

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19639 - L2 Version 1
Chandra X-Ray Center

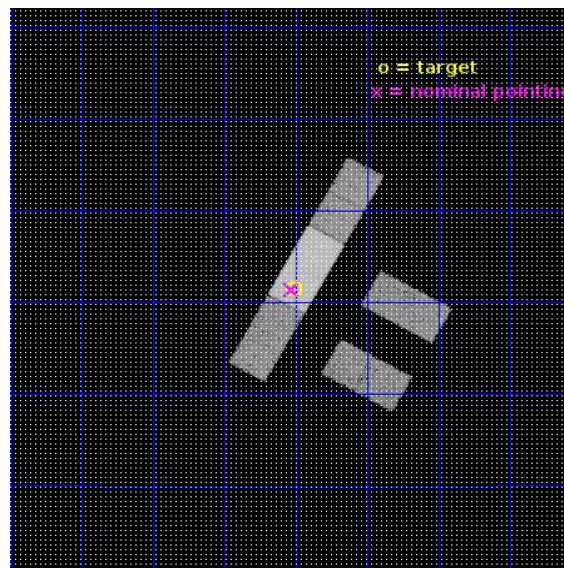
L2 Processing Date : Jan 5 2017

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1 Front

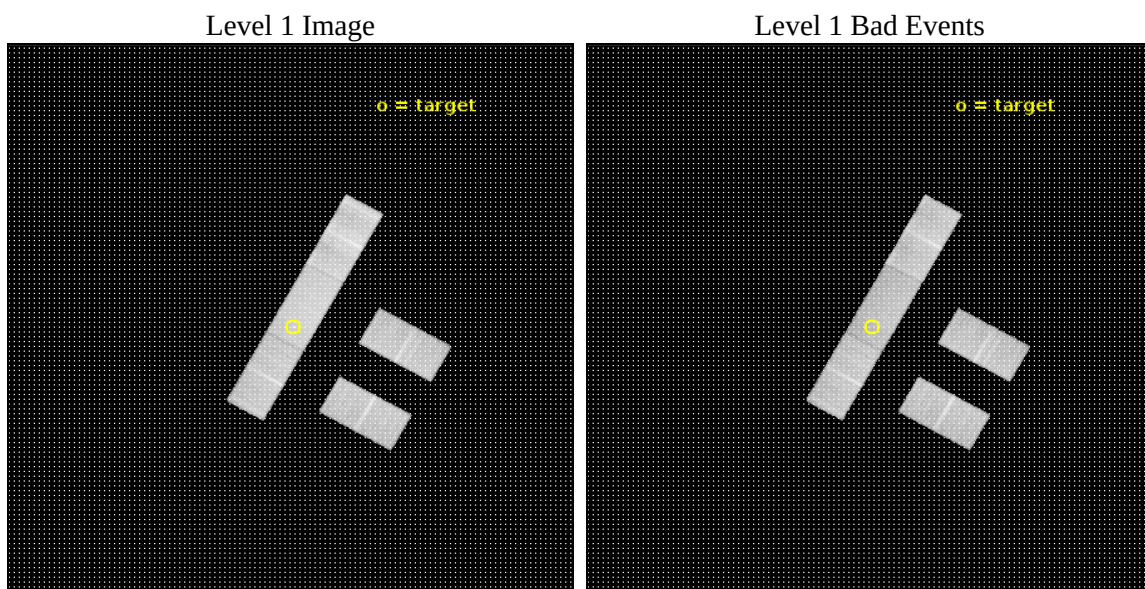
seq_num	703436	Sequence number
obs_id	19639	Observation id
title	MEASURING THE INNERMOST STABLE ORBIT USING MICROLENSING OF THE FE K LINE	Proposal title
observer	George Chartas	Principal investigator
object	Q2237+0305	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	340.12625	Observer's specified target RA [deg]
dec_targ	3.358	Observer's specified target Dec [deg]
ra_nom	340.13226991202	Nominal RA [deg]
dec_nom	3.3564648879182	Nominal Dec [deg]
roll_nom	299.15692313253	Nominal Roll [deg]
revision	1	Processing version of data
ontime	33717.722990155	Sum of GTIs [s]
livetime	32922.92485139	Livetime [s]
ontime2	33715.817799926	Sum of GTIs [s]
ontime3	33717.640910149	Sum of GTIs [s]
ontime6	33717.681950212	Sum of GTIs [s]
ontime7	33717.722990155	Sum of GTIs [s]
ontime8	33715.858850121	Sum of GTIs [s]
l2events	119142	Number of level 2 events



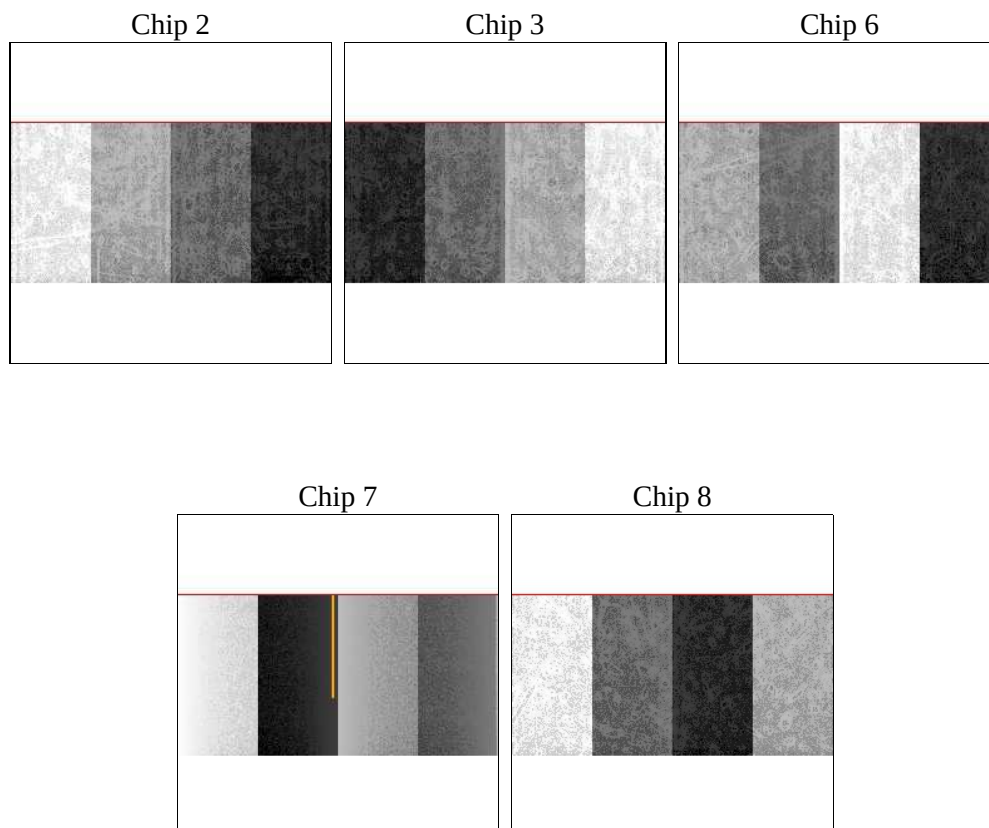
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	33663.207000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	33717.722990155	Sum of GTIs [s]
caldsver	4.7.3	 	ontime2	33715.817799926	Sum of GTIs [s]
date	2017-01-05T19:40:25	Date and time of file creation	ontime3	33717.640910149	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	33717.681950212	Sum of GTIs [s]
			ontime7	33717.722990155	Sum of GTIs [s]
			ontime8	33715.858850121	Sum of GTIs [s]
			l1events	705933	Number of level 1 events

2.1.4 Events

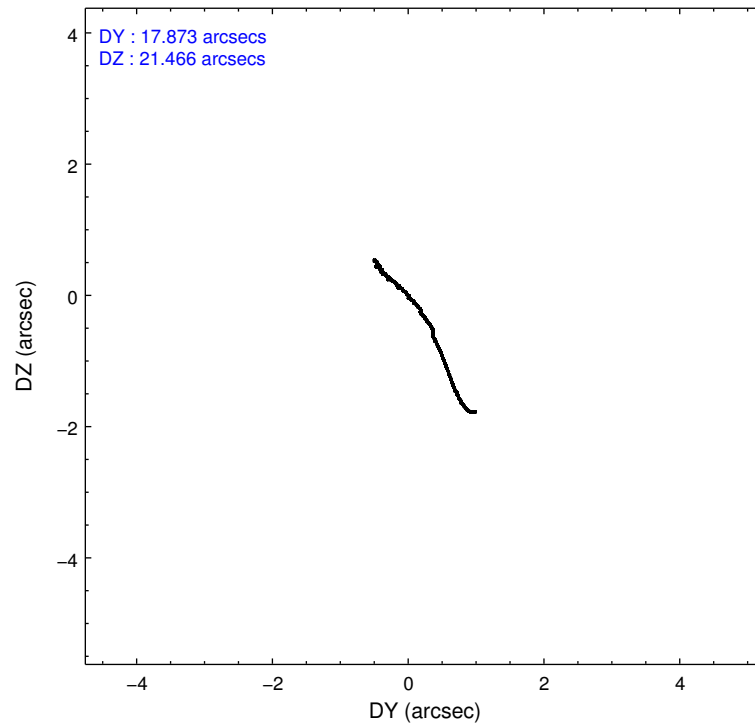
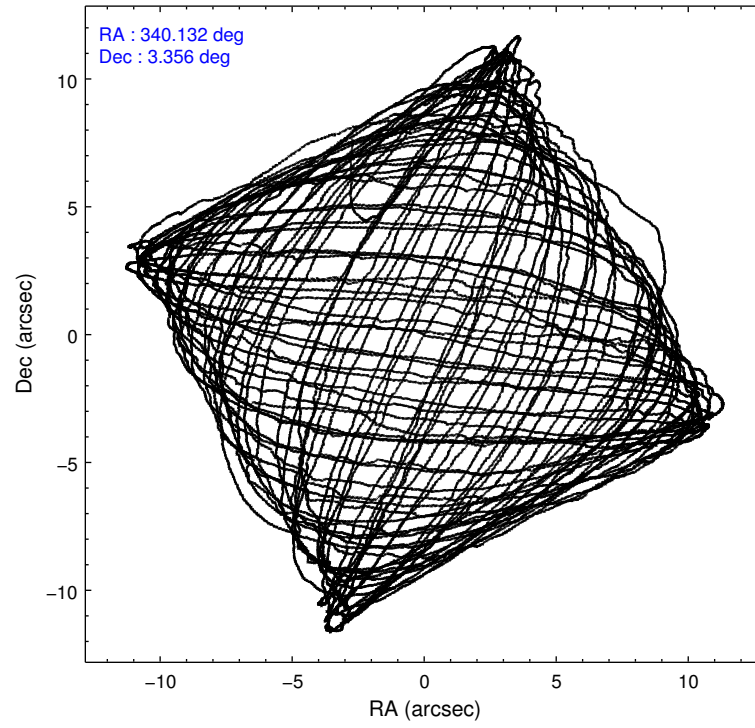
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	122327	120885	131041	158271	173409
rejected events	108635	107747	116489	86596	126898
rejected %	88%	89%	88%	54%	73%

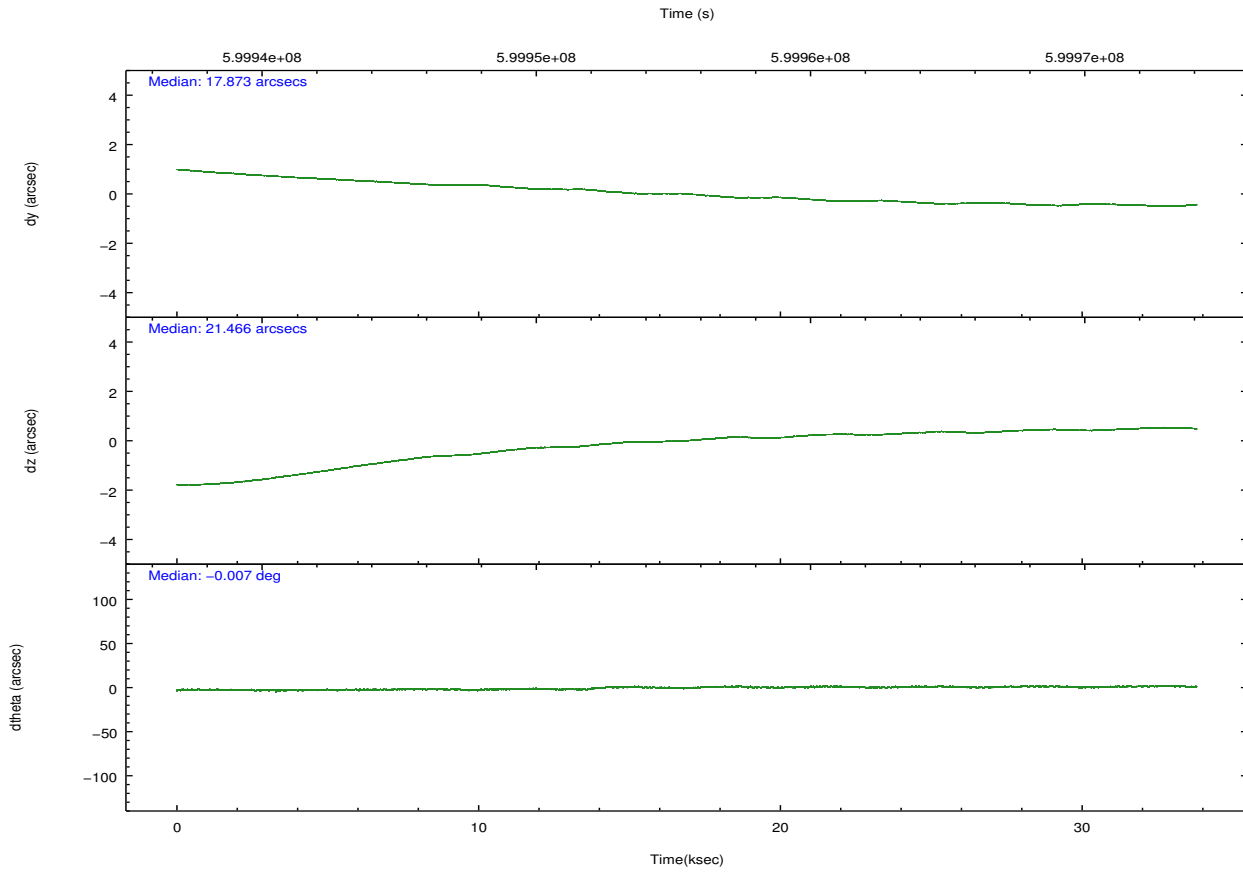
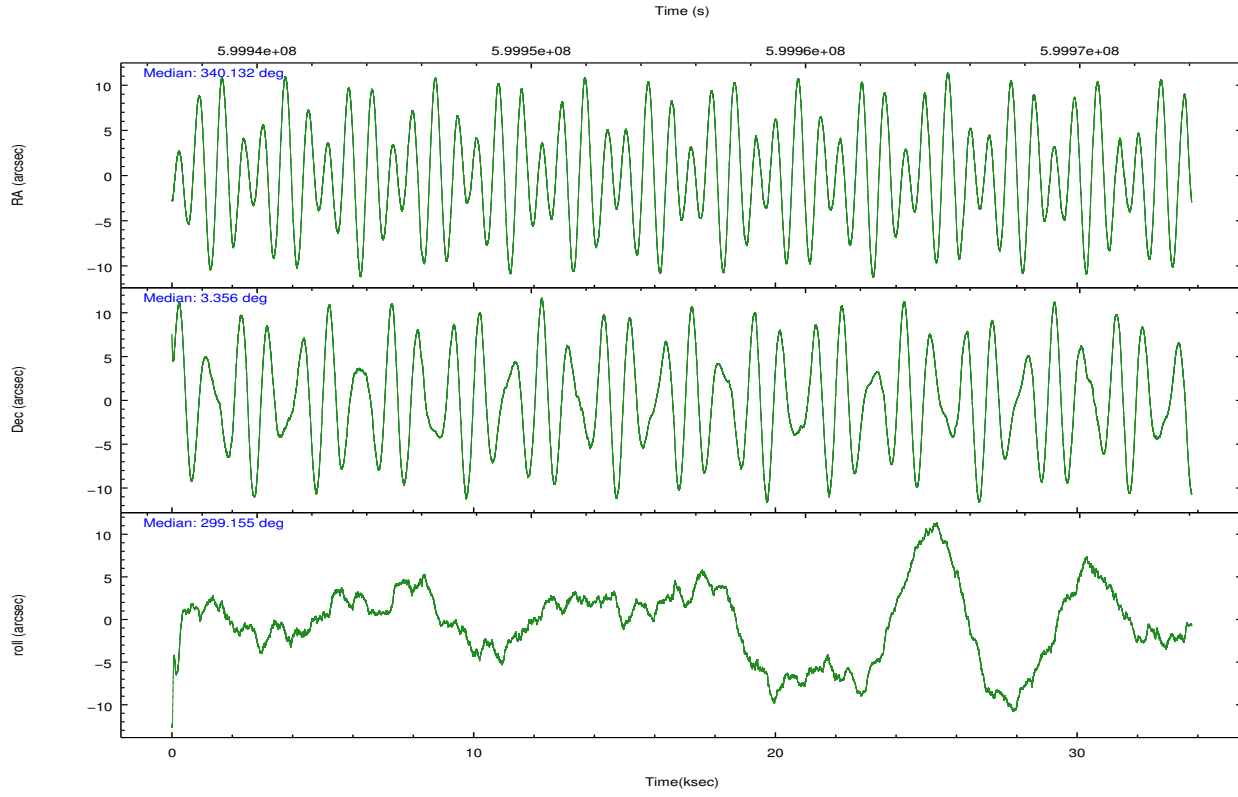
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	4512	4532	4560	6813	13119
	3%	3%	3%	4%	7%
grade 1 events	57	62	45	232	99
	0%	0%	0%	0%	0%
grade 2 events	3257	2828	3202	15158	10841
	2%	2%	2%	9%	6%
grade 3 events	1594	1638	1743	6816	5186
	1%	1%	1%	4%	2%
grade 4 events	1685	1558	1765	6657	4767
	1%	1%	1%	4%	2%
grade 5 events	4643	5738	6211	16325	8667
	3%	4%	4%	10%	4%
grade 6 events	2644	2585	3285	36233	12599
	2%	2%	2%	22%	7%
grade 7 events	103935	101944	110230	70037	118131
	84%	84%	84%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	340.108480	340.1322699120205	CCD I2 on	O1	Y
[deg] Pointing Dec	3.370204	3.356464887918249	CCD I3 on	O2	Y
[deg] Pointing Roll	299.001692	299.1569231325334	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.145094680475	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01257209746719923	CCD S4 on	O3	Y
[s] Observation start time (MET)	599938737.184000	599937512.59447	CCD S5 on	N	N
Observation start date	2017-01-04T17:37:48	2017-01-04T17:18:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	599972400.184000	599972623.459	On-chip summing requested	N	N
Observation end date	2017-01-05T02:58:51	2017-01-05T03:03:43	Subarray requested	CUSTOM	1/2
Read mode	TIMED	TIMED	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



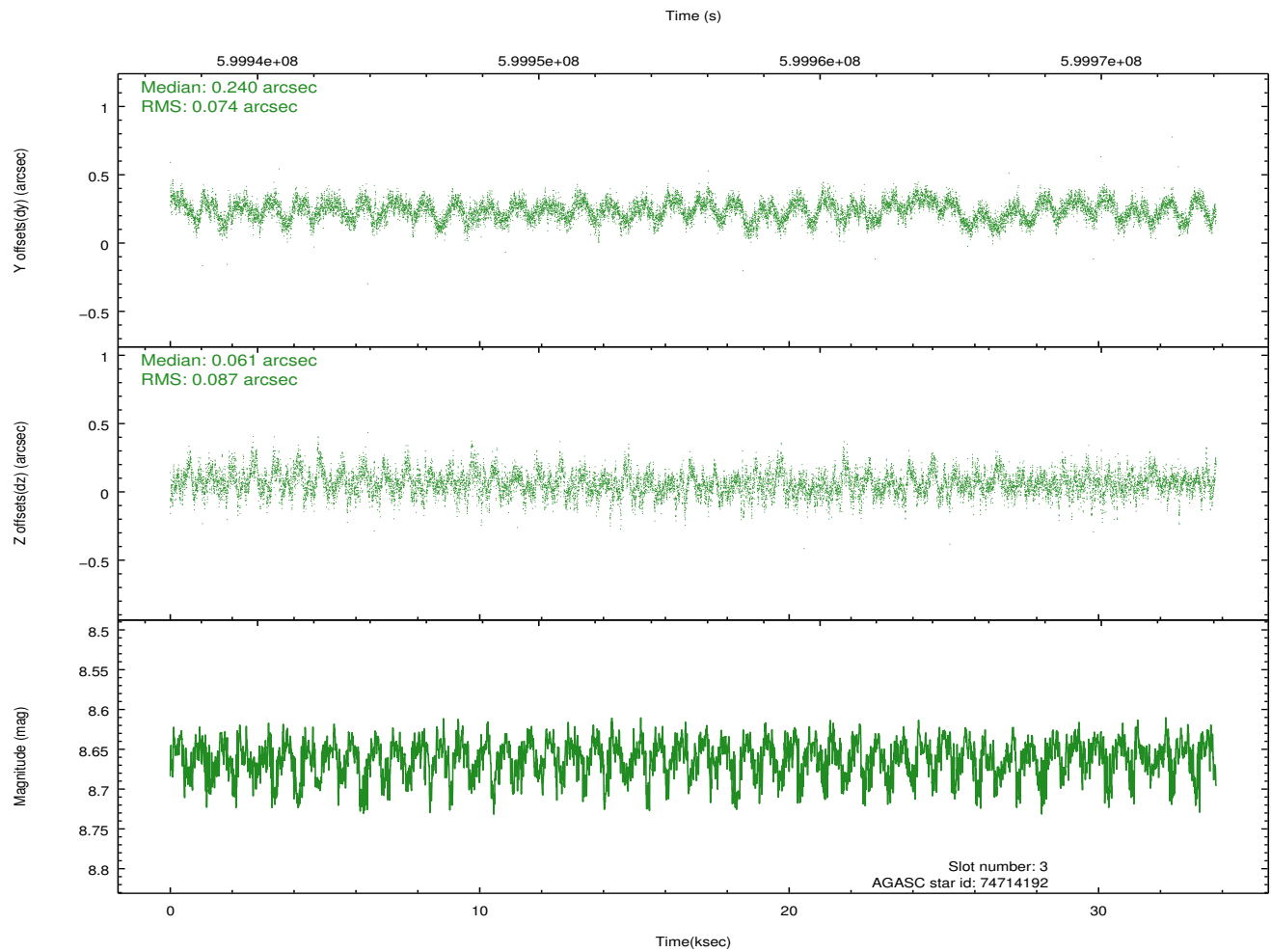
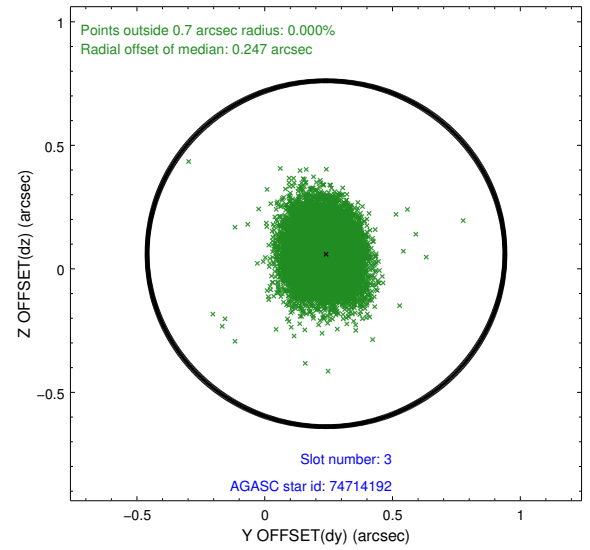
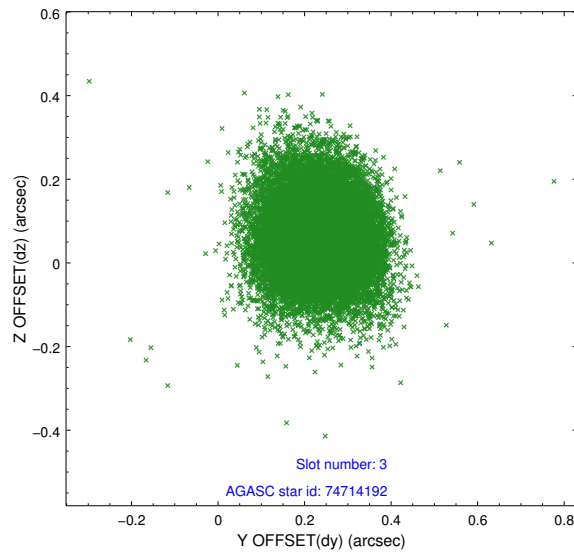


Slot Statistics

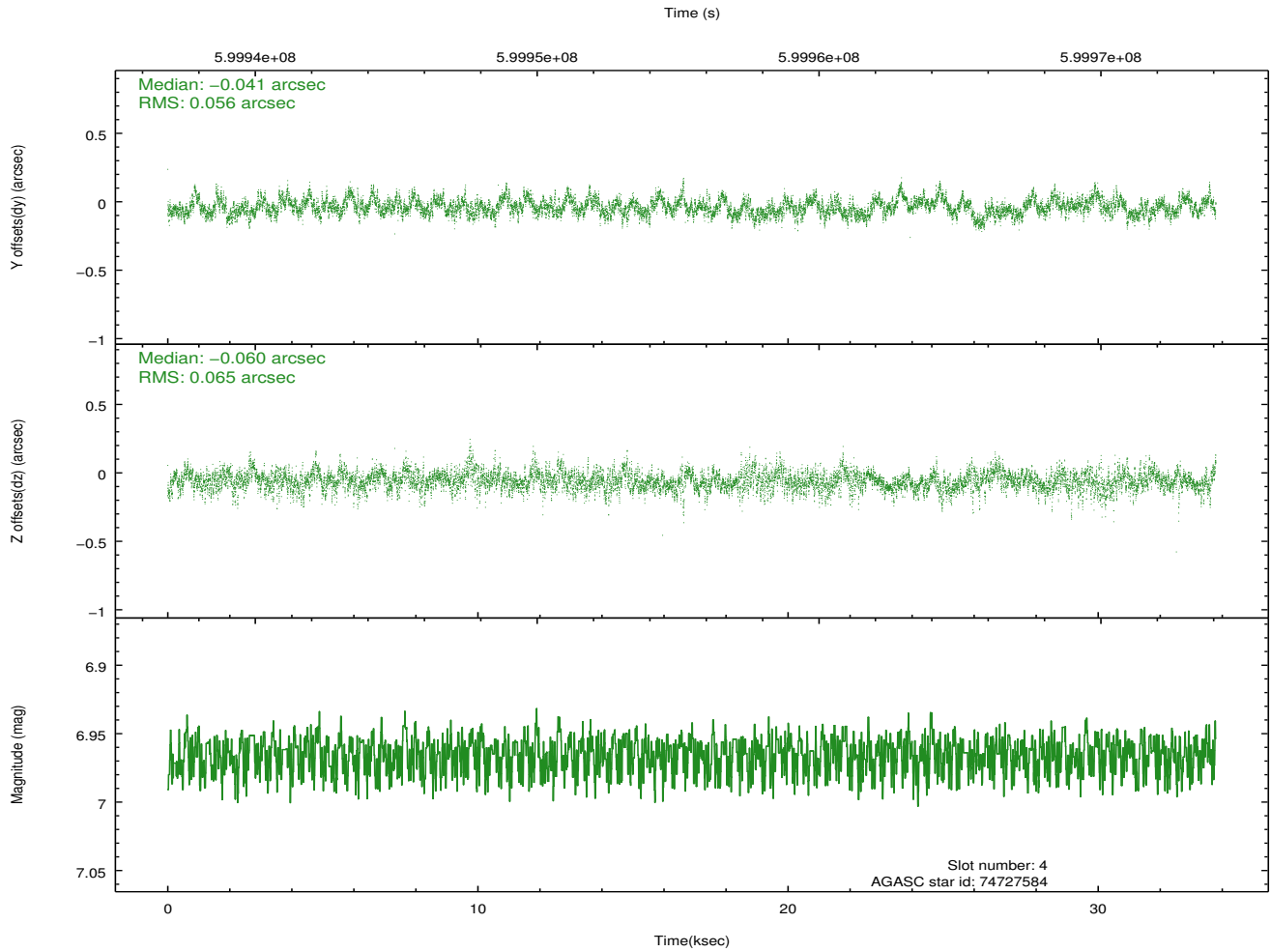
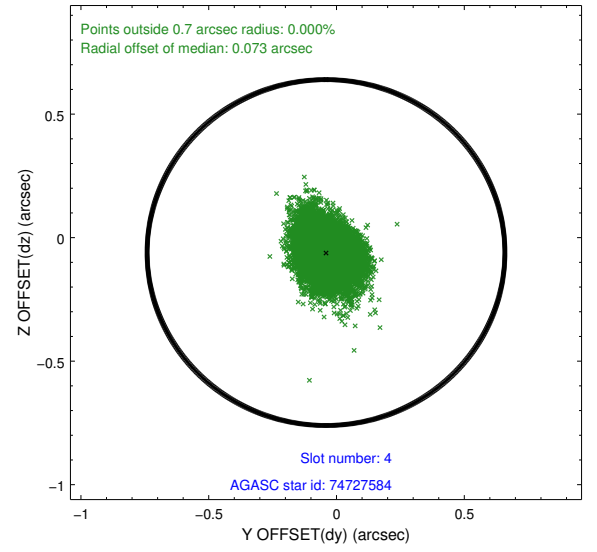
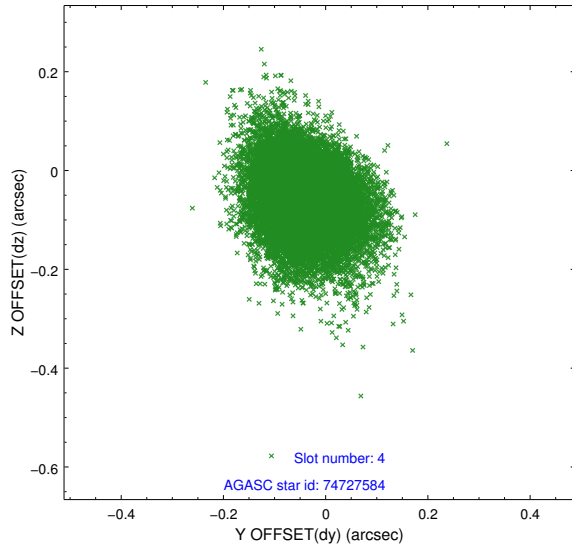
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.11	8243	0.062	-0.080	0.021	0.029	0.000000	0.000000	925.16	-1738.36
1	FID		ACIS-S-4	7.13	8242	0.325	0.032	0.037	0.066	0.000000	0.000000	2142.82	165.89
2	FID		ACIS-S-5	7.12	8242	-0.421	0.060	0.028	0.041	0.000000	0.000000	-1824.18	159.46
3	GUIDE	used	74714192	8.66	16478	0.240	0.061	0.121	0.197	339.623837	3.342441	-756.77	-1571.21
4	GUIDE	used	74727584	6.97	16486	-0.041	-0.060	0.089	0.151	339.633744	3.463732	-1121.62	-1328.42
5	GUIDE	used	74842128	8.50	16473	-0.131	-0.155	0.112	0.191	340.118134	3.132788	764.61	-384.39
6	GUIDE	used	74854992	8.26	16480	-0.161	-0.229	0.098	0.164	340.342808	3.603730	-326.78	1143.58
7	GUIDE	used	74855640	8.81	16472	0.096	0.401	0.149	0.265	340.341123	3.746937	-780.67	1389.32

2.4 Star Slots

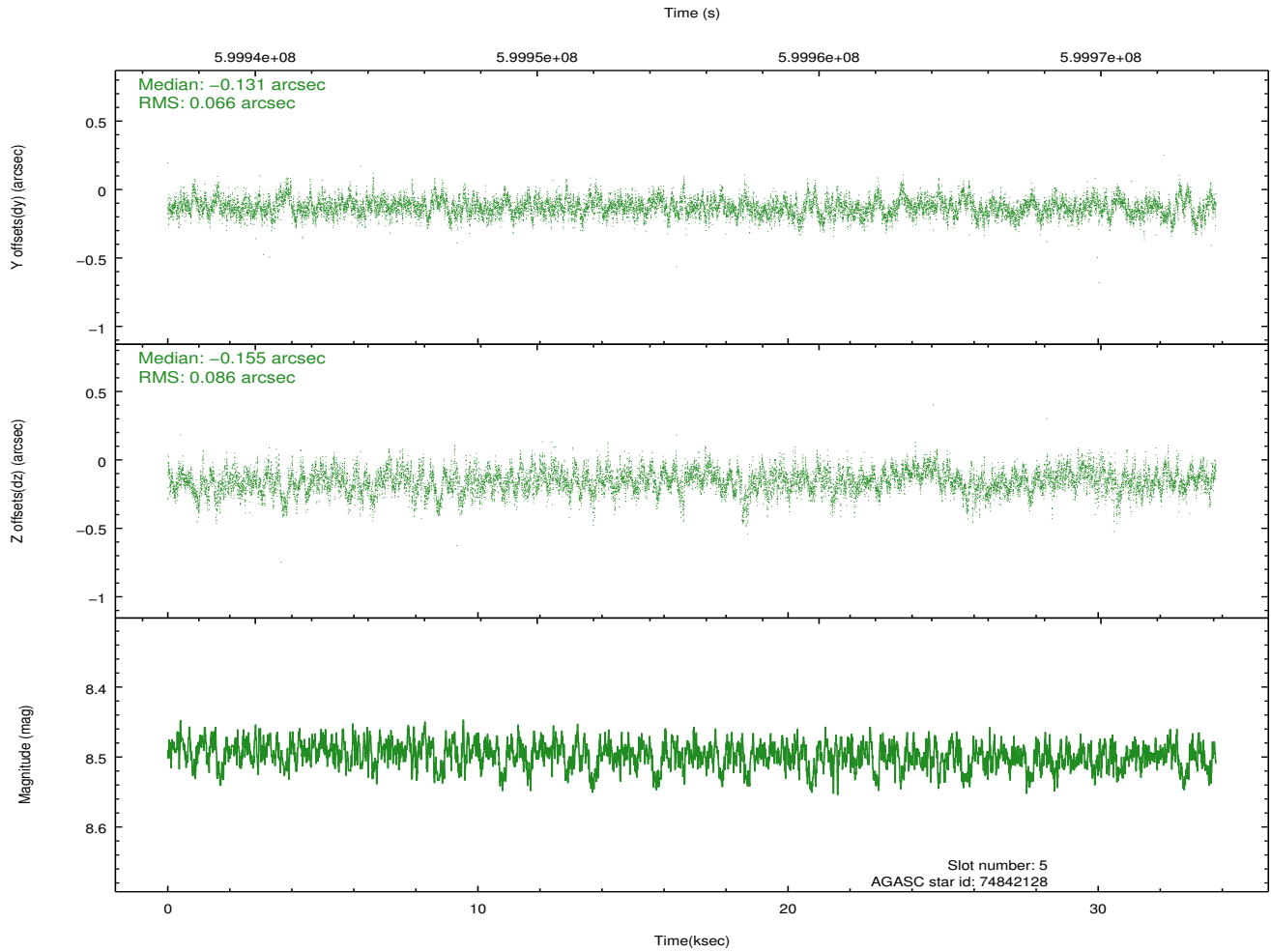
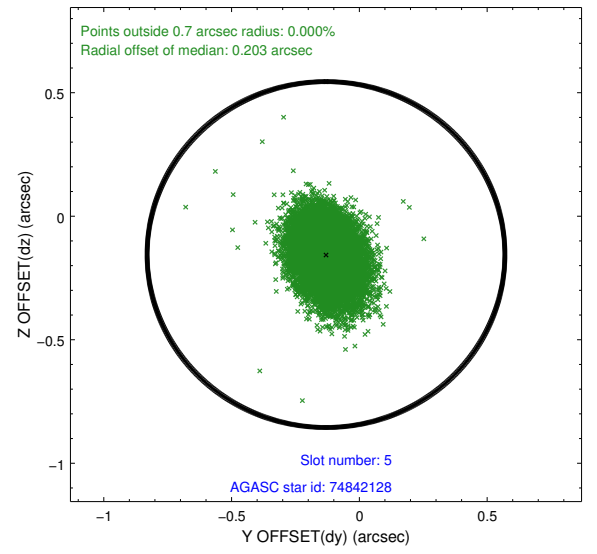
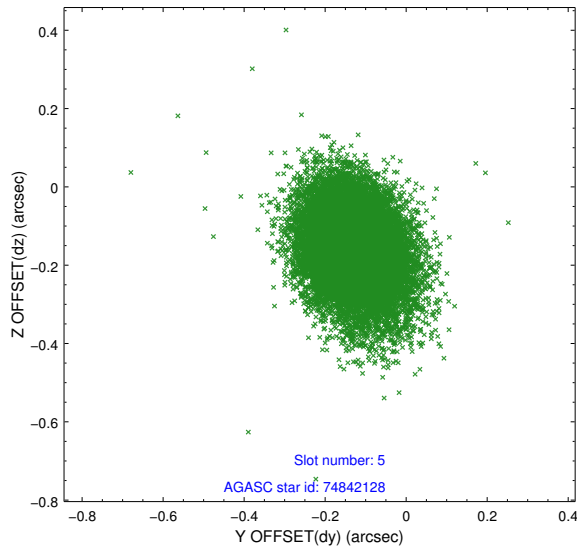
2.4.1 Slot 3



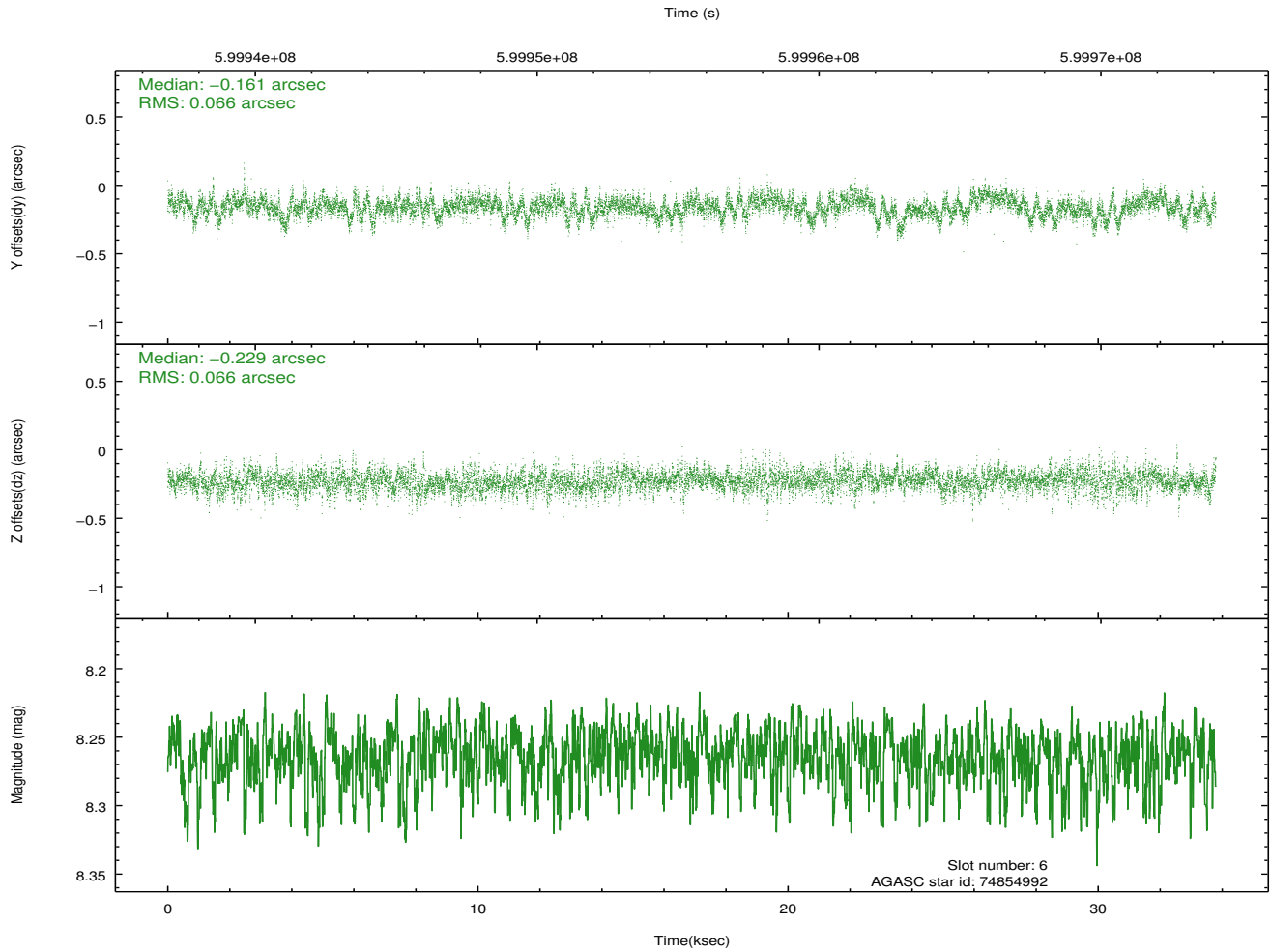
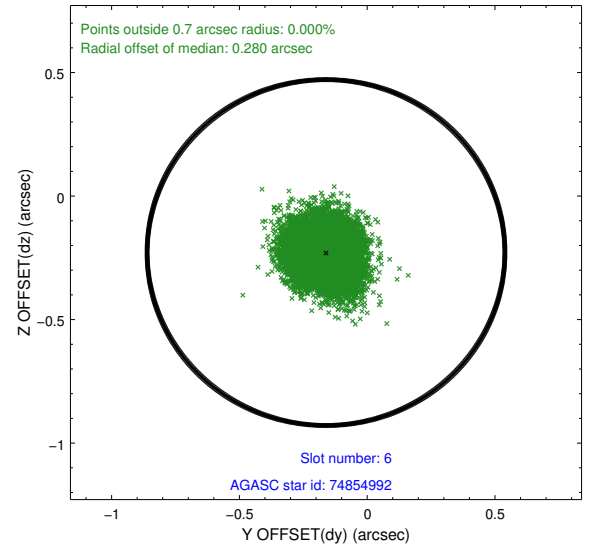
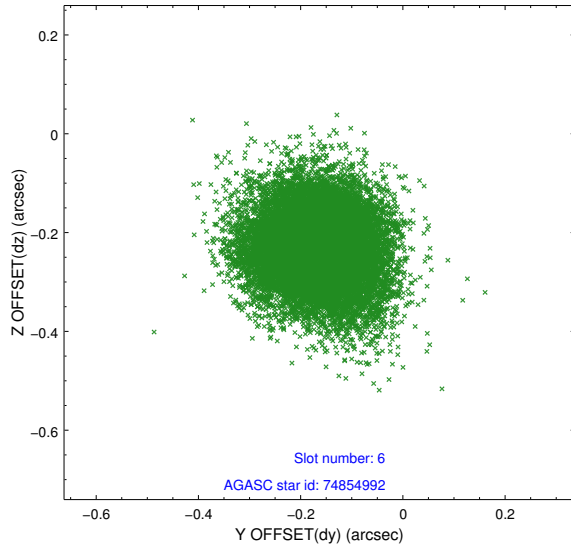
2.4.2 Slot 4



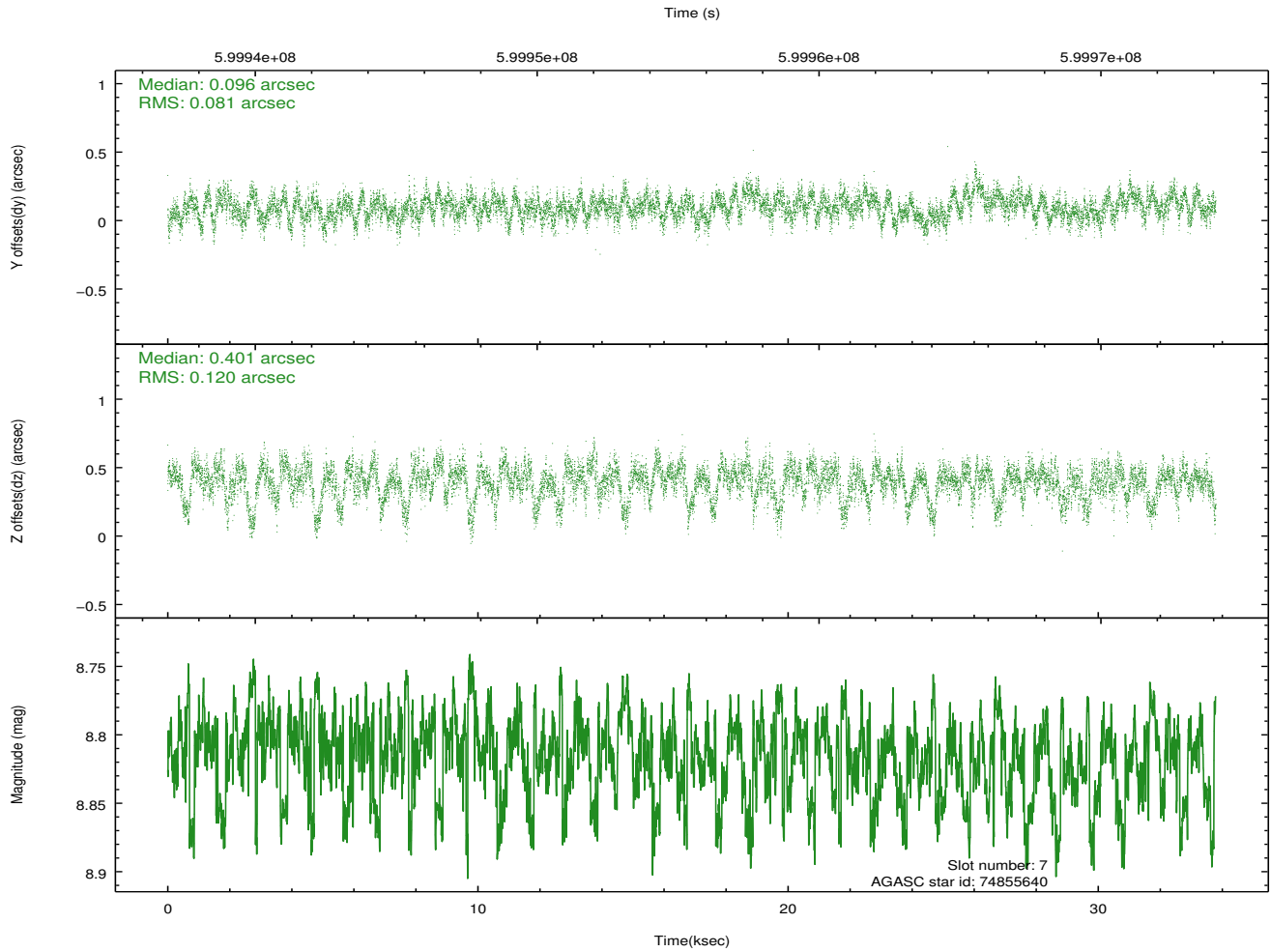
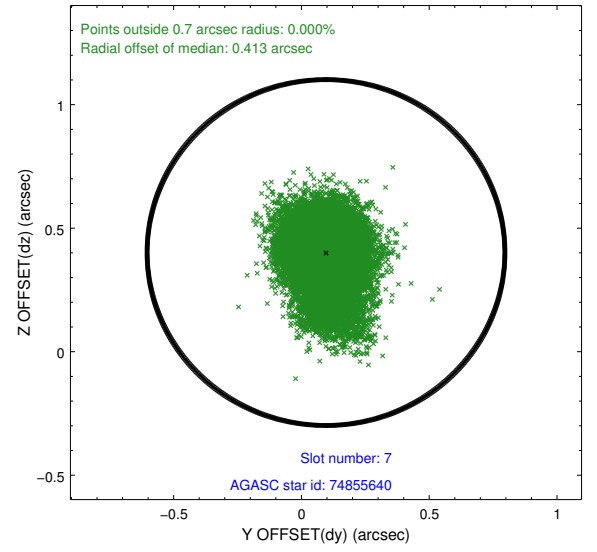
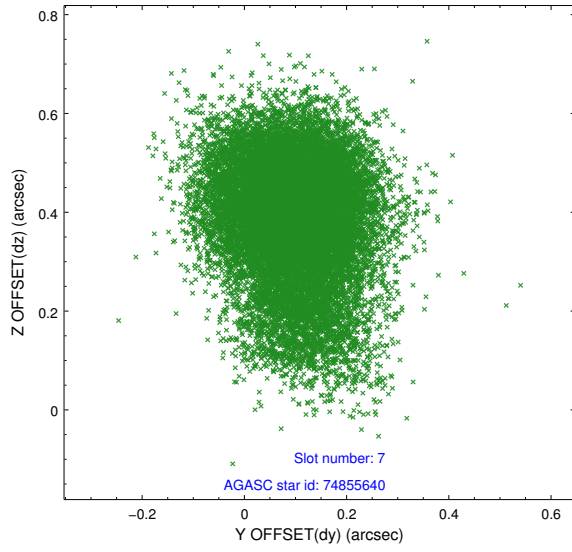
2.4.3 Slot 5



2.4.4 Slot 6

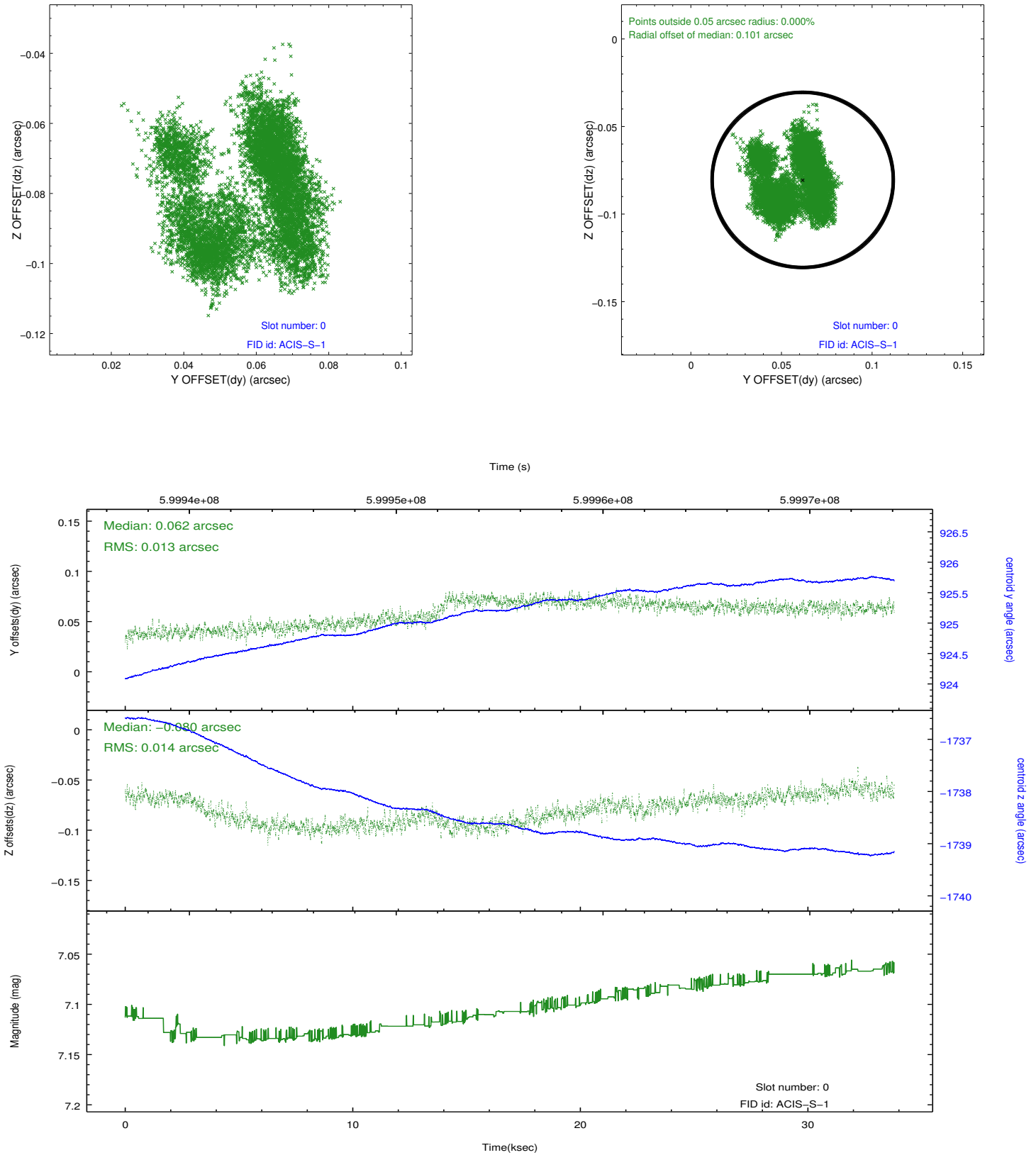


2.4.5 Slot 7

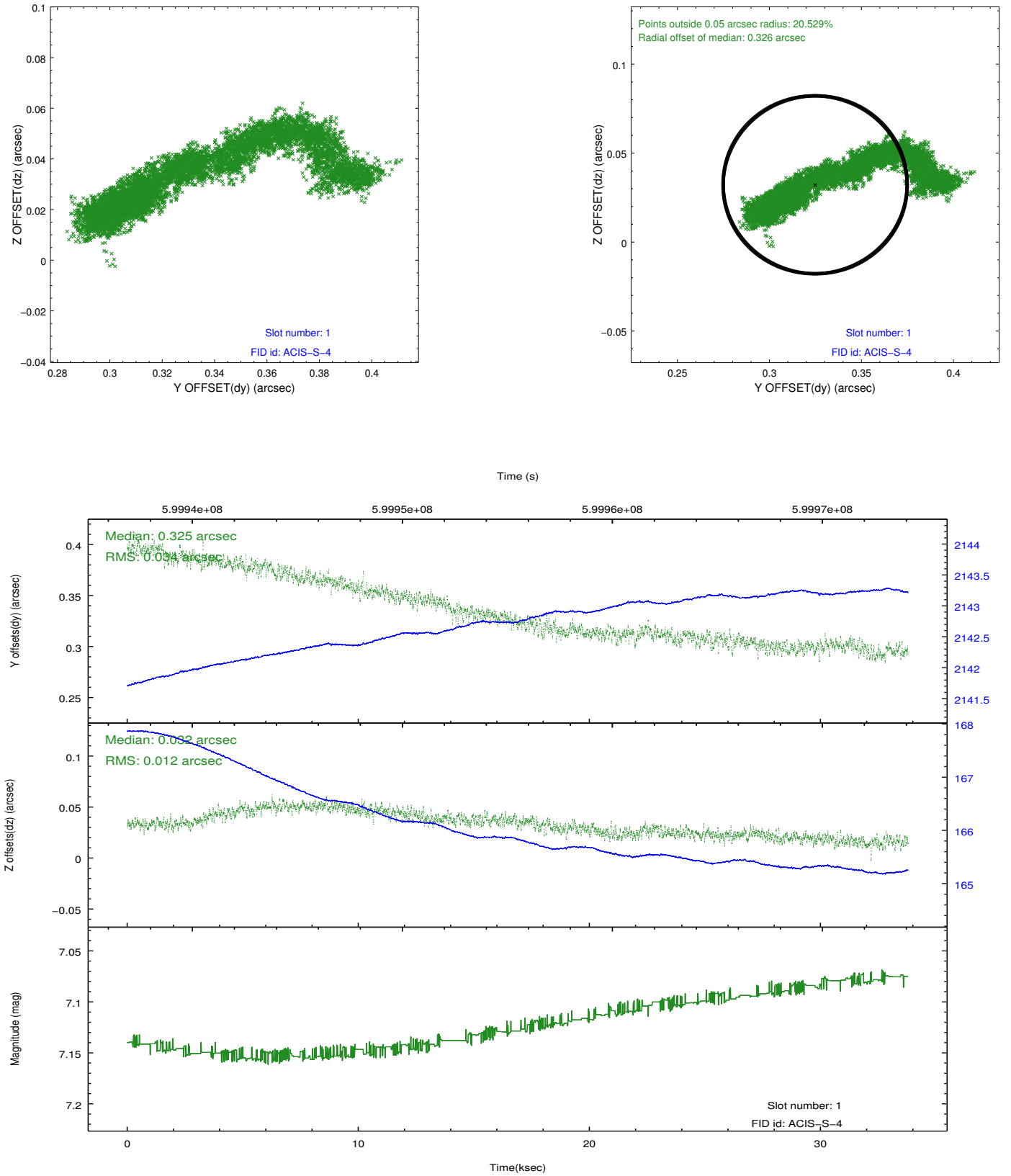


2.5 FID Slots

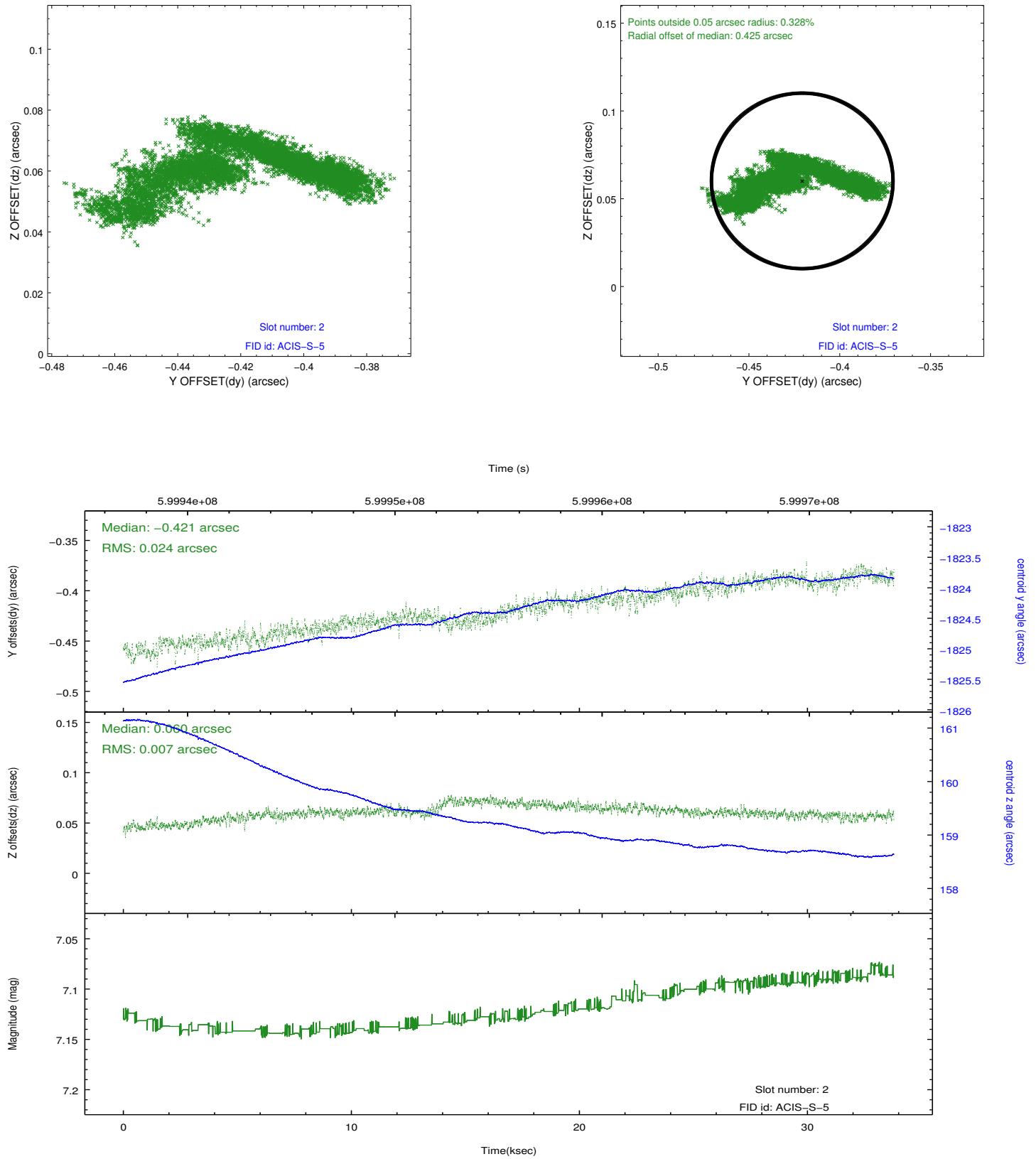
2.5.1 Slot 0



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)	2017.01.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	33.717722990155

A.2 Comments