

# V&V Reference Report

## L2 ASCDS Version : 10.2.2

Observation 16597 - L2 Version 2  
Chandra X-Ray Center

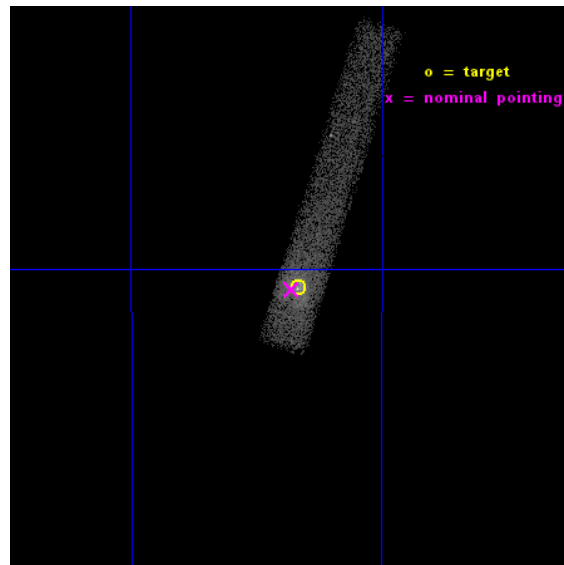
L2 Processing Date : Dec 12 2014

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# 1 Front

seq_num	601122	Sequence number
obs_id	16597	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
dtcycle	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	266.42001805358	Nominal RA [deg]
dec_nom	-29.008552126517	Nominal Dec [deg]
roll_nom	287.87506979953	Nominal Roll [deg]
revision	2	Processing version of data
ontime	18153.598917961	Sum of GTIs [s]
livetime	16464.355993072	Livetime [s]
ontime7	18153.598917961	Sum of GTIs [s]
l2events	17814	Number of level 2 events

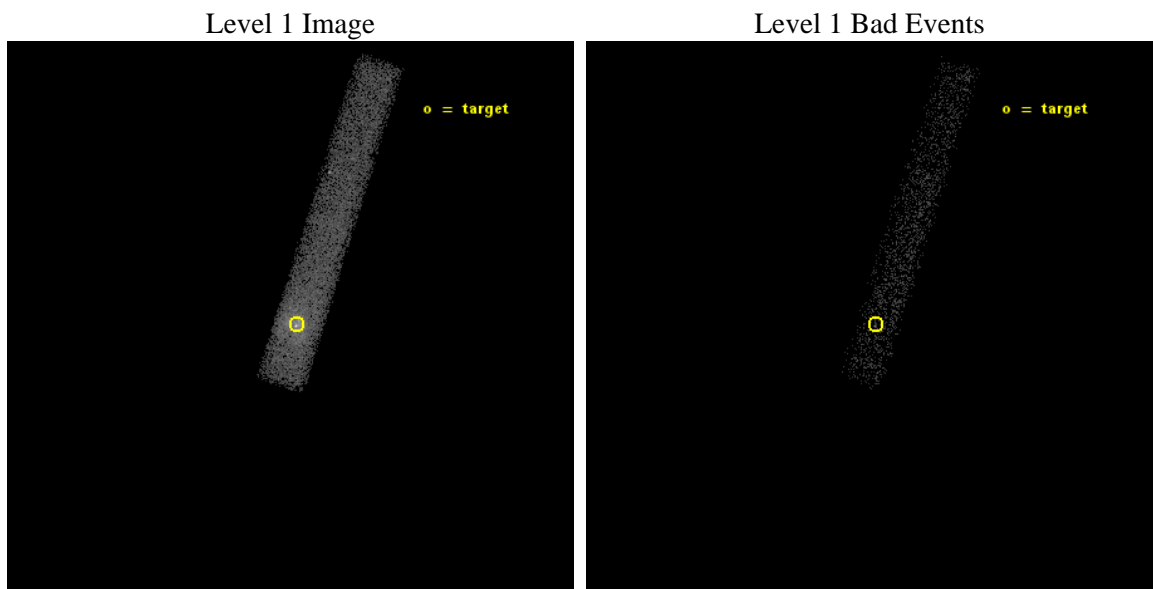




## 2 OBI

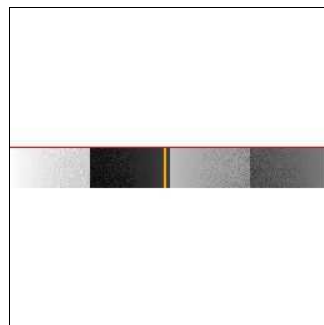
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	18300.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	18153.598917961	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime7	18153.598917961	Sum of GTIs [s]
date	2014-12-12T20:26:31	Date and time of file creation	l1events	26264	Number of level 1 events
revision	2	Processing version of data			

### 2.1.4 Events

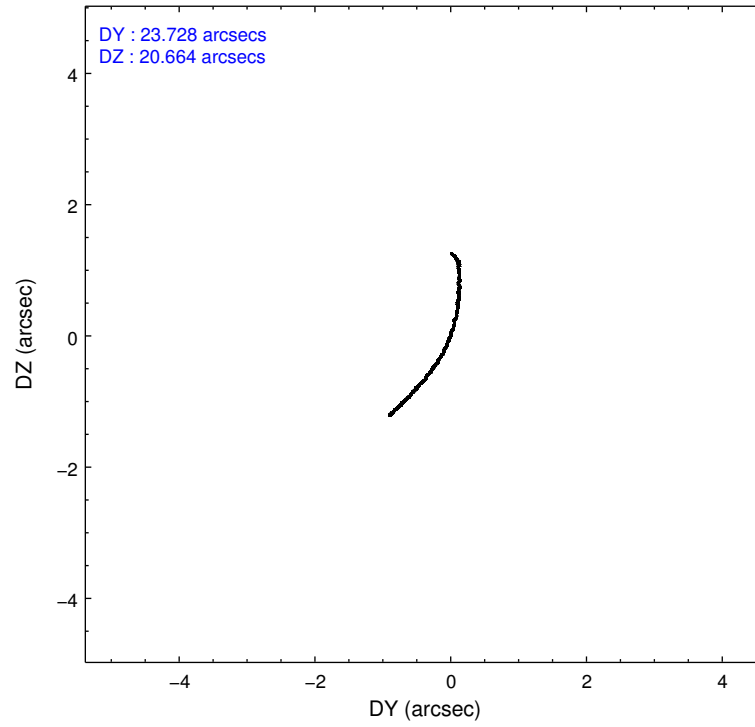
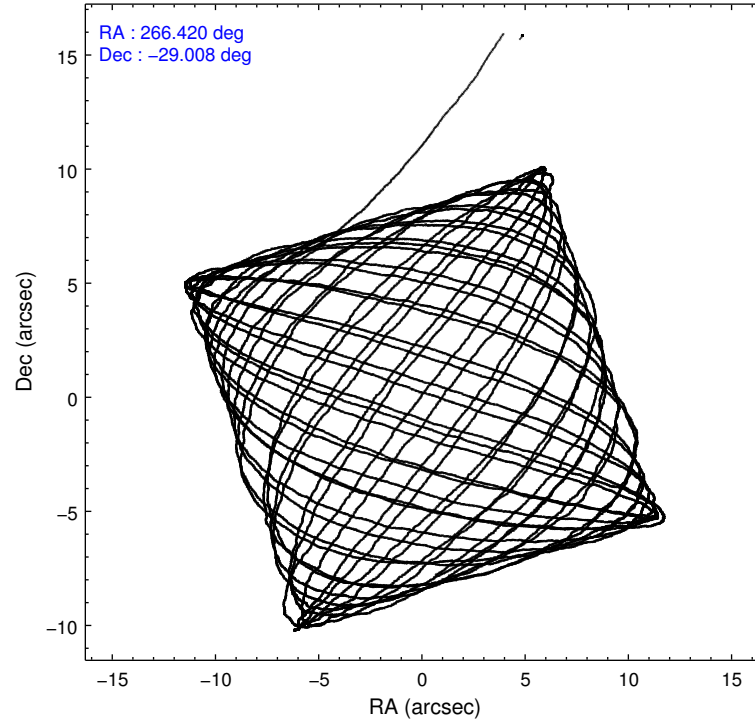
	<b>ccd 7</b>
level 1 events	26264
rejected events	8073
rejected %	30%

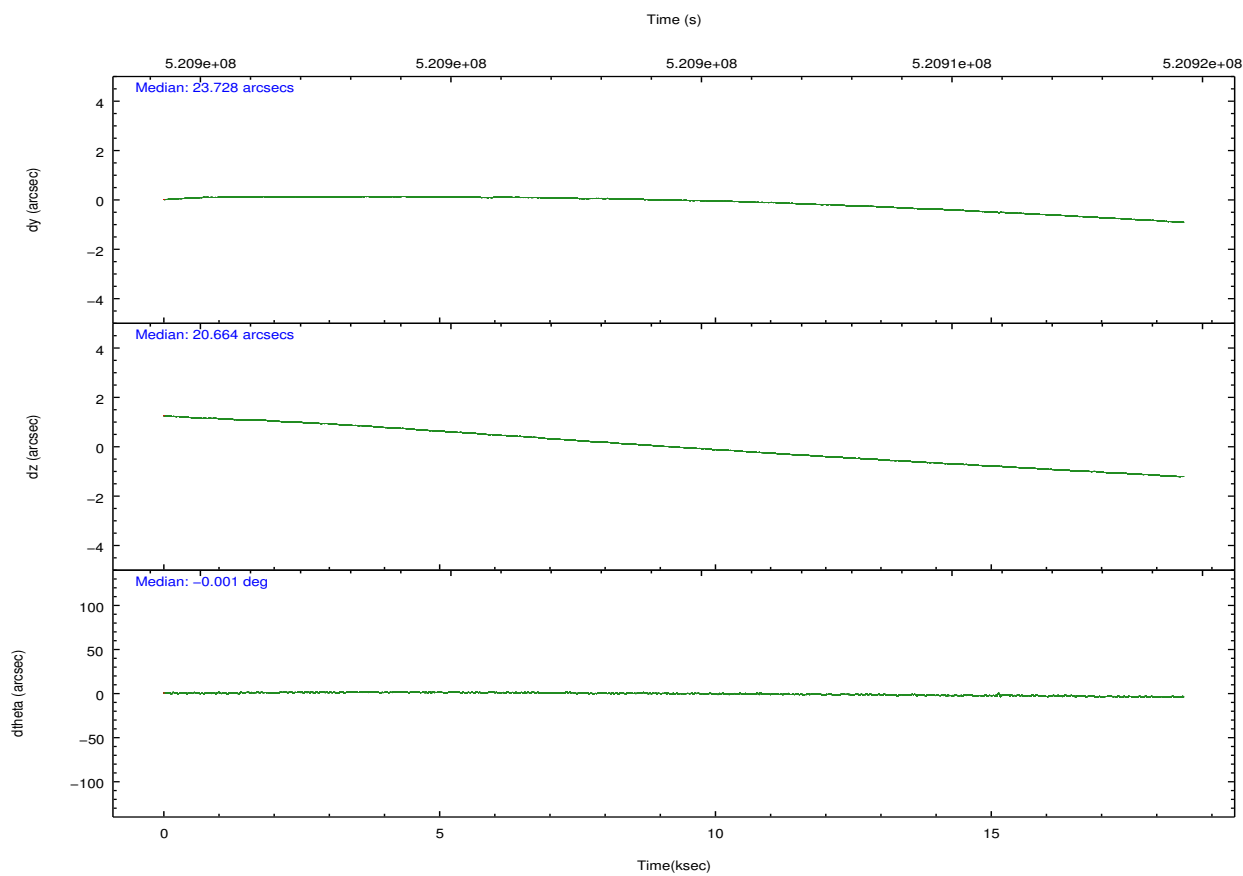
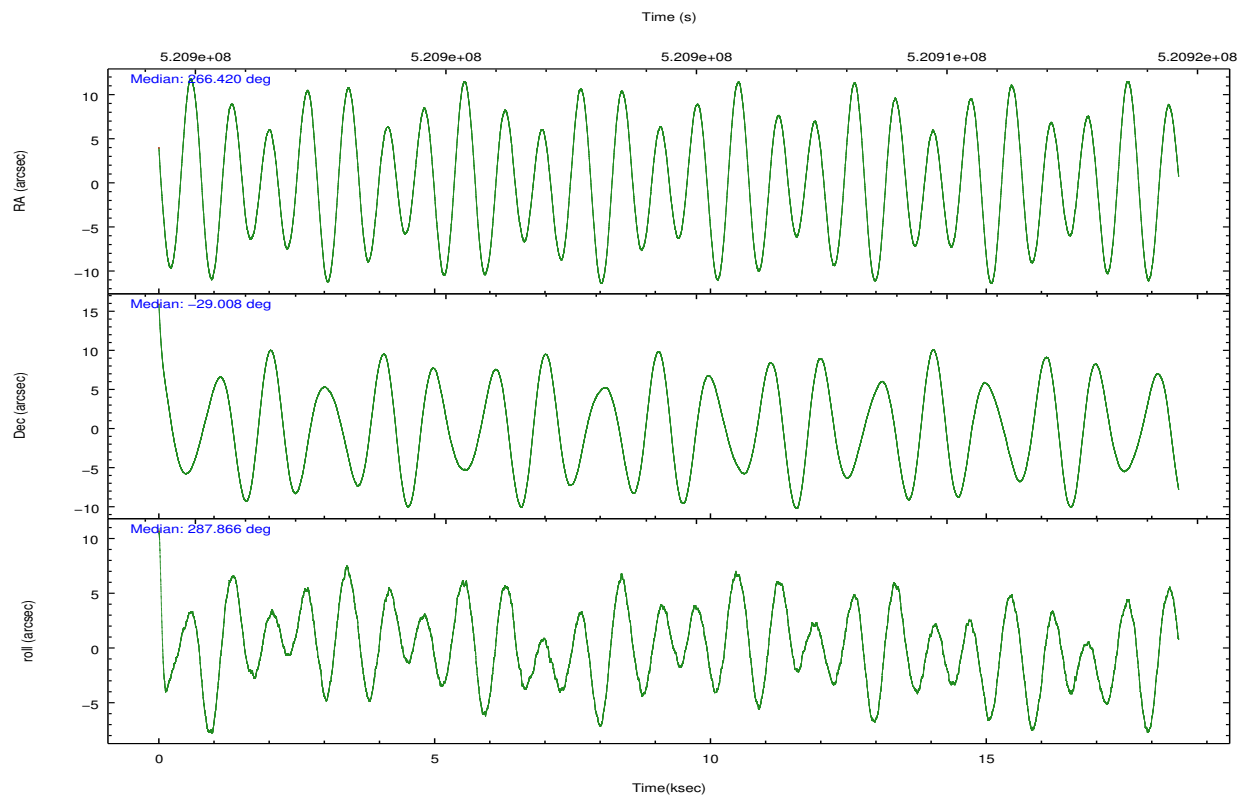
	<b>ccd 7</b>
grade 0 events	2846
	10%
grade 1 events	20
	0%
grade 2 events	4091
	15%
grade 3 events	2195
	8%
grade 4 events	2035
	7%
grade 5 events	1699
	6%
grade 6 events	7024
	26%
grade 7 events	6354
	24%

## 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	266.396548	266.4200180535789	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-28.990504	-29.00855212651707	Subarray start row	449	449
[deg] Pointing Roll	287.707051	287.875069799525	Subarray row count	128	128
[s] Window start time (MET)	520560067.184000	520560067.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	521337667.184000	521337667.184000	[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	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	520895388.184000	520894092.73724			
Observation start date	2014-07-04T21:08:41	2014-07-04T20:48:12			
[s] Observation end time (MET)	520913688.184000	520914092.53835			
Observation end date	2014-07-05T02:13:41	2014-07-05T02:21:32			
Read mode	TIMED	TIMED			

## 2.3 Aspect



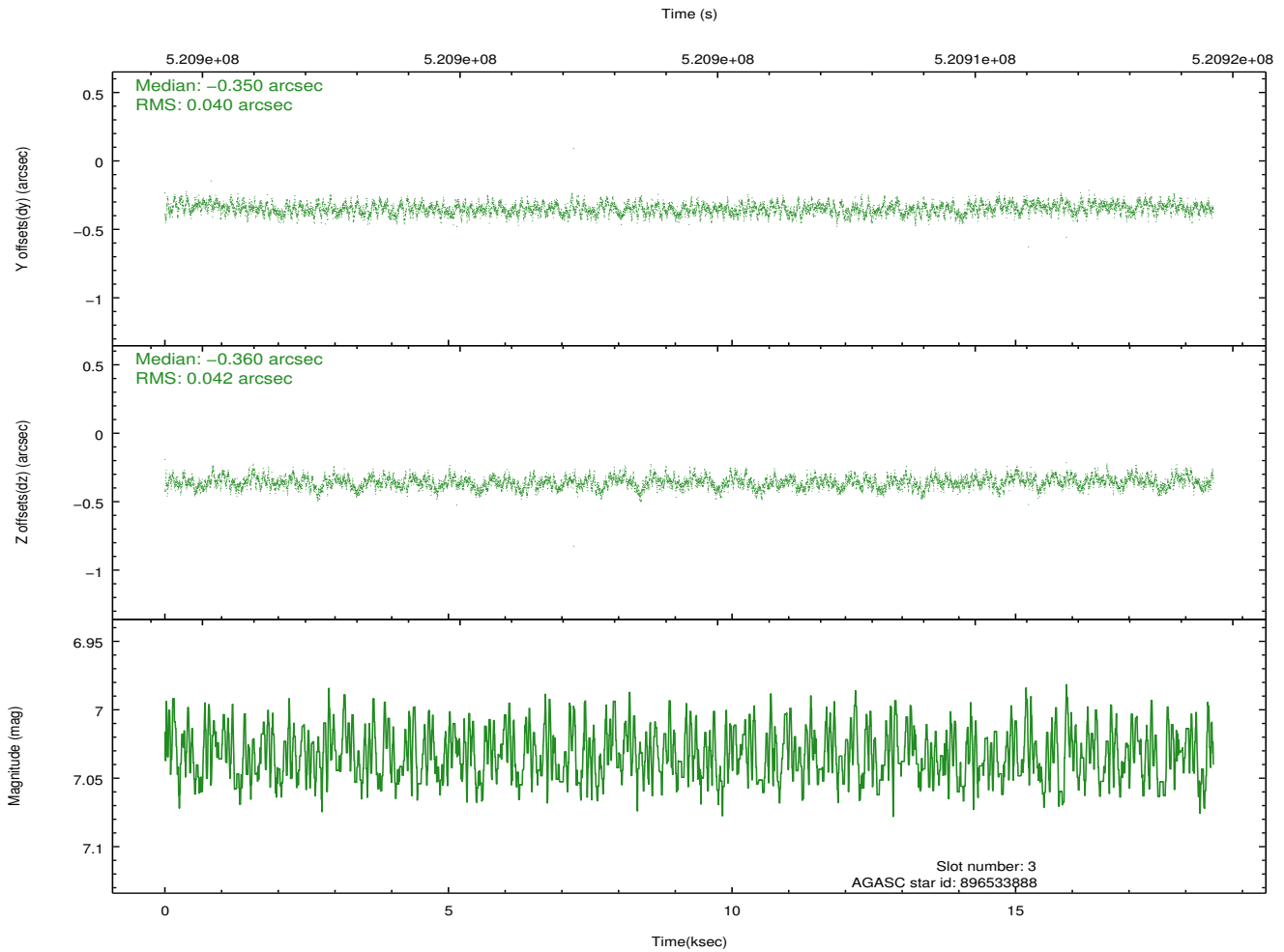
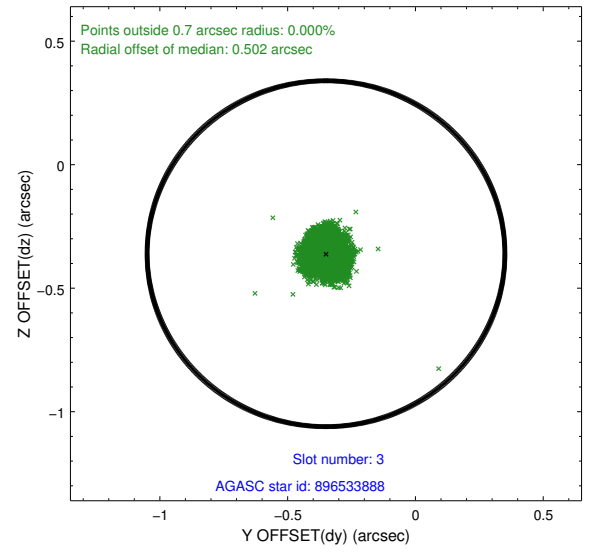
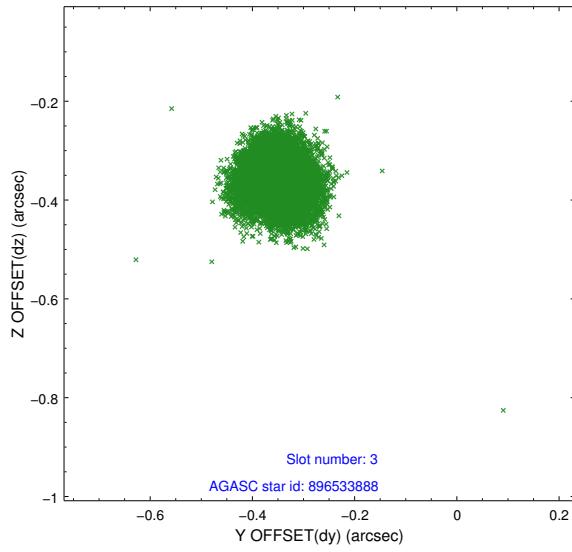


### Slot Statistics

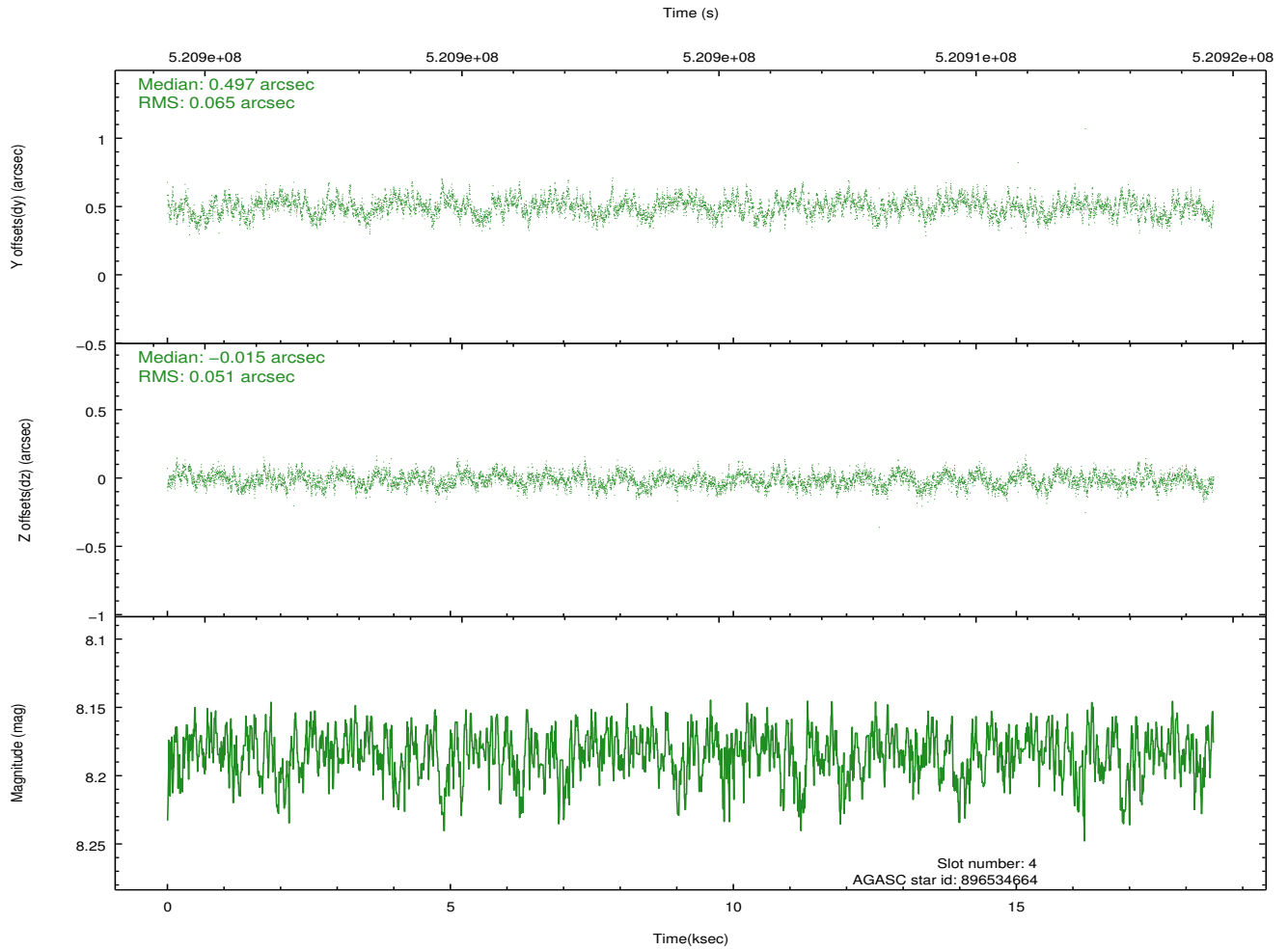
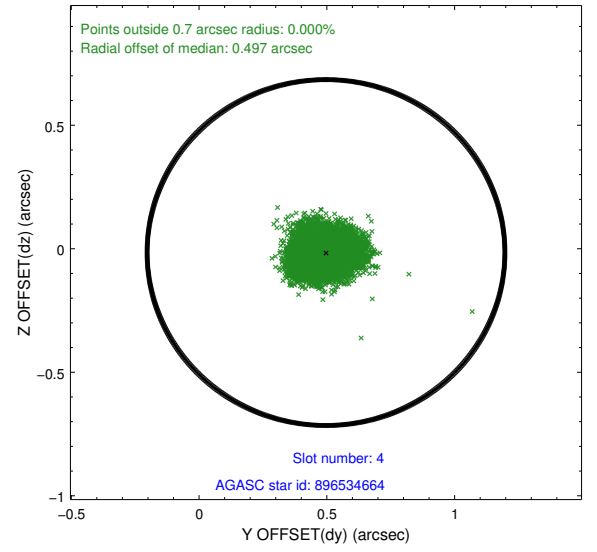
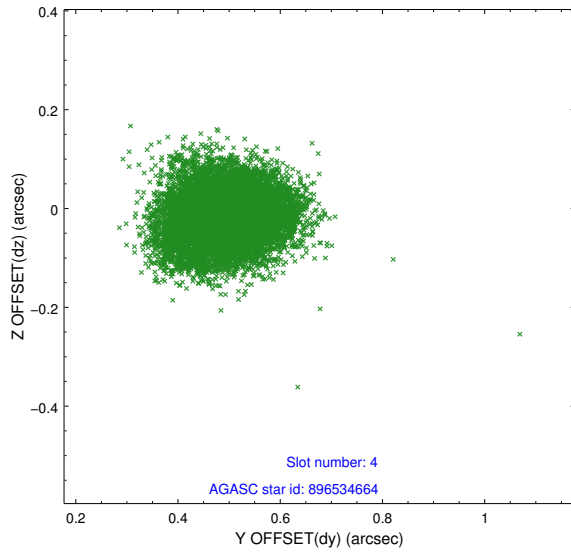
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.96	4510	-0.189	-0.114	0.007	0.012	0.000000	0.000000	-777.05	-1742.29
1	FID		ACIS-S-4	7.05	4510	0.217	0.108	0.009	0.015	0.000000	0.000000	2136.62	166.05
2	FID		ACIS-S-6	7.17	4510	-0.056	0.013	0.010	0.017	0.000000	0.000000	385.45	803.68
3	GUIDE	used	896533888	7.03	9015	-0.350	-0.360	0.063	0.097	266.666434	-29.392757	1638.14	365.70
4	GUIDE	used	896534664	8.18	9018	0.497	-0.015	0.089	0.140	266.405570	-28.407461	-1989.61	665.48
5	GUIDE	used	896540808	7.47	9017	-0.362	0.225	0.110	0.158	265.985401	-29.308604	700.81	-1577.99
6	GUIDE	used	896403520	8.98	9015	0.502	0.329	0.201	0.306	265.626481	-28.748780	-1559.23	-2053.10
7	GUIDE	used	896541576	8.18	9017	-0.284	-0.168	0.097	0.154	267.051055	-28.762912	-147.01	2214.82

## 2.4 Star Slots

### 2.4.1 Slot 3

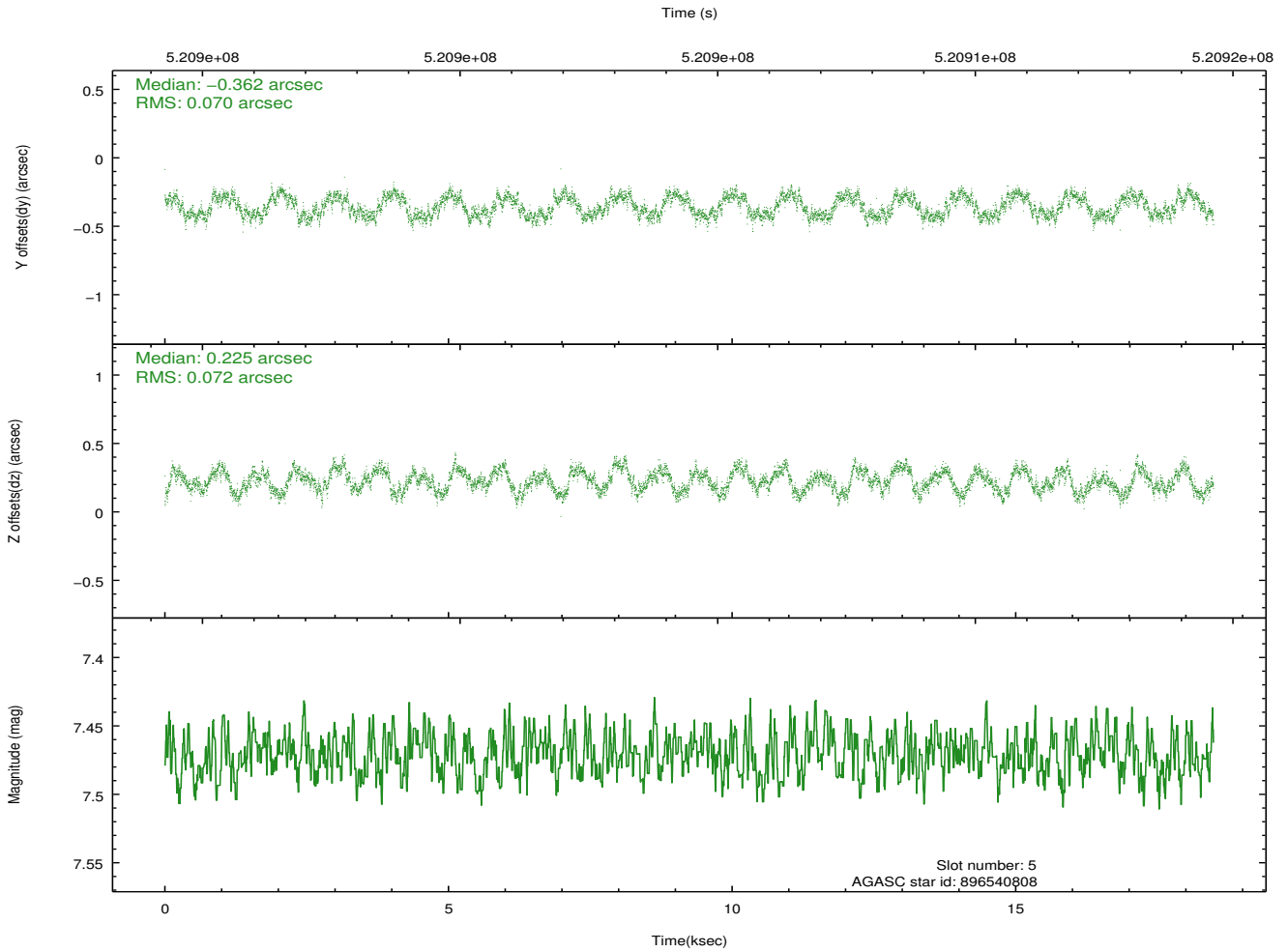
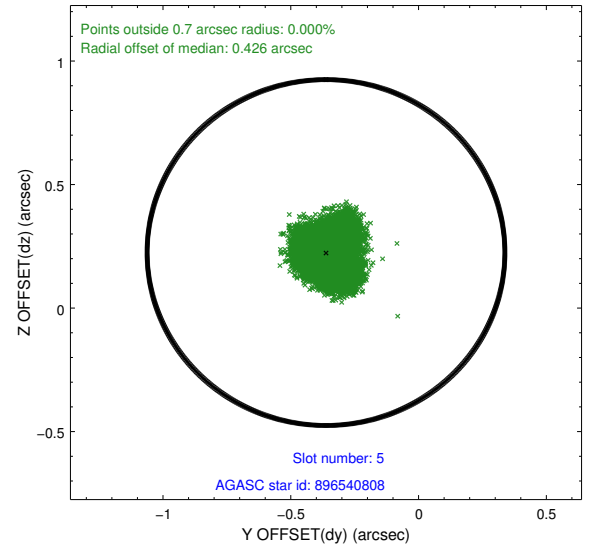
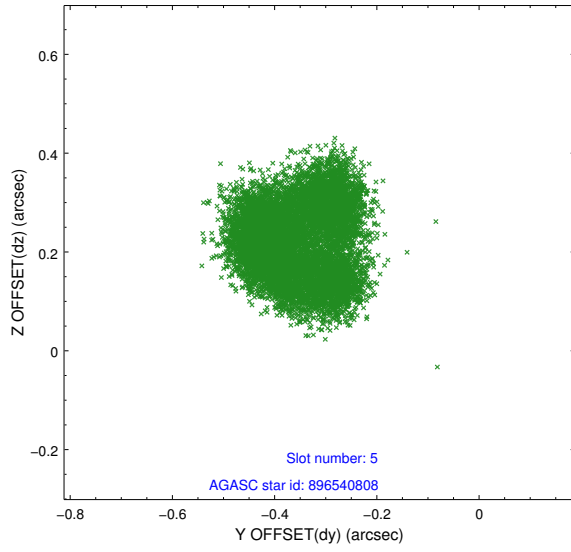


## 2.4.2 Slot 4

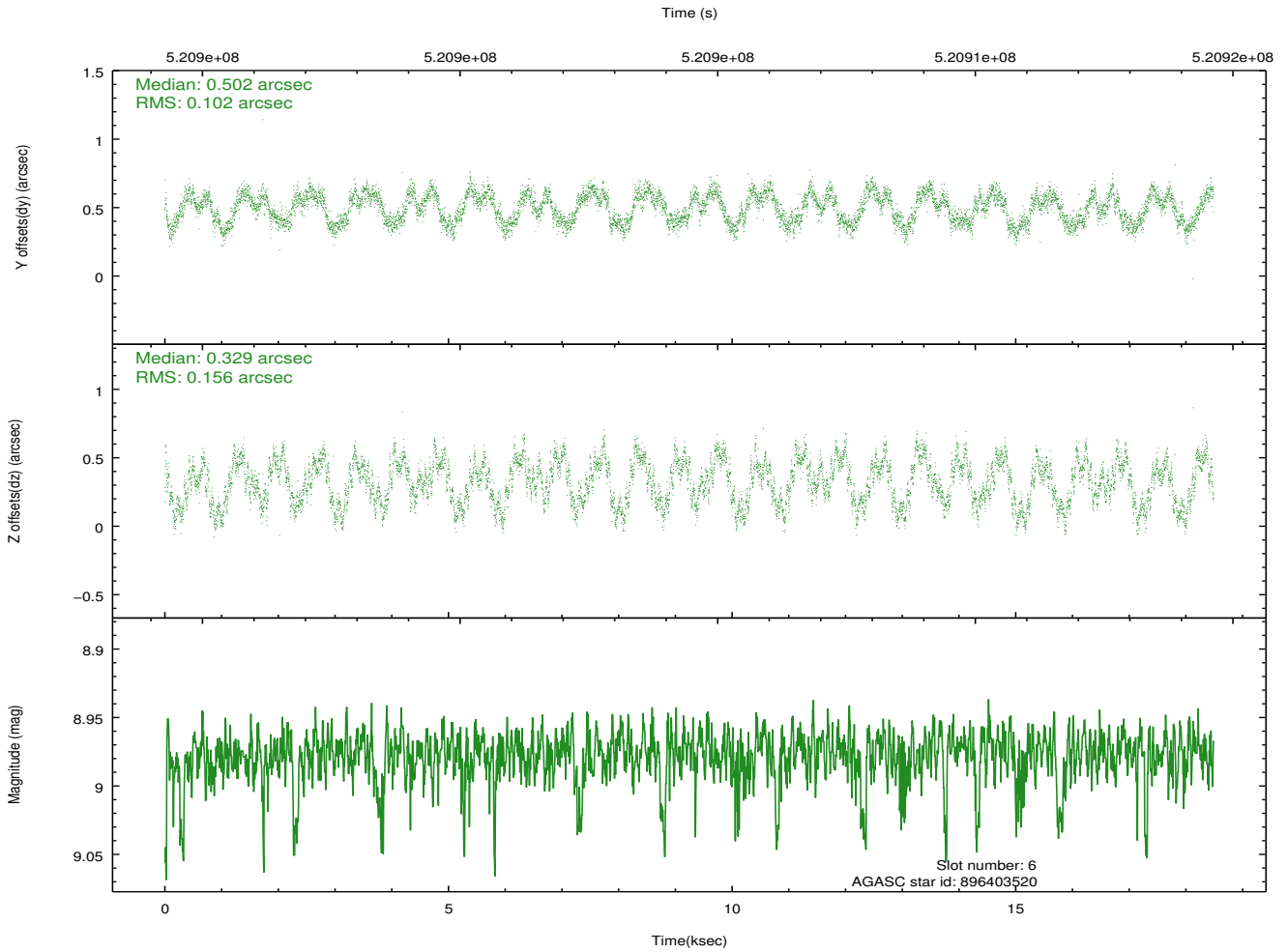
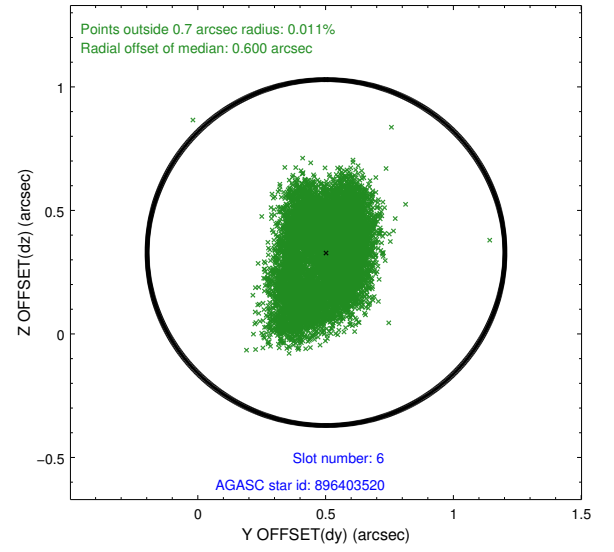
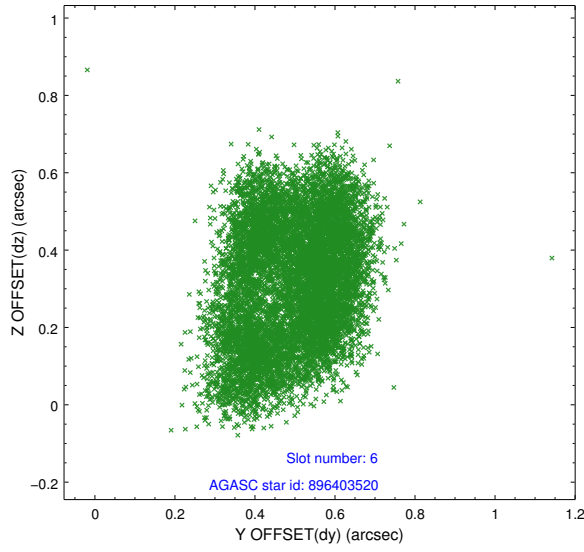




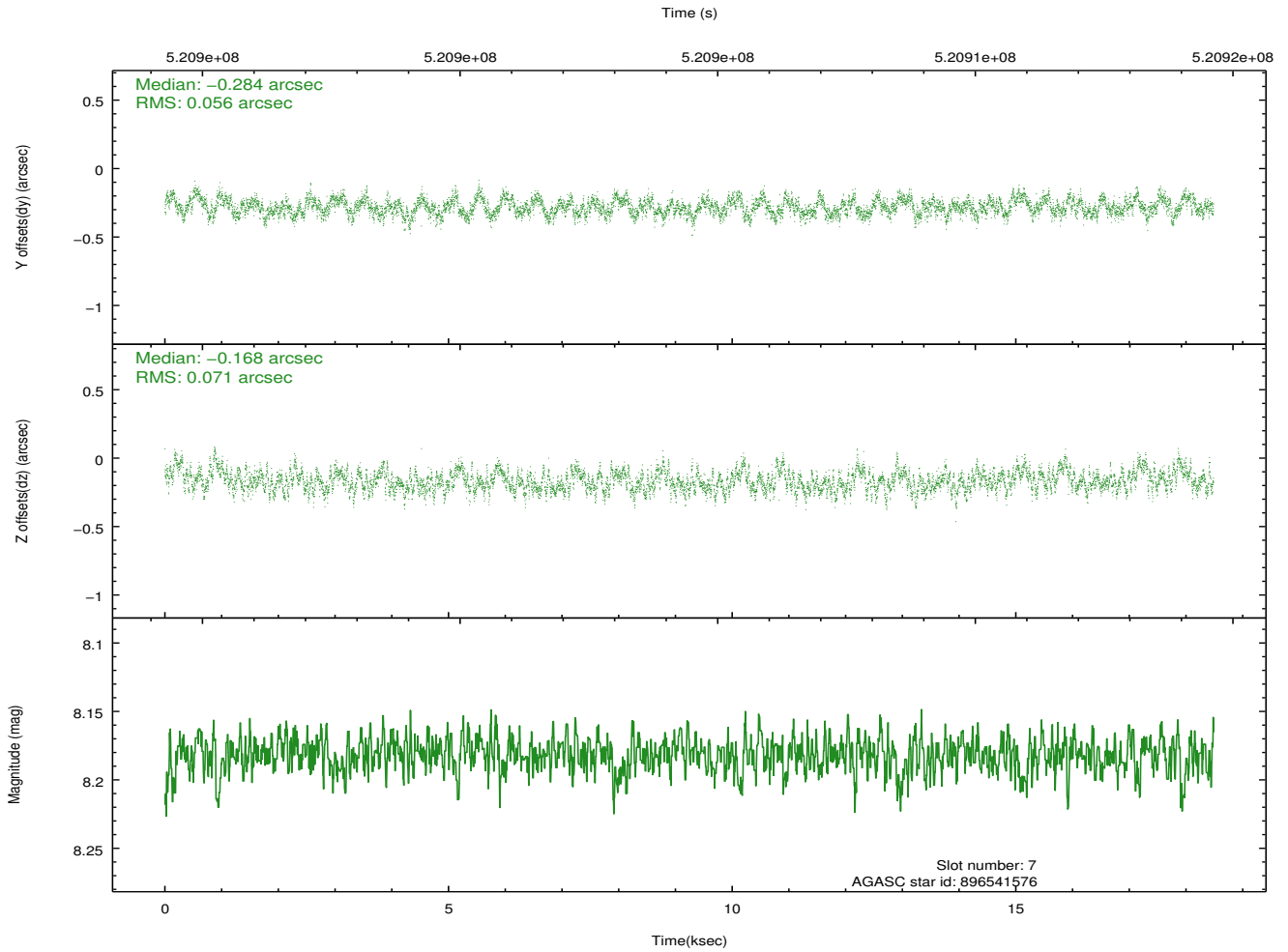
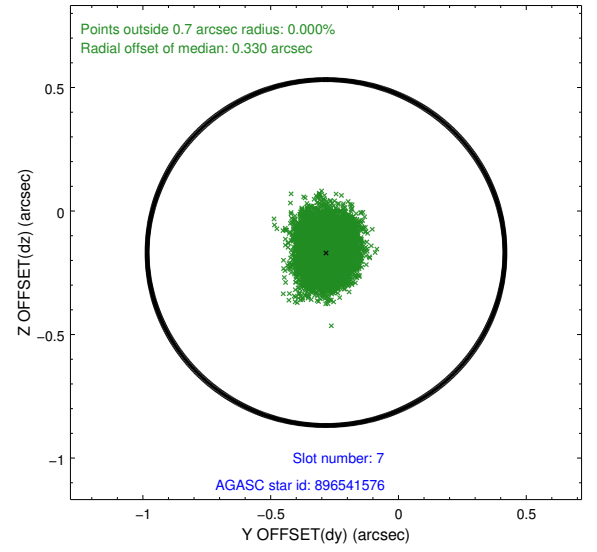
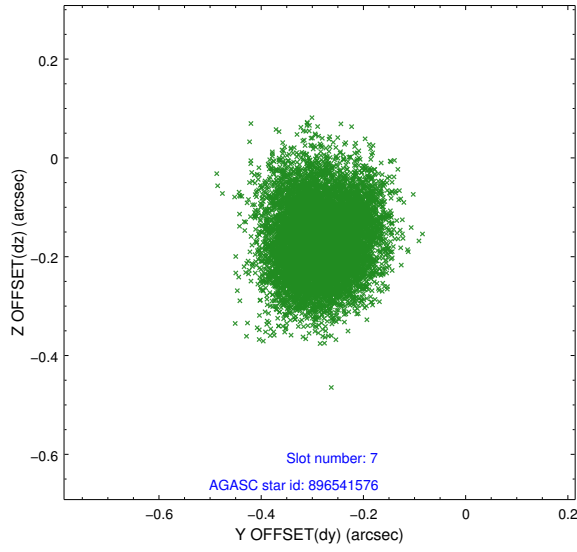
### 2.4.3 Slot 5



## 2.4.4 Slot 6

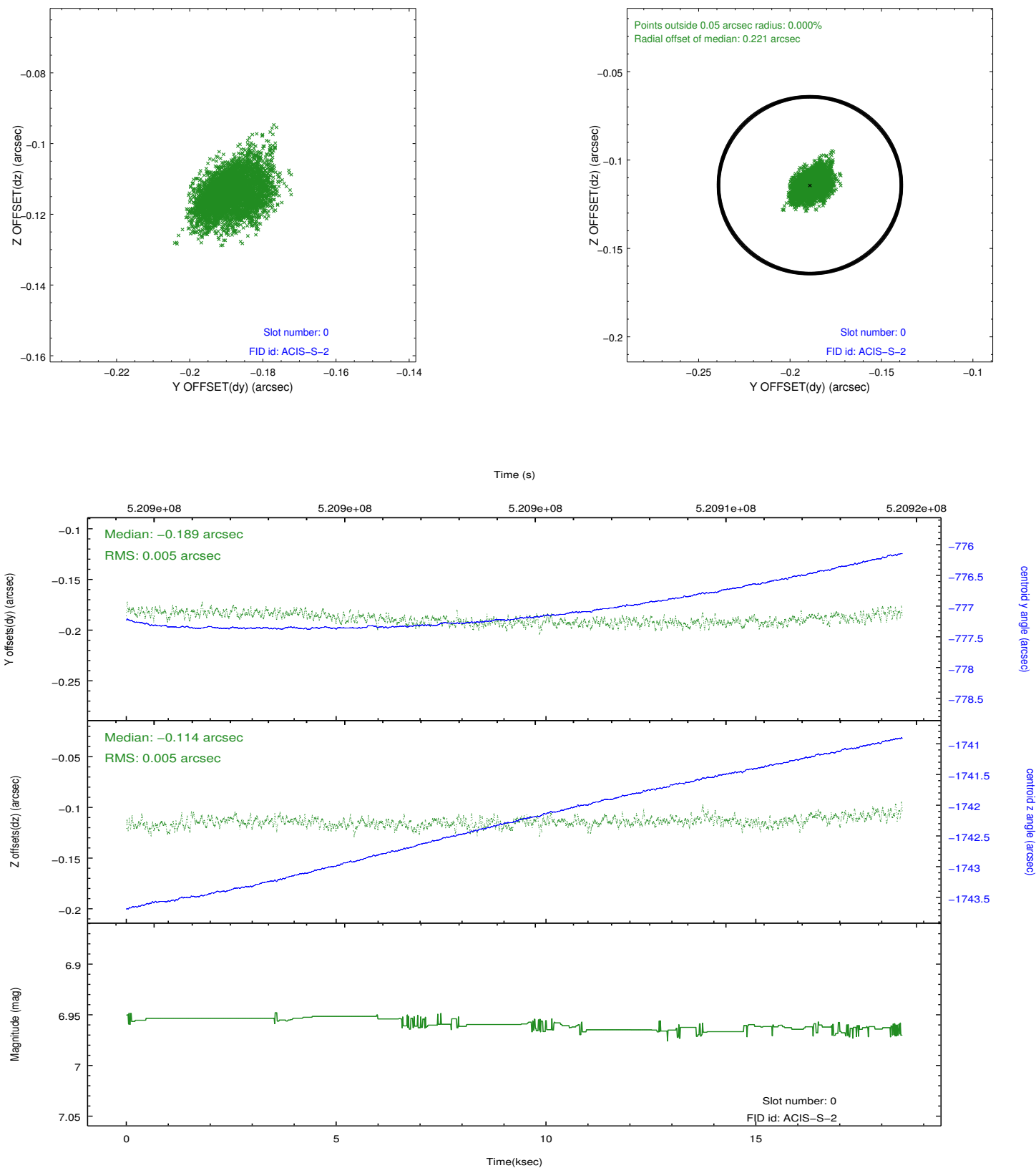


## 2.4.5 Slot 7

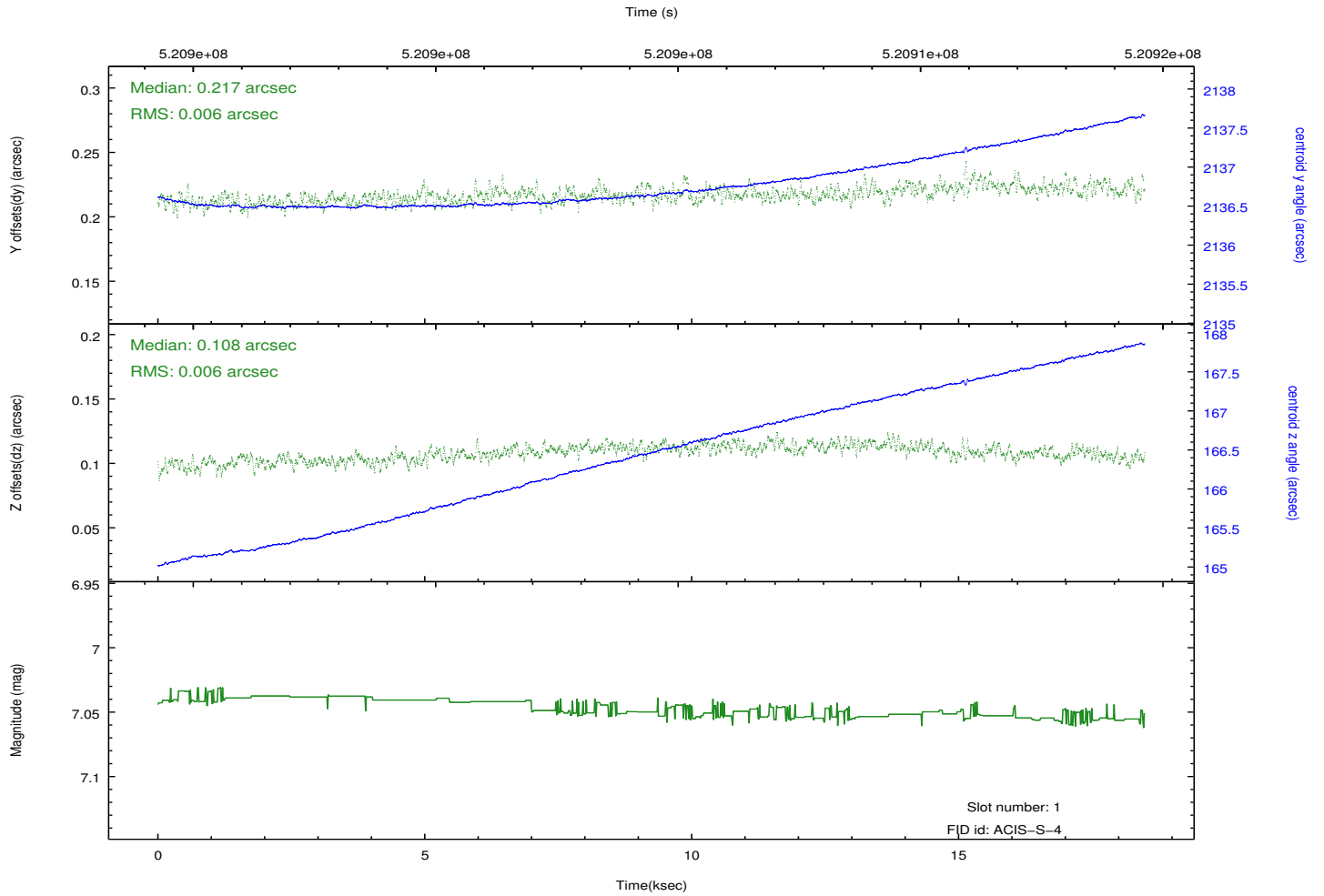
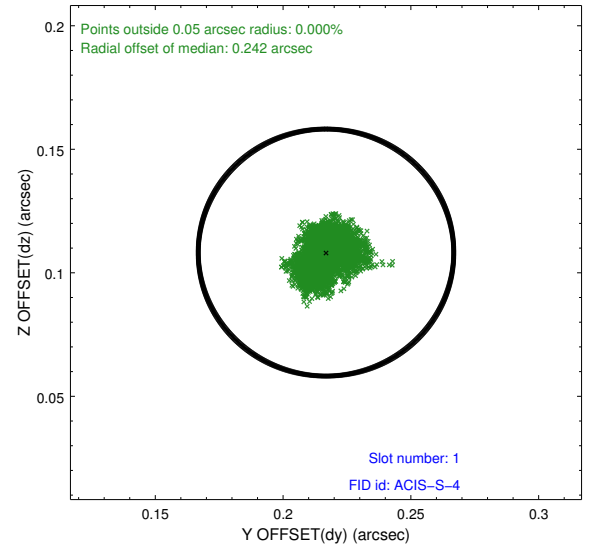
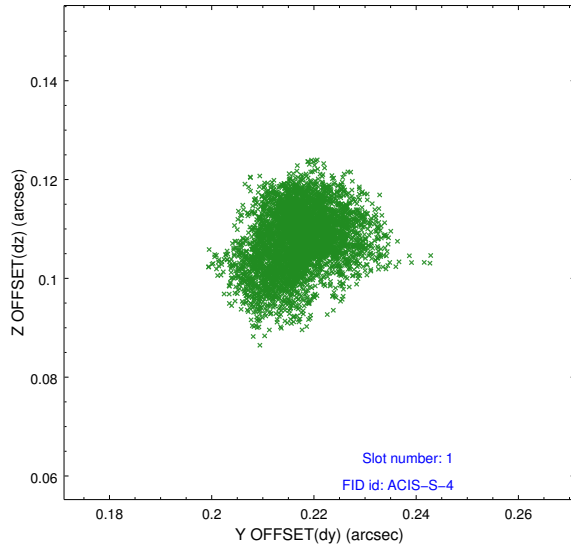


## 2.5 FID Slots

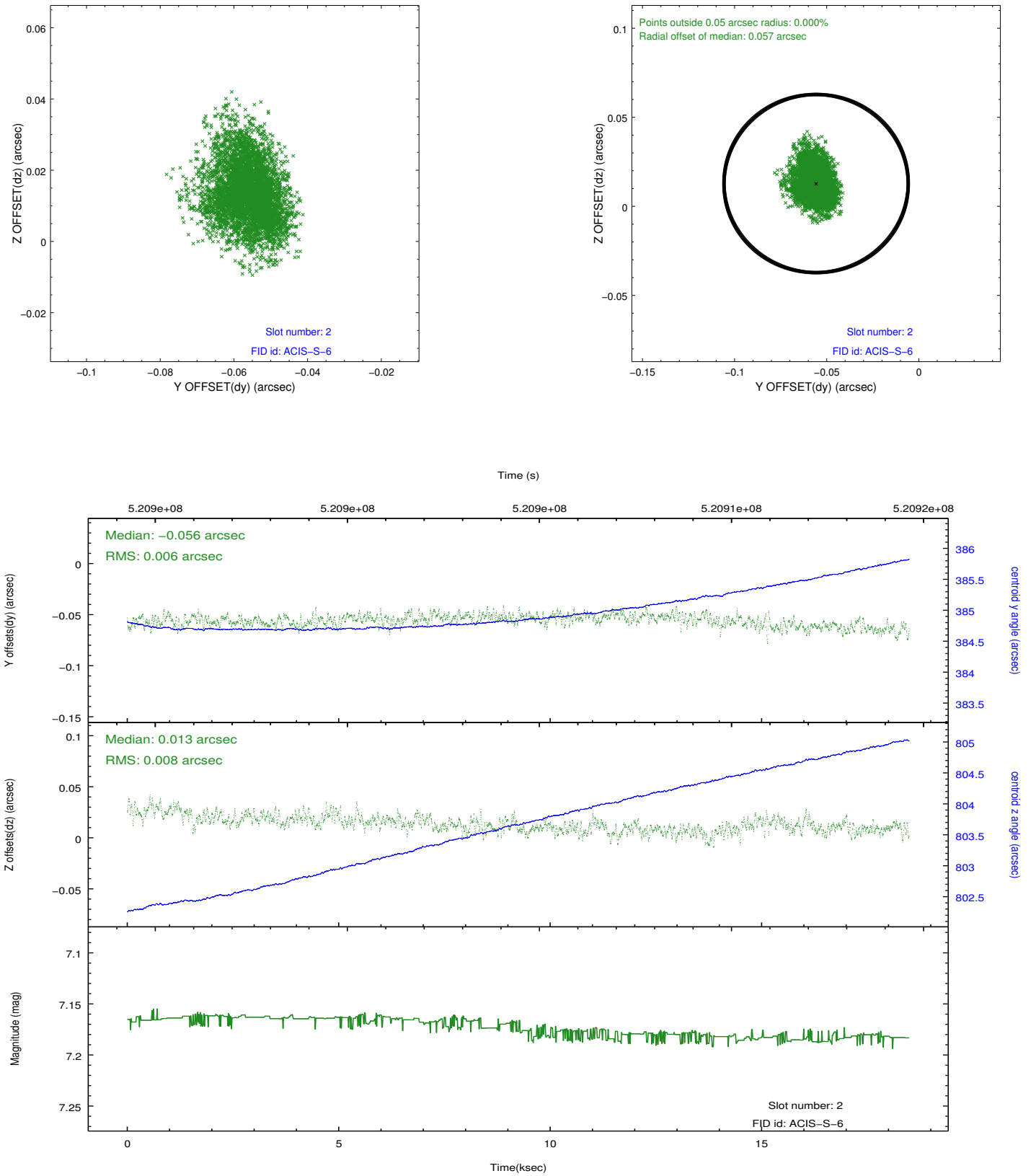
### 2.5.1 Slot 0



## 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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	18.153598917961

## A.2 Comments

Joint observation with NRAO. Observation coordinated with VLA. Window preference met.

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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.