

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17308 - L2 Version 1
Chandra X-Ray Center

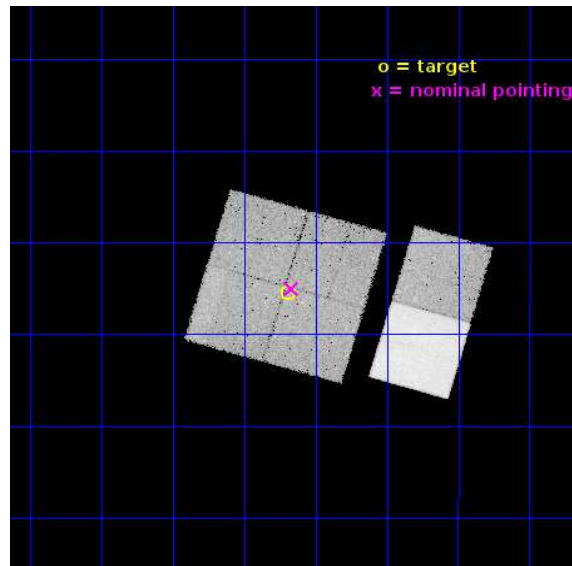
L2 Processing Date : Jul 11 2015

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1 Front

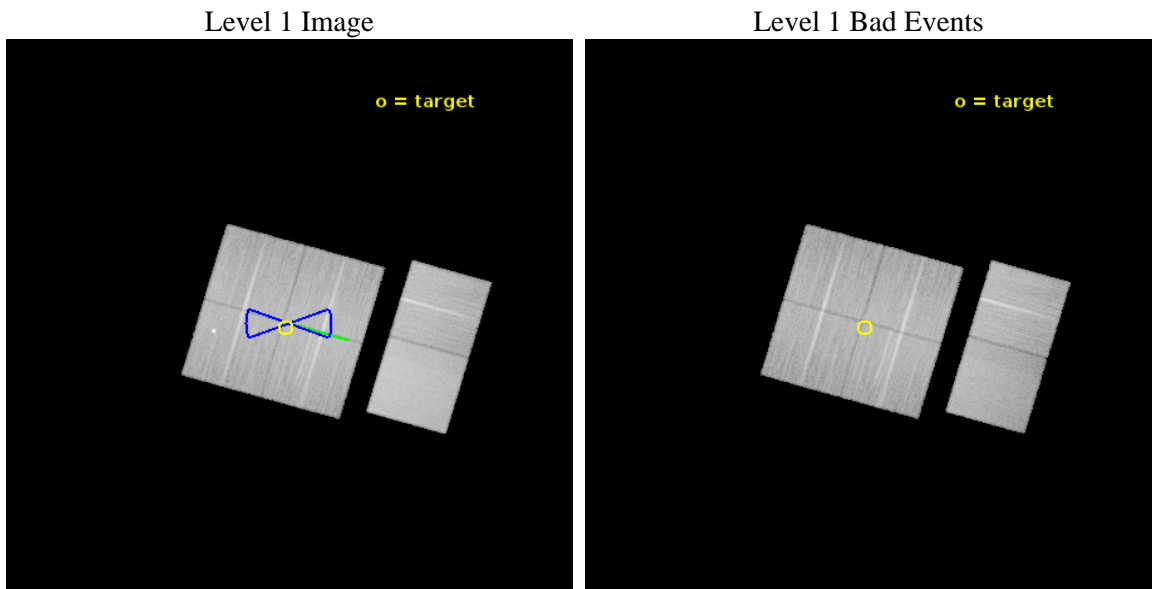
seq_num	901166	Sequence number
obs_id	17308	Observation id
title	Black Hole Fingerprints from Cosmic Dawn to Cosmic Noon	Proposal t
observer	Prof. Guenther Hasinger	Principal investigator
object	UDS	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	34.29796	Observer's specified target RA [deg]
dec_targ	-5.092076	Observer's specified target Dec [deg]
ra_nom	34.292151874242	Nominal RA [deg]
dec_nom	-5.0838886854791	Nominal Dec [deg]
roll_nom	106.20816853603	Nominal Roll [deg]
revision	1	Processing version of data
ontime	45365.519613266	Sum of GTIs [s]
livetime	44791.074088086	Livetime [s]
ontime0	45362.15549314	Sum of GTIs [s]
ontime1	45358.955652237	Sum of GTIs [s]
ontime2	45365.478573322	Sum of GTIs [s]
ontime3	45365.519613266	Sum of GTIs [s]
ontime6	45362.360722899	Sum of GTIs [s]
ontime7	45365.560653329	Sum of GTIs [s]
l2events	248343	Number of level 2 events



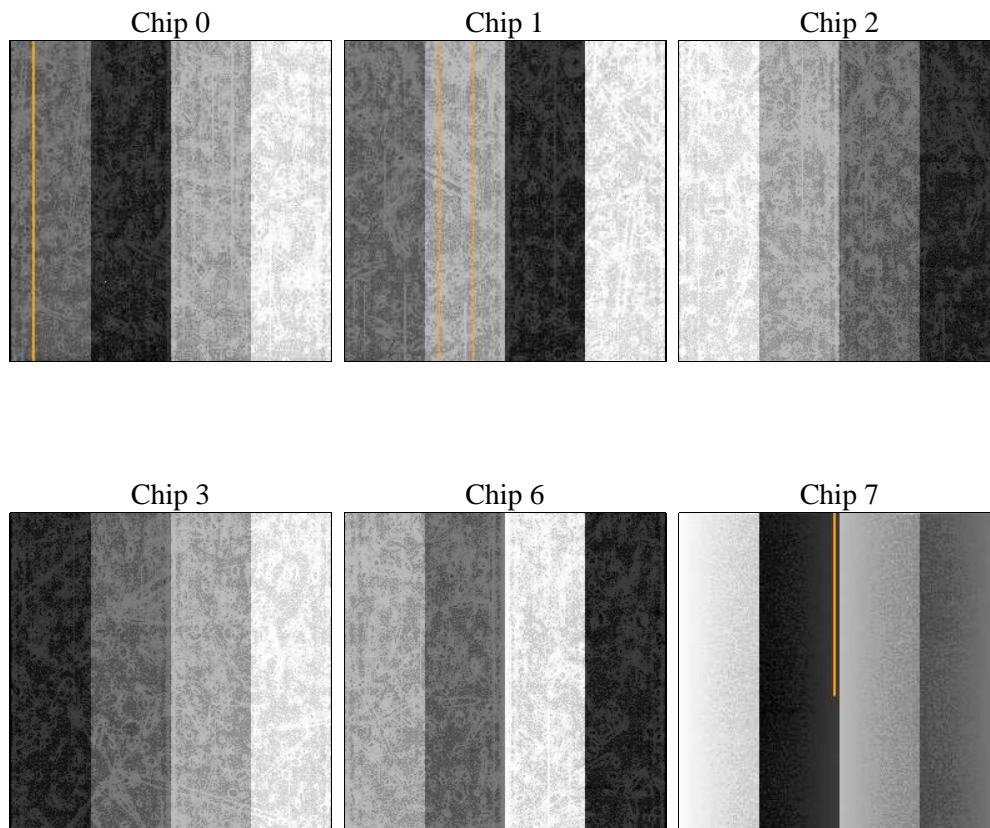
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	45600.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	45365.519613266	Sum of GTIs [s]
caldbver	4.6.8	 	ontime0	45362.15549314	Sum of GTIs [s]
date	2015-07-11T21:40:21	Date and time of file creation	ontime1	45358.955652237	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	45365.478573322	Sum of GTIs [s]
			ontime3	45365.519613266	Sum of GTIs [s]
			ontime6	45362.360722899	Sum of GTIs [s]
			ontime7	45365.560653329	Sum of GTIs [s]
			l1events	1457096	Number of level 1 events

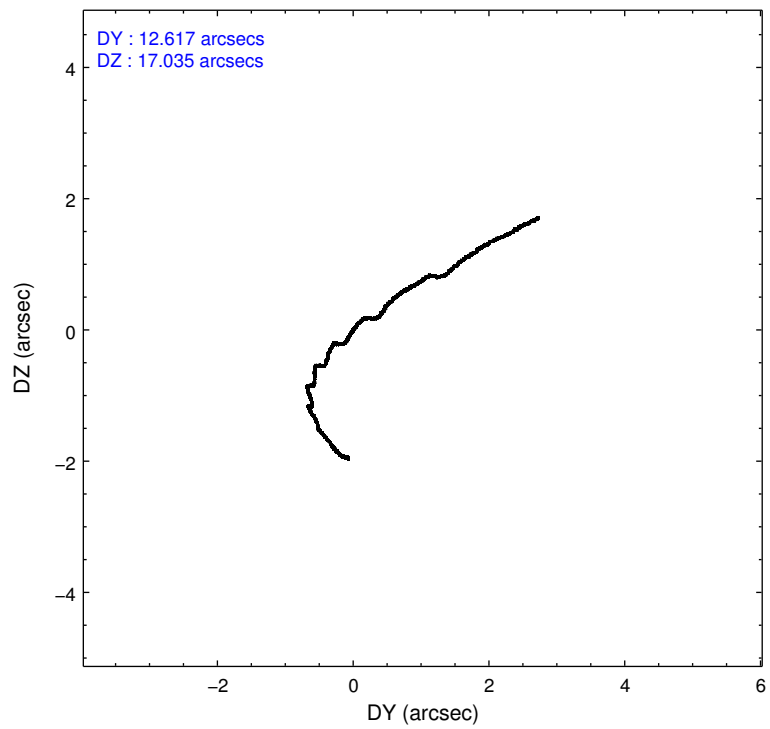
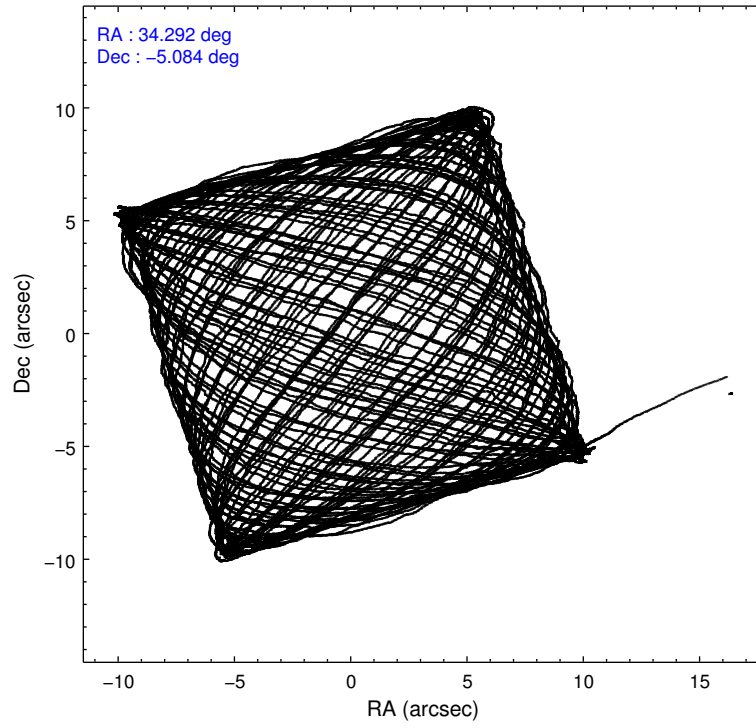
2.1.4 Events

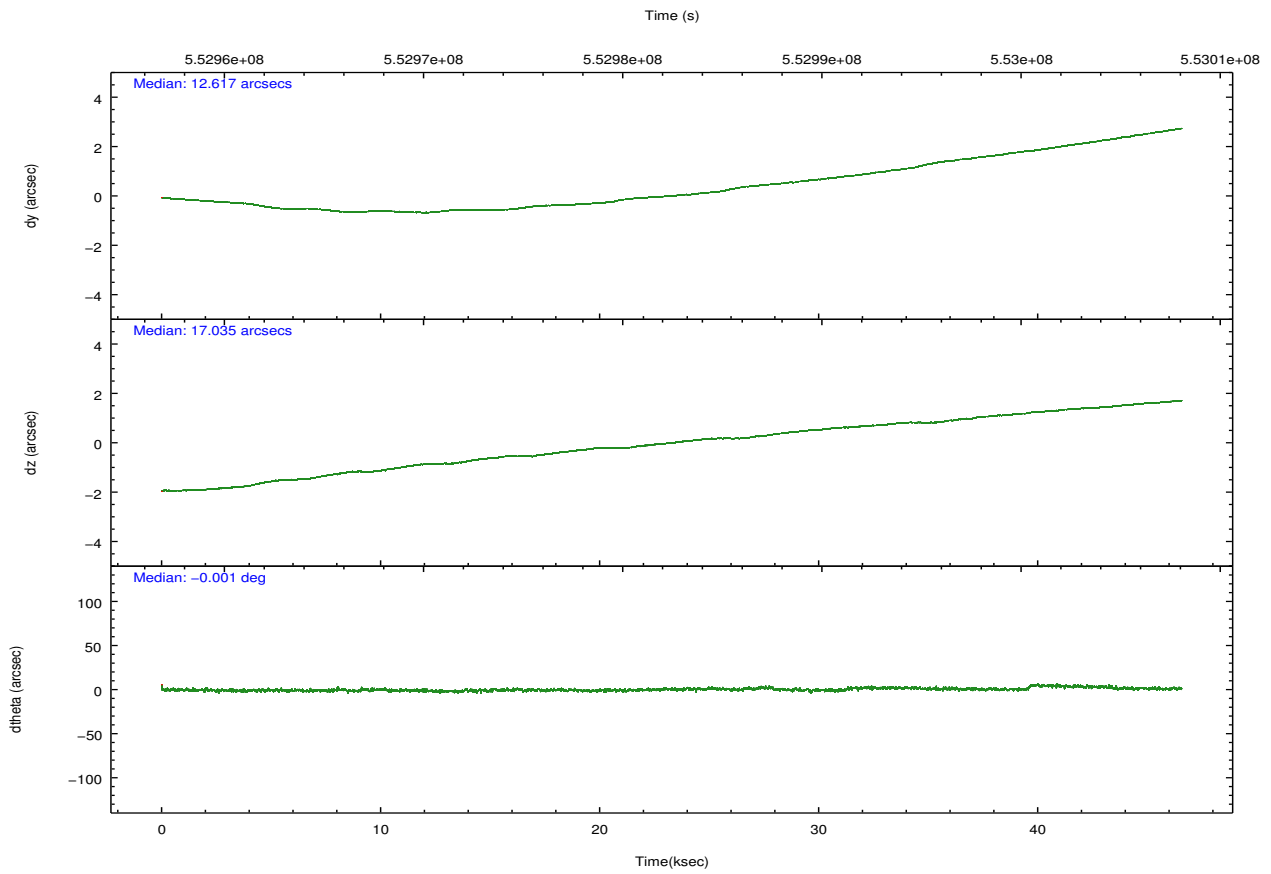
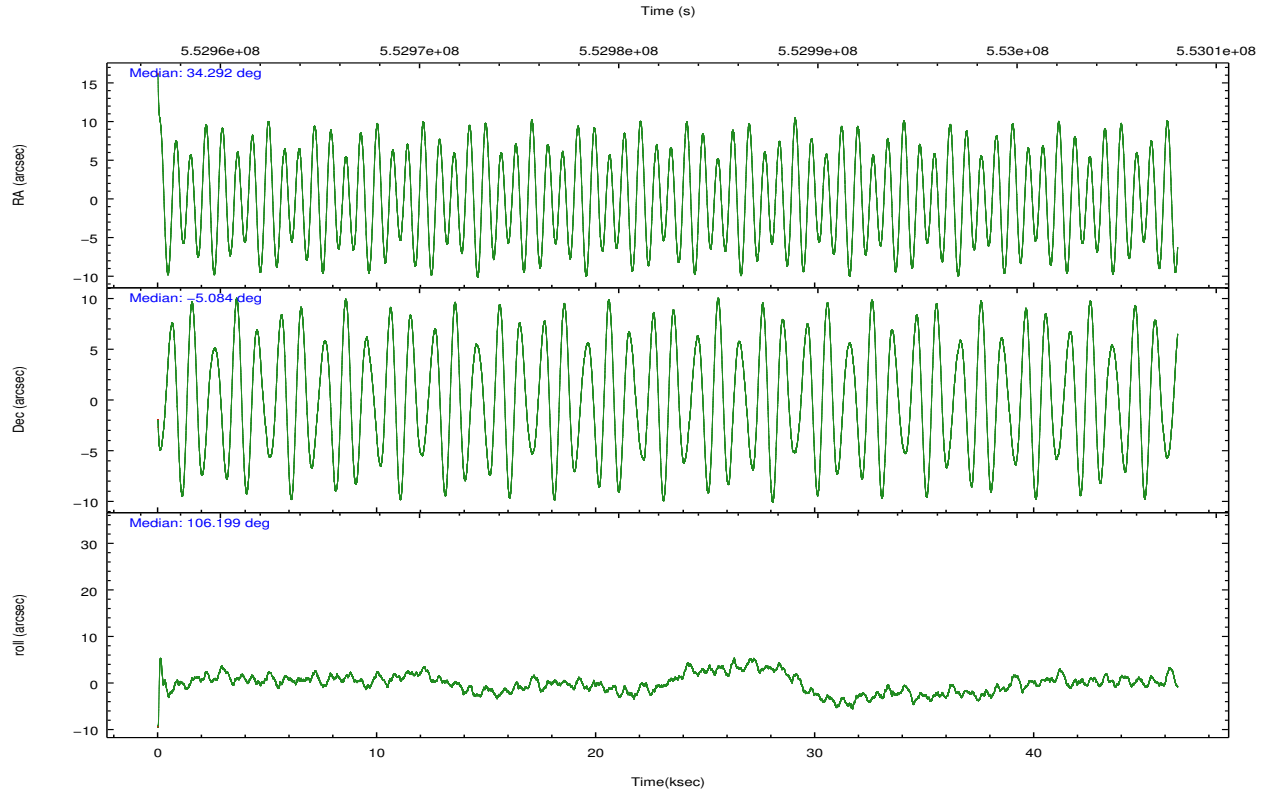
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	213002	221131	231526	228771	246661	316005	grade 0 events	9040	13814	9136	8538	9215	11922
rejected events	185964	187805	205450	203888	218682	178289		4%	6%	3%	3%	3%	3%
rejected %	87%	84%	88%	89%	88%	56%	grade 1 events	112	149	124	128	124	412
								0%	0%	0%	0%	0%	0%
							grade 2 events	7030	7363	6559	5507	6666	28508
								3%	3%	2%	2%	2%	9%
							grade 3 events	2795	2906	2623	2749	2823	11161
								1%	1%	1%	1%	1%	3%
							grade 4 events	2615	2902	2576	2702	2775	11387
								1%	1%	1%	1%	1%	3%
							grade 5 events	10846	11254	10004	12050	12447	32410
								5%	5%	4%	5%	5%	10%
							grade 6 events	5564	6347	5184	5387	6505	74760
								2%	2%	2%	2%	2%	23%
							grade 7 events	175000	176396	195320	191710	206106	145445
								82%	79%	84%	83%	83%	46%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	34.312219	34.29215187424238	CCD I2 on	Y	Y
[deg] Pointing Dec	-5.102916	-5.083888685479118	CCD I3 on	Y	Y
[deg] Pointing Roll	106.001263	106.2081685360263	CCD S0 on	N	N
[deg] Roll angle	0.000000	0.000000	CCD S1 on	N	N
[deg] Roll tolerance	20.000000	20.000000	CCD S2 on	O1	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	O2	Y
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S4 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S5 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	-0.005018542100998502	On-chip summing requested	N	N
[s] Observation start time (MET)	552960144.184000	552958208.07616	Subarray requested	NONE	NONE
Observation start date	2015-07-11T00:01:16	2015-07-10T23:30:08	Alternating exposures requested	N	N
[s] Observation end time (MET)	553005744.184000	553006699.2913899	[s] Primary exposure time	0.000000	3.2
Observation end date	2015-07-11T12:41:16	2015-07-11T12:58:19			
Read mode	TIMED	TIMED			

2.3 Aspect



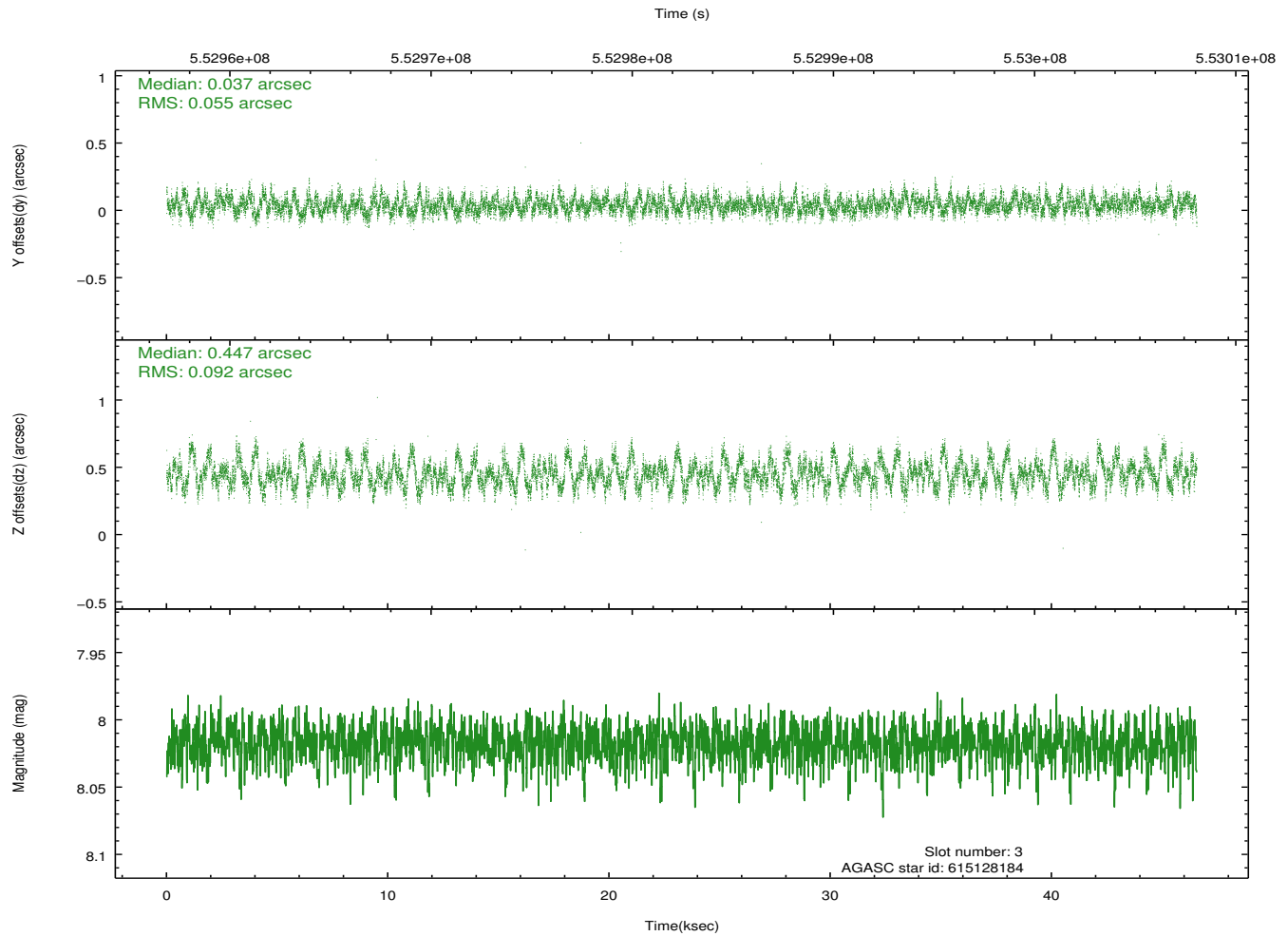
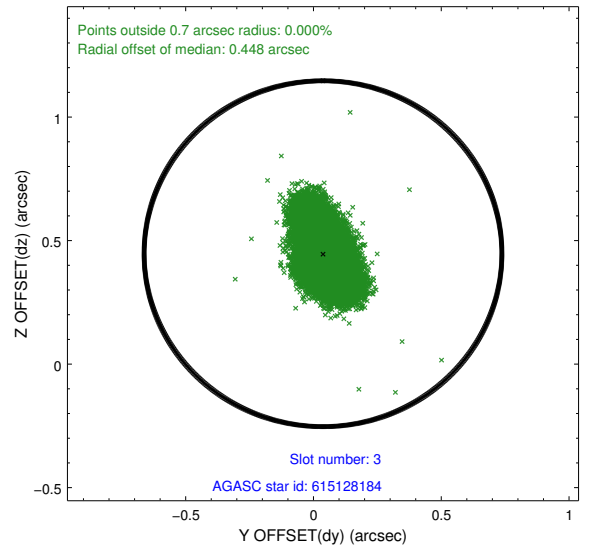
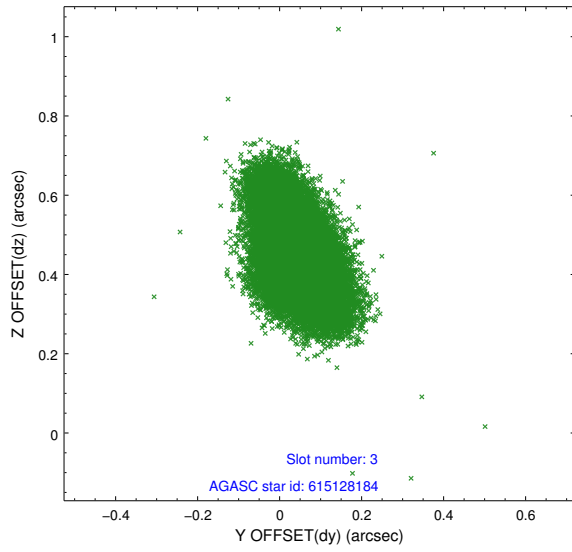


Slot Statistics

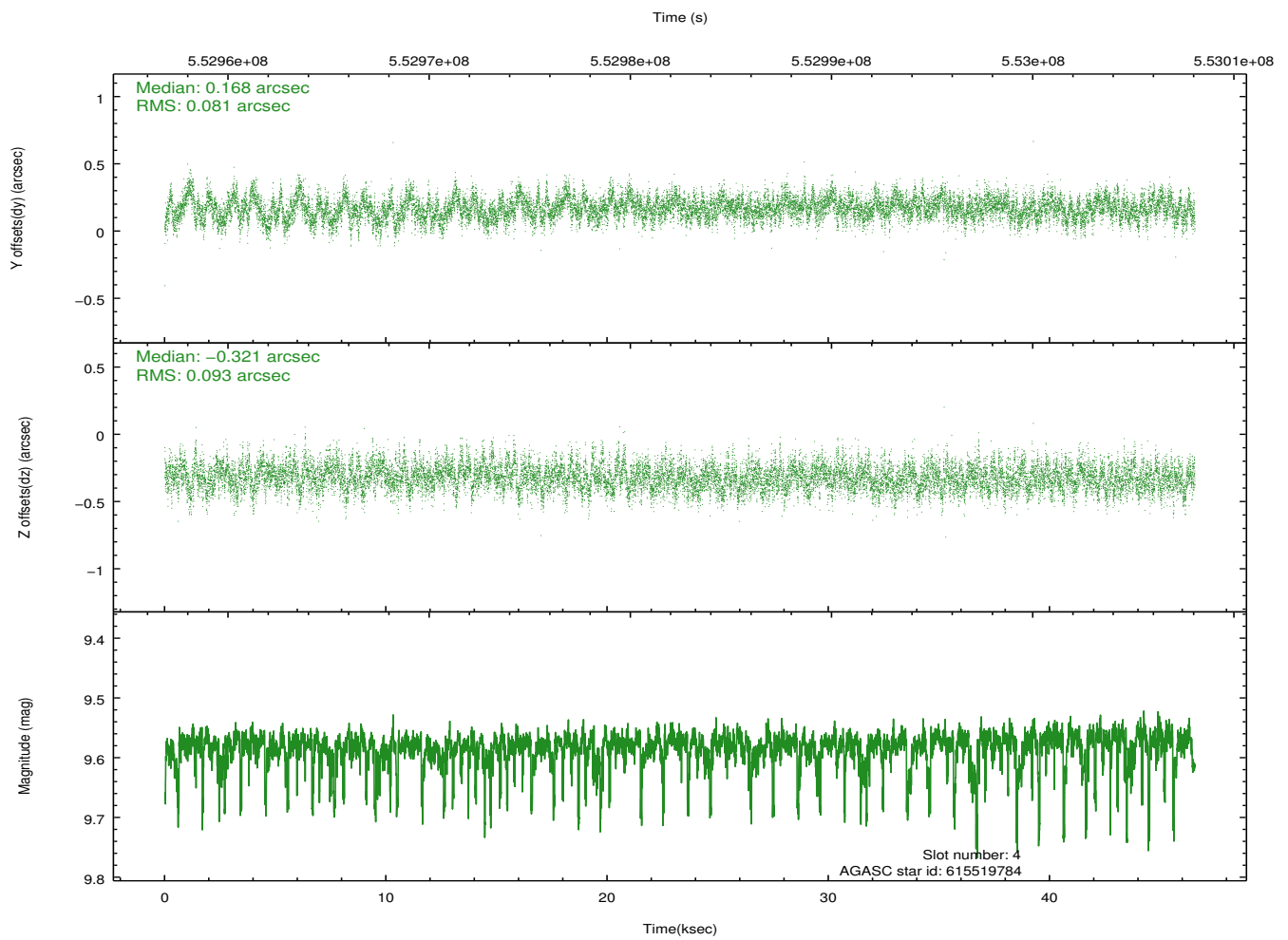
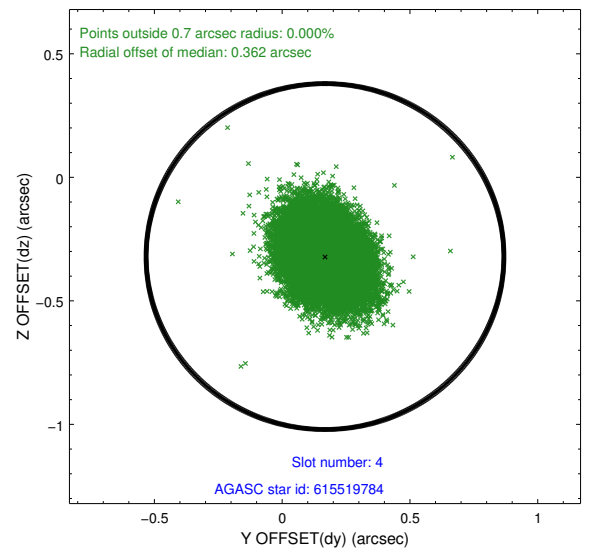
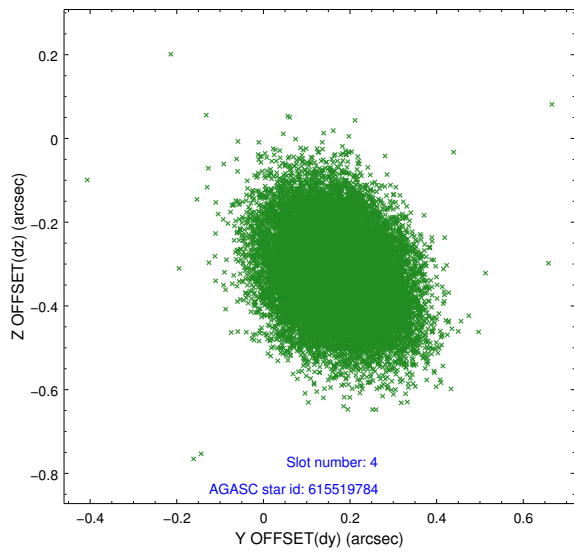
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.07	11356	-0.031	-0.017	0.034	0.070	0.000000	0.000000	926.42	-840.64
1	FID		ACIS-I-2	6.99	11354	-0.216	-0.086	0.018	0.031	0.000000	0.000000	-767.86	-847.14
2	FID		ACIS-I-4	6.99	11357	0.147	0.165	0.035	0.050	0.000000	0.000000	2146.51	1059.32
3	GUIDE	used	615128184	8.02	22705	0.037	0.447	0.113	0.194	34.627231	-4.869545	496.42	-1317.08
4	GUIDE	used	615519784	9.58	22695	0.168	-0.321	0.130	0.214	33.905889	-5.455828	-820.11	1749.68
5	GUIDE	used	615129680	9.03	22703	-0.014	0.110	0.123	0.200	34.462822	-4.356201	2435.57	-1259.92
6	GUIDE	used	615129592	8.87	22704	0.012	0.094	0.135	0.223	34.607456	-4.334536	2366.83	-1780.95
7	GUIDE	used	615128272	9.76	22691	-0.217	-0.326	0.197	0.324	34.040073	-4.481636	2419.17	322.49

2.4 Star Slots

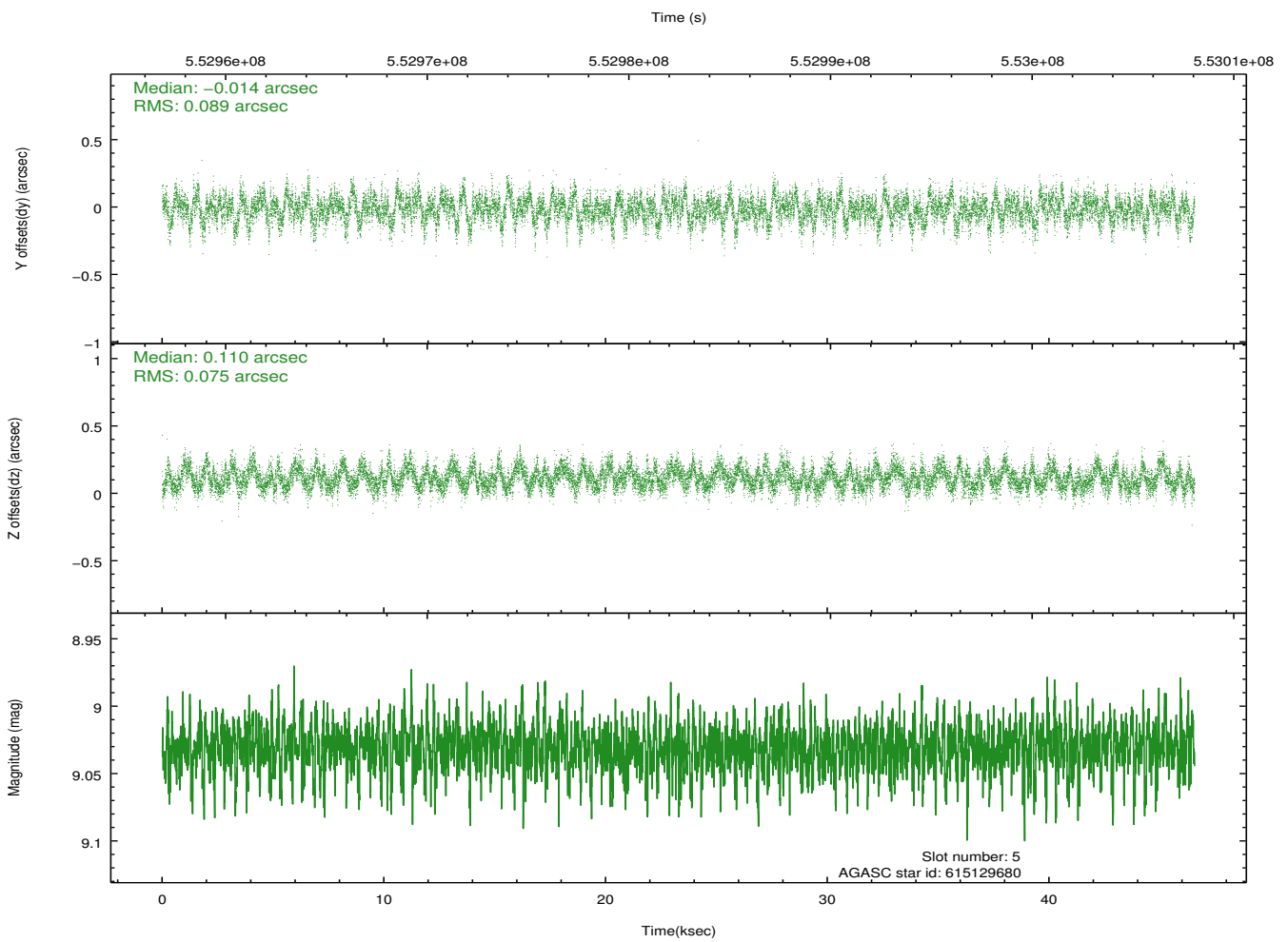
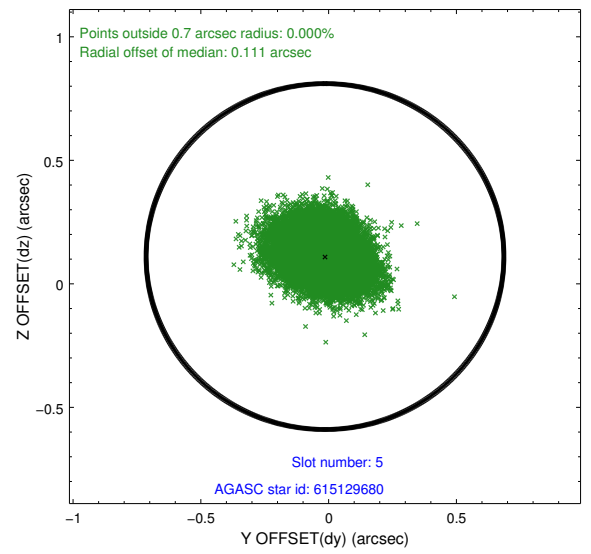
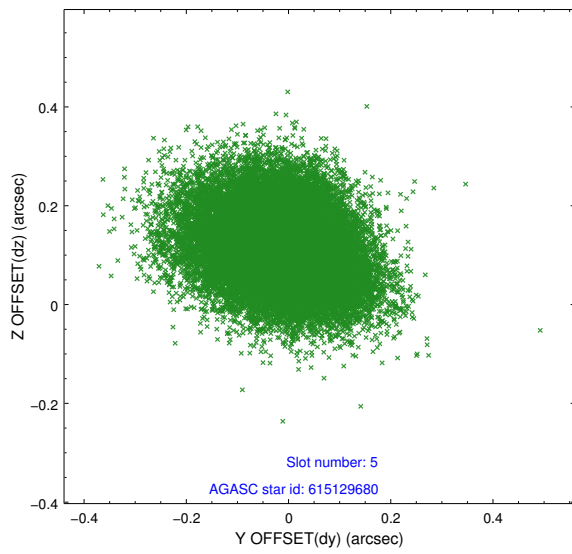
2.4.1 Slot 3



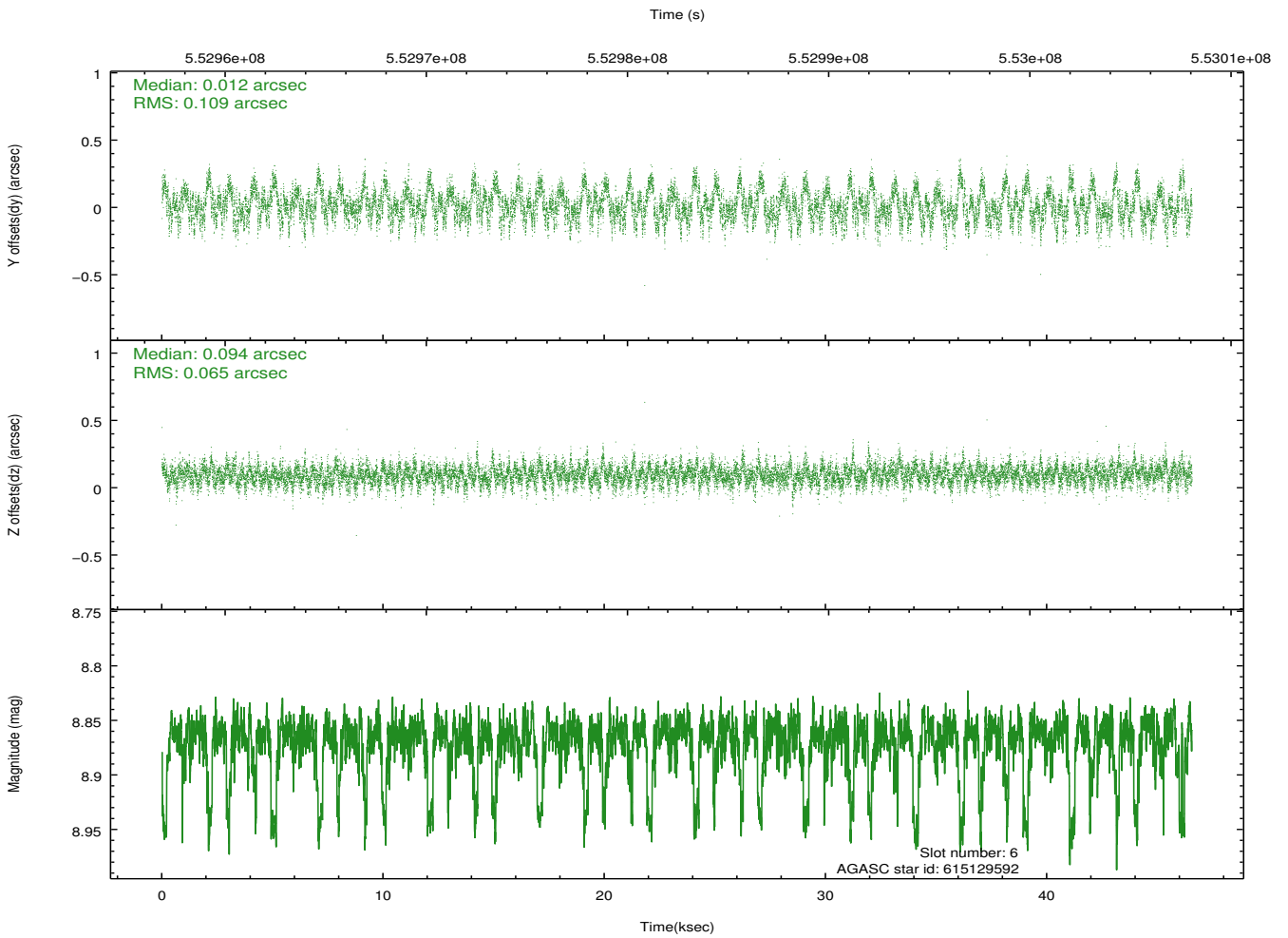
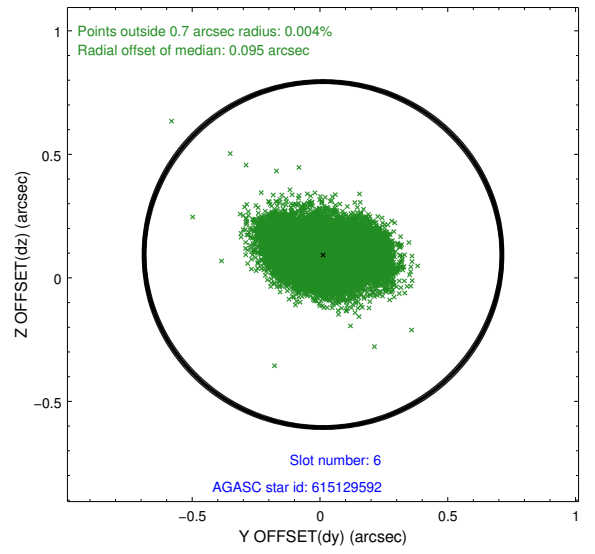
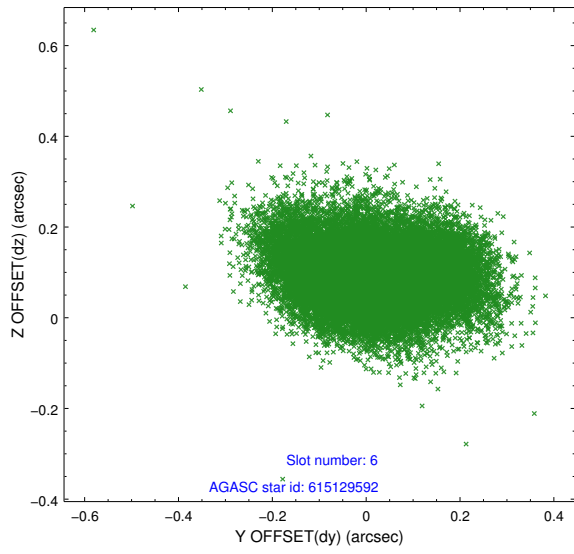
2.4.2 Slot 4



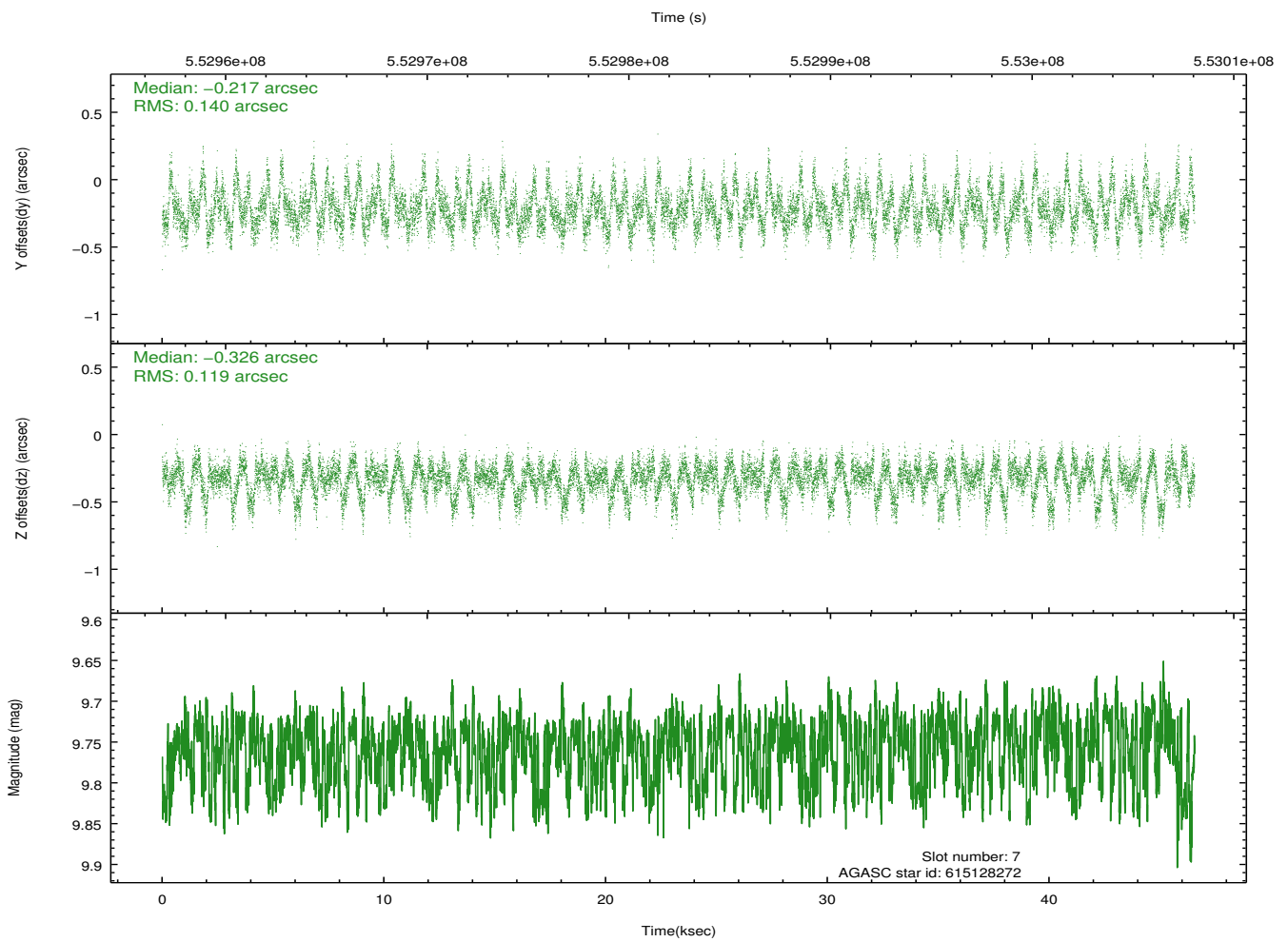
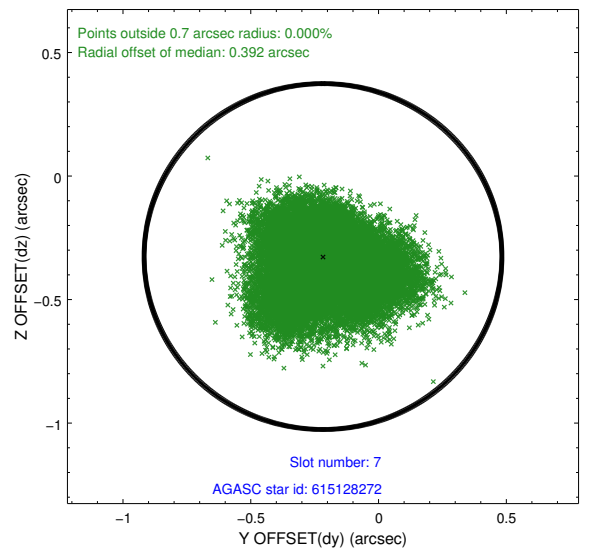
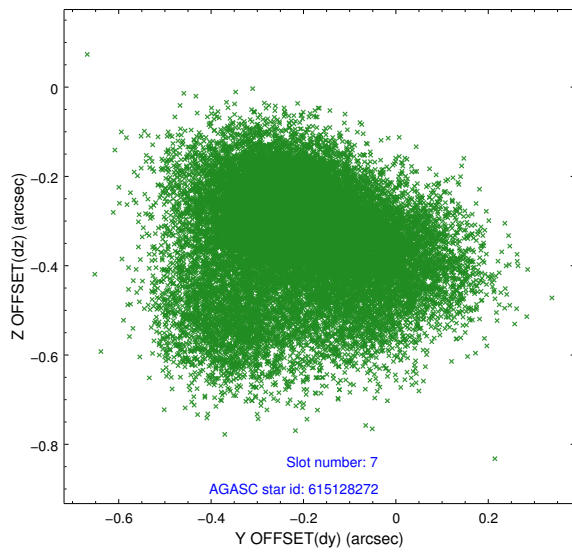
2.4.3 Slot 5



2.4.4 Slot 6

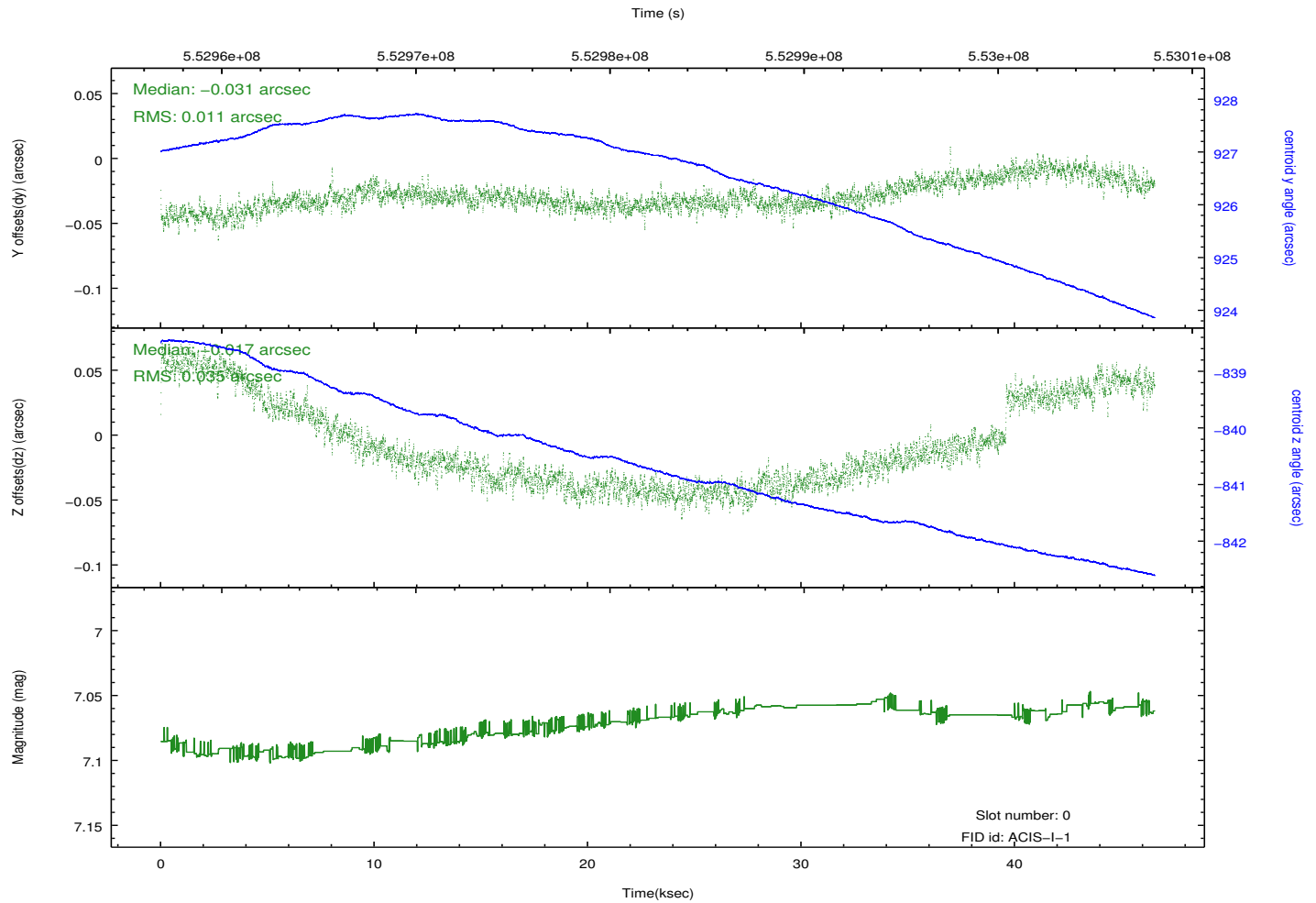
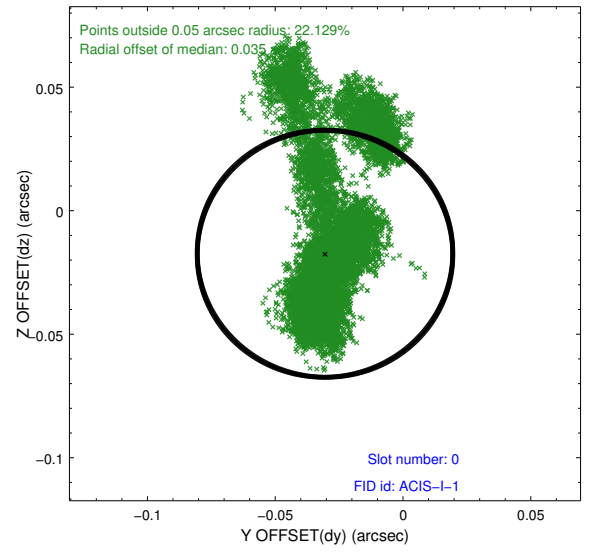
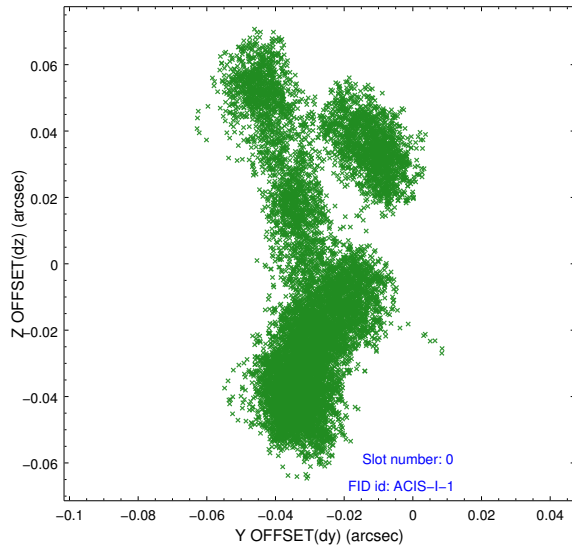


2.4.5 Slot 7

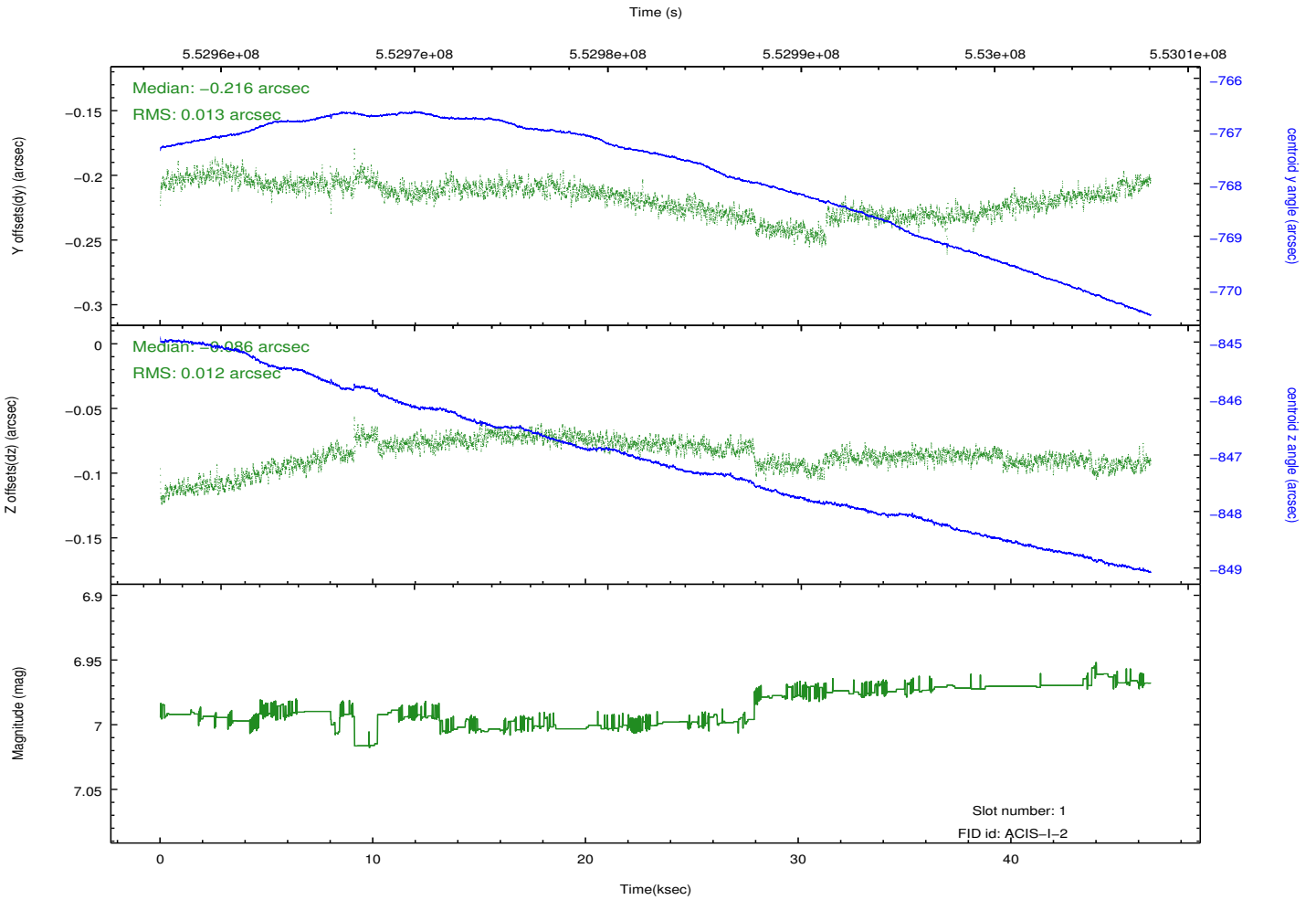
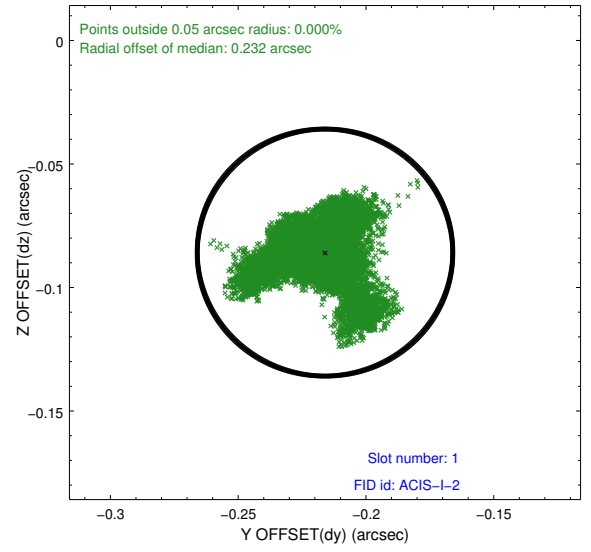
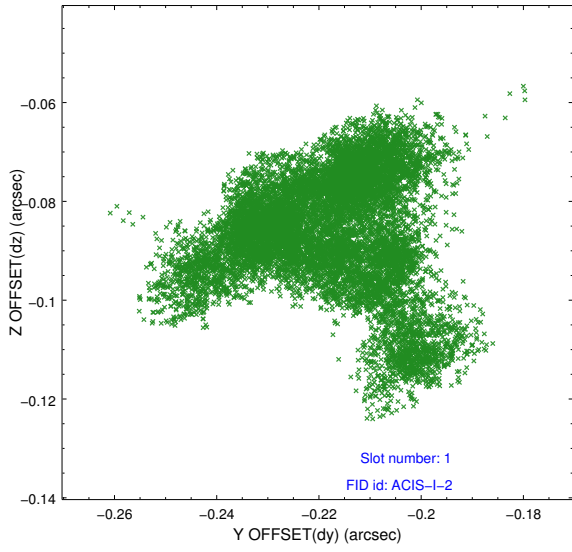


2.5 FID Slots

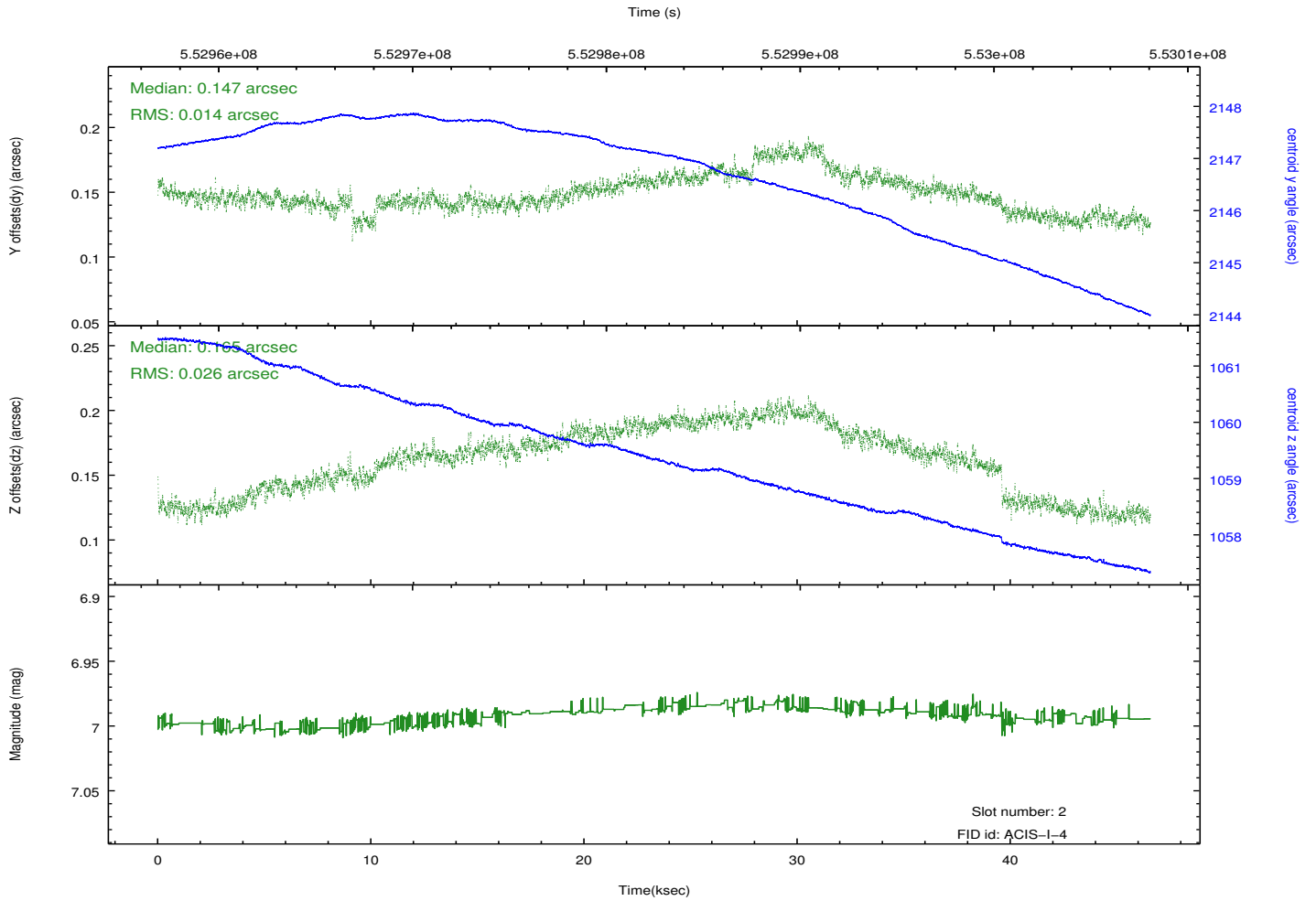
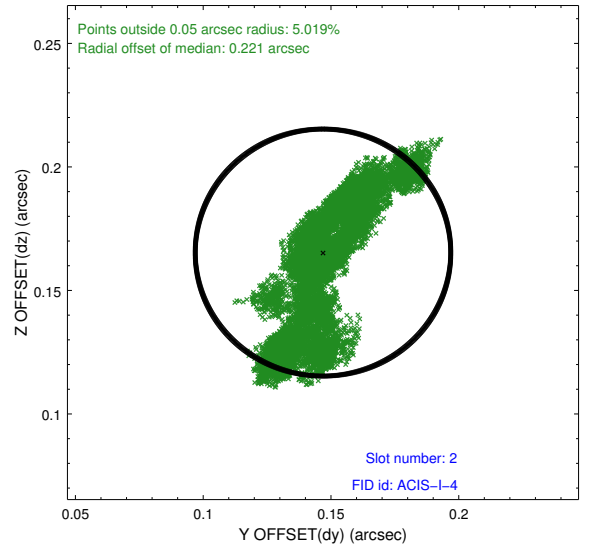
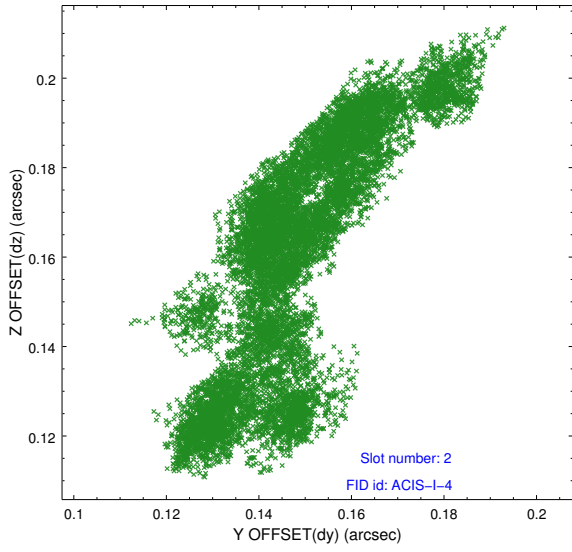
2.5.1 Slot 0



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)	2015.07.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	45.365519613266

A.2 Comments

Roll preference met.