

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15060 - L2 Version 2
Chandra X-Ray Center

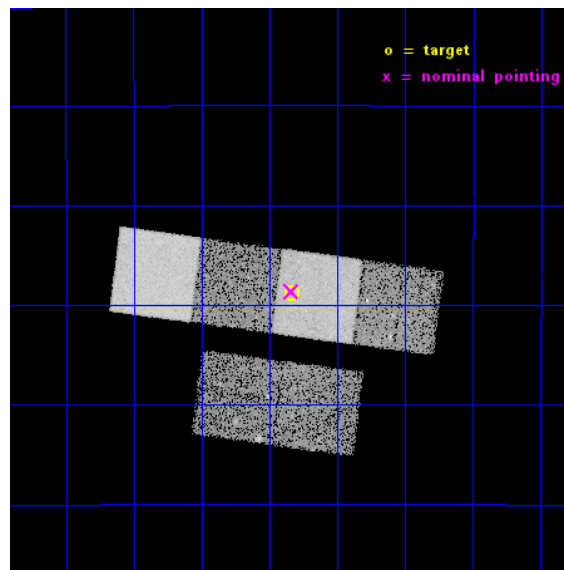
L2 Processing Date : Nov 29 2014

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

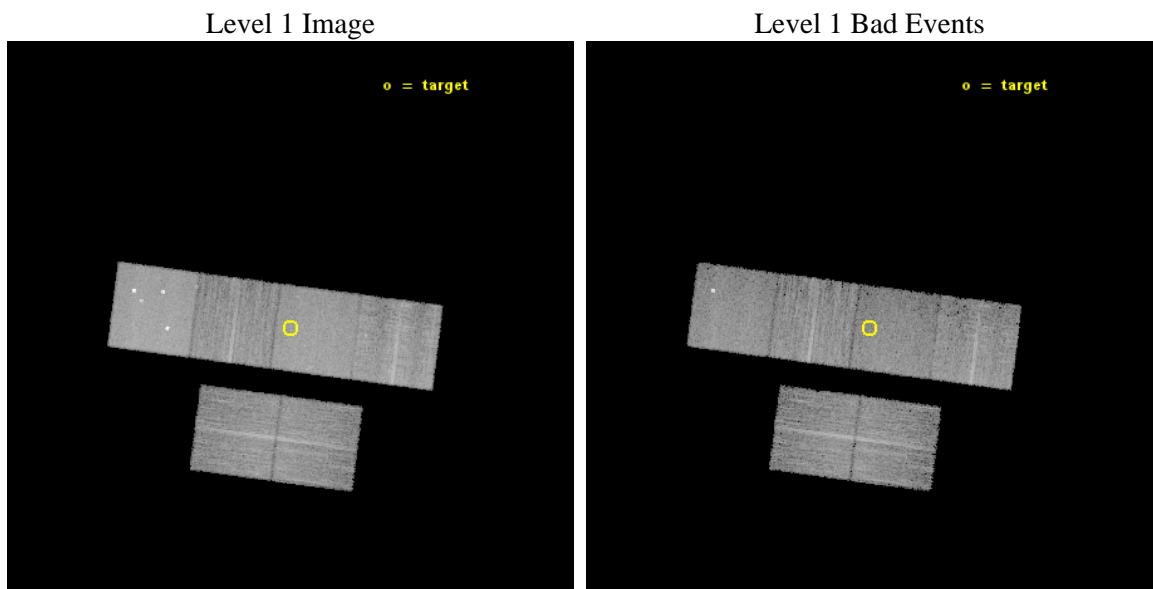
seq_num	702867	Sequence number
obs_id	15060	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	ESO 550-IG025	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.333333	Observer's specified target RA [deg]
dec_targ	-18.813333	Observer's specified target Dec [deg]
ra_nom	65.334647834442	Nominal RA [deg]
dec_nom	-18.810608498987	Nominal Dec [deg]
roll_nom	7.4113747249243	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14966.399944305	Sum of GTIs [s]
livetime	14776.886376526	Livetime [s]
ontime2	14966.399944305	Sum of GTIs [s]
ontime3	14966.399944305	Sum of GTIs [s]
ontime5	14966.399944305	Sum of GTIs [s]
ontime6	14963.15891397	Sum of GTIs [s]
ontime7	14966.399944305	Sum of GTIs [s]
ontime8	14966.399944305	Sum of GTIs [s]
l2events	130310	Number of level 2 events



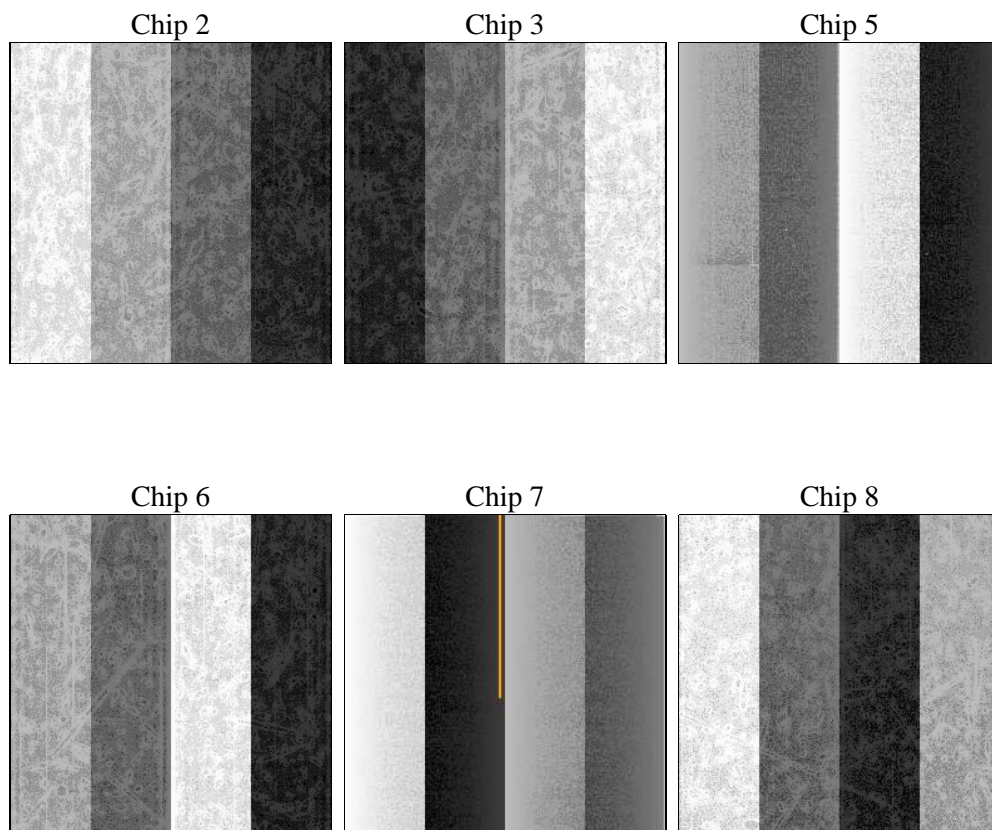
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	14966.399944305	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	14966.399944305	Sum of GTIs [s]
date	2014-11-30T01:35:09	Date and time of file creation	ontime3	14966.399944305	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	14966.399944305	Sum of GTIs [s]
			ontime6	14963.15891397	Sum of GTIs [s]
			ontime7	14966.399944305	Sum of GTIs [s]
			ontime8	14966.399944305	Sum of GTIs [s]
			l1events	548675	Number of level 1 events

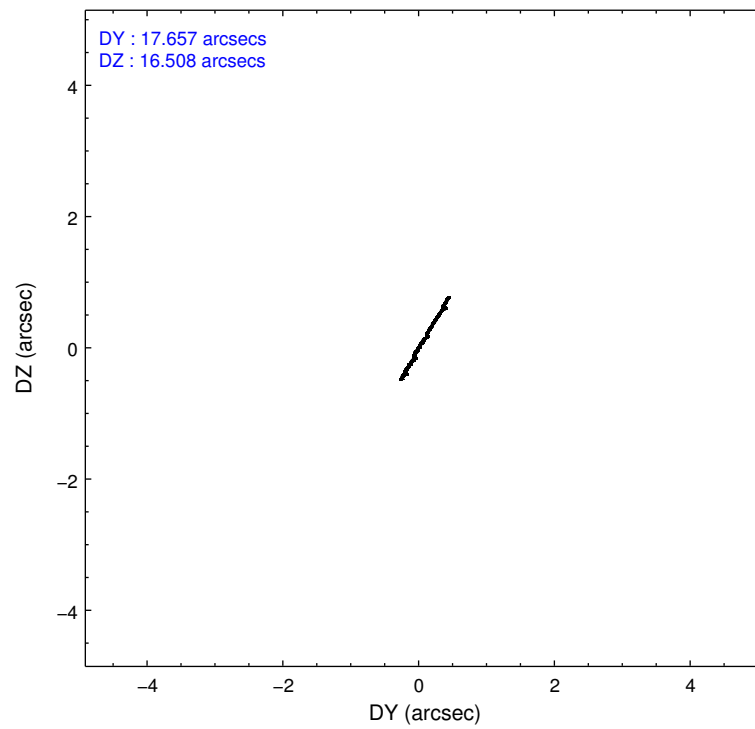
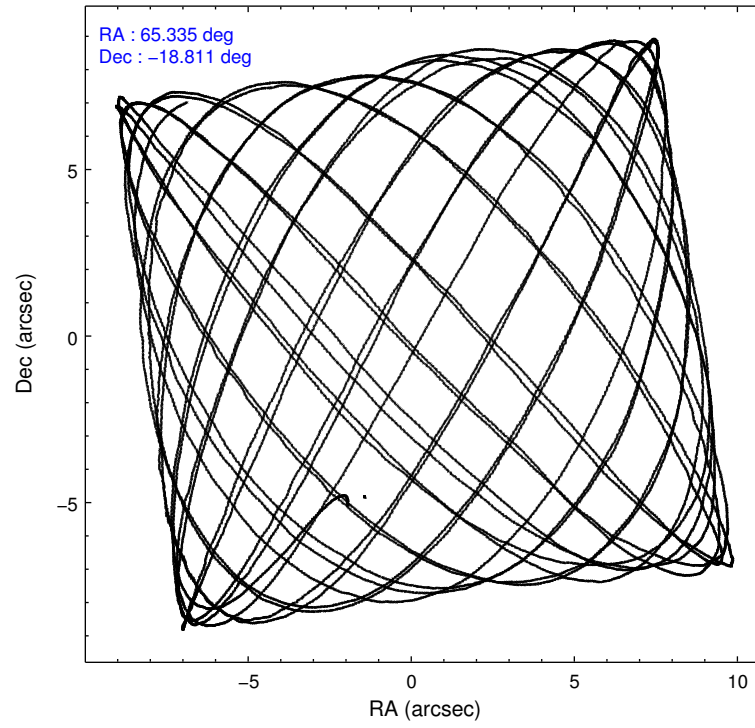
2.1.4 Events

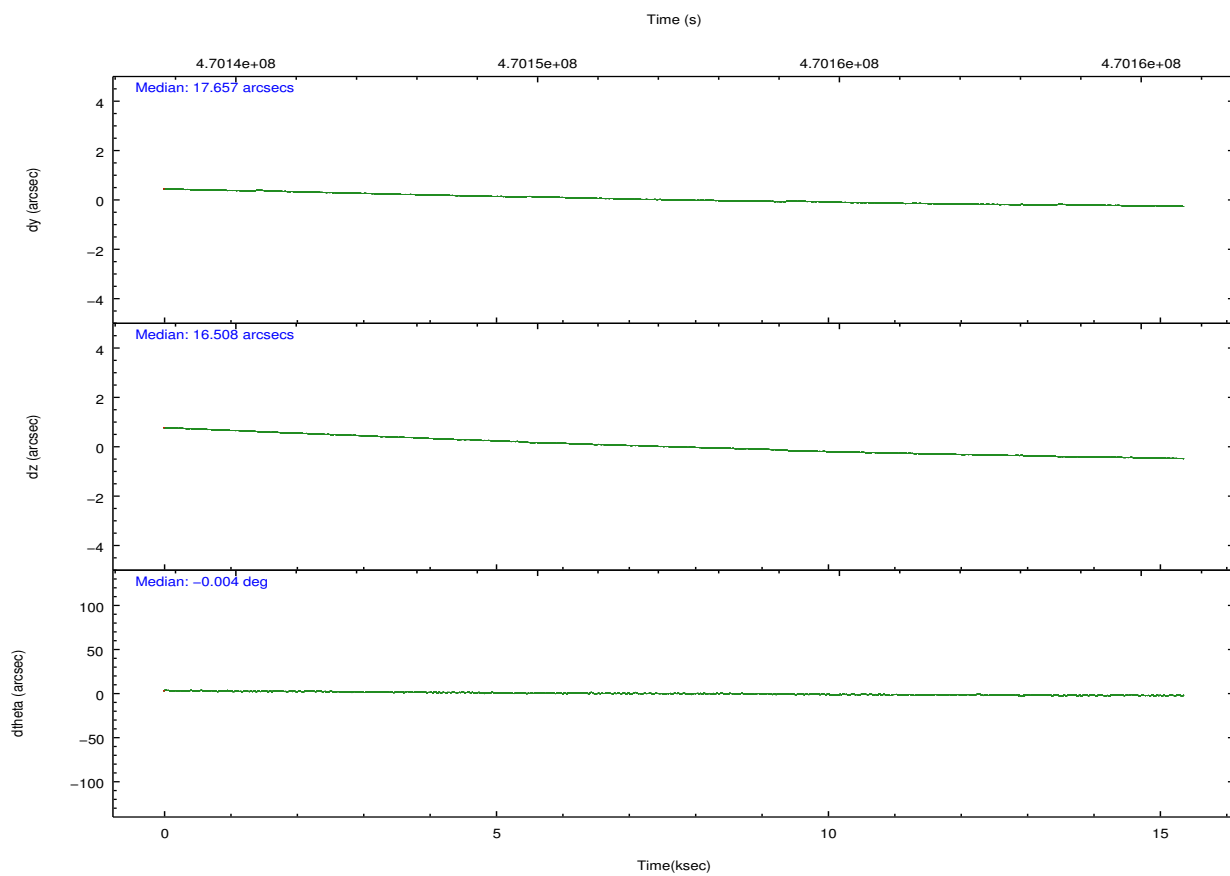
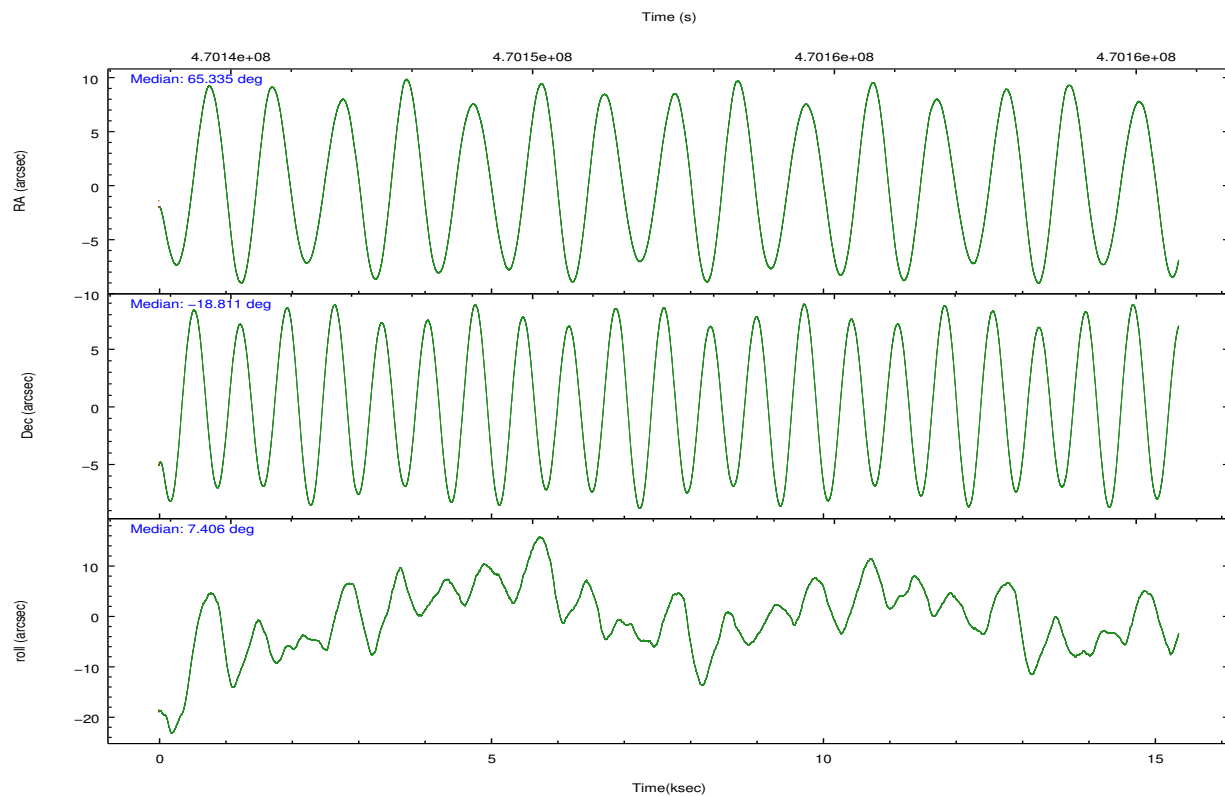
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	71669	71843	131287	76146	100896	96834	grade 0 events	3363	2827	10134	3053	3949	6949
rejected events	62883	63703	65997	67123	56935	71534		4%	3%	7%	4%	3%	7%
rejected %	87%	88%	50%	88%	56%	73%	grade 1 events	37	38	205	34	132	73
								0%	0%	0%	0%	0%	0%
							grade 2 events	2070	1769	19110	2067	8956	6324
								2%	2%	14%	2%	8%	6%
							grade 3 events	878	904	2314	949	3735	2591
								1%	1%	1%	1%	3%	2%
							grade 4 events	808	895	2056	875	3723	2358
								1%	1%	1%	1%	3%	2%
							grade 5 events	3308	3783	10751	3830	10312	5495
								4%	5%	8%	5%	10%	5%
							grade 6 events	1680	1748	31706	2083	23626	7083
								2%	2%	24%	2%	23%	7%
							grade 7 events	59525	59879	55011	63255	46463	65961
								83%	83%	41%	83%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	65.311979	65.33464783444181	CCD I2 on	O2	Y
[deg] Pointing Dec	-18.827498	-18.81060849898656	CCD I3 on	Y	Y
[deg] Pointing Roll	7.247437	7.411374724924343	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	470144927.184000	470143878.42926	CCD S5 on	N	N
Observation start date	2012-11-24T11:47:40	2012-11-24T11:31:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	470159927.184000	470160572.60515	On-chip summing requested	N	N
Observation end date	2012-11-24T15:57:40	2012-11-24T16:09:32	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



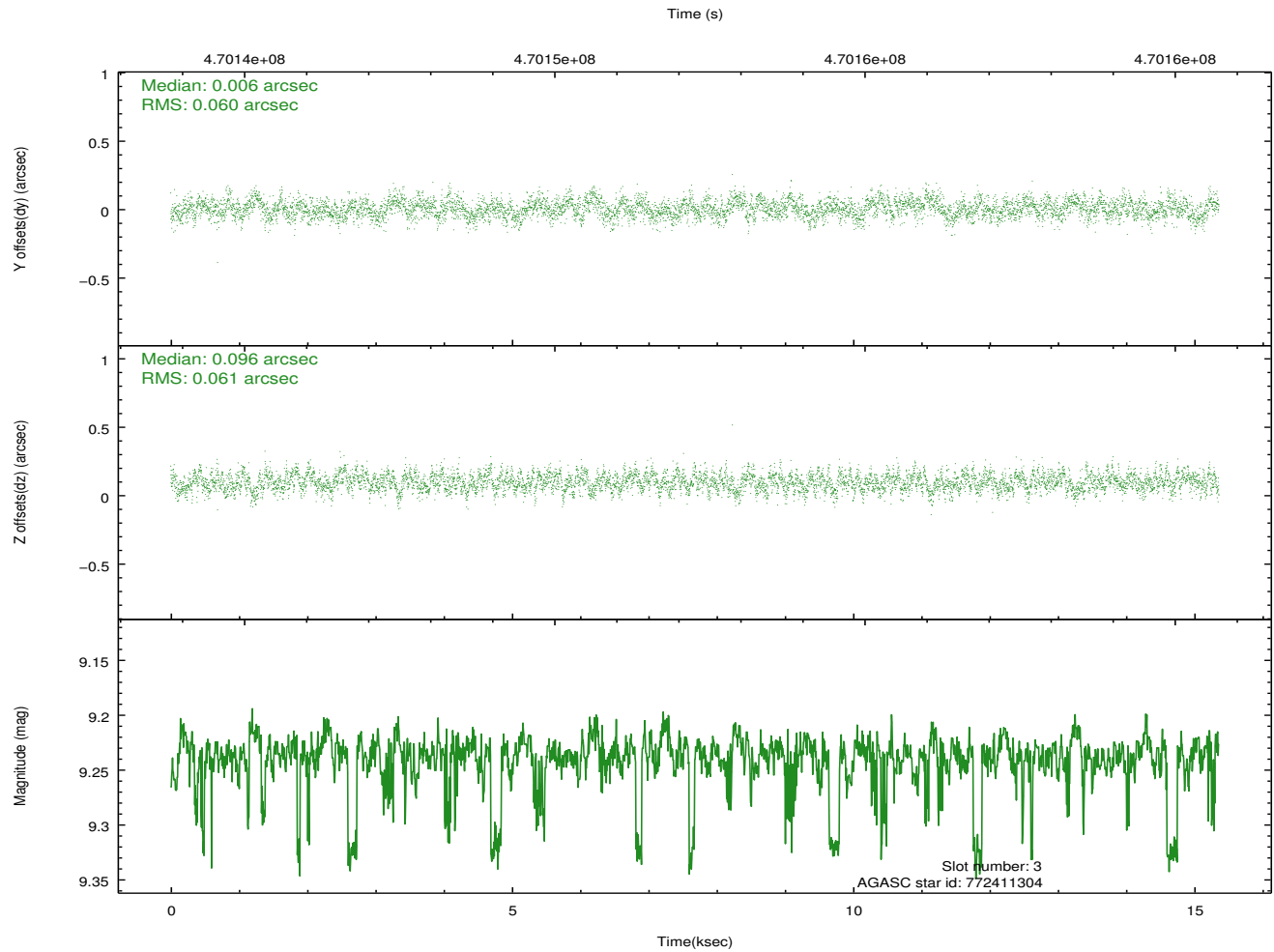
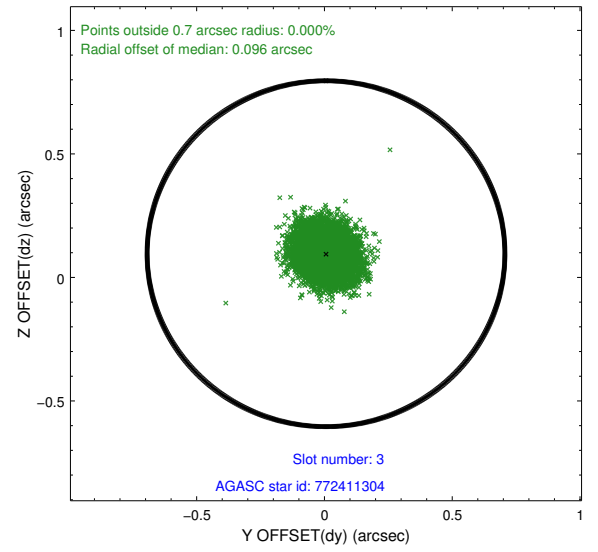
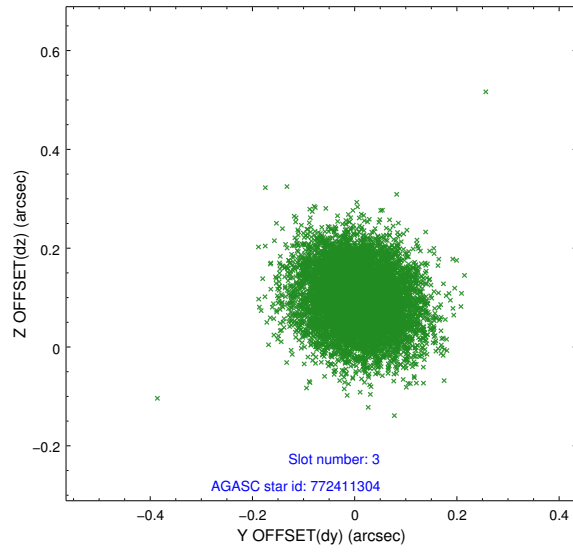


Slot Statistics

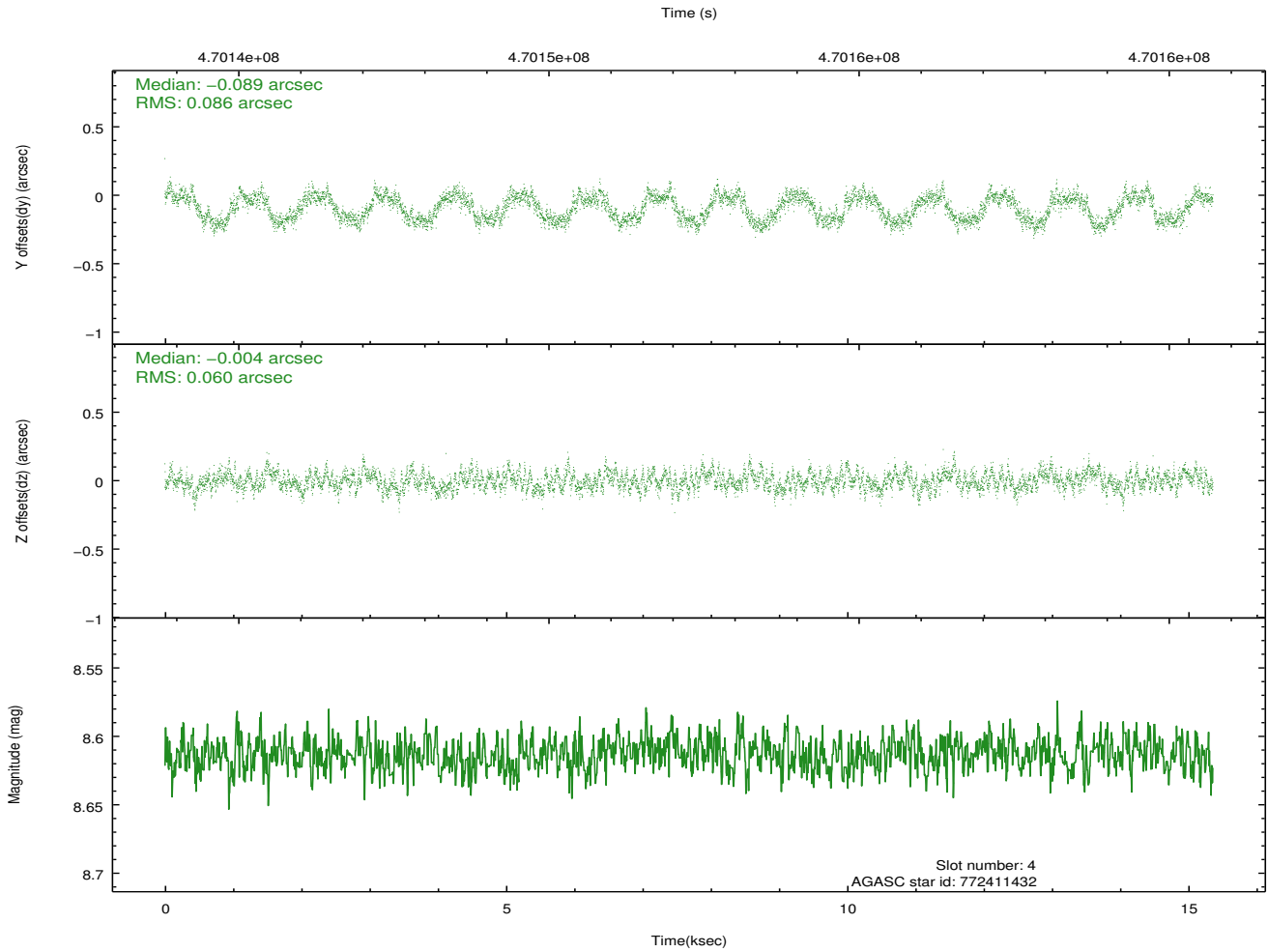
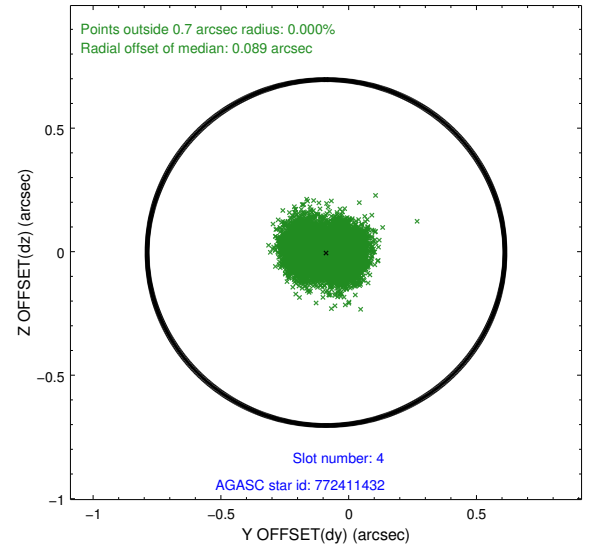
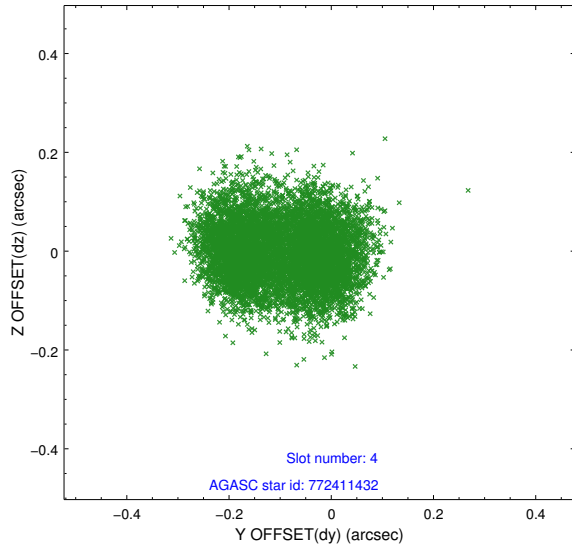
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.99	3747	-0.100	-0.018	0.016	0.027	0.000000	0.000000	-770.85	-1737.94
1	FID		ACIS-S-4	7.07	3746	0.253	0.053	0.008	0.013	0.000000	0.000000	2142.66	170.30
2	FID		ACIS-S-5	7.11	3747	-0.186	-0.027	0.022	0.032	0.000000	0.000000	-1823.39	164.24
3	GUIDE	used	772411304	9.24	7457	0.006	0.096	0.092	0.146	65.784998	-18.921806	1555.55	-541.66
4	GUIDE	used	772411432	8.61	7434	-0.089	-0.004	0.115	0.167	65.556499	-19.420941	554.76	-2224.63
5	GUIDE	used	772413592	8.36	7488	-0.078	0.010	0.086	0.135	65.621877	-18.868722	1029.03	-281.25
6	GUIDE	used	772421232	8.28	7491	0.049	-0.011	0.063	0.101	65.250673	-19.243760	-394.65	-1459.82
7	GUIDE	used	772419424	9.78	7470	0.117	-0.091	0.137	0.232	64.591425	-18.409256	-2251.82	1799.07

2.4 Star Slots

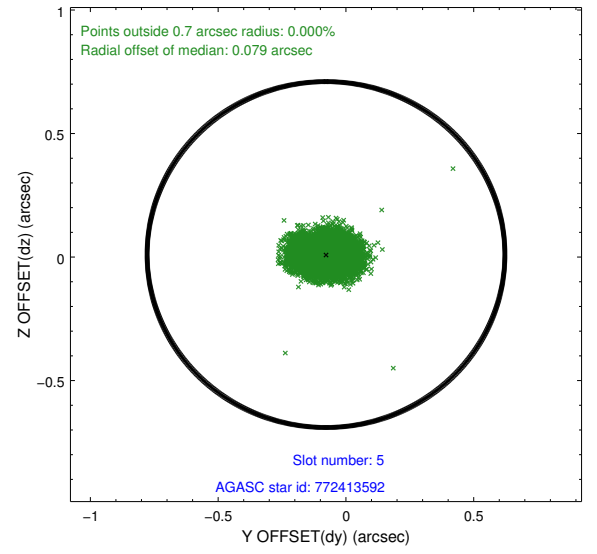
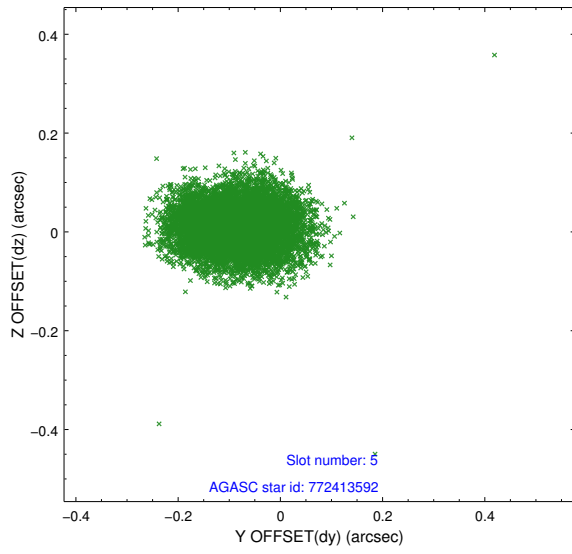
2.4.1 Slot 3



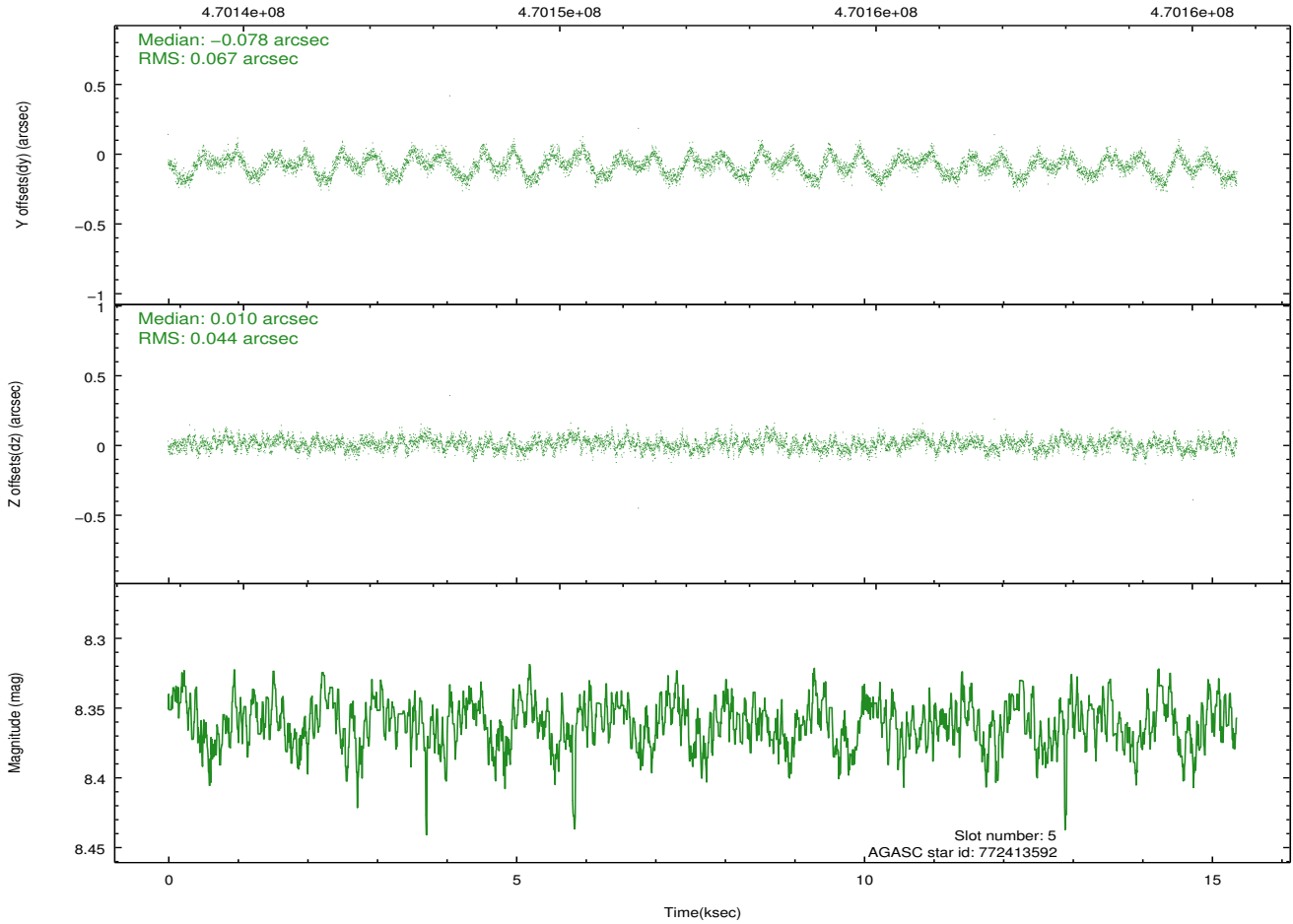
2.4.2 Slot 4



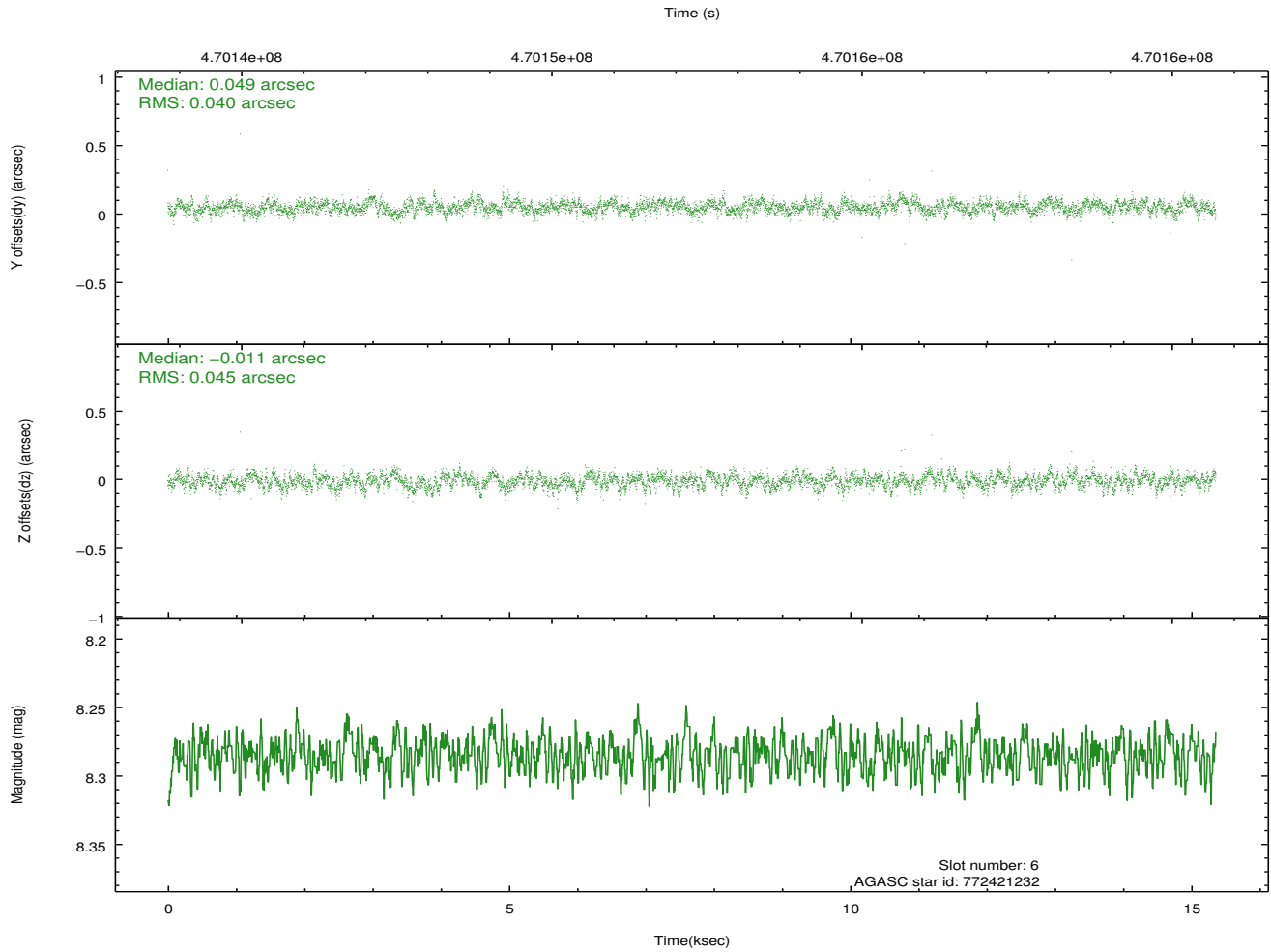
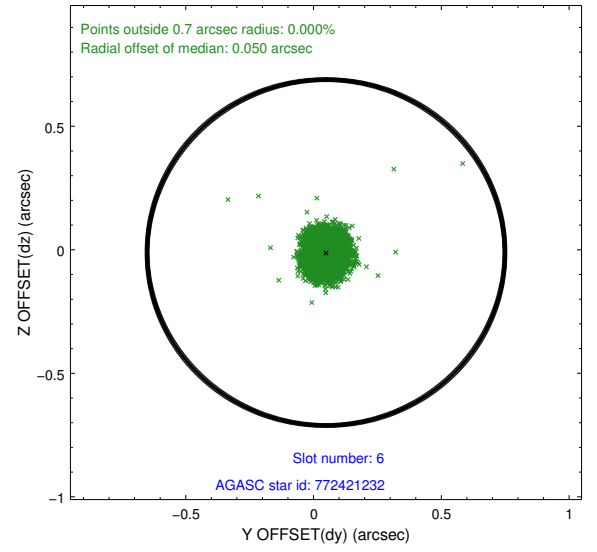
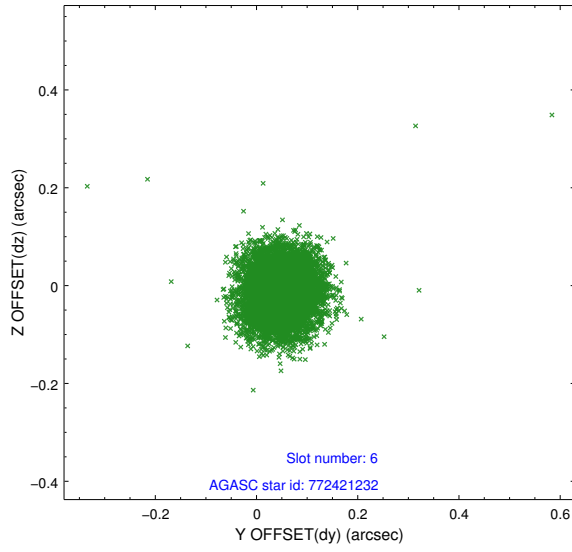
2.4.3 Slot 5



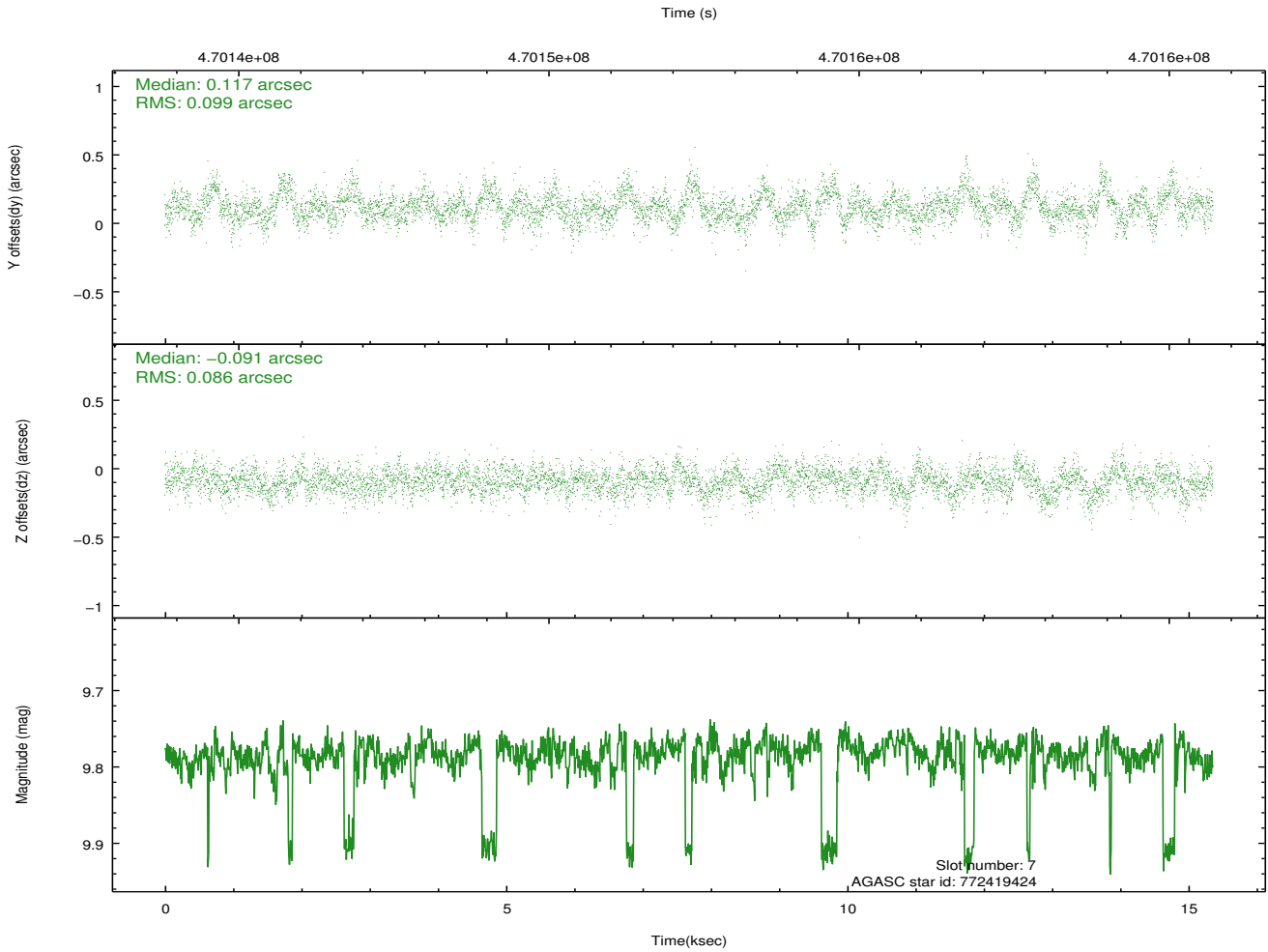
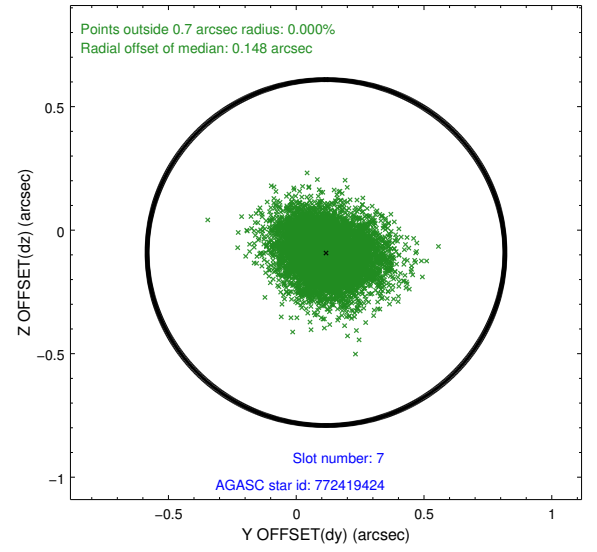
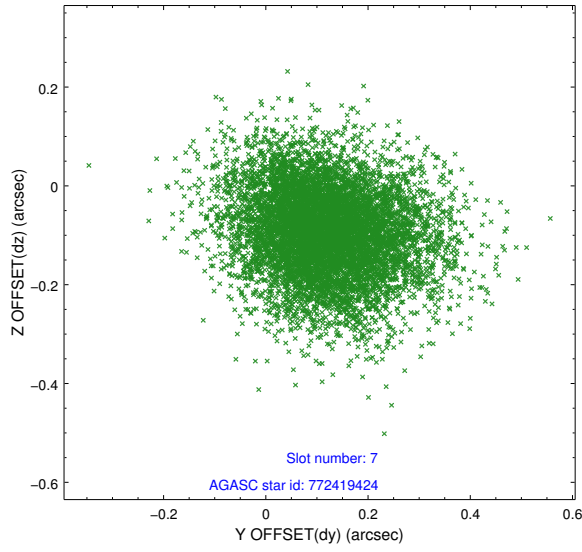
Time (s)



2.4.4 Slot 6

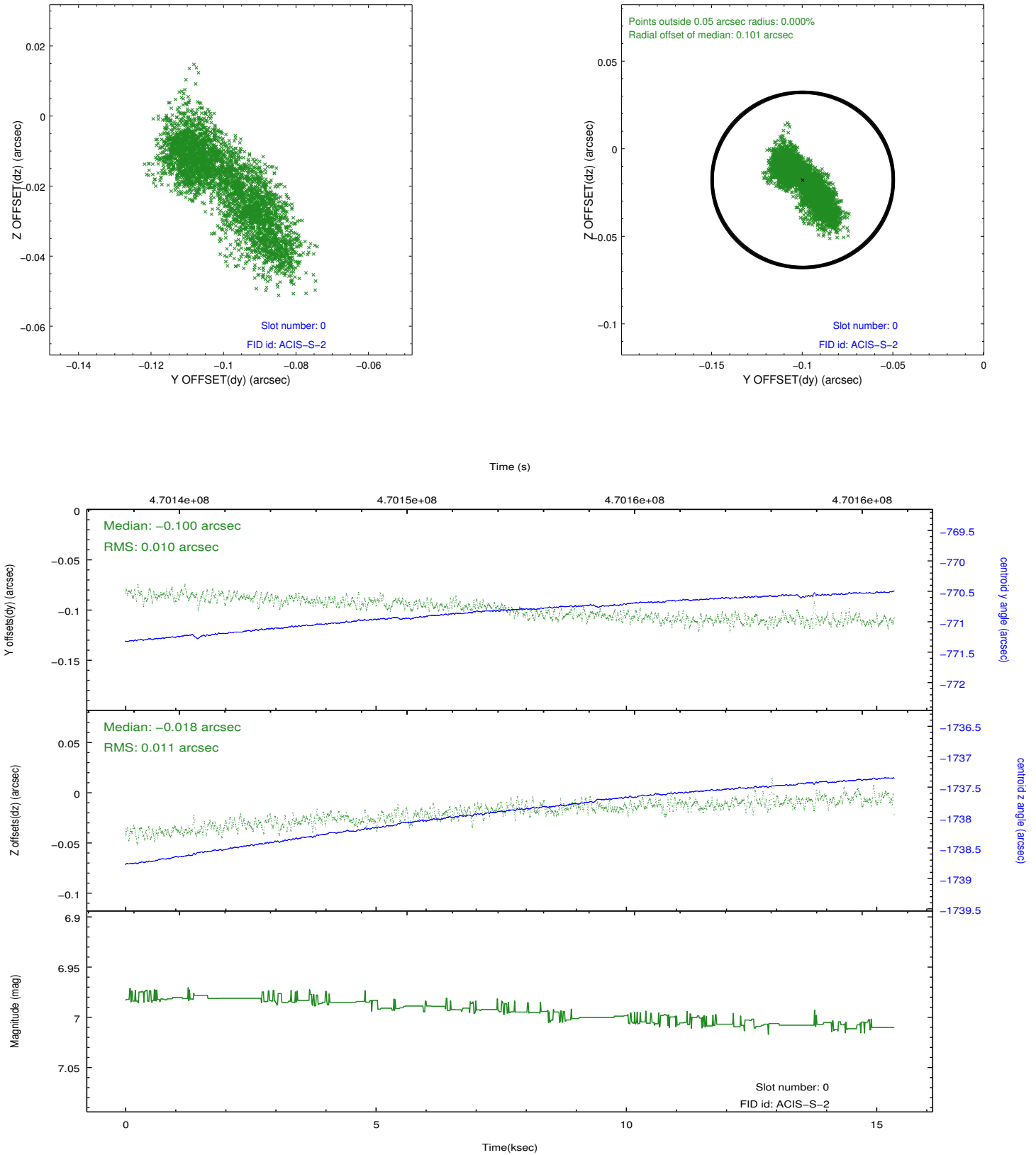


2.4.5 Slot 7

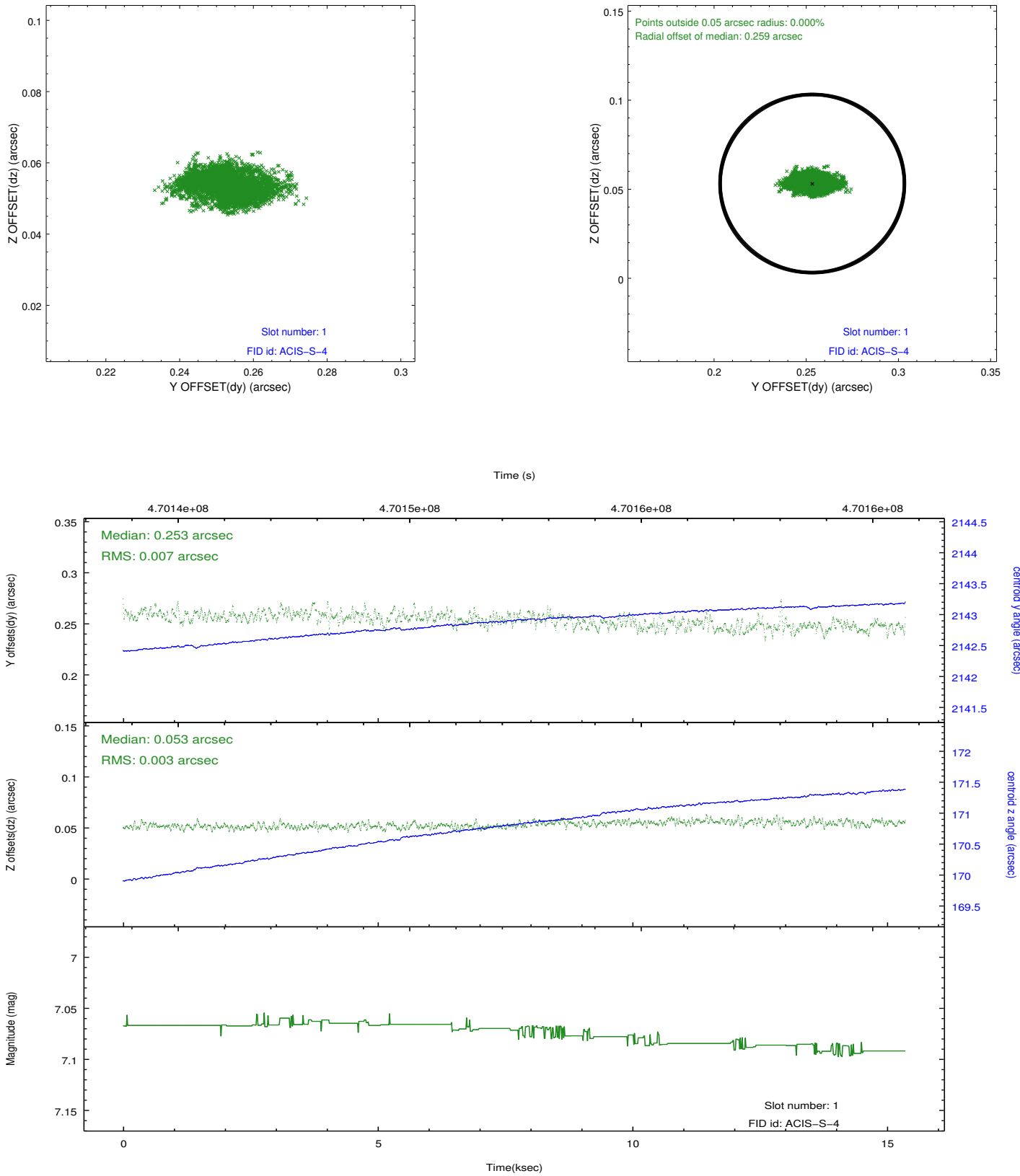


2.5 FID Slots

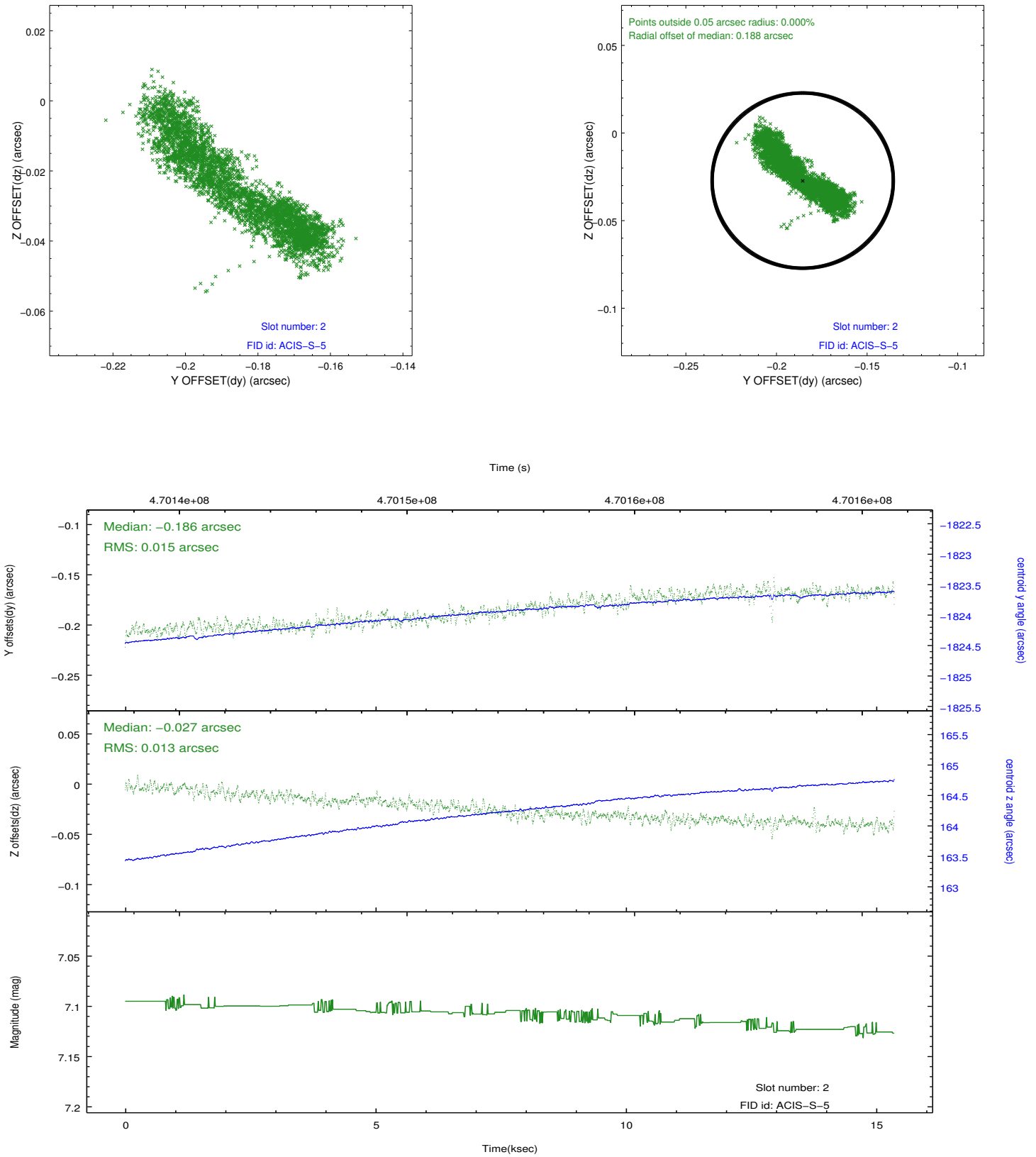
2.5.1 Slot 0



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)	2014.12.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.966399944305

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.