

V&V Reference Report

L2 ASCDS Version : 10

Observation 15143 - L2 Version 2
Chandra X-Ray Center

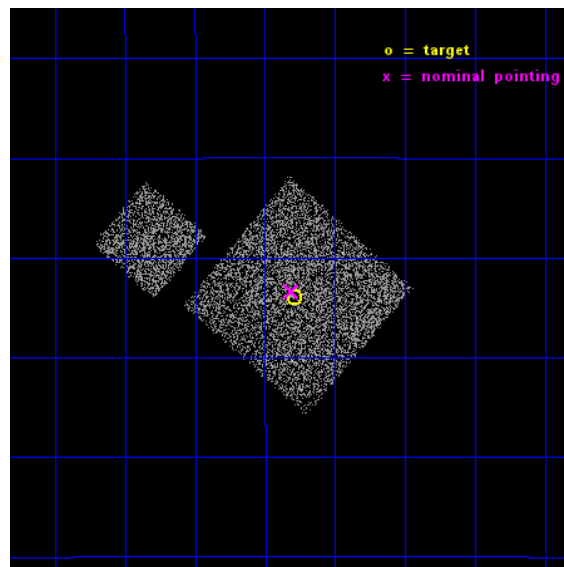
L2 Processing Date : Dec 6 2014

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1 Front

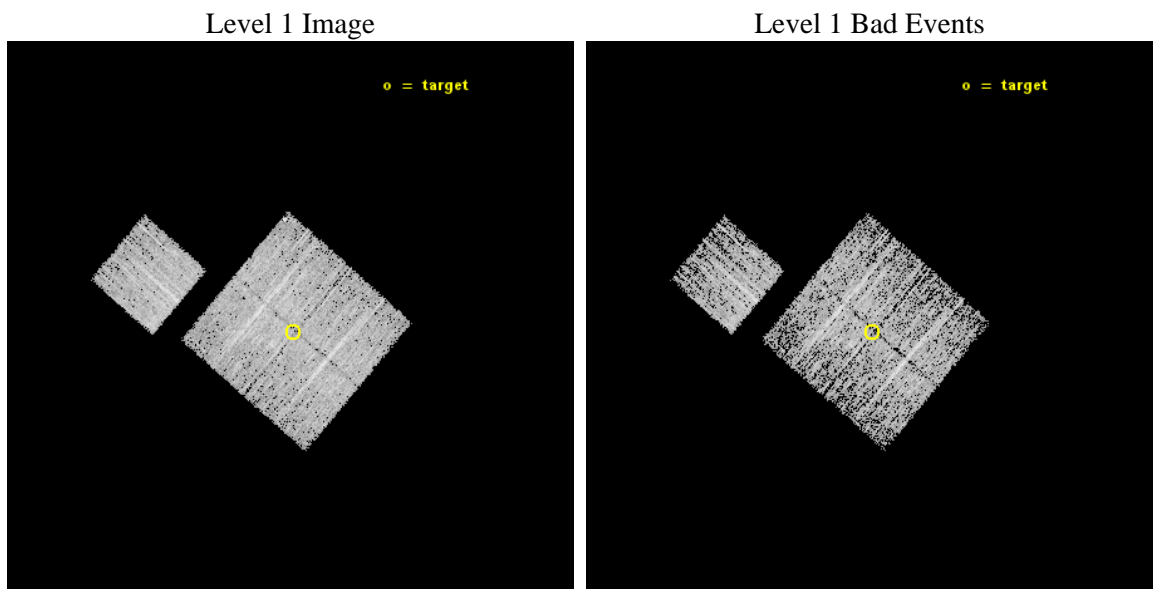
seq_num	801272	Sequence number
obs_id	15143	Observation id
title	TO THE OUTER LIMITS OF CLUSTERS WITH CHANDRA AND SUZAKU	Proposal t
observer	Dr. Eric Miller	Principal investigator
object	A2597	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	351.5715	Observer's specified target RA [deg]
dec_targ	-12.232153	Observer's specified target Dec [deg]
ra_nom	351.57797422133	Nominal RA [deg]
dec_nom	-12.223103501649	Nominal Dec [deg]
roll_nom	310.82506321525	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5083.112496376	Sum of GTIs [s]
livetime	5016.6978894779	Livetime [s]
ontime0	5083.0714662671	Sum of GTIs [s]
ontime1	5083.112496376	Sum of GTIs [s]
ontime2	5086.2945266366	Sum of GTIs [s]
ontime3	5086.3355666399	Sum of GTIs [s]
ontime6	5086.1714066267	Sum of GTIs [s]
l2events	12771	Number of level 2 events



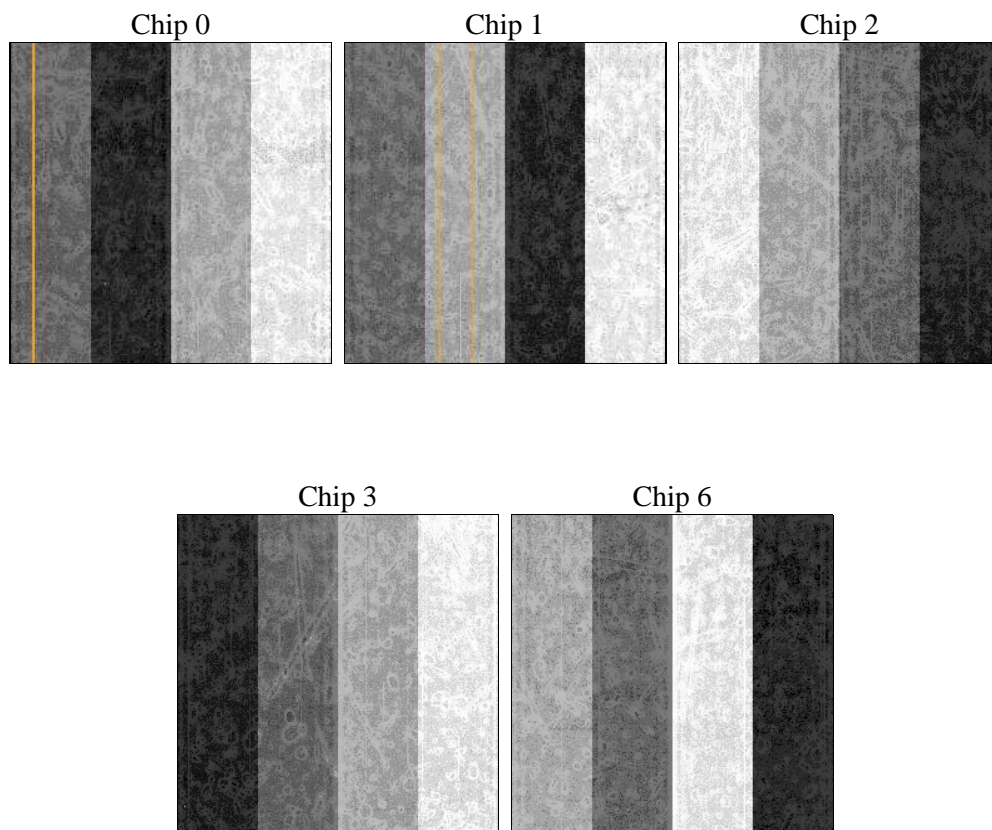
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	5083.112496376	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	5083.0714662671	Sum of GTIs [s]
date	2014-12-07T00:30:03	Date and time of file creation	ontime1	5083.112496376	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5086.2945266366	Sum of GTIs [s]
			ontime3	5086.3355666399	Sum of GTIs [s]
			ontime6	5086.1714066267	Sum of GTIs [s]
			l1events	120458	Number of level 1 events

2.1.4 Events

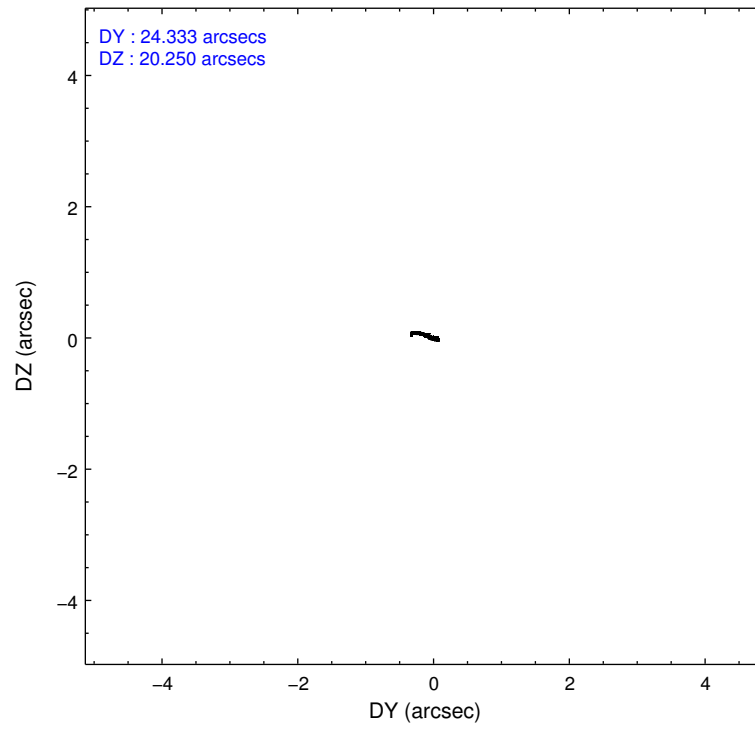
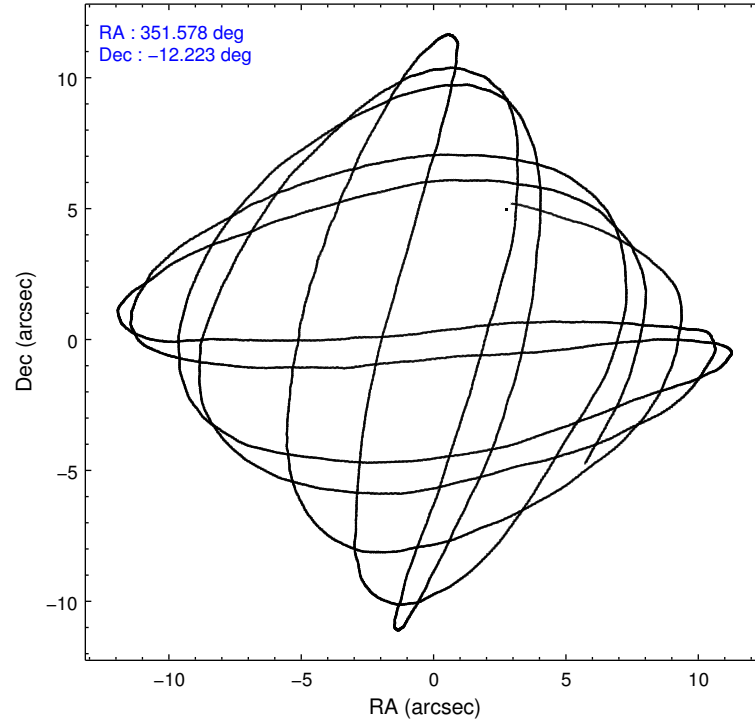
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	22575	23443	24248	24767	25425
rejected events	19538	19994	21296	21678	22431
rejected %	86%	85%	87%	87%	88%

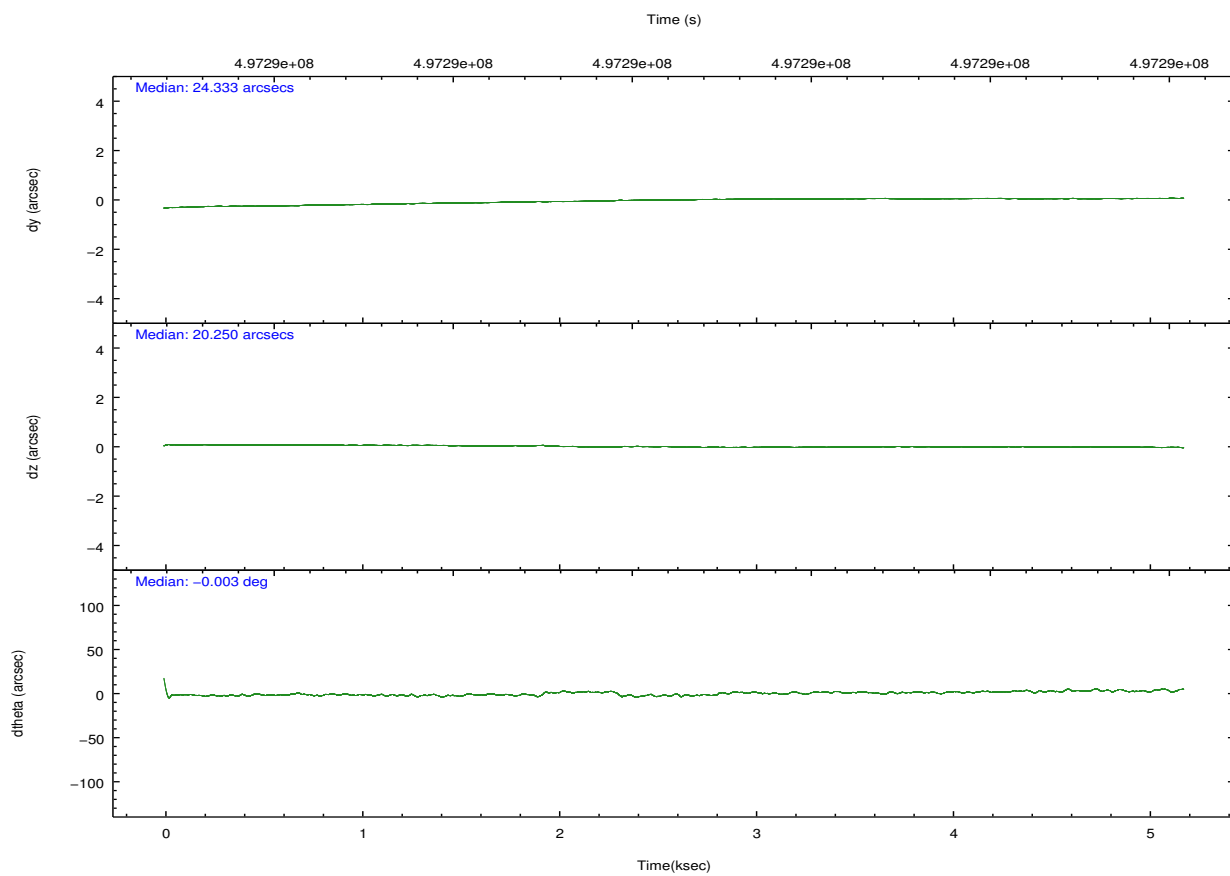
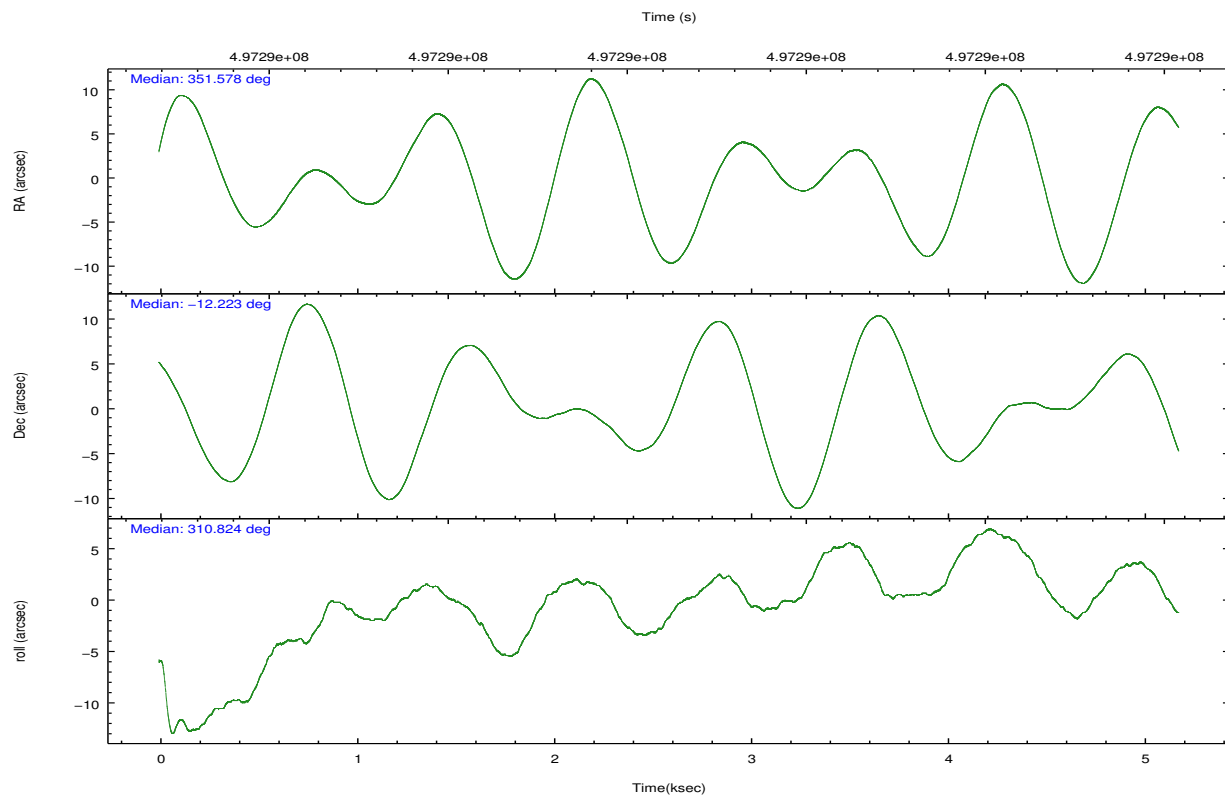
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1085	1228	1102	1204	1026
	4%	5%	4%	4%	4%
grade 1 events	11	14	20	23	14
	0%	0%	0%	0%	0%
grade 2 events	791	849	720	665	684
	3%	3%	2%	2%	2%
grade 3 events	305	325	291	317	311
	1%	1%	1%	1%	1%
grade 4 events	286	320	303	308	289
	1%	1%	1%	1%	1%
grade 5 events	1144	1261	1021	1324	1261
	5%	5%	4%	5%	4%
grade 6 events	573	733	544	598	687
	2%	3%	2%	2%	2%
grade 7 events	18380	18713	20247	20328	21153
	81%	79%	83%	82%	83%

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	351.551264	351.5779742213312	CCD I2 on	Y	Y
[deg] Pointing Dec	-12.214207	-12.22310350164896	CCD I3 on	Y	Y
[deg] Pointing Roll	310.610689	310.8250632152455	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)	497288810.184000	497287709.01315	CCD S5 on	N	N
Observation start date	2013-10-04T15:45:43	2013-10-04T15:28:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	497293810.184000	497294688.23853	On-chip summing requested	N	N
Observation end date	2013-10-04T17:09:03	2013-10-04T17:24:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



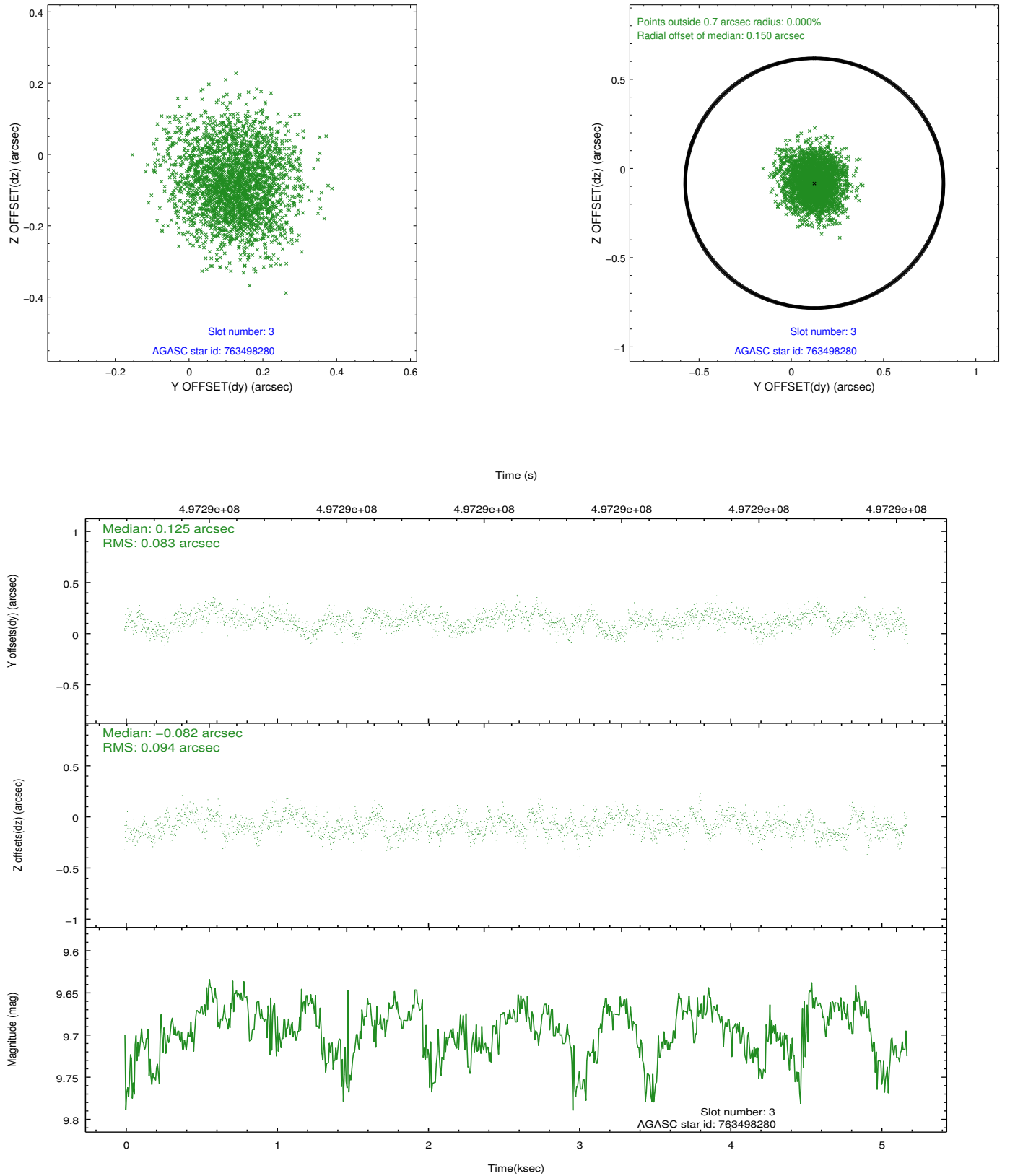


Slot Statistics

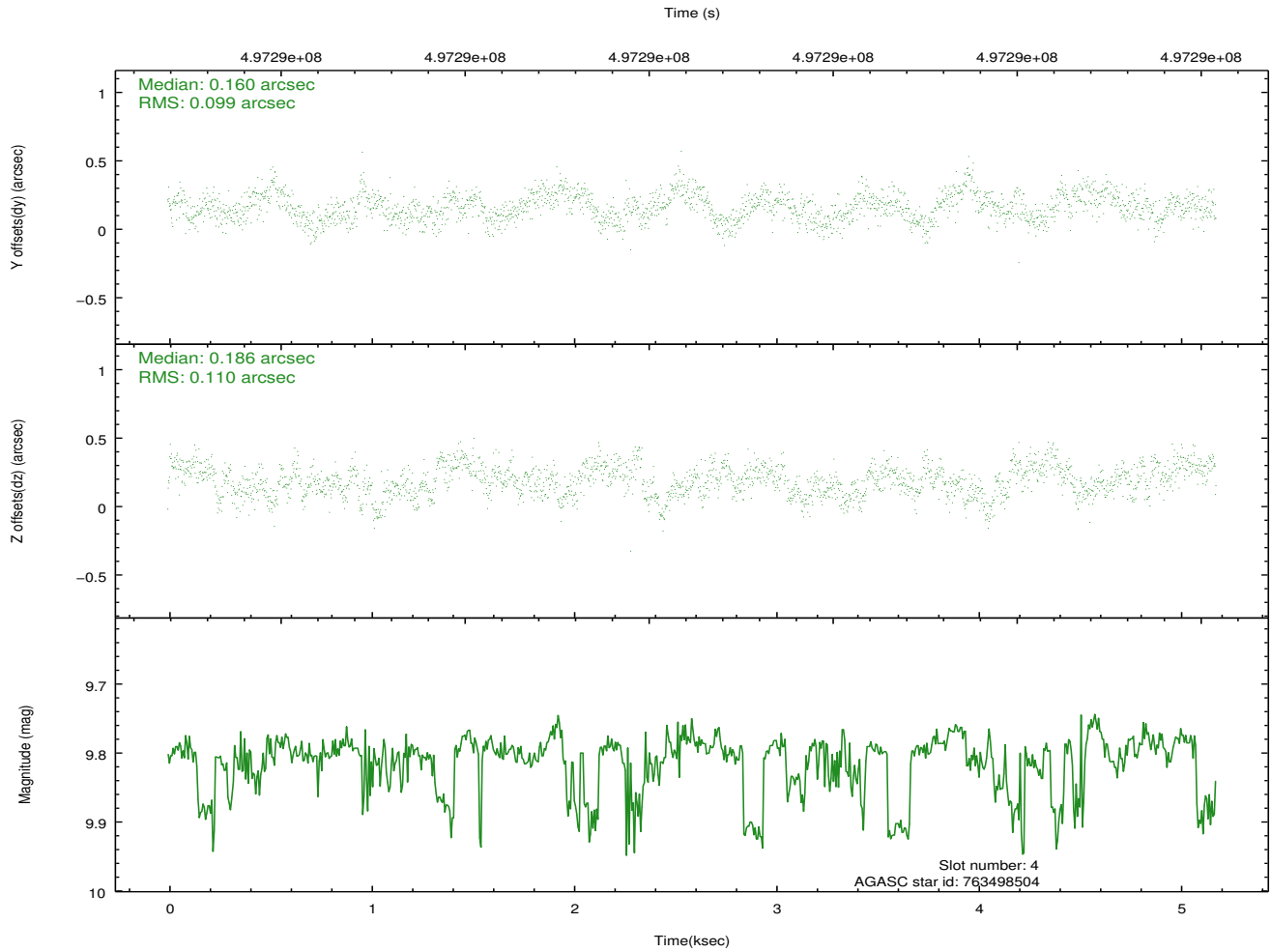
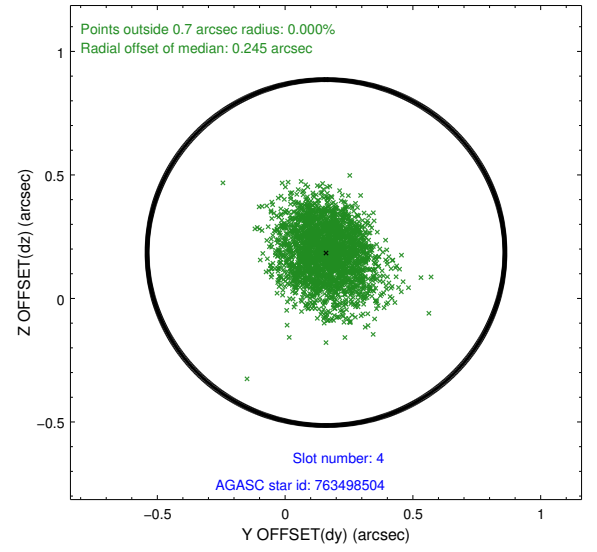
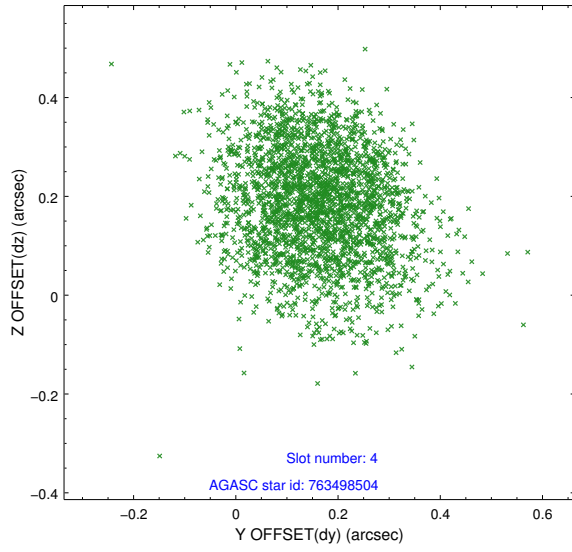
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	6.98	1264	-0.036	0.044	0.017	0.025	0.000000	0.000000	914.90	-843.95
1	FID		ACIS-I-2	6.88	1264	-0.238	-0.126	0.013	0.018	0.000000	0.000000	-778.76	-851.16
2	FID		ACIS-I-4	6.95	1264	0.174	0.145	0.025	0.034	0.000000	0.000000	2134.43	1055.39
3	GUIDE	used	763498280	9.69	2527	0.125	-0.082	0.135	0.219	351.715548	-11.532836	-1484.81	2036.16
4	GUIDE	used	763498504	9.80	2511	0.160	0.186	0.158	0.250	351.252498	-11.852907	-1672.21	47.91
5	GUIDE	used	763499608	9.56	2505	0.084	0.014	0.202	0.318	351.830271	-12.196099	589.27	787.18
6	GUIDE	used	763500112	6.19	2528	-0.235	-0.196	0.097	0.139	352.030274	-12.212329	1093.01	1282.81
7	GUIDE	used	764421032	9.57	2520	-0.117	0.085	0.158	0.256	352.401028	-12.365670	2362.91	1910.95

2.4 Star Slots

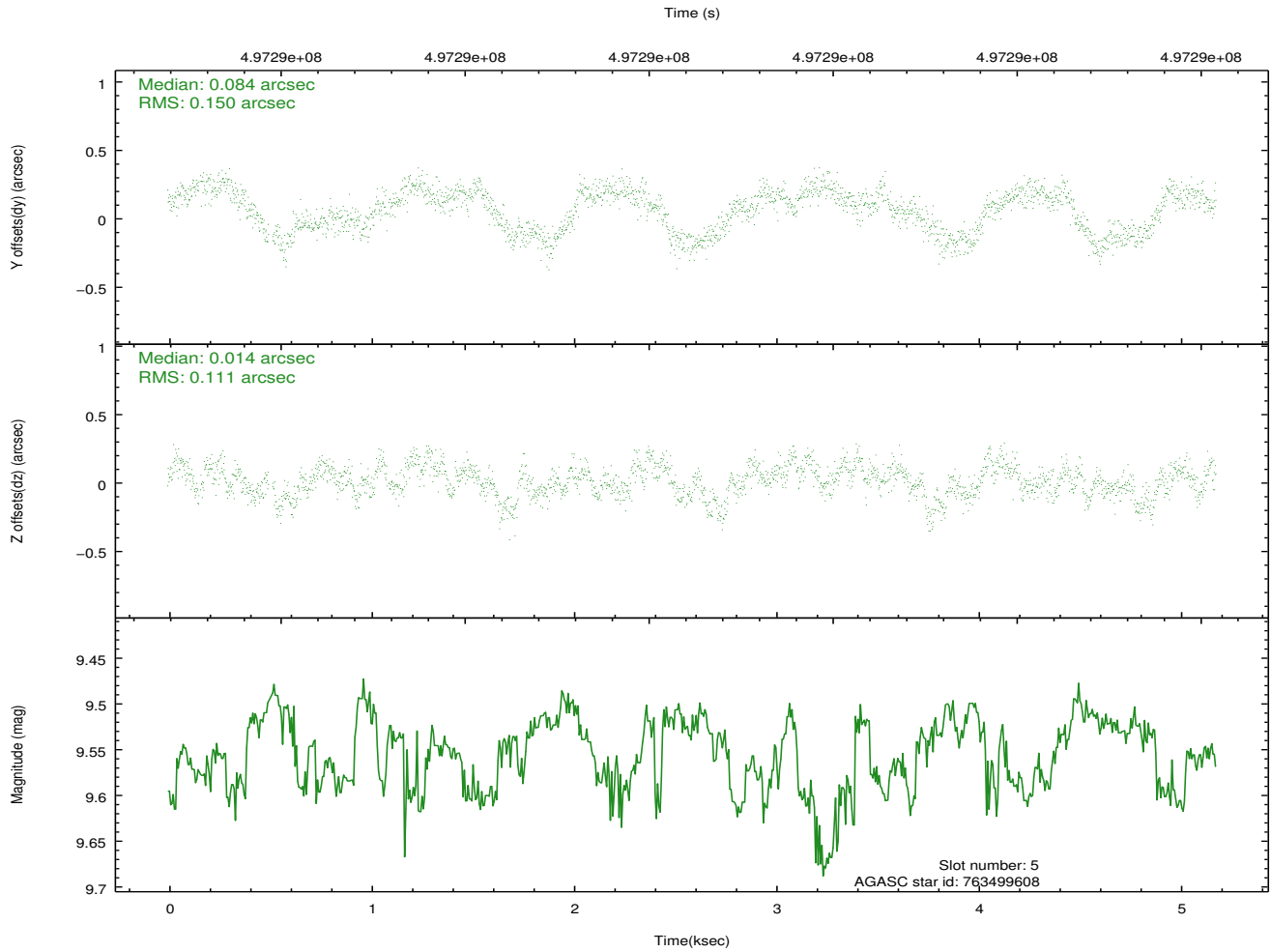
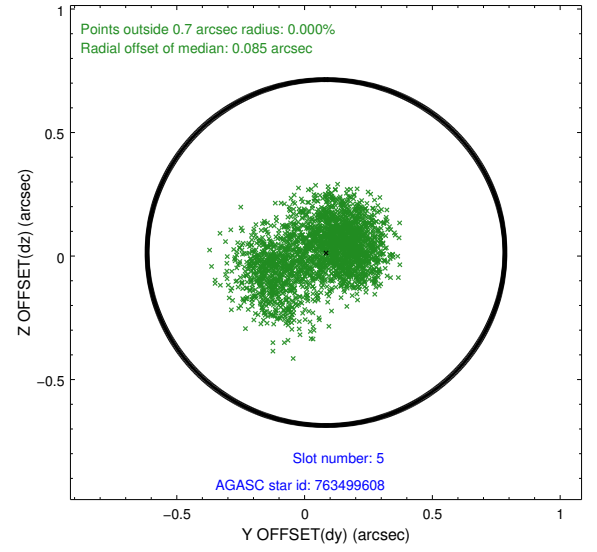
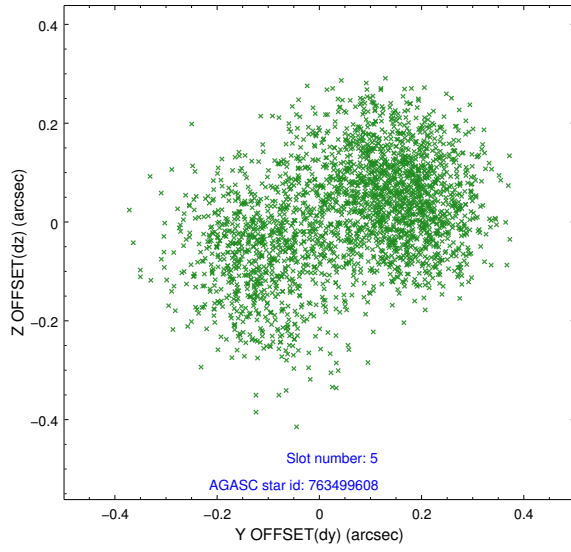
2.4.1 Slot 3



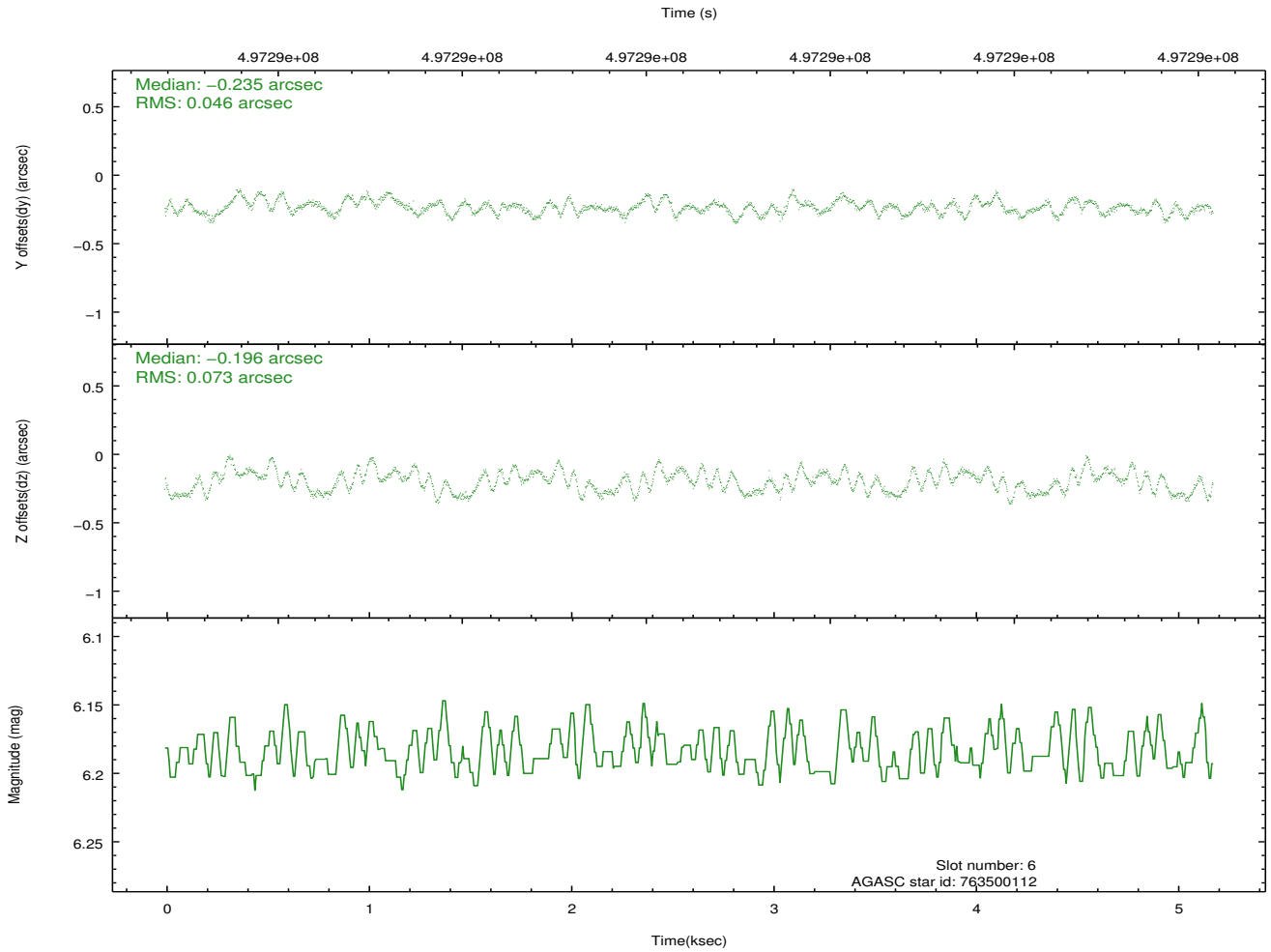
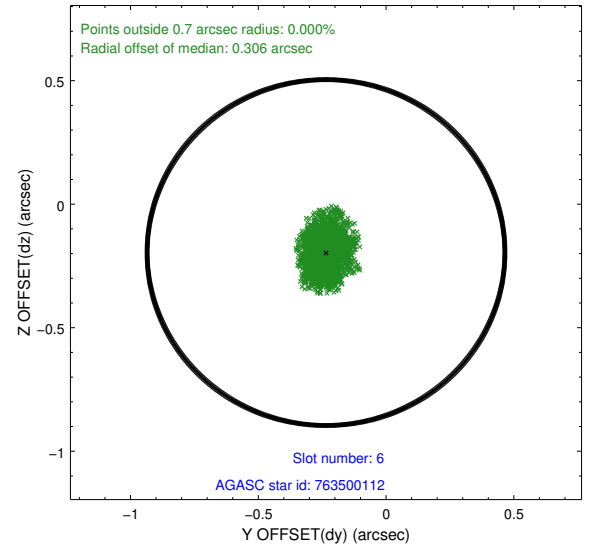
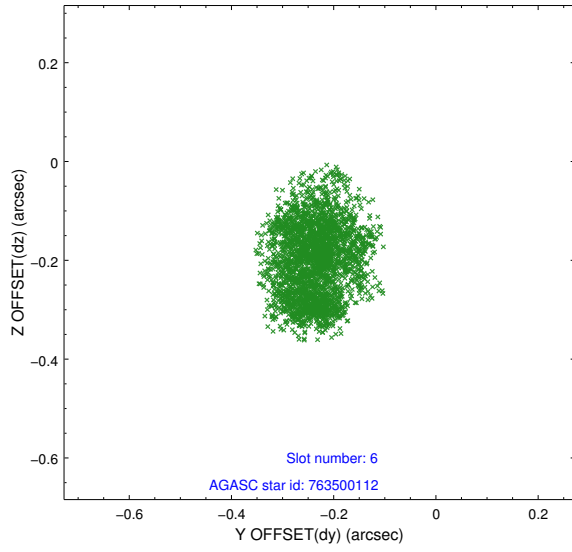
2.4.2 Slot 4



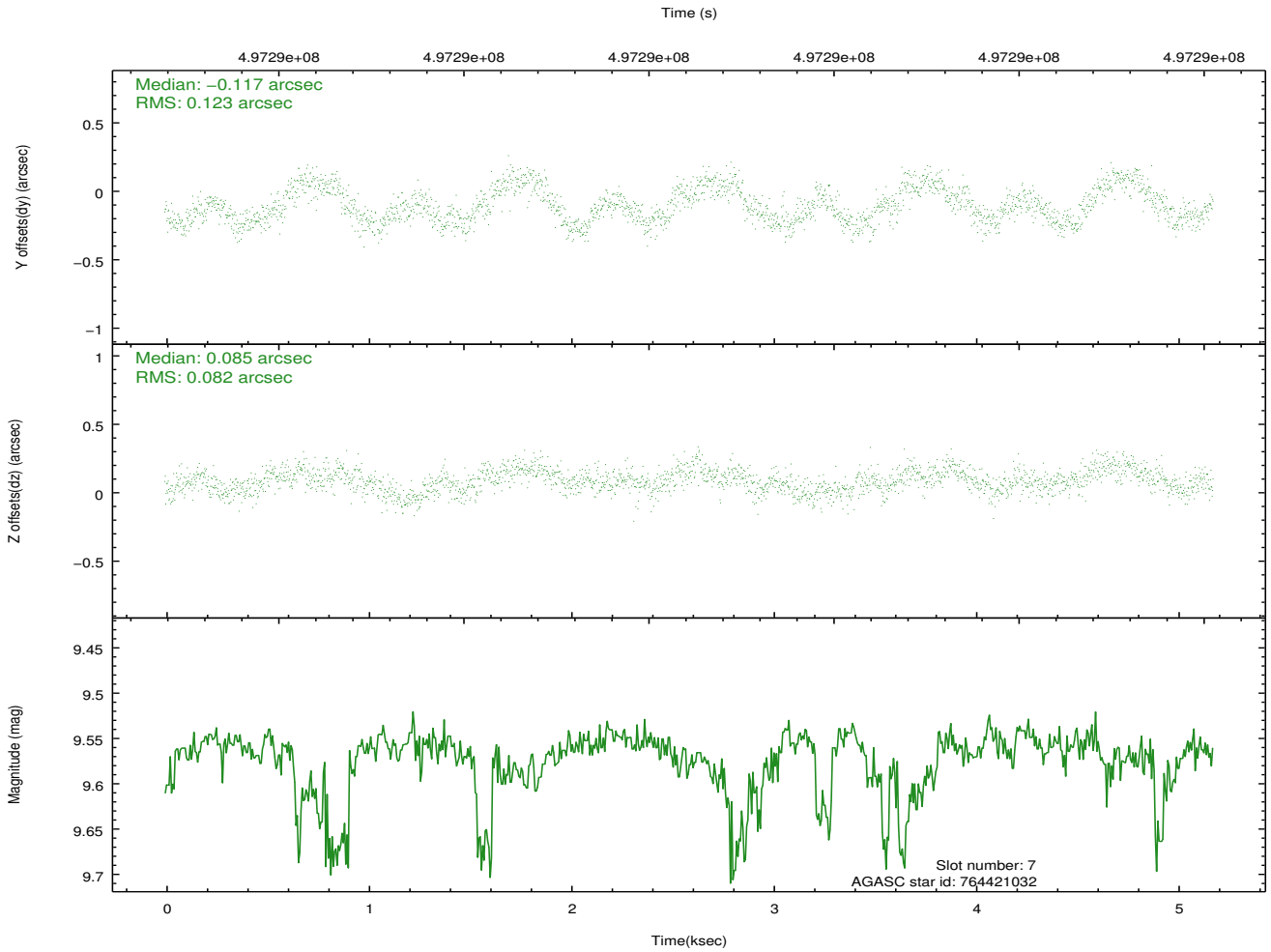
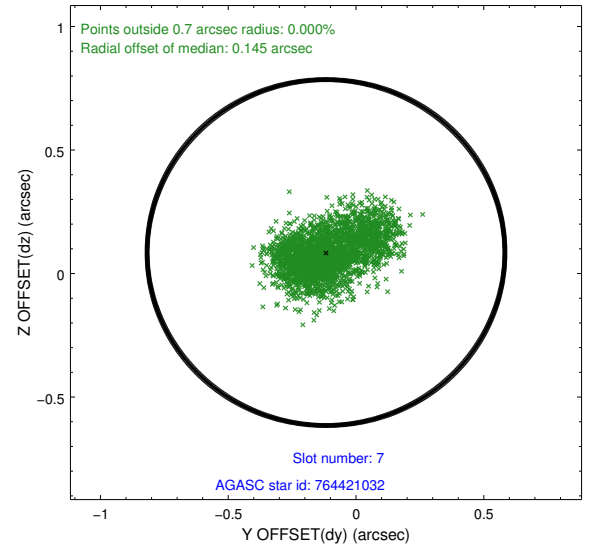
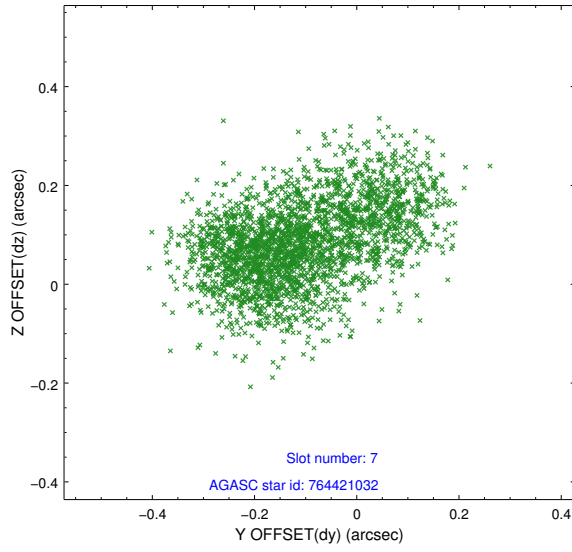
2.4.3 Slot 5



2.4.4 Slot 6

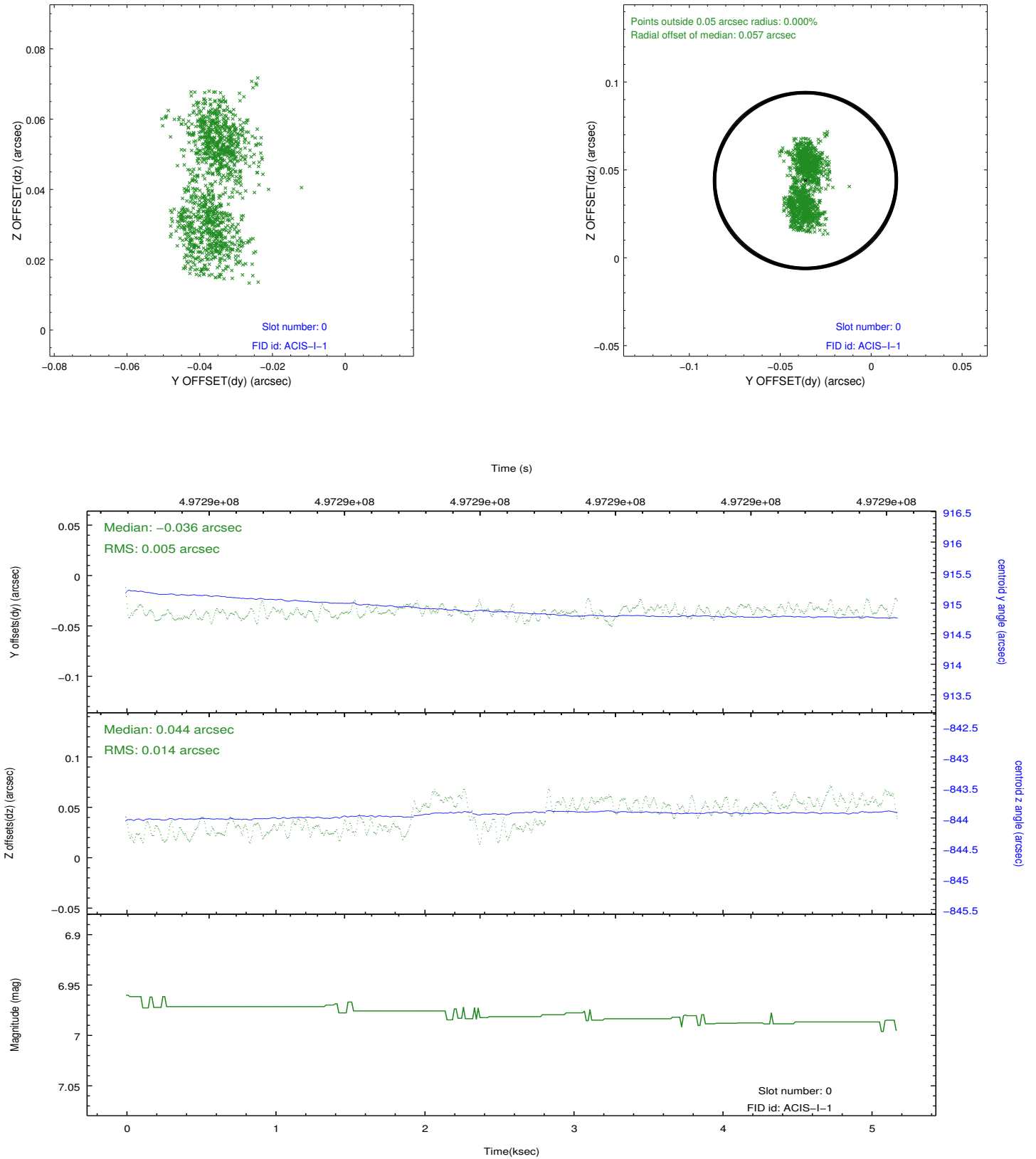


2.4.5 Slot 7

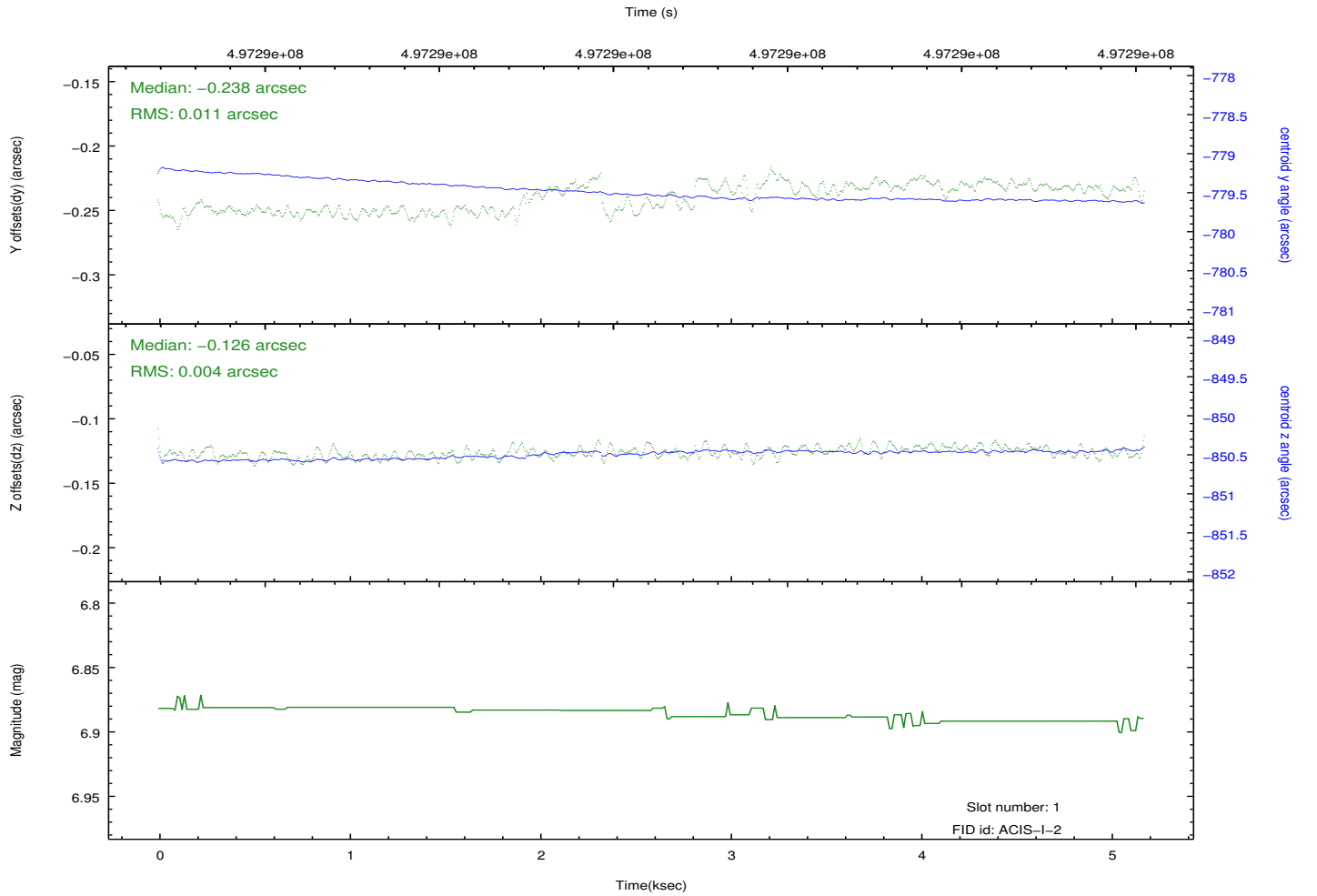
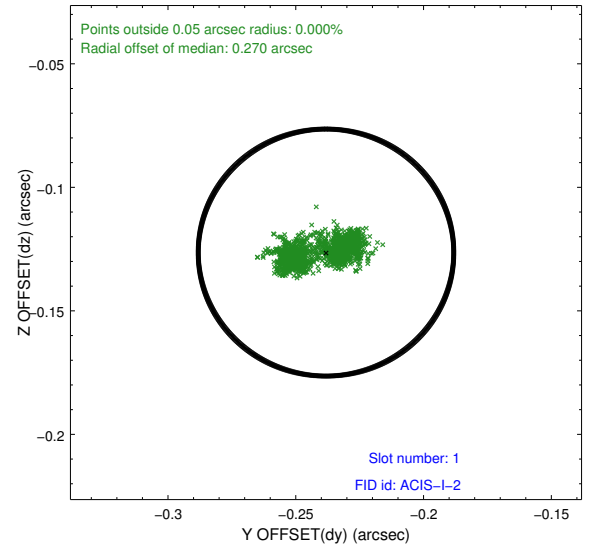
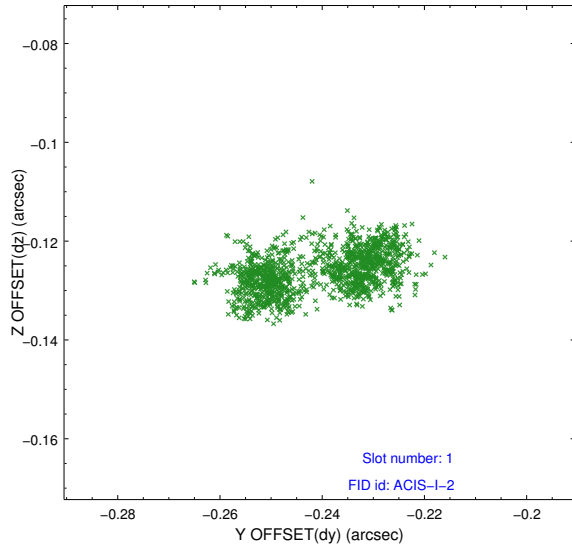


2.5 FID Slots

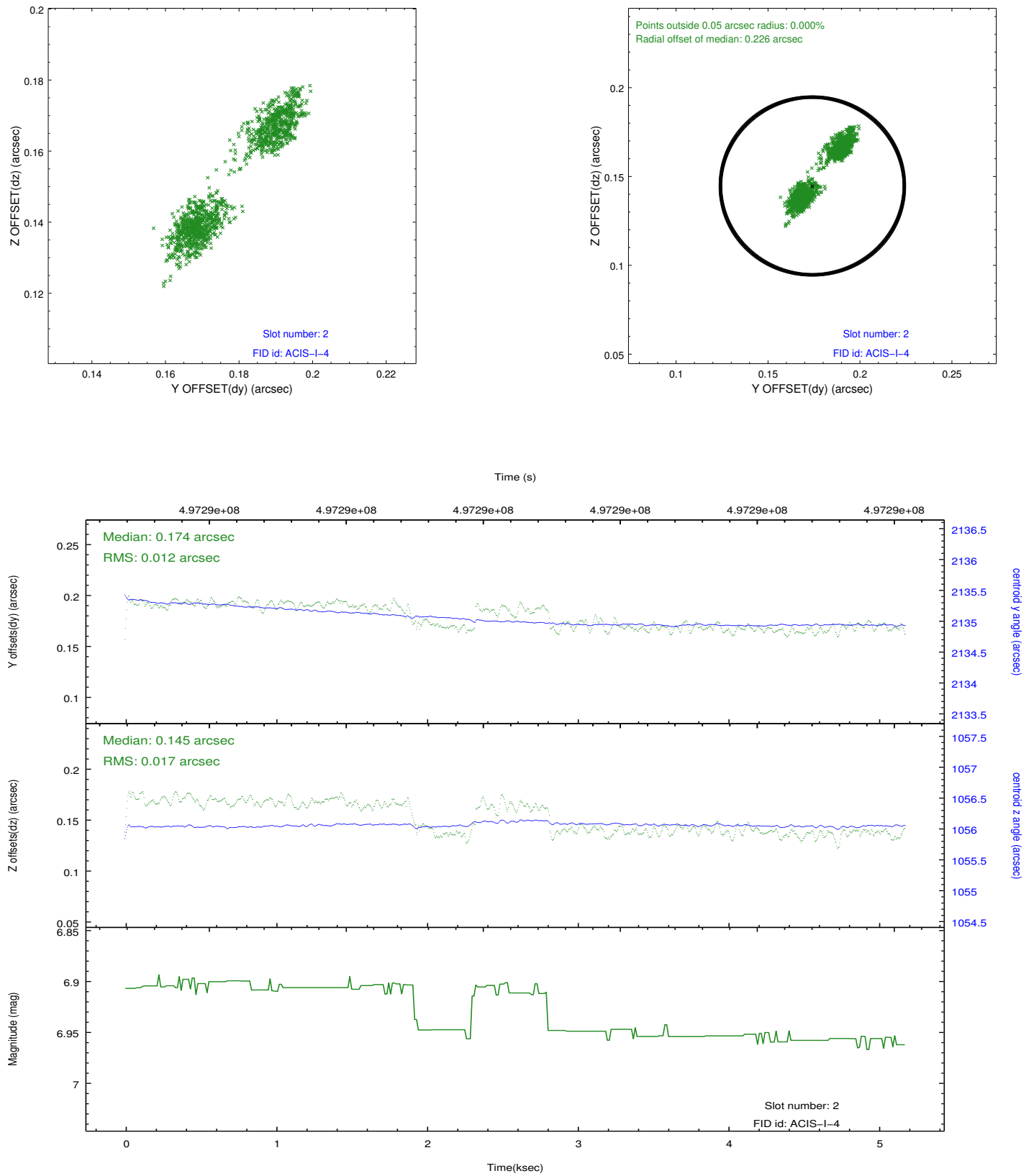
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.083112496376

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.