

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 14587 - L2 Version 2
Chandra X-Ray Center

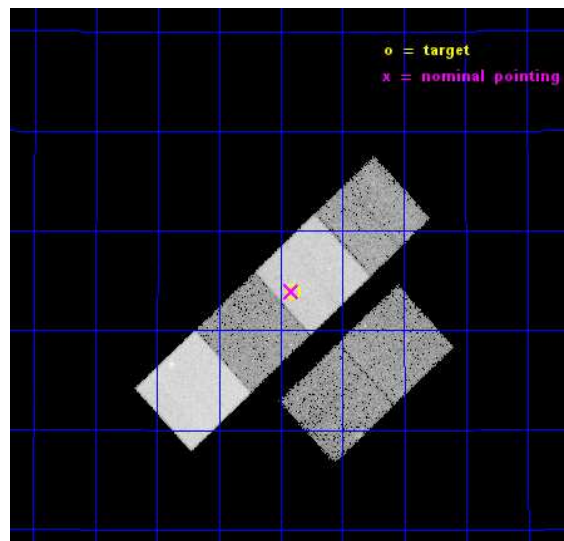
L2 Processing Date : Dec 8 2014

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1 Front

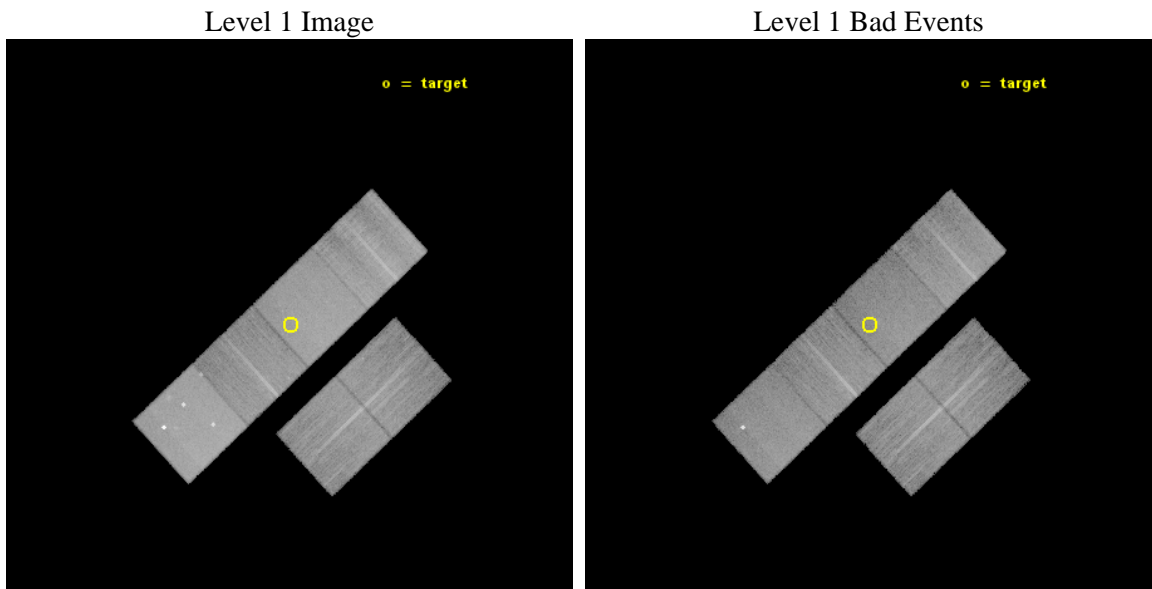
seq_num	200888	Sequence number
obs_id	14587	Observation id
title	COMPACT AND DIFFUSE X-RAY SOURCES IN THE YOUNGEST PLANETARY NEBULAE	
observer	Dr. Joel Kastner	Principal investigator
object	NGC 6894	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	304.1	Observer's specified target RA [deg]
dec_targ	30.564778	Observer's specified target Dec [deg]
ra_nom	304.10338672676	Nominal RA [deg]
dec_nom	30.565530723877	Nominal Dec [deg]
roll_nom	316.92791849935	Nominal Roll [deg]
revision	2	Processing version of data
ontime	29618.658757567	Sum of GTIs [s]
livetime	29243.609466164	Livetime [s]
ontime2	29618.699797571	Sum of GTIs [s]
ontime3	29618.535637558	Sum of GTIs [s]
ontime5	29618.617717564	Sum of GTIs [s]
ontime6	29618.576677561	Sum of GTIs [s]
ontime7	29618.658757567	Sum of GTIs [s]
ontime8	29618.494597554	Sum of GTIs [s]
l2events	249232	Number of level 2 events



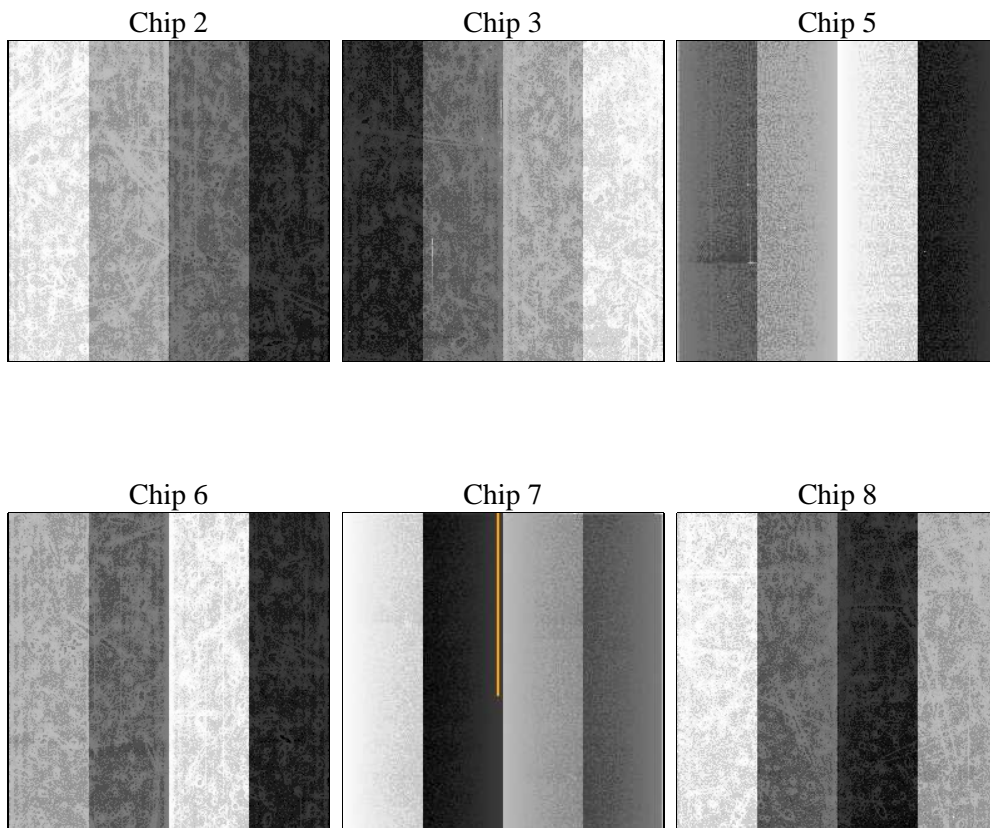
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29651.849000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	29618.658757567	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	29618.699797571	Sum of GTIs [s]
date	2014-12-08T10:03:30	Date and time of file creation	ontime3	29618.535637558	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	29618.617717564	Sum of GTIs [s]
			ontime6	29618.576677561	Sum of GTIs [s]
			ontime7	29618.658757567	Sum of GTIs [s]
			ontime8	29618.494597554	Sum of GTIs [s]
			l1events	1036126	Number of level 1 events

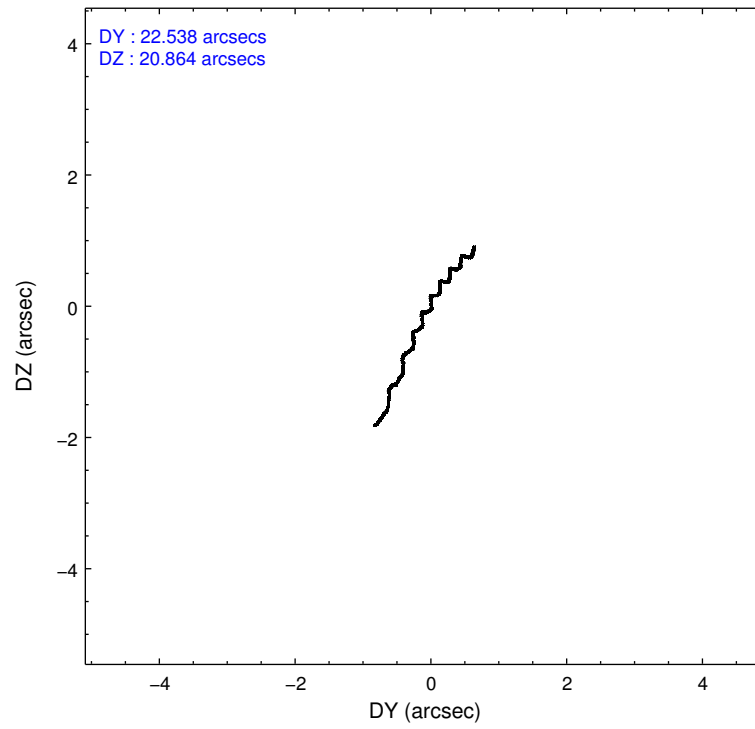
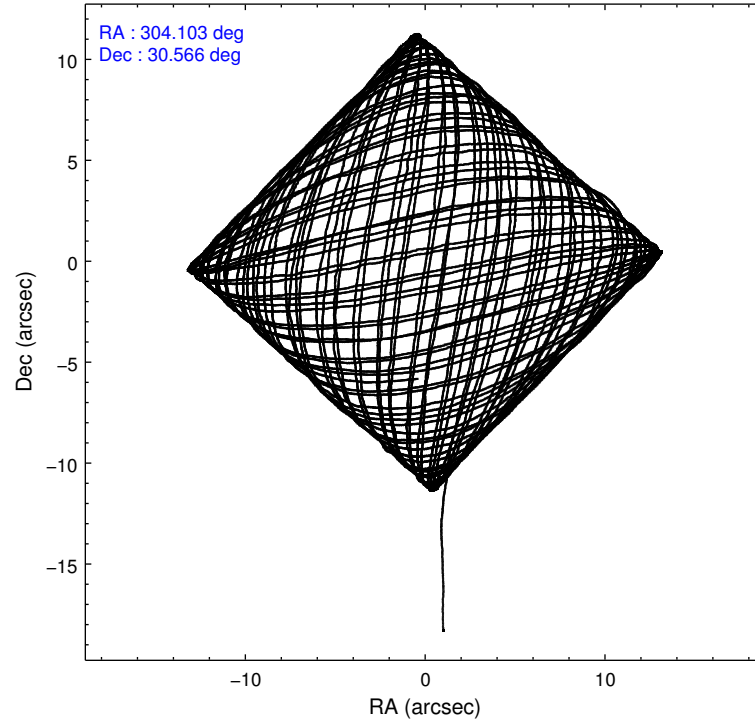
2.1.4 Events

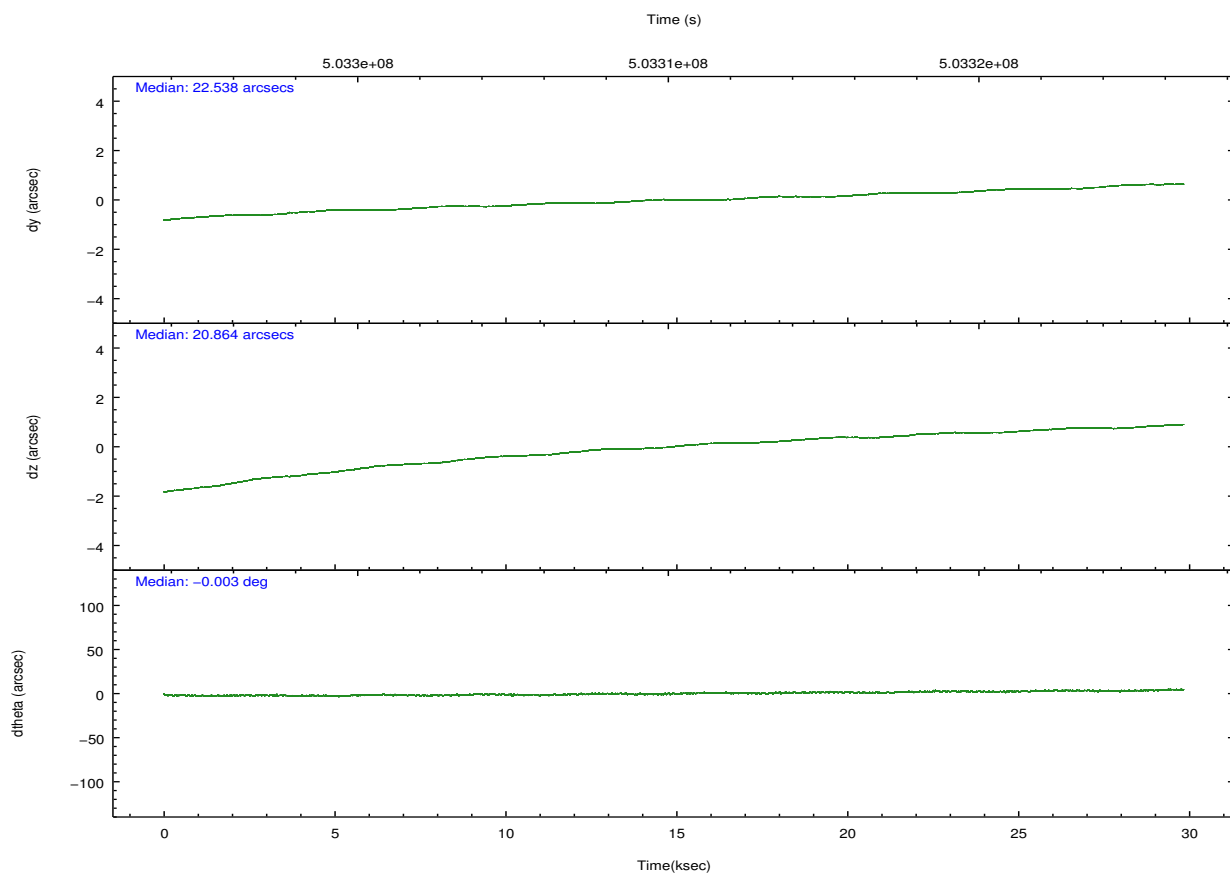
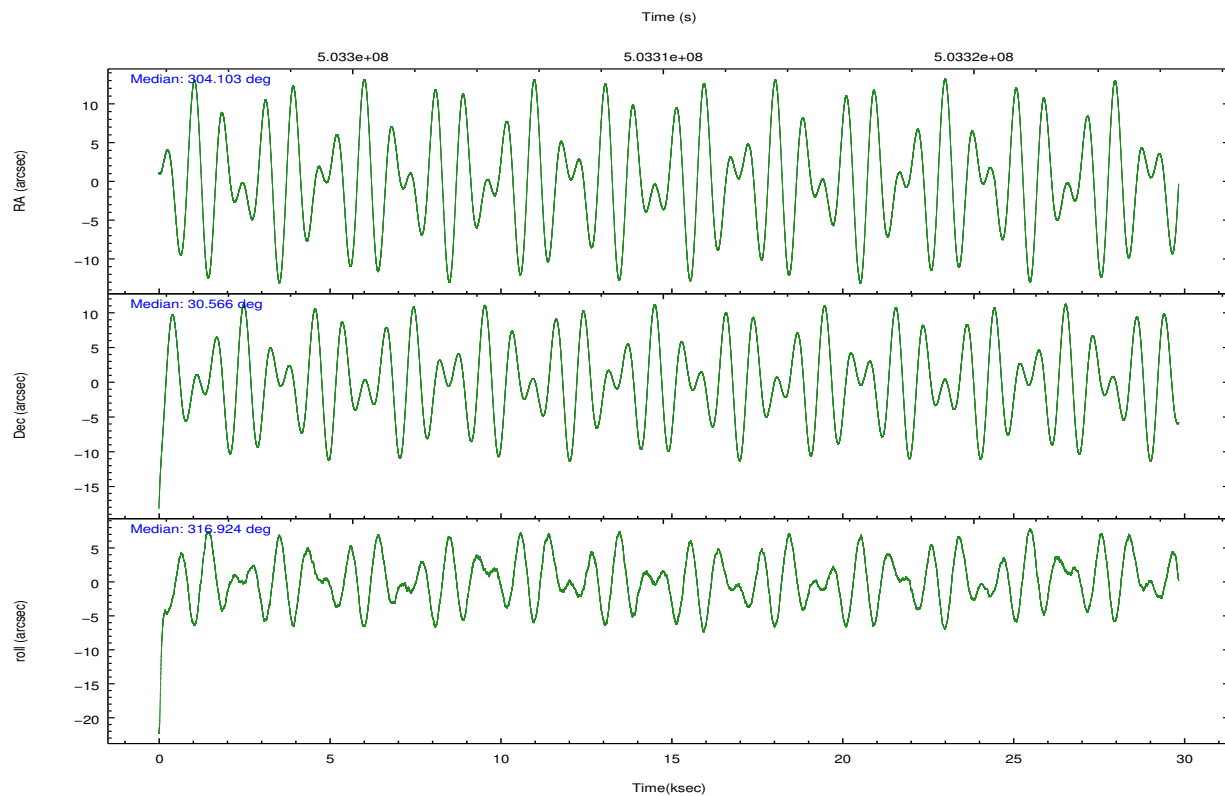
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	143125	129259	244196	139807	192025	187714	grade 0 events	5703	5430	13596	5846	7330	15101
rejected events	126944	113696	124699	122358	108246	136669		3%	4%	5%	4%	3%	8%
rejected %	88%	87%	51%	87%	56%	72%	grade 1 events	86	78	390	72	200	173
								0%	0%	0%	0%	0%	0%
							grade 2 events	4011	3504	36956	3977	17159	12147
								2%	2%	15%	2%	8%	6%
							grade 3 events	1639	1701	3851	1751	7305	5140
								1%	1%	1%	1%	3%	2%
							grade 4 events	1612	1696	3946	1846	7307	4991
								1%	1%	1%	1%	3%	2%
							grade 5 events	6167	7425	17546	7481	20212	10973
								4%	5%	7%	5%	10%	5%
							grade 6 events	3218	3234	61166	4033	44688	13667
								2%	2%	25%	2%	23%	7%
							grade 7 events	120689	106191	106745	114801	87824	125522
								84%	82%	43%	82%	45%	66%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	304.072382	304.1033867267599	CCD I2 on	O3	Y
[deg] Pointing Dec	30.571350	30.56553072387657	CCD I3 on	O2	Y
[deg] Pointing Roll	316.787066	316.9279184993536	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	Y	Y
[s] Observation start time (MET)	503295439.184000	503294447.65469	CCD S5 on	N	N
Observation start date	2013-12-13T04:16:12	2013-12-13T04:00:47	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	503325091.184000	503325318.60639	On-chip summing requested	N	N
Observation end date	2013-12-13T12:30:24	2013-12-13T12:35:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



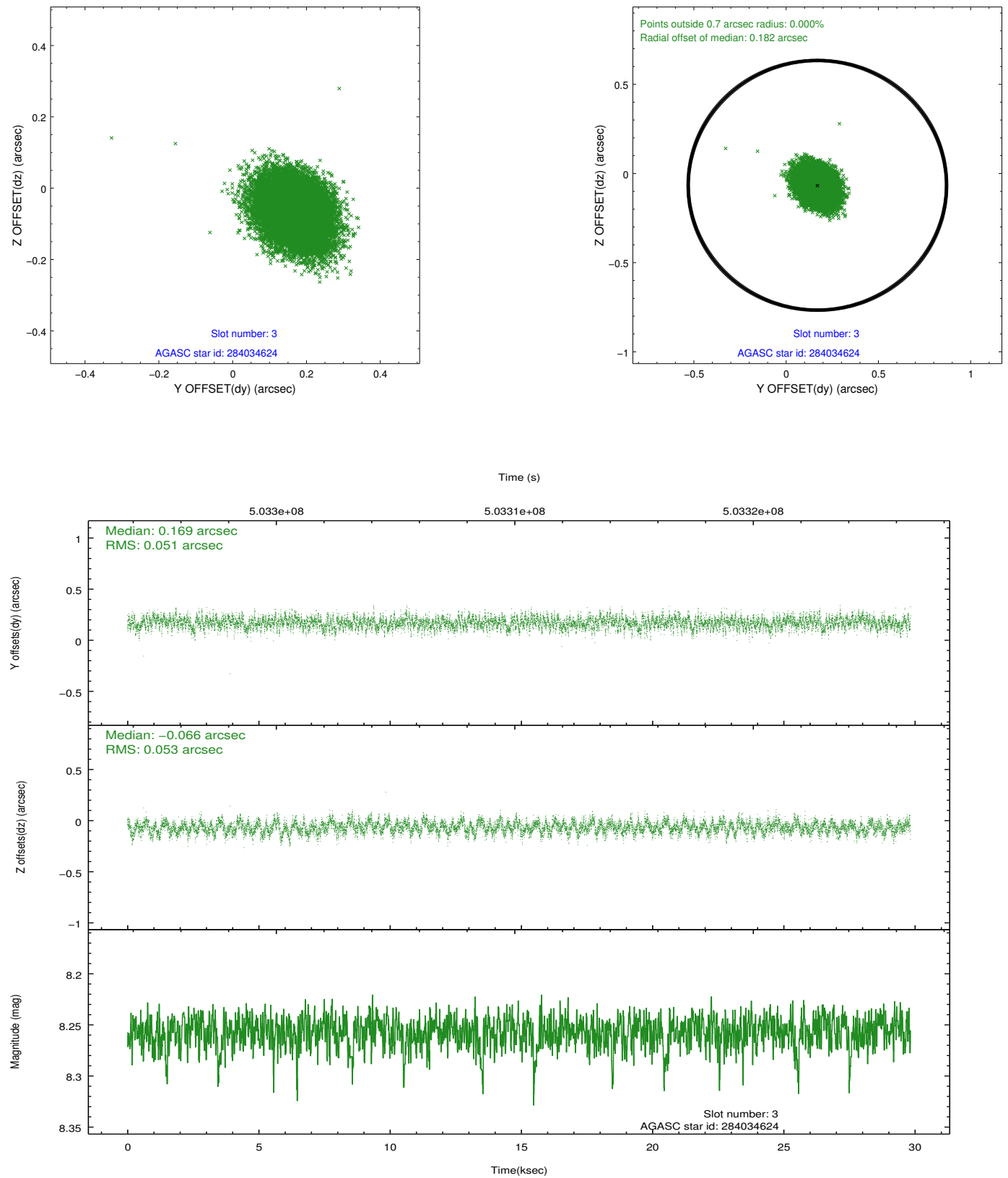


Slot Statistics

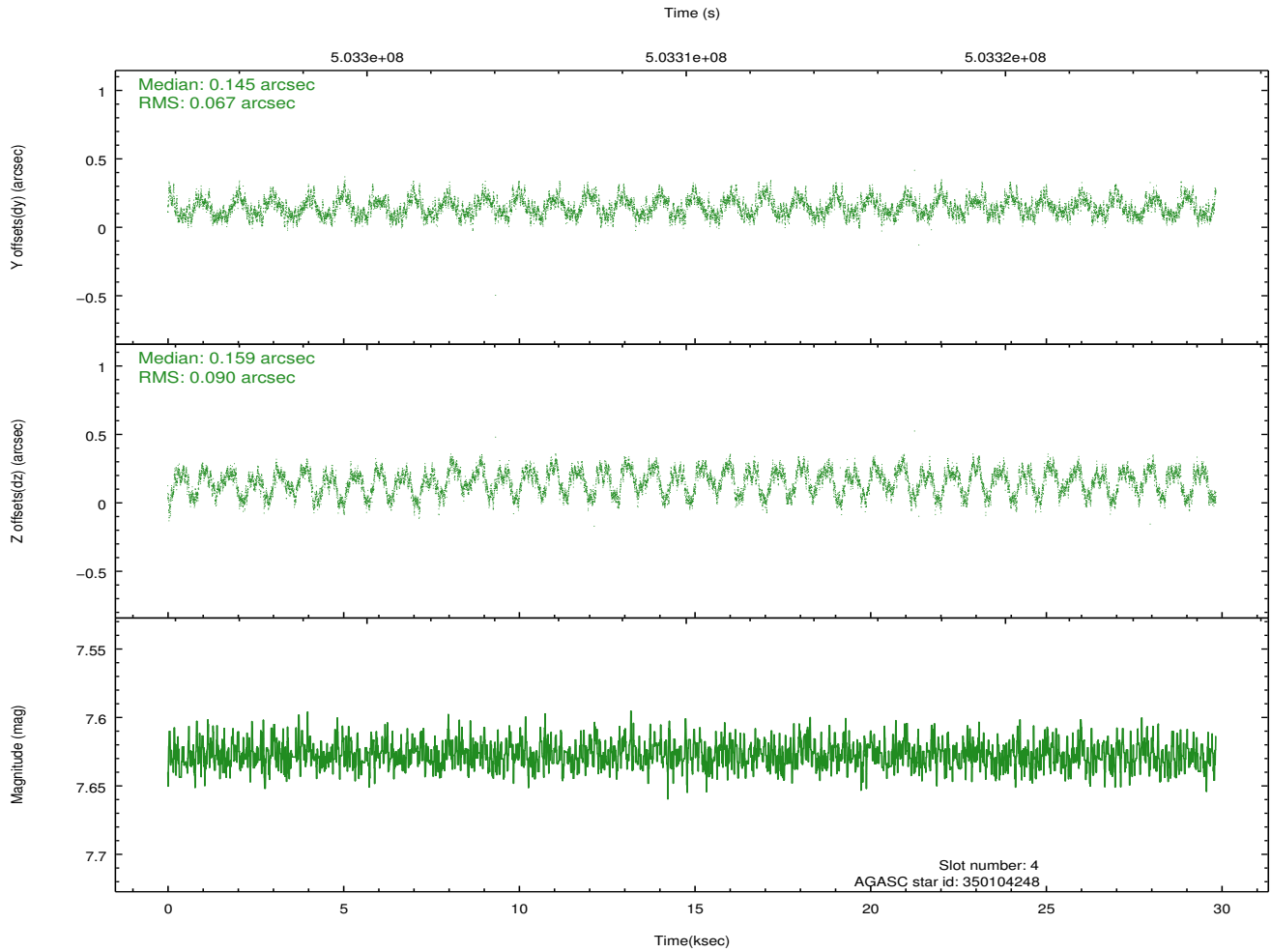
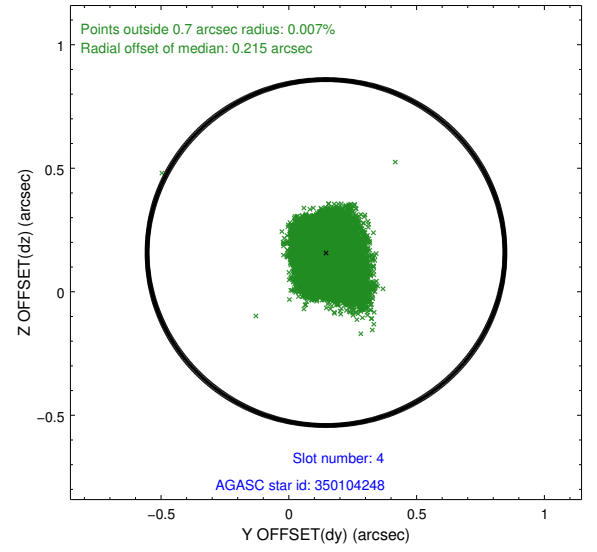
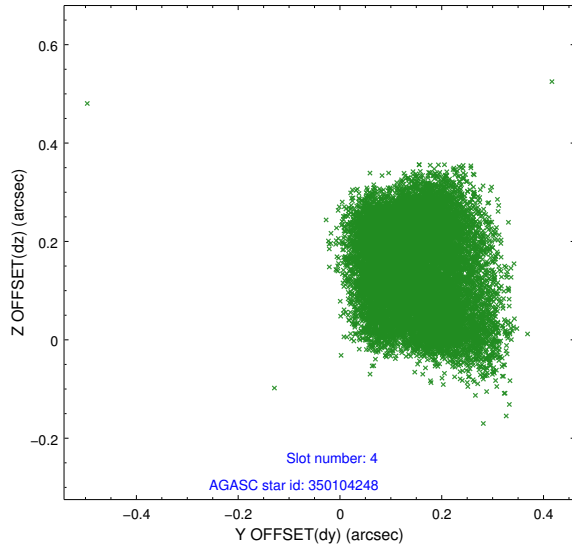
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.95	7277	-0.132	-0.075	0.010	0.020	0.000000	0.000000	-775.86	-1742.26
1	FID		ACIS-S-4	7.03	7277	0.175	0.068	0.007	0.013	0.000000	0.000000	2137.73	166.21
2	FID		ACIS-S-6	7.16	7277	-0.069	0.016	0.010	0.016	0.000000	0.000000	386.34	803.68
3	GUIDE	used	284034624	8.26	14549	0.169	-0.066	0.078	0.126	304.094757	29.770027	2027.03	-2054.35
4	GUIDE	used	350104248	7.63	14554	0.145	0.159	0.120	0.184	303.577439	30.177271	-152.63	-2085.98
5	GUIDE	used	350233312	8.15	14554	-0.137	-0.155	0.074	0.117	304.610006	30.821247	592.84	1796.58
6	GUIDE	used	350111376	9.09	14548	0.031	0.281	0.097	0.163	303.734567	31.221754	-2361.82	995.86
7	GUIDE	used	350234528	7.93	14552	-0.209	-0.206	0.067	0.106	304.823458	30.623656	1561.54	1736.40

2.4 Star Slots

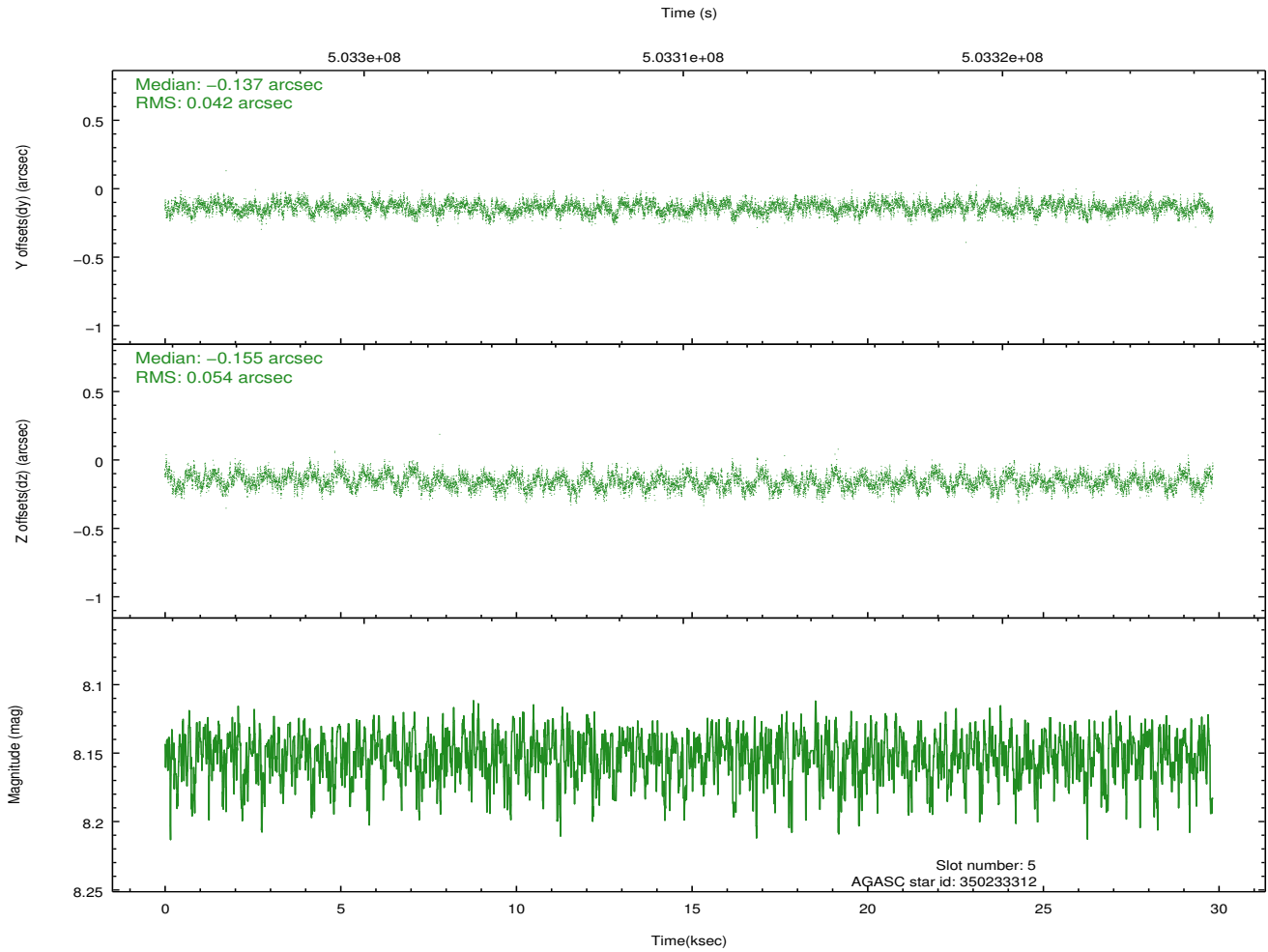
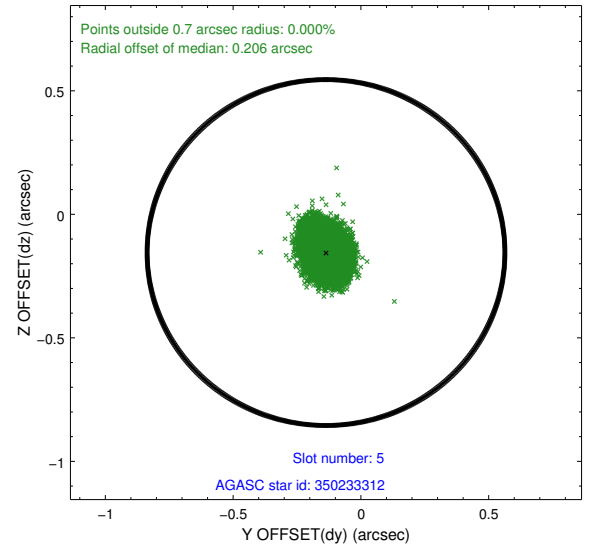
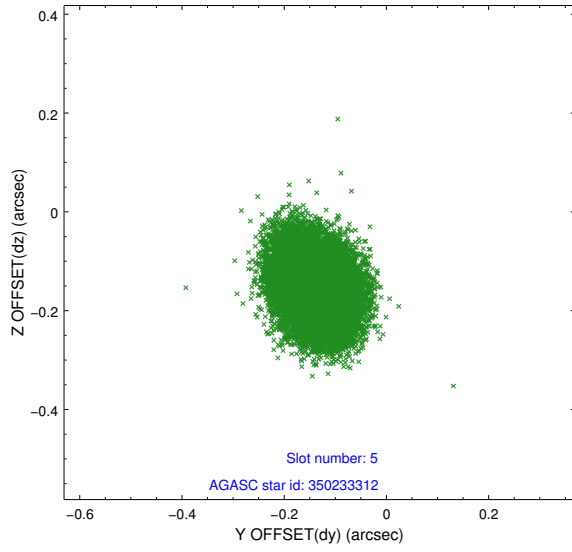
2.4.1 Slot 3



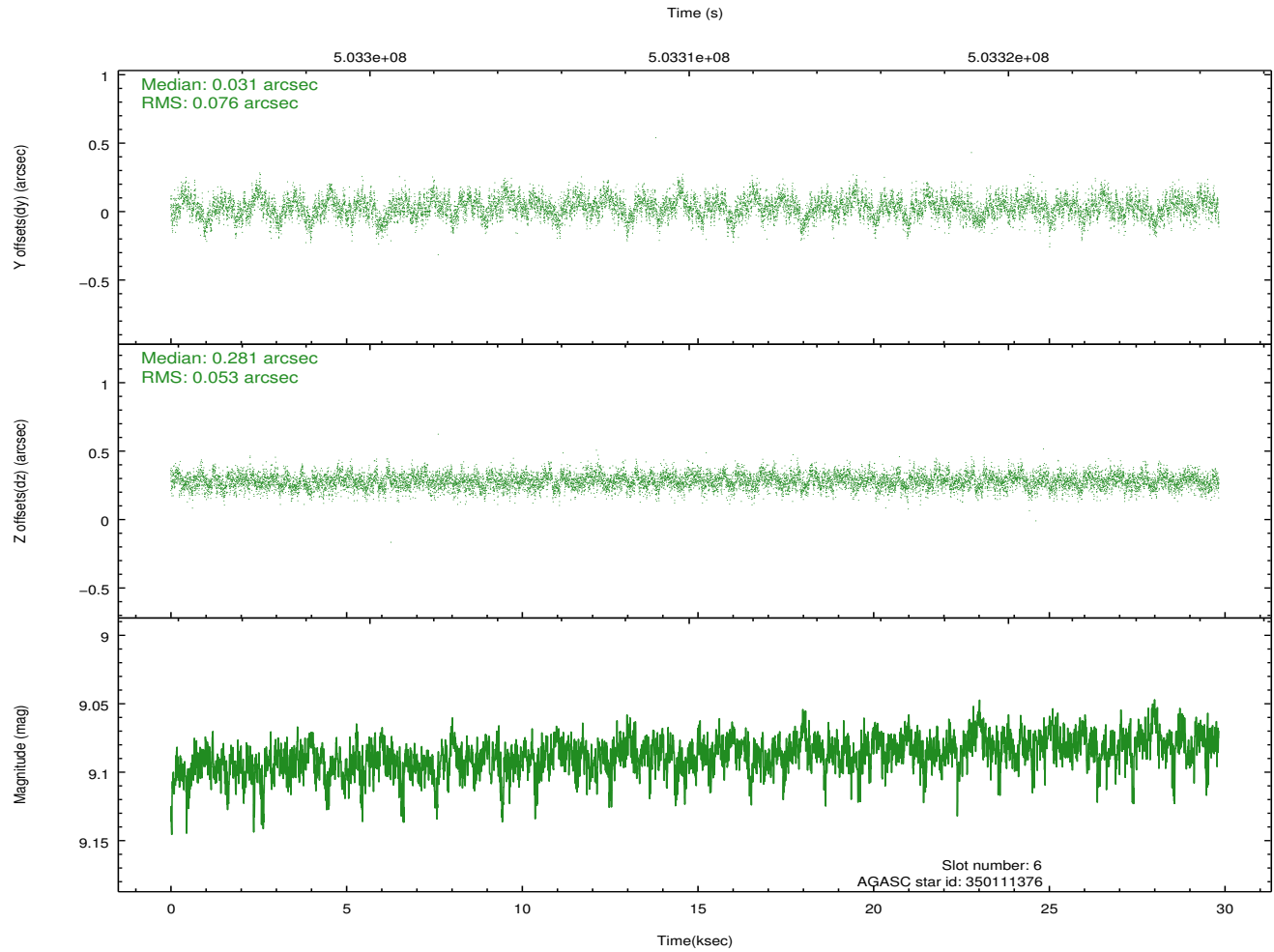
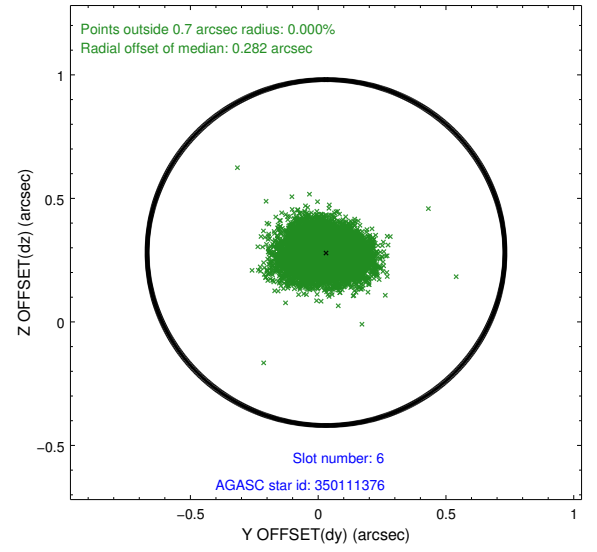
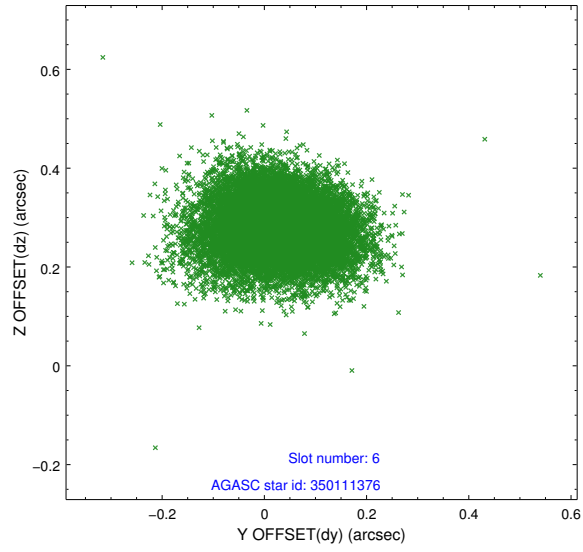
2.4.2 Slot 4



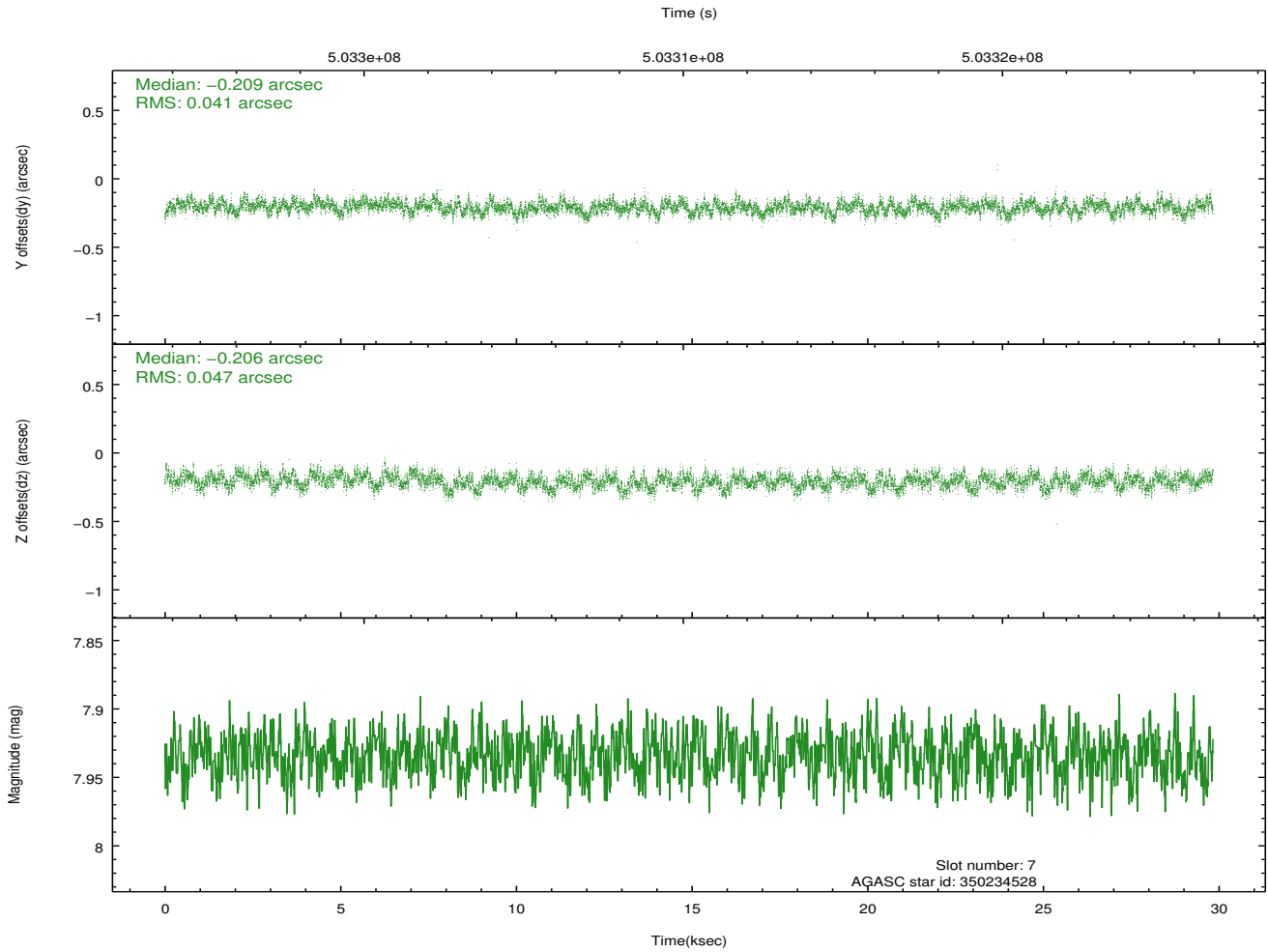
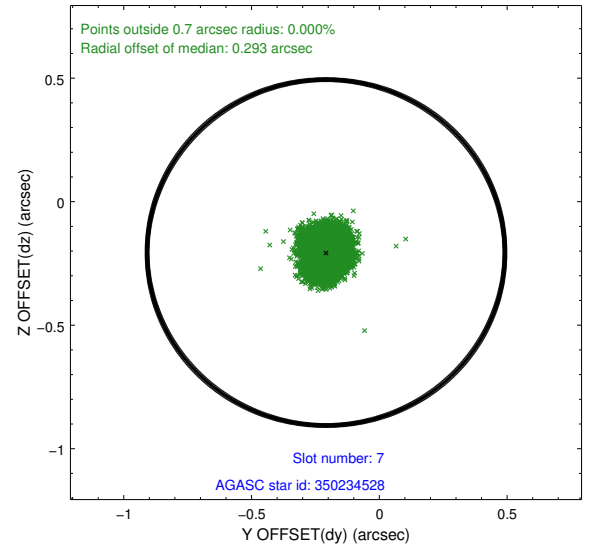
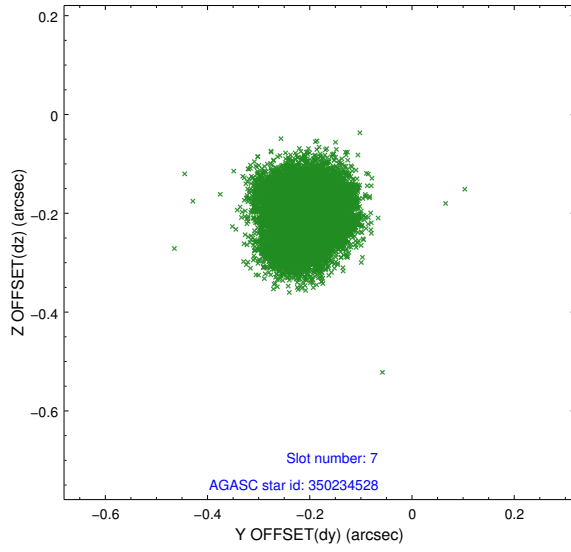
2.4.3 Slot 5



2.4.4 Slot 6

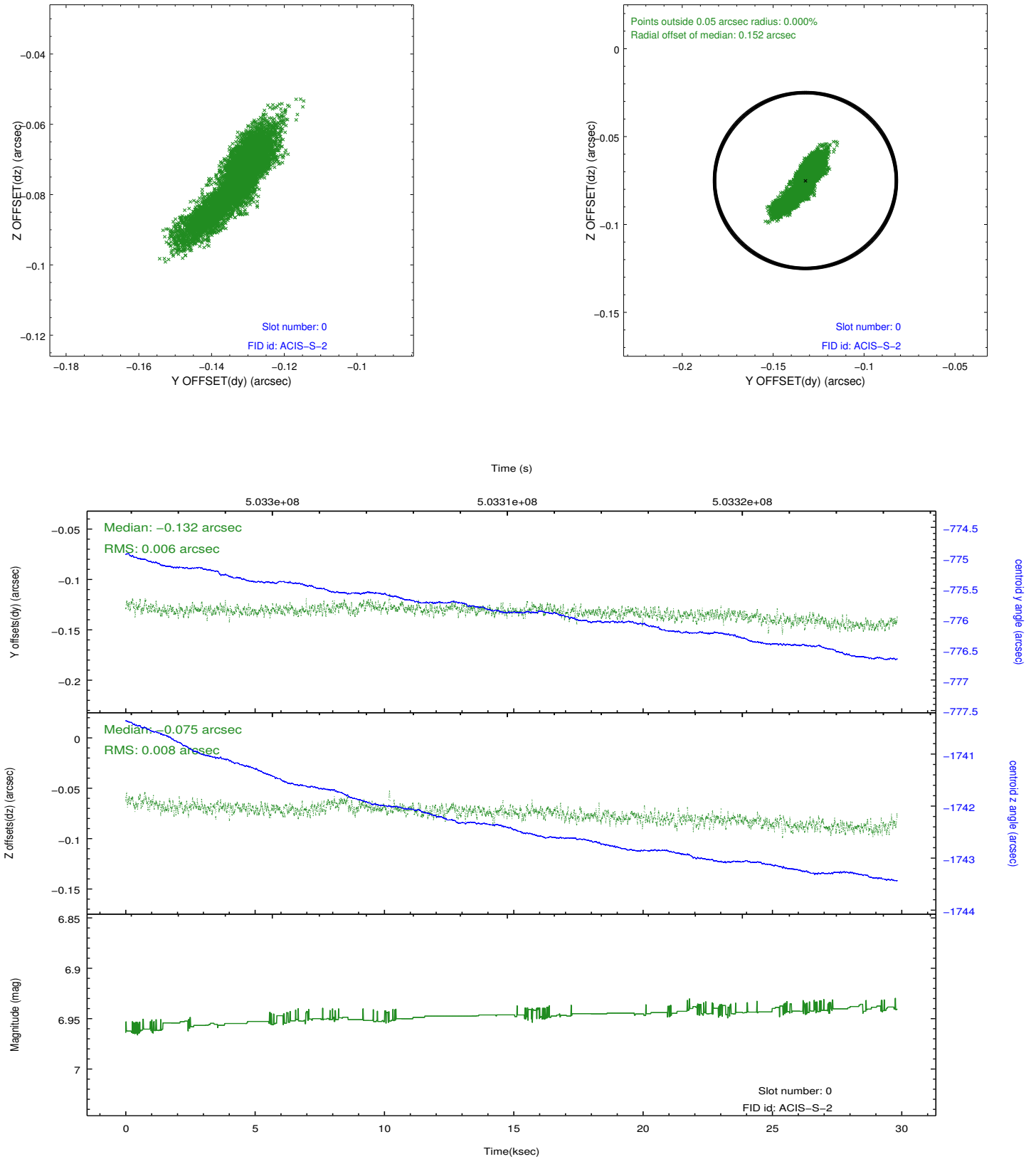


2.4.5 Slot 7

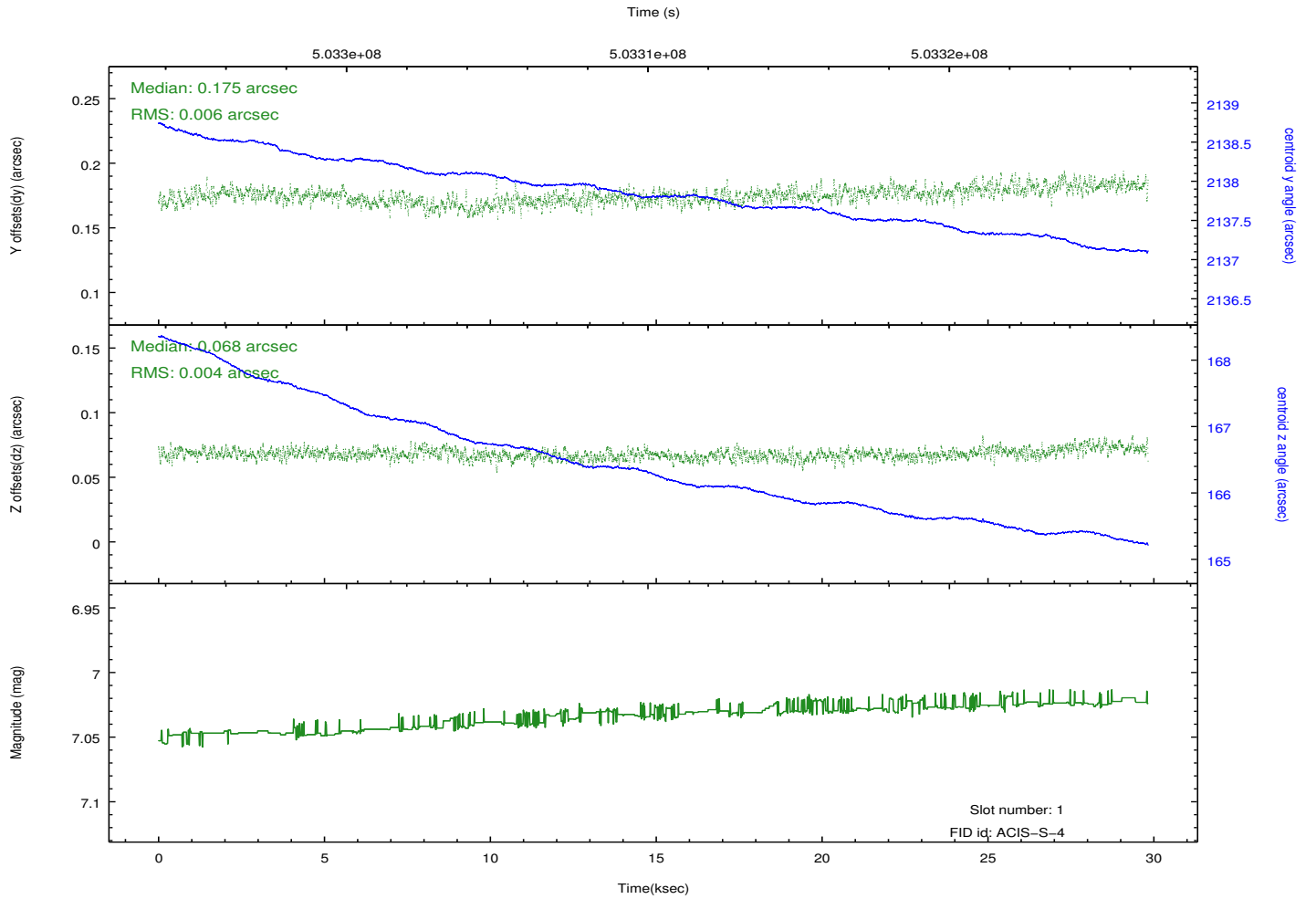
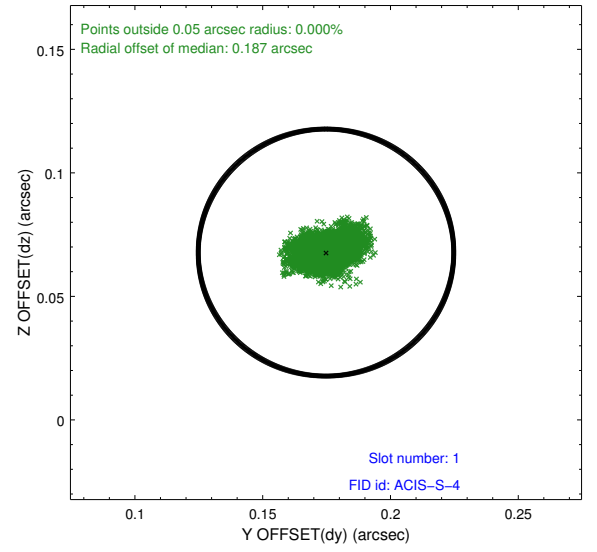
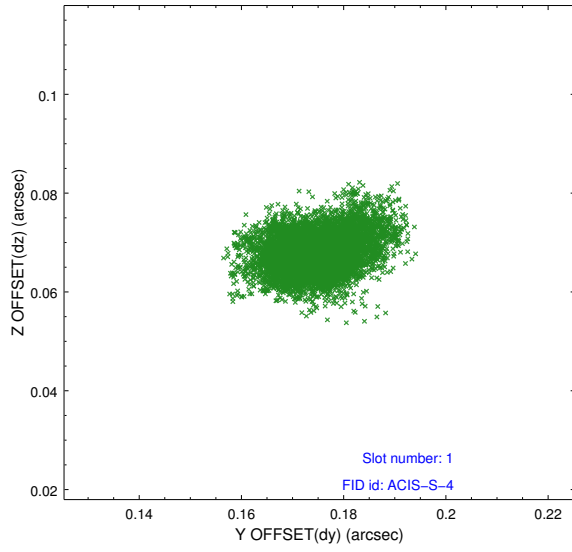


2.5 FID Slots

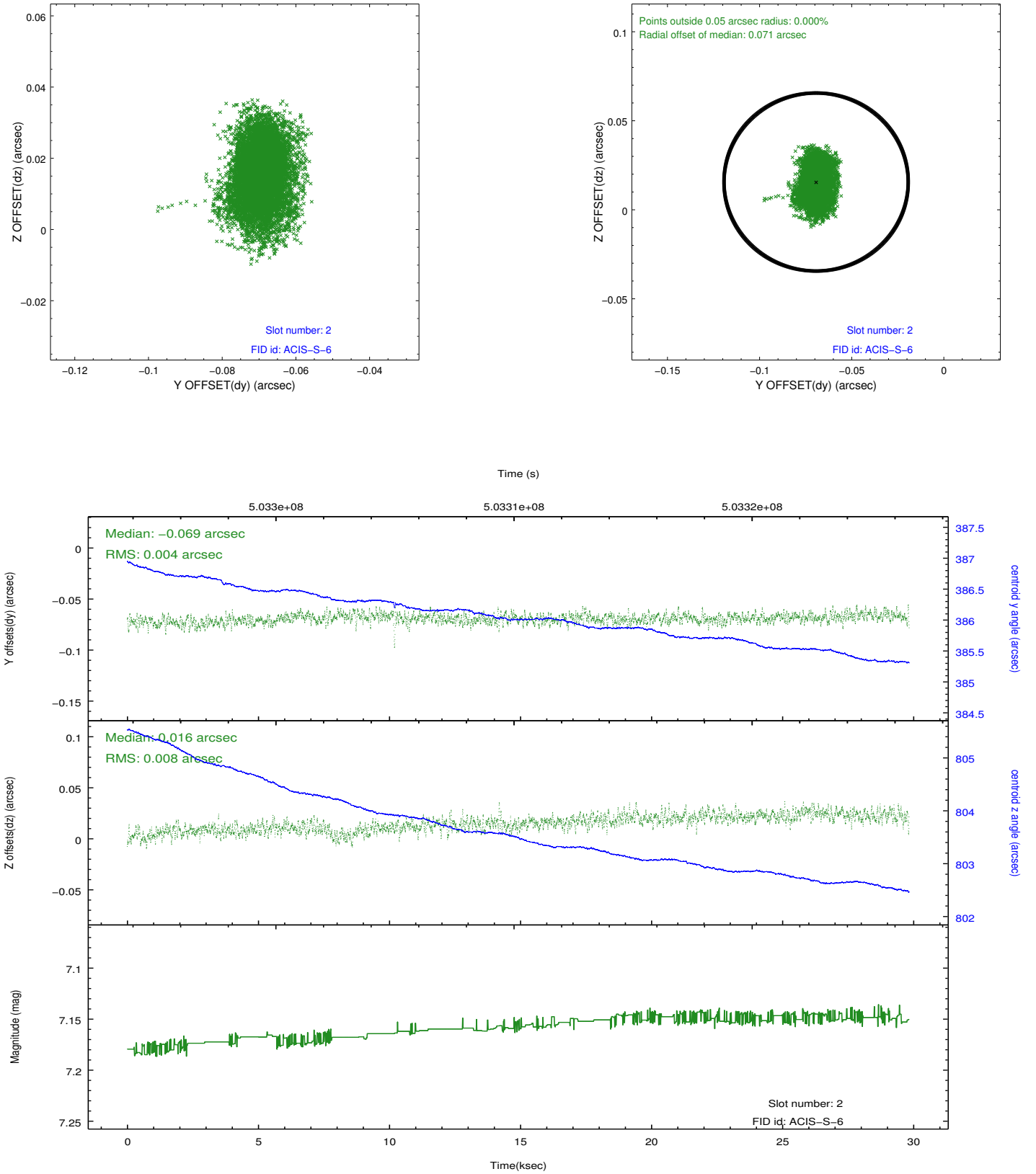
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.618658757567

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.