

# V&V Reference Report

## L2 ASCDS Version : 10.3.1

Observation 17497 - L2 Version 1  
Chandra X-Ray Center

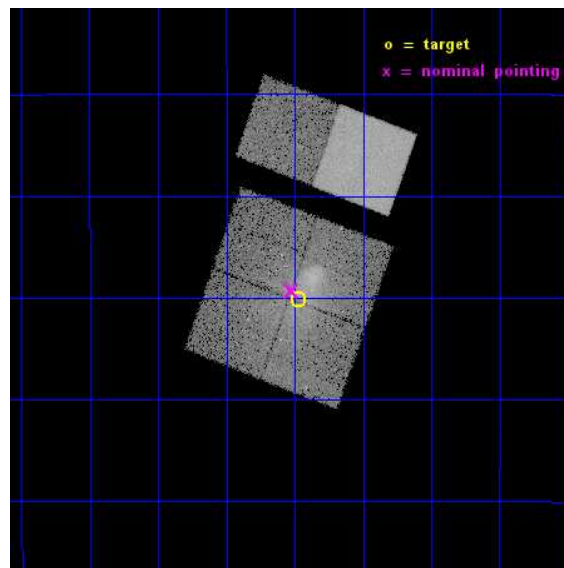
L2 Processing Date : Jan 14 2015

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# 1 Front

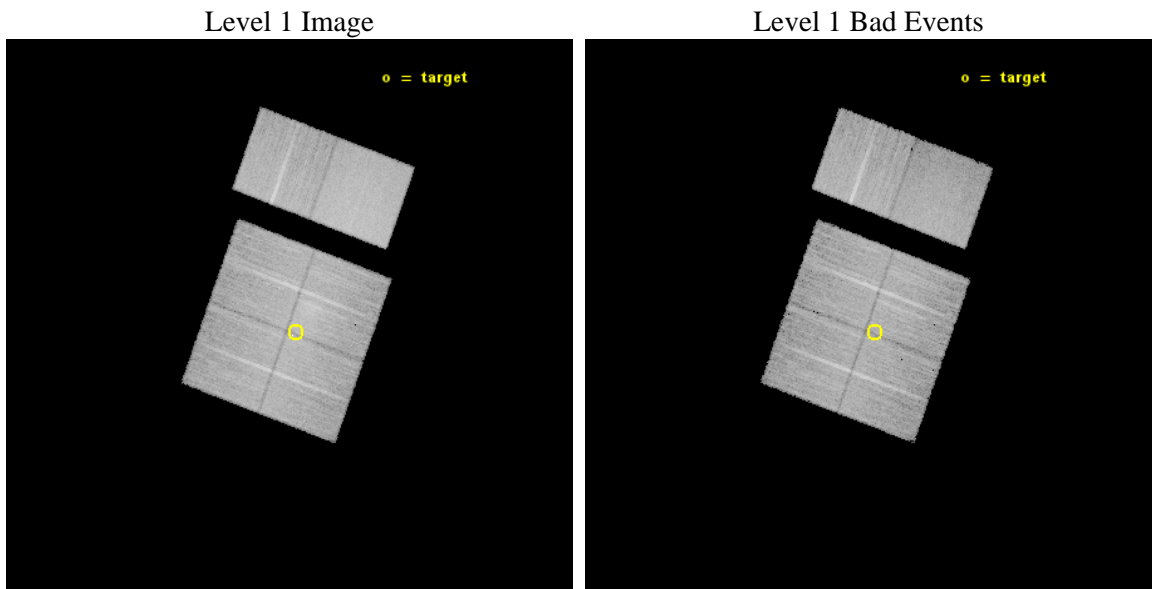
seq_num	801476	Sequence number
obs_id	17497	Observation id
title	Abell 3411: Confronting the Relic Shock Acceleration Mystery	Propo
observer	Dr Reinout van Weeren	Principal investigator
object	Abell 3411	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	130.49375	Observer's specified target RA [deg]
dec_targ	-17.503472	Observer's specified target Dec [deg]
ra_nom	130.50605313241	Nominal RA [deg]
dec_nom	-17.488561992694	Nominal Dec [deg]
roll_nom	20.212388694124	Nominal Roll [deg]
revision	1	Processing version of data
ontime	22271.005397677	Sum of GTIs [s]
livetime	21988.996517343	Livetime [s]
ontime0	22280.68758893	Sum of GTIs [s]
ontime1	22271.005397677	Sum of GTIs [s]
ontime2	22280.769668937	Sum of GTIs [s]
ontime3	22280.81070888	Sum of GTIs [s]
ontime6	22277.651788473	Sum of GTIs [s]
ontime7	22280.851748943	Sum of GTIs [s]
l2events	144619	Number of level 2 events



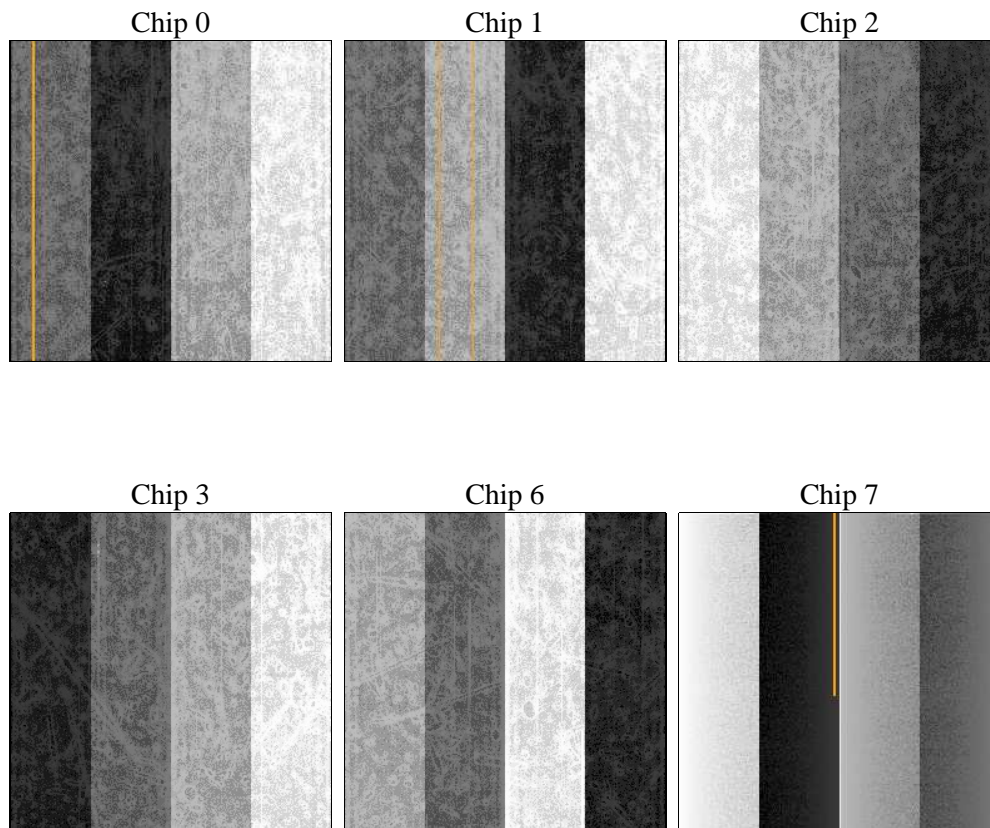
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	22324.397000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	22271.005397677	Sum of GTIs [s]
caldbver	4.6.5	&#160	ontime0	22280.68758893	Sum of GTIs [s]
date	2015-01-14T14:24:33	Date and time of file creation	ontime1	22271.005397677	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	22280.769668937	Sum of GTIs [s]
			ontime3	22280.81070888	Sum of GTIs [s]
			ontime6	22277.651788473	Sum of GTIs [s]
			ontime7	22280.851748943	Sum of GTIs [s]
			l1events	744192	Number of level 1 events

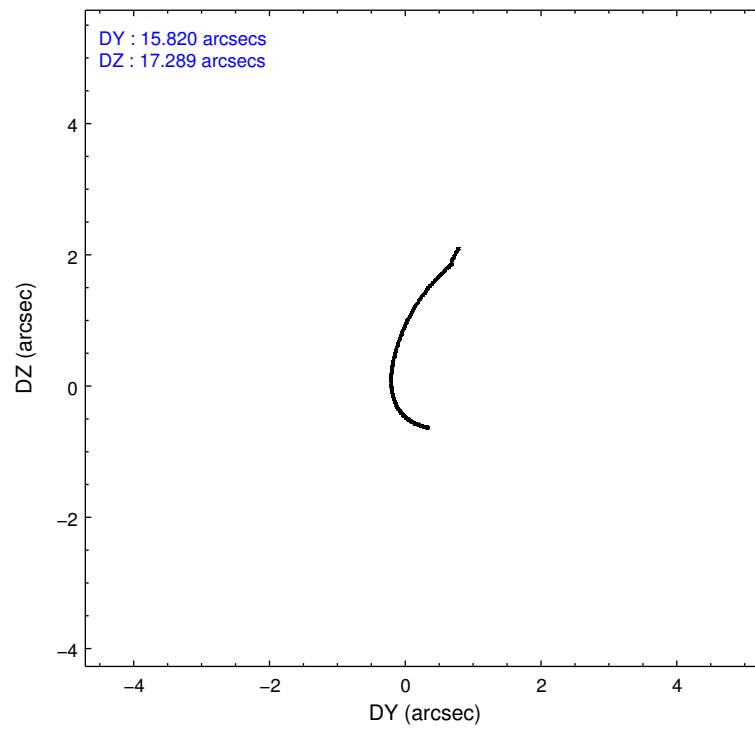
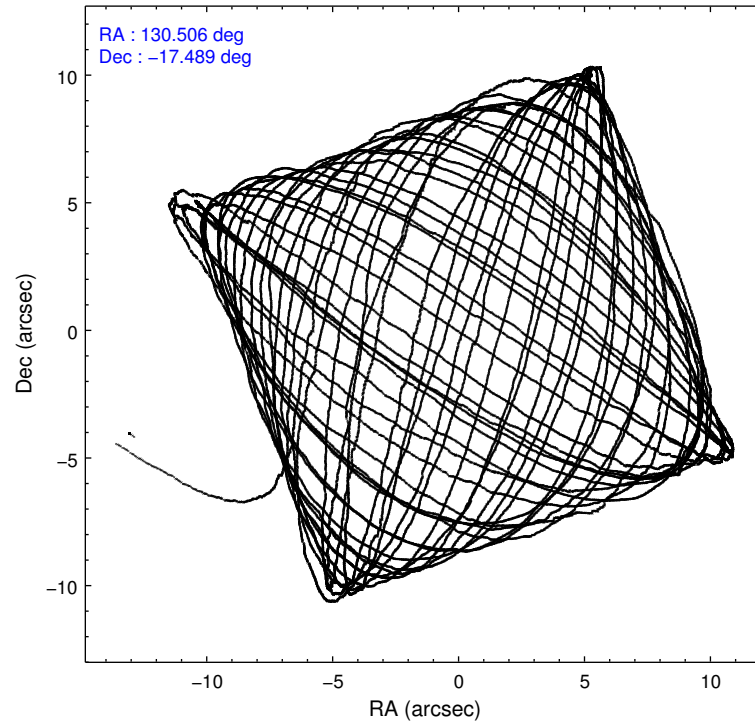
### 2.1.4 Events

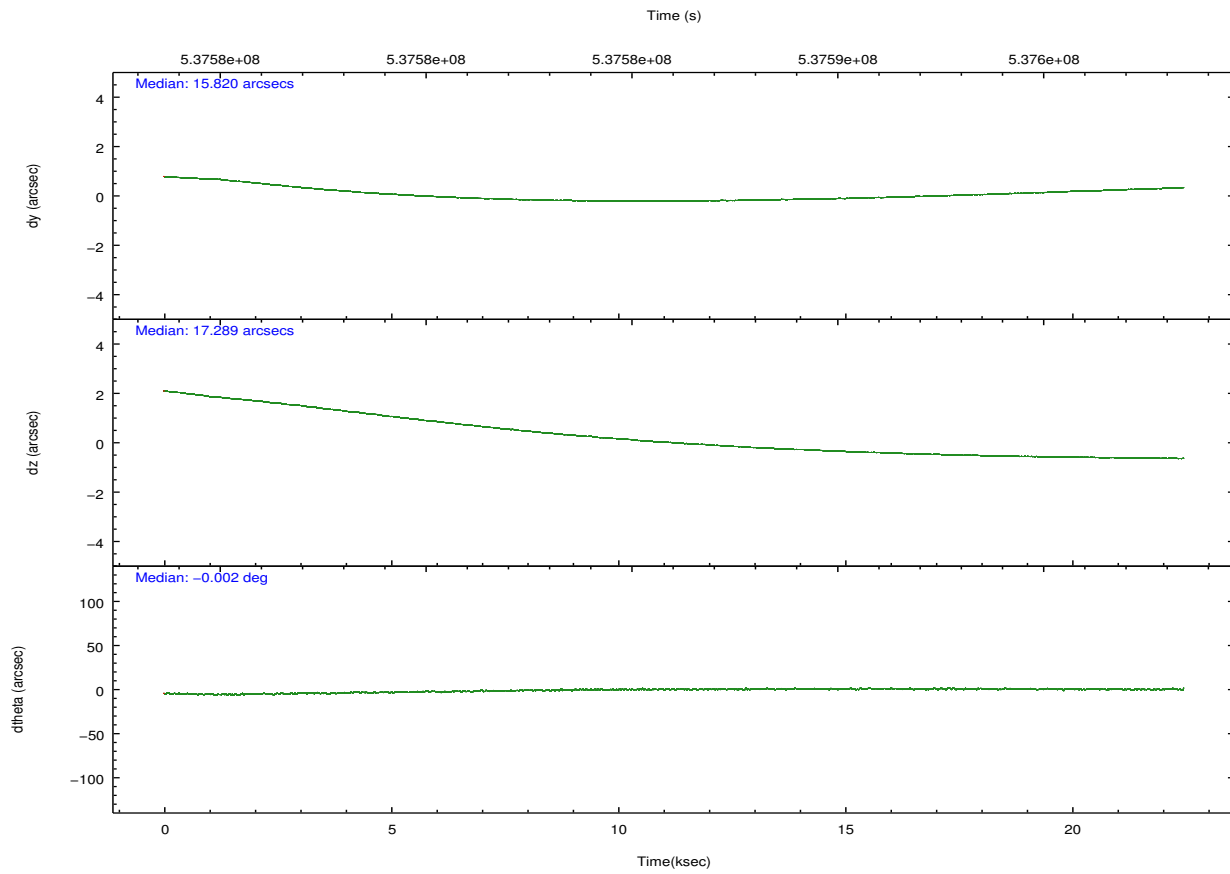
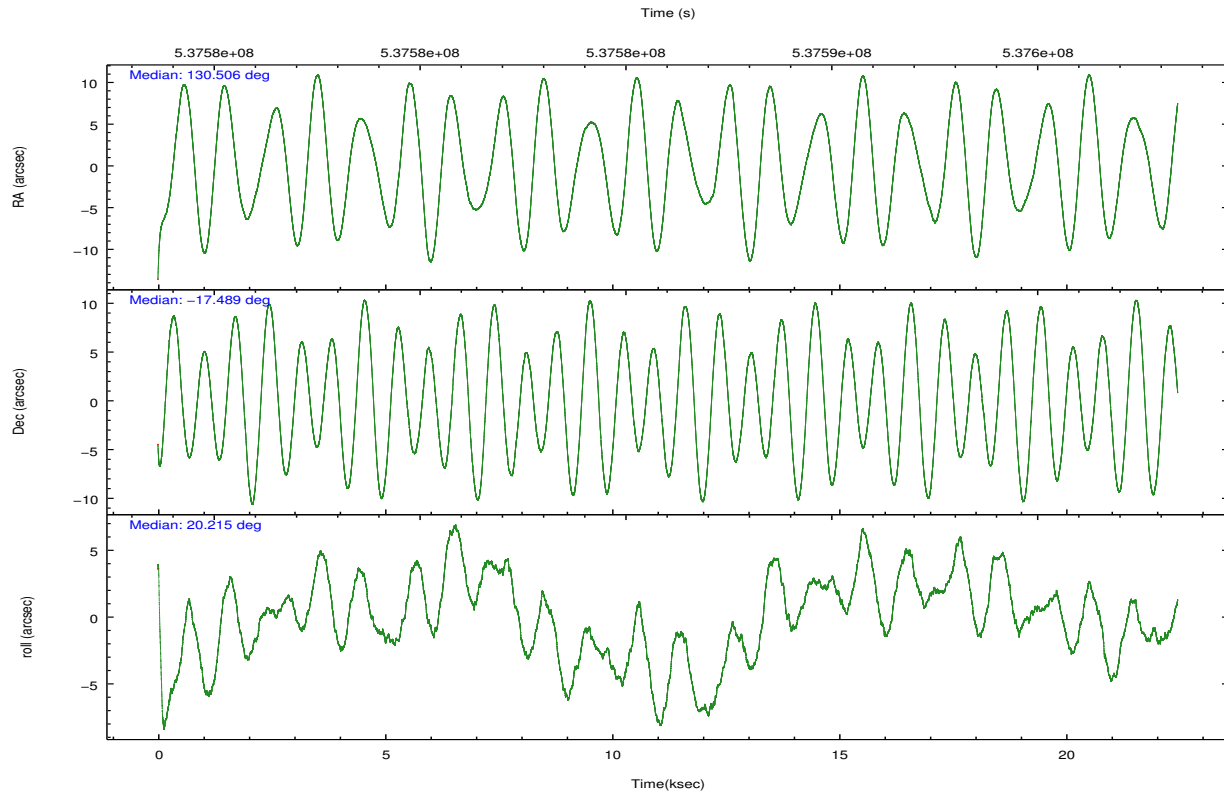
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	108454	112840	116761	125943	122030	158164	grade 0 events	6818	9257	6656	12605	4881	5966
rejected events	92034	92690	101089	103135	107900	89689		6%	8%	5%	10%	3%	3%
rejected %	84%	82%	86%	81%	88%	56%	grade 1 events	74	67	90	106	57	223
								0%	0%	0%	0%	0%	0%
							grade 2 events	3648	4135	3542	3808	3228	14049
								3%	3%	3%	3%	2%	8%
							grade 3 events	1561	1699	1422	1728	1341	5791
								1%	1%	1%	1%	1%	3%
							grade 4 events	1427	1566	1440	1704	1432	5665
								1%	1%	1%	1%	1%	3%
							grade 5 events	5415	5786	5222	6253	6158	16100
								4%	5%	4%	4%	5%	10%
							grade 6 events	2971	3495	2613	2967	3249	37014
								2%	3%	2%	2%	2%	23%
							grade 7 events	86540	86835	95776	96772	101684	73356
								79%	76%	82%	76%	83%	46%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	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	130.487629	130.5060531324104	CCD I2 on	Y	Y
[deg] Pointing Dec	-17.509852	-17.48856199269434	CCD I3 on	Y	Y
[deg] Pointing Roll	19.998157	20.2123886941242	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	O2	Y
[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)	537574901.184000	537573709.0517401	CCD S5 on	N	N
Observation start date	2015-01-13T22:20:34	2015-01-13T22:01:49	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	537597225.184000	537597462.40307	On-chip summing requested	N	N
Observation end date	2015-01-14T04:32:38	2015-01-14T04:37:42	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



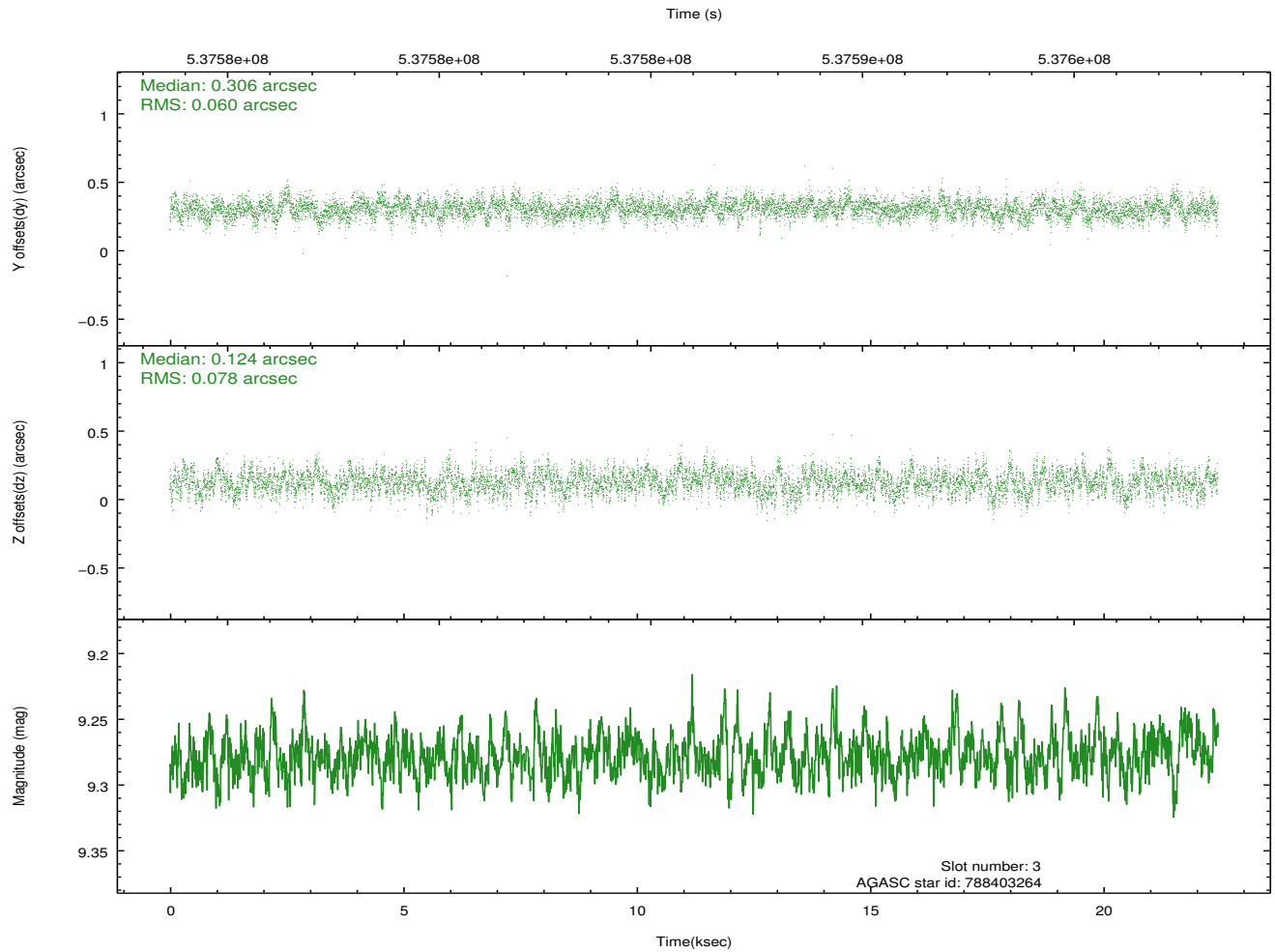
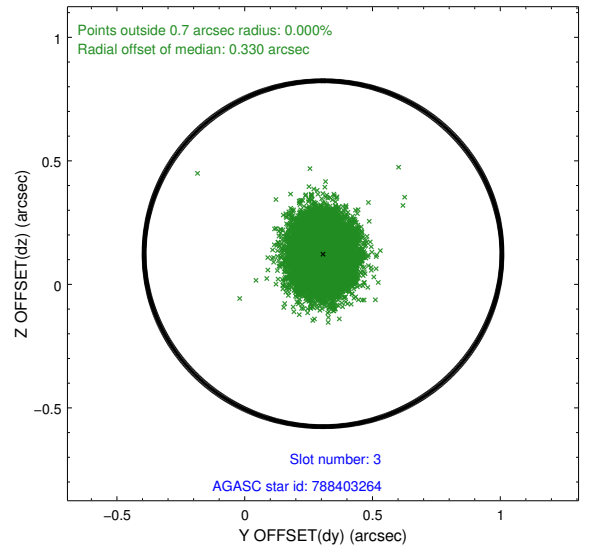
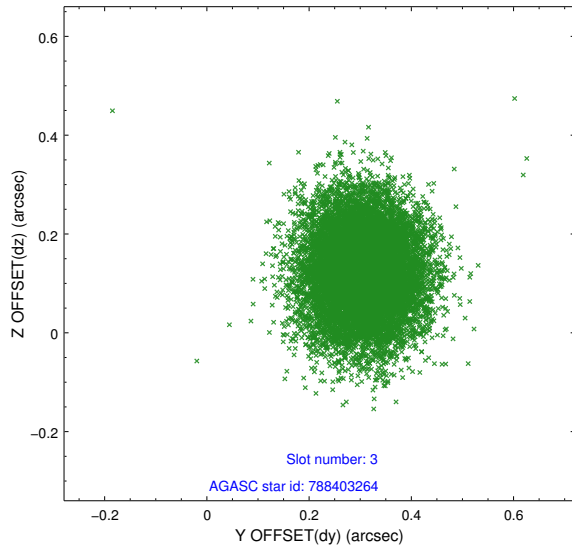


### Slot Statistics

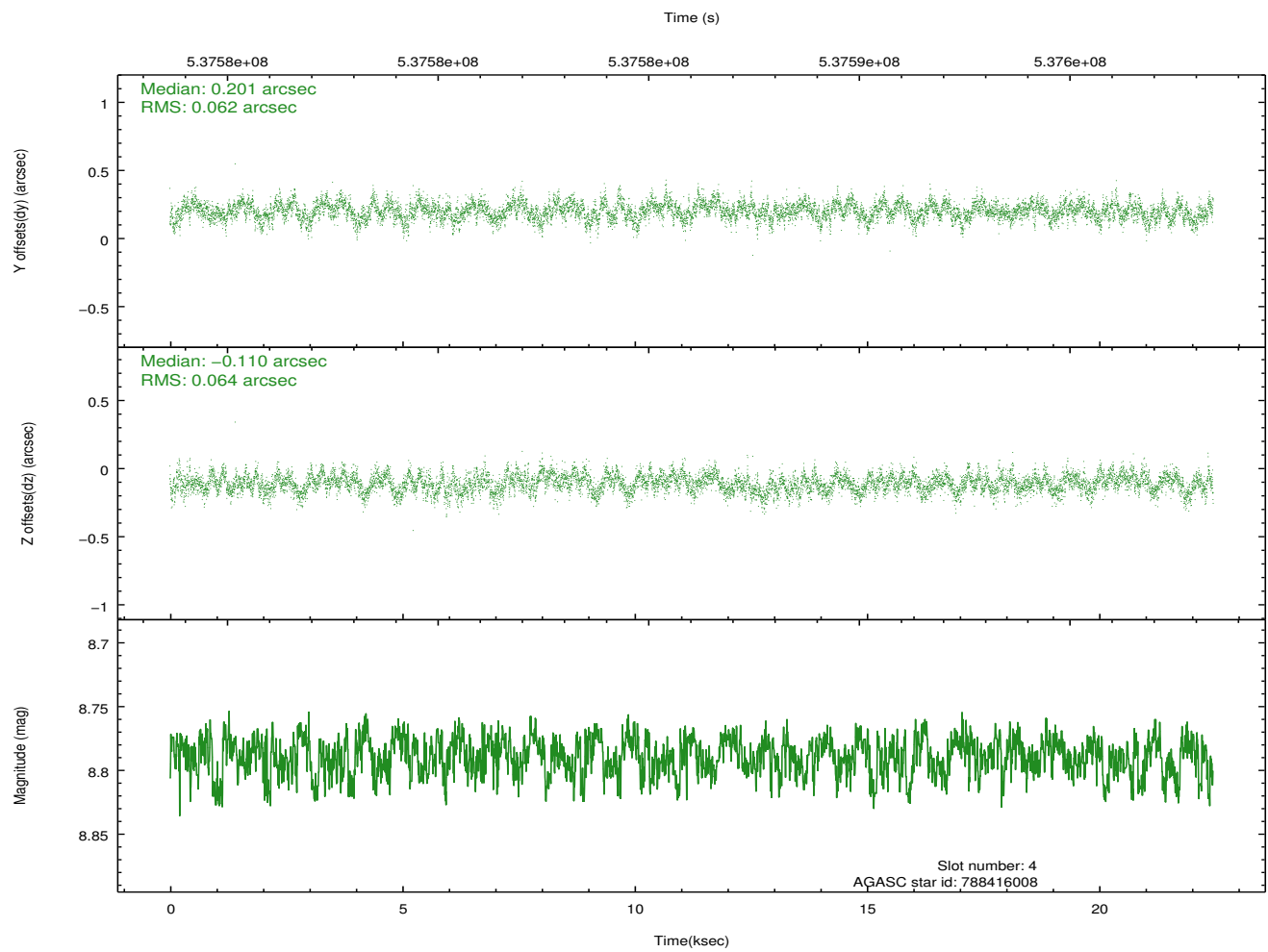
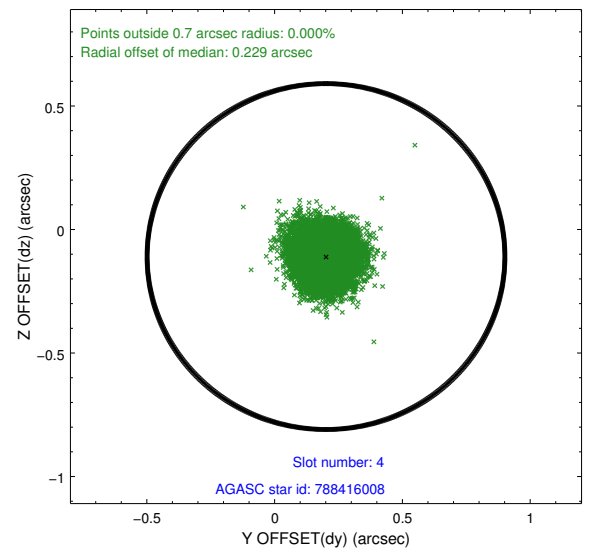
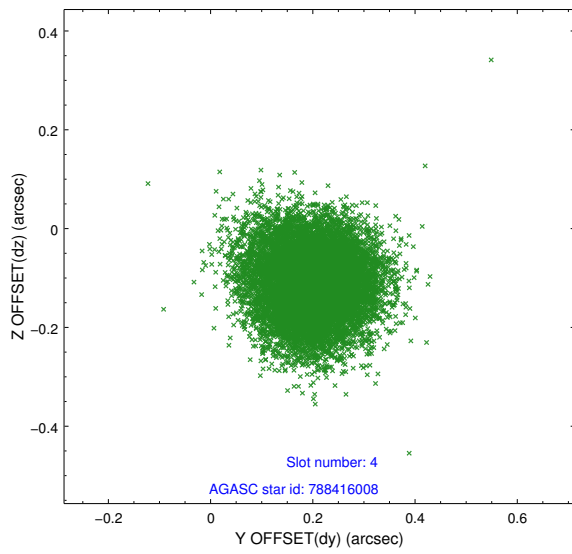
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	5479	0.062	-0.001	0.039	0.063	0.000000	0.000000	923.61	-841.22
1	FID		ACIS-I-5	7.12	5479	-0.257	0.056	0.012	0.024	0.000000	0.000000	-1824.75	1056.20
2	FID		ACIS-I-6	7.11	5479	0.107	0.009	0.034	0.042	0.000000	0.000000	389.01	1700.87
3	GUIDE	used	788403264	9.28	10950	0.306	0.124	0.105	0.170	129.988745	-17.706292	-1849.94	-80.84
4	GUIDE	used	788416008	8.79	10955	0.201	-0.110	0.095	0.154	129.756864	-17.301734	-2105.40	1558.76
5	GUIDE	used	788546808	8.89	10948	-0.039	0.196	0.102	0.164	131.022424	-17.370468	1897.37	-158.83
6	GUIDE	used	788548808	8.68	10954	-0.285	-0.054	0.078	0.128	130.875619	-17.230270	1597.52	488.37
7	GUIDE	used	788552320	8.48	10952	-0.181	-0.155	0.093	0.147	130.958057	-17.020554	2123.72	1097.44

## 2.4 Star Slots

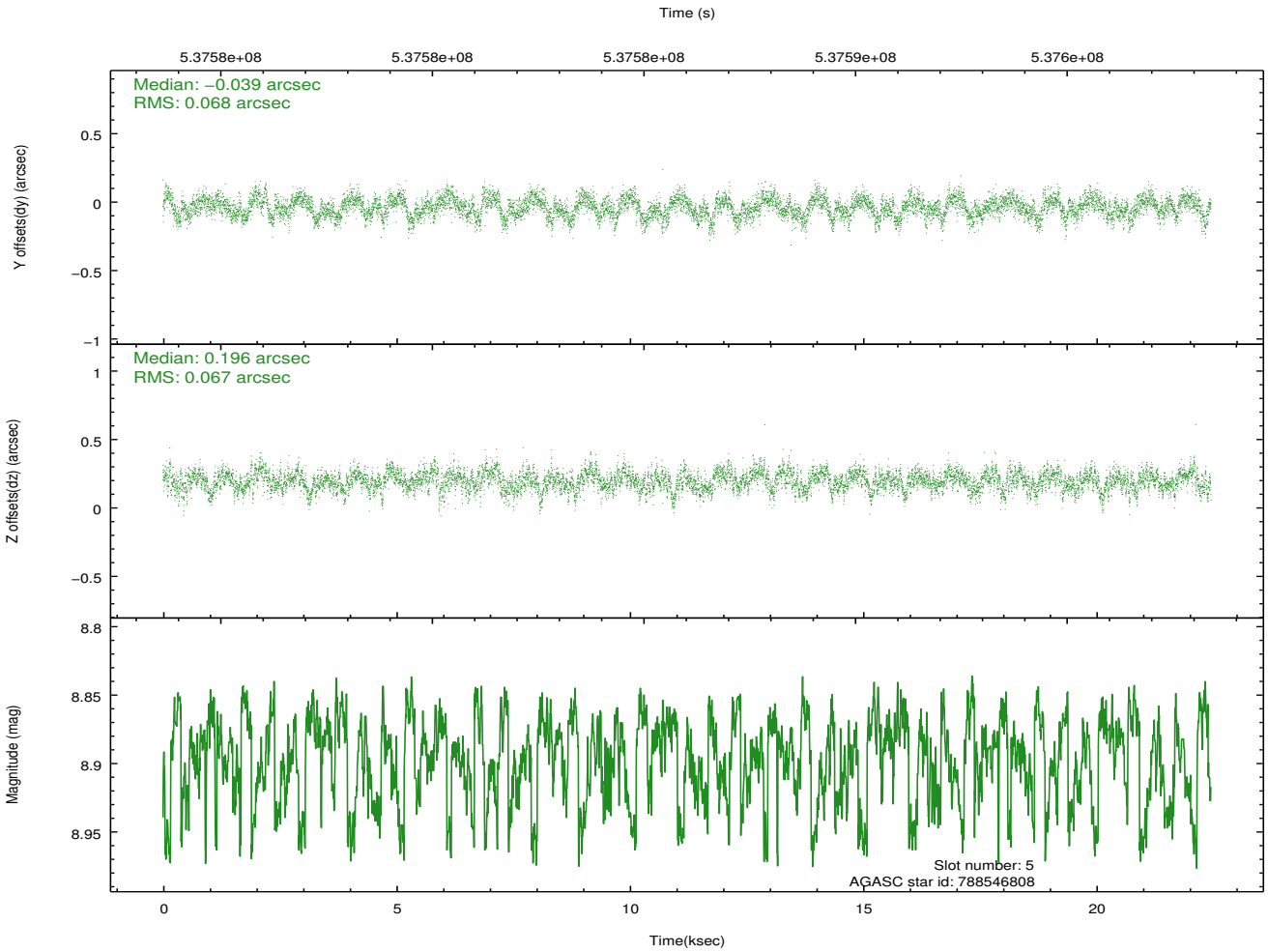
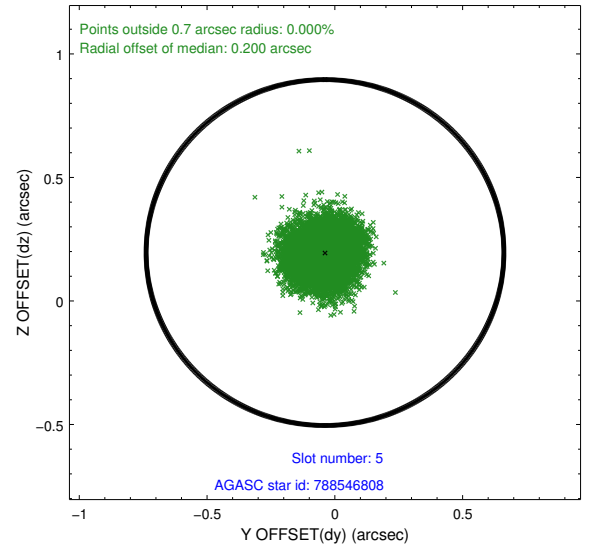
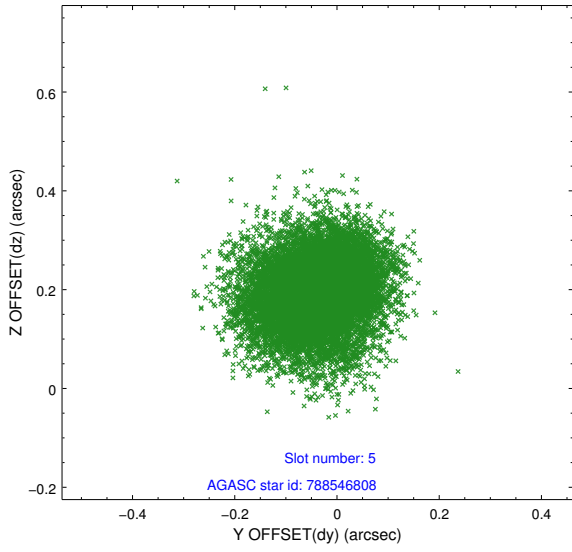
### 2.4.1 Slot 3



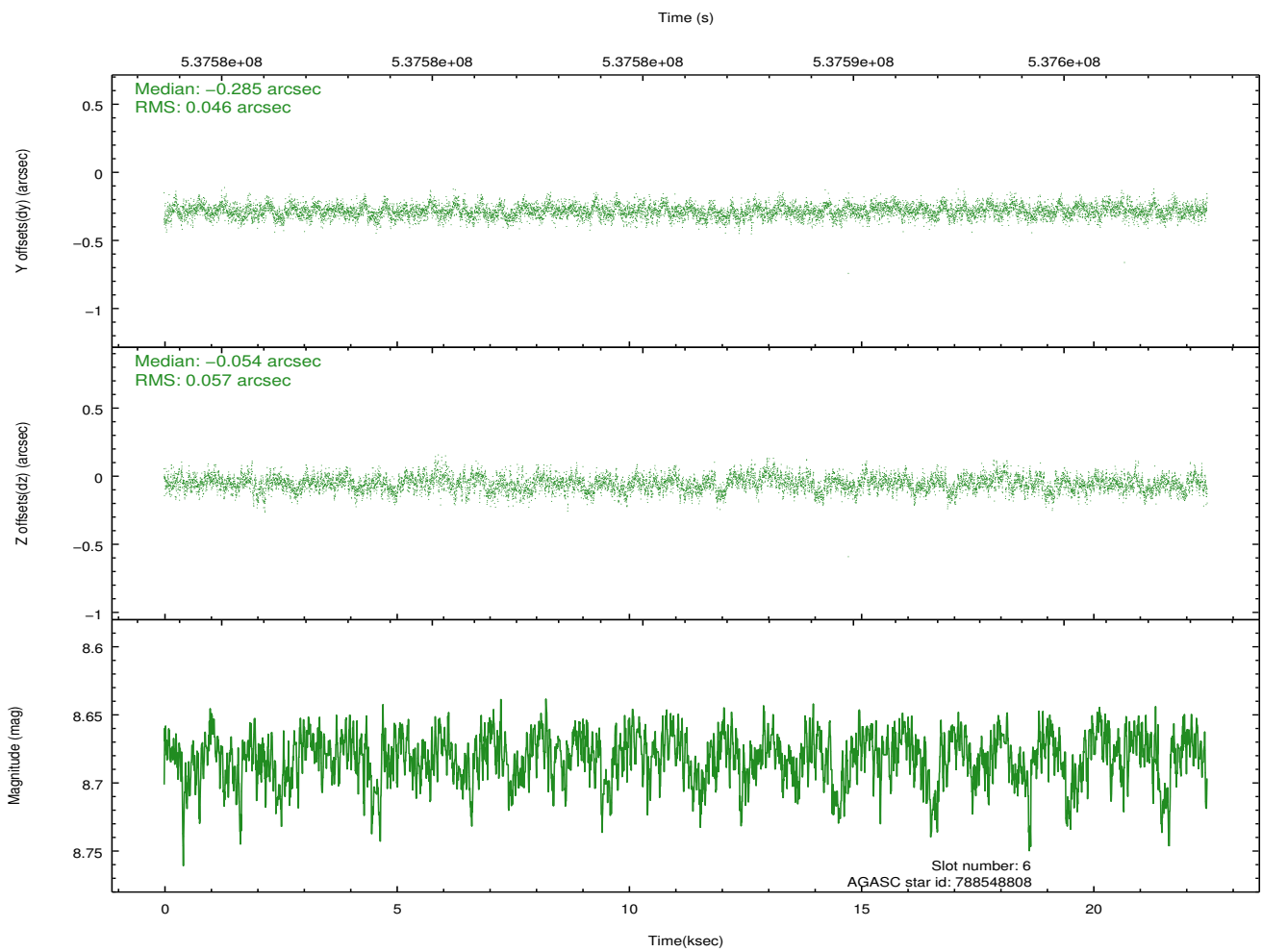
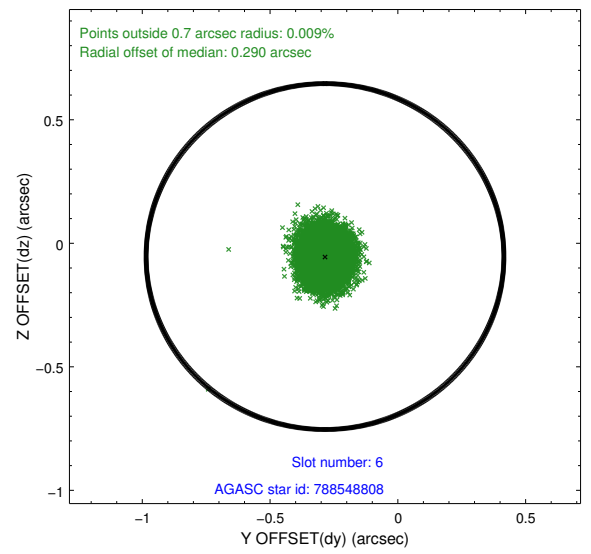
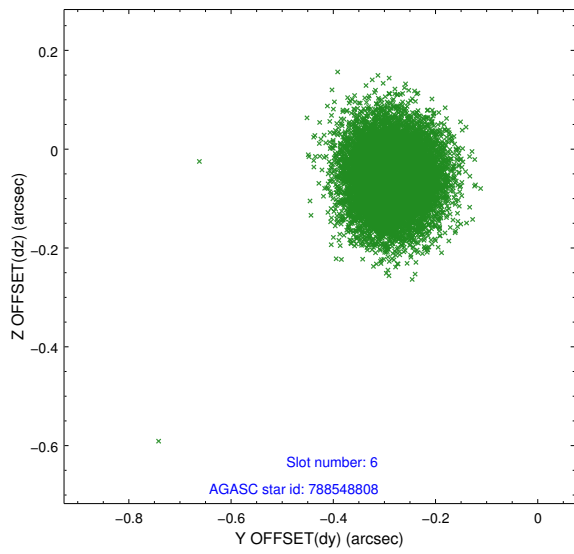
## 2.4.2 Slot 4



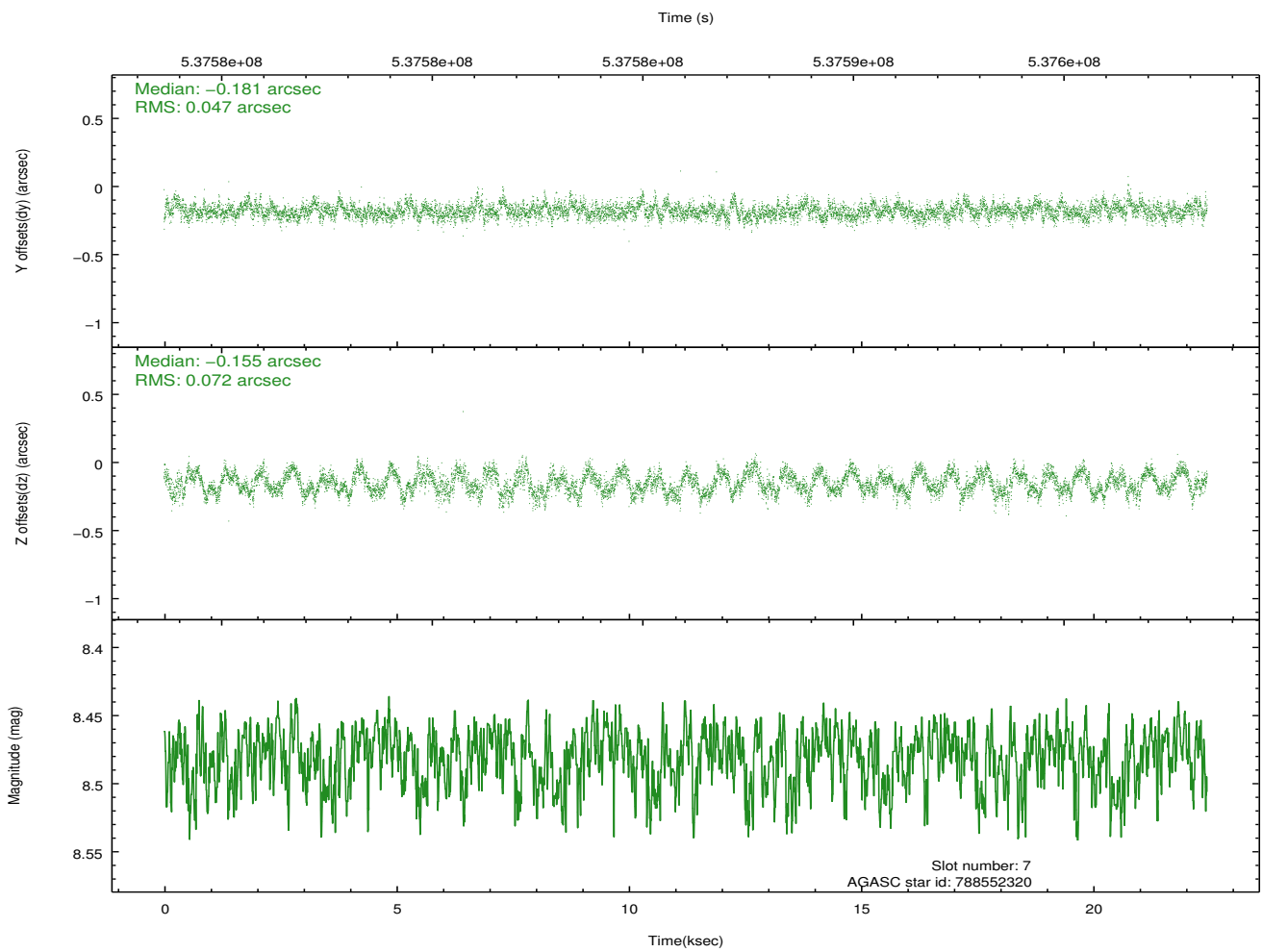
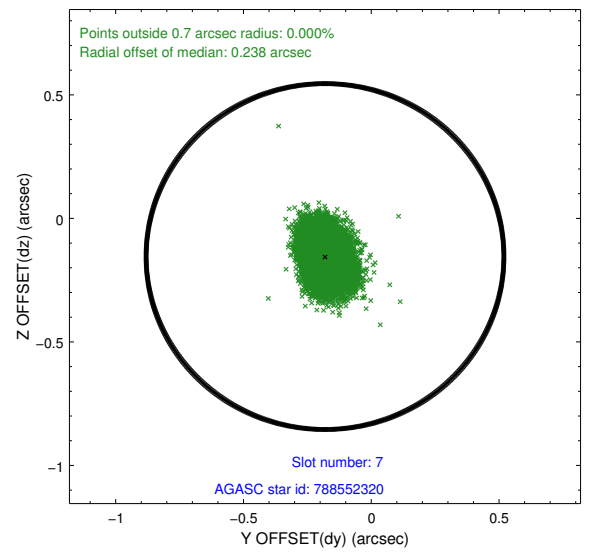
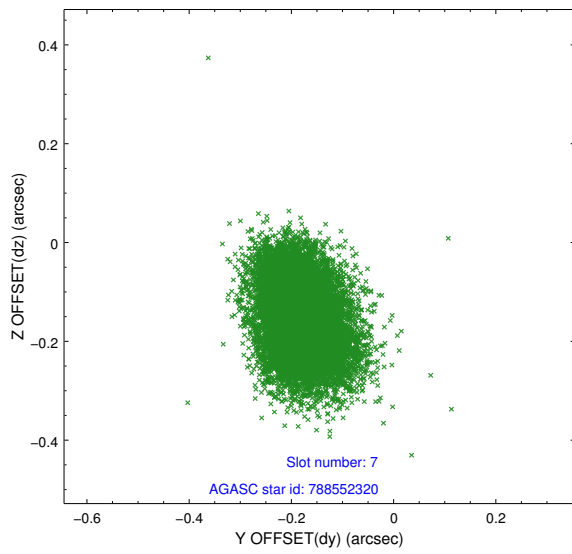
### 2.4.3 Slot 5



## 2.4.4 Slot 6

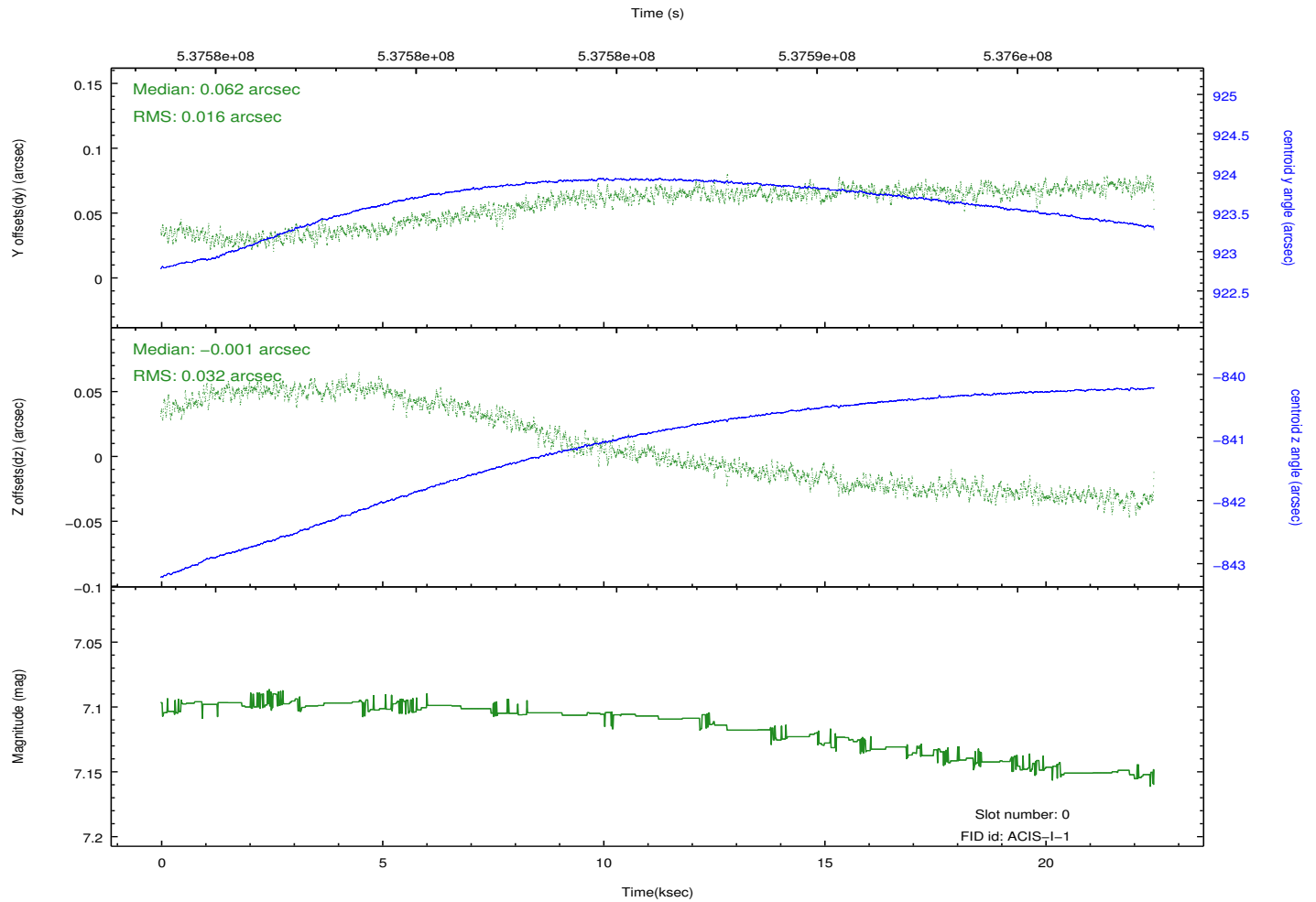
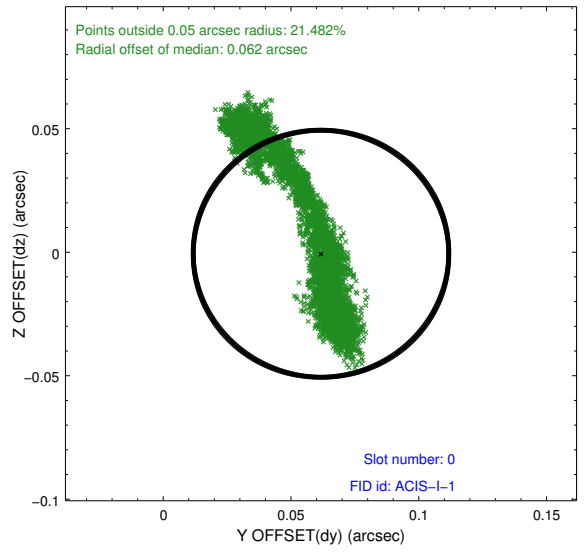
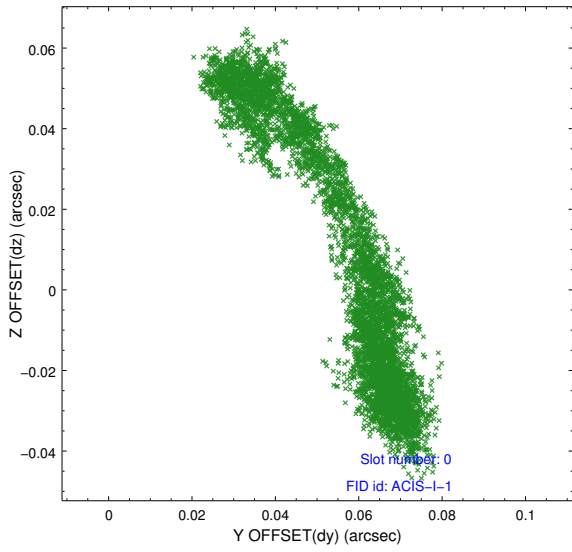


## 2.4.5 Slot 7

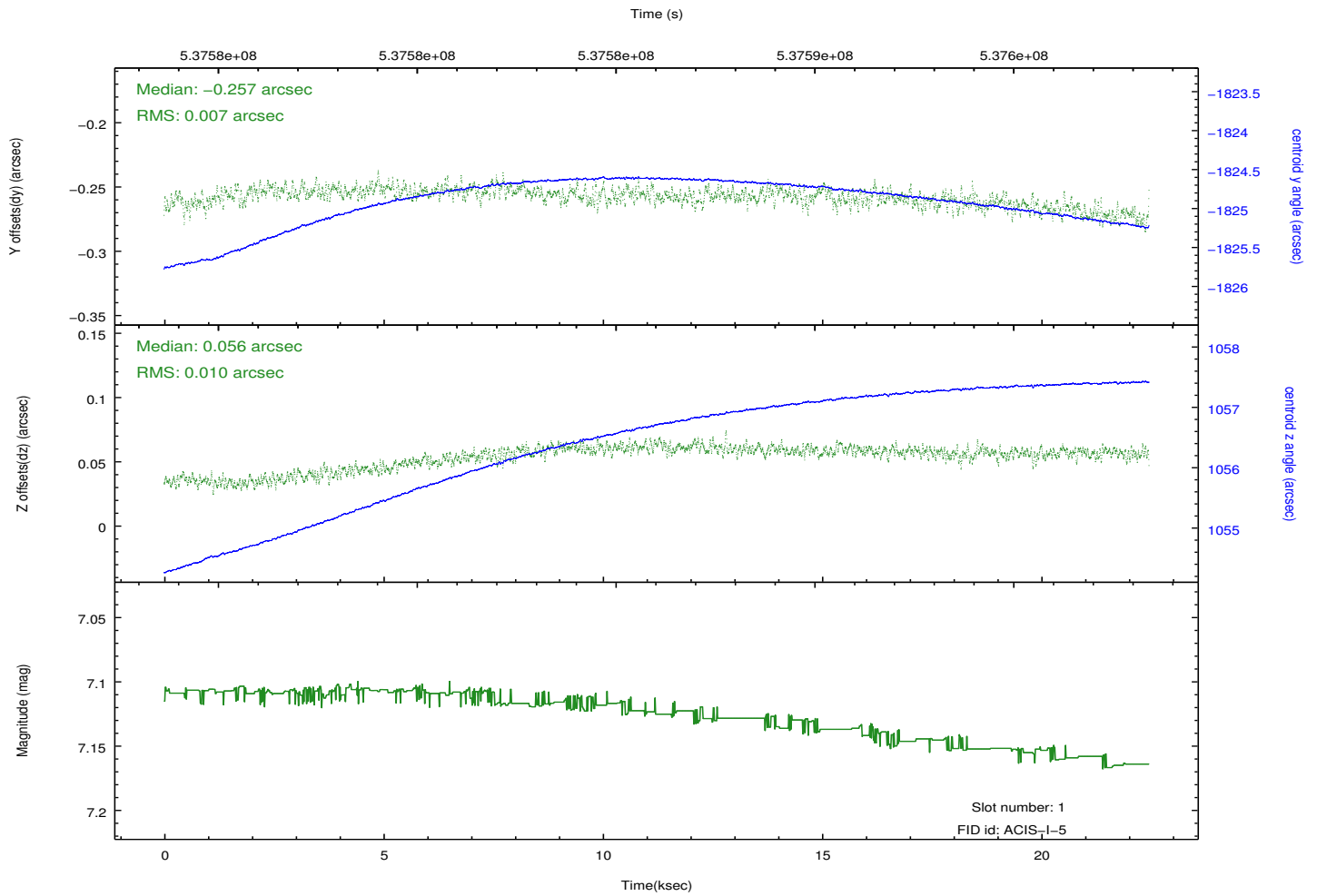
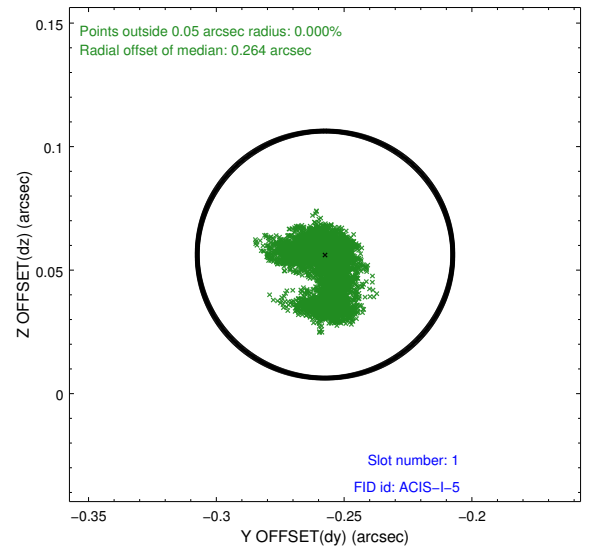
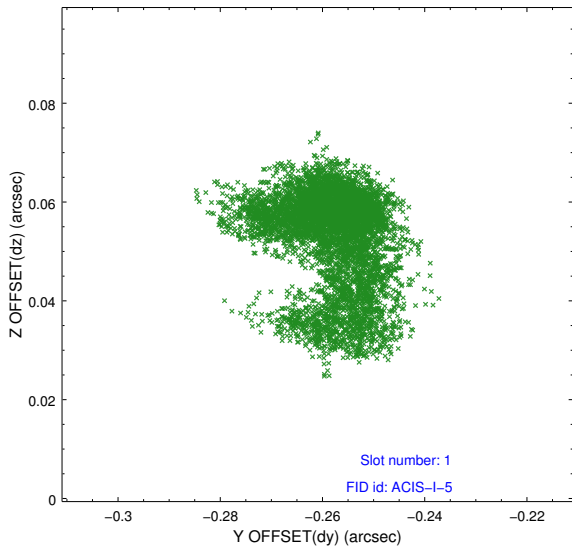


## 2.5 FID Slots

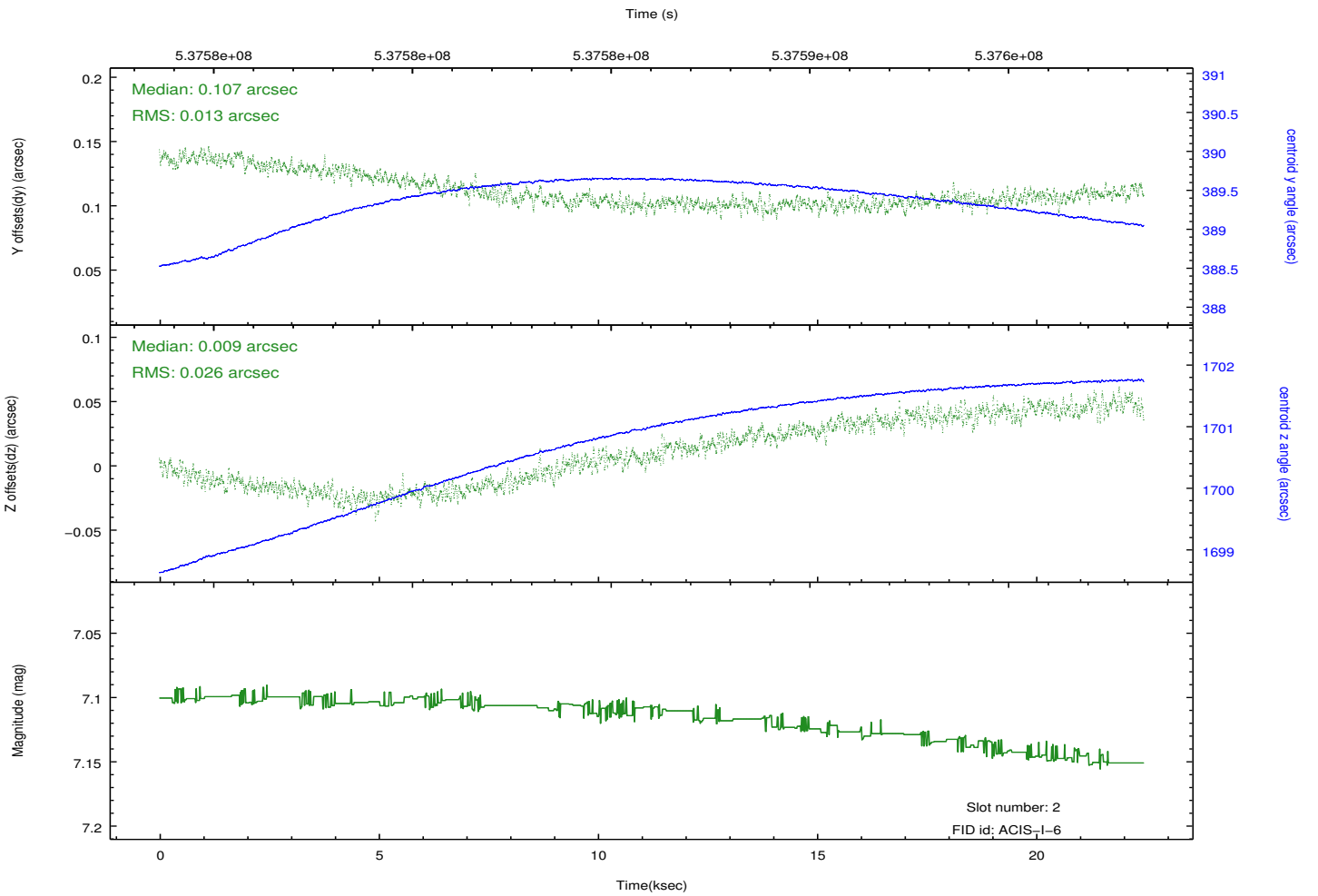
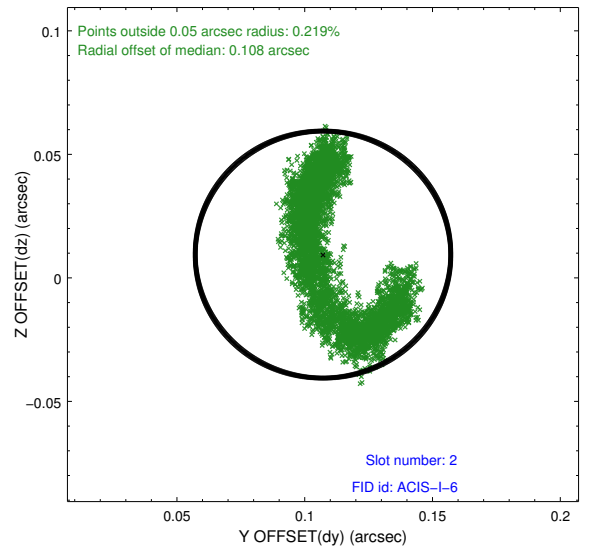
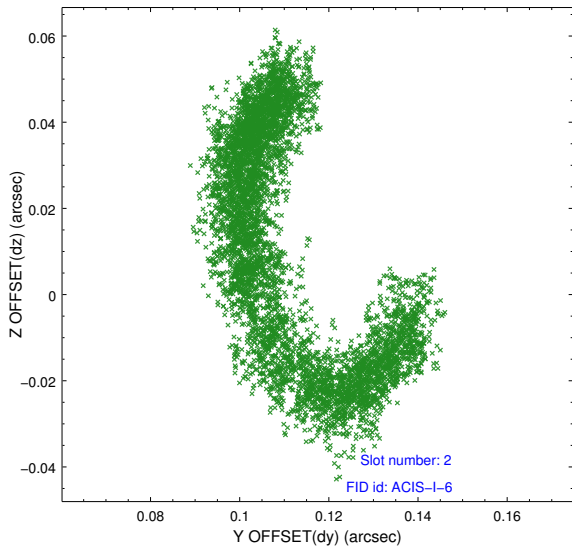
### 2.5.1 Slot 0



## 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)	2015.01.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	22.271005397677

## A.2 Comments

Joint Proposal: NRAO