

V&V Reference Report

L2 ASCDS Version : 10.7

Observation 21478 - L2 Version 1
Chandra X-Ray Center

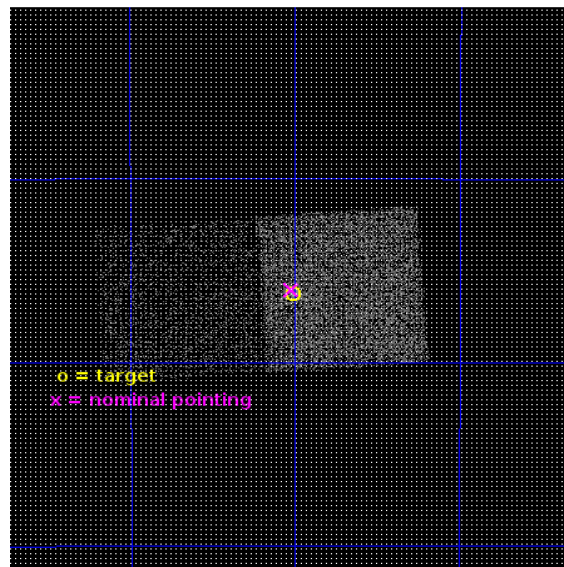
L2 Processing Date : Dec 6 2018

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1 Front

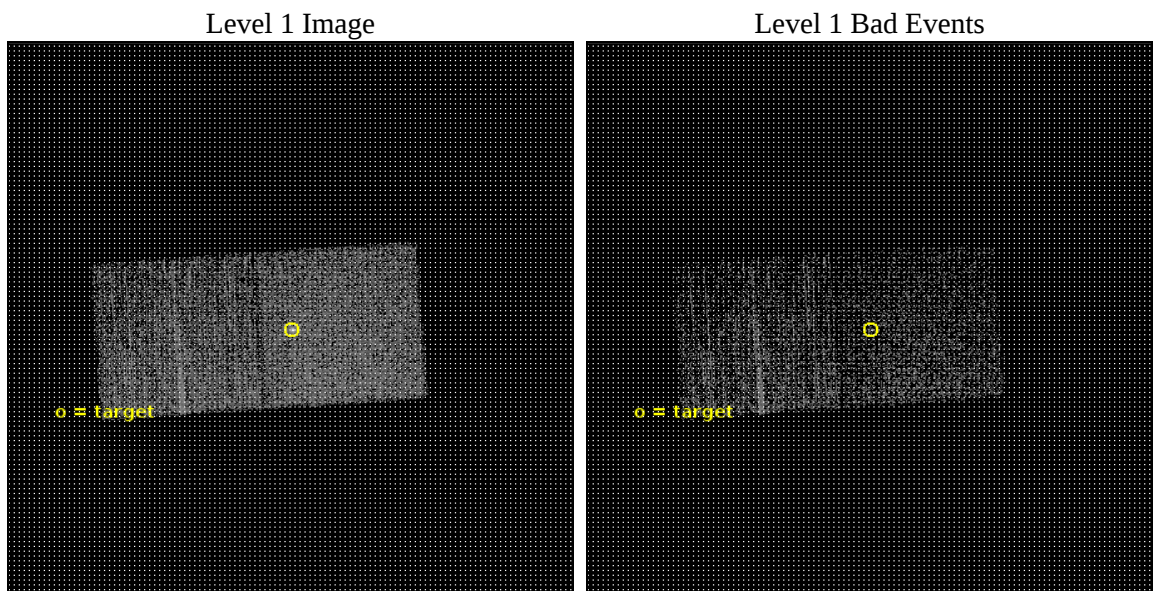
seq_num	703774	Sequence number
obs_id	21478	Observation id
title	RUNAWAY TIDAL CAPTURE IN NUCLEAR STAR CLUSTERS AS A FORMATION PATHWAY FOR MASSIVE BLACK HOLES	Proposal title
observer	Vivienne Baldassare	Principal investigator
object	NGC 1566	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	65.001667	Observer's specified target RA [deg]
dec_targ	-54.937806	Observer's specified target Dec [deg]
ra_nom	65.005421859527	Nominal RA [deg]
dec_nom	-54.934245601156	Nominal Dec [deg]
roll_nom	355.93579821788	Nominal Roll [deg]
revision	1	Processing version of data
ontime	3078.0	Sum of GTIs [s]
livetime	3036.4612106385	Livetime [s]
ontime6	3078.0	Sum of GTIs [s]
ontime7	3078.0	Sum of GTIs [s]
l2events	16548	Number of level 2 events



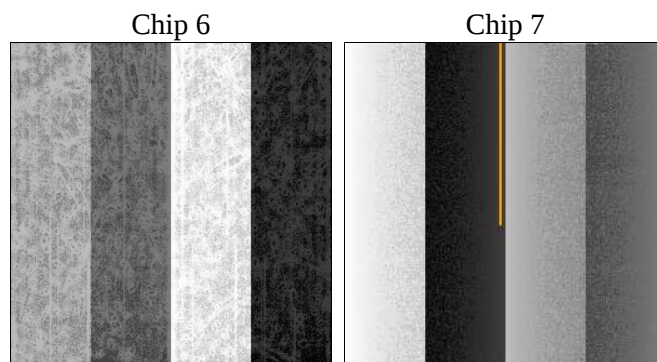
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.7	Processing system revision	ontime	3078.0	Sum of GTIs [s]
caldsver	4.8.0.1	 	ontime6	3078.0	Sum of GTIs [s]
date	2018-12-07T01:36:15	Date and time of file creation	ontime7	3078.0	Sum of GTIs [s]
revision	1	Processing version of data	l1events	57143	Number of level 1 events

2.1.4 Events

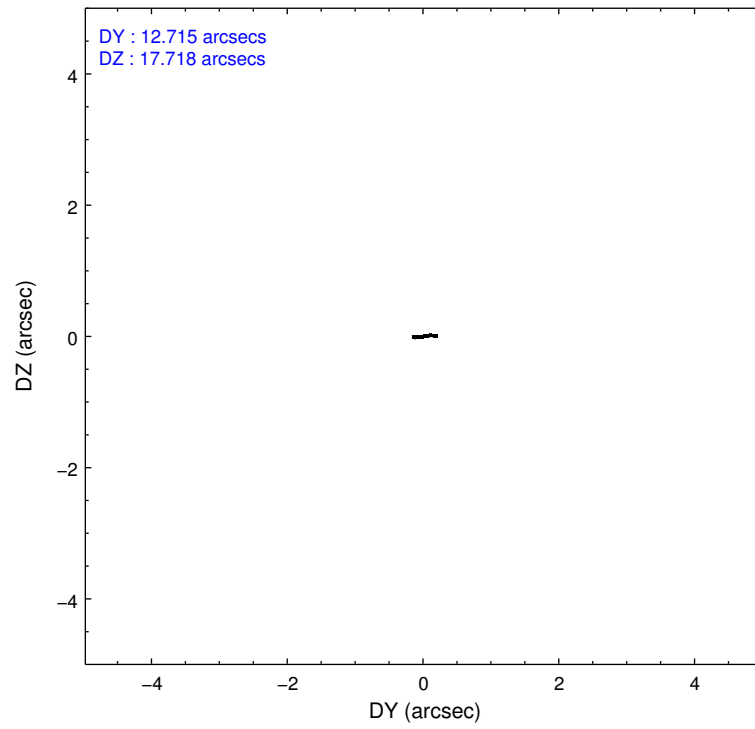
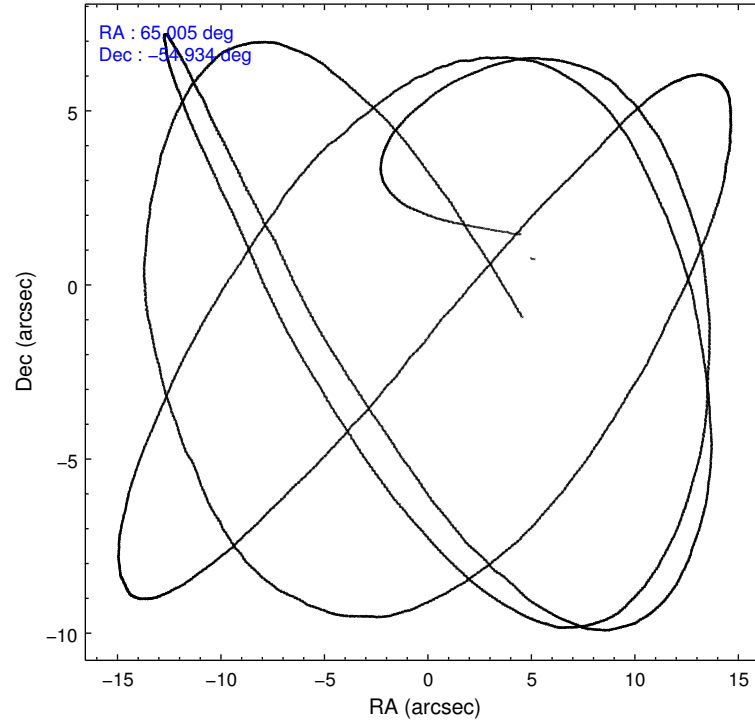
	ccd 6	ccd 7
level 1 events	24887	32256
rejected events	22143	17785
rejected %	88%	55%

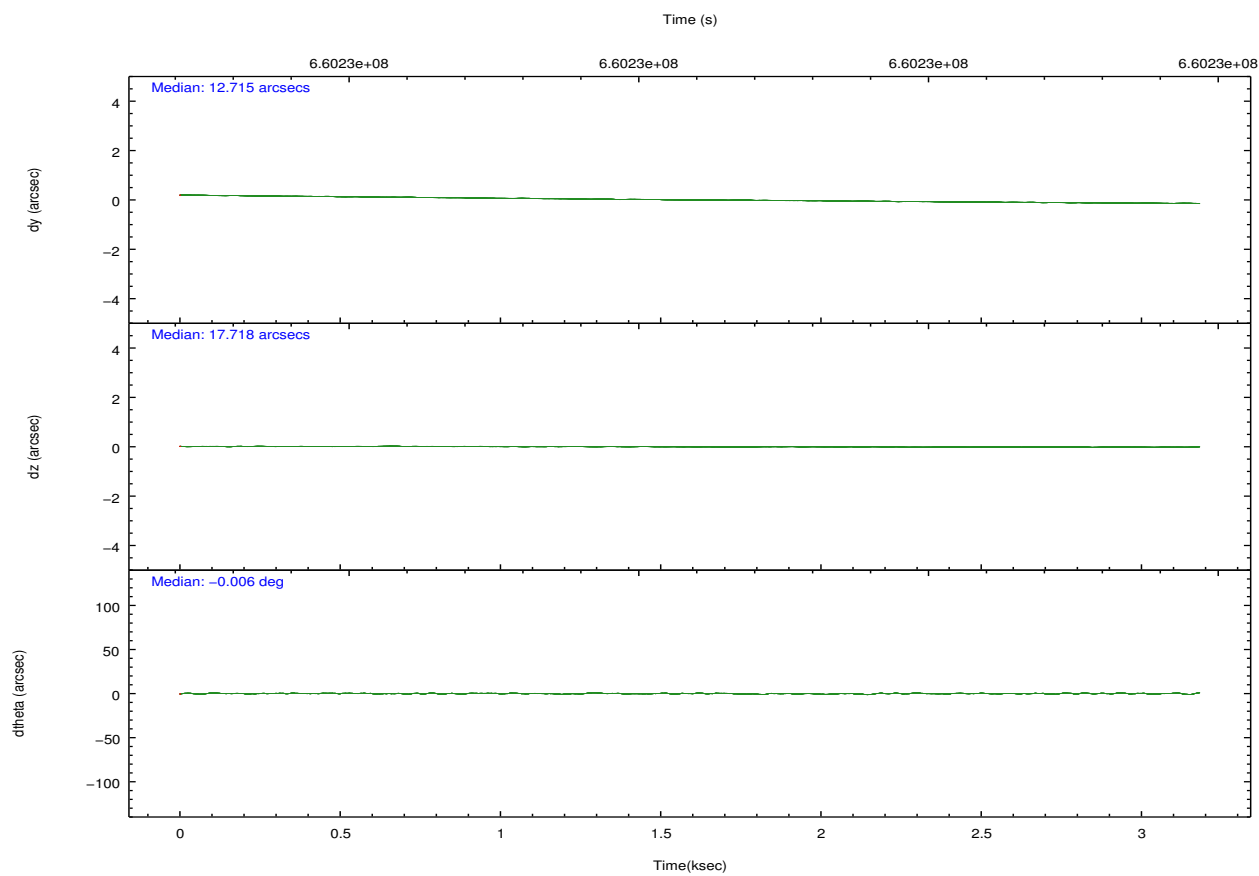
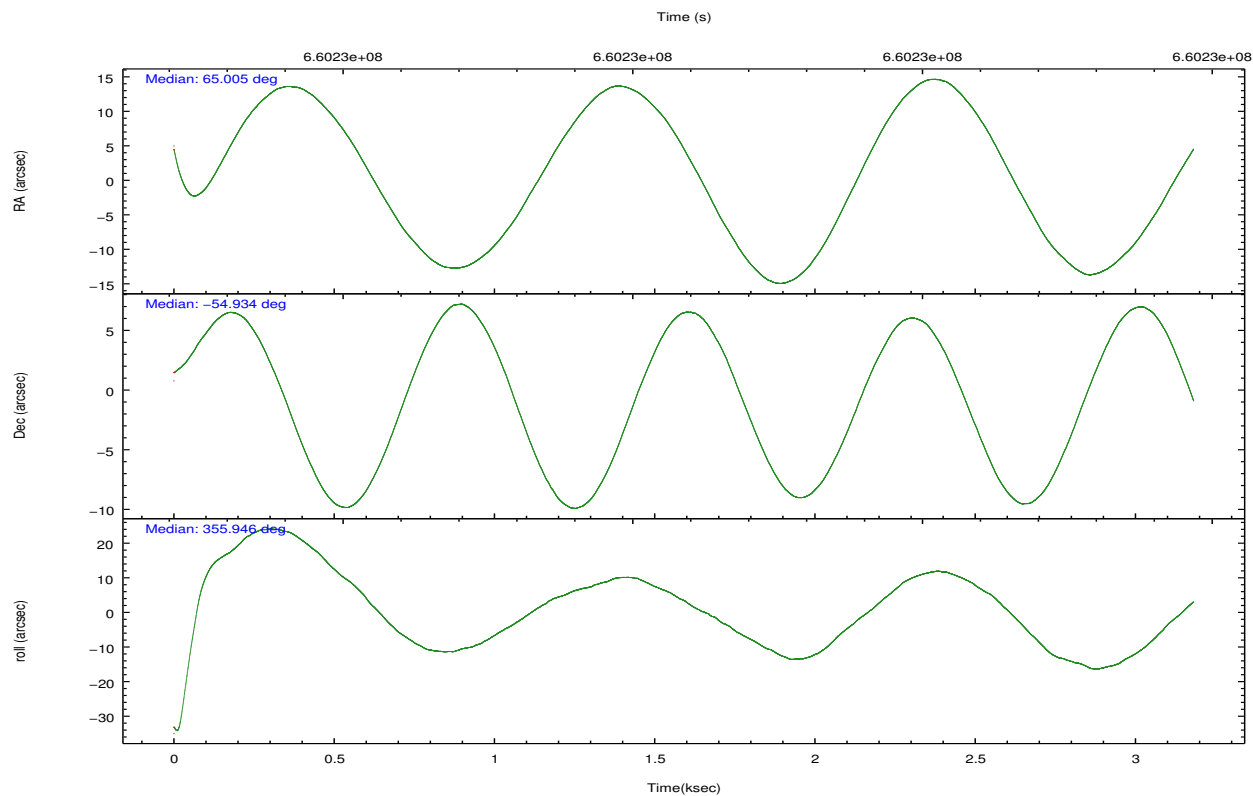
	ccd 6	ccd 7
grade 0 events	767	1457
	3%	4%
grade 1 events	16	88
	0%	0%
grade 2 events	788	2986
	3%	9%
grade 3 events	221	1176
	0%	3%
grade 4 events	203	1093
	0%	3%
grade 5 events	920	2956
	3%	9%
grade 6 events	770	7771
	3%	24%
grade 7 events	21202	14729
	85%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-67	ACIS-67	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	64.962707	65.00542185952695	CCD I2 on	N	N
[deg] Pointing Dec	-54.946765	-54.93424560115639	CCD I3 on	N	N
[deg] Pointing Roll	355.744431	355.9357982178842	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	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O1	N
[s] Observation start time (MET)	660228787.184000	660227868.61546	CCD S5 on	N	N
Observation start date	2018-12-03T12:51:58	2018-12-03T12:37:48	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	660231787.184000	660232464.20324	On-chip summing requested	N	N
Observation end date	2018-12-03T13:41:58	2018-12-03T13:54:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3

2.3 Aspect



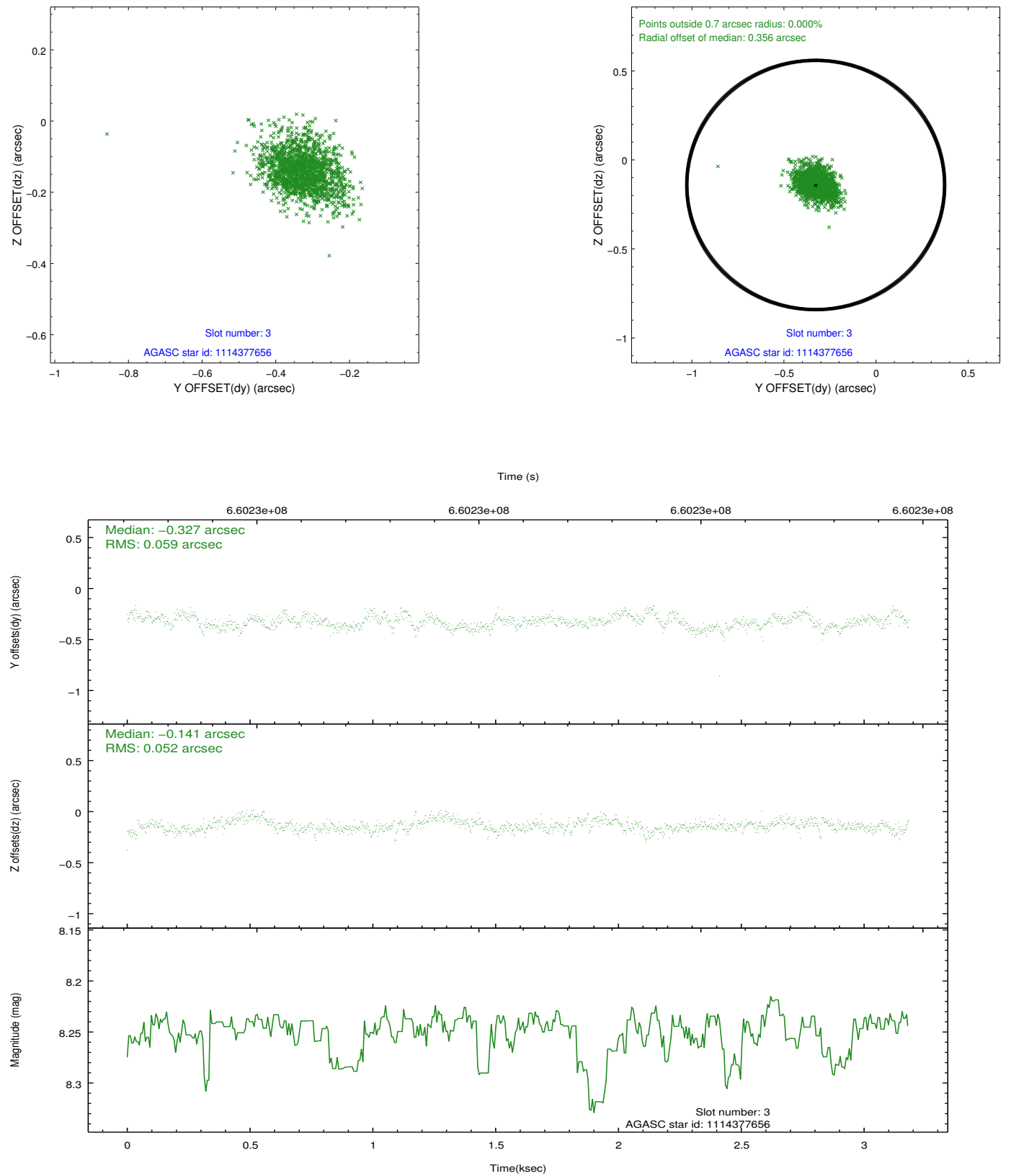


Slot Statistics

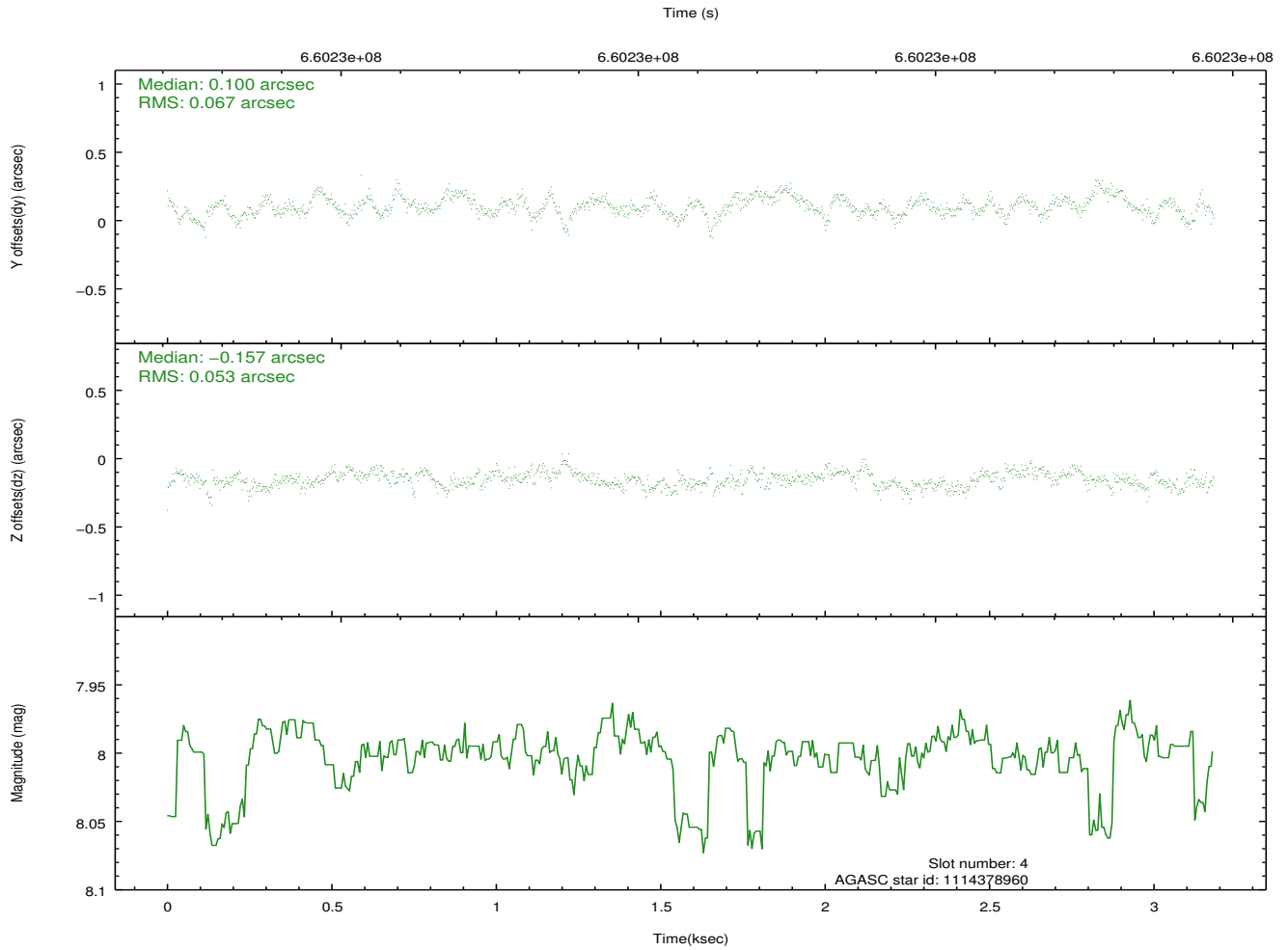
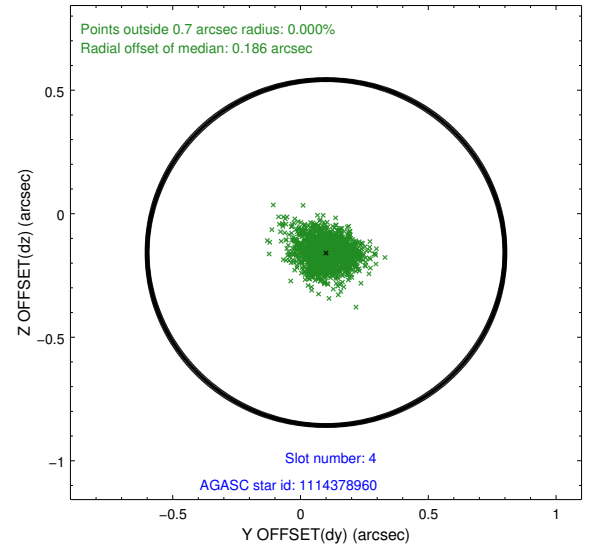
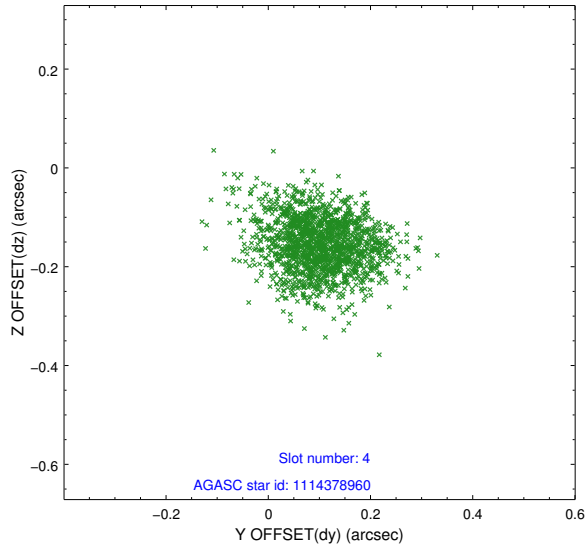
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.15	777	1.000	-0.259	-0.252	0.008	0.012	0.000000	0.000000	-765.83	-1739
1	FID		ACIS-S-4	7.29	777	1.000	0.772	0.193	0.006	0.010	0.000000	0.000000	2147.50	167
2	FID		ACIS-S-5	7.26	777	1.000	-0.545	0.069	0.007	0.011	0.000000	0.000000	-1816.46	163
3	GUIDE	used	1114377656	8.25	1553	1.000	-0.327	-0.141	0.082	0.136	65.037475	-54.692489	87.36	923
4	GUIDE	used	1114378960	8.00	1553	1.000	0.100	-0.157	0.090	0.145	64.869451	-54.891133	-206.56	185
5	GUIDE	used	1114778616	8.34	1553	1.000	0.063	0.105	0.103	0.171	65.645010	-55.096292	1442.58	-439
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	1114374752	8.14	1548	1.000	0.159	0.195	0.067	0.111	63.822668	-54.864488	-2374.22	100

2.4 Star Slots

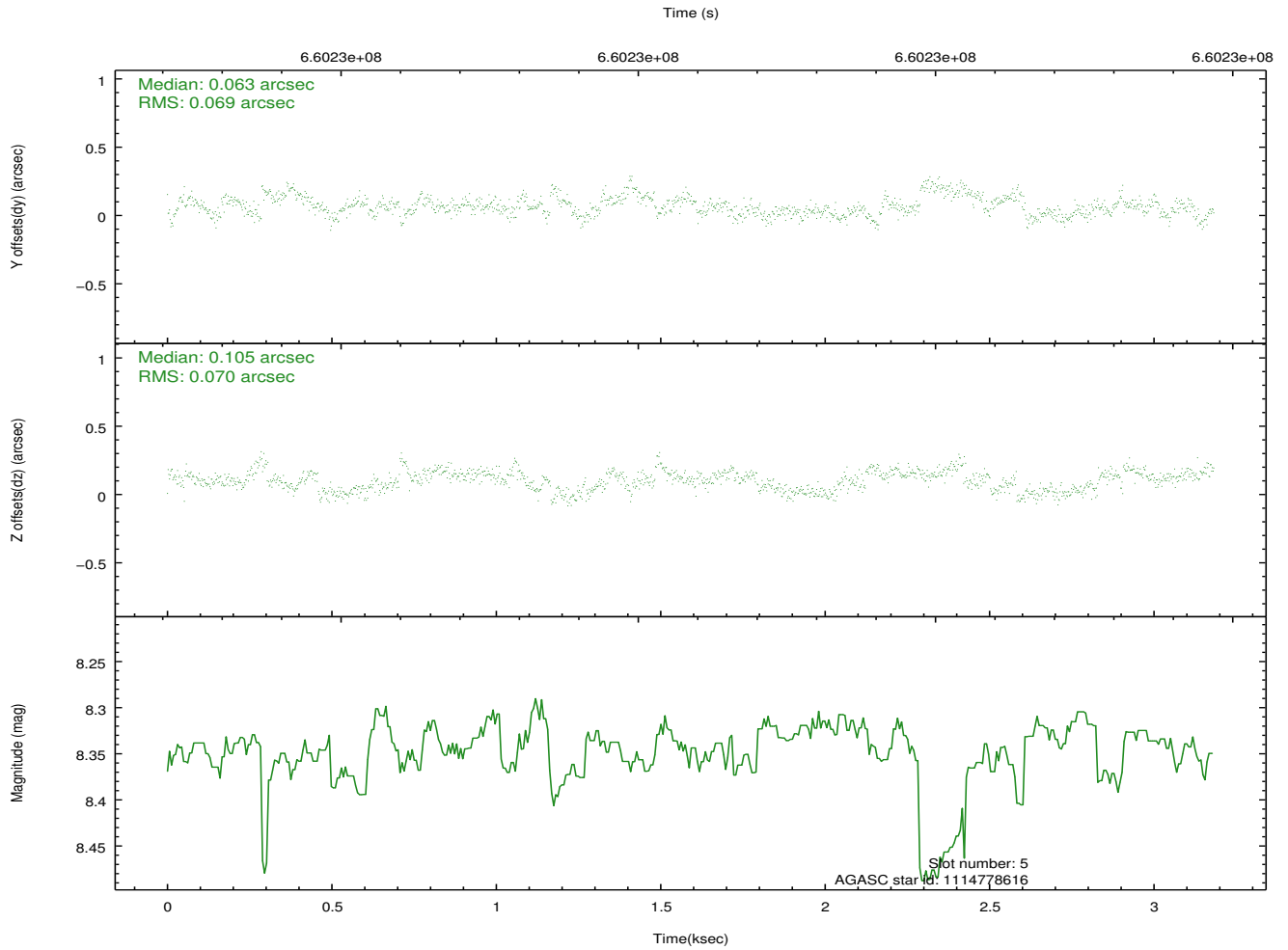
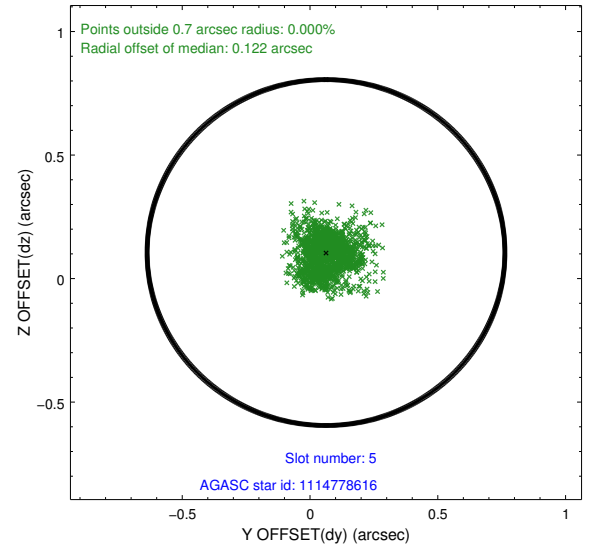
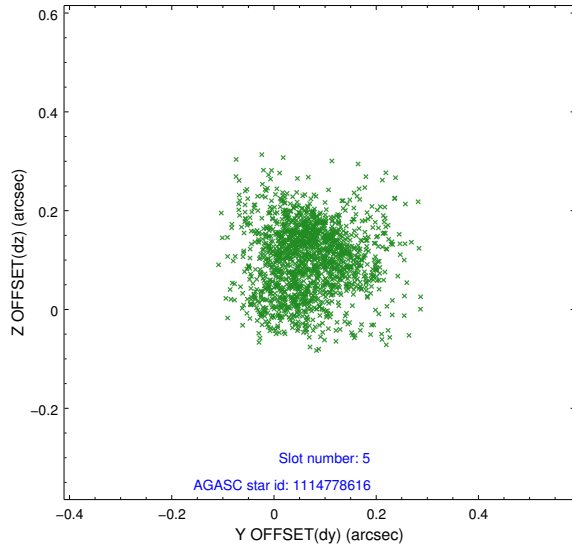
2.4.1 Slot 3



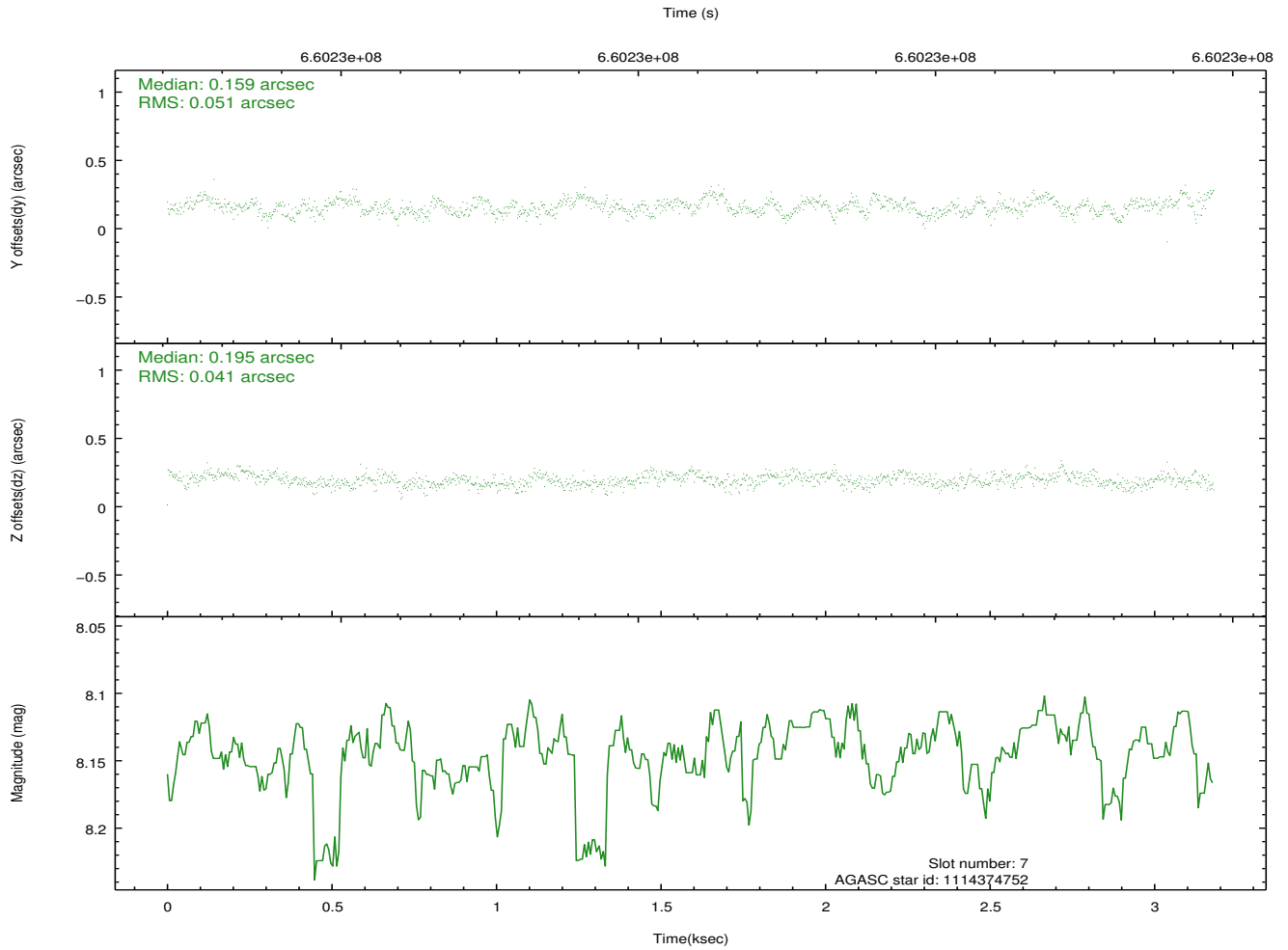
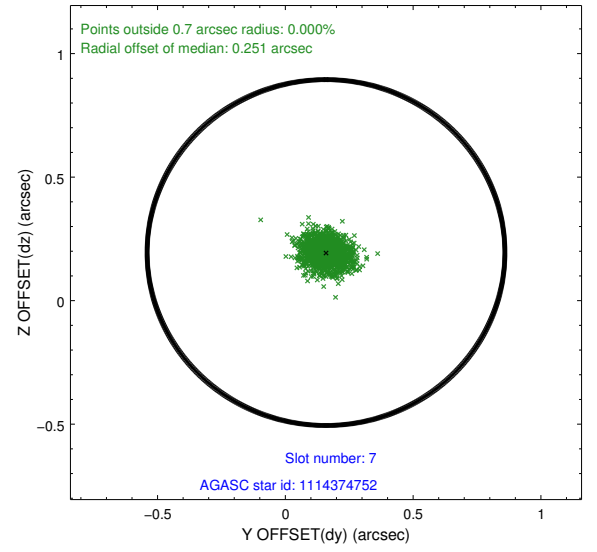
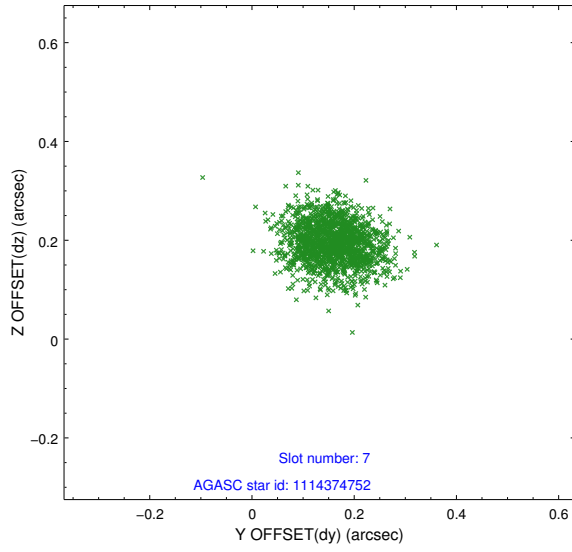
2.4.2 Slot 4



2.4.3 Slot 5

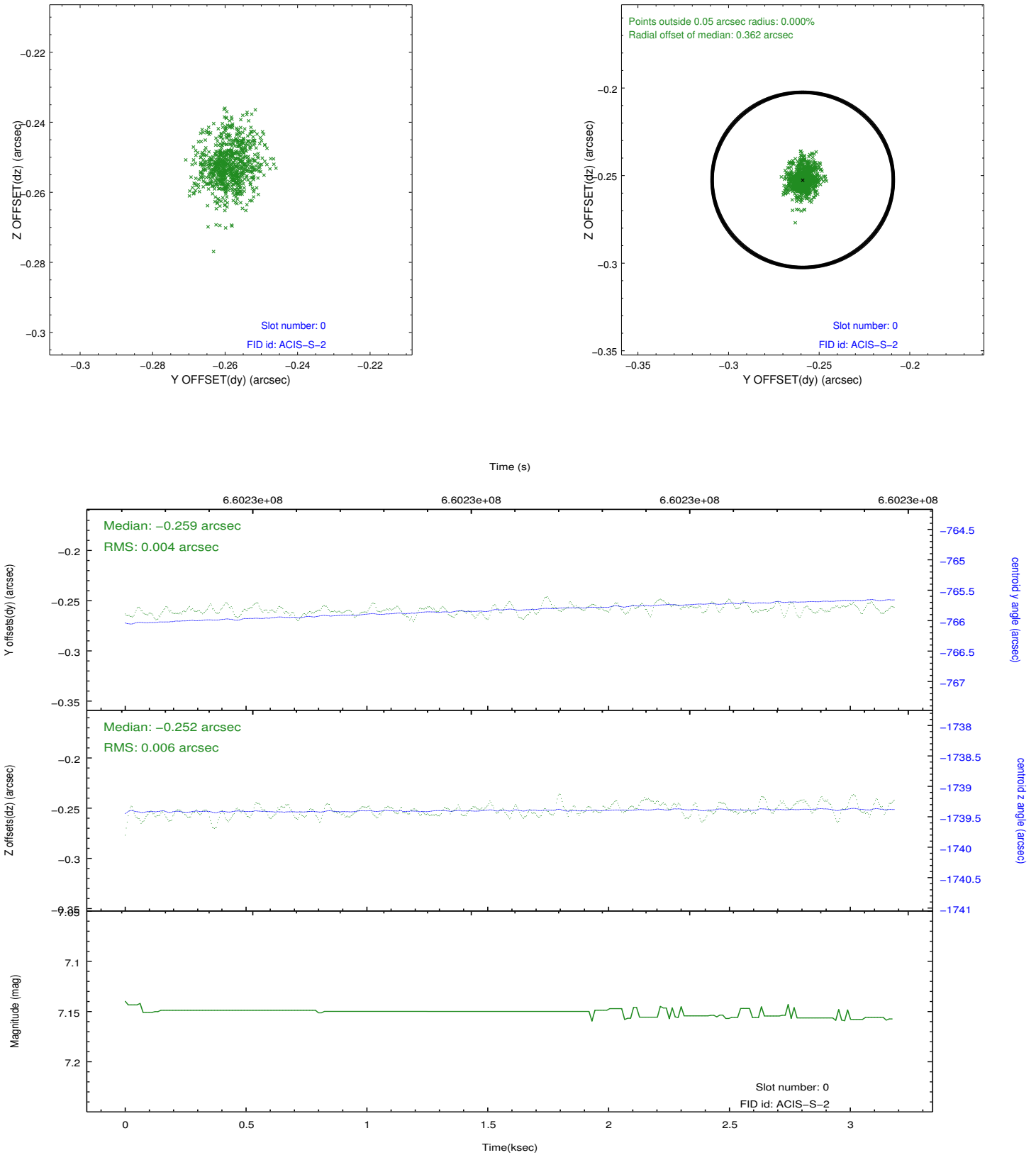


2.4.4 Slot 7

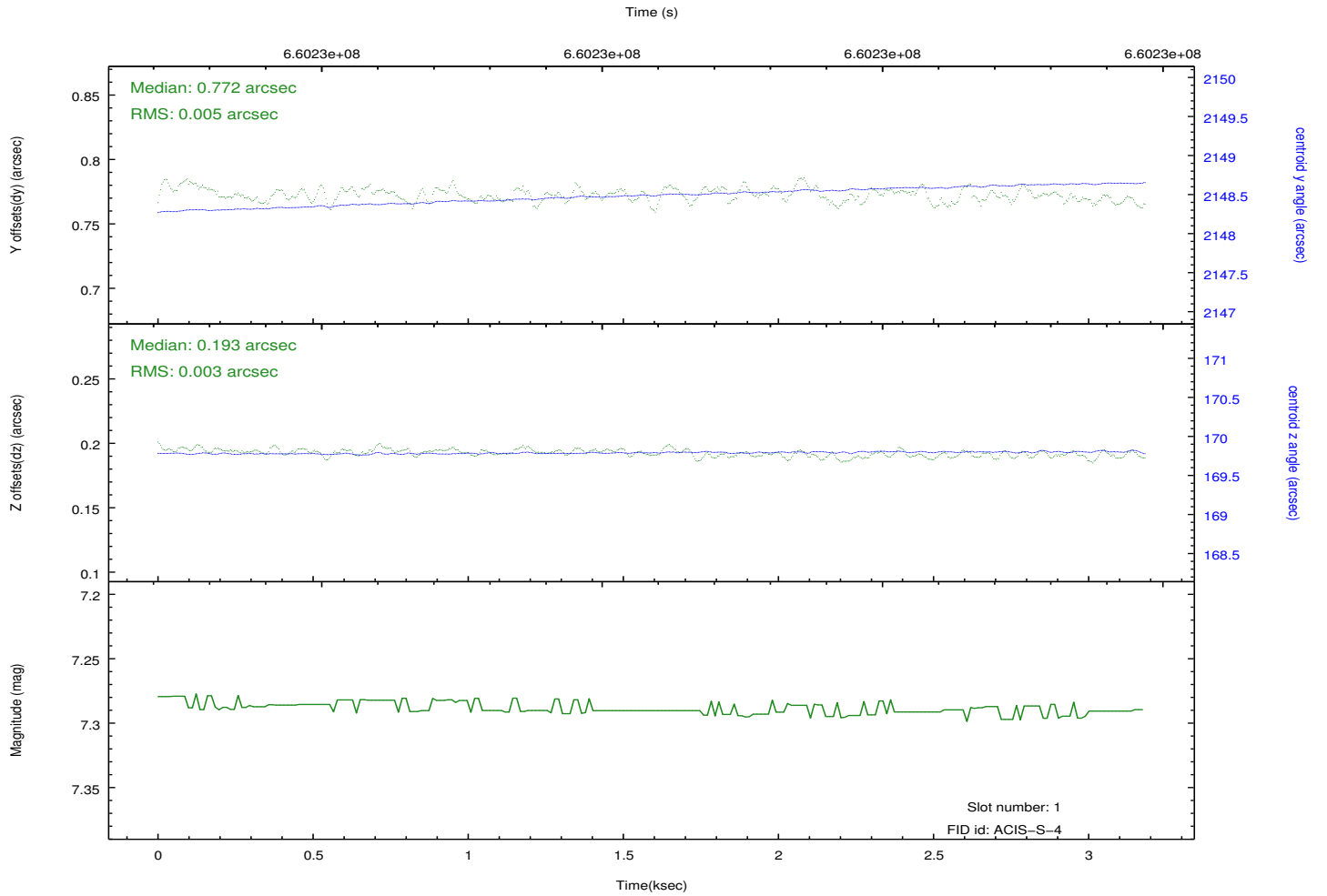
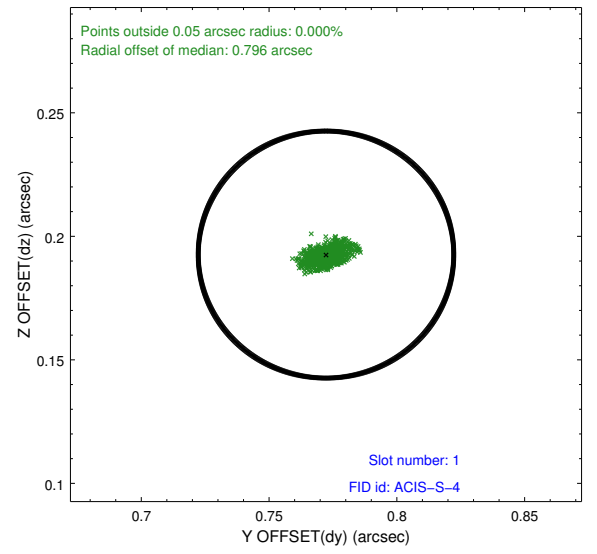
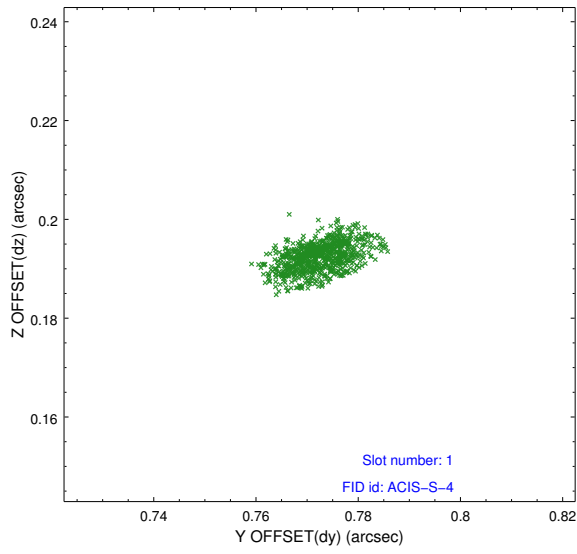


2.5 FID Slots

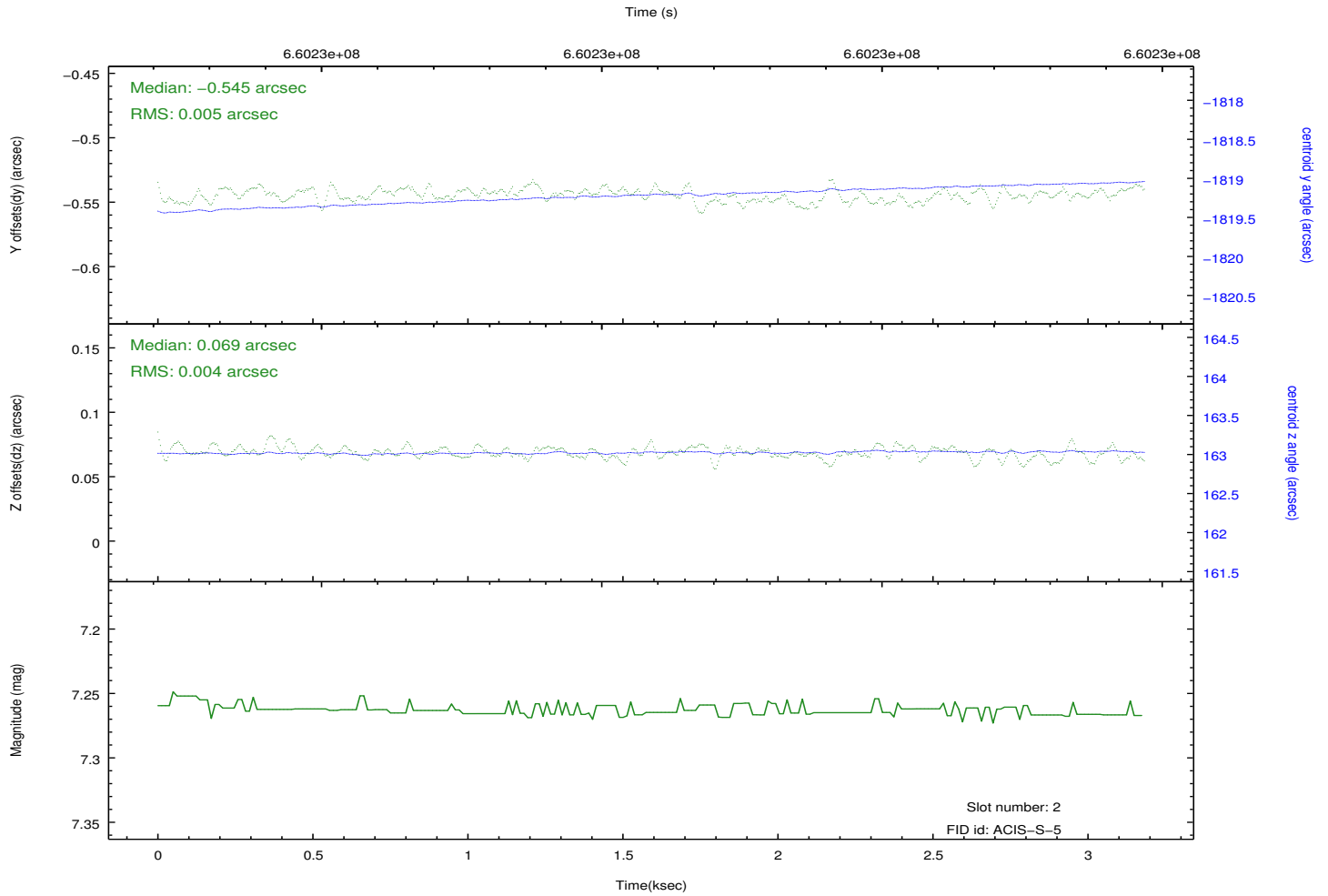
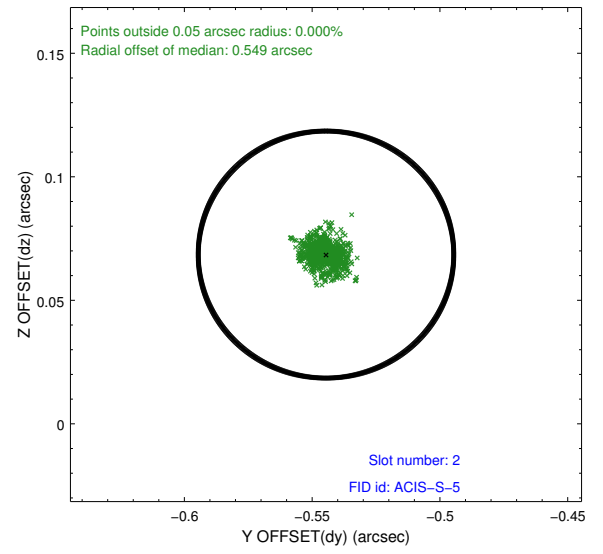
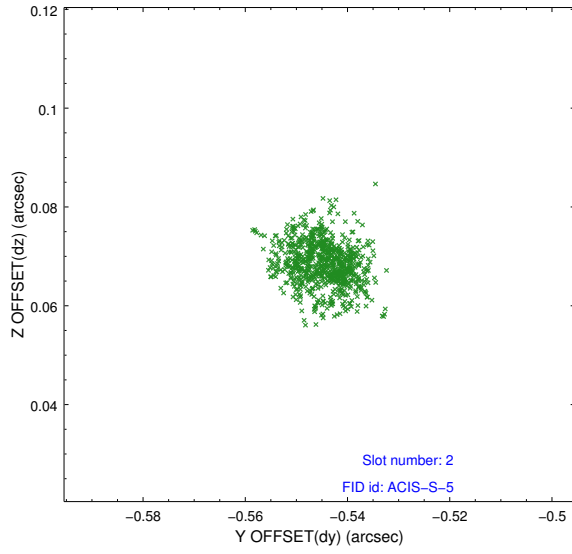
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2018.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.078

A.2 Comments

Optional chip S4 not included.

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The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.