

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17717 - L2 Version 1
Chandra X-Ray Center

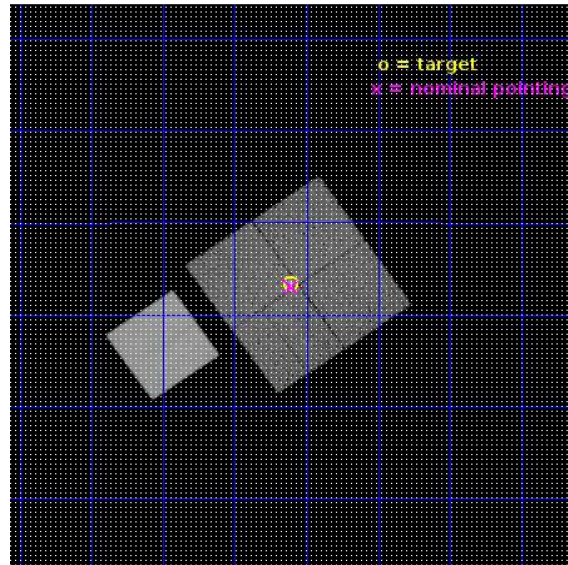
L2 Processing Date : Jul 30 2016

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

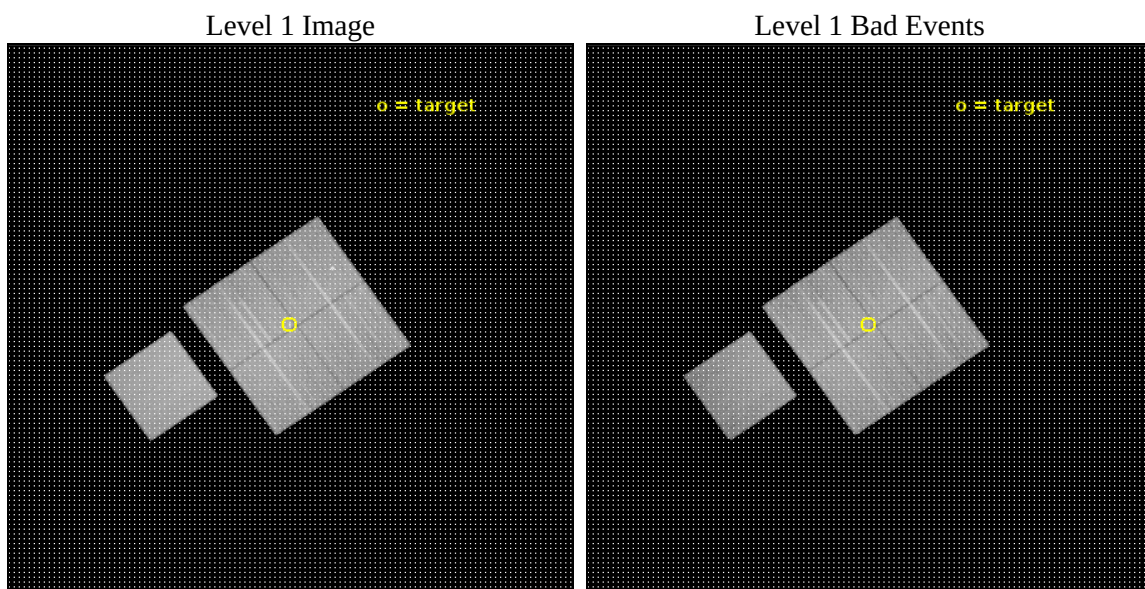
seq_num	201028	Sequence number
obs_id	17717	Observation id
title	Into the Maelstrom of W43	Proposal title
observer	Leisa Townsley	Principal investigator
object	W43-Main	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	281.902917	Observer's specified target RA [deg]
dec_targ	-1.942639	Observer's specified target Dec [deg]
ra_nom	281.90139939468	Nominal RA [deg]
dec_nom	-1.9492577500558	Nominal Dec [deg]
roll_nom	235.20864132515	Nominal Roll [deg]
revision	1	Processing version of data
ontime	46056.659273863	Sum of GTIs [s]
livetime	45454.895114031	Livetime [s]
ontime0	46050.377103686	Sum of GTIs [s]
ontime1	46053.518213987	Sum of GTIs [s]
ontime2	46059.800354362	Sum of GTIs [s]
ontime3	46056.659273863	Sum of GTIs [s]
ontime7	46059.800354362	Sum of GTIs [s]
l2events	252828	Number of level 2 events



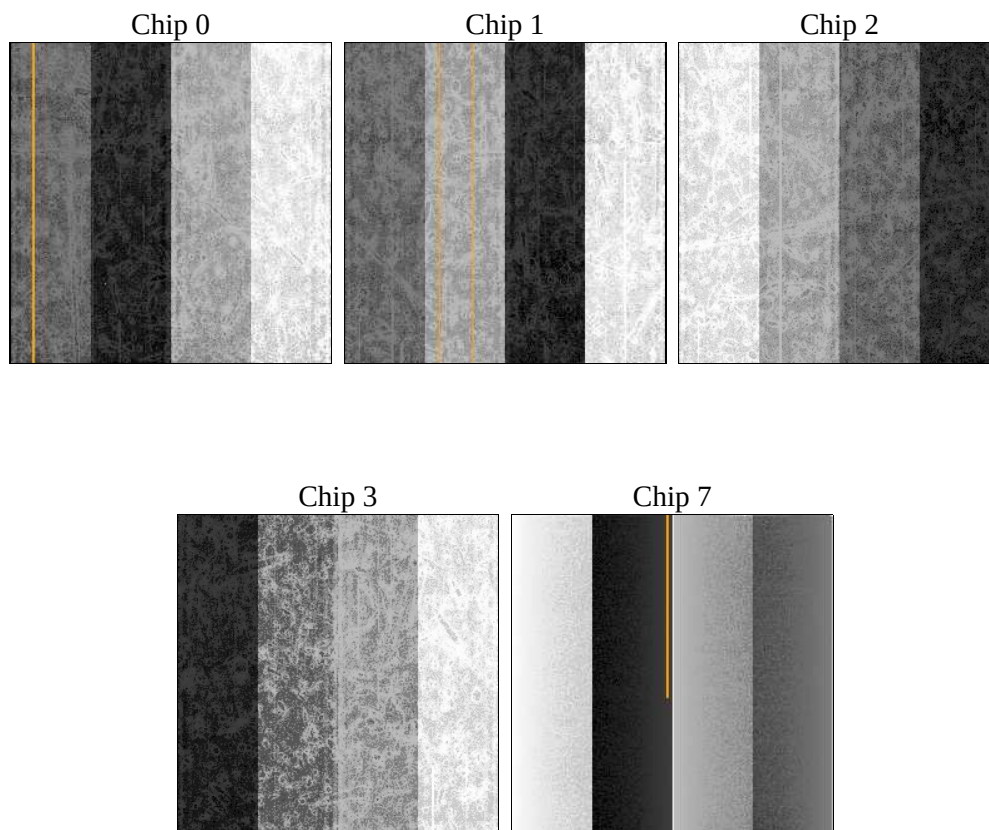
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	46056.659273863	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	46050.377103686	Sum of GTIs [s]
date	2016-07-30T22:11:40	Date and time of file creation	ontime1	46053.518213987	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	46059.800354362	Sum of GTIs [s]
			ontime3	46056.659273863	Sum of GTIs [s]
			ontime7	46059.800354362	Sum of GTIs [s]
			l1events	1394161	Number of level 1 events

2.1.4 Events

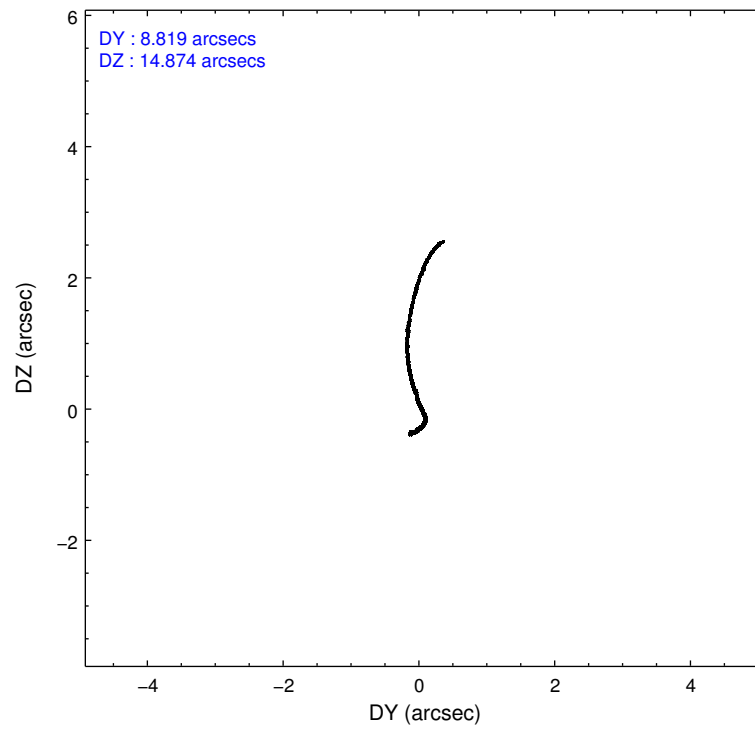
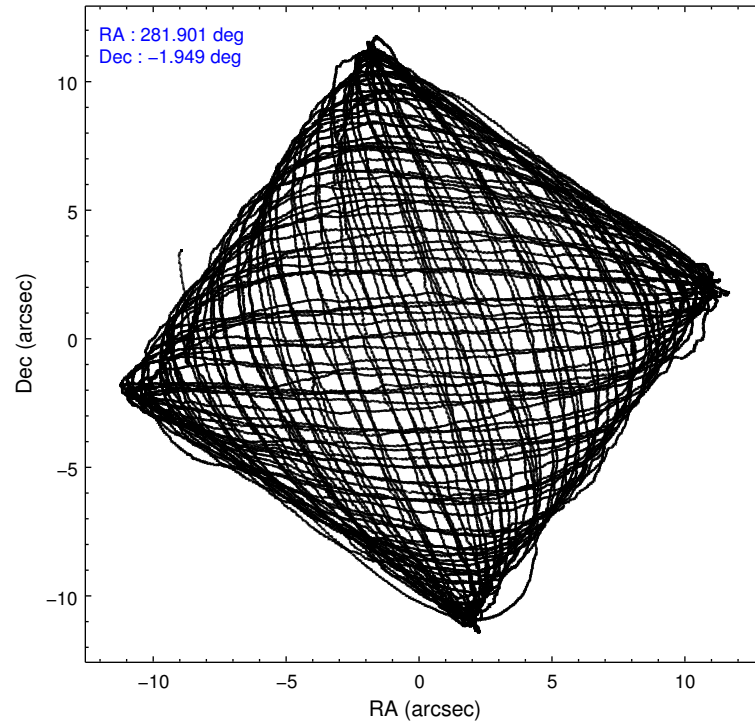
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	256120	262157	279471	282714	313699
rejected events	224166	225276	247511	247774	167209
rejected %	87%	85%	88%	87%	53%

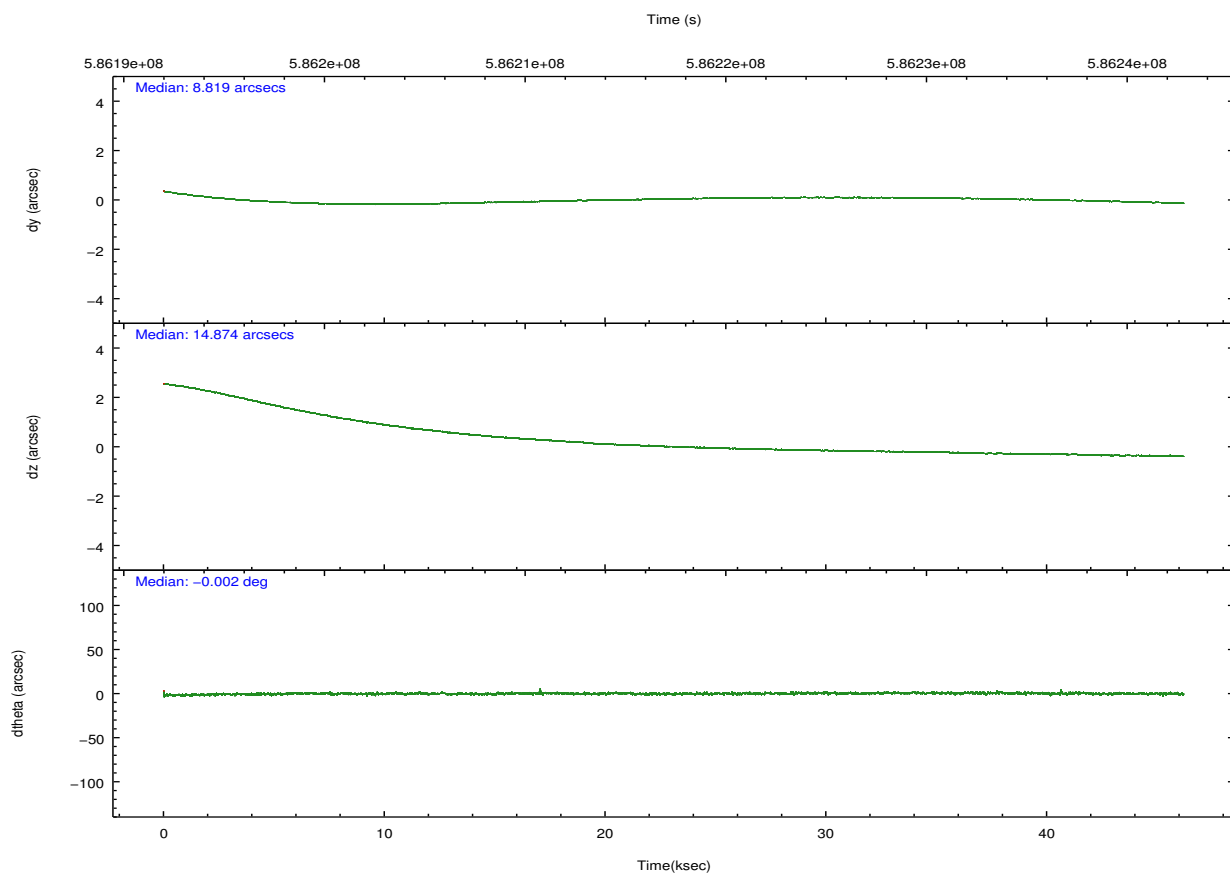
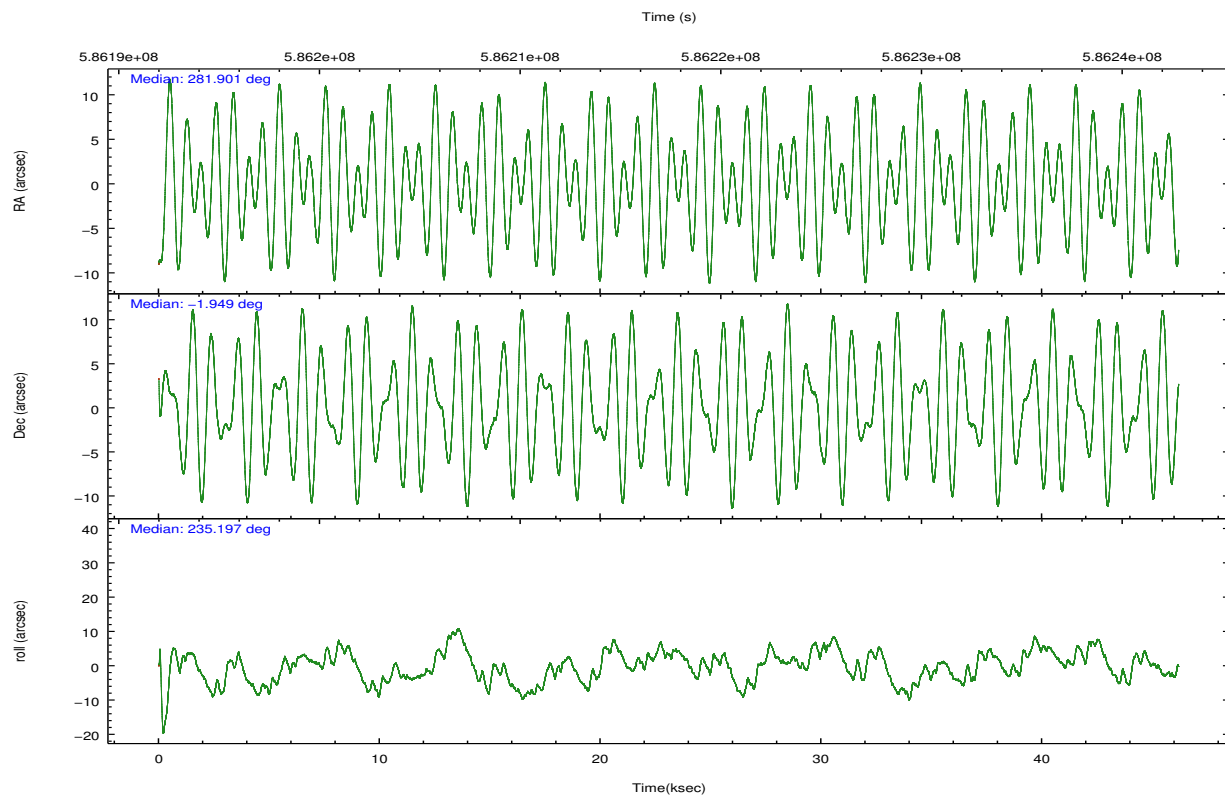
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	11762	15019	12363	14629	13193
	4%	5%	4%	5%	4%
grade 1 events	163	185	169	204	493
	0%	0%	0%	0%	0%
grade 2 events	7939	7957	7628	7108	32341
	3%	3%	2%	2%	10%
grade 3 events	3173	3332	3092	3477	12139
	1%	1%	1%	1%	3%
grade 4 events	2999	3323	3150	3303	11906
	1%	1%	1%	1%	3%
grade 5 events	10259	10990	9624	11789	31791
	4%	4%	3%	4%	10%
grade 6 events	6085	7255	5732	6423	76924
	2%	2%	2%	2%	24%
grade 7 events	213740	214096	237713	235781	134912
	83%	81%	85%	83%	43%

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	281.903618	281.9013993946808	CCD I2 on	Y	Y
[deg] Pointing Dec	-1.921748	-1.949257750055818	CCD I3 on	Y	Y
[deg] Pointing Roll	235.000021	235.208641325151	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	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	586194513.184000	586193217.61473	CCD S5 on	N	N
Observation start date	2016-07-29T15:47:25	2016-07-29T15:26:57	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	586240513.184000	586241403.38	On-chip summing requested	N	N
Observation end date	2016-07-30T04:34:05	2016-07-30T04:50:03	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



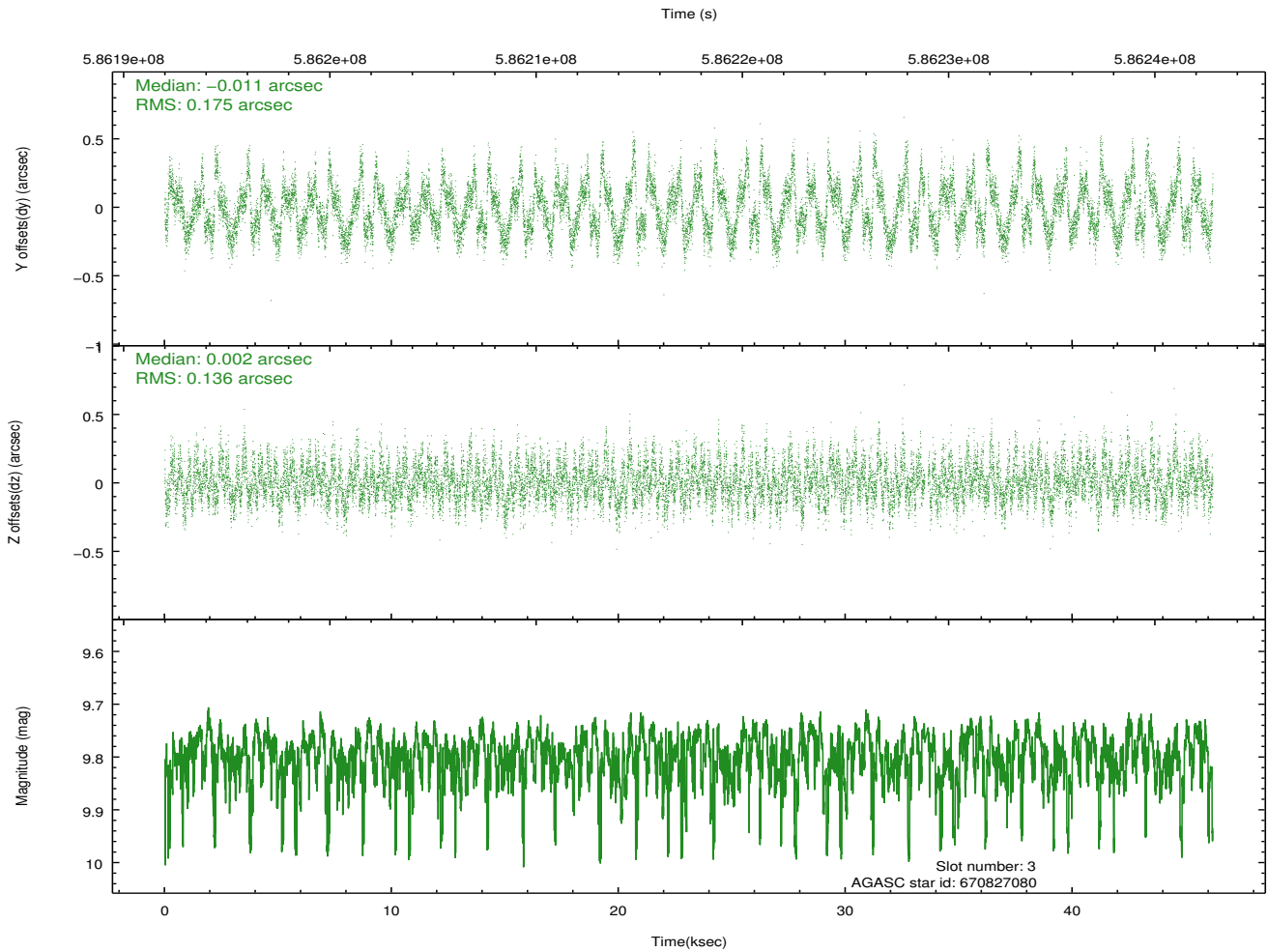
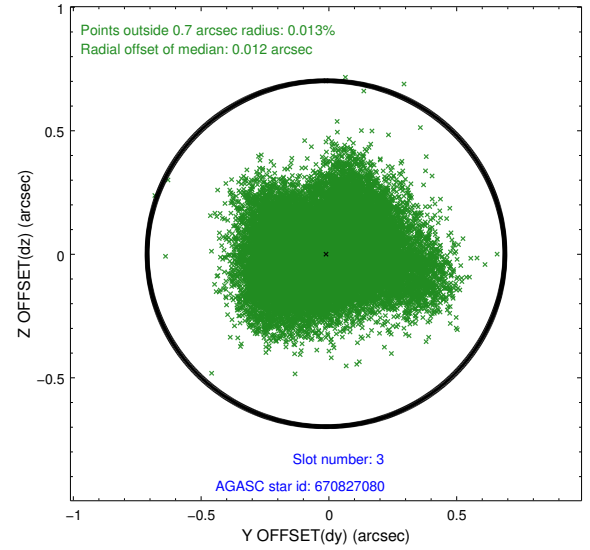
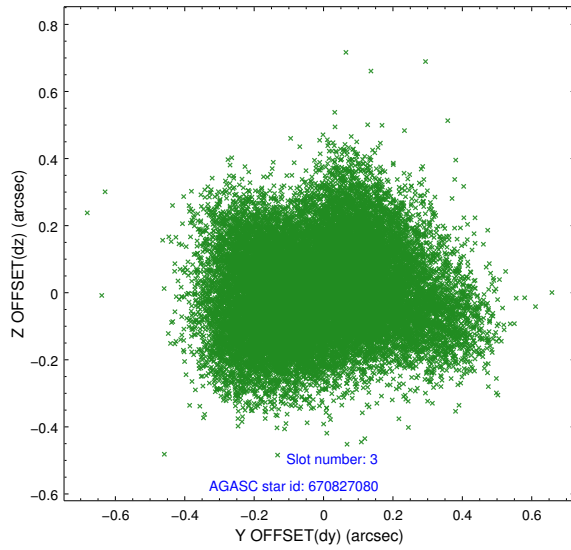


Slot Statistics

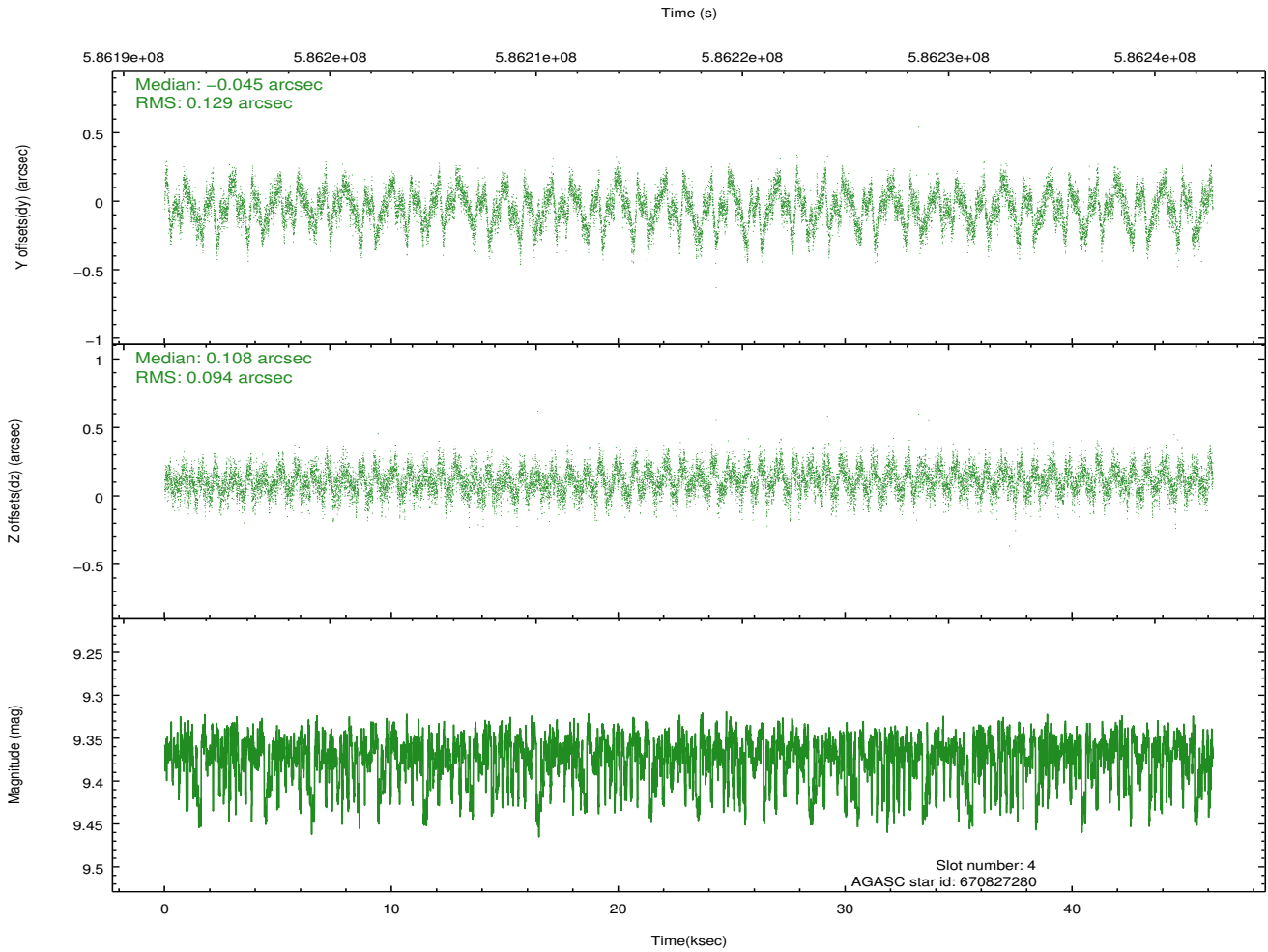
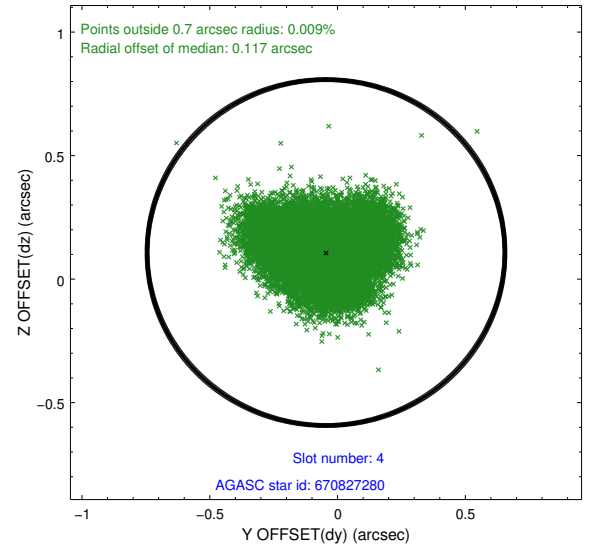
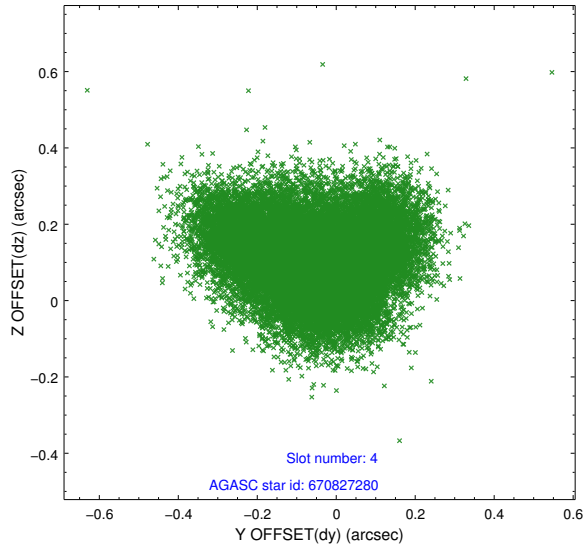
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.06	11265	-0.173	-0.112	0.019	0.031	0.000000	0.000000	-763.53	-845.32
1	FID		ACIS-I-4	7.10	11265	0.355	0.124	0.009	0.017	0.000000	0.000000	2151.07	1061.08
2	FID		ACIS-I-5	7.14	11266	-0.283	0.057	0.016	0.026	0.000000	0.000000	-1817.47	1058.88
3	GUIDE	used	670827080	9.80	22426	-0.011	0.002	0.239	0.376	281.524319	-2.036517	1121.88	-880.43
4	GUIDE	used	670827280	9.37	22504	-0.045	0.108	0.173	0.275	281.434708	-1.976010	1130.08	-1269.23
5	GUIDE	used	670827744	9.50	22501	0.079	0.186	0.138	0.225	281.699180	-2.020401	713.48	-398.38
6	GUIDE	used	670827848	9.67	22504	-0.007	-0.209	0.163	0.269	282.233886	-2.502228	1030.63	2172.11
7	GUIDE	used	670829768	7.46	22465	-0.004	-0.090	0.119	0.178	281.927934	-2.010470	211.87	255.00

2.4 Star Slots

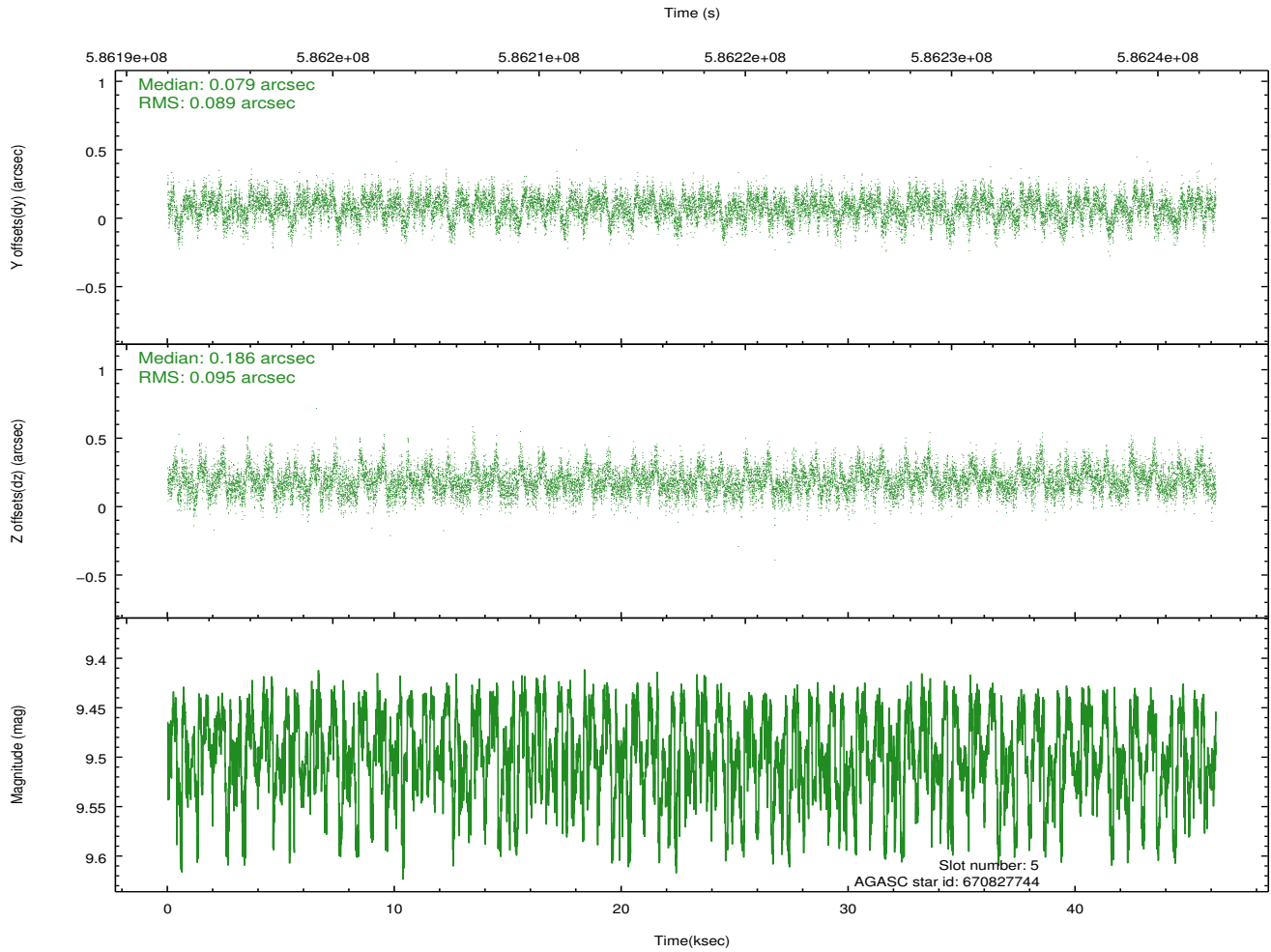
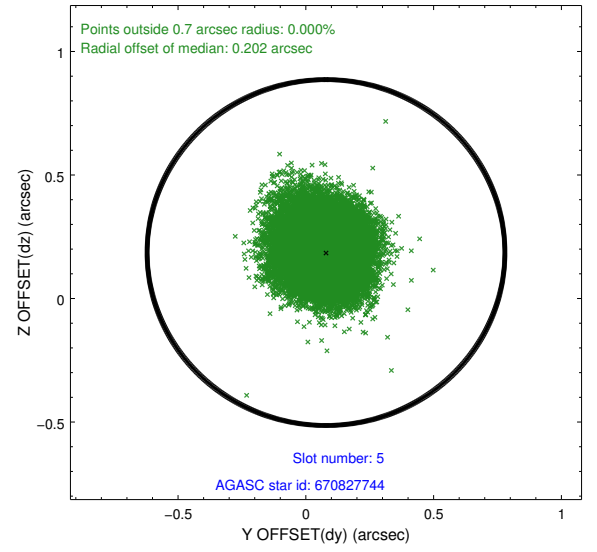
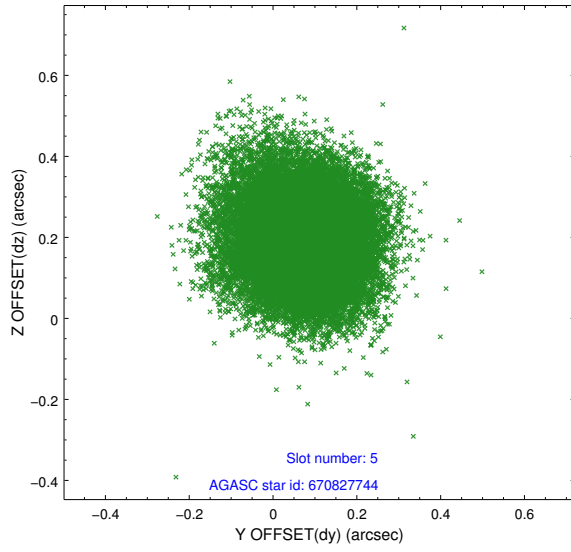
2.4.1 Slot 3



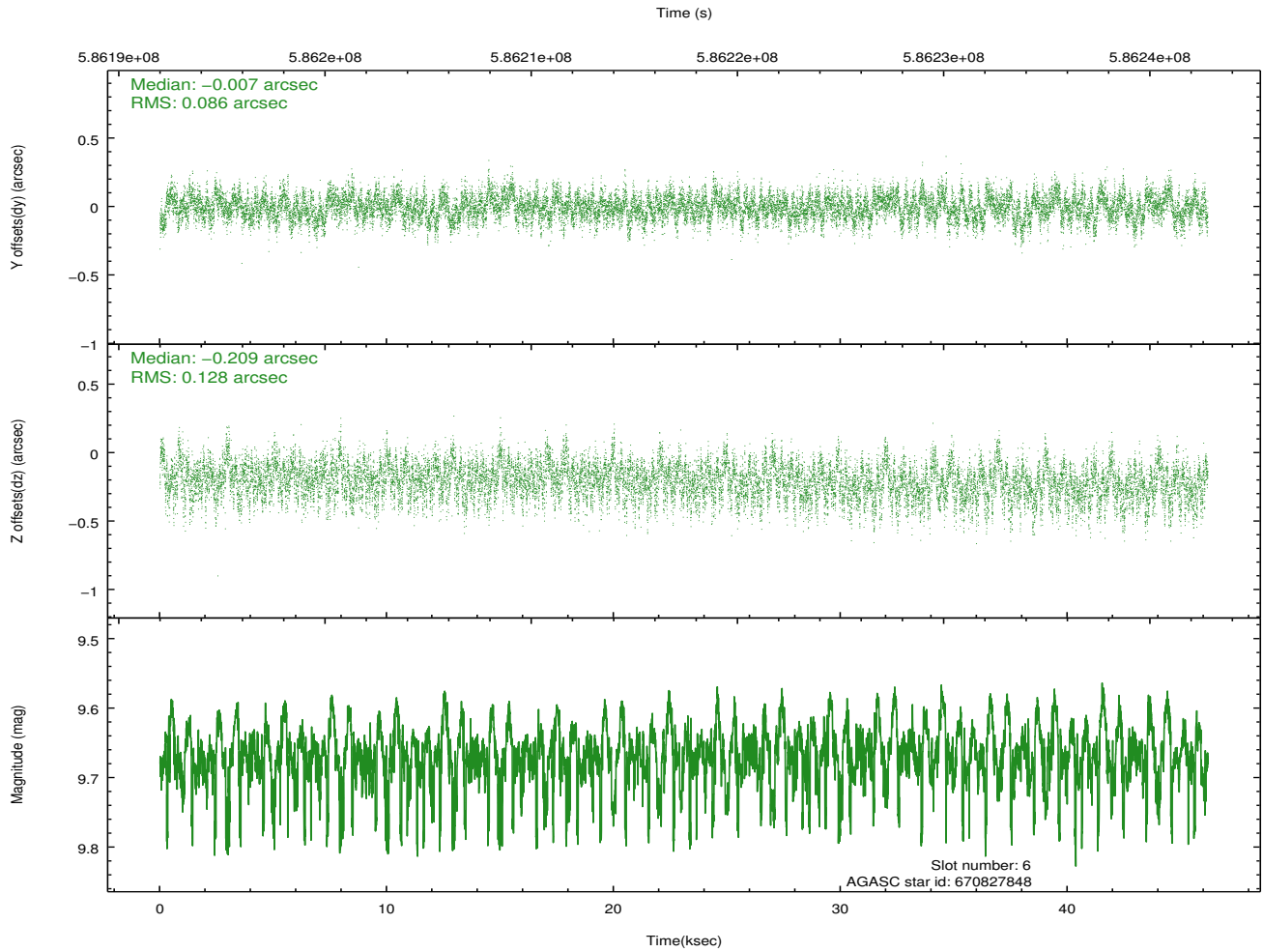
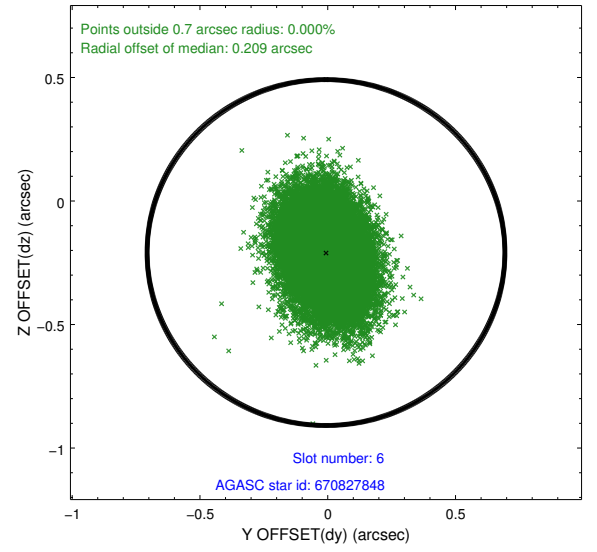
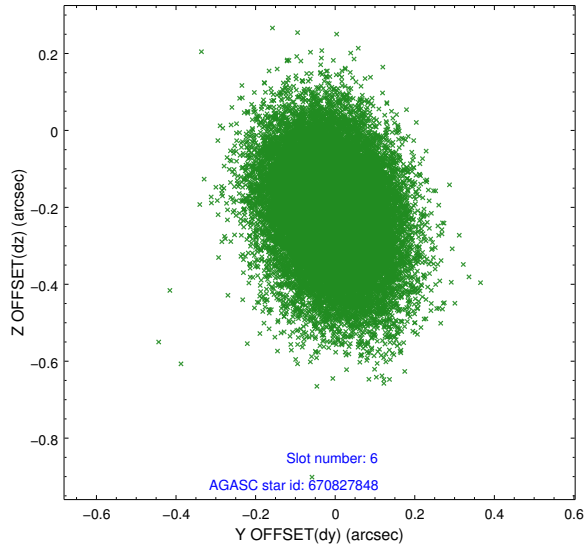
2.4.2 Slot 4



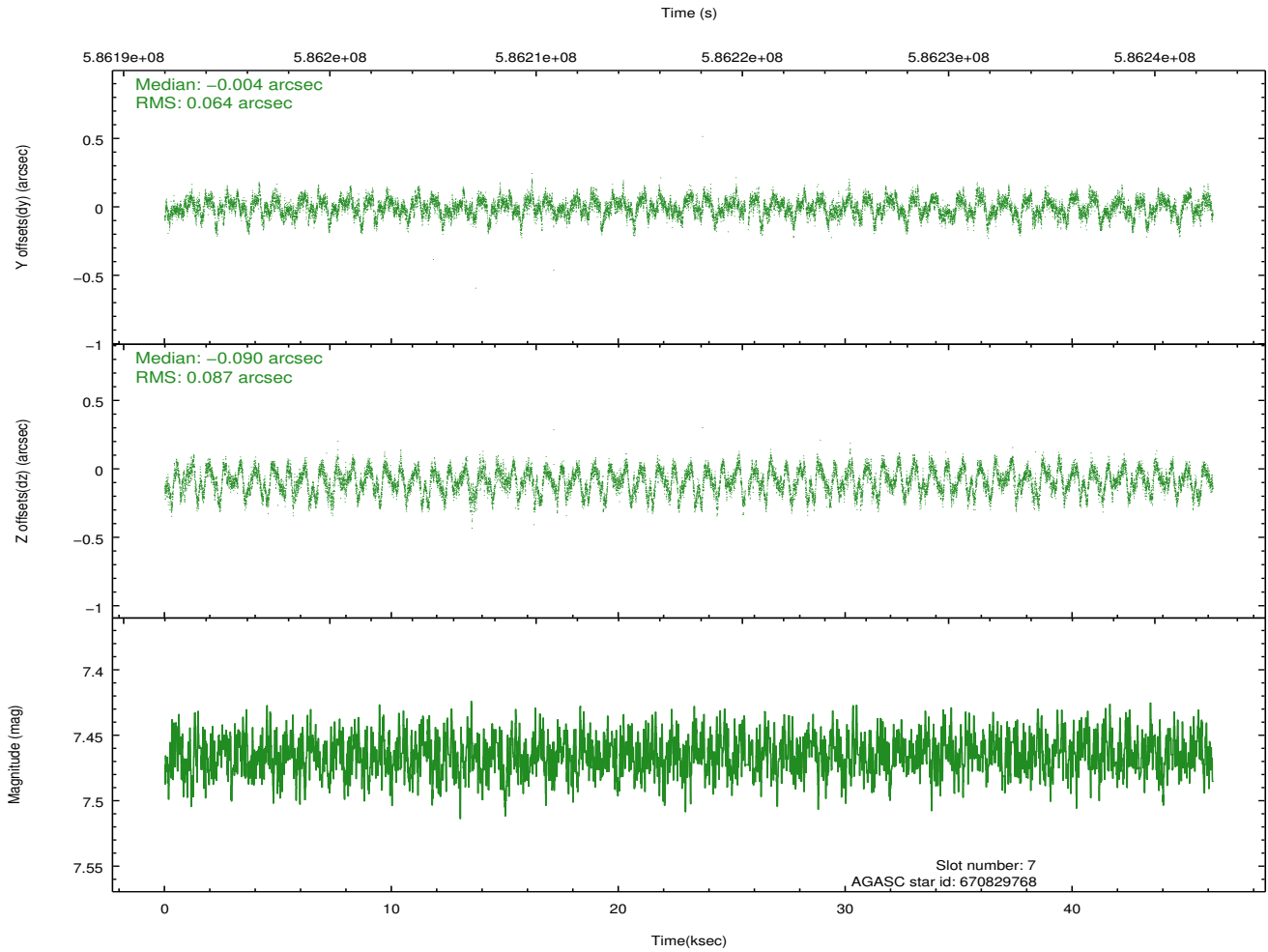
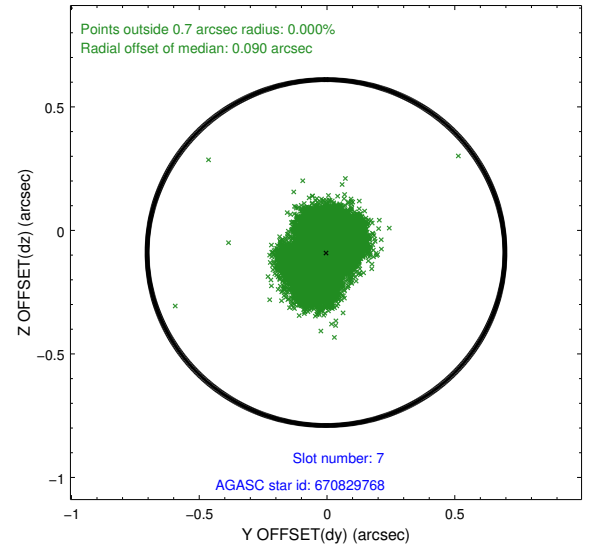
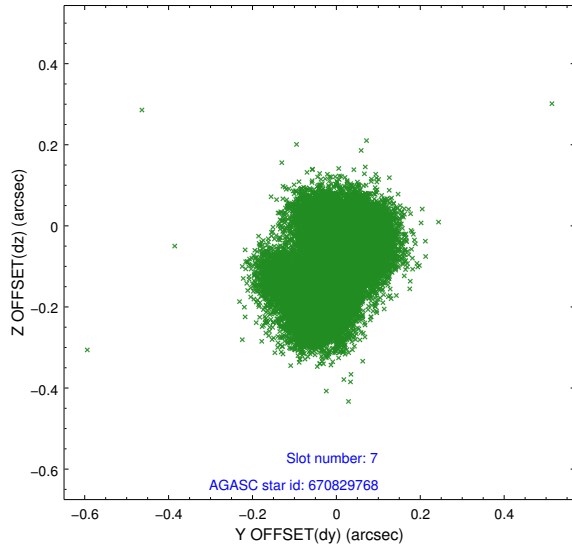
2.4.3 Slot 5



2.4.4 Slot 6

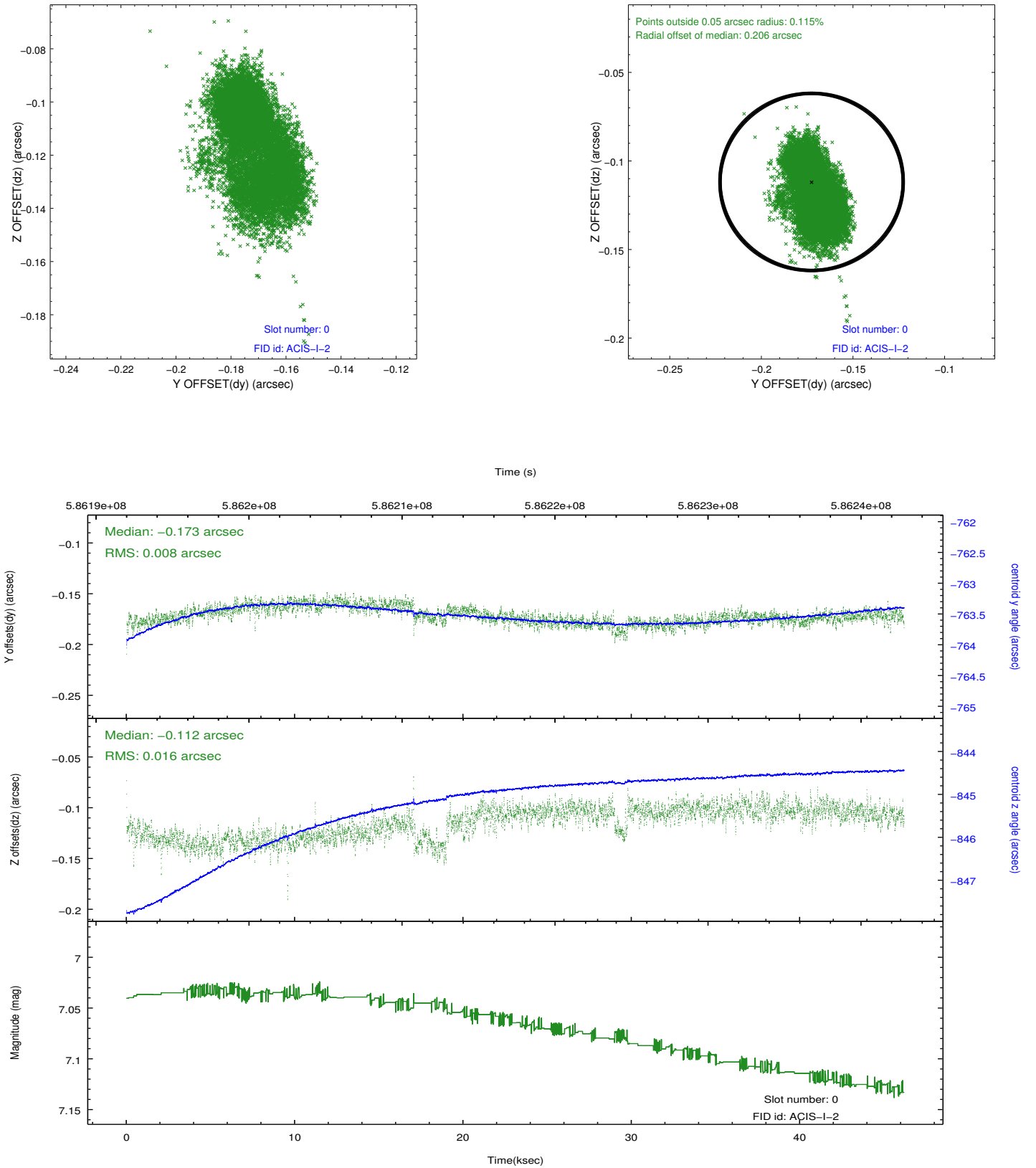


2.4.5 Slot 7

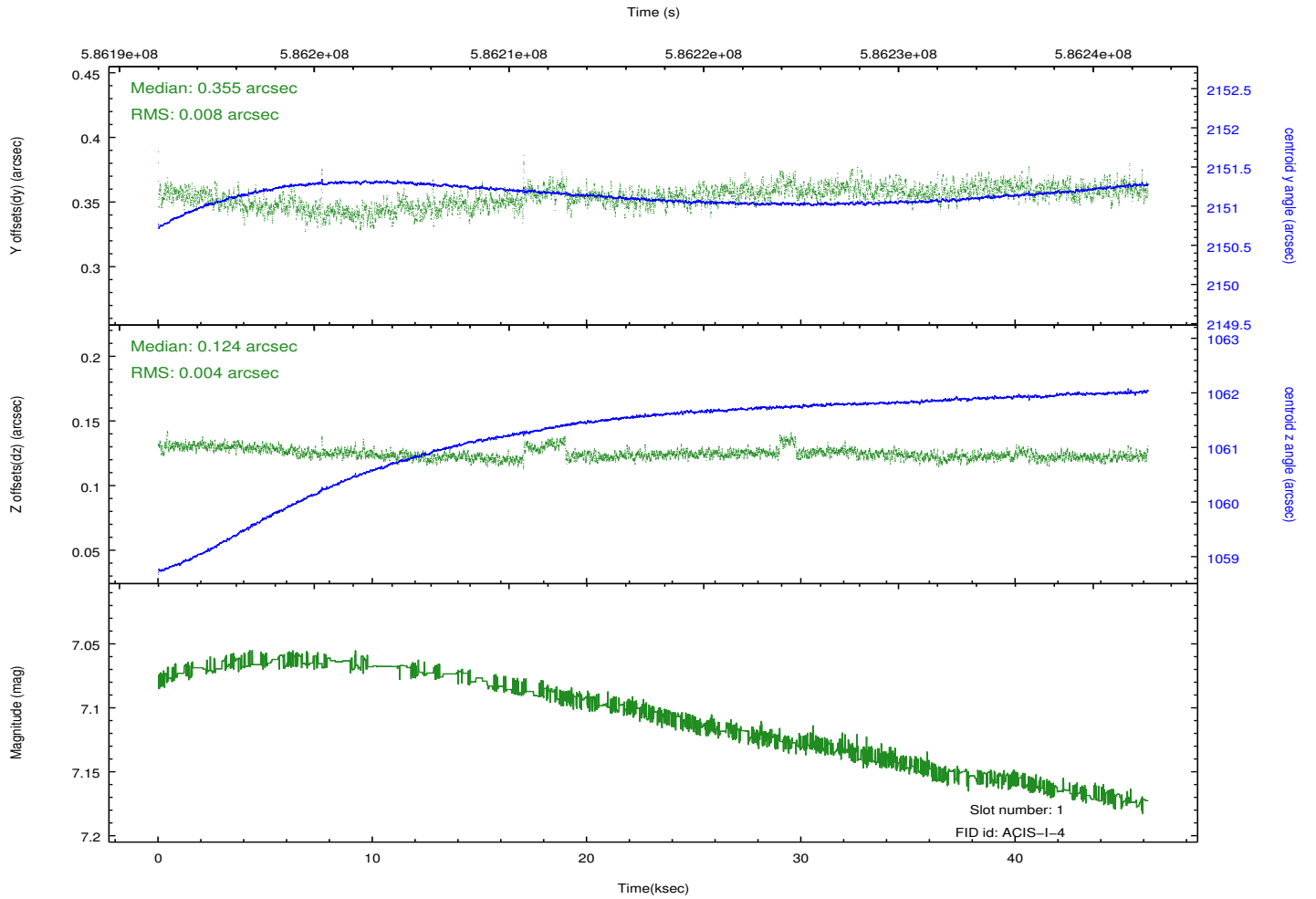
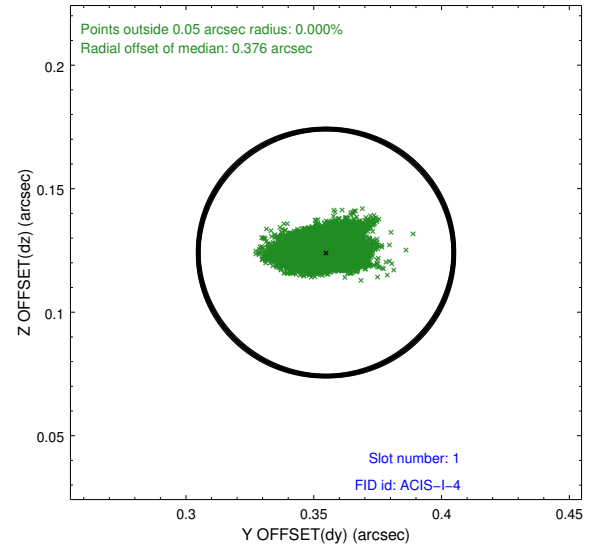
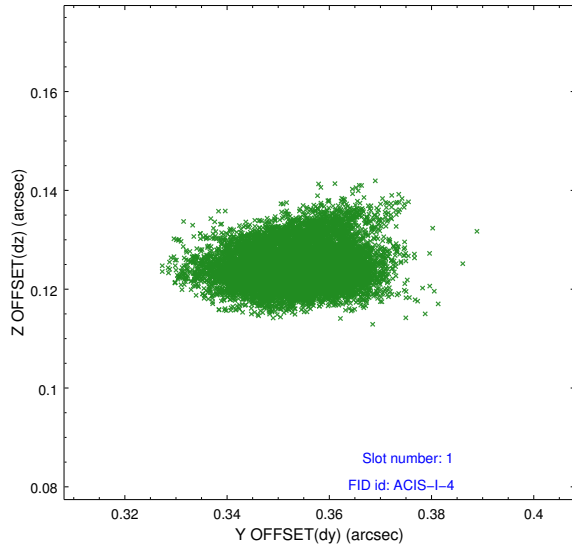


2.5 FID Slots

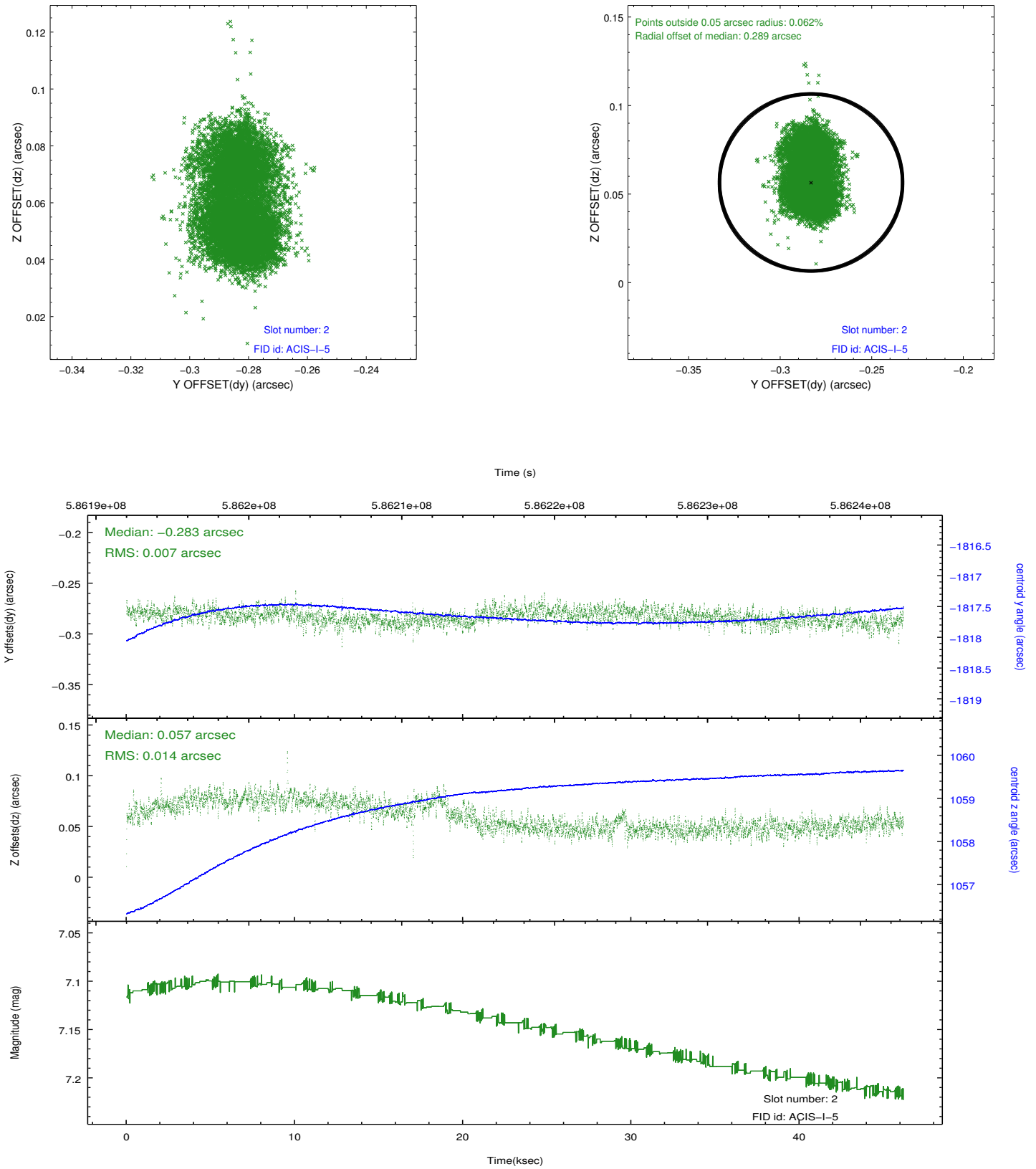
2.5.1 Slot 0



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)	2016.08.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	46.056659273863

A.2 Comments