

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 21726 - L2 Version 1
Chandra X-Ray Center

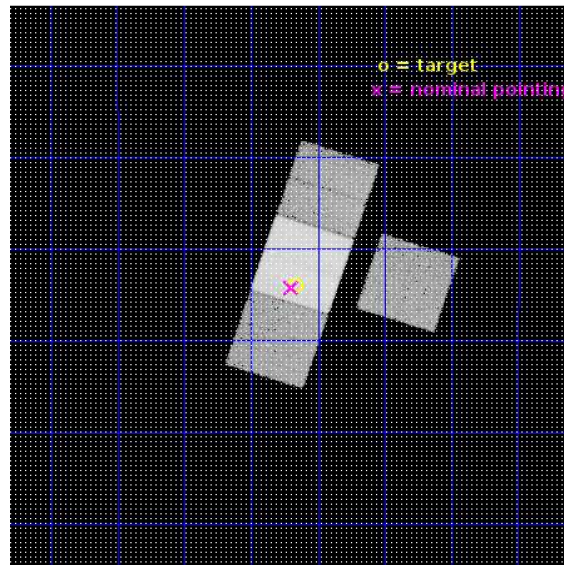
L2 Processing Date : Aug 31 2018

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1 Front

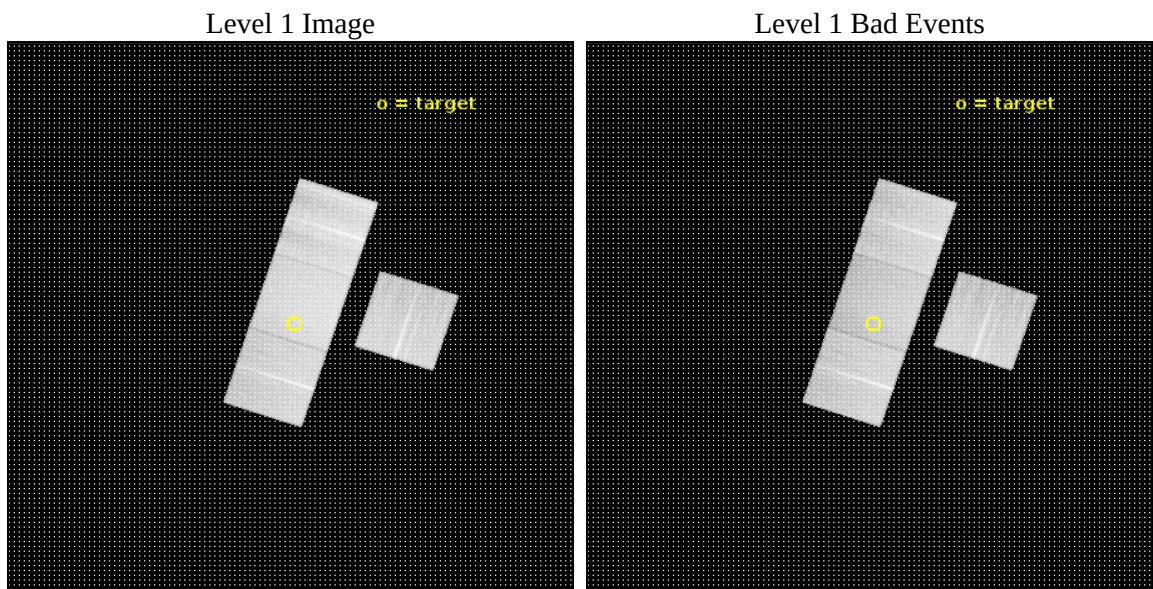
seq_num	703573	Sequence number
obs_id	21726	Observation id
title	Did the first quasars come in pairs? Chandra/ALMA synergistic observations of quasars at $z > 6$	Proposal title
observer	Eduardo Banados	Principal investigator
object	P308-21	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	308.0425	Observer's specified target RA [deg]
dec_targ	-21.234083	Observer's specified target Dec [deg]
ra_nom	308.04967051166	Nominal RA [deg]
dec_nom	-21.237707578953	Nominal Dec [deg]
roll_nom	288.15921630679	Nominal Roll [deg]
revision	1	Processing version of data
ontime	33507.900257826	Sum of GTIs [s]
livetime	33070.0948728	Livetime [s]
ontime3	33507.900257826	Sum of GTIs [s]
ontime6	33507.900257826	Sum of GTIs [s]
ontime7	33507.900257826	Sum of GTIs [s]
ontime8	33507.900257826	Sum of GTIs [s]
l2events	213008	Number of level 2 events



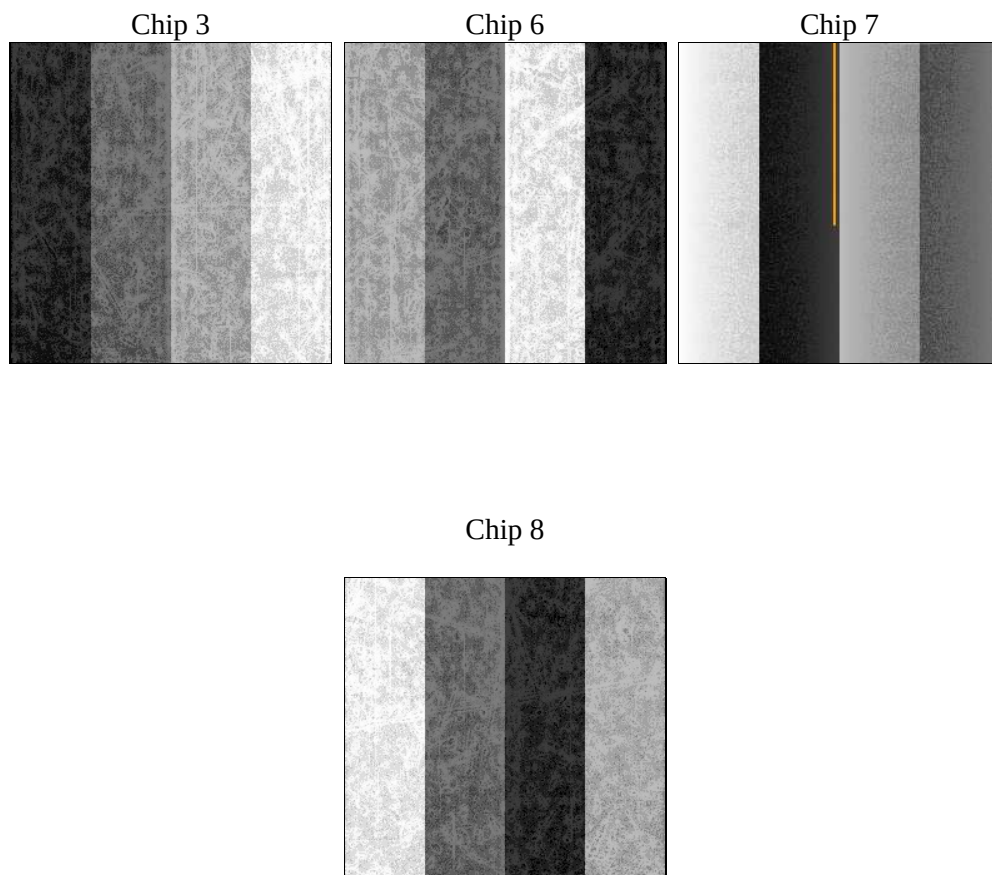
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33440.953000	[s] Scheduled observation exposure time
ascdsver	10.6.4	Processing system revision	ontime	33507.900257826	Sum of GTIs [s]
caldsver	4.7.8	 	ontime3	33507.900257826	Sum of GTIs [s]
date	2018-08-31T06:41:46	Date and time of file creation	ontime6	33507.900257826	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	33507.900257826	Sum of GTIs [s]
			ontime8	33507.900257826	Sum of GTIs [s]
			l1events	1168220	Number of level 1 events

2.1.4 Events

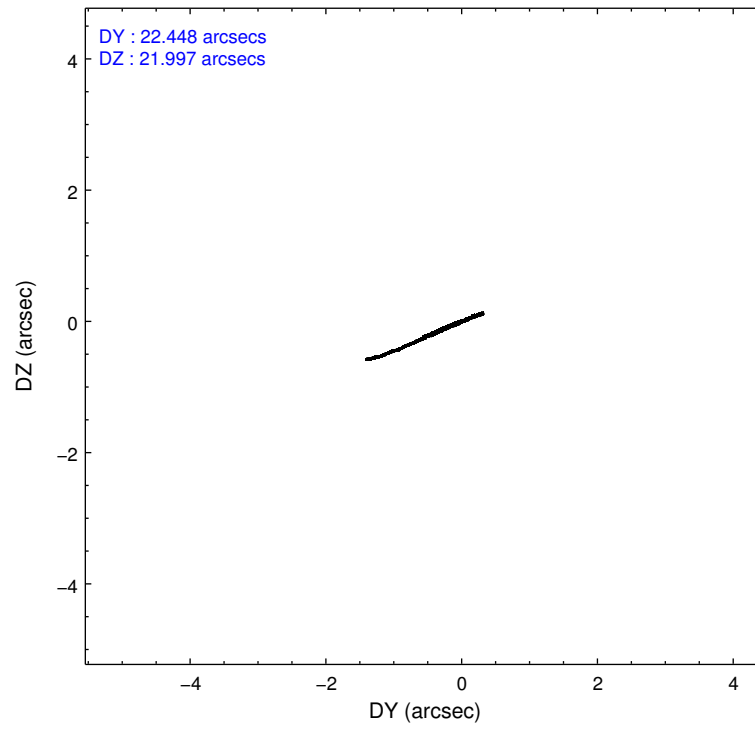
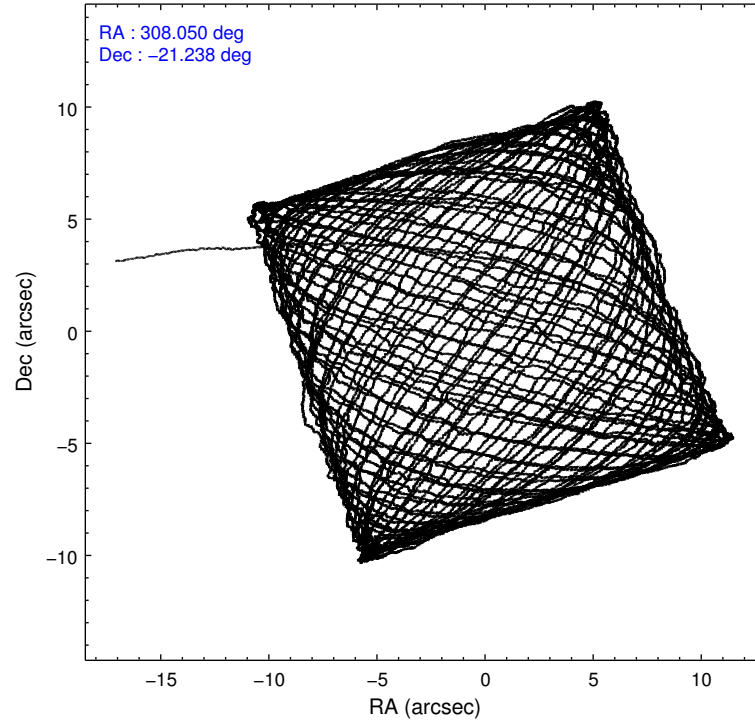
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	249463	260465	326364	331928
rejected events	223866	231735	185298	244335
rejected %	89%	88%	56%	73%

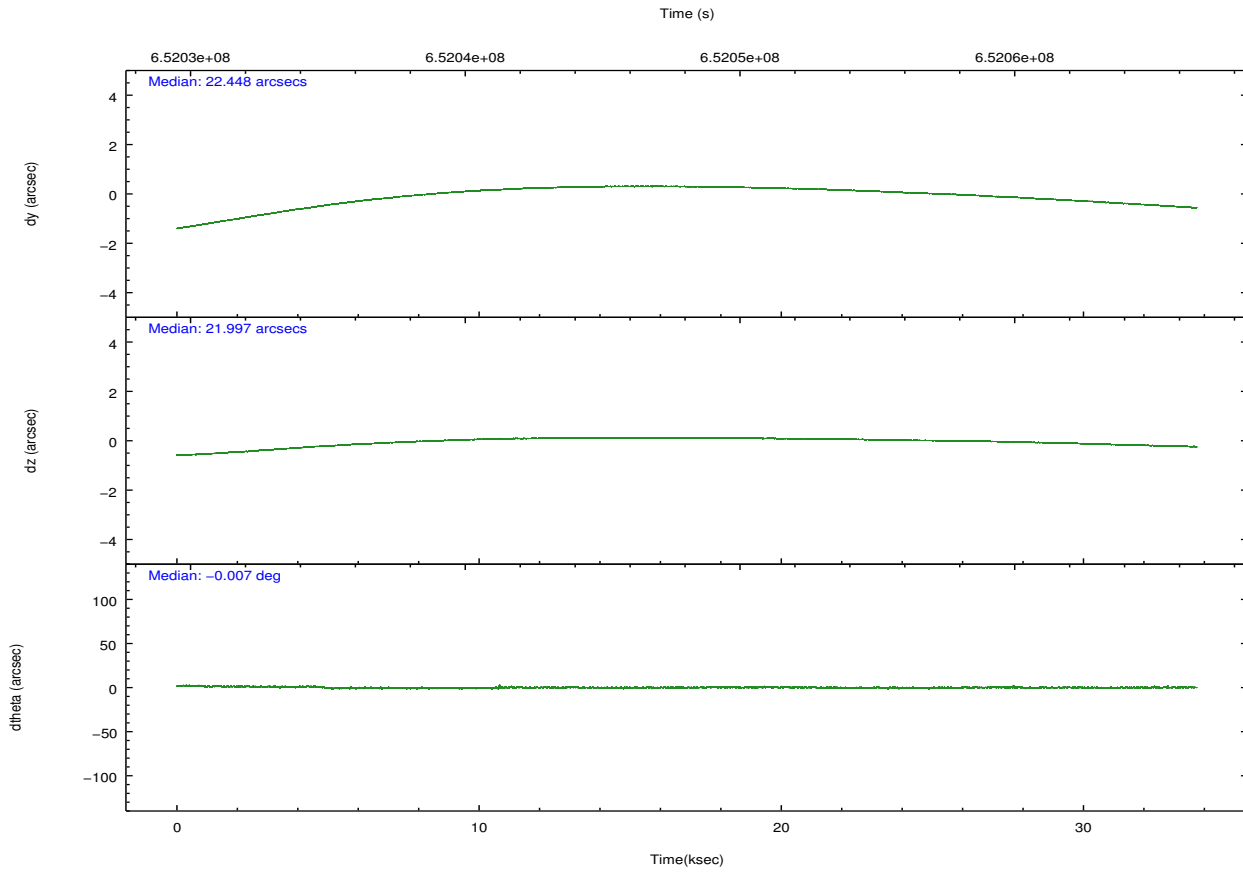
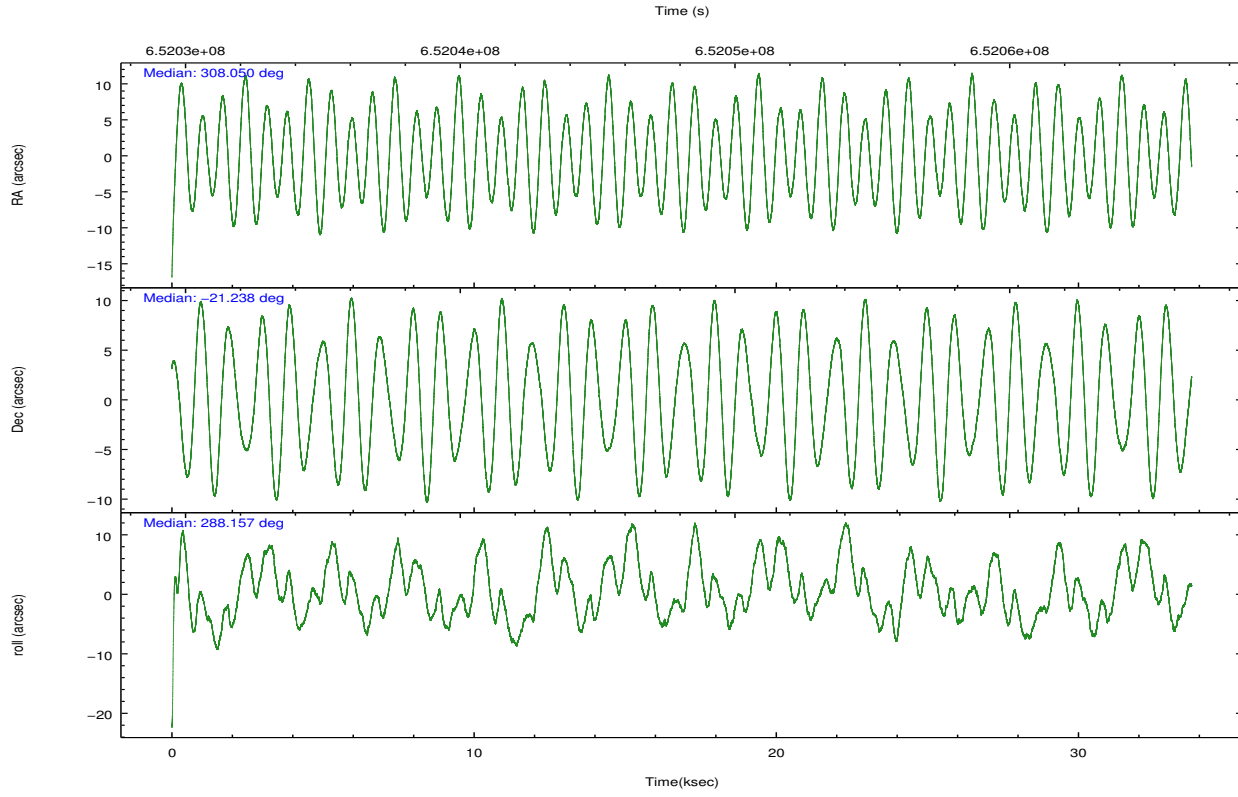
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8847	9169	11807	24264
	3%	3%	3%	7%
grade 1 events	138	128	421	244
	0%	0%	0%	0%
grade 2 events	5595	6820	29755	21446
	2%	2%	9%	6%
grade 3 events	2658	2614	11307	9031
	1%	1%	3%	2%
grade 4 events	2844	2718	11020	8552
	1%	1%	3%	2%
grade 5 events	11393	11367	32451	17795
	4%	4%	9%	5%
grade 6 events	5654	7412	77198	24329
	2%	2%	23%	7%
grade 7 events	212334	220237	152405	226267
	85%	84%	46%	68%

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	308.027463	308.0496705116578	CCD I2 on	O1	N
[deg] Pointing Dec	-21.219658	-21.23770757895256	CCD I3 on	Y	Y
[deg] Pointing Roll	287.994554	288.1592163067939	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)	652031524.184000	652030580.19803	CCD S5 on	N	N
Observation start date	2018-08-30T15:50:55	2018-08-30T15:36:20	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	652064965.184000	652065255.43759	On-chip summing requested	N	N
Observation end date	2018-08-31T01:08:16	2018-08-31T01:14:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



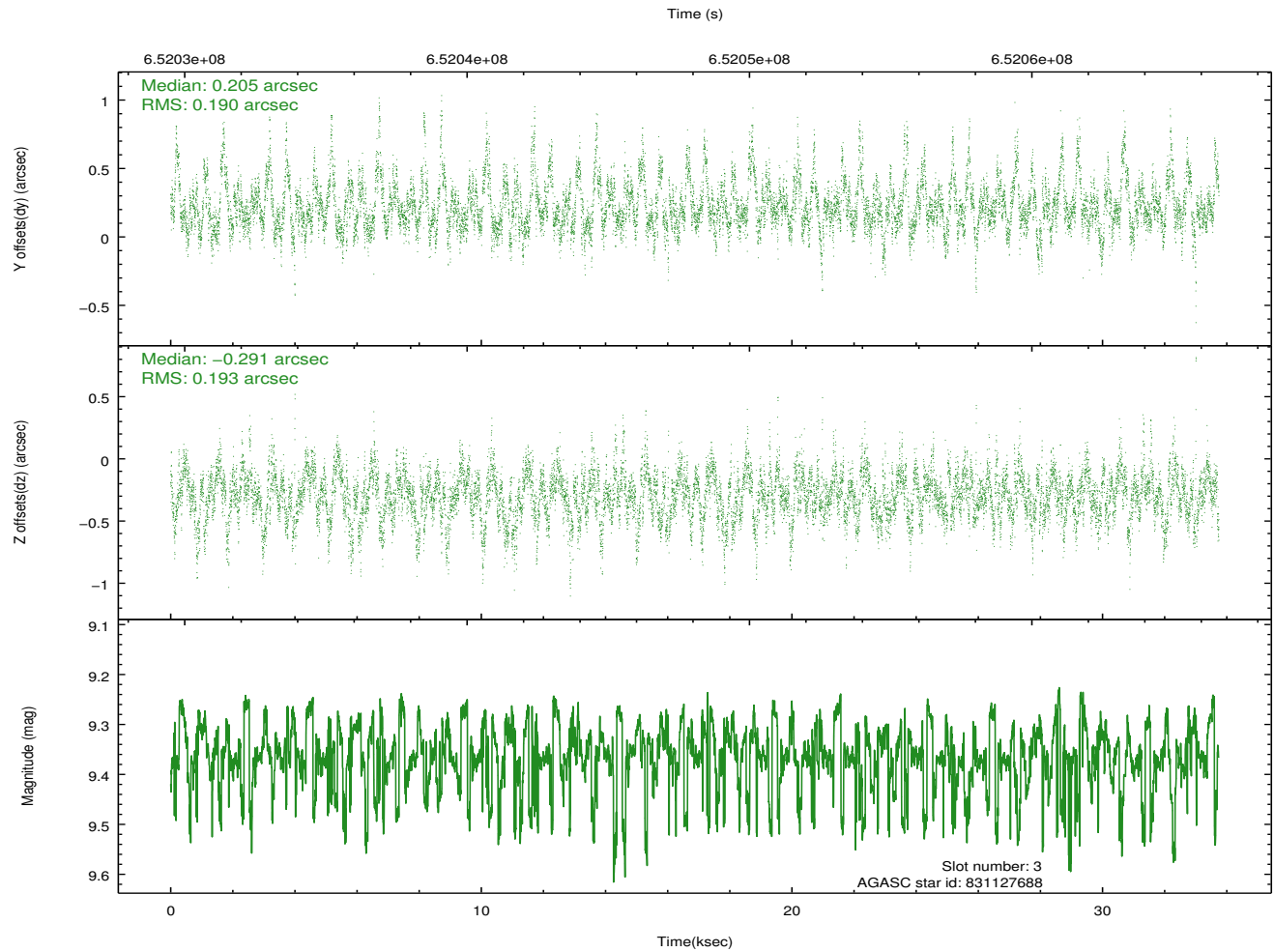
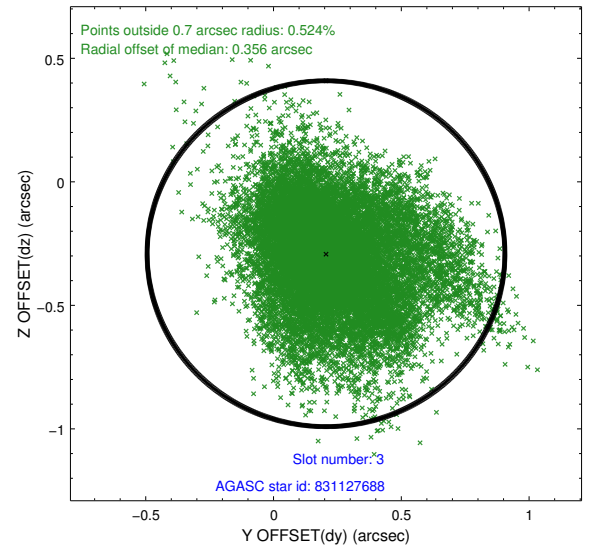
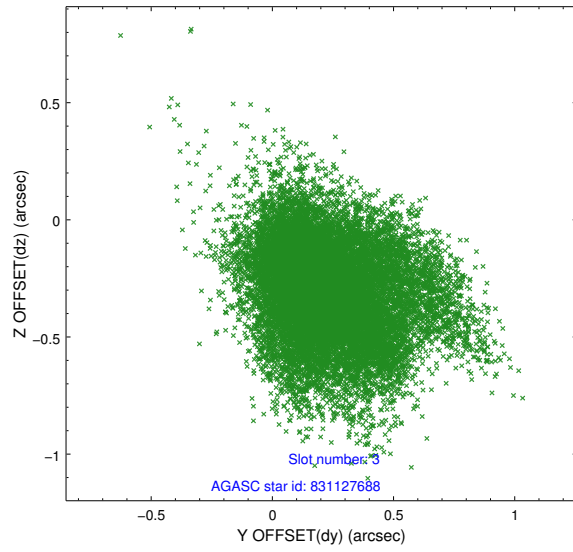


Slot Statistics

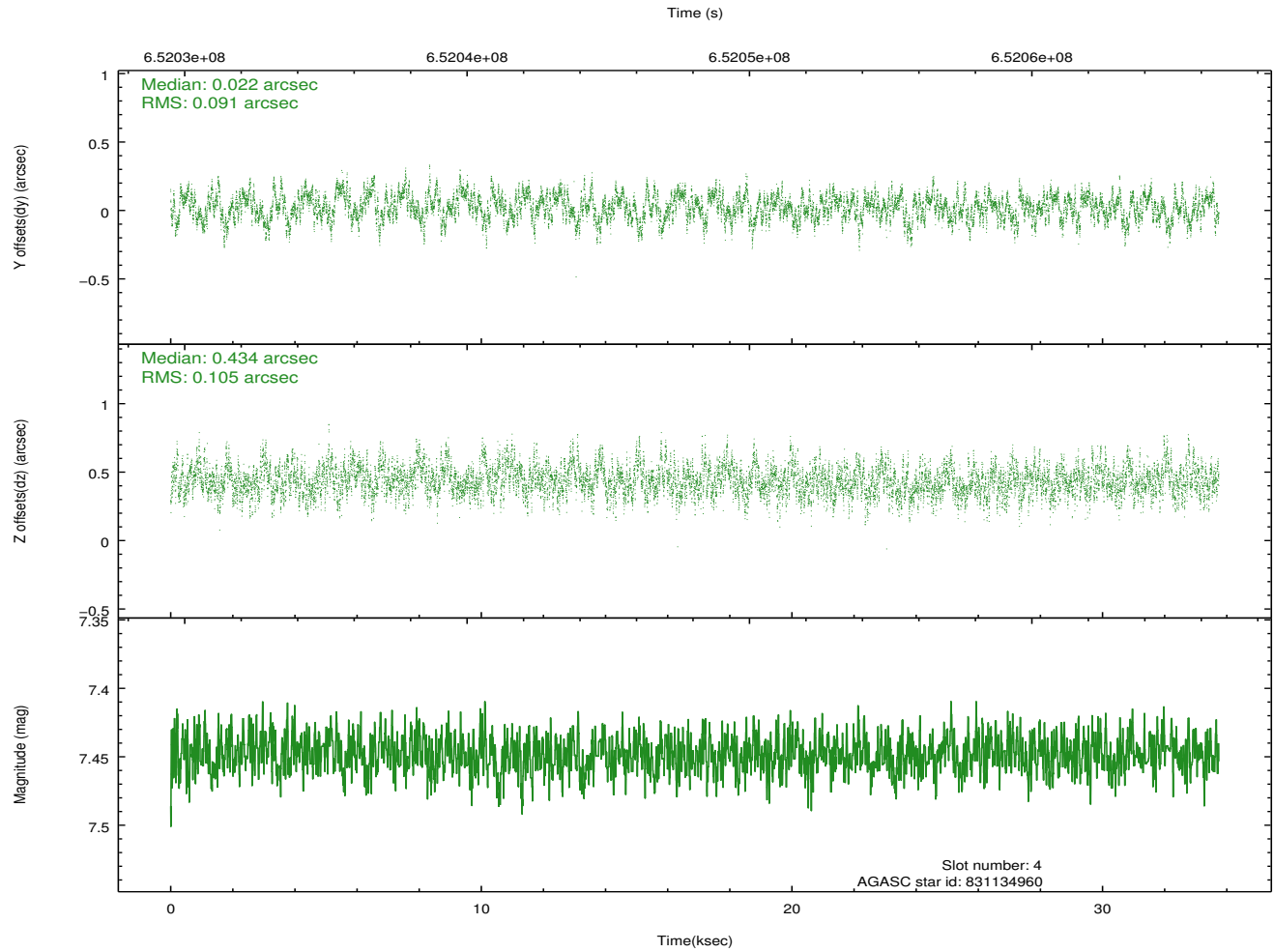
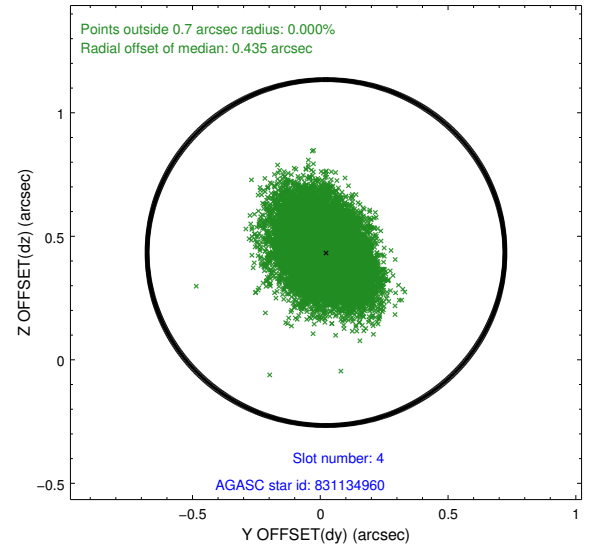
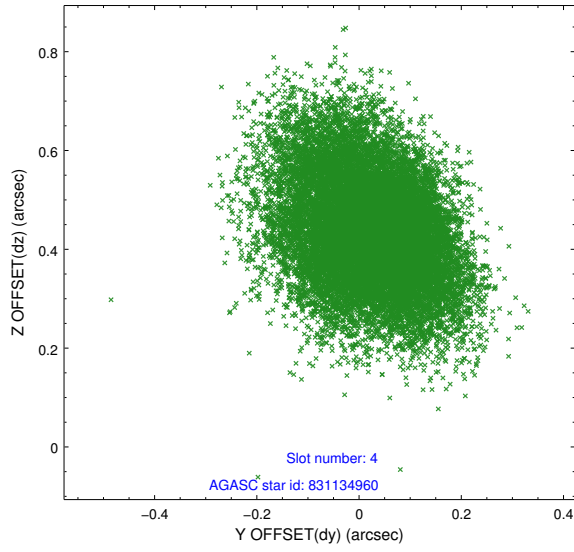
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-1	7.16	8230	1.000	0.052	-0.064	0.013	0.038	0.000000	0.000000	920.64	-1739
1	FID		ACIS-S-4	7.17	8231	1.000	0.428	0.024	0.016	0.036	0.000000	0.000000	2138.38	165
2	FID		ACIS-S-5	7.18	8231	1.000	-0.507	0.051	0.020	0.063	0.000000	0.000000	-1828.78	158
3	GUIDE	used	831127688	9.36	16415	1.000	0.205	-0.291	0.279	0.492	307.515525	-21.827699	1557.00	-2304
4	GUIDE	used	831134960	7.45	16461	1.000	0.022	0.434	0.147	0.244	307.251441	-20.901506	-1888.69	-2129
5	GUIDE	used	831138952	9.01	16449	1.000	0.271	0.266	0.174	0.287	307.512679	-21.257158	-401.27	-1684
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	831271720	9.45	16364	1.000	-0.527	-0.413	0.158	0.255	308.678830	-21.435437	1417.52	1834

2.4 Star Slots

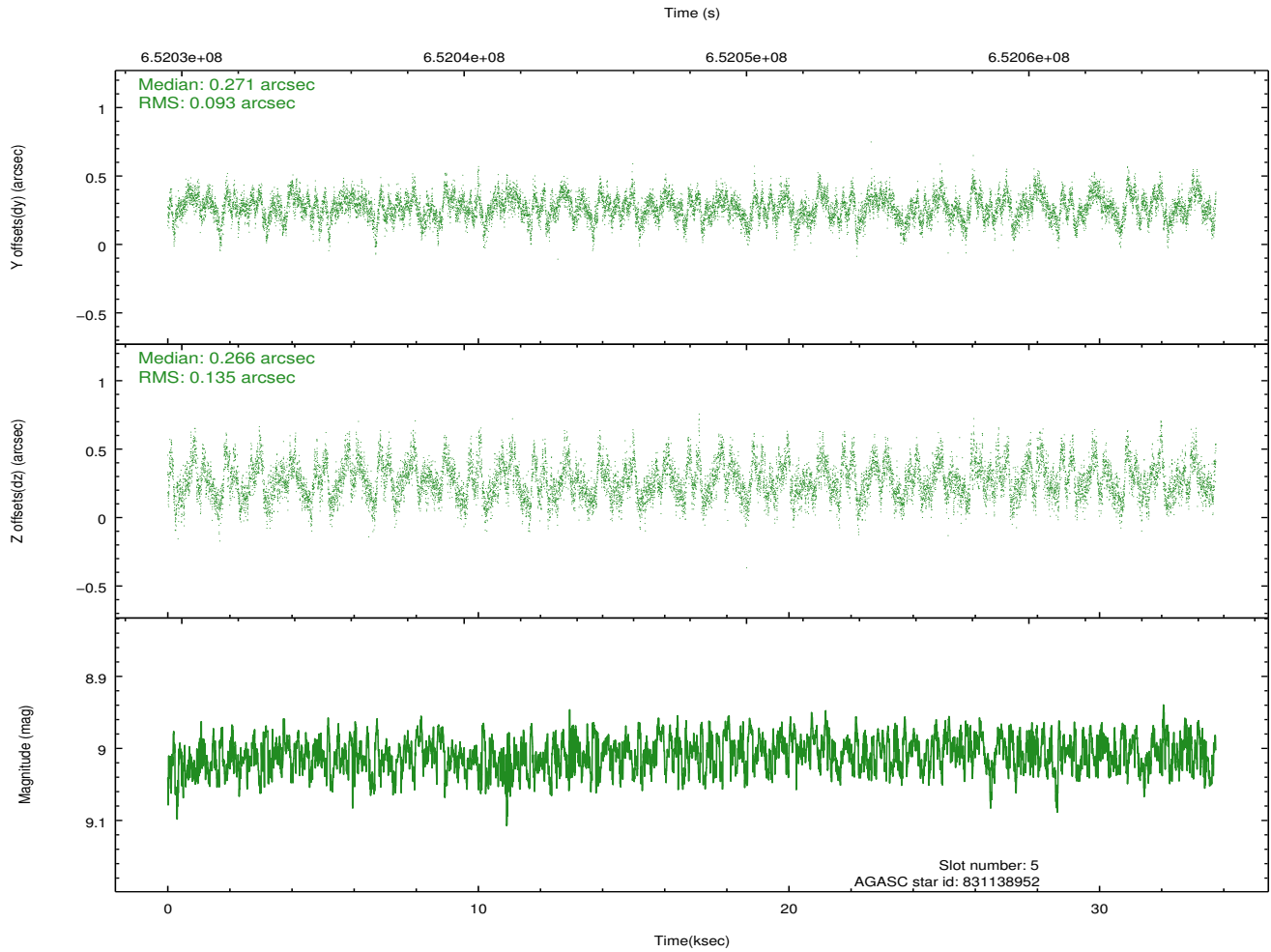
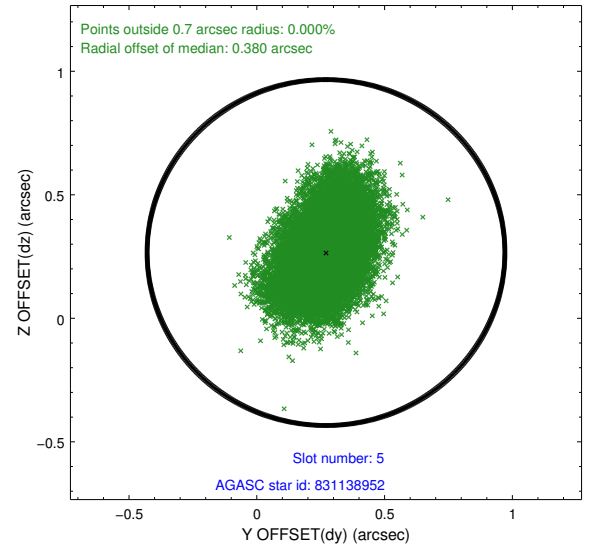
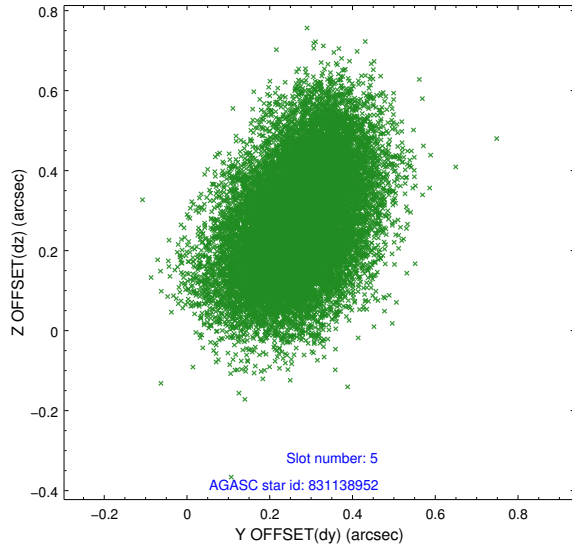
2.4.1 Slot 3



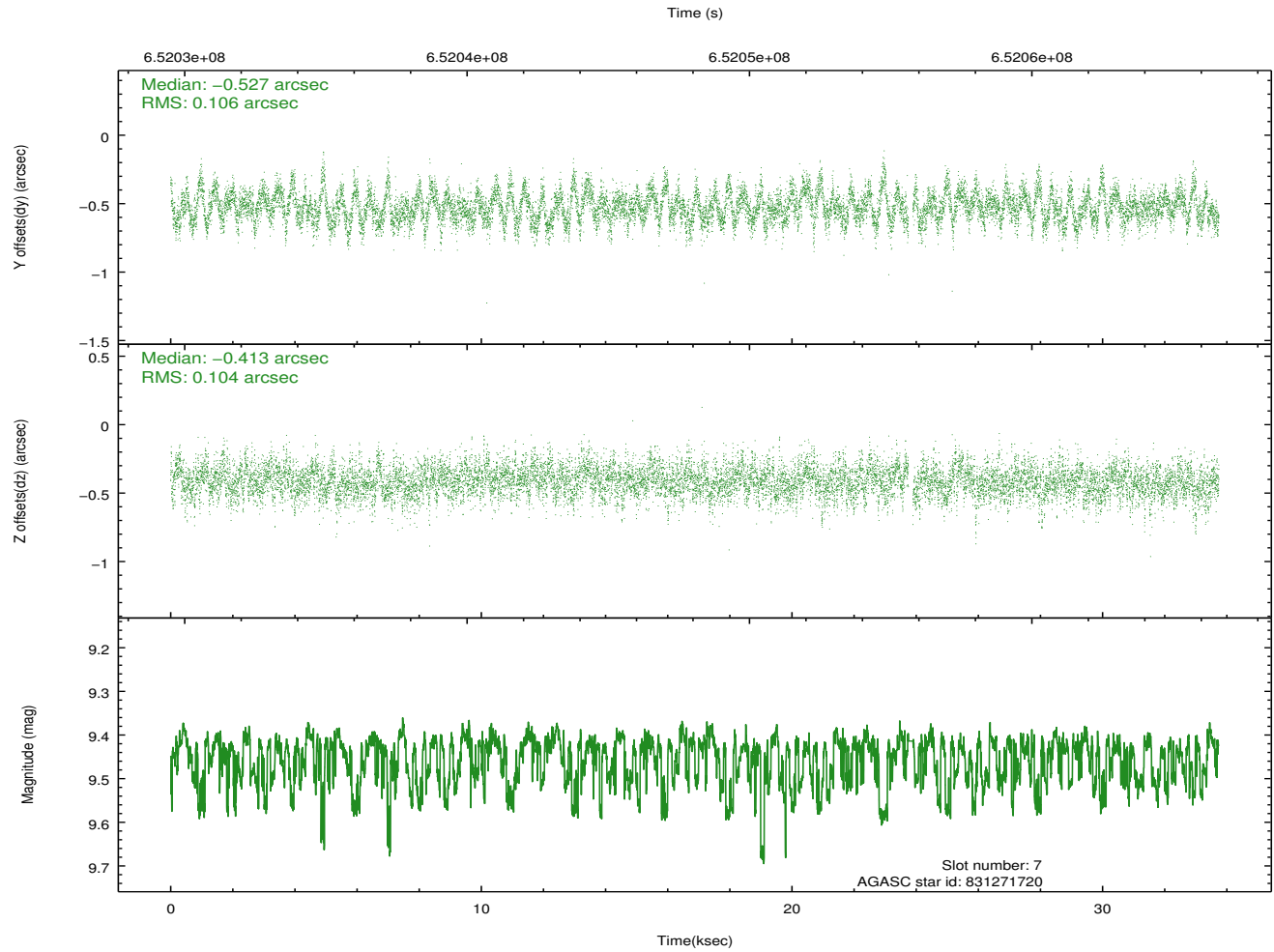
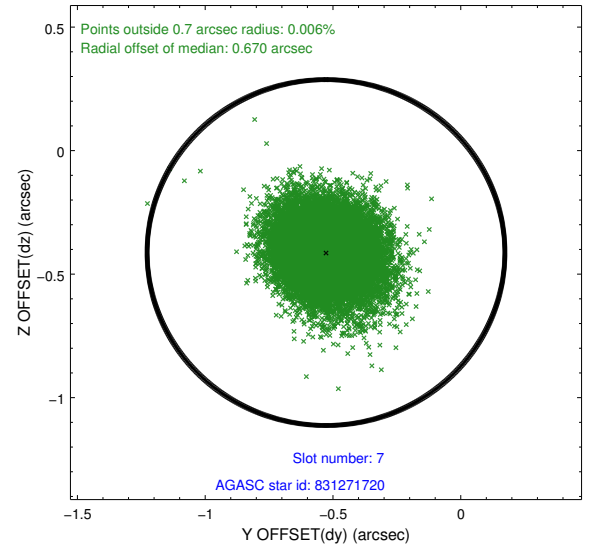
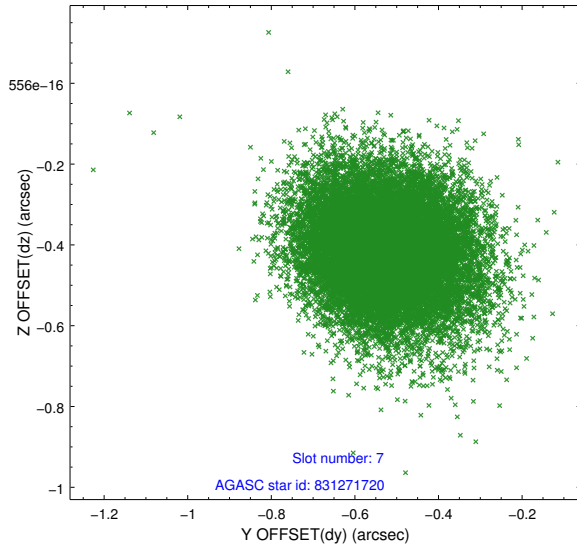
2.4.2 Slot 4



2.4.3 Slot 5

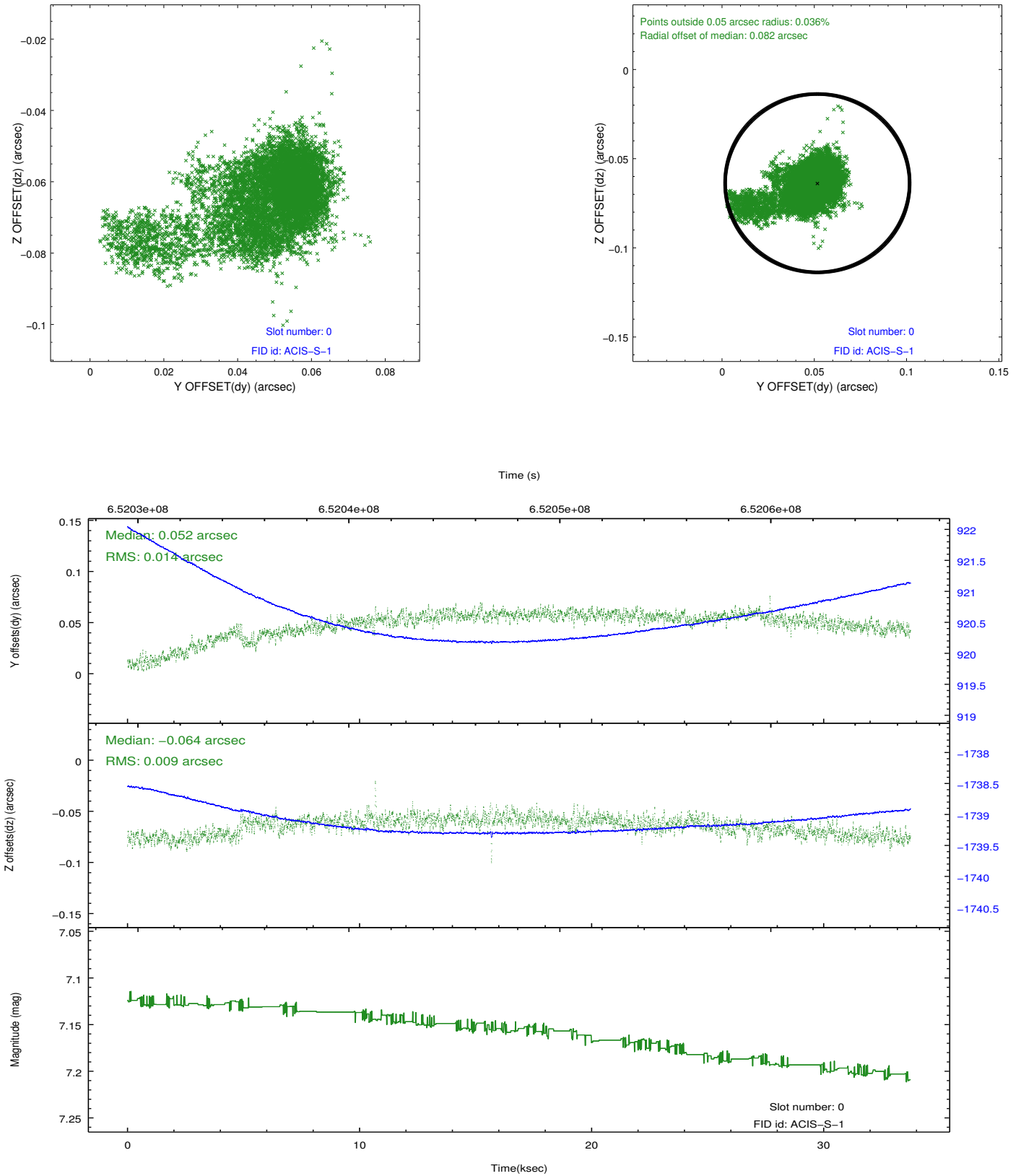


2.4.4 Slot 7

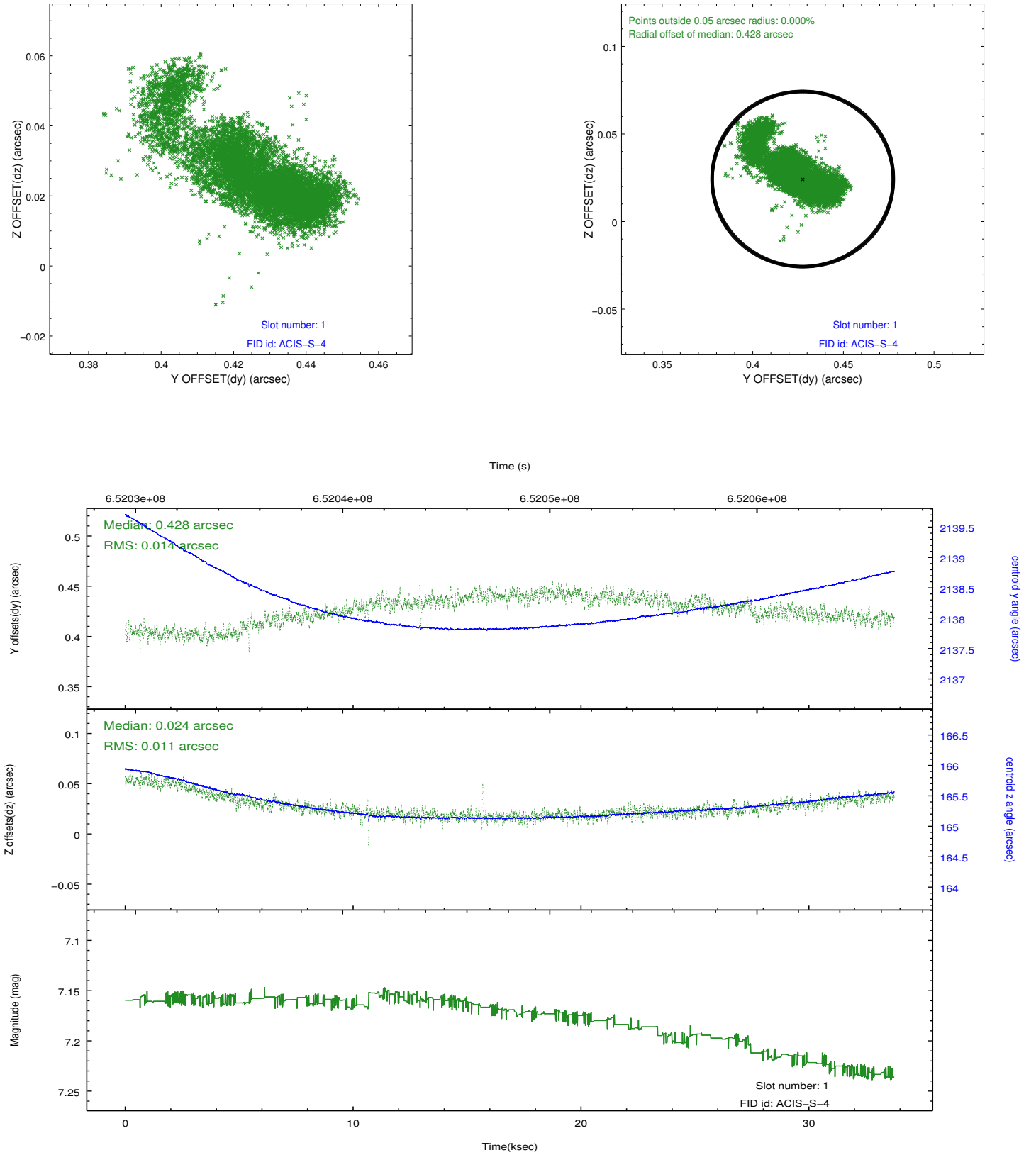


2.5 FID Slots

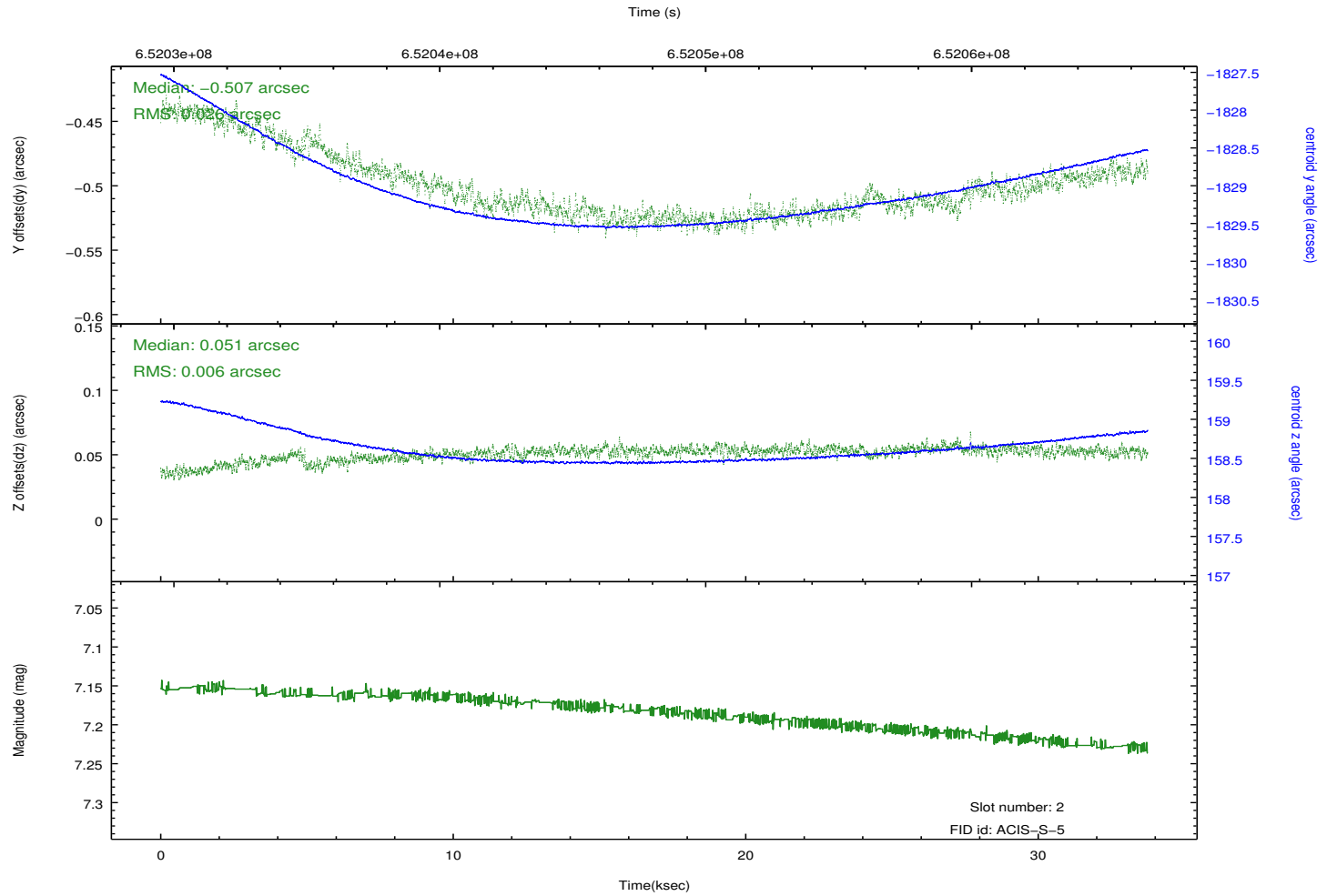
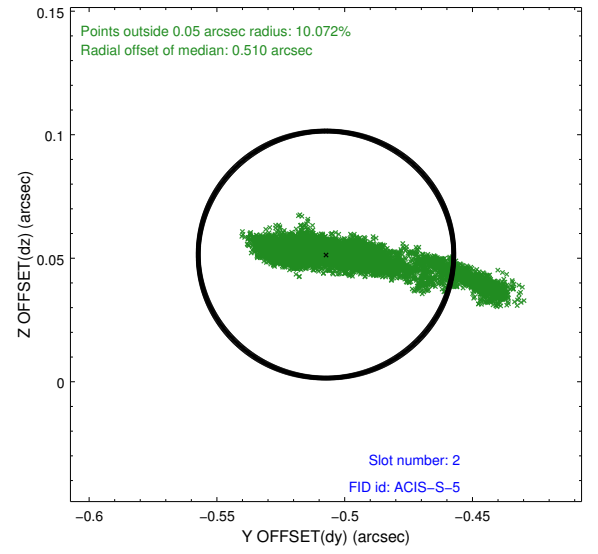
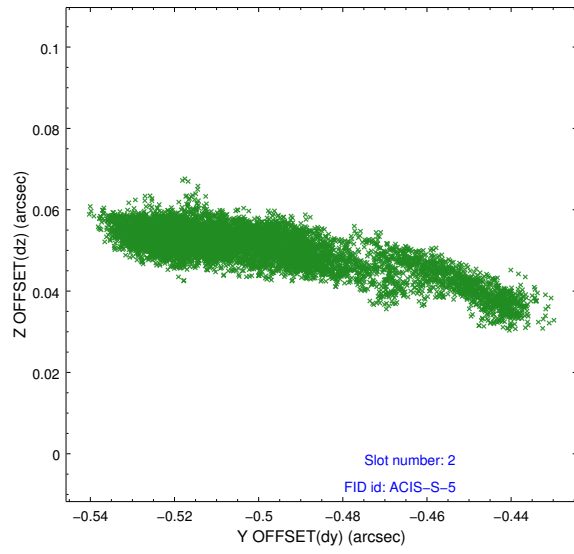
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2018.08.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.507900257826

A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.