

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19316 - L2 Version 1
Chandra X-Ray Center

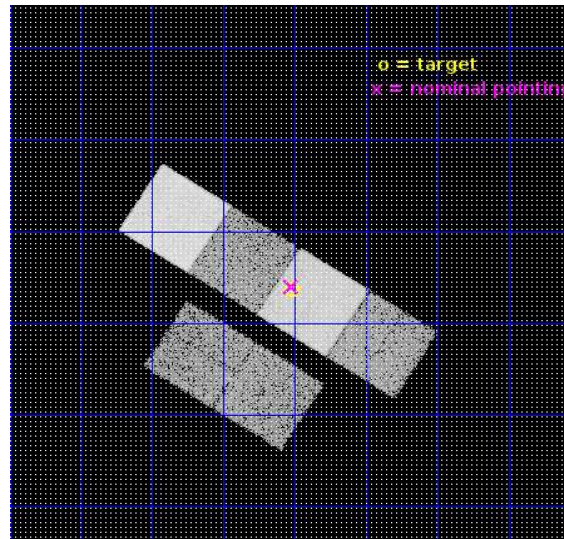
L2 Processing Date : Nov 22 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

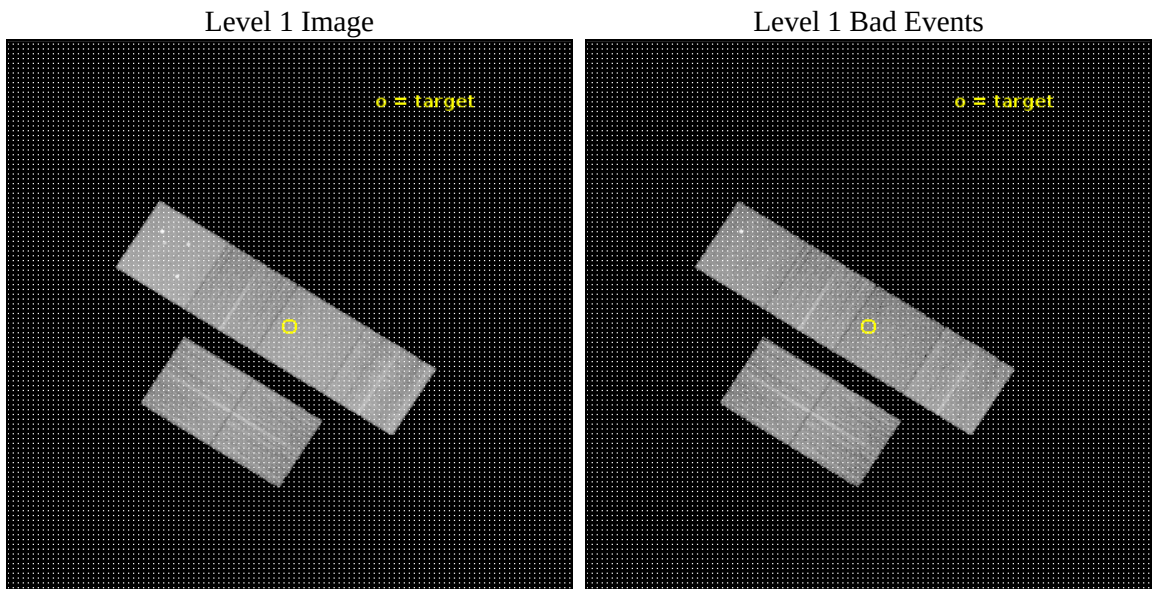
seq_num	601273	Sequence number
obs_id	19316	Observation id
title	A homogeneous view of X-ray halos in massive early-type galaxies	P
observer	Andy Goulding	Principal investigator
object	NGC1684	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	73.129583	Observer's specified target RA [deg]
dec_targ	-3.106111	Observer's specified target Dec [deg]
ra_nom	73.13068445449	Nominal RA [deg]
dec_nom	-3.1002122883722	Nominal Dec [deg]
roll_nom	32.351593231351	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15929.60023737	Sum of GTIs [s]
livetime	15727.89004751	Livetime [s]
ontime2	15929.60023737	Sum of GTIs [s]
ontime3	15929.60023737	Sum of GTIs [s]
ontime5	15929.60023737	Sum of GTIs [s]
ontime6	15929.60023737	Sum of GTIs [s]
ontime7	15929.60023737	Sum of GTIs [s]
ontime8	15926.359187245	Sum of GTIs [s]
l2events	187941	Number of level 2 events



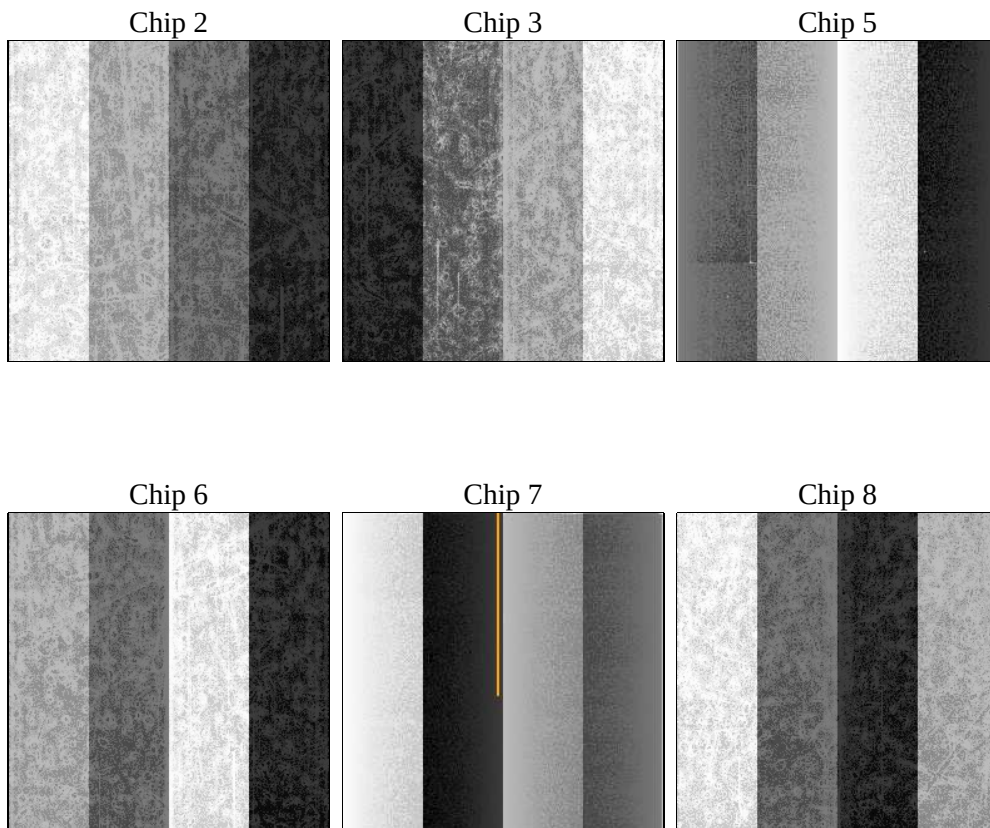
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	15929.60023737	Sum of GTIs [s]
caldsver	4.7.2	 	ontime2	15929.60023737	Sum of GTIs [s]
date	2016-11-22T20:58:01	Date and time of file creation	ontime3	15929.60023737	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	15929.60023737	Sum of GTIs [s]
			ontime6	15929.60023737	Sum of GTIs [s]
			ontime7	15929.60023737	Sum of GTIs [s]
			ontime8	15926.359187245	Sum of GTIs [s]
			l1events	815192	Number of level 1 events

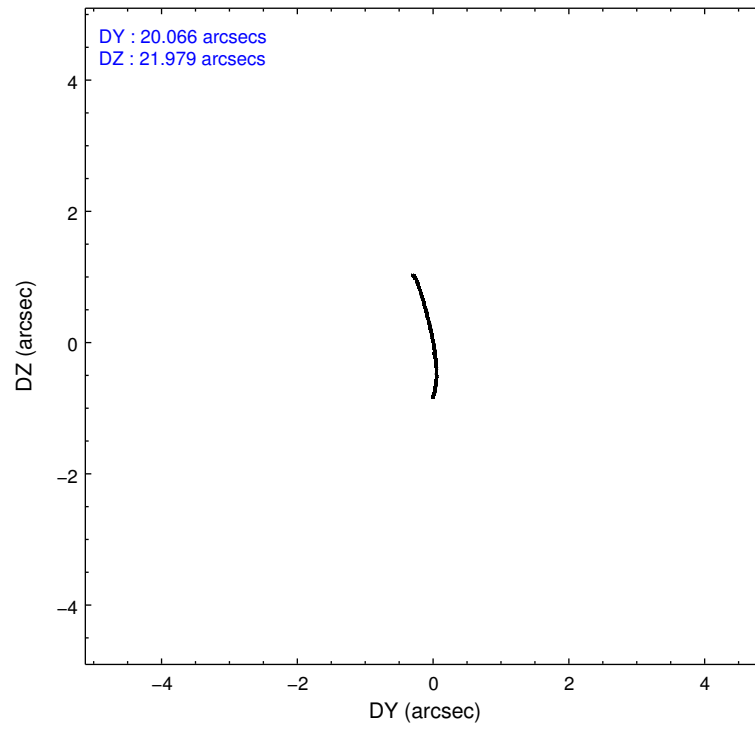
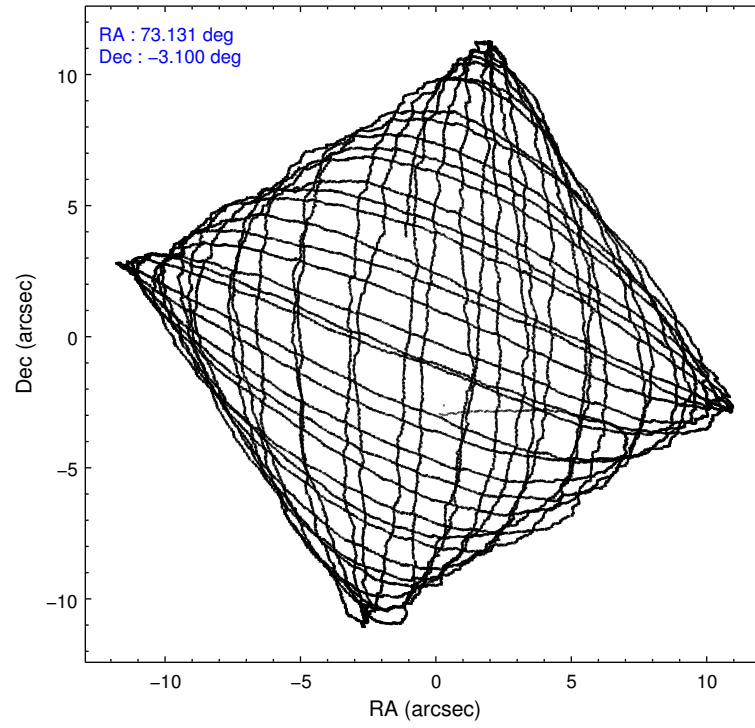
2.1.4 Events

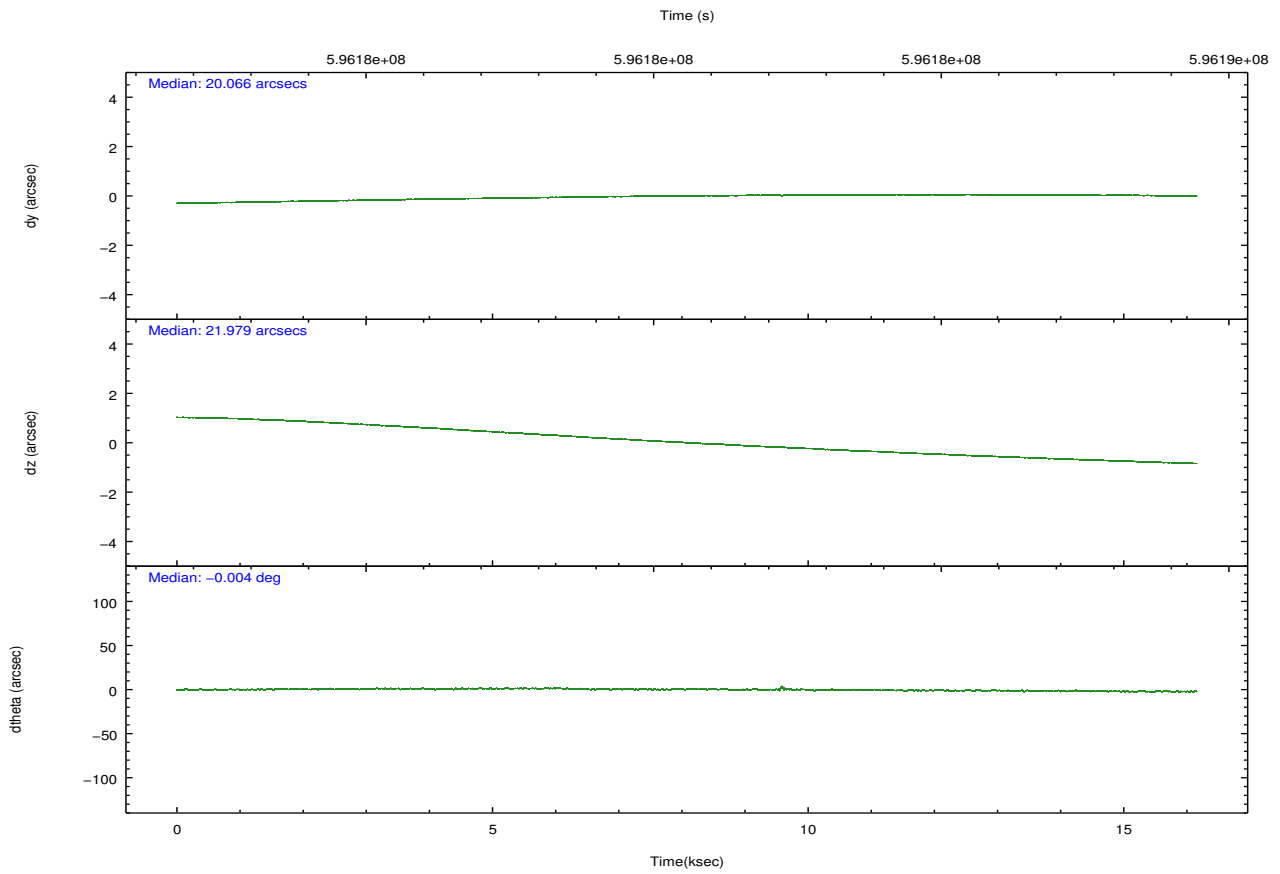
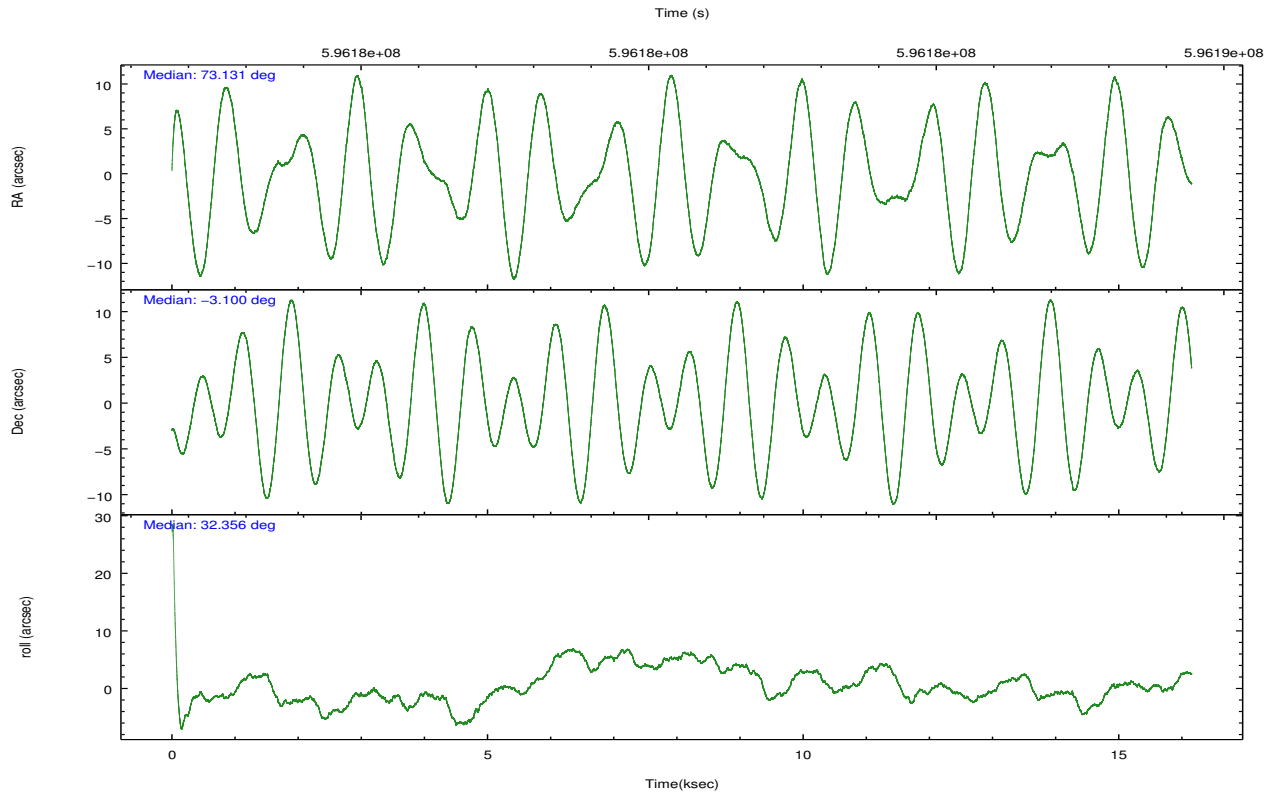
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	115206	106592	187342	112761	144232	149059	grade 0 events	4434	4134	11656	4349	5747	11044
rejected events	102907	95102	96282	99871	80512	109235		3%	3%	6%	3%	3%	7%
rejected %	89%	89%	51%	88%	55%	73%	grade 1 events	70	68	395	62	206	99
								0%	0%	0%	0%	0%	0%
							grade 2 events	3071	2447	27717	3027	13549	10032
								2%	2%	14%	2%	9%	6%
							grade 3 events	1239	1218	2706	1249	5342	3959
								1%	1%	1%	1%	3%	2%
							grade 4 events	1172	1196	2701	1317	5360	3692
								1%	1%	1%	1%	3%	2%
							grade 5 events	4657	5246	12623	5372	14750	8242
								4%	4%	6%	4%	10%	5%
							grade 6 events	2387	2499	46318	2951	33752	11122
								2%	2%	24%	2%	23%	7%
							grade 7 events	98176	89784	83226	94434	65526	100869
								85%	84%	44%	83%	45%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	73.118250	73.13068445448997	CCD I2 on	O1	Y
[deg] Pointing Dec	-3.124706	-3.100212288372246	CCD I3 on	O2	Y
[deg] Pointing Roll	32.194263	32.35159323135084	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	596172663.184000	596171486.07682	CCD S5 on	N	N
Observation start date	2016-11-22T03:29:55	2016-11-22T03:11:26	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	596188663.184000	596189688.02785	On-chip summing requested	N	N
Observation end date	2016-11-22T07:56:35	2016-11-22T08:14:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



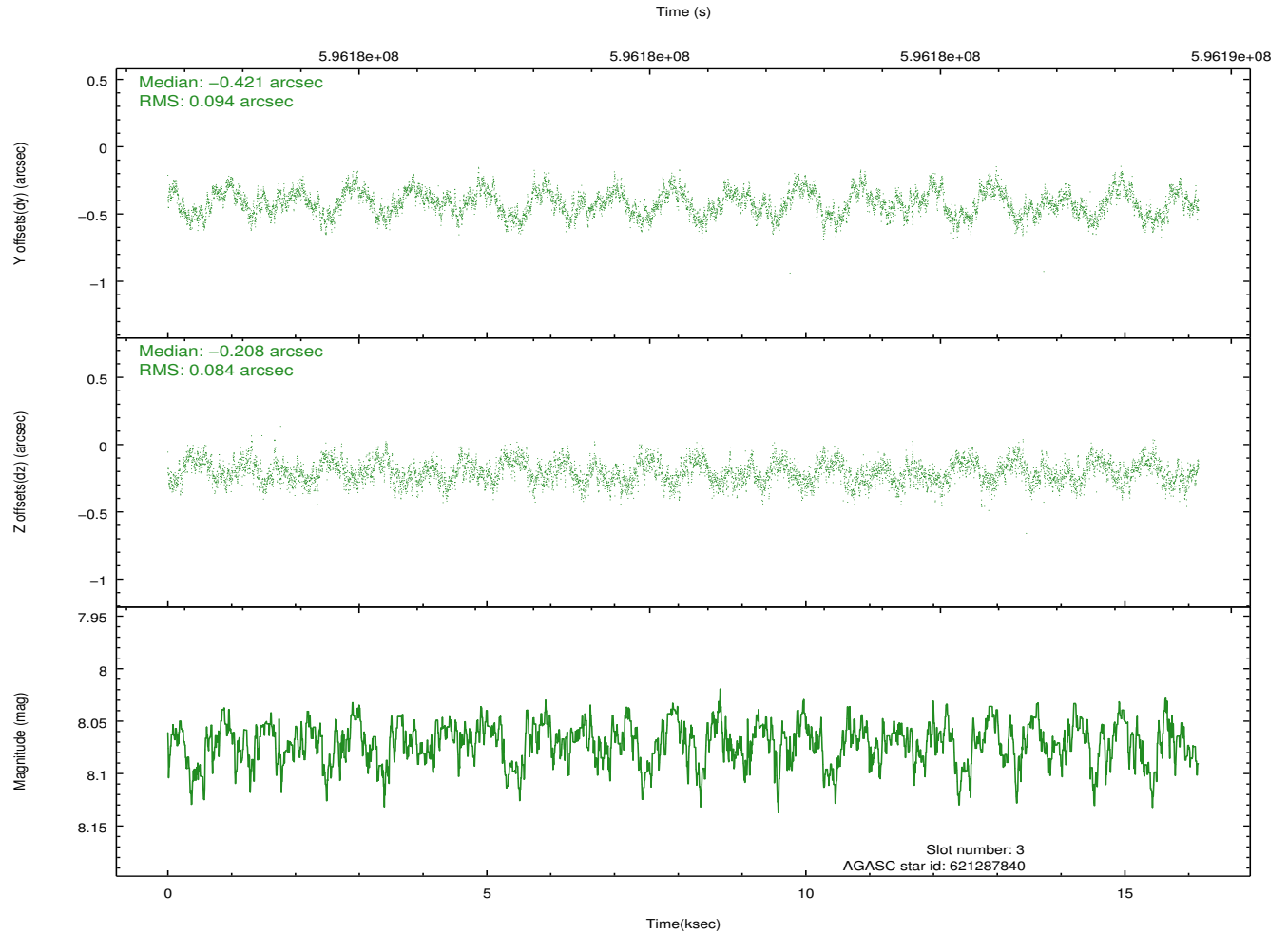
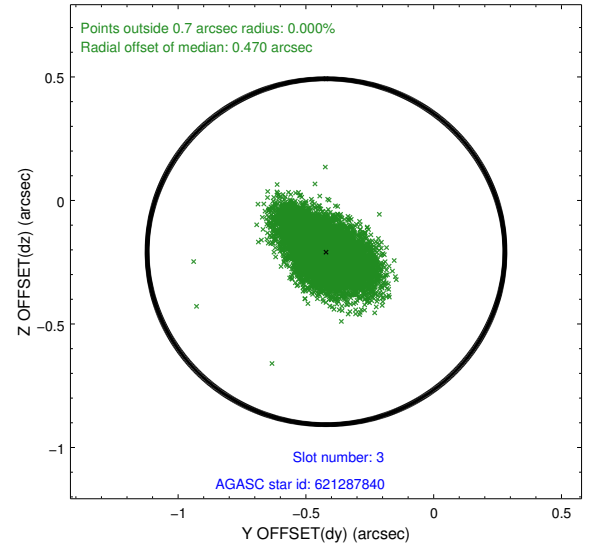
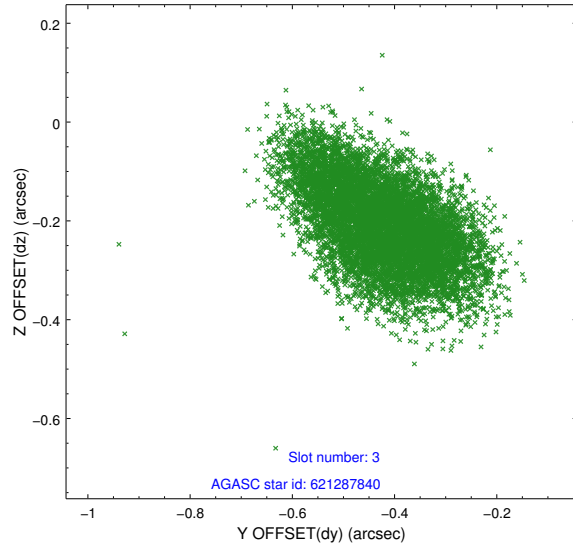


Slot Statistics

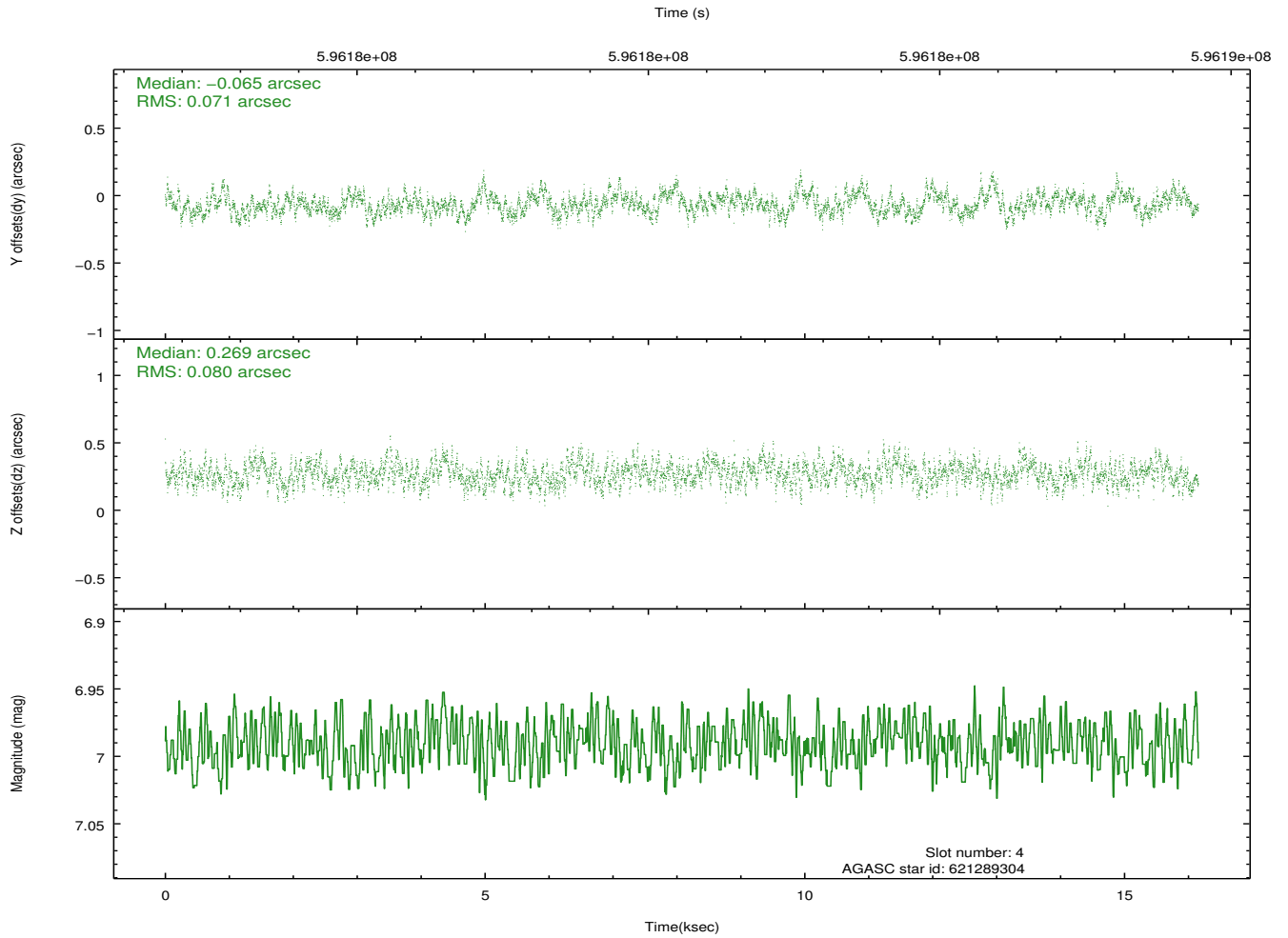
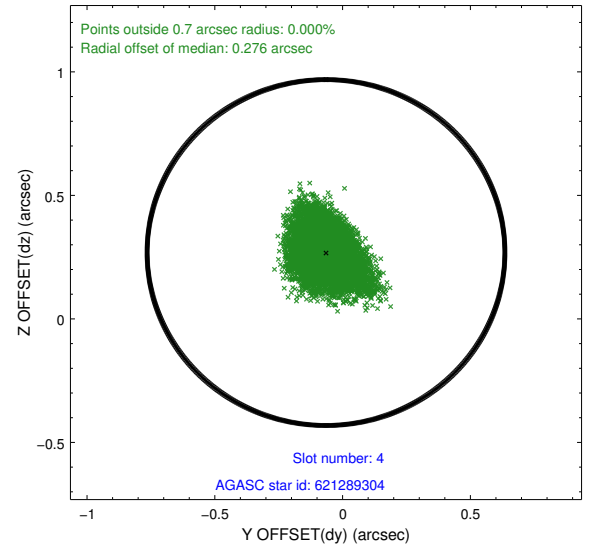
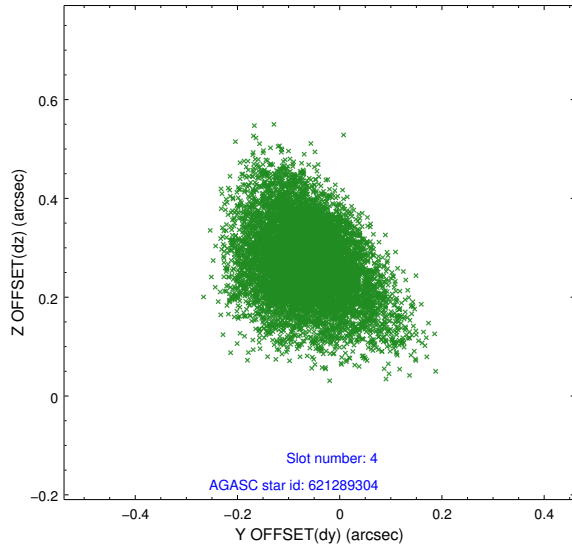
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	3941	-0.228	-0.138	0.017	0.028	0.000000	0.000000	-773.36	-1743.73
1	FID		ACIS-S-4	7.09	3941	0.459	0.146	0.007	0.014	0.000000	0.000000	2140.49	164.73
2	FID		ACIS-S-5	7.08	3940	-0.263	0.000	0.016	0.025	0.000000	0.000000	-1825.88	158.58
3	GUIDE	used	621287840	8.07	7878	-0.421	-0.208	0.135	0.217	72.904853	-2.949814	-313.74	941.44
4	GUIDE	used	621289304	6.99	7882	-0.065	0.269	0.112	0.183	72.877455	-3.659535	-1757.74	-1167.90
5	GUIDE	used	621289504	8.91	7878	0.203	0.032	0.118	0.202	73.076403	-3.394128	-643.65	-740.62
6	GUIDE	used	621289720	8.29	7877	0.374	0.268	0.100	0.162	73.012320	-3.701575	-1427.93	-1554.31
7	GUIDE	used	621416776	9.29	7877	-0.093	-0.360	0.163	0.265	73.251683	-2.926024	787.24	349.15

2.4 Star Slots

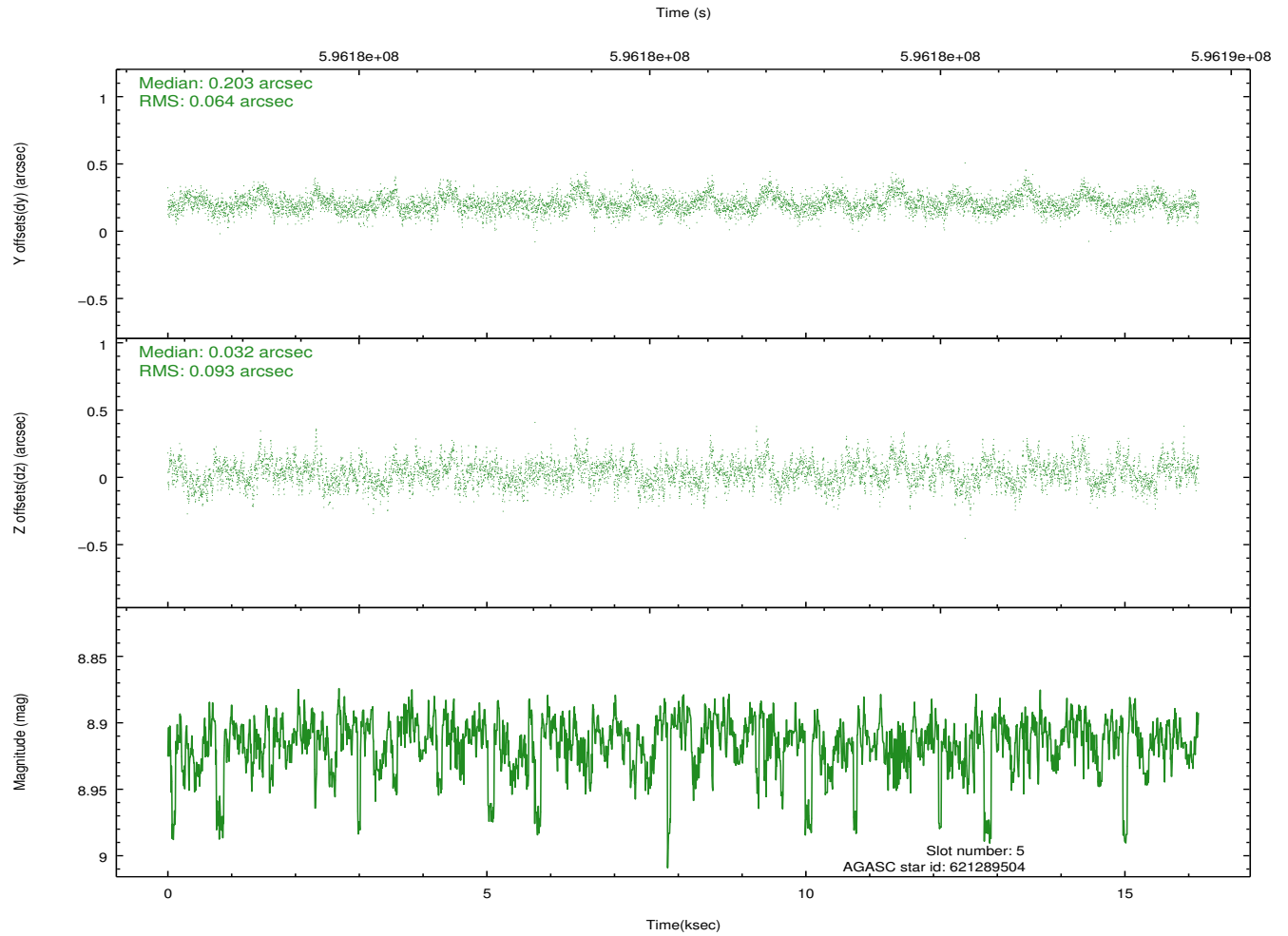
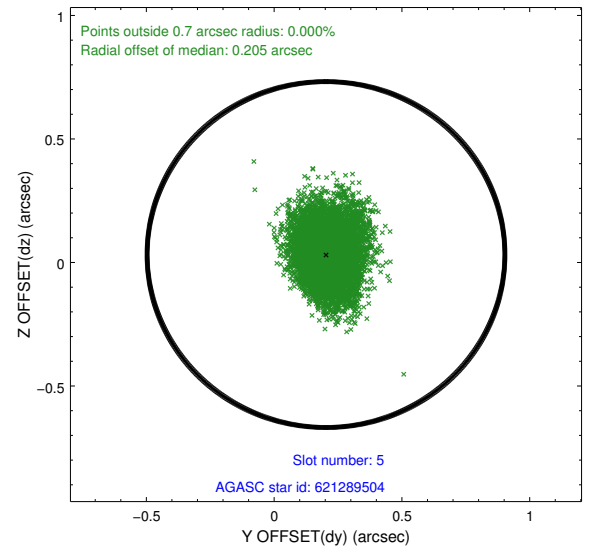
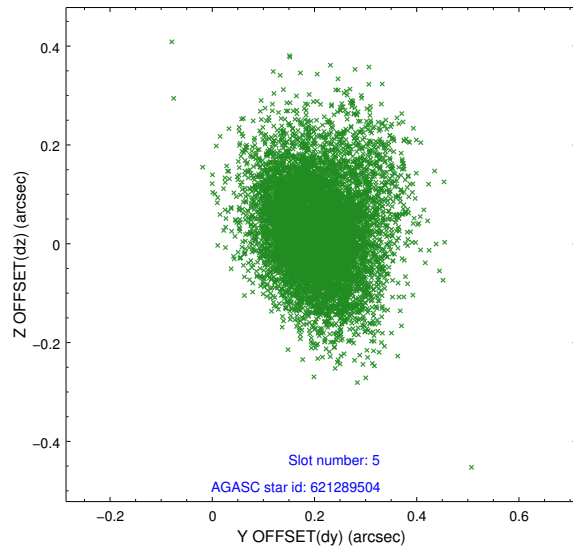
2.4.1 Slot 3



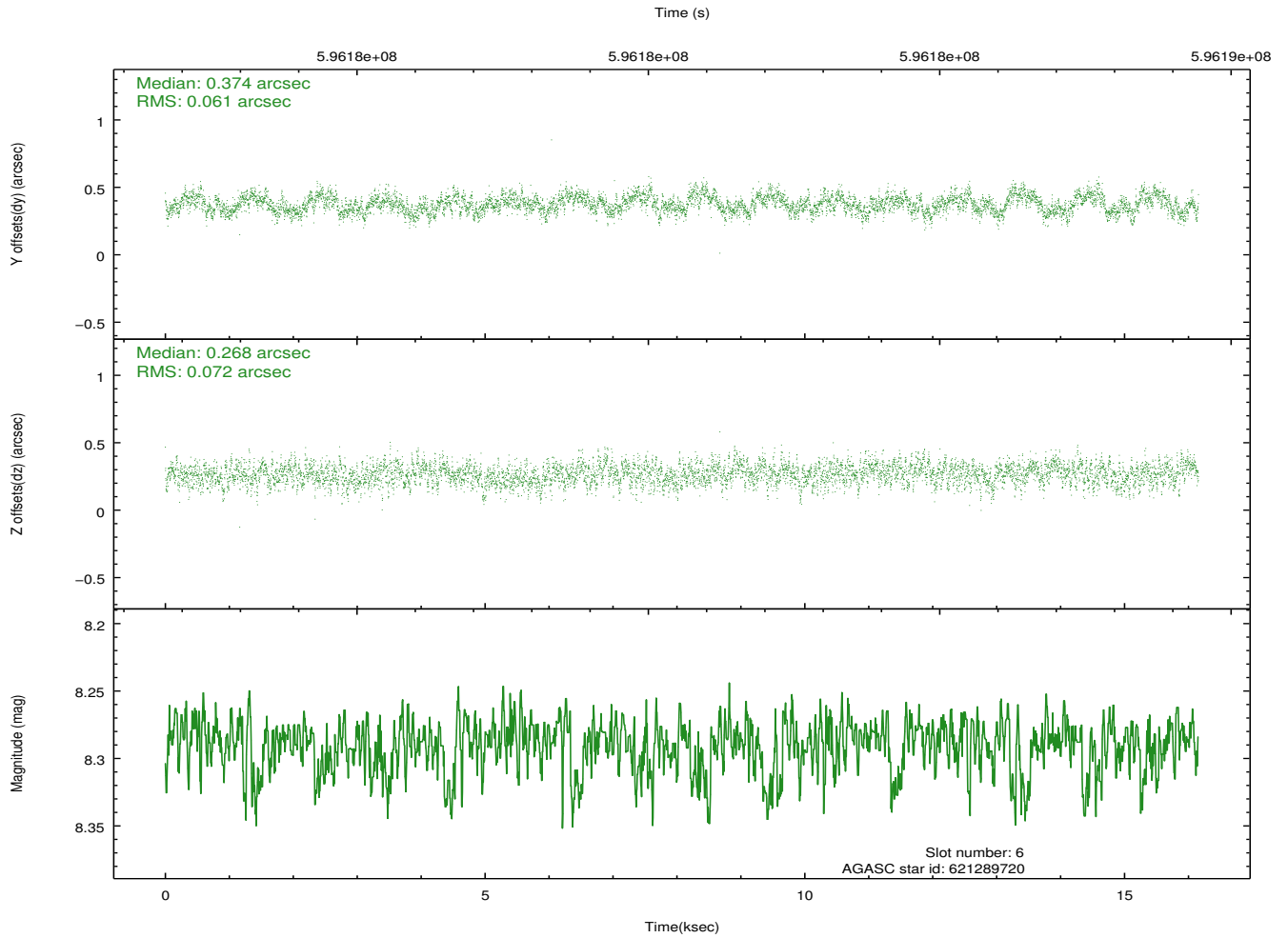
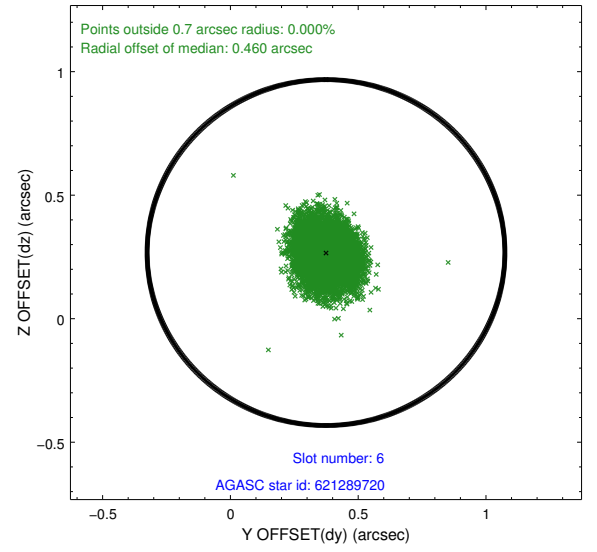
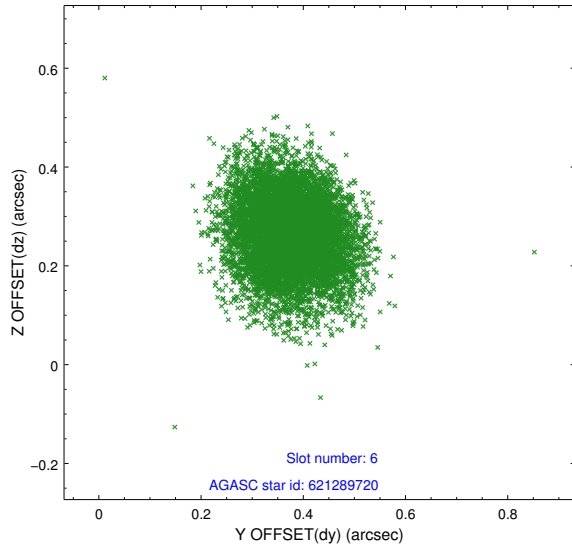
2.4.2 Slot 4



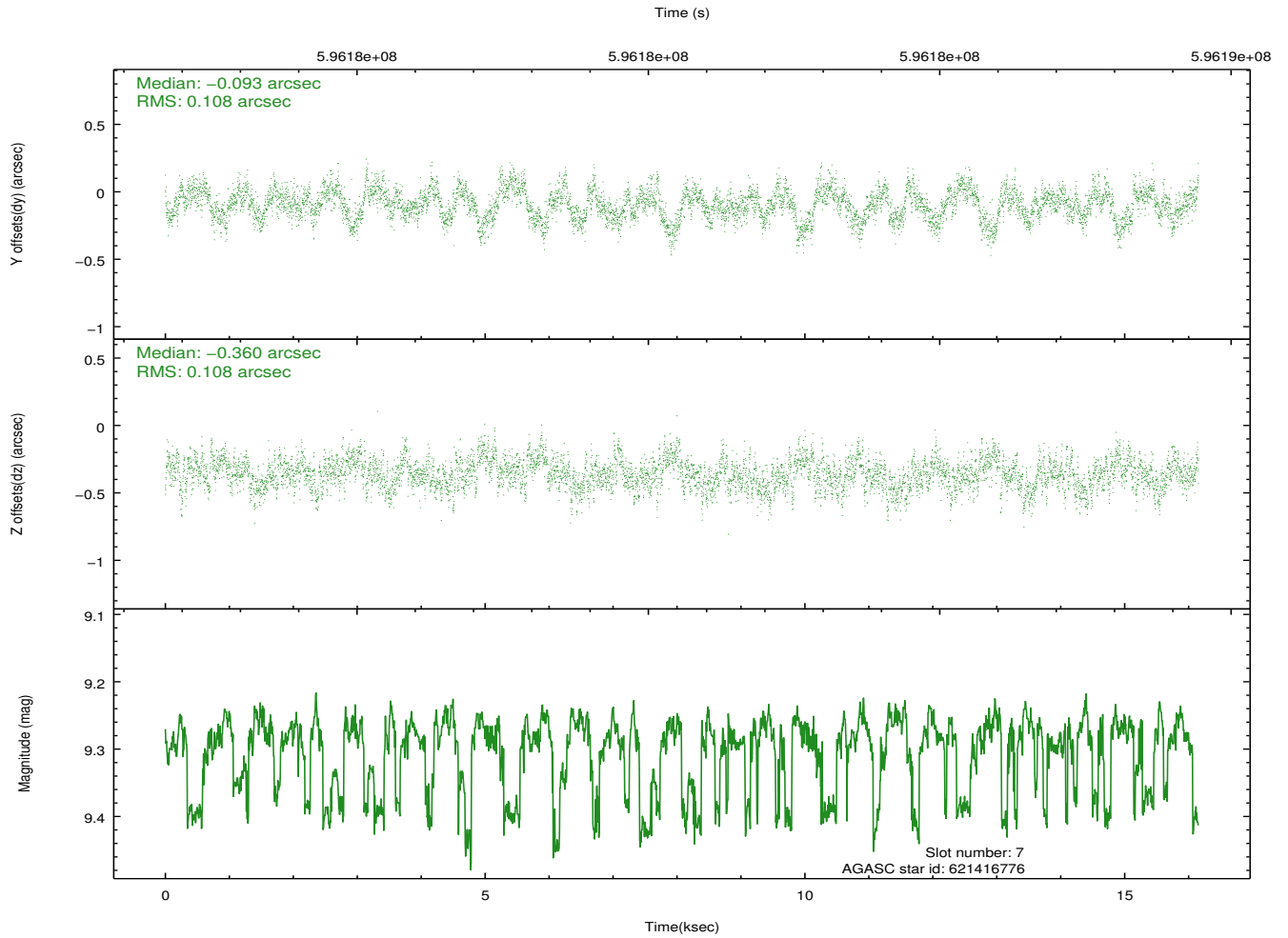
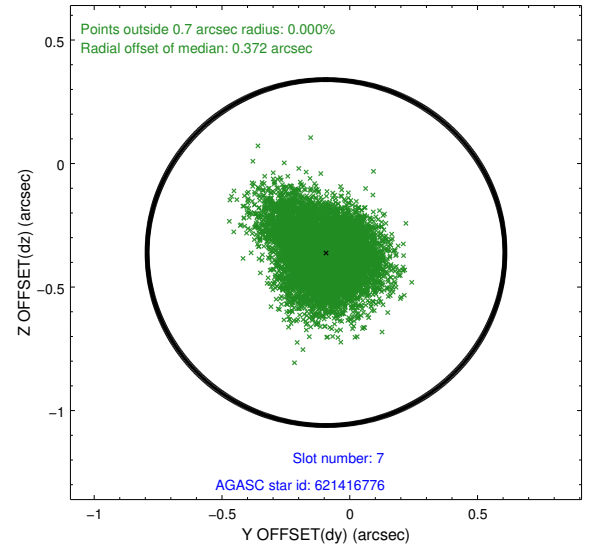
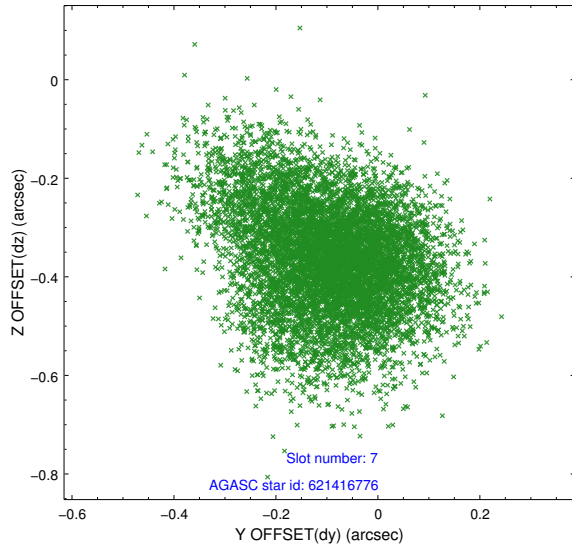
2.4.3 Slot 5



2.4.4 Slot 6

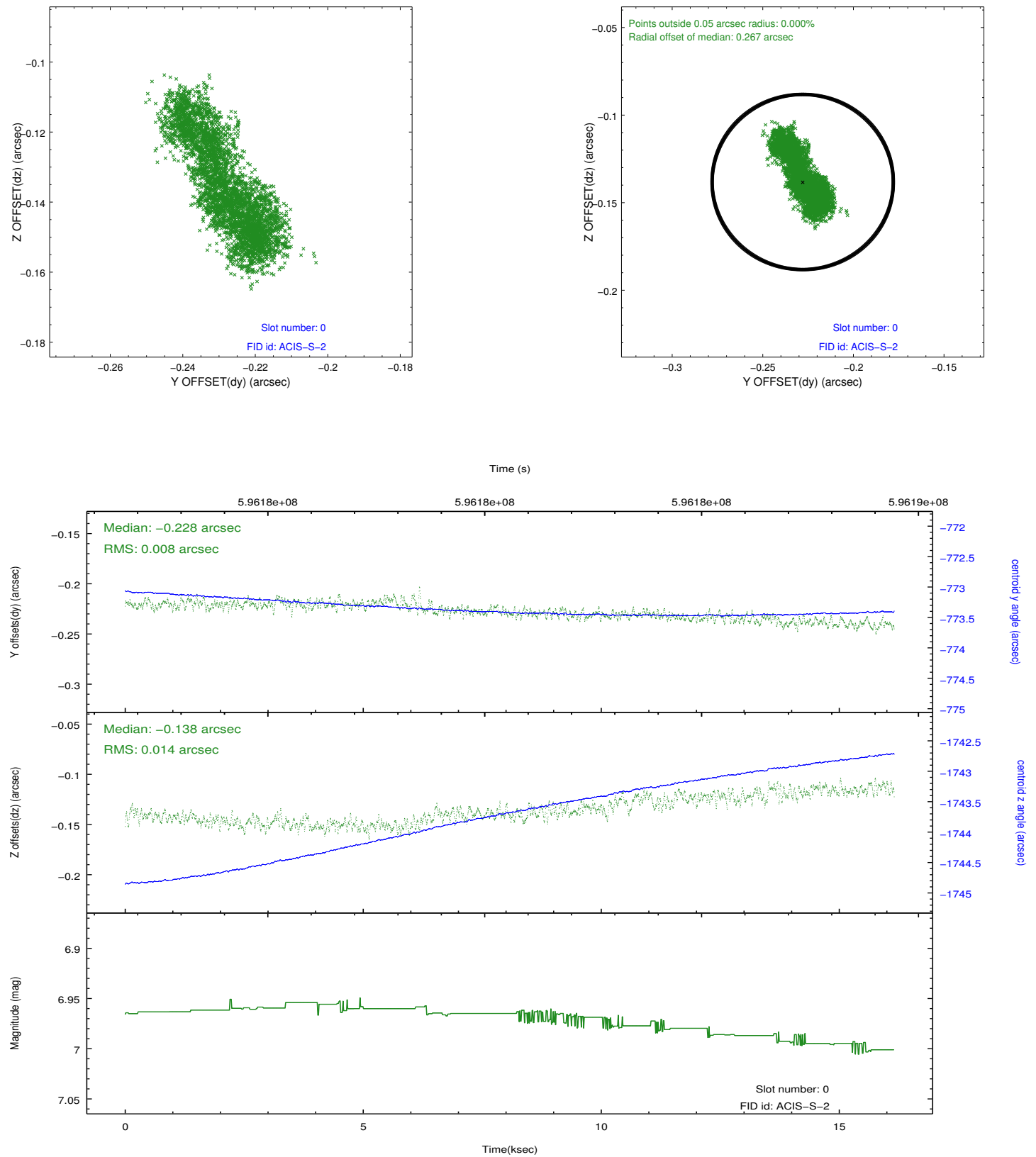


2.4.5 Slot 7

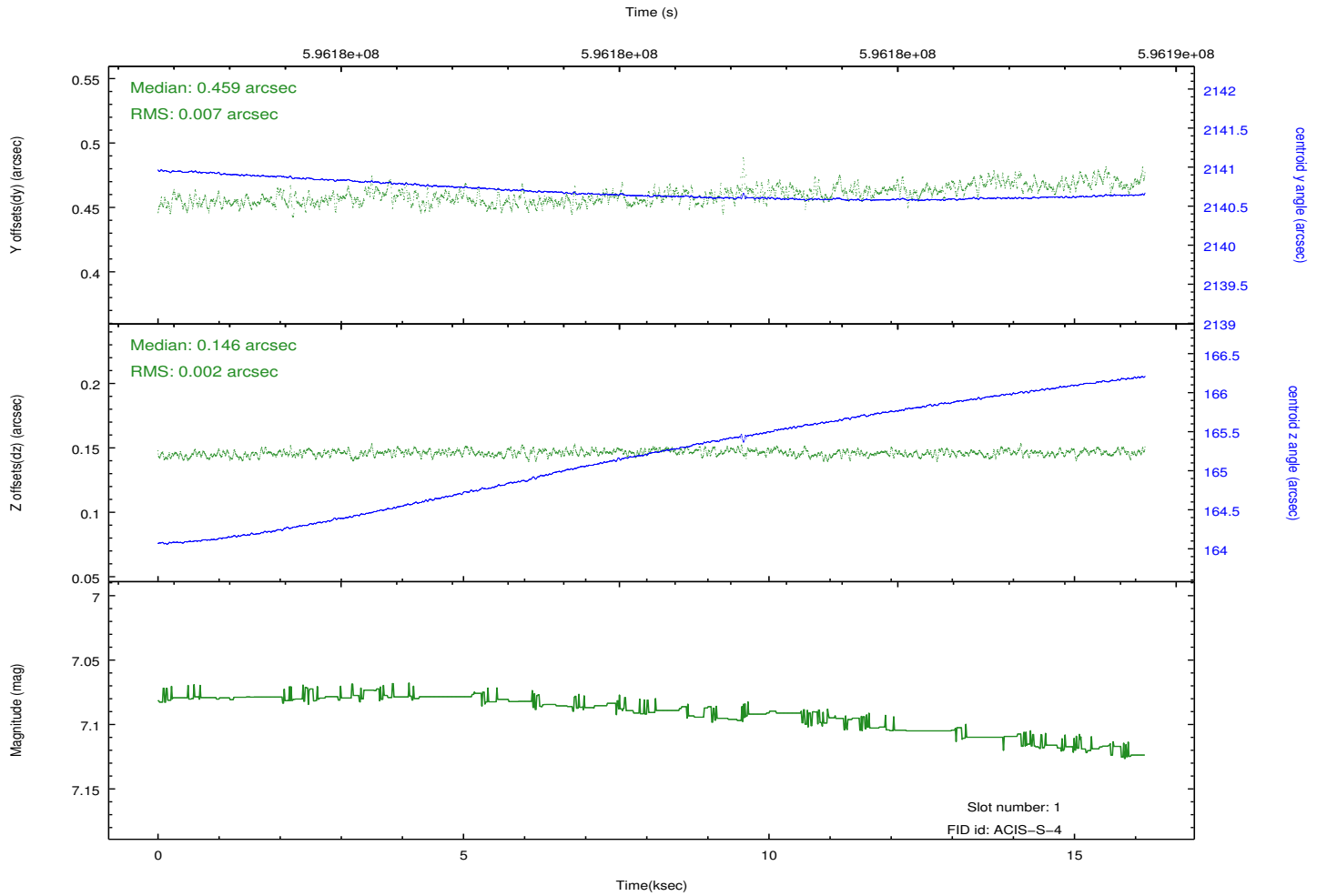
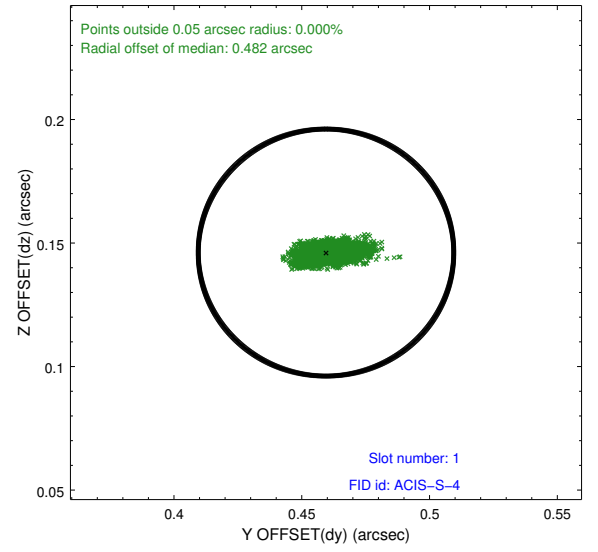
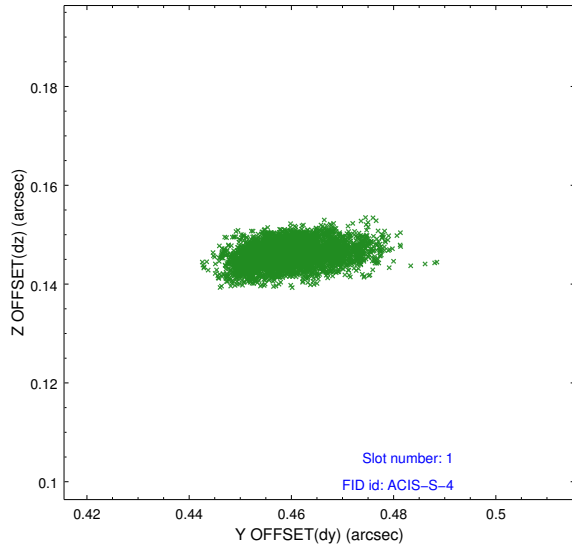


2.5 FID Slots

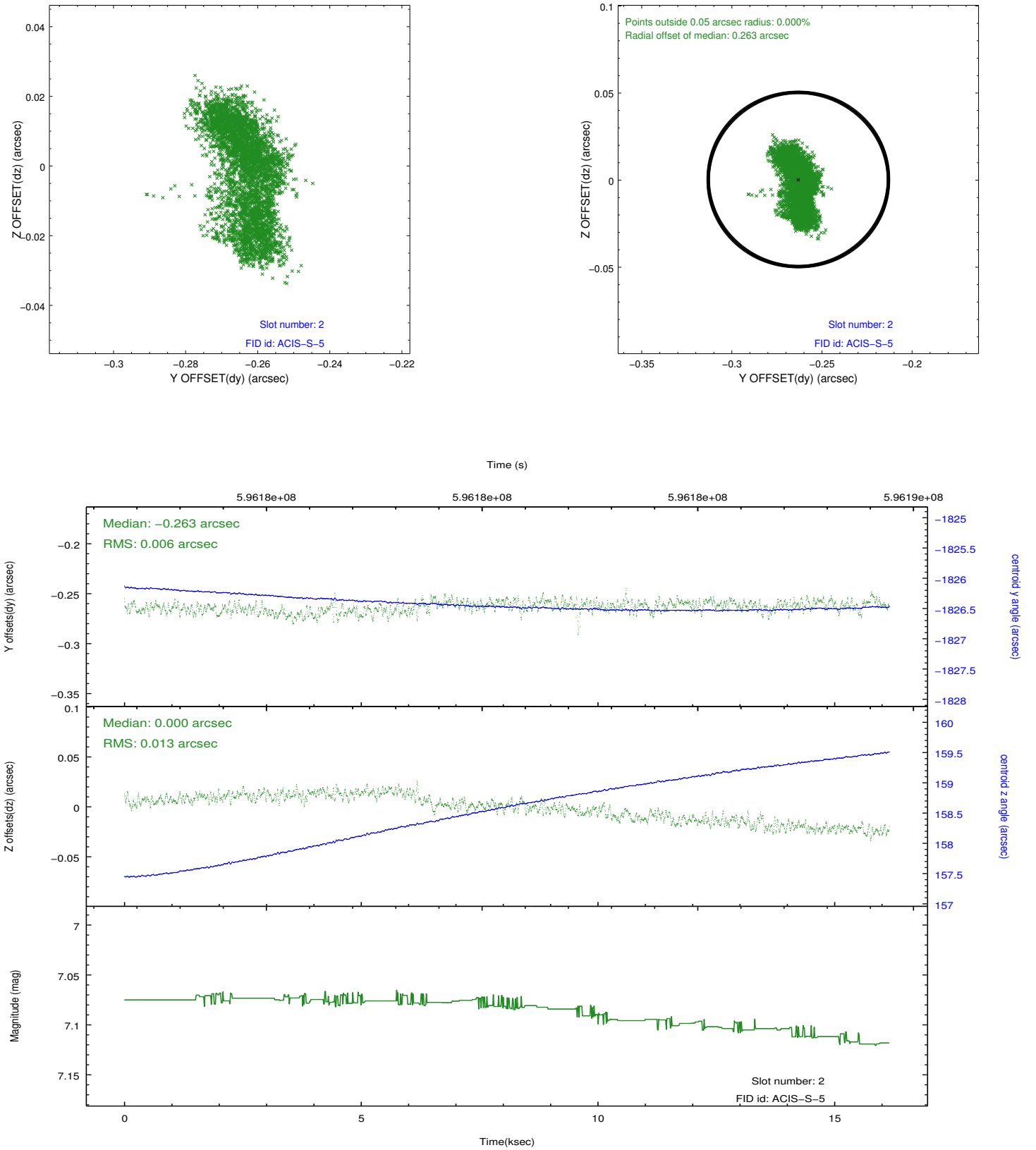
2.5.1 Slot 0



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)	2016.11.22
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.92960023737

A.2 Comments