

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 20024 - L2 Version 2
Chandra X-Ray Center

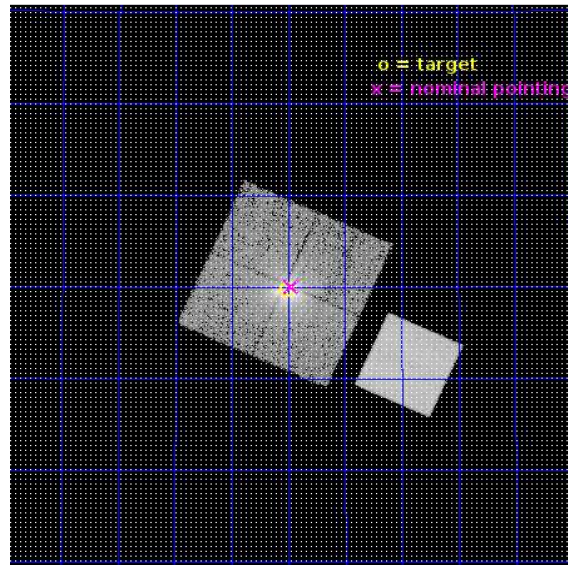
L2 Processing Date : Mar 15 2017

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1 Front

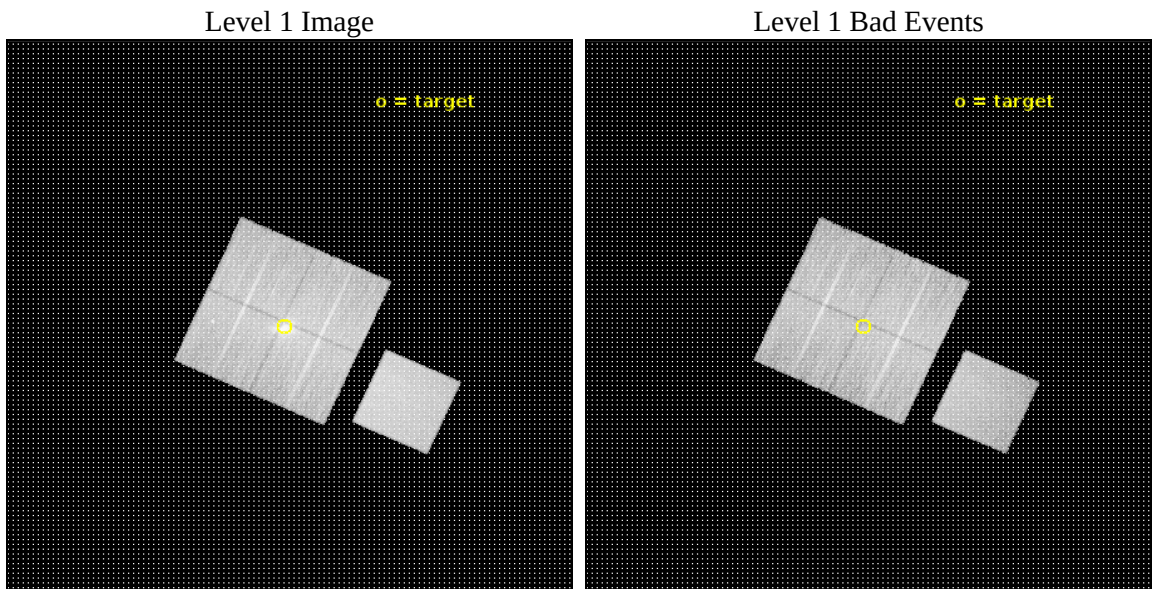
seq_num	801576	Sequence number
obs_id	20024	Observation id
title	Searching for Shock Features in the Radio Halo Cluster Abell 1914	
observer	Jimmy Irwin	Principal investigator
object	Abell 1914	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	216.501667	Observer's specified target RA [deg]
dec_targ	37.828056	Observer's specified target Dec [deg]
ra_nom	216.49332263422	Nominal RA [deg]
dec_nom	37.834017066027	Nominal Dec [deg]
roll_nom	114.21381468389	Nominal Roll [deg]
revision	2	Processing version of data
ontime	17396.869693875	Sum of GTIs [s]
livetime	17169.566783936	Livetime [s]
ontime0	17396.746573806	Sum of GTIs [s]
ontime1	17399.928673983	Sum of GTIs [s]
ontime2	17399.969713926	Sum of GTIs [s]
ontime3	17396.869693875	Sum of GTIs [s]
ontime7	17400.051793933	Sum of GTIs [s]
l2events	139370	Number of level 2 events



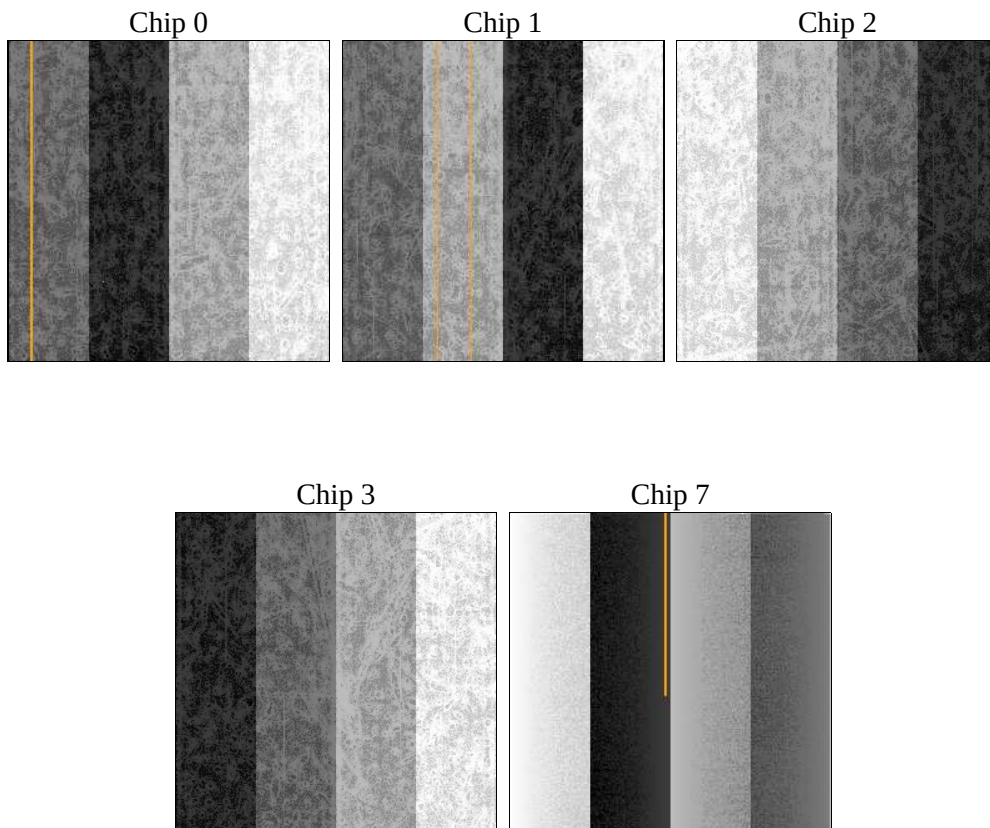
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	17352.009000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	17396.869693875	Sum of GTIs [s]
caldbver	4.7.3	 	ontime0	17396.746573806	Sum of GTIs [s]
date	2017-03-15T18:55:24	Date and time of file creation	ontime1	17399.928673983	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	17399.969713926	Sum of GTIs [s]
			ontime3	17396.869693875	Sum of GTIs [s]
			ontime7	17400.051793933	Sum of GTIs [s]
			l1events	683427	Number of level 1 events

2.1.4 Events

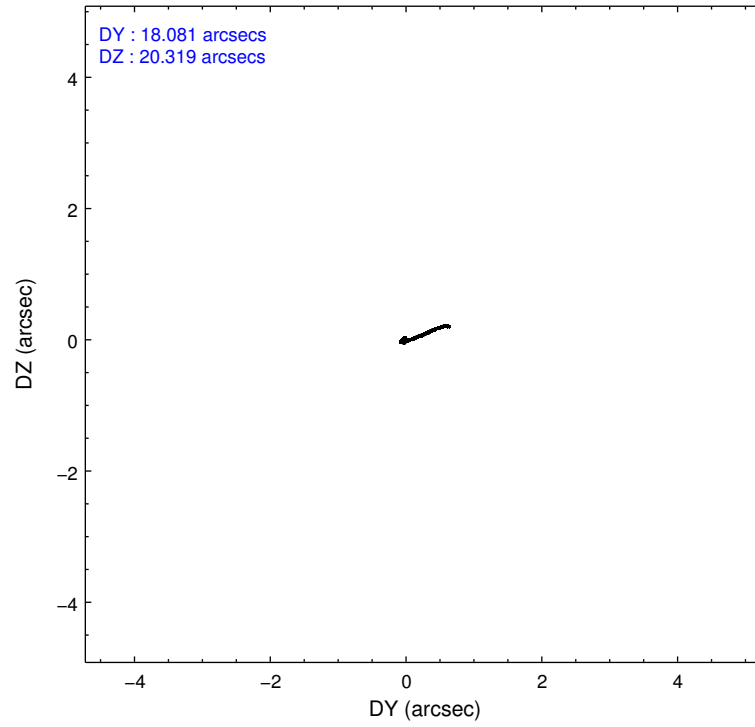
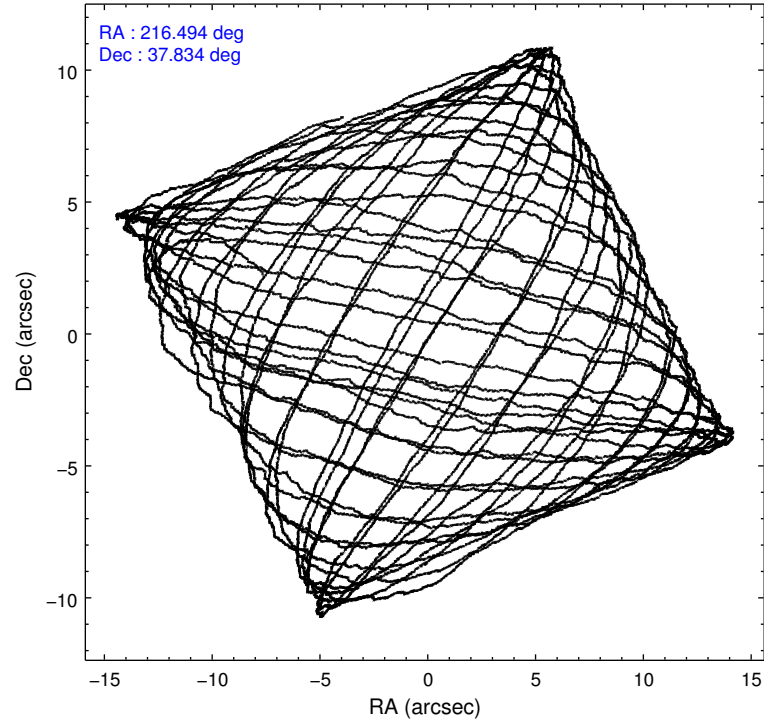
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	119868	123615	135707	141035	163202
rejected events	104038	102732	118154	112805	94059
rejected %	86%	83%	87%	79%	57%

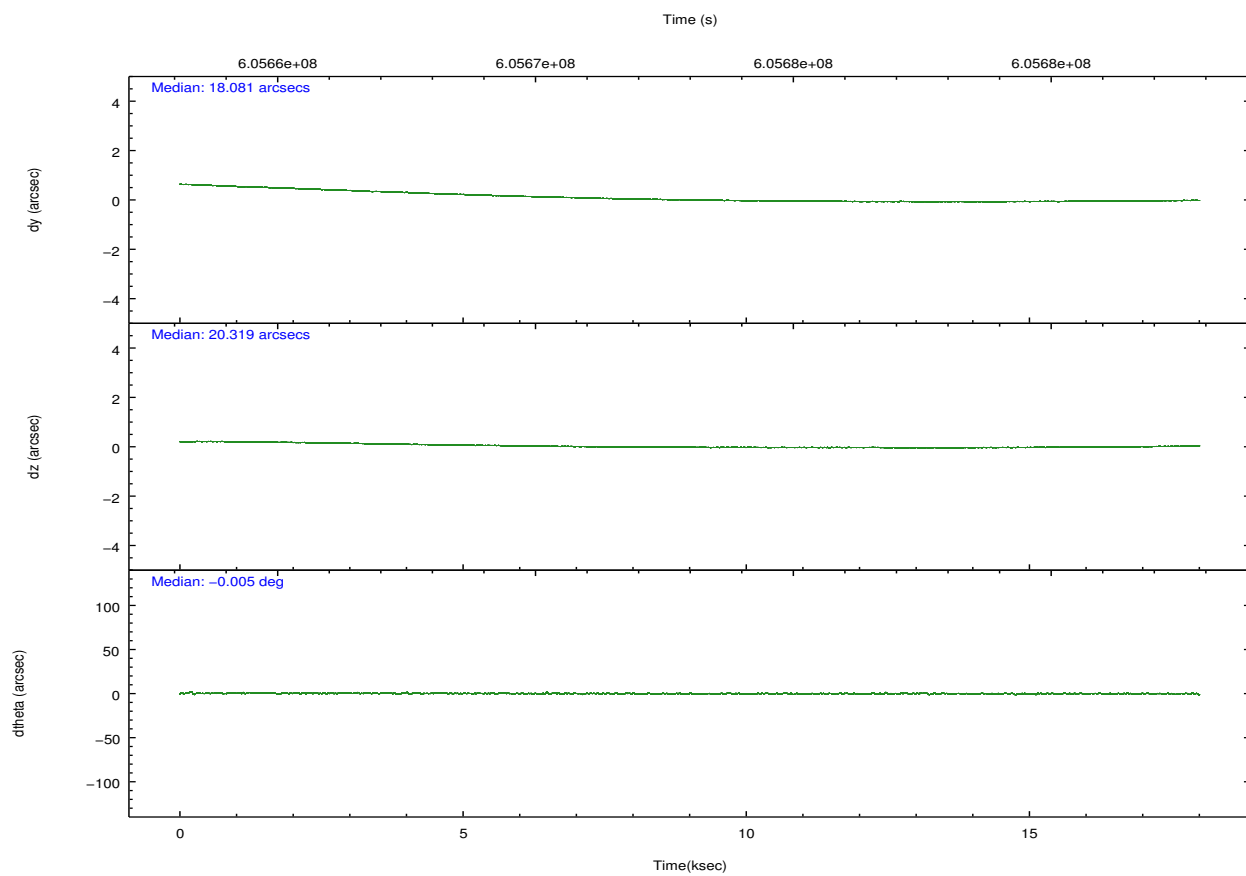
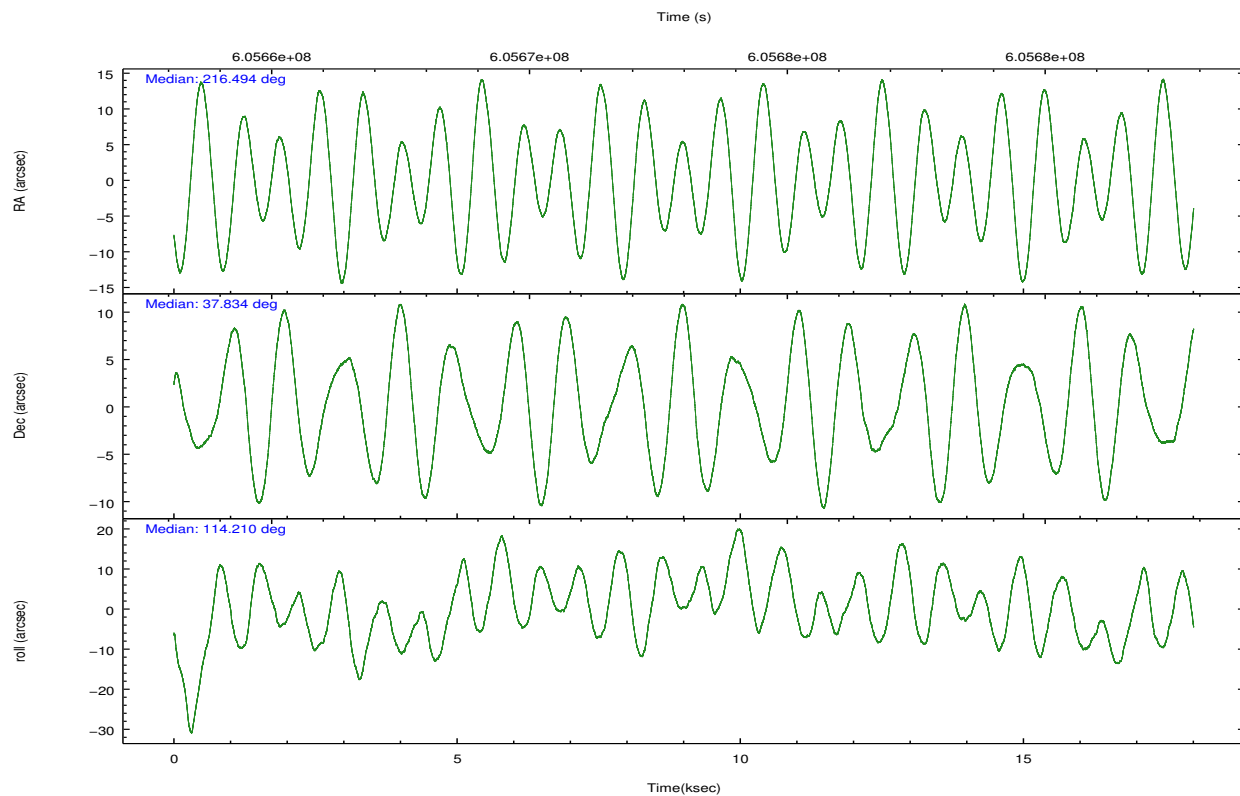
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	6312	9689	8348	16824	5526
	5%	7%	6%	11%	3%
grade 1 events	70	93	107	145	224
	0%	0%	0%	0%	0%
grade 2 events	3688	4327	3576	4433	14951
	3%	3%	2%	3%	9%
grade 3 events	1529	1644	1431	1847	5253
	1%	1%	1%	1%	3%
grade 4 events	1365	1601	1485	1840	5007
	1%	1%	1%	1%	3%
grade 5 events	5219	5516	4810	6004	15102
	4%	4%	3%	4%	9%
grade 6 events	2939	3626	2714	3294	38419
	2%	2%	1%	2%	23%
grade 7 events	98746	97119	113236	106648	78720
	82%	78%	83%	75%	48%

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	216.521787	216.4933226342208	CCD I2 on	Y	Y
[deg] Pointing Dec	37.817967	37.83401706602653	CCD I3 on	Y	Y
[deg] Pointing Roll	113.987665	114.2138146838926	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	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	605664655.184000	605663478.6262	CCD S5 on	N	N
Observation start date	2017-03-12T00:09:46	2017-03-11T23:51:18	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	605682007.184000	605682245.35229	On-chip summing requested	N	N
Observation end date	2017-03-12T04:58:58	2017-03-12T05:04:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



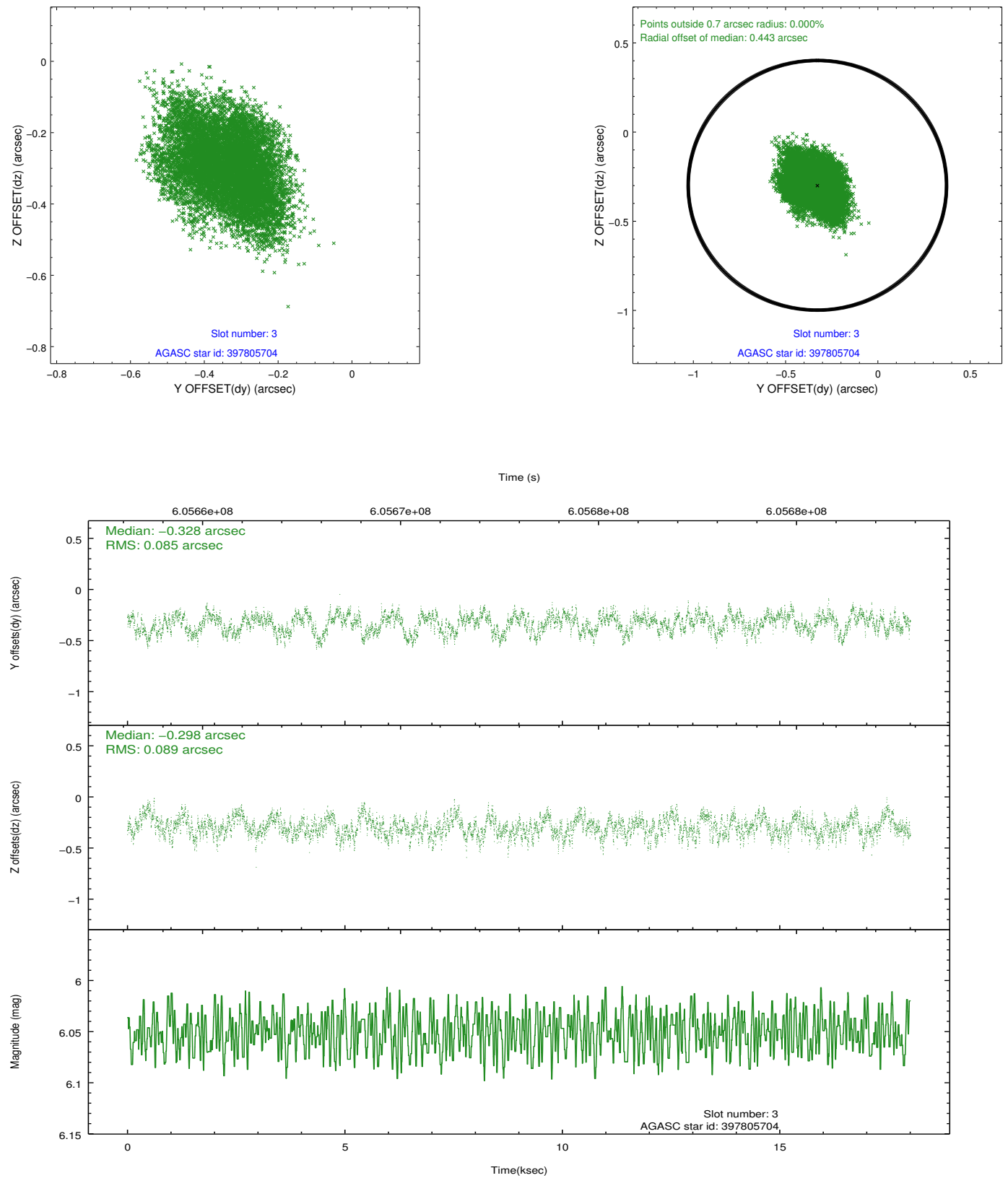


Slot Statistics

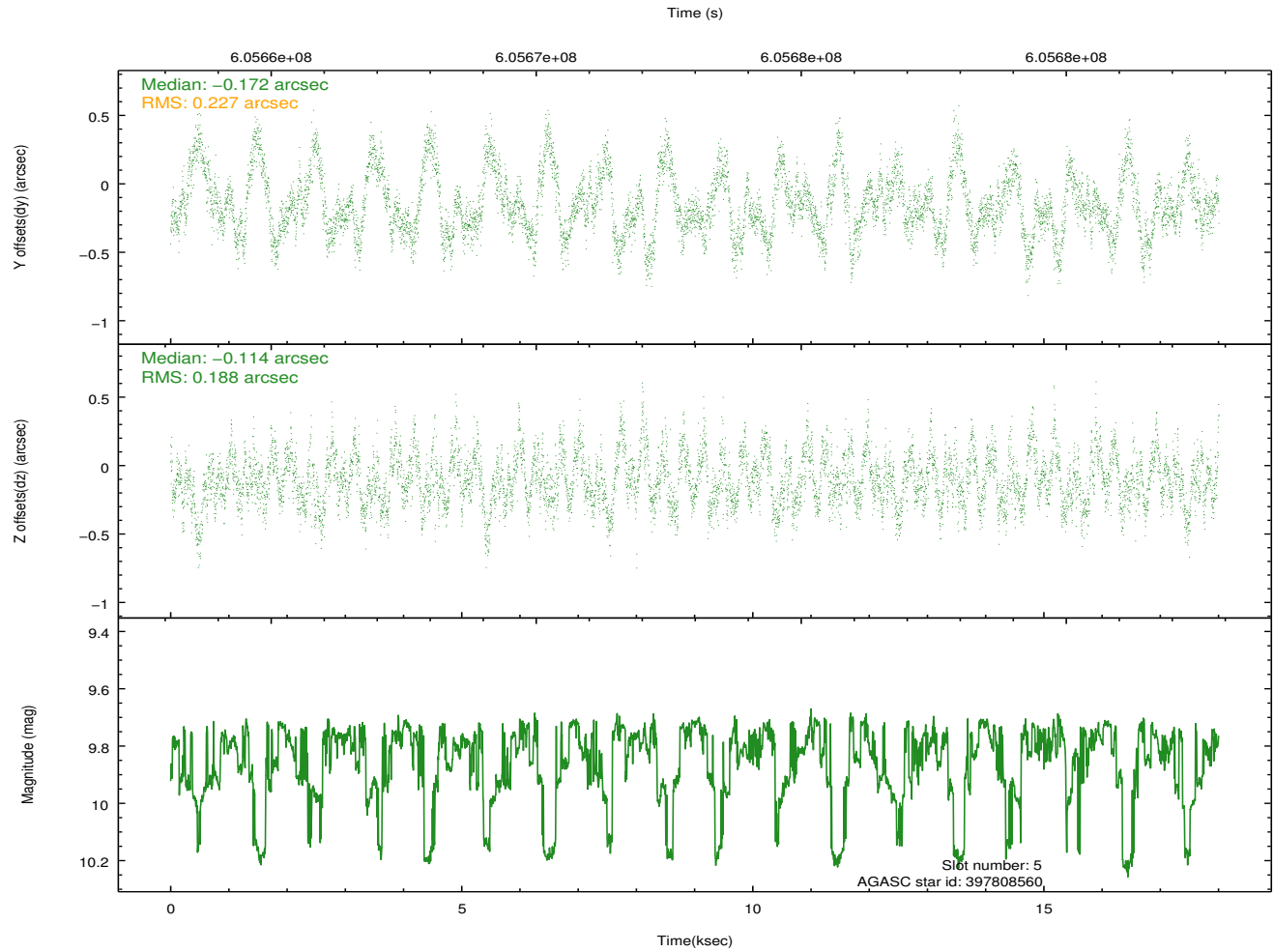
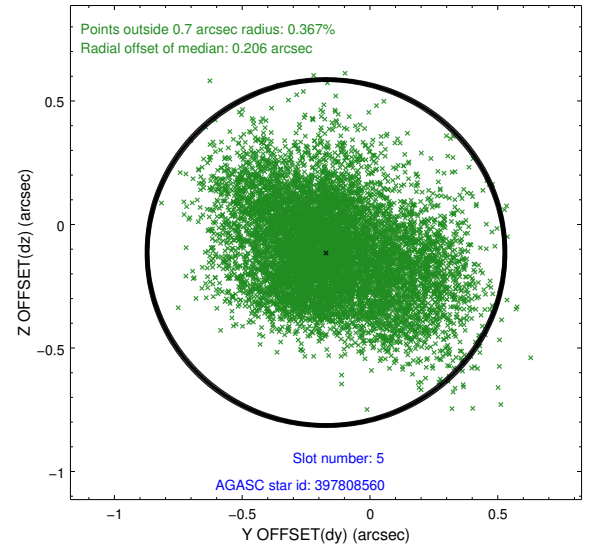
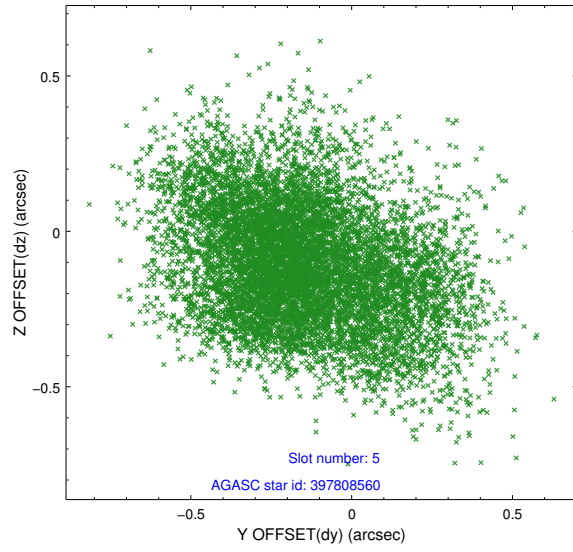
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.23	4392	0.080	-0.092	0.006	0.011	0.000000	0.000000	921.30	-844.14
1	FID		ACIS-I-5	7.22	4392	-0.399	0.015	0.007	0.012	0.000000	0.000000	-1827.27	1053.19
2	FID		ACIS-I-6	7.23	4392	0.229	0.147	0.007	0.012	0.000000	0.000000	386.61	1698.21
3	GUIDE	used	397805704	6.05	8784	-0.328	-0.298	0.132	0.212	216.371468	38.393051	2064.17	-454.19
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	397808560	9.83	8722	-0.172	-0.114	0.312	0.517	216.564463	37.977903	477.26	-343.69
6	GUIDE	used	397940208	9.65	8774	0.126	0.375	0.220	0.345	217.129334	38.261499	766.73	-2219.85
7	GUIDE	used	397943760	7.93	8783	0.359	0.033	0.117	0.186	217.039857	37.556695	-1455.57	-970.23

2.4 Star Slots

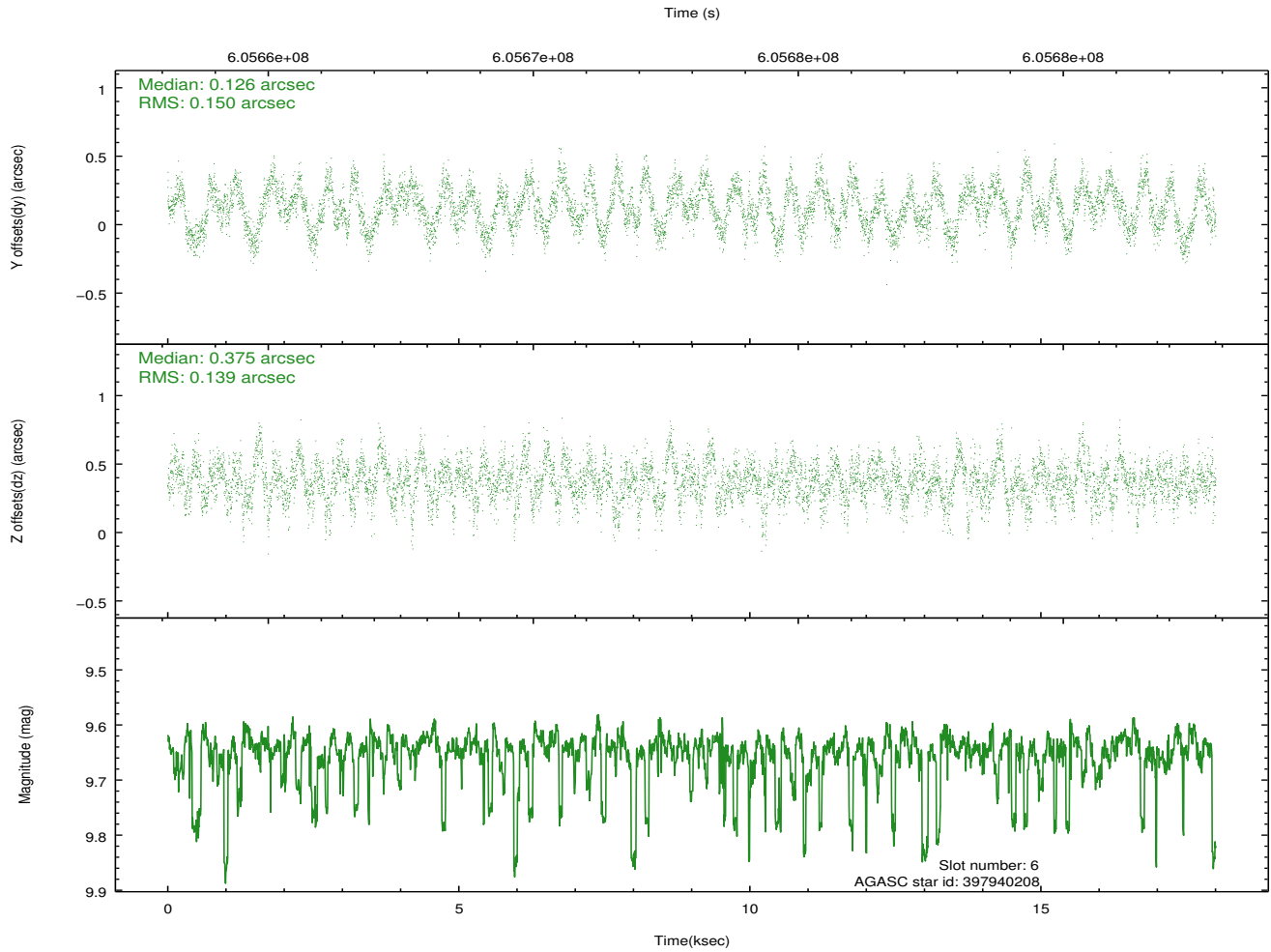
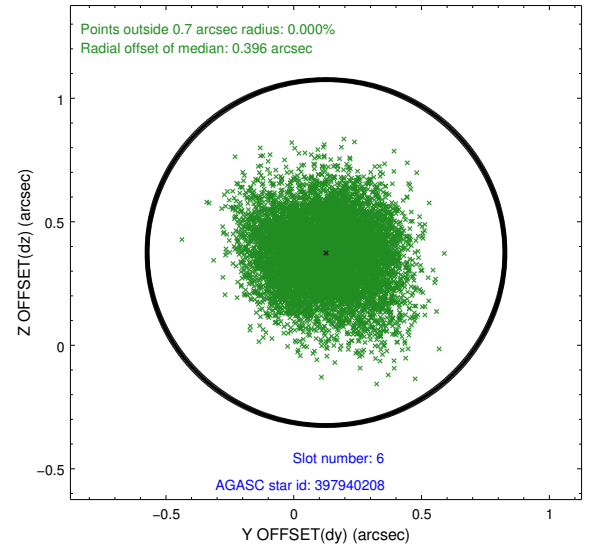
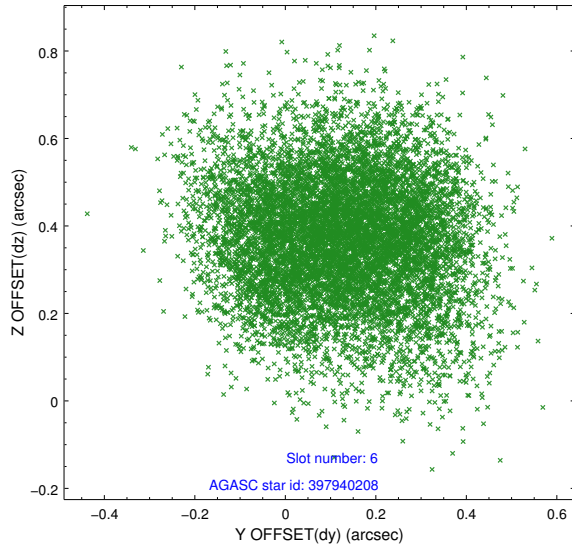
2.4.1 Slot 3



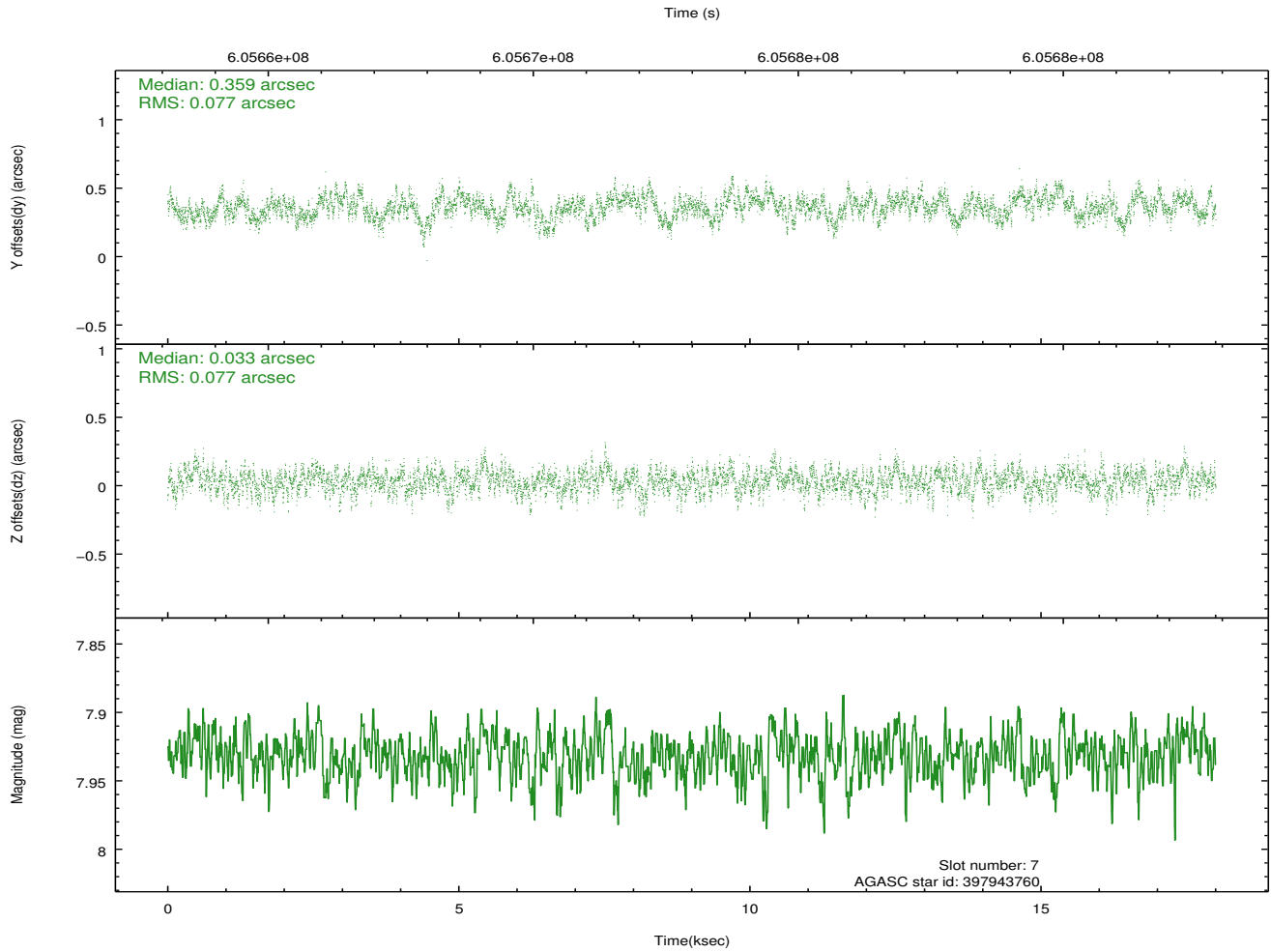
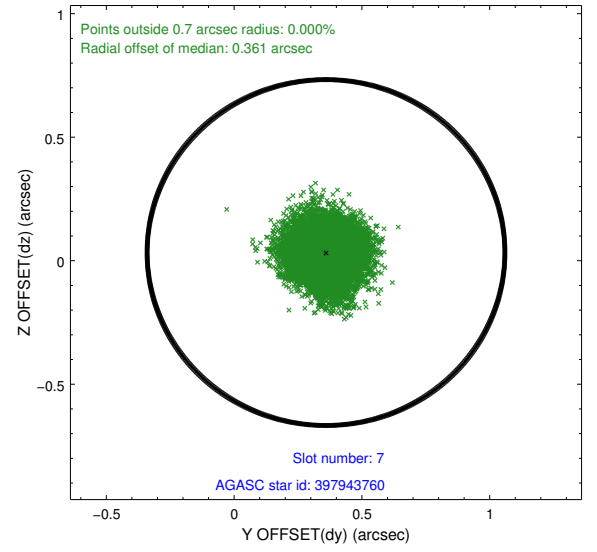
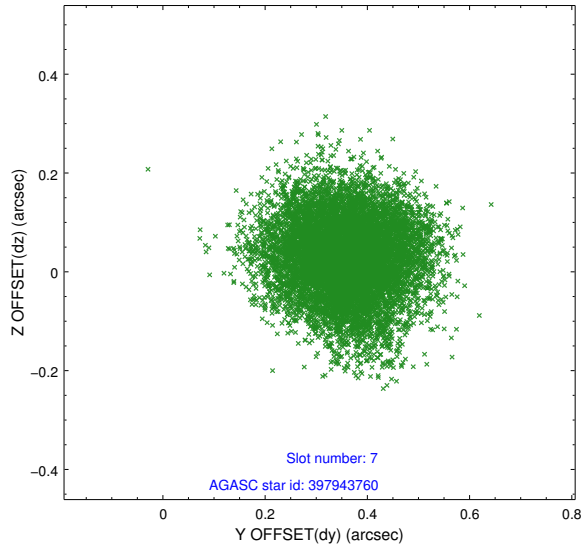
2.4.2 Slot 5



2.4.3 Slot 6

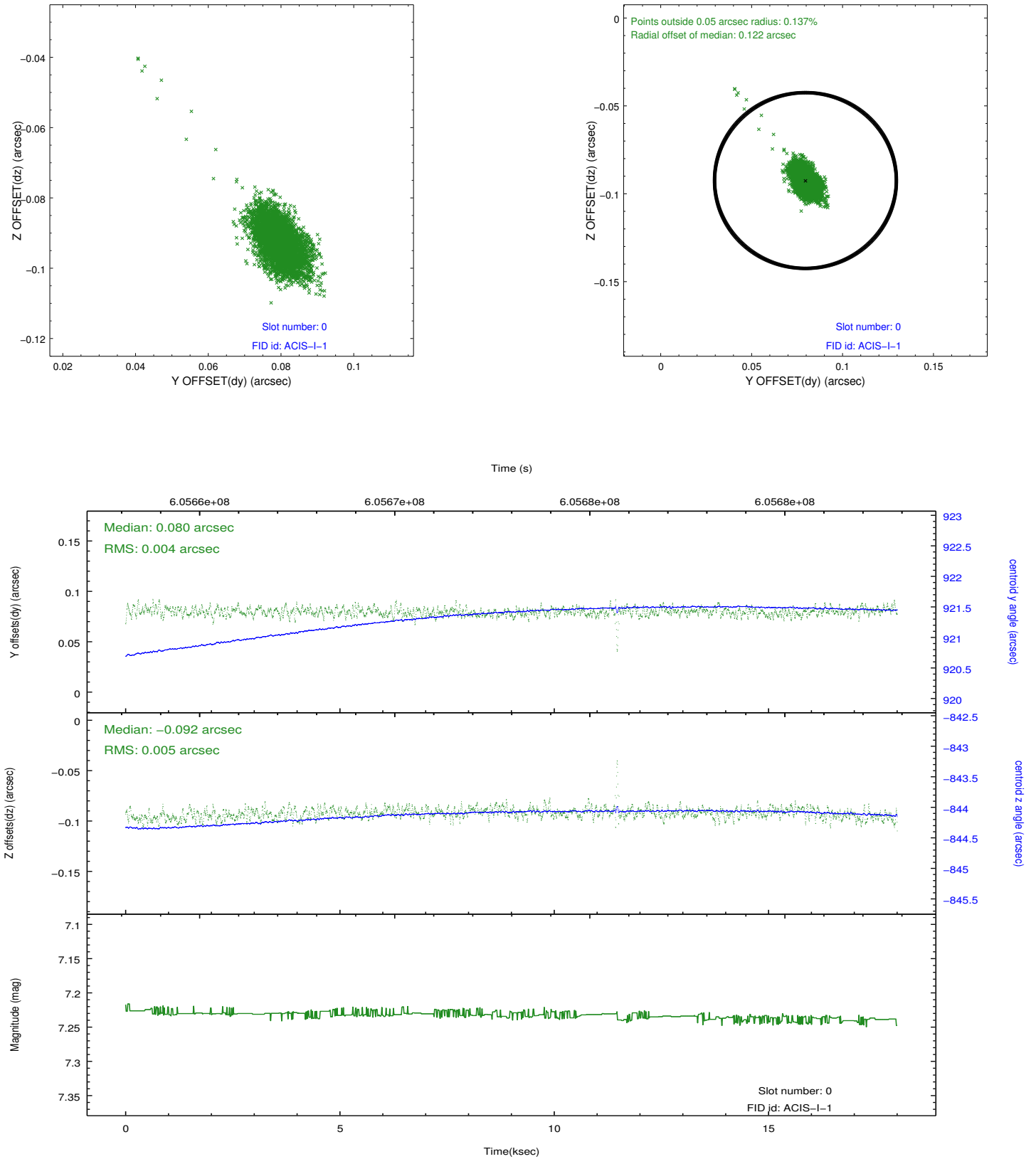


2.4.4 Slot 7

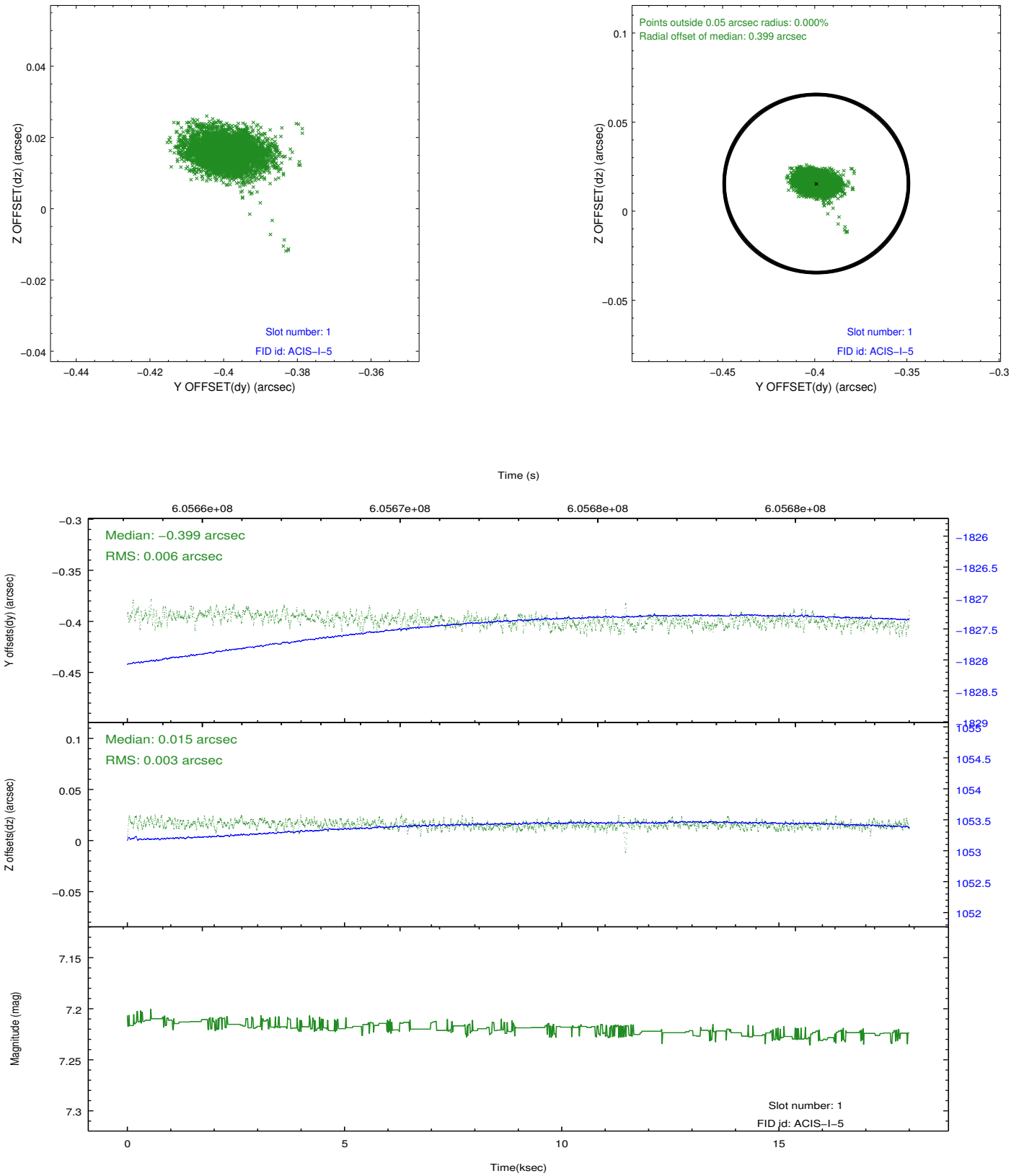


2.5 FID Slots

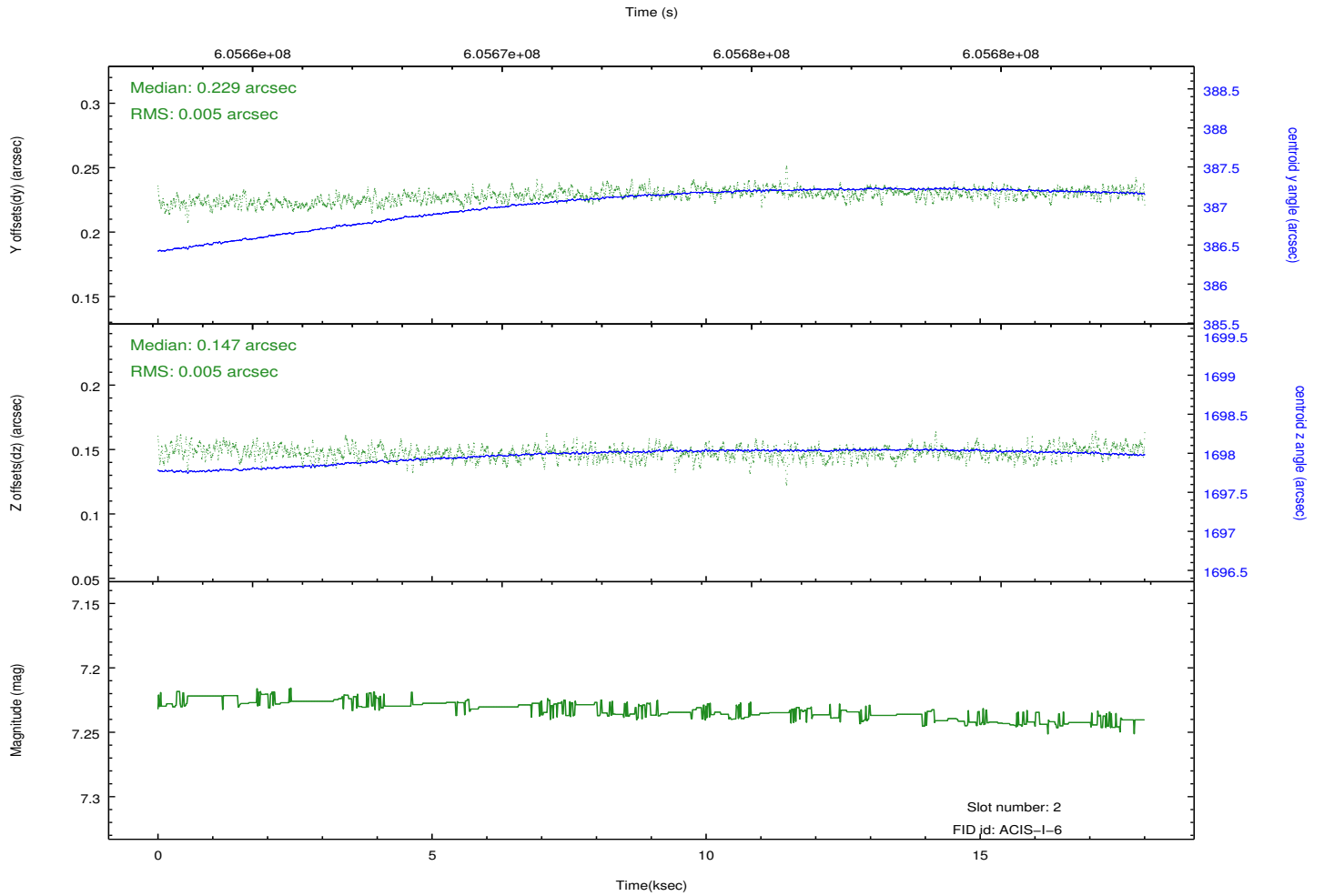
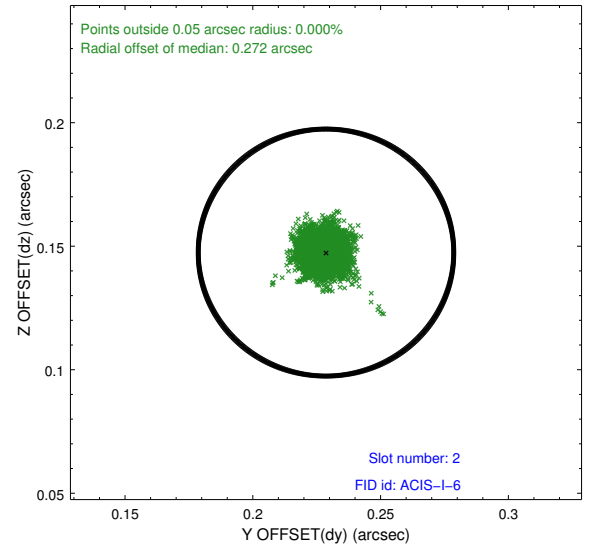
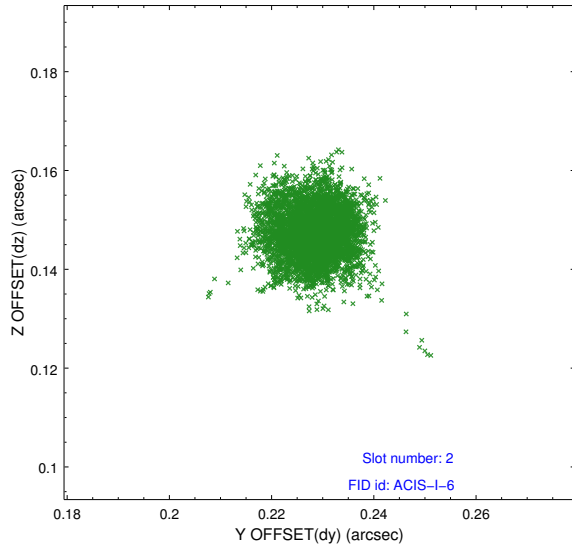
2.5.1 Slot 0



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)	2017.03.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.396869693875

A.2 Comments

The guide star in slot 4 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.