

# V&V Reference Report

## L2 ASCDS Version : 10.3.3

Observation 17092 - L2 Version 1  
Chandra X-Ray Center

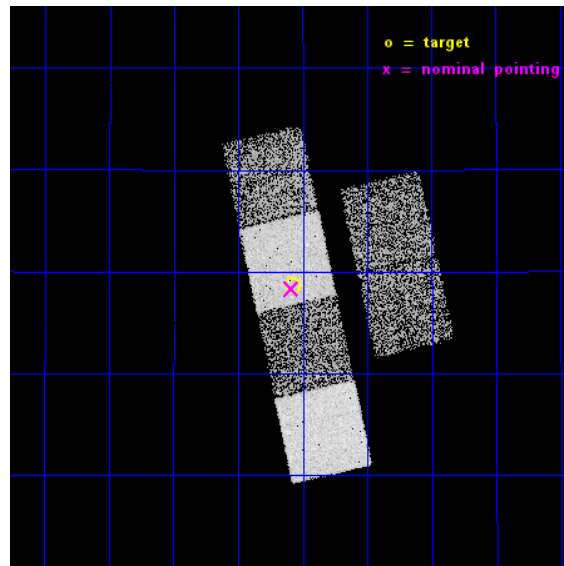
L2 Processing Date : Apr 15 2015

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# 1 Front

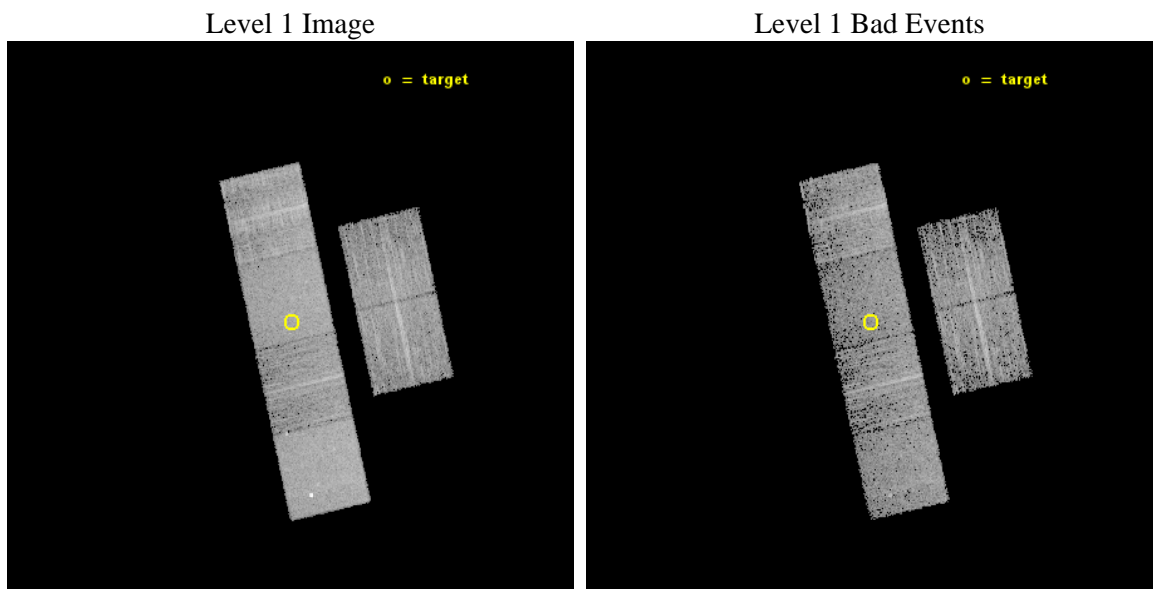
seq_num	703096	Sequence number
obs_id	17092	Observation id
title	Probing the Physics of Quasar Outflows using Mini-LoBALs	Proposal
observer	Professor Karen Leighly	Principal investigator
object	SDSS J080934.64+254837.9	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	122.394167	Observer's specified target RA [deg]
dec_targ	25.810556	Observer's specified target Dec [deg]
ra_nom	122.39693016315	Nominal RA [deg]
dec_nom	25.80570268806	Nominal Dec [deg]
roll_nom	257.3906520386	Nominal Roll [deg]
revision	1	Processing version of data
ontime	7851.6107447147	Sum of GTIs [s]
livetime	7752.1889217928	Livetime [s]
ontime2	7851.6517846584	Sum of GTIs [s]
ontime3	7848.2465943098	Sum of GTIs [s]
ontime5	7851.5697046518	Sum of GTIs [s]
ontime6	7851.5286647081	Sum of GTIs [s]
ontime7	7851.6107447147	Sum of GTIs [s]
ontime8	7851.4465847015	Sum of GTIs [s]
l2events	62875	Number of level 2 events



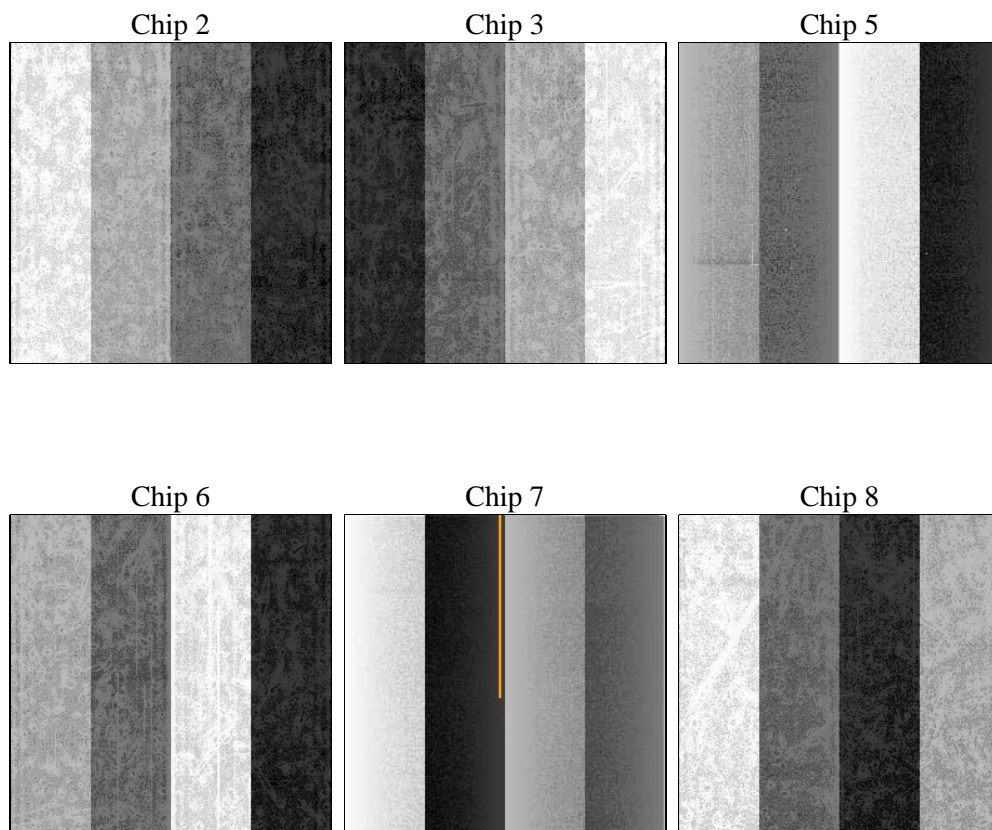
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	7900.000000	[s] Scheduled observation exposure time
ascdsver	10.3.3	Processing system revision	ontime	7851.6107447147	Sum of GTIs [s]
caldsver	4.6.7	&#160	ontime2	7851.6517846584	Sum of GTIs [s]
date	2015-04-15T16:28:21	Date and time of file creation	ontime3	7848.2465943098	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	7851.5697046518	Sum of GTIs [s]
			ontime6	7851.5286647081	Sum of GTIs [s]
			ontime7	7851.6107447147	Sum of GTIs [s]
			ontime8	7851.4465847015	Sum of GTIs [s]
			l1events	268384	Number of level 1 events

### 2.1.4 Events

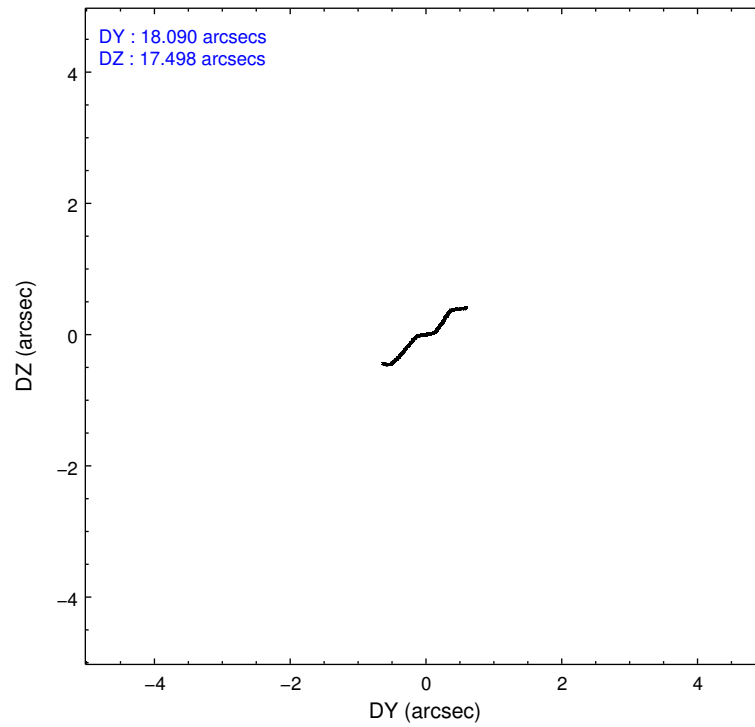
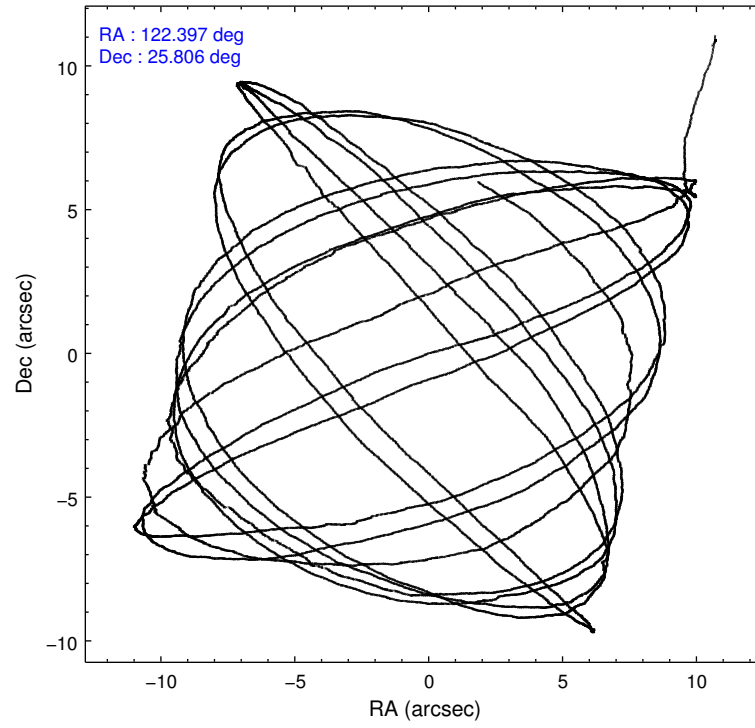
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	37119	34805	60362	36725	49183	50190	grade 0 events	1425	1300	3010	1443	1884	3599
rejected events	32967	30940	30953	32441	27819	37020		3%	3%	4%	3%	3%	7%
rejected %	88%	88%	51%	88%	56%	73%	grade 1 events	24	20	272	15	65	38
								0%	0%	0%	0%	0%	0%
							grade 2 events	1021	873	9091	957	4419	3191
								2%	2%	15%	2%	8%	6%
							grade 3 events	395	396	979	450	1722	1301
								1%	1%	1%	1%	3%	2%
							grade 4 events	440	449	891	429	1719	1220
								1%	1%	1%	1%	3%	2%
							grade 5 events	1623	1897	4278	1881	4978	2672
								4%	5%	7%	5%	10%	5%
							grade 6 events	871	849	15448	1007	11631	3874
								2%	2%	25%	2%	23%	7%
							grade 7 events	31320	29021	26393	30543	22765	34295
								84%	83%	43%	83%	46%	68%

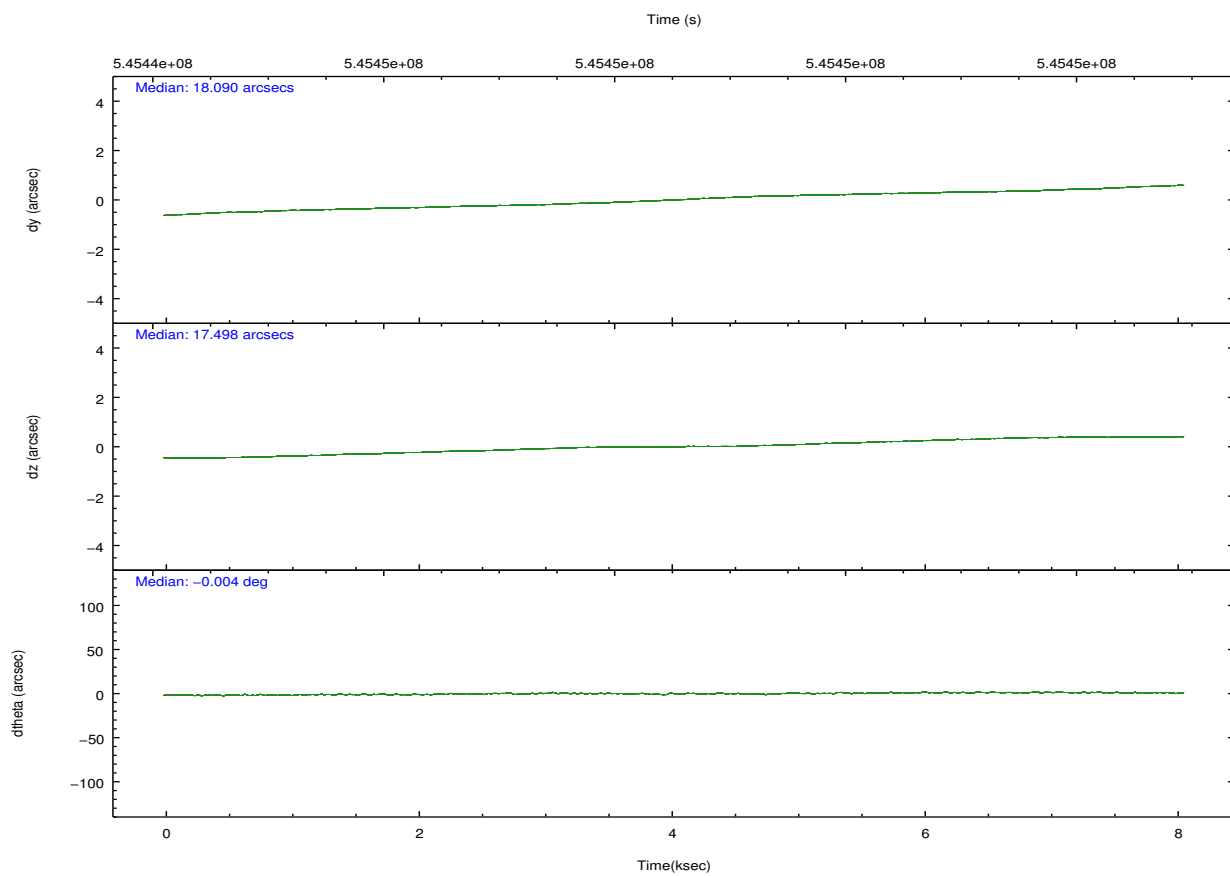
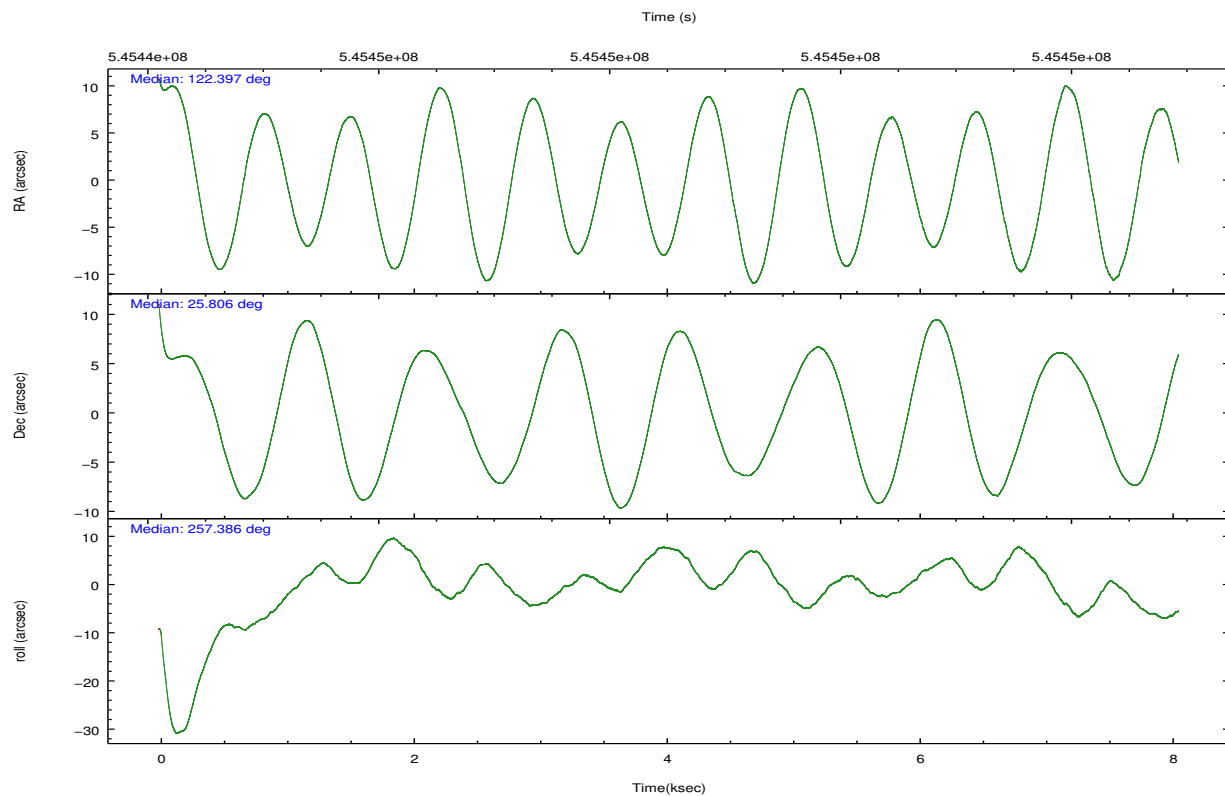


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	122.387348	122.39693016315	CCD I2 on	O1	Y
[deg] Pointing Dec	25.831766	25.80570268805994	CCD I3 on	O2	Y
[deg] Pointing Roll	257.238162	257.3906520385997	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	545444623.184000	545442878.95427	CCD S5 on	N	N
Observation start date	2015-04-15T00:22:36	2015-04-14T23:54:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	545452523.184000	545453423.12986	On-chip summing requested	N	N
Observation end date	2015-04-15T02:34:16	2015-04-15T02:50:23	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



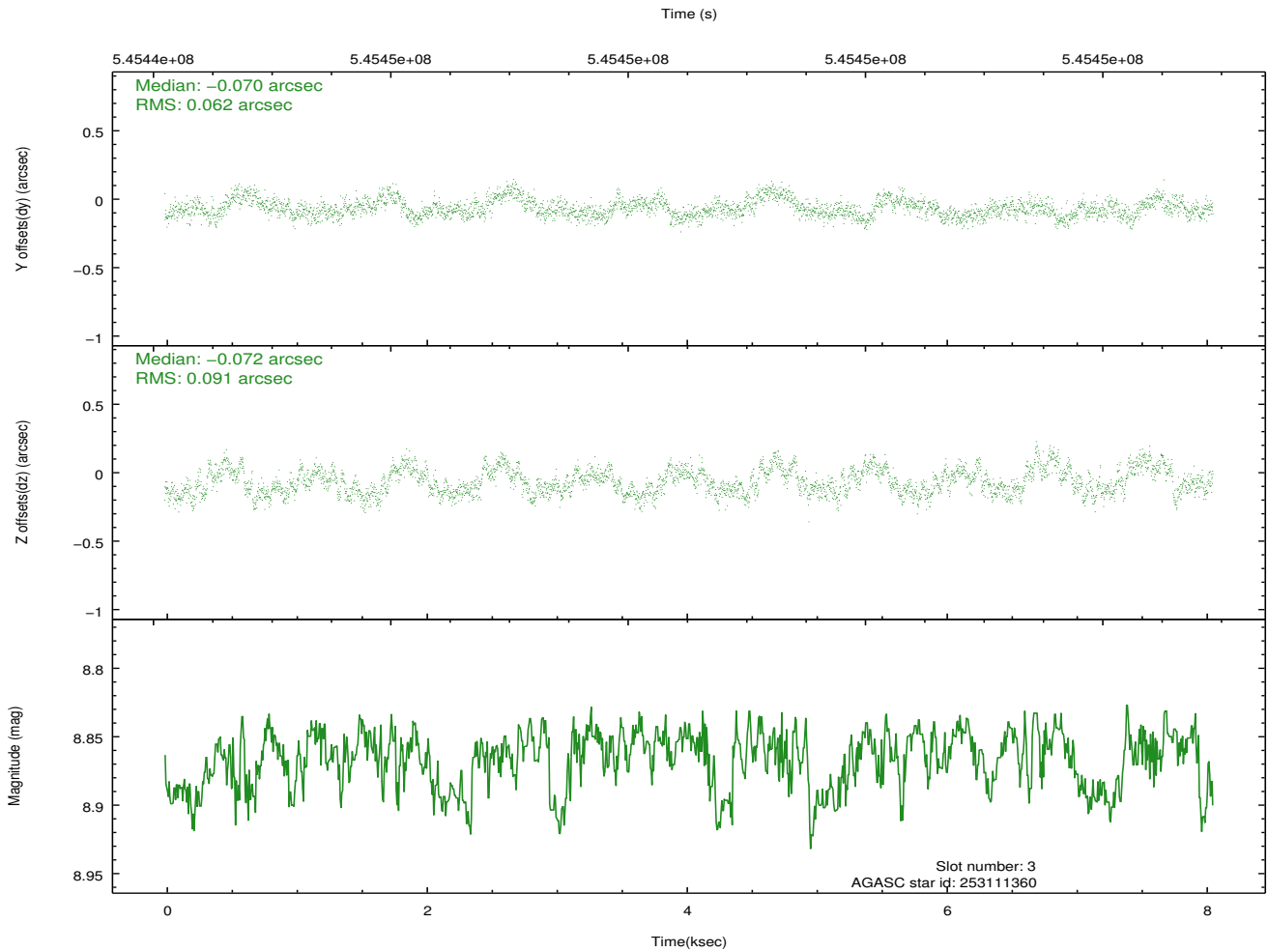
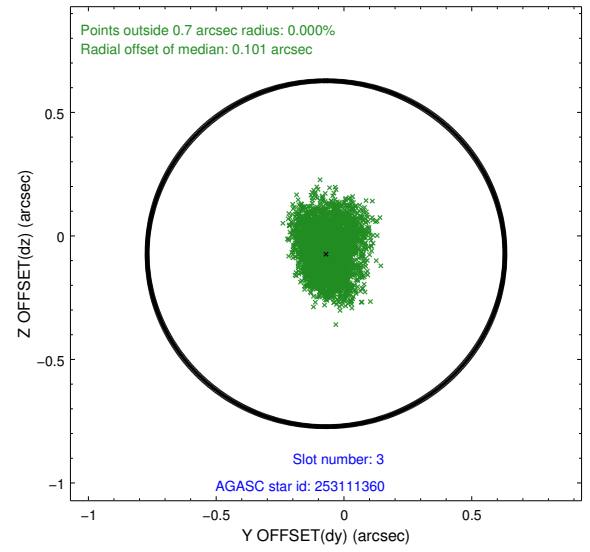
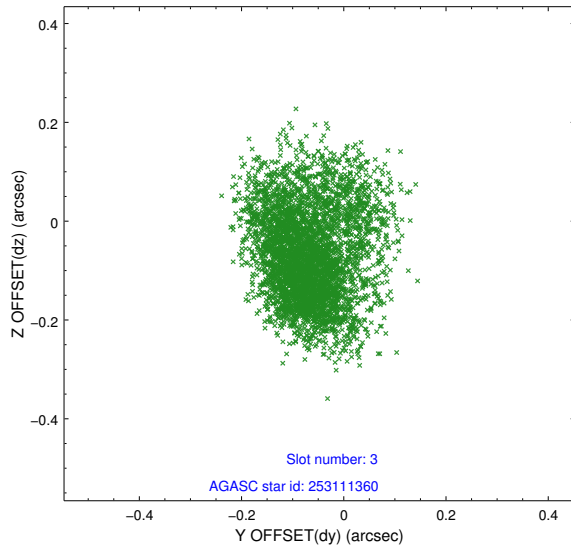


### Slot Statistics

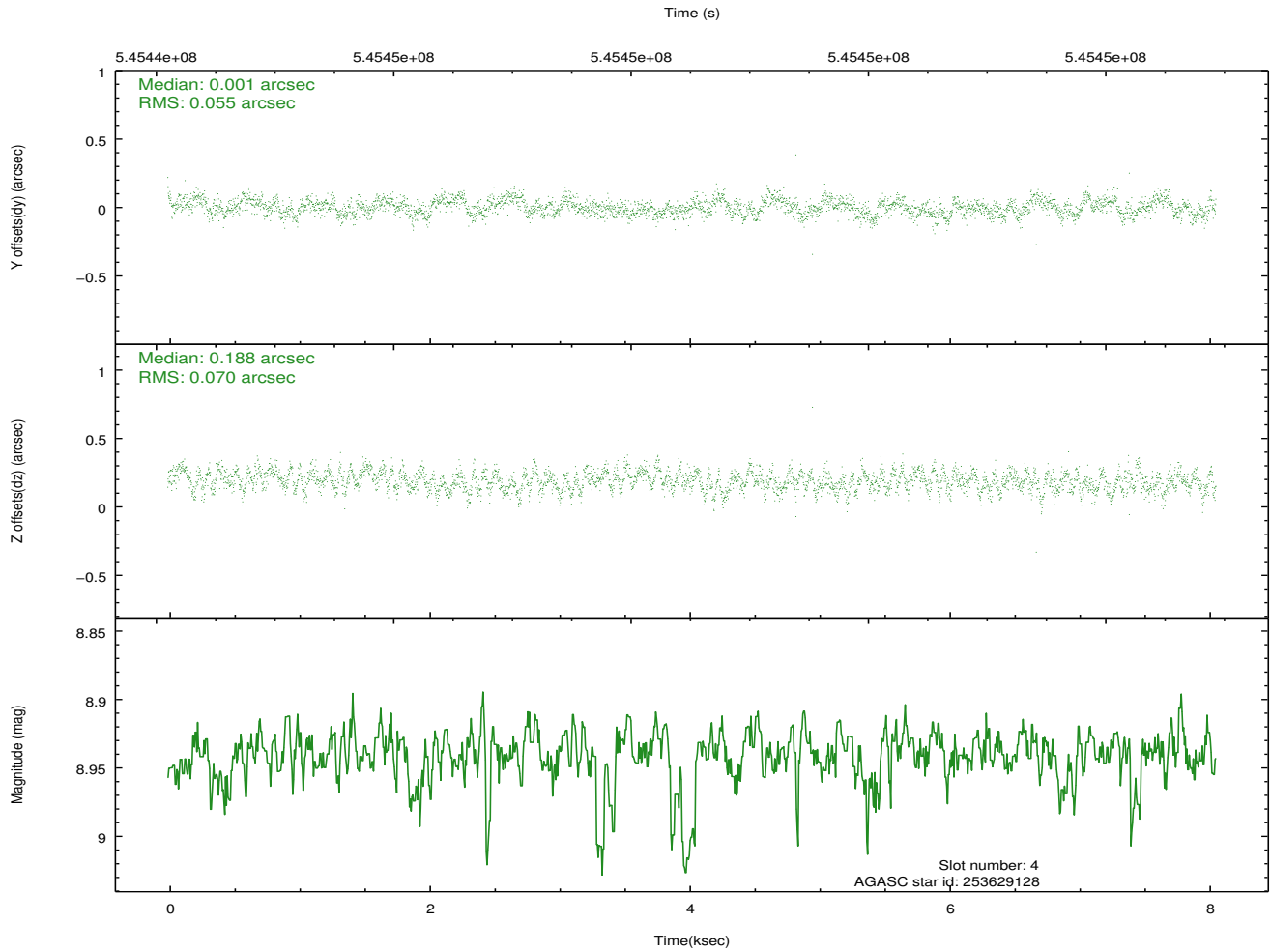
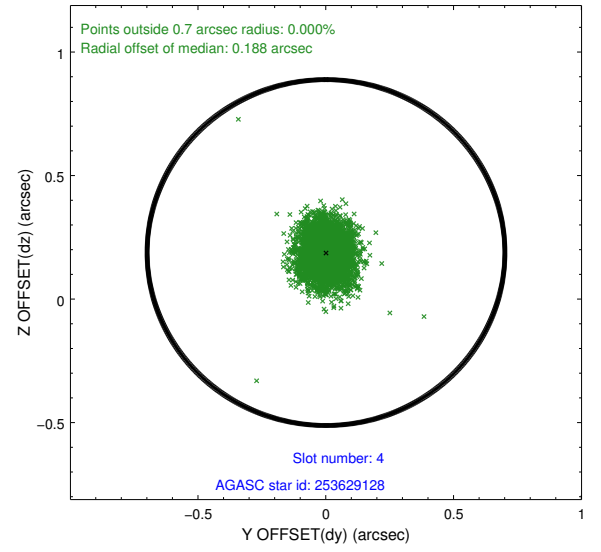
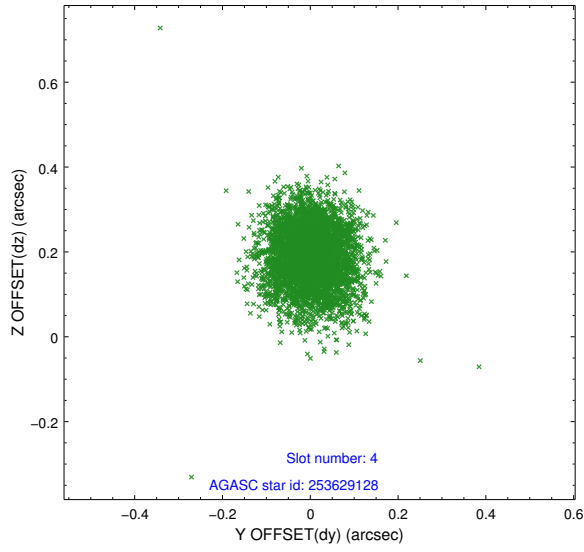
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	1967	-0.103	-0.090	0.018	0.026	0.000000	0.000000	-771.25	-1739.03
1	FID		ACIS-S-4	7.13	1967	0.357	0.073	0.020	0.029	0.000000	0.000000	2142.18	168.88
2	FID		ACIS-S-5	7.15	1967	-0.286	0.026	0.014	0.026	0.000000	0.000000	-1823.37	163.31
3	GUIDE	used	253111360	8.86	3932	-0.070	-0.072	0.118	0.190	122.832350	25.779138	-136.05	1448.08
4	GUIDE	used	253629128	8.94	3932	0.001	0.188	0.094	0.152	121.952226	26.365542	-1565.48	-1793.67
5	GUIDE	used	253106152	7.40	3934	0.067	-0.073	0.099	0.166	121.530527	25.493894	1792.85	-2449.28
6	GUIDE	used	253100344	9.07	3930	0.032	-0.084	0.127	0.211	122.576032	25.893031	-349.30	546.05
7	GUIDE	used	253109584	9.36	3926	-0.024	0.035	0.126	0.203	122.837053	25.137379	2112.03	1981.42

## 2.4 Star Slots

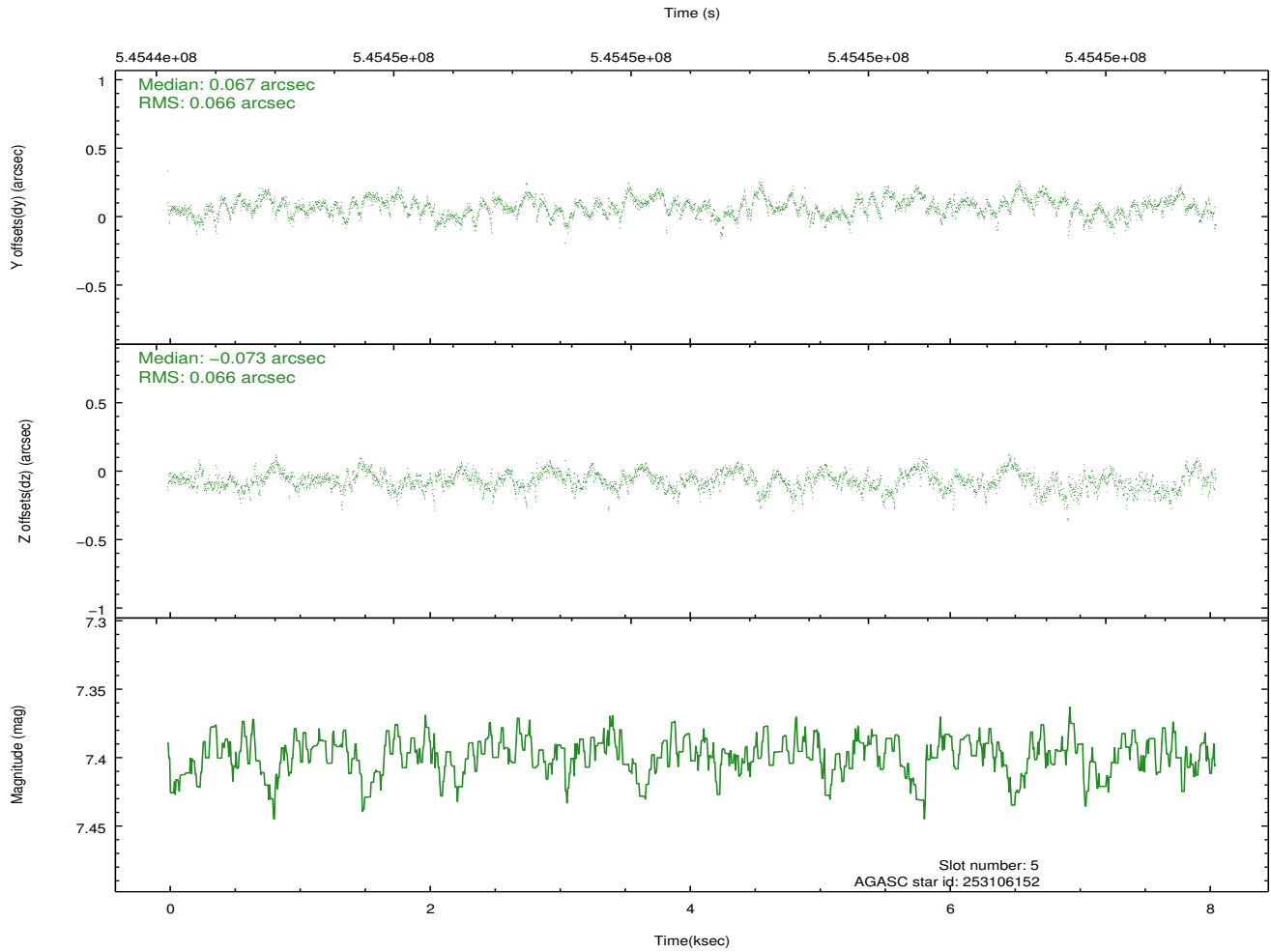
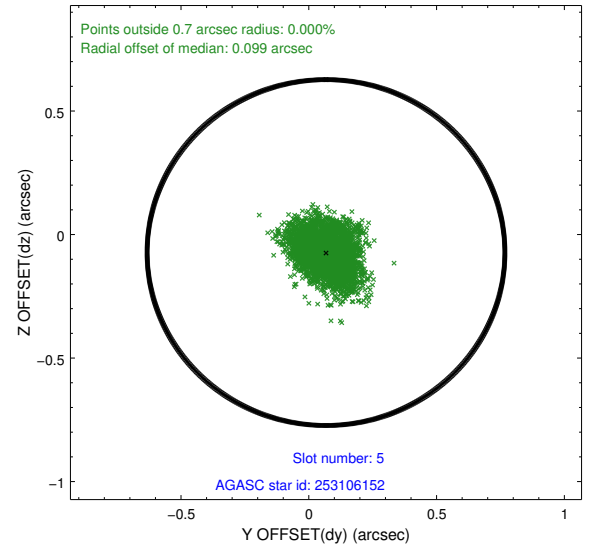
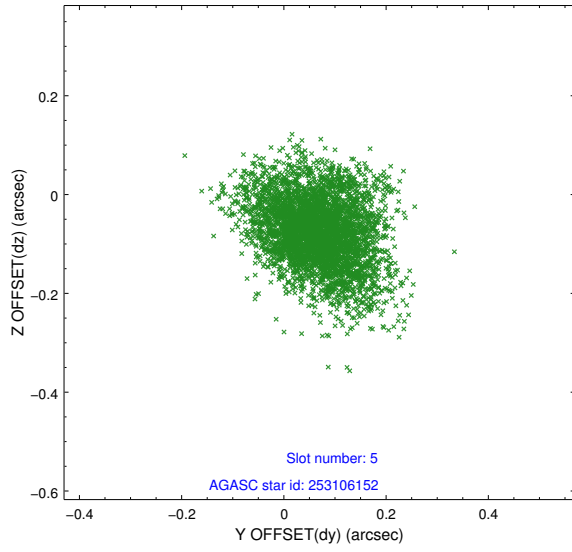
### 2.4.1 Slot 3



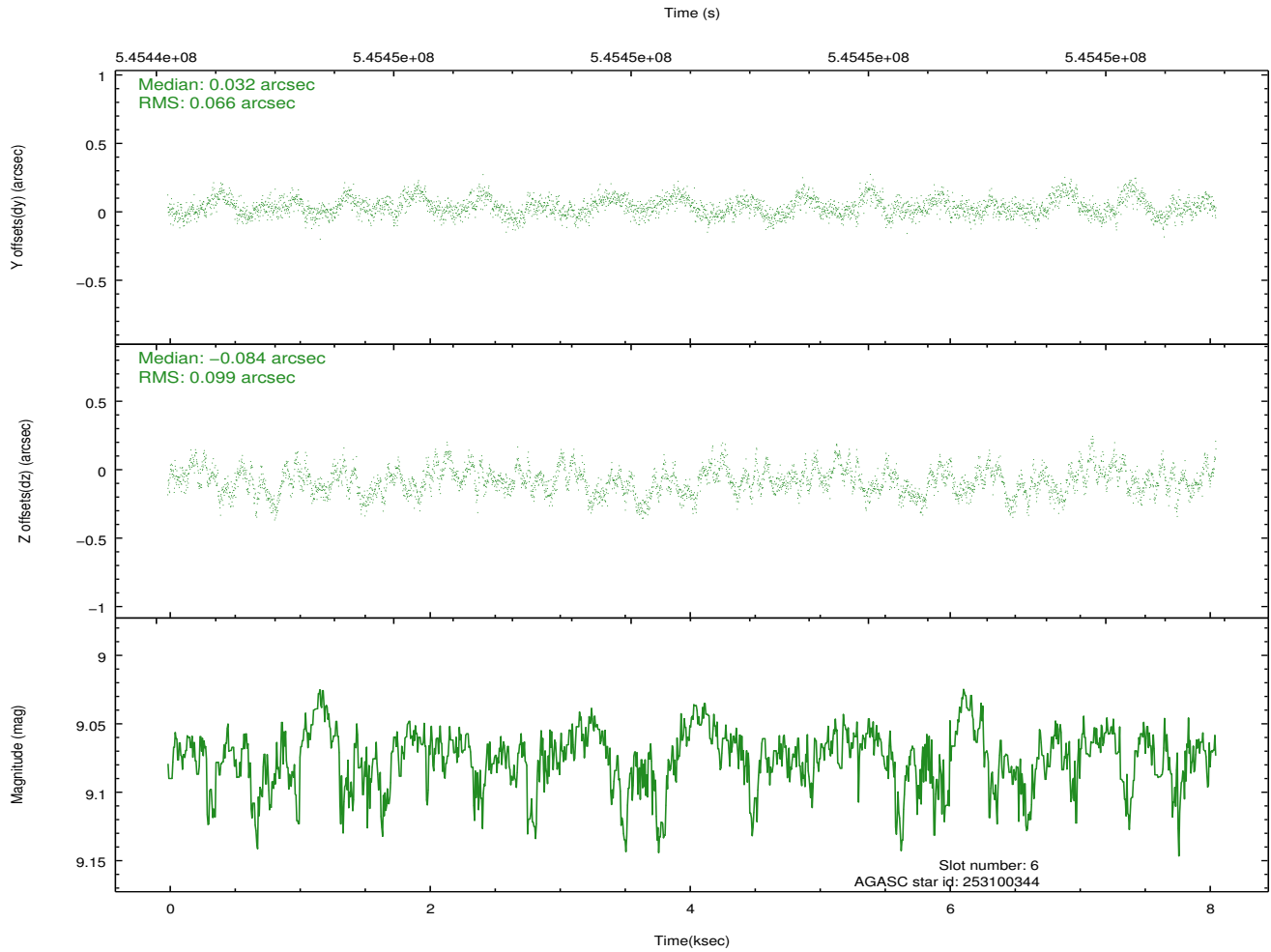
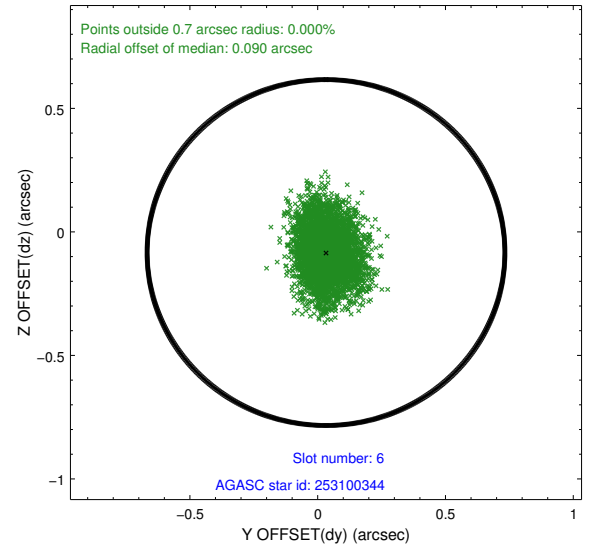
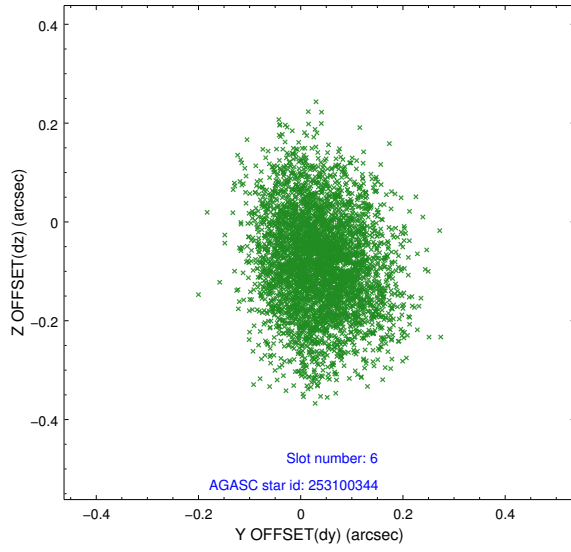
## 2.4.2 Slot 4



### 2.4.3 Slot 5

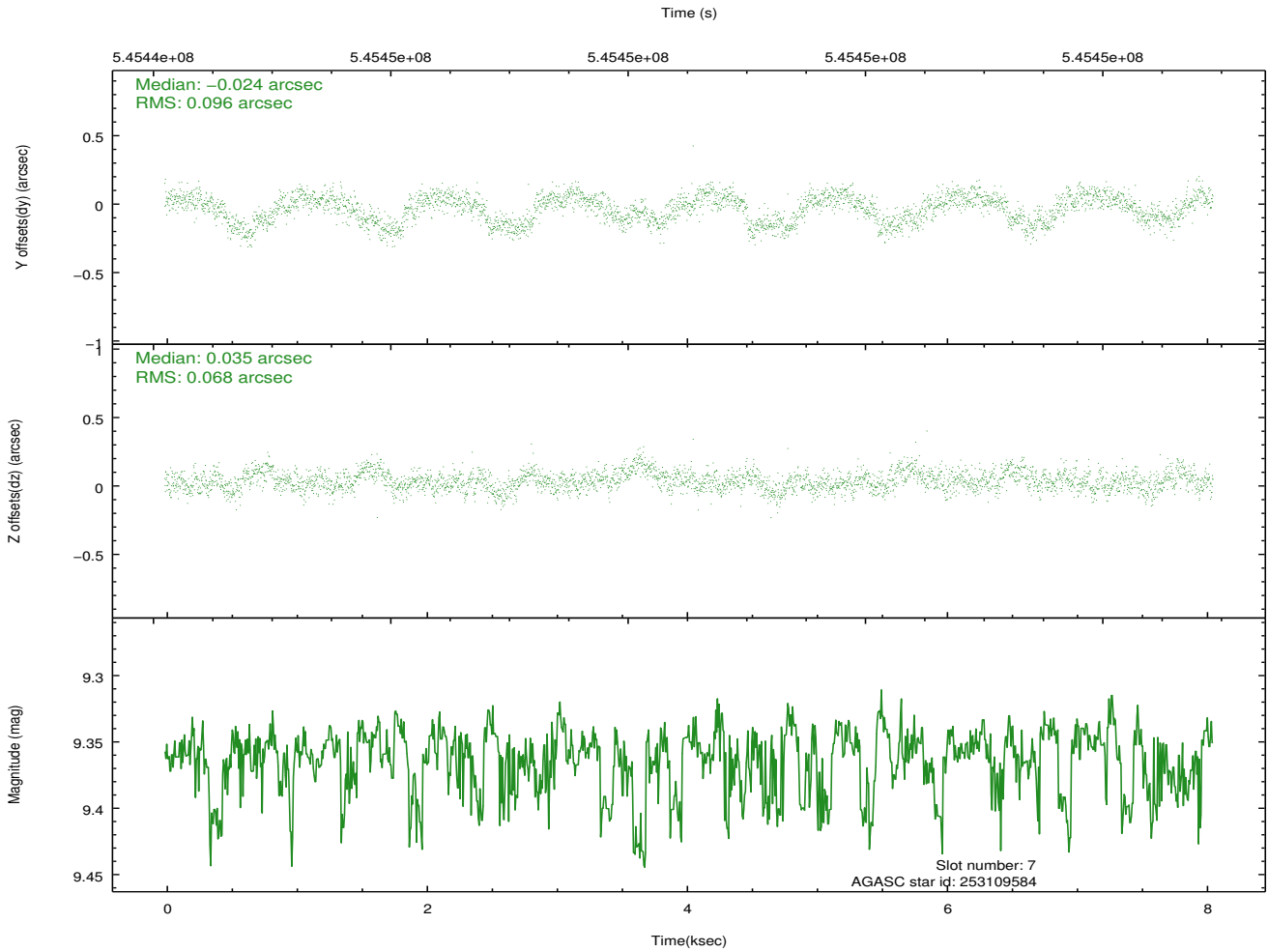
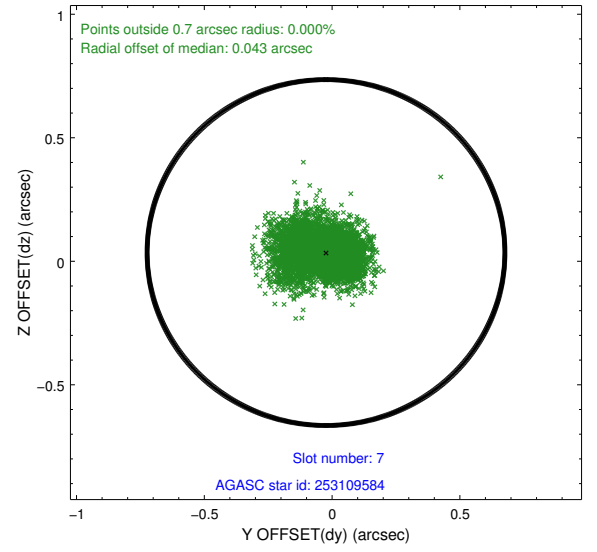
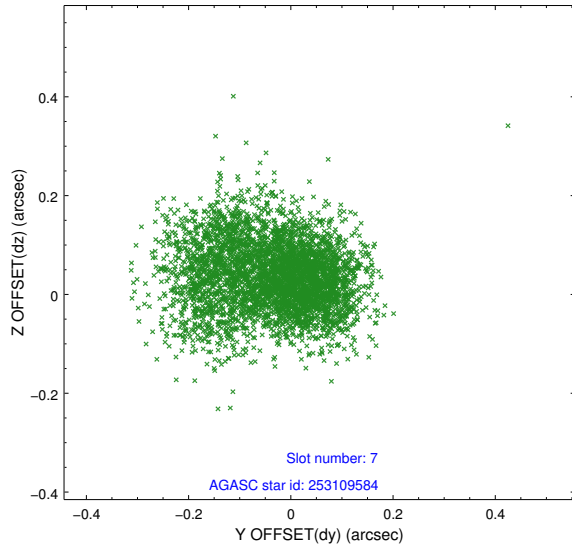


## 2.4.4 Slot 6



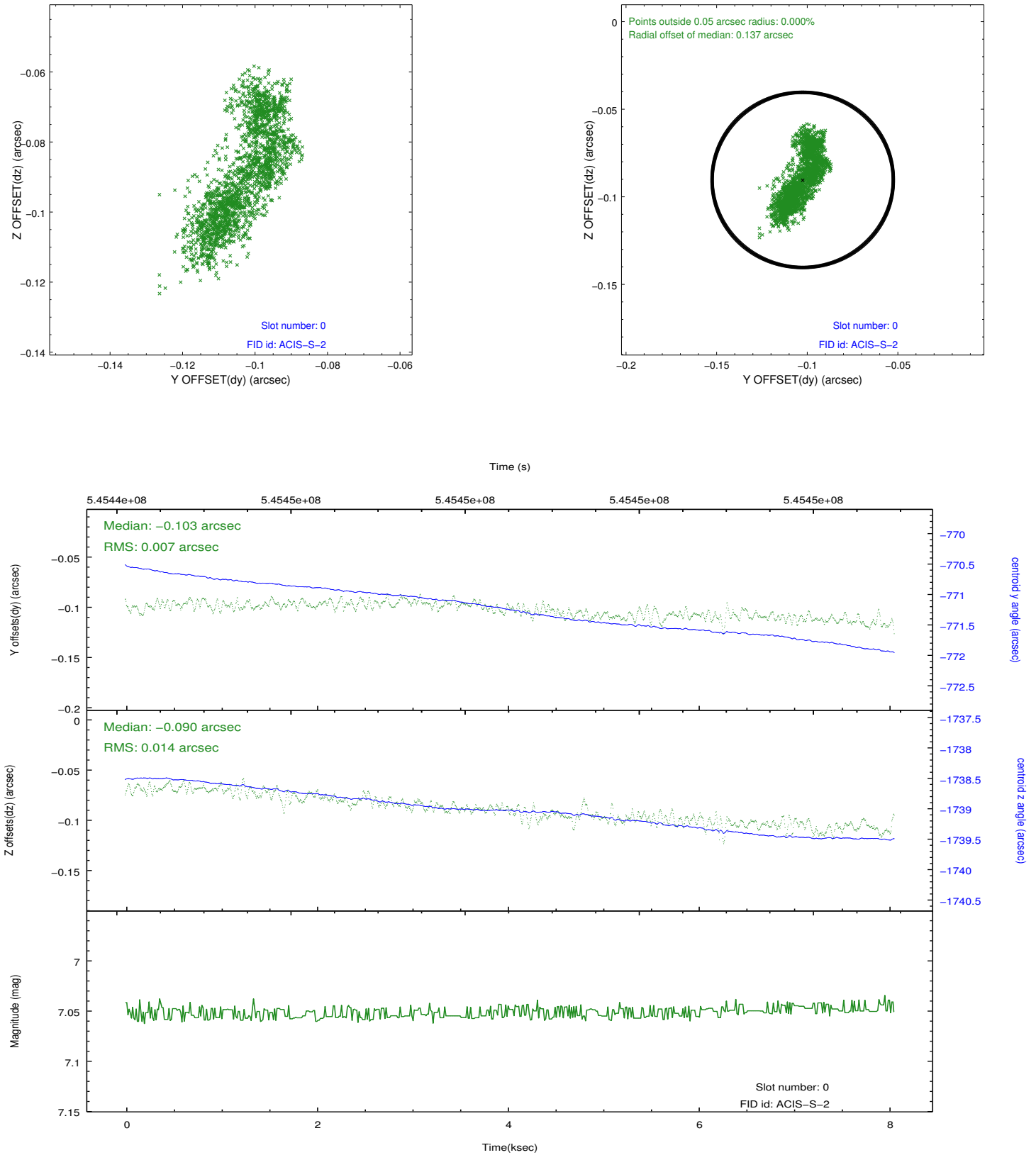


## 2.4.5 Slot 7

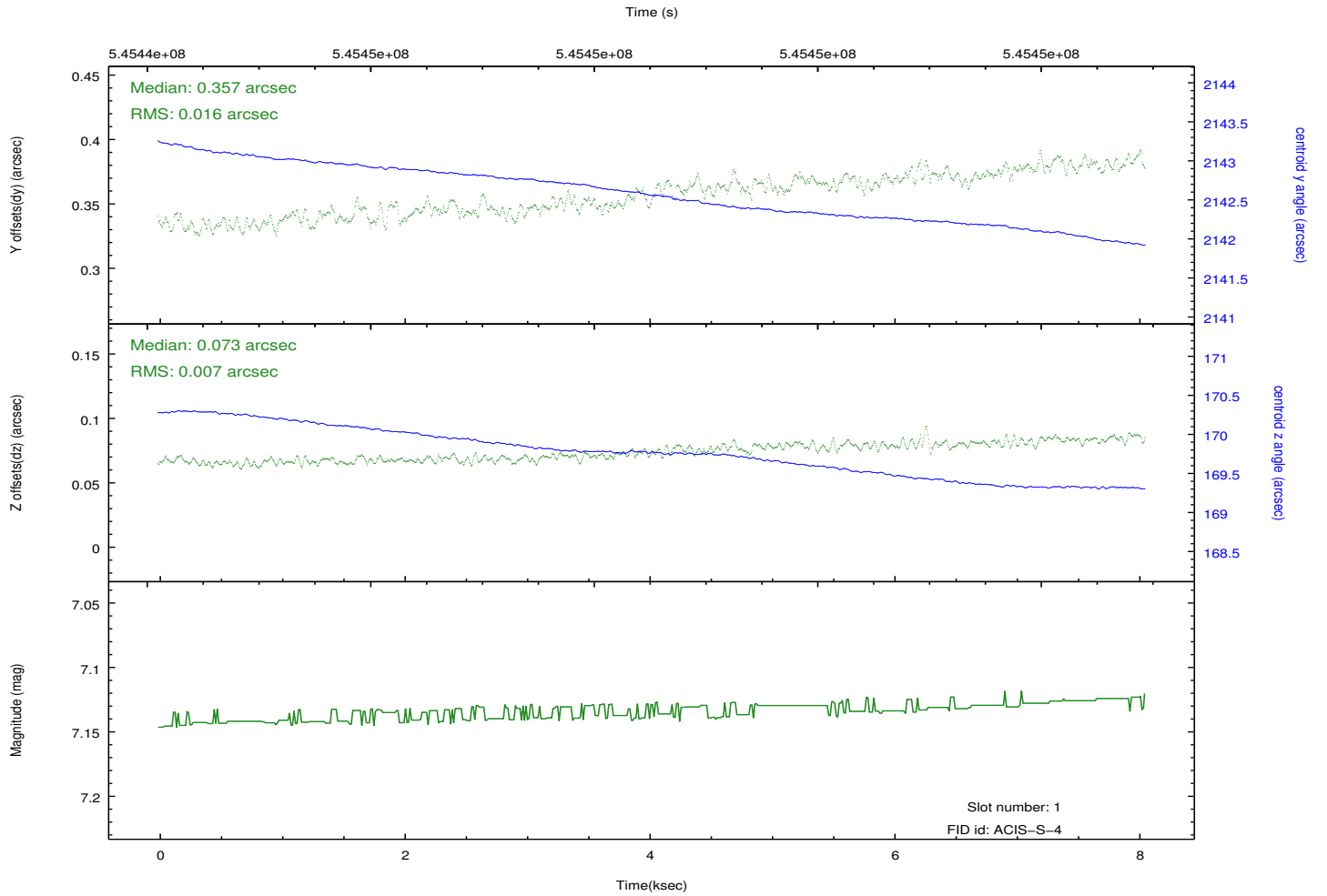
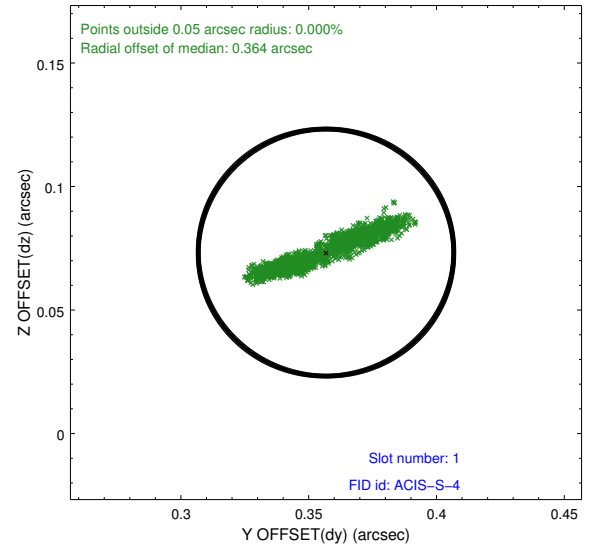
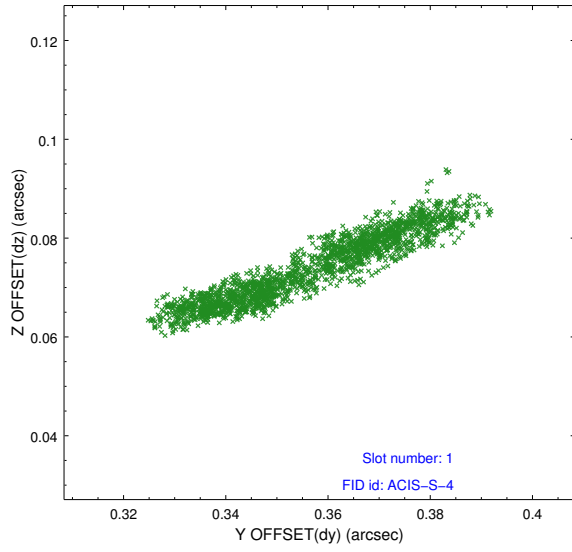


## 2.5 FID Slots

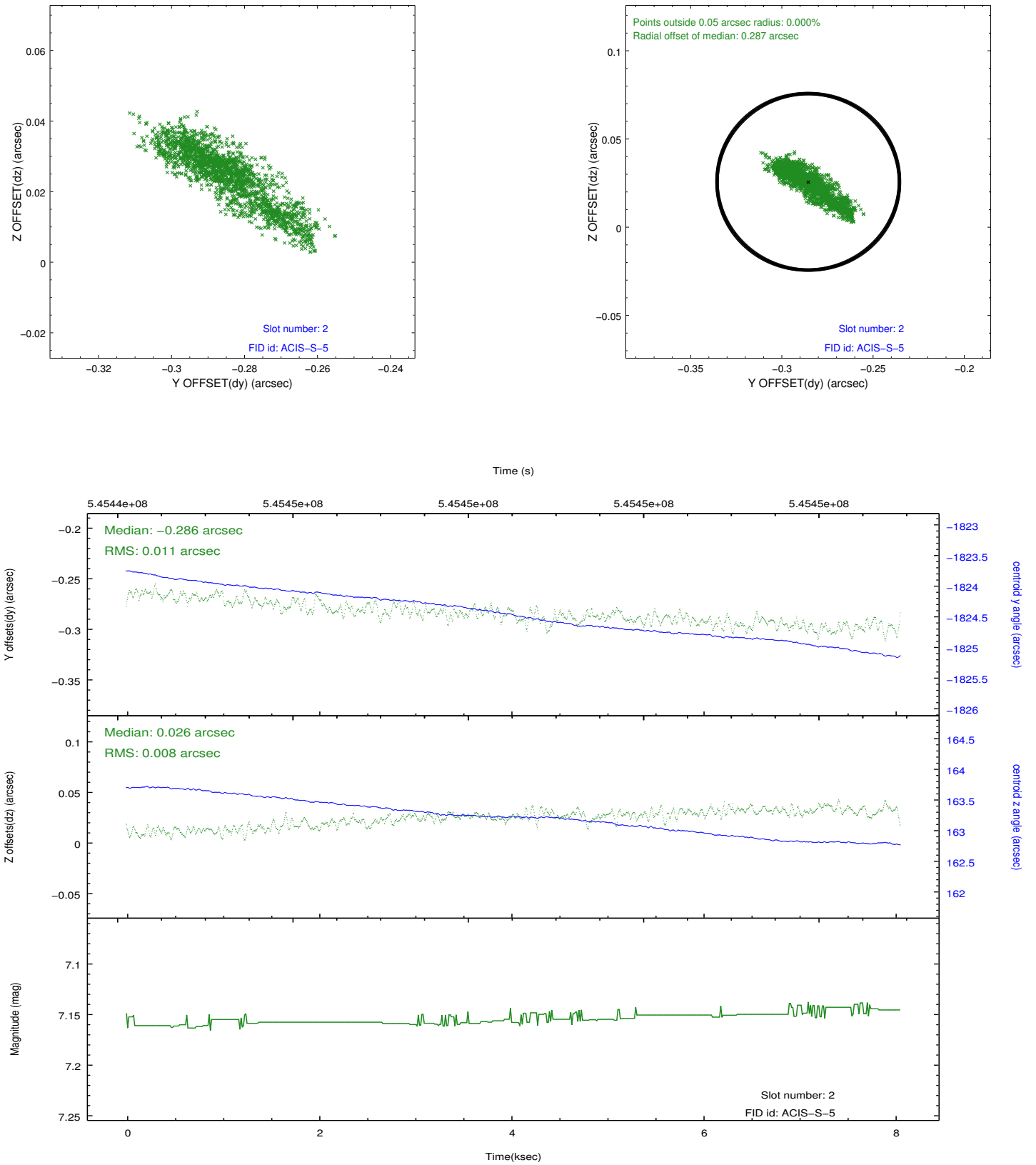
### 2.5.1 Slot 0



## 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)	2015.04.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.8516107447147

### A.2 Comments