

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15313 - L2 Version 3
Chandra X-Ray Center

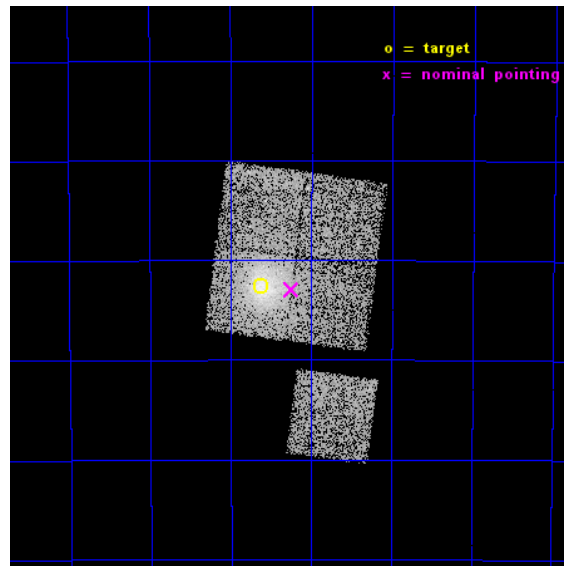
L2 Processing Date : Dec 3 2014

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1 Front

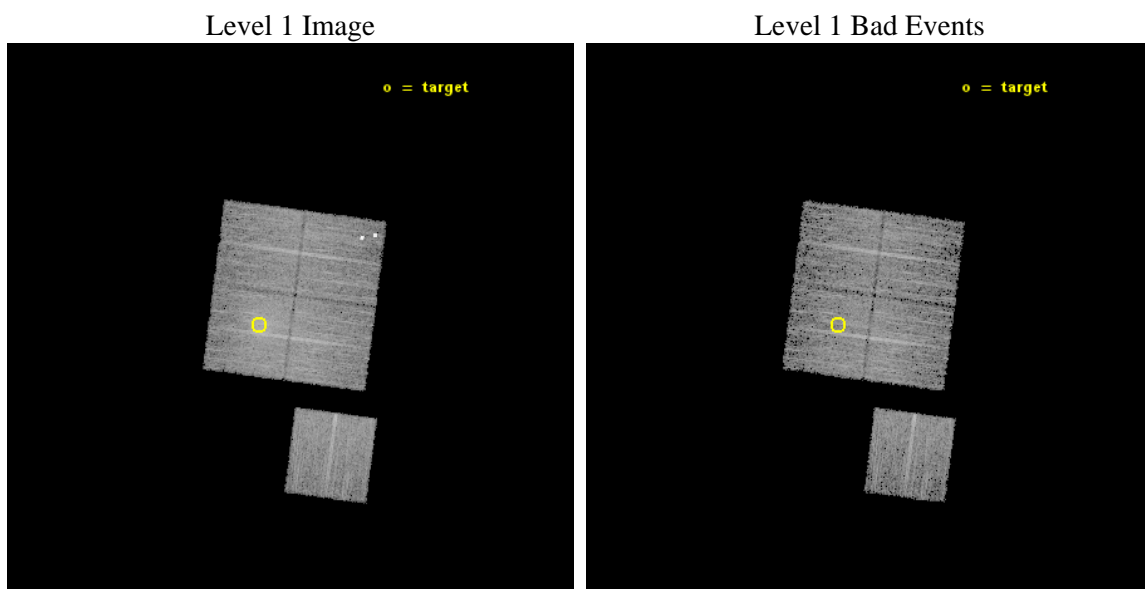
seq_num	801346	Sequence number
obs_id	15313	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G269.31-49.87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	52.157917	Observer's specified target RA [deg]
dec_targ	-55.710444	Observer's specified target Dec [deg]
ra_nom	52.061851963129	Nominal RA [deg]
dec_nom	-55.715705418932	Nominal Dec [deg]
roll_nom	187.52173016454	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10084.054507256	Sum of GTIs [s]
livetime	9952.2989113453	Livetime [s]
ontime0	10083.931387246	Sum of GTIs [s]
ontime1	10083.972427249	Sum of GTIs [s]
ontime2	10084.013467252	Sum of GTIs [s]
ontime3	10084.054507256	Sum of GTIs [s]
ontime6	10083.890347242	Sum of GTIs [s]
l2events	37002	Number of level 2 events



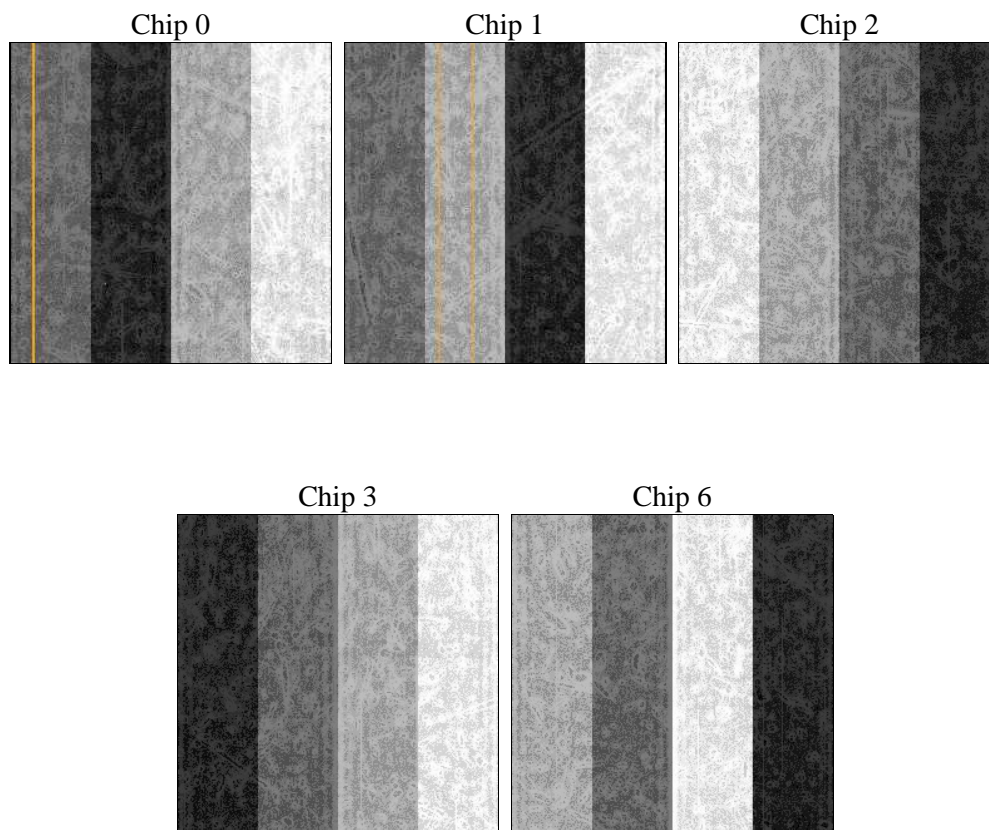
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.627000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10084.054507256	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10083.931387246	Sum of GTIs [s]
date	2014-12-03T23:30:08	Date and time of file creation	ontime1	10083.972427249	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	10084.013467252	Sum of GTIs [s]
			ontime3	10084.054507256	Sum of GTIs [s]
			ontime6	10083.890347242	Sum of GTIs [s]
			l1events	268223	Number of level 1 events

2.1.4 Events

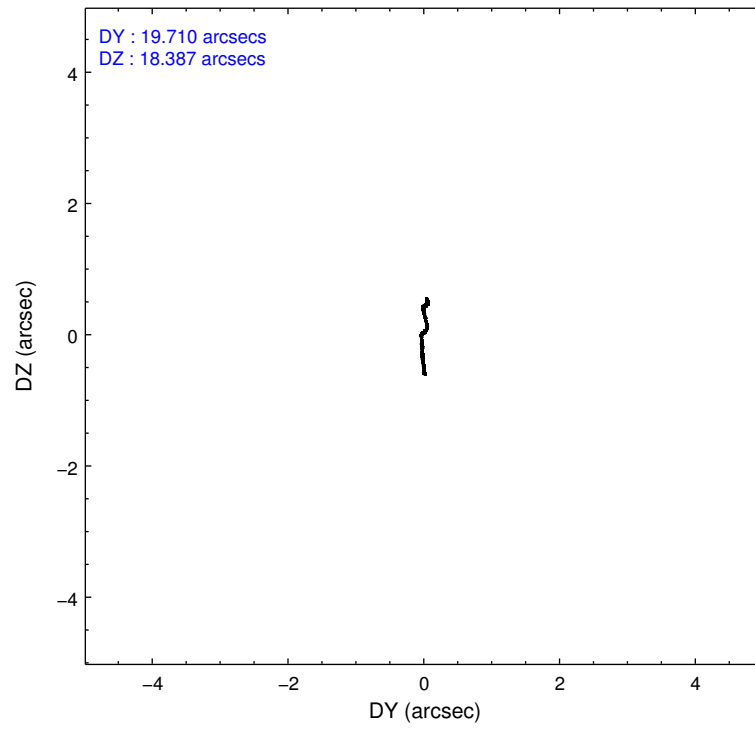
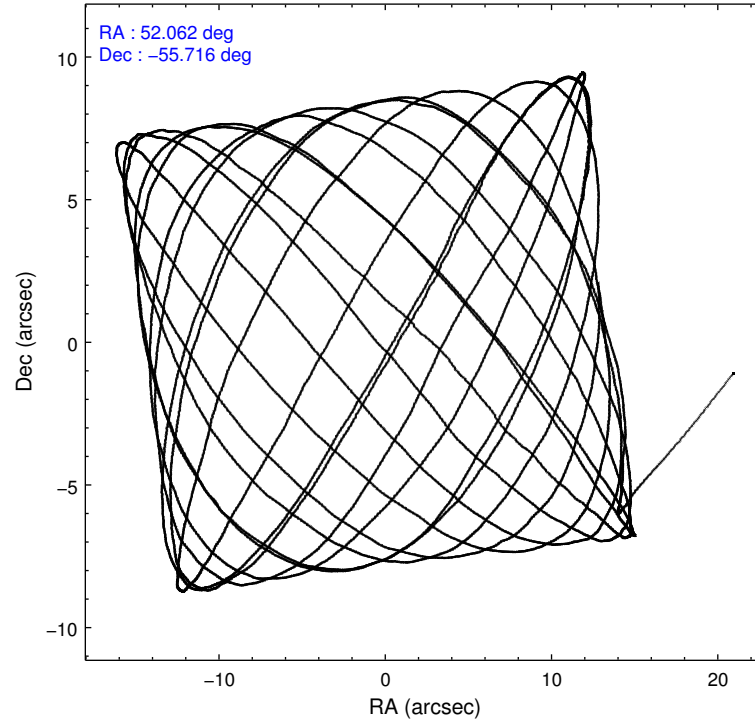
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	53892	47825	54986	60483	51037
rejected events	41260	40514	48373	44787	44837
rejected %	76%	84%	87%	74%	87%

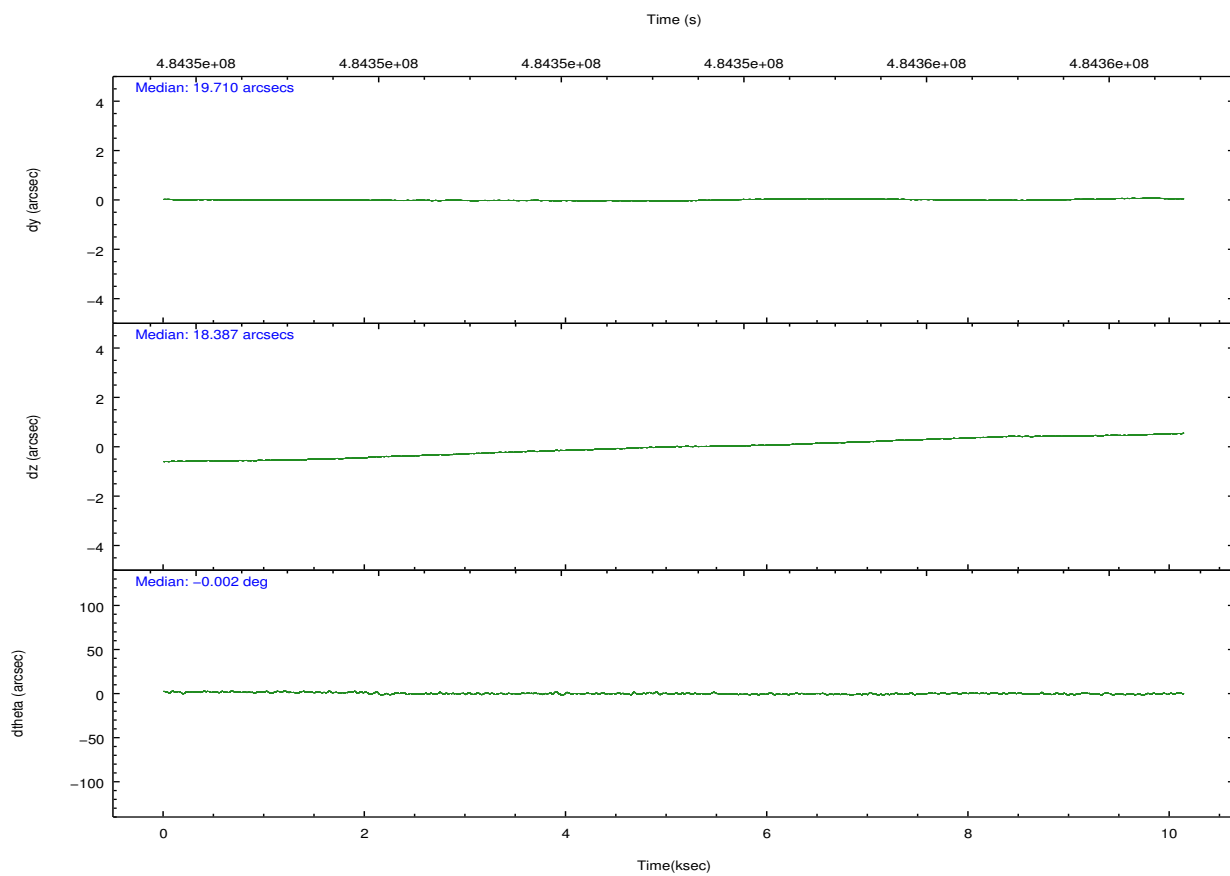
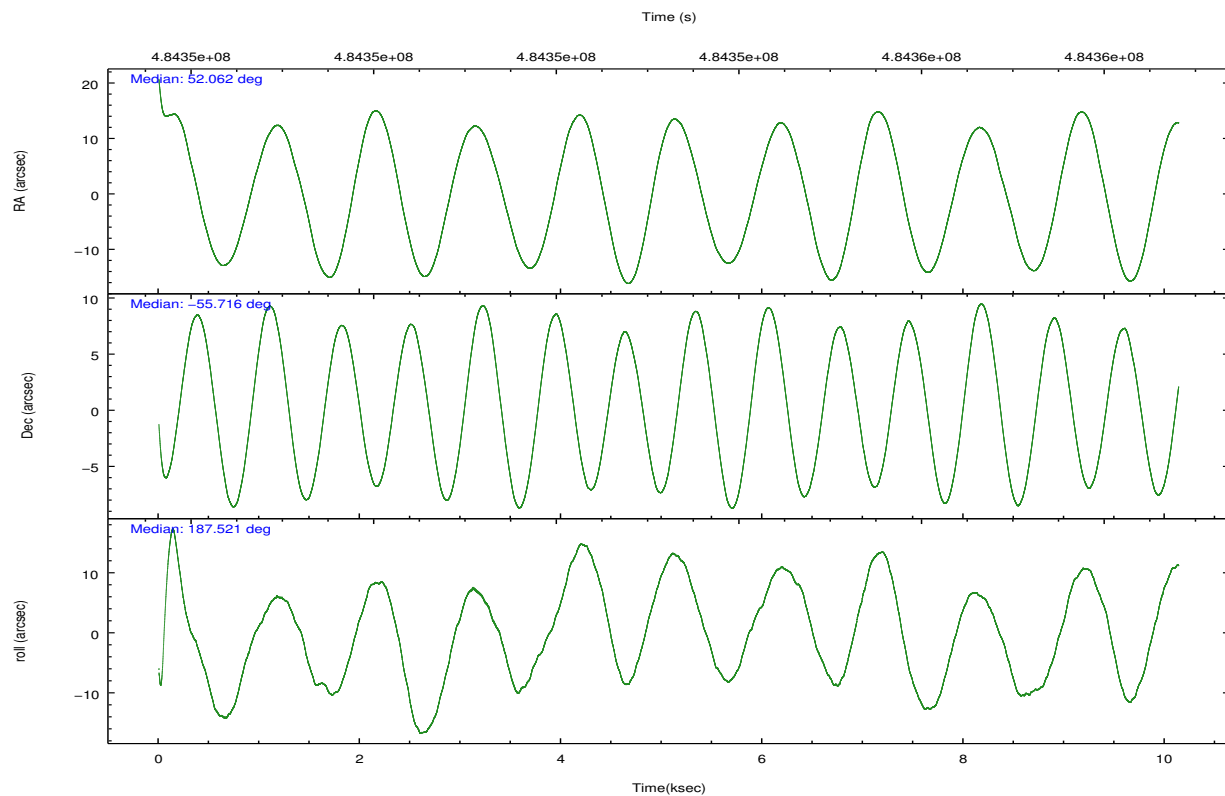
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5379	2852	2676	10252	2112
	9%	5%	4%	16%	4%
grade 1 events	34	35	34	60	23
	0%	0%	0%	0%	0%
grade 2 events	4744	1678	1533	2262	1327
	8%	3%	2%	3%	2%
grade 3 events	660	648	629	875	668
	1%	1%	1%	1%	1%
grade 4 events	617	679	635	900	607
	1%	1%	1%	1%	1%
grade 5 events	2355	2479	2176	2831	2643
	4%	5%	3%	4%	5%
grade 6 events	1239	1457	1142	1413	1492
	2%	3%	2%	2%	2%
grade 7 events	38864	37997	46161	41890	42165
	72%	79%	83%	69%	82%

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	52.100382	52.06185196312902	CCD I2 on	Y	Y
[deg] Pointing Dec	-55.698835	-55.71570541893202	CCD I3 on	Y	Y
[deg] Pointing Roll	187.344917	187.5217301645392	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)	484348303.184000	484347049.99633	CCD S5 on	N	N
Observation start date	2013-05-07T21:10:36	2013-05-07T20:50:49	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	484358304.184000	484358539.22195	On-chip summing requested	N	N
Observation end date	2013-05-07T23:57:17	2013-05-08T00:02:19	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



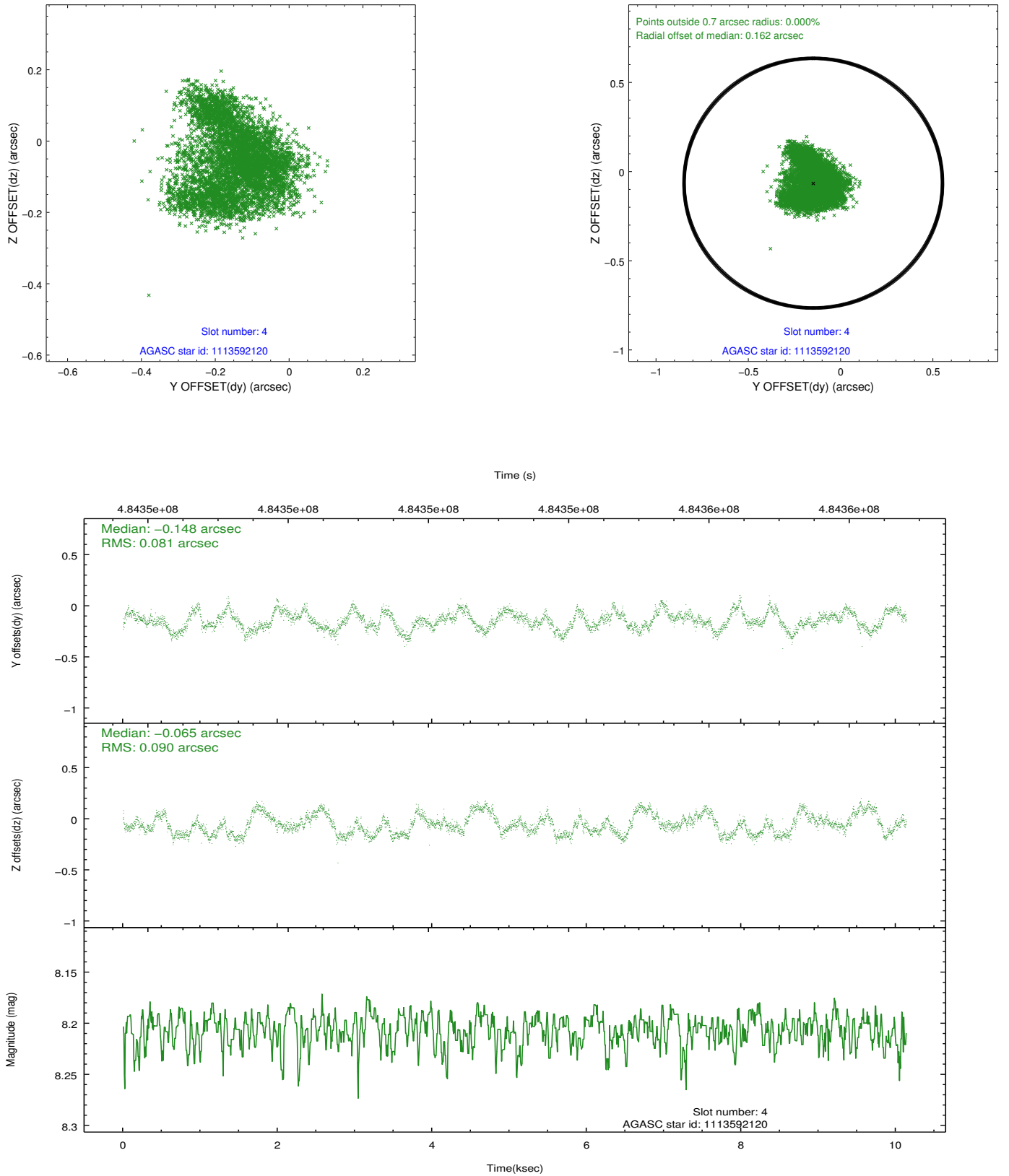


Slot Statistics

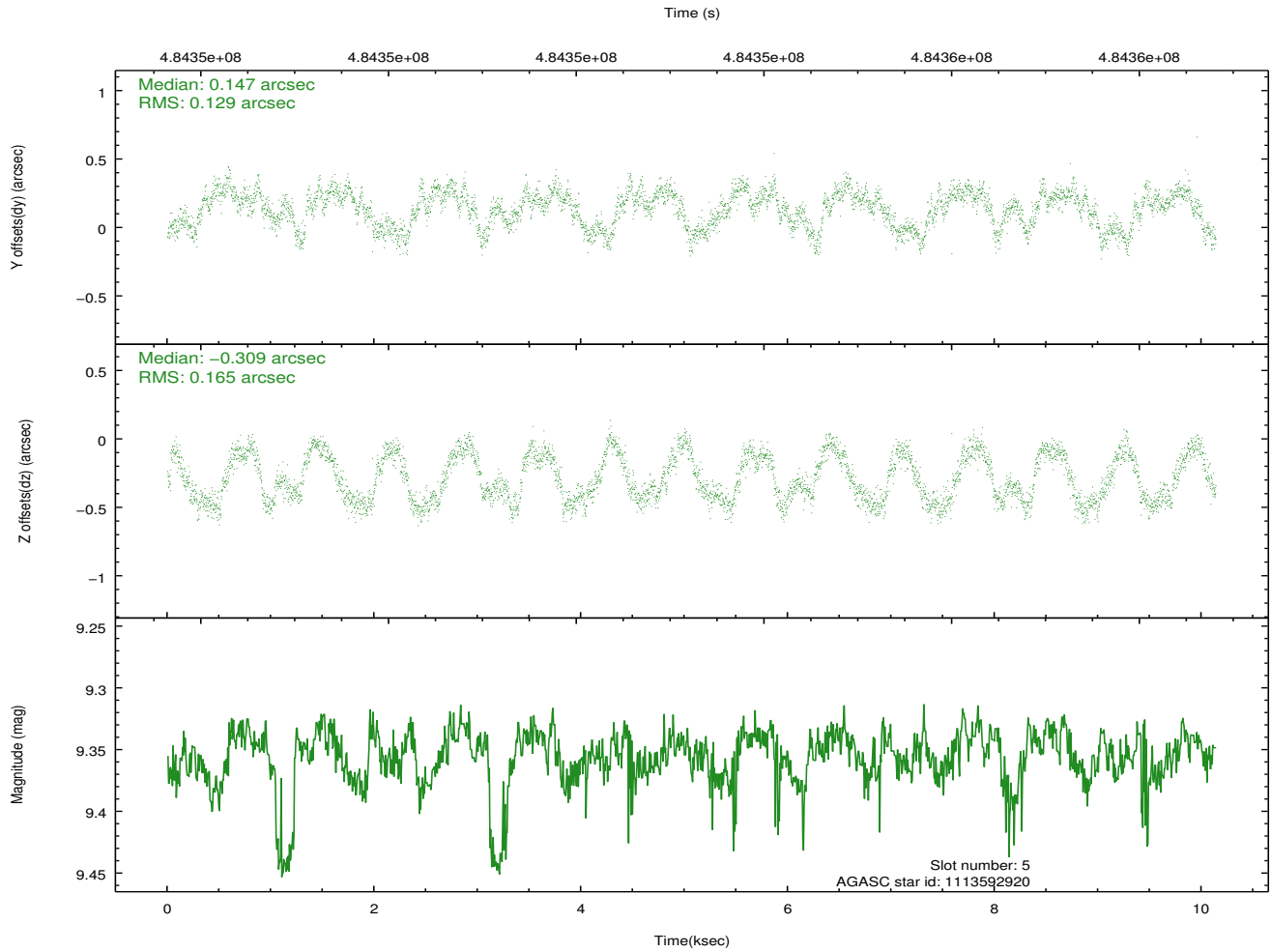
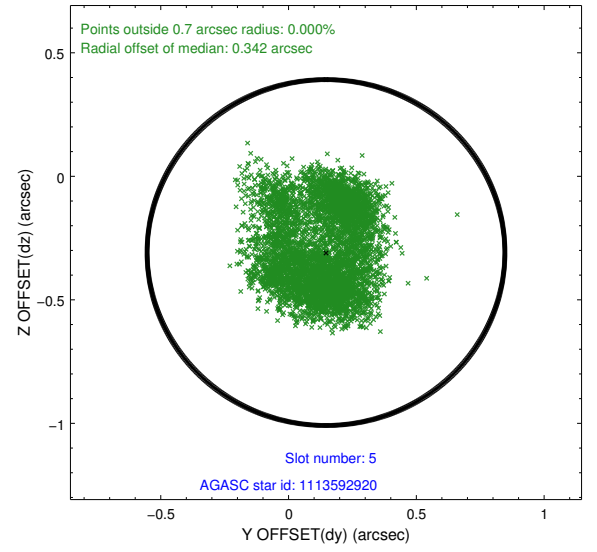
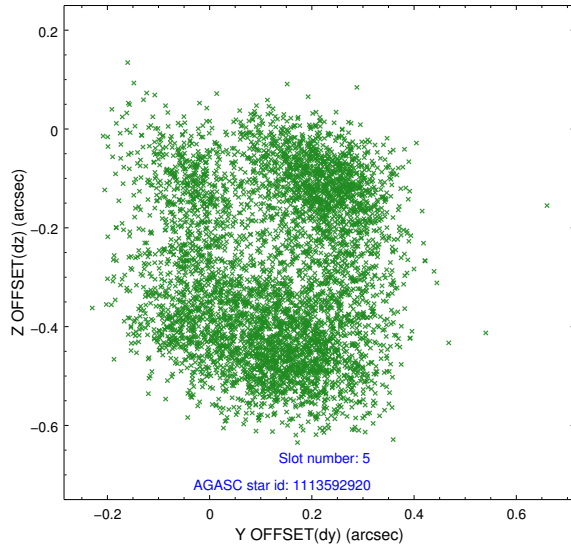
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.12	2473	-0.119	-0.069	0.020	0.037	0.000000	0.000000	-775.22	-1006.52
1	FID		ACIS-I-4	7.08	2473	0.272	0.087	0.009	0.014	0.000000	0.000000	2138.95	899.43
2	FID		ACIS-I-5	7.16	2473	-0.253	0.051	0.016	0.033	0.000000	0.000000	-1828.11	896.85
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	1113592120	8.21	4945	-0.148	-0.065	0.134	0.197	51.906839	-55.828033	447.86	411.86
5	GUIDE	used	1113592920	9.35	4934	0.147	-0.309	0.231	0.319	53.136445	-56.224667	-1812.17	2157.67
6	GUIDE	used	1113598168	10.29	4774	-0.341	0.064	0.293	0.448	51.582651	-55.408332	915.80	-1168.11
7	GUIDE	used	1113598296	6.53	4944	0.368	0.260	0.147	0.227	52.820916	-55.249200	-1671.84	-1408.92

2.4 Star Slots

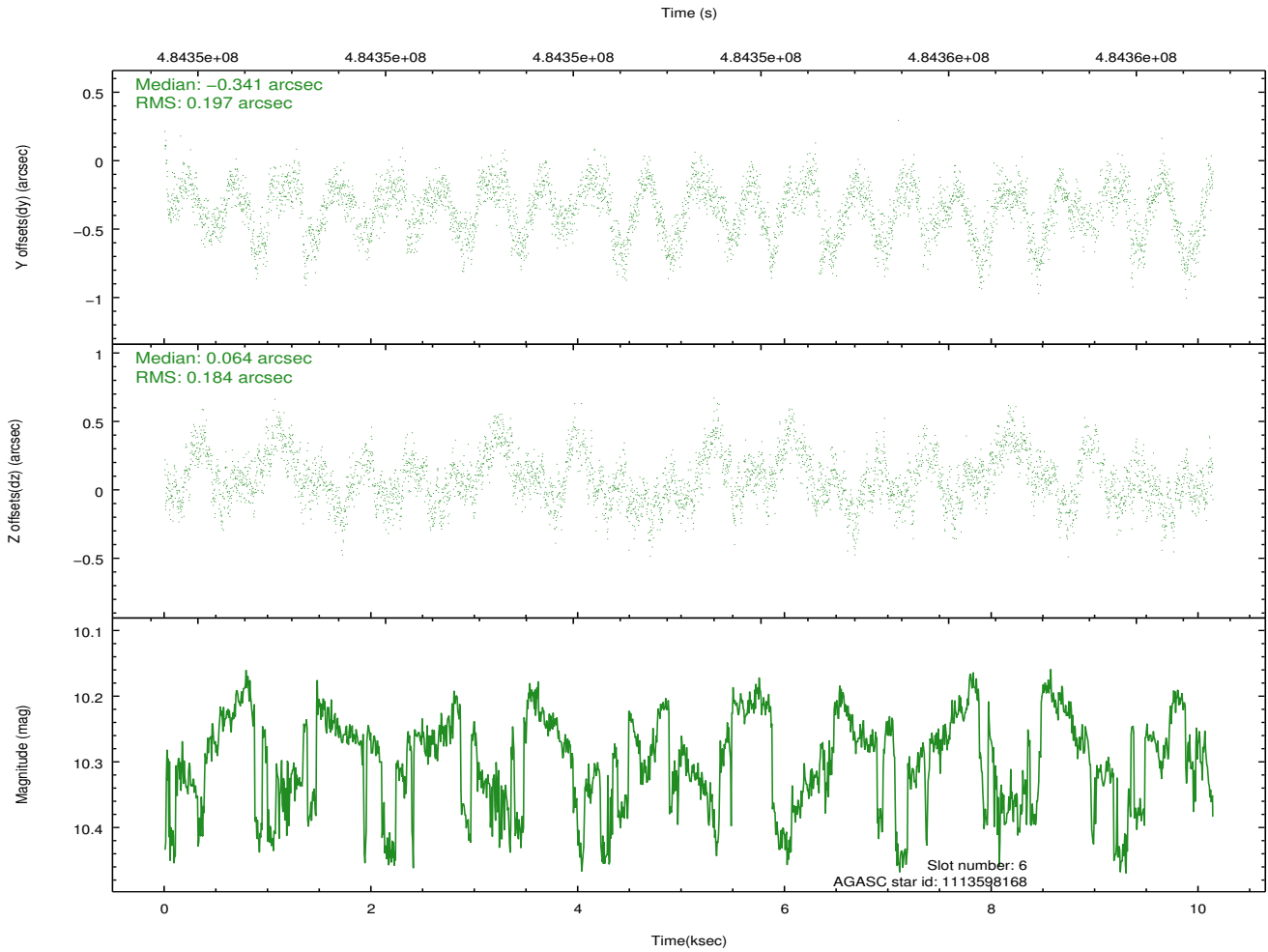
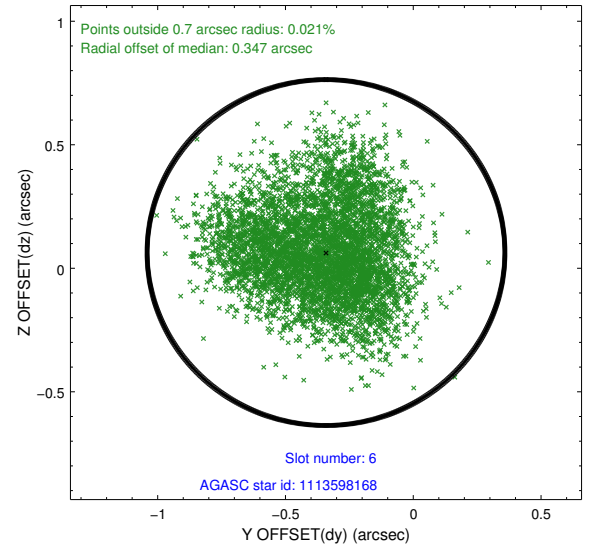
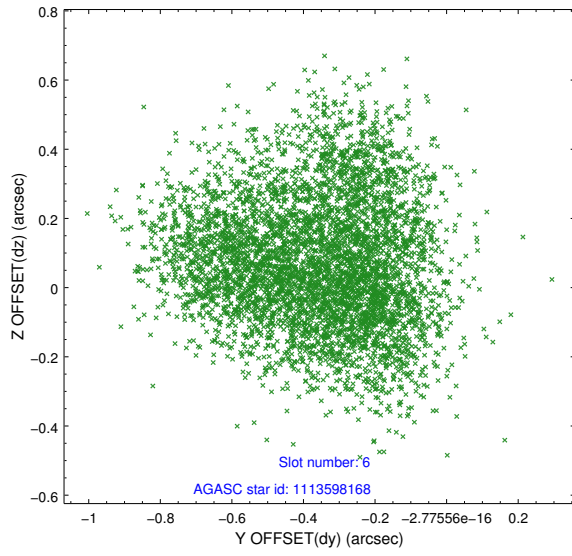
2.4.1 Slot 4



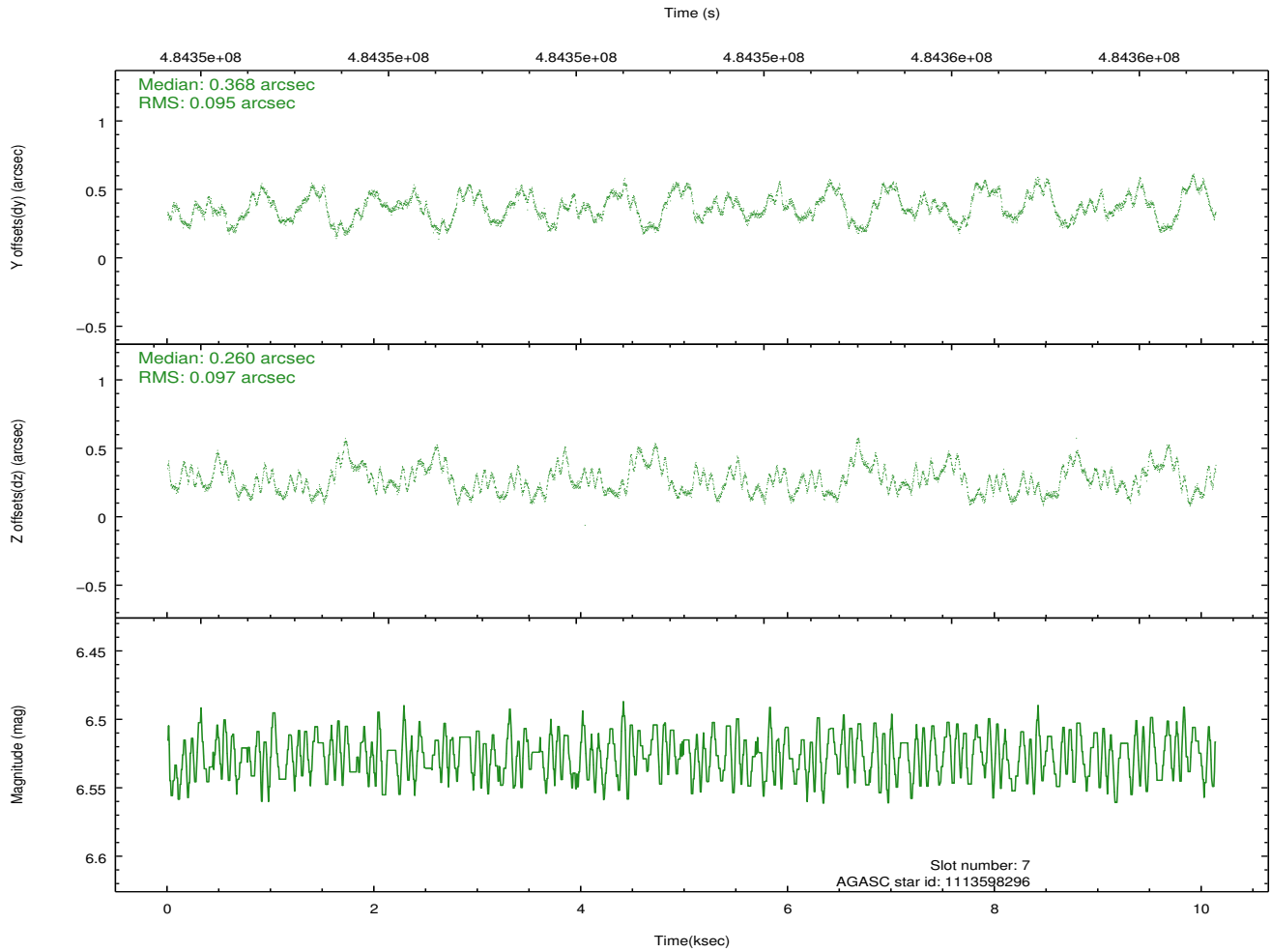
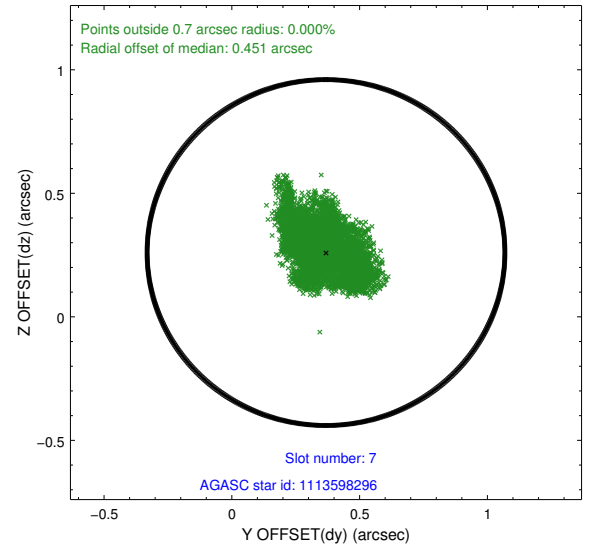
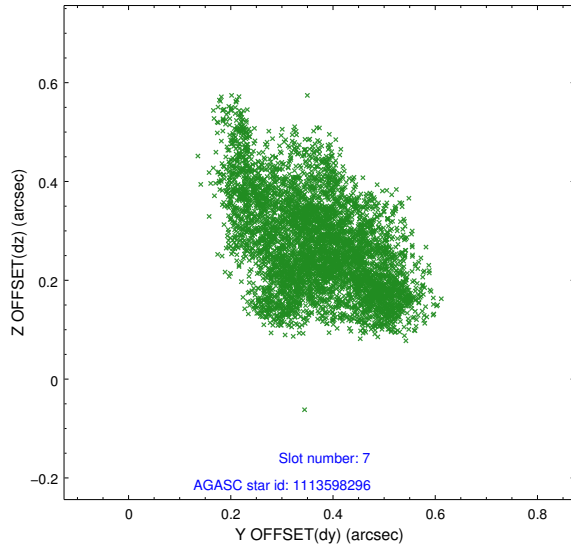
2.4.2 Slot 5



2.4.3 Slot 6

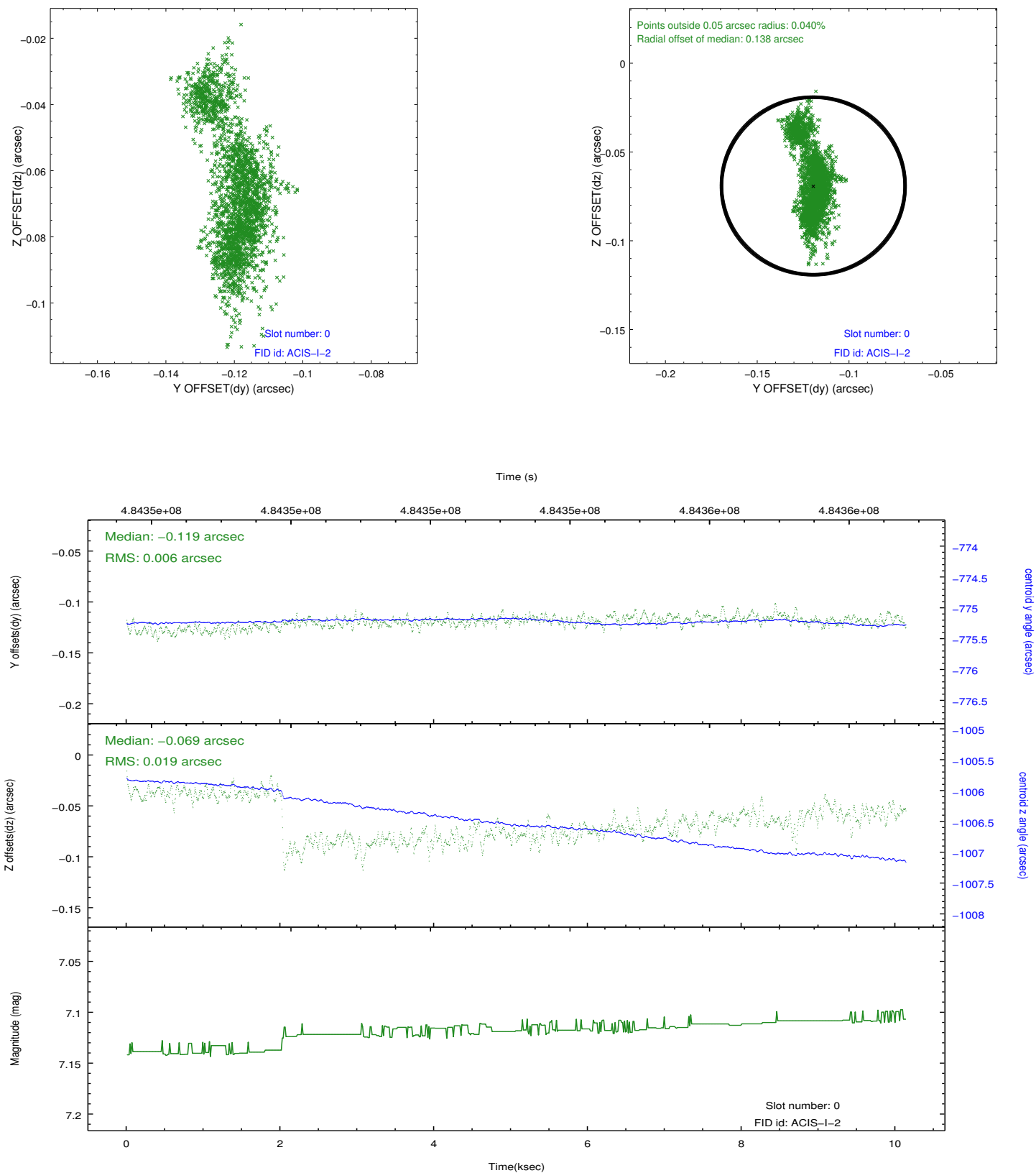


2.4.4 Slot 7

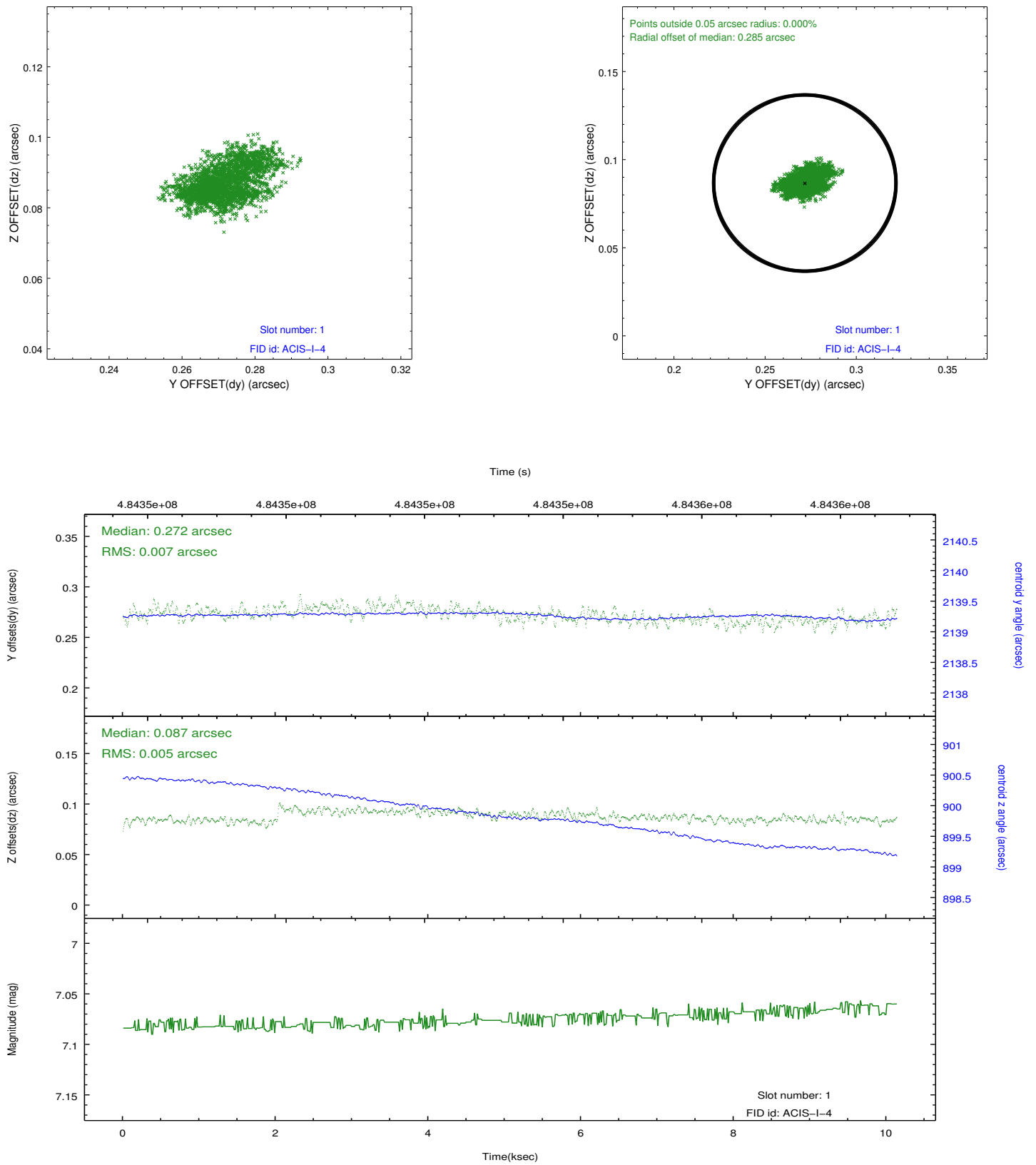


2.5 FID Slots

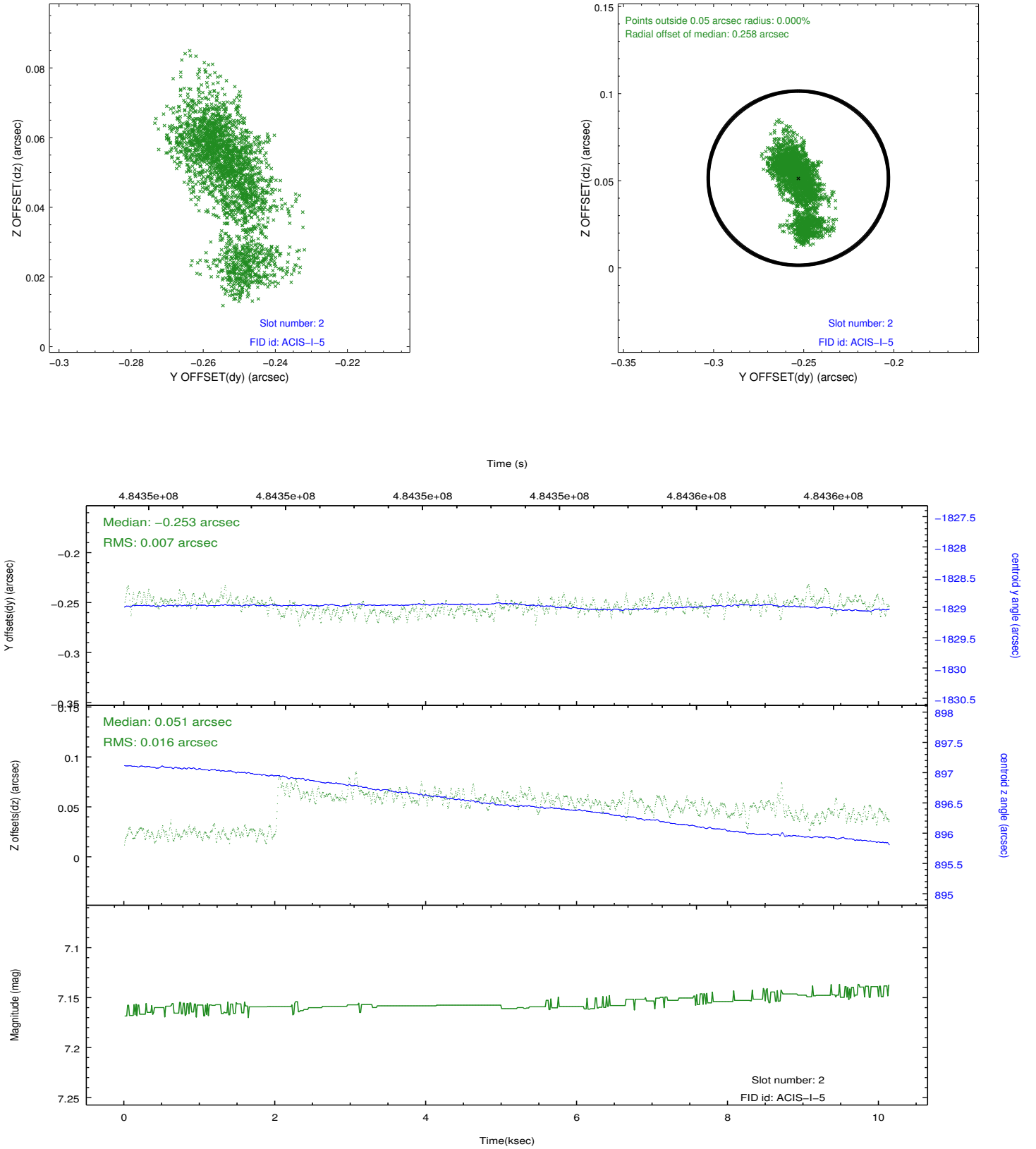
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.084054507256

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this guide star from the solution.

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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.