

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 16747 - L2 Version 1
Chandra X-Ray Center

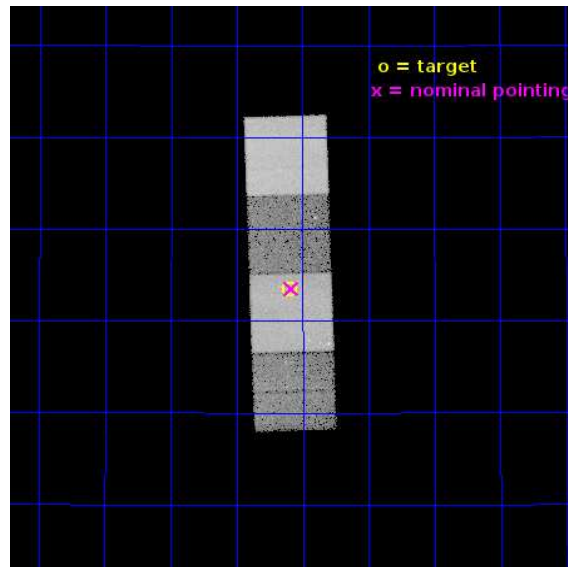
L2 Processing Date : Mar 13 2016

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1 Front

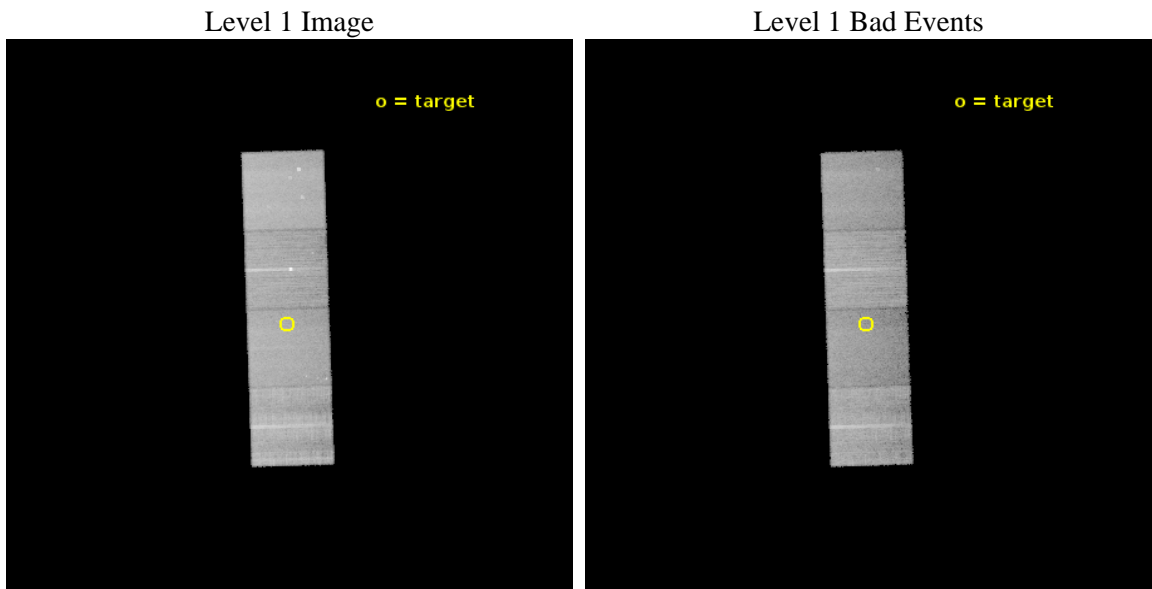
seq_num	401669	Sequence number
obs_id	16747	Observation id
title	Constraining Neutron Star Properties with Chandra Observations of Millisecond Pulsars	Proposal title
observer	Dr. Tod Strohmayer	Principal investigator
object	PSR J1709+2313	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	257.274167	Observer's specified target RA [deg]
dec_targ	23.224389	Observer's specified target Dec [deg]
ra_nom	257.27140016141	Nominal RA [deg]
dec_nom	23.225318045592	Nominal Dec [deg]
roll_nom	88.157714471324	Nominal Roll [deg]
revision	1	Processing version of data
ontime	27112.464798927	Sum of GTIs [s]
livetime	26758.220486423	Livetime [s]
ontime5	27112.423758984	Sum of GTIs [s]
ontime6	27112.382718921	Sum of GTIs [s]
ontime7	27112.464798927	Sum of GTIs [s]
ontime8	27112.341678977	Sum of GTIs [s]
l2events	217359	Number of level 2 events



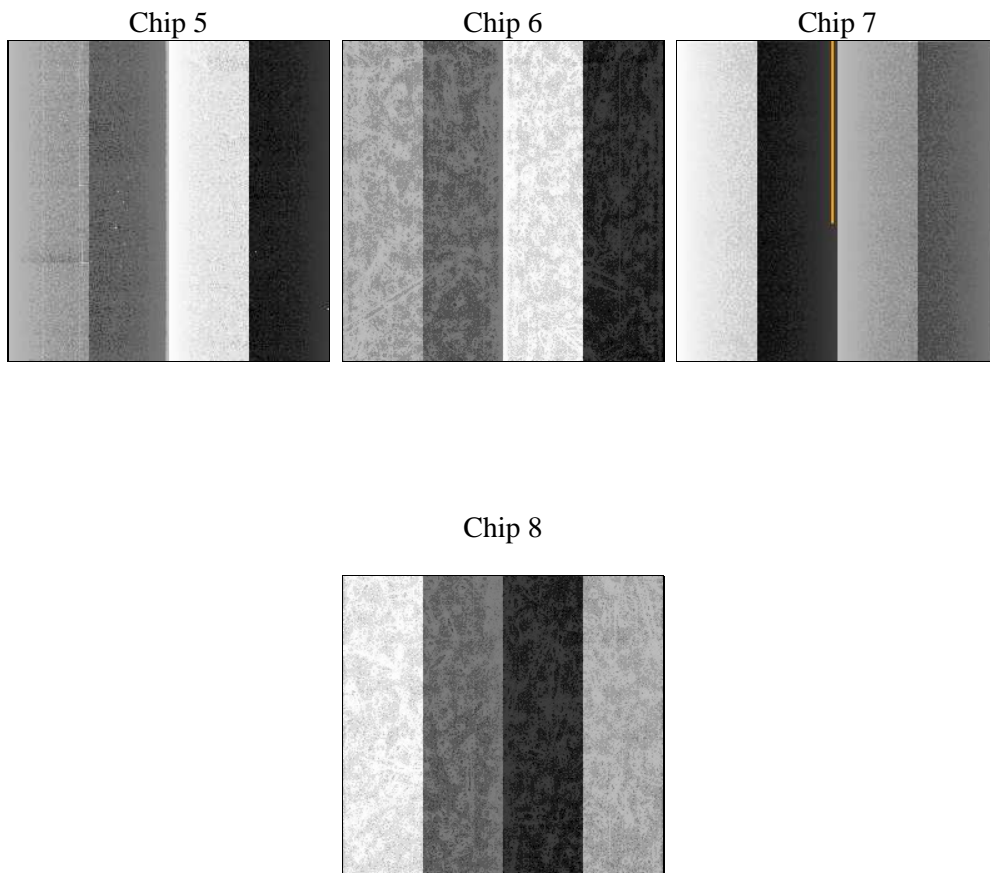
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	27000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	27112.464798927	Sum of GTIs [s]
caldsver	4.7.0	 	ontime5	27112.423758984	Sum of GTIs [s]
date	2016-03-13T15:34:45	Date and time of file creation	ontime6	27112.382718921	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	27112.464798927	Sum of GTIs [s]
			ontime8	27112.341678977	Sum of GTIs [s]
			l1events	745040	Number of level 1 events

2.1.4 Events

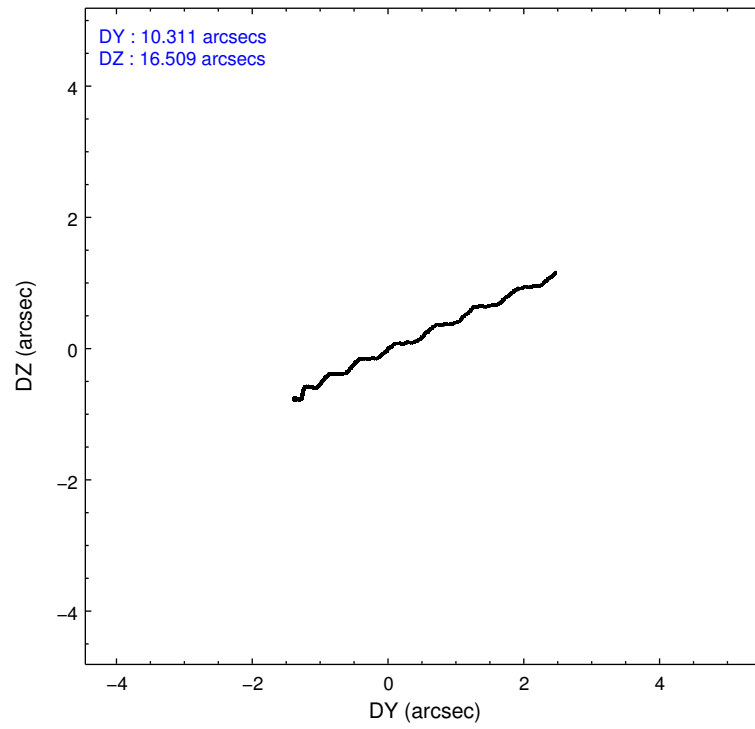
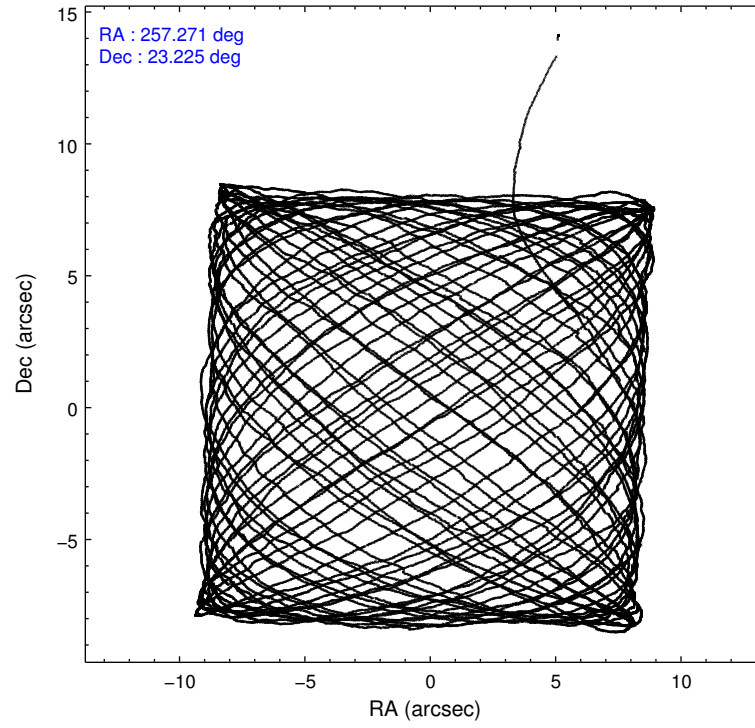
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	218694	162038	168952	195356
rejected events	106033	141488	89434	140675
rejected %	48%	87%	52%	72%

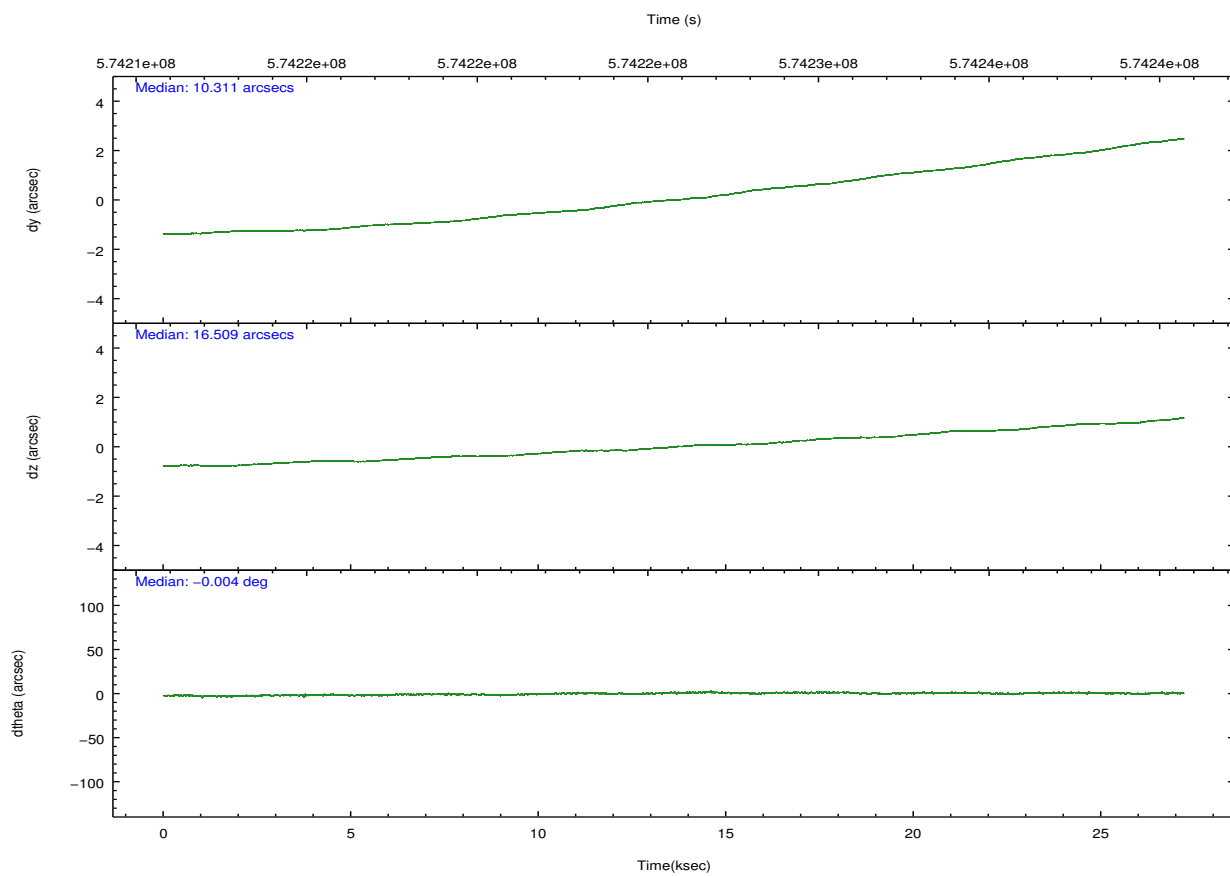
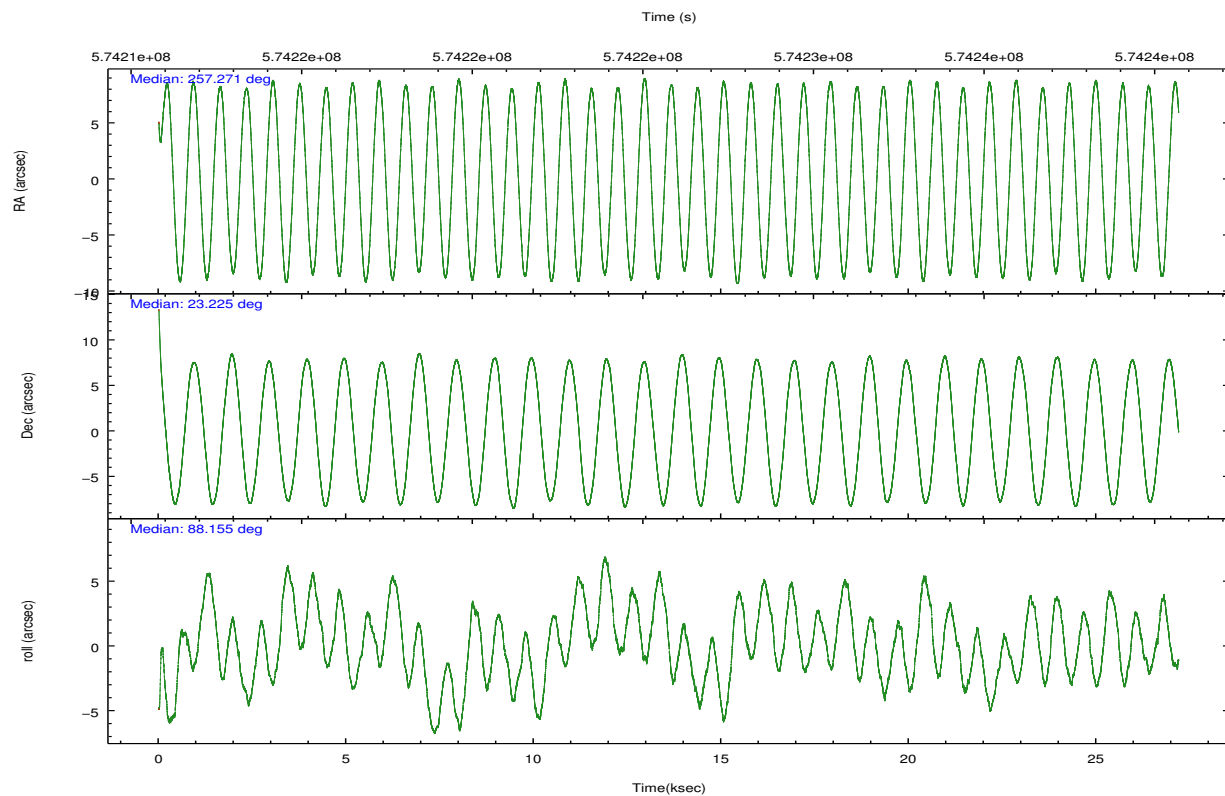
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	8291	9238	7267	15471
	3%	5%	4%	7%
grade 1 events	729	80	263	154
	0%	0%	0%	0%
grade 2 events	35998	4099	17652	13030
	16%	2%	10%	6%
grade 3 events	3839	1700	6488	5903
	1%	1%	3%	3%
grade 4 events	3832	1695	6512	5574
	1%	1%	3%	2%
grade 5 events	15891	6049	17155	9769
	7%	3%	10%	5%
grade 6 events	60713	3821	41609	14704
	27%	2%	24%	7%
grade 7 events	89401	135356	72006	130751
	40%	83%	42%	66%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	257.285820	257.2714001614118	Subarray requested	NONE	NONE
[deg] Pointing Dec	23.201289	23.22531804559235	Alternating exposures requested	N	N
[deg] Pointing Roll	87.995407	88.15771447132435	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	574212372.184000	574210720.92893			
Observation start date	2016-03-12T23:25:04	2016-03-12T22:58:40			
[s] Observation end time (MET)	574239372.184000	574240165.08061			
Observation end date	2016-03-13T06:55:04	2016-03-13T07:09:25			
Read mode	TIMED	TIMED			

2.3 Aspect



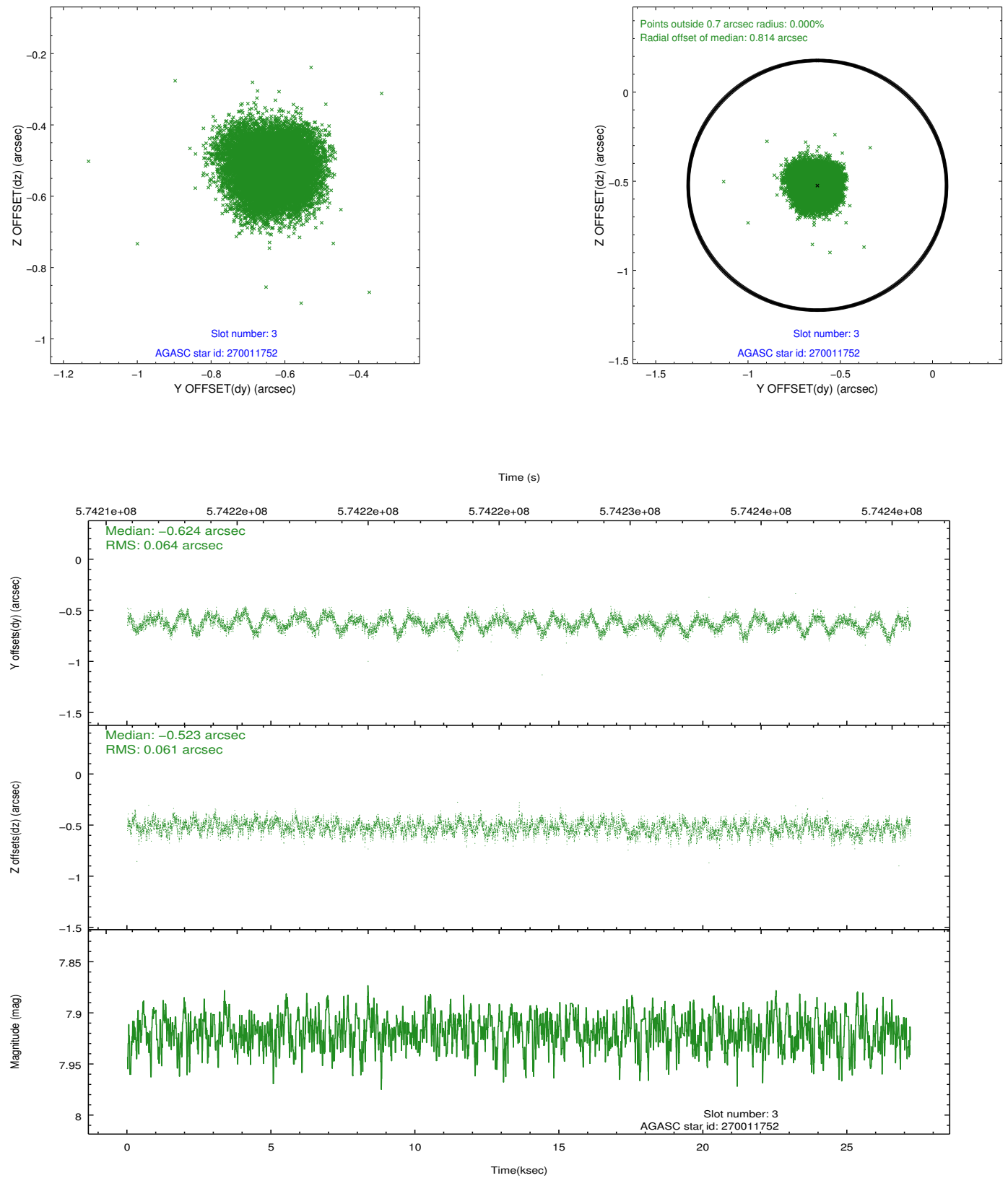


Slot Statistics

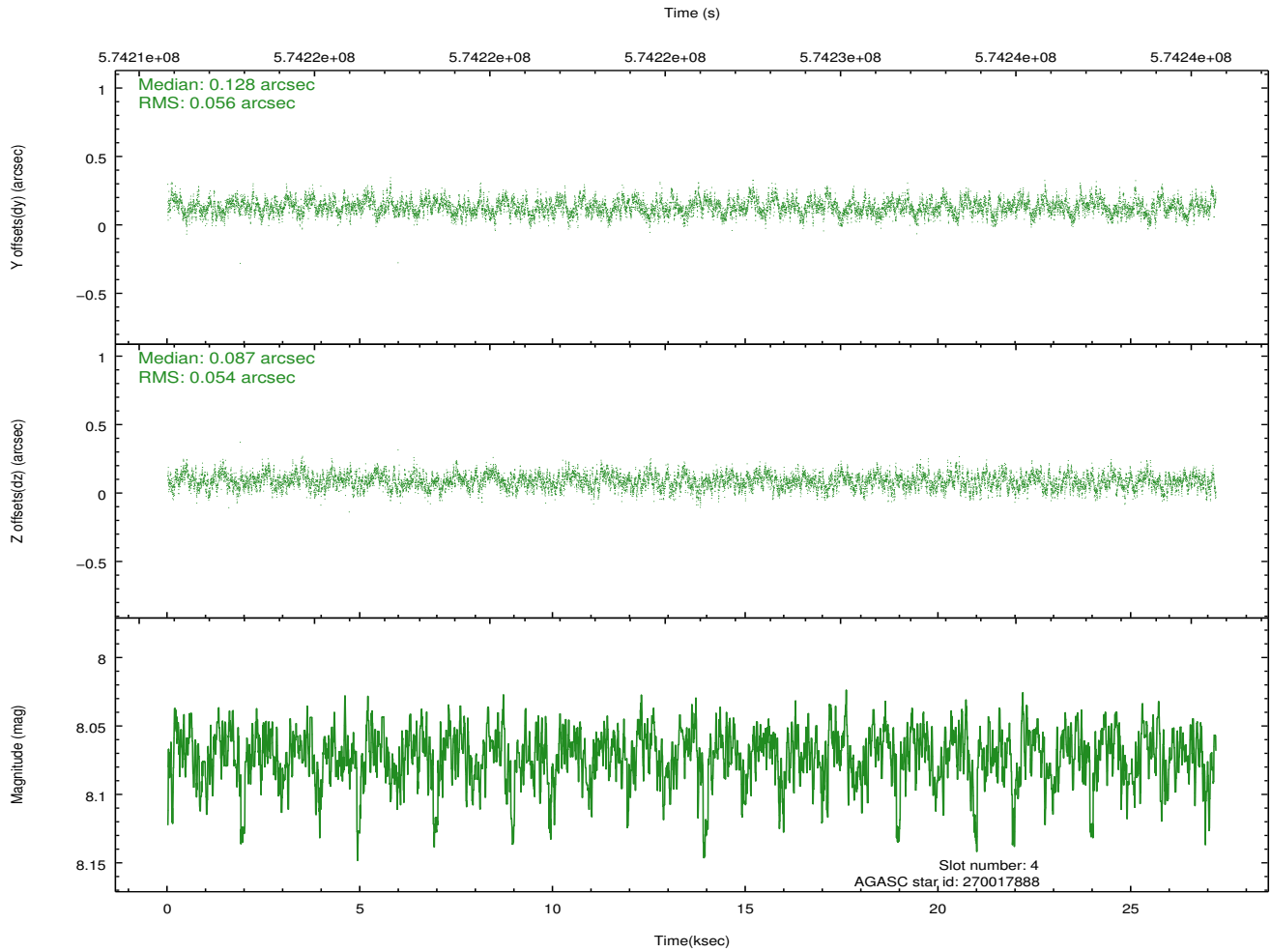
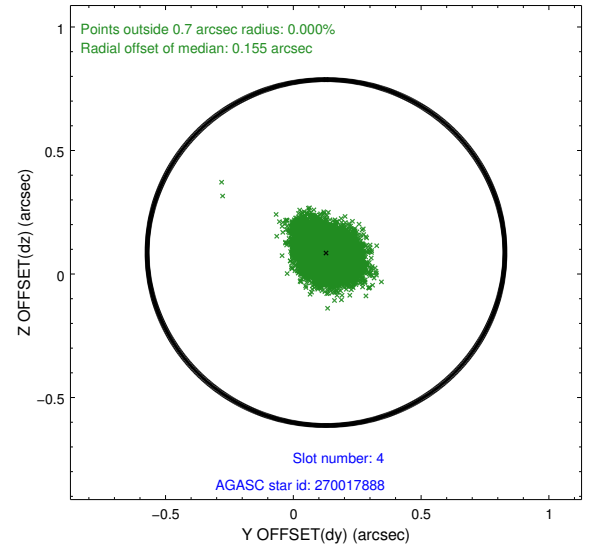
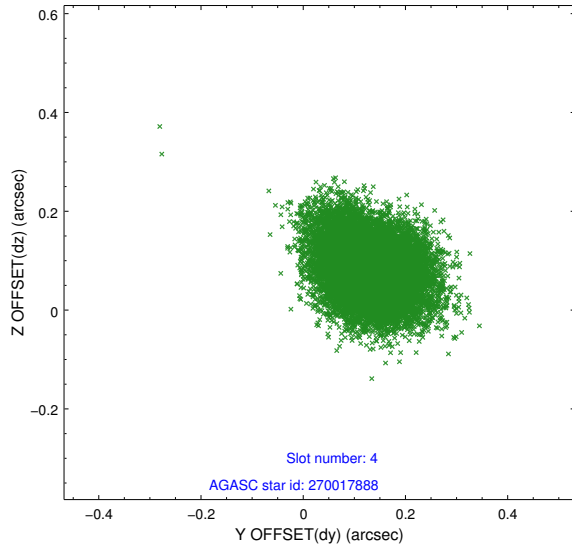
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	6632	-0.142	-0.083	0.021	0.050	0.000000	0.000000	-763.46	-1738.06
1	FID		ACIS-S-4	7.22	6633	0.394	0.091	0.010	0.019	0.000000	0.000000	2150.30	170.52
2	FID		ACIS-S-5	7.24	6632	-0.282	-0.002	0.018	0.062	0.000000	0.000000	-1816.33	164.19
3	GUIDE	used	270011752	7.92	13264	-0.624	-0.523	0.095	0.147	256.685095	23.563891	1238.65	2026.69
4	GUIDE	used	270017888	8.07	13260	0.128	0.087	0.083	0.134	257.407344	23.577924	1369.99	-352.54
5	GUIDE	used	270019064	8.42	13260	-0.054	-0.272	0.100	0.154	256.784607	23.399474	656.86	1680.42
6	GUIDE	used	270142880	8.66	13258	0.394	0.550	0.101	0.164	257.888174	22.724961	-1639.01	-2058.06
7	GUIDE	used	270018248	9.63	13248	0.159	0.153	0.183	0.286	256.826726	22.568306	-2328.42	1445.83

2.4 Star Slots

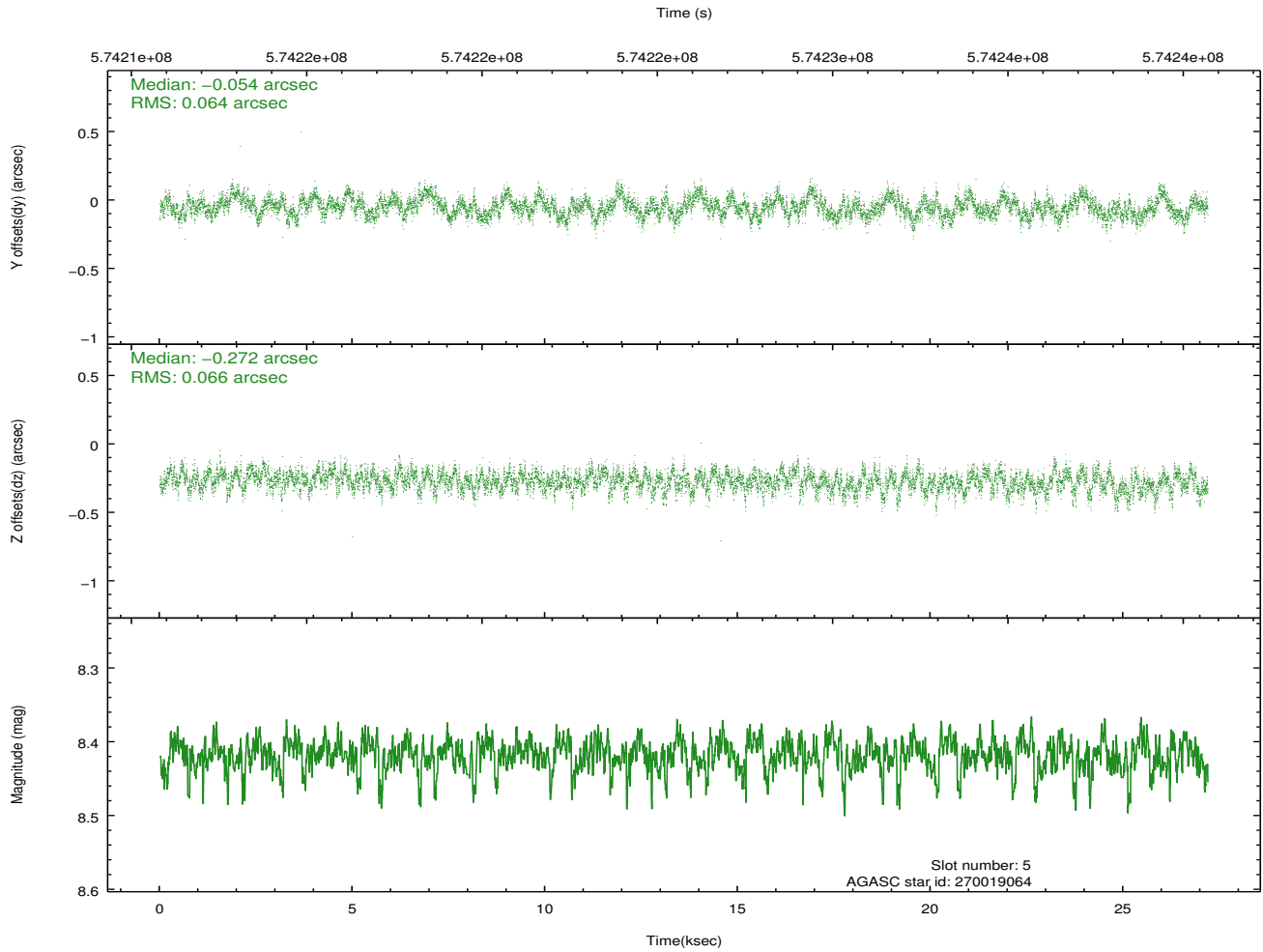
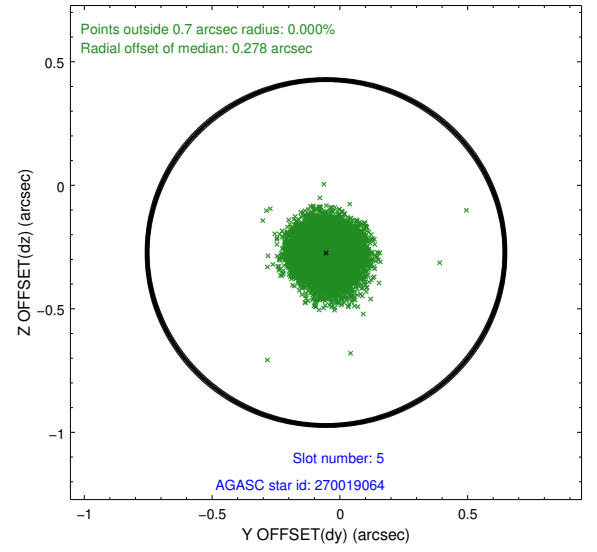
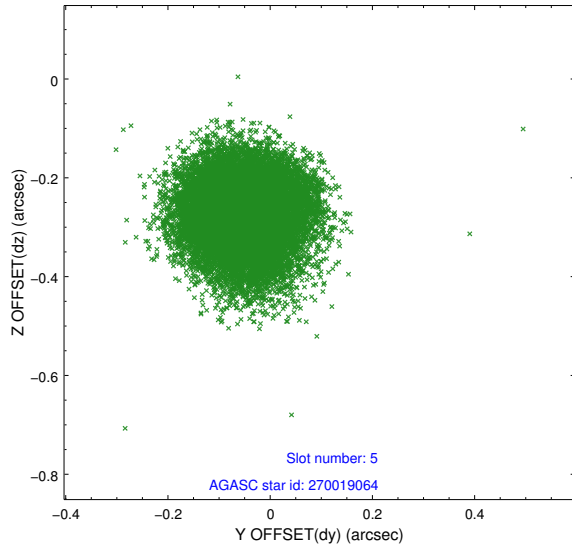
2.4.1 Slot 3



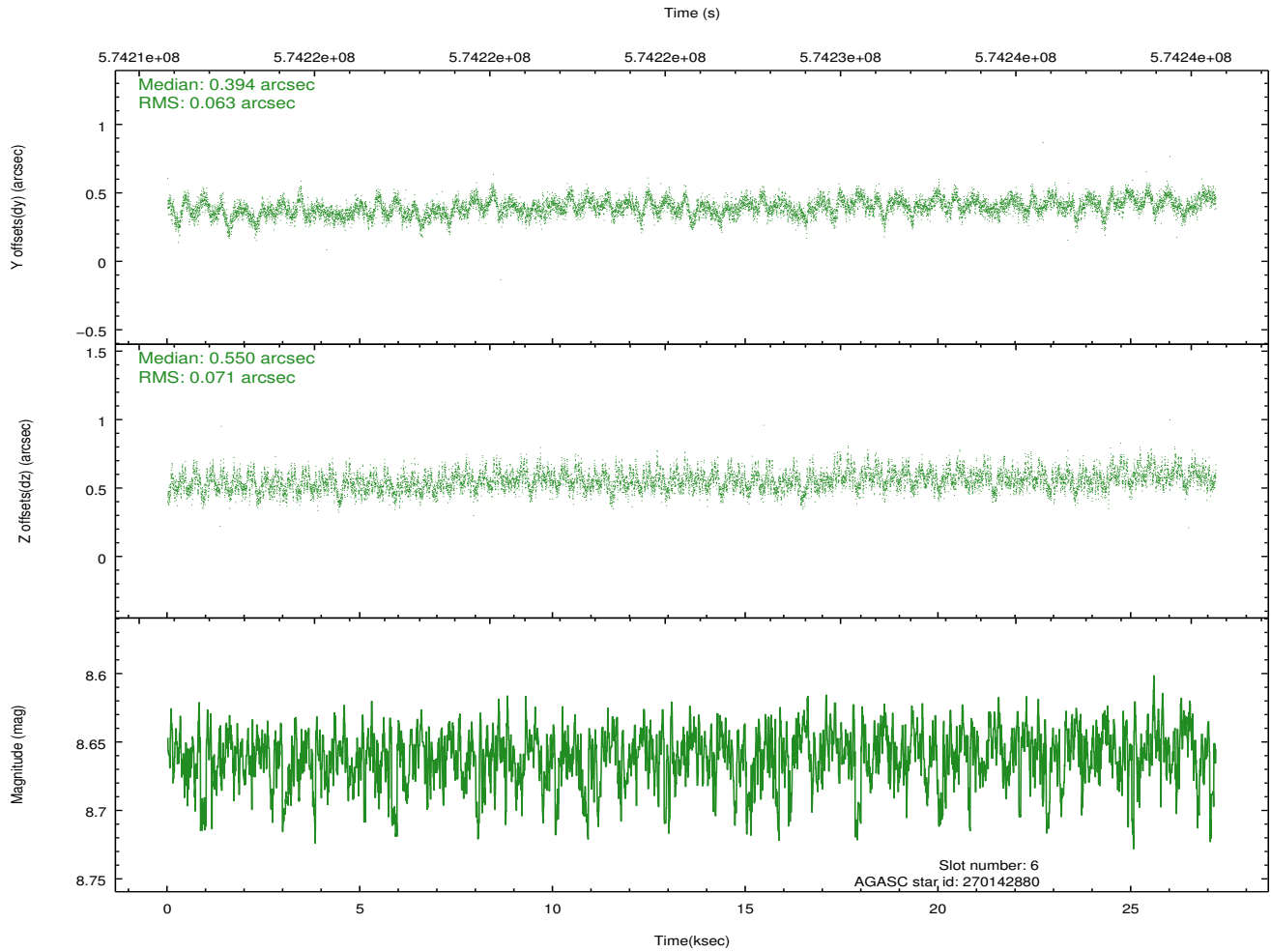
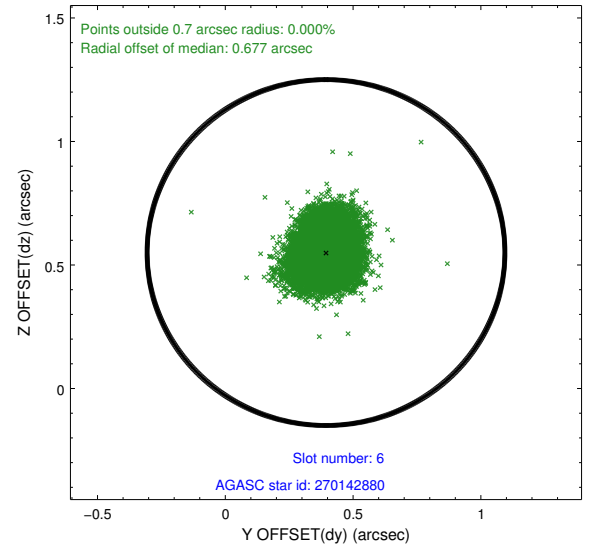
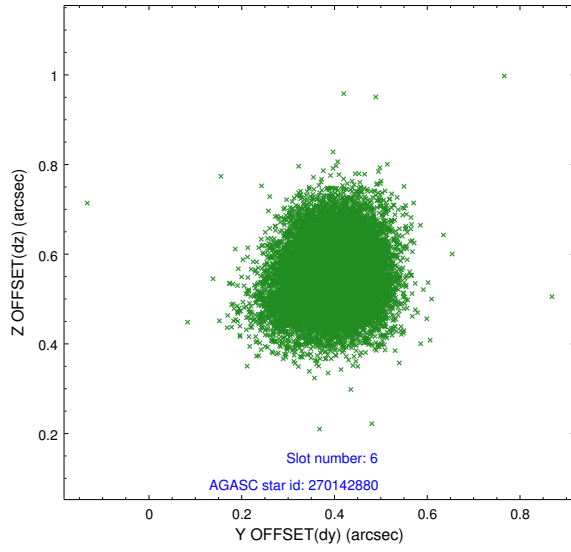
2.4.2 Slot 4



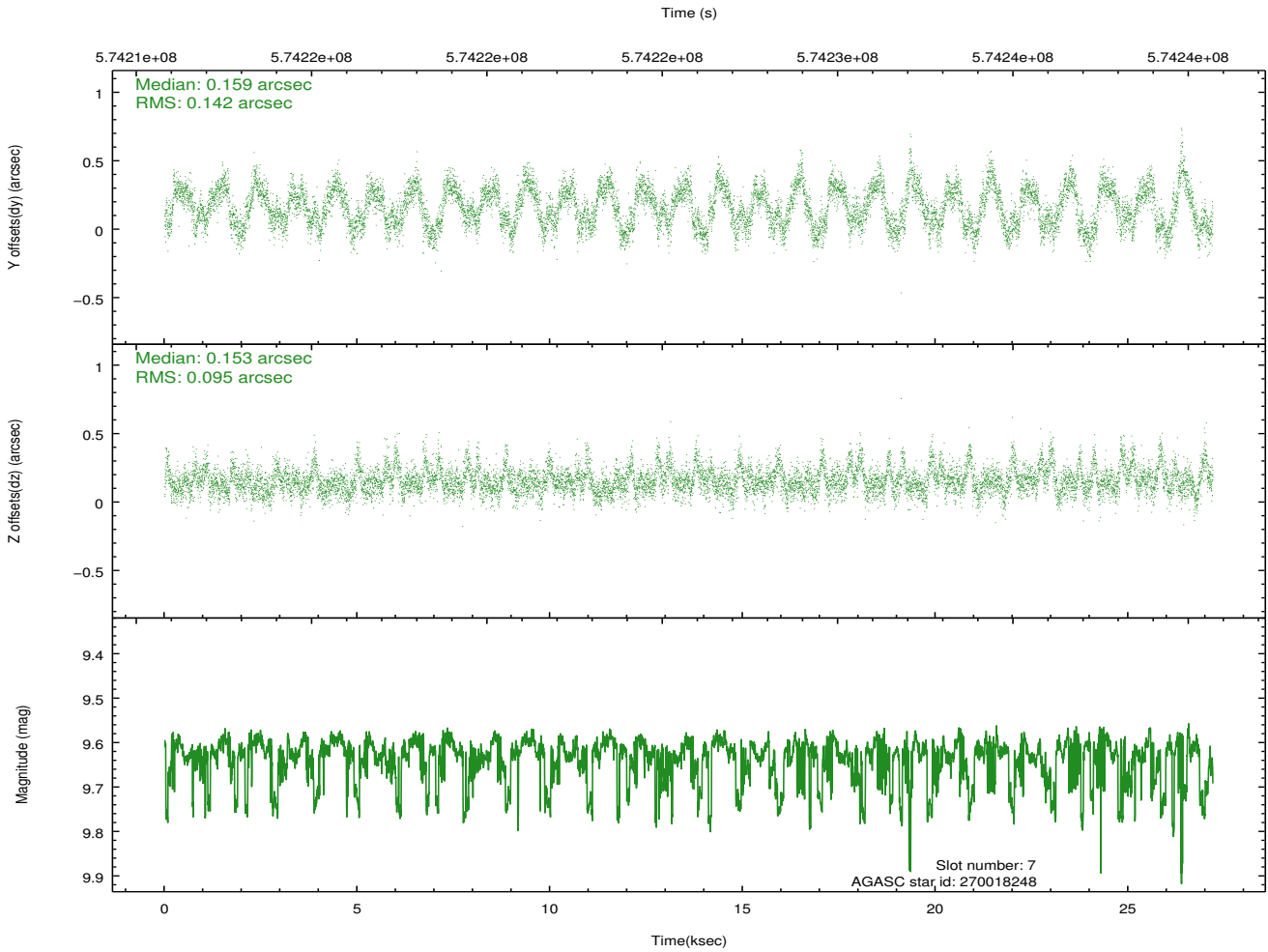
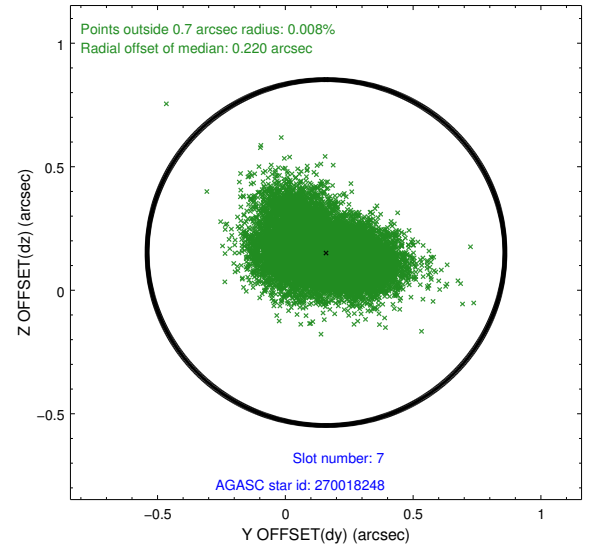
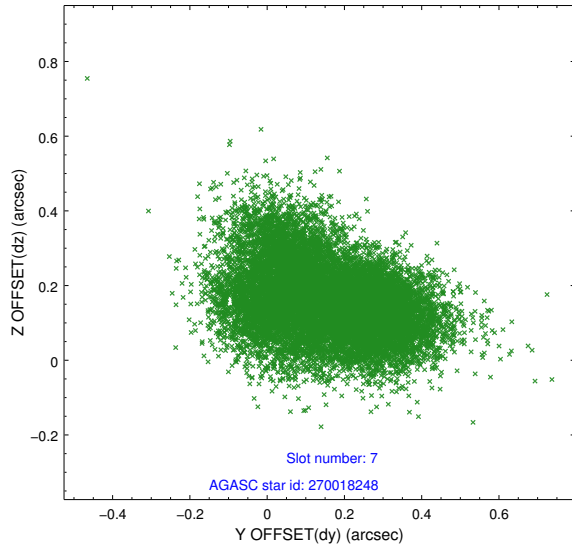
2.4.3 Slot 5



2.4.4 Slot 6

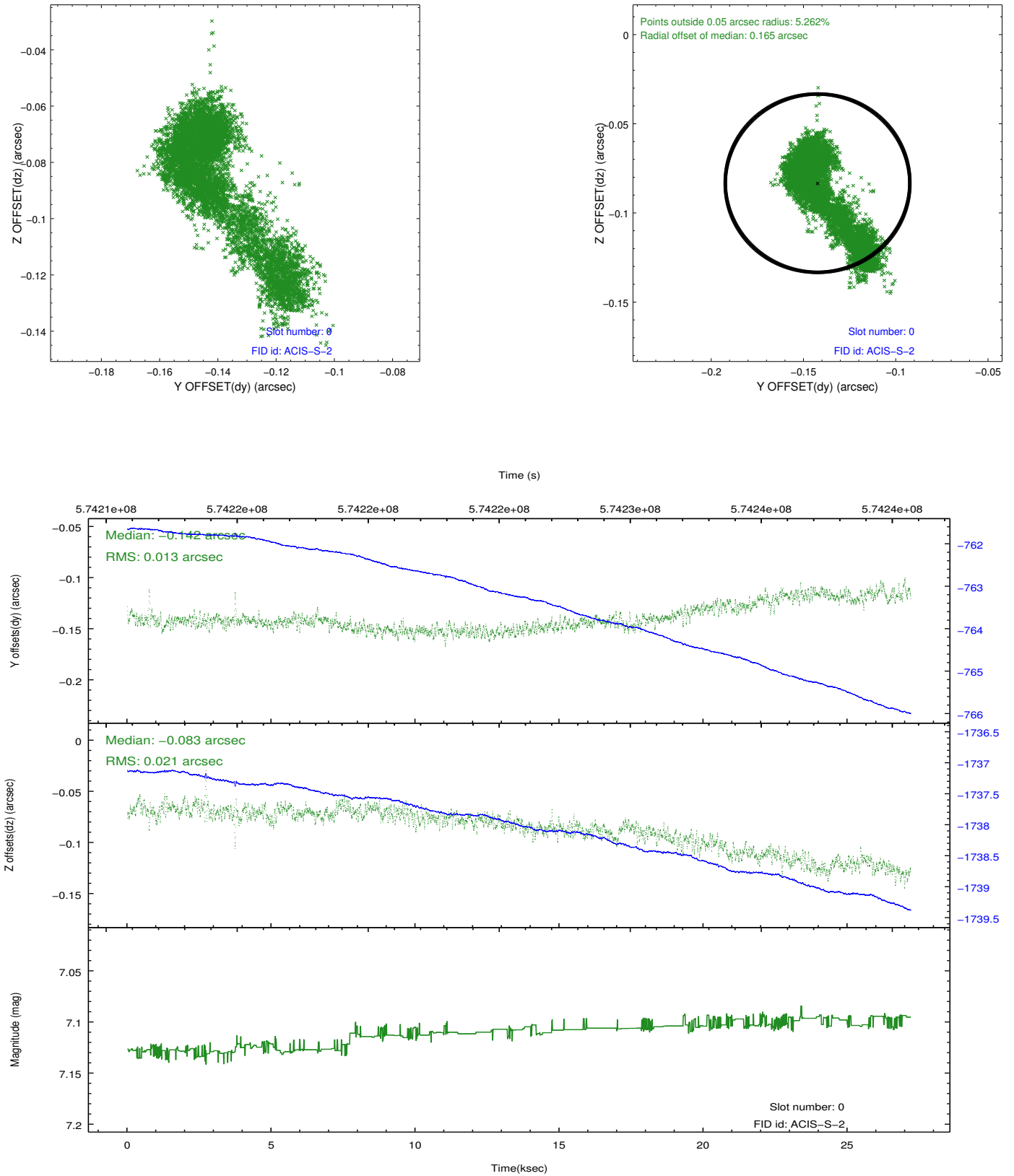


2.4.5 Slot 7

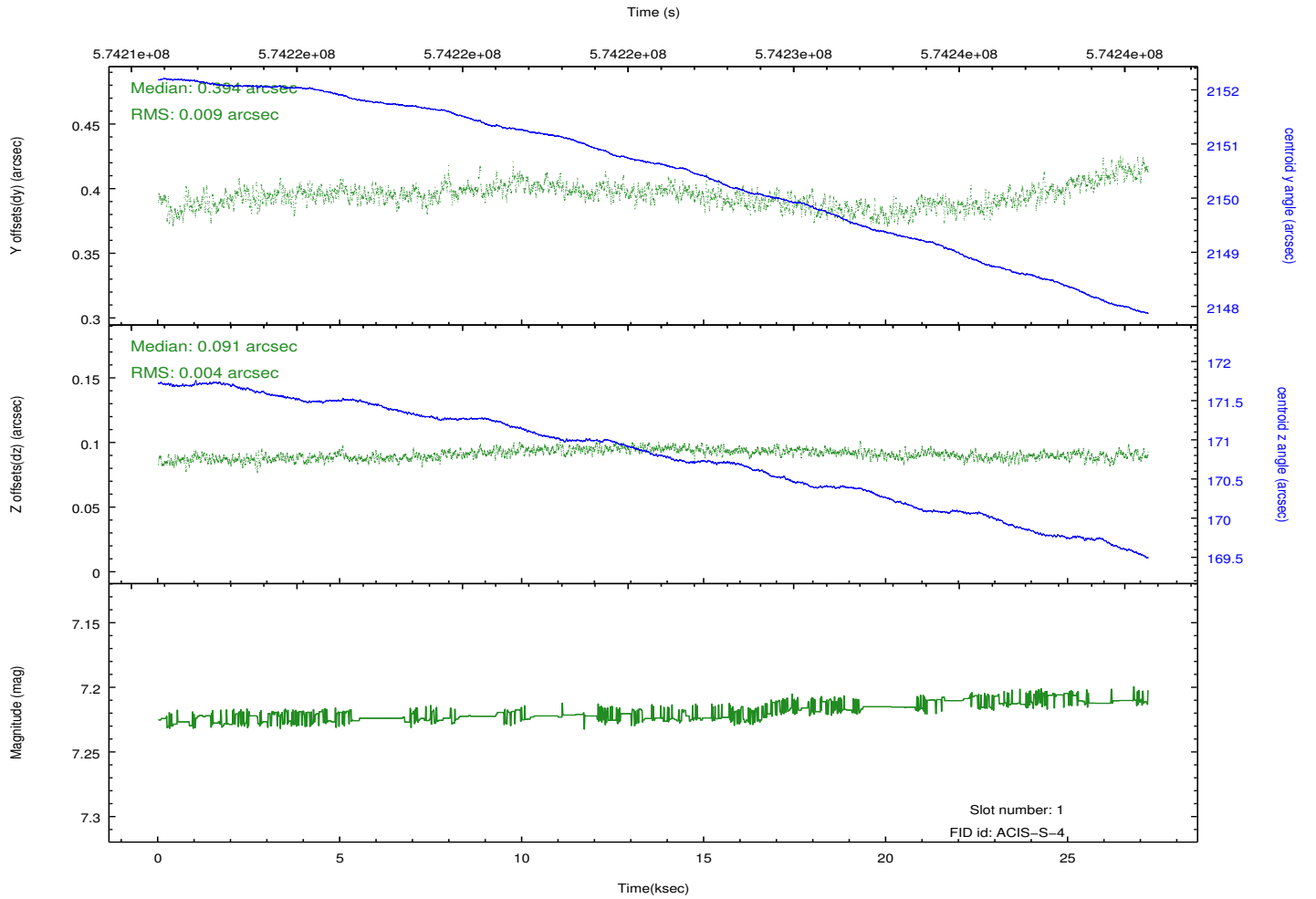
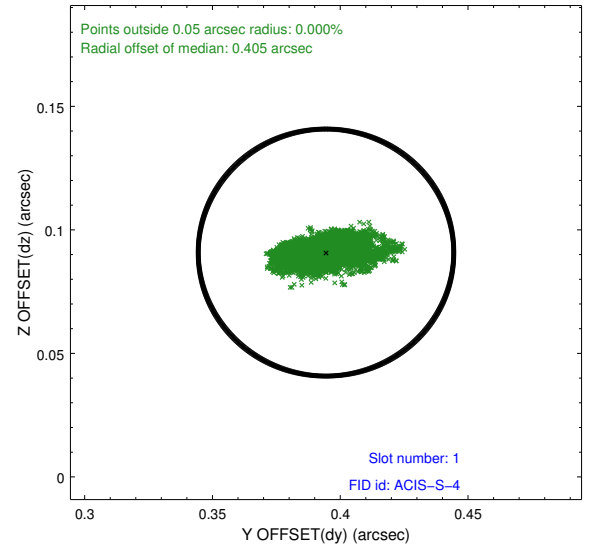
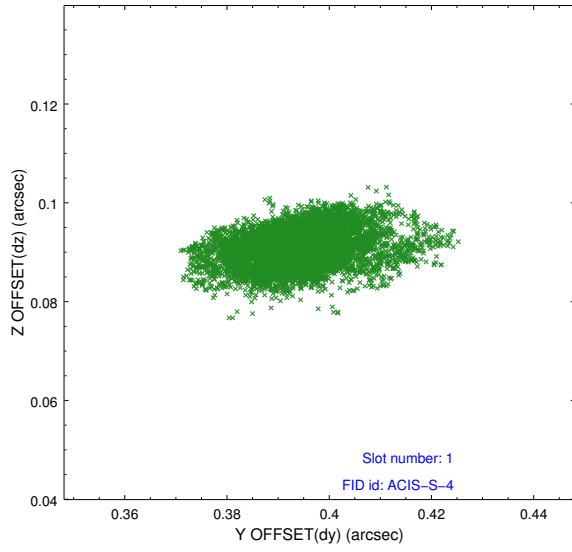


2.5 FID Slots

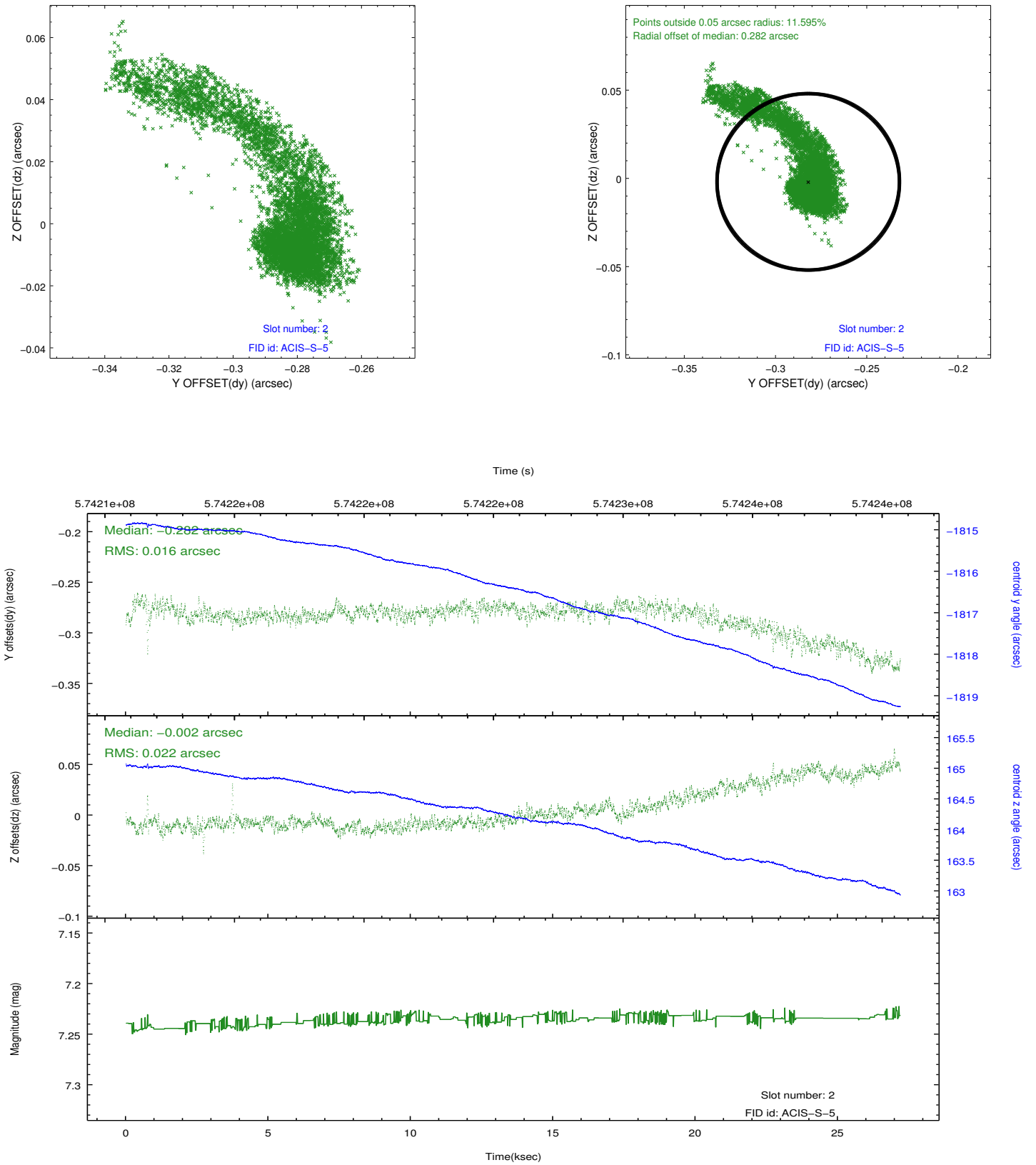
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.03.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.112464798927

A.2 Comments