

# V&V Reference Report

## L2 ASCDS Version : 10.2.2

Observation 16210 - L2 Version 2  
Chandra X-Ray Center

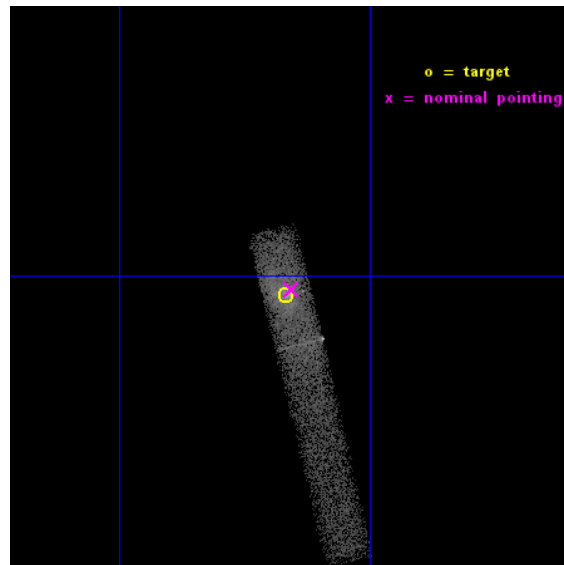
L2 Processing Date : Dec 11 2014

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# 1 Front

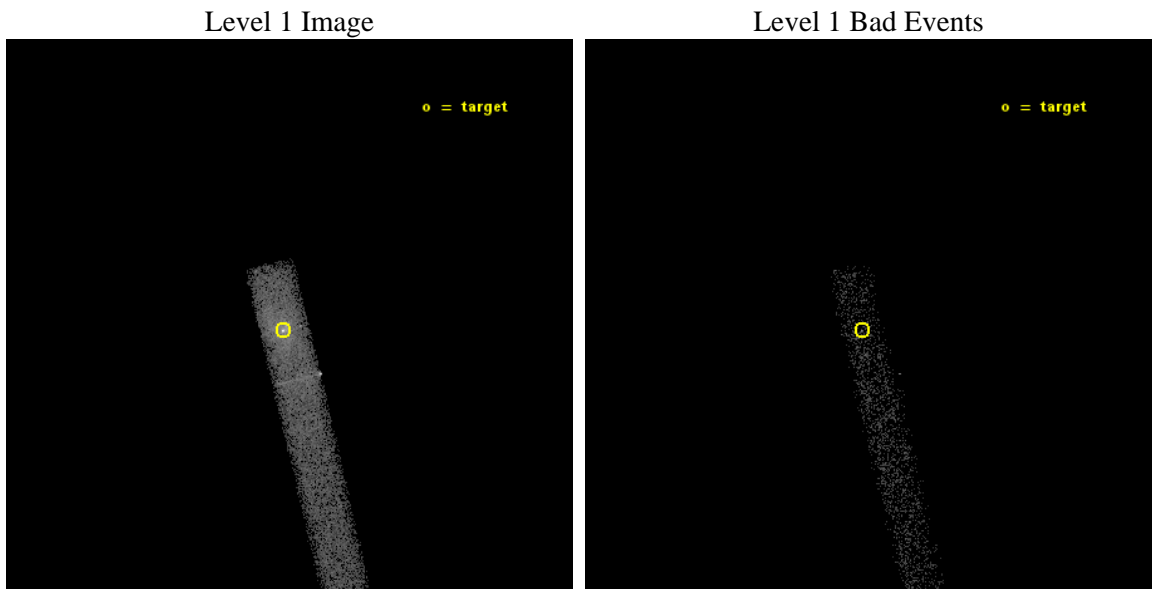
seq_num	601122	Sequence number
obs_id	16210	Observation id
title	Monitoring the Tidal Disruption of the Gas Cloud G2 As It Encounters Sgr A*	Proposal title
observer	Dr. Daryl Haggard	Principal investigator
object	Sgr A*	Source name
dtycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.41423959232	Nominal RA [deg]
dec_nom	-29.005619609676	Nominal Dec [deg]
roll_nom	76.155459016971	Nominal Roll [deg]
revision	2	Processing version of data
ontime	18768.654399514	Sum of GTIs [s]
livetime	17022.17884955	Livetime [s]
ontime7	18768.654399514	Sum of GTIs [s]
l2events	20961	Number of level 2 events



## 2 OBI

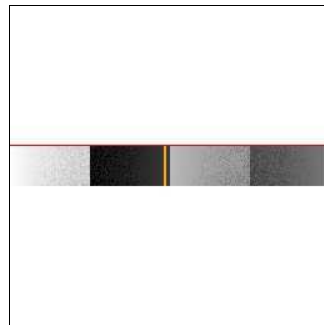
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18700.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	18768.654399514	Sum of GTIs [s]
caldbver	4.6.4	&#160	ontime7	18768.654399514	Sum of GTIs [s]
date	2014-12-12T01:27:24	Date and time of file creation	l1events	29831	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

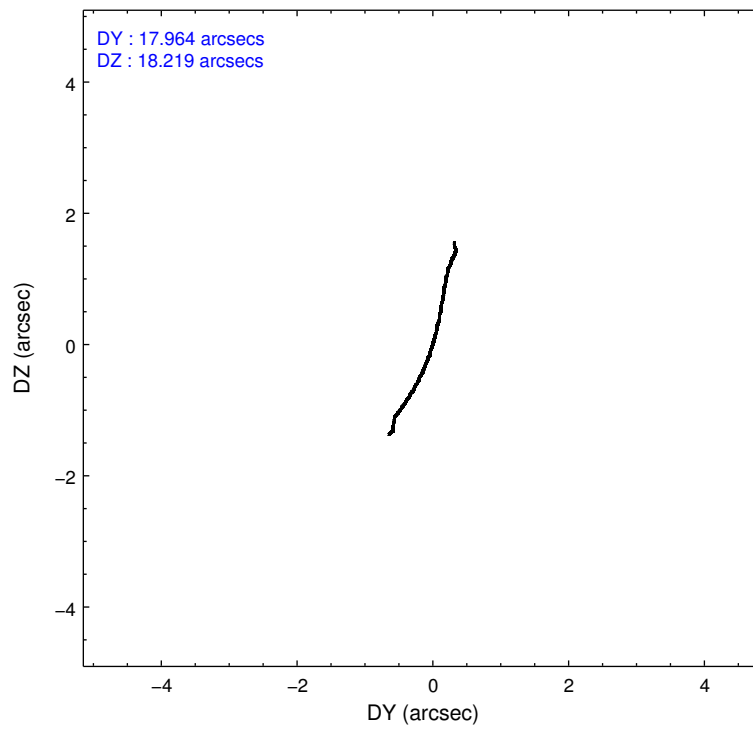
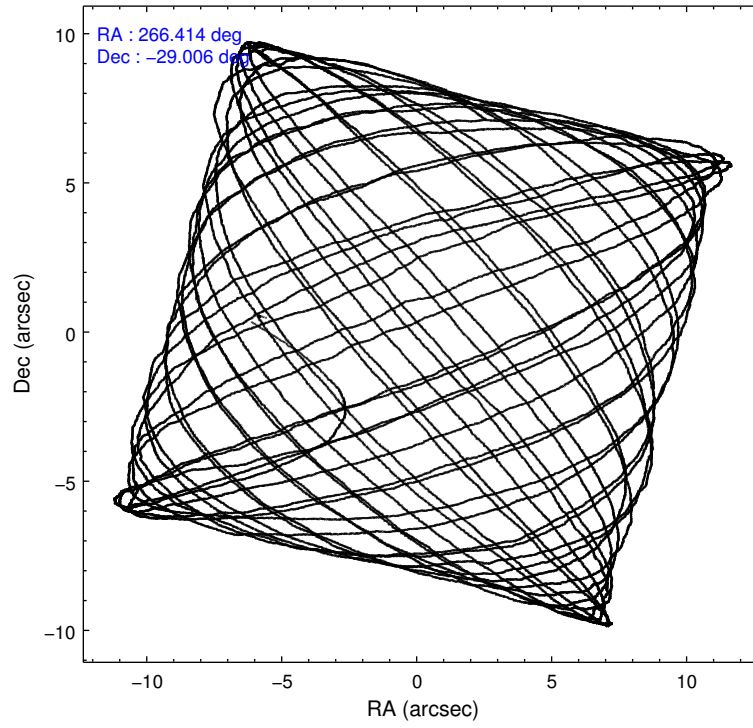
	<b>ccd 7</b>
level 1 events	29831
rejected events	8488
rejected %	28%

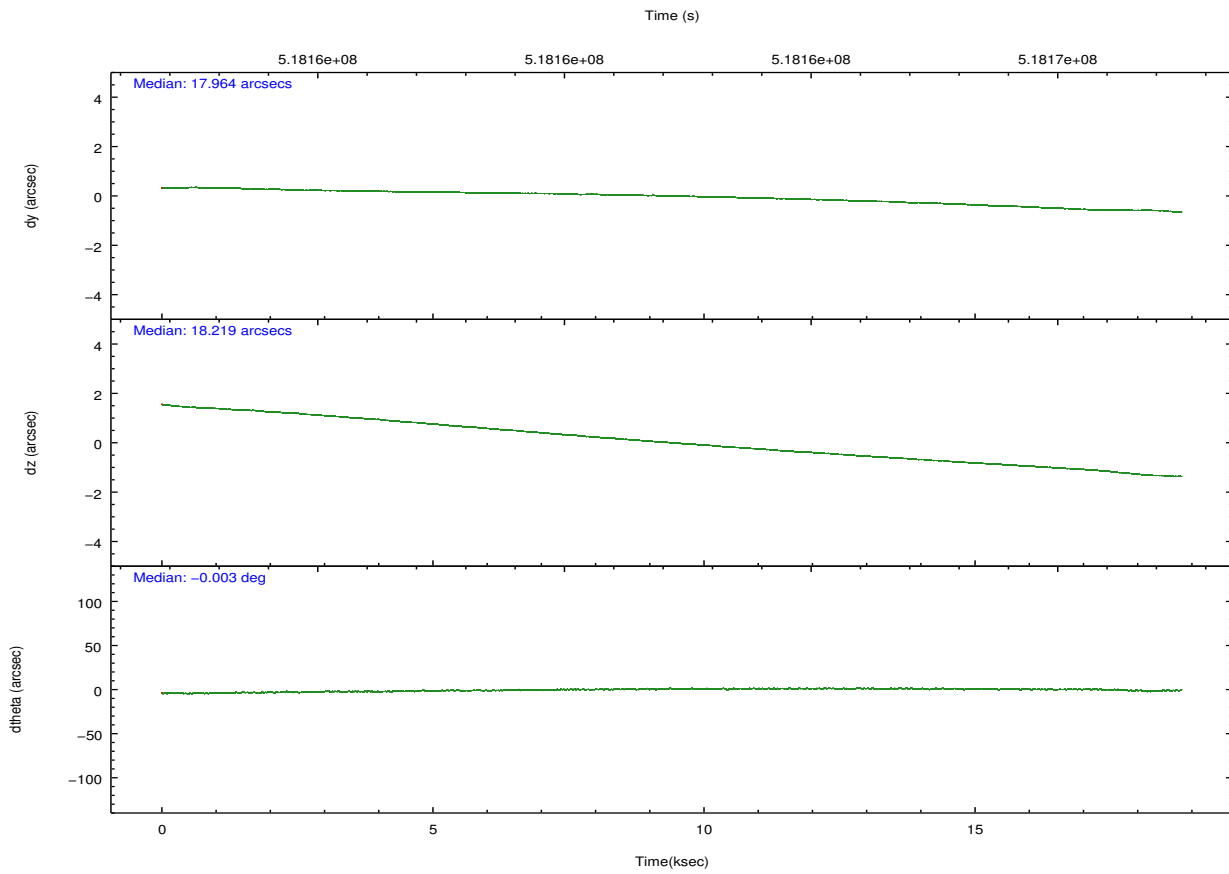
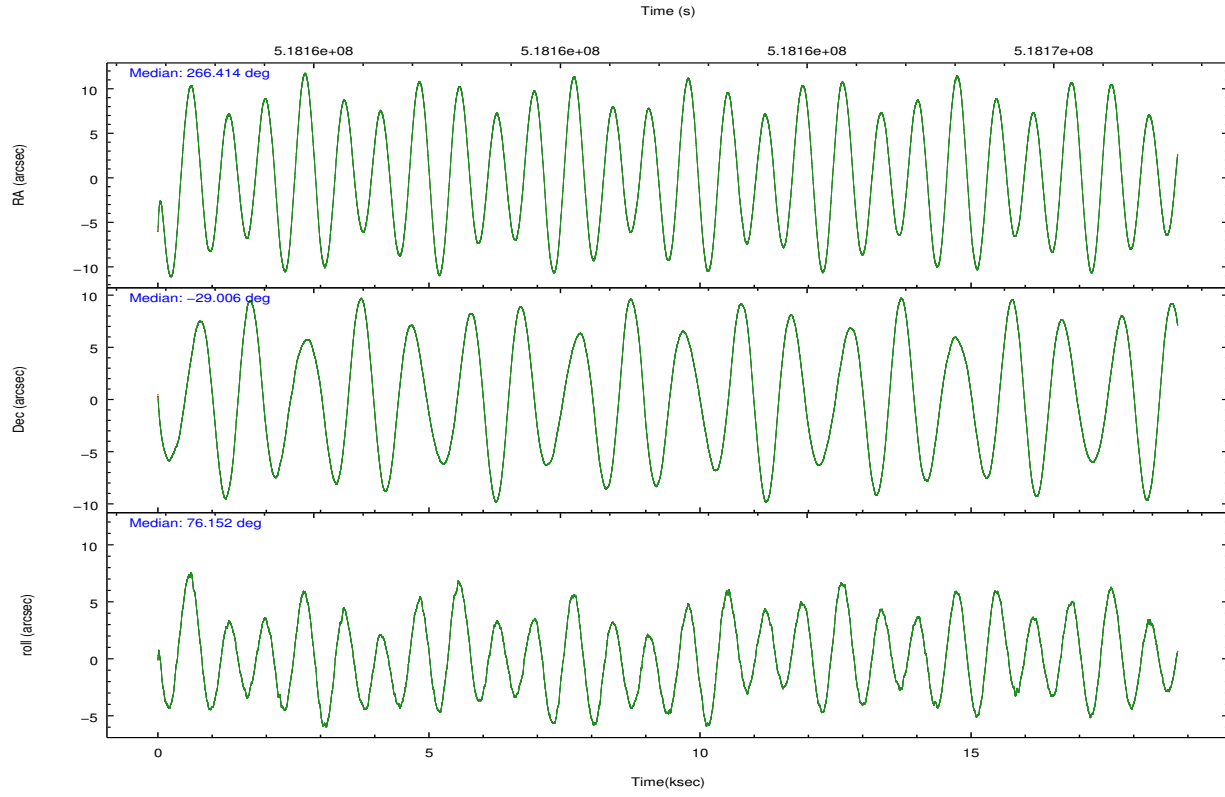
	<b>ccd 7</b>
grade 0 events	3534
	11%
grade 1 events	30
	0%
grade 2 events	4801
	16%
grade 3 events	2427
	8%
grade 4 events	2409
	8%
grade 5 events	1781
	5%
grade 6 events	8176
	27%
grade 7 events	6673
	22%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.423395	266.4142395923198	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-29.031775	-29.00561960967561	Subarray start row	449	449
[deg] Pointing Roll	76.003270	76.15545901697138	Subarray row count	128	128
[s] Window start time (MET)	517968067.184000	517968067.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	518745667.184000	518745667.184000	[s] Primary exposure time	0.000000	0.4
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	518152880.184000	518151563.12301			
Observation start date	2014-06-03T03:20:13	2014-06-03T02:59:23			
[s] Observation end time (MET)	518171580.184000	518172034.93664			
Observation end date	2014-06-03T08:31:53	2014-06-03T08:40:34			
Read mode	TIMED	TIMED			

## 2.3 Aspect





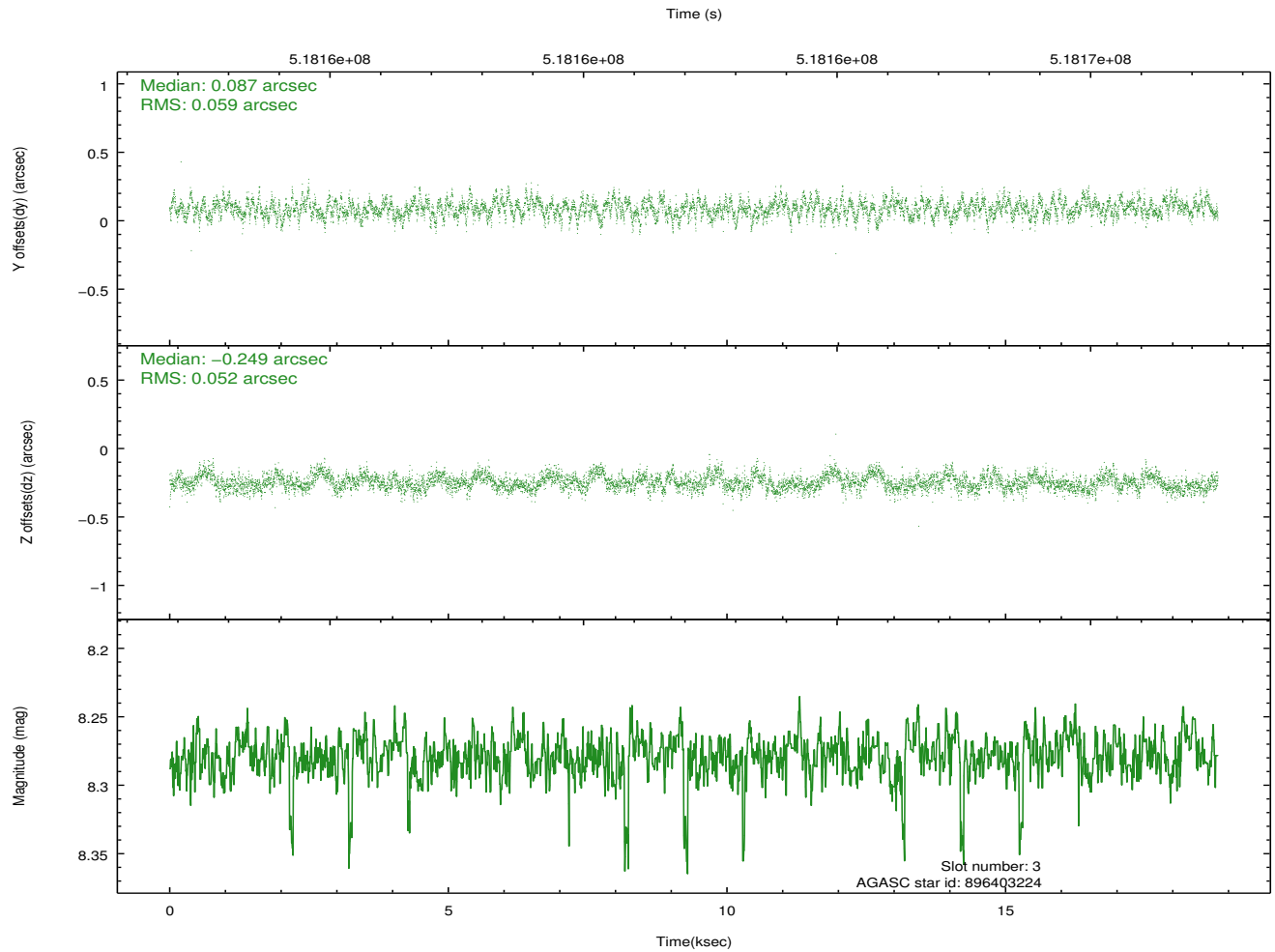
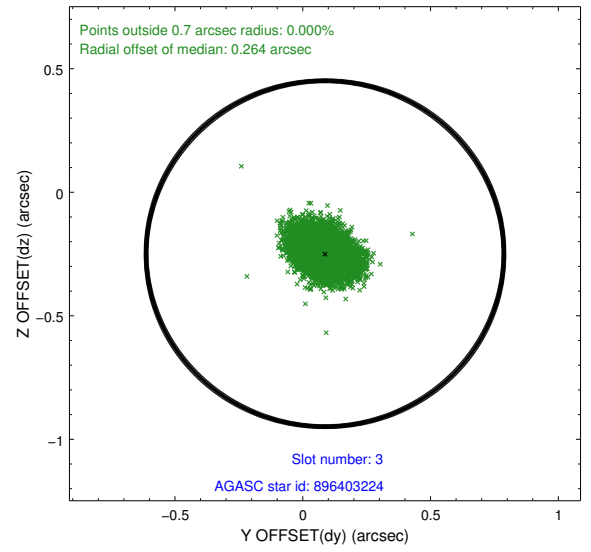
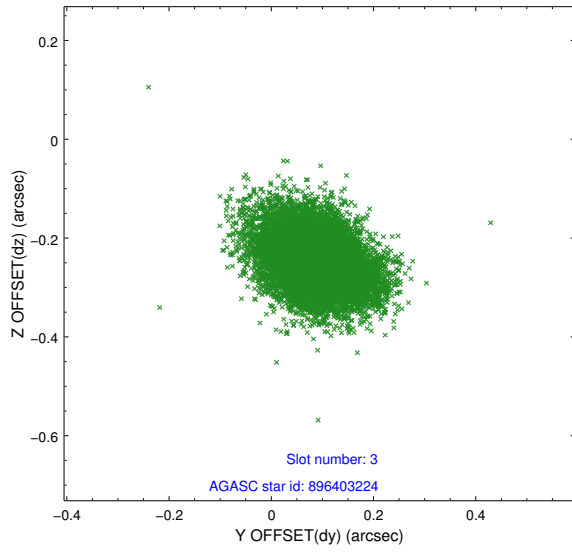
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	4589	-0.093	-0.037	0.017	0.028	0.000000	0.000000	-771.06	-1739.71
1	FID		ACIS-S-4	7.04	4589	0.239	0.057	0.018	0.025	0.000000	0.000000	2142.48	168.61
2	FID		ACIS-S-5	7.07	4588	-0.176	-0.010	0.015	0.023	0.000000	0.000000	-1823.69	162.50
3	GUIDE	used	896403224	8.28	9172	0.087	-0.249	0.083	0.137	265.612825	-29.438915	-2045.53	2108.74
4	GUIDE	used	896537776	7.53	9176	0.238	0.206	0.056	0.088	266.655684	-29.665673	-2038.94	-1256.89
5	GUIDE	used	896541360	7.73	9177	0.217	0.197	0.058	0.094	266.684478	-29.453744	-1276.64	-1161.76
6	GUIDE	used	896538696	6.79	9177	-0.456	-0.352	0.055	0.087	266.298470	-28.325572	2370.46	998.76
7	GUIDE	used	896538208	7.96	9172	-0.088	0.193	0.077	0.122	267.176969	-28.671626	1826.98	-1997.38

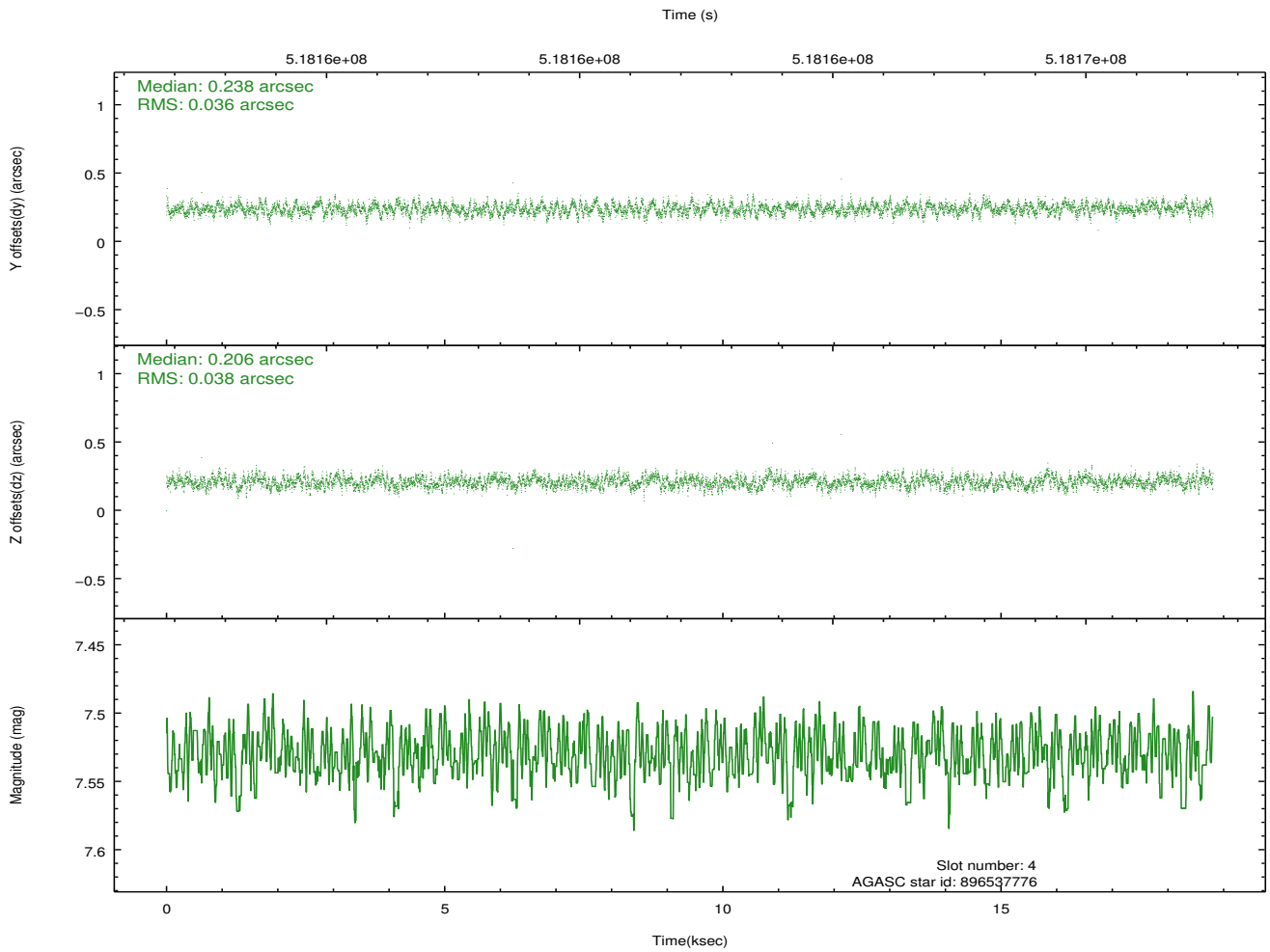
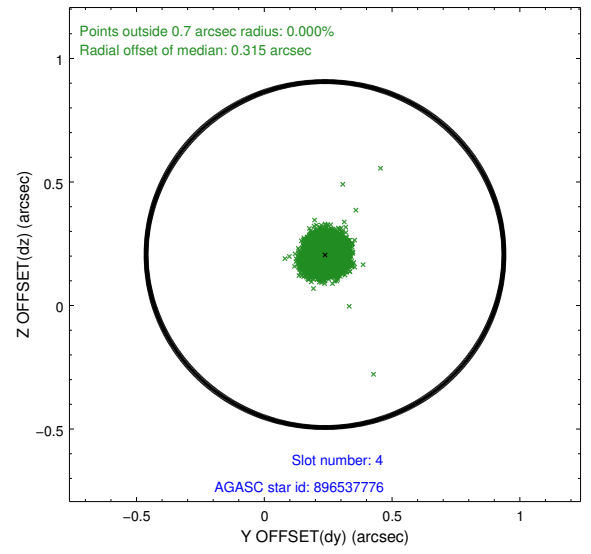
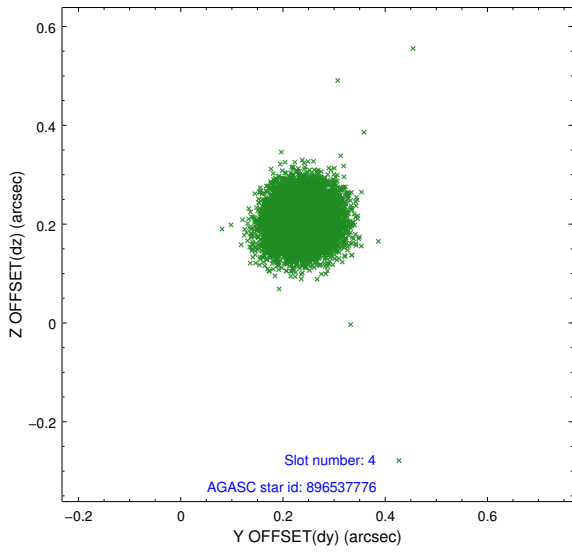
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## 2.4 Star Slots

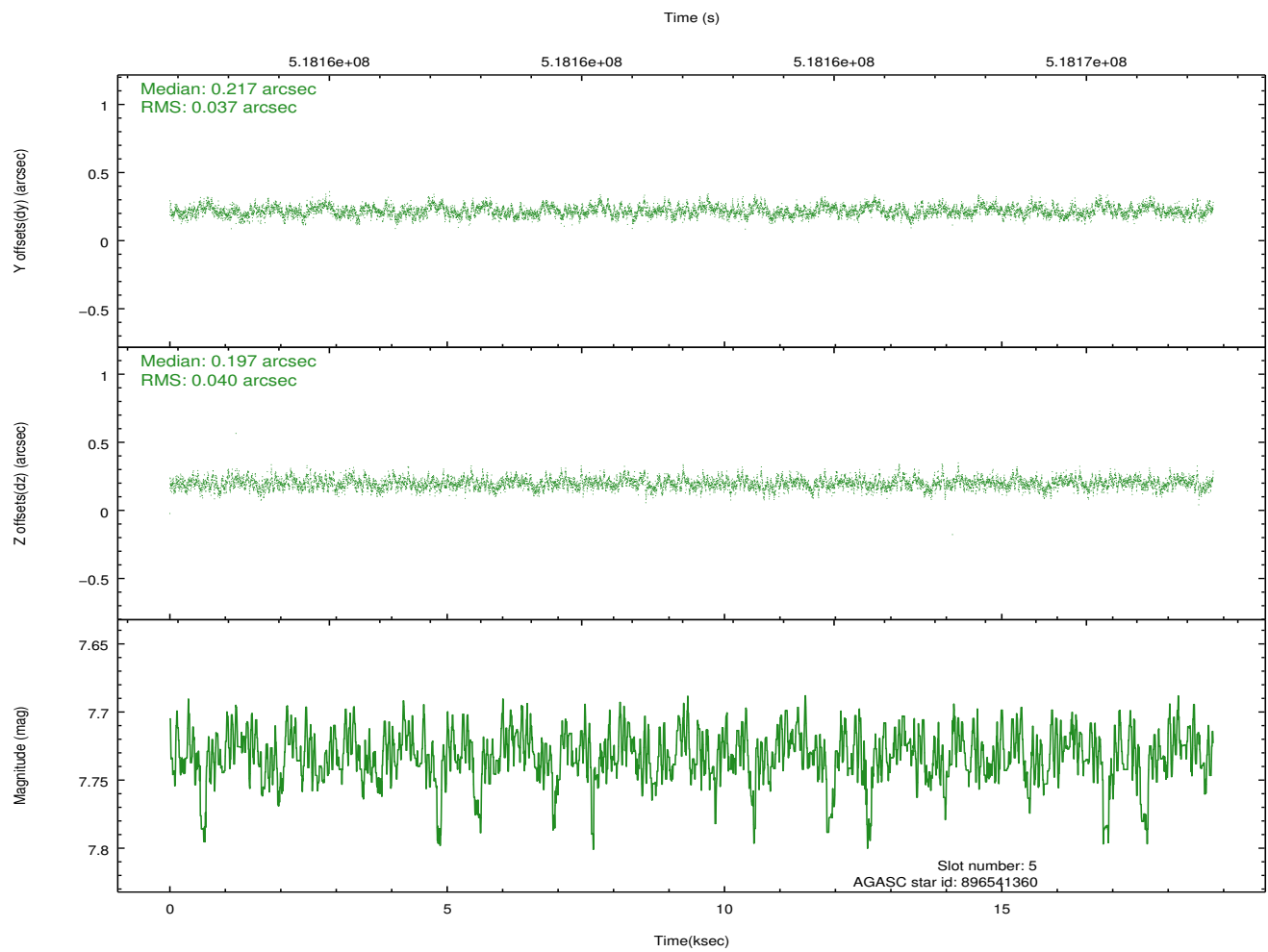
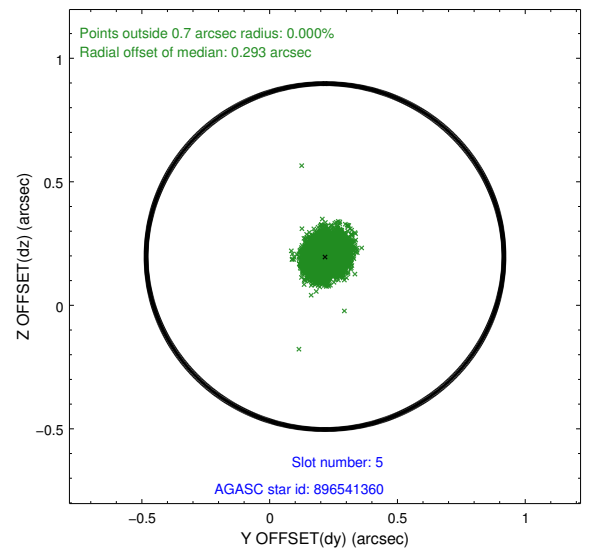
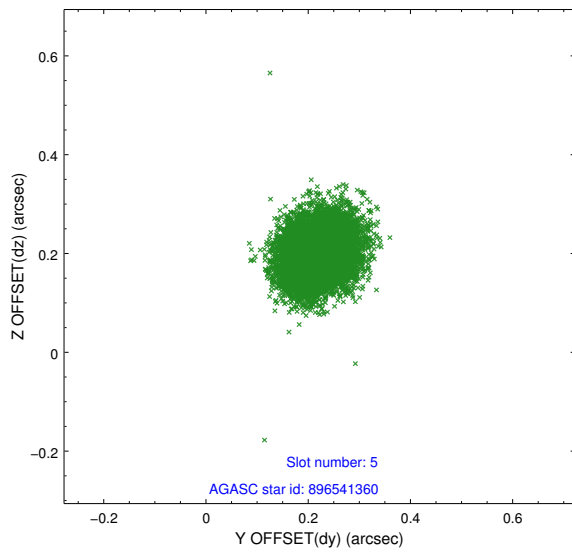
### 2.4.1 Slot 3



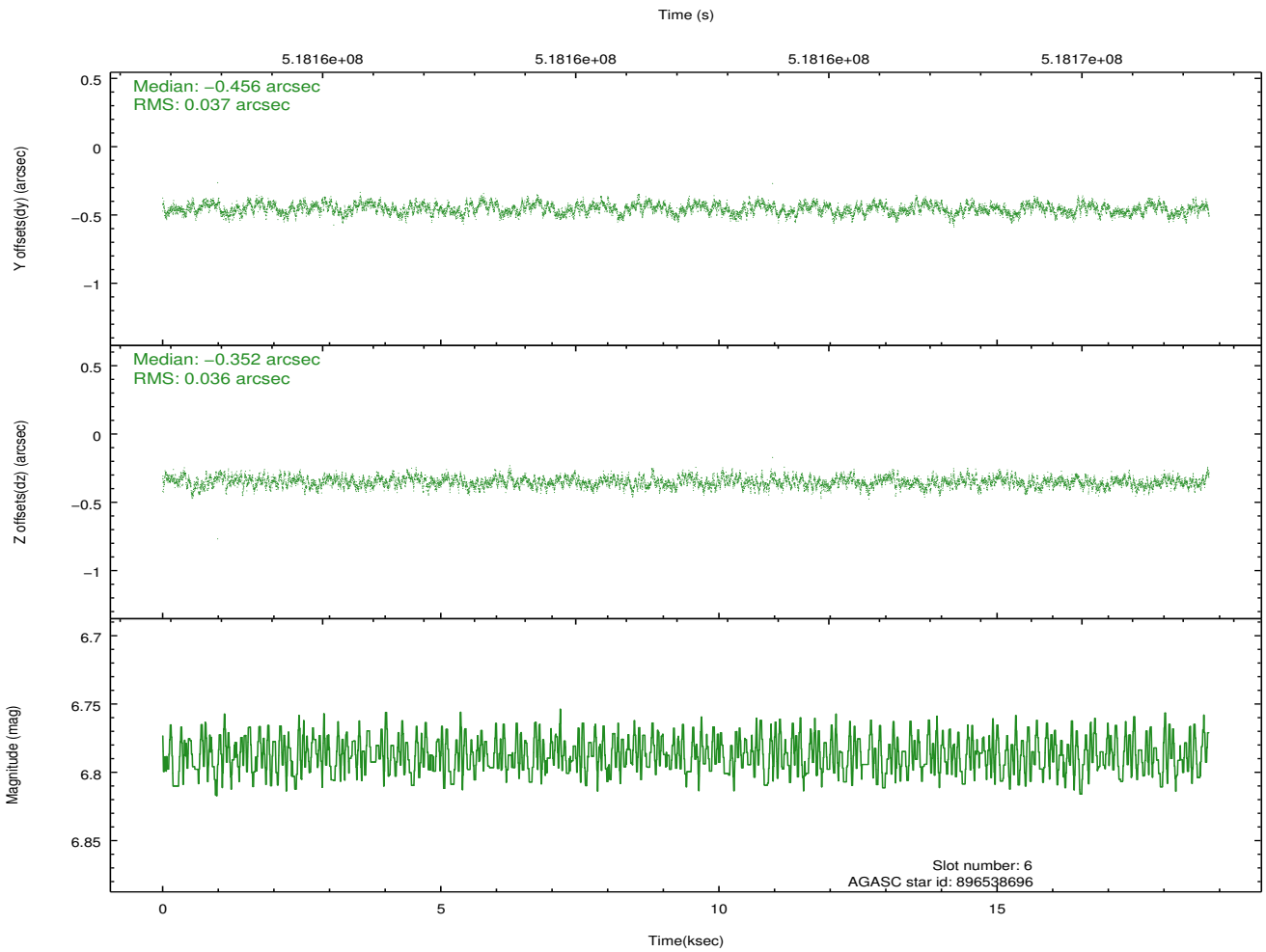
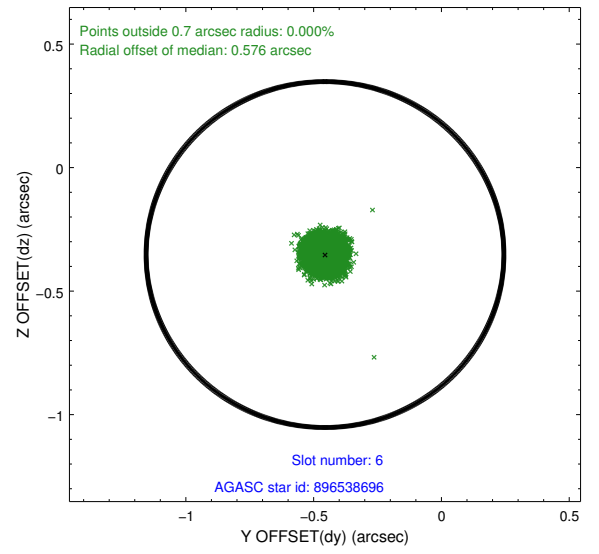
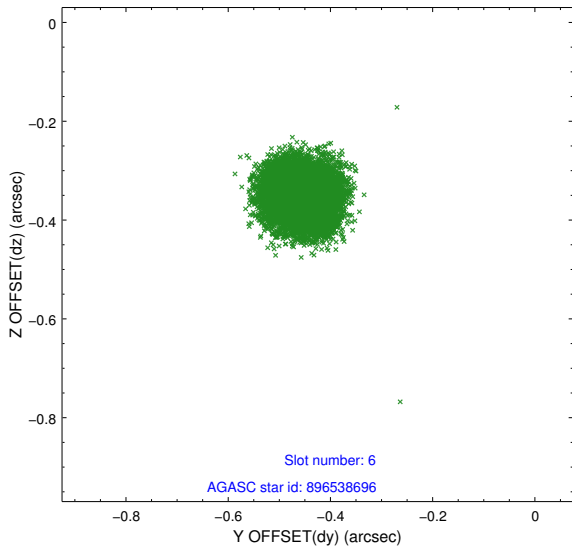
### 2.4.2 Slot 4



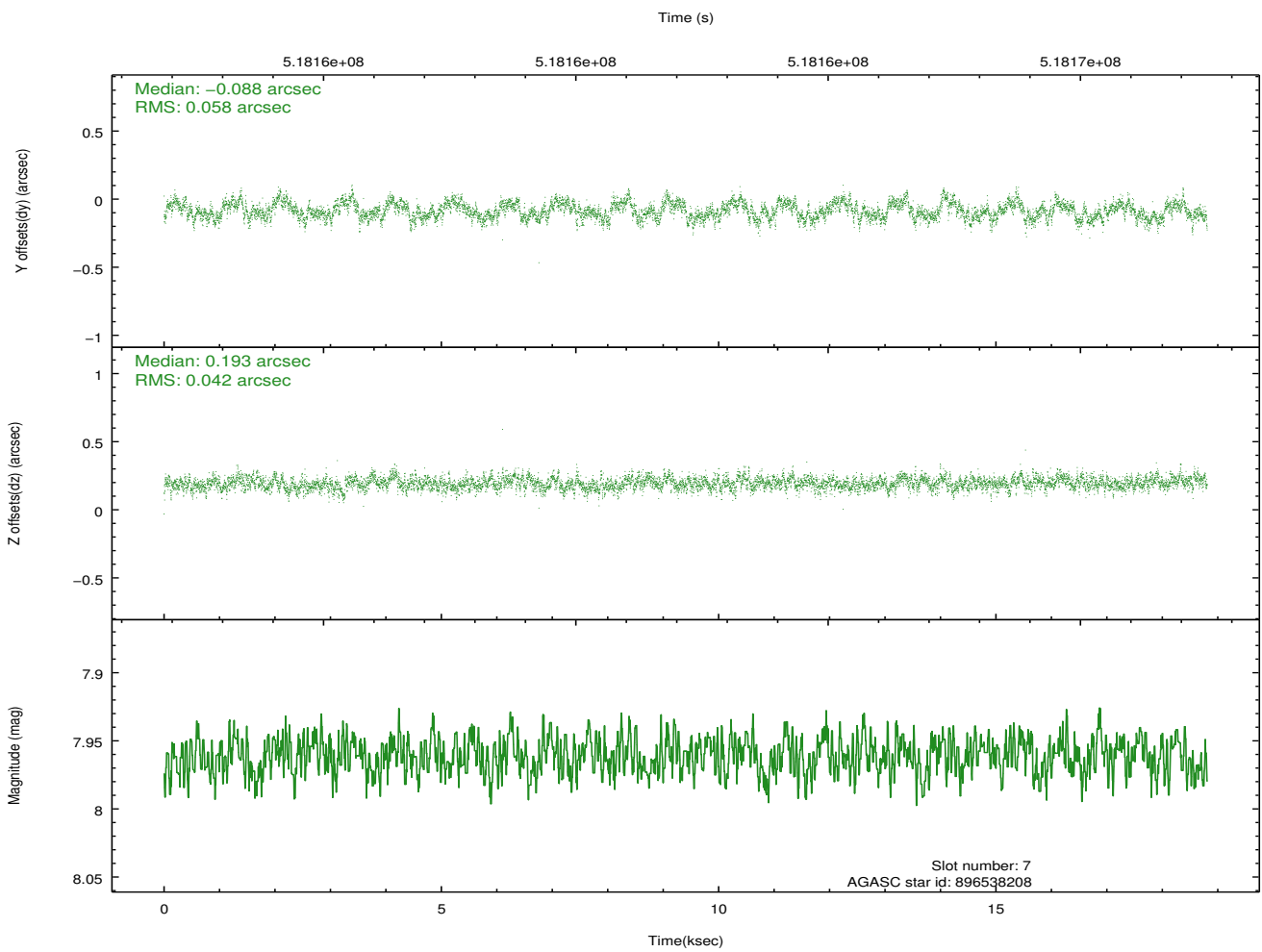
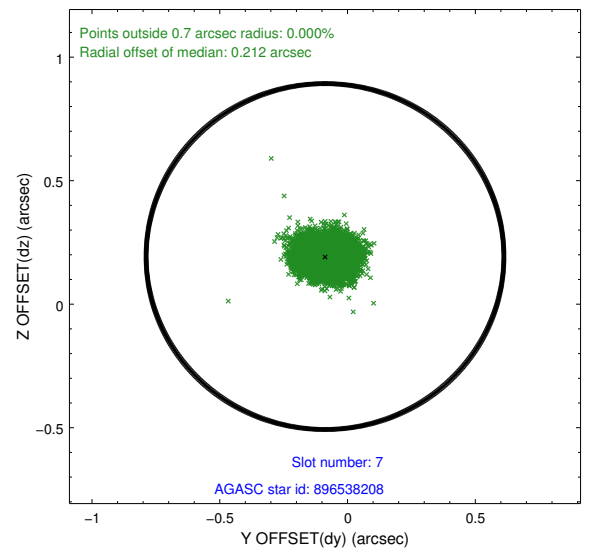
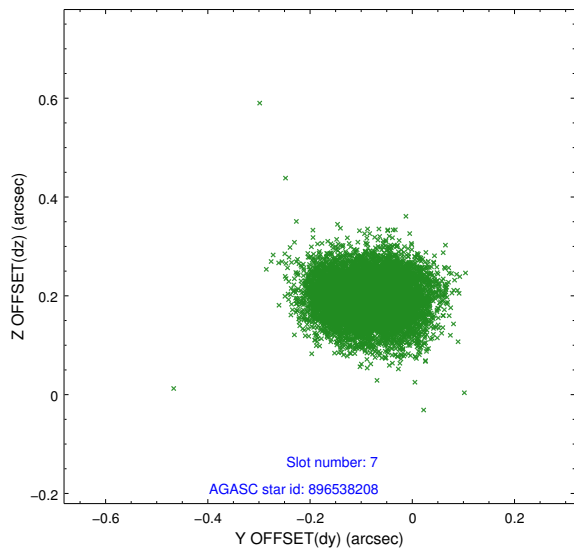
### 2.4.3 Slot 5



## 2.4.4 Slot 6

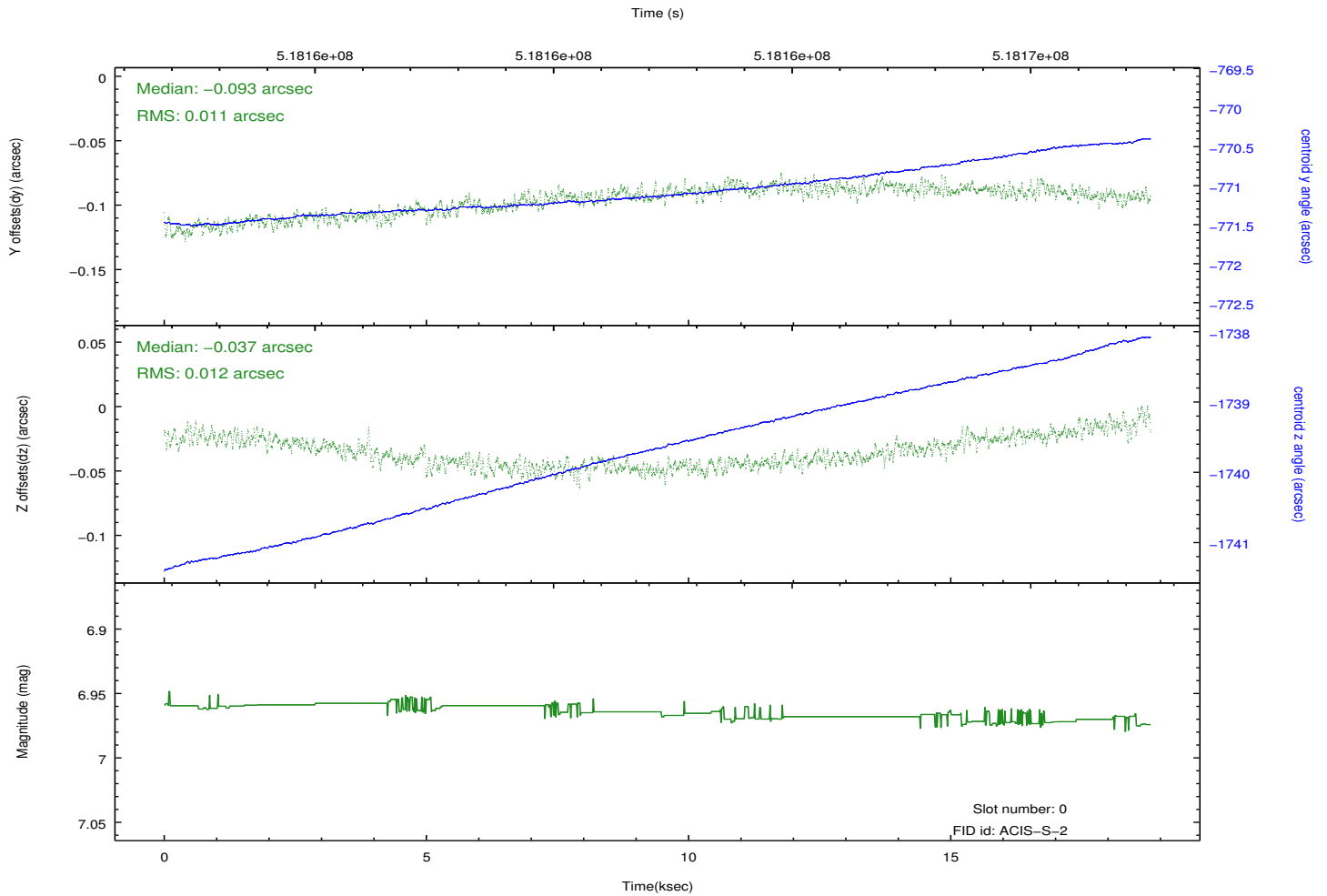
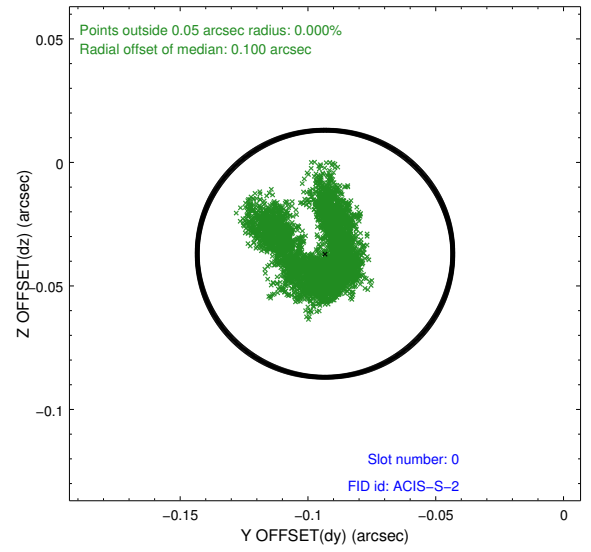
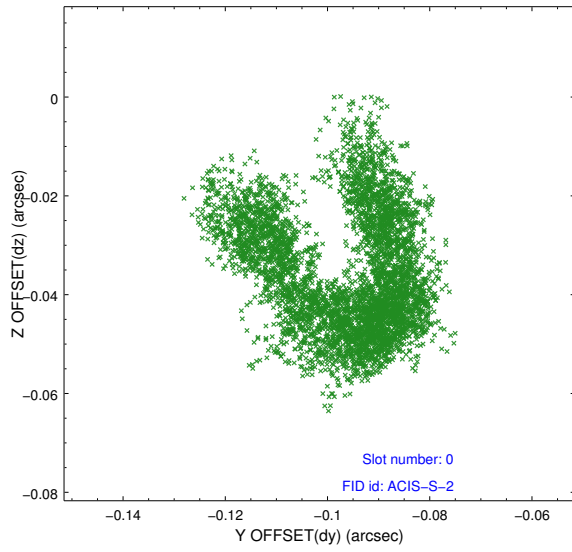


## 2.4.5 Slot 7

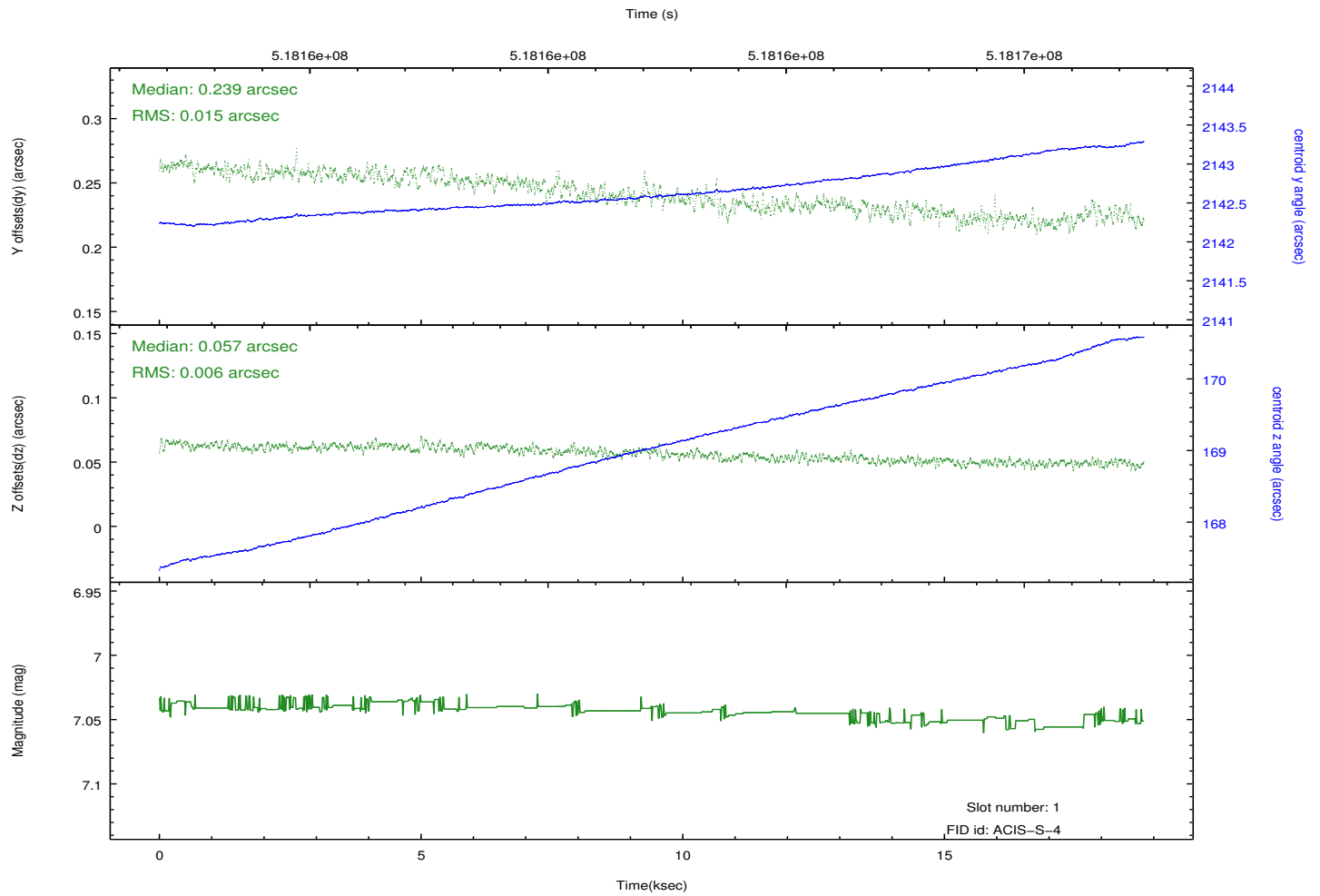
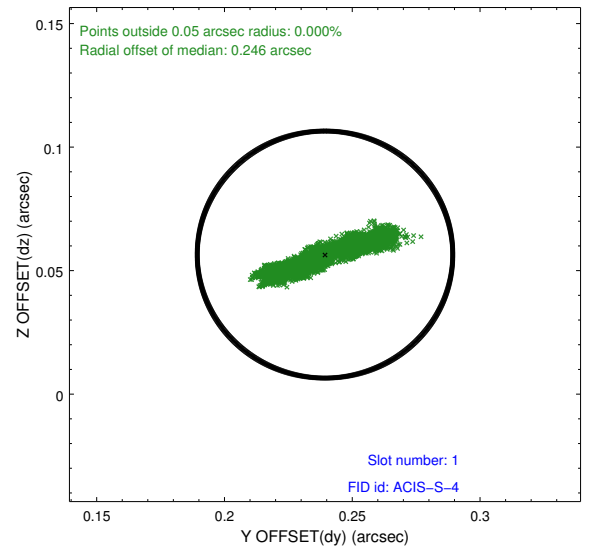
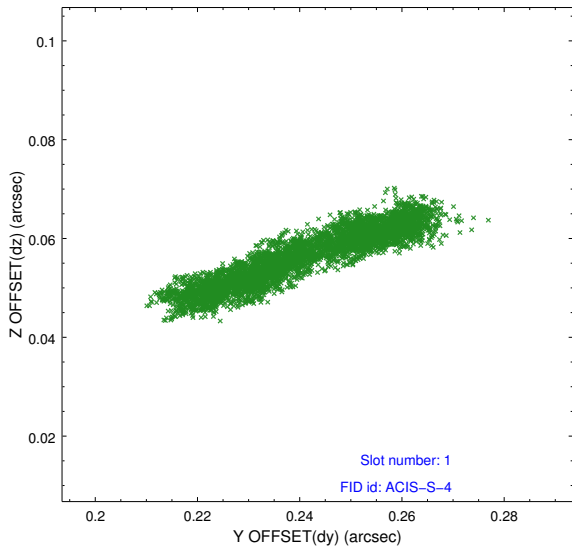


## 2.5 FID Slots

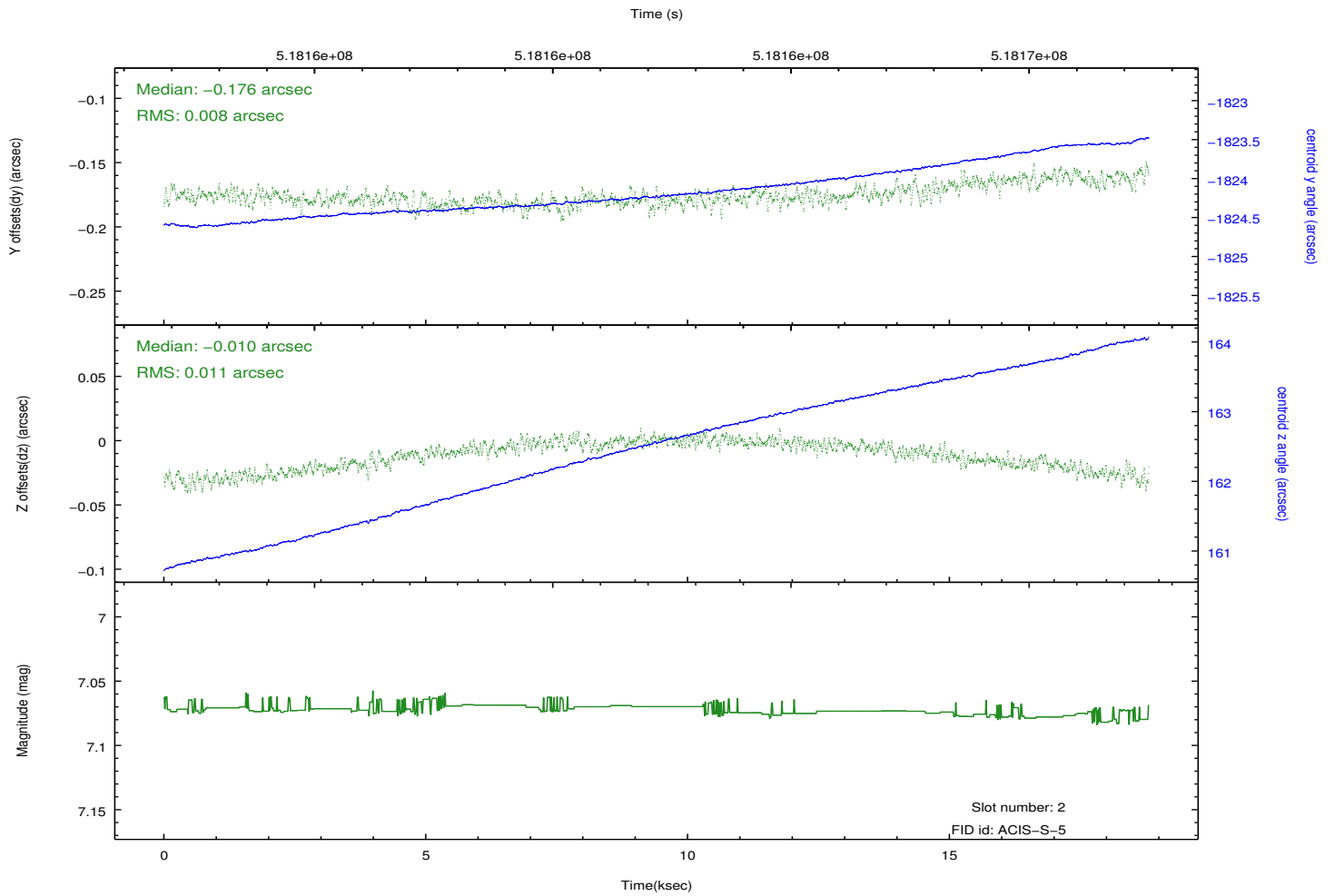
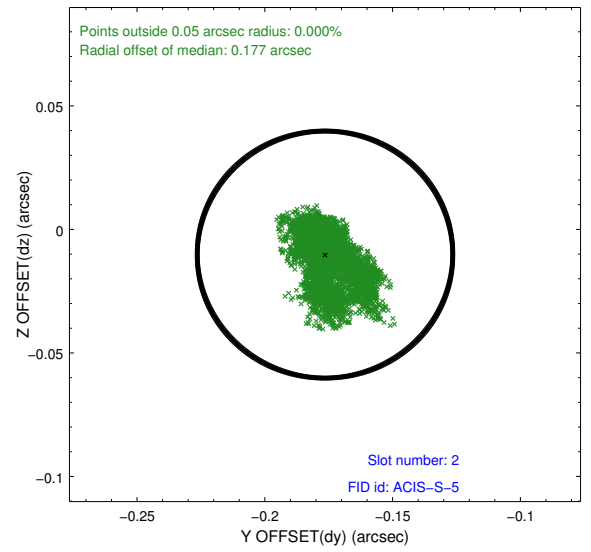
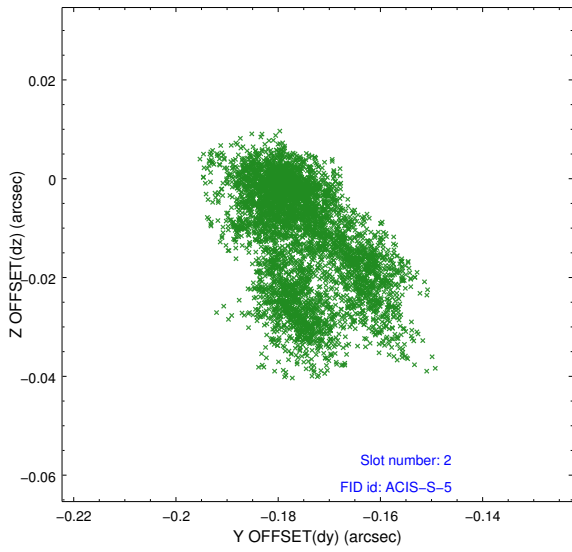
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.768654399514

## A.2 Comments

Joint proposal with NRAO.

Observation coordinated with Spitzer.

Window preference met.

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.