

V&V Reference Report

L2 ASCDS Version : 10.3.3

Observation 17160 - L2 Version 1
Chandra X-Ray Center

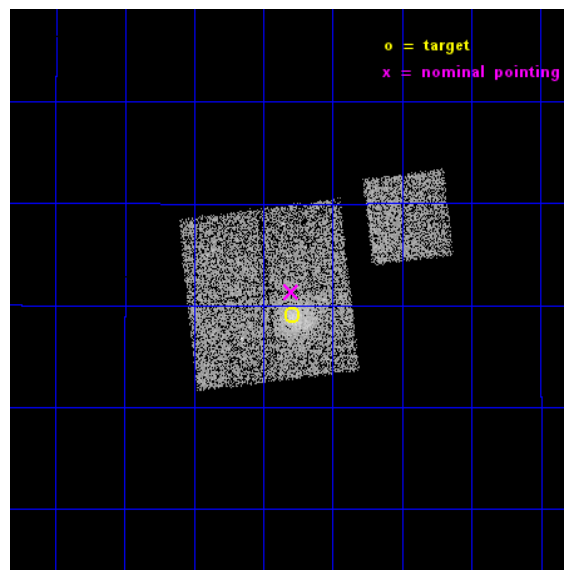
L2 Processing Date : Feb 1 2015

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1 Front

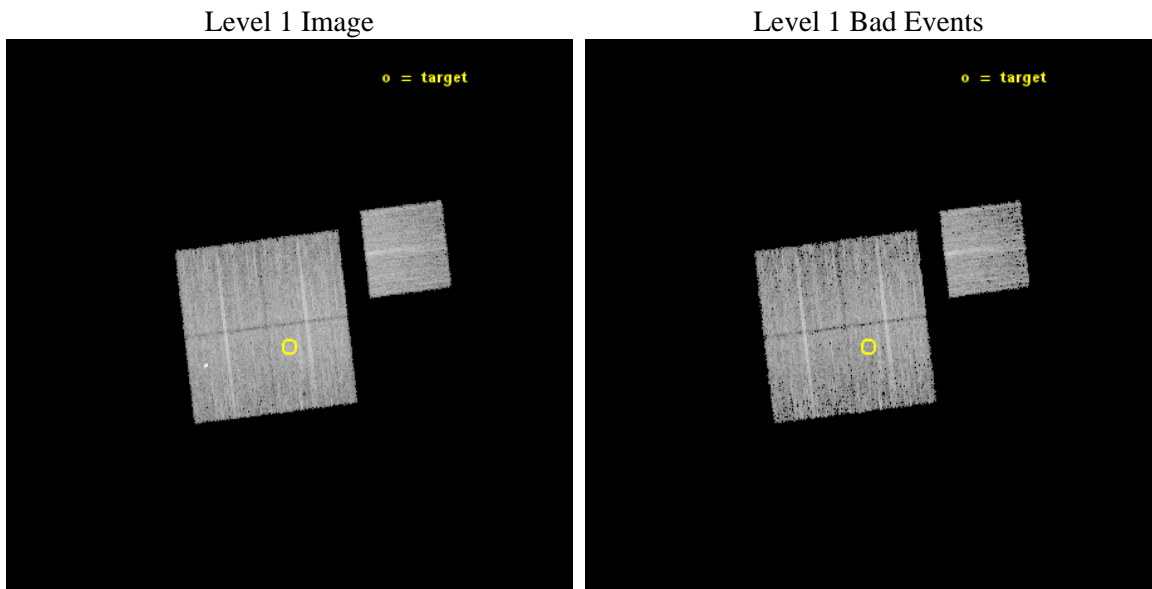
seq_num	801448	Sequence number
obs_id	17160	Observation id
title	Chandra Calibration of the Richness-Mass Relation of Galaxy Clusters: Enabling Cluster Cosmology with the DES	Proposal title
observer	Dr. Eduardo Rozo	Principal investigator
object	RM J105417.5+143904.2	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	163.572917	Observer's specified target RA [deg]
dec_targ	14.651167	Observer's specified target Dec [deg]
ra_nom	163.57435980125	Nominal RA [deg]
dec_nom	14.689090961923	Nominal Dec [deg]
roll_nom	83.098353242331	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10600.971115351	Sum of GTIs [s]
livetime	10462.461623407	Livetime [s]
ontime0	10600.8479954	Sum of GTIs [s]
ontime1	10600.889035344	Sum of GTIs [s]
ontime2	10600.930075407	Sum of GTIs [s]
ontime3	10600.971115351	Sum of GTIs [s]
ontime6	10600.806955338	Sum of GTIs [s]
l2events	27328	Number of level 2 events



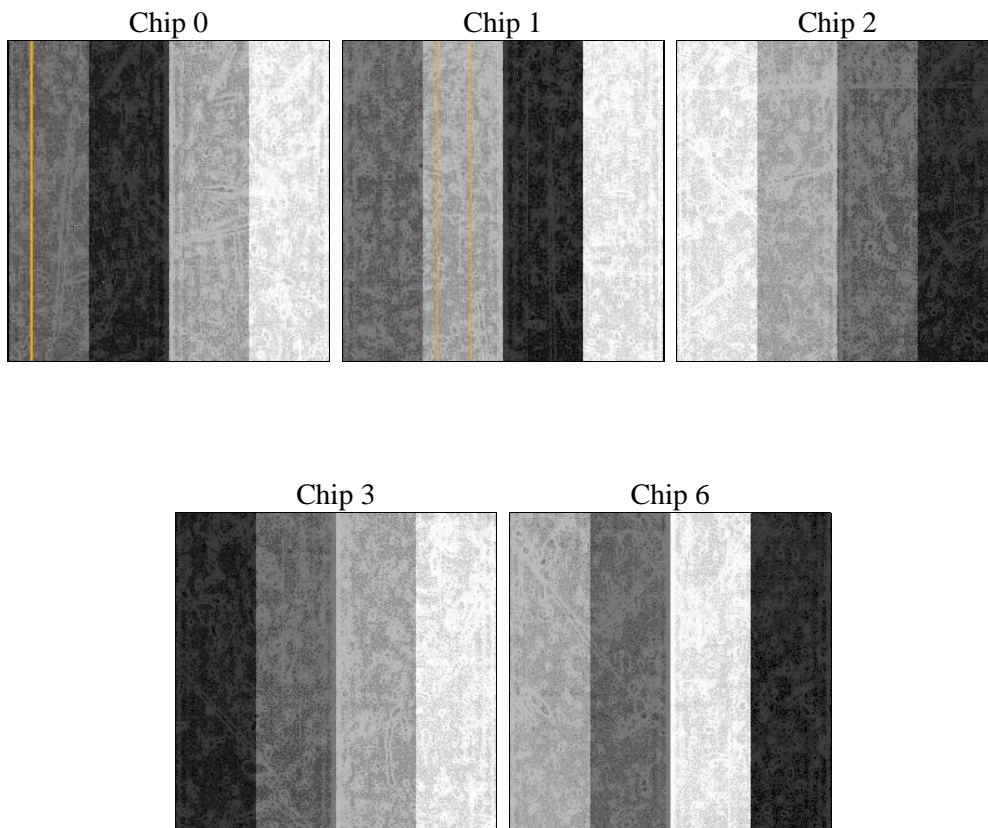
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10827.724000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	10600.971115351	Sum of GTIs [s]
caldsver	4.6.6	 	ontime0	10600.8479954	Sum of GTIs [s]
date	2015-02-01T22:51:53	Date and time of file creation	ontime1	10600.889035344	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	10600.930075407	Sum of GTIs [s]
			ontime3	10600.971115351	Sum of GTIs [s]
			ontime6	10600.806955338	Sum of GTIs [s]
			l1events	243214	Number of level 1 events

2.1.4 Events

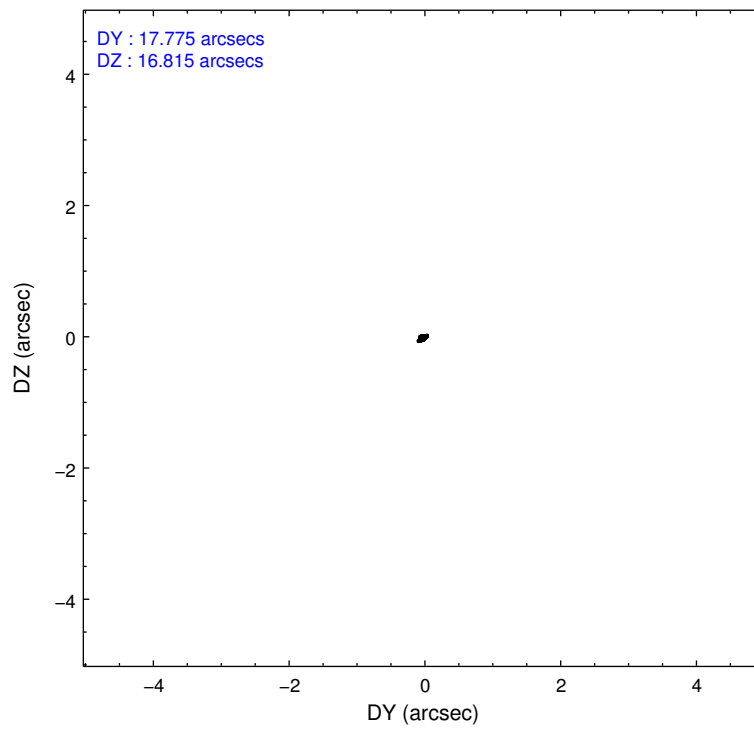
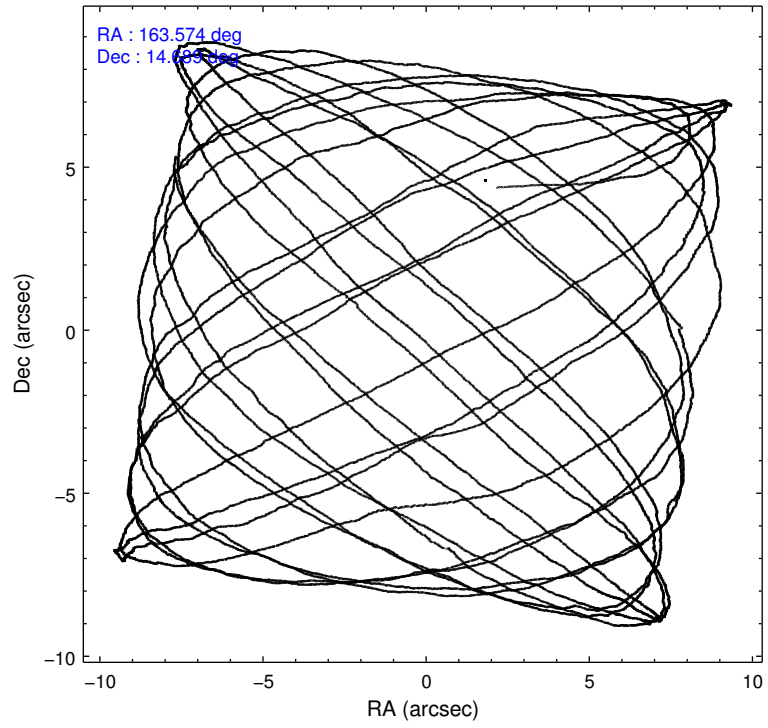
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	45614	47586	49171	51158	49685
rejected events	39899	40082	43504	43155	43799
rejected %	87%	84%	88%	84%	88%

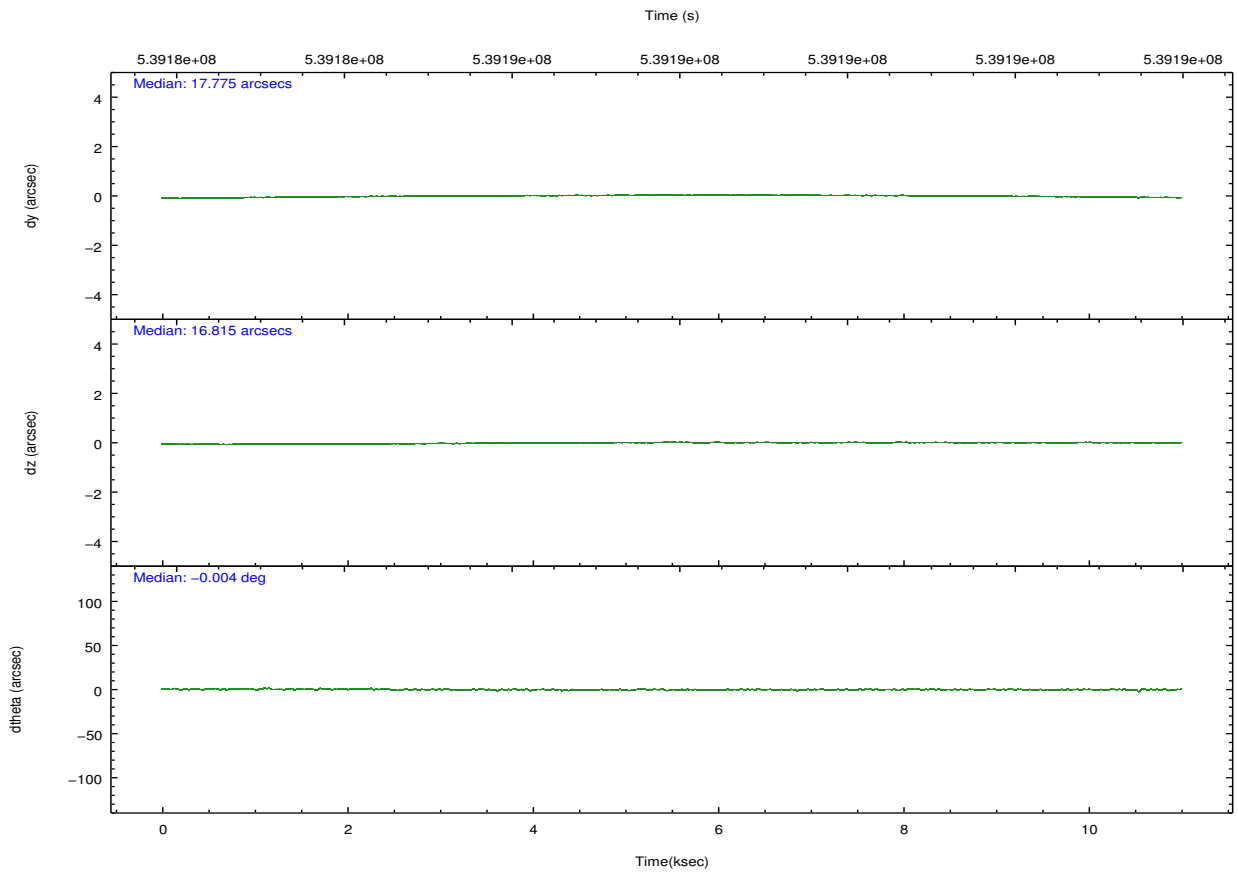
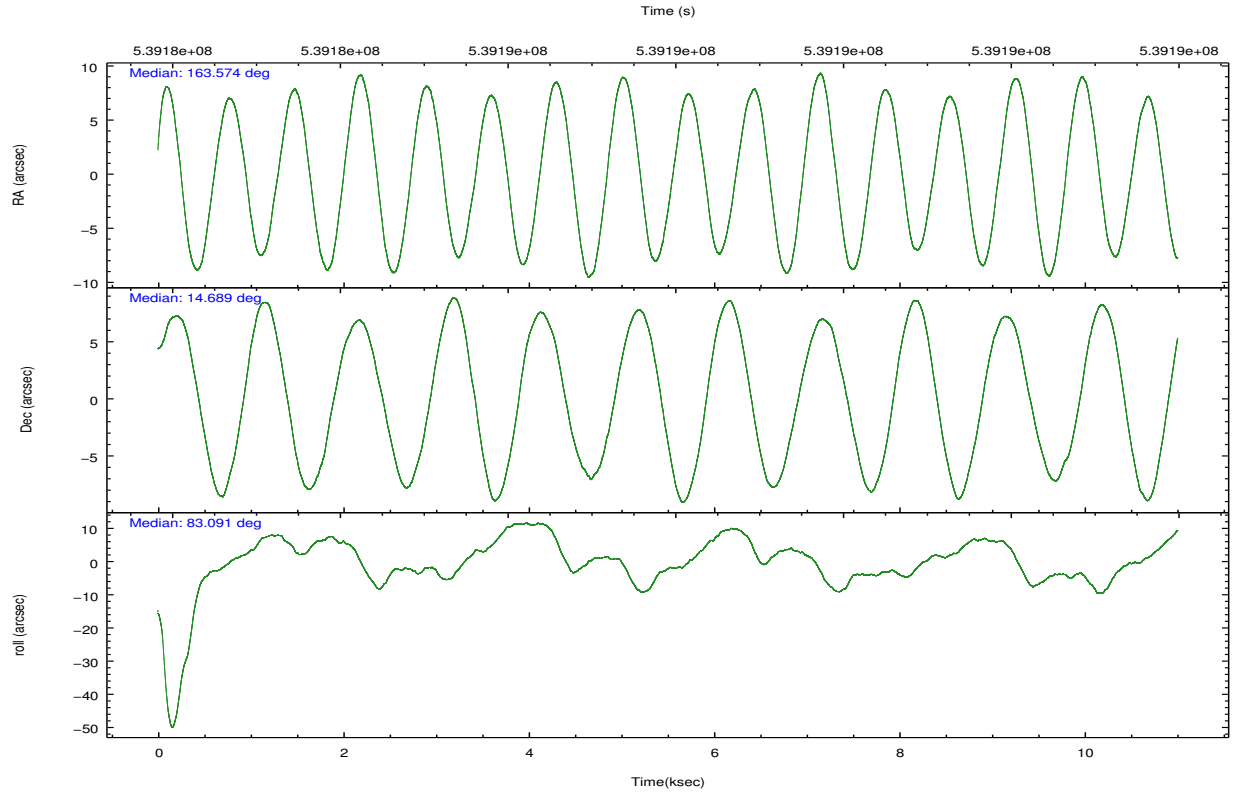
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1934	3365	2043	3844	1881
	4%	7%	4%	7%	3%
grade 1 events	24	38	34	28	13
	0%	0%	0%	0%	0%
grade 2 events	1335	1444	1305	1504	1409
	2%	3%	2%	2%	2%
grade 3 events	591	611	582	653	604
	1%	1%	1%	1%	1%
grade 4 events	599	591	601	658	569
	1%	1%	1%	1%	1%
grade 5 events	2425	2444	2200	2692	2537
	5%	5%	4%	5%	5%
grade 6 events	1258	1495	1137	1345	1424
	2%	3%	2%	2%	2%
grade 7 events	37448	37598	41269	40434	41248
	82%	79%	83%	79%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	163.585650	163.5743598012507	CCD I2 on	Y	Y
[deg] Pointing Dec	14.663737	14.68909096192256	CCD I3 on	Y	Y
[deg] Pointing Roll	82.886770	83.0983532423306	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	O1	Y
[mm] SIM translation stage pos	-228.472463	-228.4808600833603	CCD S3 on	N	N
[mm] SIM translation stage offset	-5.12	-5.111592919569347	CCD S4 on	N	N
[s] Observation start time (MET)	539182570.184000	539181924.40405	CCD S5 on	N	N
Observation start date	2015-02-01T12:55:03	2015-02-01T12:45:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	539193398.184000	539193632.97971	On-chip summing requested	N	N
Observation end date	2015-02-01T15:55:31	2015-02-01T16:00:32	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





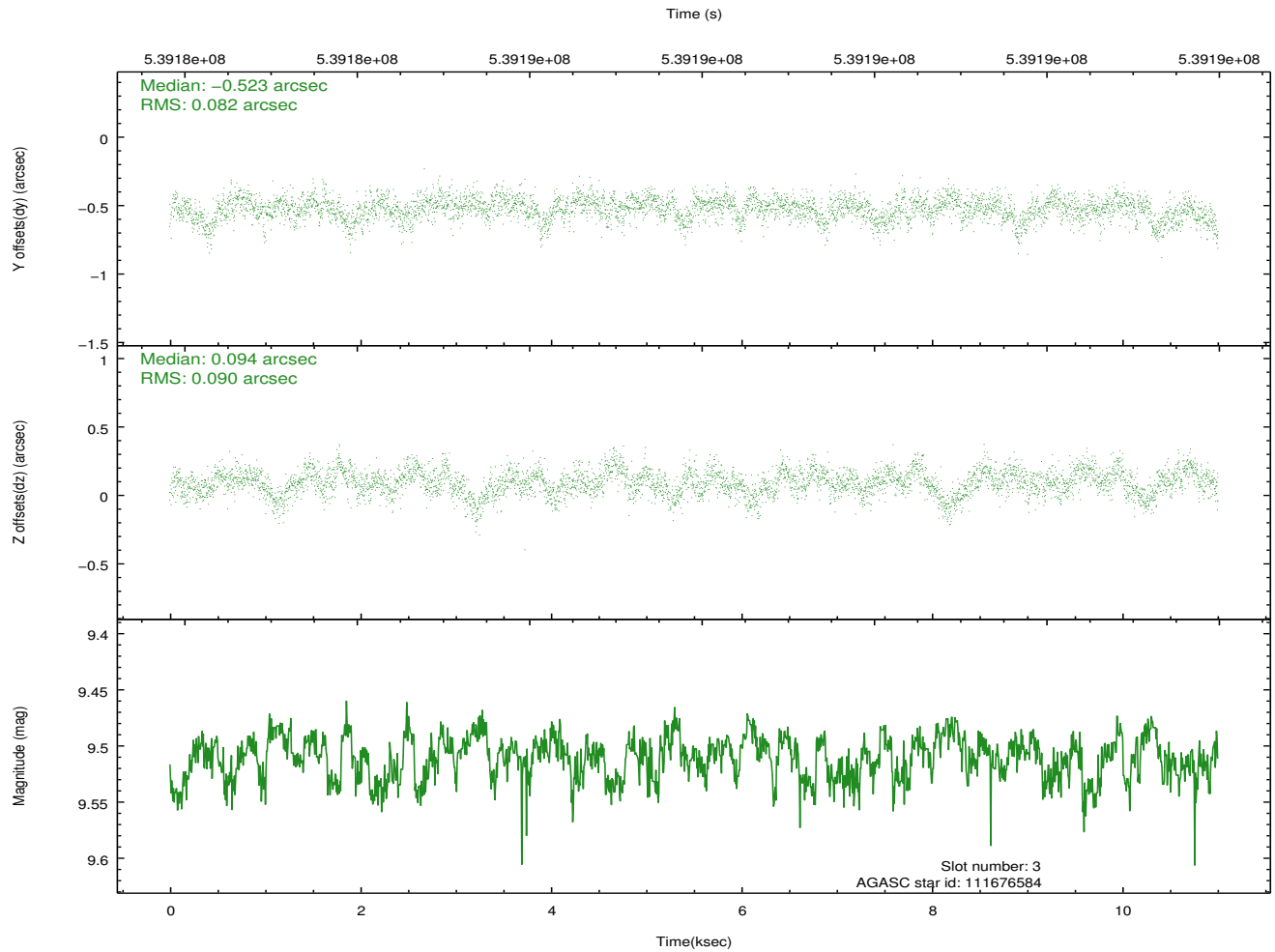
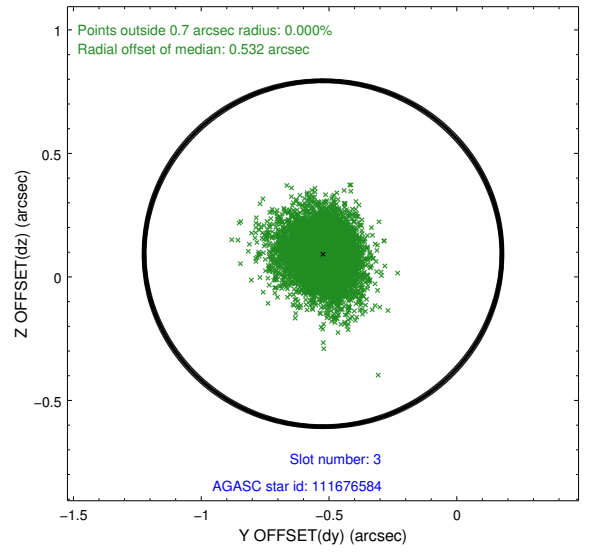
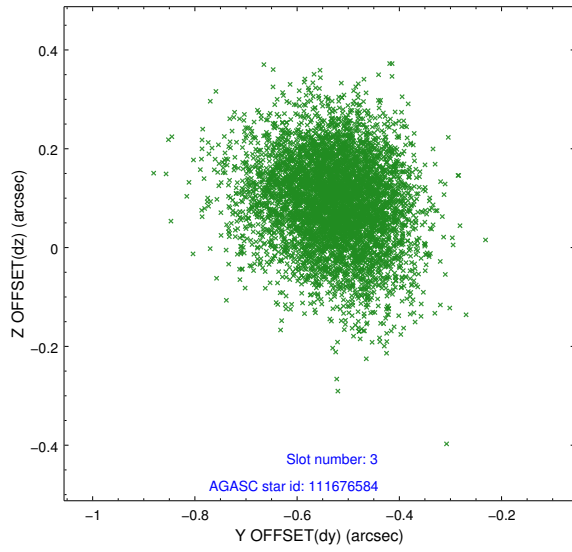
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.21	2685	0.123	-0.099	0.009	0.019	0.000000	0.000000	921.68	-945.42
1	FID		ACIS-I-5	7.21	2684	-0.325	0.085	0.007	0.012	0.000000	0.000000	-1826.68	951.90
2	FID		ACIS-I-6	7.20	2685	0.110	0.086	0.008	0.014	0.000000	0.000000	386.62	1597.00
3	GUIDE	used	111676584	9.51	5332	-0.523	0.094	0.128	0.213	163.119140	14.067211	-2331.74	1350.77
4	GUIDE	used	111676640	9.38	5362	0.057	0.073	0.160	0.266	163.220277	14.740153	115.95	1296.88
5	GUIDE	used	111805224	9.83	5363	0.246	0.156	0.327	0.513	163.661817	14.985576	1182.81	-118.79
6	GUIDE	used	187305256	9.94	5355	0.272	-0.391	0.256	0.391	163.329770	15.067063	1331.30	1062.27
7	GUIDE	used	187307000	8.46	5369	-0.010	0.102	0.121	0.191	163.691792	15.196891	1950.59	-127.60

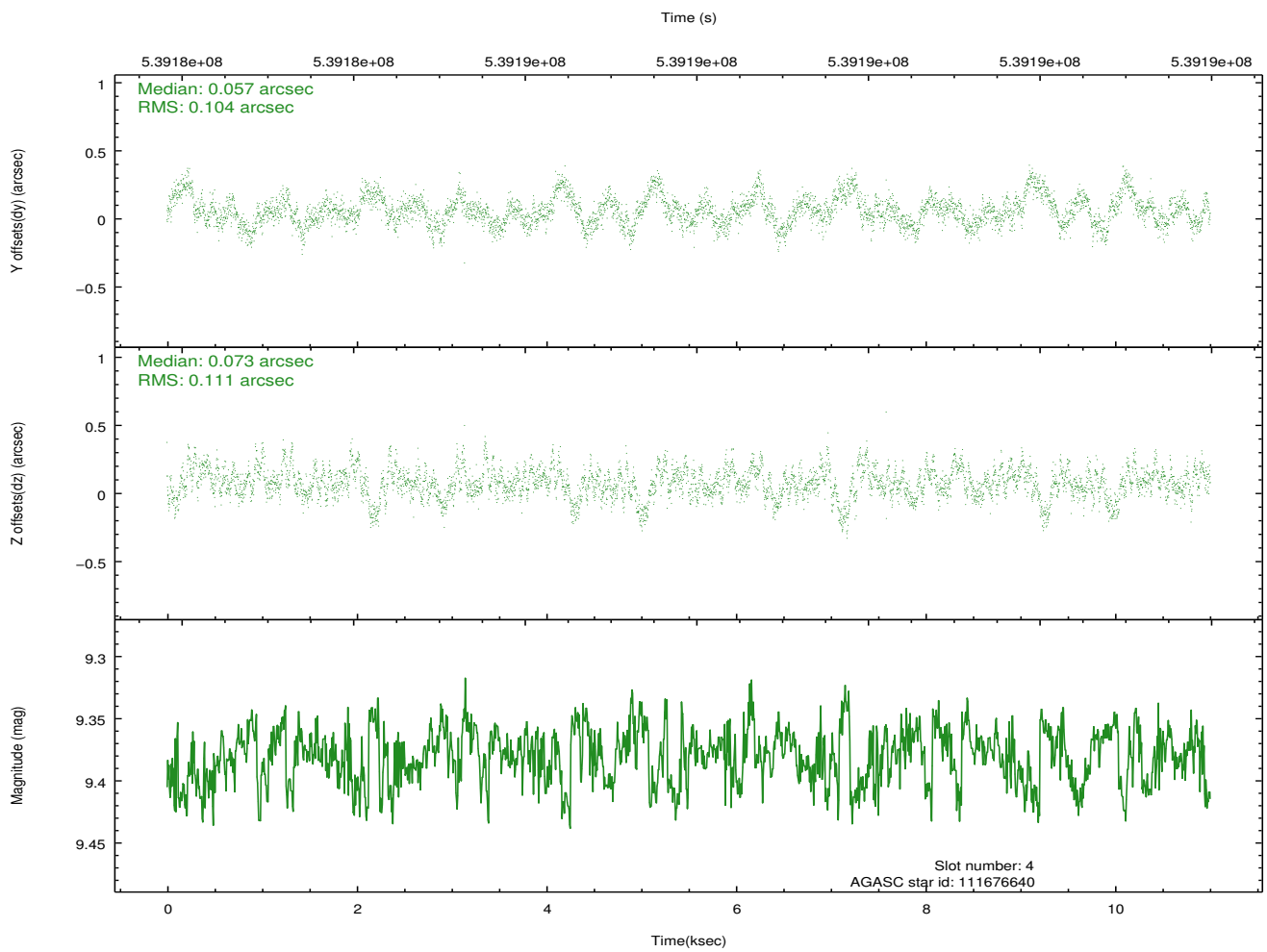
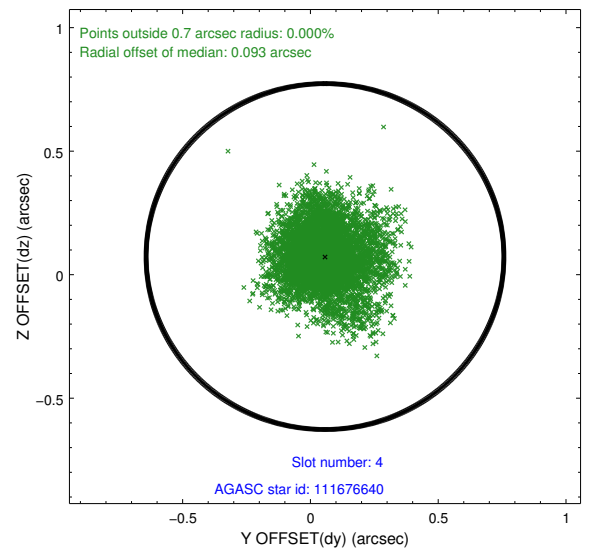
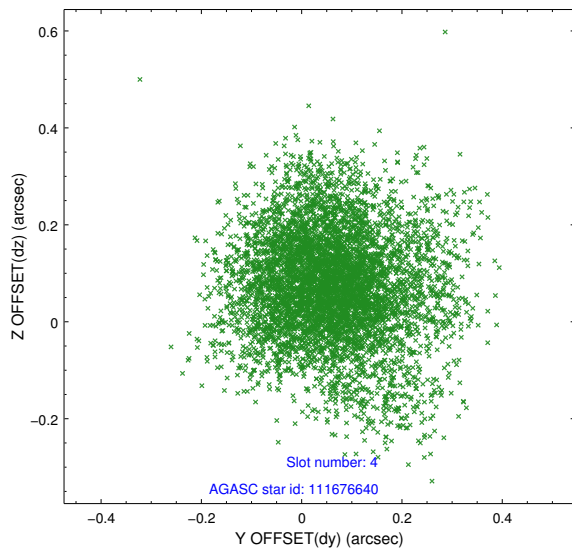
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2.4 Star Slots

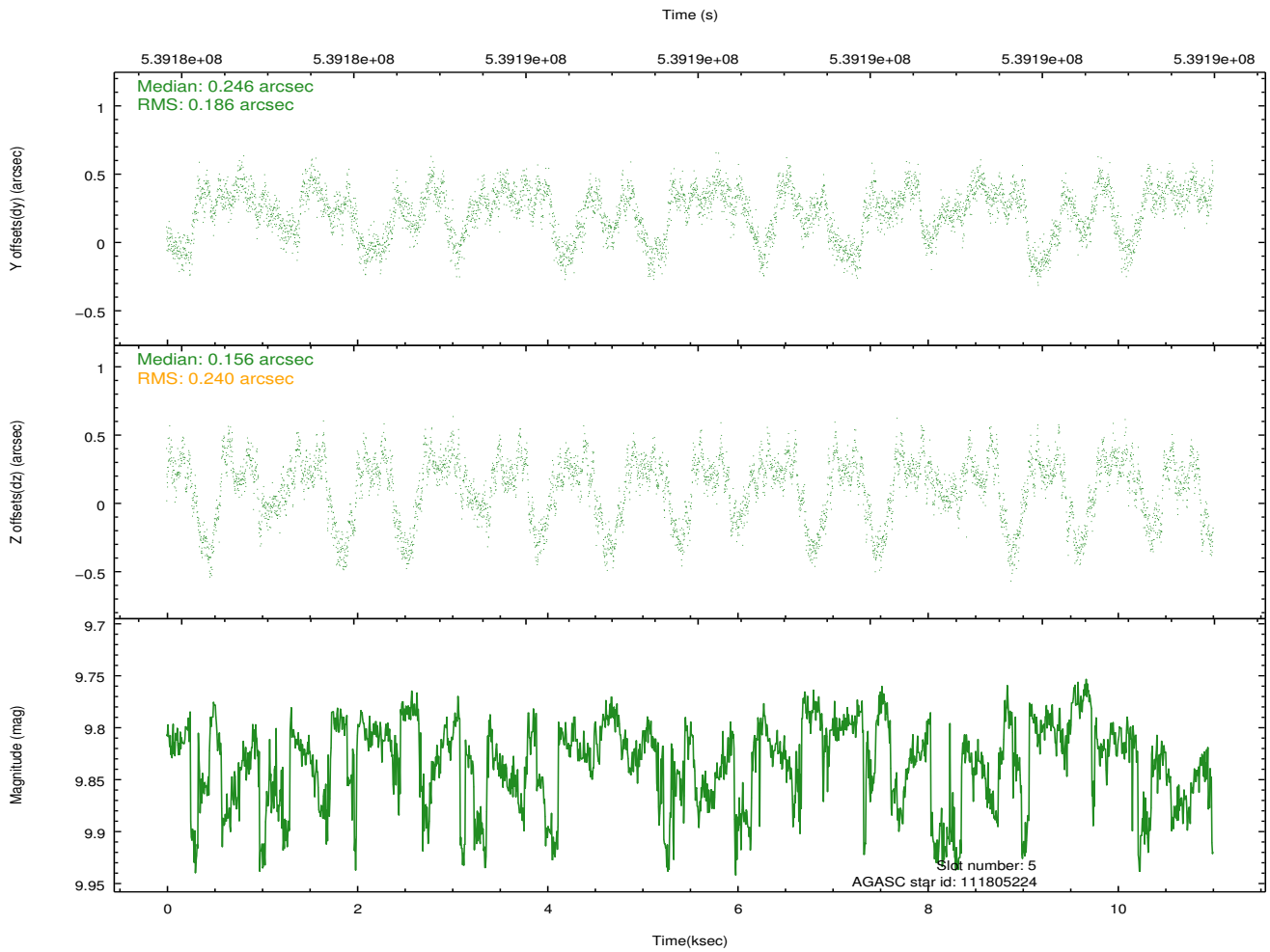
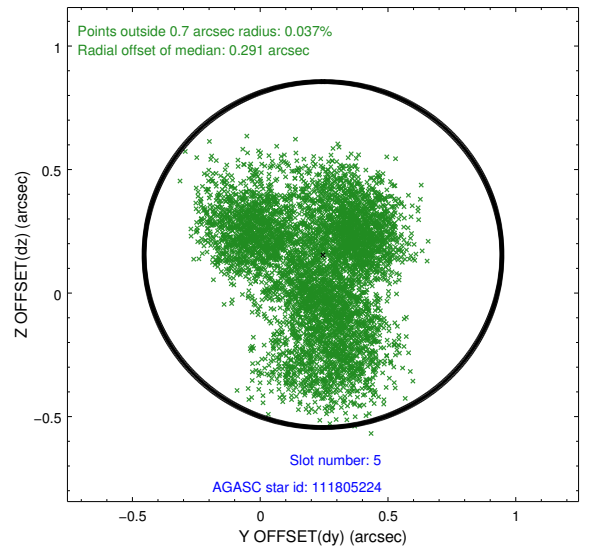
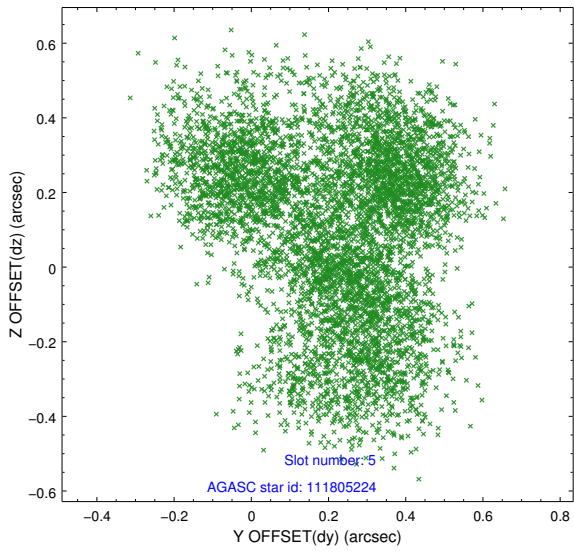
2.4.1 Slot 3



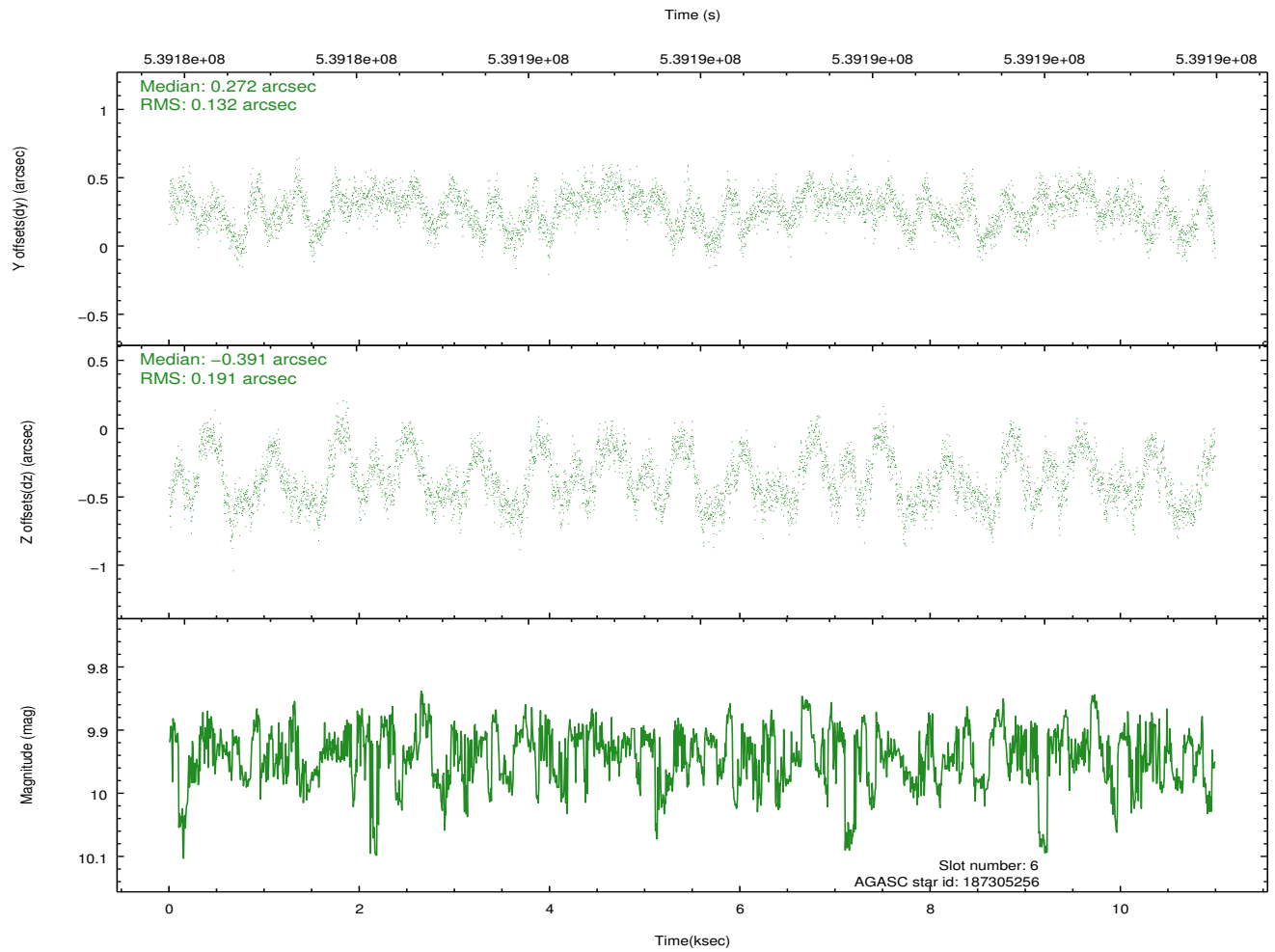
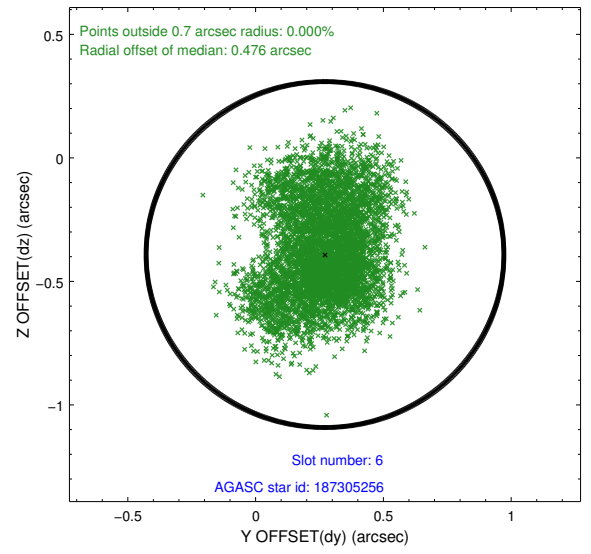
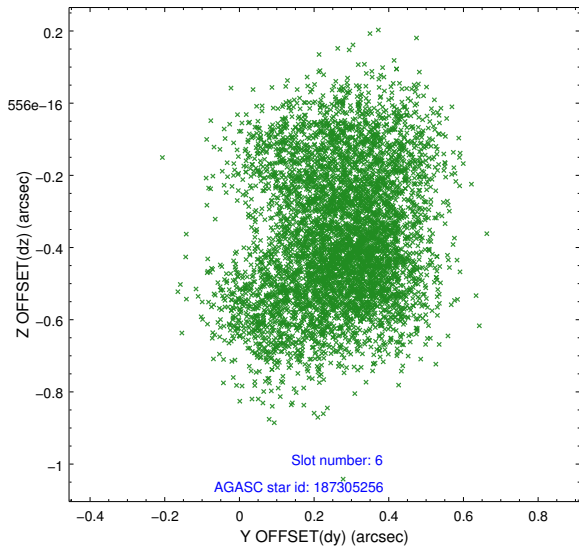
2.4.2 Slot 4



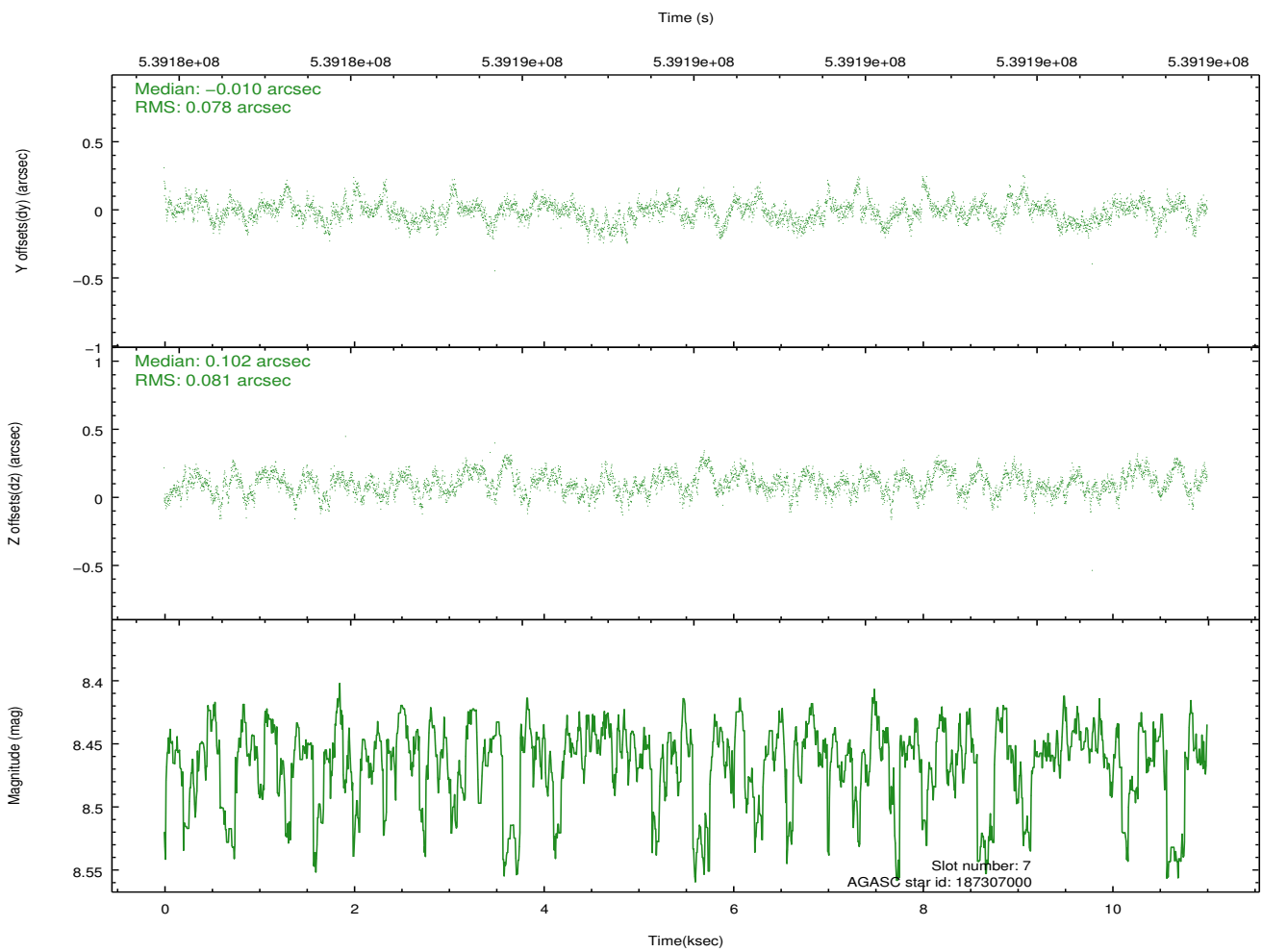
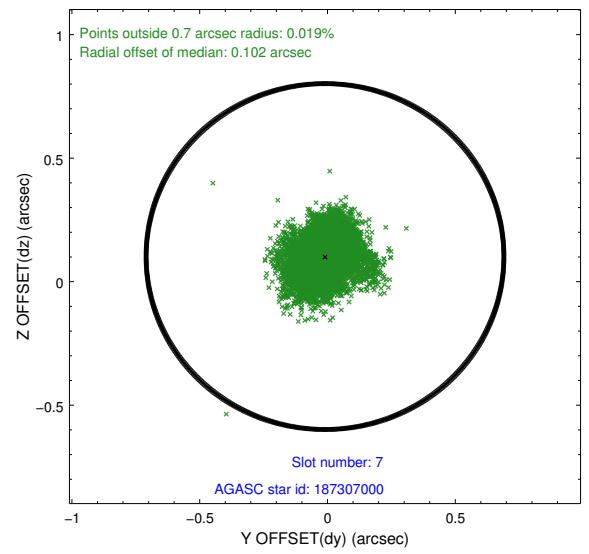
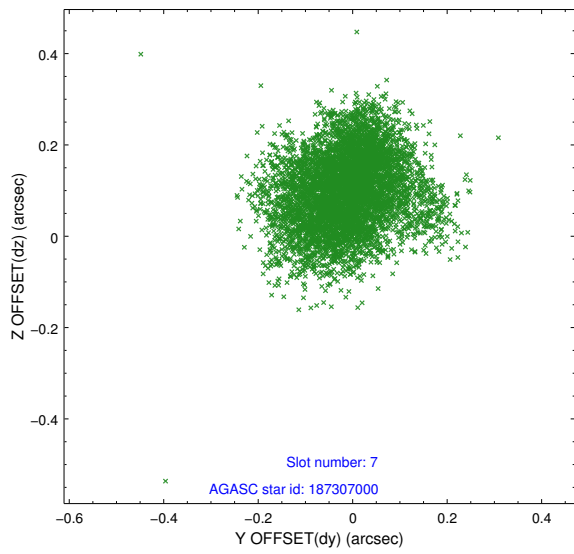
2.4.3 Slot 5



2.4.4 Slot 6

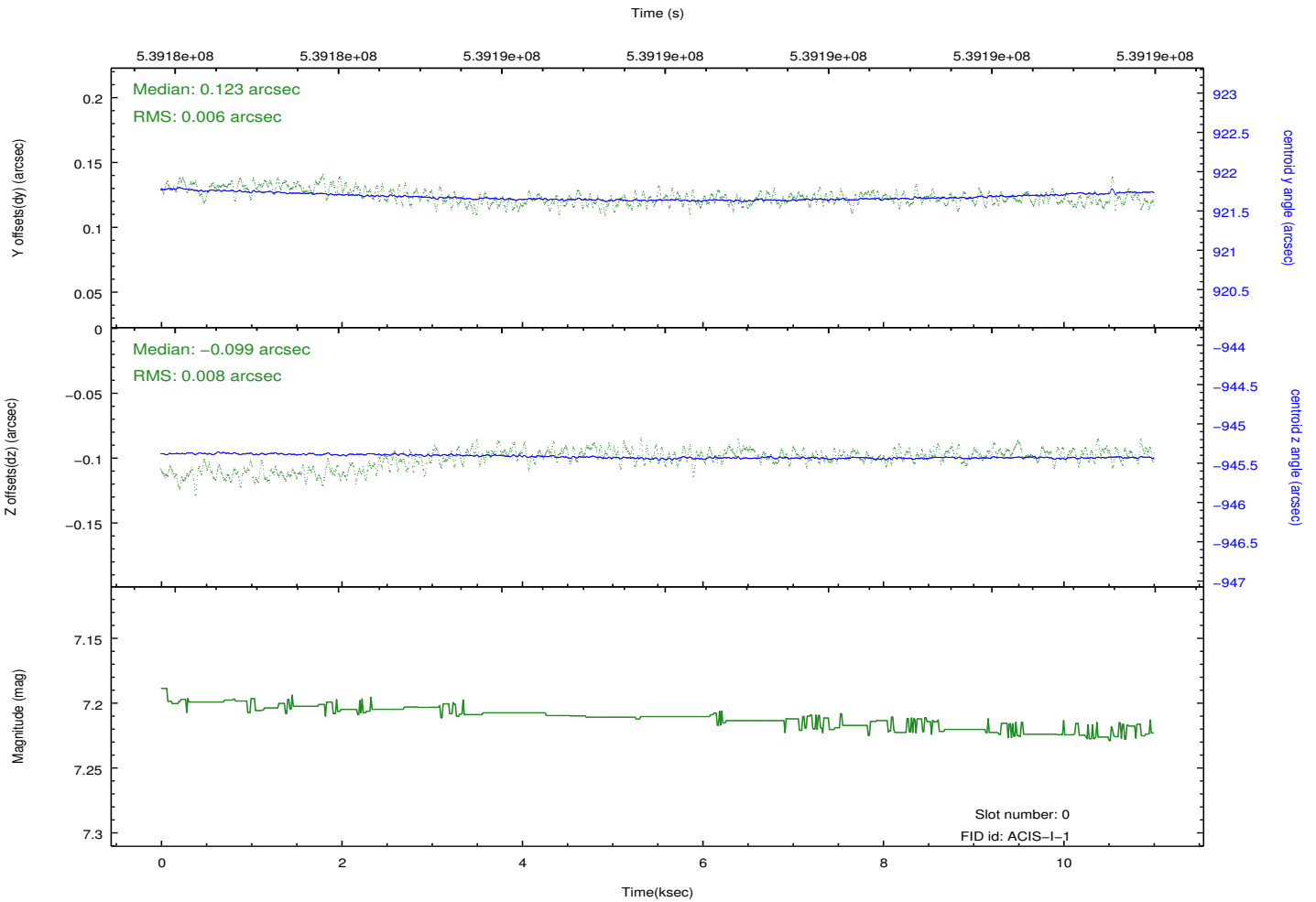
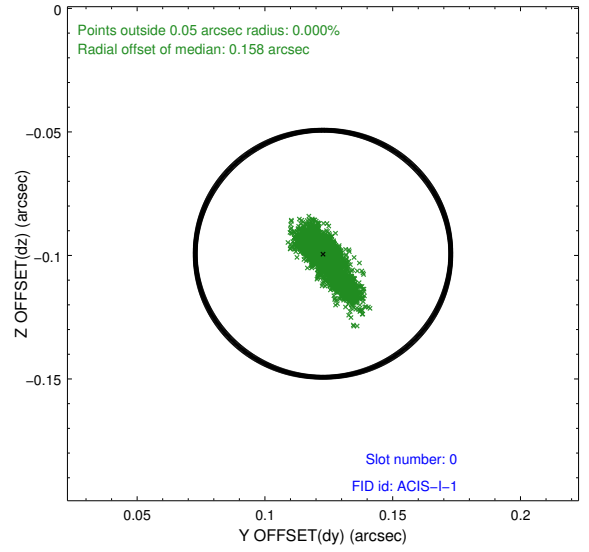
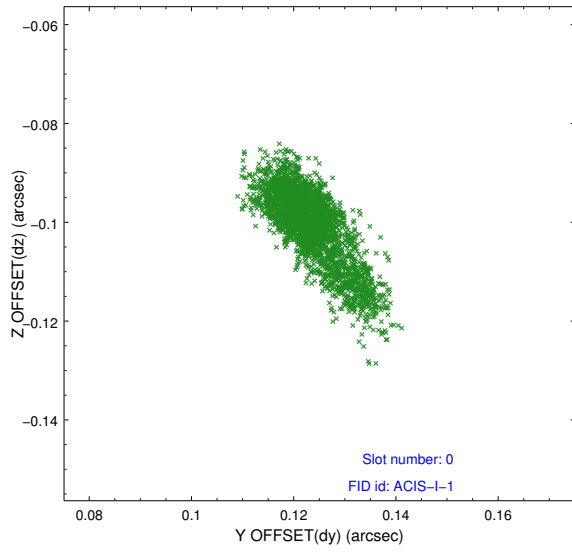


2.4.5 Slot 7

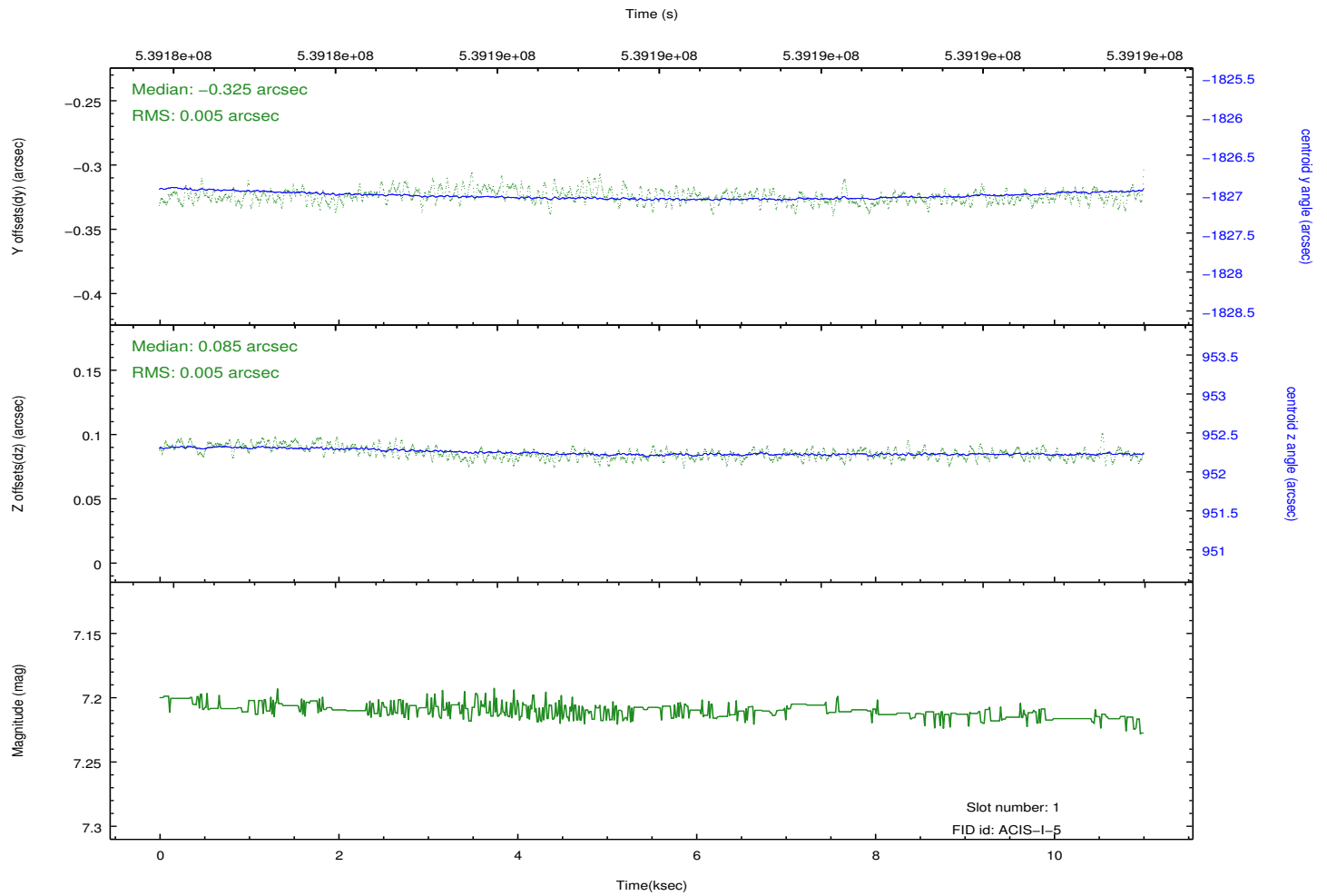
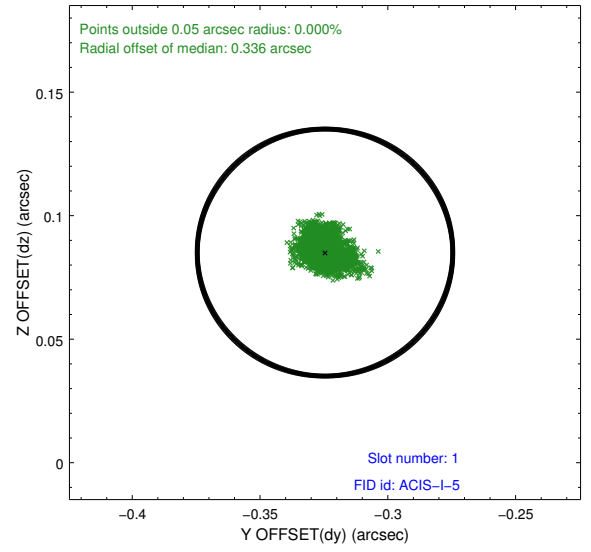
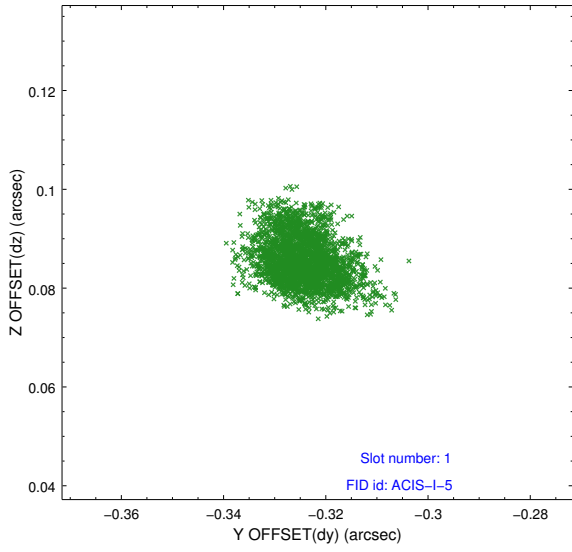


2.5 FID Slots

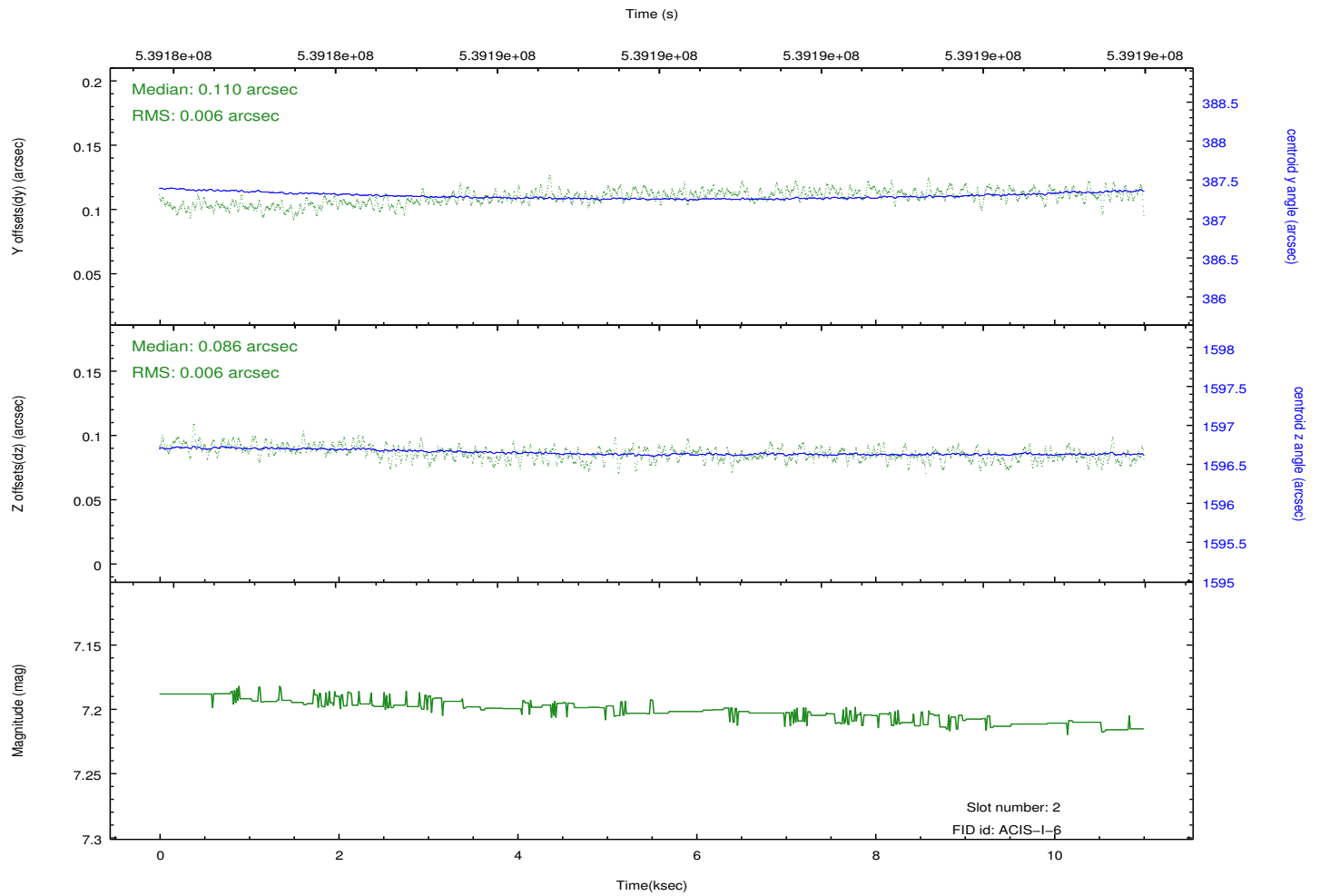
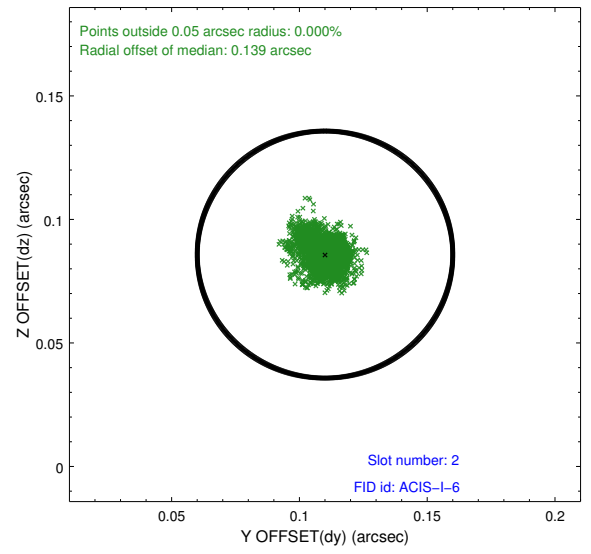
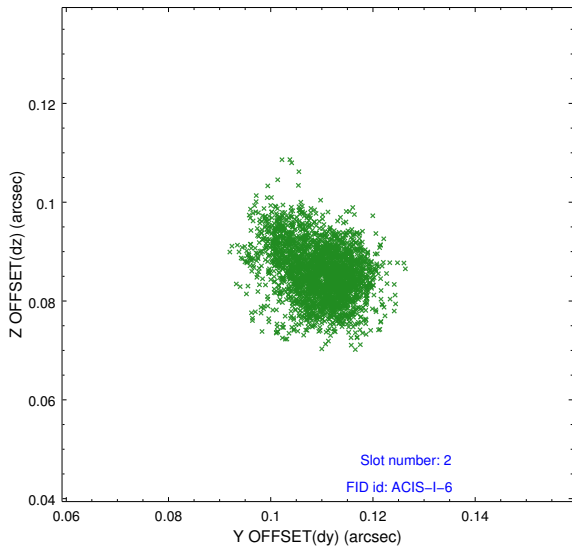
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2015.02.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.600971115351

A.2 Comments