

V&V Reference Report

L2 ASCDS Version : 10.6.4

Observation 21064 - L2 Version 1
Chandra X-Ray Center

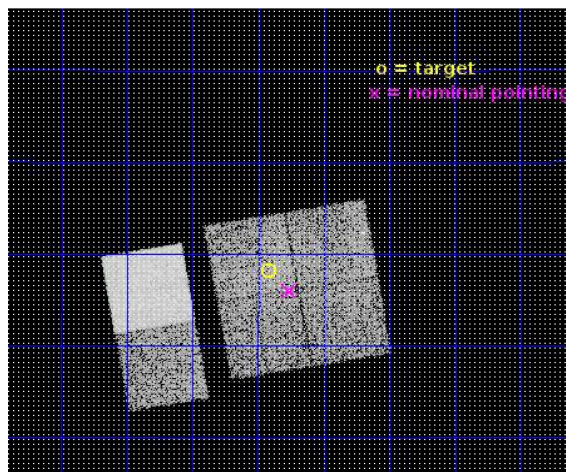
L2 Processing Date : Jul 18 2018

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

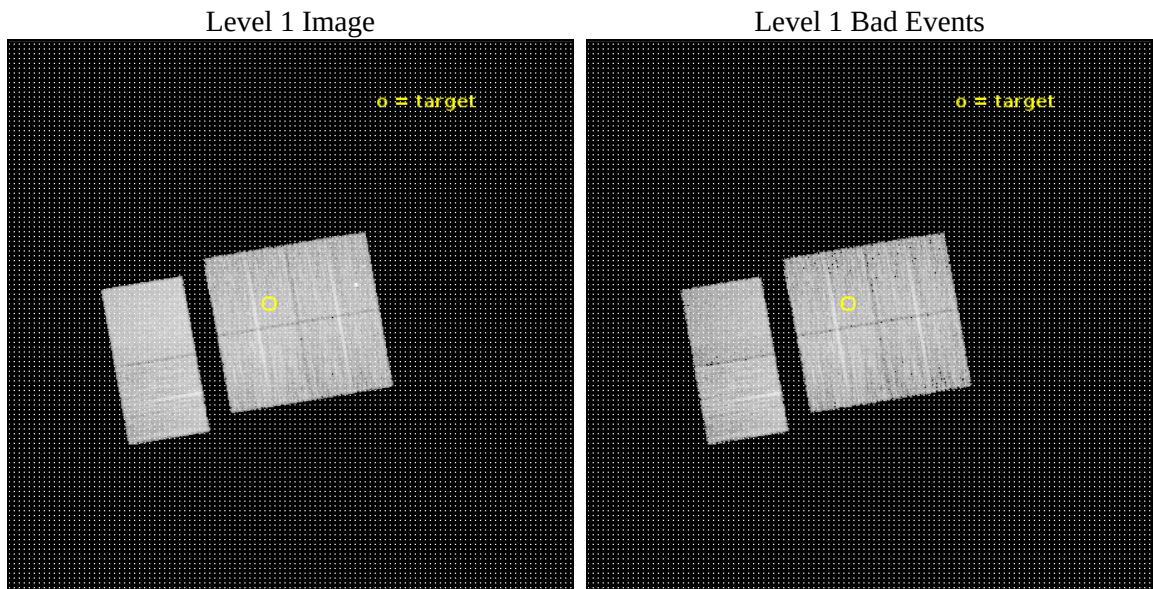
seq_num	801809	Sequence number
obs_id	21064	Observation id
title	Witnessing the culmination of structure formation in the Universe	
observer	Stefano Etori	Principal investigator
object	PSZ2 G218.59+71.31	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.479167	Observer's specified target RA [deg]
dec_targ	23.803889	Observer's specified target Dec [deg]
ra_nom	172.44029521839	Nominal RA [deg]
dec_nom	23.766948398928	Nominal Dec [deg]
roll_nom	260.2243703701	Nominal Roll [deg]
revision	1	Processing version of data
ontime	9955.200148344	Sum of GTIs [s]
livetime	9829.1414097638	Livetime [s]
ontime0	9955.200148344	Sum of GTIs [s]
ontime1	9955.200148344	Sum of GTIs [s]
ontime2	9955.200148344	Sum of GTIs [s]
ontime3	9955.200148344	Sum of GTIs [s]
ontime6	9955.200148344	Sum of GTIs [s]
ontime7	9955.200148344	Sum of GTIs [s]
l2events	77979	Number of level 2 events



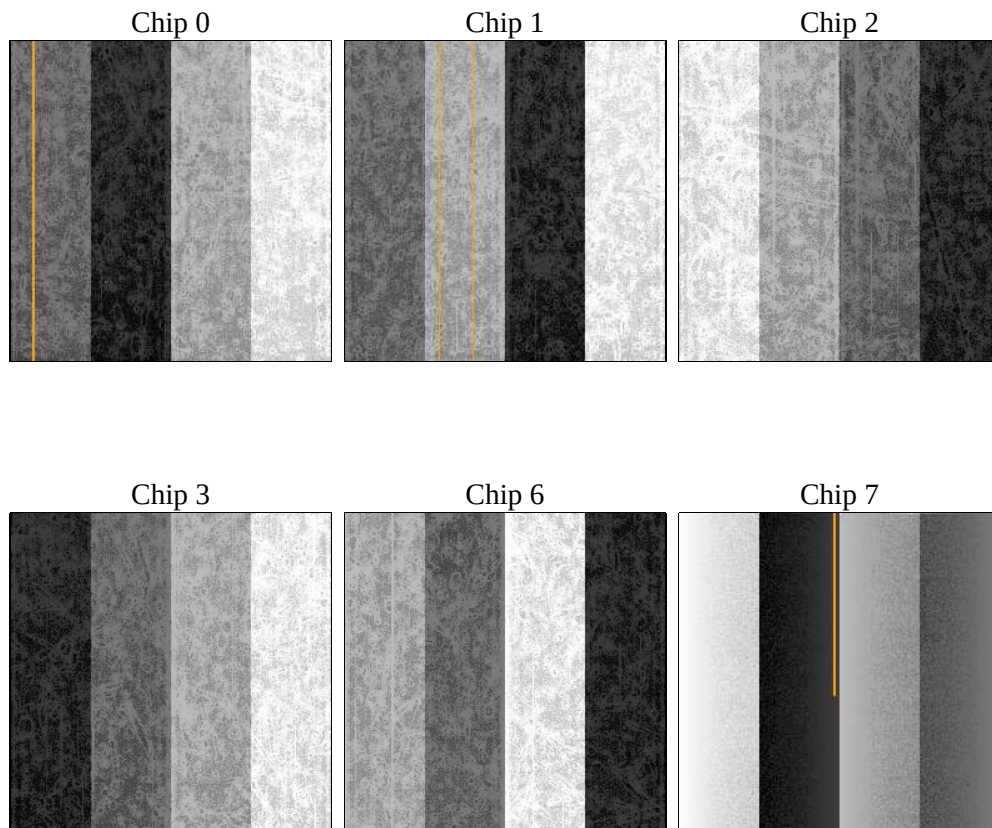
2 OBI

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	10.6.4	Processing system revision	ontime	9955.200148344	Sum of GTIs [s]
caldsver	4.7.8	 	ontime0	9955.200148344	Sum of GTIs [s]
date	2018-07-18T21:12:45	Date and time of file creation	ontime1	9955.200148344	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	9955.200148344	Sum of GTIs [s]
			ontime3	9955.200148344	Sum of GTIs [s]
			ontime6	9955.200148344	Sum of GTIs [s]
			ontime7	9955.200148344	Sum of GTIs [s]
			l1events	451621	Number of level 1 events

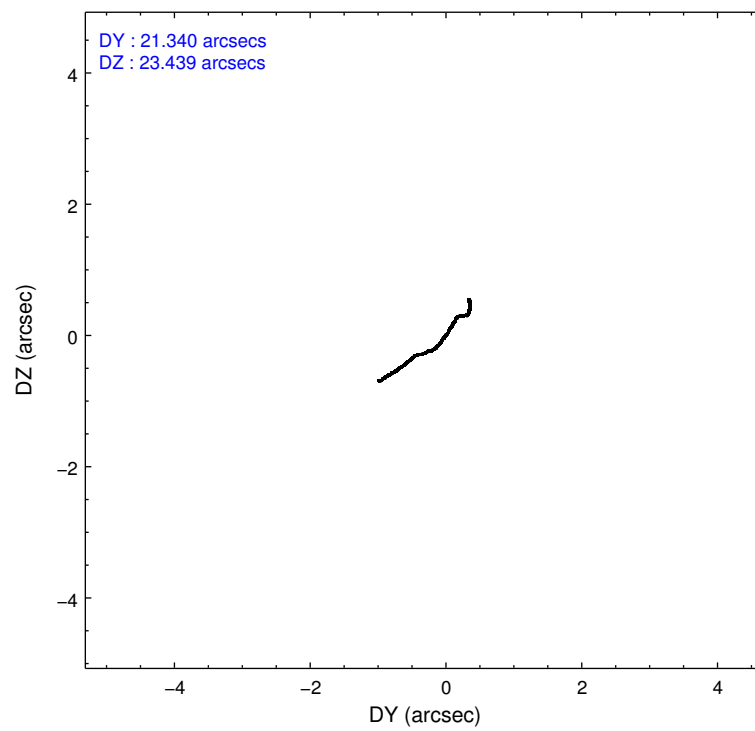
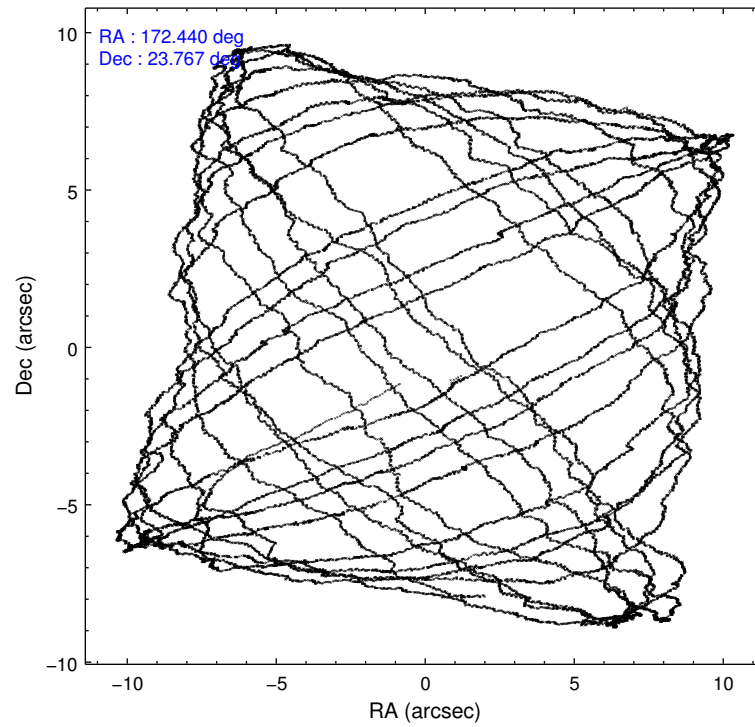
2.1.4 Events

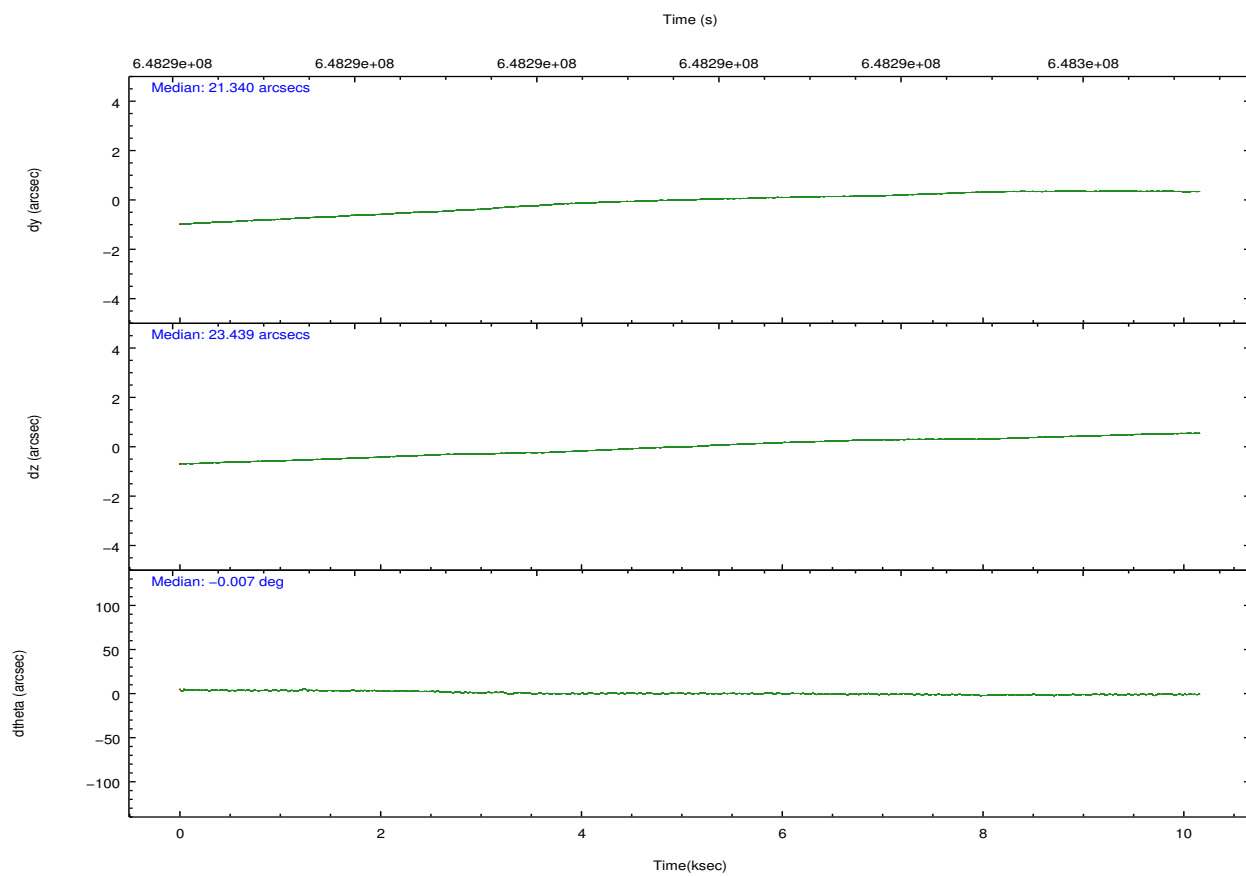
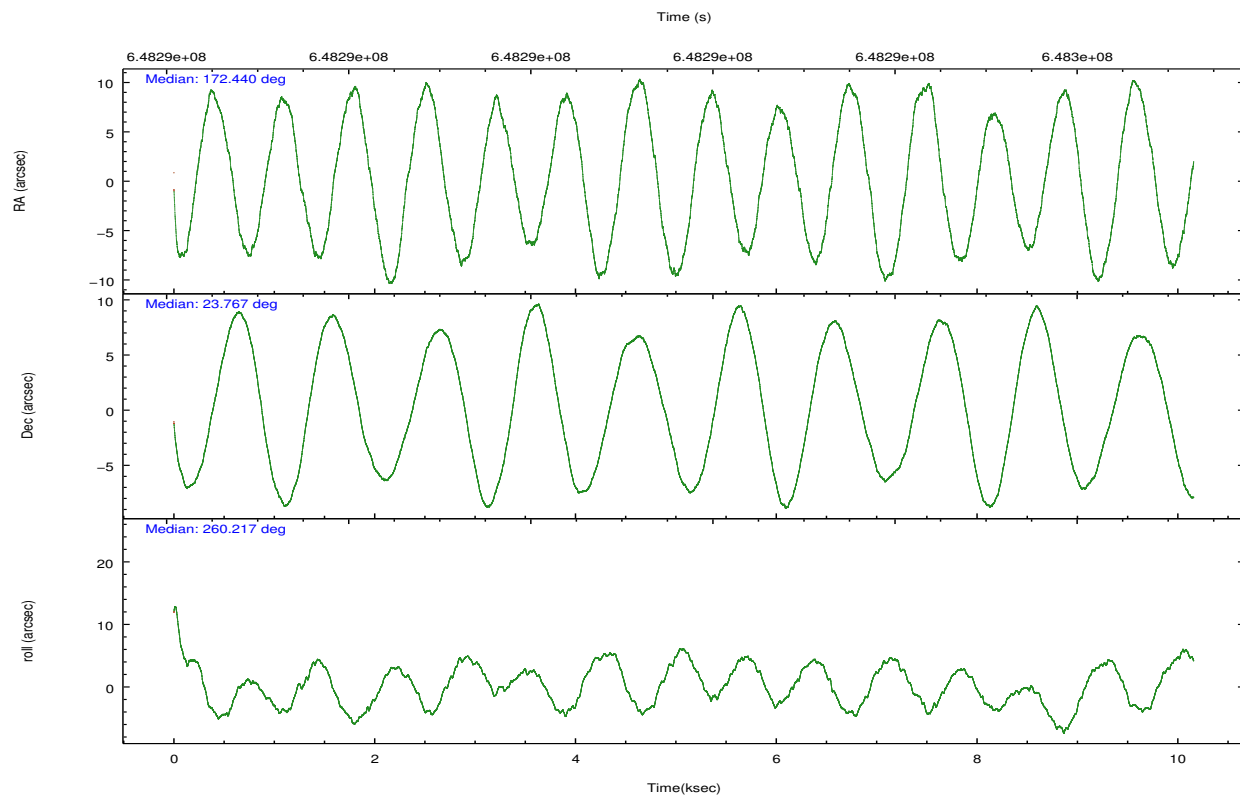
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	65576	68282	75242	70495	76920	95106	grade 0 events	2941	4334	3106	4075	2799	3523
rejected events	57100	57642	66747	61065	68524	53873		4%	6%	4%	5%	3%	3%
rejected %	87%	84%	88%	86%	89%	56%	grade 1 events	33	46	41	43	38	149
								0%	0%	0%	0%	0%	0%
							grade 2 events	2151	2493	2131	1902	2026	8938
								3%	3%	2%	2%	2%	9%
							grade 3 events	890	903	806	884	754	3160
								1%	1%	1%	1%	0%	3%
							grade 4 events	797	857	844	852	832	3259
								1%	1%	1%	1%	1%	3%
							grade 5 events	3114	3352	3012	3482	3613	9655
								4%	4%	4%	4%	4%	10%
							grade 6 events	1698	2056	1610	1718	1990	22364
								2%	3%	2%	2%	2%	23%
							grade 7 events	53952	54241	63692	57539	64868	44058
								82%	79%	84%	81%	84%	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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	172.429802	172.4402952183902	CCD I2 on	Y	Y
[deg] Pointing Dec	23.792834	23.76694839892847	CCD I3 on	Y	Y
[deg] Pointing Roll	260.019916	260.2243703701006	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)	648286760.184000	648285744.52586	CCD S5 on	N	N
Observation start date	2018-07-18T07:38:11	2018-07-18T07:22:24	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	648296760.184000	648297813.90158	On-chip summing requested	N	N
Observation end date	2018-07-18T10:24:51	2018-07-18T10:43:33	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



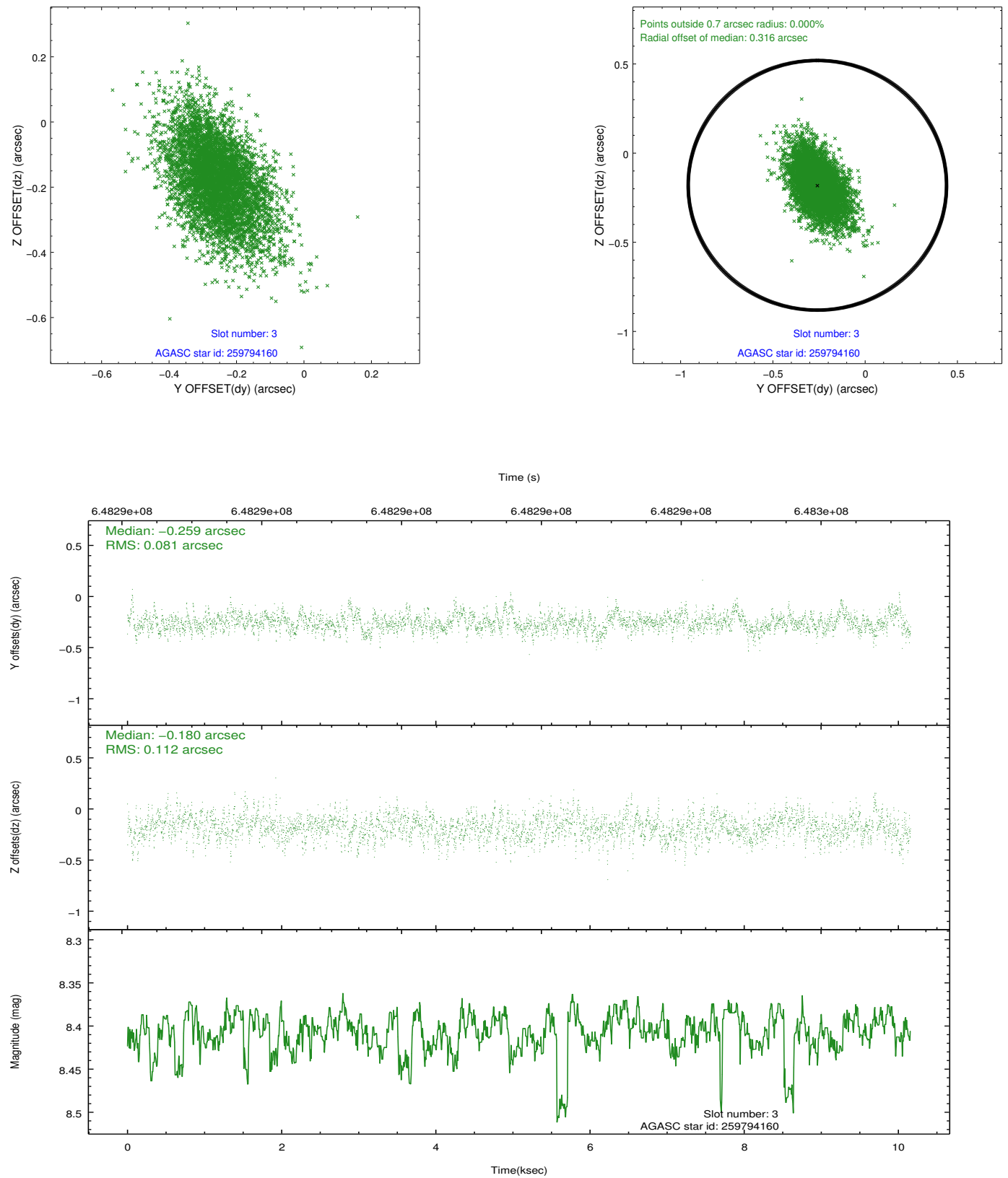


Slot Statistics

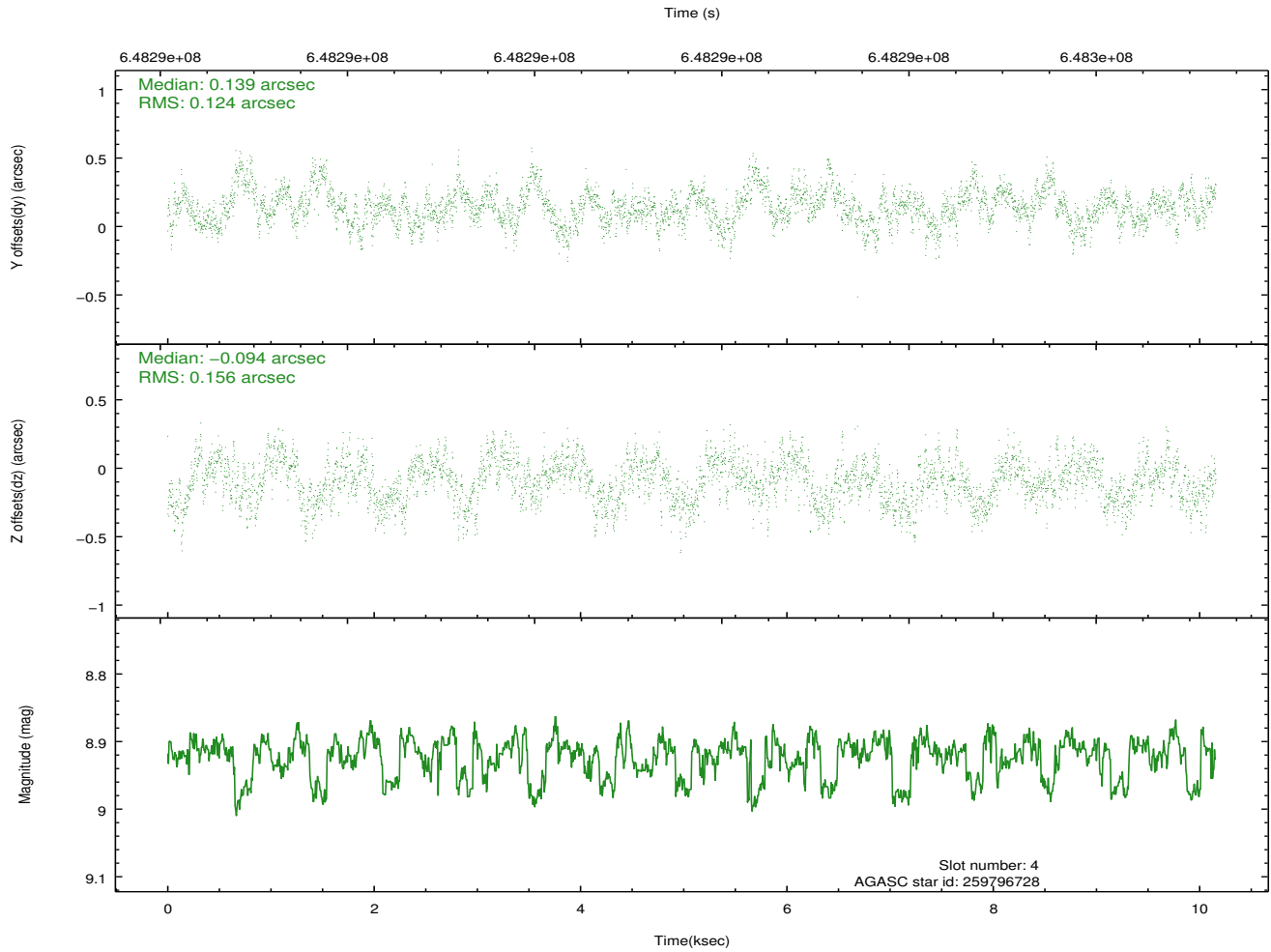
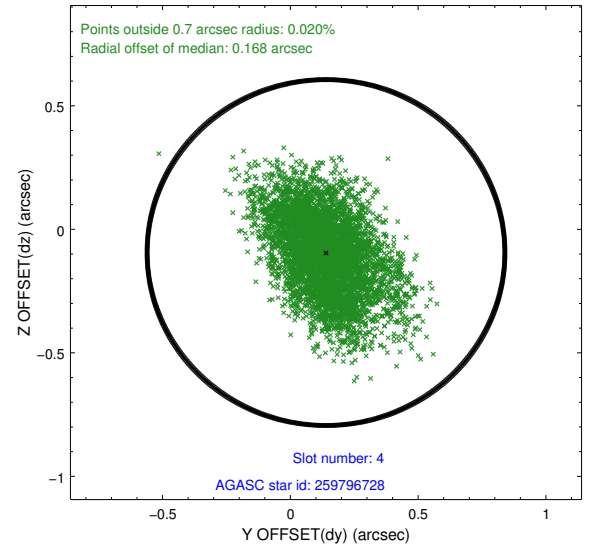
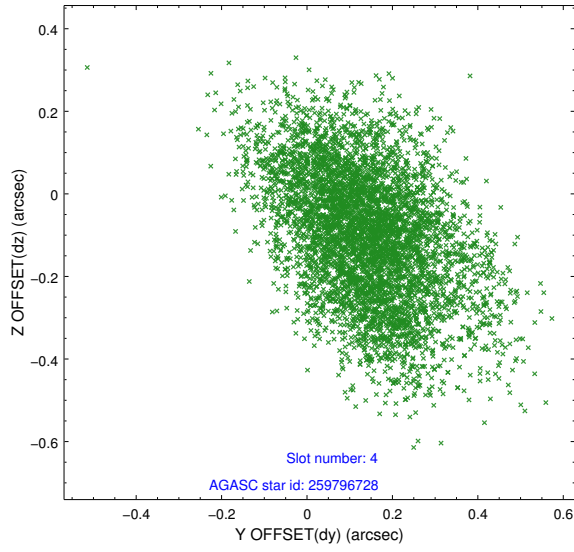
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.09	2478	1.000	0.044	0.032	0.012	0.028	0.000000	0.000000	918.18	-847
1	FID		ACIS-I-5	7.07	2477	1.000	-0.385	0.009	0.013	0.021	0.000000	0.000000	-1830.24	1049
2	FID		ACIS-I-6	7.10	2478	1.000	0.251	0.030	0.016	0.028	0.000000	0.000000	383.14	1695
3	GUIDE	used	259794160	8.41	4952	1.000	-0.259	-0.180	0.142	0.252	172.933537	23.871242	-568.21	1583
4	GUIDE	used	259796728	8.92	4952	1.000	0.139	-0.094	0.212	0.351	171.857755	23.321466	1995.77	-1568
5	GUIDE	used	259798040	6.76	4955	1.000	-0.274	-0.027	0.129	0.239	172.965175	24.311443	-2146.09	1404
6	GUIDE	used	259797600	8.81	4951	1.000	0.162	-0.179	0.189	0.320	172.029681	23.191855	2358.53	-931
7	GUIDE	used	259785664	9.29	4950	1.000	0.221	0.486	0.206	0.345	171.968854	24.522123	-2325.14	-1942

2.4 Star Slots

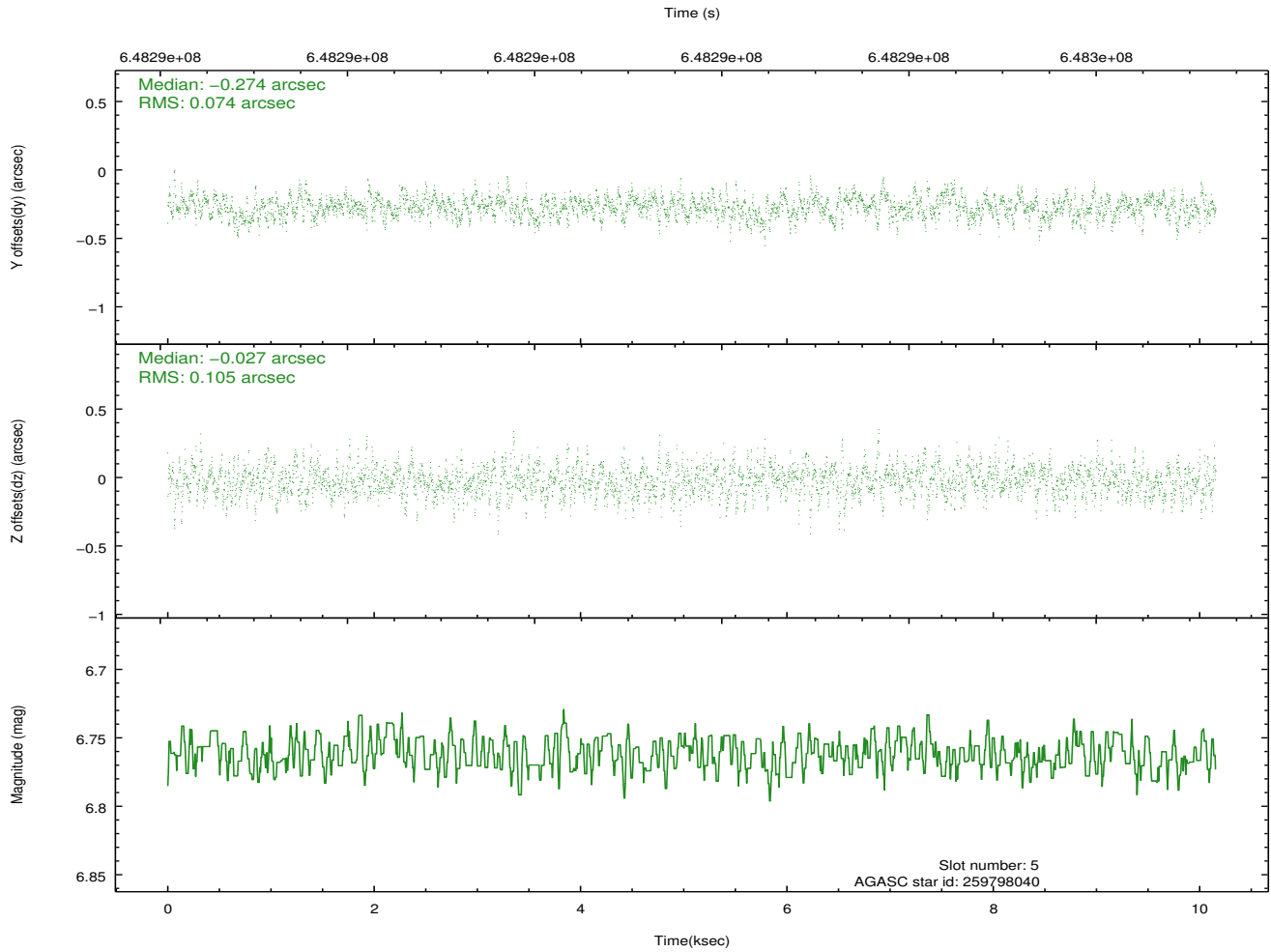
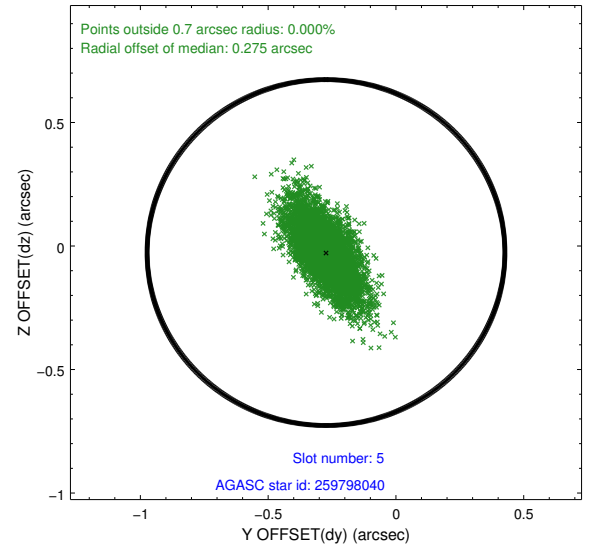
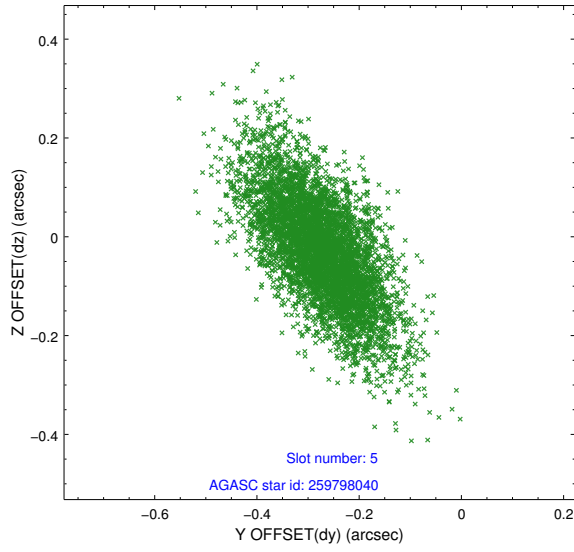
2.4.1 Slot 3



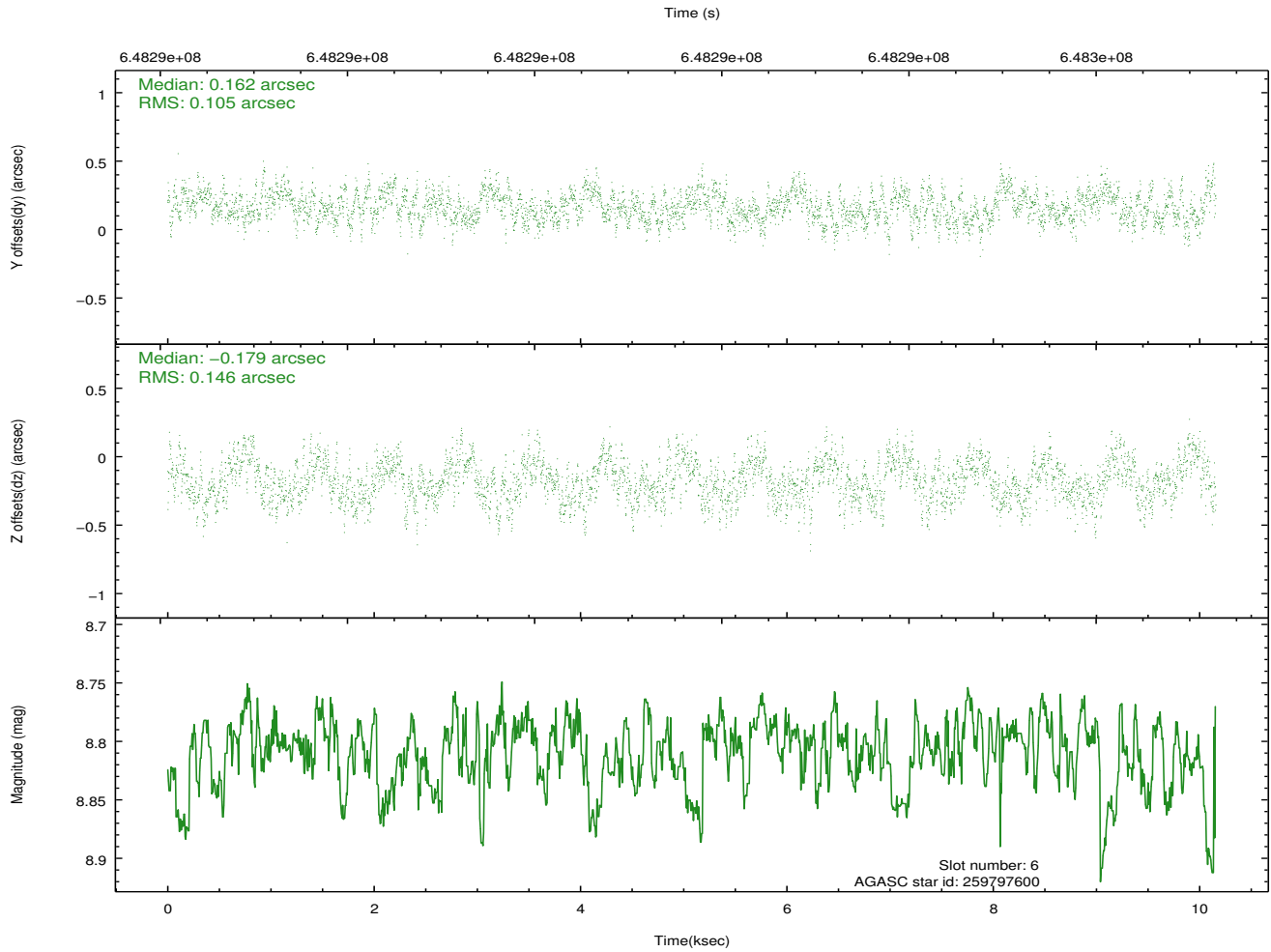
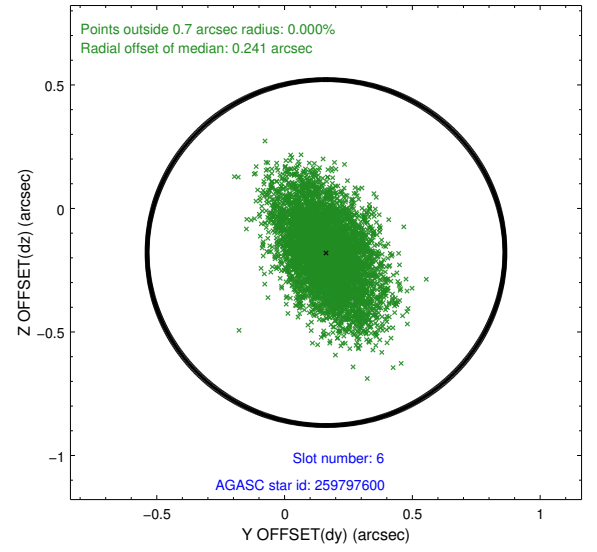
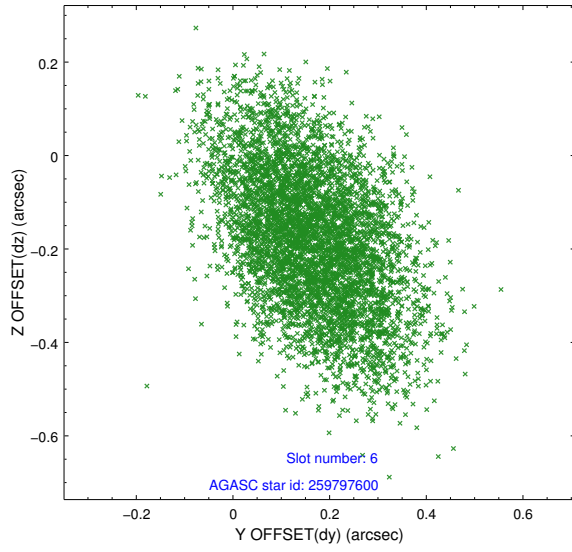
2.4.2 Slot 4



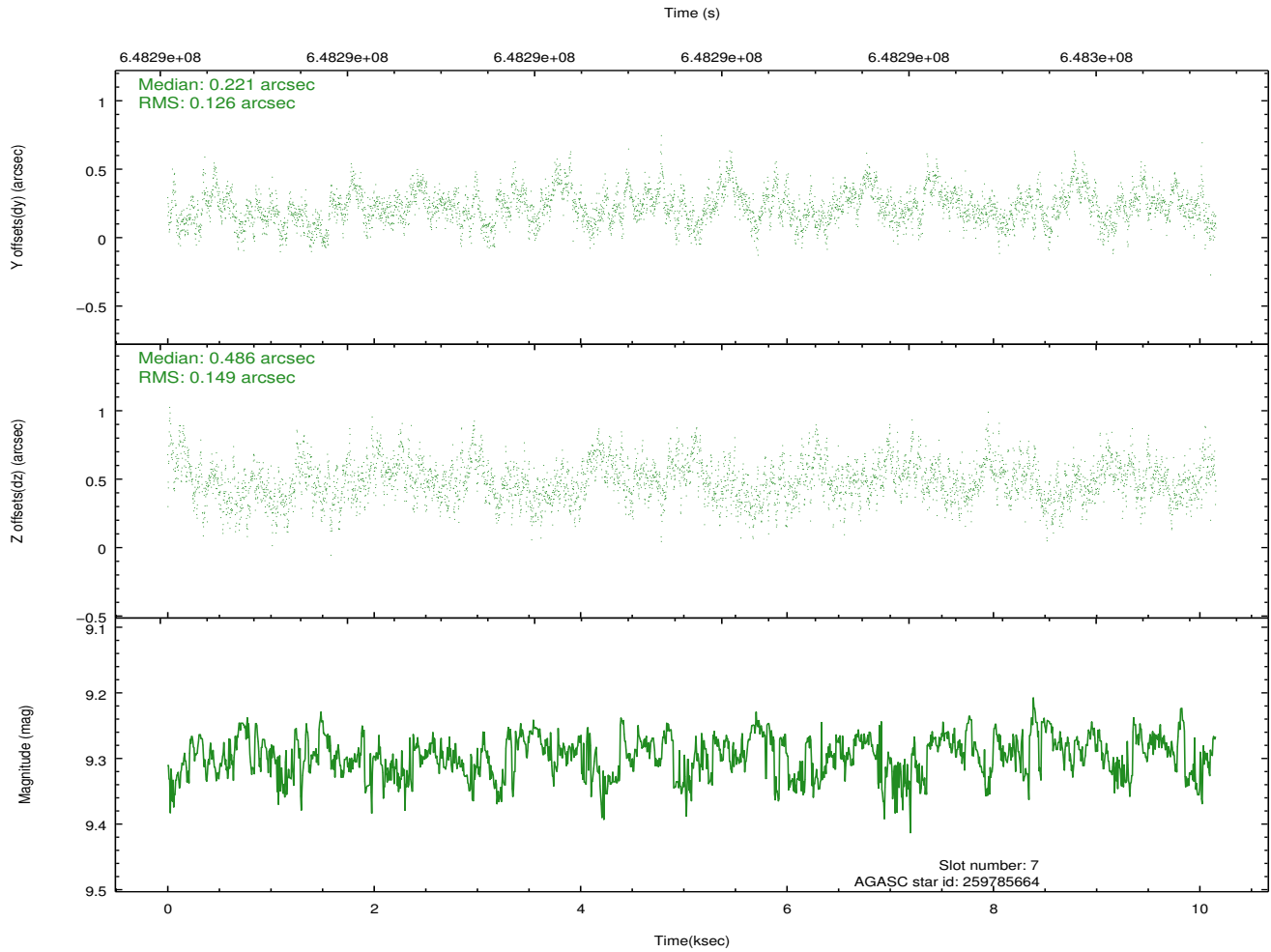
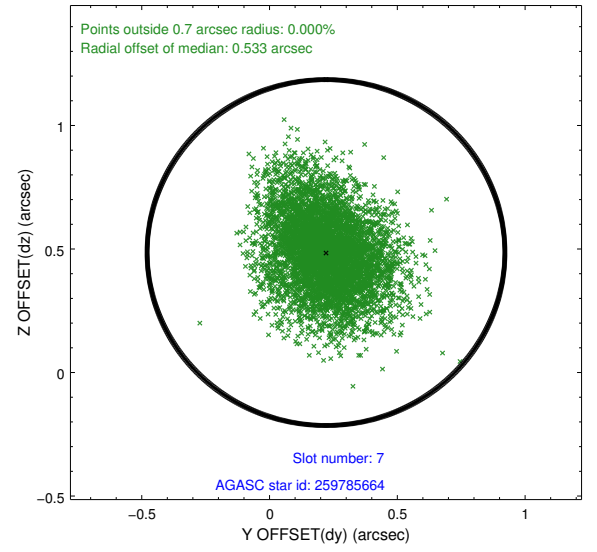
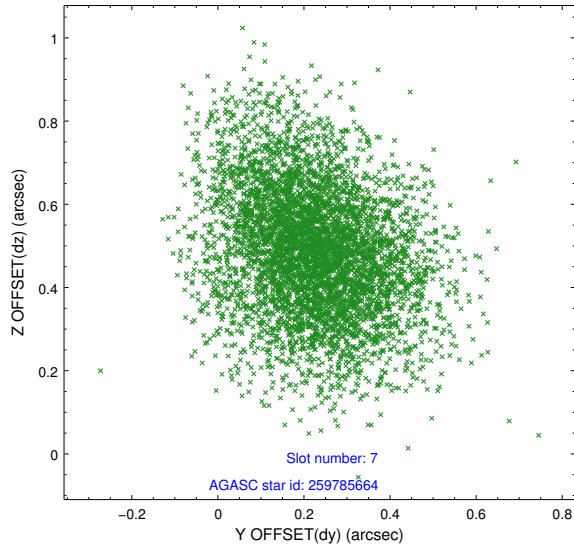
2.4.3 Slot 5



2.4.4 Slot 6

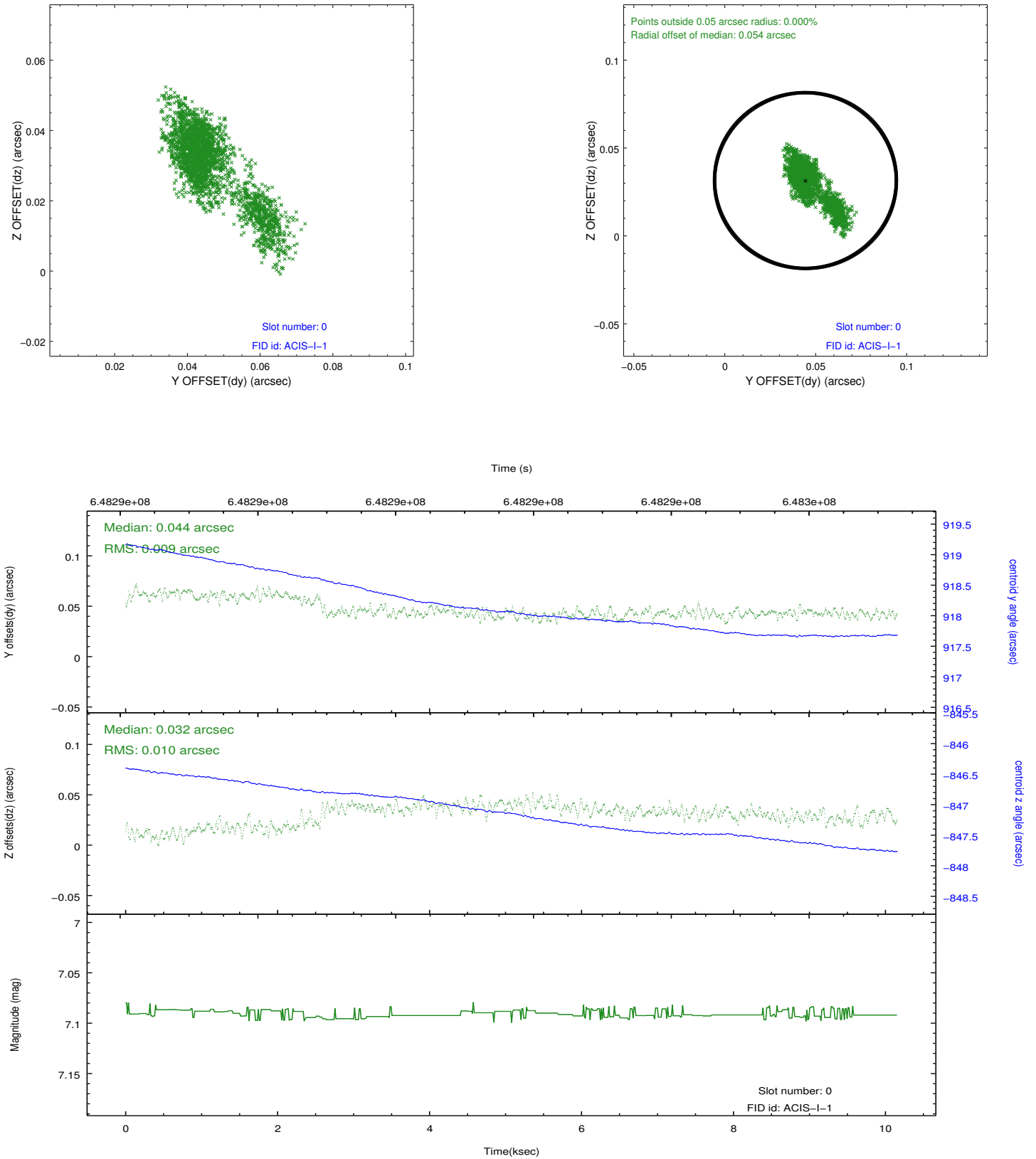


2.4.5 Slot 7

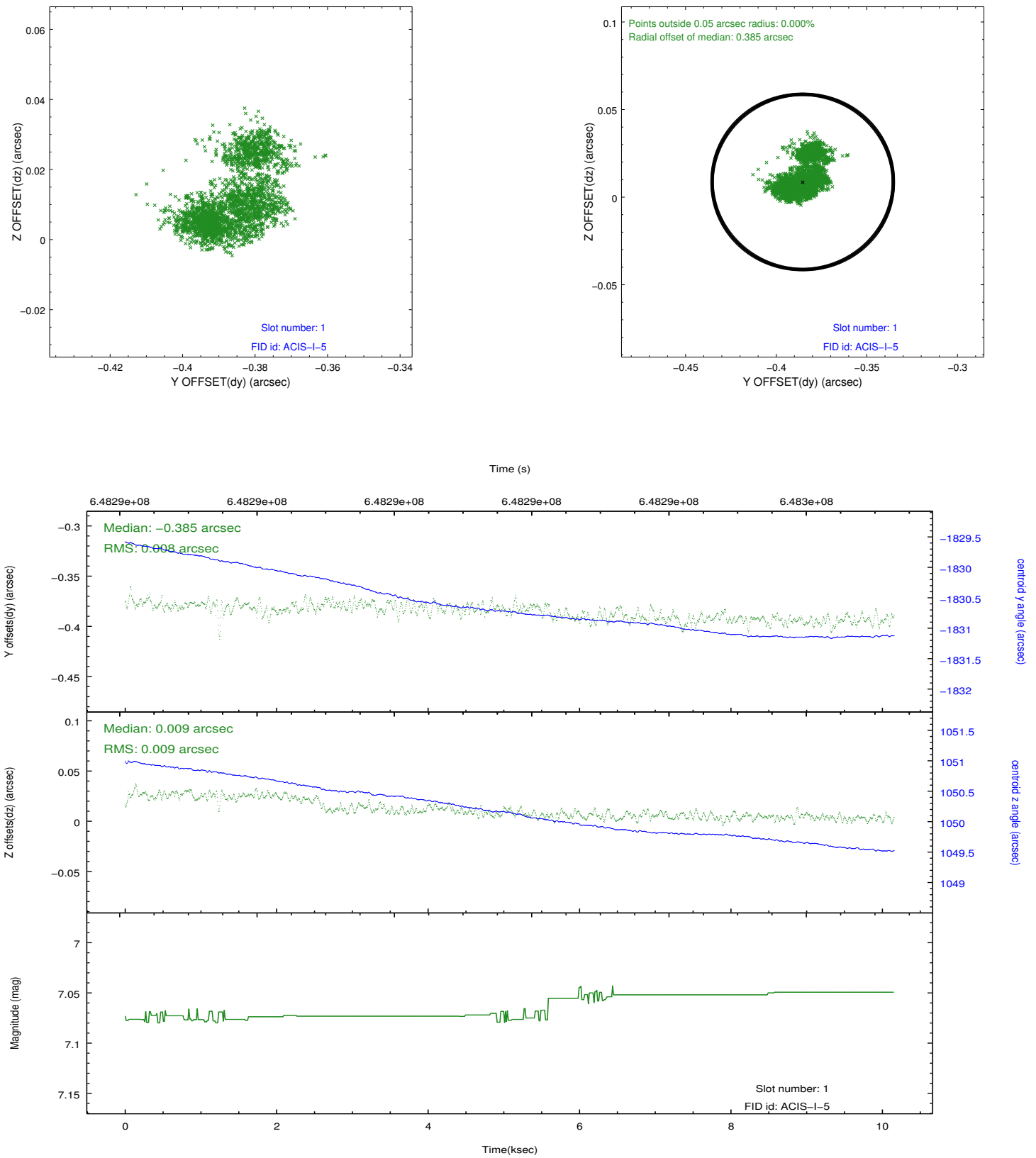


2.5 FID Slots

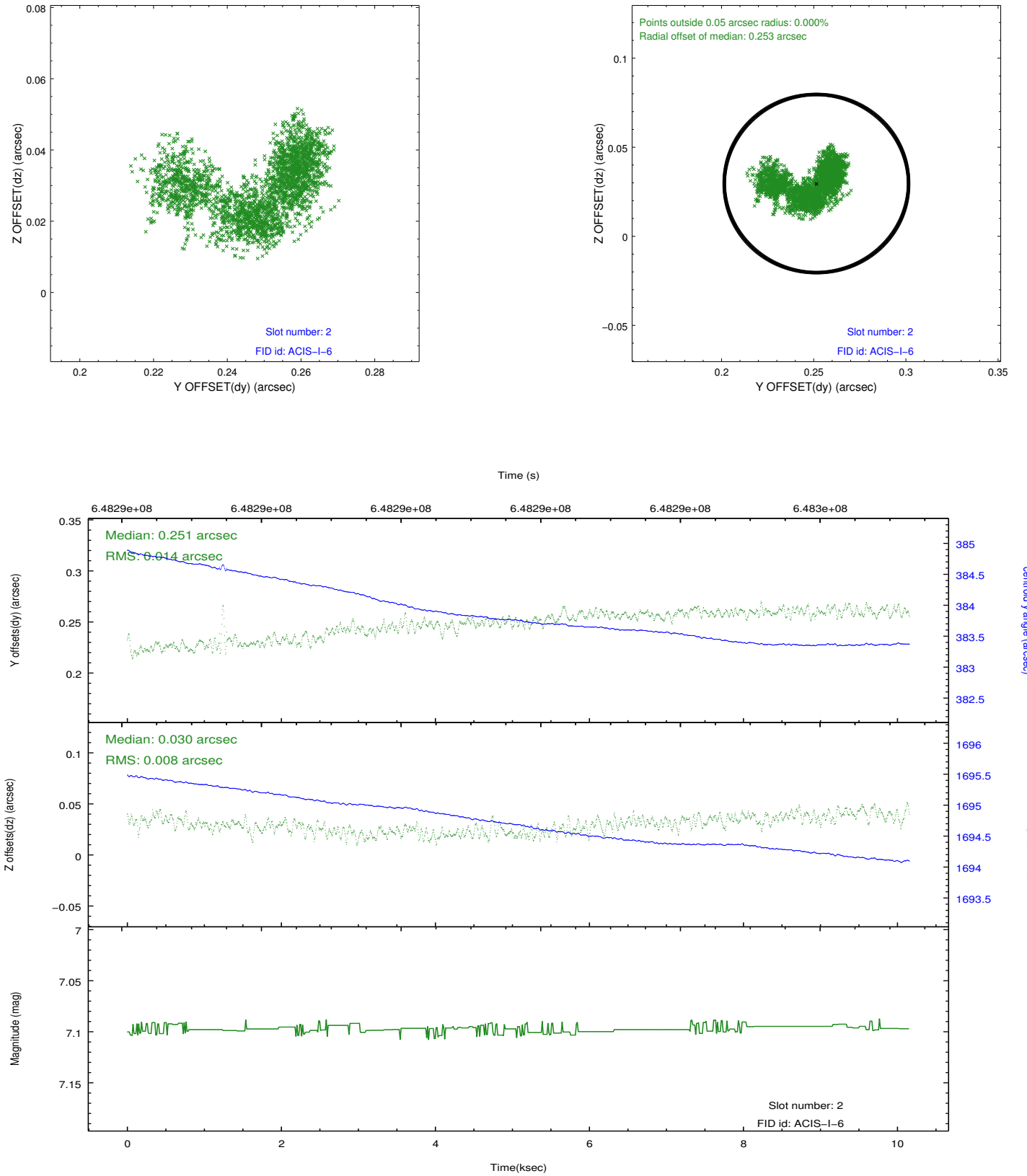
2.5.1 Slot 0



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)	2018.07.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.955200148344

A.2 Comments

Joint Proposal: CX0-XMM. Window preference met.