

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 14335 - L2 Version 2
Chandra X-Ray Center

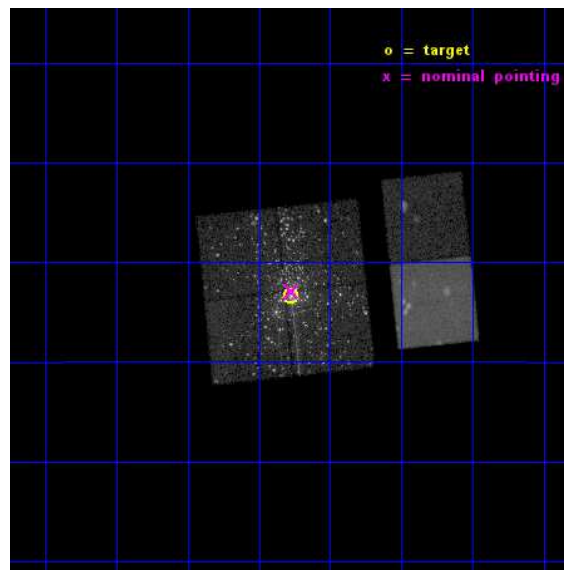
L2 Processing Date : Nov 27 2014

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1 Front

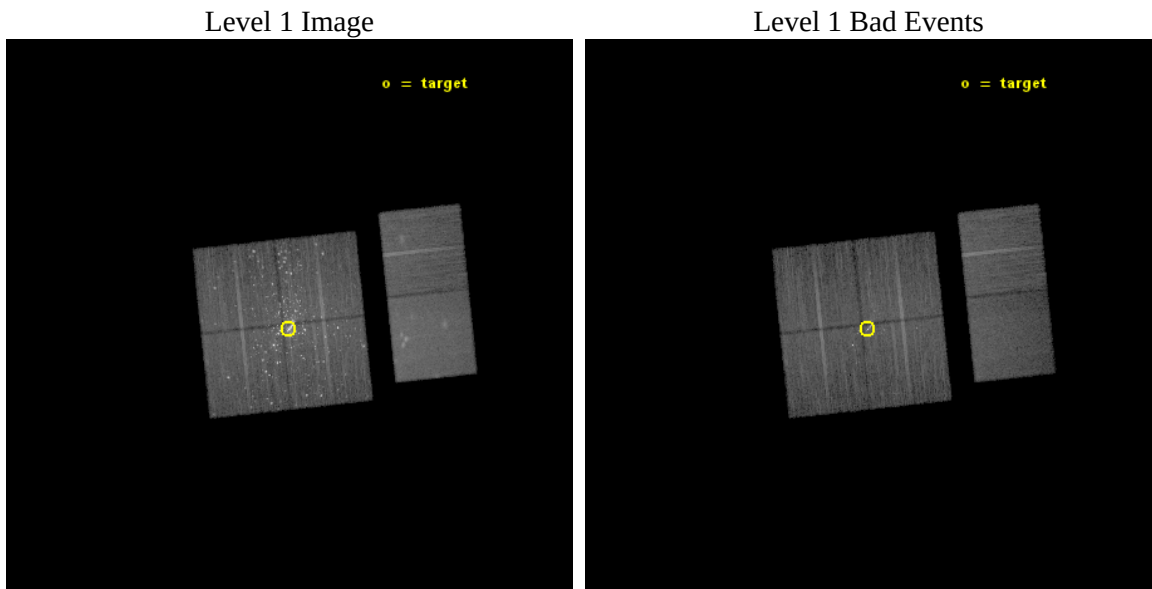
seq_num	200828	Sequence number
obs_id	14335	Observation id
title	Simultaneous X-ray and radio flaring of Young Stellar Objects in the Orion Nebula Cluster	Proposal title
observer	Dr Jan Forbrich	Principal investigator
object	Orion Nebula Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	83.819583	Observer's specified target RA [deg]
dec_targ	-5.39	Observer's specified target Dec [deg]
ra_nom	83.818020836004	Nominal RA [deg]
dec_nom	-5.3820591483404	Nominal Dec [deg]
roll_nom	83.905277454602	Nominal Roll [deg]
revision	2	Processing version of data
ontime	26264.795394182	Sum of GTIs [s]
livetime	25932.21474014	Livetime [s]
ontime0	26271.15419513	Sum of GTIs [s]
ontime1	26267.954224885	Sum of GTIs [s]
ontime2	26267.99539417	Sum of GTIs [s]
ontime3	26264.795394182	Sum of GTIs [s]
ontime6	26271.359395146	Sum of GTIs [s]
ontime7	26271.318355143	Sum of GTIs [s]
l2events	321576	Number of level 2 events



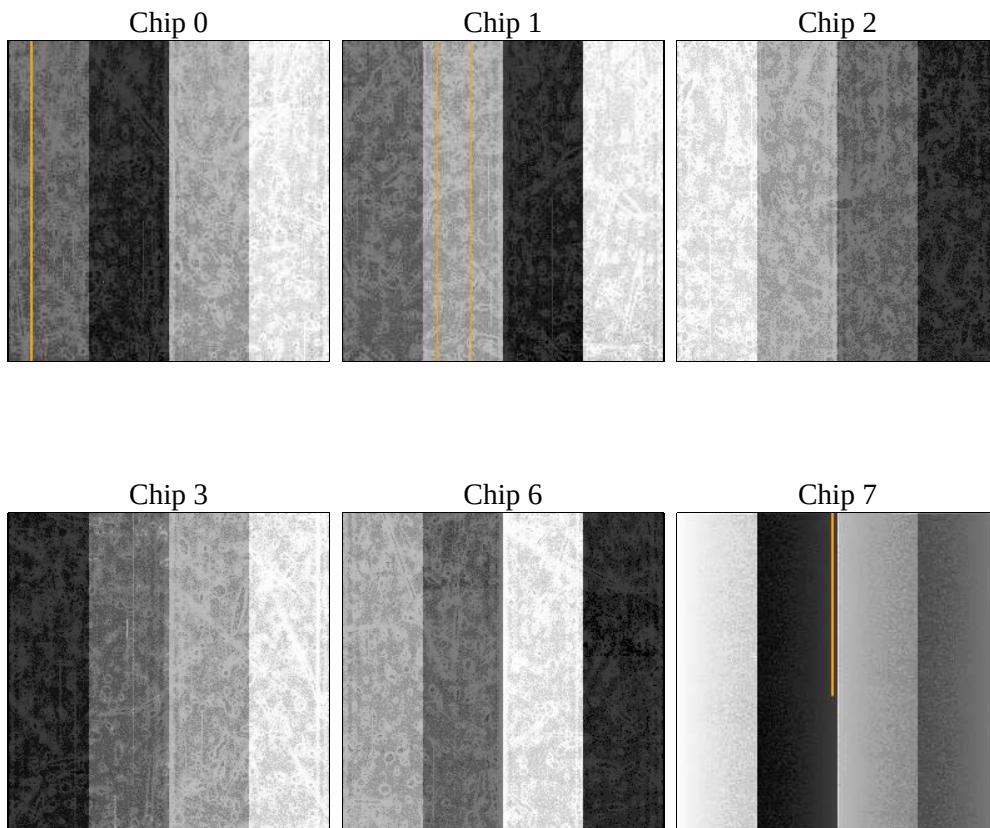
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26300.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	26264.795394182	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	26271.15419513	Sum of GTIs [s]
date	2014-11-27T23:17:38	Date and time of file creation	ontime1	26267.954224885	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	26267.99539417	Sum of GTIs [s]
			ontime3	26264.795394182	Sum of GTIs [s]
			ontime6	26271.359395146	Sum of GTIs [s]
			ontime7	26271.318355143	Sum of GTIs [s]
			l1events	1045022	Number of level 1 events

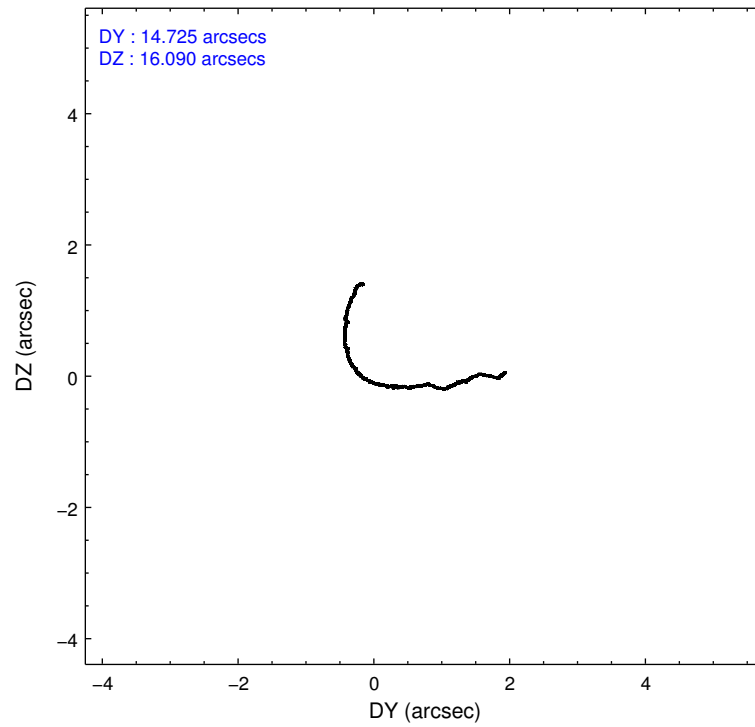
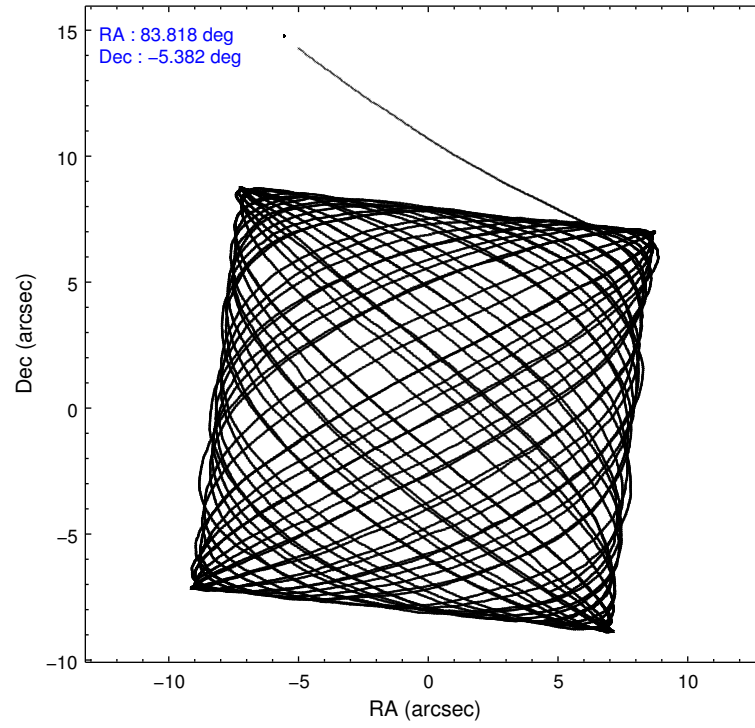
2.1.4 Events

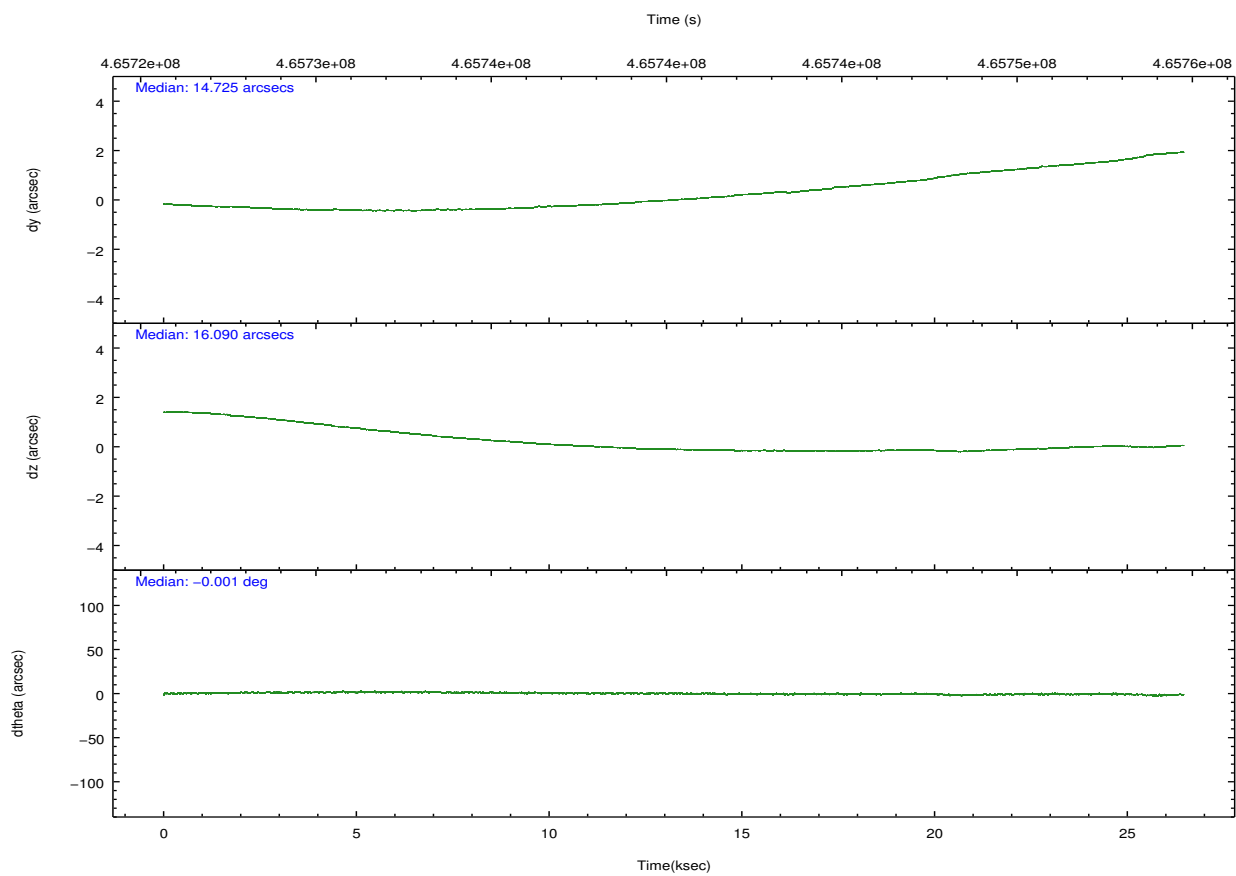
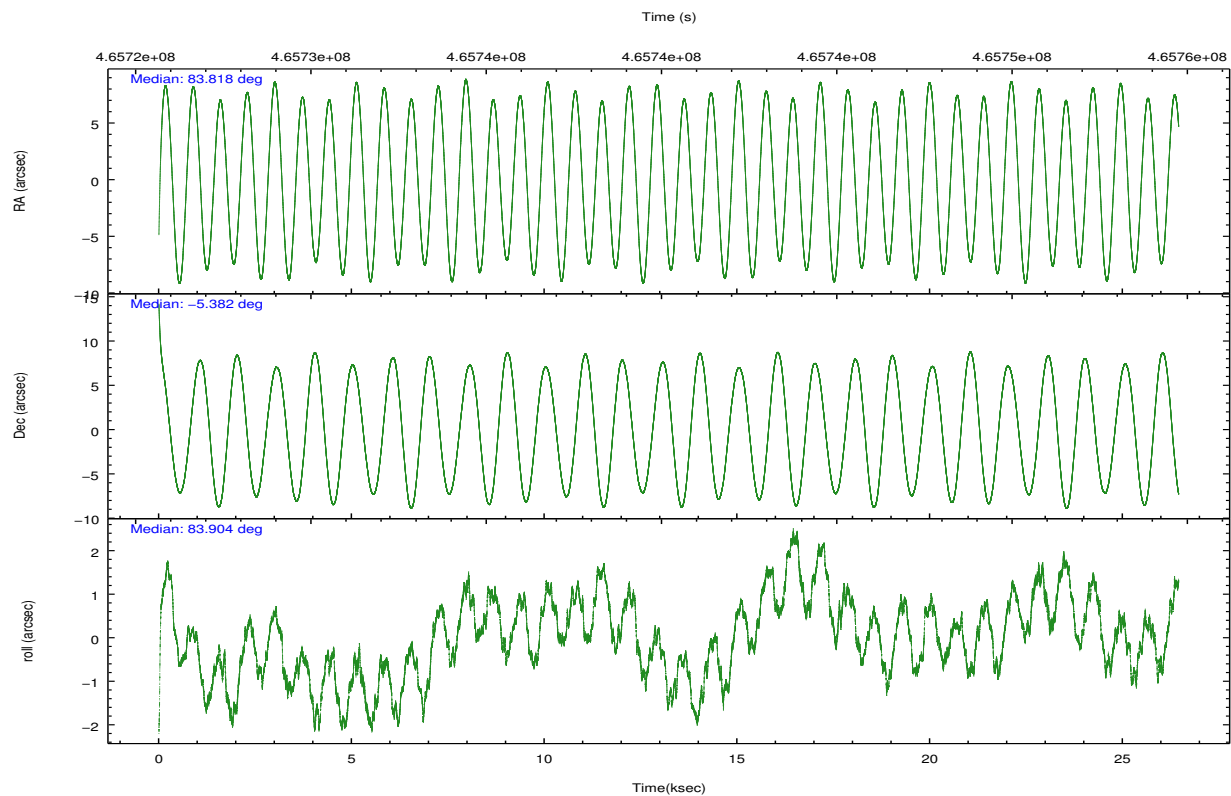
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	144340	174653	178247	212502	142846	192434	grade 0 events	18938	37410	38541	61090	6955	9501
rejected events	111207	115180	120418	126365	124366	103032		13%	21%	21%	28%	4%	4%
rejected %	77%	65%	67%	59%	87%	53%	grade 1 events	152	1567	704	2491	71	230
								0%	0%	0%	1%	0%	0%
							grade 2 events	6015	9577	8461	11162	4072	18945
								4%	5%	4%	5%	2%	9%
							grade 3 events	2203	3492	3101	4223	1817	7864
								1%	1%	1%	1%	1%	4%
							grade 4 events	2159	3366	3199	3984	1700	7977
								1%	1%	1%	1%	1%	4%
							grade 5 events	6452	8414	6565	9253	7216	19324
								4%	4%	3%	4%	5%	10%
							grade 6 events	3823	5636	4536	5689	3937	45127
								2%	3%	2%	2%	2%	23%
							grade 7 events	104598	105191	113140	114610	117078	83466
								72%	60%	63%	53%	81%	43%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	83.829300	83.81802083600365	CCD I2 on	Y	Y
[deg] Pointing Dec	-5.407167	-5.382059148340399	CCD I3 on	Y	Y
[deg] Pointing Roll	83.697658	83.9052774546025	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	465727138.184000	465726010.31692	CCD S5 on	N	N
Observation start date	2012-10-04T08:37:51	2012-10-04T08:20:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	465753438.184000	465754395.64345	On-chip summing requested	N	N
Observation end date	2012-10-04T15:56:11	2012-10-04T16:13:15	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



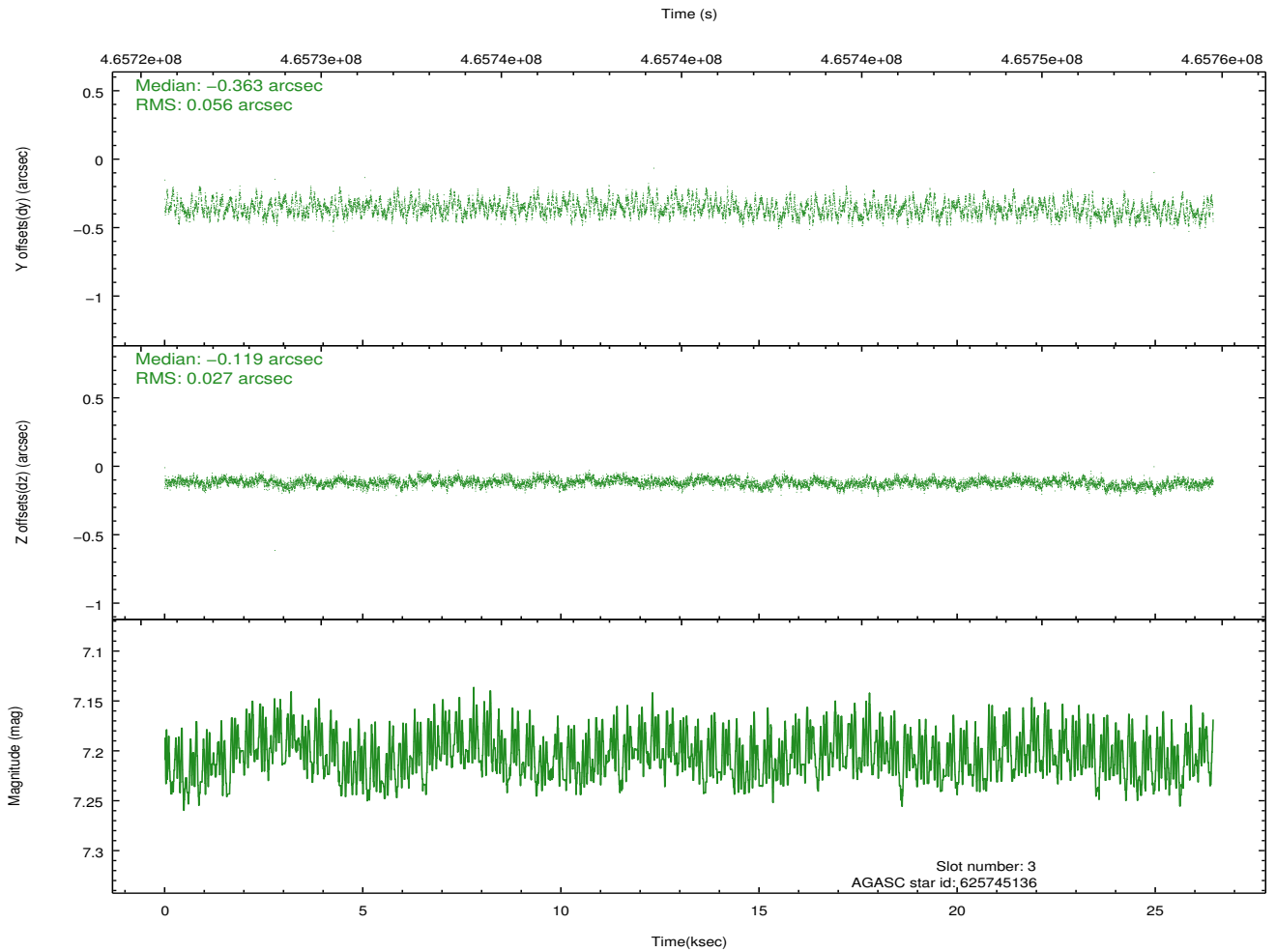
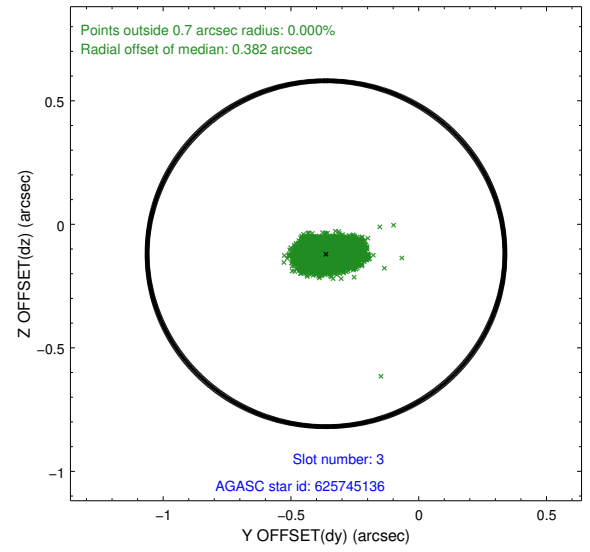
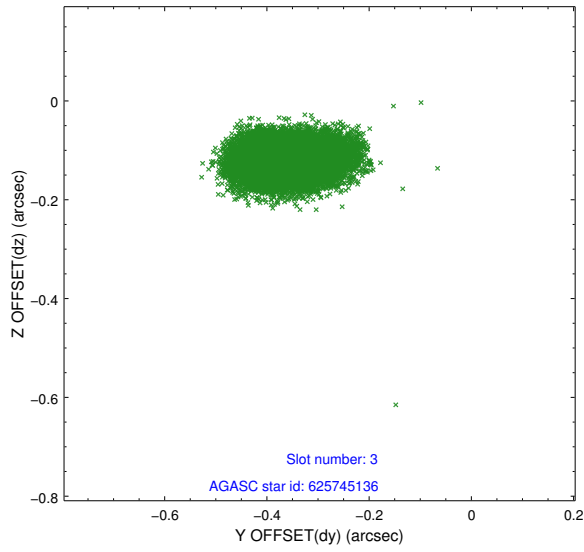


Slot Statistics

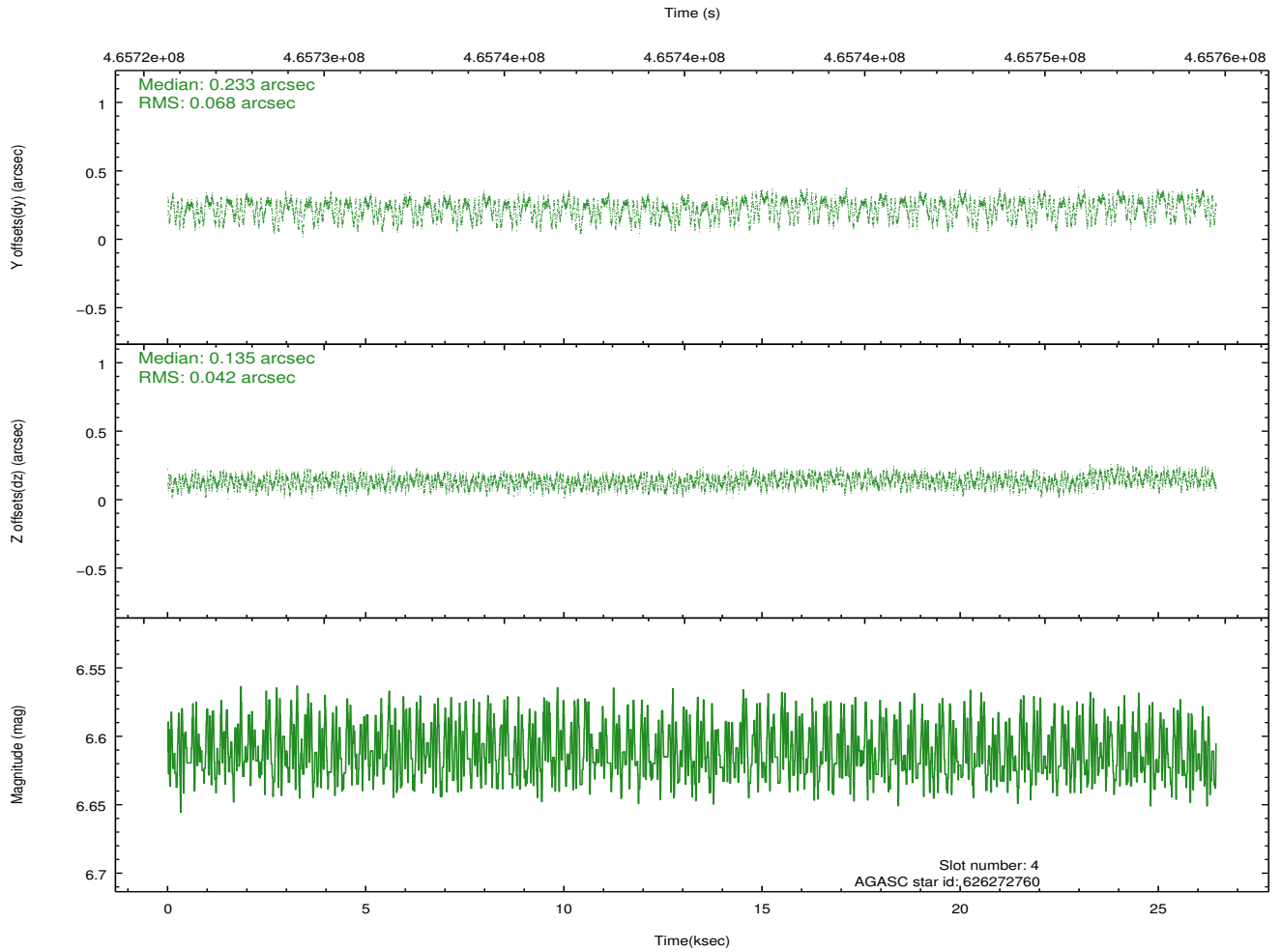
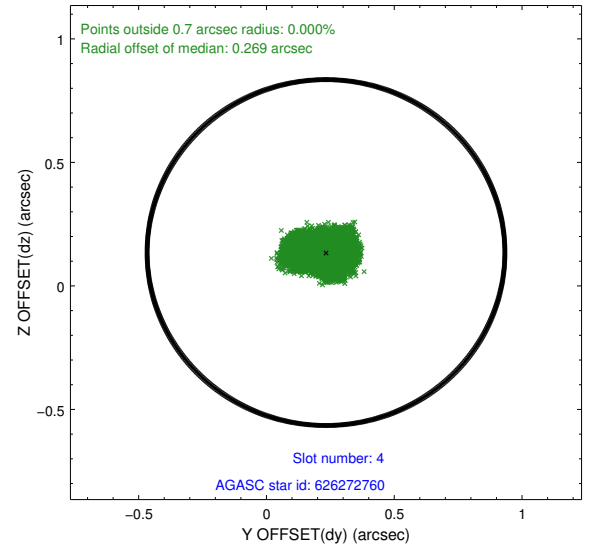
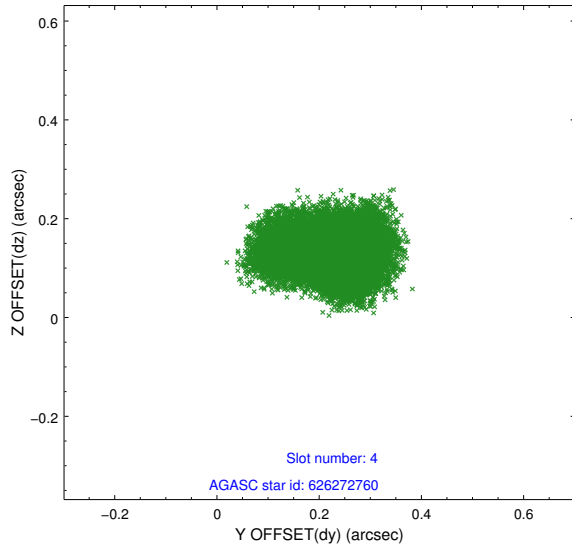
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	6453	0.060	-0.030	0.017	0.023	0.000000	0.000000	924.49	-840.00
1	FID		ACIS-I-5	7.05	6453	-0.216	0.058	0.014	0.022	0.000000	0.000000	-1823.82	1057.55
2	FID		ACIS-I-6	7.05	6453	0.068	0.045	0.014	0.040	0.000000	0.000000	389.95	1702.14
3	GUIDE	used	625745136	7.21	12906	-0.363	-0.119	0.065	0.111	83.600341	-4.804339	2066.67	1054.59
4	GUIDE	used	626272760	6.61	12905	0.233	0.135	0.085	0.134	84.363987	-5.938389	-1691.03	-2112.71
5	GUIDE	used	626273040	7.13	12903	0.198	-0.003	0.087	0.140	84.062610	-5.647920	-769.65	-925.95
6	GUIDE	used	625745128	7.82	12905	-0.293	-0.170	0.073	0.123	83.769930	-4.731835	2392.90	478.60
7	GUIDE	used	626272880	7.67	12904	0.223	0.152	0.076	0.130	83.815609	-6.032748	-2243.30	-198.18

2.4 Star Slots

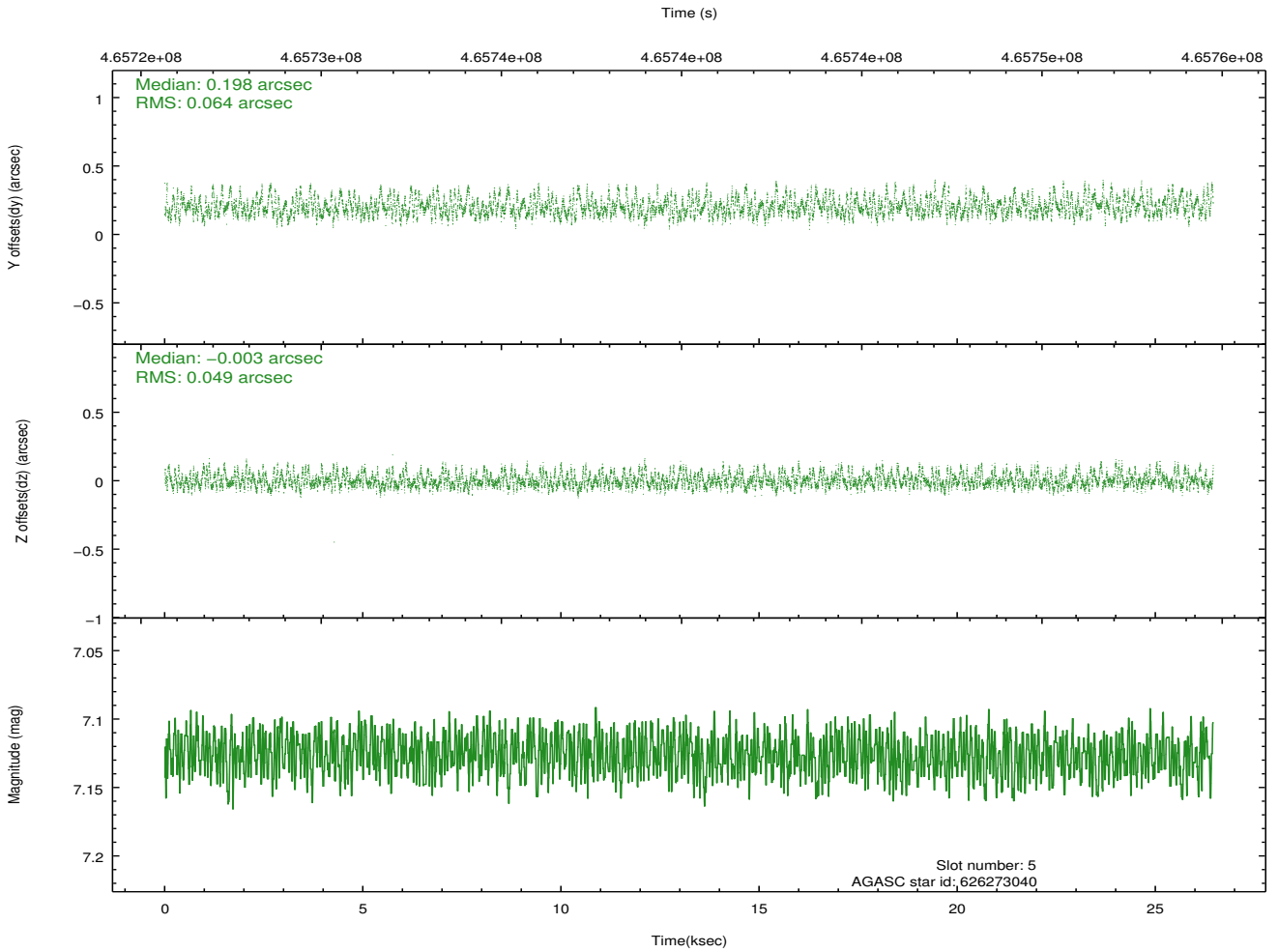
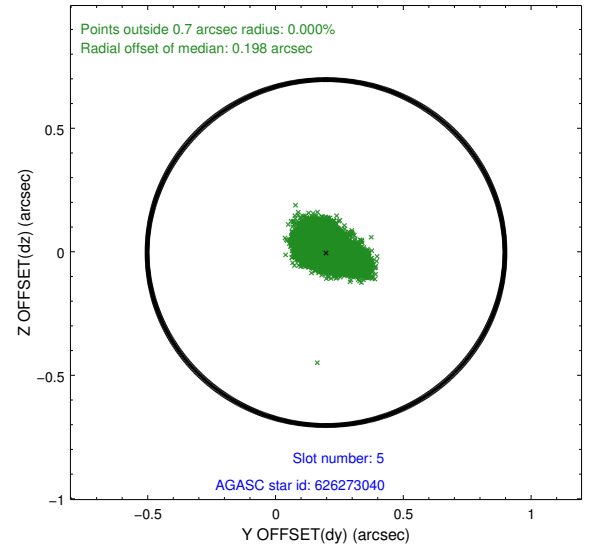
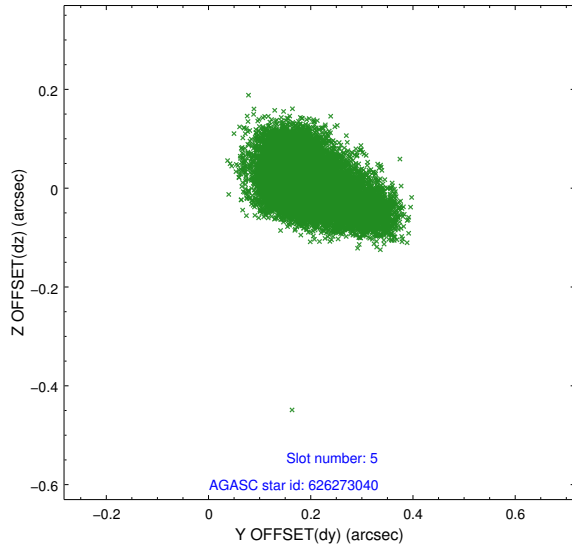
2.4.1 Slot 3



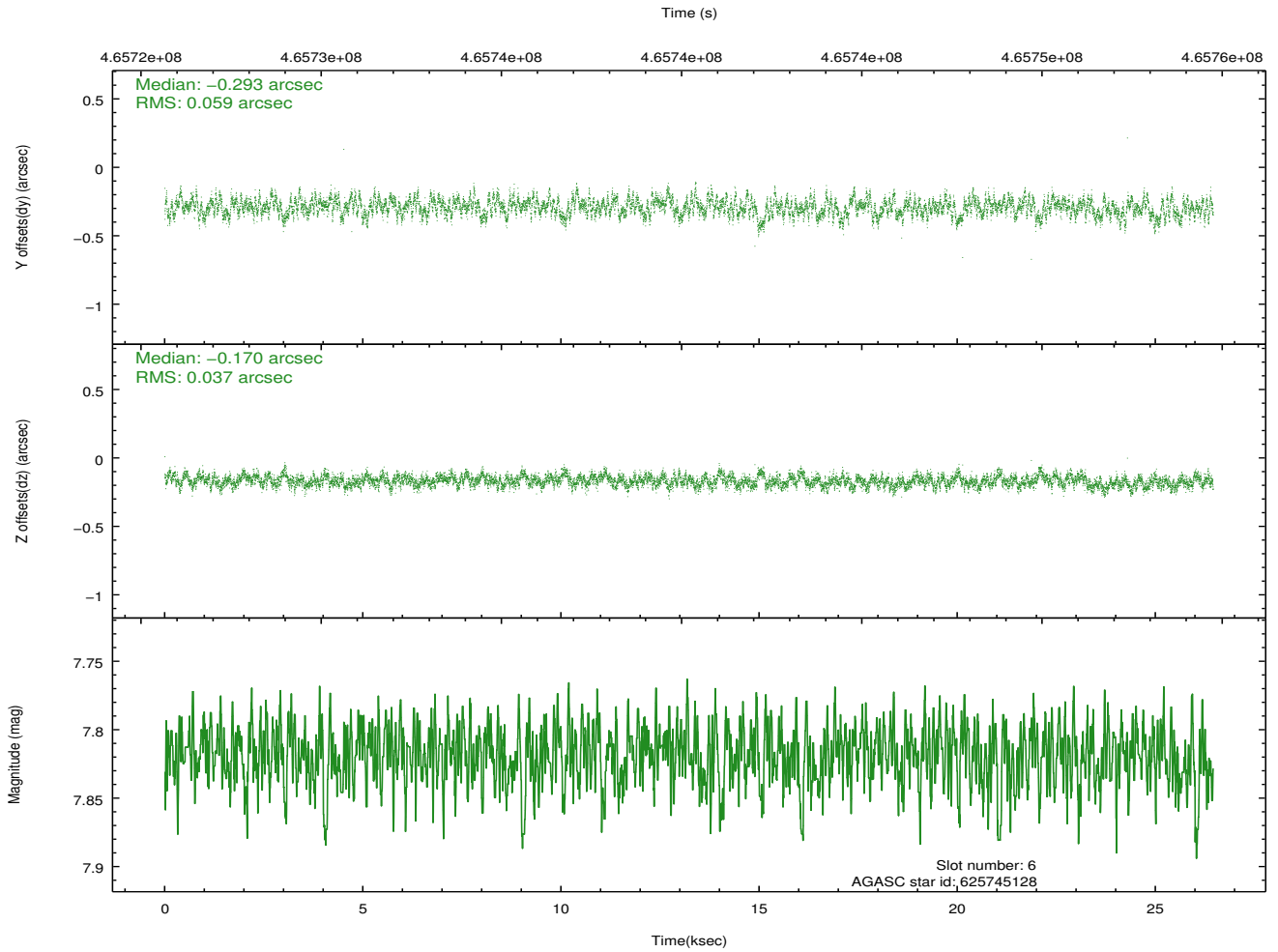
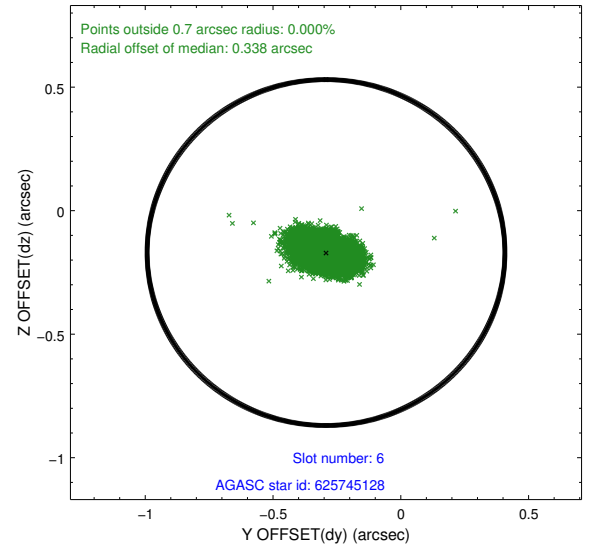
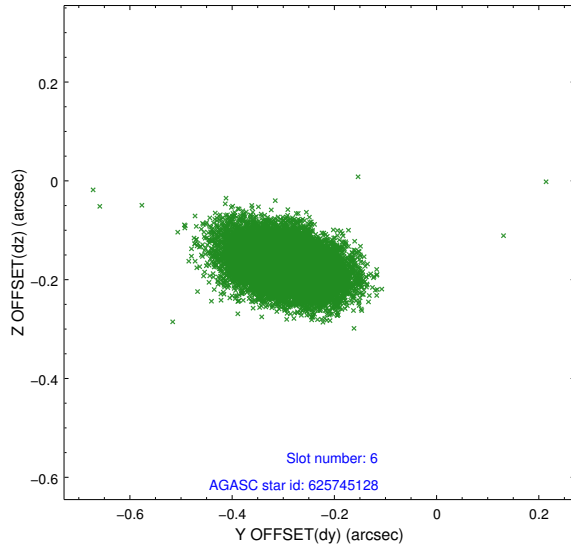
2.4.2 Slot 4



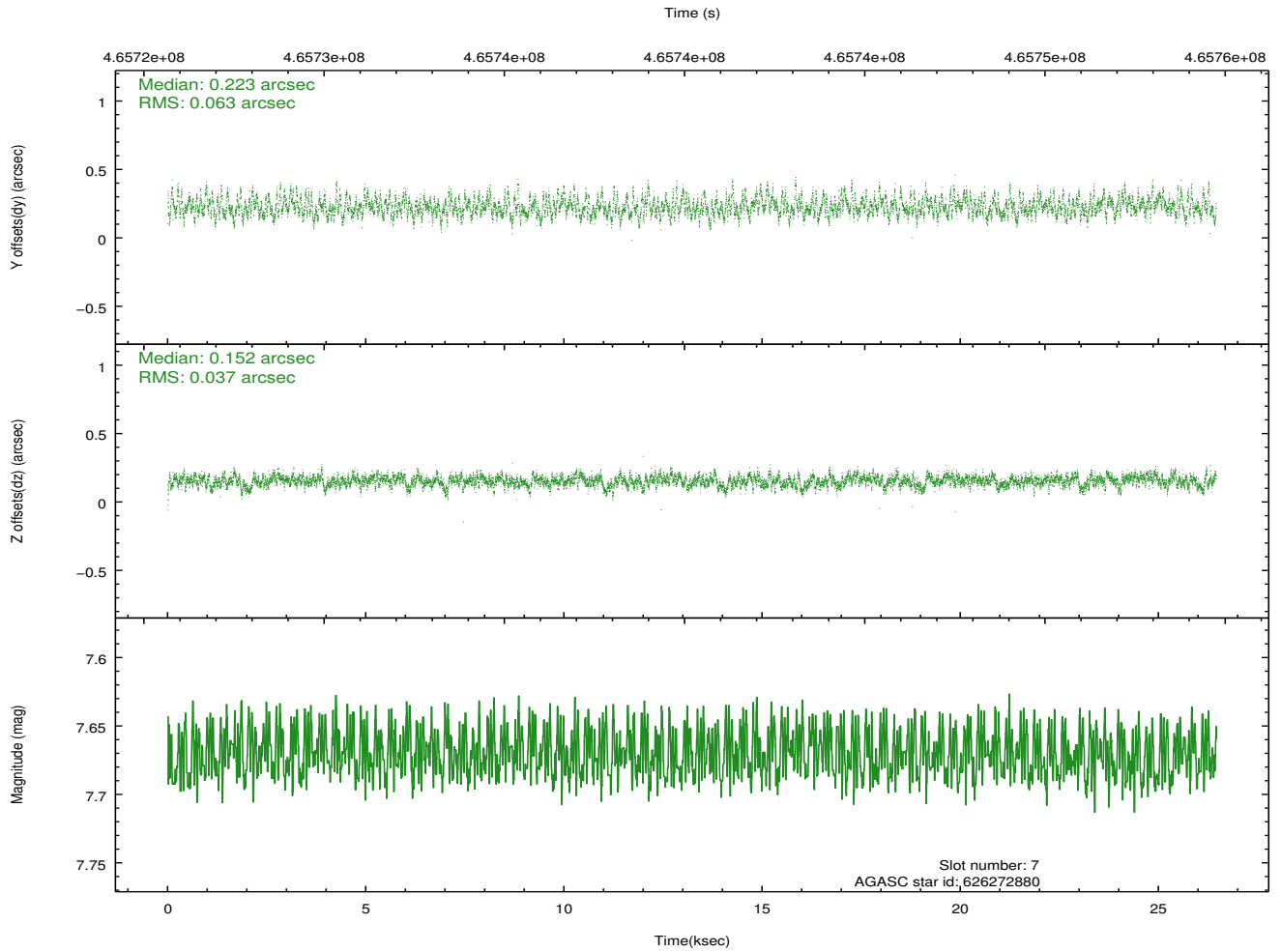
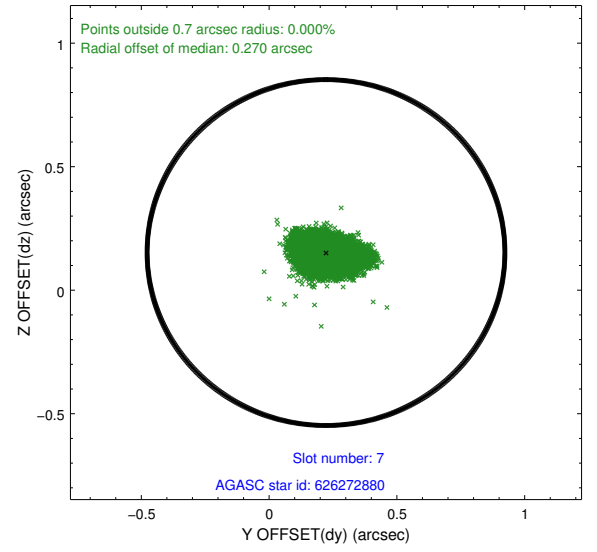
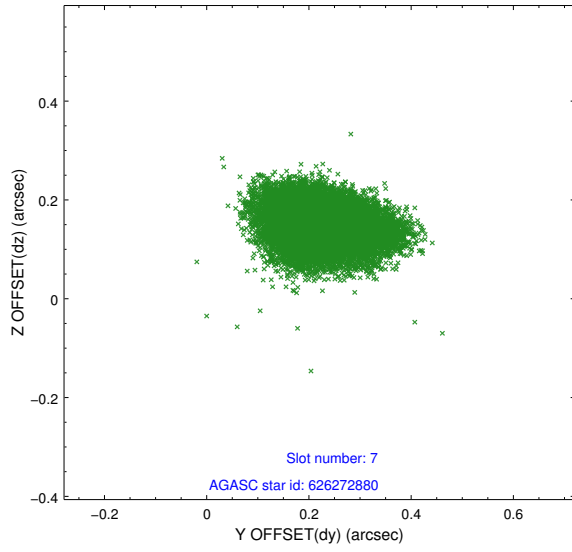
2.4.3 Slot 5



2.4.4 Slot 6

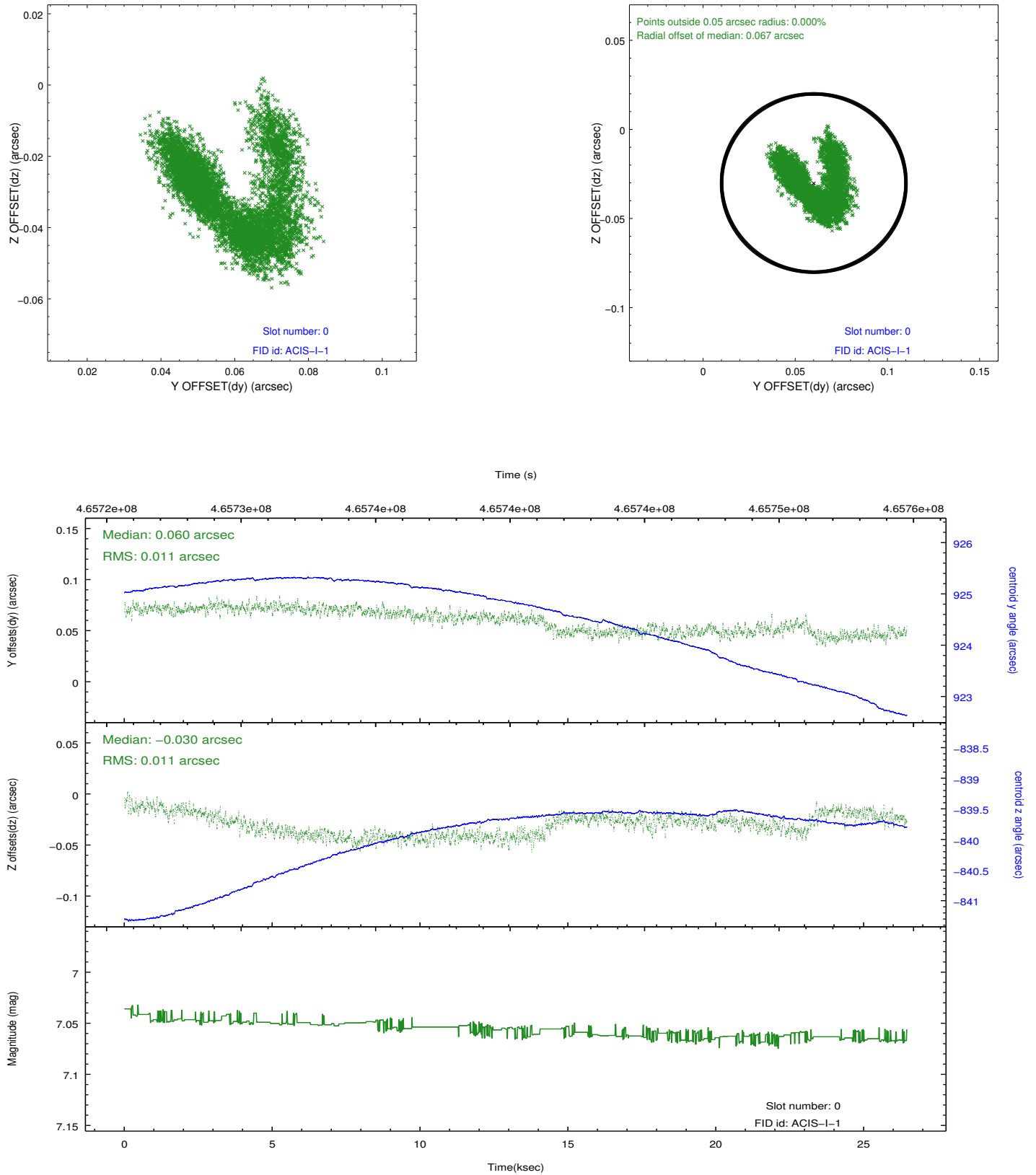


2.4.5 Slot 7

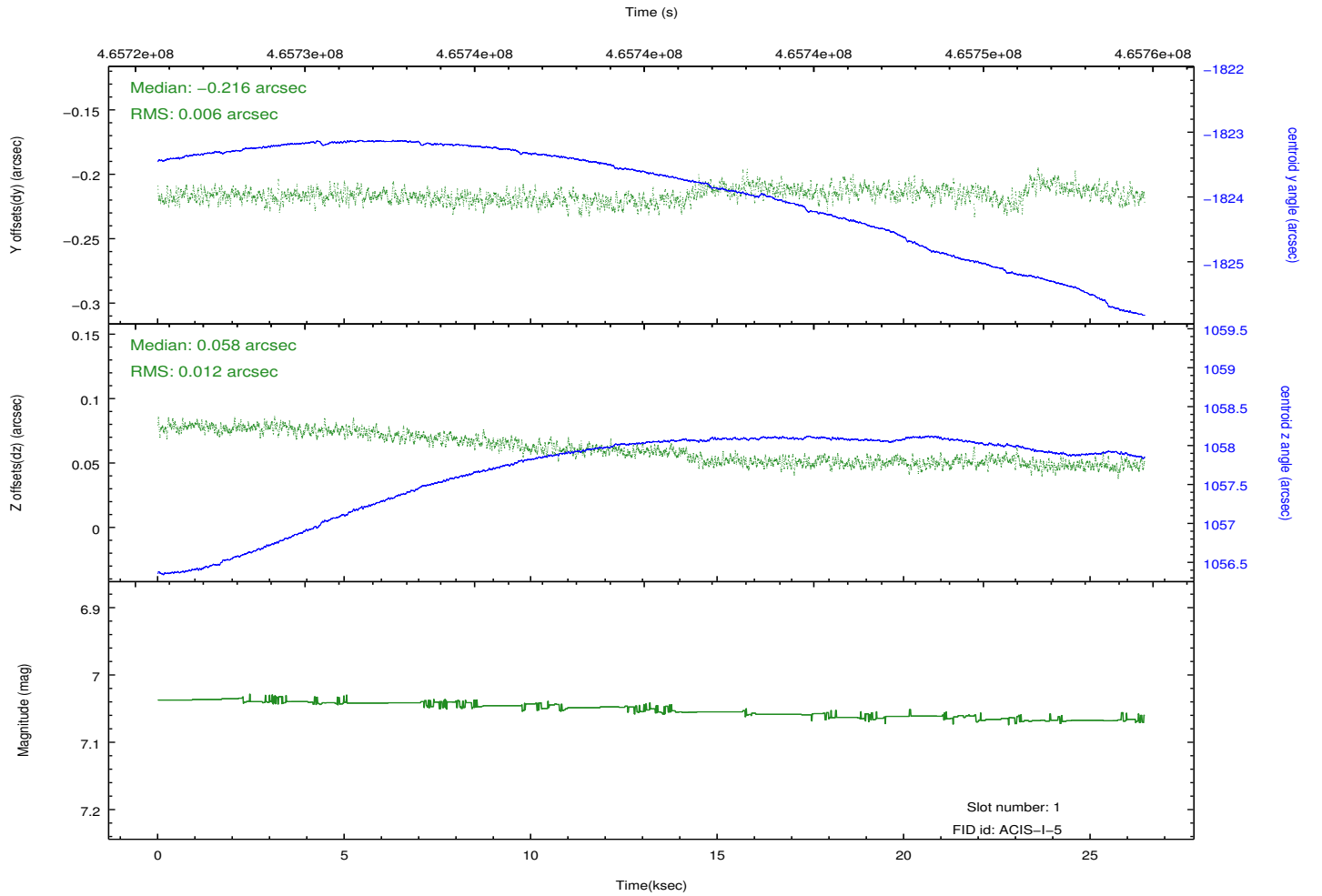
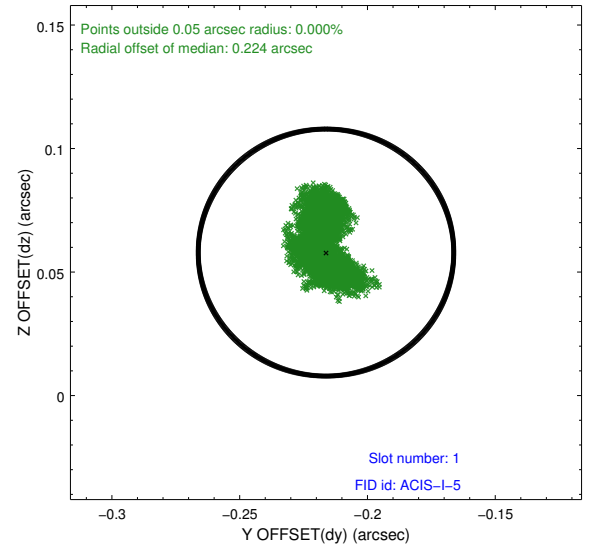
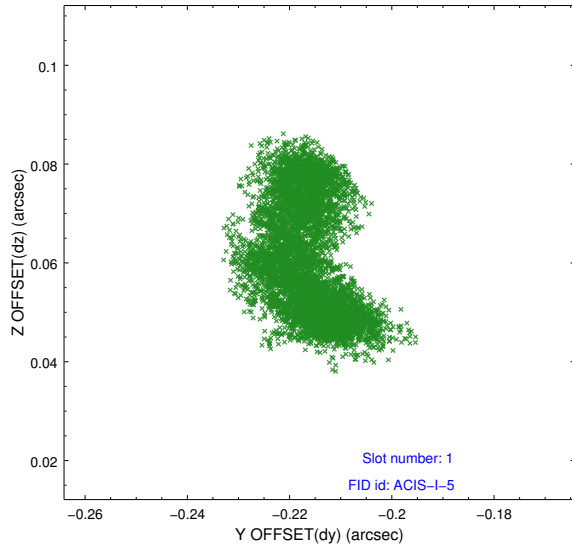


2.5 FID Slots

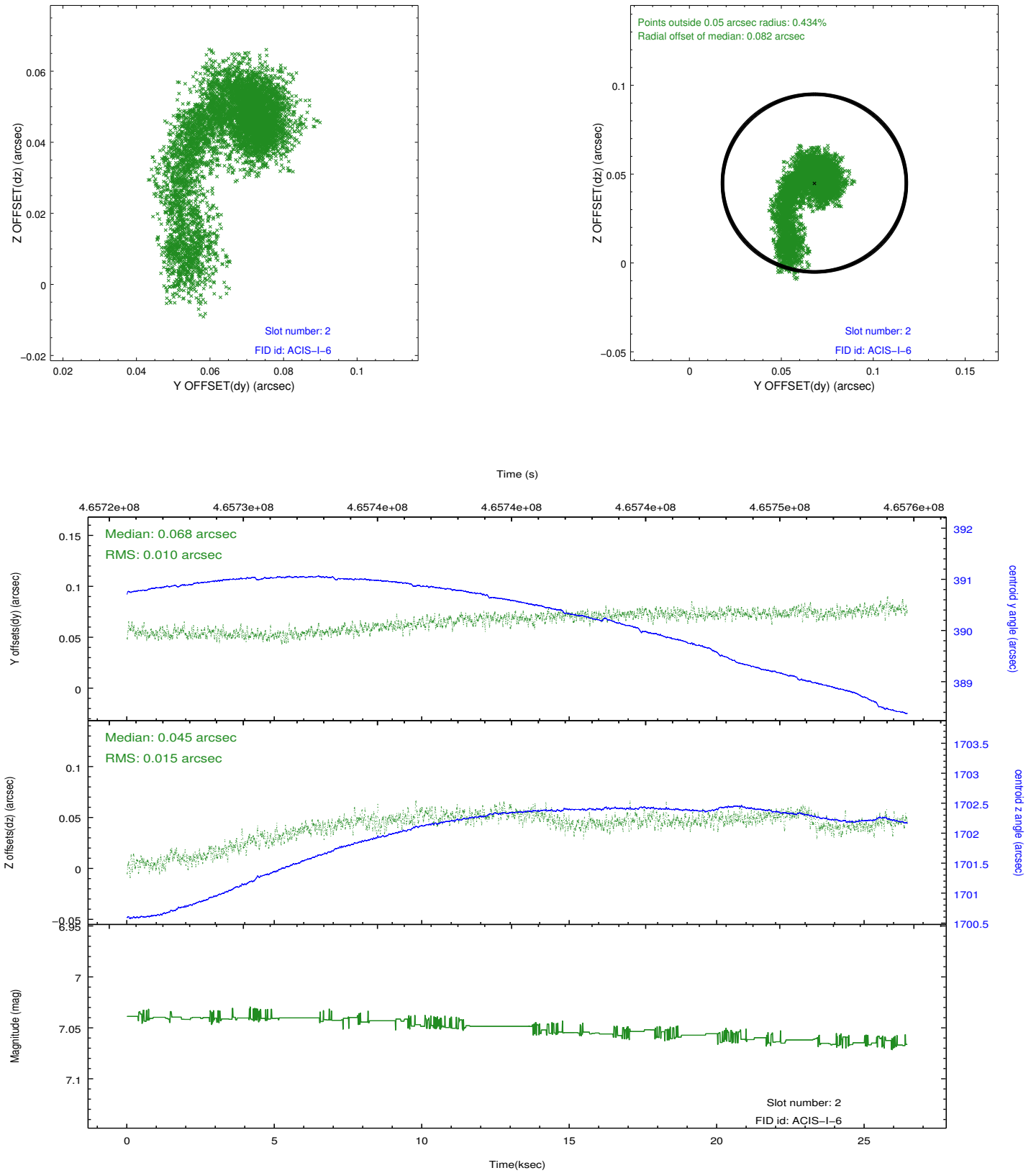
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	26.264795394182

A.2 Comments

Joint observation with NRAO.

Observation coordinated with EVLA.

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.