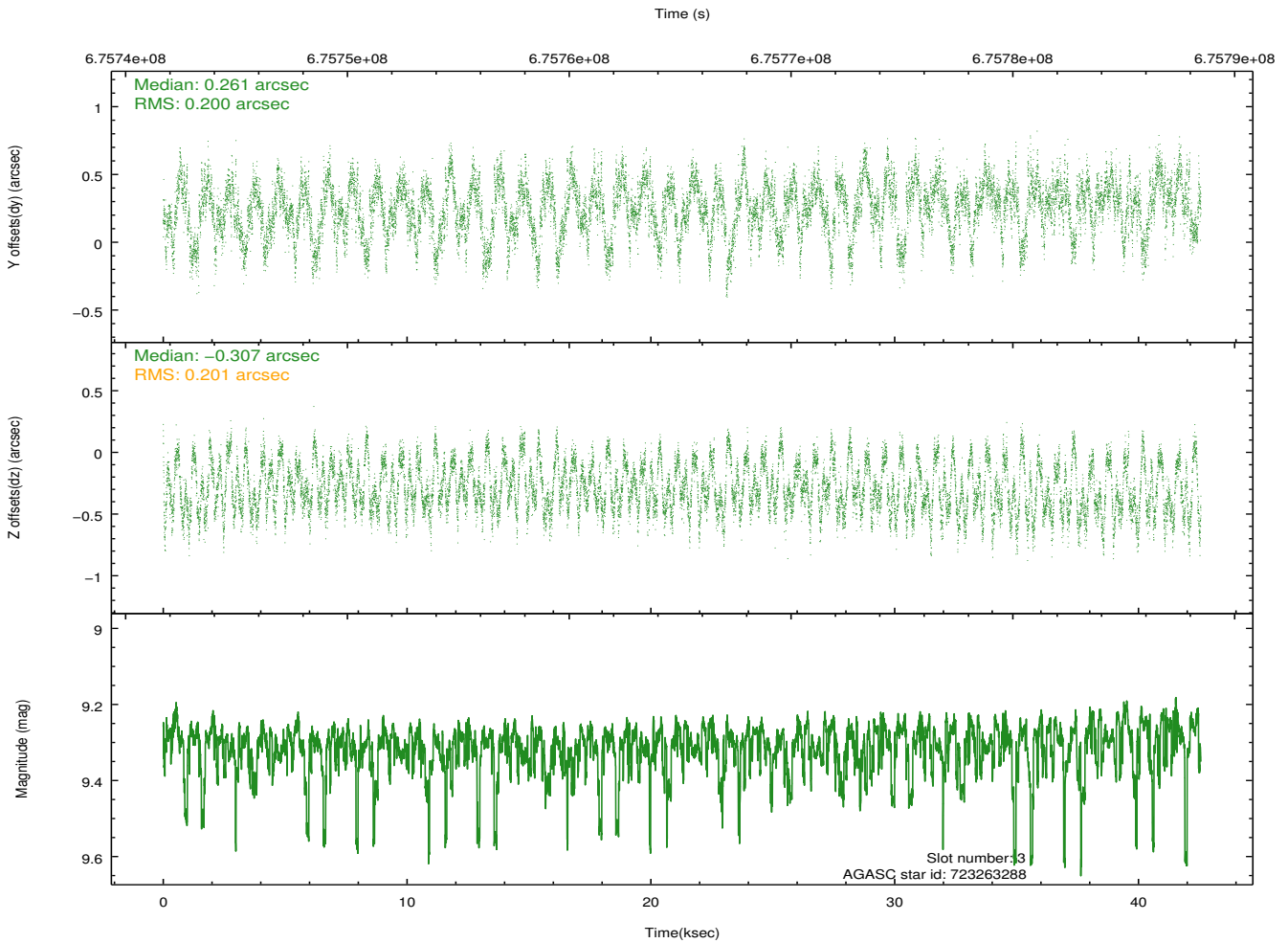
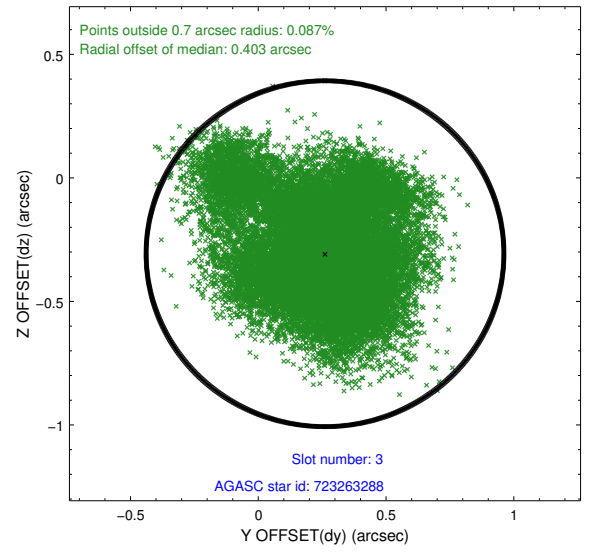
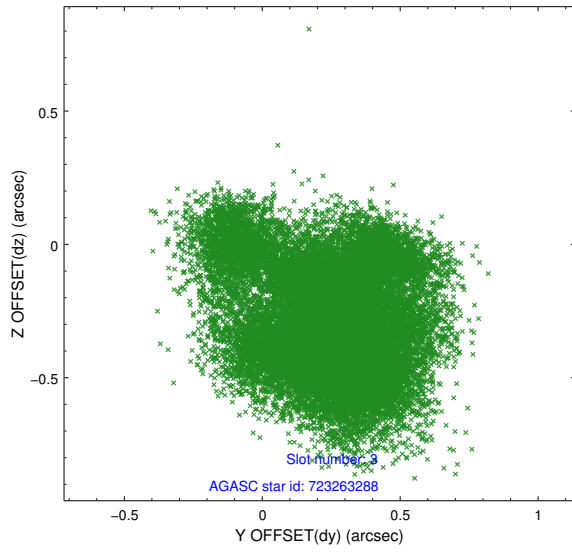
Slot Statistics

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	7.24	10382	1.000	0.108	-0.150	0.037	0.100	0.000000	0.000000	929.66	-840
1	FID		ACIS-I-5	7.23	10381	1.000	-0.467	0.017	0.010	0.035	0.000000	0.000000	-1819.19	1057
2	FID		ACIS-I-6	7.21	10378	1.000	0.267	0.204	0.045	0.103	0.000000	0.000000	395.14	1702
3	GUIDE	used	723263288	9.31	20739	1.000	0.261	-0.307	0.303	0.490	181.077399	-9.358326	2339.20	-903
4	GUIDE	used	723263376	8.48	20752	1.000	0.047	0.058	0.133	0.210	181.274677	-9.308585	1973.33	-278
5	GUIDE	used	723264944	8.73	20747	1.000	0.264	0.334	0.188	0.285	181.255643	-8.527713	-709.24	-1119
6	GUIDE	used	723397104	7.72	20759	1.000	-0.160	0.316	0.111	0.183	181.946290	-8.486028	-1531.20	1199
7	GUIDE	used	723396560	10.06	20614	1.000	-0.382	-0.414	0.279	0.453	182.042270	-9.131323	607.62	2167

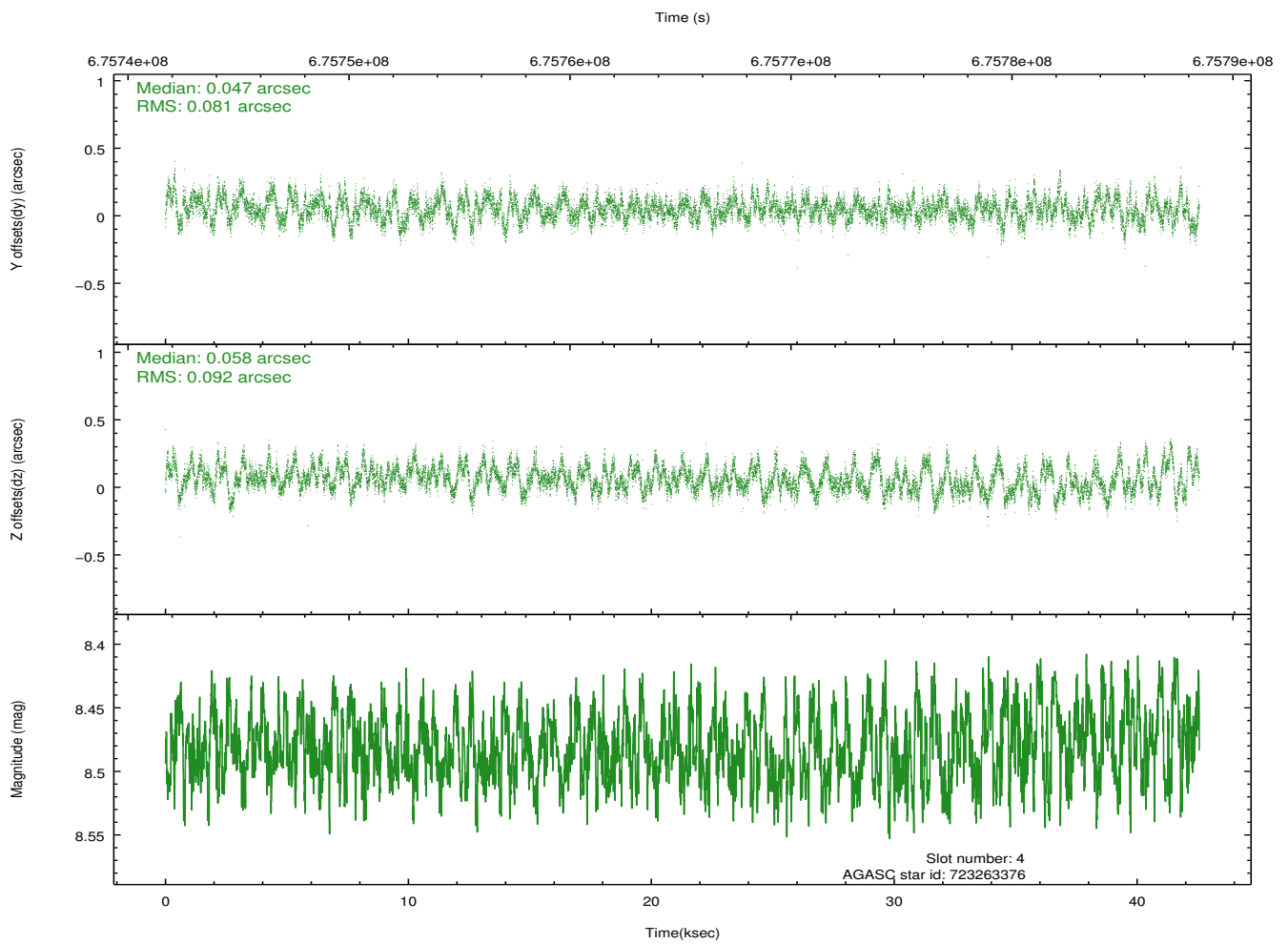
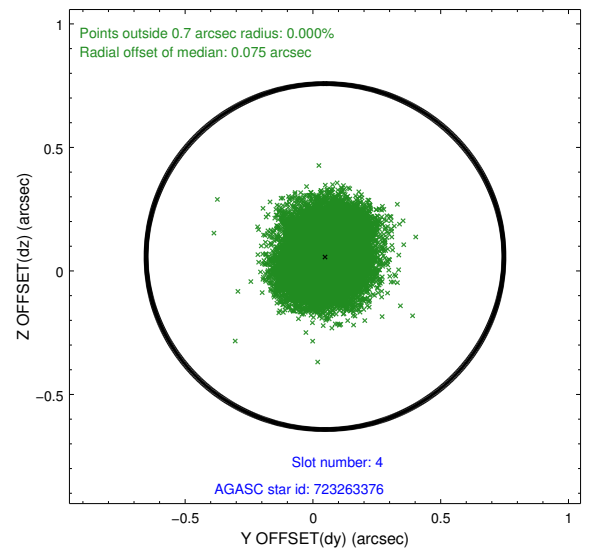
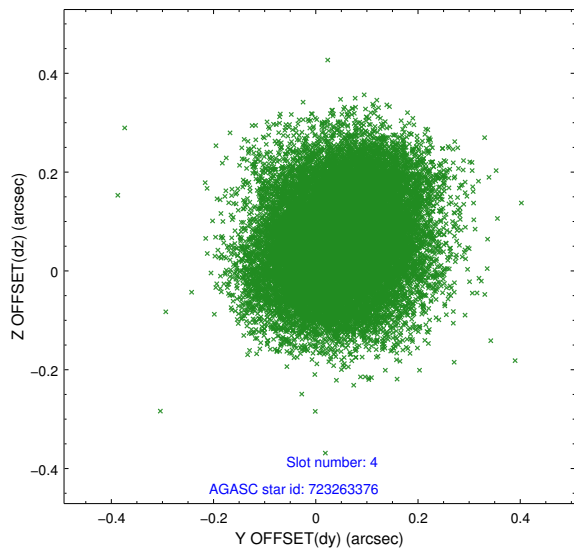
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2.4 Star Slots

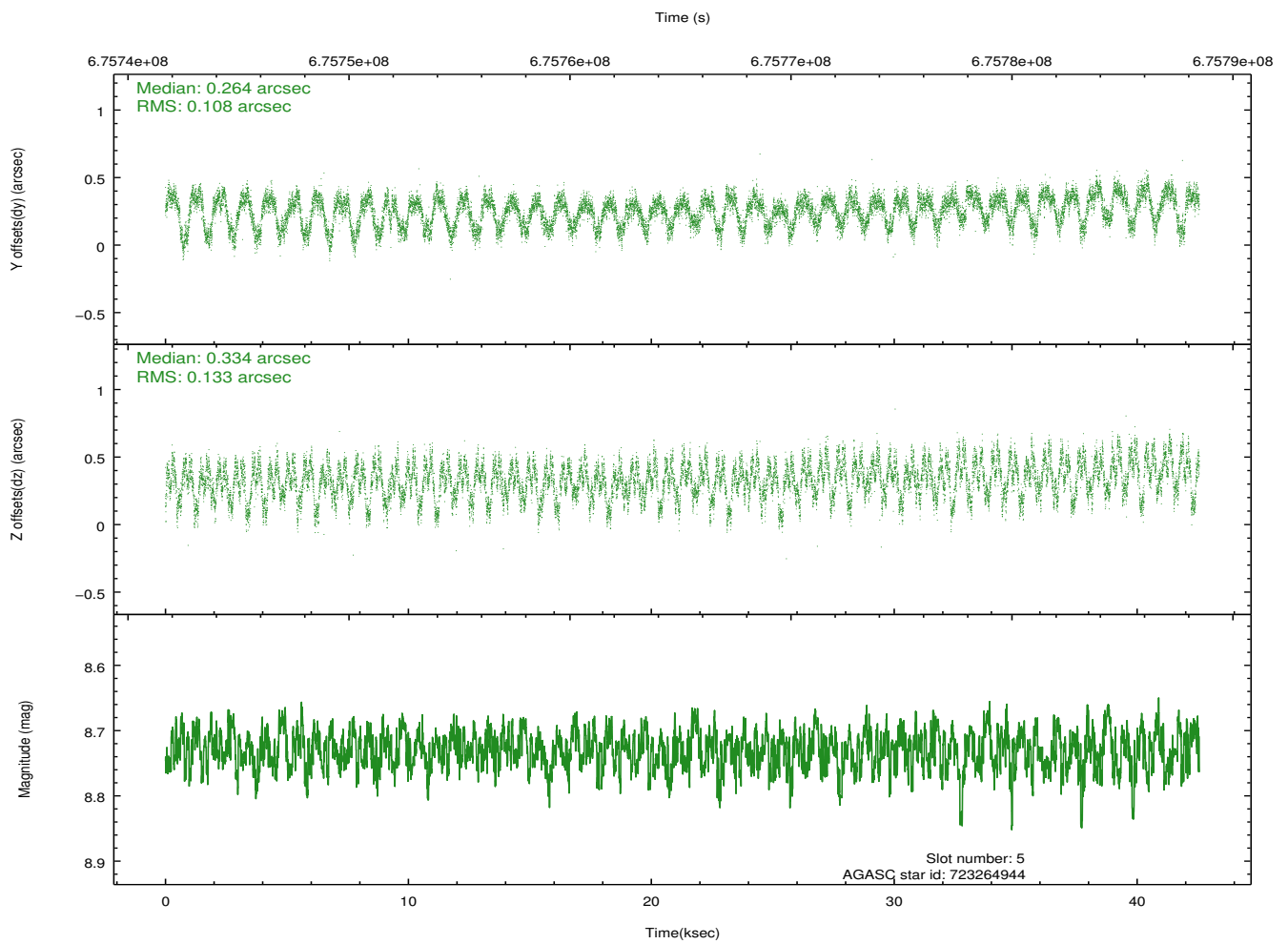
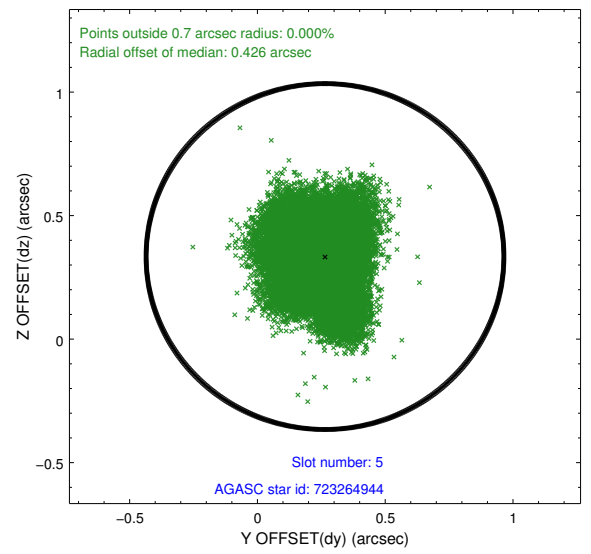
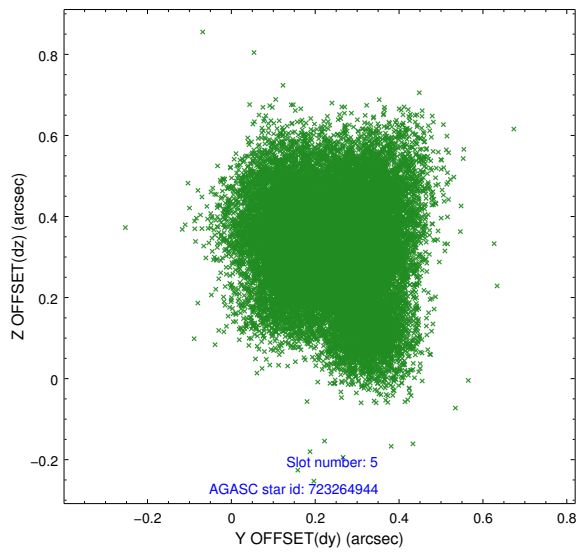
2.4.1 Slot 3



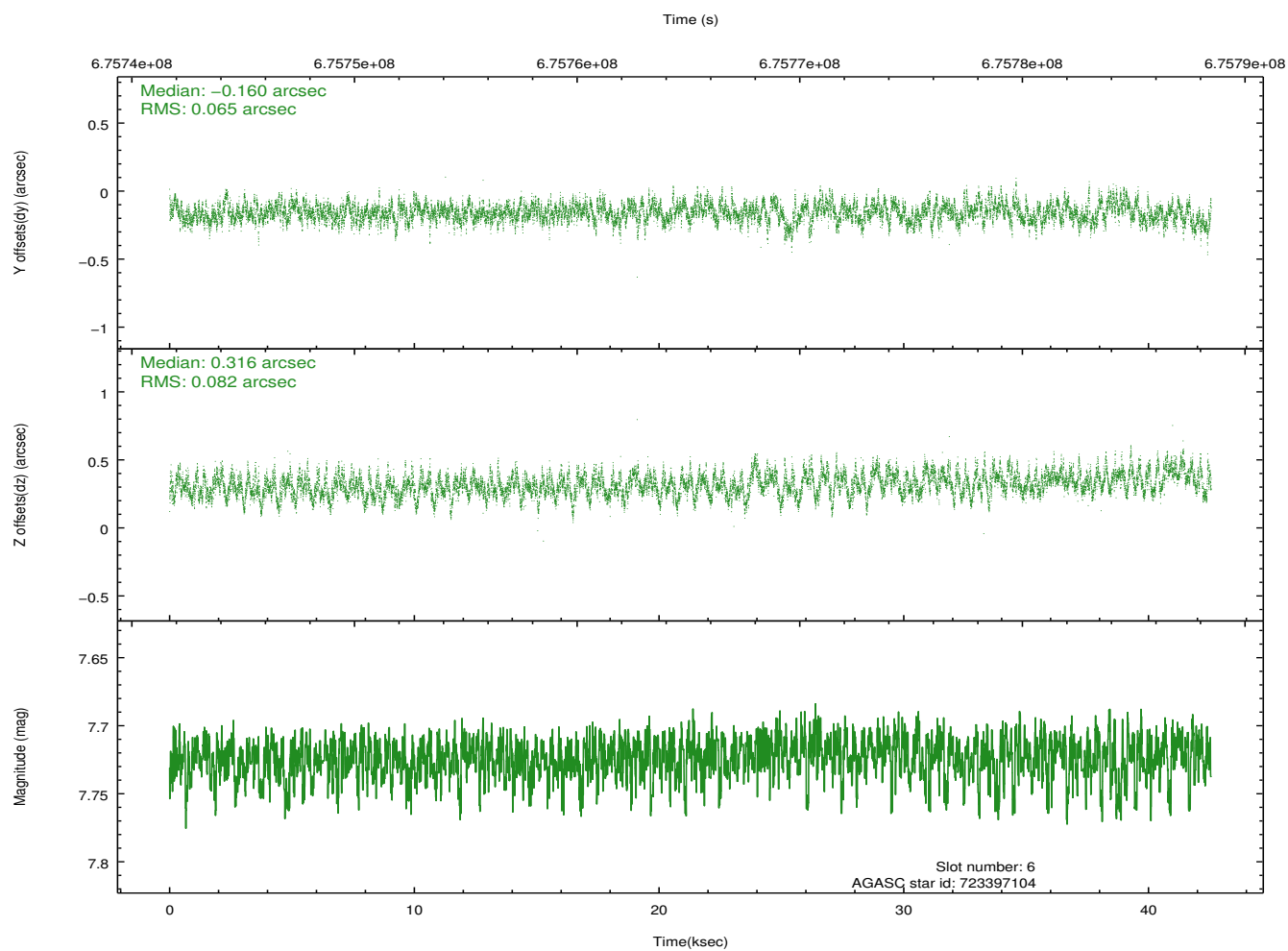
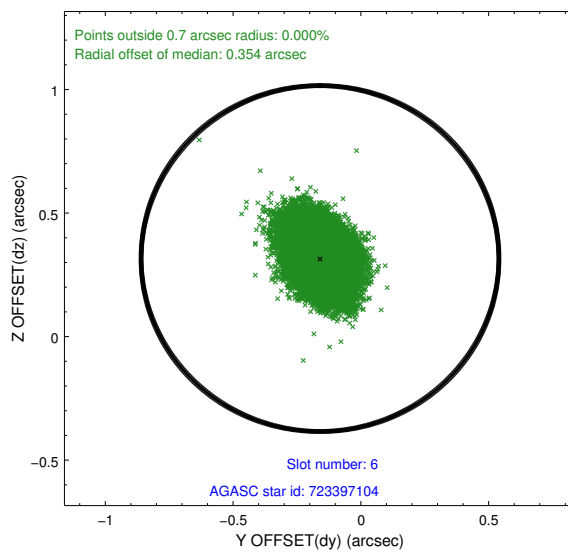
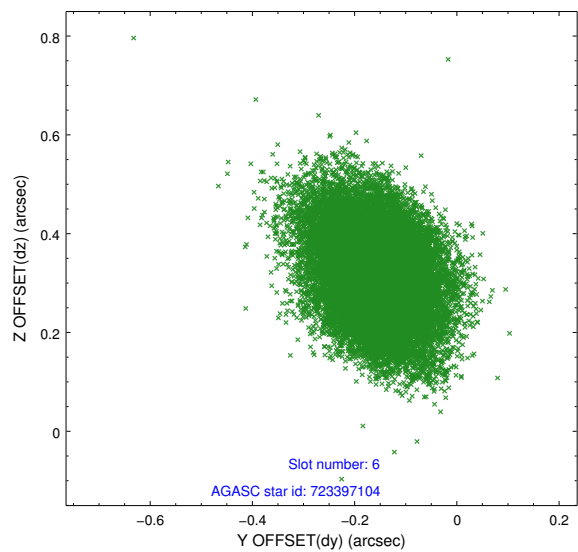
2.4.2 Slot 4



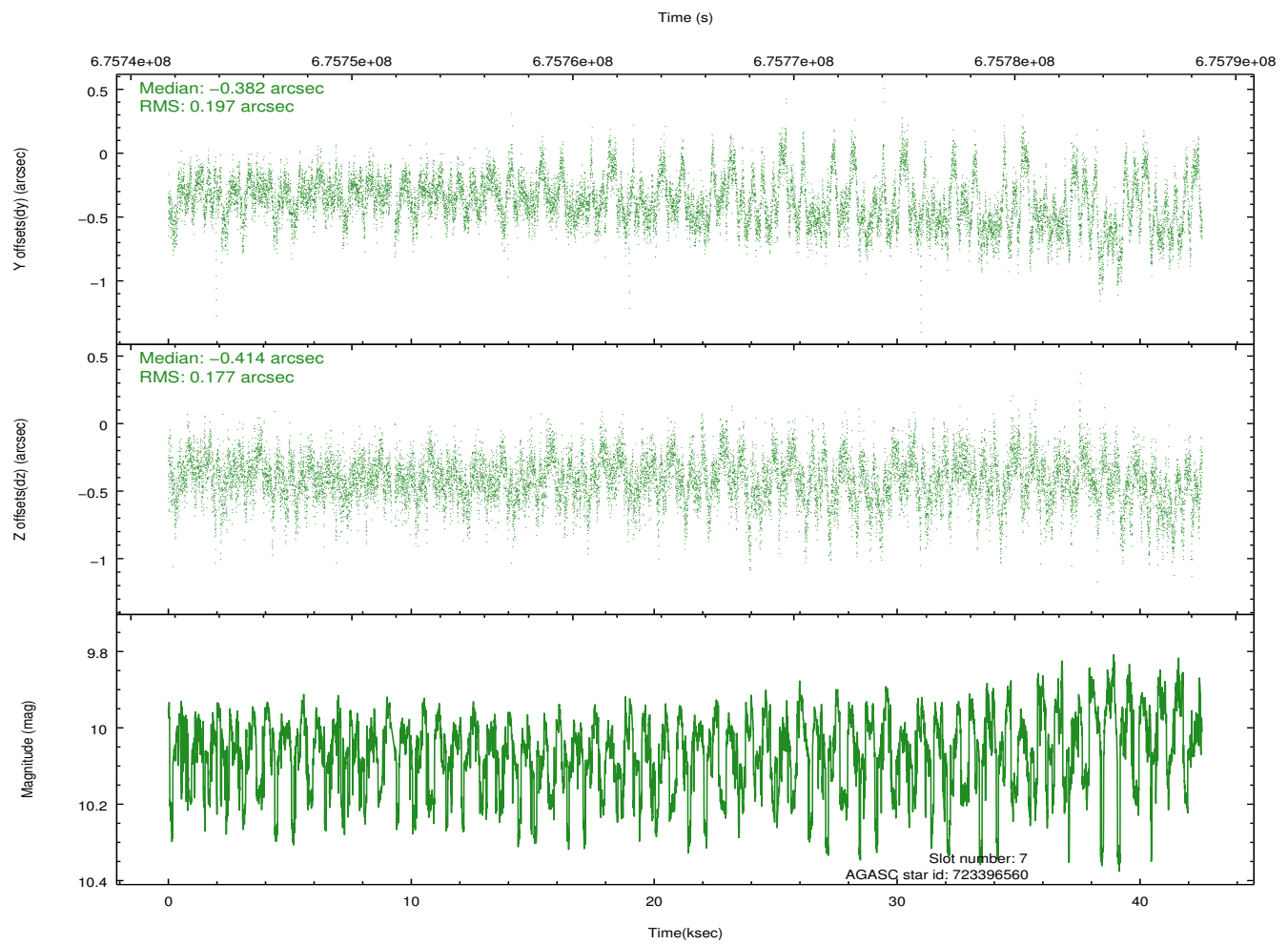
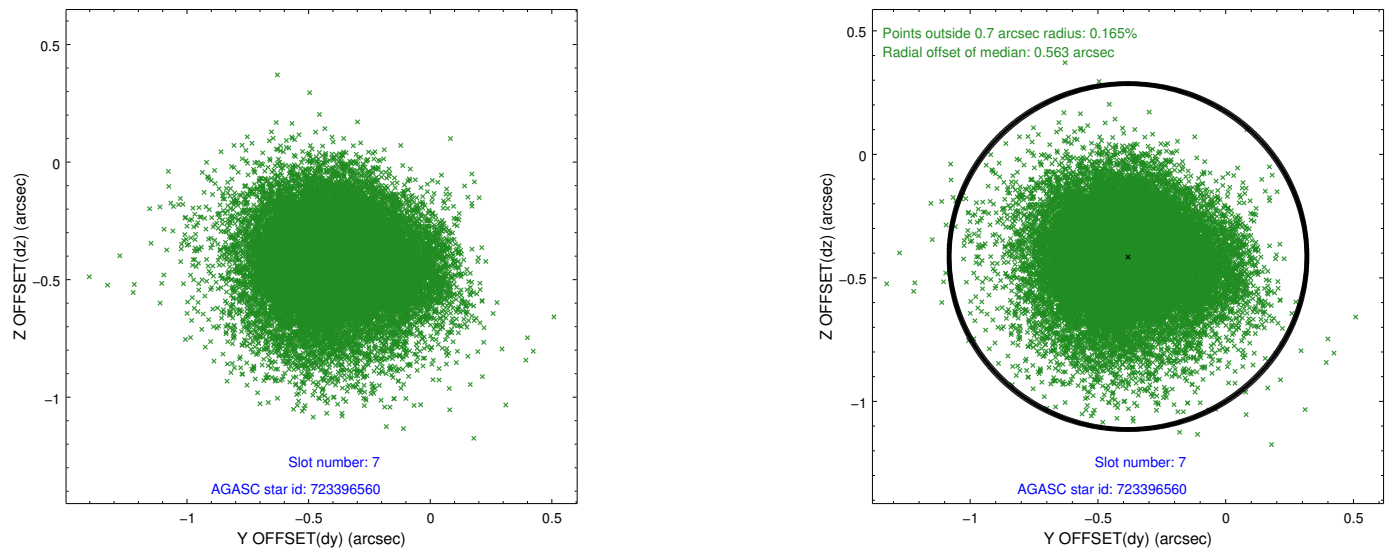
2.4.3 Slot 5



2.4.4 Slot 6

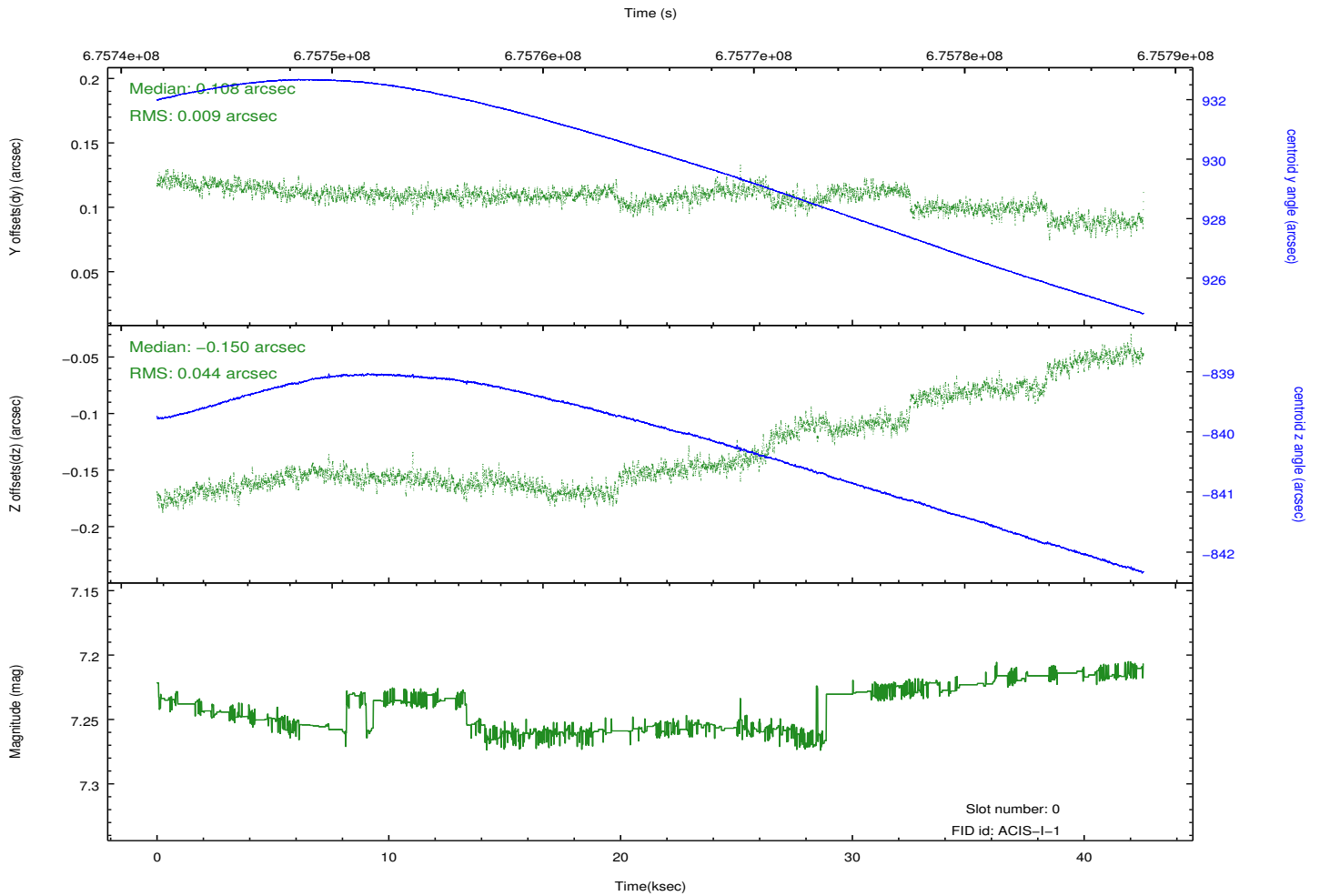
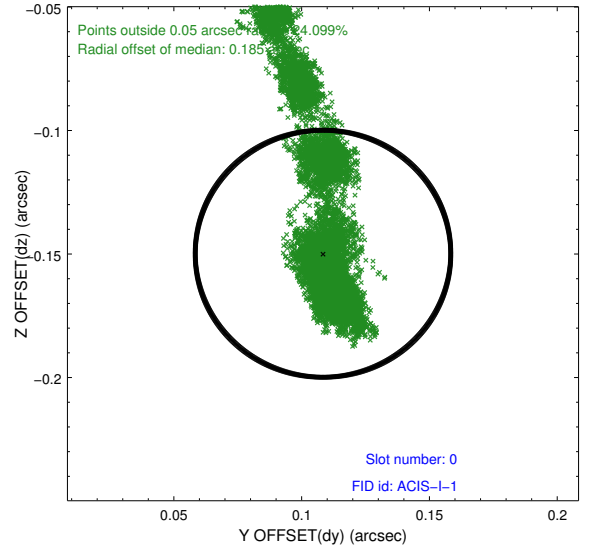
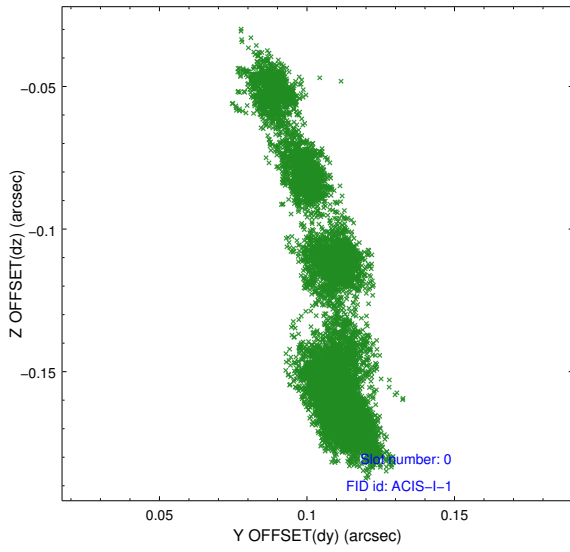


2.4.5 Slot 7

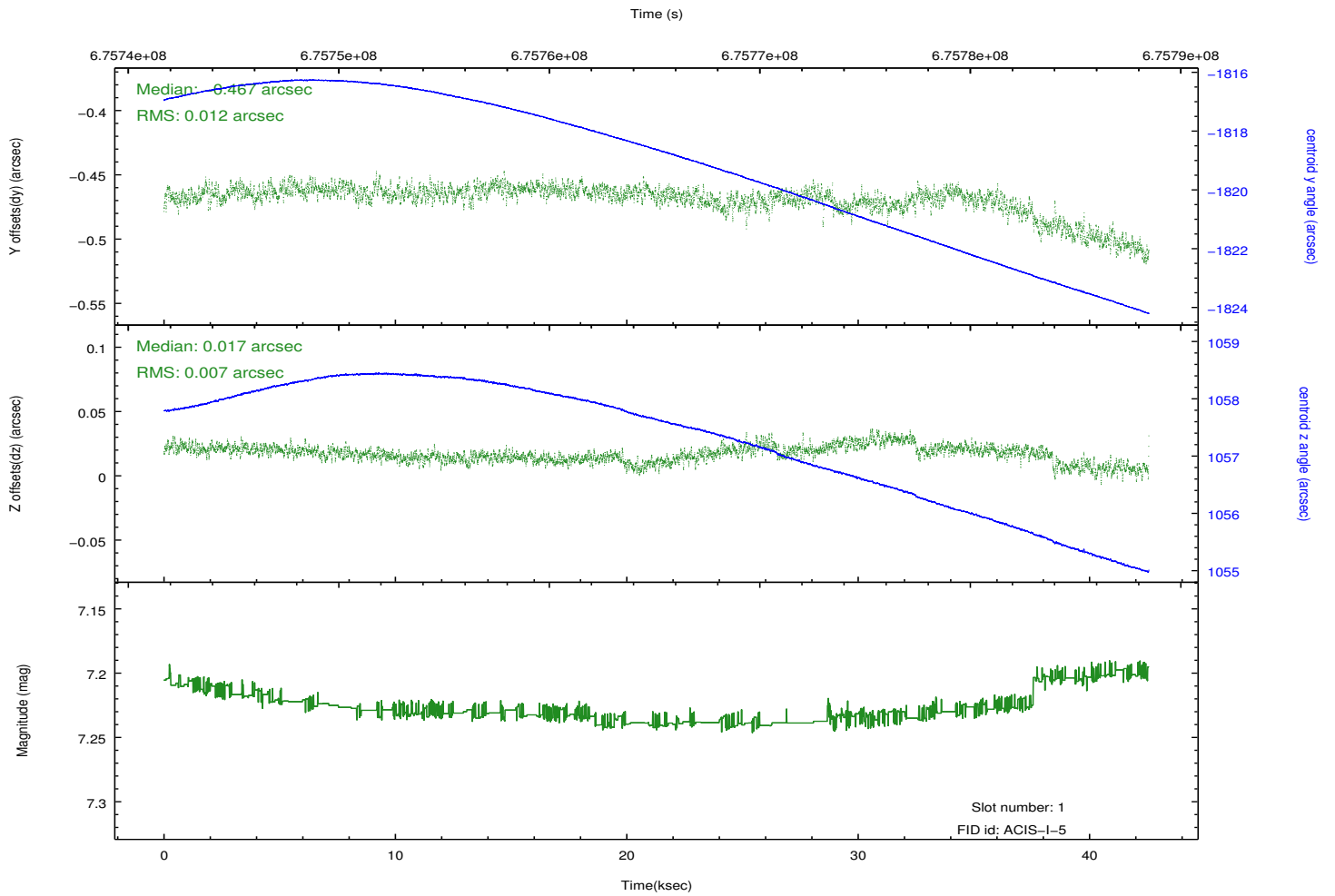
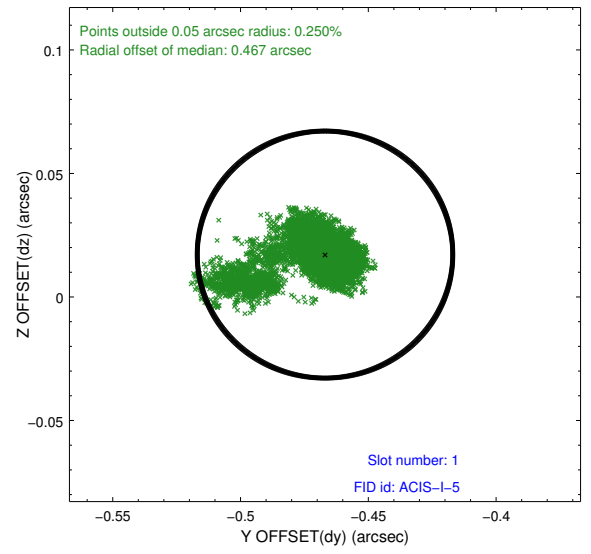
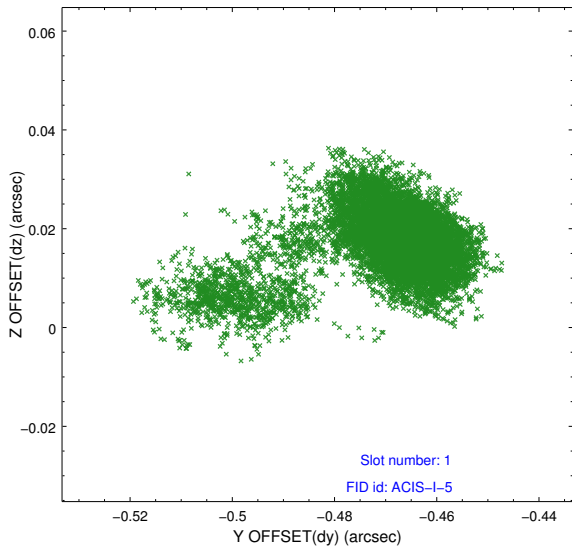


2.5 FID Slots

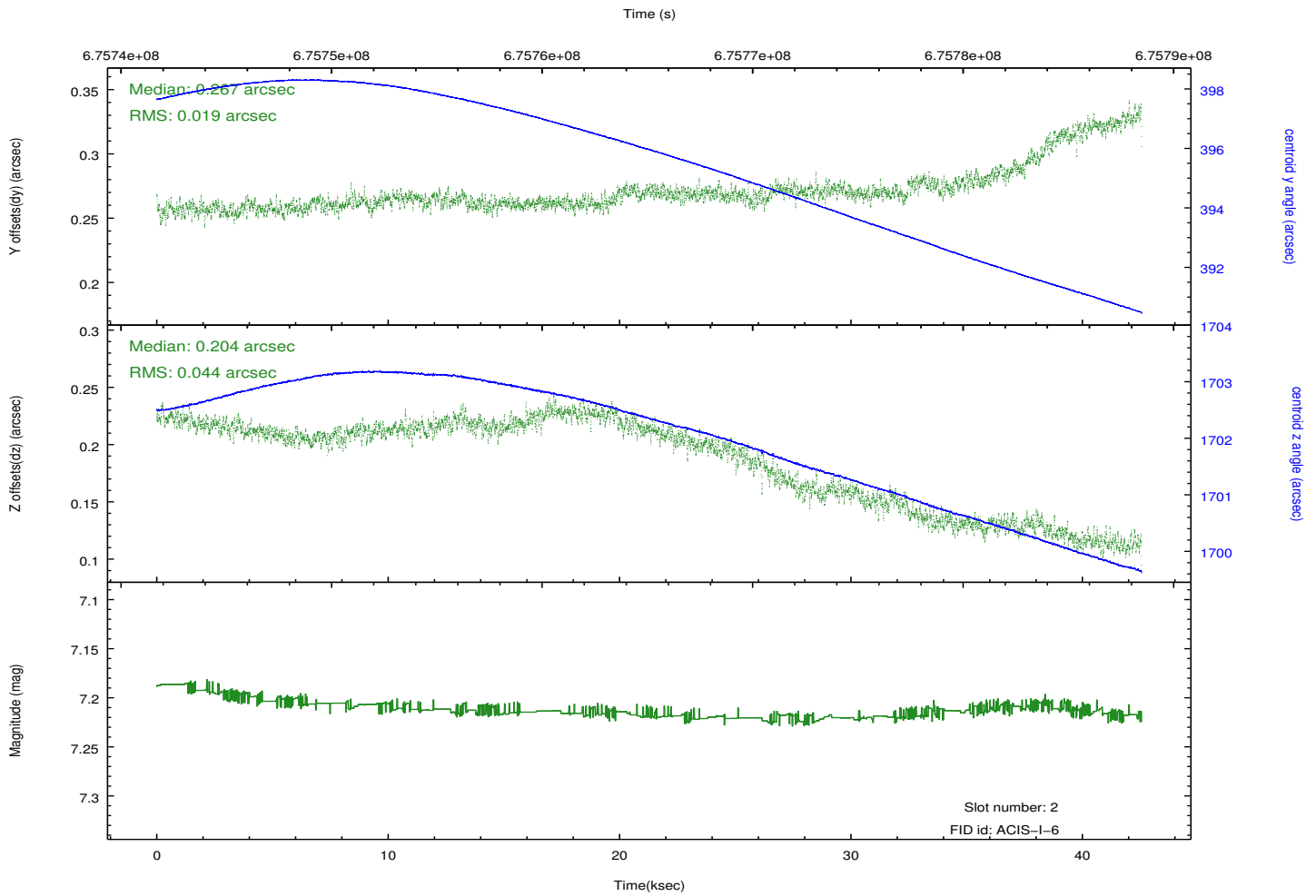
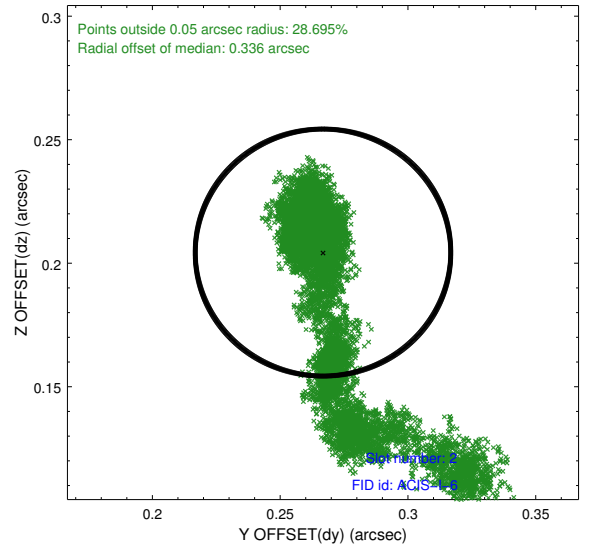
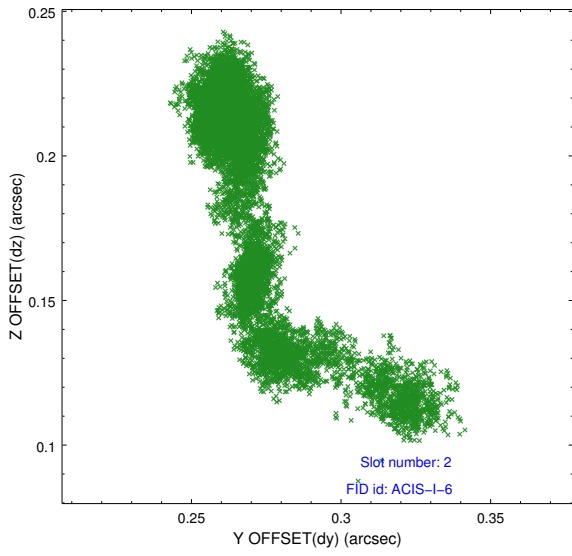
2.5.1 Slot 0



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)	2019.06.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	42.462594756126

A.2 Comments

One optional chip was dropped.