

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 355 - L2 Version 4

Chandra X-Ray Center

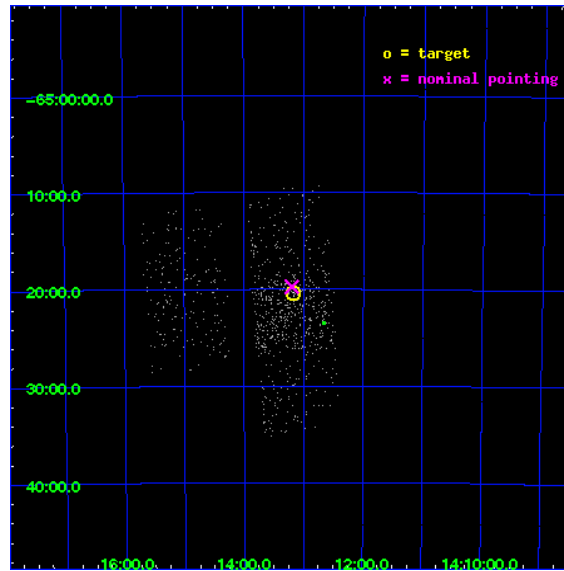
L2 Processing Date : Dec 2 2009

Contents

1	Front	2
2	OBI Primary	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	OBI Secondary	17
3.1	OBI	17
3.1.1	Images	17
3.1.2	Bias	17
3.1.3	Parameters	18
3.1.4	Events	18
4	Point Sources	19
A	Summary	20
A.1	Status	20
A.2	Comments	20

1 Front

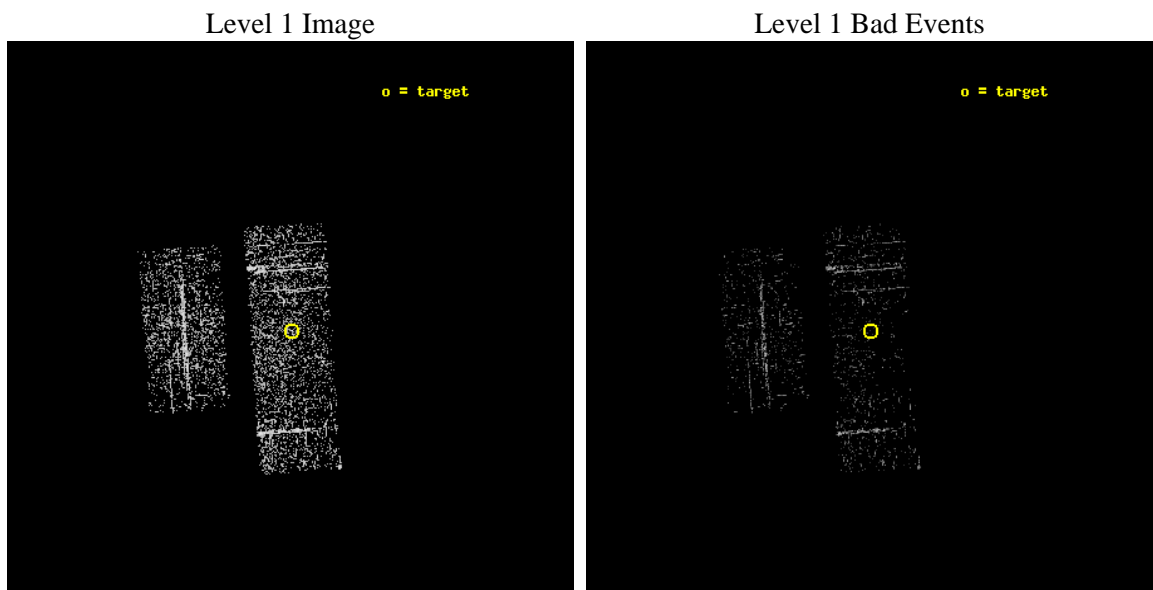
seq_num	700027	Sequence number
obs_id	355	Observation id
title	STUDIES OF RADIO JETS AND THE NARROW LINE REGIONS	Proposal title
observer	Professor Andrew Wilson	Principal investigator
object	CIRCINUS GALAXY	Source name
dtcycle	0	
cycle	P	events are from which exps? P[rimary] S[econdar
ra_targ	213.2925	Observer's specified target RA
dec_targ	-65.339167	Observer's specified target Dec
ra_nom	213.29887293214	Nominal RA
dec_nom	-65.32917847684	Nominal Dec
roll_nom	86.164134188399	Nominal Roll
revision	4	Processing version of data
ontime	485.68008749187	Sum of GTIs [s]
livetime	54.414278871096	Livetime [s]
ontime2	485.68008749187	Sum of GTIs [s]
ontime3	485.68008749187	Sum of GTIs [s]
ontime6	485.68008749187	Sum of GTIs [s]
ontime7	485.68008749187	Sum of GTIs [s]
ontime8	485.68008749187	Sum of GTIs [s]
l2events	870	Number of level 2 events



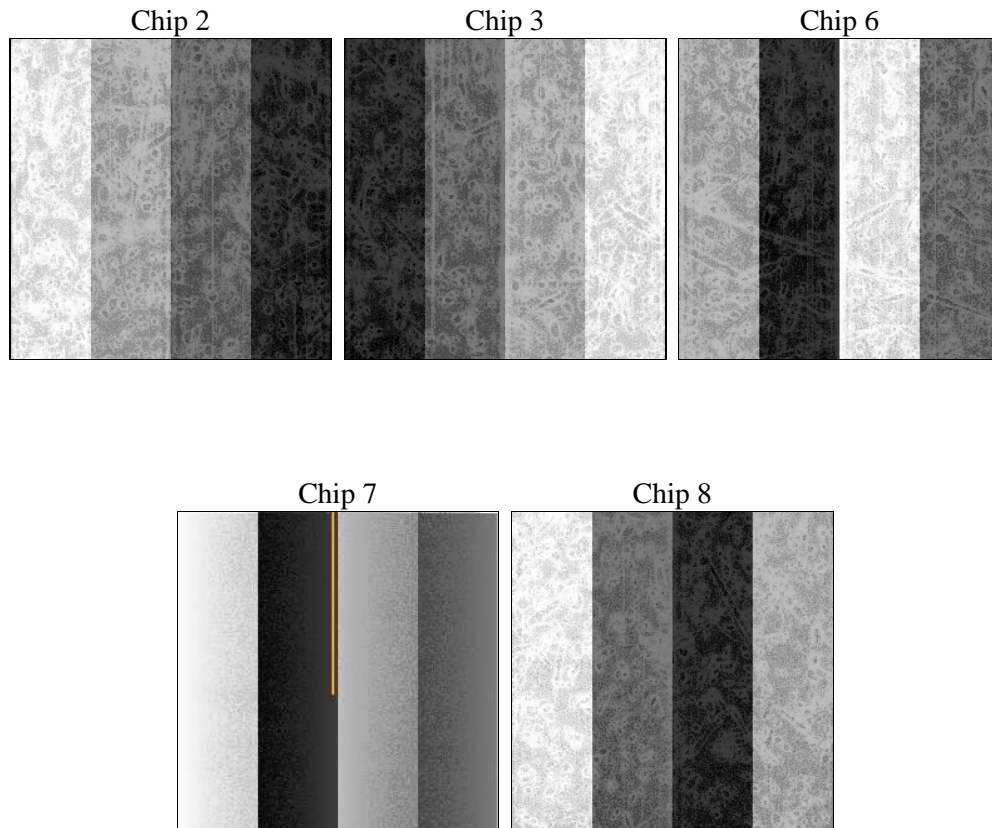
2 OBI Primary

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2700.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	485.68008749187	Sum of GTIs [s]
caldsver	4.1.4	 	ontime2	485.68008749187	Sum of GTIs [s]
date	2009-12-02T15:38:47	Date and time of file creation	ontime3	485.68008749187	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	485.68008749187	Sum of GTIs [s]
			ontime7	485.68008749187	Sum of GTIs [s]
			ontime8	485.68008749187	Sum of GTIs [s]
			l1events	10854	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	1998	2173	2609	1732	2342
rejected events	1895	2056	2481	1228	2116
rejected %	94%	94%	95%	70%	90%

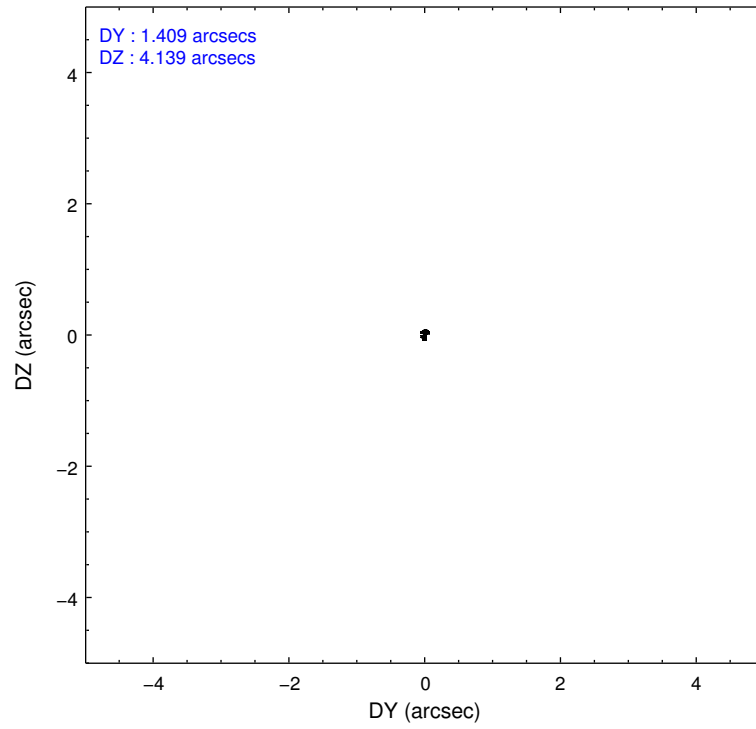
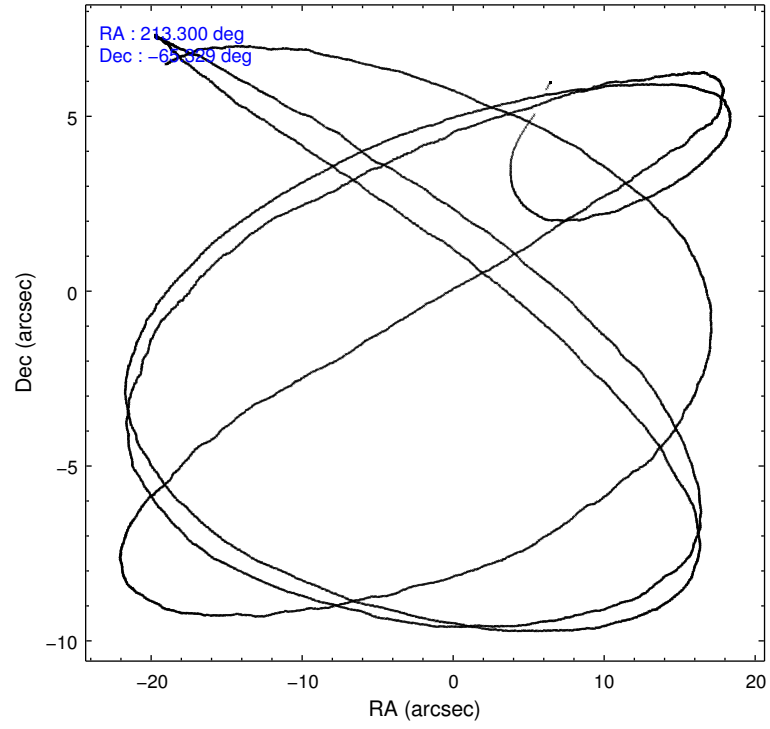
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	20	19	28	59	61
	1%	0%	1%	3%	2%
grade 1 events	0	0	0	1	0
	0%	0%	0%	0%	0%
grade 2 events	31	41	41	110	46
	1%	1%	1%	6%	1%
grade 3 events	18	13	14	52	32
	0%	0%	0%	3%	1%
grade 4 events	15	17	12	48	22
	0%	0%	0%	2%	0%
grade 5 events	30	38	47	88	45
	1%	1%	1%	5%	1%
grade 6 events	21	28	33	239	65
	1%	1%	1%	13%	2%
grade 7 events	1863	2017	2434	1135	2071
	93%	92%	93%	65%	88%

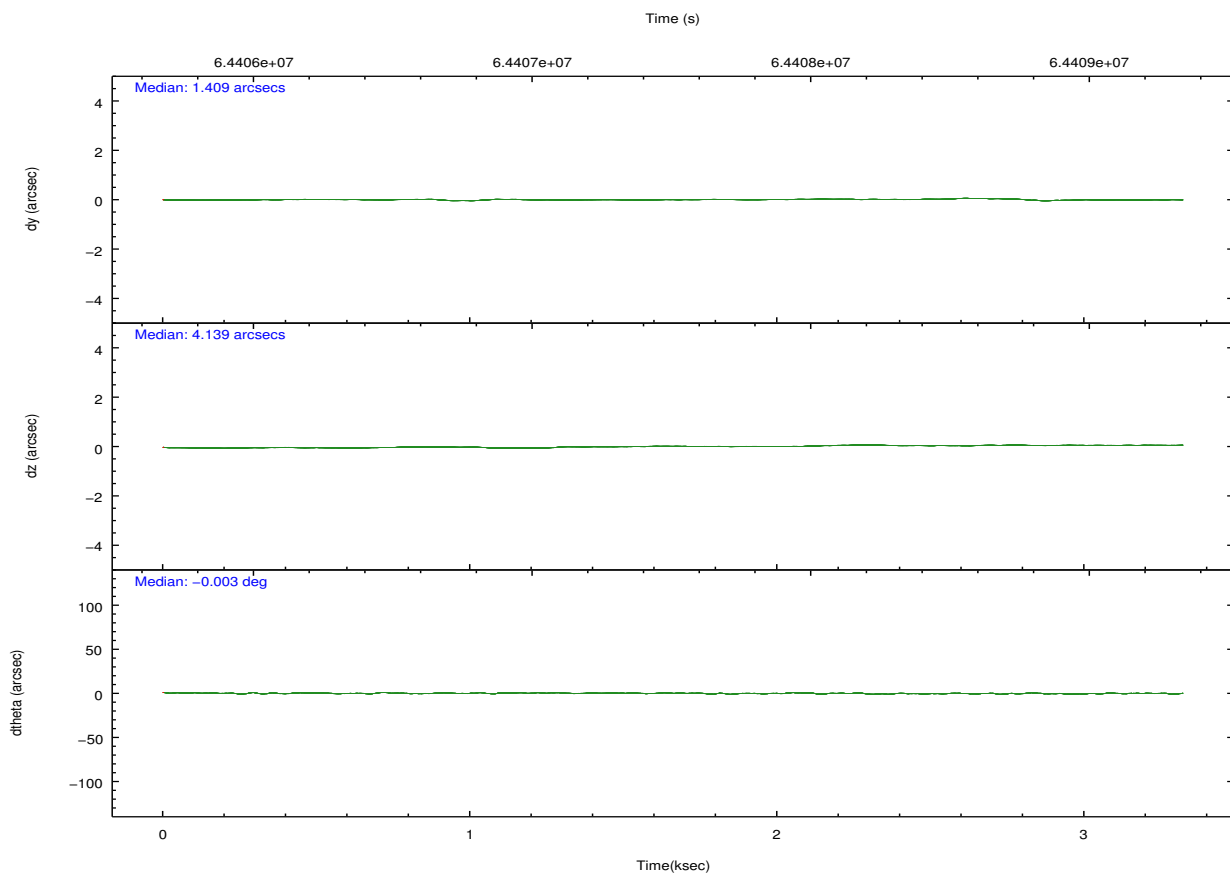
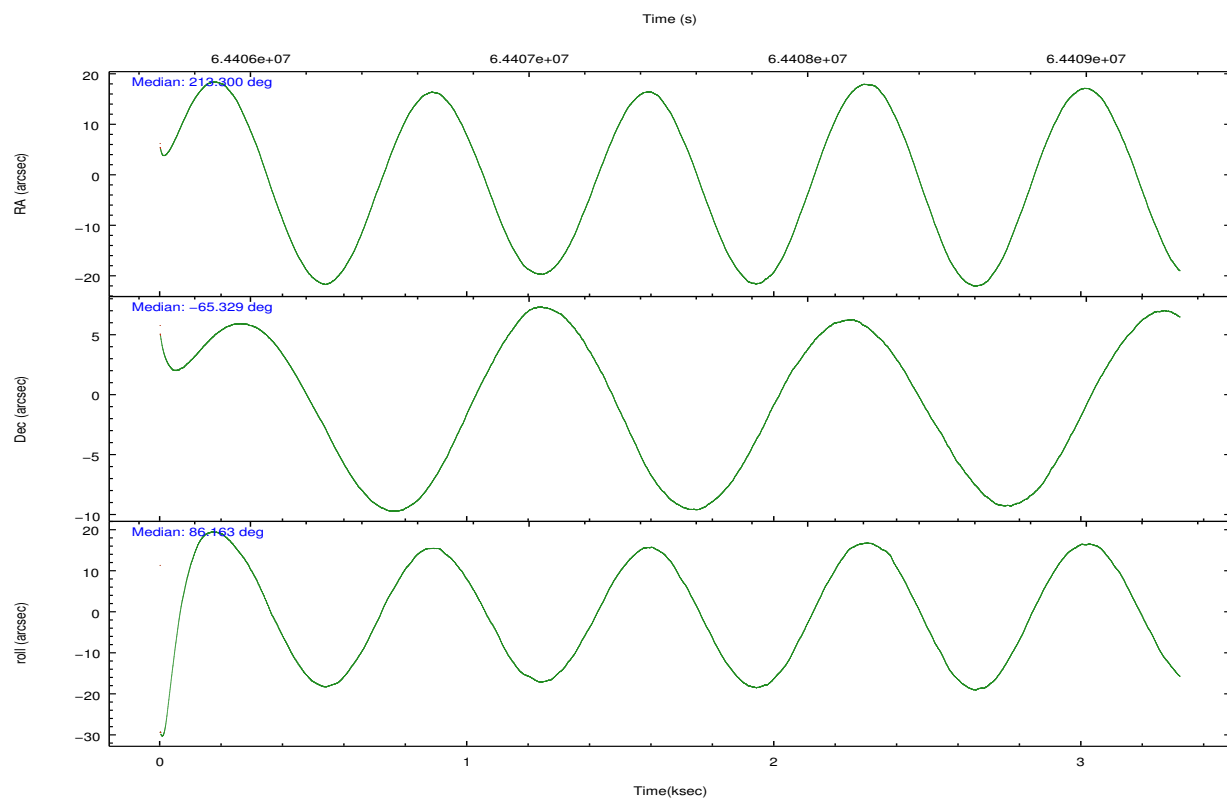
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
Pointing RA	213.327674	213.2988729321391
Pointing Dec	-65.354055	-65.32917847684034
Pointing Roll	86.033829	86.16413418839885
SIM focus pos (mm)	-0.684267	-0.6828225247311905
SIM defocus (mm)	0	0.001444936568705701
SIM translation stage pos (mm)	-190.132523	-190.1400660498719
SIM translation stage offset (mm)	0	0.00754346686406393
Observation start time	64406312.184000	64405161.646275
Observation start date	2000-01-16T10:37:28	2000-01-16T10:19:21
Observation end time	64409012.184000	64409300.596425
Observation end date	2000-01-16T11:22:28	2000-01-16T11:28:20
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	6	6
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	Y	Y
Primary exposure time	0.400000	0.4
Secondary exposure time	3.200000	3.2
Duty cycle	3	3

2.3 Aspect



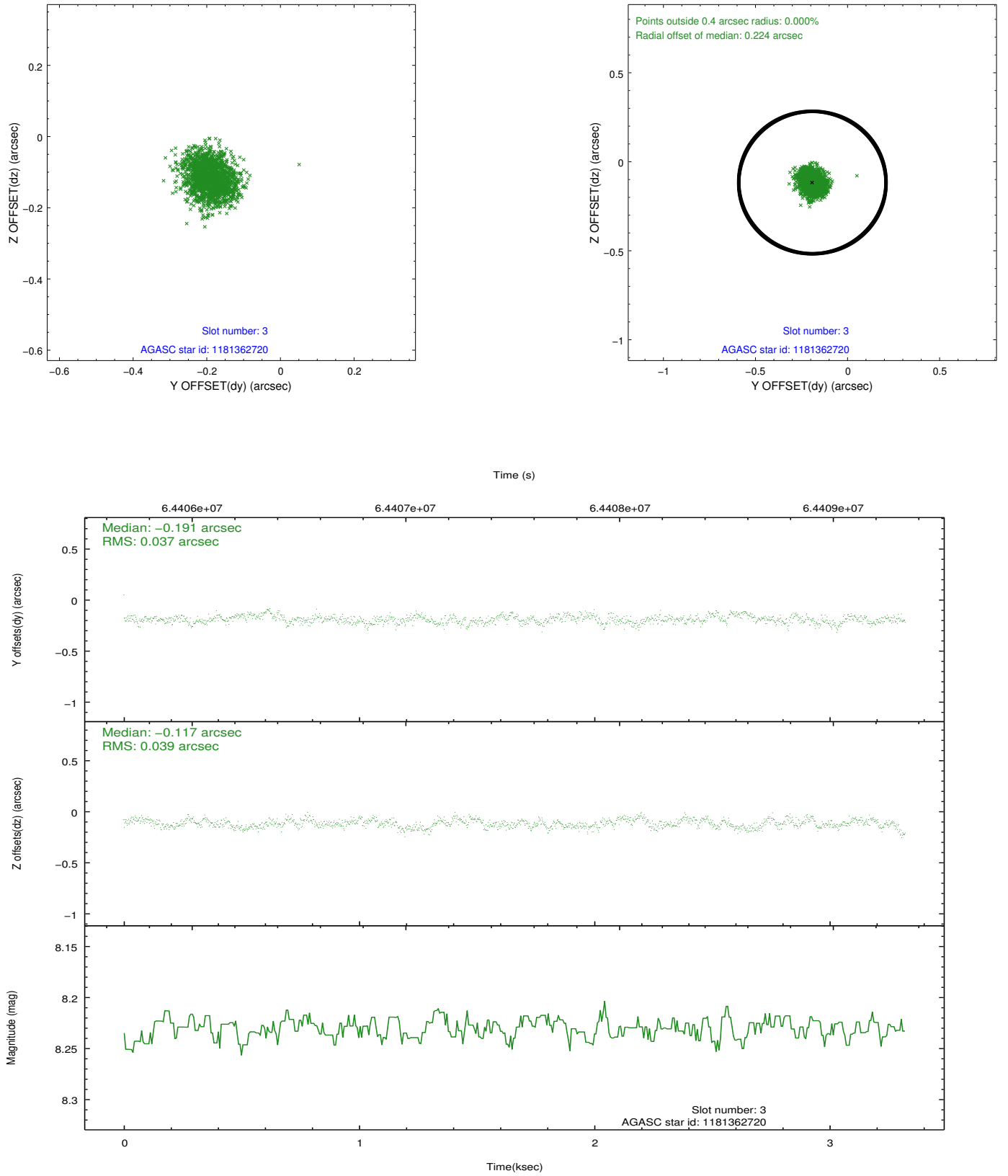


Slot Statistics

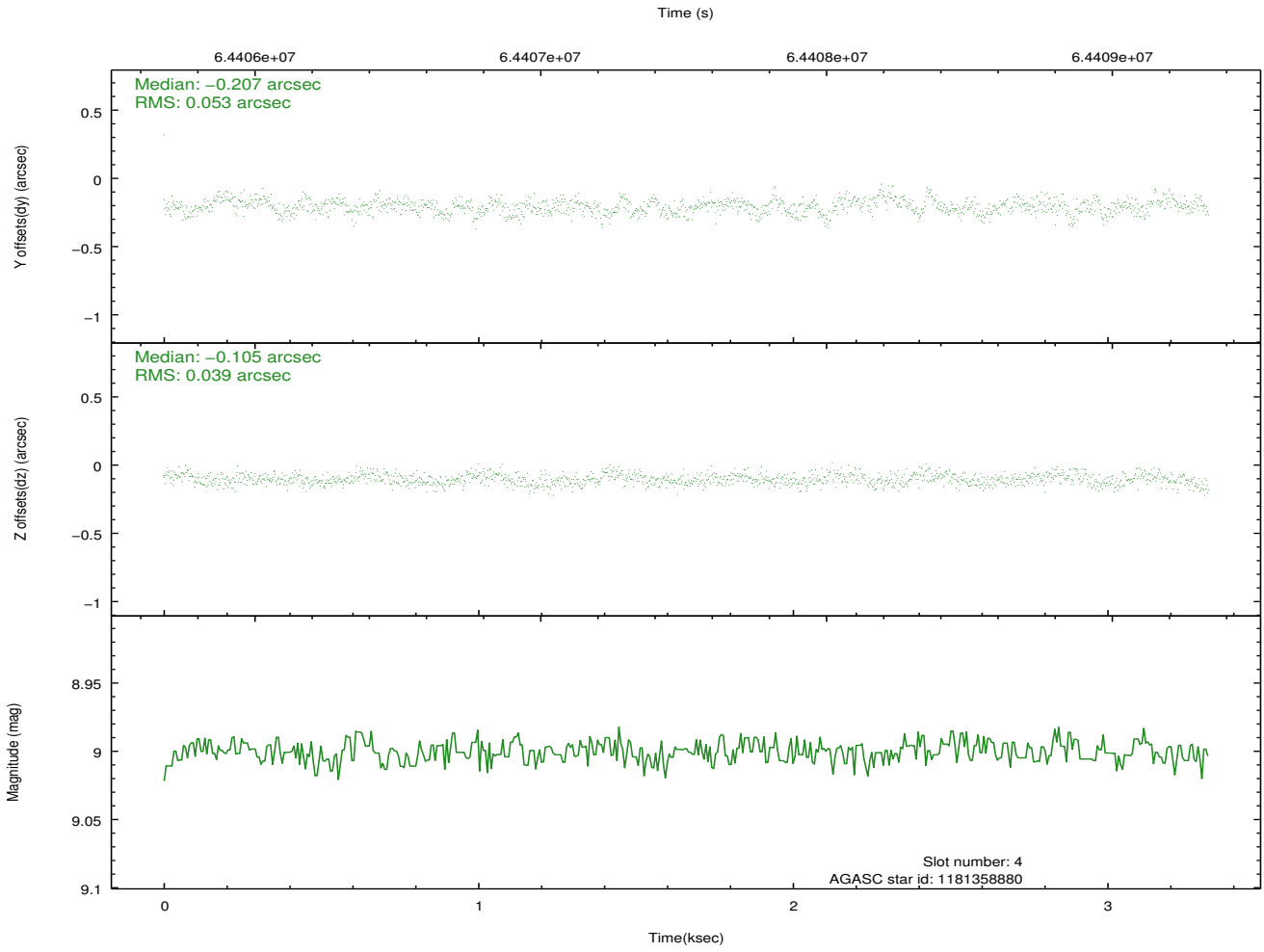
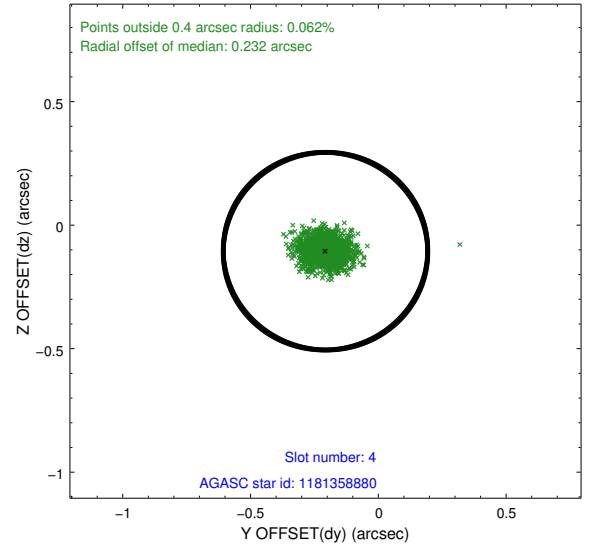
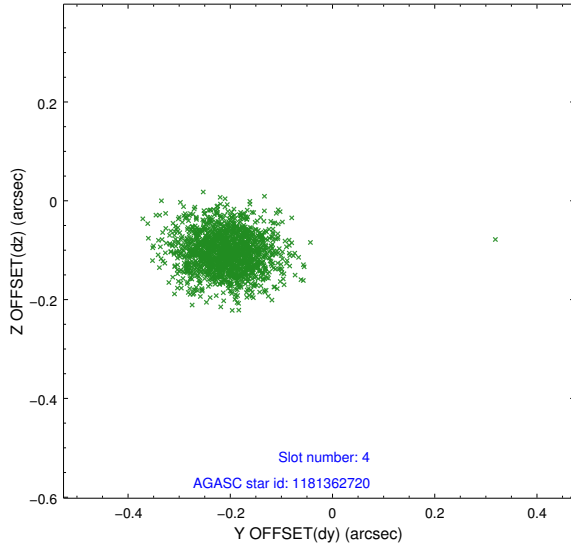
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	811	-0.010	-0.012	0.007	0.011	0.000000	0.000000	-754.06	-1725.22
1	FID	ACIS-S-4	7.21	810	0.000	0.008	0.006	0.011	0.000000	0.000000	2158.41	181.25
2	FID	ACIS-S-5	7.24	811	-0.021	0.012	0.007	0.011	0.000000	0.000000	-1804.41	177.19
3	GUIDE	1181362720	8.23	1621	-0.191	-0.117	0.057	0.092	212.359703	-64.776136	1960.08	1626.00
4	GUIDE	1181358880	9.00	1614	-0.207	-0.105	0.067	0.113	213.047835	-64.803494	1946.49	567.32
5	GUIDE	1181888328	9.12	1620	0.226	0.006	0.075	0.121	213.100875	-66.006078	-2364.97	170.57
6	GUIDE	1181356864	9.68	1617	0.091	0.041	0.094	0.155	213.819558	-65.534564	-602.94	-775.15
7	GUIDE	1181493248	9.58	1619	0.080	0.174	0.100	0.164	214.599761	-65.623973	-859.11	-1952.84

2.4 Star Slots

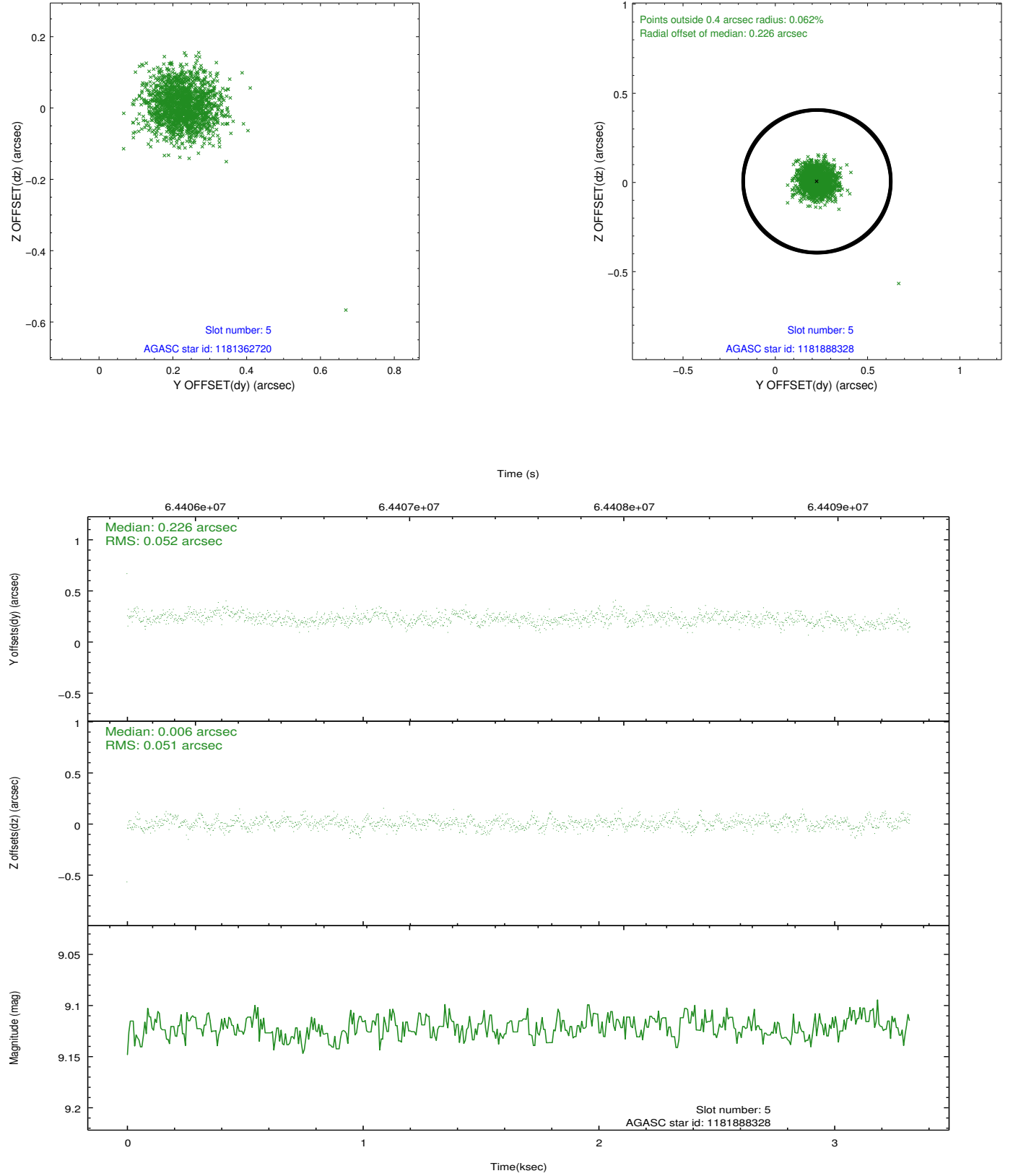
2.4.1 Slot 3



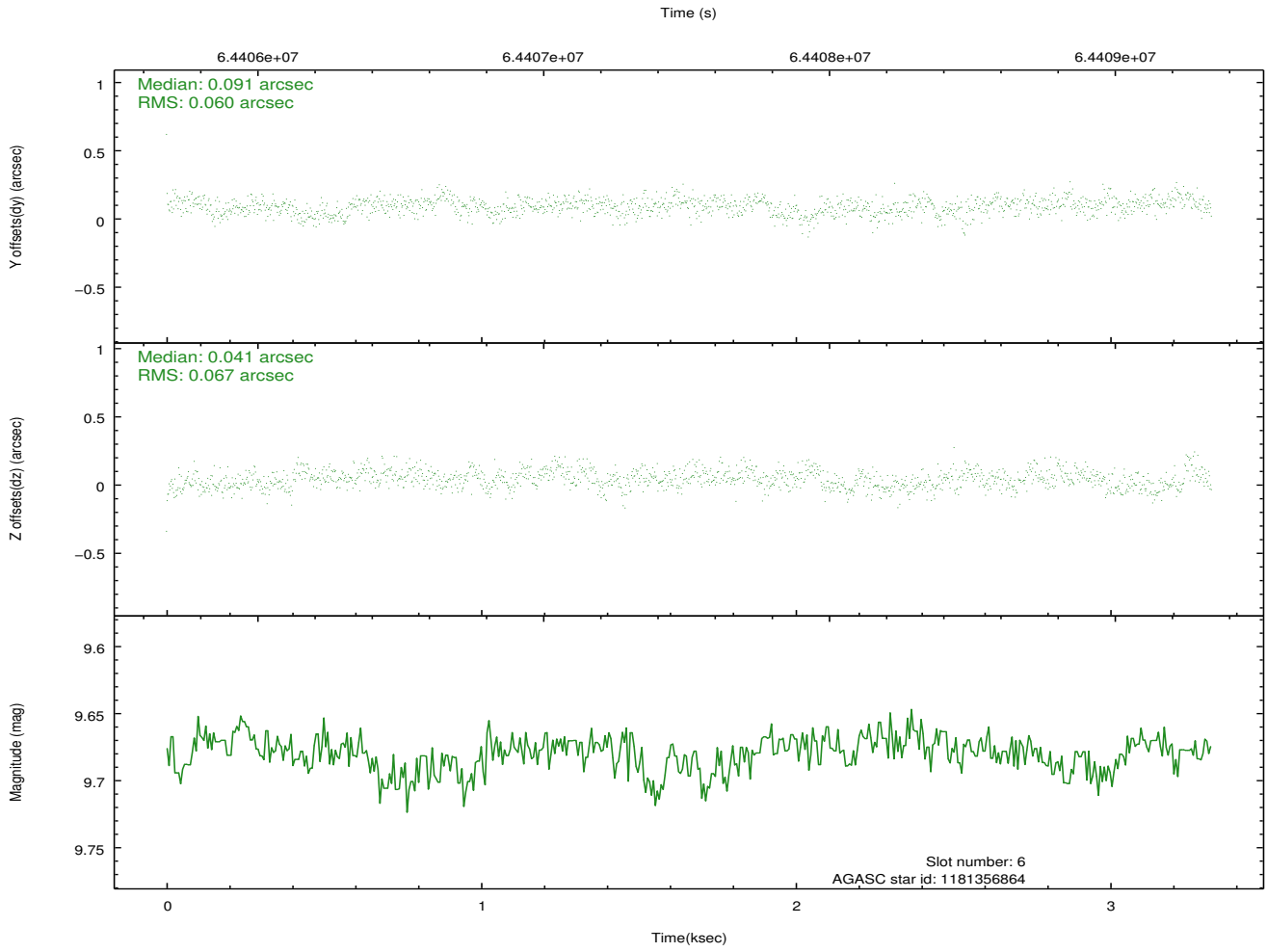
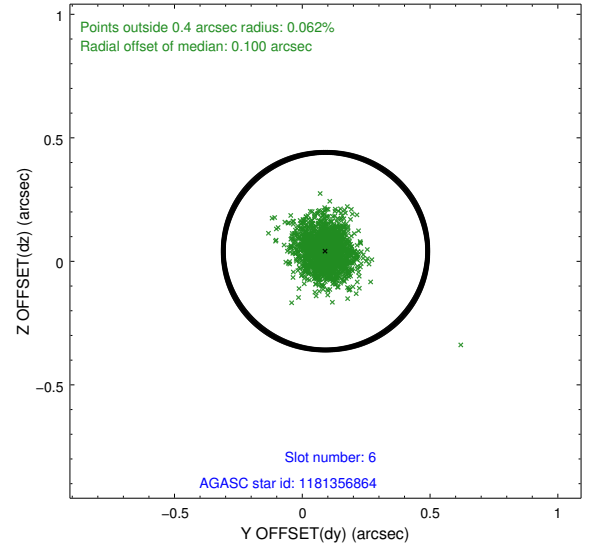
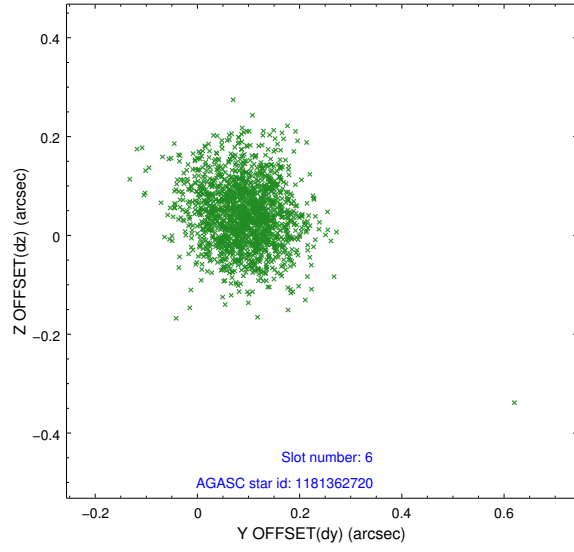
2.4.2 Slot 4



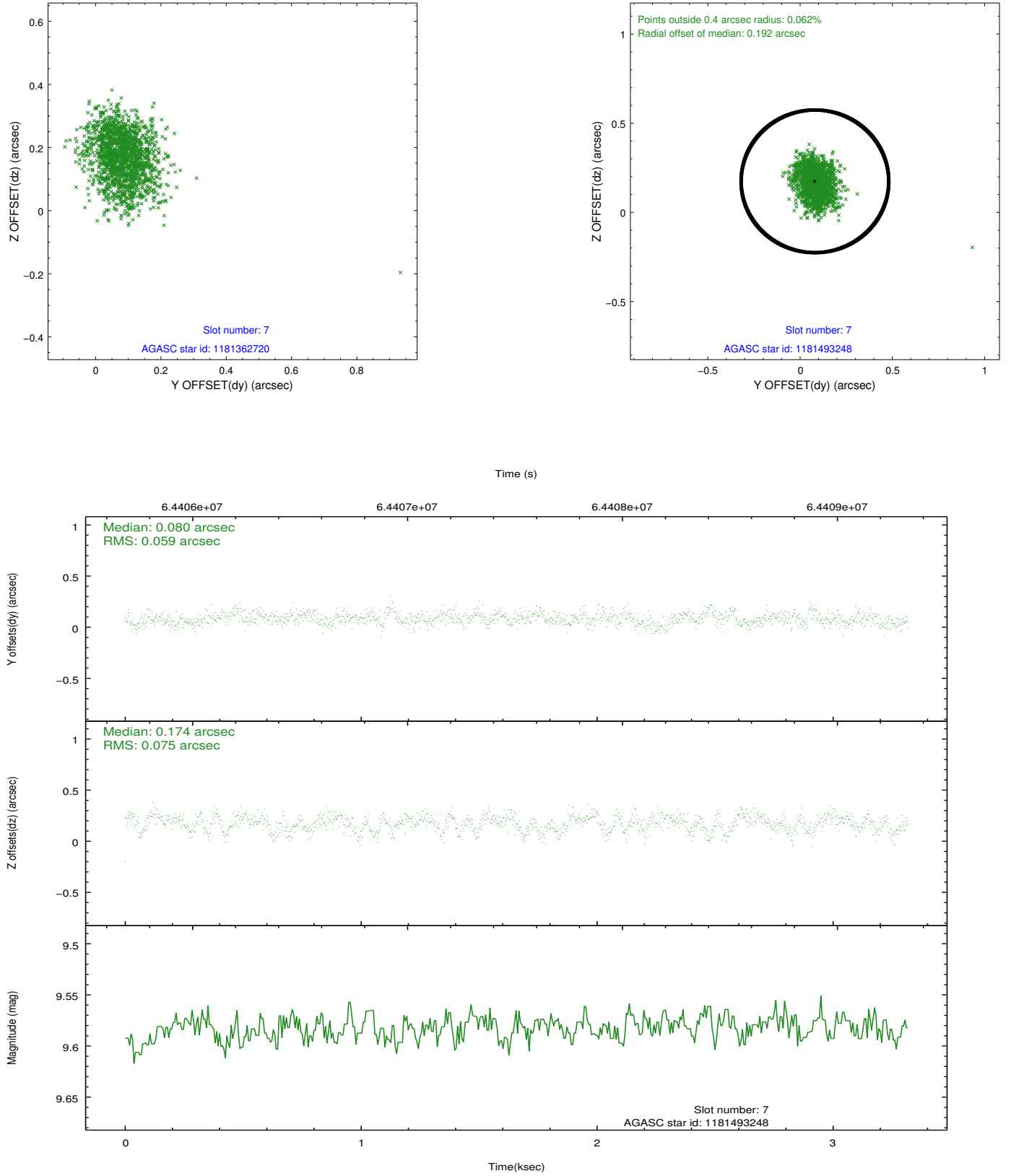
2.4.3 Slot 5



2.4.4 Slot 6

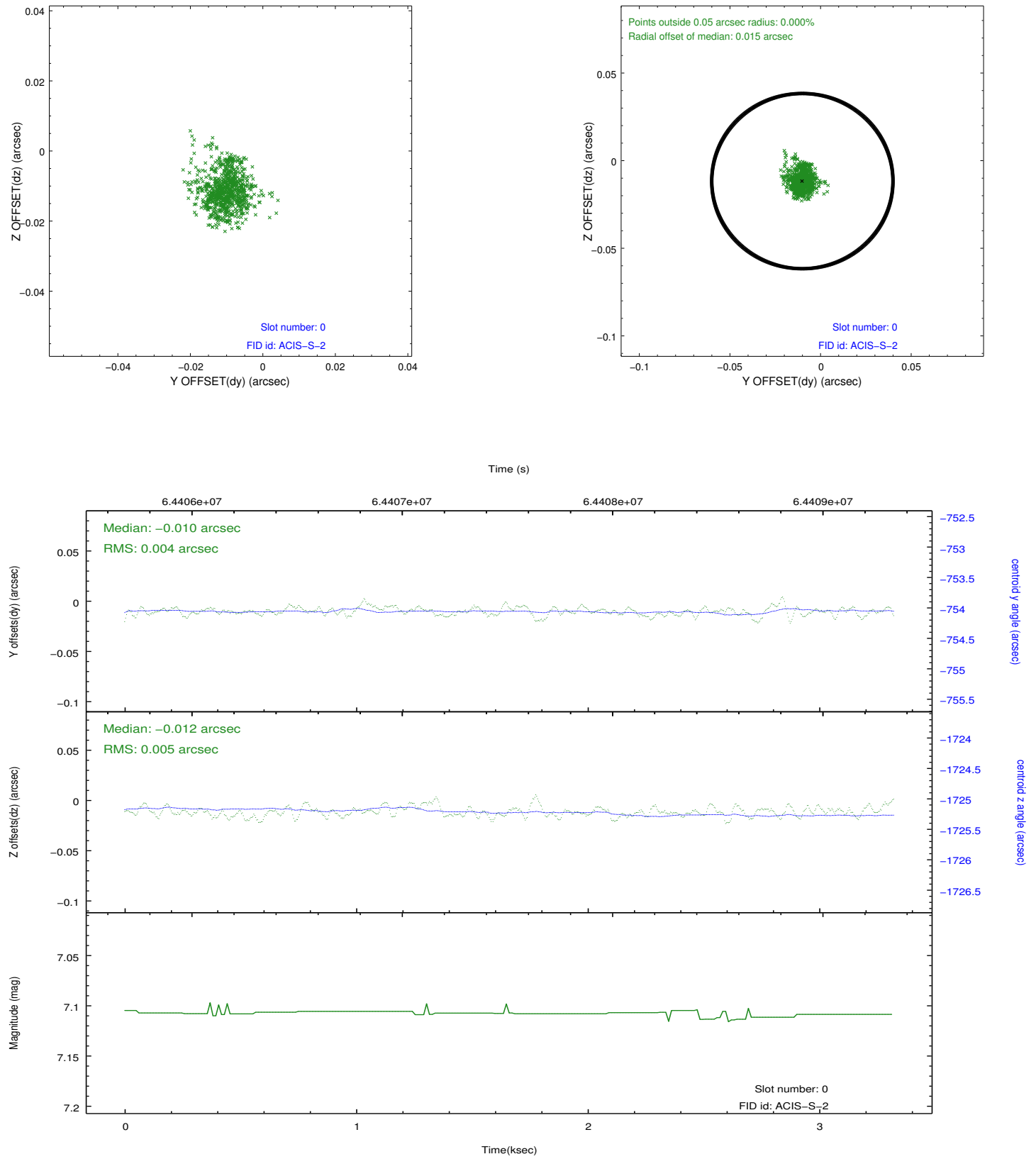


2.4.5 Slot 7

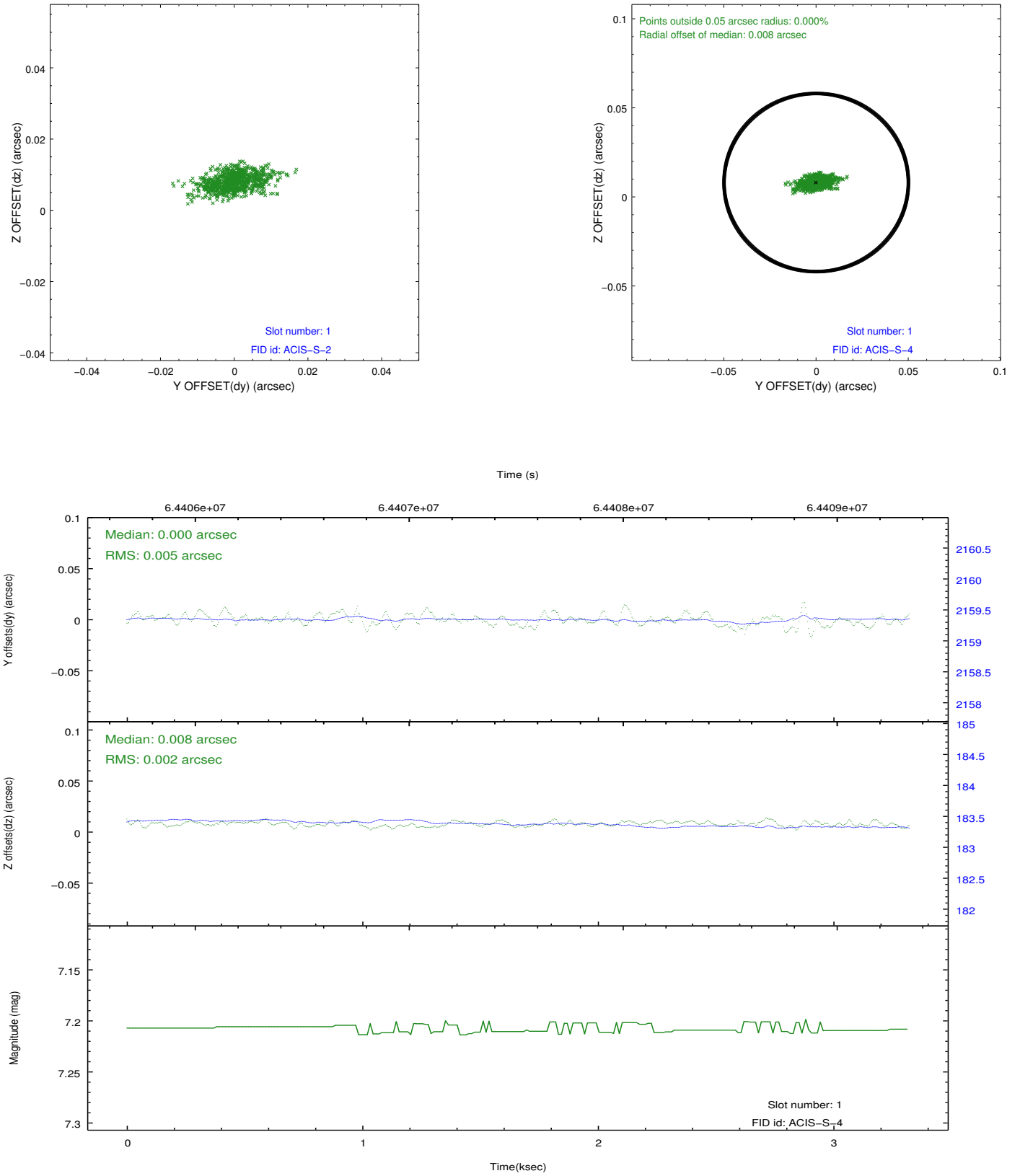


2.5 FID Slots

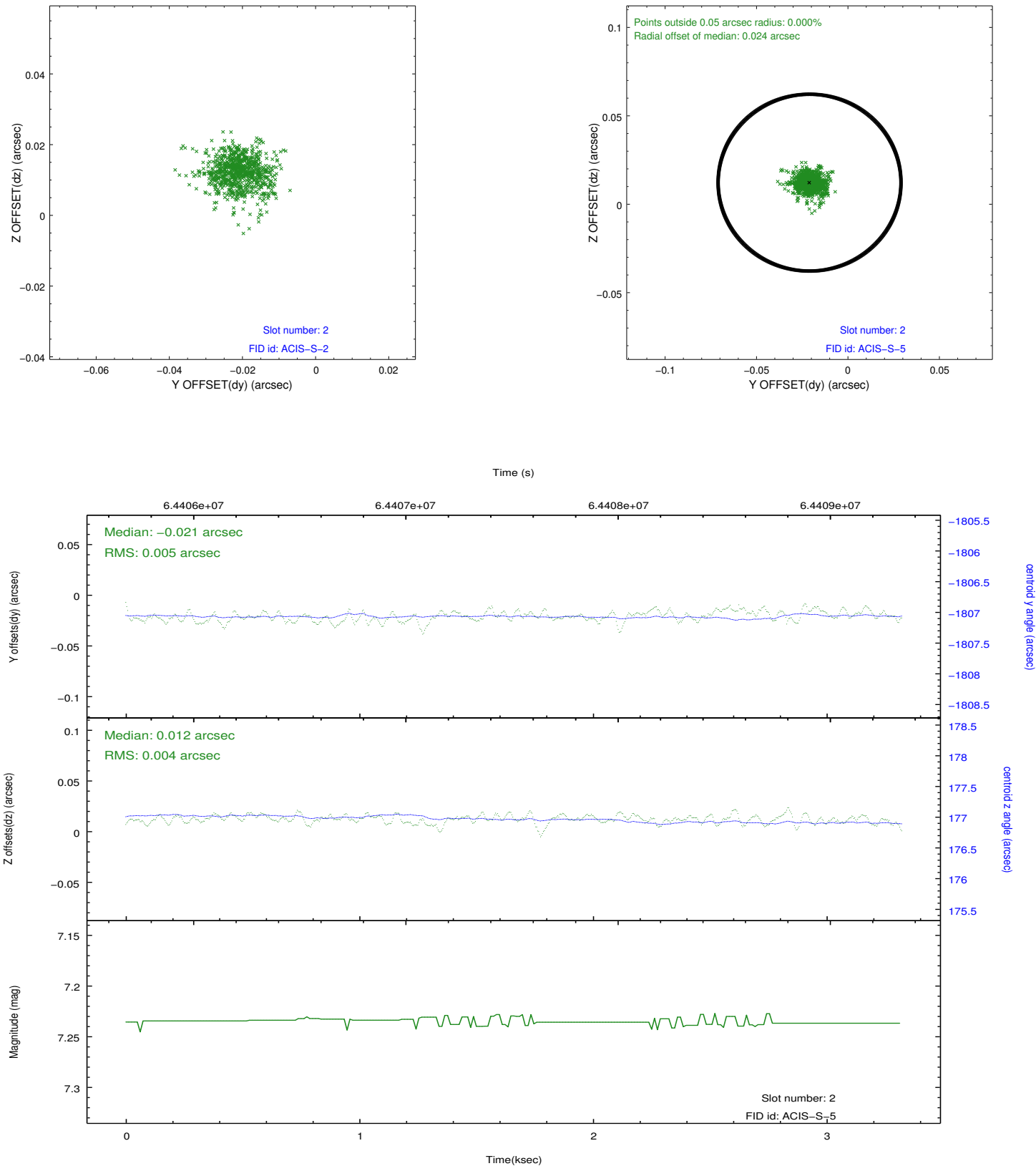
2.5.1 Slot 0



2.5.2 Slot 1



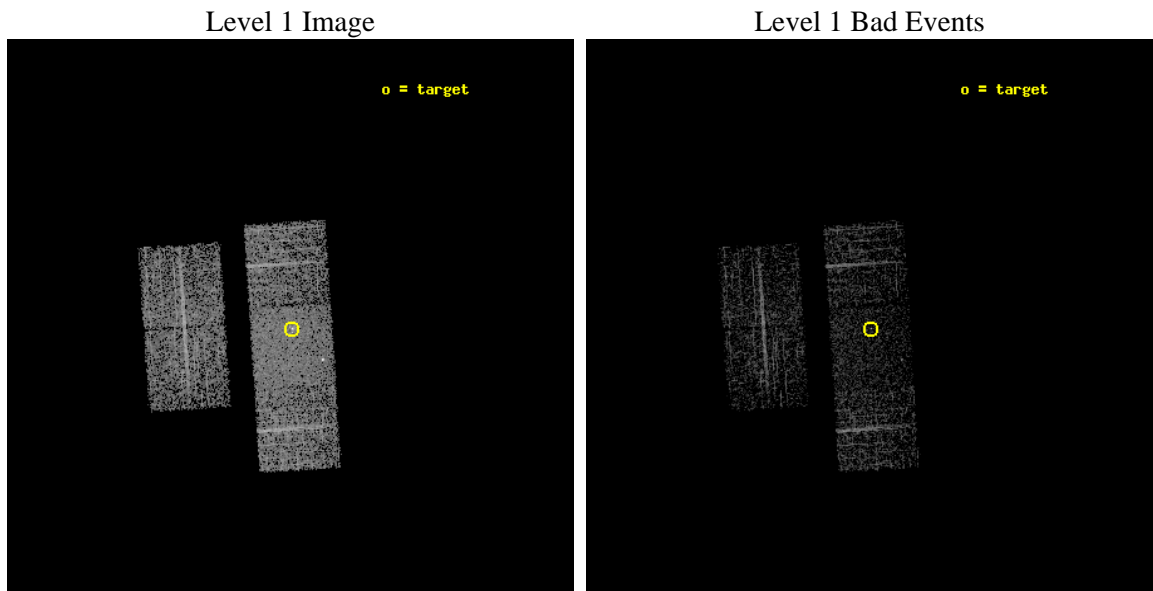
2.5.3 Slot 2



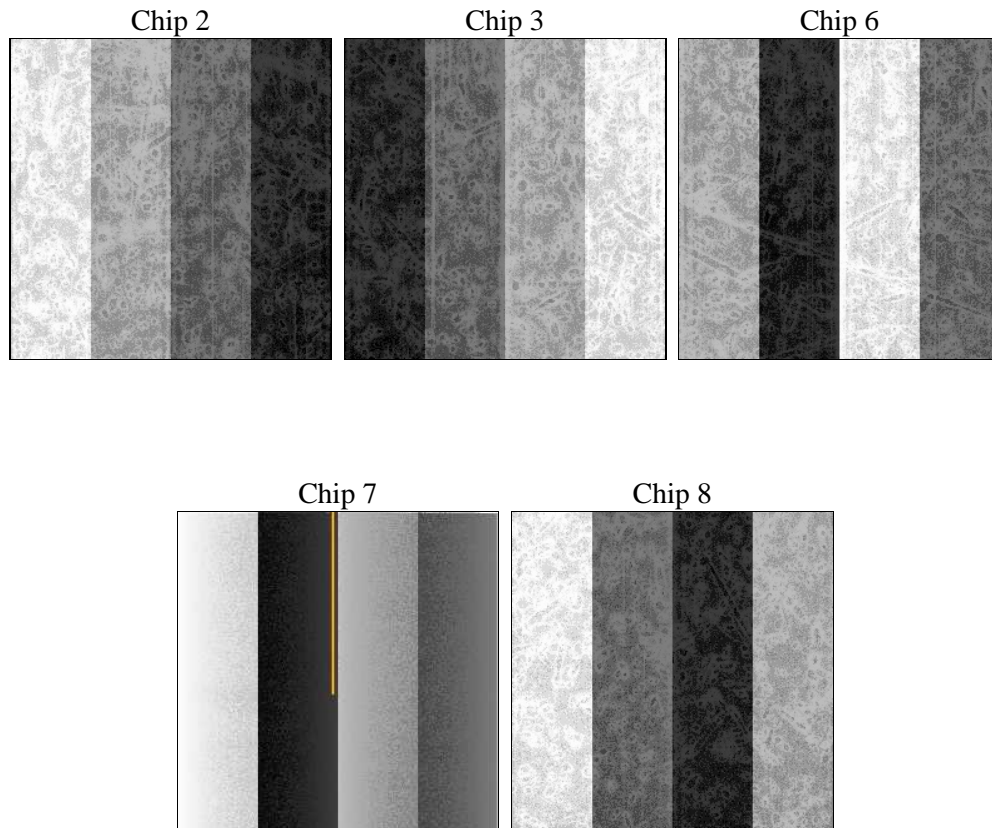
3 OBI Secondary

3.1 OBI

3.1.1 Images



3.1.2 Bias



3.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2700.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	1332.4900694638	Sum of GTIs [s]
caldsver	4.1.4	 	ontime2	1332.4897200763	Sum of GTIs [s]
date	2009-12-02T15:45:12	Date and time of file creation	ontime3	1332.4899197146	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	1332.4895706922	Sum of GTIs [s]
			ontime7	1332.4900694638	Sum of GTIs [s]
			ontime8	1332.4895605221	Sum of GTIs [s]
			l1events	63471	Number of level 1 events

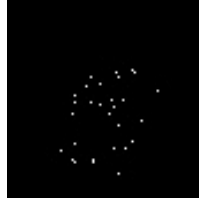
3.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	11589	10822	11404	15307	14349
rejected events	10517	9757	10201	7915	12132
rejected %	90%	90%	89%	51%	84%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	256	263	260	900	457
	2%	2%	2%	5%	3%
grade 1 events	3	2	3	20	2
	0%	0%	0%	0%	0%
grade 2 events	392	411	463	1603	751
	3%	3%	4%	10%	5%
grade 3 events	82	62	74	563	161
	0%	0%	0%	3%	1%
grade 4 events	84	62	70	536	160
	0%	0%	0%	3%	1%
grade 5 events	212	200	251	815	312
	1%	1%	2%	5%	2%
grade 6 events	260	269	337	3815	692
	2%	2%	2%	24%	4%
grade 7 events	10300	9553	9946	7055	11814
	88%	88%	87%	46%	82%

4 Point Sources

5.09 arcmin



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.01.25
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.824

A.2 Comments

arge time for this ObsId remains at original value of 1.824 ks,
although
with the current processing the charge time would have been 1.818 ksec.

Both primary and secondary exposures have large number of events of
grade 7, resulting
in a very short ontime.

=====

The focal plane temperature is approximately -110C 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.