

V&V Reference Report

L2 ASCDS Version : 10.5.4

Observation 19215 - L2 Version 1
Chandra X-Ray Center

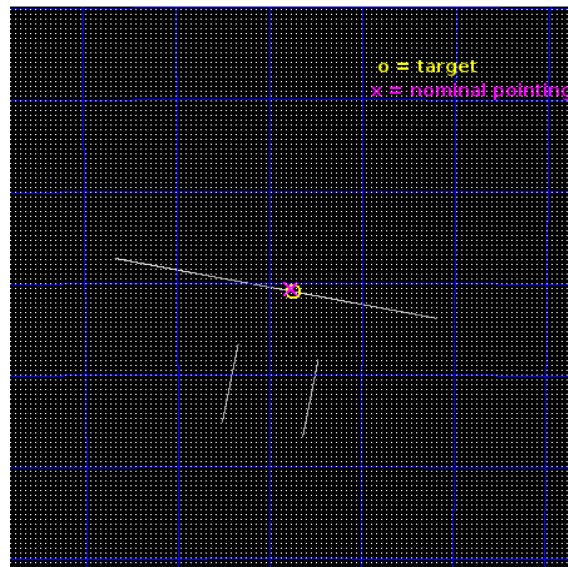
L2 Processing Date : May 23 2017

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1 Front

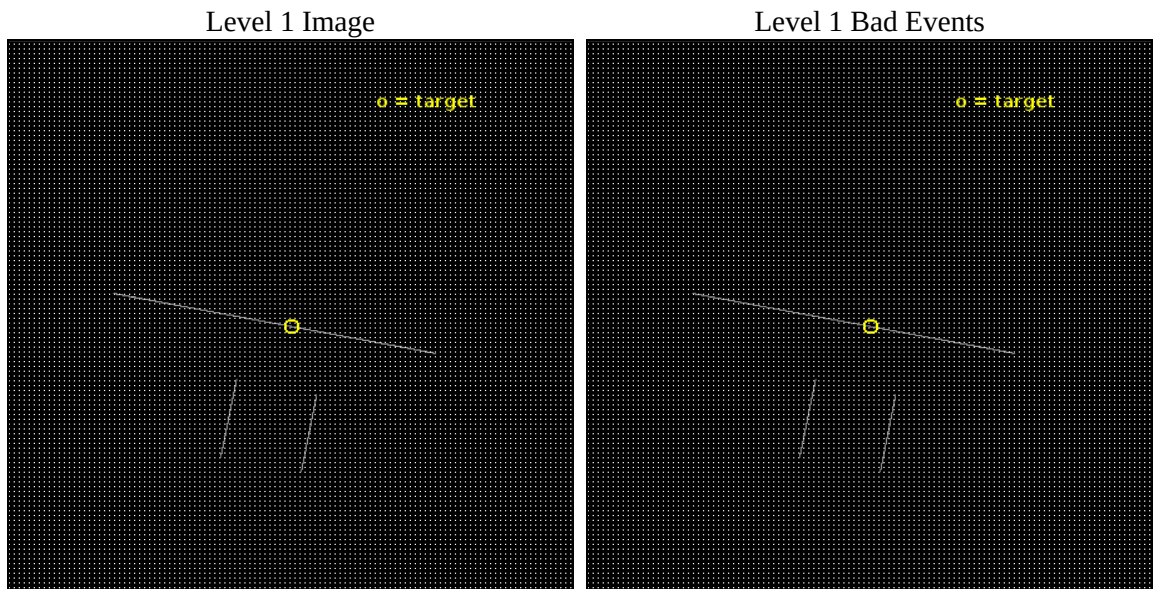
seq_num	502865	Sequence number
obs_id	19215	Observation id
title	Target-of-Opportunity Chandra Observations of Magnetars in Outburst	
observer	Victoria Kaspi	Principal investigator
object	PSR J1622-4950	Source name
ra_targ	245.686667	Observer's specified target RA [deg]
dec_targ	-49.848444	Observer's specified target Dec [deg]
ra_nom	245.69052129479	Nominal RA [deg]
dec_nom	-49.843810294722	Nominal Dec [deg]
roll_nom	10.949246121499	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15033.5	Sum of GTIs [s]
livetime	14974.775390625	Livetime [s]
ontime2	15033.5	Sum of GTIs [s]
ontime3	15033.5	Sum of GTIs [s]
ontime5	15033.5	Sum of GTIs [s]
ontime6	15033.5	Sum of GTIs [s]
ontime7	15033.5	Sum of GTIs [s]
ontime8	15033.5	Sum of GTIs [s]
l2events	215194	Number of level 2 events



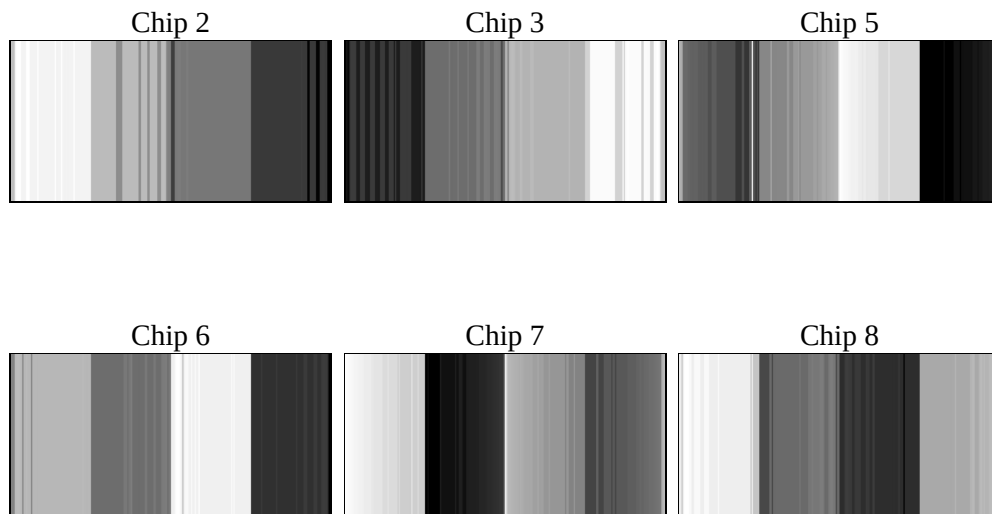
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.4	Processing system revision	ontime	15033.5	Sum of GTIs [s]
caldsver	4.7.4	 	ontime2	15033.5	Sum of GTIs [s]
date	2017-05-23T14:38:14	Date and time of file creation	ontime3	15033.5	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	15033.5	Sum of GTIs [s]
			ontime6	15033.5	Sum of GTIs [s]
			ontime7	15033.5	Sum of GTIs [s]
			ontime8	15033.5	Sum of GTIs [s]
			l1events	1551452	Number of level 1 events

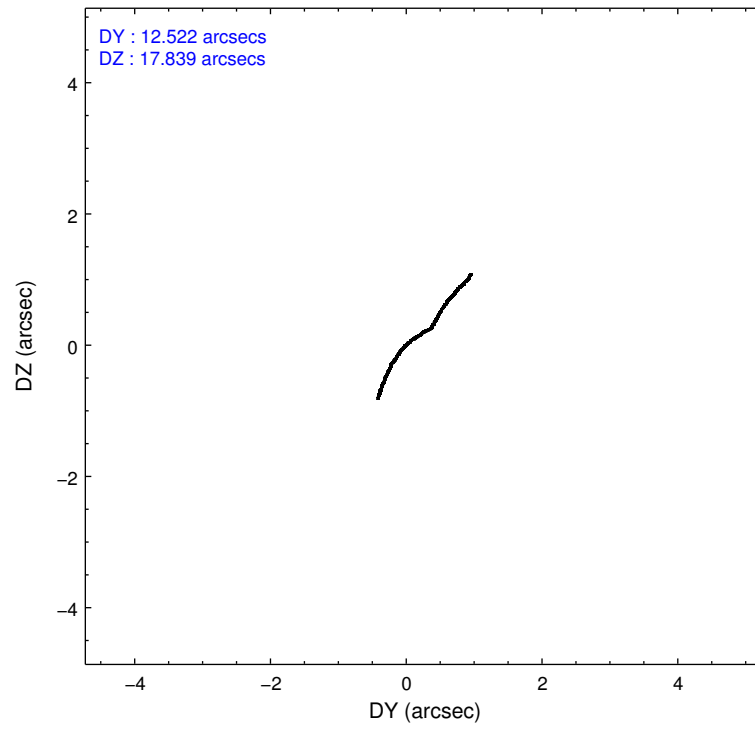
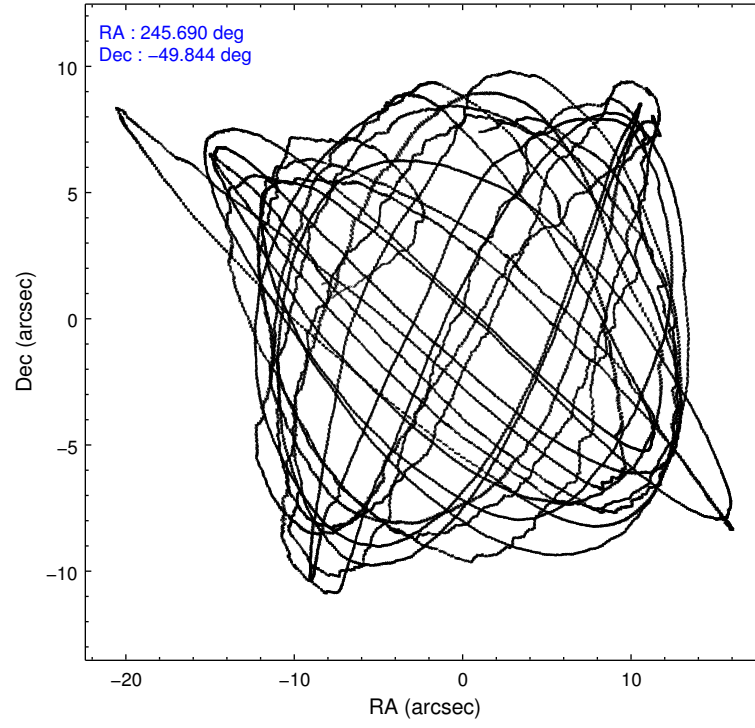
2.1.4 Events

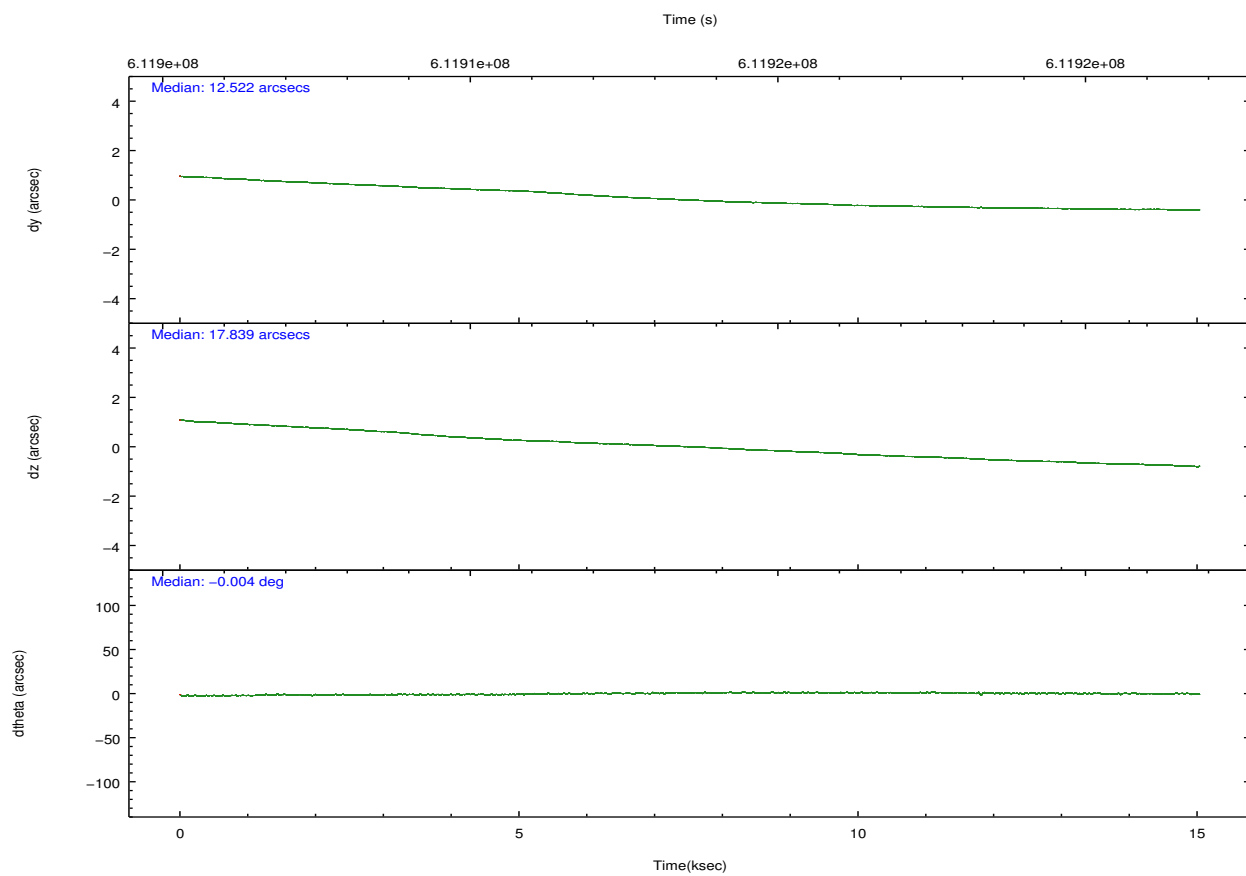
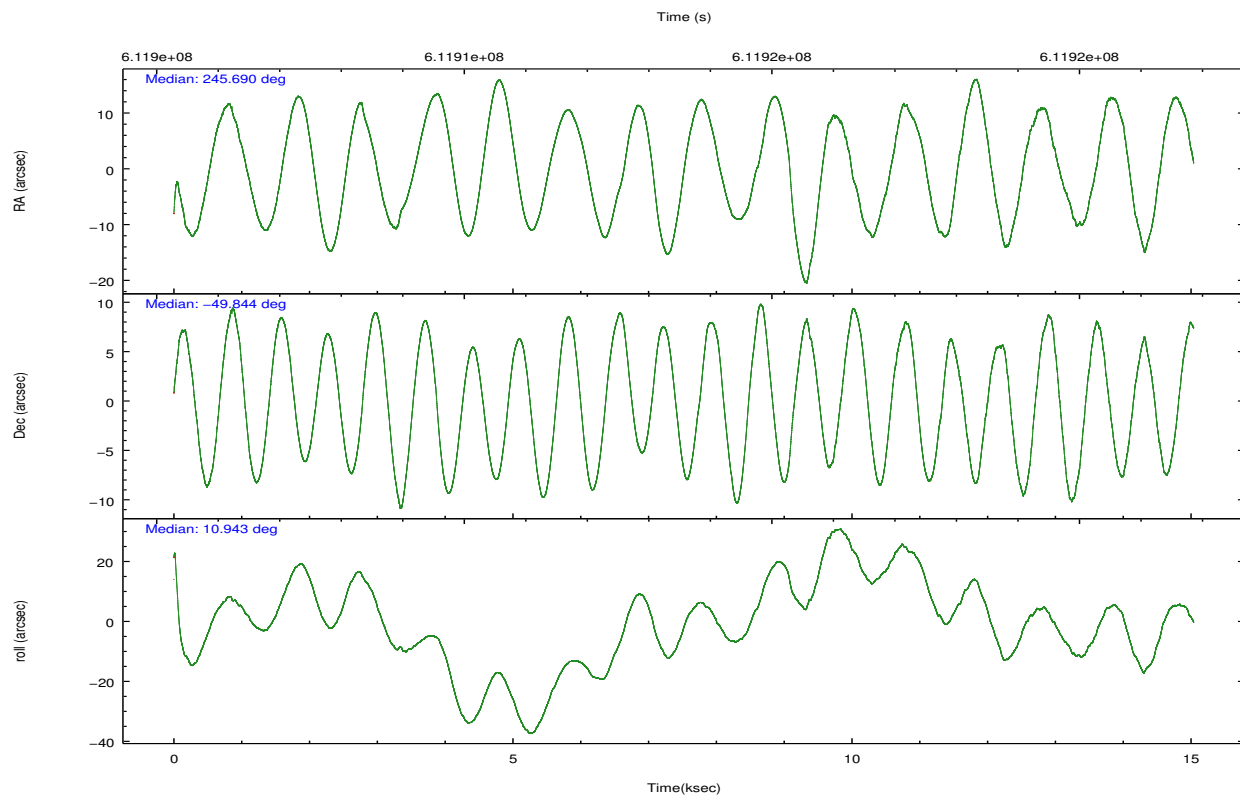
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	189321	184268	472947	184119	209635	311162	grade 0 events	2141	2359	121834	2186	4570	11971
rejected events	172534	166082	174217	164753	141058	256855		1%	1%	25%	1%	2%	3%
rejected %	91%	90%	36%	89%	67%	82%	grade 1 events	108	125	258	109	172	273
								0%	0%	0%	0%	0%	0%
							grade 2 events	6356	6630	120752	7624	19038	16329
								3%	3%	25%	4%	9%	5%
							grade 3 events	2089	2458	2006	2342	3310	5623
								1%	1%	0%	1%	1%	1%
							grade 4 events	2138	2197	1855	2176	3225	5421
								1%	1%	0%	1%	1%	1%
							grade 5 events	4815	5516	12173	5486	12920	8198
								2%	2%	2%	2%	6%	2%
							grade 6 events	4103	4583	52714	5083	38612	15142
								2%	2%	11%	2%	18%	4%
							grade 7 events	167571	160400	161355	159113	127788	248205
								88%	87%	34%	86%	60%	79%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	CC33_FAINT	CC33_FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	245.658741	245.690521294793	CCD I2 on	O2	Y
[deg] Pointing Dec	-49.862089	-49.84381029472196	CCD I3 on	O3	Y
[deg] Pointing Roll	10.768303	10.94924612149854	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	611906077.184000	611904828.01375	CCD S5 on	N	N
Observation start date	2017-05-23T05:53:28	2017-05-23T05:33:48	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	611921077.184000	611921805.08974	On-chip summing requested	N	N
Observation end date	2017-05-23T10:03:28	2017-05-23T10:16:45	Subarray requested	NONE	NONE
Read mode	CONTINUOUS	CONTINUOUS	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0

2.3 Aspect



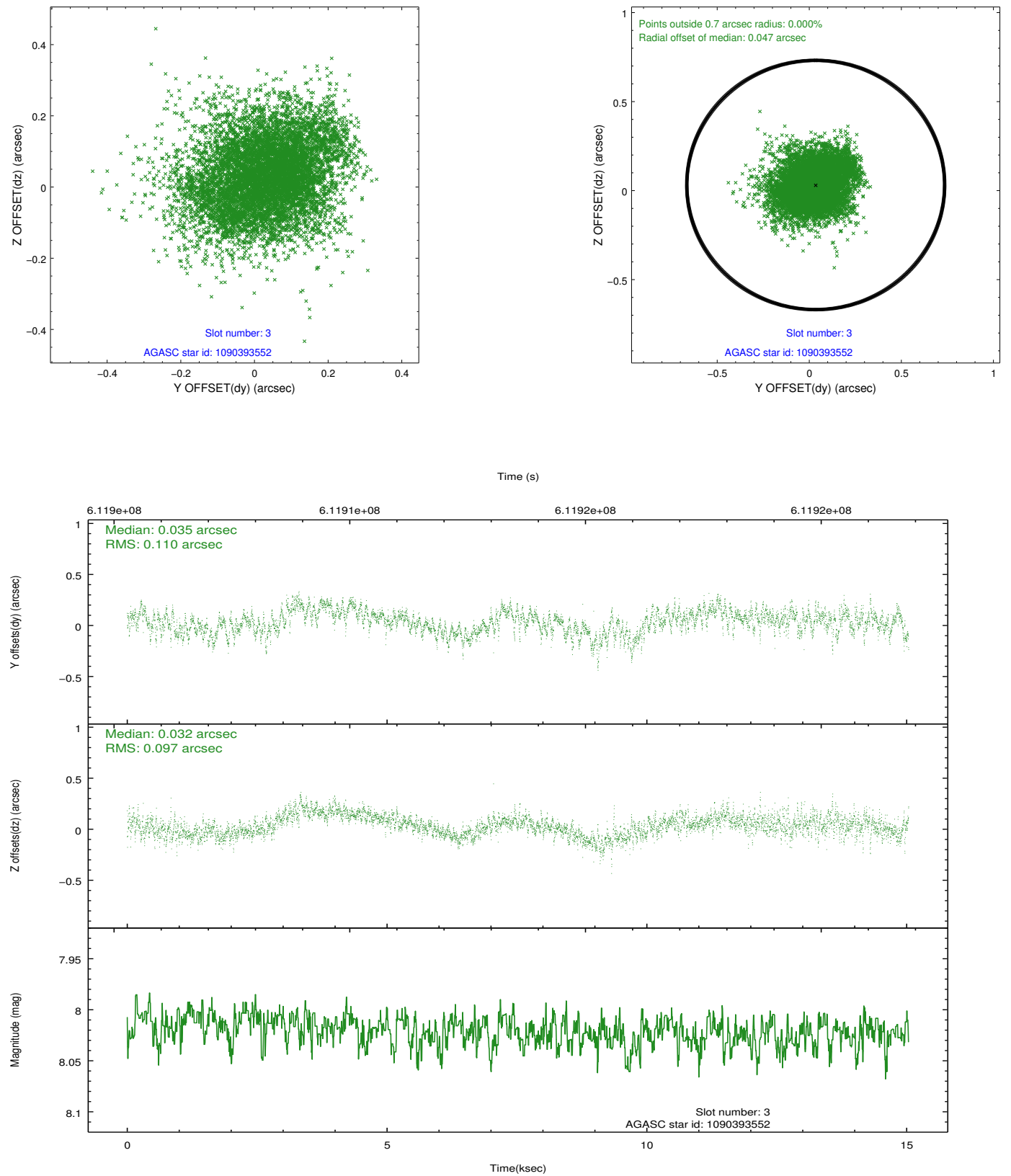


Slot Statistics

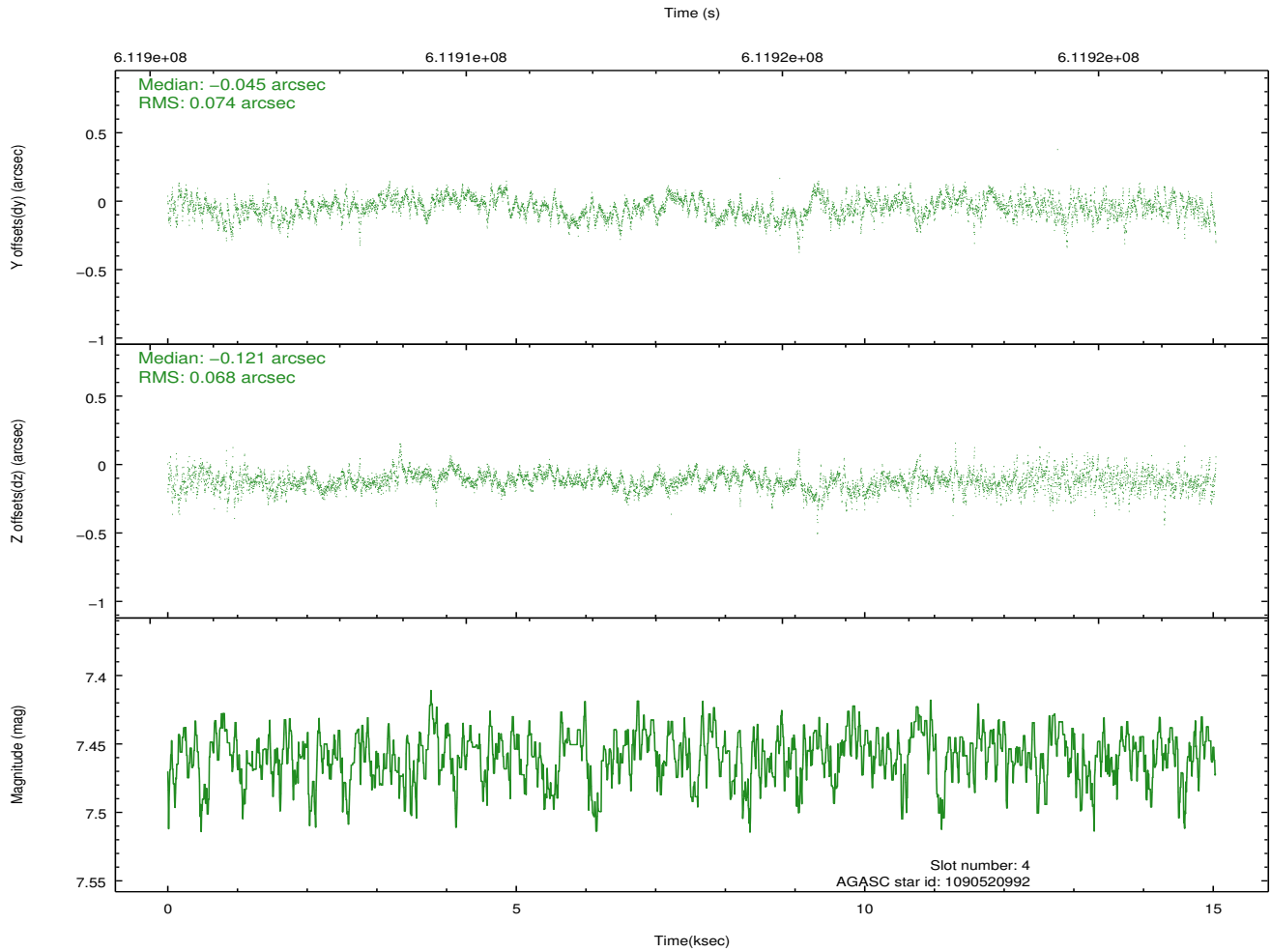
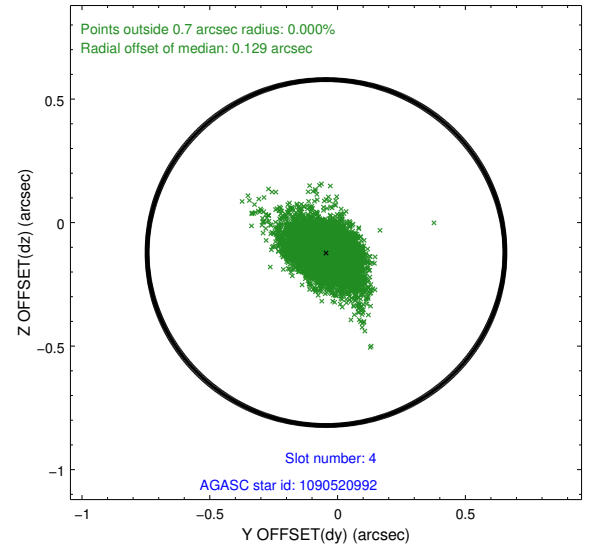
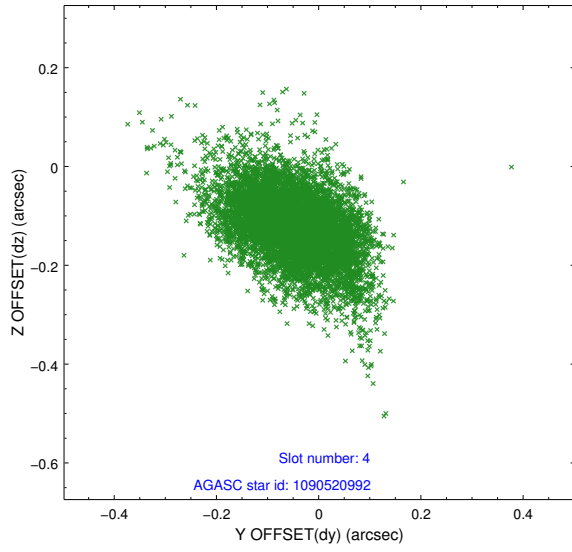
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	3669	-0.126	-0.080	0.023	0.036	0.000000	0.000000	-765.66	-1739.41
1	FID		ACIS-S-4	7.05	3668	0.379	0.080	0.027	0.067	0.000000	0.000000	2147.99	168.93
2	FID		ACIS-S-5	7.05	3668	-0.289	0.005	0.027	0.037	0.000000	0.000000	-1818.29	162.85
3	GUIDE	used	1090393552	8.02	7332	0.035	0.032	0.157	0.251	244.664084	-49.413876	-1989.85	2005.20
4	GUIDE	used	1090520992	7.46	7336	-0.045	-0.121	0.104	0.179	245.489527	-49.662443	-253.22	779.49
5	GUIDE	used	1090527696	7.20	7337	-0.231	-0.373	0.126	0.246	246.414931	-49.424565	2031.61	1207.48
6	GUIDE	used	1090525744	8.15	7334	0.229	0.398	0.131	0.212	245.649389	-50.543894	-478.84	-2407.09
7	GUIDE	used	1090533696	8.01	7331	0.017	0.061	0.160	0.262	246.732535	-50.366556	2080.05	-2262.55

2.4 Star Slots

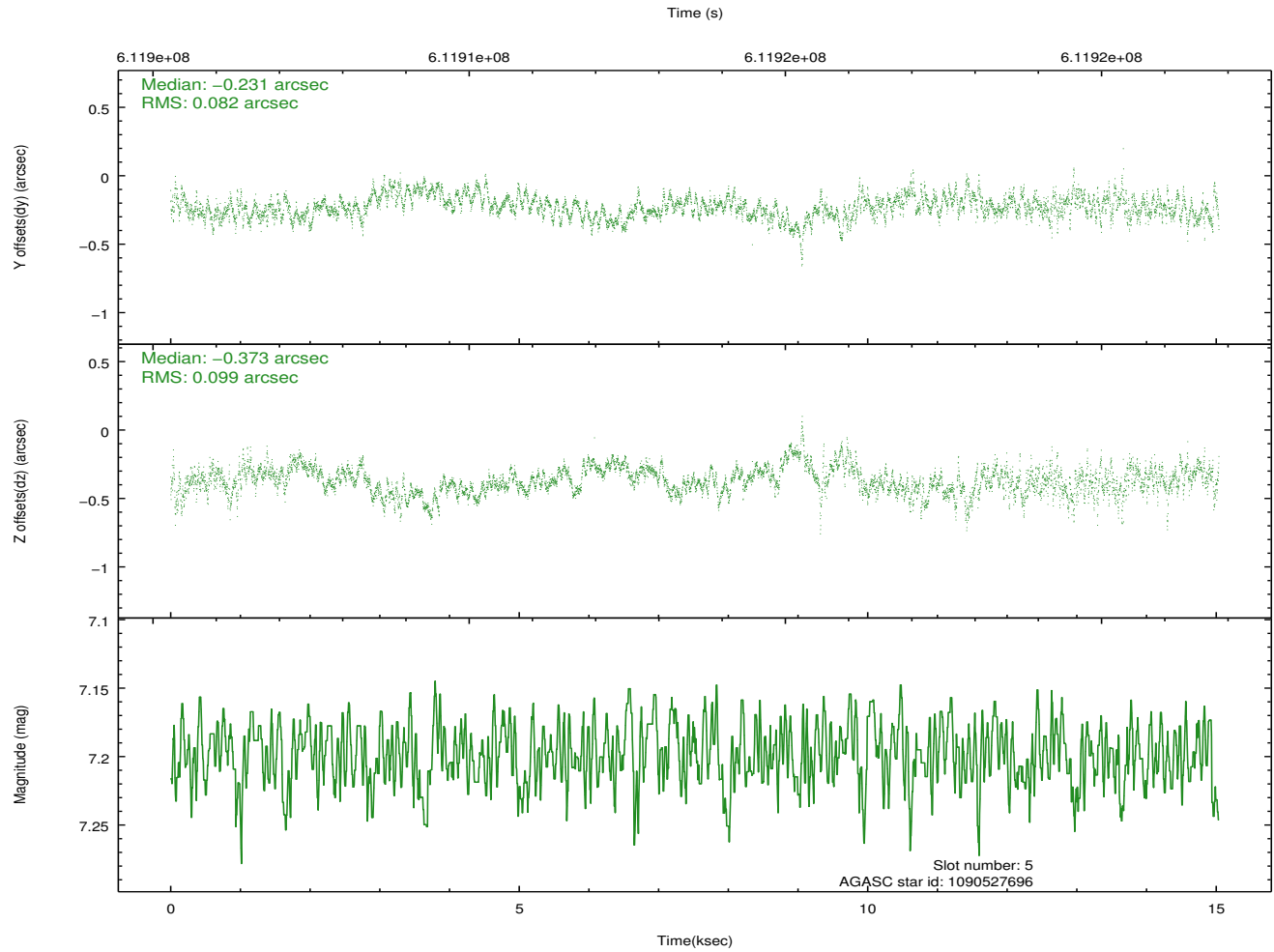
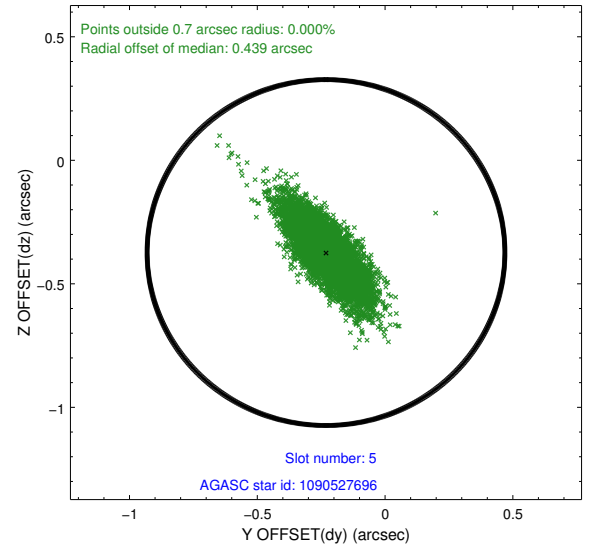
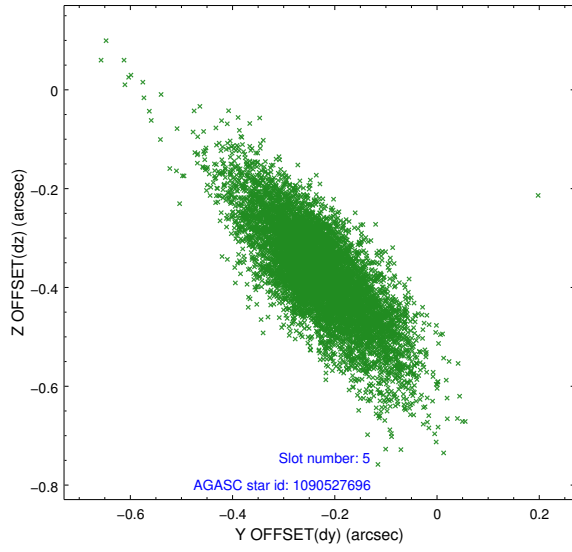
2.4.1 Slot 3



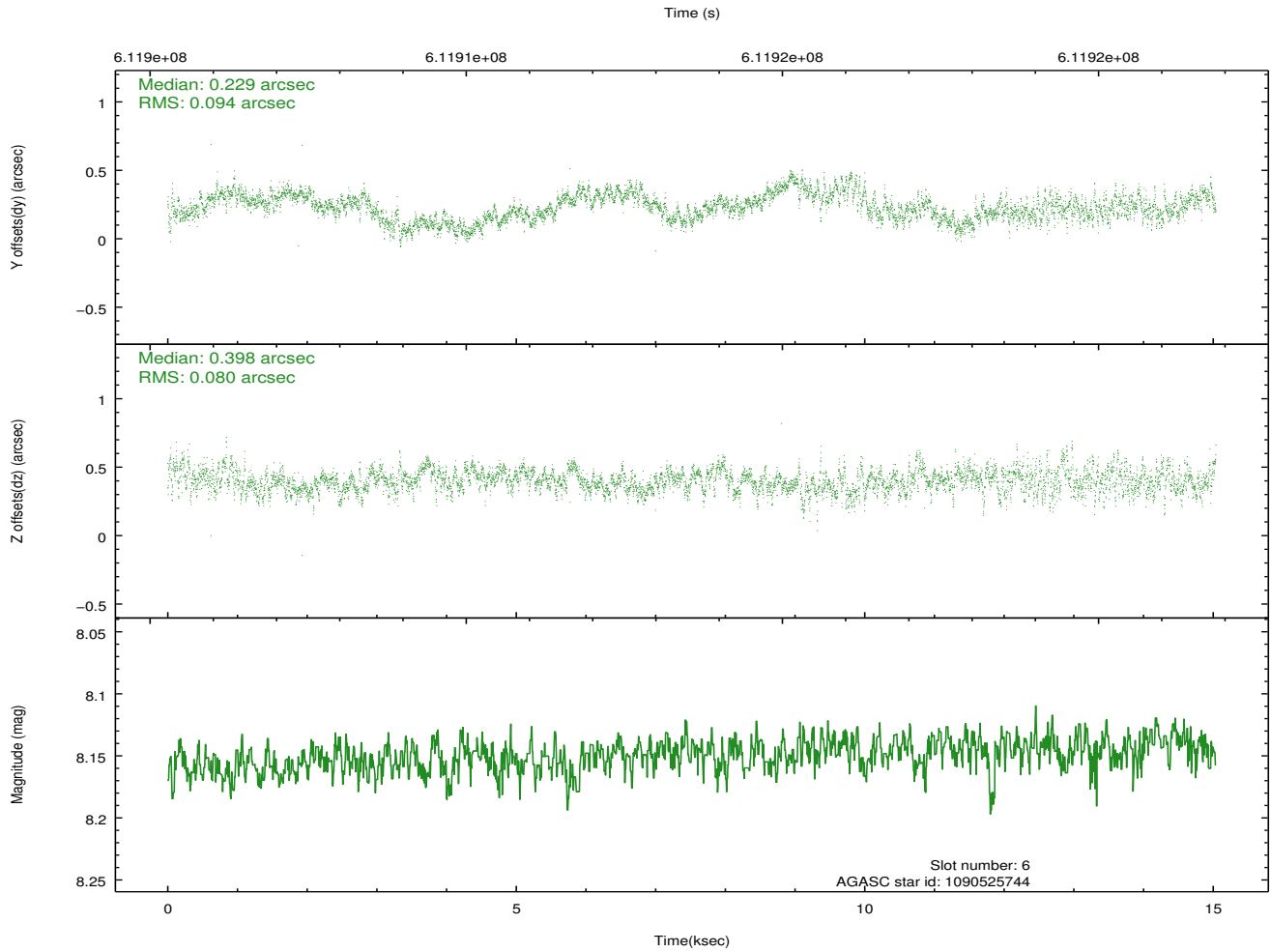
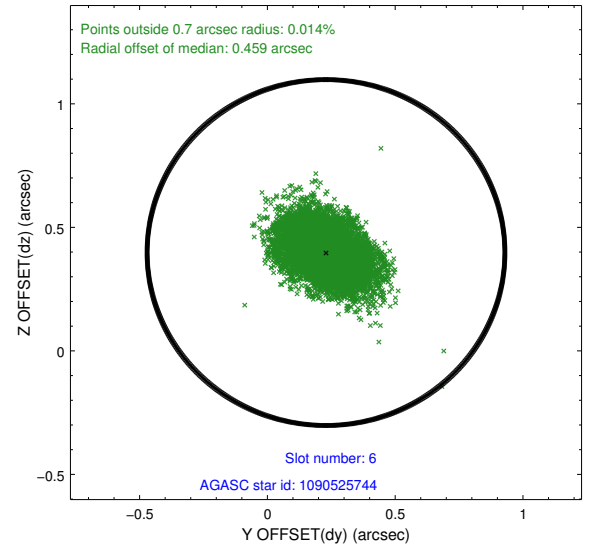
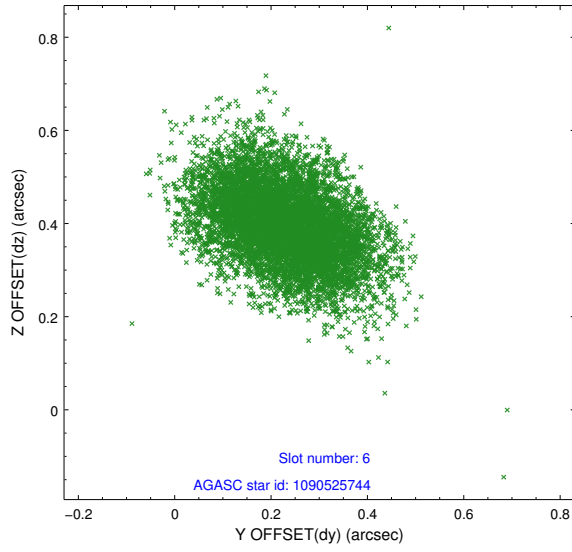
2.4.2 Slot 4



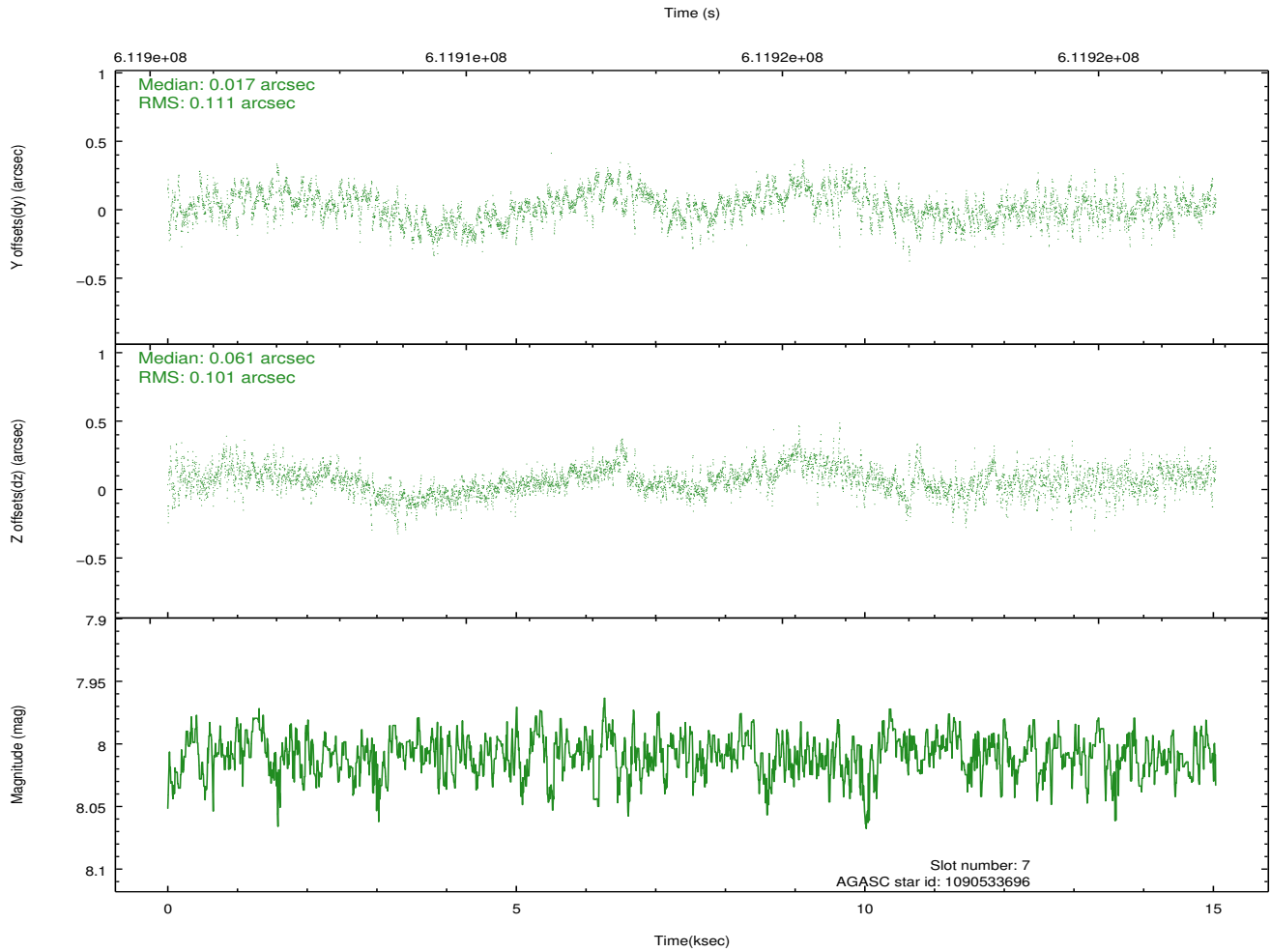
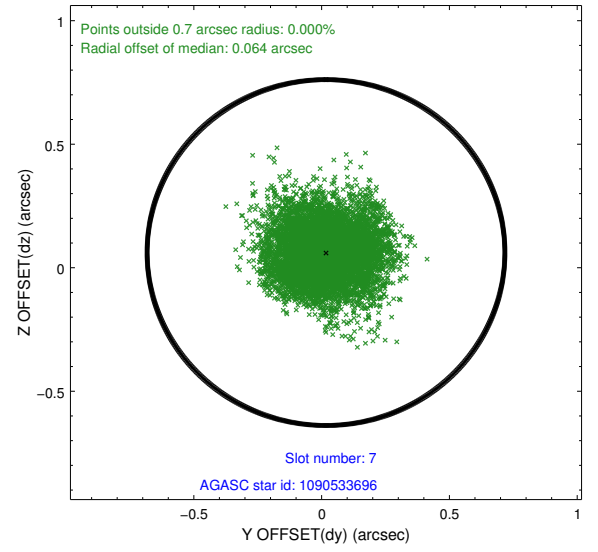
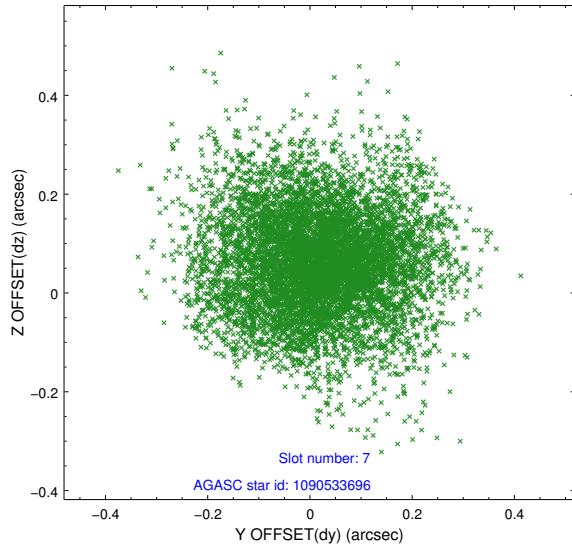
2.4.3 Slot 5



2.4.4 Slot 6

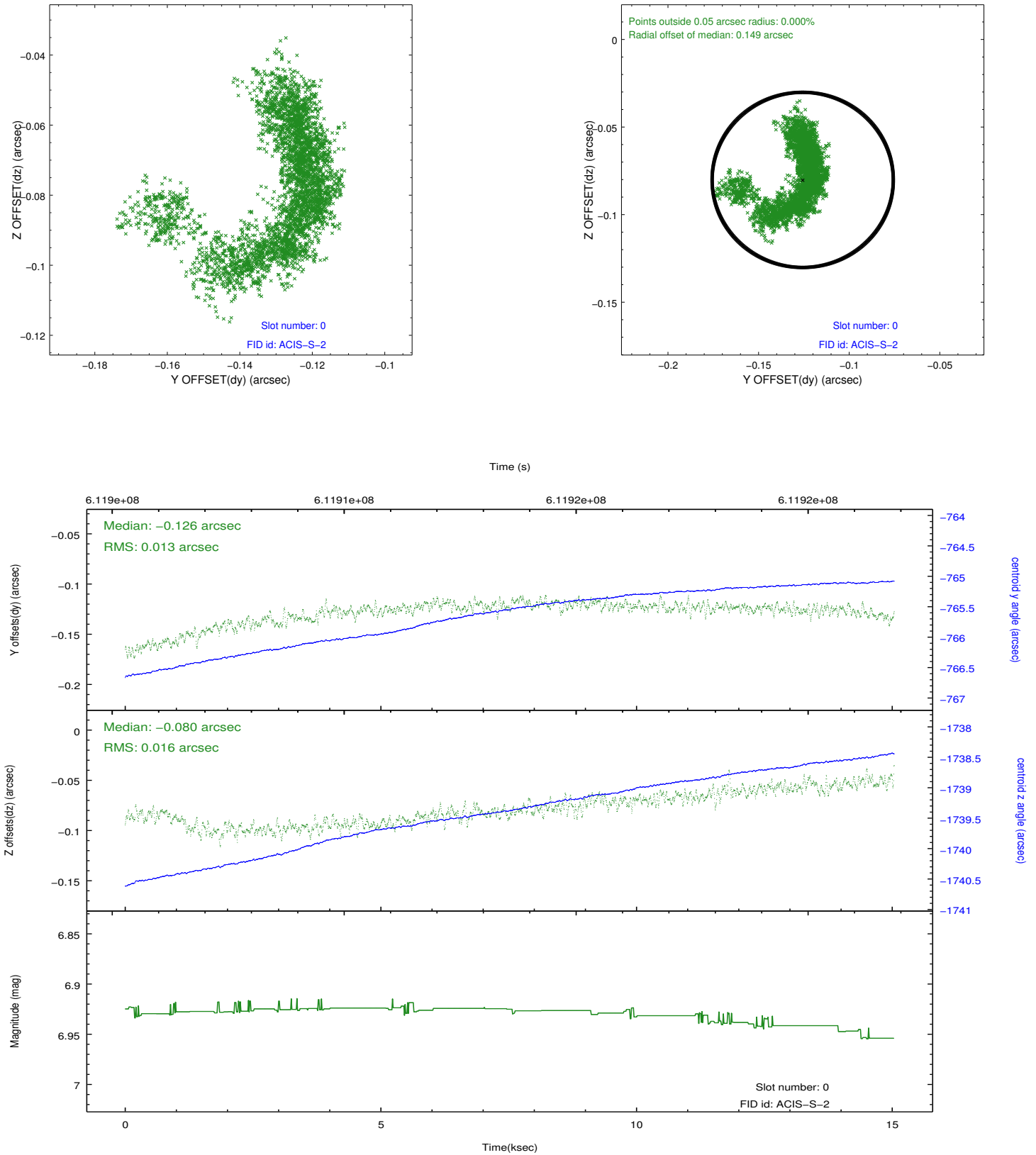


2.4.5 Slot 7

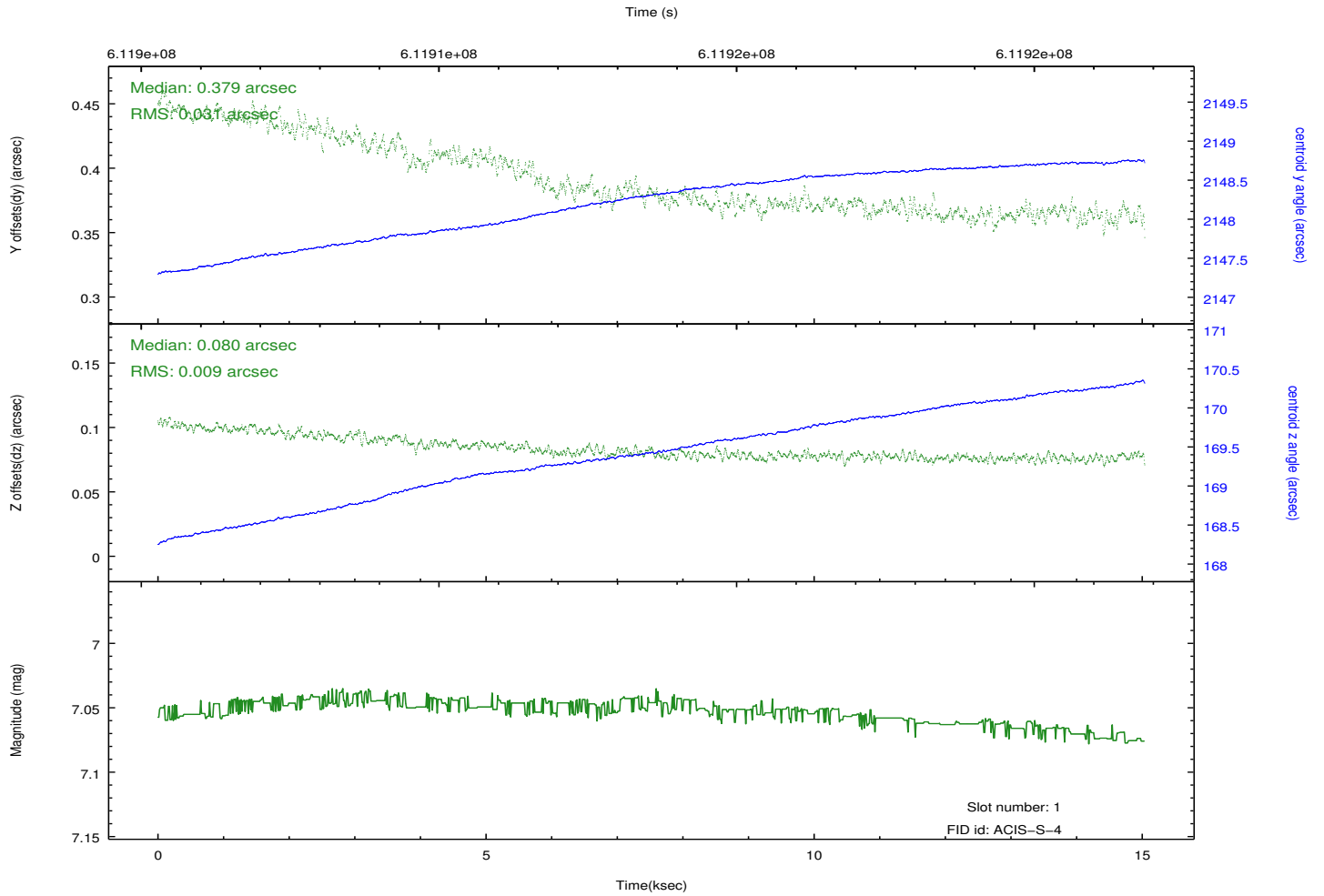
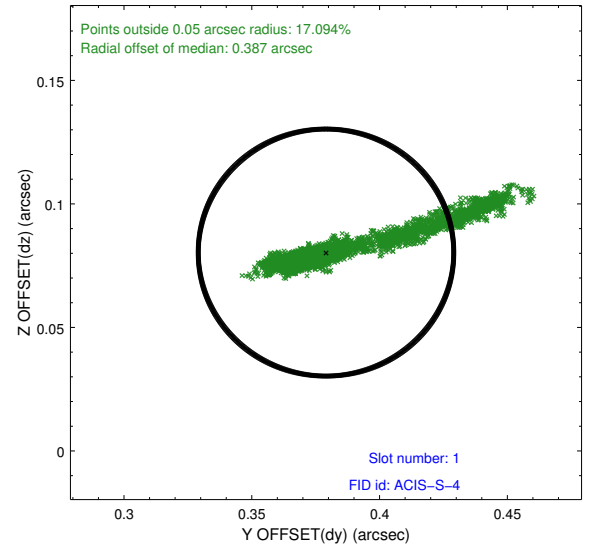
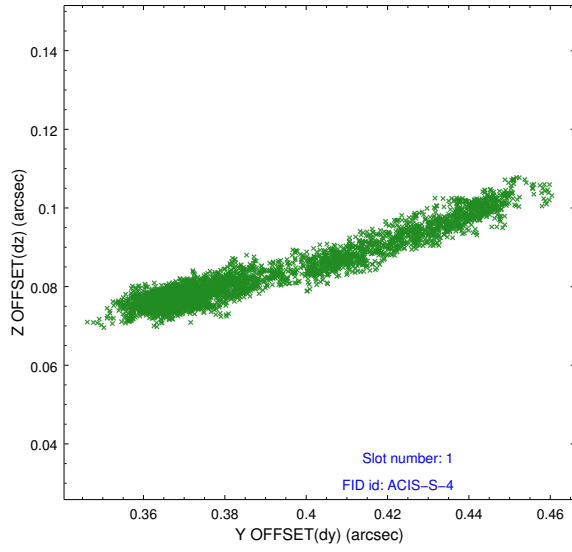


2.5 FID Slots

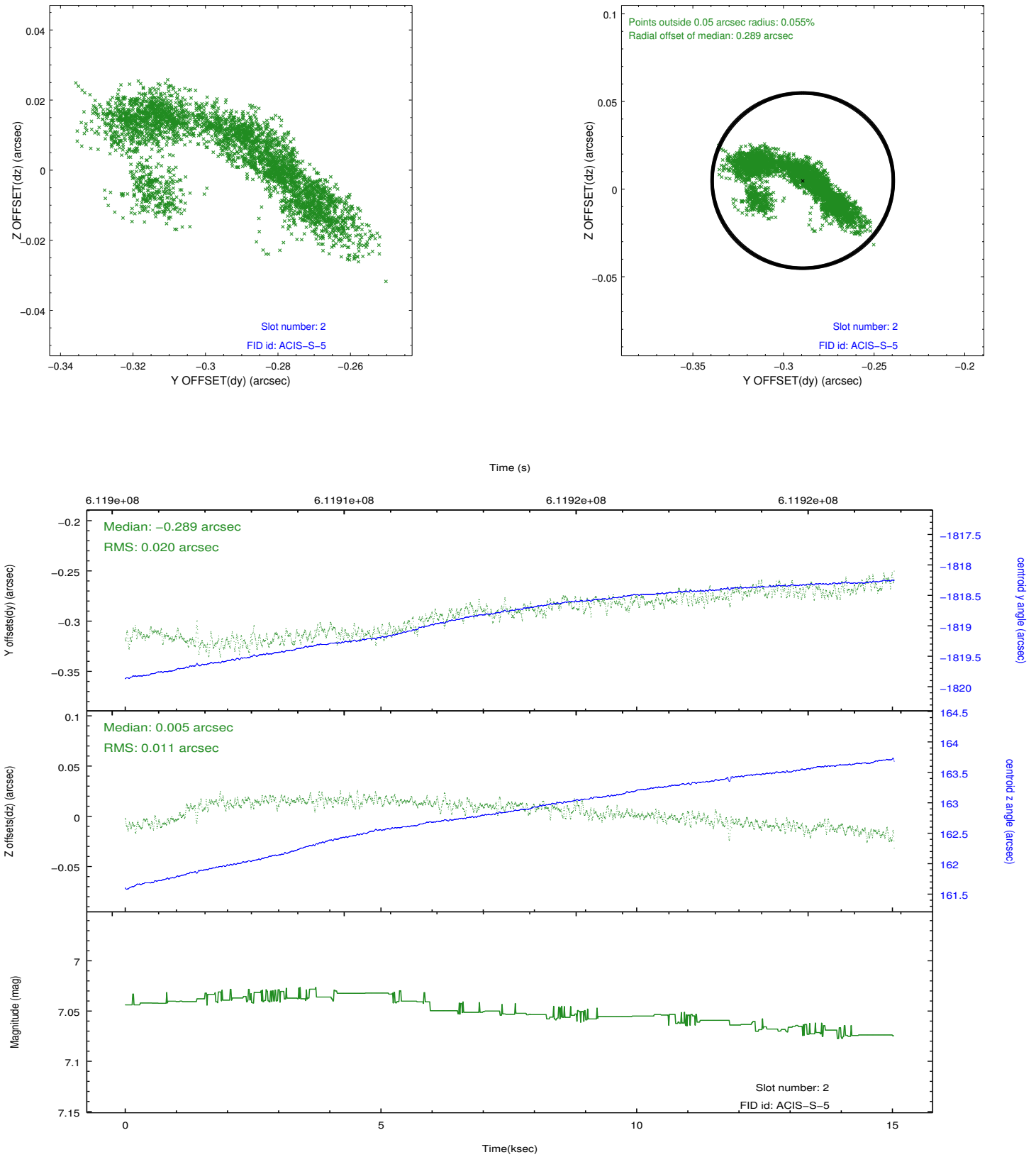
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Glenn Allen
V&V Date (YYYY-MM-DD)	2017.05.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.0335

A.2 Comments

The SIMBAD coordinates for the source were used by `acis_process_events` to obtain the sky coordinates. However, the location of the source on the 1D line on the sky is slightly offset from the SIMBAD location. Such an offset relative to the SIMBAD location is also observed in the data for the Chandra timed mode `obs_id` 10929. The difference in these two locations is about 2 arcsec.

There may be a slight broadening to the source, which could be real. For example, the Chandra data in timed mode `obs_id` 10929 appears to be slightly broadened by eye (No quantitative comparison to the PSF was made.).