

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16135 - L2 Version 1  
Chandra X-Ray Center

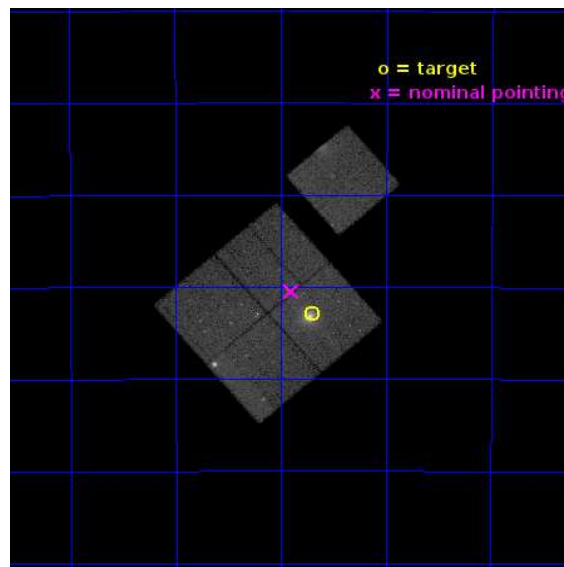
L2 Processing Date : Aug 19 2014

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# 1 Front

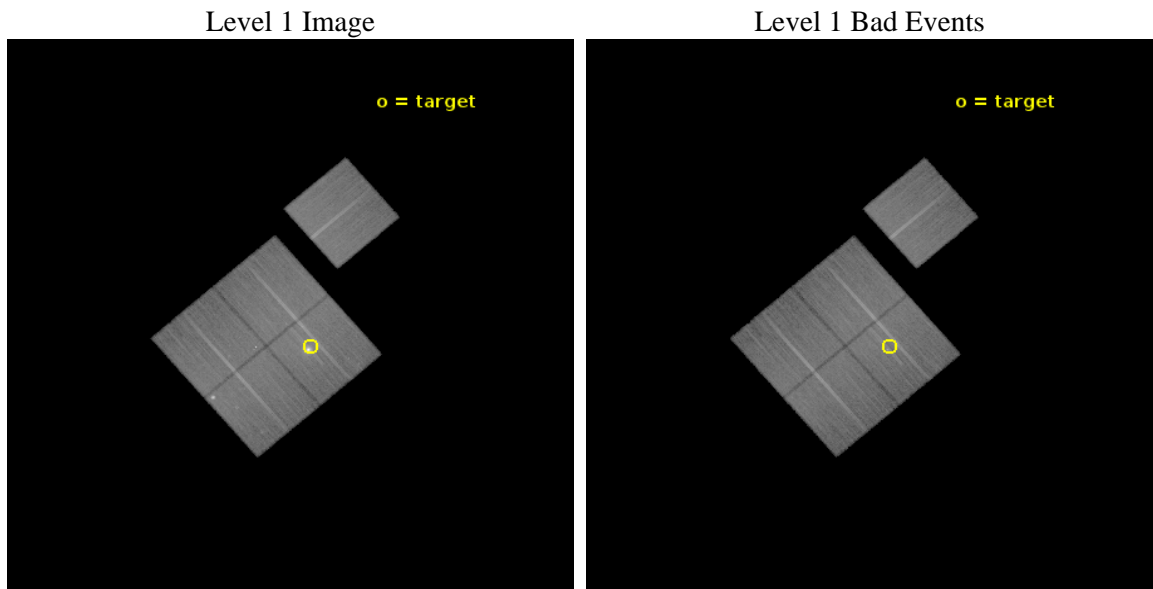
seq_num	801389	Sequence number
obs_id	16135	Observation id
title	Searching for Signatures of Episodic AGN Feedback in the Core of the Phoenix Cluster	Proposal title
observer	Dr Michael McDonald	Principal investigator
object	SPT-CLJ2344-4243	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	356.175	Observer's specified target RA [deg]
dec_targ	-42.714611	Observer's specified target Dec [deg]
ra_nom	356.22533911949	Nominal RA [deg]
dec_nom	-42.67460809464	Nominal Dec [deg]
roll_nom	49.242826285966	Nominal Roll [deg]
revision	1	Processing version of data
ontime	58881.35938251	Sum of GTIs [s]
livetime	58112.031074352	Livetime [s]
ontime0	58884.500452876	Sum of GTIs [s]
ontime1	58881.359442592	Sum of GTIs [s]
ontime2	58884.500452876	Sum of GTIs [s]
ontime3	58881.35938251	Sum of GTIs [s]
ontime6	58884.500452876	Sum of GTIs [s]
l2events	192490	Number of level 2 events



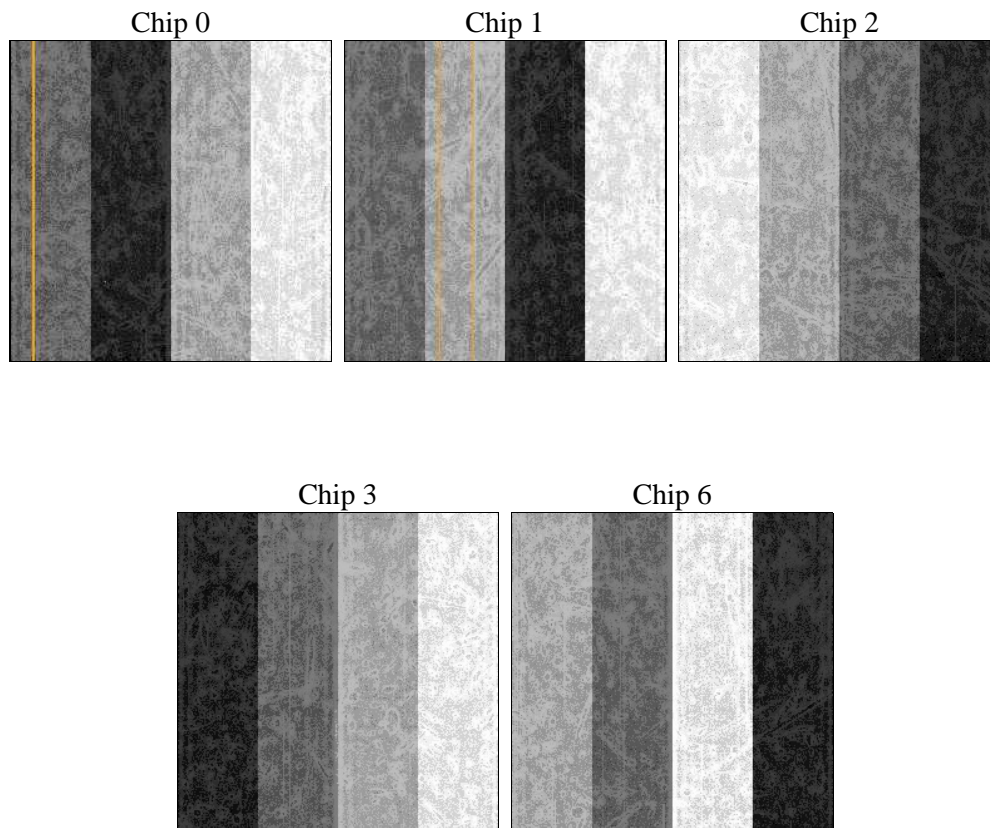
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	58800.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	58881.35938251	Sum of GTIs [s]
caldbver	4.6.2	&#160	ontime0	58884.500452876	Sum of GTIs [s]
date	2014-08-19T15:52:51	Date and time of file creation	ontime1	58881.359442592	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	58884.500452876	Sum of GTIs [s]
			ontime3	58881.35938251	Sum of GTIs [s]
			ontime6	58884.500452876	Sum of GTIs [s]
			l1events	1467860	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	267408	278883	296091	328289	297189
rejected events	229824	236377	262310	256289	261187
rejected %	85%	84%	88%	78%	87%

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	14080	16638	11885	42518	12450
	5%	5%	4%	12%	4%
grade 1 events	188	160	153	375	145
	0%	0%	0%	0%	0%
grade 2 events	9024	9556	8233	11556	7979
	3%	3%	2%	3%	2%
grade 3 events	3729	3844	3403	4909	3745
	1%	1%	1%	1%	1%
grade 4 events	3420	3834	3416	4813	3659
	1%	1%	1%	1%	1%
grade 5 events	14225	15021	13284	16371	15279
	5%	5%	4%	4%	5%
grade 6 events	7333	8635	6853	8208	8171
	2%	3%	2%	2%	2%
grade 7 events	215409	221195	248864	239539	245761
	80%	79%	84%	72%	82%

## 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	356.218463	356.2253391194909	CCD I2 on	Y	Y
[deg] Pointing Dec	-42.701732	-42.67460809463955	CCD I3 on	Y	Y
[deg] Pointing Roll	49.029472	49.24282628596615	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	-225.840463	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	524723683.184000	524722339.31186	CCD S5 on	N	N
Observation start date	2014-08-18T04:33:36	2014-08-18T04:12:19	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	524782483.184000	524783352.44024	On-chip summing requested	N	N
Observation end date	2014-08-18T20:53:36	2014-08-18T21:09:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

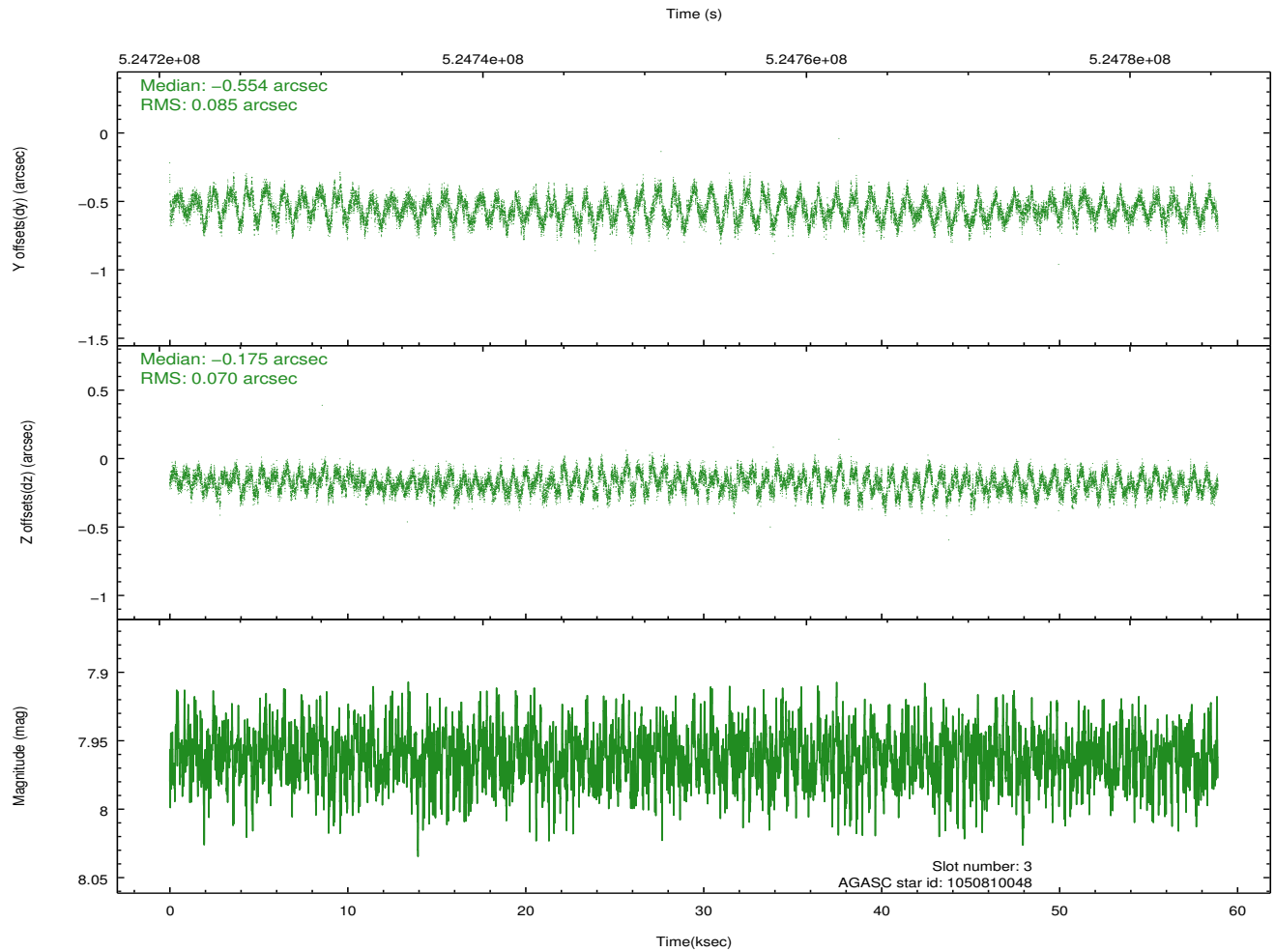
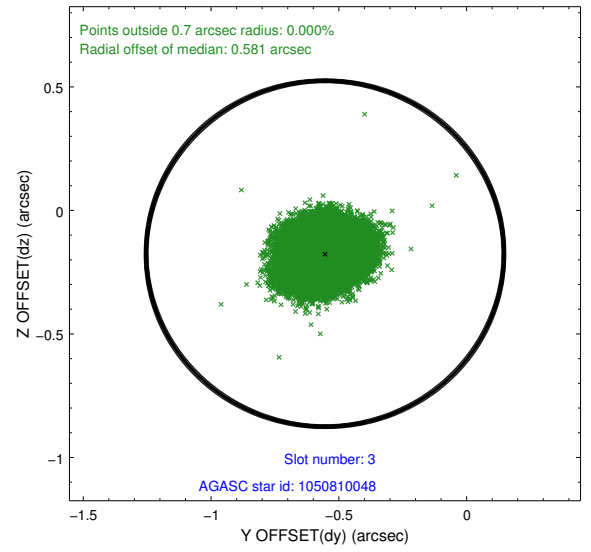
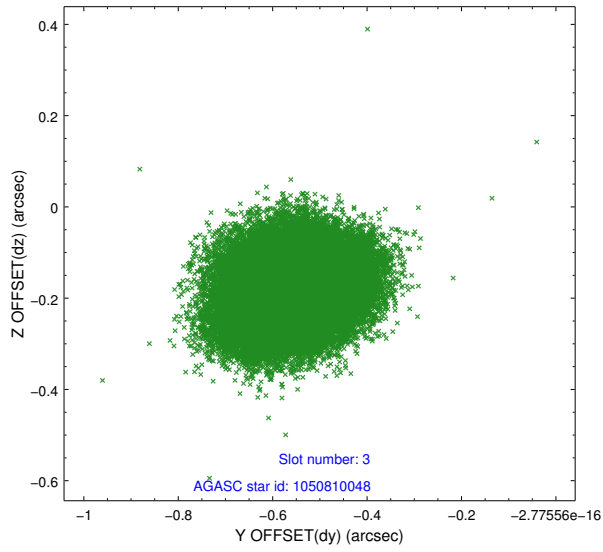


### Slot Statistics

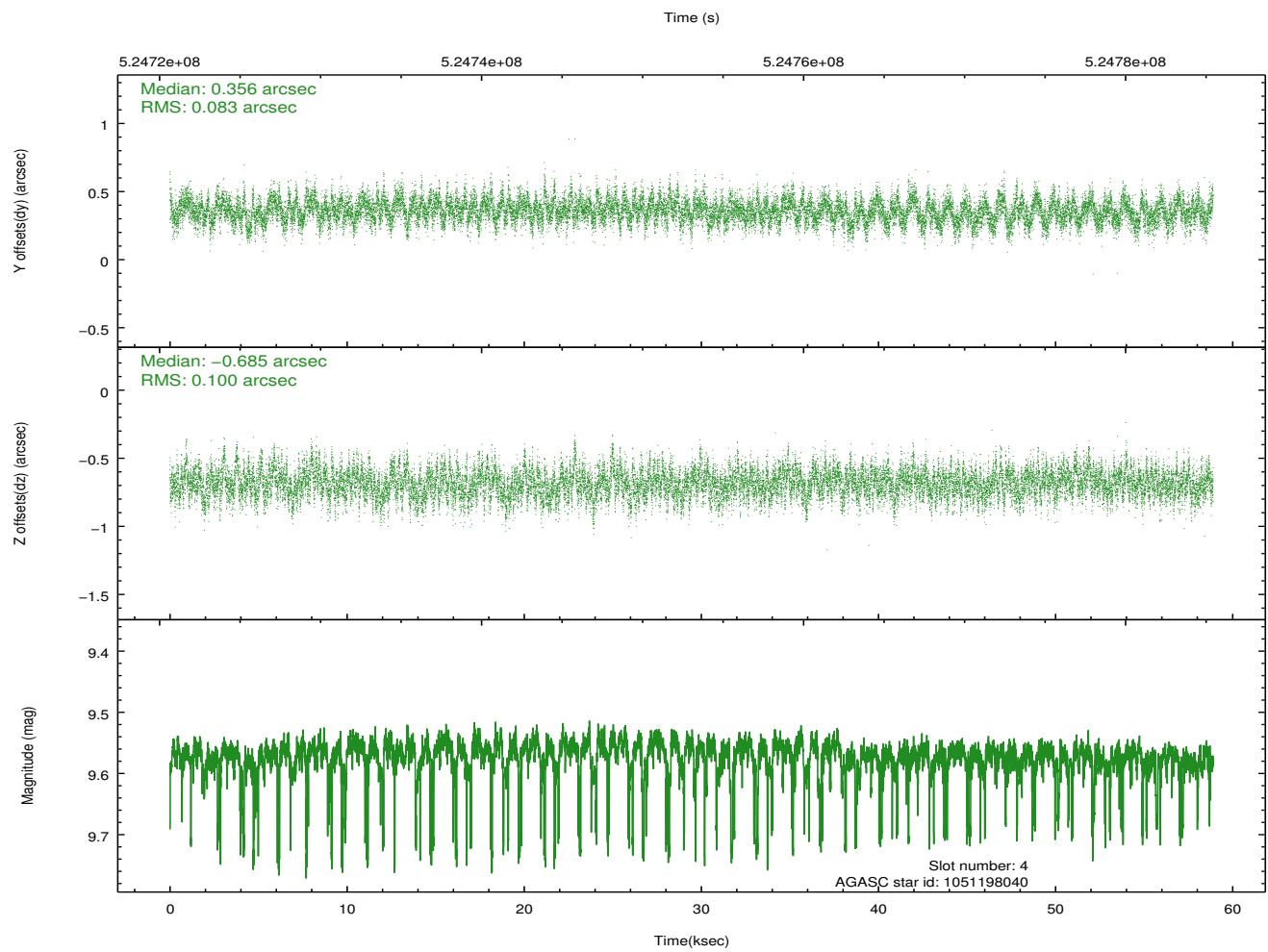
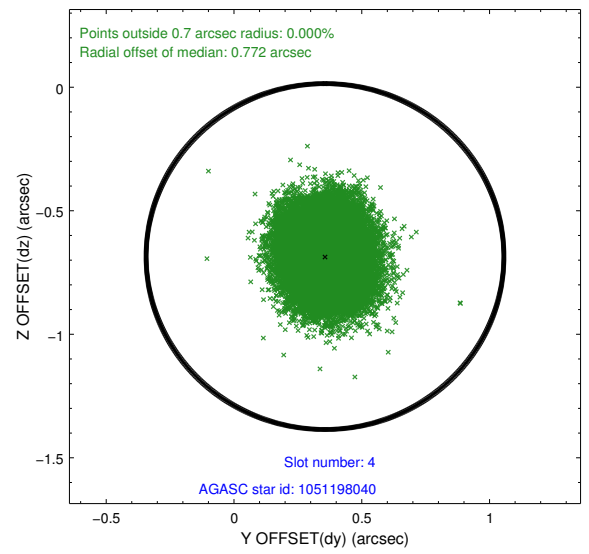
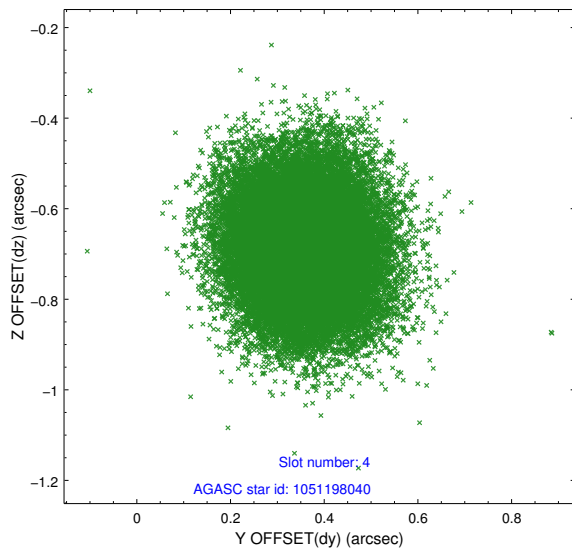
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.14	14365	0.216	-0.029	0.023	0.039	0.000000	0.000000	912.23	-1004.42
1	FID	ACIS-I-2	7.10	14368	-0.295	-0.044	0.013	0.035	0.000000	0.000000	-782.80	-1009.74
2	FID	ACIS-I-6	7.15	14368	-0.011	0.142	0.027	0.044	0.000000	0.000000	377.83	1537.60
3	GUIDE	1050810048	7.96	28733	-0.554	-0.175	0.119	0.178	356.469230	-42.341180	1416.63	346.69
4	GUIDE	1051198040	9.57	28713	0.356	-0.685	0.138	0.226	355.390308	-42.851948	-1849.00	1287.89
5	GUIDE	1051204328	9.88	27680	0.260	0.306	0.226	0.360	355.958163	-43.245581	-1924.24	-769.82
6	GUIDE	1051205696	8.13	28728	-0.175	0.212	0.113	0.176	356.065268	-43.024313	-1140.66	-456.67
7	GUIDE	1051205736	9.60	28695	0.115	0.362	0.214	0.359	356.603876	-43.253982	-839.30	-2068.12

## 2.4 Star Slots

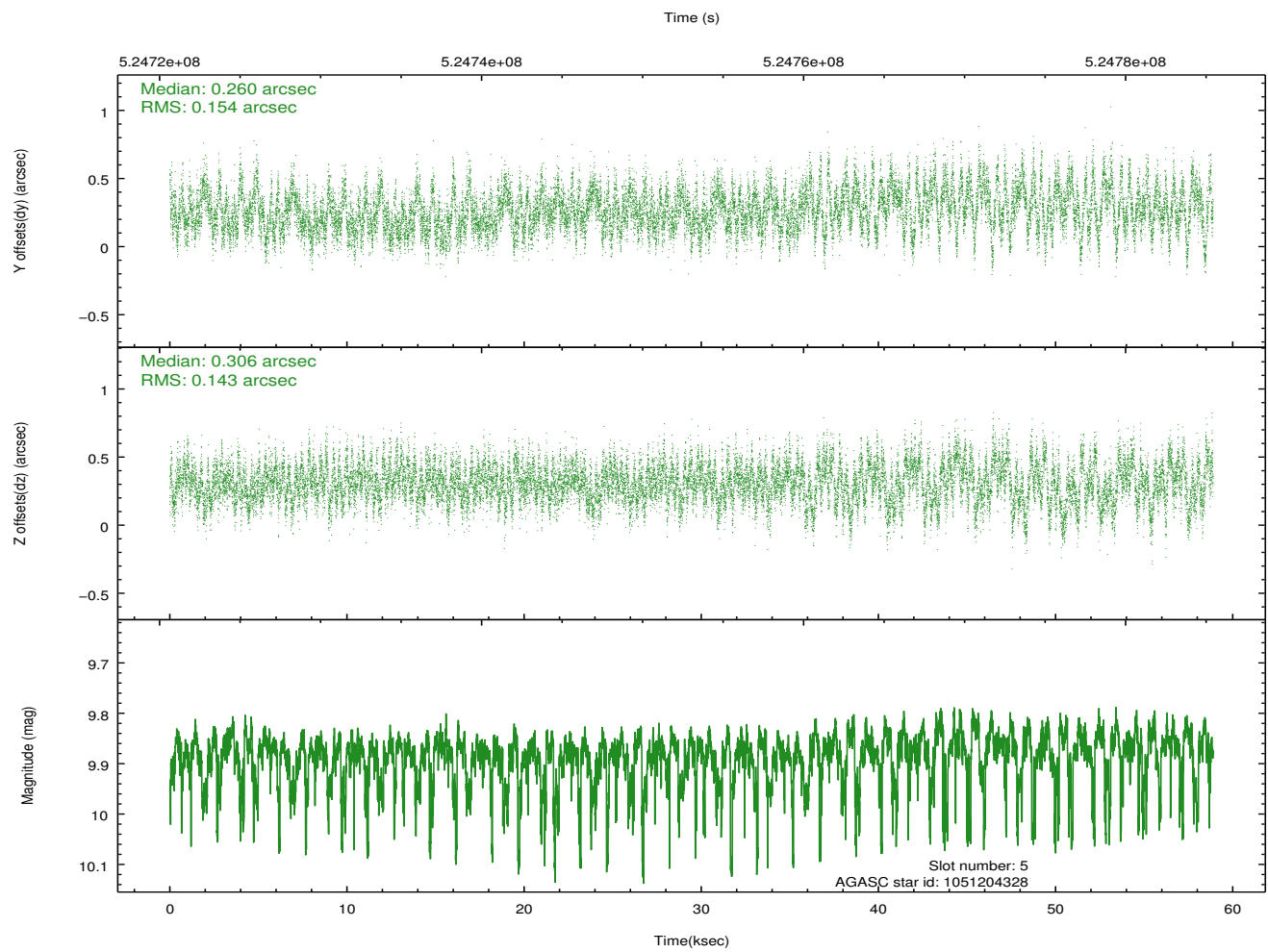
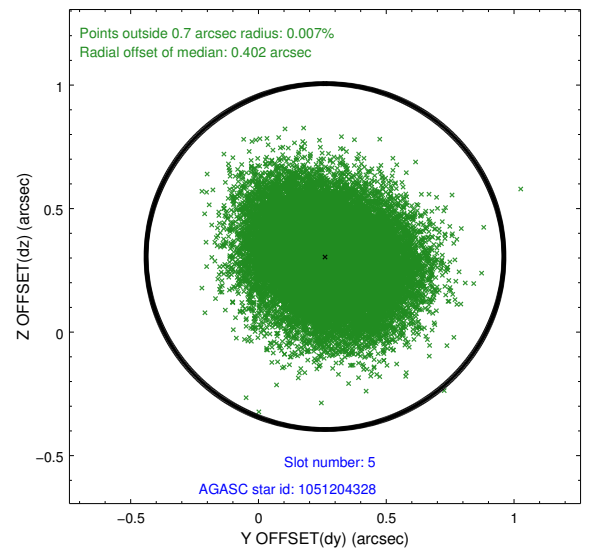
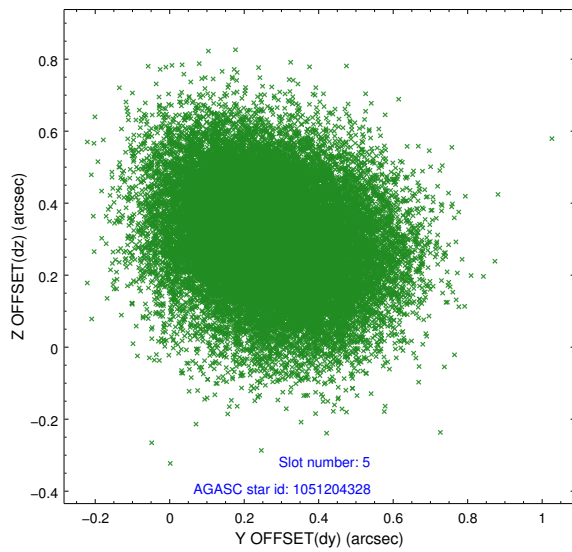
### 2.4.1 Slot 3



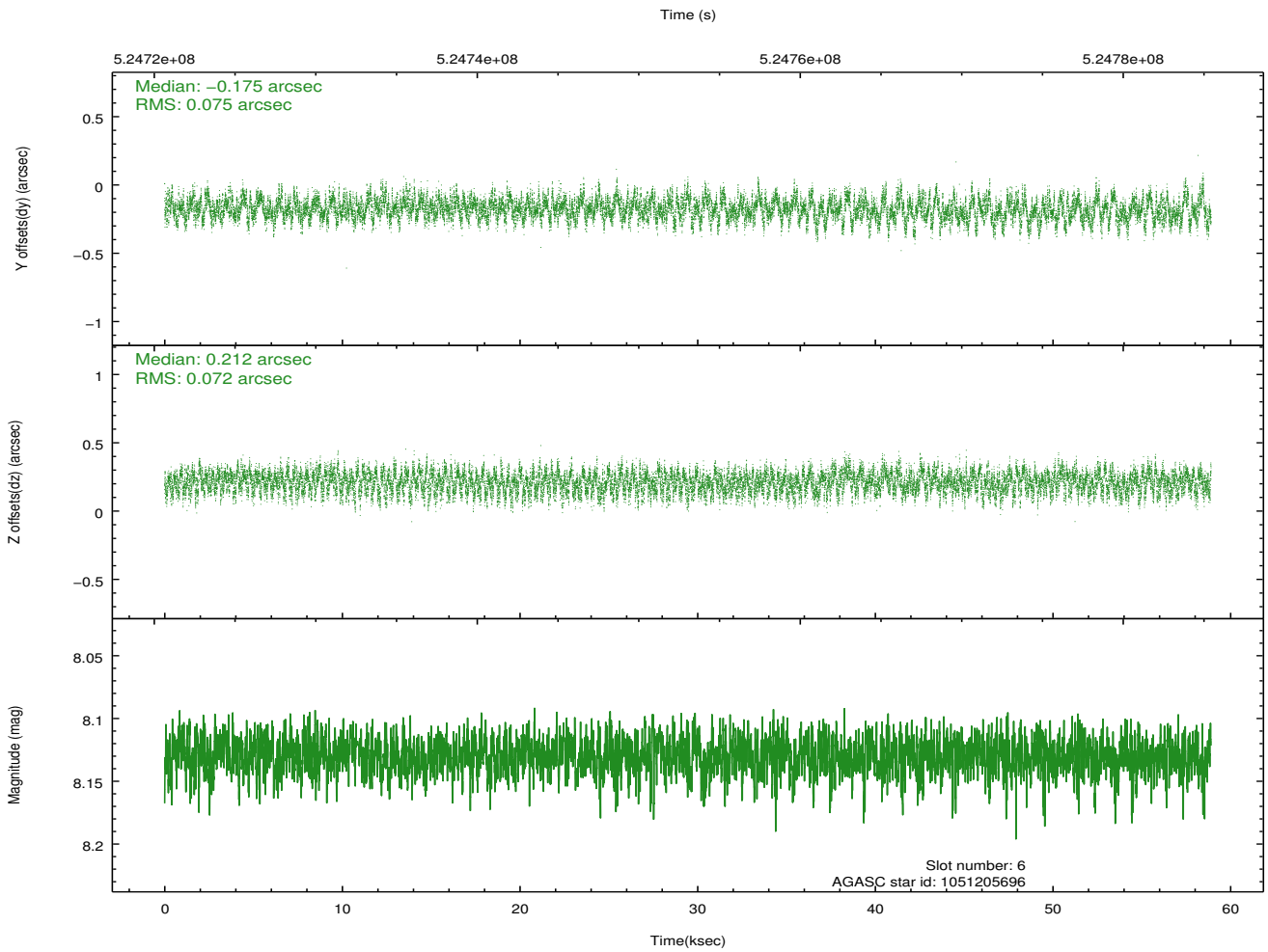
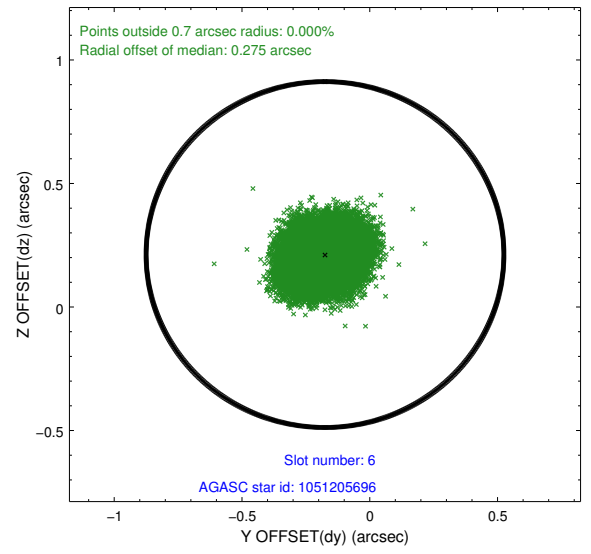
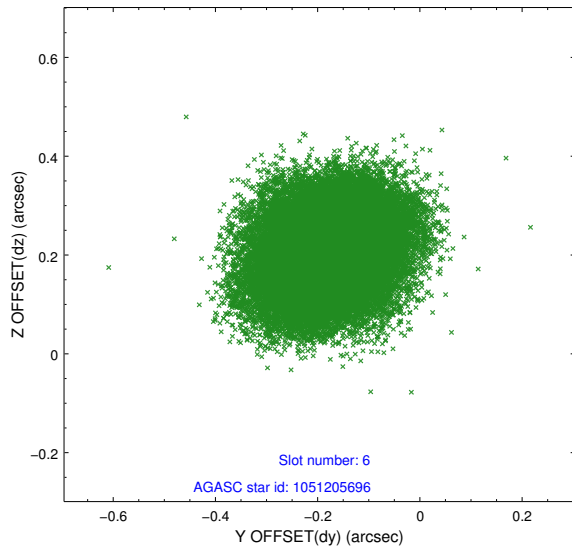
## 2.4.2 Slot 4



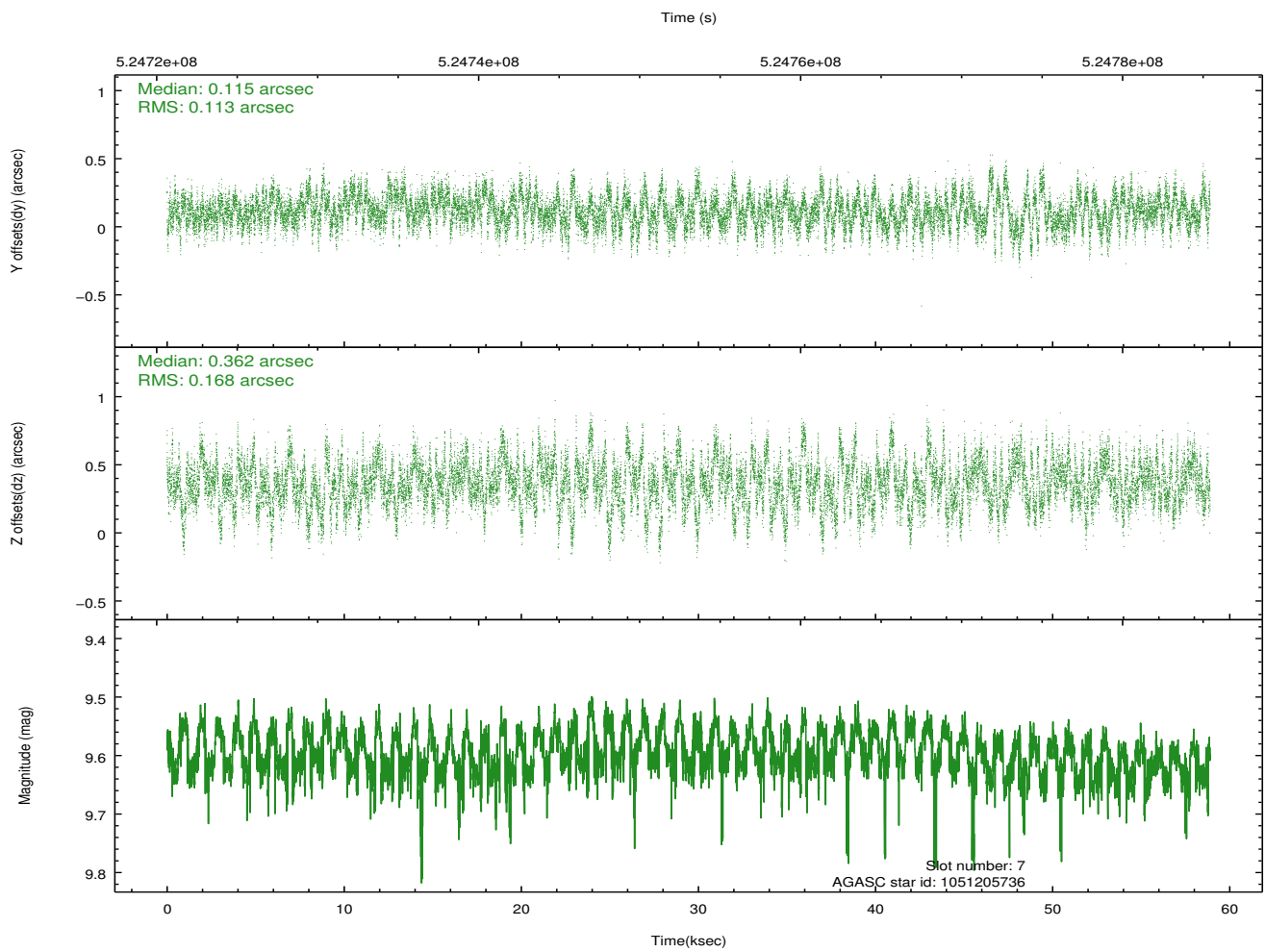
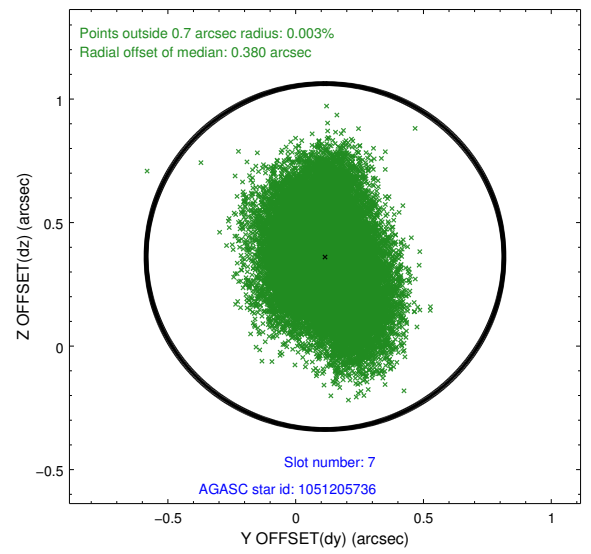
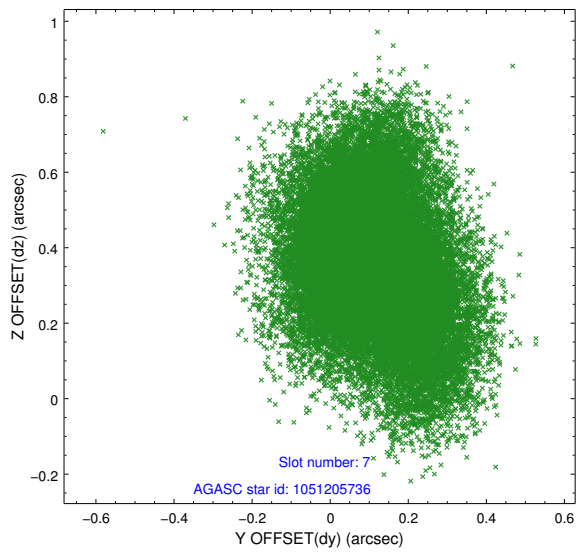
### 2.4.3 Slot 5



## 2.4.4 Slot 6

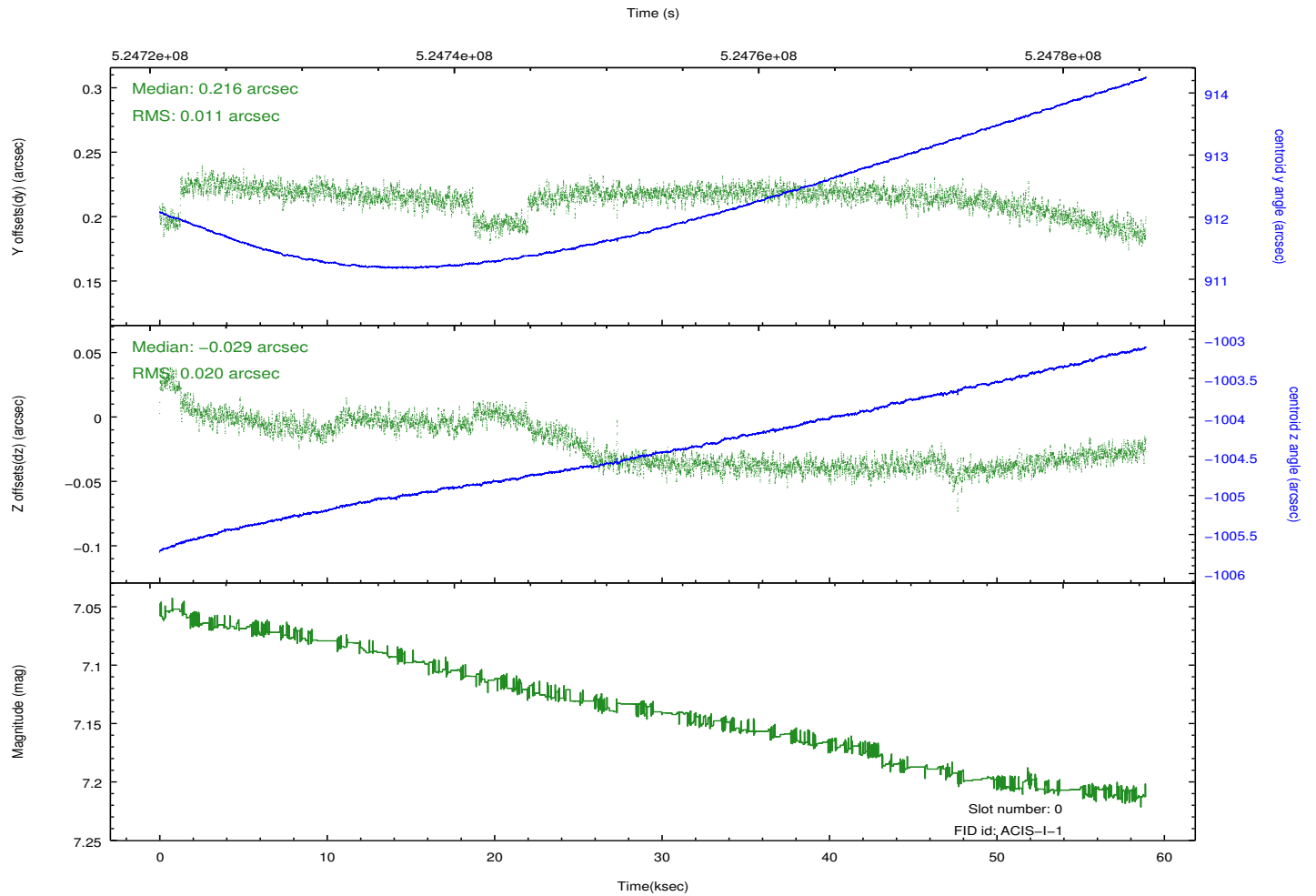
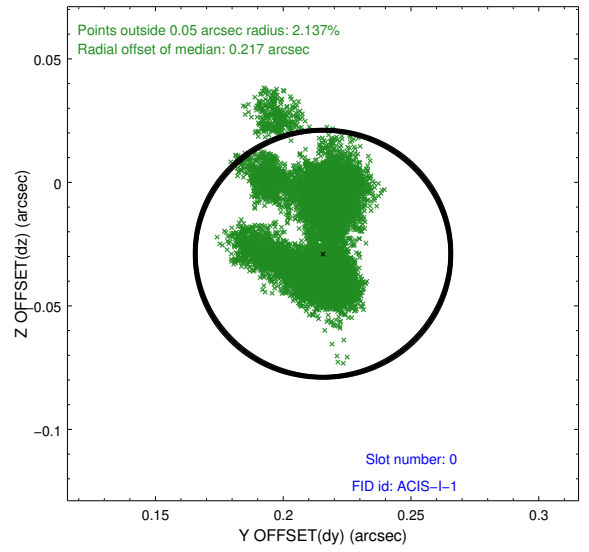
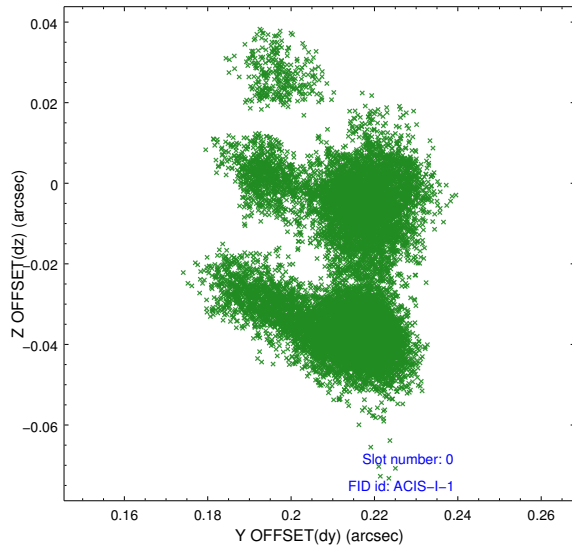


## 2.4.5 Slot 7

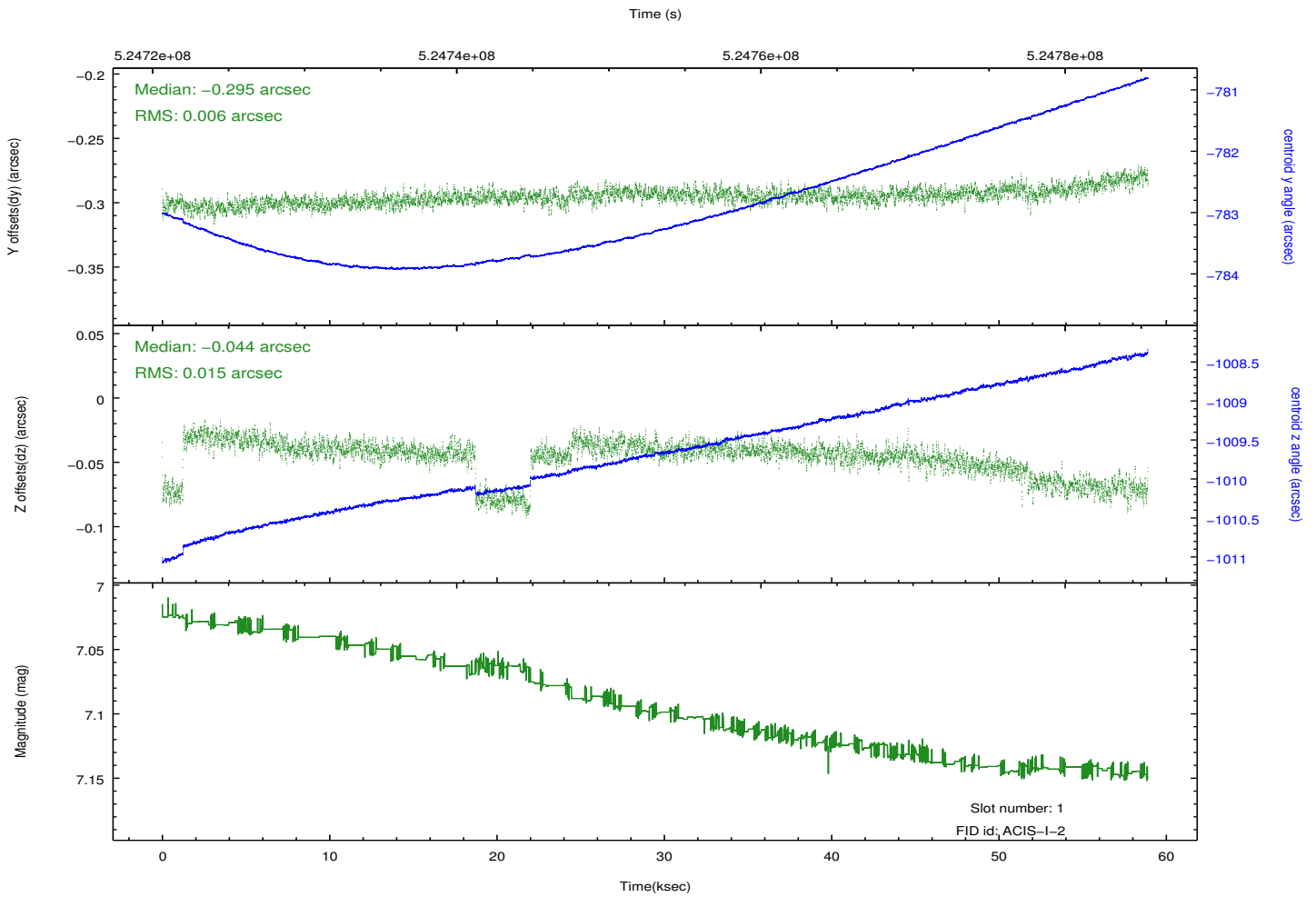
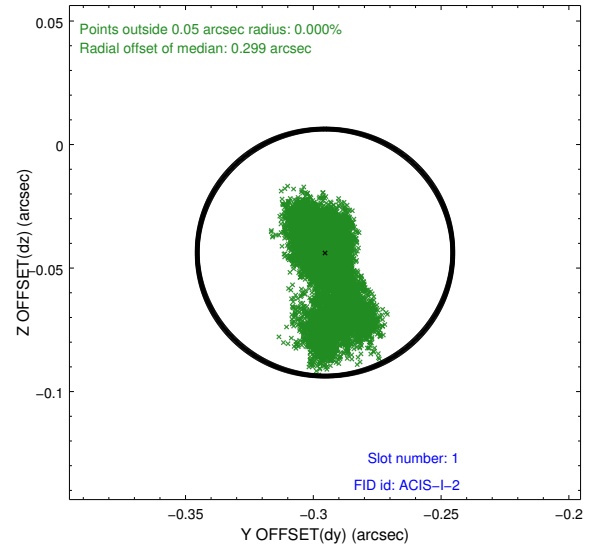
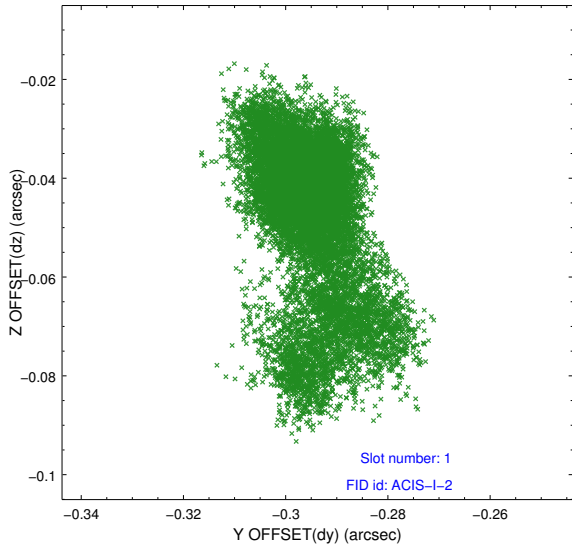


## 2.5 FID Slots

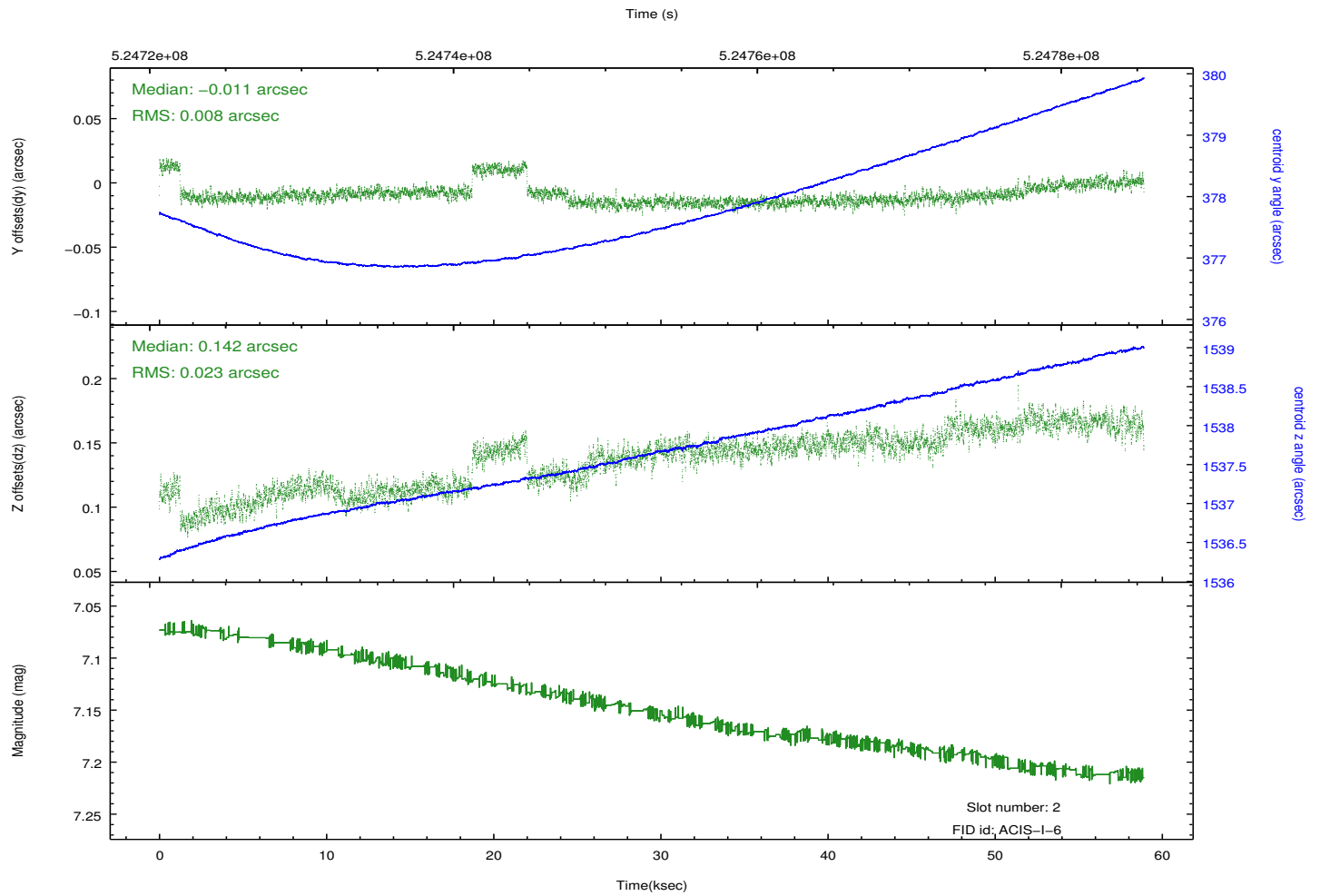
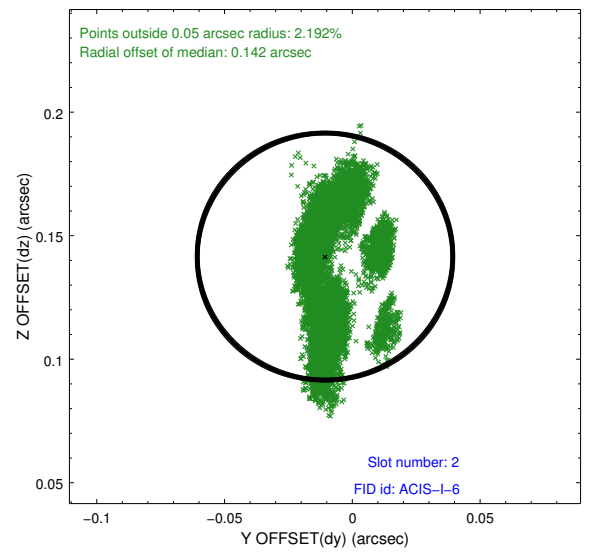
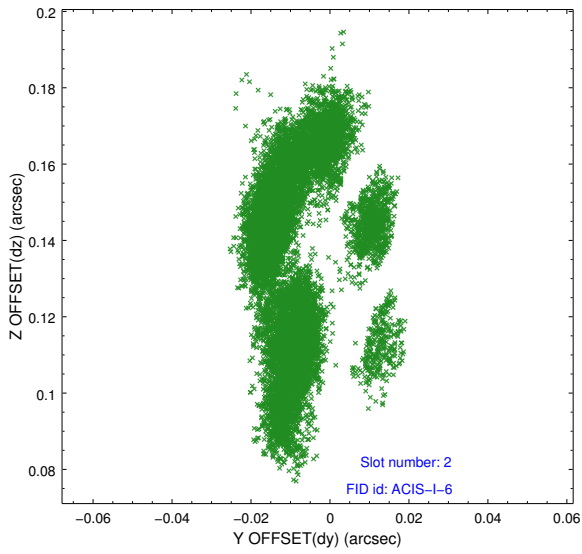
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.08.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	58.88135938251

## A.2 Comments