

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 307 - L2 Version 3

Chandra X-Ray Center

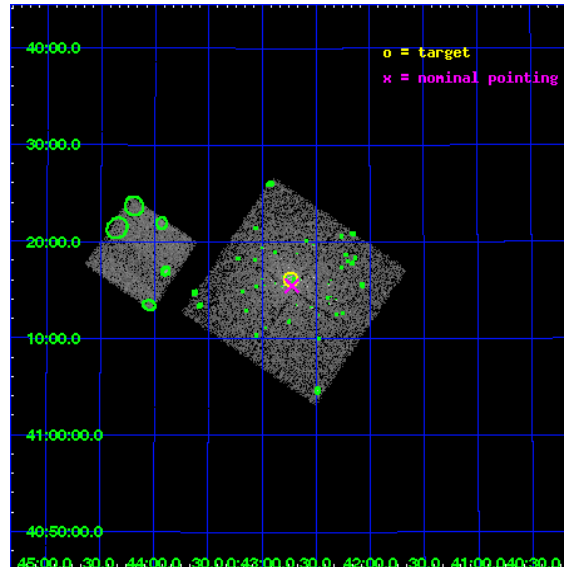
L2 Processing Date : Dec 4 2009

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

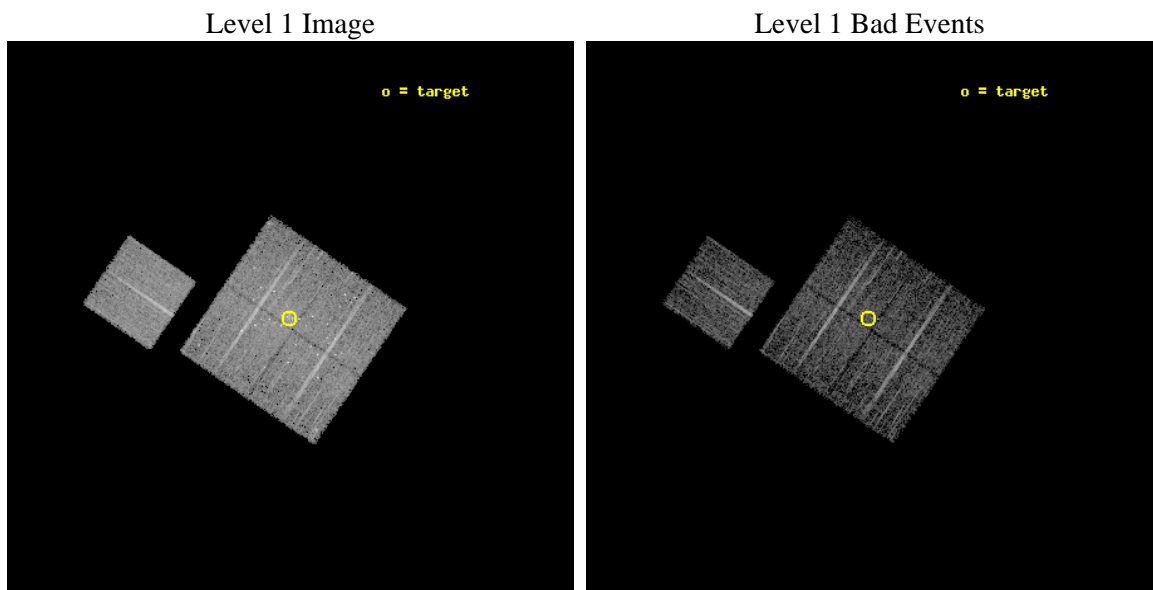
seq_num	600067	Sequence number
obs_id	307	Observation id
title	M31 MONITORING (FOLLOWUP)	Proposal title
observer	Dr Steve Murray	Principal investigator
object	M31 TRANSIENT TBD	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	10.685	Observer's specified target RA
dec_targ	41.268972	Observer's specified target Dec
ra_nom	10.681158635294	Nominal RA
dec_nom	41.25783082483	Nominal Dec
roll_nom	304.29948266731	Nominal Roll
revision	3	Processing version of data
ontime	4165.1001631916	Sum of GTIs [s]
livetime	4112.359157003	Livetime [s]
ontime0	4165.2643231899	Sum of GTIs [s]
ontime1	4165.2232831866	Sum of GTIs [s]
ontime2	4165.1822431907	Sum of GTIs [s]
ontime3	4165.1001631916	Sum of GTIs [s]
ontime6	4165.1412031874	Sum of GTIs [s]
l2events	46265	Number of level 2 events



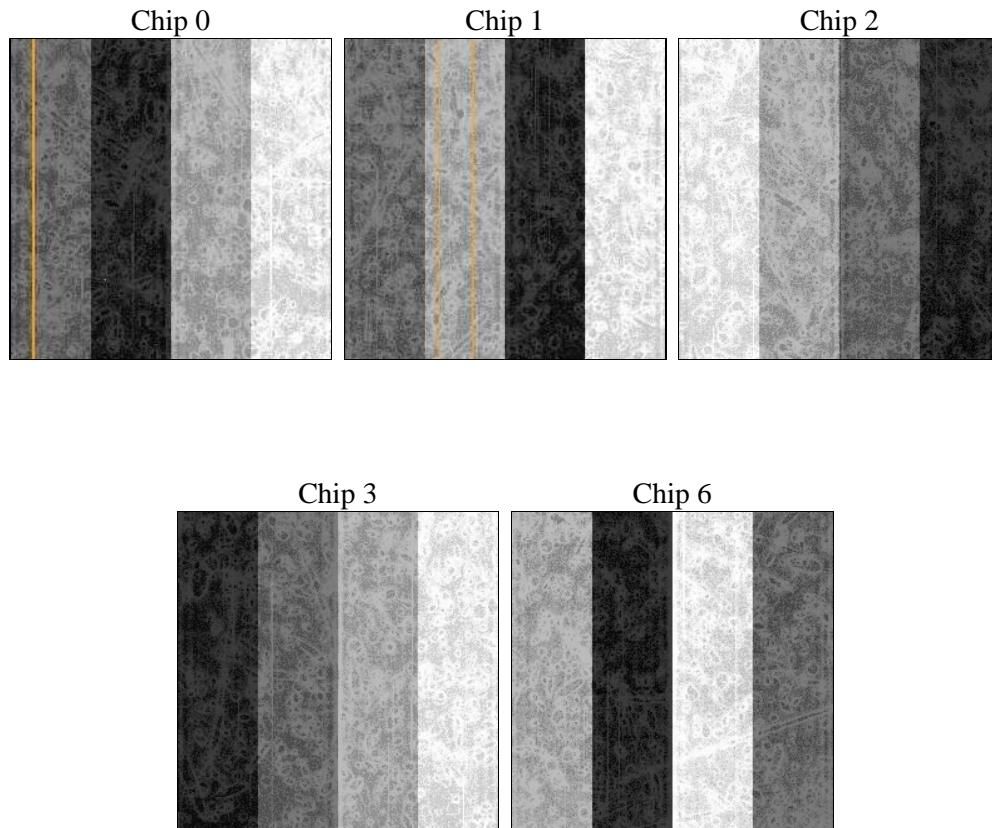
2 OBI

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	8.1.2	ASCDS version number	ontime	4165.1001631916	Sum of GTIs [s]
caldsver	4.1.4	 	ontime0	4165.2643231899	Sum of GTIs [s]
date	2009-12-05T00:49:01	Date and time of file creation	ontime1	4165.2232831866	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	4165.1822431907	Sum of GTIs [s]
			ontime3	4165.1001631916	Sum of GTIs [s]
			ontime6	4165.1412031874	Sum of GTIs [s]
			l1events	207160	Number of level 1 events

2.1.4 Events

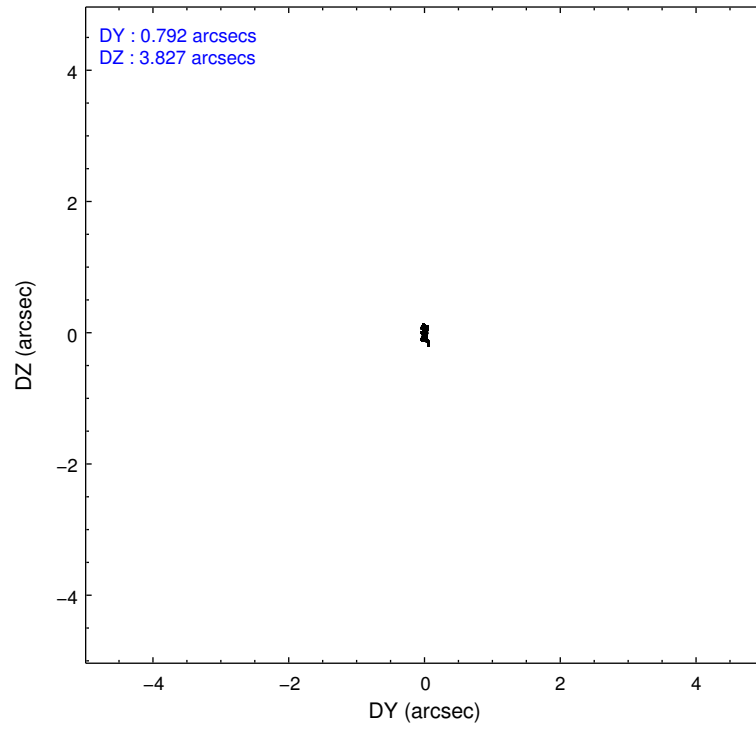
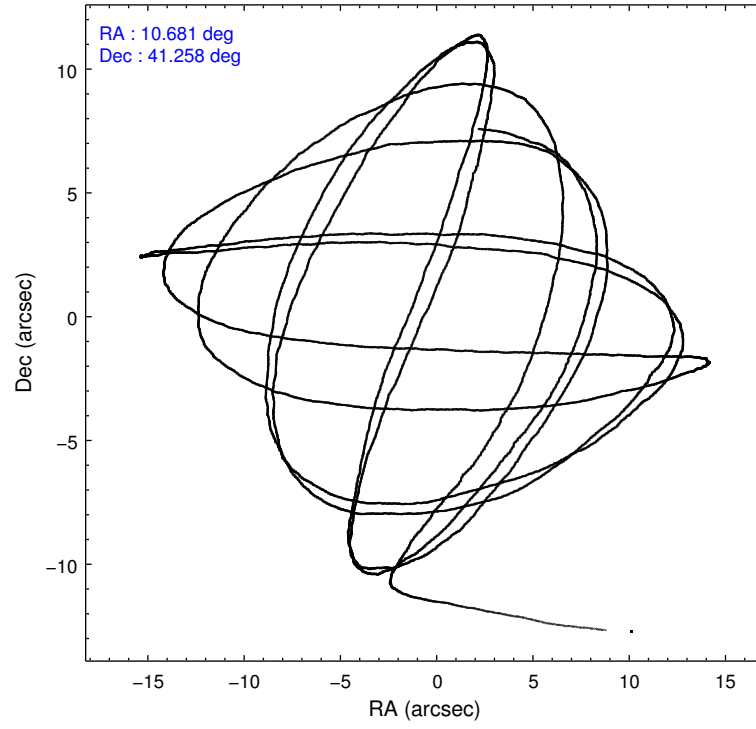
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	38876	38329	43197	41575	45183
rejected events	30911	28748	33775	30343	34989
rejected %	79%	75%	78%	72%	77%

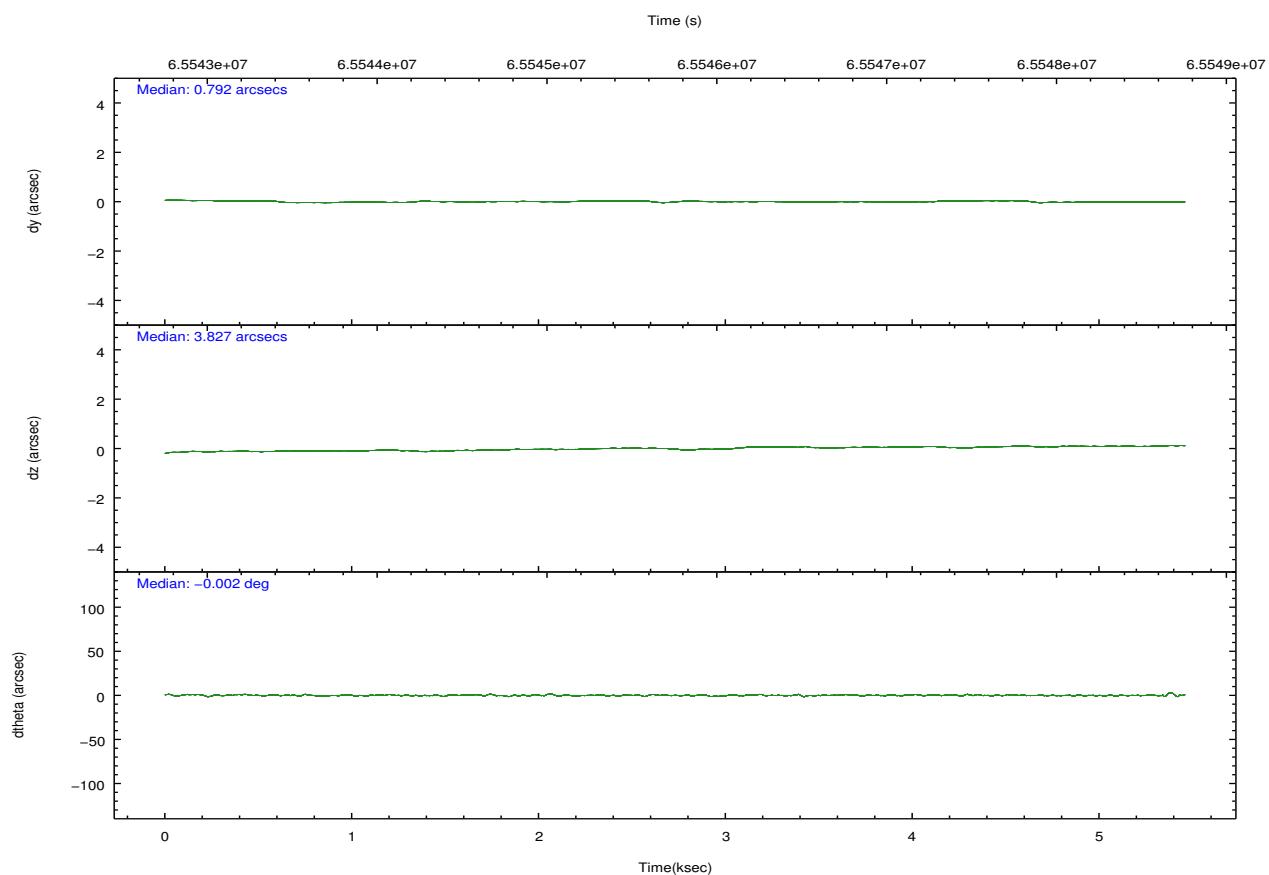
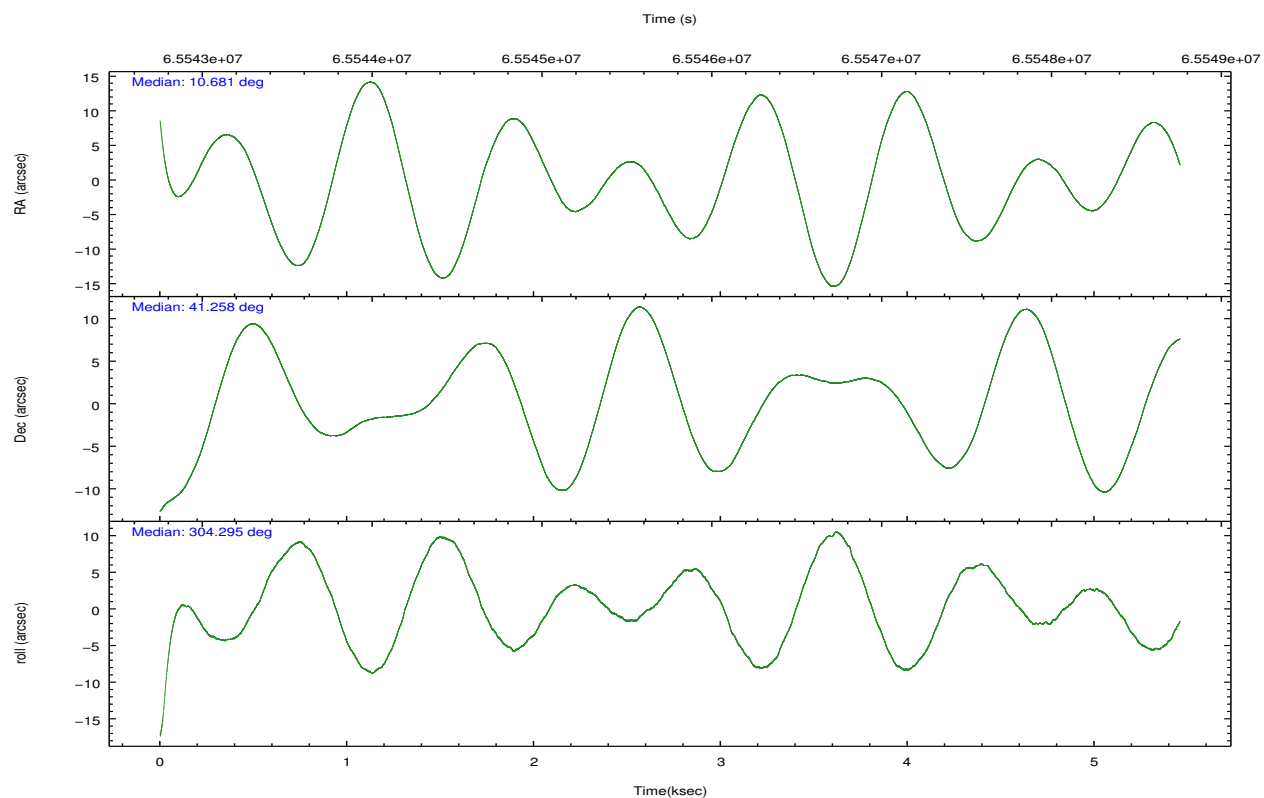
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3001	3914	3608	4314	3058
	7%	10%	8%	10%	6%
grade 1 events	19	23	25	45	10
	0%	0%	0%	0%	0%
grade 2 events	3402	3809	4281	5052	5559
	8%	9%	9%	12%	12%
grade 3 events	268	326	266	329	208
	0%	0%	0%	0%	0%
grade 4 events	269	363	272	301	245
	0%	0%	0%	0%	0%
grade 5 events	718	751	670	746	755
	1%	1%	1%	1%	1%
grade 6 events	1036	1176	1003	1246	1133
	2%	3%	2%	2%	2%
grade 7 events	30163	27967	33072	29542	34215
	77%	72%	76%	71%	75%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-01236	ACIS-01236	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	10.648042	10.68115863529447	Subarray requested	NONE	NONE
Pointing Dec	41.270156	41.25783082483034	Alternating exposures requested	N	N
Pointing Roll	304.112661	304.2994826673119	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	65543484.184000	65542313.600109			
Observation start date	2000-01-29T14:30:20	2000-01-29T14:11:53			
Observation end time	65548484.184000	65548946.88785			
Observation end date	2000-01-29T15:53:40	2000-01-29T16:02:26			
Read mode	TIMED	TIMED			

2.3 Aspect



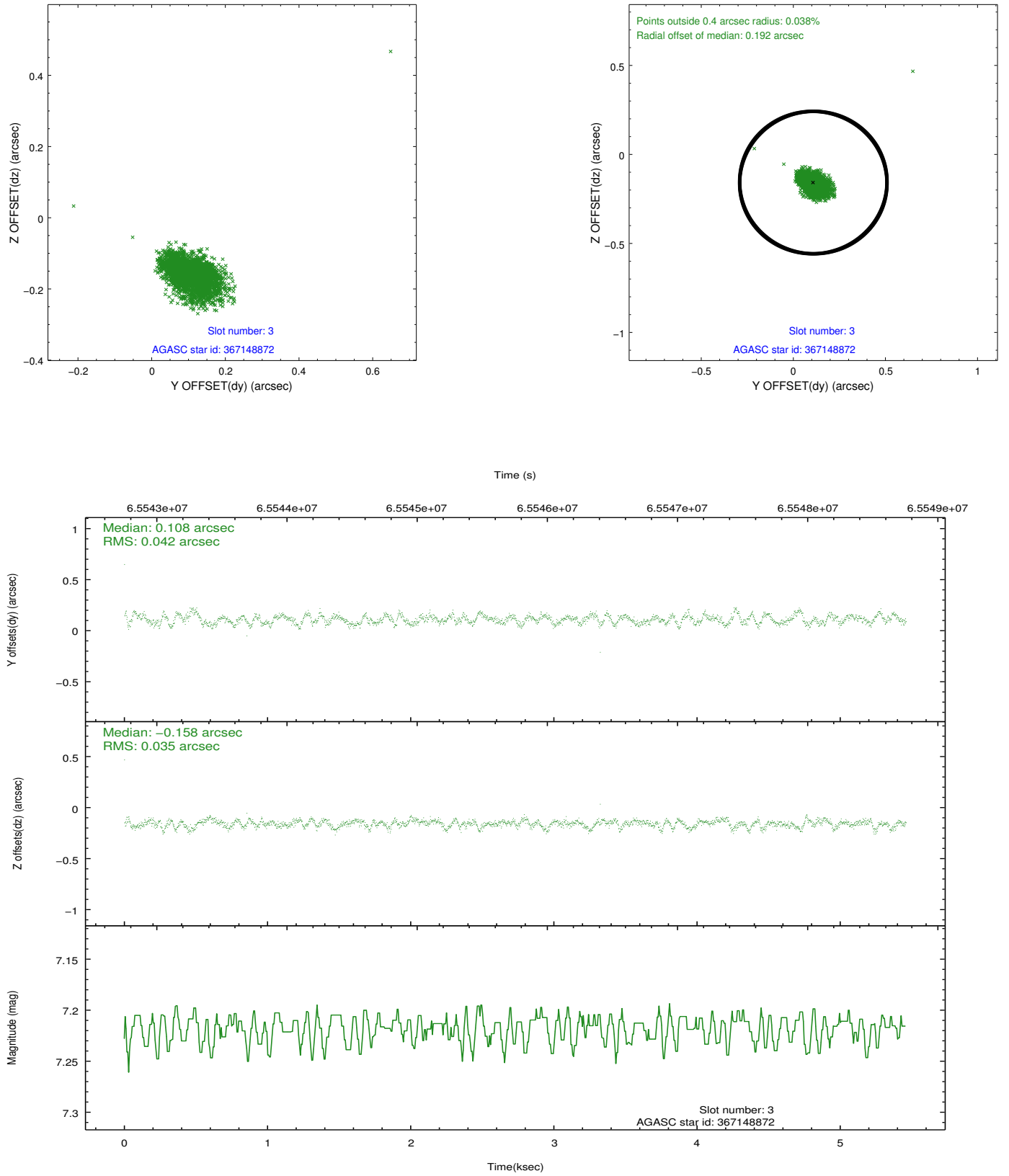


Slot Statistics

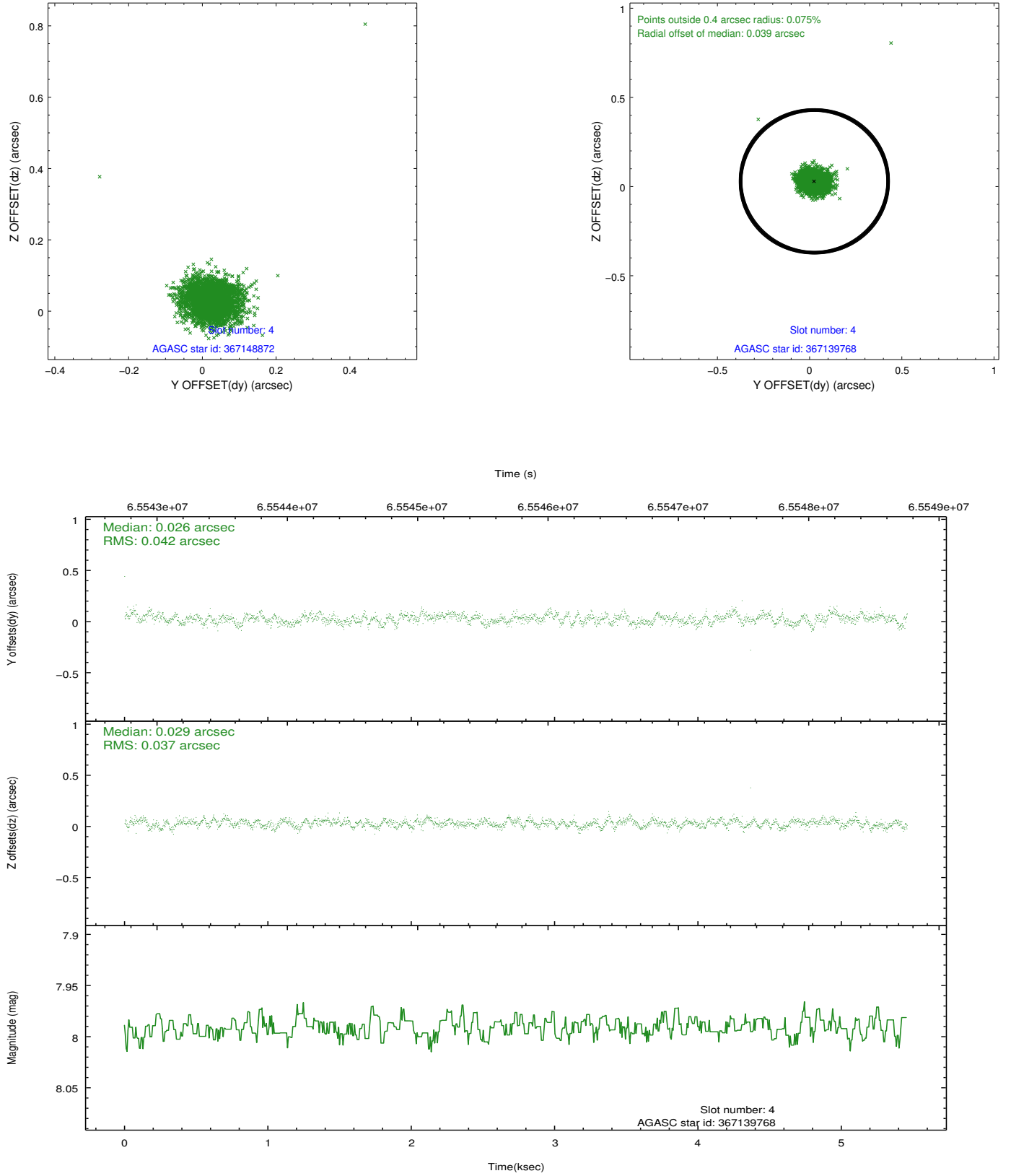
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	1331	-0.039	-0.030	0.008	0.014	0.000000	0.000000	-755.16	-833.51
1	FID	ACIS-I-4	7.20	1331	-0.003	0.038	0.006	0.011	0.000000	0.000000	2158.45	1072.16
2	FID	ACIS-I-5	7.23	1331	-0.059	0.061	0.008	0.014	0.000000	0.000000	-1807.57	1071.31
3	GUIDE	367148872	7.22	2663	0.108	-0.158	0.055	0.088	10.505940	40.688258	1517.70	-1495.44
4	GUIDE	367139768	7.99	2662	0.026	0.029	0.055	0.089	11.069715	40.685175	2388.34	-226.33
5	GUIDE	367671800	9.40	2662	-0.131	0.057	0.086	0.136	10.554735	41.964935	-2209.51	1196.32
6	GUIDE	367674552	8.84	2662	-0.008	0.041	0.067	0.108	11.016238	41.570845	-341.90	1430.21
7	GUIDE	367658664	9.60	2661	0.006	0.036	0.080	0.130	10.374070	41.369746	-712.13	-410.13

2.4 Star Slots

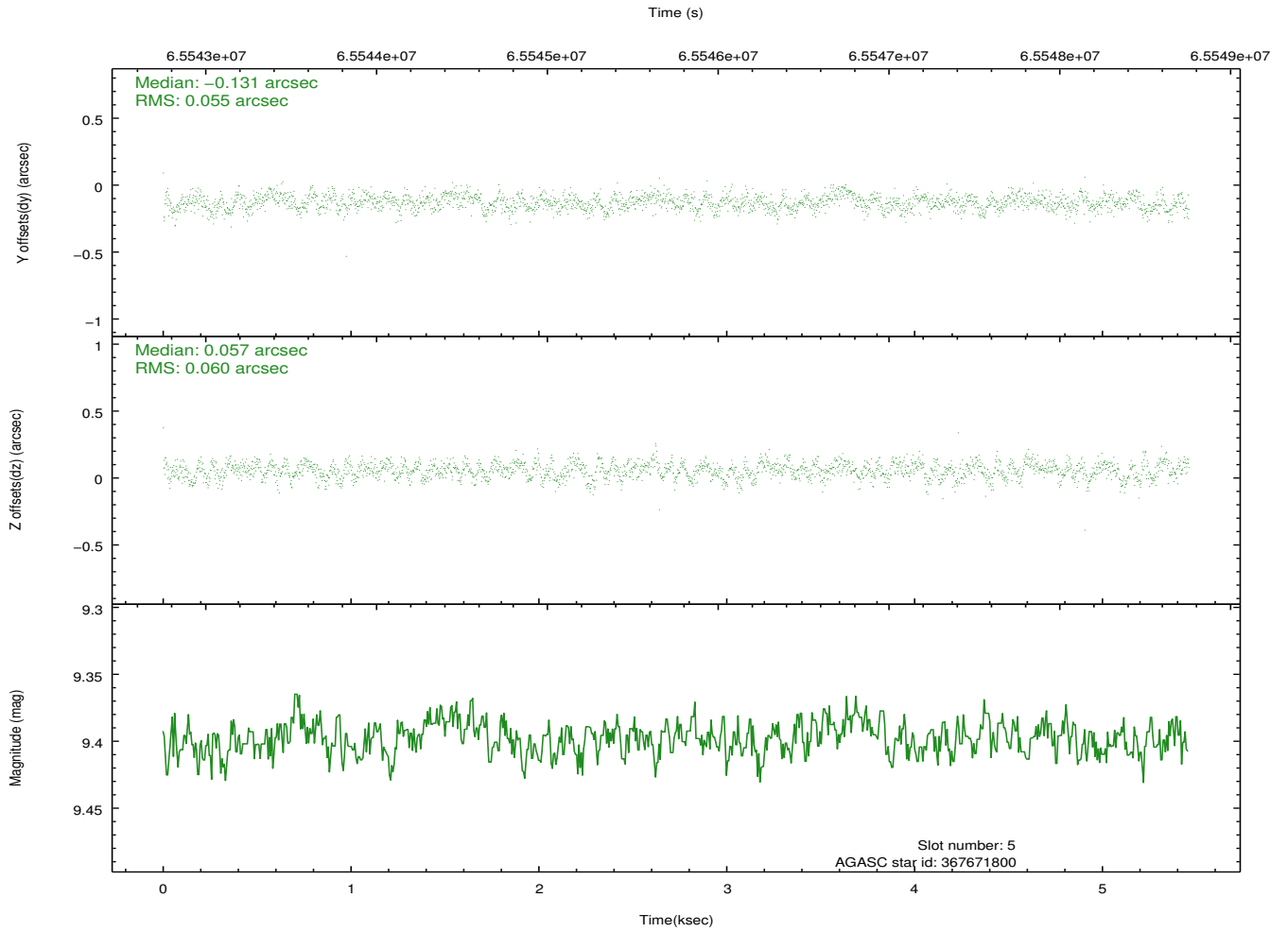
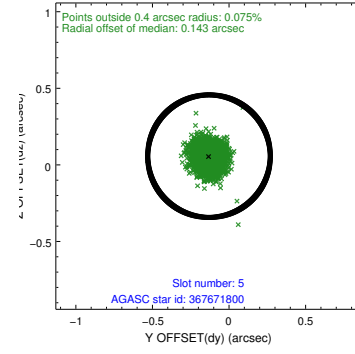
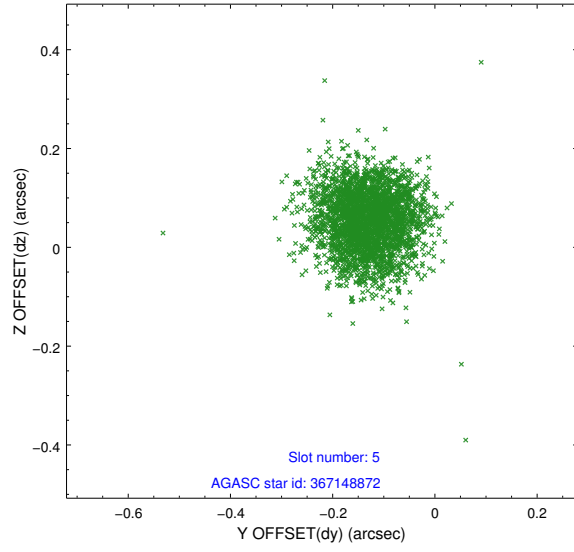
2.4.1 Slot 3



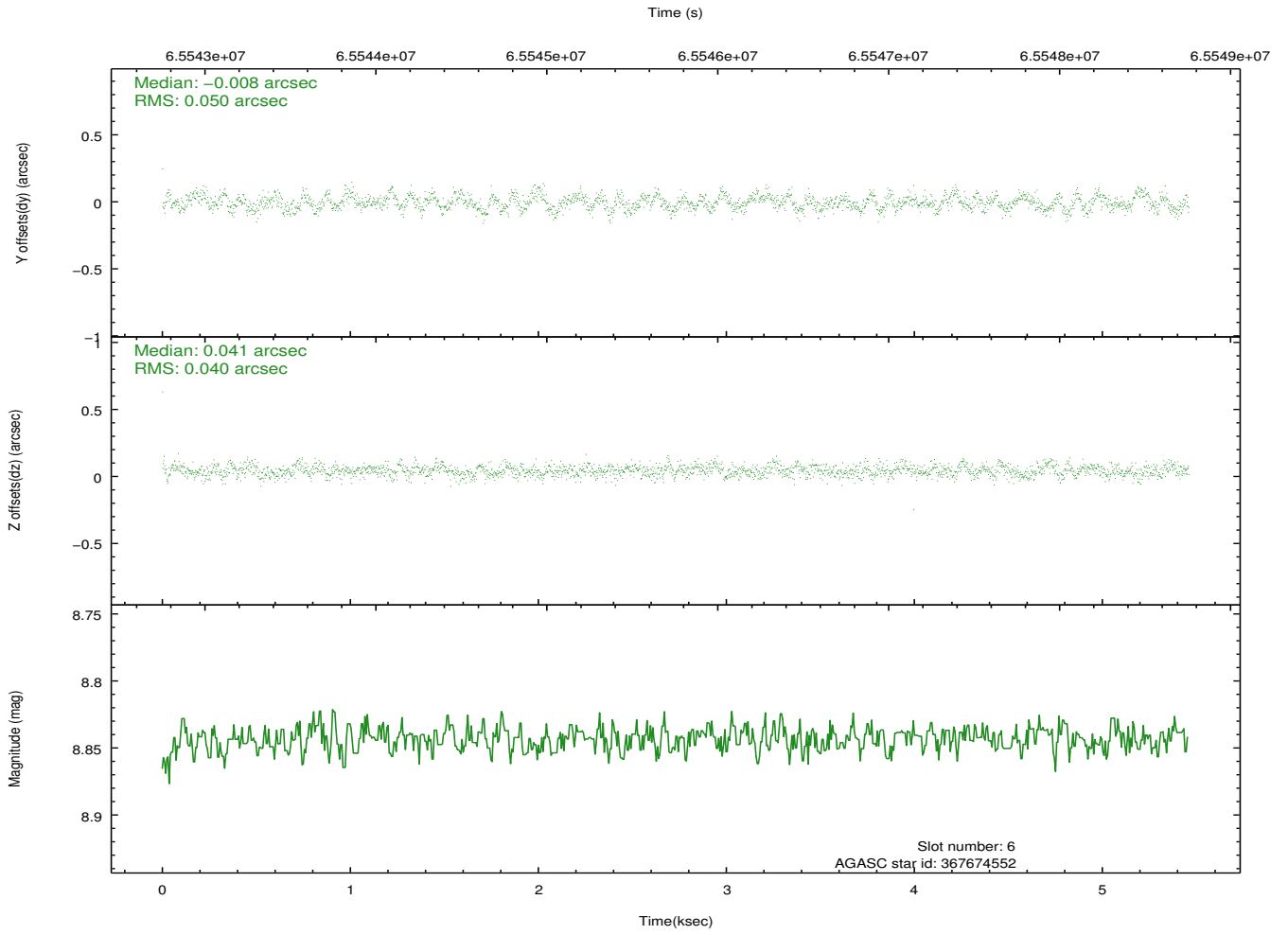
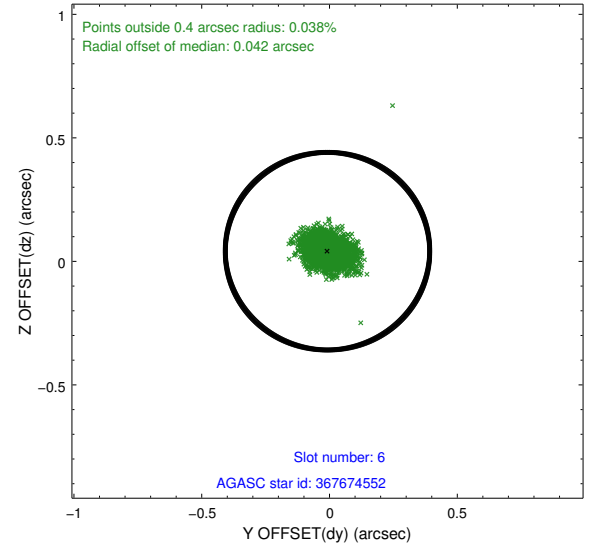
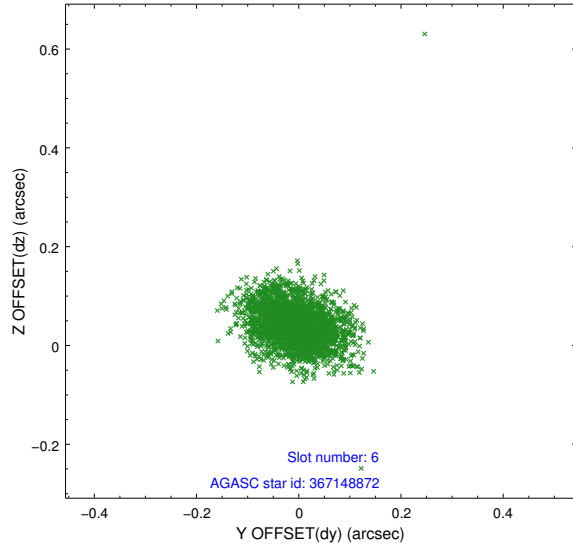
2.4.2 Slot 4



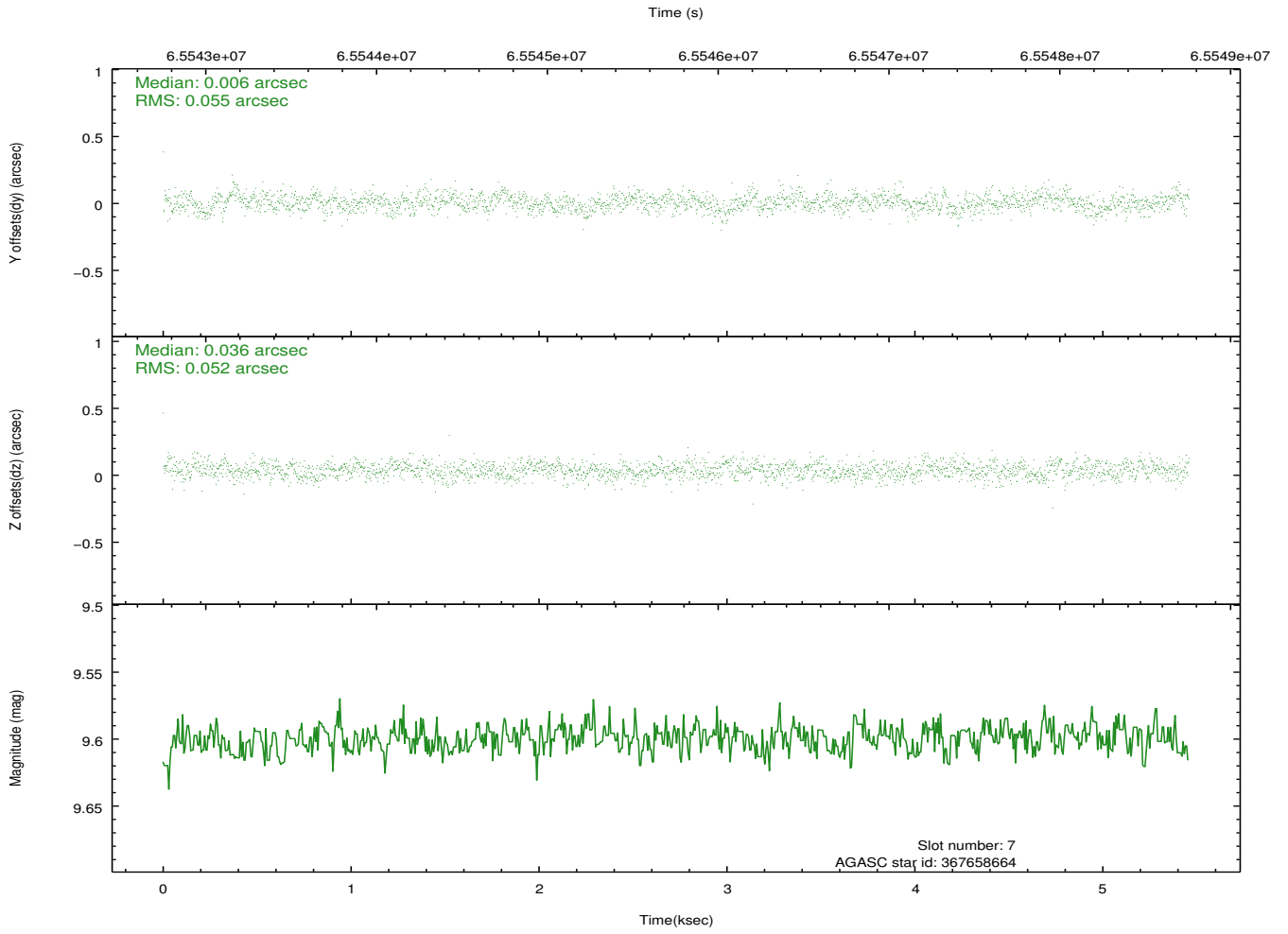
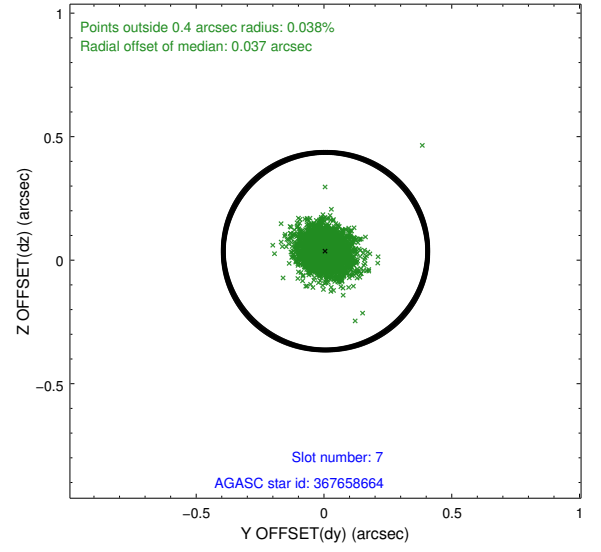
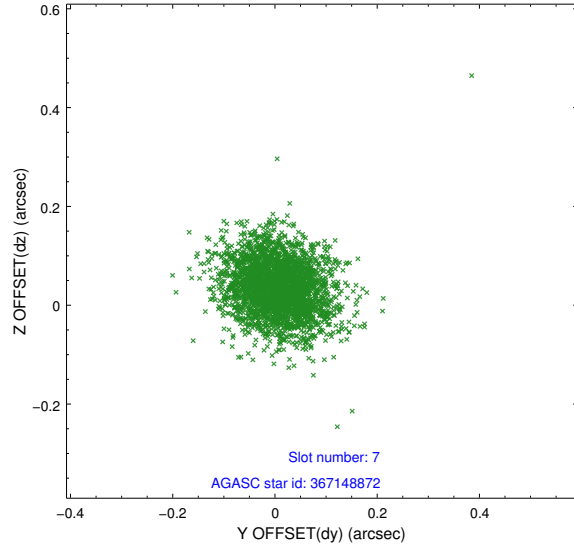
2.4.3 Slot 5



2.4.4 Slot 6

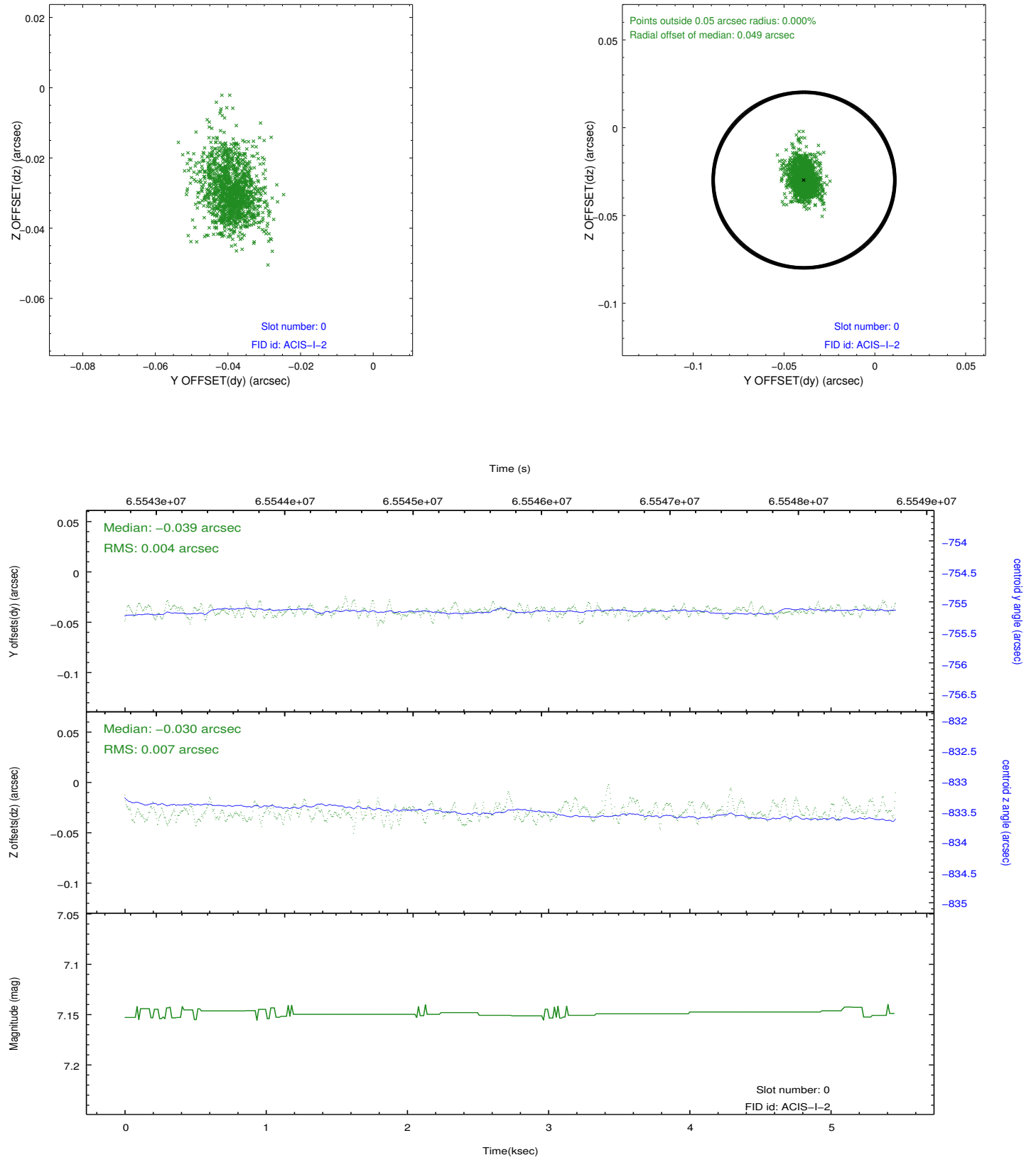


2.4.5 Slot 7

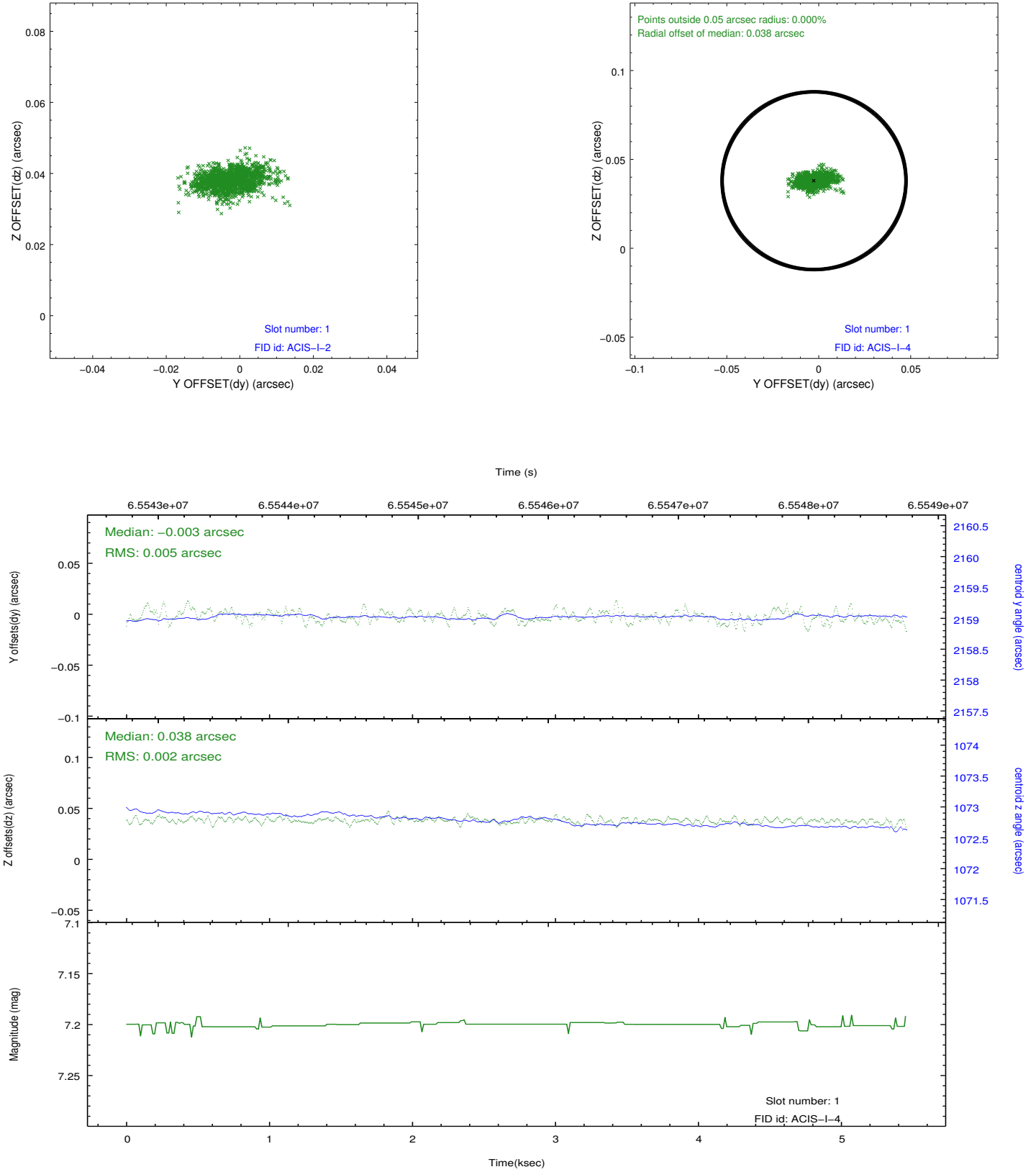


2.5 FID Slots

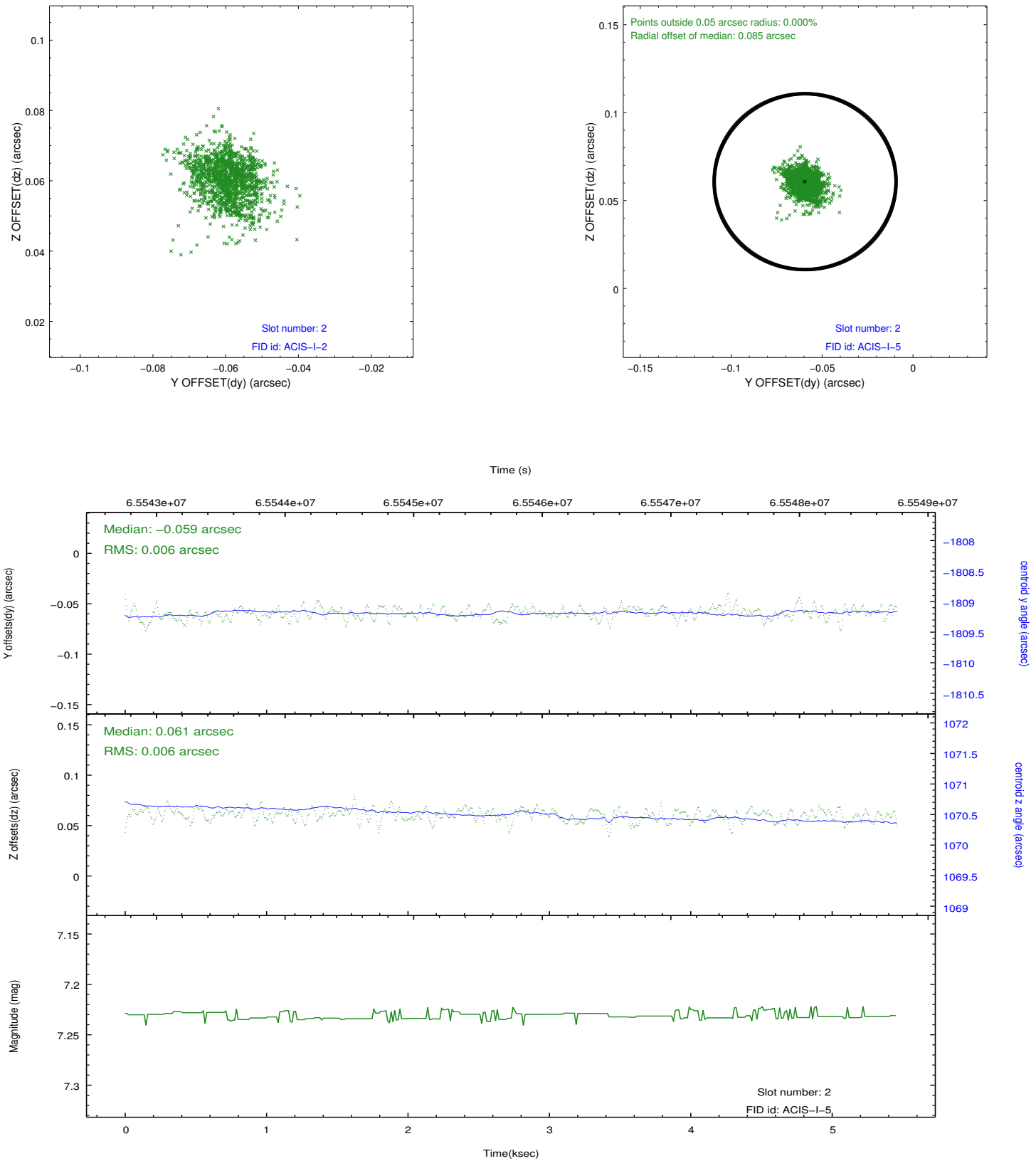
2.5.1 Slot 0



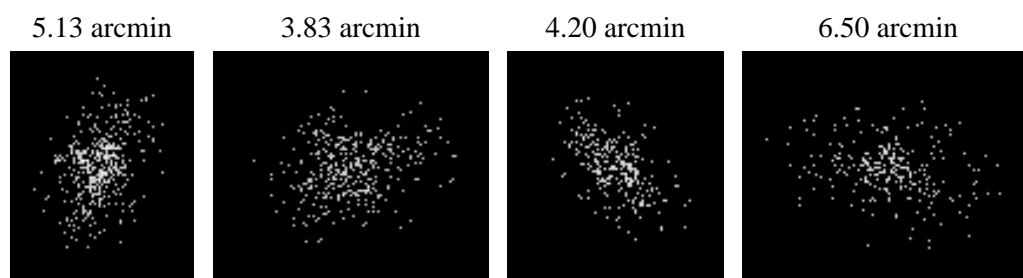
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.166

A.2 Comments

Focal plane temperature is warmer than -118.7 C degrees during the entire observation. This temperature is the upper limit of the verified ACIS calibration for the front-illuminated chips. The focal plane temperature is also warmer than -116.7 degrees C for the entire observation. This temperature is the upper limit of the verified ACIS calibration for the back-illuminated chips. 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.