

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15065 - L2 Version 2
Chandra X-Ray Center

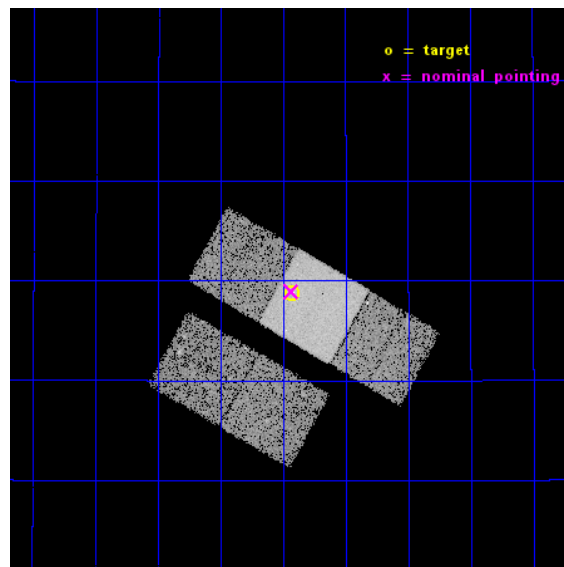
L2 Processing Date : Dec 7 2014

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1 Front

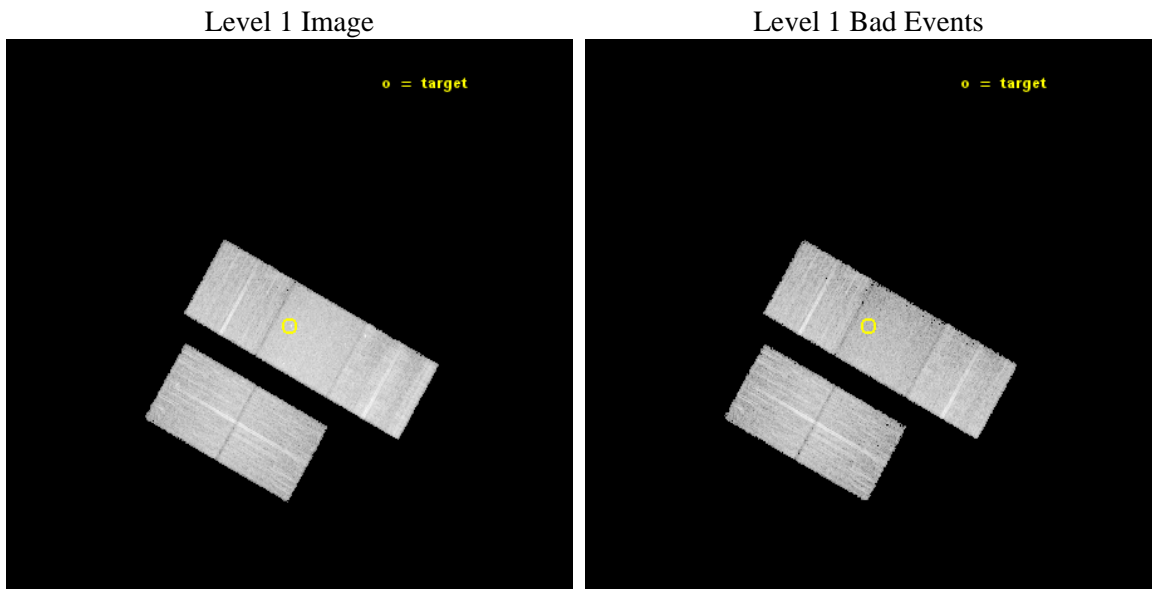
seq_num	702872	Sequence number
obs_id	15065	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	NGC 4922	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	195.357917	Observer's specified target RA [deg]
dec_targ	29.312778	Observer's specified target Dec [deg]
ra_nom	195.35808182135	Nominal RA [deg]
dec_nom	29.315802129312	Nominal Dec [deg]
roll_nom	29.440688866538	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15062.339856625	Sum of GTIs [s]
livetime	14865.539297665	Livetime [s]
ontime2	15062.175696611	Sum of GTIs [s]
ontime3	15062.257776618	Sum of GTIs [s]
ontime6	15062.298816621	Sum of GTIs [s]
ontime7	15062.339856625	Sum of GTIs [s]
ontime8	15062.216736615	Sum of GTIs [s]
l2events	78618	Number of level 2 events



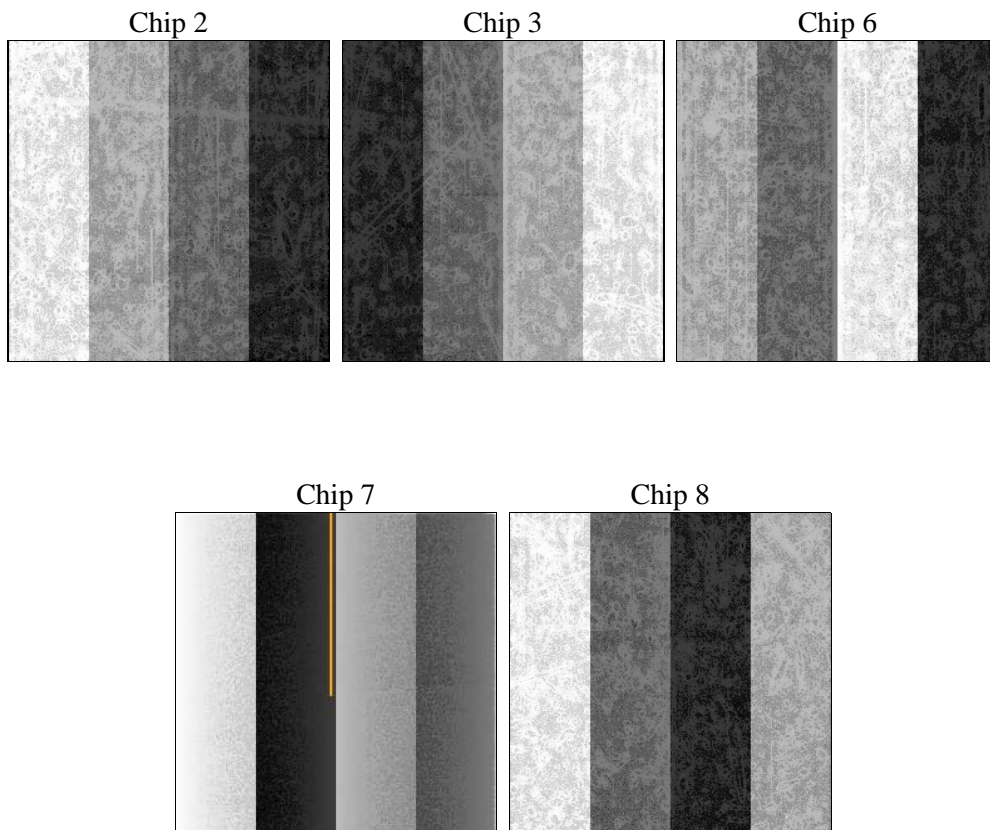
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	15062.339856625	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	15062.175696611	Sum of GTIs [s]
date	2014-12-07T19:03:52	Date and time of file creation	ontime3	15062.257776618	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15062.298816621	Sum of GTIs [s]
			ontime7	15062.339856625	Sum of GTIs [s]
			ontime8	15062.216736615	Sum of GTIs [s]
			l1events	452869	Number of level 1 events

2.1.4 Events

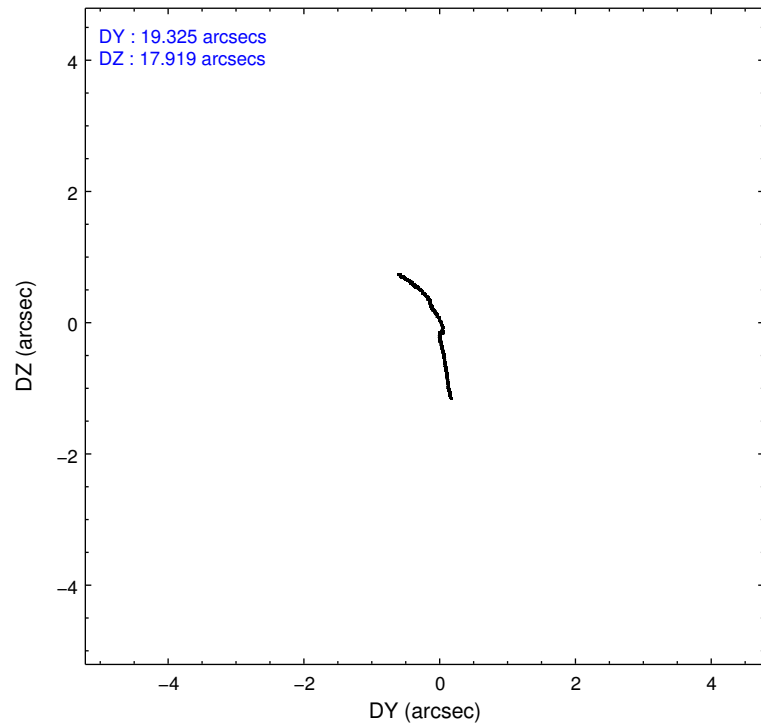
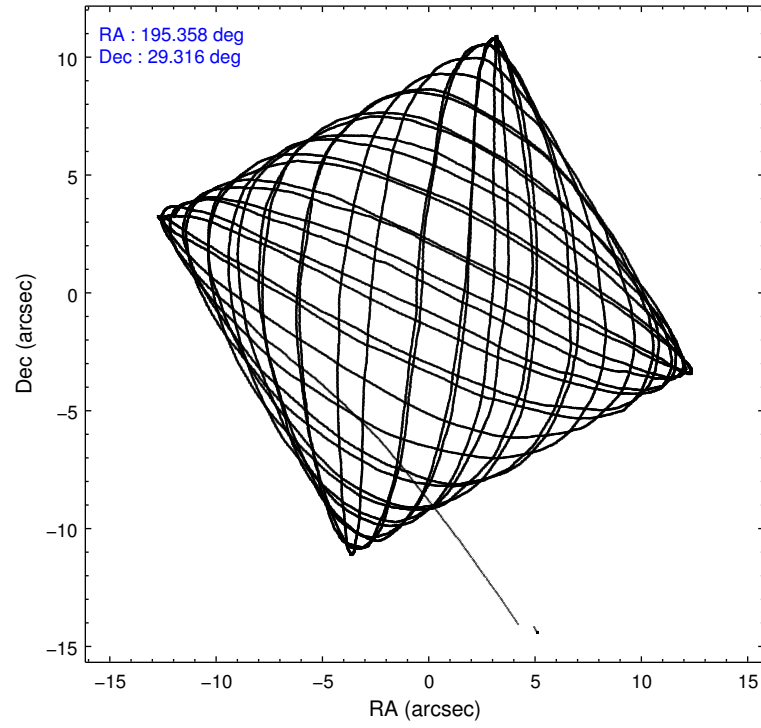
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	79471	77164	81900	103733	110601
rejected events	69934	67995	71949	58274	79348
rejected %	87%	88%	87%	56%	71%

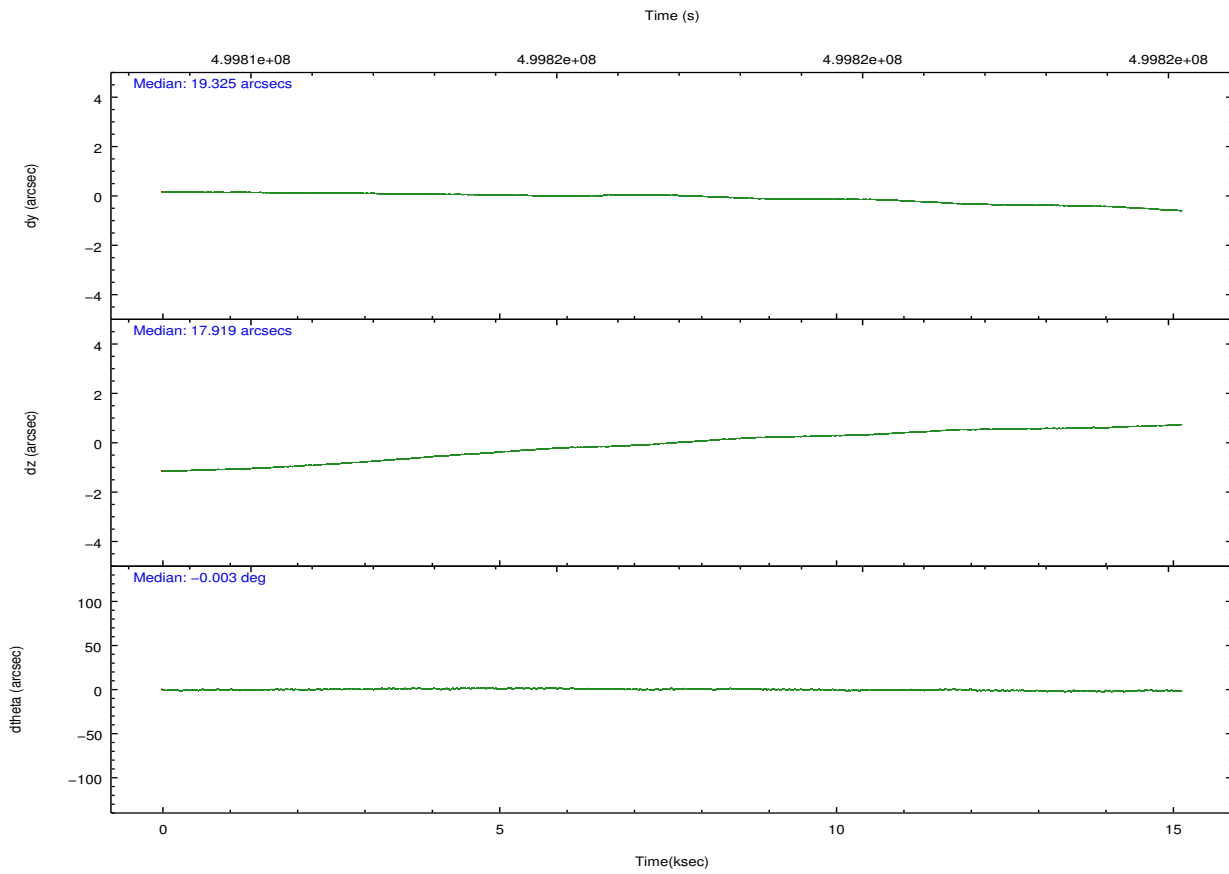
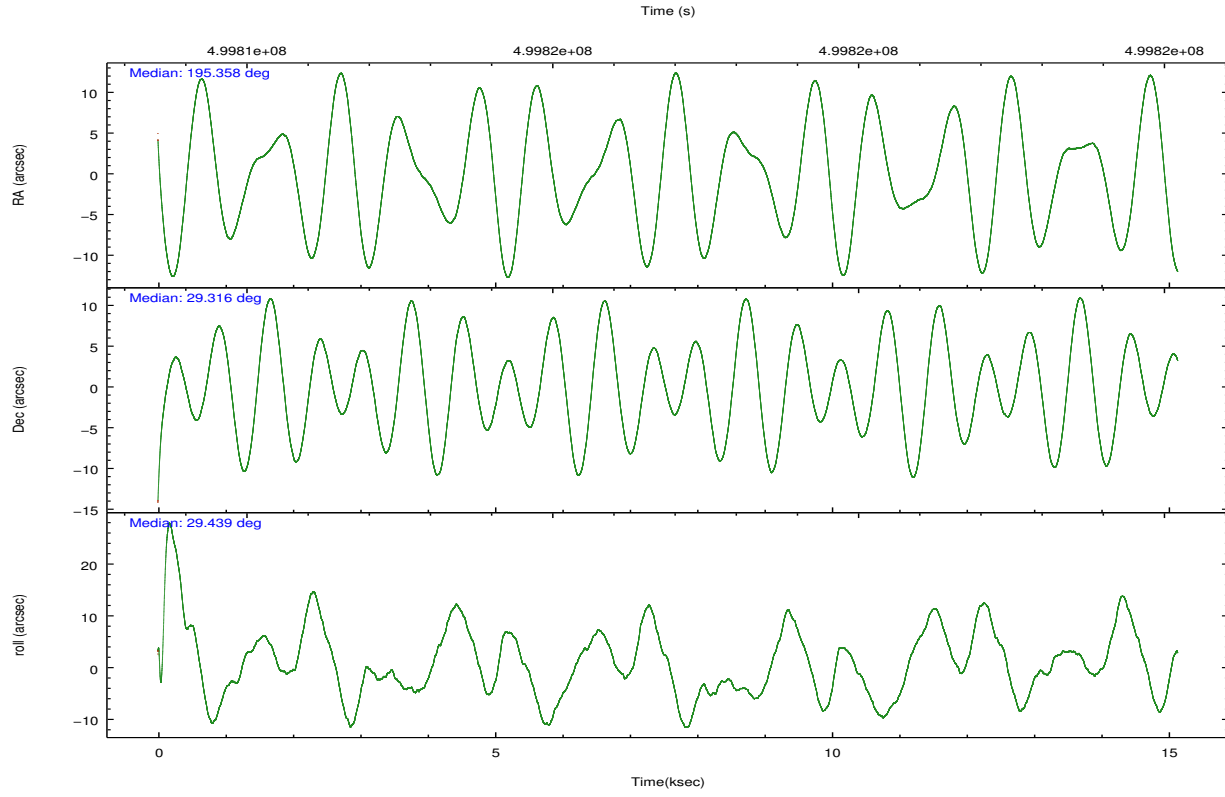
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	3675	3508	3487	4144	9661
	4%	4%	4%	3%	8%
grade 1 events	35	46	46	117	81
	0%	0%	0%	0%	0%
grade 2 events	2147	1907	2228	9502	7134
	2%	2%	2%	9%	6%
grade 3 events	997	967	957	3708	3373
	1%	1%	1%	3%	3%
grade 4 events	935	944	996	3710	3257
	1%	1%	1%	3%	2%
grade 5 events	3116	3832	3805	10189	5674
	3%	4%	4%	9%	5%
grade 6 events	1789	1843	2291	24415	7838
	2%	2%	2%	23%	7%
grade 7 events	66777	64117	68090	47948	73583
	84%	83%	83%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	195.342527	195.3580818213498	CCD I2 on	O2	Y
[deg] Pointing Dec	29.292063	29.31580212931223	CCD I3 on	Y	Y
[deg] Pointing Roll	29.291689	29.44068886653784	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	N
[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)	499809434.184000	499808117.52608	CCD S5 on	N	N
Observation start date	2013-11-02T19:56:07	2013-11-02T19:35:17	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	499824434.184000	499825075.63951	On-chip summing requested	N	N
Observation end date	2013-11-03T00:06:07	2013-11-03T00:17:55	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





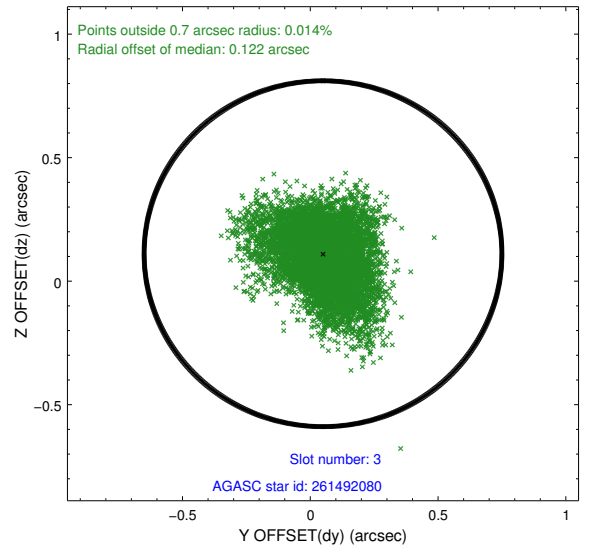
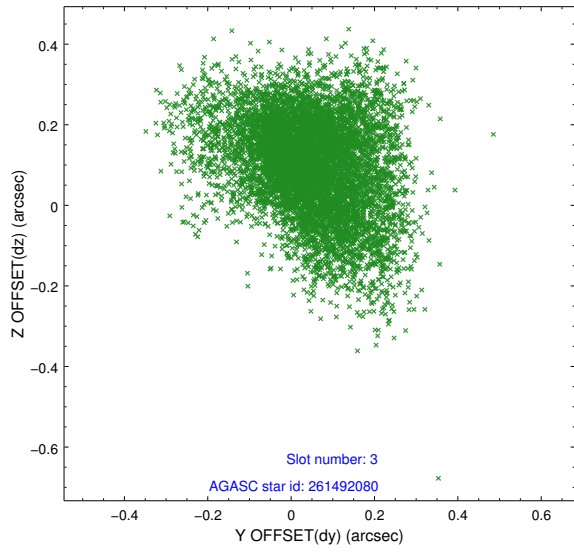
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.08	3693	-0.116	-0.065	0.012	0.030	0.000000	0.000000	-772.47	-1739.32
1	FID		ACIS-S-4	7.17	3692	0.288	0.073	0.007	0.013	0.000000	0.000000	2141.11	168.93
2	FID		ACIS-S-5	7.20	3692	-0.203	0.001	0.011	0.026	0.000000	0.000000	-1824.98	162.94
3	GUIDE	used	261492080	9.22	7378	0.050	0.111	0.169	0.292	194.976344	28.631585	-2170.98	-1505.81
4	GUIDE	used	261494624	9.81	7375	-0.459	-0.466	0.165	0.269	195.359009	29.626023	633.02	1022.48
5	GUIDE	used	261494640	9.86	7375	0.115	0.166	0.242	0.370	195.174515	28.510071	-1840.98	-2193.99
6	GUIDE	used	261501072	8.99	7382	0.050	-0.111	0.174	0.279	195.517851	28.991551	-48.34	-1212.99
7	GUIDE	used	261502080	10.43	7360	0.246	0.297	0.283	0.457	195.128859	28.458882	-2056.40	-2285.33

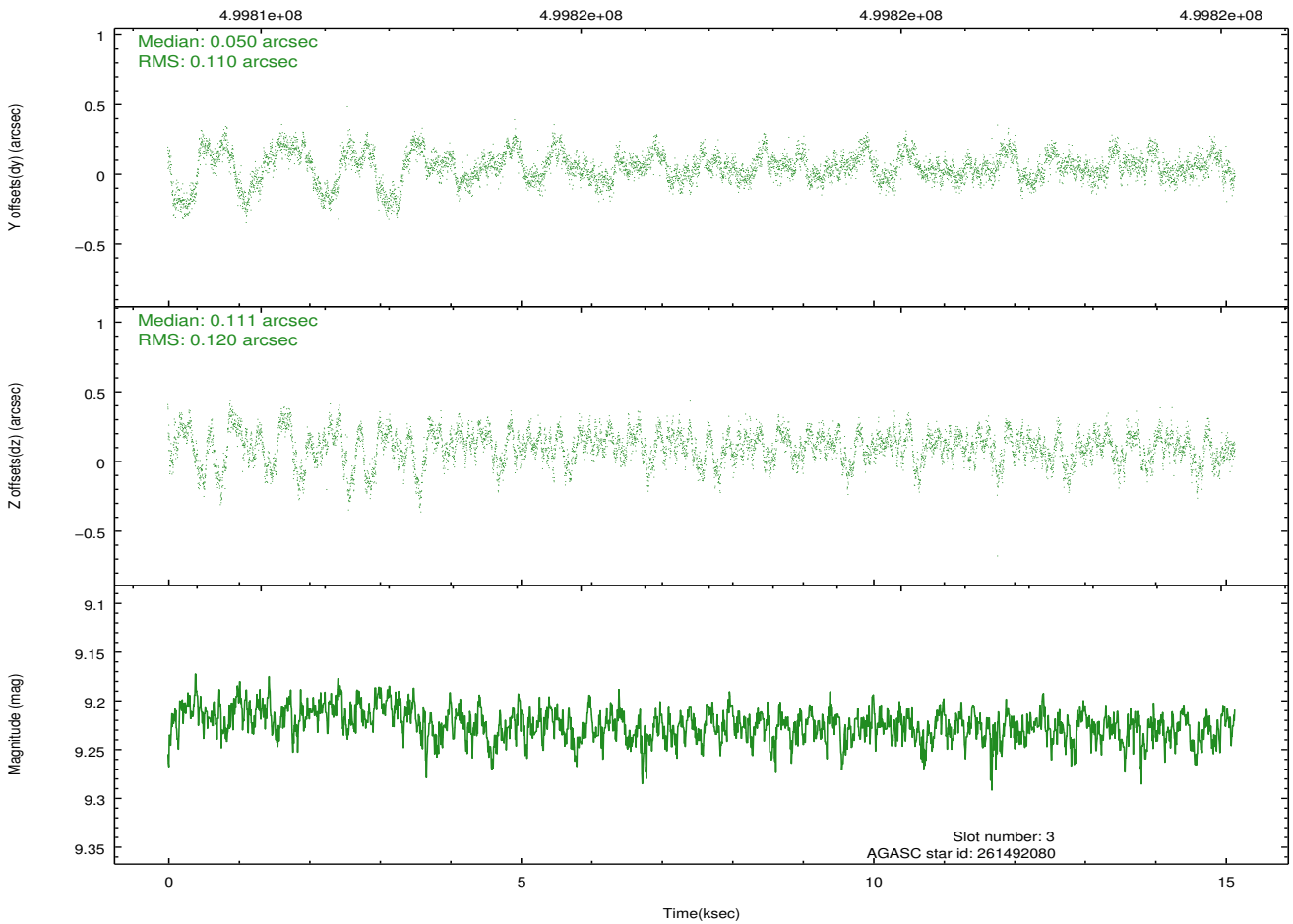
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2.4 Star Slots

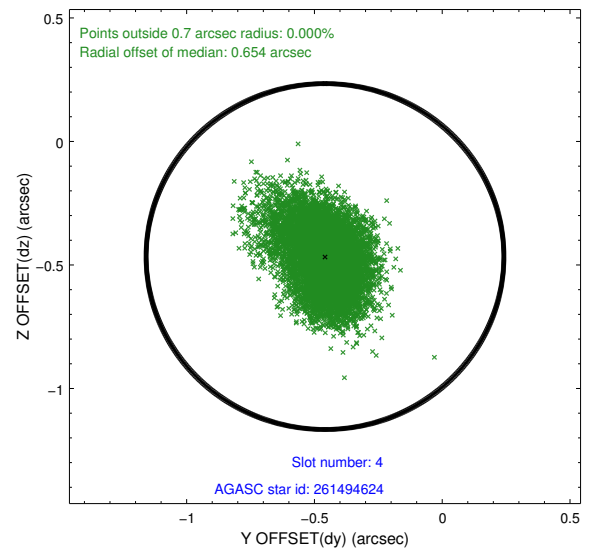
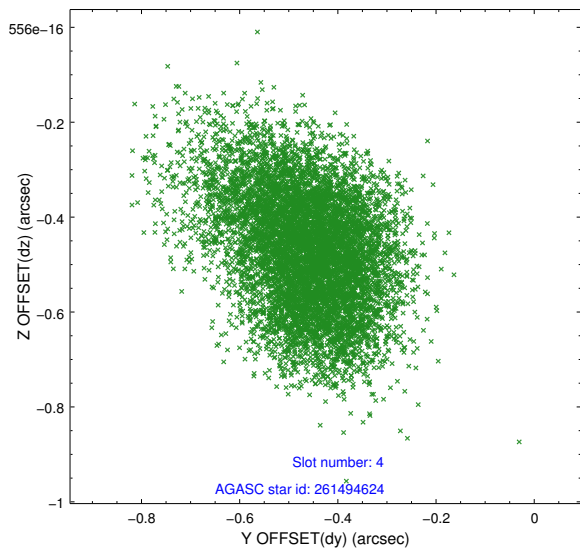
2.4.1 Slot 3



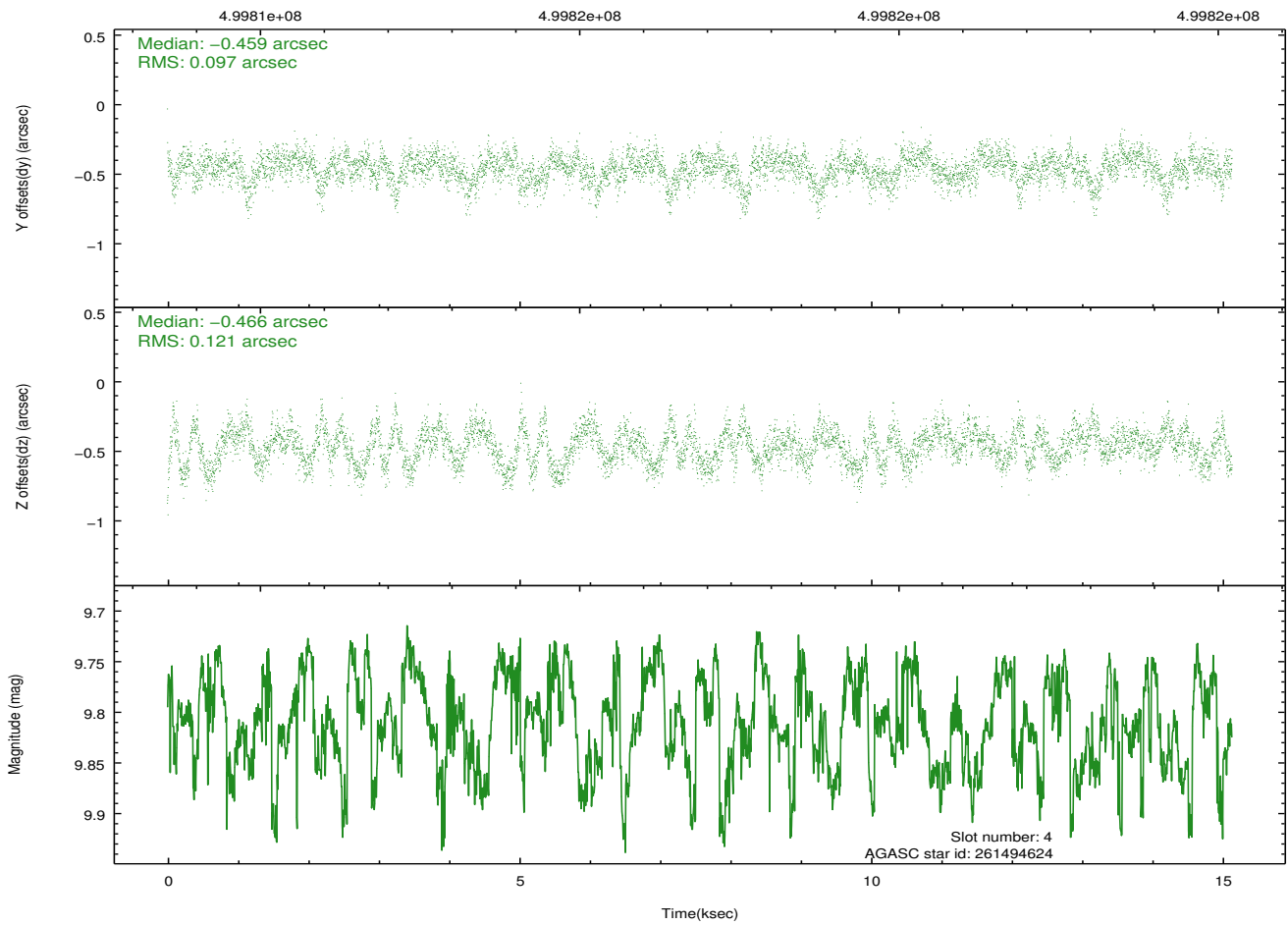
Time (s)



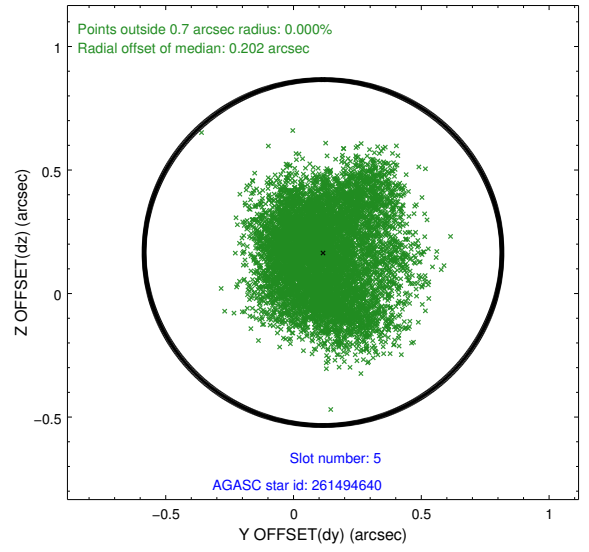
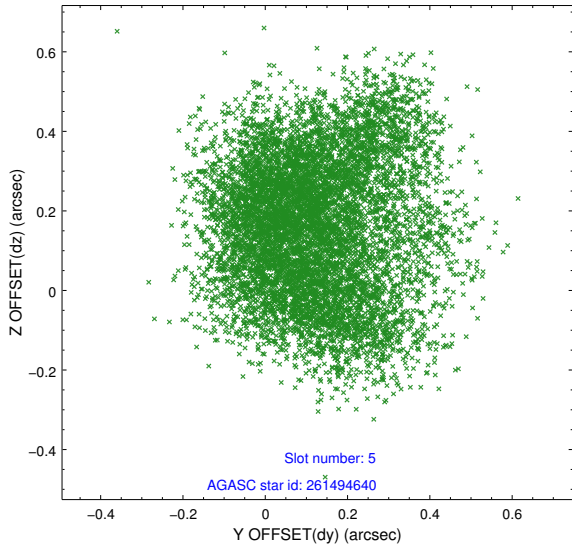
2.4.2 Slot 4



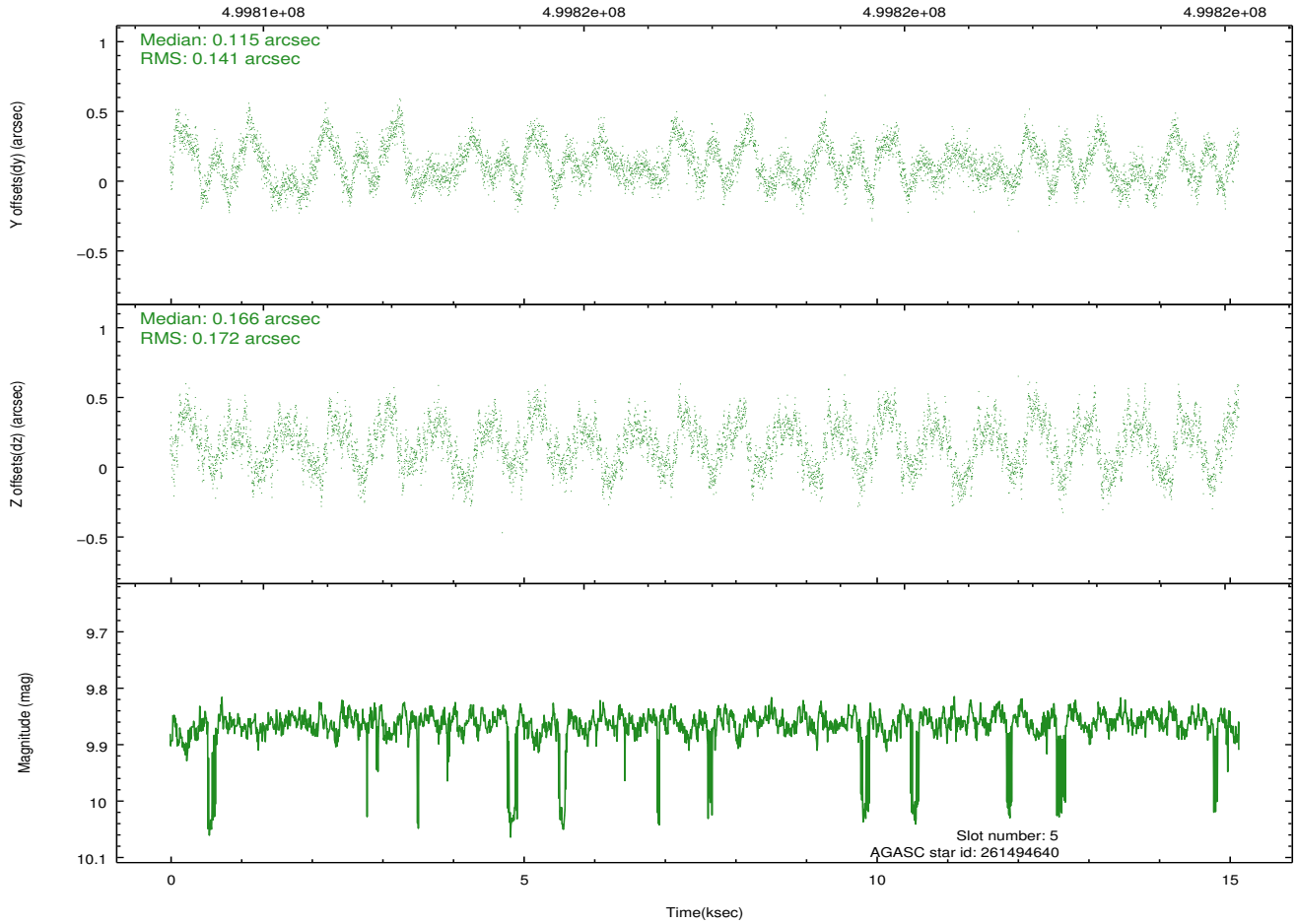
Time (s)



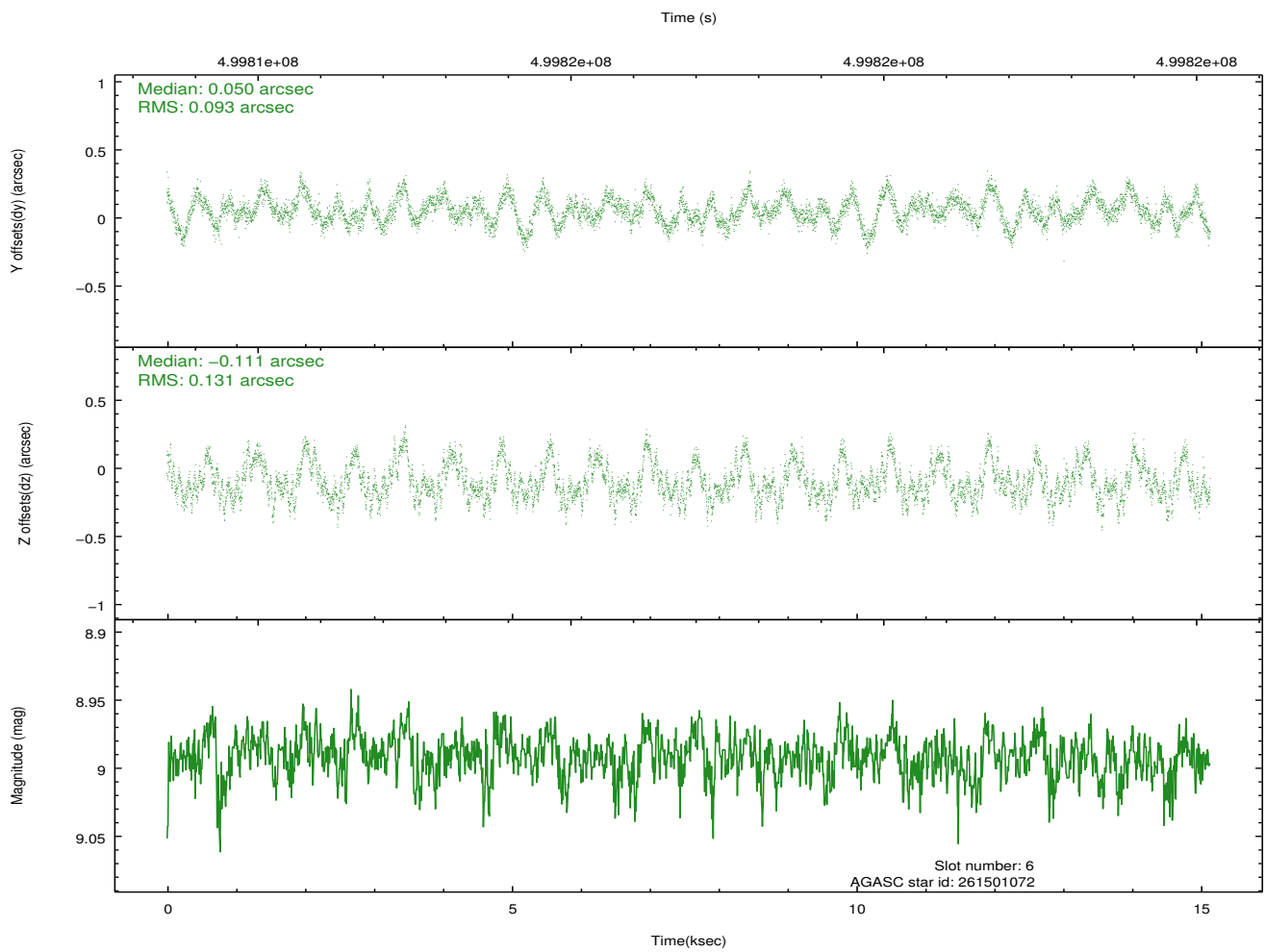
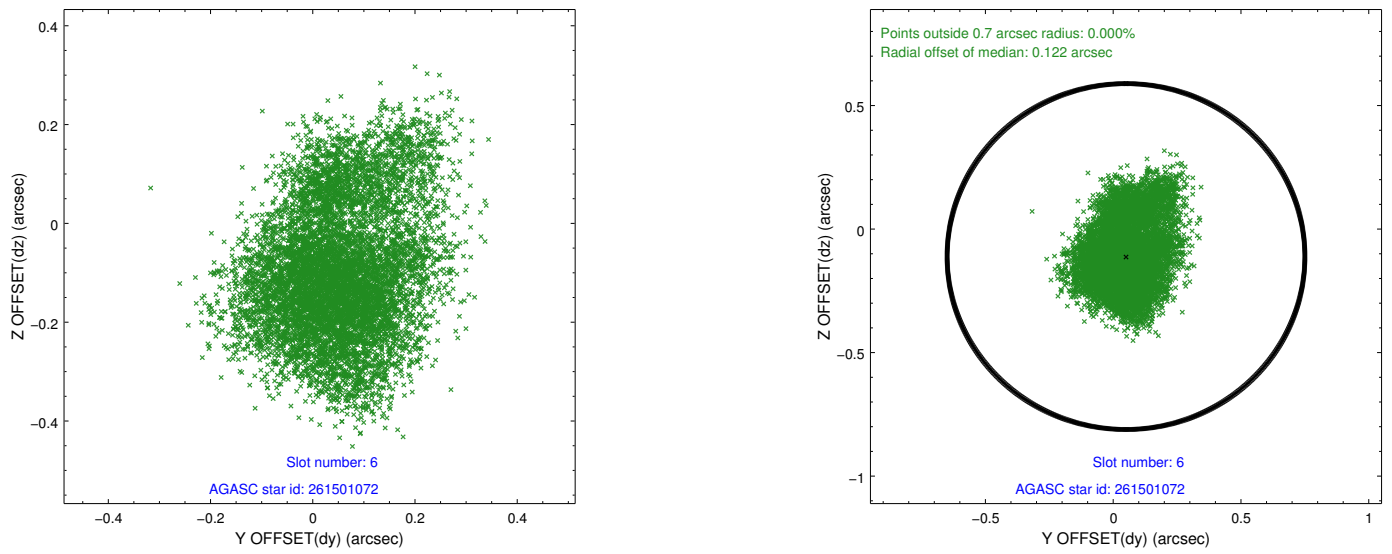
2.4.3 Slot 5



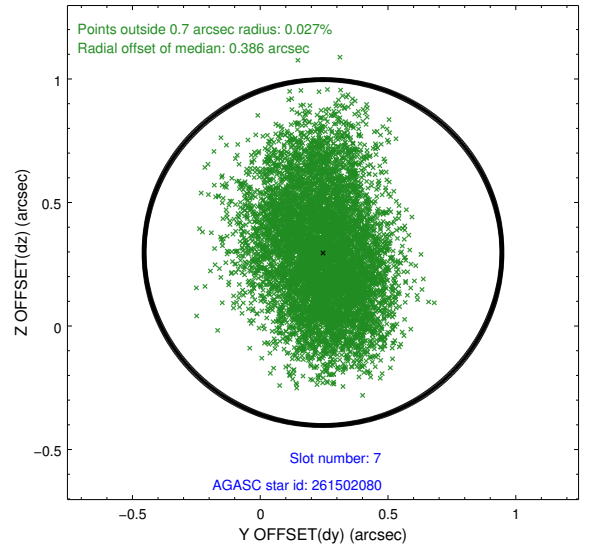
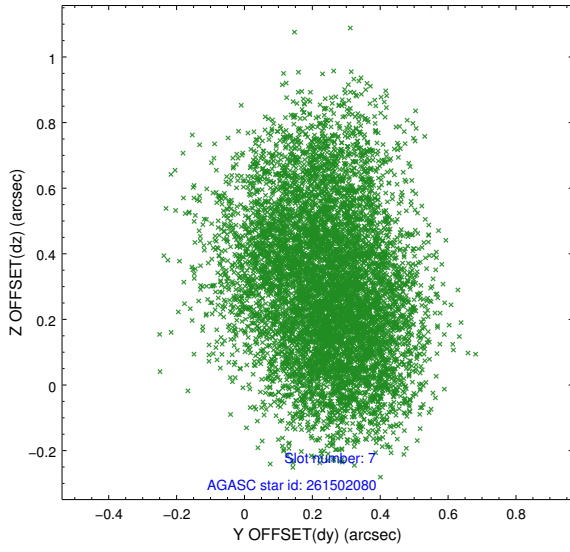
Time (s)



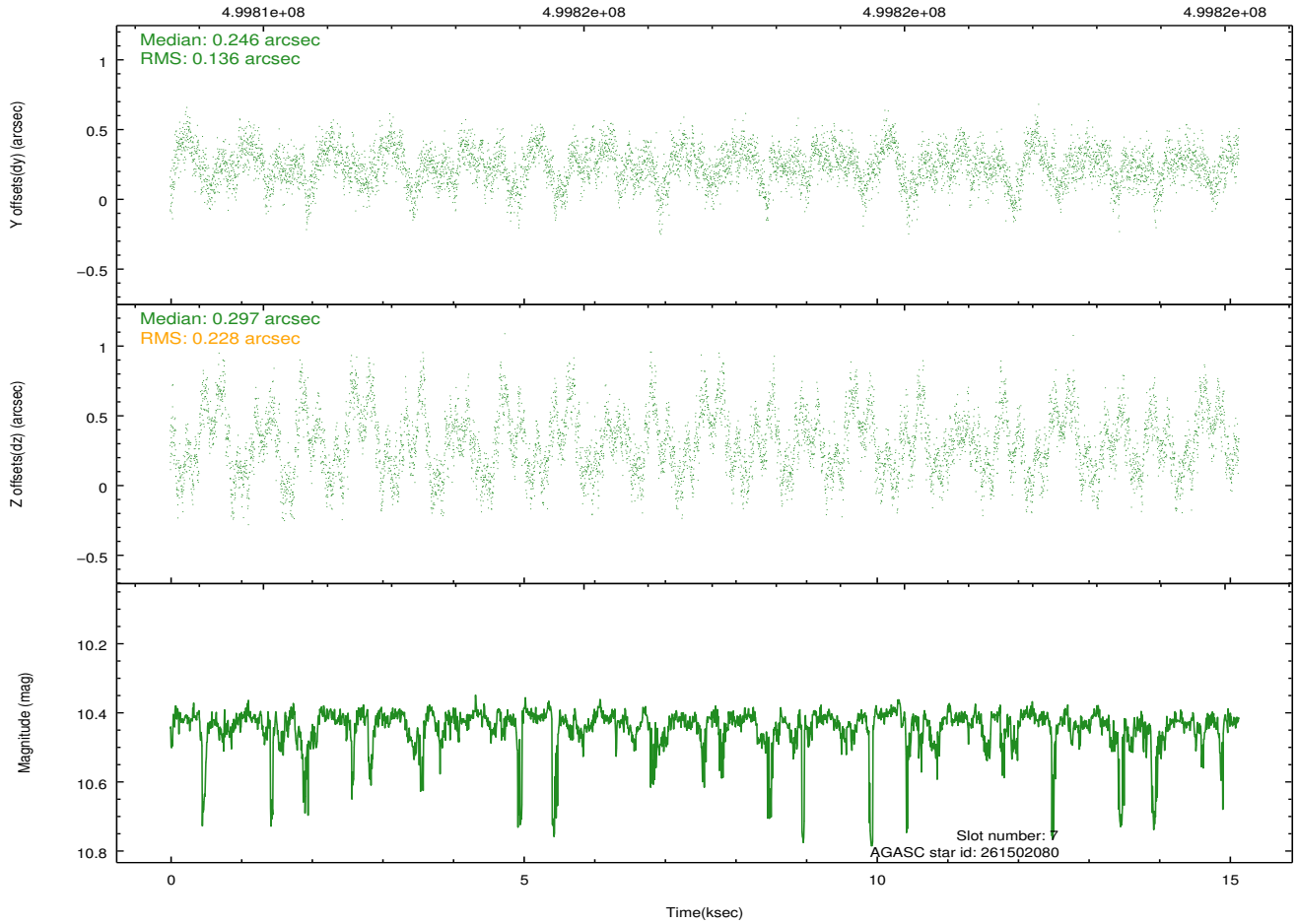
2.4.4 Slot 6



2.4.5 Slot 7

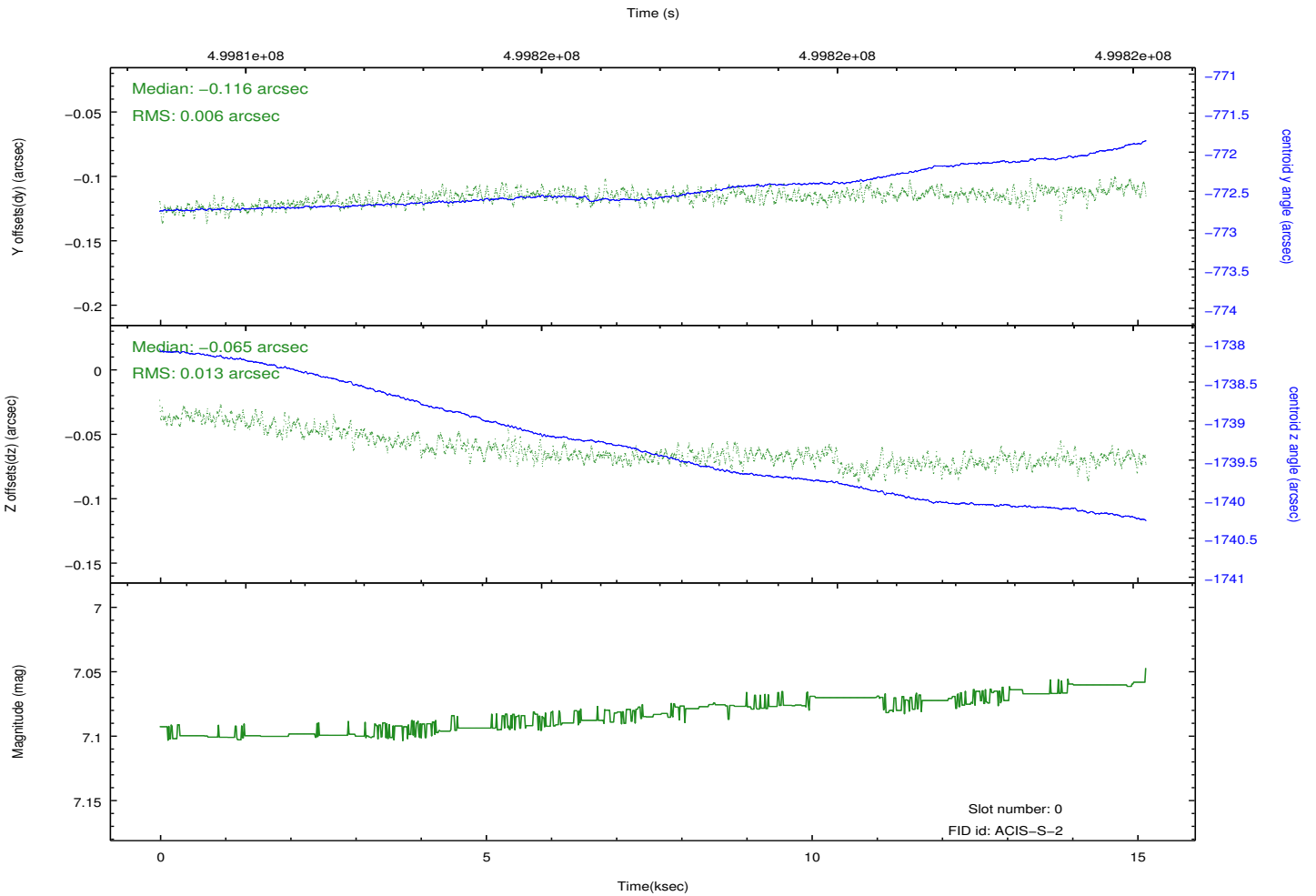
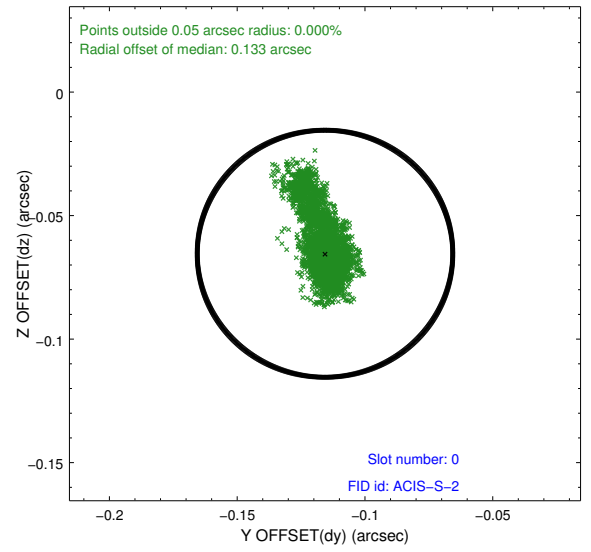
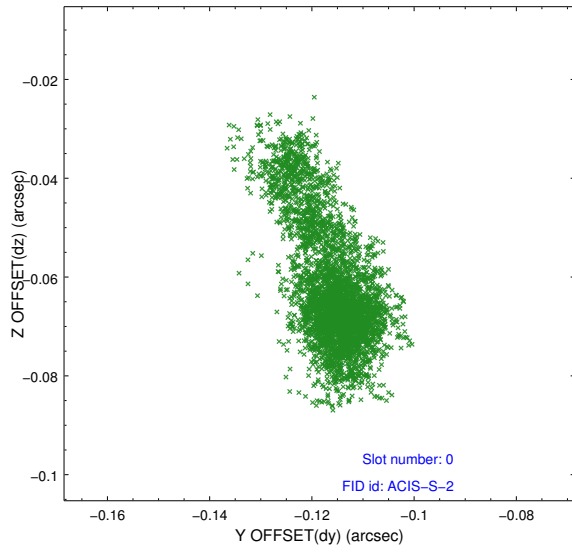


Time (s)

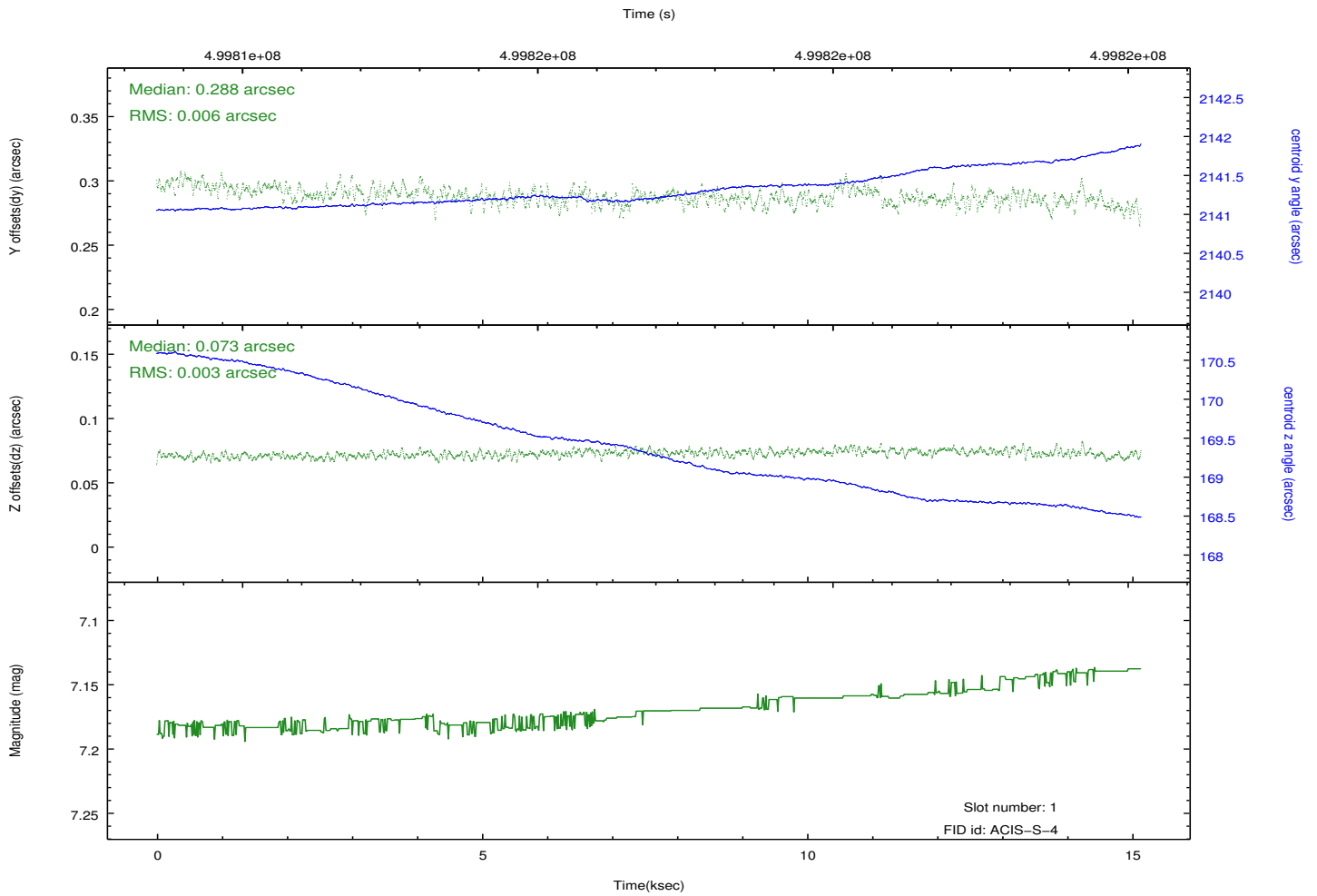
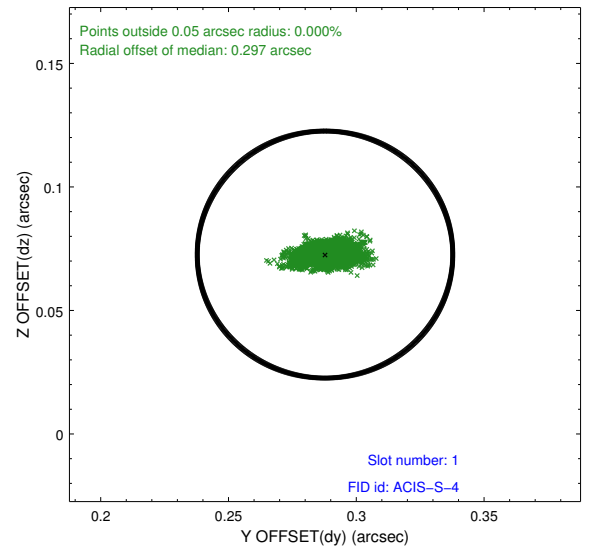
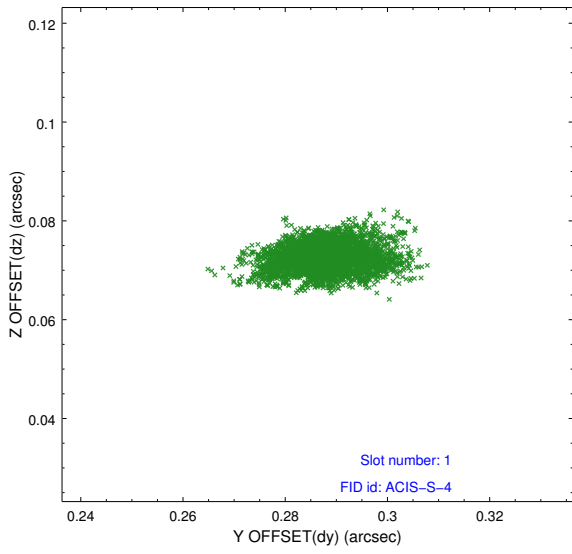


2.5 FID Slots

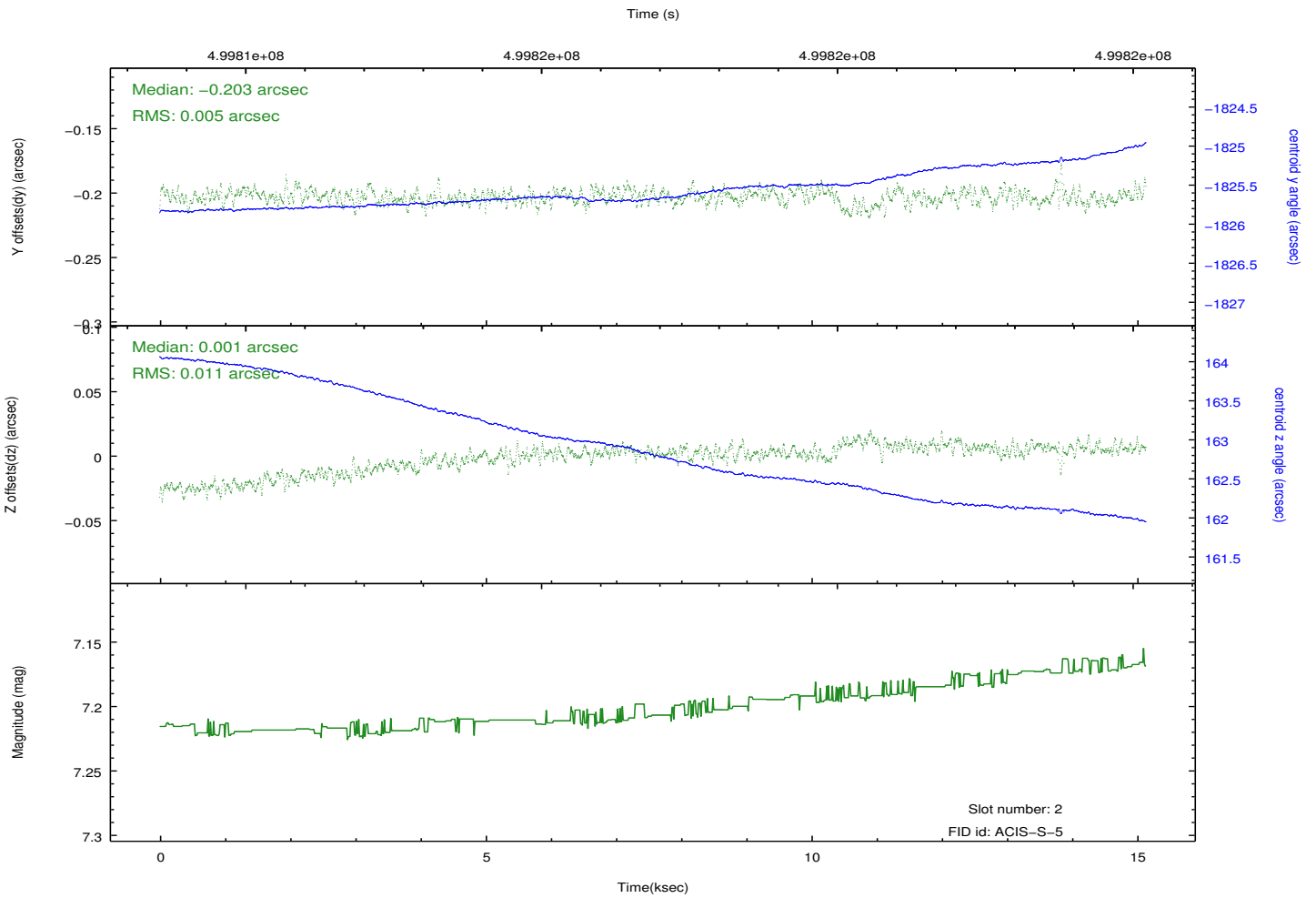
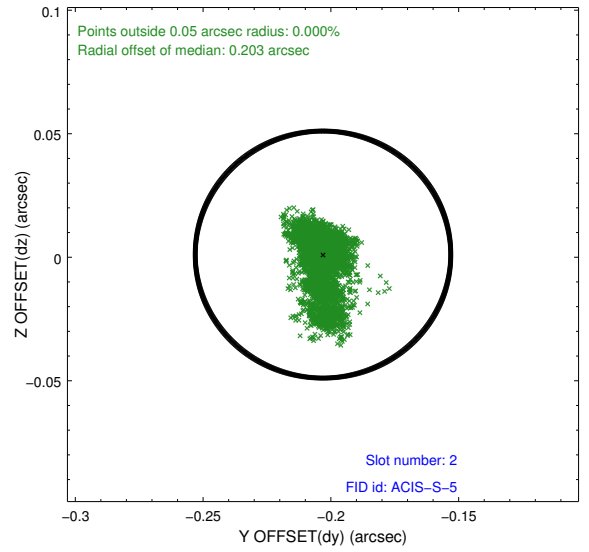
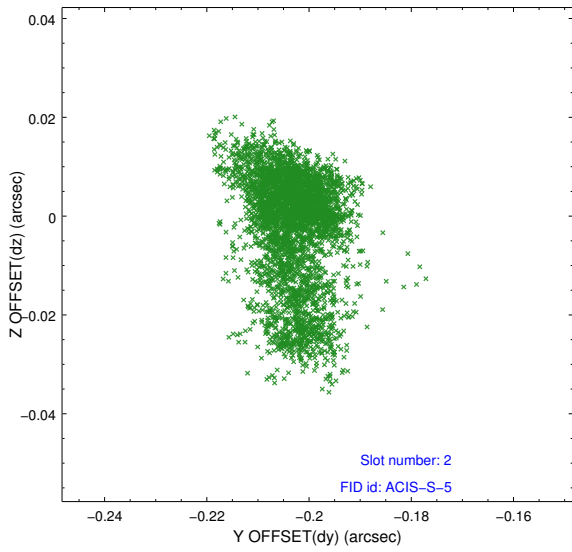
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.062339856625

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.