

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 653 - L2 Version 3
Chandra X-Ray Center

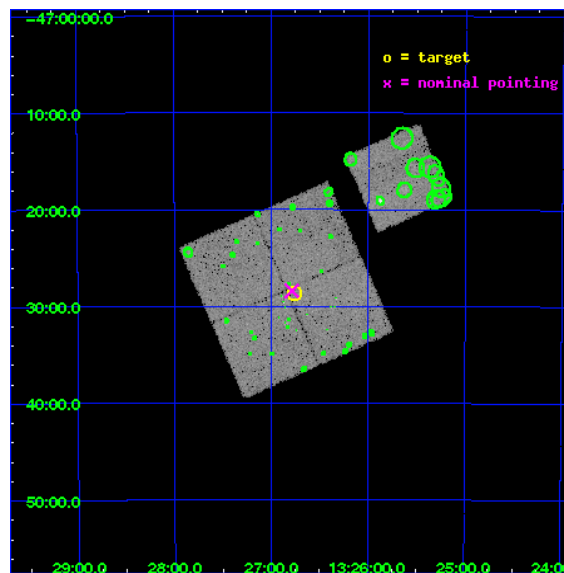
L2 Processing Date : Dec 5 2009

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

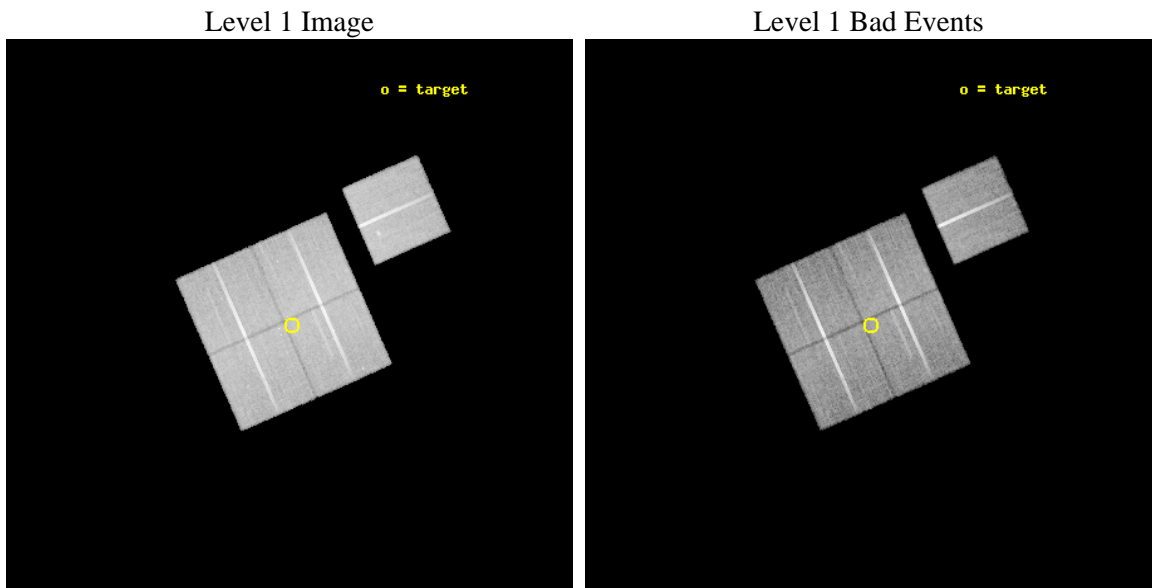
seq_num	300022	Sequence number
obs_id	653	Observation id
title	X-RAY CONSTRAINTS ON THE BINARY STAR POPULATIONS IN OMEGA CENTAURI	
observer	Dr Adrienne Cool	Principal investigator
object	NGC 5139	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	201.69125	Observer's specified target RA
dec_targ	-47.476944	Observer's specified target Dec
ra_nom	201.69681731575	Nominal RA
dec_nom	-47.473421976441	Nominal Dec
roll_nom	66.212792874031	Nominal Roll
revision	3	Processing version of data
ontime	25346.330816343	Sum of GTIs [s]
livetime	25025.380313819	Livetime [s]
ontime0	25343.253946282	Sum of GTIs [s]
ontime1	25349.694856629	Sum of GTIs [s]
ontime2	25352.894796781	Sum of GTIs [s]
ontime3	25346.330816343	Sum of GTIs [s]
ontime6	25352.853756778	Sum of GTIs [s]
l2events	95276	Number of level 2 events



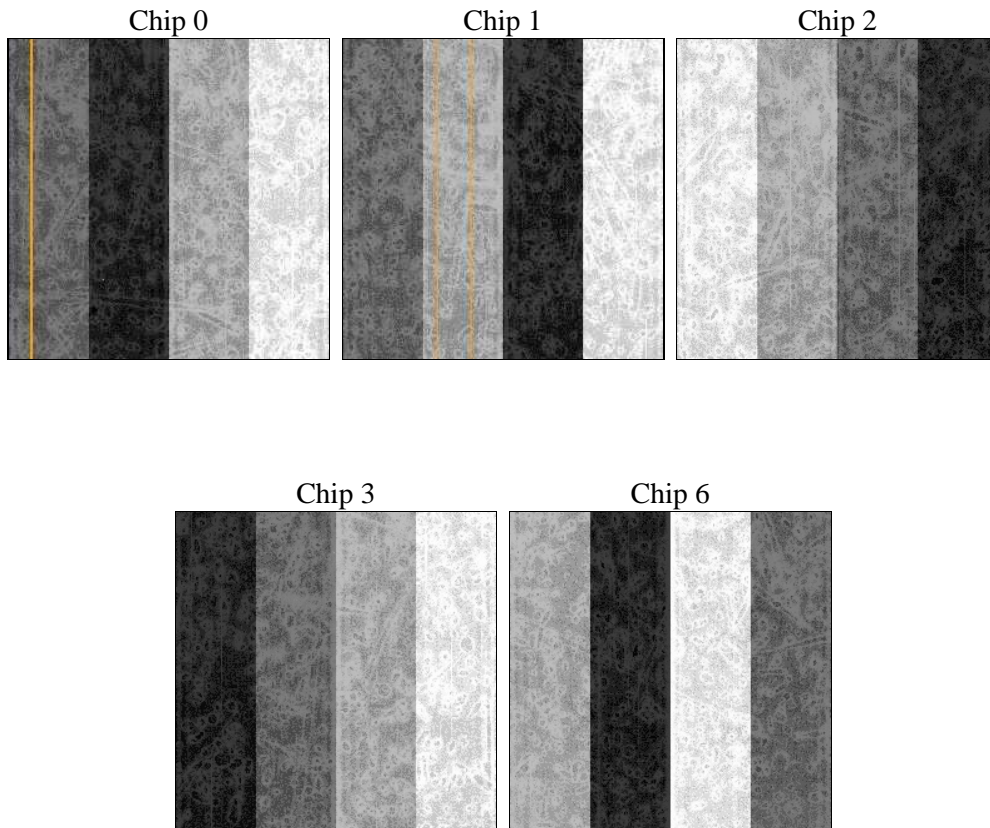
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	26187.875000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	25346.330816343	Sum of GTIs [s]
caldbver	4.1.4	 	ontime0	25343.253946282	Sum of GTIs [s]
date	2009-12-05T09:33:47	Date and time of file creation	ontime1	25349.694856629	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	25352.894796781	Sum of GTIs [s]
			ontime3	25346.330816343	Sum of GTIs [s]
			ontime6	25352.853756778	Sum of GTIs [s]
			l1events	991927	Number of level 1 events

2.1.4 Events

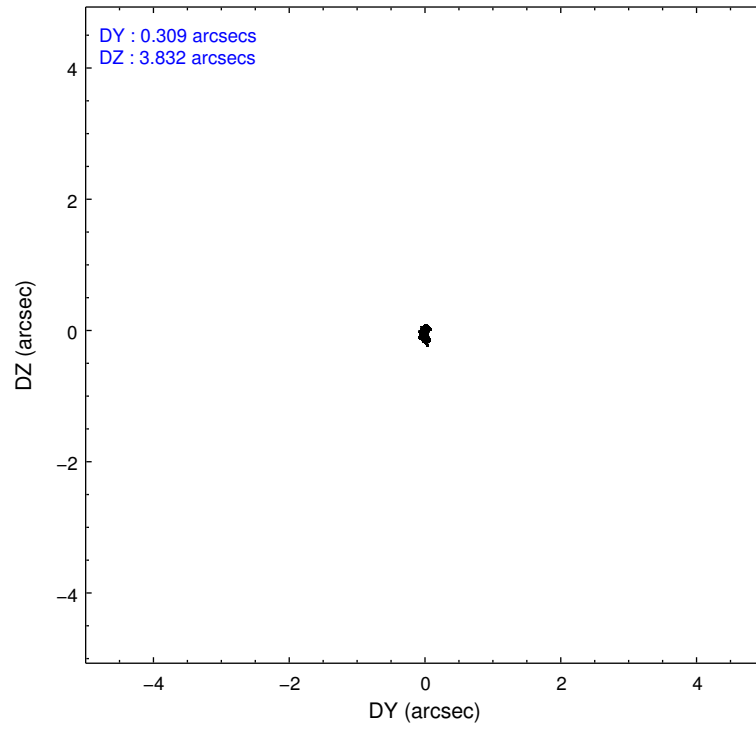
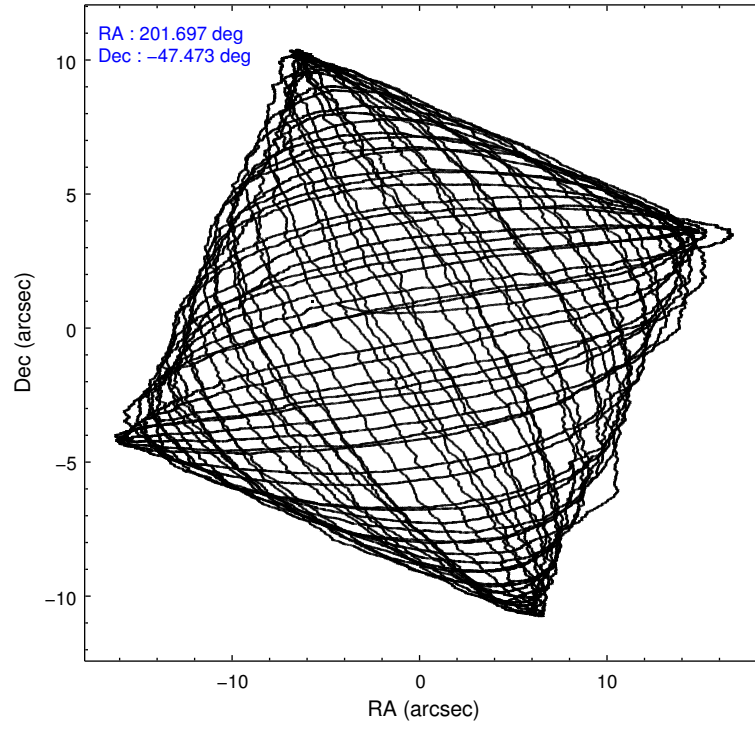
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	188446	189977	208942	197476	207086
rejected events	168128	167844	189307	176213	185751
rejected %	89%	88%	90%	89%	89%

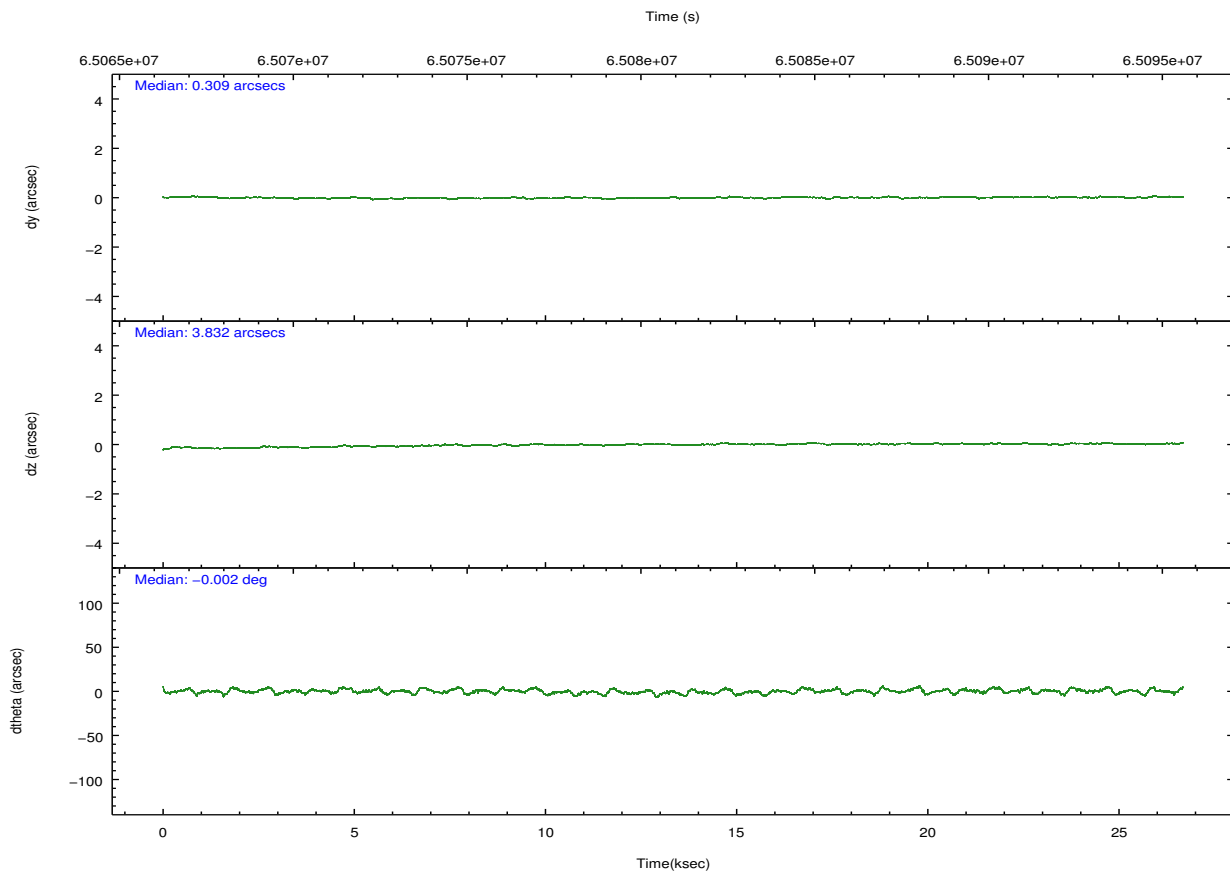
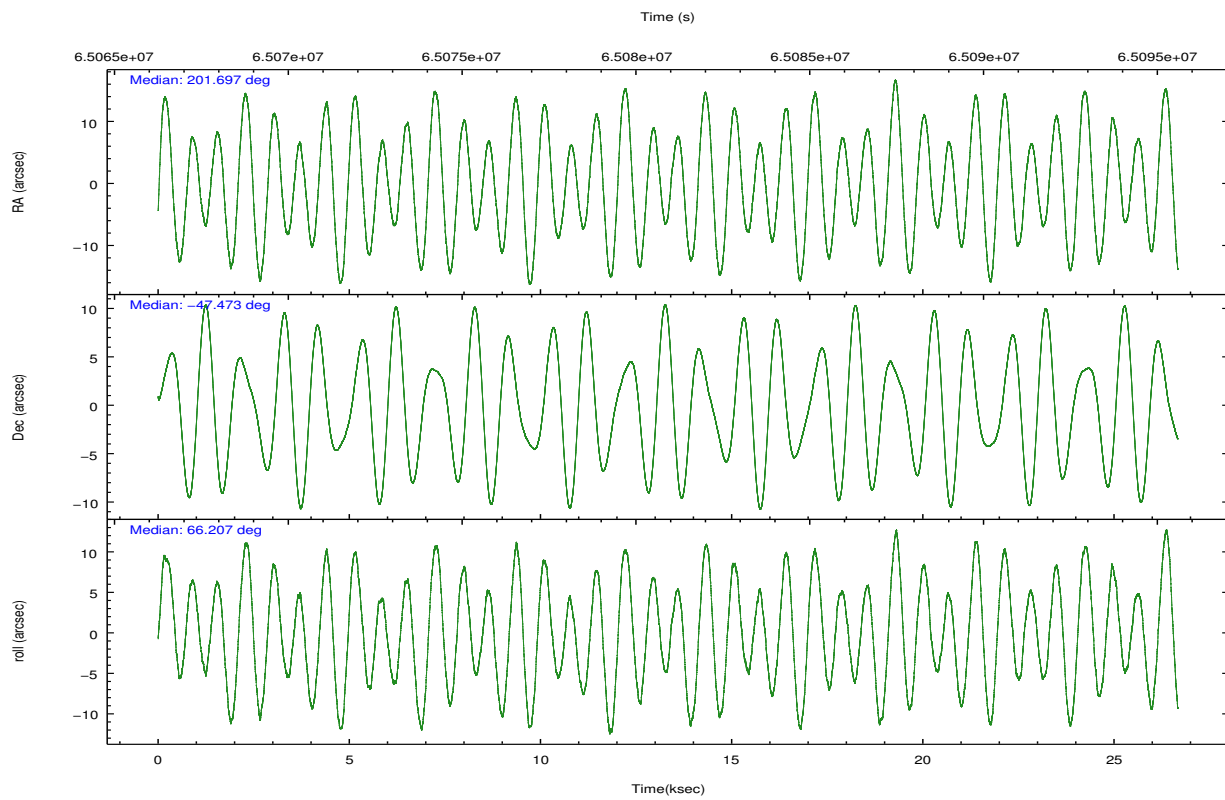
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5167	5513	4967	5703	5052
	2%	2%	2%	2%	2%
grade 1 events	45	51	34	40	38
	0%	0%	0%	0%	0%
grade 2 events	7593	8111	7503	8180	7961
	4%	4%	3%	4%	3%
grade 3 events	1437	1671	1277	1325	1349
	0%	0%	0%	0%	0%
grade 4 events	1359	1555	1263	1234	1289
	0%	0%	0%	0%	0%
grade 5 events	3907	4236	3561	3894	4242
	2%	2%	1%	1%	2%
grade 6 events	4764	5288	4626	4825	5686
	2%	2%	2%	2%	2%
grade 7 events	164174	163552	185711	172275	181469
	87%	86%	88%	87%	87%

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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
Pointing RA	201.700790	201.6968173157474	Subarray requested	NONE	NONE
Pointing Dec	-47.500979	-47.47342197644068	Alternating exposures requested	N	N
Pointing Roll	66.007037	66.21279287403064	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	65068072.184000	65067301.932835			
Observation start date	2000-01-24T02:26:48	2000-01-24T02:15:01			
Observation end time	65094260.184000	65094394.22132			
Observation end date	2000-01-24T09:43:16	2000-01-24T09:46:34			
Read mode	TIMED	TIMED			

2.3 Aspect



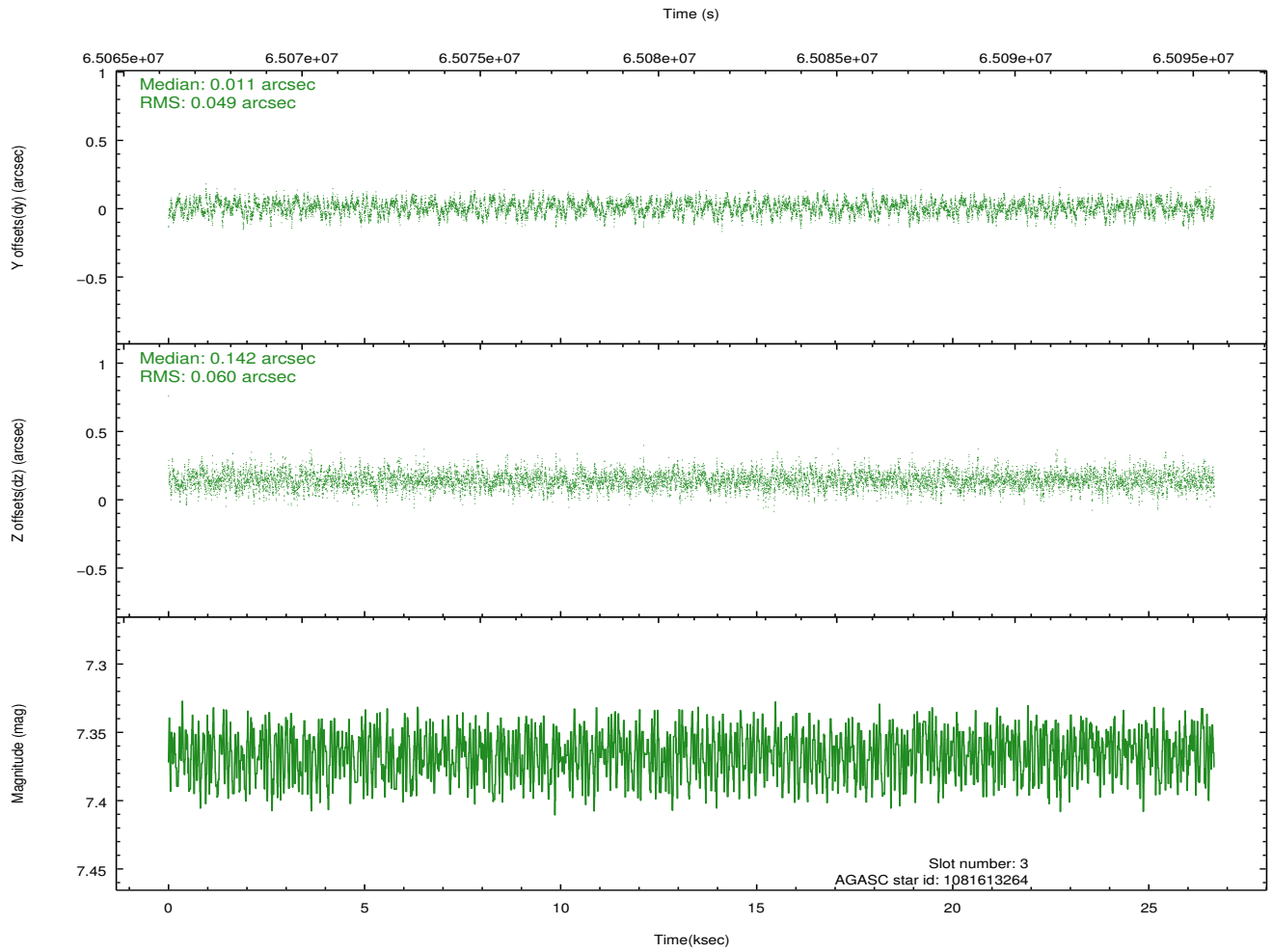
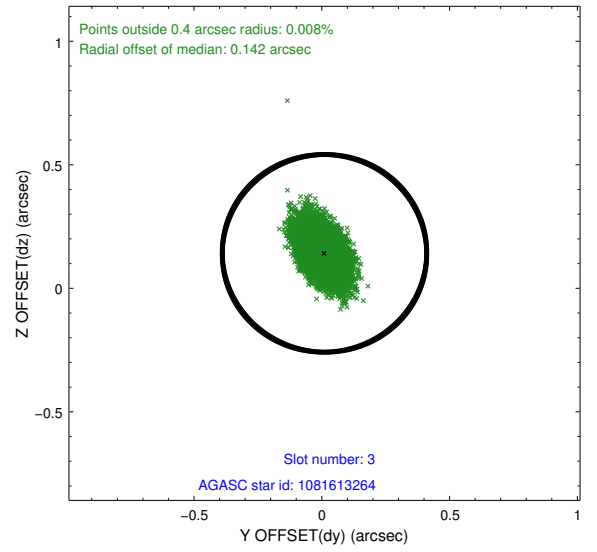
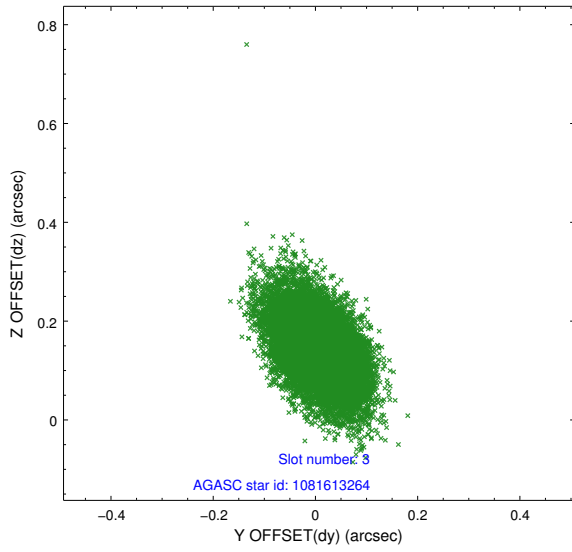


Slot Statistics

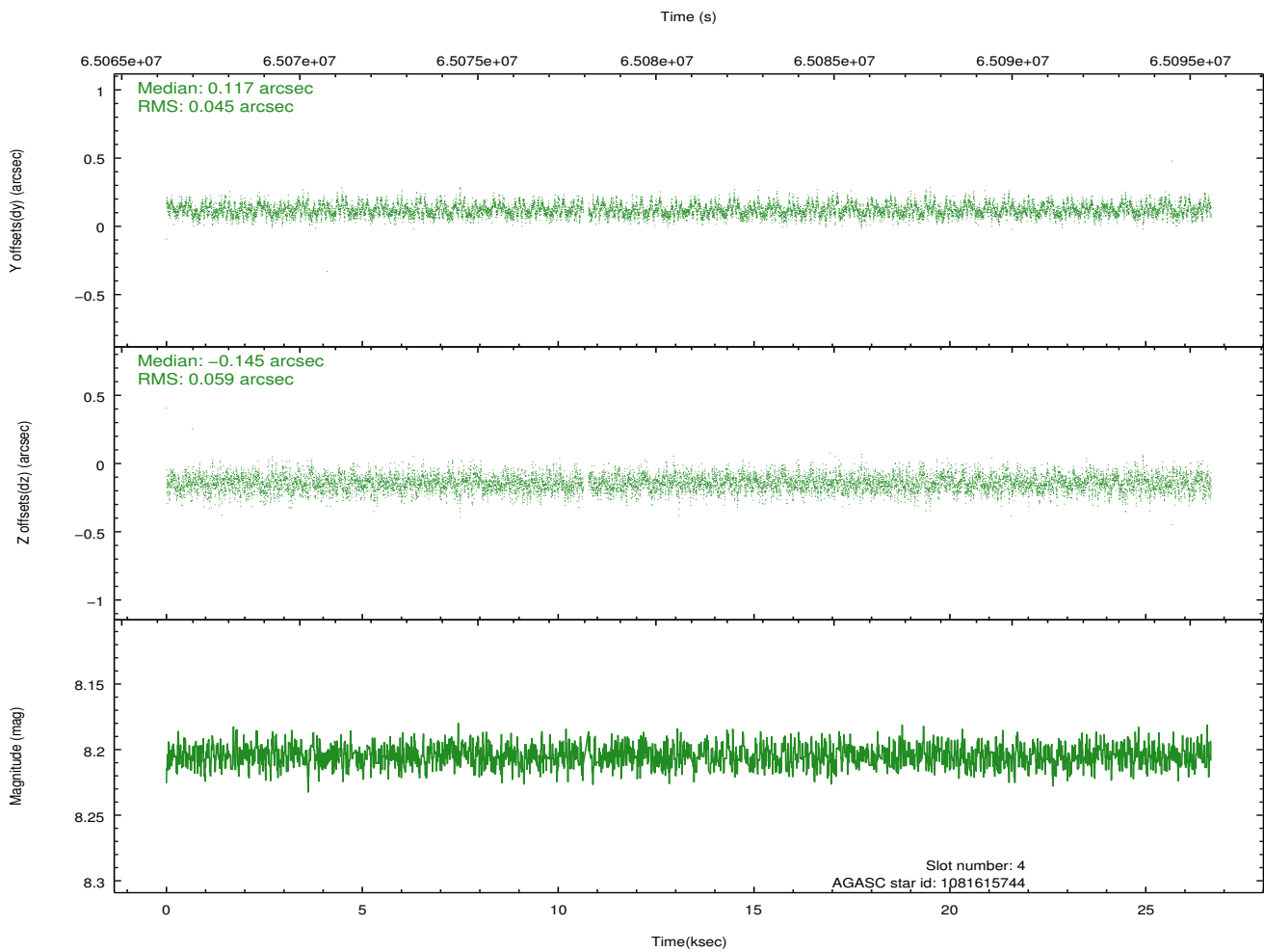
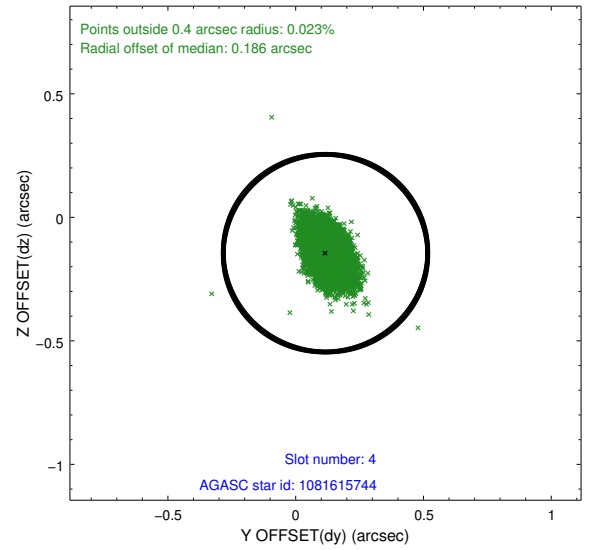
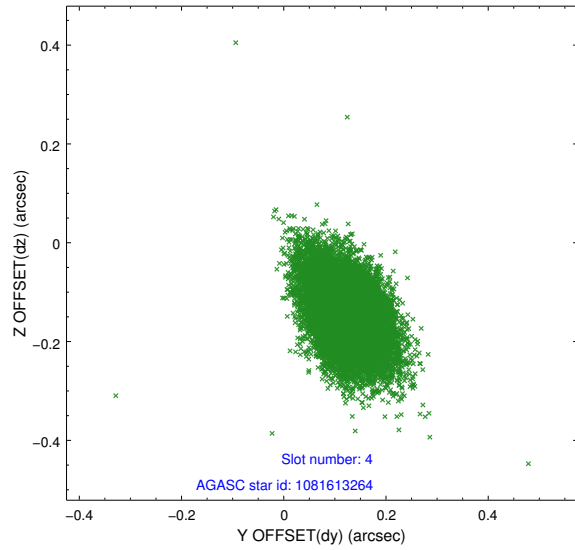
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-2	7.15	6503	-0.060	0.006	0.014	0.025	0.000000	0.000000	-754.67	-833.47
1	FID	ACIS-I-4	7.19	6503	-0.037	0.051	0.022	0.038	0.000000	0.000000	2159.36	1072.68
2	FID	ACIS-I-6	7.27	6505	-0.004	0.006	0.024	0.046	0.000000	0.000000	405.60	1714.95
3	GUIDE	1081613264	7.37	13006	0.011	0.142	0.081	0.137	202.400675	-47.875826	-553.13	-2094.93
4	GUIDE	1081615744	8.21	12944	0.117	-0.145	0.076	0.132	200.974361	-47.785829	-1659.67	1185.24
5	GUIDE	1081631864	9.33	12999	0.026	0.119	0.088	0.151	202.007250	-47.388734	670.78	-517.63
6	GUIDE	1083329128	10.03	12997	-0.335	0.100	0.184	0.288	202.539200	-47.044140	2327.88	-1213.76
7	GUIDE	1081620936	10.15	13001	0.171	-0.225	0.157	0.254	200.618145	-47.745008	-1885.58	2029.94

2.4 Star Slots

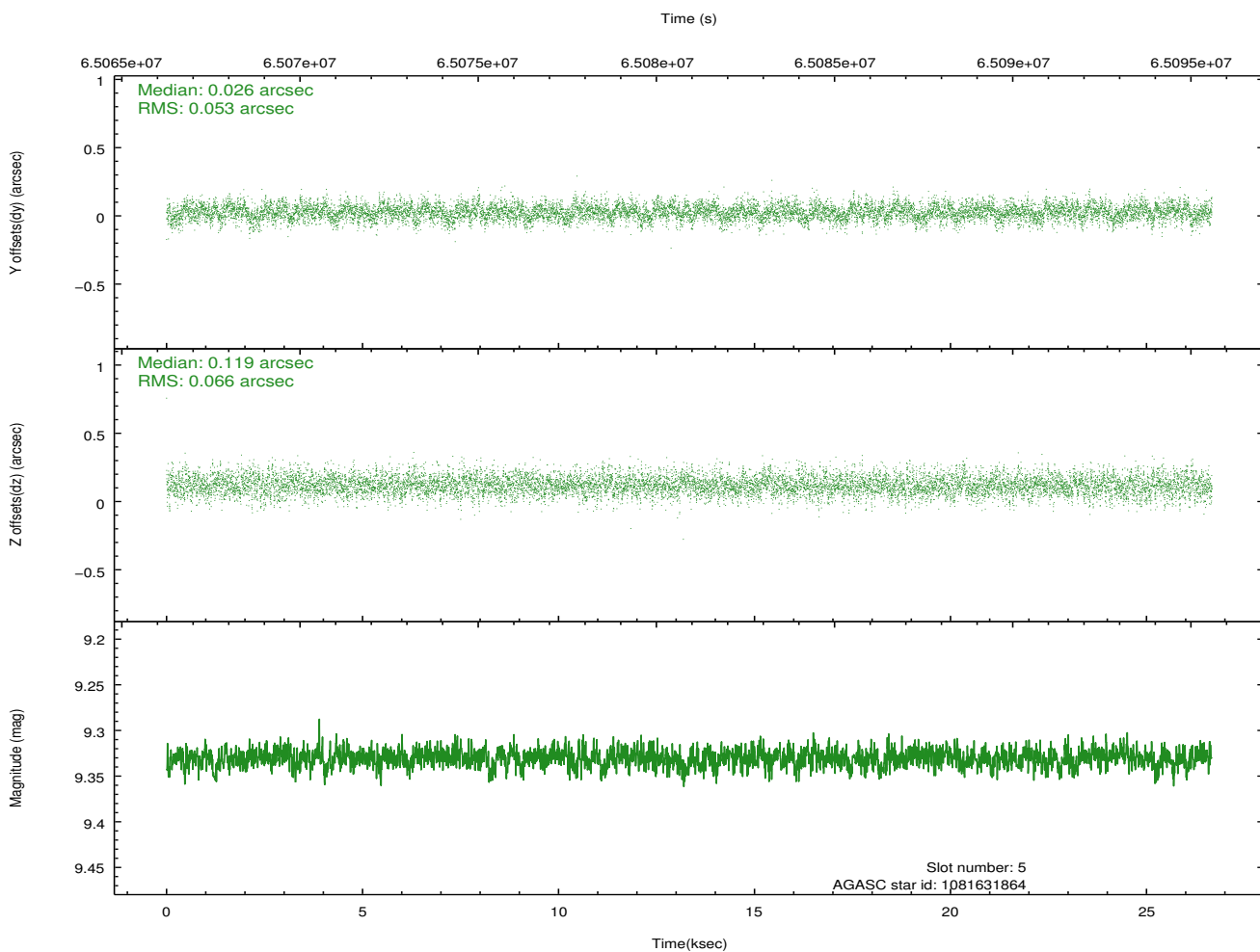
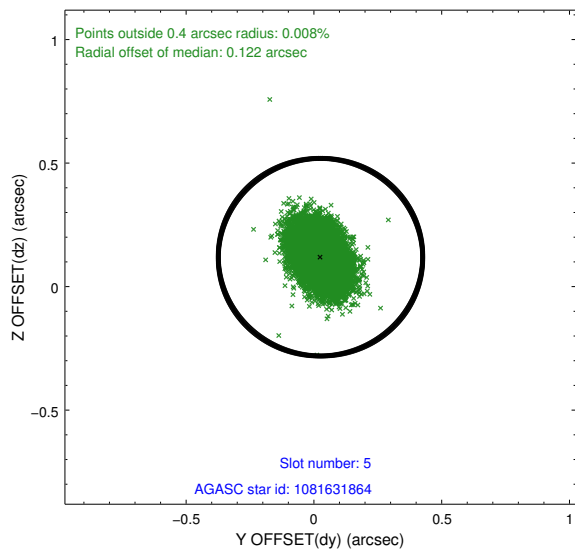
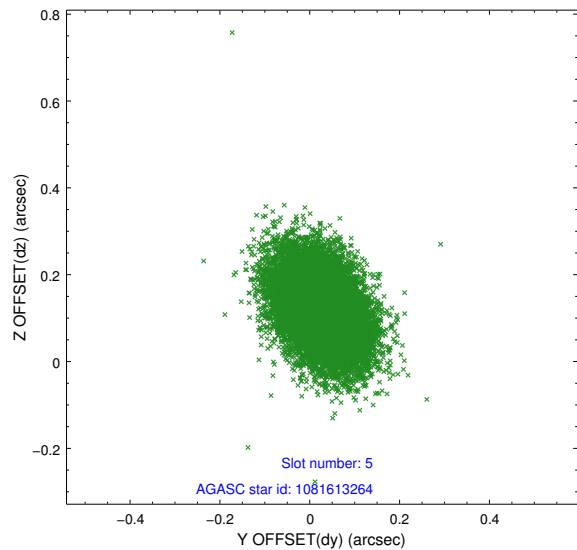
2.4.1 Slot 3



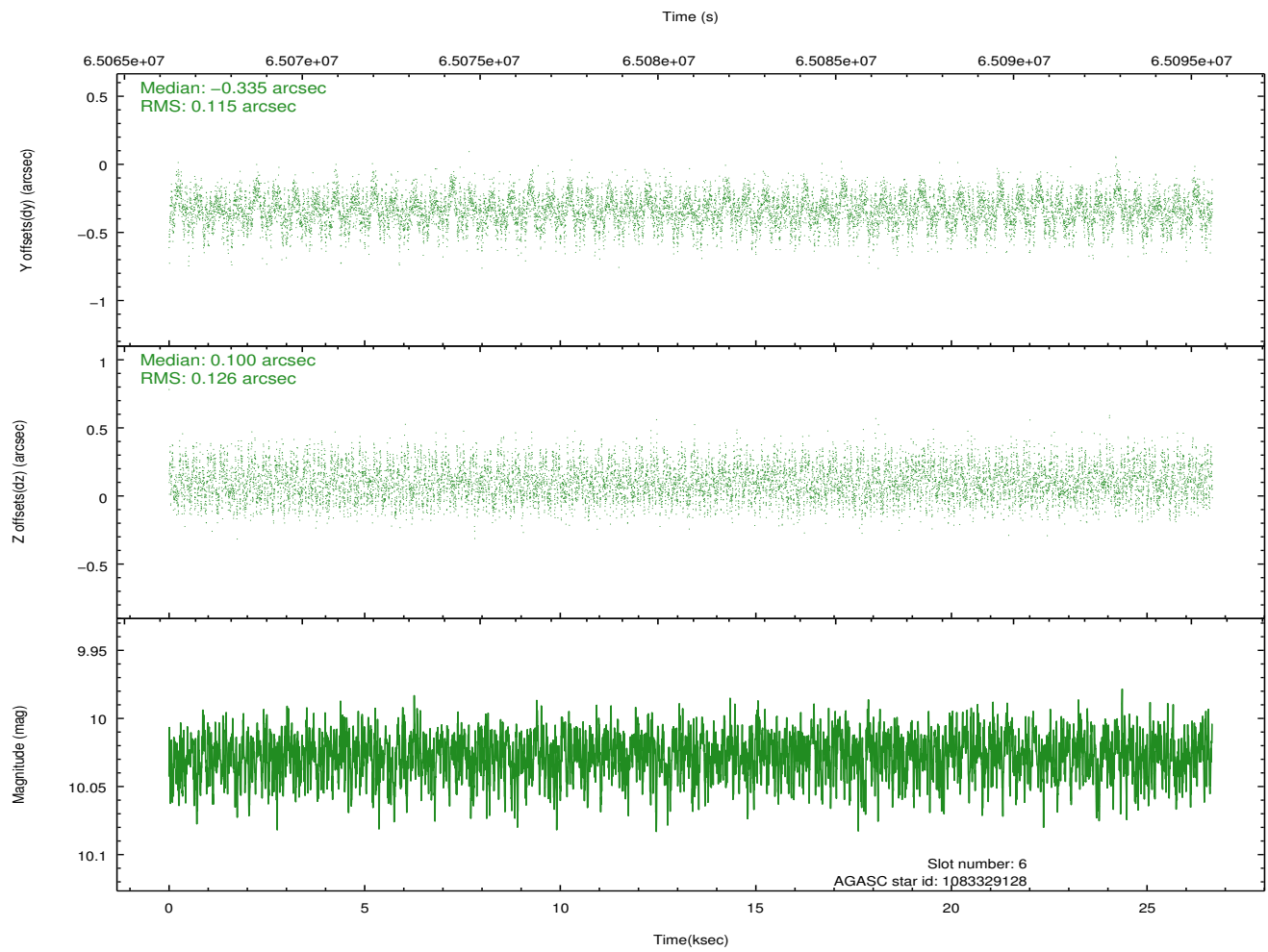
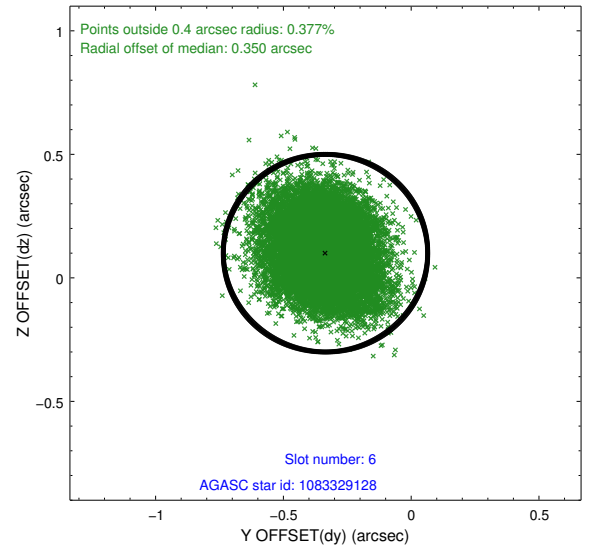
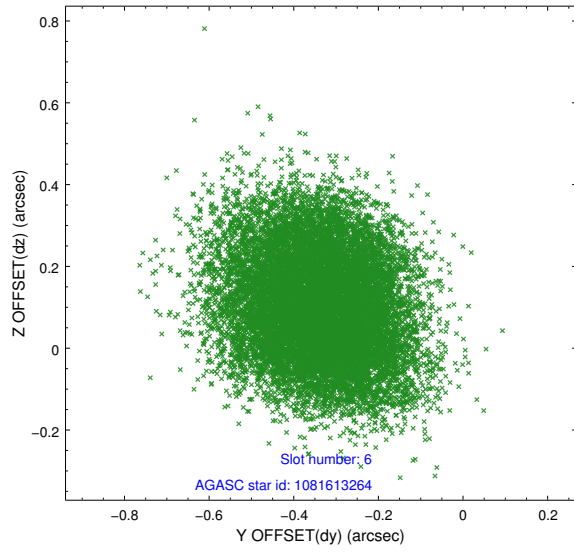
2.4.2 Slot 4



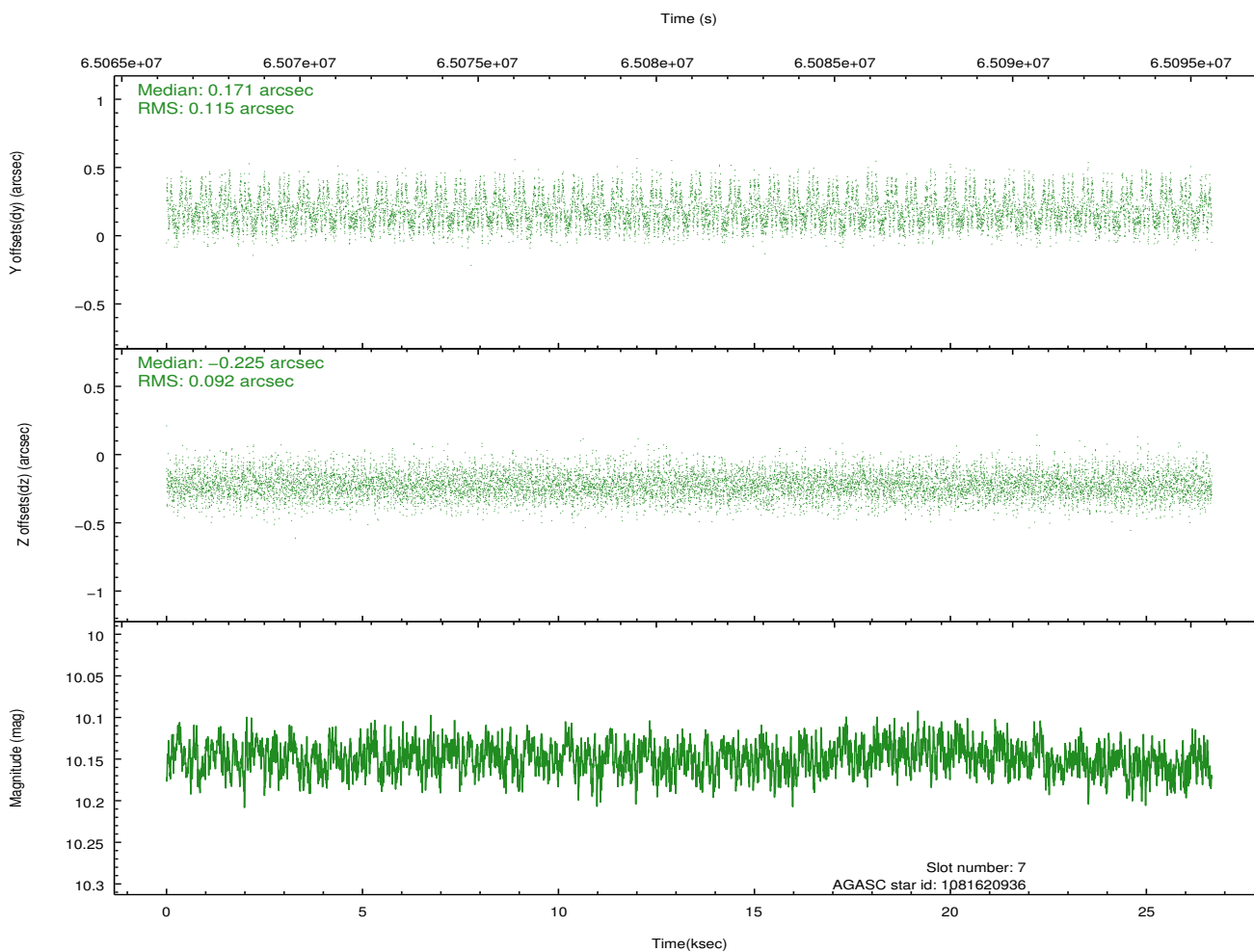
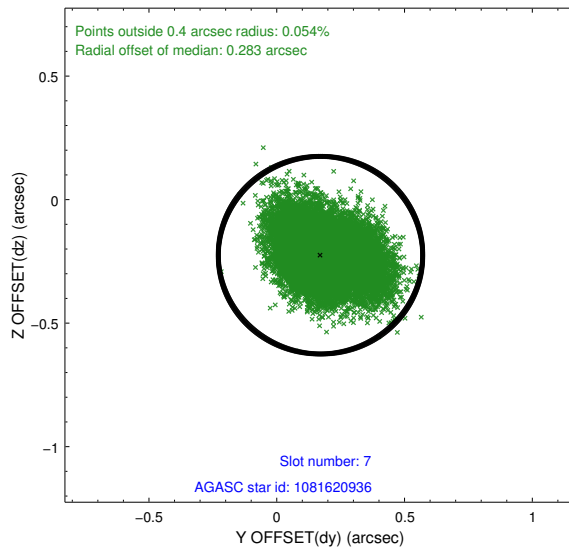
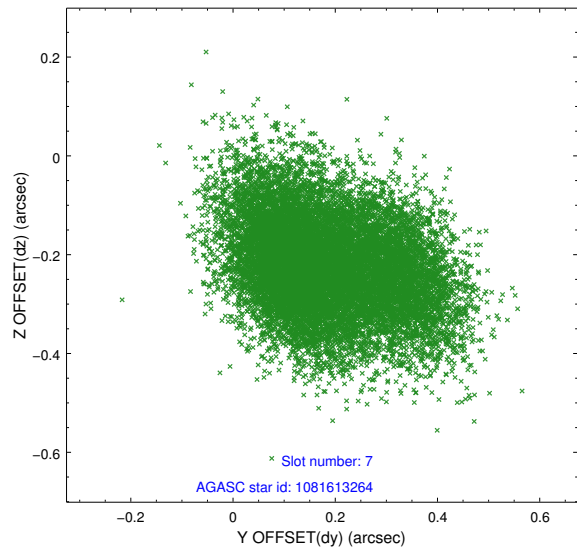
2.4.3 Slot 5



2.4.4 Slot 6

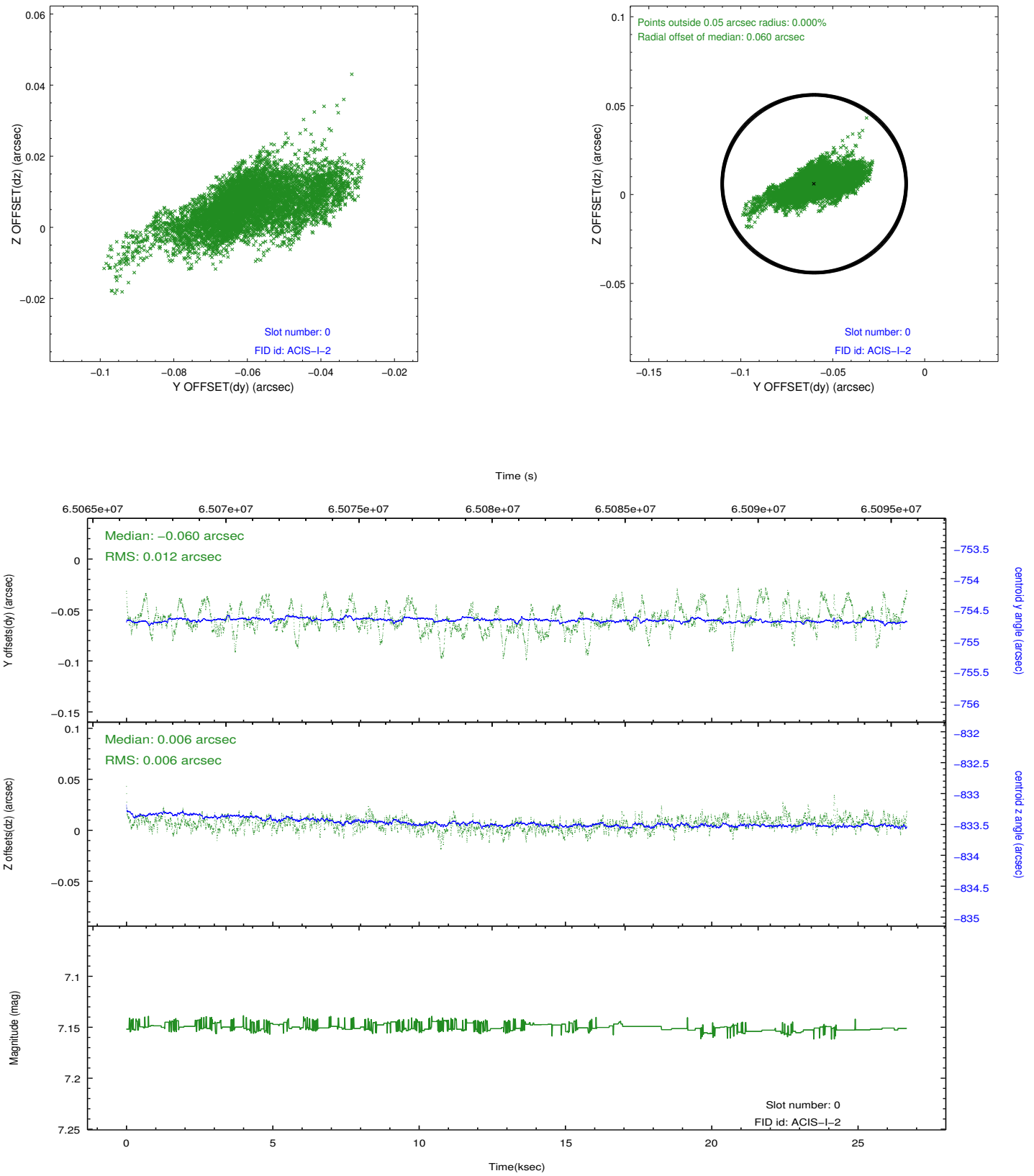


2.4.5 Slot 7

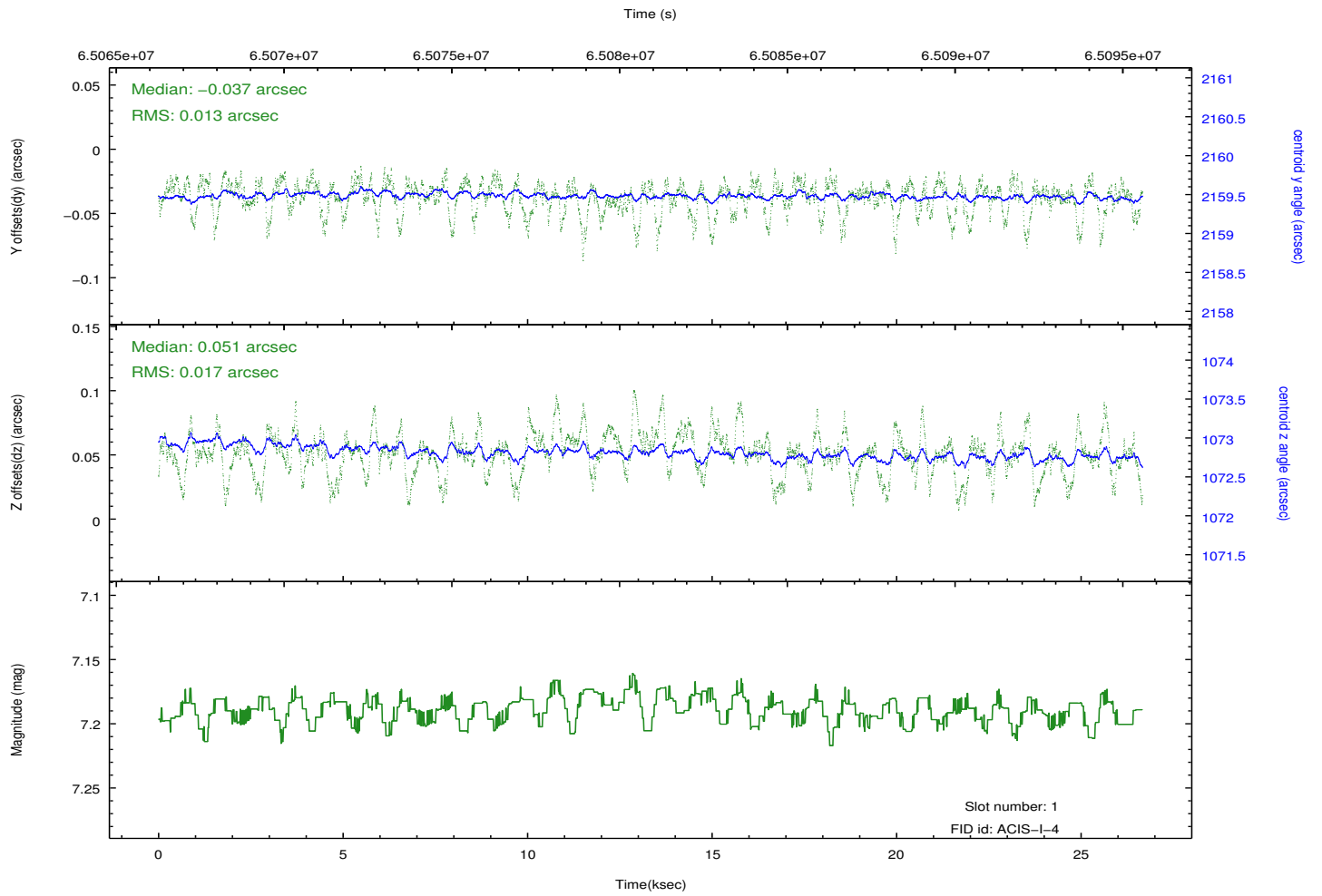
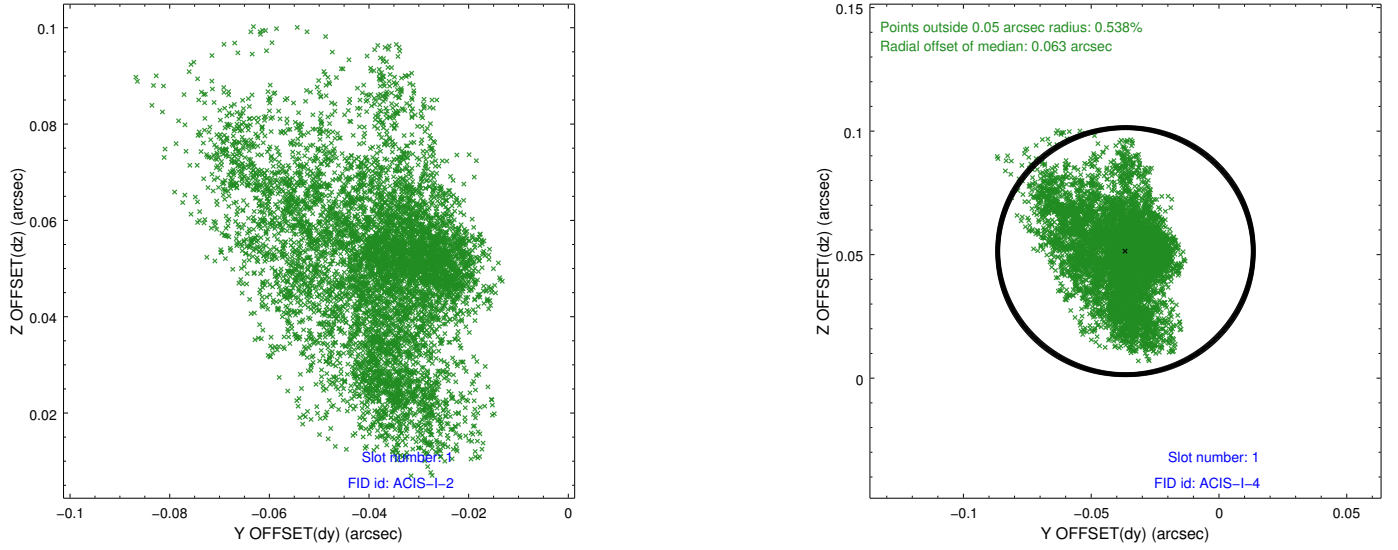


2.5 FID Slots

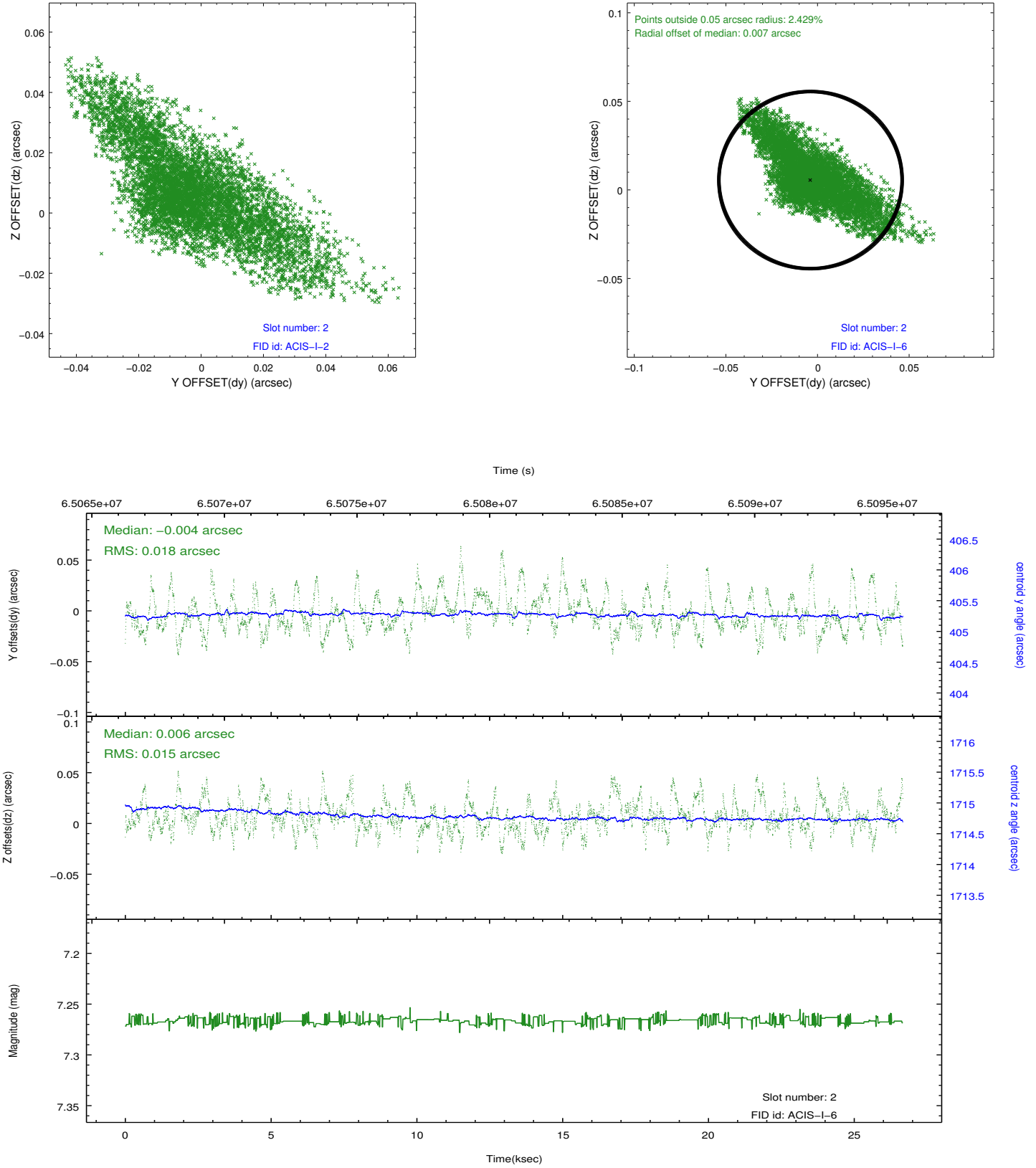
2.5.1 Slot 0



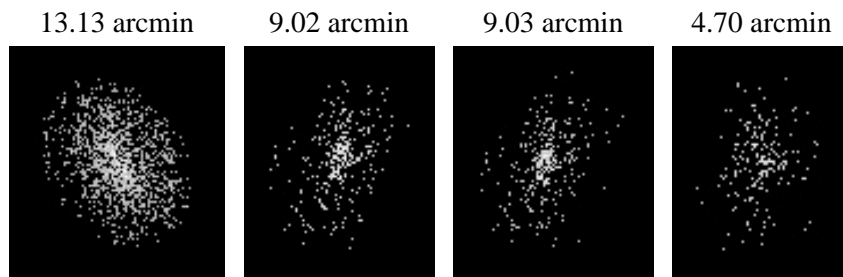
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2009.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.347

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.