

V&V Reference Report

L2 ASCDS Version : 10.5.1.1

Observation 18244 - L2 Version 1
Chandra X-Ray Center

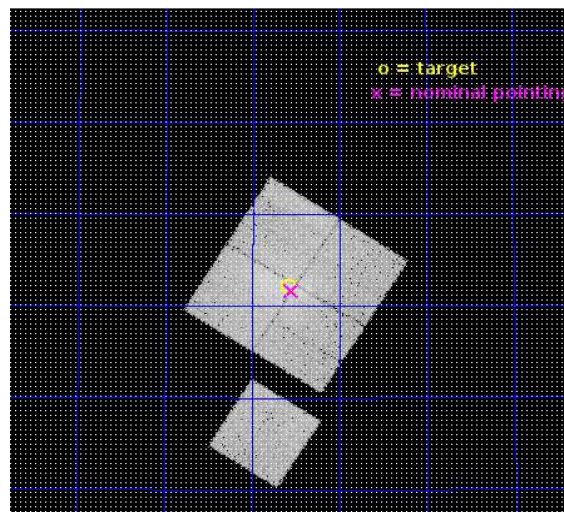
L2 Processing Date : Oct 22 2016

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1 Front

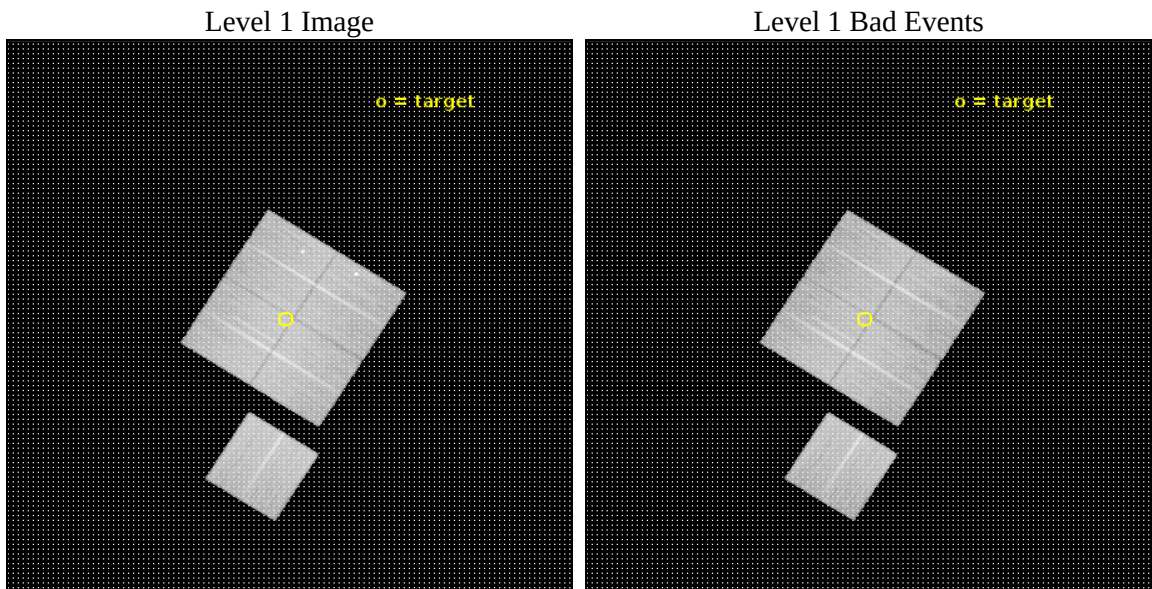
seq_num	801568	Sequence number
obs_id	18244	Observation id
title	A Shock in the Cluster ZwCl0008: A Direct Test of Particle Acceleration Models	Proposal title
observer	Dr Reinout van Weeren	Principal investigator
object	ZwCl 0008.8+5215	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	2.896667	Observer's specified target RA [deg]
dec_targ	52.535556	Observer's specified target Dec [deg]
ra_nom	2.888265572879	Nominal RA [deg]
dec_nom	52.528076964026	Nominal Dec [deg]
roll_nom	212.21535850061	Nominal Roll [deg]
revision	1	Processing version of data
ontime	32069.500246763	Sum of GTIs [s]
livetime	31650.488616817	Livetime [s]
ontime0	32066.359176517	Sum of GTIs [s]
ontime1	32066.359206557	Sum of GTIs [s]
ontime2	32069.500246763	Sum of GTIs [s]
ontime3	32069.500246763	Sum of GTIs [s]
ontime6	32066.359196544	Sum of GTIs [s]
l2events	115216	Number of level 2 events



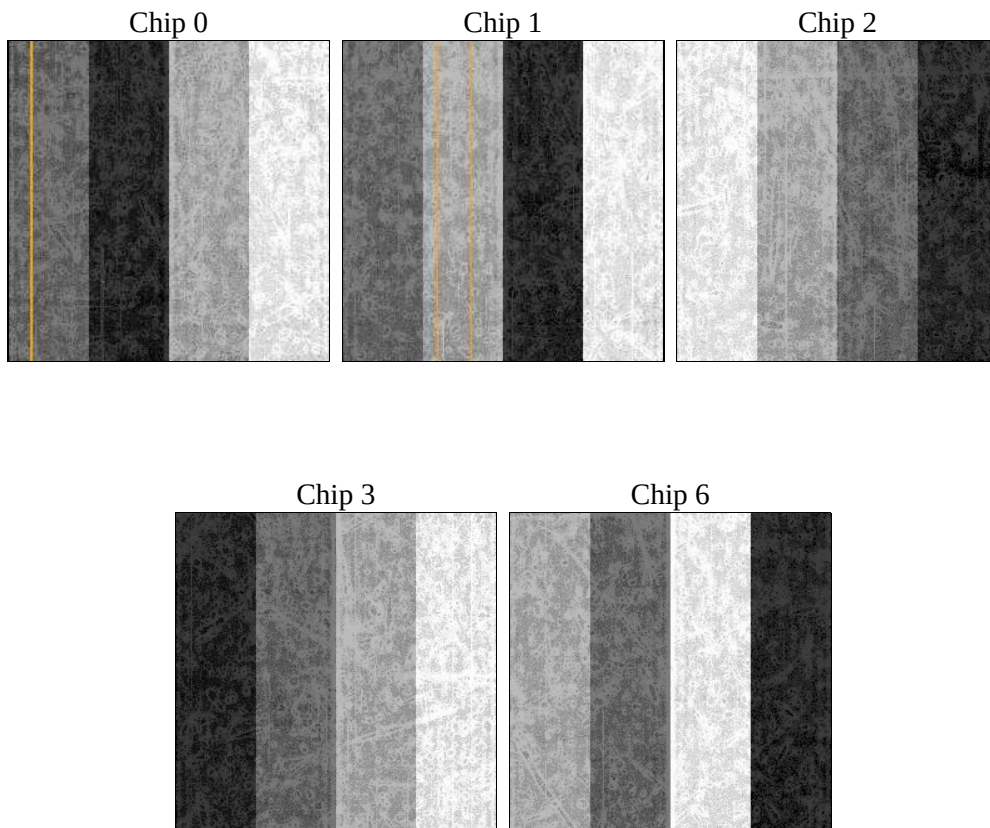
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	32000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.1.1	Processing system revision	ontime	32069.500246763	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	32066.359176517	Sum of GTIs [s]
date	2016-10-22T15:26:03	Date and time of file creation	ontime1	32066.359206557	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	32069.500246763	Sum of GTIs [s]
			ontime3	32069.500246763	Sum of GTIs [s]
			ontime6	32066.359196544	Sum of GTIs [s]
			l1events	1091717	Number of level 1 events

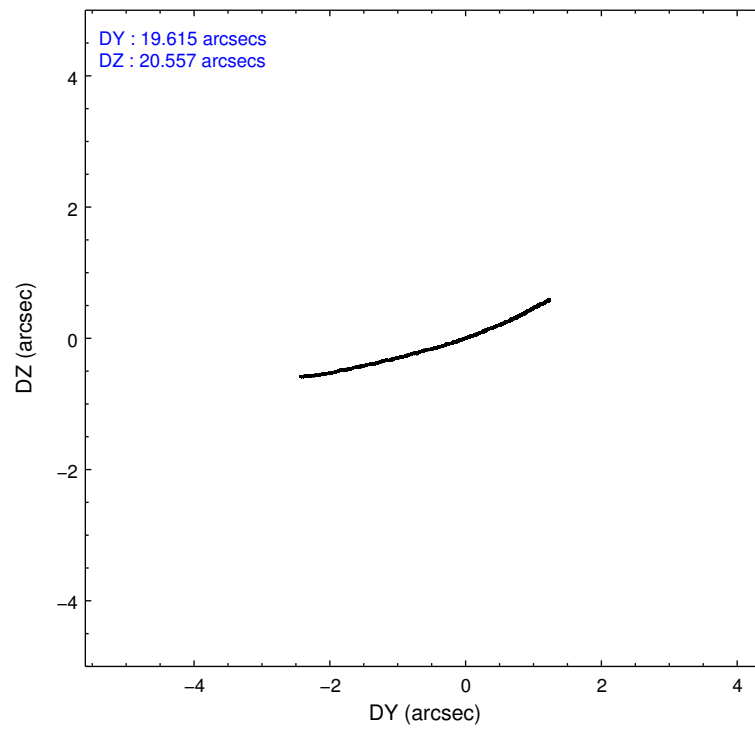
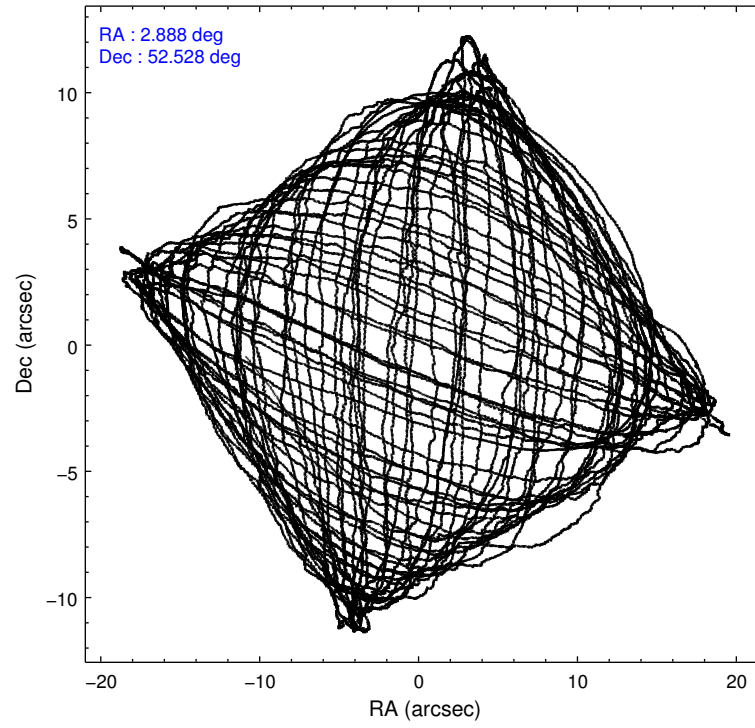
2.1.4 Events

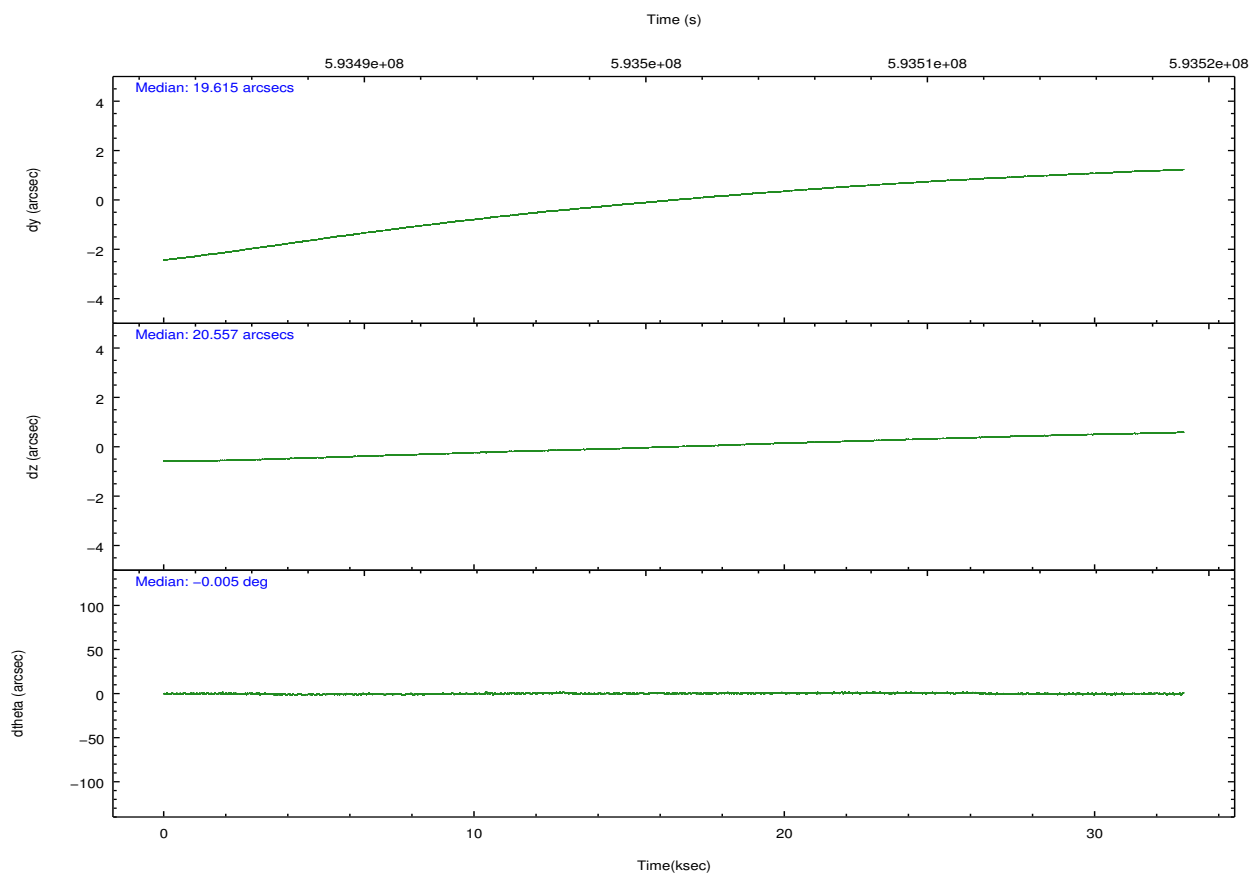
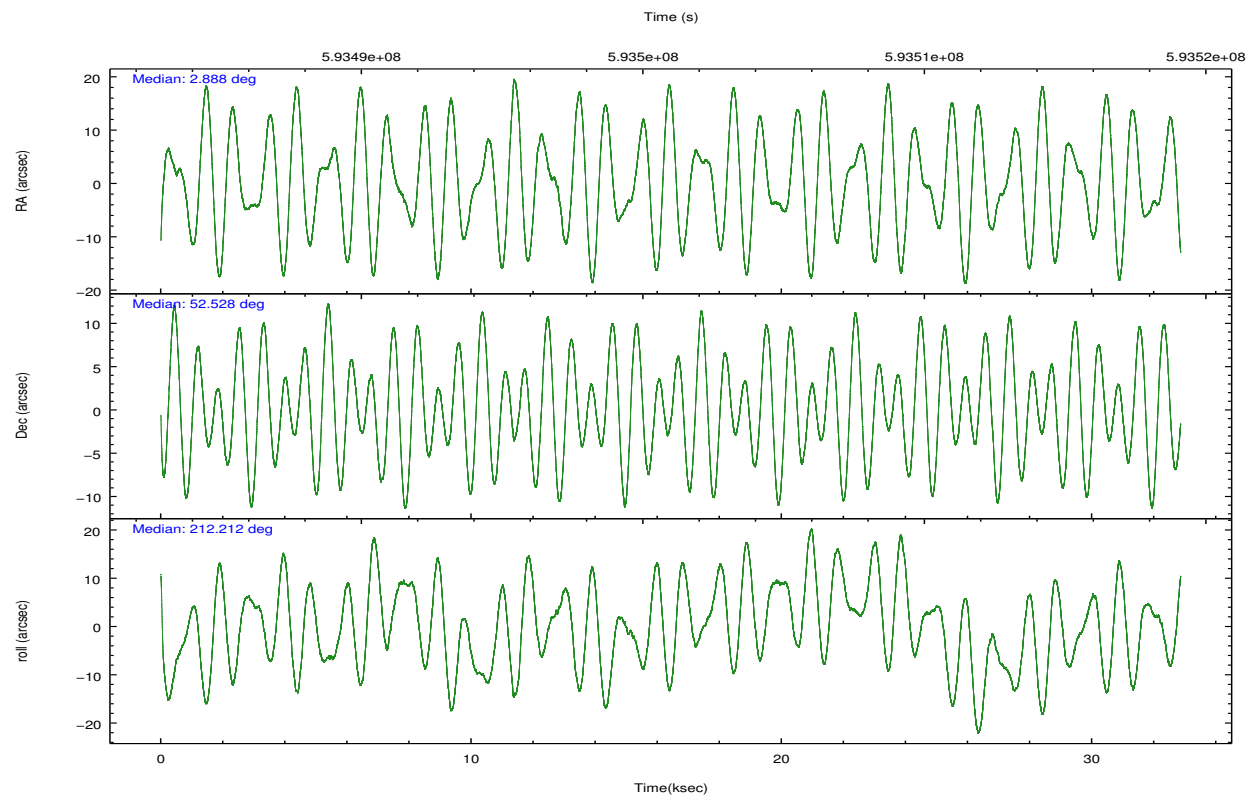
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	203200	212652	222011	227836	226018	grade 0 events	11486	12850	10196	13451	7978
rejected events	175446	181500	196102	198051	201539		5%	6%	4%	5%	3%
rejected %	86%	85%	88%	86%	89%	grade 1 events	177	130	142	169	110
							0%	0%	0%	0%	0%
						grade 2 events	6259	6906	6031	5786	5663
							3%	3%	2%	2%	2%
						grade 3 events	2607	2672	2474	2687	2530
							1%	1%	1%	1%	1%
						grade 4 events	2285	2695	2472	2675	2489
							1%	1%	1%	1%	1%
						grade 5 events	9697	9913	8959	10720	10266
							4%	4%	4%	4%	4%
						grade 6 events	5119	6034	4738	5186	5824
							2%	2%	2%	2%	2%
						grade 7 events	165570	171452	186999	187162	191158
							81%	80%	84%	82%	84%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	2.909254	2.888265572878993	CCD I2 on	Y	Y
[deg] Pointing Dec	52.552541	52.52807696402643	CCD I3 on	Y	Y
[deg] Pointing Roll	211.990004	212.2153585006098	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	593485415.184000	593484135.28425	CCD S5 on	N	N
Observation start date	2016-10-22T01:02:27	2016-10-22T00:42:15	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	593517415.184000	593518205.77372	On-chip summing requested	N	N
Observation end date	2016-10-22T09:55:47	2016-10-22T10:10:05	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



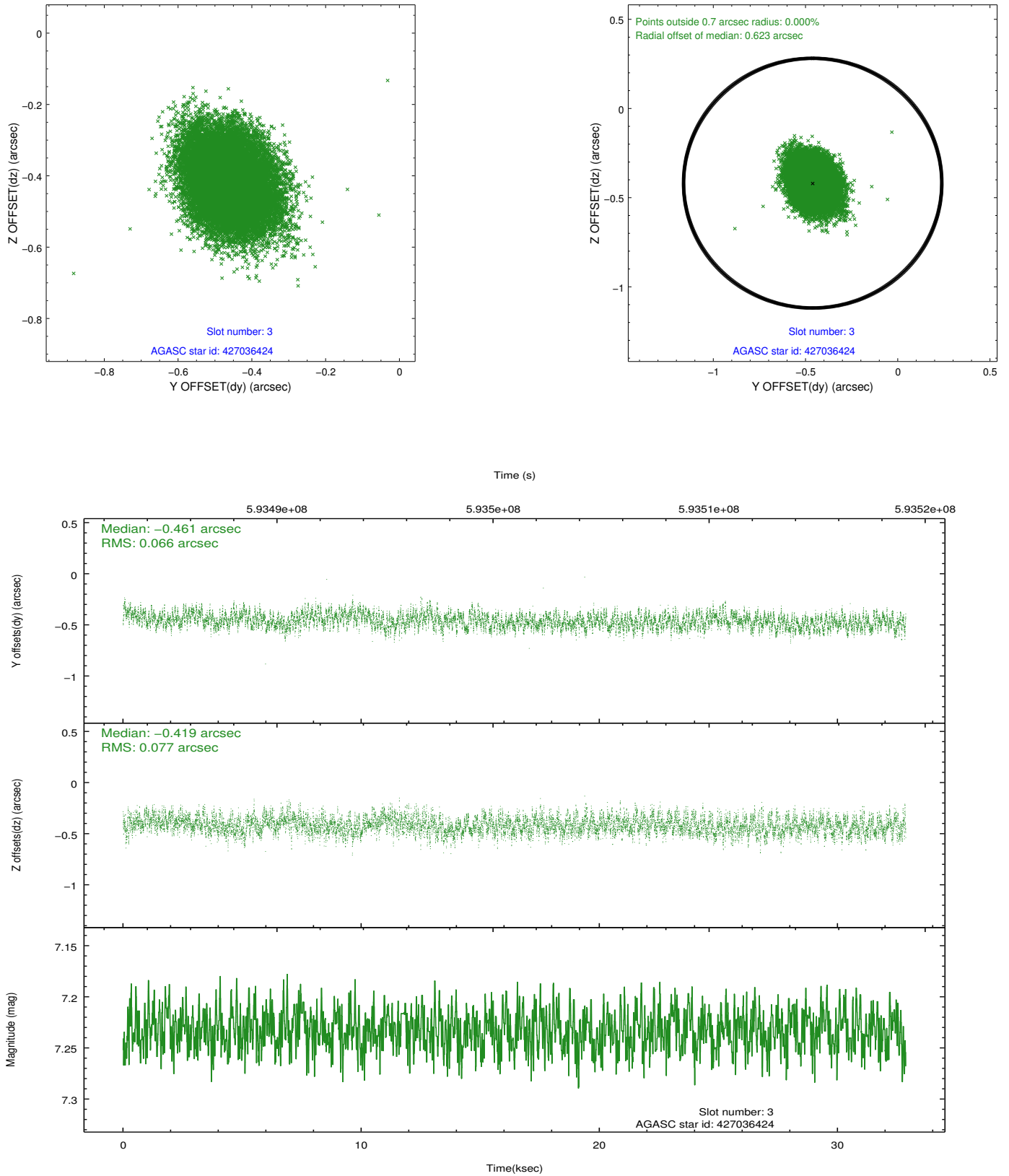


Slot Statistics

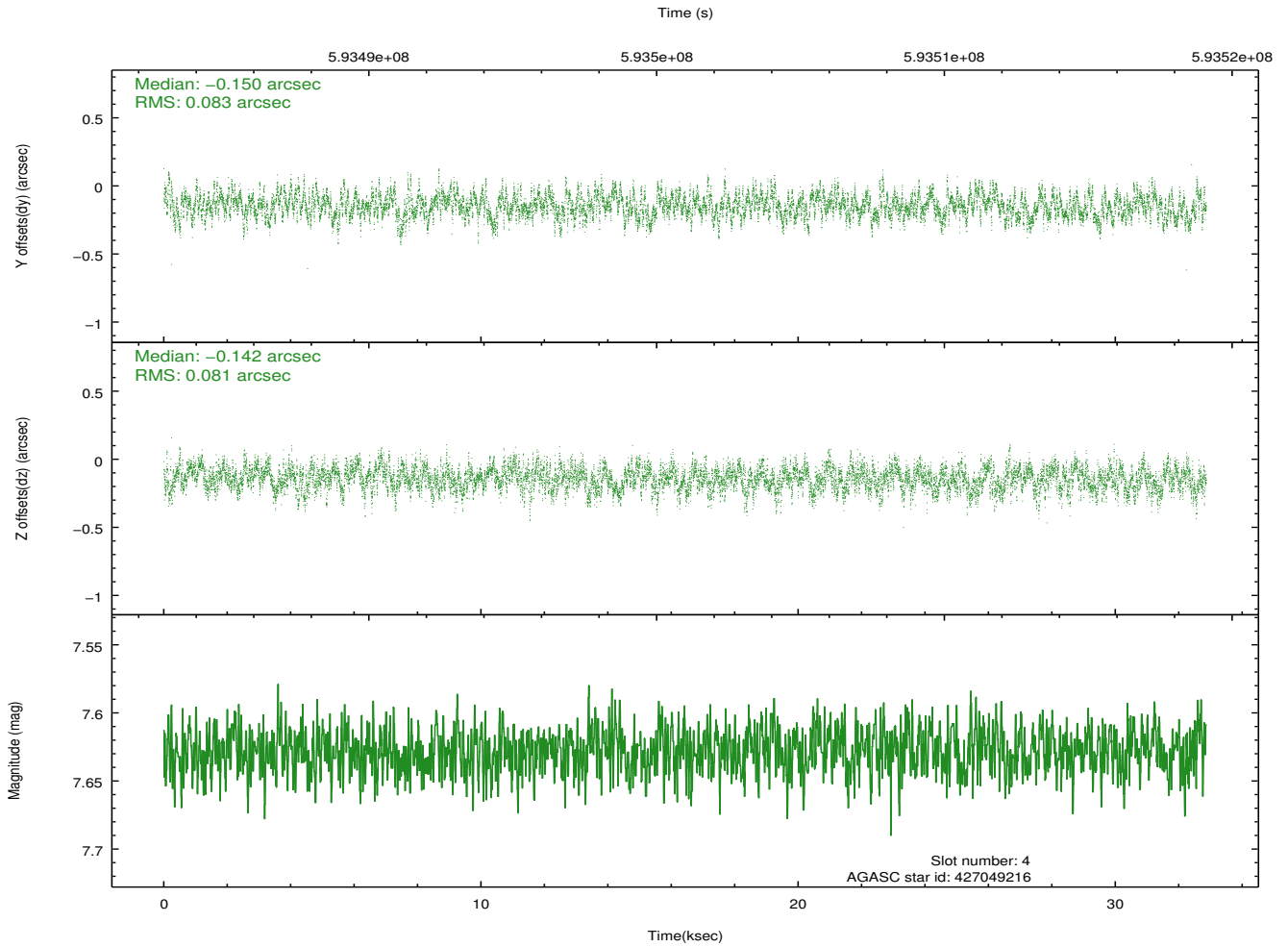
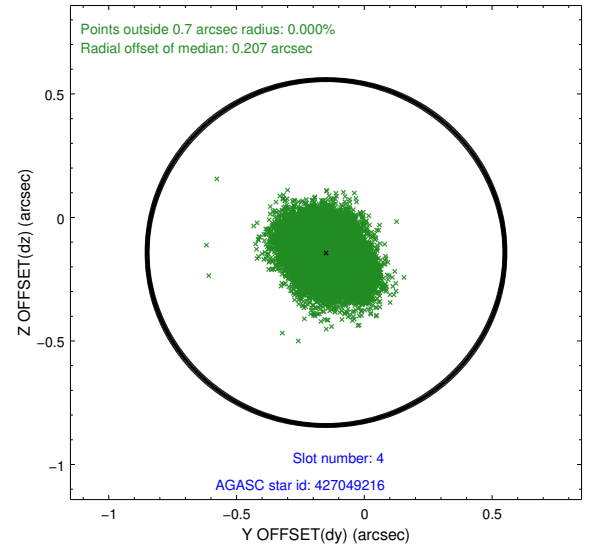
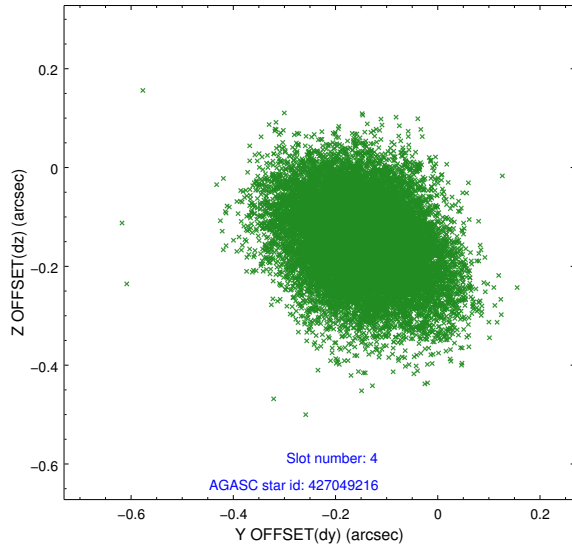
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	8016	0.079	-0.070	0.020	0.031	0.000000	0.000000	920.05	-844.33
1	FID		ACIS-I-5	7.16	8014	-0.392	0.023	0.016	0.028	0.000000	0.000000	-1828.59	1053.10
2	FID		ACIS-I-6	7.18	8016	0.222	0.117	0.010	0.020	0.000000	0.000000	385.56	1697.86
3	GUIDE	used	427036424	7.23	16031	-0.461	-0.419	0.109	0.172	2.620815	51.912344	1763.64	1614.38
4	GUIDE	used	427049216	7.63	16032	-0.150	-0.142	0.124	0.200	2.568599	52.255138	1203.23	509.06
5	GUIDE	used	478817384	8.26	16022	0.330	0.312	0.116	0.182	3.580009	52.860975	-1827.57	-174.75
6	GUIDE	used	478818512	8.14	16024	0.050	0.090	0.132	0.207	3.766666	52.639607	-1760.33	717.17
7	GUIDE	used	478675600	8.87	16023	0.228	0.160	0.138	0.231	1.576615	52.651140	2266.69	-1865.22

2.4 Star Slots

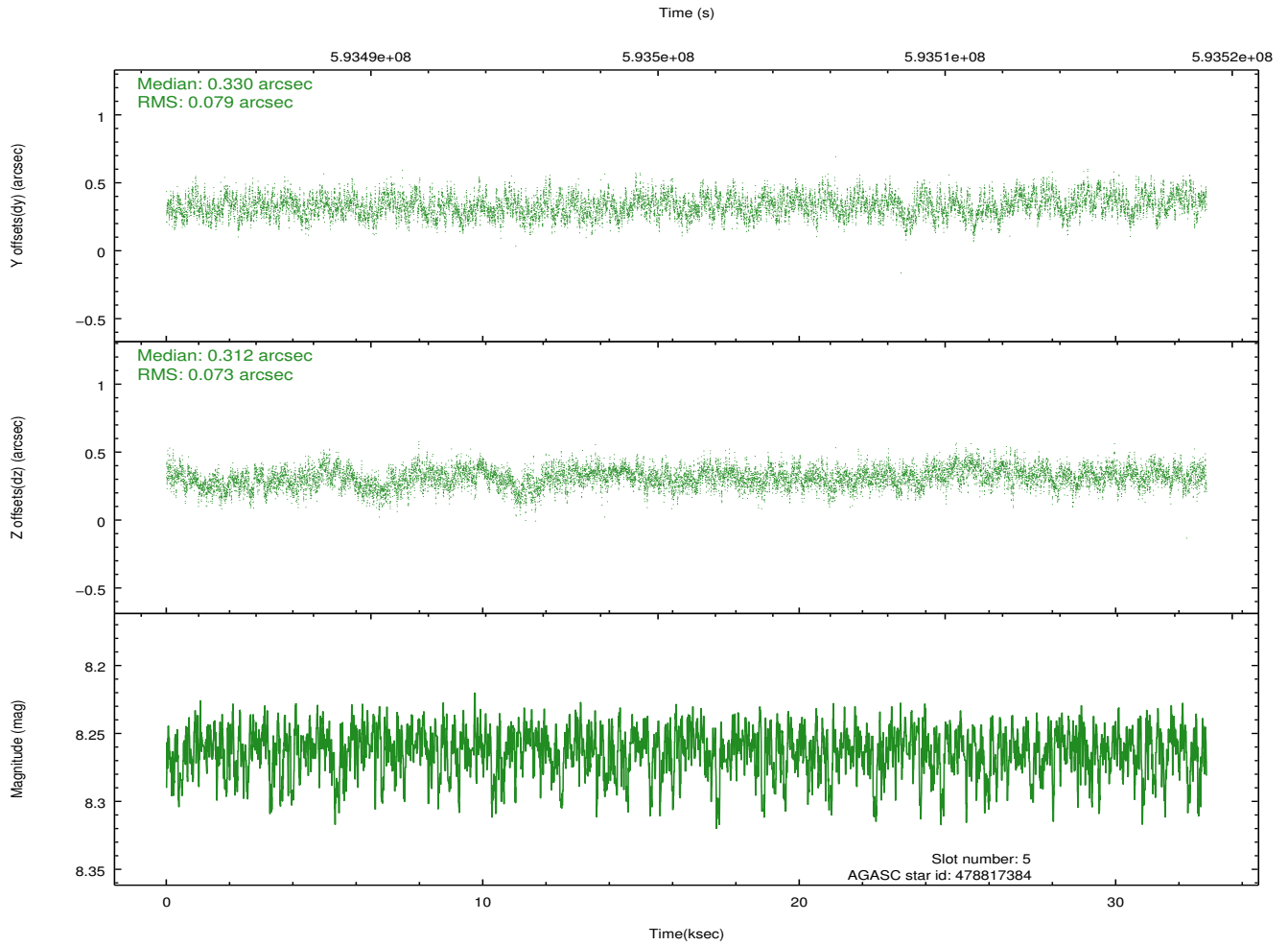
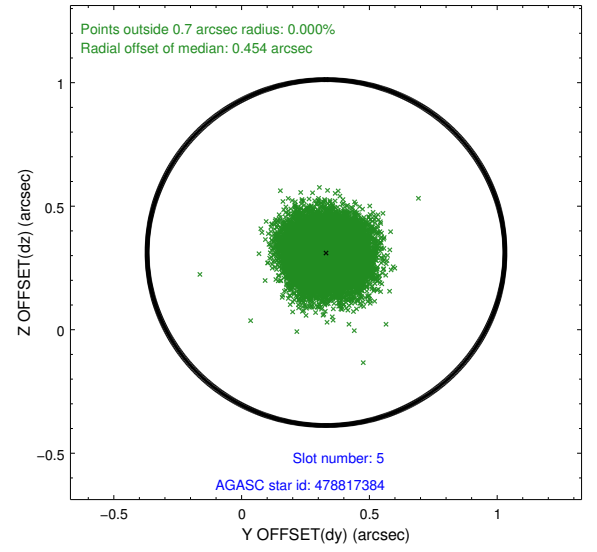
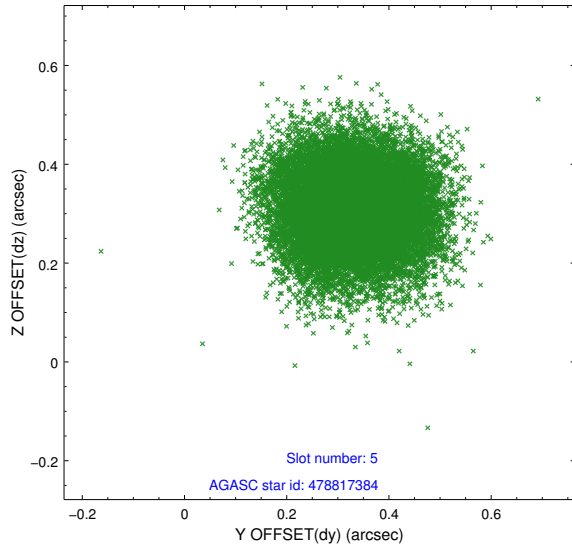
2.4.1 Slot 3



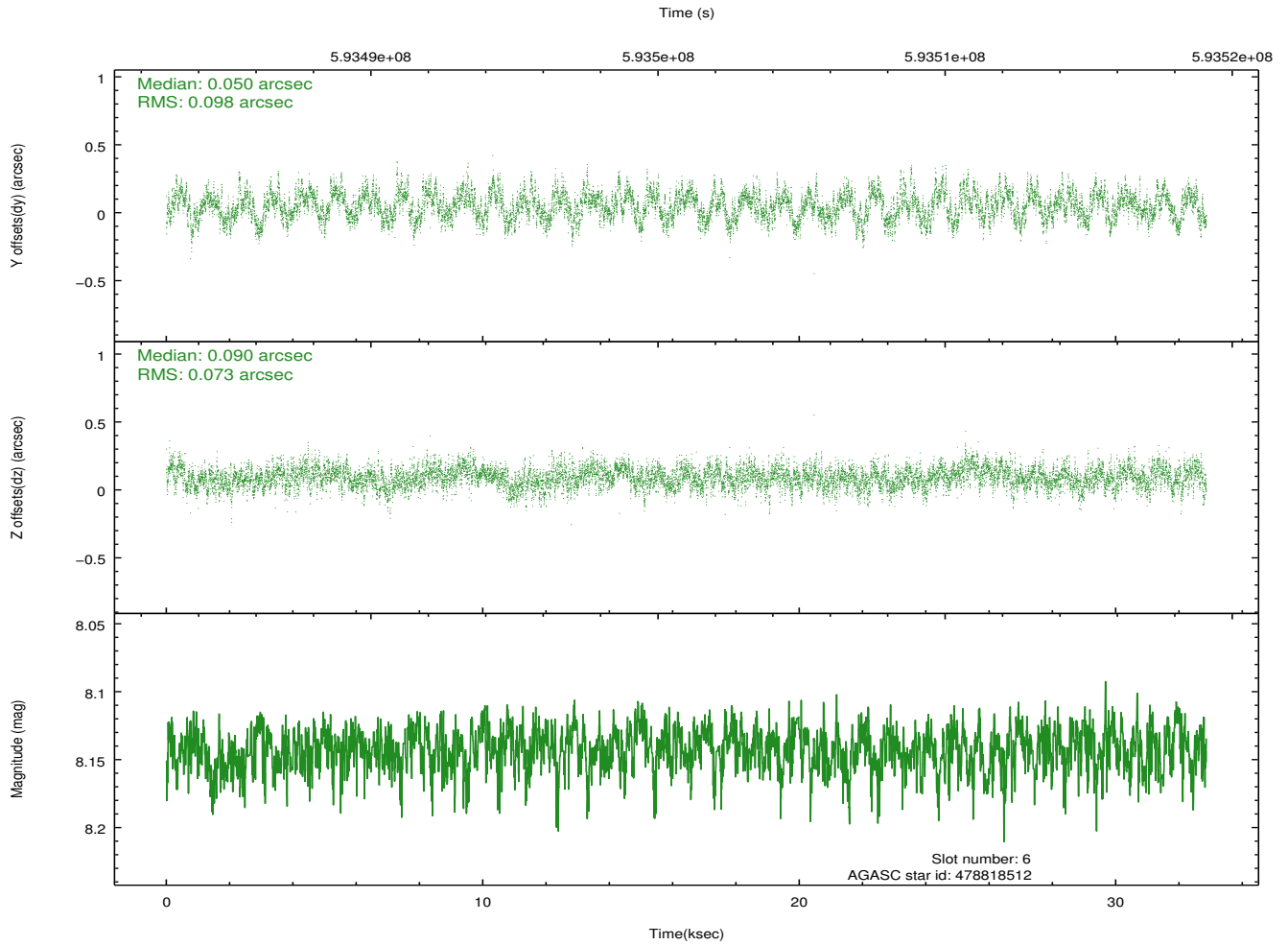
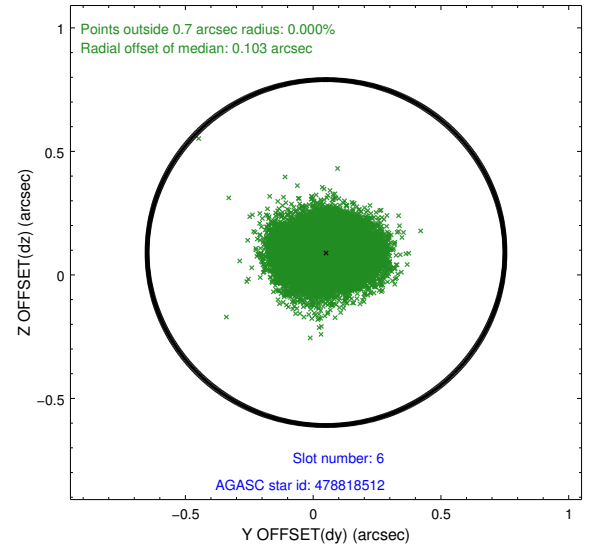
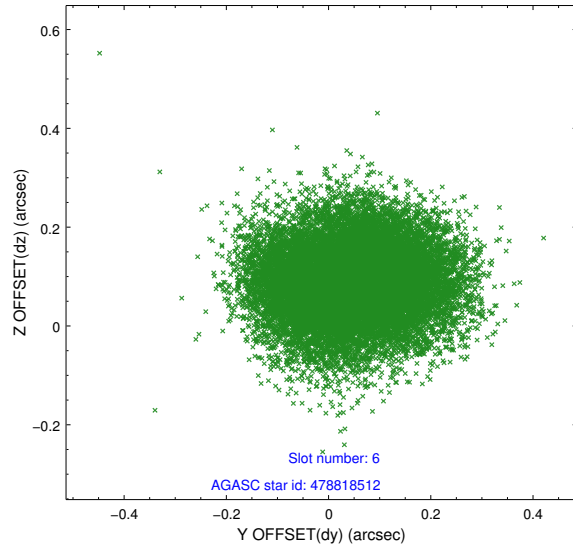
2.4.2 Slot 4



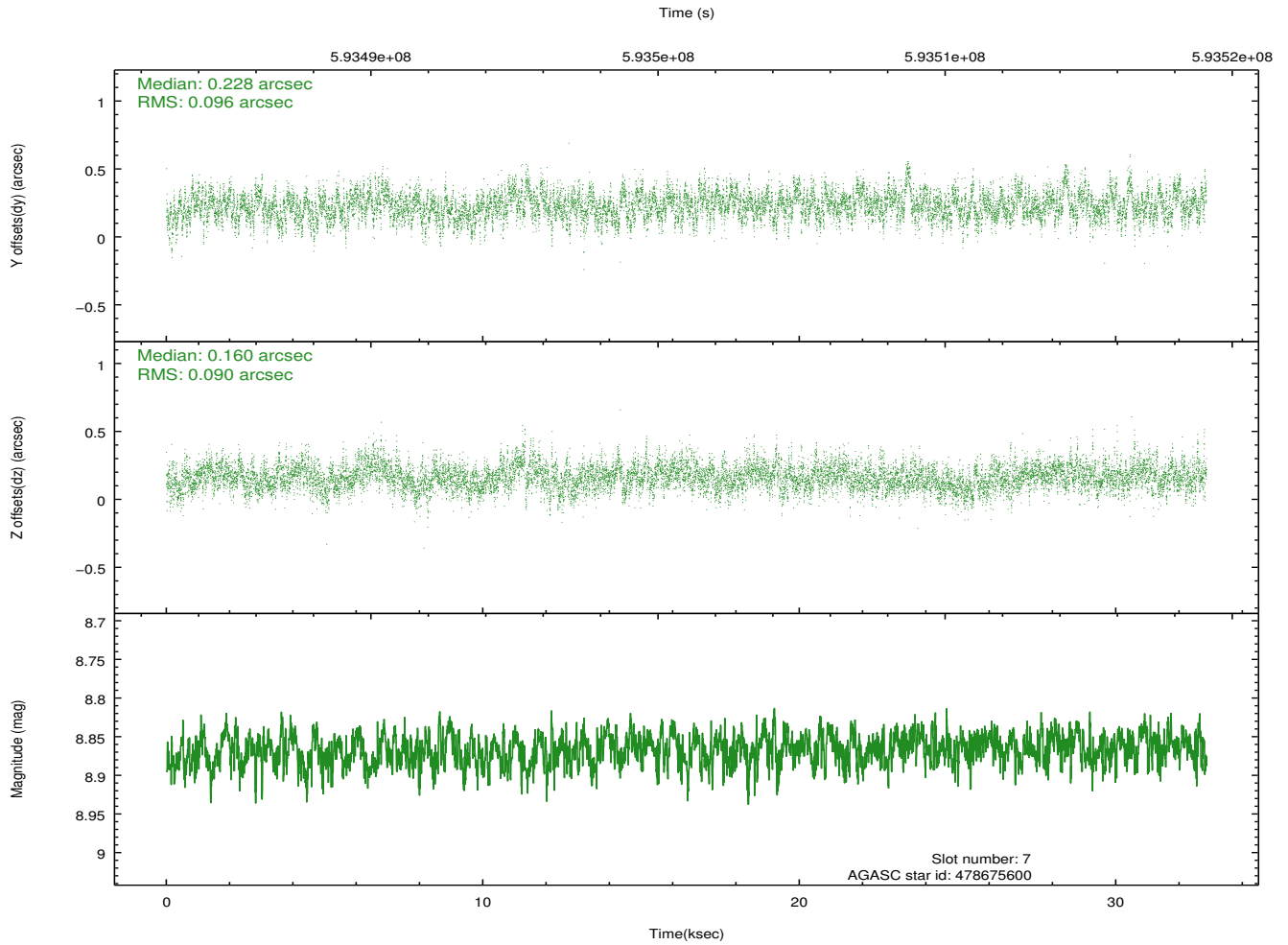
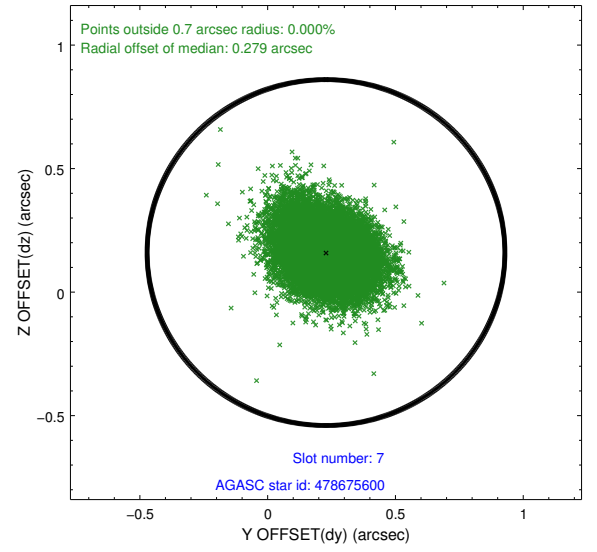
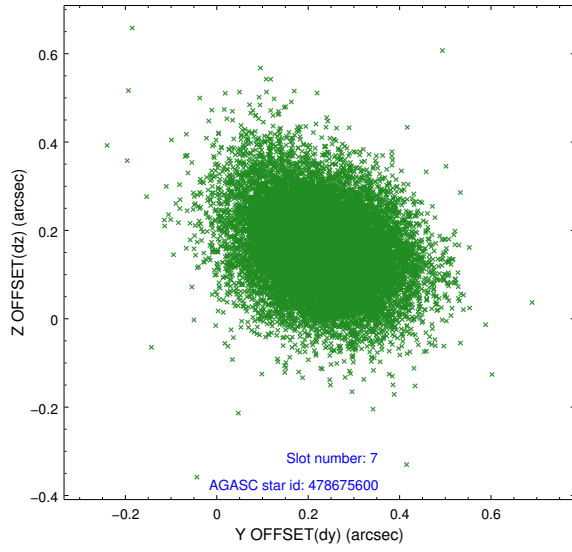
2.4.3 Slot 5



2.4.4 Slot 6

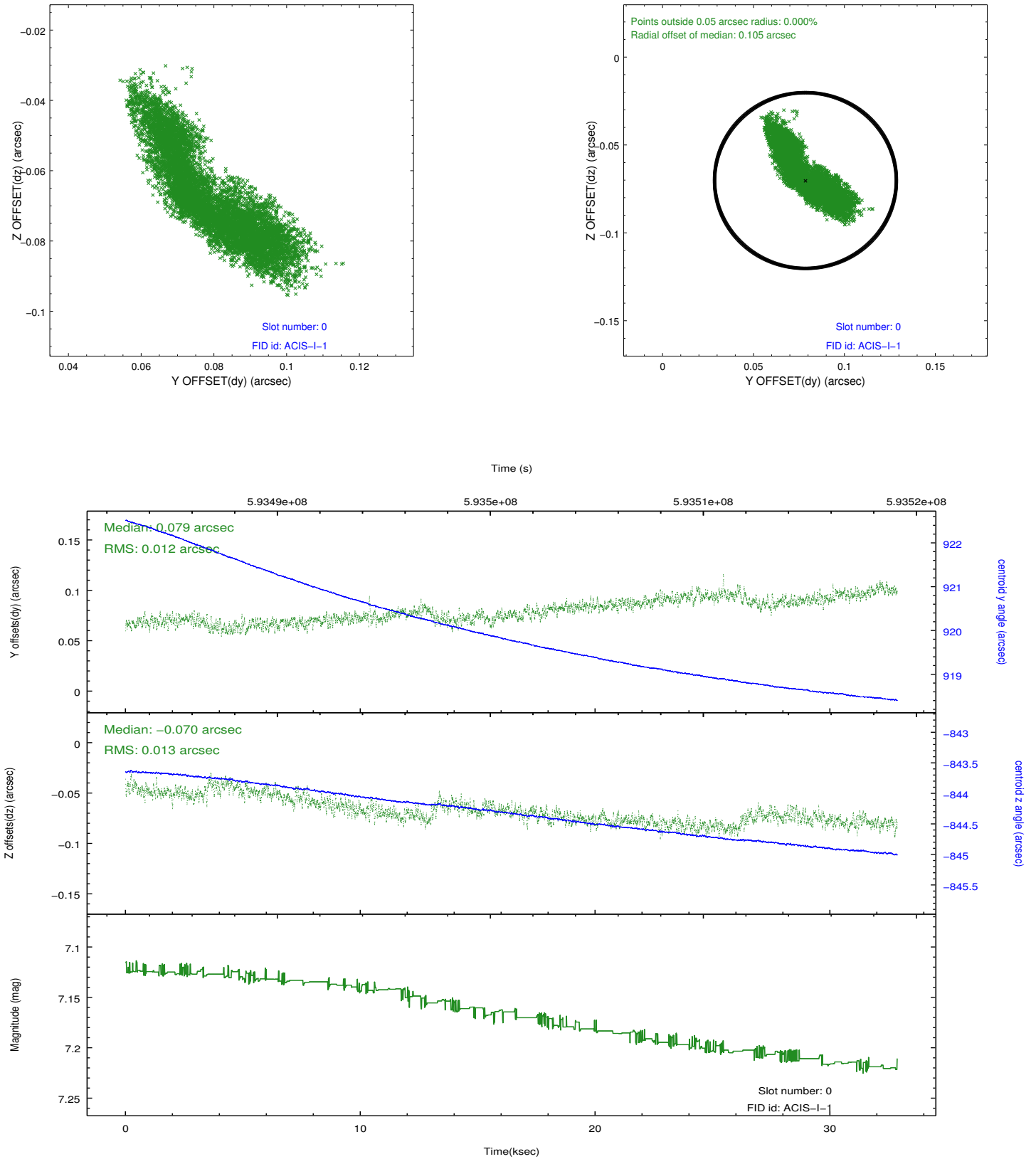


2.4.5 Slot 7

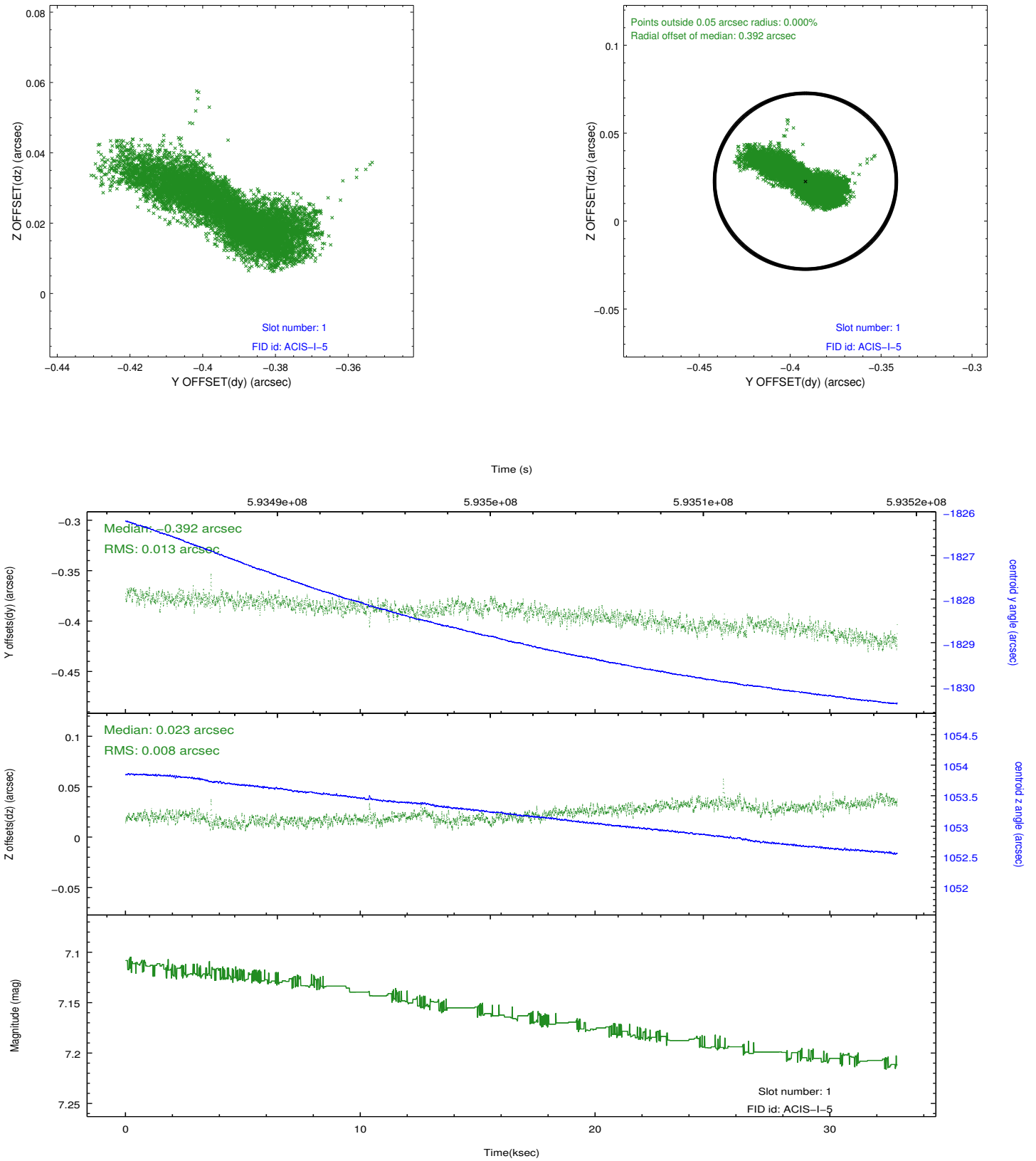


2.5 FID Slots

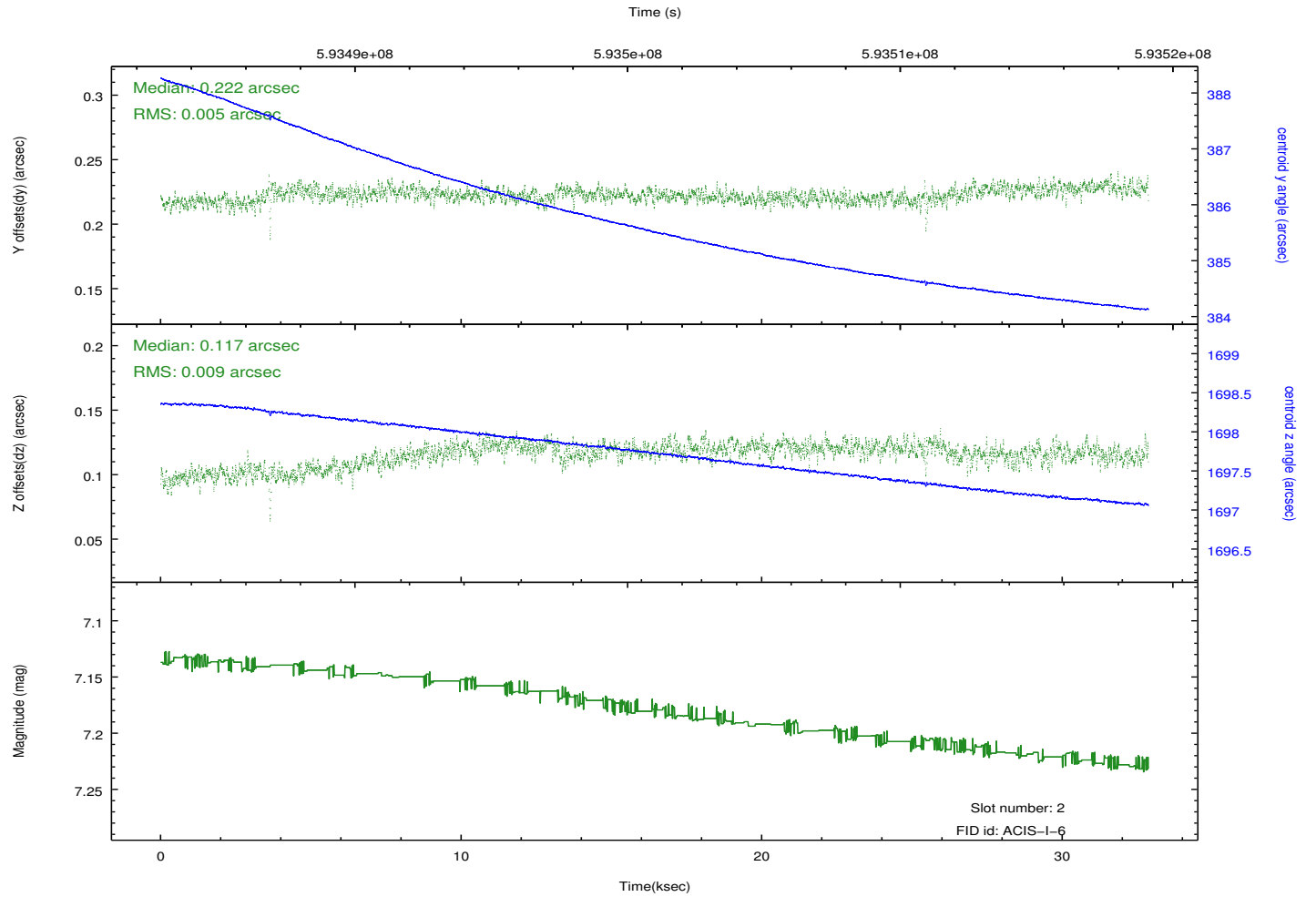
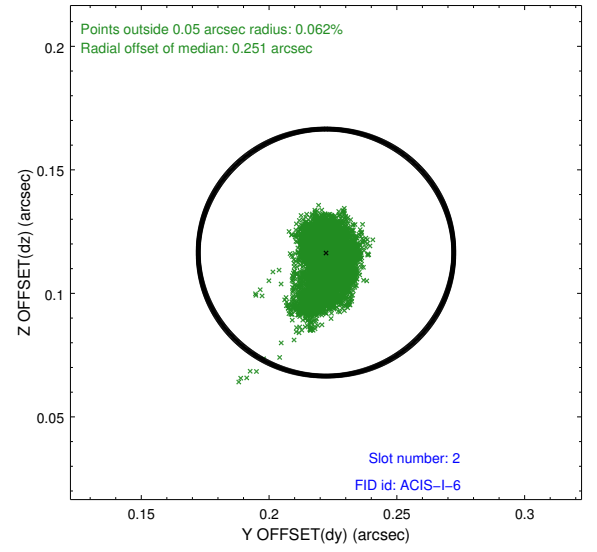
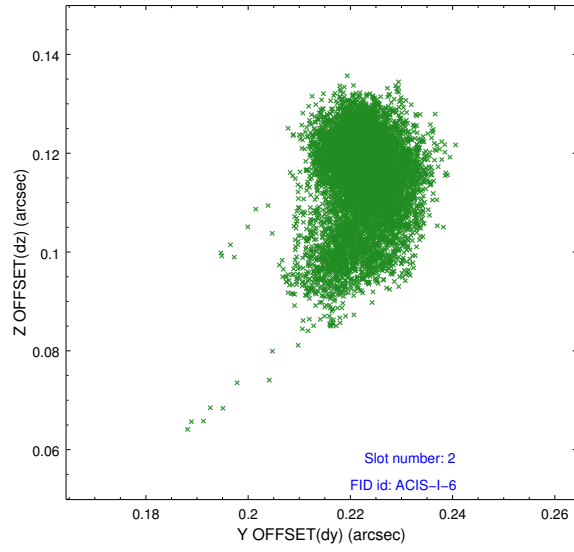
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.10.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	32.069500246763

A.2 Comments

Joint proposal with NRAO.
Optional chip S3 was dropped.