

V&V Reference Report

L2 ASCDS Version : 8.5.1

Observation 15058 - L2 Version 2
Chandra X-Ray Center

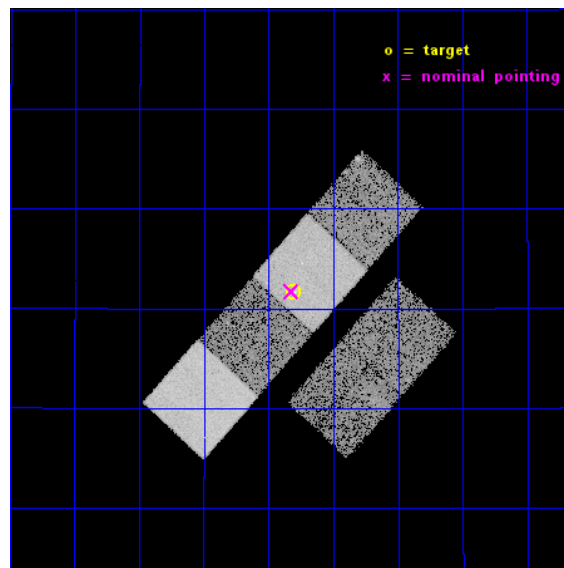
L2 Processing Date : Nov 30 2014

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1 Front

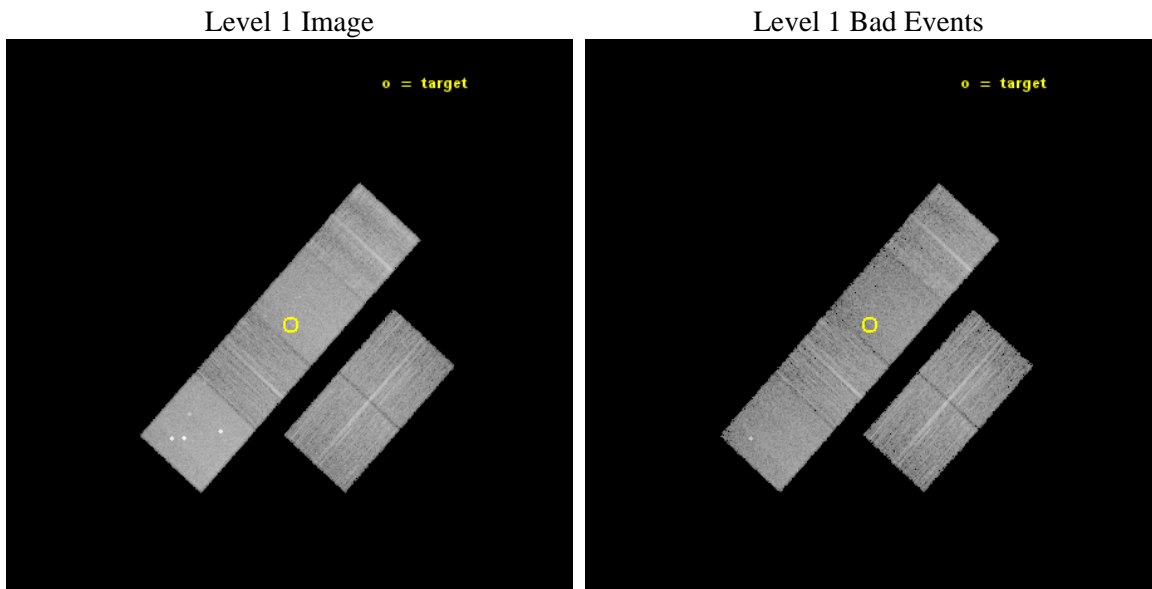
seq_num	702865	Sequence number
obs_id	15058	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	IRAS 20351+2521	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	309.3275	Observer's specified target RA [deg]
dec_targ	25.528333	Observer's specified target Dec [deg]
ra_nom	309.33078991947	Nominal RA [deg]
dec_nom	25.528813944009	Nominal Dec [deg]
roll_nom	312.07629382838	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13731.199948907	Sum of GTIs [s]
livetime	13557.327227218	Livetime [s]
ontime2	13731.199948907	Sum of GTIs [s]
ontime3	13731.199948907	Sum of GTIs [s]
ontime5	13731.199948907	Sum of GTIs [s]
ontime6	13731.199948907	Sum of GTIs [s]
ontime7	13731.199948907	Sum of GTIs [s]
ontime8	13731.199948907	Sum of GTIs [s]
l2events	127442	Number of level 2 events



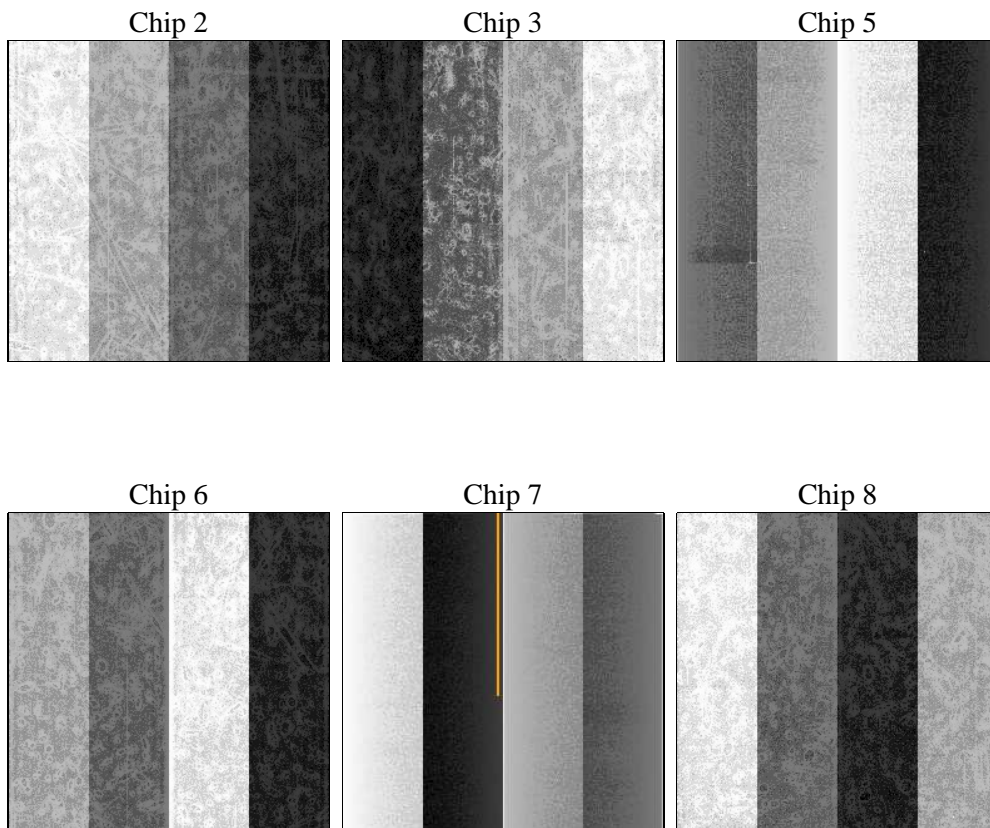
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13768.006000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	13731.199948907	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	13731.199948907	Sum of GTIs [s]
date	2014-11-30T10:19:38	Date and time of file creation	ontime3	13731.199948907	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	13731.199948907	Sum of GTIs [s]
			ontime6	13731.199948907	Sum of GTIs [s]
			ontime7	13731.199948907	Sum of GTIs [s]
			ontime8	13731.199948907	Sum of GTIs [s]
			l1events	533795	Number of level 1 events

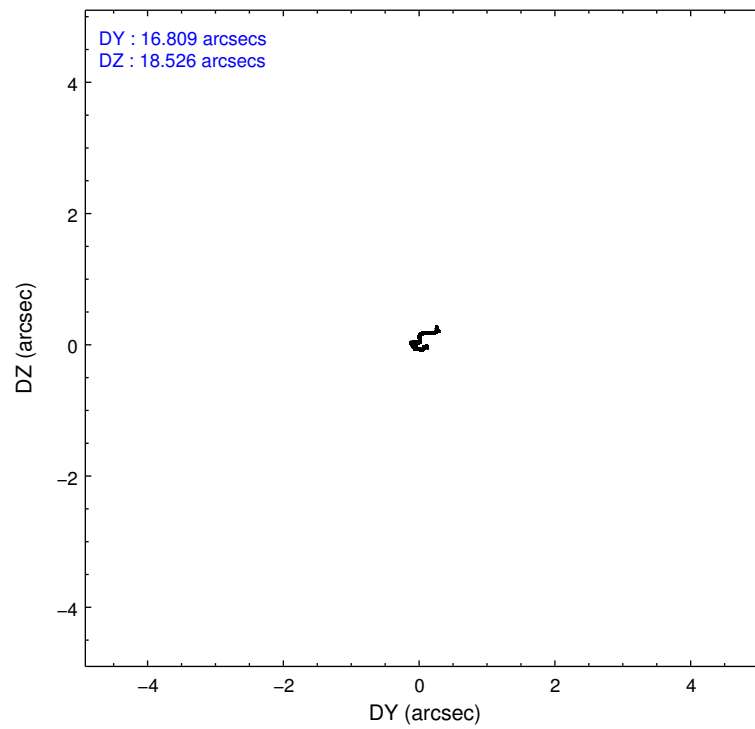
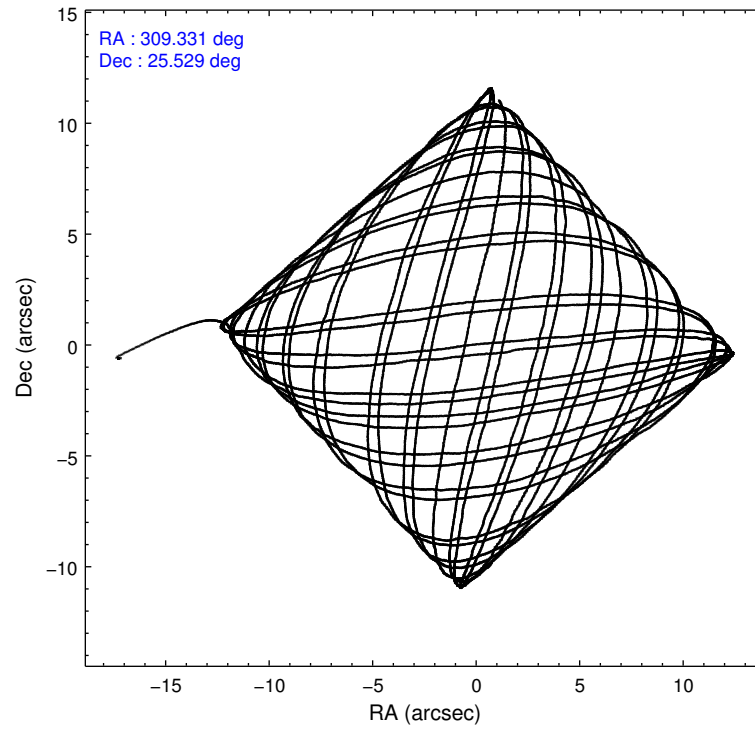
2.1.4 Events

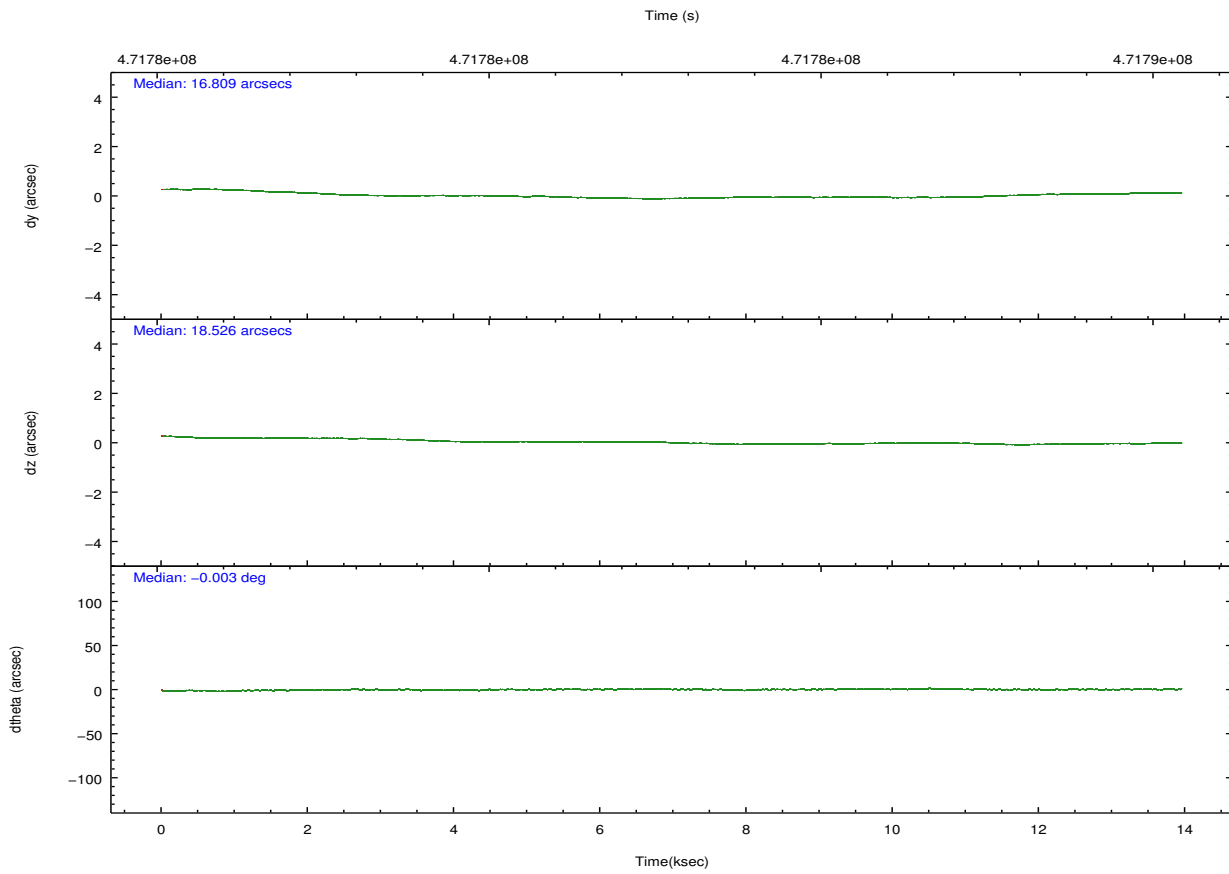
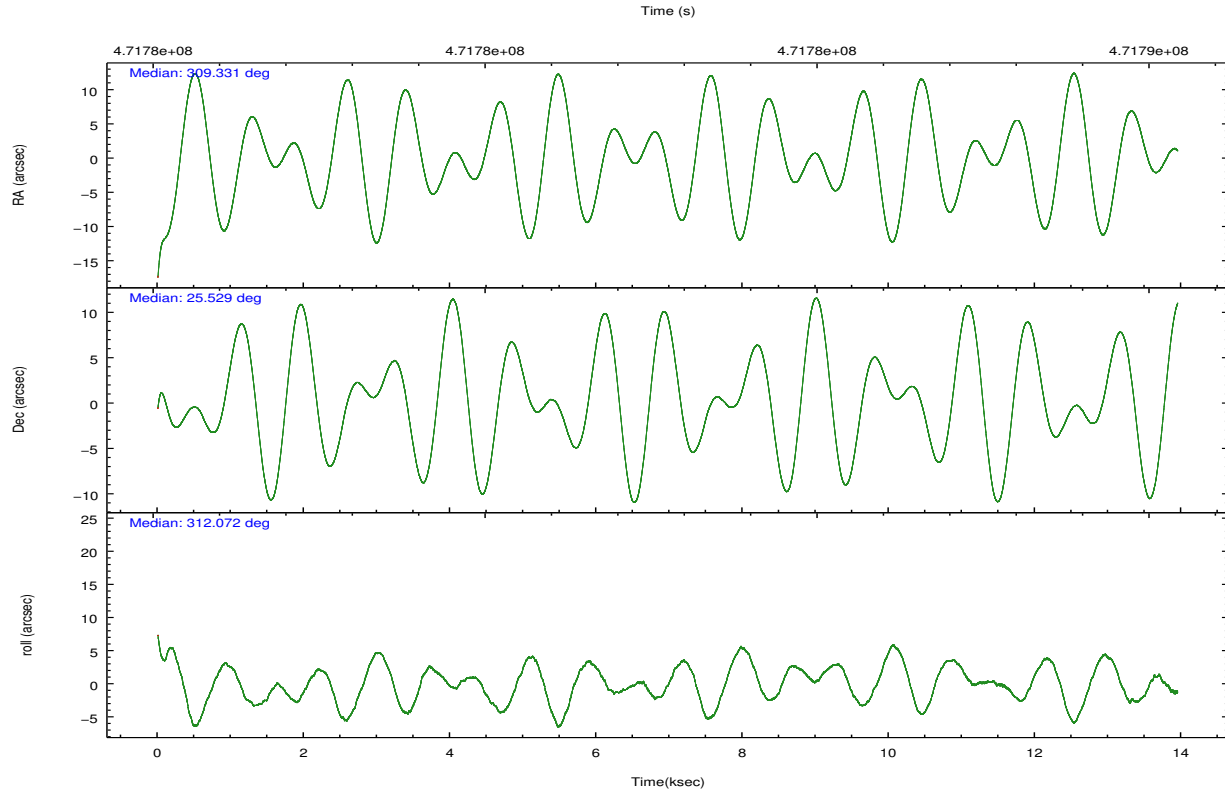
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72951	70408	125568	72728	96852	95288	grade 0 events	3258	2733	10000	3039	3828	7665
rejected events	64291	62473	62000	63875	53598	70115		4%	3%	7%	4%	3%	8%
rejected %	88%	88%	49%	87%	55%	73%	grade 1 events	46	47	224	40	107	59
								0%	0%	0%	0%	0%	0%
							grade 2 events	2116	1783	18635	2022	8904	5920
								2%	2%	14%	2%	9%	6%
							grade 3 events	810	861	2086	942	3826	2656
								1%	1%	1%	1%	3%	2%
							grade 4 events	862	857	1936	867	3695	2525
								1%	1%	1%	1%	3%	2%
							grade 5 events	3194	3643	8898	3845	10346	5422
								4%	5%	7%	5%	10%	5%
							grade 6 events	1621	1708	30947	1987	23024	6446
								2%	2%	24%	2%	23%	6%
							grade 7 events	61044	58776	52842	59986	43122	64595
								83%	83%	42%	82%	44%	67%

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	309.301849	309.3307899194673	CCD I2 on	O2	Y
[deg] Pointing Dec	25.536891	25.52881394400912	CCD I3 on	Y	Y
[deg] Pointing Roll	311.932144	312.0762938283826	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	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	471775968.184000	471774936.41702	CCD S5 on	N	N
Observation start date	2012-12-13T08:51:41	2012-12-13T08:35:36	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	471789736.184000	471789962.40533	On-chip summing requested	N	N
Observation end date	2012-12-13T12:41:09	2012-12-13T12:46:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect





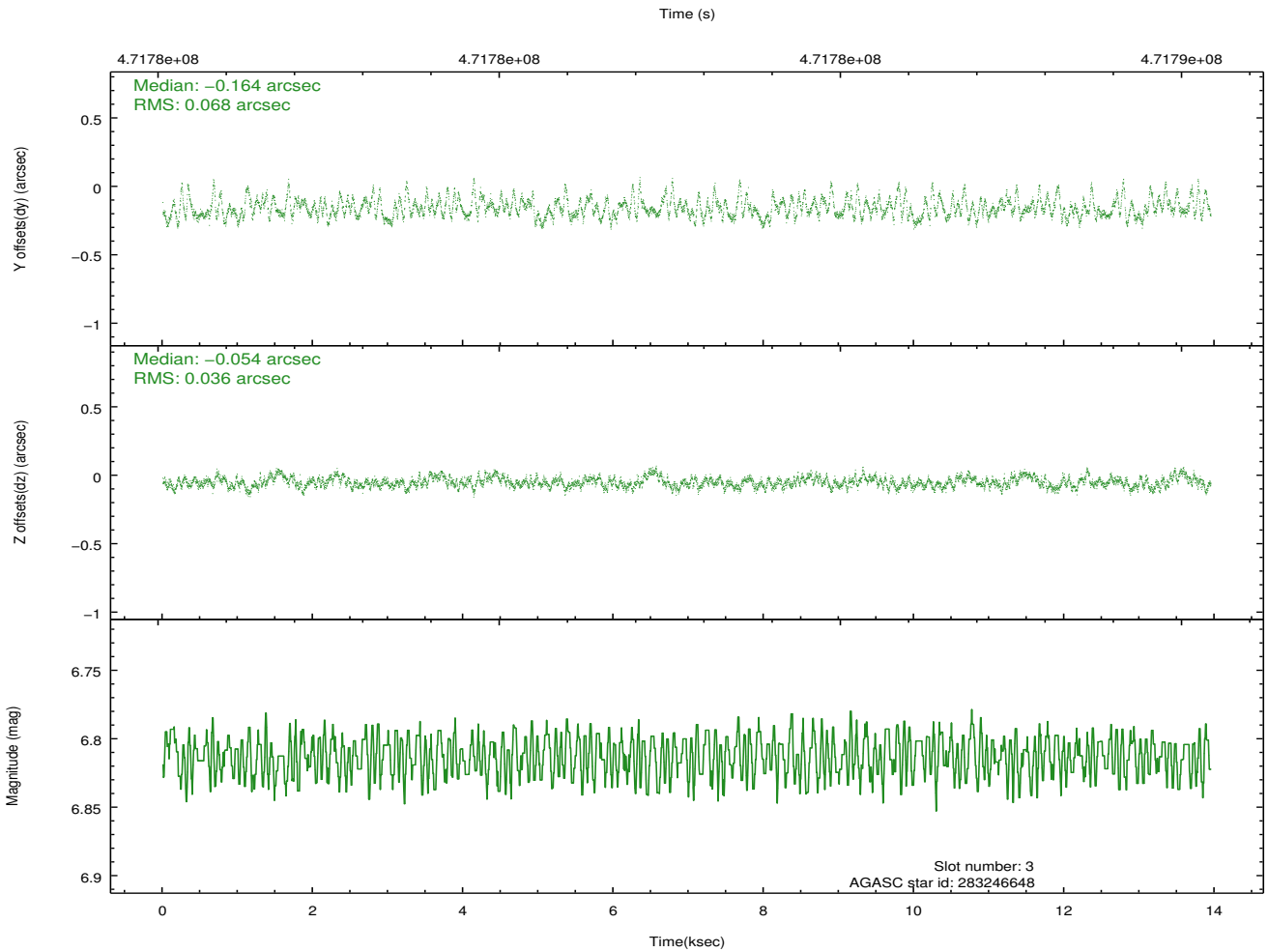
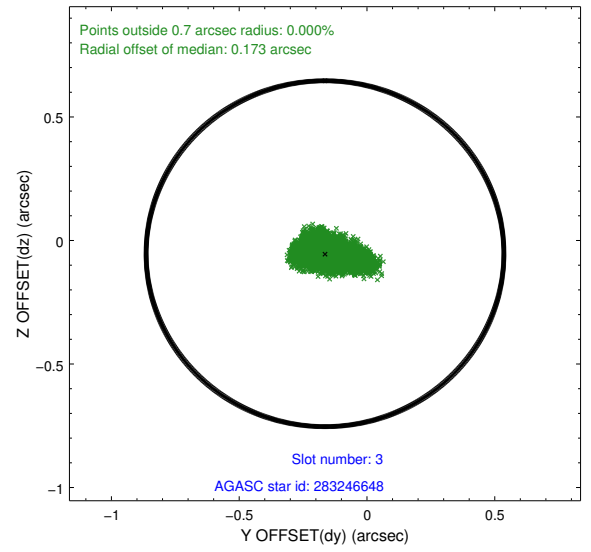
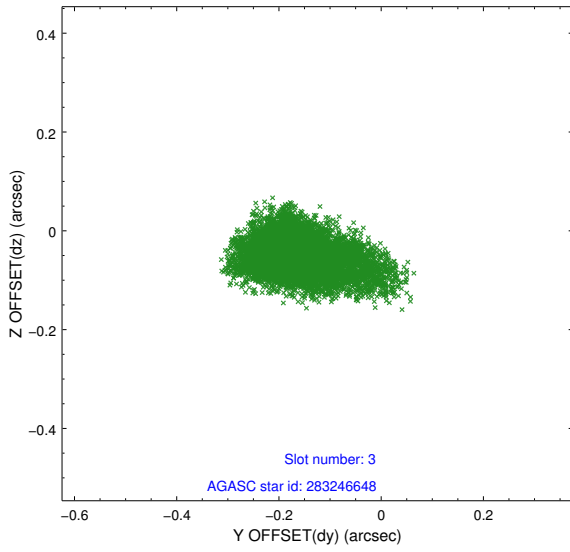
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.90	3403	-0.082	-0.029	0.007	0.011	0.000000	0.000000	-769.96	-1740.05
1	FID		ACIS-S-4	7.00	3403	0.176	0.047	0.007	0.013	0.000000	0.000000	2143.45	168.11
2	FID		ACIS-S-5	7.02	3402	-0.126	-0.010	0.007	0.012	0.000000	0.000000	-1822.38	162.17
3	GUIDE	used	283246648	6.81	6805	-0.164	-0.054	0.077	0.141	309.034745	25.882648	-1504.53	189.19
4	GUIDE	used	283250952	8.37	6801	-0.051	-0.134	0.071	0.115	309.587662	25.590709	475.24	820.68
5	GUIDE	used	283255464	9.04	6795	0.246	-0.043	0.119	0.198	309.222322	24.732754	1980.67	-2127.49
6	GUIDE	used	283256680	8.72	6787	0.106	0.018	0.086	0.139	309.363533	24.953245	1698.51	-1254.39
7	GUIDE	used	283258440	7.54	6802	-0.140	0.214	0.057	0.089	308.491848	25.616604	-1975.79	-1758.82

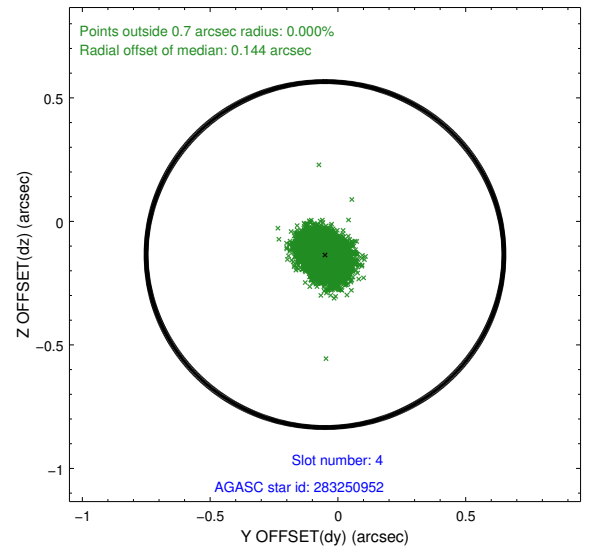
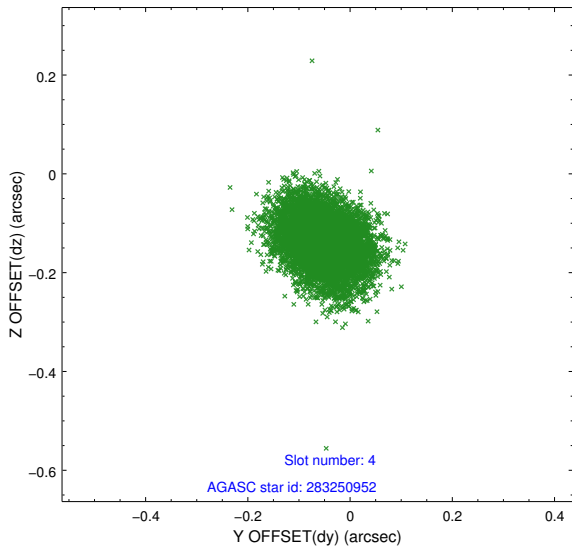
∞

2.4 Star Slots

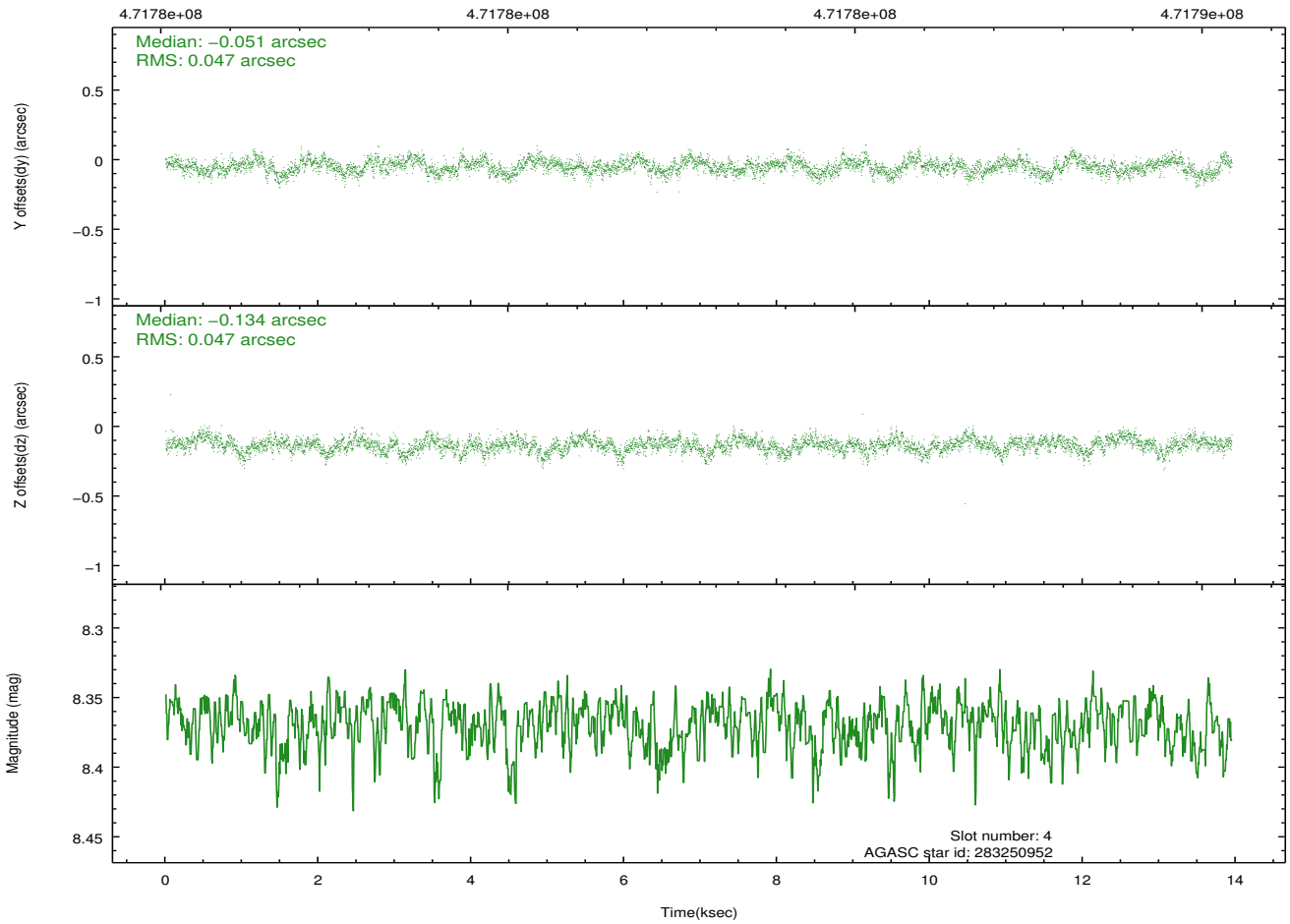
2.4.1 Slot 3



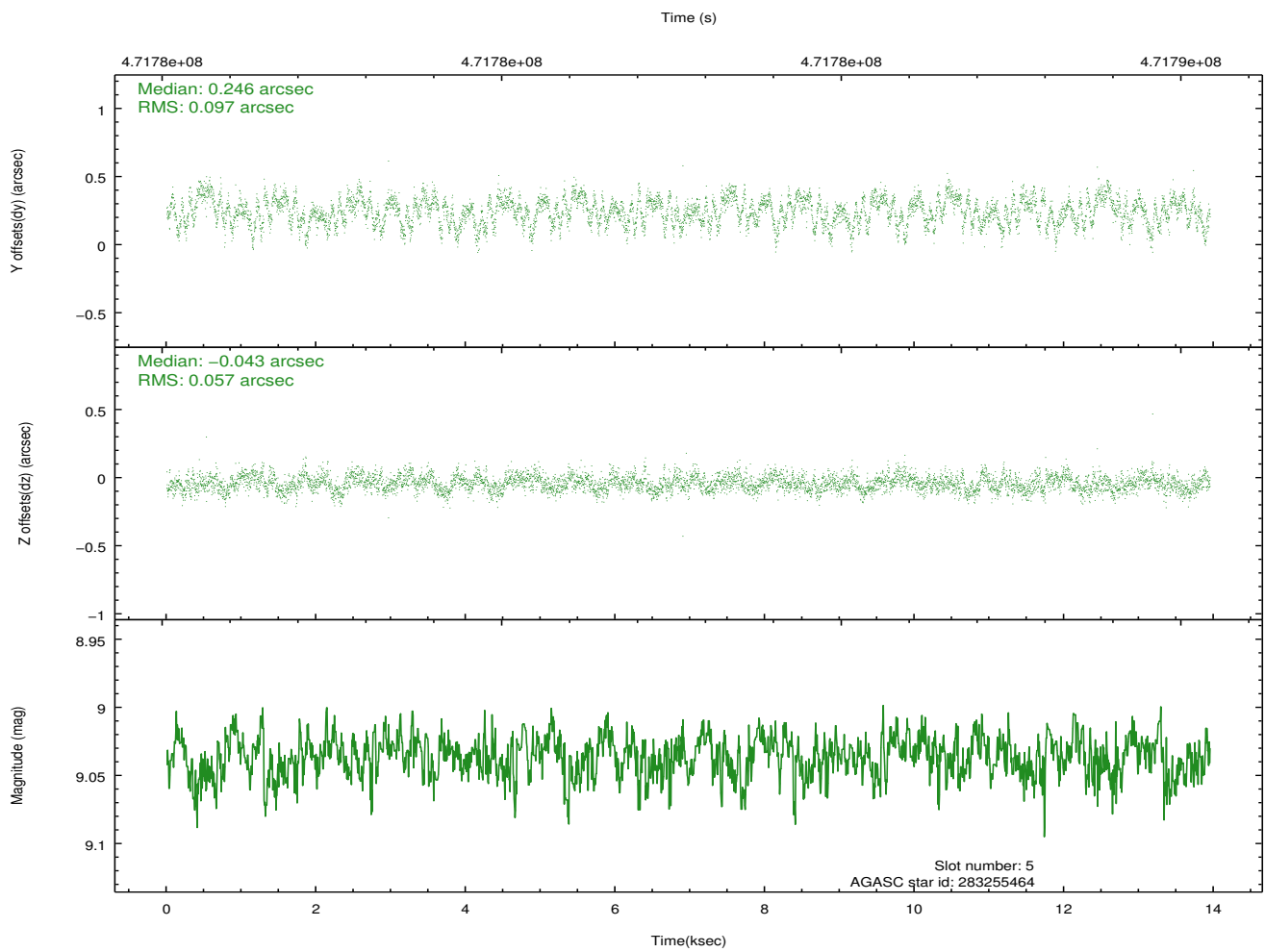
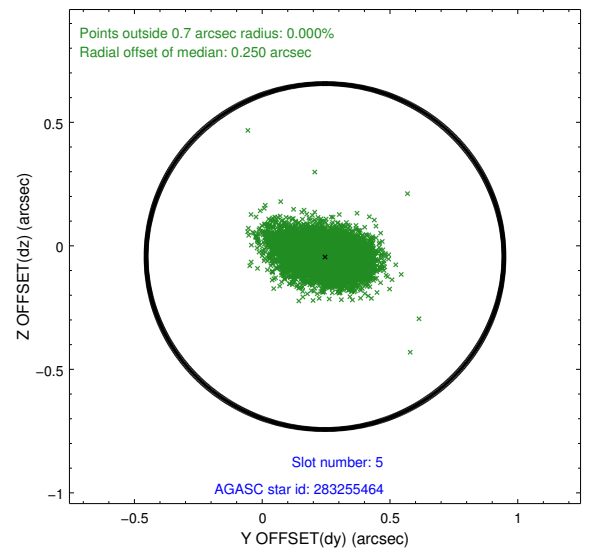
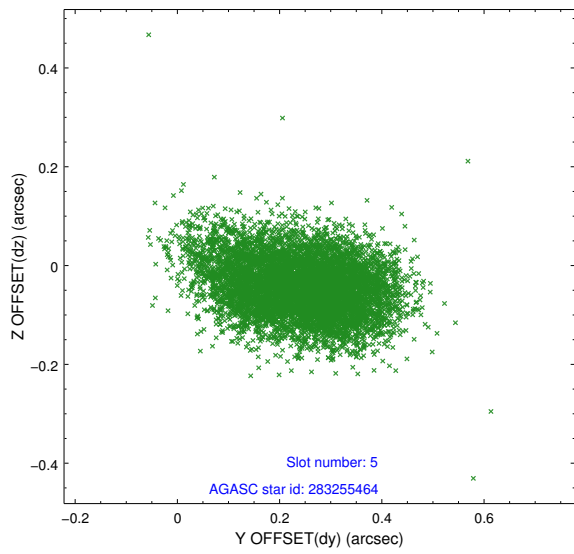
2.4.2 Slot 4



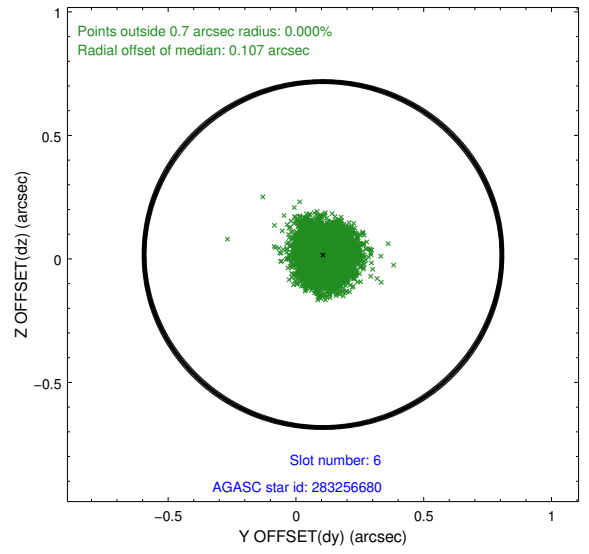
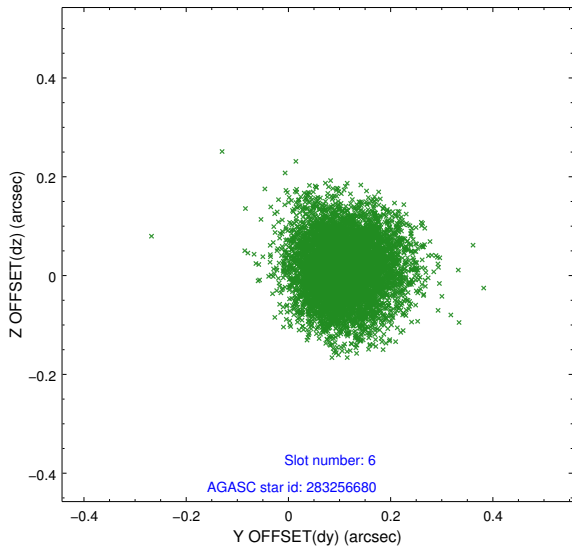
Time (s)



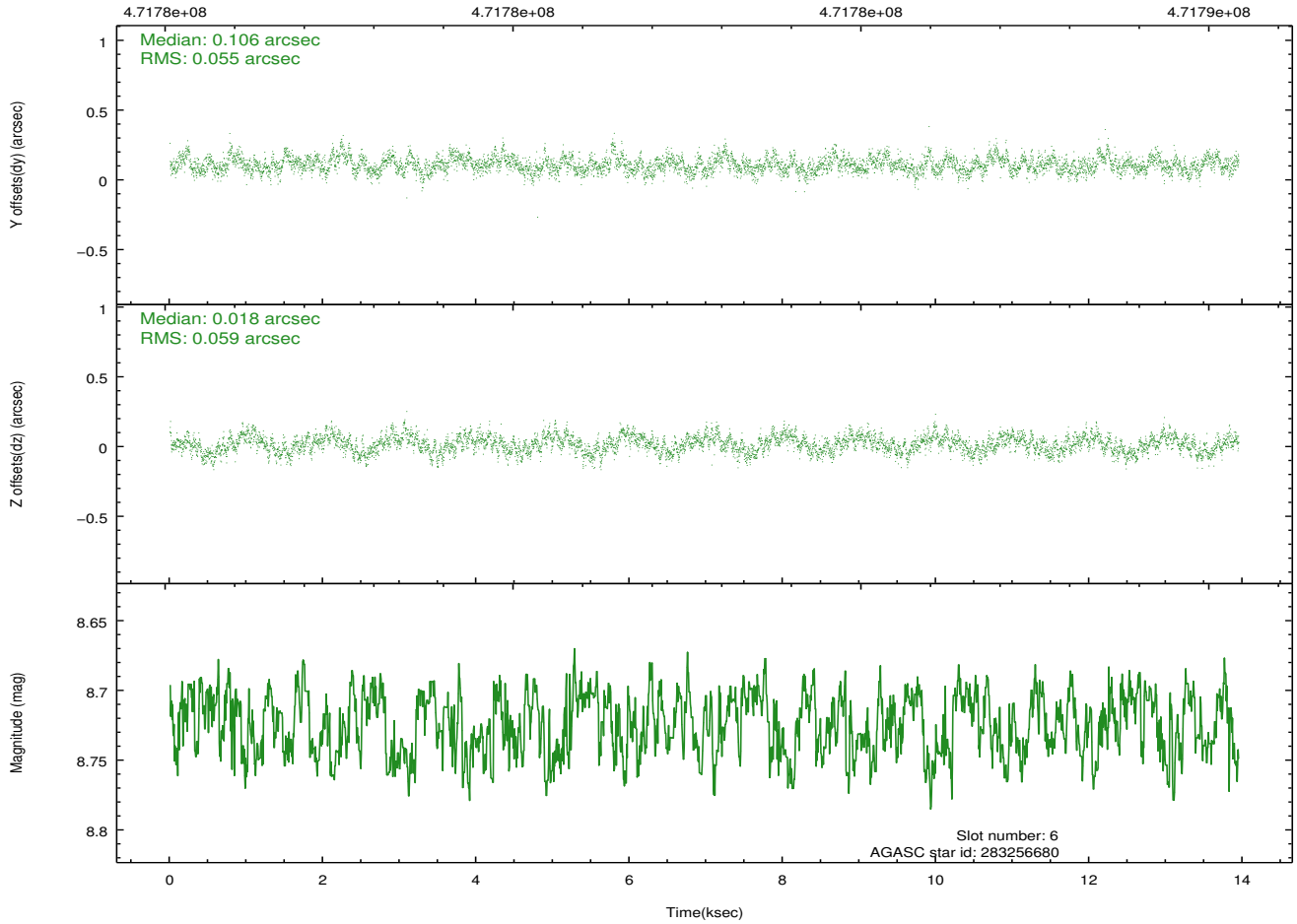
2.4.3 Slot 5



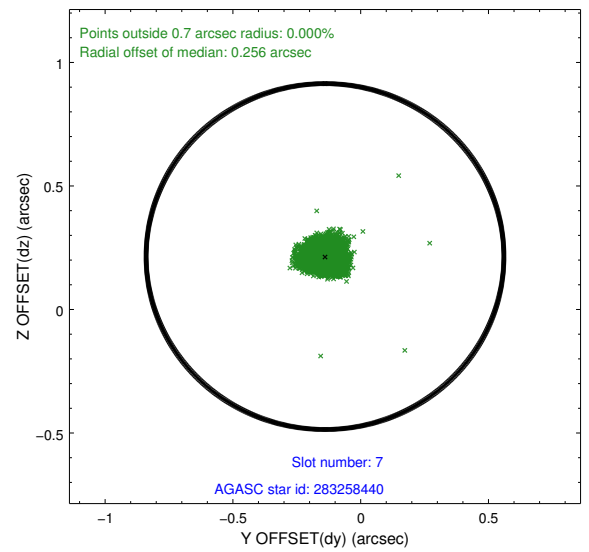
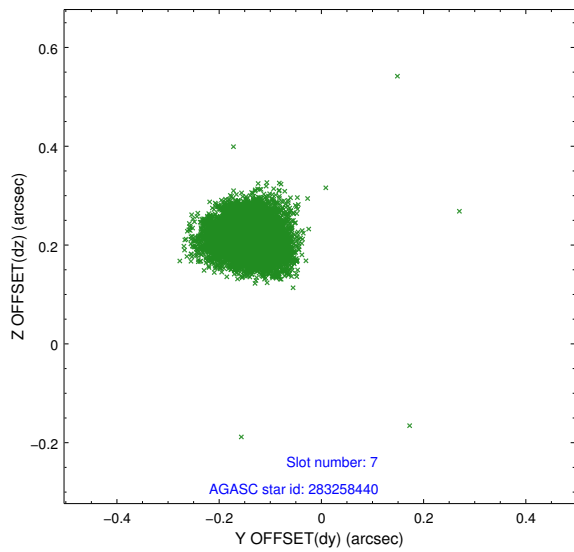
2.4.4 Slot 6



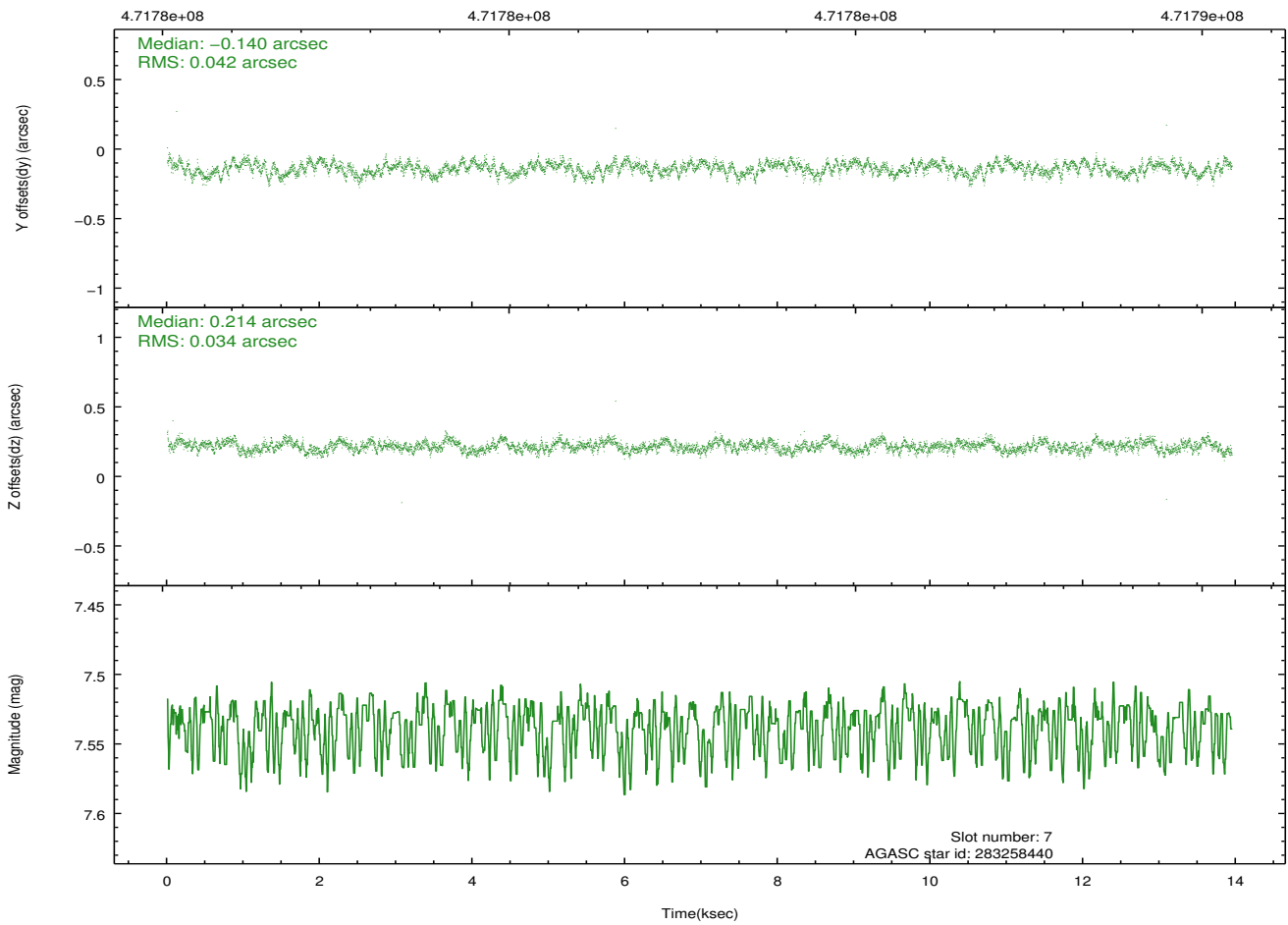
Time (s)



2.4.5 Slot 7

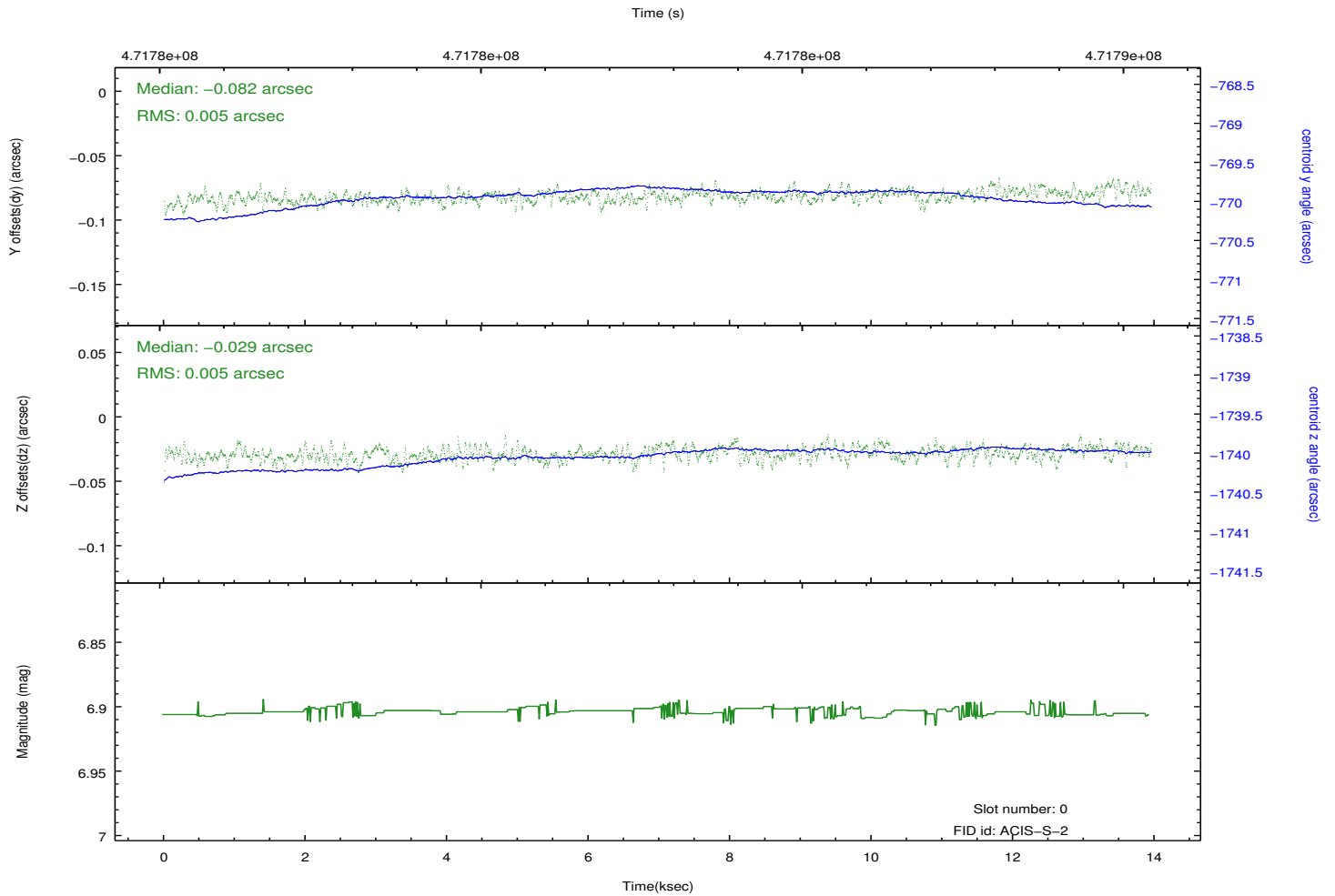
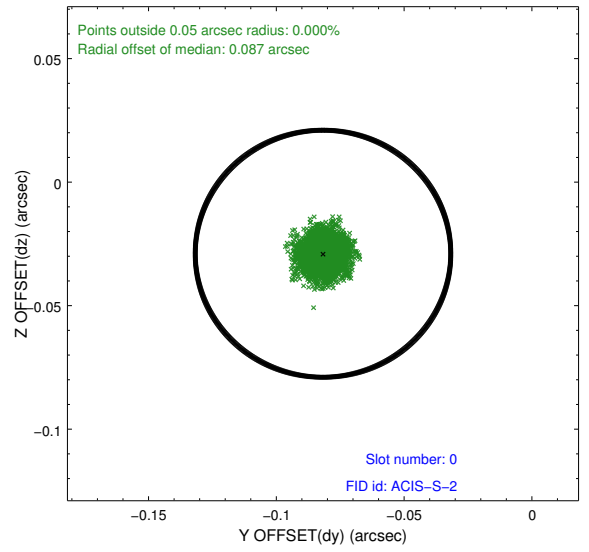
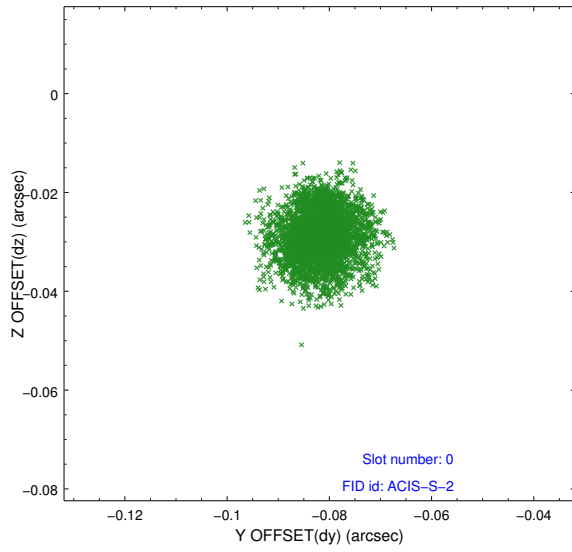


Time (s)

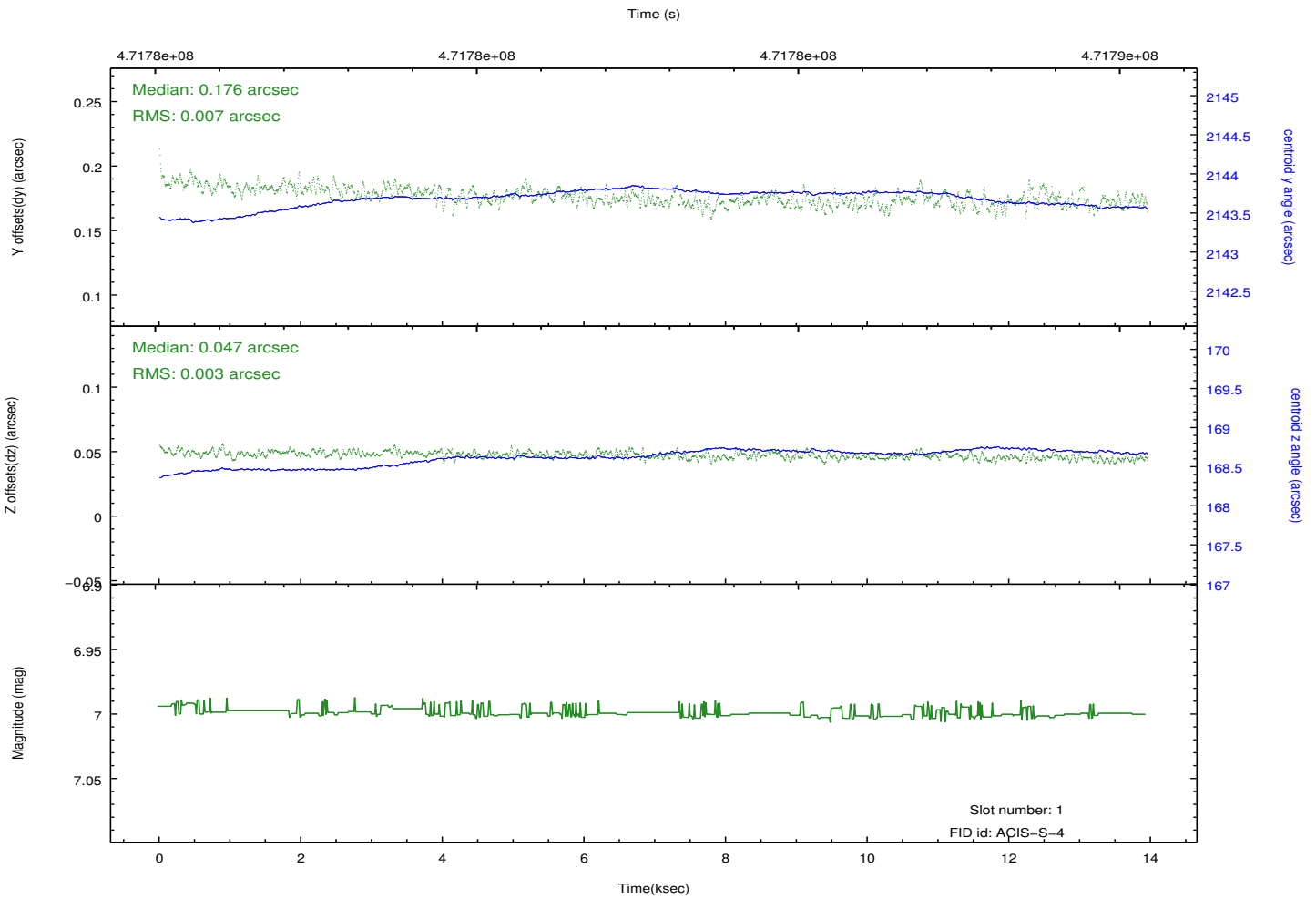
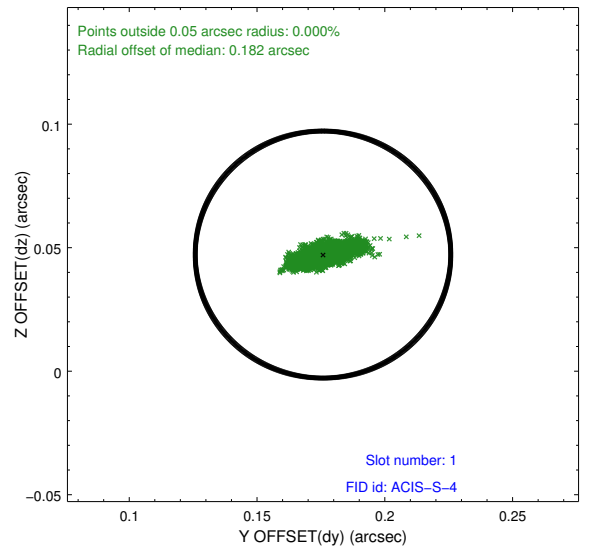
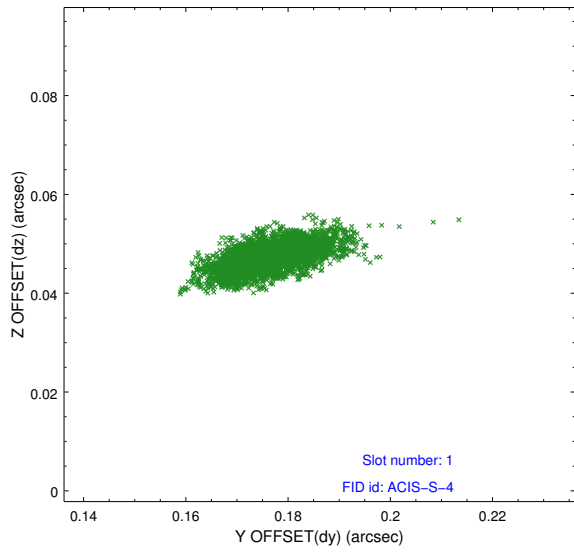


2.5 FID Slots

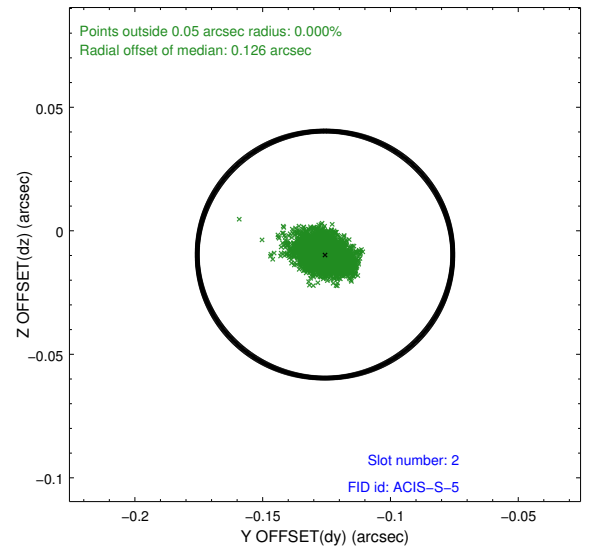
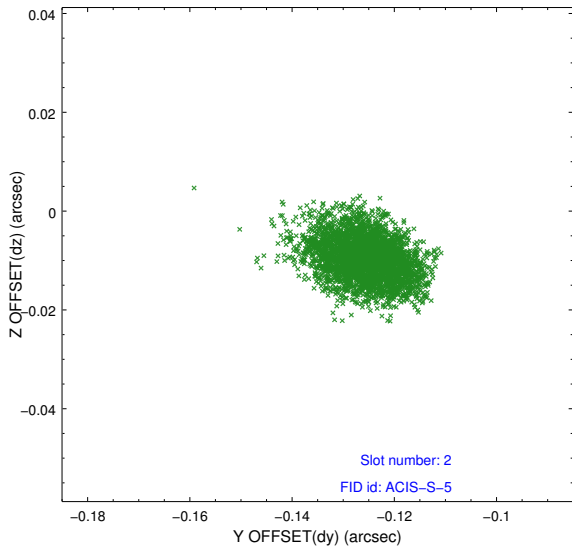
2.5.1 Slot 0



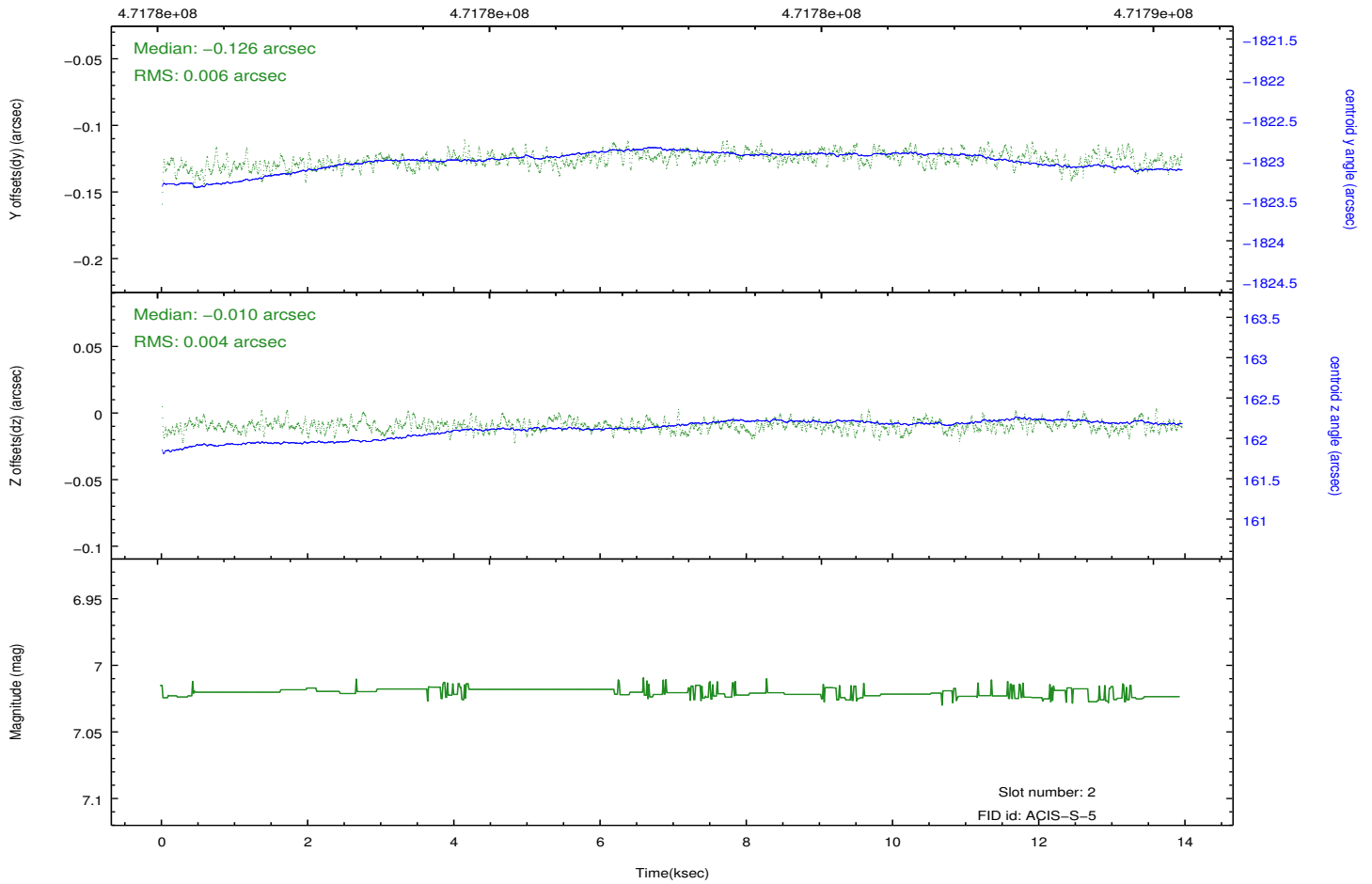
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.731199948907

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.