

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15307 - L2 Version 2
Chandra X-Ray Center

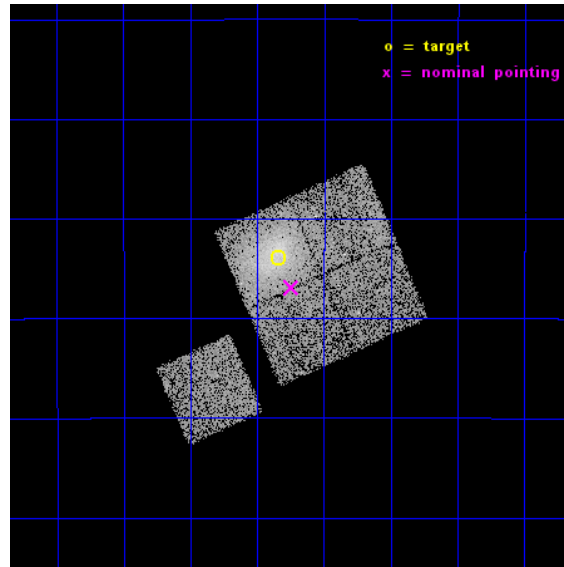
L2 Processing Date : Dec 2 2014

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1 Front

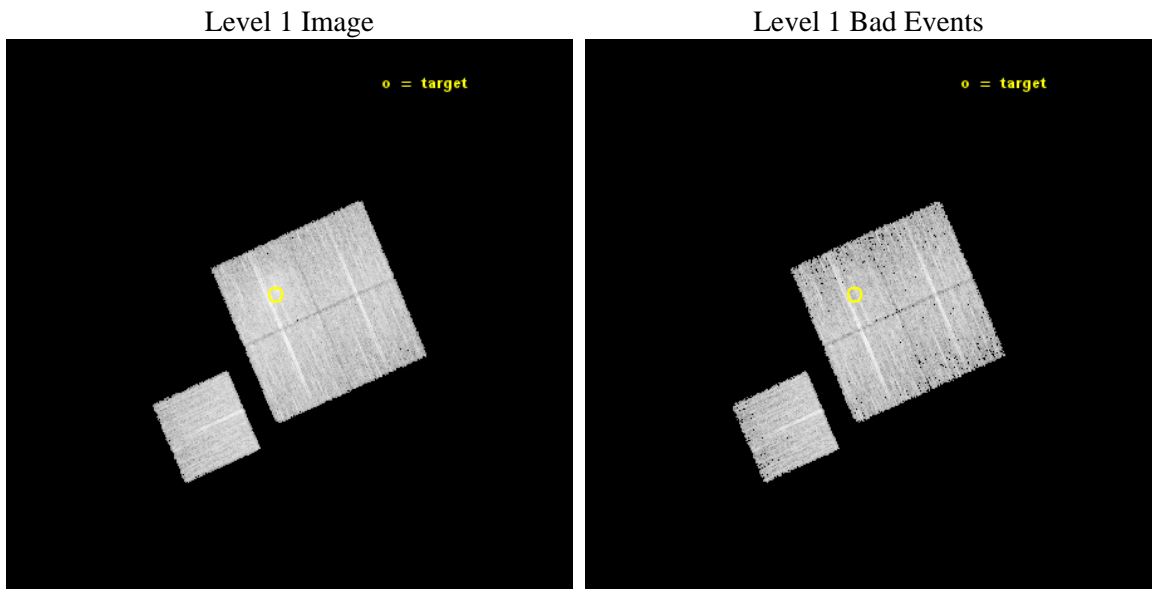
seq_num	801340	Sequence number
obs_id	15307	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G226.17-21.91	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	88.21125	Observer's specified target RA [deg]
dec_targ	-21.066	Observer's specified target Dec [deg]
ra_nom	88.185897781035	Nominal RA [deg]
dec_nom	-21.114988972977	Nominal Dec [deg]
roll_nom	246.29361393638	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10084.300077558	Sum of GTIs [s]
livetime	9952.5412730906	Livetime [s]
ontime0	10084.300077558	Sum of GTIs [s]
ontime1	10081.159077346	Sum of GTIs [s]
ontime2	10078.018106997	Sum of GTIs [s]
ontime3	10084.300077558	Sum of GTIs [s]
ontime6	10084.300077558	Sum of GTIs [s]
l2events	39259	Number of level 2 events



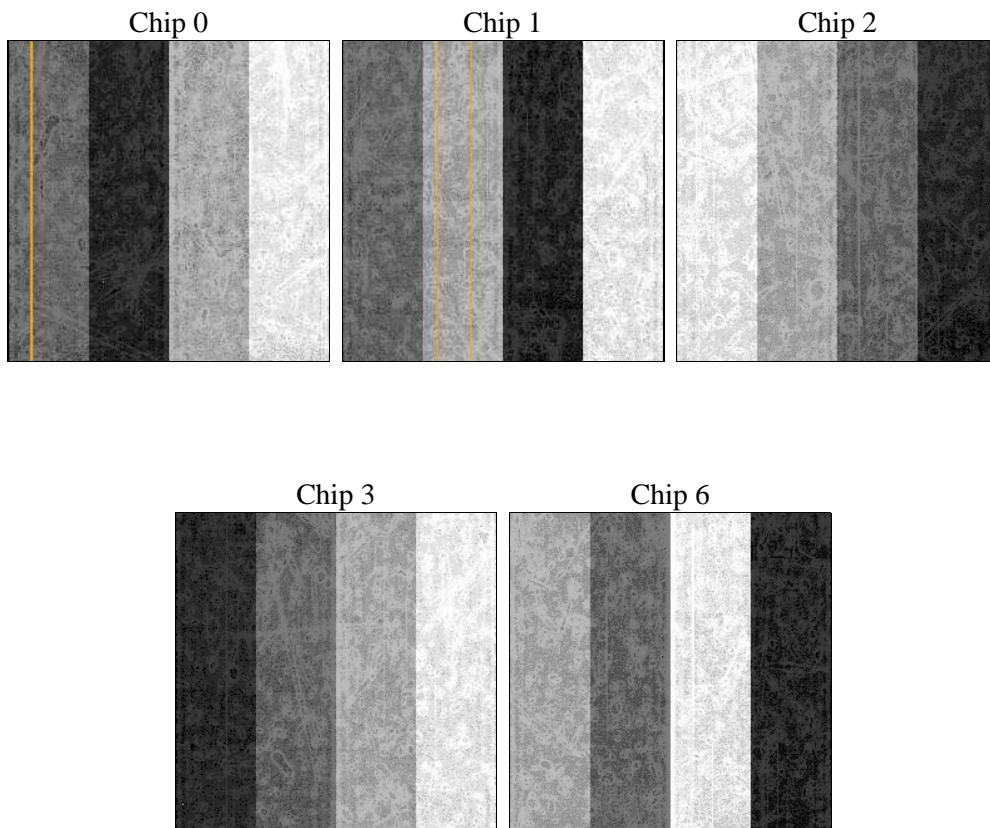
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10084.300077558	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10084.300077558	Sum of GTIs [s]
date	2014-12-02T17:48:28	Date and time of file creation	ontime1	10081.159077346	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10078.018106997	Sum of GTIs [s]
			ontime3	10084.300077558	Sum of GTIs [s]
			ontime6	10084.300077558	Sum of GTIs [s]
			l1events	272497	Number of level 1 events

2.1.4 Events

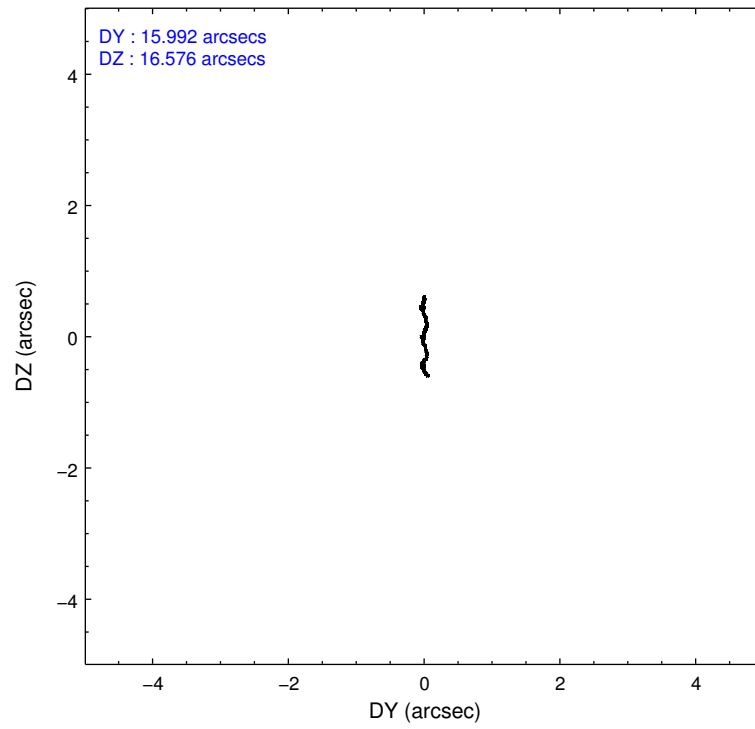
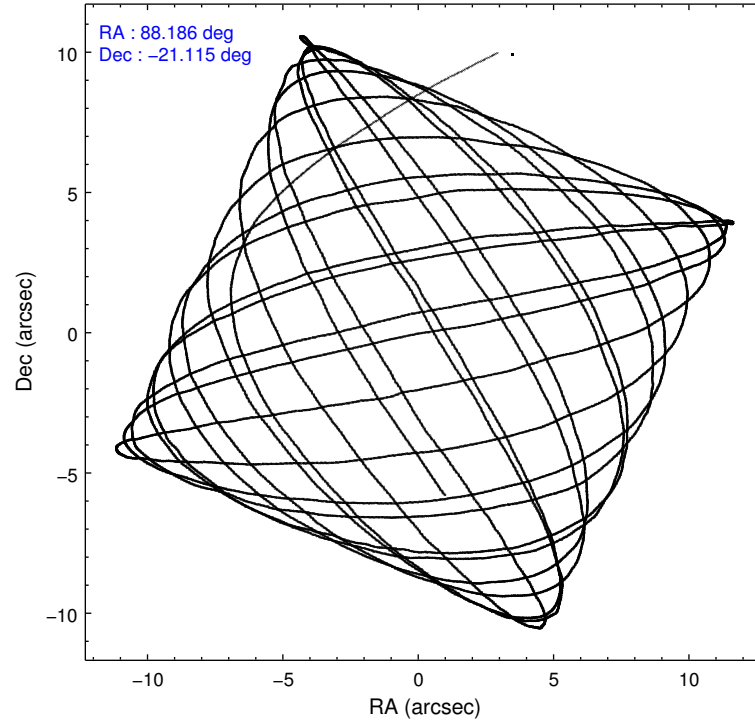
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	48374	51023	56190	62175	54735
rejected events	41882	42903	49214	45517	48123
rejected %	86%	84%	87%	73%	87%

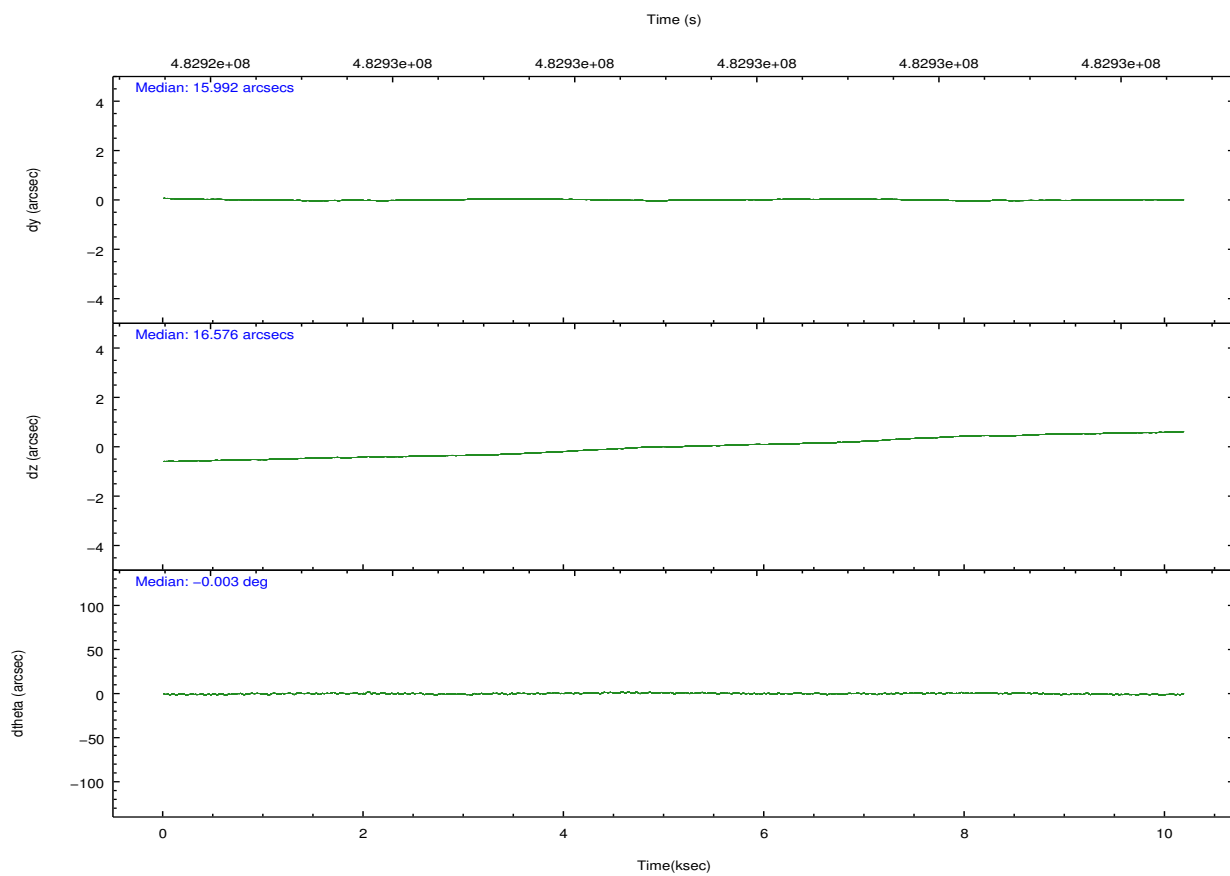
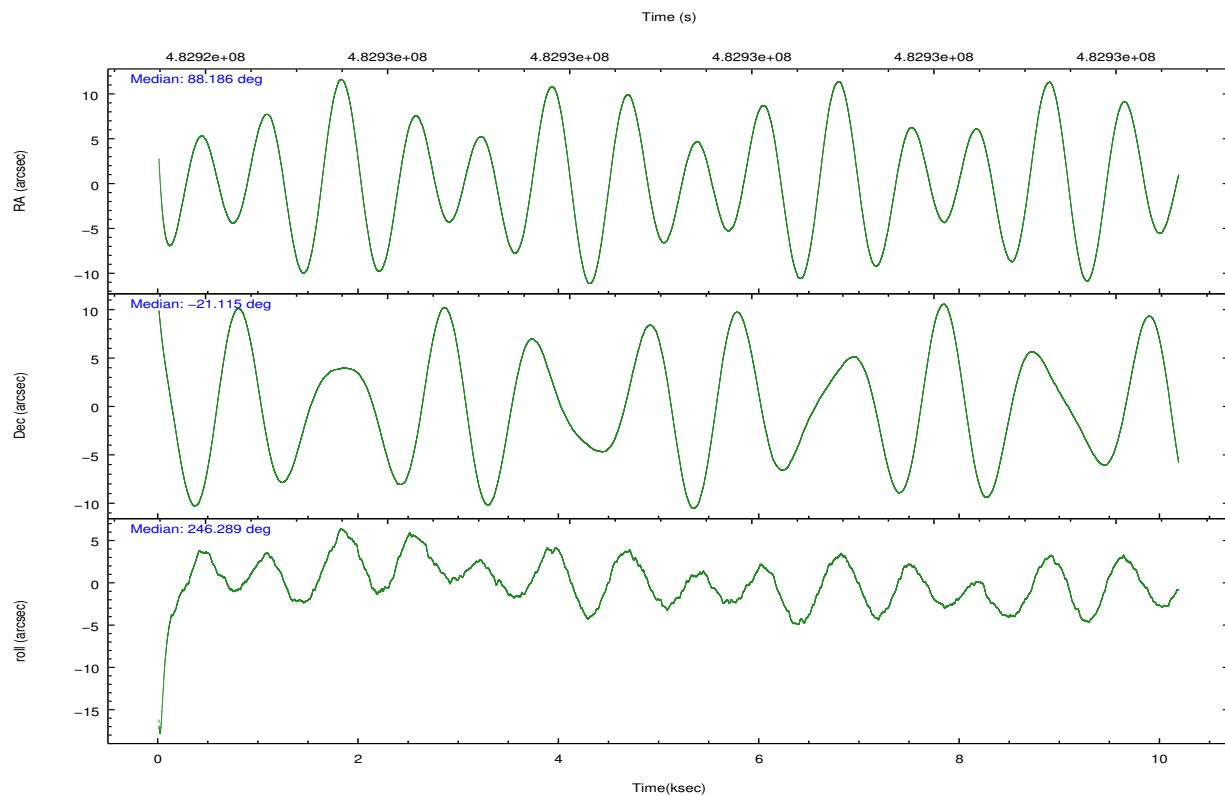
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2334	3277	2868	10641	2206
	4%	6%	5%	17%	4%
grade 1 events	32	23	40	72	24
	0%	0%	0%	0%	0%
grade 2 events	1609	1829	1626	2467	1538
	3%	3%	2%	3%	2%
grade 3 events	647	696	649	988	667
	1%	1%	1%	1%	1%
grade 4 events	614	732	615	928	675
	1%	1%	1%	1%	1%
grade 5 events	2460	2757	2297	2885	2573
	5%	5%	4%	4%	4%
grade 6 events	1294	1587	1219	1638	1527
	2%	3%	2%	2%	2%
grade 7 events	39384	40122	46876	42556	45525
	81%	78%	83%	68%	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	88.182578	88.1858977810346	CCD I2 on	Y	Y
[deg] Pointing Dec	-21.087687	-21.11498897297703	CCD I3 on	Y	Y
[deg] Pointing Roll	246.083759	246.2936139363816	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	-225.840463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	482924192.184000	482923030.23165	CCD S5 on	N	N
Observation start date	2013-04-21T09:35:25	2013-04-21T09:17:10	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	482934192.184000	482935442.46982	On-chip summing requested	N	N
Observation end date	2013-04-21T12:22:05	2013-04-21T12:44:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



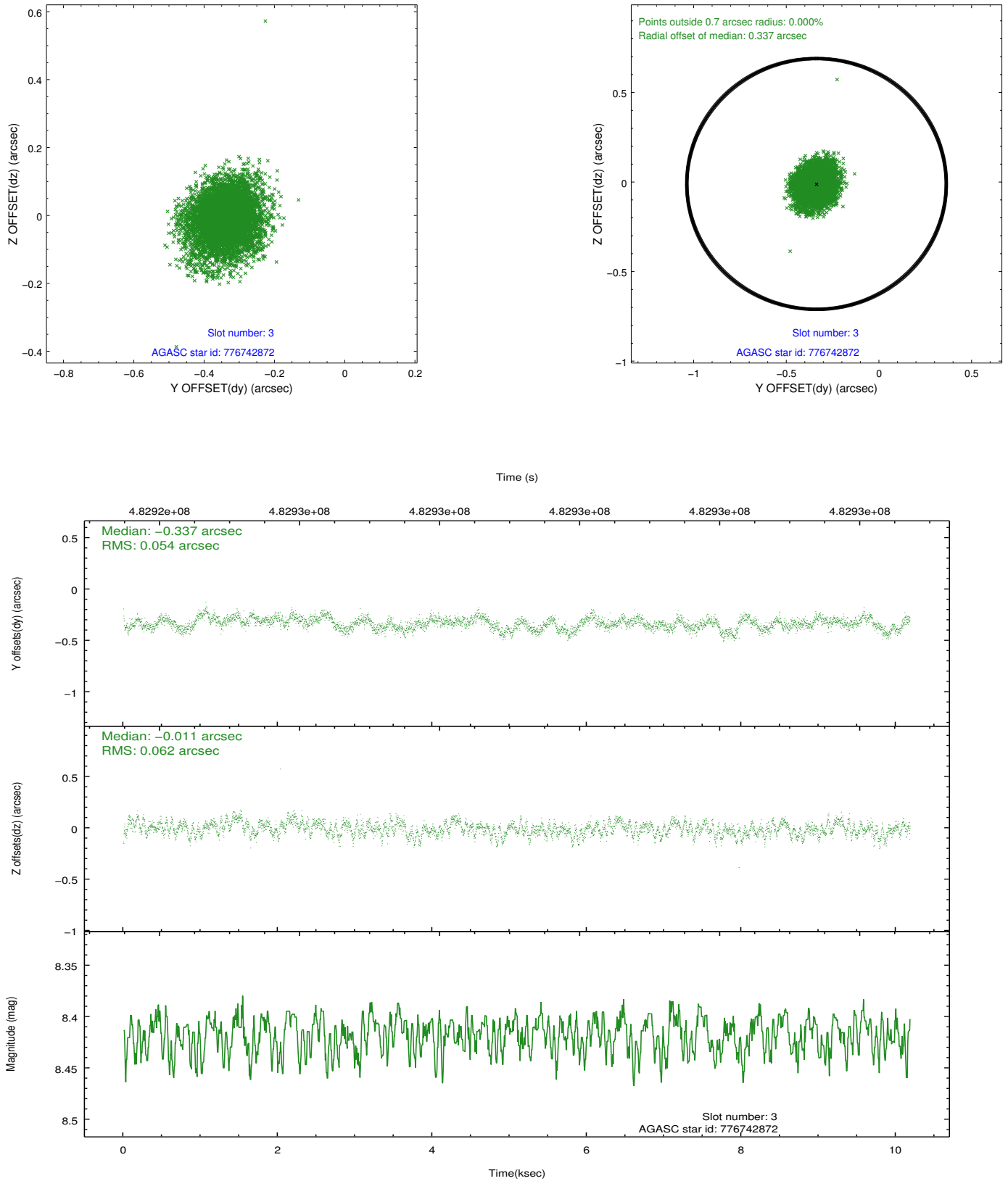


Slot Statistics

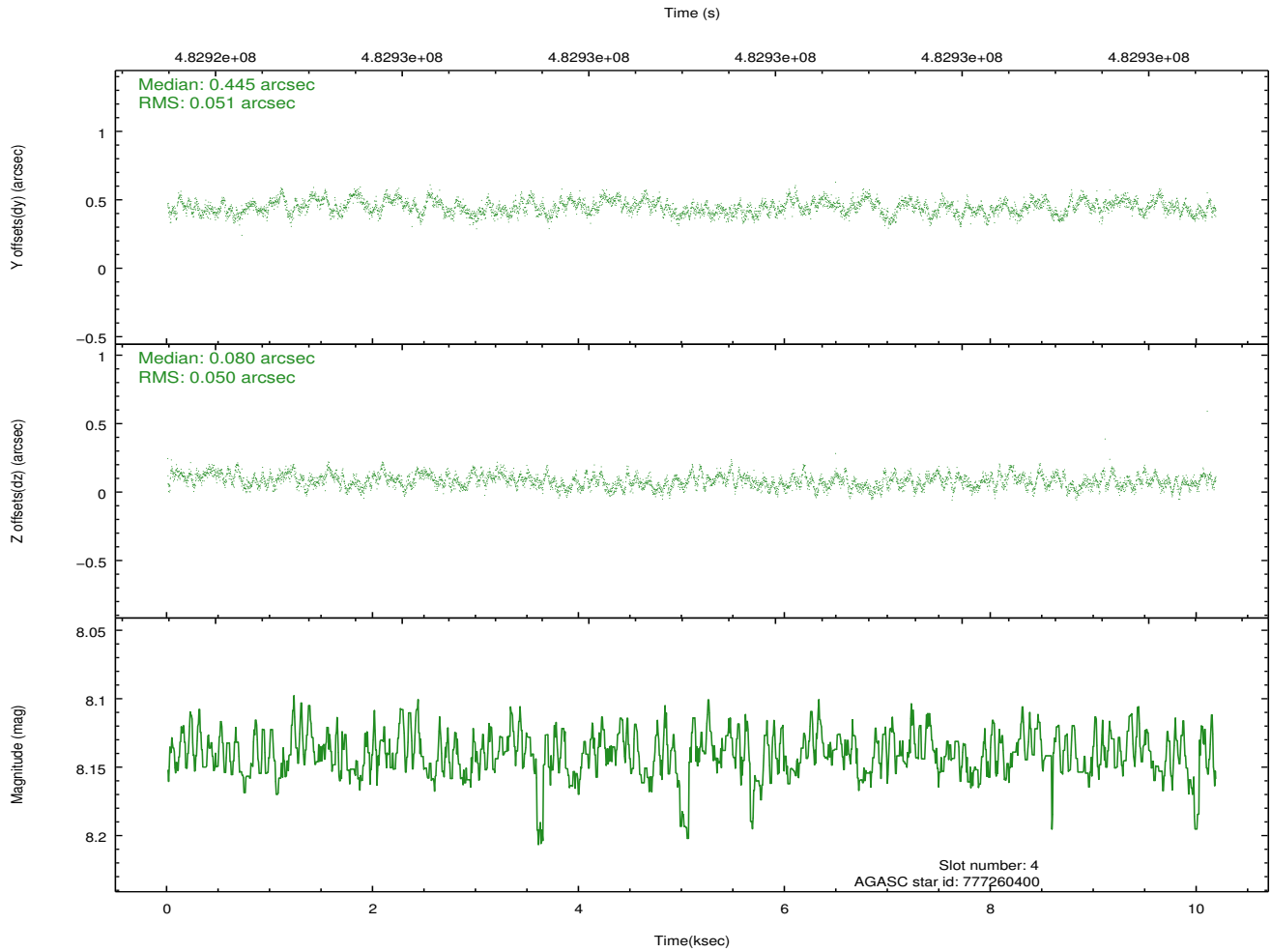
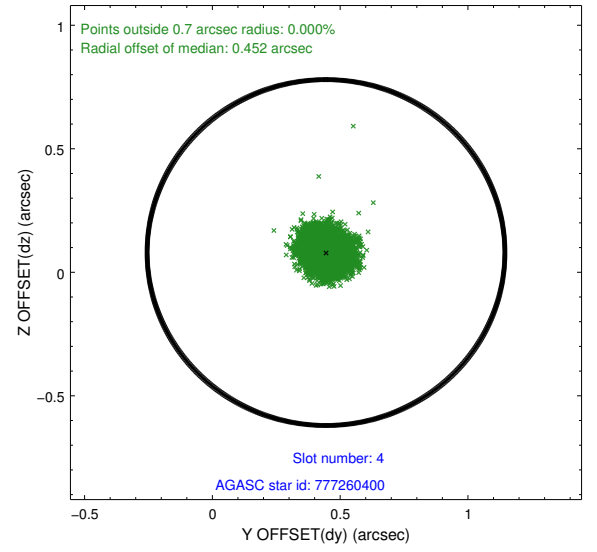
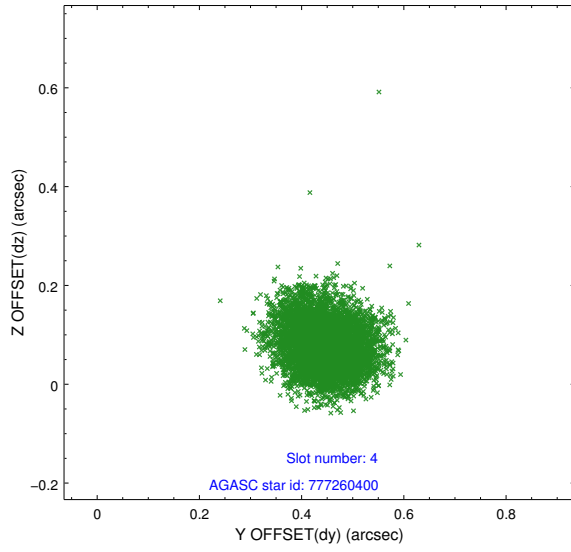
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.10	2483	0.182	-0.150	0.012	0.020	0.000000	0.000000	923.49	-999.42
1	FID		ACIS-I-5	7.10	2483	-0.334	0.138	0.010	0.017	0.000000	0.000000	-1824.88	897.99
2	FID		ACIS-I-6	7.10	2483	0.063	0.088	0.012	0.018	0.000000	0.000000	388.31	1543.07
3	GUIDE	used	776742872	8.42	4967	-0.337	-0.011	0.088	0.141	87.822419	-20.295083	-2114.11	-2267.89
4	GUIDE	used	777260400	8.14	4967	0.445	0.080	0.078	0.118	87.903226	-20.836963	-442.95	-1224.92
5	GUIDE	used	778962272	8.72	4960	0.058	-0.006	0.102	0.157	88.504882	-20.885139	-1104.86	695.76
6	GUIDE	used	778965808	7.26	4967	-0.190	-0.035	0.067	0.104	88.684963	-21.280380	-46.91	1823.25
7	GUIDE	used	778975584	8.44	4965	0.023	-0.031	0.061	0.100	88.141770	-21.662826	1948.33	715.34

2.4 Star Slots

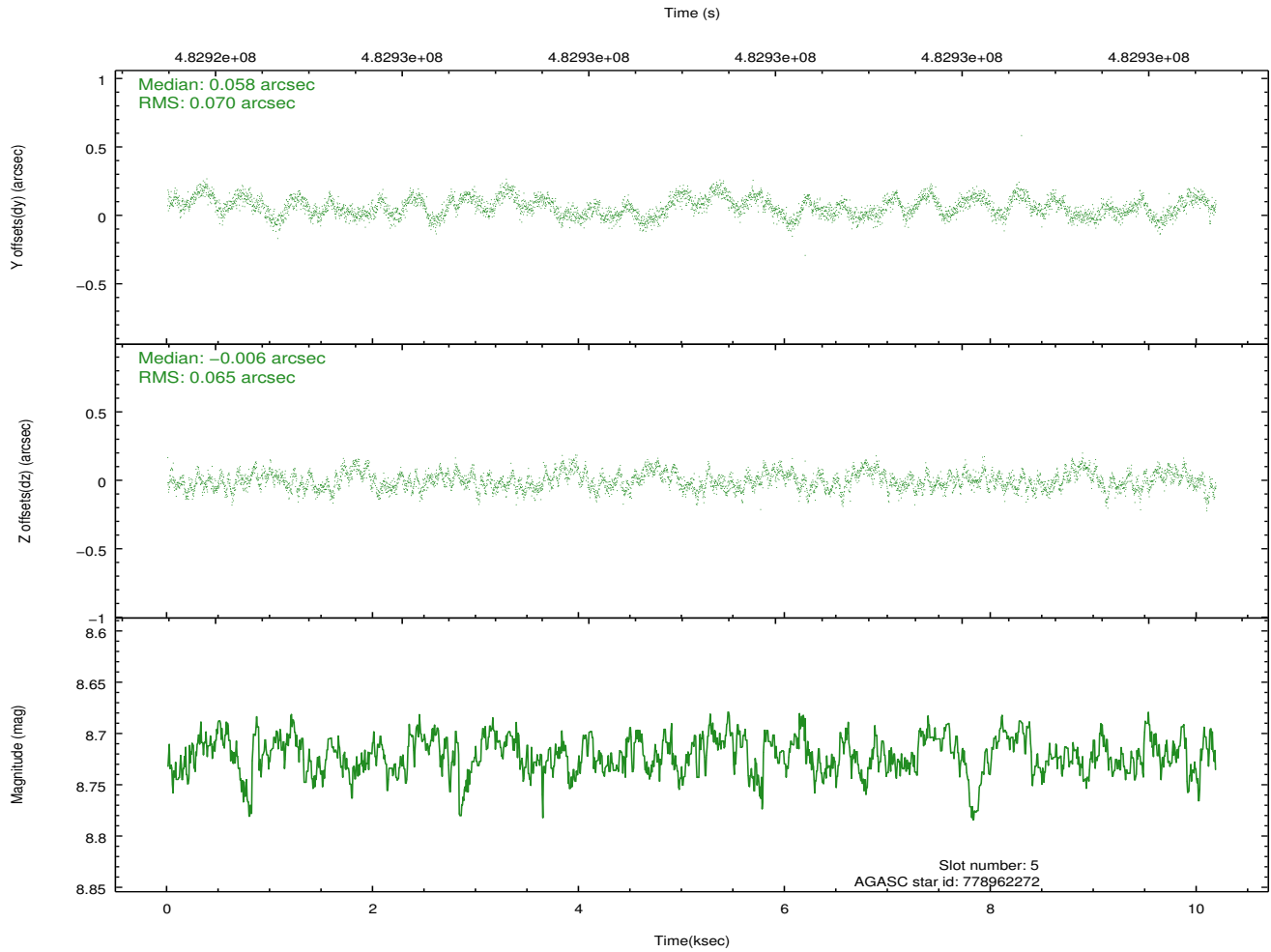
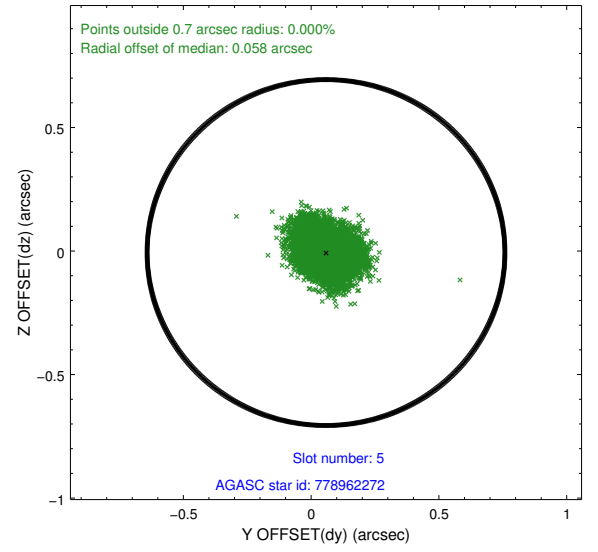
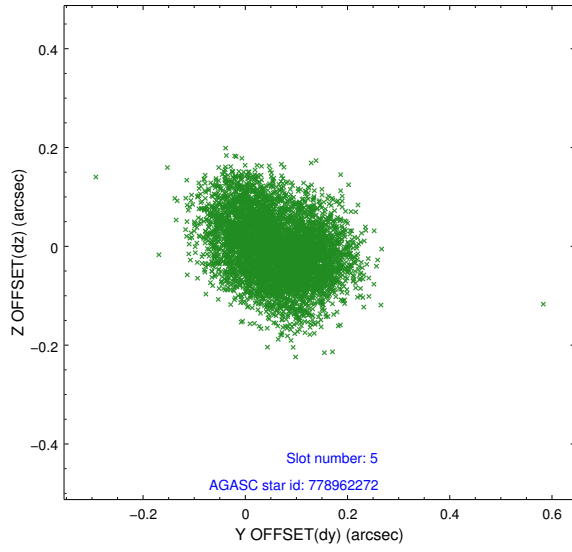
2.4.1 Slot 3



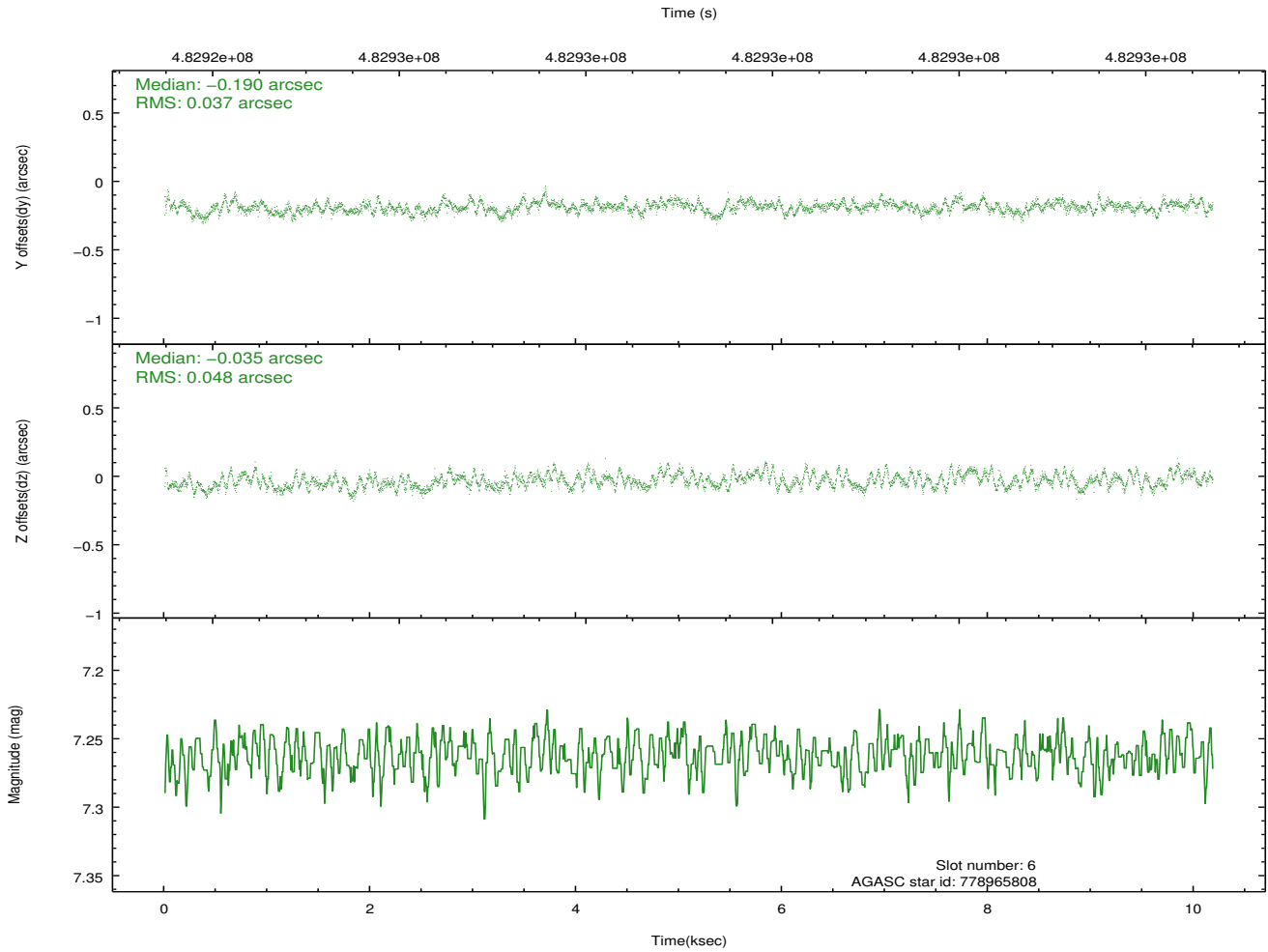
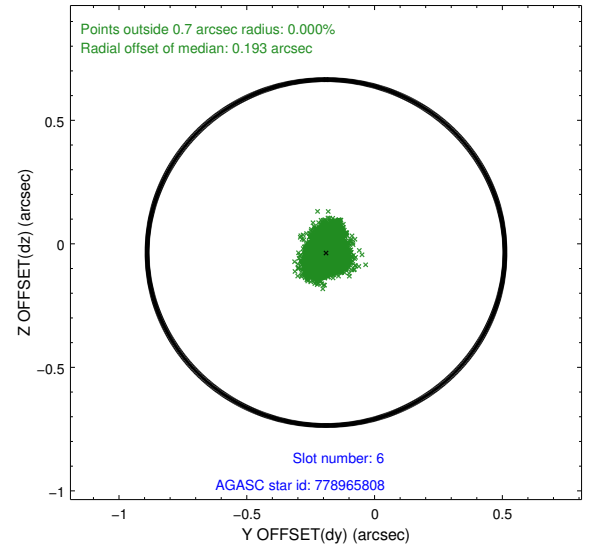
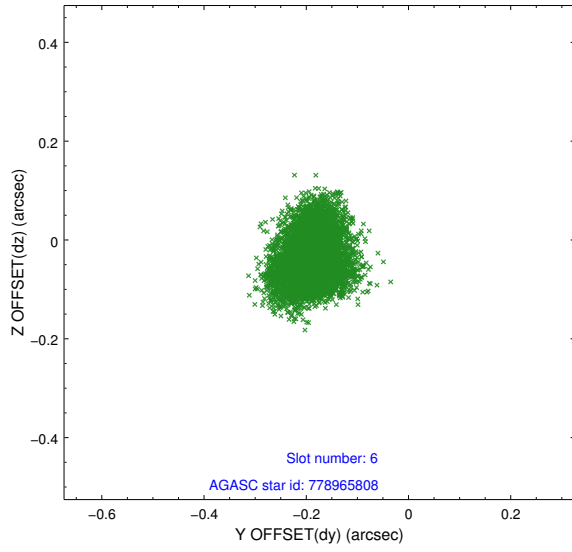
2.4.2 Slot 4



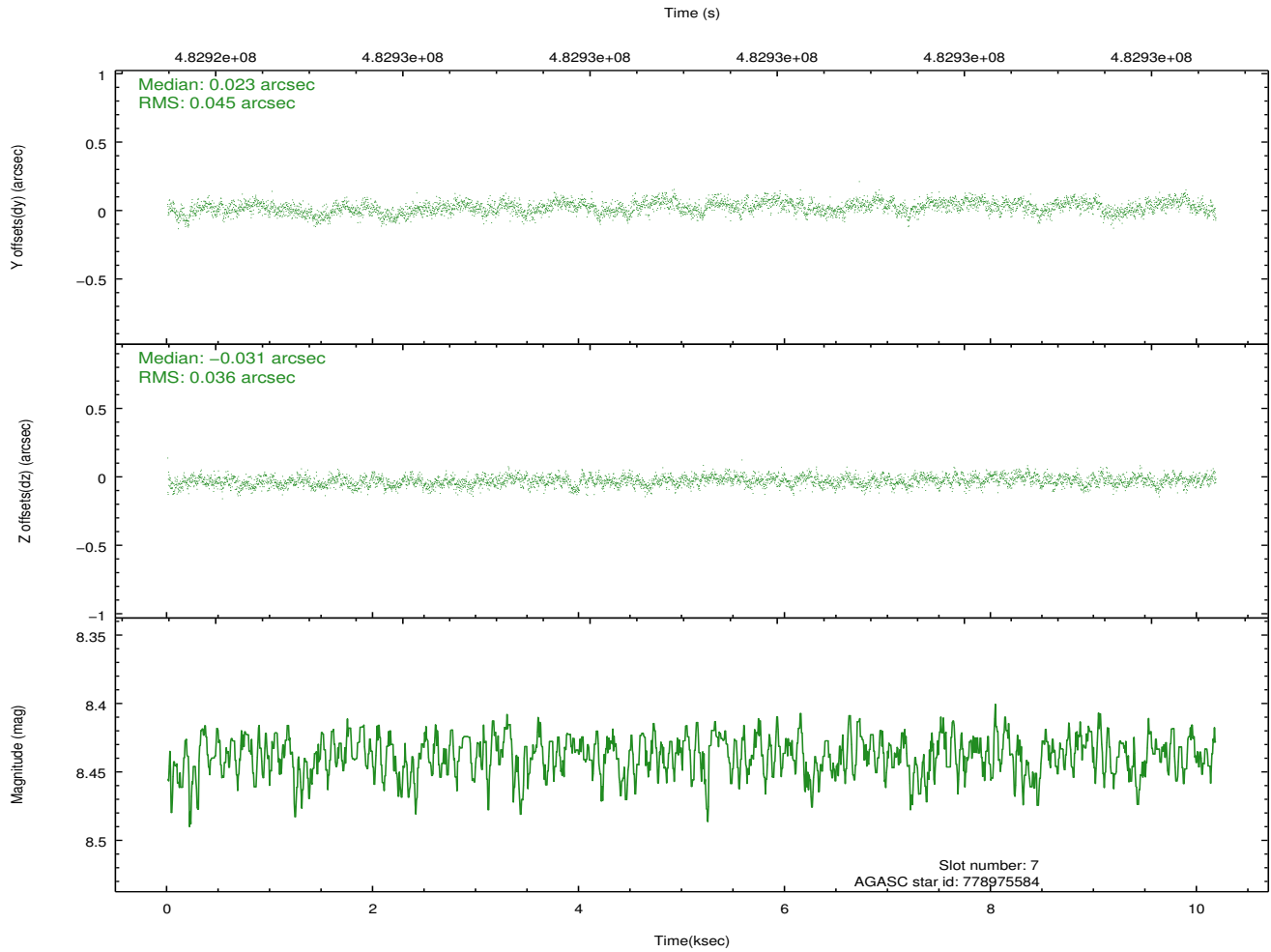
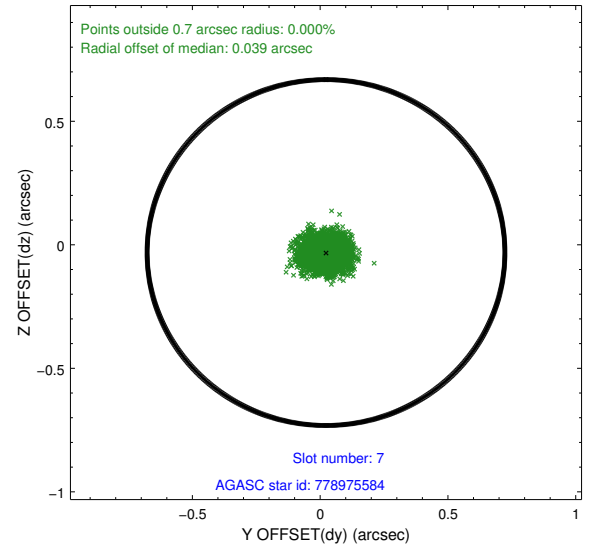
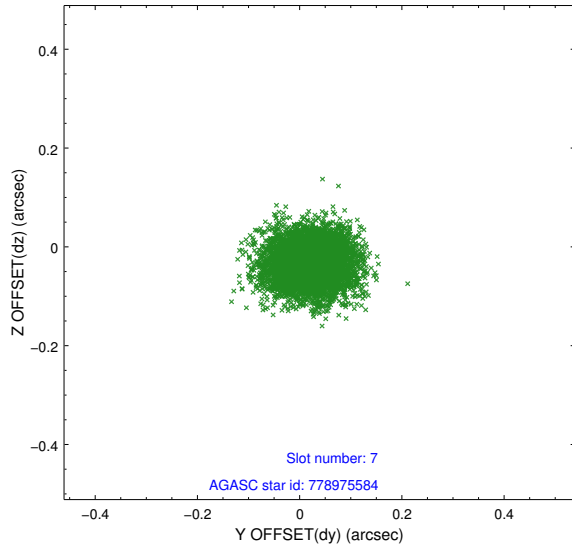
2.4.3 Slot 5



2.4.4 Slot 6

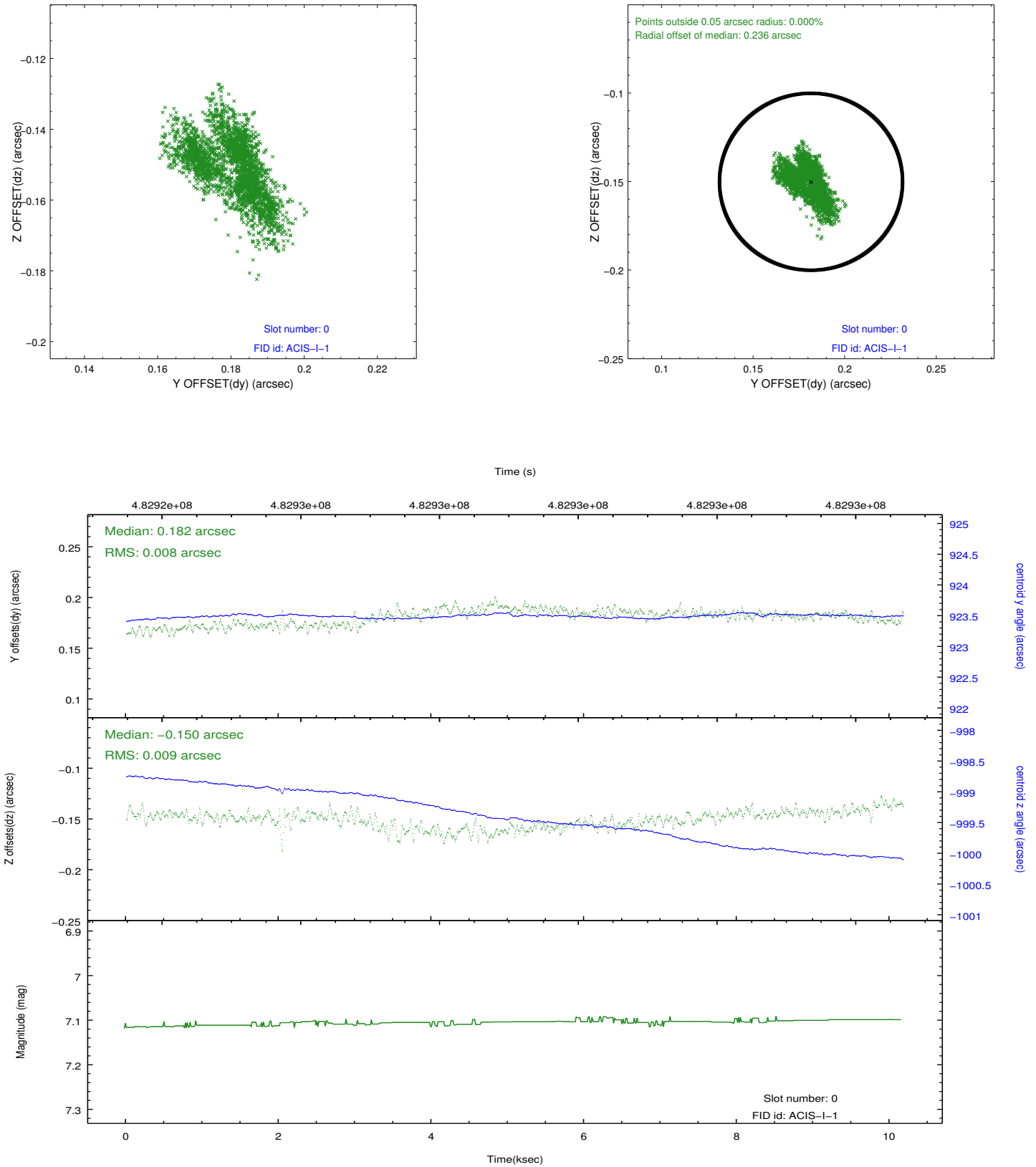


2.4.5 Slot 7

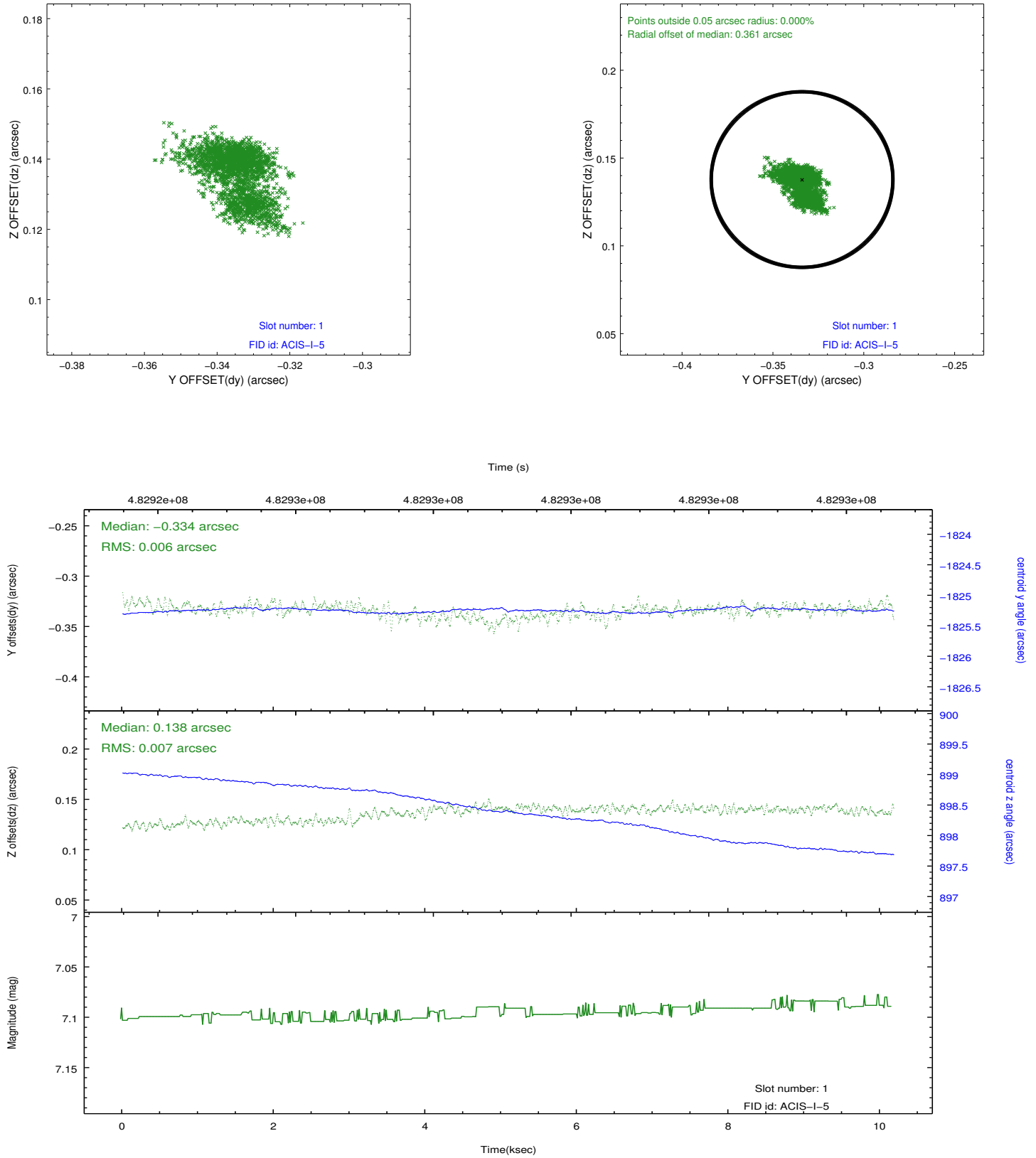


2.5 FID Slots

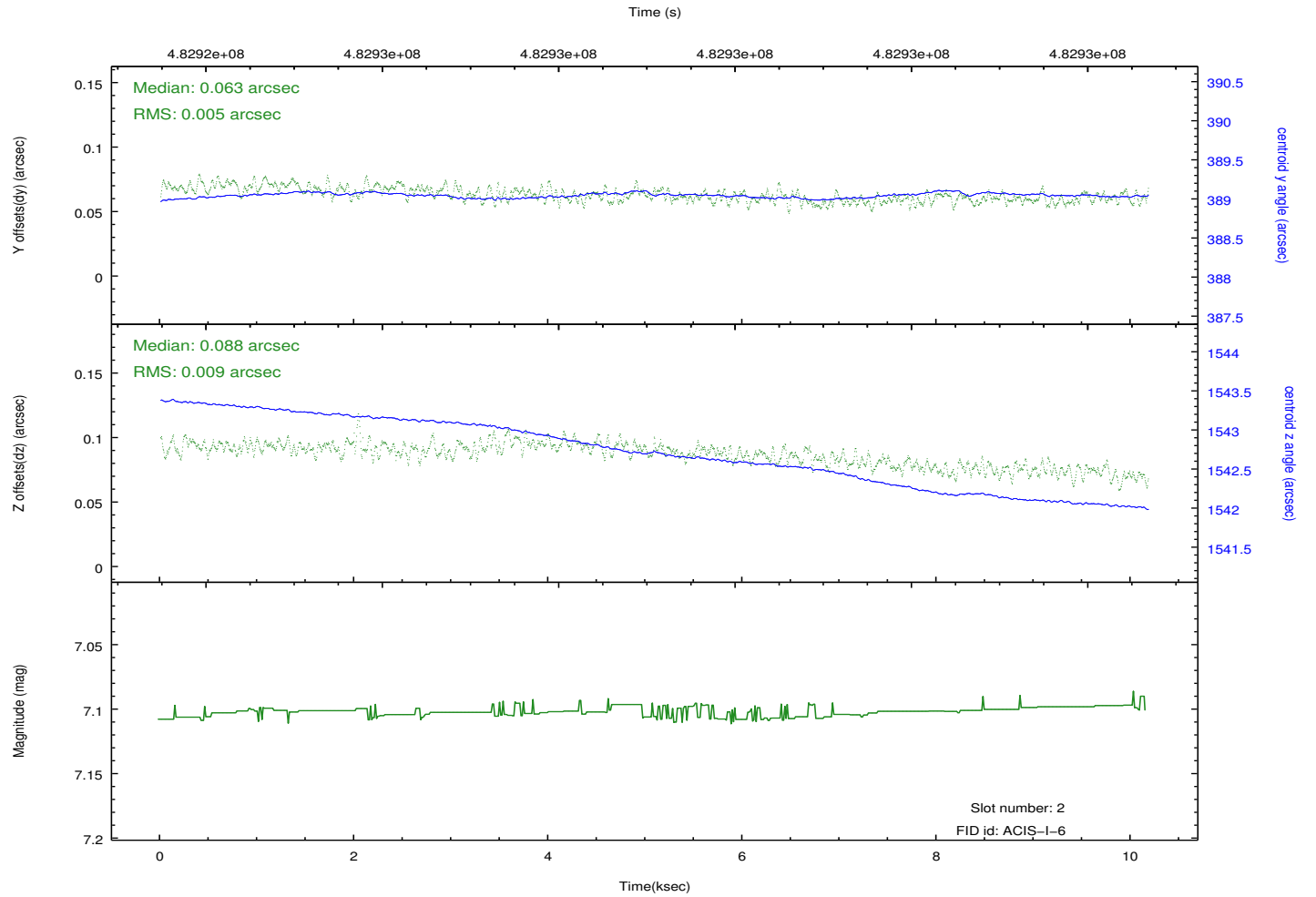
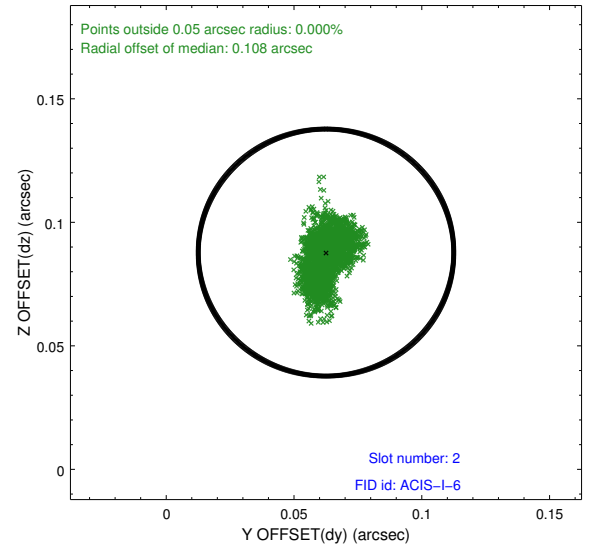
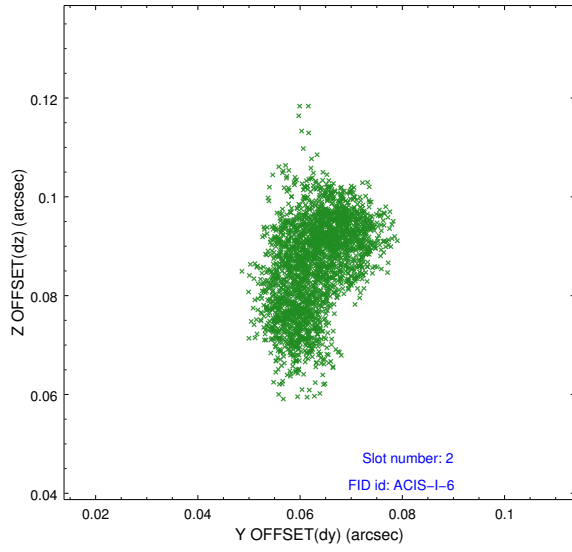
2.5.1 Slot 0



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)	2014.12.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.084300077558

A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.