

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 846 - L2 Version 4

Chandra X-Ray Center

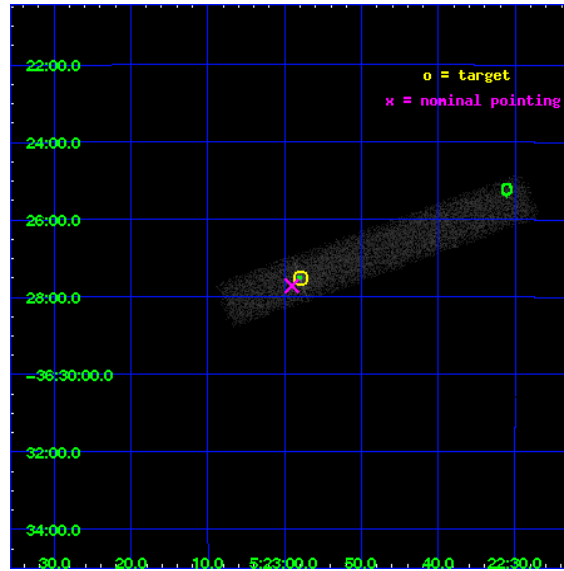
L2 Processing Date : Nov 29 2009

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

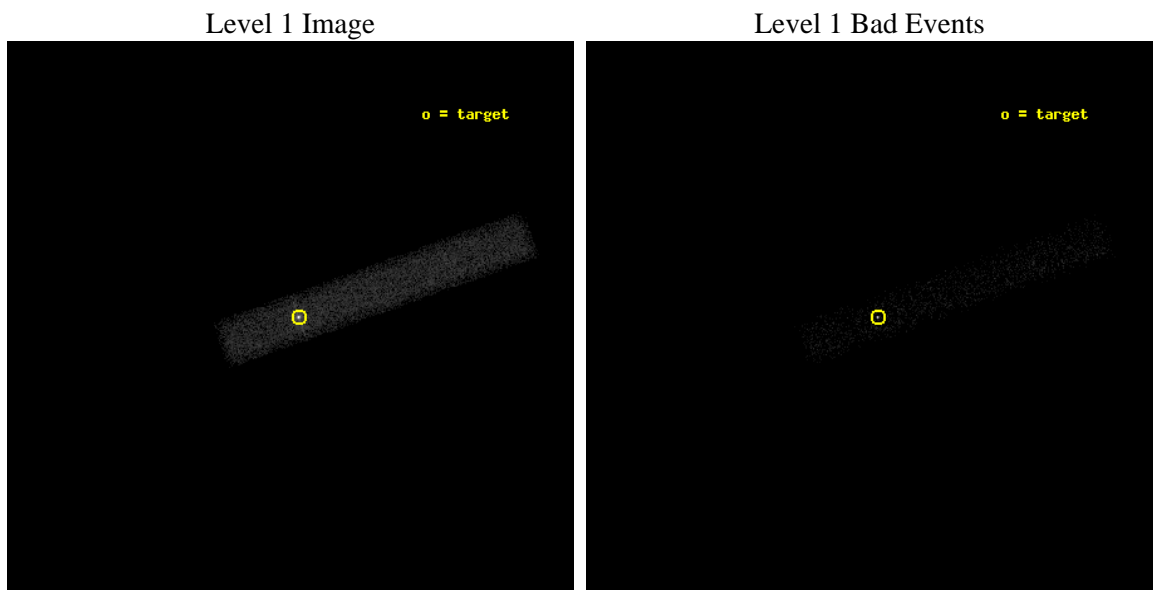
seq_num	700151	Sequence number
obs_id	846	Observation id
title	STRUCTURES AND SPECTRA OF HOT GAS AROUND NEARBY BL LAC OBJECTS	Pro
observer	Prof Mark Birkinshaw	Principal investigator
object	PKS 0521-365	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	80.74158	Observer's specified target RA
dec_targ	-36.45857	Observer's specified target Dec
ra_nom	80.746146864999	Nominal RA
dec_nom	-36.461898544469	Nominal Dec
roll_nom	340.36124091486	Nominal Roll
revision	4	Processing version of data
ontime	9870.0	Sum of GTIs [s]
livetime	9121.3218985657	Livetime [s]
ontime7	9870.0	Sum of GTIs [s]
l2events	24501	Number of level 2 events



2 OBI

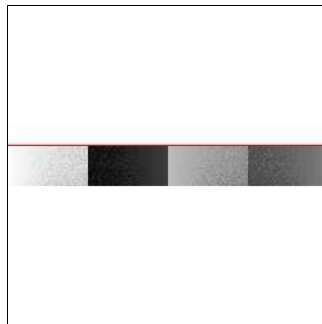
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	9870.0	Sum of GTIs [s]
caldbver	4.1.4	 	ontime7	9870.0	Sum of GTIs [s]
date	2009-11-29T20:19:42	Date and time of file creation	ll events	35378	Number of level 1 events
revision	3	Processing version of data			

2.1.4 Events

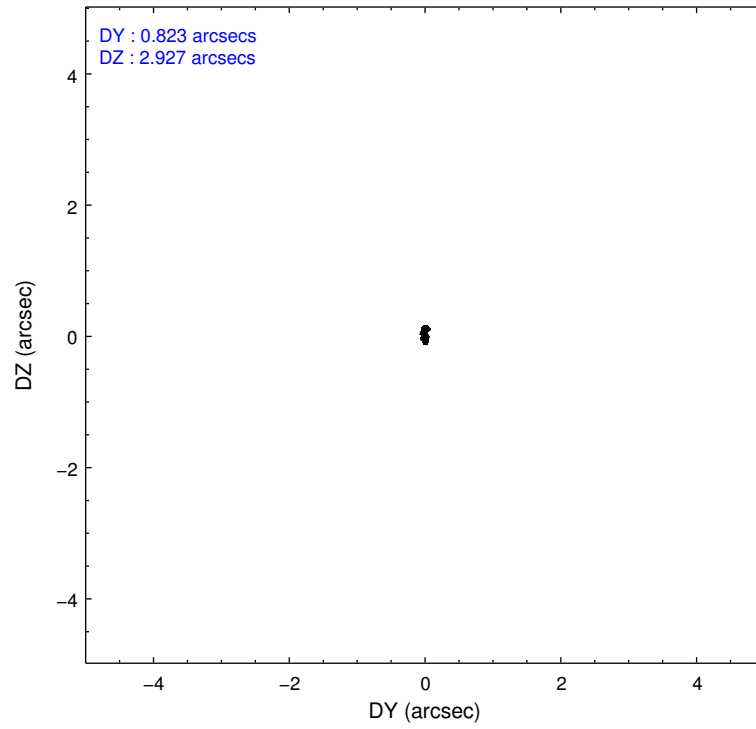
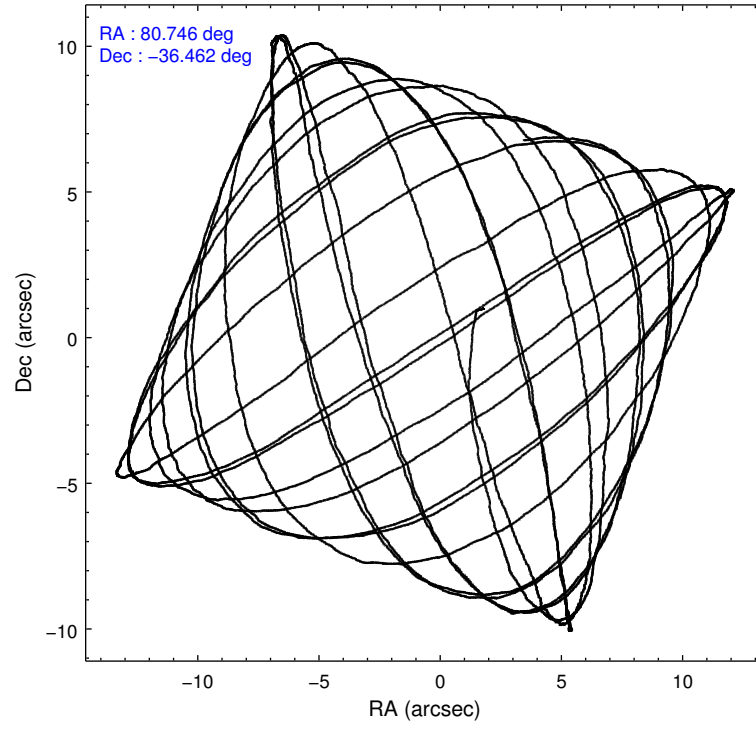
	ccd 7
level 1 events	35378
rejected events	9996
rejected %	28%

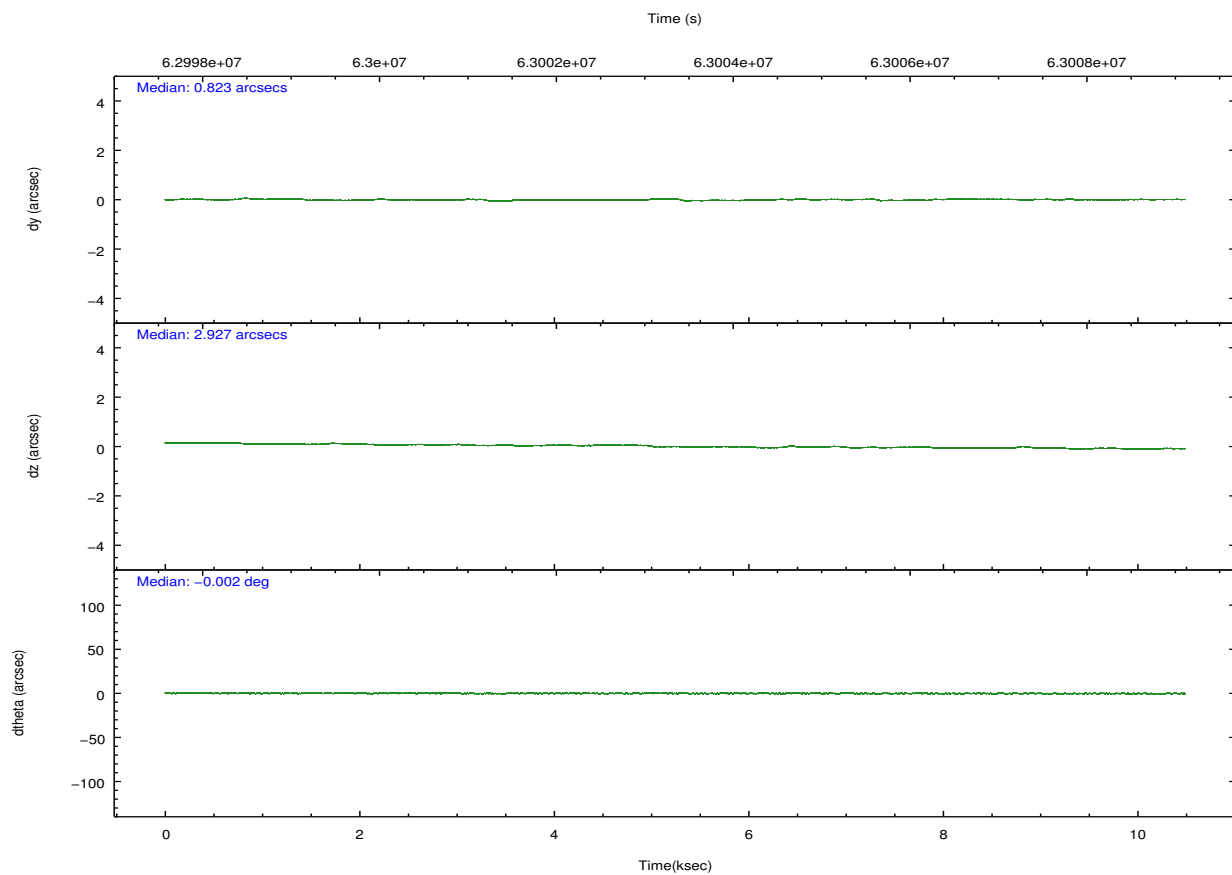
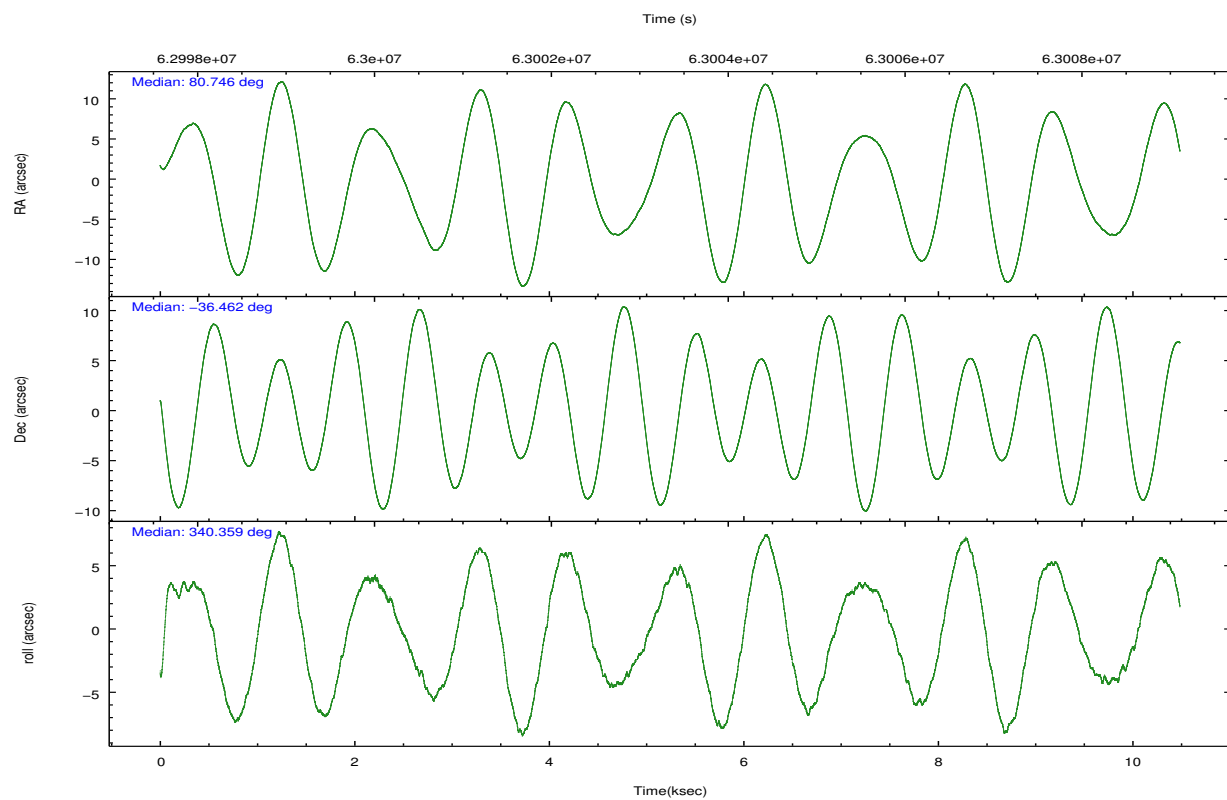
	ccd 7
grade 0 events	4448
	12%
grade 1 events	194
	0%
grade 2 events	5322
	15%
grade 3 events	2426
	6%
grade 4 events	2249
	6%
grade 5 events	1653
	4%
grade 6 events	10937
	30%
grade 7 events	8149
	23%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-7	ACIS-7	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
Pointing RA	80.712359	80.74614686499899	Subarray requested	CUSTOM	1/8
Pointing Dec	-36.466756	-36.4618985444686	Subarray start row	449	449
Pointing Roll	340.184528	340.3612409148577	Subarray row count	128	128
SIM focus pos (mm)	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
SIM defocus (mm)	0	0.001444936568705701	Primary exposure time	0.000000	0.5
SIM translation stage pos (mm)	-190.132523	-190.145094680475			
SIM translation stage offset (mm)	0	0.01257209746719923			
Observation start time	62998583.184000	62997759.720196			
Observation start date	1999-12-31T03:35:19	1999-12-31T03:22:39			
Observation end time	63008583.184000	63009113.645607			
Observation end date	1999-12-31T06:21:59	1999-12-31T06:31:53			
Read mode	TIMED	TIMED			

2.3 Aspect



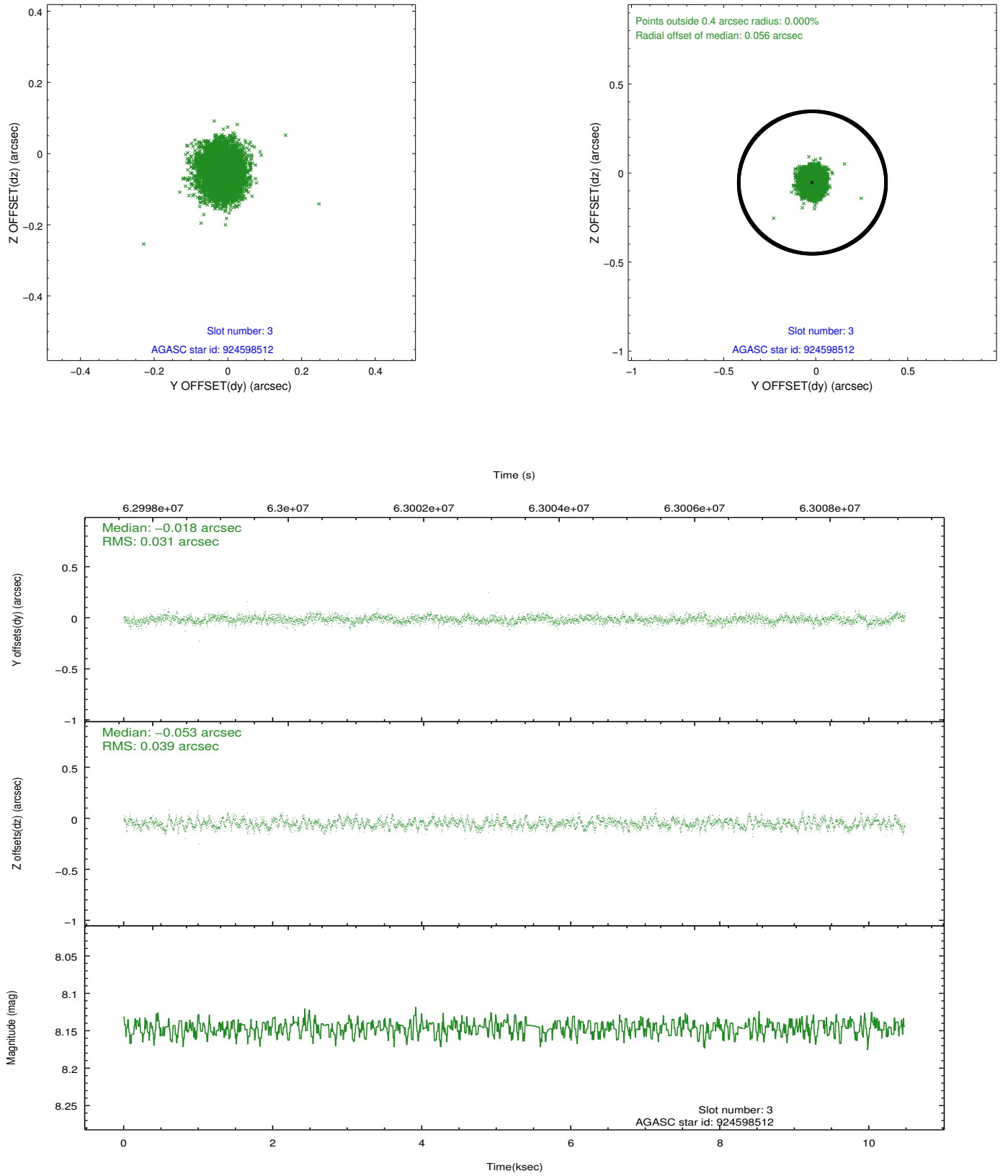


Slot Statistics

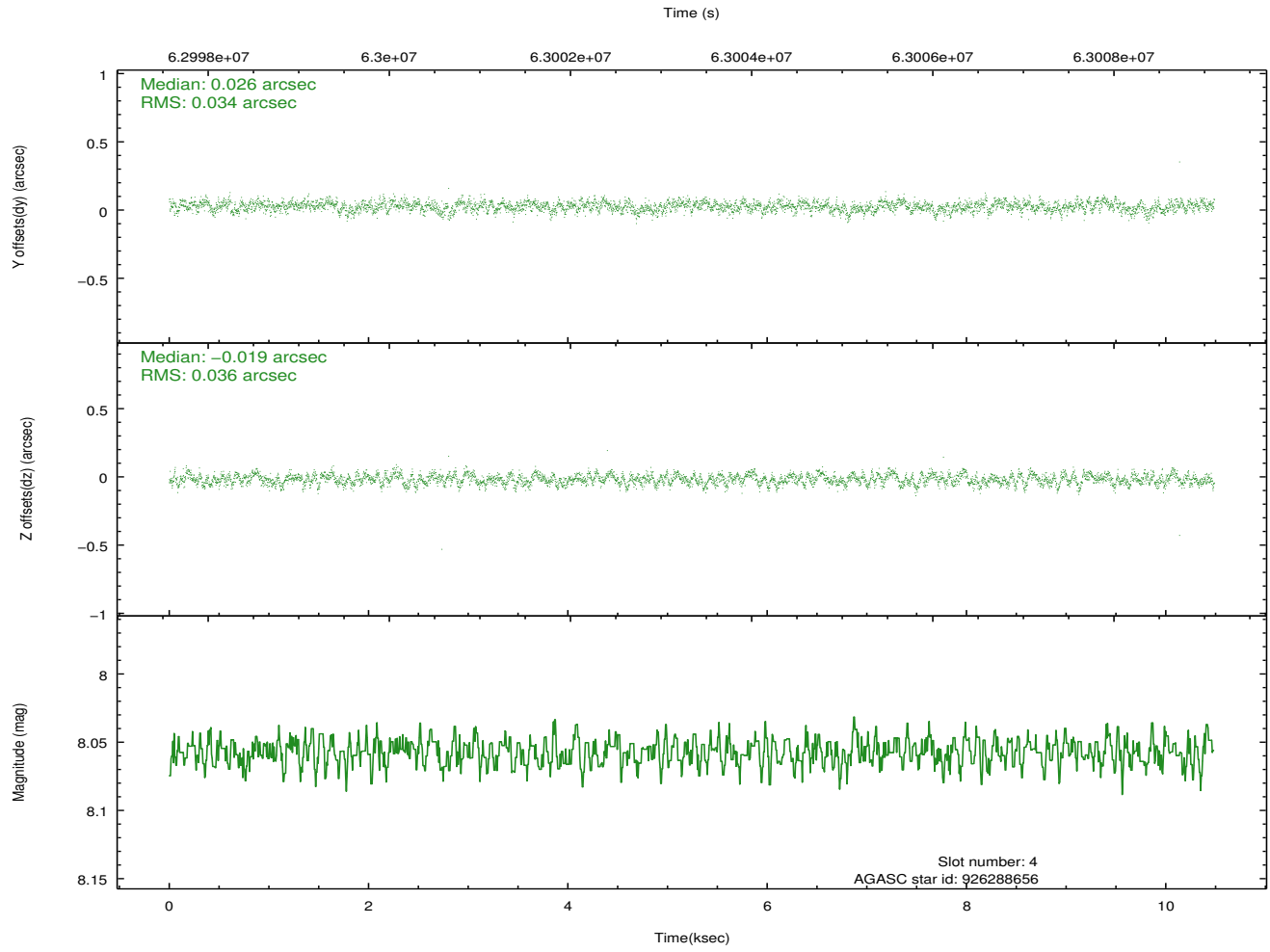
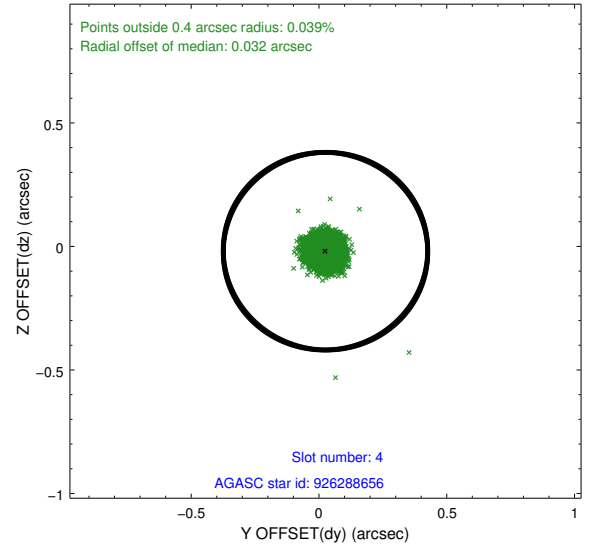
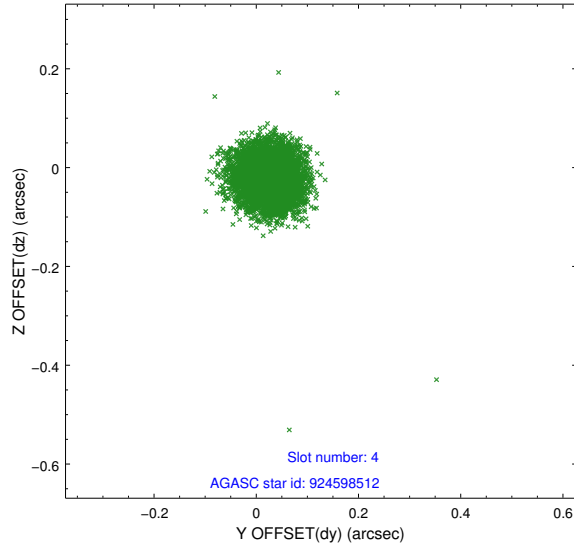
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	5116	0.003	-0.003	0.006	0.011	0.000000	0.000000	-753.46	-1723.87
1	FID	ACIS-S-4	7.22	5116	0.005	-0.001	0.005	0.010	0.000000	0.000000	2159.81	184.34
2	FID	ACIS-S-5	7.24	5116	-0.039	0.012	0.006	0.010	0.000000	0.000000	-1806.06	178.35
3	GUIDE	924598512	8.15	5114	-0.018	-0.053	0.053	0.085	80.814637	-36.371896	163.01	421.66
4	GUIDE	926288656	8.06	5116	0.026	-0.019	0.052	0.082	81.320723	-36.495523	1693.25	494.40
5	GUIDE	924588800	8.20	5115	0.024	0.031	0.066	0.099	79.855531	-36.745092	-1981.69	-1790.84
6	GUIDE	926286400	9.64	5113	-0.006	0.050	0.082	0.132	81.130407	-36.186437	800.95	1358.50
7	GUIDE	924593400	9.83	5106	-0.024	-0.010	0.086	0.141	80.831376	-36.314182	138.64	633.92

2.4 Star Slots

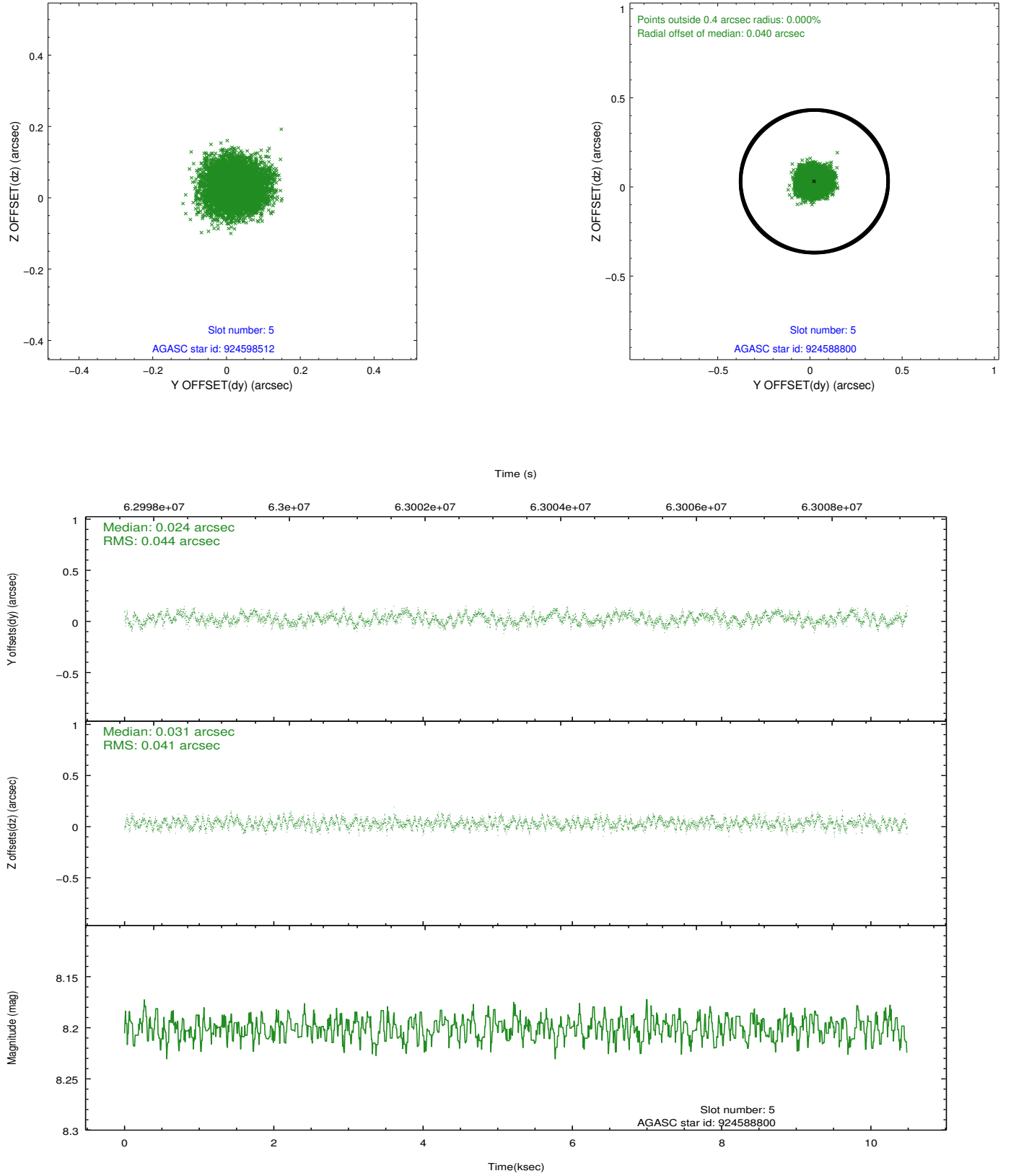
2.4.1 Slot 3



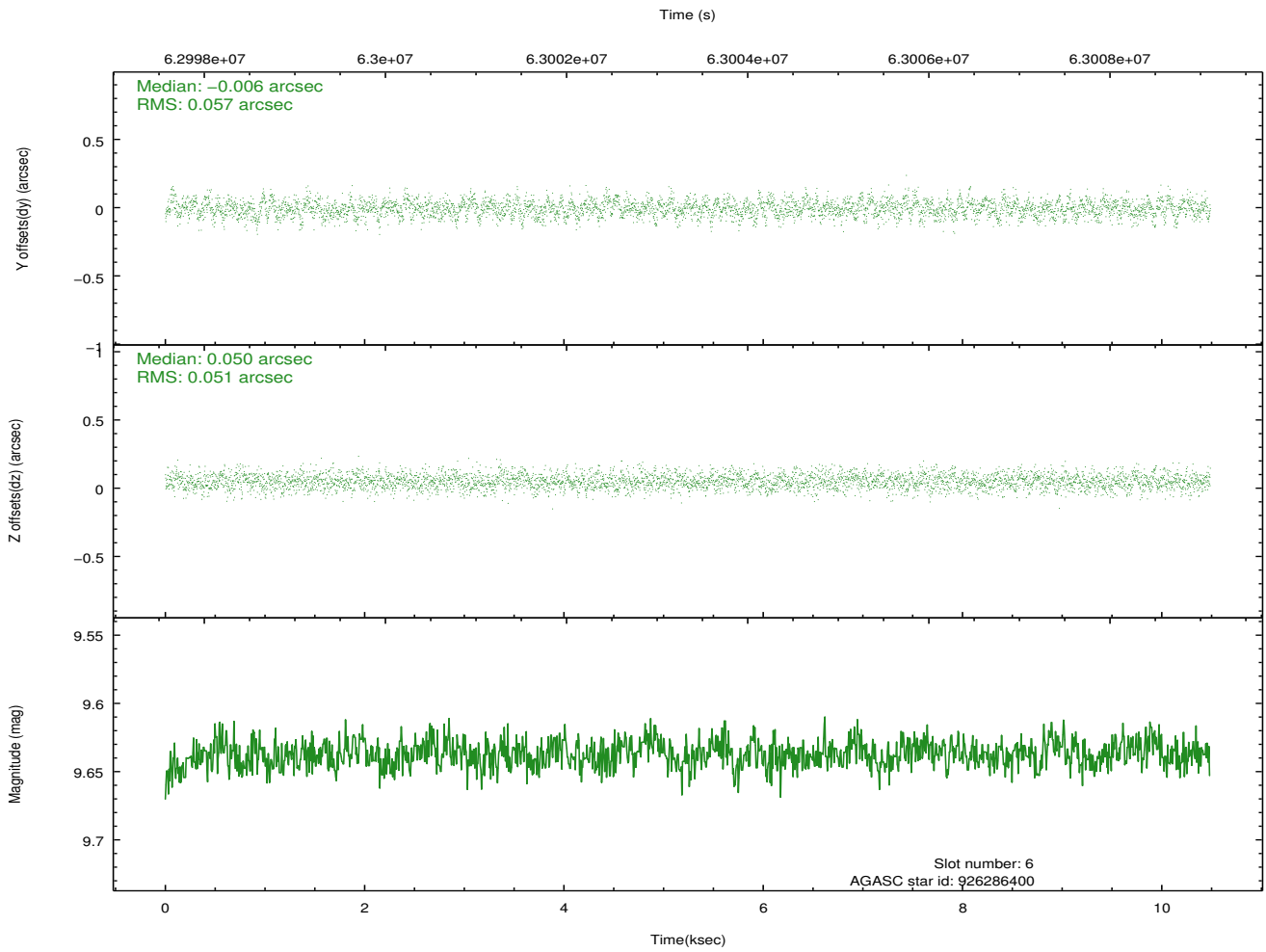
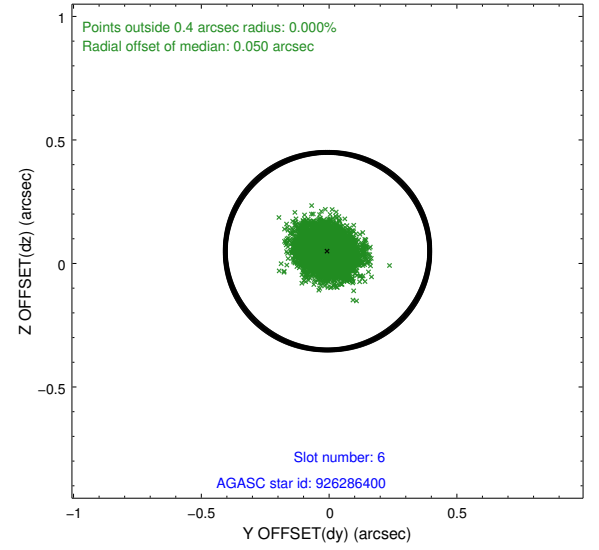
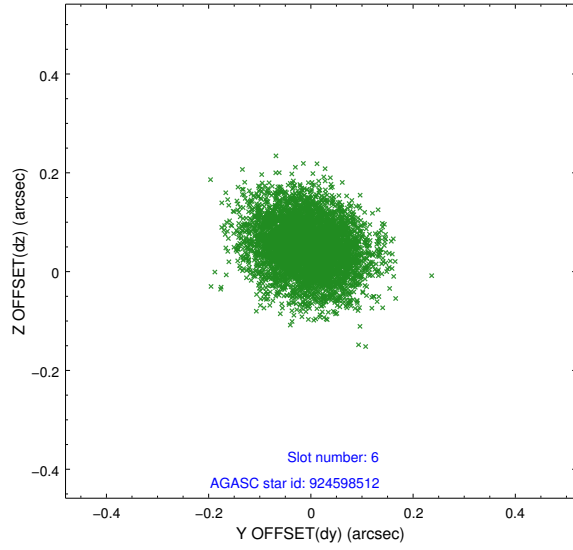
2.4.2 Slot 4



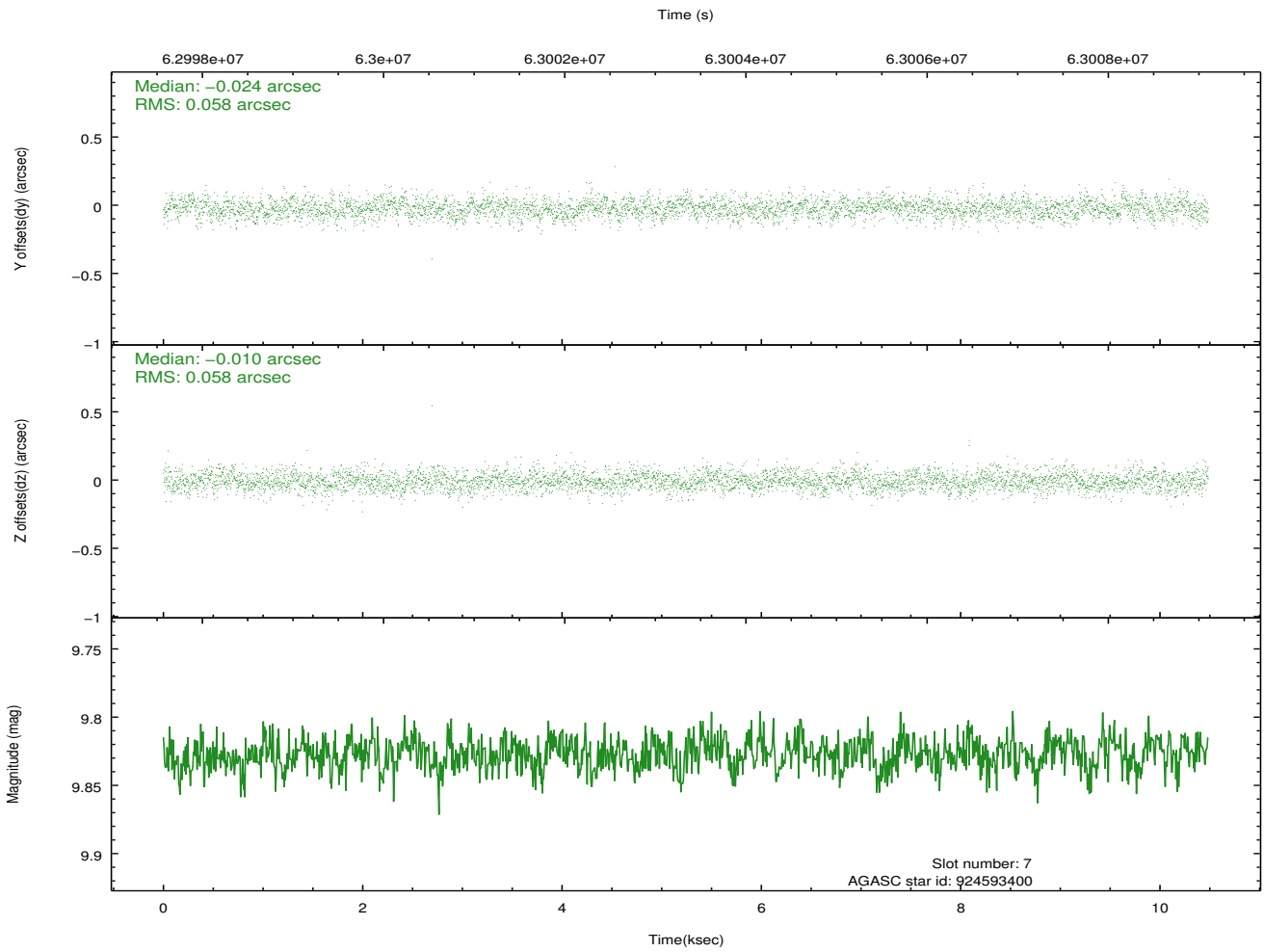
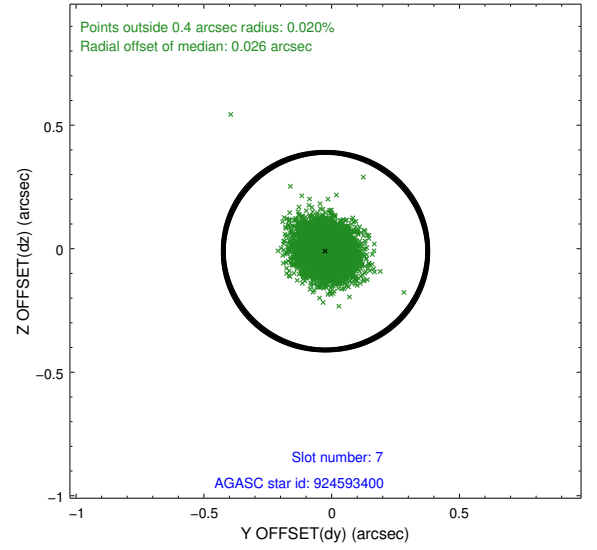
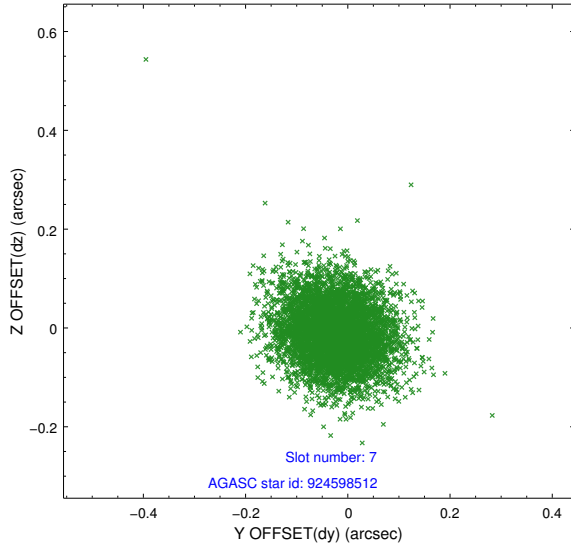
2.4.3 Slot 5



2.4.4 Slot 6

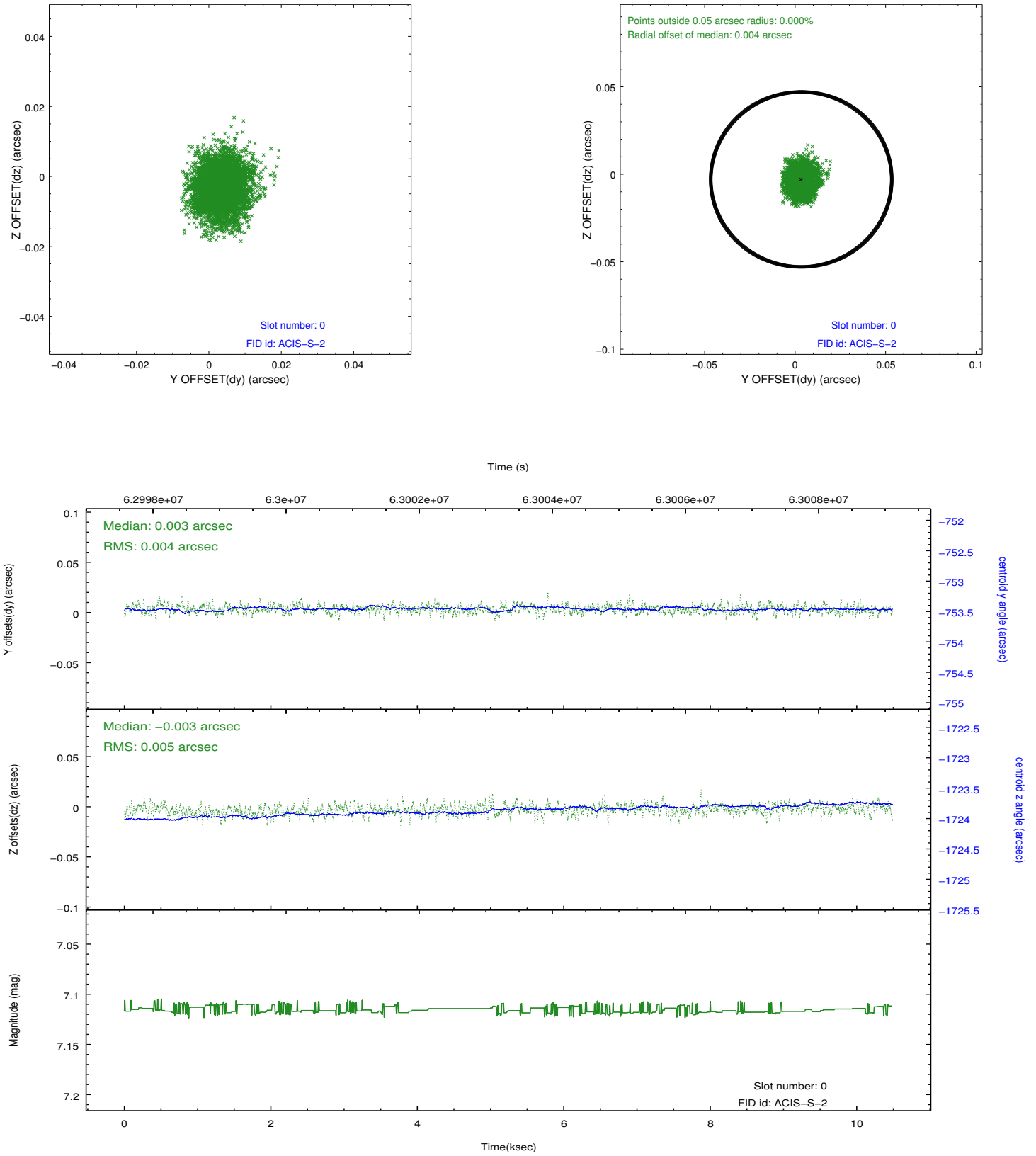


2.4.5 Slot 7

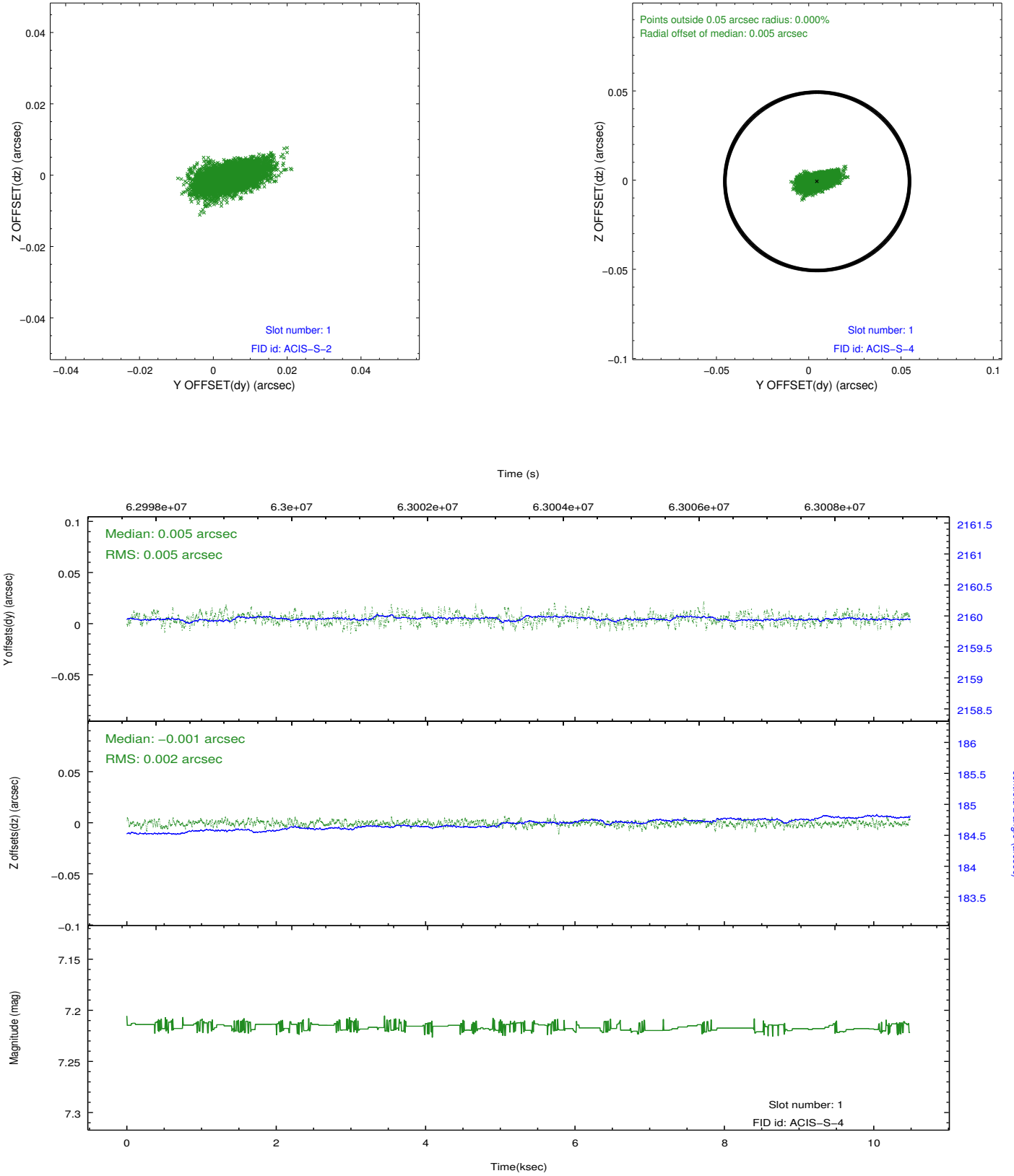


2.5 FID Slots

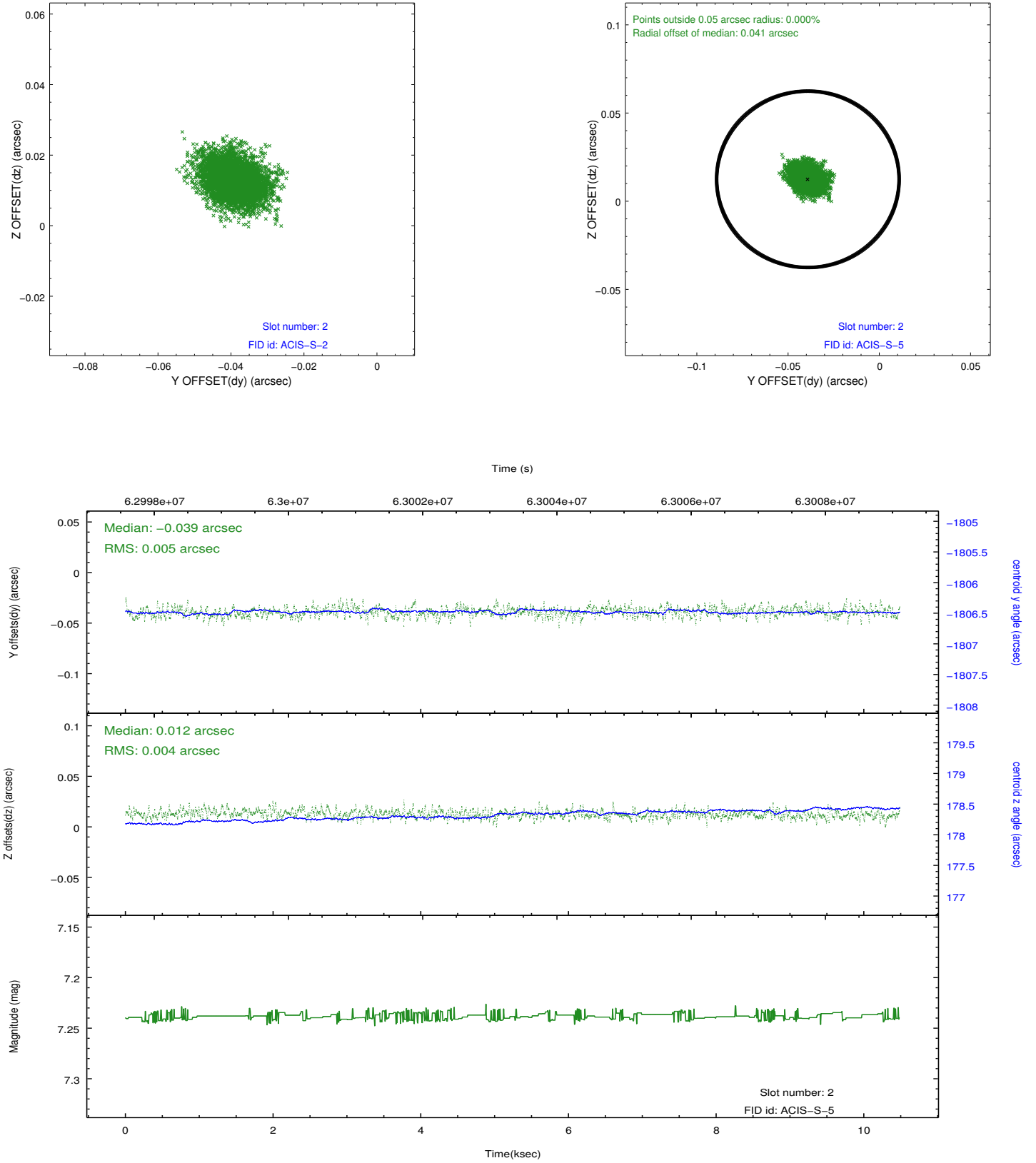
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources

A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.87

A.2 Comments

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.