

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 16262 - L2 Version 1
Chandra X-Ray Center

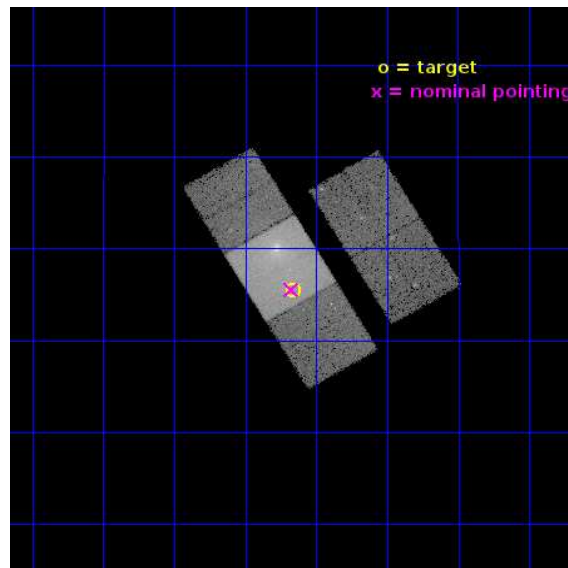
L2 Processing Date : Apr 30 2016

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

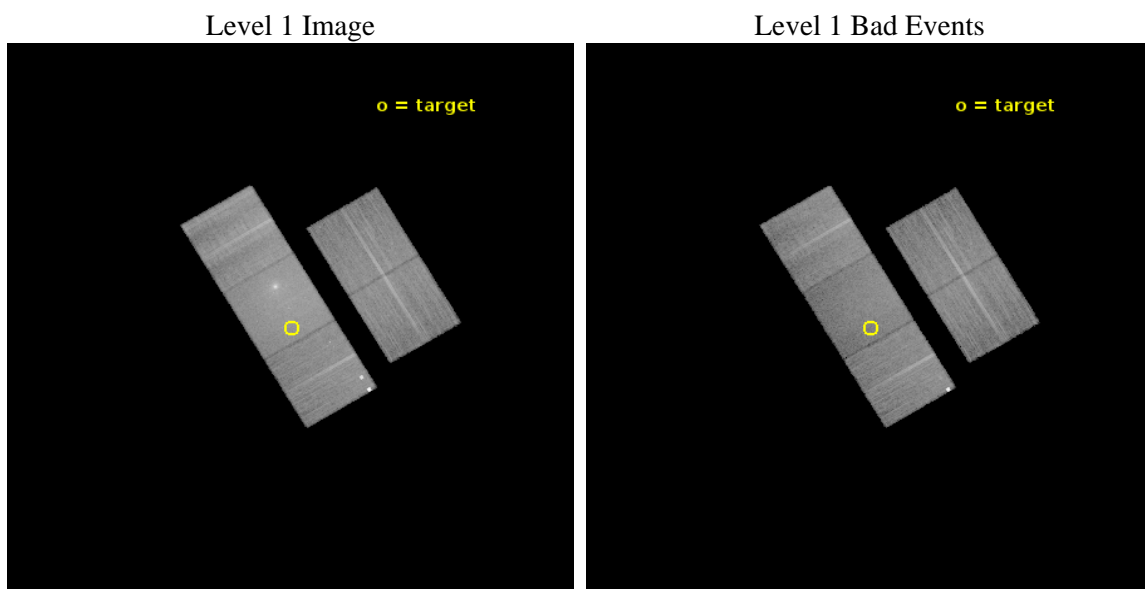
seq_num	601137	Sequence number
obs_id	16262	Observation id
title	Long-term X-ray and Optical Study of the Black Hole X-ray Binaries in the Elliptical Galaxy NGC 4472	Proposal title
observer	Prof. Steve Zepf	Principal investigator
object	XMMUJ122939.9 +075333	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.41625	Observer's specified target RA [deg]
dec_targ	7.925	Observer's specified target Dec [deg]
ra_nom	187.4186484772	Nominal RA [deg]
dec_nom	7.9255191908731	Nominal Dec [deg]
roll_nom	239.15632048266	Nominal Roll [deg]
revision	1	Processing version of data
ontime	25054.200192809	Sum of GTIs [s]
livetime	24726.848622656	Livetime [s]
ontime2	25054.200192809	Sum of GTIs [s]
ontime3	25054.200192809	Sum of GTIs [s]
ontime6	25054.200192809	Sum of GTIs [s]
ontime7	25054.200192809	Sum of GTIs [s]
ontime8	25054.200192809	Sum of GTIs [s]
l2events	191444	Number of level 2 events



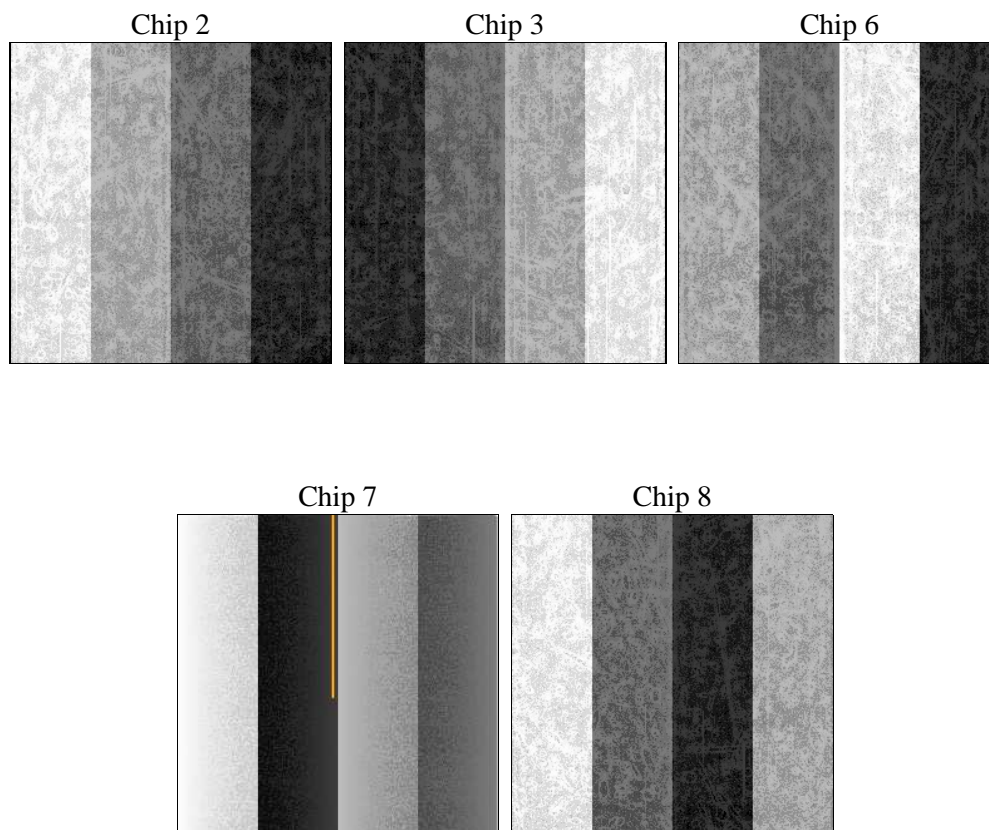
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	25054.200192809	Sum of GTIs [s]
caldsver	4.7.1	 	ontime2	25054.200192809	Sum of GTIs [s]
date	2016-04-30T20:08:36	Date and time of file creation	ontime3	25054.200192809	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	25054.200192809	Sum of GTIs [s]
			ontime7	25054.200192809	Sum of GTIs [s]
			ontime8	25054.200192809	Sum of GTIs [s]
			l1events	941999	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	155259	153640	183450	240078	209572
rejected events	137208	136256	153705	116477	152284
rejected %	88%	88%	83%	48%	72%

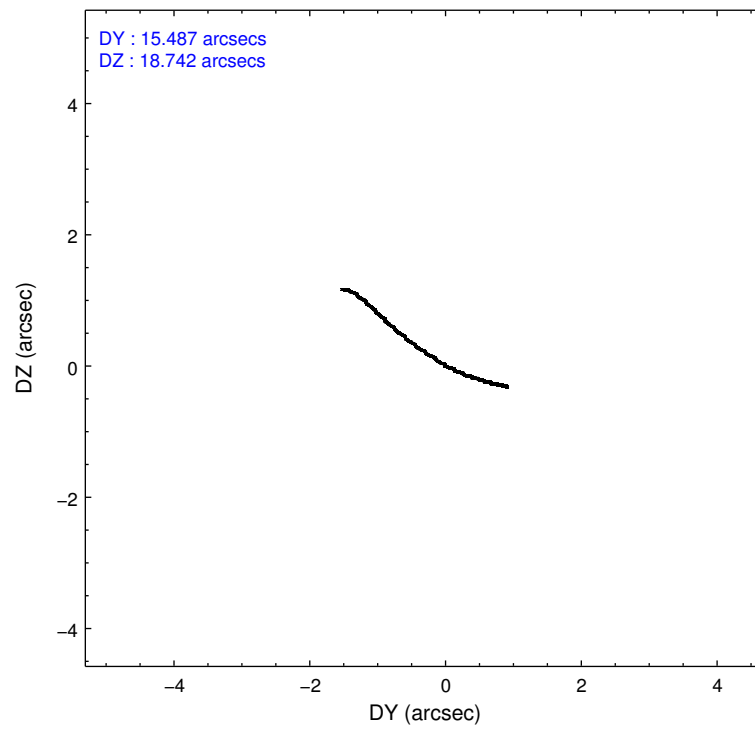
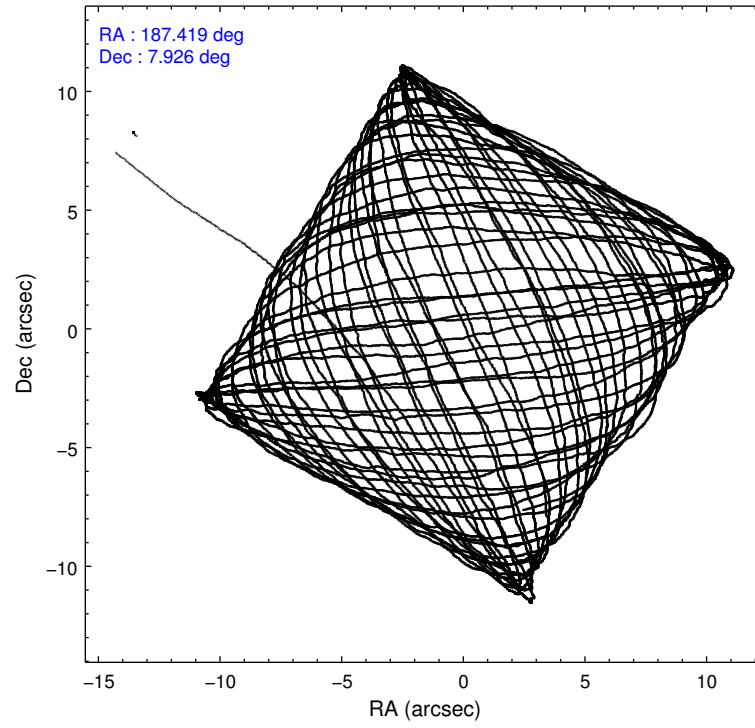
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	7001	6445	9021	18721	17552
	4%	4%	4%	7%	8%
grade 1 events	85	86	90	283	155
	0%	0%	0%	0%	0%
grade 2 events	4196	3824	4595	28259	13853
	2%	2%	2%	11%	6%
grade 3 events	1785	1790	7011	11345	5721
	1%	1%	3%	4%	2%
grade 4 events	1818	1817	4759	11402	5273
	1%	1%	2%	4%	2%
grade 5 events	6444	7734	14672	21059	11679
	4%	5%	7%	8%	5%
grade 6 events	3253	3513	4363	53888	14891
	2%	2%	2%	22%	7%
grade 7 events	130677	128431	138939	95121	140448
	84%	83%	75%	39%	67%

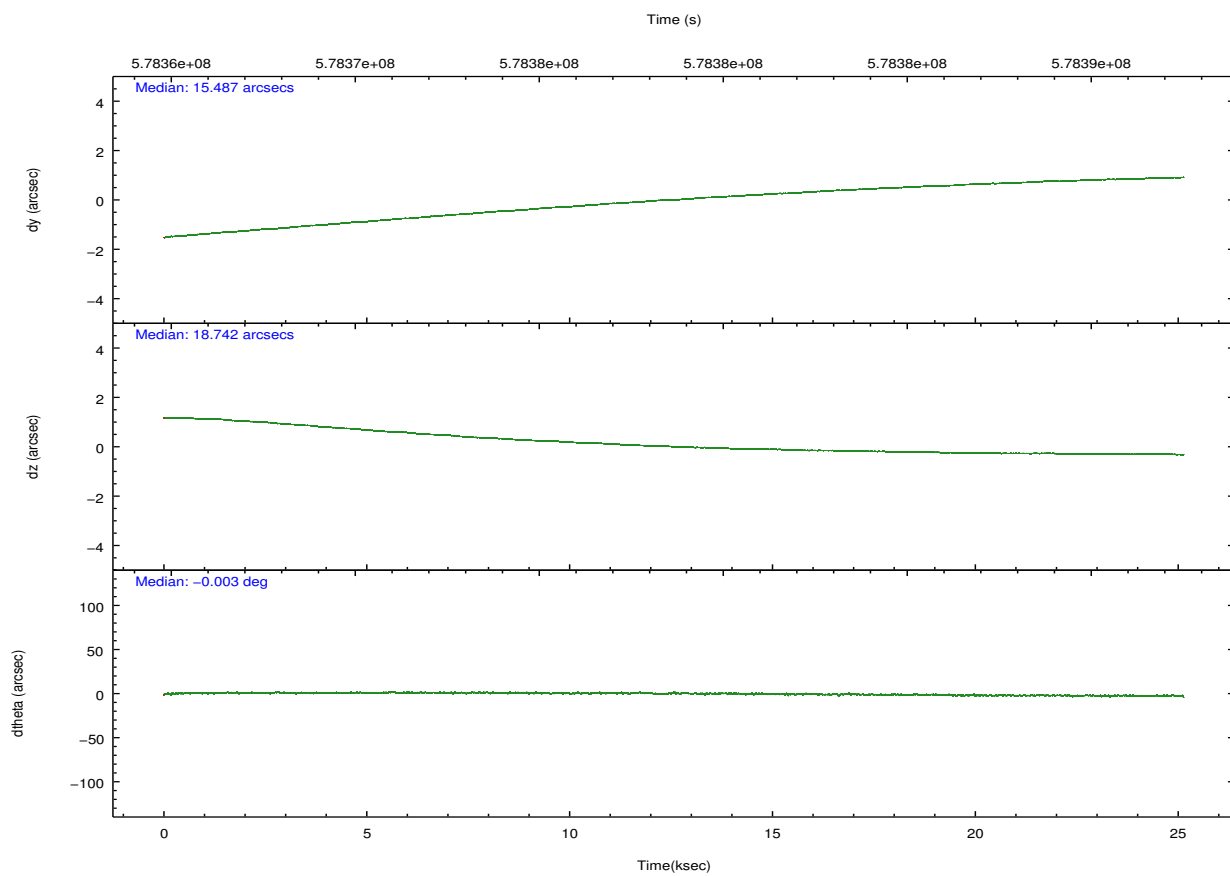
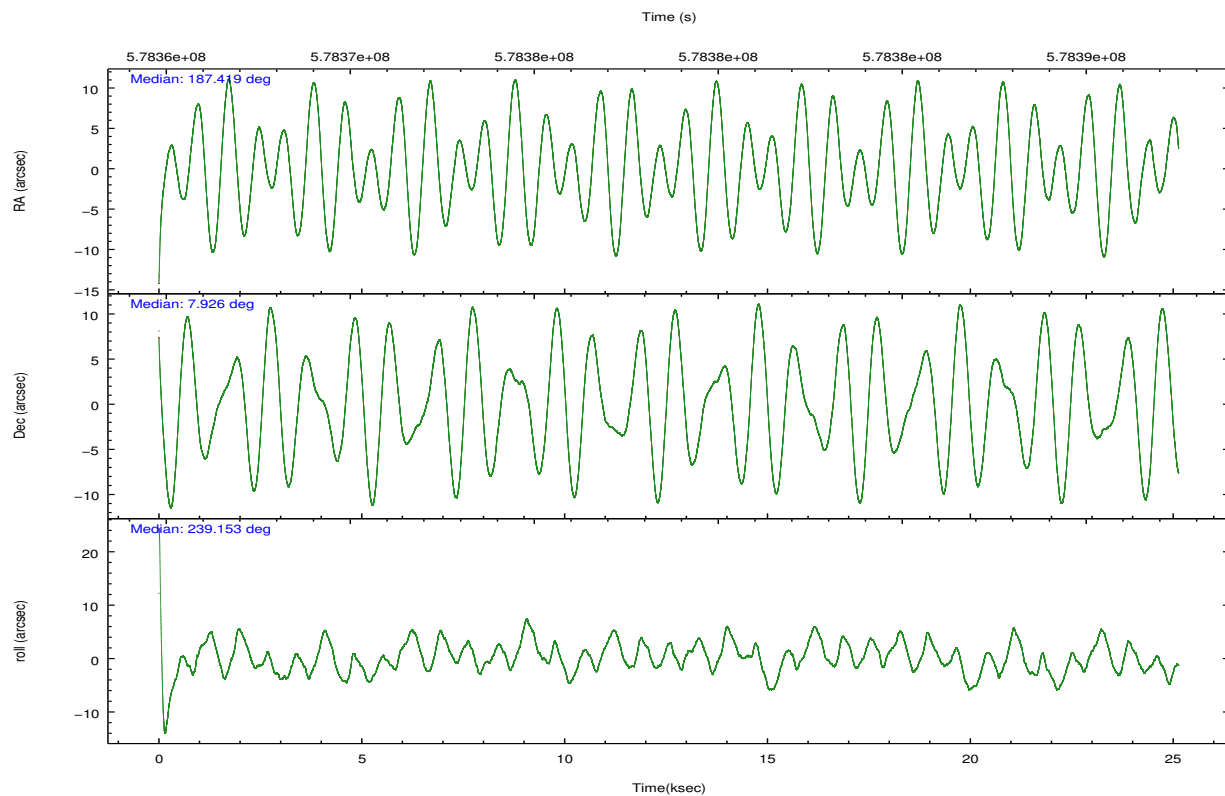
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	187.418679	187.4186484771961
[deg] Pointing Dec	7.952973	7.925519190873136
[deg] Pointing Roll	238.999671	239.1563204826611
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	578366214.184000	578364873.9662499
Observation start date	2016-04-30T01:15:46	2016-04-30T00:54:33
[s] Observation end time (MET)	578391214.184000	578392373.18032
Observation end date	2016-04-30T08:12:26	2016-04-30T08:32:53
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	N	N
CCD I1 on	N	N
CCD I2 on	O4	Y
CCD I3 on	O3	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O1	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
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



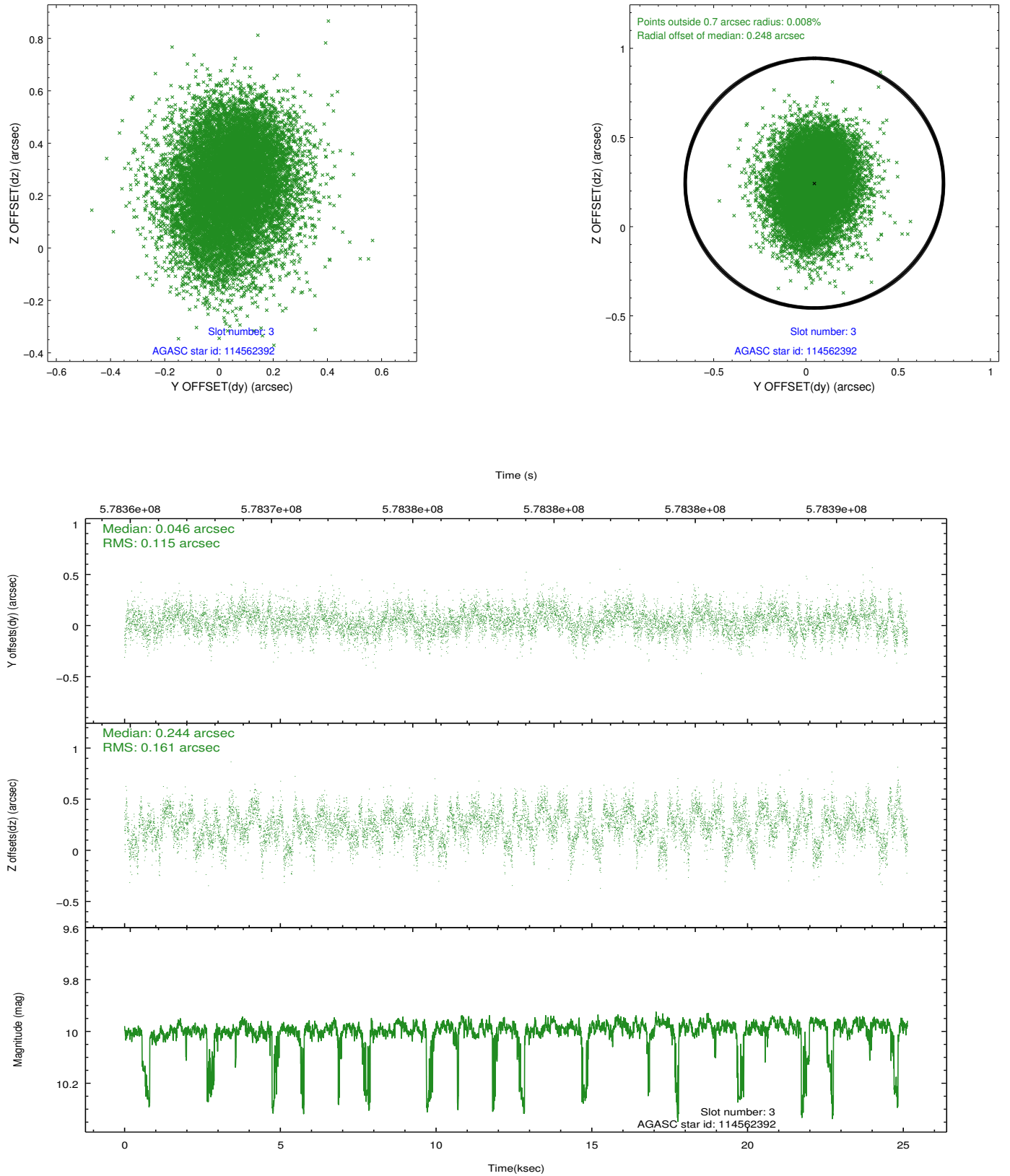


Slot Statistics

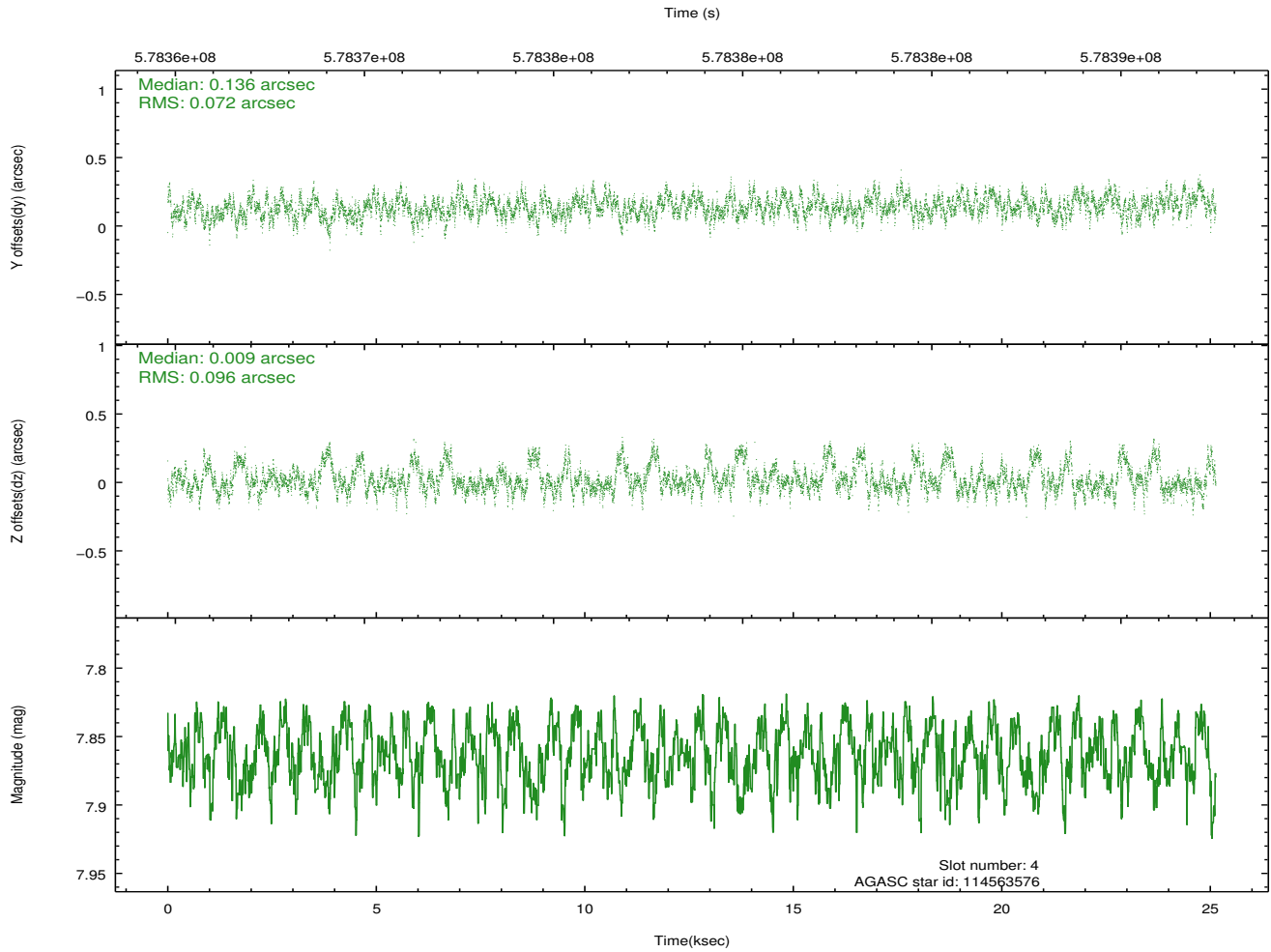
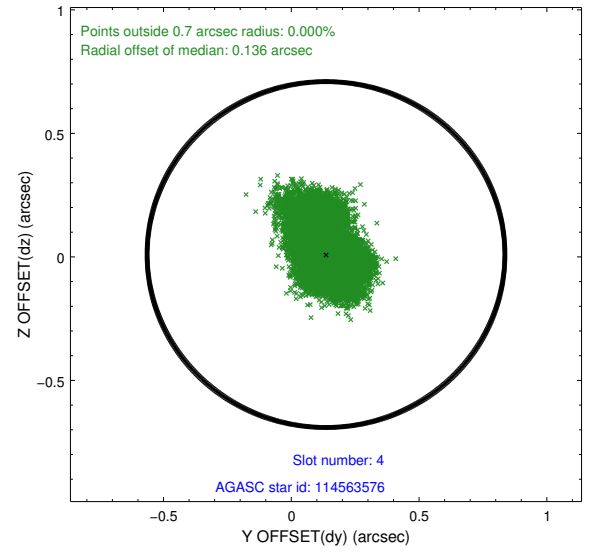
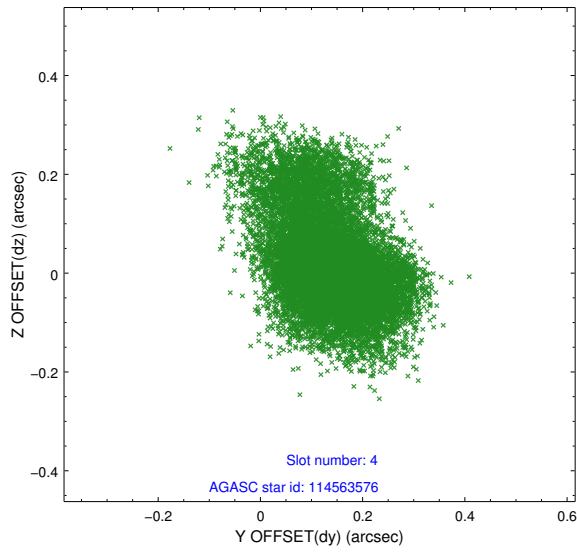
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.11	6131	-0.259	-0.165	0.007	0.012	0.000000	0.000000	-768.67	-1740.55
1	FID		ACIS-S-4	7.22	6131	0.292	0.150	0.010	0.015	0.000000	0.000000	2145.15	168.05
2	FID		ACIS-S-6	7.37	6131	-0.060	0.023	0.011	0.019	0.000000	0.000000	393.72	805.49
3	GUIDE	used	114562392	9.99	12207	0.046	0.244	0.211	0.342	187.662769	8.522526	-2204.80	-310.78
4	GUIDE	used	114563576	7.86	12254	0.136	0.009	0.125	0.221	186.867039	8.012388	829.79	-1796.83
5	GUIDE	used	114563648	9.78	12232	0.092	0.011	0.235	0.370	187.009208	7.938475	796.67	-1224.89
6	GUIDE	used	114565064	9.90	12249	-0.184	-0.077	0.215	0.351	187.898151	7.788605	-373.75	1770.37
7	GUIDE	used	38672128	8.76	12255	-0.089	-0.210	0.104	0.182	187.663685	7.121505	2115.12	2291.94

2.4 Star Slots

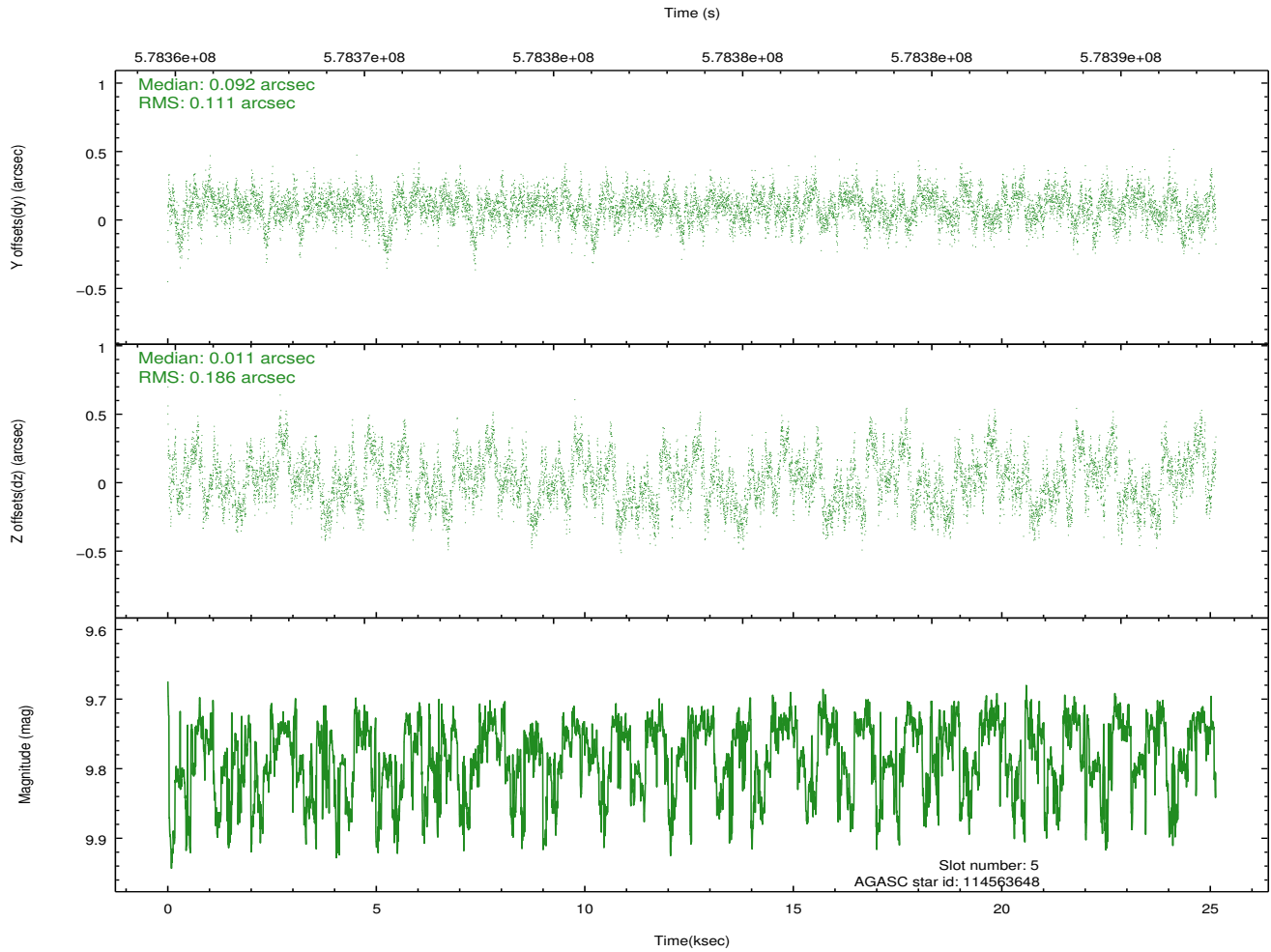
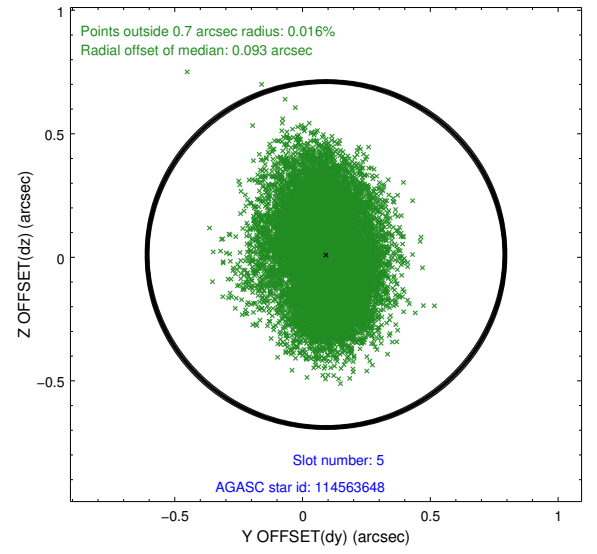
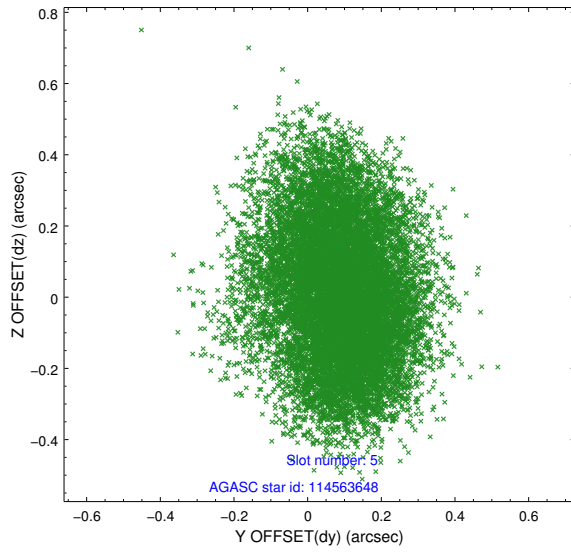
2.4.1 Slot 3



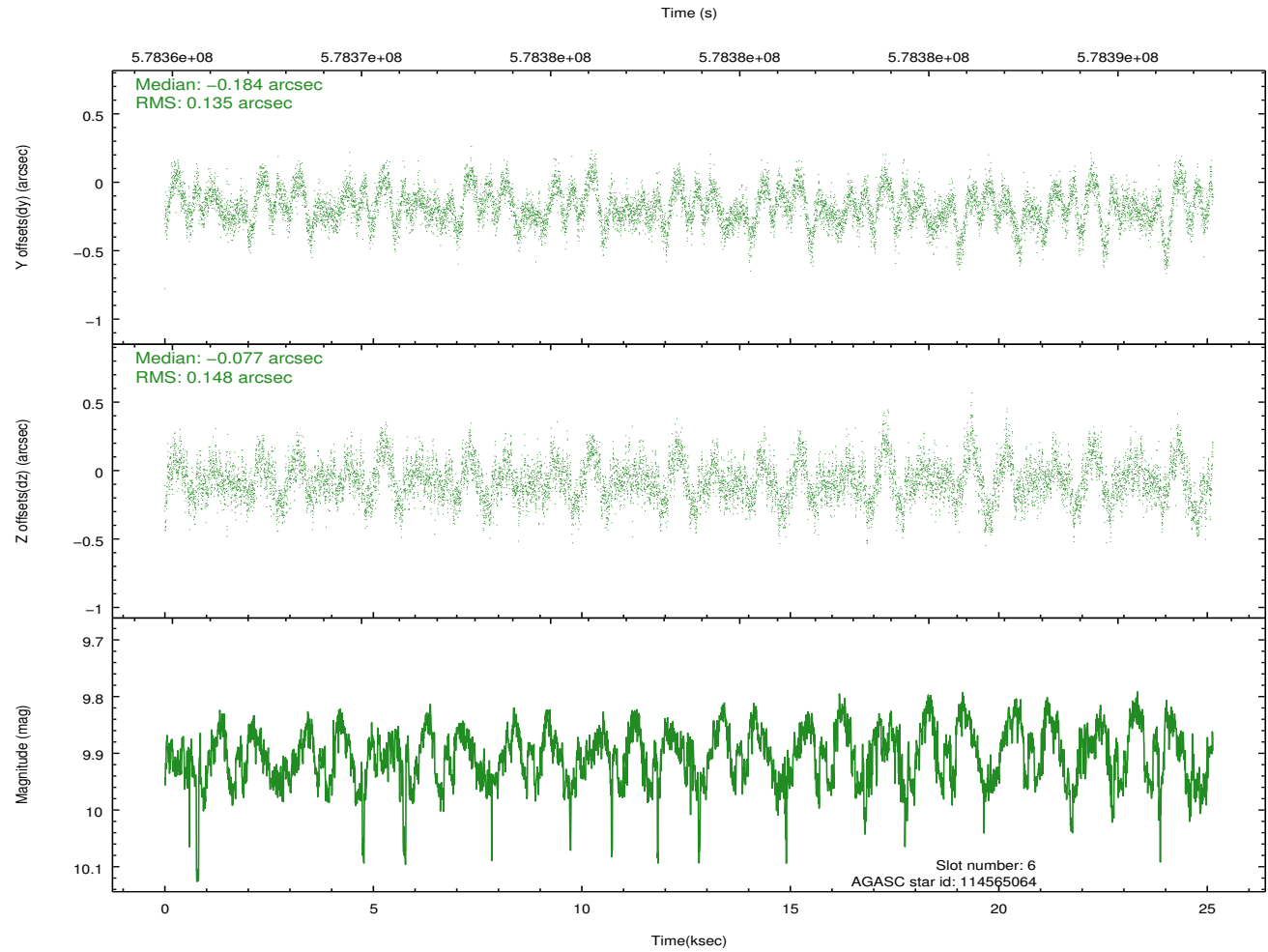
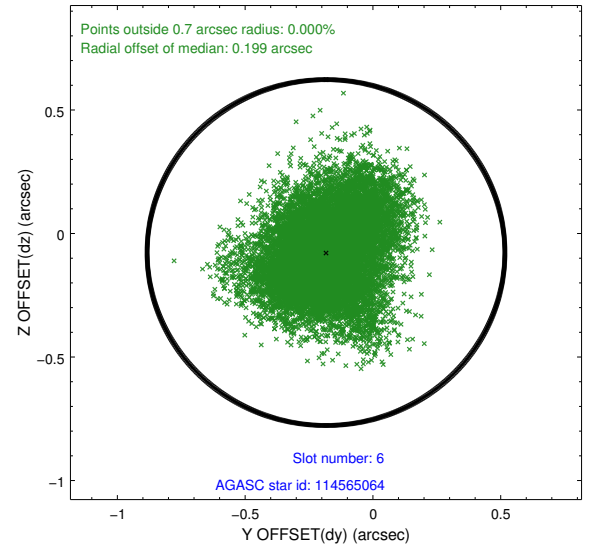
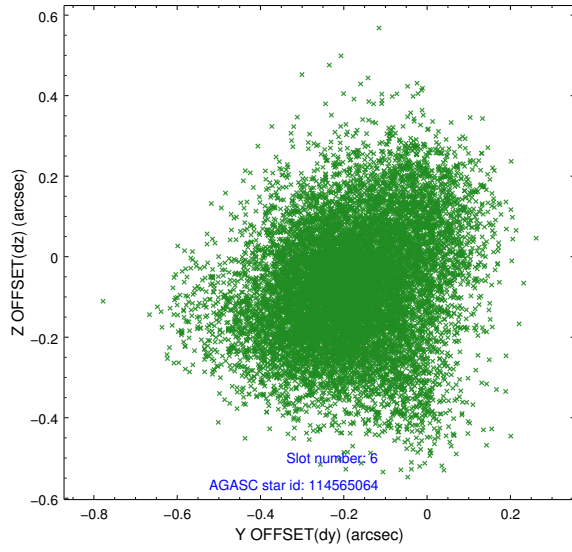
2.4.2 Slot 4



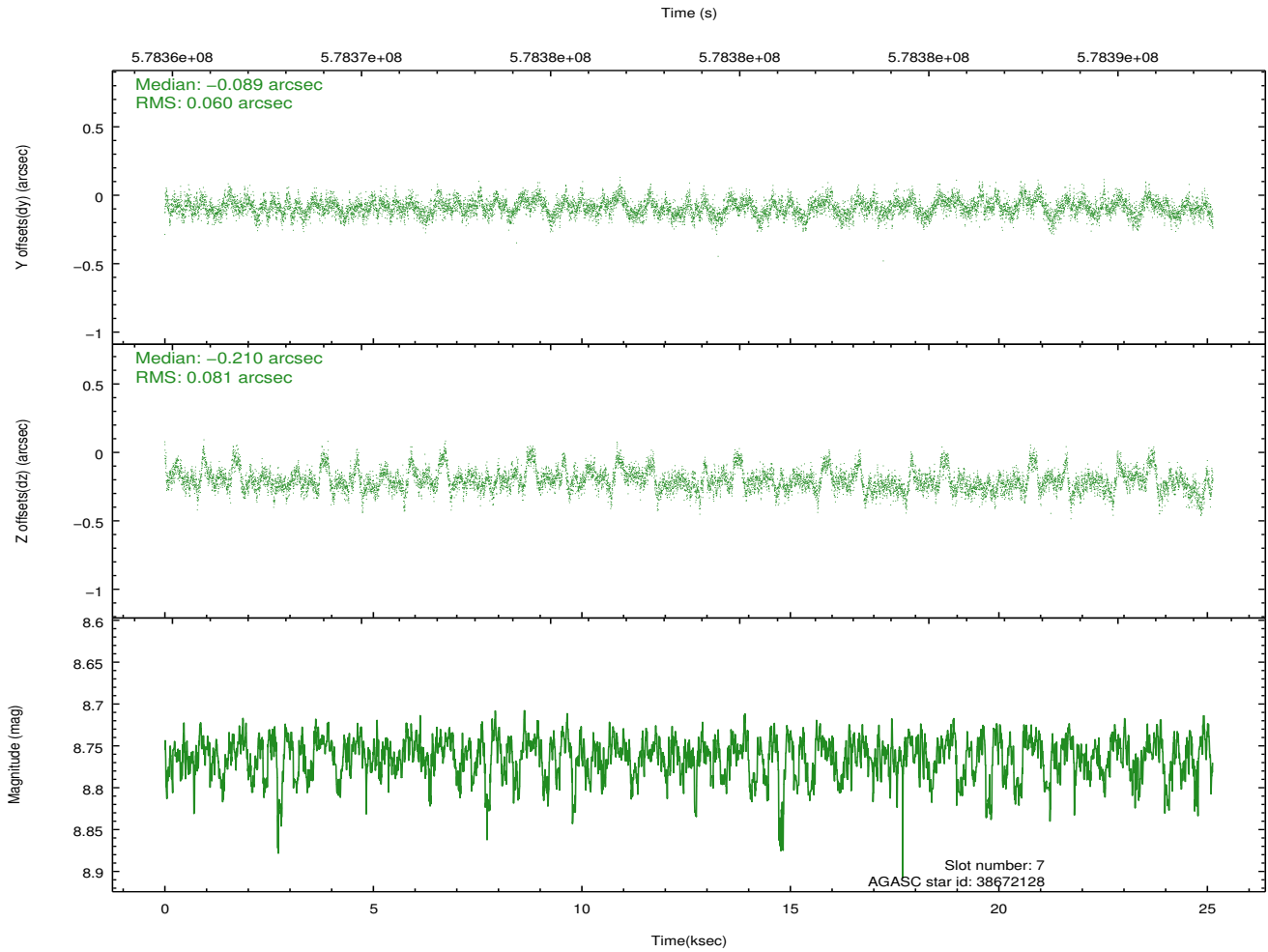
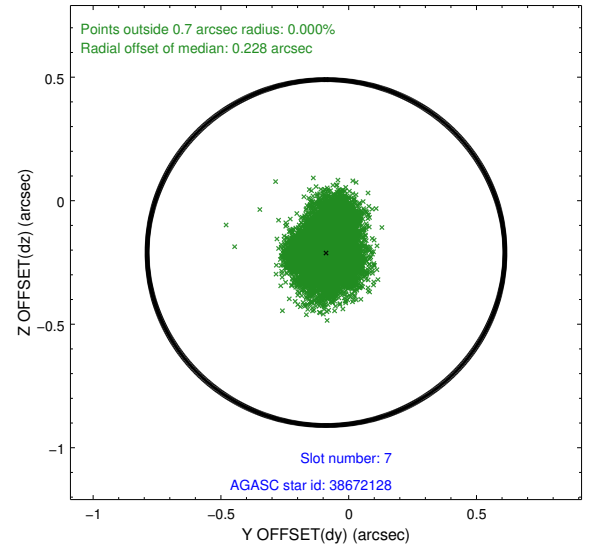
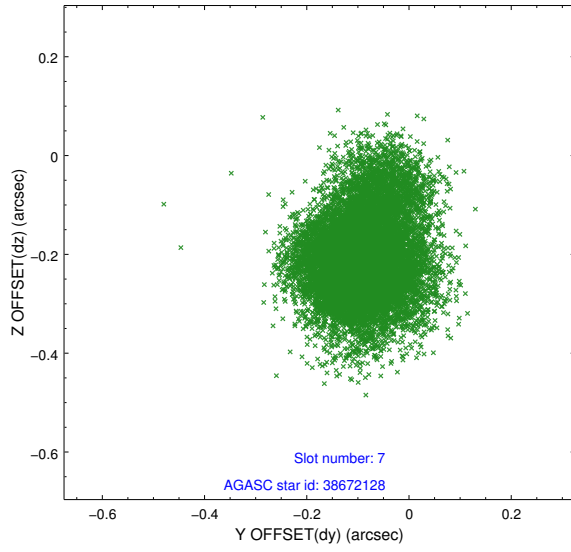
2.4.3 Slot 5



2.4.4 Slot 6

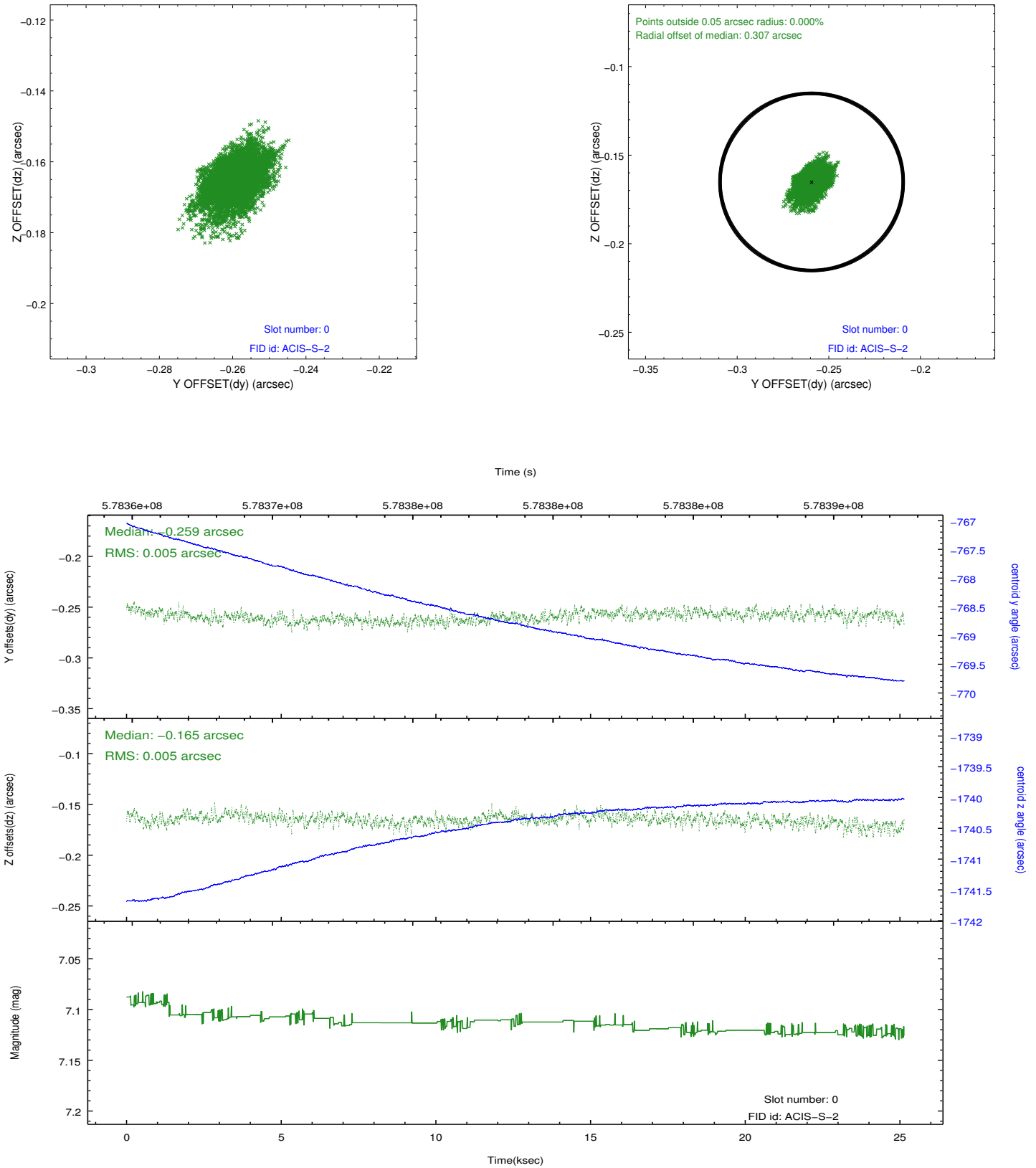


2.4.5 Slot 7

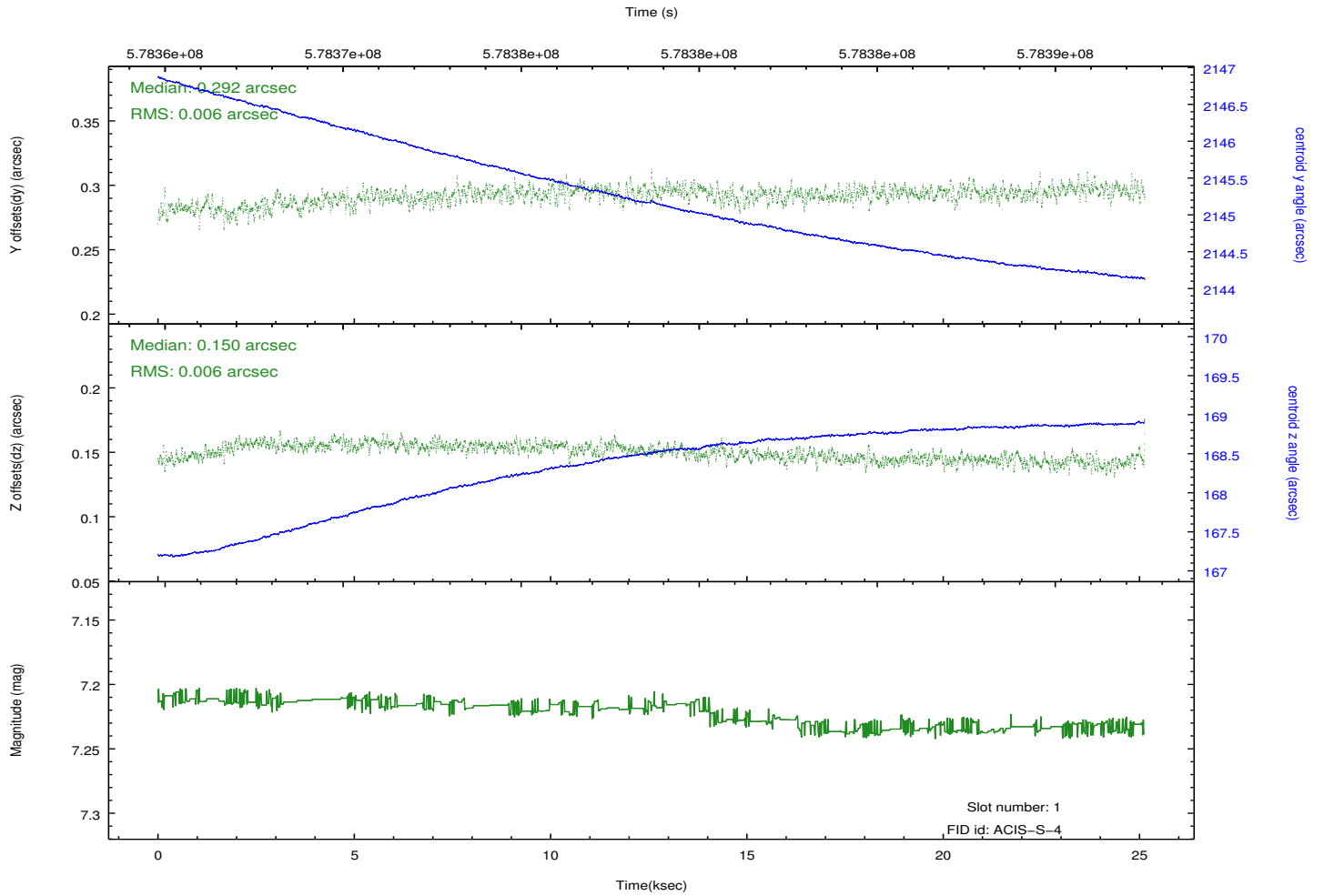
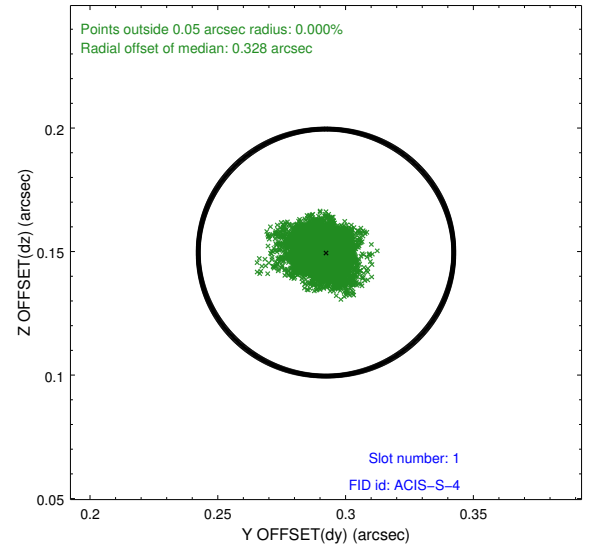
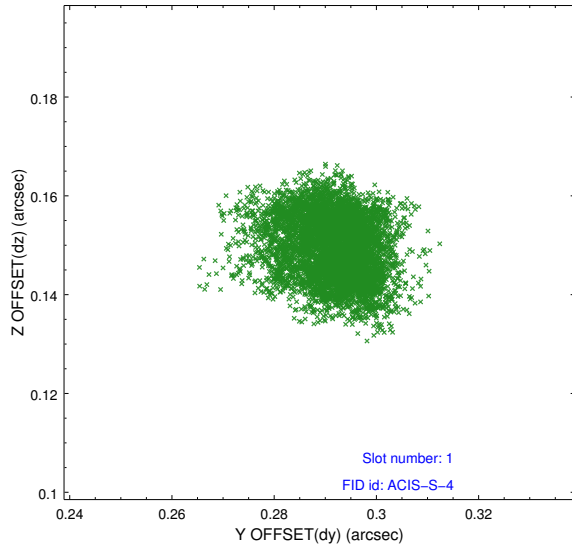


2.5 FID Slots

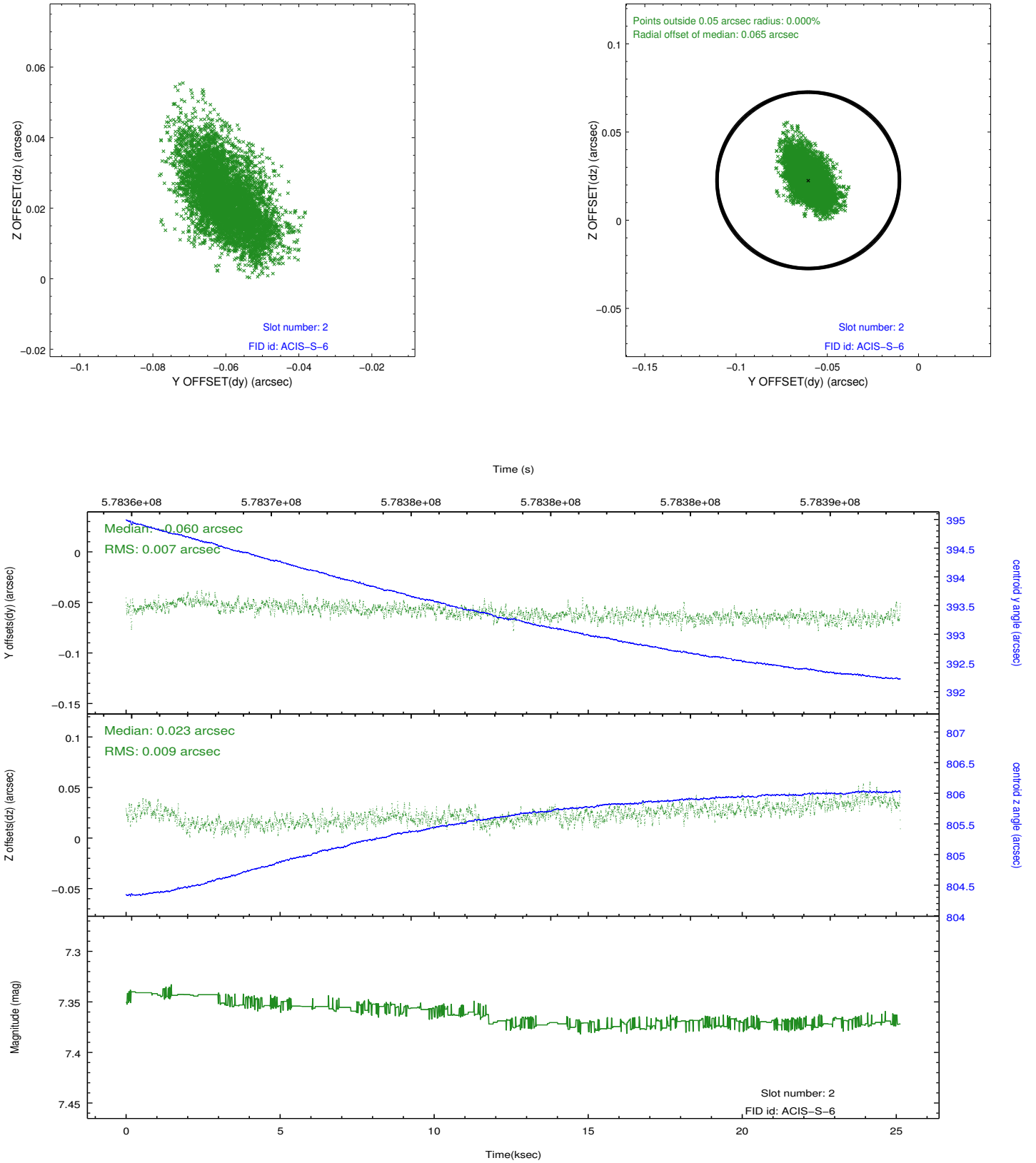
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2016.05.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.054200192809

A.2 Comments