

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 4069 - L2 Version 5
Chandra X-Ray Center

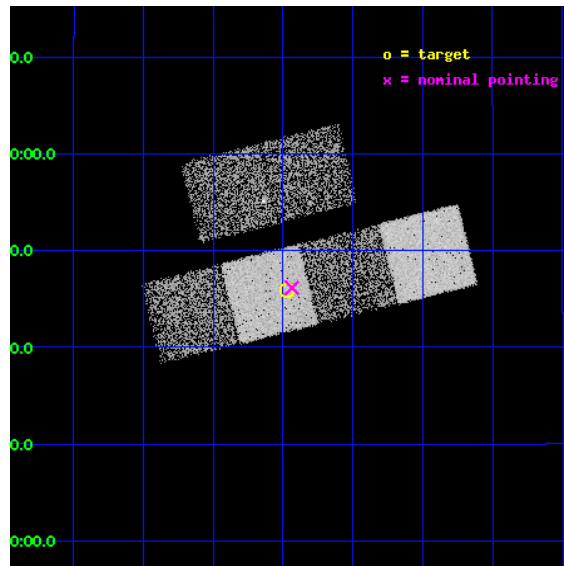
L2 Processing Date : Dec 27 2012

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1 Front

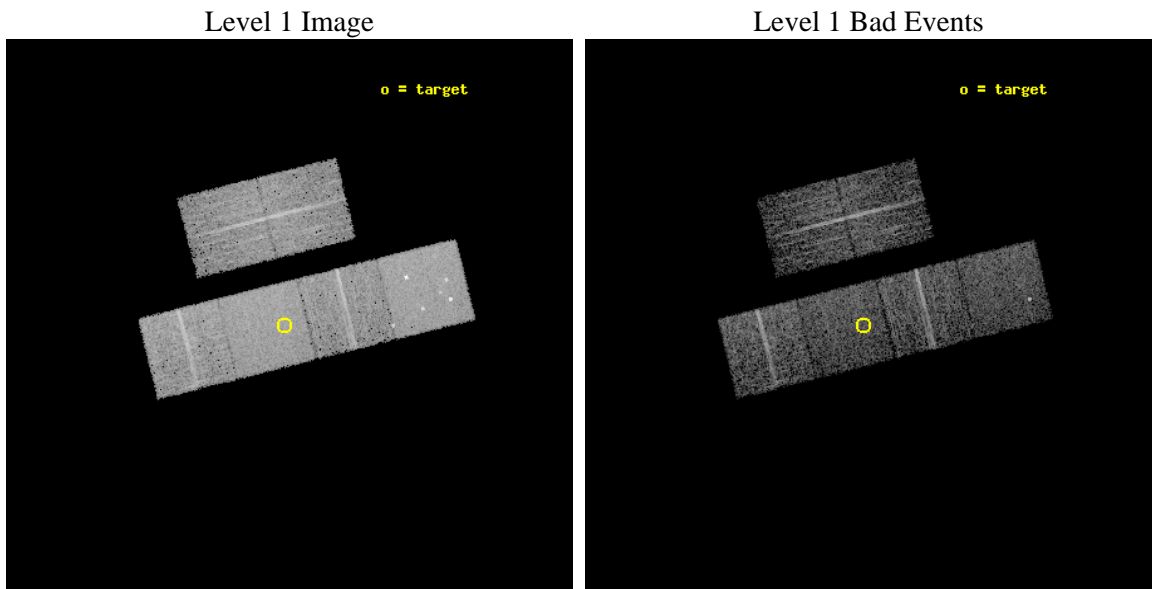
seq_num	700748	Sequence number
obs_id	4069	Observation id
title	A CHANDRA SURVEY OF THE MOST LUMINOUS QUASARS AT $Z > 4$	Proposal titl
observer	Dr Cristian Vignali	Principal investigator
object	PSS 1058+1245	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	164.743333	Observer's specified target RA [deg]
dec_targ	12.765222	Observer's specified target Dec [deg]
ra_nom	164.7342454534	Nominal RA [deg]
dec_nom	12.769226054632	Nominal Dec [deg]
roll_nom	166.00672196971	Nominal Roll [deg]
revision	5	Processing version of data
ontime	5116.3210308552	Sum of GTIs [s]
livetime	5051.5350932838	Livetime [s]
ontime2	5116.3620708585	Sum of GTIs [s]
ontime3	5116.1979108453	Sum of GTIs [s]
ontime5	5116.2799908519	Sum of GTIs [s]
ontime6	5116.2389508486	Sum of GTIs [s]
ontime7	5116.3210308552	Sum of GTIs [s]
ontime8	5116.1568708718	Sum of GTIs [s]
l2events	51024	Number of level 2 events



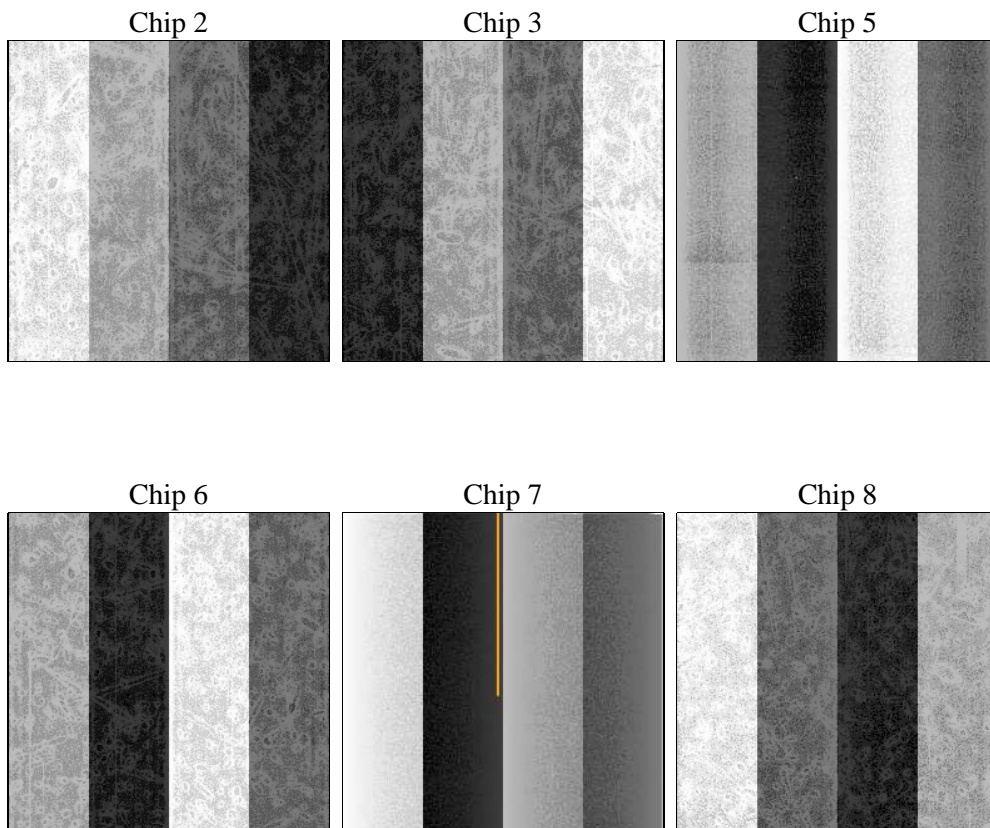
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	5116.3210308552	Sum of GTIs [s]
caldsver	4.5.5	 	ontime2	5116.3620708585	Sum of GTIs [s]
date	2012-12-27T19:19:25	Date and time of file creation	ontime3	5116.1979108453	Sum of GTIs [s]
revision	5	Processing version of data	ontime5	5116.2799908519	Sum of GTIs [s]
			ontime6	5116.2389508486	Sum of GTIs [s]
			ontime7	5116.3210308552	Sum of GTIs [s]
			ontime8	5116.1568708718	Sum of GTIs [s]
			l1events	233964	Number of level 1 events

2.1.4 Events

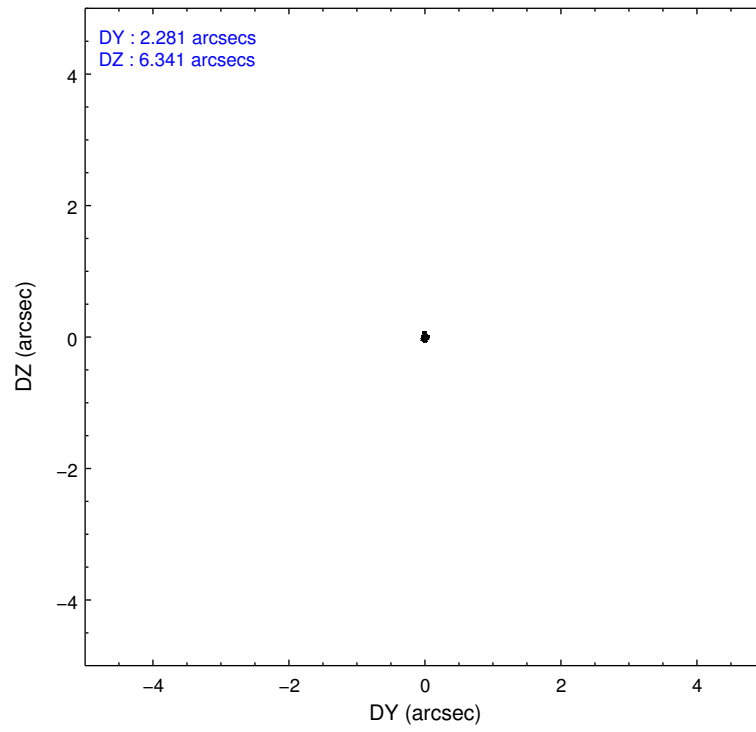
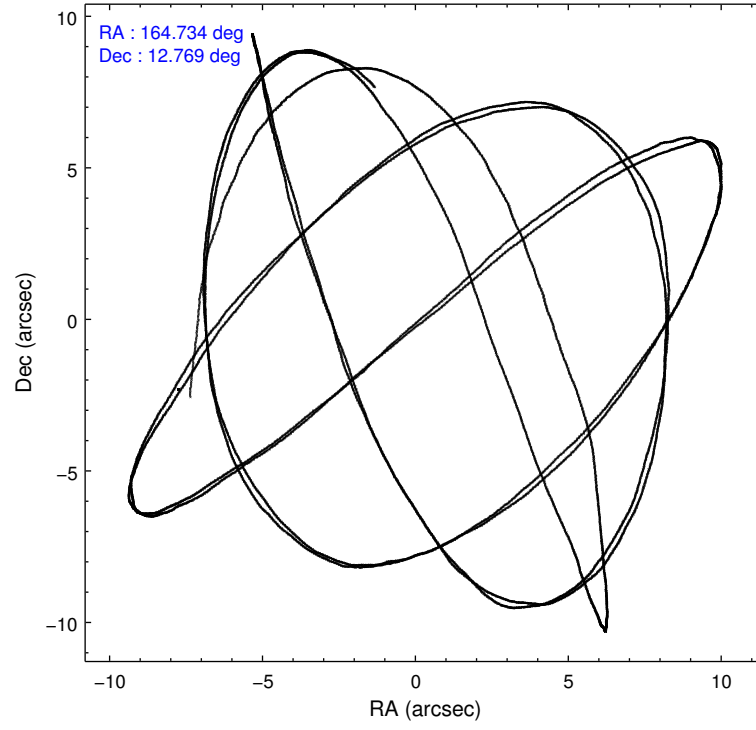
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	32209	30884	50305	34994	43905	41667	grade 0 events	1627	1692	3698	1527	1575	2571
rejected events	28518	27127	26178	31214	26164	33413		5%	5%	7%	4%	3%	6%
rejected %	88%	87%	52%	89%	59%	80%	grade 1 events	17	21	97	18	46	23
								0%	0%	0%	0%	0%	0%
							grade 2 events	677	660	7176	753	3534	1893
								2%	2%	14%	2%	8%	4%
							grade 3 events	341	384	893	396	1619	837
								1%	1%	1%	1%	3%	2%
							grade 4 events	357	368	844	364	1579	772
								1%	1%	1%	1%	3%	1%
							grade 5 events	1240	1429	3518	1548	4251	1847
								3%	4%	6%	4%	9%	4%
							grade 6 events	689	654	11536	741	9444	2185
								2%	2%	22%	2%	21%	5%
							grade 7 events	27261	25676	22543	29647	21857	31539
								84%	83%	44%	84%	49%	75%

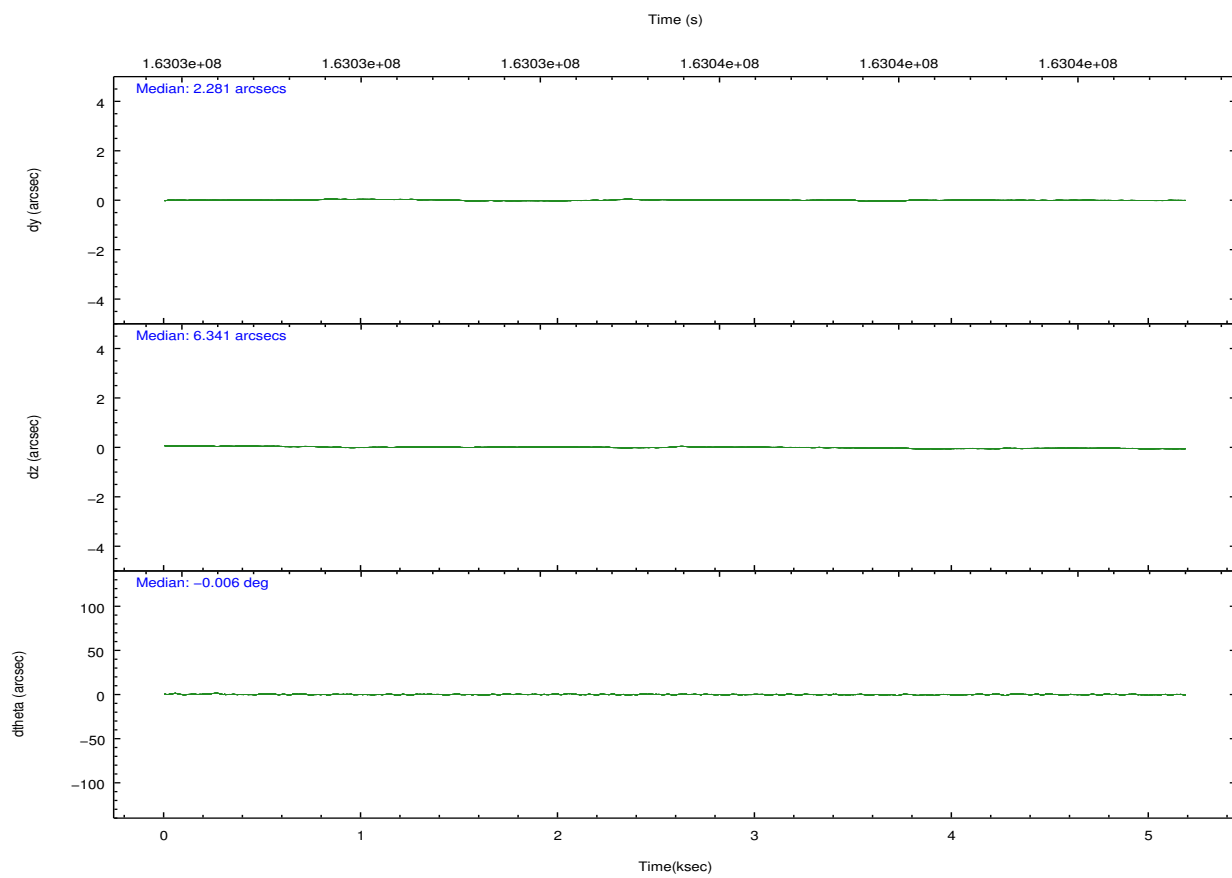
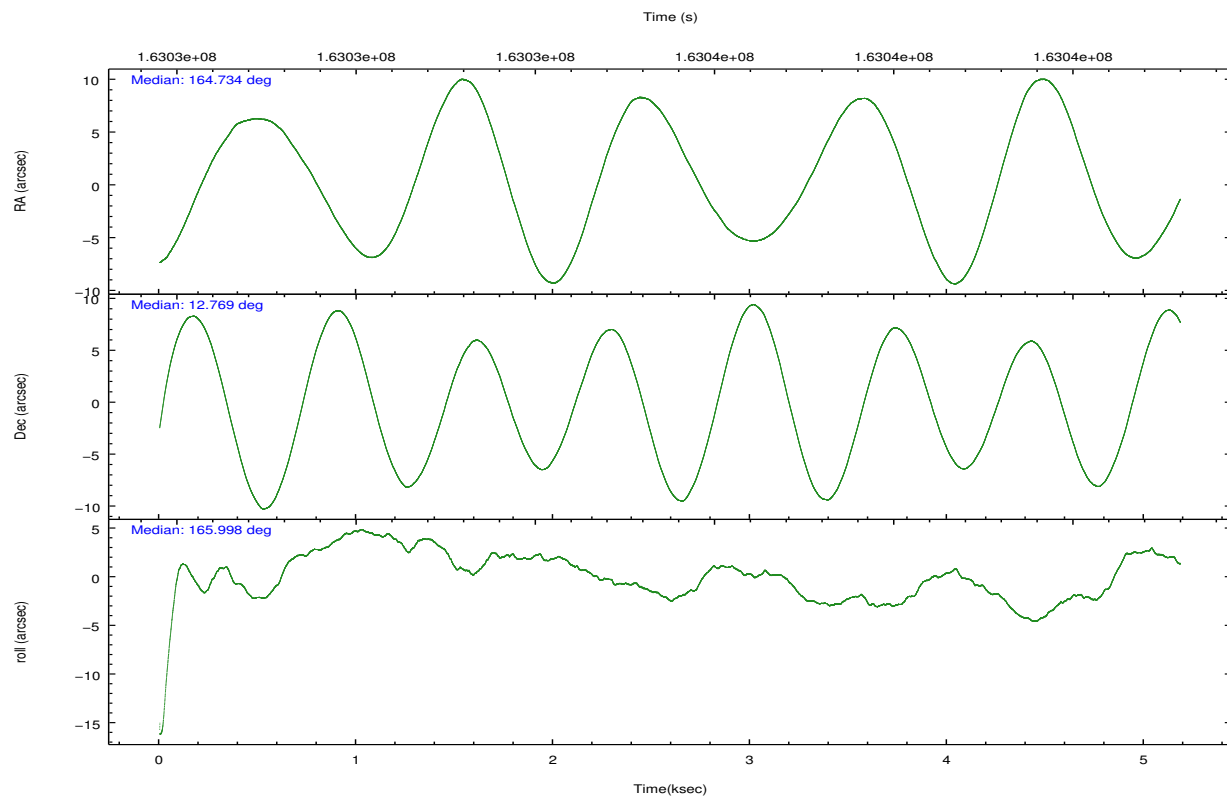
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	164.761019	164.7342454533998
[deg] Pointing Dec	12.777032	12.76922605463155
[deg] Pointing Roll	165.844208	166.0067219697082
[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)	163032349.184000	163031310.30057
Observation start date	2003-03-02T22:44:45	2003-03-02T22:28:30
[s] Observation end time (MET)	163037349.184000	163038360.25086
Observation end date	2003-03-03T00:08:05	2003-03-03T00:26:00
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
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	3.2

2.3 Aspect



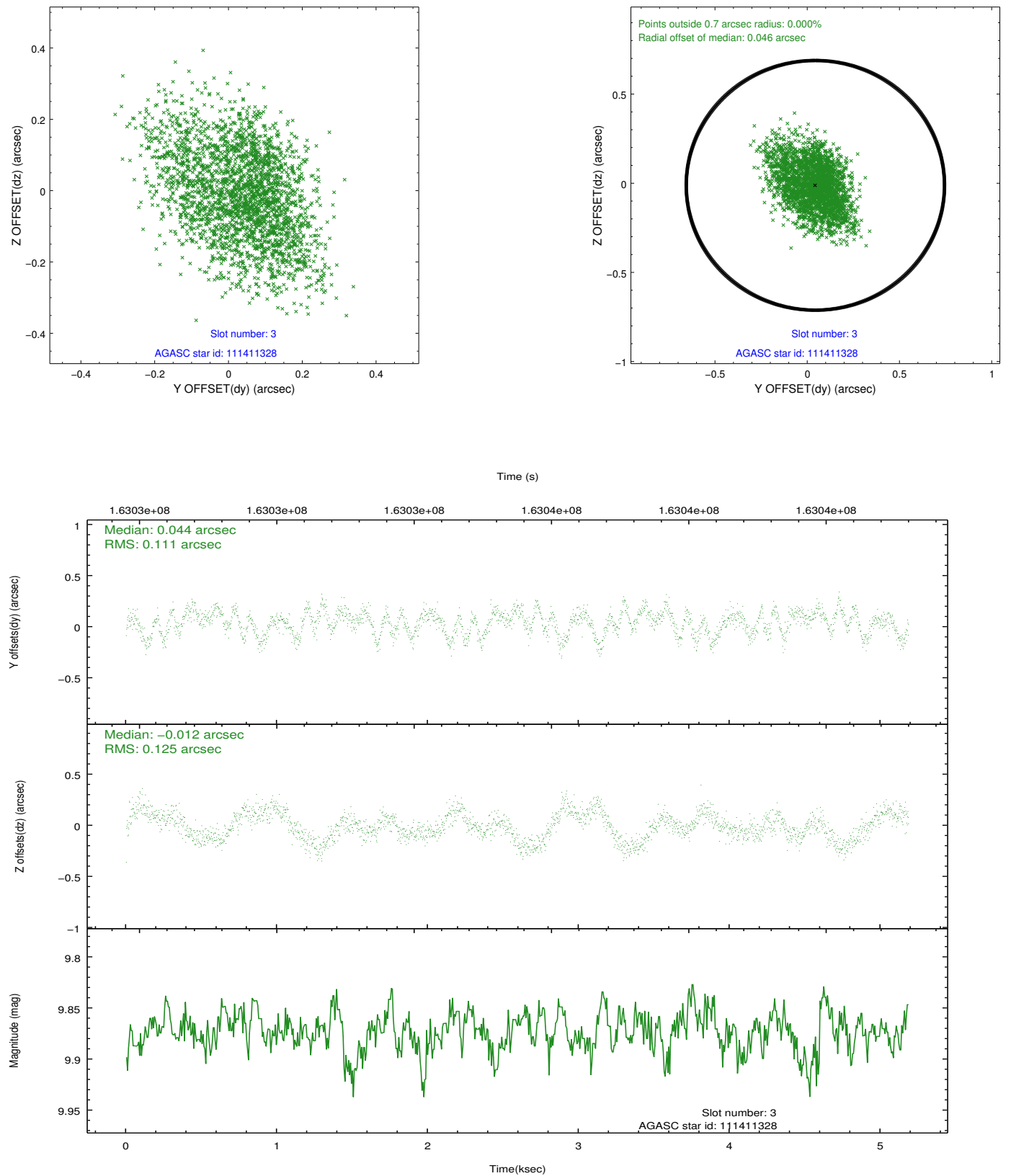


Slot Statistics

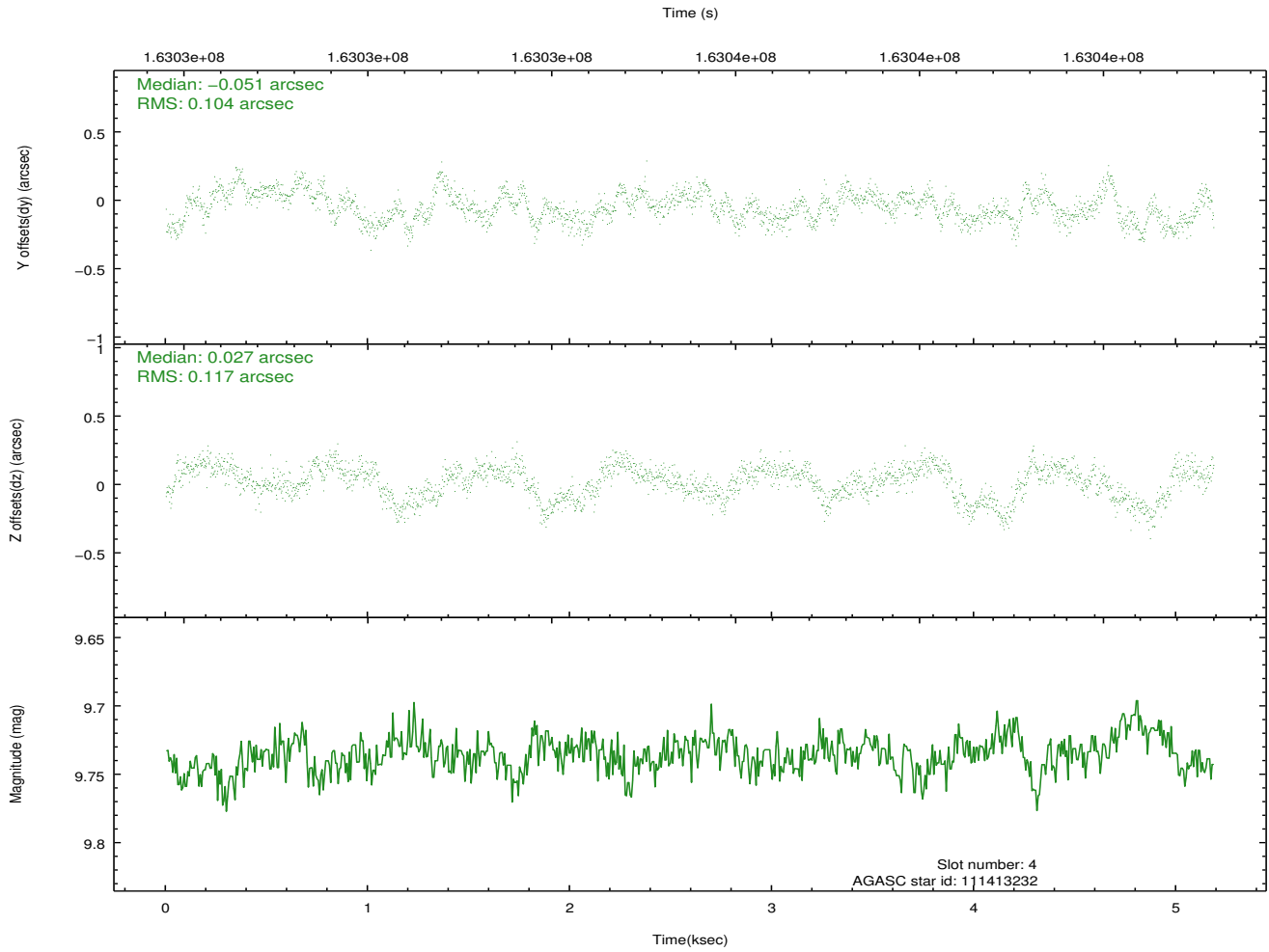
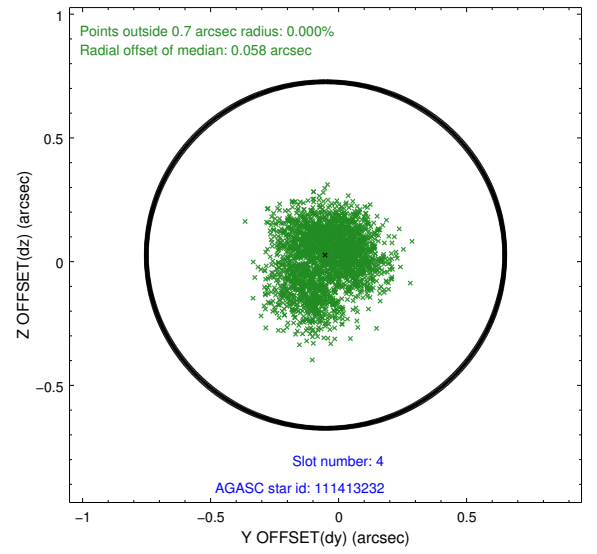
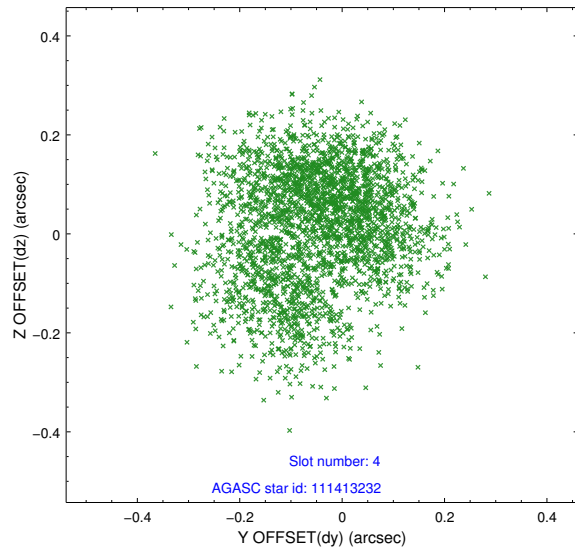
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.19	1265	0.014	-0.036	0.007	0.013	0.000000	0.000000	941.16	-1723.09
1	FID	ACIS-S-4	7.21	1265	-0.028	0.022	0.006	0.010	0.000000	0.000000	2159.16	179.94
2	FID	ACIS-S-5	7.24	1265	-0.013	0.026	0.006	0.011	0.000000	0.000000	-1806.26	174.81
3	GUIDE	111411328	9.87	2529	0.044	-0.012	0.177	0.291	164.980954	12.081972	-1363.06	2236.69
4	GUIDE	111413232	9.74	2529	-0.051	0.027	0.170	0.263	164.555622	12.408277	374.68	1464.85
5	GUIDE	111415064	9.77	2528	-0.012	-0.048	0.341	0.463	165.057861	12.389176	-1353.47	1098.65
6	GUIDE	111811832	9.27	2528	0.096	-0.079	0.107	0.168	164.435186	12.713926	1053.40	500.37
7	GUIDE	111812400	9.49	2529	-0.053	0.101	0.092	0.144	164.475748	13.334413	1460.56	-1700.99

2.4 Star Slots

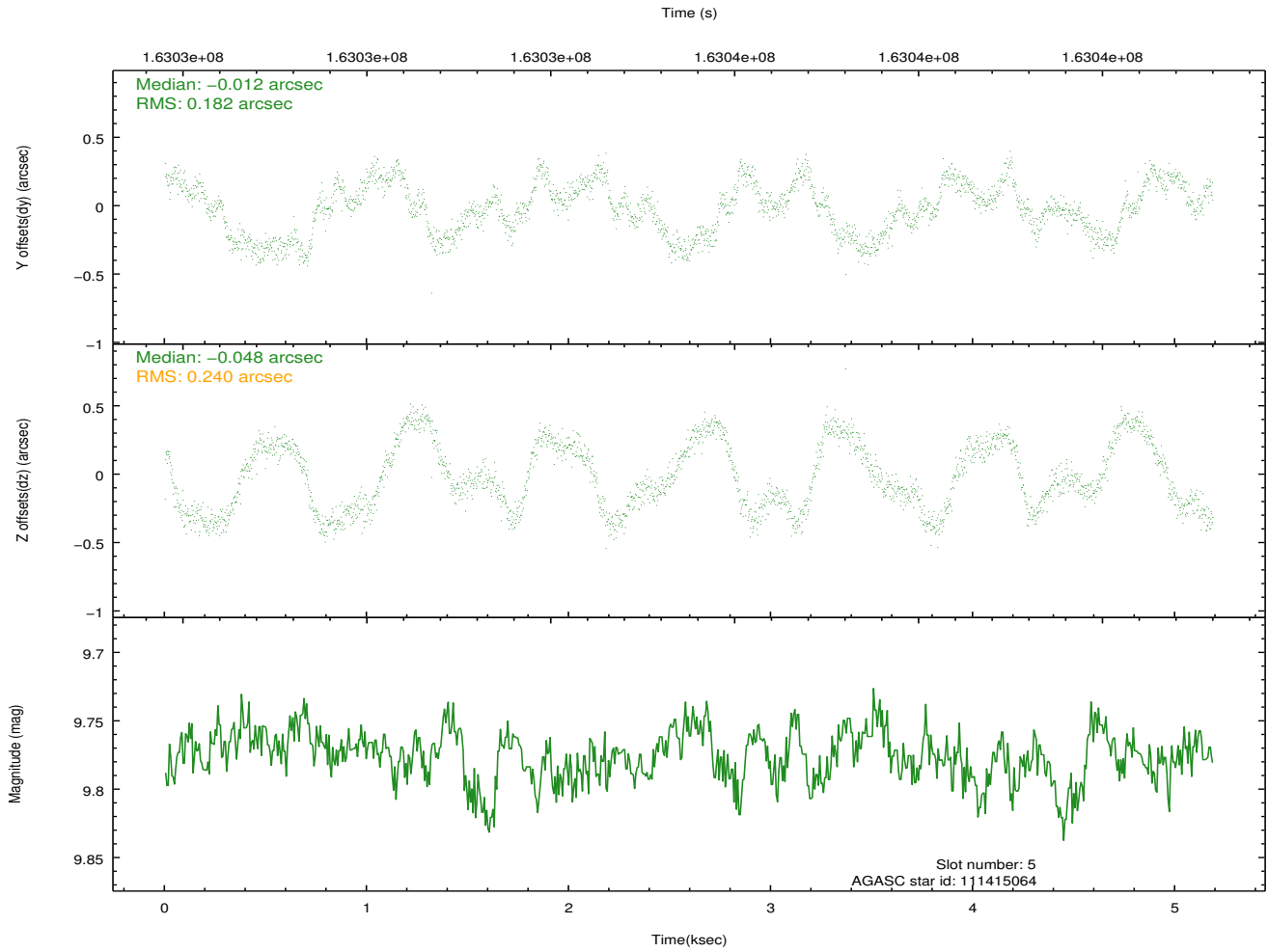
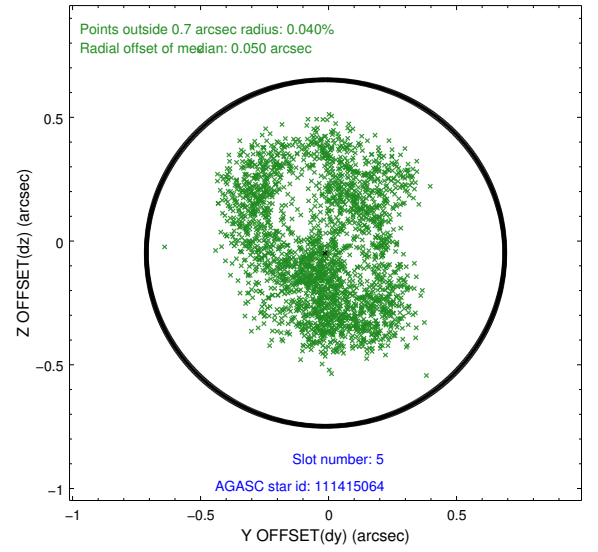
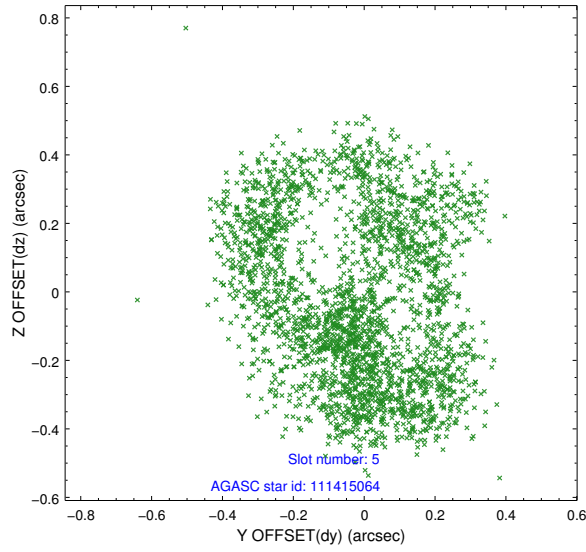
2.4.1 Slot 3



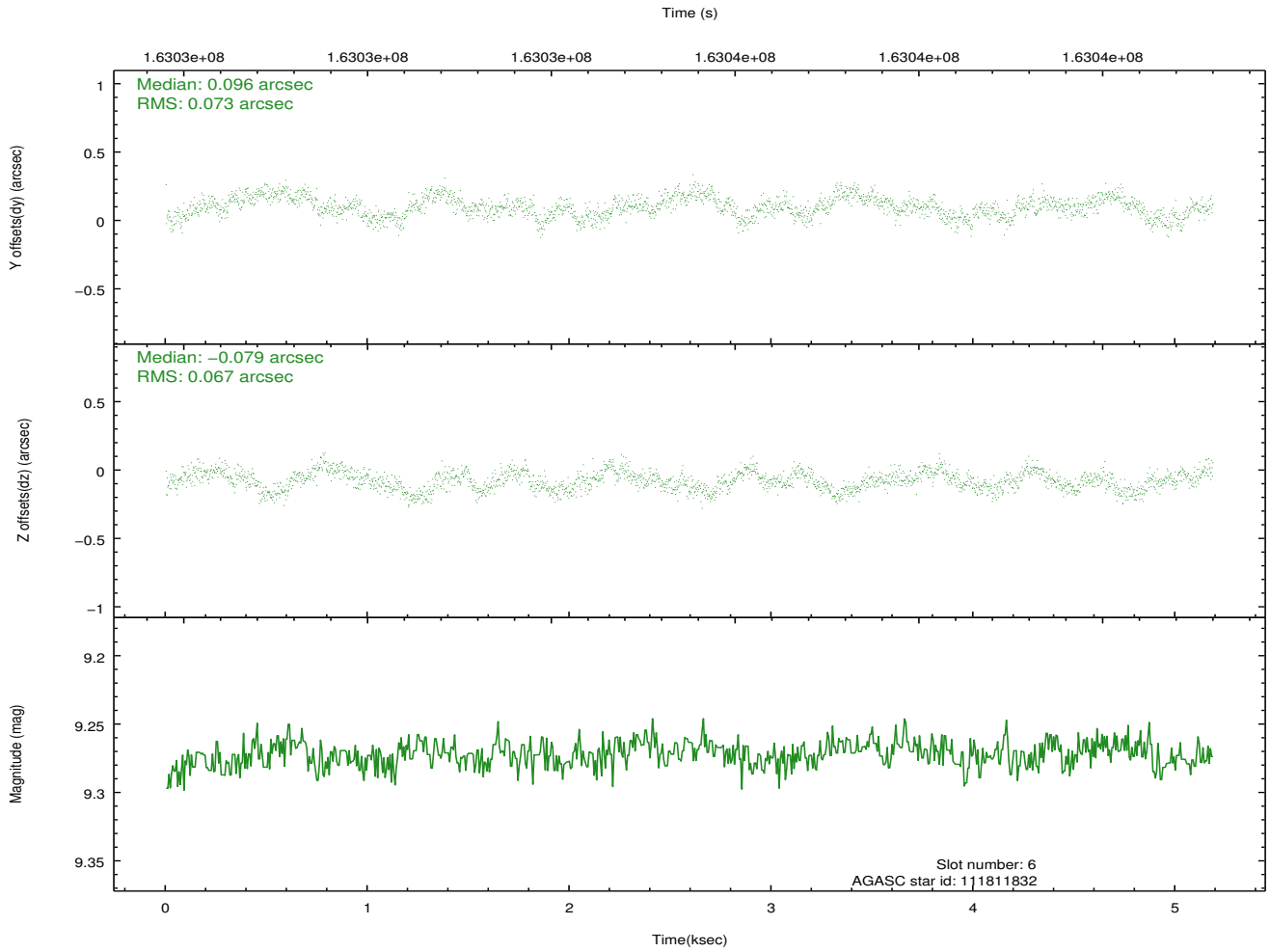
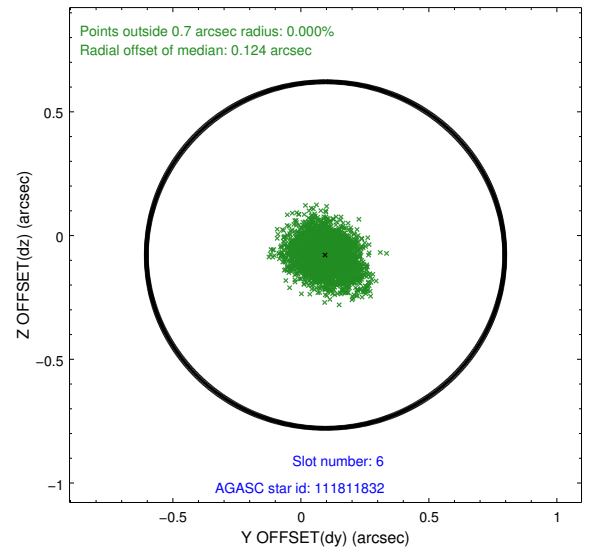
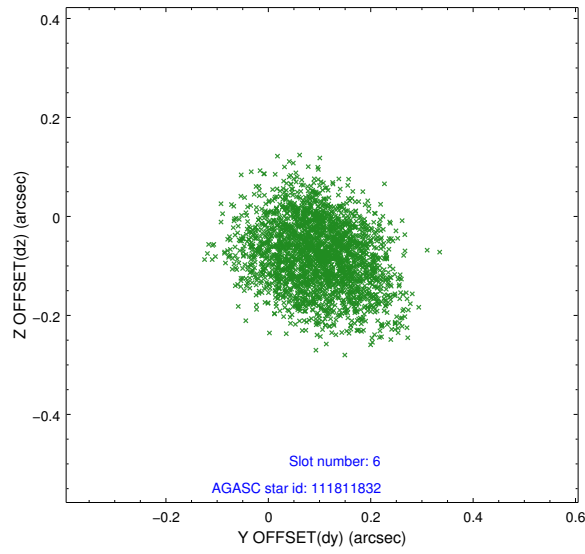
2.4.2 Slot 4



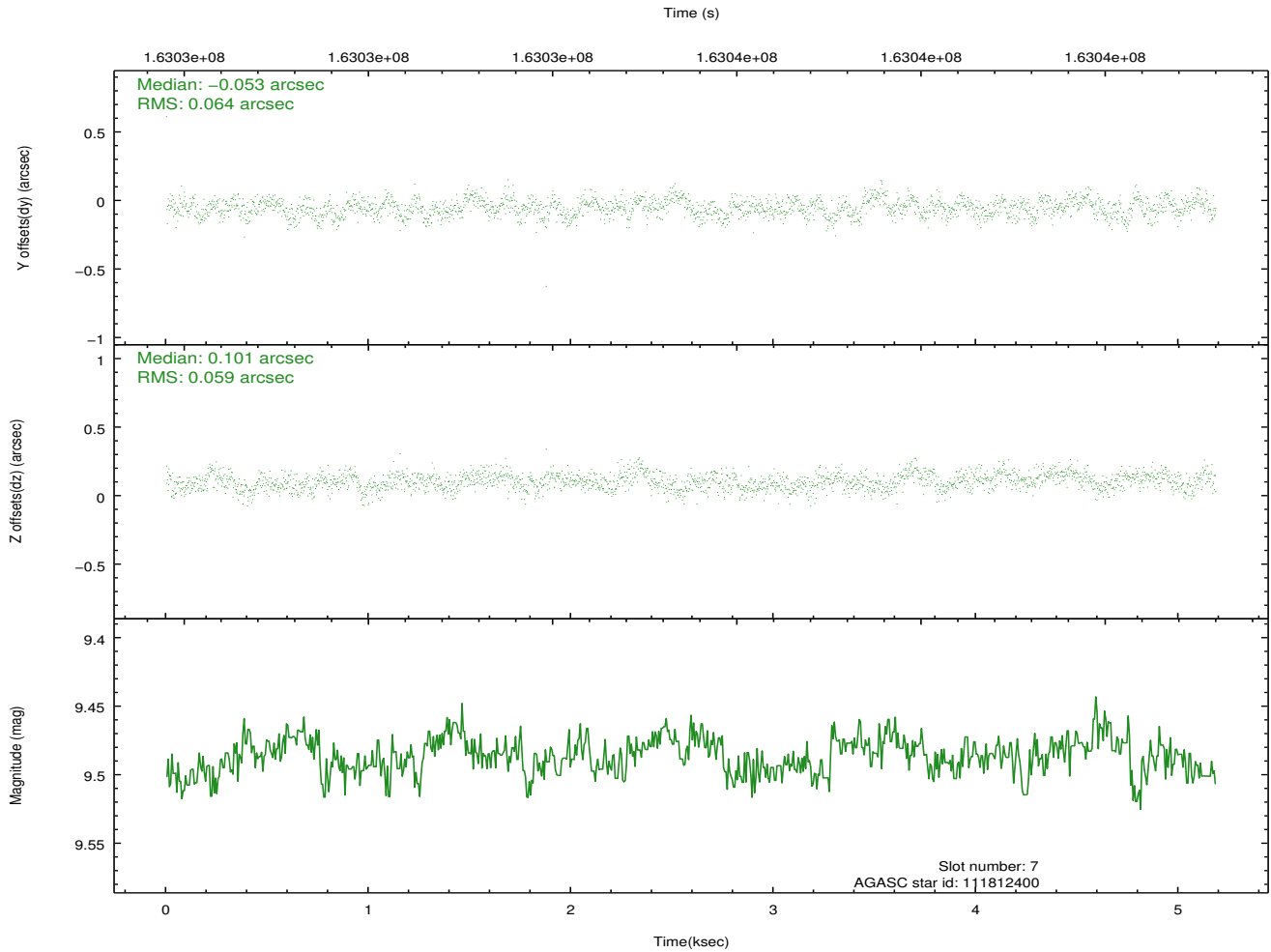
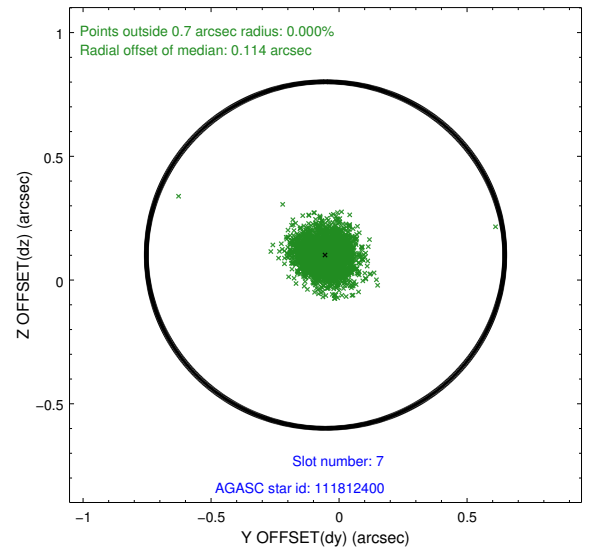
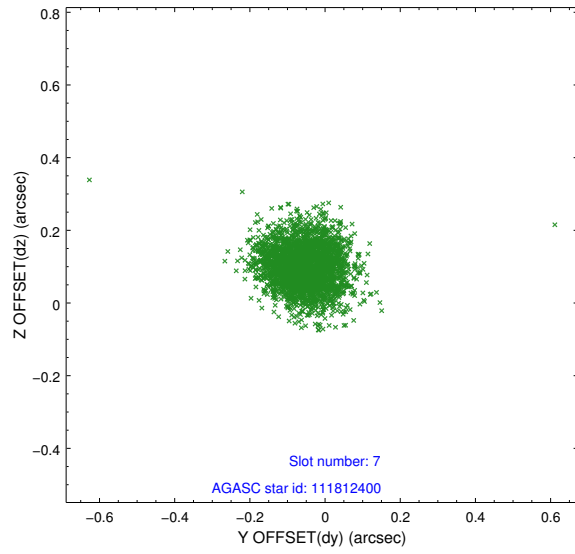
2.4.3 Slot 5



2.4.4 Slot 6

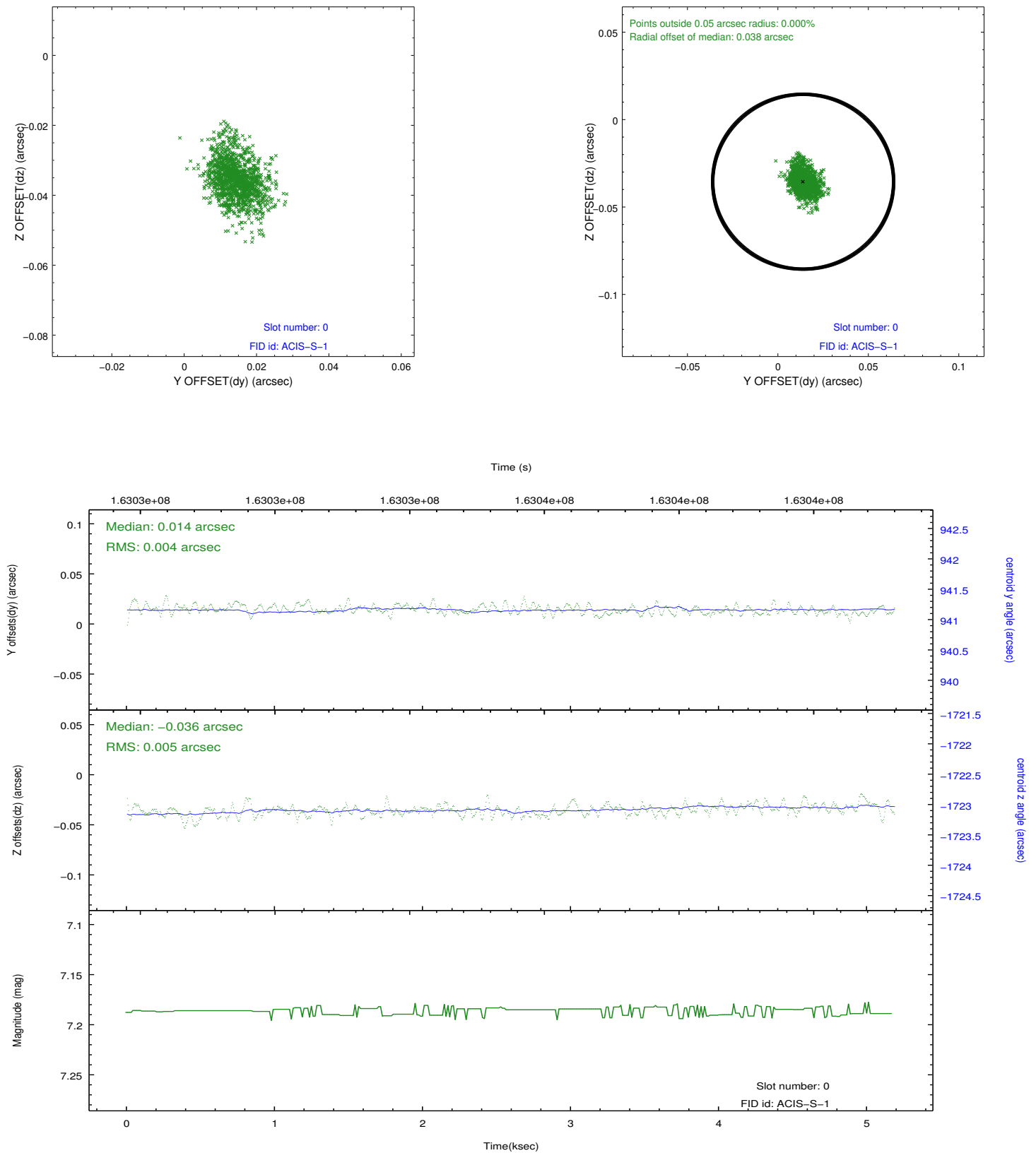


2.4.5 Slot 7

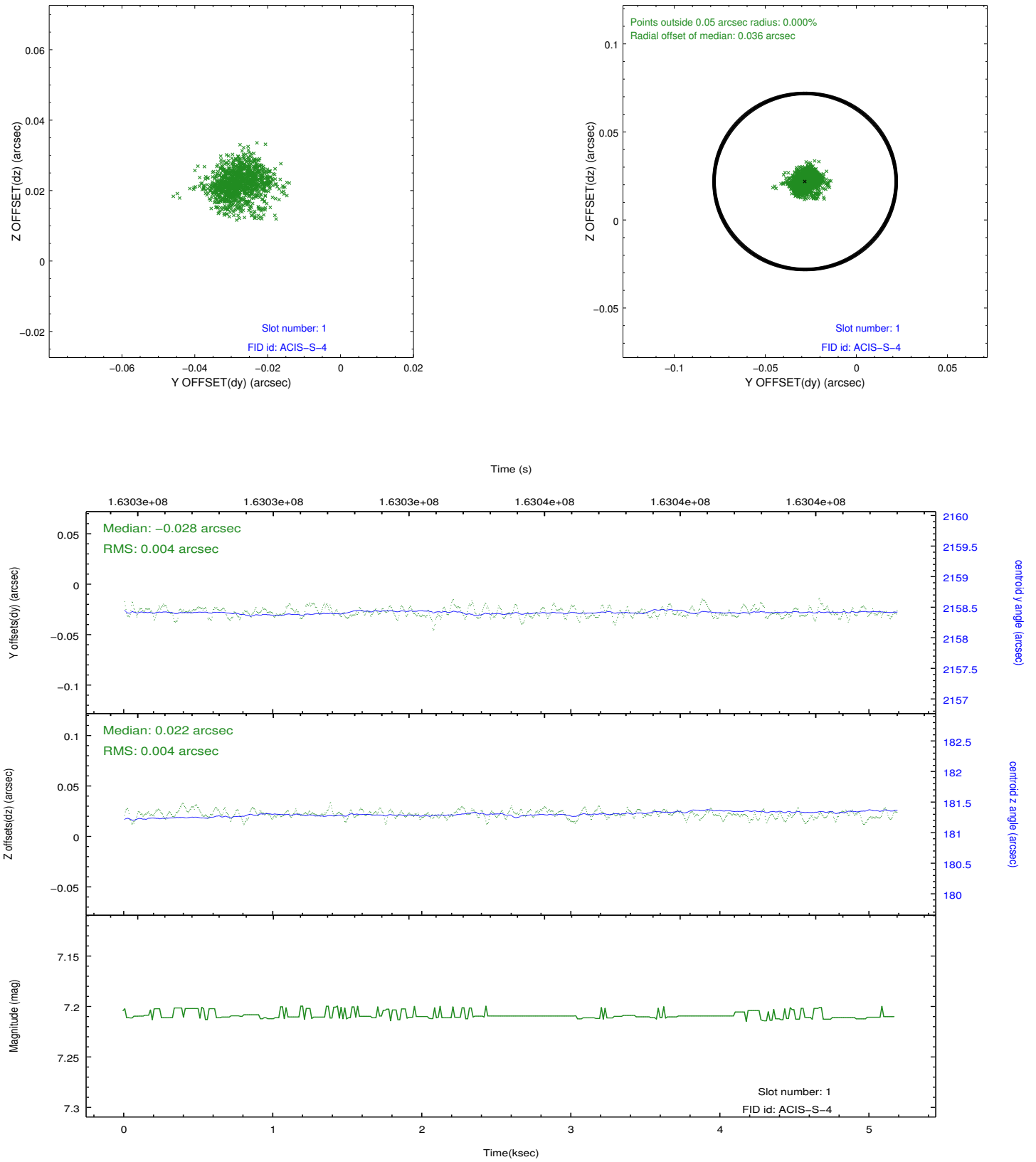


2.5 FID Slots

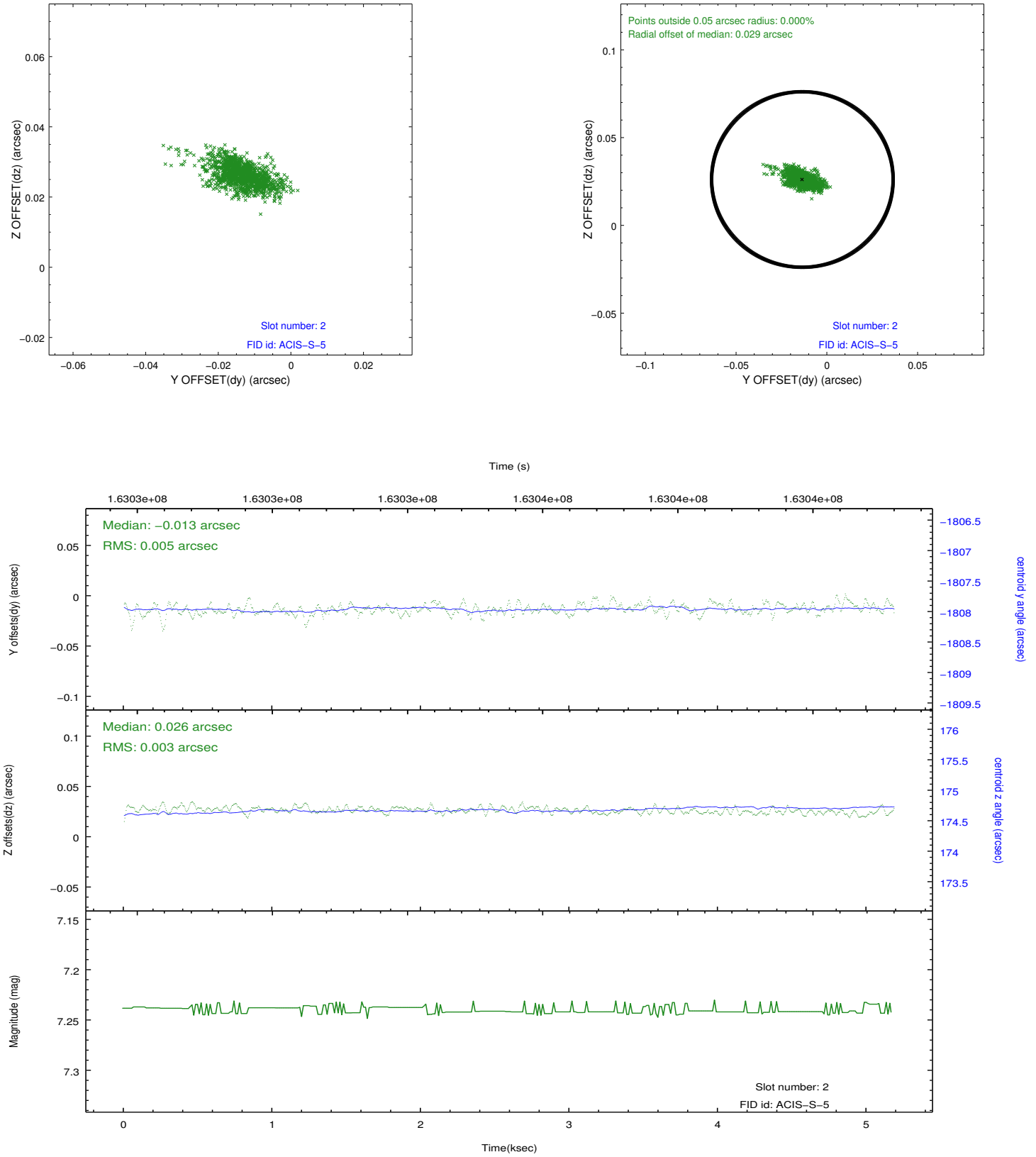
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2013.01.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.116

A.2 Comments

A spatial region of the original bias map for CCD = 2 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 2 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(164.63635,12.99006), (164.63478,12.98383), (164.68664,12.97125), (164.69134,12.97671)