

V&V Reference Report

L2 ASCDS Version : 10.2.4

Observation 16260 - L2 Version 2
Chandra X-Ray Center

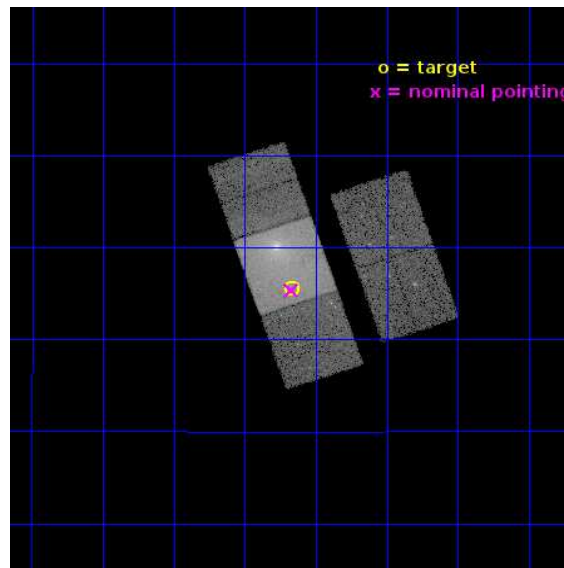
L2 Processing Date : Aug 6 2014

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1 Front

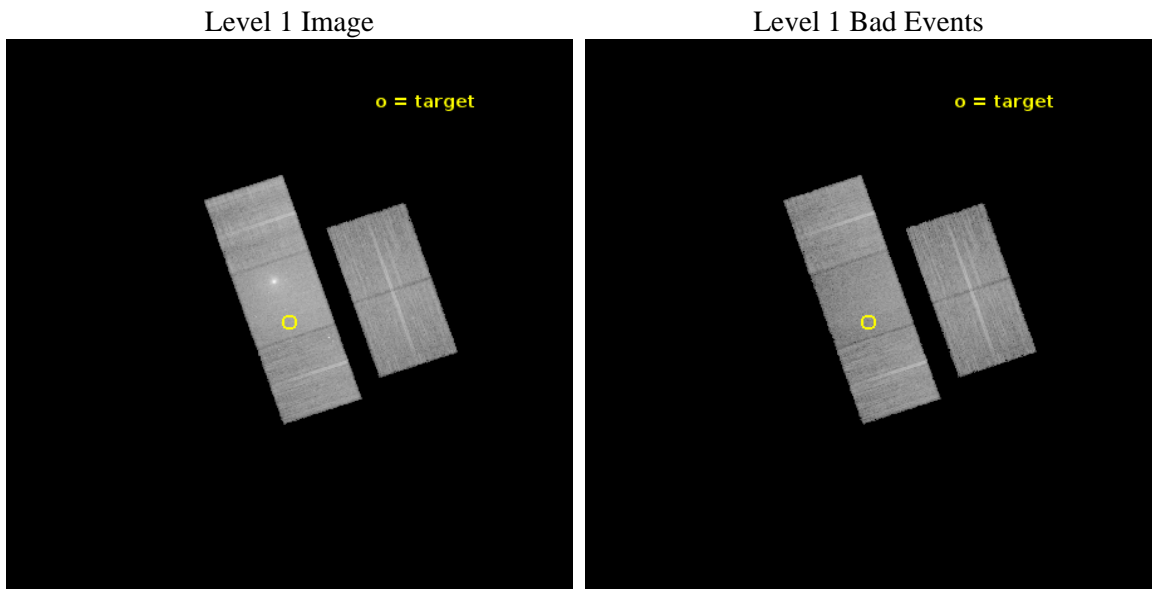
seq_num	601135	Sequence number
obs_id	16260	Observation id
title	Long-term X-ray and Optical Study of the Black Hole X-ray Binaries in the Elliptical Galaxy NGC 4472	Proposal title
observer	Steve Zepf	Principal investigator
object	XMMUJ122939.9 +075333	Source name
dtcycle	0	
cycle	P	events from which 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	187.41818542574	Nominal RA [deg]
dec_nom	7.922541015336	Nominal Dec [deg]
roll_nom	251.15636636869	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25069.700192809	Sum of GTIs [s]
livetime	24742.146103745	Livetime [s]
ontime2	25069.700192809	Sum of GTIs [s]
ontime3	25069.700192809	Sum of GTIs [s]
ontime6	25069.700192809	Sum of GTIs [s]
ontime7	25069.700192809	Sum of GTIs [s]
ontime8	25069.700192809	Sum of GTIs [s]
l2events	174163	Number of level 2 events



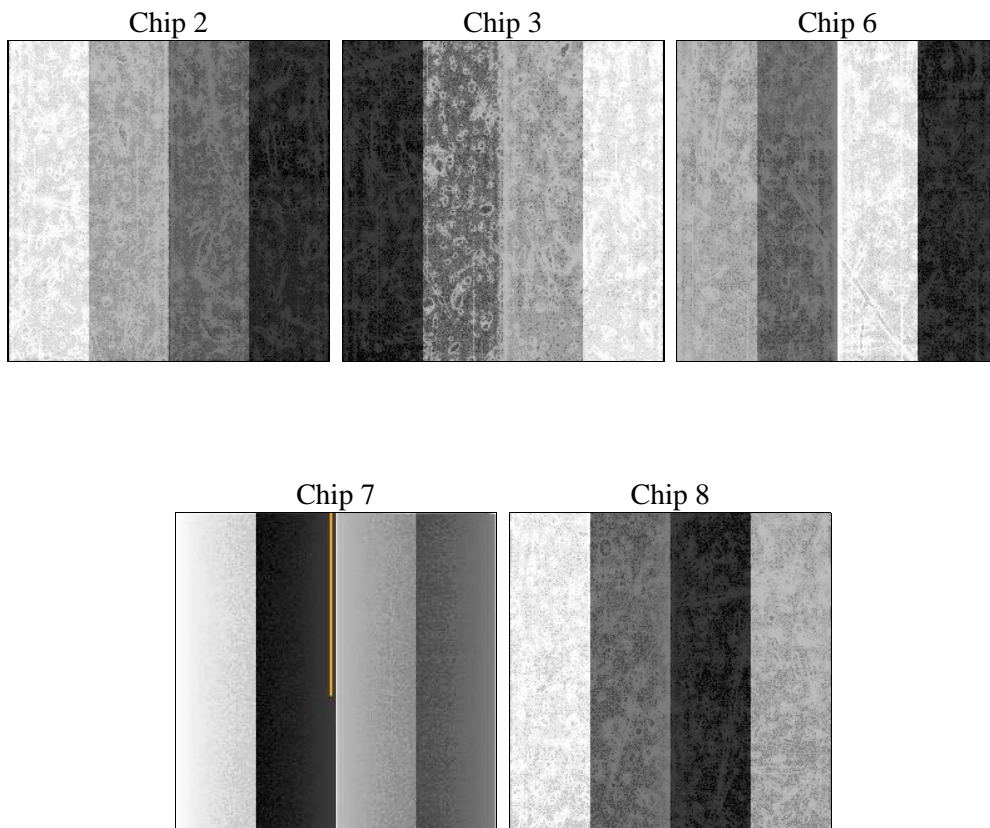
2 OBI

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	10.2.4	Processing system revision	ontime	25069.700192809	Sum of GTIs [s]
caldsver	4.6.2	 	ontime2	25069.700192809	Sum of GTIs [s]
date	2014-08-06T16:21:58	Date and time of file creation	ontime3	25069.700192809	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	25069.700192809	Sum of GTIs [s]
			ontime7	25069.700192809	Sum of GTIs [s]
			ontime8	25069.700192809	Sum of GTIs [s]
			l1events	751461	Number of level 1 events

2.1.4 Events

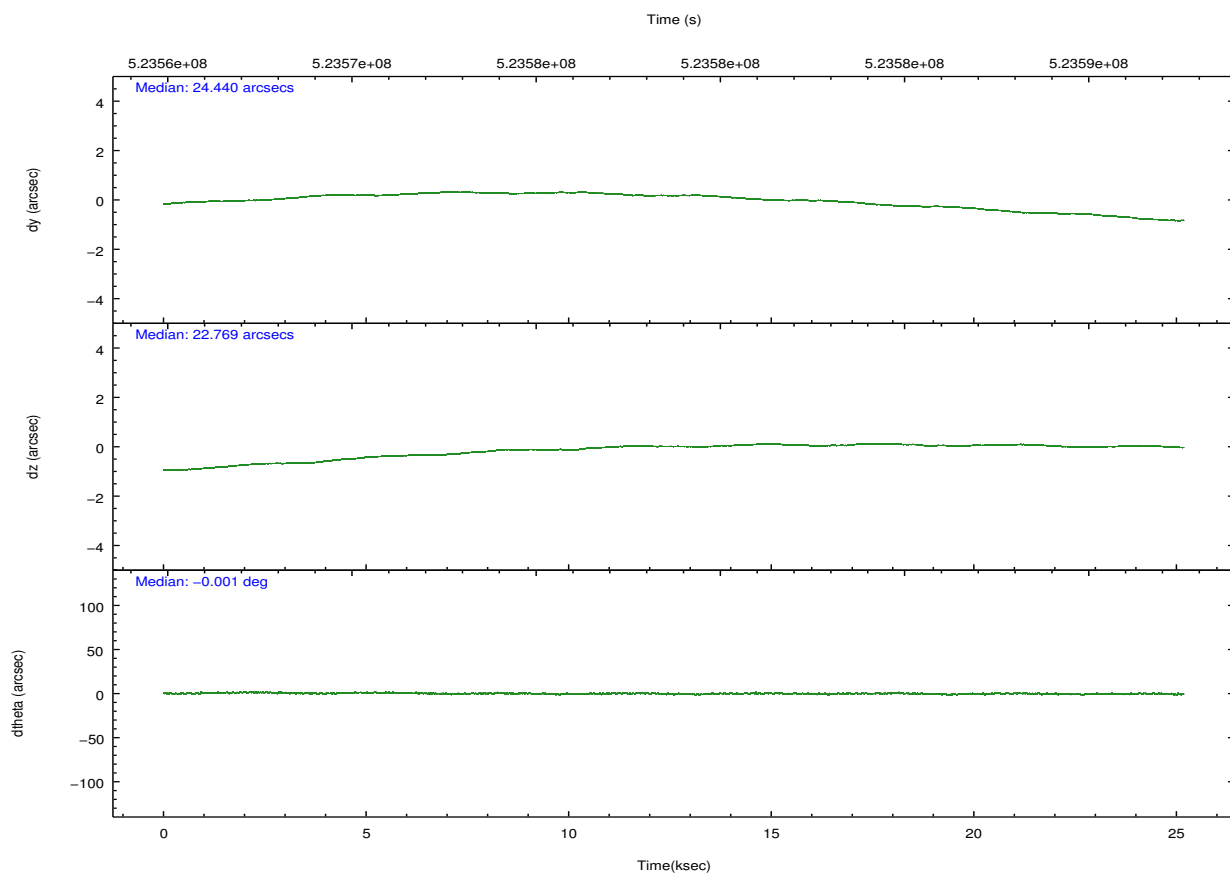
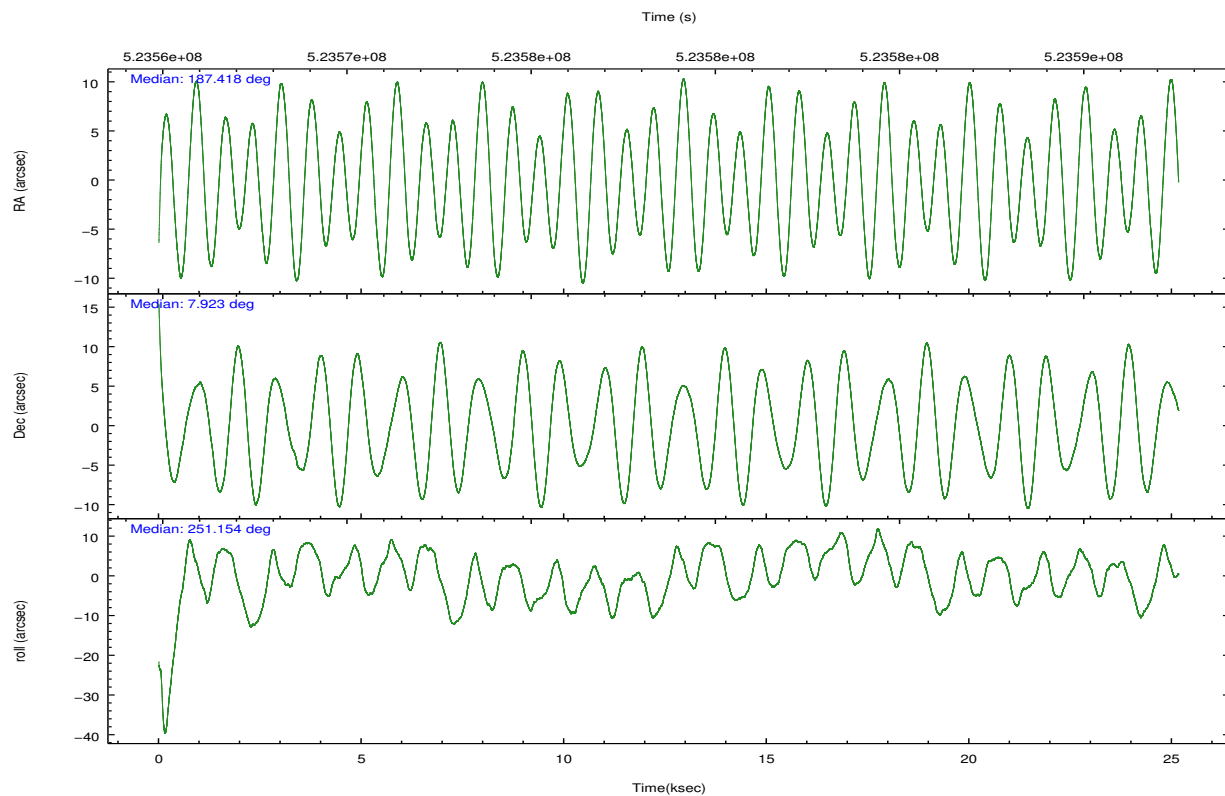
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	119462	118817	130841	211226	171115
rejected events	103853	103995	111492	96109	122644
rejected %	86%	87%	85%	45%	71%

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6323	5816	8500	20042	15489
	5%	4%	6%	9%	9%
grade 1 events	83	63	77	225	118
	0%	0%	0%	0%	0%
grade 2 events	3618	3120	3796	26333	11135
	3%	2%	2%	12%	6%
grade 3 events	1441	1490	1702	11066	4663
	1%	1%	1%	5%	2%
grade 4 events	1433	1512	1678	11140	4502
	1%	1%	1%	5%	2%
grade 5 events	5369	6516	6480	17694	9552
	4%	5%	4%	8%	5%
grade 6 events	2796	2886	3674	46548	12685
	2%	2%	2%	22%	7%
grade 7 events	98399	97414	104934	78178	112971
	82%	81%	80%	37%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	187.412453	187.4181854257401	CCD I2 on	O4	Y
[deg] Pointing Dec	7.949389	7.922541015336015	CCD I3 on	O3	Y
[deg] Pointing Roll	251.000527	251.1563663686923	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O2	Y
[s] Observation start time (MET)	523566325.184000	523565229.5602	CCD S5 on	N	N
Observation start date	2014-08-04T19:04:18	2014-08-04T18:47:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	523591325.184000	523592671.88673	On-chip summing requested	N	N
Observation end date	2014-08-05T02:00:58	2014-08-05T02:24:31	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect

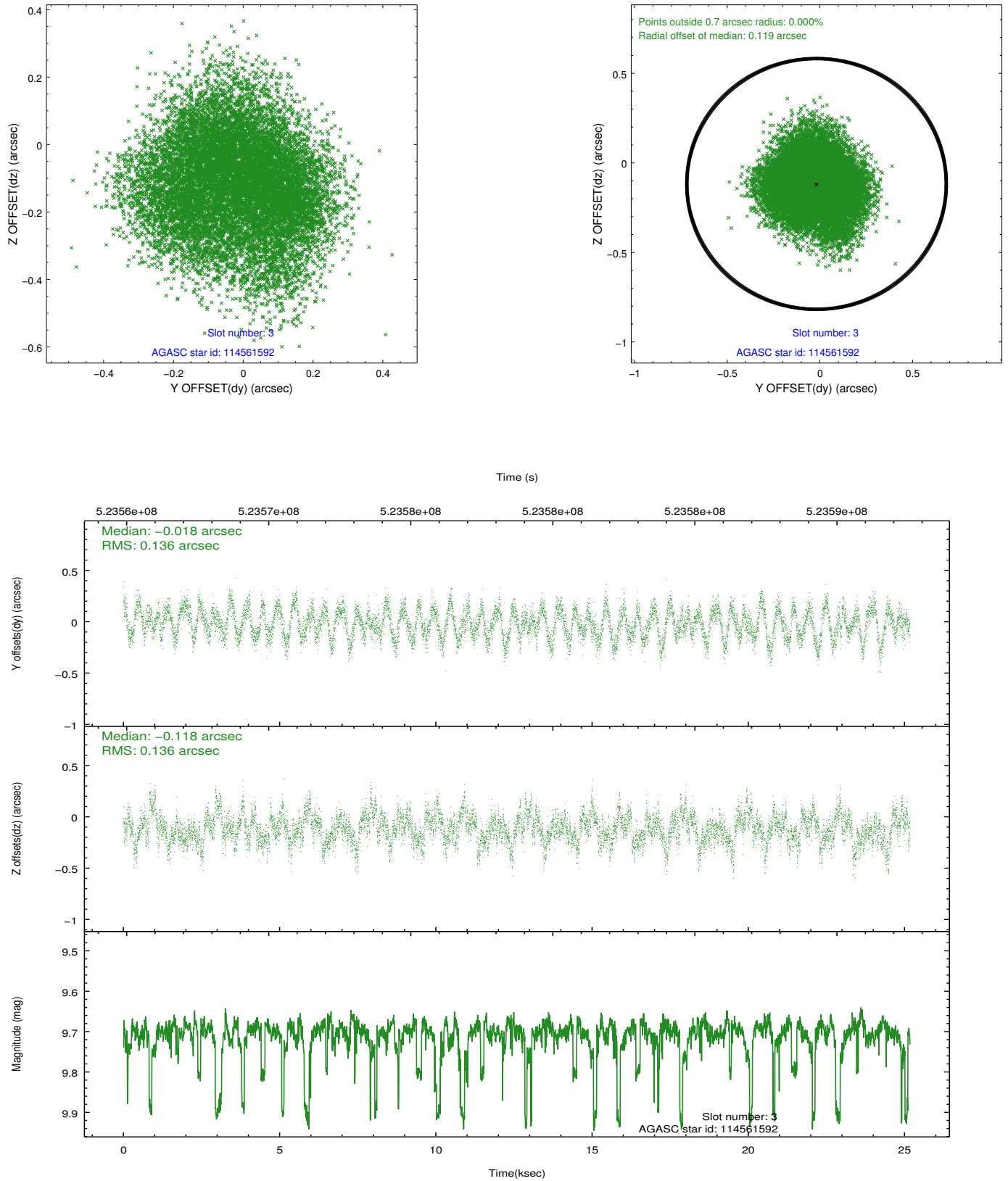


Slot Statistics

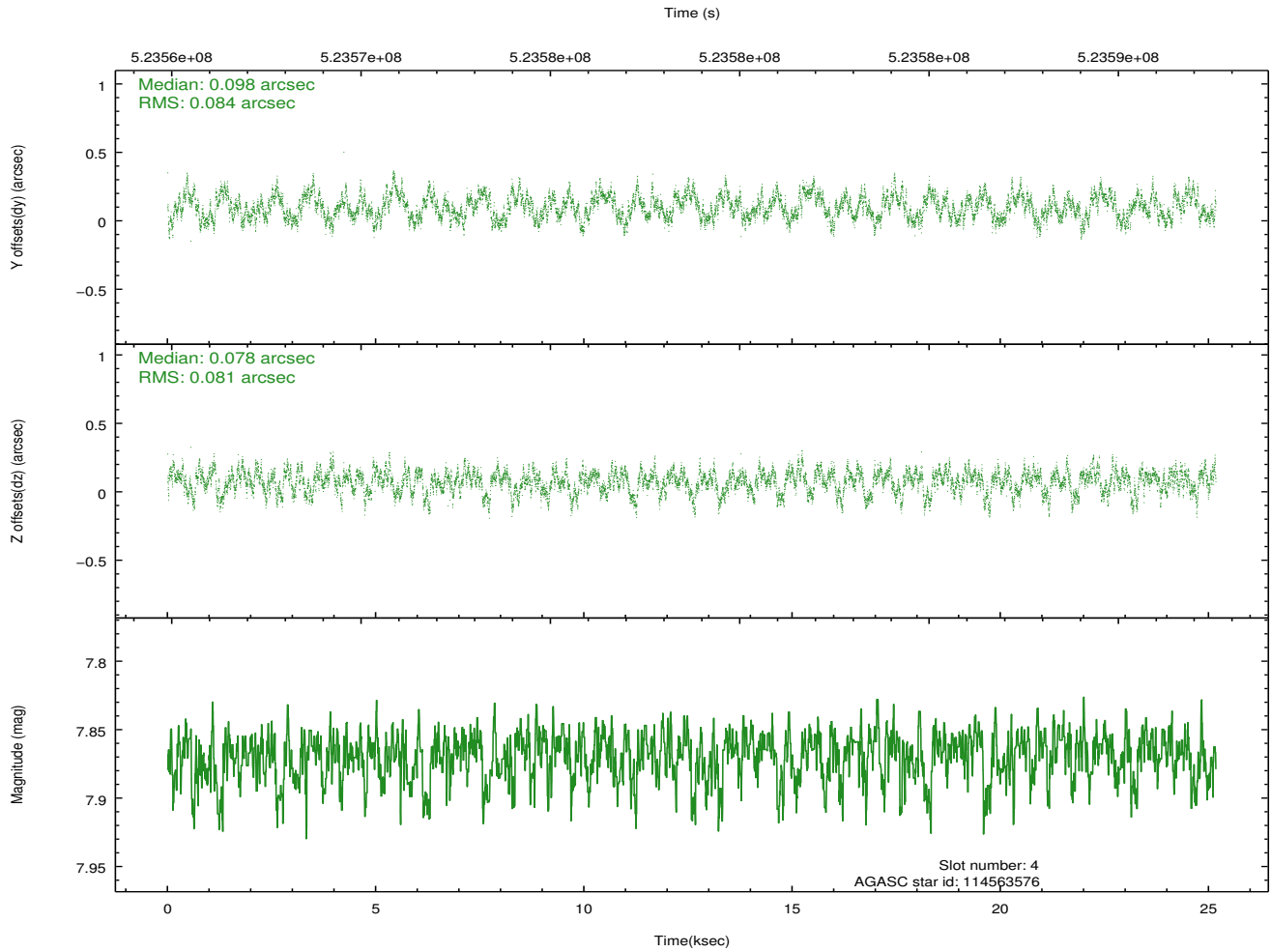
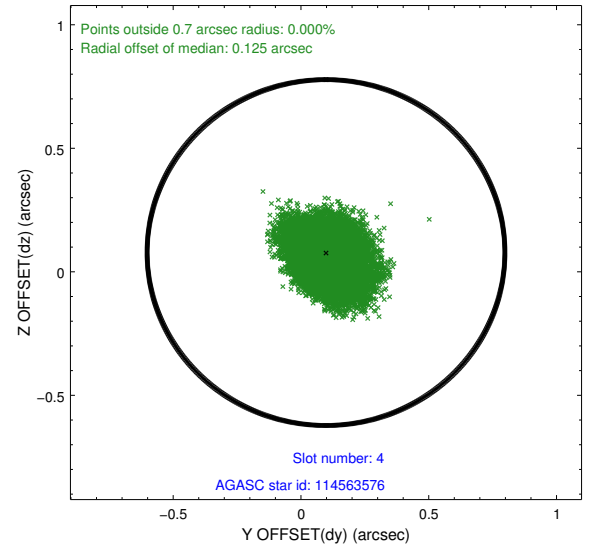
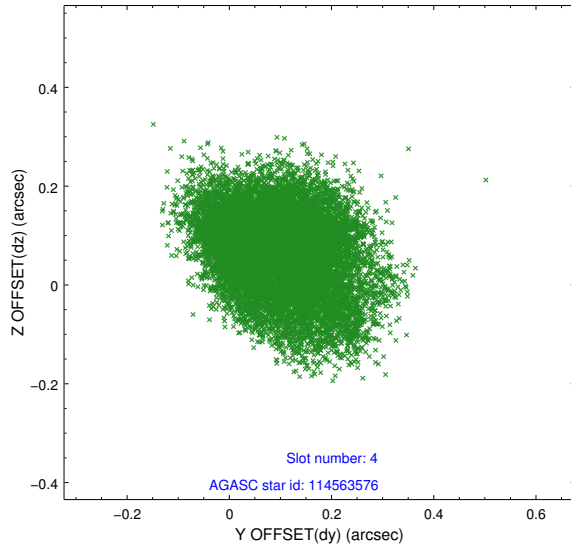
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.94	6139	-0.184	-0.104	0.008	0.017	0.000000	0.000000	-777.88	-1744.19
1	FID	ACIS-S-4	7.02	6139	0.205	0.112	0.008	0.015	0.000000	0.000000	2135.83	164.22
2	FID	ACIS-S-6	7.16	6138	-0.049	-0.001	0.007	0.012	0.000000	0.000000	384.52	801.73
3	GUIDE	114561592	9.71	12265	-0.018	-0.118	0.210	0.318	187.709505	8.445382	-2032.68	418.81
4	GUIDE	114563576	7.87	12279	0.098	0.078	0.125	0.201	186.867039	8.012388	418.38	-1913.10
5	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	114565064	9.96	12234	0.027	-0.106	0.245	0.429	187.898151	7.788605	-16.90	1826.06
7	GUIDE	114565400	6.33	12278	-0.080	0.162	0.105	0.162	186.925333	8.610343	-1685.88	-2413.65

2.4 Star Slots

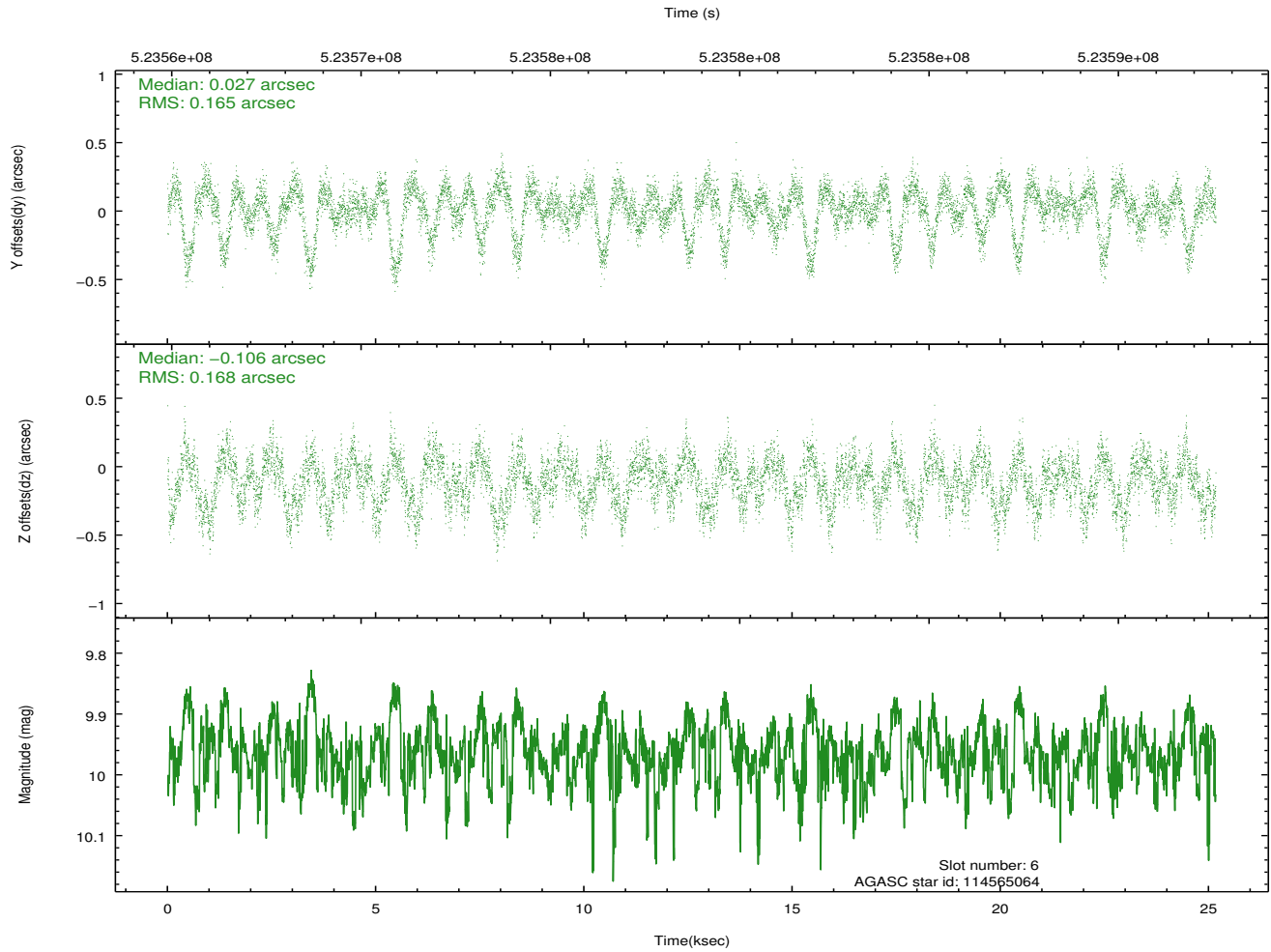
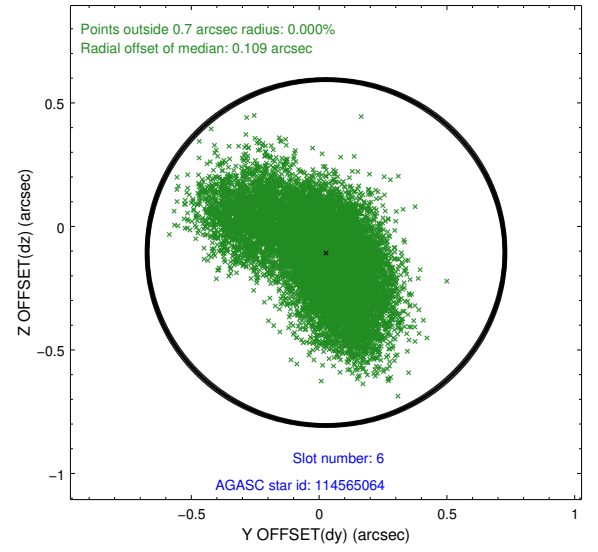
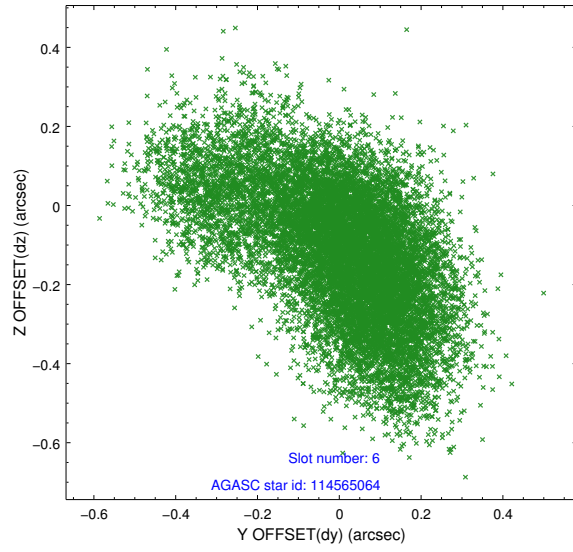
2.4.1 Slot 3



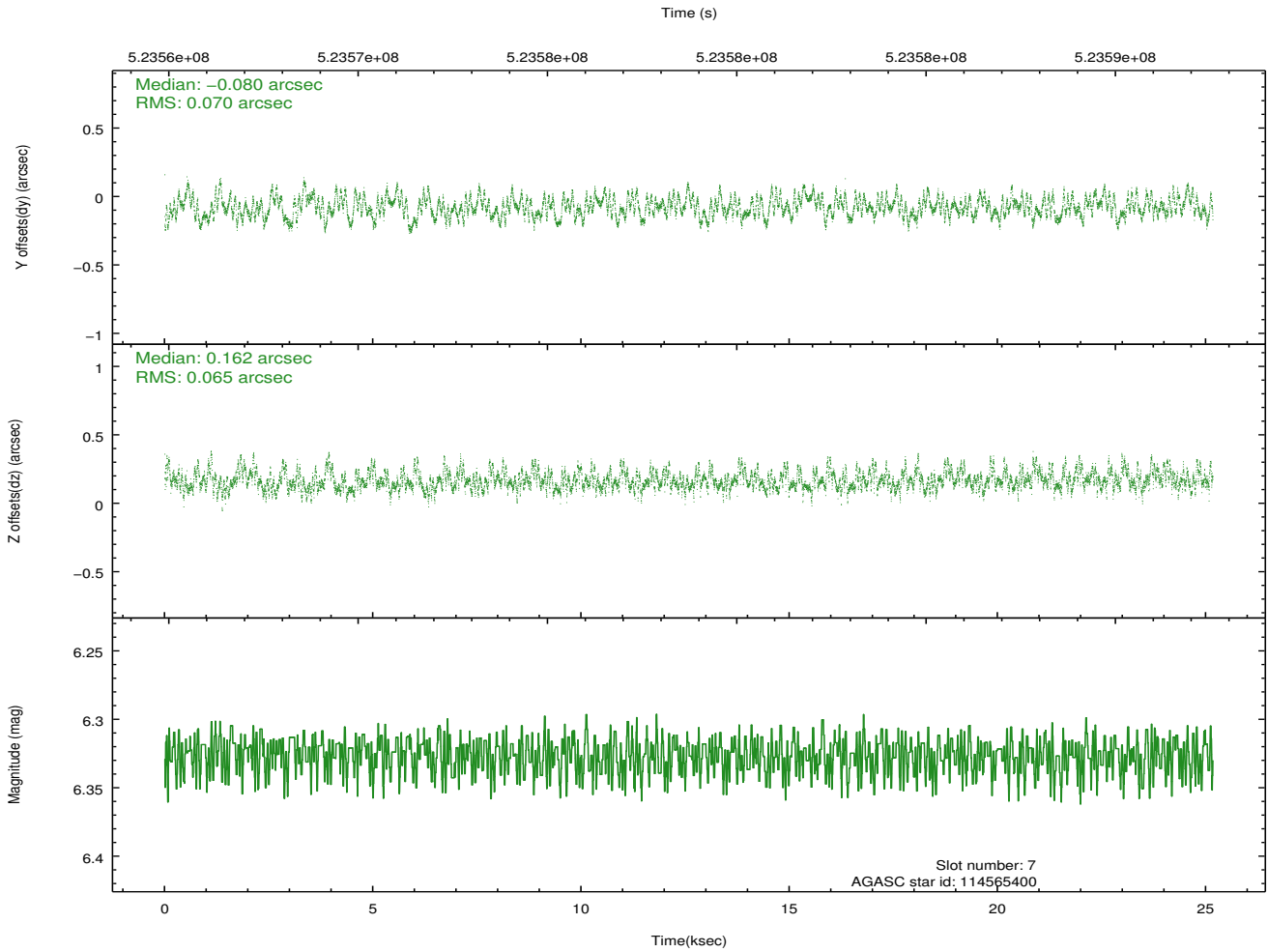
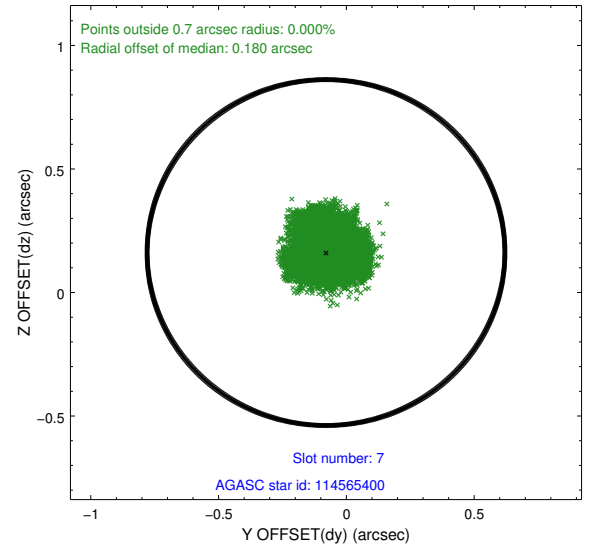
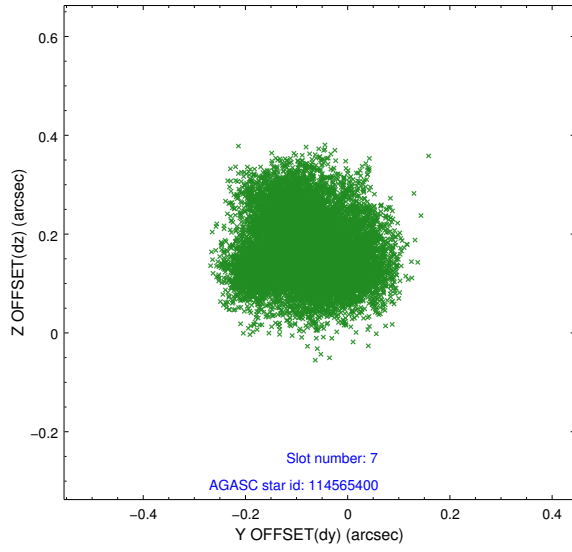
2.4.2 Slot 4



2.4.3 Slot 6

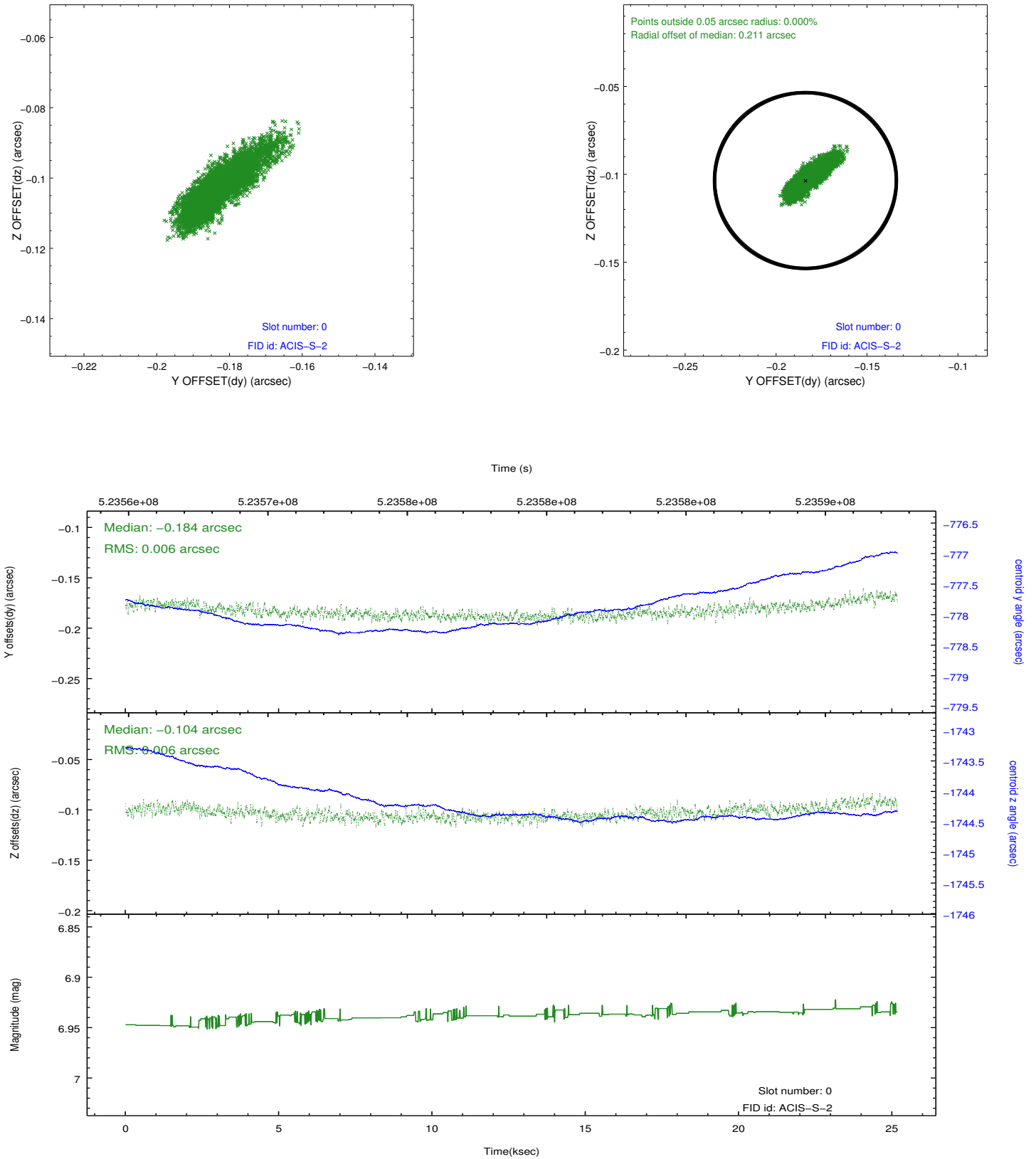


2.4.4 Slot 7

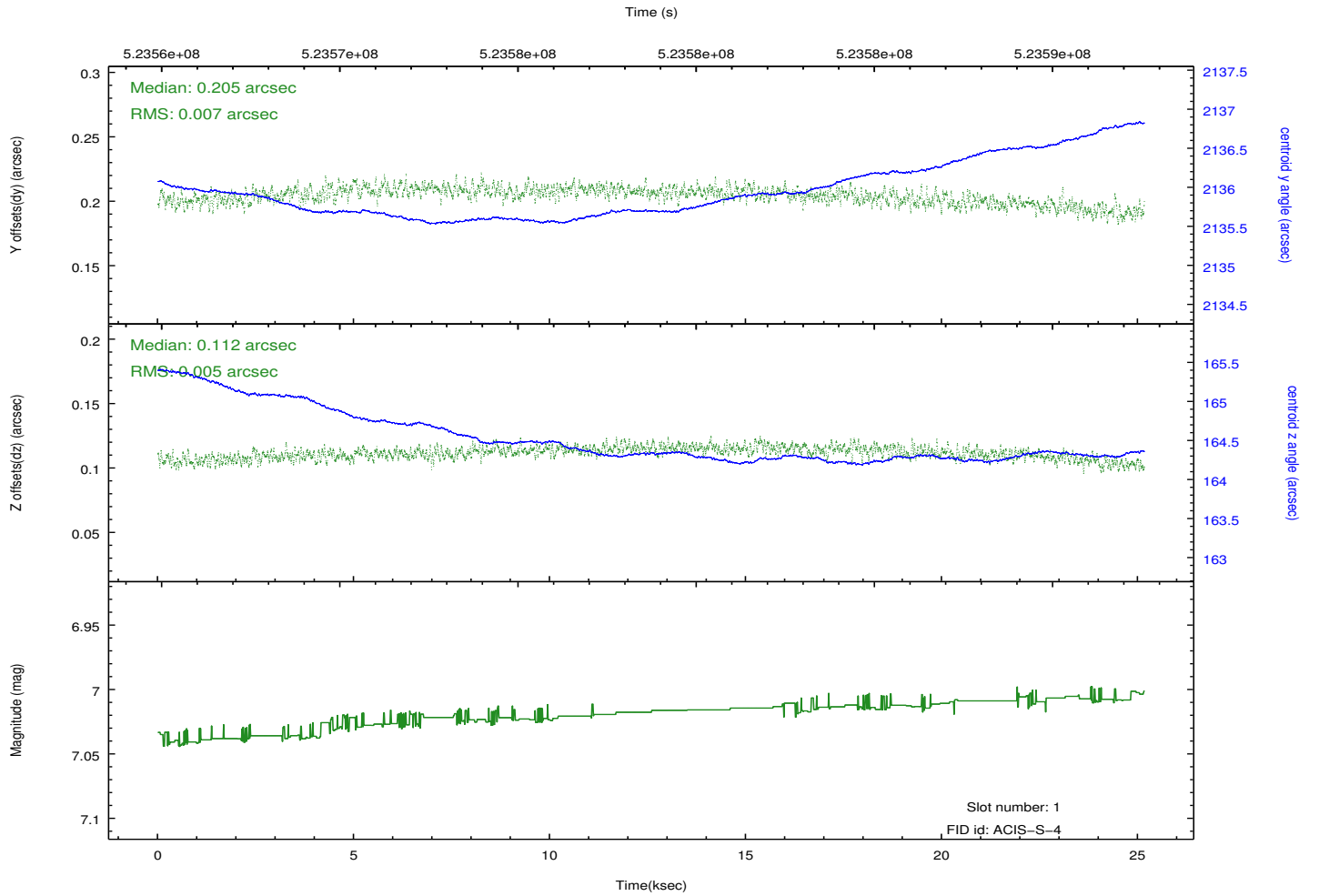
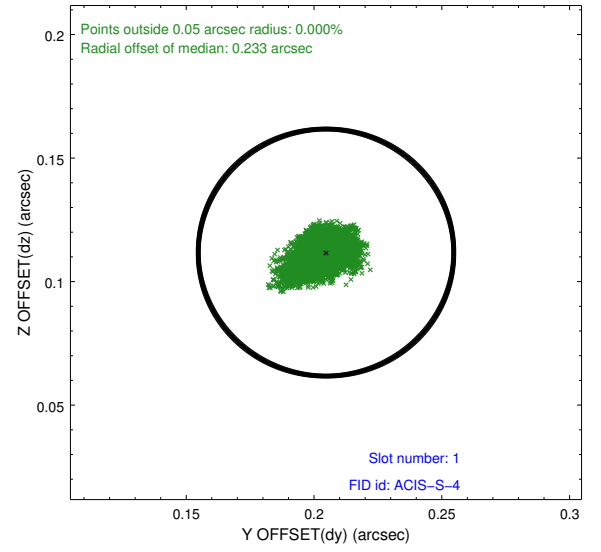
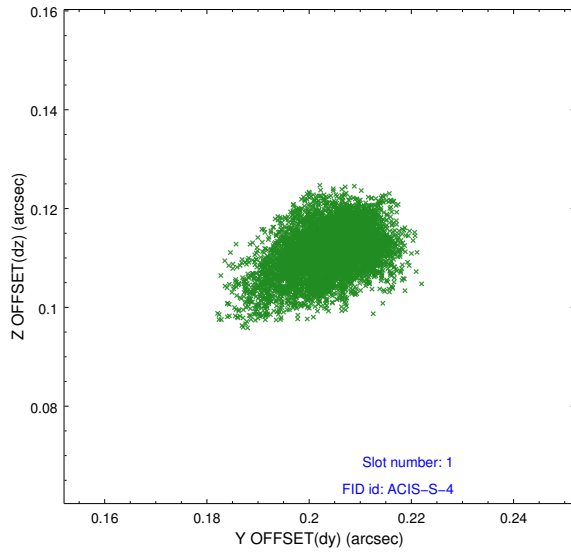


2.5 FID Slots

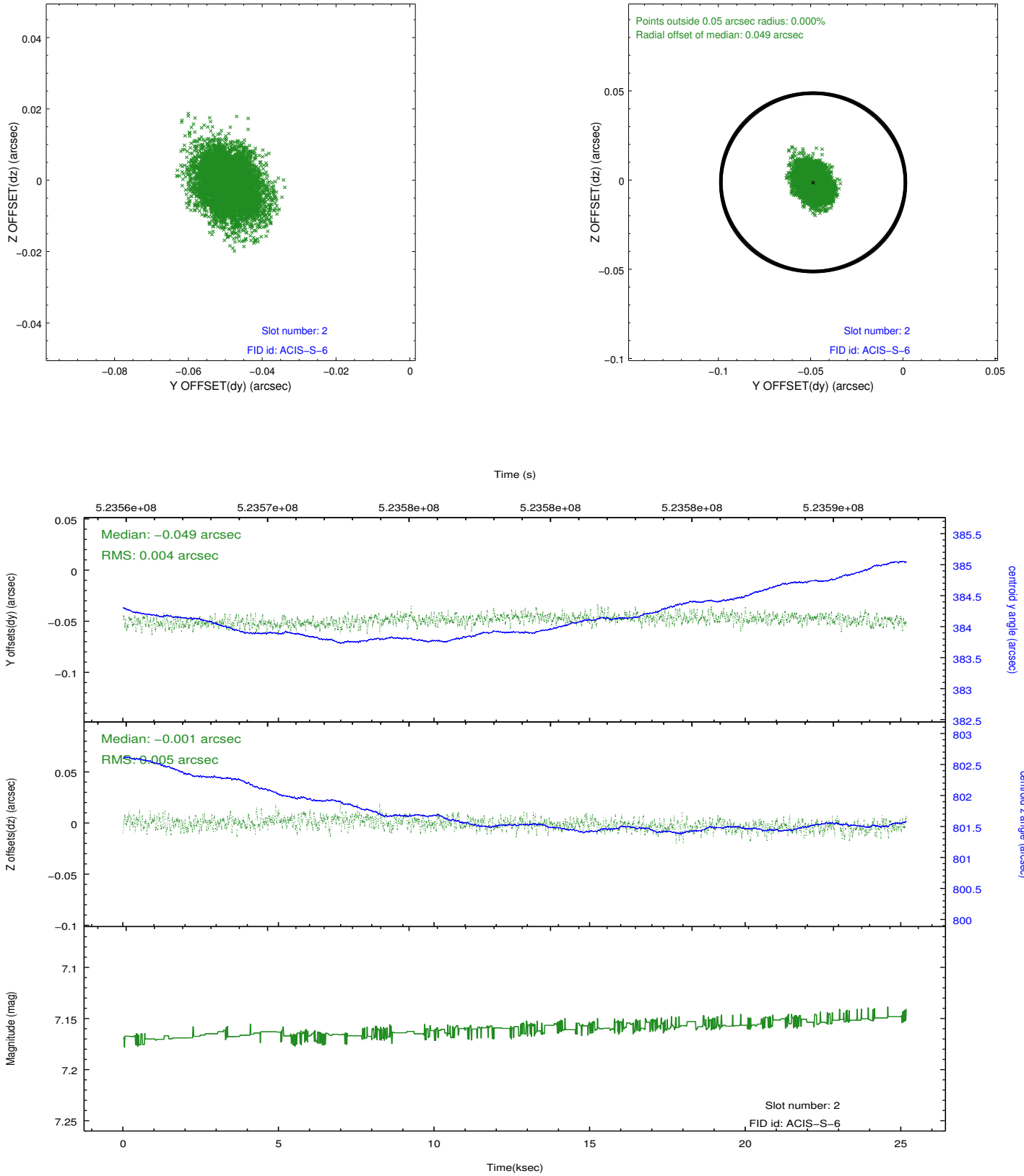
2.5.1 Slot 0



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)	2014.08.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.069700192809

A.2 Comments

Joint proposal with NOAO.

The guide star in slot 5 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.