

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 18446 - L2 Version 2
Chandra X-Ray Center

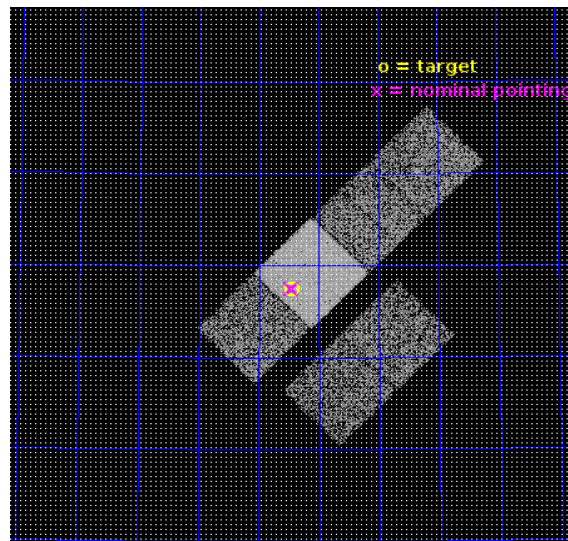
L2 Processing Date : Aug 29 2016

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1 Front

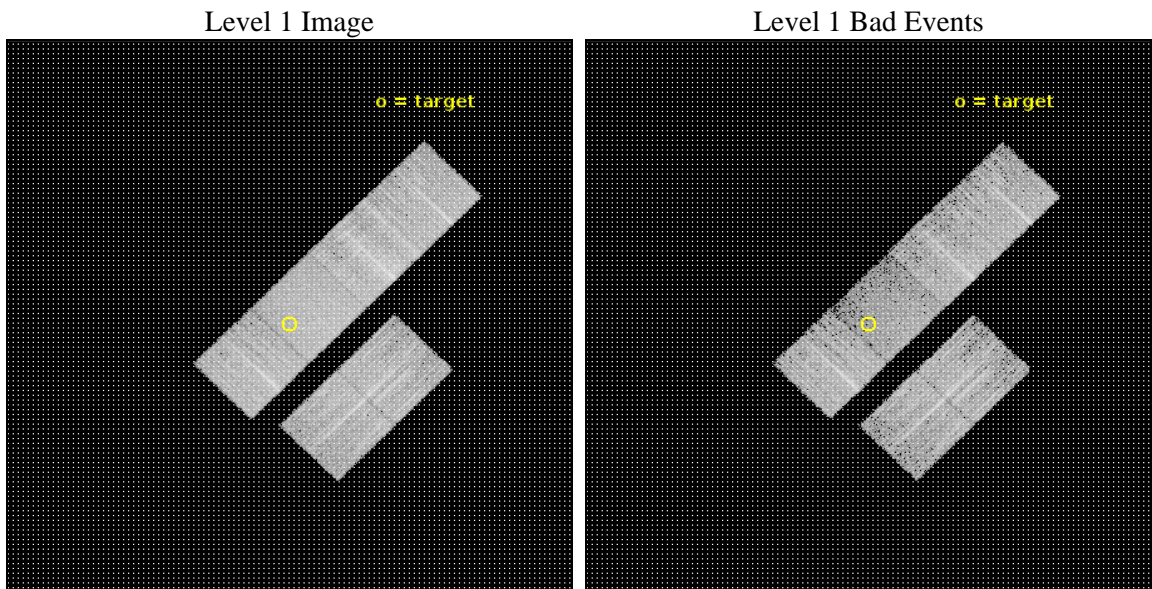
seq_num	703285	Sequence number
obs_id	18446	Observation id
title	Deciphering the X-ray Enhancement of Highly Radio-Loud Quasars in the Early Universe	Proposal title
observer	Gordon Garmire	Principal investigator
object	SDSS J123726.26+651724.4	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.359583	Observer's specified target RA [deg]
dec_targ	65.290111	Observer's specified target Dec [deg]
ra_nom	189.36445561649	Nominal RA [deg]
dec_nom	65.29162431687	Nominal Dec [deg]
roll_nom	314.71117602353	Nominal Roll [deg]
revision	2	Processing version of data
ontime	7958.4001185894	Sum of GTIs [s]
livetime	7857.6260643146	Livetime [s]
ontime2	7958.4001185894	Sum of GTIs [s]
ontime3	7958.4001185894	Sum of GTIs [s]
ontime6	7958.4001185894	Sum of GTIs [s]
ontime7	7958.4001185894	Sum of GTIs [s]
ontime8	7958.4001185894	Sum of GTIs [s]
ontime9	7958.4001185894	Sum of GTIs [s]
l2events	46018	Number of level 2 events



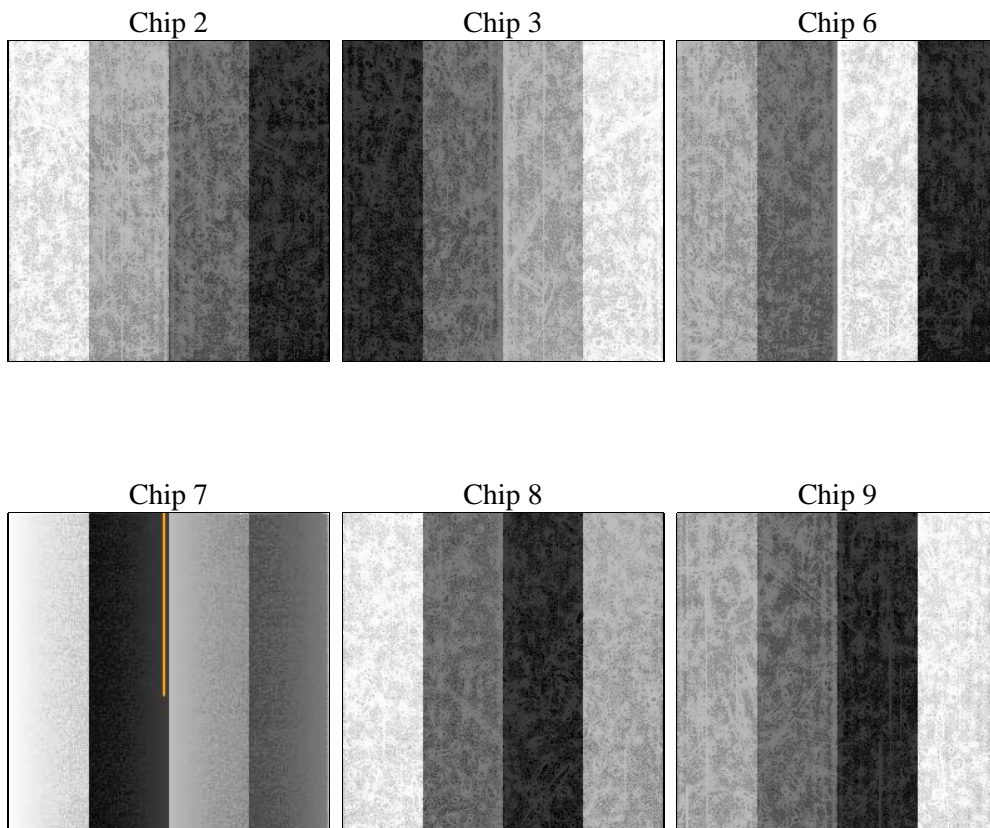
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	7958.4001185894	Sum of GTIs [s]
caldbver	4.7.2	 	ontime2	7958.4001185894	Sum of GTIs [s]
date	2016-08-25T18:21:22	Date and time of file creation	ontime3	7958.4001185894	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	7958.4001185894	Sum of GTIs [s]
			ontime7	7958.4001185894	Sum of GTIs [s]
			ontime8	7958.4001185894	Sum of GTIs [s]
			ontime9	7958.4001185894	Sum of GTIs [s]
			l1events	307946	Number of level 1 events

2.1.4 Events

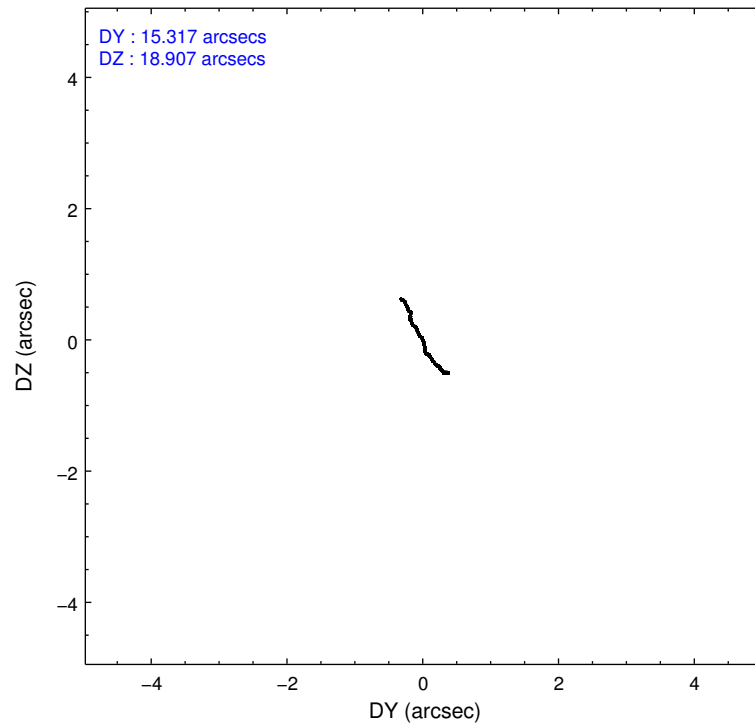
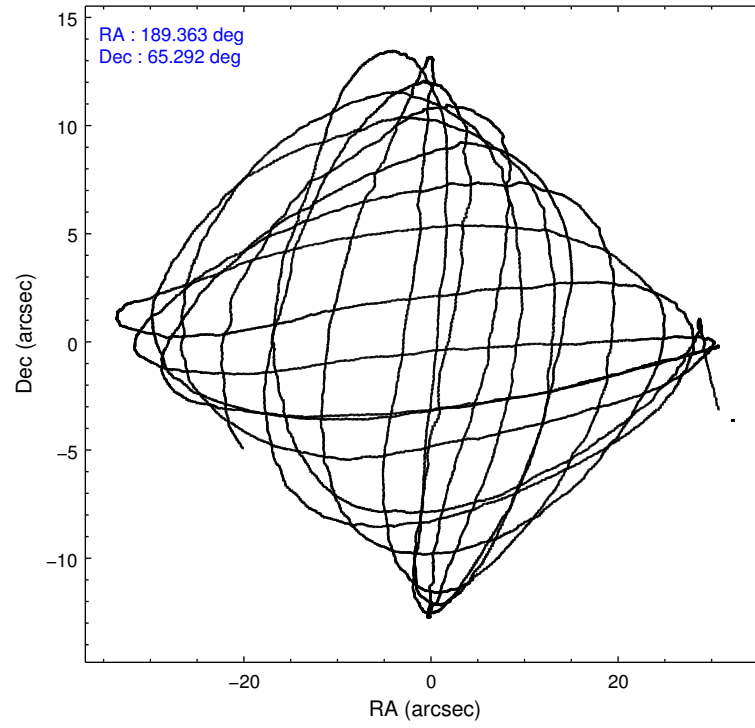
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9		ccd 2	ccd 3	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	46233	48524	51353	52089	61431	48316	grade 0 events	1801	1714	1852	2195	4679	1958
rejected events	41402	43831	46039	27956	44874	42830		3%	3%	3%	4%	7%	4%
rejected %	89%	90%	89%	53%	73%	88%	grade 1 events	26	28	22	92	65	26
								0%	0%	0%	0%	0%	0%
							grade 2 events	1180	1004	1245	5350	3938	1207
								2%	2%	2%	10%	6%	2%
							grade 3 events	490	512	505	1964	1798	574
								1%	1%	0%	3%	2%	1%
							grade 4 events	473	520	530	1922	1704	567
								1%	1%	1%	3%	2%	1%
							grade 5 events	1568	1968	1936	5259	2857	2241
								3%	4%	3%	10%	4%	4%
							grade 6 events	889	943	1186	12712	4452	1186
								1%	1%	2%	24%	7%	2%
							grade 7 events	39806	41835	44077	22595	41938	40557
								86%	86%	85%	43%	68%	83%

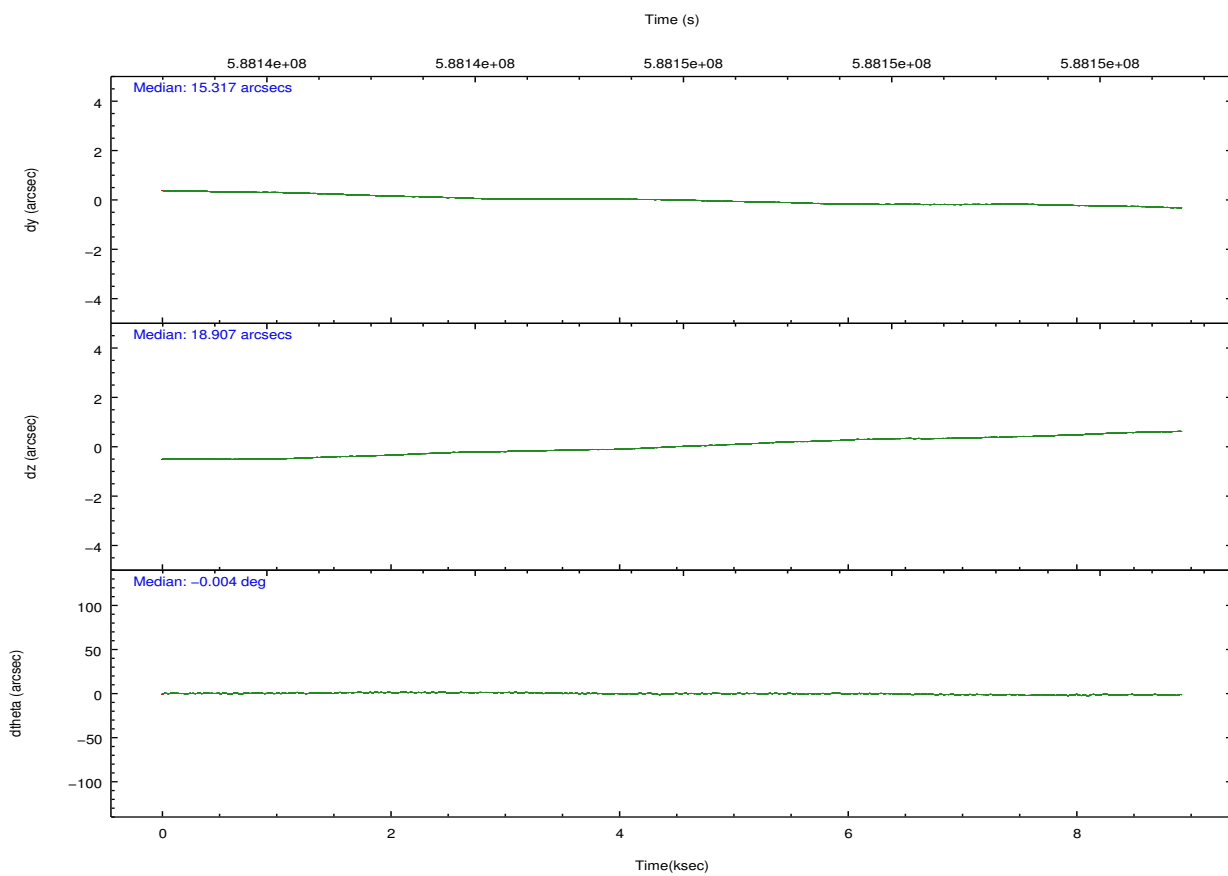
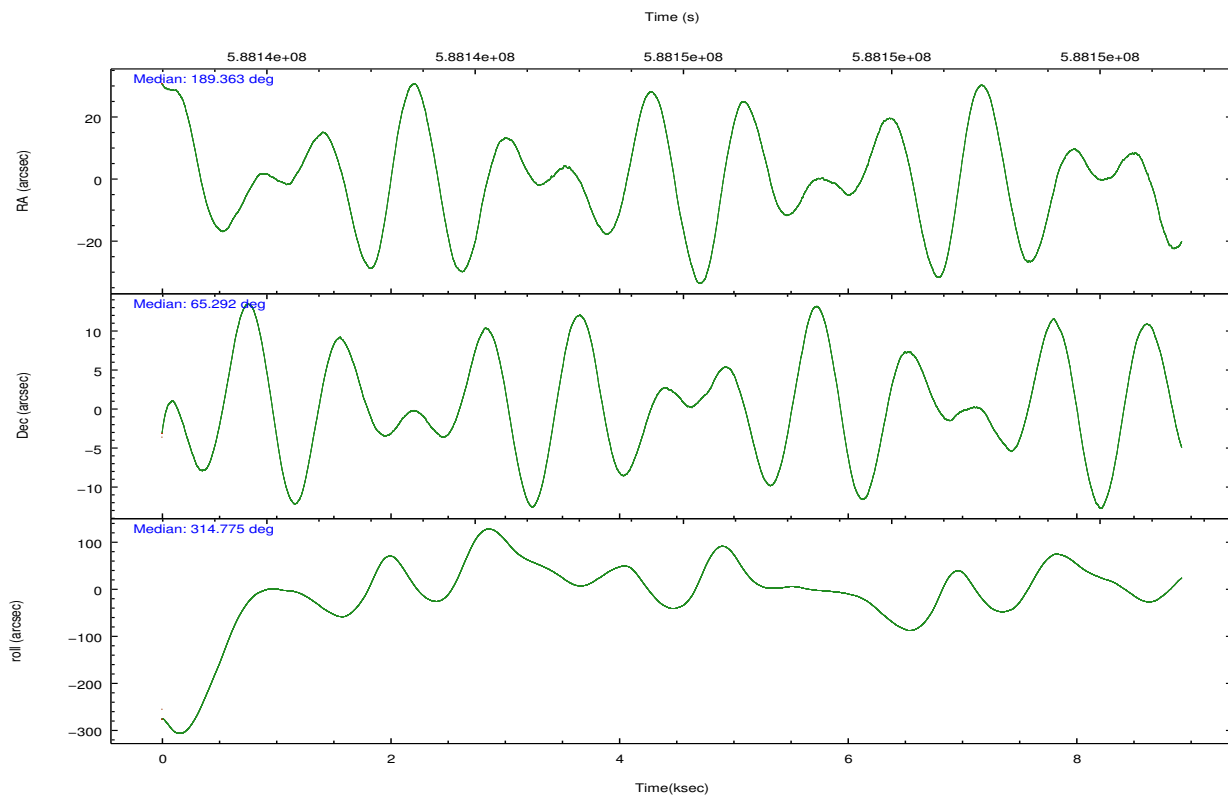
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-236789	ACIS-236789
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	189.300843	189.364455616485
[deg] Pointing Dec	65.298498	65.29162431686999
[deg] Pointing Roll	314.612317	314.7111760235276
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	588142358.184000	588140399.9766001
Observation start date	2016-08-21T04:51:30	2016-08-21T04:19:59
[s] Observation end time (MET)	588150358.184000	588150927.75221
Observation end date	2016-08-21T07:04:50	2016-08-21T07:15:27
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O1	Y
CCD I3 on	O2	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	Y	Y
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

2.3 Aspect



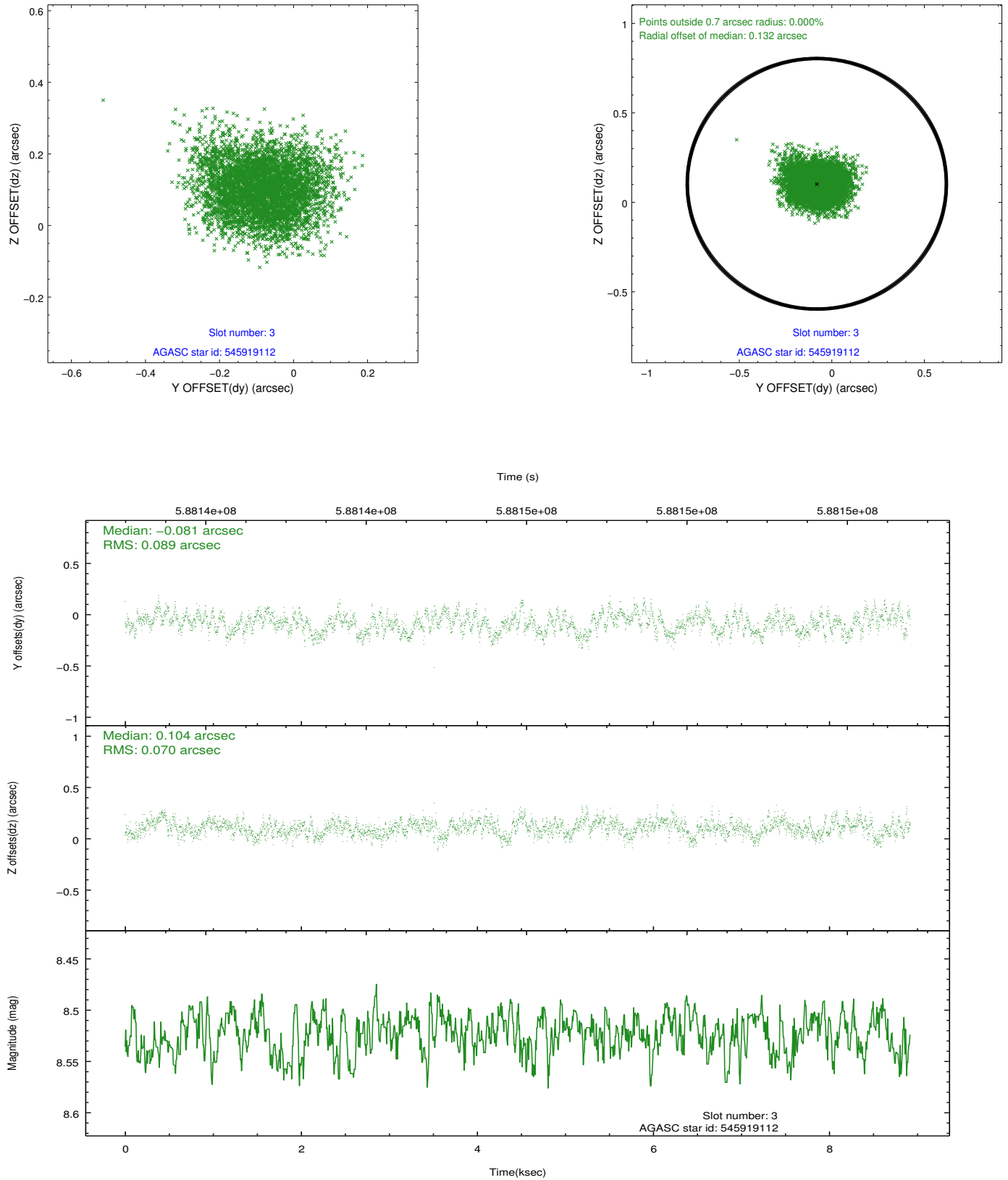


Slot Statistics

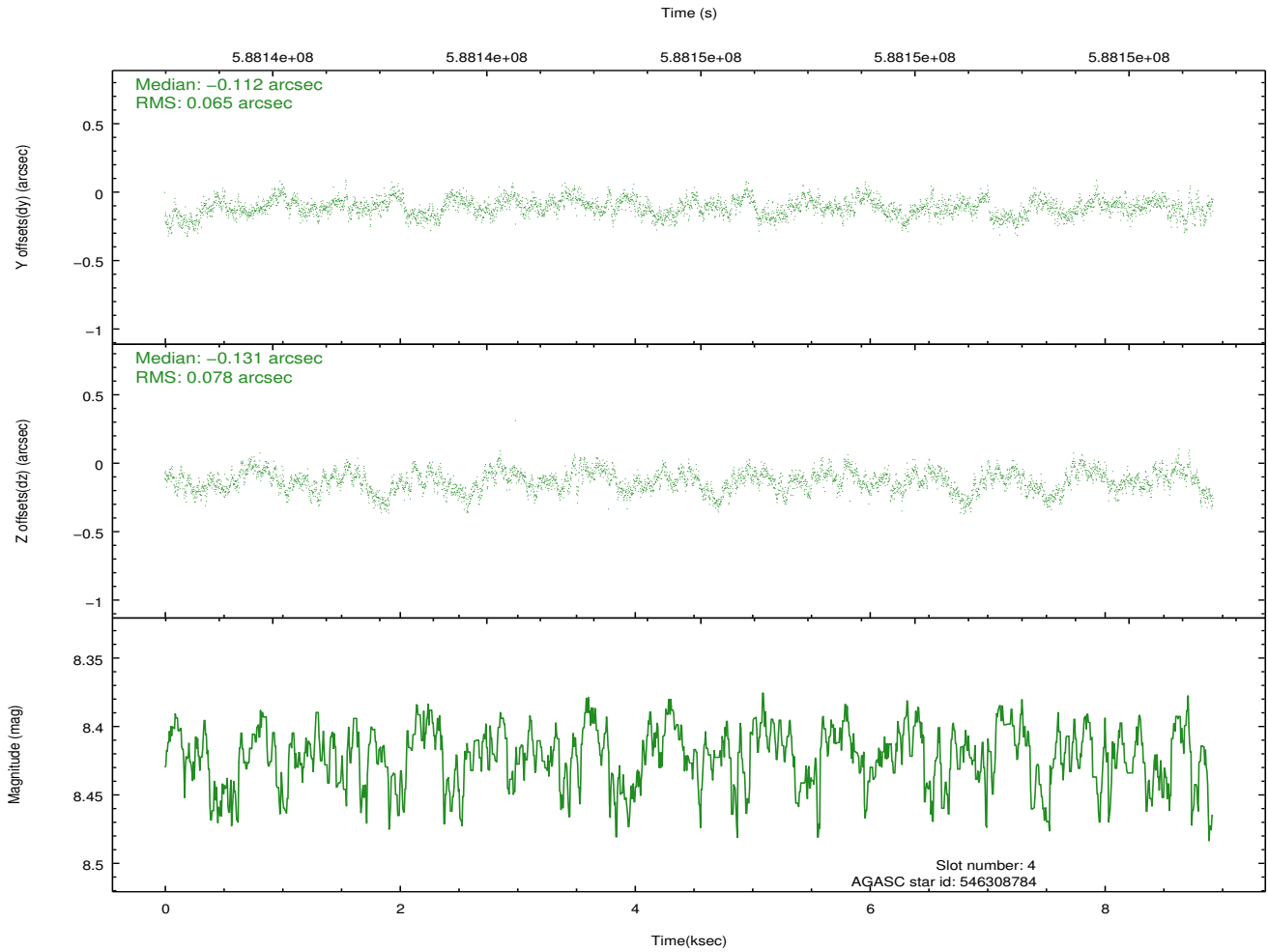
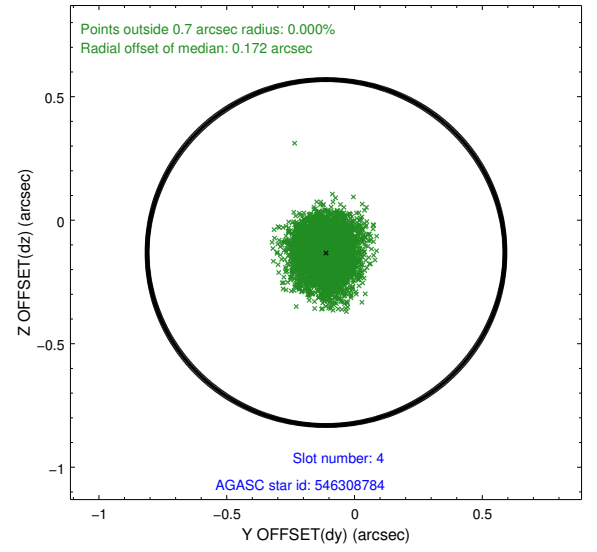
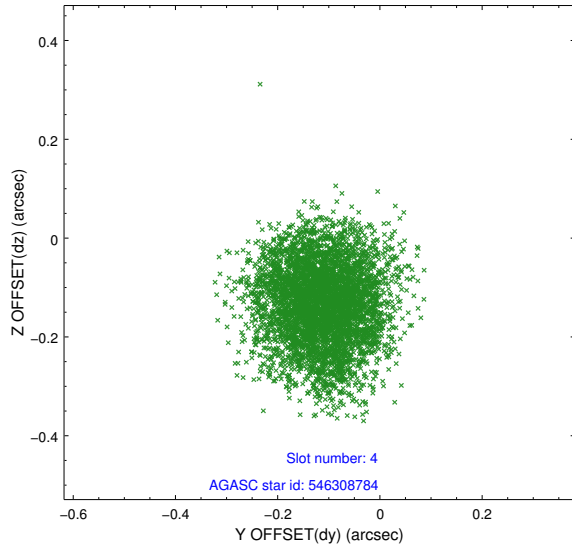
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	2176	-0.198	-0.107	0.017	0.027	0.000000	0.000000	-768.48	-1740.51
1	FID		ACIS-S-4	7.14	2177	0.439	0.123	0.007	0.017	0.000000	0.000000	2145.14	167.57
2	FID		ACIS-S-5	7.15	2177	-0.271	-0.008	0.016	0.025	0.000000	0.000000	-1820.62	161.79
3	GUIDE	used	545919112	8.52	4351	-0.081	0.104	0.121	0.191	189.347122	64.571008	1914.60	-1788.80
4	GUIDE	used	546308784	8.42	4353	-0.112	-0.131	0.110	0.171	190.382816	65.321868	1076.19	1226.17
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	546309776	9.22	4349	0.019	-0.078	0.203	0.321	190.070921	65.168911	1148.24	506.77
7	GUIDE	used	546311272	9.70	4346	0.166	0.130	0.246	0.388	188.624678	65.219652	-516.53	-919.41

2.4 Star Slots

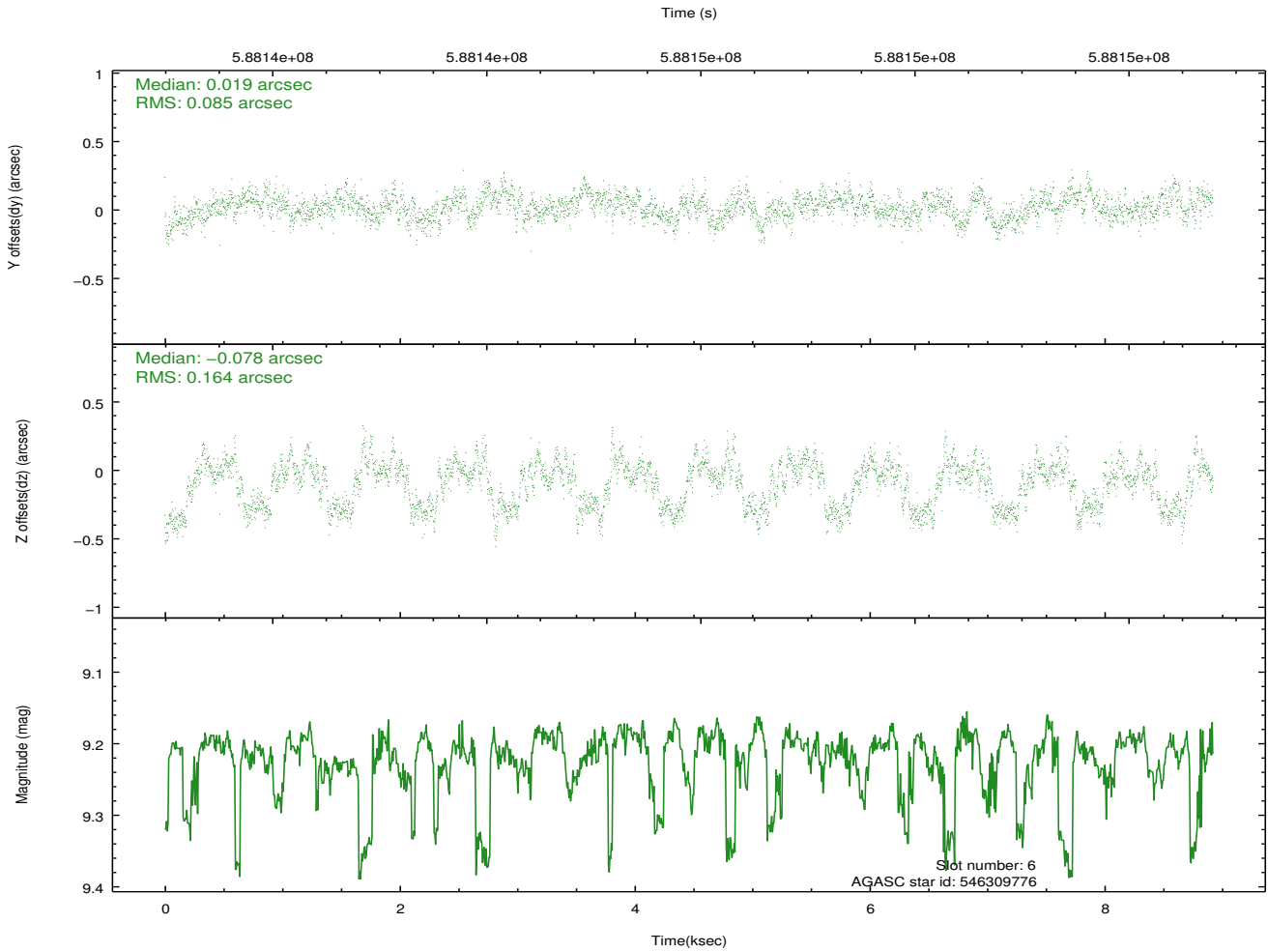
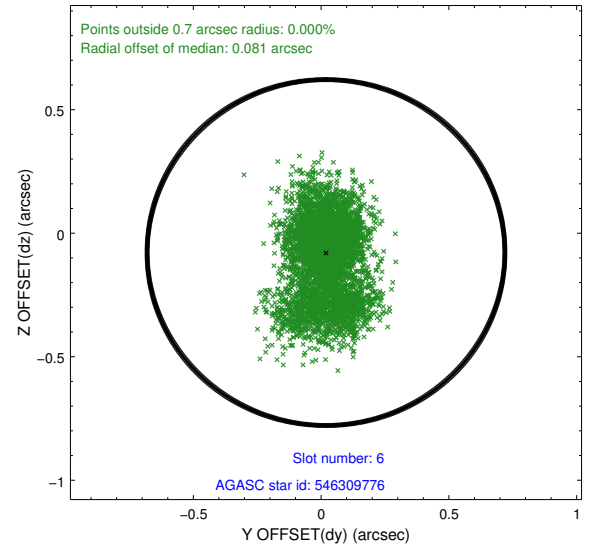
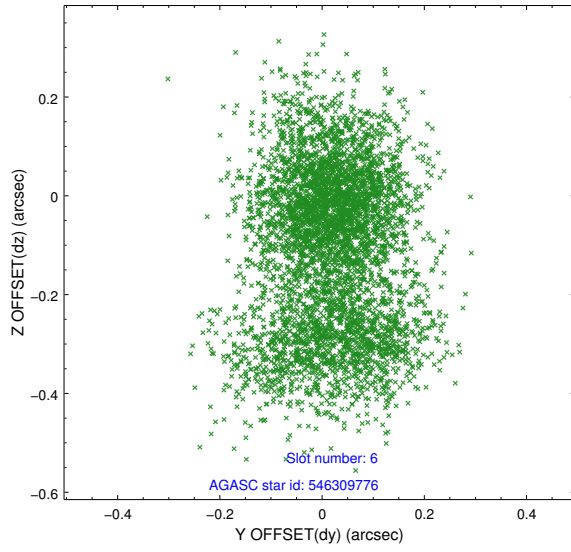
2.4.1 Slot 3



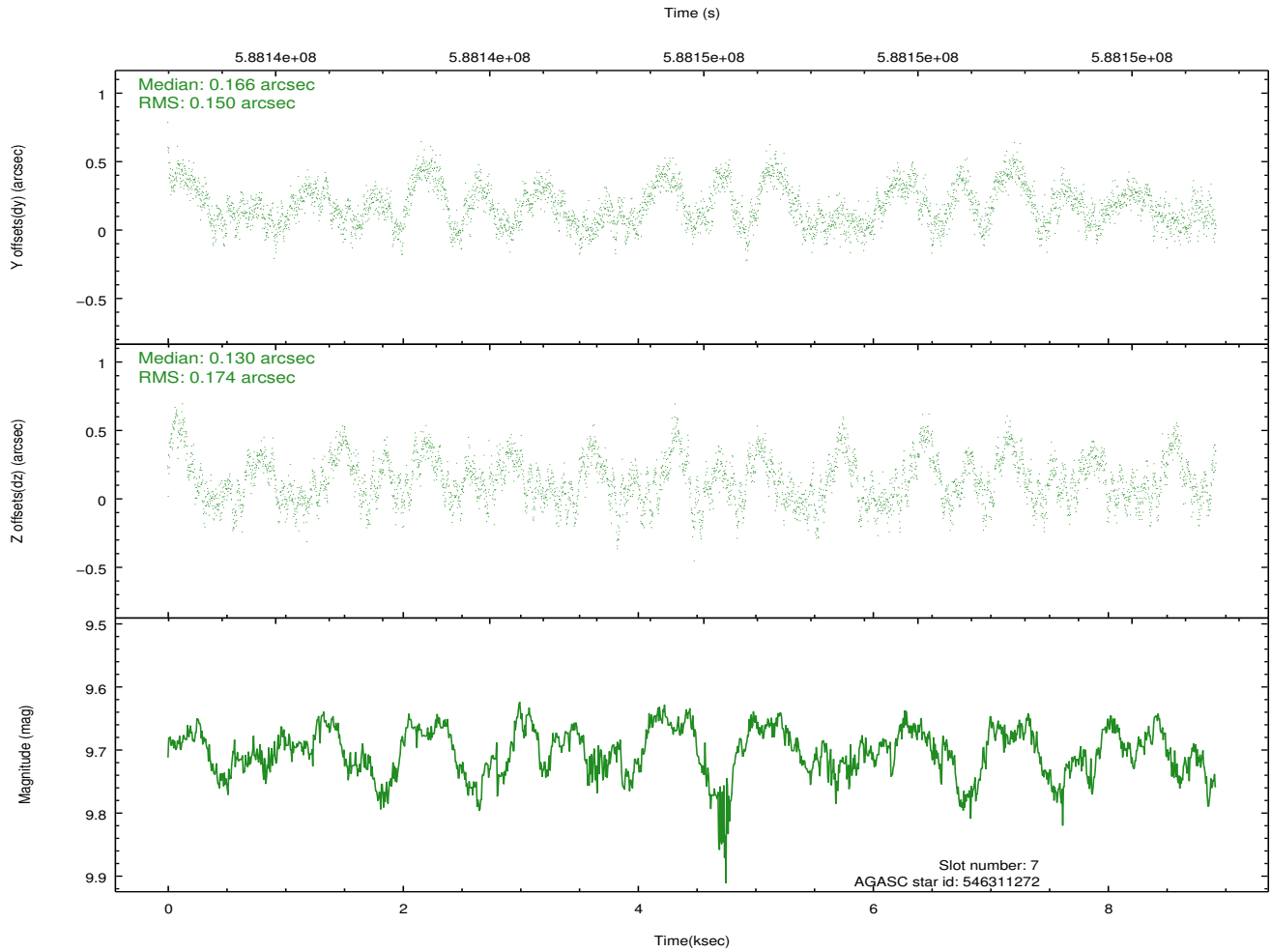
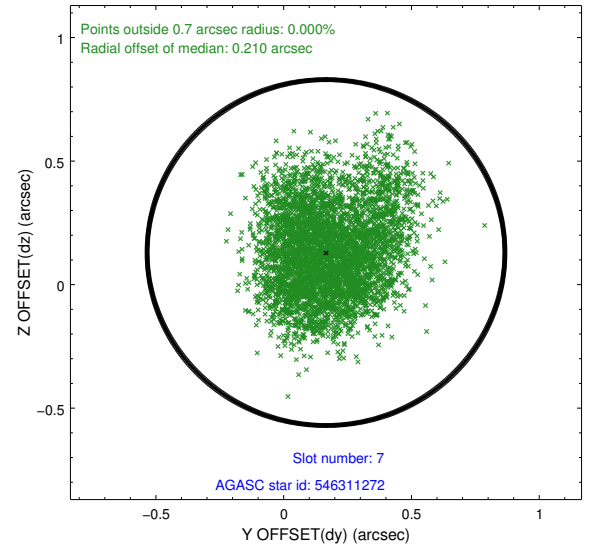
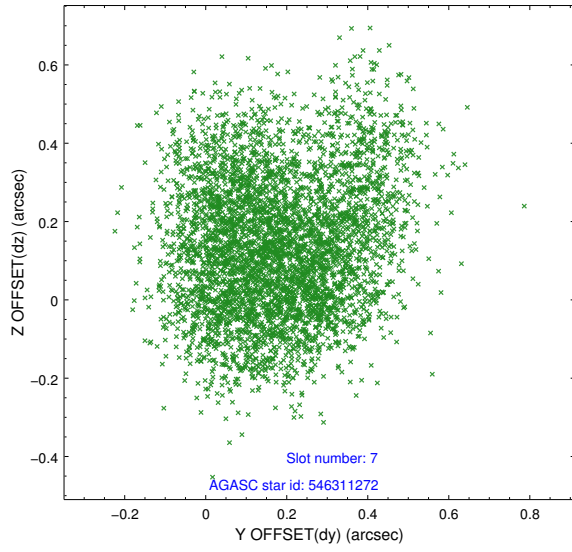
2.4.2 Slot 4



2.4.3 Slot 6

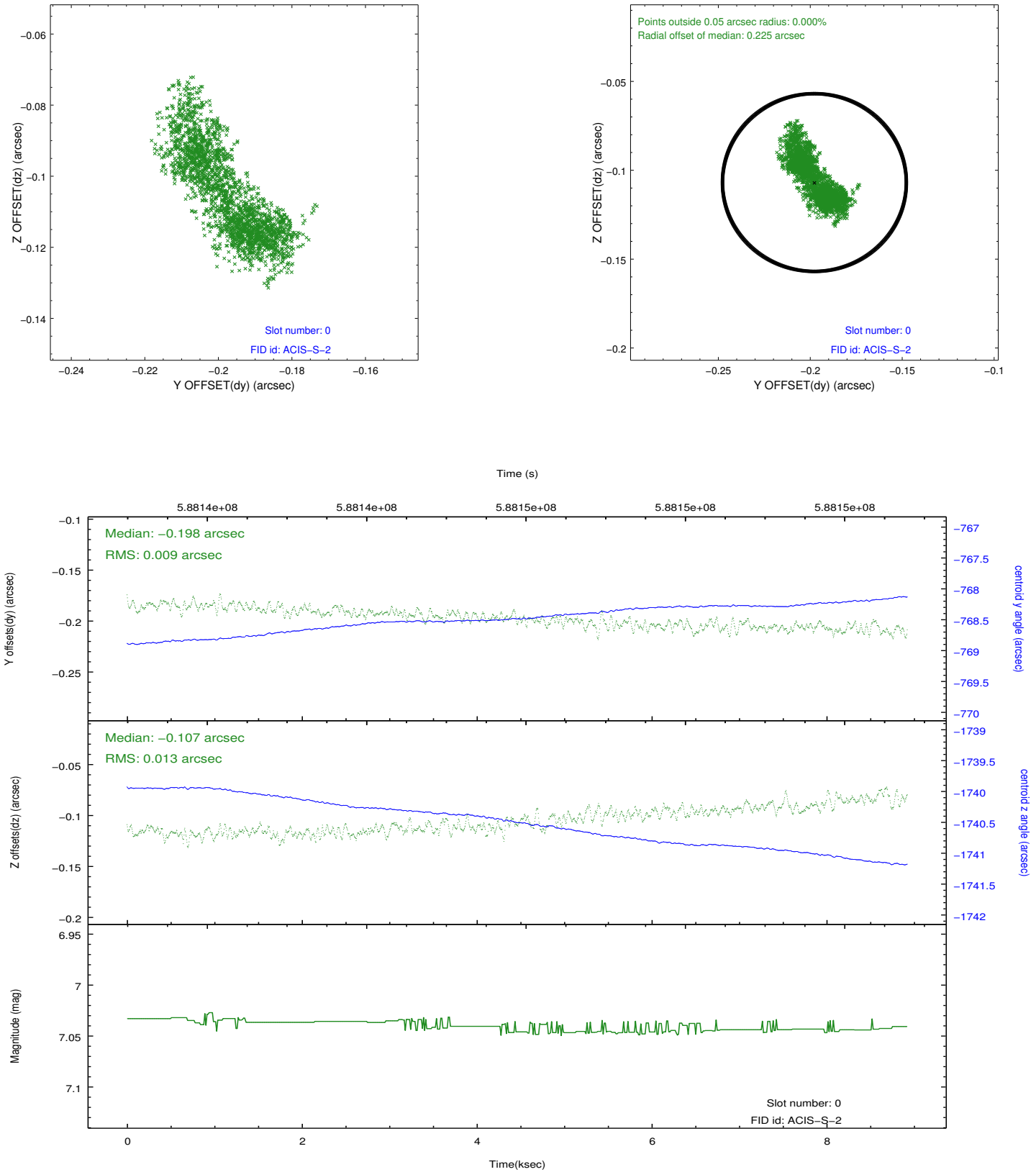


2.4.4 Slot 7

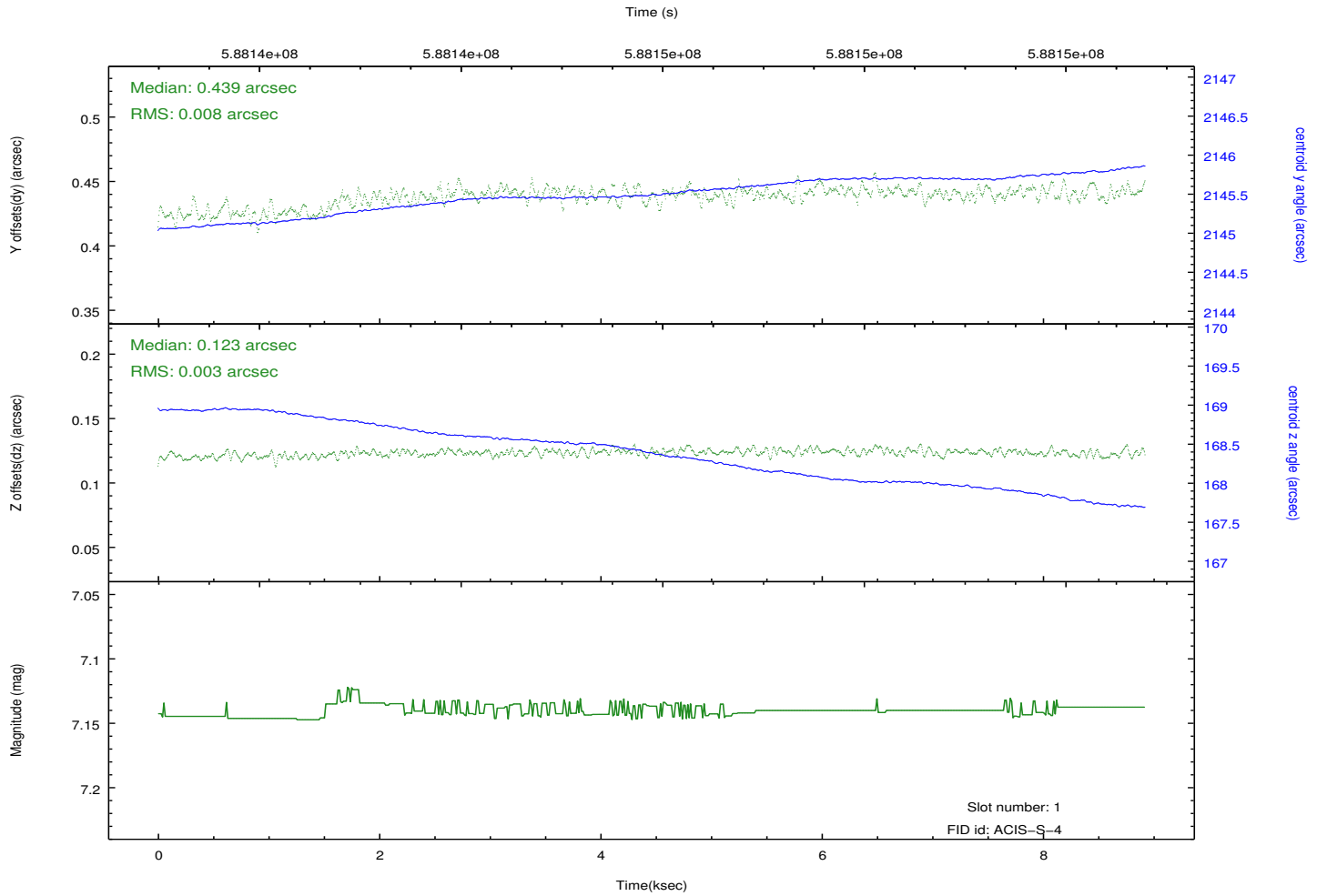
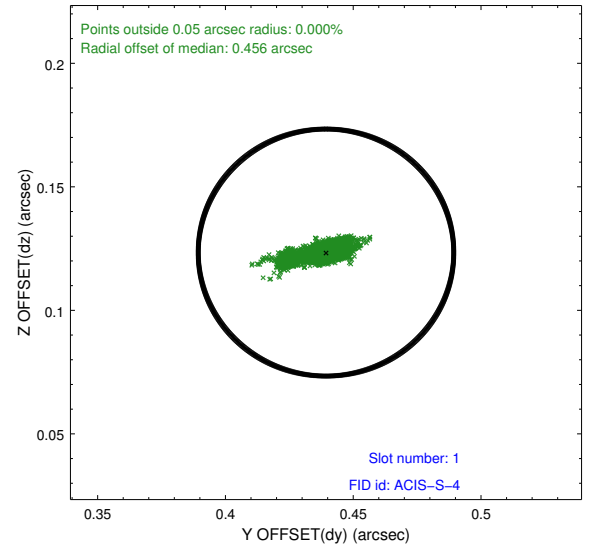
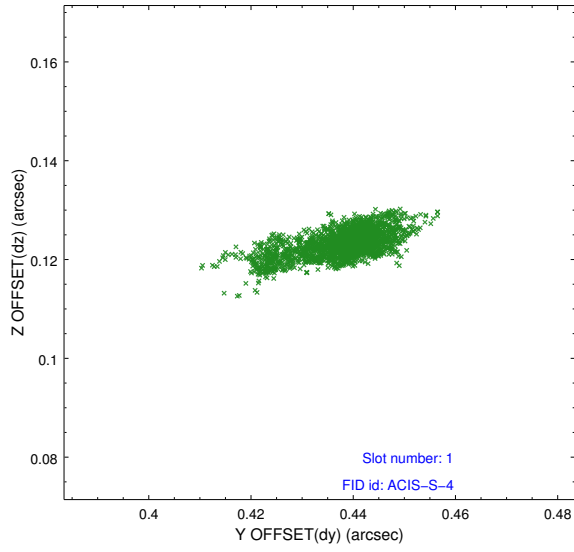


2.5 FID Slots

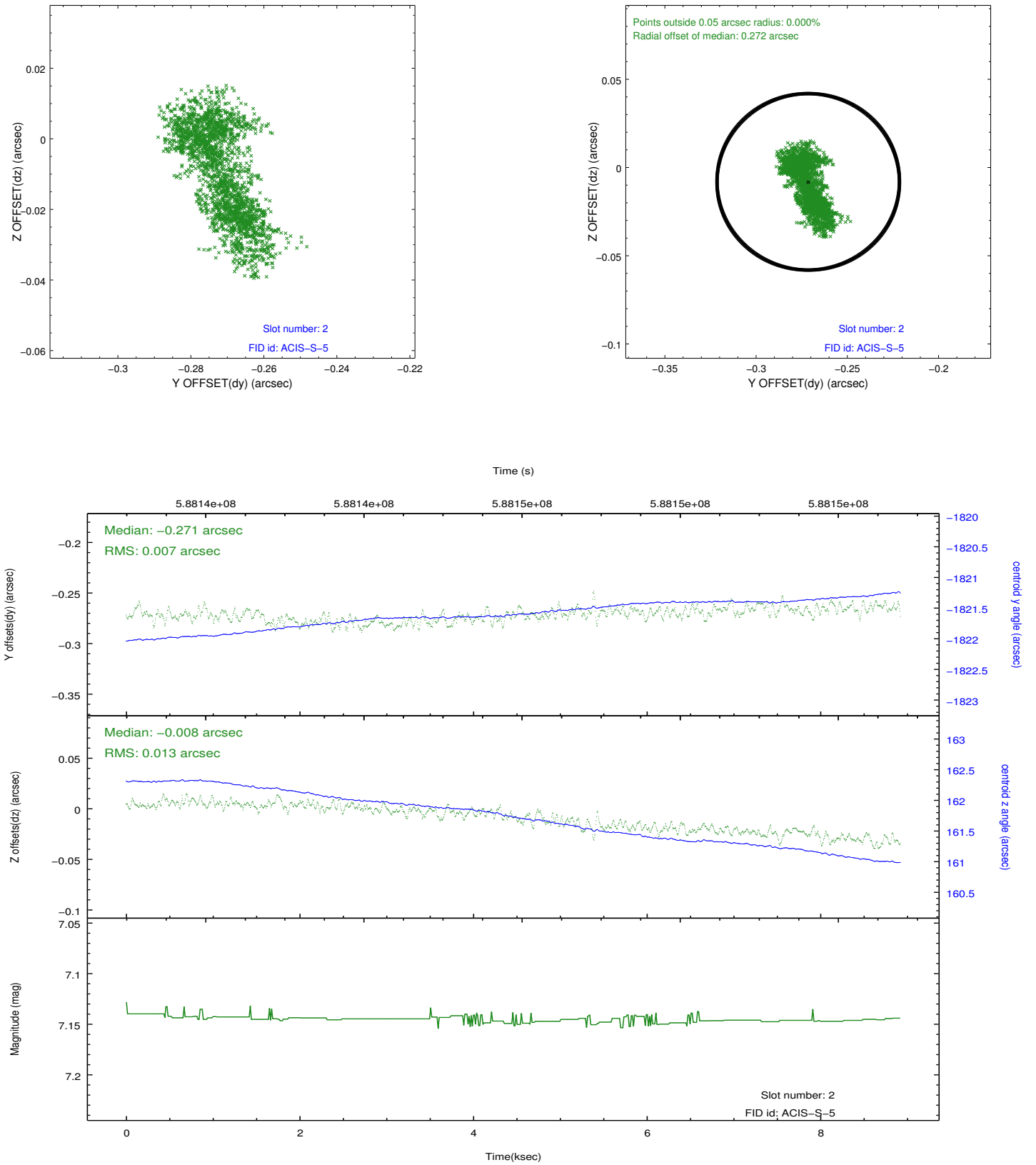
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.08.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.9584001185894

A.2 Comments

The guide star in slot 5 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.