

V&V Reference Report

L2 ASCDS Version : 8.3.3.1

Observation 817 - L2 Version 6
Chandra X-Ray Center

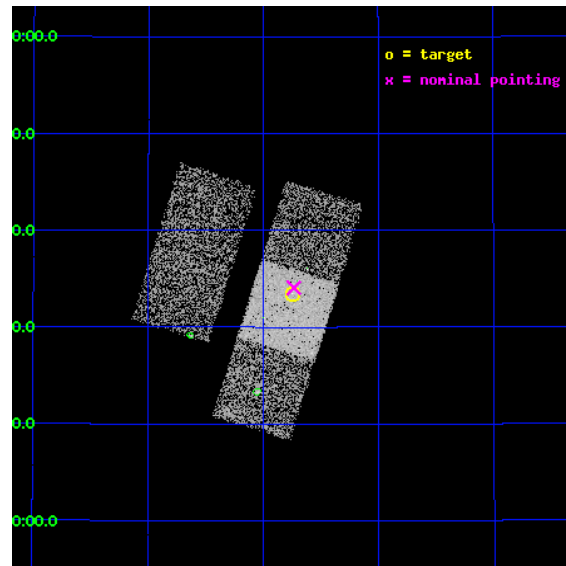
L2 Processing Date : Dec 3 2010

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
3	Point Sources	17
A	Summary	18
A.1	Status	18
A.2	Comments	18

1 Front

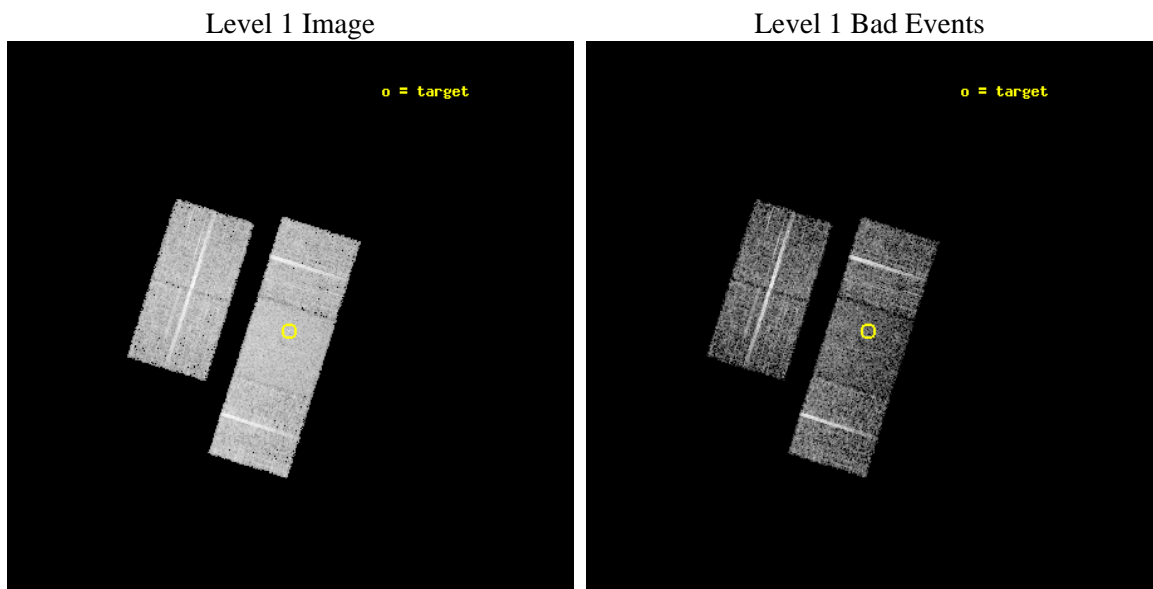
seq_num	700122	Sequence number
obs_id	817	Observation id
title	LIFTING THE SHROUD AROUND BROAD ABSORPTION LINE QSOS: AN AXAF SURVEY	
observer	Dr. Paul Green	Principal investigator
object	FIRST J0840+3633	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	130.185	Observer's specified target RA
dec_targ	36.557556	Observer's specified target Dec
ra_nom	130.18350187096	Nominal RA
dec_nom	36.56780606283	Nominal Dec
roll_nom	107.46408936966	Nominal Roll
revision	6	Processing version of data
ontime	4163.2000038773	Sum of GTIs [s]
livetime	4110.4830586501	Livetime [s]
ontime2	4163.1694526523	Sum of GTIs [s]
ontime3	4163.0873726532	Sum of GTIs [s]
ontime6	4163.1284126565	Sum of GTIs [s]
ontime7	4163.2000038773	Sum of GTIs [s]
ontime8	4163.0463326573	Sum of GTIs [s]
l2events	27603	Number of level 2 events



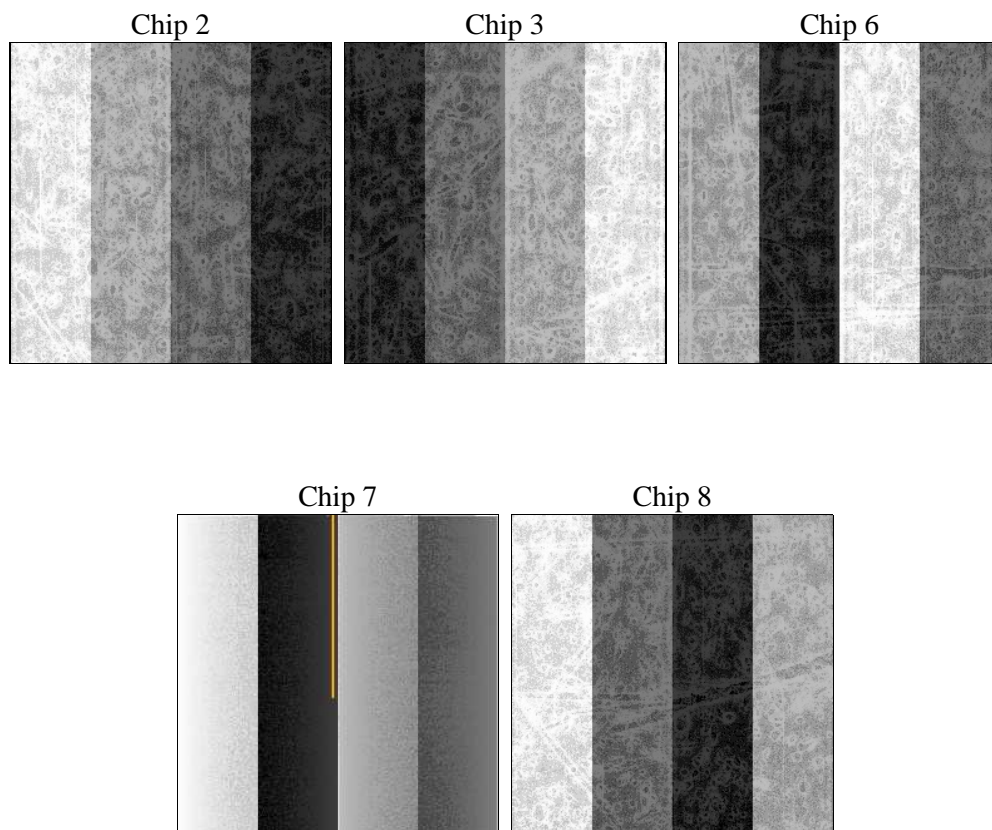
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	Scheduled observation exposure time
ascdsver	8.3.3.1	ASCDS version number	ontime	4163.2000038773	Sum of GTIs [s]
caldsver	4.4.0	 	ontime2	4163.1694526523	Sum of GTIs [s]
date	2010-12-03T19:20:53	Date and time of file creation	ontime3	4163.0873726532	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	4163.1284126565	Sum of GTIs [s]
			ontime7	4163.2000038773	Sum of GTIs [s]
			ontime8	4163.0463326573	Sum of GTIs [s]
			l1events	185320	Number of level 1 events

2.1.4 Events

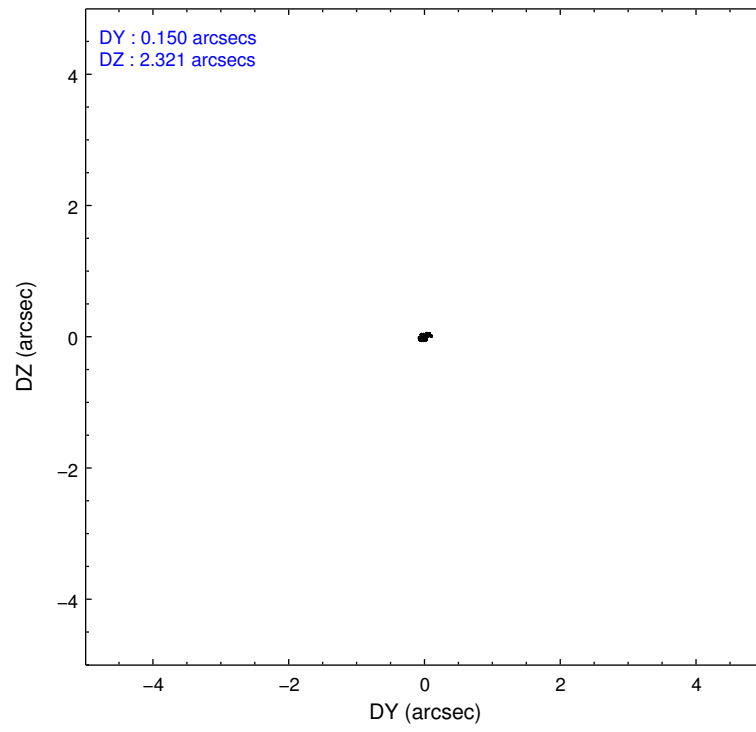
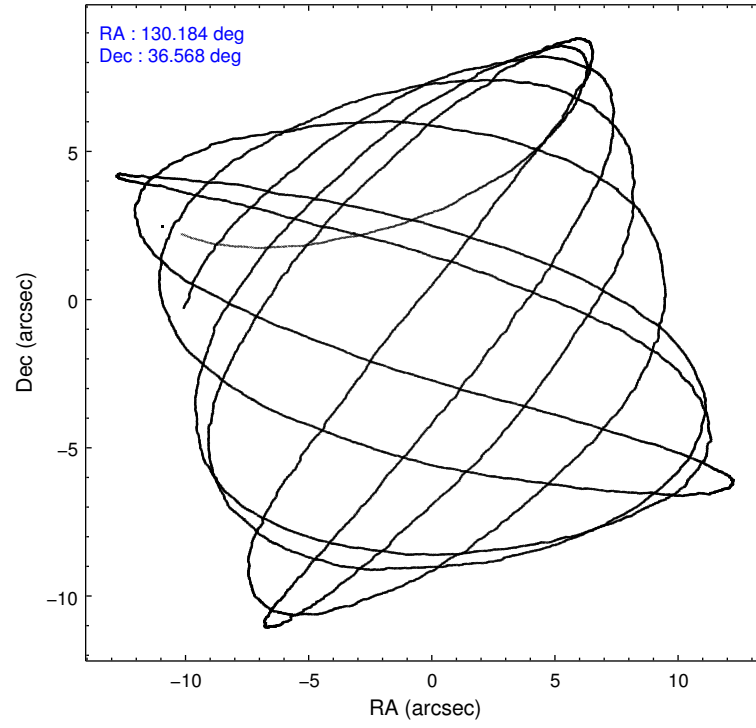
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	35749	34637	34881	38730	41323
rejected events	32630	31355	31540	23409	34293
rejected %	91%	90%	90%	60%	82%

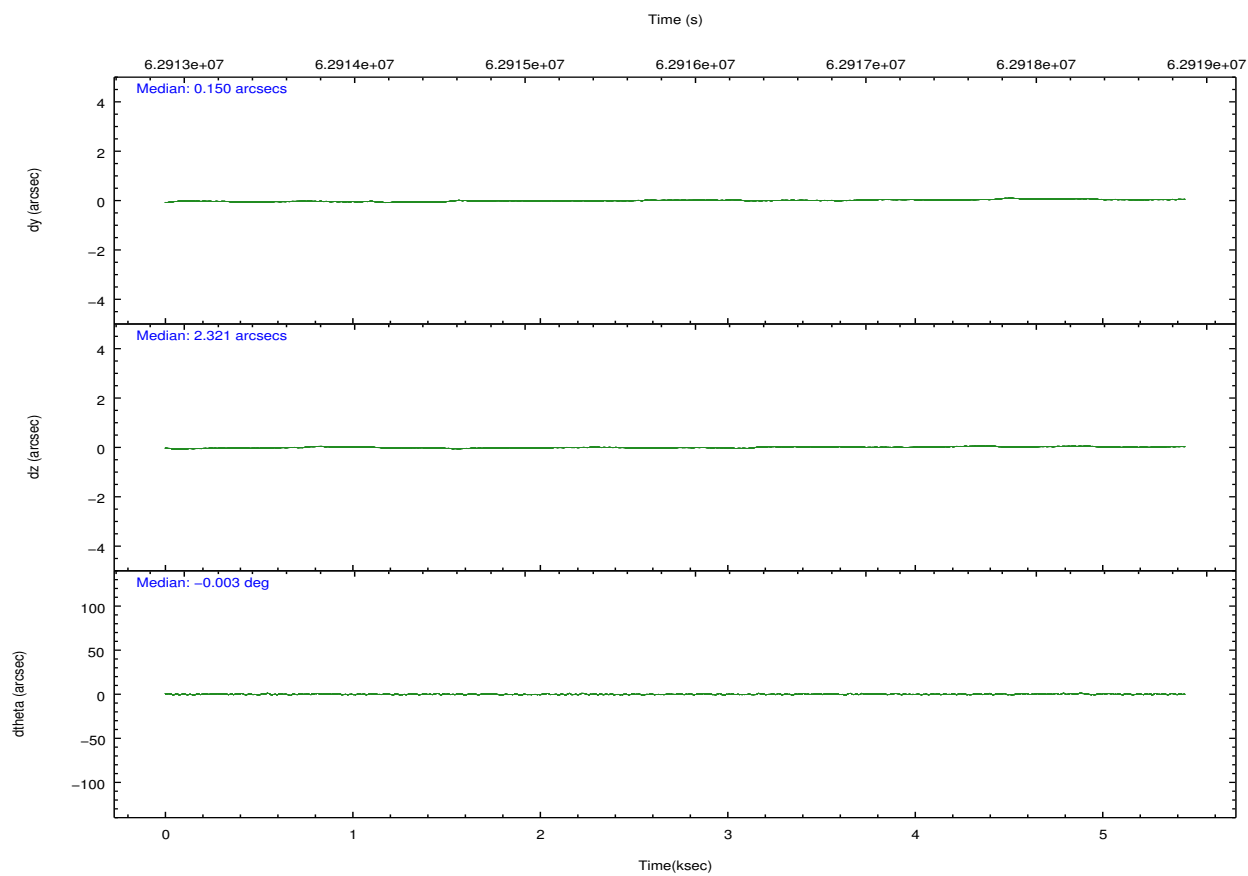
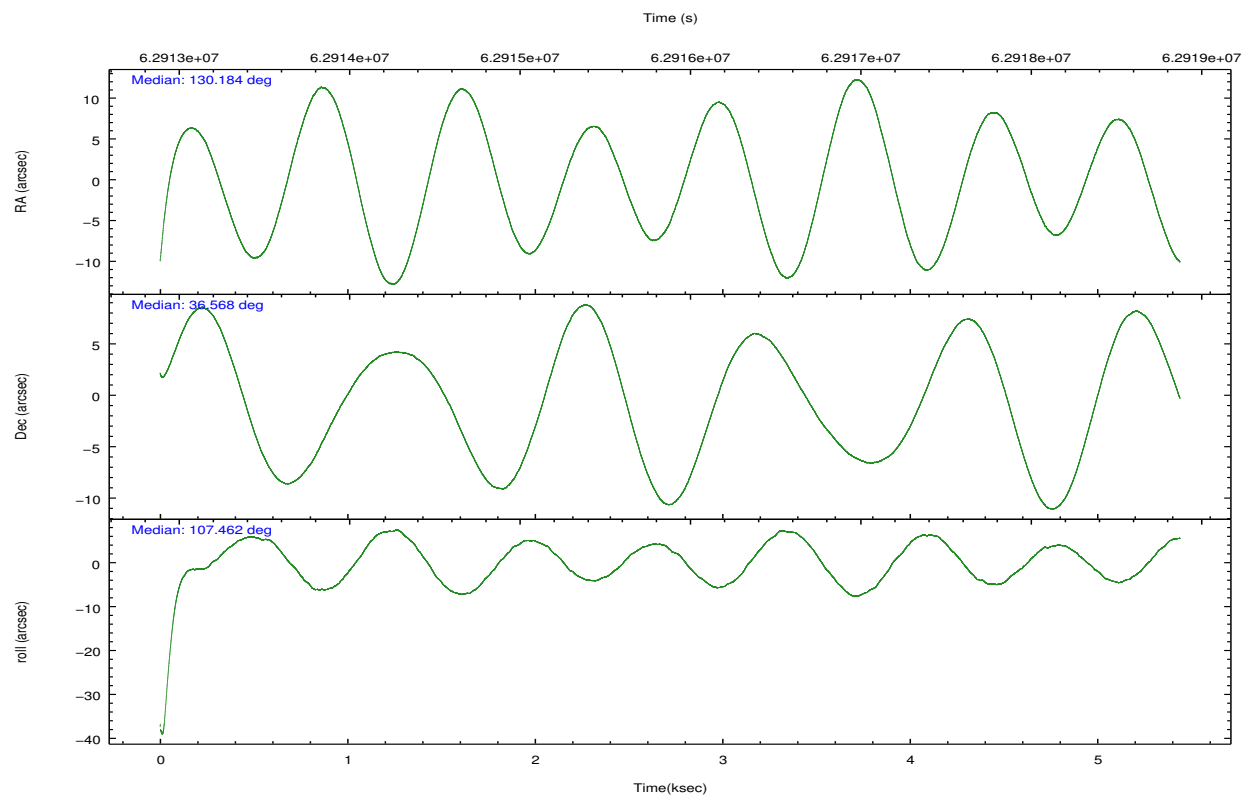
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	651	703	686	937	1704
	1%	2%	1%	2%	4%
grade 1 events	7	4	5	23	12
	0%	0%	0%	0%	0%
grade 2 events	1182	1375	1278	3262	2249
	3%	3%	3%	8%	5%
grade 3 events	215	220	203	951	576
	0%	0%	0%	2%	1%
grade 4 events	226	195	200	818	542
	0%	0%	0%	2%	1%
grade 5 events	657	654	738	2251	1016
	1%	1%	2%	5%	2%
grade 6 events	847	795	979	9358	1970
	2%	2%	2%	24%	4%
grade 7 events	31964	30691	30792	21130	33254
	89%	88%	88%	54%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-23678	ACIS-23678	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
Pointing RA	130.208744	130.1835018709563	Subarray requested	NONE	NONE
Pointing Dec	36.549007	36.56780606282992	Alternating exposures requested	N	N
Pointing Roll	107.292533	107.4640893696603	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.145094680475			
SIM translation stage offset (mm)	0	0.01257209746719923			
Observation start time	62913599.184000	62912424.367102			
Observation start date	1999-12-30T03:58:55	1999-12-30T03:40:24			
Observation end time	62918599.184000	62919165.792347			
Observation end date	1999-12-30T05:22:15	1999-12-30T05:32:45			
Read mode	TIMED	TIMED			

2.3 Aspect



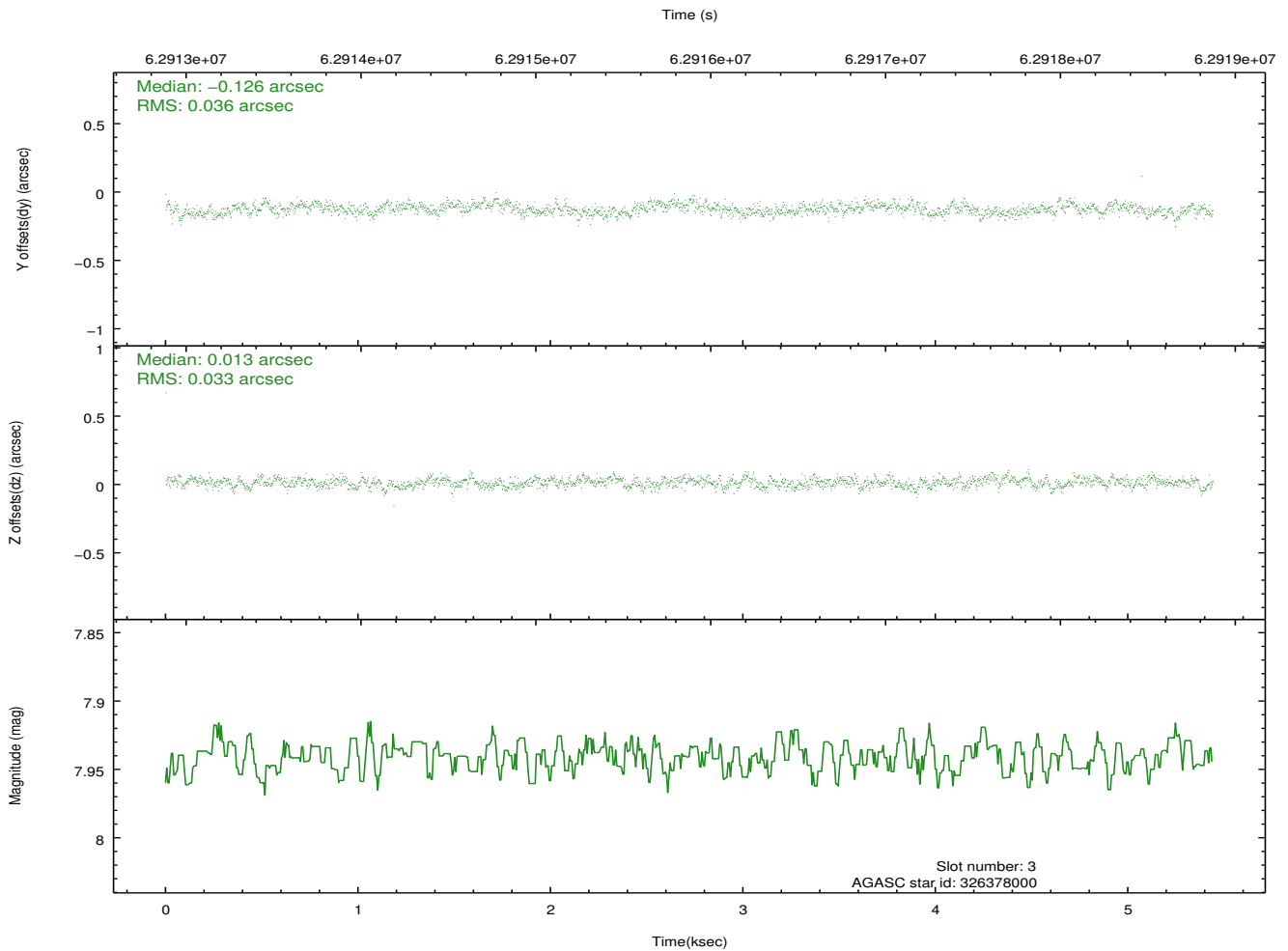
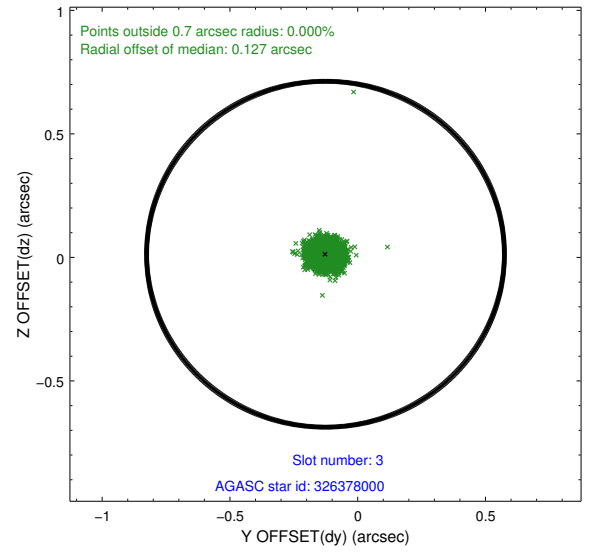
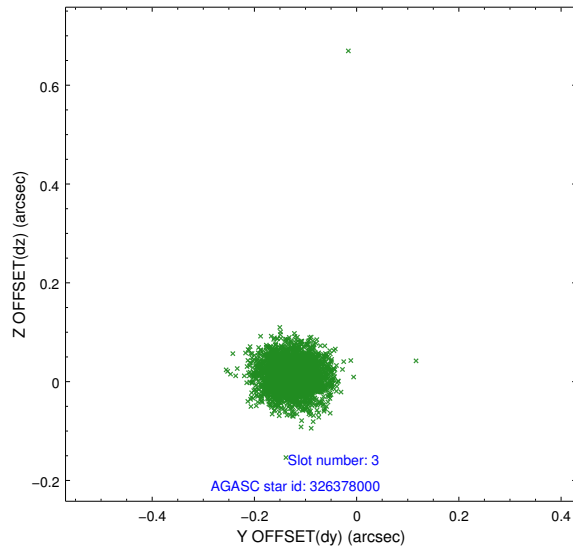


Slot Statistics

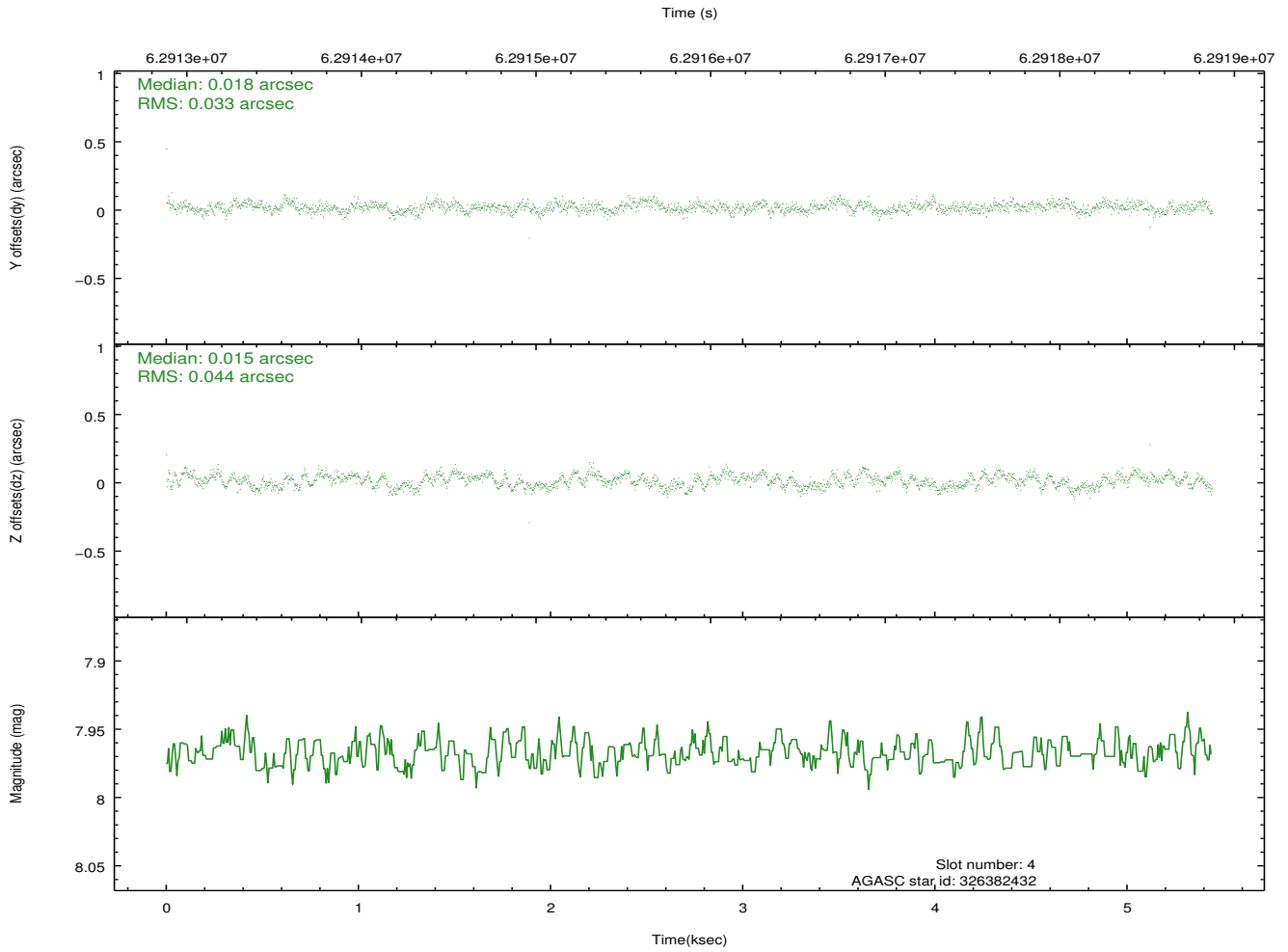
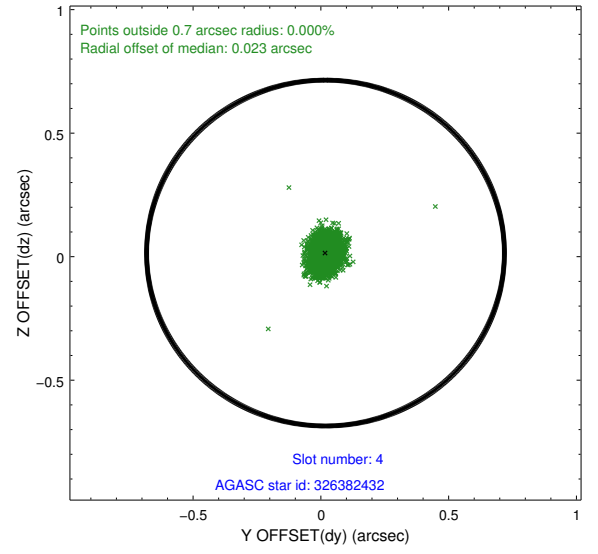
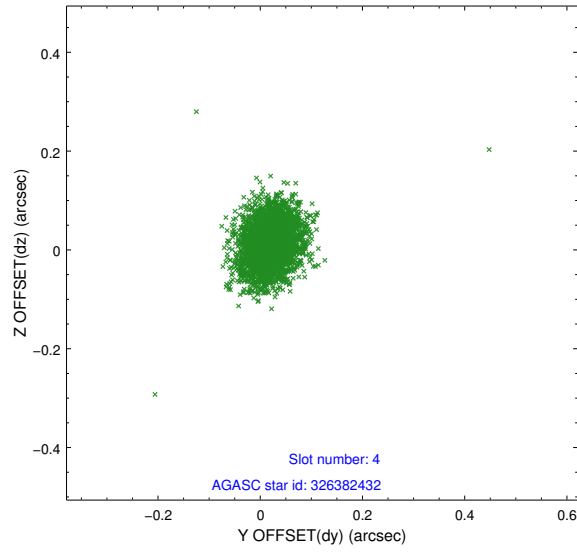
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.20	2655	0.035	-0.069	0.006	0.011	0.000000	0.000000	943.28	-1718.99
1	FID	ACIS-S-5	7.25	2655	-0.071	0.016	0.006	0.010	0.000000	0.000000	-1805.47	178.28
2	FID	ACIS-S-6	7.36	2655	0.015	0.066	0.006	0.010	0.000000	0.000000	408.41	822.73
3	GUIDE	326378000	7.94	2654	-0.126	0.013	0.050	0.080	129.573069	37.020339	2169.14	1238.70
4	GUIDE	326382432	7.97	2654	0.018	0.015	0.058	0.090	130.541837	36.474054	-541.51	-840.33
5	GUIDE	326379304	8.47	2653	0.115	-0.046	0.058	0.094	130.301704	35.966005	-2084.15	364.94
6	GUIDE	326381952	8.84	2655	-0.110	0.122	0.061	0.099	130.575418	36.508326	-453.85	-969.70
7	GUIDE	326382016	9.60	2654	0.099	-0.099	0.088	0.151	130.062959	36.685792	595.79	255.11

2.4 Star Slots

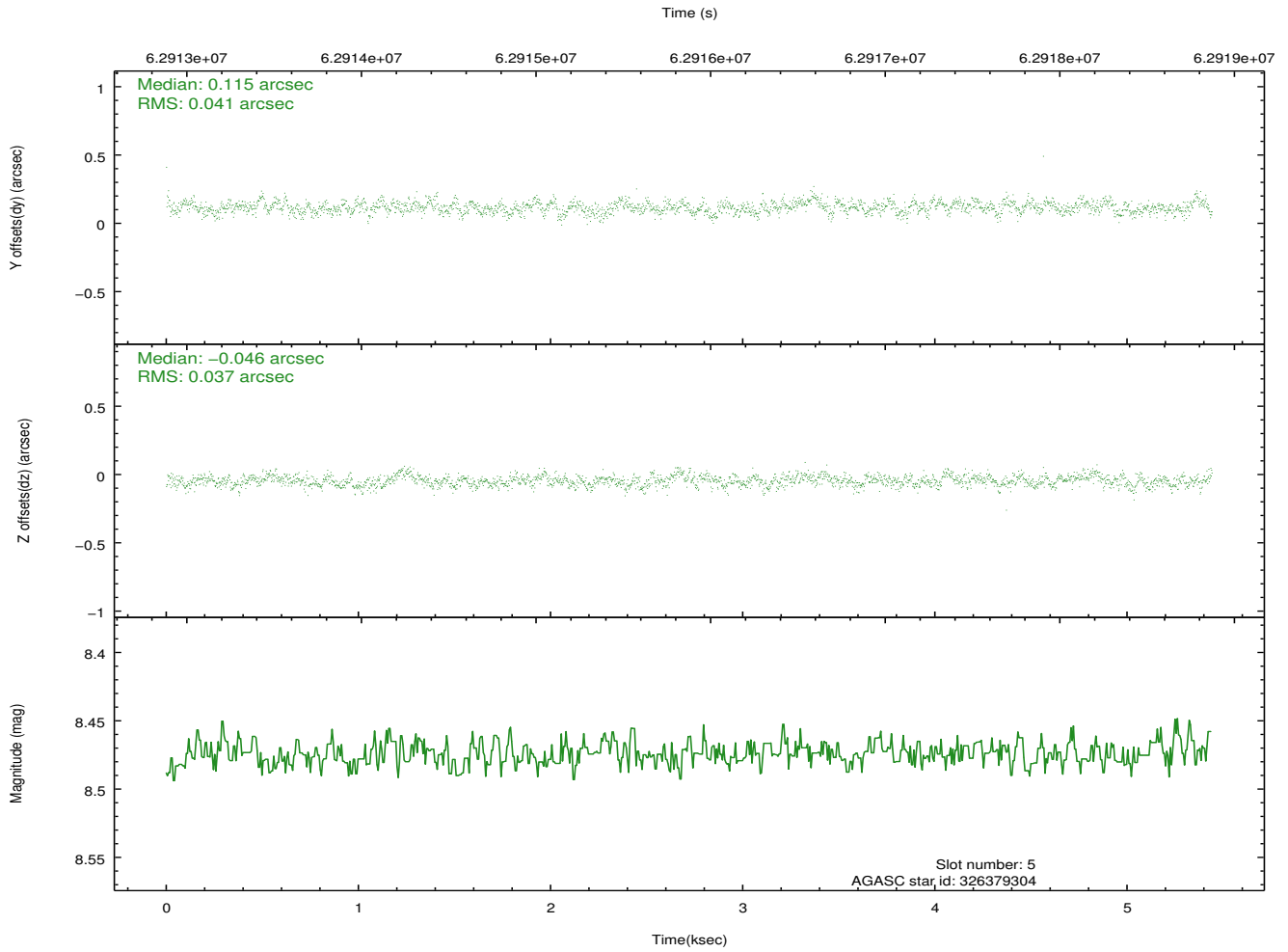
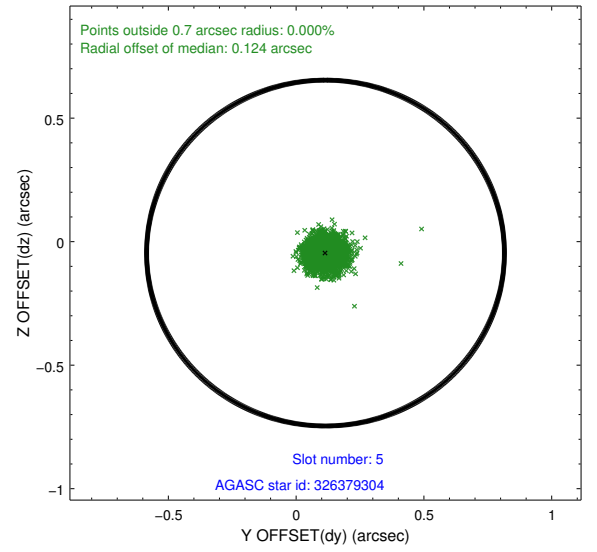
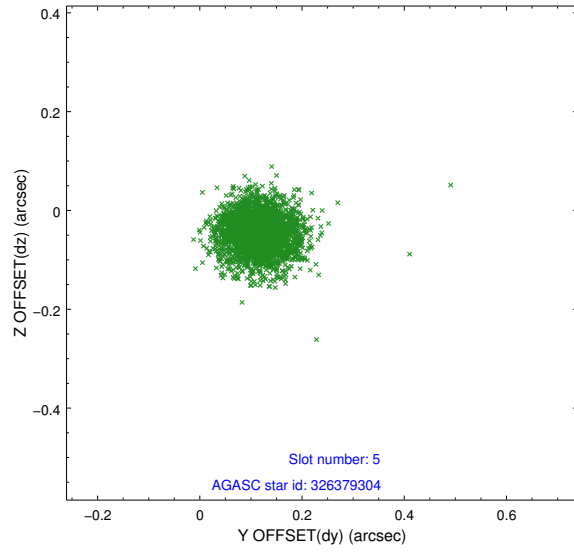
2.4.1 Slot 3



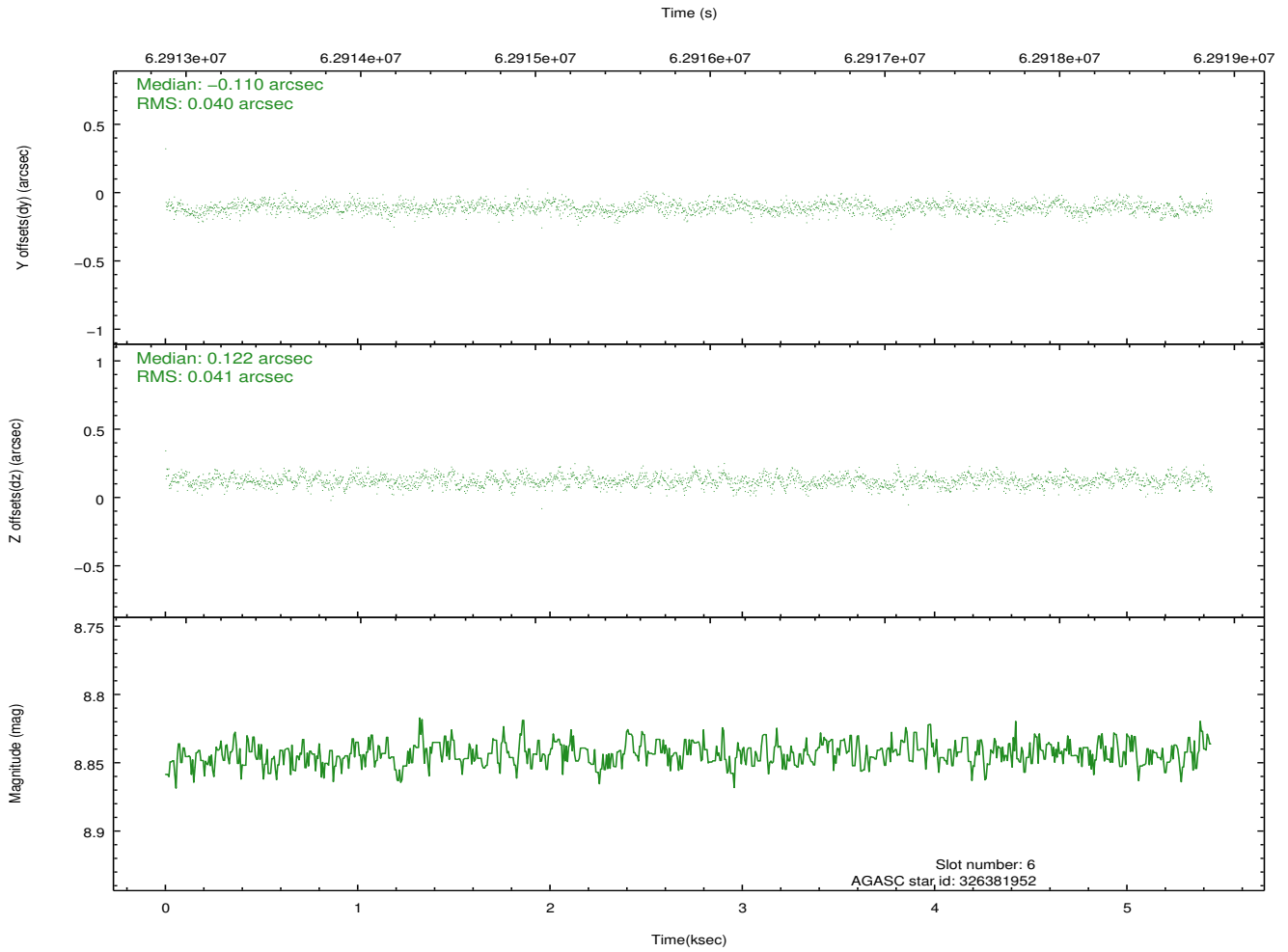
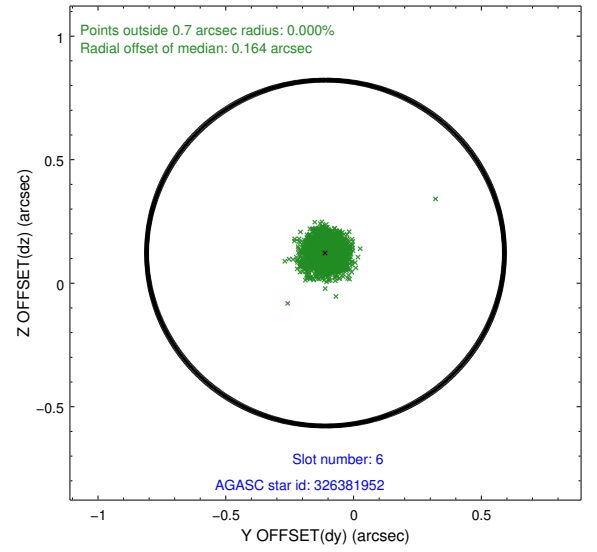
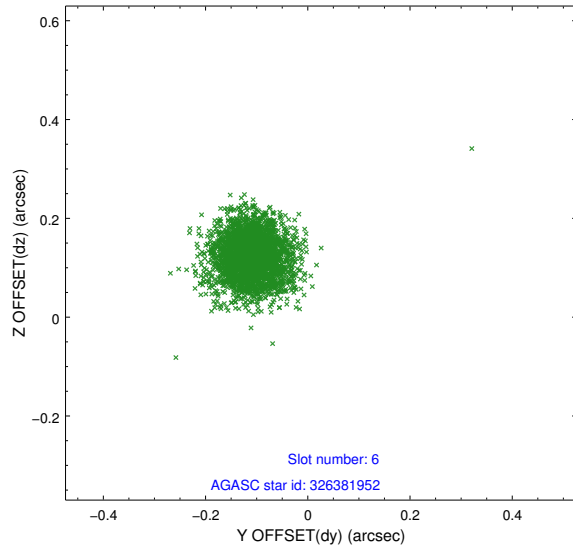
2.4.2 Slot 4



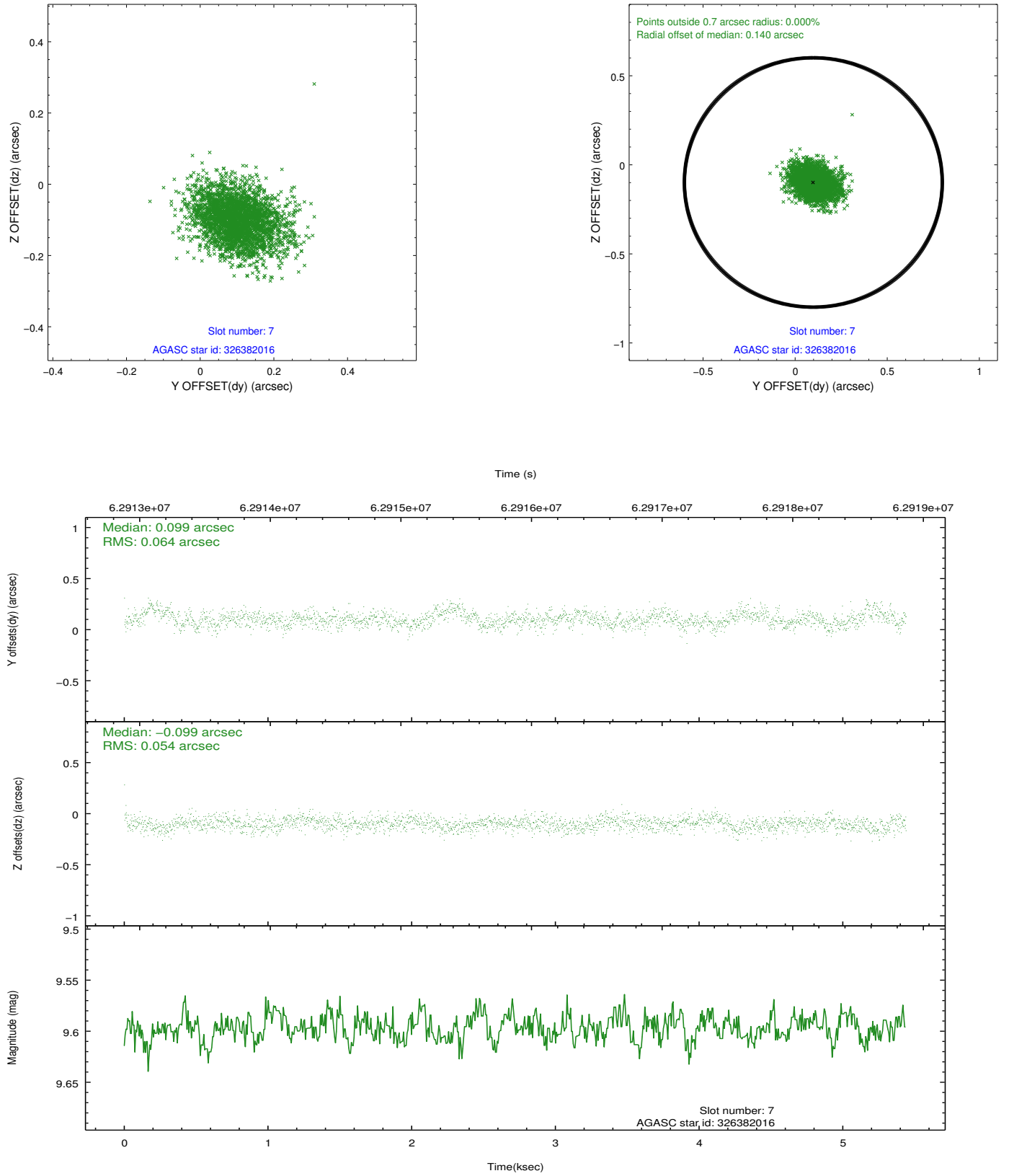
2.4.3 Slot 5



2.4.4 Slot 6

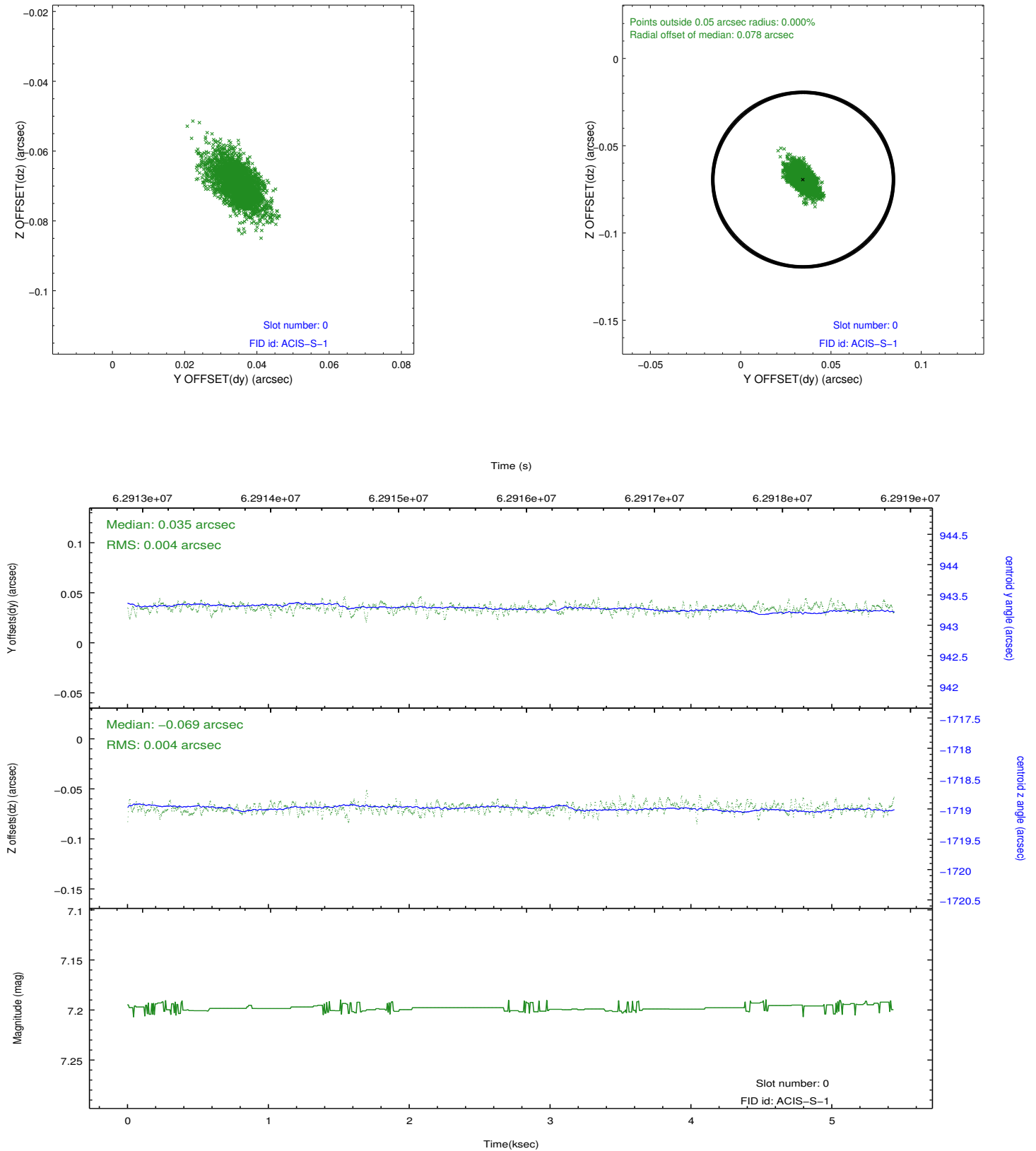


2.4.5 Slot 7

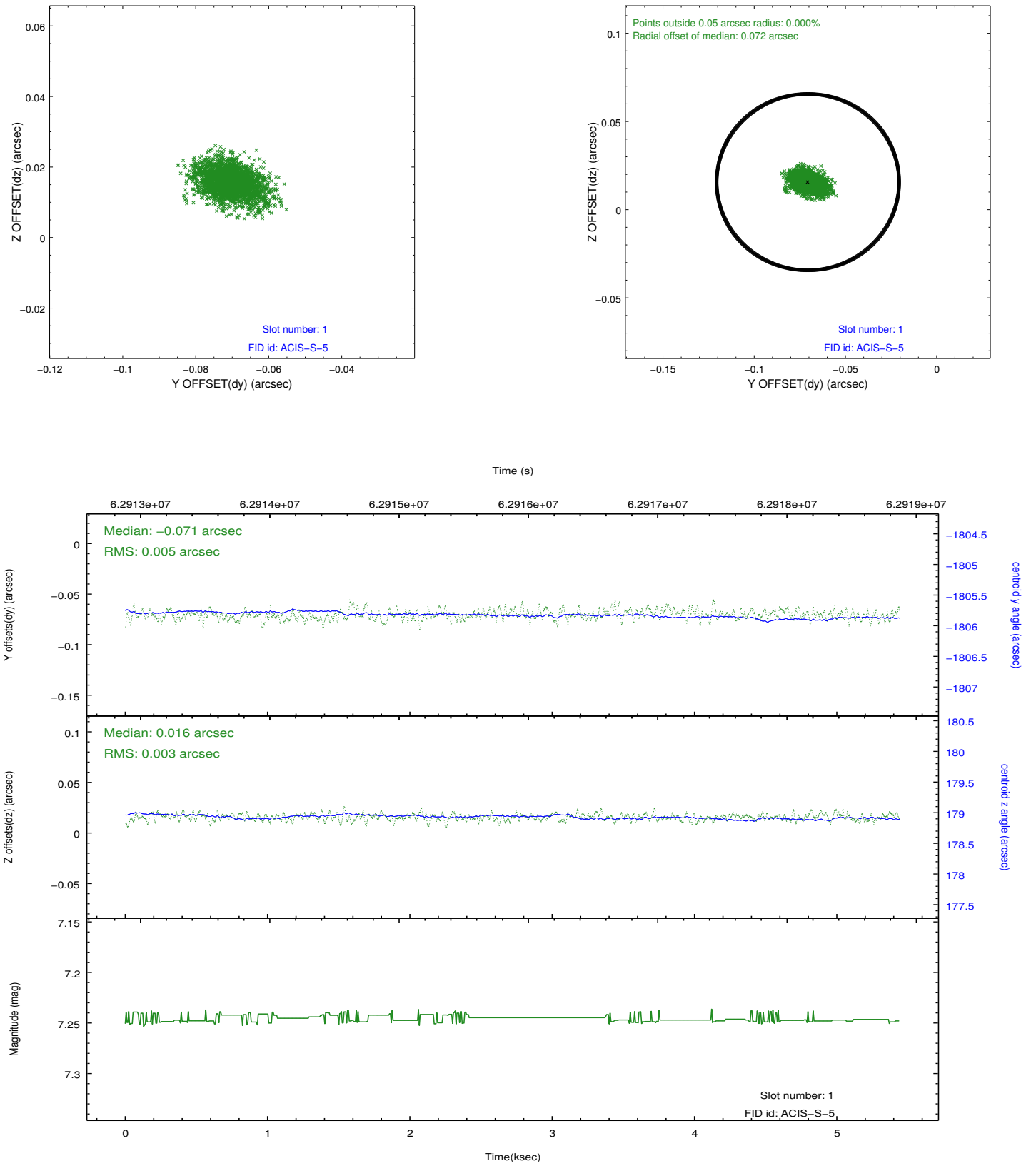


2.5 FID Slots

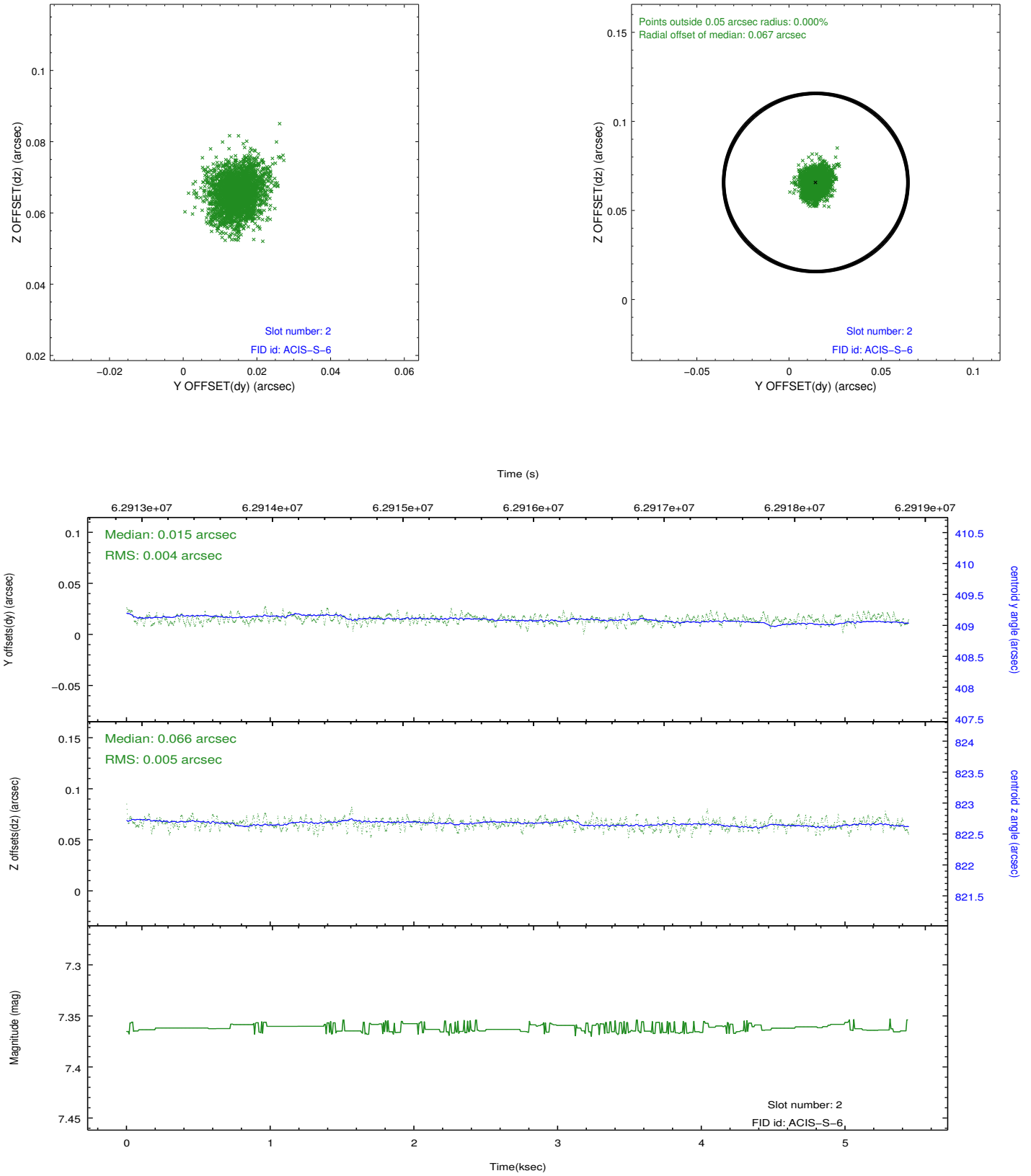
2.5.1 Slot 0



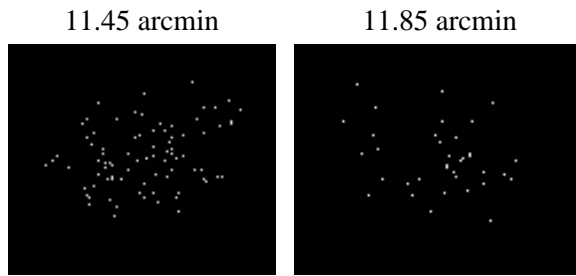
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2010.12.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.166

A.2 Comments

The bias map for chip 7 was incomplete because of a data gap in telemetry.

Bias map for chip 7 was reconstructed for this processing using scaled data

from a comparable bias map for another observation to replace pixels affected

by the data gap. The pixels affected by the anomaly are bounded by sky coords:

(130.16557,36.59466),(130.21779,36.46150),(130.21925,36.46187),(130.16702,36.59503)

===

The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.