

V&V Reference Report

L2 ASCDS Version : 10

Observation 15145 - L2 Version 2
Chandra X-Ray Center

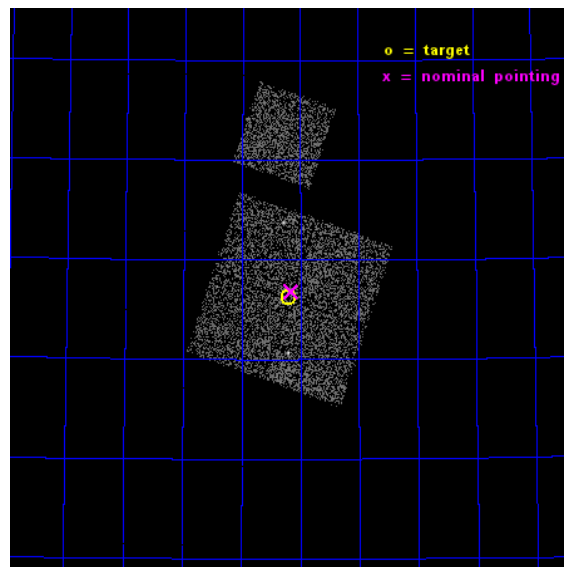
L2 Processing Date : Dec 5 2014

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
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

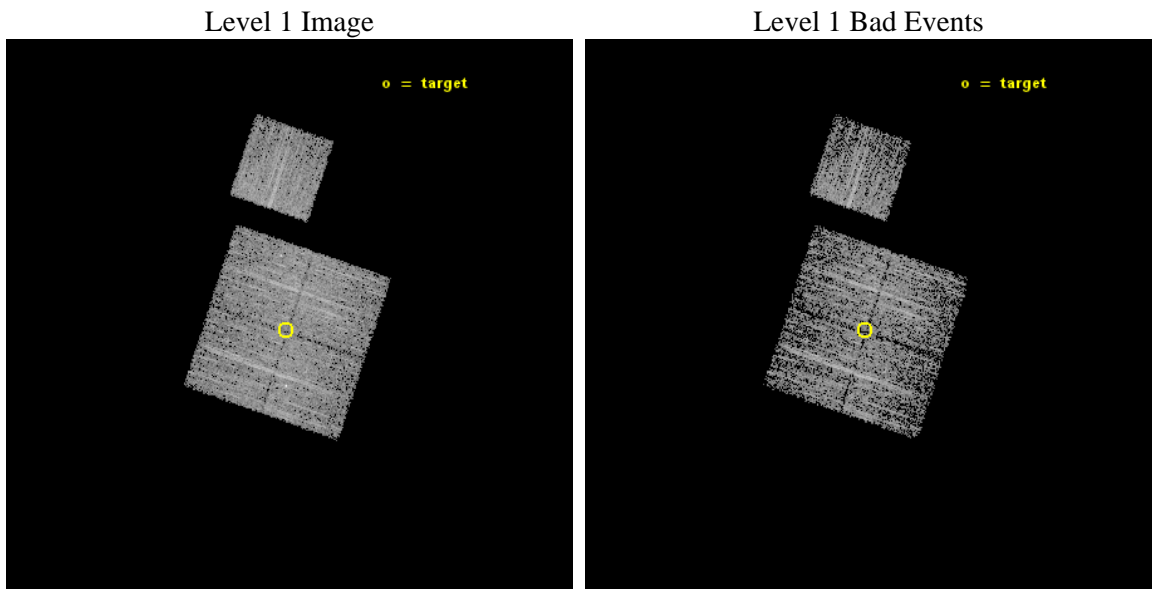
seq_num	801274	Sequence number
obs_id	15145	Observation id
title	TO THE OUTER LIMITS OF CLUSTERS WITH CHANDRA AND SUZAKU	Proposal t
observer	Dr. Eric Miller	Principal investigator
object	A665	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.3025	Observer's specified target RA [deg]
dec_targ	65.9379	Observer's specified target Dec [deg]
ra_nom	128.28783798132	Nominal RA [deg]
dec_nom	65.947119280375	Nominal Dec [deg]
roll_nom	18.751163353066	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4770.9000366926	Sum of GTIs [s]
livetime	4708.5647154277	Livetime [s]
ontime0	4770.9000366926	Sum of GTIs [s]
ontime1	4770.9000366926	Sum of GTIs [s]
ontime2	4770.9000366926	Sum of GTIs [s]
ontime3	4770.9000366926	Sum of GTIs [s]
ontime6	4770.9000366926	Sum of GTIs [s]
l2events	12429	Number of level 2 events



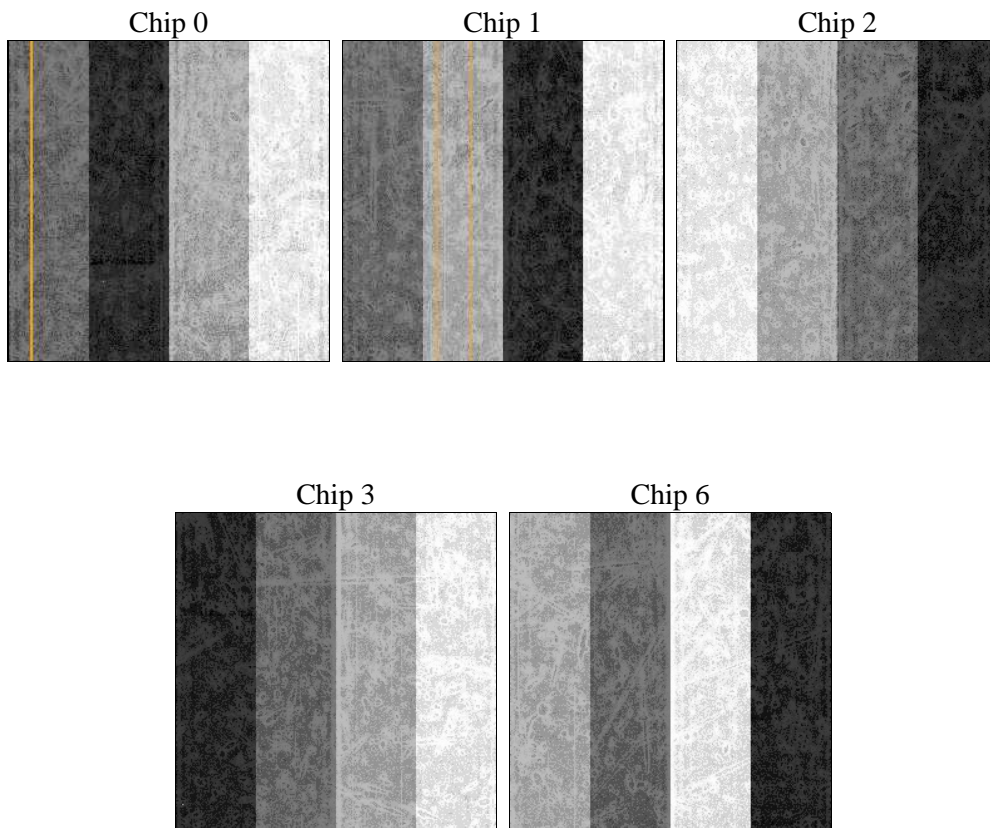
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.319000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	4770.9000366926	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	4770.9000366926	Sum of GTIs [s]
date	2014-12-06T03:13:59	Date and time of file creation	ontime1	4770.9000366926	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	4770.9000366926	Sum of GTIs [s]
			ontime3	4770.9000366926	Sum of GTIs [s]
			ontime6	4770.9000366926	Sum of GTIs [s]
			l1events	107809	Number of level 1 events

2.1.4 Events

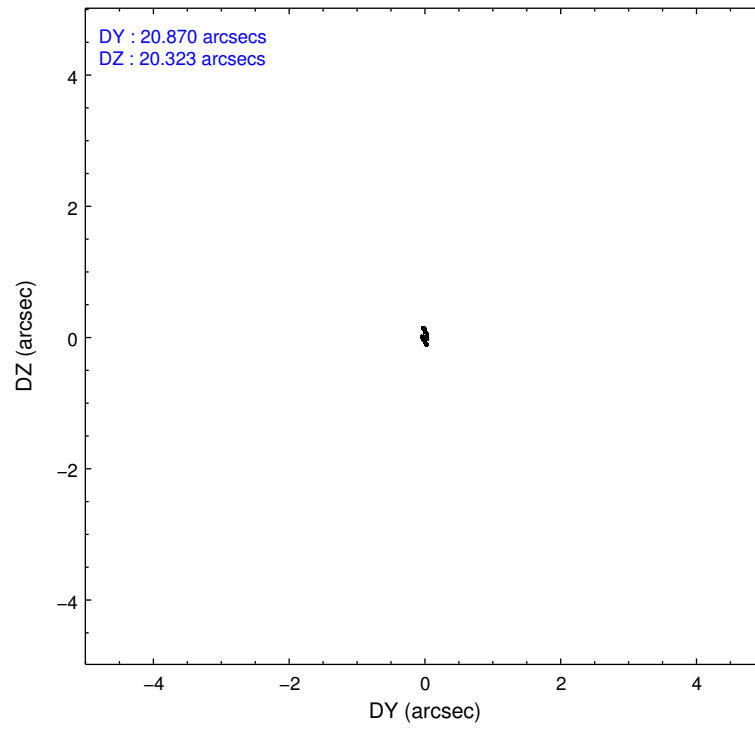
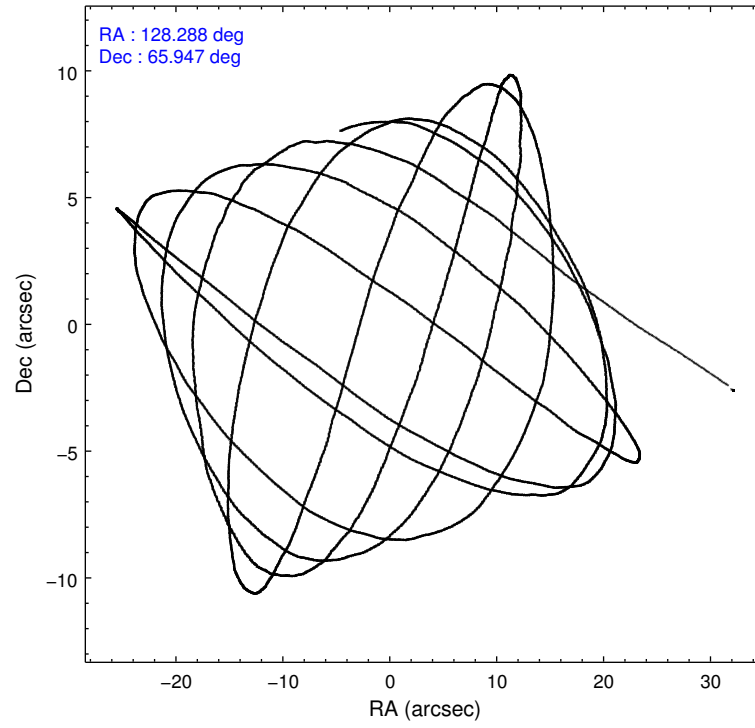
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	20487	21235	21626	21965	22496
rejected events	17762	17712	18720	19327	19640
rejected %	86%	83%	86%	87%	87%

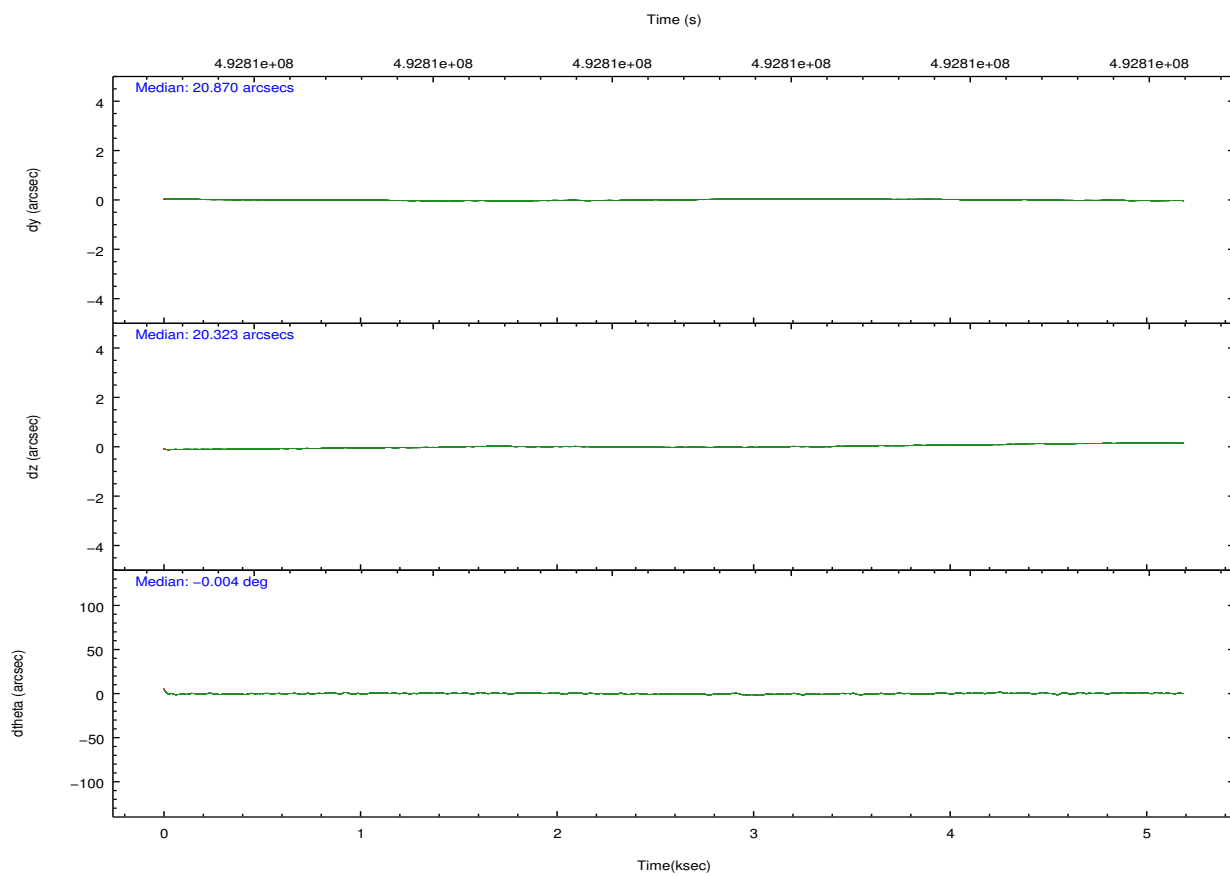
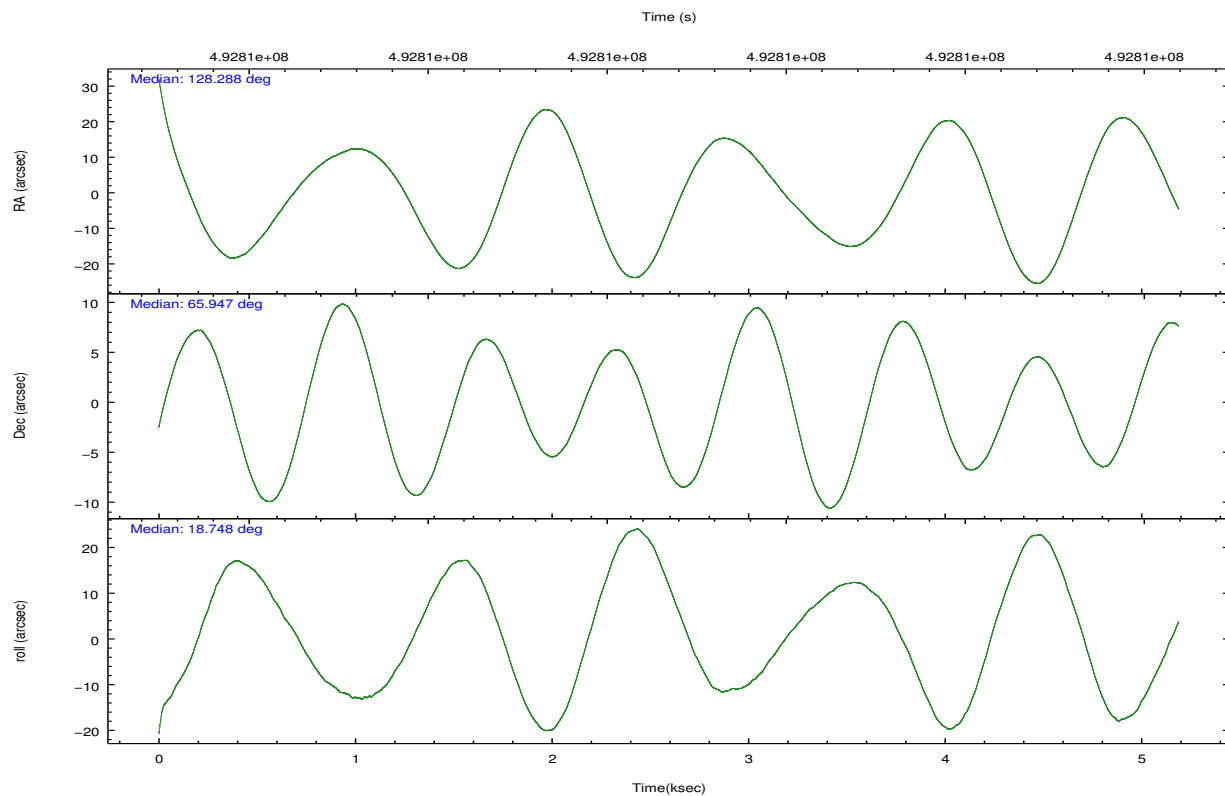
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	991	1402	1122	961	948
	4%	6%	5%	4%	4%
grade 1 events	5	15	15	12	12
	0%	0%	0%	0%	0%
grade 2 events	667	793	690	575	633
	3%	3%	3%	2%	2%
grade 3 events	291	318	278	272	295
	1%	1%	1%	1%	1%
grade 4 events	247	291	275	289	288
	1%	1%	1%	1%	1%
grade 5 events	1085	1144	1025	1214	1239
	5%	5%	4%	5%	5%
grade 6 events	537	725	545	543	693
	2%	3%	2%	2%	3%
grade 7 events	16664	16547	17676	18099	18388
	81%	77%	81%	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	128.243498	128.2878379813201	CCD I2 on	Y	Y
[deg] Pointing Dec	65.926308	65.94711928037539	CCD I3 on	Y	Y
[deg] Pointing Roll	18.582944	18.75116335306629	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)	492806941.184000	492806319.59353	CCD S5 on	N	N
Observation start date	2013-08-13T18:47:54	2013-08-13T18:38:39	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492811941.184000	492812177.98134	On-chip summing requested	N	N
Observation end date	2013-08-13T20:11:14	2013-08-13T20:16:17	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



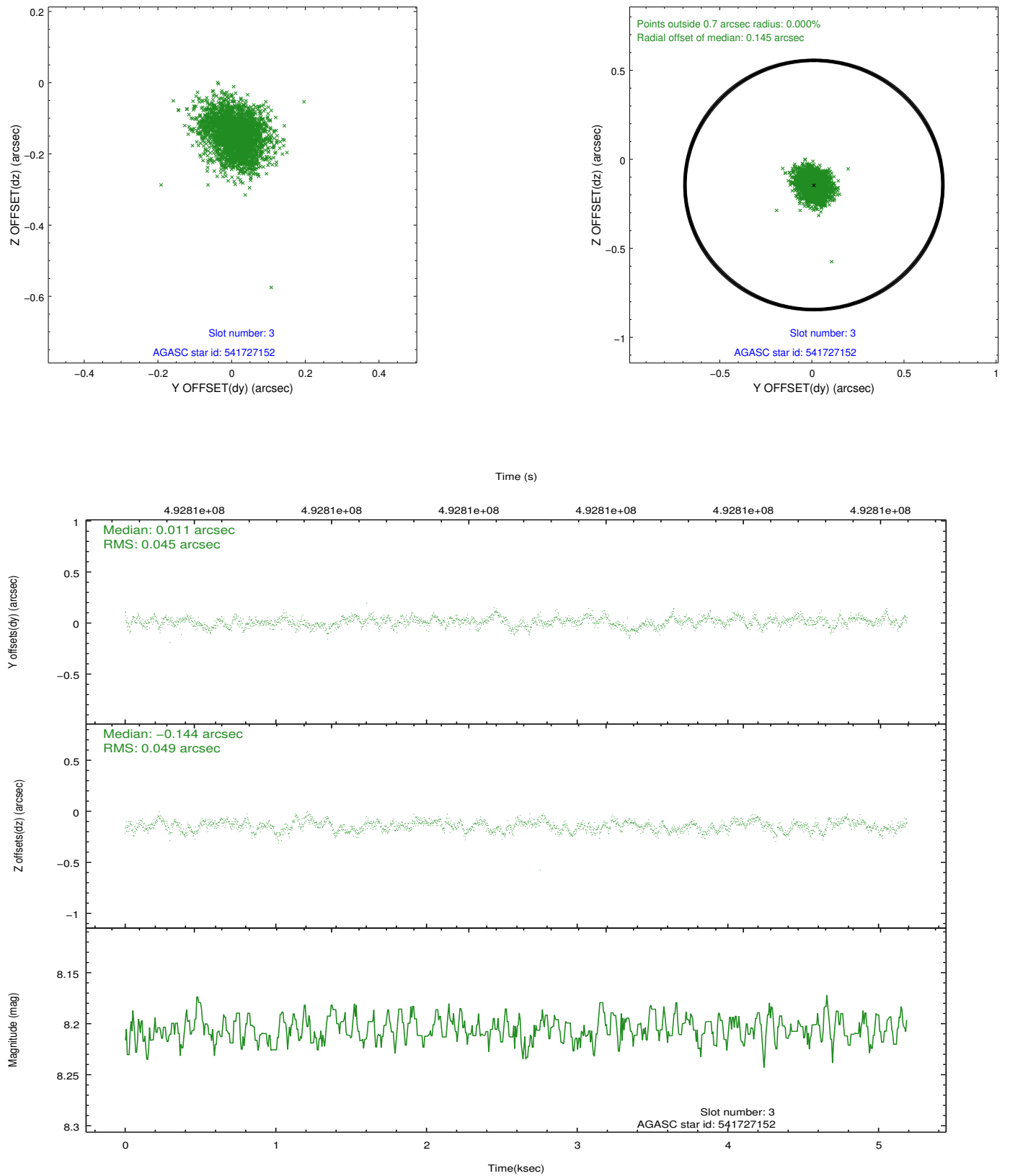


Slot Statistics

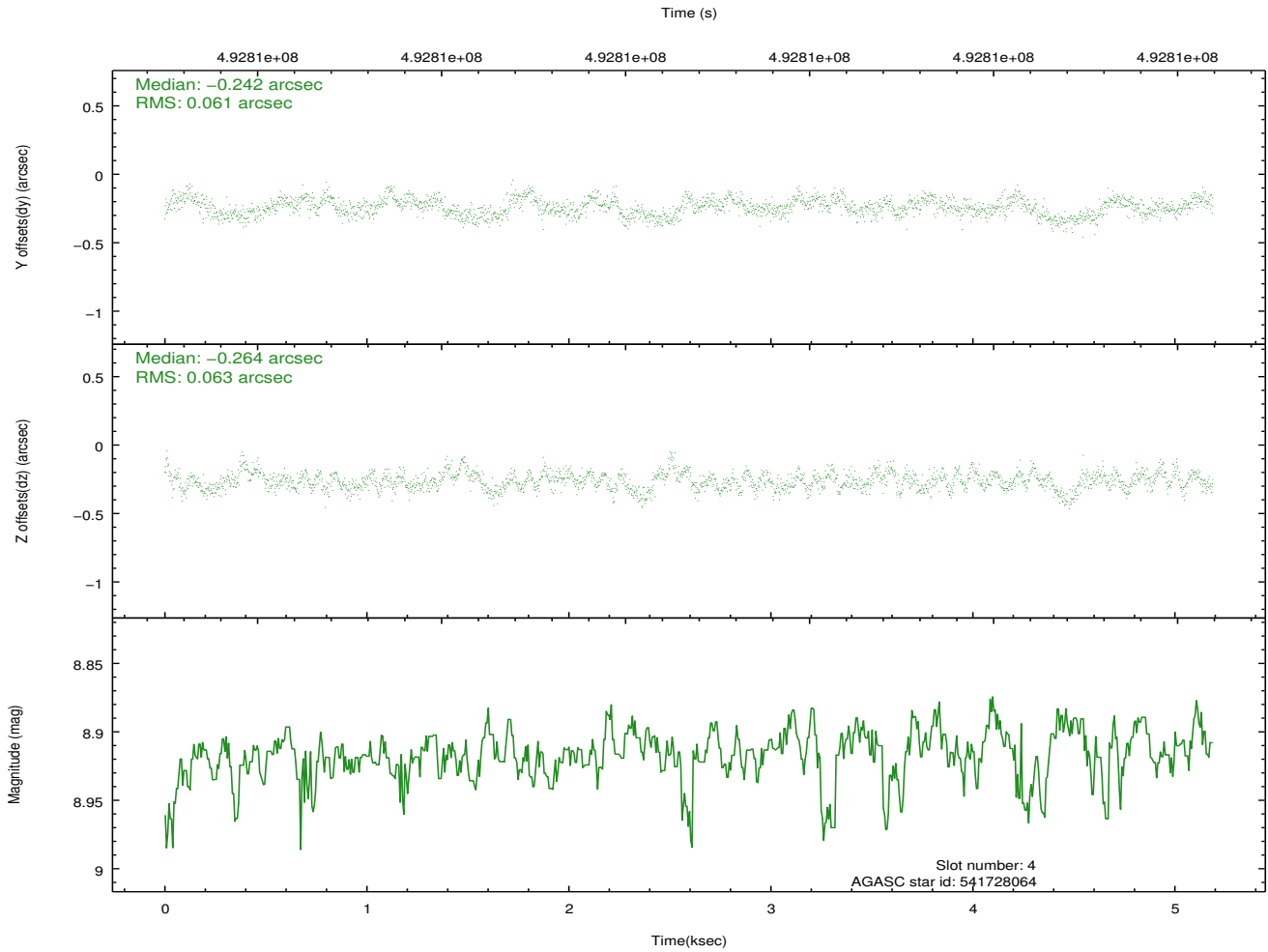
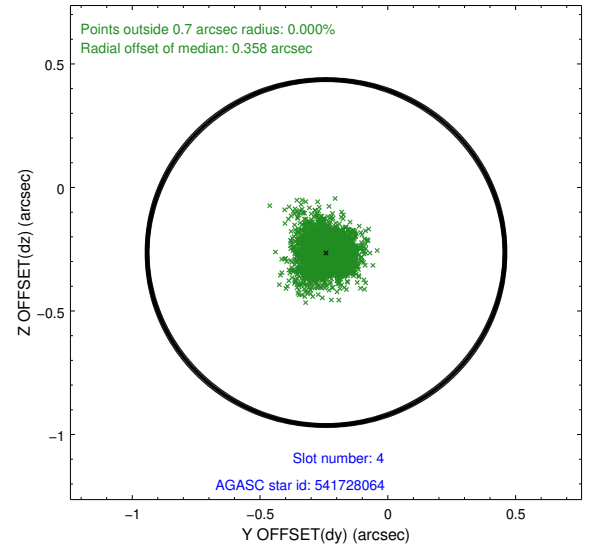
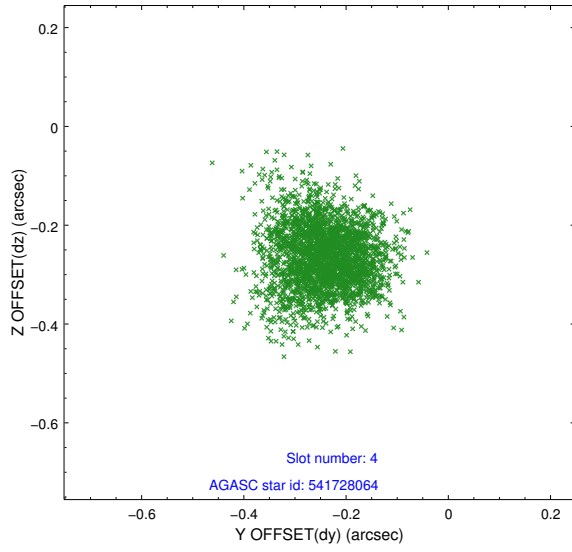
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.09	1266	-0.021	-0.060	0.009	0.016	0.000000	0.000000	918.44	-844.10
1	FID		ACIS-I-4	7.02	1266	0.206	0.075	0.008	0.013	0.000000	0.000000	2139.28	1055.30
2	FID		ACIS-I-5	7.08	1266	-0.283	0.055	0.007	0.012	0.000000	0.000000	-1828.40	1054.31
3	GUIDE	used	541727152	8.21	2532	0.011	-0.144	0.072	0.112	127.263195	66.213821	-1015.89	1445.20
4	GUIDE	used	541728064	8.92	2517	-0.242	-0.264	0.093	0.151	128.919170	66.393334	1459.73	1288.49
5	GUIDE	used	541730424	9.16	2529	0.139	0.190	0.106	0.170	127.891536	65.345004	-1166.72	-1812.94
6	GUIDE	used	541730880	8.11	2523	0.093	0.383	0.107	0.156	127.501712	65.260390	-1821.02	-1911.00
7	GUIDE	used	541727552	9.24	2527	-0.009	-0.161	0.105	0.181	126.194614	66.313173	-2350.31	2309.23

2.4 Star Slots

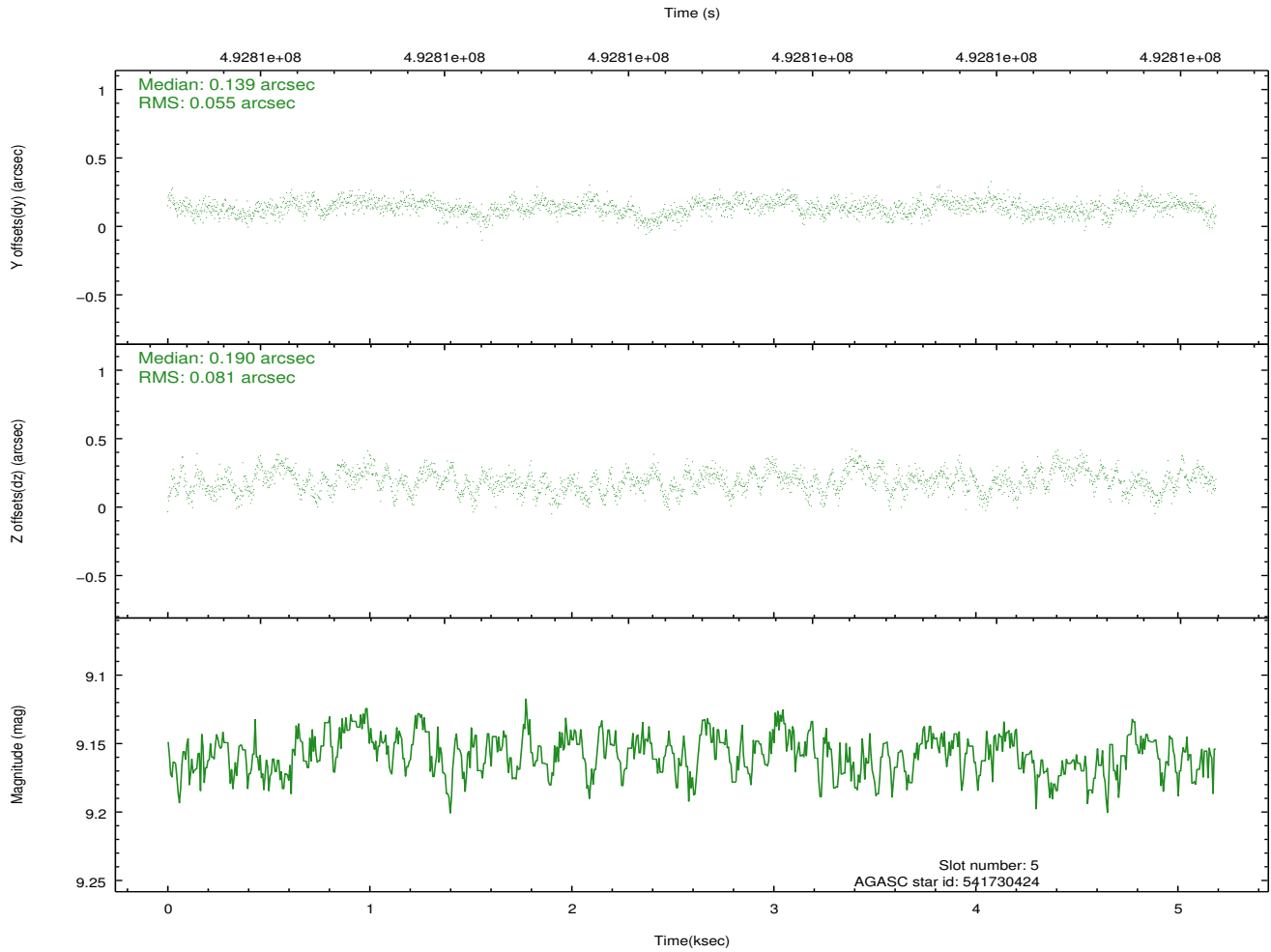
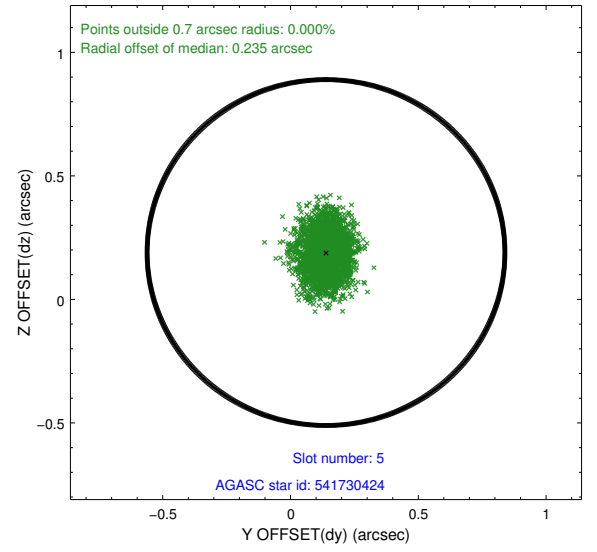
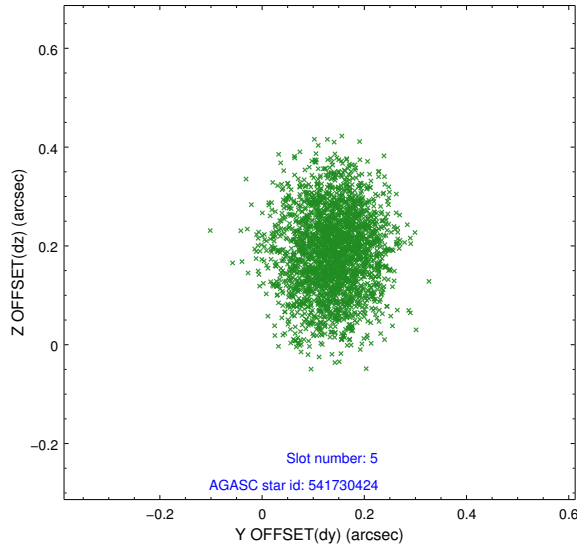
2.4.1 Slot 3



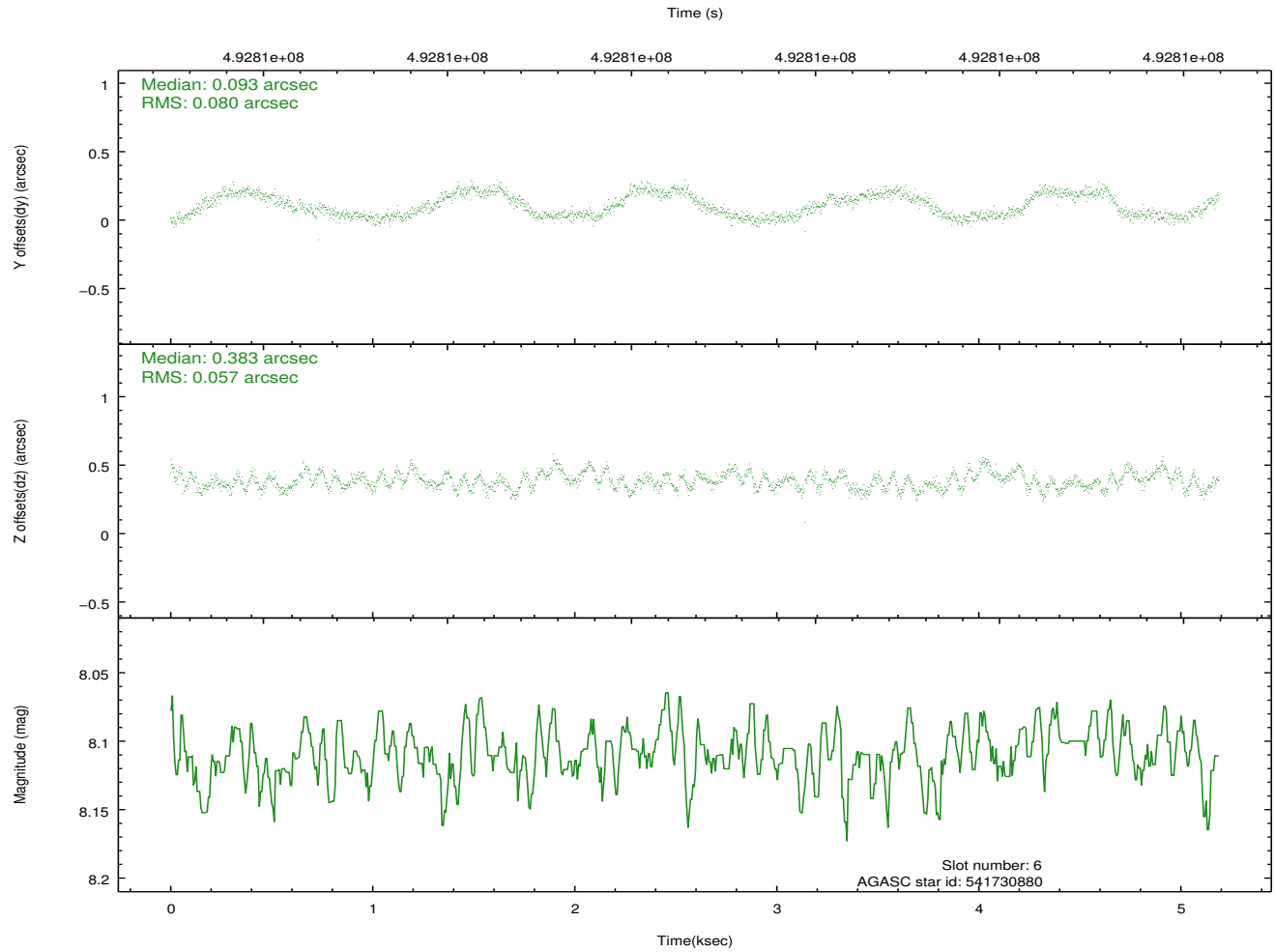
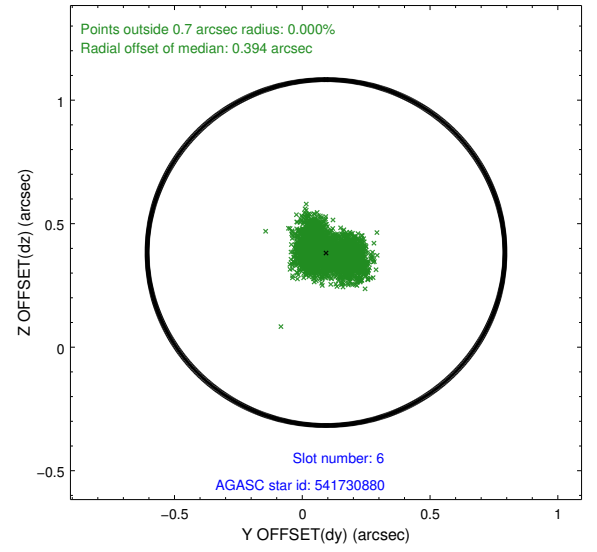
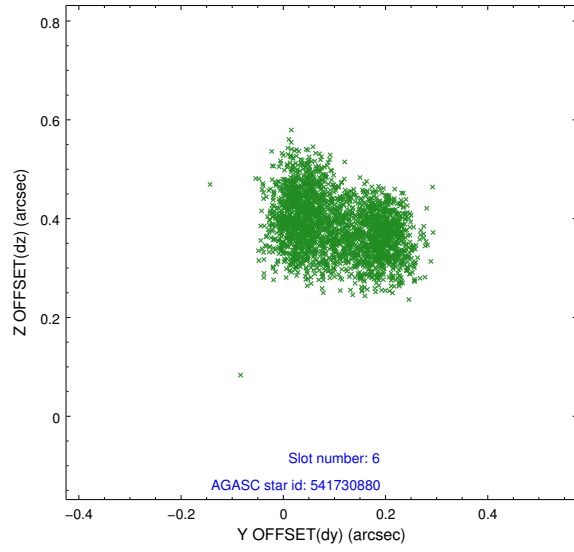
2.4.2 Slot 4



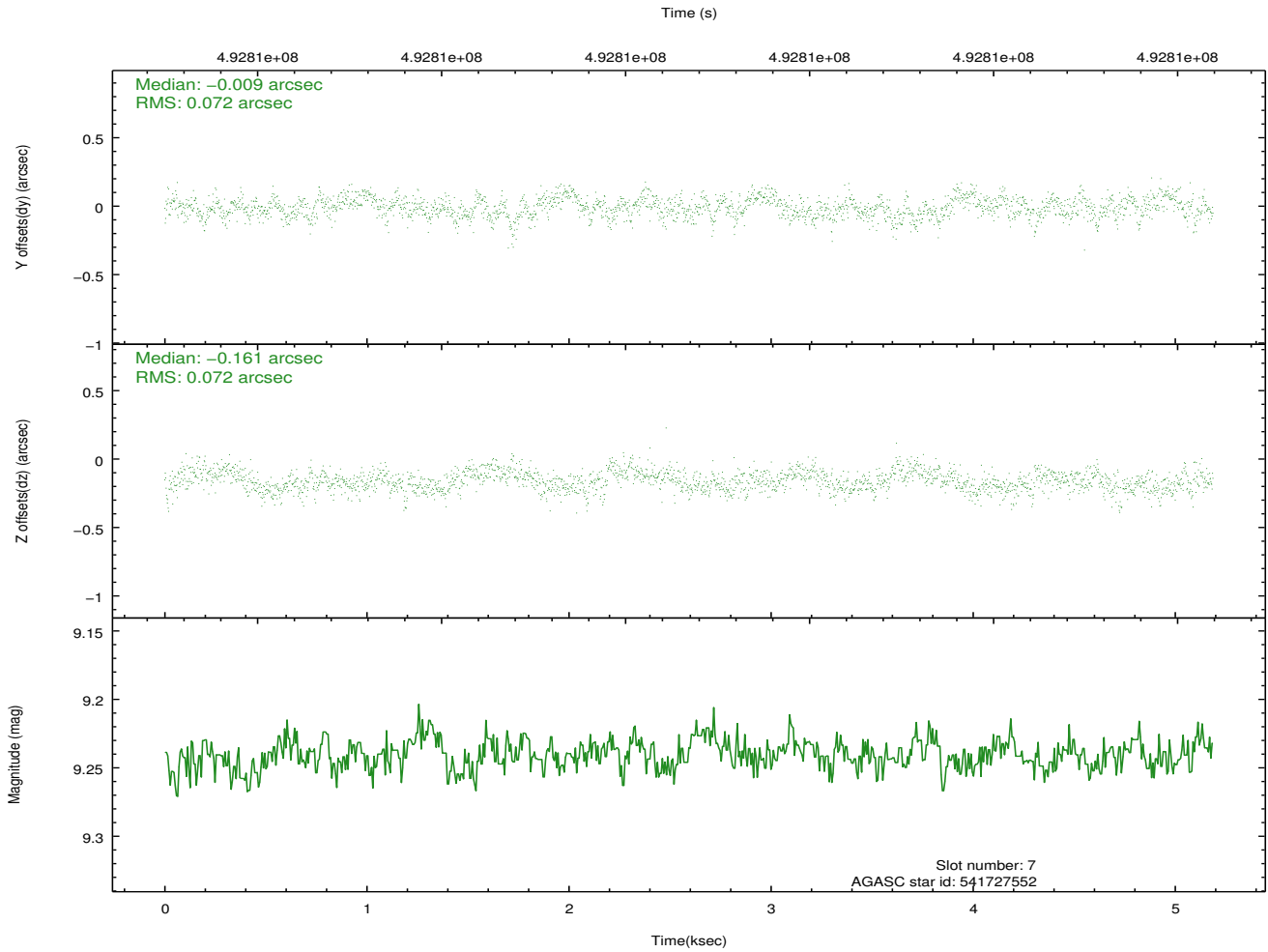
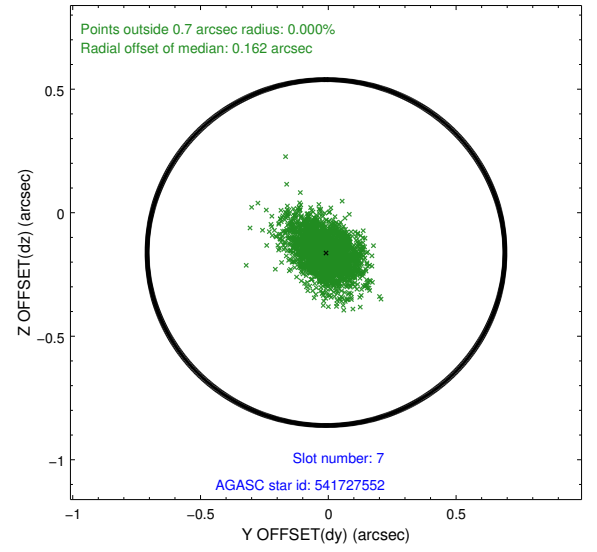
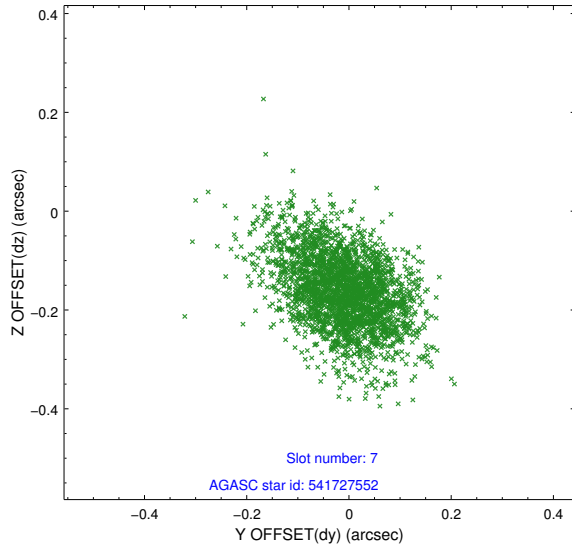
2.4.3 Slot 5



2.4.4 Slot 6

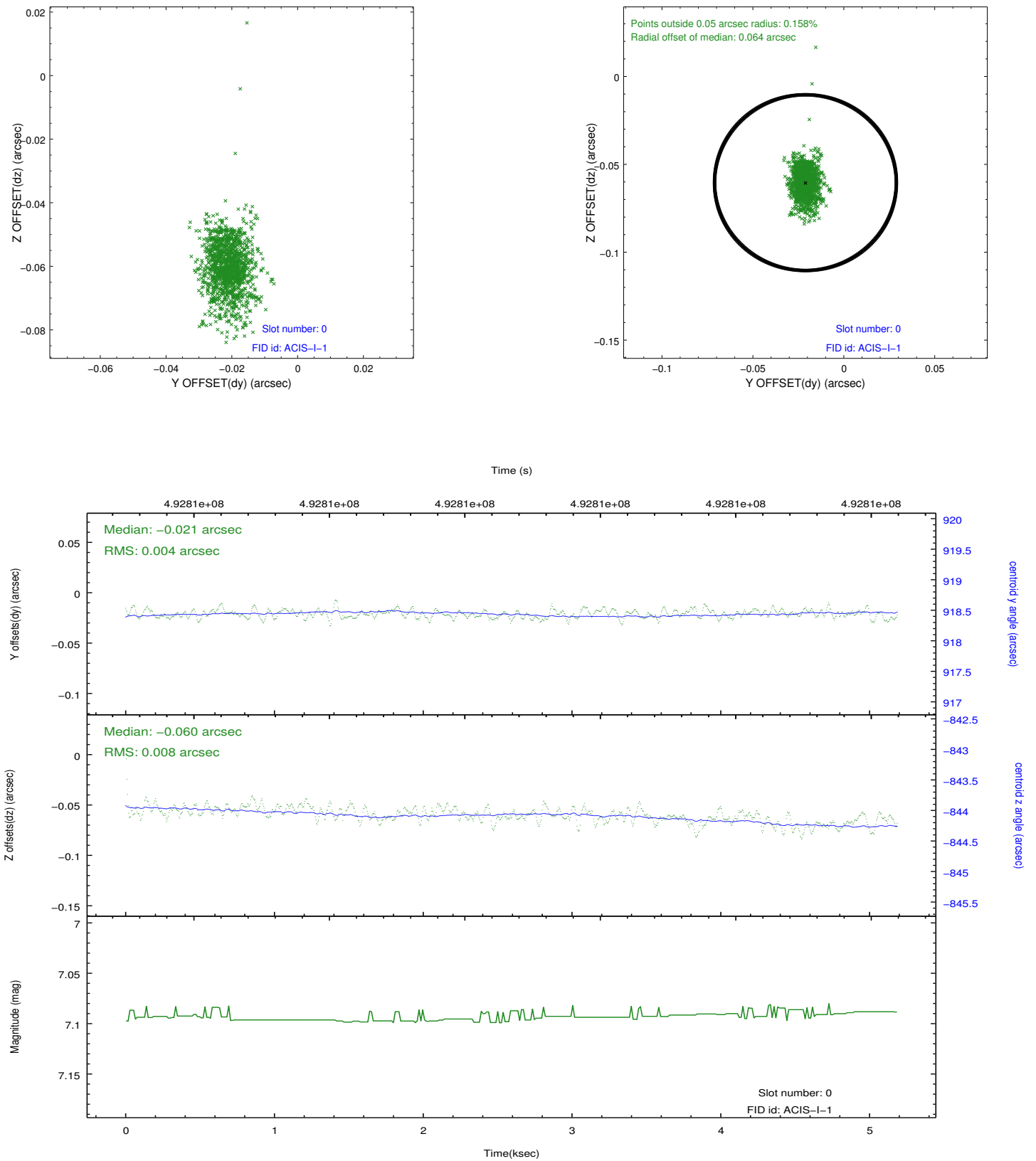


2.4.5 Slot 7

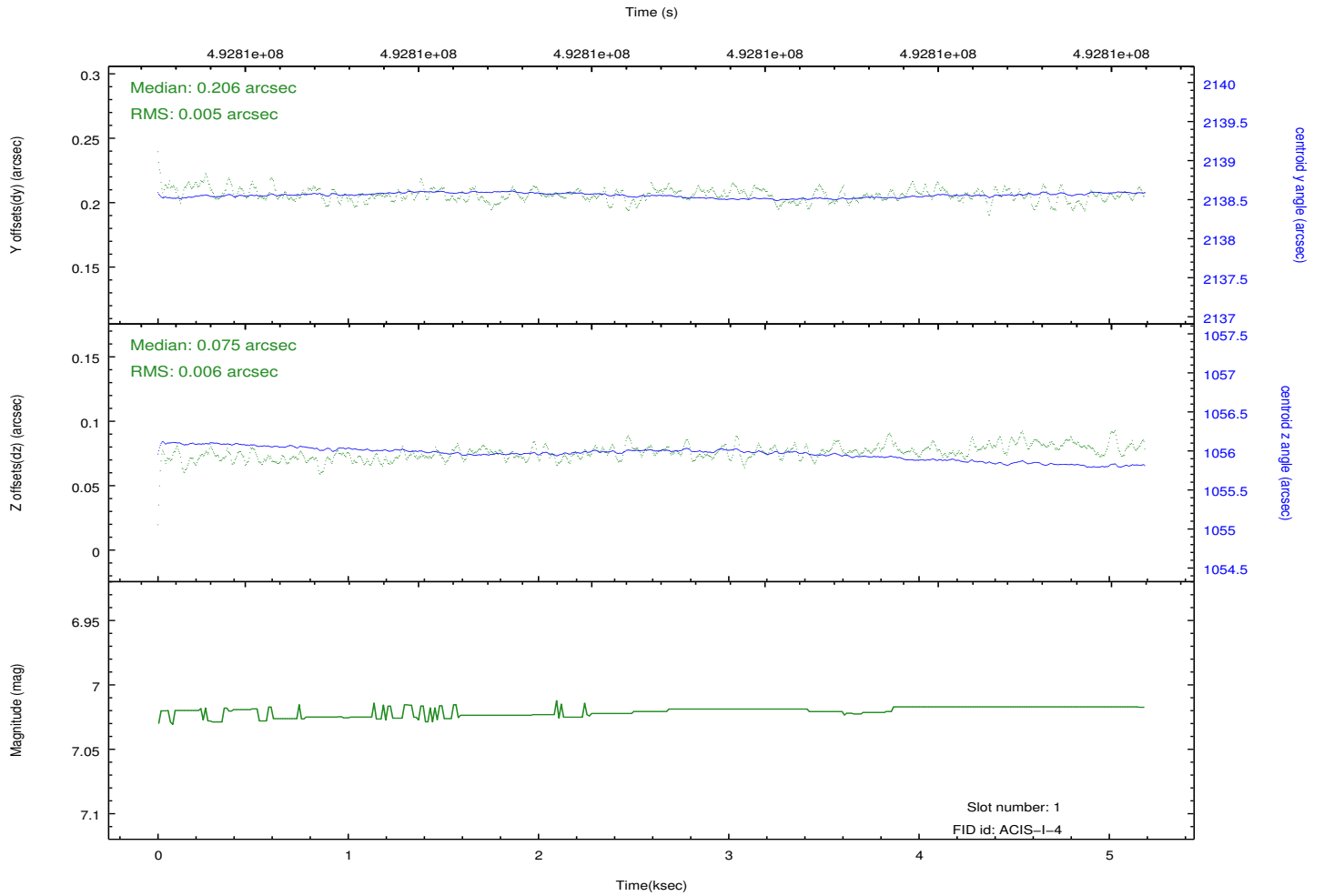
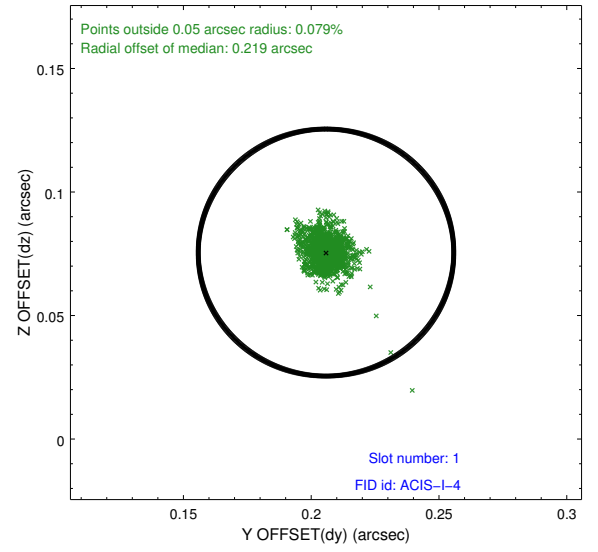
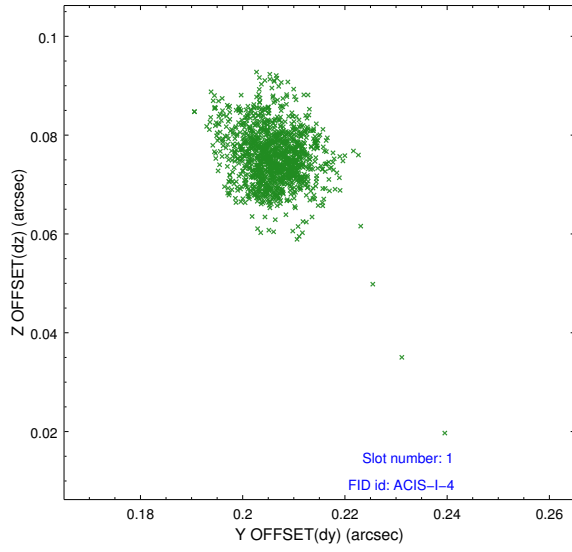


2.5 FID Slots

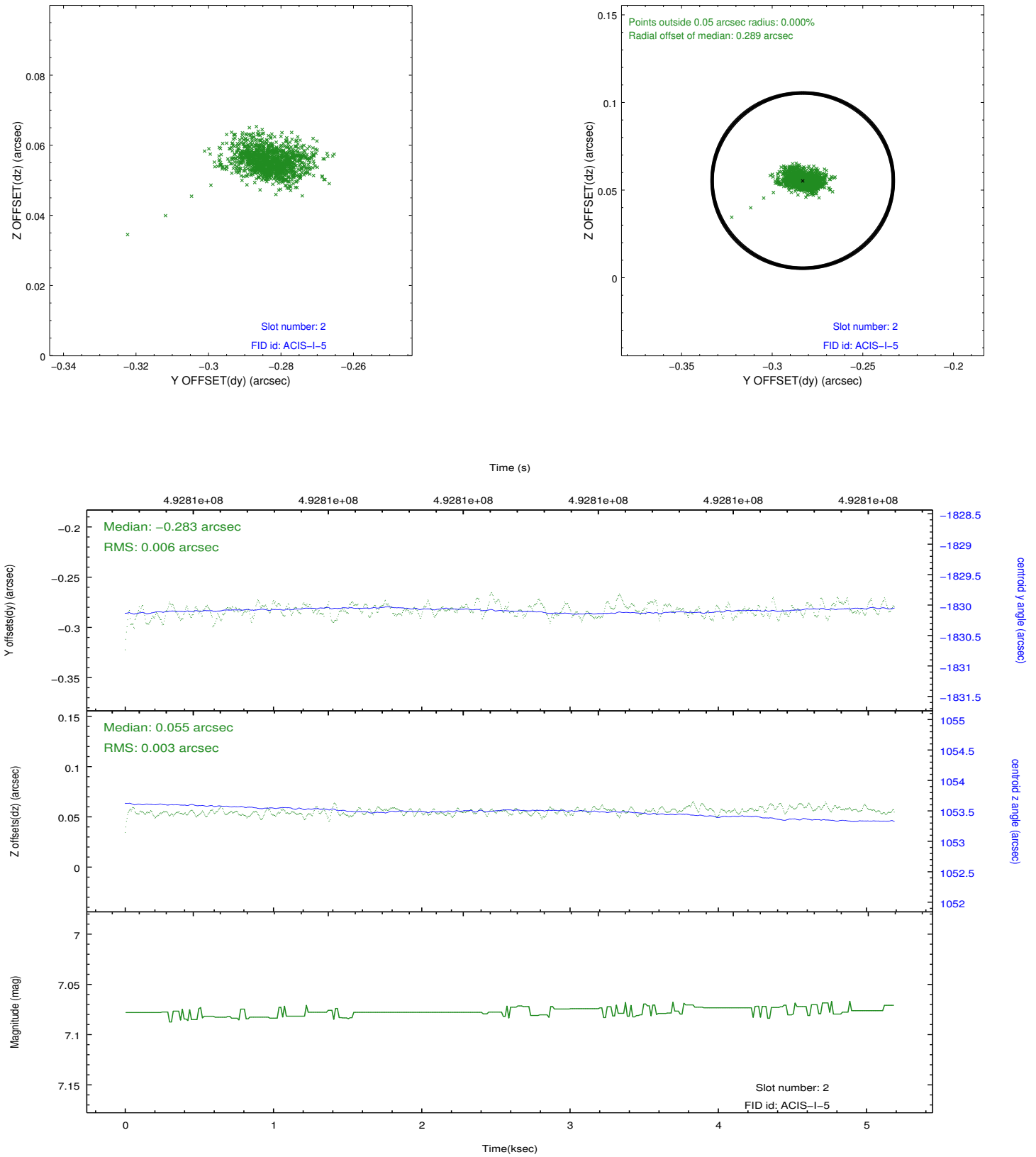
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7709000366926

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.