

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20865 - L2 Version 2
Chandra X-Ray Center

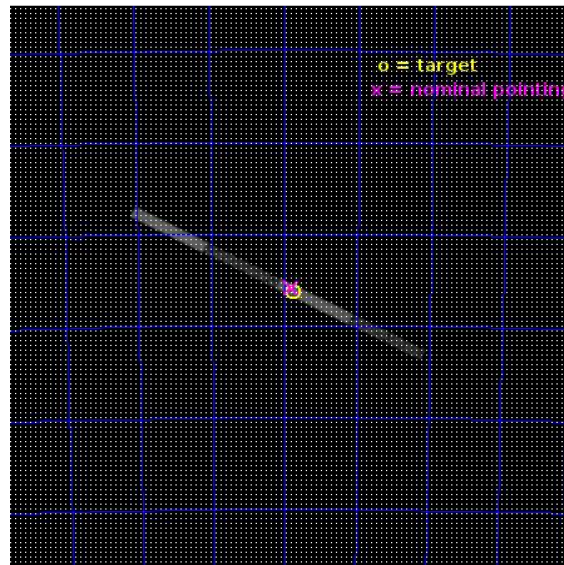
L2 Processing Date : Nov 30 2017

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1 Front

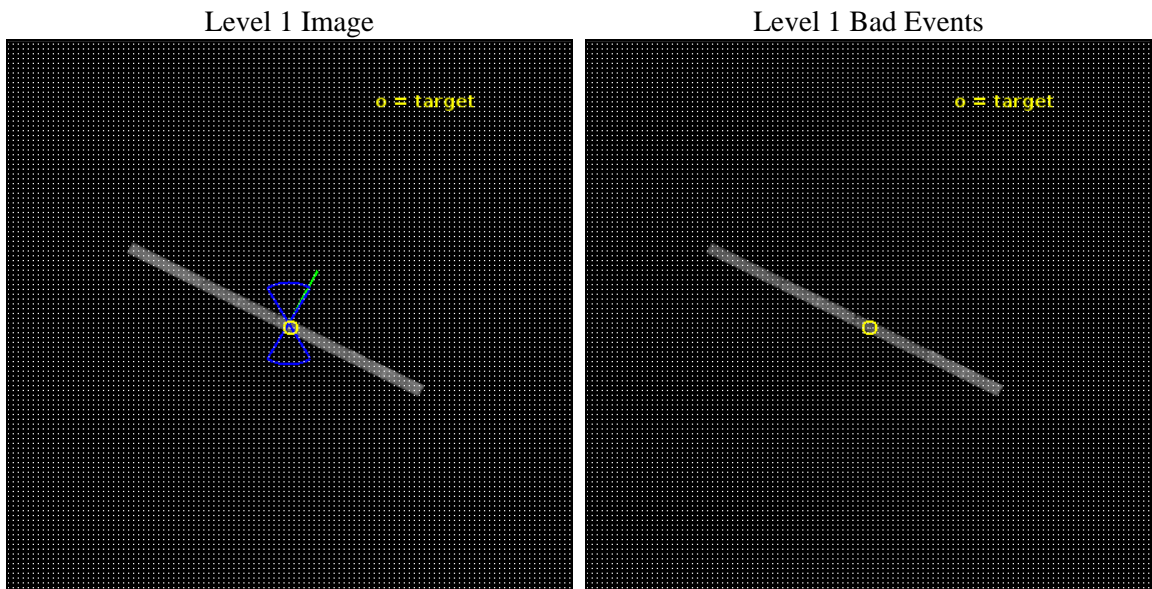
seq_num	703441	Sequence number
obs_id	20865	Observation id
title	The Physics of the Jets of Powerful Radio Galaxies and Quasars	Pro
observer	Eric Perlman	Principal investigator
object	PKS 0637-75	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	98.94375	Observer's specified target RA [deg]
dec_targ	-75.271306	Observer's specified target Dec [deg]
ra_nom	98.952765214957	Nominal RA [deg]
dec_nom	-75.264544334191	Nominal Dec [deg]
roll_nom	27.165339842262	Nominal Roll [deg]
revision	2	Processing version of data
ontime	22665.600900769	Sum of GTIs [s]
livetime	21214.52723771	Livetime [s]
ontime5	22665.600900769	Sum of GTIs [s]
ontime6	22665.600900769	Sum of GTIs [s]
ontime7	22665.600900769	Sum of GTIs [s]
ontime8	22665.600900769	Sum of GTIs [s]
l2events	48399	Number of level 2 events



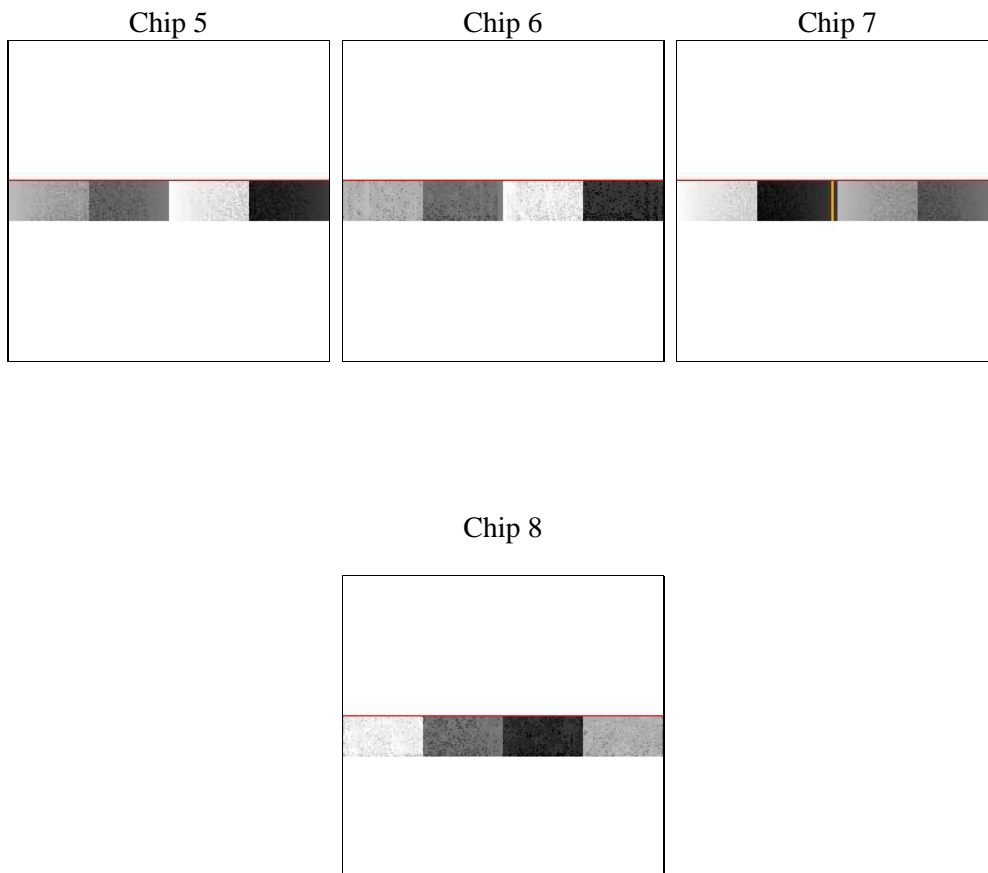
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22578.455000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	22665.600900769	Sum of GTIs [s]
caldsver	4.7.6	 	ontime5	22665.600900769	Sum of GTIs [s]
date	2017-11-30T16:17:57	Date and time of file creation	ontime6	22665.600900769	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	22665.600900769	Sum of GTIs [s]
			ontime8	22665.600900769	Sum of GTIs [s]
			l1events	146304	Number of level 1 events

2.1.4 Events

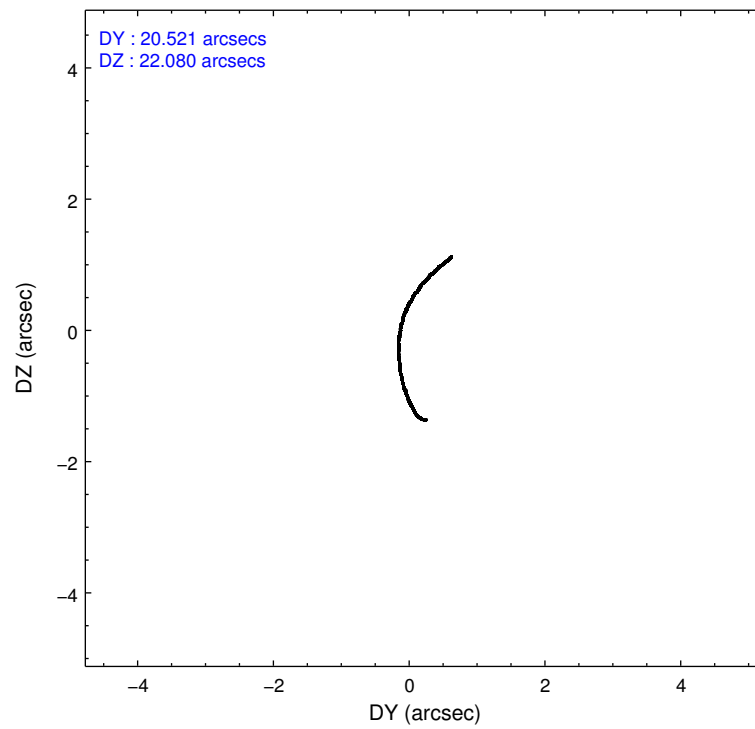
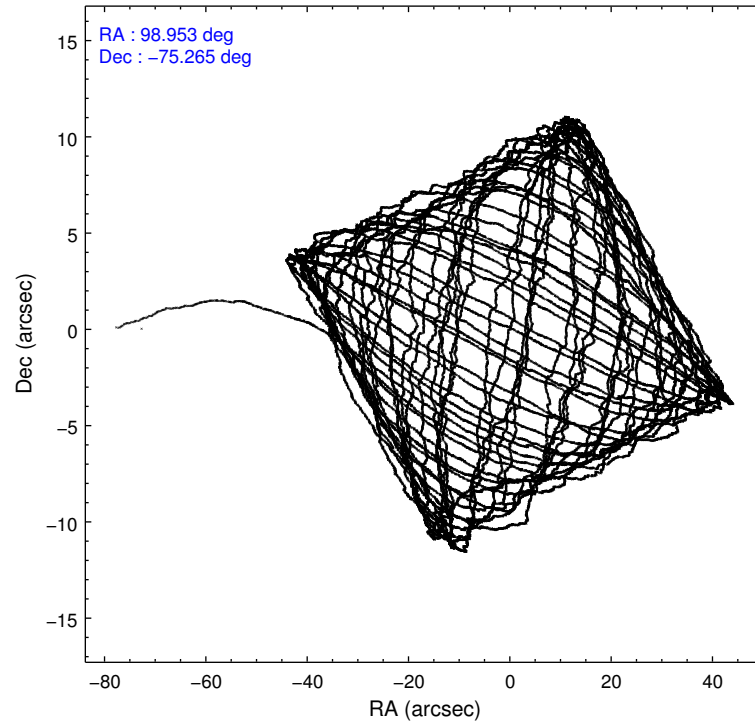
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	34525	27219	44753	39807
rejected events	17895	24074	17189	31388
rejected %	51%	88%	38%	78%

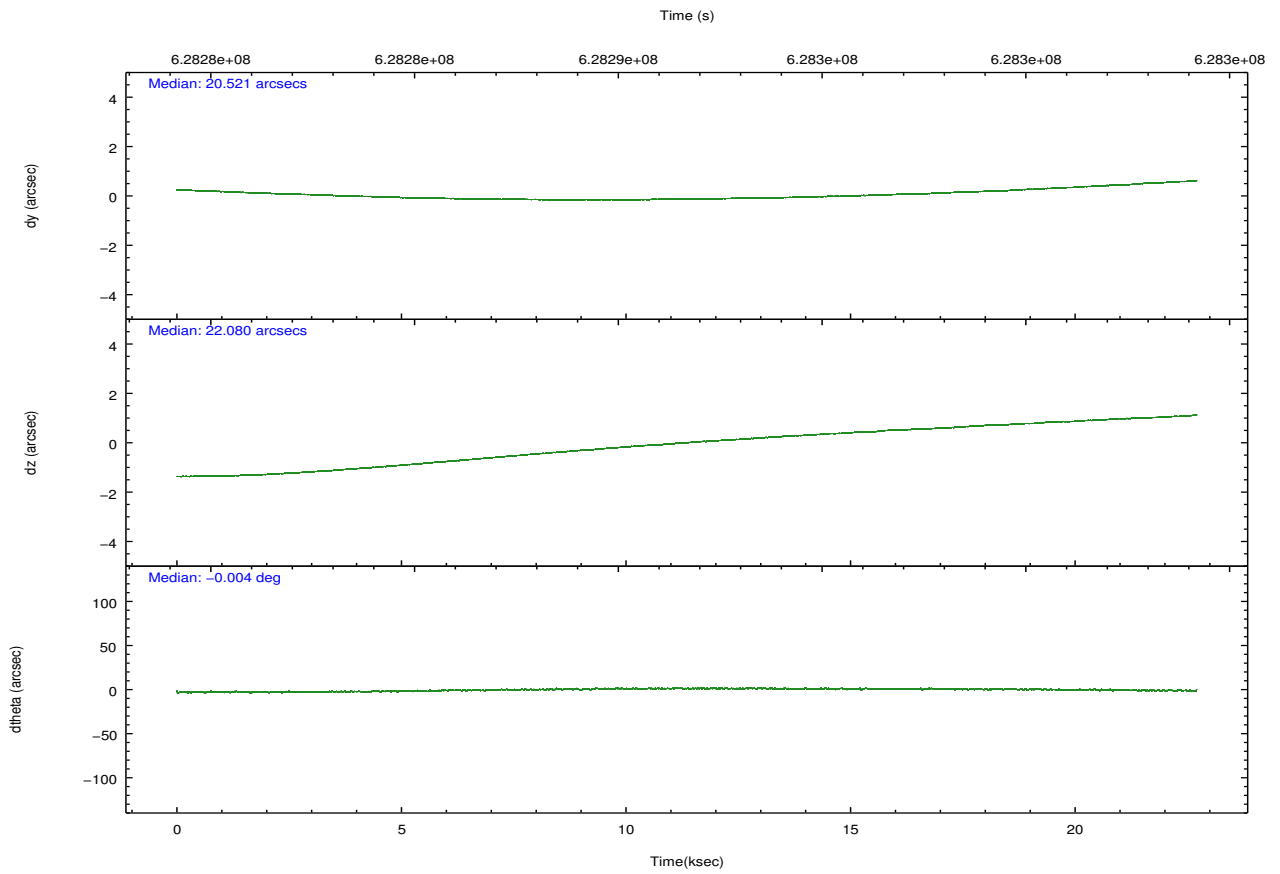
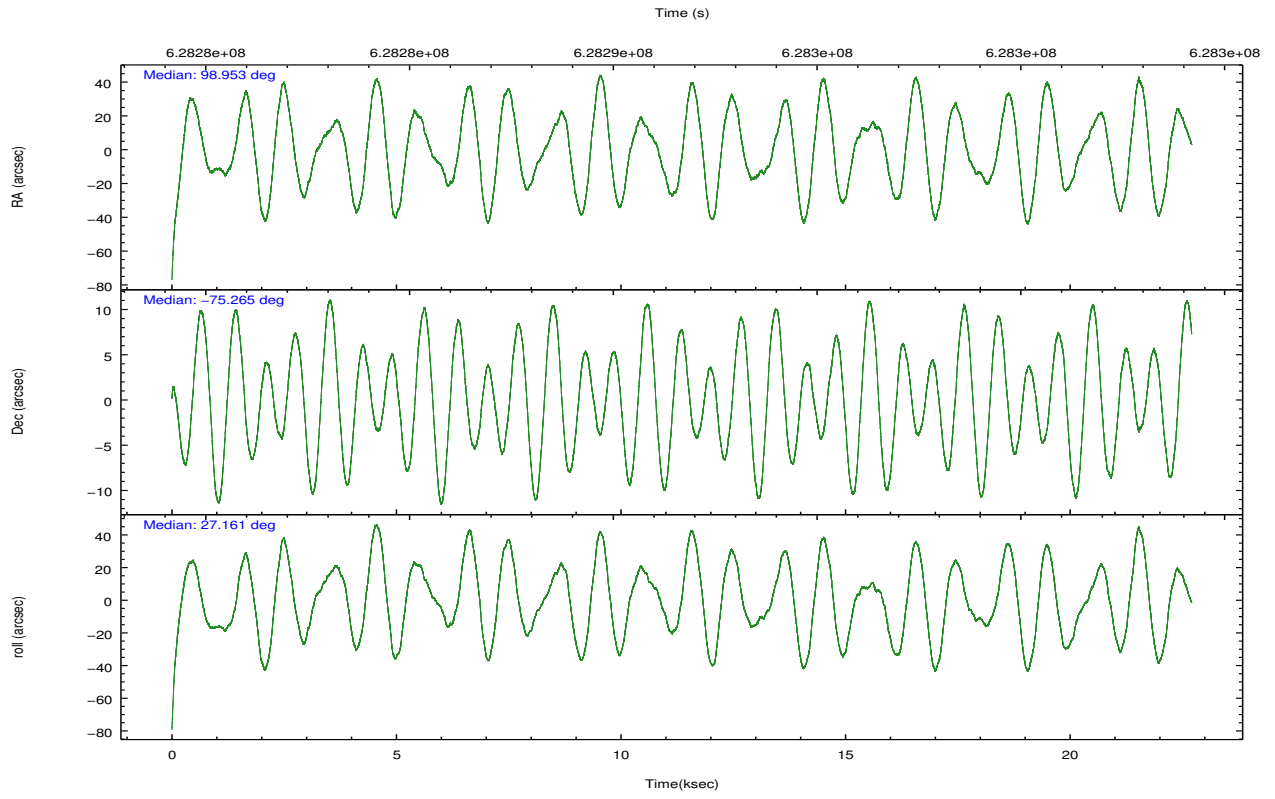
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	1064	841	4557	1748
	3%	3%	10%	4%
grade 1 events	100	10	159	12
	0%	0%	0%	0%
grade 2 events	5051	594	6300	1932
	14%	2%	14%	4%
grade 3 events	913	554	3242	908
	2%	2%	7%	2%
grade 4 events	855	517	3025	847
	2%	1%	6%	2%
grade 5 events	2493	922	3533	1488
	7%	3%	7%	3%
grade 6 events	8748	639	10440	2984
	25%	2%	23%	7%
grade 7 events	15301	23142	13497	29888
	44%	85%	30%	75%

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	98.895381	98.95276521495721	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-75.287800	-75.2645443341911	Subarray start row	449	449
[deg] Pointing Roll	26.953215	27.16533984226192	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)	628280460.184000	628279197.3082401			
Observation start date	2017-11-28T18:19:51	2017-11-28T17:59:57			
[s] Observation end time (MET)	628303038.184000	628303881.87219			
Observation end date	2017-11-29T00:36:09	2017-11-29T00:51:21			
Read mode	TIMED	TIMED			

2.3 Aspect





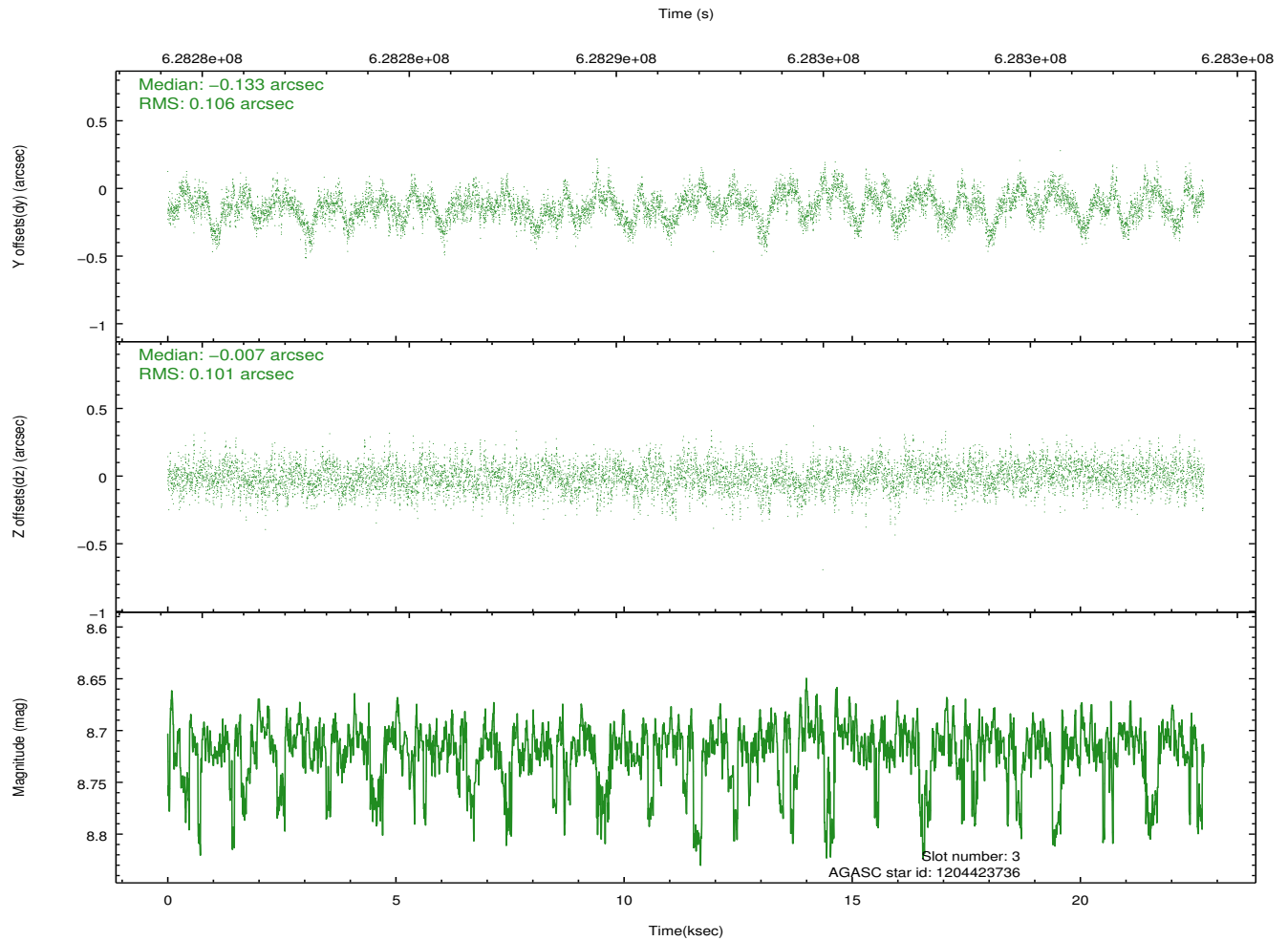
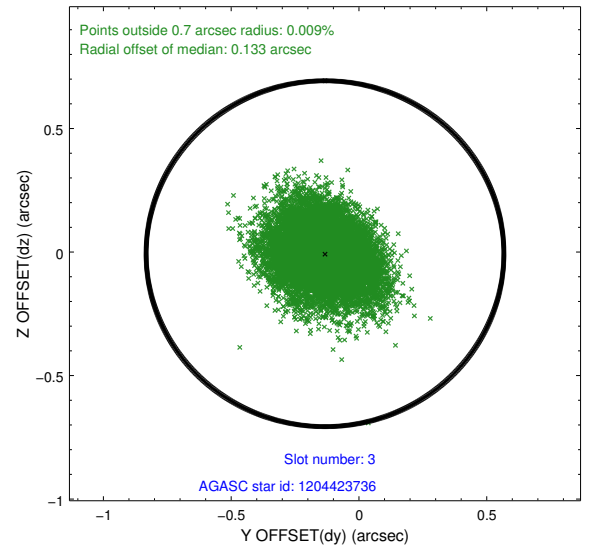
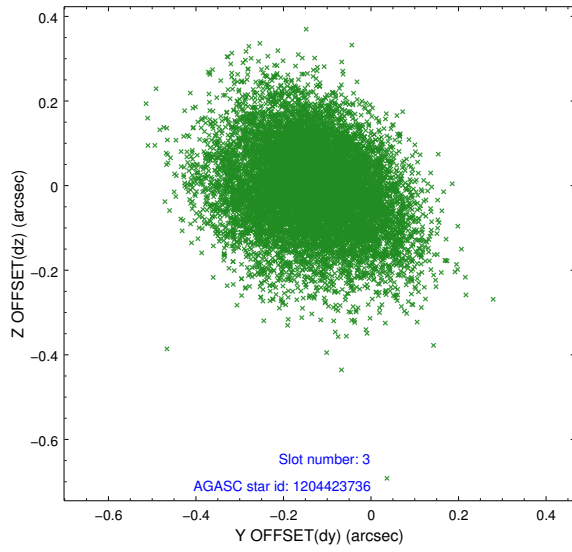
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.13	5539	-0.268	-0.178	0.016	0.024	0.000000	0.000000	-773.97	-1743.68
1	FID		ACIS-S-4	7.25	5539	0.573	0.178	0.017	0.025	0.000000	0.000000	2140.08	165.01
2	FID		ACIS-S-5	7.24	5538	-0.334	0.011	0.013	0.021	0.000000	0.000000	-1826.69	158.67
3	GUIDE	used	1204423736	8.72	11073	-0.133	-0.007	0.155	0.253	99.272017	-74.796122	1118.82	1415.81
4	GUIDE	used	1229457576	9.30	11068	0.065	0.168	0.177	0.304	100.335360	-75.489746	821.75	-1250.59
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	9.15	11062	0.112	0.366	0.154	0.262	100.958417	-75.581890	1153.84	-1810.56
7	GUIDE	used	1204429184	9.63	11060	-0.044	-0.527	0.190	0.309	99.730987	-74.425450	2124.76	2396.55

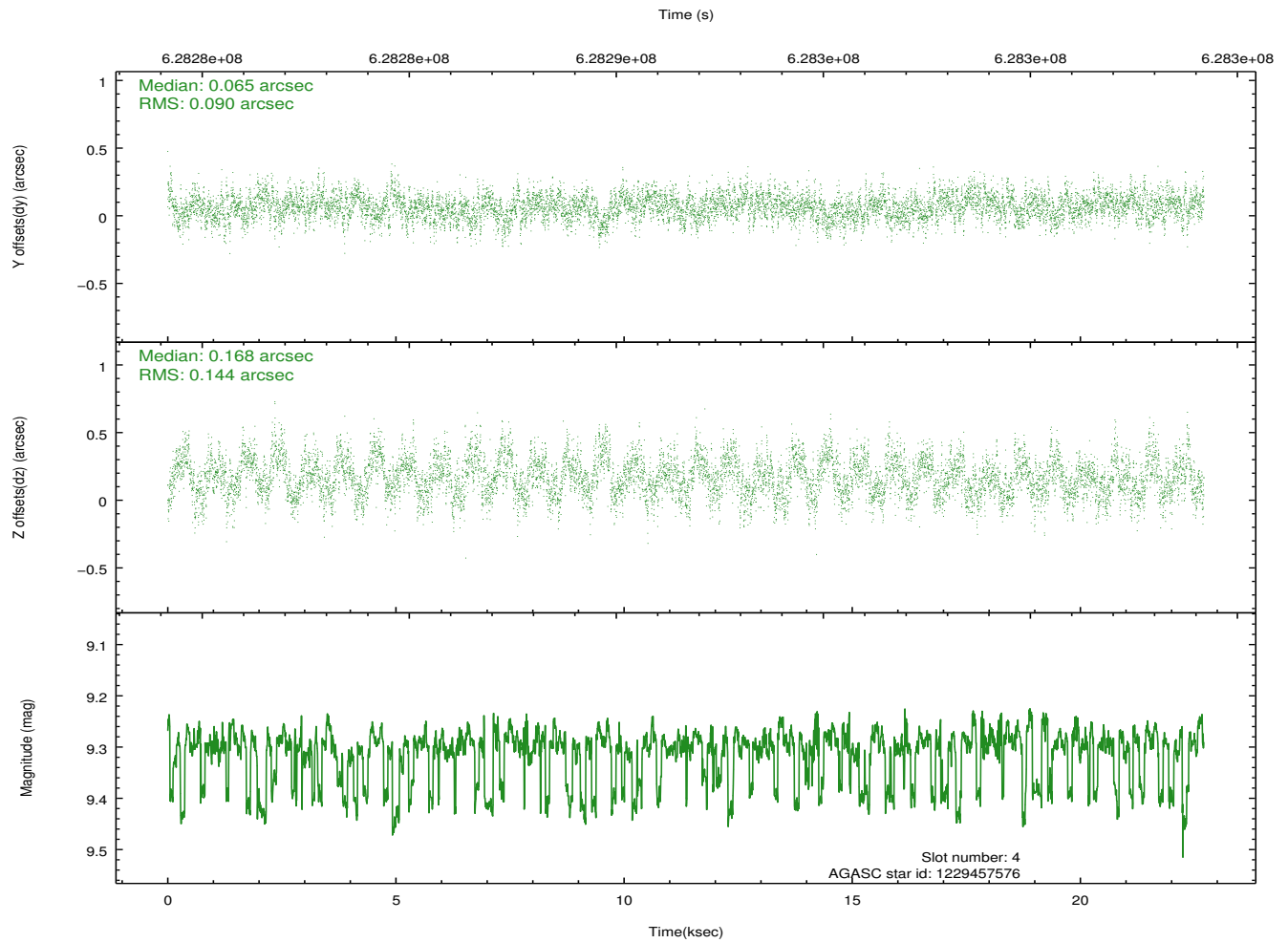
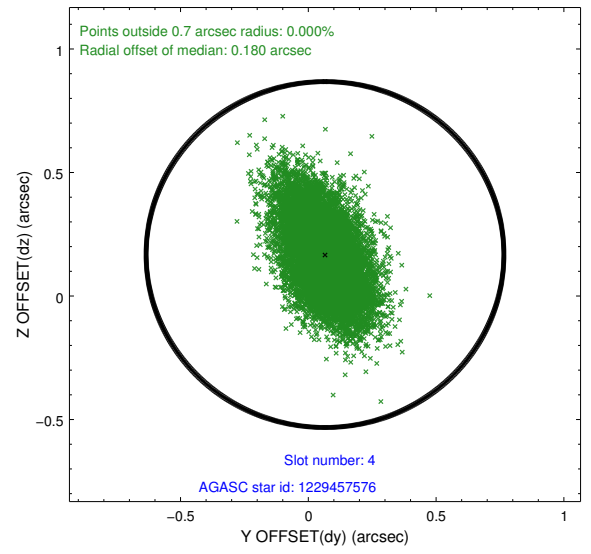
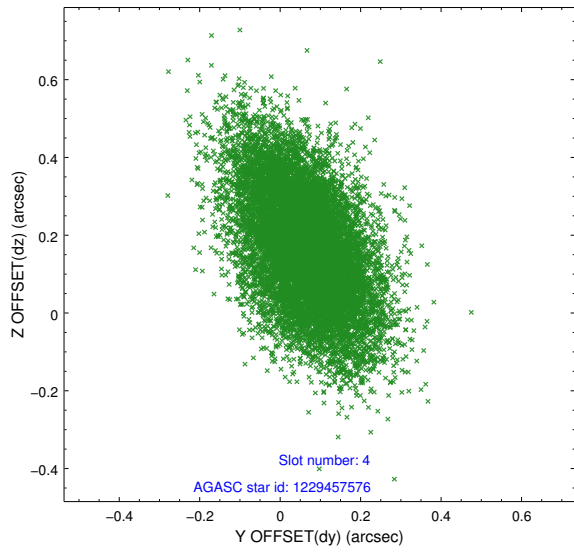
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2.4 Star Slots

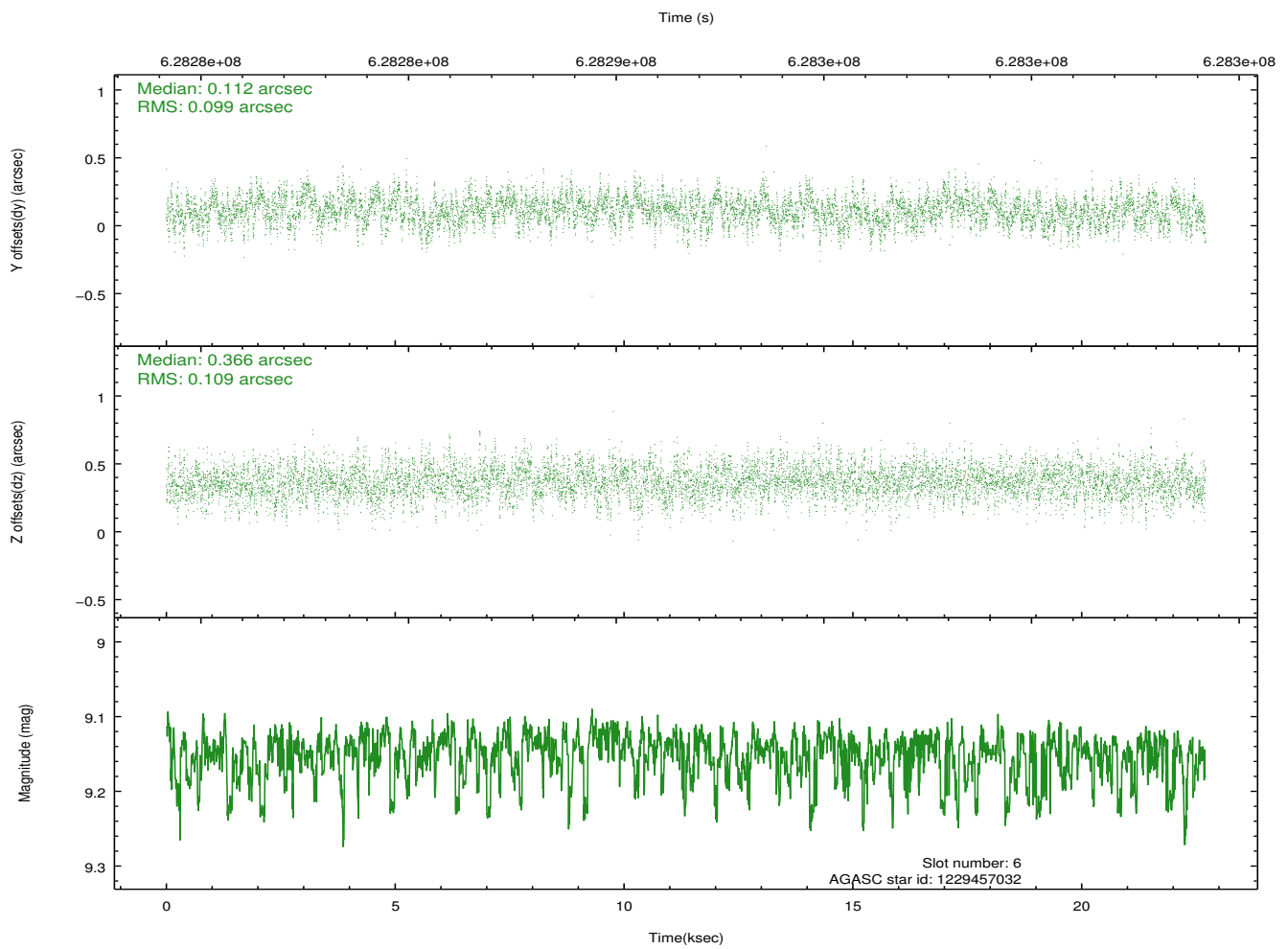
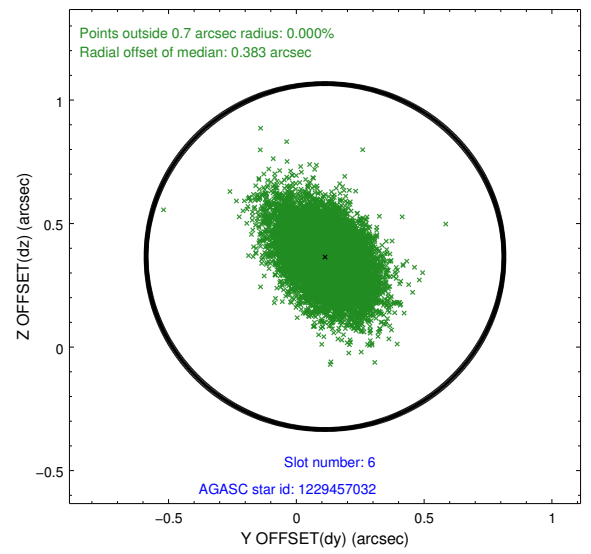
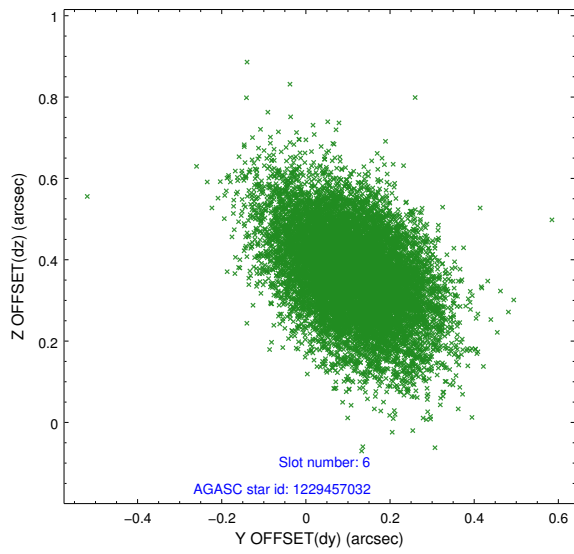
2.4.1 Slot 3



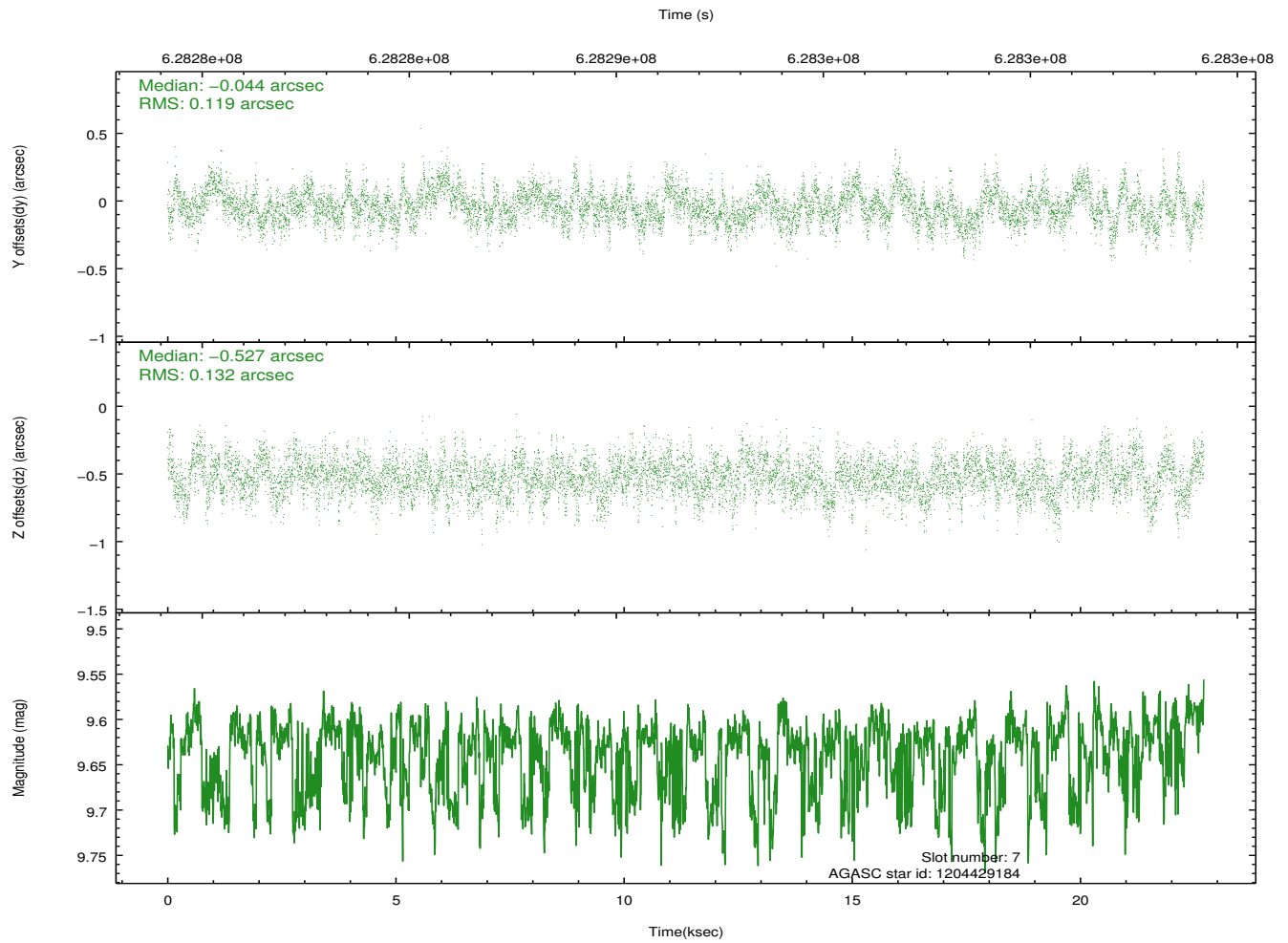
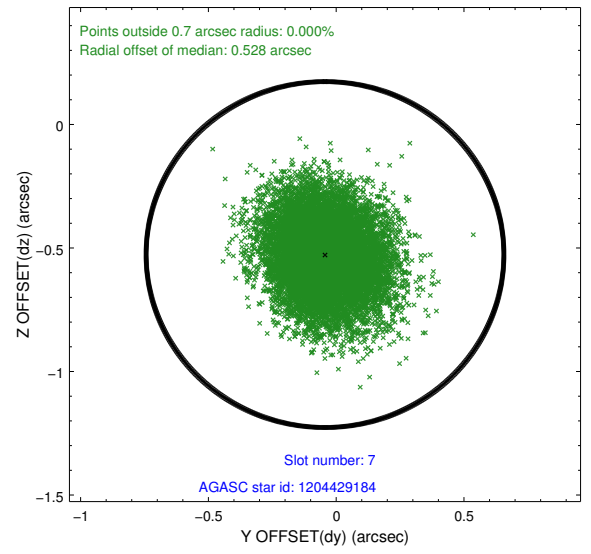
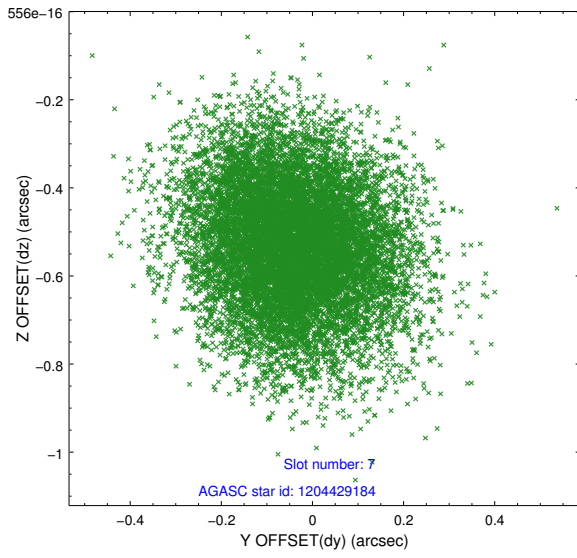
2.4.2 Slot 4



2.4.3 Slot 6

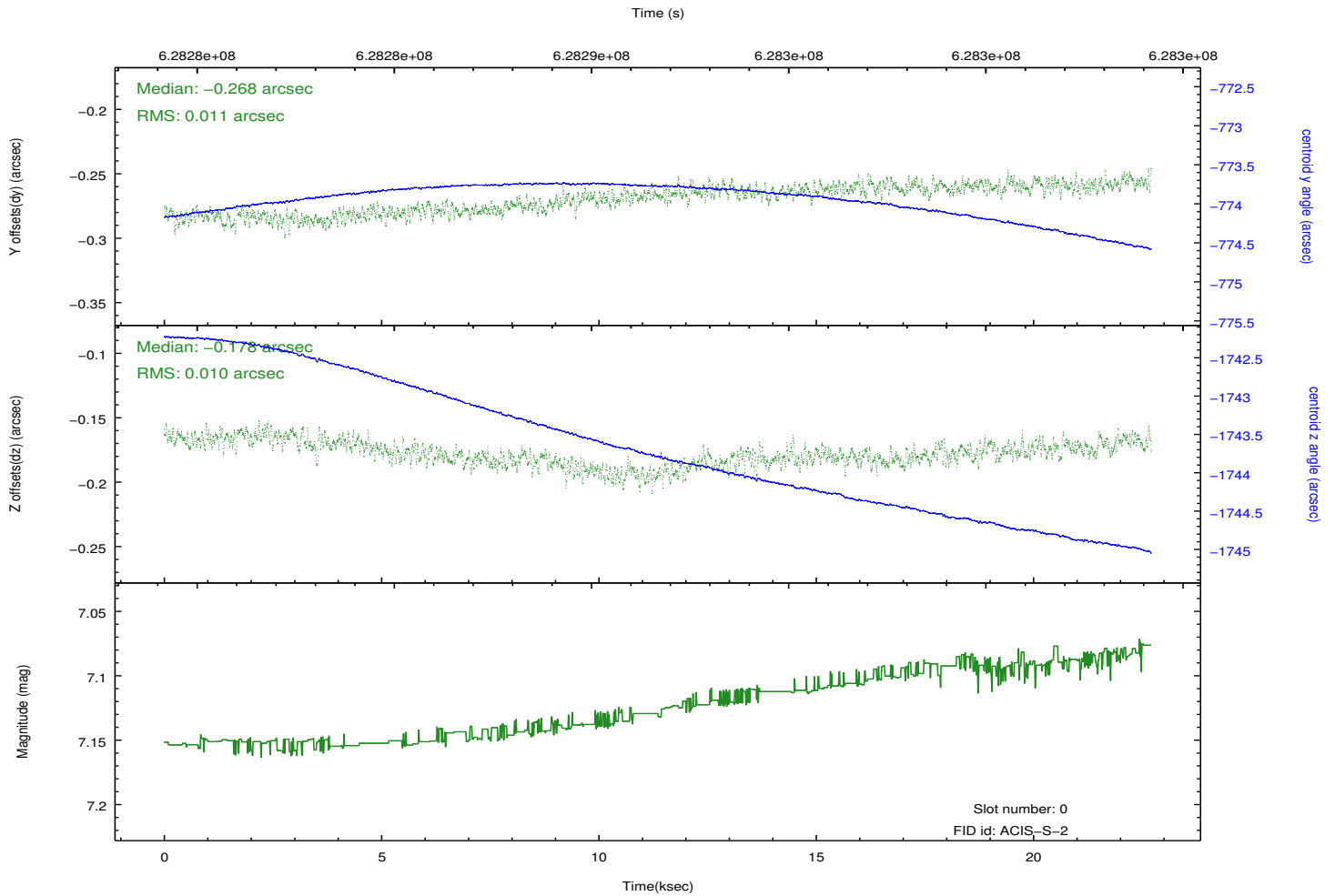
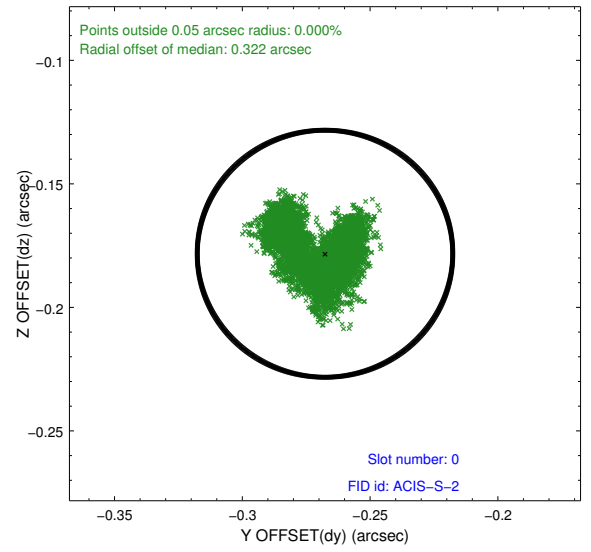
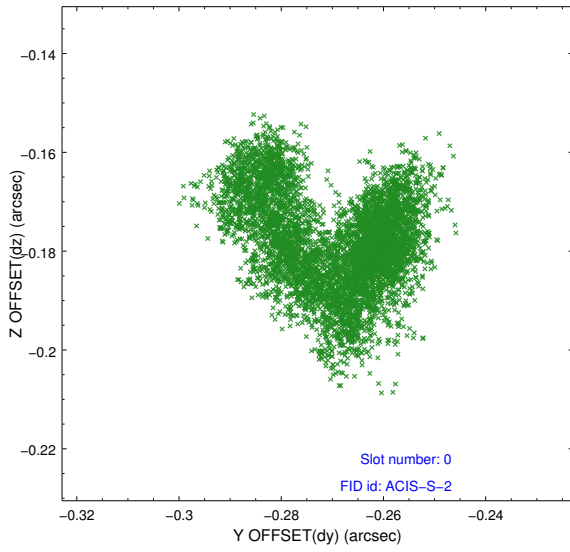


2.4.4 Slot 7

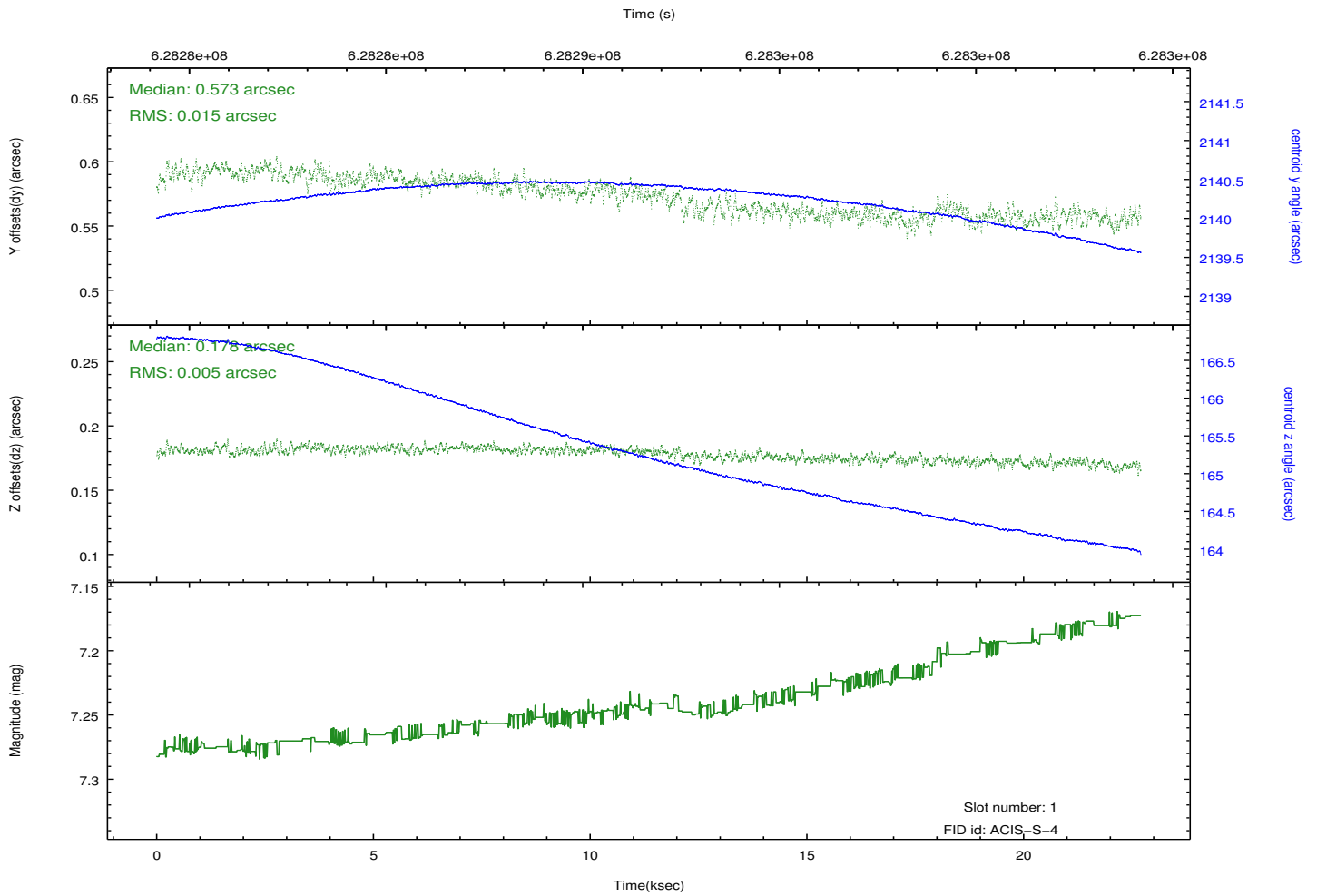
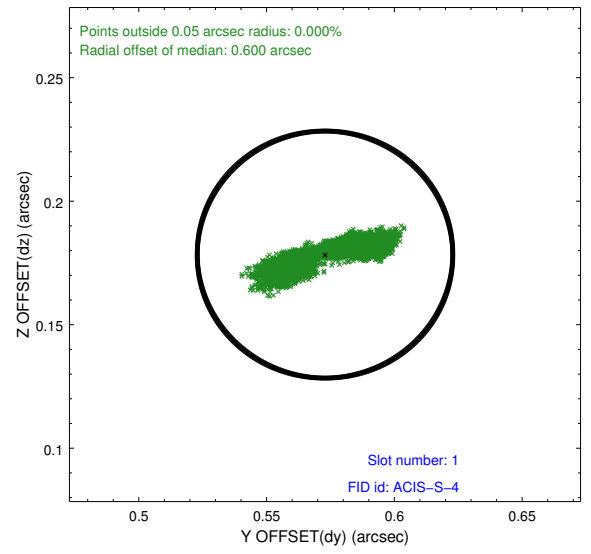
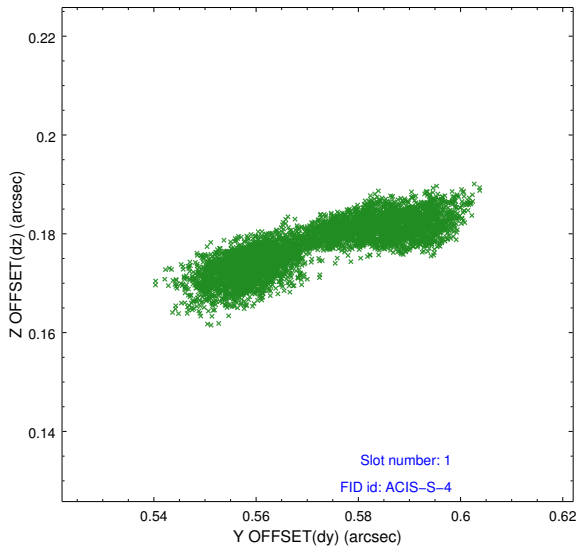


2.5 FID Slots

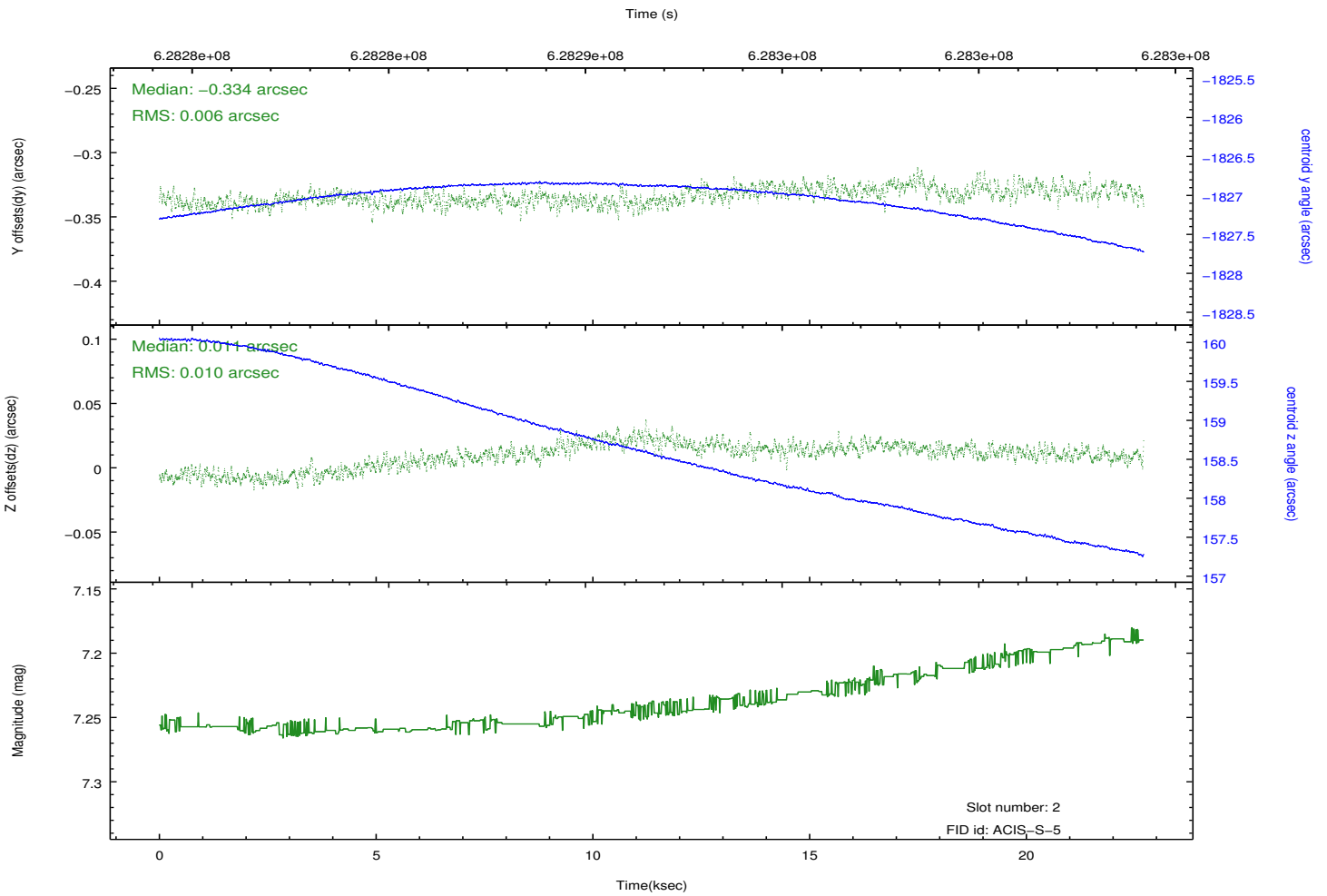
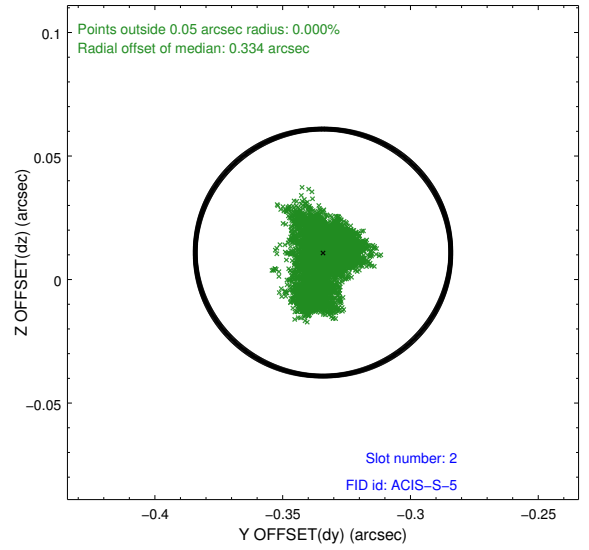
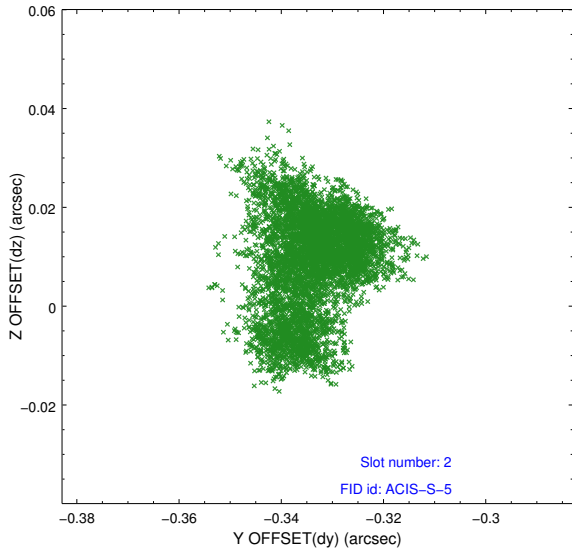
2.5.1 Slot 0



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	22.665600900769

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.