

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9398 - L2 Version 2  
Chandra X-Ray Center

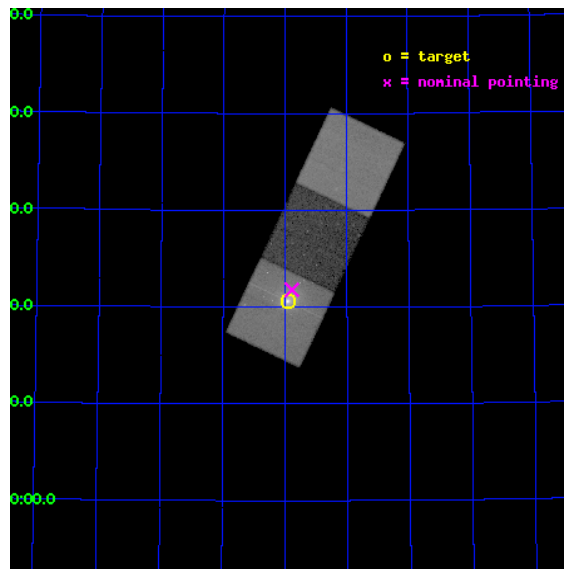
L2 Processing Date : May 13 2012

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# 1 Front

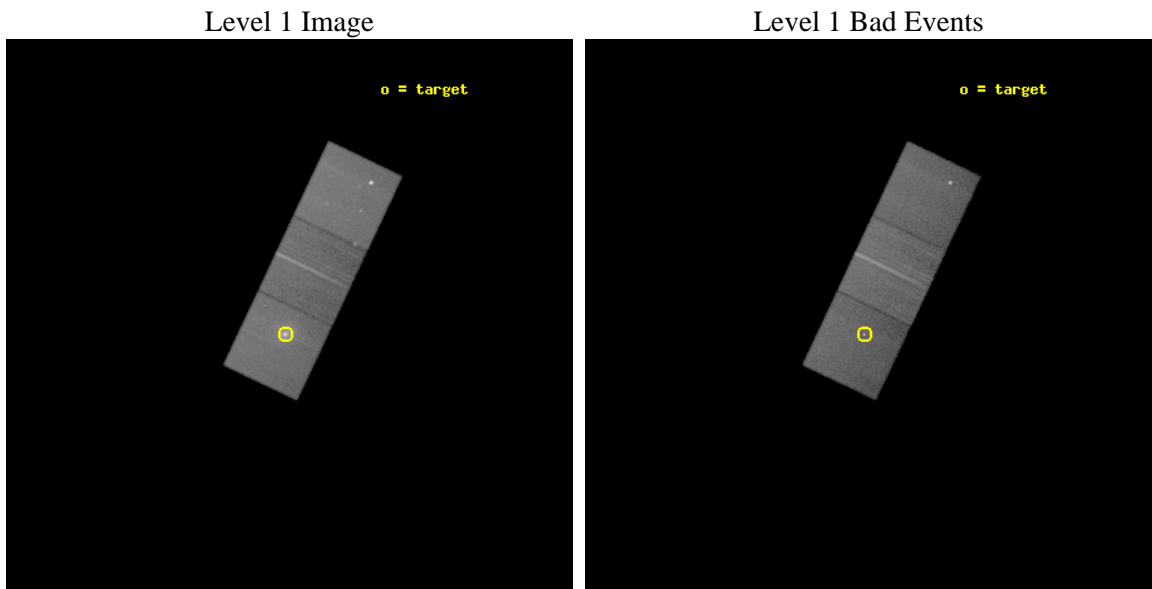
seq_num	800735	Sequence number
obs_id	9398	Observation id
title	The X-ray Luminous Cluster underlying the Radio-Quiet Quasar H1821+643	Proposal title
observer	Professor Andrew Fabian	Principal investigator
object	H1821+643	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	275.489167	Observer's specified target RA [deg]
dec_targ	64.343611	Observer's specified target Dec [deg]
ra_nom	275.47209482853	Nominal RA [deg]
dec_nom	64.363104926611	Nominal Dec [deg]
roll_nom	115.37202972827	Nominal Roll [deg]
revision	2	Processing version of data
ontime	34174.400262833	Sum of GTIs [s]
livetime	33727.886564571	Livetime [s]
ontime5	34174.400262833	Sum of GTIs [s]
ontime6	34171.259302437	Sum of GTIs [s]
ontime7	34174.400262833	Sum of GTIs [s]
l2events	397612	Number of level 2 events



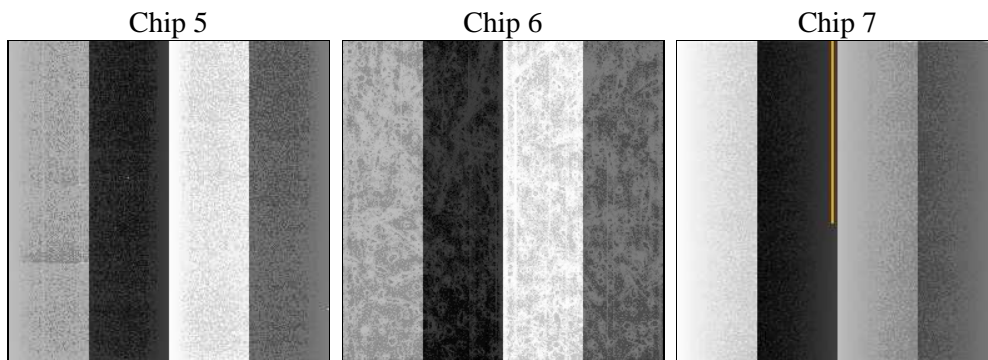
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	34000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	34174.400262833	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime5	34174.400262833	Sum of GTIs [s]
date	2012-05-13T13:08:10	Date and time of file creation	ontime6	34171.259302437	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	34174.400262833	Sum of GTIs [s]
			l1events	1048765	Number of level 1 events

### 2.1.4 Events

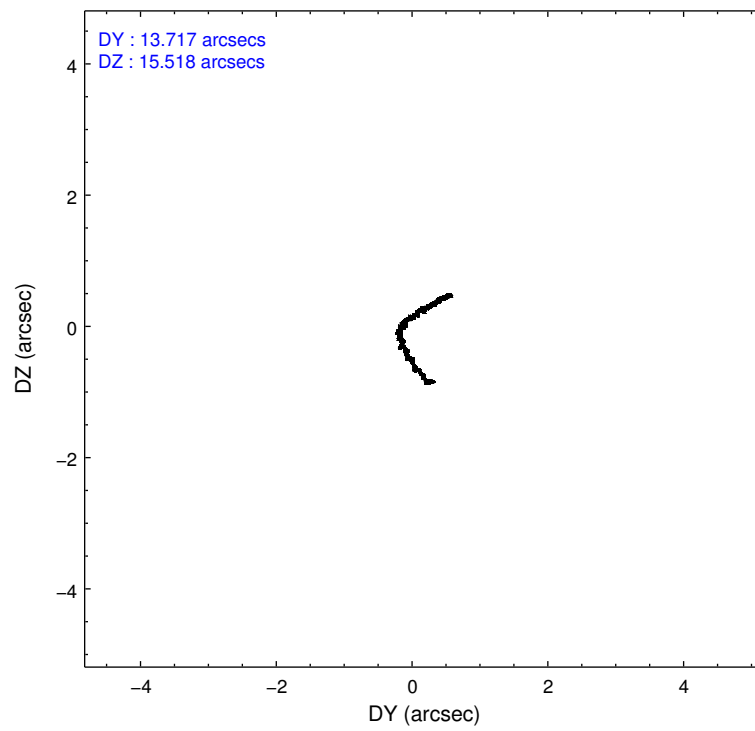
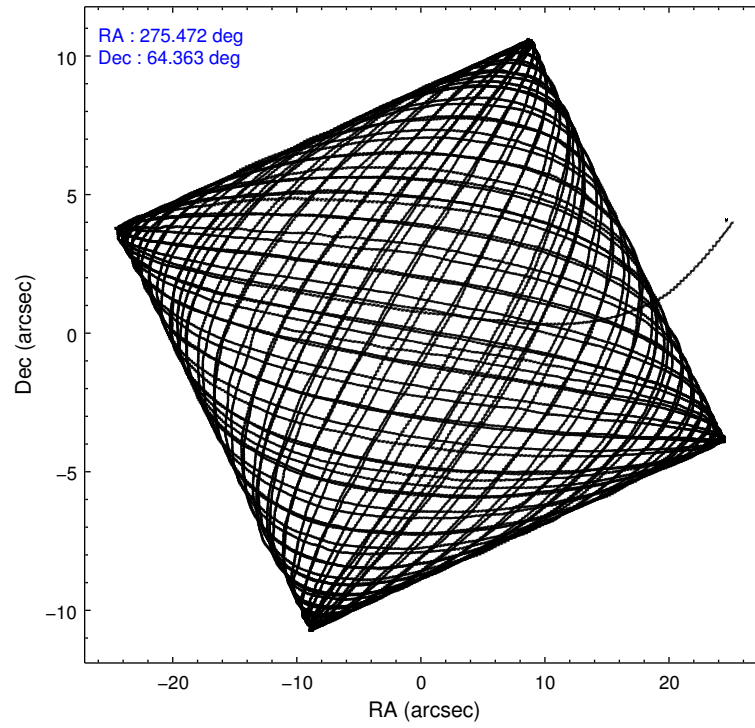
	ccd 5	ccd 6	ccd 7
level 1 events	394777	279581	374407
rejected events	197388	249971	178401
rejected %	49%	89%	47%

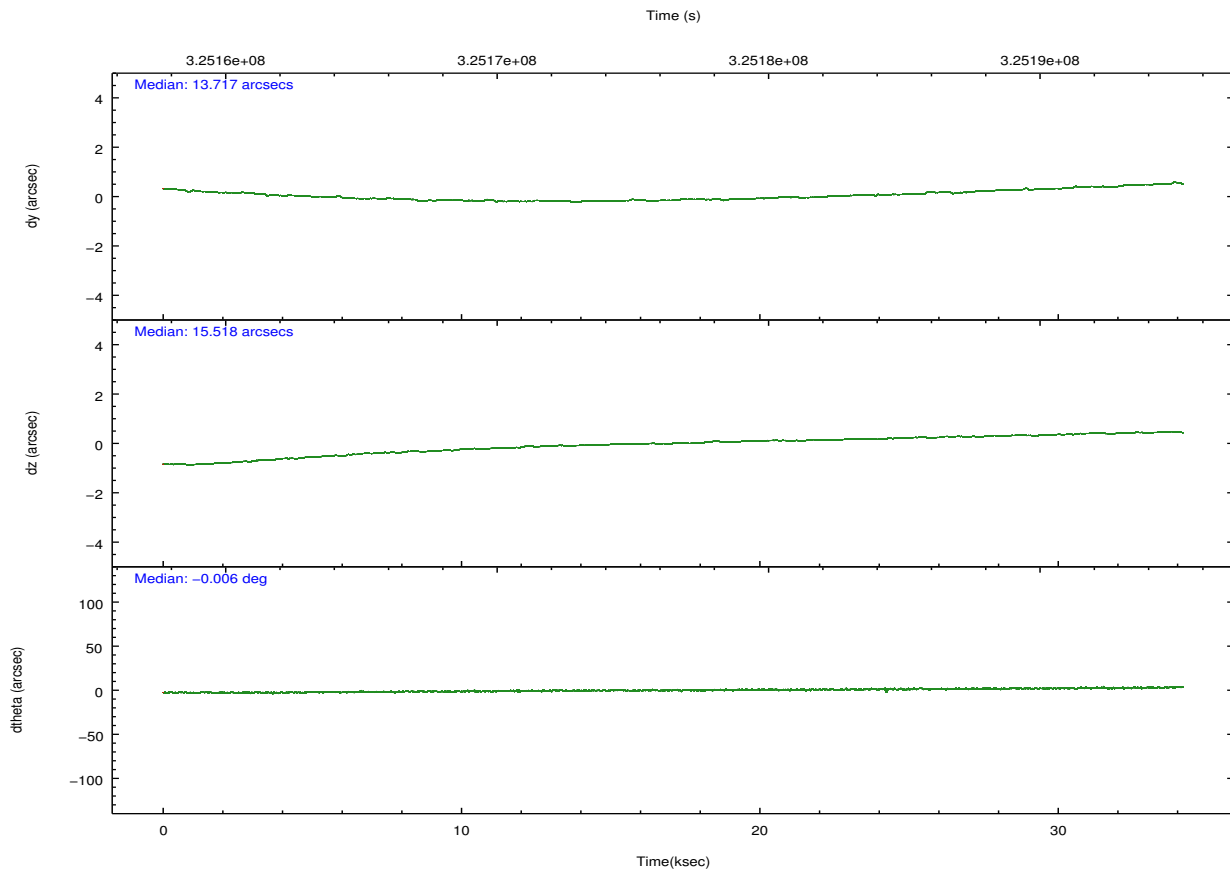
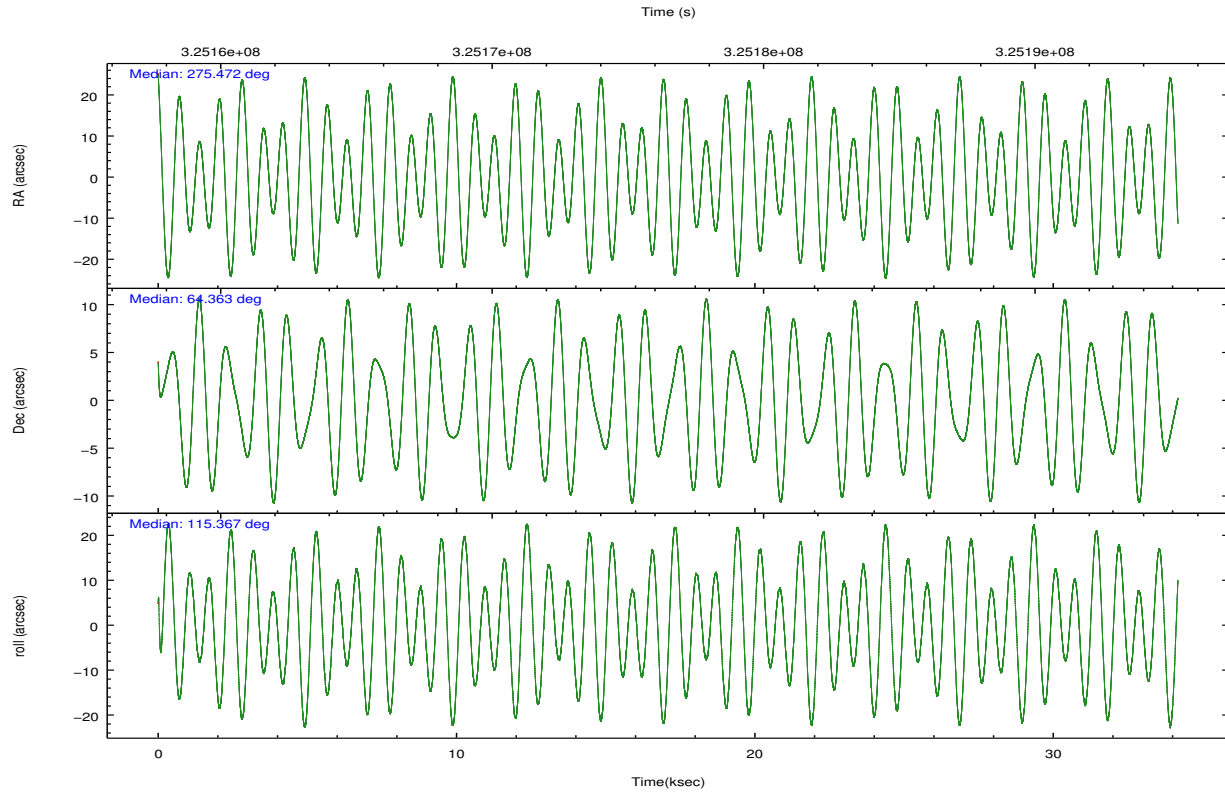
	ccd 5	ccd 6	ccd 7
grade 0 events	22530	11102	30255
	5%	3%	8%
grade 1 events	4679	125	773
	1%	0%	0%
grade 2 events	60042	6465	42923
	15%	2%	11%
grade 3 events	8318	3120	19207
	2%	1%	5%
grade 4 events	8047	3076	18905
	2%	1%	5%
grade 5 events	30428	11193	33826
	7%	4%	9%
grade 6 events	100381	6123	86363
	25%	2%	23%
grade 7 events	160352	238377	142155
	40%	85%	37%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-567	ACIS-567	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	275.524529	275.4720948285341	Subarray requested	NONE	NONE
[deg] Pointing Dec	64.347863	64.36310492661056	Alternating exposures requested	N	N
[deg] Pointing Roll	115.168123	115.3720297282693	[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)	325159571.184000	325158549.95791			
Observation start date	2008-04-21T10:05:06	2008-04-21T09:49:09			
[s] Observation end time (MET)	325193571.184000	325194282.99715			
Observation end date	2008-04-21T19:31:46	2008-04-21T19:44:42			
Read mode	TIMED	TIMED			

## 2.3 Aspect



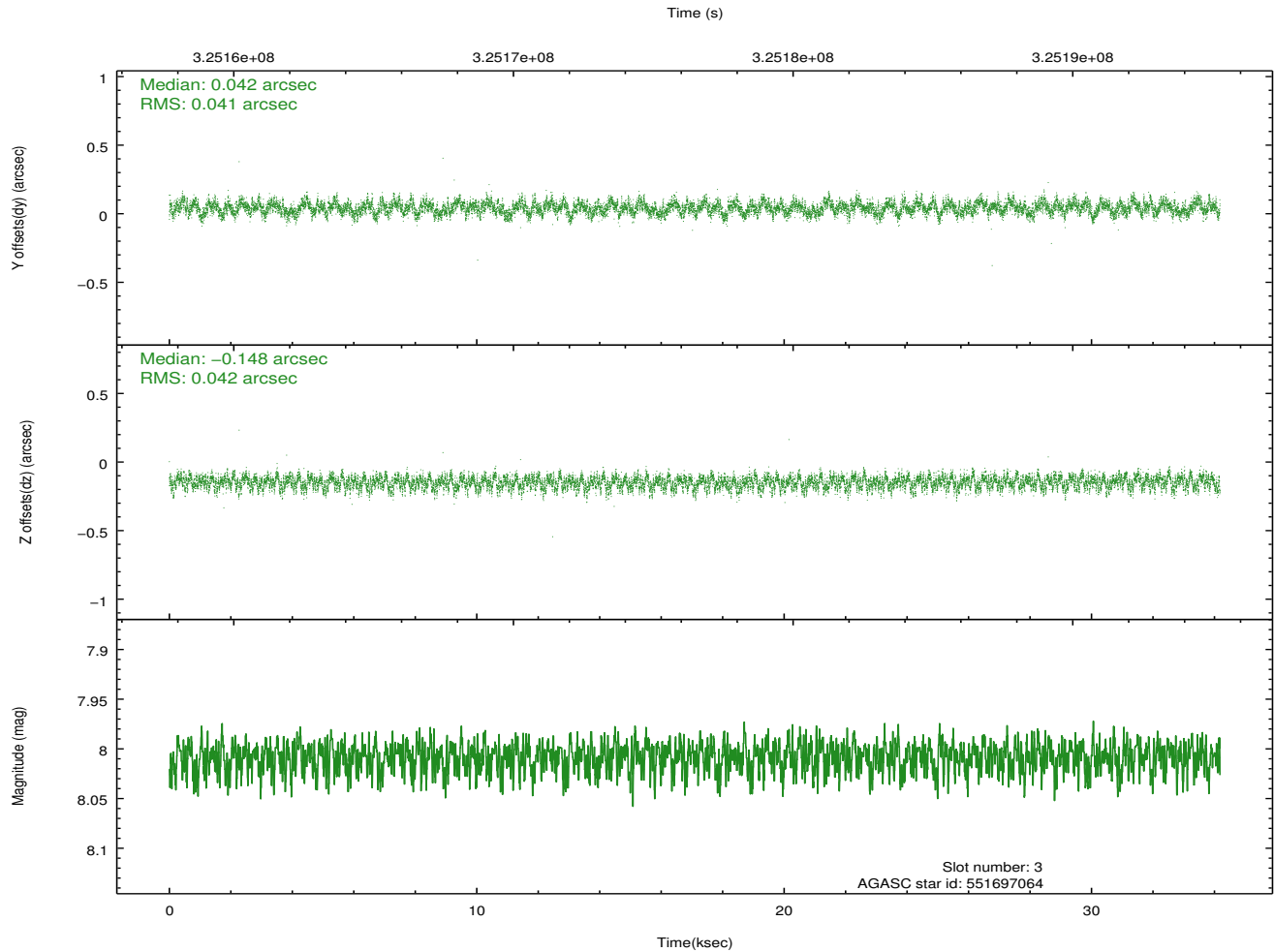
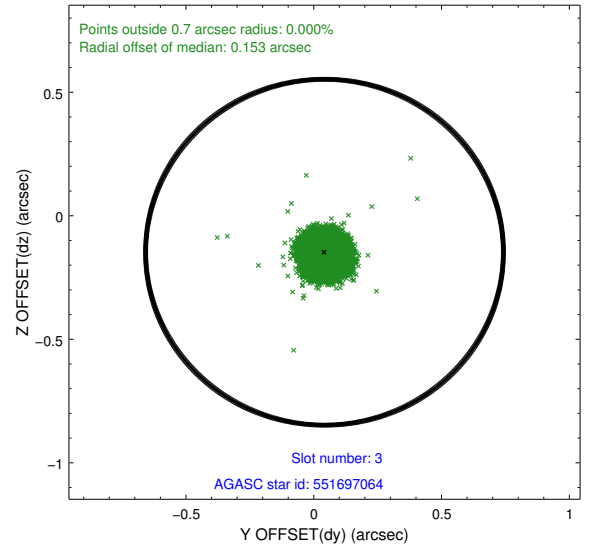
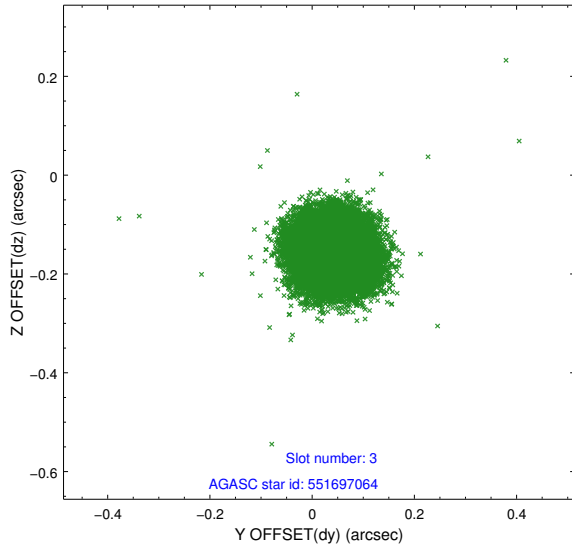


### Slot Statistics

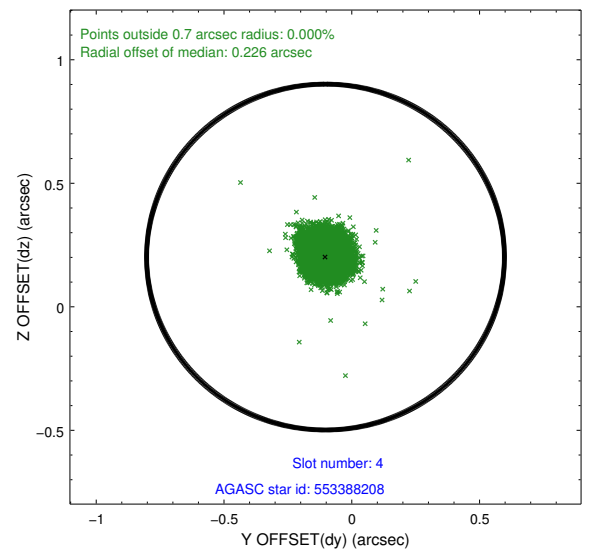
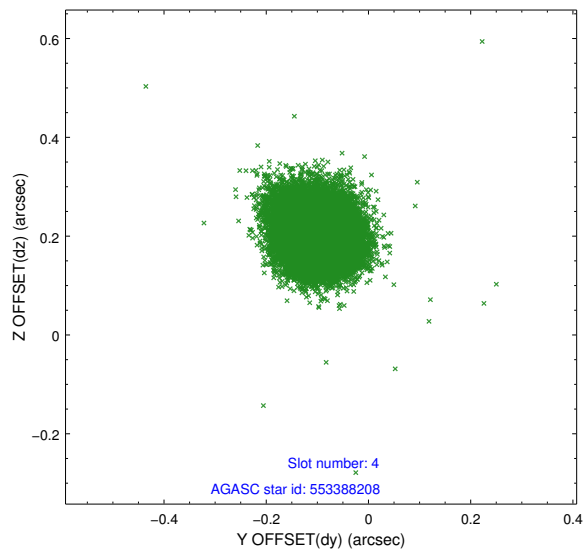
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	6.94	8337	0.086	-0.046	0.017	0.025	0.000000	0.000000	929.44	-1732.51
1	FID	ACIS-S-2	6.86	8337	-0.051	0.035	0.011	0.032	0.000000	0.000000	-766.57	-1737.05
2	FID	ACIS-S-5	6.97	8337	-0.059	0.019	0.014	0.021	0.000000	0.000000	-1819.90	165.03
3	GUIDE	551697064	8.01	16666	0.042	-0.148	0.063	0.099	274.138245	64.538359	1554.48	1640.26
4	GUIDE	553388208	8.48	16664	-0.103	0.201	0.063	0.102	276.332157	64.911426	1319.56	-1981.54
5	GUIDE	553402720	7.31	16668	0.013	-0.192	0.064	0.103	275.081751	64.202988	-174.50	848.46
6	GUIDE	553404184	8.64	16663	0.138	-0.032	0.058	0.094	276.556964	64.060570	-1614.97	-1037.11
7	GUIDE	553396016	6.84	16673	-0.097	0.168	0.057	0.094	276.292154	64.838422	1105.97	-1817.16

## 2.4 Star Slots

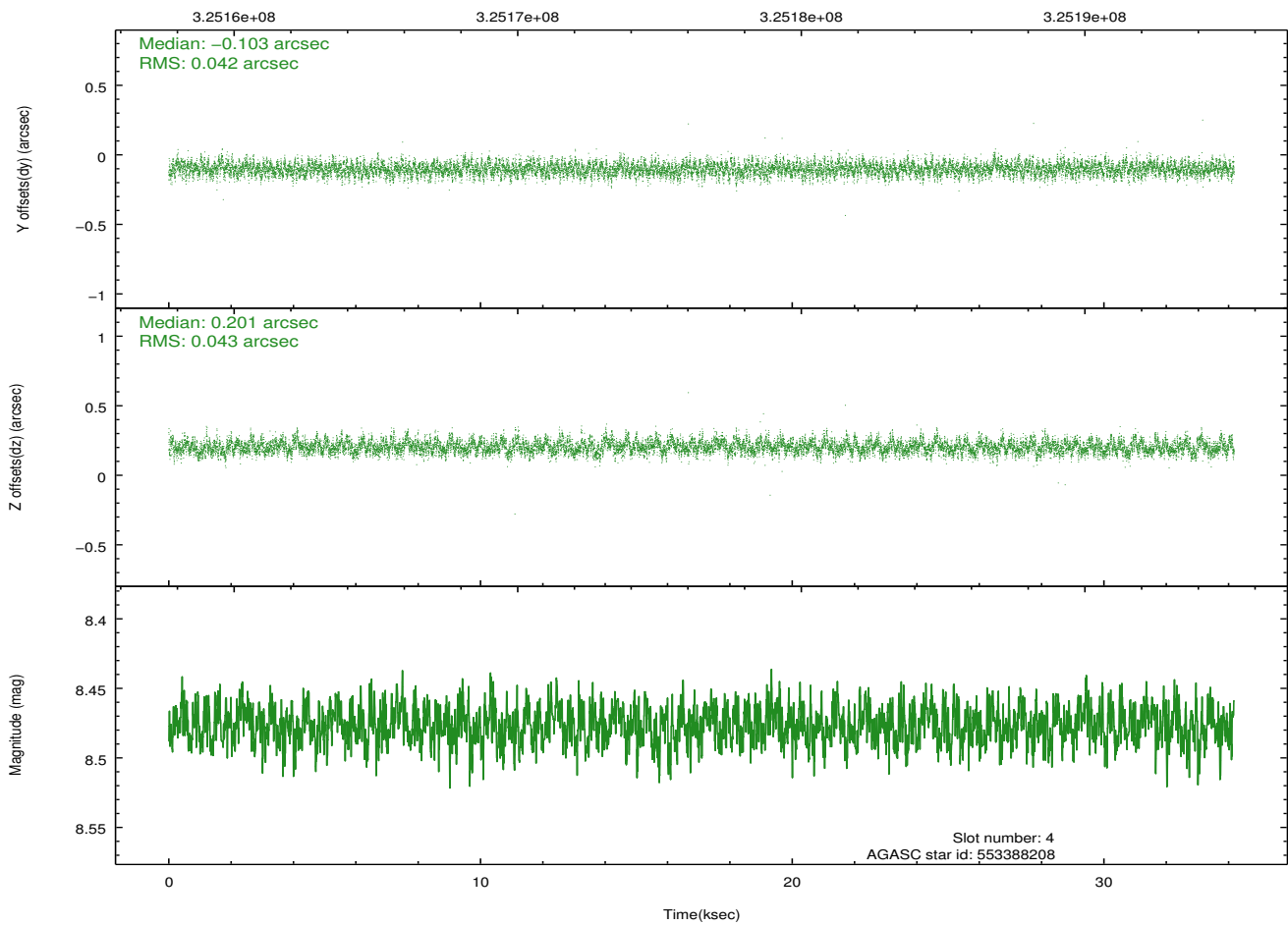
### 2.4.1 Slot 3



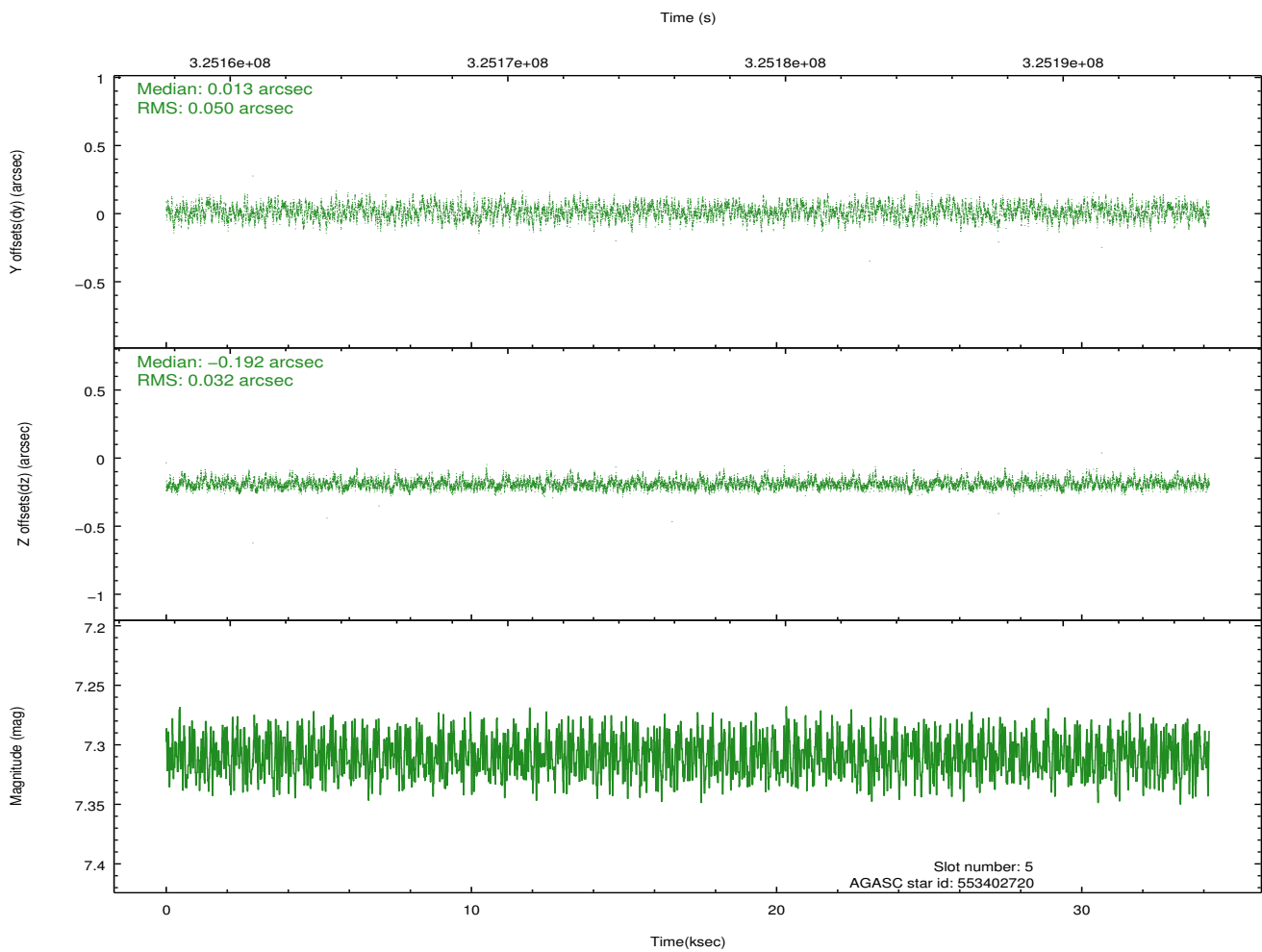
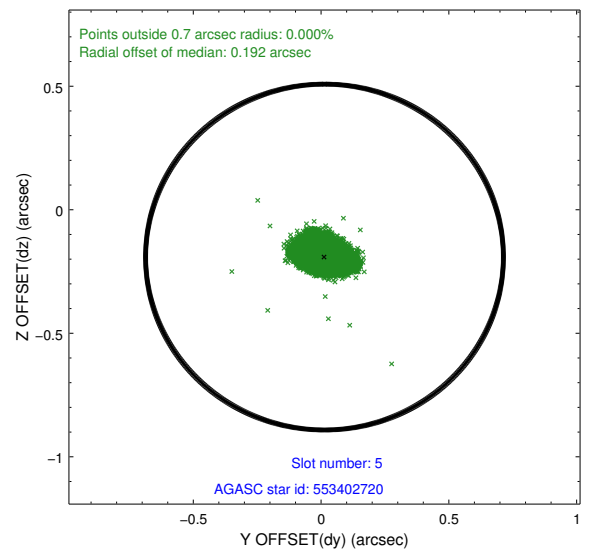
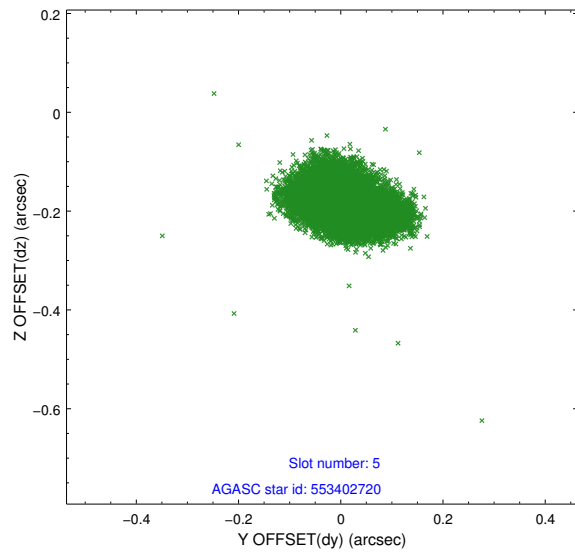
## 2.4.2 Slot 4



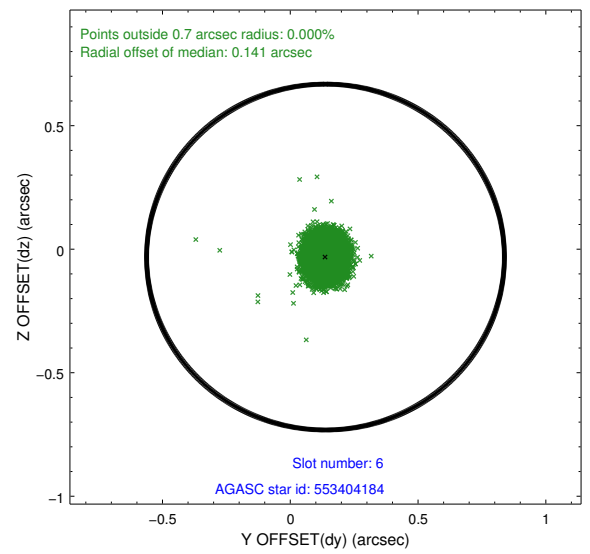
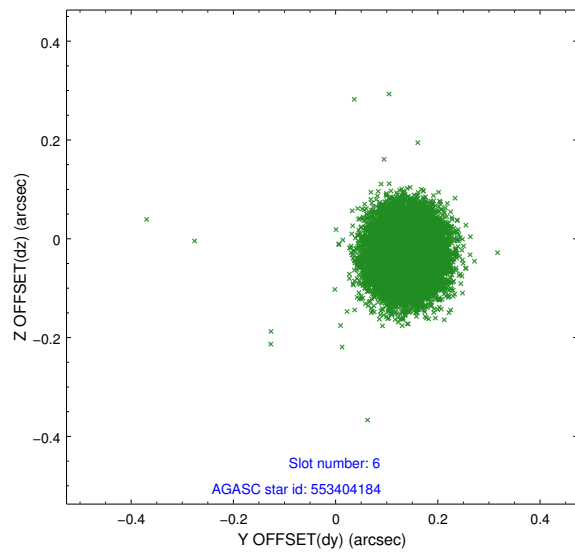
Time (s)



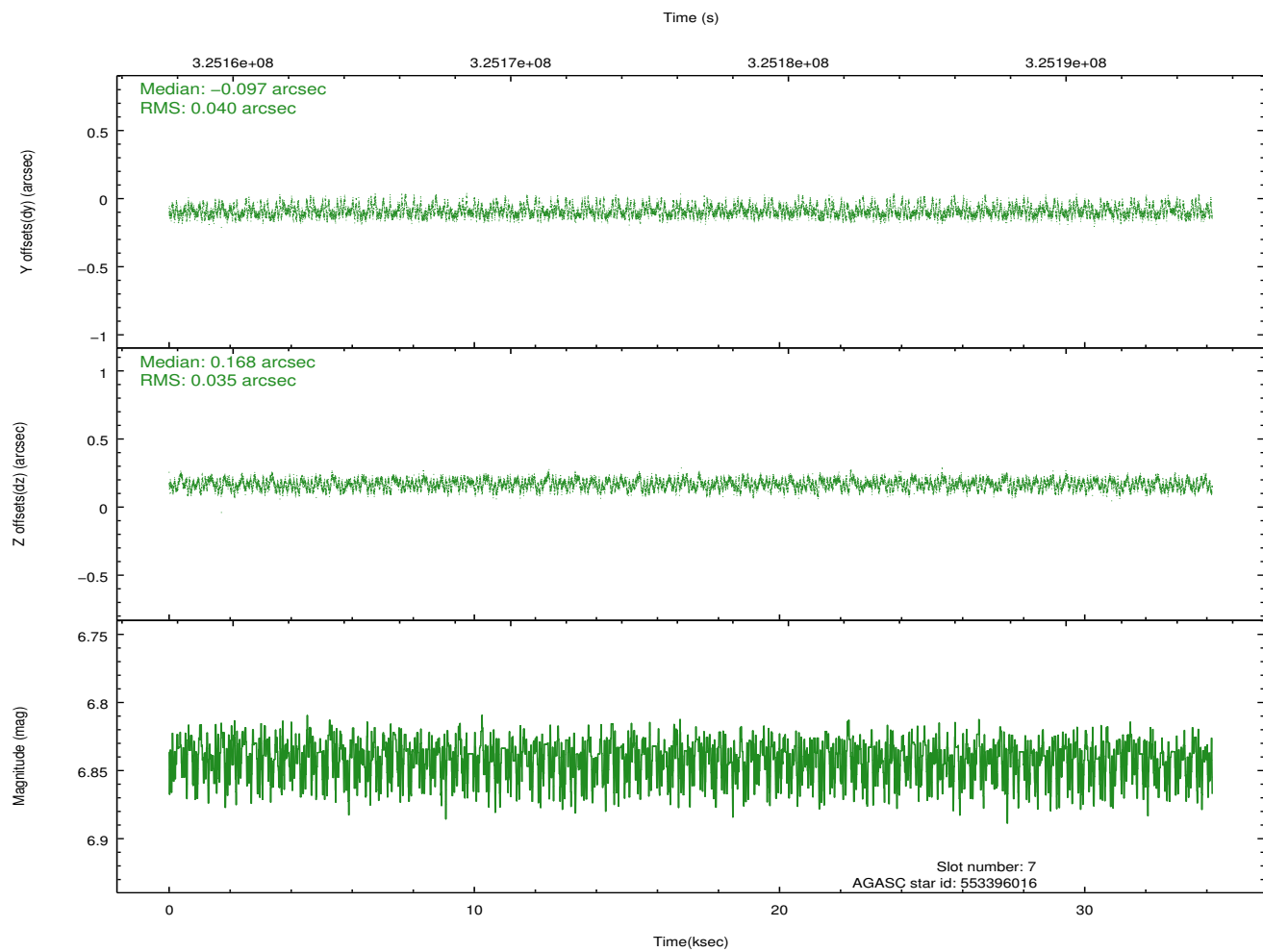
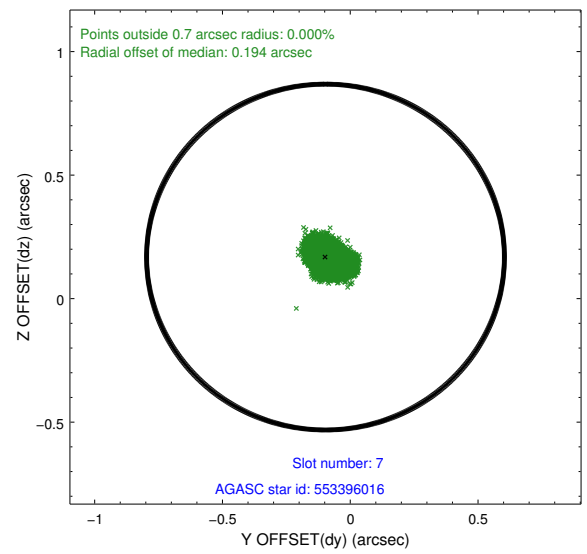
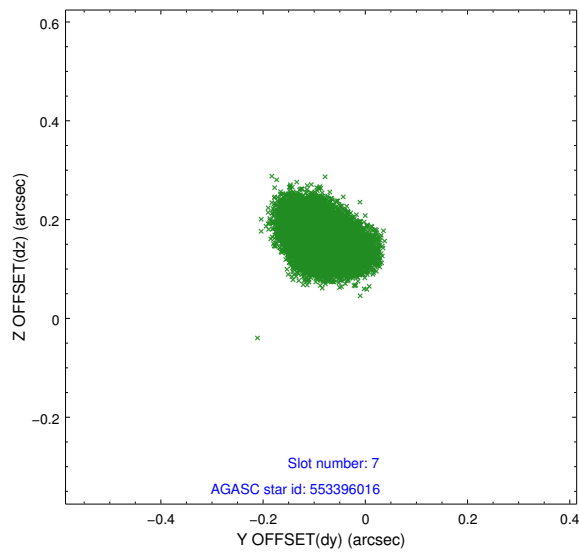
### 2.4.3 Slot 5



## 2.4.4 Slot 6

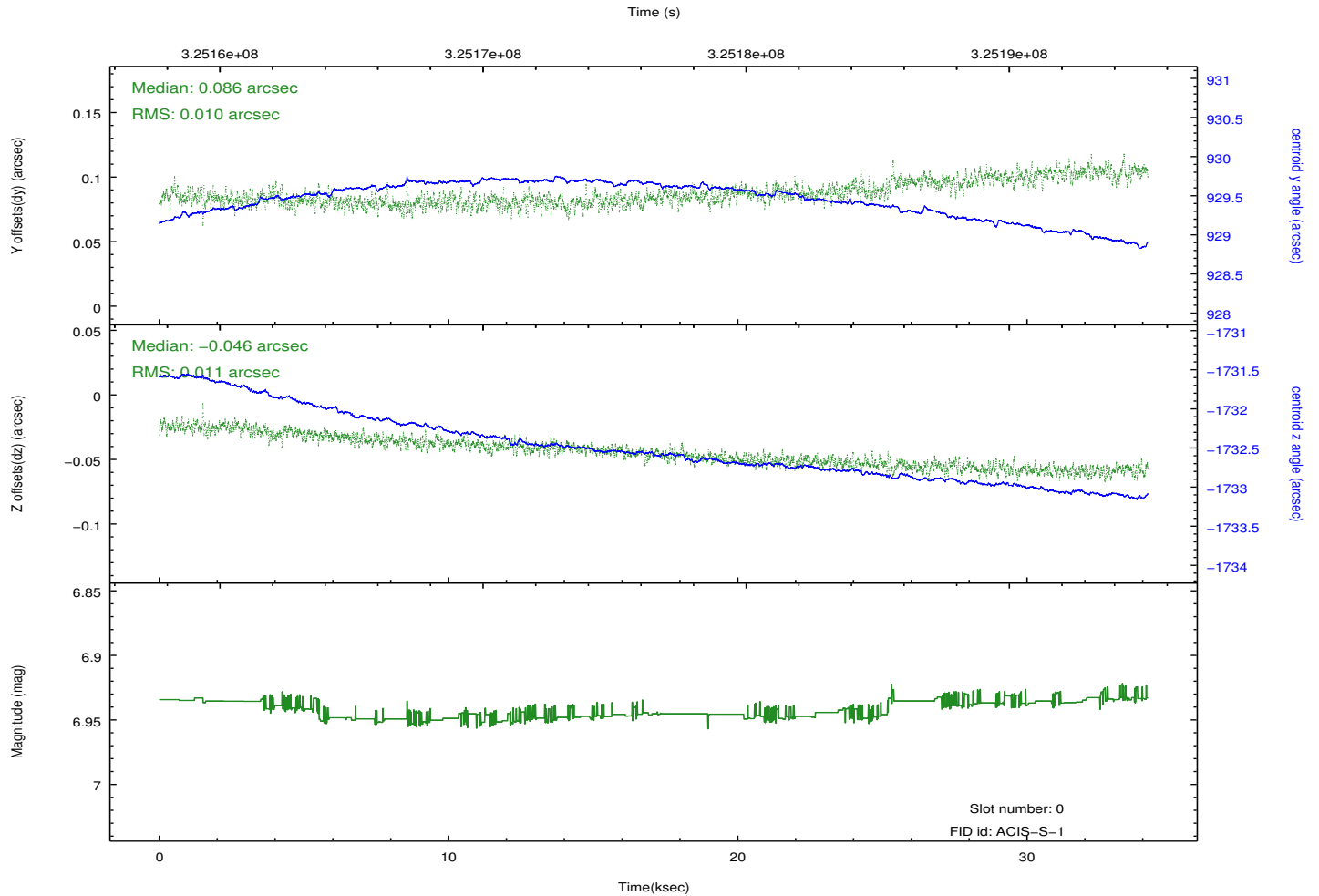
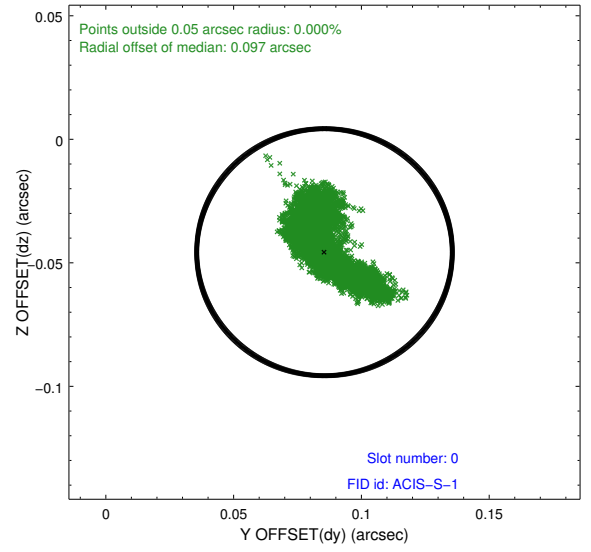
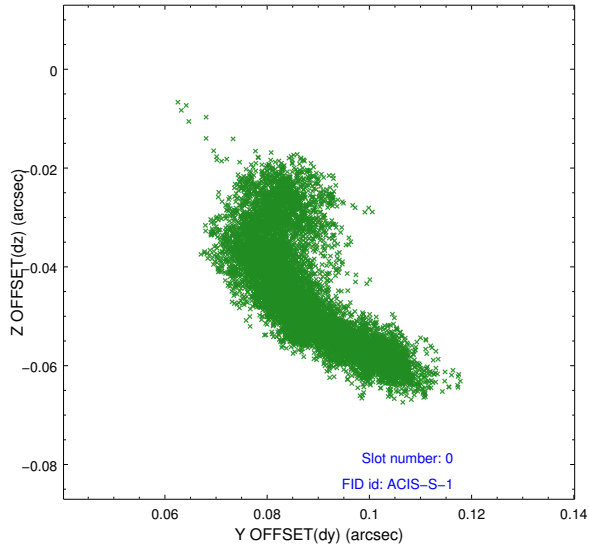


## 2.4.5 Slot 7

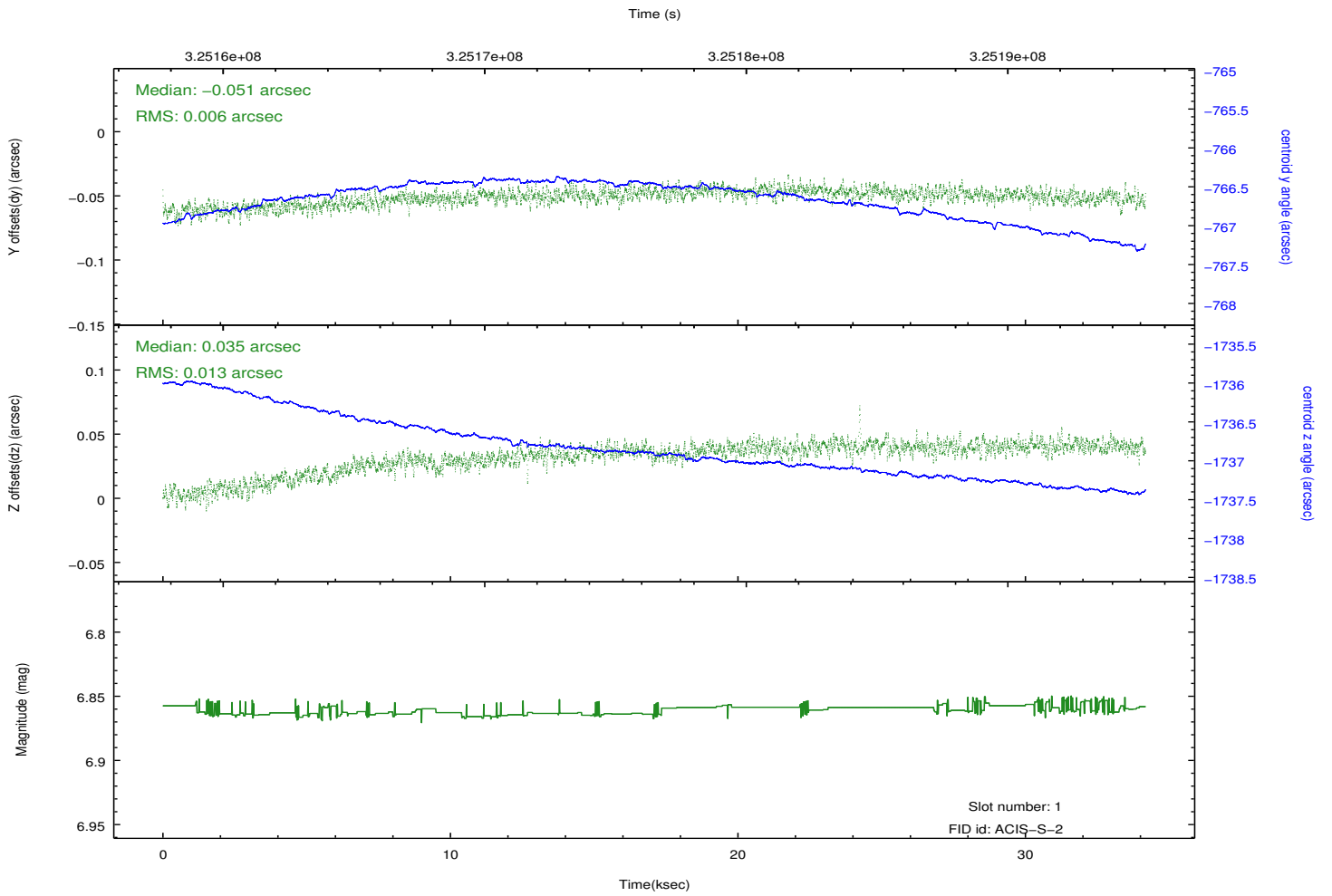
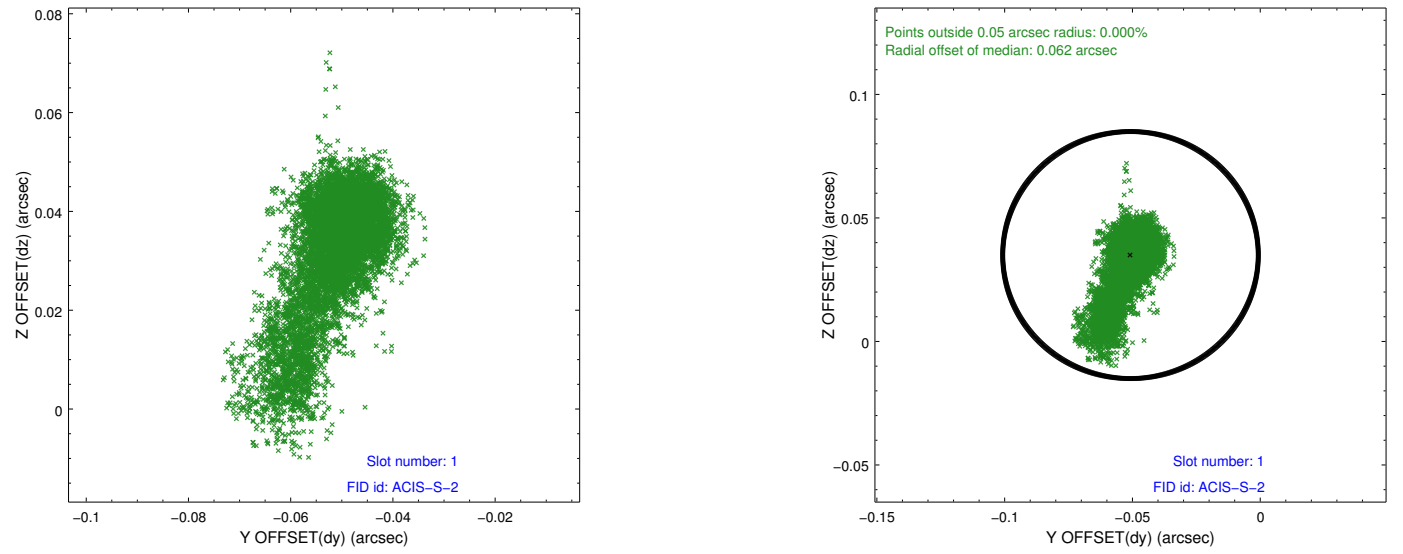


## 2.5 FID Slots

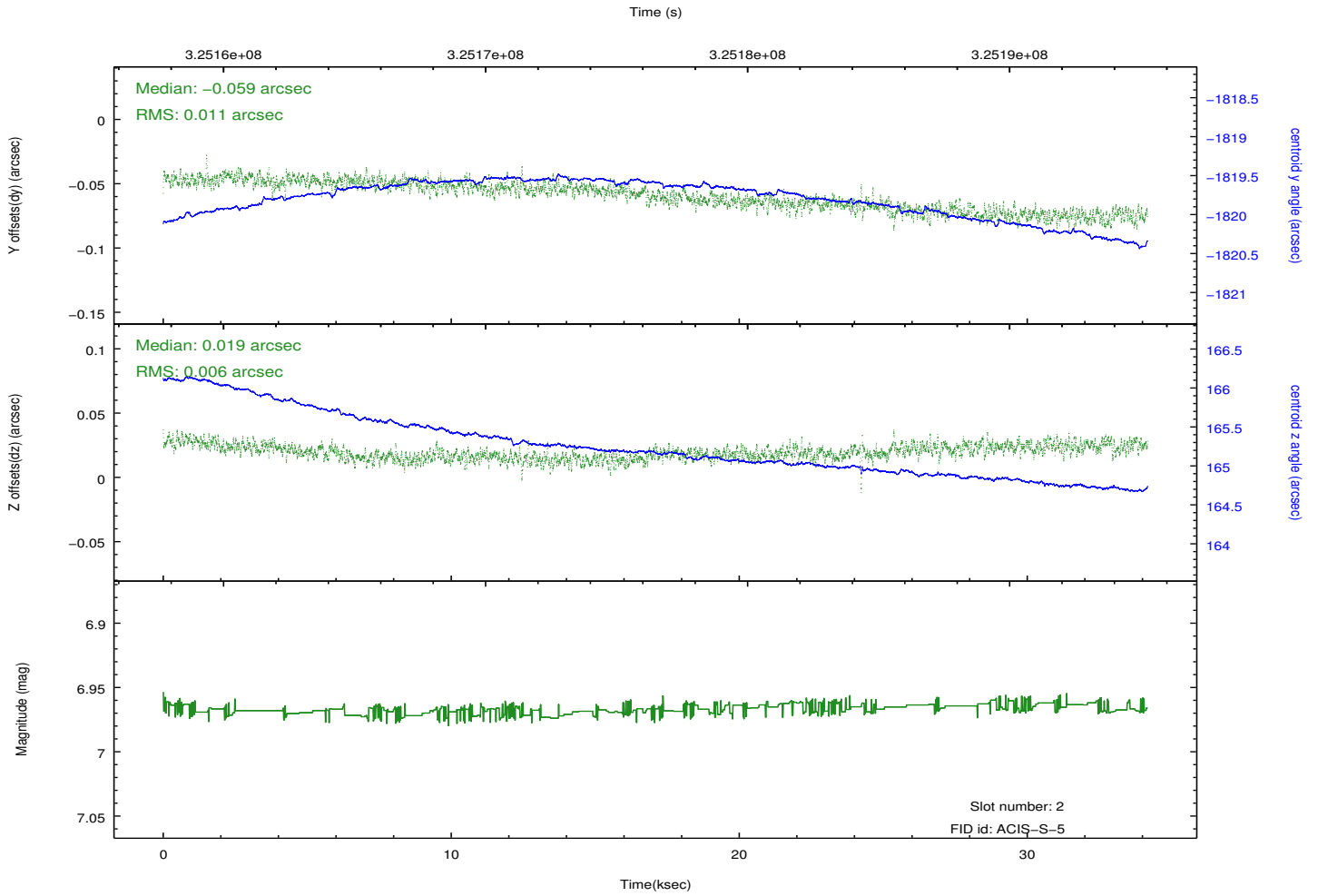
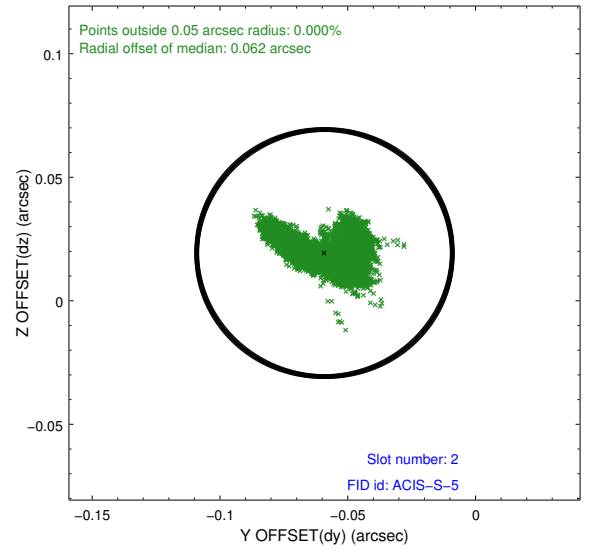
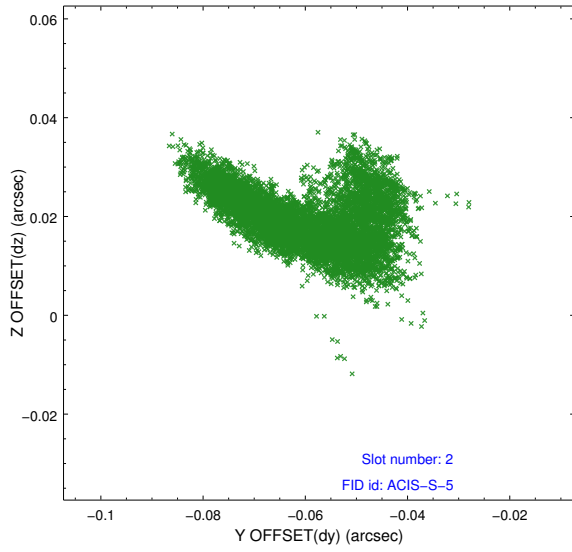
### 2.5.1 Slot 0



## 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)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.1744002

## A.2 Comments