

V&V Reference Report

L2 ASCDS Version : 8.2.1

Observation 1110 - L2 Version 3

Chandra X-Ray Center

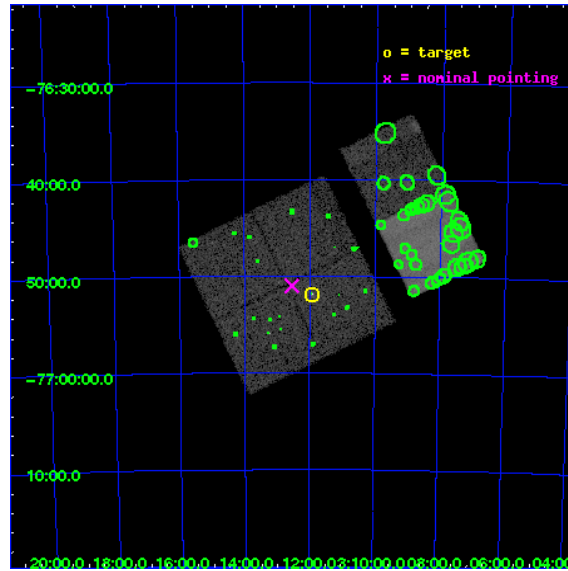
L2 Processing Date : Jan 13 2010

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

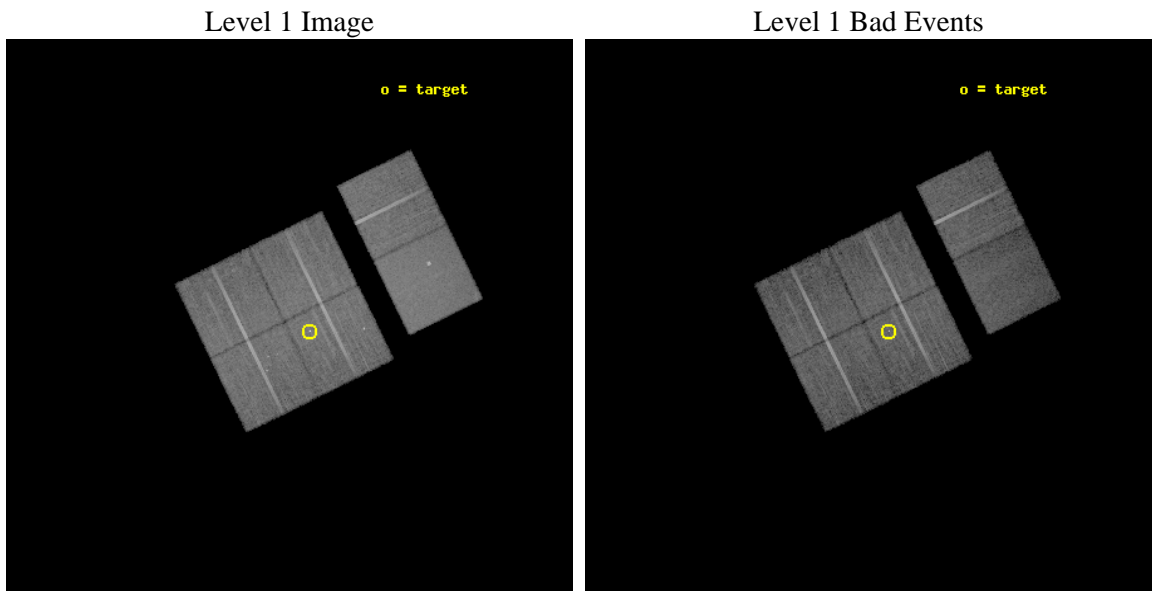
seq_num	780060	Sequence number
obs_id	1110	Observation id
title	 	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	PKS0312-770	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.98	Observer's specified target RA
dec_targ	-76.864167	Observer's specified target Dec
ra_nom	48.136362370213	Nominal RA
dec_nom	-76.850105094583	Nominal Dec
roll_nom	63.827479120974	Nominal Roll
revision	3	Processing version of data
ontime	12739.036260806	Sum of GTIs [s]
livetime	12577.726913145	Livetime [s]
ontime0	12752.000011876	Sum of GTIs [s]
ontime1	12748.759051658	Sum of GTIs [s]
ontime2	12752.000011876	Sum of GTIs [s]
ontime3	12739.036260806	Sum of GTIs [s]
ontime6	12752.000011876	Sum of GTIs [s]
ontime7	12752.000011876	Sum of GTIs [s]
l2events	120344	Number of level 2 events



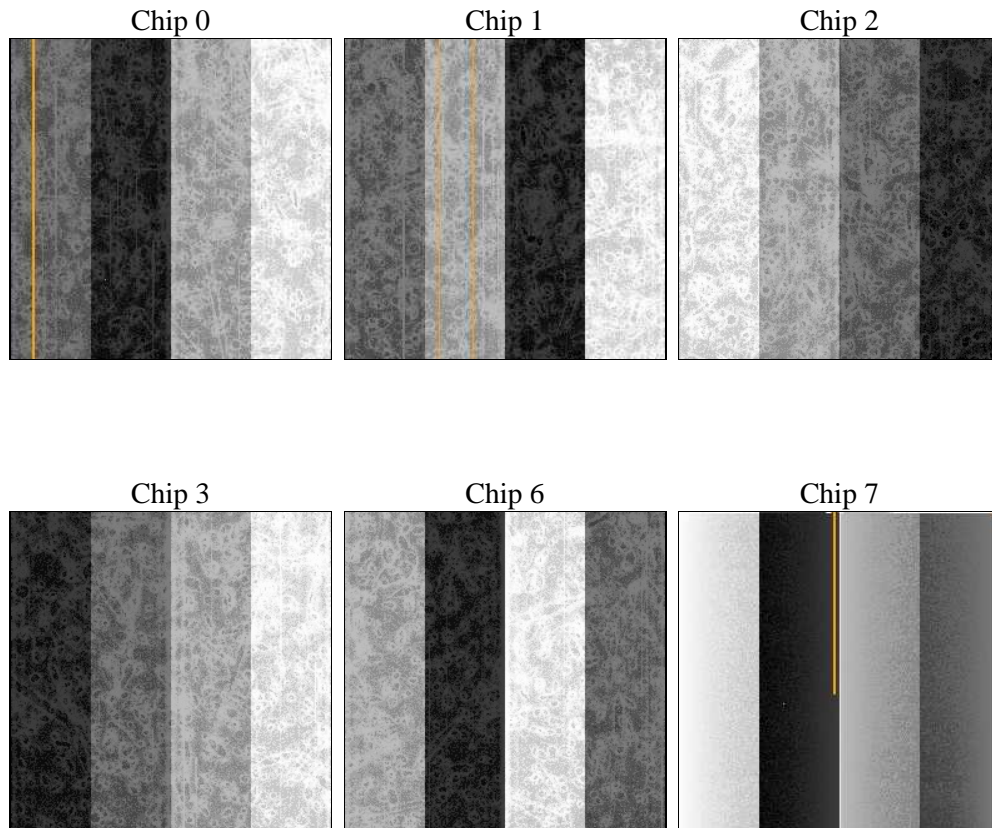
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13000.000000	Scheduled observation exposure time
ascdsver	8.2.1	ASCDS version number	ontime	12739.036260806	Sum of GTIs [s]
caldsver	4.1.5	 	ontime0	12752.000011876	Sum of GTIs [s]
date	2010-01-13T09:28:38	Date and time of file creation	ontime1	12748.759051658	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	12752.000011876	Sum of GTIs [s]
			ontime3	12739.036260806	Sum of GTIs [s]
			ontime6	12752.000011876	Sum of GTIs [s]
			ontime7	12752.000011876	Sum of GTIs [s]
			l1events	777416	Number of level 1 events

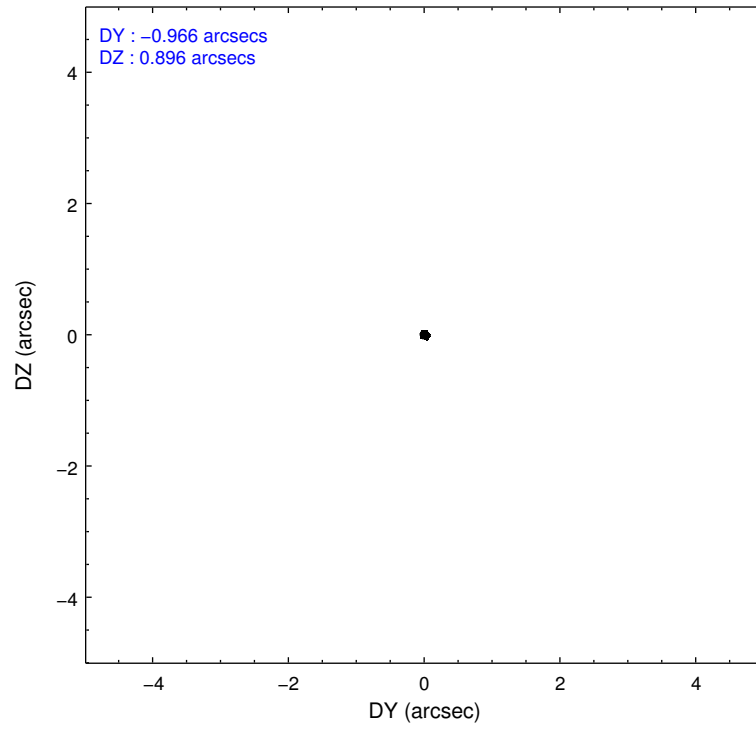
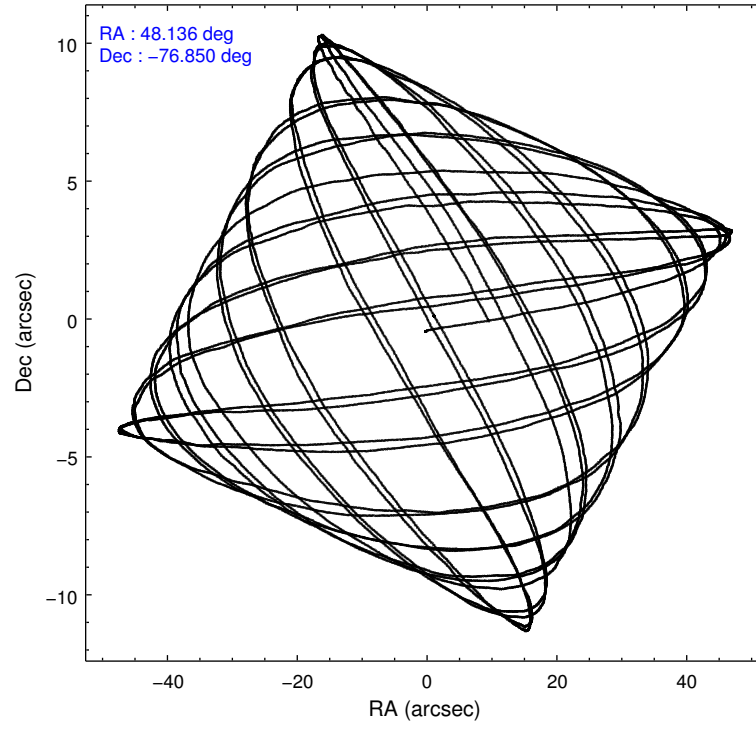
2.1.4 Events

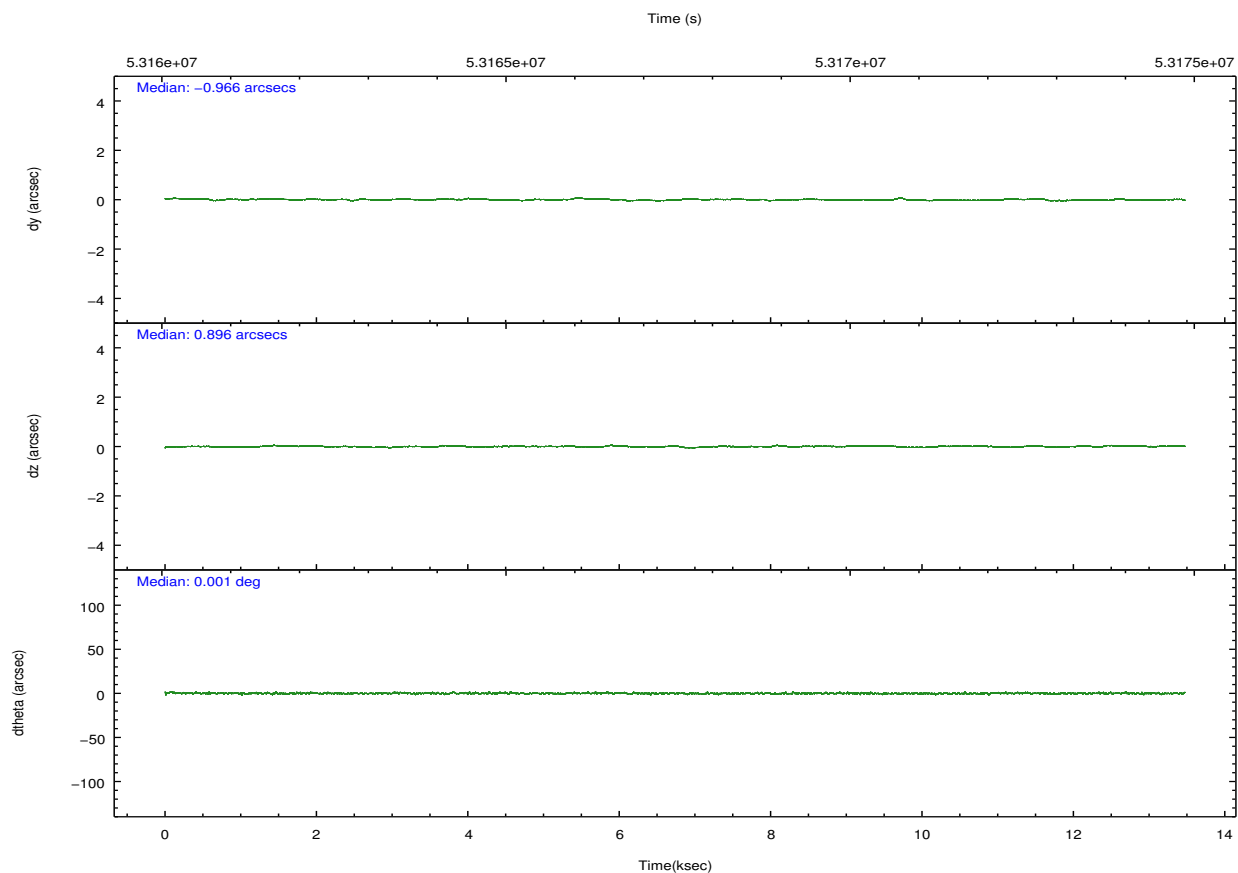
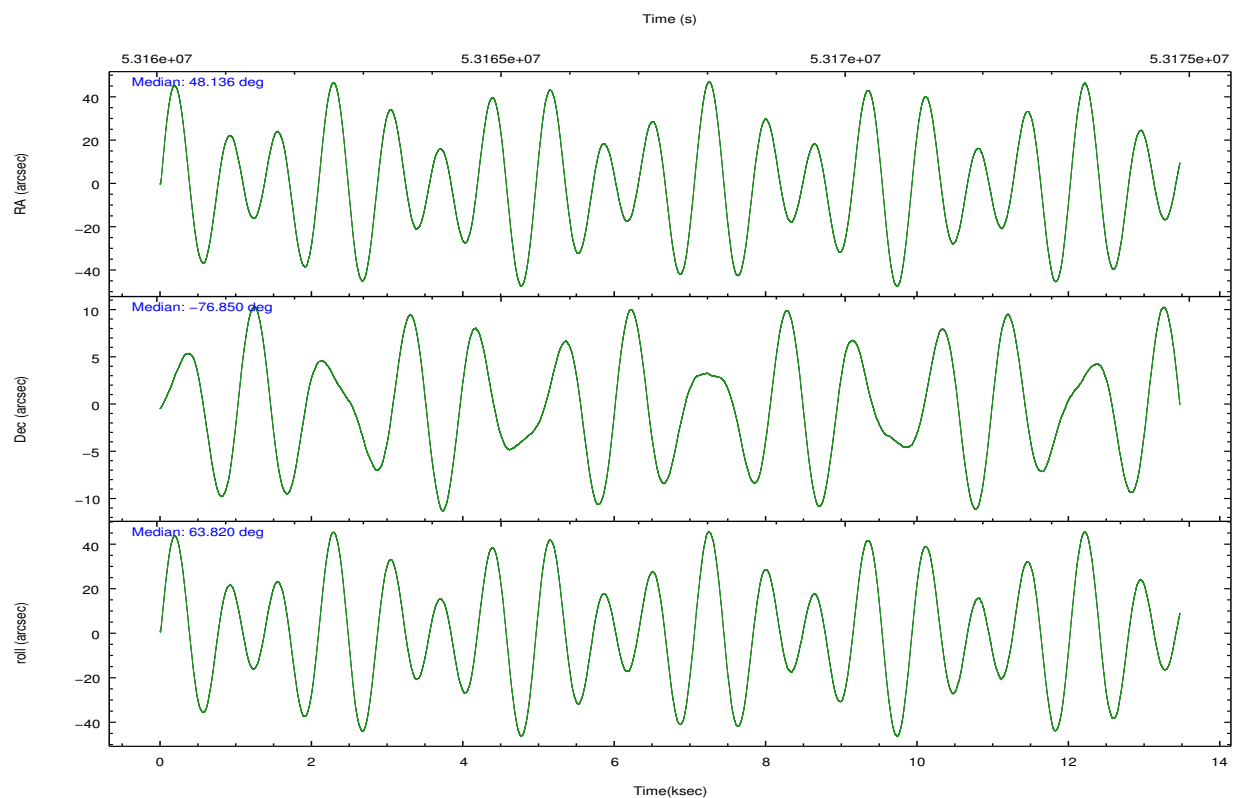
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	121767	121763	129077	134880	125482	144447	grade 0 events	4323	4907	3837	7125	3370	6951
rejected events	109471	108407	117919	118418	113860	79642		3%	4%	2%	5%	2%	4%
rejected %	89%	89%	91%	87%	90%	55%	grade 1 events	38	44	37	486	30	92
								0%	0%	0%	0%	0%	0%
							grade 2 events	3415	3498	3199	4165	3703	10234
								2%	2%	2%	3%	2%	7%
							grade 3 events	1111	1207	898	1237	906	6160
								0%	0%	0%	0%	0%	4%
							grade 4 events	1056	1173	973	1288	918	5325
								0%	0%	0%	0%	0%	3%
							grade 5 events	3025	2949	2580	3322	2964	8817
								2%	2%	1%	2%	2%	6%
							grade 6 events	2397	2581	2259	2659	2730	36164
								1%	2%	1%	1%	2%	25%
							grade 7 events	106402	105404	115294	114598	110861	70704
								87%	86%	89%	84%	88%	48%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-012367	ACIS-012367	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	48.141567	48.13636237021294	Subarray requested	NONE	NONE
Pointing Dec	-76.877962	-76.8501050945829	Alternating exposures requested	N	N
Pointing Roll	63.623860	63.82747912097405	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.782348	-0.7809083437167272			
SIM defocus (mm)	0	0.001439871863259334			
SIM translation stage pos (mm)	-233.592463	-233.5874344608287			
SIM translation stage offset (mm)	0	-0.005018542100998502			
Observation start time	53161193.184000	53160527.372423			
Observation start date	1999-09-08T06:58:49	1999-09-08T06:48:47			
Observation end time	53174193.184000	53174327.460419			
Observation end date	1999-09-08T10:35:29	1999-09-08T10:38:47			
Read mode	TIMED	TIMED			

2.3 Aspect



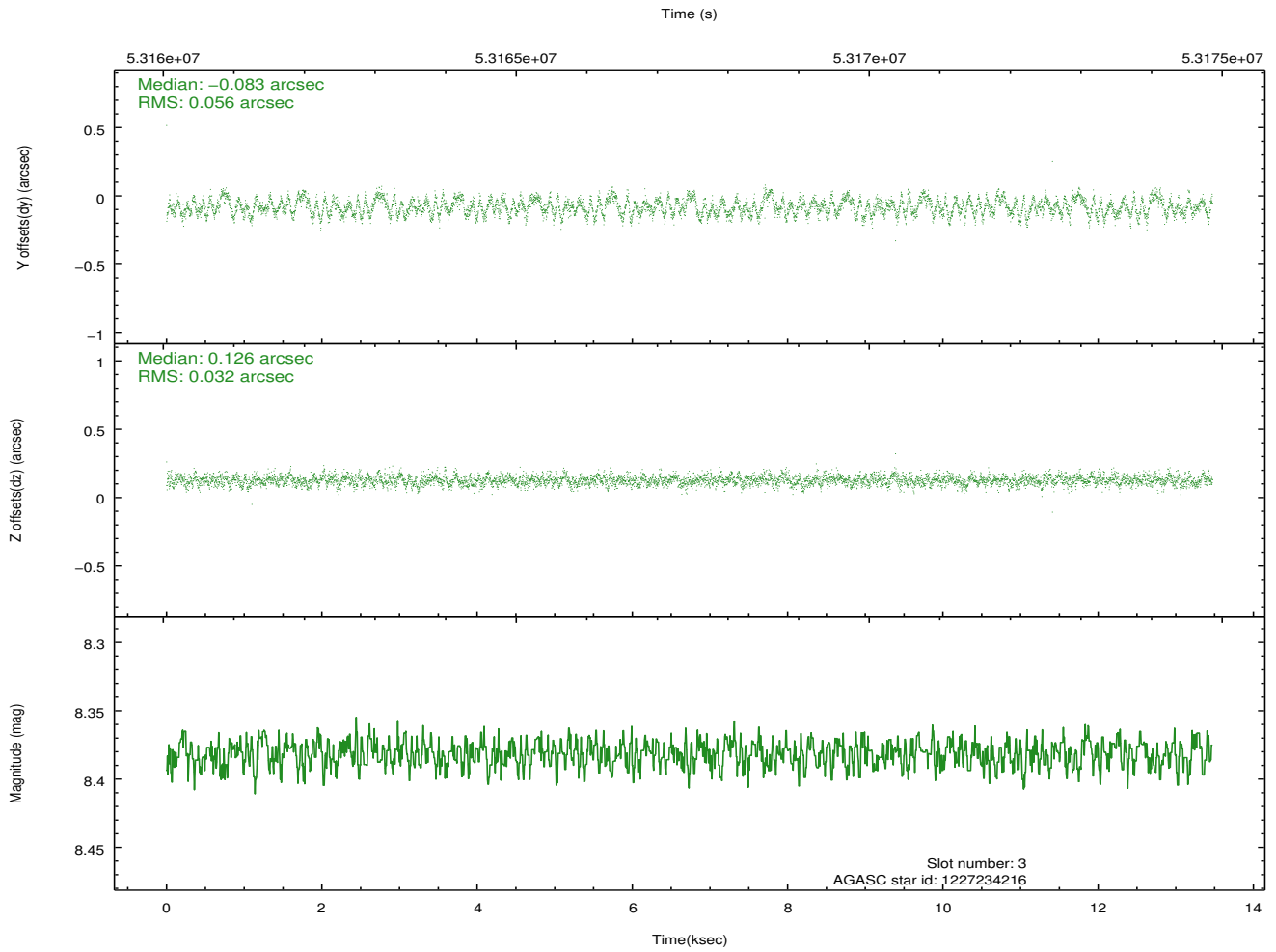
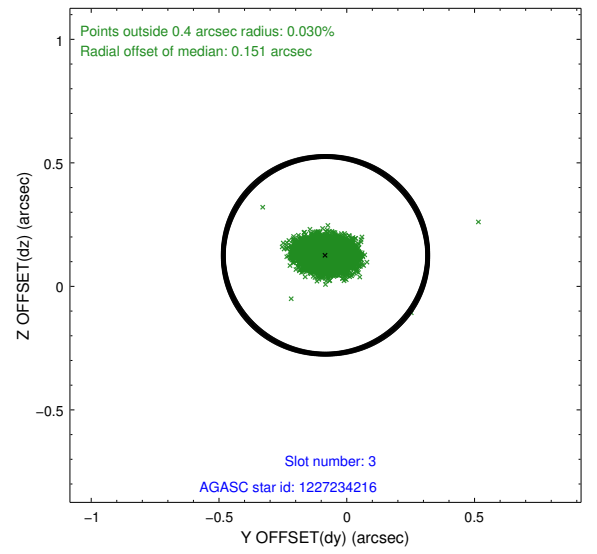
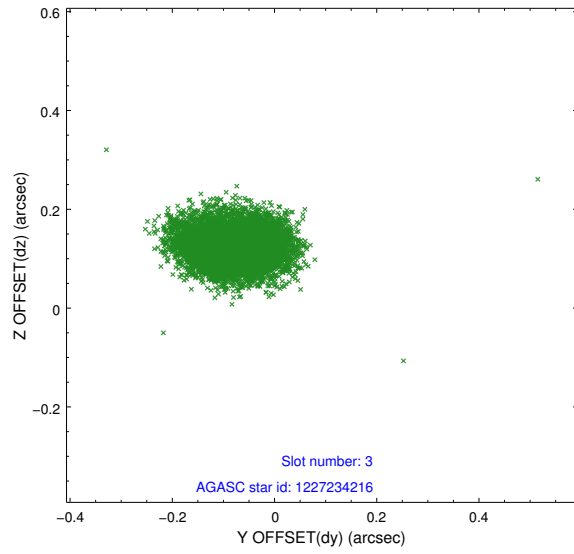


Slot Statistics

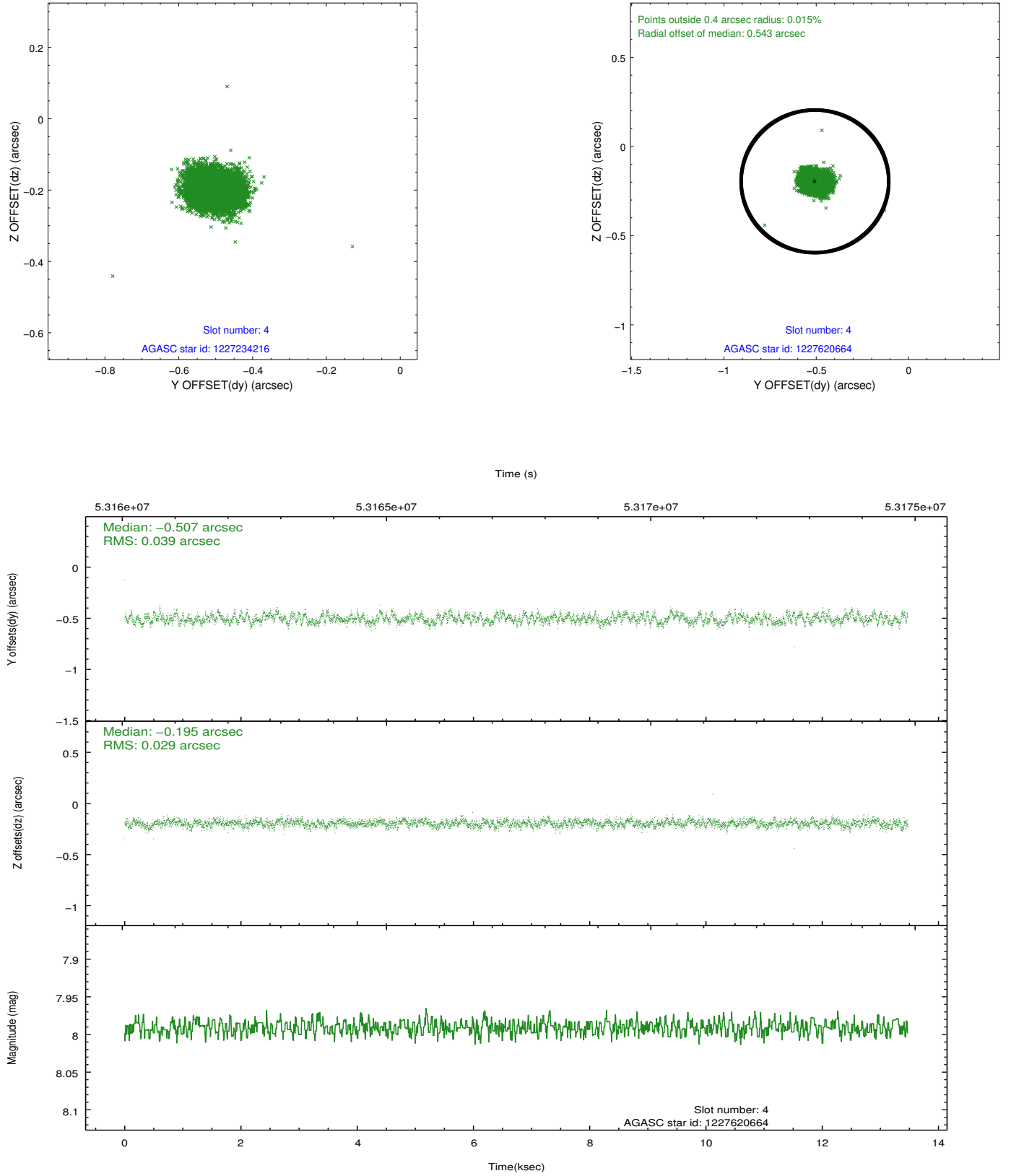
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.21	6571	-0.046	0.033	0.010	0.015	0.000000	0.000000	-753.40	-830.41
1	FID	ACIS-I-4	7.23	6573	0.127	0.024	0.007	0.013	0.000000	0.000000	2160.90	1075.54
2	FID	ACIS-I-5	7.23	6573	-0.182	0.011	0.009	0.014	0.000000	0.000000	-1807.12	1073.71
3	GUIDE	1227234216	8.38	6571	-0.083	0.126	0.069	0.112	51.506981	-76.616205	2018.36	-2127.59
4	GUIDE	1227620664	7.99	6573	-0.507	-0.195	0.052	0.082	46.150563	-77.166043	-1660.32	952.86
5	GUIDE	1227629440	9.11	6568	-0.169	-0.040	0.061	0.100	48.268116	-77.028500	-440.13	-332.22
6	GUIDE	1227104240	9.80	6565	-0.104	0.162	0.090	0.144	48.955462	-76.524572	1439.14	-48.12
7	GUIDE	1227097864	9.92	6564	0.861	-0.054	0.088	0.143	46.669937	-76.763312	-181.30	1263.38

2.4 Star Slots

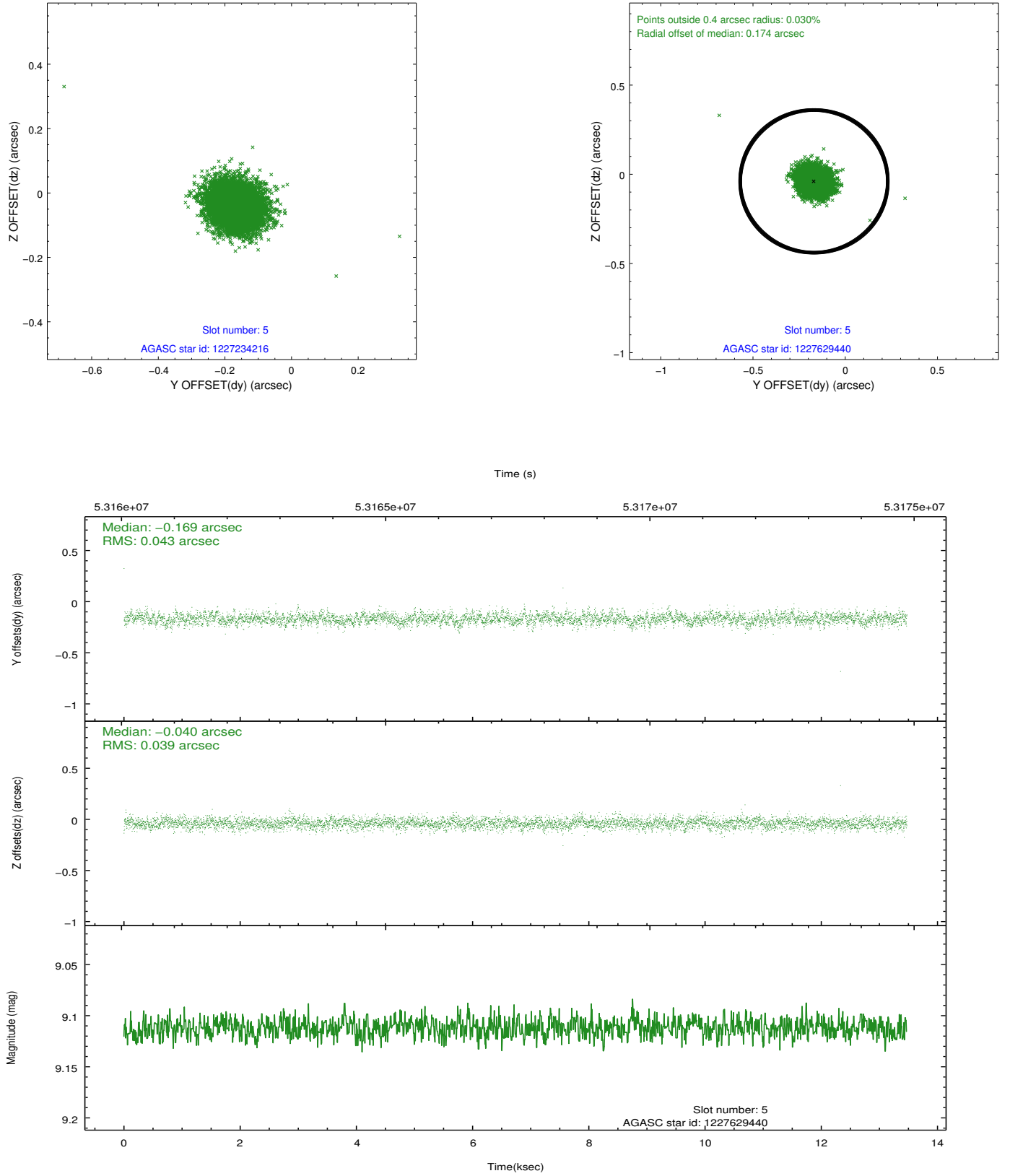
2.4.1 Slot 3



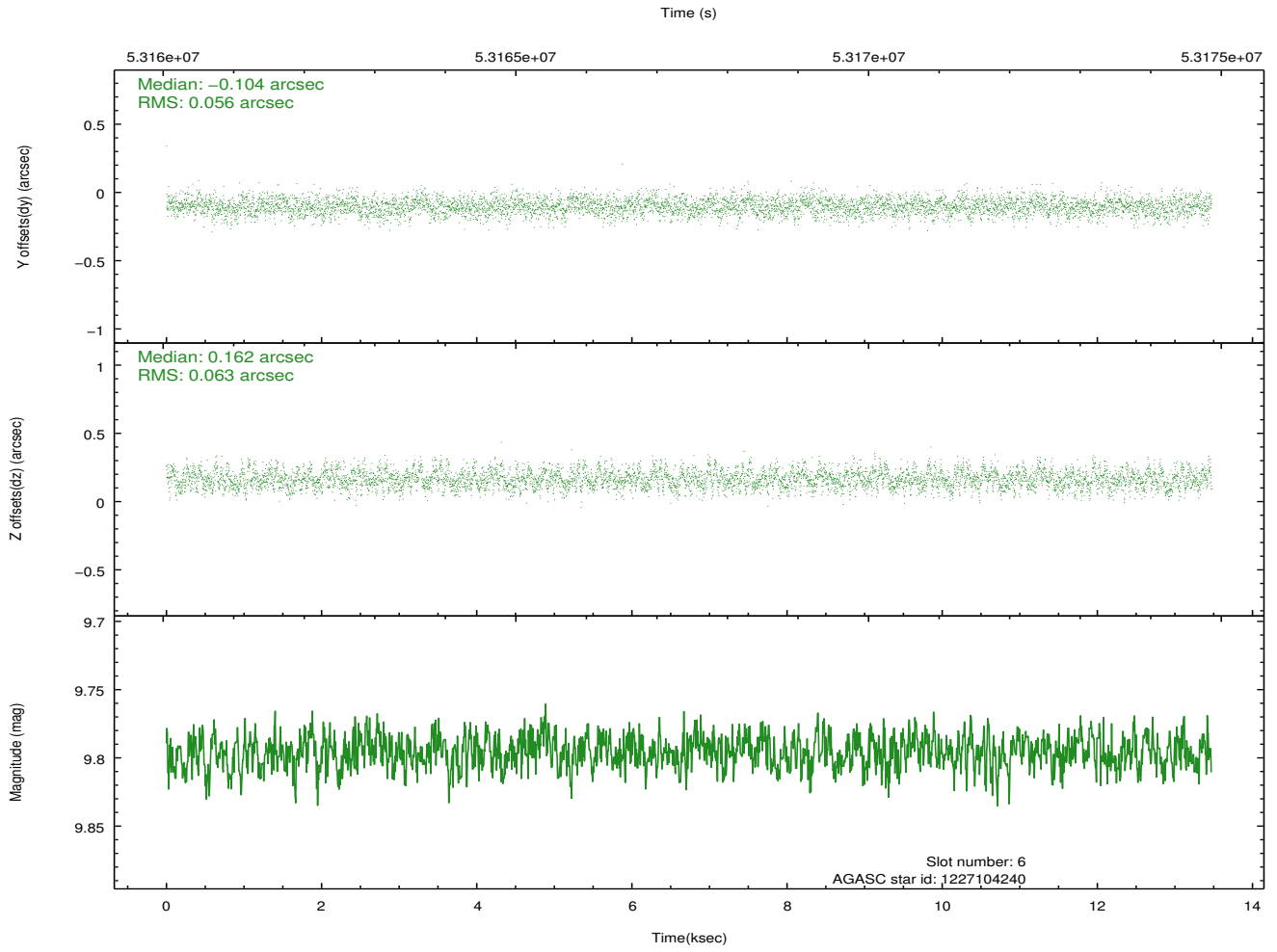
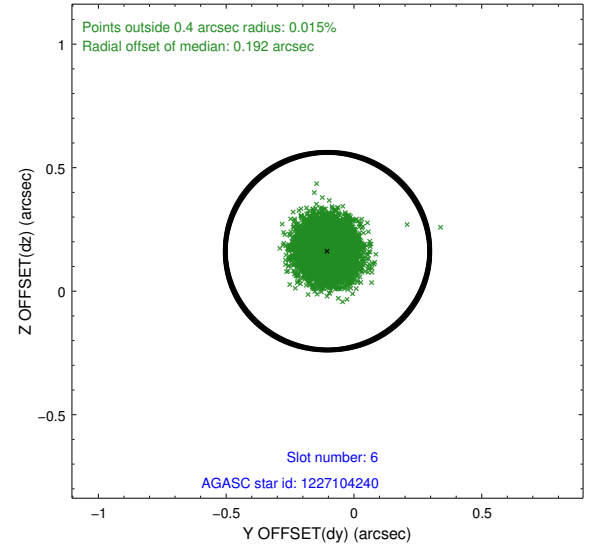
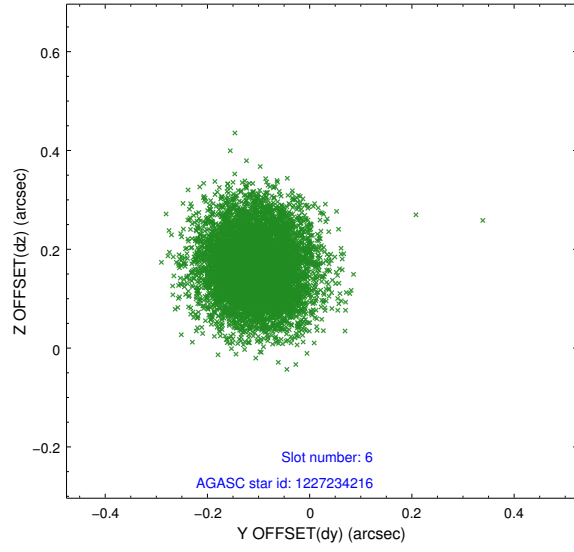
2.4.2 Slot 4



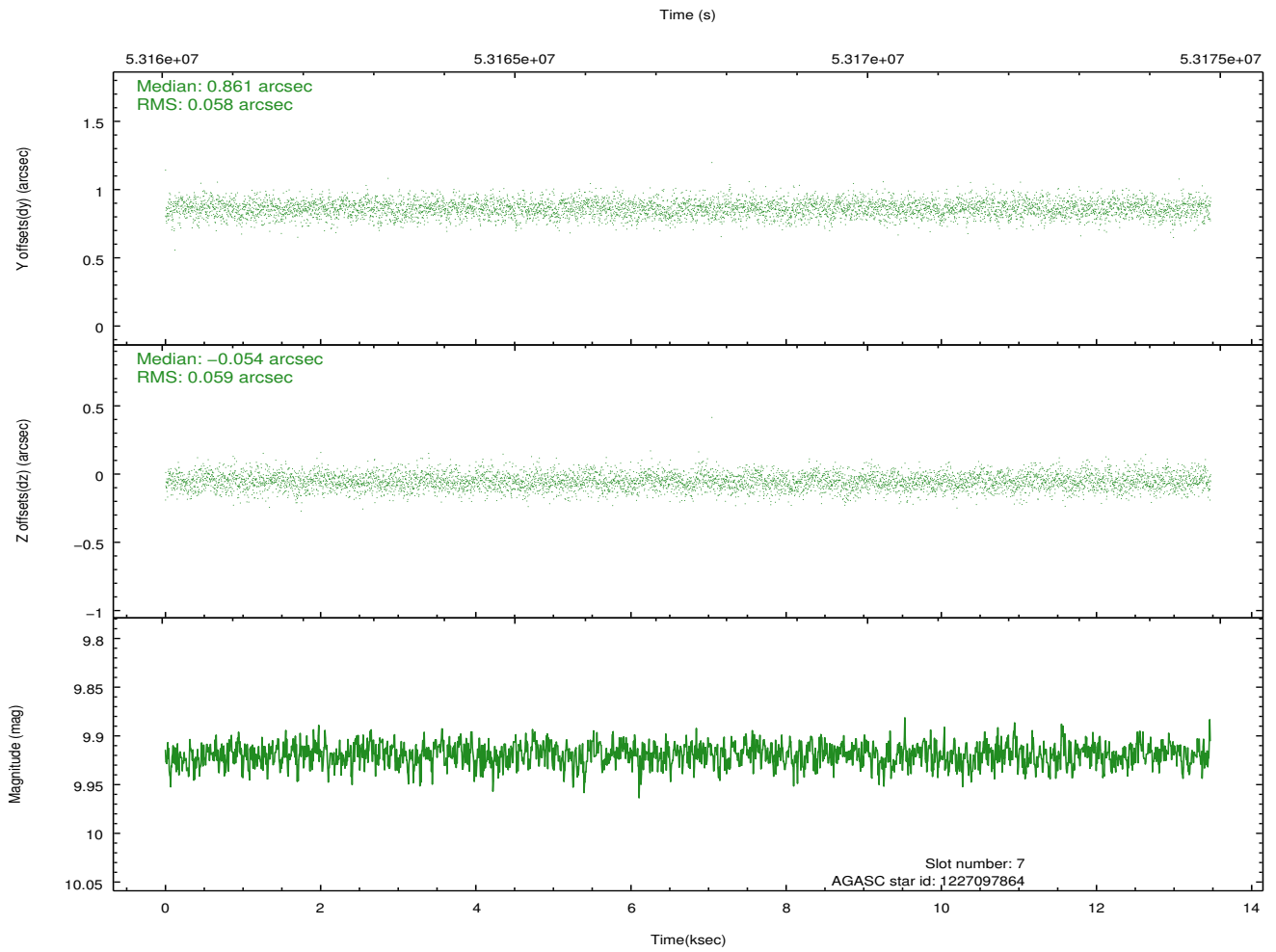
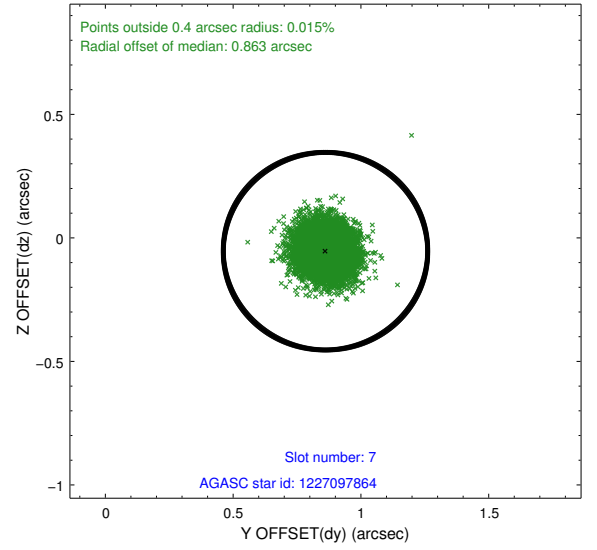
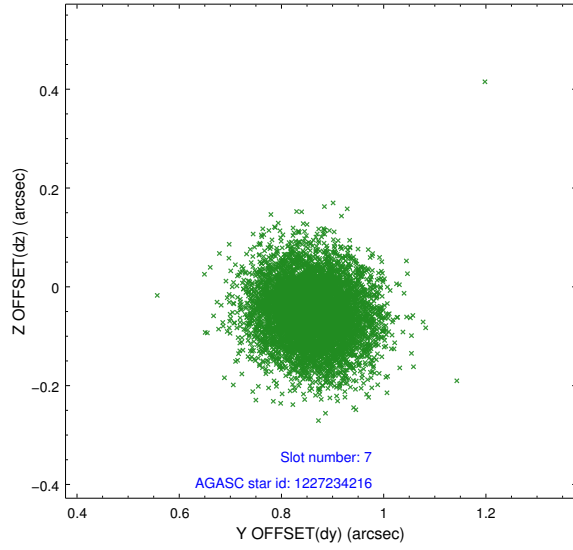
2.4.3 Slot 5



2.4.4 Slot 6

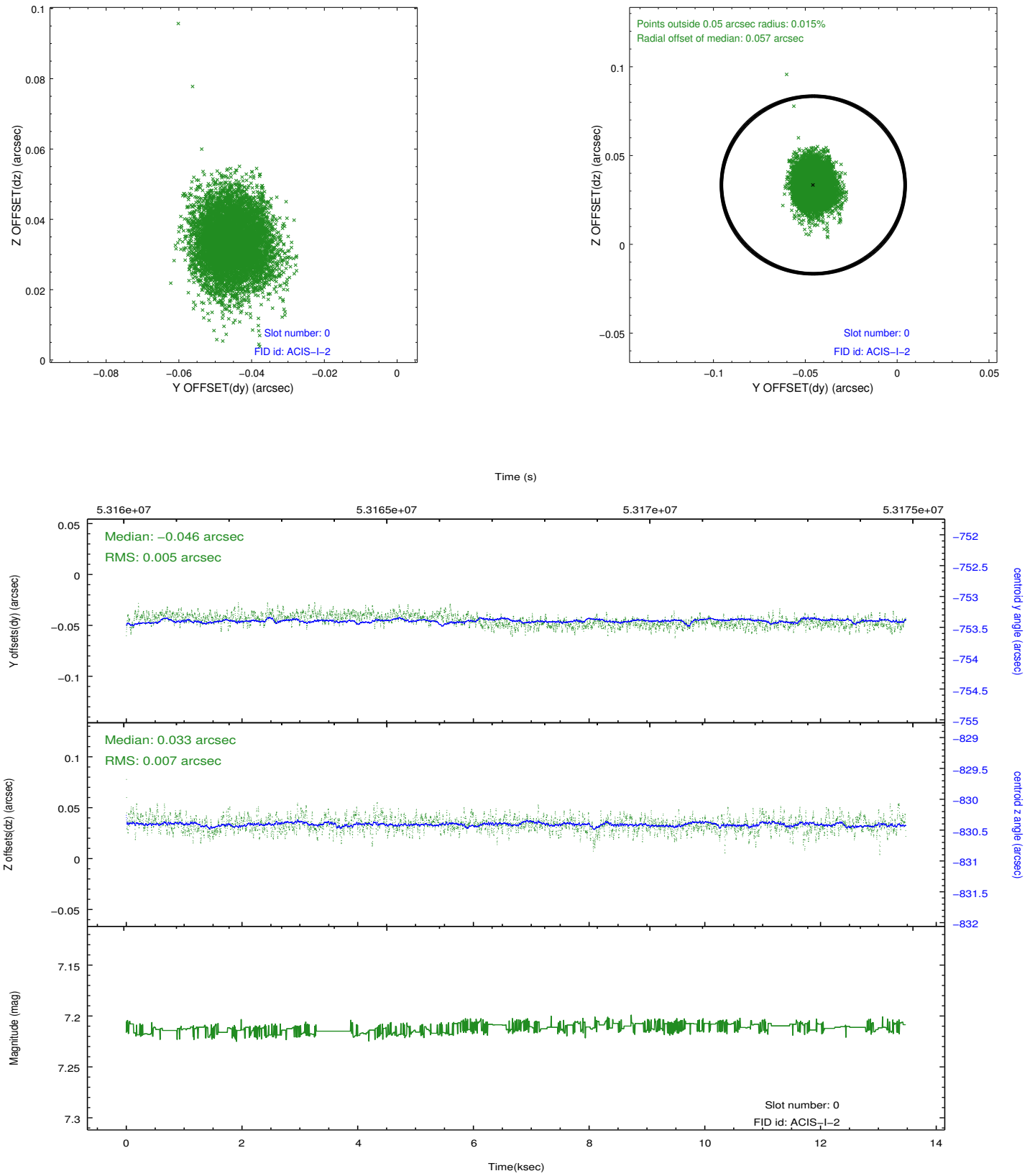


2.4.5 Slot 7

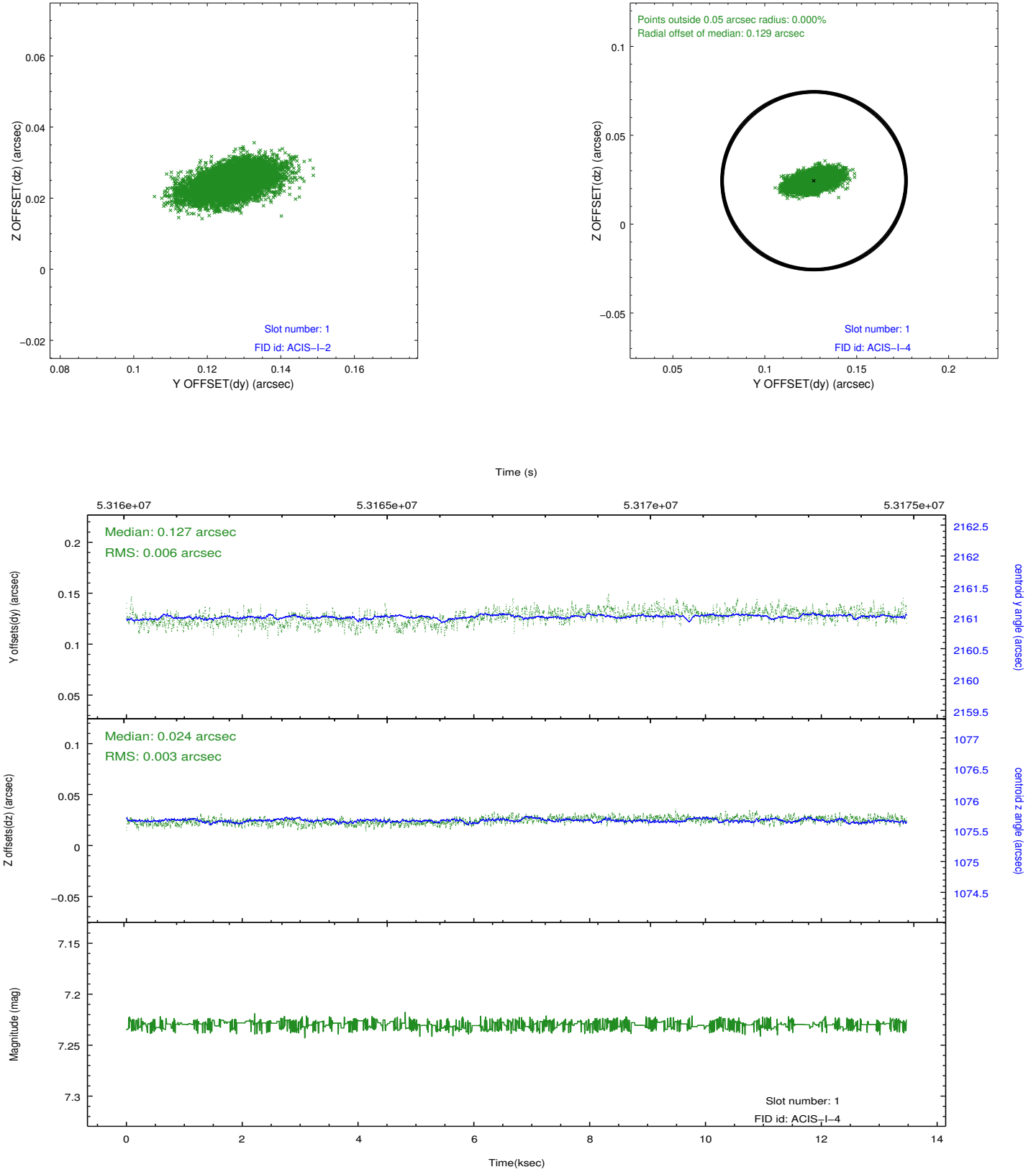


2.5 FID Slots

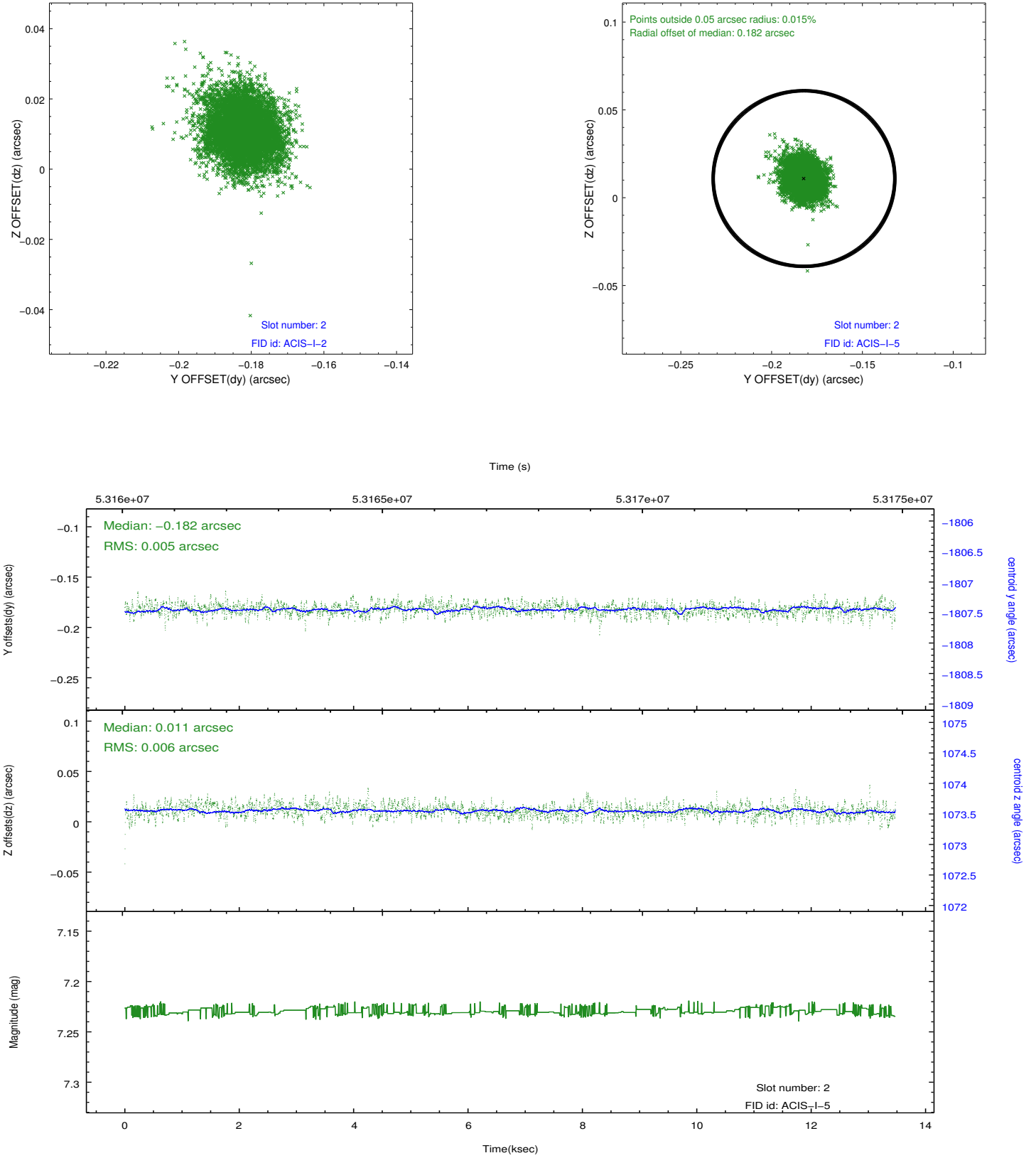
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

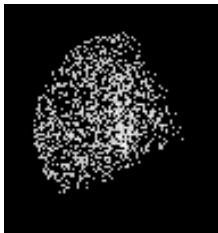


3 Point Sources

7.80 arcmin



19.64 arcmin



5.46 arcmin



4.15 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.07.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.742

A.2 Comments

ACIS off-axis PSF and pileup study on I3.

===

The focal plane temperature is approximately -100 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.