

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 15869 - L2 Version 2
Chandra X-Ray Center

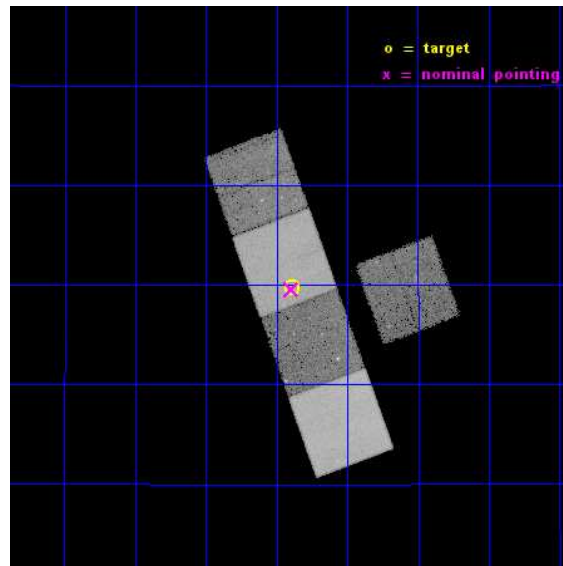
L2 Processing Date : Dec 11 2014

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1 Front

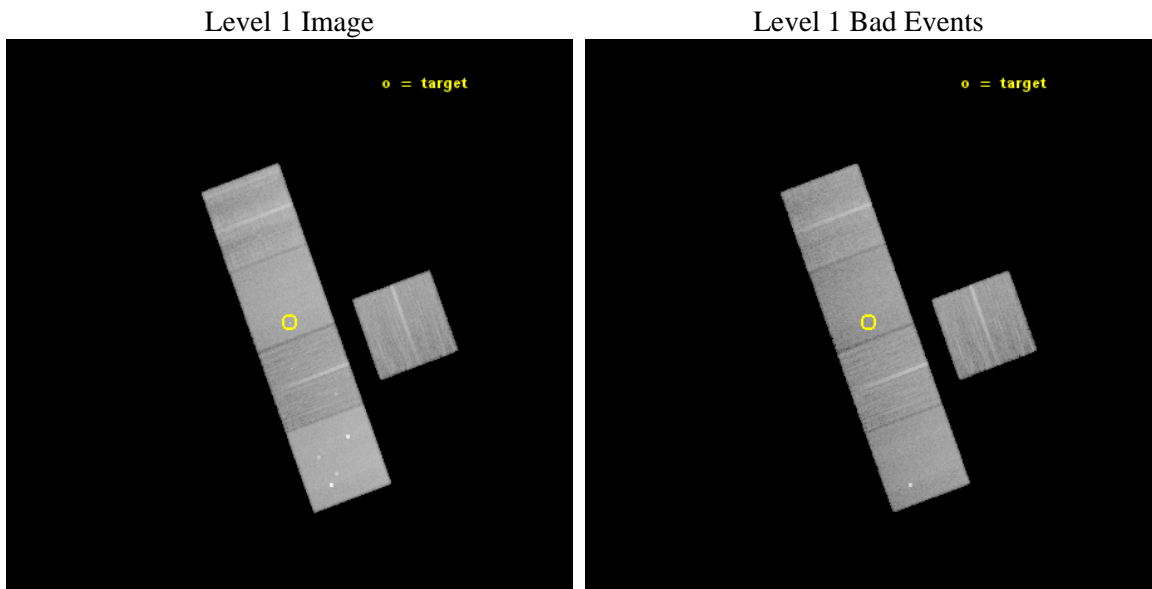
seq_num	502102	Sequence number
obs_id	15869	Observation id
title	The remarkable X-ray evolution of SN 2010jl	Proposal title
observer	Dr. Poonam Chandra	Principal investigator
object	SN 2010jl	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	145.722083	Observer's specified target RA [deg]
dec_targ	9.494944	Observer's specified target Dec [deg]
ra_nom	145.72393422664	Nominal RA [deg]
dec_nom	9.4925405023246	Nominal Dec [deg]
roll_nom	249.82446947007	Nominal Roll [deg]
revision	2	Processing version of data
ontime	40064.184084654	Sum of GTIs [s]
livetime	39540.716024765	Livetime [s]
ontime2	40064.019924641	Sum of GTIs [s]
ontime5	40064.143044651	Sum of GTIs [s]
ontime6	40064.102004647	Sum of GTIs [s]
ontime7	40064.184084654	Sum of GTIs [s]
ontime8	40057.778984129	Sum of GTIs [s]
l2events	314577	Number of level 2 events



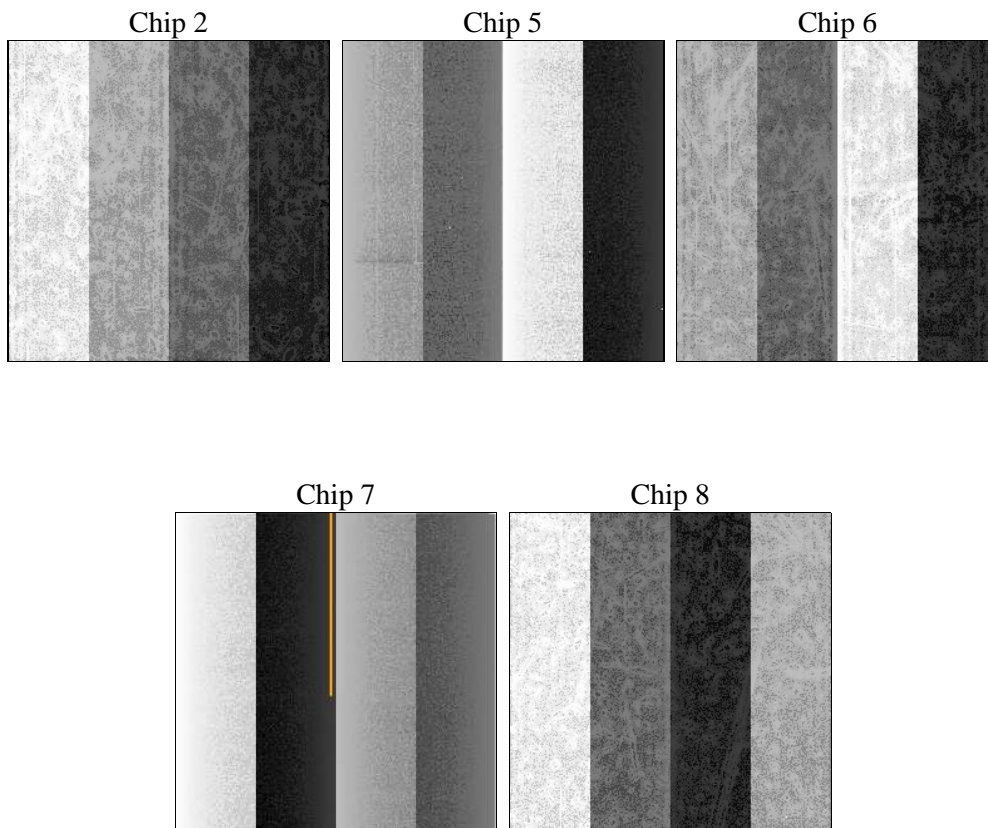
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	40064.184084654	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	40064.019924641	Sum of GTIs [s]
date	2014-12-12T01:49:51	Date and time of file creation	ontime5	40064.143044651	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	40064.102004647	Sum of GTIs [s]
			ontime7	40064.184084654	Sum of GTIs [s]
			ontime8	40057.778984129	Sum of GTIs [s]
			l1events	1196456	Number of level 1 events

2.1.4 Events

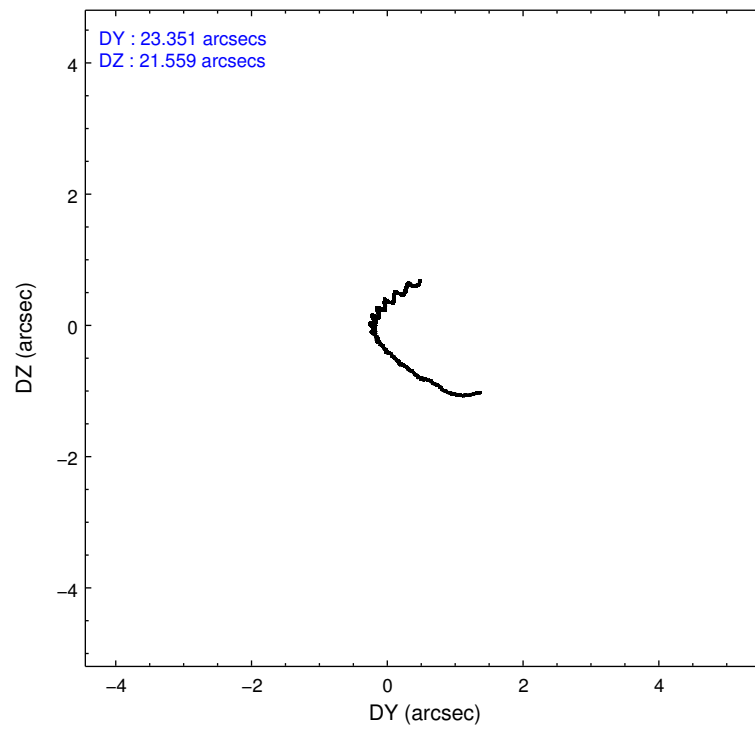
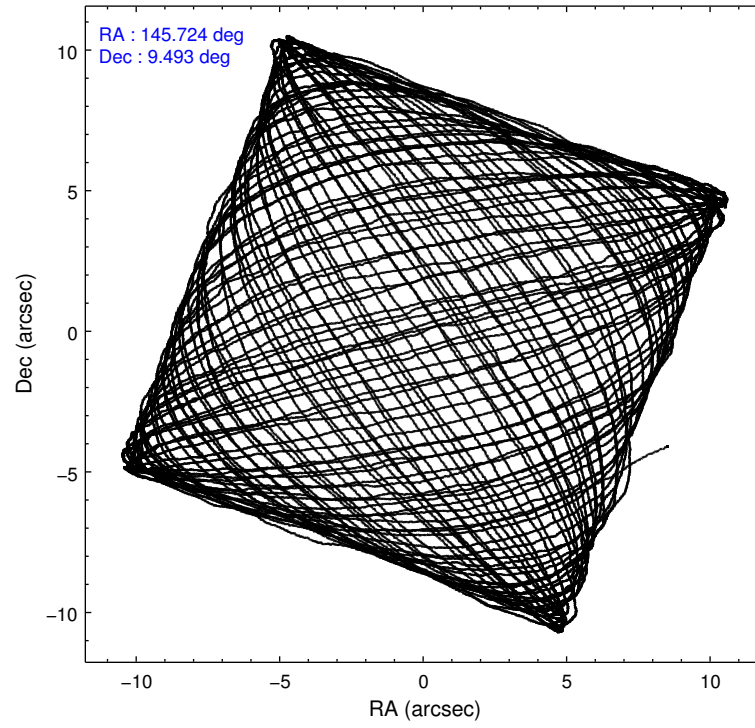
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	179135	323115	184187	259776	250243
rejected events	158130	166157	160891	147717	181835
rejected %	88%	51%	87%	56%	72%

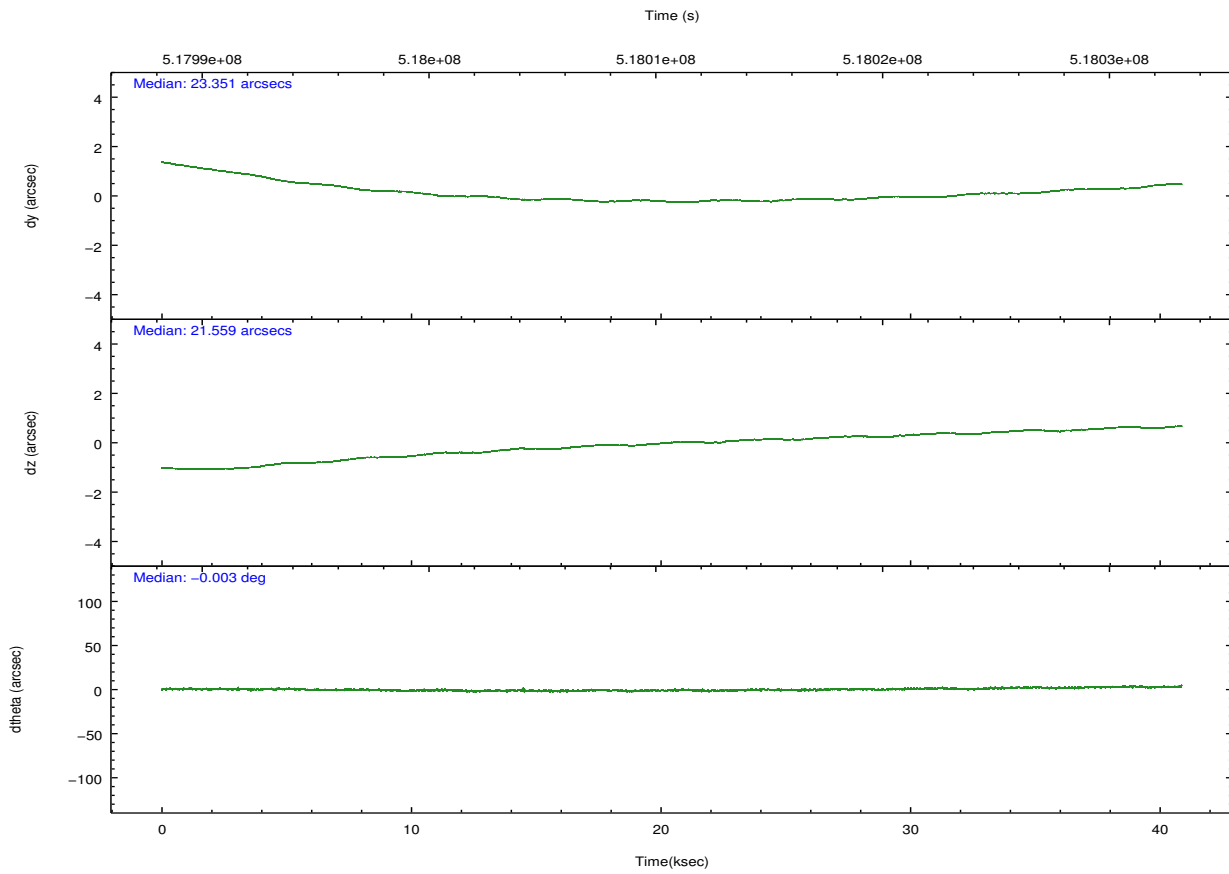
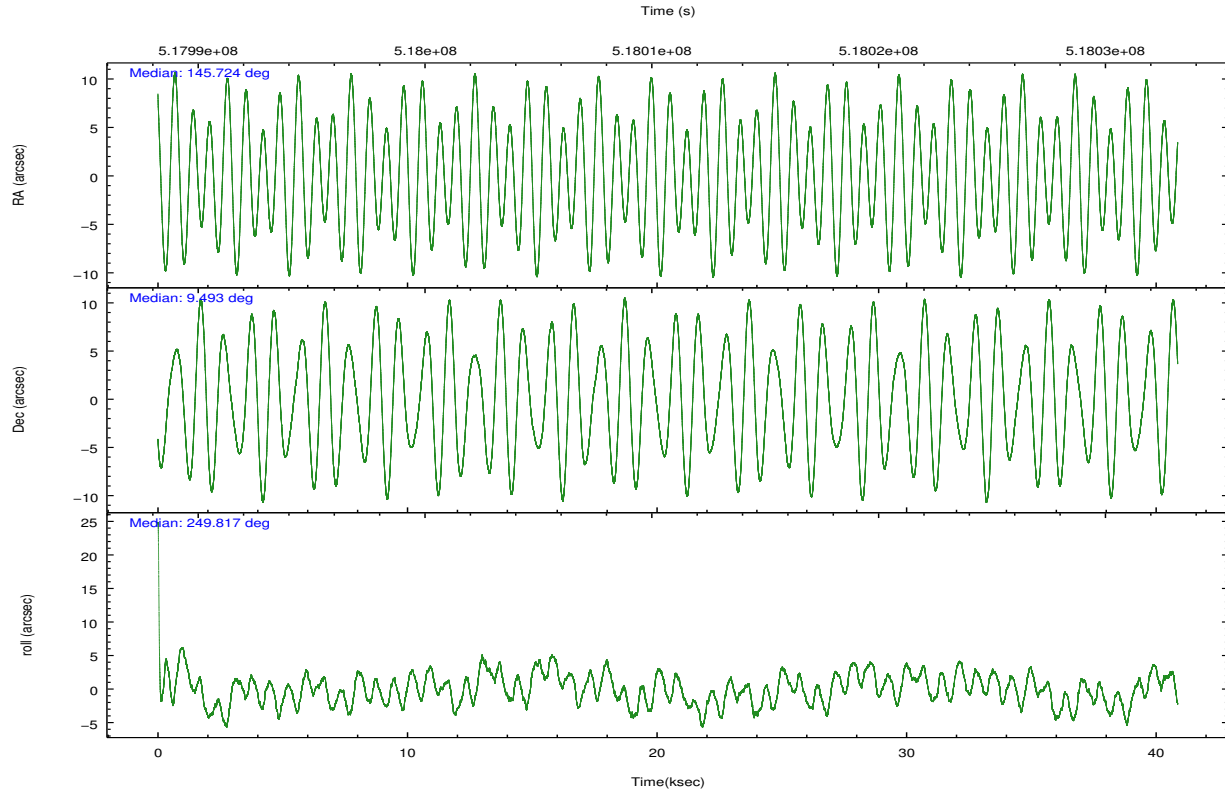
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7426	18850	8108	9742	20297
	4%	5%	4%	3%	8%
grade 1 events	104	2891	96	310	163
	0%	0%	0%	0%	0%
grade 2 events	5144	45953	5276	23064	15749
	2%	14%	2%	8%	6%
grade 3 events	2189	5412	2273	9521	7223
	1%	1%	1%	3%	2%
grade 4 events	2232	5087	2293	9259	6933
	1%	1%	1%	3%	2%
grade 5 events	8060	23839	9764	26597	14417
	4%	7%	5%	10%	5%
grade 6 events	4020	81682	5349	60489	18209
	2%	25%	2%	23%	7%
grade 7 events	149960	139401	151028	120794	167252
	83%	43%	81%	46%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-25678	ACIS-25678	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	145.718845	145.723934226637	CCD I2 on	O1	Y
[deg] Pointing Dec	9.519411	9.492540502324642	CCD I3 on	N	N
[deg] Pointing Roll	249.668672	249.8244694700717	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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)	517991136.184000	517989328.67655	CCD S5 on	N	N
Observation start date	2014-06-01T06:24:29	2014-06-01T05:55:28	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	518031136.184000	518031926.1414	On-chip summing requested	N	N
Observation end date	2014-06-01T17:31:09	2014-06-01T17:45:26	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



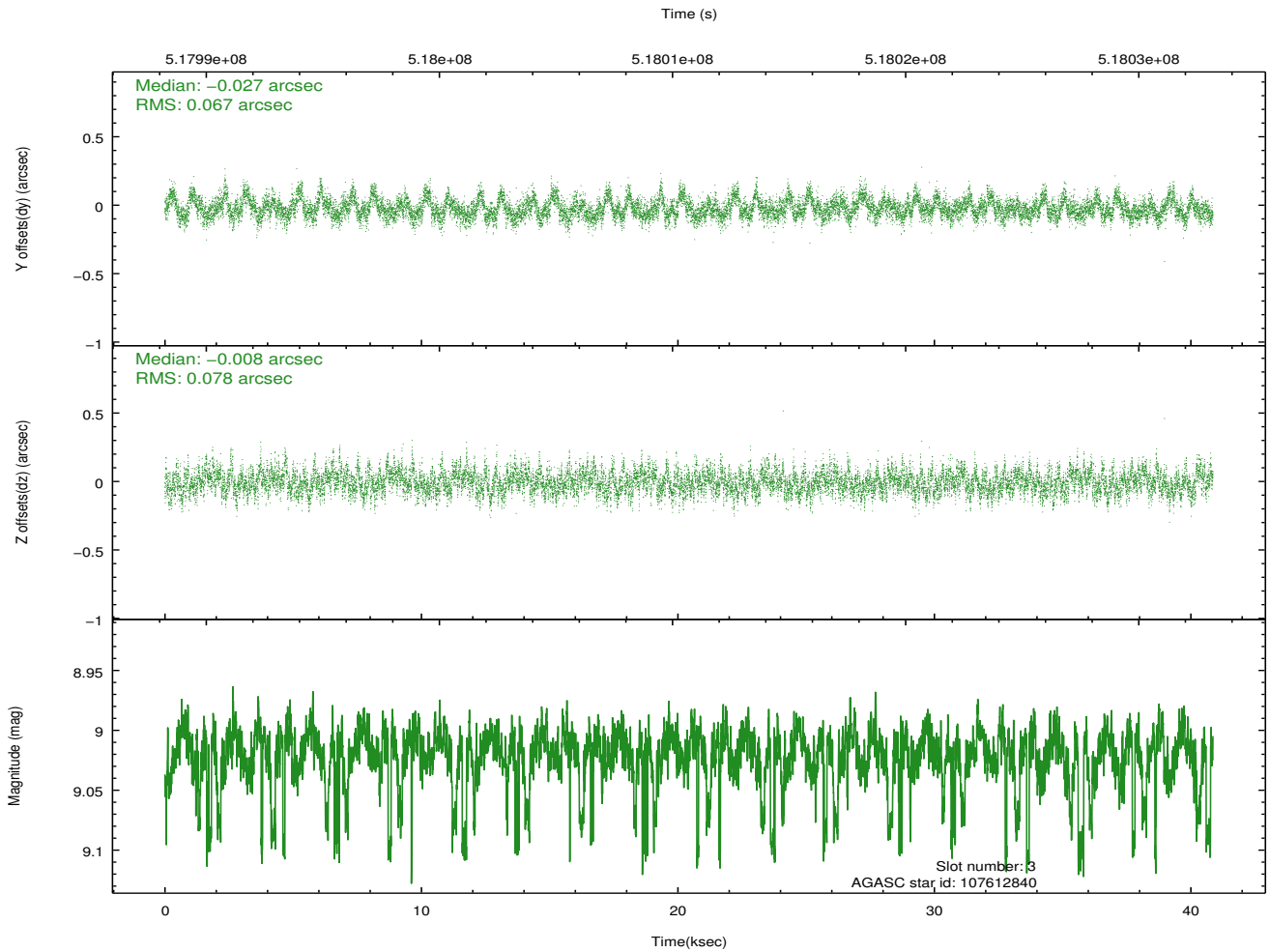
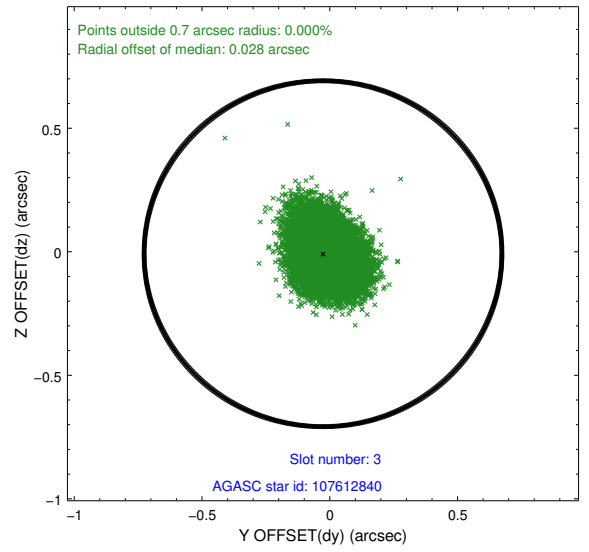
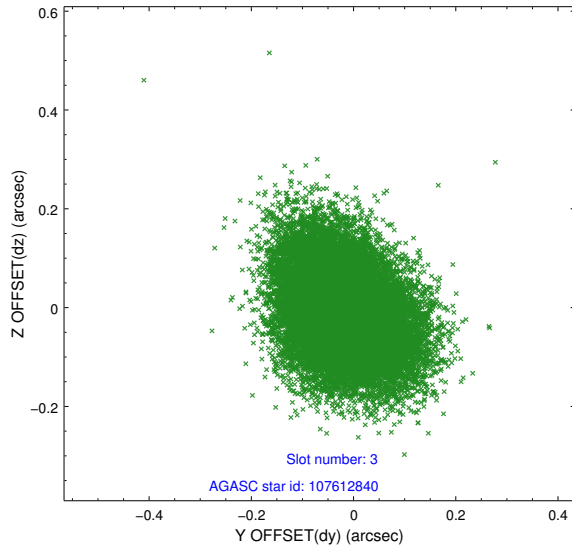


Slot Statistics

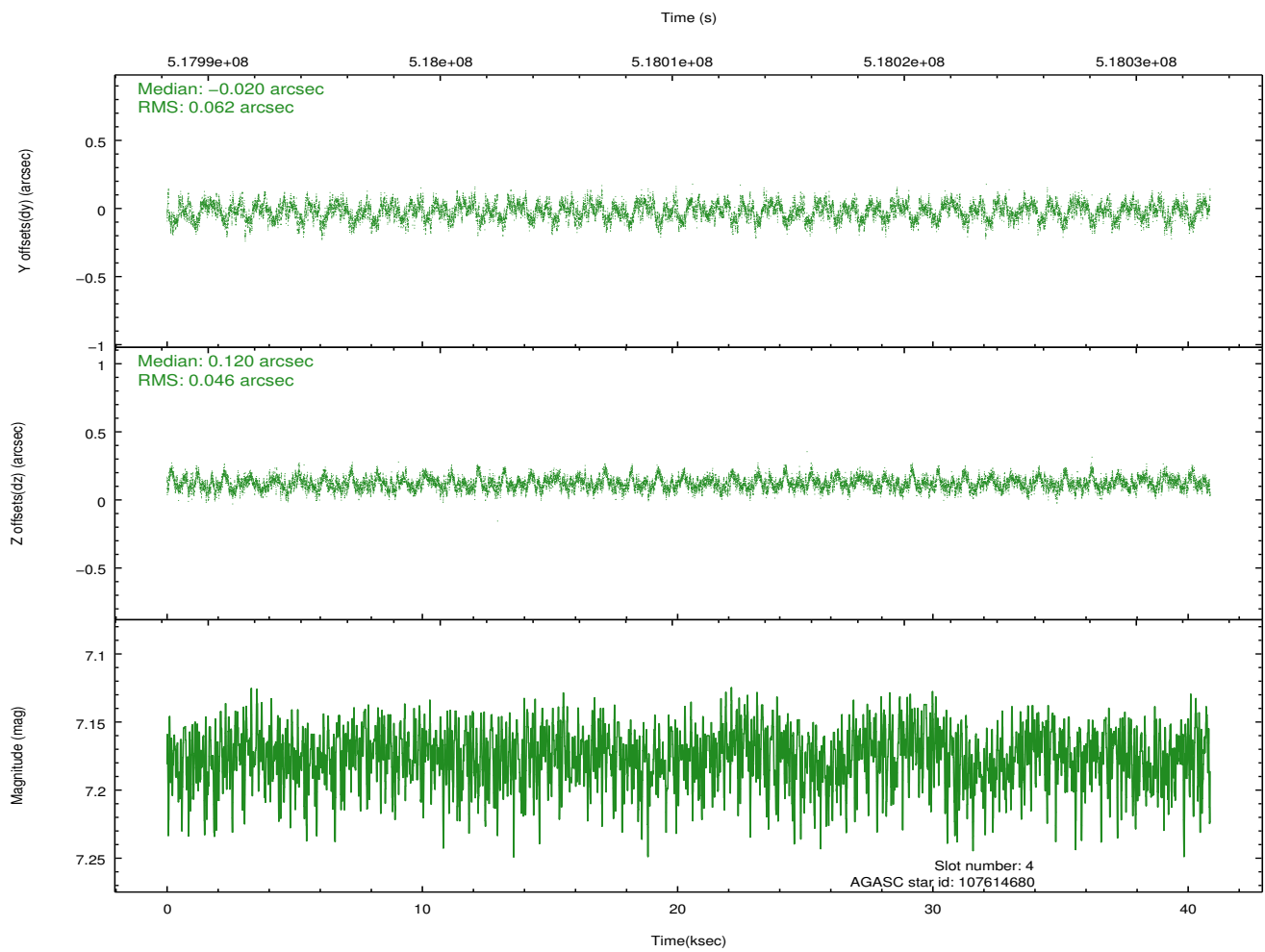
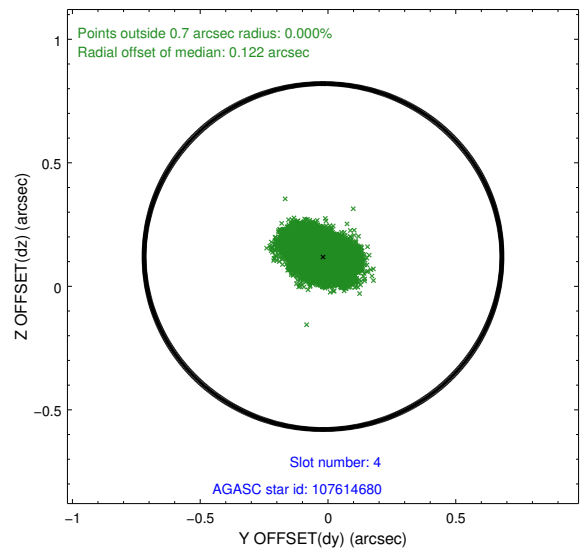
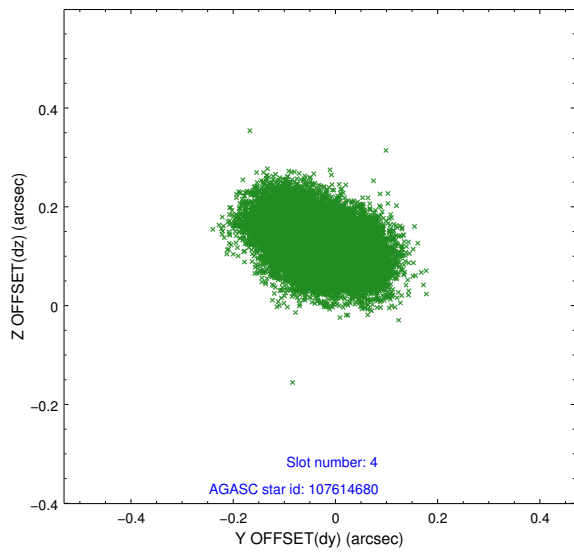
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	9968	-0.029	-0.019	0.017	0.043	0.000000	0.000000	-776.76	-1743.01
1	FID		ACIS-S-5	7.07	9968	-0.136	-0.043	0.019	0.055	0.000000	0.000000	-1829.95	158.93
2	FID		ACIS-S-6	7.17	9968	0.137	0.072	0.017	0.047	0.000000	0.000000	385.05	802.94
3	GUIDE	used	107612840	9.02	19922	-0.027	-0.008	0.108	0.178	145.374441	9.465044	608.57	-1078.89
4	GUIDE	used	107614680	7.17	19936	-0.020	0.120	0.081	0.135	145.310964	8.995416	2273.23	-704.38
5	GUIDE	used	107617024	8.32	19866	-0.000	0.097	0.096	0.152	145.130994	9.426697	1037.45	-1841.88
6	GUIDE	used	107618792	8.87	19930	0.078	0.033	0.122	0.193	144.990311	9.510841	926.37	-2415.29
7	GUIDE	used	108531080	8.76	19930	-0.034	-0.252	0.076	0.125	145.751319	8.809136	2357.87	996.90

2.4 Star Slots

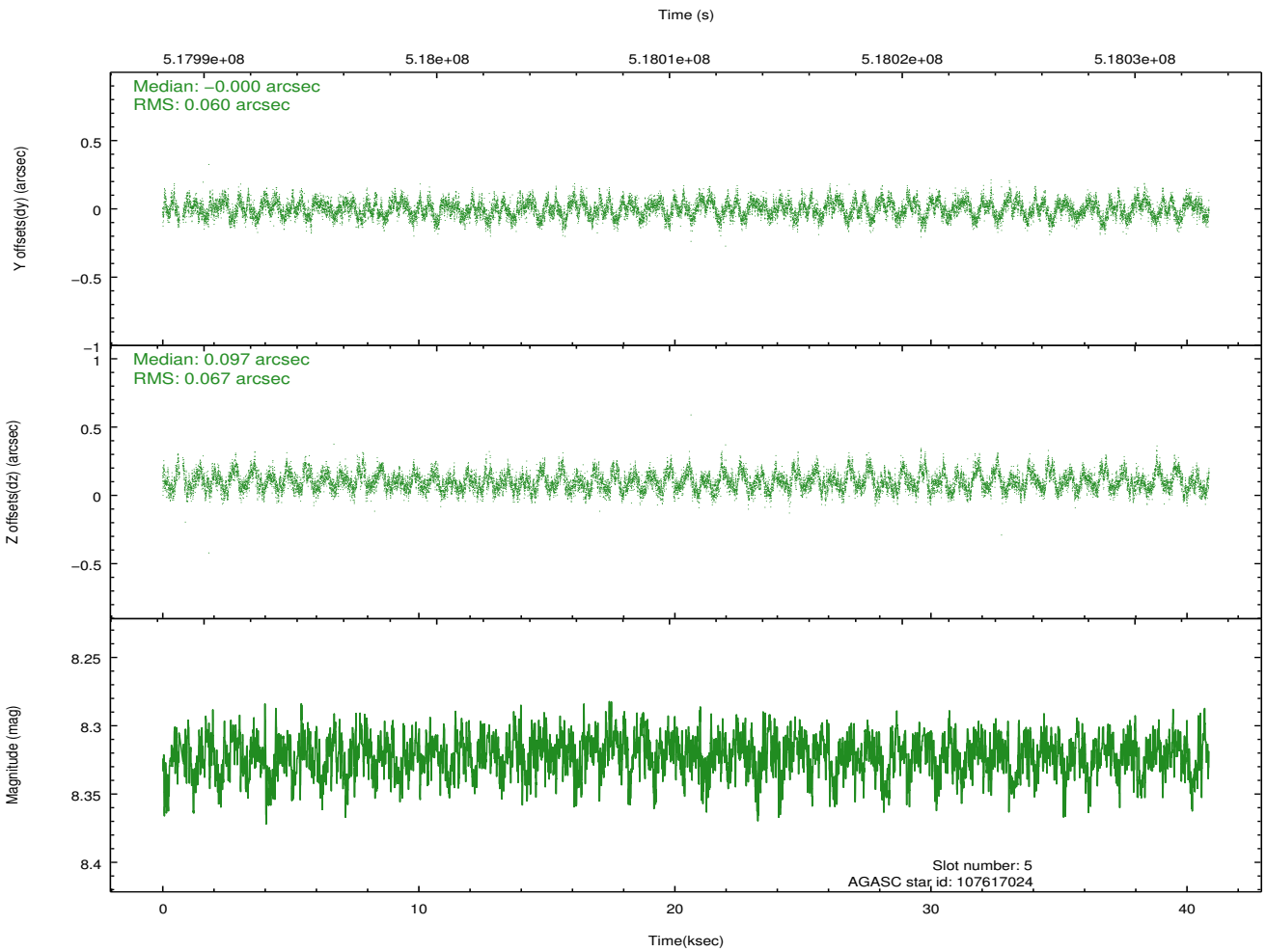
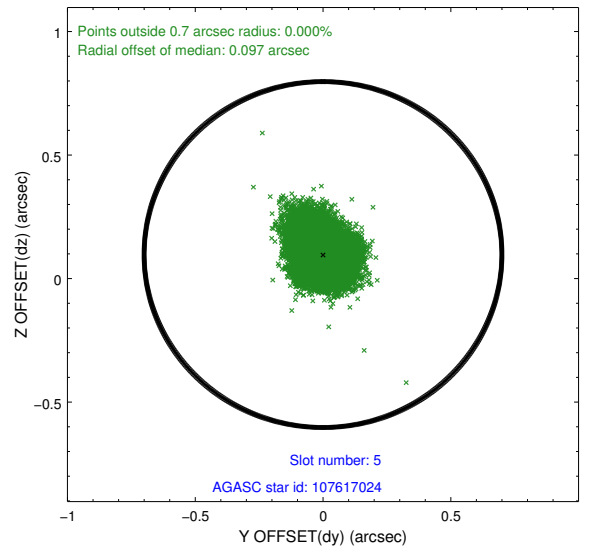
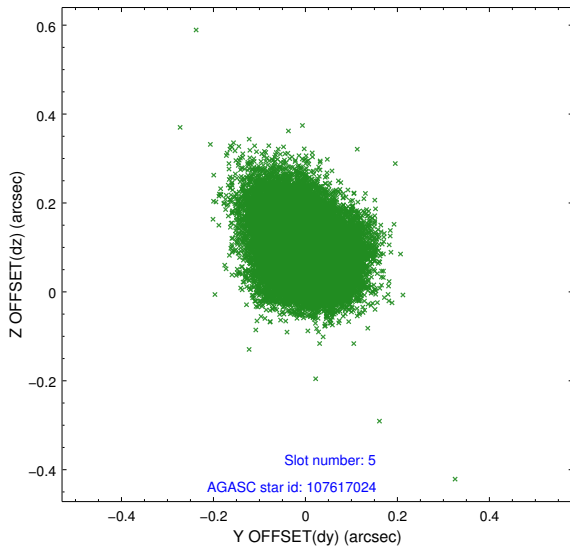
2.4.1 Slot 3



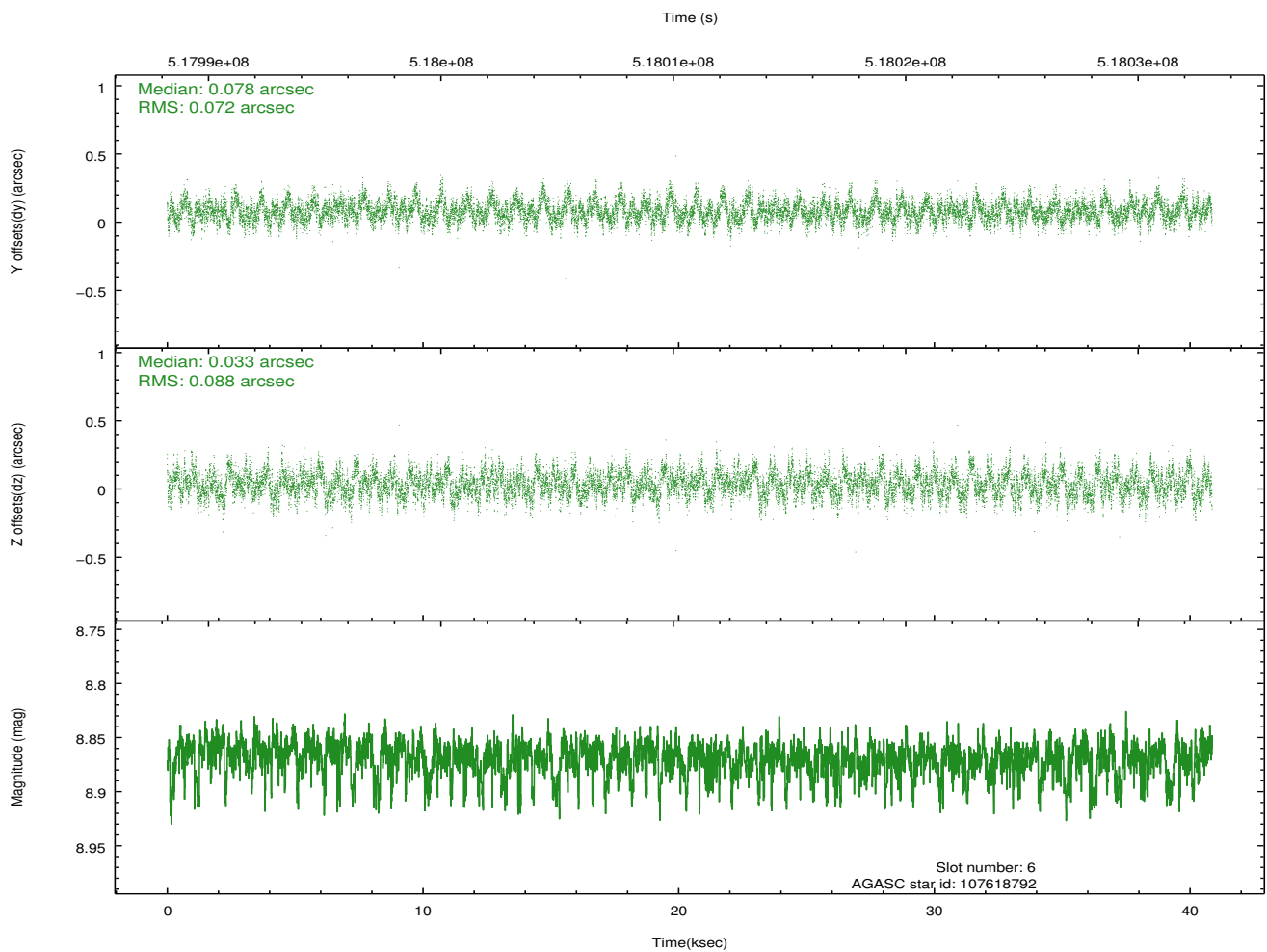
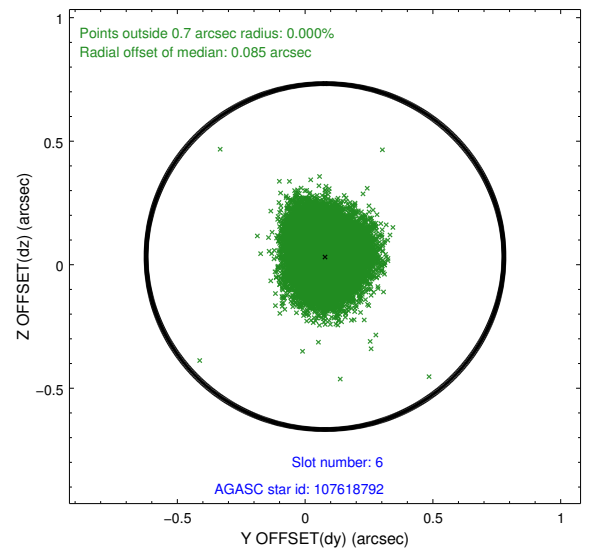
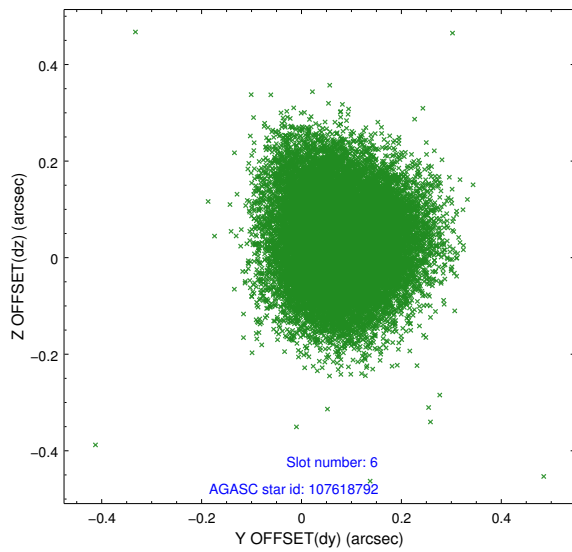
2.4.2 Slot 4



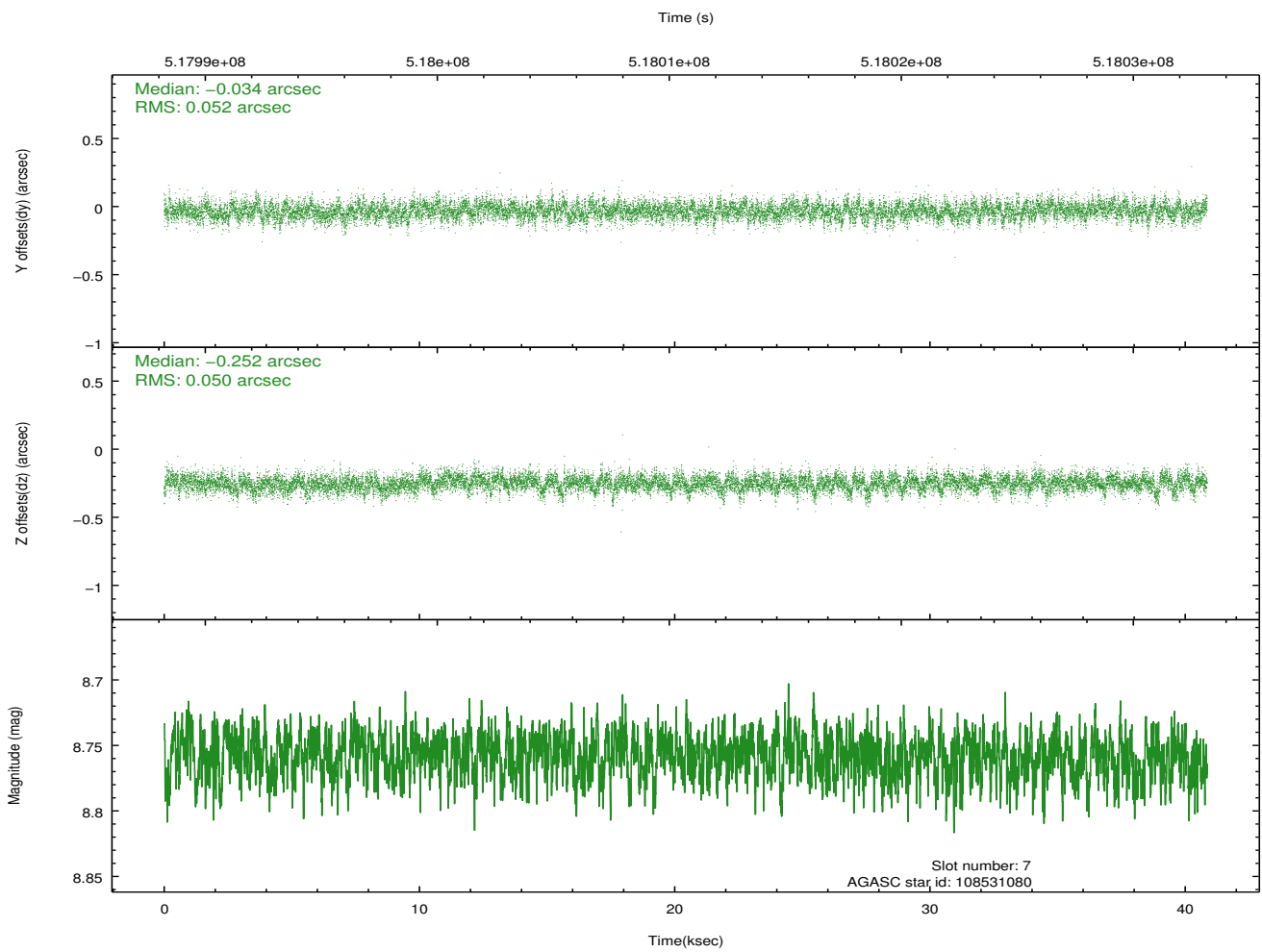
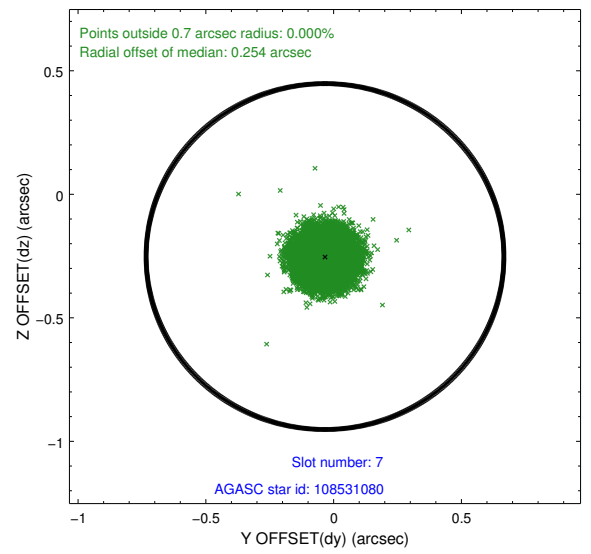
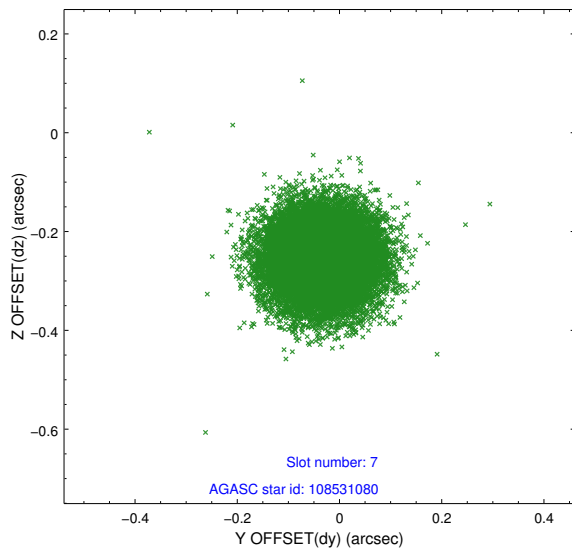
2.4.3 Slot 5



2.4.4 Slot 6

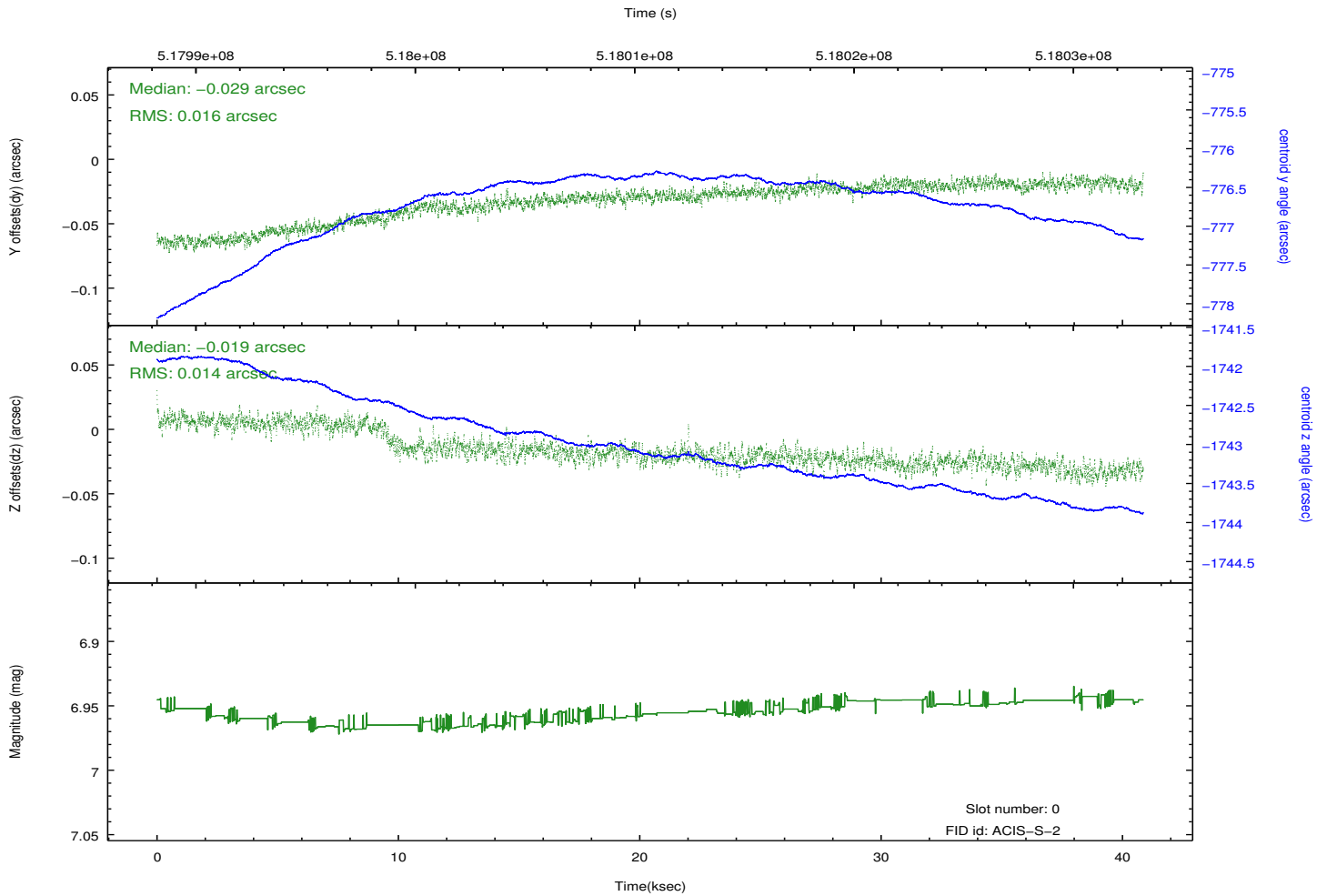
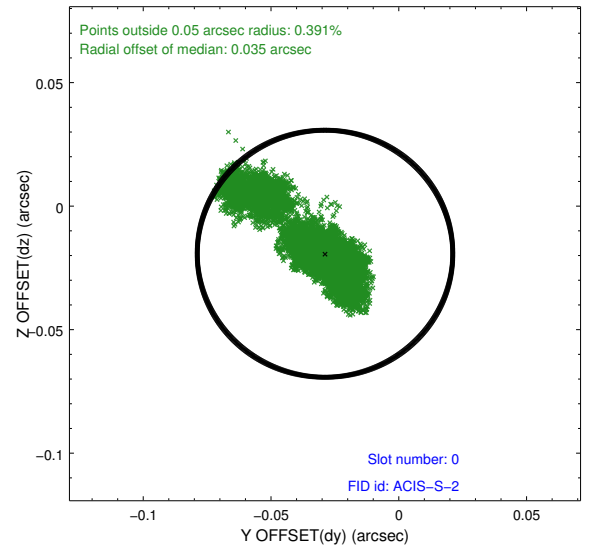
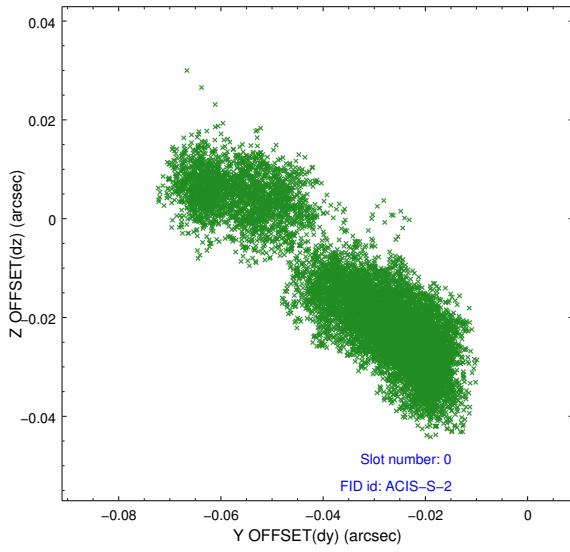


2.4.5 Slot 7

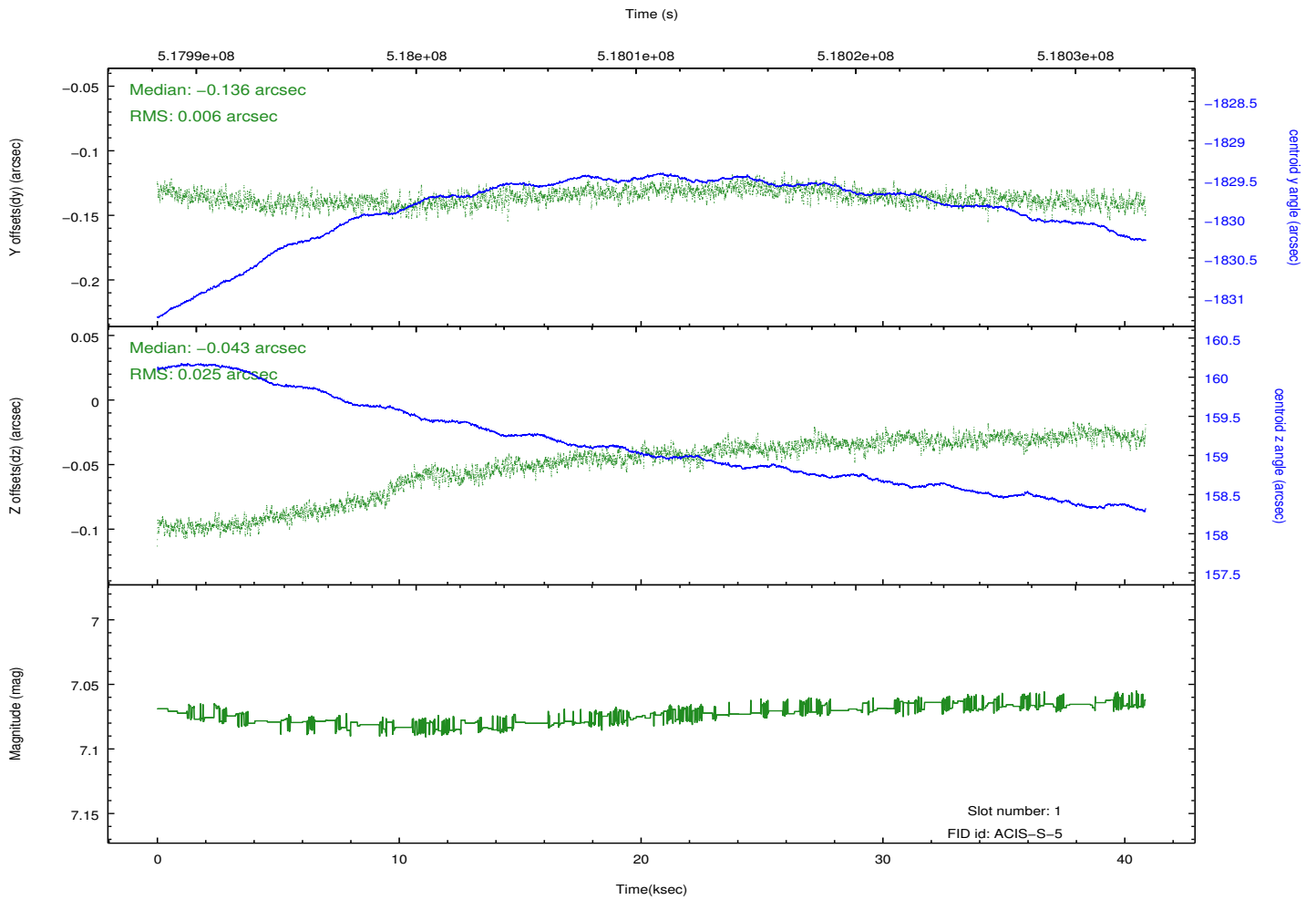
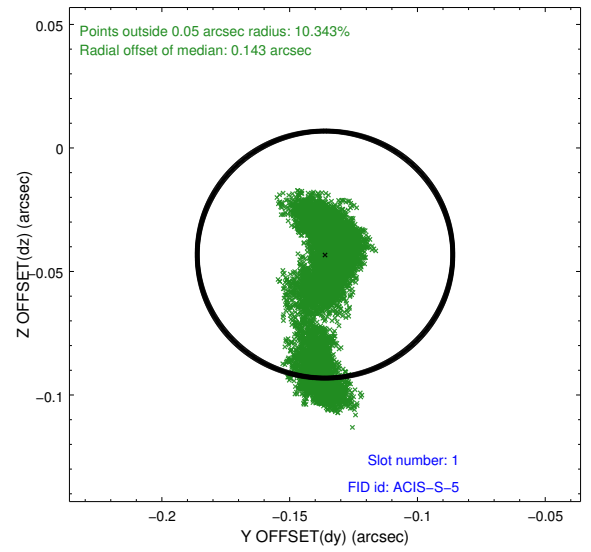
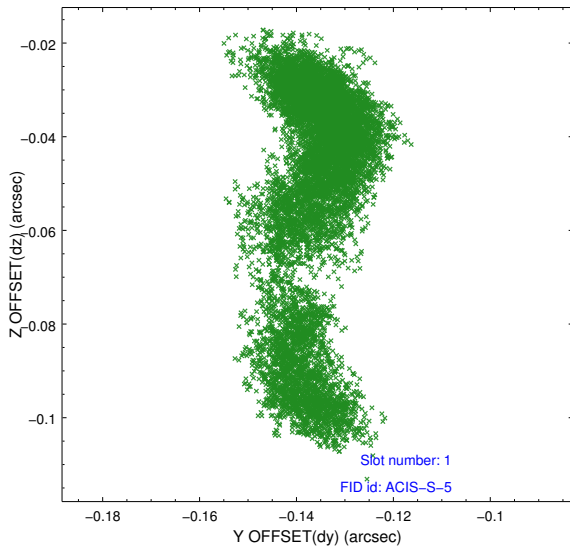


2.5 FID Slots

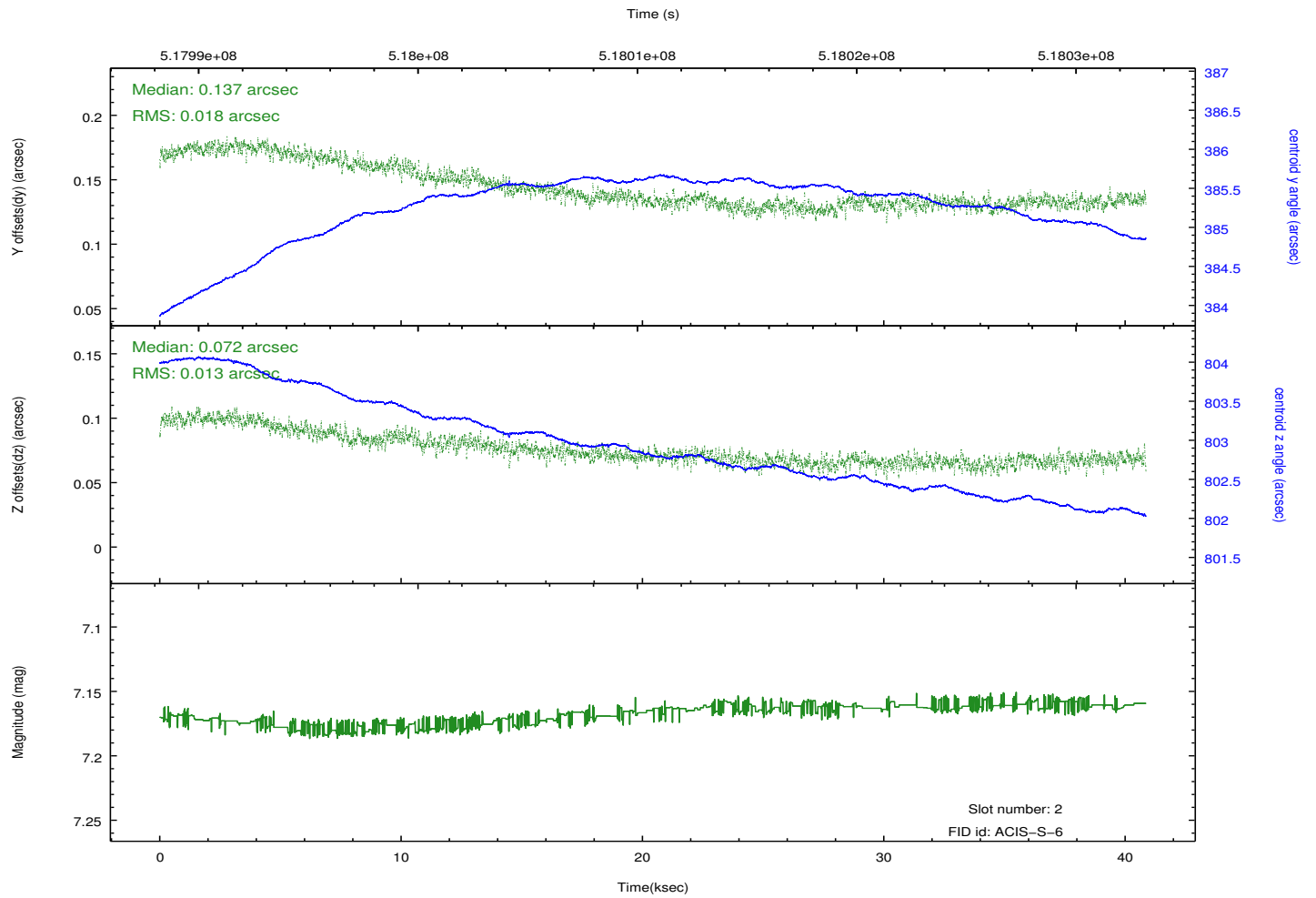
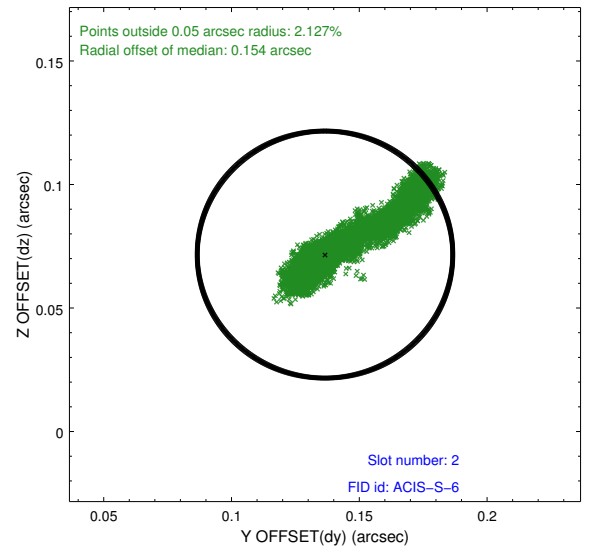
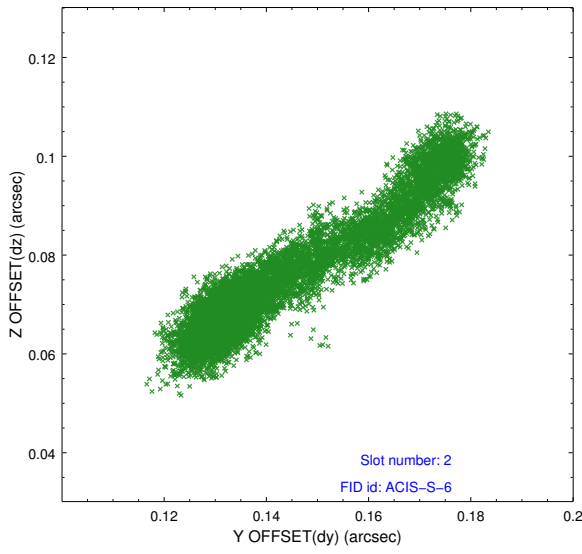
2.5.1 Slot 0



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)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	40.064184084654

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.