

# V&V Reference Report

## L2 ASCDS Version : 10.0.1

Observation 15361 - L2 Version 2  
Chandra X-Ray Center

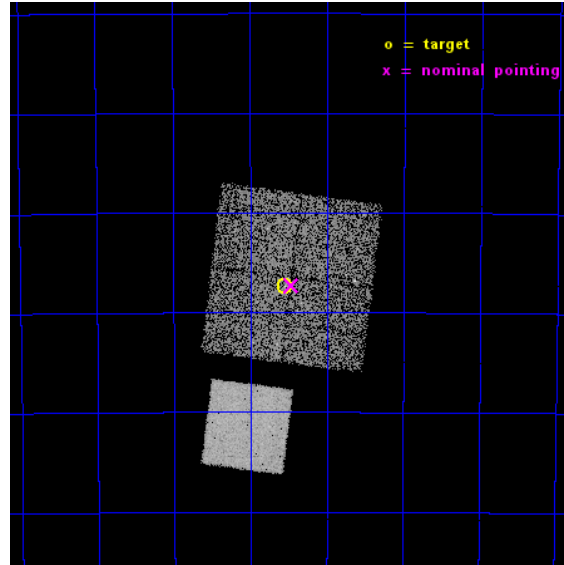
L2 Processing Date : Dec 6 2014

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# 1 Front

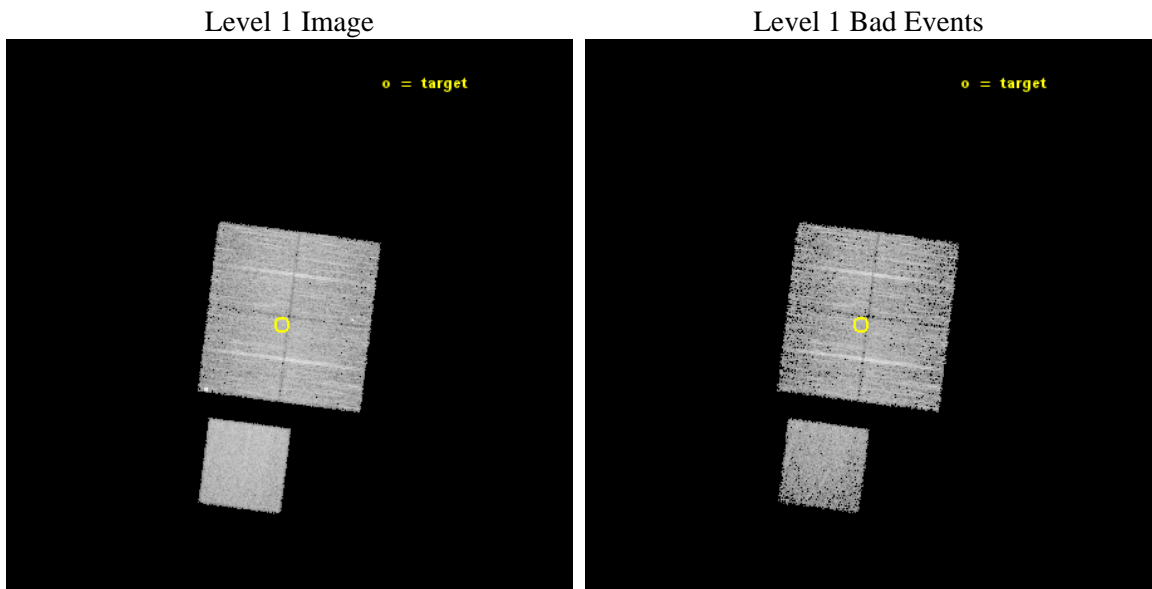
seq_num	502026	Sequence number
obs_id	15361	Observation id
title	Snap-shot survey of galactic gamma-ray sources	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PSR J1044-5737	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	161.136667	Observer's specified target RA [deg]
dec_targ	-57.622028	Observer's specified target Dec [deg]
ra_nom	161.11578988093	Nominal RA [deg]
dec_nom	-57.621626765111	Nominal Dec [deg]
roll_nom	187.28812593047	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10071.464591146	Sum of GTIs [s]
livetime	9939.8734917578	Livetime [s]
ontime0	10071.341471136	Sum of GTIs [s]
ontime1	10071.382511139	Sum of GTIs [s]
ontime2	10068.282520771	Sum of GTIs [s]
ontime3	10071.464591146	Sum of GTIs [s]
ontime7	10071.505631149	Sum of GTIs [s]
l2events	42654	Number of level 2 events



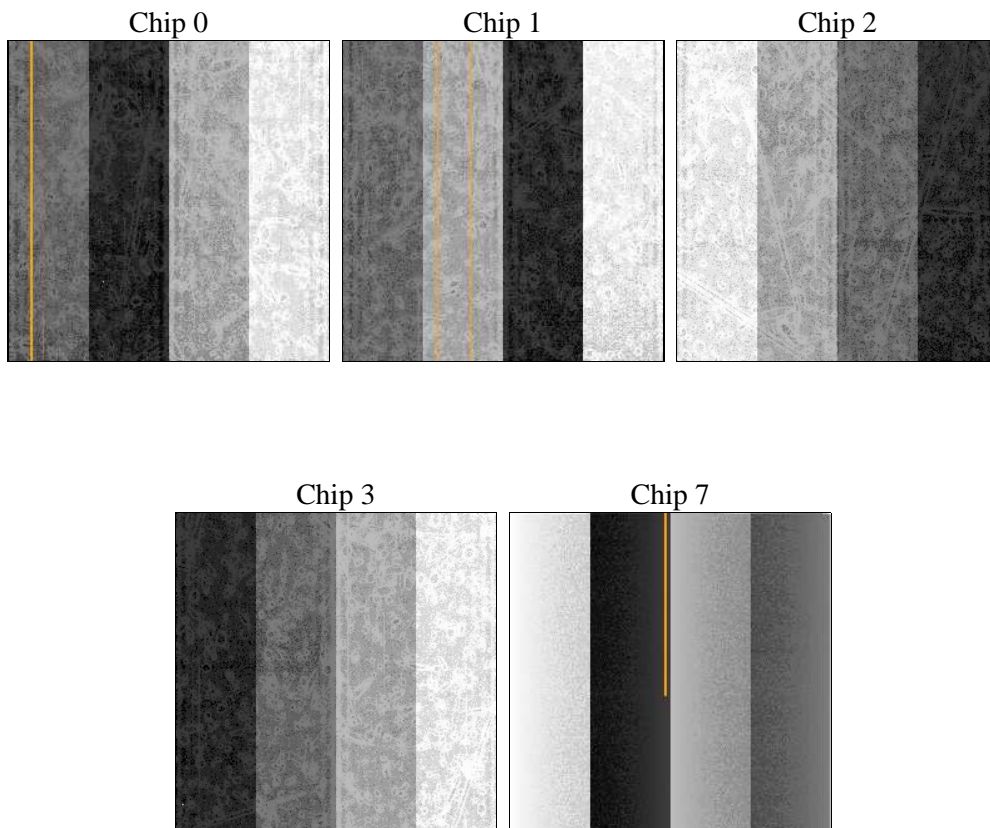
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	10071.464591146	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime0	10071.341471136	Sum of GTIs [s]
date	2014-12-06T05:10:56	Date and time of file creation	ontime1	10071.382511139	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10068.282520771	Sum of GTIs [s]
			ontime3	10071.464591146	Sum of GTIs [s]
			ontime7	10071.505631149	Sum of GTIs [s]
			l1events	217109	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	39215	40533	44184	40620	52557
rejected events	33511	34737	38814	34692	27605
rejected %	85%	85%	87%	85%	52%

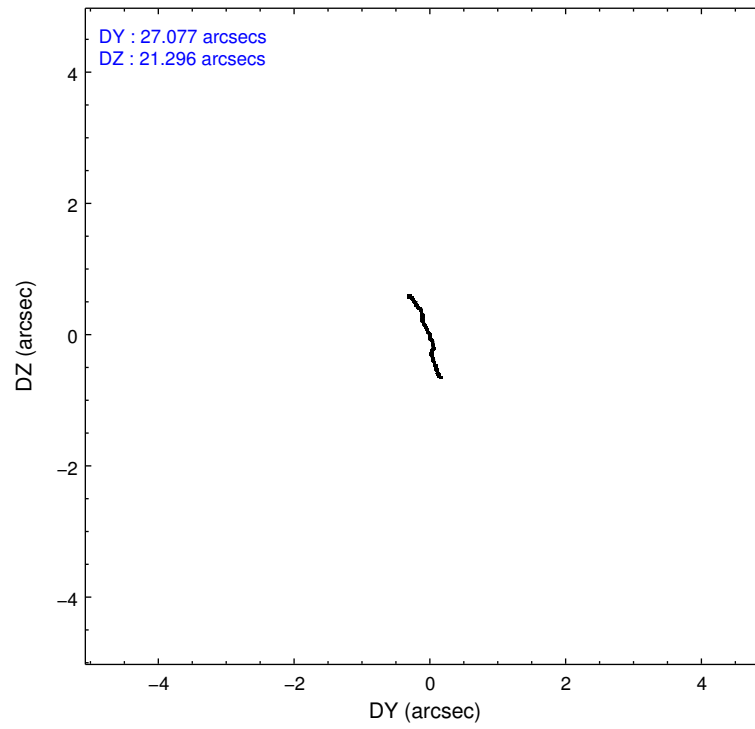
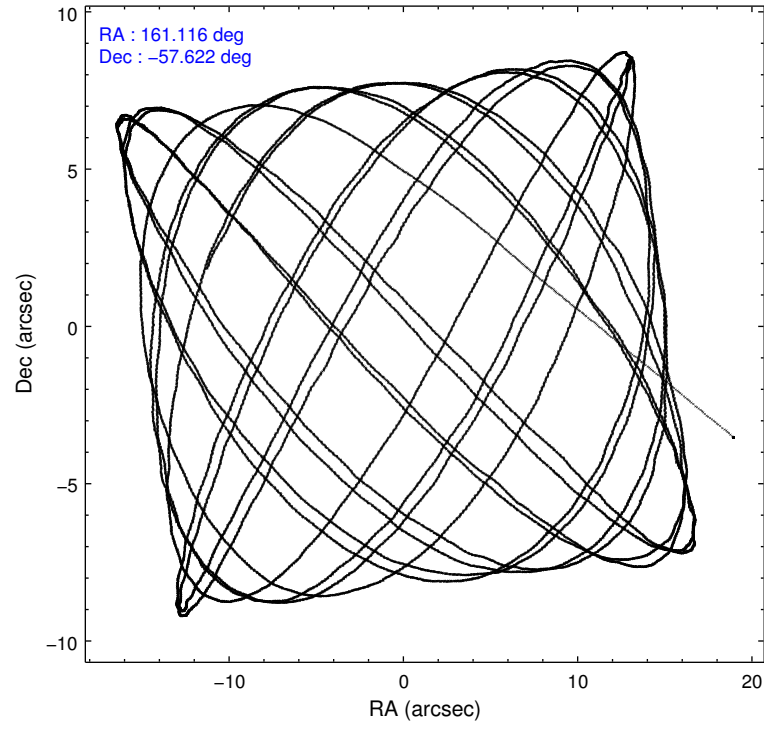
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2254	2087	2111	2753	2502
	5%	5%	4%	6%	4%
grade 1 events	22	28	33	22	81
	0%	0%	0%	0%	0%
grade 2 events	1381	1318	1323	1147	5291
	3%	3%	2%	2%	10%
grade 3 events	584	565	514	534	2238
	1%	1%	1%	1%	4%
grade 4 events	499	558	491	475	2249
	1%	1%	1%	1%	4%
grade 5 events	1808	1882	1624	2019	5614
	4%	4%	3%	4%	10%
grade 6 events	992	1272	932	1024	12689
	2%	3%	2%	2%	24%
grade 7 events	31675	32823	37156	32646	21893
	80%	80%	84%	80%	41%

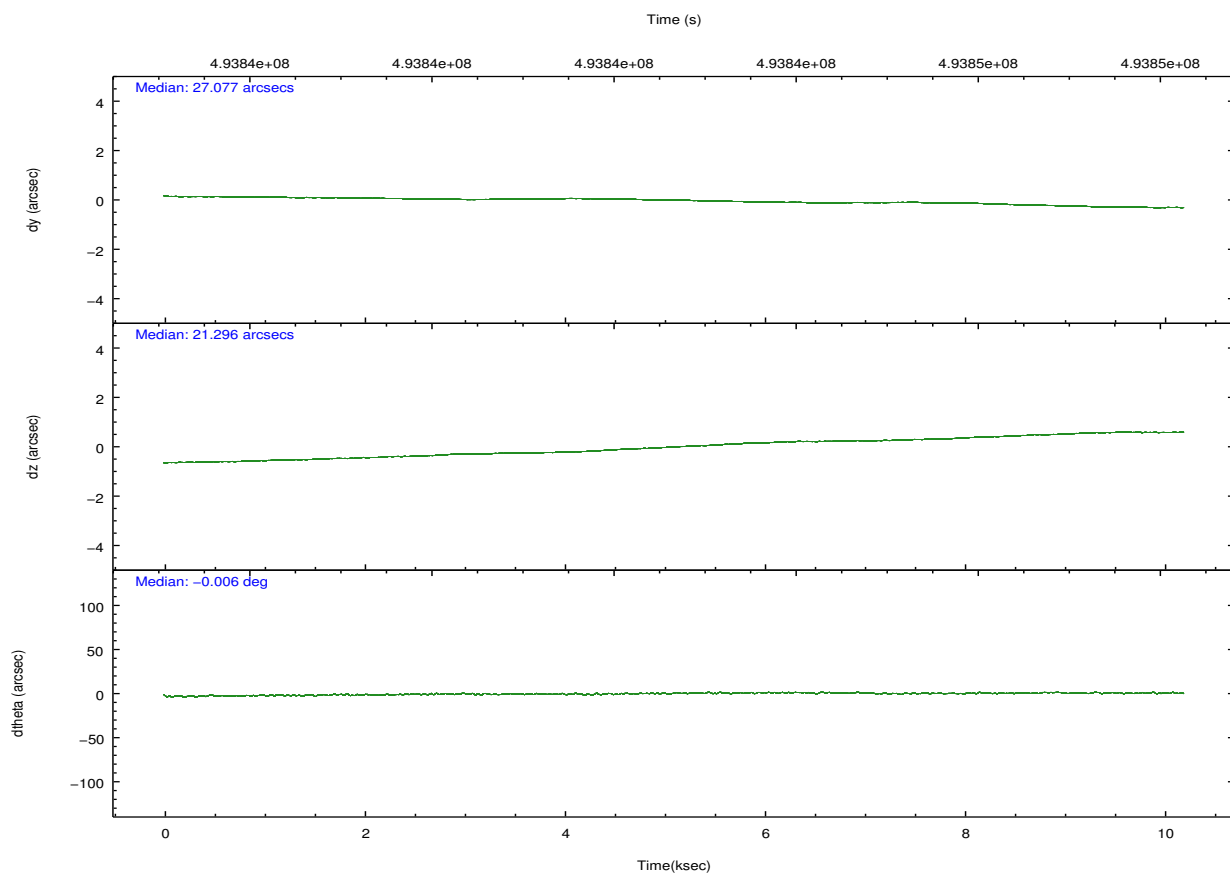
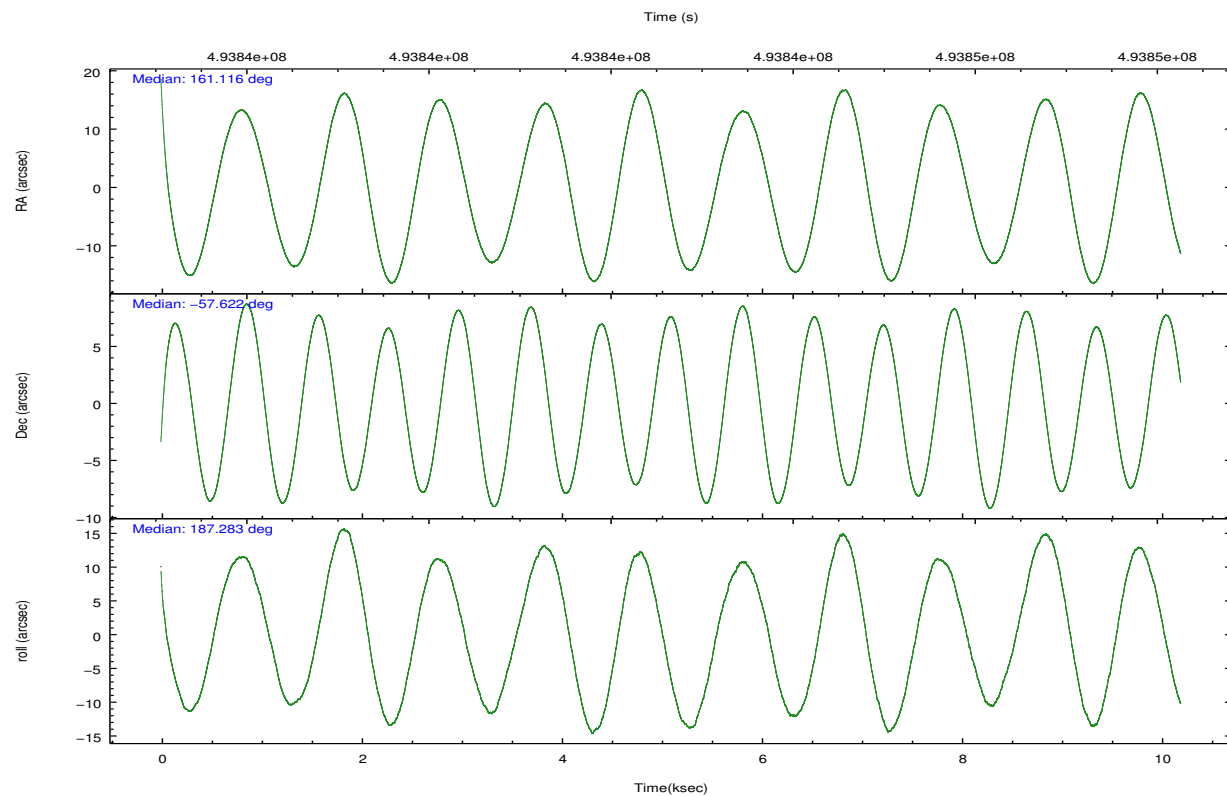


## 2.2 Compared Parameters

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	161.156517	161.1157898809288	CCD I2 on	Y	Y
[deg] Pointing Dec	-57.604907	-57.62162676511109	CCD I3 on	Y	Y
[deg] Pointing Roll	187.113835	187.2881259304659	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)	493837750.184000	493836658.36222	CCD S5 on	N	N
Observation start date	2013-08-25T17:08:03	2013-08-25T16:50:58	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	493847750.184000	493848819.98788	On-chip summing requested	N	N
Observation end date	2013-08-25T19:54:43	2013-08-25T20:13:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



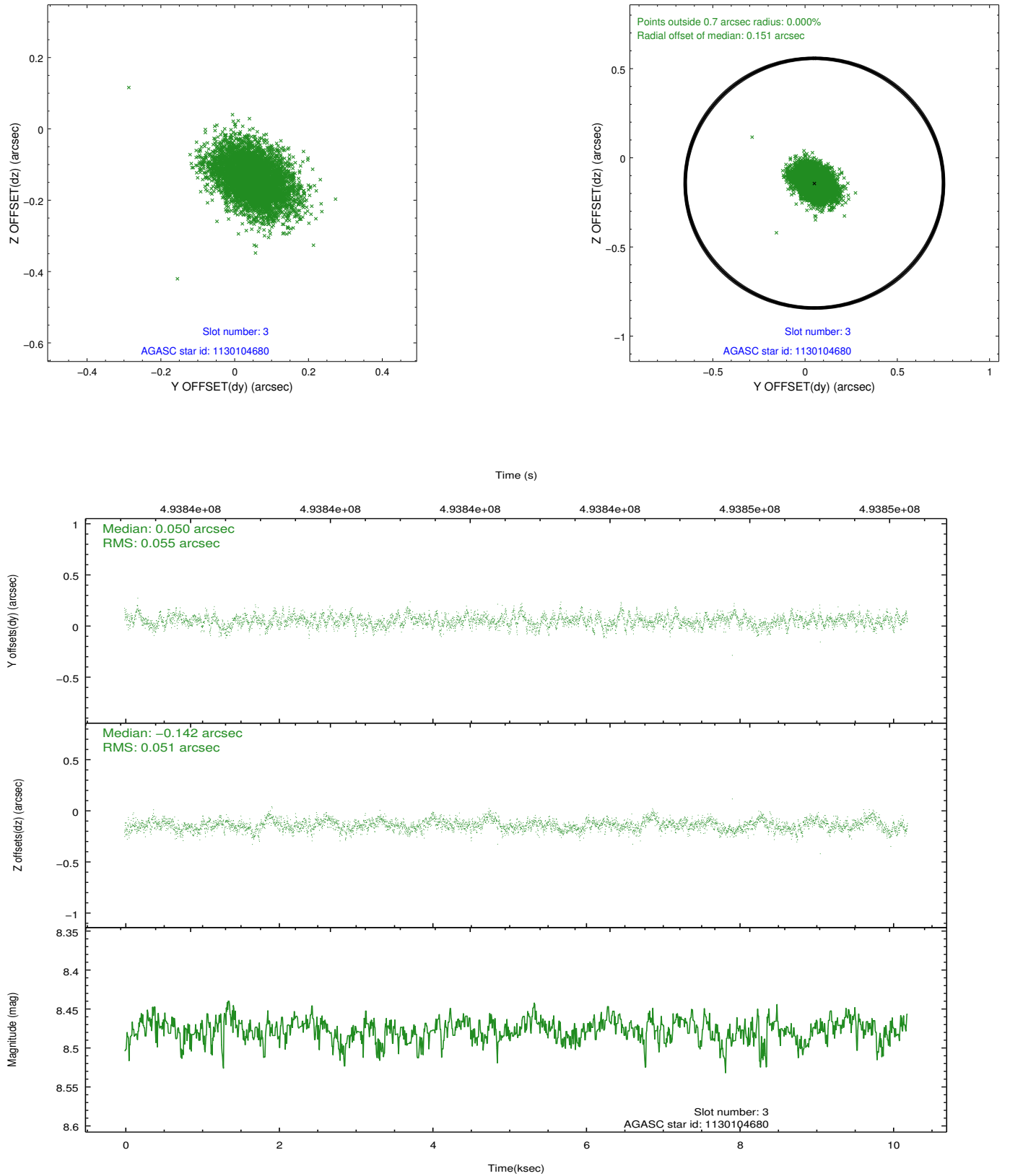


### Slot Statistics

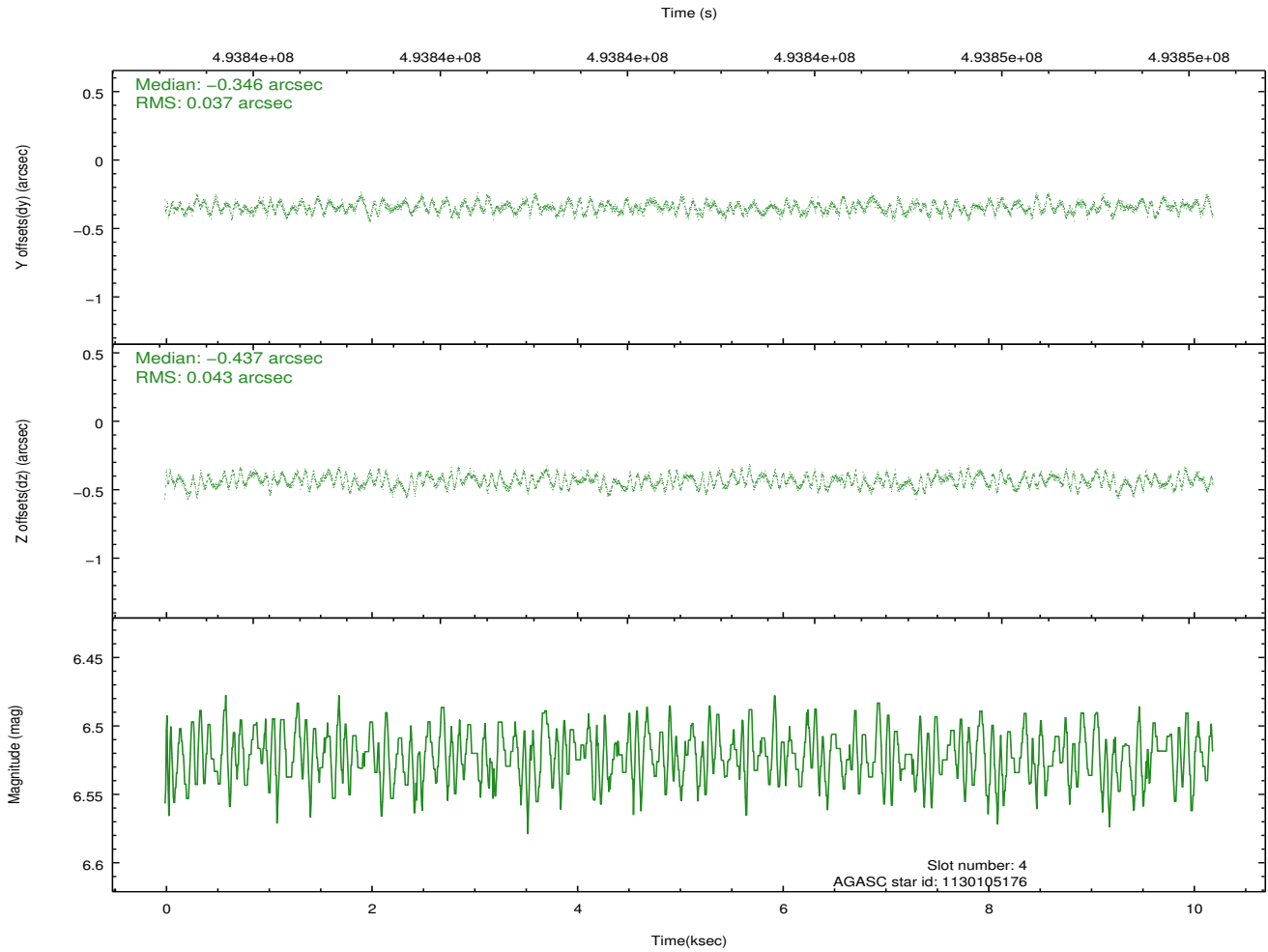
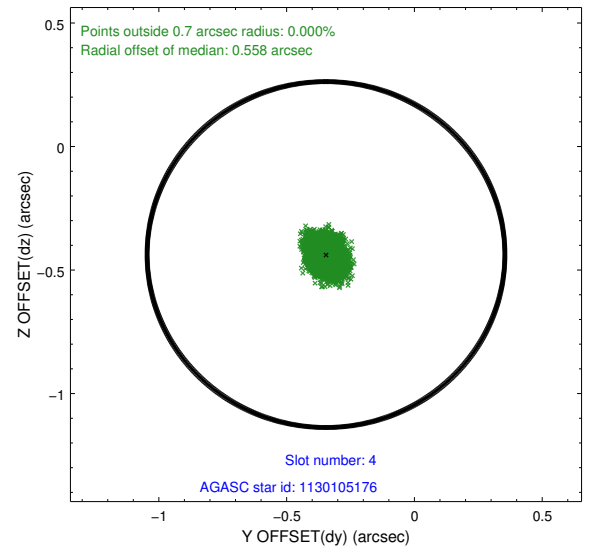
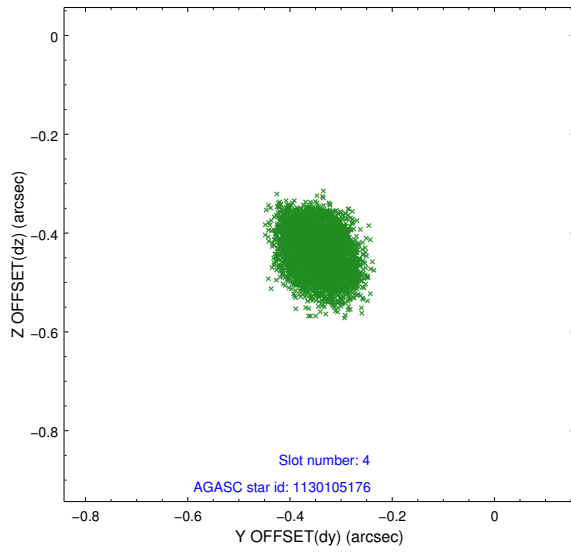
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	2487	0.151	-0.024	0.008	0.014	0.000000	0.000000	912.30	-845.00
1	FID		ACIS-I-2	7.02	2487	-0.098	-0.059	0.013	0.023	0.000000	0.000000	-781.75	-851.85
2	FID		ACIS-I-5	7.10	2488	-0.146	0.155	0.012	0.021	0.000000	0.000000	-1836.62	1052.22
3	GUIDE	used	1130104680	8.48	4974	0.050	-0.142	0.077	0.131	162.297370	-57.969531	-1996.43	1590.63
4	GUIDE	used	1130105176	6.52	4975	-0.346	-0.437	0.062	0.094	160.221059	-57.935597	1922.41	972.68
5	GUIDE	used	1130114312	8.21	4973	0.439	0.140	0.074	0.118	161.719101	-57.102603	-1313.69	-1653.02
6	GUIDE	used	1130123984	8.02	4971	0.001	0.160	0.066	0.108	160.304104	-57.043811	1407.92	-2200.41
7	GUIDE	used	1130112096	7.50	4972	-0.143	0.278	0.064	0.103	161.955018	-57.494291	-1580.72	-194.52

## 2.4 Star Slots

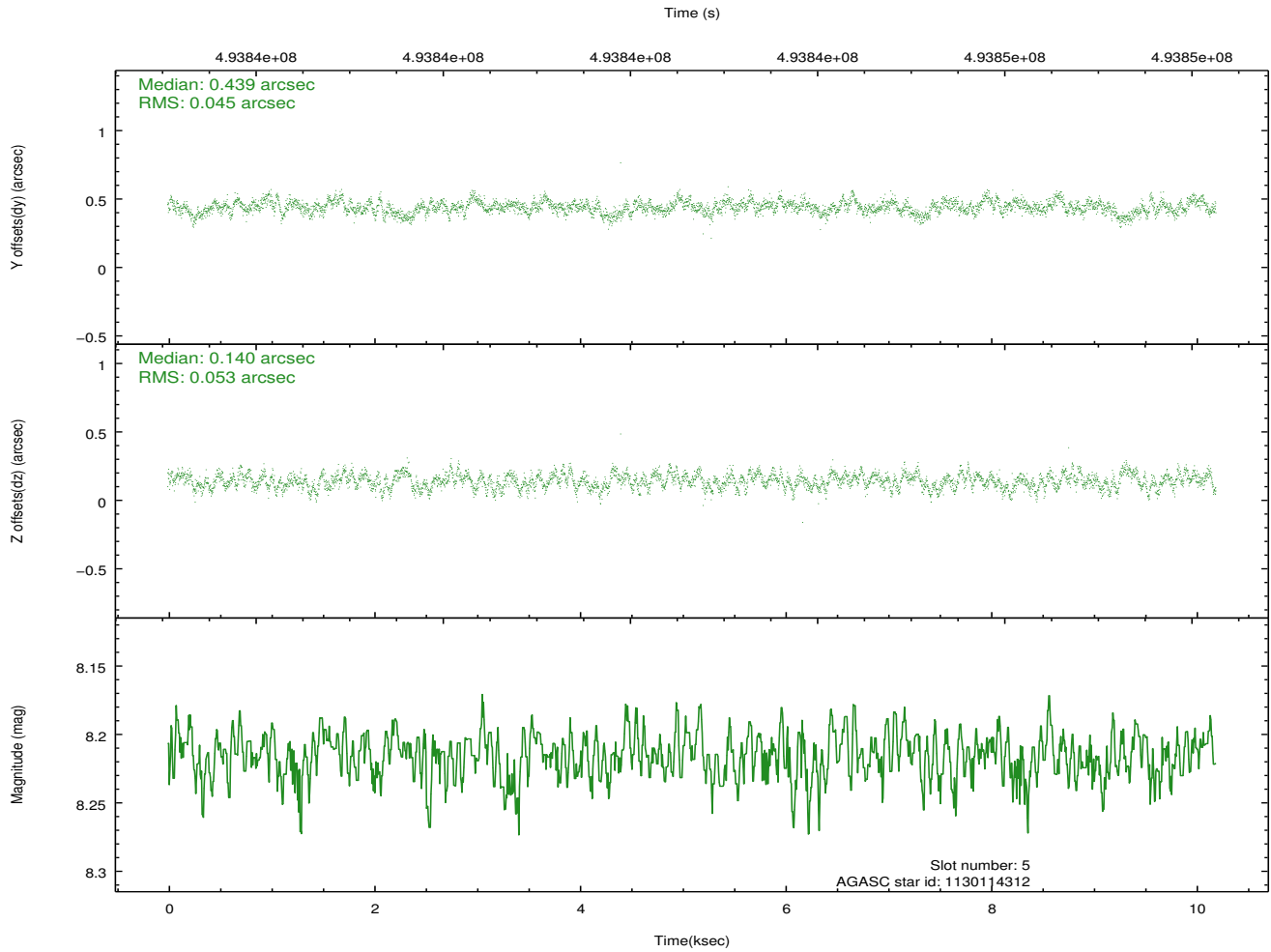
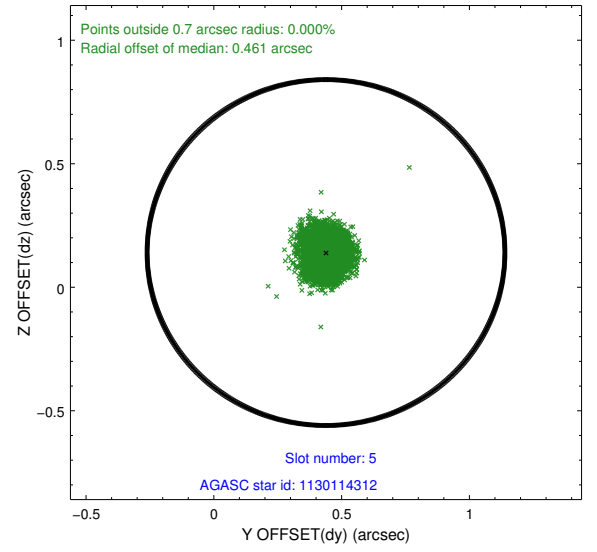
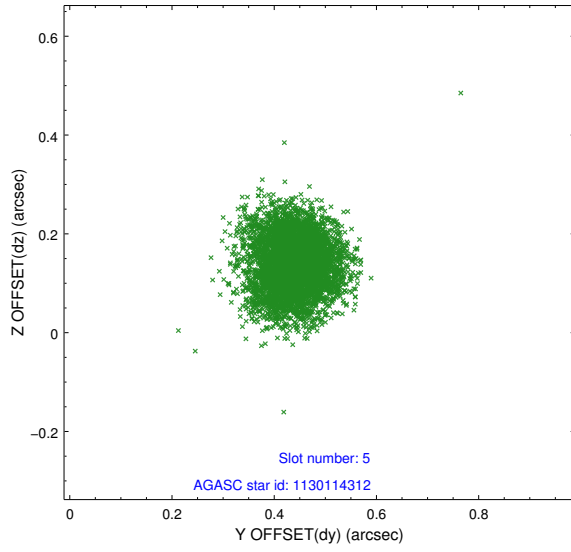
### 2.4.1 Slot 3



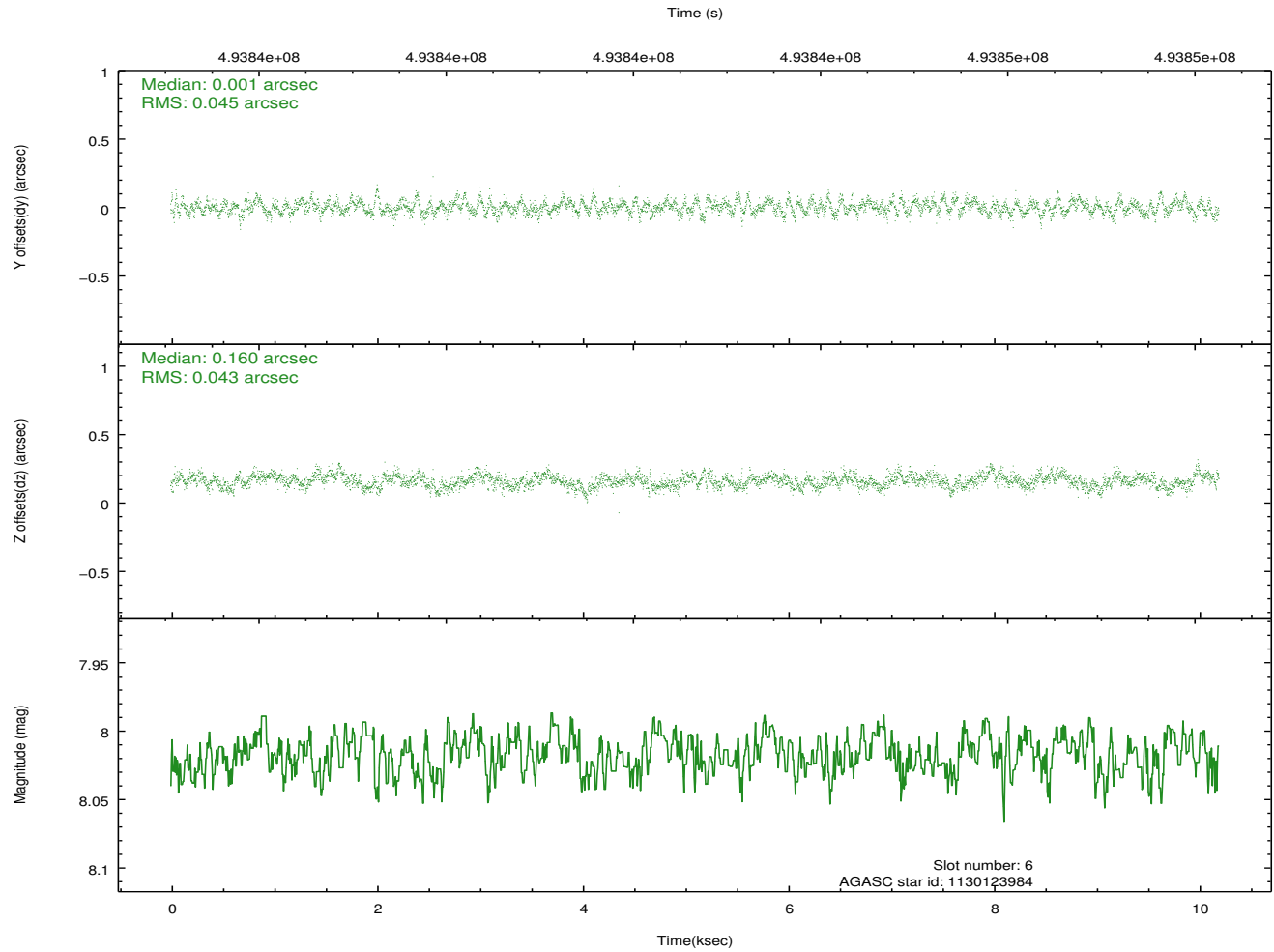
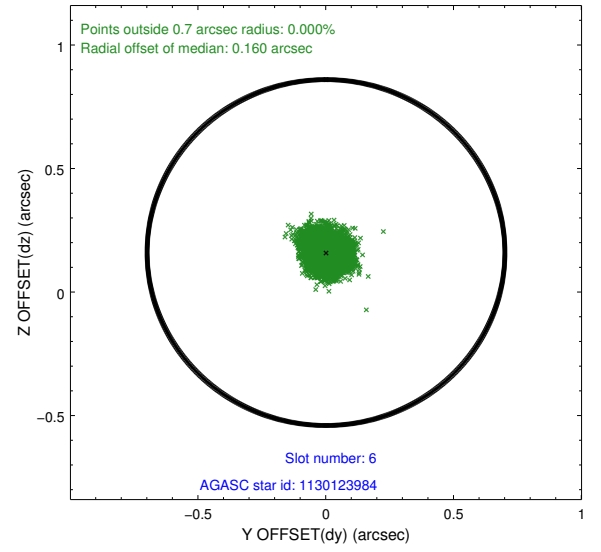
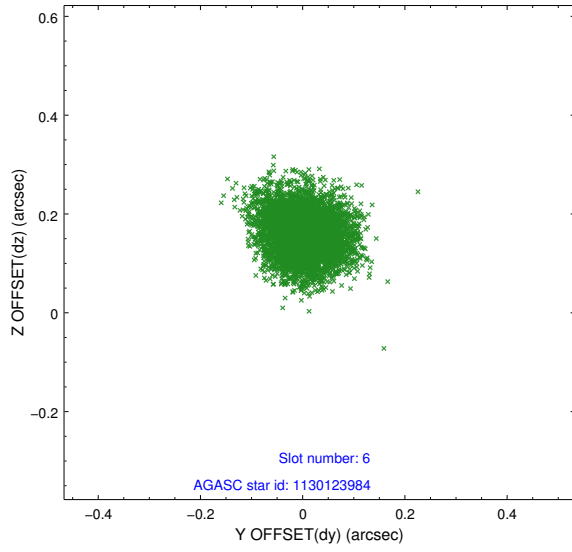
## 2.4.2 Slot 4



### 2.4.3 Slot 5

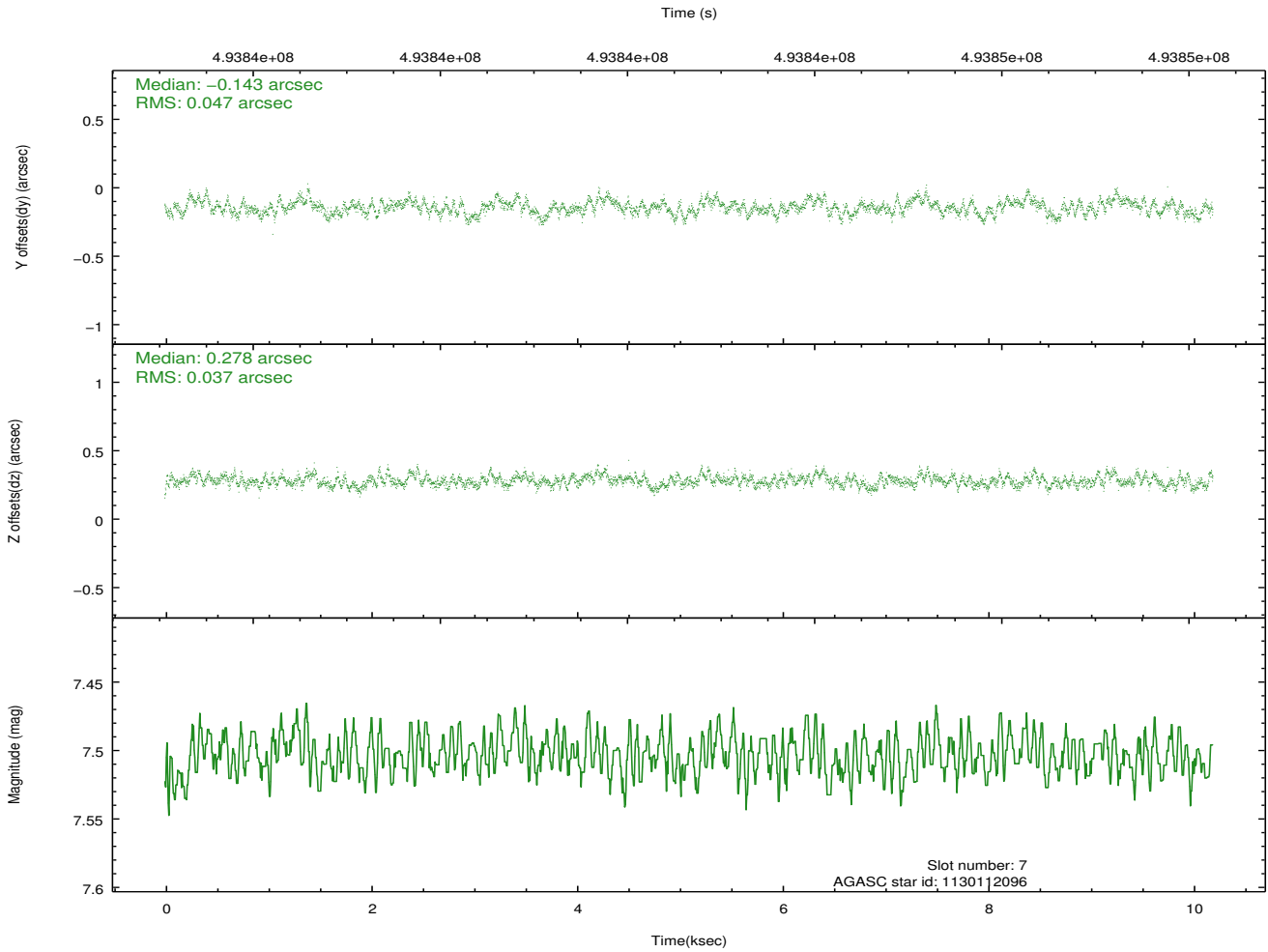
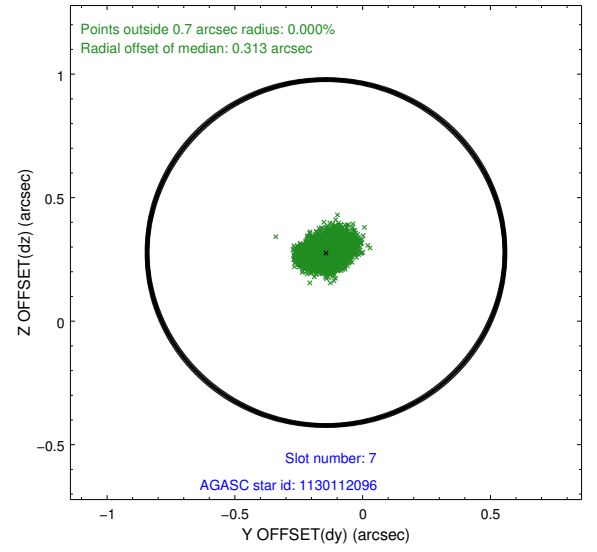
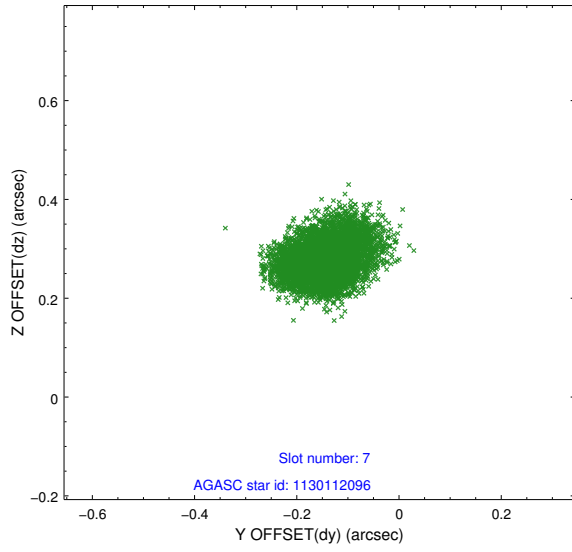


## 2.4.4 Slot 6



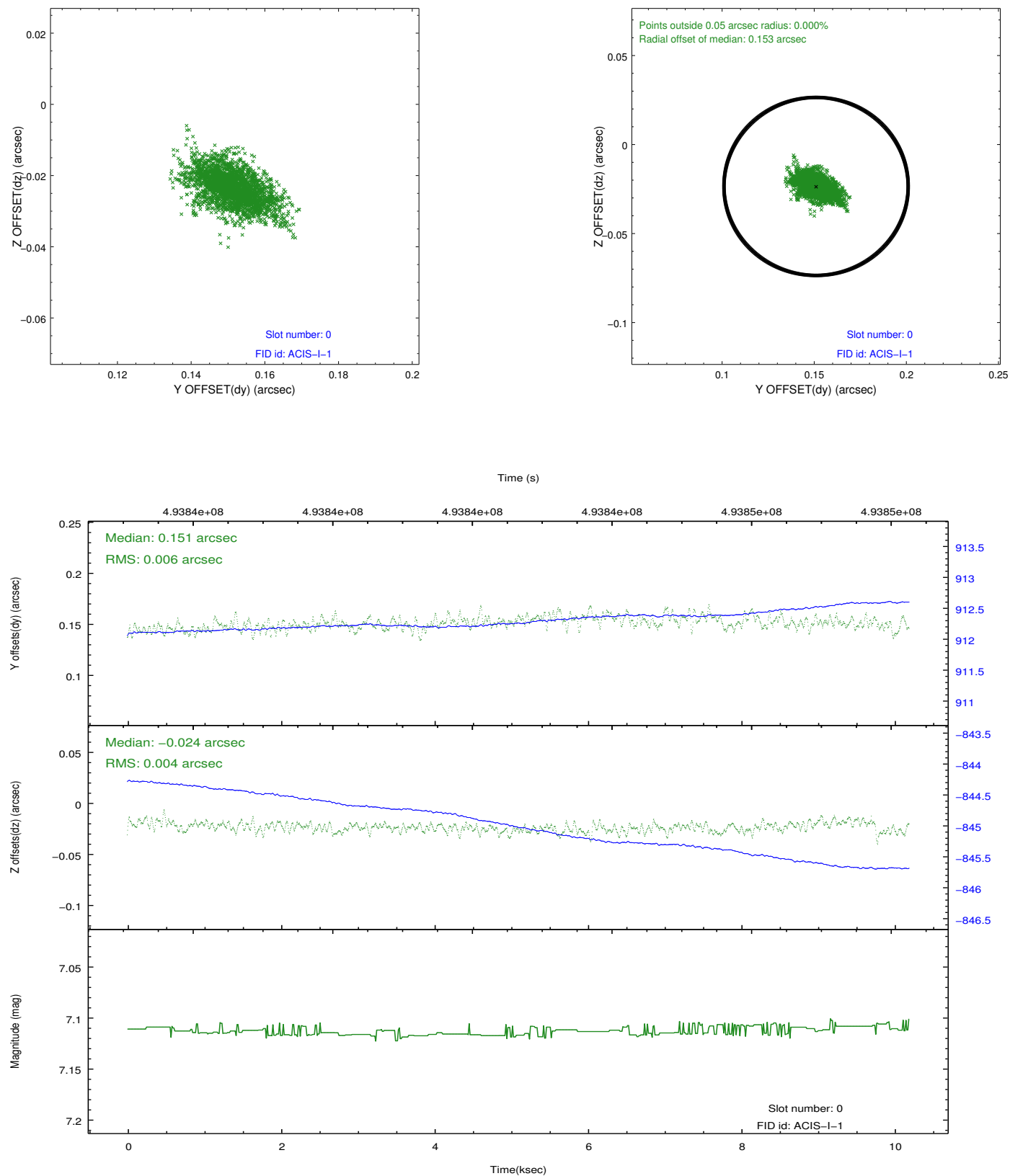


## 2.4.5 Slot 7

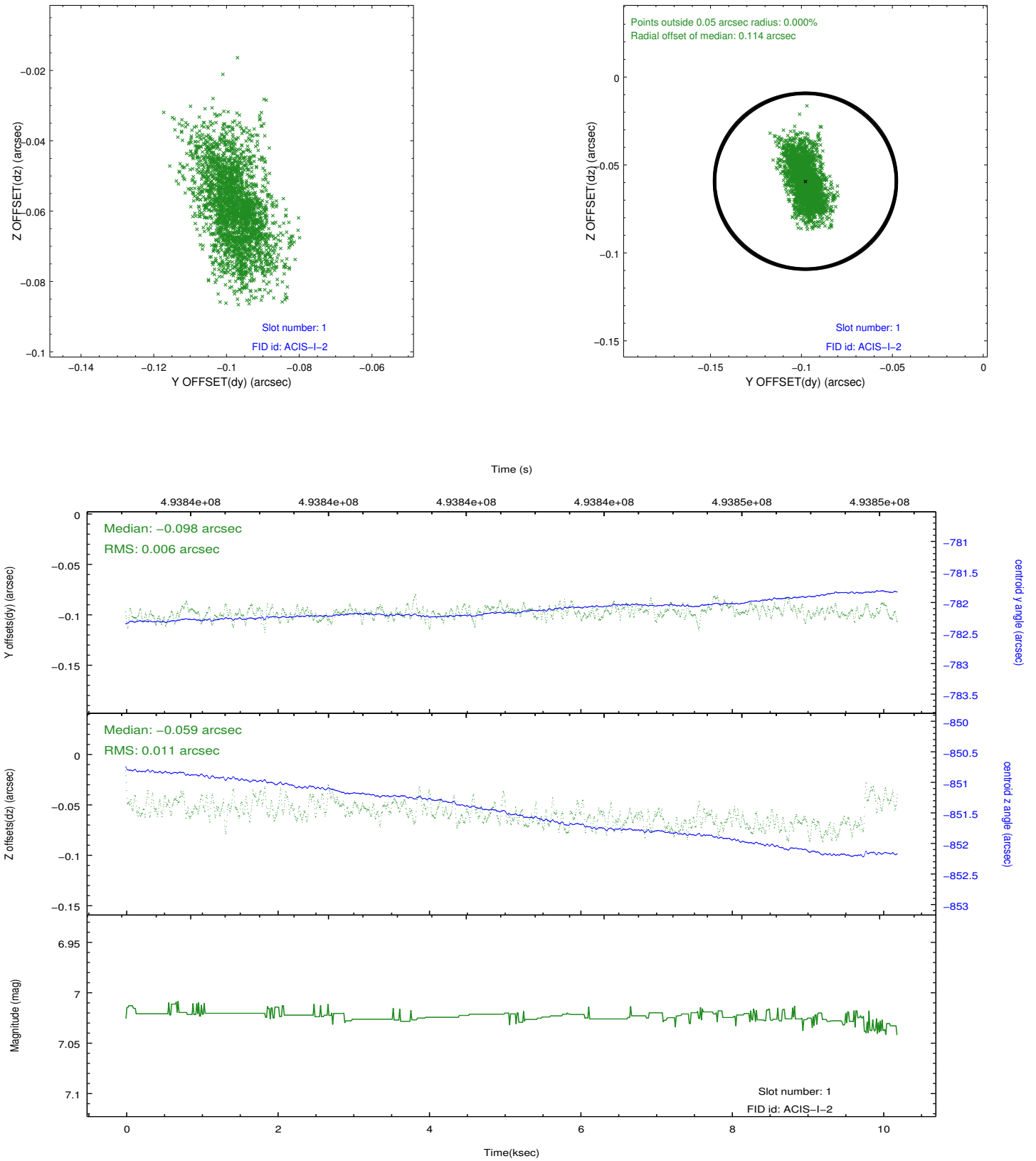


## 2.5 FID Slots

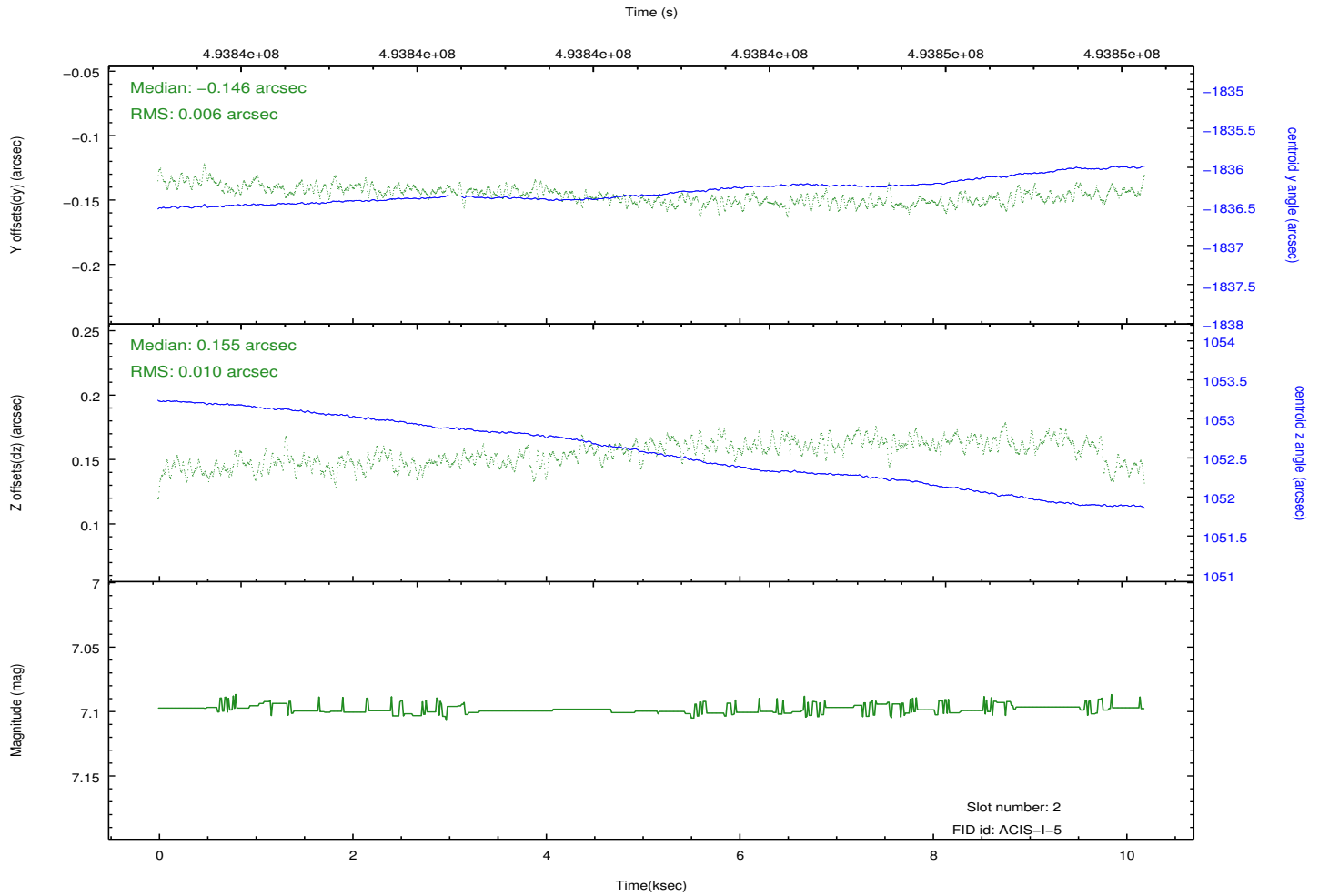
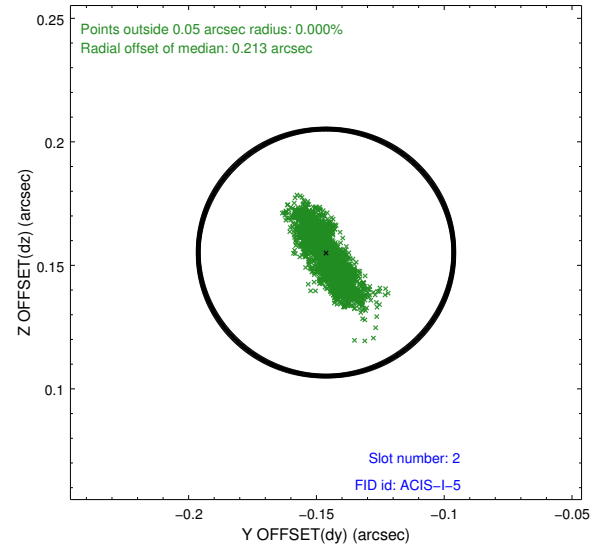
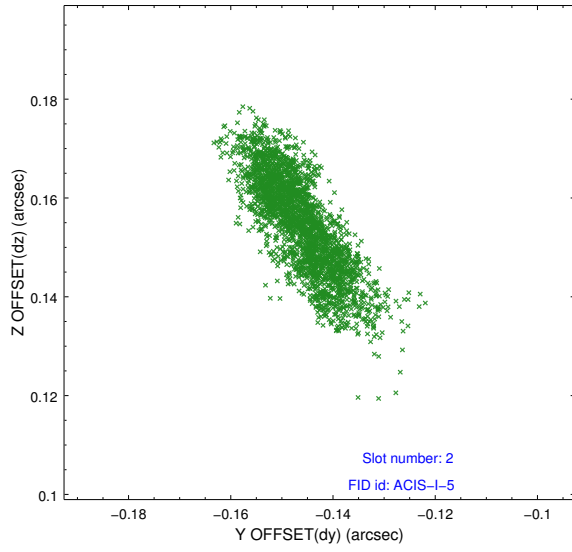
### 2.5.1 Slot 0



## 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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.071464591146

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.