

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17289 - L2 Version 1
Chandra X-Ray Center

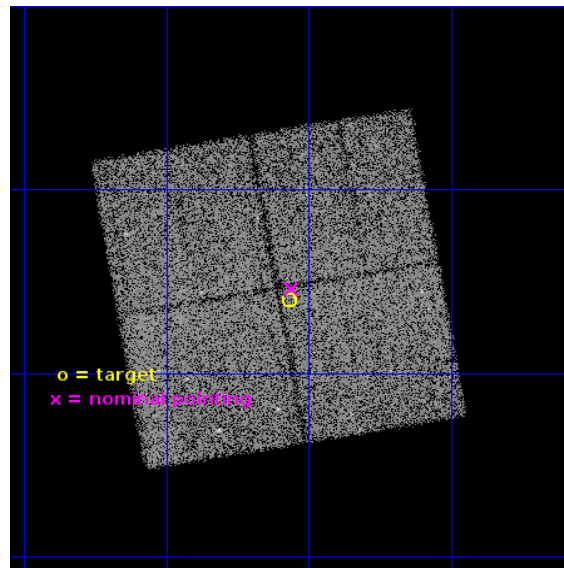
L2 Processing Date : Sep 26 2015

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 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

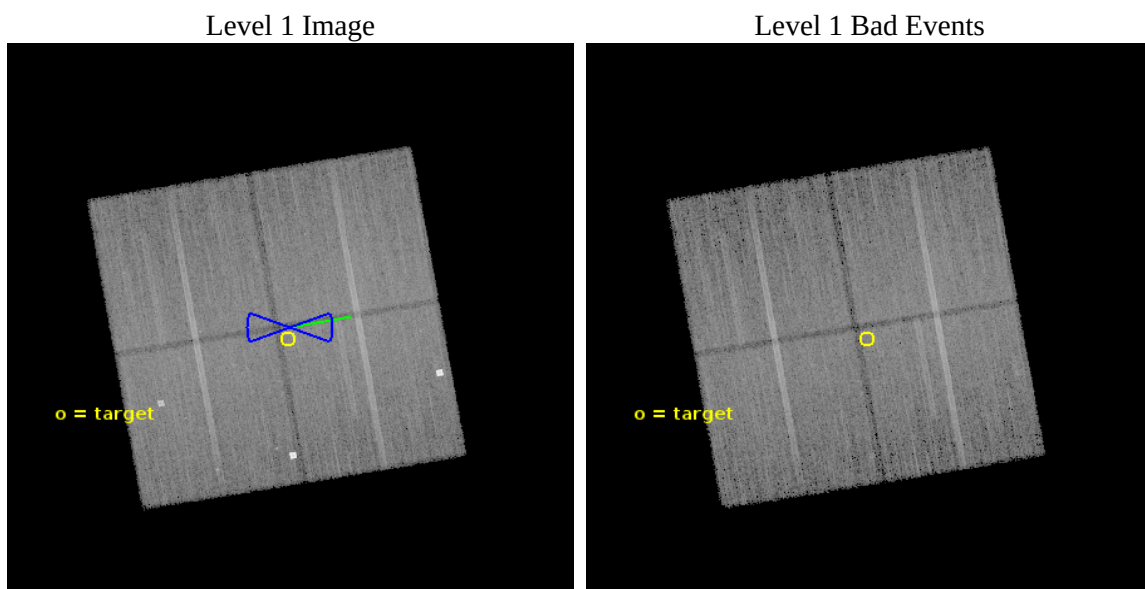
seq_num	901147	Sequence number
obs_id	17289	Observation id
title	Black Hole Fingerprints from Cosmic Dawn to Cosmic Noon	Proposal t
observer	Prof. Guenther Hasinger	Principal investigator
object	UDS	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	34.391923	Observer's specified target RA [deg]
dec_targ	-5.266524	Observer's specified target Dec [deg]
ra_nom	34.39030231815	Nominal RA [deg]
dec_nom	-5.256615308292	Nominal Dec [deg]
roll_nom	80.208547612589	Nominal Roll [deg]
revision	1	Processing version of data
ontime	46573.710425138	Sum of GTIs [s]
livetime	45965.190611367	Livetime [s]
ontime0	46573.587305188	Sum of GTIs [s]
ontime1	46573.628345132	Sum of GTIs [s]
ontime2	46570.528325081	Sum of GTIs [s]
ontime3	46573.710425138	Sum of GTIs [s]
l2events	94234	Number of level 2 events



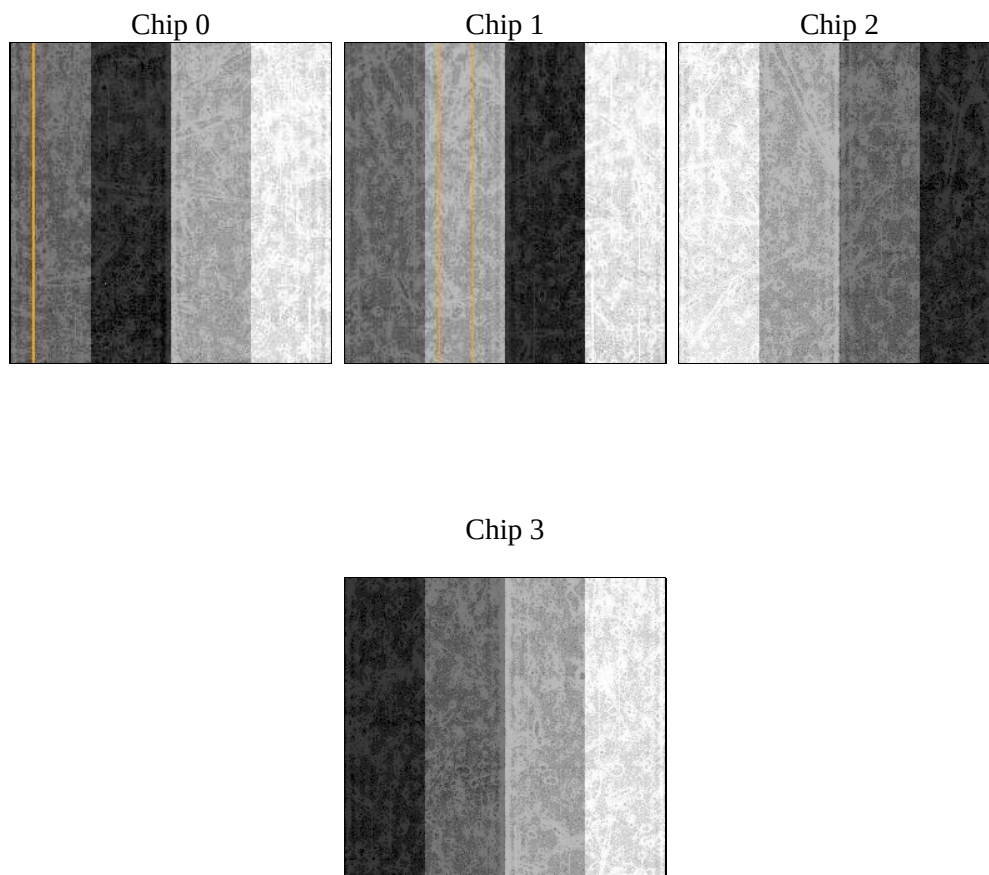
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	46500.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	46573.710425138	Sum of GTIs [s]
caldsver	4.6.8	 	ontime0	46573.587305188	Sum of GTIs [s]
date	2015-09-27T02:12:19	Date and time of file creation	ontime1	46573.628345132	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	46570.528325081	Sum of GTIs [s]
			ontime3	46573.710425138	Sum of GTIs [s]
			l1events	1009294	Number of level 1 events

2.1.4 Events

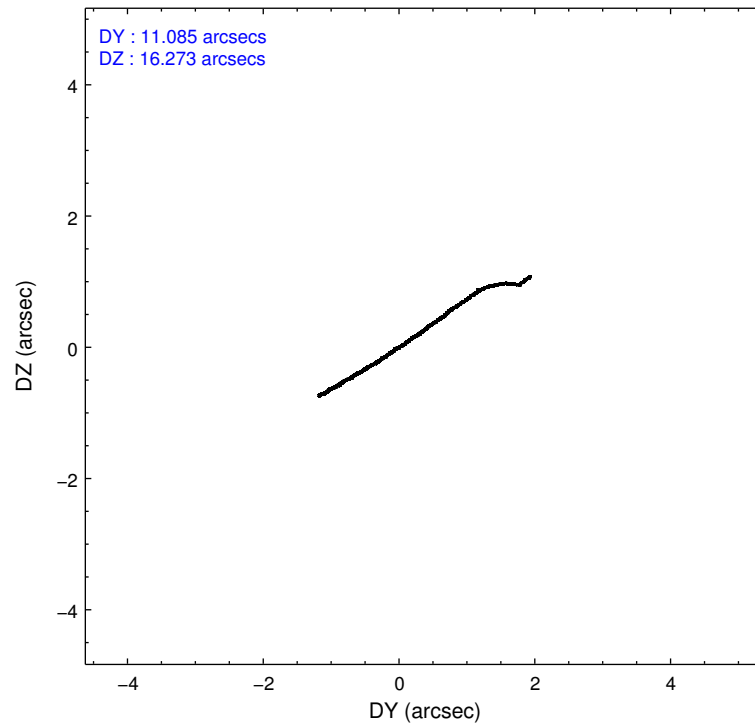
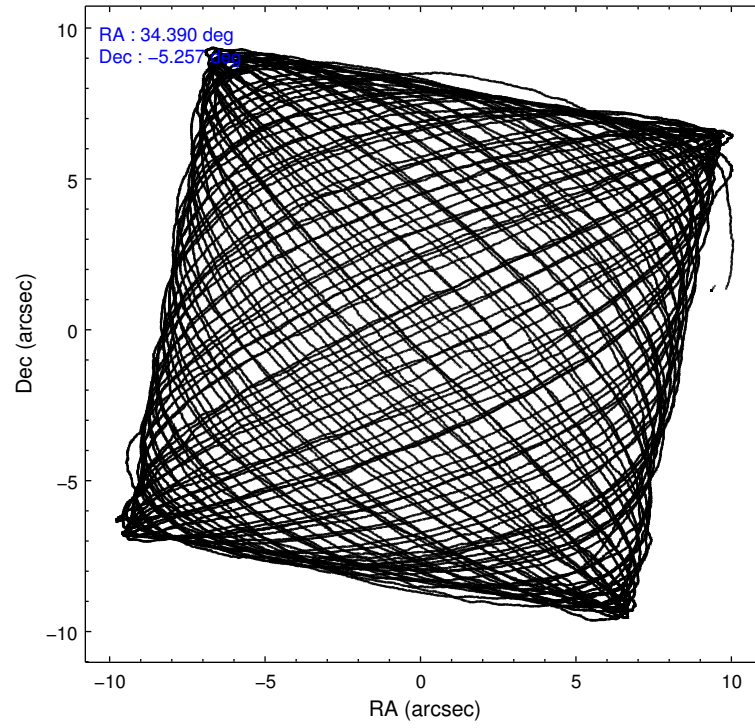
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	232064	257769	257327	262134
rejected events	203908	210107	230370	221366
rejected %	87%	81%	89%	84%

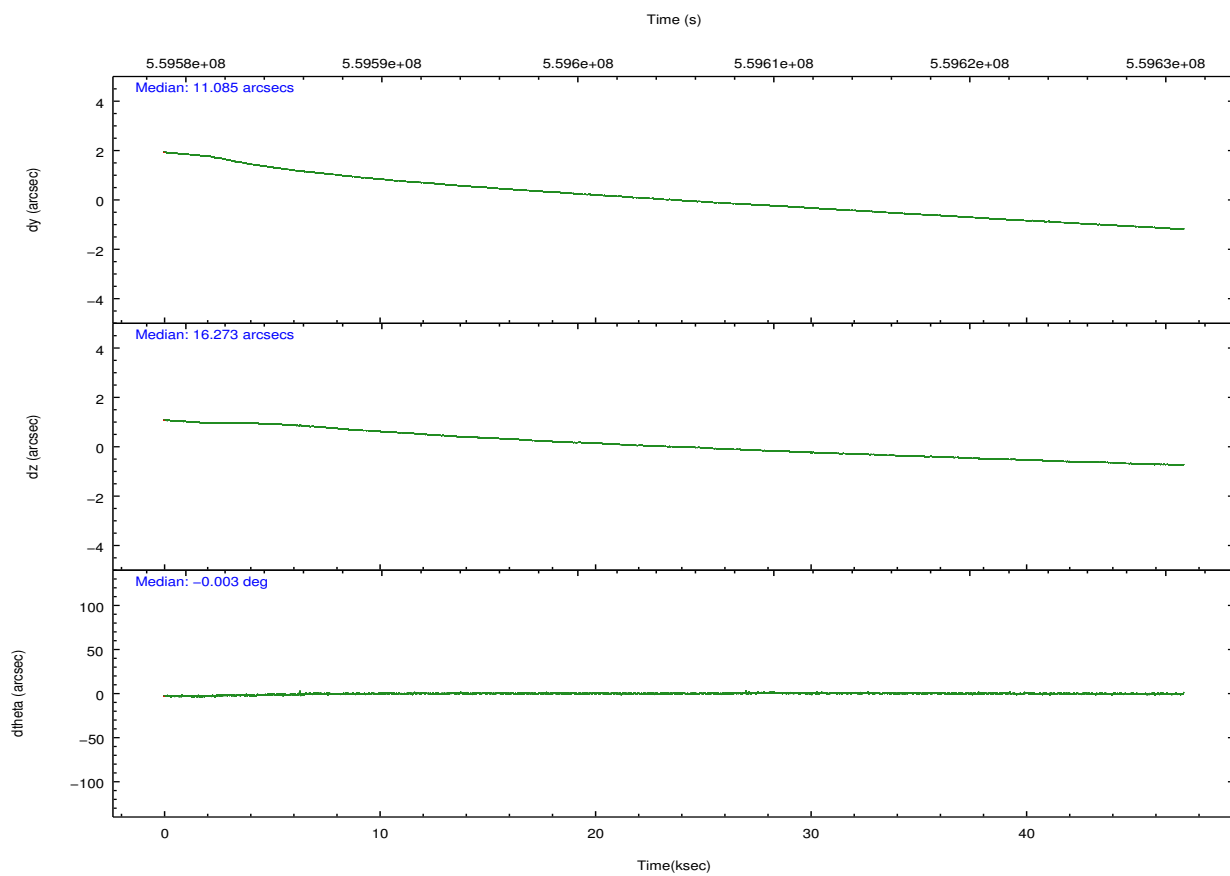
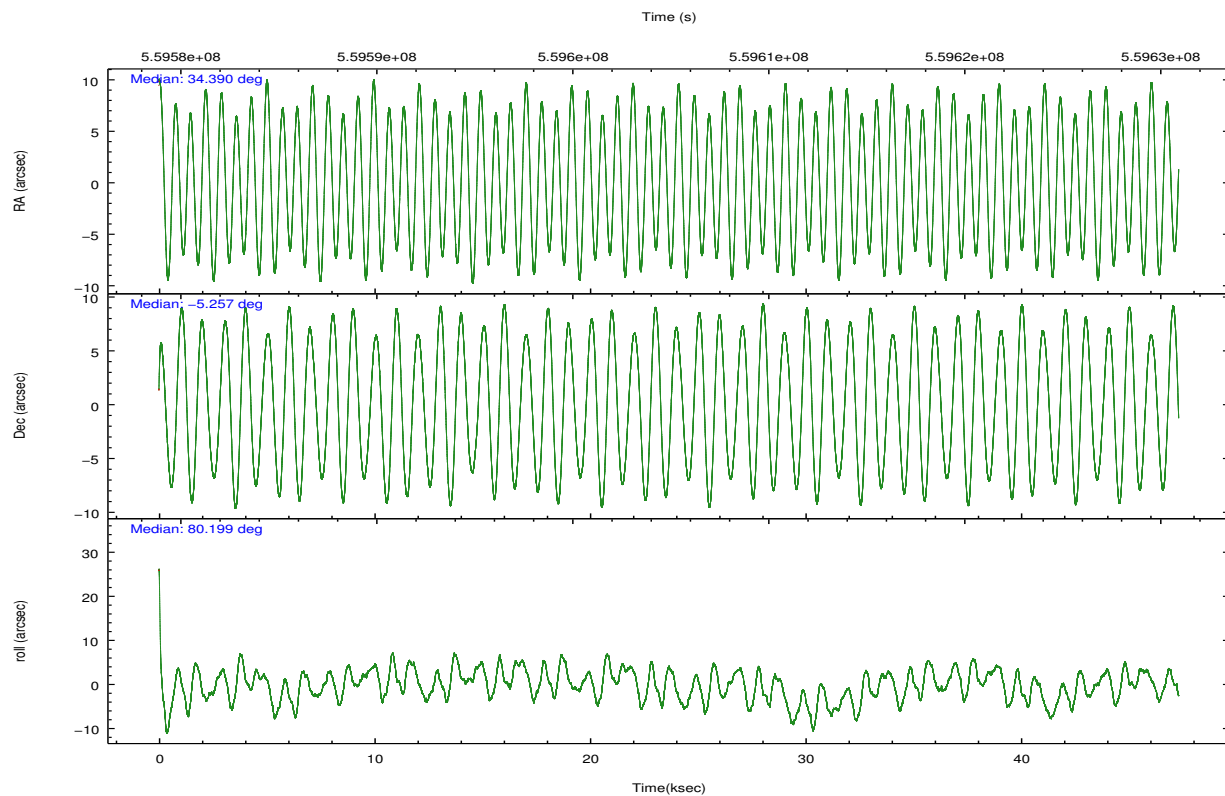
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	9517	27266	9388	9130
	4%	10%	3%	3%
grade 1 events	122	190	139	146
	0%	0%	0%	0%
grade 2 events	6872	7224	6301	19937
	2%	2%	2%	7%
grade 3 events	2943	2910	2853	2916
	1%	1%	1%	1%
grade 4 events	2727	2950	2829	2839
	1%	1%	1%	1%
grade 5 events	10971	11488	10525	12415
	4%	4%	4%	4%
grade 6 events	6101	7322	5589	5951
	2%	2%	2%	2%
grade 7 events	192811	198419	219703	208800
	83%	76%	85%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	34.399970	34.39030231815005	CCD I2 on	Y	Y
[deg] Pointing Dec	-5.282494	-5.256615308292005	CCD I3 on	Y	Y
[deg] Pointing Roll	80.000738	80.2085476125893	CCD S0 on	N	N
[deg] Roll angle	0.000000	0.000000	CCD S1 on	N	N
[deg] Roll tolerance	20.000000	20.000000	CCD S2 on	O1	N
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	O2	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S4 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S5 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	Number of optional ACIS chips dropped	2	2
[mm] SIM translation stage offset	0	-0.005018542100998502	On-chip summing requested	N	N
[s] Observation start time (MET)	559582035.184000	559580182.78844	Subarray requested	NONE	NONE
Observation start date	2015-09-25T15:26:07	2015-09-25T14:56:22	Alternating exposures requested	N	N
[s] Observation end time (MET)	559628535.184000	559629530.90372	[s] Primary exposure time	0.000000	3.1
Observation end date	2015-09-26T04:21:07	2015-09-26T04:38:50			
Read mode	TIMED	TIMED			

2.3 Aspect



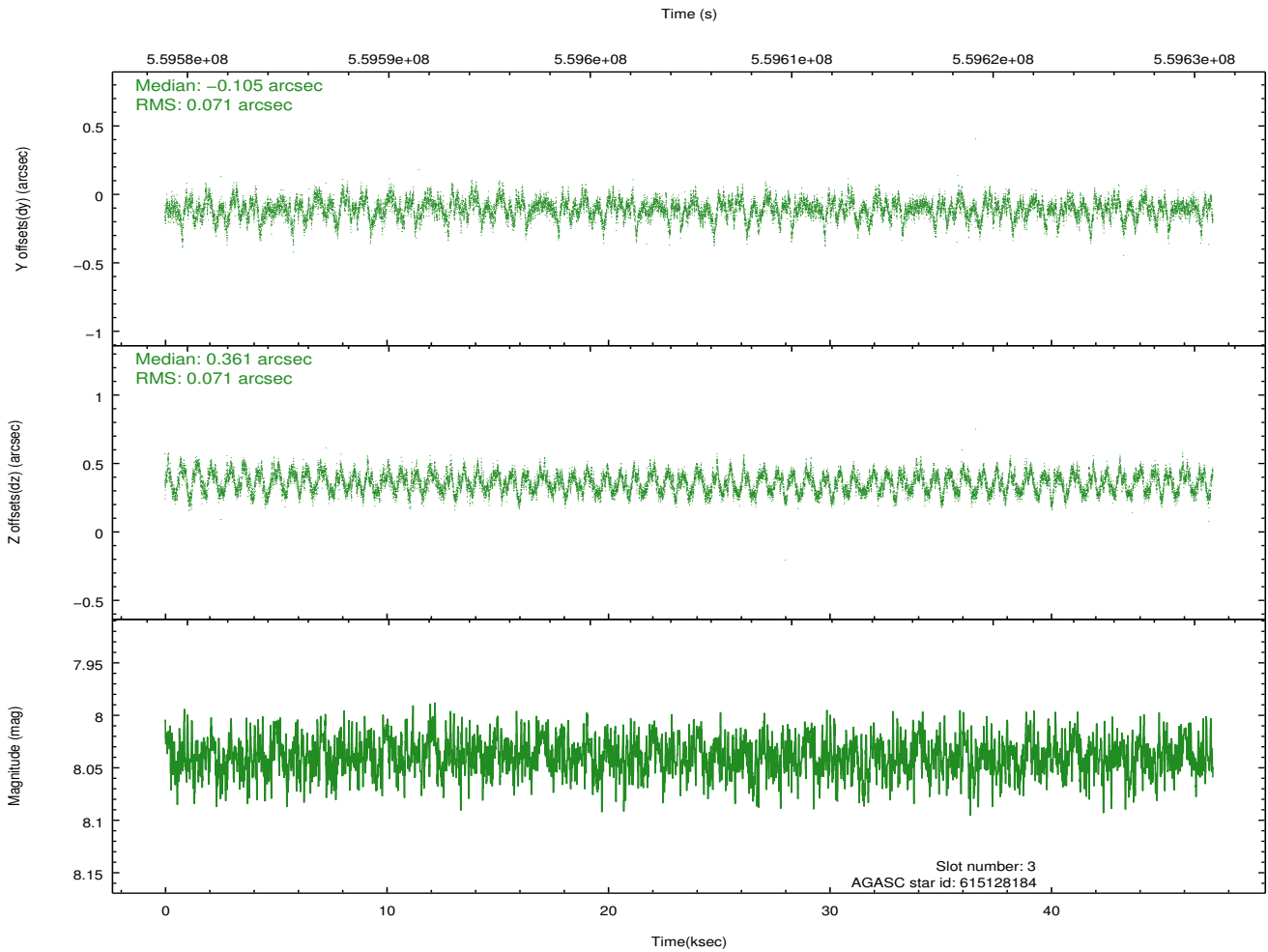
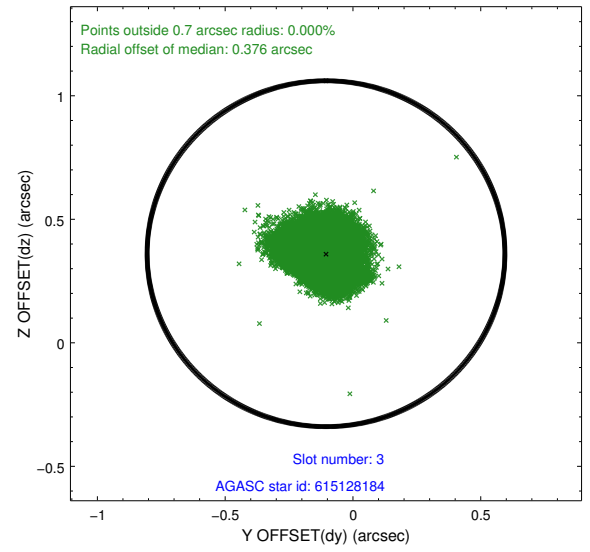
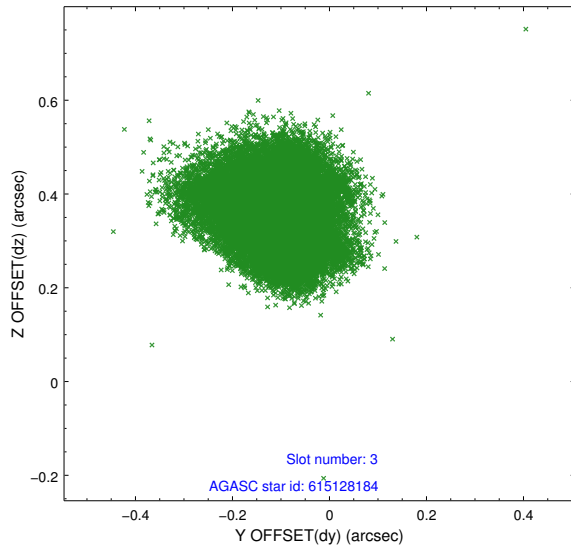


Slot Statistics

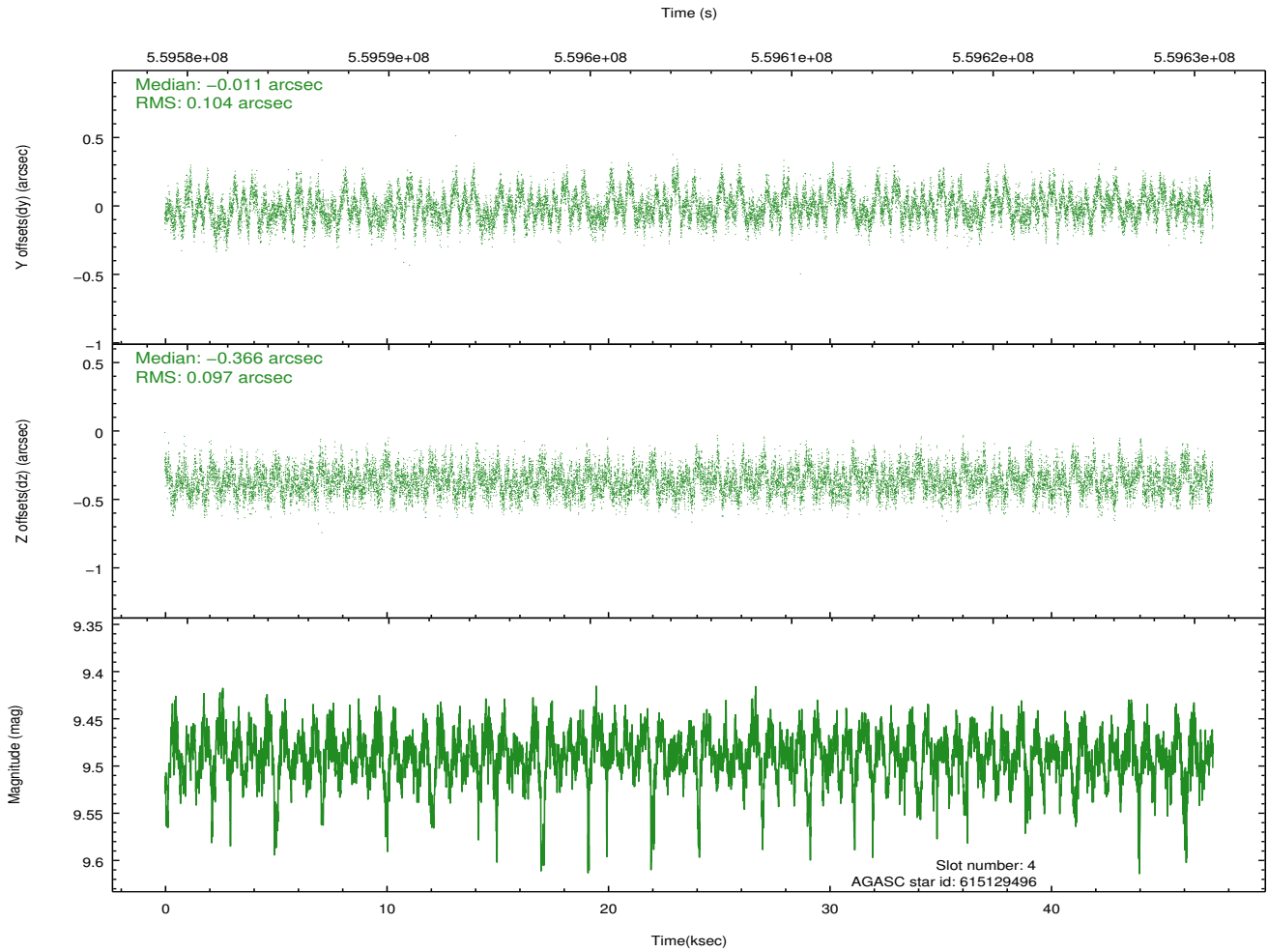
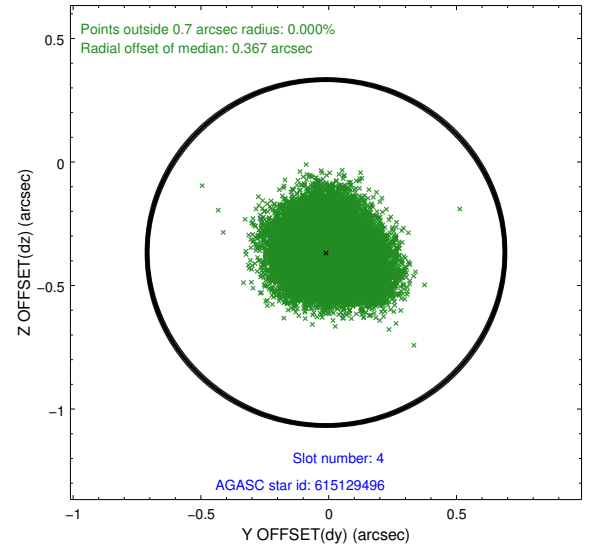
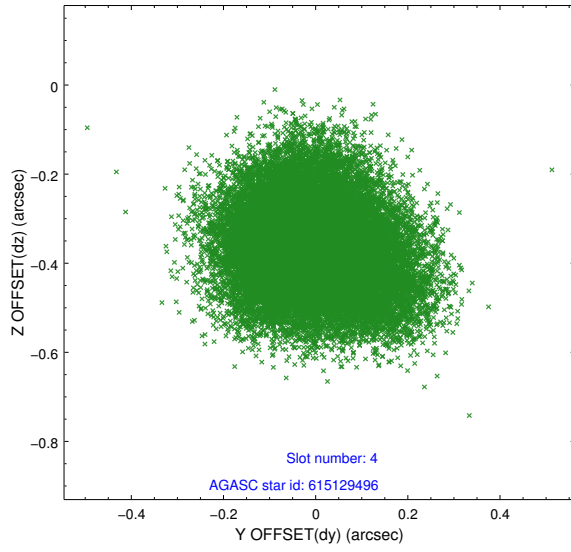
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	11541	0.106	-0.117	0.020	0.045	0.000000	0.000000	928.49	-840.09
1	FID		ACIS-I-5	7.26	11542	-0.310	0.067	0.008	0.014	0.000000	0.000000	-1820.06	1057.55
2	FID		ACIS-I-6	7.25	11539	0.112	0.121	0.022	0.044	0.000000	0.000000	394.02	1702.12
3	GUIDE	used	615128184	8.04	23080	-0.105	0.361	0.108	0.167	34.627231	-4.869545	1605.76	-543.99
4	GUIDE	used	615129496	9.49	23066	-0.011	-0.366	0.155	0.240	34.177462	-4.840209	1428.96	1059.59
5	GUIDE	used	615519784	9.63	23045	0.025	-0.270	0.141	0.233	33.905889	-5.455828	-922.53	1635.00
6	GUIDE	used	615521424	9.93	23053	0.204	0.079	0.232	0.353	34.185589	-5.674448	-1523.10	510.72
7	GUIDE	used	615520664	9.46	23055	-0.128	0.182	0.184	0.306	34.931323	-5.027518	1234.52	-1716.82

2.4 Star Slots

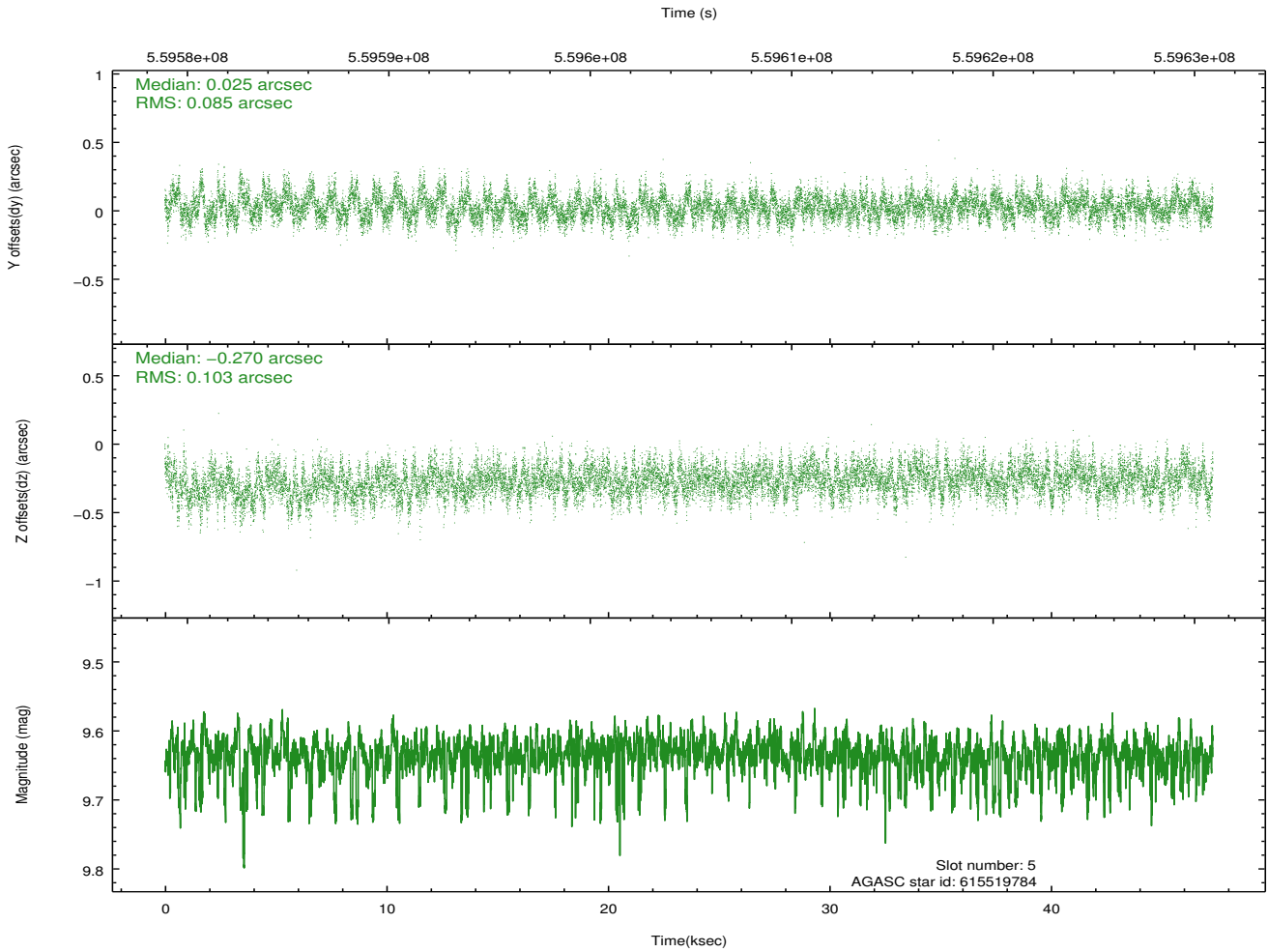
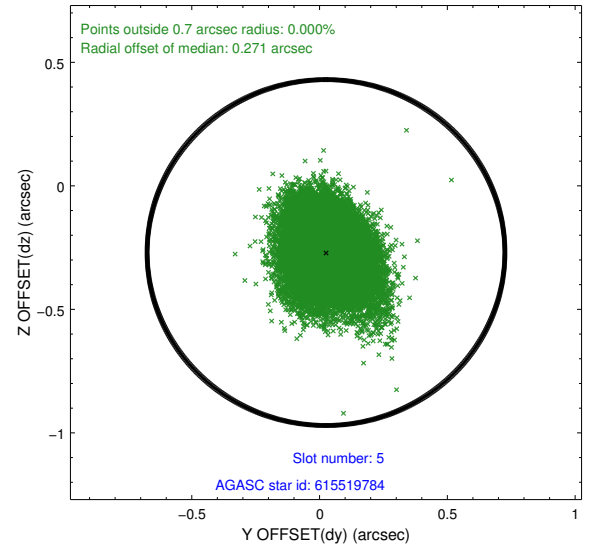
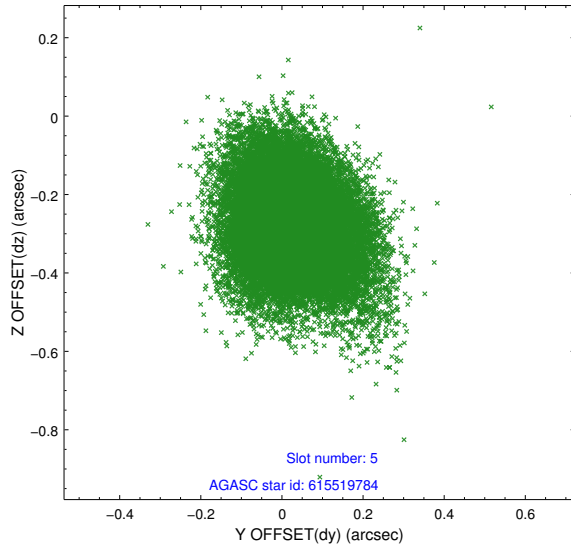
2.4.1 Slot 3



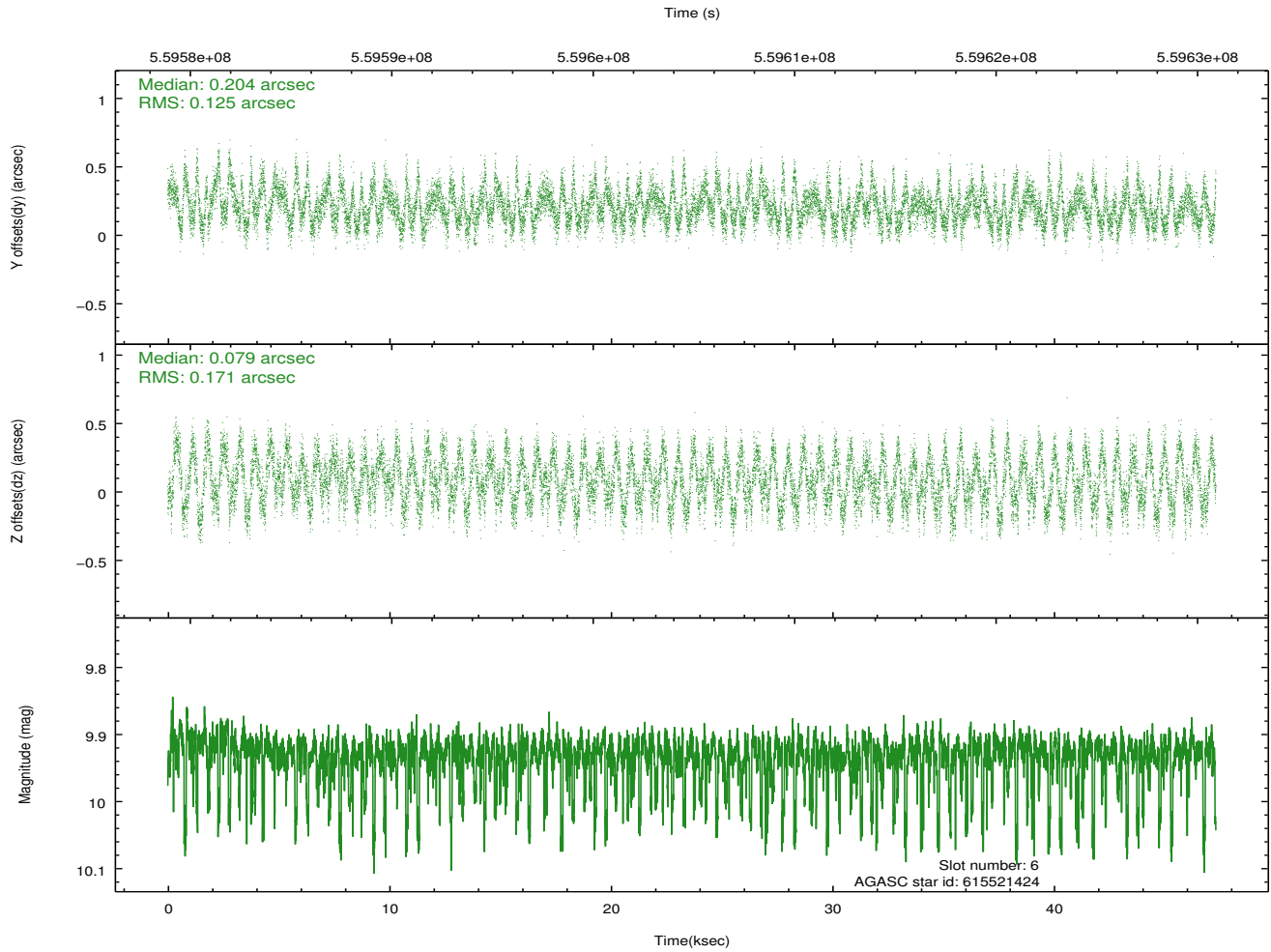
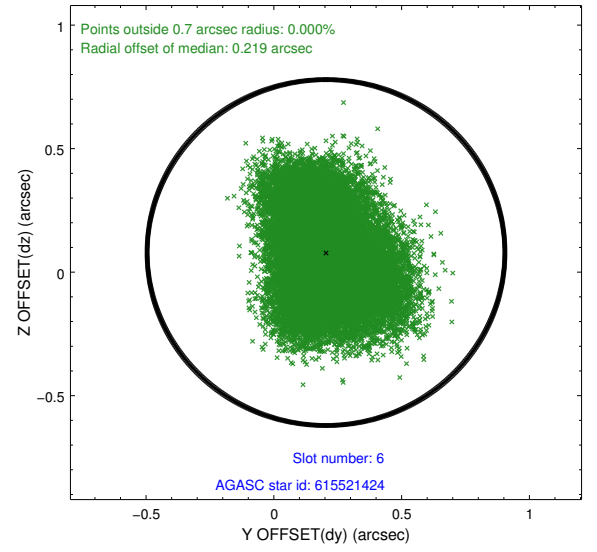
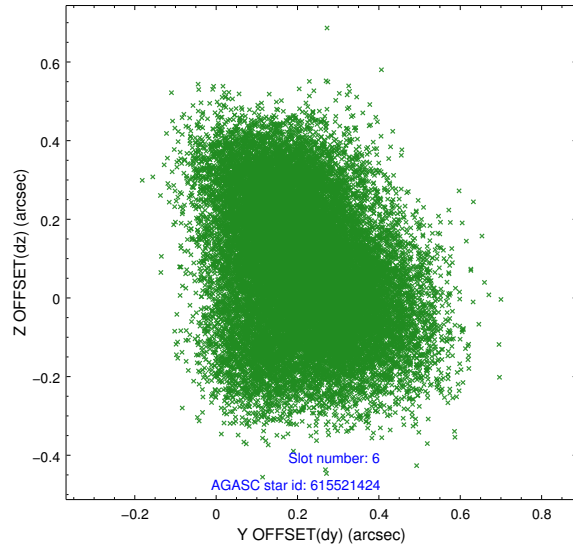
2.4.2 Slot 4



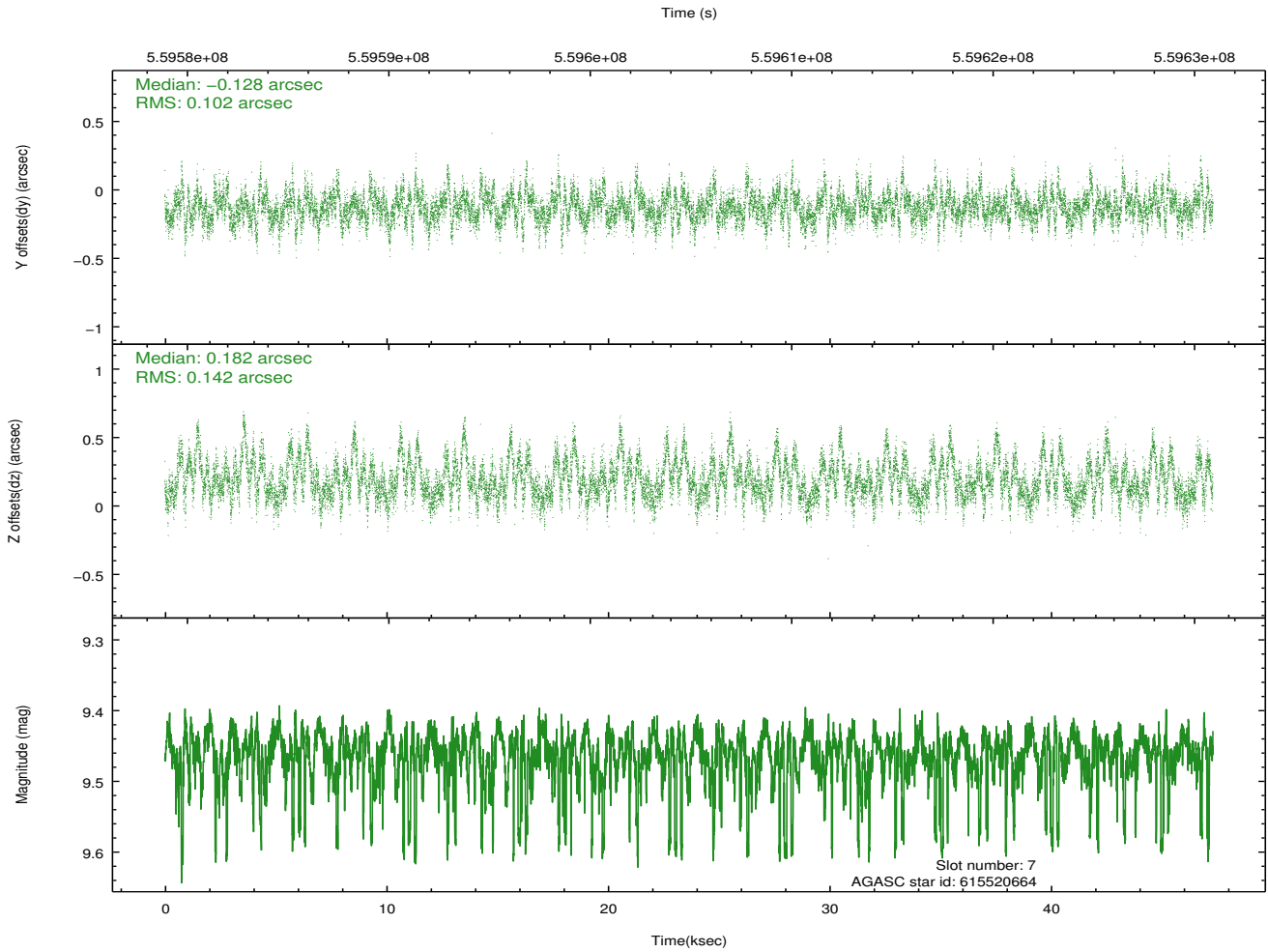
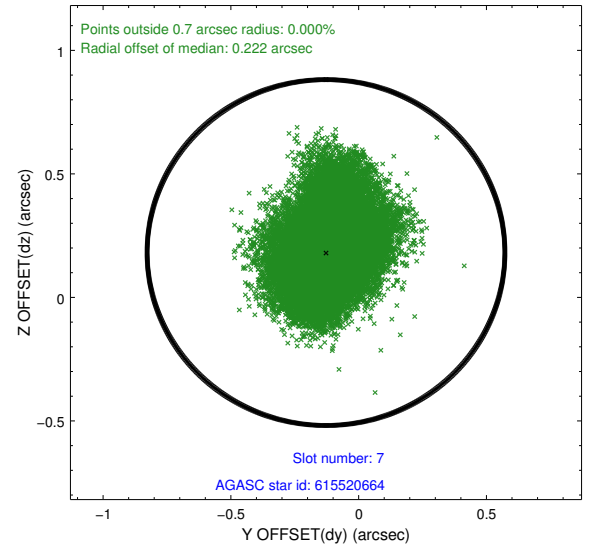
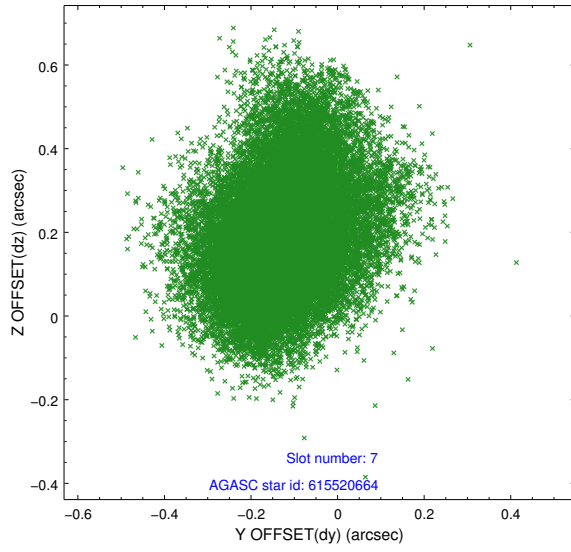
2.4.3 Slot 5



2.4.4 Slot 6

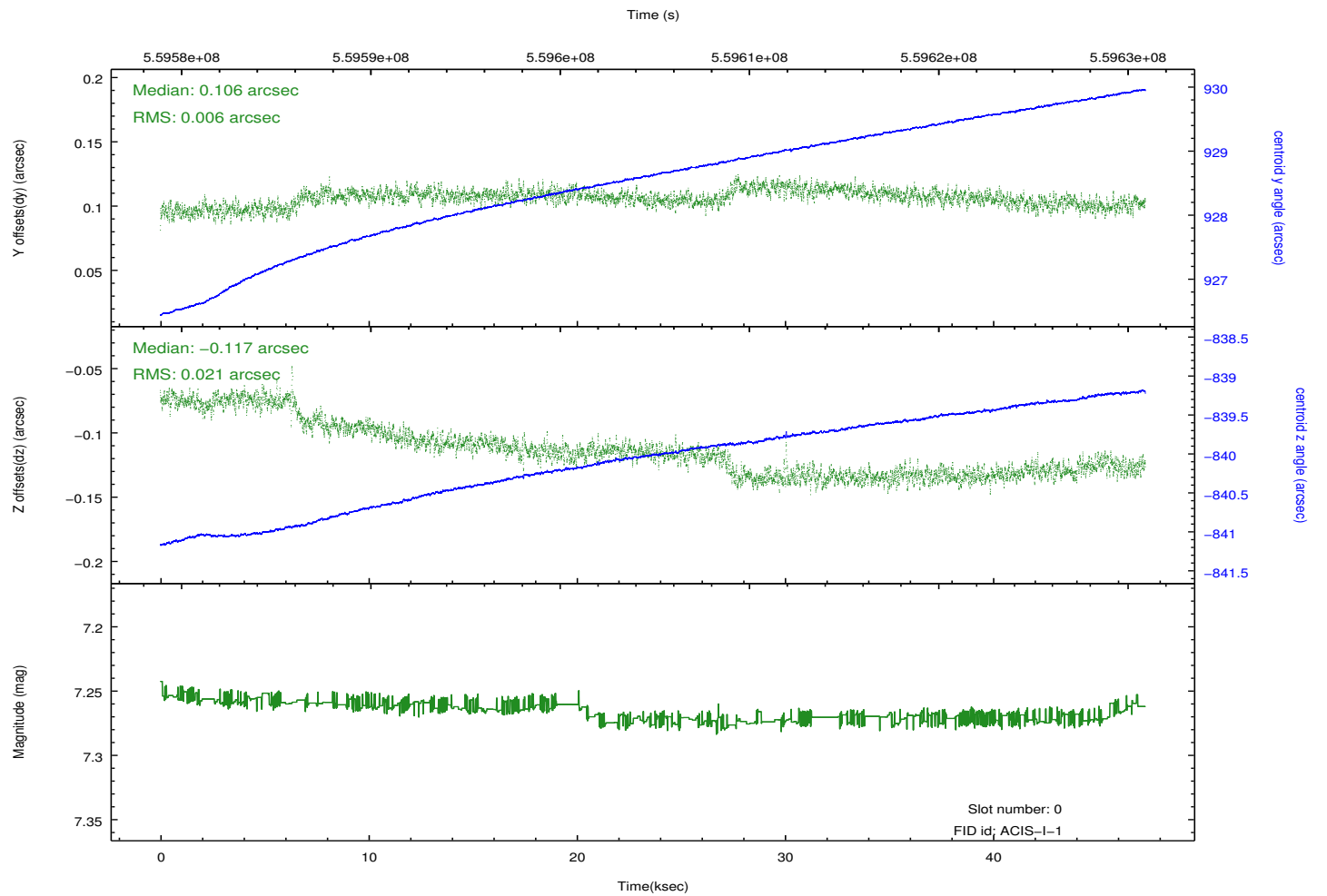
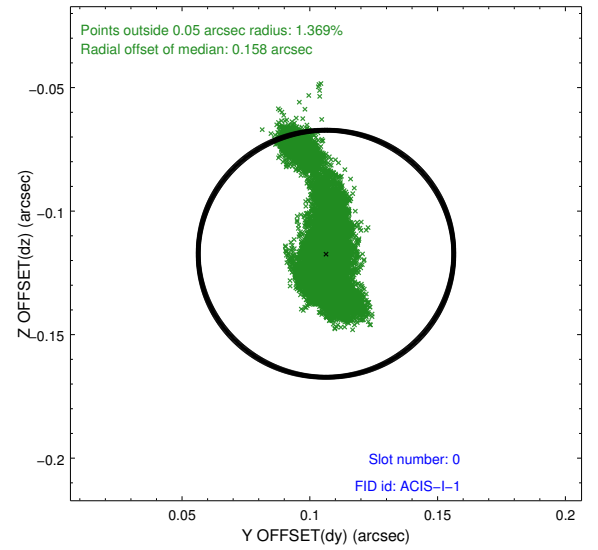
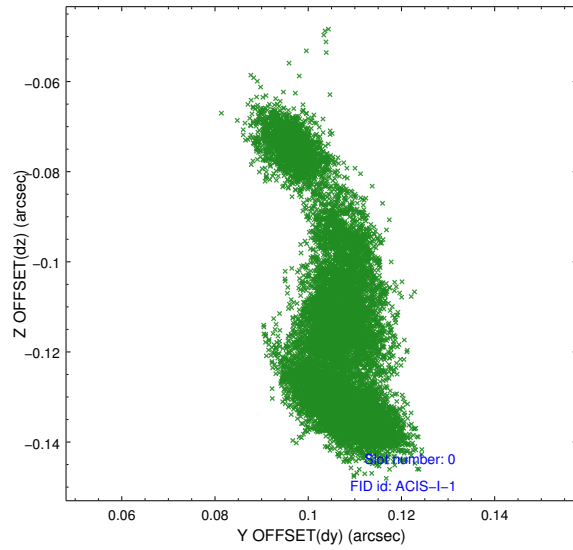


2.4.5 Slot 7

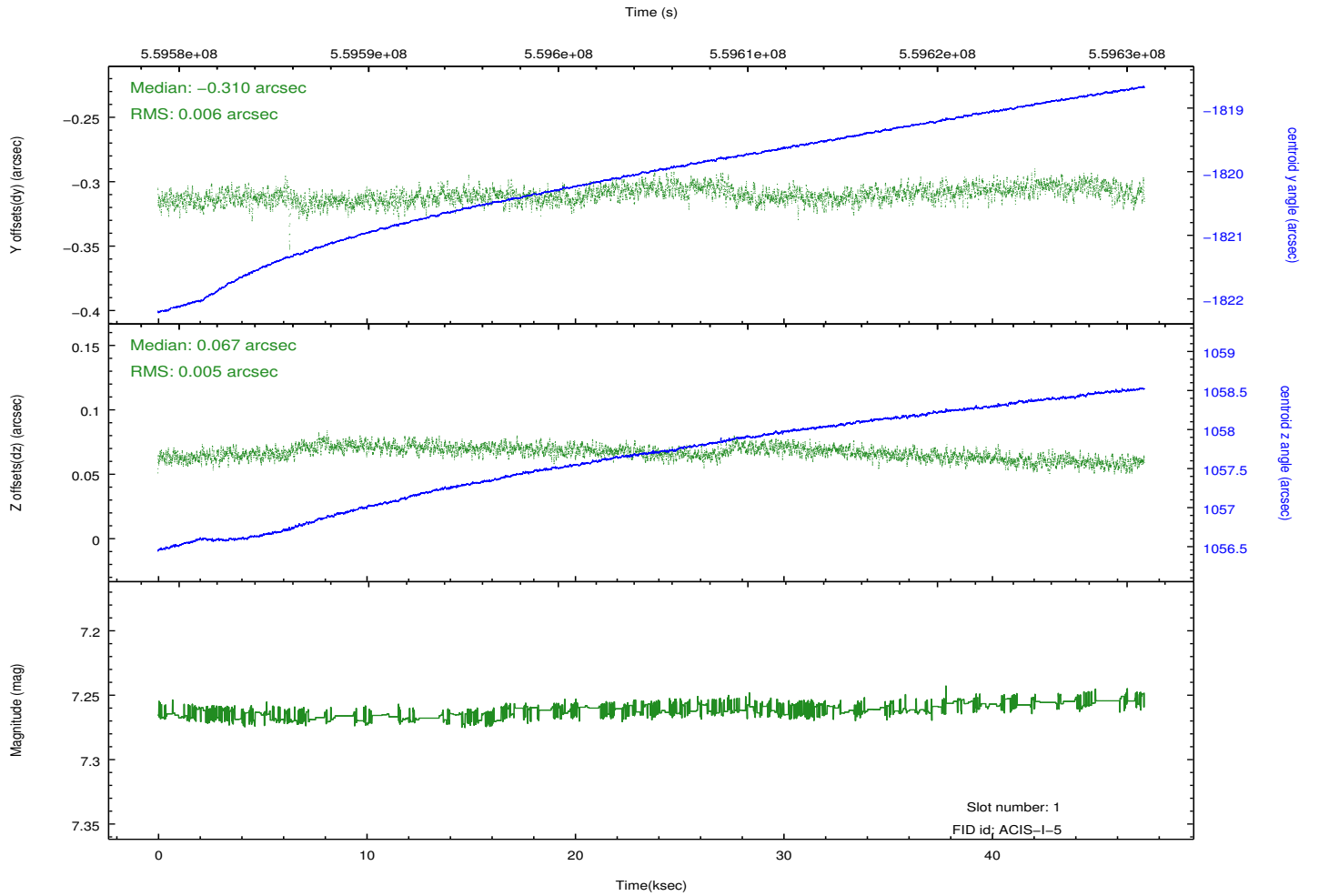
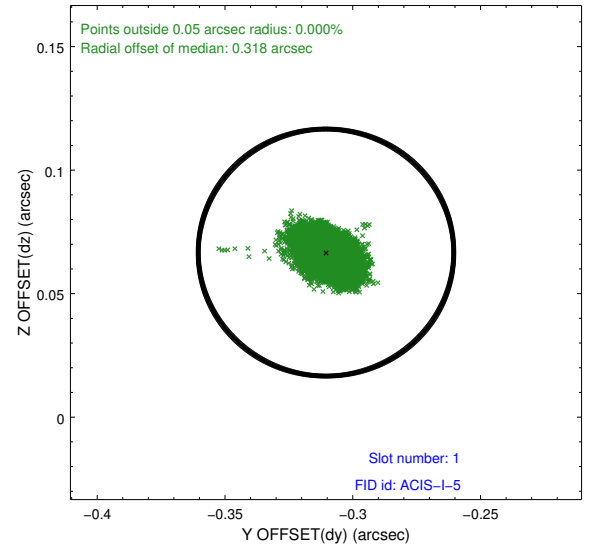
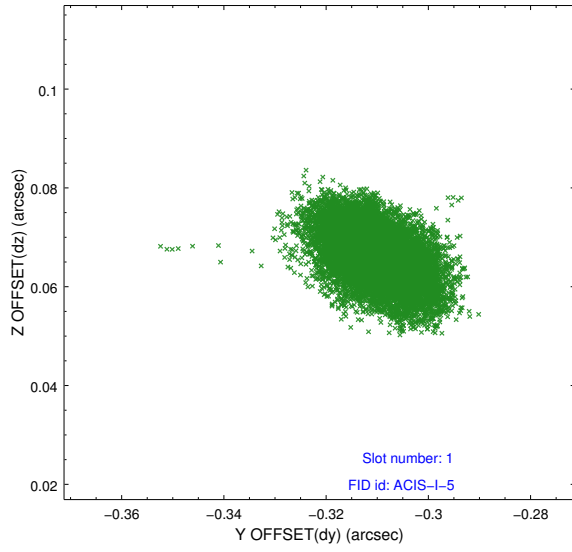


2.5 FID Slots

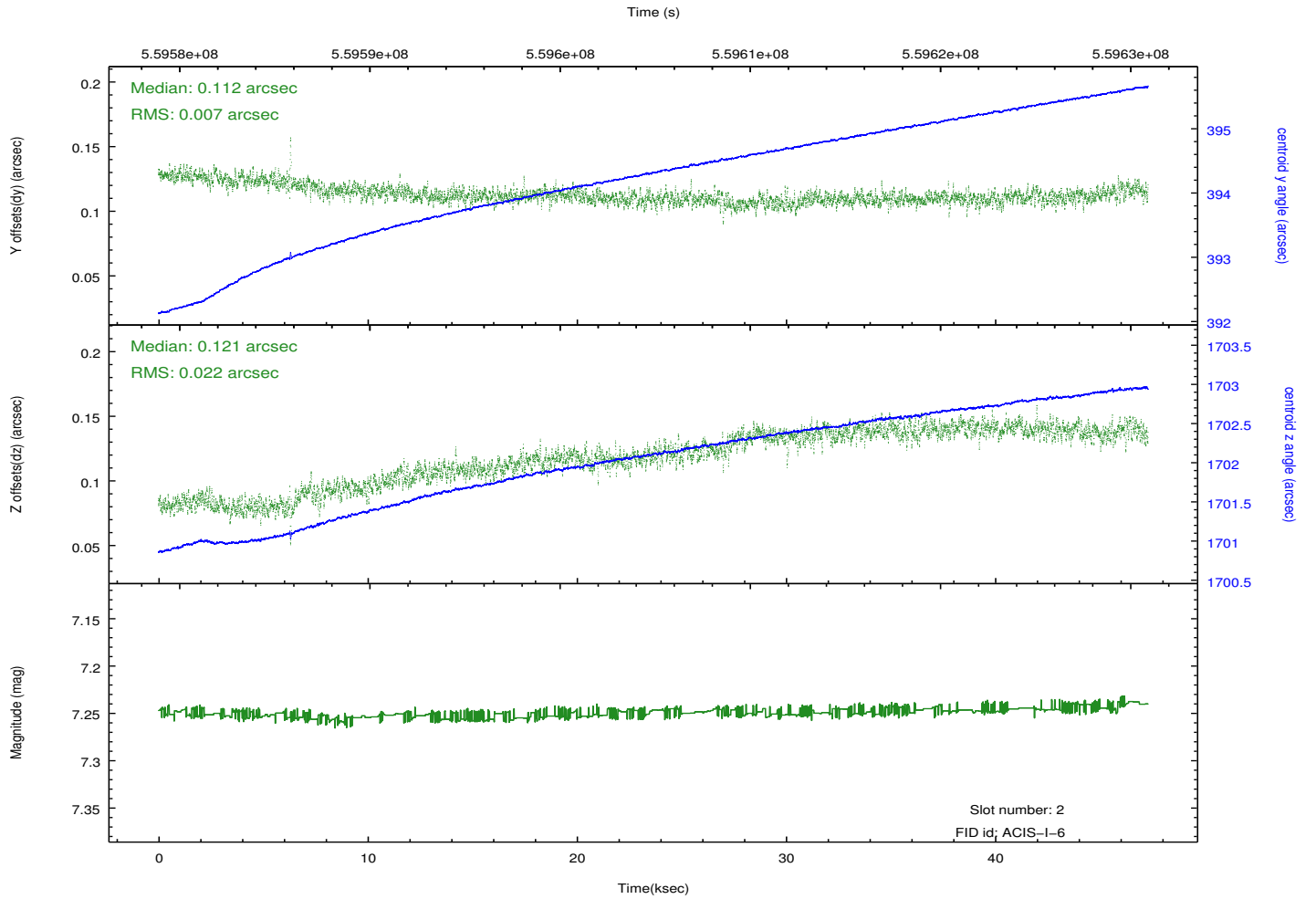
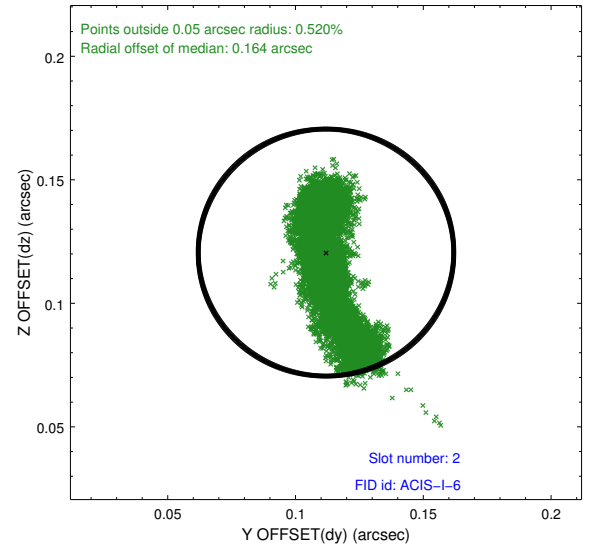
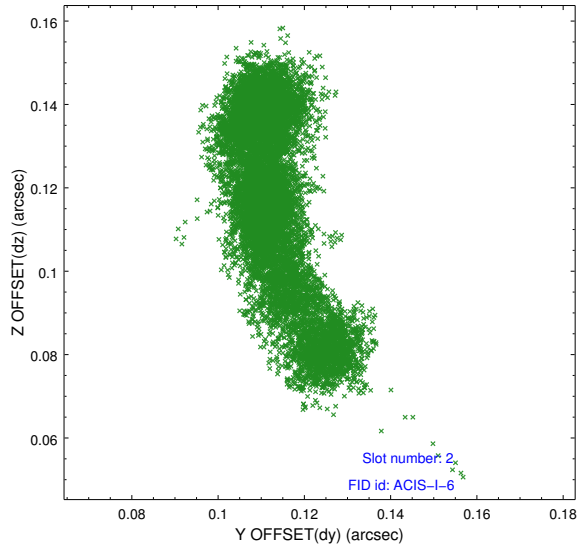
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.09.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.573710425138

A.2 Comments

Roll constraint met.