

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19021 - L2 Version 2
Chandra X-Ray Center

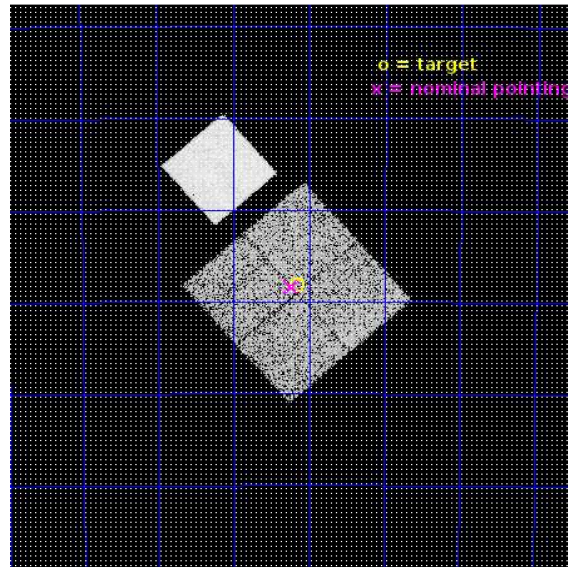
L2 Processing Date : Jun 9 2017

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1 Front

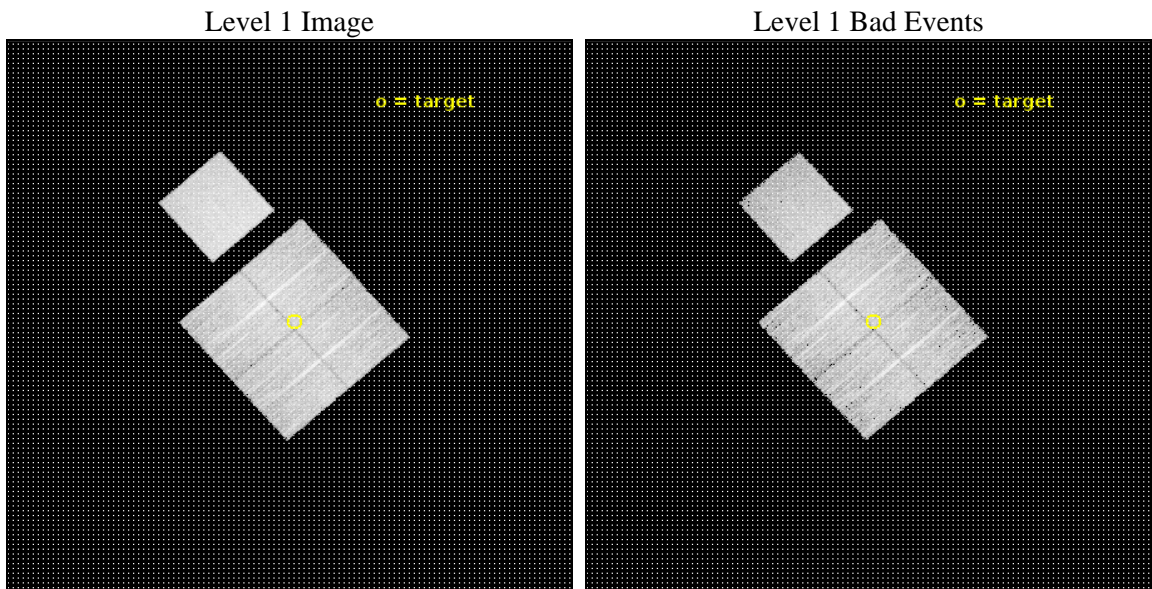
seq_num	502671	Sequence number
obs_id	19021	Observation id
title	X-Raying new Galactic Accelerators with Chandra	Proposal title
observer	Marco Ajello	Principal investigator
object	2FHL J1505.1-5808	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	226.291	Observer's specified target RA [deg]
dec_targ	-58.137	Observer's specified target Dec [deg]
ra_nom	226.30873473601	Nominal RA [deg]
dec_nom	-58.139387201341	Nominal Dec [deg]
roll_nom	318.69036932235	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10053.217996955	Sum of GTIs [s]
livetime	9921.8653027533	Livetime [s]
ontime0	10059.500077486	Sum of GTIs [s]
ontime1	10056.359057307	Sum of GTIs [s]
ontime2	10059.500077486	Sum of GTIs [s]
ontime3	10053.217996955	Sum of GTIs [s]
ontime7	10059.500077486	Sum of GTIs [s]
l2events	66527	Number of level 2 events



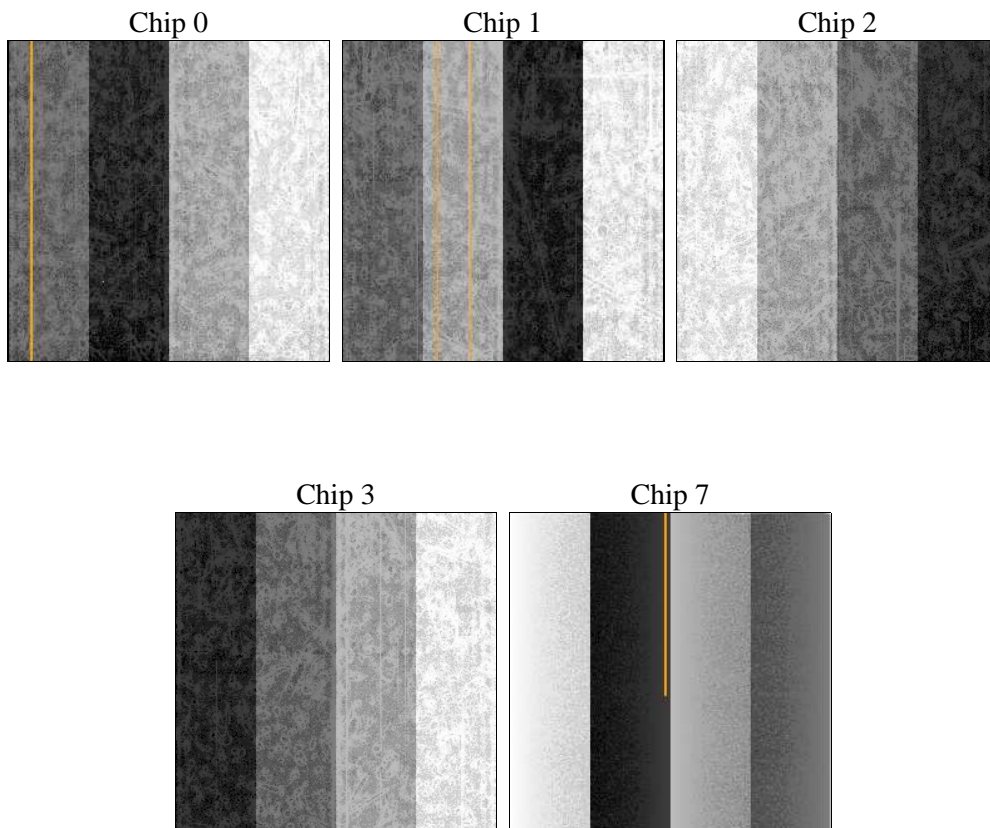
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	10053.217996955	Sum of GTIs [s]
caldsver	4.7.4	 	ontime0	10059.500077486	Sum of GTIs [s]
date	2017-06-09T15:31:58	Date and time of file creation	ontime1	10056.359057307	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10059.500077486	Sum of GTIs [s]
			ontime3	10053.217996955	Sum of GTIs [s]
			ontime7	10059.500077486	Sum of GTIs [s]
			l1events	367415	Number of level 1 events

2.1.4 Events

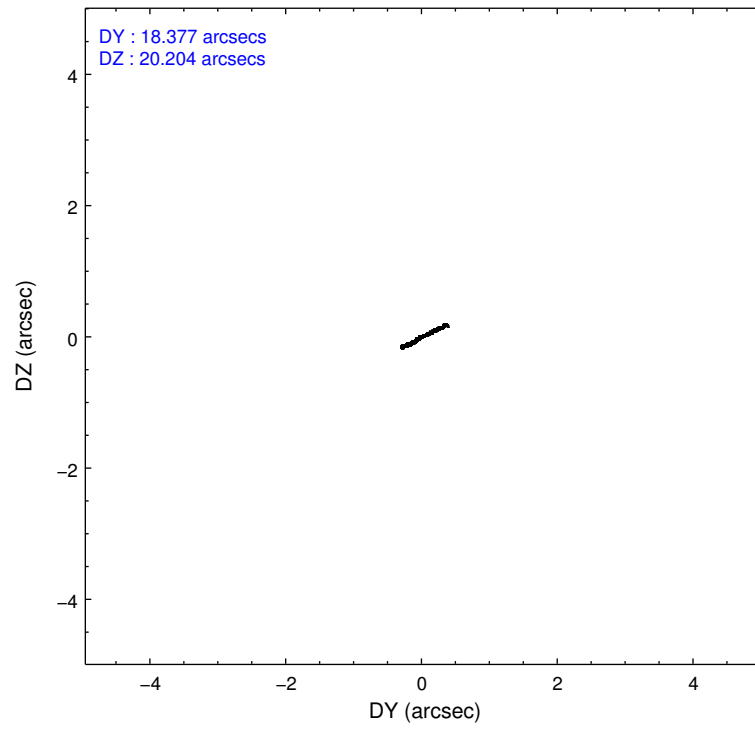
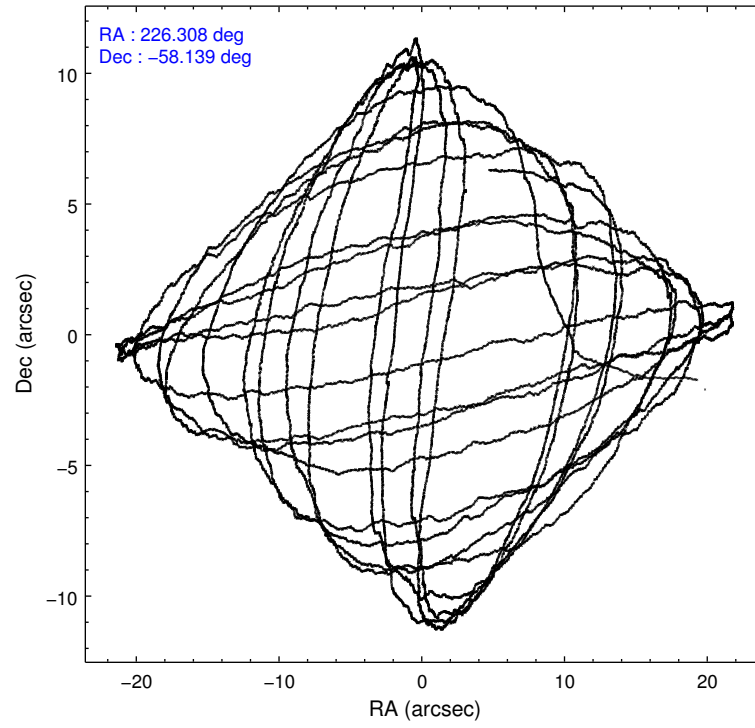
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	66594	65490	71091	71690	92550
rejected events	58331	56524	63178	63957	52534
rejected %	87%	86%	88%	89%	56%

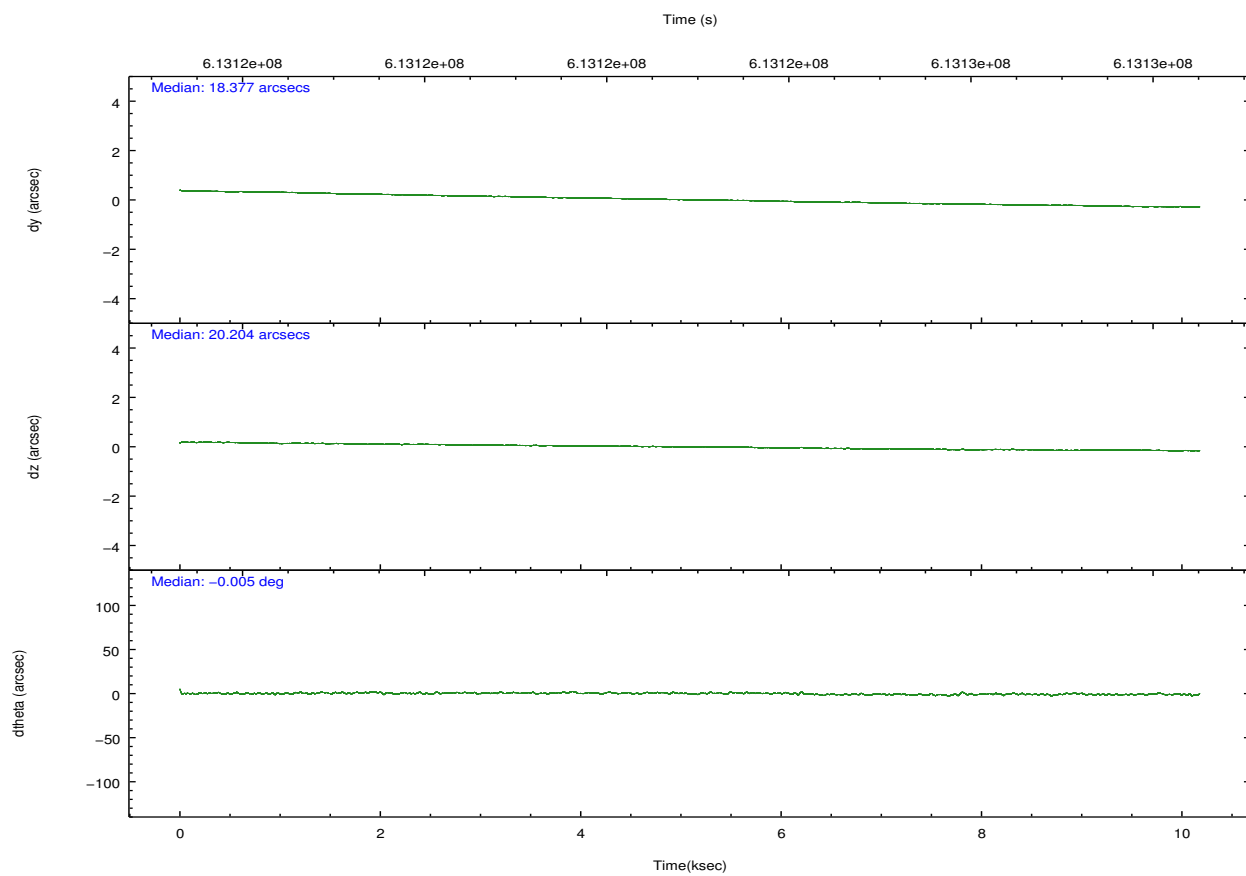
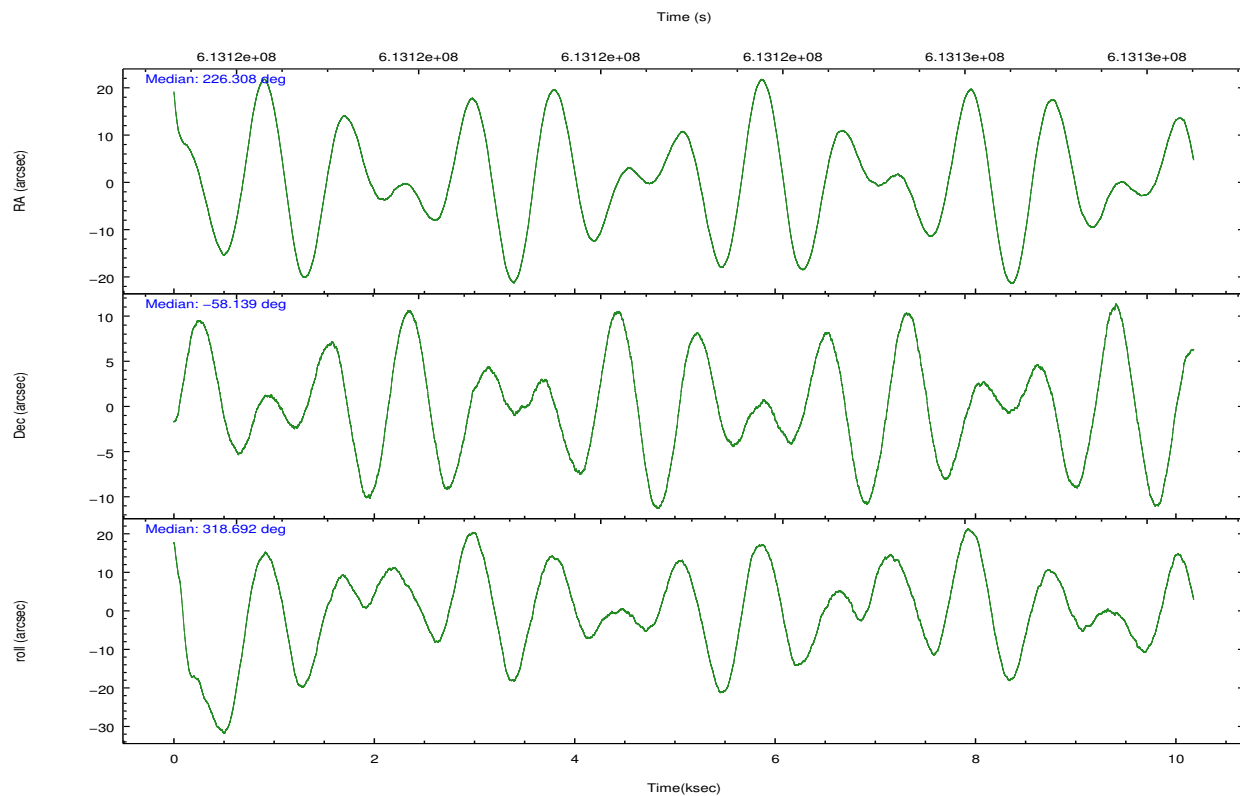
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2943	3119	3043	2740	3364
	4%	4%	4%	3%	3%
grade 1 events	29	40	45	39	140
	0%	0%	0%	0%	0%
grade 2 events	1975	2287	1914	1719	8622
	2%	3%	2%	2%	9%
grade 3 events	854	861	762	809	3124
	1%	1%	1%	1%	3%
grade 4 events	787	838	721	815	3088
	1%	1%	1%	1%	3%
grade 5 events	3138	3128	2909	3374	9105
	4%	4%	4%	4%	9%
grade 6 events	1707	1864	1474	1653	21829
	2%	2%	2%	2%	23%
grade 7 events	55161	53353	60223	60541	43278
	82%	81%	84%	84%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	226.257352	226.3087347360097	CCD I2 on	Y	Y
[deg] Pointing Dec	-58.134101	-58.13938720134141	CCD I3 on	Y	Y
[deg] Pointing Roll	318.438002	318.6903693223534	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	N	N
[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)	613117982.184000	613116680.45926	CCD S5 on	N	N
Observation start date	2017-06-06T06:31:53	2017-06-06T06:11:20	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	613127982.184000	613128673.9849499	On-chip summing requested	N	N
Observation end date	2017-06-06T09:18:33	2017-06-06T09:31:13	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



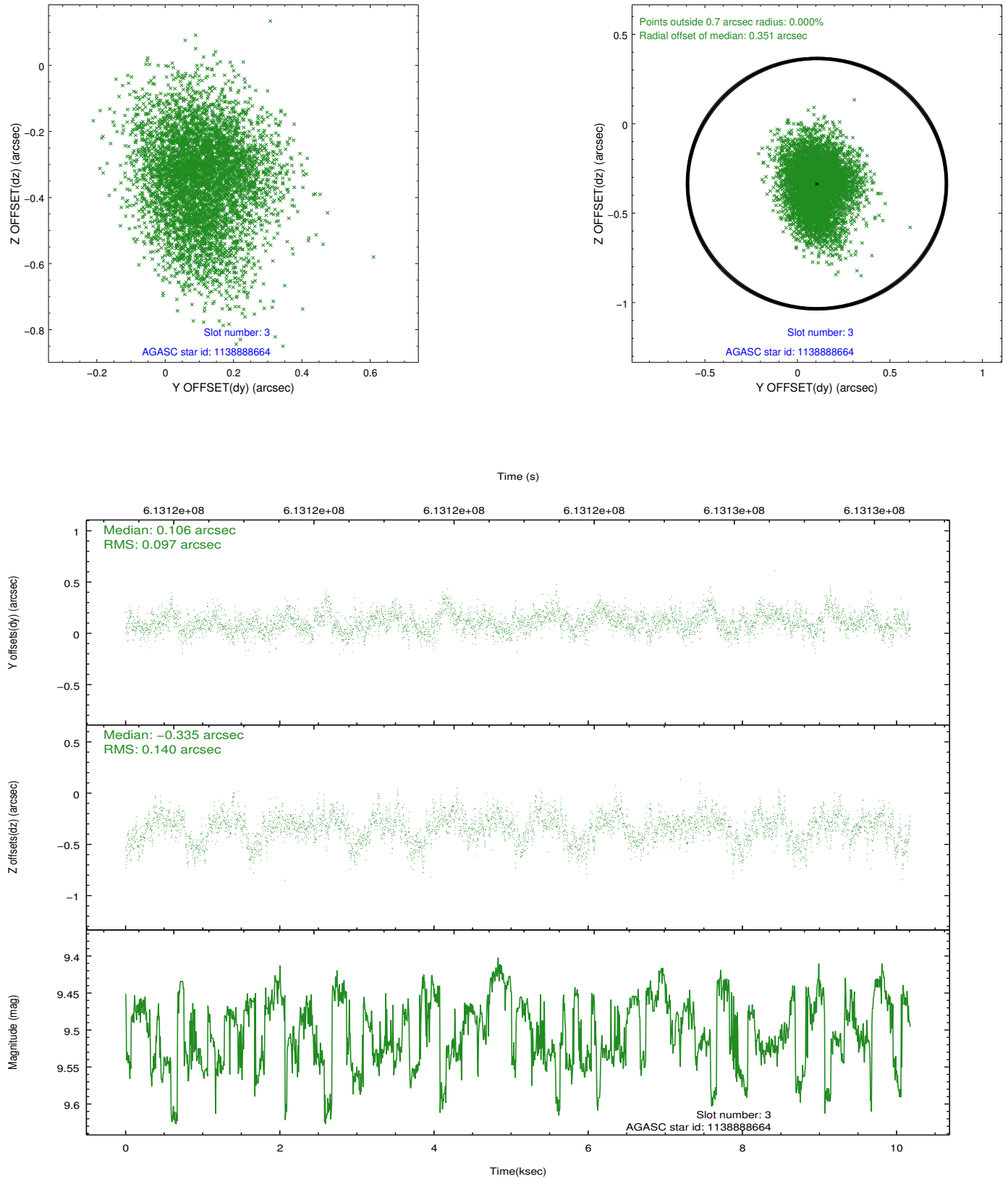


Slot Statistics

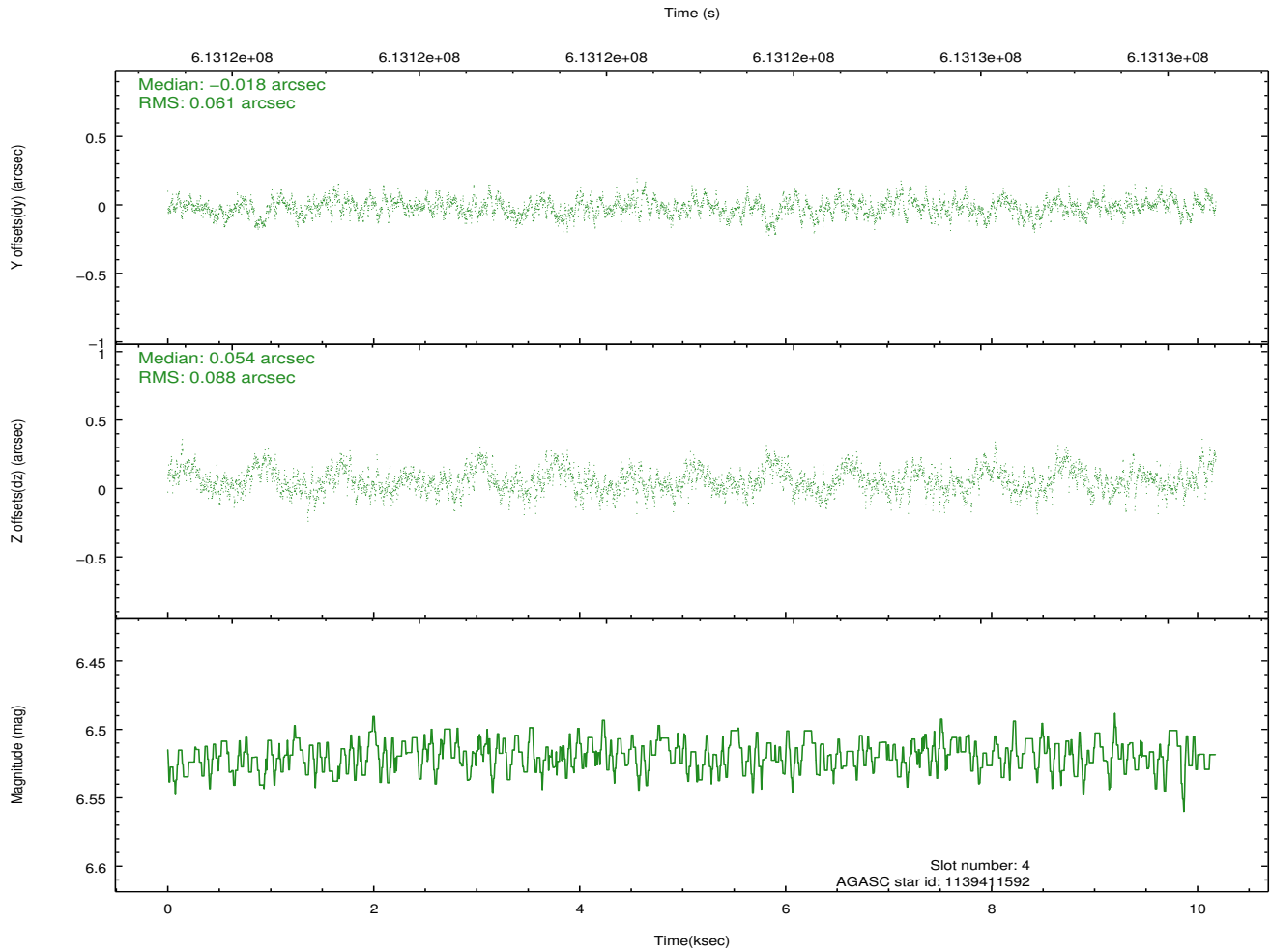
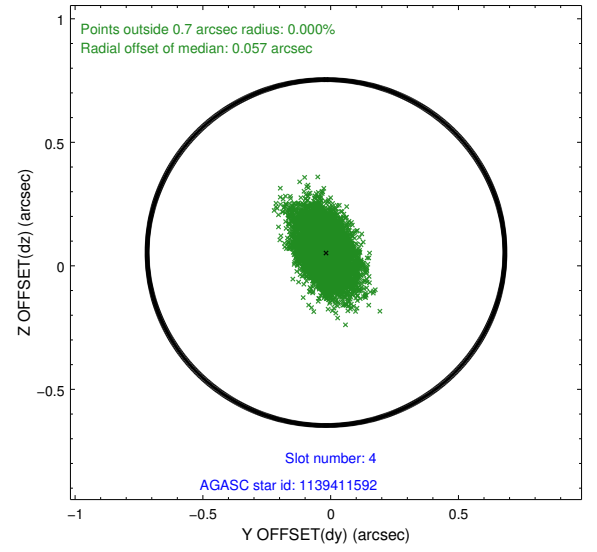
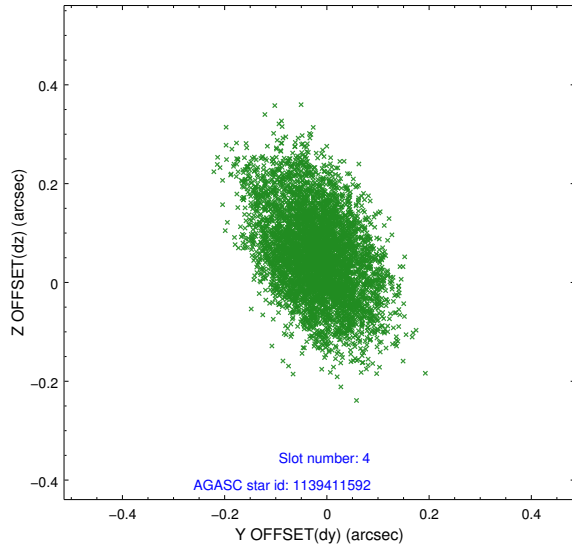
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.04	2483	-0.239	-0.070	0.015	0.028	0.000000	0.000000	-773.39	-850.41
1	FID		ACIS-I-4	7.09	2483	0.587	0.145	0.012	0.020	0.000000	0.000000	2141.14	1055.87
2	FID		ACIS-I-5	7.13	2482	-0.448	-0.006	0.011	0.020	0.000000	0.000000	-1826.87	1053.94
3	GUIDE	used	1138888664	9.50	4954	0.106	-0.335	0.178	0.302	226.223531	-57.674134	-1146.62	1195.27
4	GUIDE	used	1139411592	6.52	4965	-0.018	0.054	0.112	0.191	225.067680	-58.306316	-1258.86	-1971.34
5	GUIDE	used	1141120752	8.94	4959	-0.278	0.070	0.128	0.221	226.972418	-58.548951	2000.52	-232.30
6	GUIDE	used	1138886936	9.21	4964	0.182	0.223	0.137	0.223	225.068010	-58.000839	-2001.51	-1161.17
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

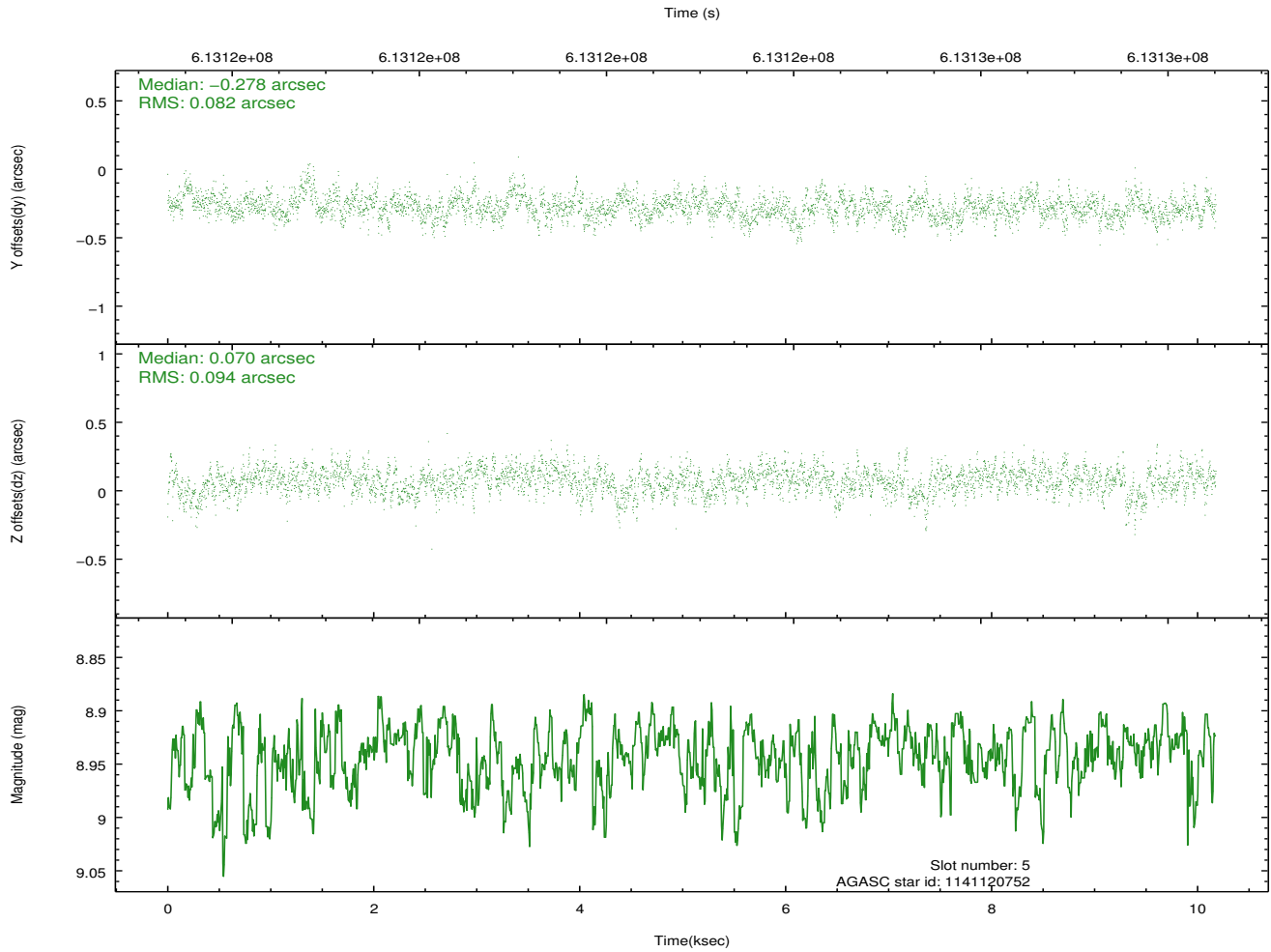
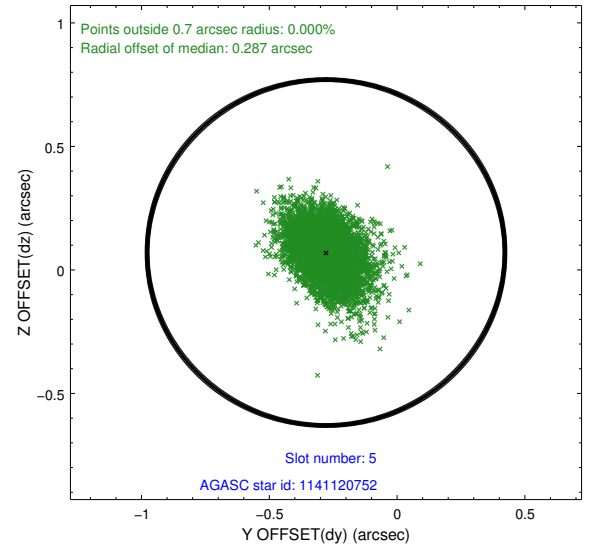
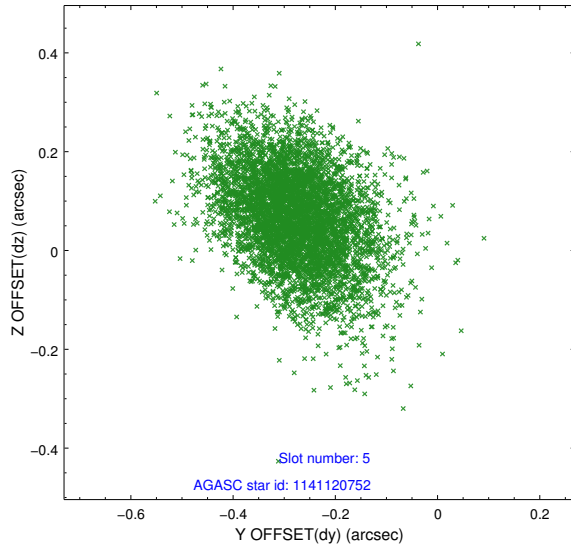
2.4.1 Slot 3



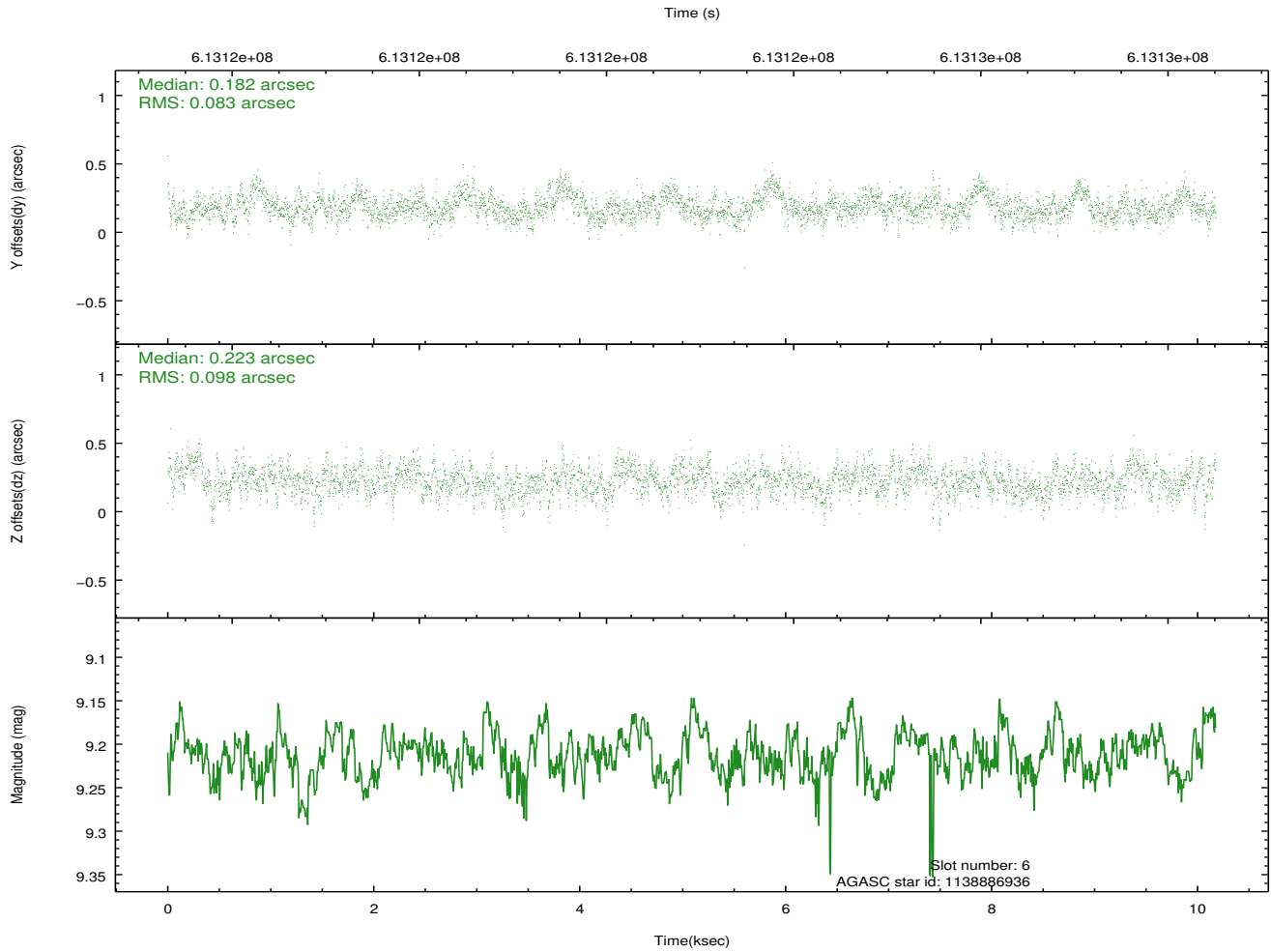
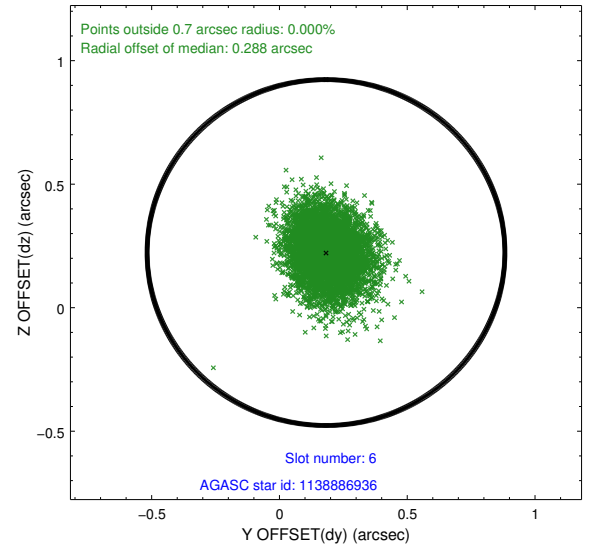
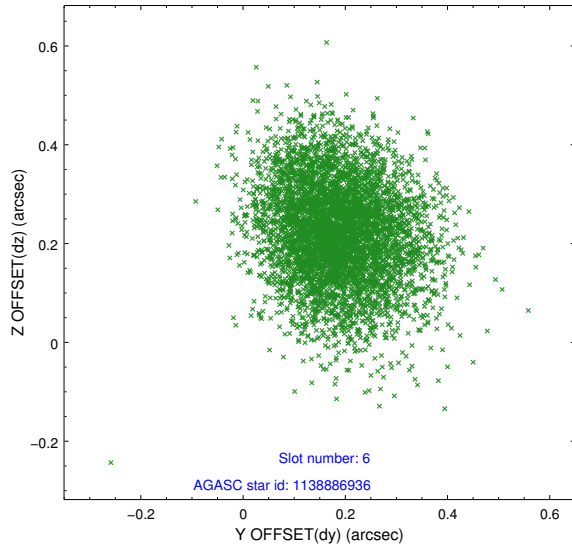
2.4.2 Slot 4



2.4.3 Slot 5

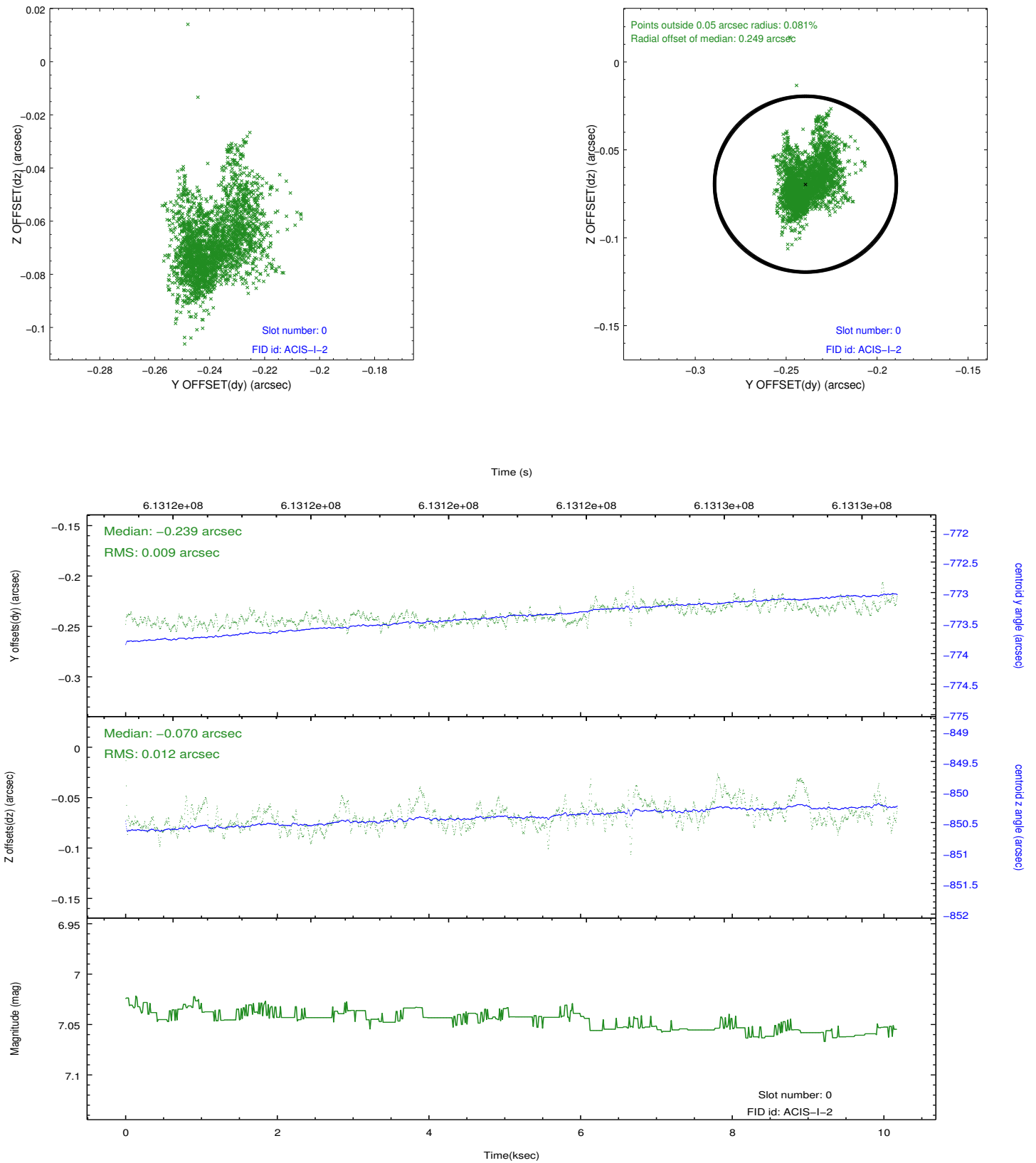


2.4.4 Slot 6

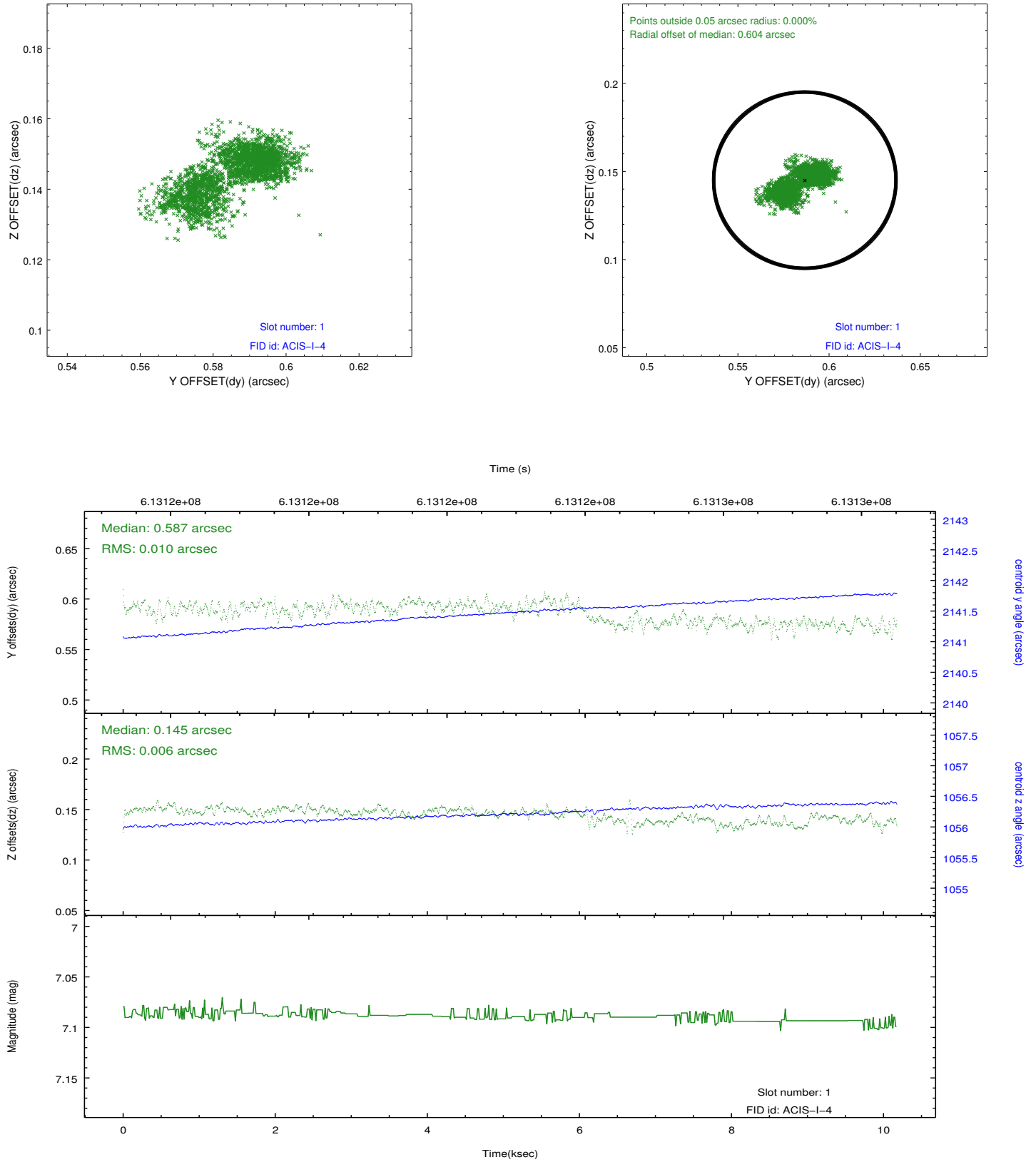


2.5 FID Slots

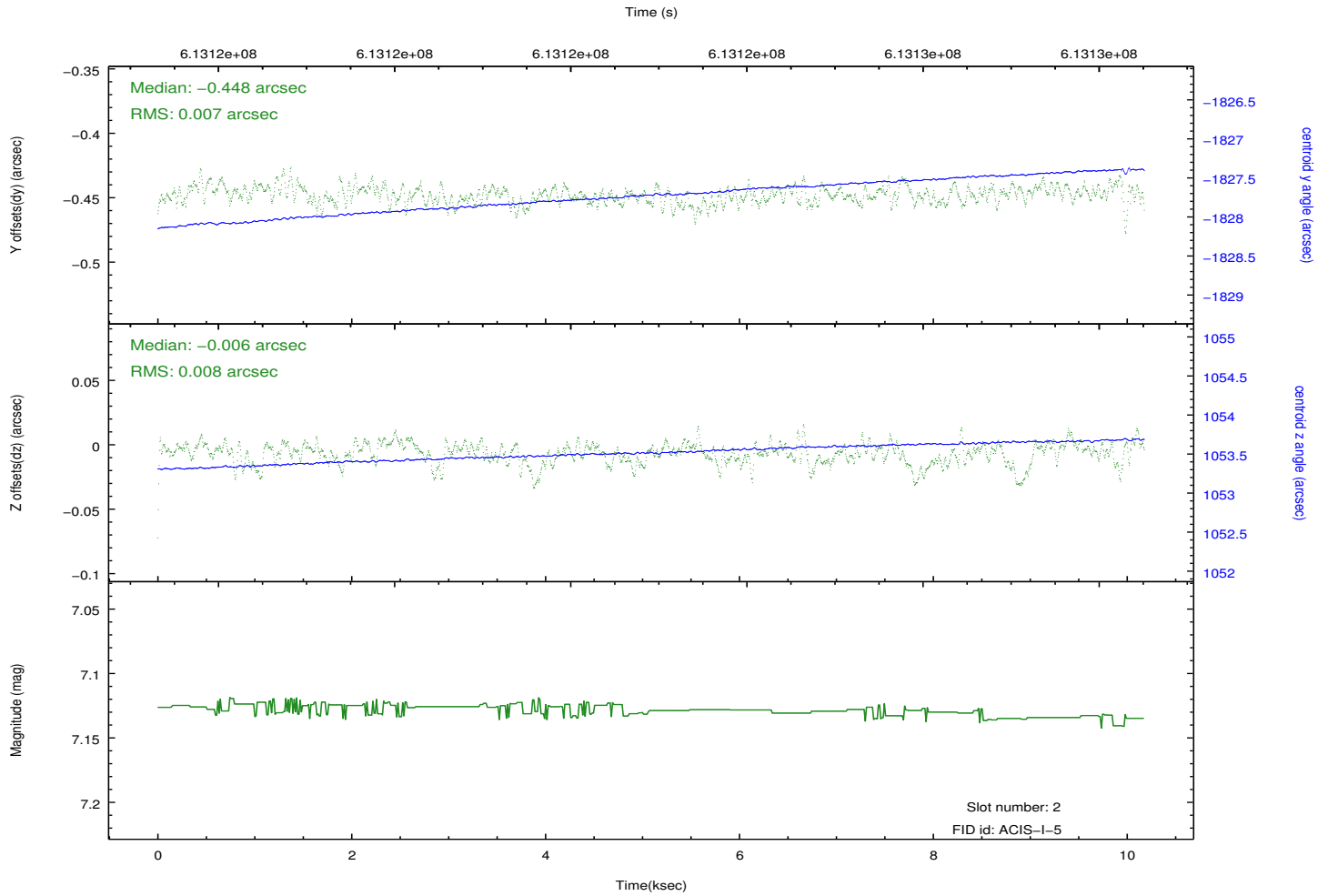
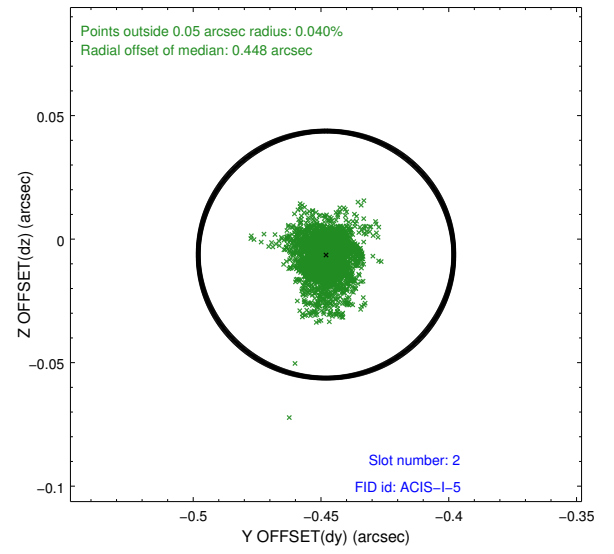
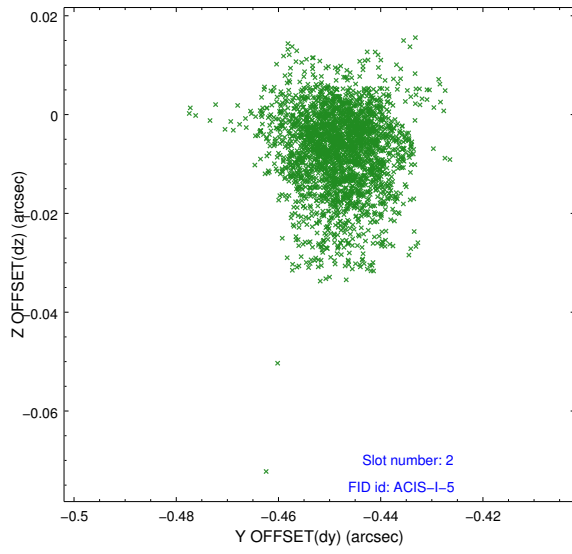
2.5.1 Slot 0



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)	2017.06.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.053217996955

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.