

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 11547 - L2 Version 2  
Chandra X-Ray Center

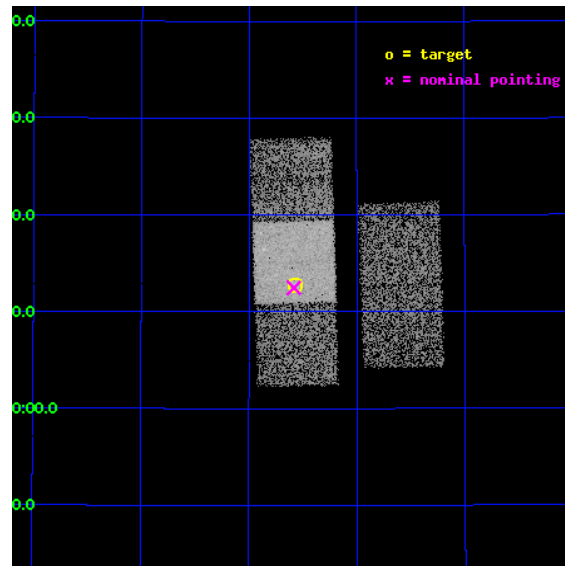
L2 Processing Date : Jun 28 2012

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# 1 Front

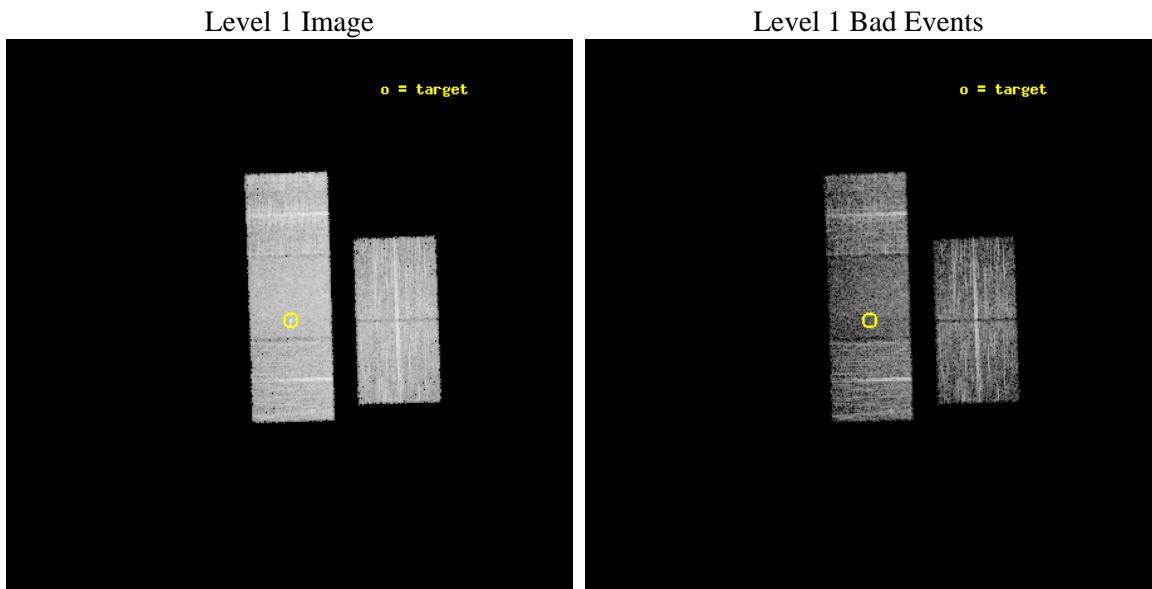
seq_num	702133	Sequence number
obs_id	11547	Observation id
title	The Size of Quasar Non-Thermal/X-ray Emission Regions	Proposal tit
observer	Prof. Christopher Kochanek	Principal investigator
object	SDSS1004+4112	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	151.1425	Observer's specified target RA [deg]
dec_targ	41.212222	Observer's specified target Dec [deg]
ra_nom	151.14573891799	Nominal RA [deg]
dec_nom	41.208049105962	Nominal Dec [deg]
roll_nom	268.27253305504	Nominal Roll [deg]
revision	2	Processing version of data
ontime	6038.8000464439	Sum of GTIs [s]
livetime	5959.8986781372	Livetime [s]
ontime2	6038.8000464439	Sum of GTIs [s]
ontime3	6038.8000464439	Sum of GTIs [s]
ontime6	6038.8000464439	Sum of GTIs [s]
ontime7	6038.8000464439	Sum of GTIs [s]
ontime8	6038.8000464439	Sum of GTIs [s]
l2events	42034	Number of level 2 events



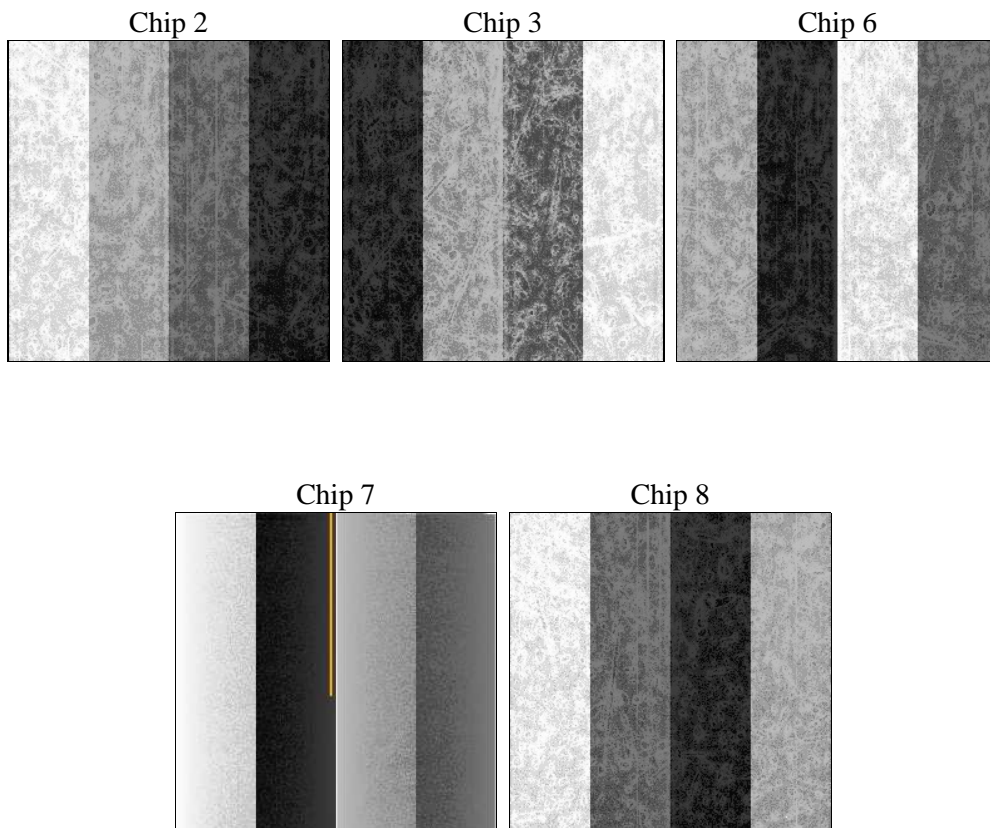
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	6000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	6038.8000464439	Sum of GTIs [s]
caldsver	4.5.0	&#160	ontime2	6038.8000464439	Sum of GTIs [s]
date	2012-06-28T20:04:59	Date and time of file creation	ontime3	6038.8000464439	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	6038.8000464439	Sum of GTIs [s]
			ontime7	6038.8000464439	Sum of GTIs [s]
			ontime8	6038.8000464439	Sum of GTIs [s]
			l1events	249000	Number of level 1 events

### 2.1.4 Events

	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
level 1 events	44149	43424	45512	55707	60208
rejected events	39395	38958	40355	30408	44864
rejected %	89%	89%	88%	54%	74%

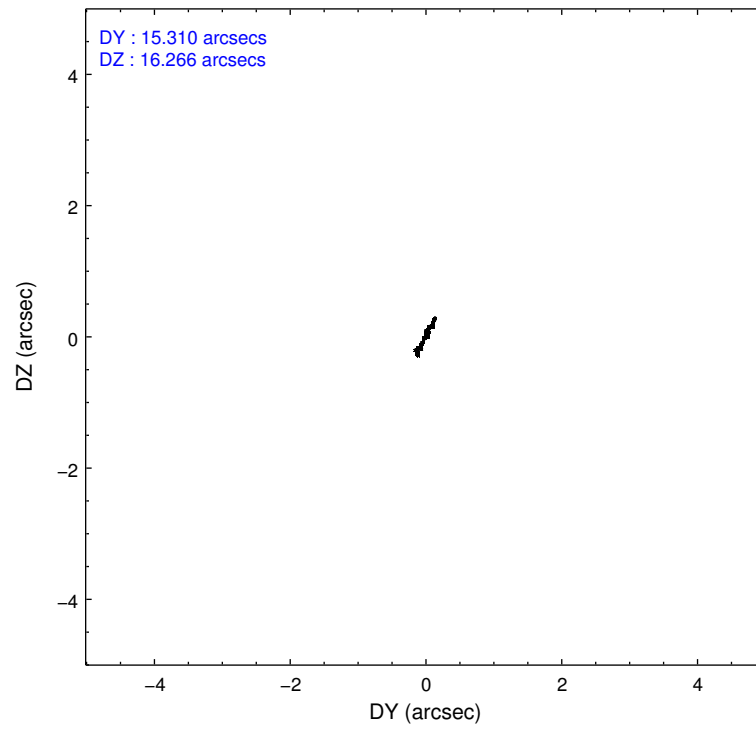
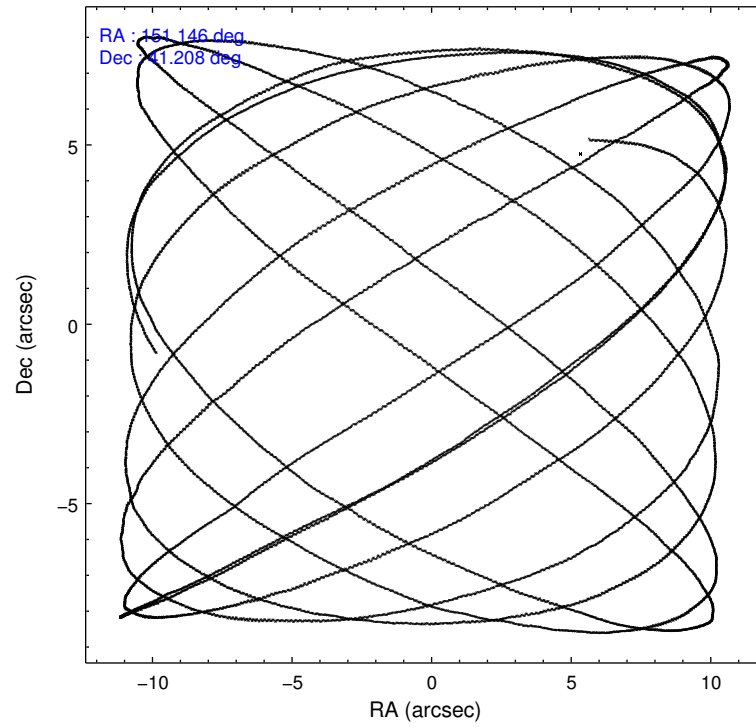
	<b>ccd 2</b>	<b>ccd 3</b>	<b>ccd 6</b>	<b>ccd 7</b>	<b>ccd 8</b>
grade 0 events	1617	1522	1779	2512	4690
	3%	3%	3%	4%	7%
grade 1 events	27	26	22	65	56
	0%	0%	0%	0%	0%
grade 2 events	1222	1011	1148	5214	3624
	2%	2%	2%	9%	6%
grade 3 events	495	497	546	2263	1577
	1%	1%	1%	4%	2%
grade 4 events	531	470	536	2215	1466
	1%	1%	1%	3%	2%
grade 5 events	1618	2028	2150	5732	2935
	3%	4%	4%	10%	4%
grade 6 events	892	972	1151	13102	4020
	2%	2%	2%	23%	6%
grade 7 events	37747	36898	38180	24604	41840
	85%	84%	83%	44%	69%

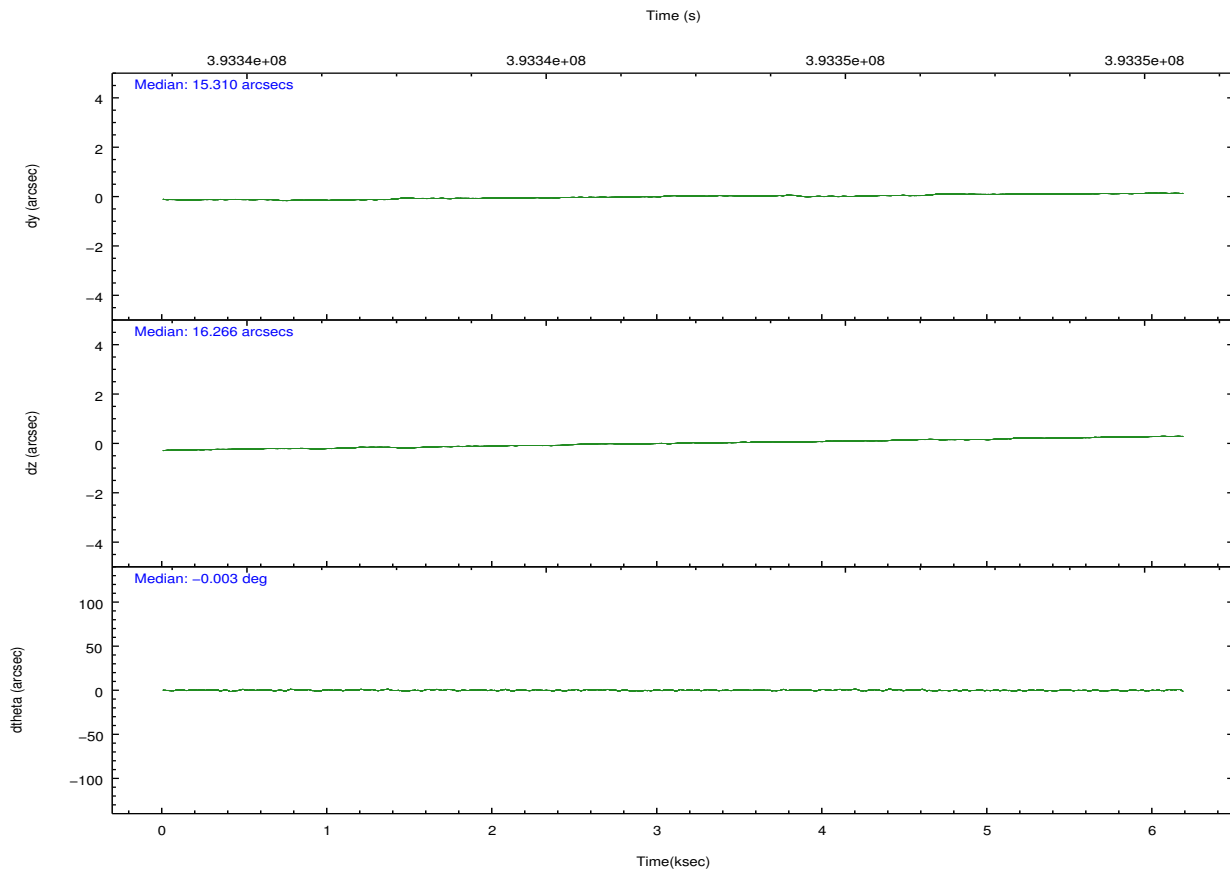
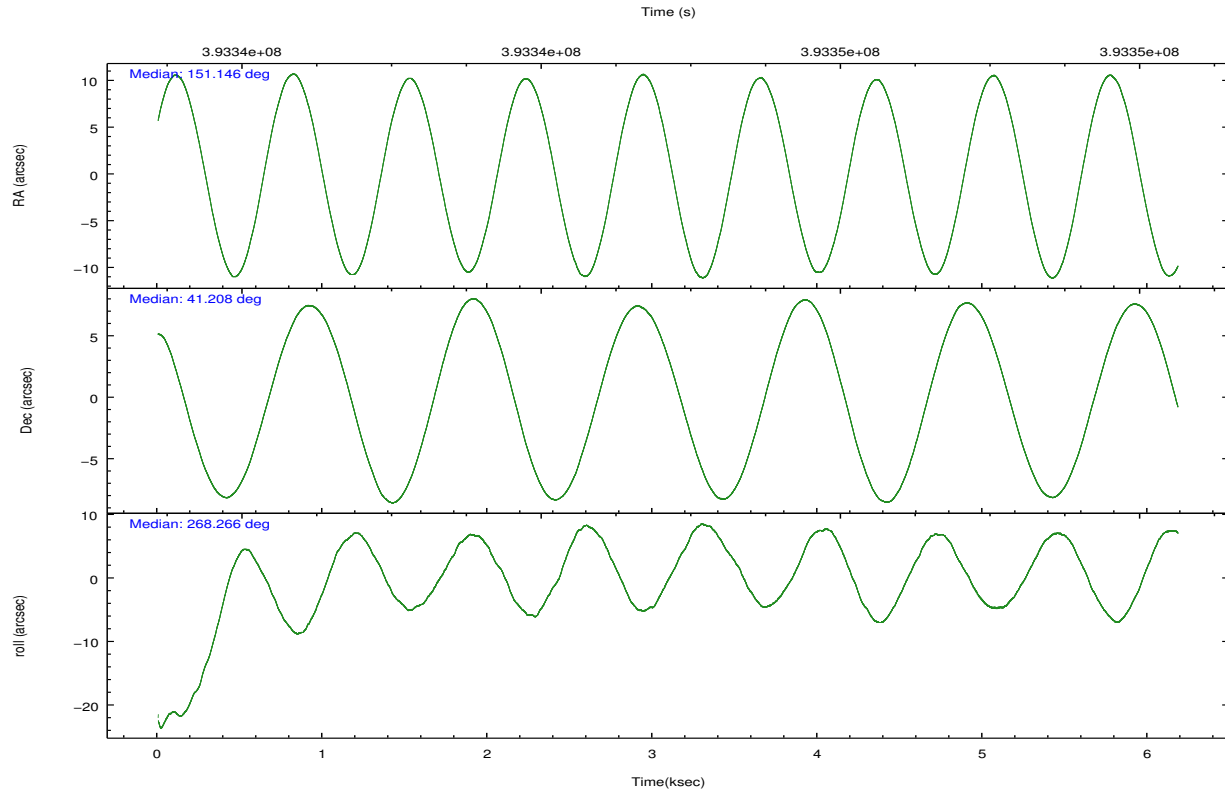


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	151.128057	151.1457389179898	CCD I2 on	O4	Y
[deg] Pointing Dec	41.231924	41.20804910596165	CCD I3 on	O3	Y
[deg] Pointing Roll	268.127561	268.2725330550447	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	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	O2	Y
[s] Observation start time (MET)	393341948.184000	393340678.8056	CCD S5 on	N	N
Observation start date	2010-06-19T13:38:02	2010-06-19T13:17:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	393347948.184000	393348962.85603	On-chip summing requested	N	N
Observation end date	2010-06-19T15:18:02	2010-06-19T15:36:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



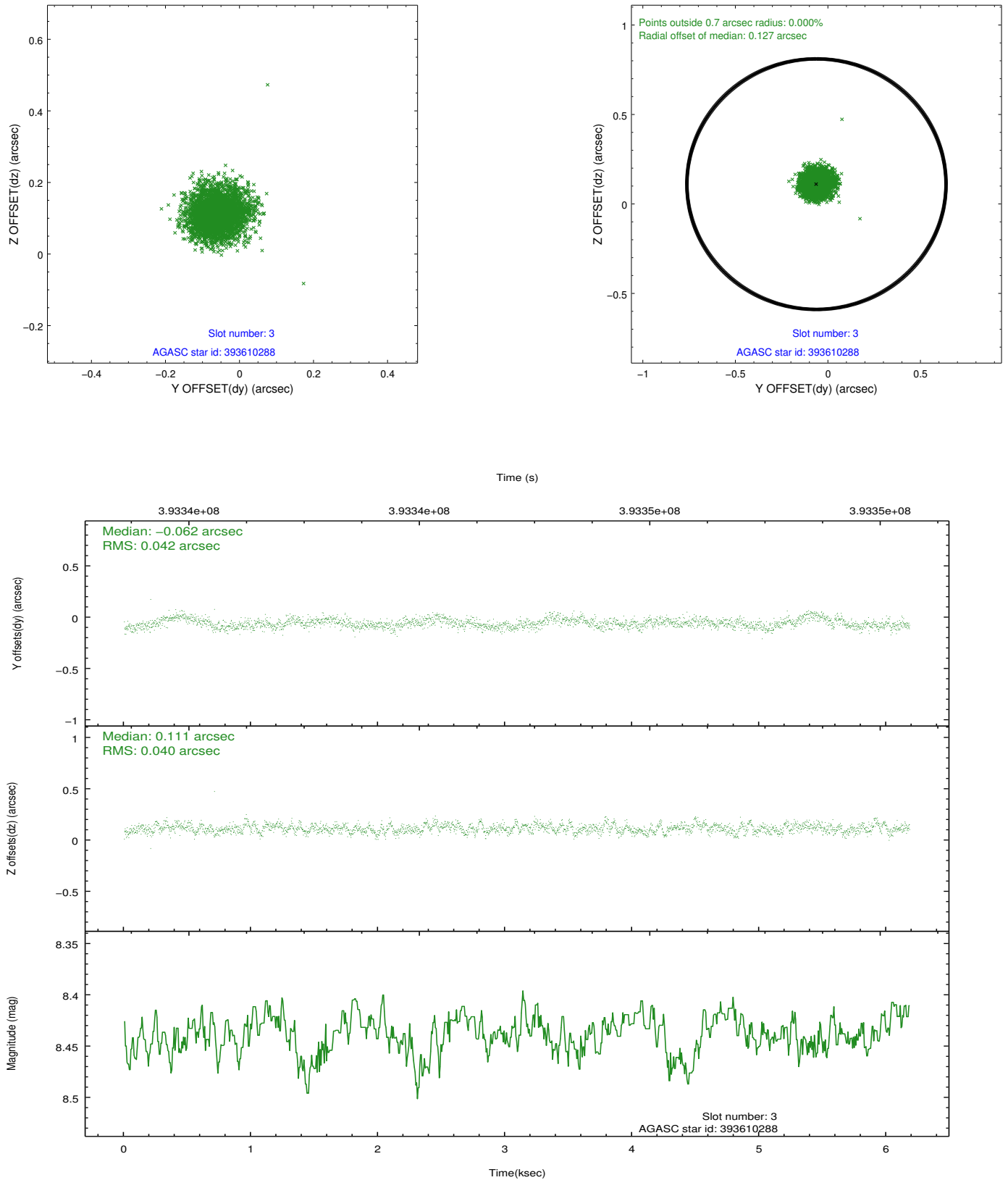


### Slot Statistics

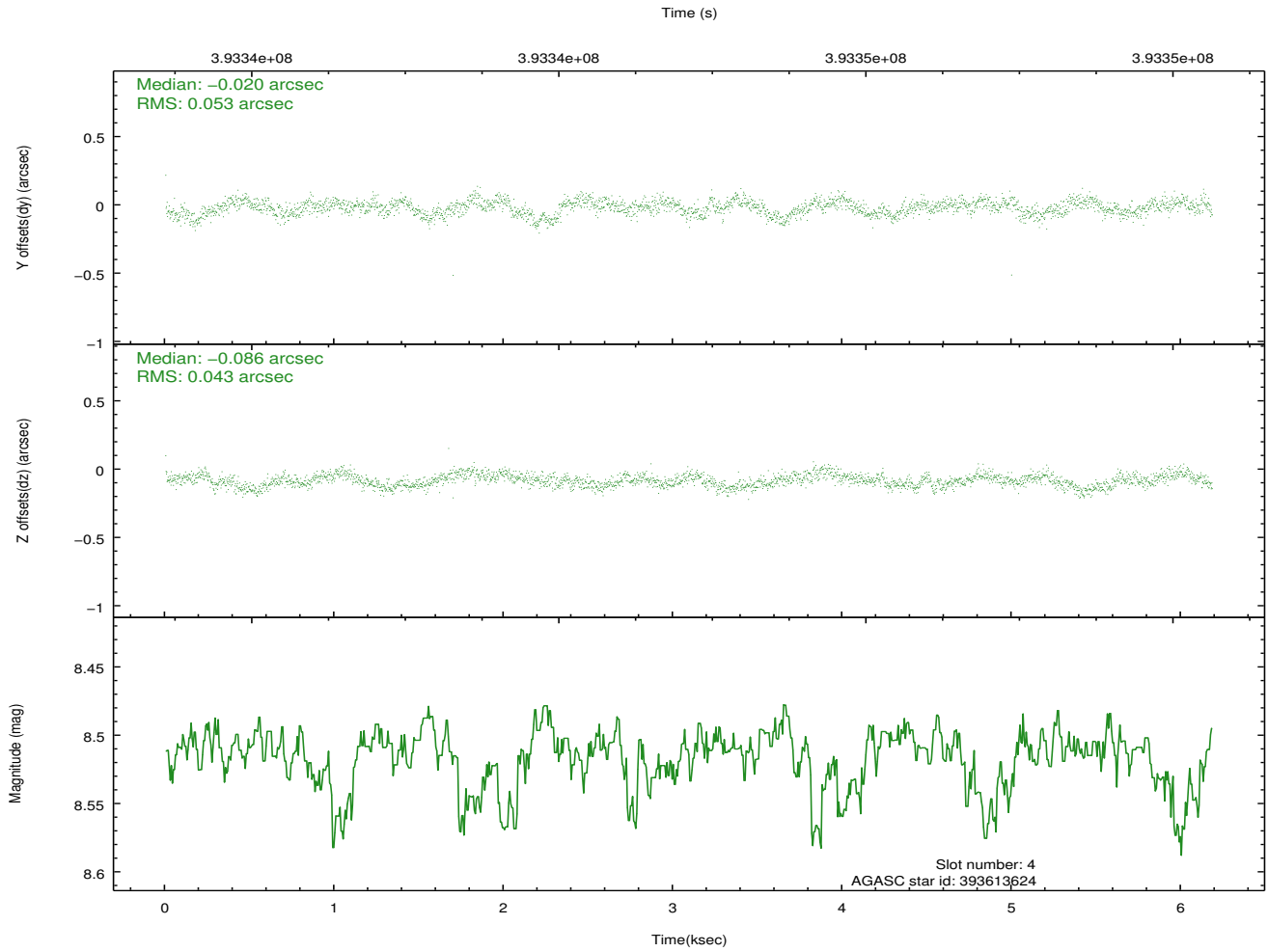
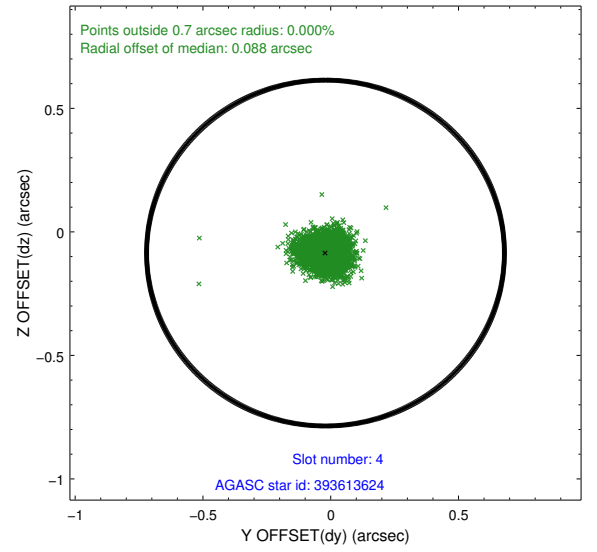
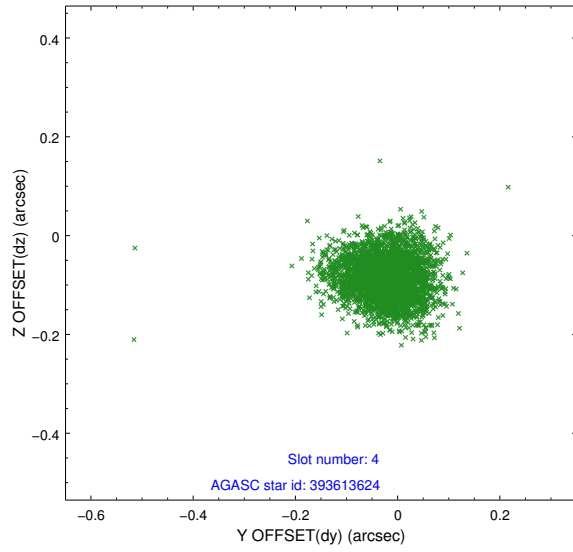
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.90	1508	0.111	-0.056	0.008	0.015	0.000000	0.000000	927.80	-1733.40
1	FID	ACIS-S-2	6.84	1508	-0.115	-0.008	0.007	0.011	0.000000	0.000000	-767.80	-1738.83
2	FID	ACIS-S-6	7.05	1508	-0.016	0.069	0.006	0.010	0.000000	0.000000	392.99	807.09
3	GUIDE	393610288	8.44	3014	-0.062	0.111	0.062	0.100	151.538899	41.090404	470.68	1129.83
4	GUIDE	393613624	8.51	3016	-0.020	-0.086	0.072	0.114	151.136661	40.665270	2038.74	90.71
5	GUIDE	393616408	9.05	3013	0.001	-0.047	0.100	0.160	150.713966	41.346840	-378.25	-1132.15
6	GUIDE	393616816	8.42	3015	0.023	0.019	0.058	0.094	151.562975	40.925077	1062.95	1217.25
7	GUIDE	393619280	9.40	3006	0.059	0.002	0.110	0.181	150.915222	40.640455	2148.11	-511.07

## 2.4 Star Slots

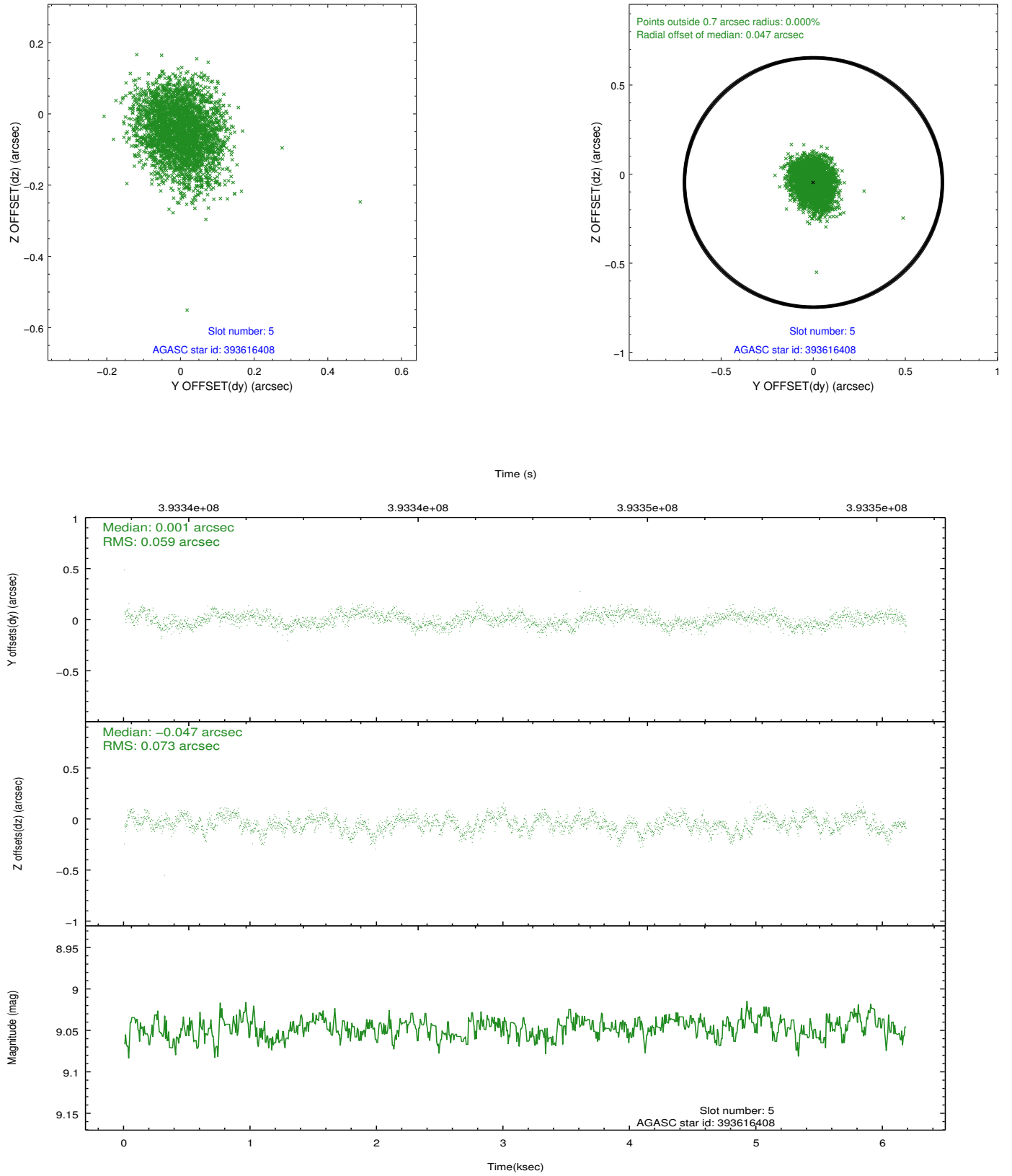
### 2.4.1 Slot 3



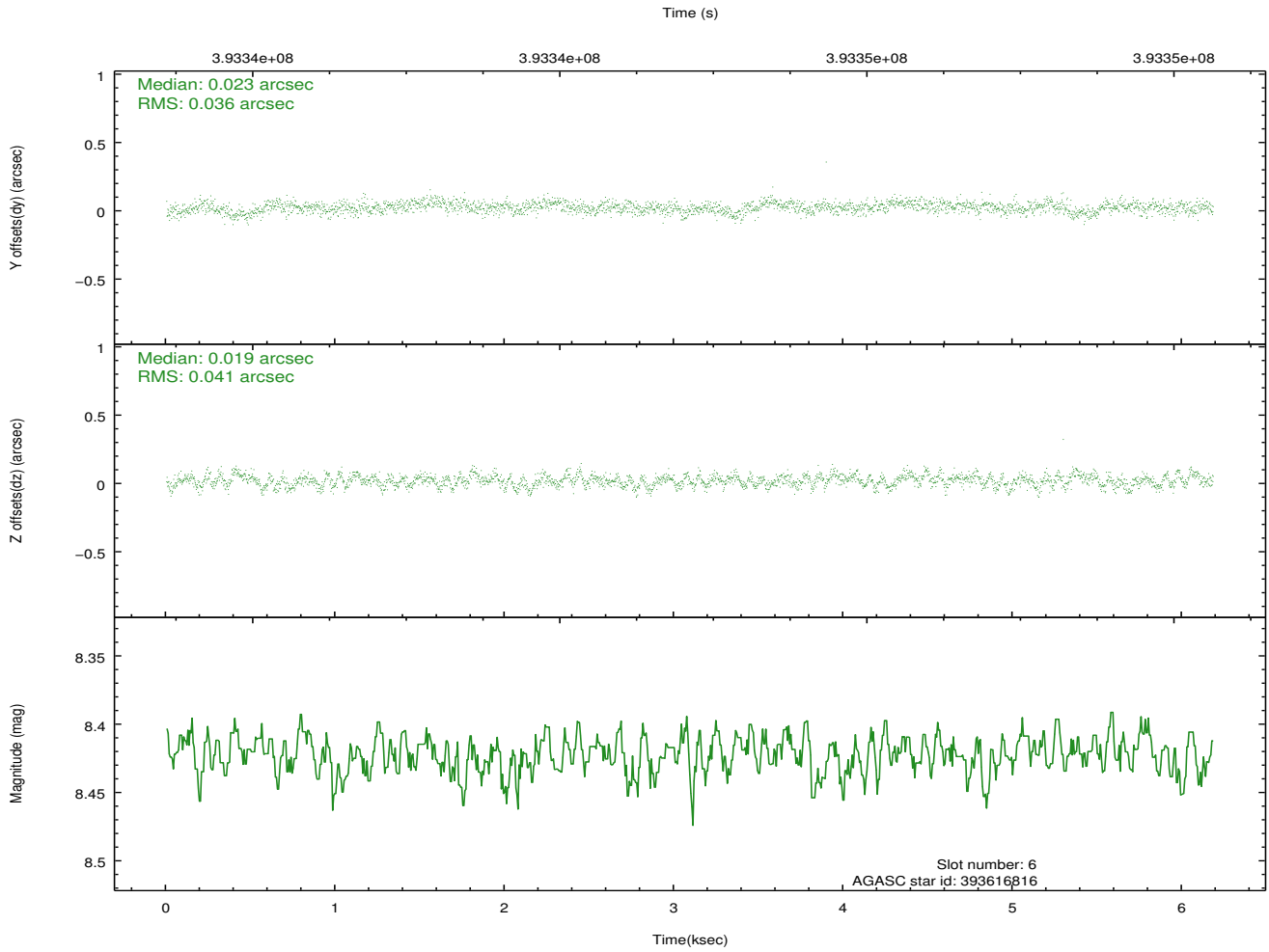
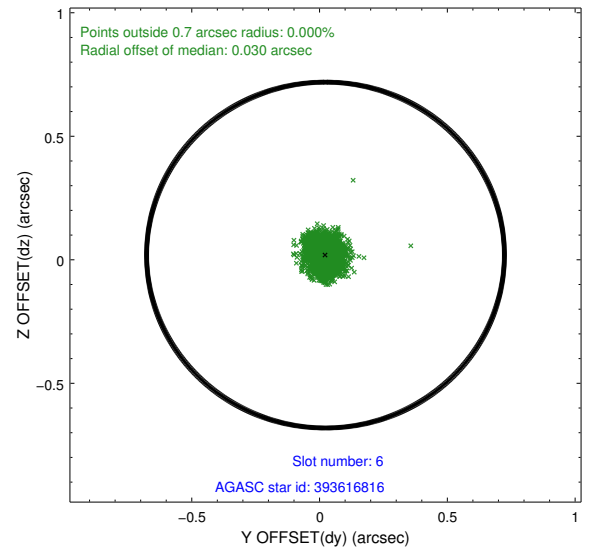
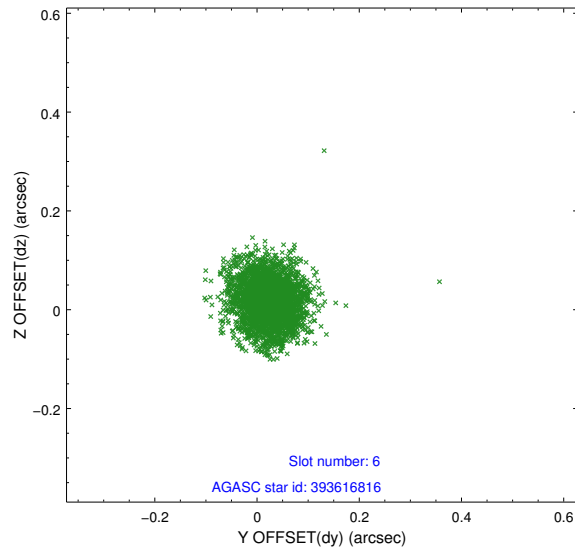
## 2.4.2 Slot 4



### 2.4.3 Slot 5

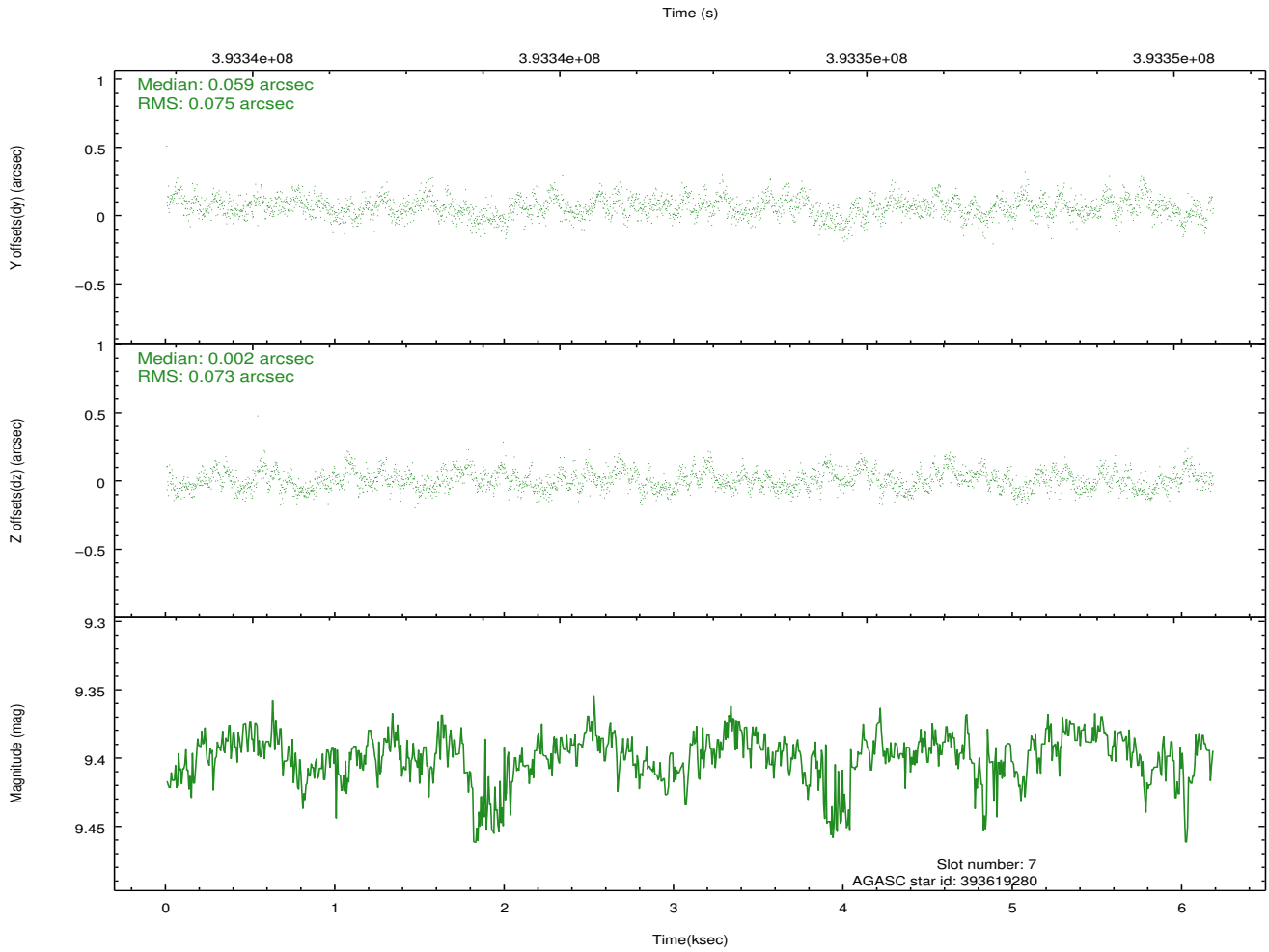
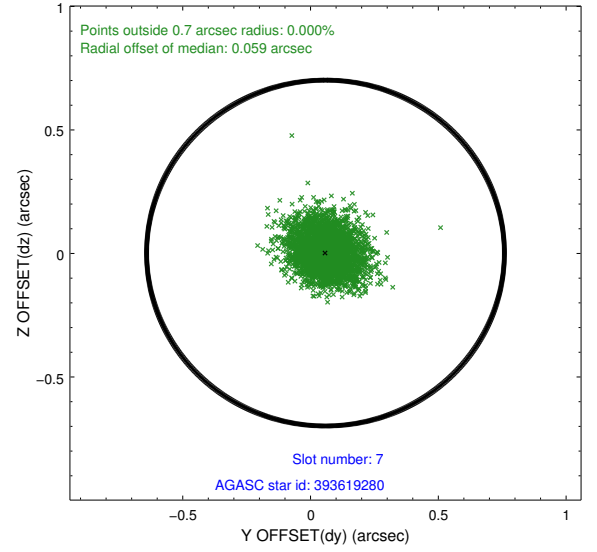
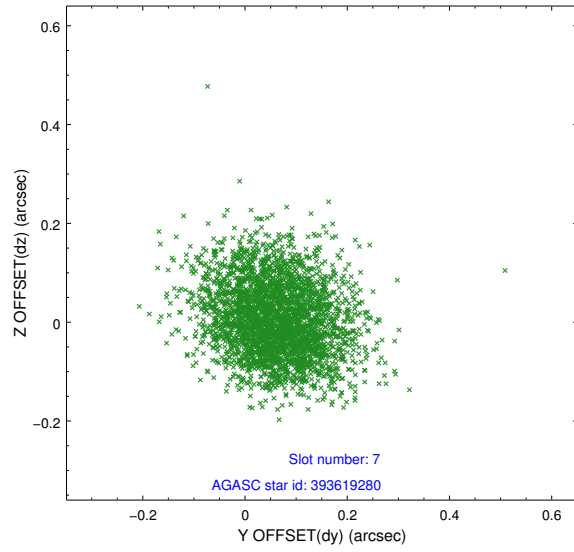


## 2.4.4 Slot 6



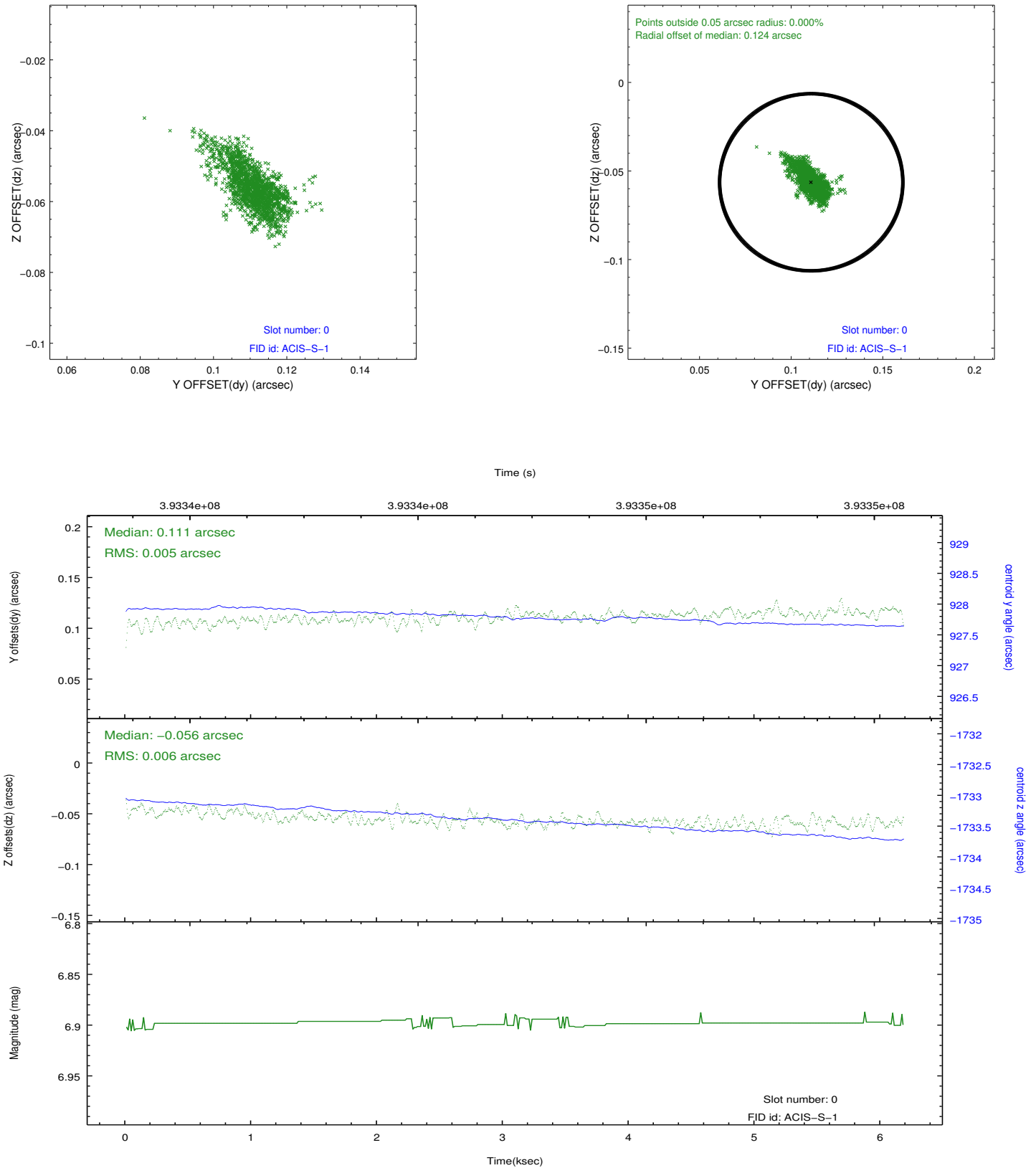


## 2.4.5 Slot 7

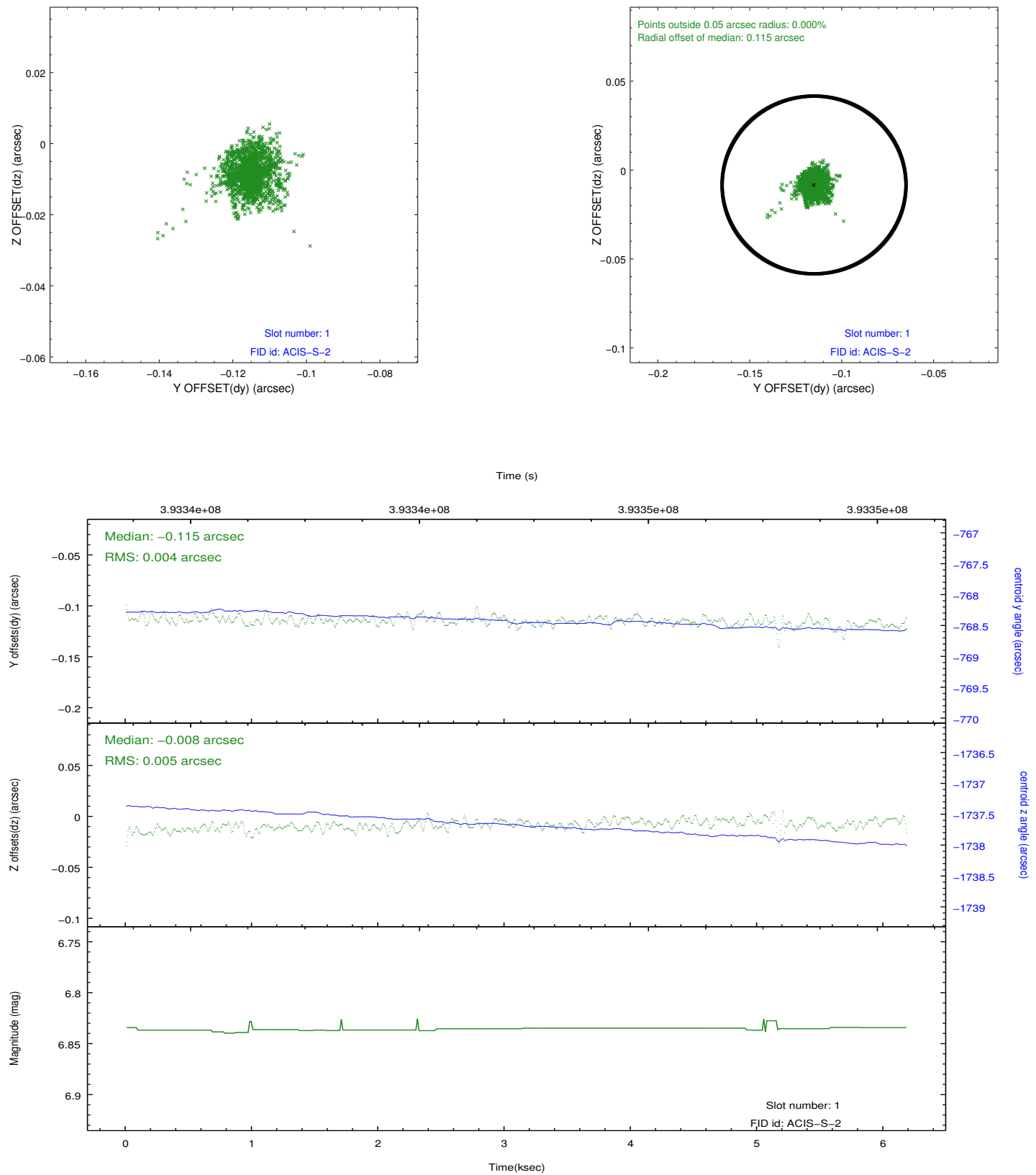


## 2.5 FID Slots

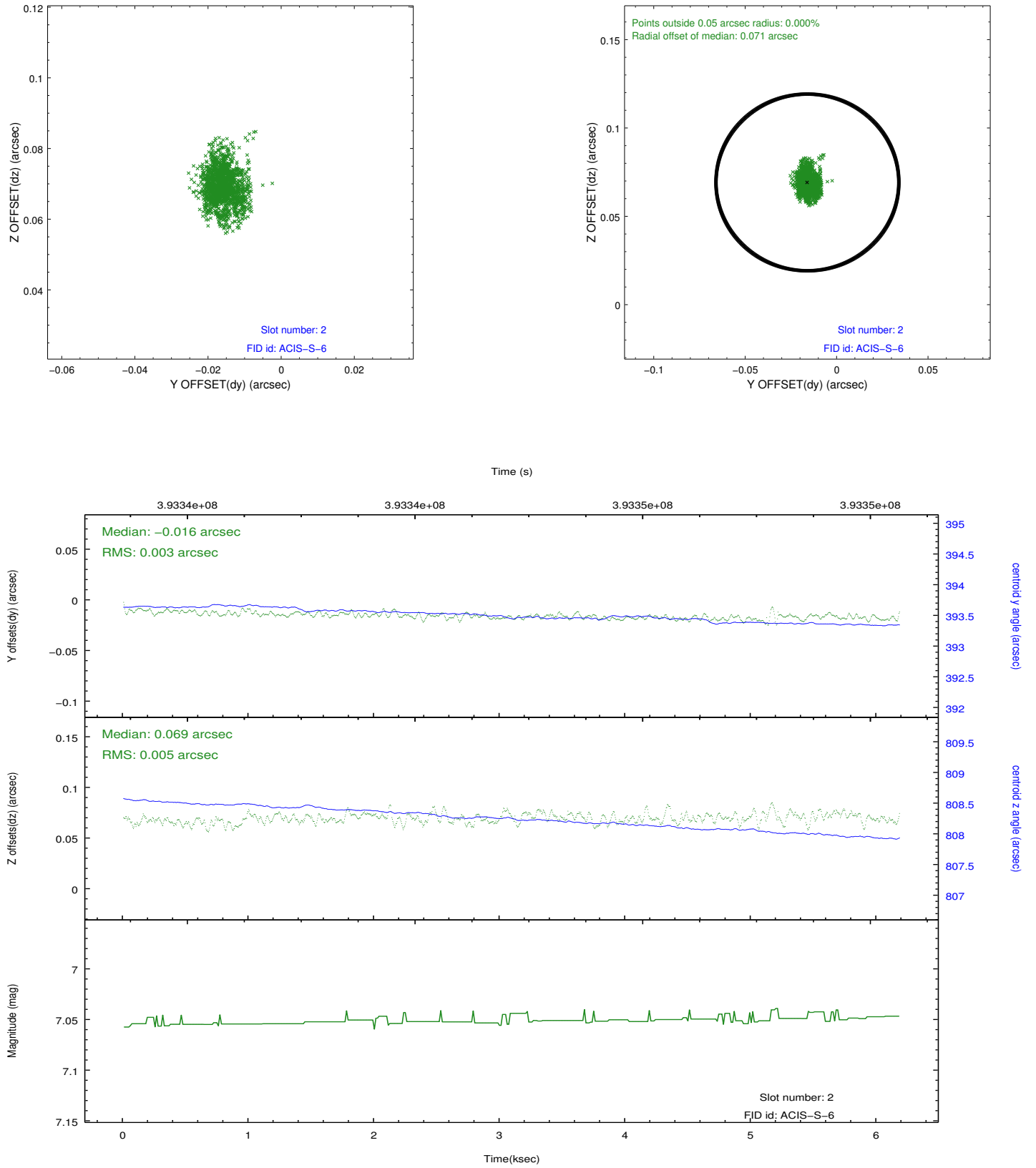
### 2.5.1 Slot 0



## 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)	2012.07.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.03880004

### A.2 Comments