

# V&V Reference Report

## L2 ASCDS Version : 8.5

Observation 4763 - L2 Version 3  
Chandra X-Ray Center

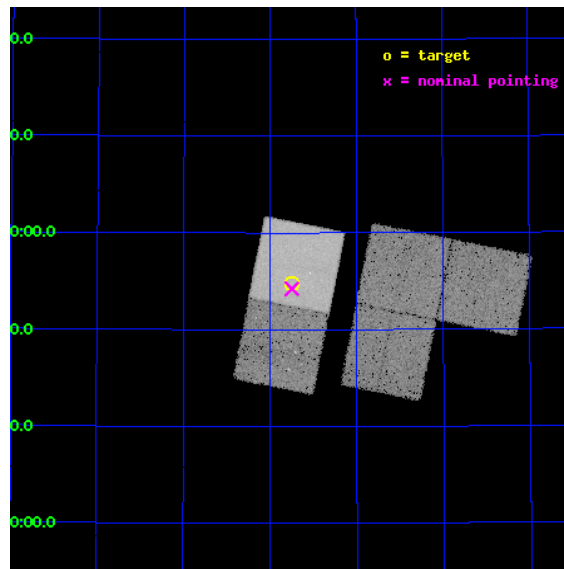
L2 Processing Date : Dec 8 2012

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# 1 Front

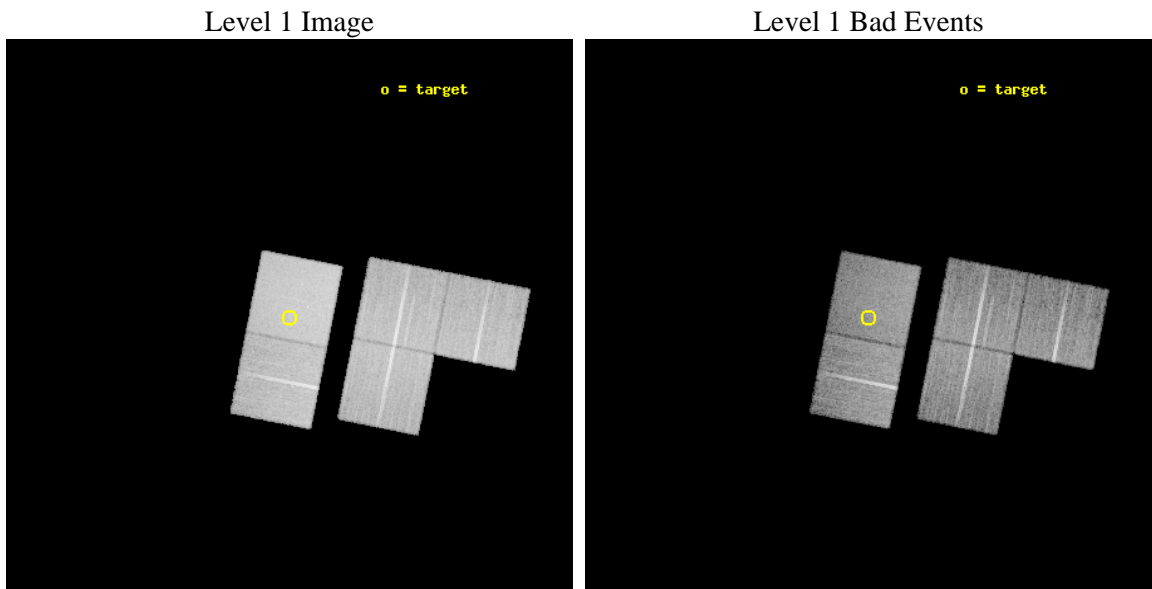
seq_num	700846	Sequence number
obs_id	4763	Observation id
title	Lensed Views of Quasar Outflows	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	SBS 1520+530	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	230.436667	Observer's specified target RA [deg]
dec_targ	52.9135	Observer's specified target Dec [deg]
ra_nom	230.43699001783	Nominal RA [deg]
dec_nom	52.90382196362	Nominal Dec [deg]
roll_nom	281.23866779706	Nominal Roll [deg]
revision	3	Processing version of data
ontime	20177.899961174	Sum of GTIs [s]
livetime	19914.260843427	Livetime [s]
ontime1	20174.758971035	Sum of GTIs [s]
ontime2	20171.618040681	Sum of GTIs [s]
ontime3	20174.758990914	Sum of GTIs [s]
ontime6	20174.758971006	Sum of GTIs [s]
ontime7	20177.899961174	Sum of GTIs [s]
l2events	158669	Number of level 2 events



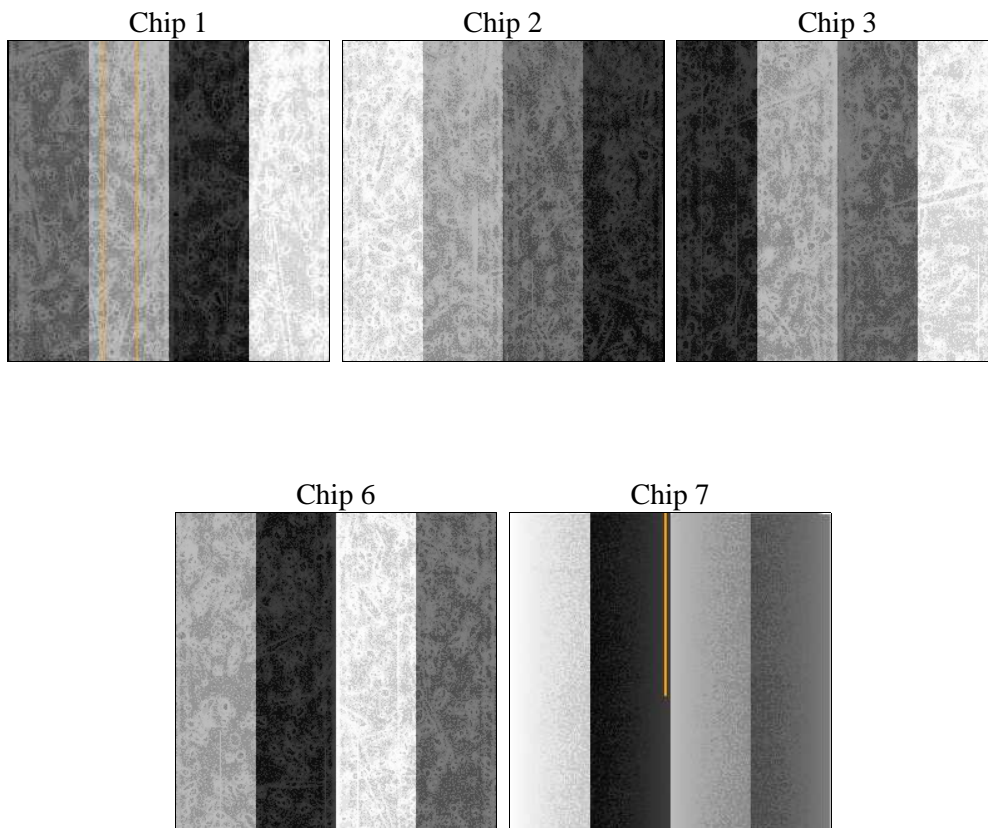
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	20000.000000	[s] Scheduled observation exposure time
ascdsver	8.5	Processing system revision	ontime	20177.899961174	Sum of GTIs [s]
caldbver	4.5.4	&#160	ontime1	20174.758971035	Sum of GTIs [s]
date	2012-12-08T08:21:14	Date and time of file creation	ontime2	20171.618040681	Sum of GTIs [s]
revision	3	Processing version of data	ontime3	20174.758990914	Sum of GTIs [s]
			ontime6	20174.758971006	Sum of GTIs [s]
			ontime7	20177.899961174	Sum of GTIs [s]
			l1events	874070	Number of level 1 events

### 2.1.4 Events

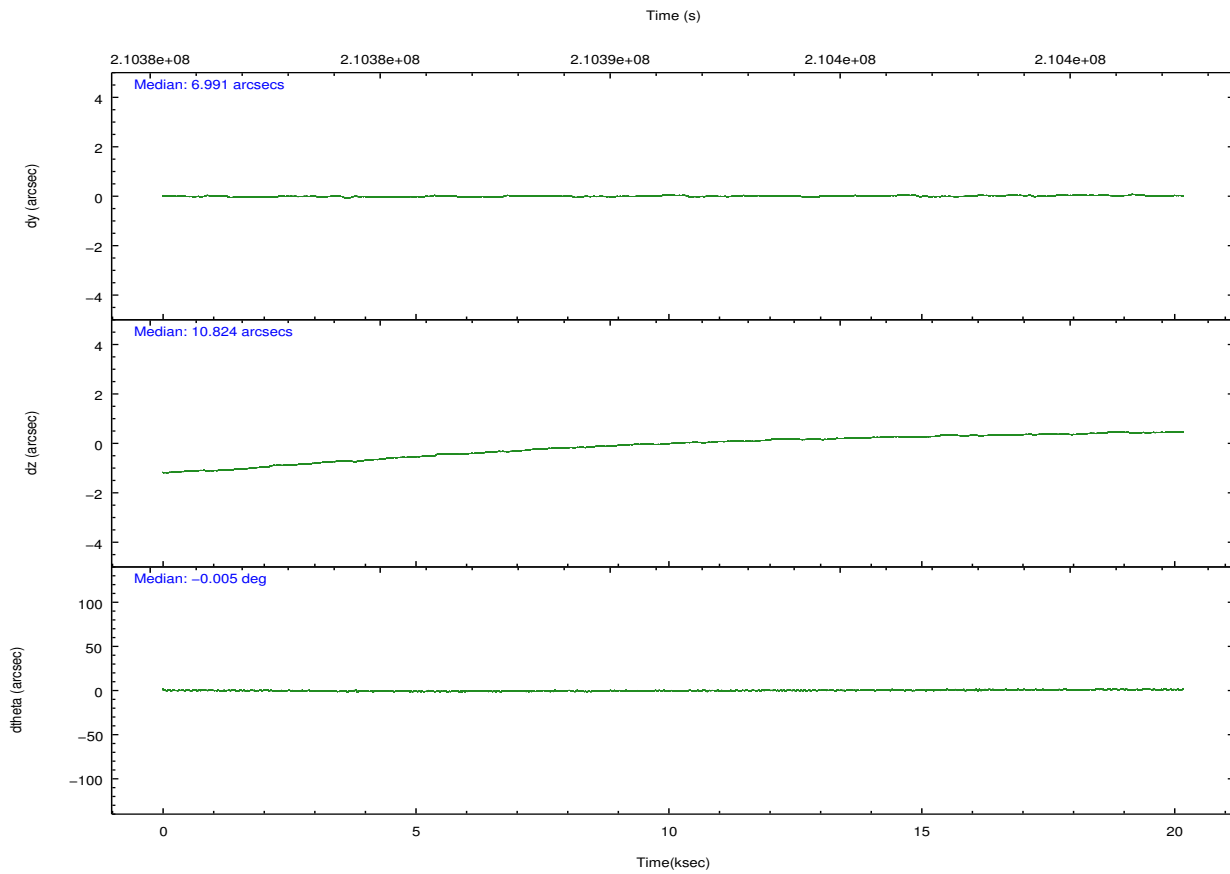
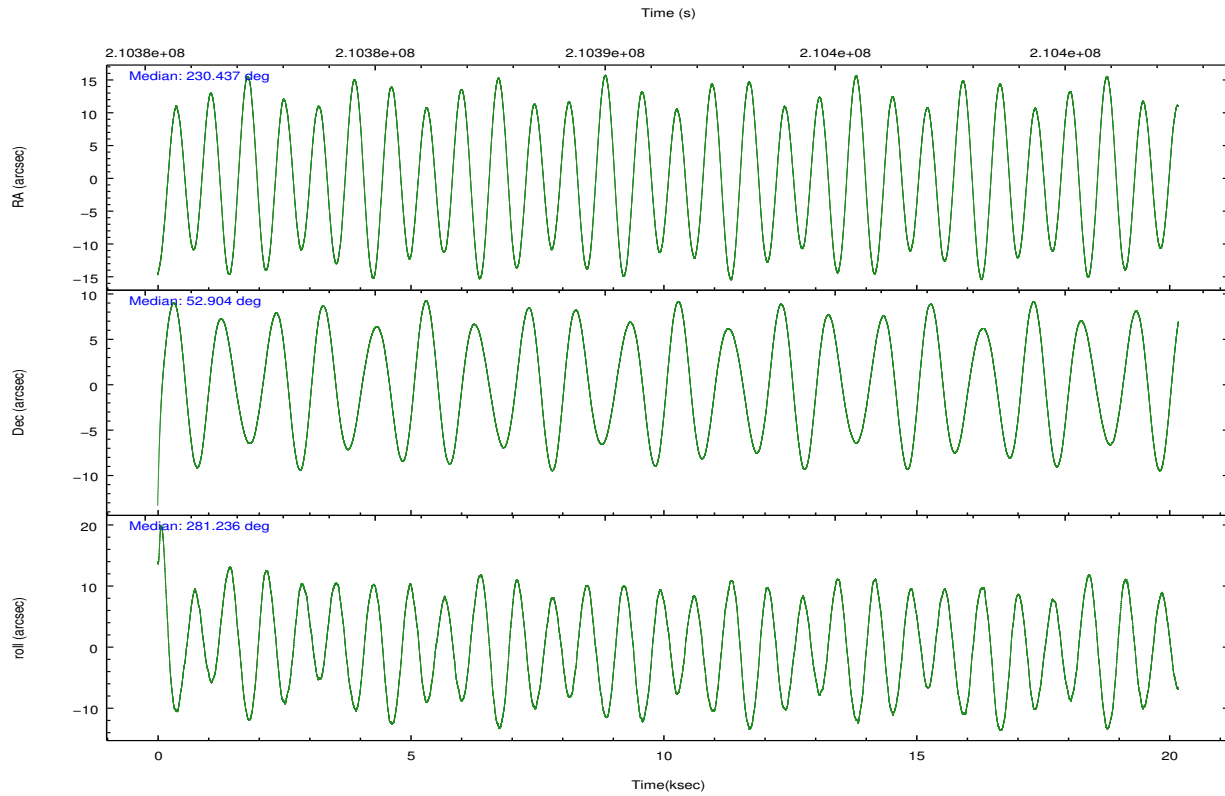
	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	152169	161960	163289	169003	227649
rejected events	131786	142748	144125	148617	136225
rejected %	86%	88%	88%	87%	59%

	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	9052	9778	9362	9561	9101
	5%	6%	5%	5%	3%
grade 1 events	62	102	105	82	232
	0%	0%	0%	0%	0%
grade 2 events	4635	3958	3825	4398	19335
	3%	2%	2%	2%	8%
grade 3 events	2044	1863	1966	1966	8610
	1%	1%	1%	1%	3%
grade 4 events	2071	1873	1914	1902	8580
	1%	1%	1%	1%	3%
grade 5 events	6926	6285	7234	7519	21043
	4%	3%	4%	4%	9%
grade 6 events	4068	3151	3487	4011	52592
	2%	1%	2%	2%	23%
grade 7 events	123311	134950	135396	139564	108156
	81%	83%	82%	82%	47%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-12367	ACIS-12367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	230.406751	230.4369900178341	Subarray requested	NONE	NONE
[deg] Pointing Dec	52.924064	52.9038219636198	Alternating exposures requested	N	N
[deg] Pointing Roll	281.106170	281.2386677970572	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	210381454.184000	210379663.68937			
Observation start date	2004-08-31T23:16:30	2004-08-31T22:47:43			
[s] Observation end time (MET)	210401454.184000	210401984.60286			
Observation end date	2004-09-01T04:49:50	2004-09-01T04:59:44			
Read mode	TIMED	TIMED			

## 2.3 Aspect

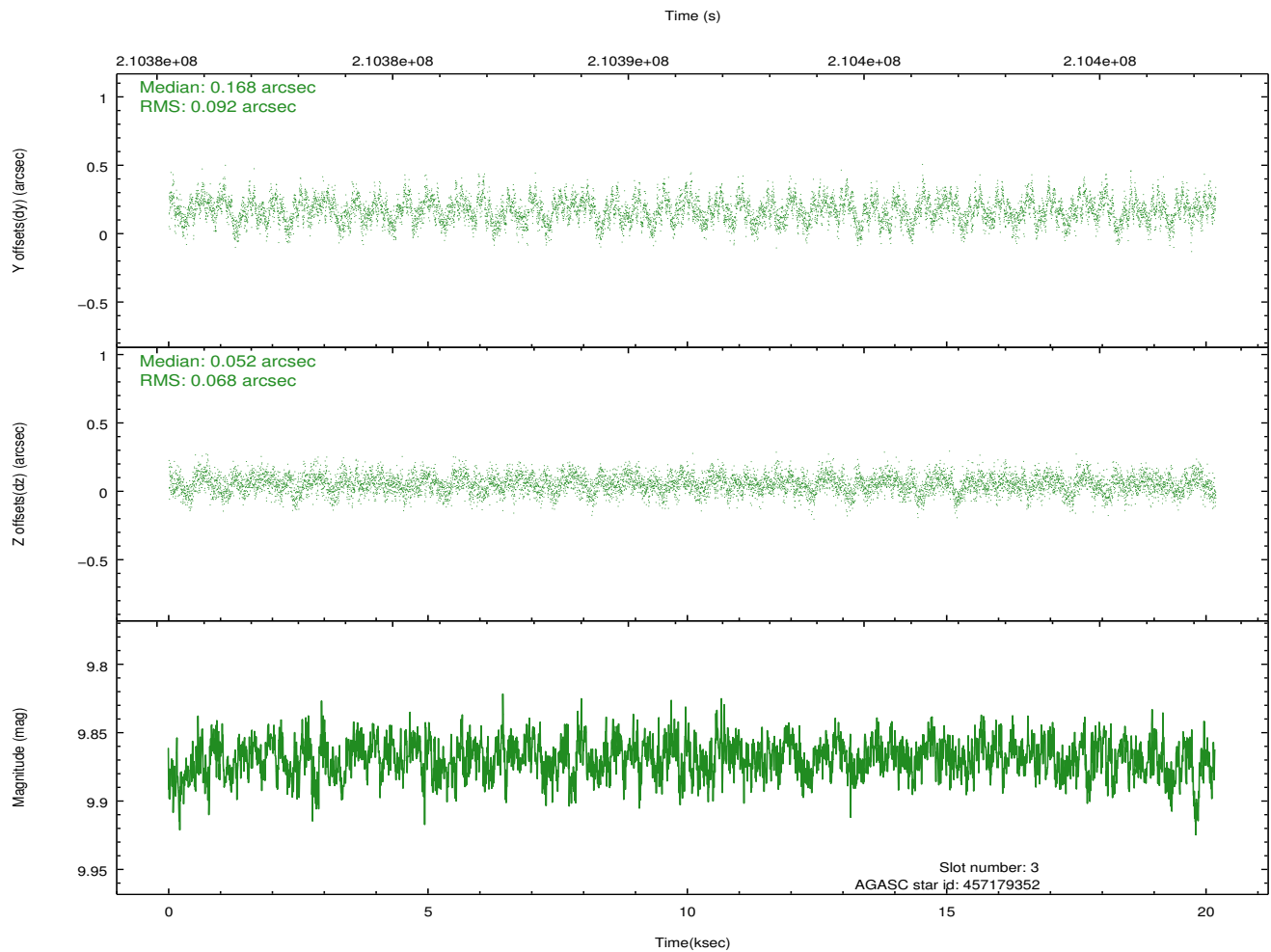
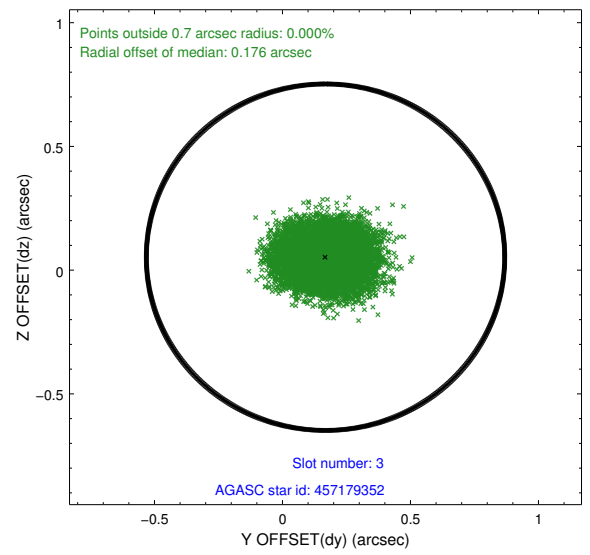
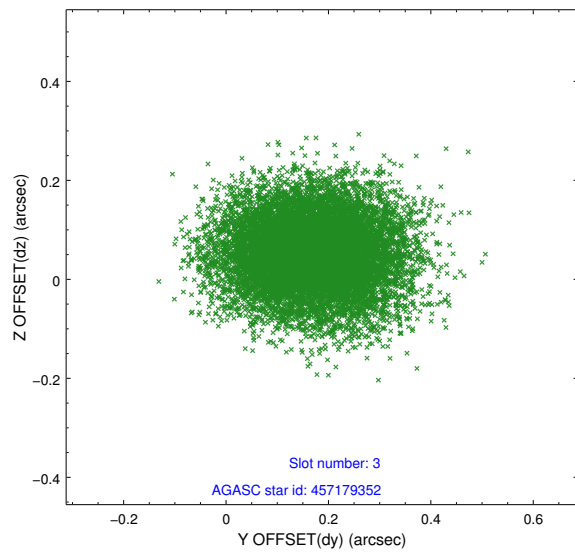


### Slot Statistics

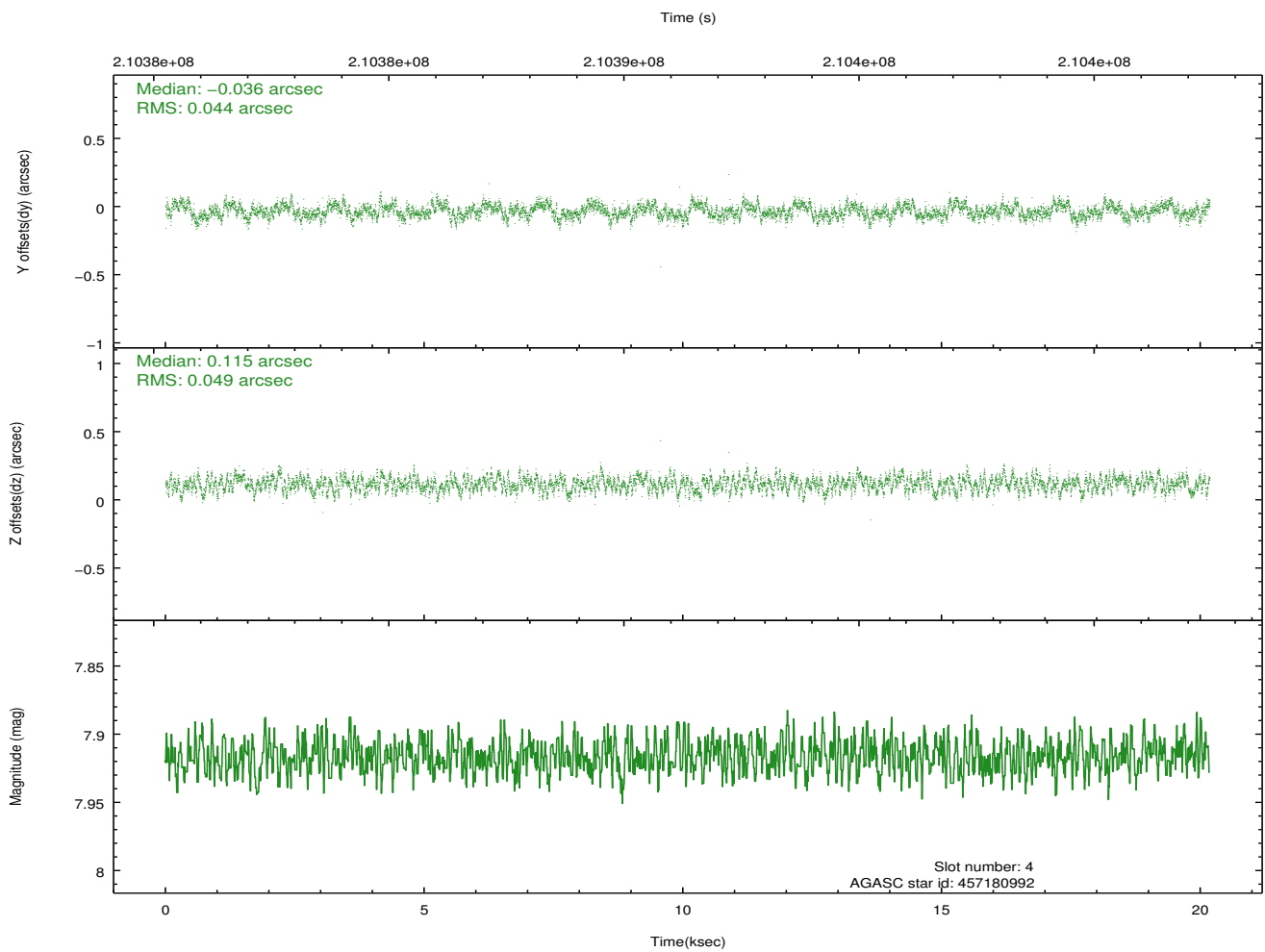
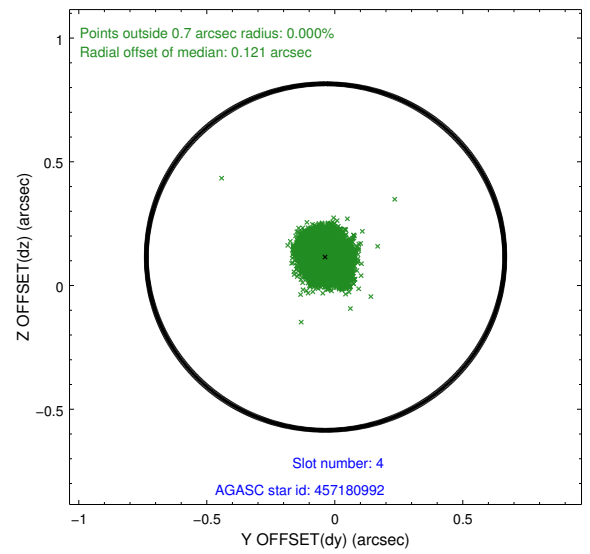
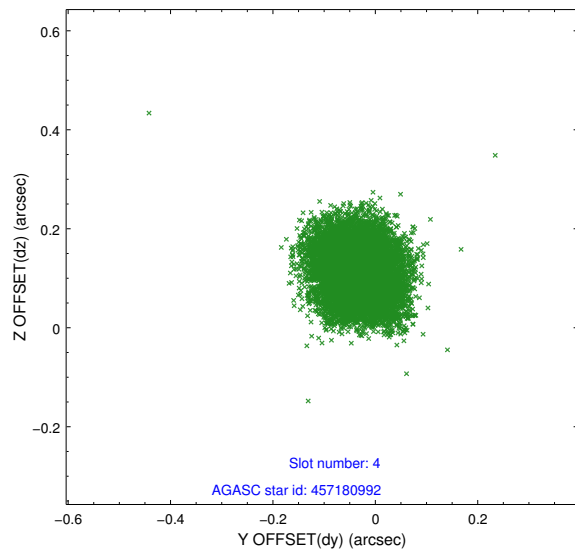
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	4923	-0.052	-0.016	0.010	0.017	0.000000	0.000000	-759.77	-1731.97
1	FID	ACIS-S-4	7.20	4921	0.079	0.030	0.009	0.017	0.000000	0.000000	2153.53	176.41
2	FID	ACIS-S-5	7.23	4923	-0.057	-0.005	0.008	0.014	0.000000	0.000000	-1812.41	170.20
3	GUIDE	457179352	9.87	9836	0.168	0.052	0.122	0.198	231.588393	52.490307	2010.74	2245.30
4	GUIDE	457180992	7.92	9846	-0.036	0.115	0.071	0.112	230.362137	52.344454	2028.98	-497.76
5	GUIDE	457181616	8.84	9842	-0.014	-0.003	0.073	0.116	229.954323	52.287535	2053.79	-1417.93
6	GUIDE	506994248	8.26	9844	-0.126	-0.159	0.067	0.107	230.374449	53.063992	-507.44	28.33
7	GUIDE	506993752	9.81	9841	0.006	-0.001	0.128	0.205	230.957817	53.653149	-2353.42	1660.39

## 2.4 Star Slots

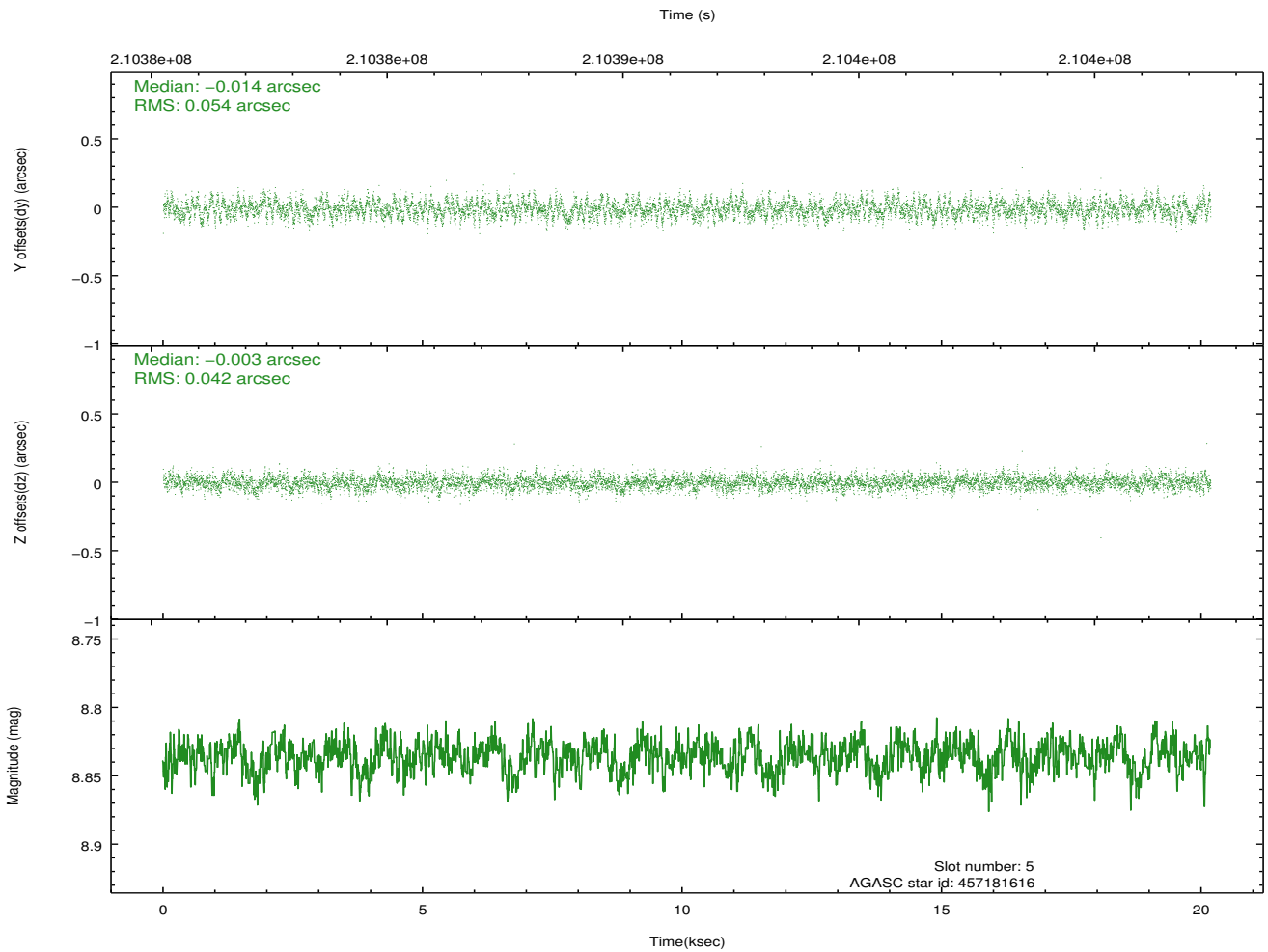
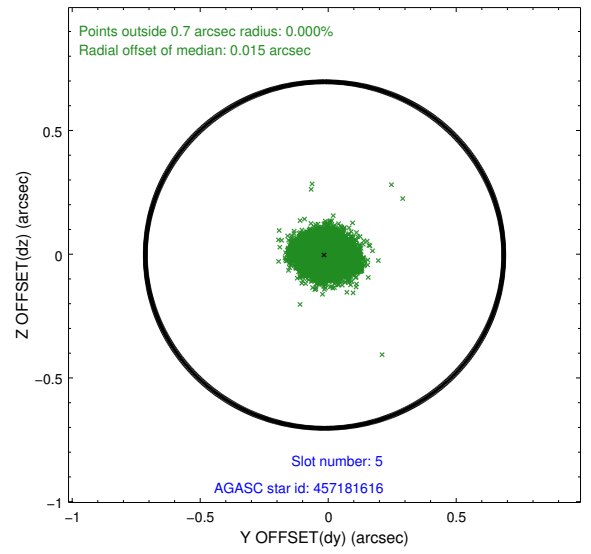
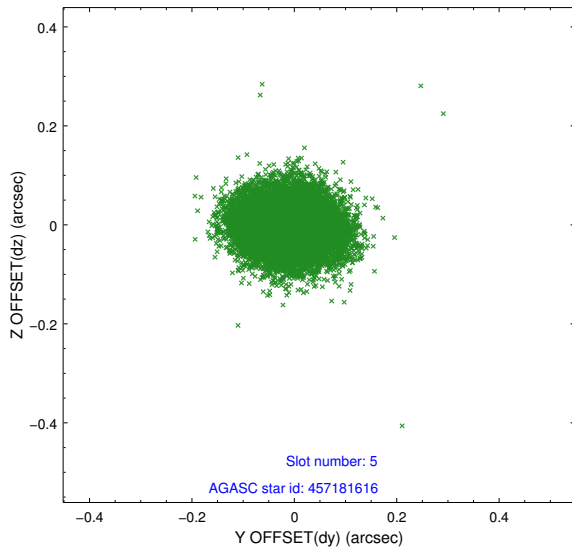
### 2.4.1 Slot 3



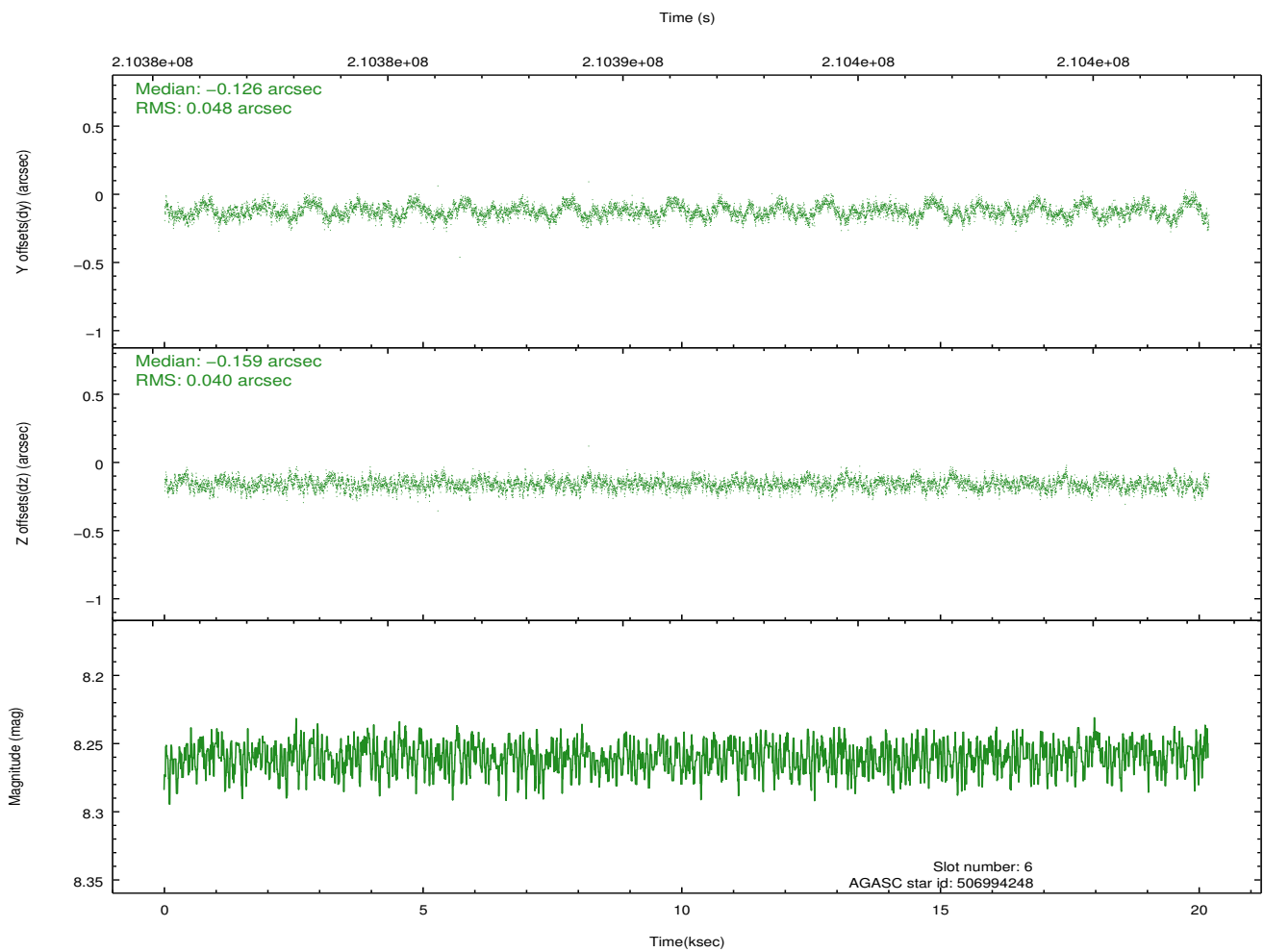
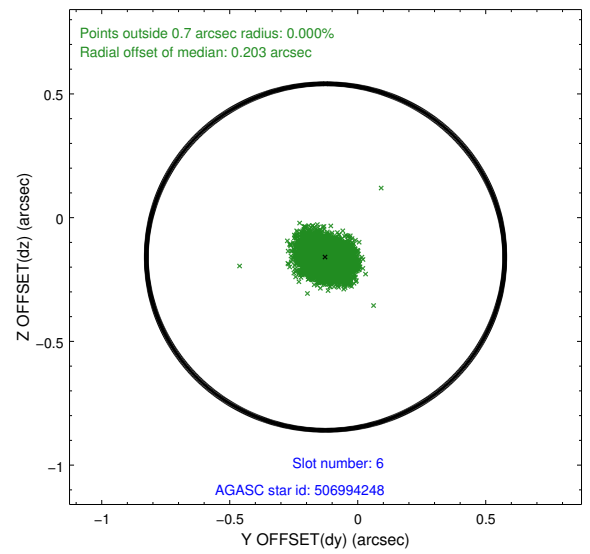
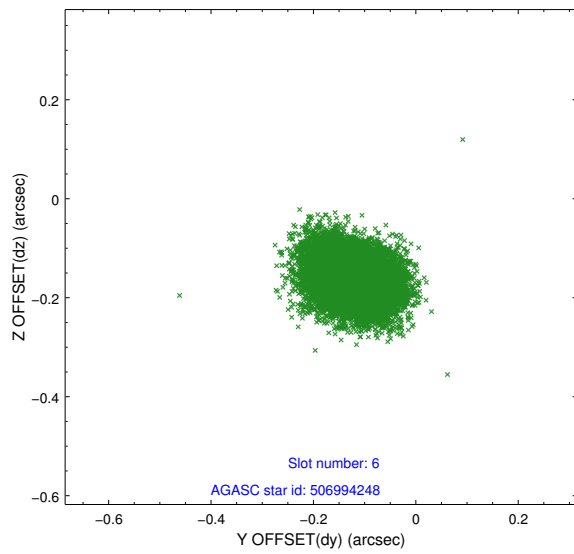
## 2.4.2 Slot 4



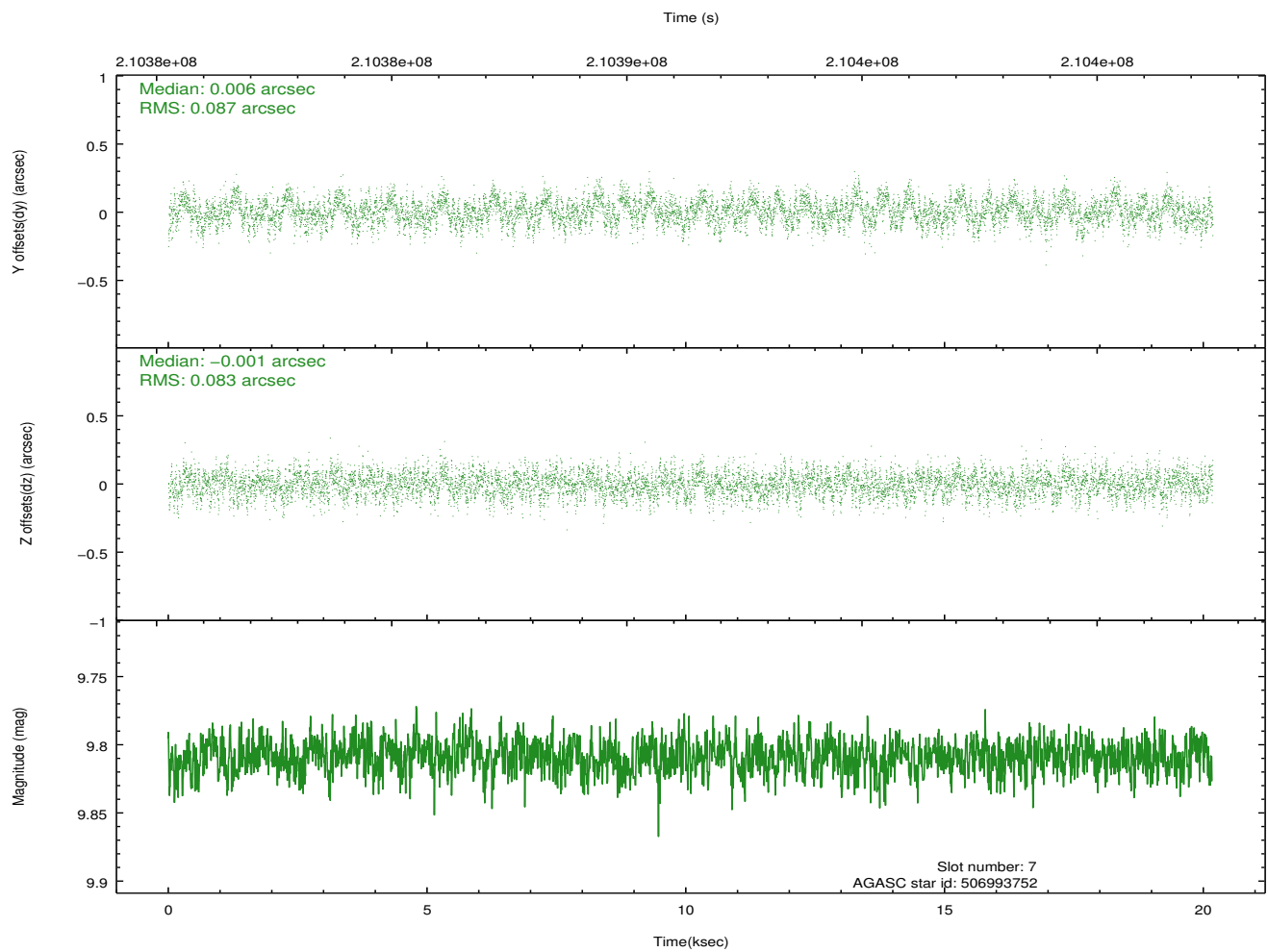
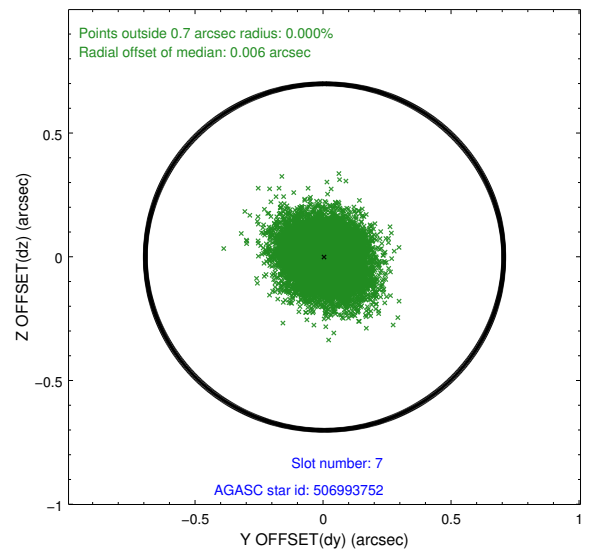
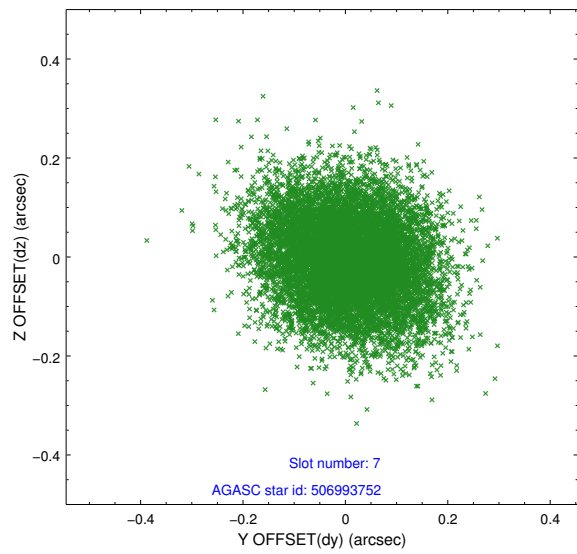
### 2.4.3 Slot 5



## 2.4.4 Slot 6

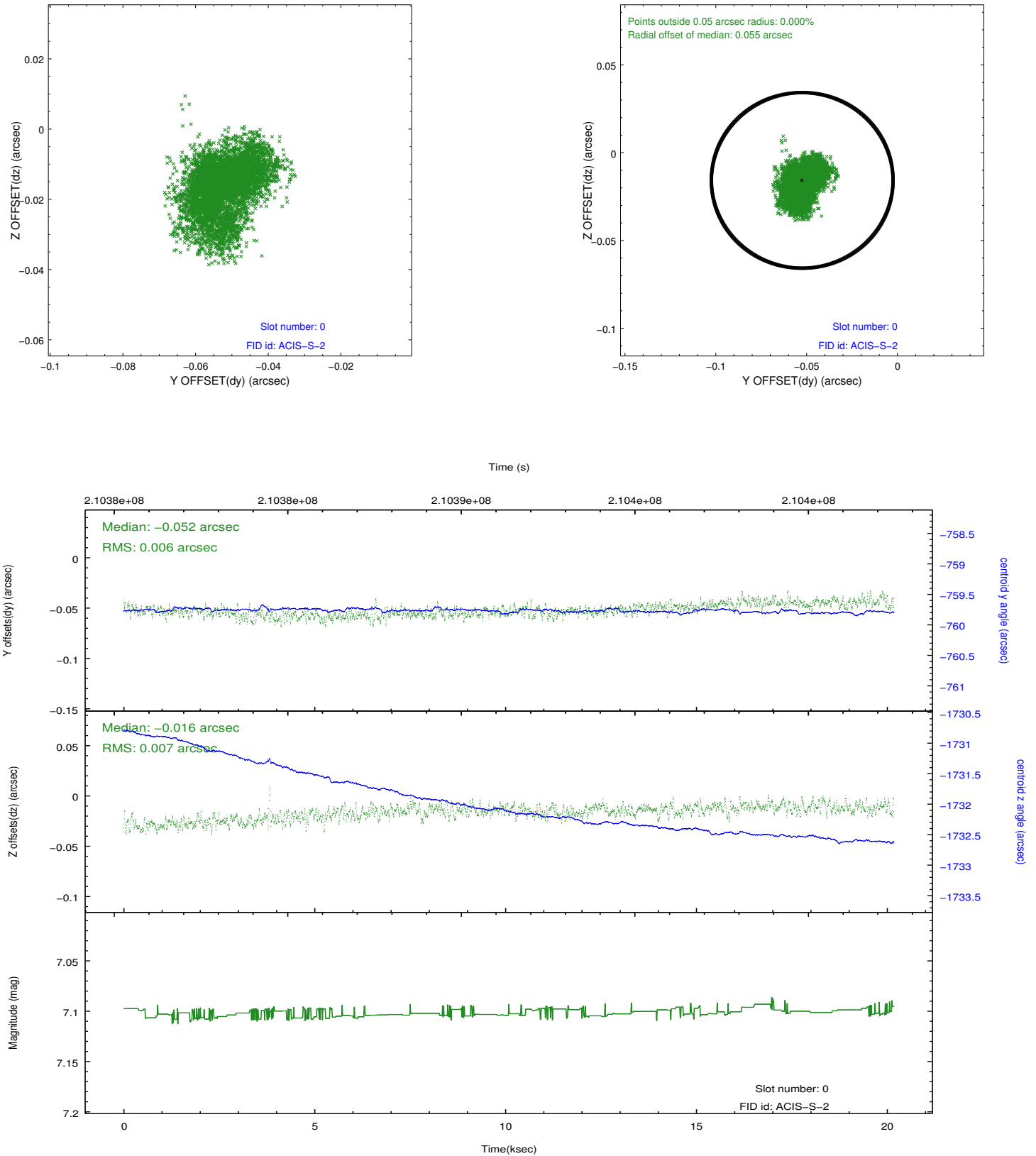


## 2.4.5 Slot 7

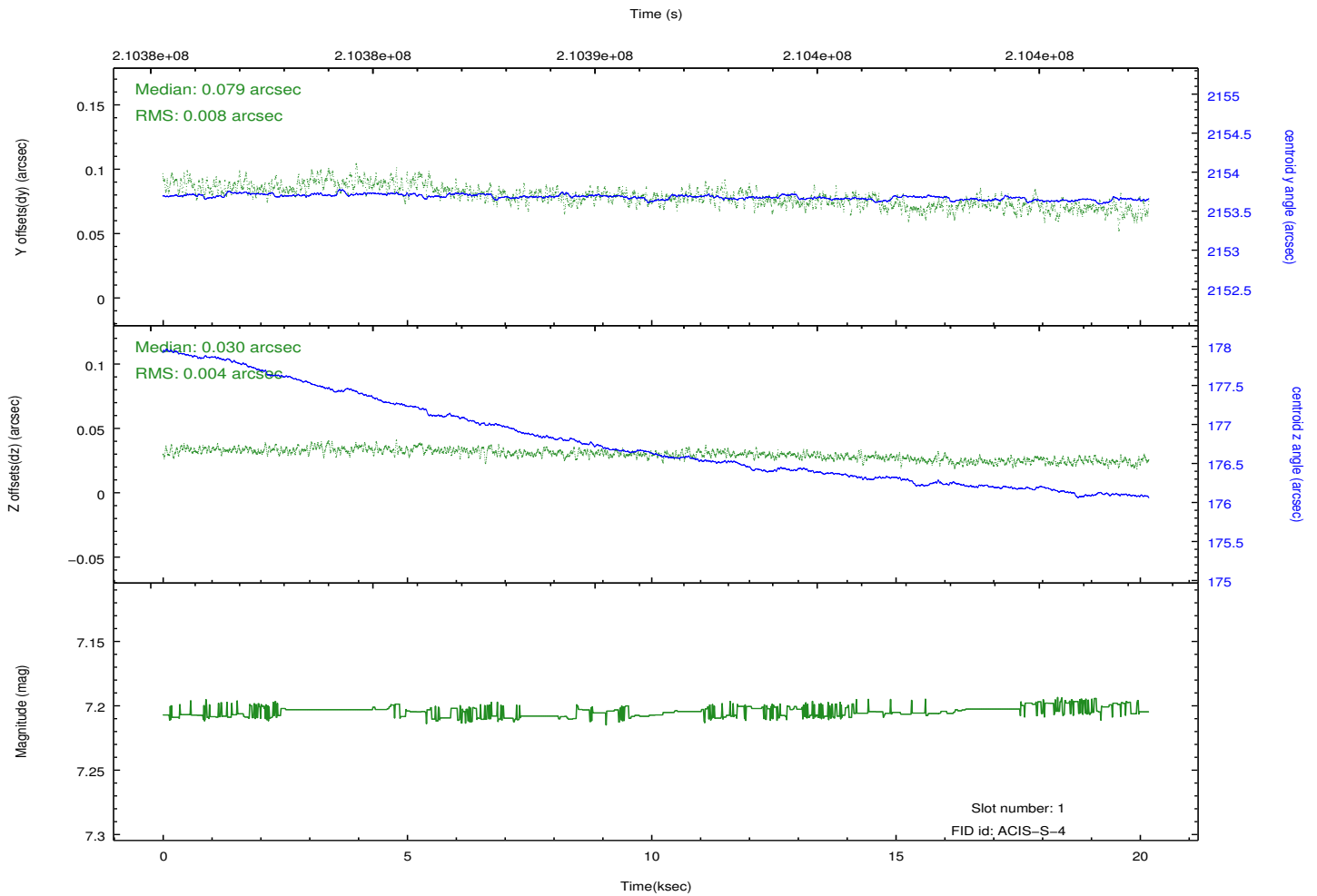
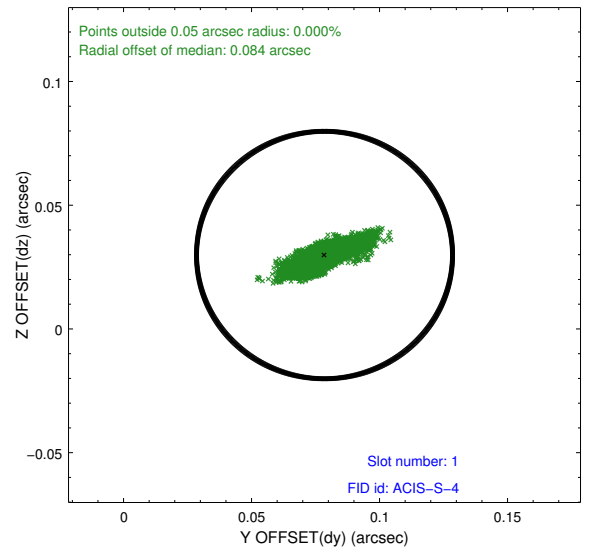
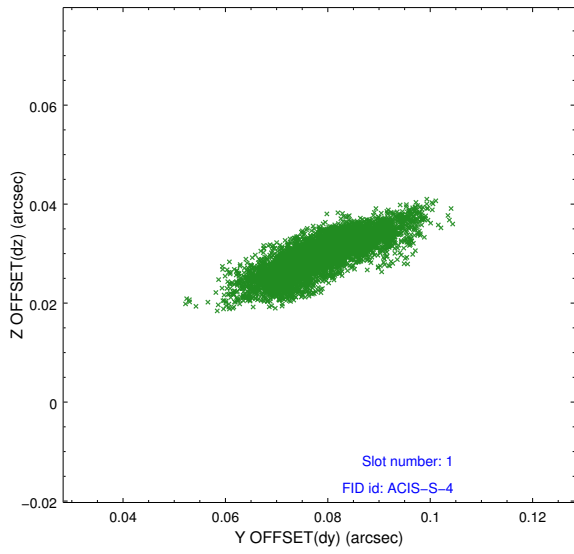


## 2.5 FID Slots

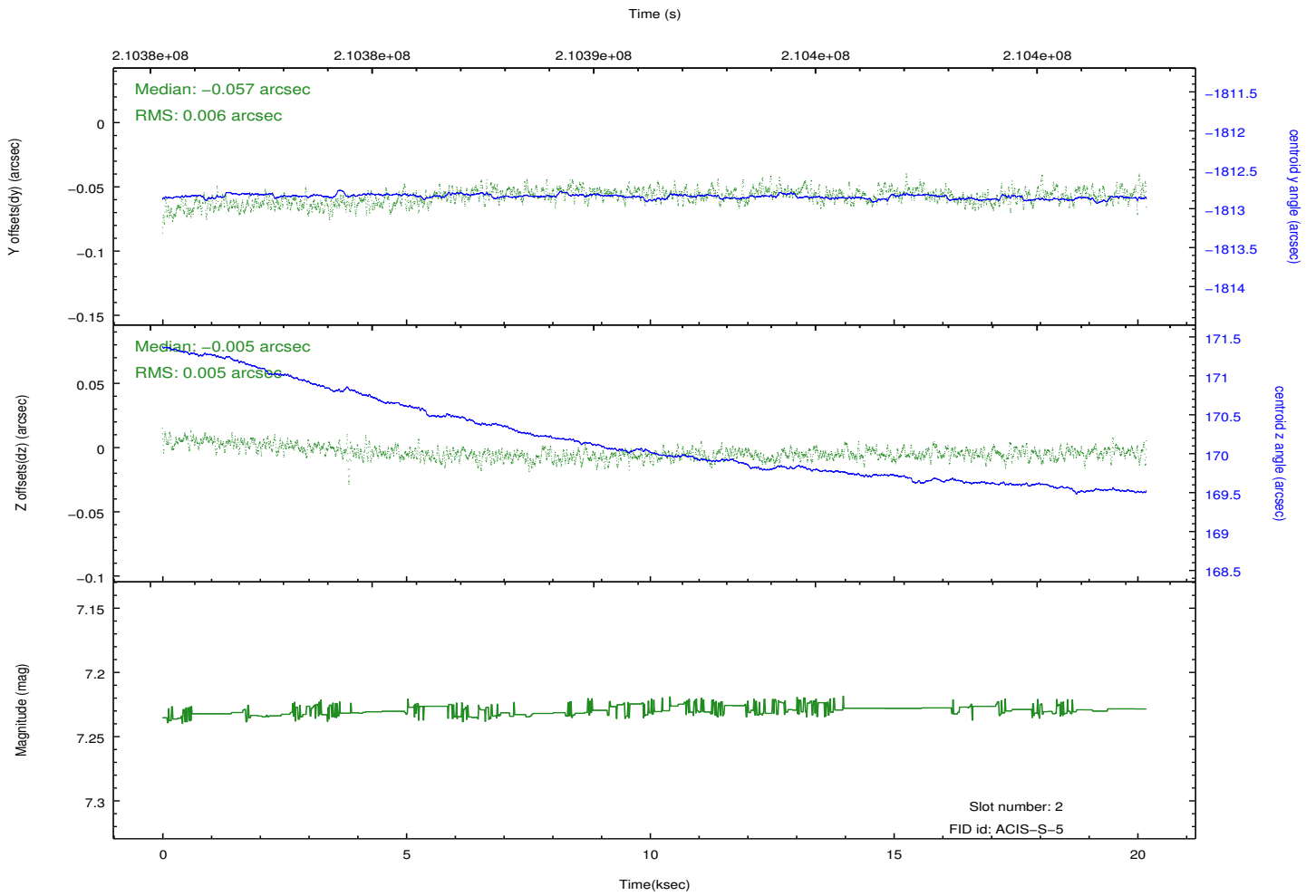
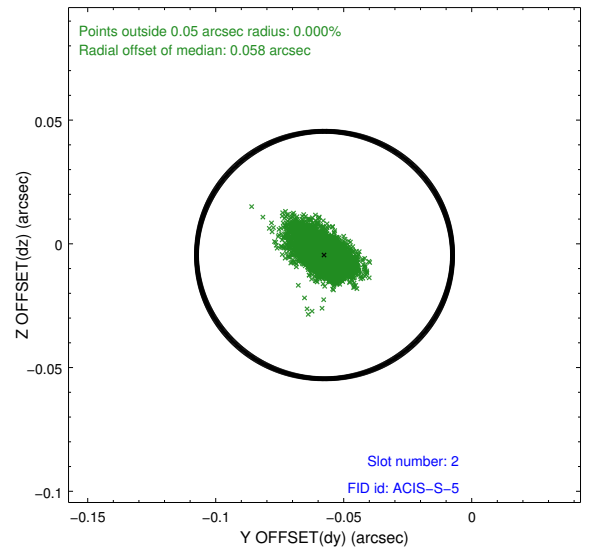
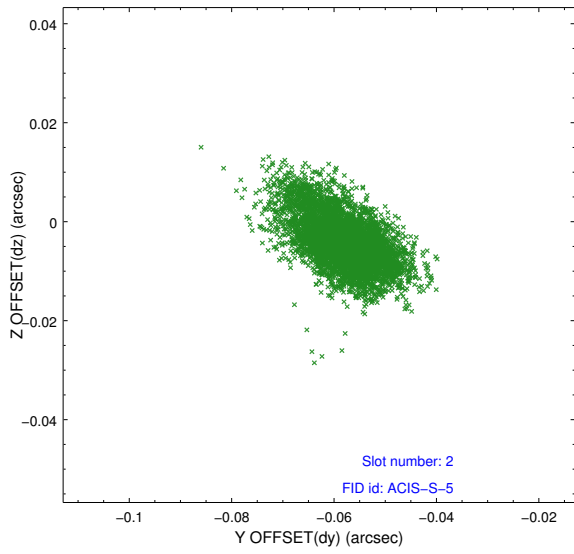
### 2.5.1 Slot 0



## 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)	2012.12.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.177

## A.2 Comments