

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 16997 - L2 Version 1
Chandra X-Ray Center

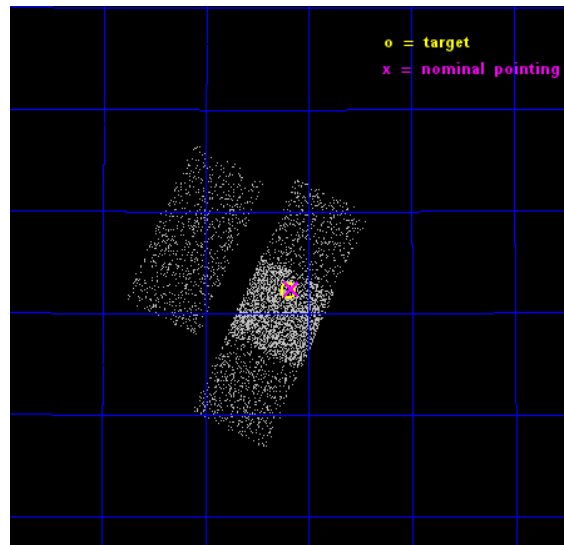
L2 Processing Date : Feb 19 2015

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1 Front

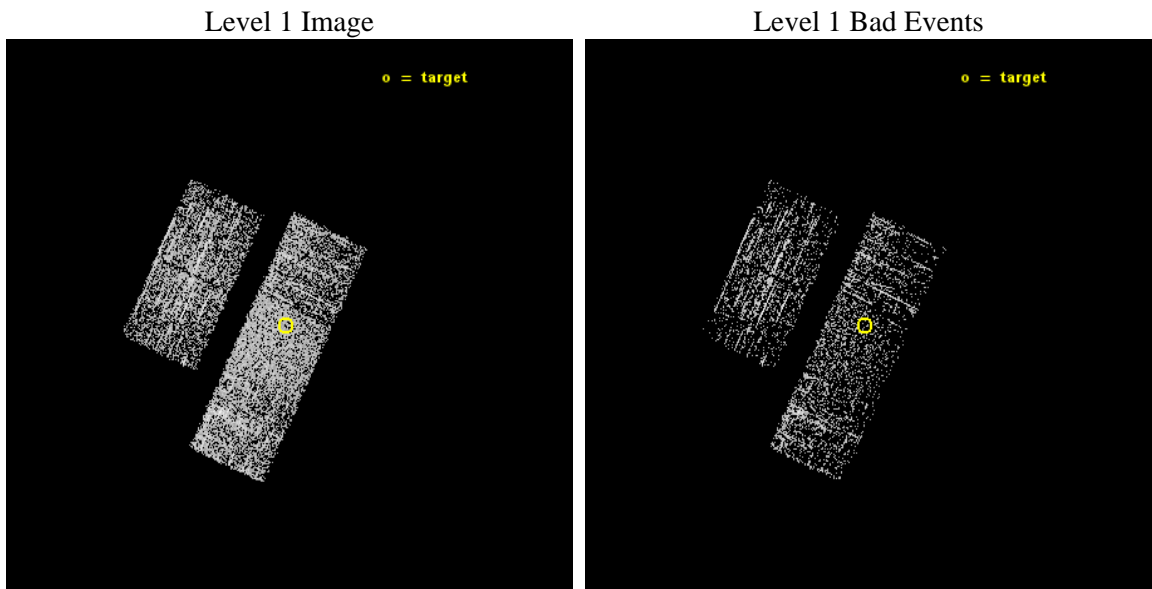
seq_num	601190	Sequence number
obs_id	16997	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC5023	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	198.049167	Observer's specified target RA [deg]
dec_targ	44.038028	Observer's specified target Dec [deg]
ra_nom	198.04219905025	Nominal RA [deg]
dec_nom	44.040495085173	Nominal Dec [deg]
roll_nom	115.14201396473	Nominal Roll [deg]
revision	1	Processing version of data
ontime	1062.5993618965	Sum of GTIs [s]
livetime	1048.7157189591	Livetime [s]
ontime2	1062.4352018833	Sum of GTIs [s]
ontime3	1062.5172818899	Sum of GTIs [s]
ontime6	1062.5583219528	Sum of GTIs [s]
ontime7	1062.5993618965	Sum of GTIs [s]
ontime8	1062.4762419462	Sum of GTIs [s]
l2events	5095	Number of level 2 events



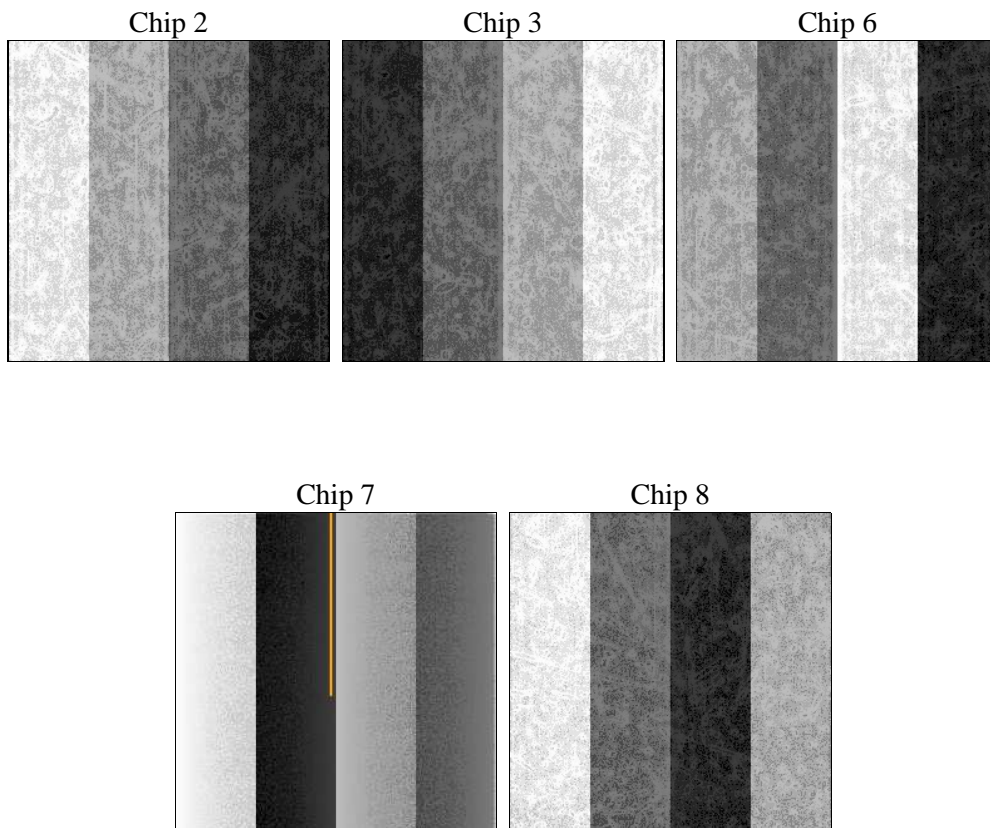
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	1000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	1062.5993618965	Sum of GTIs [s]
caldbver	4.6.6	 	ontime2	1062.4352018833	Sum of GTIs [s]
date	2015-02-19T18:09:09	Date and time of file creation	ontime3	1062.5172818899	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	1062.5583219528	Sum of GTIs [s]
			ontime7	1062.5993618965	Sum of GTIs [s]
			ontime8	1062.4762419462	Sum of GTIs [s]
			l1events	29470	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	5243	5190	5050	7025	6962
rejected events	4722	4624	4466	3987	5224
rejected %	90%	89%	88%	56%	75%

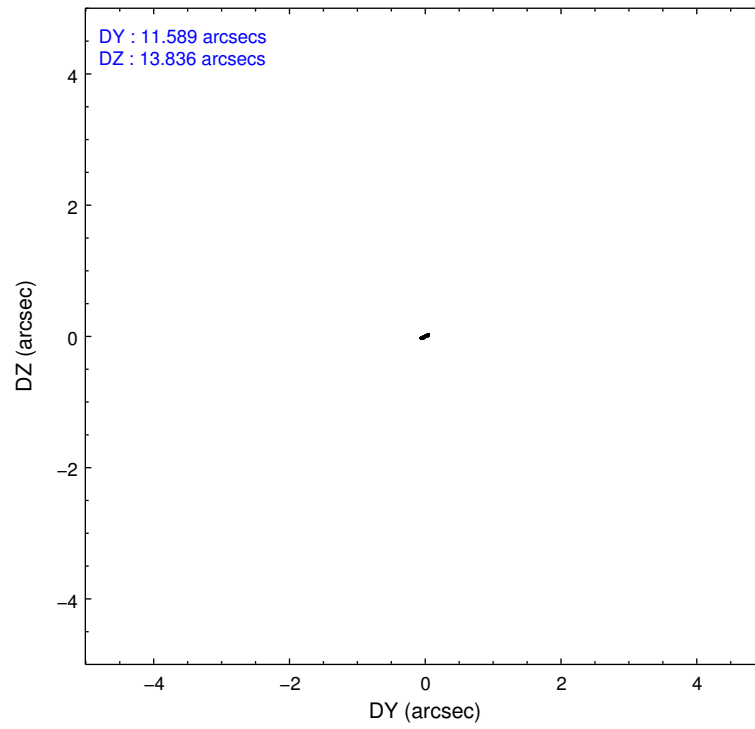
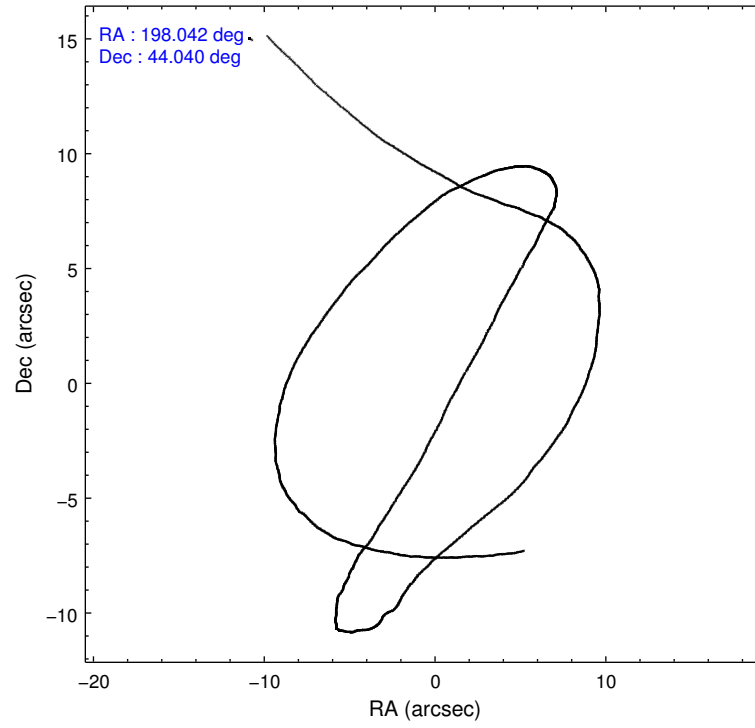
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	176	204	180	267	449
	3%	3%	3%	3%	6%
grade 1 events	2	2	7	10	10
	0%	0%	0%	0%	0%
grade 2 events	142	132	135	621	437
	2%	2%	2%	8%	6%
grade 3 events	56	55	65	254	195
	1%	1%	1%	3%	2%
grade 4 events	51	56	66	209	157
	0%	1%	1%	2%	2%
grade 5 events	209	263	262	662	388
	3%	5%	5%	9%	5%
grade 6 events	101	123	141	1702	511
	1%	2%	2%	24%	7%
grade 7 events	4506	4355	4194	3300	4815
	85%	83%	83%	46%	69%

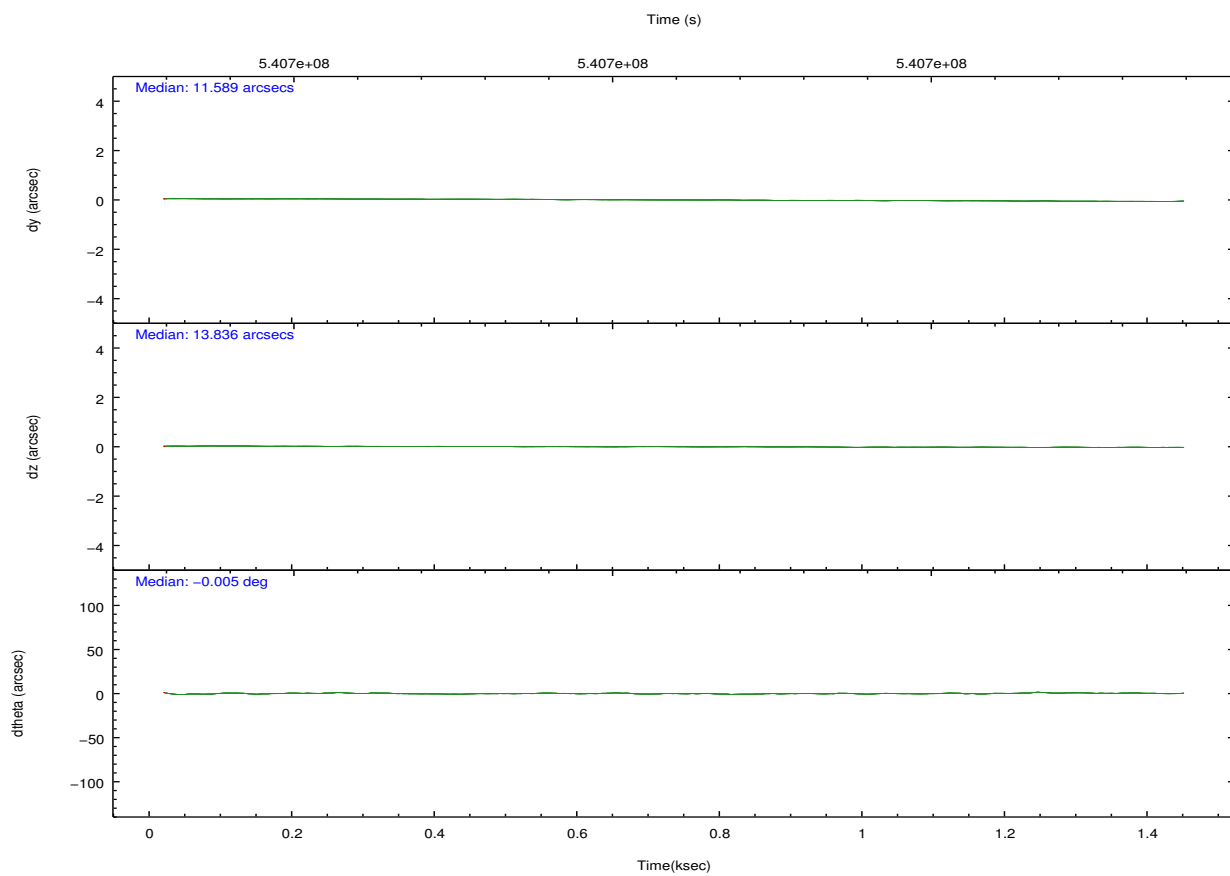
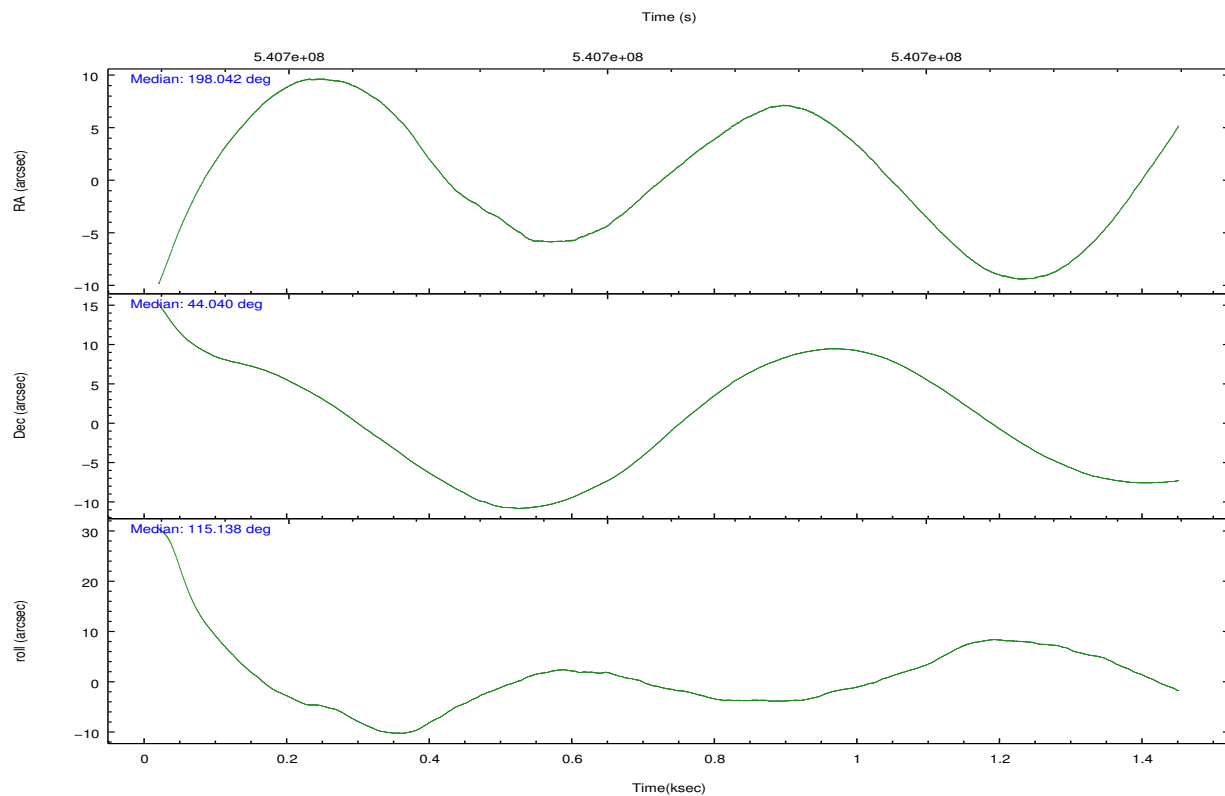
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	198.073976	198.0421990502487
[deg] Pointing Dec	44.025001	44.04049508517306
[deg] Pointing Roll	114.963106	115.1420139647312
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	540703812.184000	540702752.3515199
Observation start date	2015-02-19T03:29:05	2015-02-19T03:12:32
[s] Observation end time (MET)	540704812.184000	540705677.18918
Observation end date	2015-02-19T03:45:45	2015-02-19T04:01:17
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	O2	Y
CCD I3 on	O1	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
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



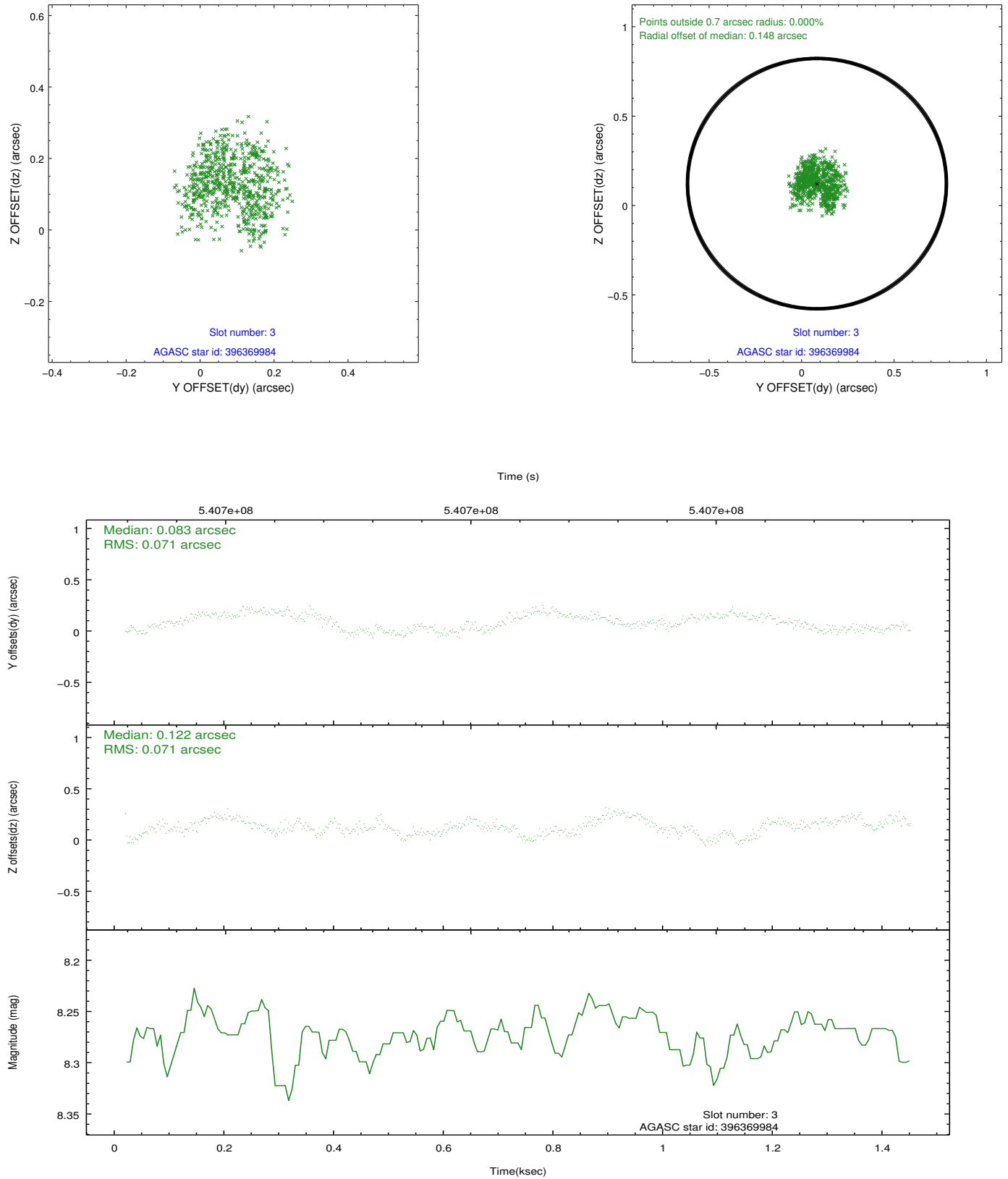


Slot Statistics

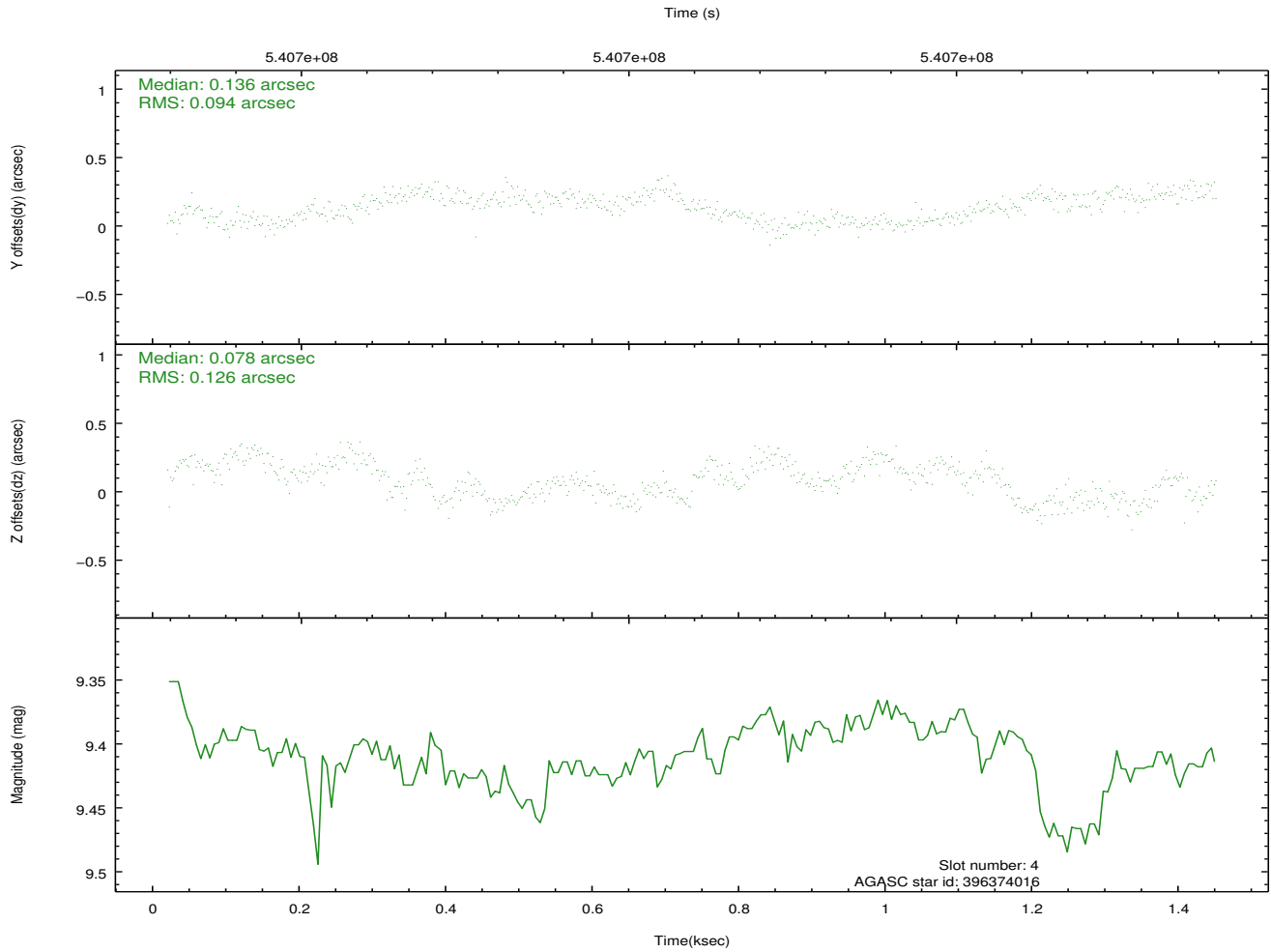
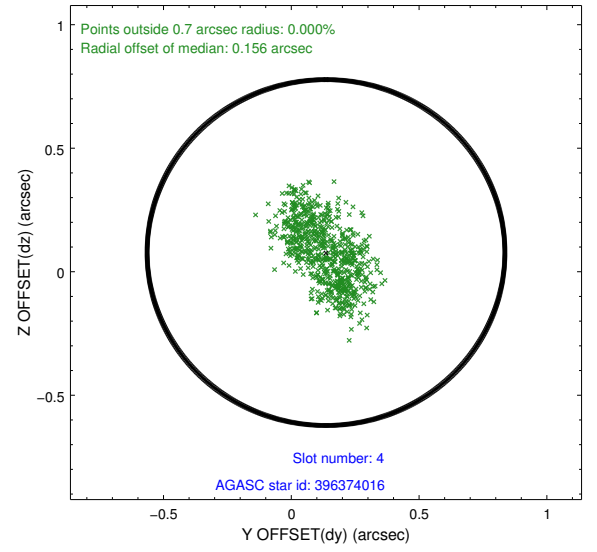
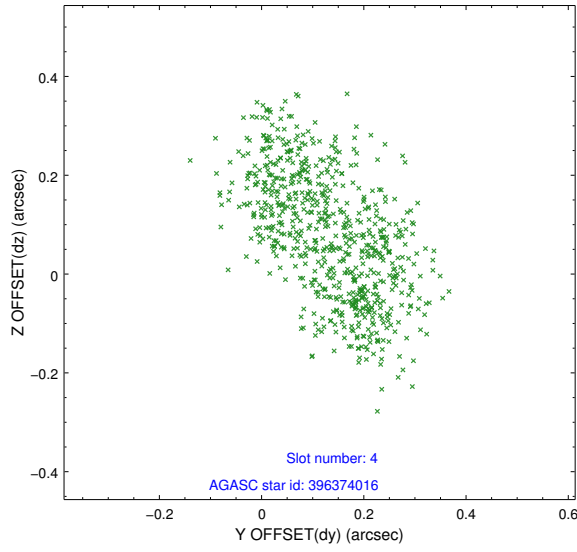
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.22	350	0.039	0.003	0.008	0.015	0.000000	0.000000	931.60	-1730.76
1	FID		ACIS-S-4	7.22	350	0.168	-0.016	0.006	0.011	0.000000	0.000000	2151.71	168.60
2	FID		ACIS-S-5	7.25	350	-0.233	0.025	0.007	0.012	0.000000	0.000000	-1811.59	167.47
3	GUIDE	used	396369984	8.27	699	0.083	0.122	0.113	0.160	199.169989	43.839251	-1790.55	-2305.51
4	GUIDE	used	396374016	9.41	698	0.136	0.078	0.171	0.256	199.049182	44.102233	-799.92	-2412.05
5	GUIDE	used	396374920	9.50	699	0.412	0.398	0.213	0.315	198.777717	44.042638	-704.66	-1683.98
6	GUIDE	used	396378504	9.11	699	-0.110	-0.153	0.173	0.252	198.227196	44.400847	1059.44	-930.52
7	GUIDE	used	396376888	10.26	680	-0.499	-0.481	0.331	0.523	197.165929	44.446354	2370.64	1466.38

2.4 Star Slots

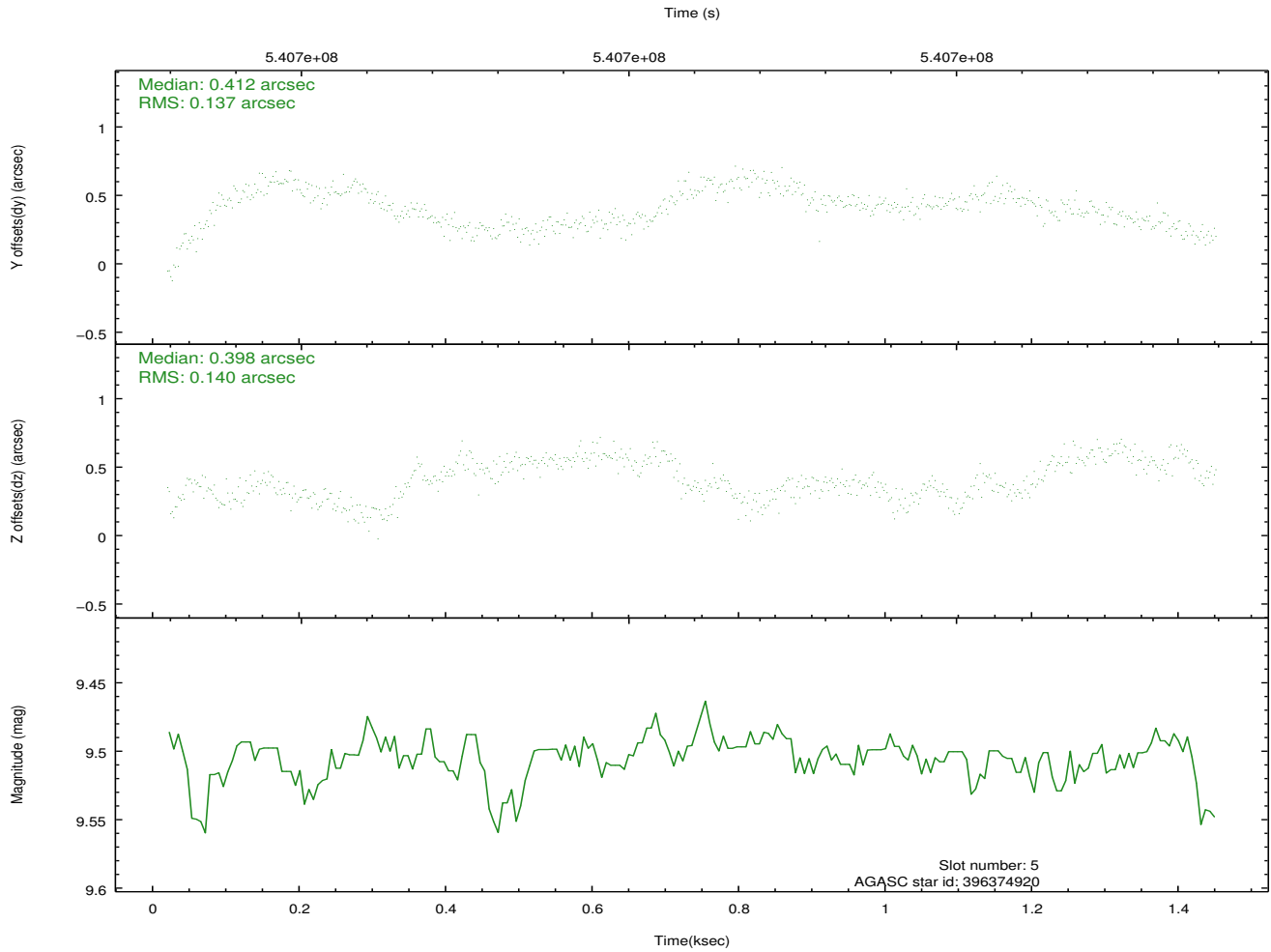
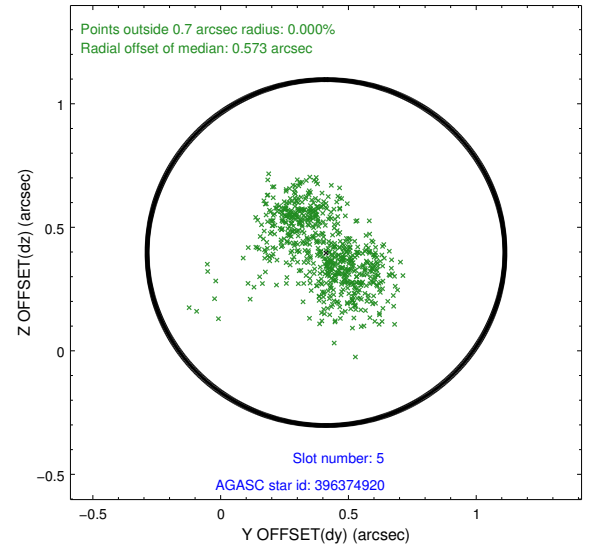
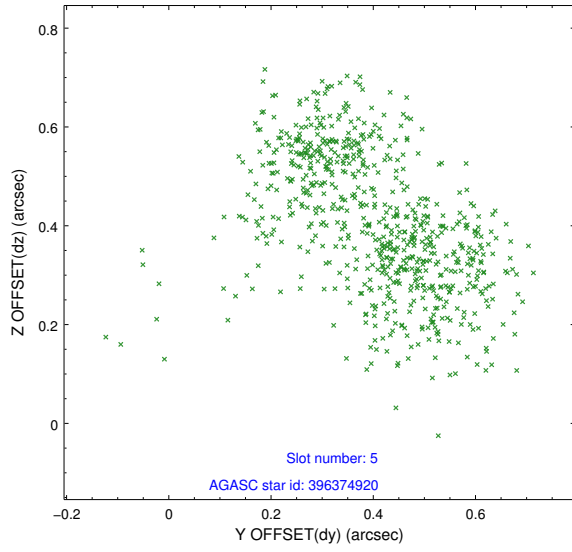
2.4.1 Slot 3



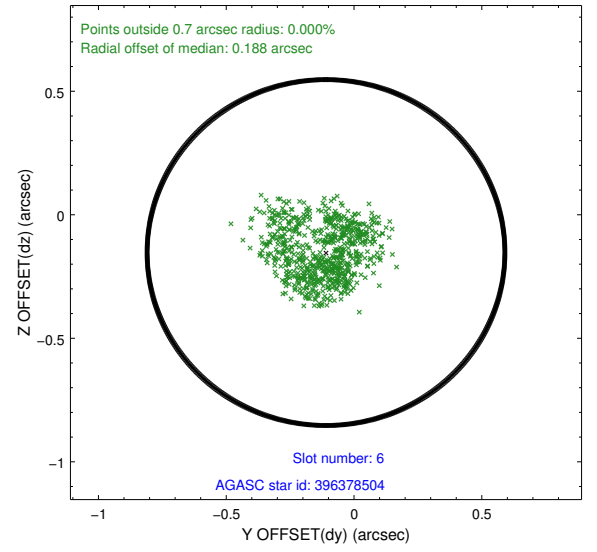
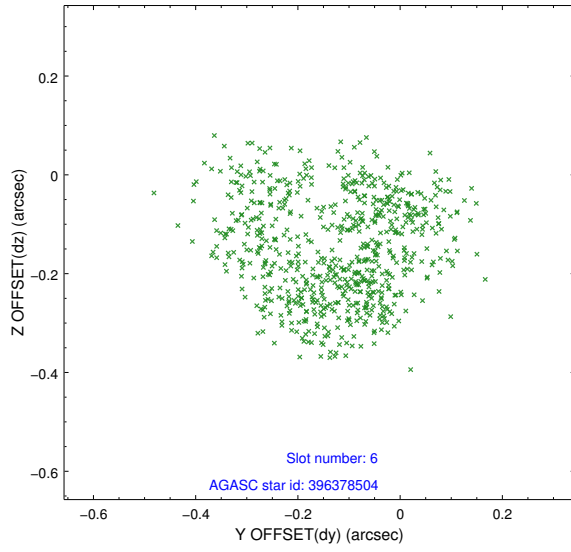
2.4.2 Slot 4



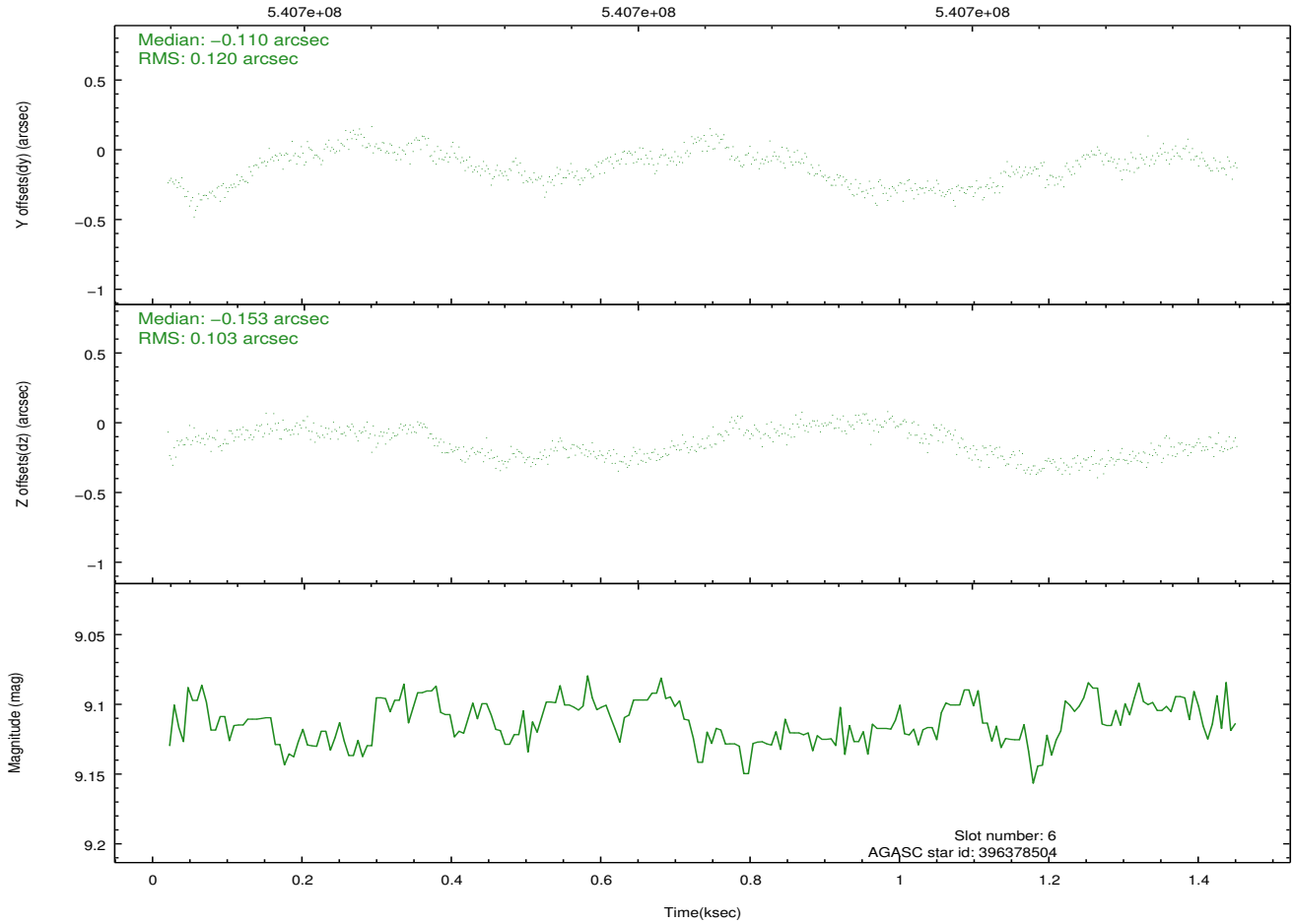
2.4.3 Slot 5



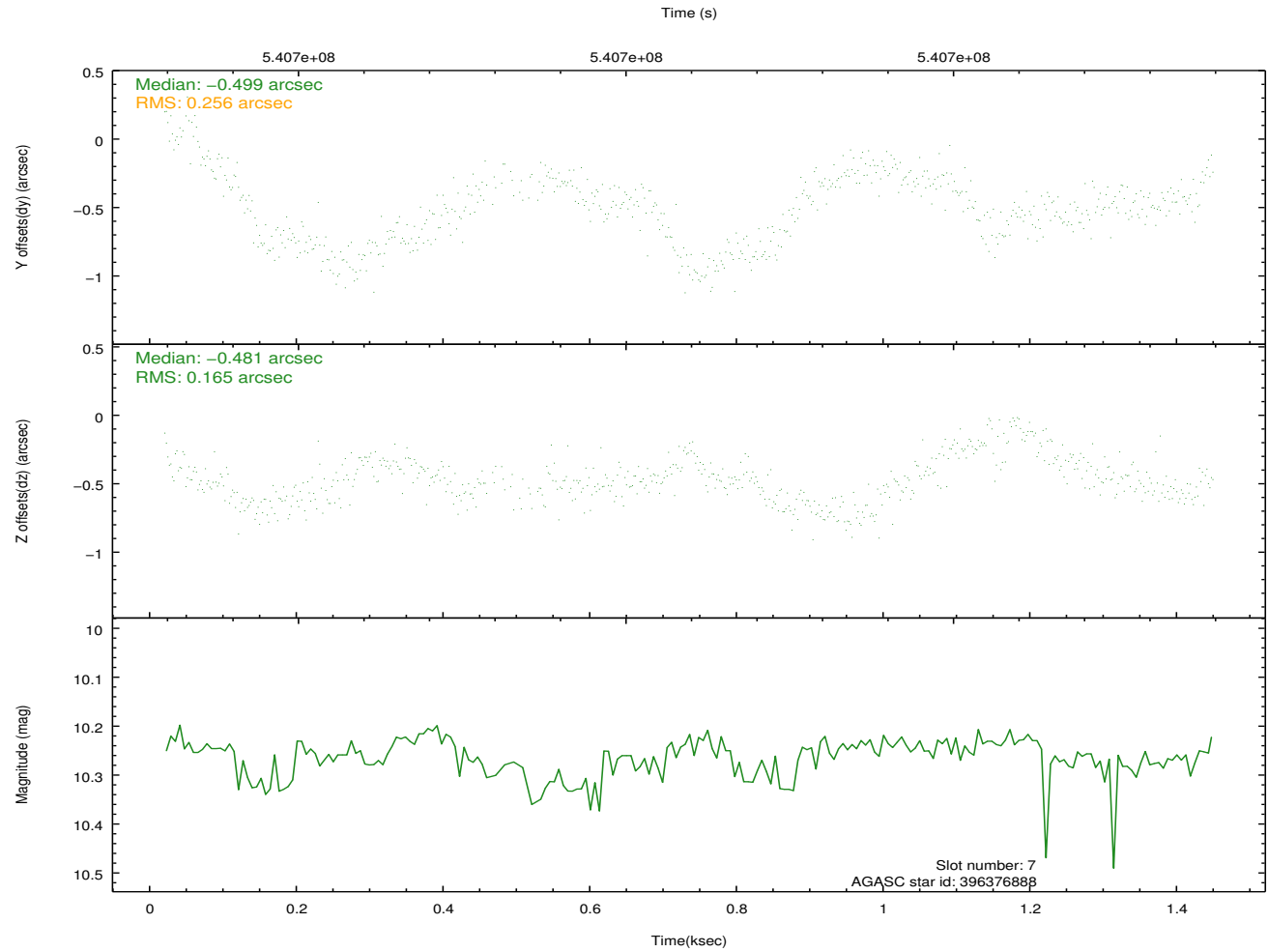
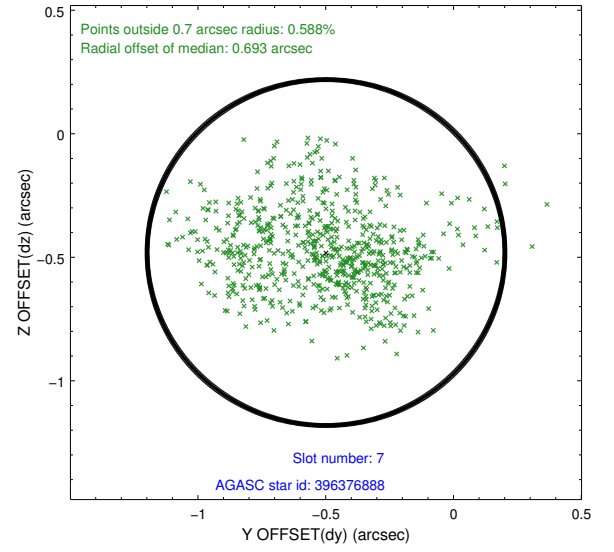
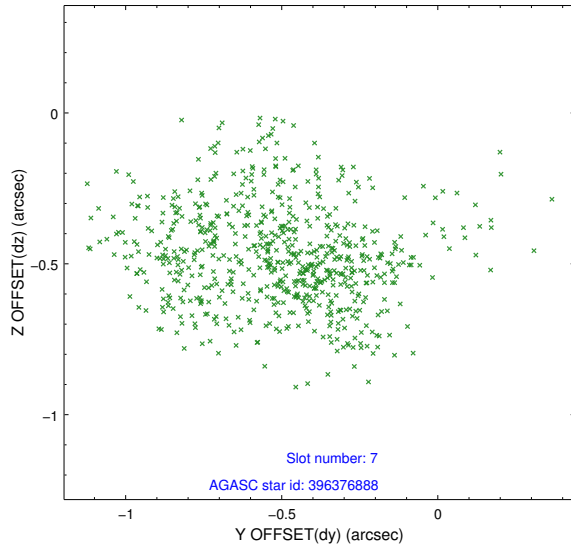
2.4.4 Slot 6



Time (s)

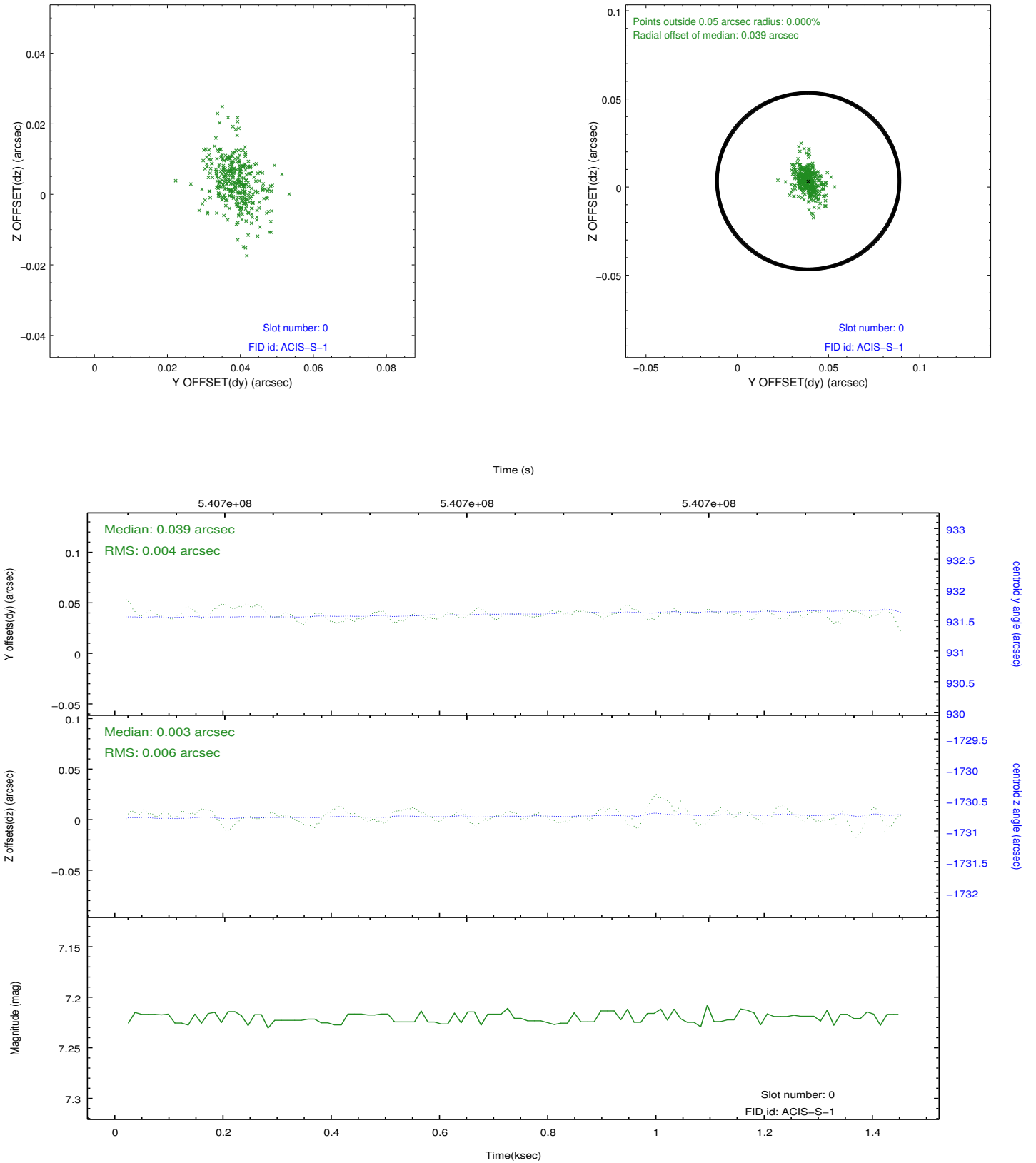


2.4.5 Slot 7

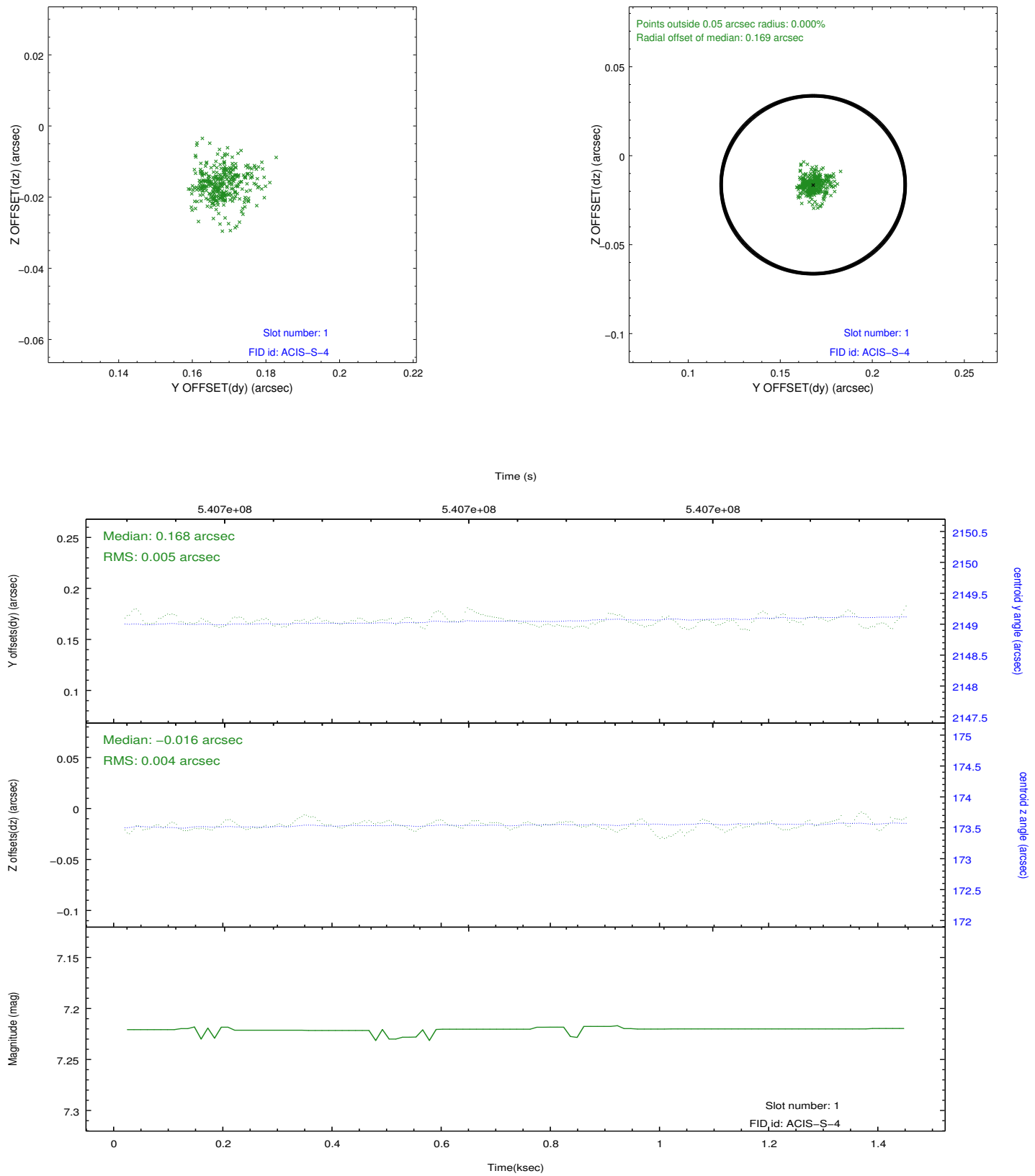


2.5 FID Slots

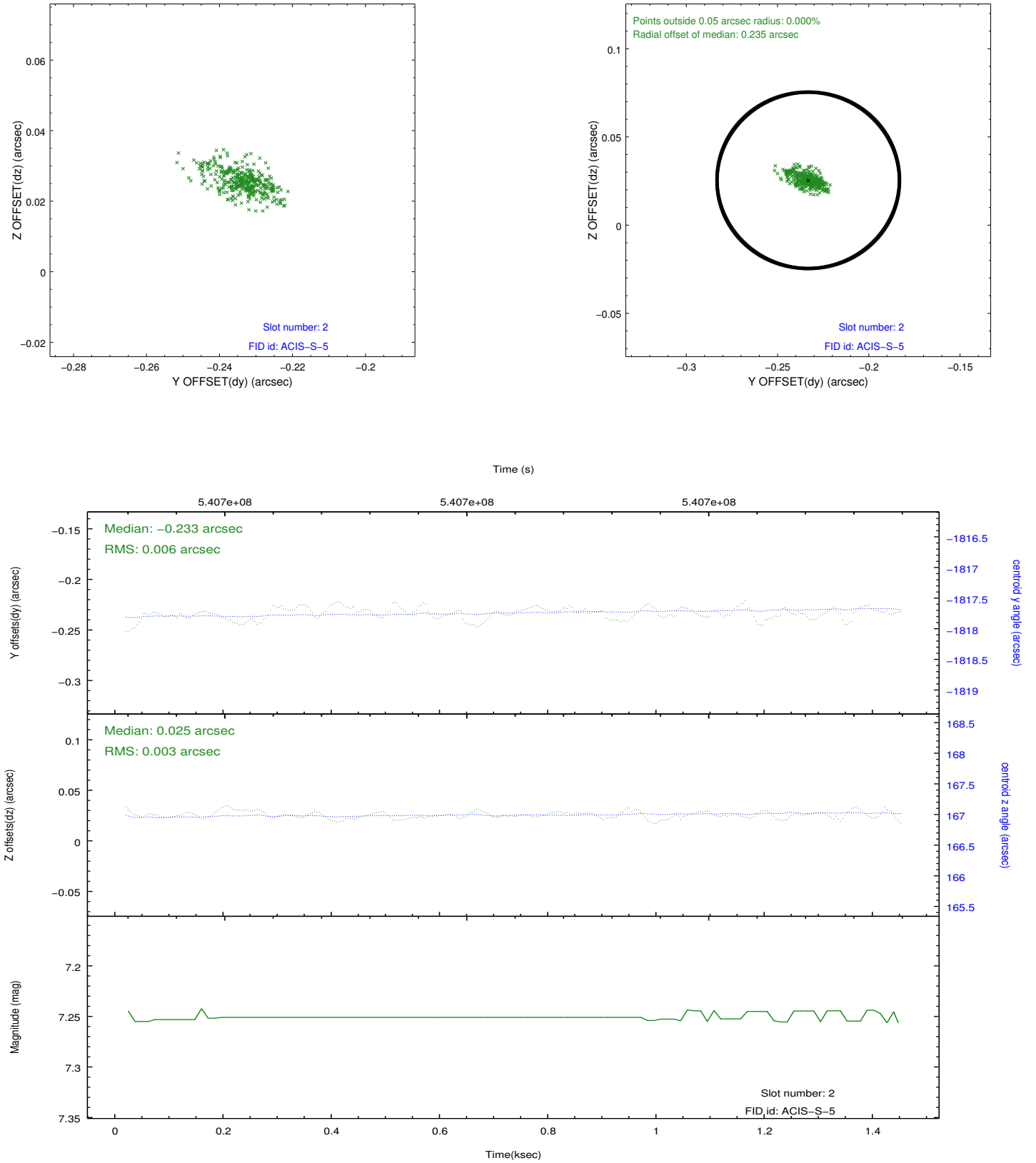
2.5.1 Slot 0



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)	2015.02.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.0625993618965

A.2 Comments