

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 17519 - L2 Version 1
Chandra X-Ray Center

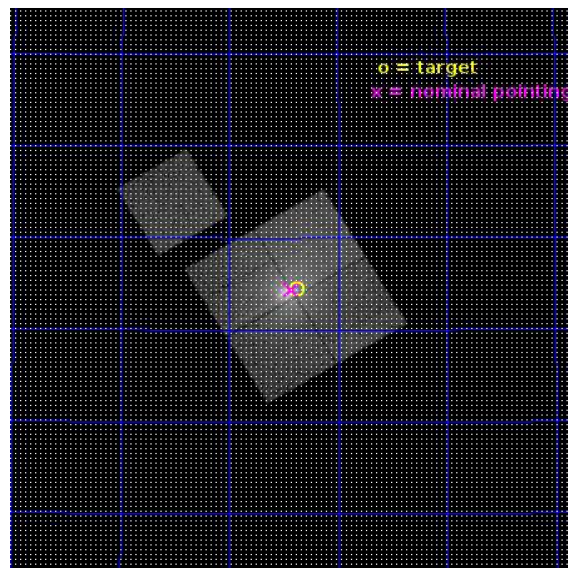
L2 Processing Date : Dec 20 2016

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1 Front

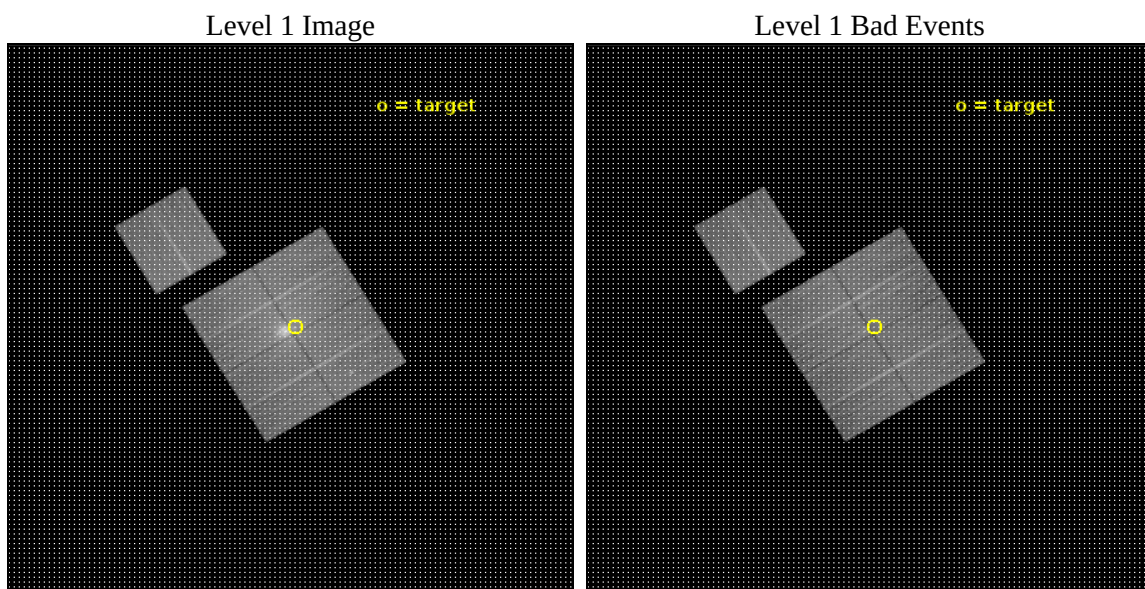
seq_num	703132	Sequence number
obs_id	17519	Observation id
title	The Rise to Power: Half a Billion Years of Intense AGN Activity in the Merging Cluster Cygnus A	Proposal title
observer	Dr. Michael Wise	Principal investigator
object	Cygnus A - W Hotspot	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	299.845	Observer's specified target RA [deg]
dec_targ	40.740361	Observer's specified target Dec [deg]
ra_nom	299.85734580222	Nominal RA [deg]
dec_nom	40.739341087908	Nominal Dec [deg]
roll_nom	329.15352126359	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30065.9289608	Sum of GTIs [s]
livetime	29673.095464712	Livetime [s]
ontime0	30062.664880514	Sum of GTIs [s]
ontime1	30062.705910563	Sum of GTIs [s]
ontime2	30065.887920856	Sum of GTIs [s]
ontime3	30065.9289608	Sum of GTIs [s]
ontime6	30065.764800787	Sum of GTIs [s]
l2events	247866	Number of level 2 events



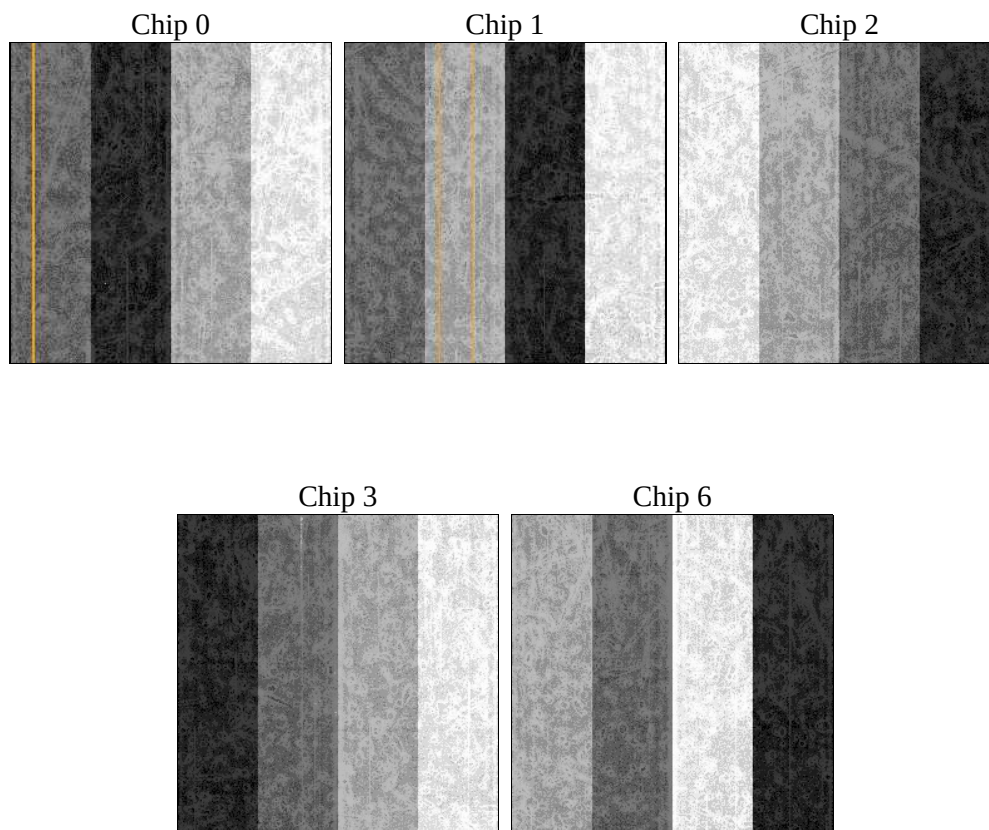
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	30065.9289608	Sum of GTIs [s]
caldsver	4.7.3	 	ontime0	30062.664880514	Sum of GTIs [s]
date	2016-12-20T11:48:48	Date and time of file creation	ontime1	30062.705910563	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	30065.887920856	Sum of GTIs [s]
			ontime3	30065.9289608	Sum of GTIs [s]
			ontime6	30065.764800787	Sum of GTIs [s]
			l1events	1176738	Number of level 1 events

2.1.4 Events

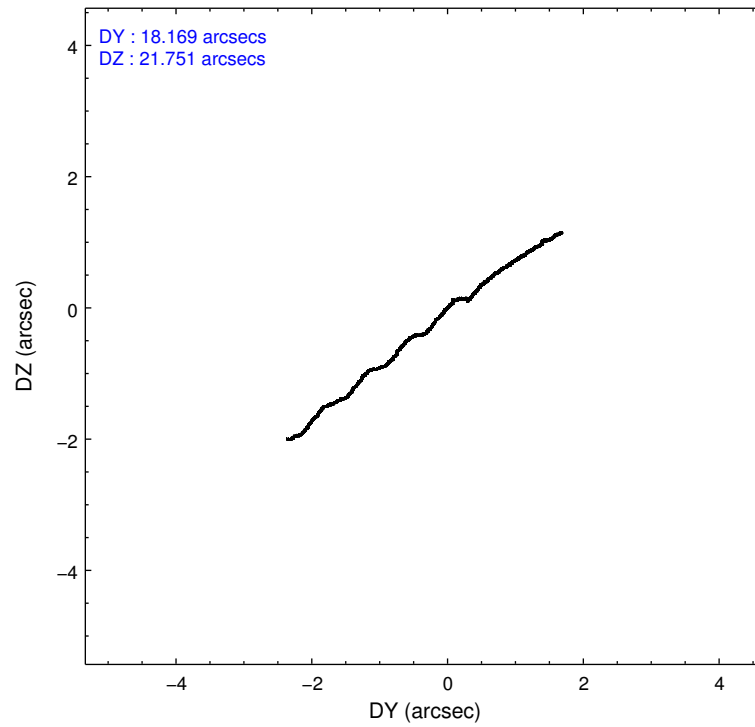
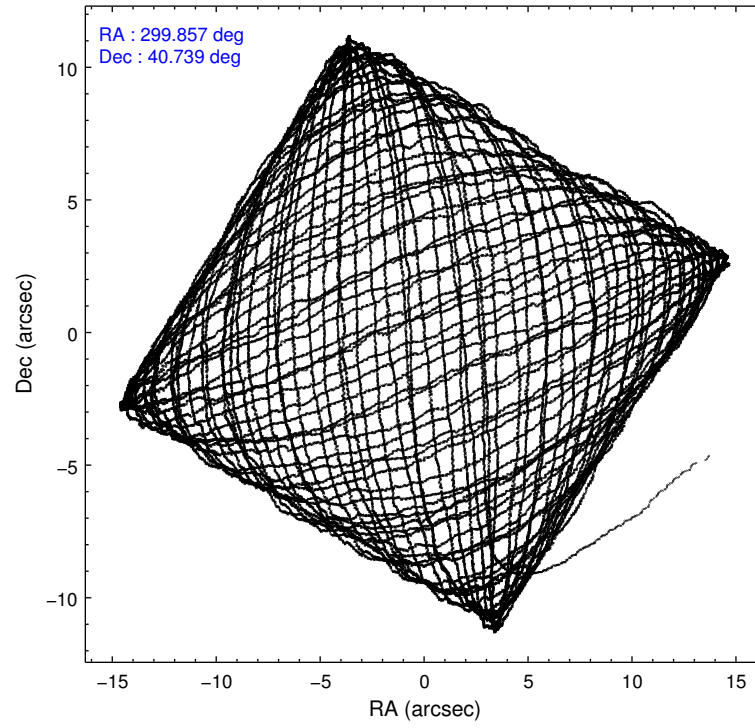
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	205073	215530	294402	249500	212233
rejected events	165689	173705	188481	183979	187469
rejected %	80%	80%	64%	73%	88%

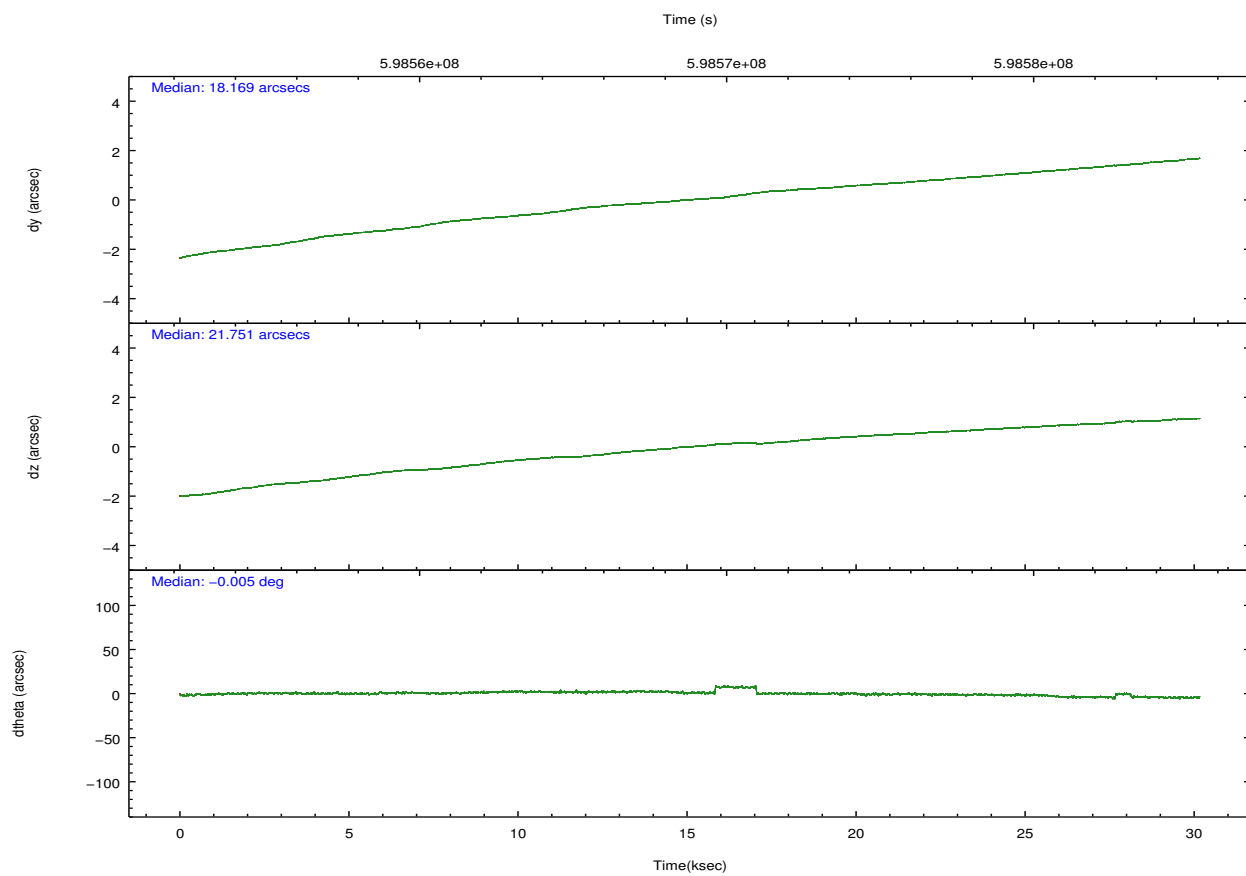
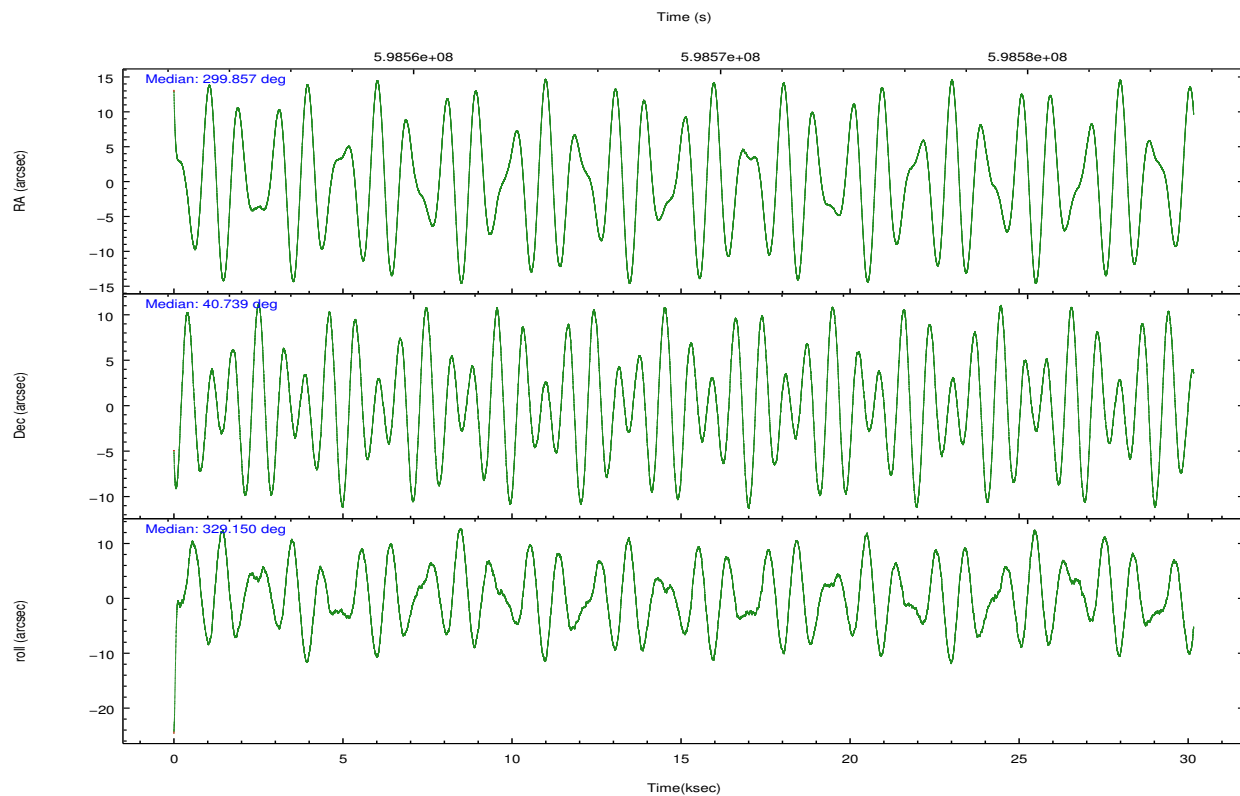
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	20408	21049	71646	41698	8939
	9%	9%	24%	16%	4%
grade 1 events	175	189	876	331	110
	0%	0%	0%	0%	0%
grade 2 events	7686	8464	15121	9672	5603
	3%	3%	5%	3%	2%
grade 3 events	2994	3074	5324	3882	2416
	1%	1%	1%	1%	1%
grade 4 events	2878	3004	5457	3819	2364
	1%	1%	1%	1%	1%
grade 5 events	9050	9483	9381	10357	9590
	4%	4%	3%	4%	4%
grade 6 events	5426	6245	8402	6460	5445
	2%	2%	2%	2%	2%
grade 7 events	156456	164022	178195	173281	177766
	76%	76%	60%	69%	83%

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	299.820909	299.857345802219	CCD I2 on	Y	Y
[deg] Pointing Dec	40.739645	40.73934108790834	CCD I3 on	Y	Y
[deg] Pointing Roll	328.968630	329.15352126359	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	Y
[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)	598553875.184000	598552426.42686	CCD S5 on	N	N
Observation start date	2016-12-19T16:56:47	2016-12-19T16:33:46	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	598583875.184000	598584781.0662301	On-chip summing requested	N	N
Observation end date	2016-12-20T01:16:47	2016-12-20T01:33:01	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



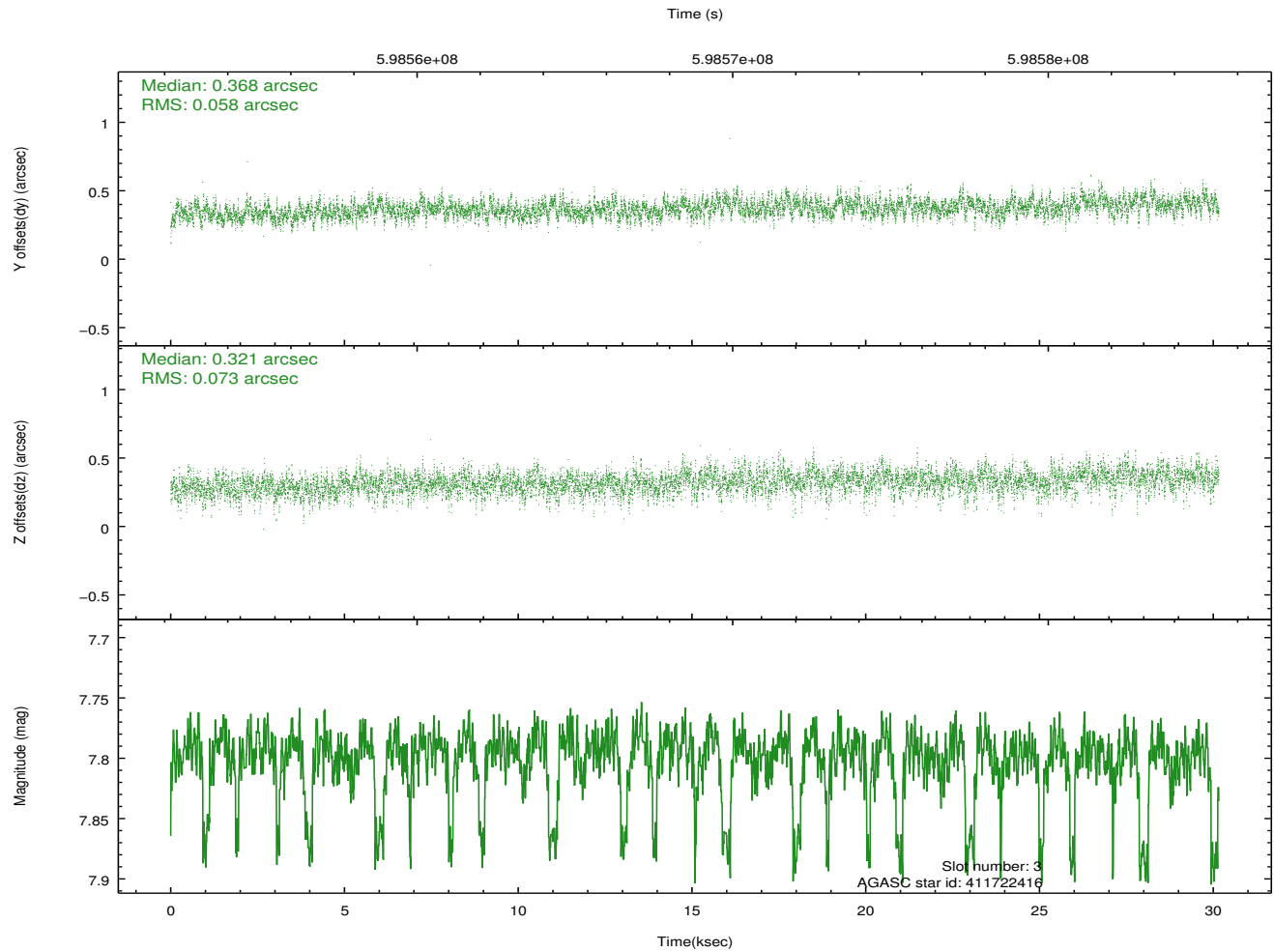
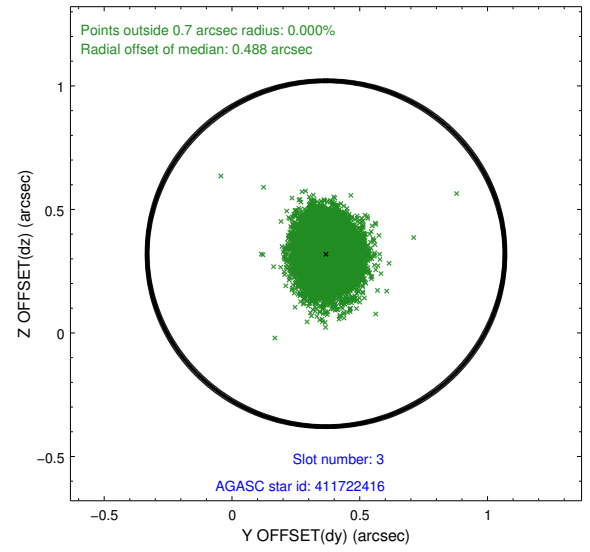
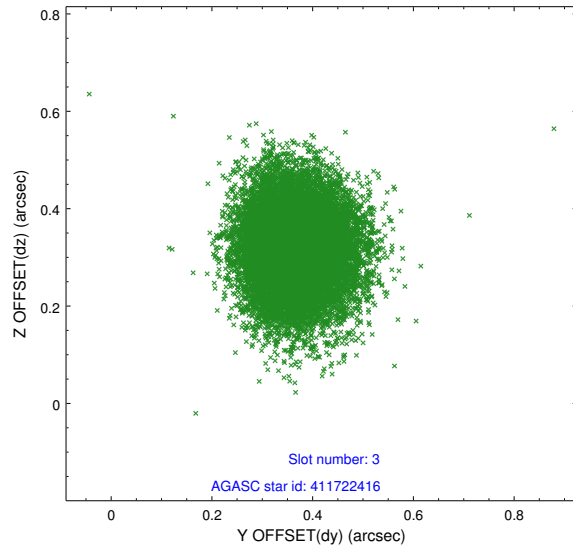


Slot Statistics

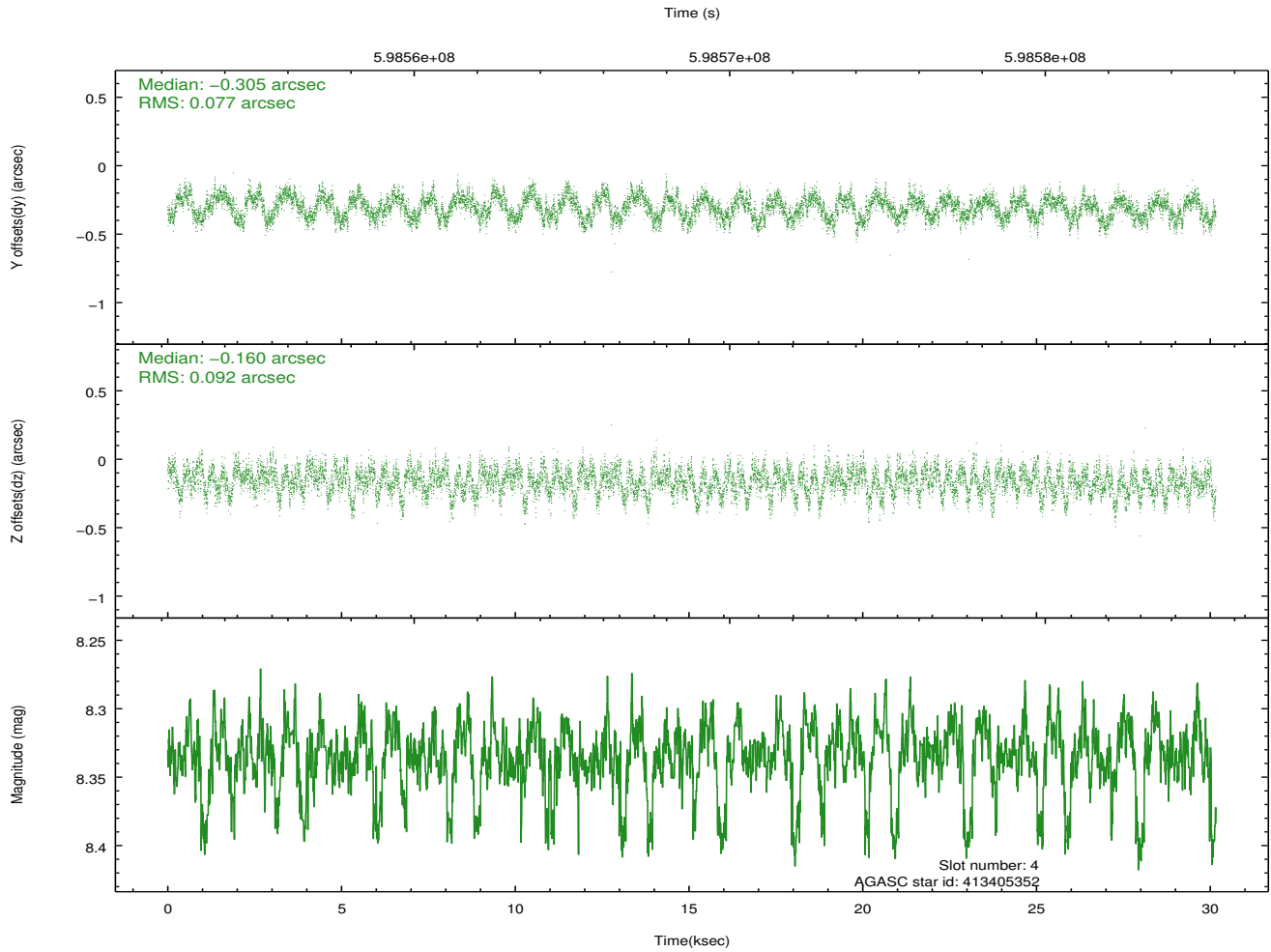
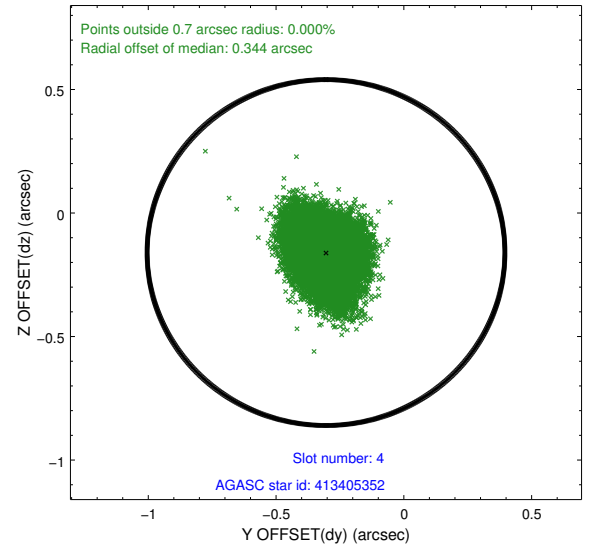
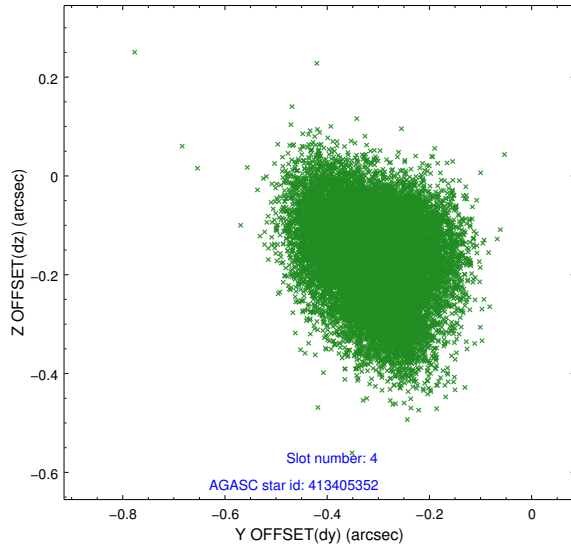
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	7357	-0.064	-0.090	0.030	0.064	0.000000	0.000000	921.29	-845.39
1	FID		ACIS-I-4	7.05	7356	0.405	0.117	0.026	0.073	0.000000	0.000000	2141.72	1054.64
2	FID		ACIS-I-5	7.09	7356	-0.438	0.044	0.020	0.044	0.000000	0.000000	-1827.10	1052.27
3	GUIDE	used	411722416	7.80	14714	0.368	0.321	0.098	0.162	298.936507	40.391736	-1437.71	-2312.57
4	GUIDE	used	413405352	8.33	14708	-0.305	-0.160	0.128	0.201	300.290830	41.091941	436.89	1746.68
5	GUIDE	used	411701312	8.67	14709	0.246	0.289	0.108	0.174	298.889956	40.820220	-2329.02	-1046.77
6	GUIDE	used	413421624	8.67	14703	-0.232	-0.228	0.139	0.213	300.399768	40.893051	1062.40	1289.82
7	GUIDE	used	413421016	8.71	14701	-0.079	-0.215	0.099	0.162	300.612426	40.446254	2397.86	221.05

2.4 Star Slots

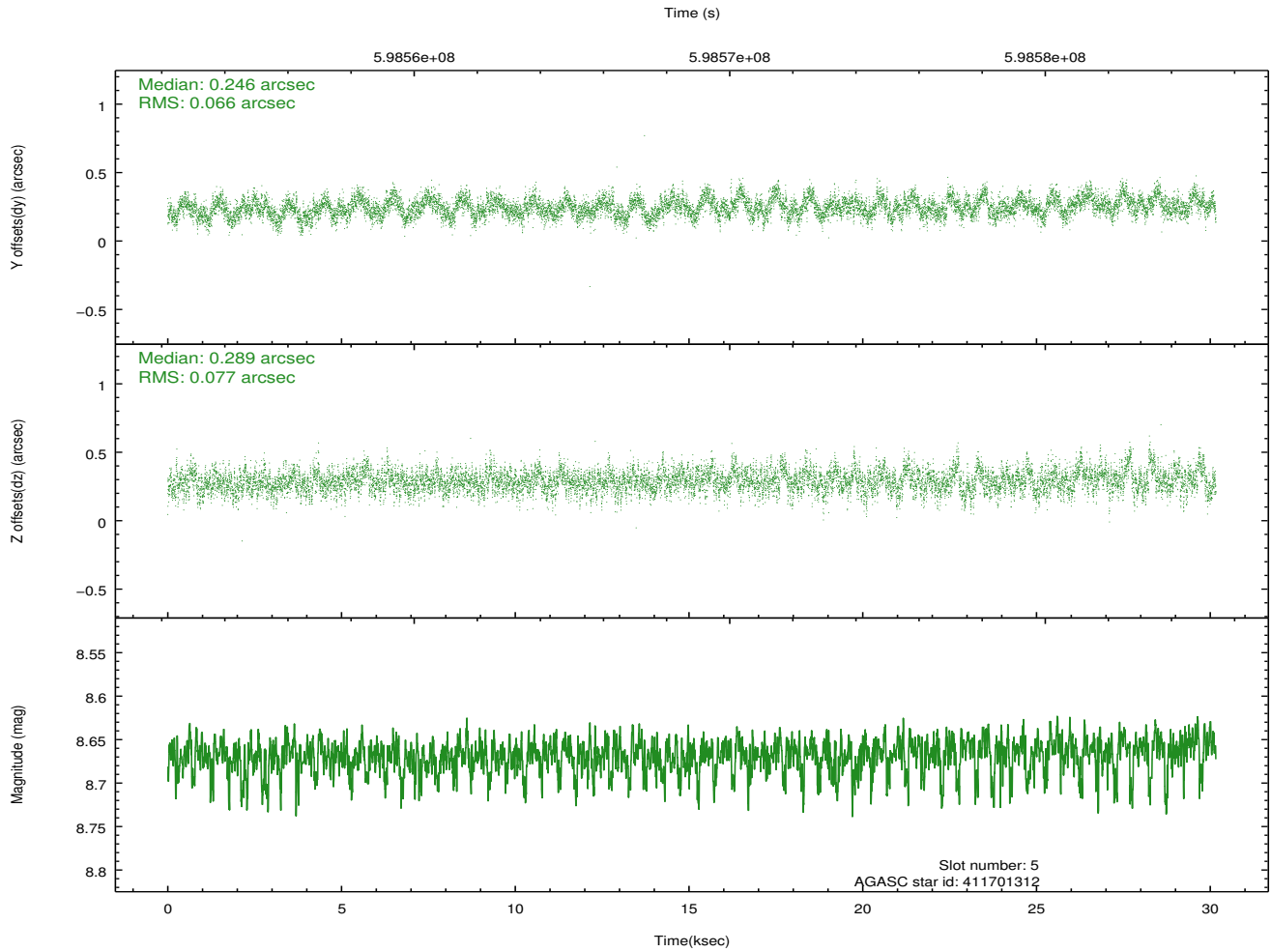
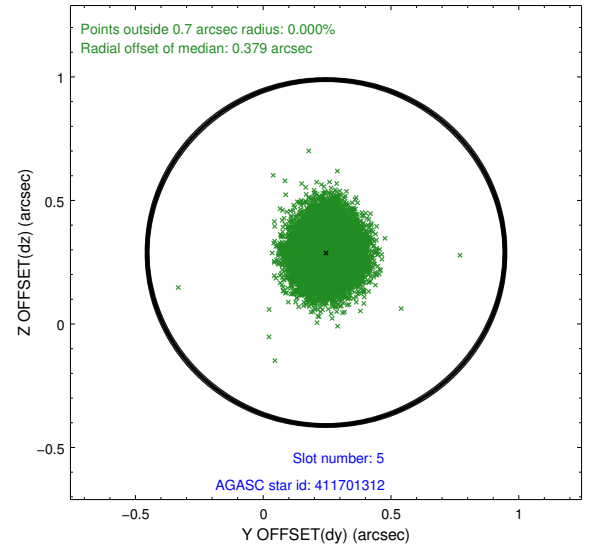
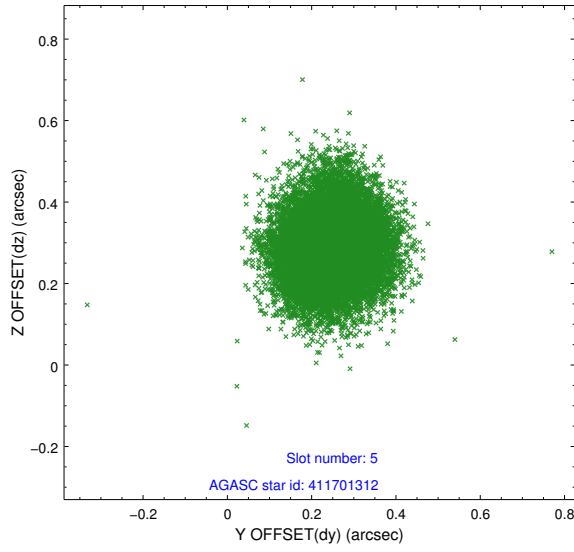
2.4.1 Slot 3



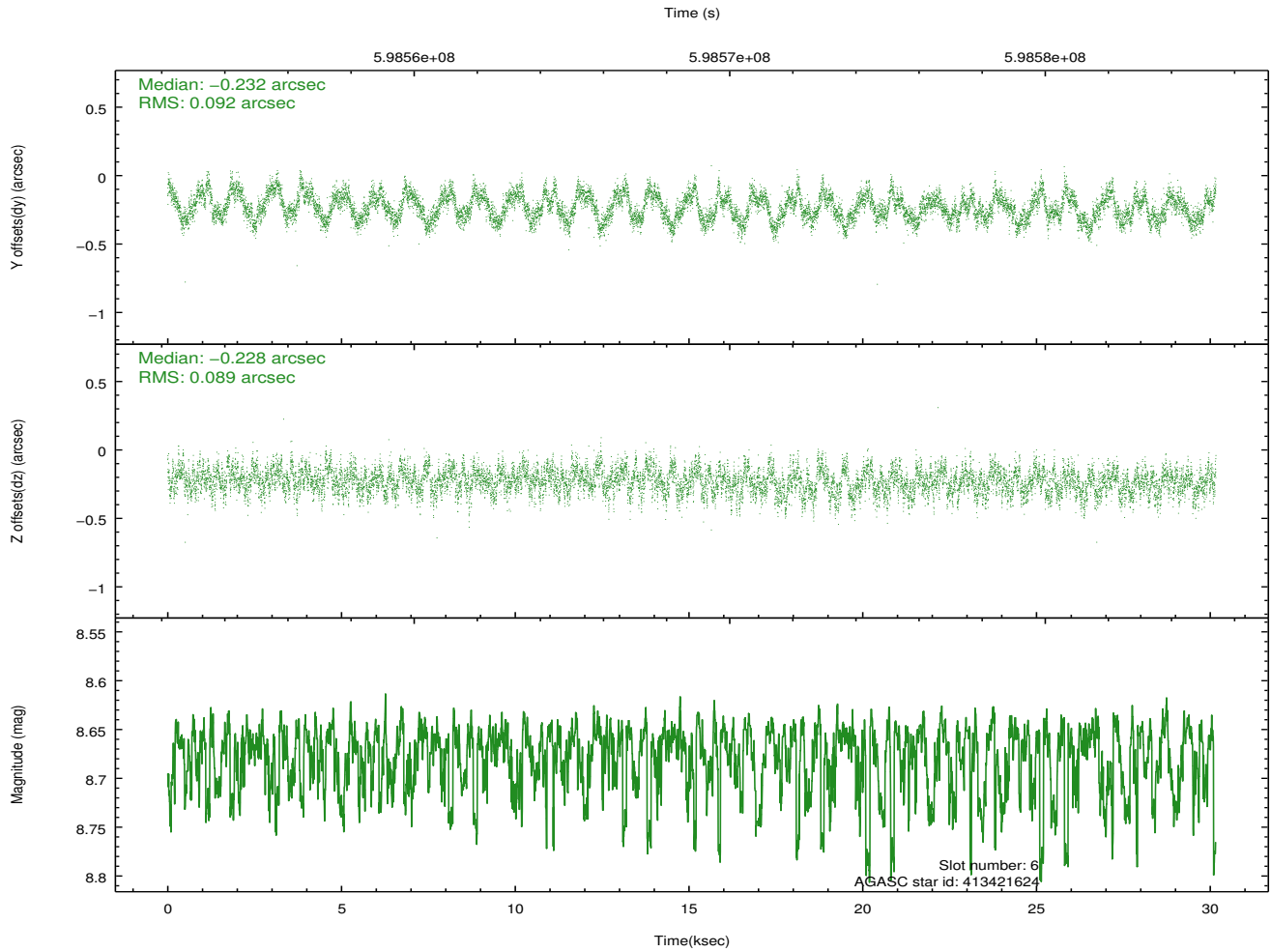
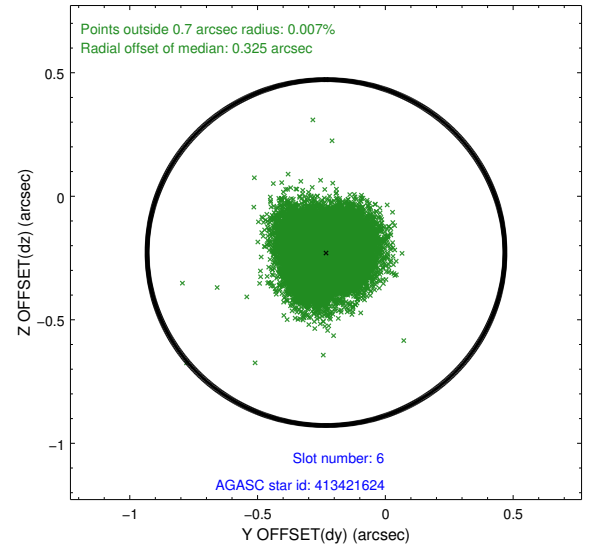
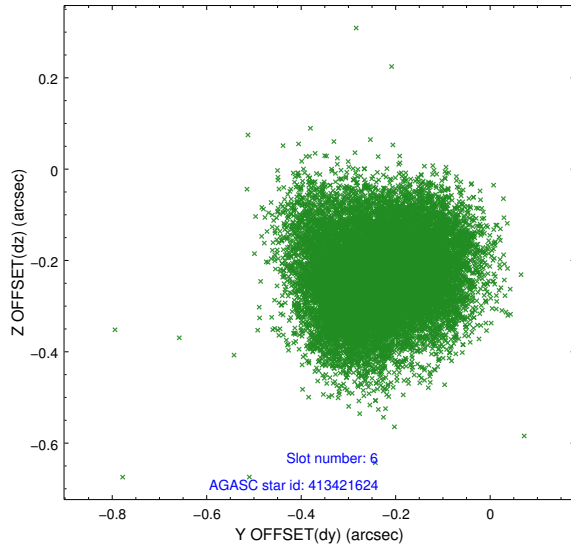
2.4.2 Slot 4



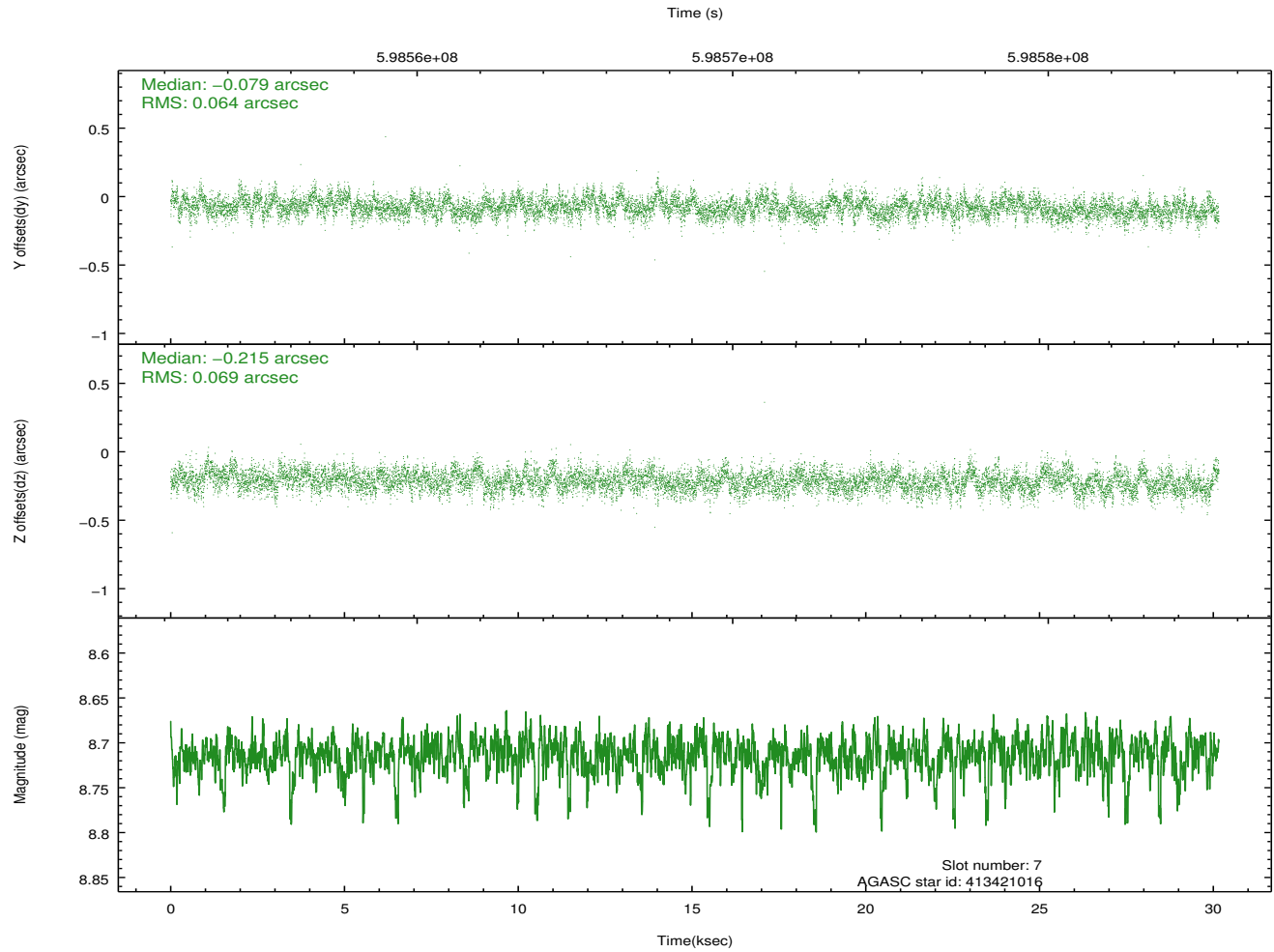
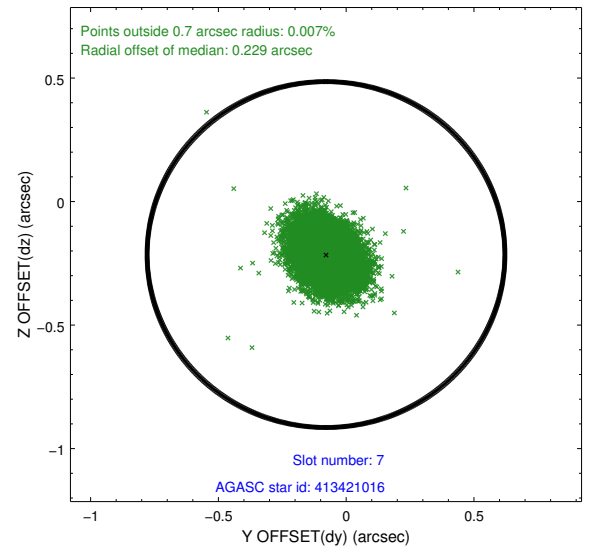
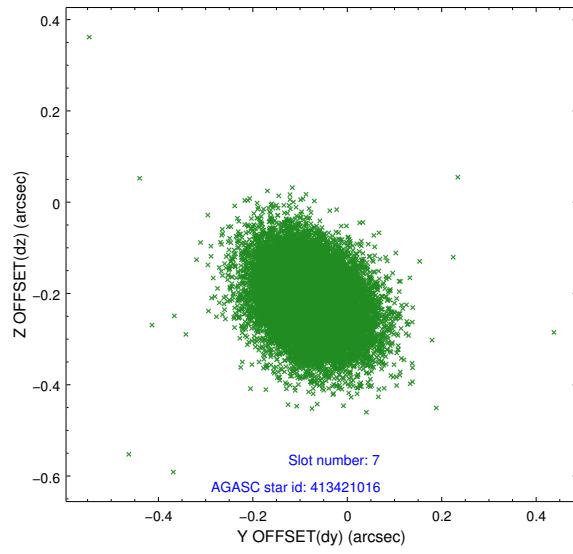
2.4.3 Slot 5



2.4.4 Slot 6

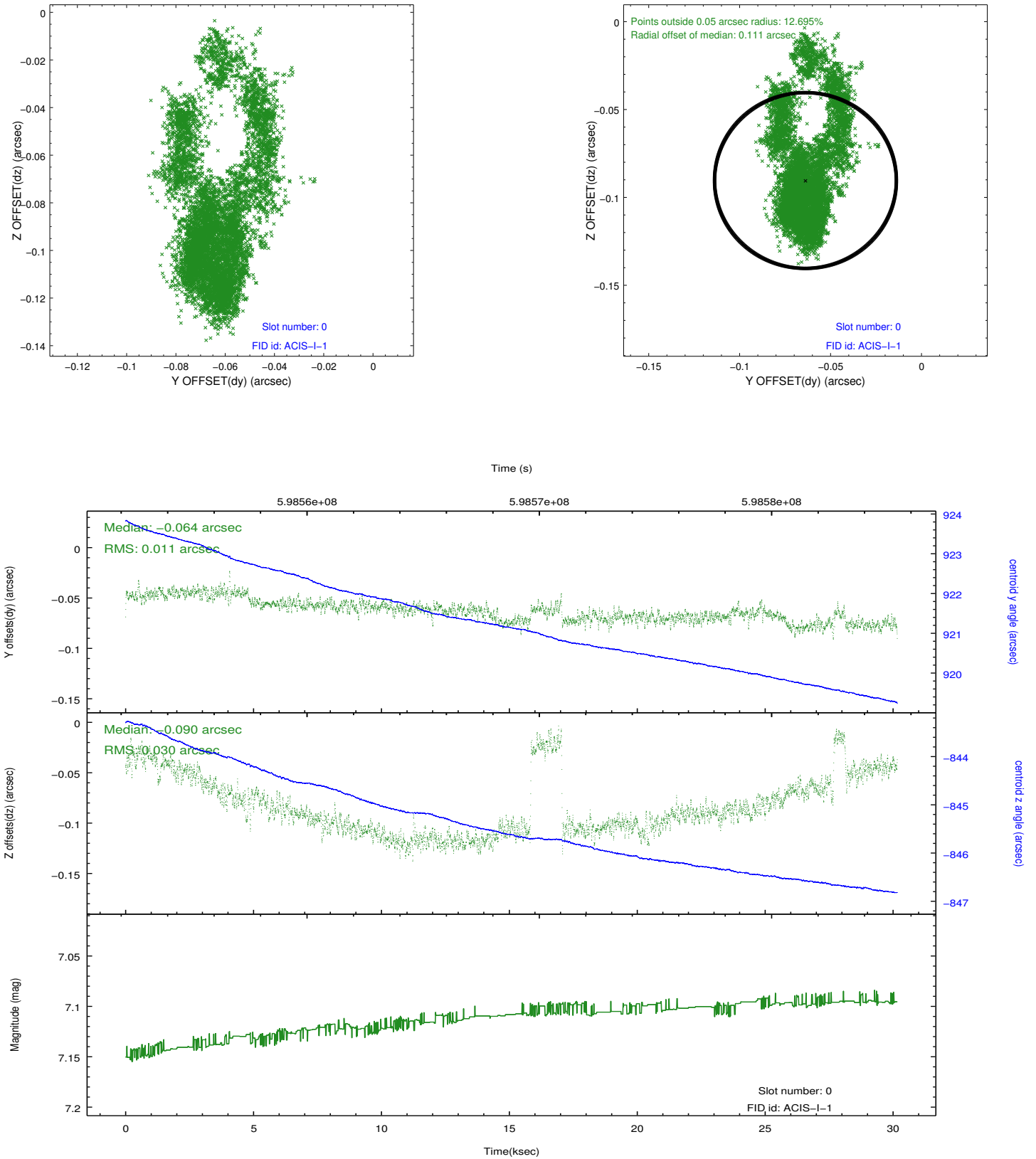


2.4.5 Slot 7

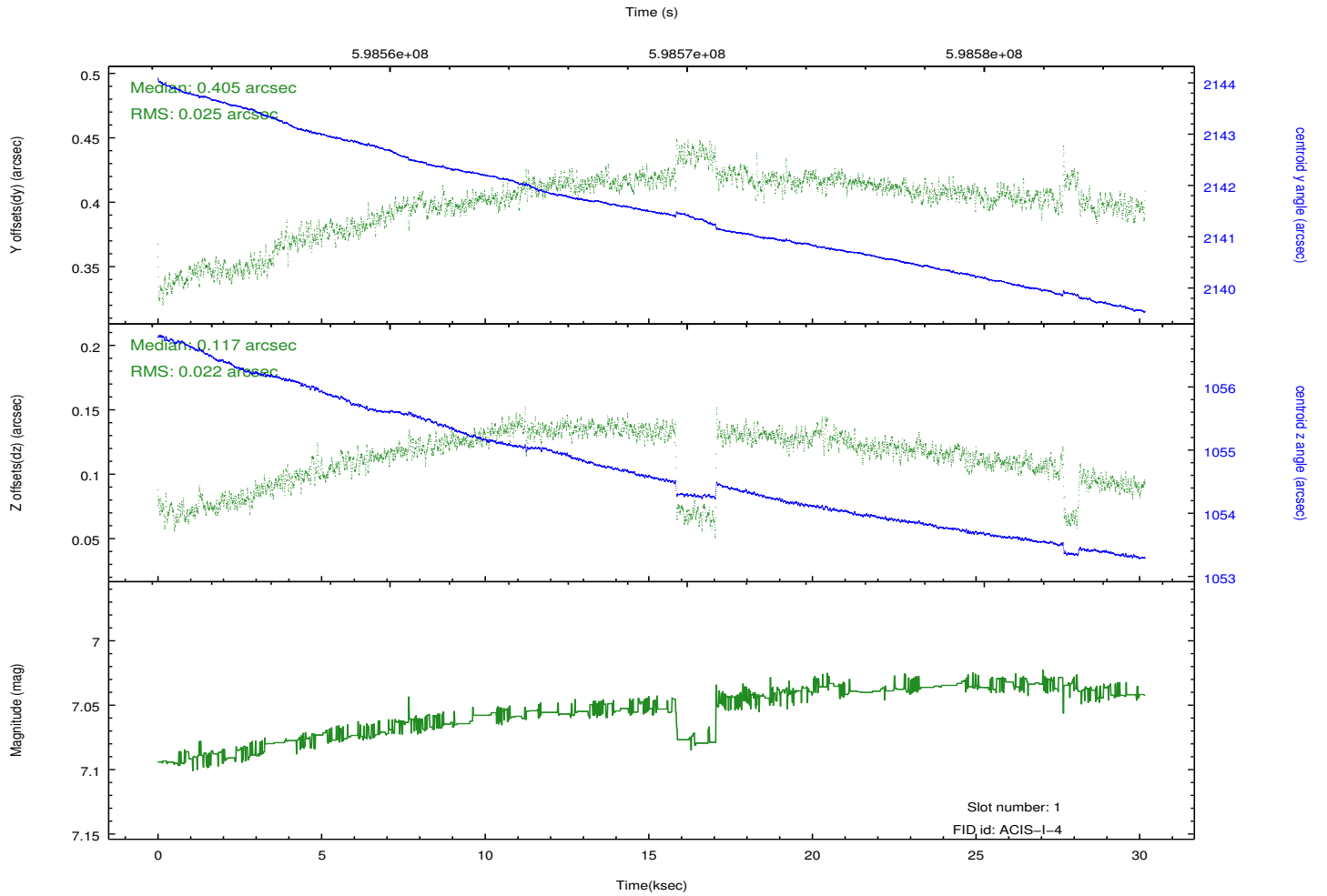
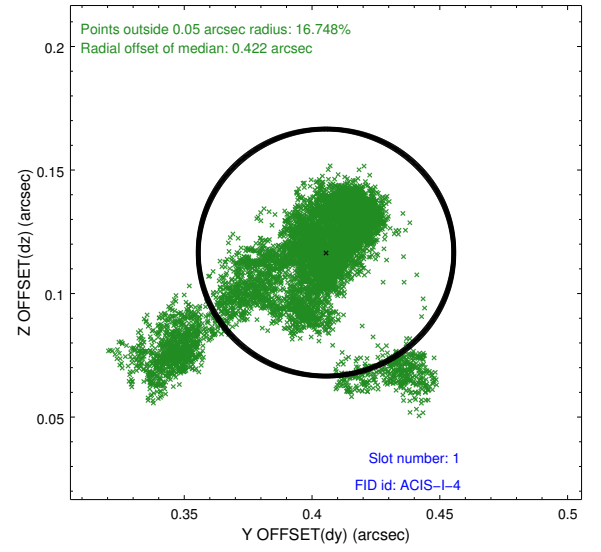
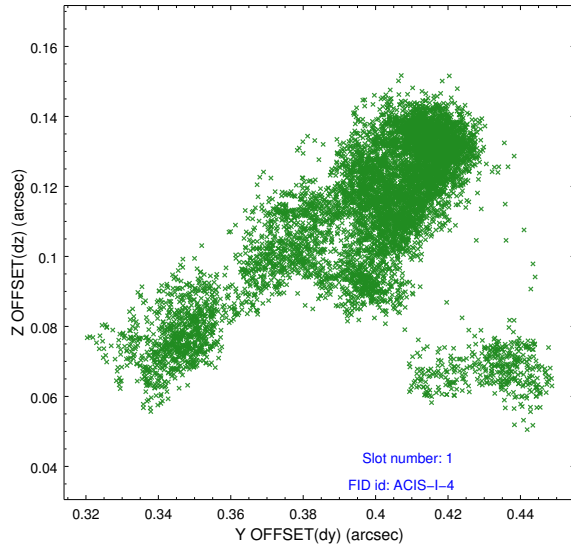


2.5 FID Slots

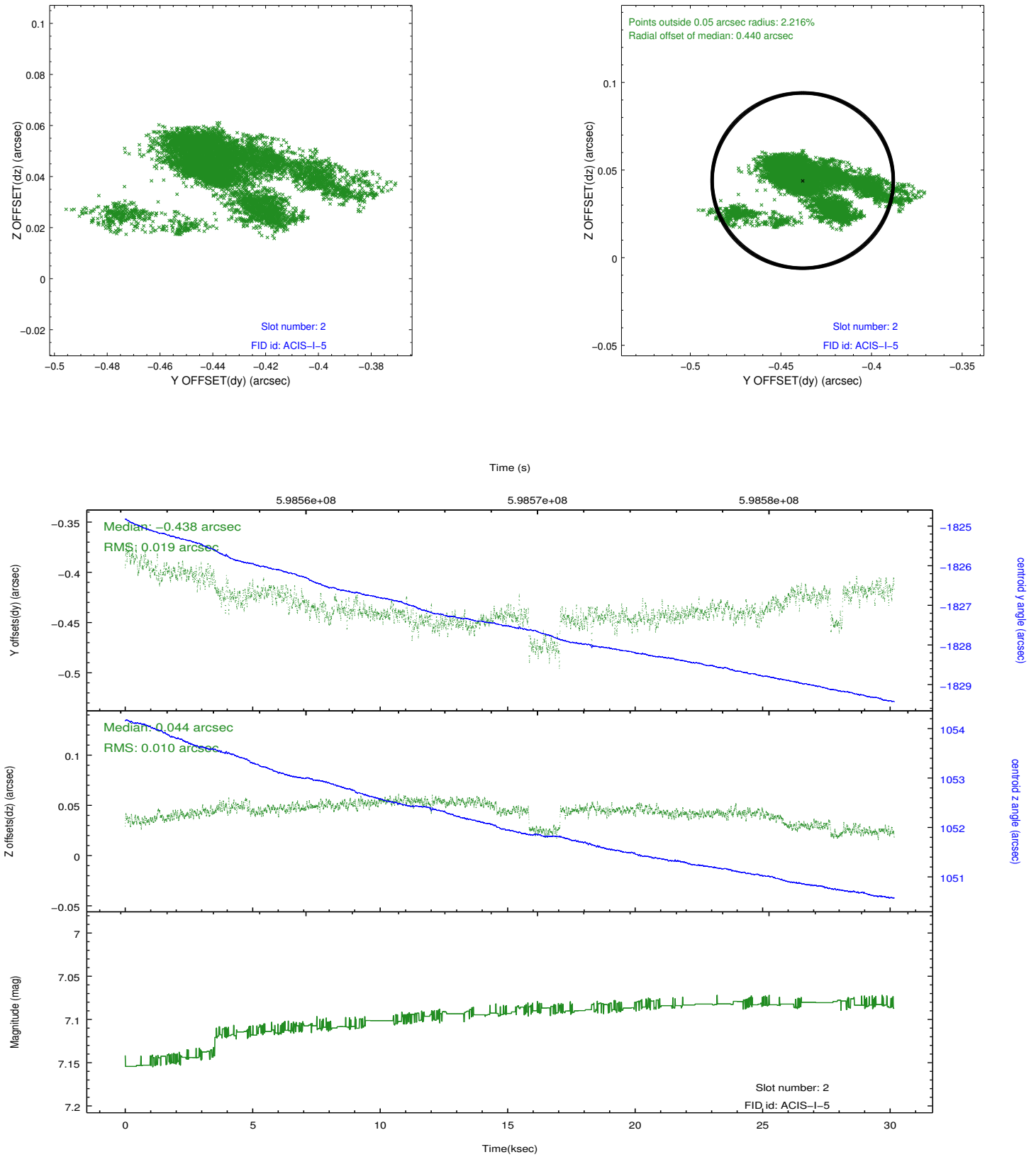
2.5.1 Slot 0



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)	2016.12.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.0659289608

A.2 Comments