

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15182 - L2 Version 2
Chandra X-Ray Center

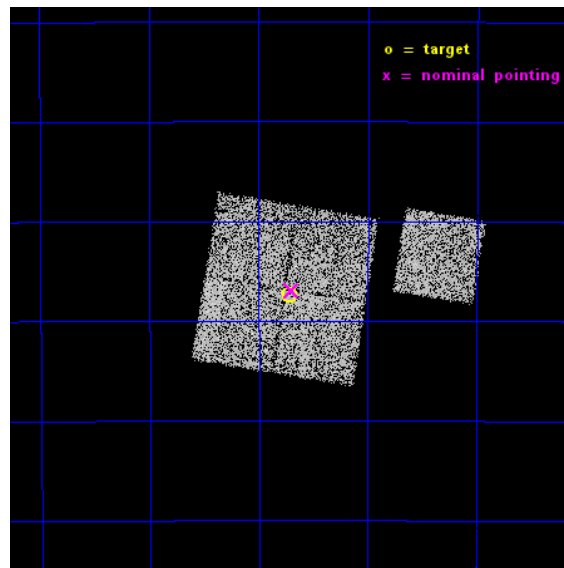
L2 Processing Date : Nov 29 2014

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1 Front

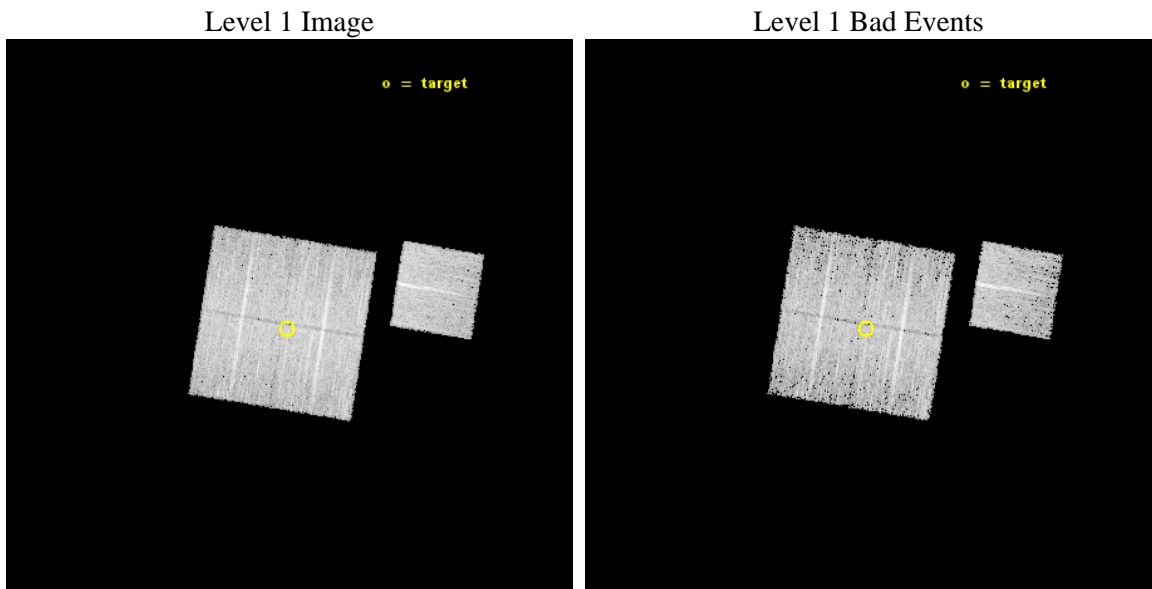
seq_num	801307	Sequence number
obs_id	15182	Observation id
title	Joint Chandra and Suzaku exploration of the outskirts of the nearby, X-ray bright Centaurus cluster	Proposal title
observer	Mr Stephen Walker	Principal investigator
object	Centaurus Cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	191.68	Observer's specified target RA [deg]
dec_targ	-40.456139	Observer's specified target Dec [deg]
ra_nom	191.67522124534	Nominal RA [deg]
dec_nom	-40.448889667437	Nominal Dec [deg]
roll_nom	99.143765861658	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10083.078579426	Sum of GTIs [s]
livetime	9951.3357347312	Livetime [s]
ontime0	10082.955459416	Sum of GTIs [s]
ontime1	10082.996499419	Sum of GTIs [s]
ontime2	10083.037539423	Sum of GTIs [s]
ontime3	10083.078579426	Sum of GTIs [s]
ontime6	10082.914419413	Sum of GTIs [s]
l2events	26147	Number of level 2 events



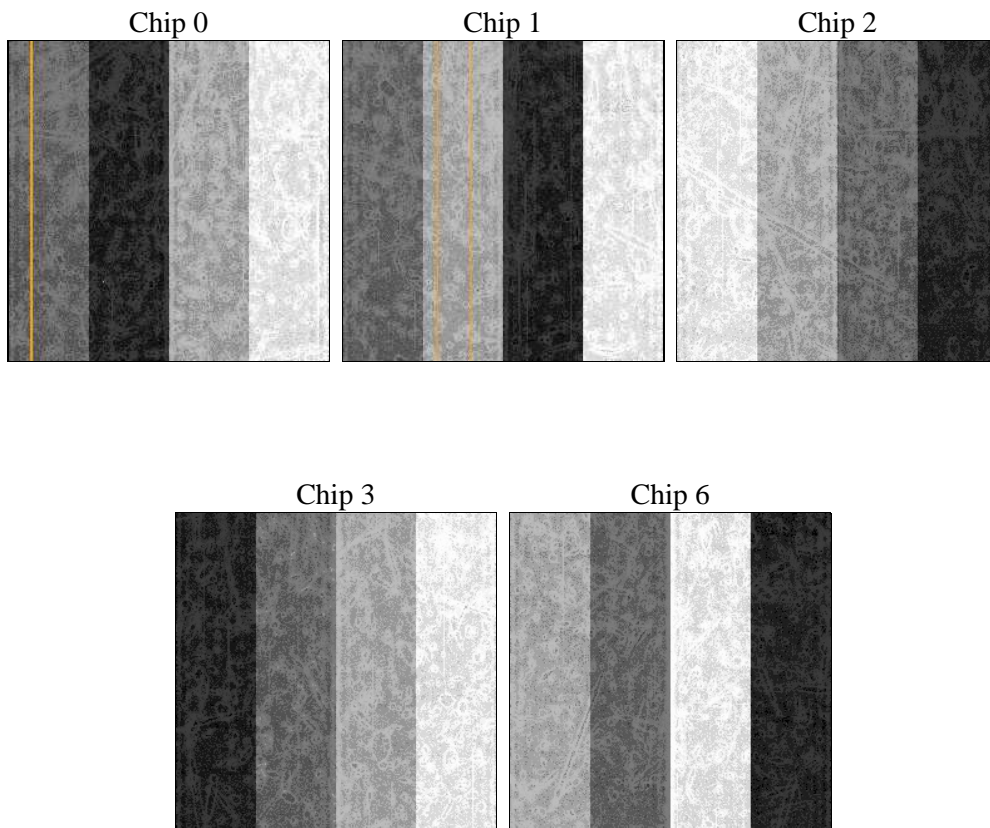
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10083.078579426	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10082.955459416	Sum of GTIs [s]
date	2014-11-30T05:30:57	Date and time of file creation	ontime1	10082.996499419	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10083.037539423	Sum of GTIs [s]
			ontime3	10083.078579426	Sum of GTIs [s]
			ontime6	10082.914419413	Sum of GTIs [s]
			l1events	236966	Number of level 1 events

2.1.4 Events

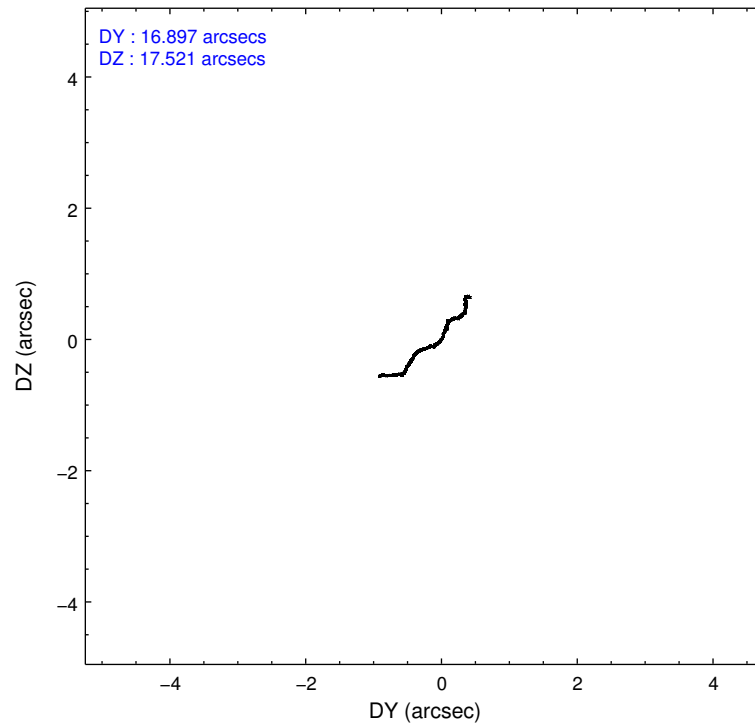
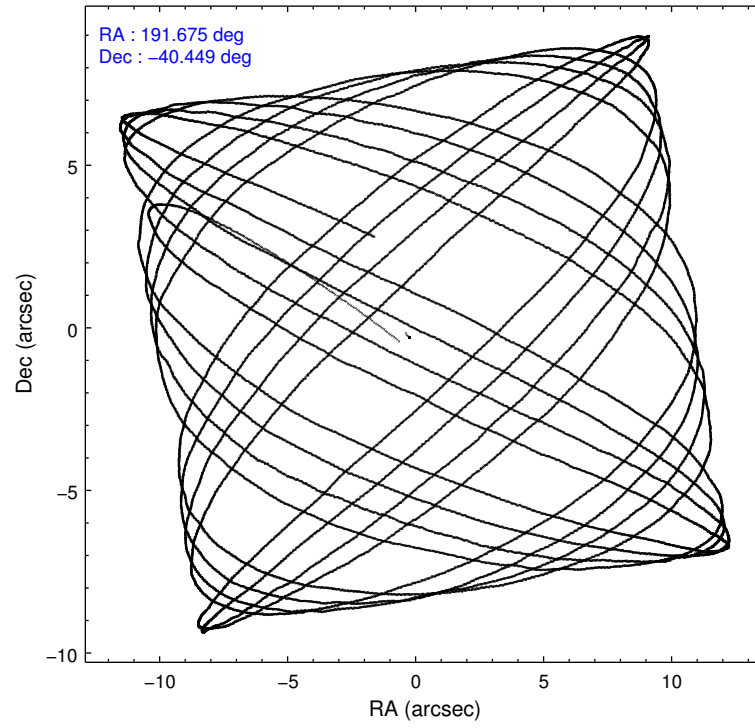
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	44852	46041	49391	49659	47023
rejected events	38764	39160	43527	43832	40905
rejected %	86%	85%	88%	88%	86%

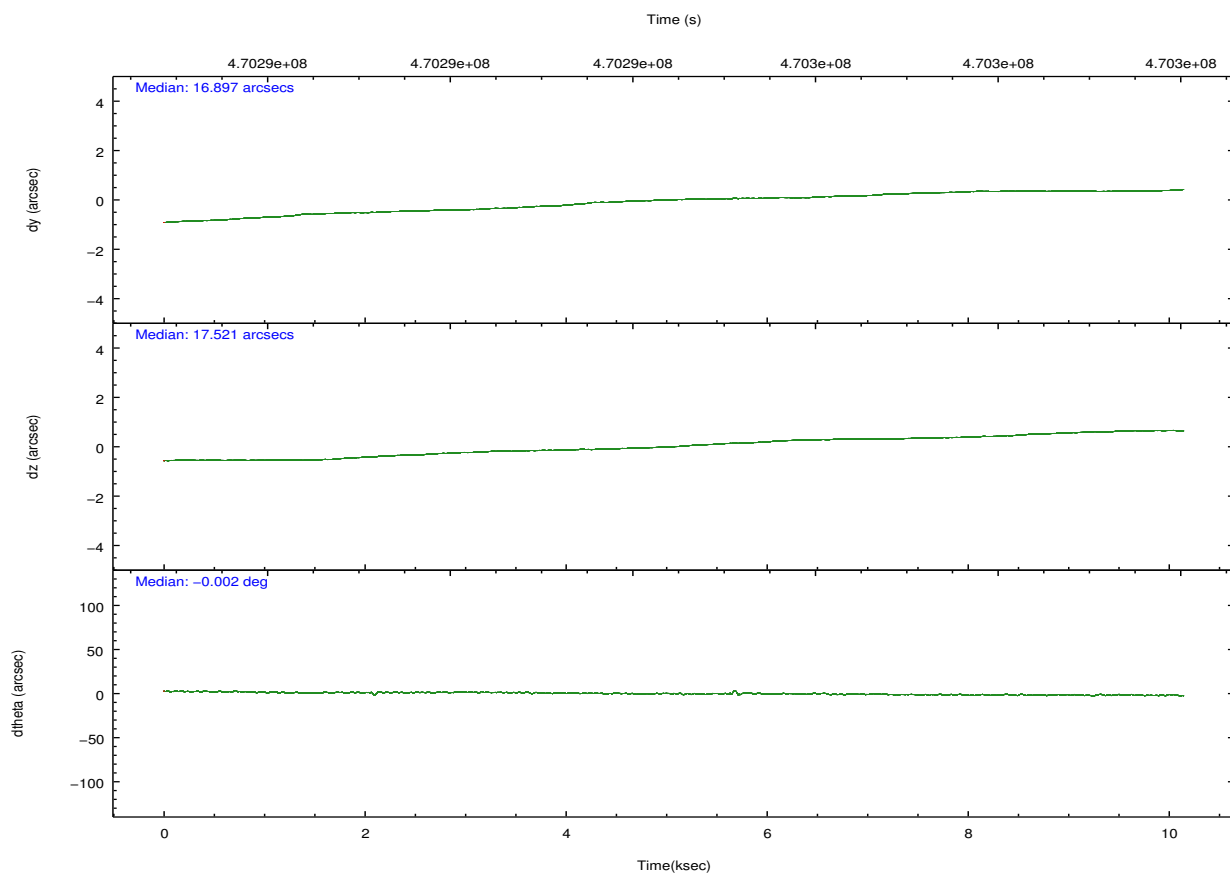
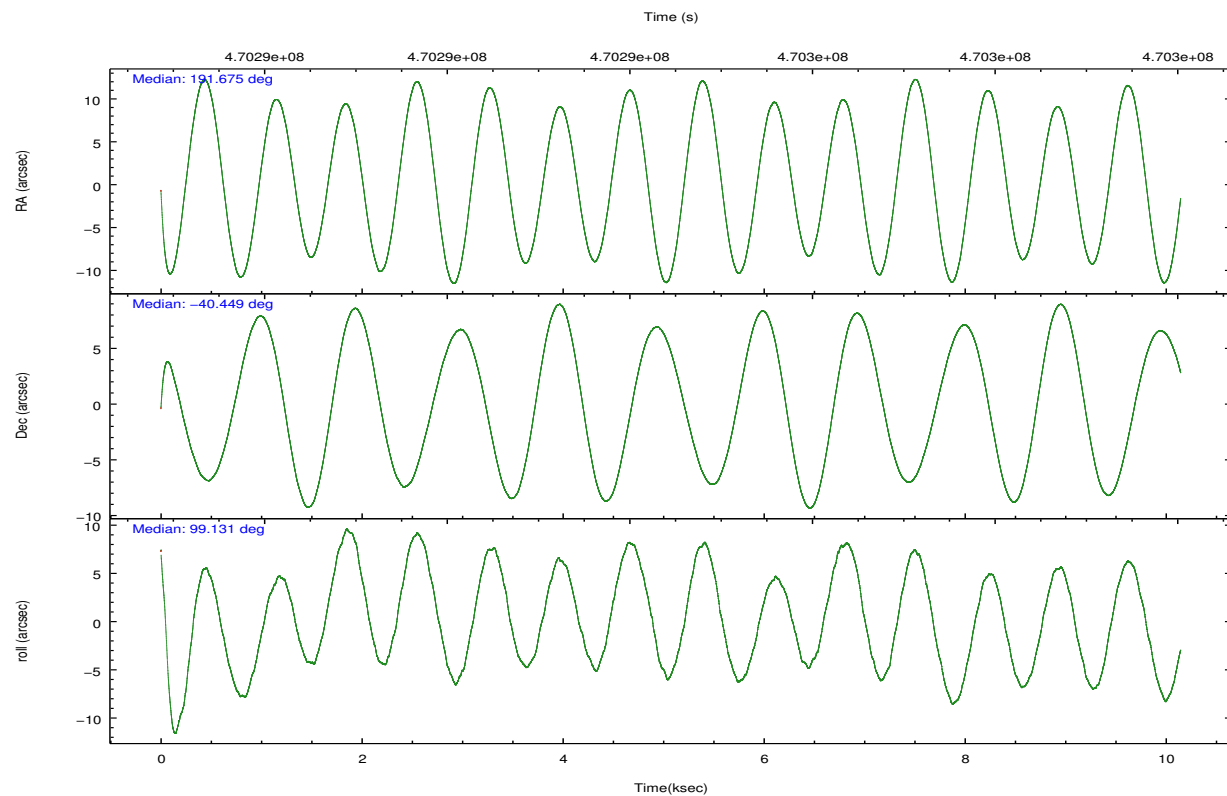
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2165	2507	2118	2106	2075
	4%	5%	4%	4%	4%
grade 1 events	25	23	32	35	17
	0%	0%	0%	0%	0%
grade 2 events	1515	1643	1469	1334	1341
	3%	3%	2%	2%	2%
grade 3 events	628	727	583	587	616
	1%	1%	1%	1%	1%
grade 4 events	590	629	582	616	663
	1%	1%	1%	1%	1%
grade 5 events	2273	2657	2215	2649	2597
	5%	5%	4%	5%	5%
grade 6 events	1198	1384	1116	1185	1428
	2%	3%	2%	2%	3%
grade 7 events	36458	36471	41276	41147	38286
	81%	79%	83%	82%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	191.698198	191.6752212453442	CCD I2 on	Y	Y
[deg] Pointing Dec	-40.470149	-40.44888966743678	CCD I3 on	Y	Y
[deg] Pointing Roll	98.949979	99.14376586165758	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	470289521.184000	470288544.37454	CCD S5 on	N	N
Observation start date	2012-11-26T03:57:34	2012-11-26T03:42:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	470299521.184000	470299654.86263	On-chip summing requested	N	N
Observation end date	2012-11-26T06:44:14	2012-11-26T06:47:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



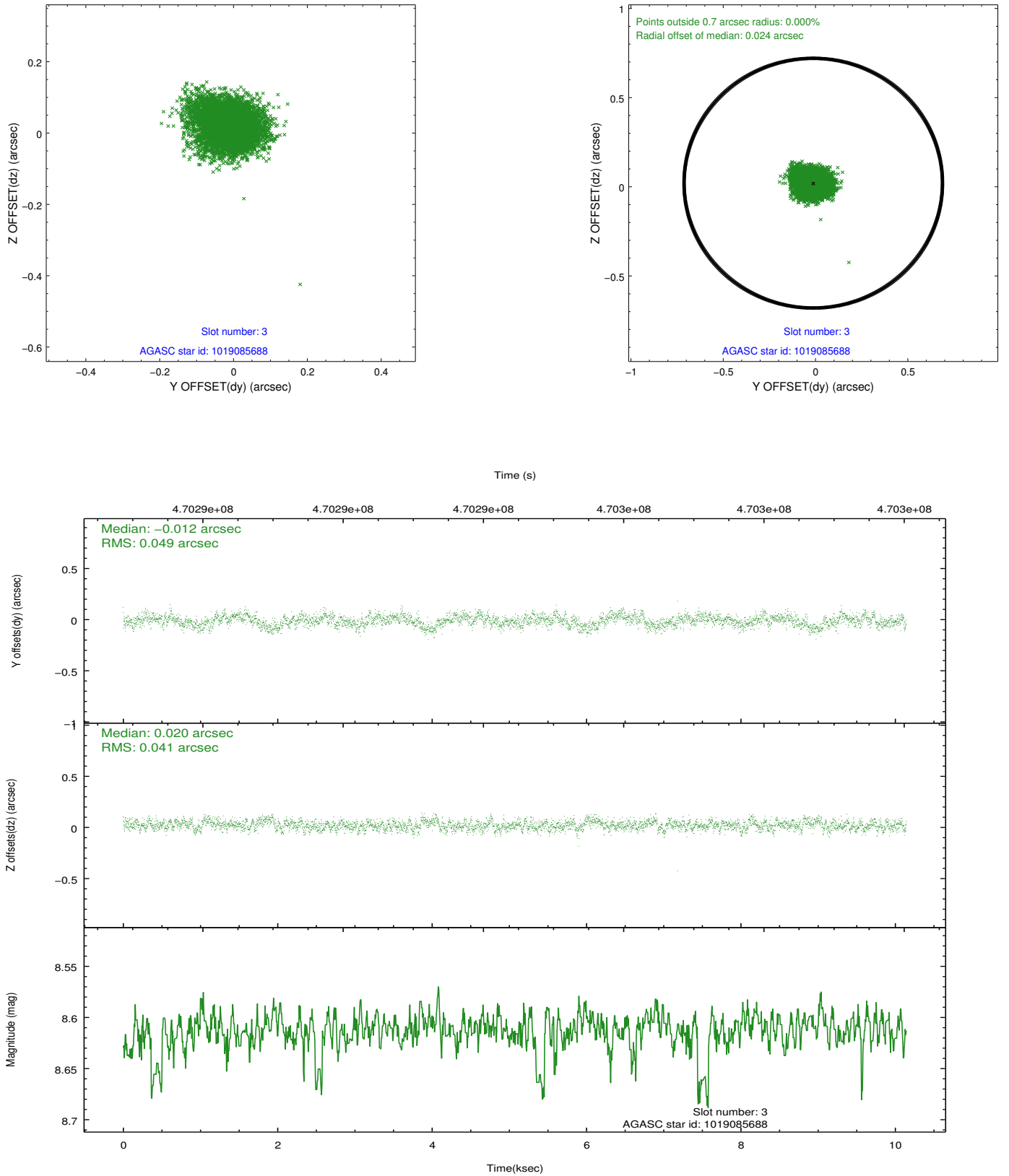


Slot Statistics

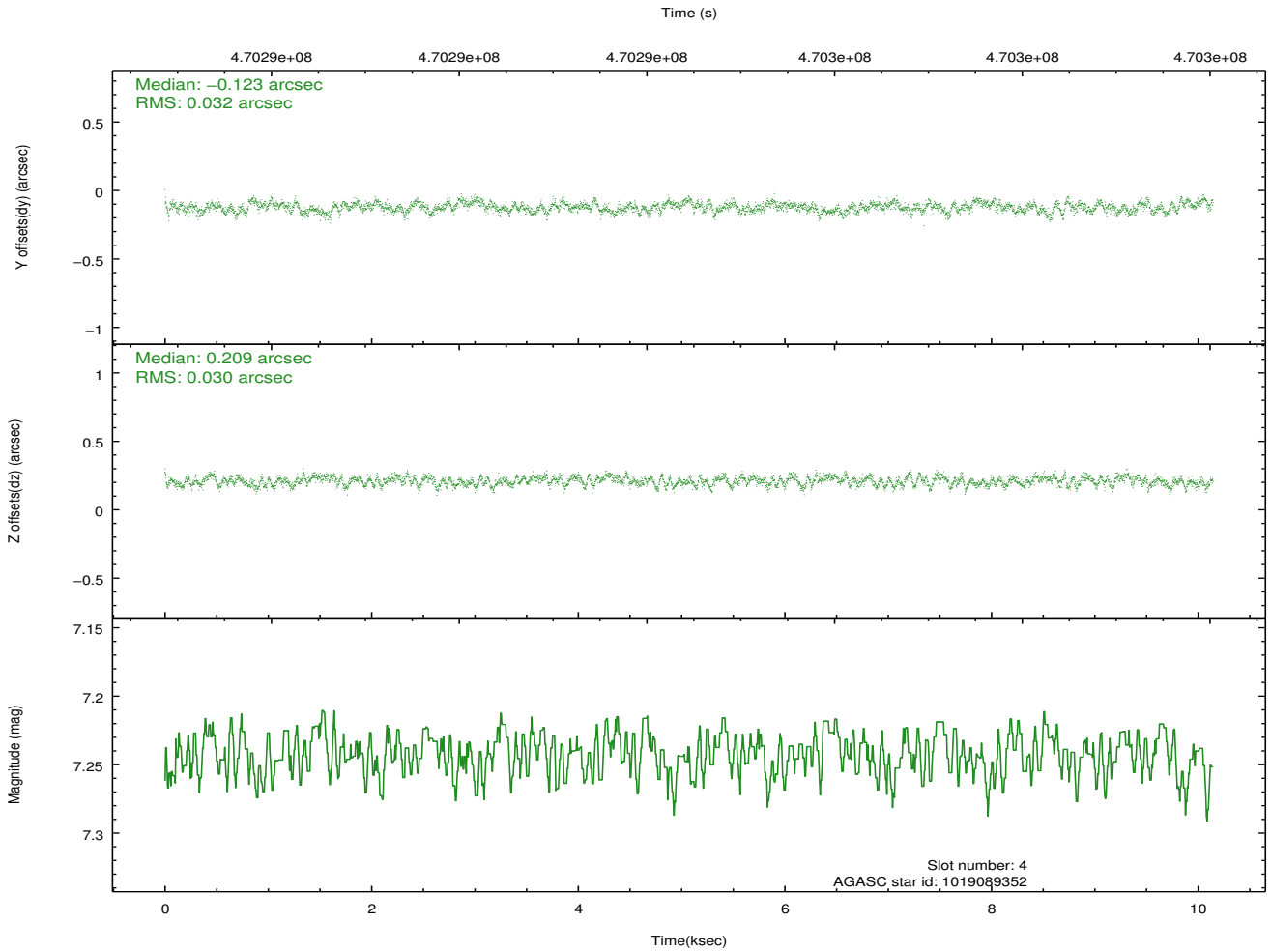
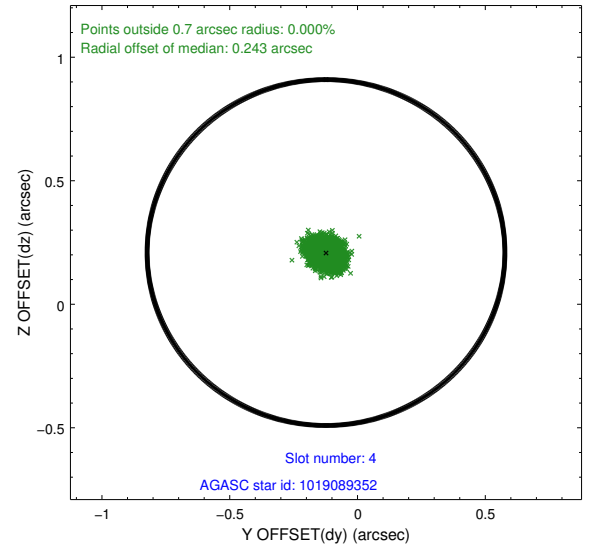
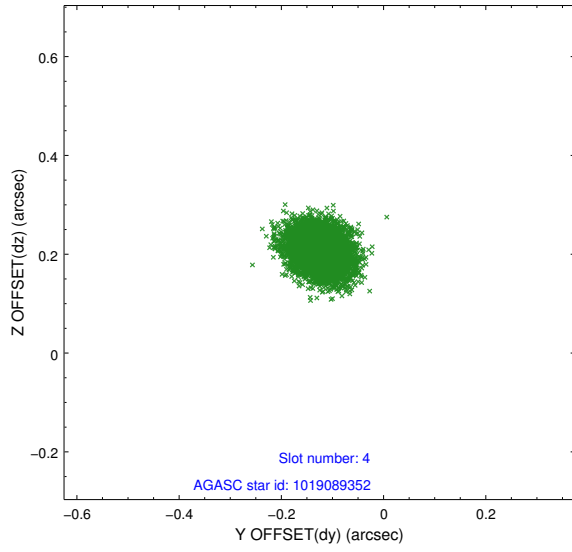
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	2475	0.054	0.005	0.016	0.037	0.000000	0.000000	922.67	-841.21
1	FID		ACIS-I-5	7.05	2475	-0.228	0.060	0.010	0.016	0.000000	0.000000	-1825.43	1056.07
2	FID		ACIS-I-6	7.05	2475	0.081	0.004	0.017	0.030	0.000000	0.000000	387.67	1701.11
3	GUIDE	used	1019085688	8.61	4947	-0.012	0.020	0.068	0.112	191.592761	-40.007815	1689.46	28.50
4	GUIDE	used	1019089352	7.24	4950	-0.123	0.209	0.048	0.075	191.830631	-40.127246	1163.07	-551.83
5	GUIDE	used	1019099112	7.56	4950	0.018	0.210	0.067	0.104	191.717552	-40.300293	595.68	-147.40
6	GUIDE	used	1019101328	6.77	4949	-0.017	-0.425	0.095	0.138	190.859432	-40.177847	1387.29	2116.35
7	GUIDE	used	1019087408	8.60	4946	0.140	-0.024	0.105	0.178	192.291847	-39.717138	2417.89	-2044.14

2.4 Star Slots

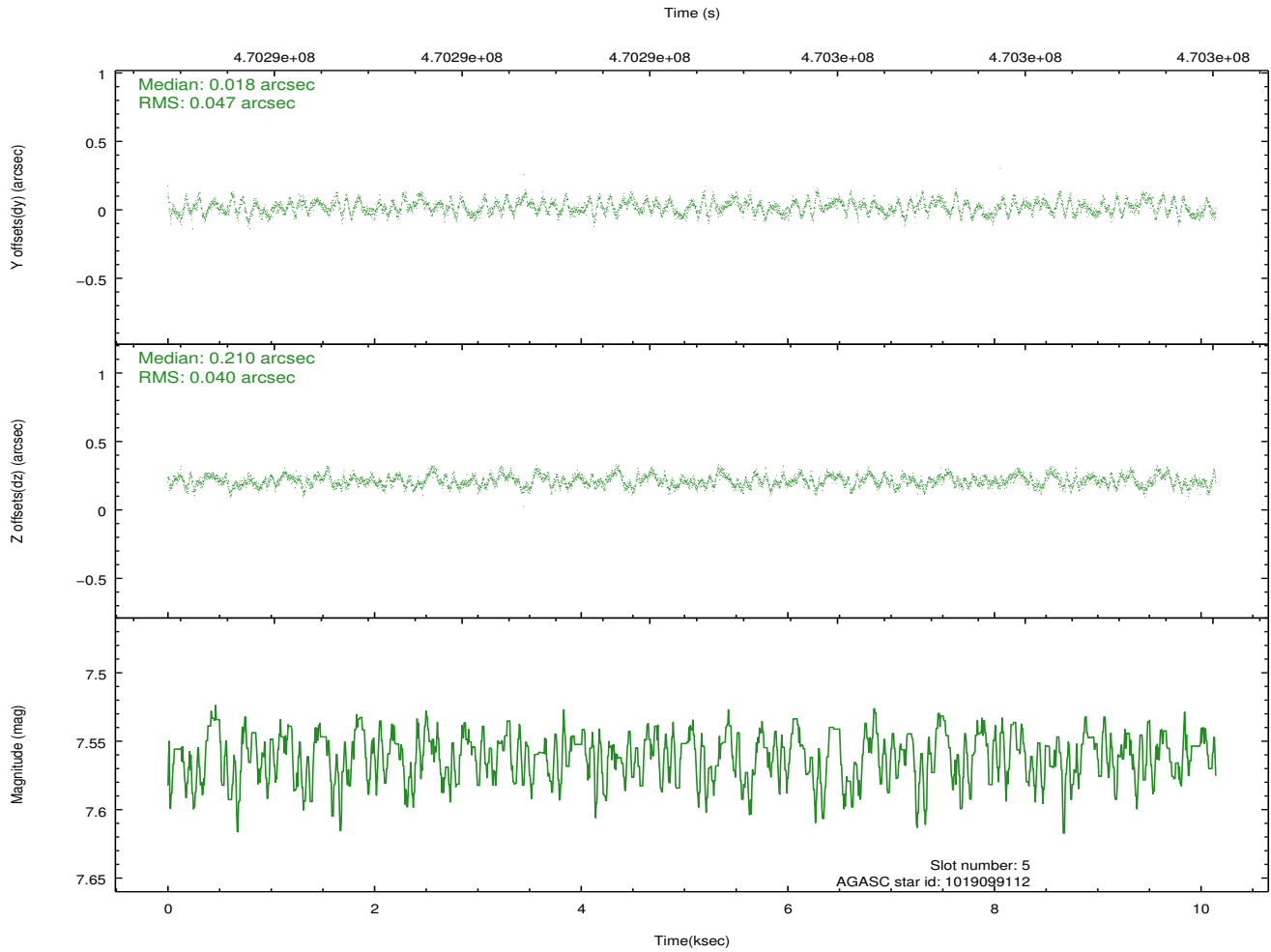
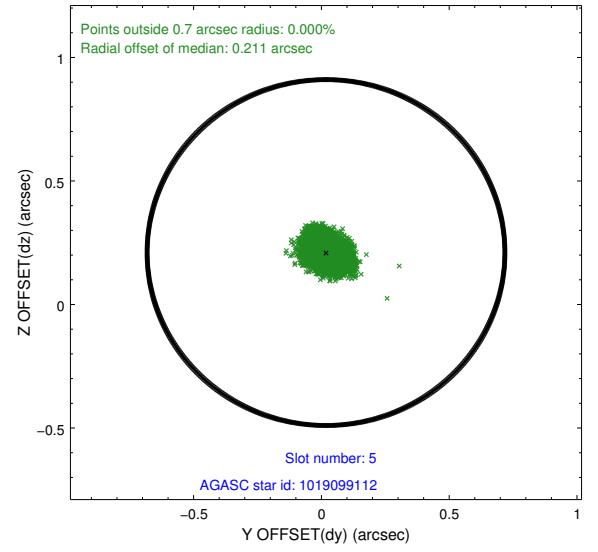
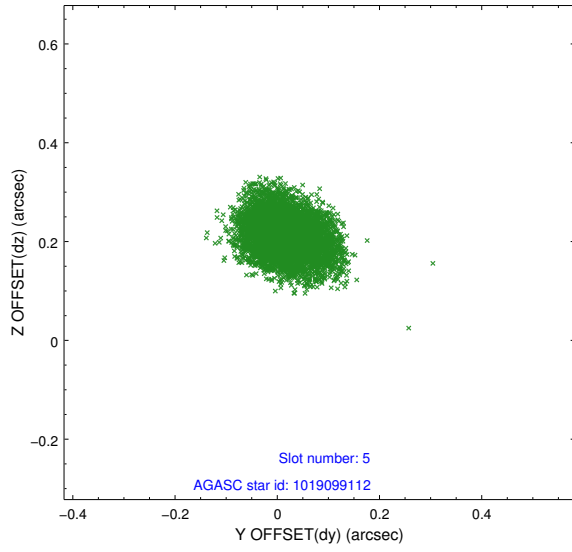
2.4.1 Slot 3



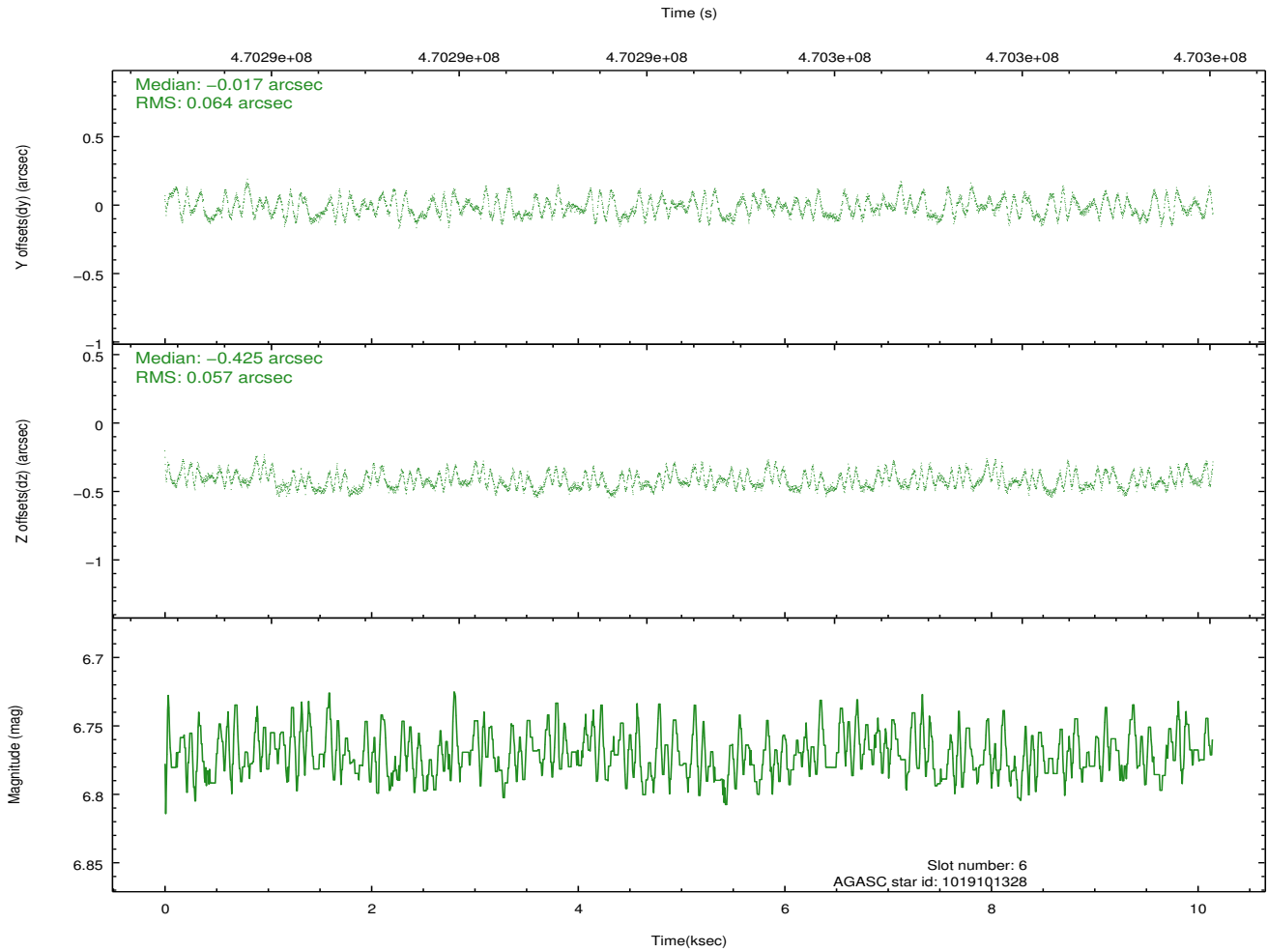
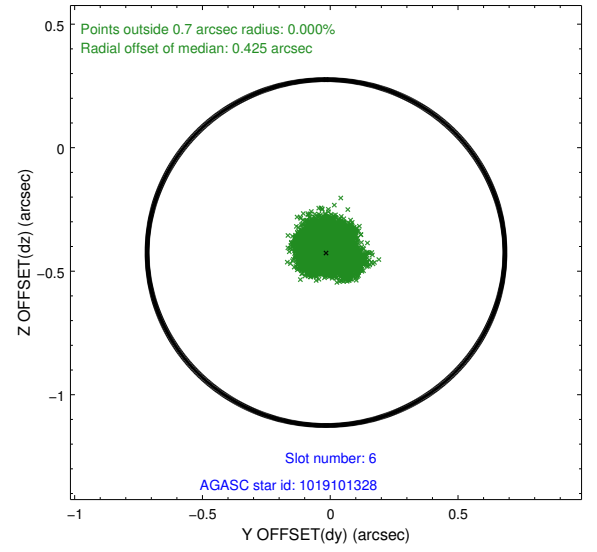
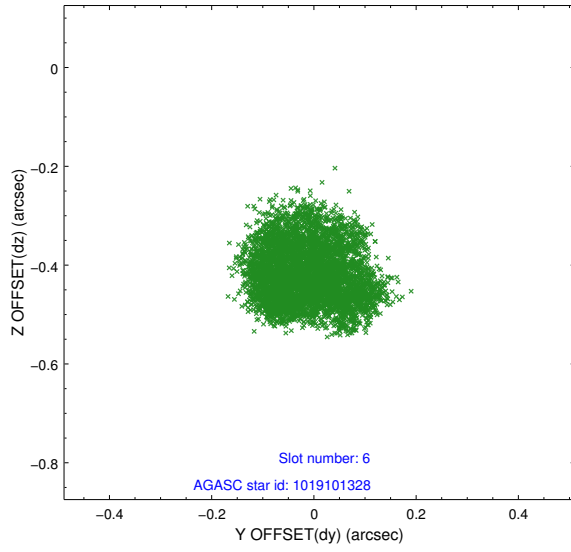
2.4.2 Slot 4



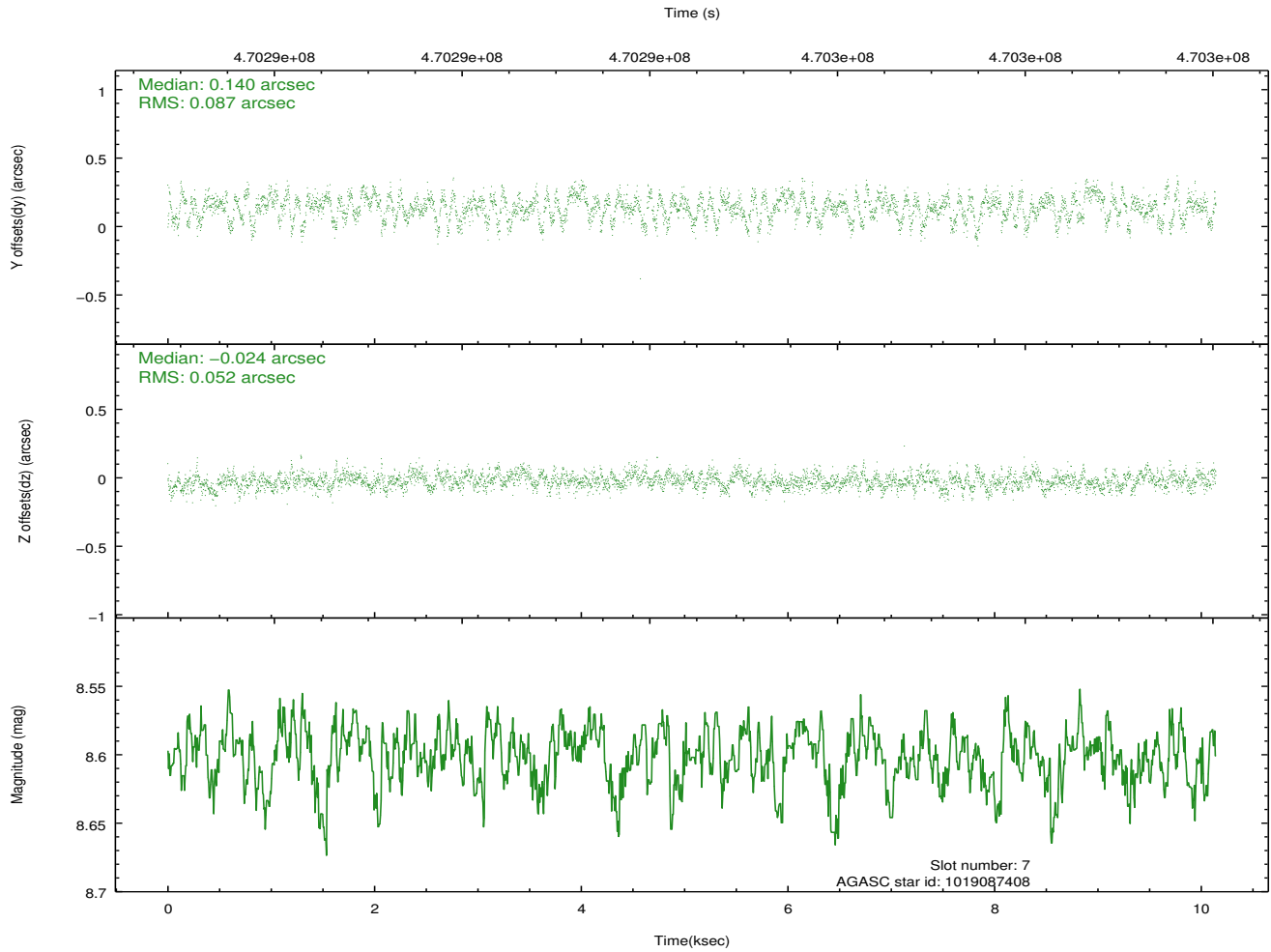
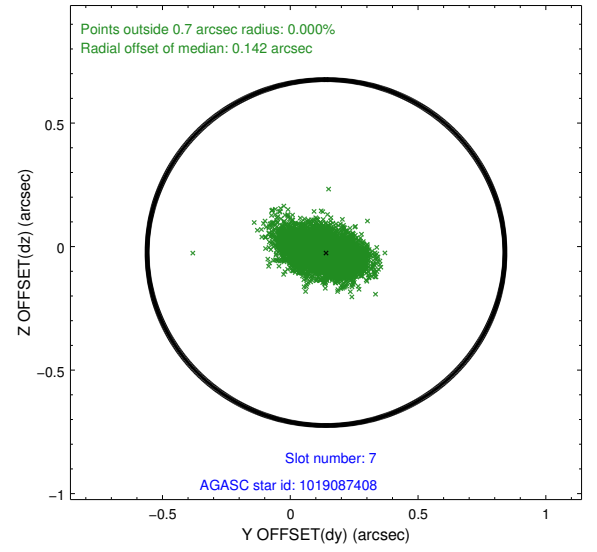
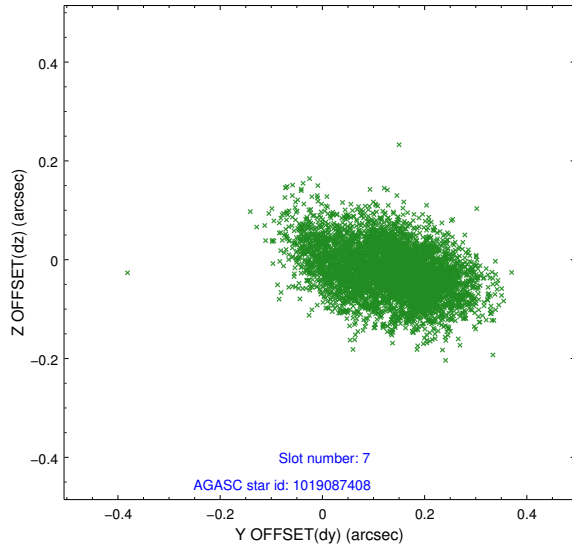
2.4.3 Slot 5



2.4.4 Slot 6

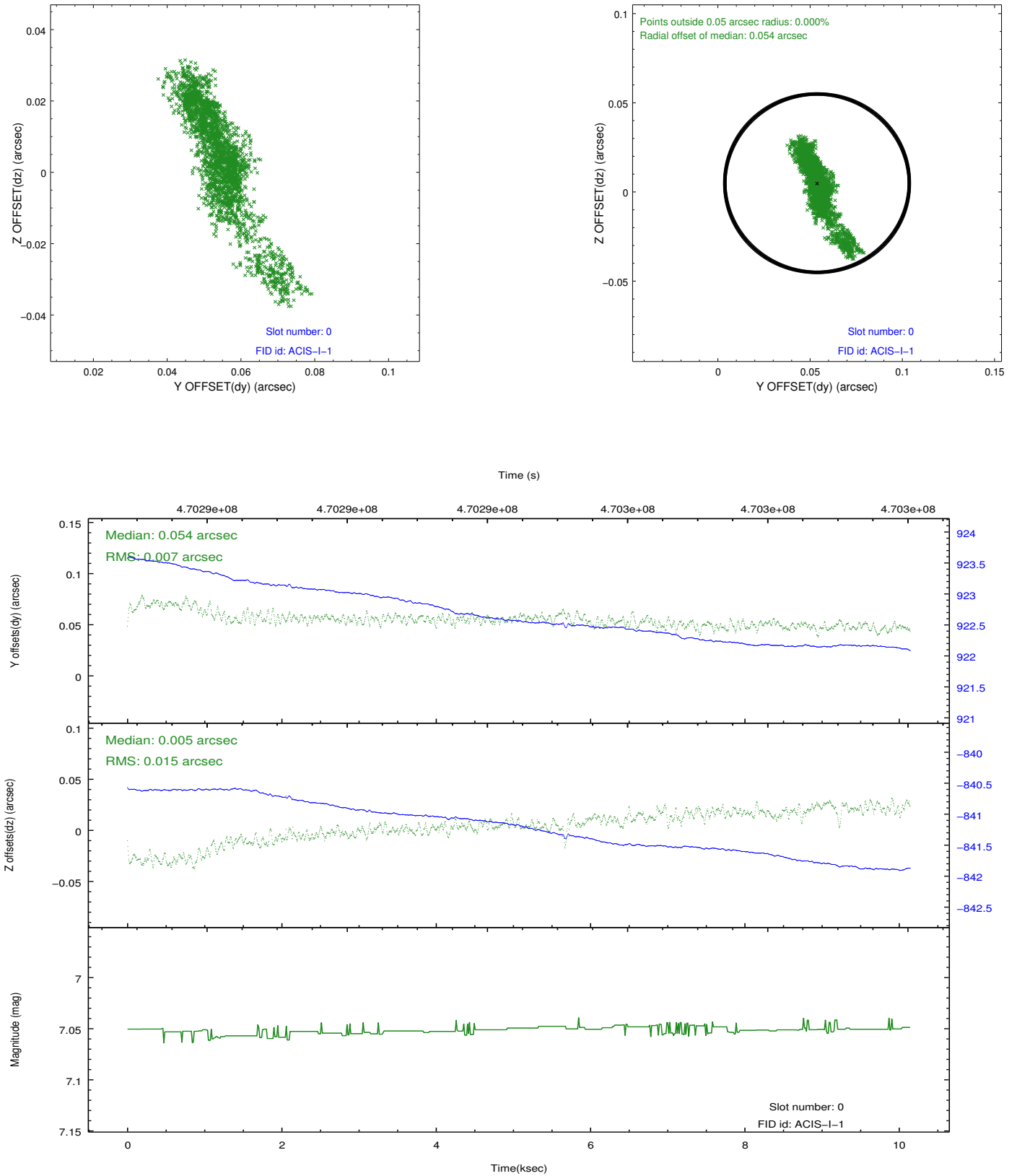


2.4.5 Slot 7

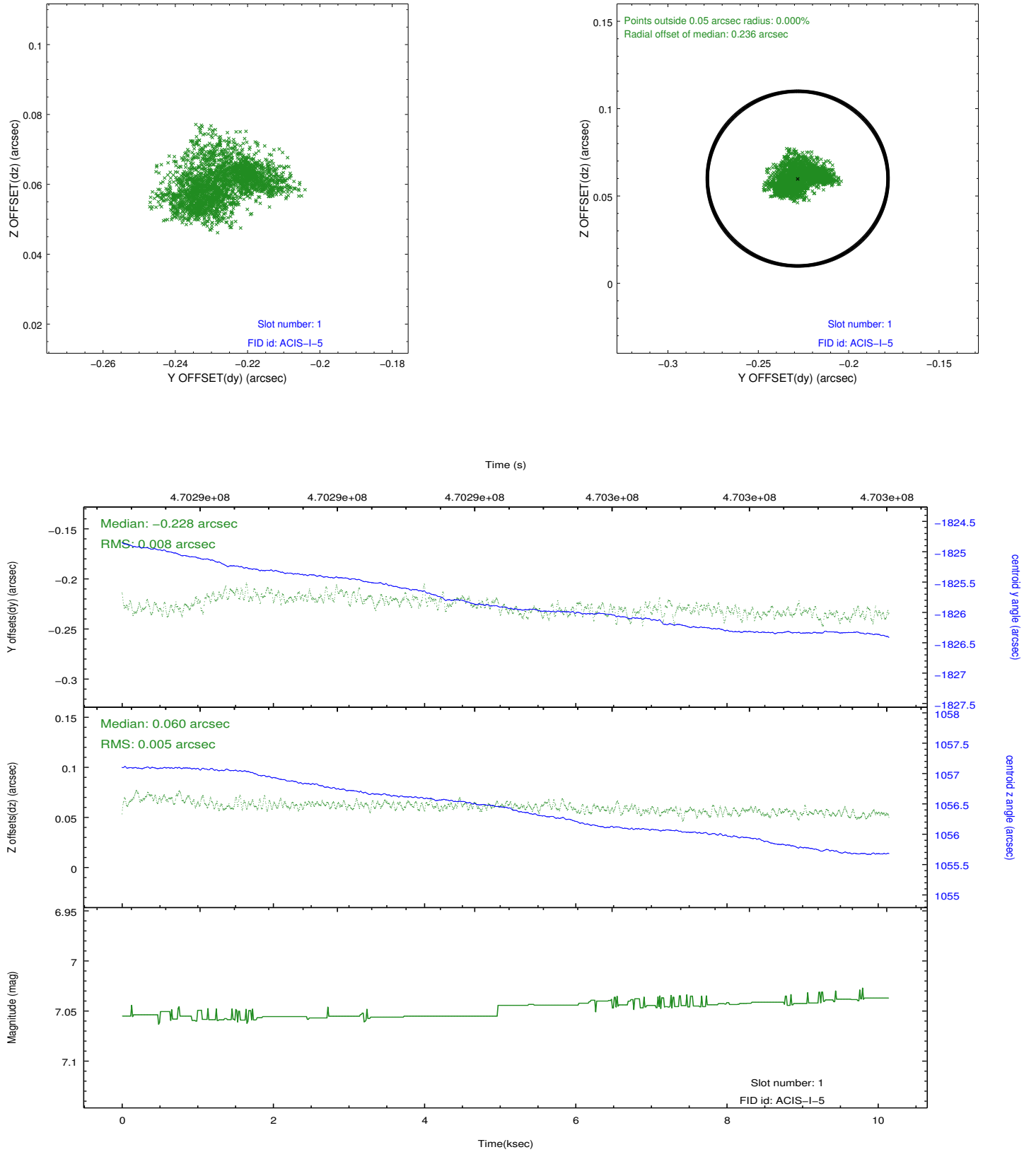


2.5 FID Slots

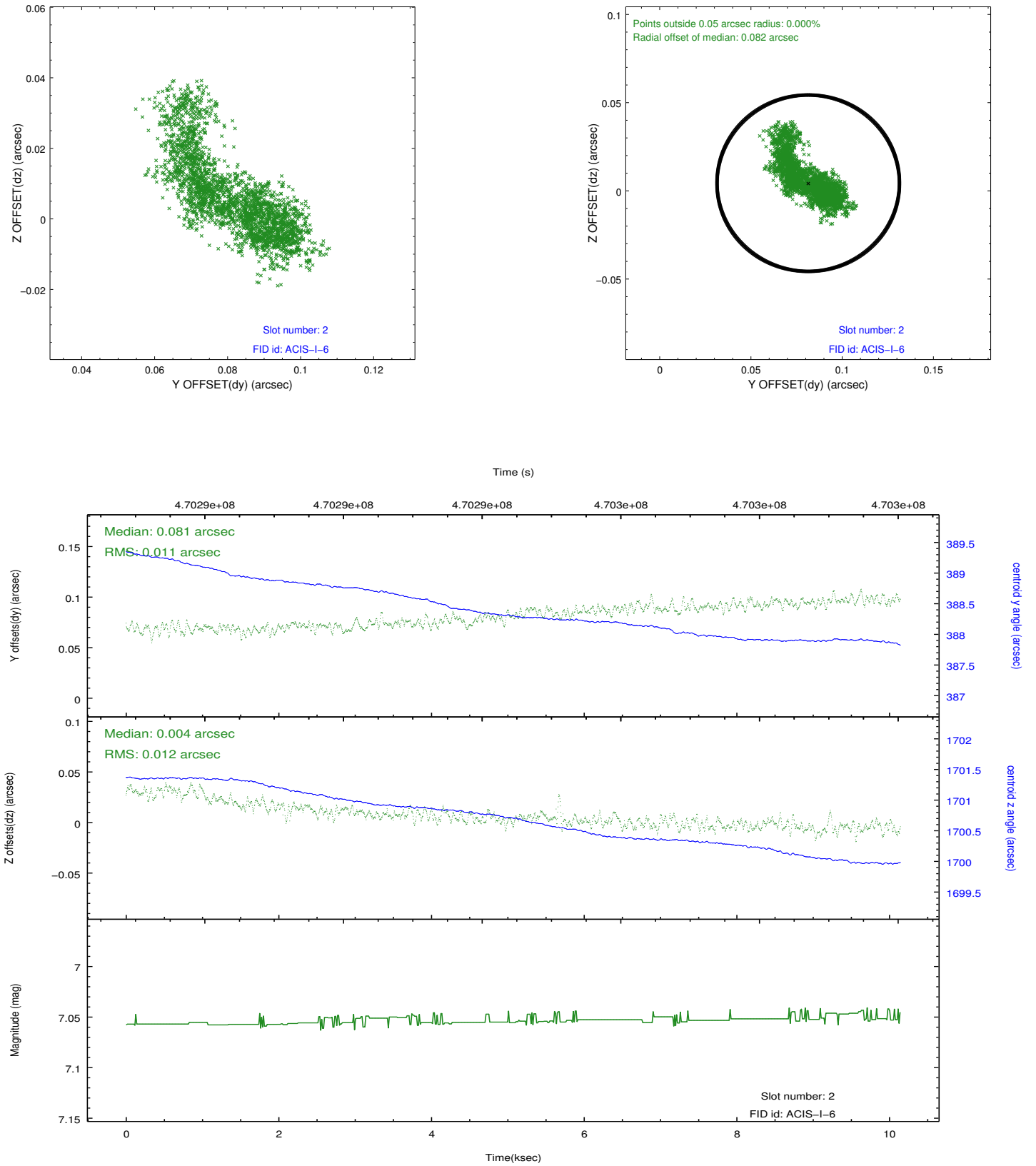
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.083078579426

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.