

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 16614 - L2 Version 2
Chandra X-Ray Center

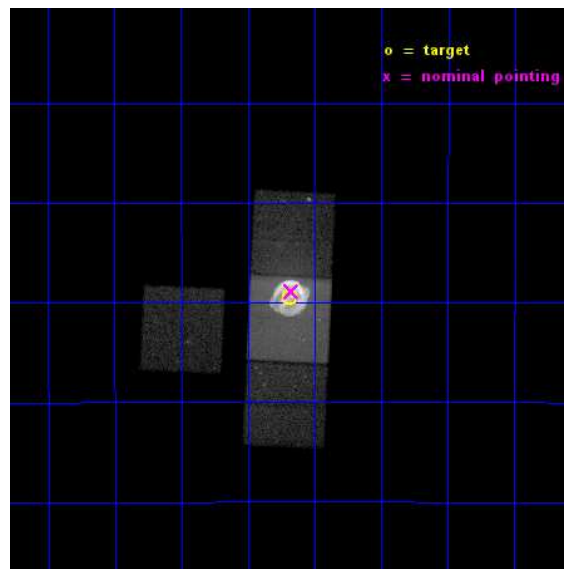
L2 Processing Date : Dec 11 2014

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1 Front

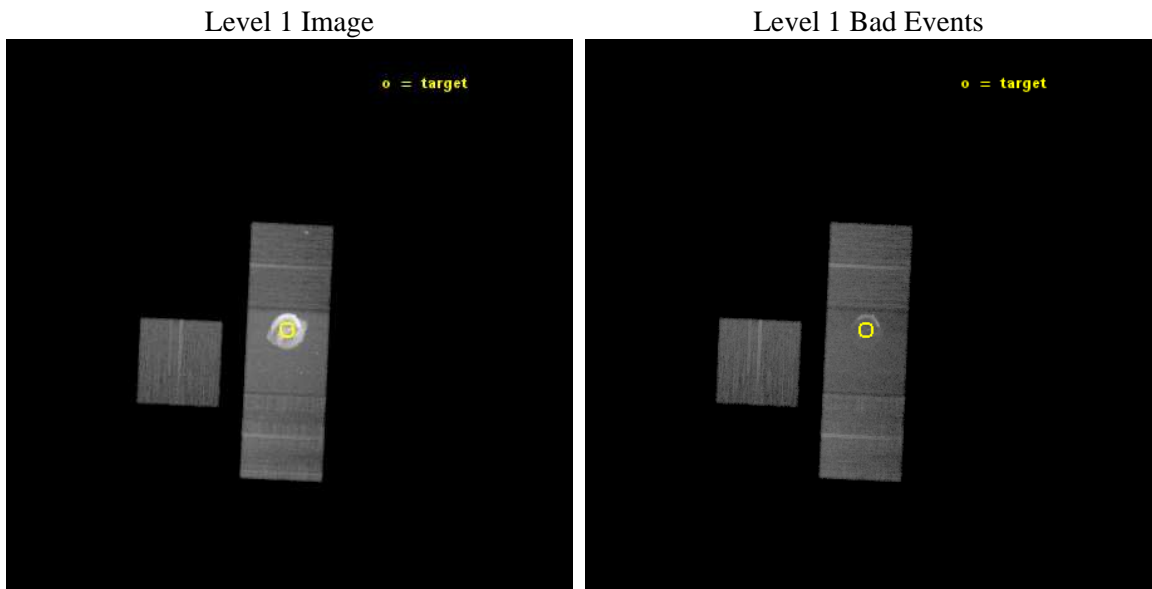
seq_num	502237	Sequence number
obs_id	16614	Observation id
title	Dynamics of the Remnant of Kepler's Type Ia Supernova	Proposal ti
observer	Dr. Kazimierz Borkowski	Principal investigator
object	Kepler's Supernova Remnant	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	262.671667	Observer's specified target RA [deg]
dec_targ	-21.492056	Observer's specified target Dec [deg]
ra_nom	262.66841266705	Nominal RA [deg]
dec_nom	-21.481409816639	Nominal Dec [deg]
roll_nom	92.655428784083	Nominal Roll [deg]
revision	2	Processing version of data
ontime	36876.70134902	Sum of GTIs [s]
livetime	36394.880097662	Livetime [s]
ontime3	36876.619269013	Sum of GTIs [s]
ontime6	36876.660309017	Sum of GTIs [s]
ontime7	36876.70134902	Sum of GTIs [s]
ontime8	36876.57822901	Sum of GTIs [s]
l2events	1321240	Number of level 2 events



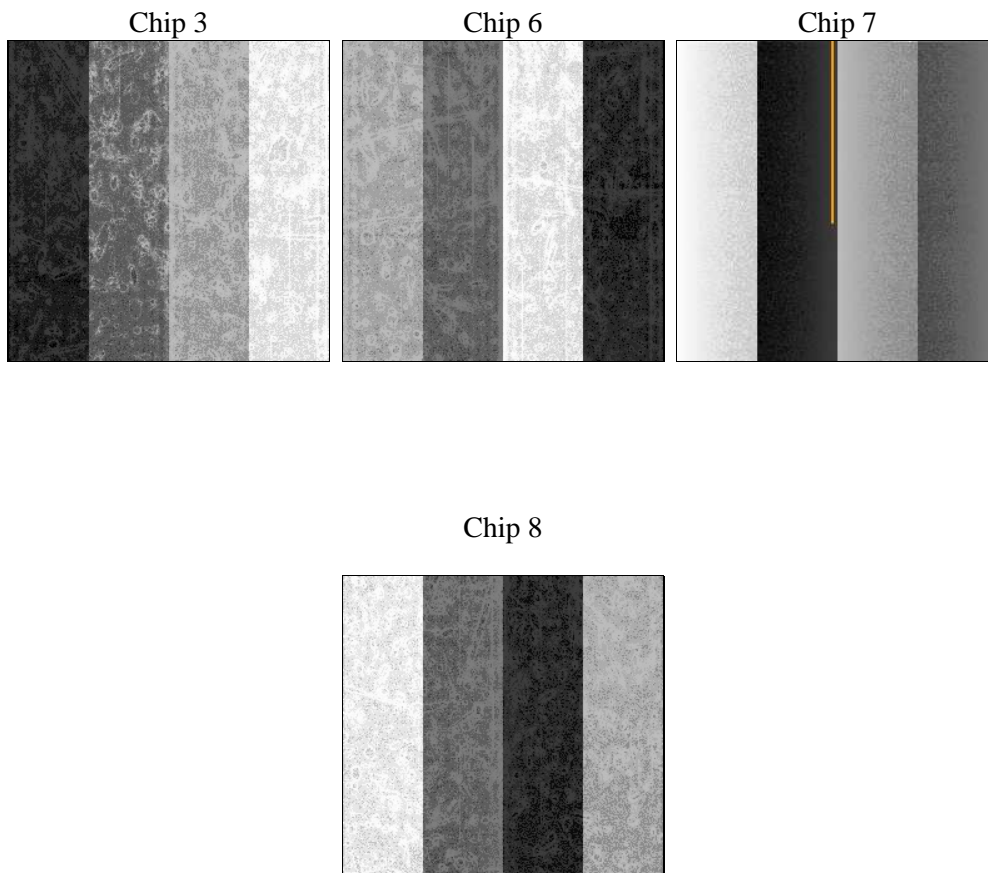
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	36800.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	36876.70134902	Sum of GTIs [s]
caldsver	4.6.4	 	ontime3	36876.619269013	Sum of GTIs [s]
date	2014-12-11T12:55:18	Date and time of file creation	ontime6	36876.660309017	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	36876.70134902	Sum of GTIs [s]
			ontime8	36876.57822901	Sum of GTIs [s]
			l1events	2021243	Number of level 1 events

2.1.4 Events

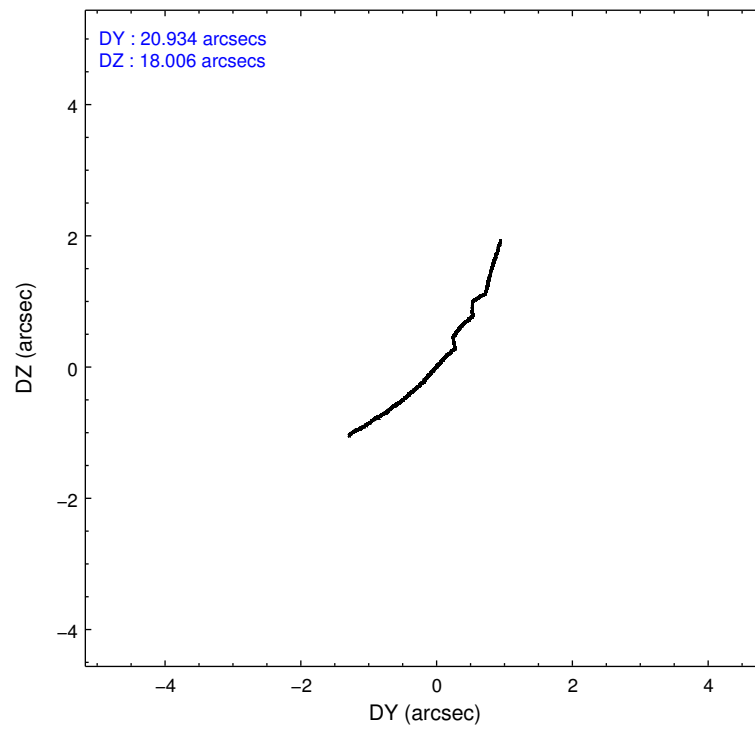
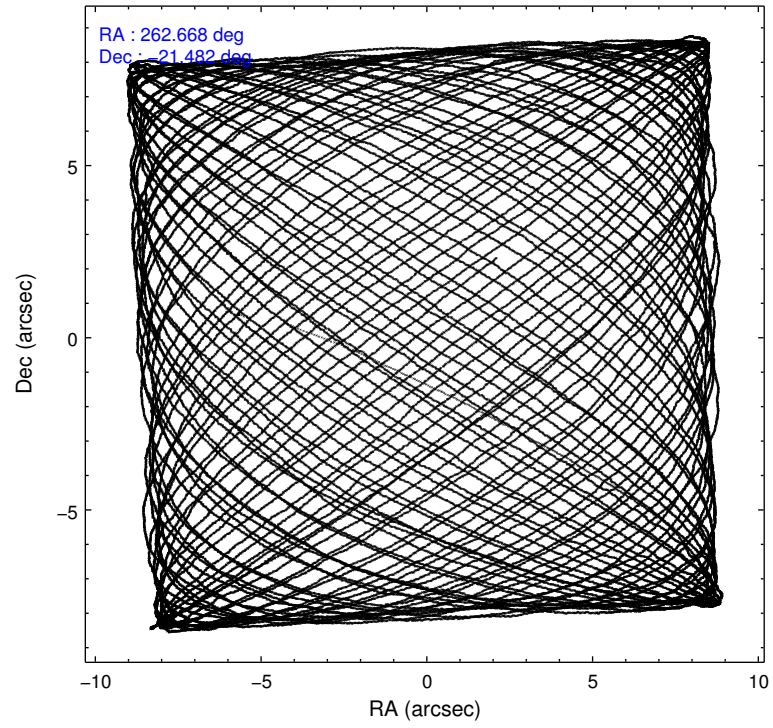
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	177538	199287	1400300	244118
rejected events	154977	160472	154281	174878
rejected %	87%	80%	11%	71%

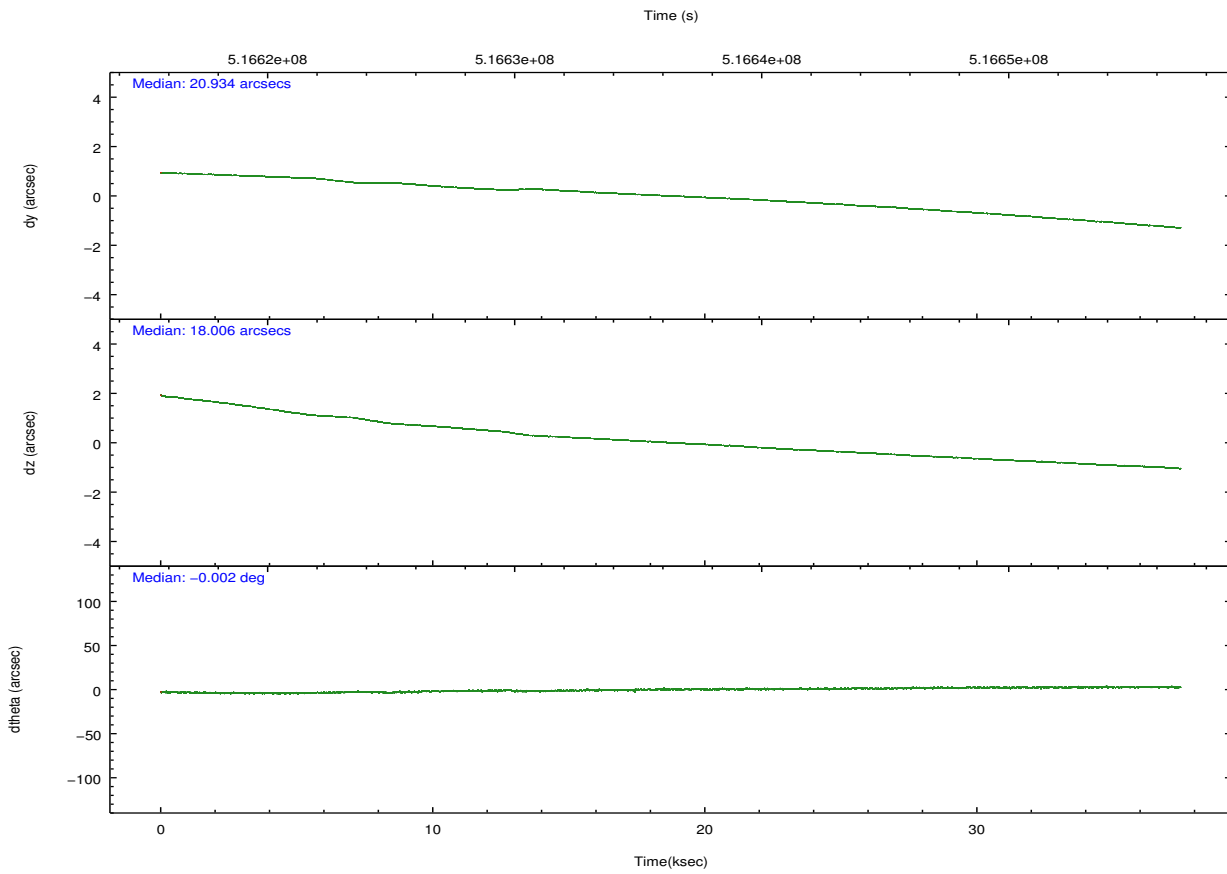
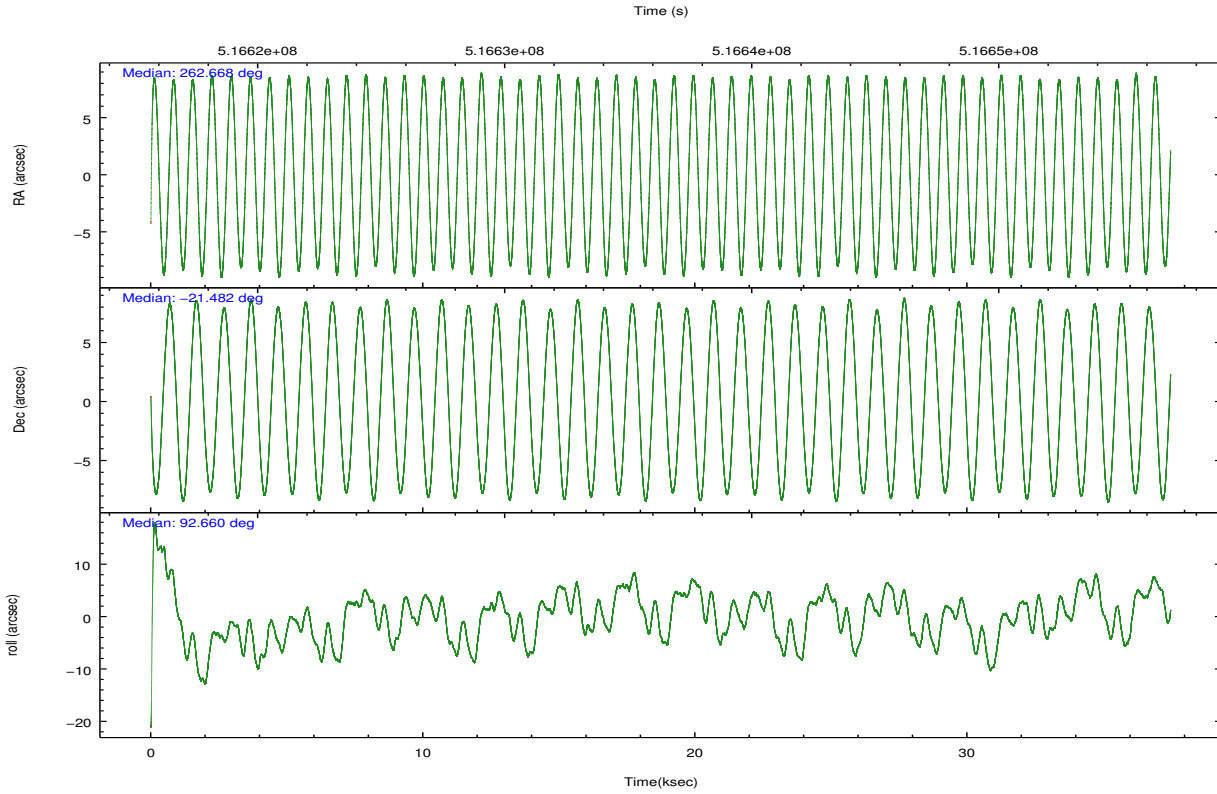
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	9028	21862	332175	22269
	5%	10%	23%	9%
grade 1 events	112	141	1743	174
	0%	0%	0%	0%
grade 2 events	4853	6384	338862	15631
	2%	3%	24%	6%
grade 3 events	2146	2616	146919	6878
	1%	1%	10%	2%
grade 4 events	2197	2592	143274	6671
	1%	1%	10%	2%
grade 5 events	9452	9817	35271	13741
	5%	4%	2%	5%
grade 6 events	4342	5367	284970	17798
	2%	2%	20%	7%
grade 7 events	145408	150508	117086	160956
	81%	75%	8%	65%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	262.684608	262.6684126670485	CCD I2 on	N	N
[deg] Pointing Dec	-21.504213	-21.48140981663867	CCD I3 on	O2	Y
[deg] Pointing Roll	92.504748	92.65542878408294	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	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	O1	Y
[s] Observation start time (MET)	516618259.184000	516616436.42572	CCD S5 on	N	N
Observation start date	2014-05-16T09:03:12	2014-05-16T08:33:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	516655059.184000	516656051.65291	On-chip summing requested	N	N
Observation end date	2014-05-16T19:16:32	2014-05-16T19:34:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





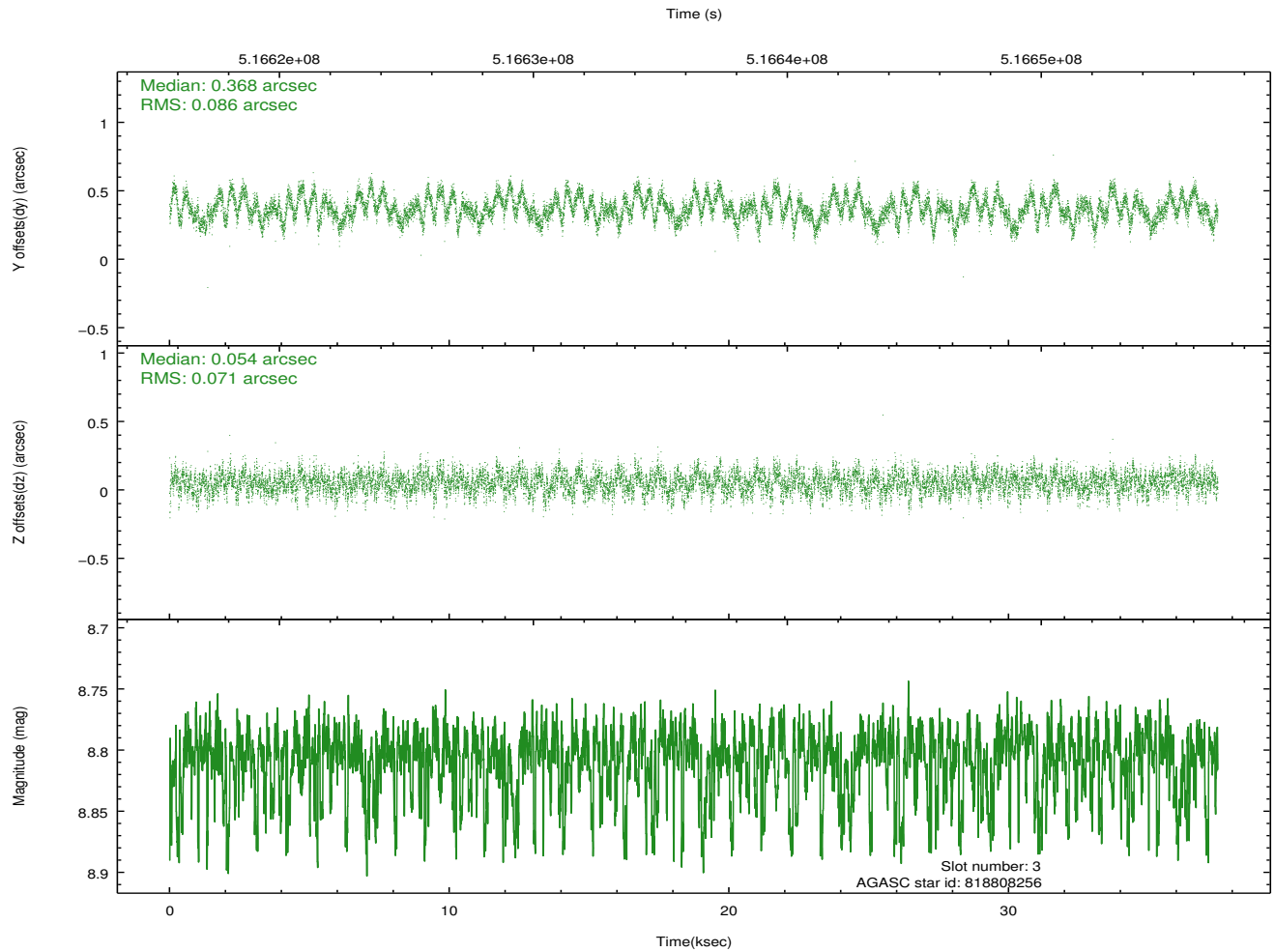
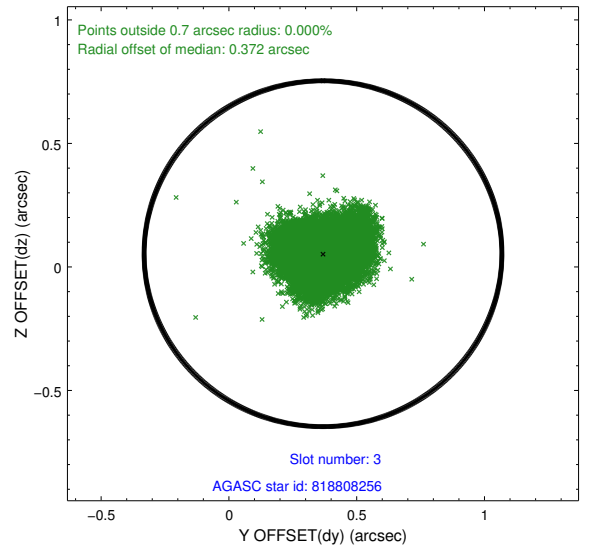
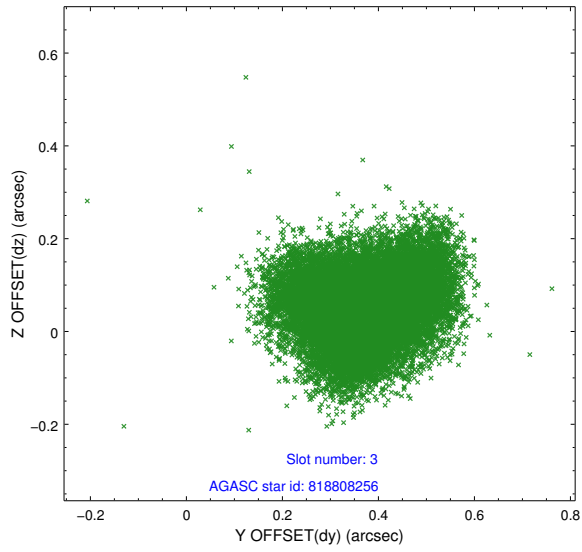
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.92	9143	-0.146	-0.081	0.010	0.018	0.000000	0.000000	-774.21	-1739.66
1	FID		ACIS-S-4	7.01	9142	0.188	0.078	0.009	0.017	0.000000	0.000000	2139.45	168.85
2	FID		ACIS-S-6	7.14	9143	-0.071	0.010	0.012	0.017	0.000000	0.000000	387.97	806.27
3	GUIDE	used	818808256	8.81	18277	0.368	0.054	0.121	0.189	263.255476	-21.831270	-1265.11	-1854.53
4	GUIDE	used	818808880	9.57	18278	-0.021	0.019	0.149	0.244	262.860845	-20.882902	2208.48	-689.37
5	GUIDE	used	818810616	7.87	18282	0.279	-0.094	0.085	0.130	263.165516	-21.873468	-1399.72	-1546.76
6	GUIDE	used	818808064	9.33	18271	-0.483	-0.015	0.133	0.218	263.335711	-21.304630	617.90	-2212.87
7	GUIDE	used	818806888	9.71	18268	-0.164	0.039	0.169	0.276	263.030968	-21.219468	971.73	-1206.09

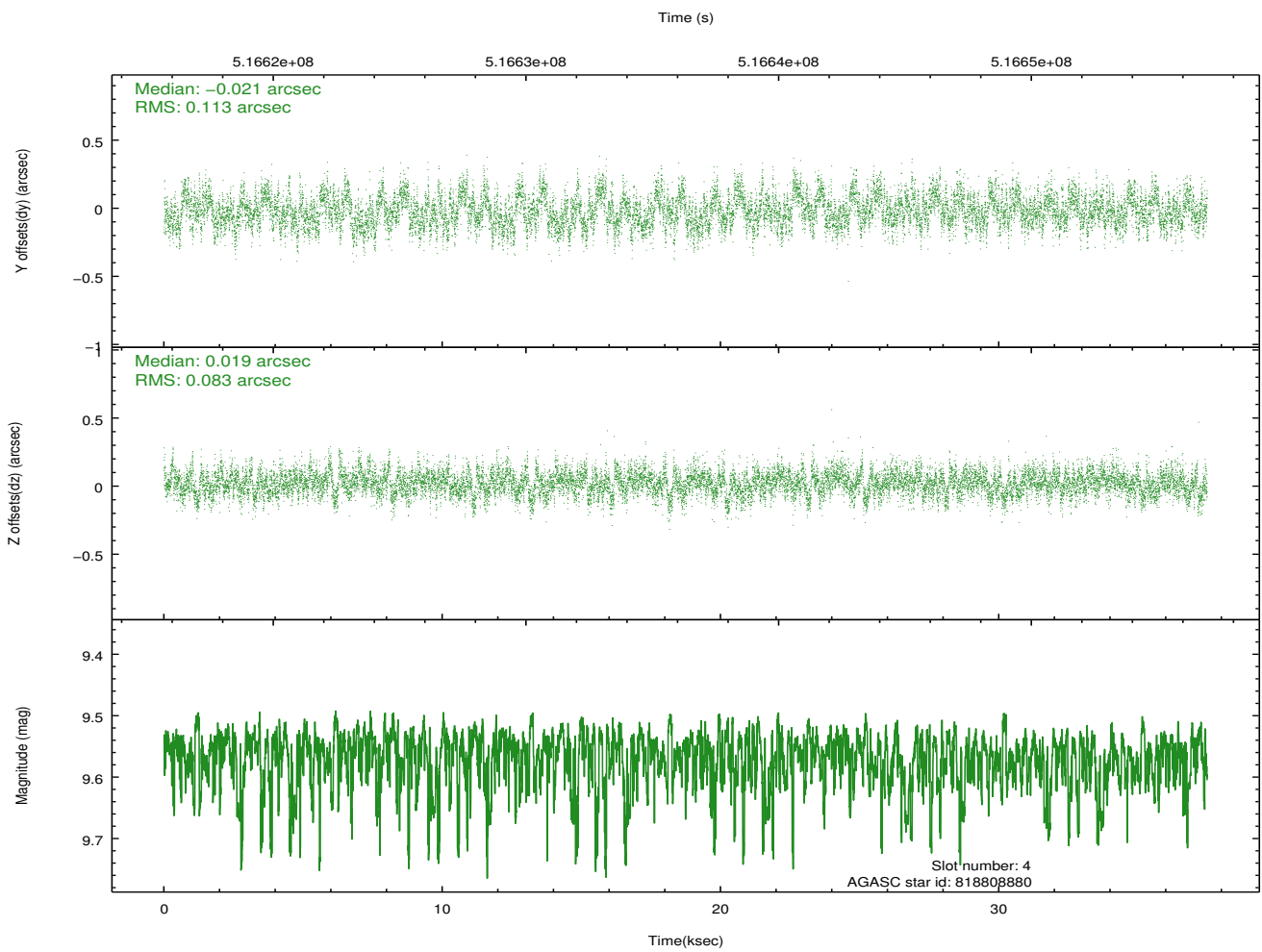
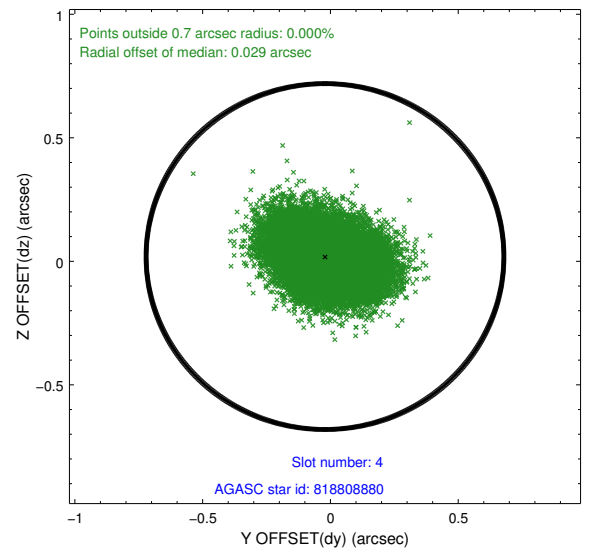
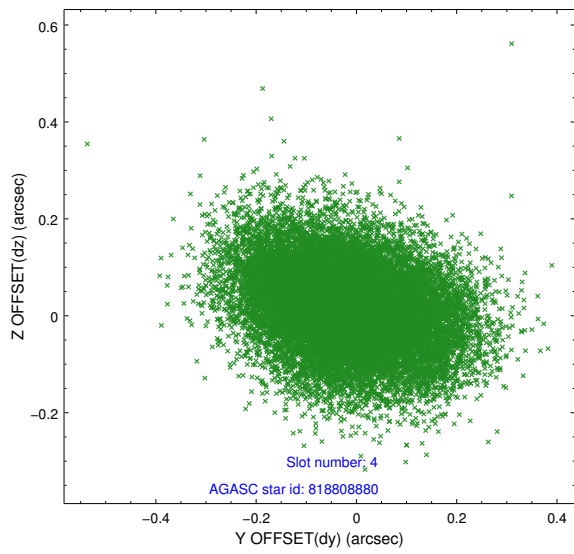
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2.4 Star Slots

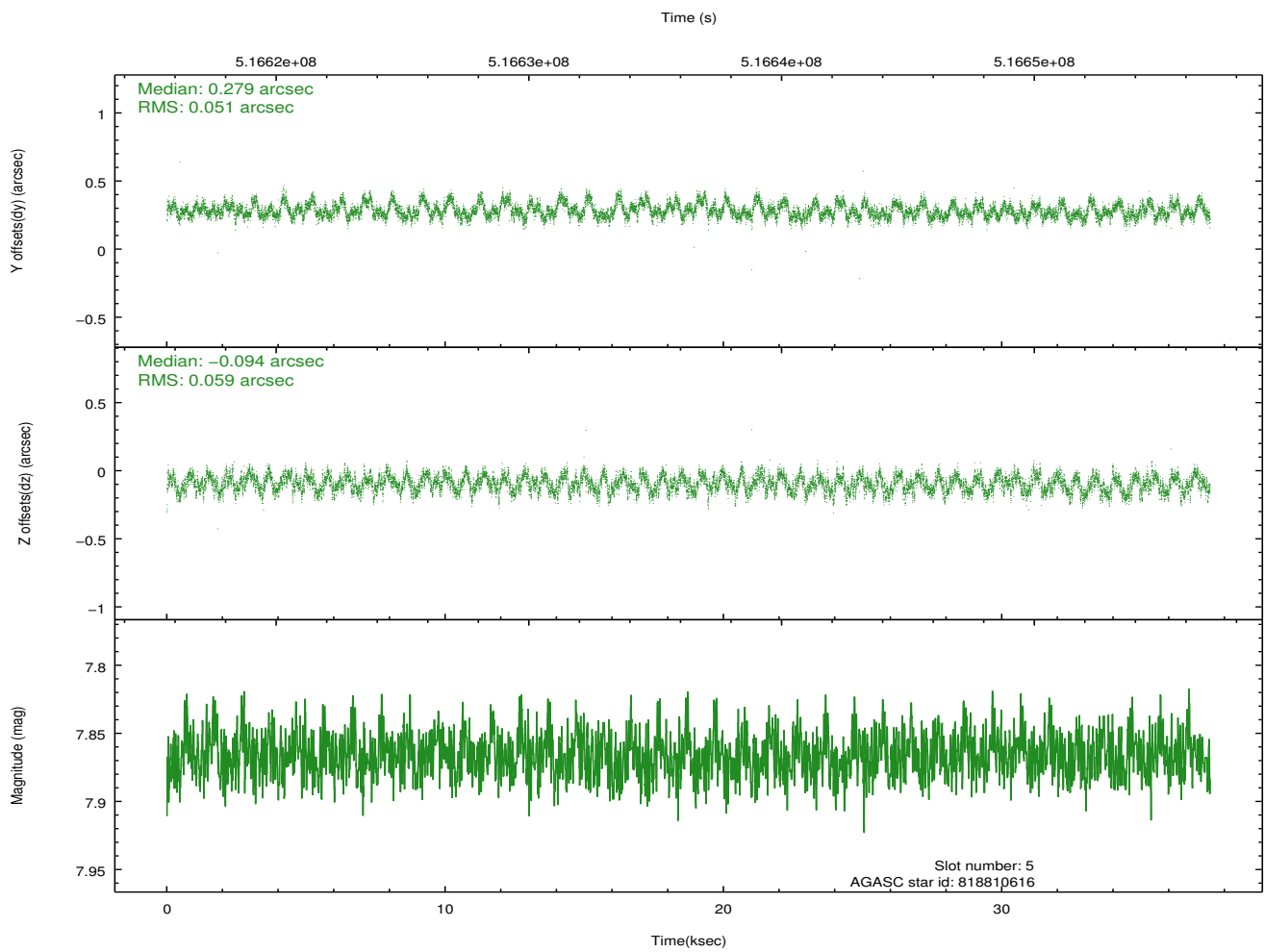
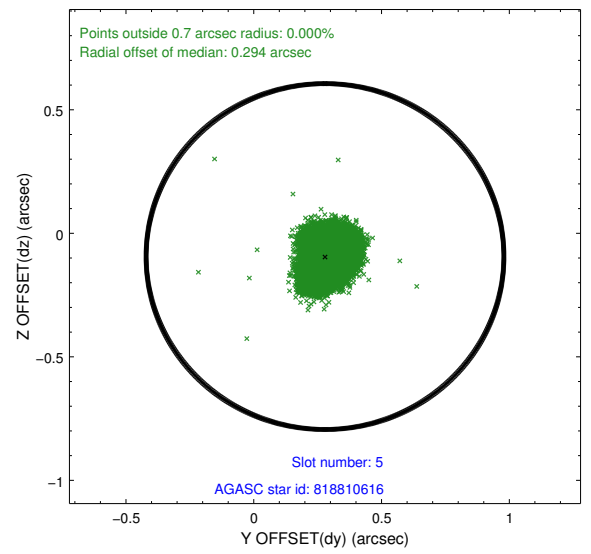
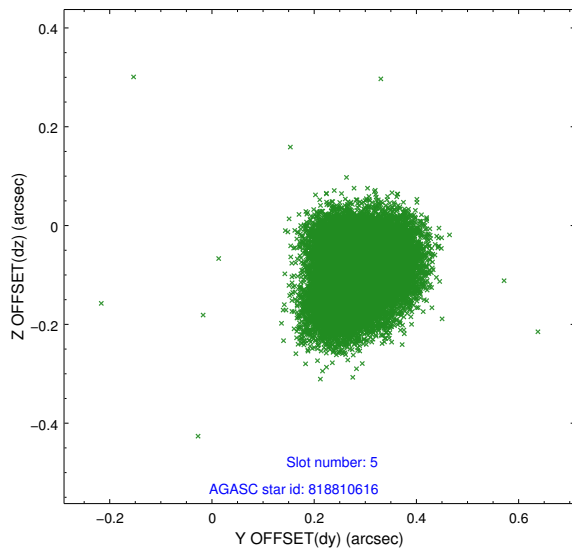
2.4.1 Slot 3



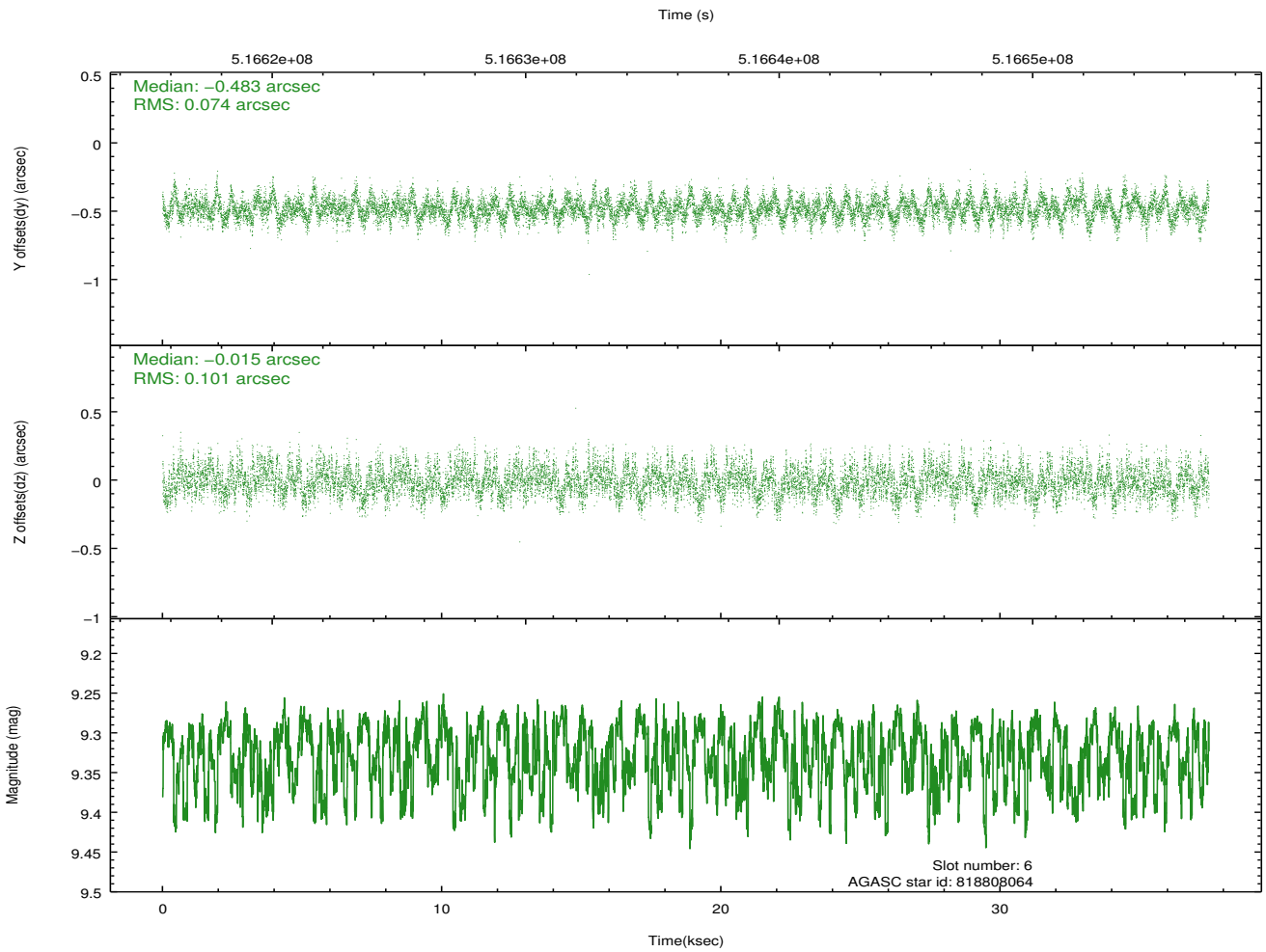
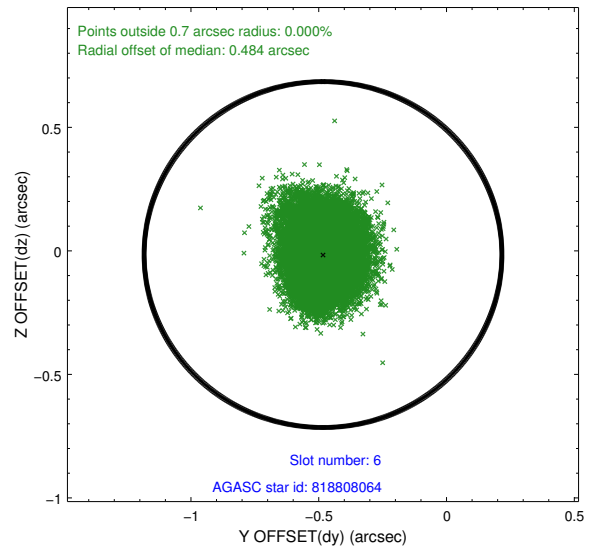
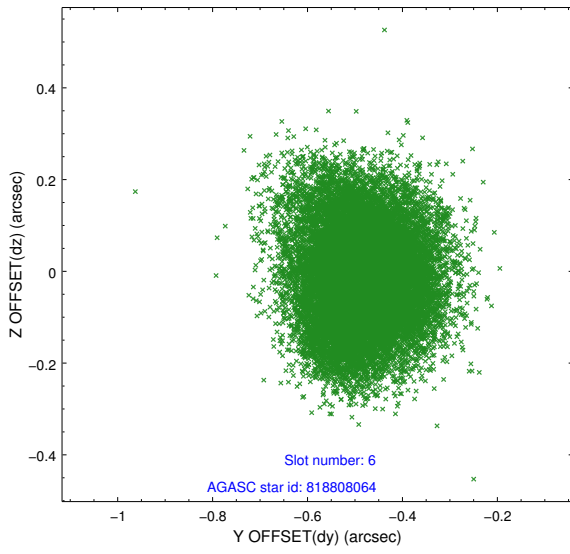
2.4.2 Slot 4



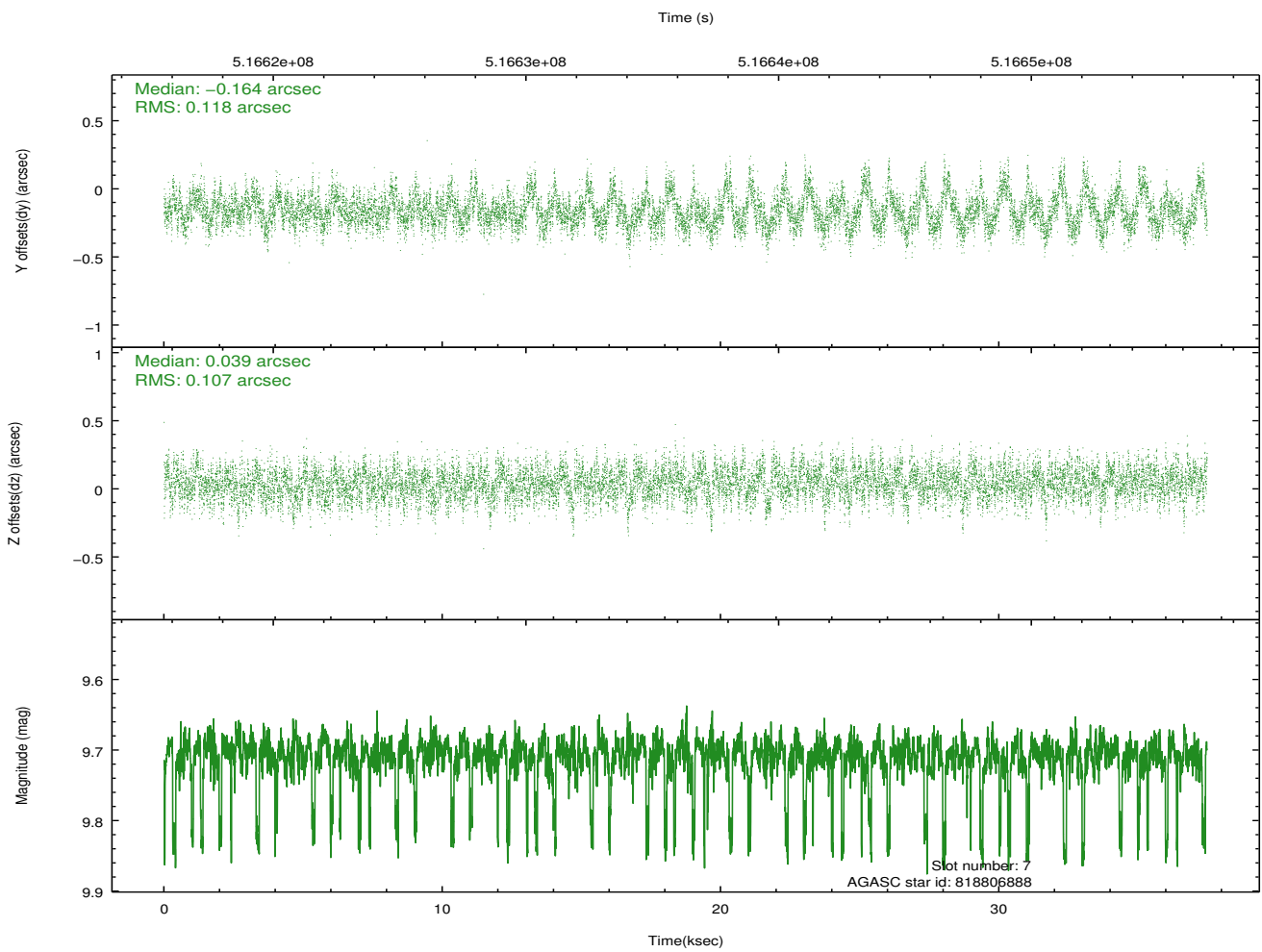
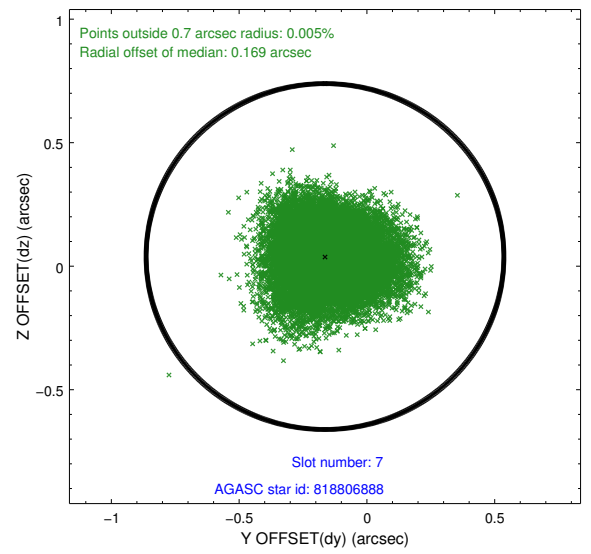
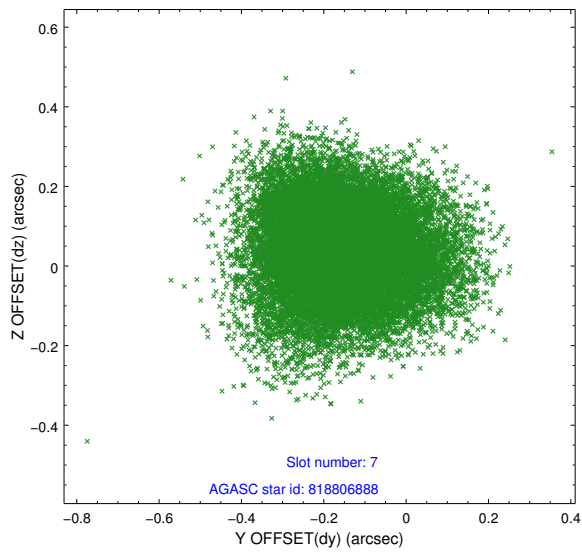
2.4.3 Slot 5



2.4.4 Slot 6

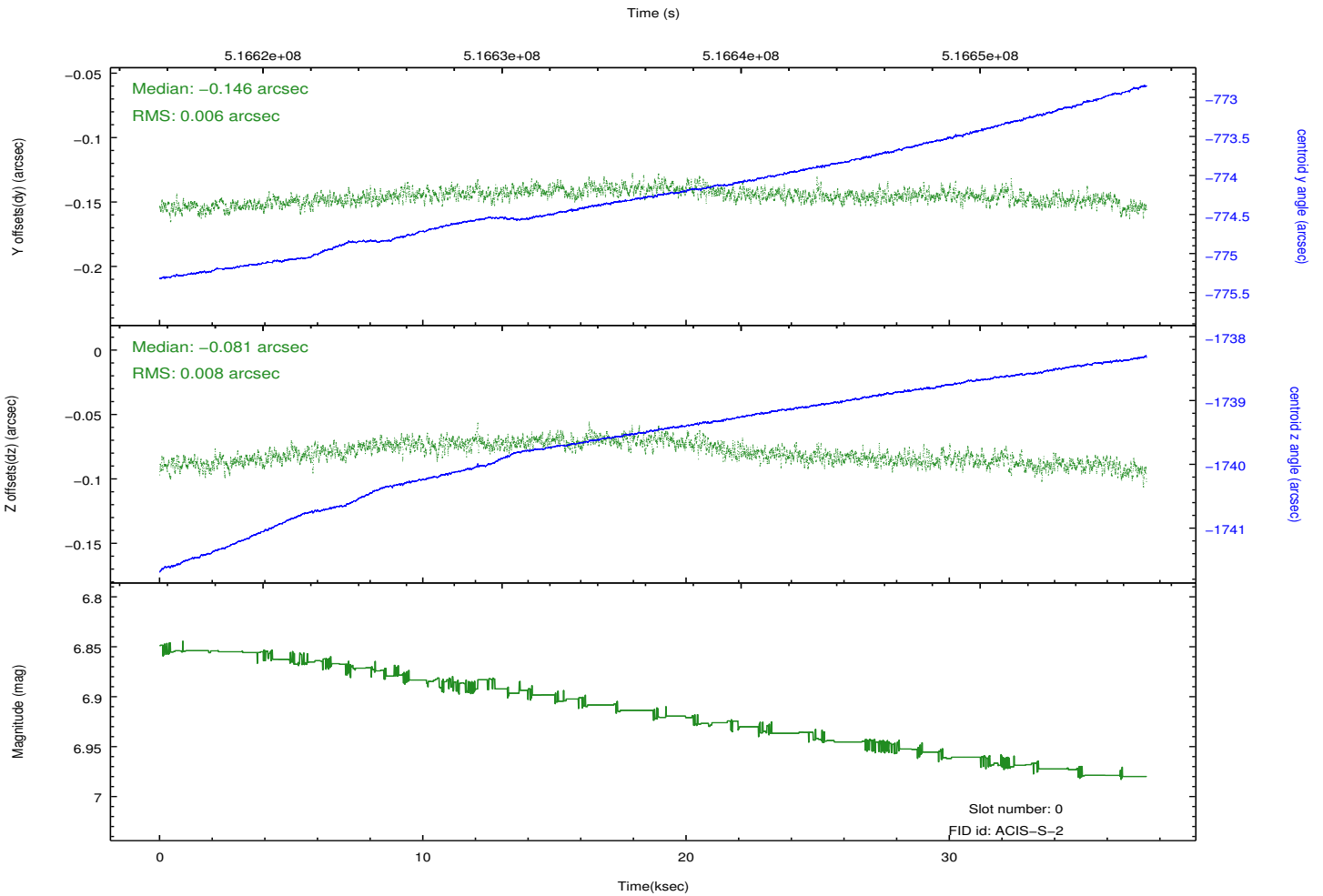
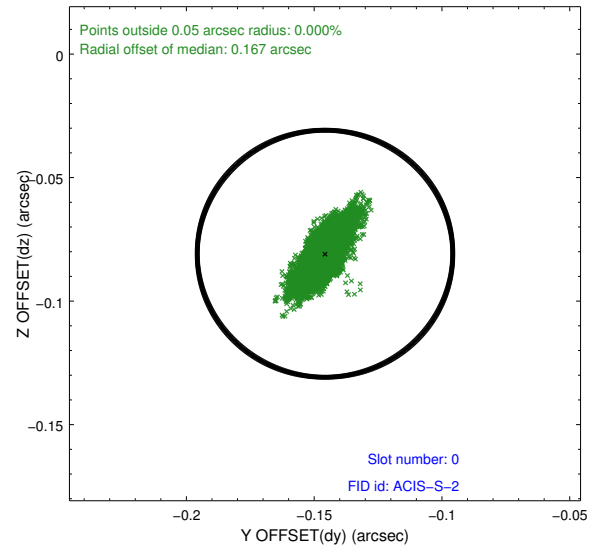
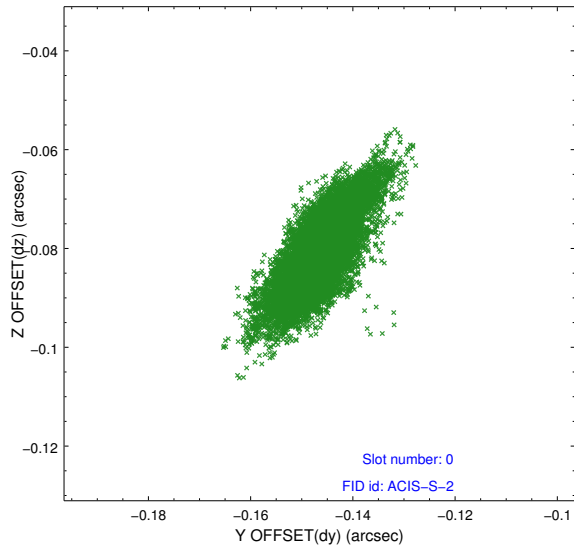


2.4.5 Slot 7

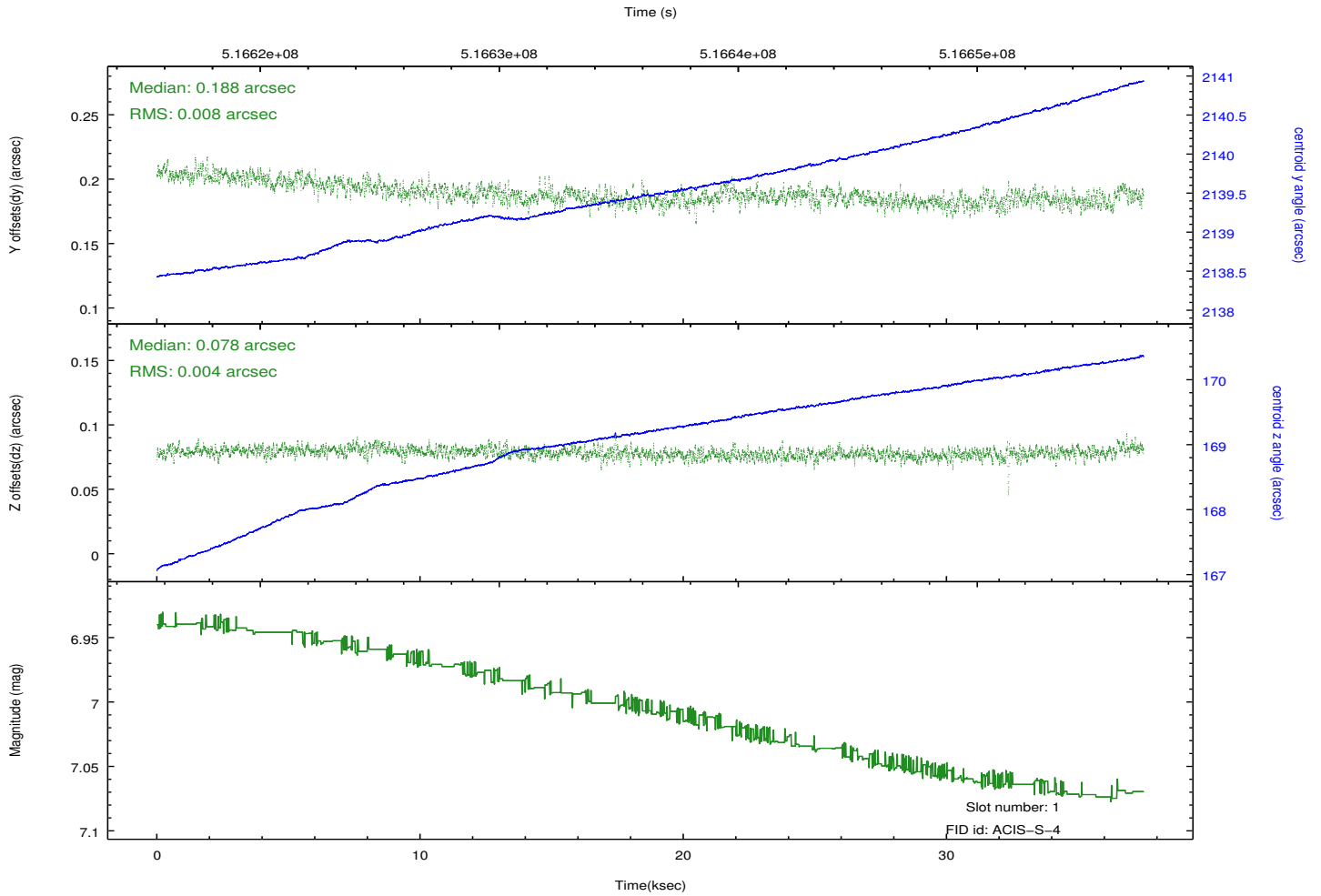
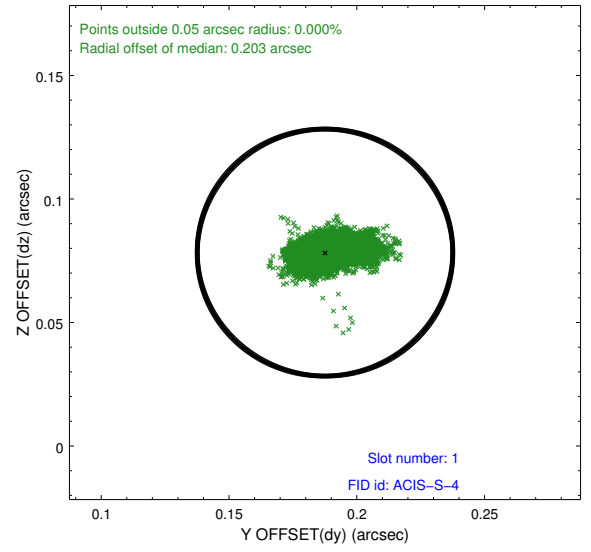
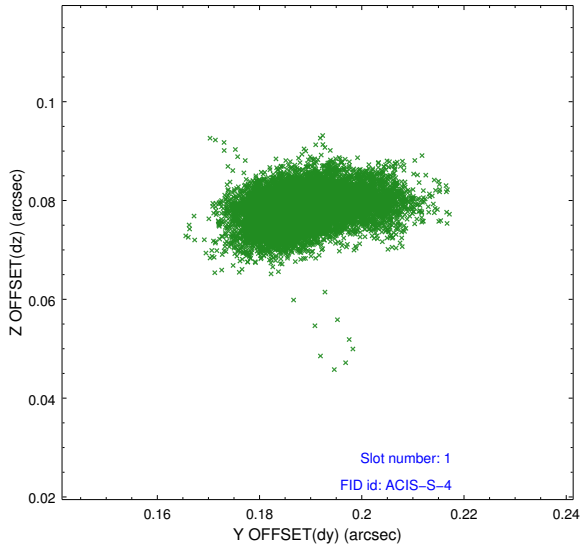


2.5 FID Slots

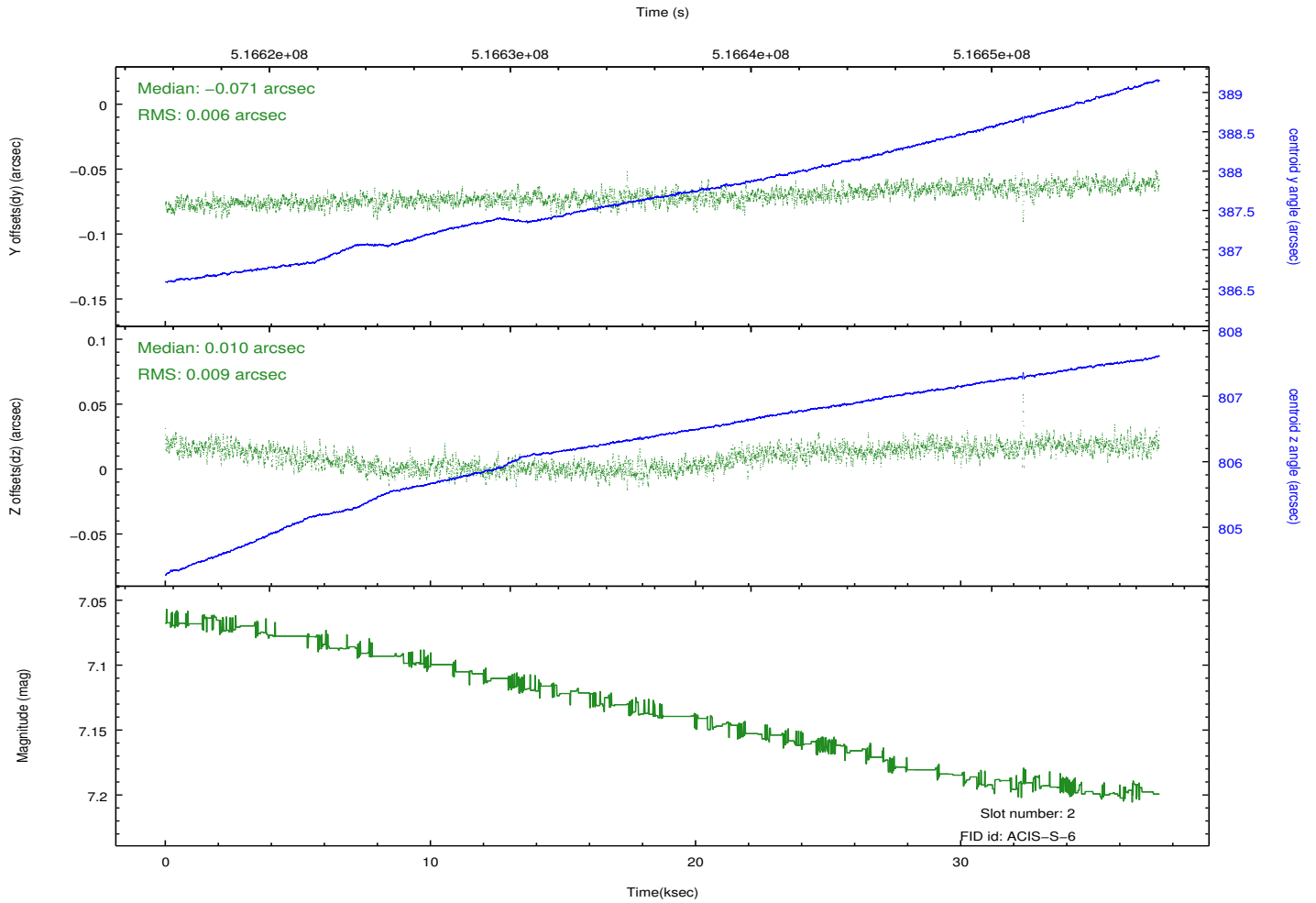
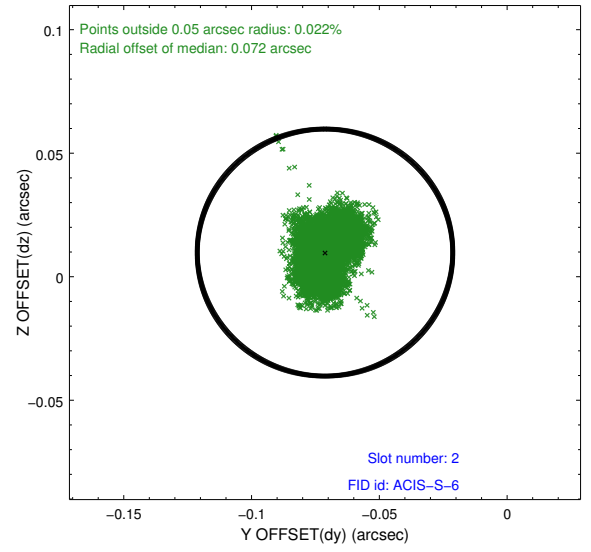
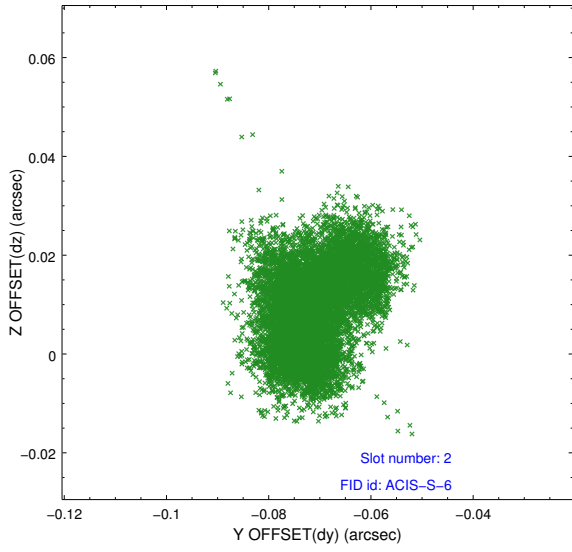
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	36.87670134902

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.