

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18115 - L2 Version 2
Chandra X-Ray Center

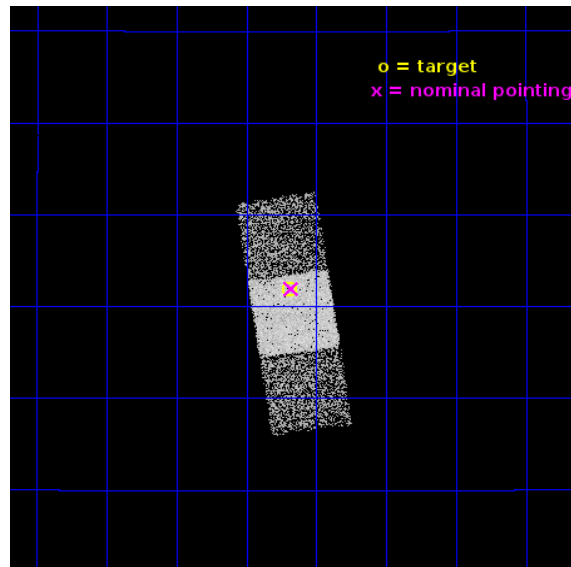
L2 Processing Date : Feb 10 2016

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1 Front

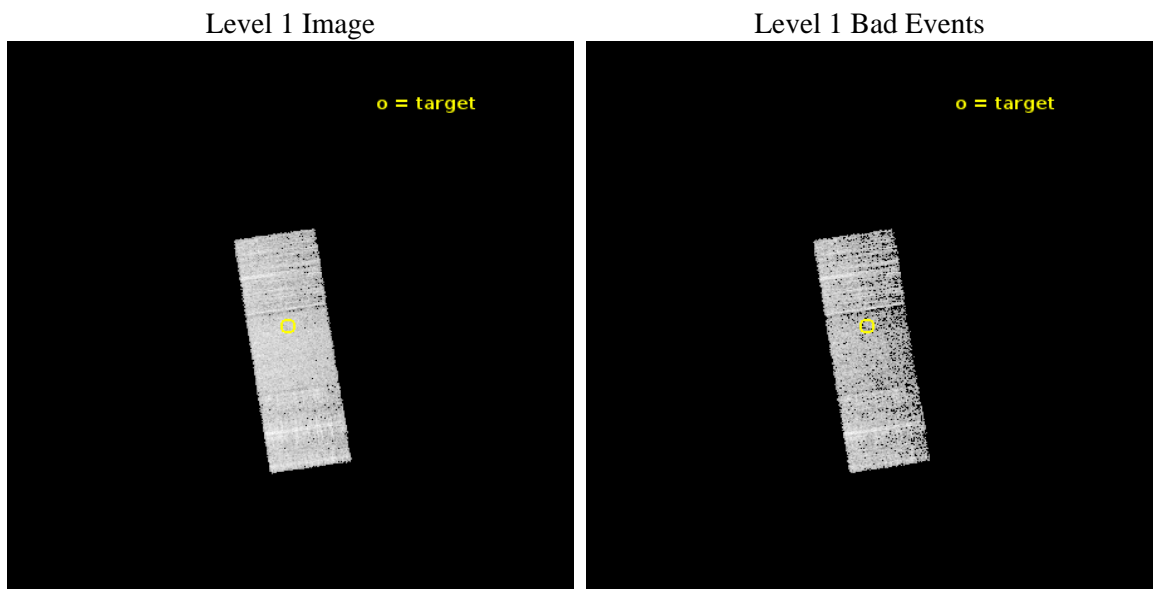
seq_num	703181	Sequence number
obs_id	18115	Observation id
title	Bridging the Gap Between Weak-Line and Typical Quasars	Proposal ti
observer	Prof. William Brandt	Principal investigator
object	SDSS J1223+1241	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.797083	Observer's specified target RA [deg]
dec_targ	12.698306	Observer's specified target Dec [deg]
ra_nom	185.79466307185	Nominal RA [deg]
dec_nom	12.698861438332	Nominal Dec [deg]
roll_nom	81.416793088919	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4606.6000355482	Sum of GTIs [s]
livetime	4546.4114147542	Livetime [s]
ontime6	4606.6000355482	Sum of GTIs [s]
ontime7	4606.6000355482	Sum of GTIs [s]
ontime8	4594.0358542204	Sum of GTIs [s]
l2events	21136	Number of level 2 events



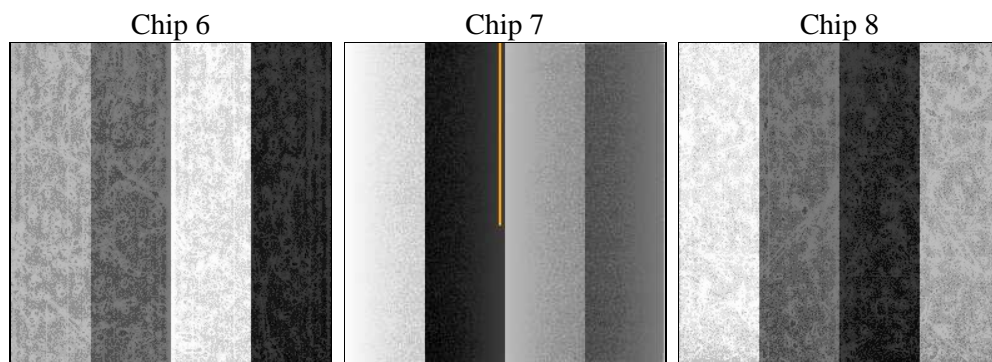
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4800.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	4606.6000355482	Sum of GTIs [s]
caldsver	4.7.0	 	ontime6	4606.6000355482	Sum of GTIs [s]
date	2016-02-11T02:56:56	Date and time of file creation	ontime7	4606.6000355482	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	4594.0358542204	Sum of GTIs [s]
			l1events	102963	Number of level 1 events

2.1.4 Events

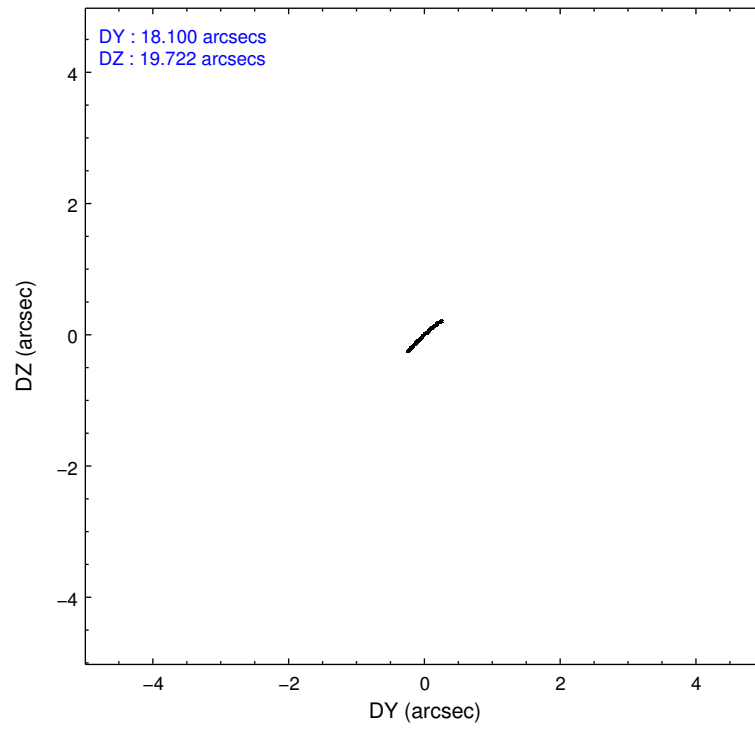
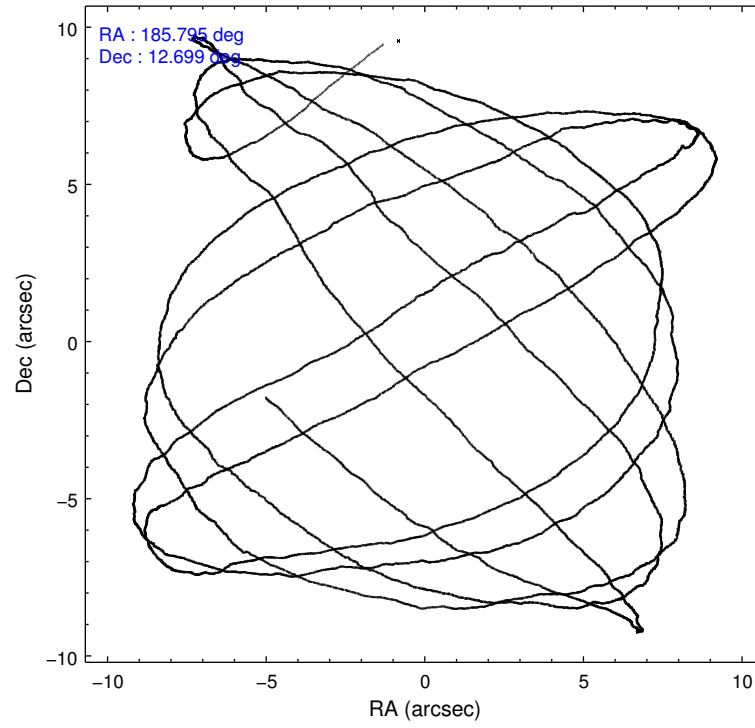
	ccd 6	ccd 7	ccd 8
level 1 events	29569	35896	37498
rejected events	26247	20326	28151
rejected %	88%	56%	75%

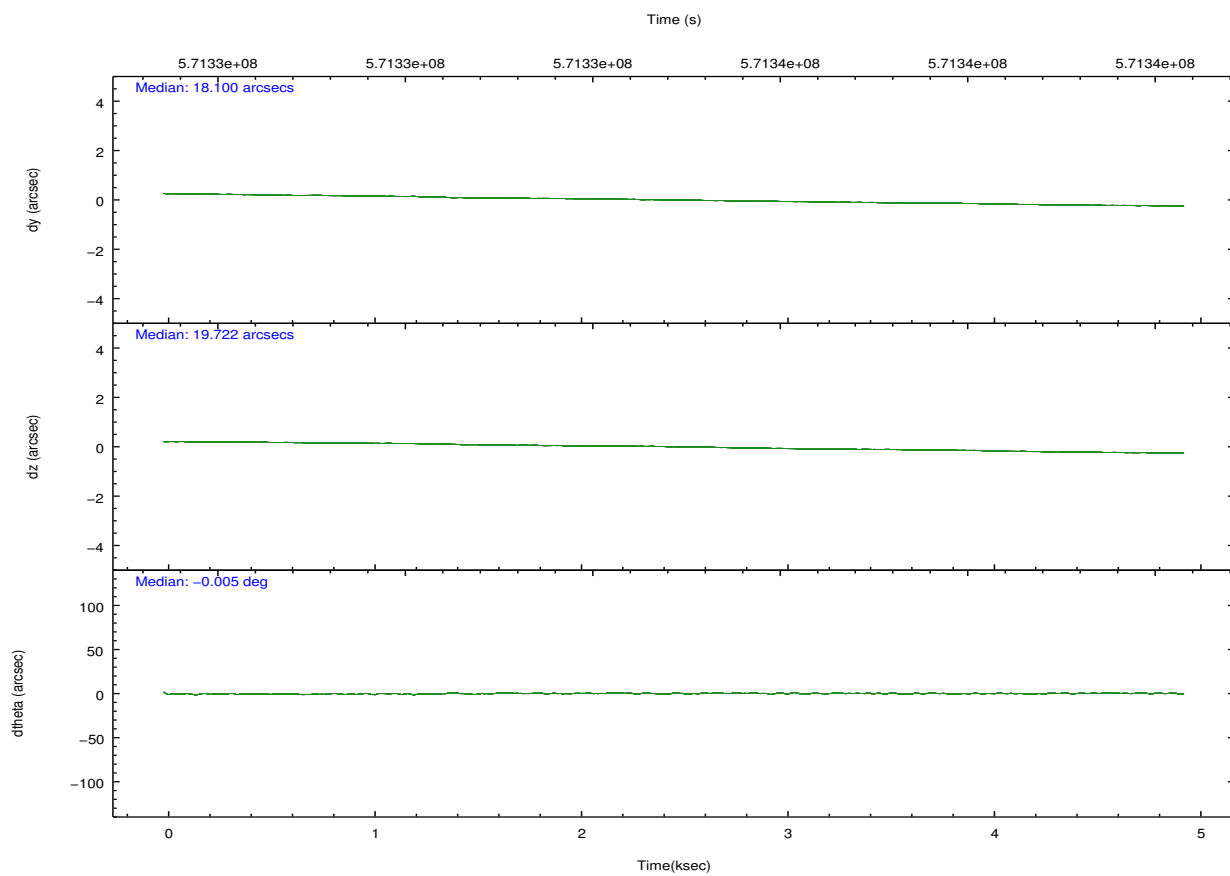
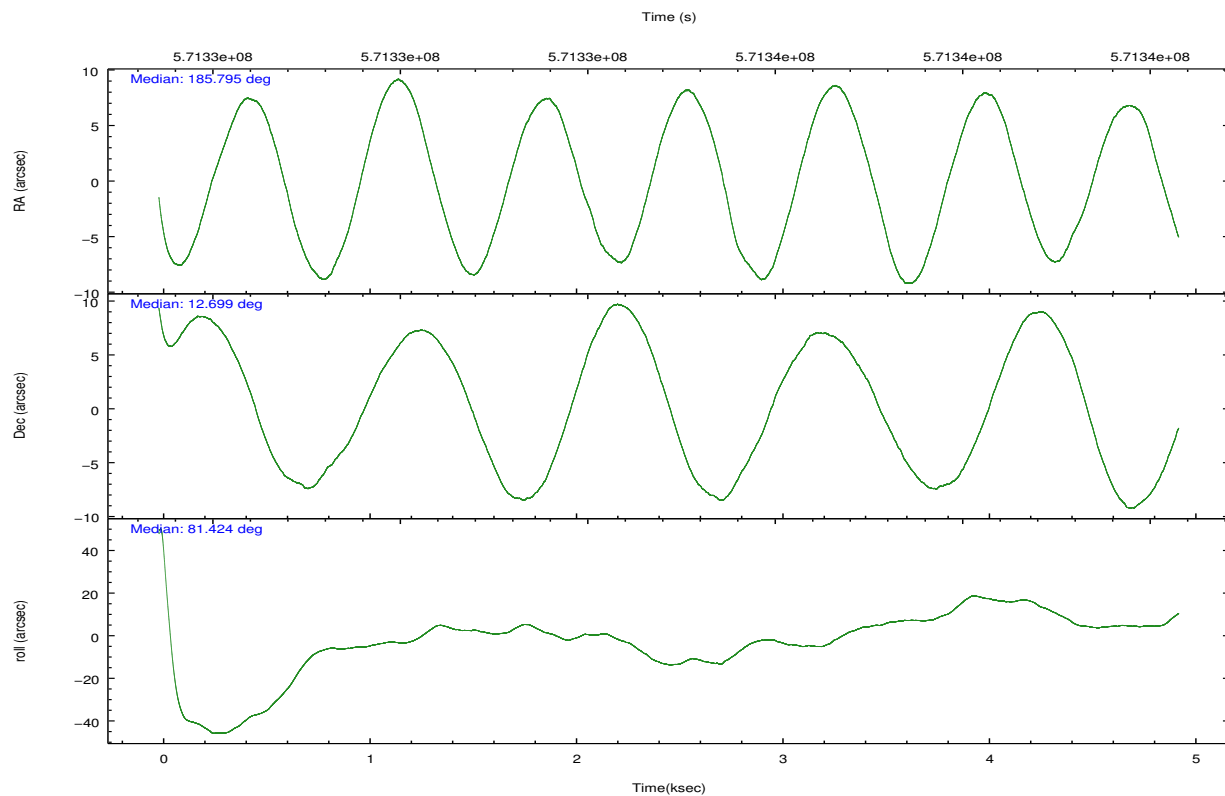
	ccd 6	ccd 7	ccd 8
grade 0 events	1254	1328	2641
	4%	3%	7%
grade 1 events	19	51	40
	0%	0%	0%
grade 2 events	704	3213	2250
	2%	8%	6%
grade 3 events	304	1267	950
	1%	3%	2%
grade 4 events	310	1305	909
	1%	3%	2%
grade 5 events	1379	3522	1989
	4%	9%	5%
grade 6 events	753	8468	2600
	2%	23%	6%
grade 7 events	24846	16742	26119
	84%	46%	69%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	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	185.805304	185.7946630718538	Subarray requested	NONE	NONE
[deg] Pointing Dec	12.673426	12.69886143833175	Alternating exposures requested	N	N
[deg] Pointing Roll	81.257553	81.41679308891923	[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	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	571332085.184000	571331083.26692			
Observation start date	2016-02-08T15:20:17	2016-02-08T15:04:43			
[s] Observation end time (MET)	571336885.184000	571337708.3548			
Observation end date	2016-02-08T16:40:17	2016-02-08T16:55:08			
Read mode	TIMED	TIMED			

2.3 Aspect



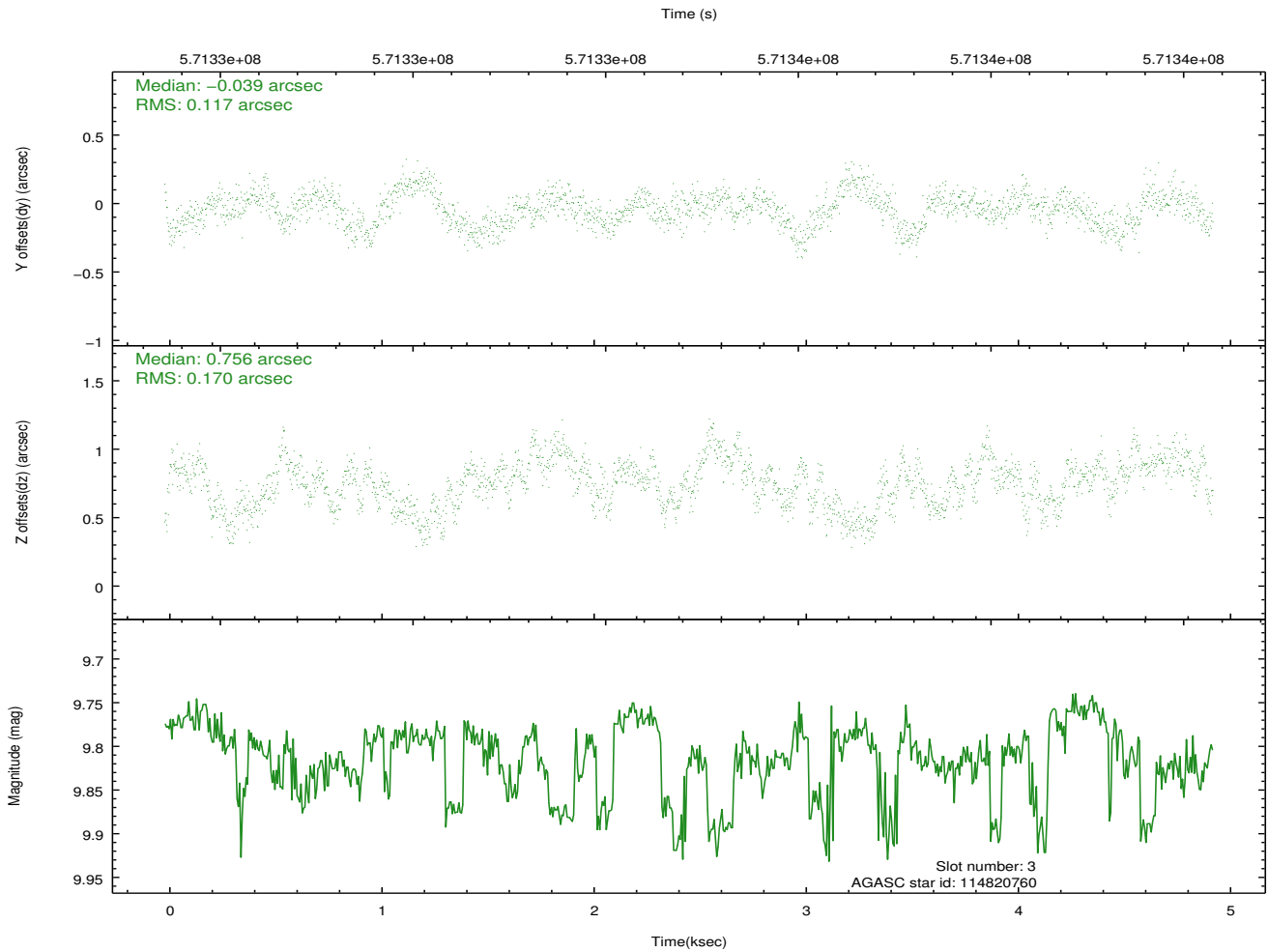
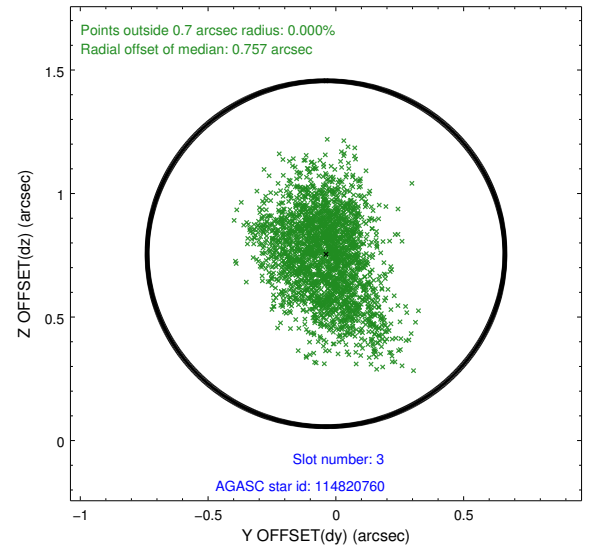
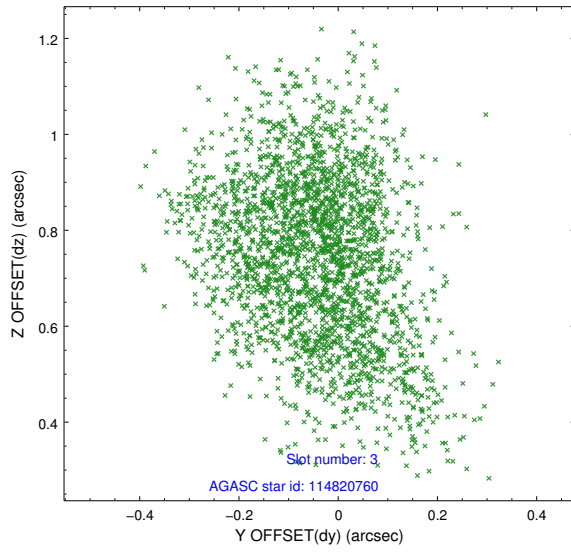


Slot Statistics

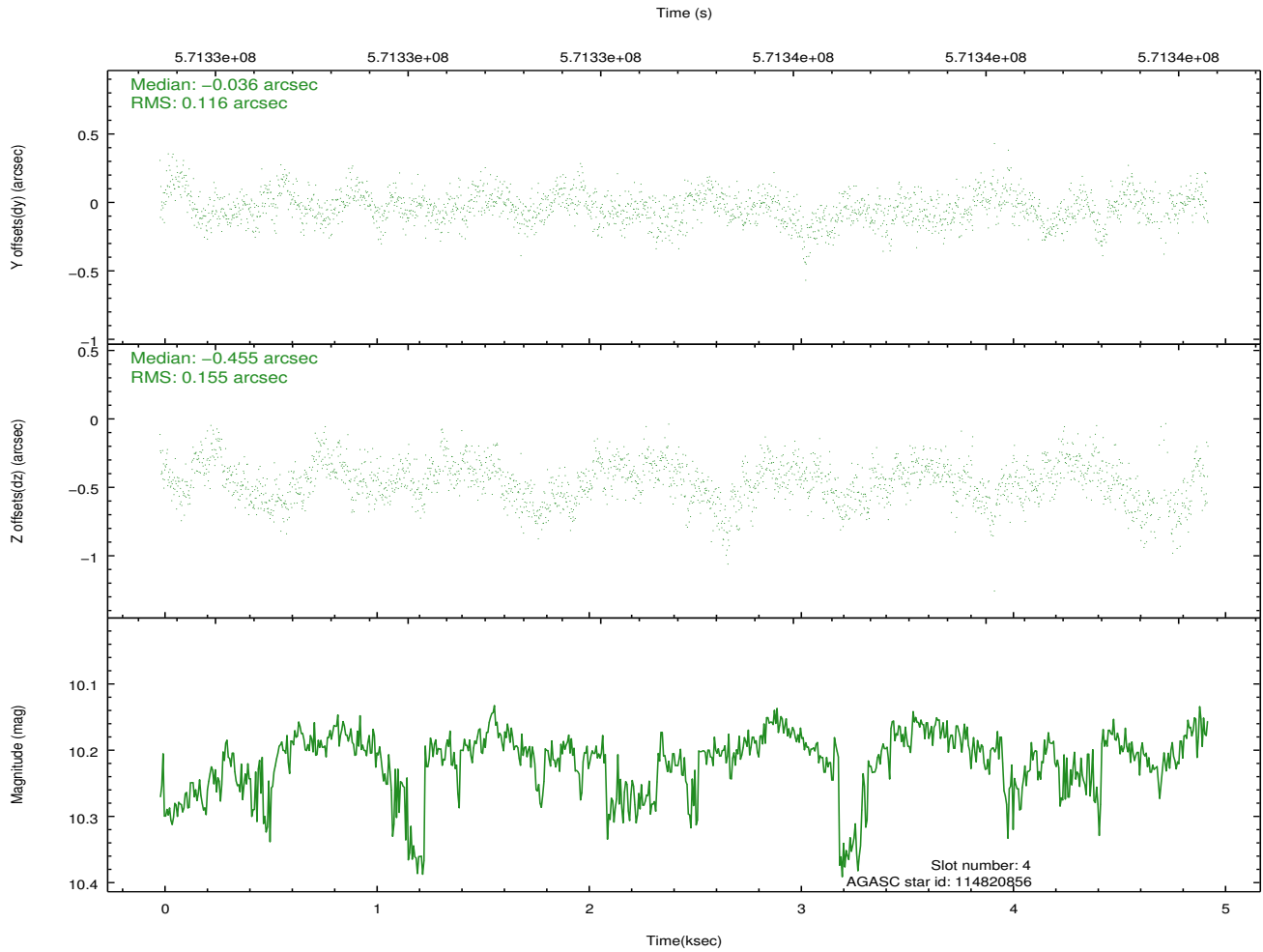
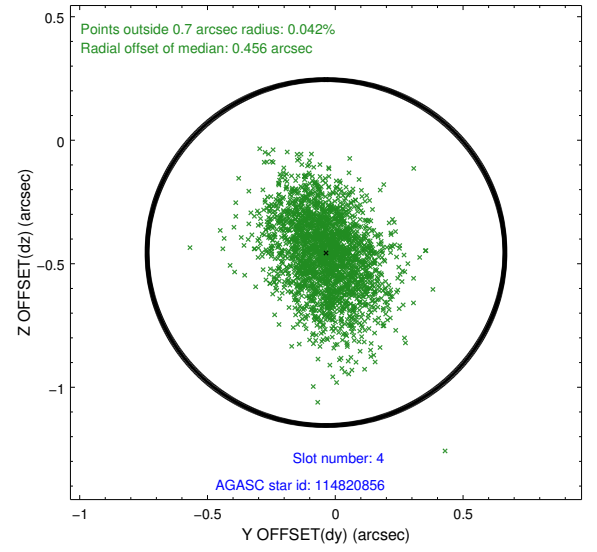
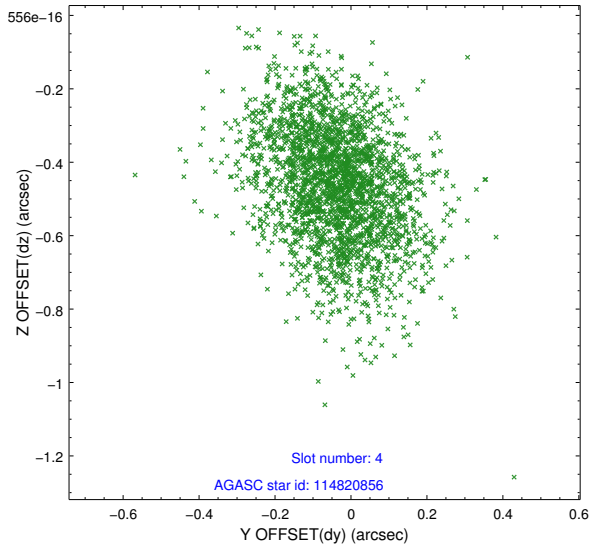
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-S-2	7.13	1205	-0.180	-0.110	0.012	0.019	0.000000	0.000000	-771.31	-1741.28
1	FID		ACIS-S-4	7.23	1205	0.442	0.116	0.007	0.012	0.000000	0.000000	2142.00	166.18
2	FID		ACIS-S-5	7.24	1205	-0.293	0.004	0.012	0.021	0.000000	0.000000	-1822.71	161.09
3	GUIDE	used	114820760	9.81	2409	-0.039	0.756	0.218	0.364	185.391534	12.472874	-933.40	1329.06
4	GUIDE	used	114820856	10.21	2388	-0.036	-0.455	0.203	0.338	185.122937	12.297040	-1701.26	2167.33
5	GUIDE	used	115215744	9.57	2406	-0.020	-0.334	0.171	0.281	185.354799	12.680023	-215.80	1570.62
6	BAD	used	115215968	10.11	2134	-0.454	-0.274	0.236	0.442	186.327588	13.159527	2010.05	-1541.66
7	GUIDE	used	115215984	10.00	2396	0.519	0.277	0.228	0.367	186.134733	12.875031	894.61	-1032.40

2.4 Star Slots

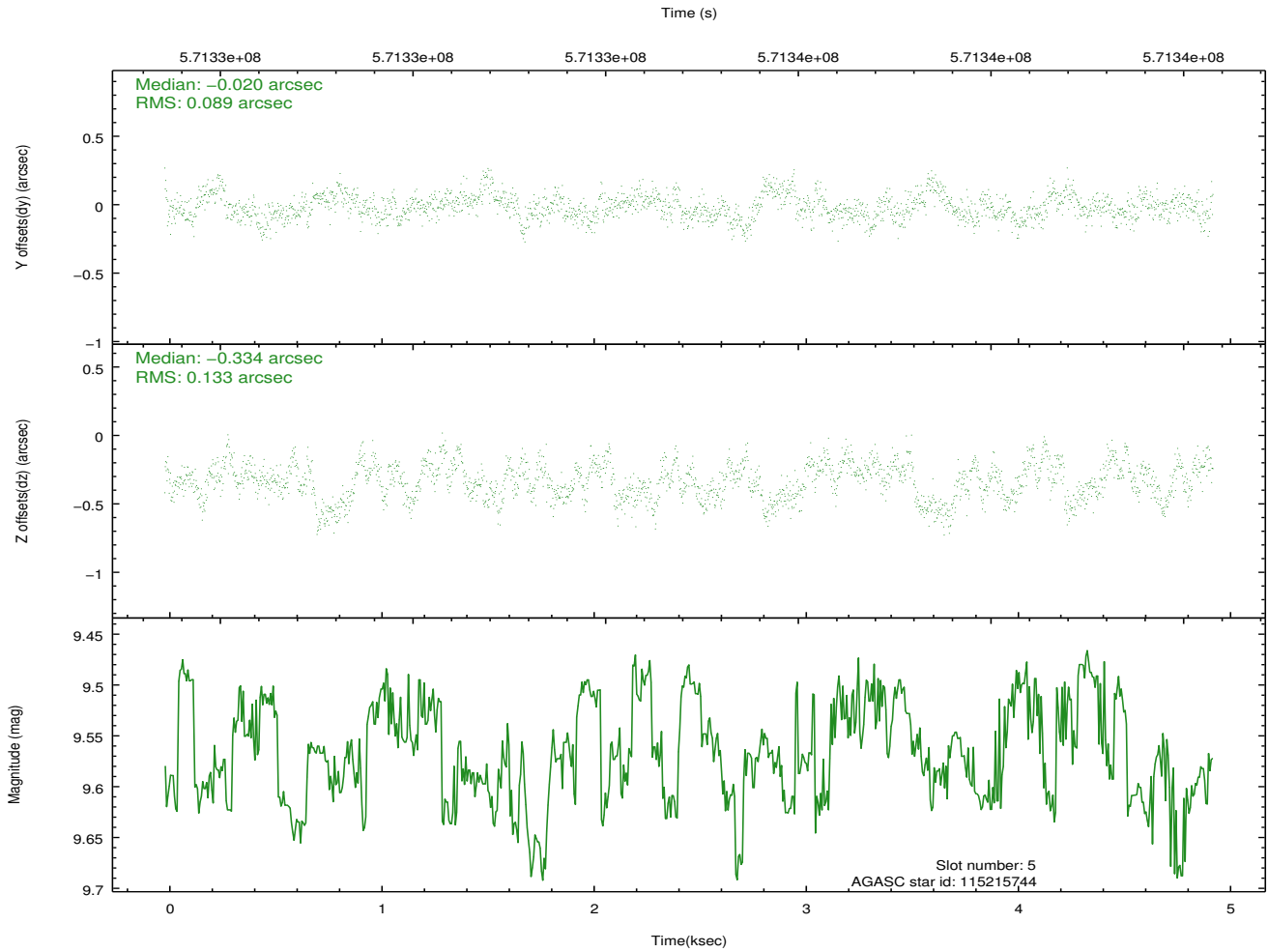
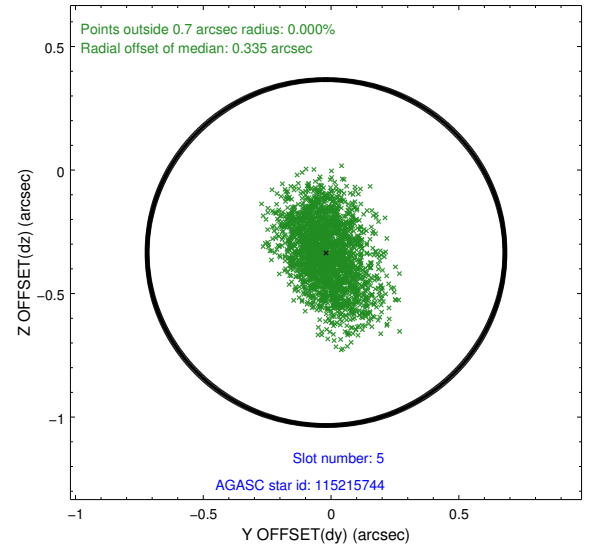
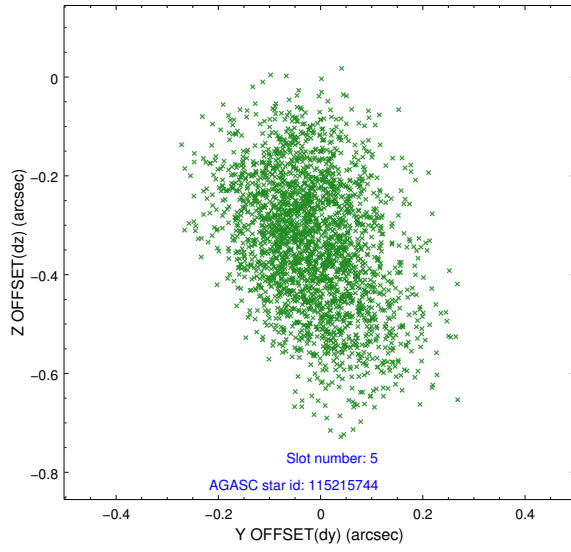
2.4.1 Slot 3



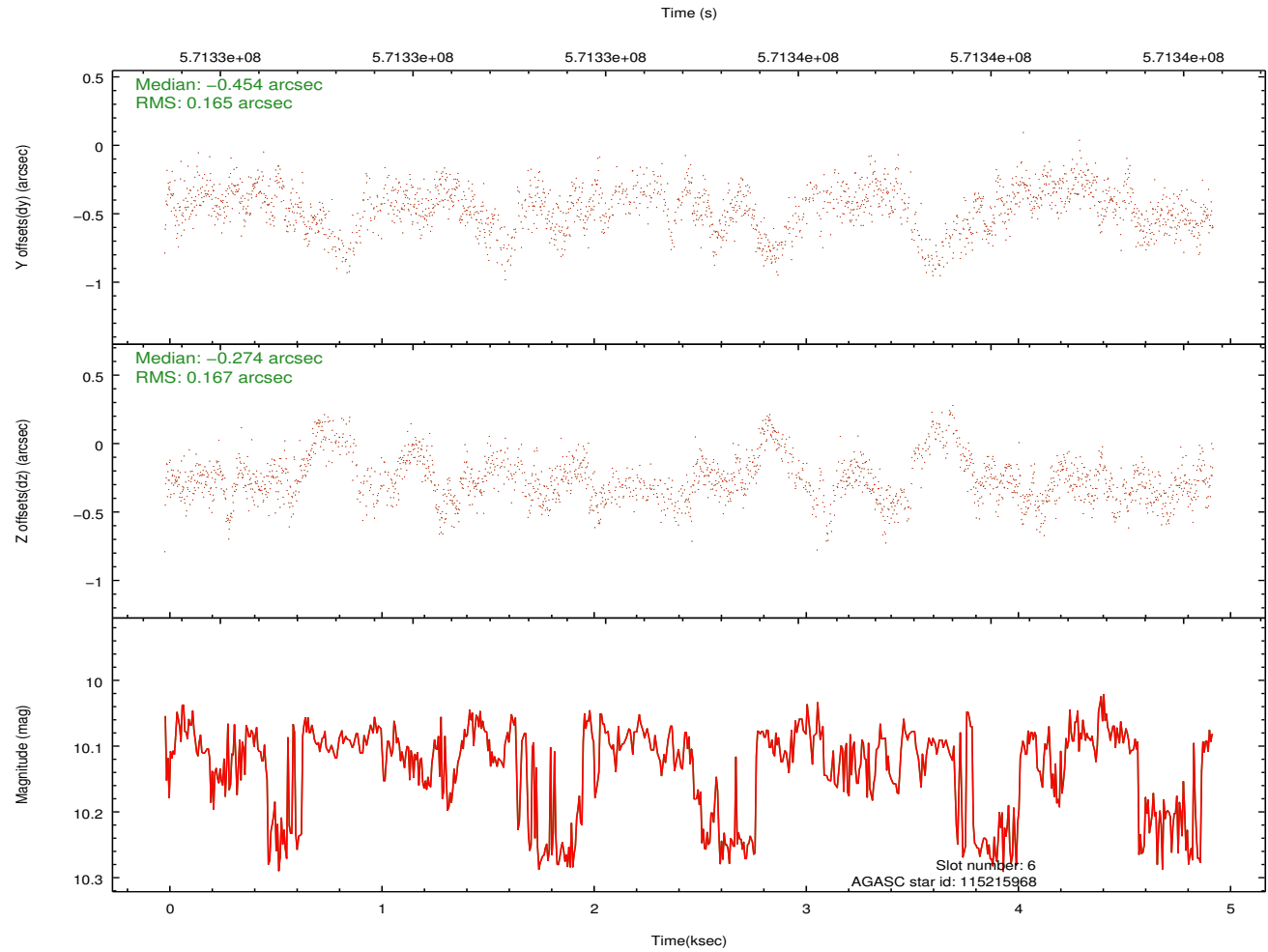
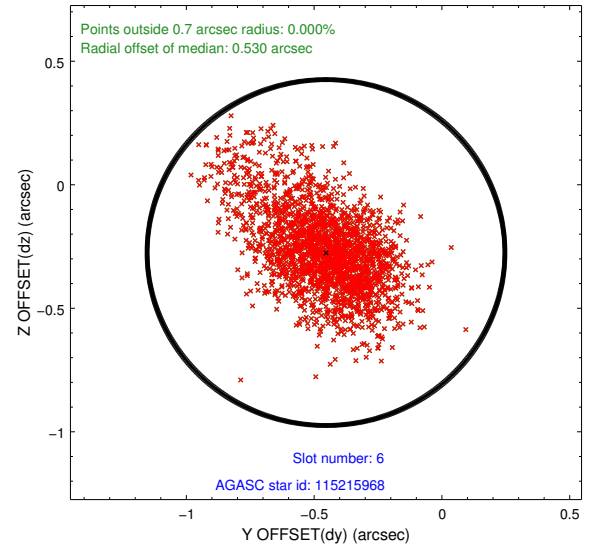
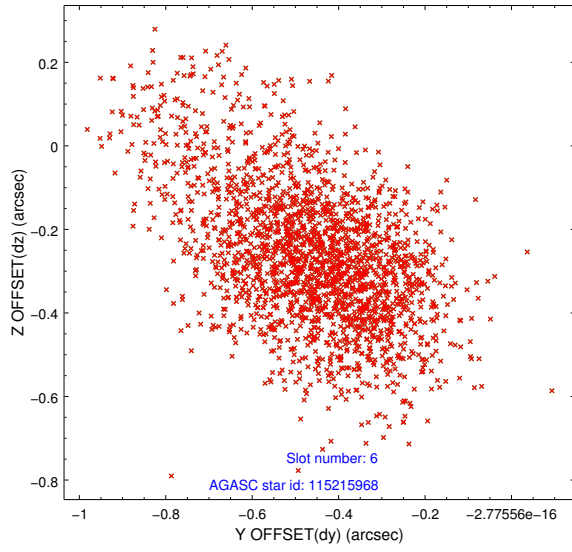
2.4.2 Slot 4



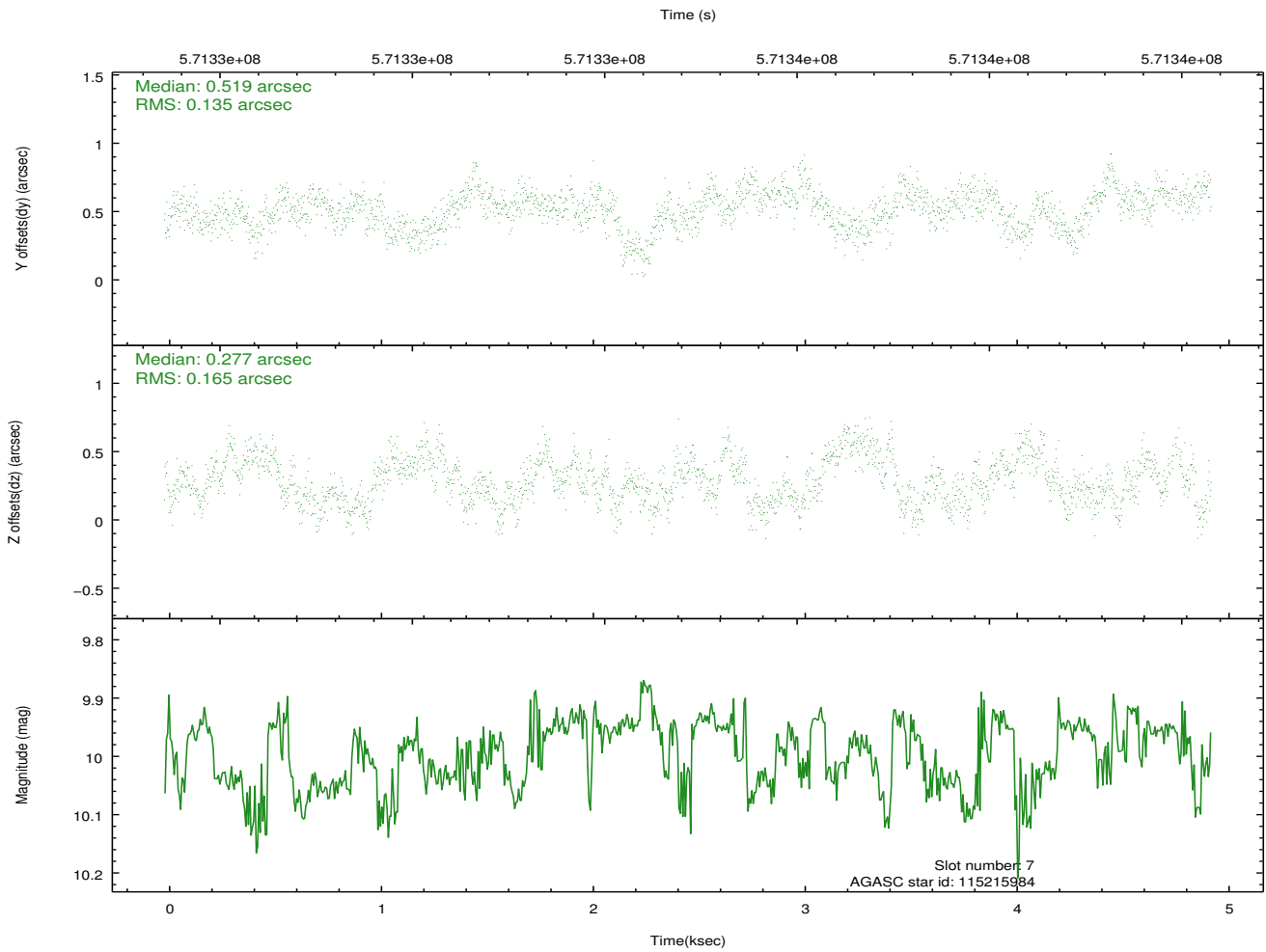
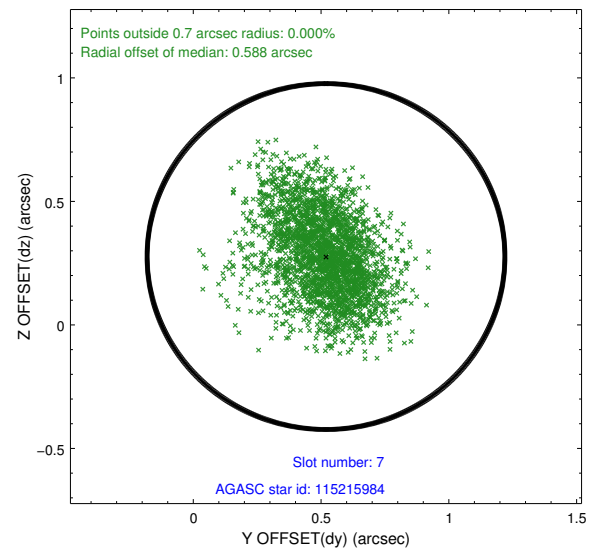
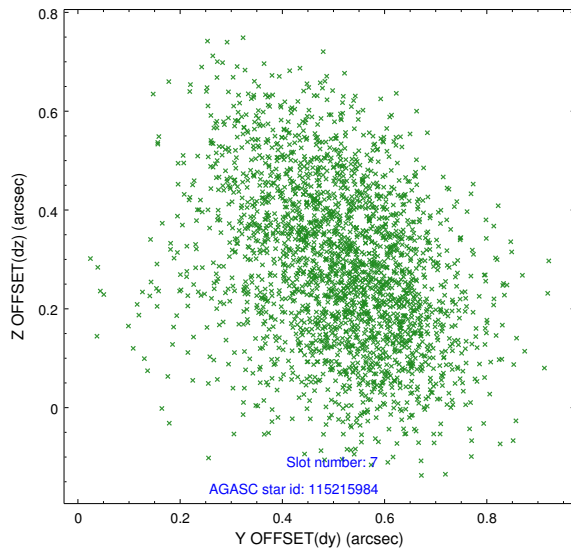
2.4.3 Slot 5



2.4.4 Slot 6

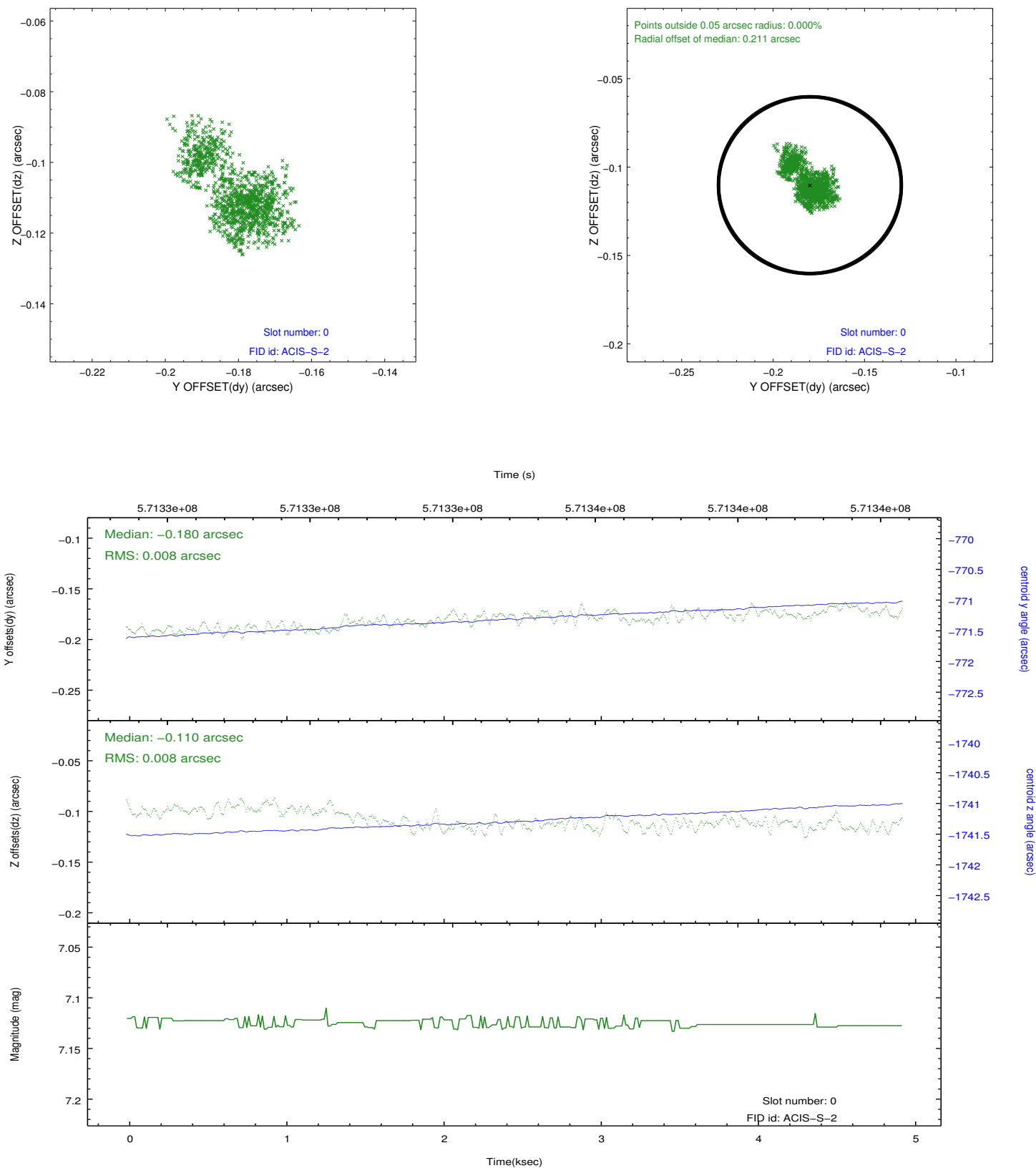


2.4.5 Slot 7

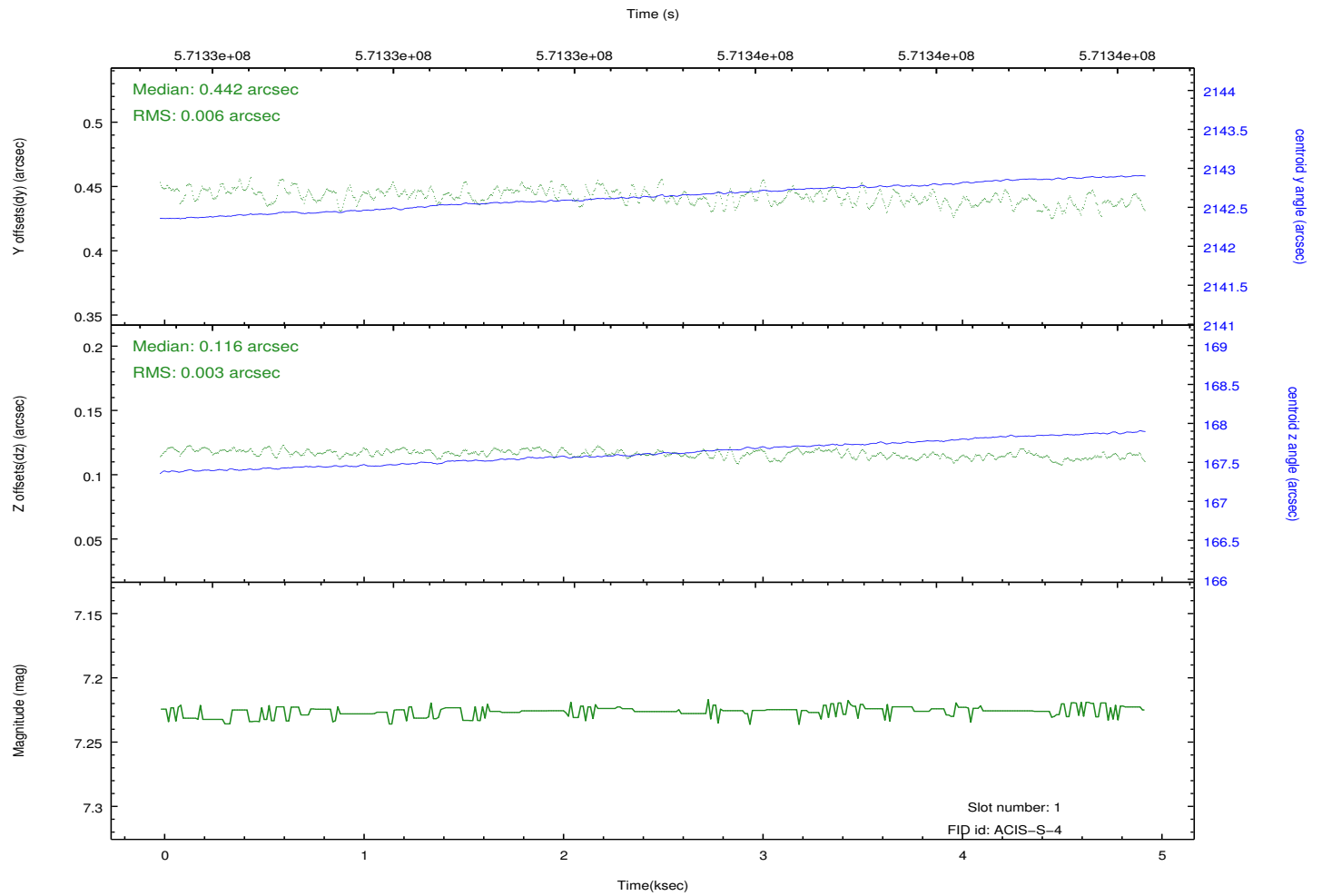
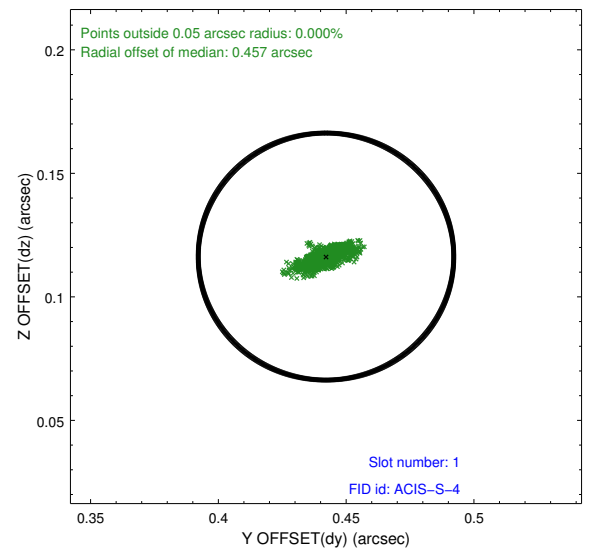
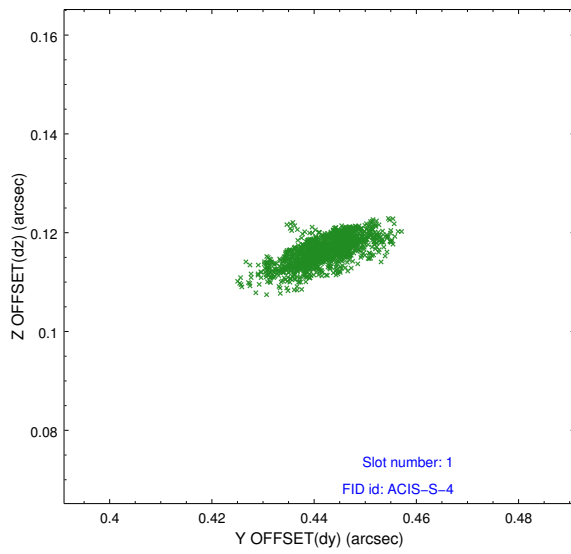


2.5 FID Slots

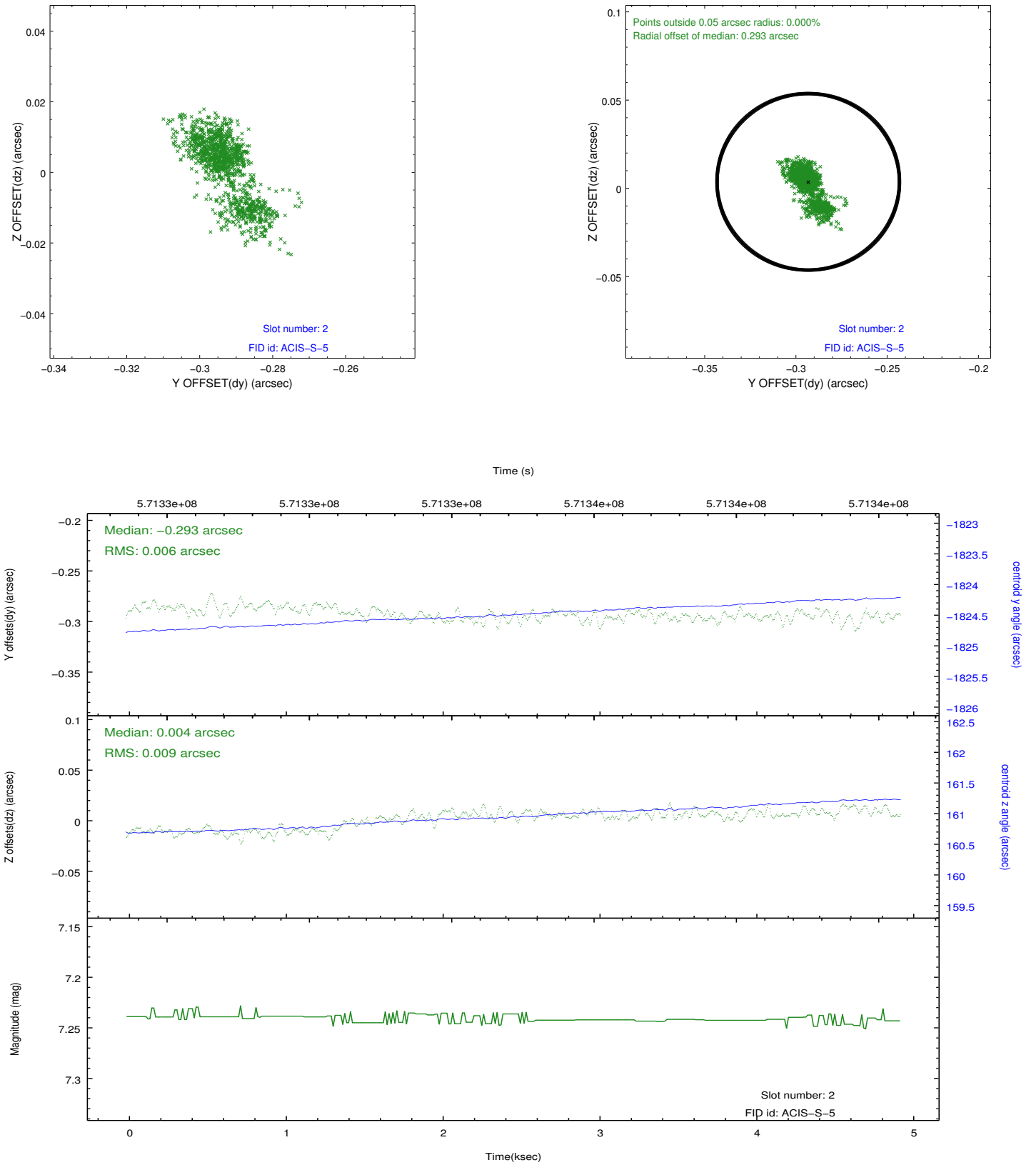
2.5.1 Slot 0



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)	2016.02.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.6066000355482

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords: (185.73272, 12.74690), (185.73241, 12.74488), (185.82498, 12.73134), (185.82696, 12.73312).