

V&V Reference Report

L2 ASCDS Version : 10.6.4.1

Observation 21856 - L2 Version 1
Chandra X-Ray Center

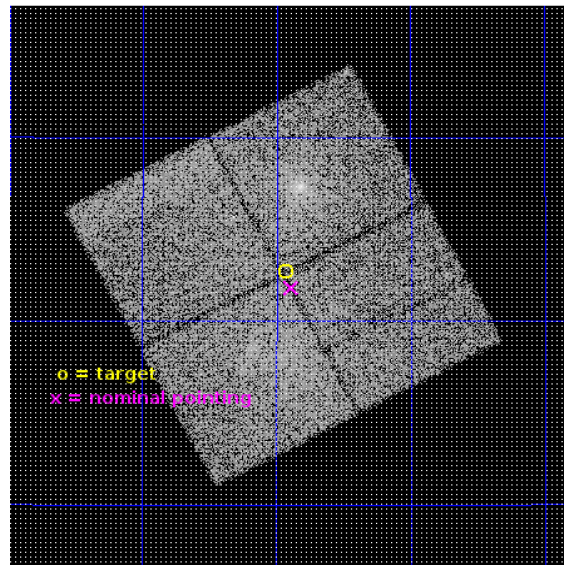
L2 Processing Date : Sep 26 2018

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1 Front

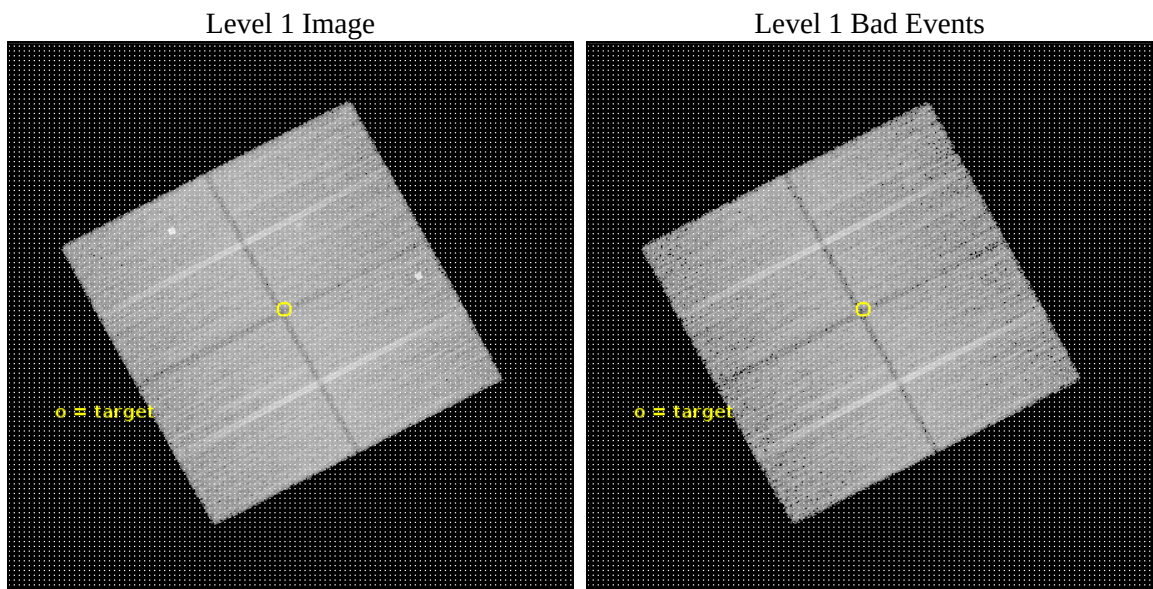
seq_num	801818	Sequence number
obs_id	21856	Observation id
title	Deep Chandra Observations of the Shock Front and Faint Filament in the Pre-Merger Cluster Abell 98	Proposal title
observer	Scott Randall	Principal investigator
object	Abell 98	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.615833	Observer's specified target RA [deg]
dec_targ	20.544667	Observer's specified target Dec [deg]
ra_nom	11.610981829797	Nominal RA [deg]
dec_nom	20.530259343368	Nominal Dec [deg]
roll_nom	152.21038305352	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30899.359150887	Sum of GTIs [s]
livetime	30495.636275803	Livetime [s]
ontime0	30893.0360502	Sum of GTIs [s]
ontime1	30899.359150887	Sum of GTIs [s]
ontime2	30889.977049828	Sum of GTIs [s]
ontime3	30896.300160646	Sum of GTIs [s]
l2events	95429	Number of level 2 events



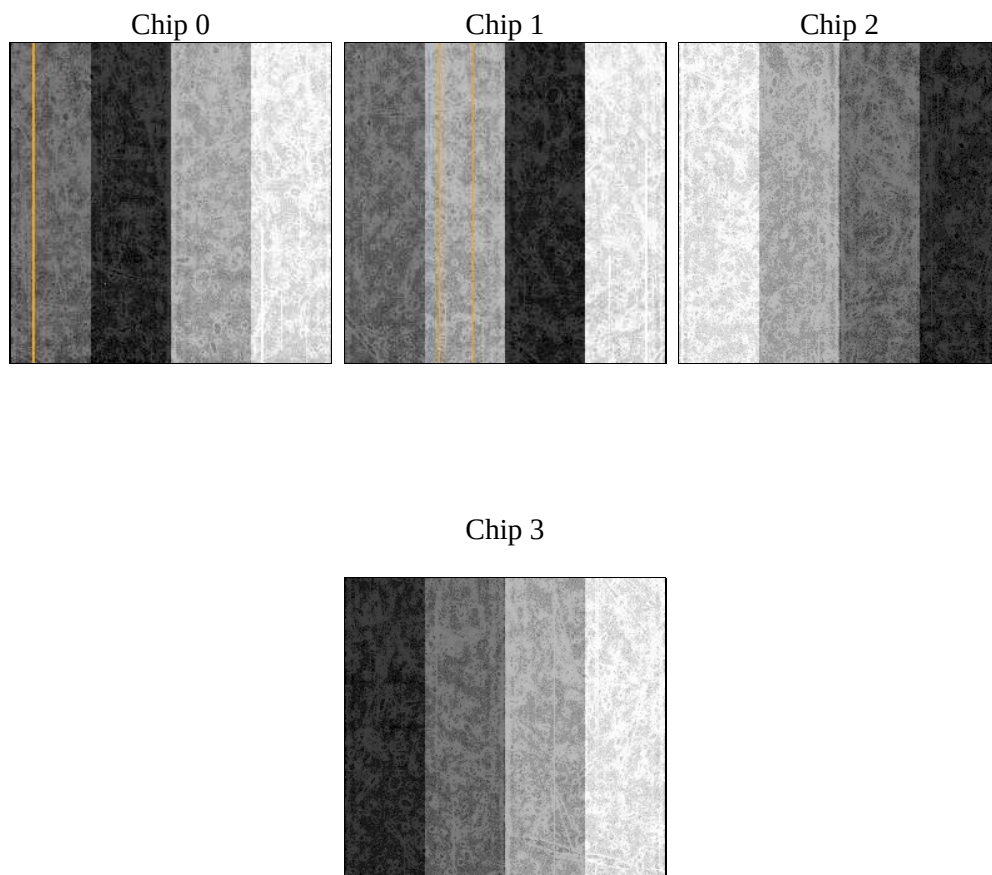
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30819.540000	[s] Scheduled observation exposure time
ascdsver	10.6.4.1	Processing system revision	ontime	30899.359150887	Sum of GTIs [s]
caldsver	4.8.0	 	ontime0	30893.0360502	Sum of GTIs [s]
date	2018-09-26T20:48:11	Date and time of file creation	ontime1	30899.359150887	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	30889.977049828	Sum of GTIs [s]
			ontime3	30896.300160646	Sum of GTIs [s]
			l1events	912106	Number of level 1 events

2.1.4 Events

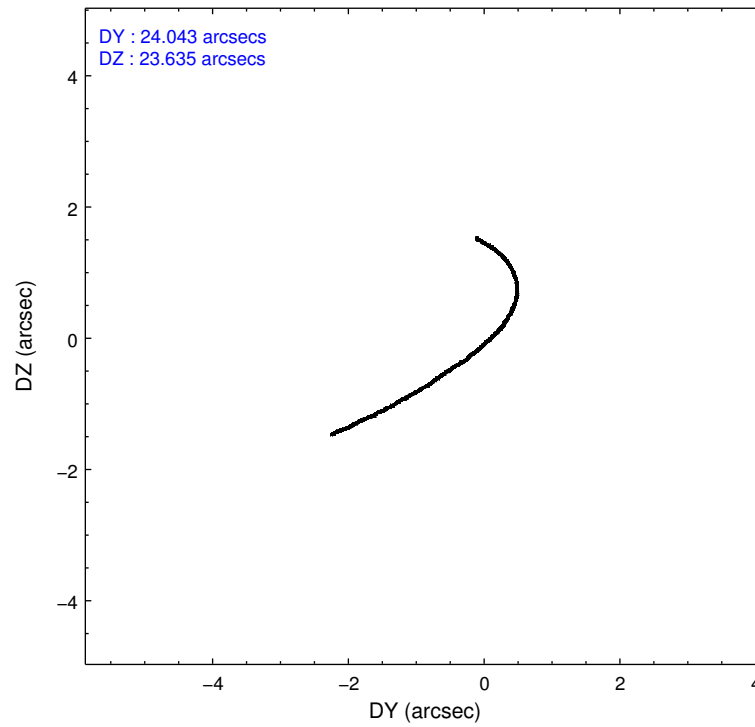
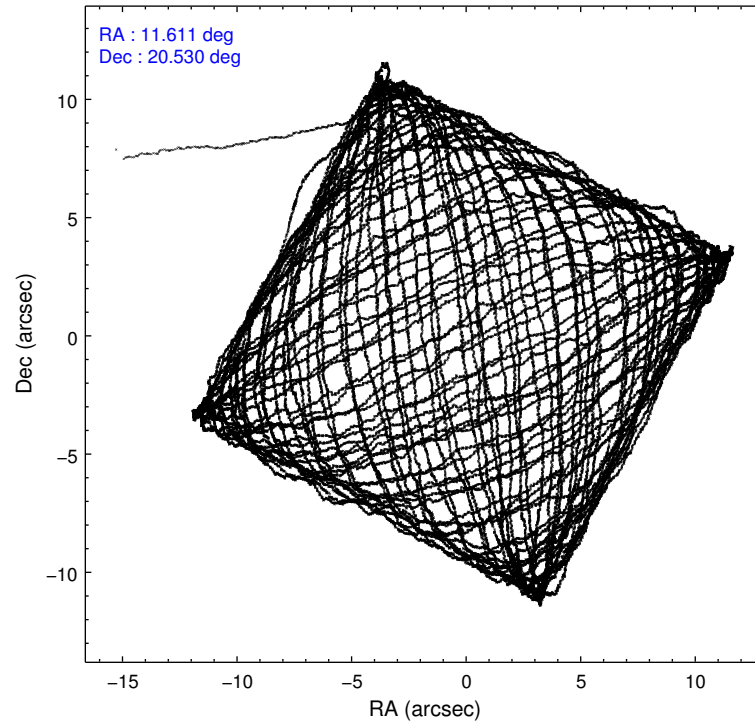
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	218664	225736	237660	230046
rejected events	188370	194026	209337	202179
rejected %	86%	85%	88%	87%

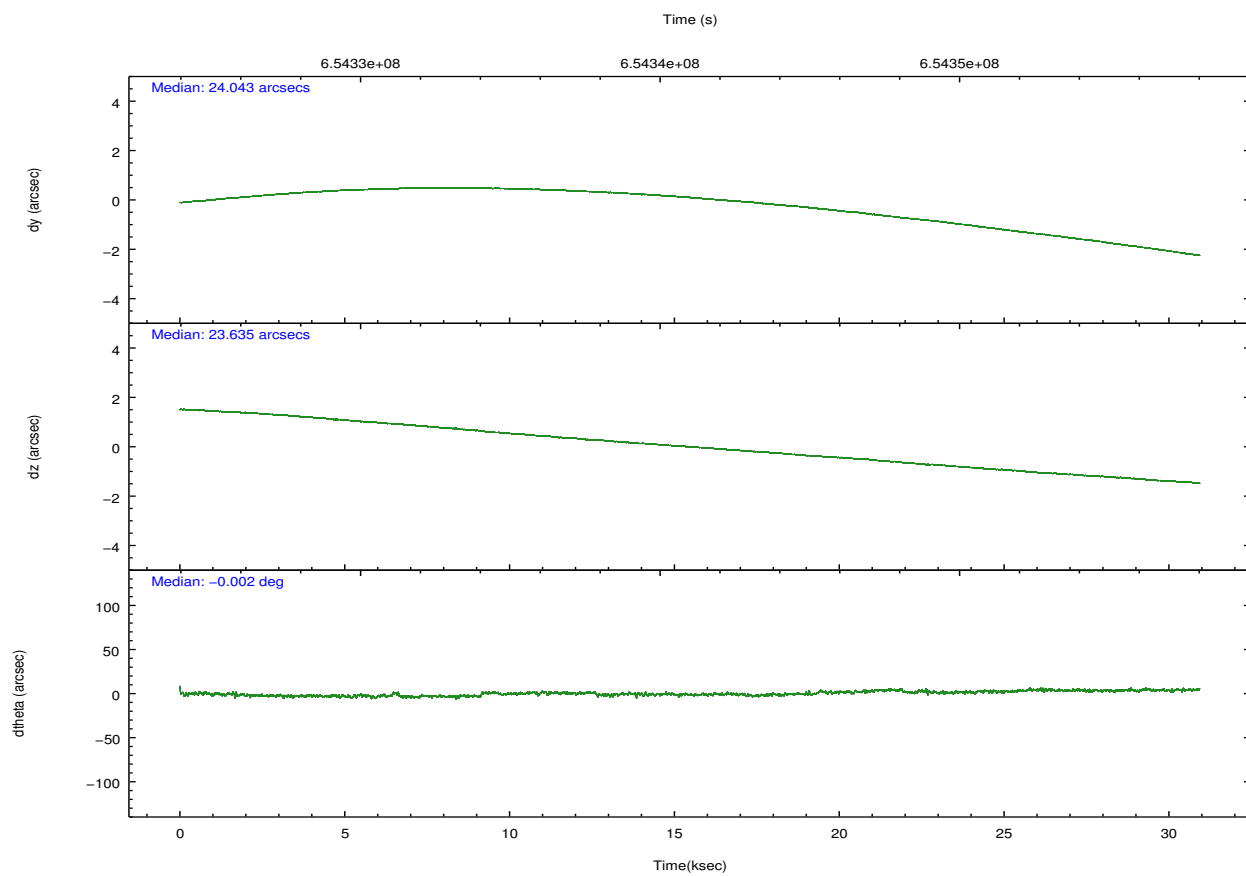
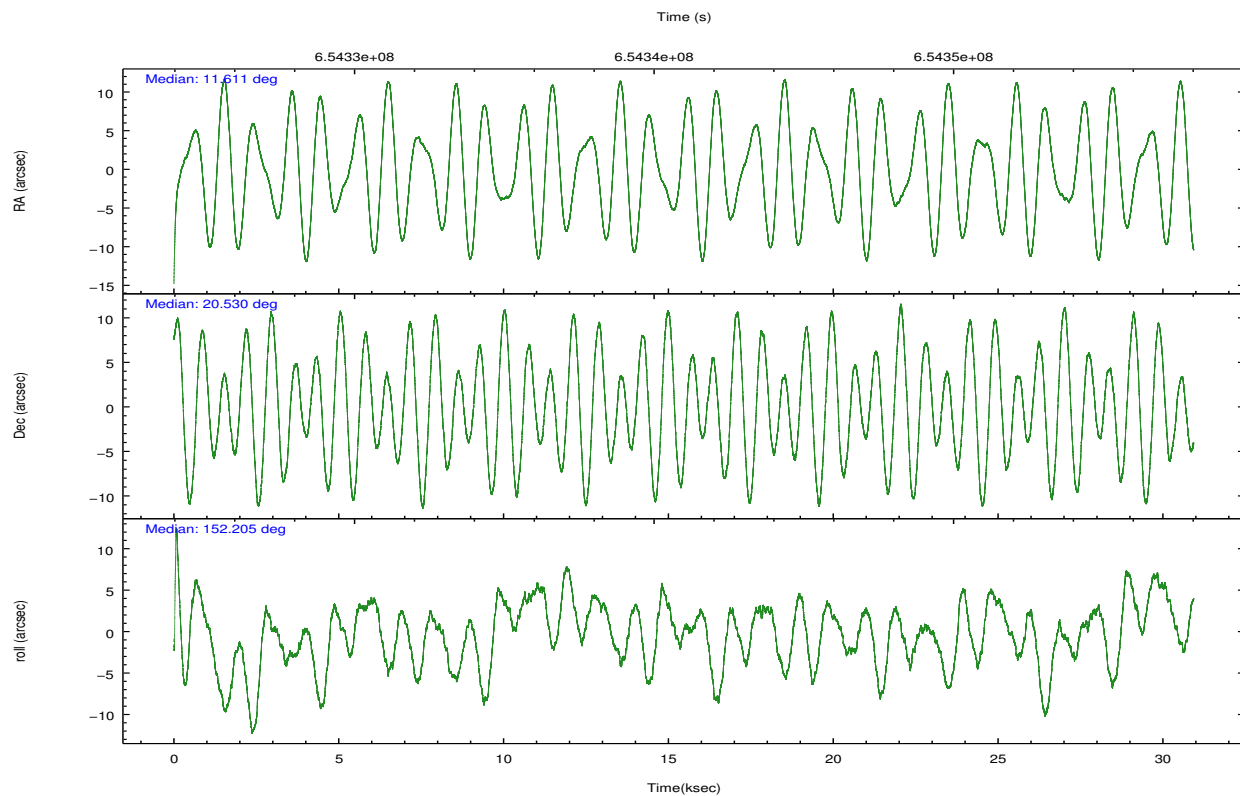
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	12483	12821	12045	11587
	5%	5%	5%	5%
grade 1 events	158	153	151	145
	0%	0%	0%	0%
grade 2 events	7005	7152	6244	5744
	3%	3%	2%	2%
grade 3 events	2675	2705	2468	2658
	1%	1%	1%	1%
grade 4 events	2570	2592	2559	2572
	1%	1%	1%	1%
grade 5 events	9416	10189	8995	10803
	4%	4%	3%	4%
grade 6 events	5569	6450	5012	5312
	2%	2%	2%	2%
grade 7 events	178788	183674	200186	191225
	81%	81%	84%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	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	11.640426	11.61098182979736	CCD I2 on	Y	Y
[deg] Pointing Dec	20.531416	20.53025934336775	CCD I3 on	Y	Y
[deg] Pointing Roll	151.991379	152.2103830535223	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	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	654325631.184000	654324371.45928	CCD S5 on	N	N
Observation start date	2018-09-26T05:06:02	2018-09-26T04:46:11	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	654356450.184000	654357782.3612601	On-chip summing requested	N	N
Observation end date	2018-09-26T13:39:41	2018-09-26T14:03:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



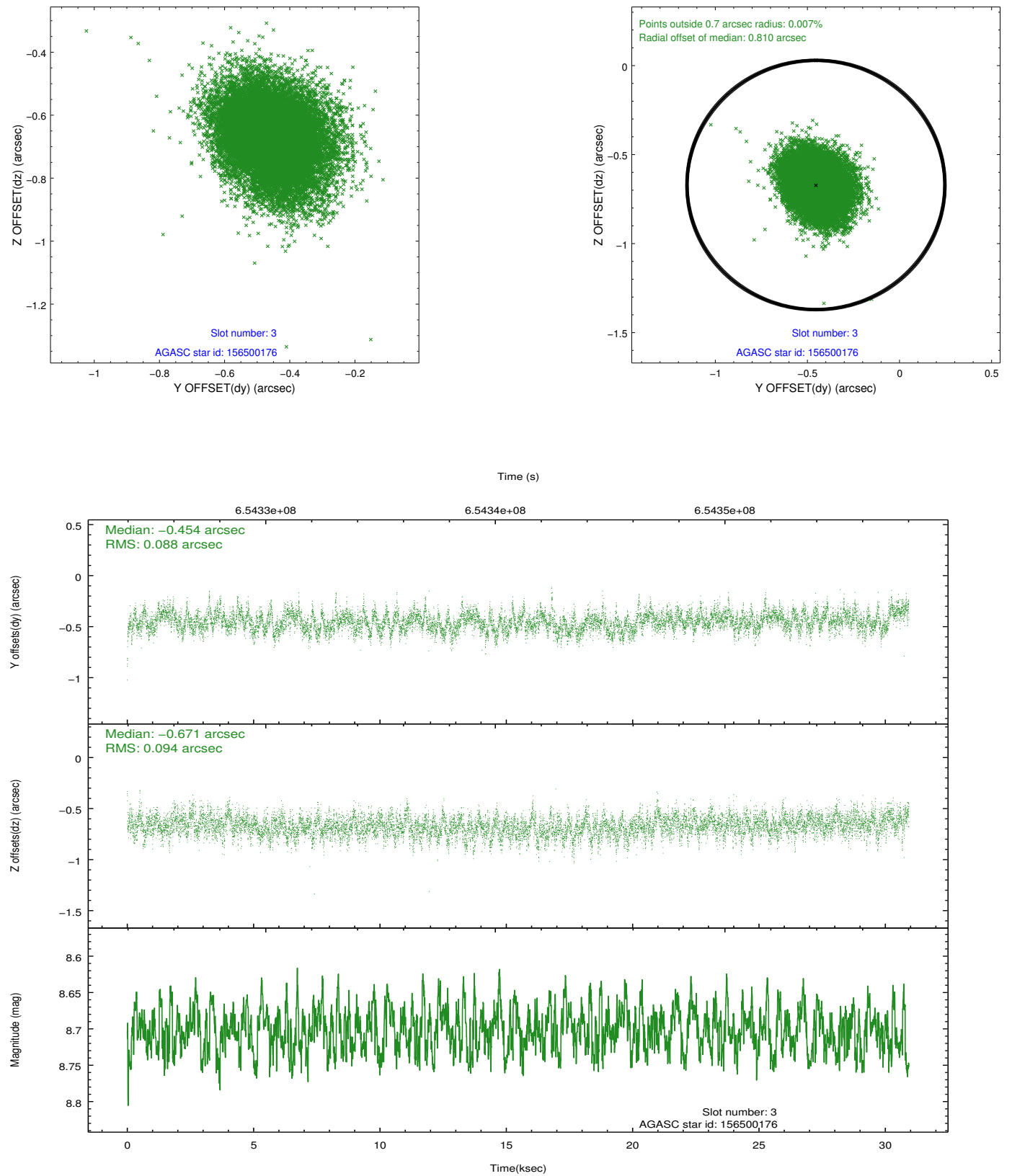


Slot Statistics

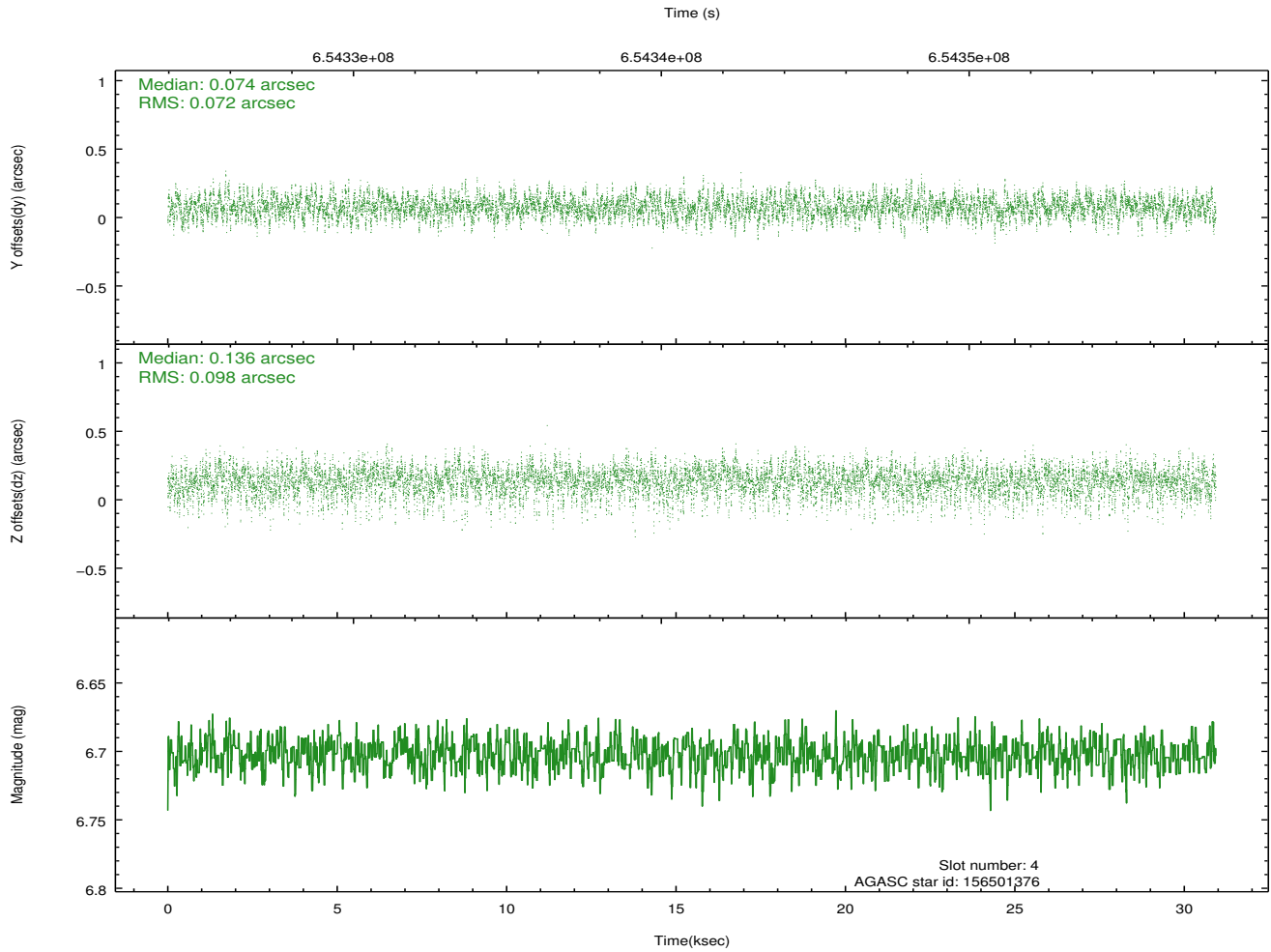
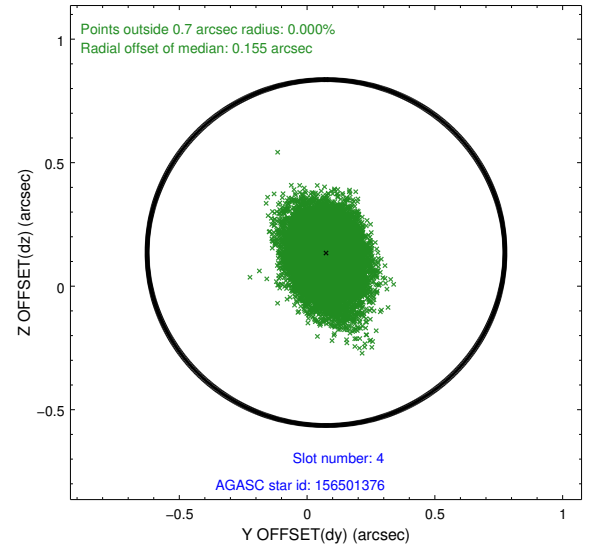
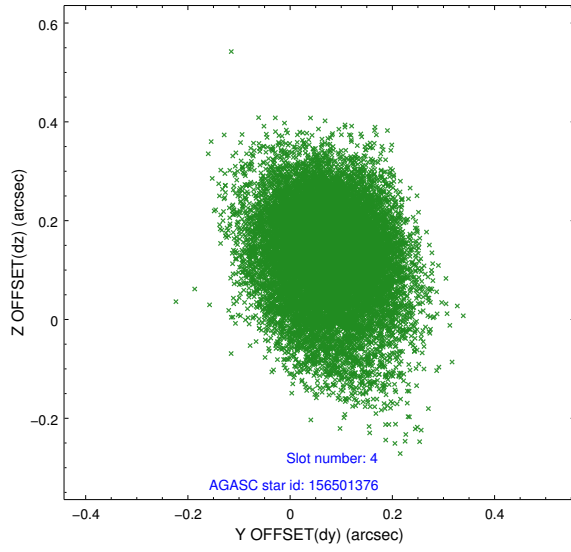
pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-I-1	7.17	7545	1.000	-0.045	0.033	0.036	0.055	0.000000	0.000000	915.45	-847
1	FID		ACIS-I-2	7.07	7543	1.000	-0.427	-0.256	0.034	0.047	0.000000	0.000000	-778.98	-854
2	FID		ACIS-I-4	7.13	7544	1.000	0.379	0.290	0.027	0.038	0.000000	0.000000	2135.73	1052
3	GUIDE	used	156500176	8.70	15081	1.000	-0.454	-0.671	0.137	0.222	11.171670	20.448926	1254.23	1003
4	GUIDE	used	156501376	6.70	15090	1.000	0.074	0.136	0.127	0.214	11.978451	20.925347	-338.86	-1787
5	GUIDE	used	156502176	8.02	15081	1.000	0.213	0.229	0.129	0.210	11.982190	21.024044	-180.19	-2105
6	GUIDE	used	156504328	9.24	15068	1.000	0.252	0.506	0.205	0.313	12.430893	20.736850	-1998.96	-1907
7	GUIDE	used	156509336	7.44	15088	1.000	-0.082	-0.189	0.106	0.186	12.201488	20.214746	-2207.35	113

2.4 Star Slots

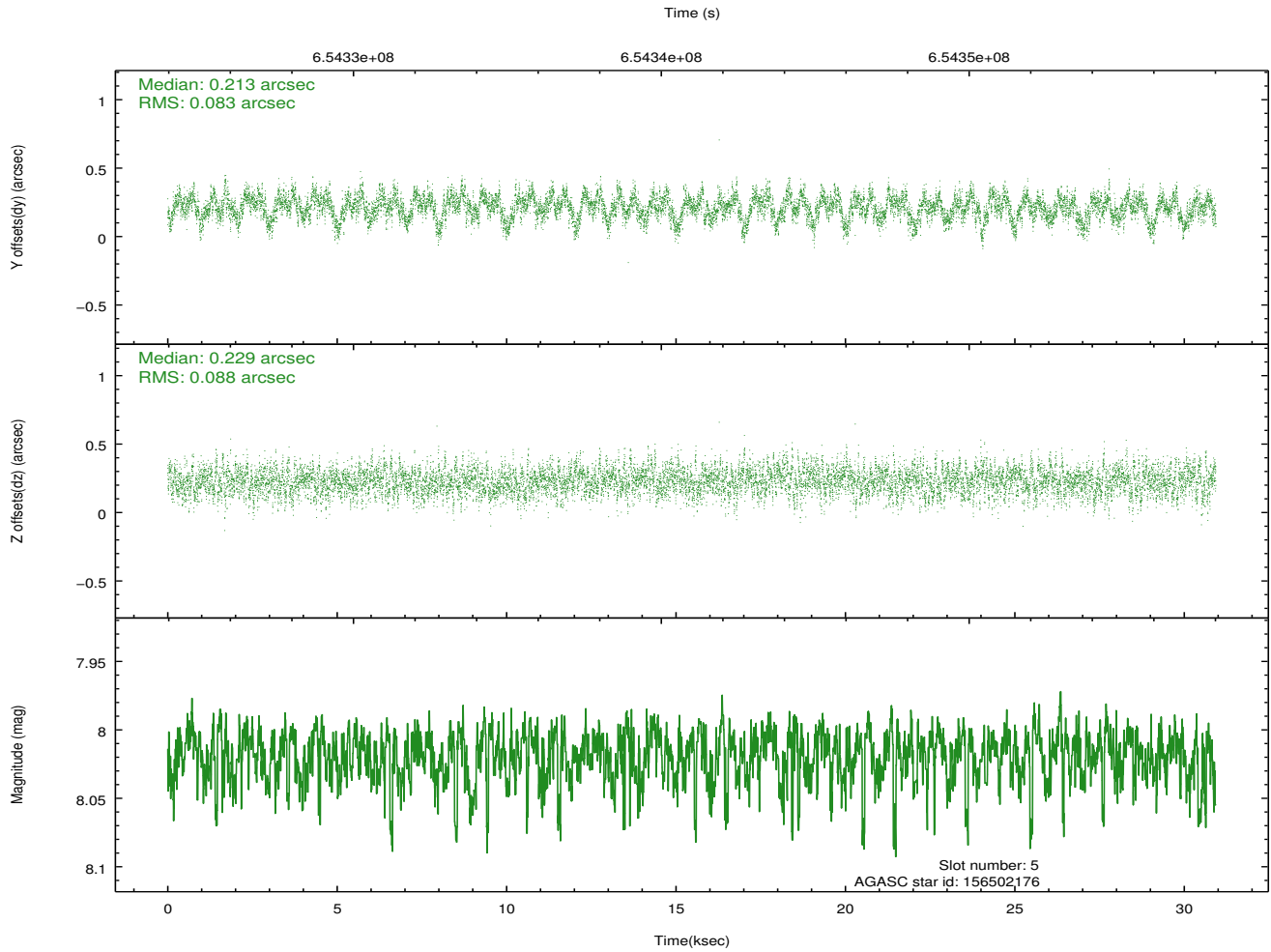
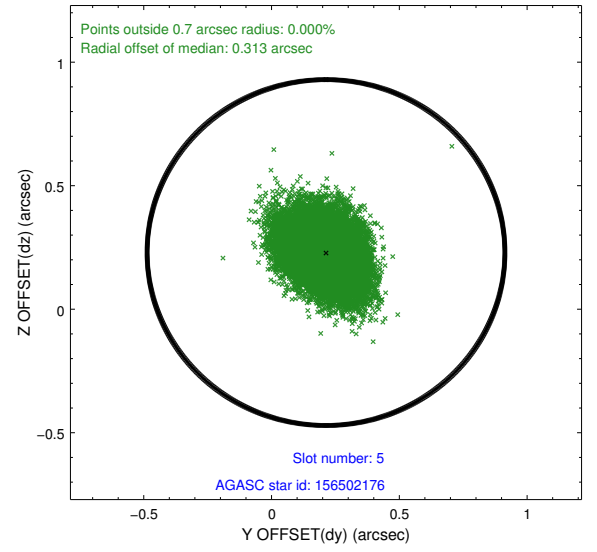
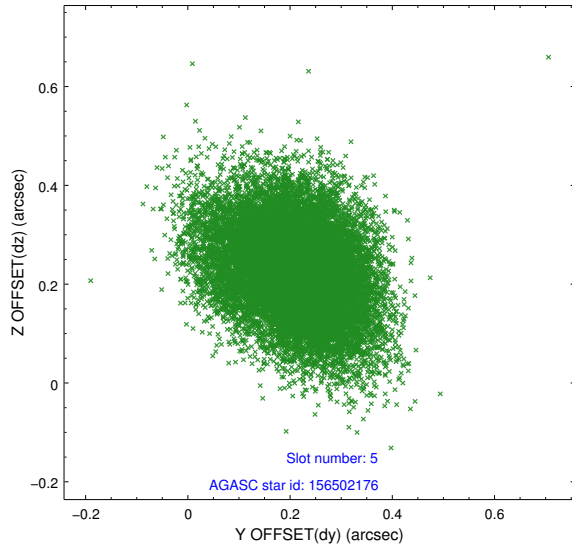
2.4.1 Slot 3



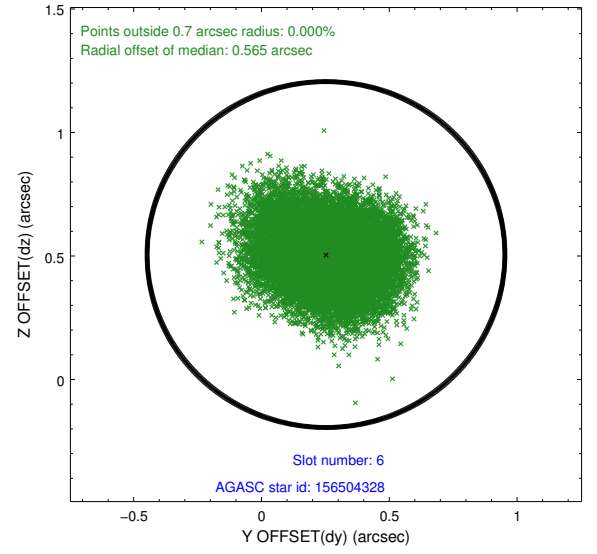
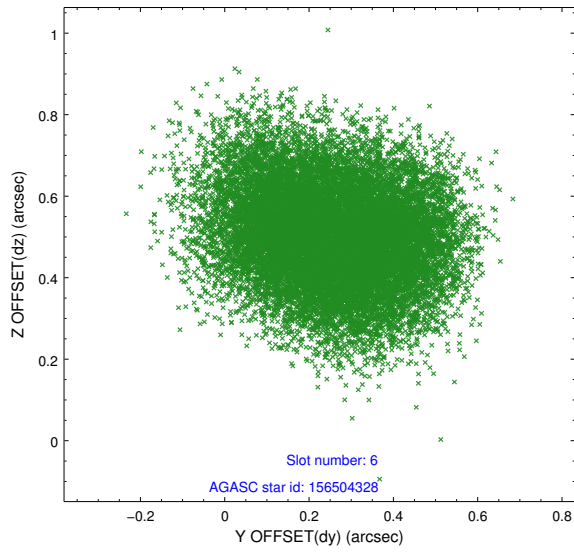
2.4.2 Slot 4



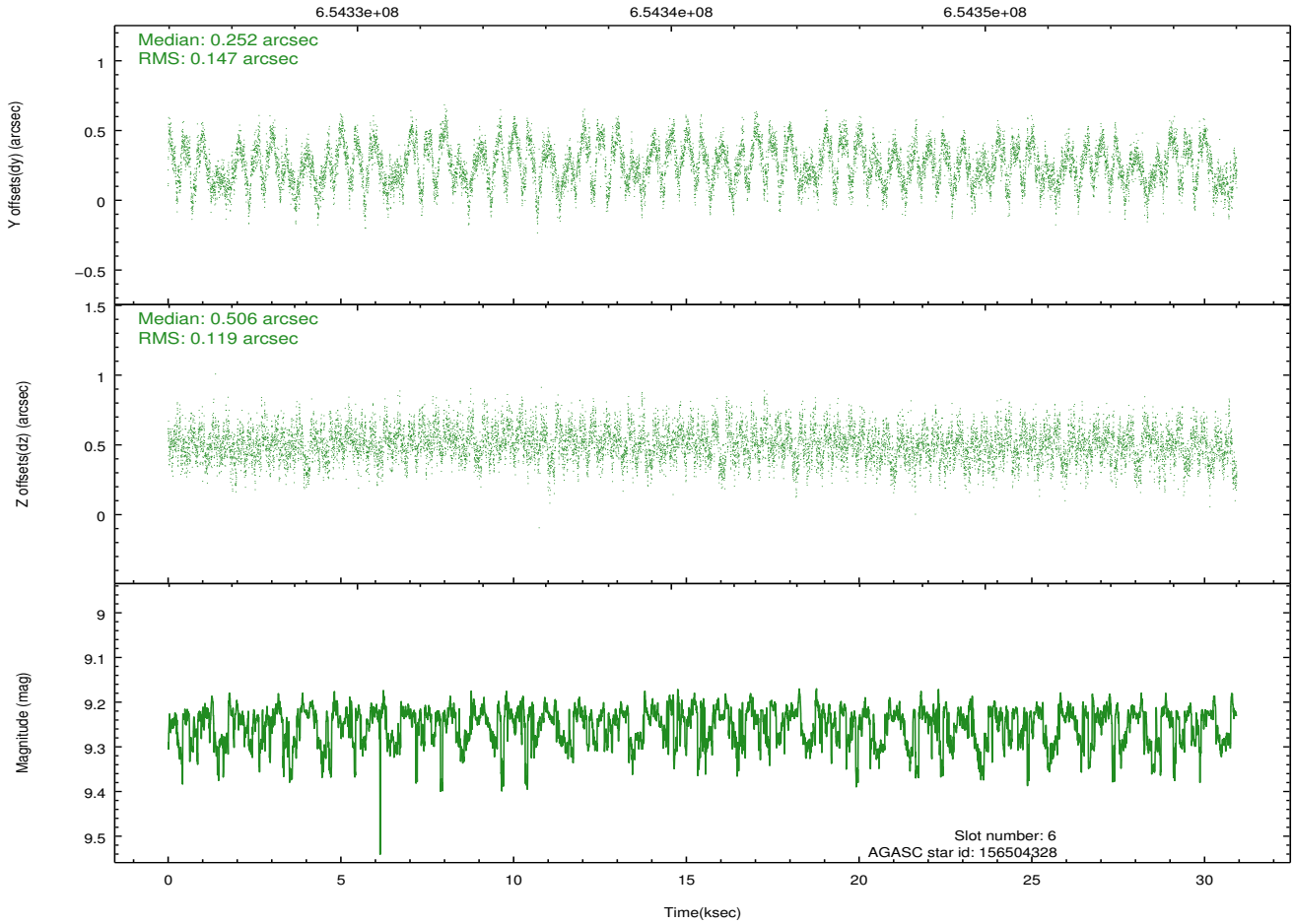
2.4.3 Slot 5



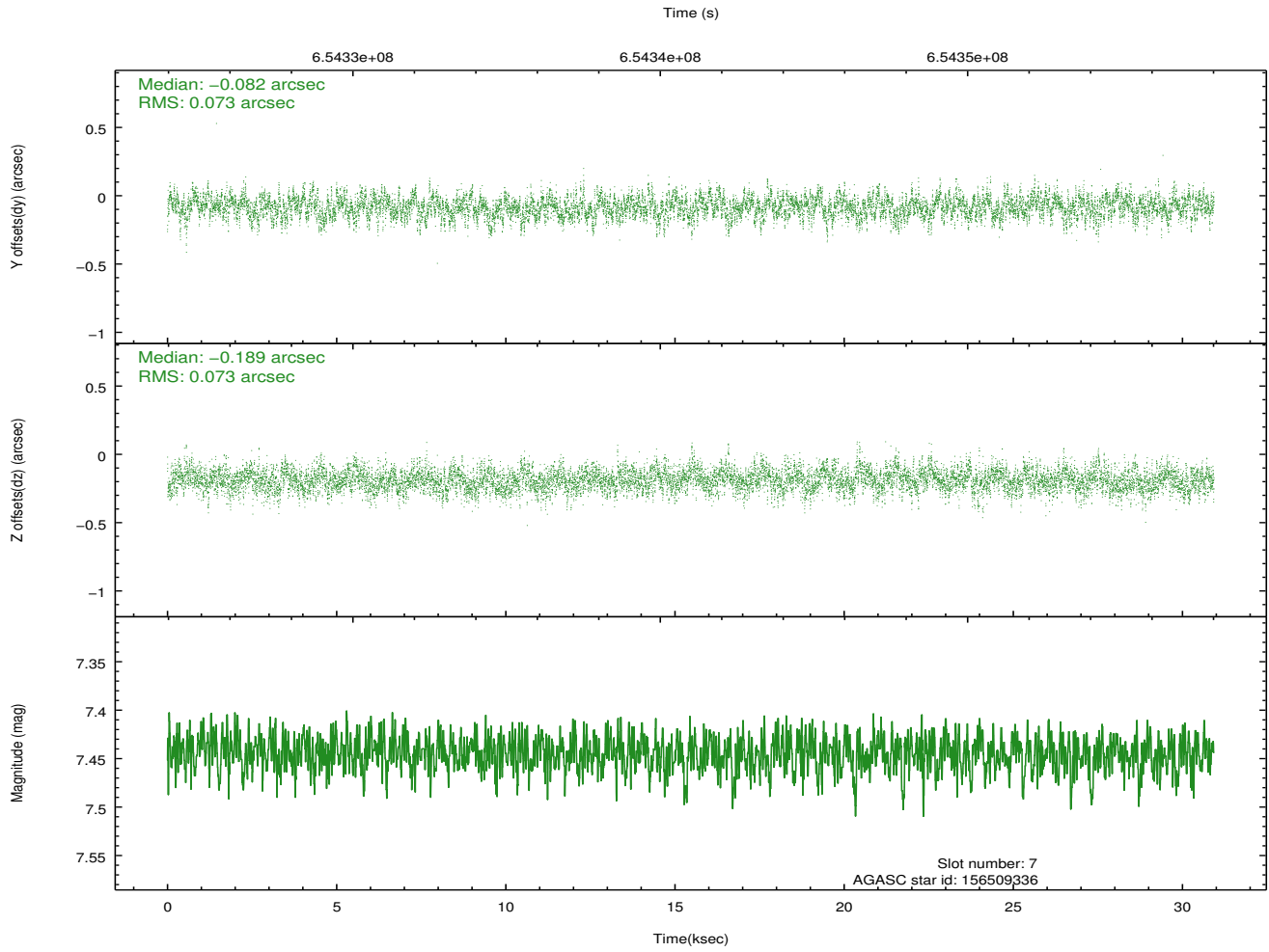
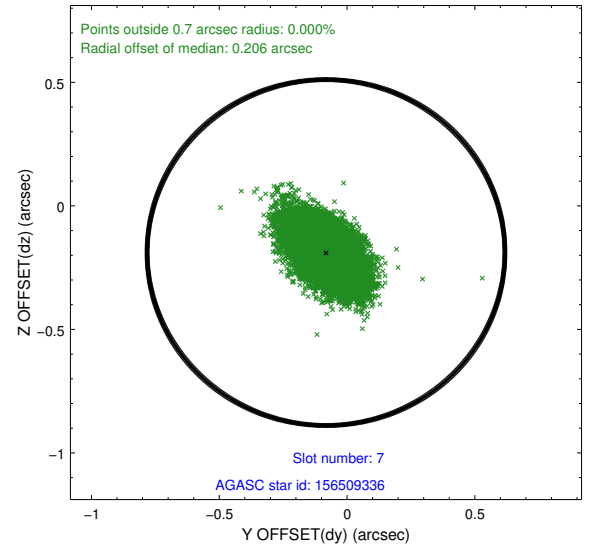
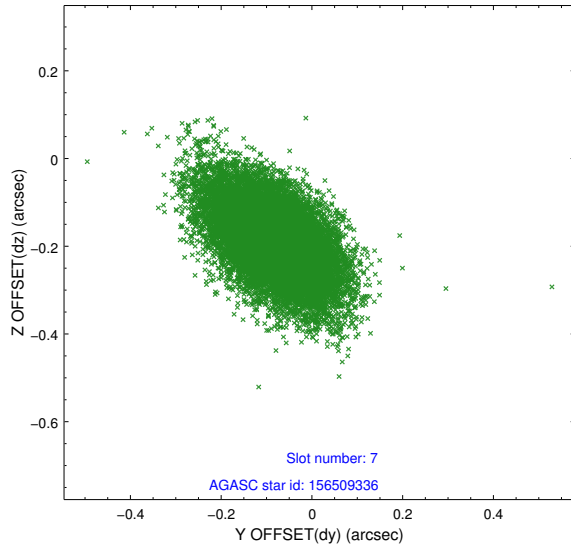
2.4.4 Slot 6



Time (s)

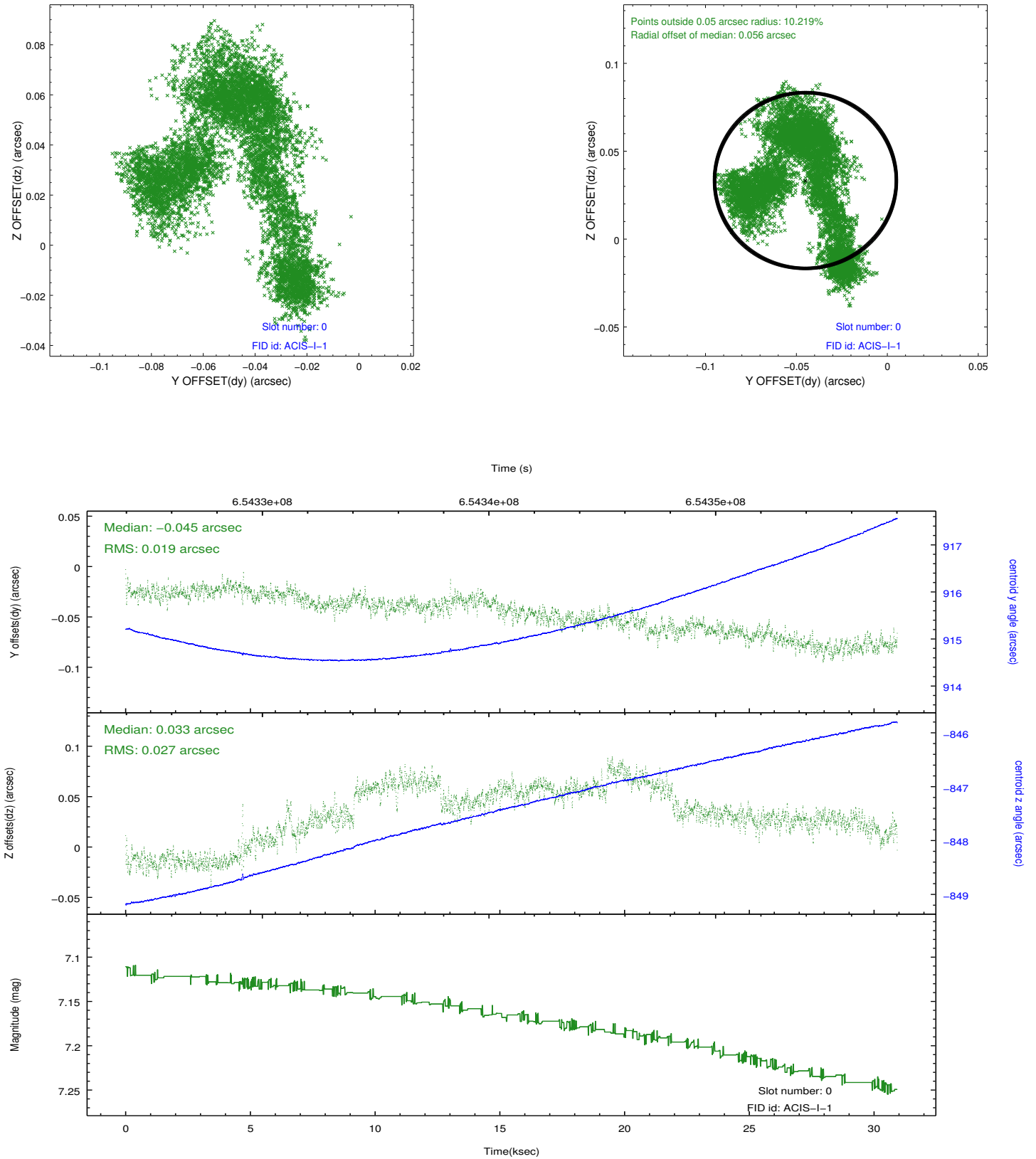


2.4.5 Slot 7

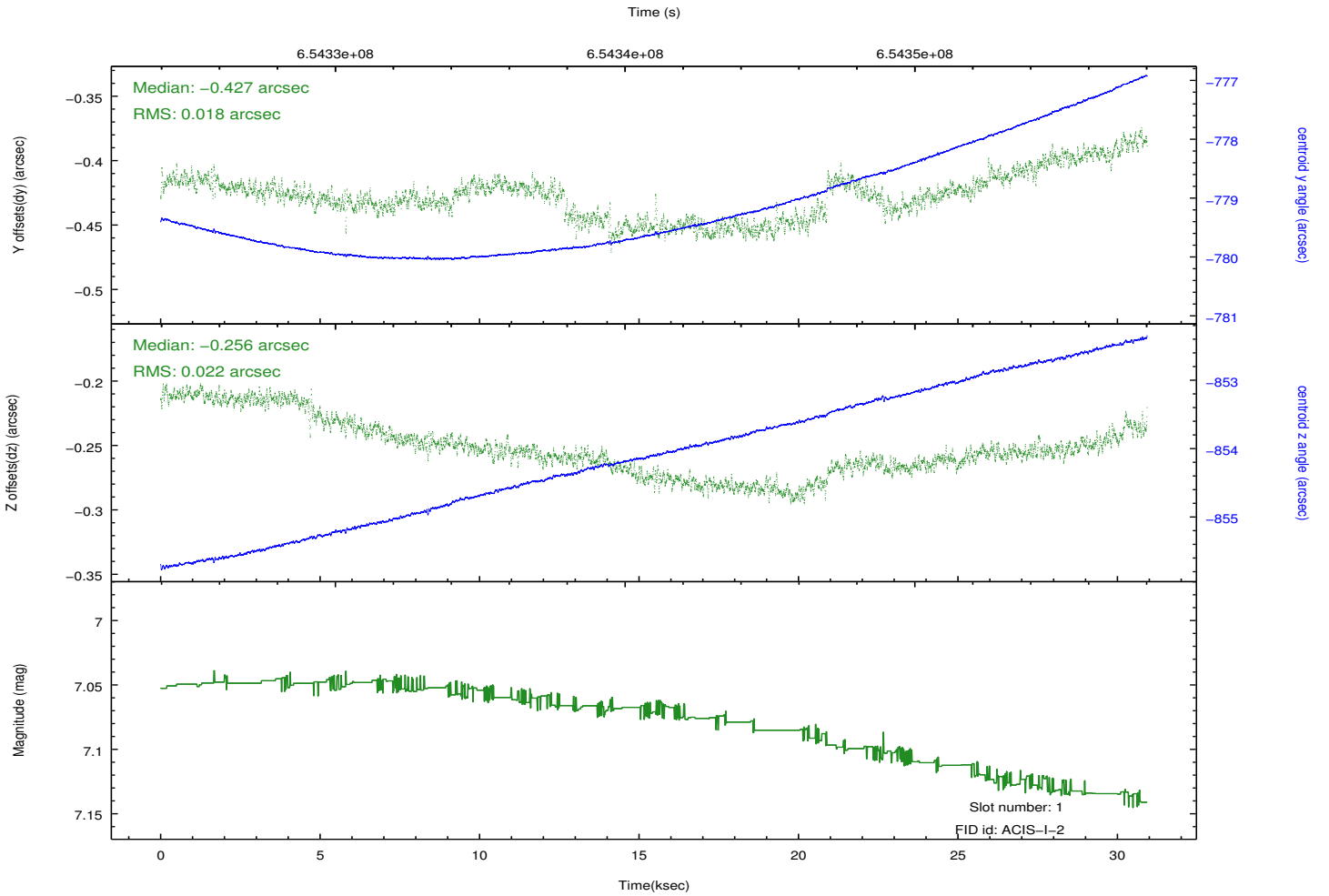
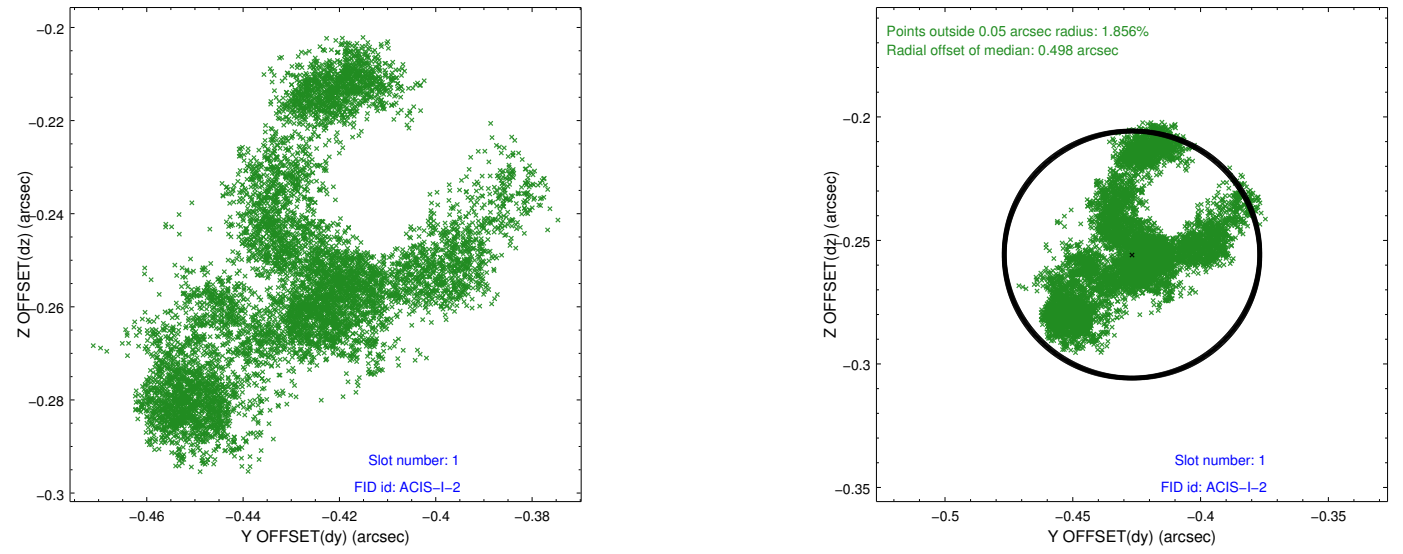


2.5 FID Slots

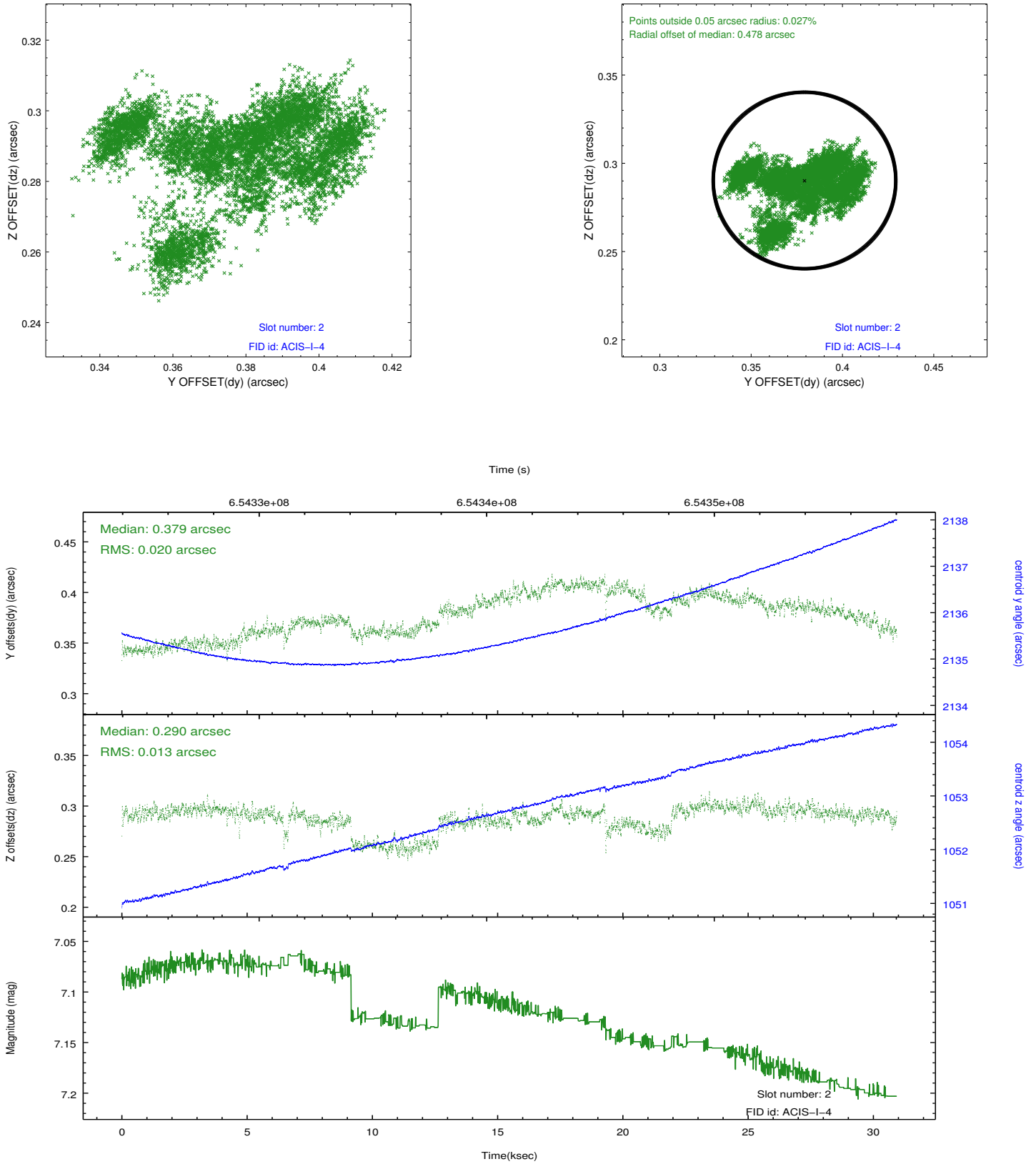
2.5.1 Slot 0



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)	2018.09.26
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.899359150887

A.2 Comments

One optional chip was dropped.