

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 18777 - L2 Version 2
Chandra X-Ray Center

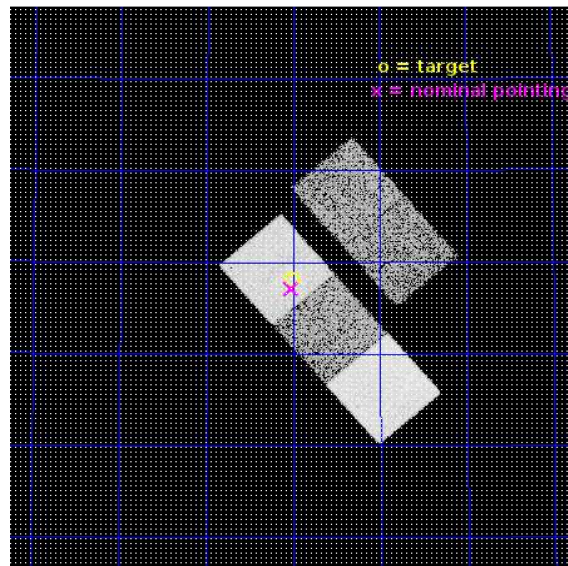
L2 Processing Date : Jul 14 2017

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1 Front

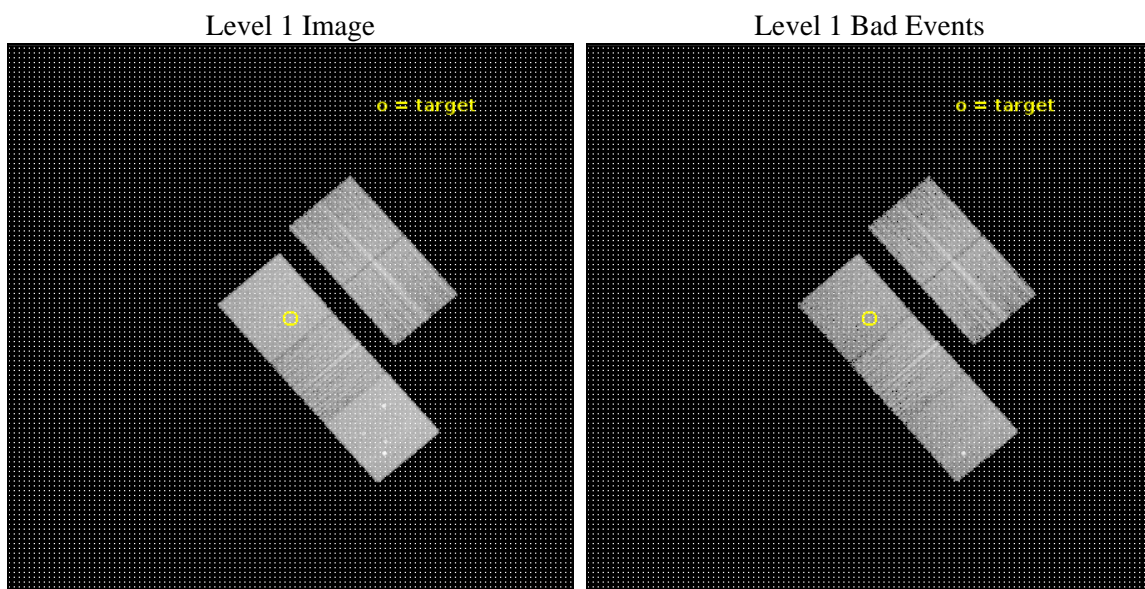
seq_num	801652	Sequence number
obs_id	18777	Observation id
title	Probing the extreme mass peaks at $z>0.7$	Proposal title
observer	Monique ARNAUD	Principal investigator
object	PSZ2 G086.93+53.18	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.50251	Observer's specified target RA [deg]
dec_targ	52.802818	Observer's specified target Dec [deg]
ra_nom	228.50524283348	Nominal RA [deg]
dec_nom	52.78553754321	Nominal Dec [deg]
roll_nom	229.20696496451	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10059.030012131	Sum of GTIs [s]
livetime	9927.6013796721	Livetime [s]
ontime2	10058.865852118	Sum of GTIs [s]
ontime3	10058.90689218	Sum of GTIs [s]
ontime5	10058.988972187	Sum of GTIs [s]
ontime6	10055.806941986	Sum of GTIs [s]
ontime7	10059.030012131	Sum of GTIs [s]
l2events	112551	Number of level 2 events



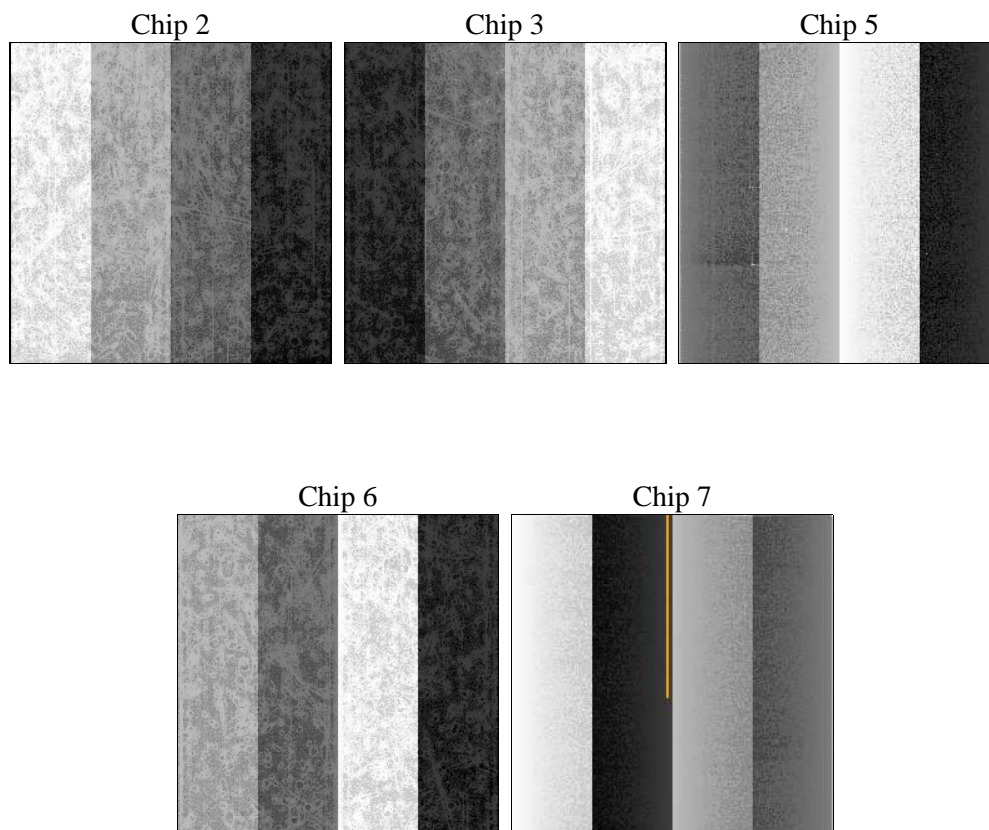
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10059.030012131	Sum of GTIs [s]
caldbver	4.7.5	 	ontime2	10058.865852118	Sum of GTIs [s]
date	2017-07-14T19:26:07	Date and time of file creation	ontime3	10058.90689218	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10058.988972187	Sum of GTIs [s]
			ontime6	10055.806941986	Sum of GTIs [s]
			ontime7	10059.030012131	Sum of GTIs [s]
			l1events	419747	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	70843	67780	116819	72360	91945
rejected events	63178	60123	59913	64010	50832
rejected %	89%	88%	51%	88%	55%

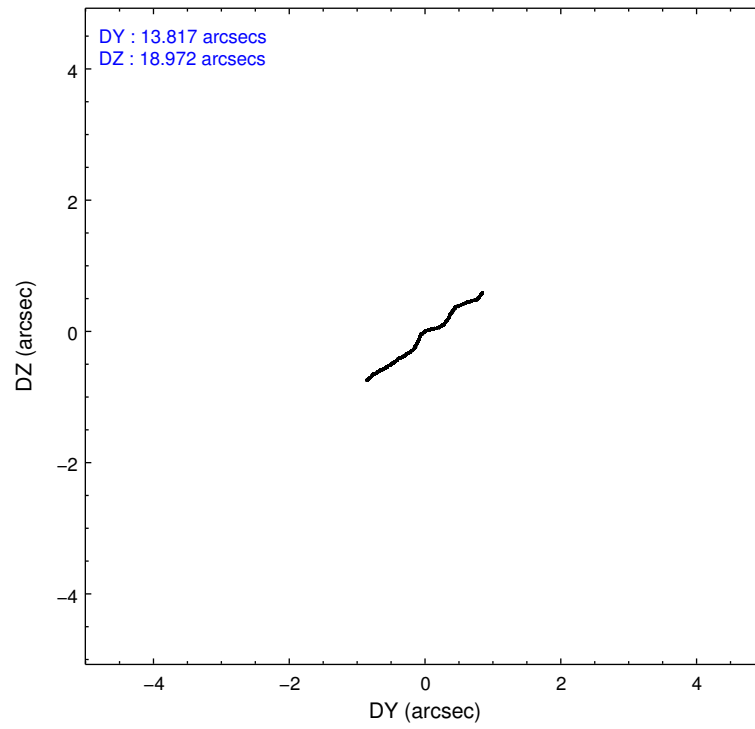
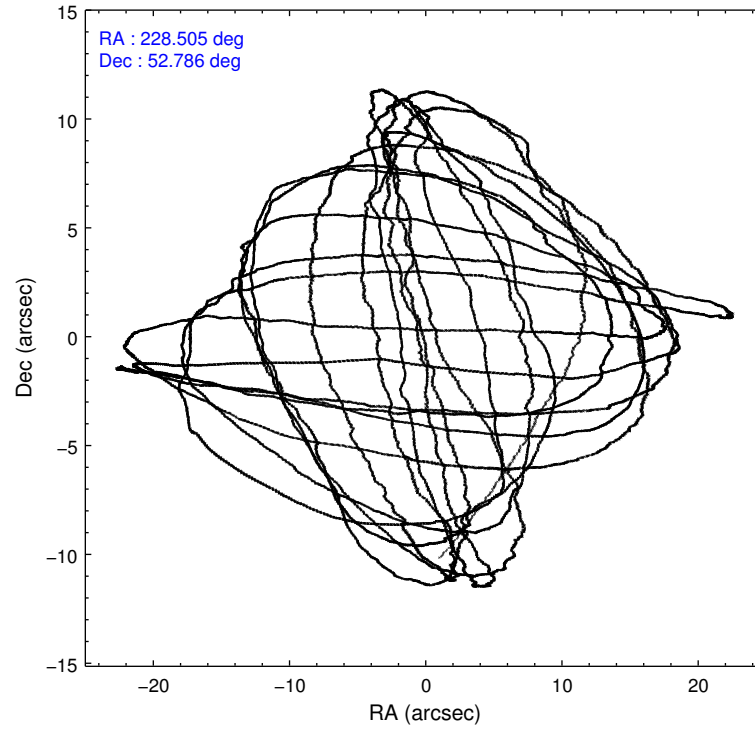
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2693	2809	5798	2835	3671
	3%	4%	4%	3%	3%
grade 1 events	36	42	257	44	127
	0%	0%	0%	0%	0%
grade 2 events	1963	1674	18013	1933	8754
	2%	2%	15%	2%	9%
grade 3 events	762	788	1787	832	3369
	1%	1%	1%	1%	3%
grade 4 events	806	794	1664	830	3468
	1%	1%	1%	1%	3%
grade 5 events	2830	3398	8561	3439	9556
	3%	5%	7%	4%	10%
grade 6 events	1449	1598	29696	1932	21877
	2%	2%	25%	2%	23%
grade 7 events	60304	56677	51043	60515	41123
	85%	83%	43%	83%	44%

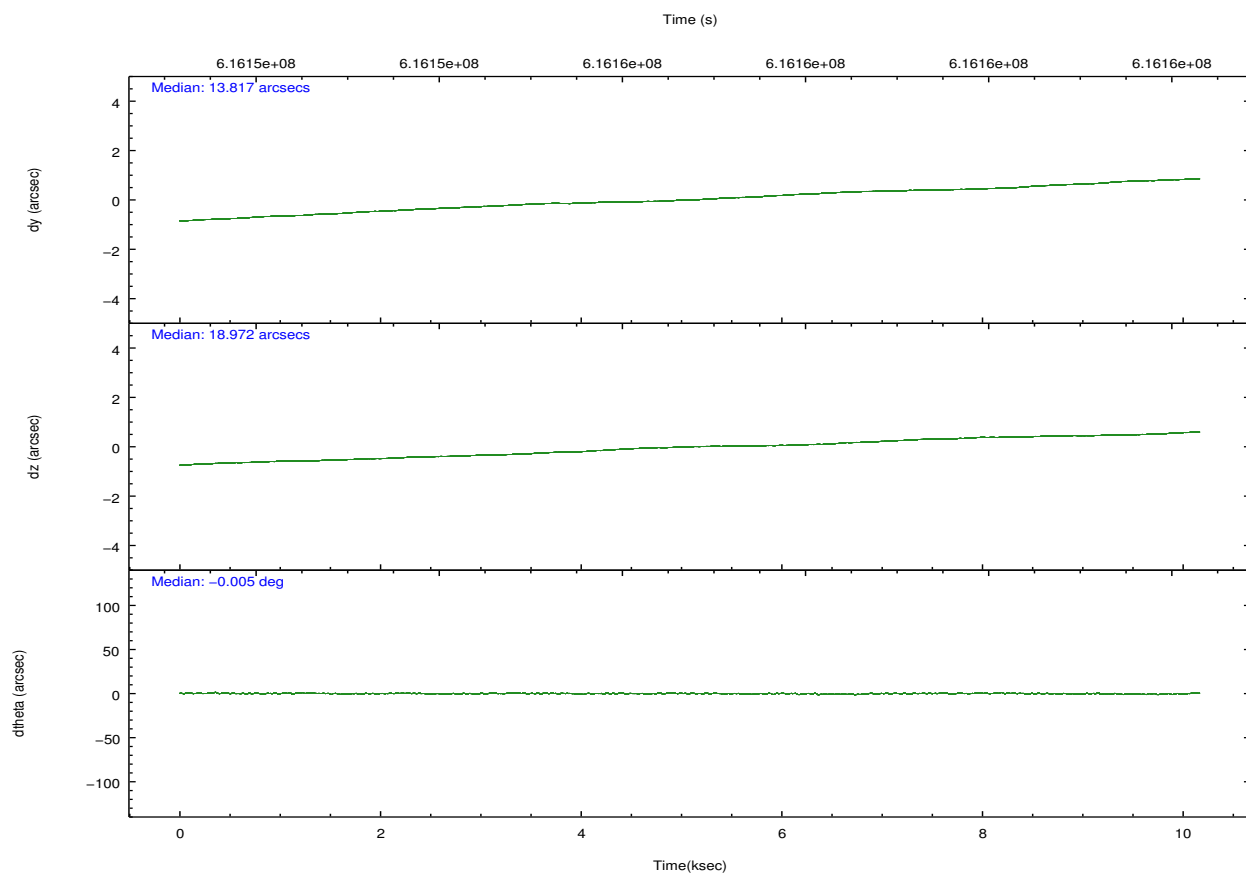
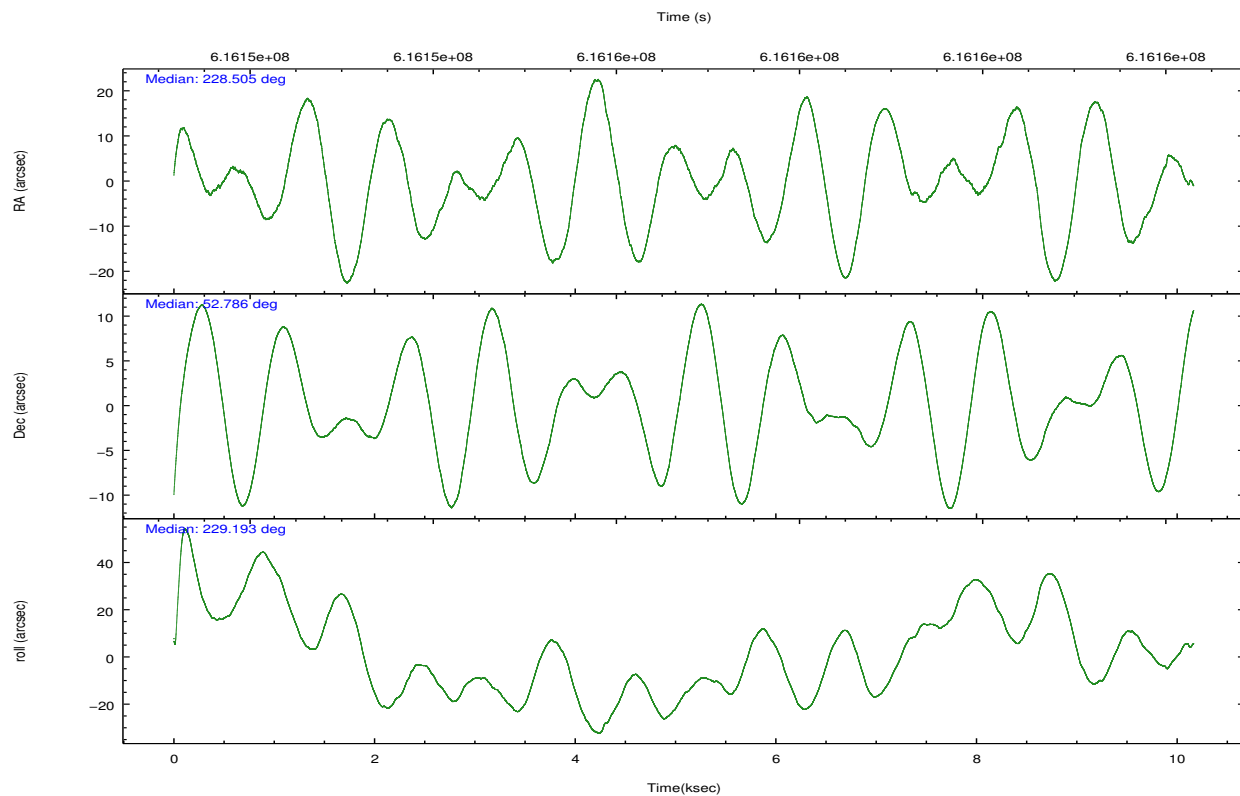
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23567	ACIS-23567
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	228.513141	228.5052428334817
[deg] Pointing Dec	52.812549	52.78553754321047
[deg] Pointing Roll	229.044133	229.2069649645075
[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)	616151818.184000	616150802.6110899
Observation start date	2017-07-11T09:15:49	2017-07-11T09:00:02
[s] Observation end time (MET)	616161818.184000	616162552.6992199
Observation end date	2017-07-11T12:02:29	2017-07-11T12:15:52
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	Y	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



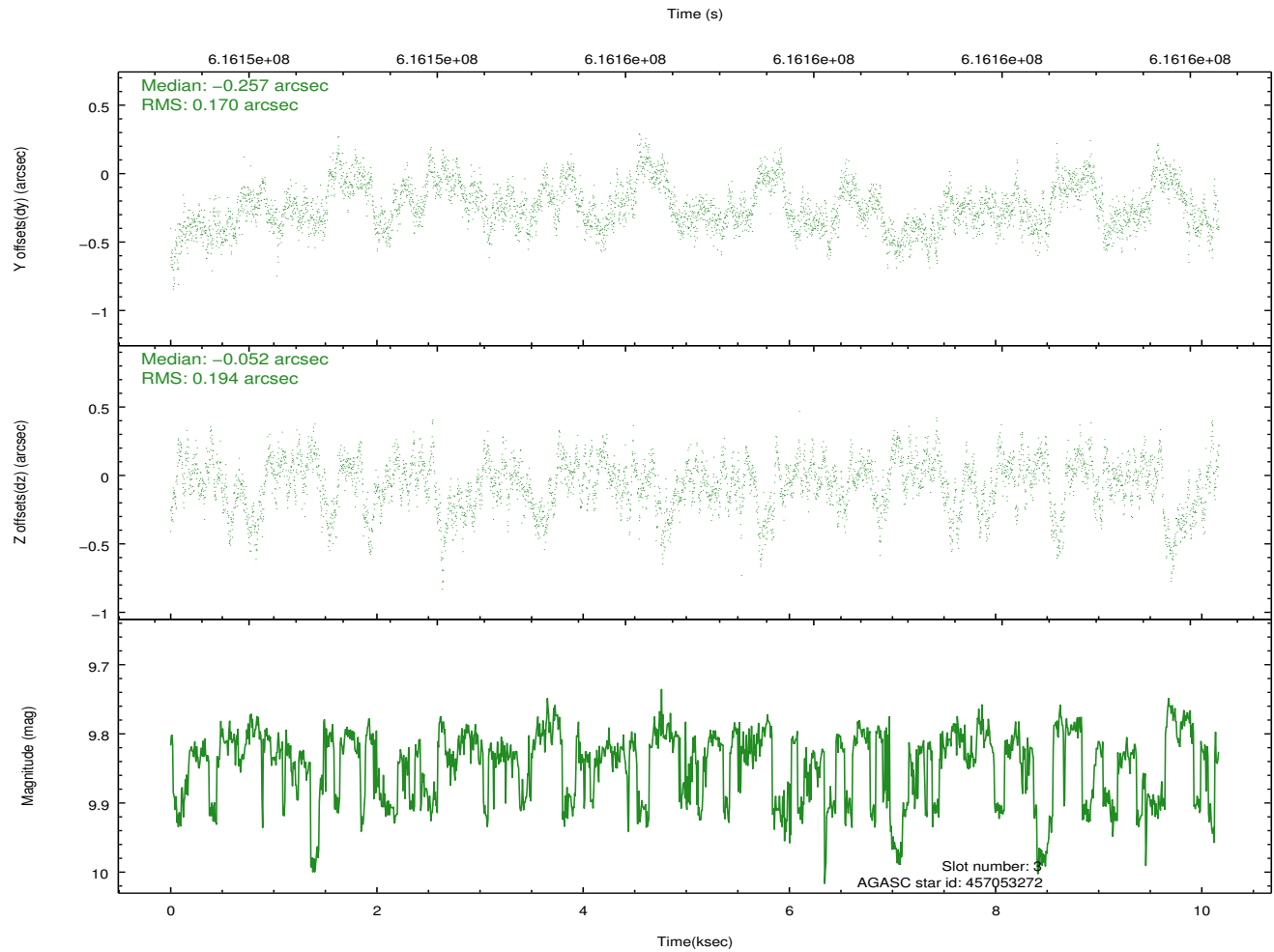
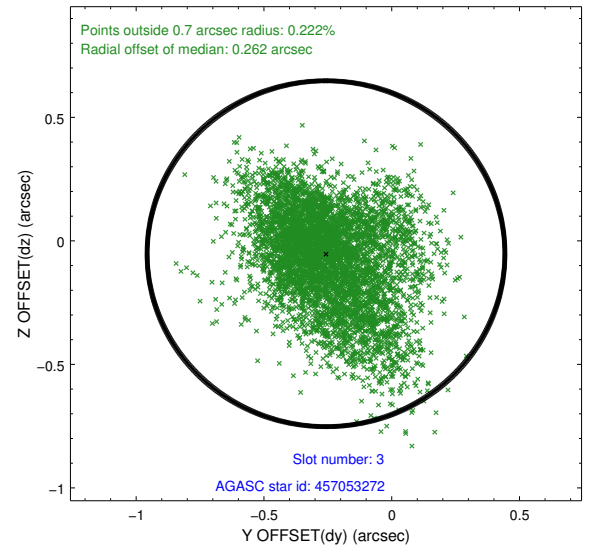
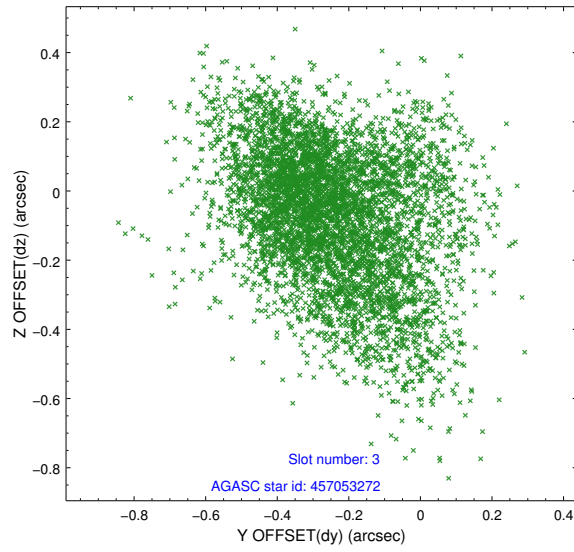


Slot Statistics

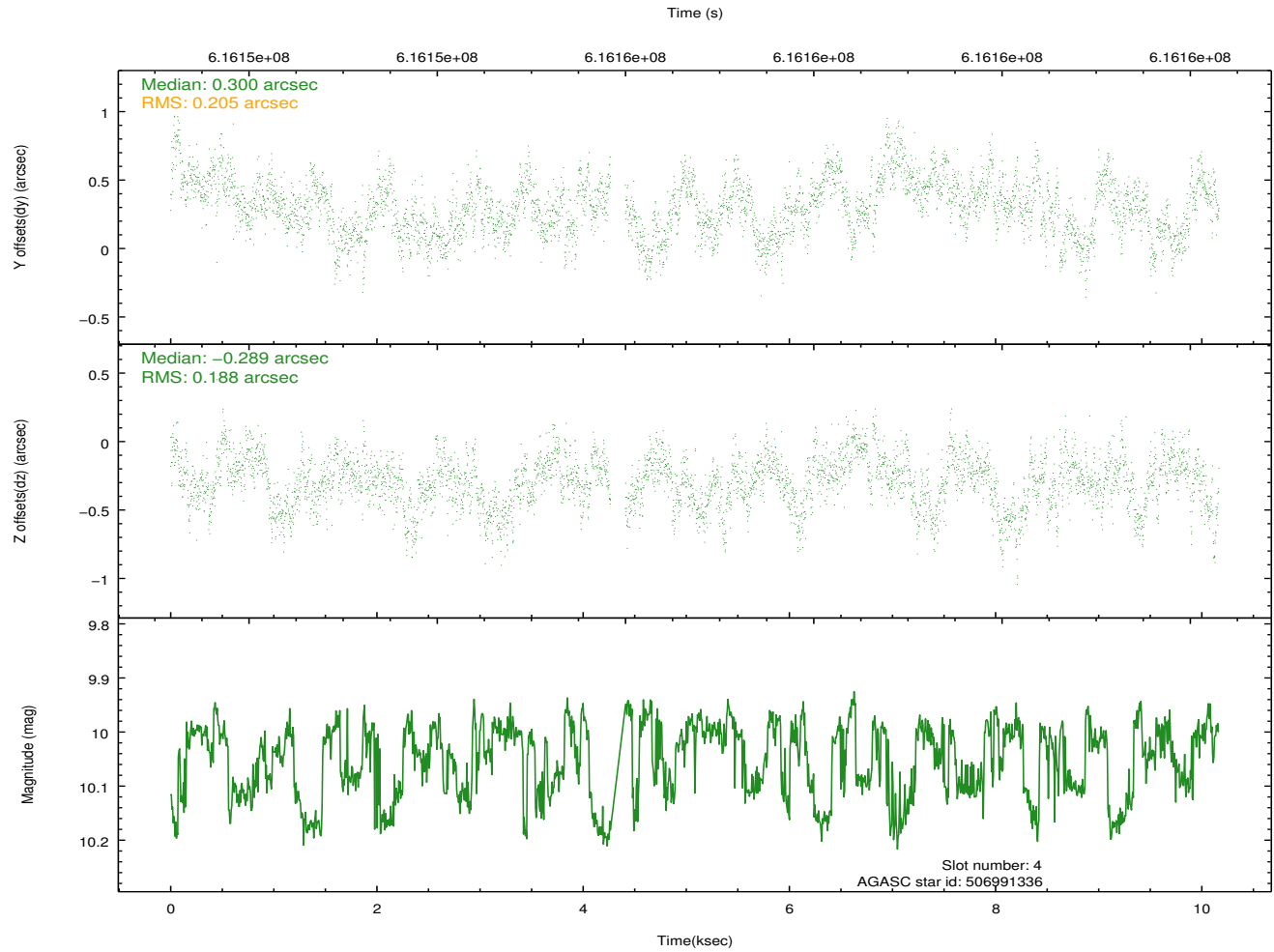
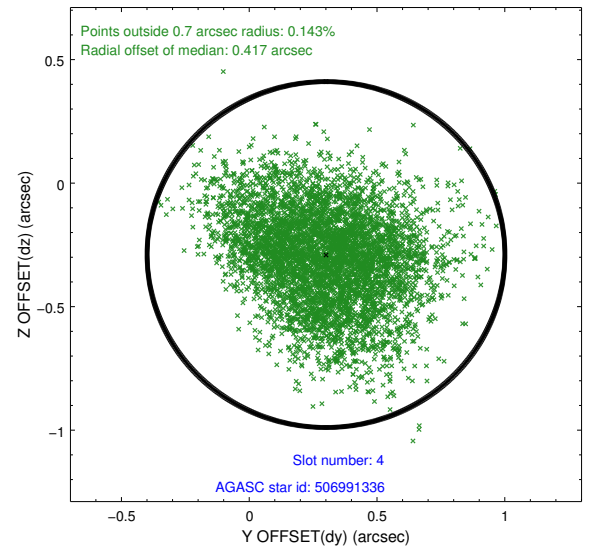
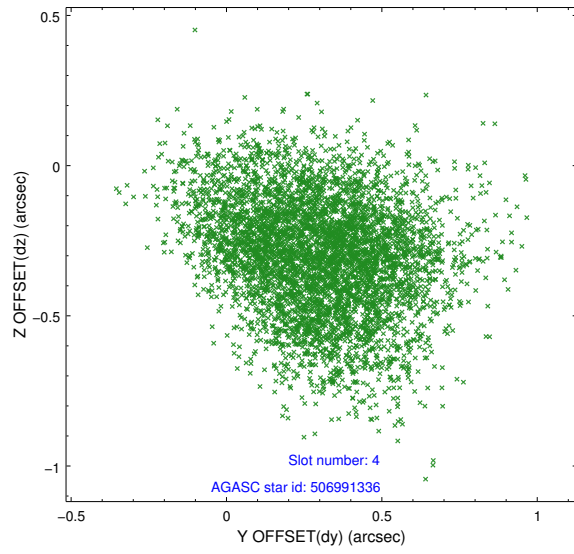
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.89	2480	-0.162	-0.075	0.033	0.045	0.000000	0.000000	-766.92	-1740.49
1	FID		ACIS-S-4	7.02	2480	0.435	0.098	0.028	0.060	0.000000	0.000000	2146.68	167.66
2	FID		ACIS-S-5	7.01	2480	-0.302	-0.015	0.023	0.030	0.000000	0.000000	-1819.26	161.76
3	GUIDE	used	457053272	9.83	4950	-0.257	-0.052	0.268	0.455	228.749621	52.367022	869.77	1442.79
4	GUIDE	used	506991336	10.04	4879	0.300	-0.289	0.296	0.472	227.112193	52.764552	2109.77	-2210.26
5	GUIDE	used	506992672	7.41	4960	-0.150	0.173	0.181	0.301	228.109077	52.930089	253.90	-941.35
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	used	506994624	10.00	4861	0.112	0.227	0.297	0.529	229.104736	52.571452	-196.22	1542.98

2.4 Star Slots

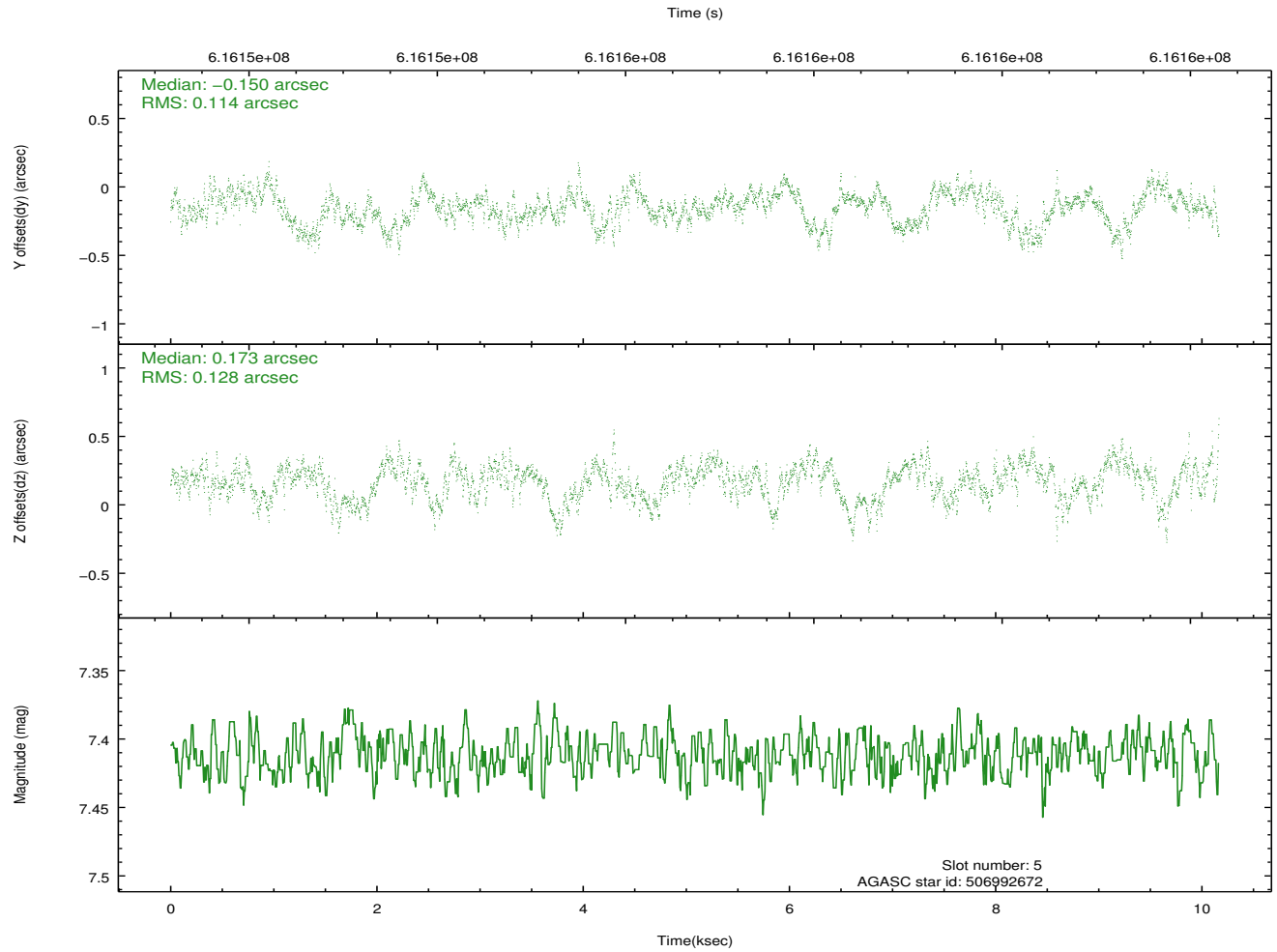
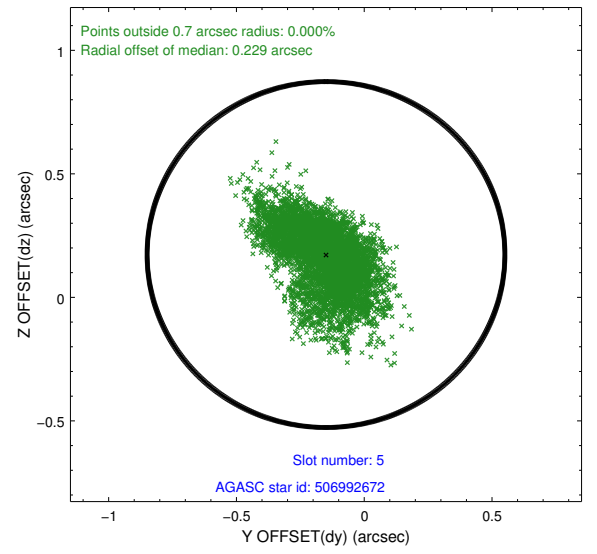
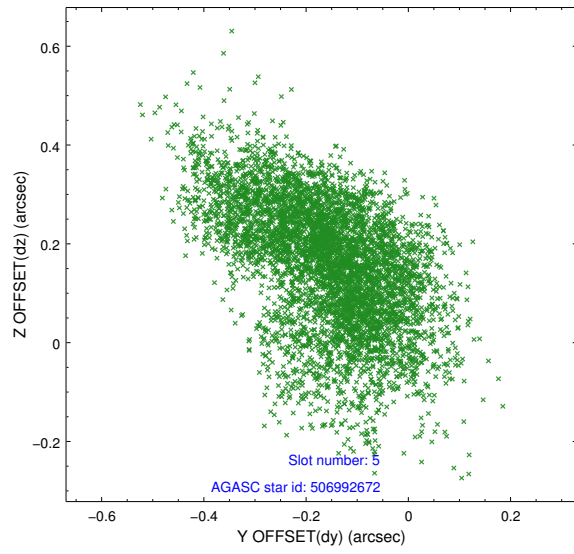
2.4.1 Slot 3



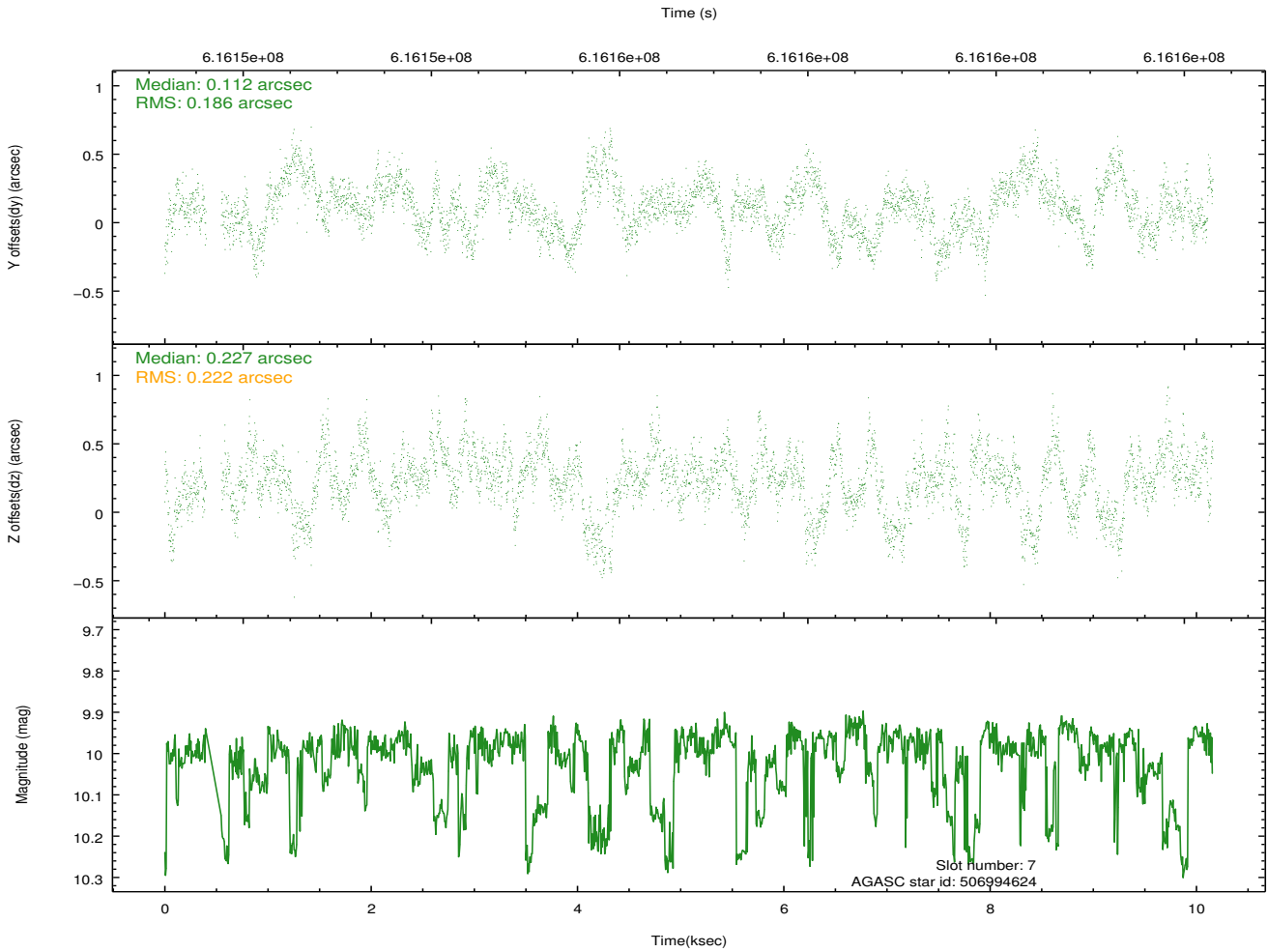
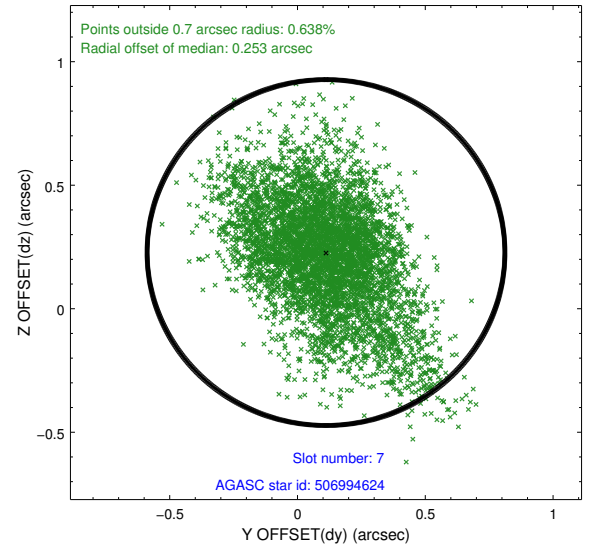
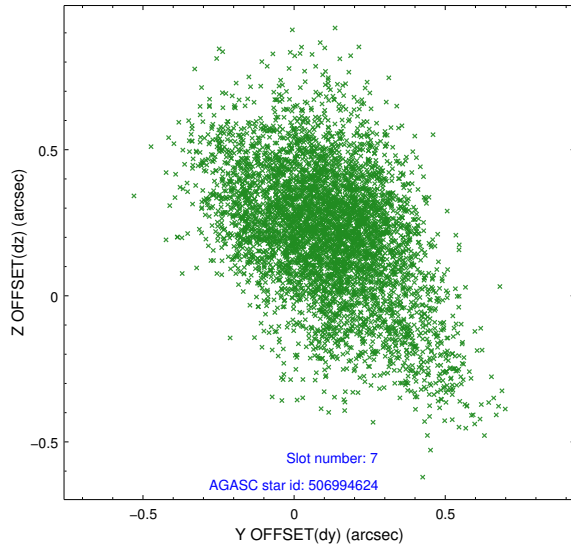
2.4.2 Slot 4



2.4.3 Slot 5

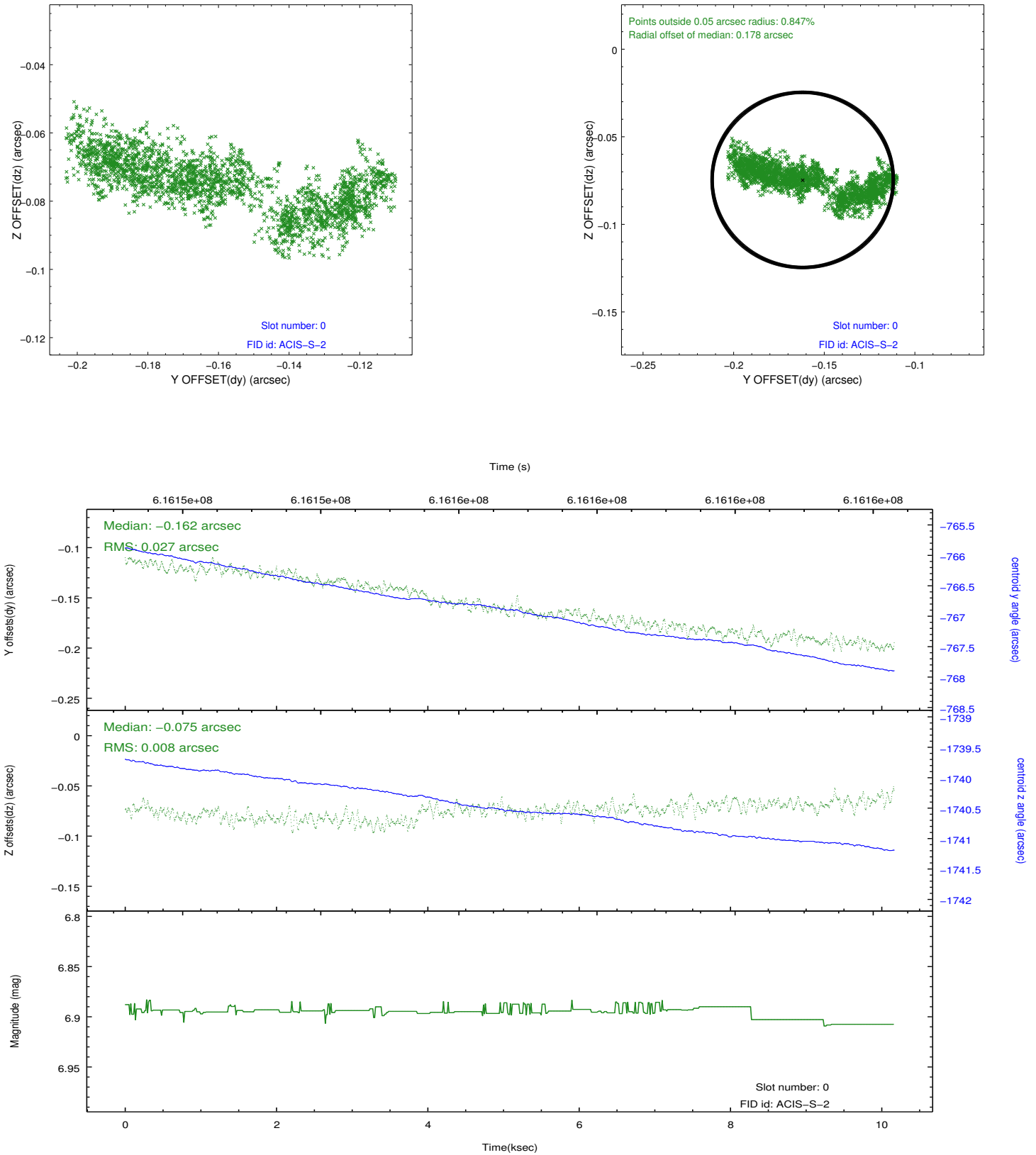


2.4.4 Slot 7

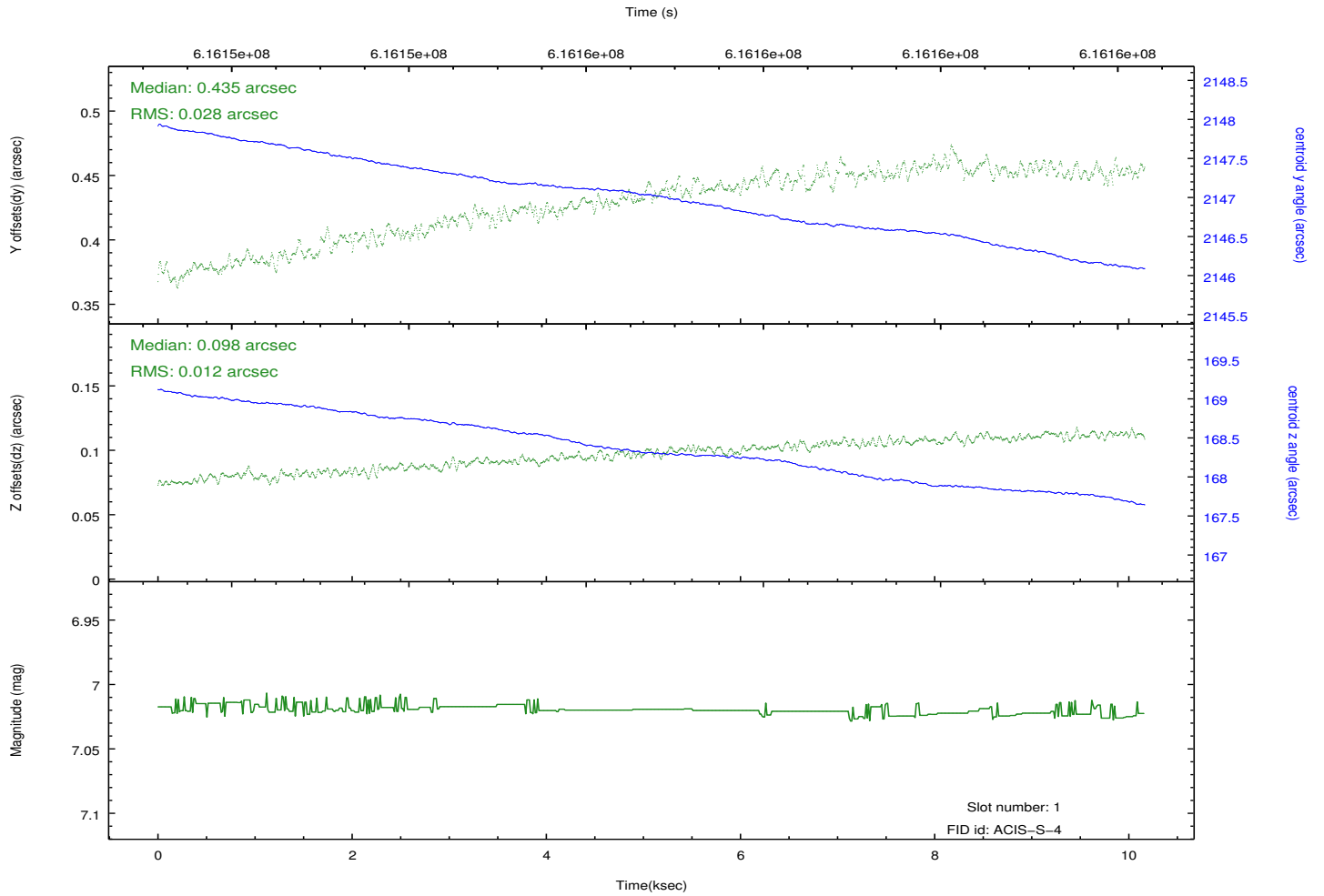
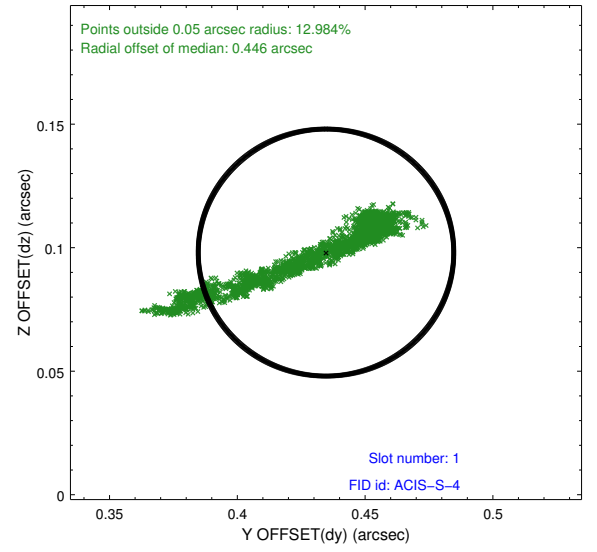
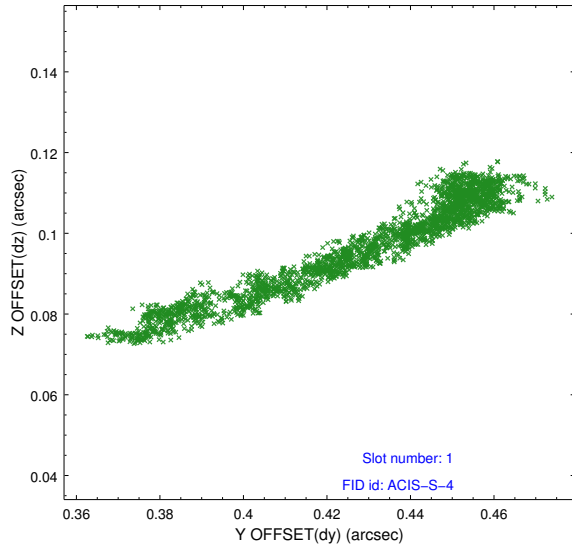


2.5 FID Slots

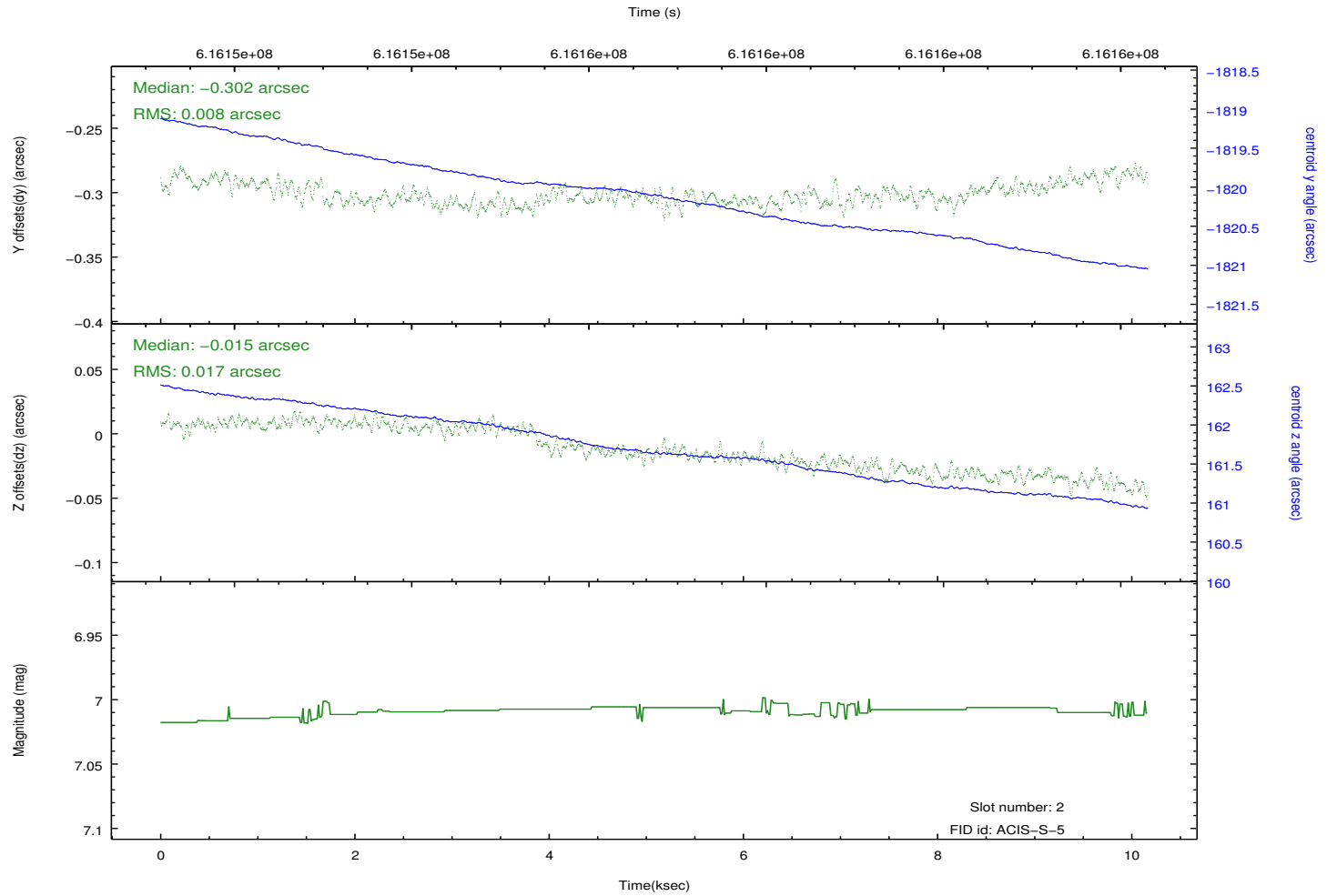
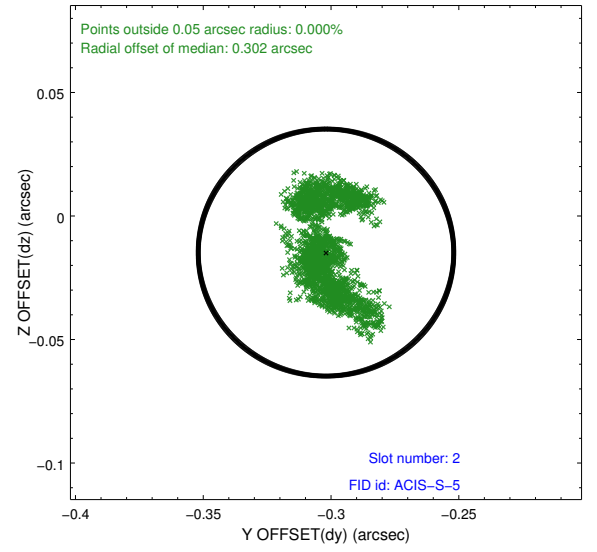
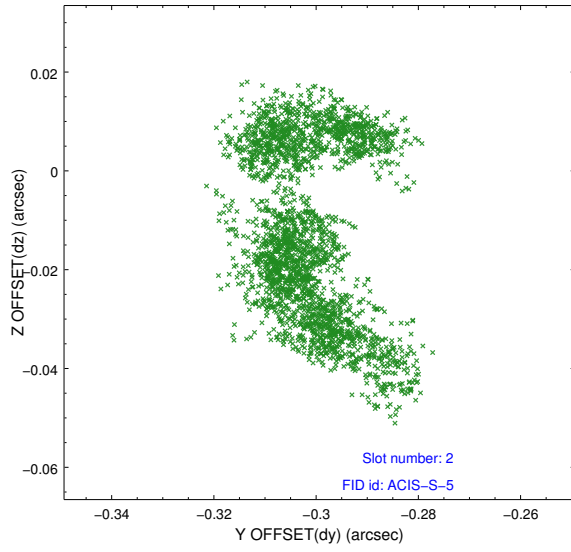
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.07.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.059030012131

A.2 Comments

Joint proposal with XMM.

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 slot from the solution.