

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19504 - L2 Version 2
Chandra X-Ray Center

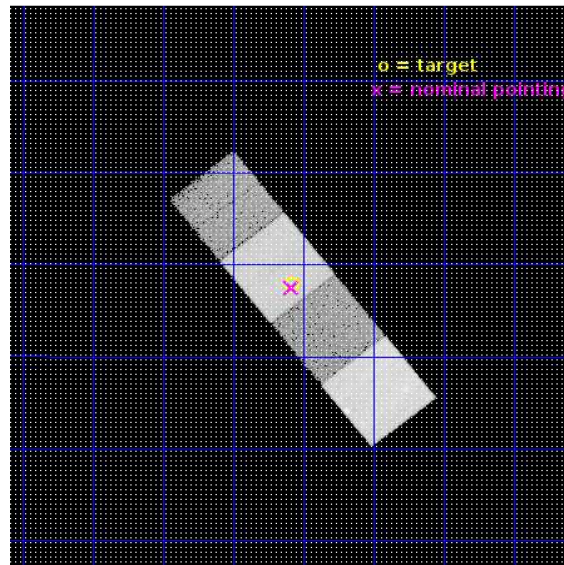
L2 Processing Date : May 3 2017

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

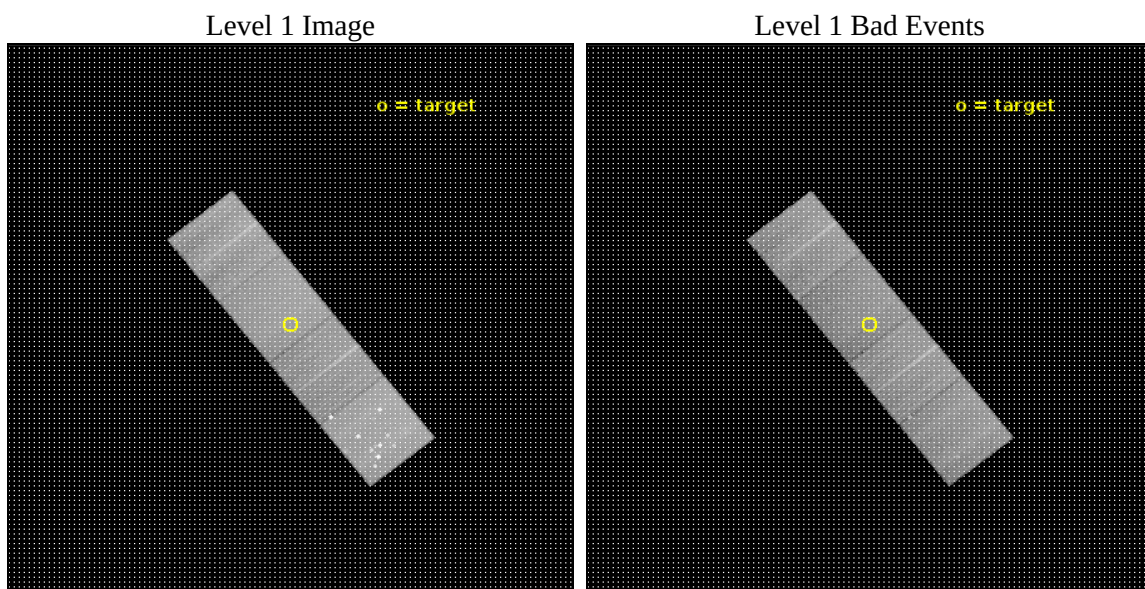
seq_num	703352	Sequence number
obs_id	19504	Observation id
title	WISE Discovery of the Largest Sample of Obscured Dual AGNs: A Chandra and NuSTAR Follow-up	Proposal title
observer	Shobita Satyapal	Principal investigator
object	J1221+1137	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	185.270833	Observer's specified target RA [deg]
dec_targ	11.631222	Observer's specified target Dec [deg]
ra_nom	185.2717202162	Nominal RA [deg]
dec_nom	11.624983595728	Nominal Dec [deg]
roll_nom	231.75602724711	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23454.224364638	Sum of GTIs [s]
livetime	23147.777656566	Livetime [s]
ontime5	23454.183324695	Sum of GTIs [s]
ontime6	23454.142284632	Sum of GTIs [s]
ontime7	23454.224364638	Sum of GTIs [s]
ontime8	23454.101244688	Sum of GTIs [s]
l2events	243285	Number of level 2 events



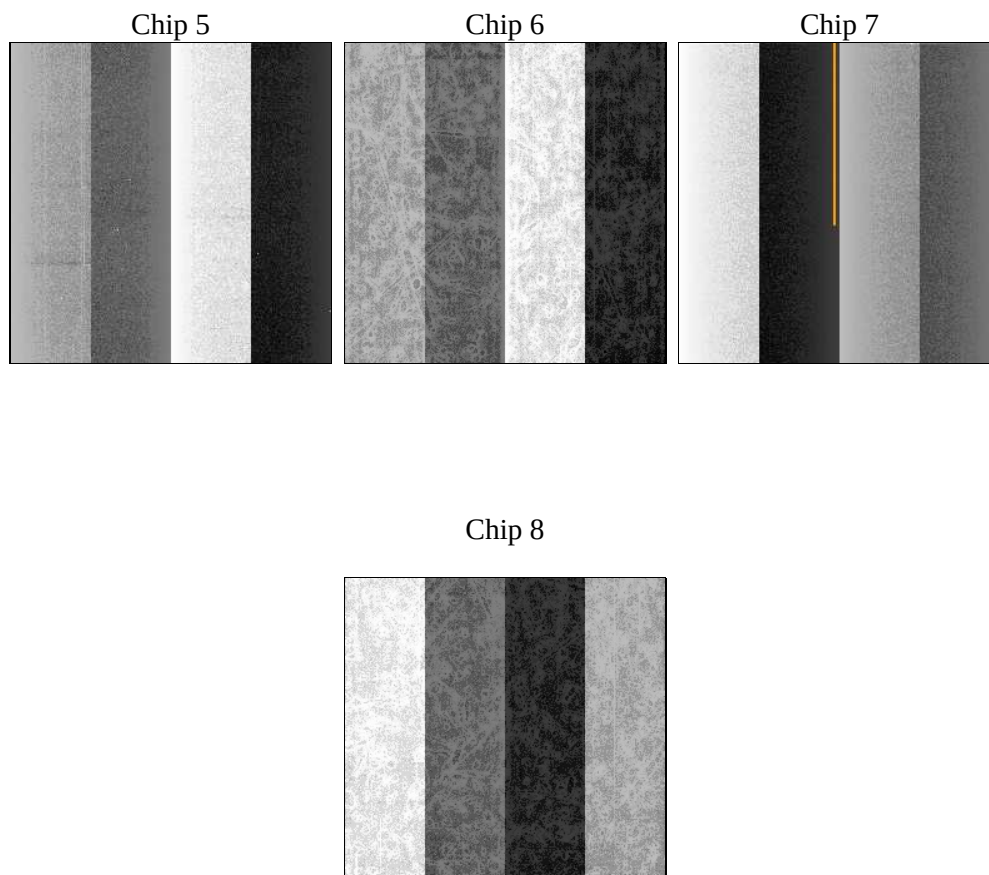
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23393.013000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	23454.224364638	Sum of GTIs [s]
caldsver	4.7.3	 	ontime5	23454.183324695	Sum of GTIs [s]
date	2017-05-03T17:56:50	Date and time of file creation	ontime6	23454.142284632	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	23454.224364638	Sum of GTIs [s]
			ontime8	23454.101244688	Sum of GTIs [s]
			l1events	922893	Number of level 1 events

2.1.4 Events

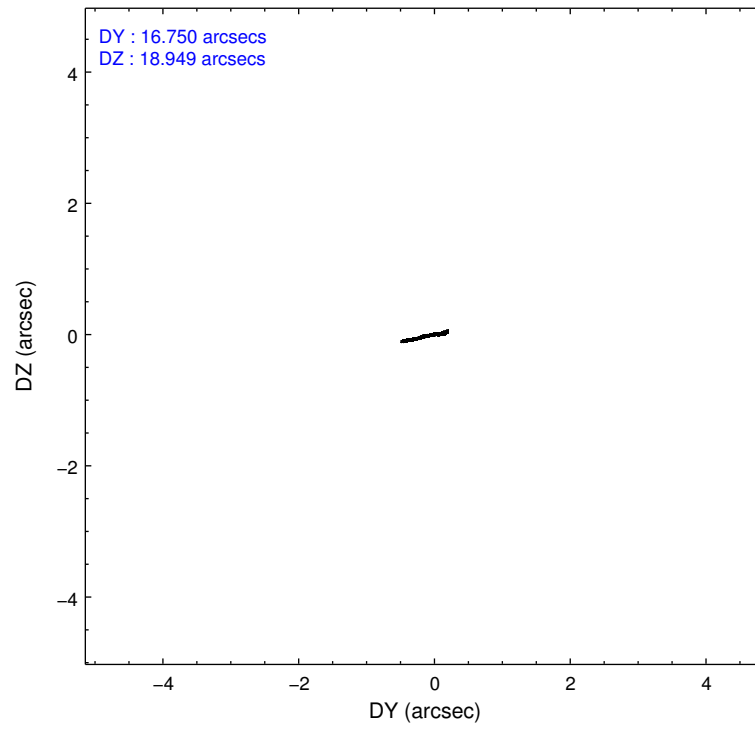
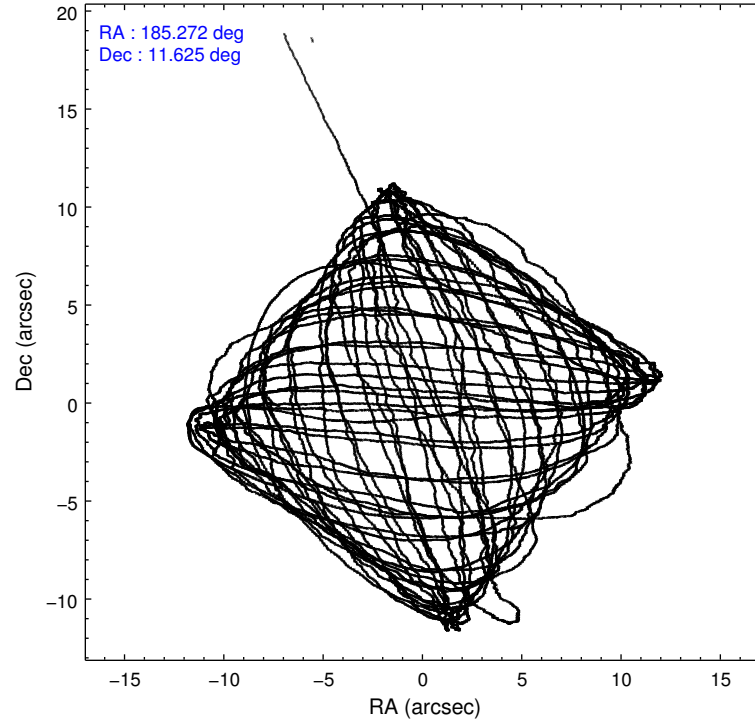
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	312371	178170	214505	217847
rejected events	140077	159484	123210	164639
rejected %	44%	89%	57%	75%

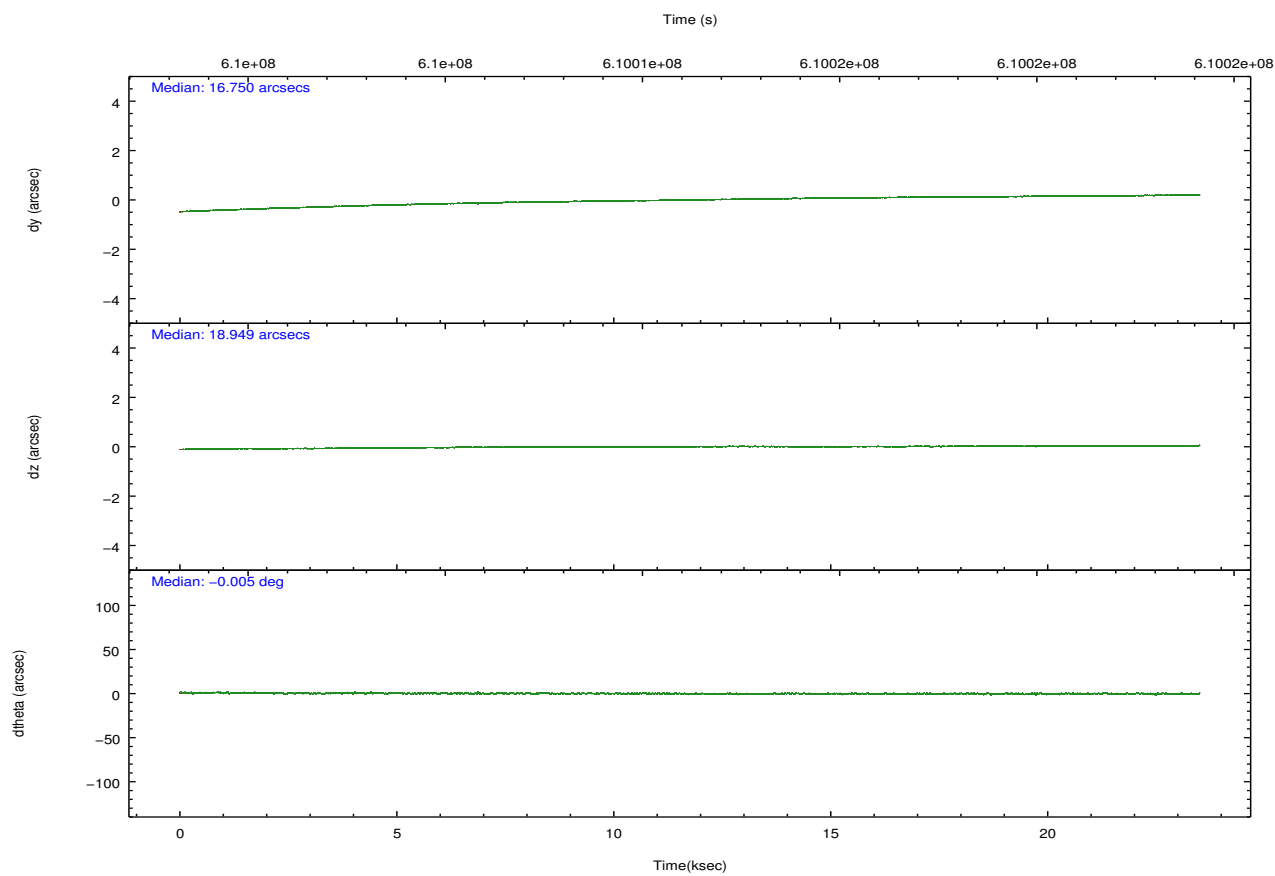
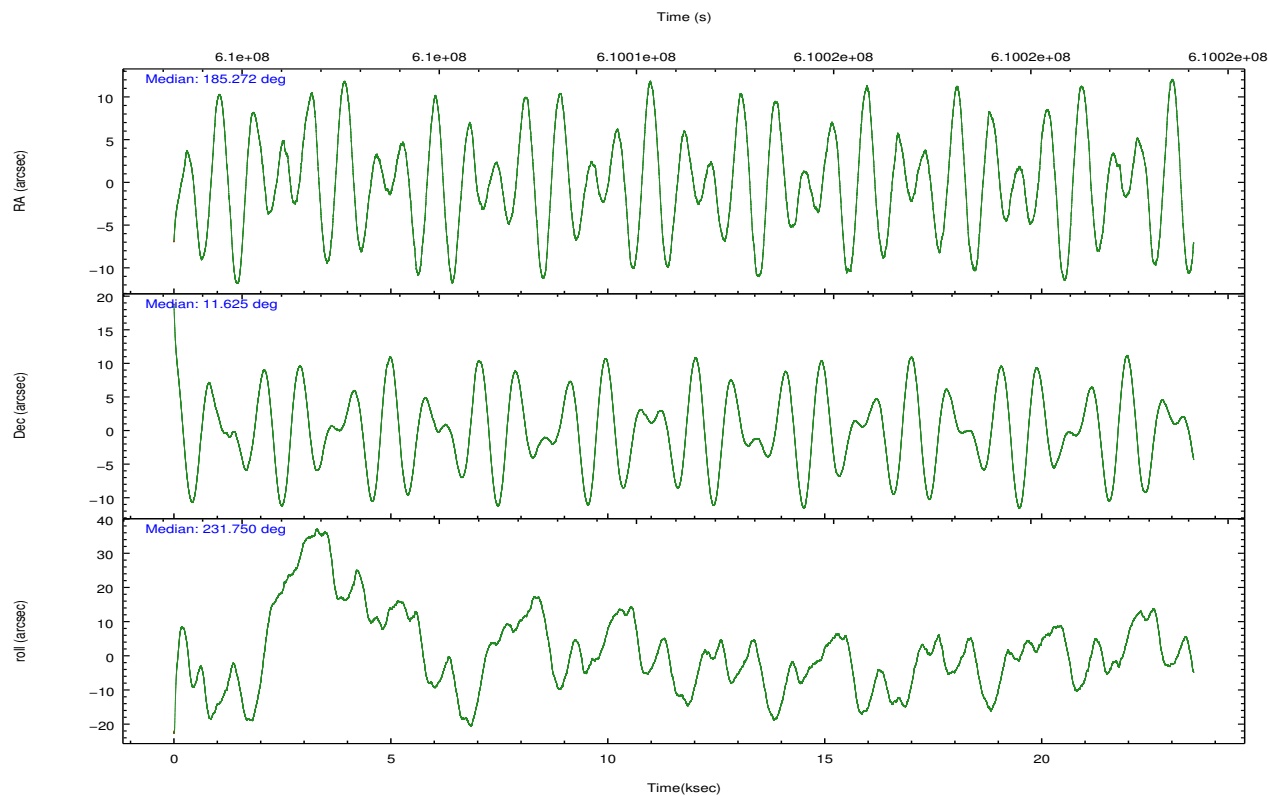
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	40670	5515	7120	14543
	13%	3%	3%	6%
grade 1 events	1179	79	286	151
	0%	0%	0%	0%
grade 2 events	46828	4998	19576	13239
	14%	2%	9%	6%
grade 3 events	5602	1699	6742	5416
	1%	0%	3%	2%
grade 4 events	7462	1584	6504	5022
	2%	0%	3%	2%
grade 5 events	17795	7126	19665	11258
	5%	3%	9%	5%
grade 6 events	71760	4895	51370	15017
	22%	2%	23%	6%
grade 7 events	121075	152274	103242	153201
	38%	85%	48%	70%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	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	185.275381	185.2717202162003	CCD I2 on	N	N
[deg] Pointing Dec	11.652197	11.62498359572794	CCD I3 on	N	N
[deg] Pointing Roll	231.598673	231.7560272471107	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[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	O2	Y
[s] Observation start time (MET)	609999537.184000	609997832.31539	CCD S5 on	N	N
Observation start date	2017-05-01T04:17:48	2017-05-01T03:50:32	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	610022930.184000	610023144.17936	On-chip summing requested	N	N
Observation end date	2017-05-01T10:47:41	2017-05-01T10:52:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



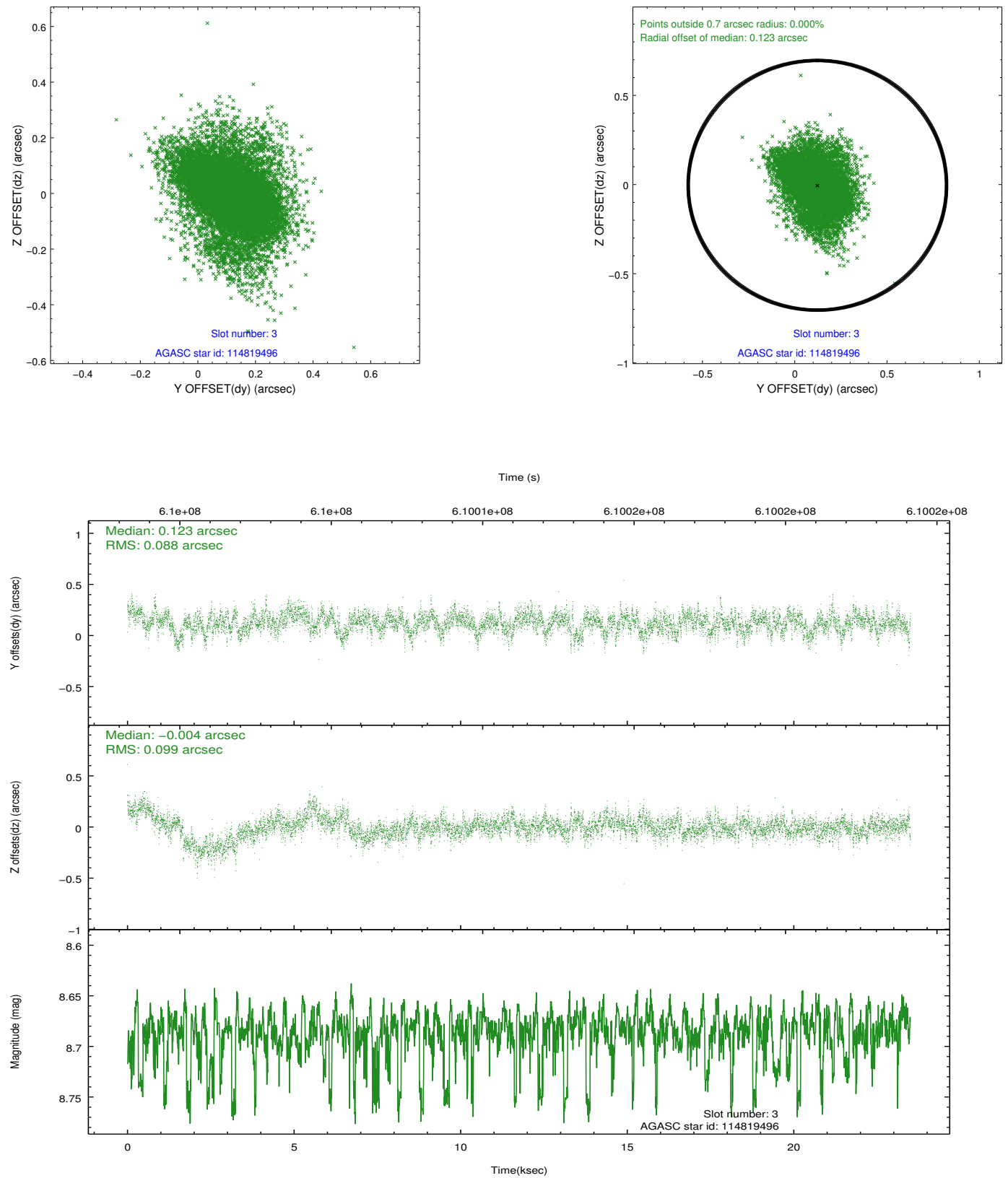


Slot Statistics

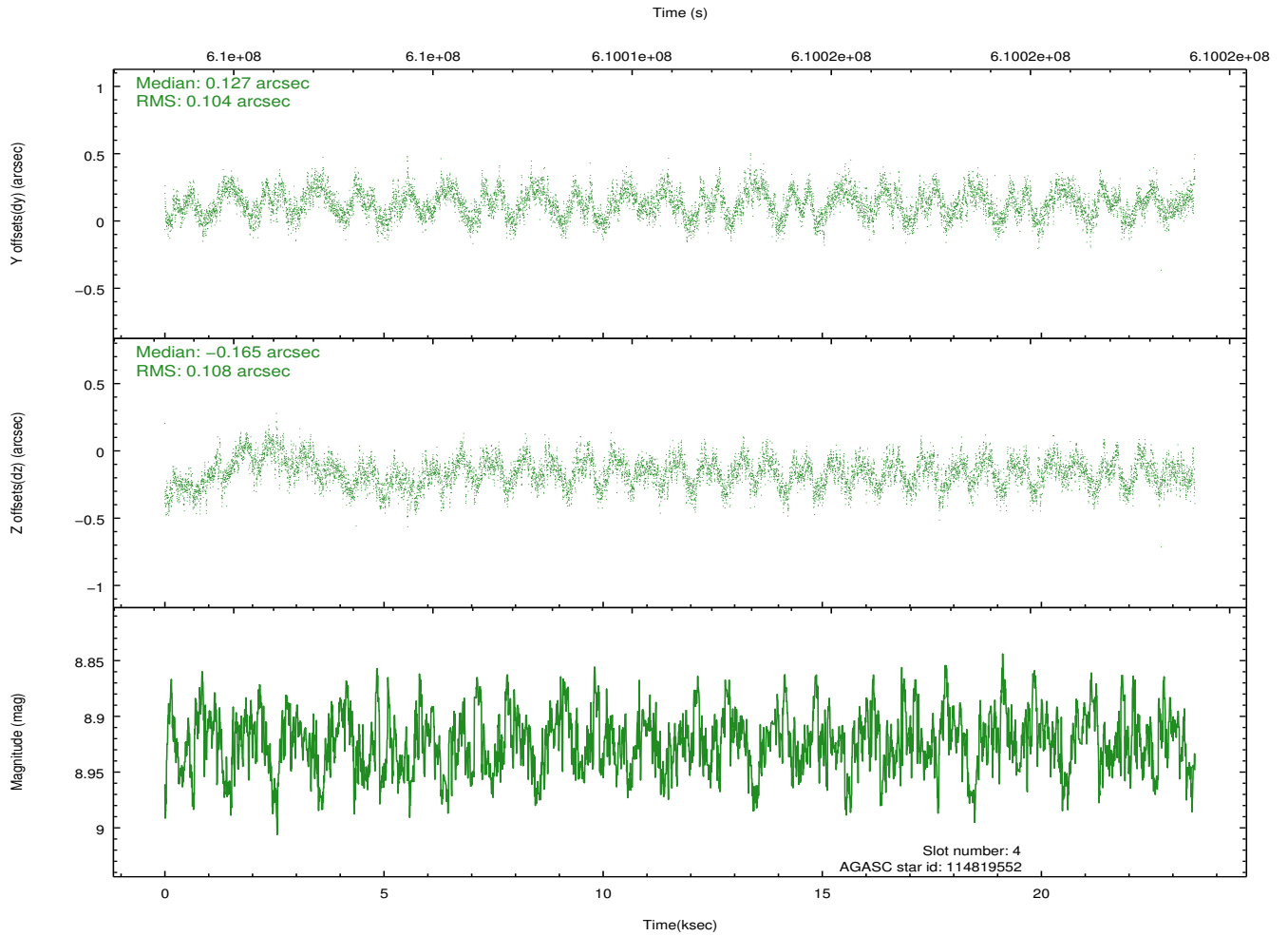
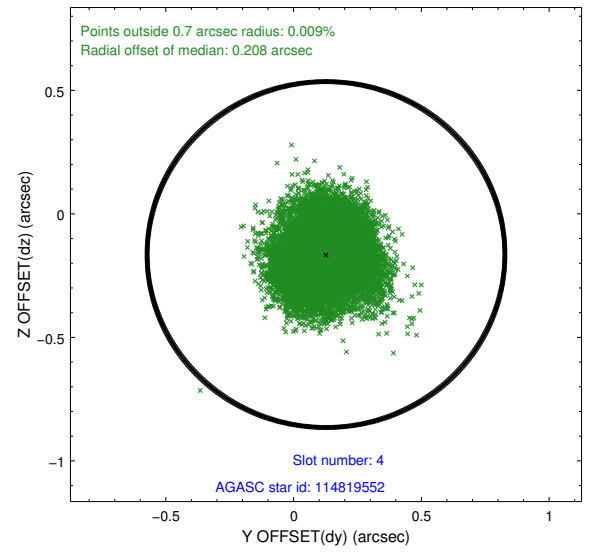
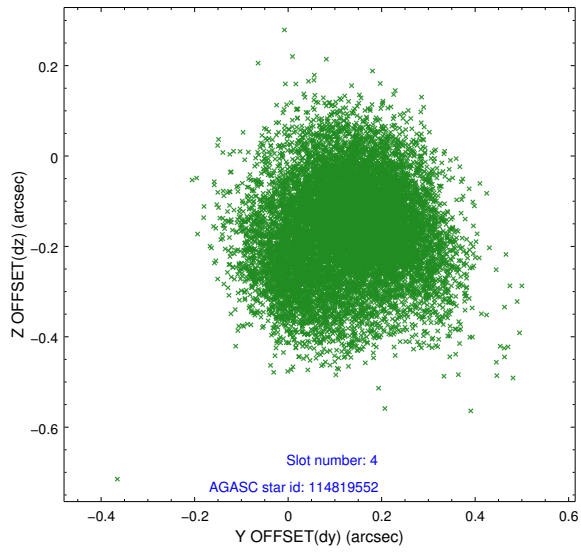
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.15	5731	-0.210	-0.154	0.008	0.014	0.000000	0.000000	-769.91	-1740.59
1	FID		ACIS-S-4	7.26	5731	0.532	0.142	0.007	0.013	0.000000	0.000000	2144.02	168.09
2	FID		ACIS-S-5	7.25	5731	-0.353	0.020	0.007	0.013	0.000000	0.000000	-1822.75	161.74
3	GUIDE	used	114819496	8.69	11459	0.123	-0.004	0.134	0.245	185.927253	11.920483	-2185.02	1197.92
4	GUIDE	used	114819552	8.92	11459	0.127	-0.165	0.164	0.248	185.130690	11.375327	1098.40	219.16
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	114822360	6.78	11464	-0.105	0.169	0.143	0.236	184.966087	11.598578	828.83	-734.72
7	GUIDE	used	114823144	9.19	11444	-0.145	0.003	0.151	0.249	185.759442	11.403801	-361.26	1893.33

2.4 Star Slots

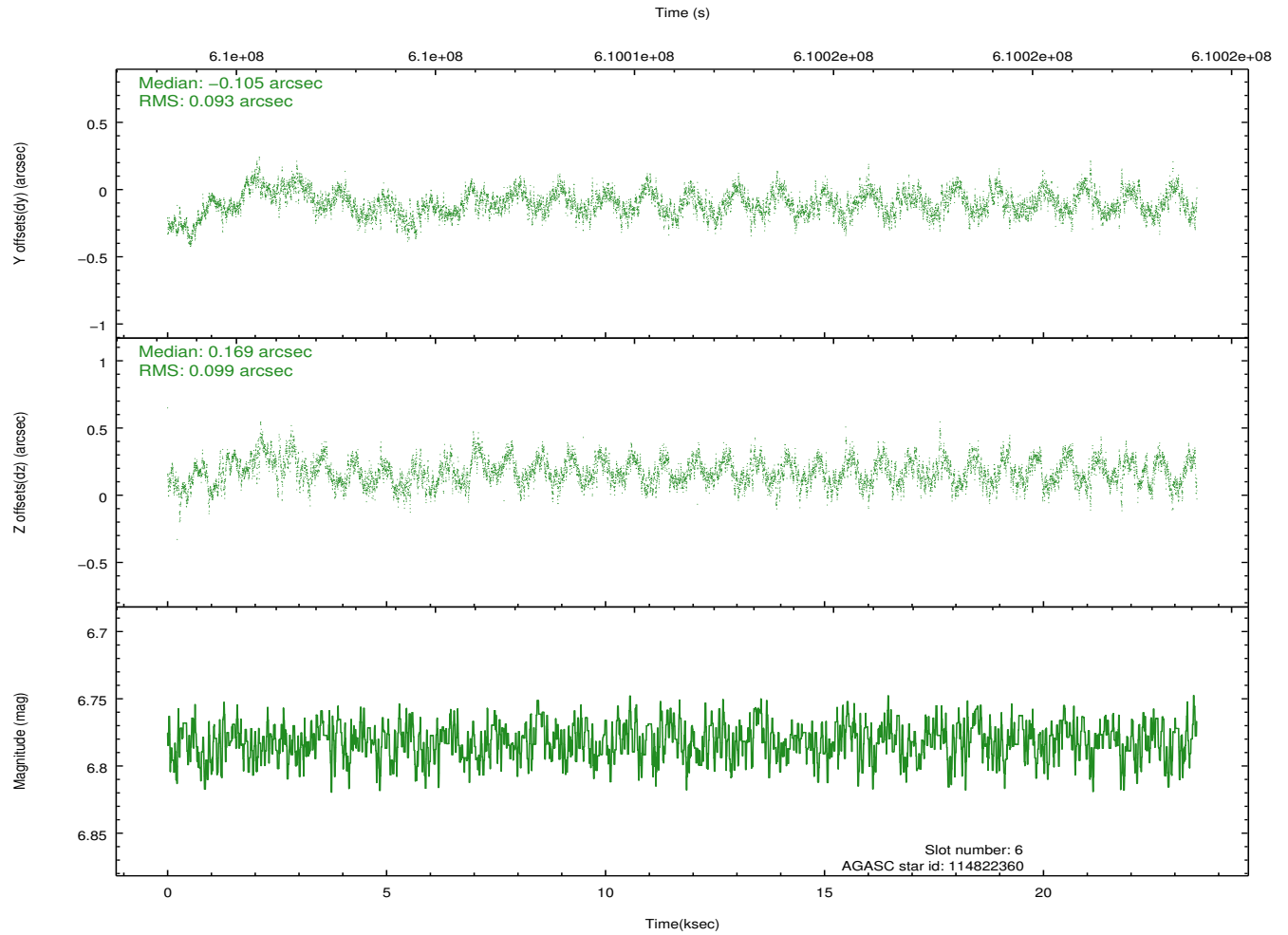
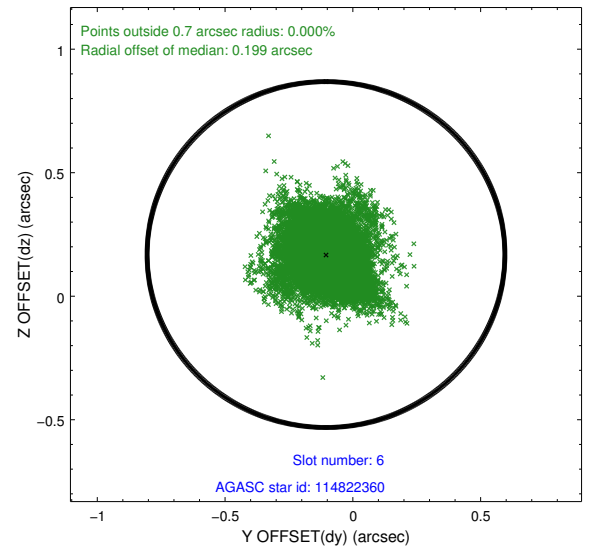
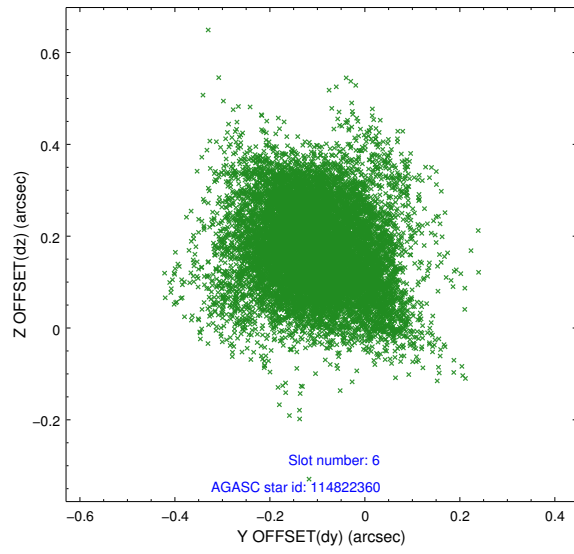
2.4.1 Slot 3



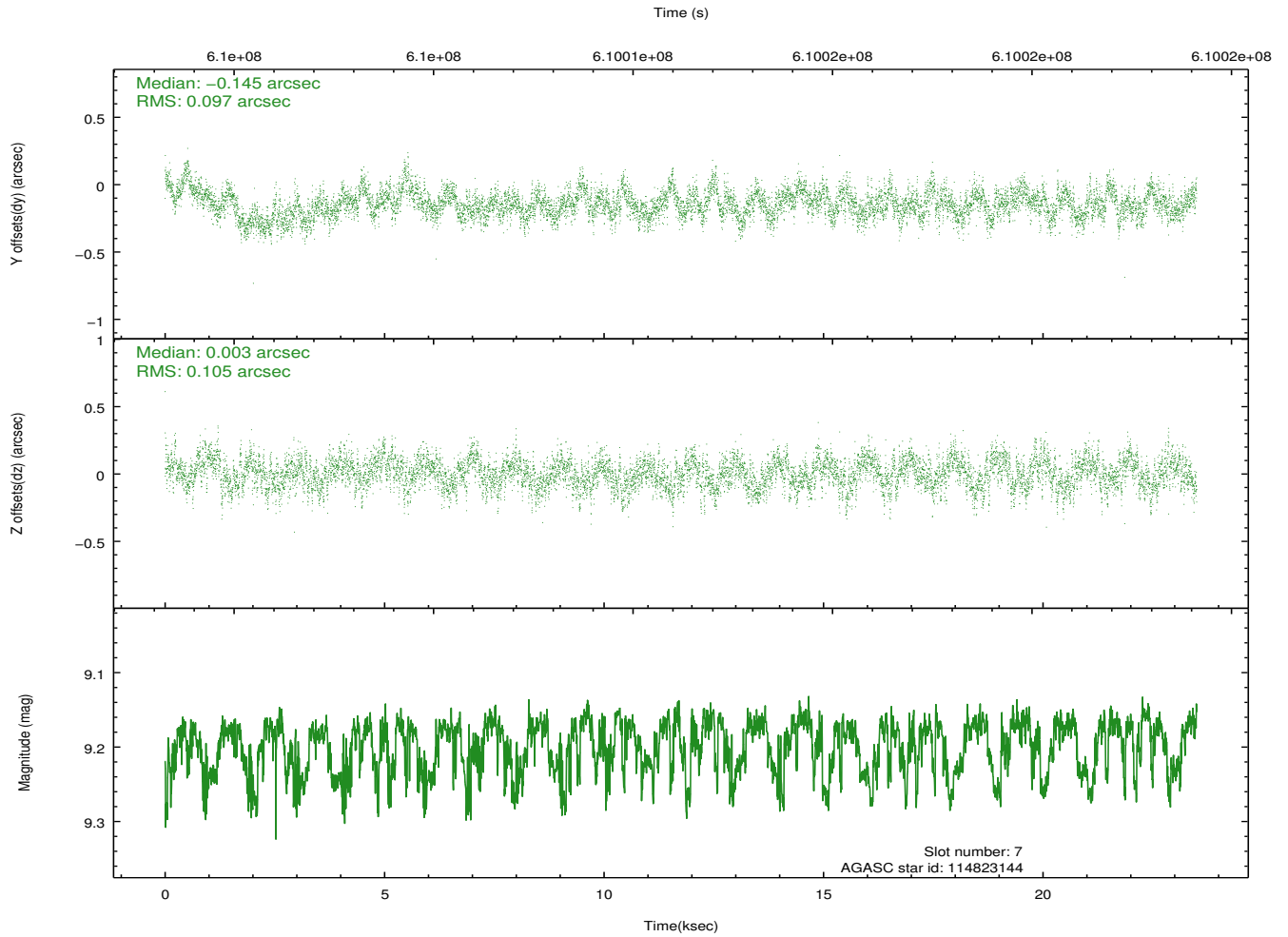
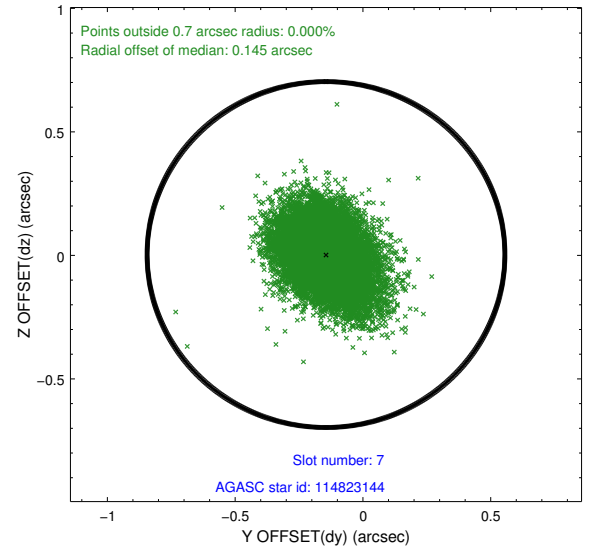
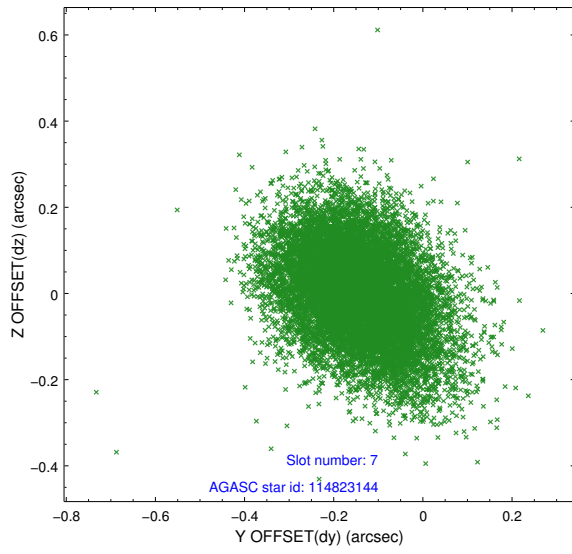
2.4.2 Slot 4



2.4.3 Slot 6

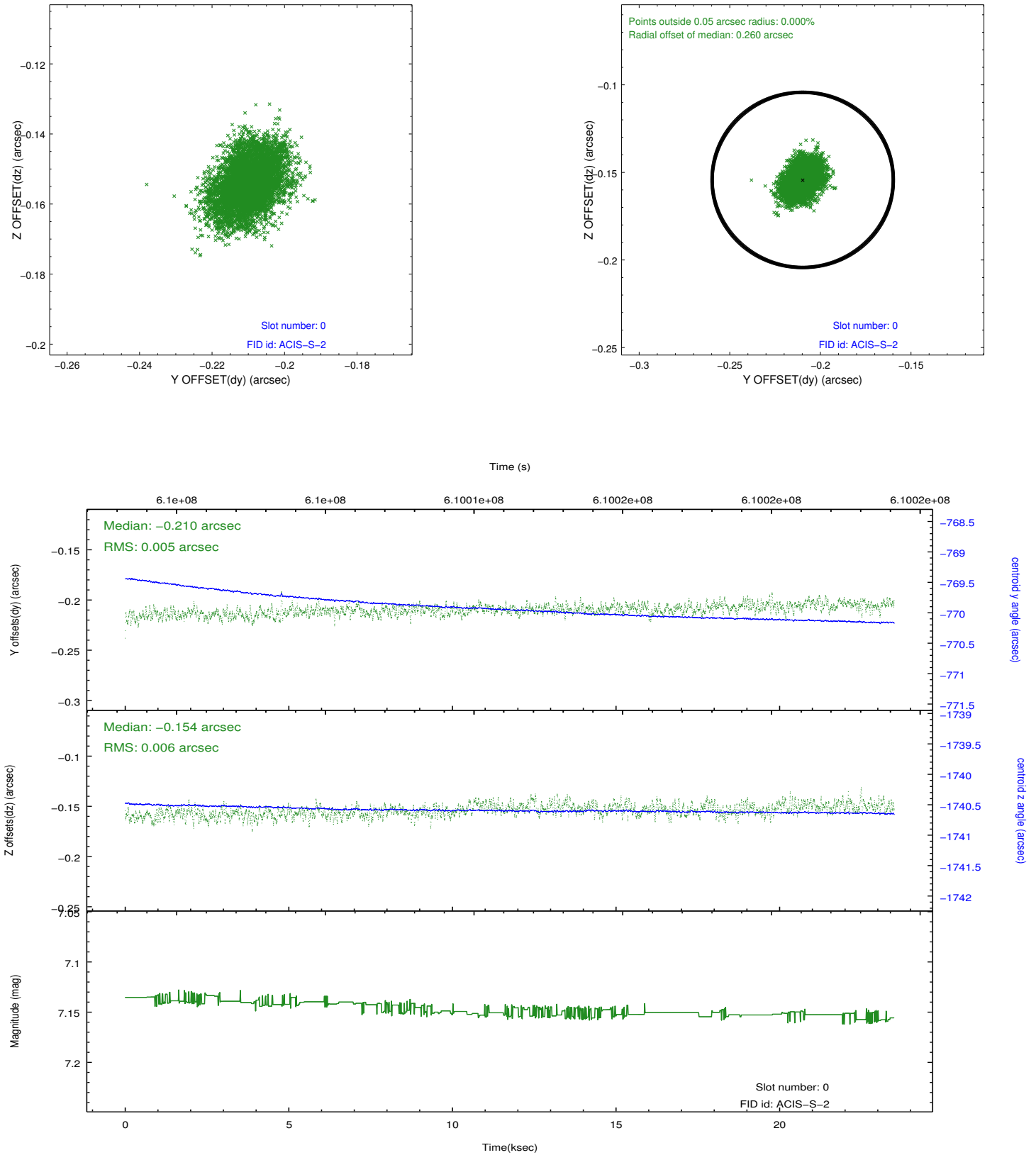


2.4.4 Slot 7

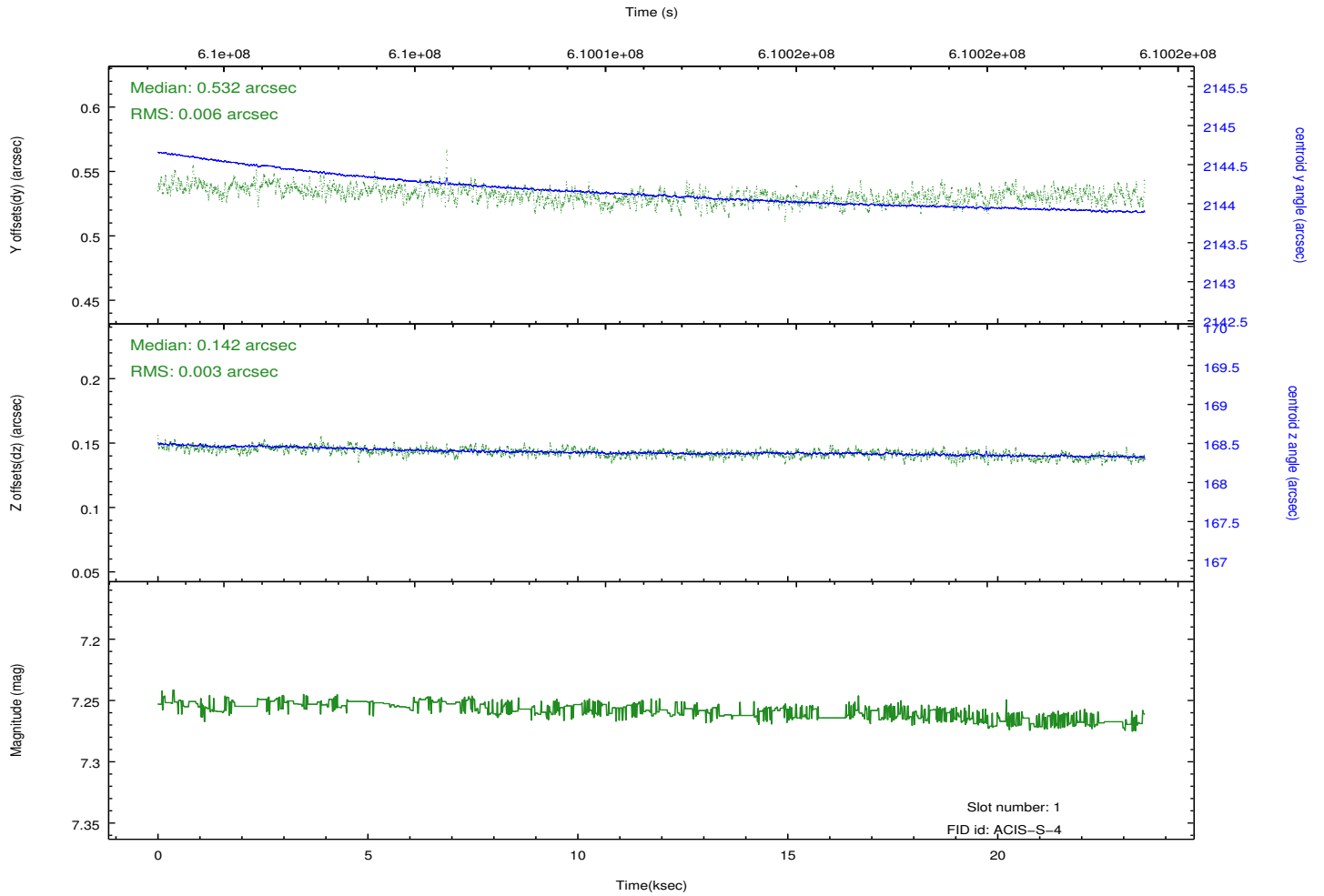
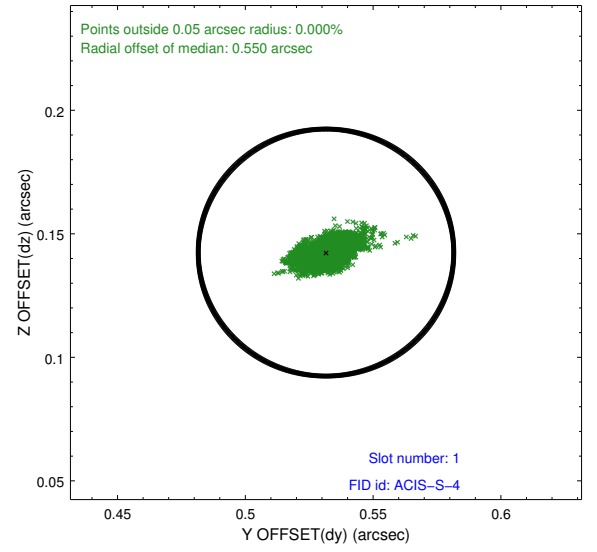
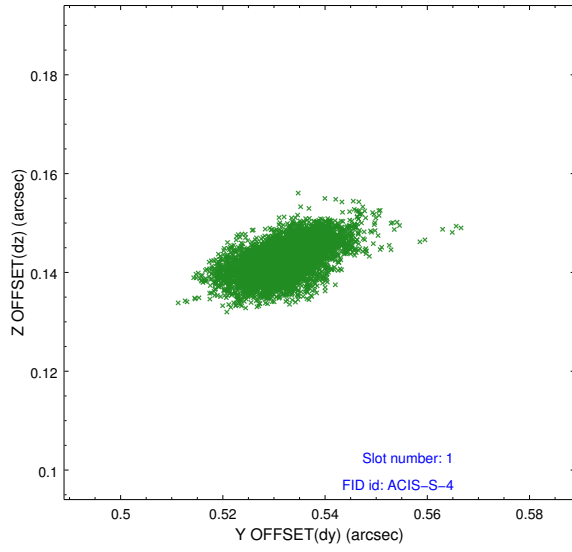


2.5 FID Slots

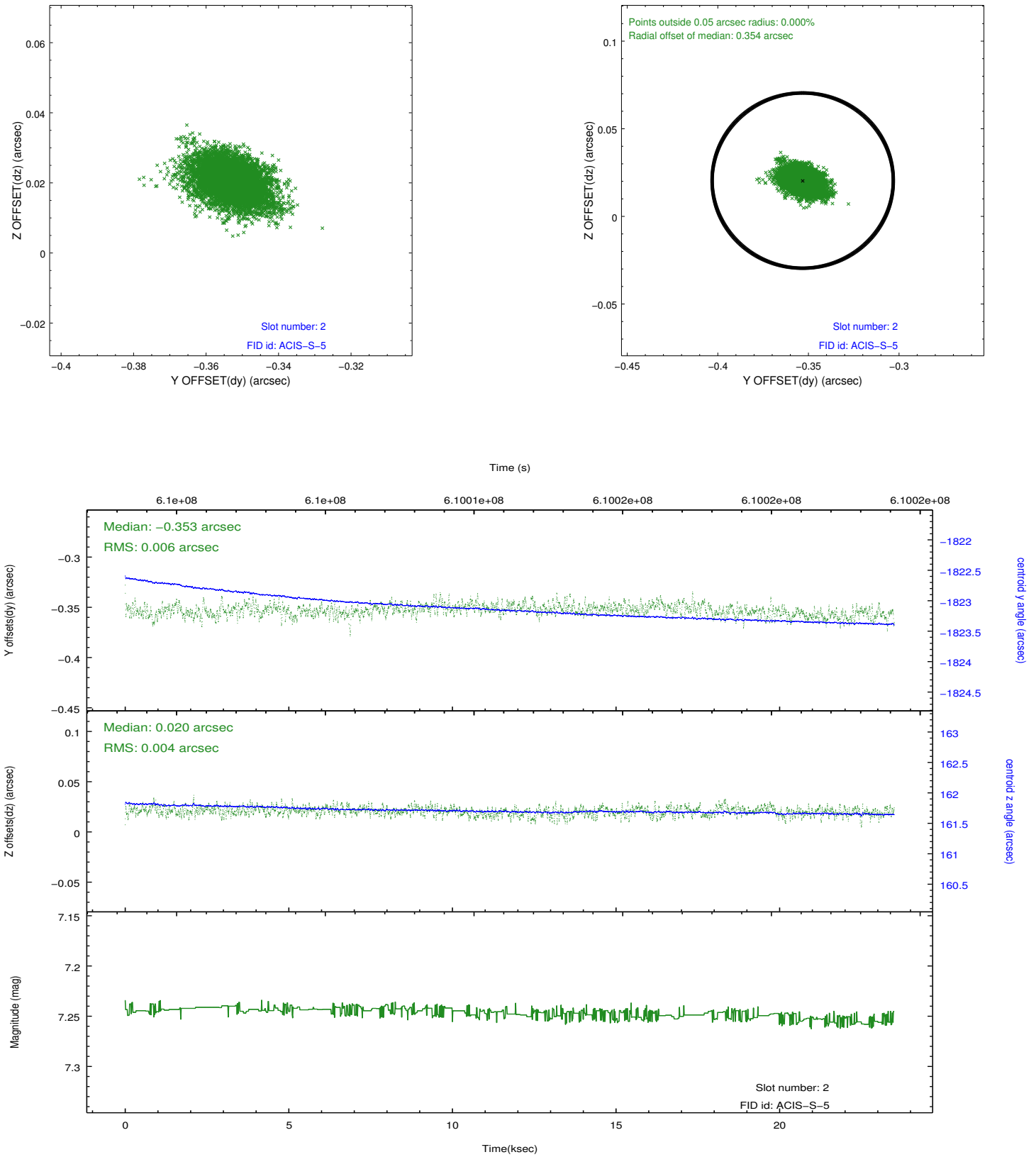
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2017.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	23.454224364638

A.2 Comments

Joint proposal with NuSTAR.

The guide star in slot 5 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.