

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19640 - L2 Version 1
Chandra X-Ray Center

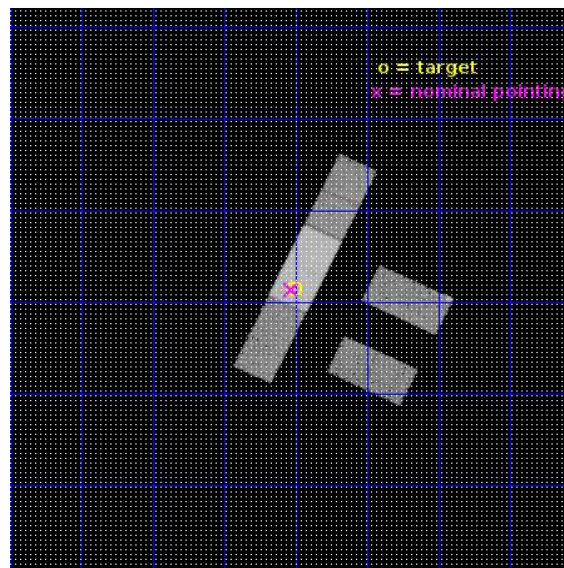
L2 Processing Date : Dec 21 2017

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1 Front

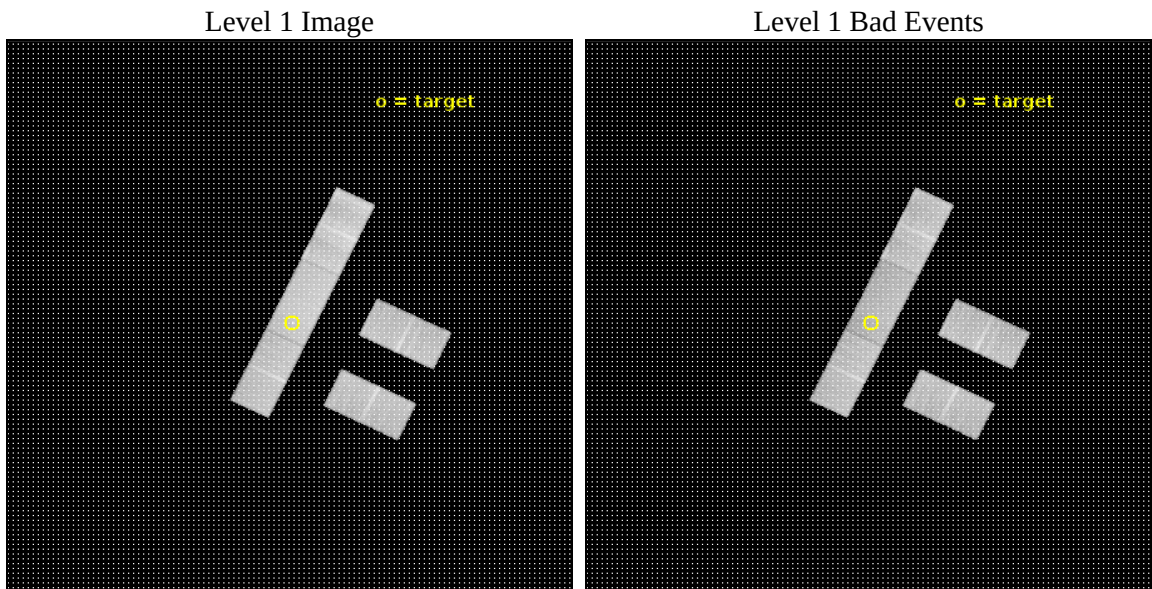
seq_num	703437	Sequence number
obs_id	19640	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	Q2237+0305	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.12625	Observer's specified target RA [deg]
dec_targ	3.358	Observer's specified target Dec [deg]
ra_nom	340.13210087924	Nominal RA [deg]
dec_nom	3.3562009022517	Nominal Dec [deg]
roll_nom	295.65958055974	Nominal Roll [deg]
revision	1	Processing version of data
ontime	35057.400983334	Sum of GTIs [s]
livetime	34231.023797079	Livetime [s]
ontime2	35055.659983039	Sum of GTIs [s]
ontime3	35057.400983334	Sum of GTIs [s]
ontime6	35055.65996325	Sum of GTIs [s]
ontime7	35057.400983334	Sum of GTIs [s]
ontime8	35057.400983334	Sum of GTIs [s]
l2events	129543	Number of level 2 events



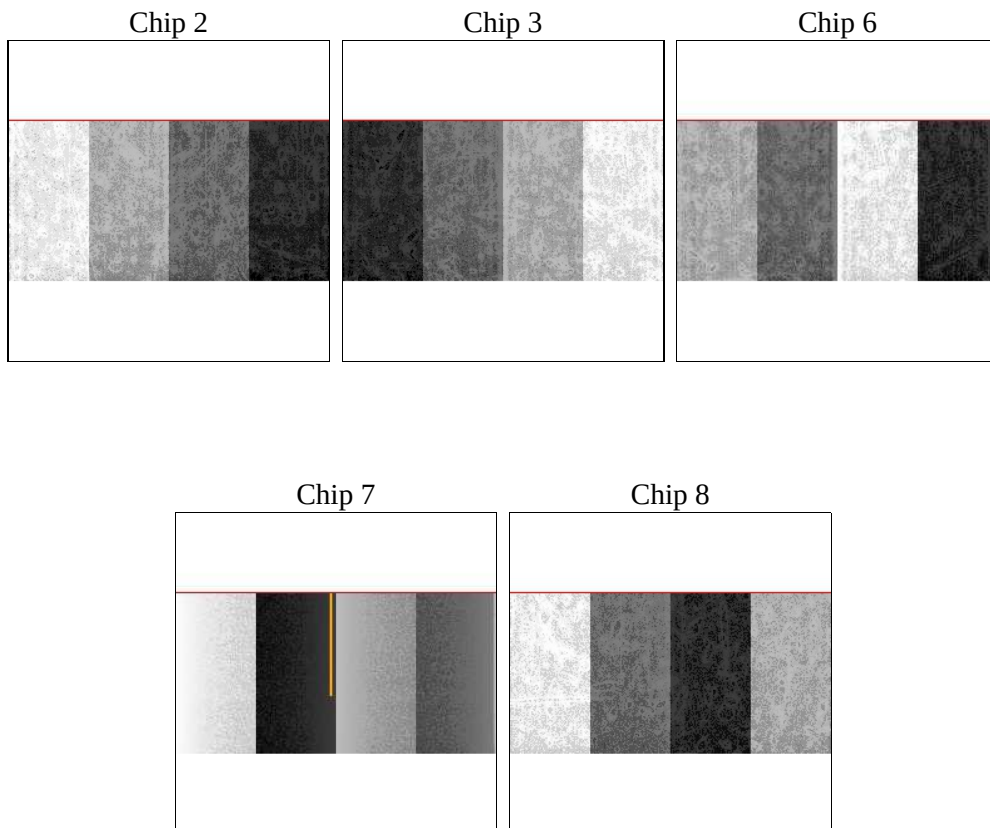
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	35057.400983334	Sum of GTIs [s]
caldsver	4.7.7	 	ontime2	35055.659983039	Sum of GTIs [s]
date	2017-12-21T19:53:36	Date and time of file creation	ontime3	35057.400983334	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	35055.65996325	Sum of GTIs [s]
			ontime7	35057.400983334	Sum of GTIs [s]
			ontime8	35057.400983334	Sum of GTIs [s]
			l1events	770902	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	135718	135250	142823	172202	184909
rejected events	121398	120360	126787	94550	137695
rejected %	89%	88%	88%	54%	74%

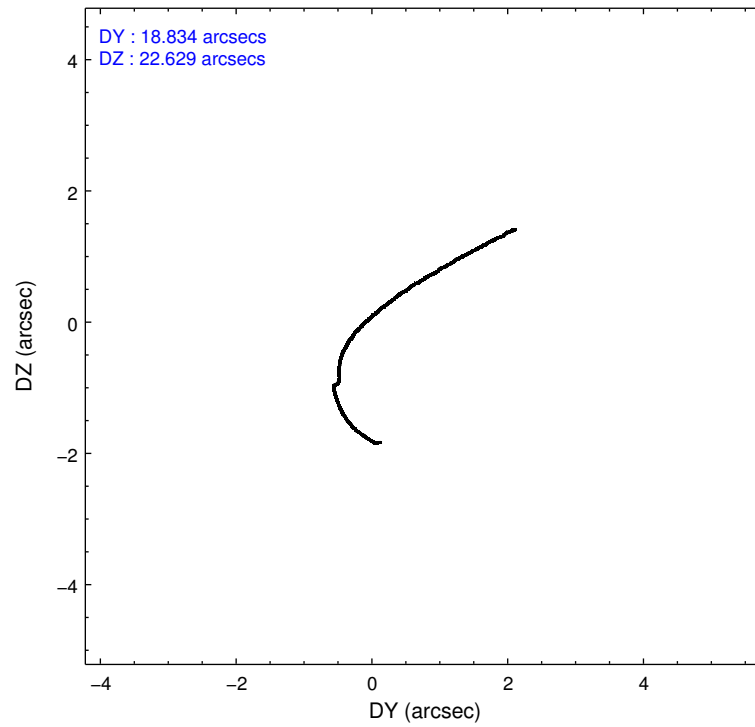
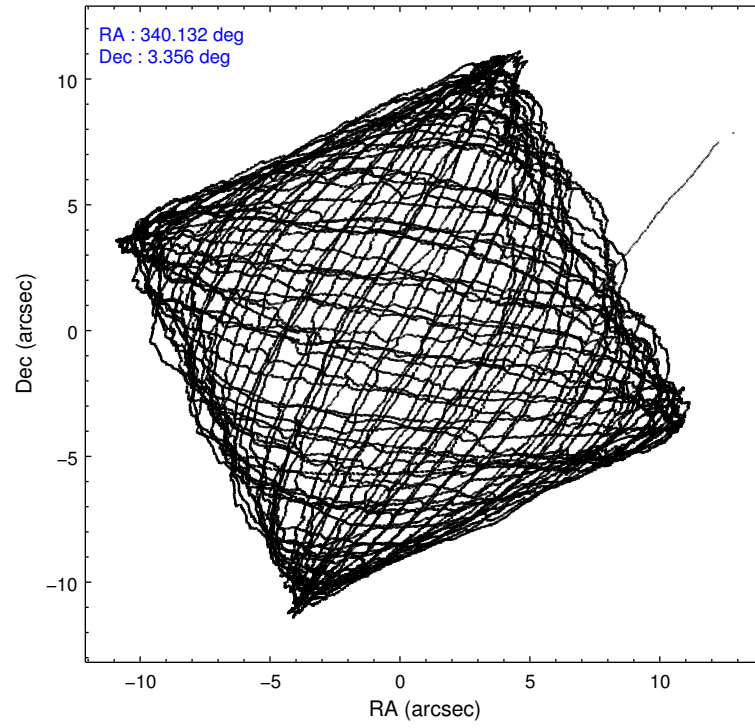
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4771	5254	5015	7447	13046
	3%	3%	3%	4%	7%
grade 1 events	57	62	49	261	113
	0%	0%	0%	0%	0%
grade 2 events	3260	3048	3636	16428	11175
	2%	2%	2%	9%	6%
grade 3 events	1769	1868	1847	7290	5086
	1%	1%	1%	4%	2%
grade 4 events	1795	1723	1874	7153	4537
	1%	1%	1%	4%	2%
grade 5 events	4903	6174	6324	17517	9254
	3%	4%	4%	10%	5%
grade 6 events	2727	2997	3665	39345	13376
	2%	2%	2%	22%	7%
grade 7 events	116436	114124	120413	76761	128322
	85%	84%	84%	44%	69%

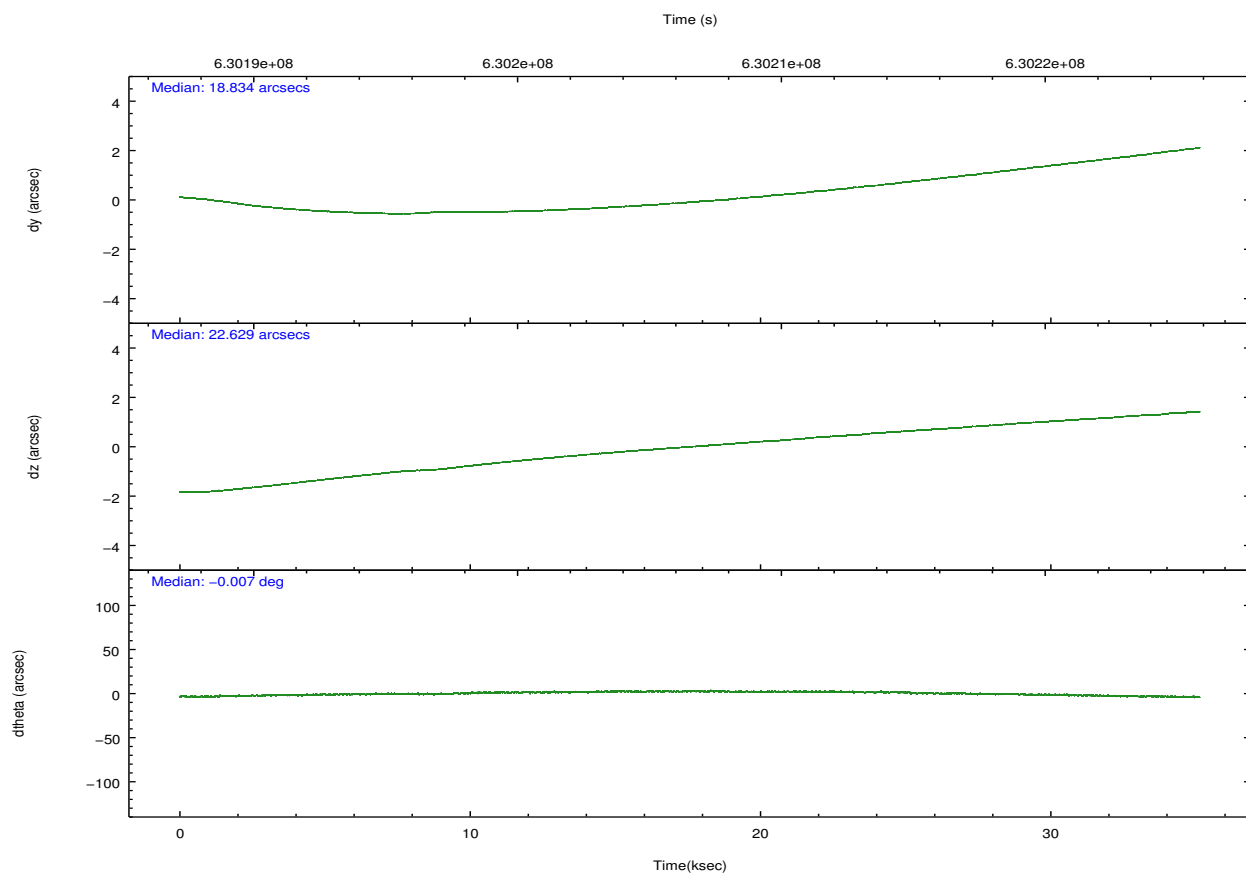
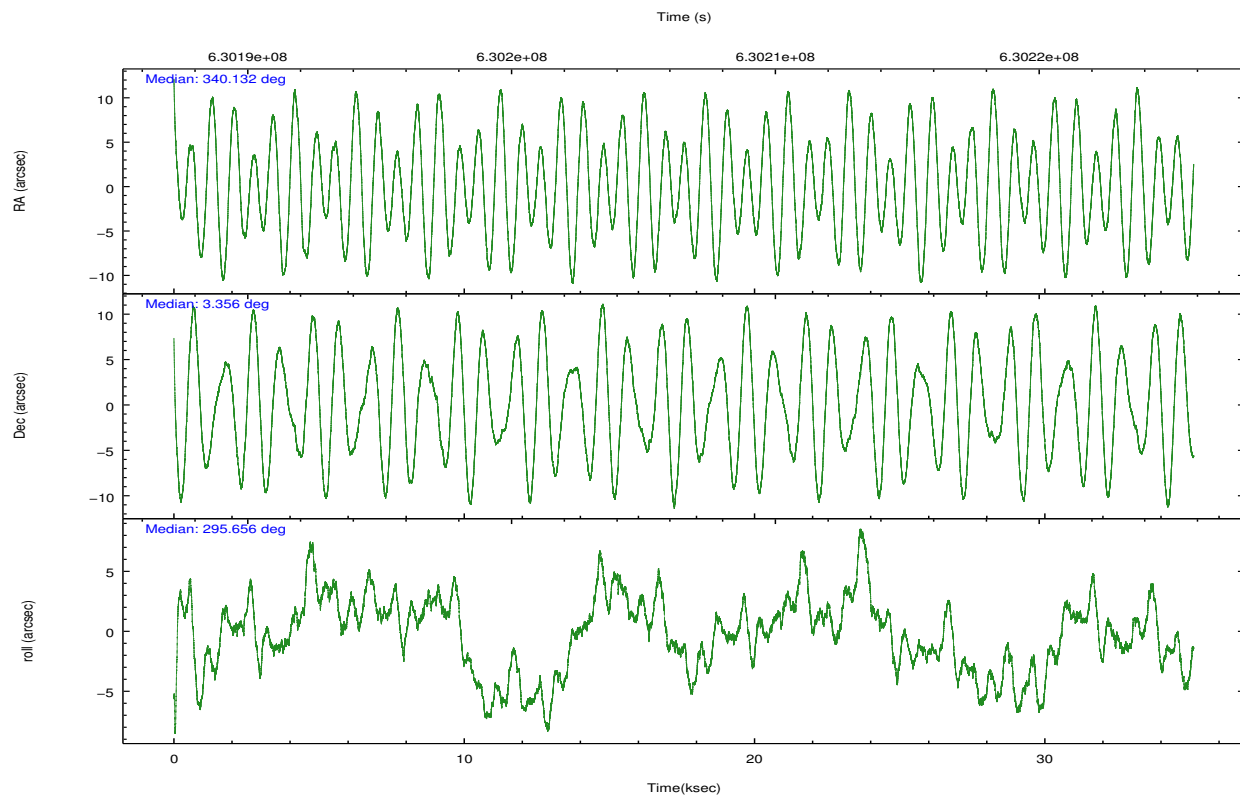
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	340.109202	340.1321008792405
[deg] Pointing Dec	3.371384	3.35620090225171
[deg] Pointing Roll	295.504301	295.6595805597395
[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)	630189078.184000	630187948.3203599
Observation start date	2017-12-20T20:30:09	2017-12-20T20:12:28
[s] Observation end time (MET)	630224078.184000	630225010.27254
Observation end date	2017-12-21T06:13:29	2017-12-21T06:30:10
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	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O4	Y
CCD S3 on	Y	Y
CCD S4 on	O3	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	CUSTOM	1/2
Subarray start row	257	257
Subarray row count	512	512
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	1.7

2.3 Aspect



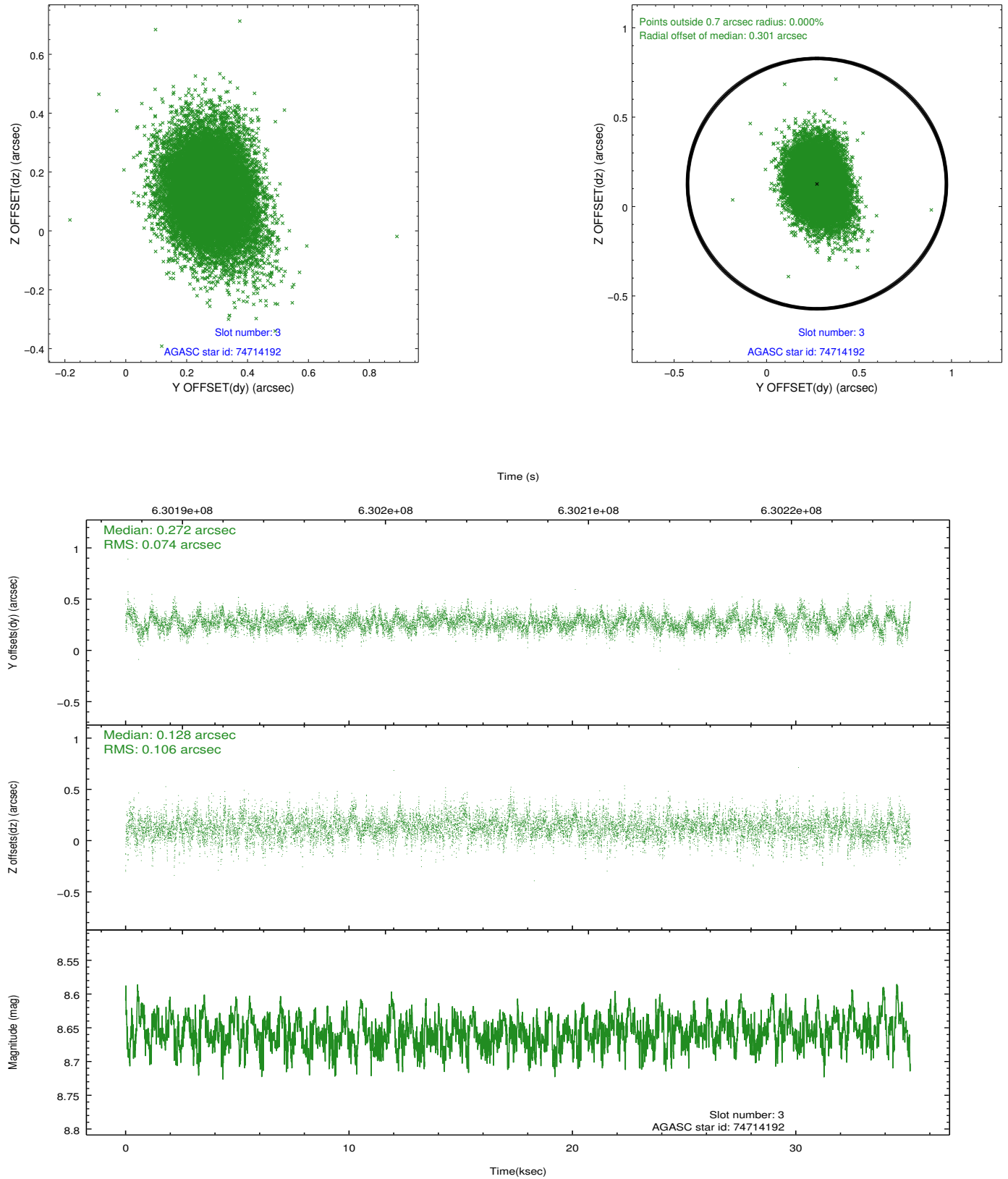


Slot Statistics

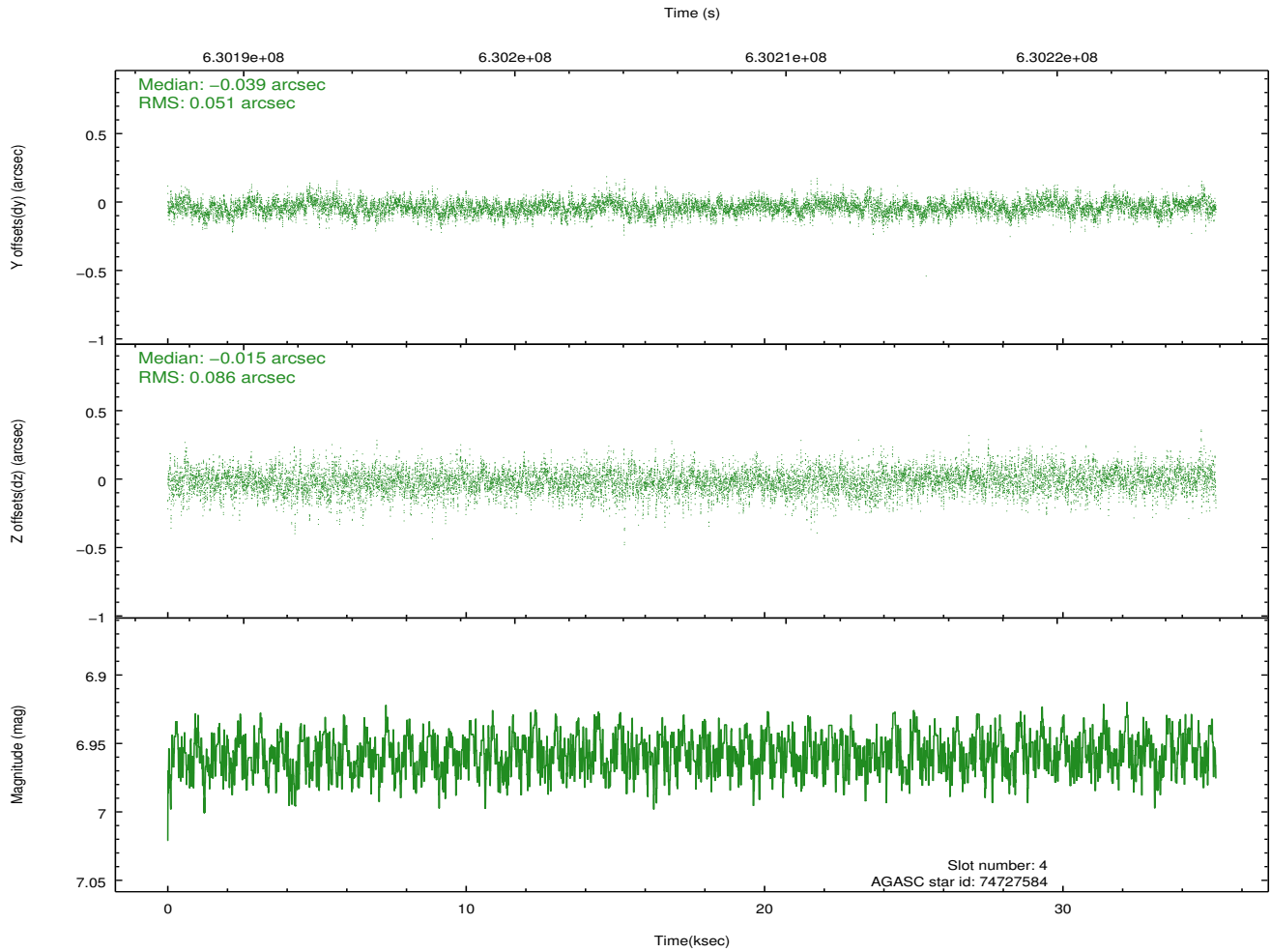
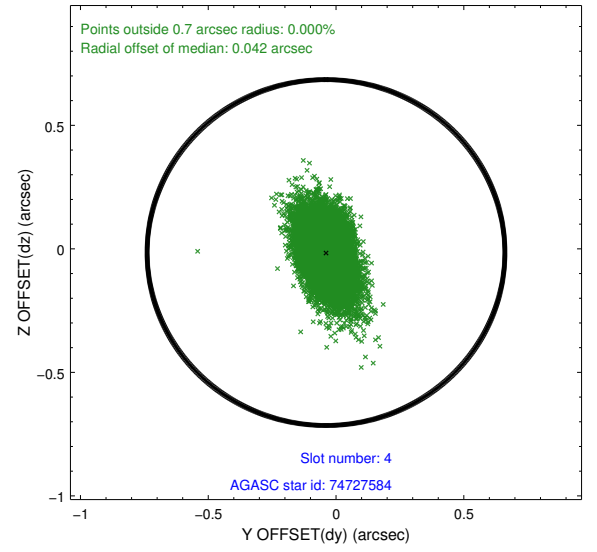
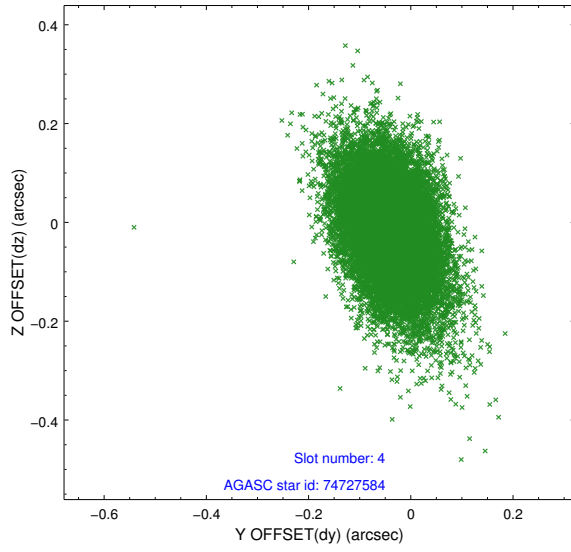
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.12	8566	0.048	-0.029	0.065	0.076	0.000000	0.000000	923.90	-1739.77
1	FID		ACIS-S-4	7.14	8568	0.391	0.014	0.028	0.046	0.000000	0.000000	2141.64	164.44
2	FID		ACIS-S-5	7.13	8567	-0.461	0.047	0.028	0.064	0.000000	0.000000	-1825.46	157.99
3	GUIDE	used	74714192	8.66	17116	0.272	0.128	0.133	0.233	339.623837	3.342441	-656.66	-1618.59
4	GUIDE	used	74727584	6.96	17133	-0.039	-0.015	0.100	0.183	339.633744	3.463732	-1035.69	-1398.52
5	GUIDE	used	74842128	8.52	17125	-0.122	-0.213	0.151	0.249	340.118134	3.132788	789.41	-341.26
6	GUIDE	used	74854992	8.25	17124	-0.197	-0.254	0.129	0.219	340.342808	3.603730	-393.22	1117.29
7	GUIDE	used	74855640	8.80	17128	0.086	0.356	0.145	0.248	340.341123	3.746937	-861.21	1334.88

2.4 Star Slots

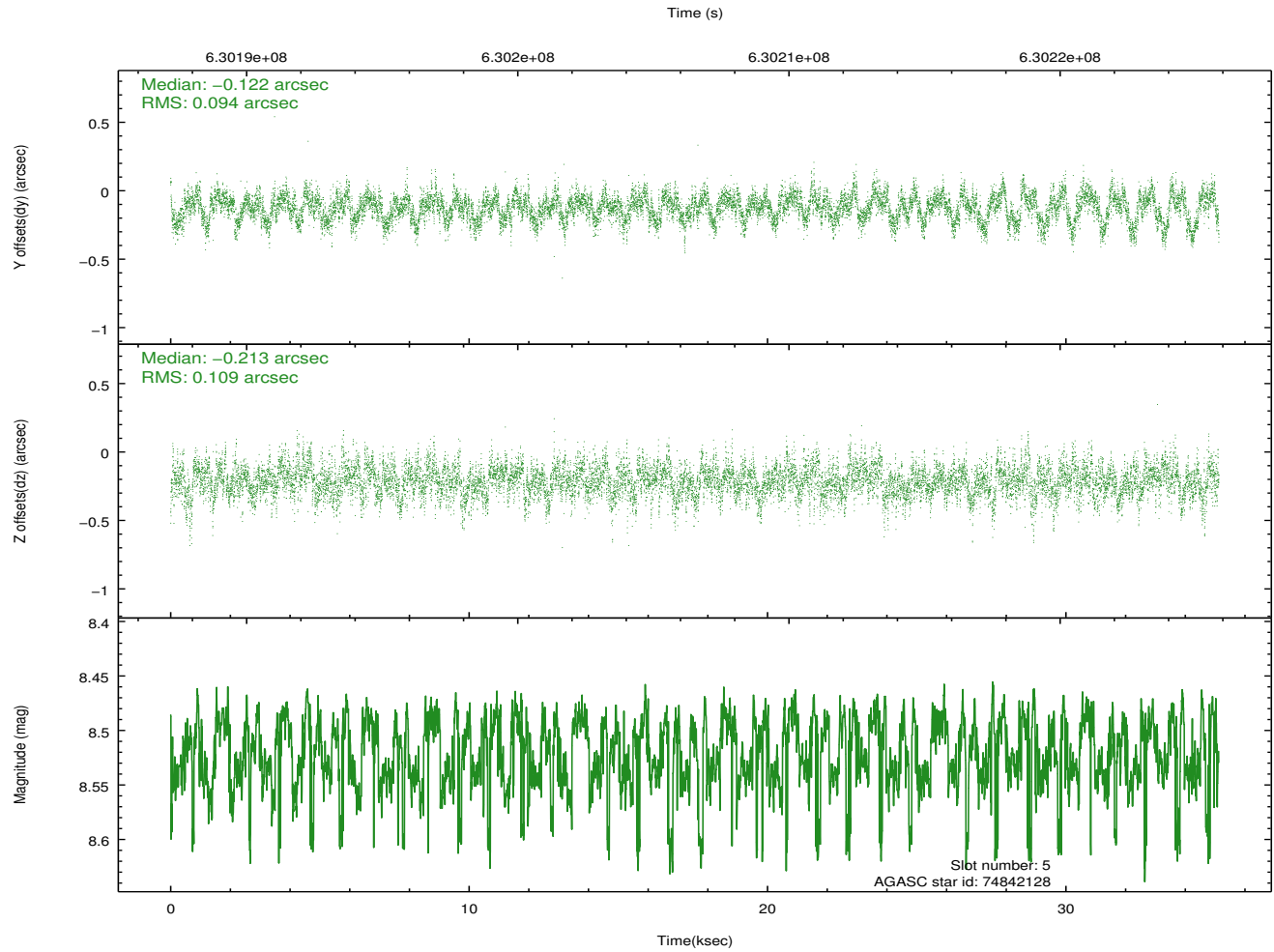
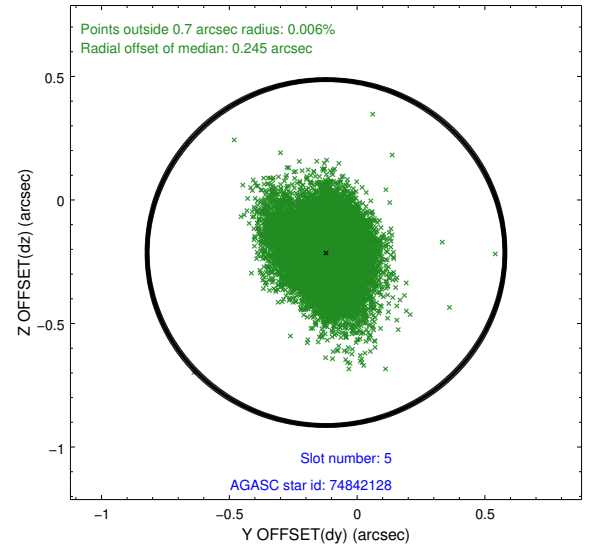
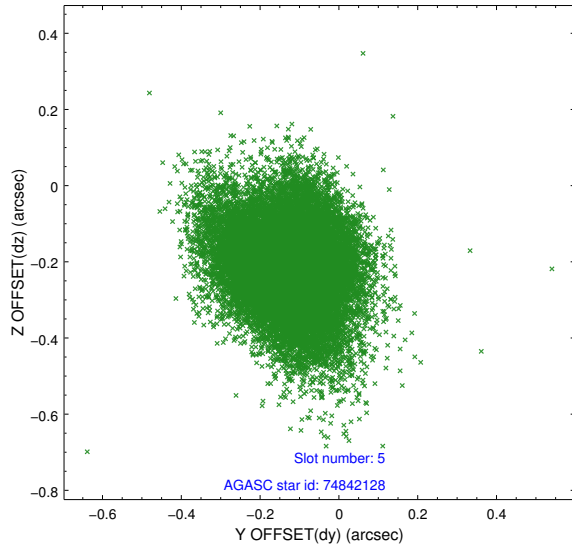
2.4.1 Slot 3



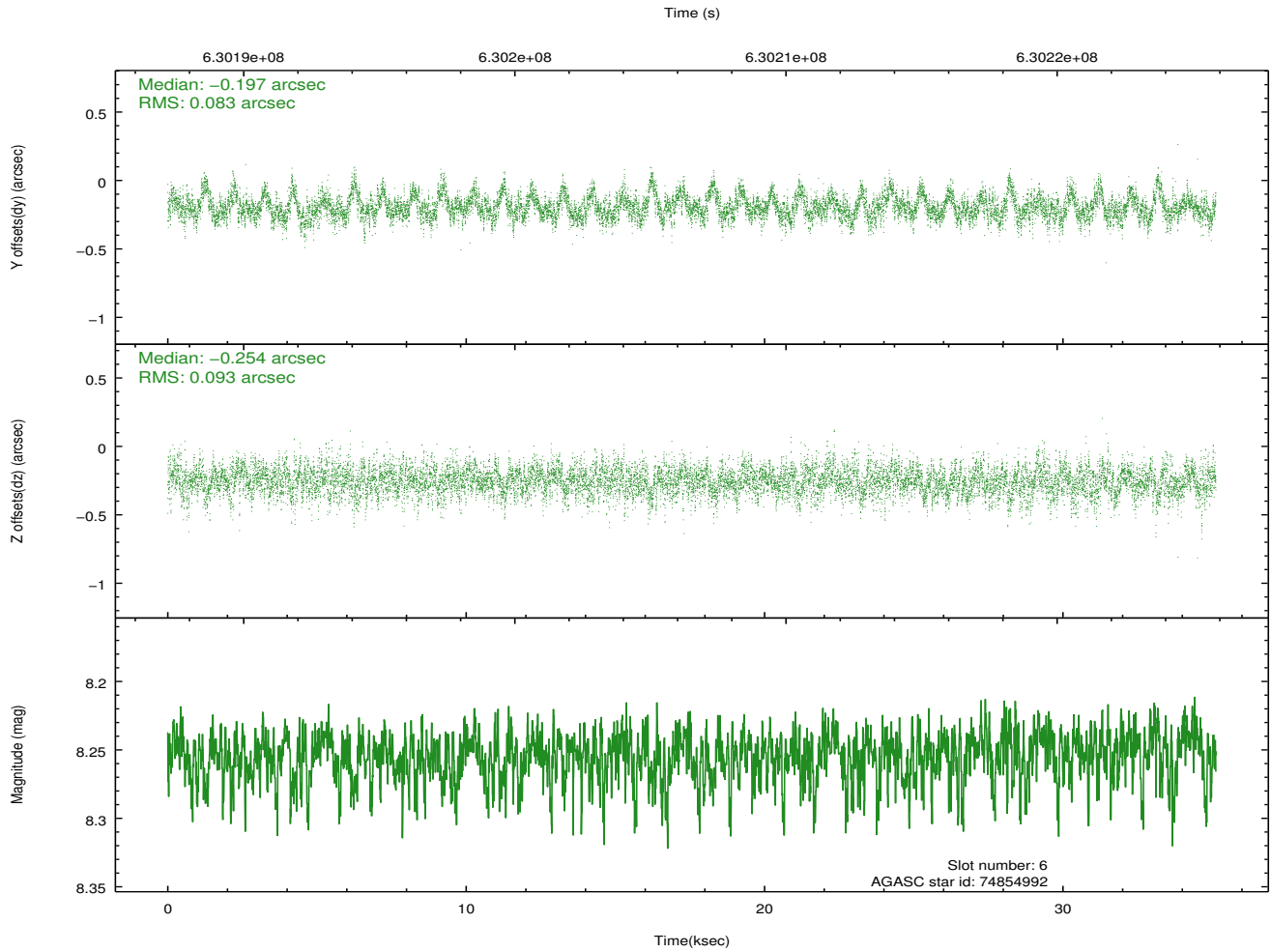
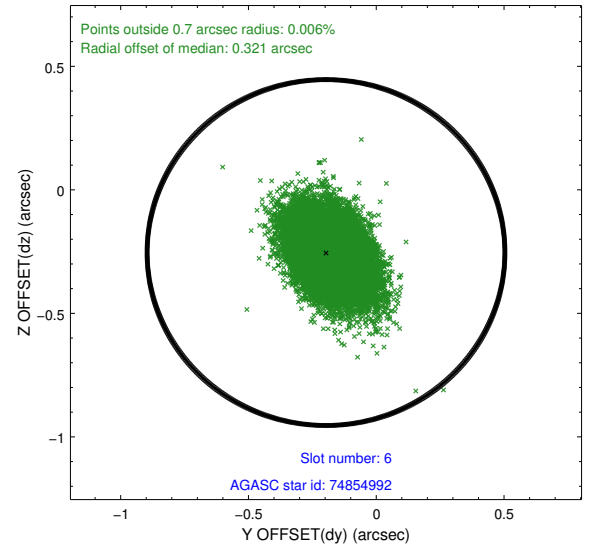
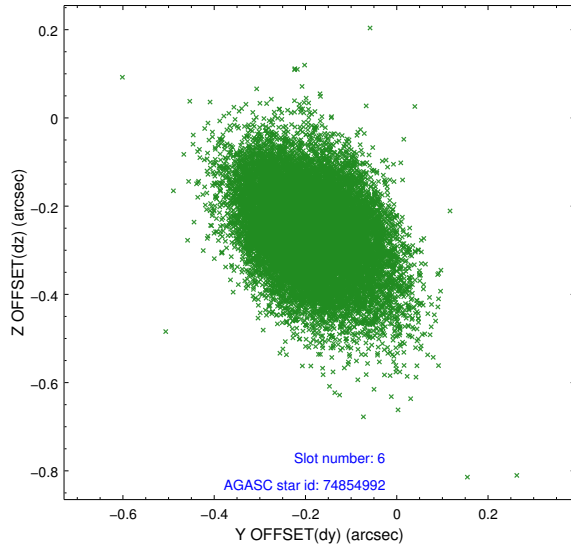
2.4.2 Slot 4



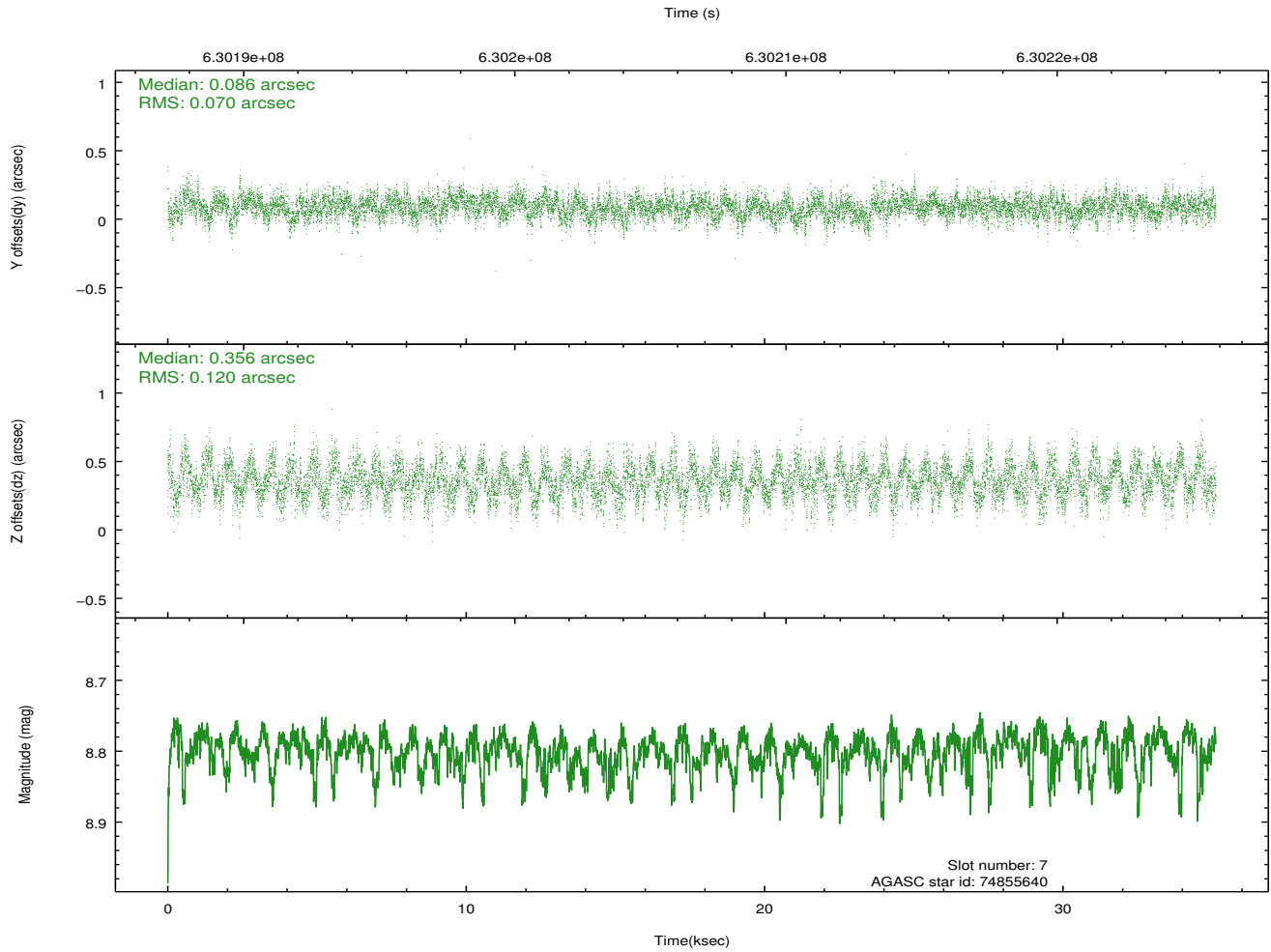
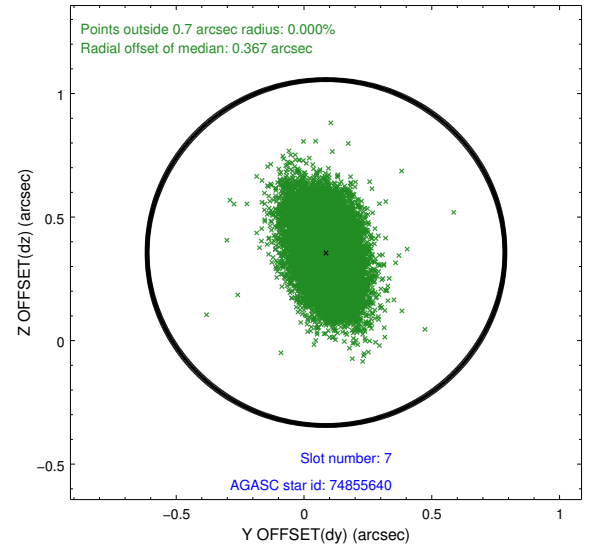
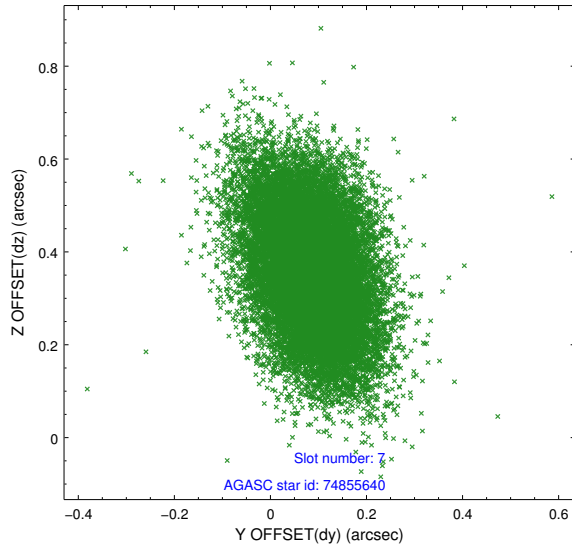
2.4.3 Slot 5



2.4.4 Slot 6

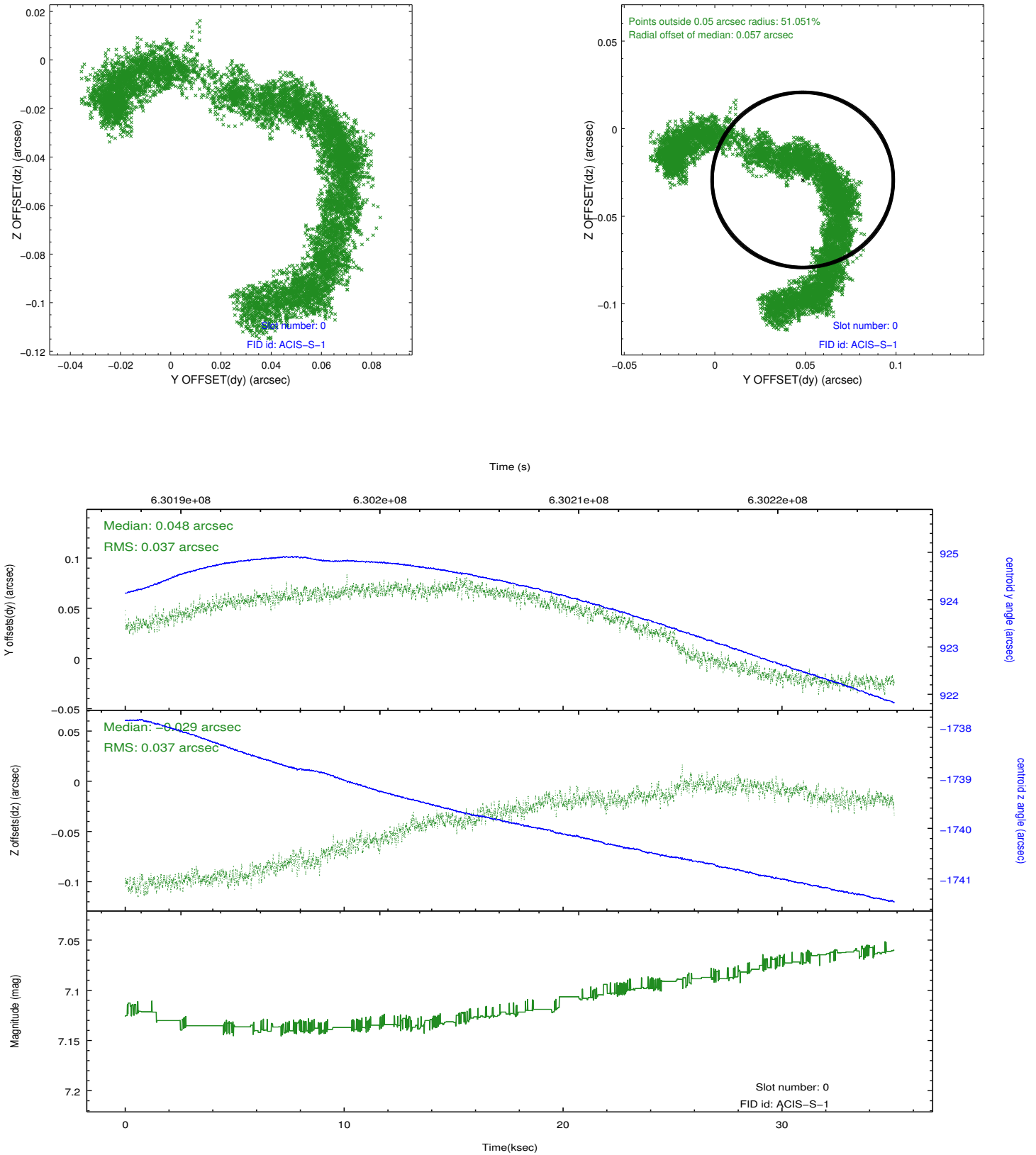


2.4.5 Slot 7

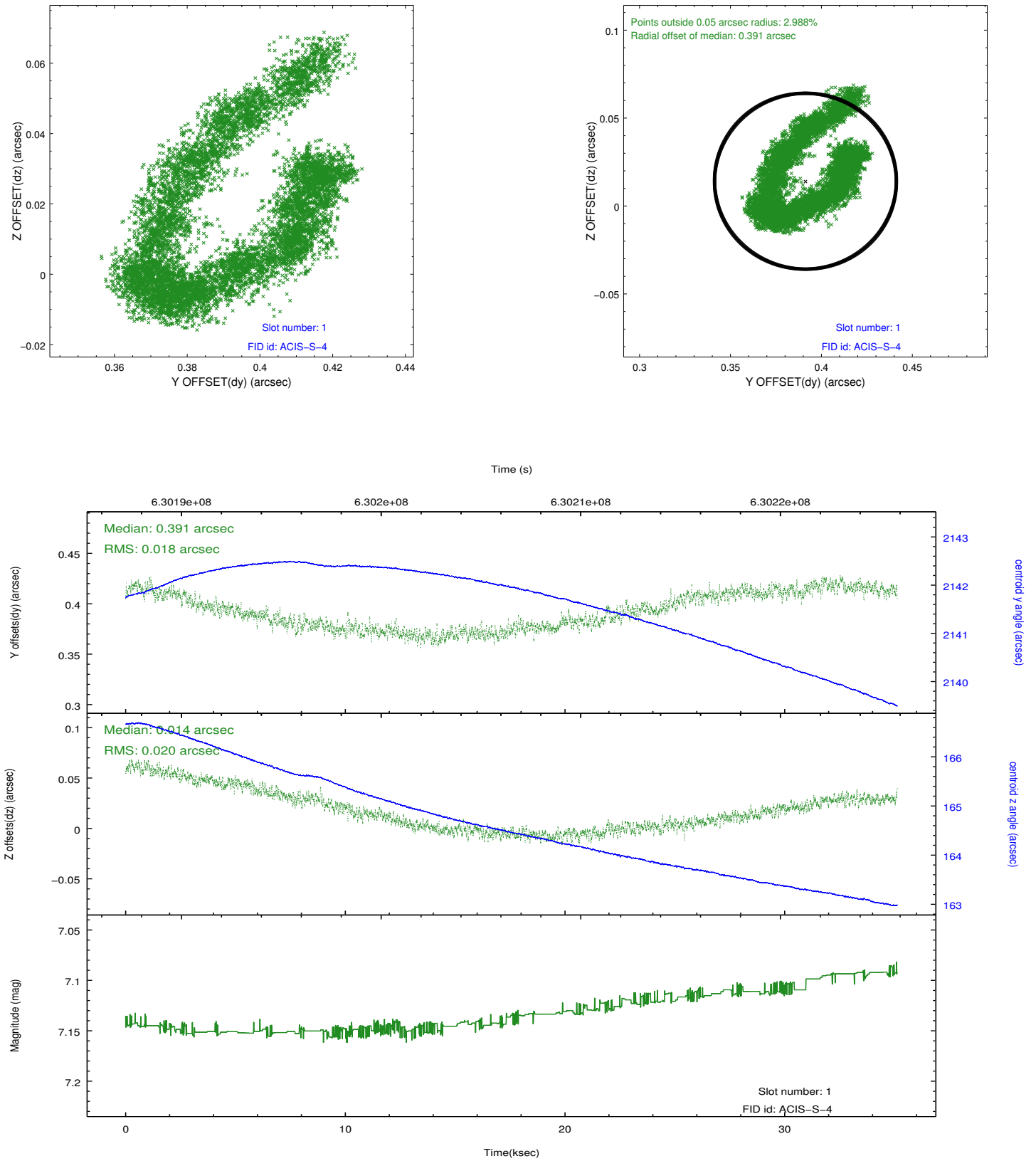


2.5 FID Slots

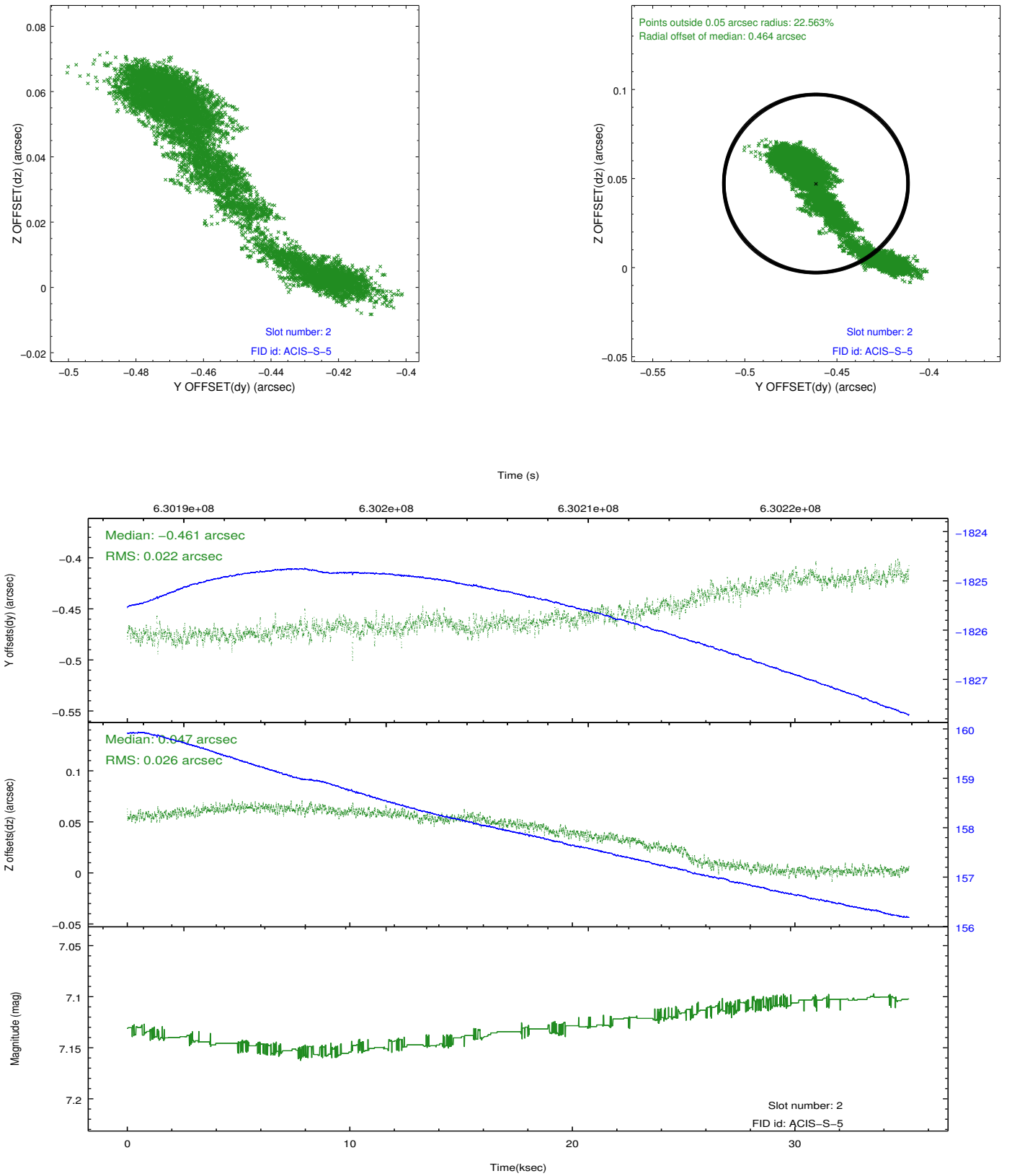
2.5.1 Slot 0



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)	2017.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	35.057400983334

A.2 Comments