

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 19901 - L2 Version 1
Chandra X-Ray Center

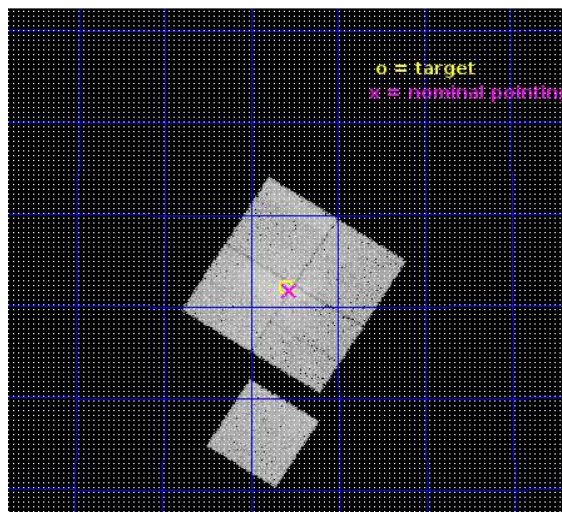
L2 Processing Date : Oct 18 2016

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1 Front

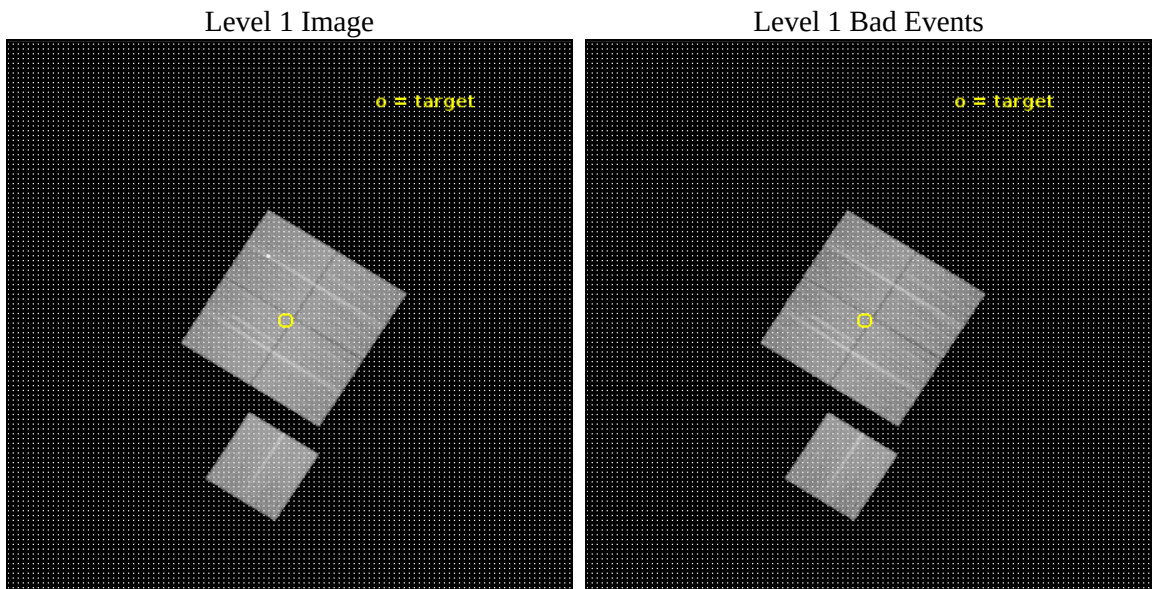
seq_num	801568	Sequence number
obs_id	19901	Observation id
title	A Shock in the Cluster ZwCl0008: A Direct Test of Particle Acceleration Models	Proposal title
observer	Dr Reinout van Weeren	Principal investigator
object	ZwCl 0008.8+5215	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	2.896667	Observer's specified target RA [deg]
dec_targ	52.535556	Observer's specified target Dec [deg]
ra_nom	2.8895396353081	Nominal RA [deg]
dec_nom	52.529330306318	Nominal Dec [deg]
roll_nom	212.21433937407	Nominal Roll [deg]
revision	1	Processing version of data
ontime	32249.218117714	Sum of GTIs [s]
livetime	31827.858341477	Livetime [s]
ontime0	32255.500248194	Sum of GTIs [s]
ontime1	32255.500248194	Sum of GTIs [s]
ontime2	32255.500248194	Sum of GTIs [s]
ontime3	32249.218117714	Sum of GTIs [s]
ontime6	32255.500248194	Sum of GTIs [s]
l2events	115310	Number of level 2 events



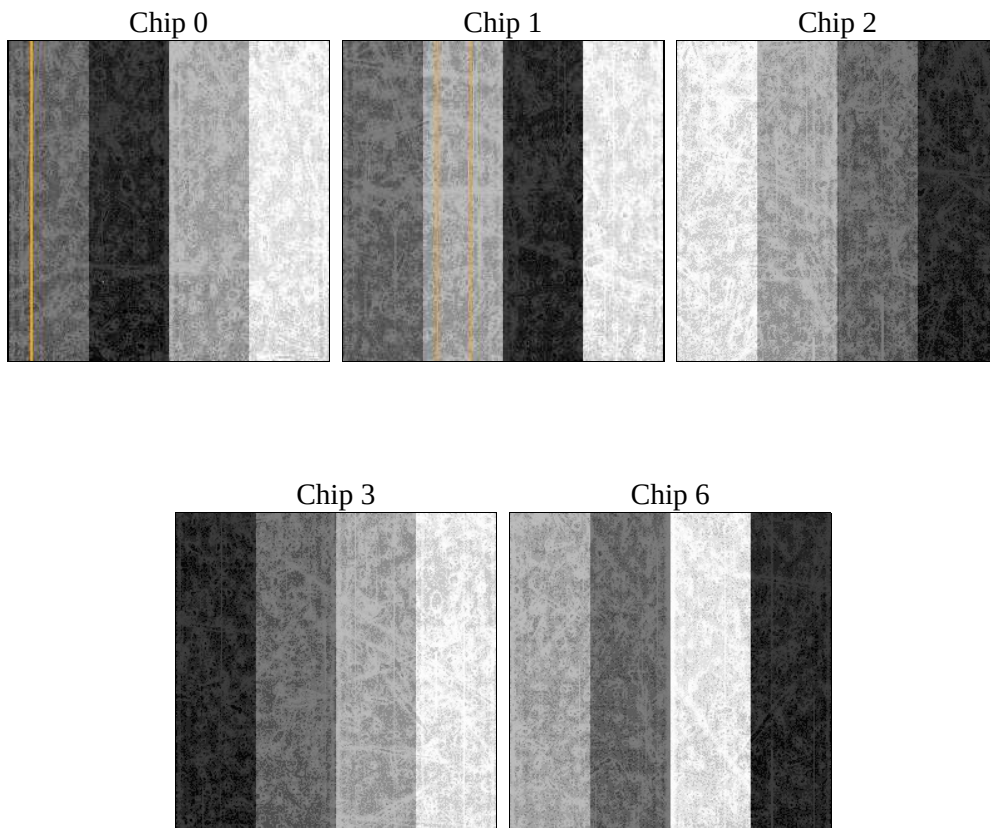
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32190.805000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	32249.218117714	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	32255.500248194	Sum of GTIs [s]
date	2016-10-18T10:51:46	Date and time of file creation	ontime1	32255.500248194	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	32255.500248194	Sum of GTIs [s]
			ontime3	32249.218117714	Sum of GTIs [s]
			ontime6	32255.500248194	Sum of GTIs [s]
			l1events	1084266	Number of level 1 events

2.1.4 Events

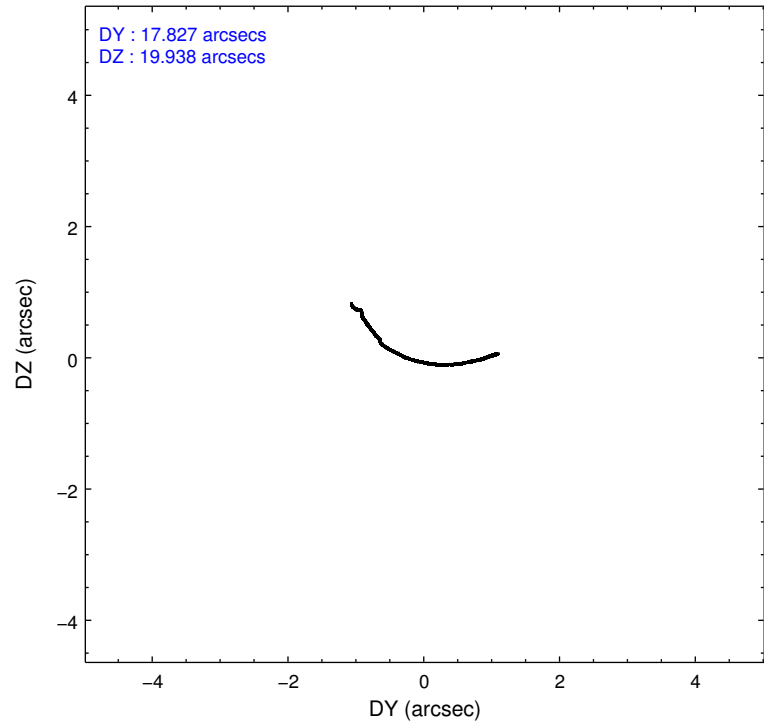
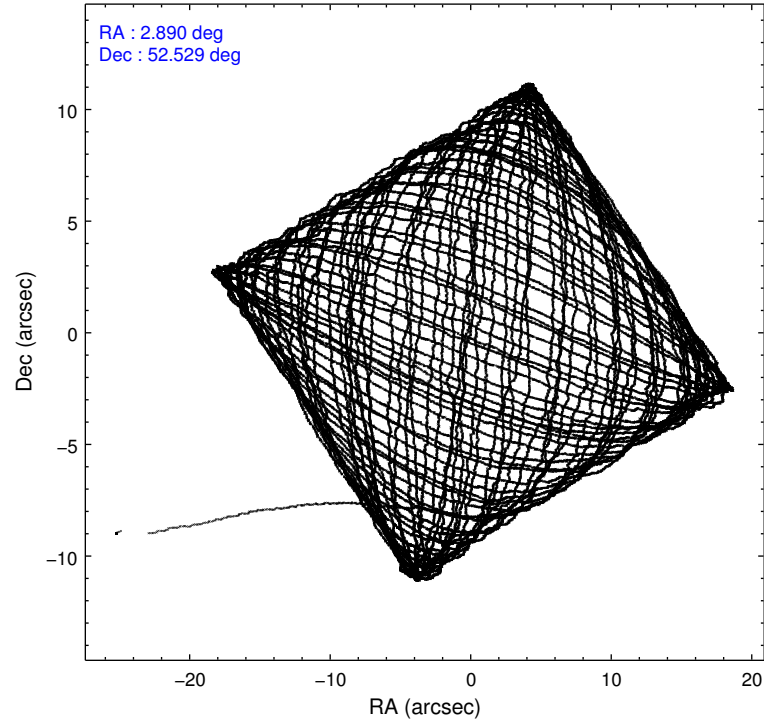
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	200545	215076	225922	228496	214227	grade 0 events	9497	20975	10302	13751	7904
rejected events	174762	175996	200391	198551	189937		4%	9%	4%	6%	3%
rejected %	87%	81%	88%	86%	88%	grade 1 events	115	185	121	153	92
							0%	0%	0%	0%	0%
						grade 2 events	6237	6945	5895	5782	5714
							3%	3%	2%	2%	2%
						grade 3 events	2599	2589	2357	2575	2479
							1%	1%	1%	1%	1%
						grade 4 events	2339	2631	2428	2680	2364
							1%	1%	1%	1%	1%
						grade 5 events	9103	9667	8539	10646	9962
							4%	4%	3%	4%	4%
						grade 6 events	5117	5947	4554	5163	5834
							2%	2%	2%	2%	2%
						grade 7 events	165538	166137	191726	187746	179878
							82%	77%	84%	82%	83%

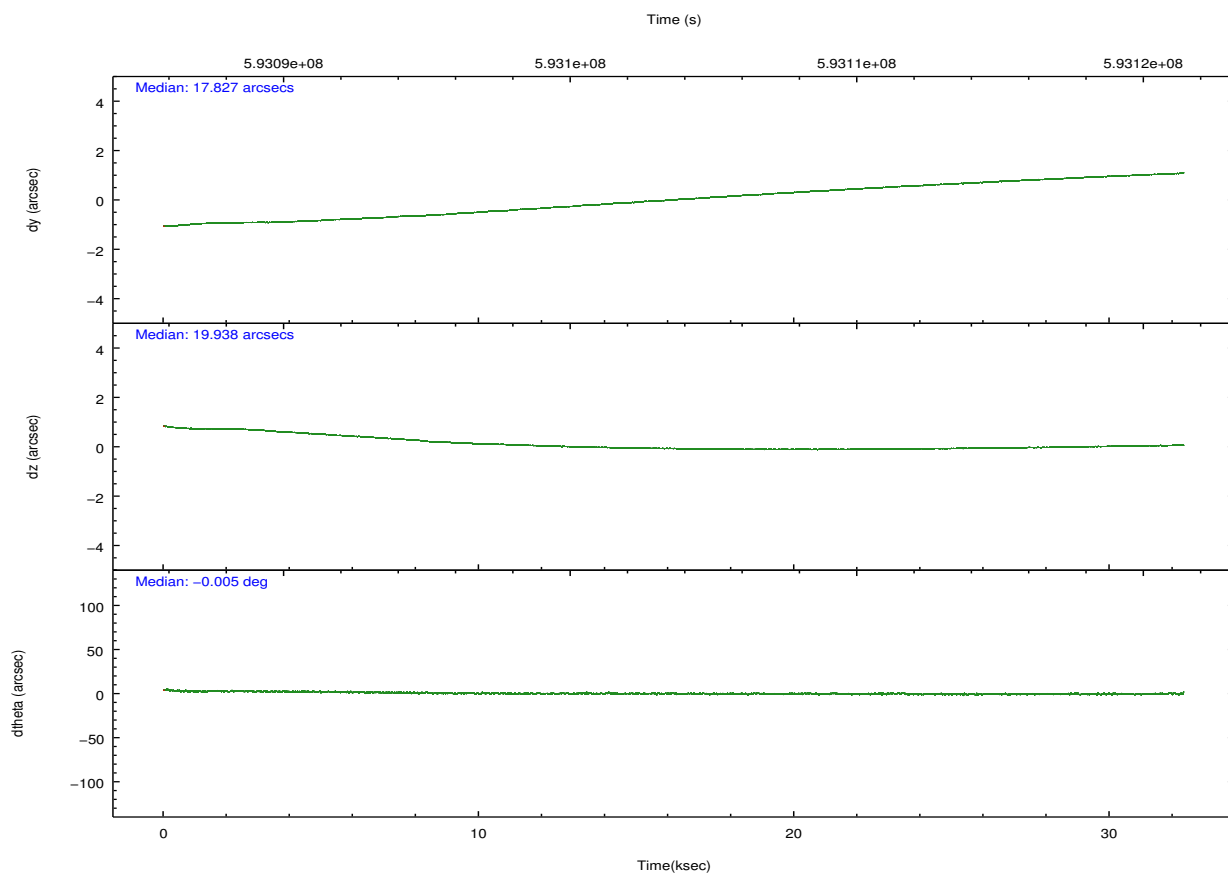
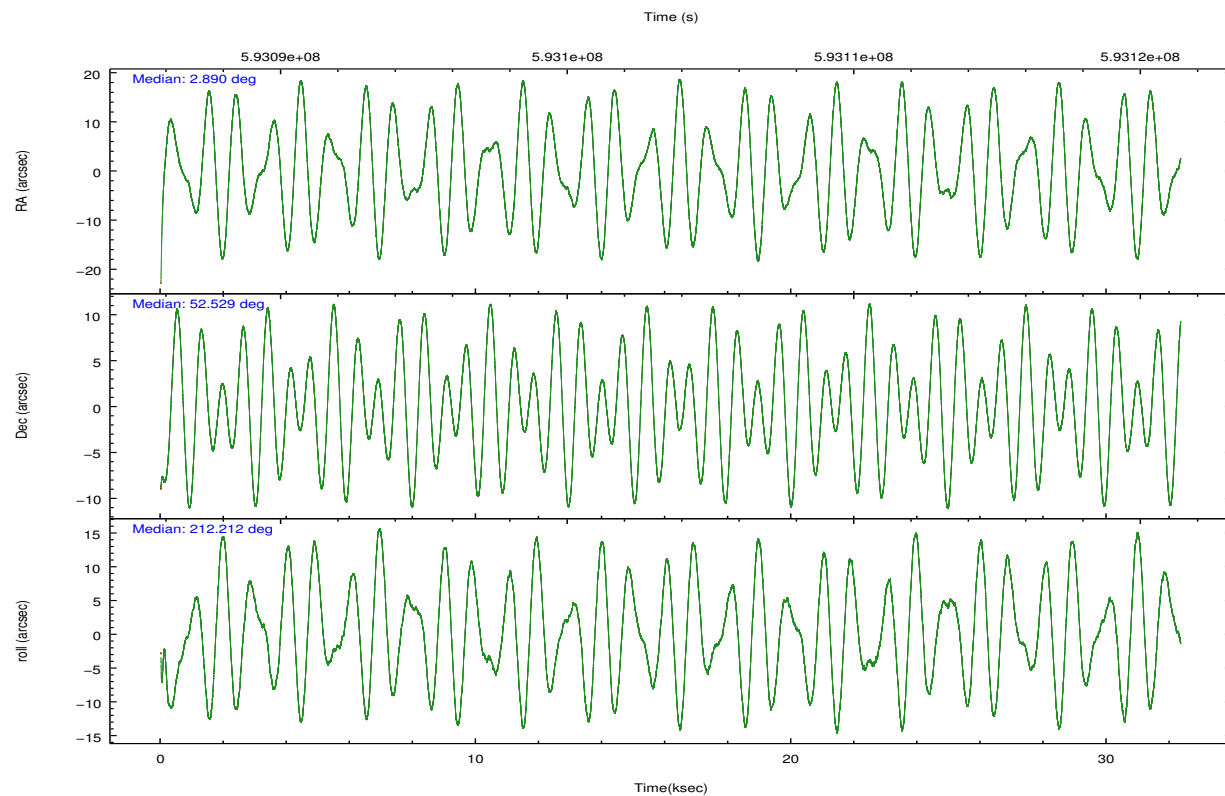
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-01236	ACIS-01236
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	2.910560	2.889539635308097
[deg] Pointing Dec	52.553802	52.52933030631787
[deg] Pointing Roll	211.988968	212.214339374075
[mm] SIM focus pos	-0.782348	-0.7809083437167272
[mm] SIM defocus	0	0.001439871863259334
[mm] SIM translation stage pos	-233.592463	-233.5874344608287
[mm] SIM translation stage offset	0	-0.005018542100998502
[s] Observation start time (MET)	593087602.184000	593086577.7363501
Observation start date	2016-10-17T10:32:14	2016-10-17T10:16:17
[s] Observation end time (MET)	593119792.184000	593120028.10078
Observation end date	2016-10-17T19:28:44	2016-10-17T19:33:48
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	Y	Y
CCD I1 on	Y	Y
CCD I2 on	Y	Y
CCD I3 on	Y	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	O1	N
CCD S4 on	N	N
CCD S5 on	N	N
Number of optional ACIS chips dropped	1	1
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



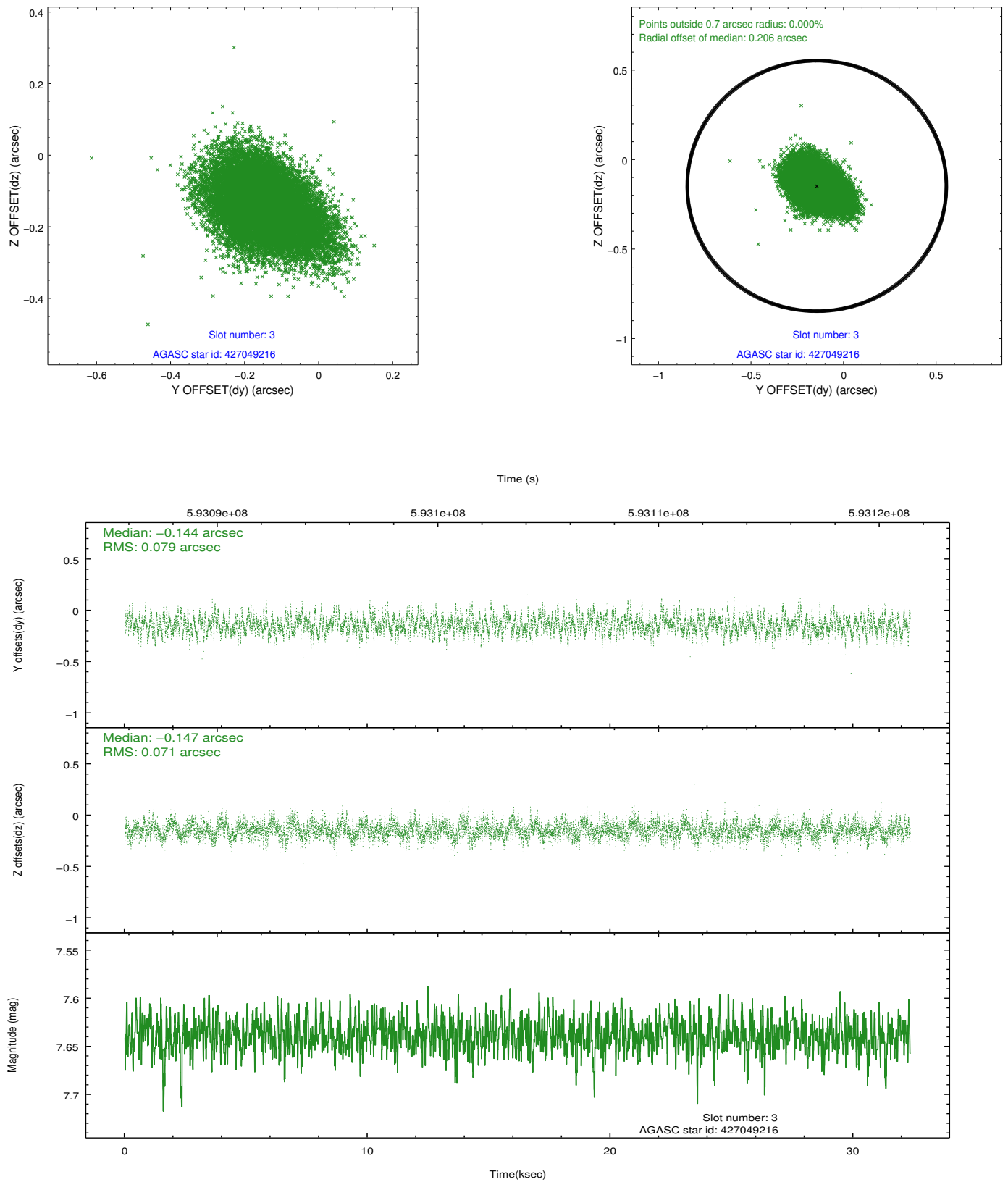


Slot Statistics

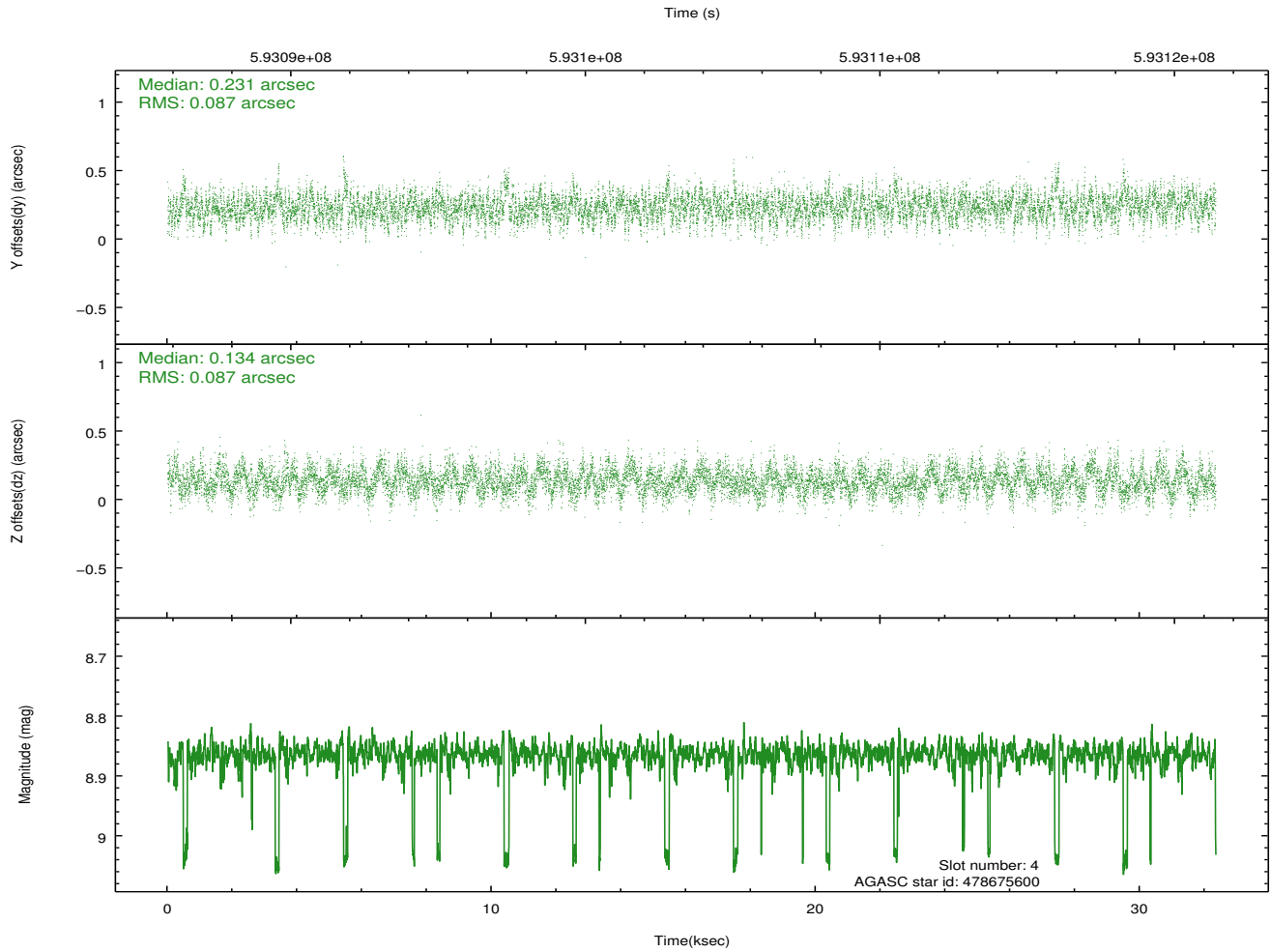
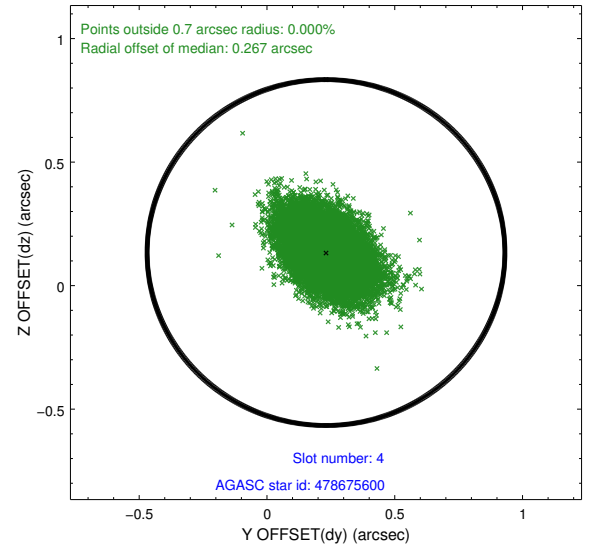
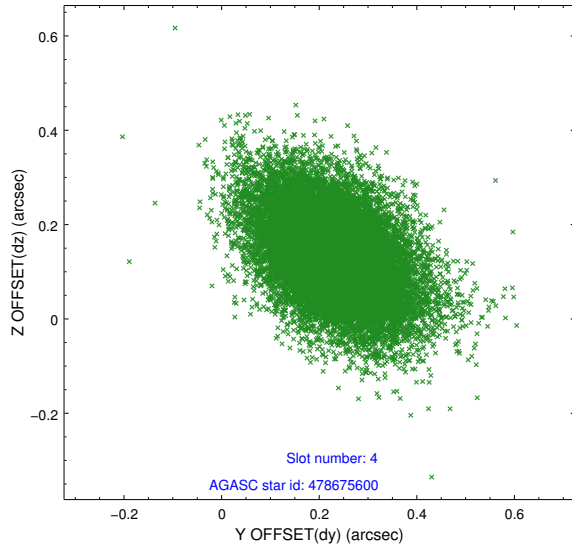
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.22	7888	0.077	-0.059	0.013	0.029	0.000000	0.000000	921.68	-843.81
1	FID		ACIS-I-5	7.21	7889	-0.388	0.024	0.011	0.016	0.000000	0.000000	-1826.96	1053.59
2	FID		ACIS-I-6	7.23	7887	0.220	0.106	0.014	0.023	0.000000	0.000000	387.17	1698.36
3	GUIDE	used	427049216	7.64	15773	-0.144	-0.147	0.112	0.187	2.568599	52.255138	1207.91	511.32
4	GUIDE	used	478675600	8.86	15764	0.231	0.134	0.127	0.217	1.576615	52.651140	2271.63	-1862.91
5	GUIDE	used	478817384	8.26	15774	0.289	0.287	0.102	0.165	3.580009	52.860975	-1822.77	-172.53
6	GUIDE	used	478818512	8.14	15768	0.058	0.102	0.104	0.175	3.766666	52.639607	-1755.54	719.58
7	GUIDE	used	427036424	7.23	15774	-0.449	-0.376	0.095	0.156	2.620815	51.912344	1768.33	1616.82

2.4 Star Slots

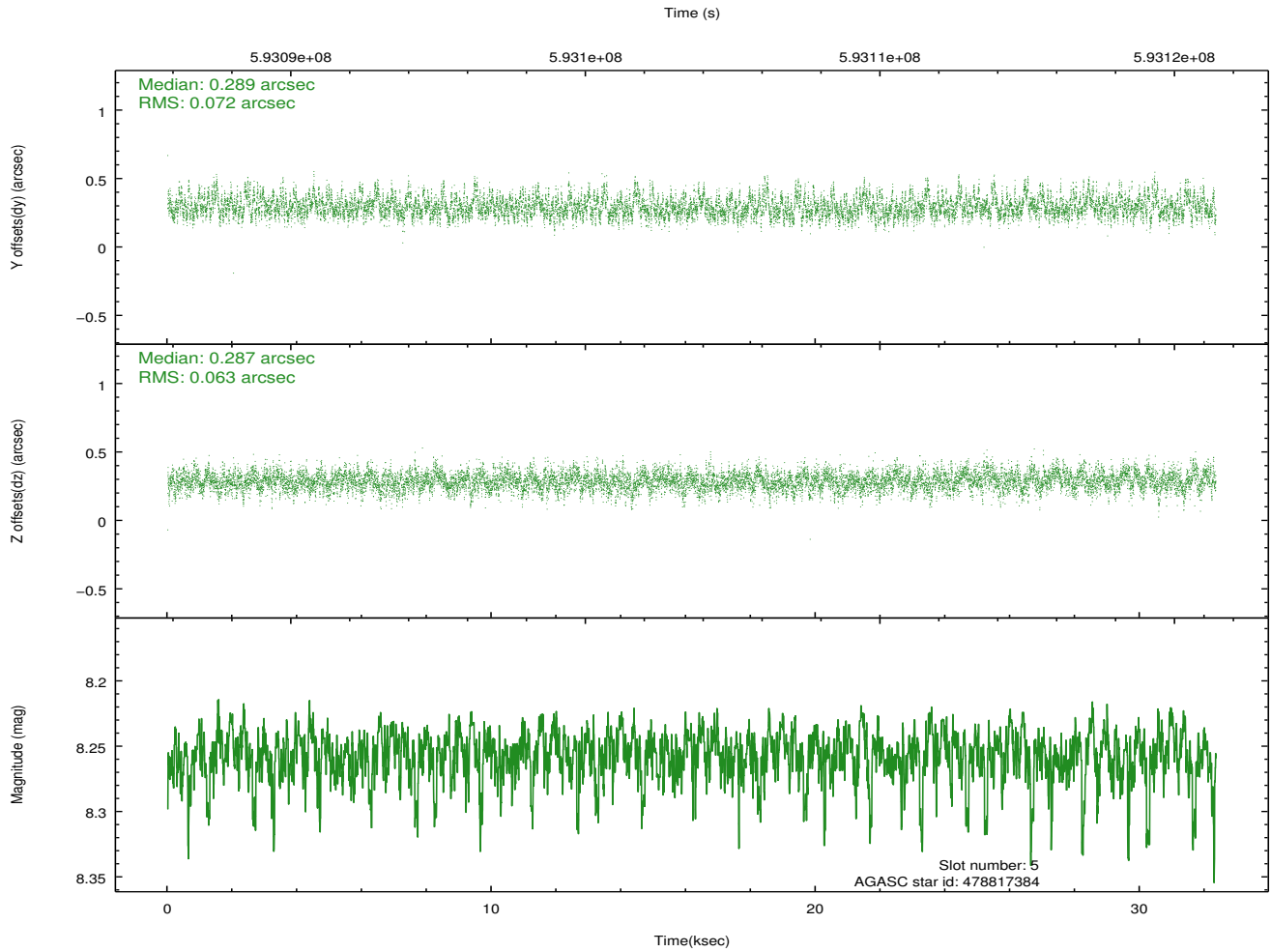
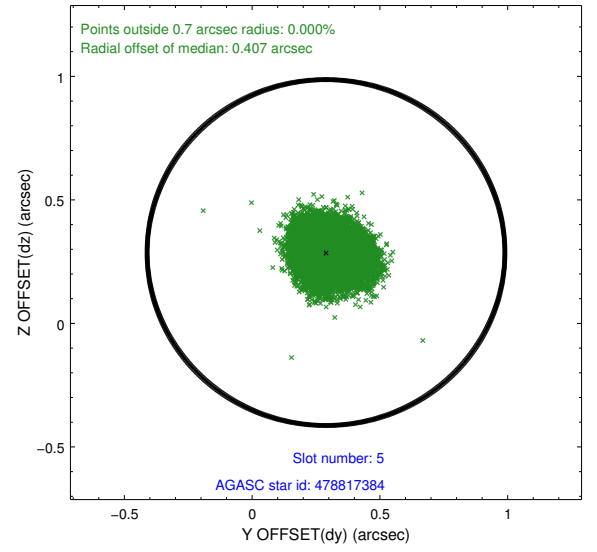
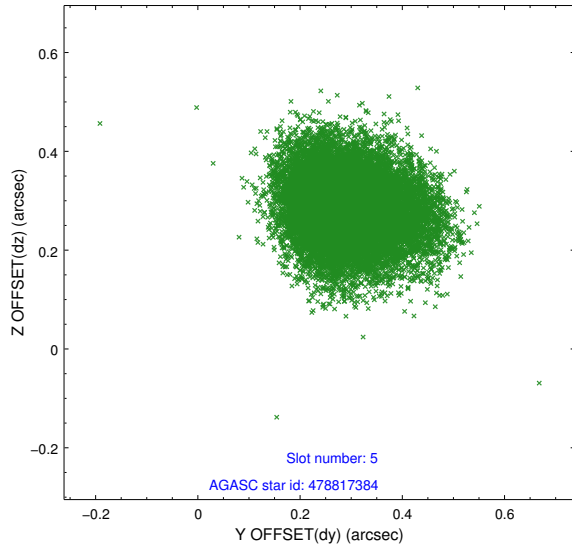
2.4.1 Slot 3



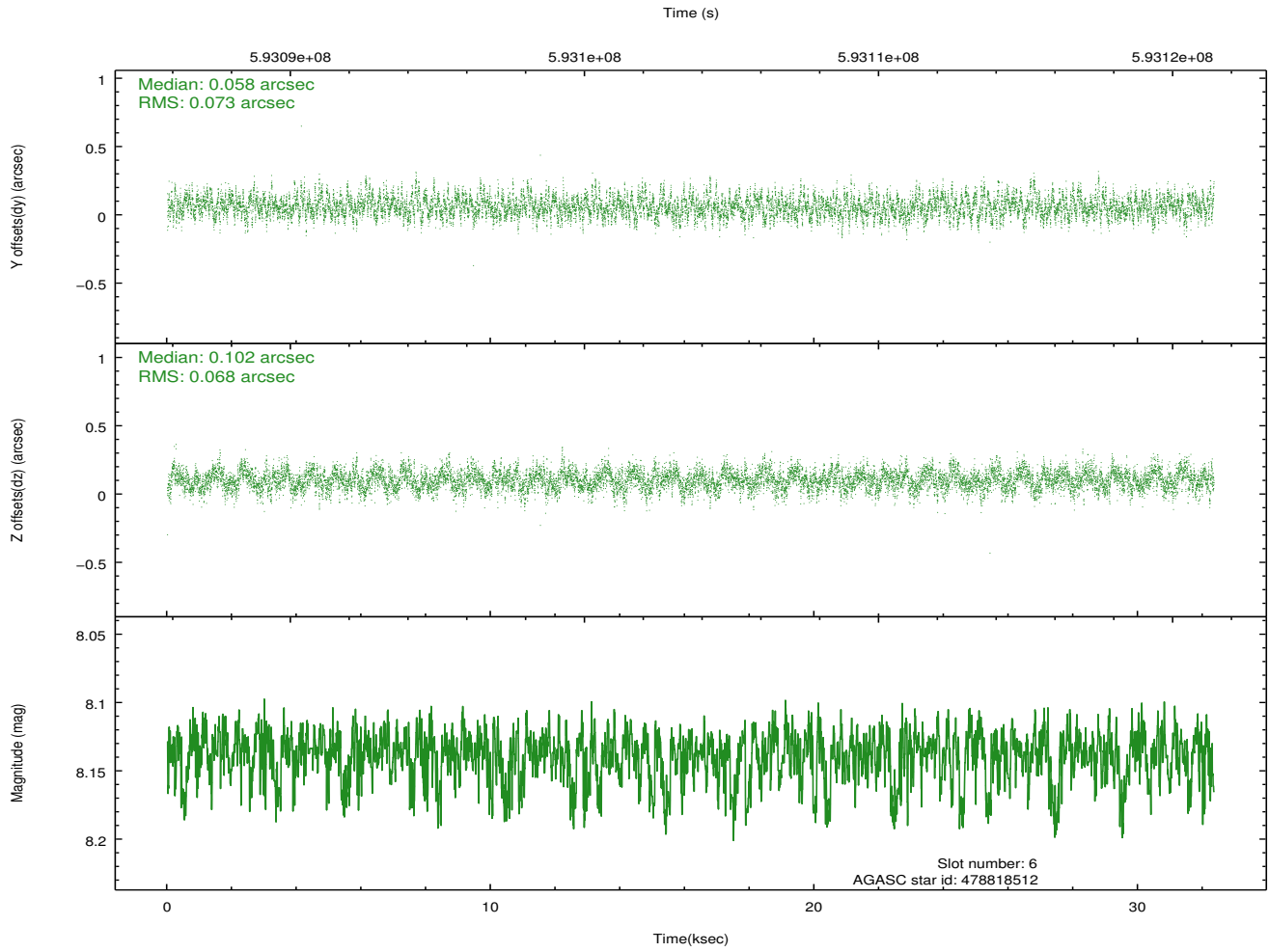
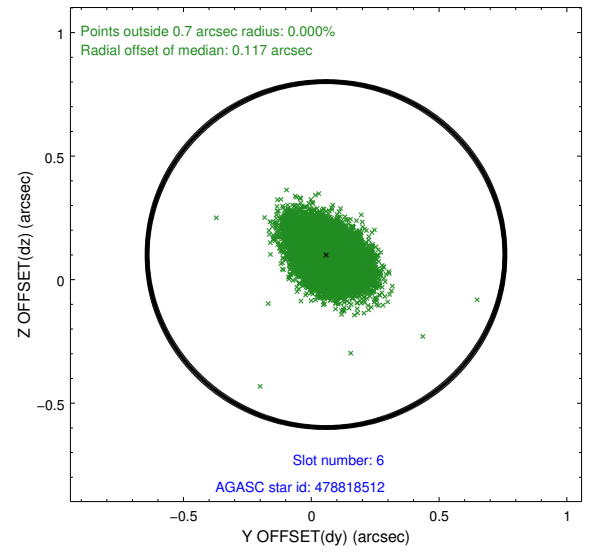
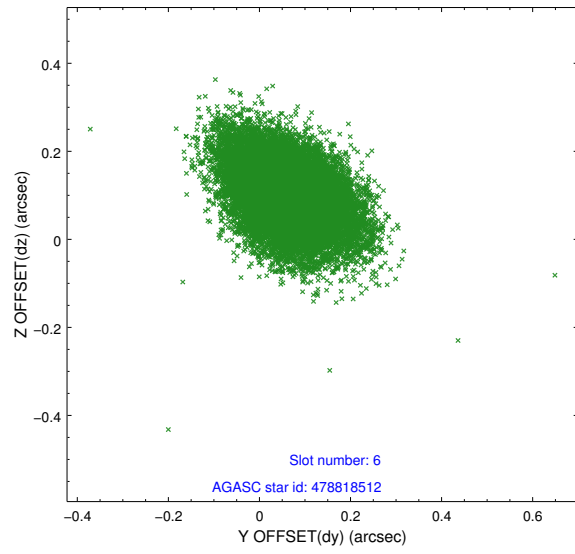
2.4.2 Slot 4



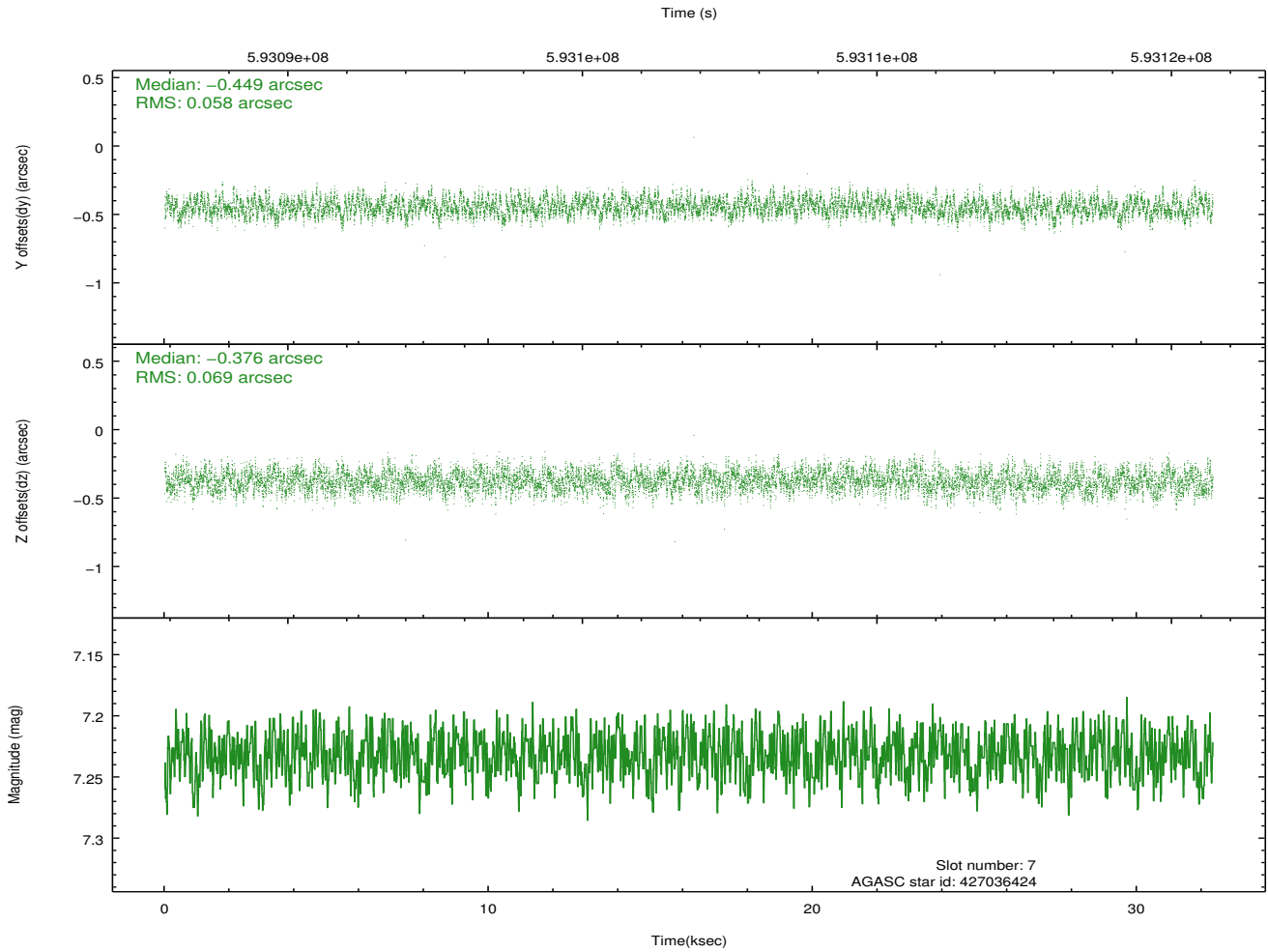
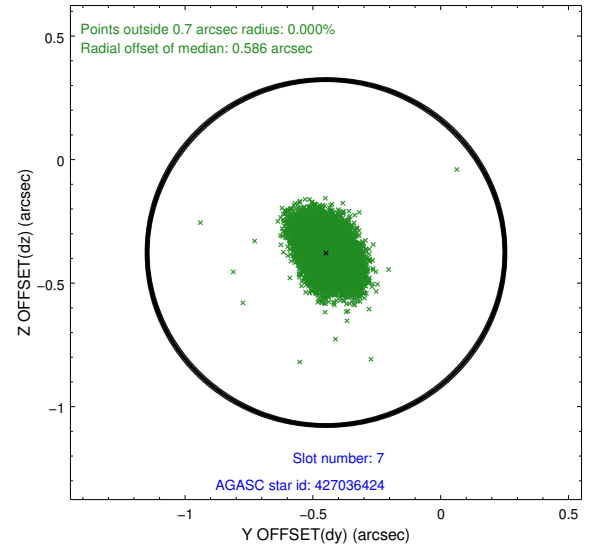
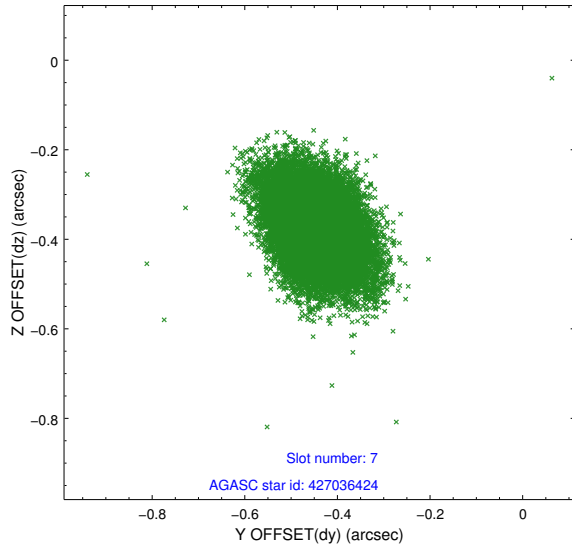
2.4.3 Slot 5



2.4.4 Slot 6

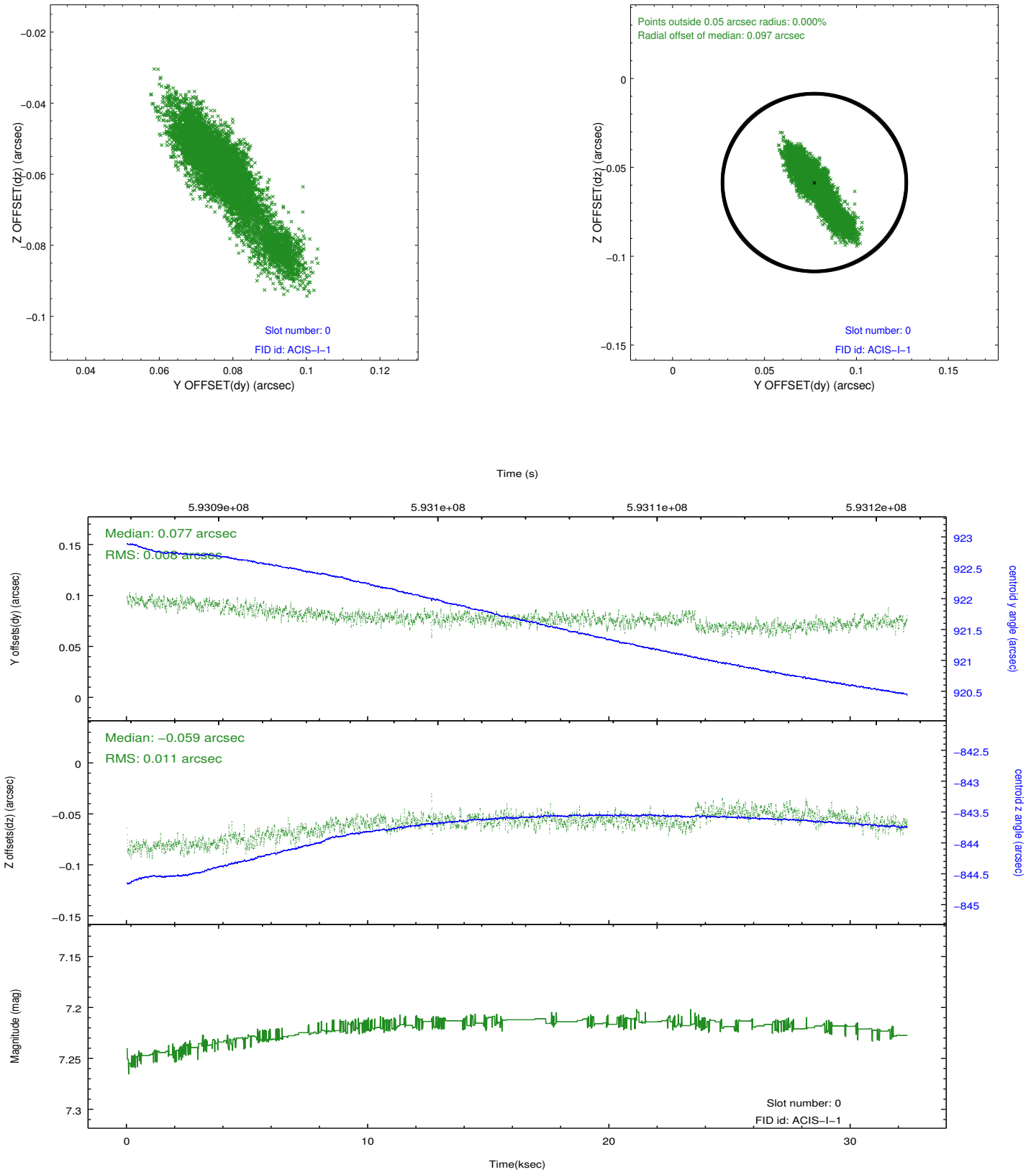


2.4.5 Slot 7

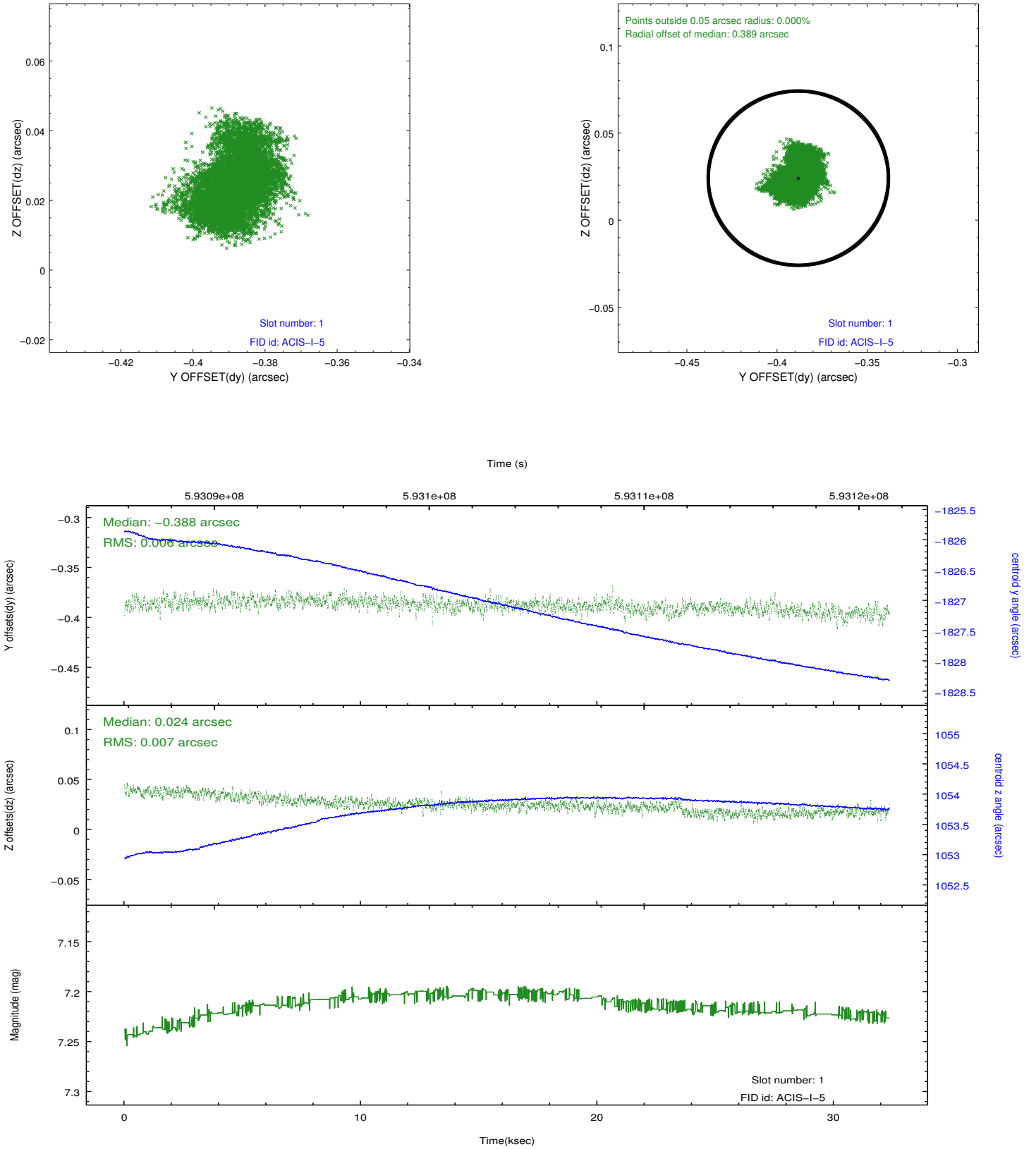


2.5 FID Slots

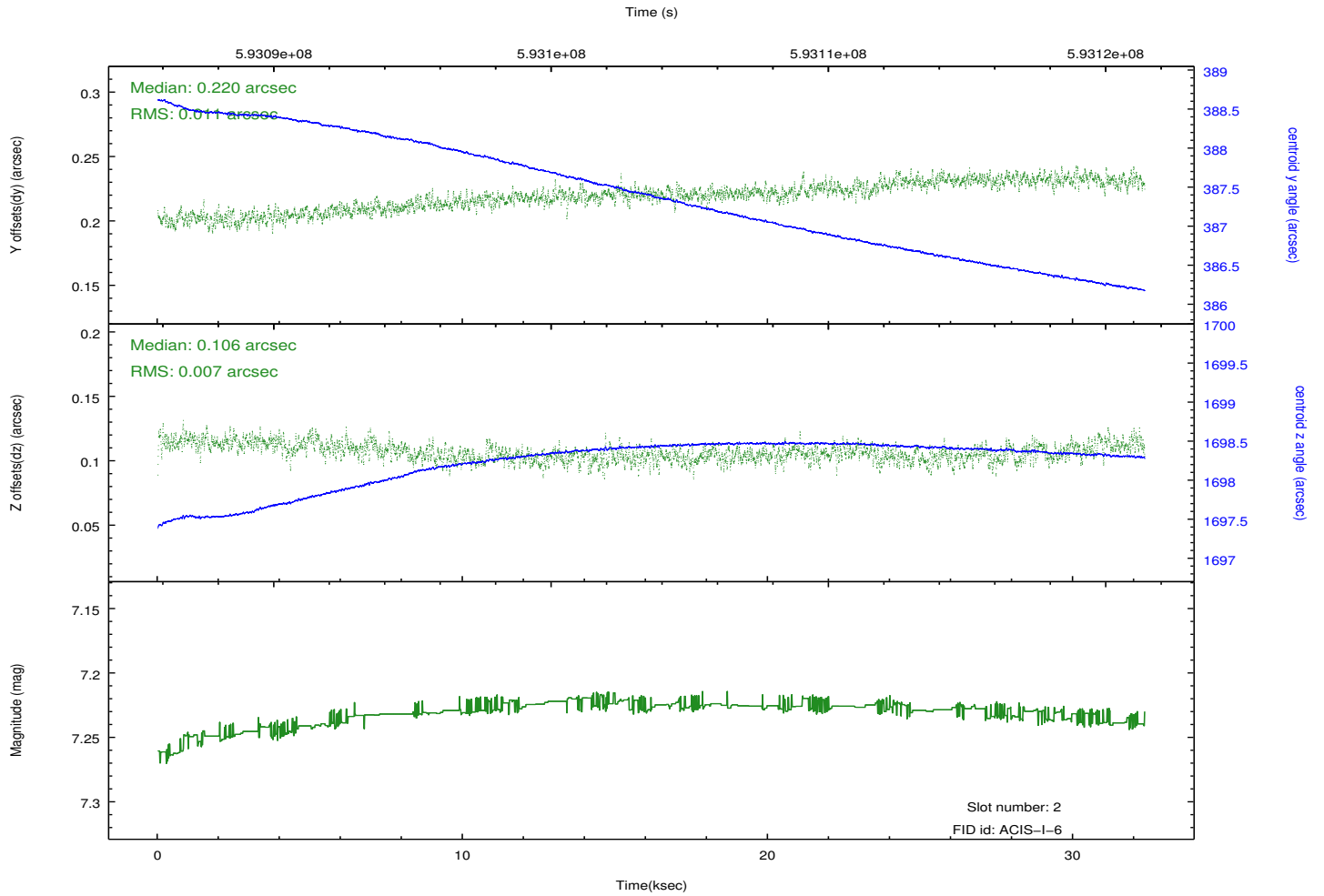
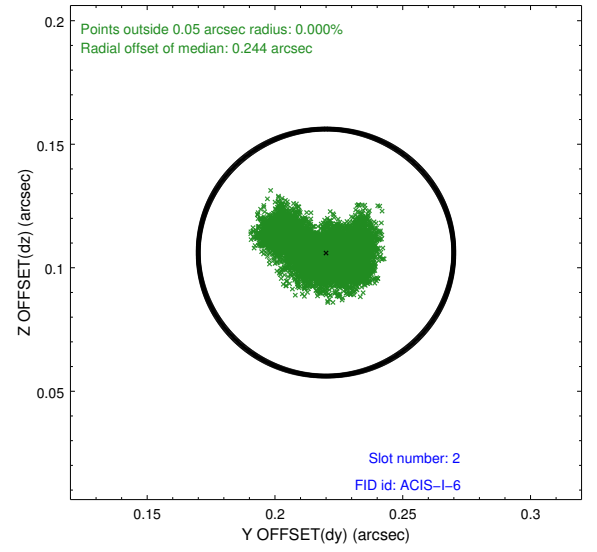
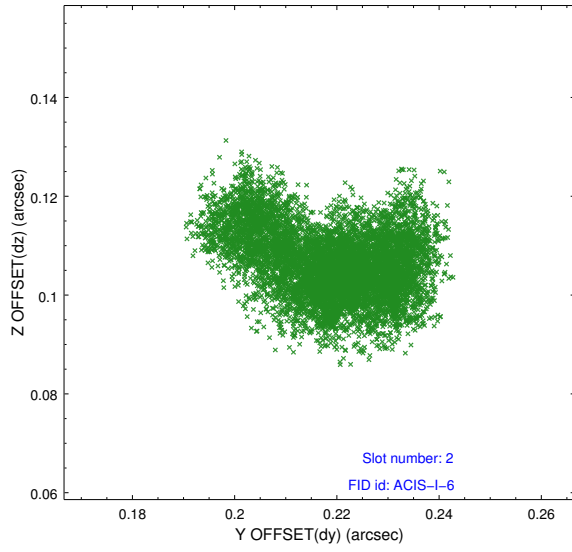
2.5.1 Slot 0



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)	2016.10.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.249218117714

A.2 Comments

Joint Proposal: NRAO. Optional chip S3 not included.