

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19692 - L2 Version 2
Chandra X-Ray Center

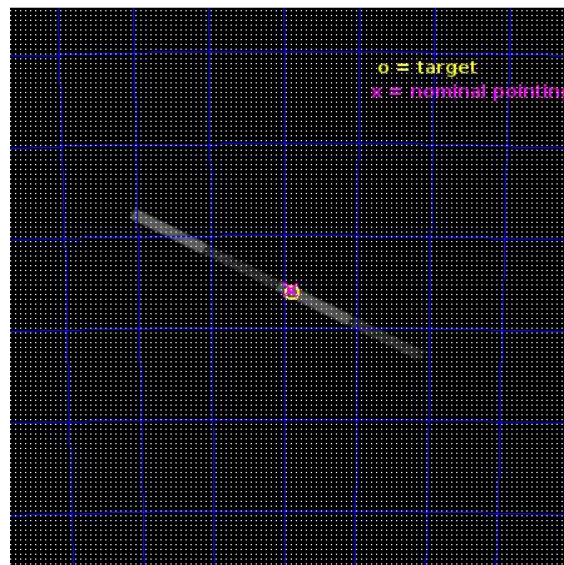
L2 Processing Date : Nov 29 2017

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1 Front

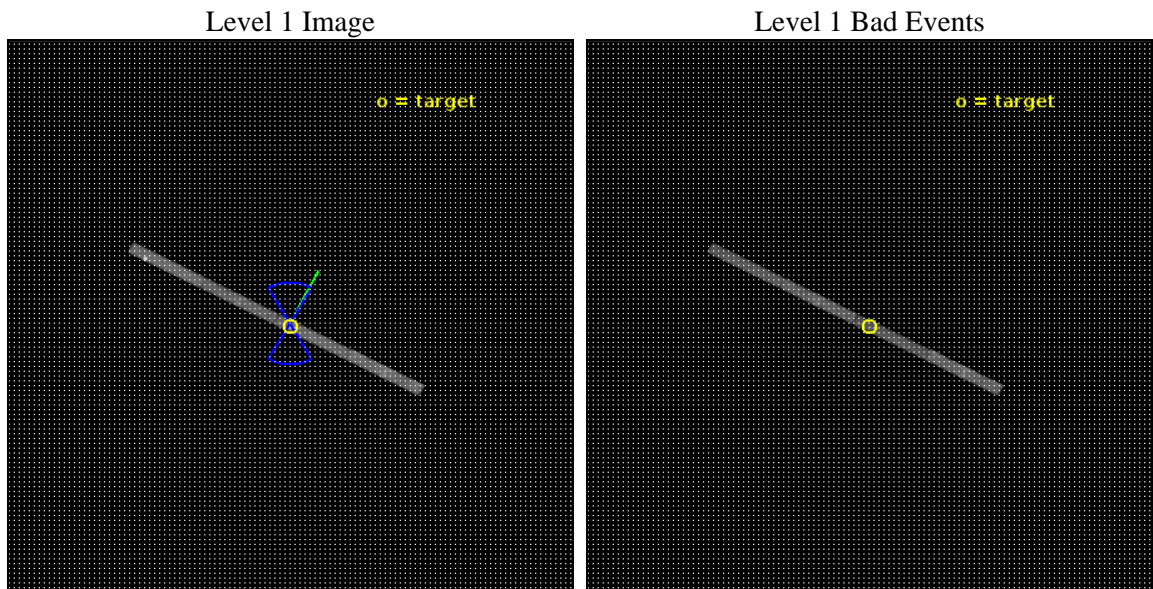
seq_num	703441	Sequence number
obs_id	19692	Observation id
title	The Physics of the Jets of Powerful Radio Galaxies and Quasars	Pro
observer	Eric Perlman	Principal investigator
object	PKS 0637-75	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94375	Observer's specified target RA [deg]
dec_targ	-75.271306	Observer's specified target Dec [deg]
ra_nom	98.949858538739	Nominal RA [deg]
dec_nom	-75.265543064646	Nominal Dec [deg]
roll_nom	27.162521963367	Nominal Roll [deg]
revision	2	Processing version of data
ontime	27087.00107646	Sum of GTIs [s]
livetime	25352.865103388	Livetime [s]
ontime5	27086.97229135	Sum of GTIs [s]
ontime6	27086.931251287	Sum of GTIs [s]
ontime7	27087.00107646	Sum of GTIs [s]
ontime8	27086.890211344	Sum of GTIs [s]
l2events	60182	Number of level 2 events



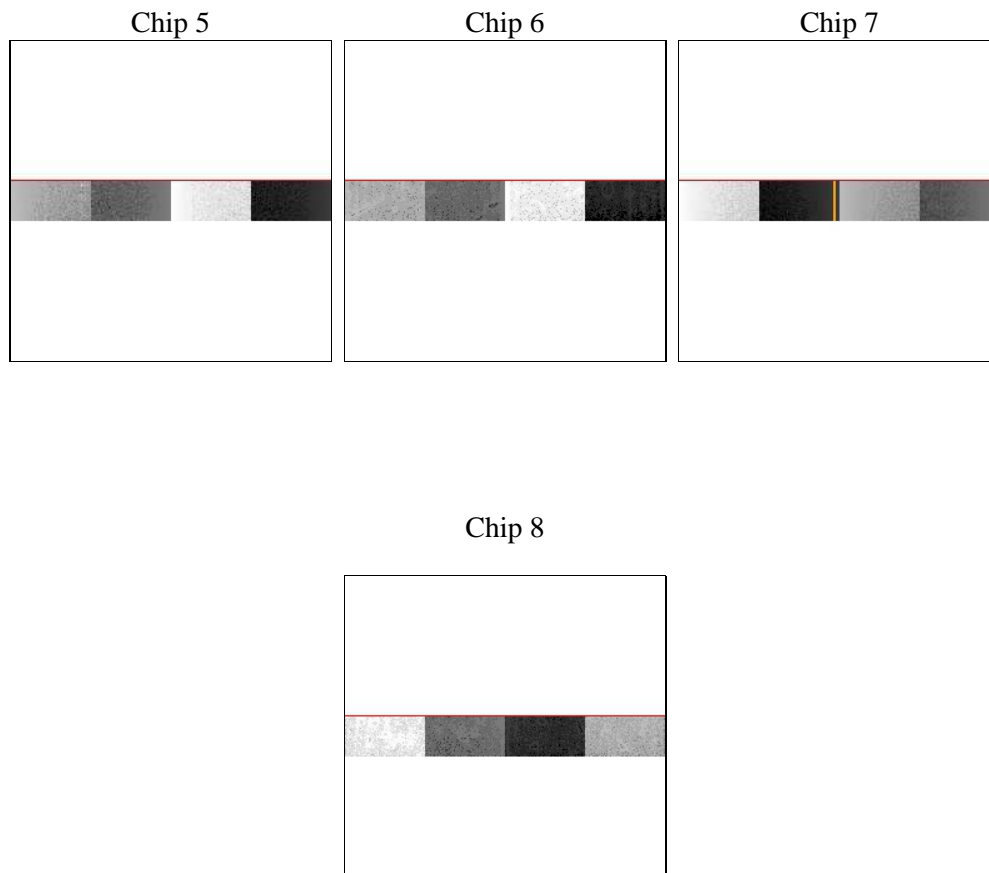
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	27087.00107646	Sum of GTIs [s]
caldbver	4.7.6	 	ontime5	27086.97229135	Sum of GTIs [s]
date	2017-11-29T22:50:43	Date and time of file creation	ontime6	27086.931251287	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	27087.00107646	Sum of GTIs [s]
			ontime8	27086.890211344	Sum of GTIs [s]
			l1events	200904	Number of level 1 events

2.1.4 Events

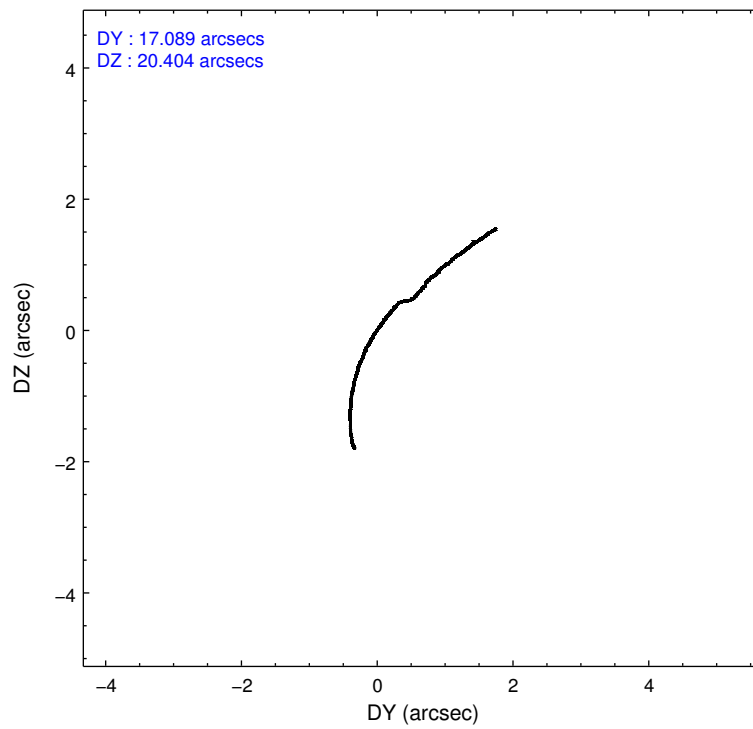
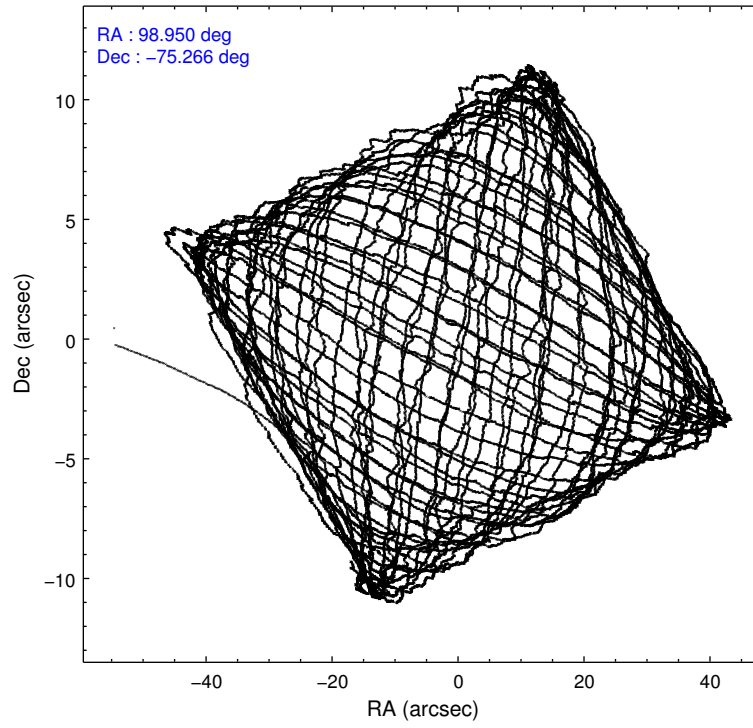
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	65672	32597	54835	47800
rejected events	21450	28845	20780	36477
rejected %	32%	88%	37%	76%

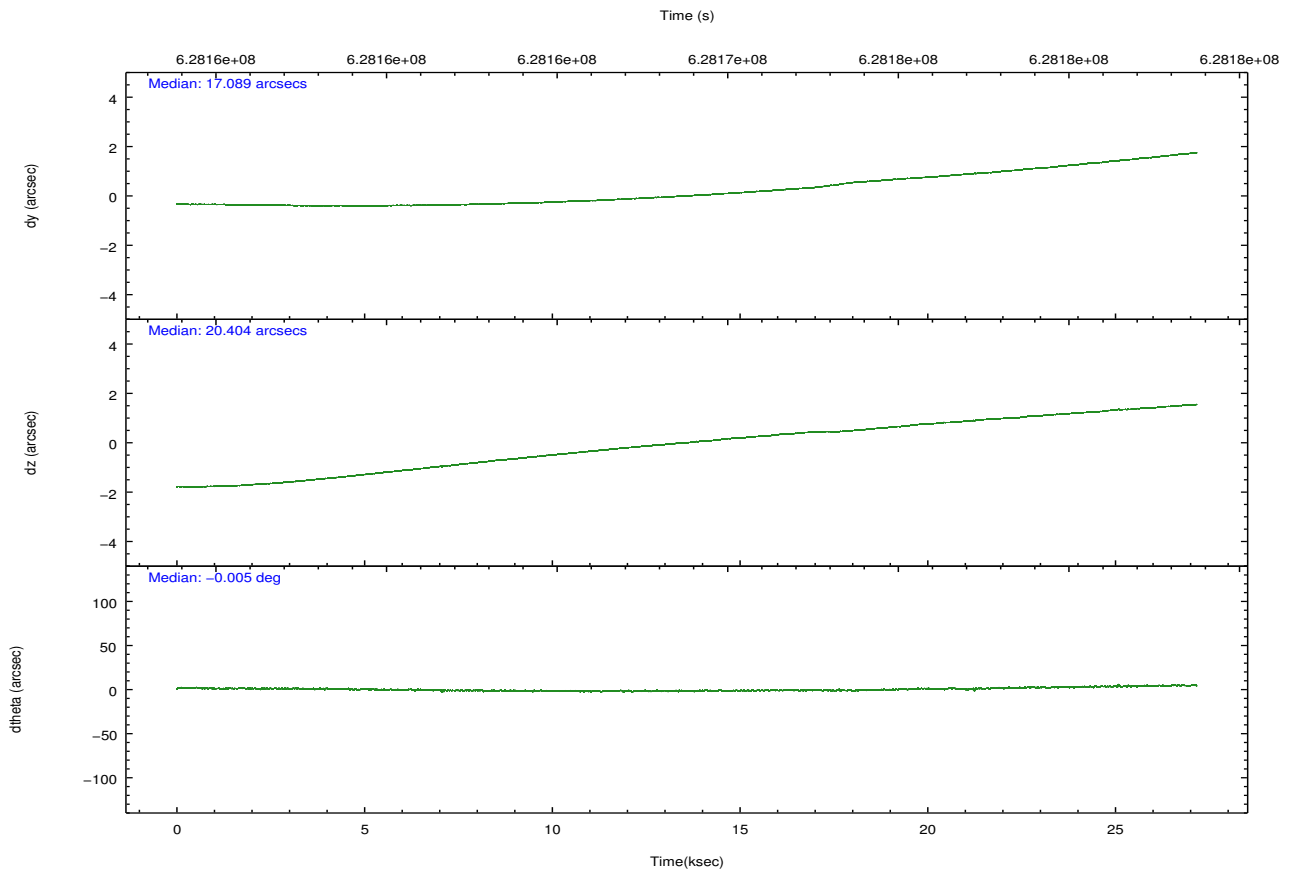
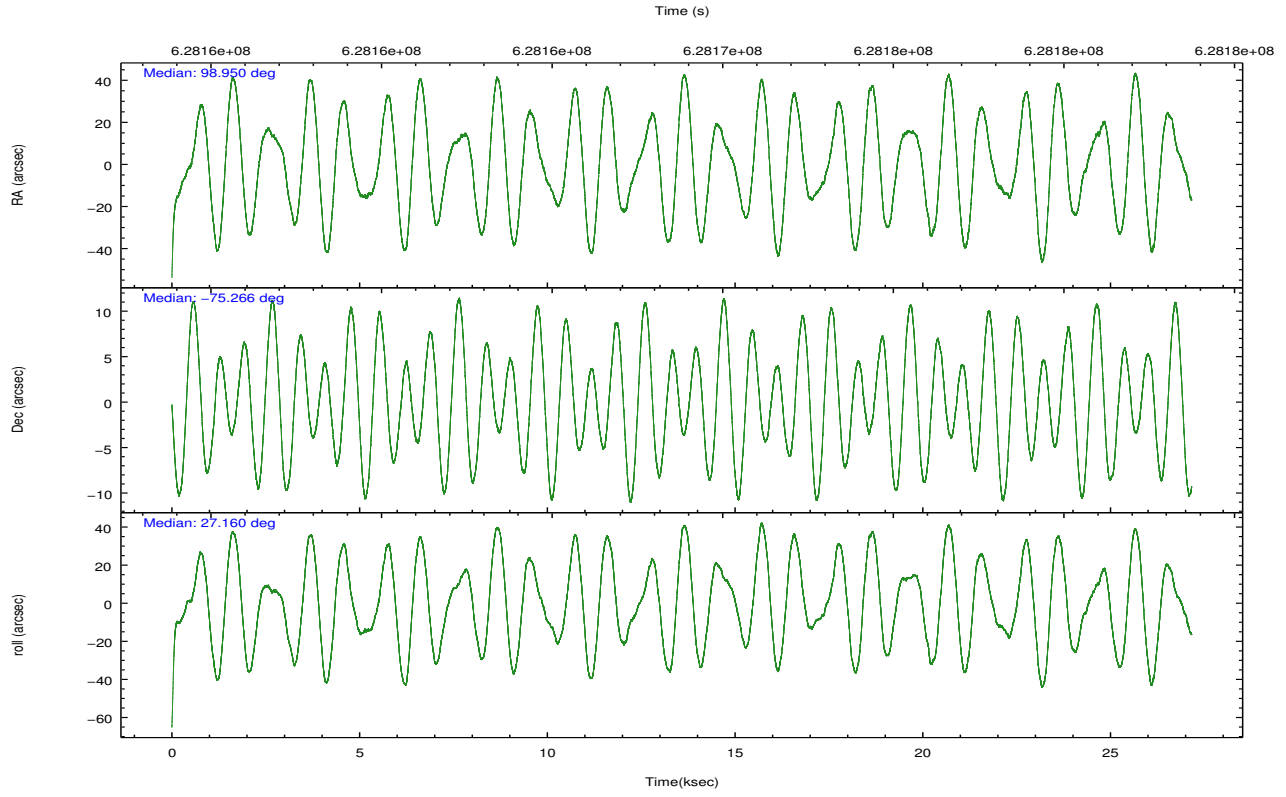
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	17167	1051	5766	2623
	26%	3%	10%	5%
grade 1 events	139	10	182	23
	0%	0%	0%	0%
grade 2 events	13923	696	7833	2386
	21%	2%	14%	4%
grade 3 events	1463	649	3948	1351
	2%	1%	7%	2%
grade 4 events	1395	625	3695	1231
	2%	1%	6%	2%
grade 5 events	3696	1249	4343	1975
	5%	3%	7%	4%
grade 6 events	10275	731	12814	3732
	15%	2%	23%	7%
grade 7 events	17614	27586	16254	34479
	26%	84%	29%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	98.892480	98.94985853873857	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-75.288780	-75.26554306464649	Subarray start row	449	449
[deg] Pointing Roll	26.950417	27.16252196336747	Subarray row count	128	128
[deg] Roll angle	0.000000	0.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	30.000000	30.000000	[s] Primary exposure time	0.000000	0.6
Roll constraint allows 180D rotation	Y	Y			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	628155357.184000	628154309.25091			
Observation start date	2017-11-27T07:34:48	2017-11-27T07:18:29			
[s] Observation end time (MET)	628182357.184000	628183164.0276			
Observation end date	2017-11-27T15:04:48	2017-11-27T15:19:24			
Read mode	TIMED	TIMED			

2.3 Aspect





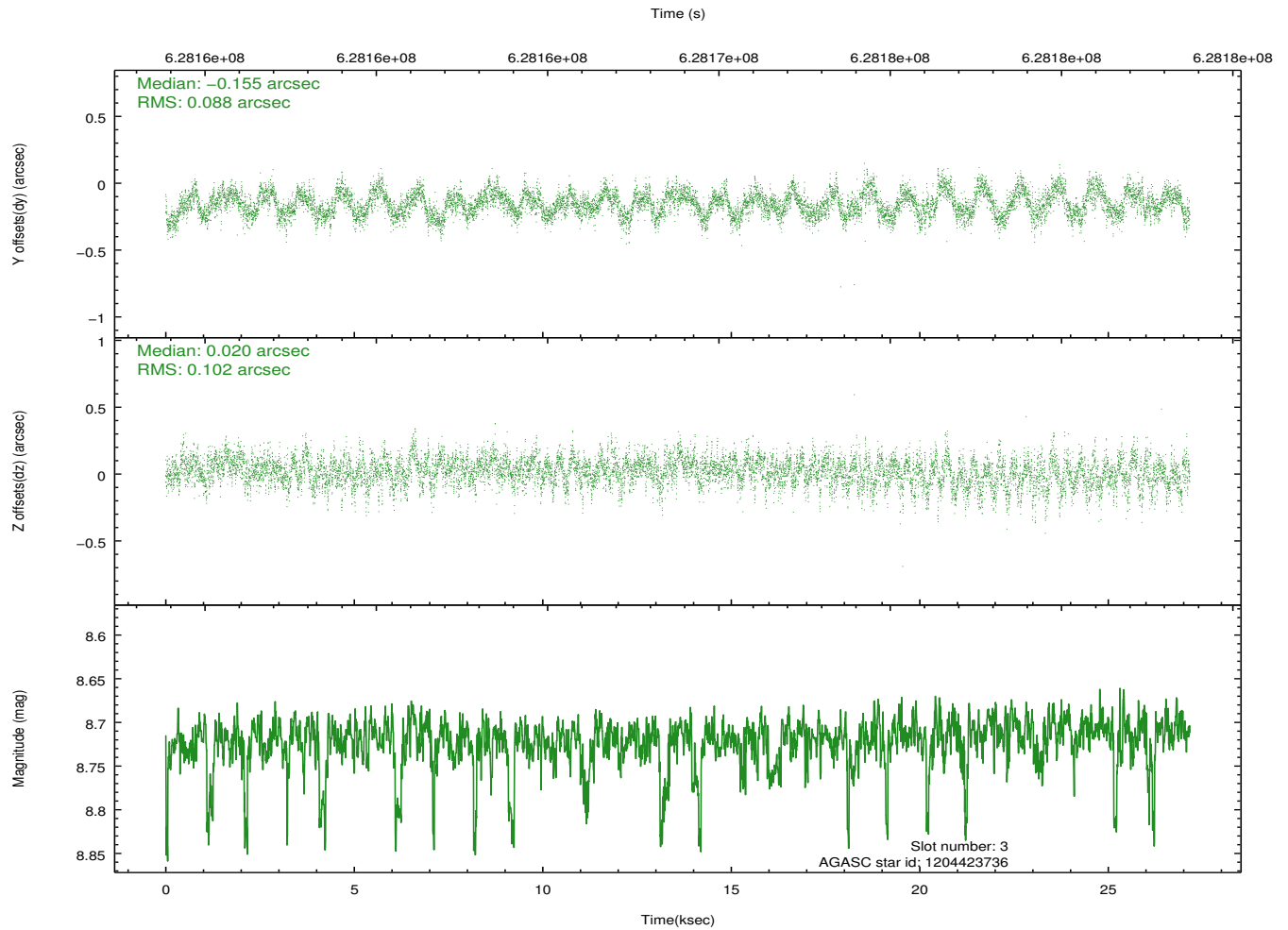
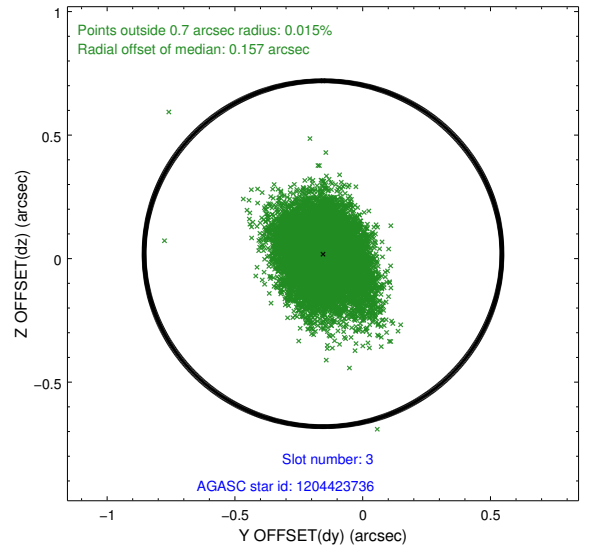
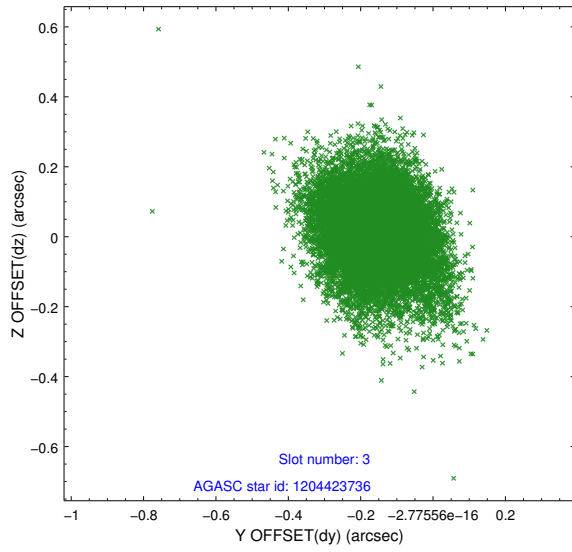
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.01	6624	-0.211	-0.095	0.020	0.032	0.000000	0.000000	-770.56	-1741.89
1	FID		ACIS-S-4	7.12	6625	0.494	0.125	0.010	0.029	0.000000	0.000000	2143.35	166.76
2	FID		ACIS-S-5	7.11	6624	-0.318	-0.022	0.019	0.026	0.000000	0.000000	-1823.42	160.33
3	GUIDE	used	1204423736	8.72	13242	-0.155	0.020	0.140	0.233	99.272017	-74.796122	1122.92	1417.88
4	GUIDE	used	1229457576	9.32	13234	0.037	0.135	0.229	0.376	100.335360	-75.489746	825.72	-1248.59
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	1229457032	9.12	13233	0.108	0.258	0.210	0.326	100.958417	-75.581890	1157.83	-1808.60
7	GUIDE	used	1204429184	9.64	13146	-0.007	-0.409	0.255	0.388	99.730987	-74.425450	2128.99	2398.69

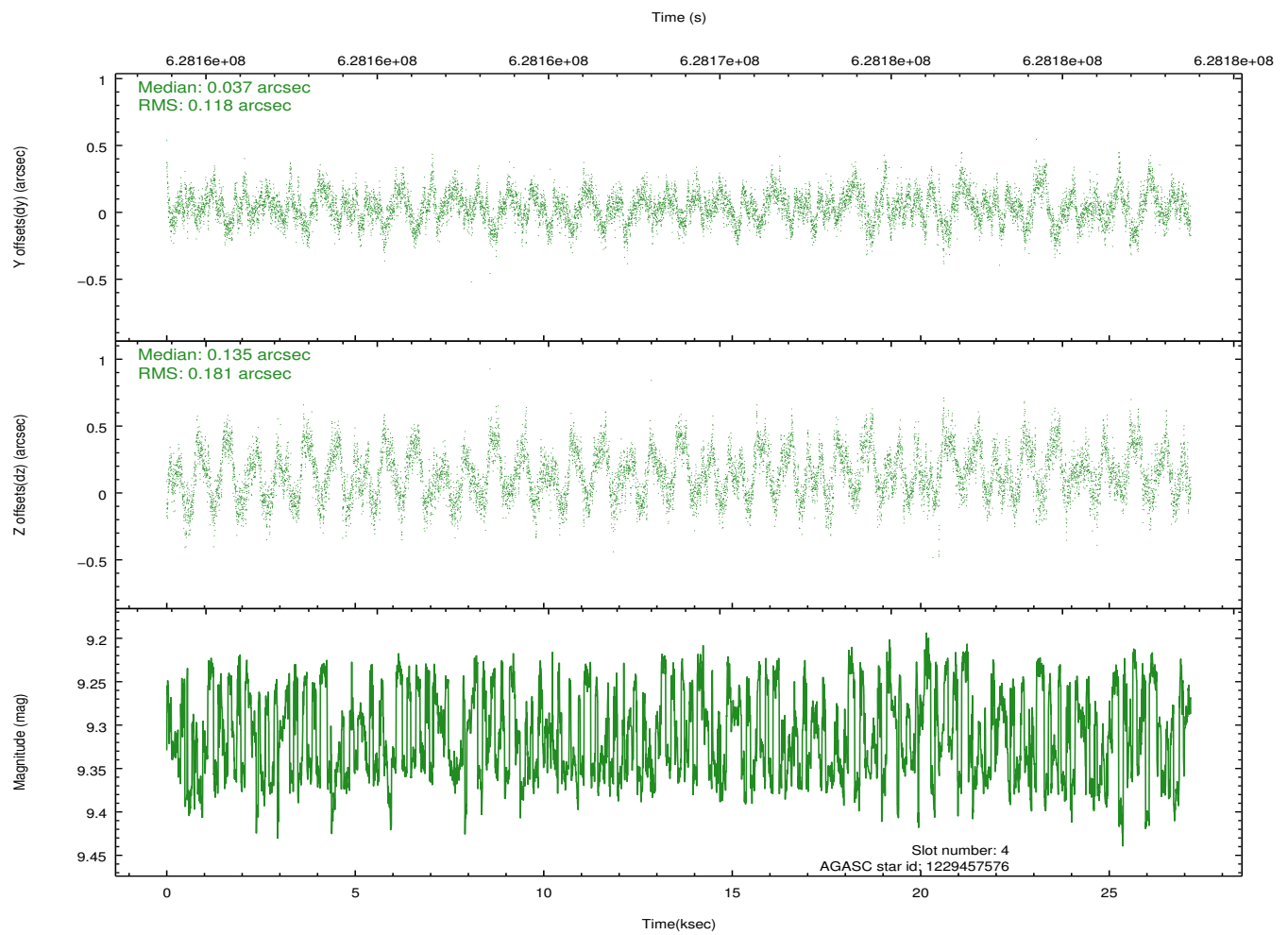
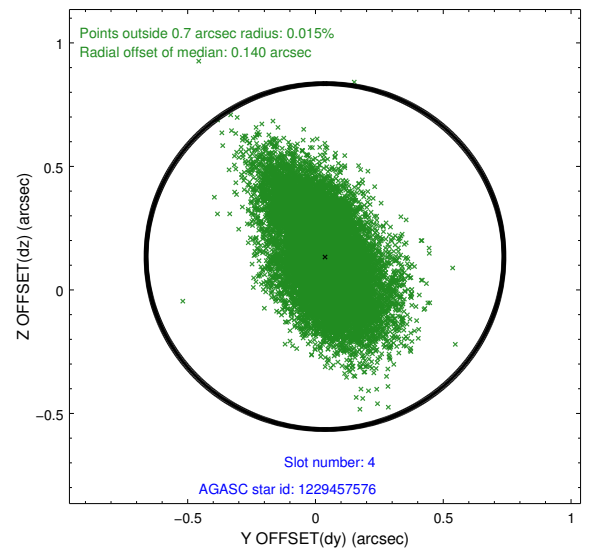
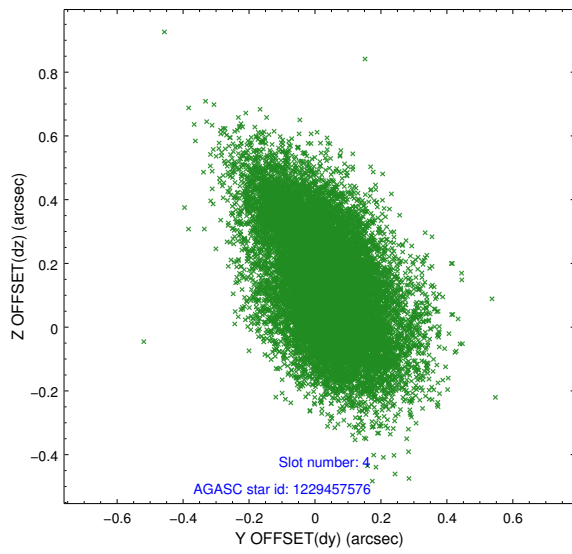
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2.4 Star Slots

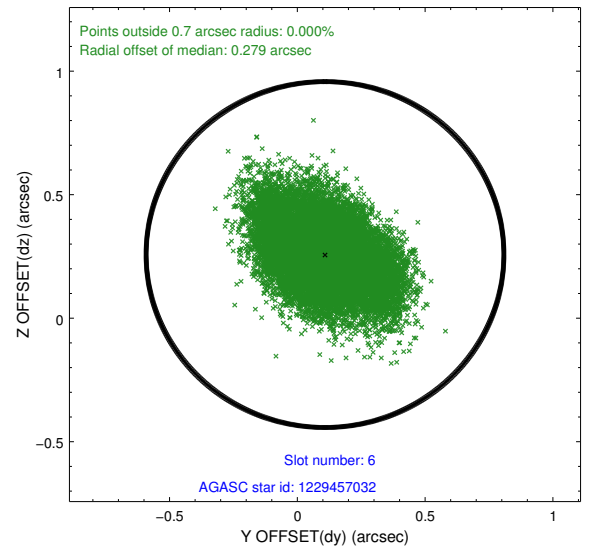
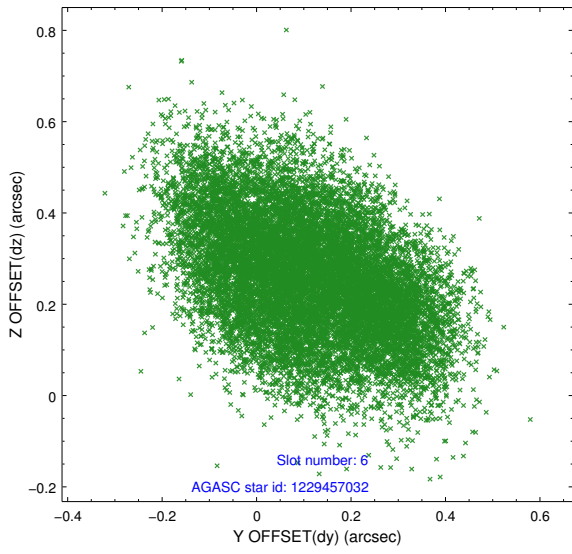
2.4.1 Slot 3



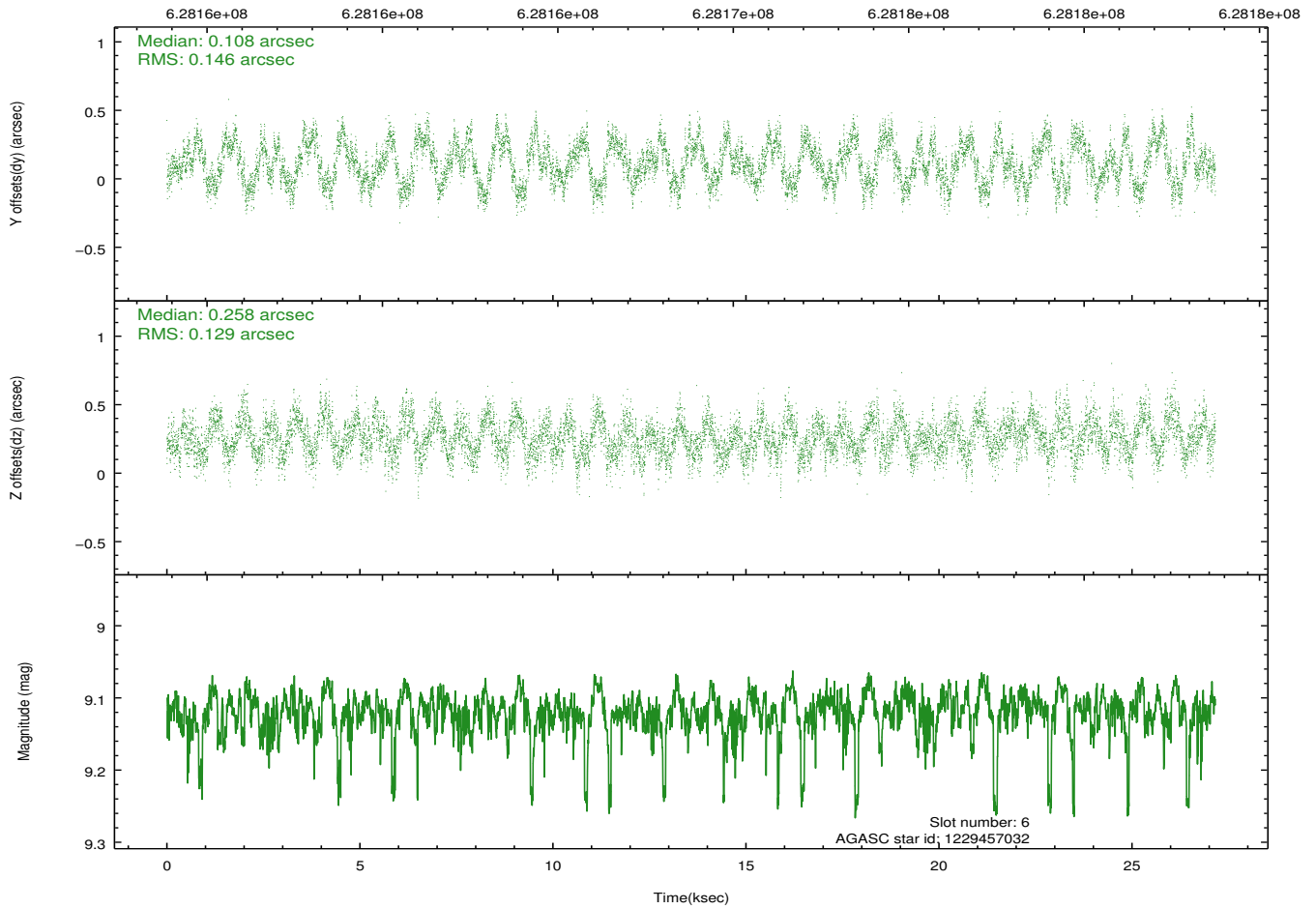
2.4.2 Slot 4



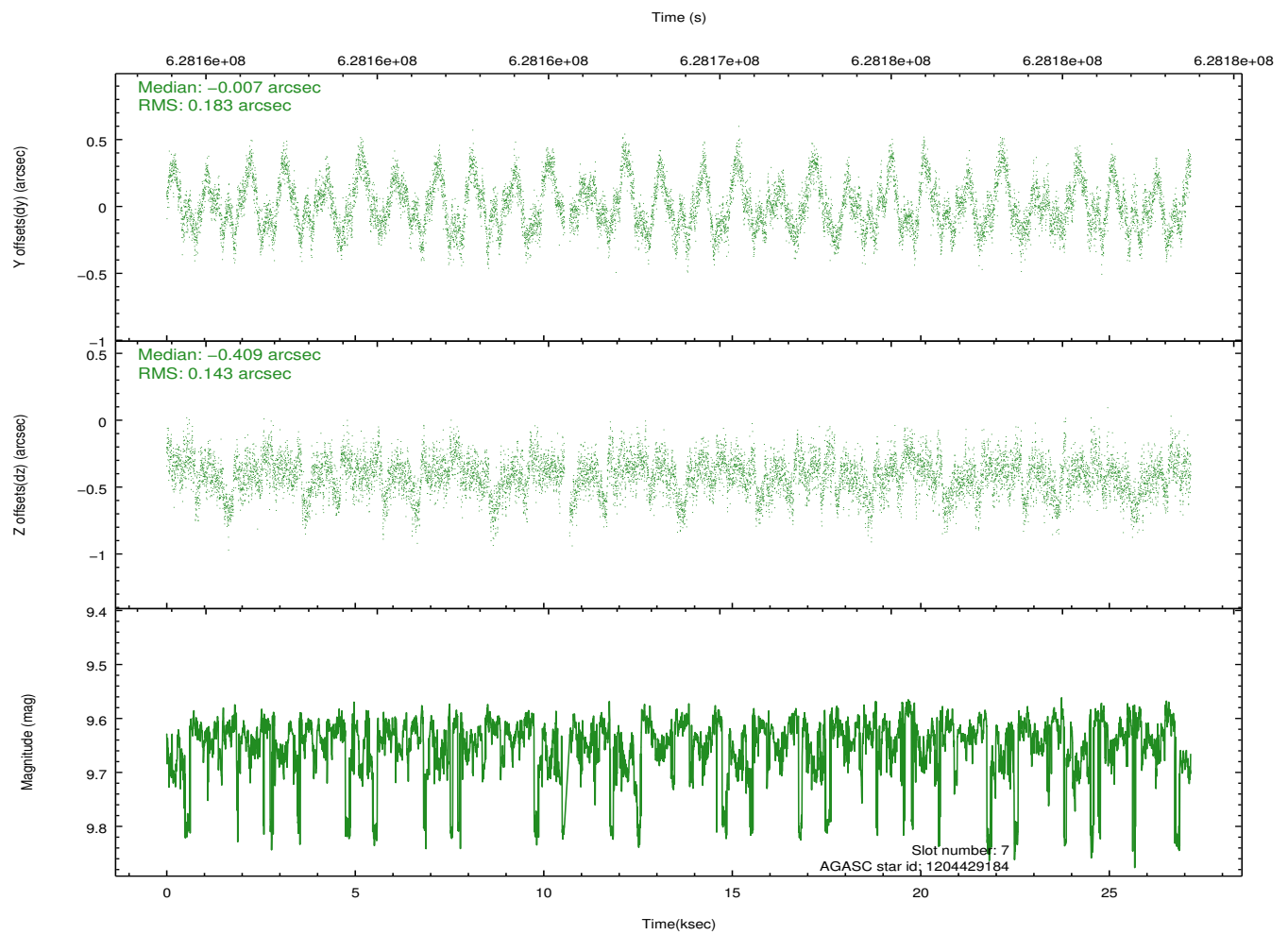
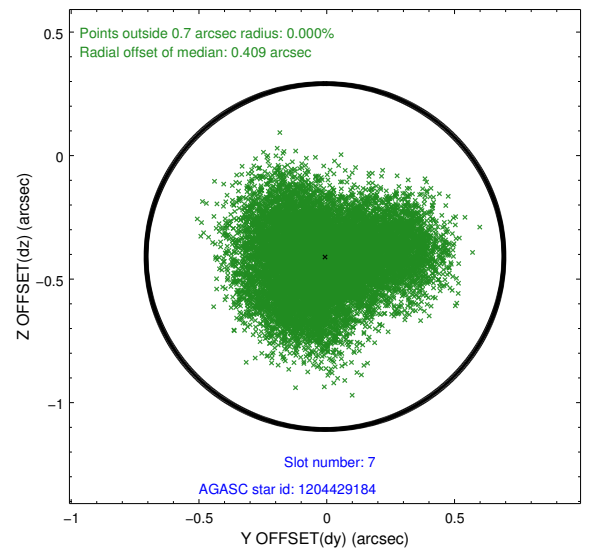
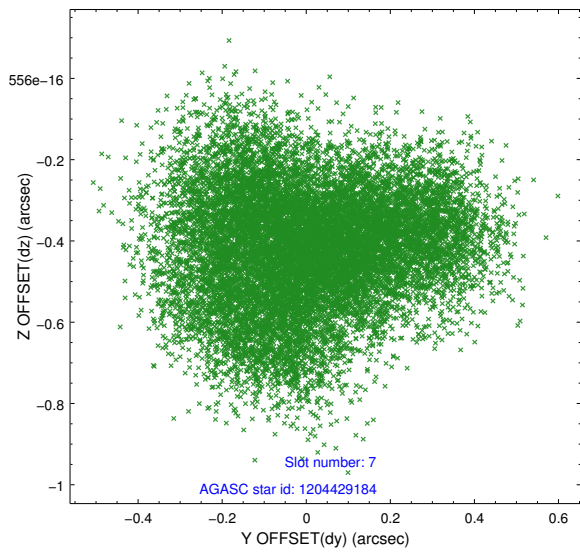
2.4.3 Slot 6



Time (s)

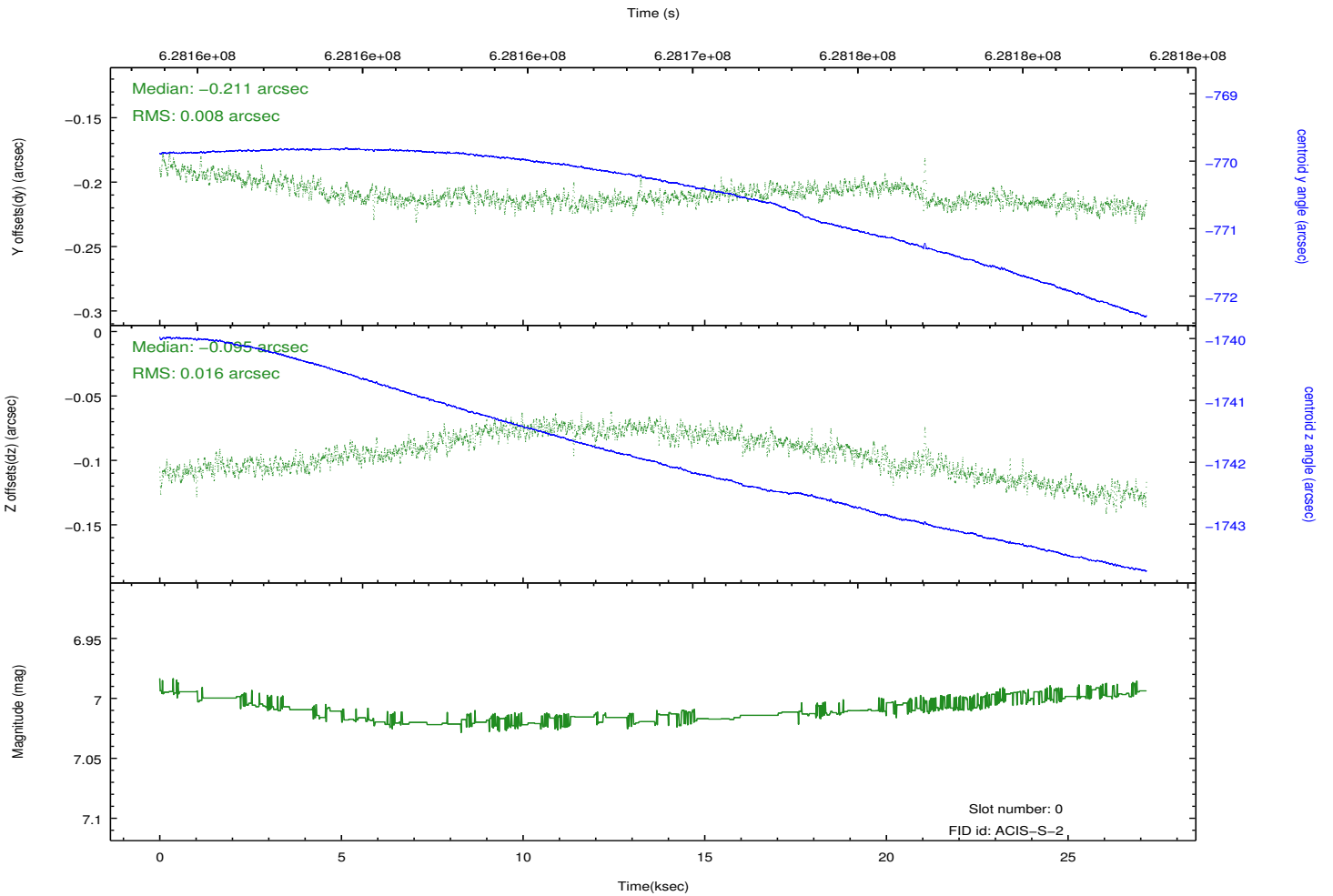
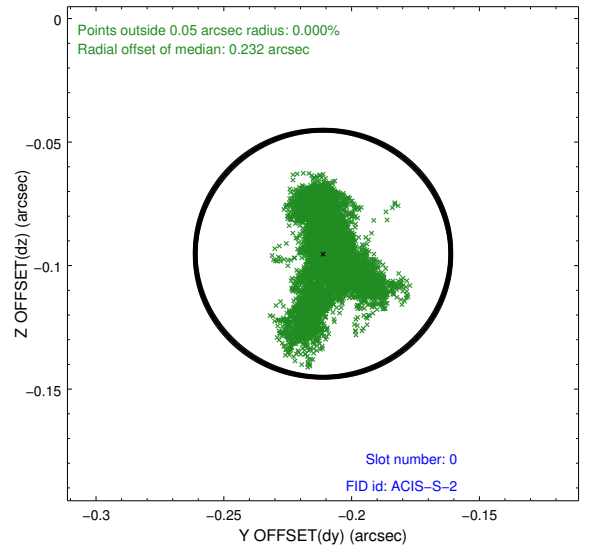
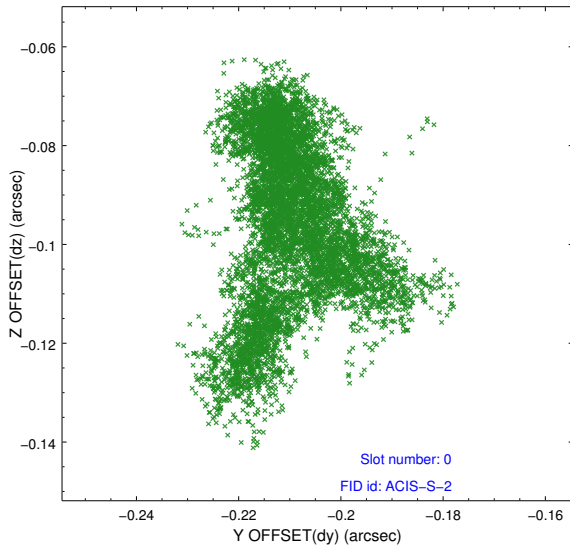


2.4.4 Slot 7

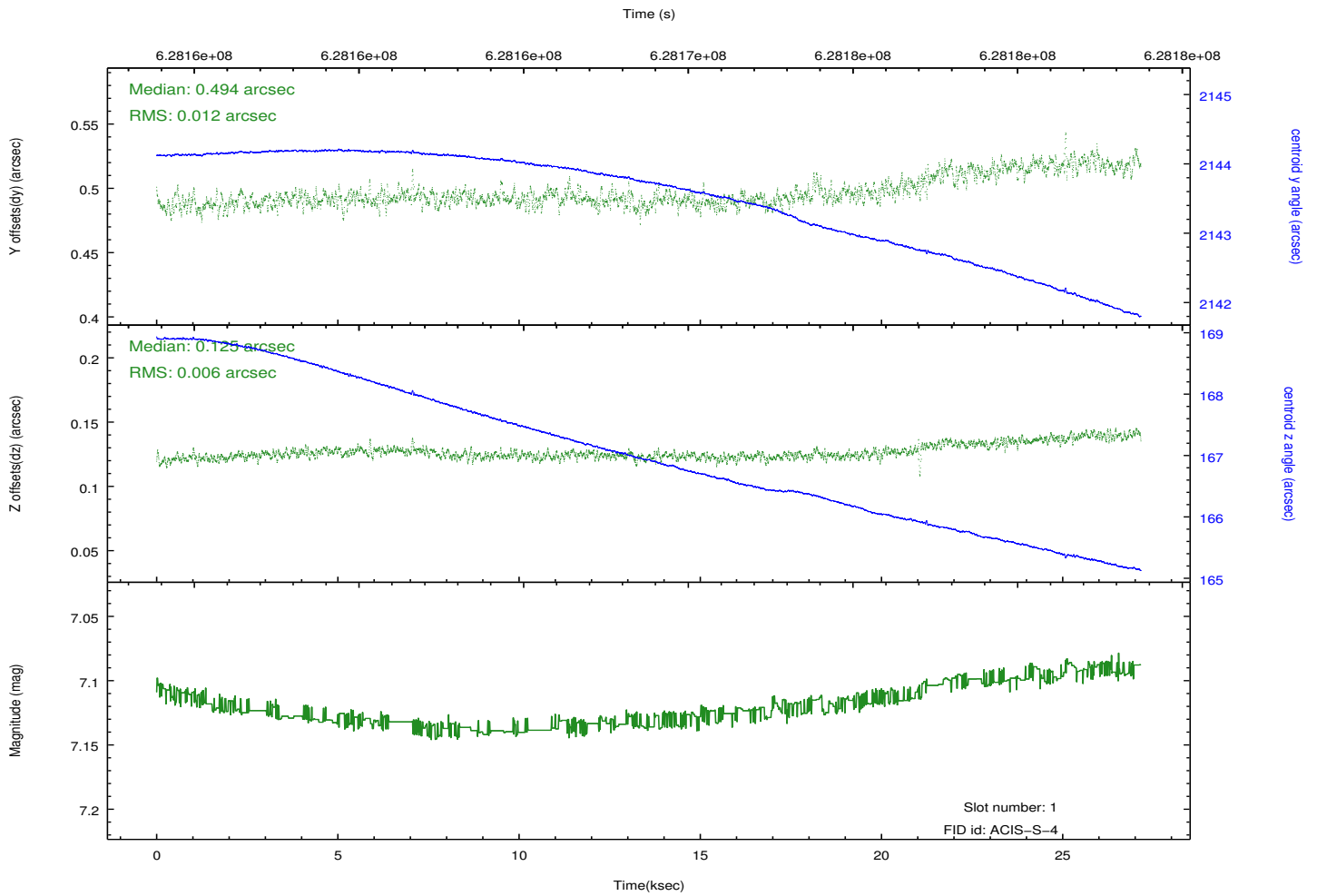
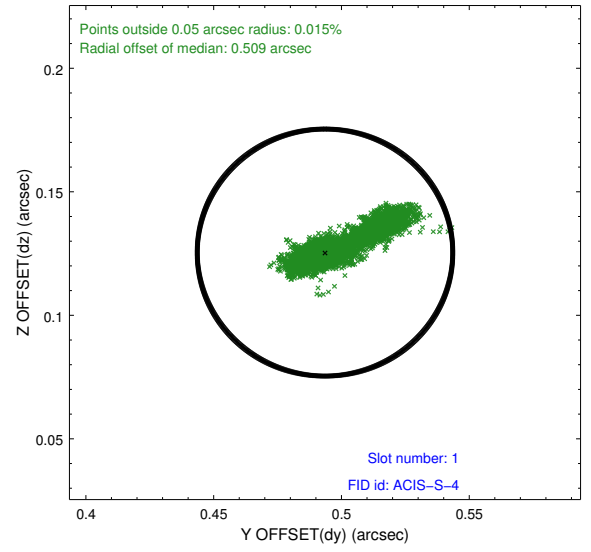
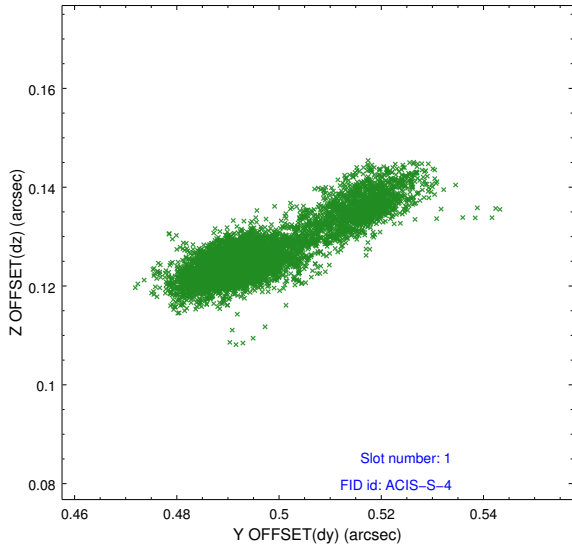


2.5 FID Slots

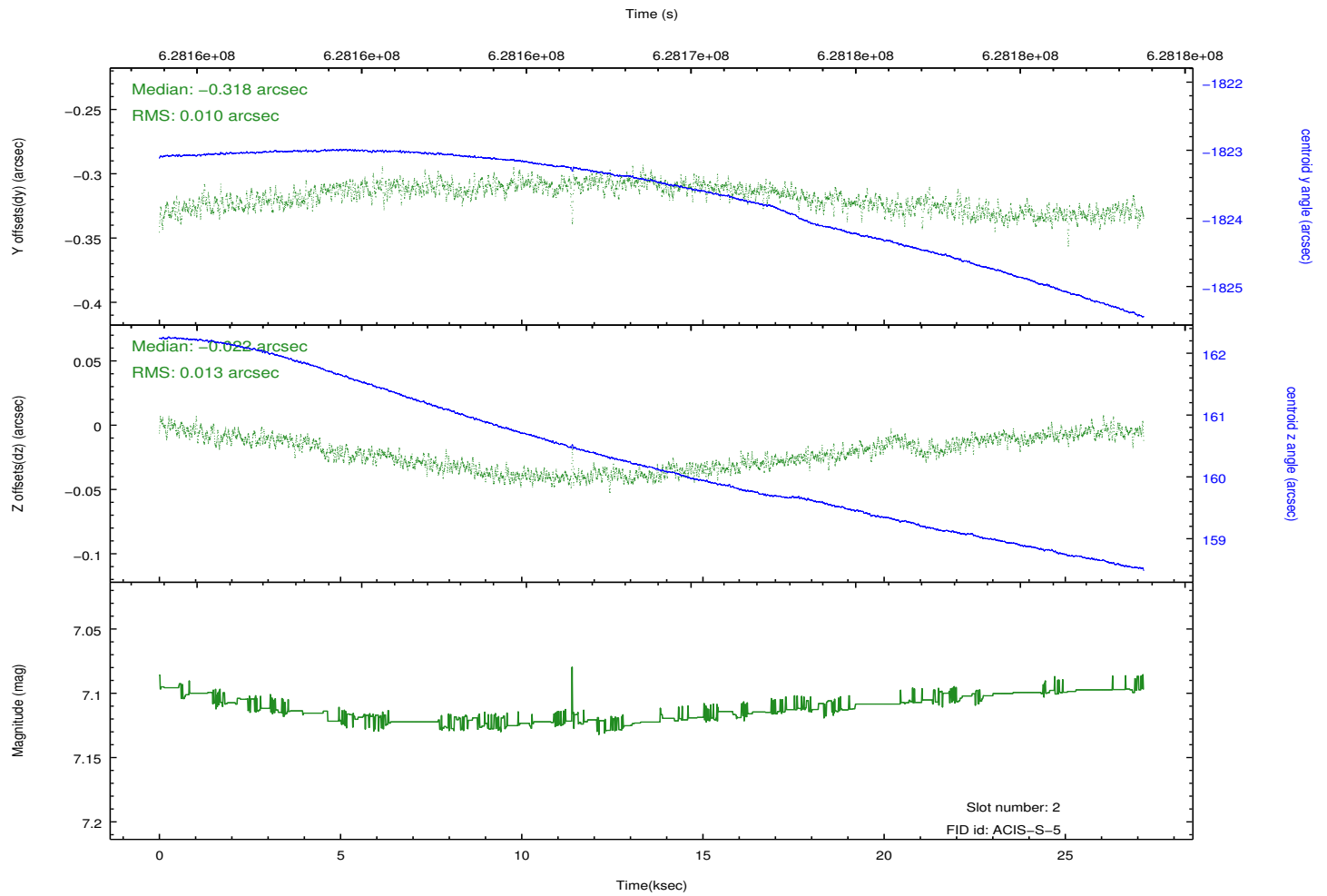
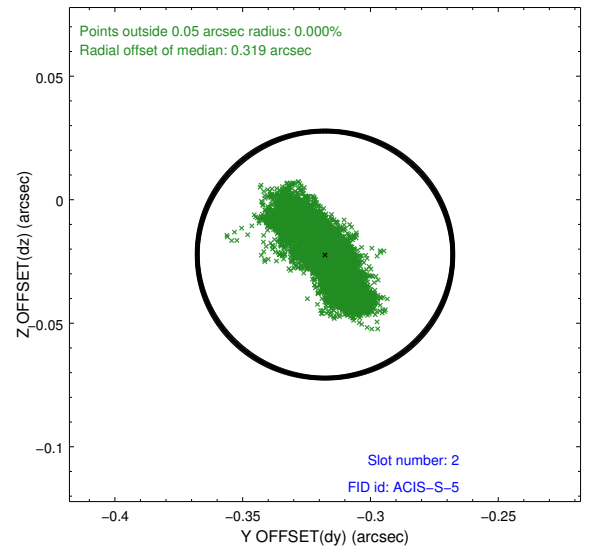
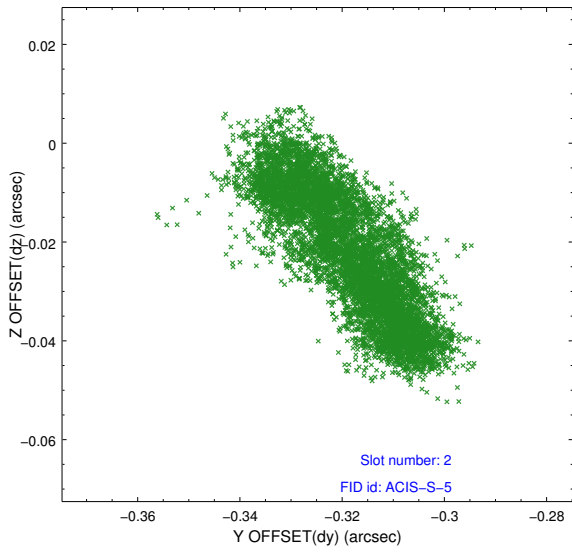
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.11.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.08700107646

A.2 Comments

Joint Proposal: CX0-HST. Roll constraint met.

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The guide star in slot 5 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.