

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 17744 - L2 Version 1
Chandra X-Ray Center

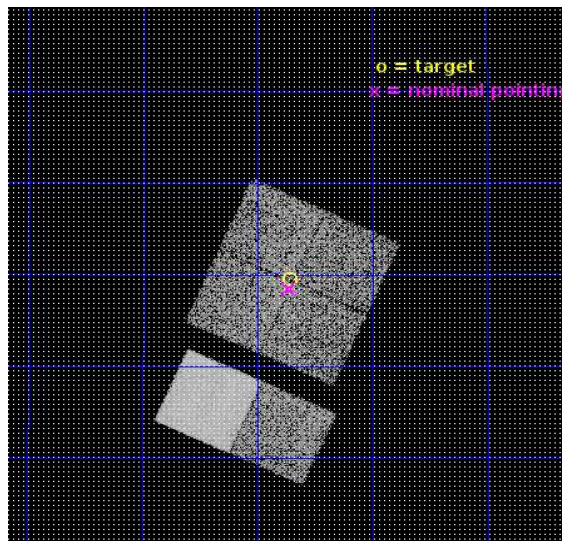
L2 Processing Date : Aug 15 2016

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1 Front

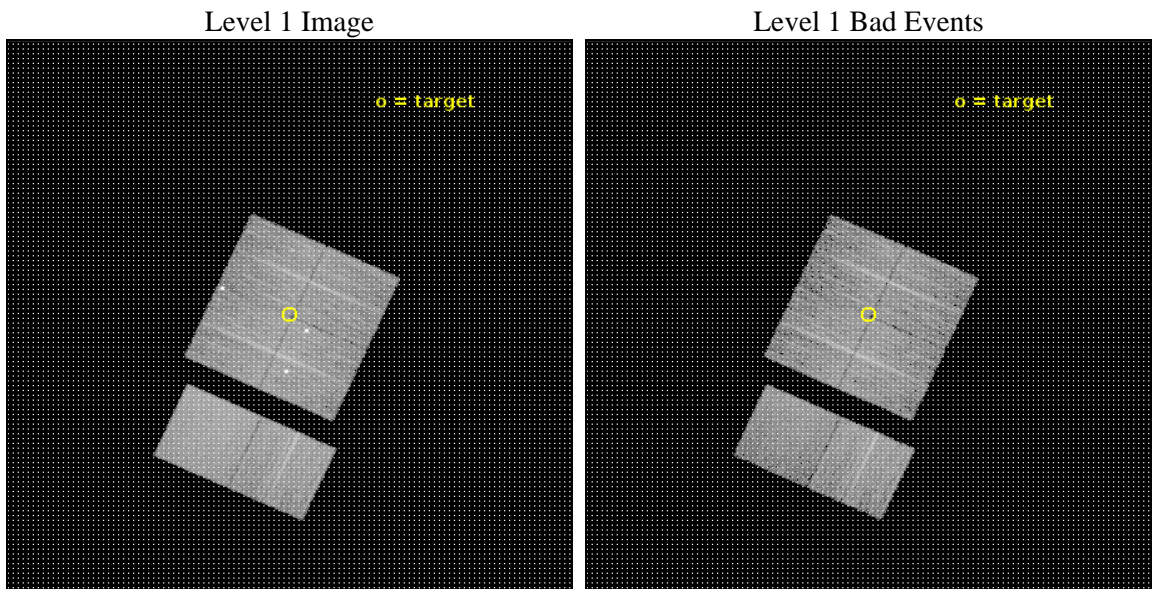
seq_num	201053	Sequence number
obs_id	17744	Observation id
title	Disentangling the gamma-ray emission towards Cygnus X: Sh2-104	Pro
observer	Eric Gotthelf	Principal investigator
object	Sh2-104	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	304.43	Observer's specified target RA [deg]
dec_targ	36.825278	Observer's specified target Dec [deg]
ra_nom	304.43101153808	Nominal RA [deg]
dec_nom	36.808174444146	Nominal Dec [deg]
roll_nom	204.34750629784	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9951.5690356493	Sum of GTIs [s]
livetime	9825.5562764044	Livetime [s]
ontime0	9951.5279957056	Sum of GTIs [s]
ontime1	9951.5690356493	Sum of GTIs [s]
ontime2	9951.6100757122	Sum of GTIs [s]
ontime3	9951.6511156559	Sum of GTIs [s]
ontime6	9951.7331956625	Sum of GTIs [s]
ontime7	9951.6921557188	Sum of GTIs [s]
l2events	66908	Number of level 2 events



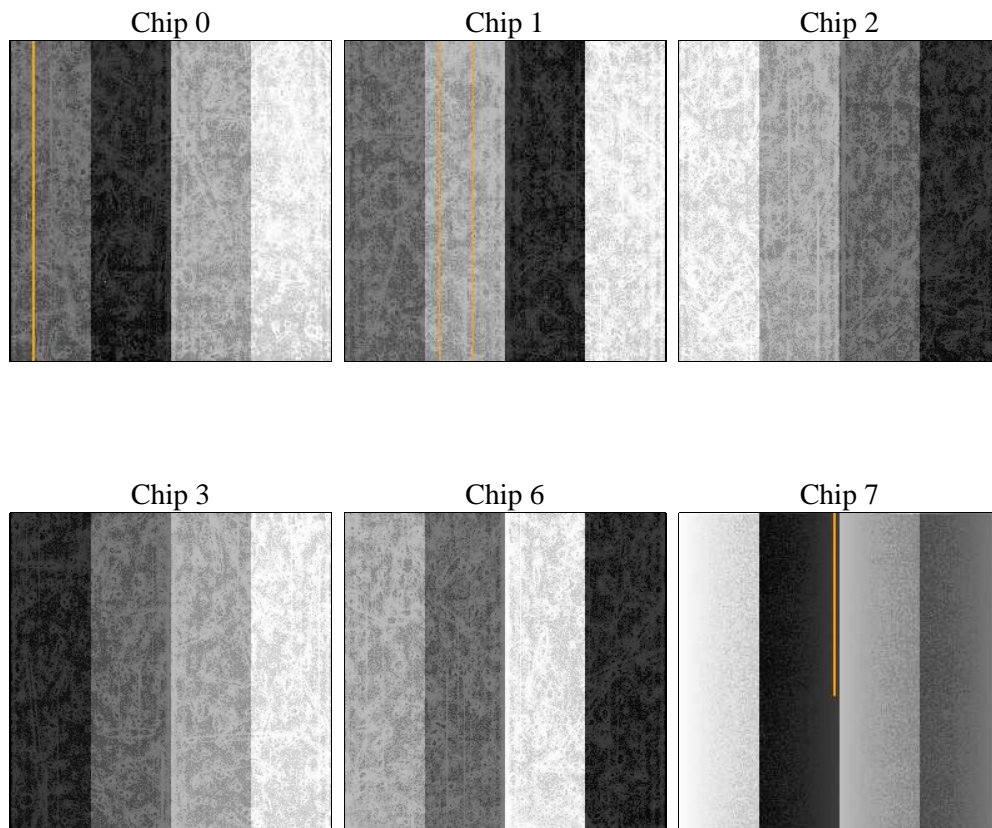
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	9951.5690356493	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	9951.5279957056	Sum of GTIs [s]
date	2016-08-15T12:05:14	Date and time of file creation	ontime1	9951.5690356493	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	9951.6100757122	Sum of GTIs [s]
			ontime3	9951.6511156559	Sum of GTIs [s]
			ontime6	9951.7331956625	Sum of GTIs [s]
			ontime7	9951.6921557188	Sum of GTIs [s]
			l1events	416038	Number of level 1 events

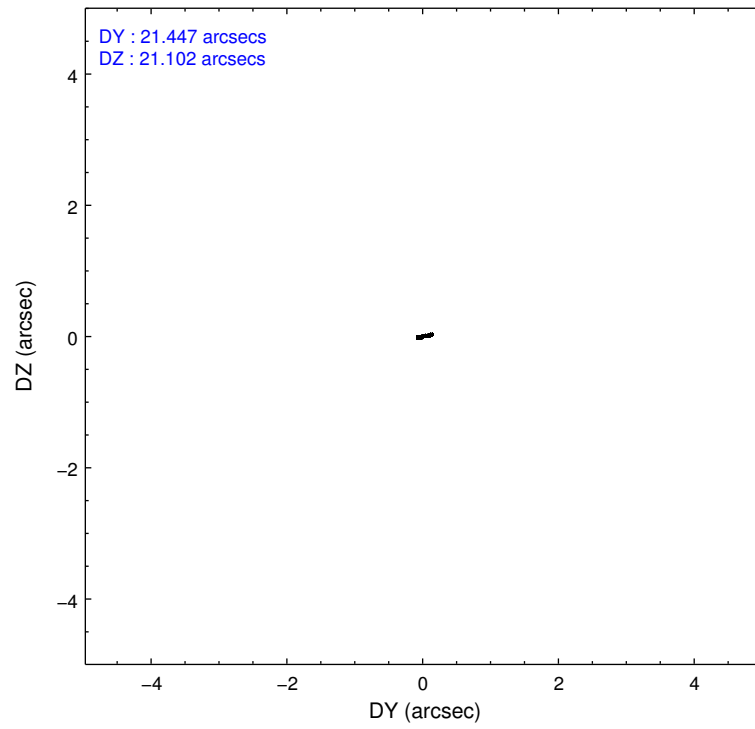
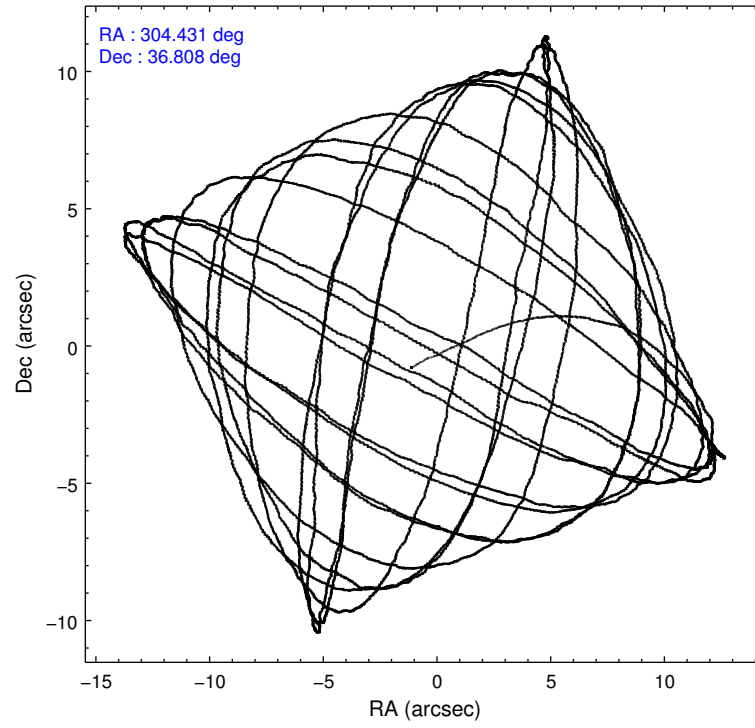
2.1.4 Events

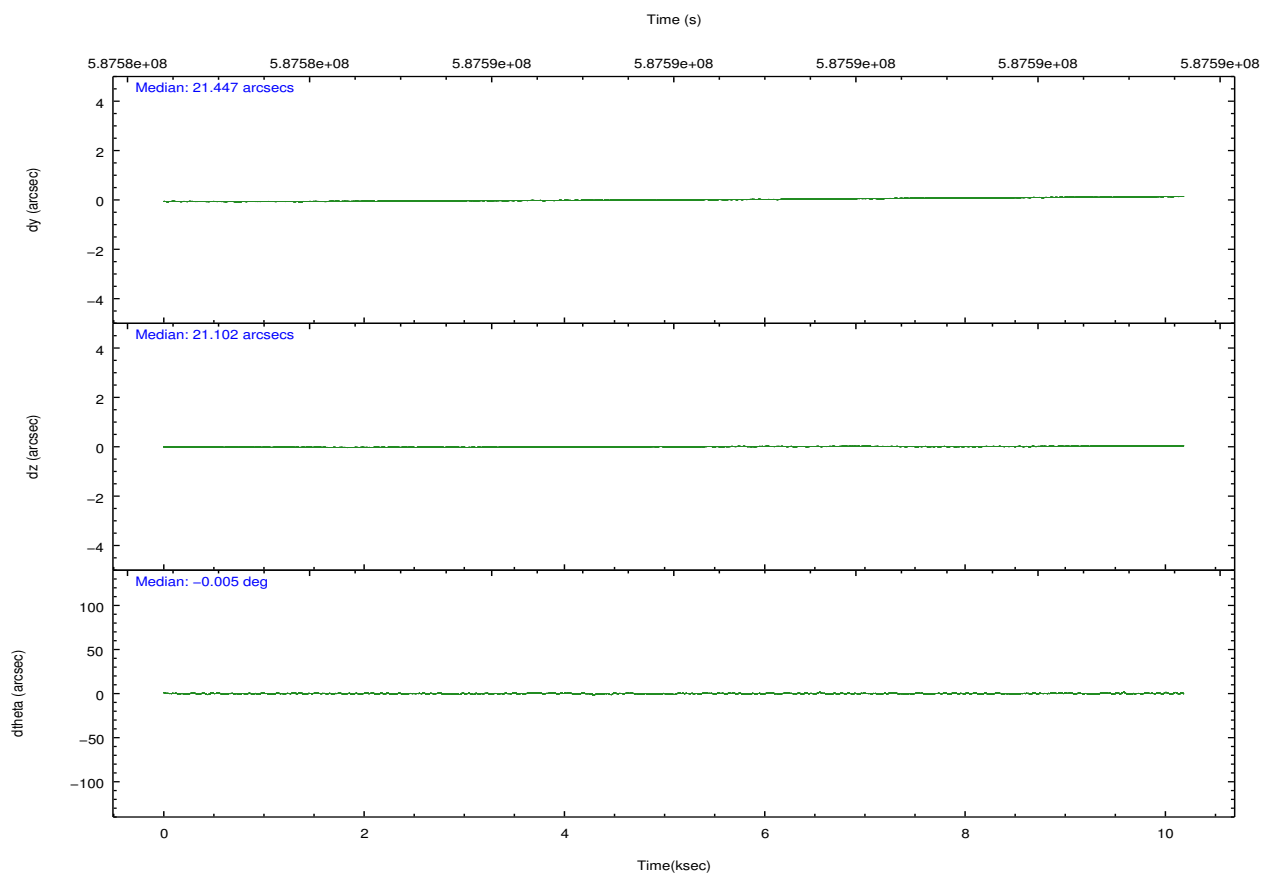
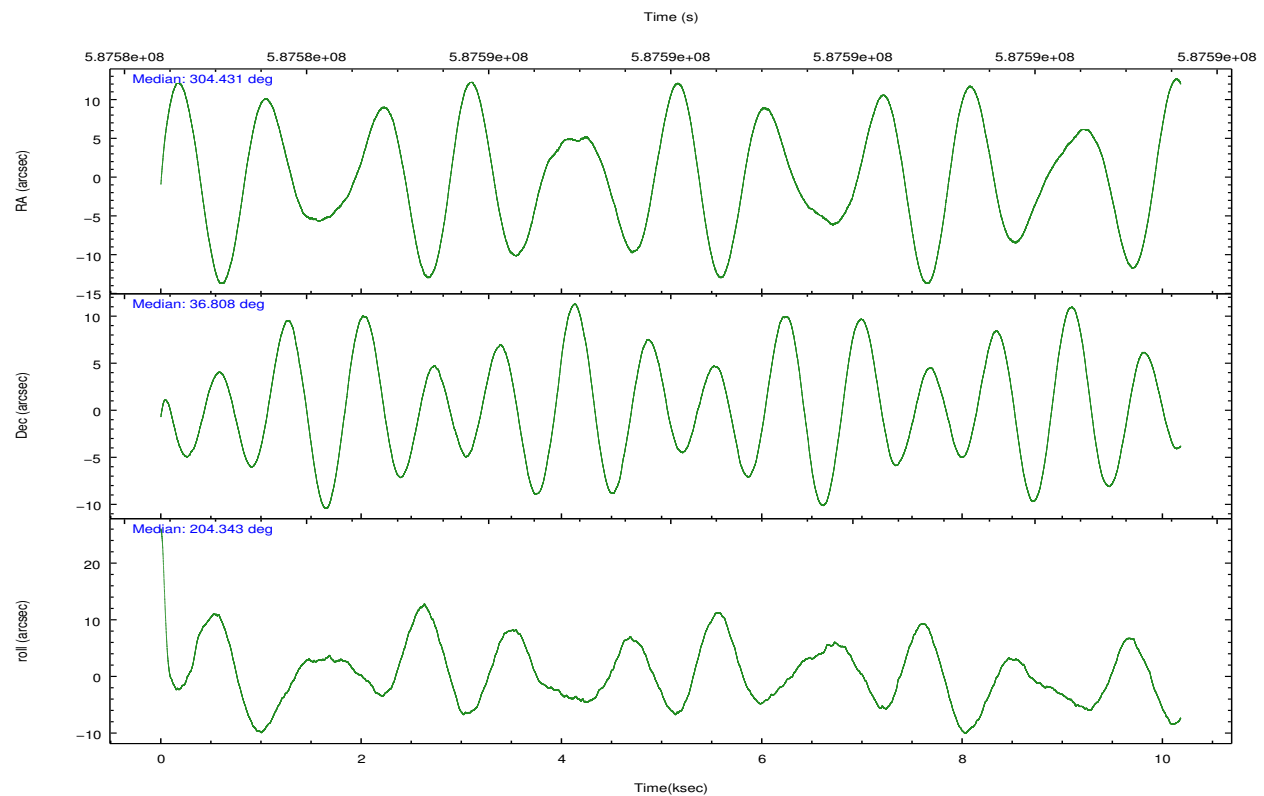
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	59850	59515	75205	67130	70653	83685	grade 0 events	2462	3096	8797	3025	2584	2785
rejected events	52915	51091	61887	56636	62893	48094		4%	5%	11%	4%	3%	3%
rejected %	88%	85%	82%	84%	89%	57%	grade 1 events	38	27	77	45	47	104
								0%	0%	0%	0%	0%	0%
							grade 2 events	1630	2010	1662	4477	1913	7580
								2%	3%	2%	6%	2%	9%
							grade 3 events	781	696	699	732	670	2625
								1%	1%	0%	1%	0%	3%
							grade 4 events	637	738	753	726	675	2589
								1%	1%	1%	1%	0%	3%
							grade 5 events	2654	2796	2507	3099	3069	8034
								4%	4%	3%	4%	4%	9%
							grade 6 events	1428	1886	1415	1541	1922	20045
								2%	3%	1%	2%	2%	23%
							grade 7 events	50220	48266	59295	53485	59773	39923
								83%	81%	78%	79%	84%	47%

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	304.450950	304.4310115380801	CCD I2 on	Y	Y
[deg] Pointing Dec	36.830687	36.80817444414599	CCD I3 on	Y	Y
[deg] Pointing Roll	204.126839	204.3475062978352	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	O2	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	587583095.184000	587581943.04453	CCD S5 on	N	N
Observation start date	2016-08-14T17:30:27	2016-08-14T17:12:23	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	587593095.184000	587594004.22023	On-chip summing requested	N	N
Observation end date	2016-08-14T20:17:07	2016-08-14T20:33:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



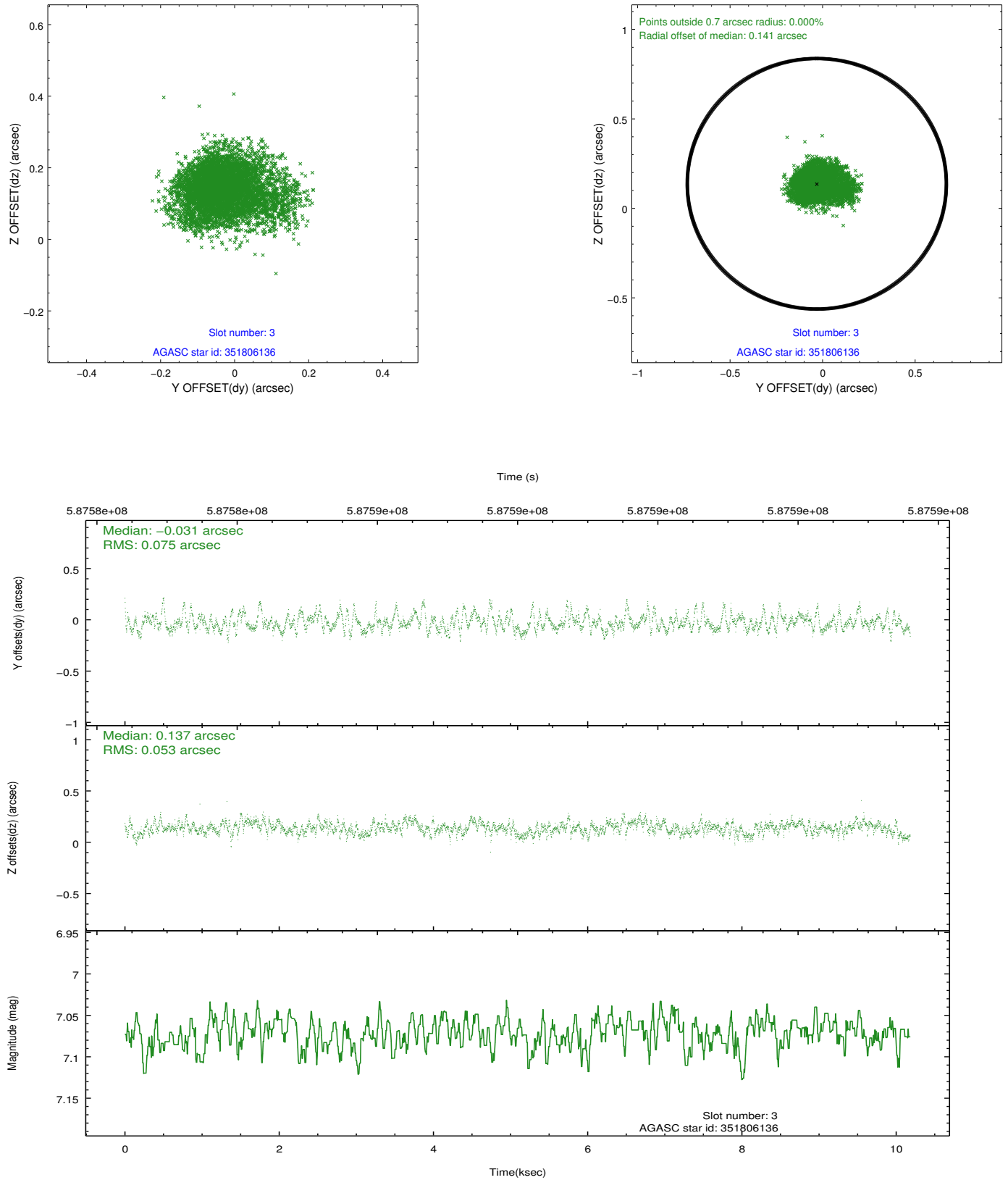


Slot Statistics

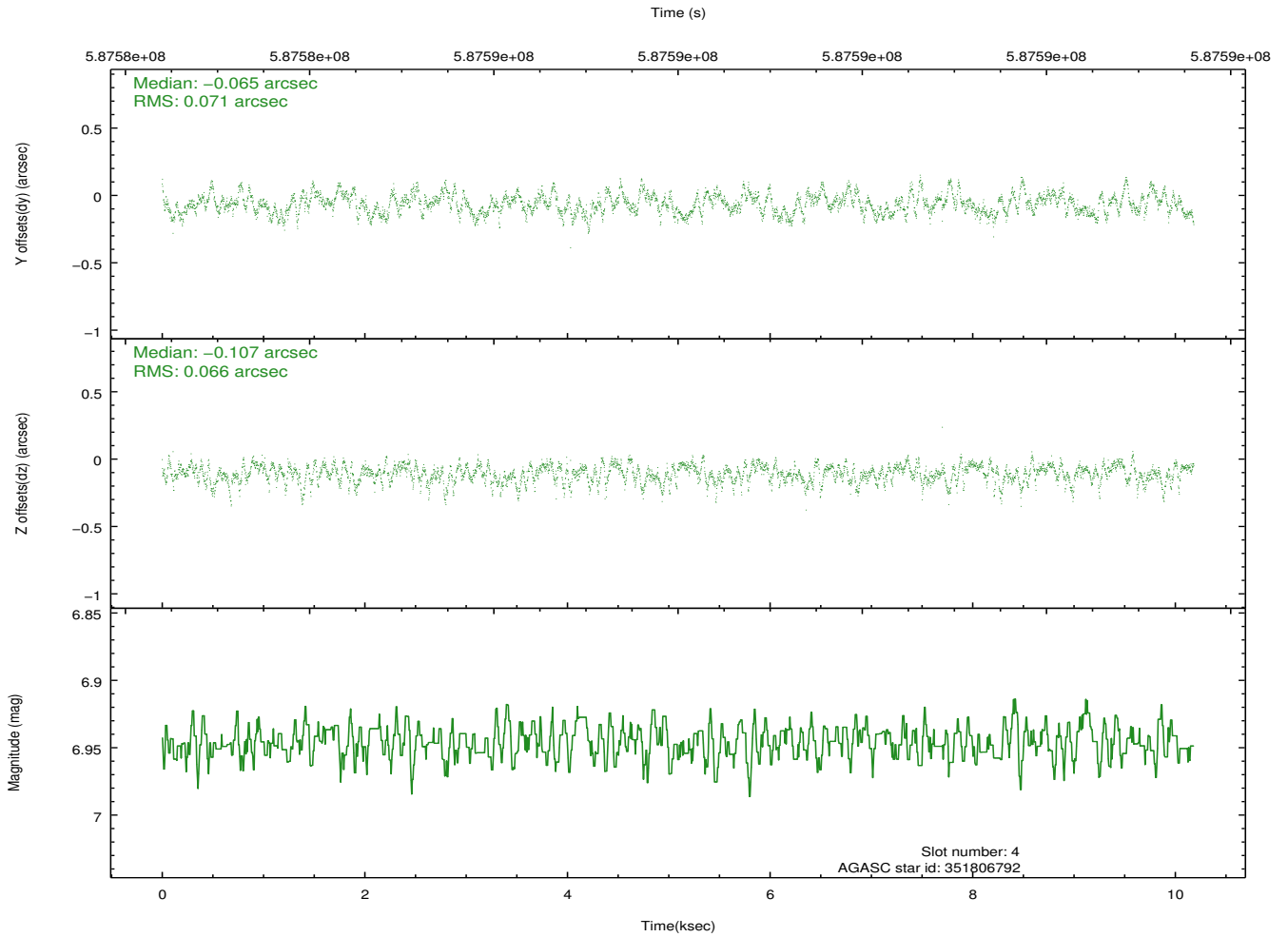
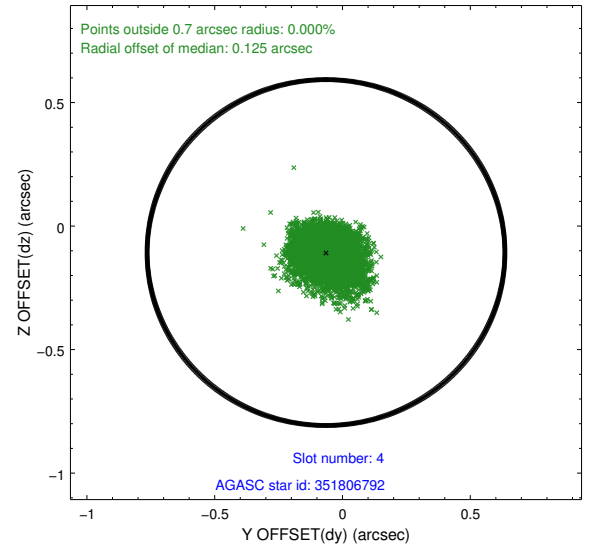
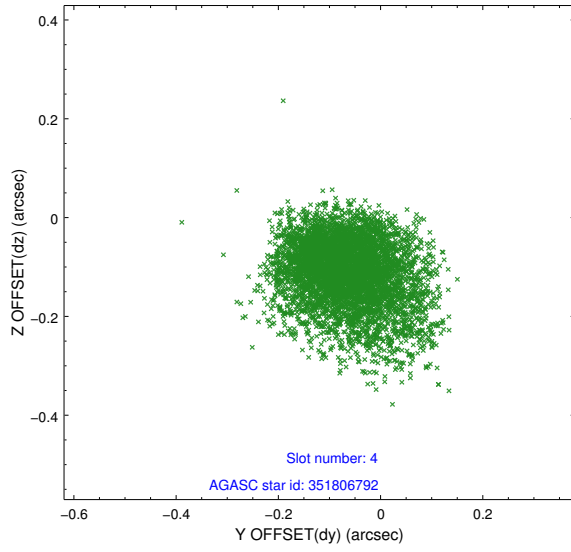
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.28	2484	0.123	-0.099	0.007	0.011	0.000000	0.000000	917.99	-844.91
1	FID		ACIS-I-5	7.27	2484	-0.441	0.052	0.006	0.010	0.000000	0.000000	-1830.50	1052.32
2	FID		ACIS-I-6	7.30	2484	0.227	0.118	0.006	0.011	0.000000	0.000000	382.94	1697.60
3	GUIDE	used	351806136	7.07	4968	-0.031	0.137	0.094	0.166	304.951337	37.132517	-1755.94	-407.60
4	GUIDE	used	351806792	6.95	4968	-0.065	-0.107	0.102	0.169	304.117302	37.056402	542.23	-1134.78
5	GUIDE	used	351811528	8.38	4963	0.041	0.013	0.127	0.204	304.011218	36.824564	1165.06	-500.33
6	GUIDE	used	351809872	8.04	4963	-0.305	-0.445	0.105	0.174	304.614845	36.254342	414.05	2087.52
7	GUIDE	used	413020600	9.15	4965	0.350	0.404	0.242	0.345	304.809847	37.660913	-2154.92	-2310.50

2.4 Star Slots

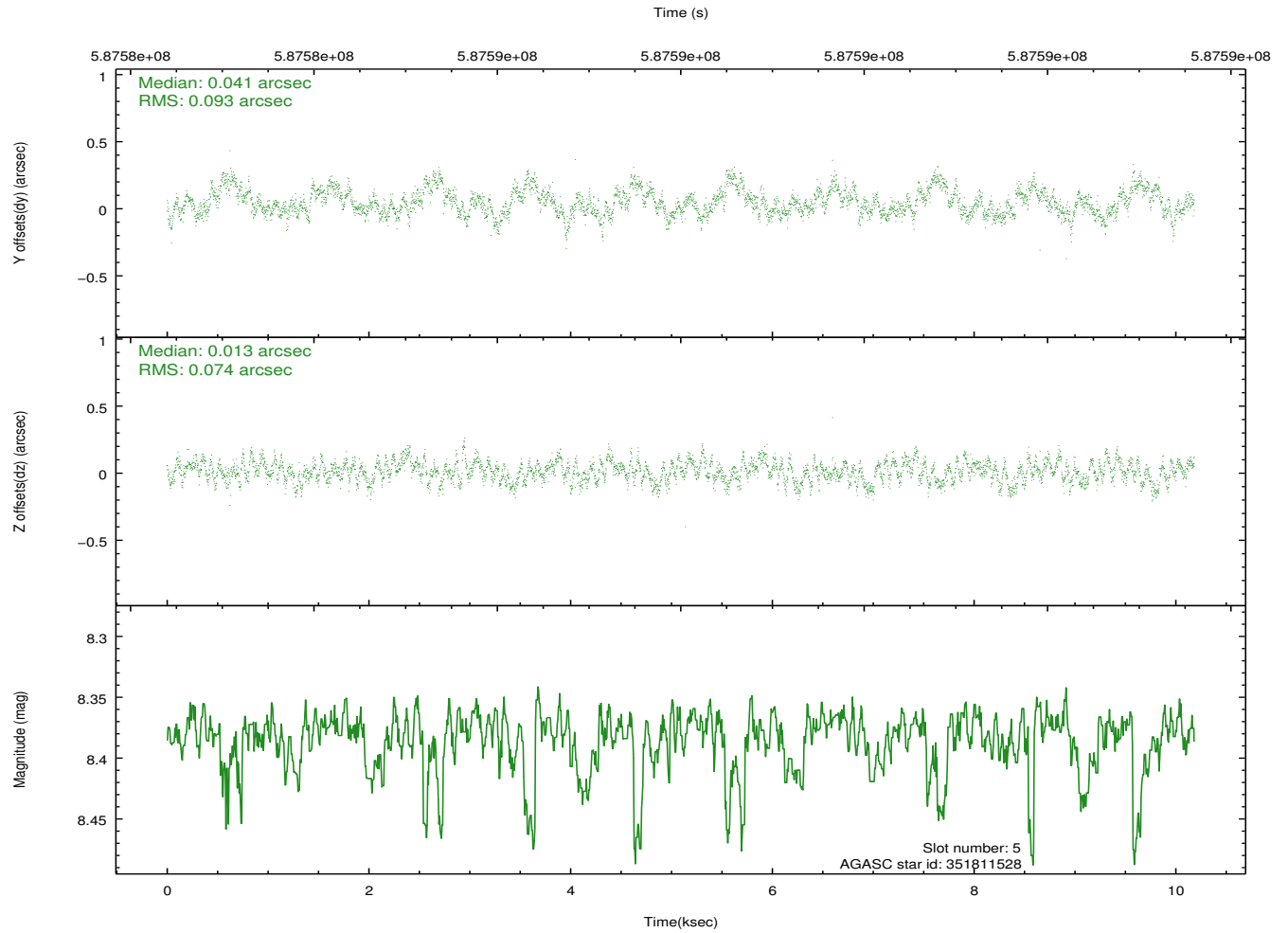
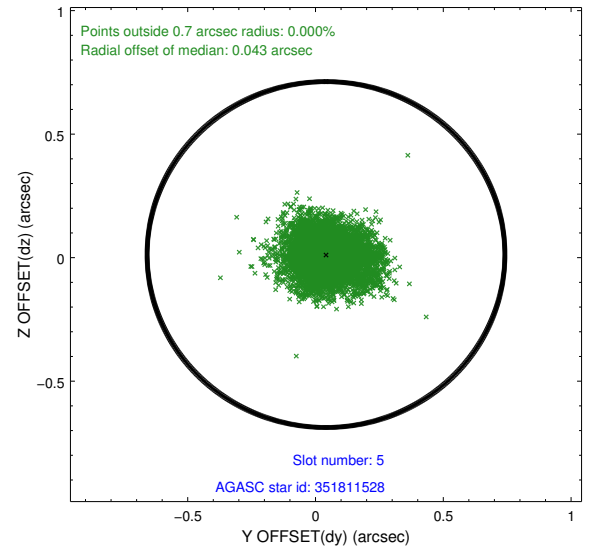
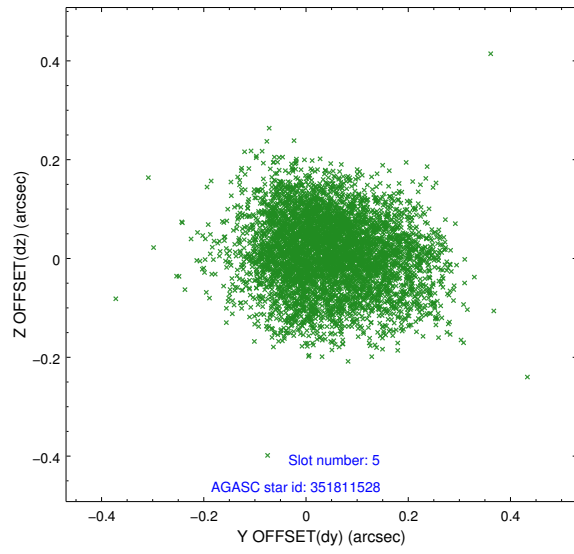
2.4.1 Slot 3



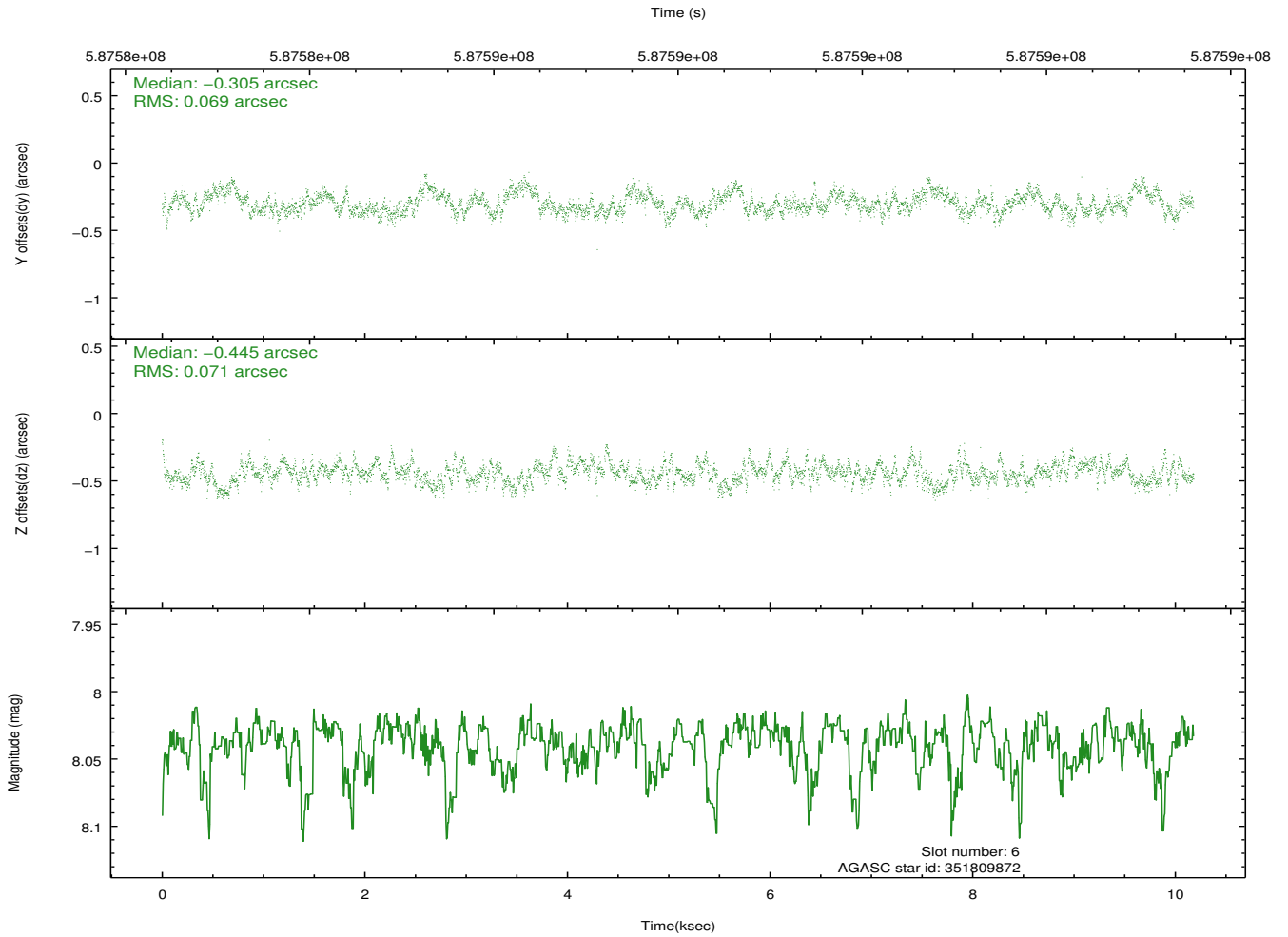
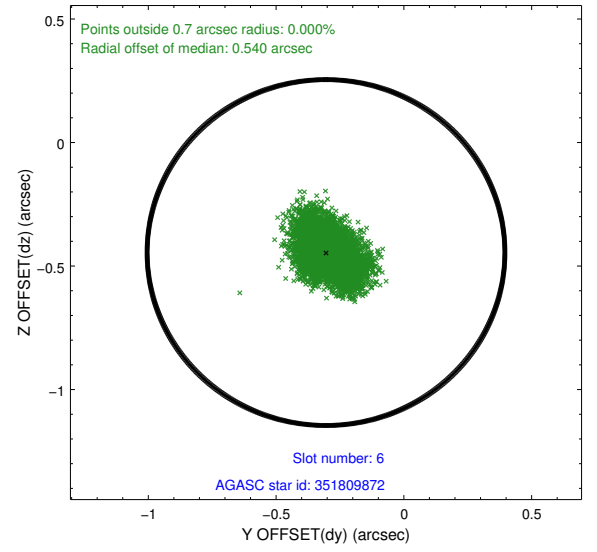
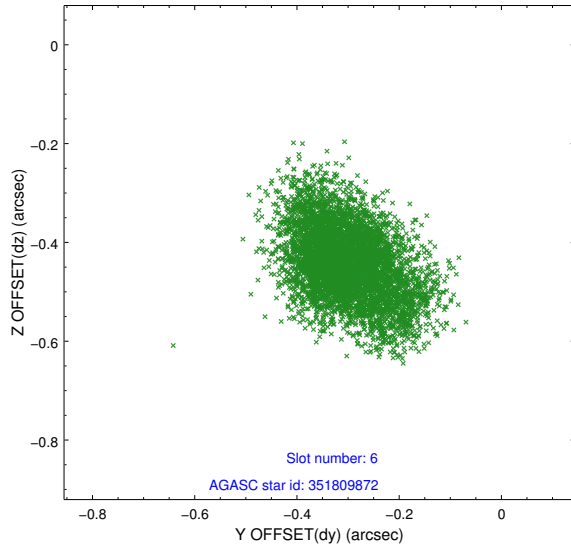
2.4.2 Slot 4



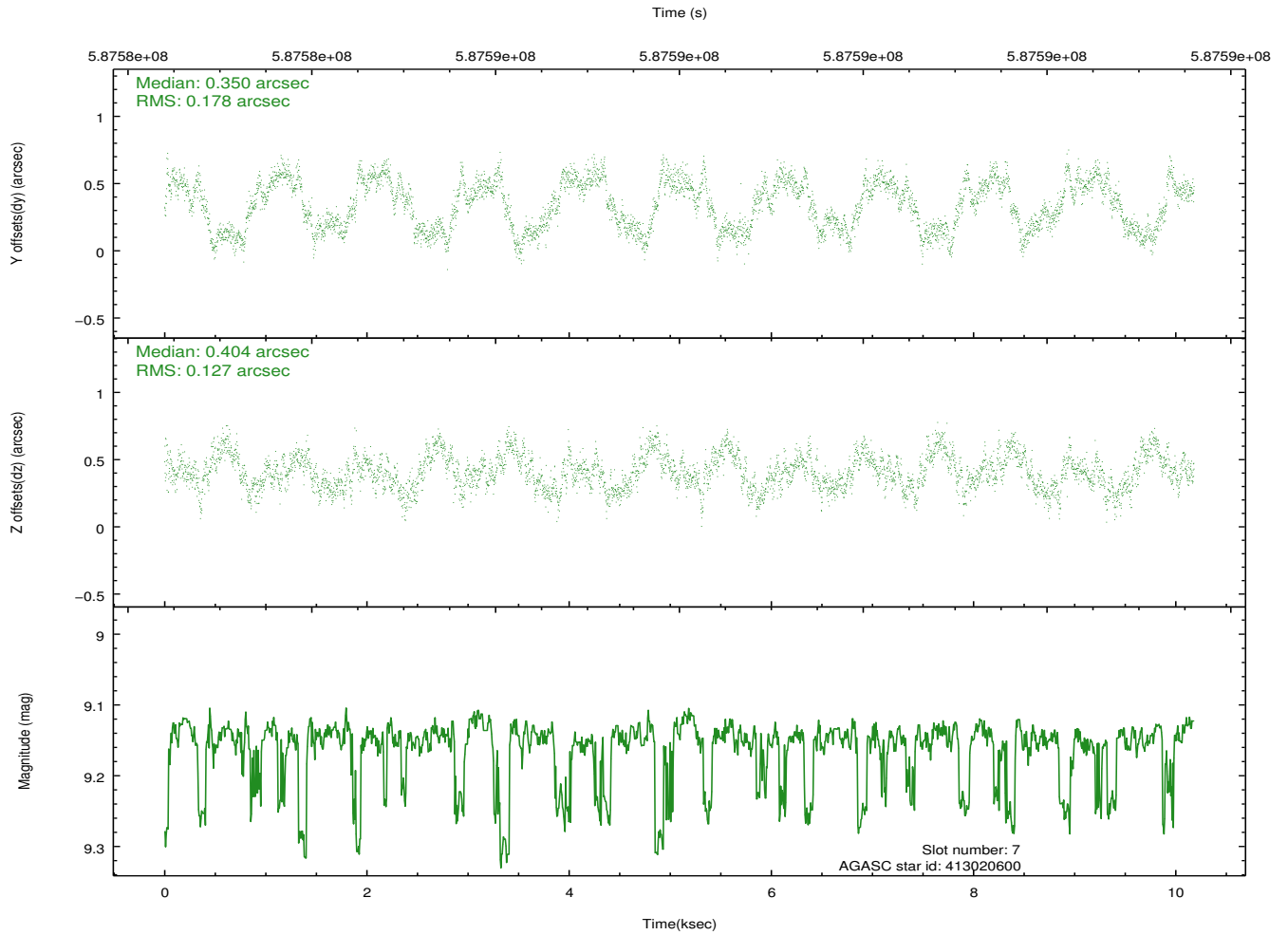
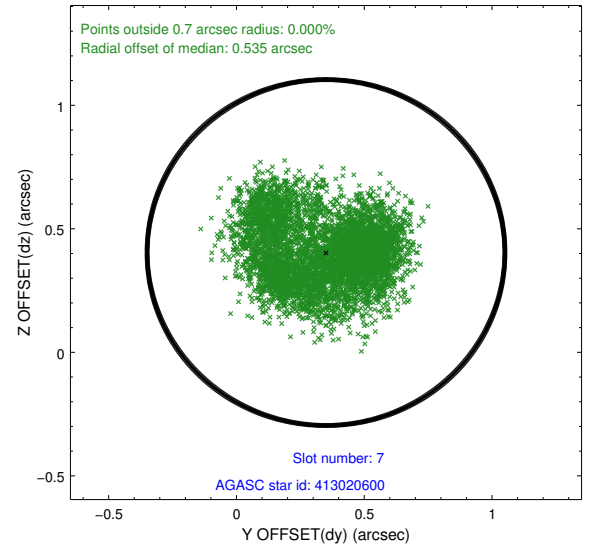
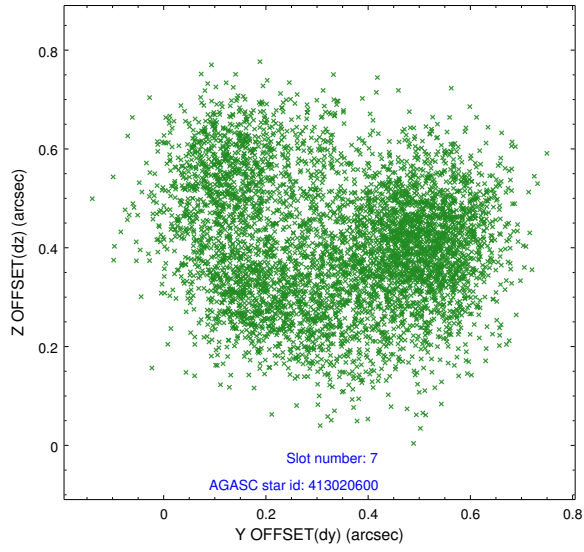
2.4.3 Slot 5



2.4.4 Slot 6

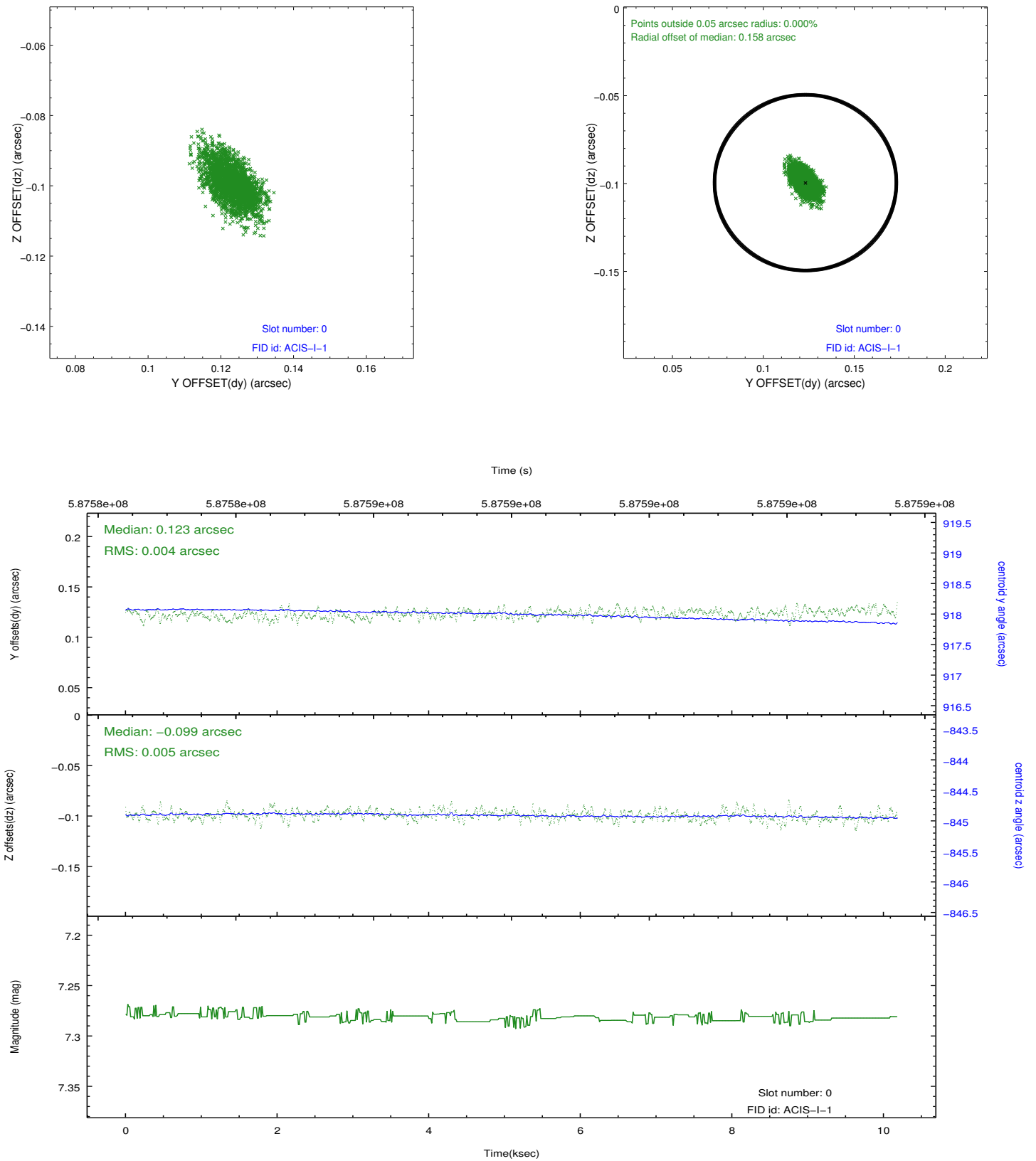


2.4.5 Slot 7

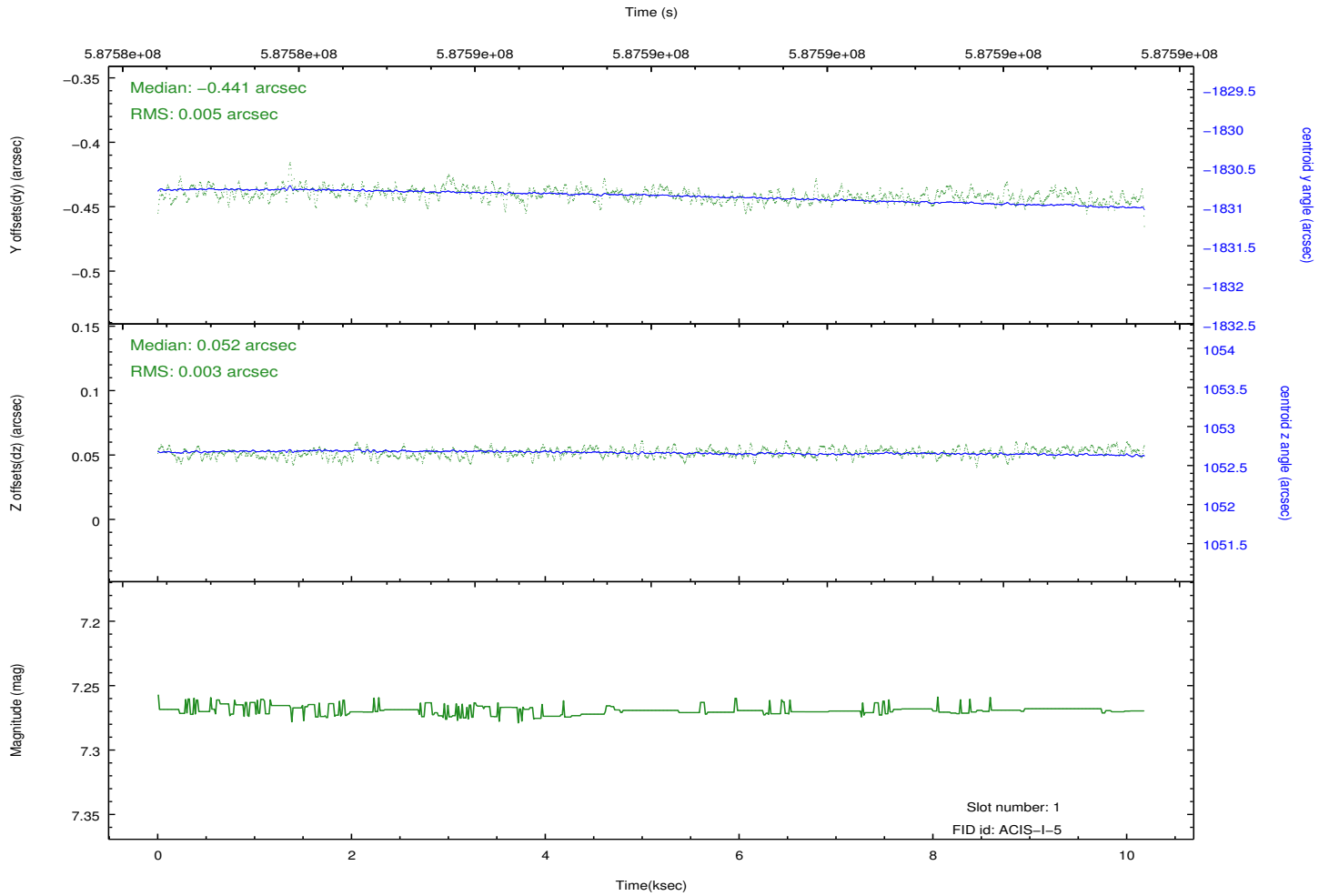
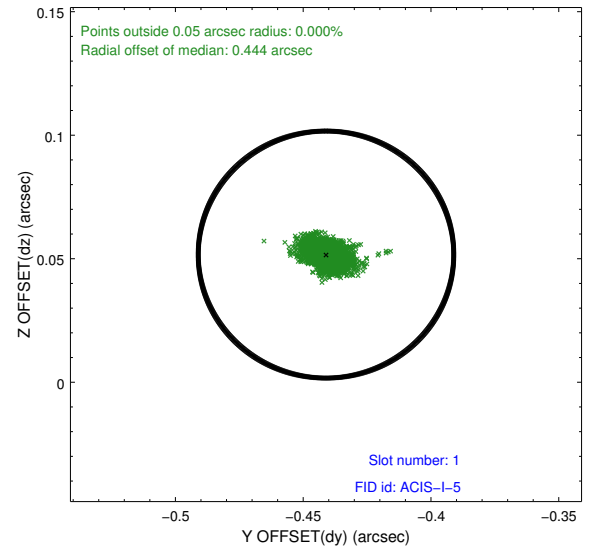
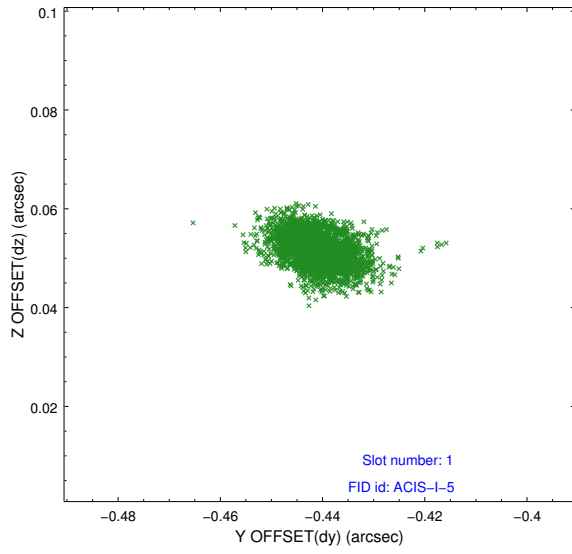


2.5 FID Slots

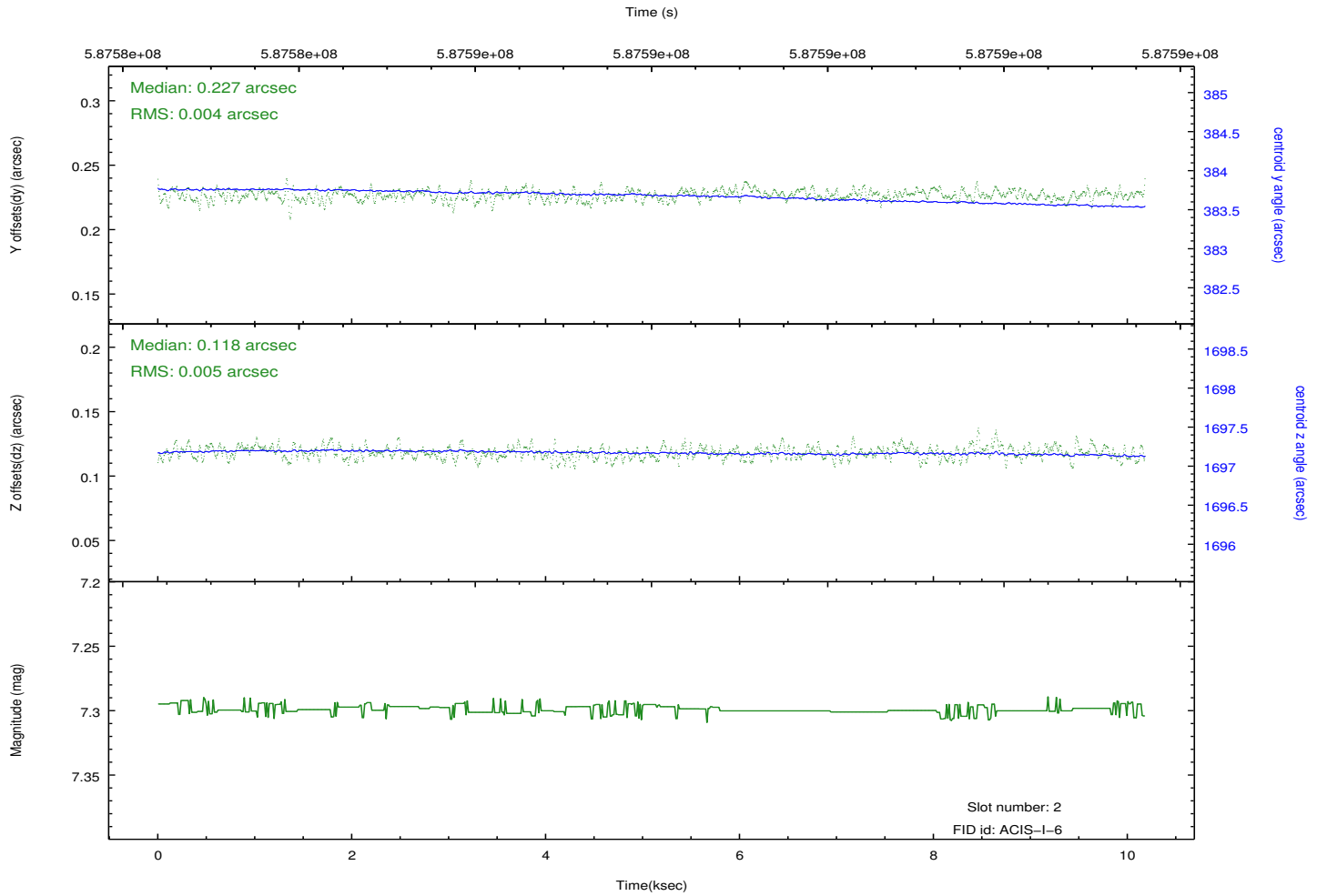
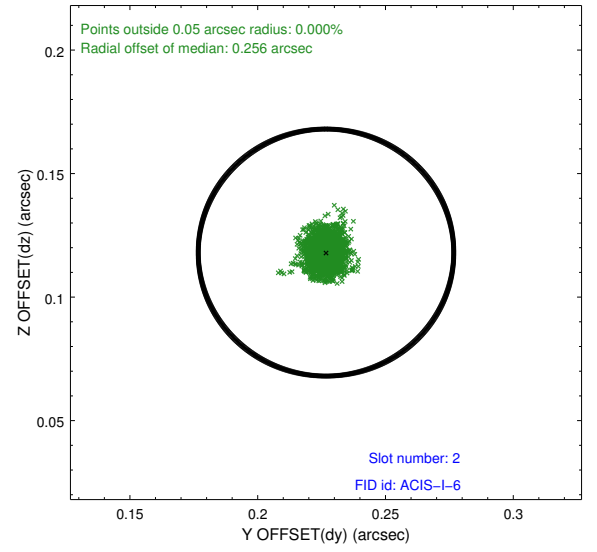
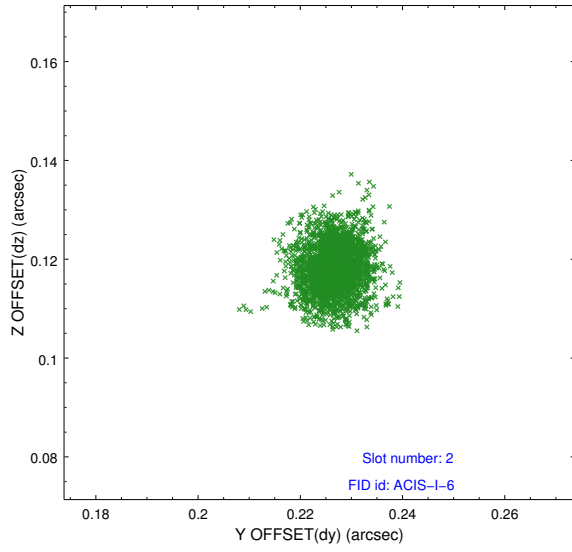
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2016.08.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9515690356493

A.2 Comments