

V&V Reference Report

L2 ASCDS Version : 10.5

Observation 18451 - L2 Version 2
Chandra X-Ray Center

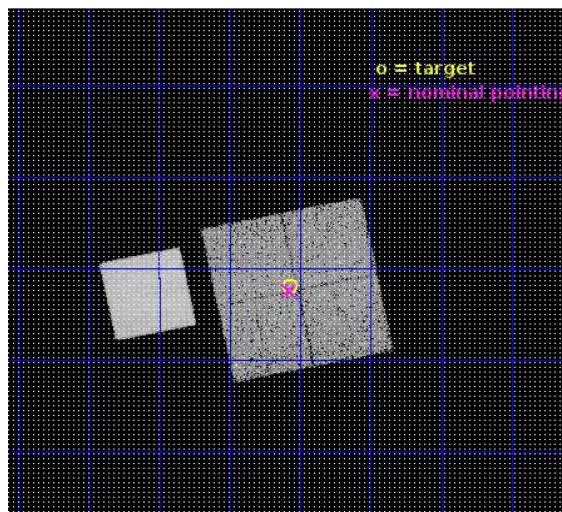
L2 Processing Date : Aug 15 2016

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1 Front

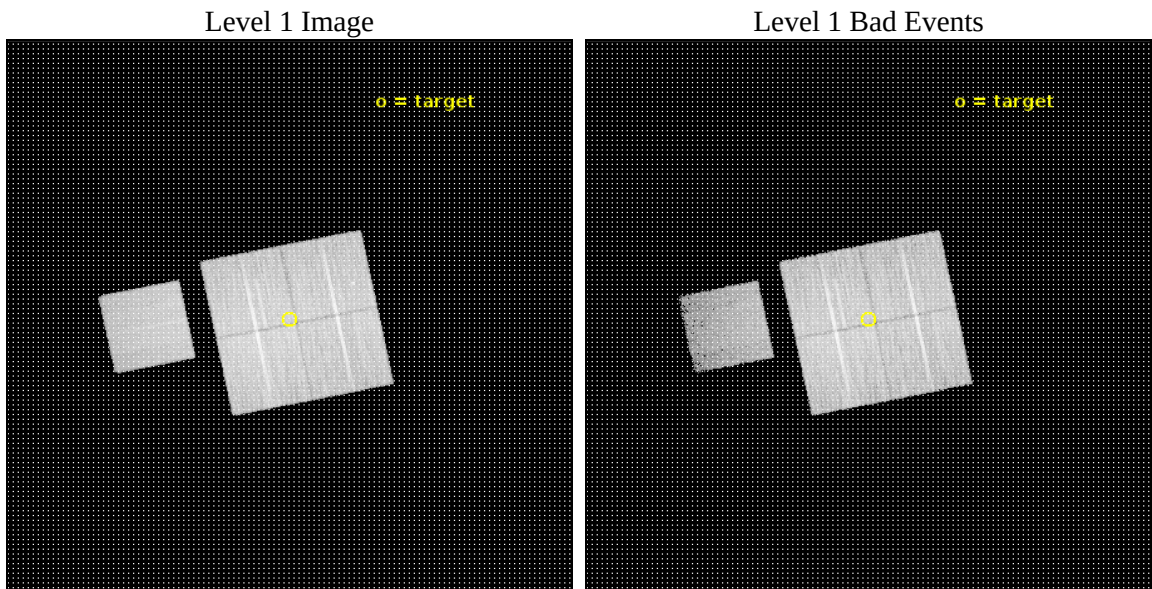
seq_num	502657	Sequence number
obs_id	18451	Observation id
title	Search for X-ray Counterpart of the TeV source HESS J1831-098	Prop
observer	Gordon Garmire	Principal investigator
object	HESS J1831-098	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	277.892917	Observer's specified target RA [deg]
dec_targ	-9.867222	Observer's specified target Dec [deg]
ra_nom	277.89414903863	Nominal RA [deg]
dec_nom	-9.8738923590271	Nominal Dec [deg]
roll_nom	258.35510359031	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29080.675841212	Sum of GTIs [s]
livetime	28700.715402465	Livetime [s]
ontime0	29080.55271101	Sum of GTIs [s]
ontime1	29077.452880621	Sum of GTIs [s]
ontime2	29083.775861382	Sum of GTIs [s]
ontime3	29080.675841212	Sum of GTIs [s]
ontime7	29083.857941389	Sum of GTIs [s]
l2events	112780	Number of level 2 events



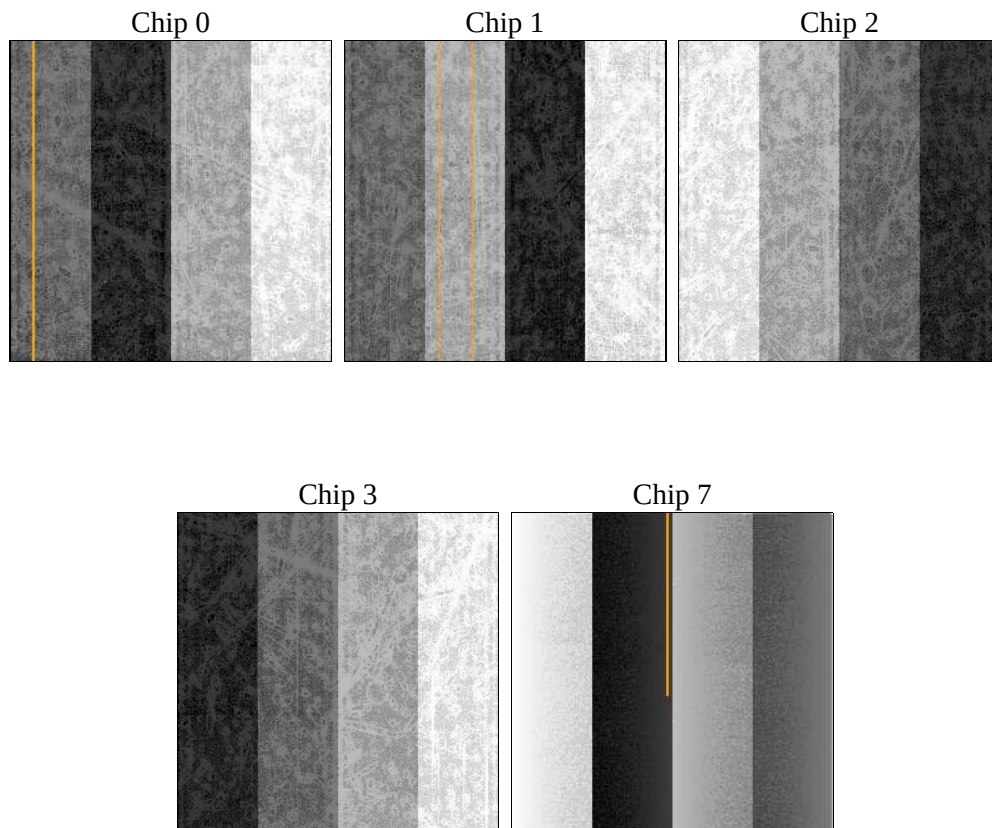
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29000.000000	[s] Scheduled observation exposure time
ascdsver	10.5	Processing system revision	ontime	29080.675841212	Sum of GTIs [s]
caldsver	4.7.2	 	ontime0	29080.55271101	Sum of GTIs [s]
date	2016-08-15T21:12:28	Date and time of file creation	ontime1	29077.452880621	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	29083.775861382	Sum of GTIs [s]
			ontime3	29080.675841212	Sum of GTIs [s]
			ontime7	29083.857941389	Sum of GTIs [s]
			l1events	670464	Number of level 1 events

2.1.4 Events

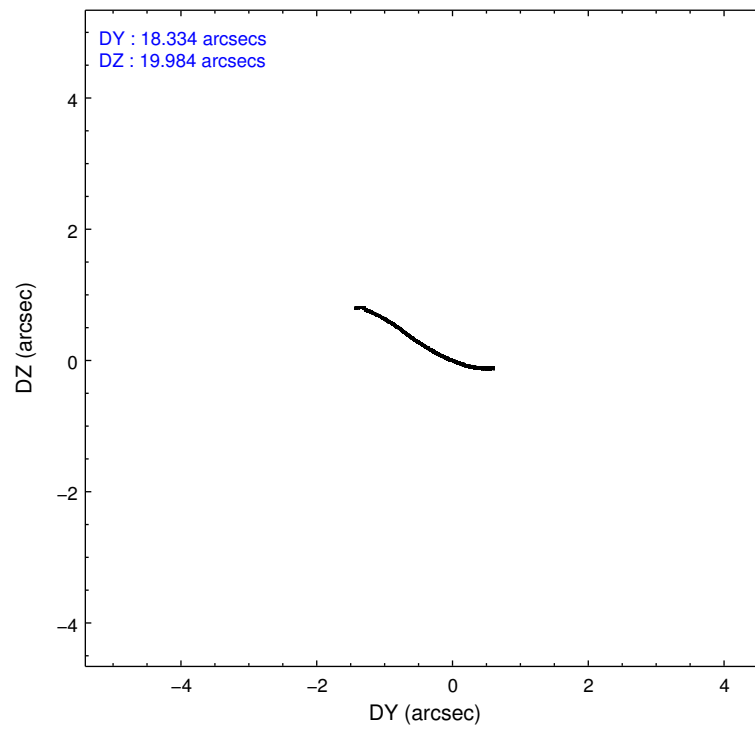
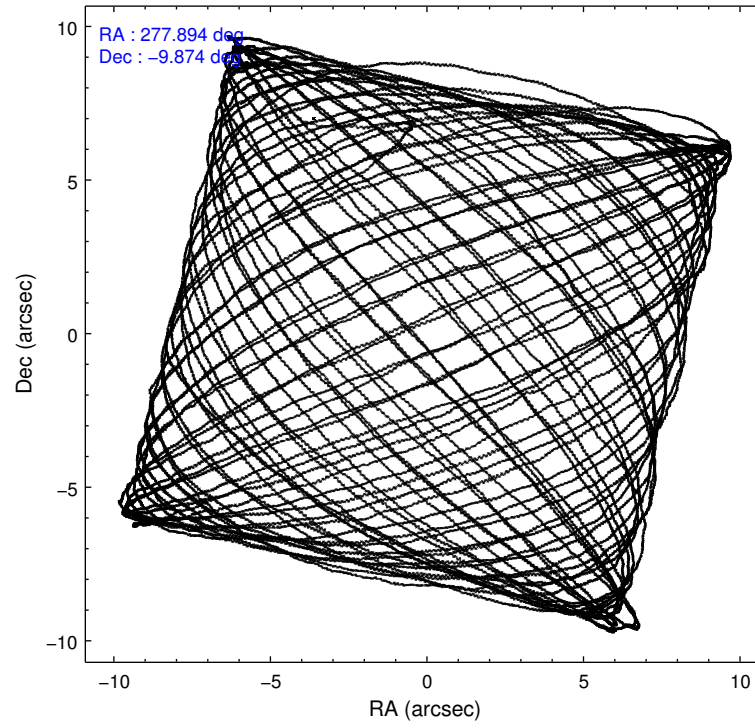
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	134629	133622	150846	143341	108026
rejected events	117828	115295	133887	127745	47684
rejected %	87%	86%	88%	89%	44%

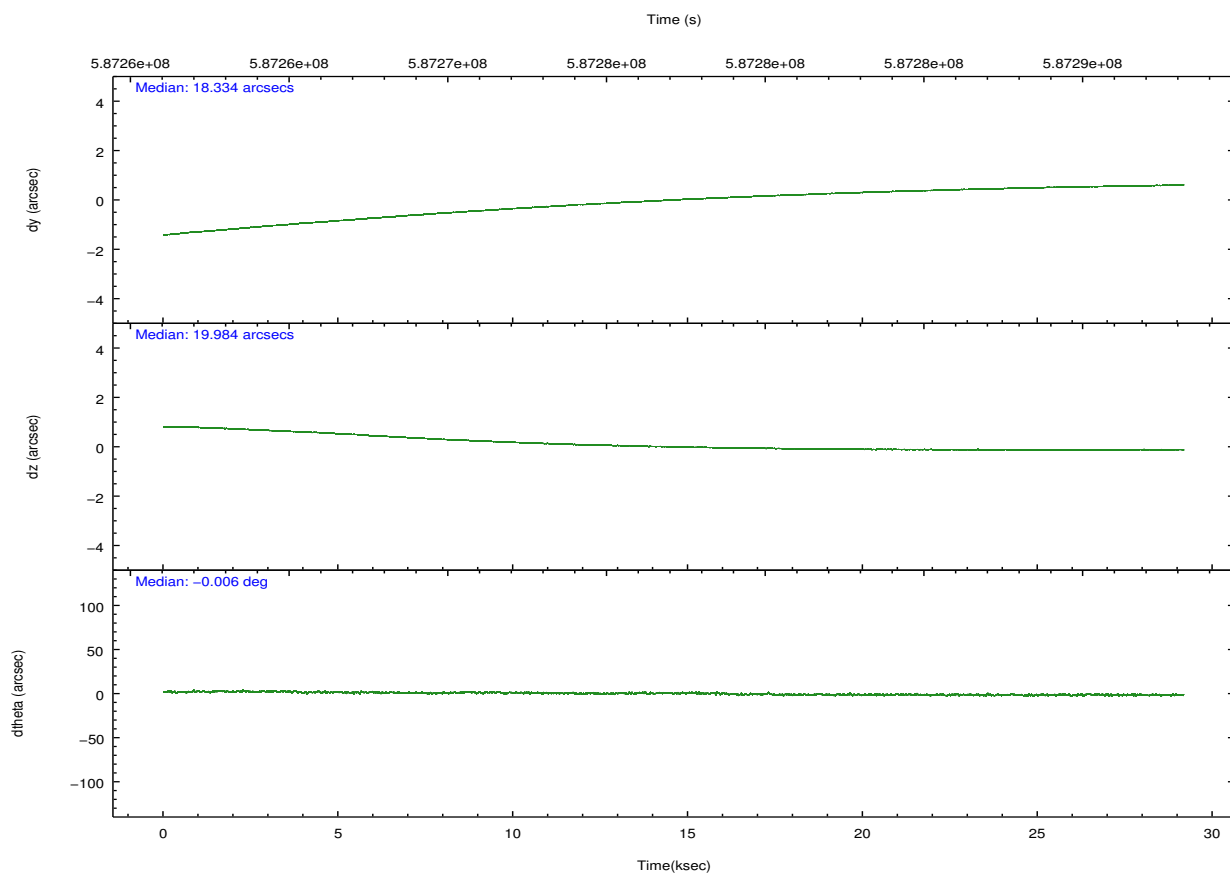
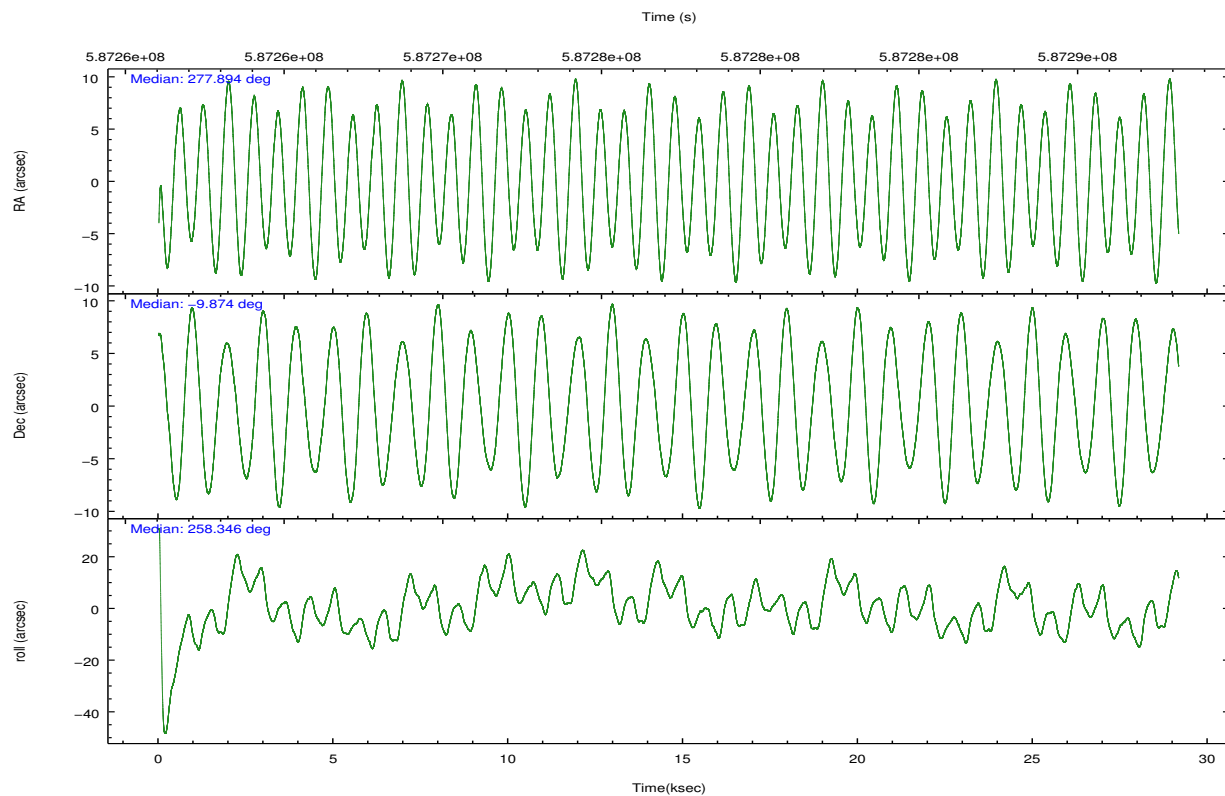
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	7260	8174	7425	6915	7404
	5%	6%	4%	4%	6%
grade 1 events	103	74	93	108	294
	0%	0%	0%	0%	0%
grade 2 events	4020	3979	4190	3377	15194
	2%	2%	2%	2%	14%
grade 3 events	1568	1674	1464	1481	5557
	1%	1%	0%	1%	5%
grade 4 events	1504	1669	1541	1451	5457
	1%	1%	1%	1%	5%
grade 5 events	3483	3633	3198	3887	11157
	2%	2%	2%	2%	10%
grade 6 events	2455	2833	2344	2372	26748
	1%	2%	1%	1%	24%
grade 7 events	114236	111586	130591	123750	36215
	84%	83%	86%	86%	33%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	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	277.885229	277.8941490386322	CCD I2 on	Y	Y
[deg] Pointing Dec	-9.847741	-9.873892359027094	CCD I3 on	Y	Y
[deg] Pointing Roll	258.144858	258.355103590313	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	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	587262717.184000	587261472.67611	CCD S5 on	N	N
Observation start date	2016-08-11T00:30:49	2016-08-11T00:11:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	587291717.184000	587292819.74041	On-chip summing requested	N	N
Observation end date	2016-08-11T08:34:09	2016-08-11T08:53:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



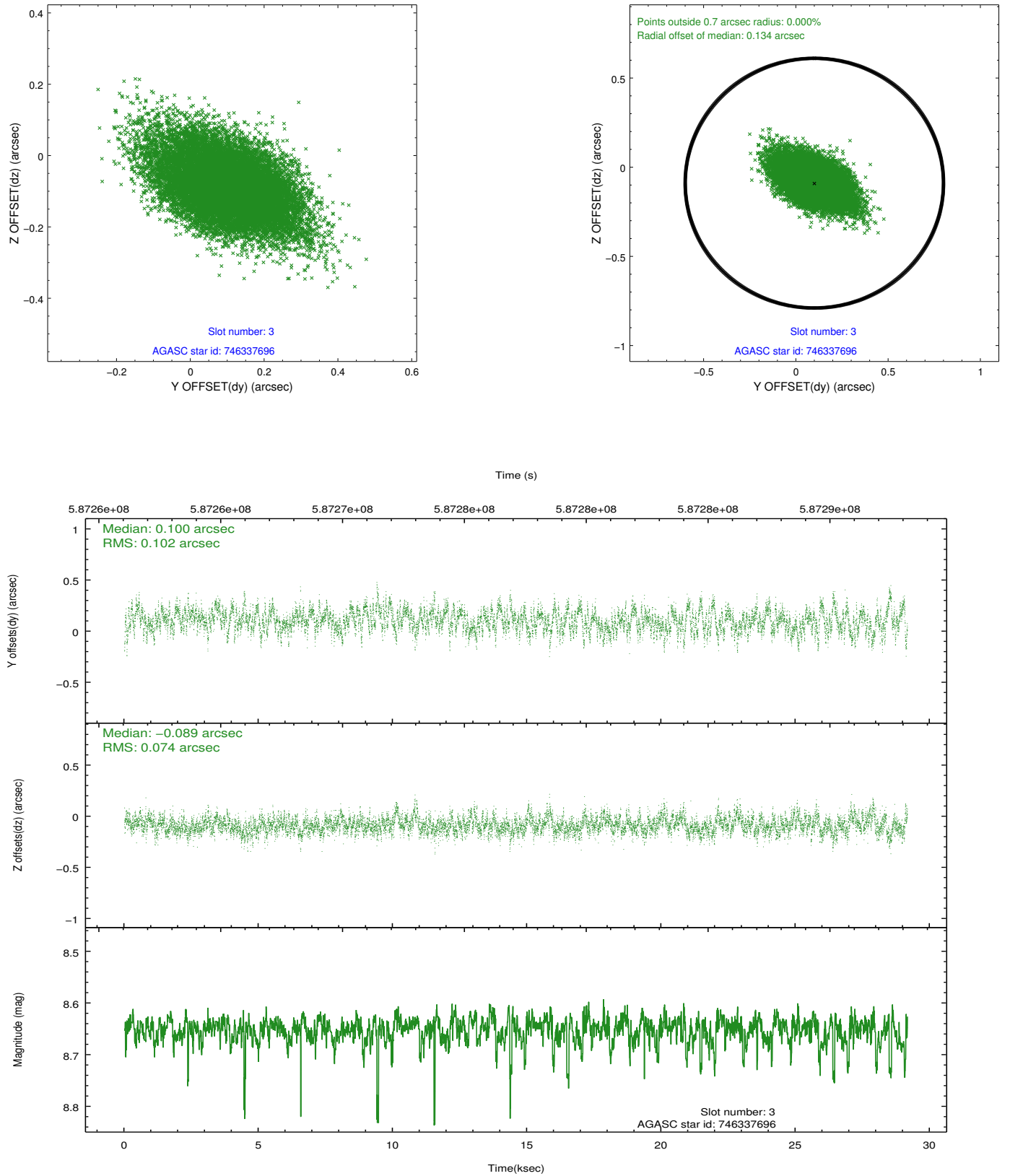


Slot Statistics

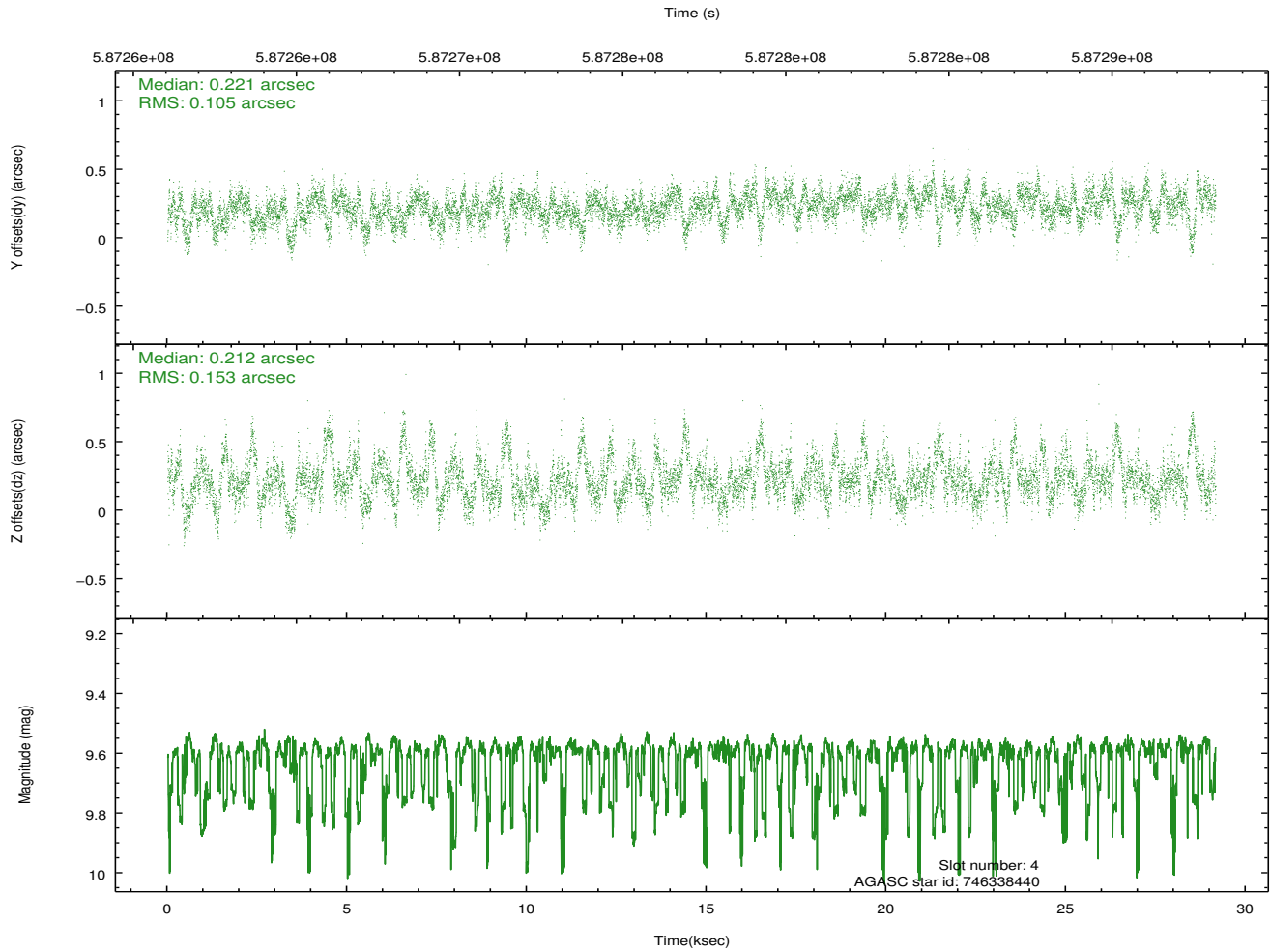
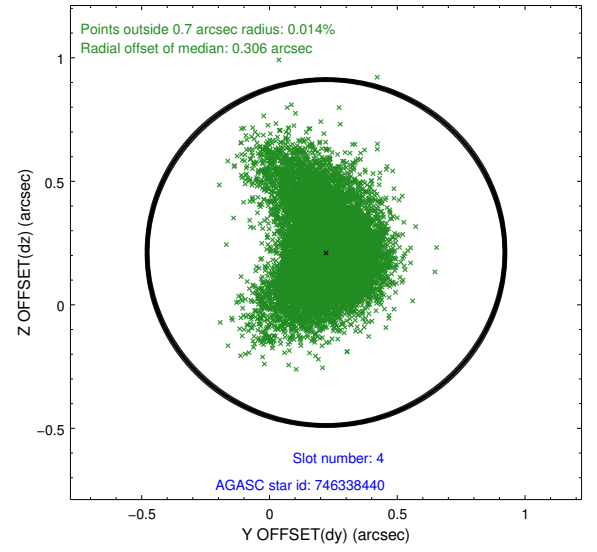
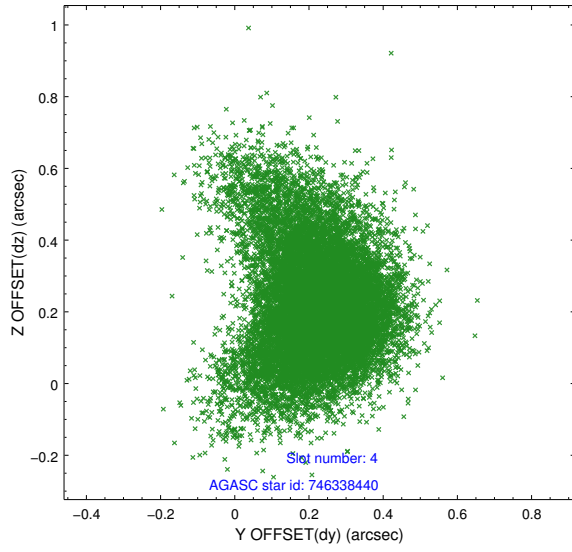
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	7113	-0.074	-0.068	0.019	0.052	0.000000	0.000000	921.16	-843.87
1	FID		ACIS-I-4	7.06	7113	0.433	0.107	0.014	0.051	0.000000	0.000000	2141.63	1056.15
2	FID		ACIS-I-5	7.10	7113	-0.455	0.032	0.012	0.034	0.000000	0.000000	-1827.24	1053.77
3	GUIDE	used	746337696	8.65	14216	0.100	-0.089	0.130	0.227	277.198817	-10.226535	1838.11	-2097.85
4	GUIDE	used	746338440	9.60	14098	0.221	0.212	0.186	0.351	277.545963	-9.496982	-986.78	-1438.18
5	GUIDE	used	746338464	9.37	14206	-0.025	-0.173	0.173	0.280	277.427613	-10.292647	1902.15	-1256.94
6	GUIDE	used	746460264	7.98	14223	-0.281	0.032	0.084	0.137	278.096404	-9.919432	99.14	786.08
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

2.4 Star Slots

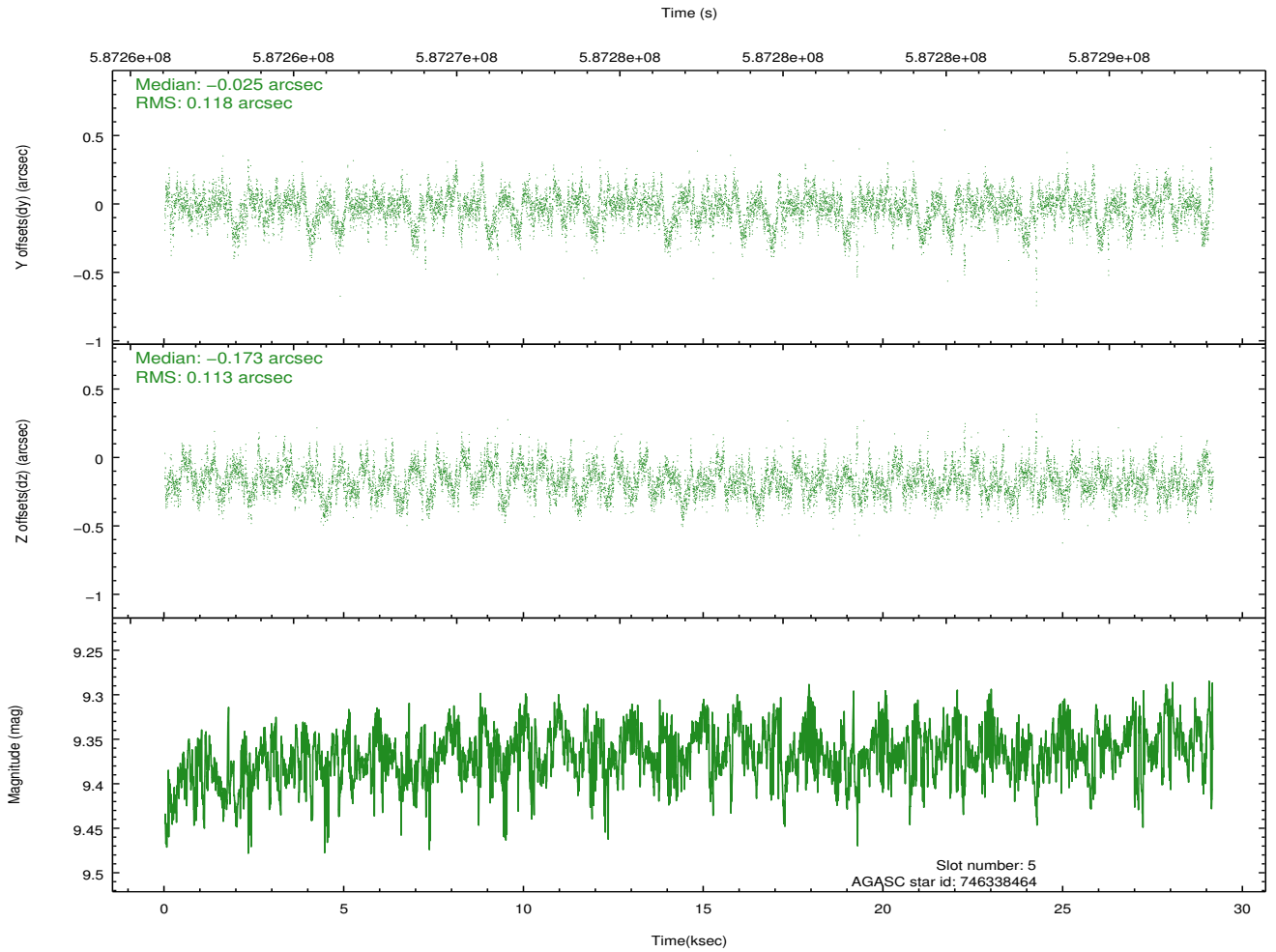
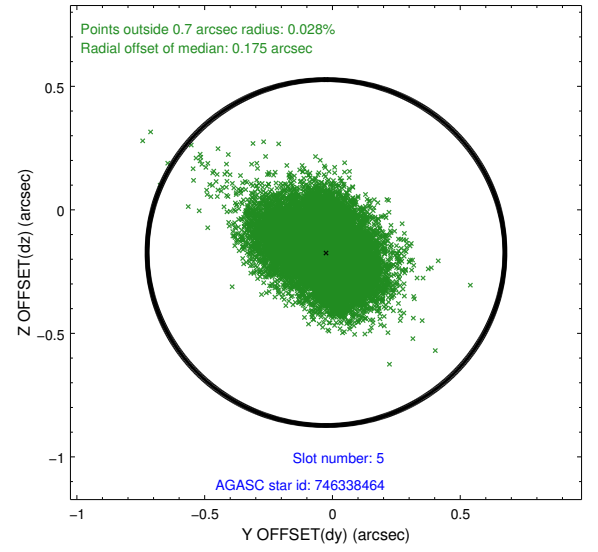
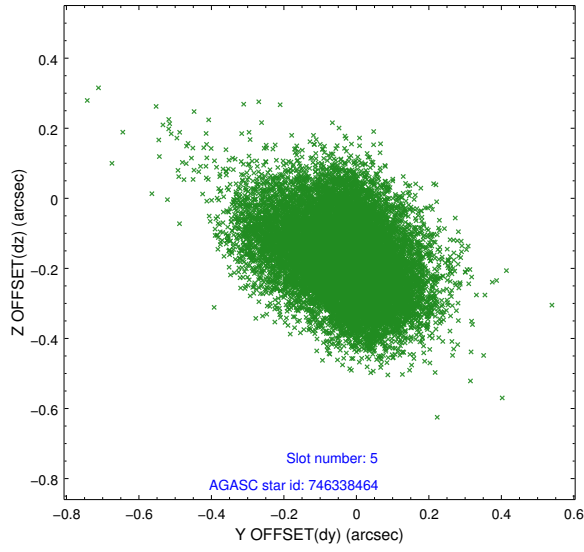
2.4.1 Slot 3



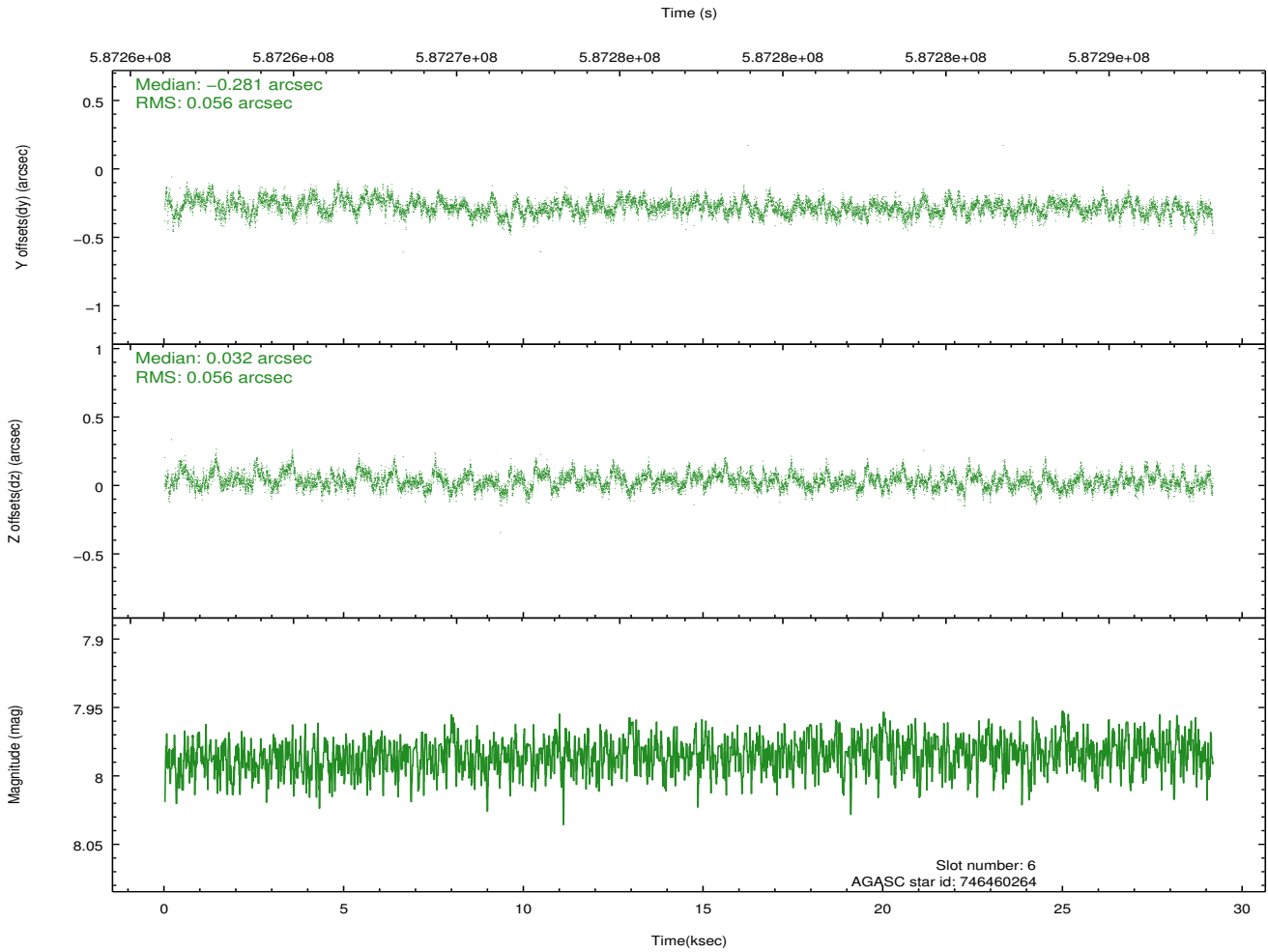
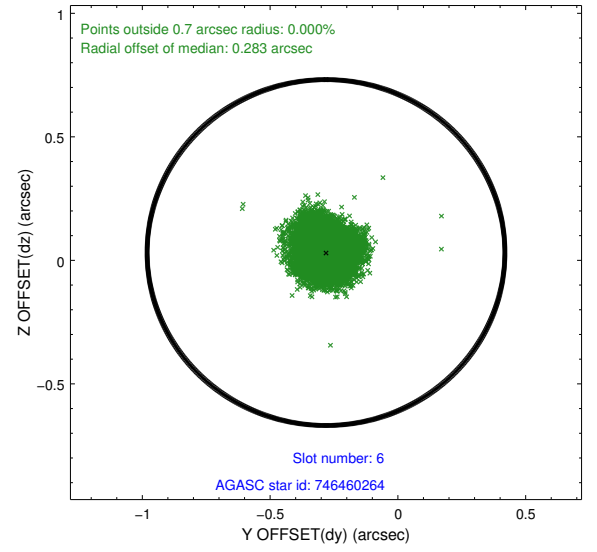
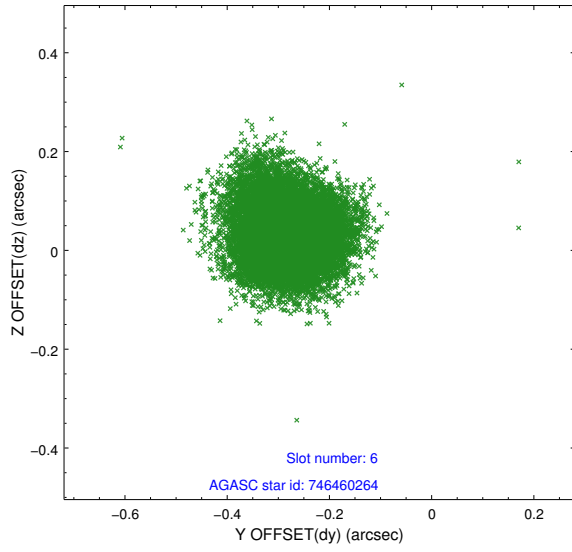
2.4.2 Slot 4



2.4.3 Slot 5

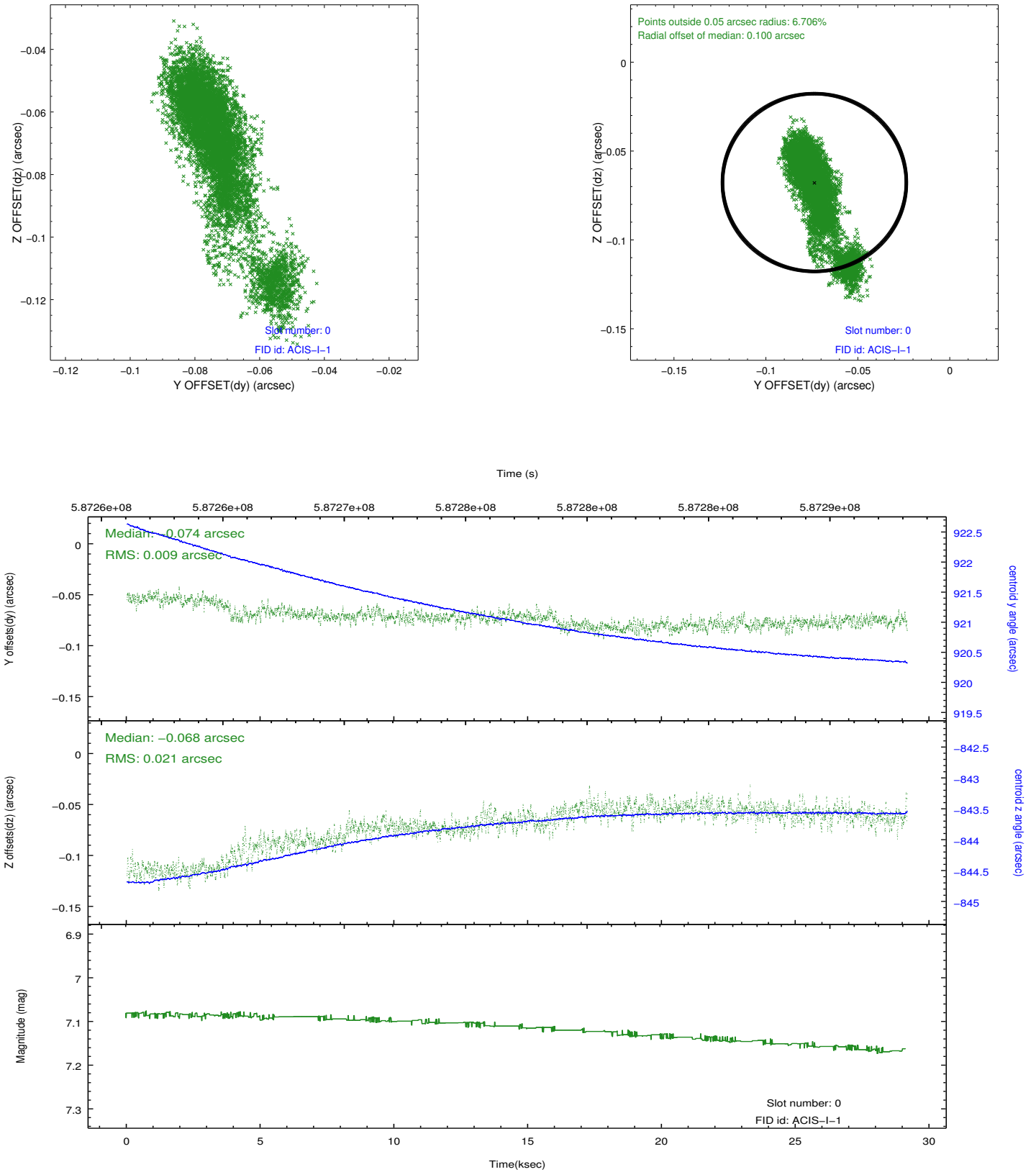


2.4.4 Slot 6

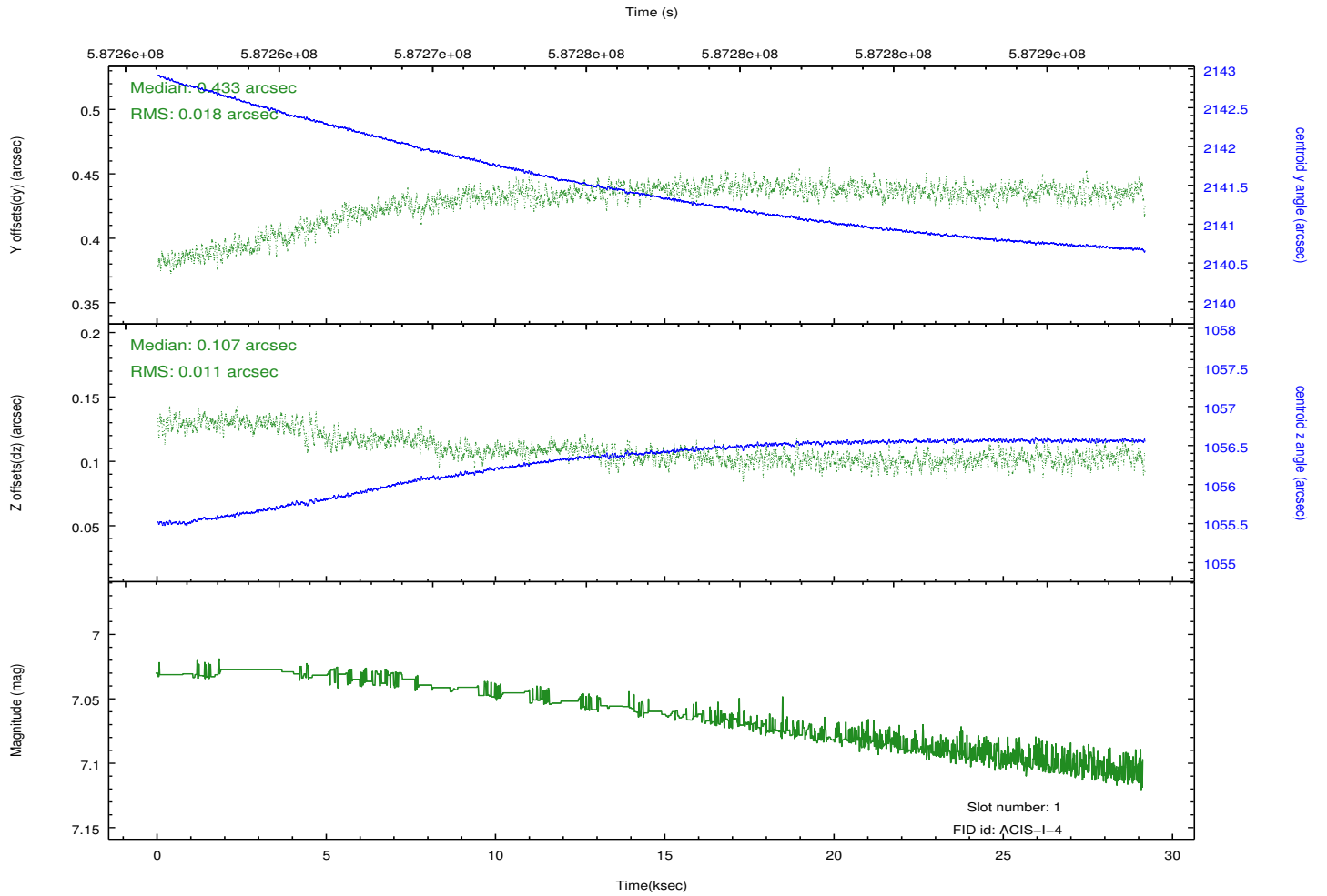
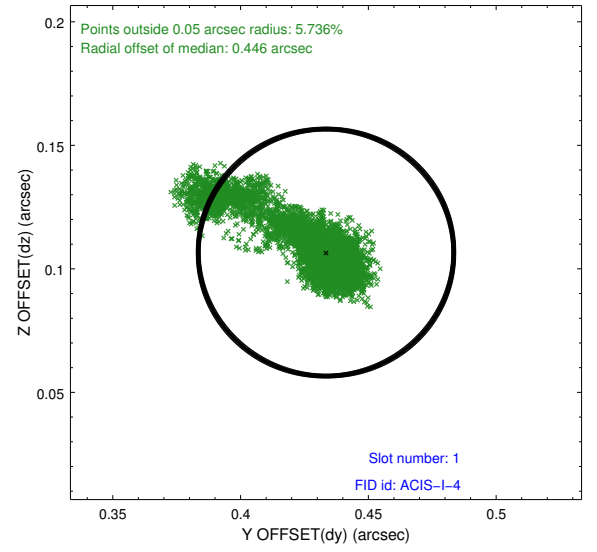
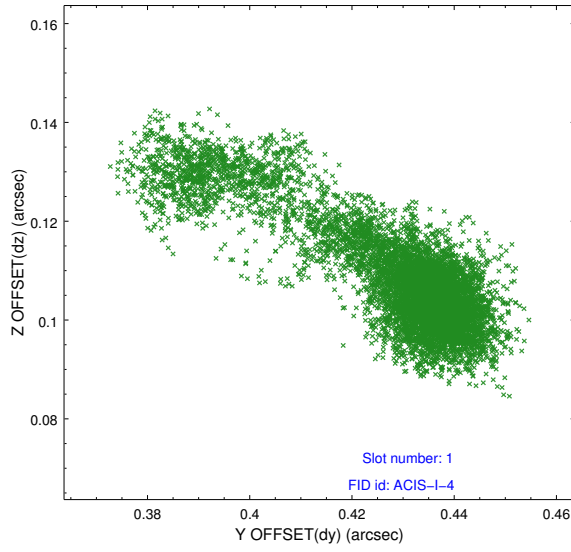


2.5 FID Slots

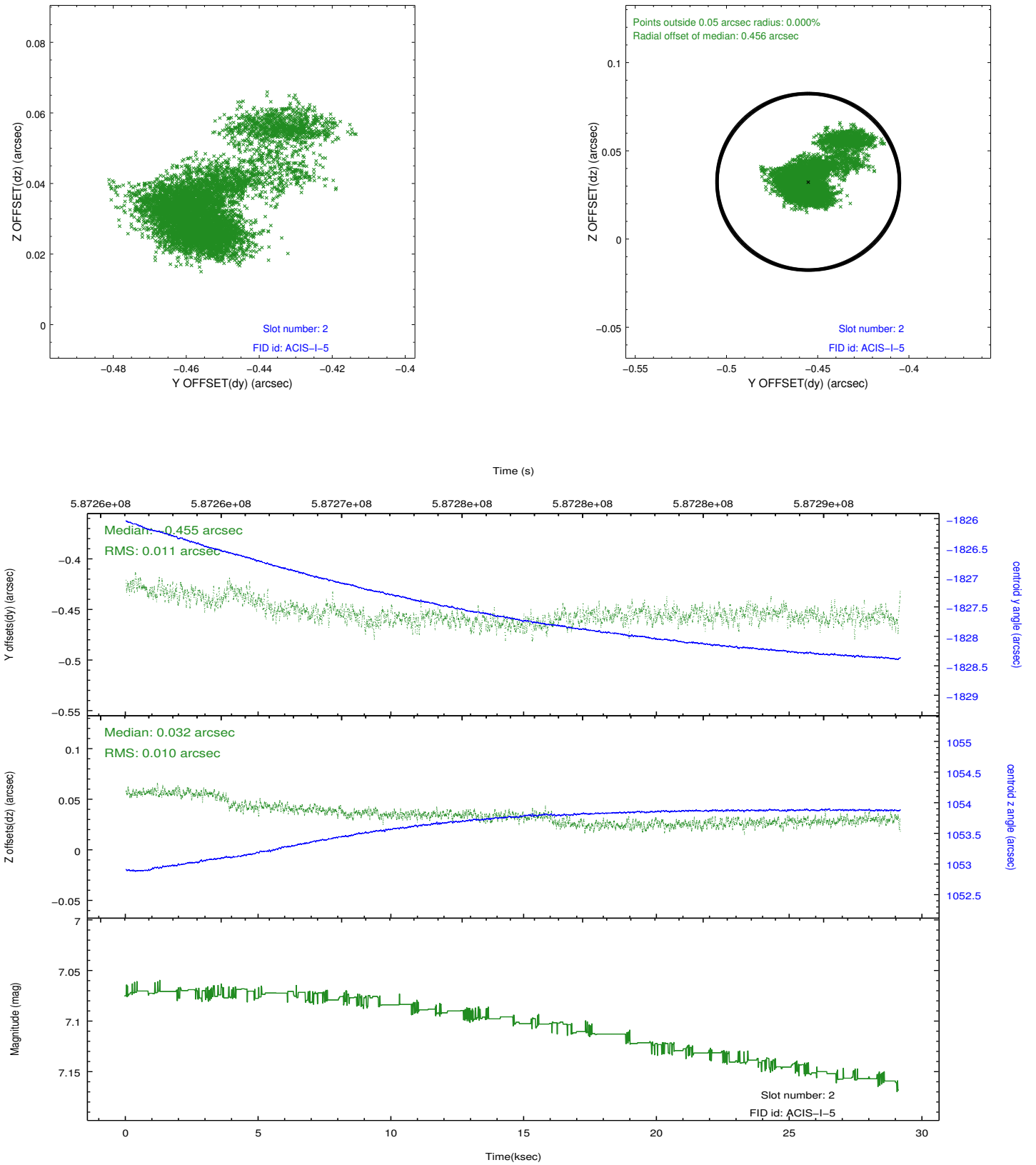
2.5.1 Slot 0



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)	2016.08.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.080675841212

A.2 Comments

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.