

V&V Reference Report

L2 ASCDS Version : 8.4.4

Observation 9381 - L2 Version 2
Chandra X-Ray Center

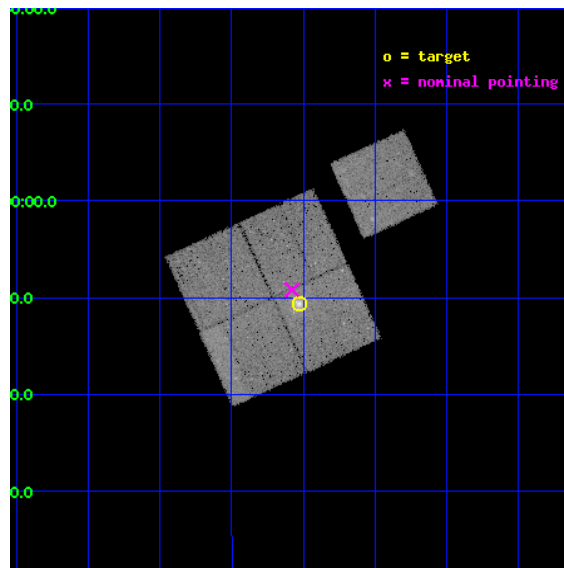
L2 Processing Date : May 5 2012

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

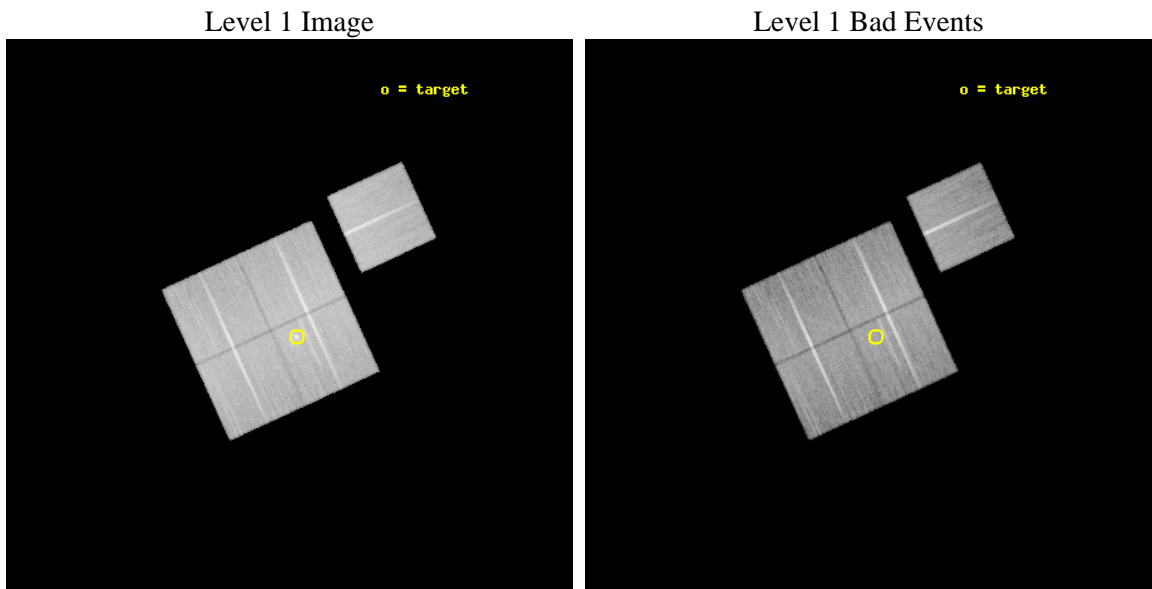
seq_num	800718	Sequence number
obs_id	9381	Observation id
title	Probing Dark Energy with Relaxed Galaxy Clusters	Proposal title
observer	Prof. Steven Allen	Principal investigator
object	MACS1311	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	197.756667	Observer's specified target RA [deg]
dec_targ	-3.177778	Observer's specified target Dec [deg]
ra_nom	197.76990129824	Nominal RA [deg]
dec_nom	-3.1533552954074	Nominal Dec [deg]
roll_nom	65.419933003693	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30131.877291024	Sum of GTIs [s]
livetime	29738.182131451	Livetime [s]
ontime0	30135.018261313	Sum of GTIs [s]
ontime1	30135.018271267	Sum of GTIs [s]
ontime2	30135.018271267	Sum of GTIs [s]
ontime3	30131.877291024	Sum of GTIs [s]
ontime6	30141.300231814	Sum of GTIs [s]
l2events	110488	Number of level 2 events



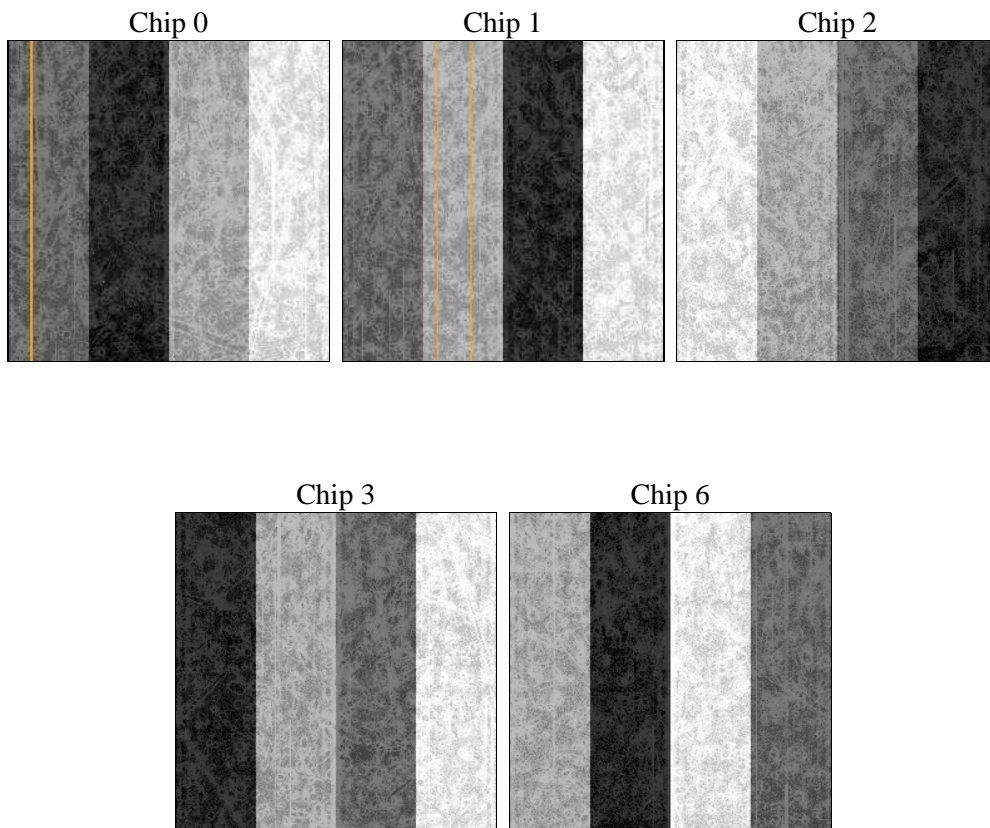
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30131.877291024	Sum of GTIs [s]
caldbver	4.4.9	 	ontime0	30135.018261313	Sum of GTIs [s]
date	2012-05-05T22:52:51	Date and time of file creation	ontime1	30135.018271267	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30135.018271267	Sum of GTIs [s]
			ontime3	30131.877291024	Sum of GTIs [s]
			ontime6	30141.300231814	Sum of GTIs [s]
			l1events	1276889	Number of level 1 events

2.1.4 Events

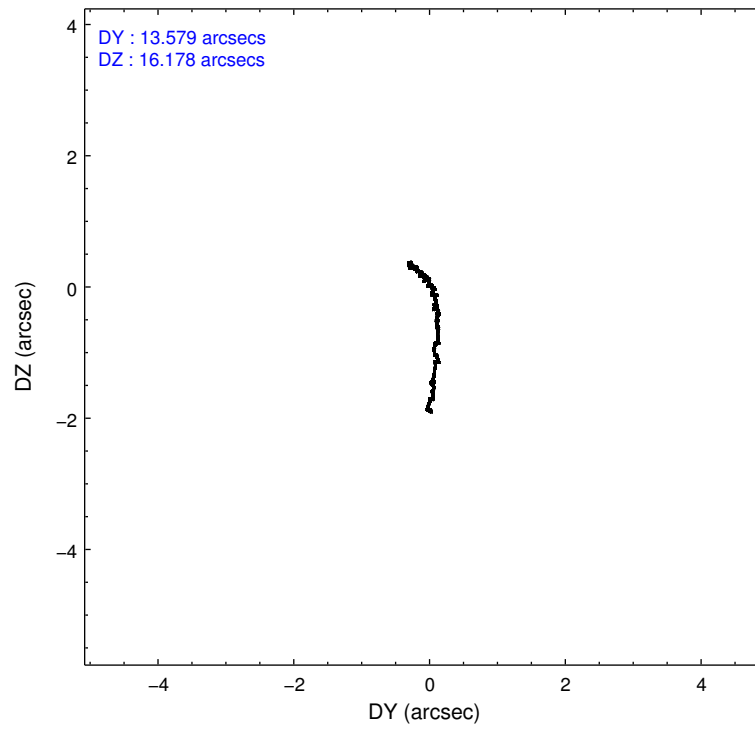
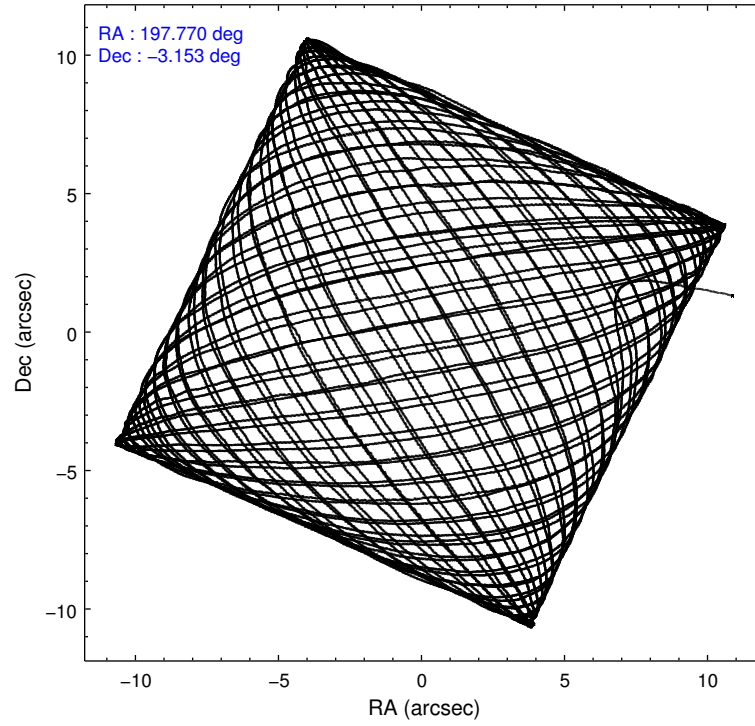
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	240976	240712	269015	264109	262077
rejected events	215751	212677	244150	235419	236579
rejected %	89%	88%	90%	89%	90%

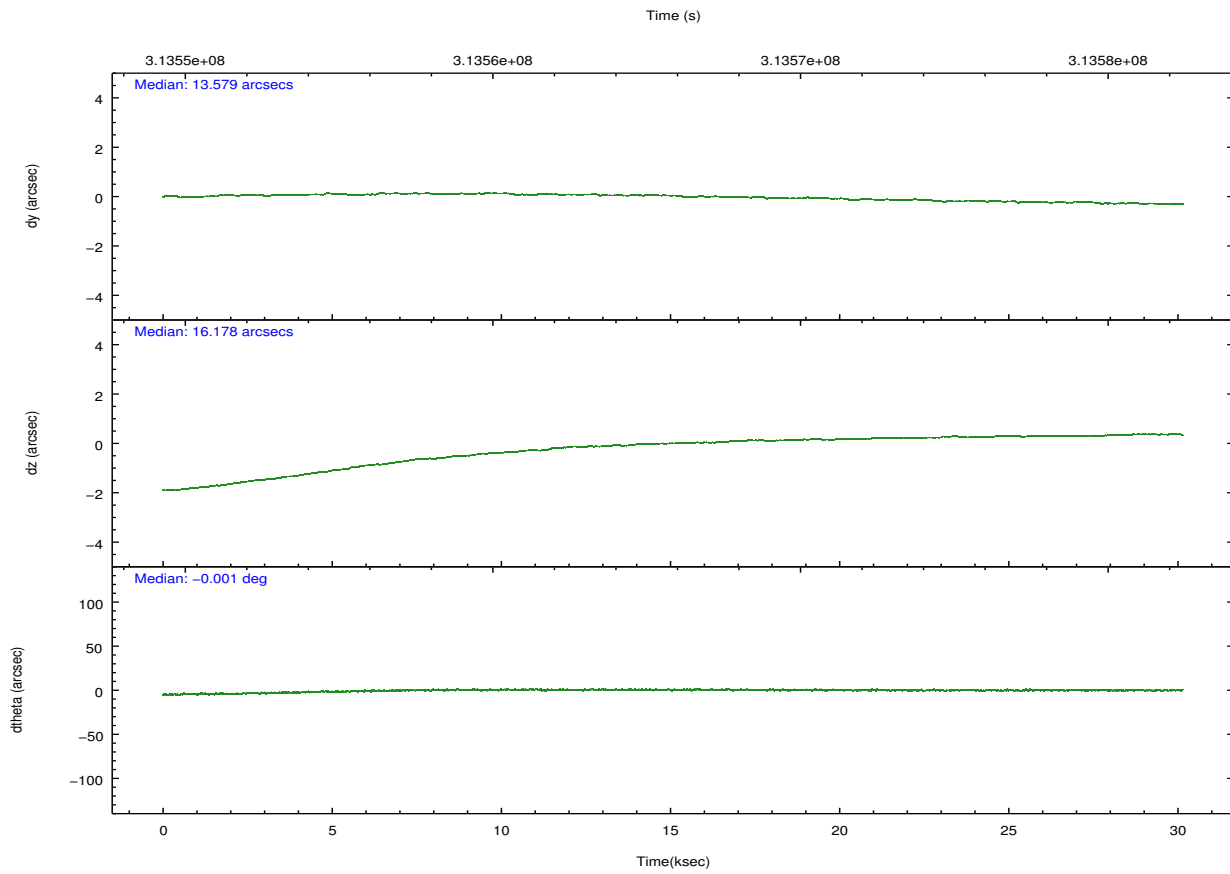
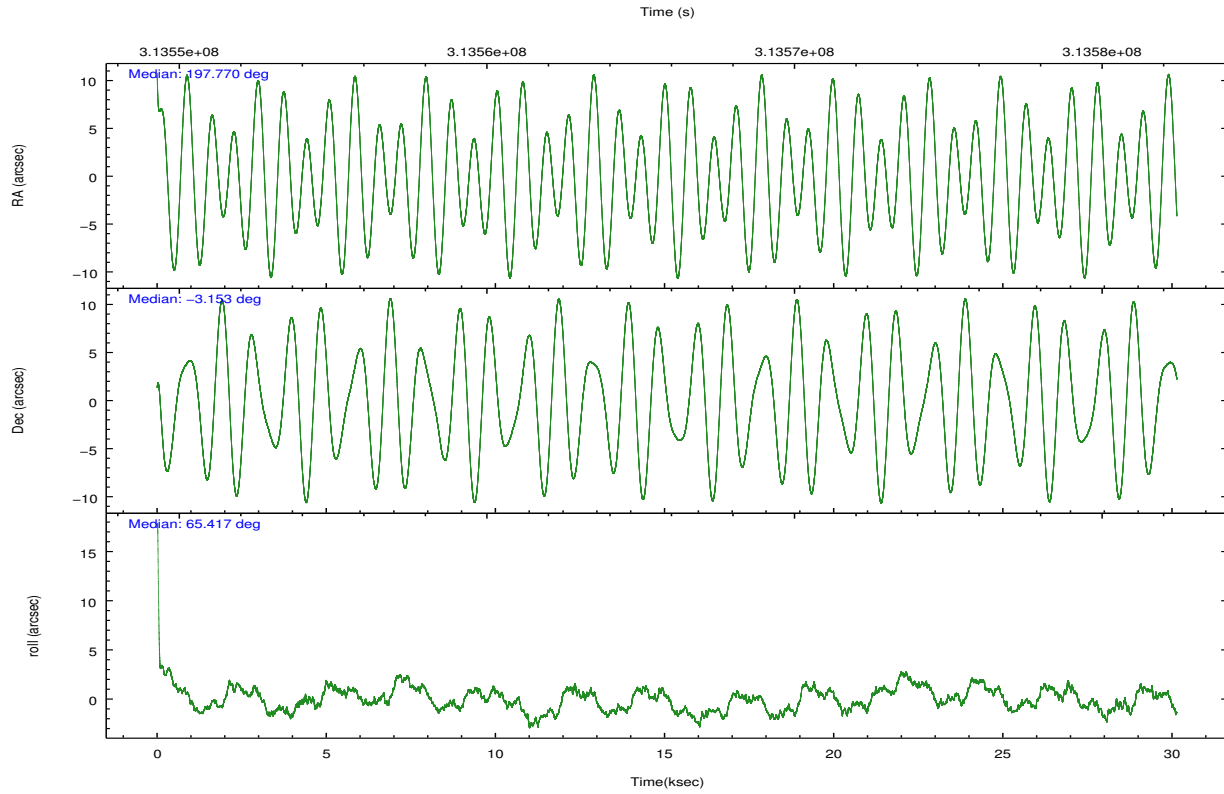
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	8866	10258	9133	12738	9099
	3%	4%	3%	4%	3%
grade 1 events	147	130	170	186	128
	0%	0%	0%	0%	0%
grade 2 events	6251	6412	6079	5785	5818
	2%	2%	2%	2%	2%
grade 3 events	2874	3037	2616	2763	2768
	1%	1%	0%	1%	1%
grade 4 events	2673	2979	2746	2764	2647
	1%	1%	1%	1%	1%
grade 5 events	8881	9767	8442	10172	9996
	3%	4%	3%	3%	3%
grade 6 events	4862	5689	4616	4956	5515
	2%	2%	1%	1%	2%
grade 7 events	206422	202440	235213	224745	226106
	85%	84%	87%	85%	86%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	197.772589	197.7699012982388	CCD I2 on	Y	Y
[deg] Pointing Dec	-3.180716	-3.153355295407432	CCD I3 on	Y	Y
[deg] Pointing Roll	65.211391	65.41993300369312	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-229.442463	-229.4438428438578	CCD S3 on	N	N
[mm] SIM translation stage offset	-4.15	-4.148610159071865	CCD S4 on	N	N
[s] Observation start time (MET)	313550930.184000	313549773.51946	CCD S5 on	N	N
Observation start date	2007-12-09T01:27:45	2007-12-09T01:09:33	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	313580930.184000	313582099.45852	On-chip summing requested	N	N
Observation end date	2007-12-09T09:47:45	2007-12-09T10:08:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



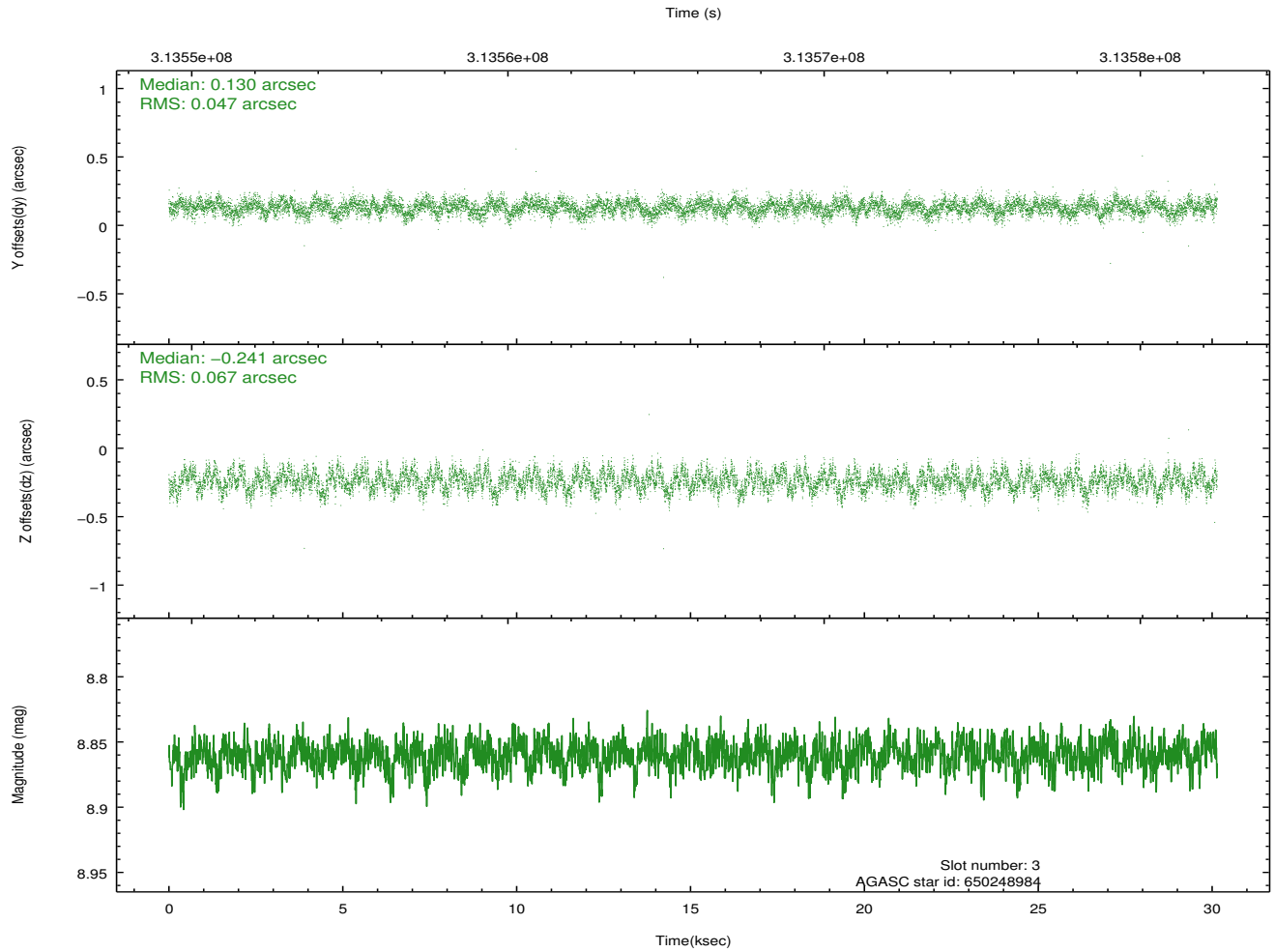
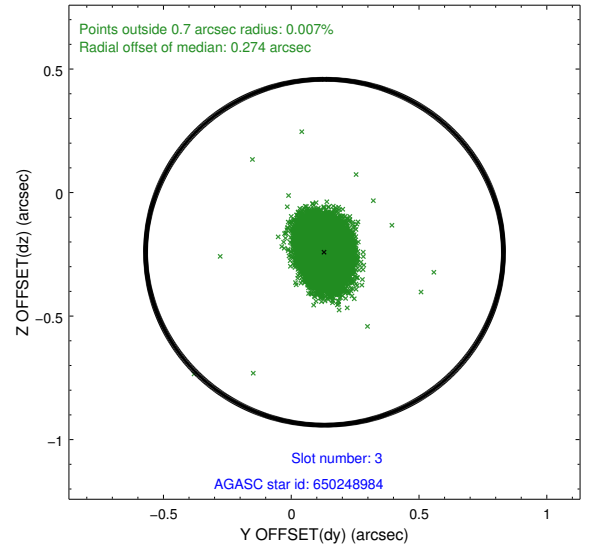
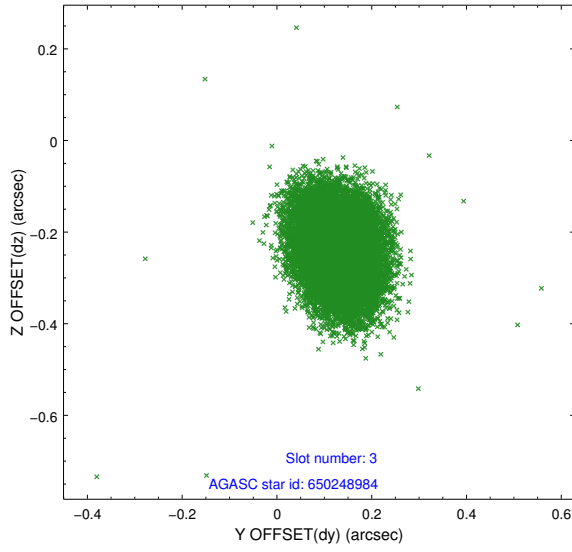


Slot Statistics

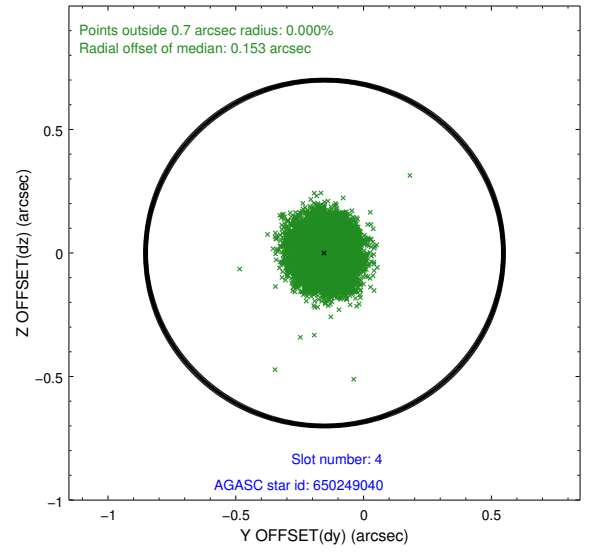
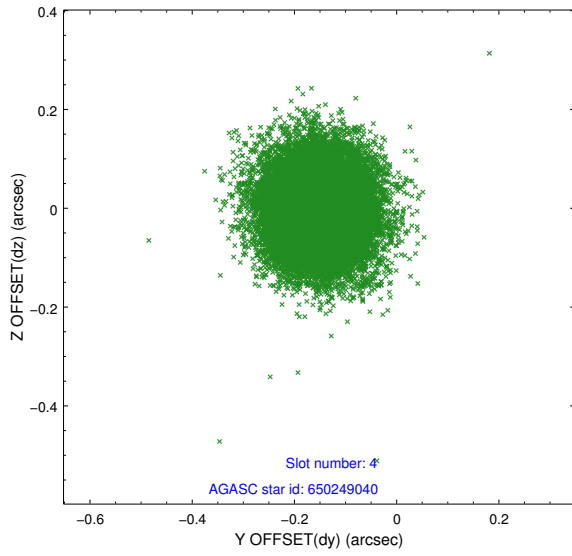
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.22	7352	0.125	-0.056	0.015	0.037	0.000000	0.000000	925.99	-924.70
1	FID	ACIS-I-5	7.23	7353	-0.263	0.117	0.013	0.035	0.000000	0.000000	-1822.44	972.95
2	FID	ACIS-I-6	7.23	7352	0.045	0.013	0.019	0.036	0.000000	0.000000	391.42	1617.41
3	GUIDE	650248984	8.86	14696	0.130	-0.241	0.087	0.140	197.683115	-3.291898	-497.91	123.42
4	GUIDE	650249040	9.31	14680	-0.153	-0.000	0.095	0.151	197.994714	-3.007393	901.34	-462.69
5	BAD	650249416	9.34	257	-6.647	-1.902	7.072	13.851	198.518267	-2.806982	2336.77	-1871.04
6	GUIDE	650254416	6.90	14704	-0.146	0.305	0.051	0.081	198.338645	-3.494561	-173.00	-2320.00
7	GUIDE	650251064	8.35	14622	0.169	-0.058	0.074	0.116	197.822546	-3.915433	-2325.55	-1271.65

2.4 Star Slots

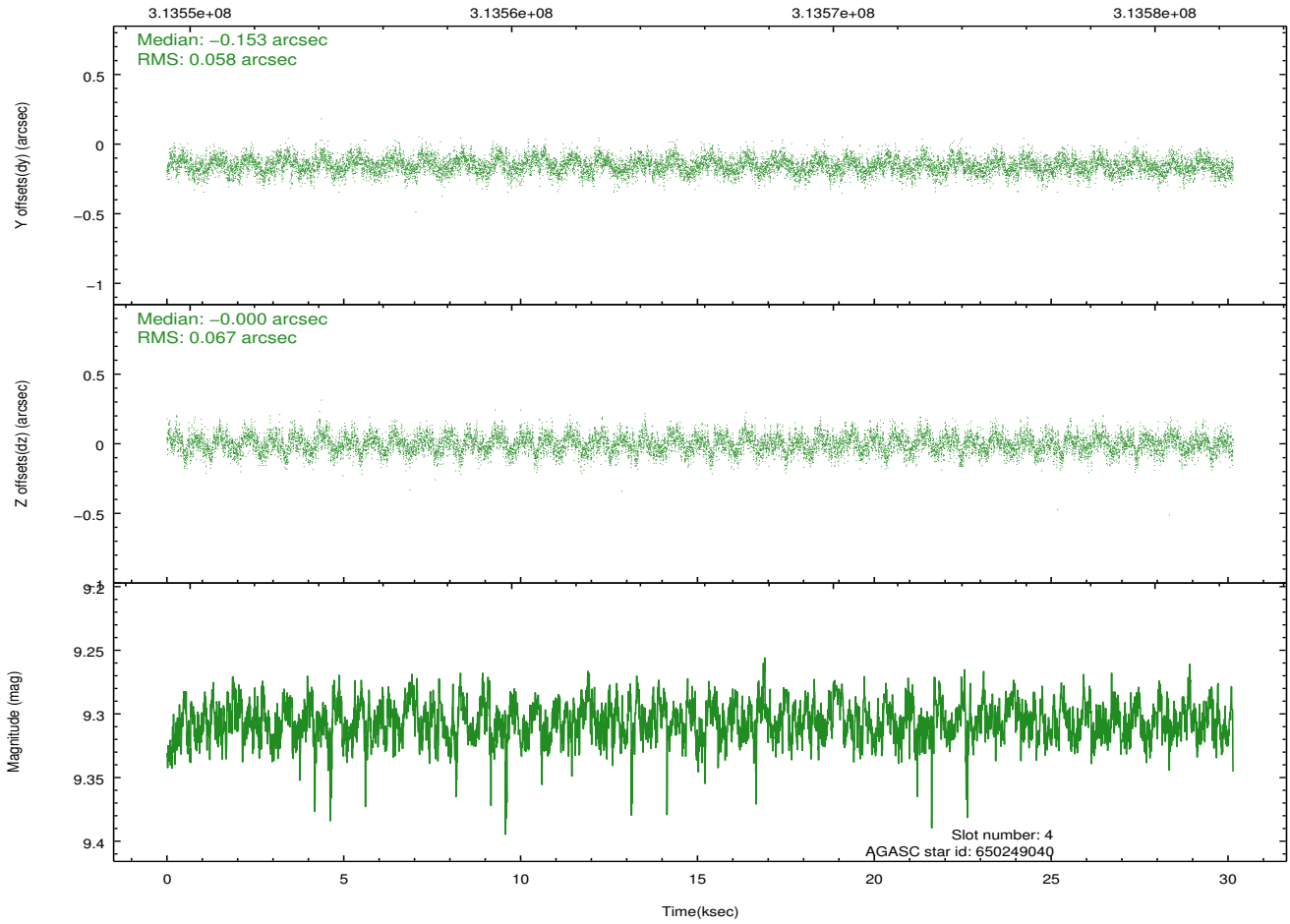
2.4.1 Slot 3



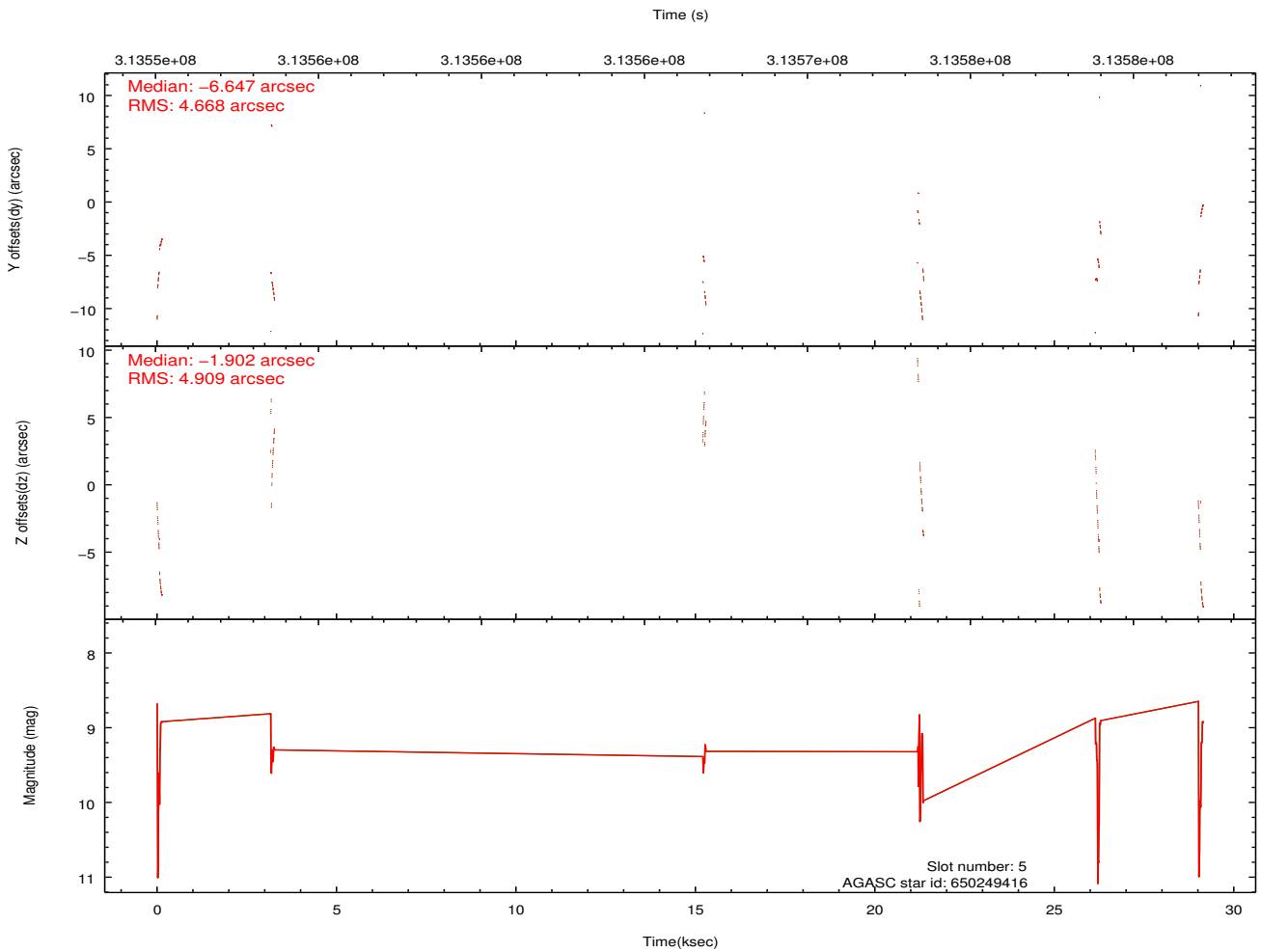
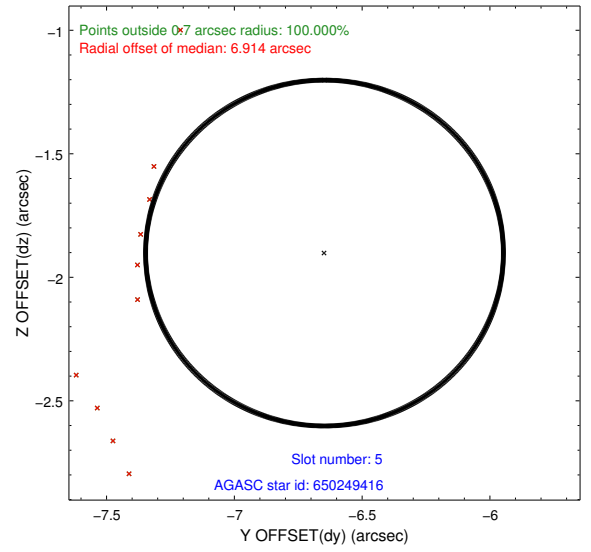
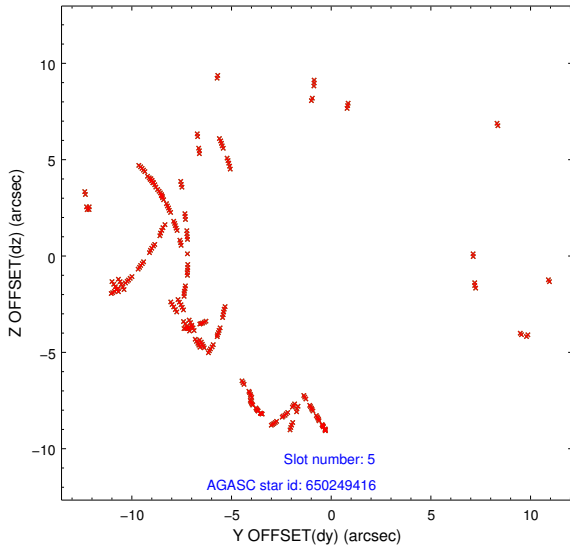
2.4.2 Slot 4



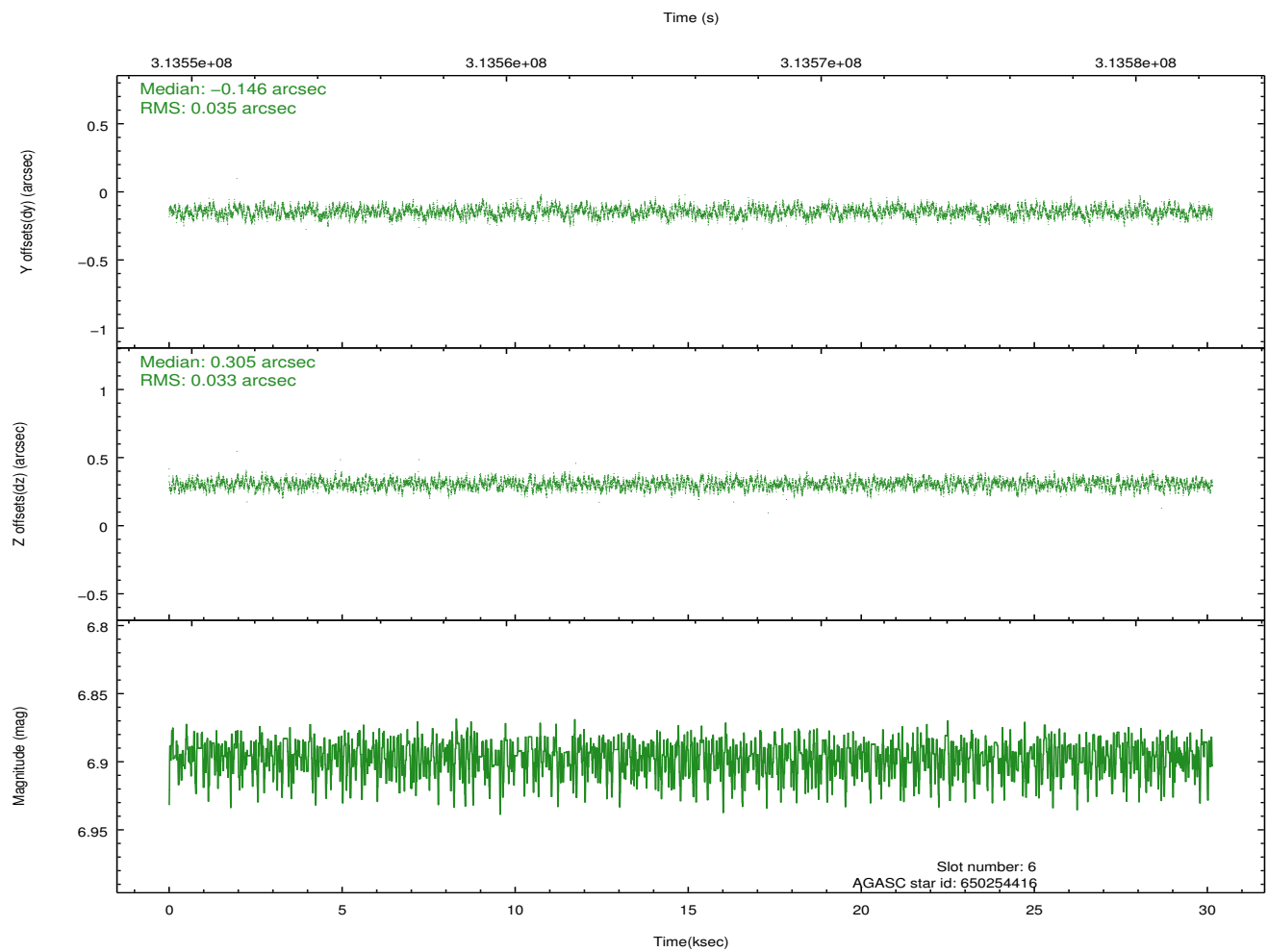
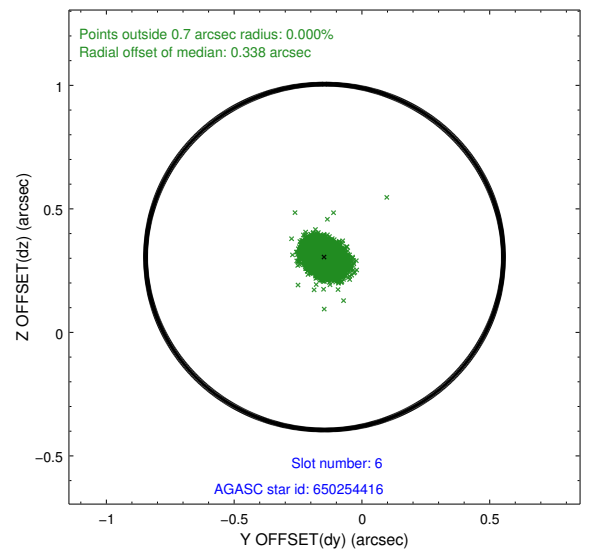
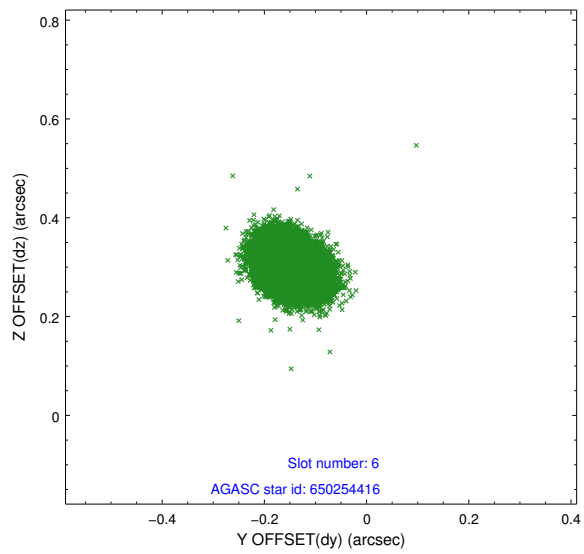
Time (s)



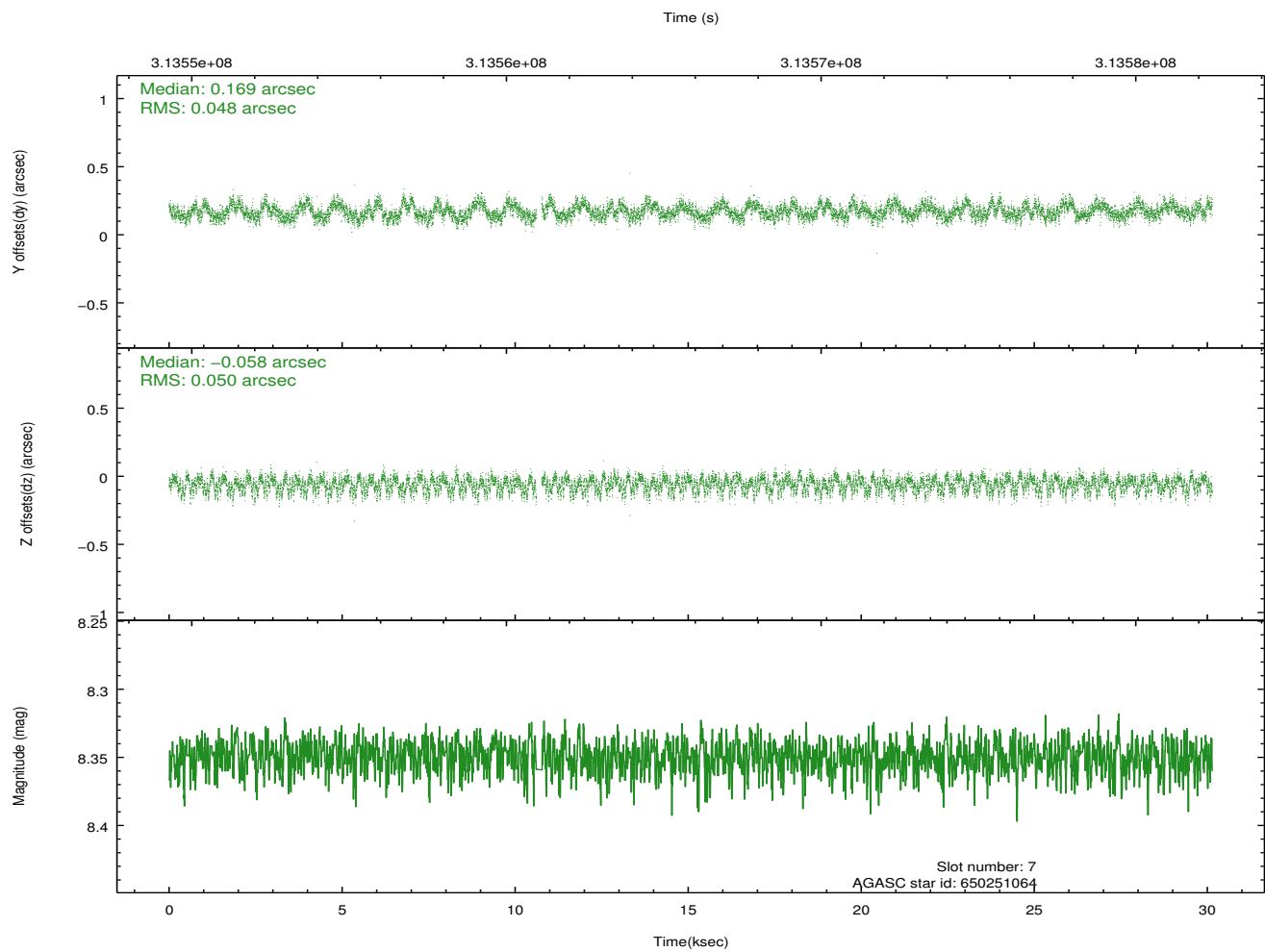
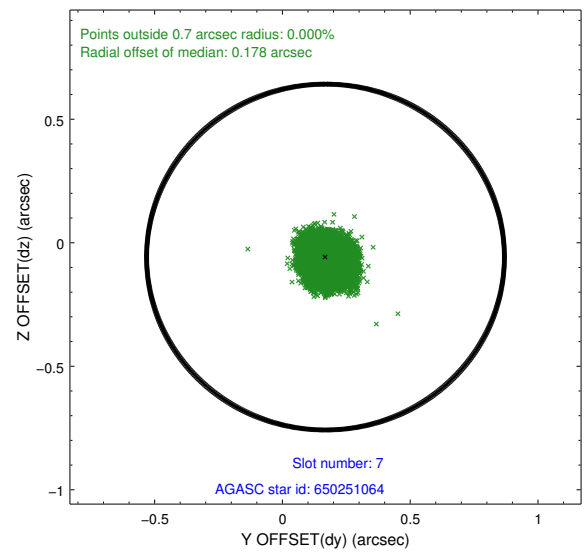
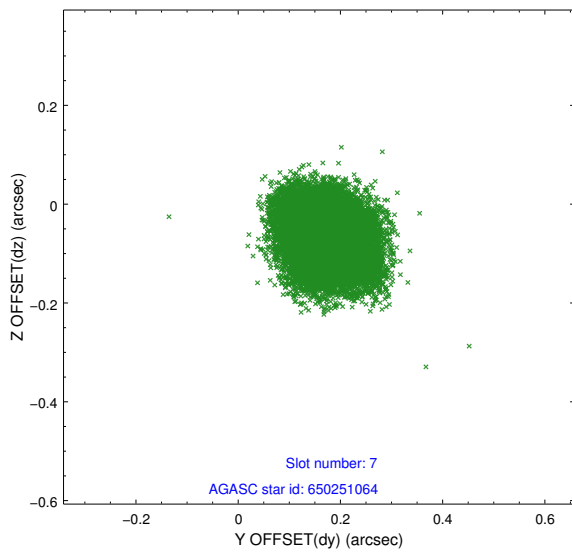
2.4.3 Slot 5



2.4.4 Slot 6

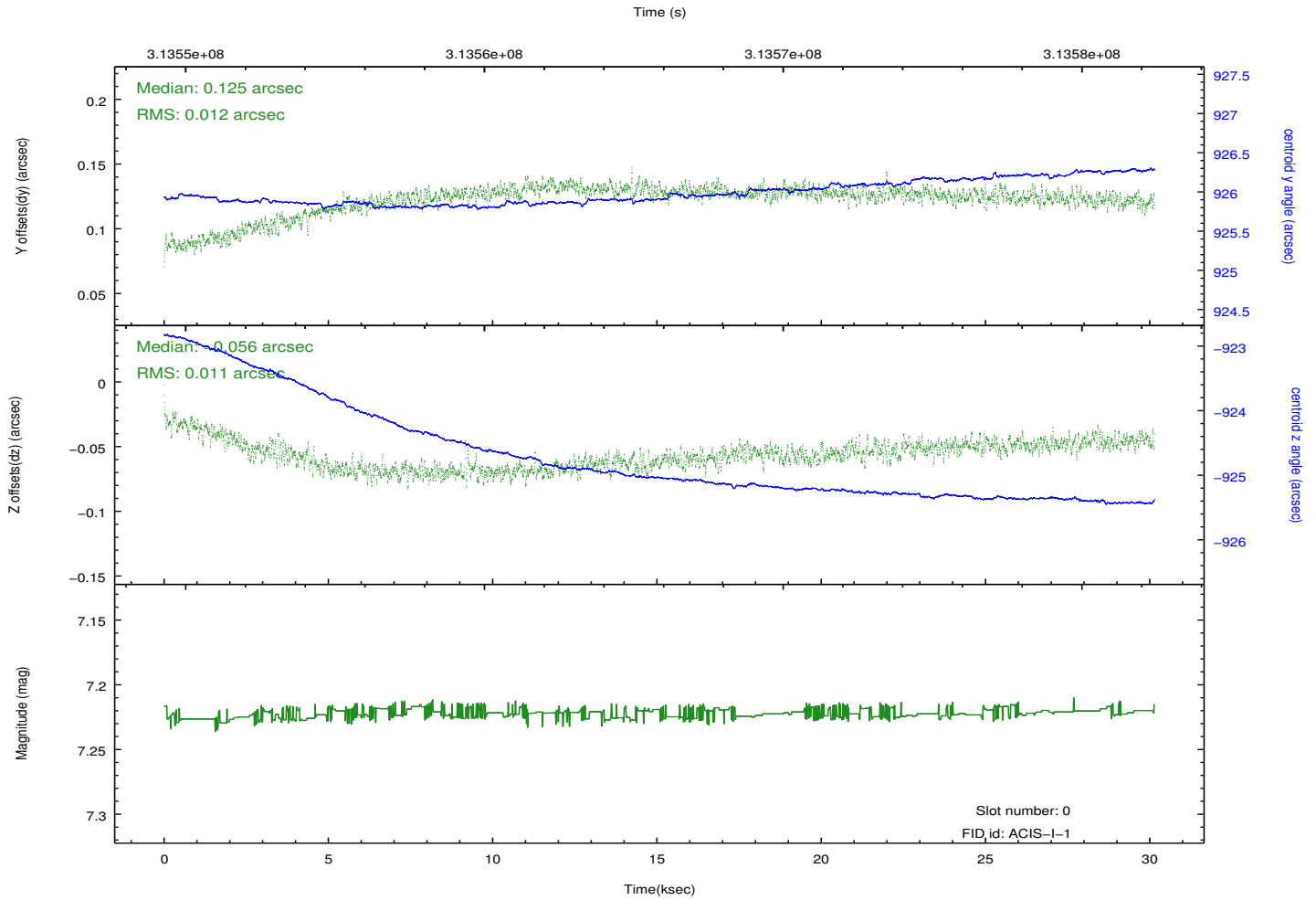
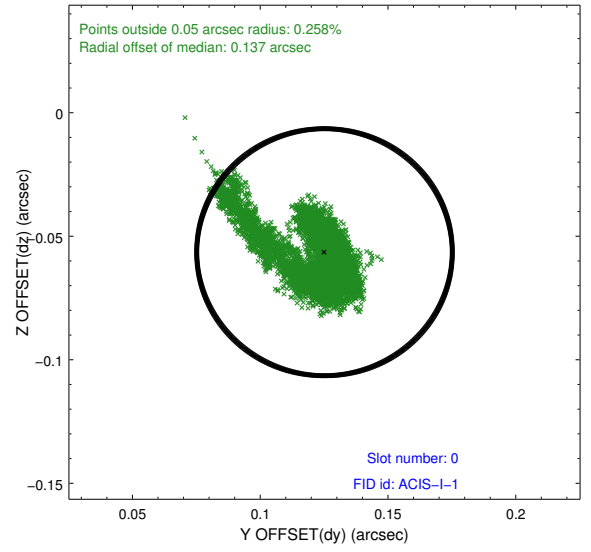
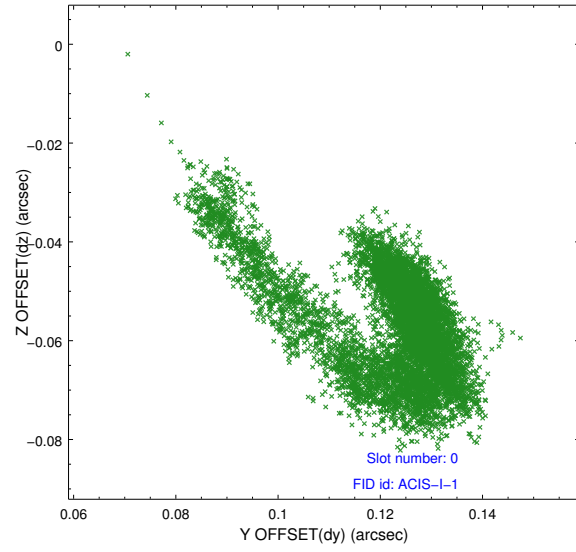


2.4.5 Slot 7

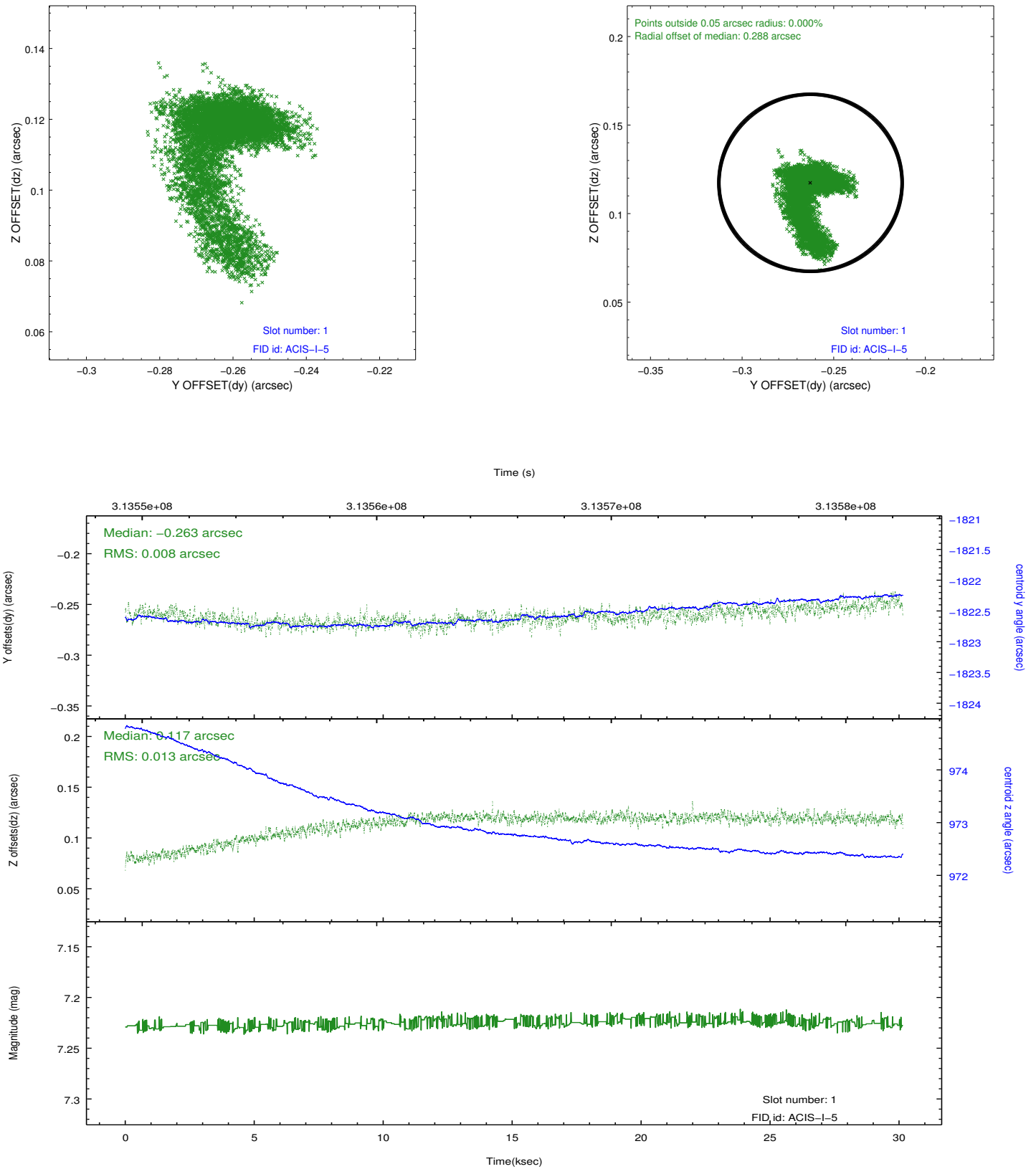


2.5 FID Slots

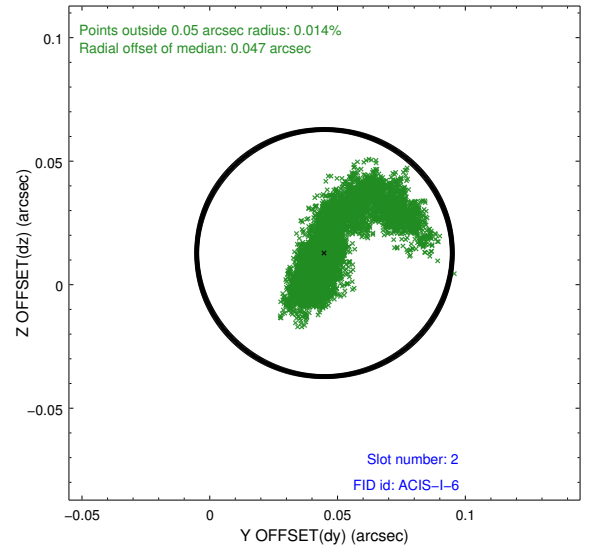
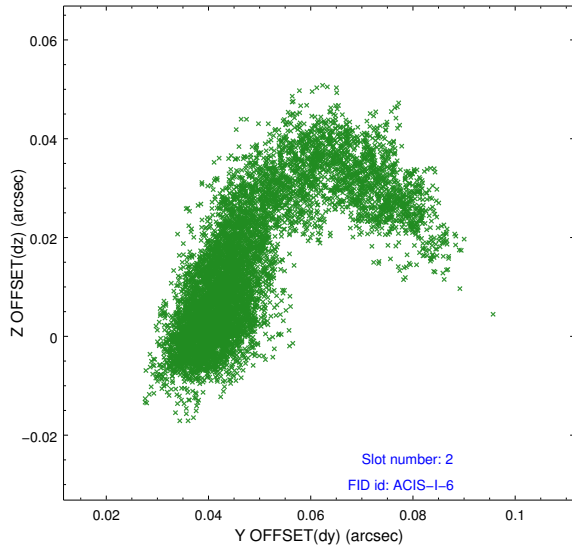
2.5.1 Slot 0



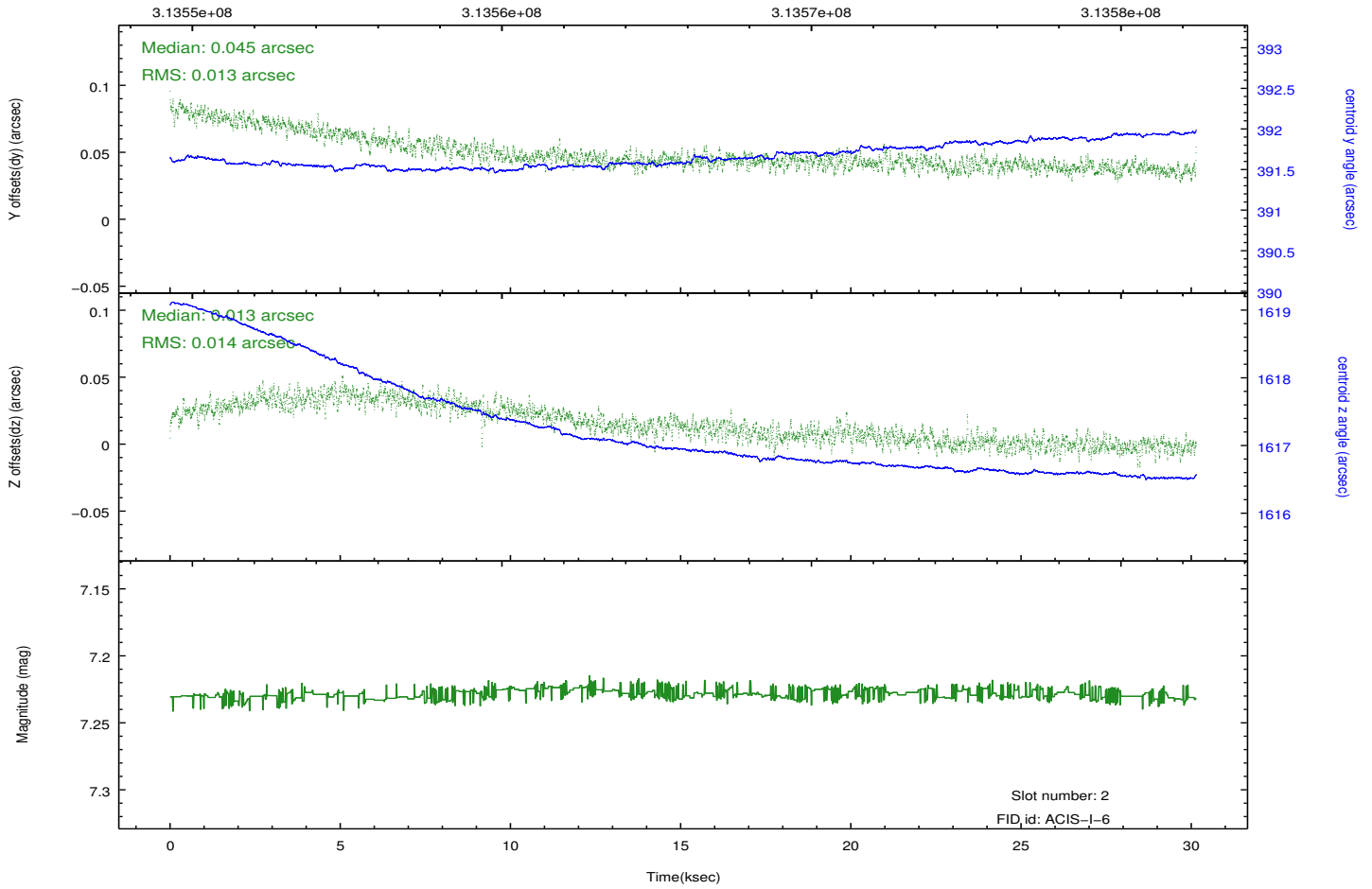
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.1318772

A.2 Comments

The guide star in slot 5 was automatically removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.