

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 9957 - L2 Version 3
Chandra X-Ray Center

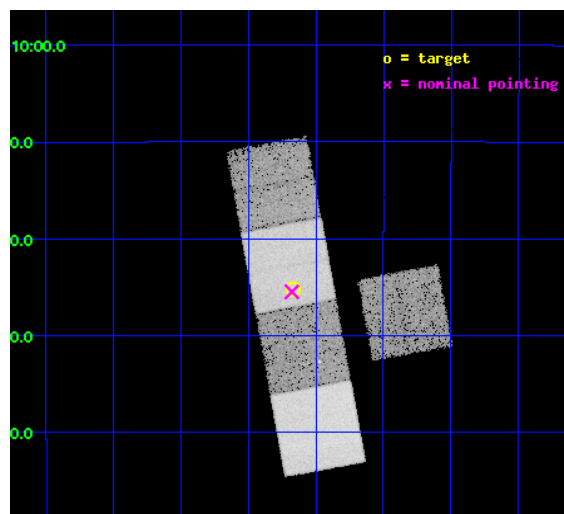
L2 Processing Date : Jun 11 2012

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1 Front

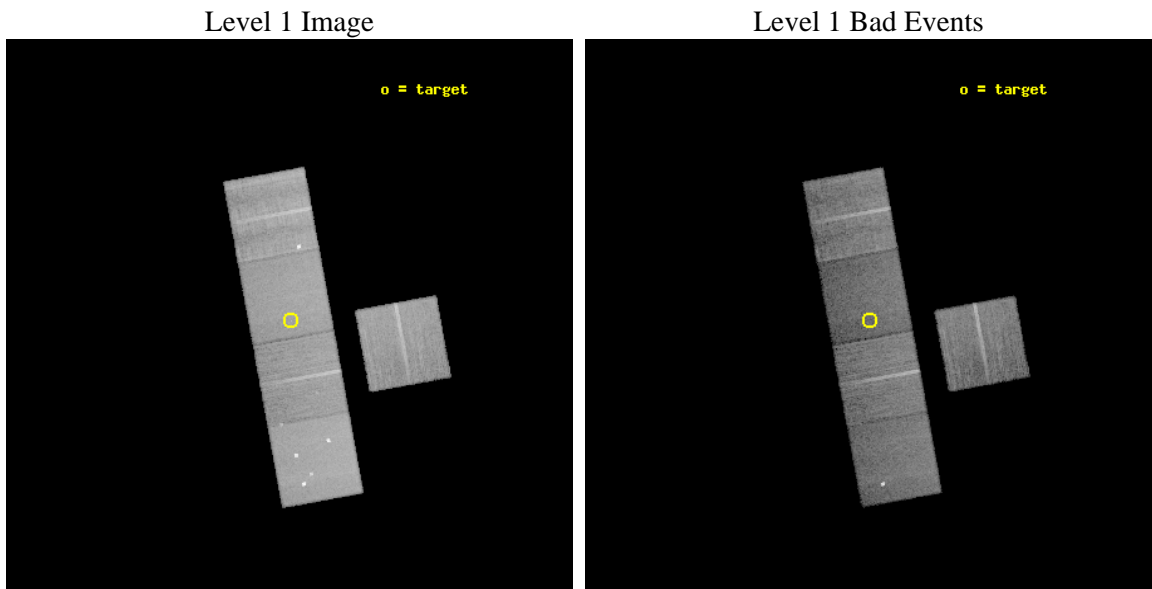
seq_num	300244	Sequence number
obs_id	9957	Observation id
title	Understanding the Current Dynamical States of Globular Clusters	Pr
observer	Prof. David Pooley	Principal investigator
object	NGC 6342	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	260.2925	Observer's specified target RA [deg]
dec_targ	-19.587222	Observer's specified target Dec [deg]
ra_nom	260.29437596311	Nominal RA [deg]
dec_nom	-19.591722245642	Nominal Dec [deg]
roll_nom	259.56874295958	Nominal Roll [deg]
revision	3	Processing version of data
ontime	16042.500123382	Sum of GTIs [s]
livetime	15832.893048953	Livetime [s]
ontime2	16036.07167989	Sum of GTIs [s]
ontime5	16042.476840496	Sum of GTIs [s]
ontime6	16042.435800493	Sum of GTIs [s]
ontime7	16042.500123382	Sum of GTIs [s]
ontime8	16042.394760489	Sum of GTIs [s]
l2events	202844	Number of level 2 events



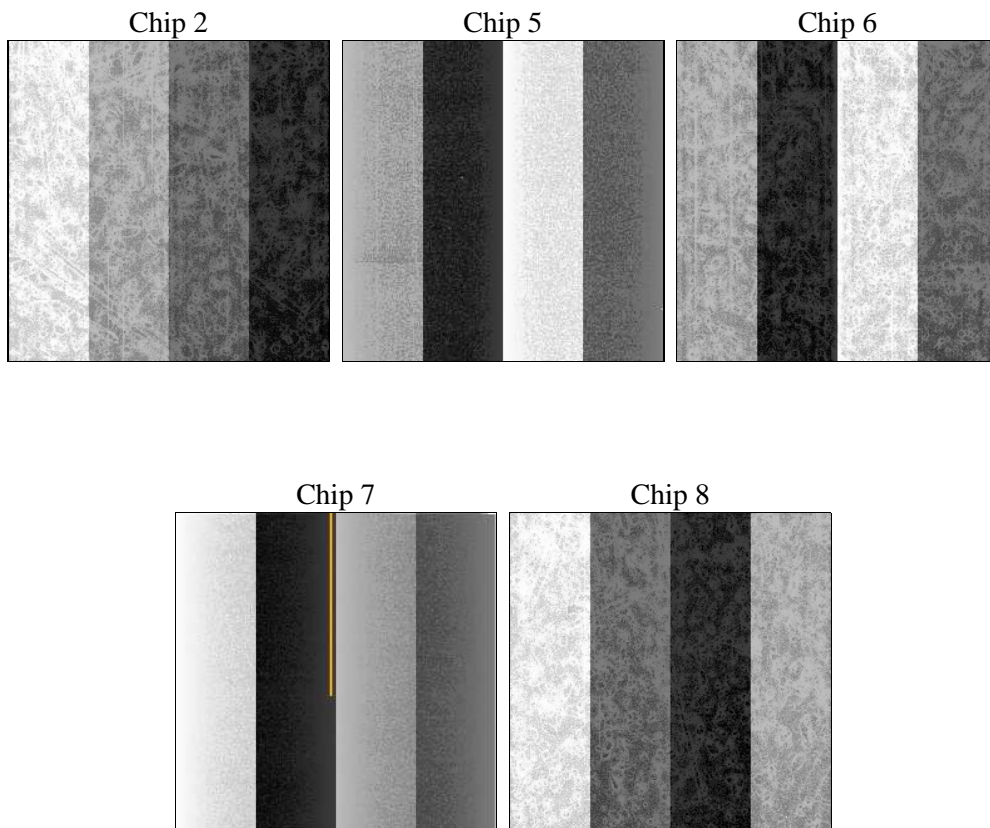
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	16042.500123382	Sum of GTIs [s]
caldbver	4.4.10	 	ontime2	16036.07167989	Sum of GTIs [s]
date	2012-06-11T14:39:50	Date and time of file creation	ontime5	16042.476840496	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	16042.435800493	Sum of GTIs [s]
			ontime7	16042.500123382	Sum of GTIs [s]
			ontime8	16042.394760489	Sum of GTIs [s]
			l1events	840084	Number of level 1 events

2.1.4 Events

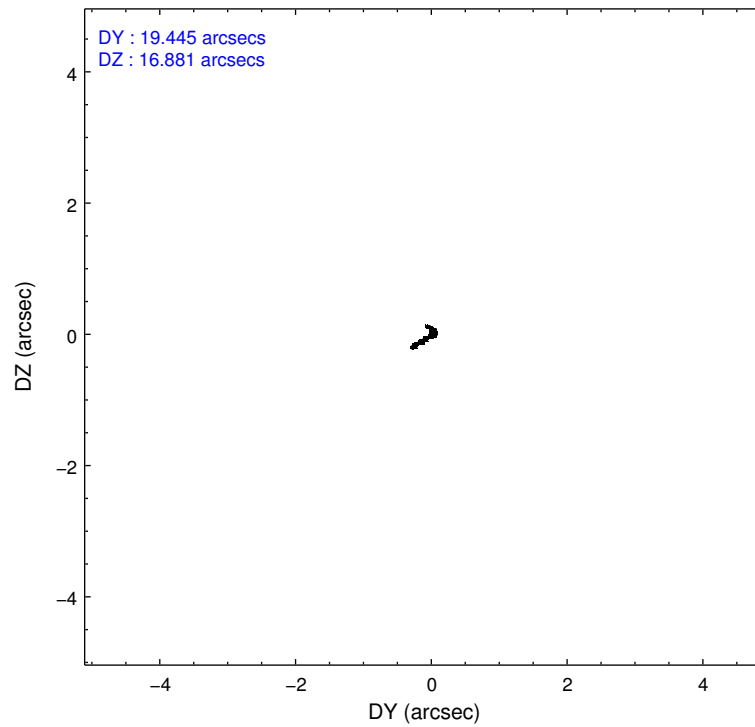
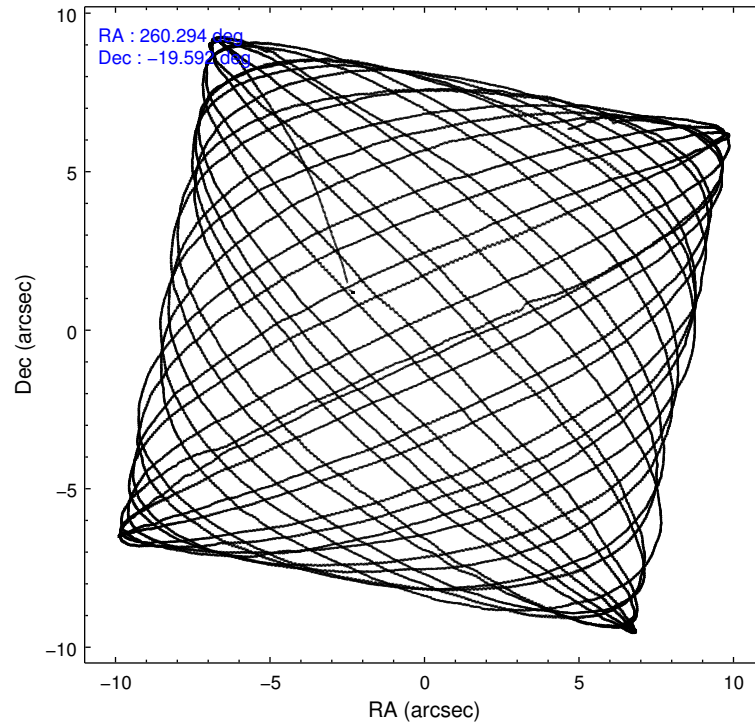
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	142433	209171	142201	160110	186169
rejected events	128467	103233	126693	87309	135852
rejected %	90%	49%	89%	54%	72%

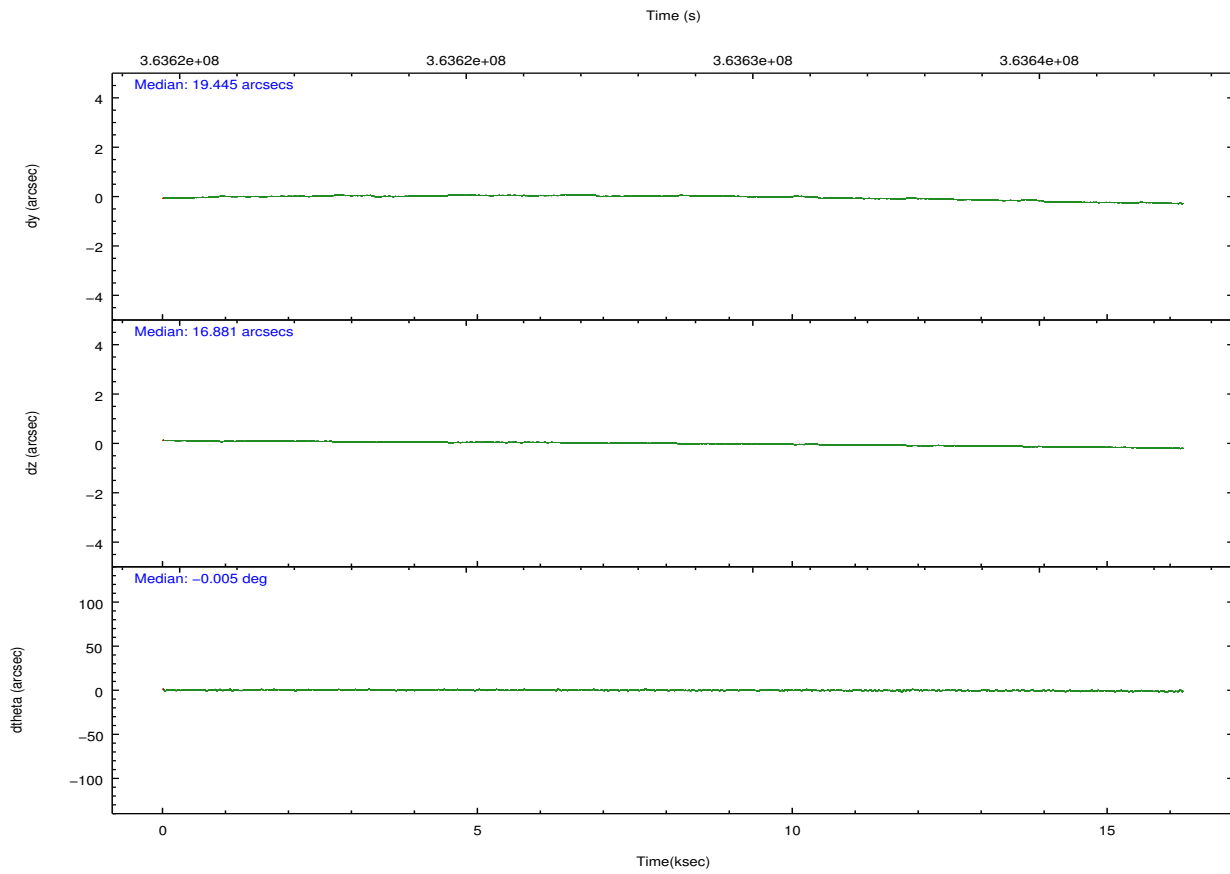
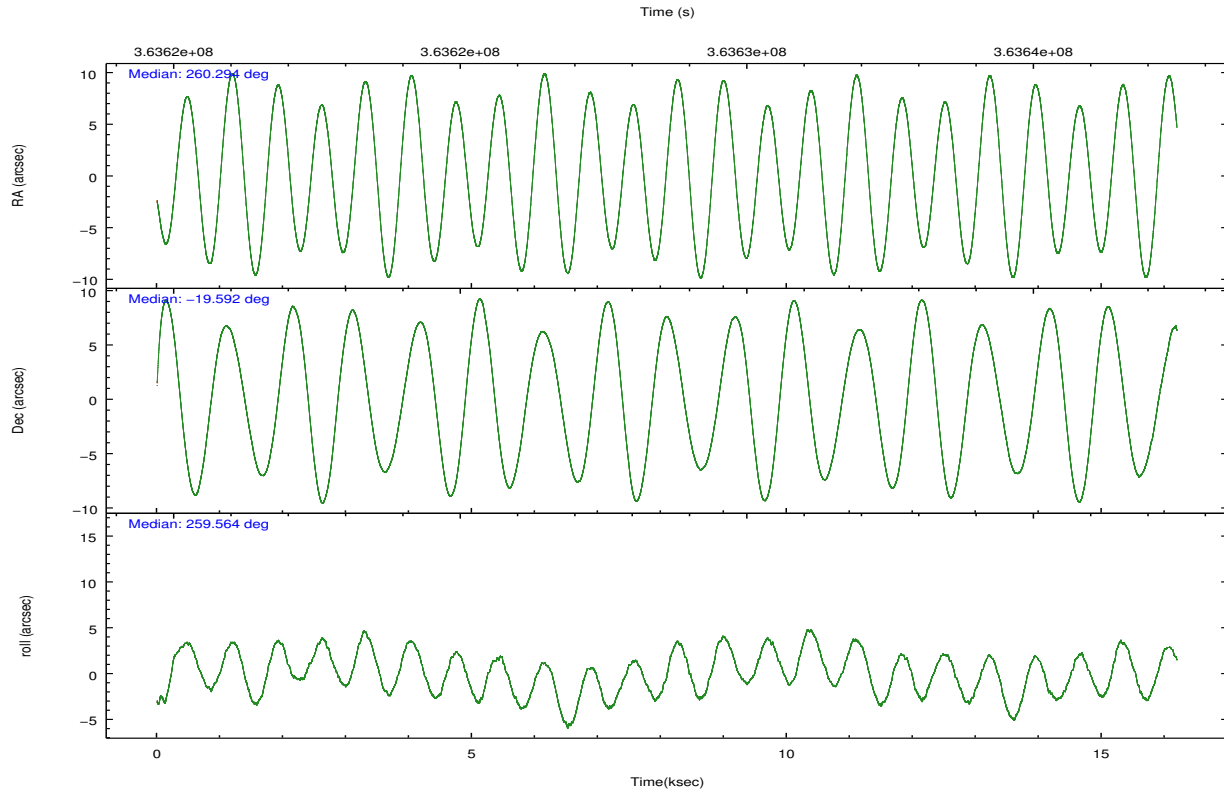
	ccd 2	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	5181	15235	5814	6815	18536
	3%	7%	4%	4%	9%
grade 1 events	83	394	80	230	165
	0%	0%	0%	0%	0%
grade 2 events	3286	31440	3346	15023	10483
	2%	15%	2%	9%	5%
grade 3 events	1437	3839	1596	6585	4821
	1%	1%	1%	4%	2%
grade 4 events	1560	3797	1546	6506	4413
	1%	1%	1%	4%	2%
grade 5 events	4672	15511	5854	16545	8475
	3%	7%	4%	10%	4%
grade 6 events	2506	51659	3211	37902	12090
	1%	24%	2%	23%	6%
grade 7 events	123708	87296	120754	70504	127186
	86%	41%	84%	44%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-25678	ACIS-25678	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	260.284267	260.2943759631149	CCD I2 on	O2	Y
[deg] Pointing Dec	-19.566105	-19.59172224564239	CCD I3 on	O1	N
[deg] Pointing Roll	259.408727	259.5687429595786	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	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)	363620716.184000	363619780.379	CCD S5 on	N	N
Observation start date	2009-07-10T13:44:10	2009-07-10T13:29:40	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	363636716.184000	363637541.06738	On-chip summing requested	N	N
Observation end date	2009-07-10T18:10:50	2009-07-10T18:25:41	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



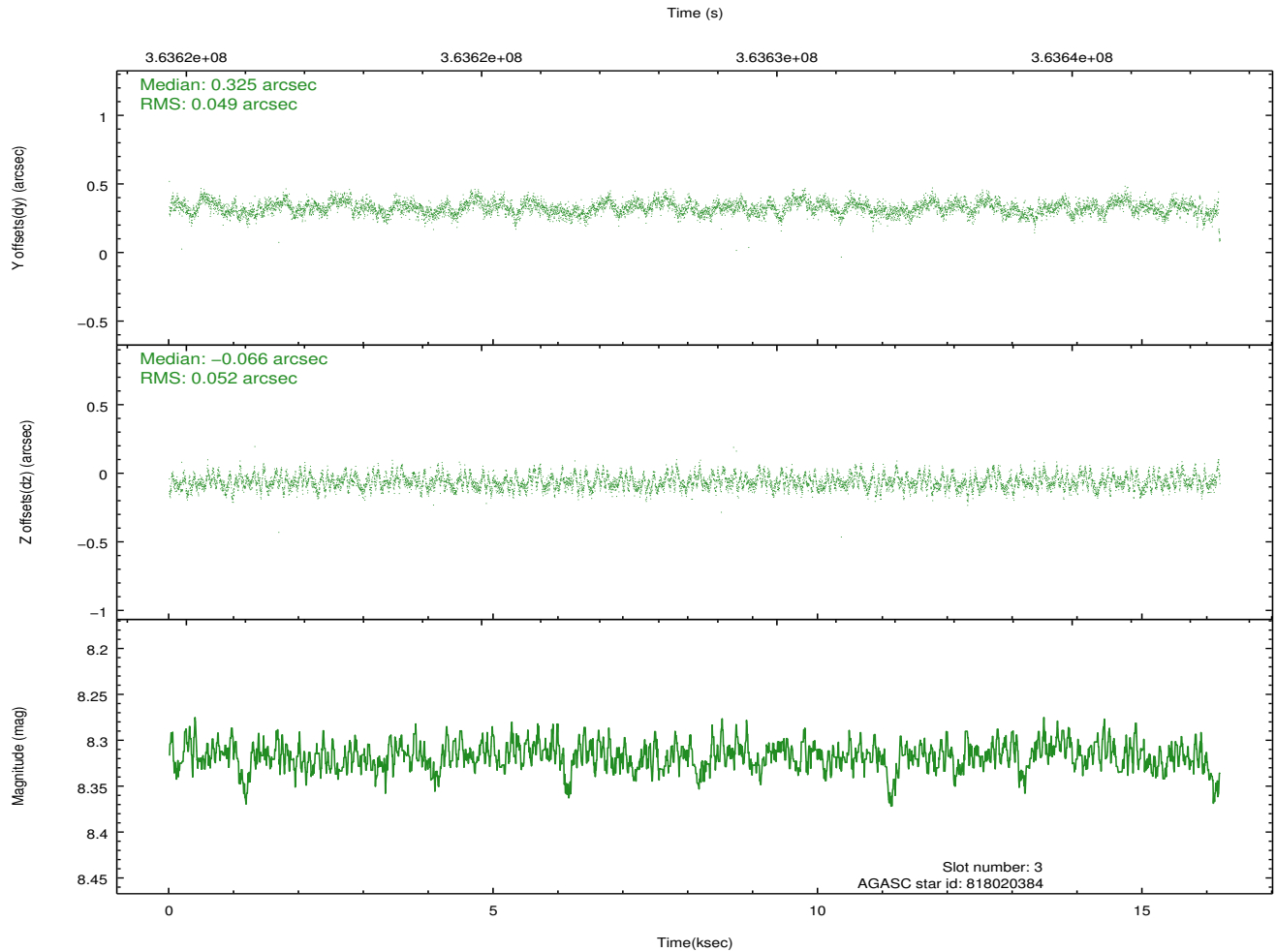
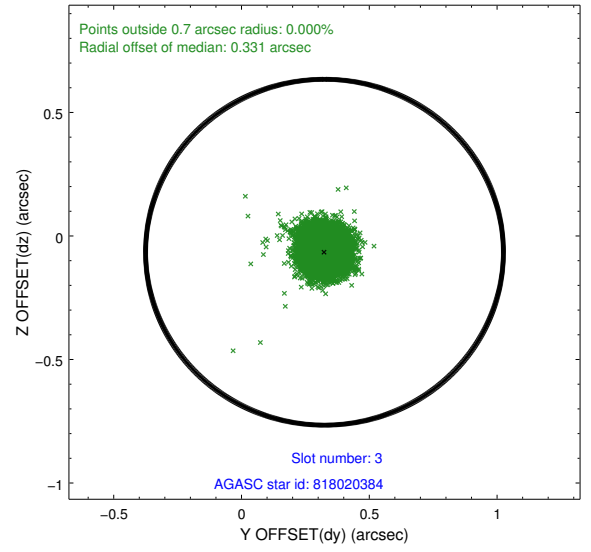
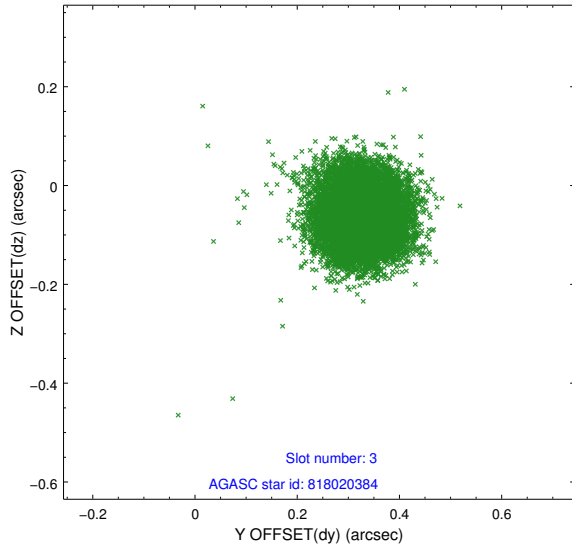


Slot Statistics

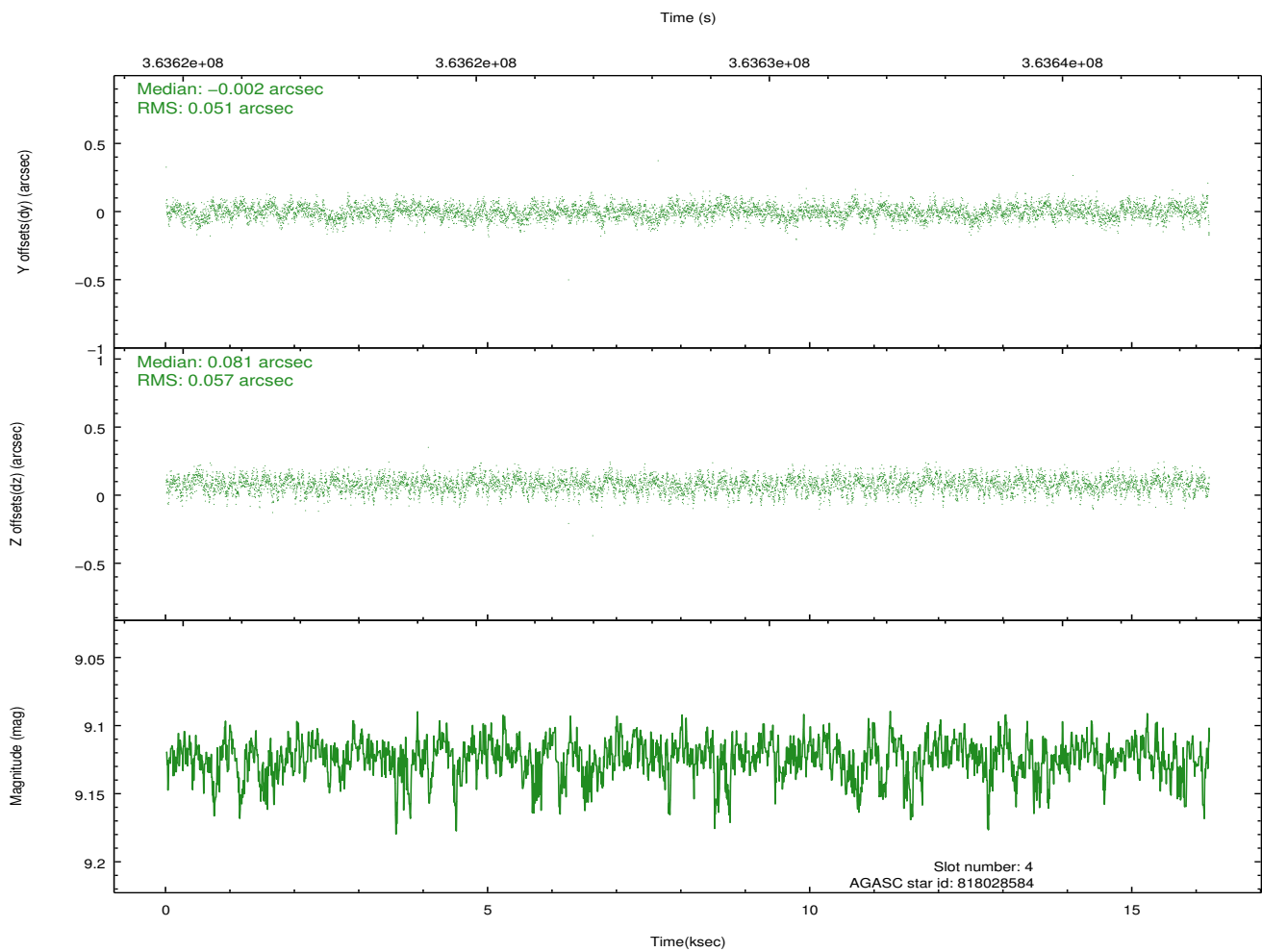
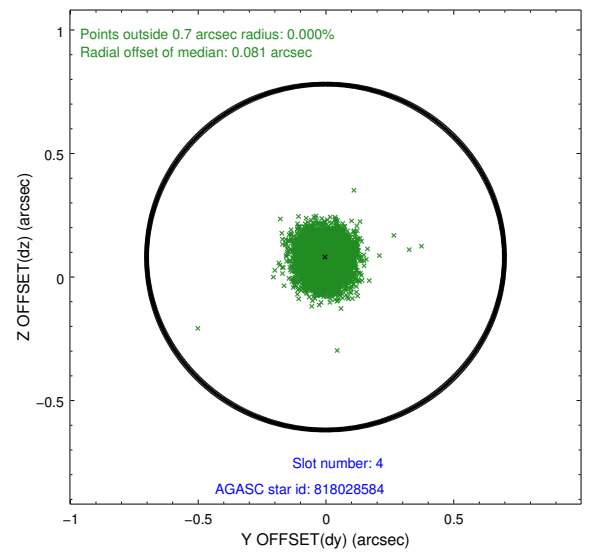
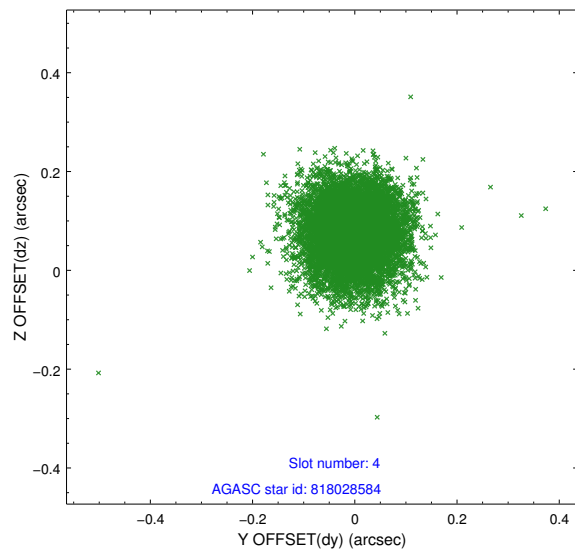
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.02	3950	0.107	-0.106	0.007	0.013	0.000000	0.000000	923.64	-1733.98
1	FID	ACIS-S-5	7.07	3950	-0.181	0.058	0.006	0.011	0.000000	0.000000	-1825.48	163.49
2	FID	ACIS-S-6	7.17	3950	0.053	0.059	0.007	0.012	0.000000	0.000000	388.87	807.73
3	GUIDE	818020384	8.32	7897	0.325	-0.066	0.076	0.118	259.984610	-19.704322	677.45	-906.63
4	GUIDE	818028584	9.12	7894	-0.002	0.081	0.081	0.131	259.974300	-19.091623	-1483.49	-1350.97
5	GUIDE	818157400	8.36	7895	-0.167	0.048	0.060	0.097	260.004036	-19.010418	-1790.06	-1305.25
6	GUIDE	818158288	7.74	7897	-0.055	0.091	0.057	0.095	260.674706	-20.226096	2094.57	1733.67
7	GUIDE	818159168	7.46	7898	-0.104	-0.155	0.062	0.094	260.736155	-20.215208	2018.82	1930.85

2.4 Star Slots

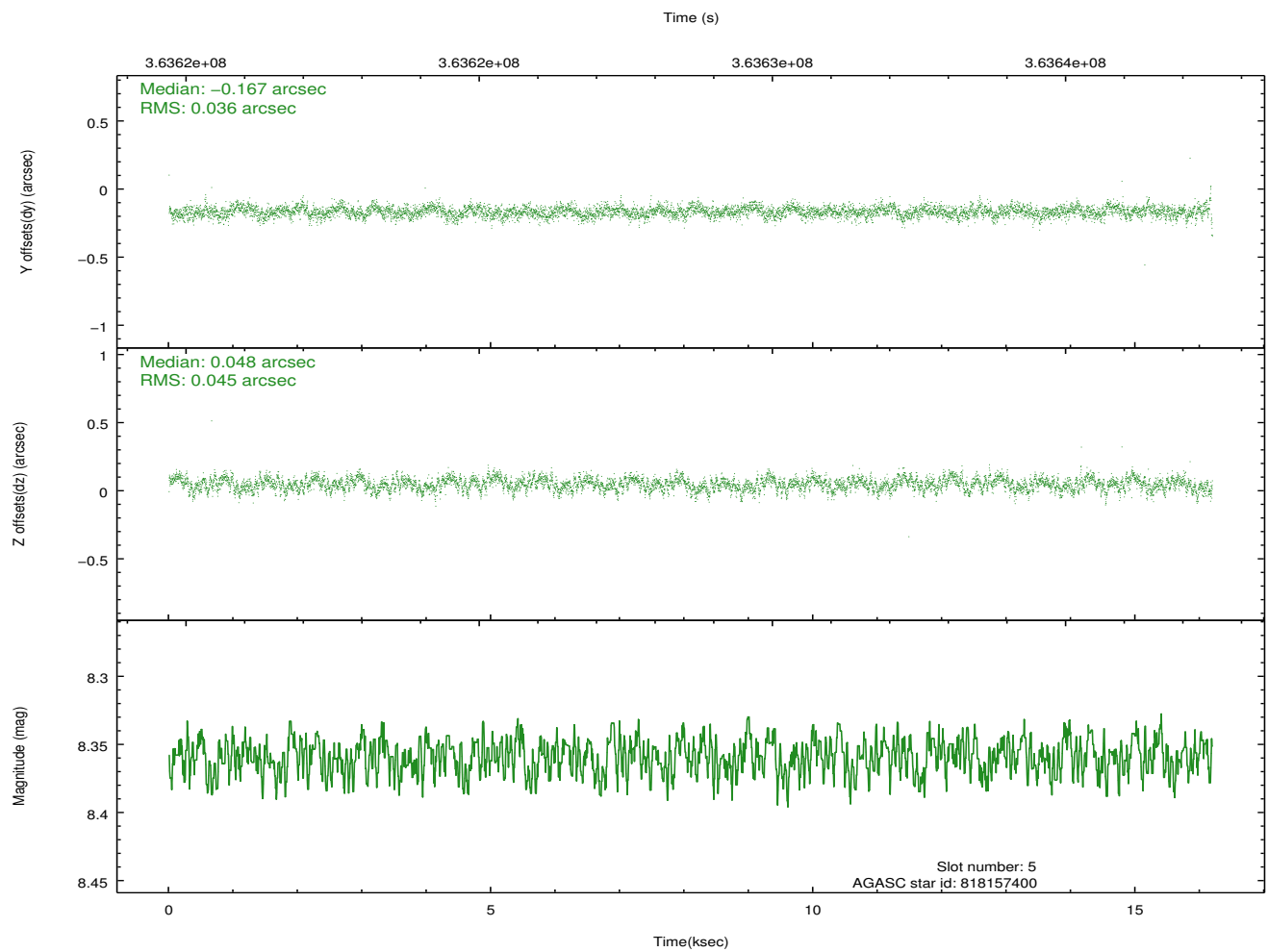
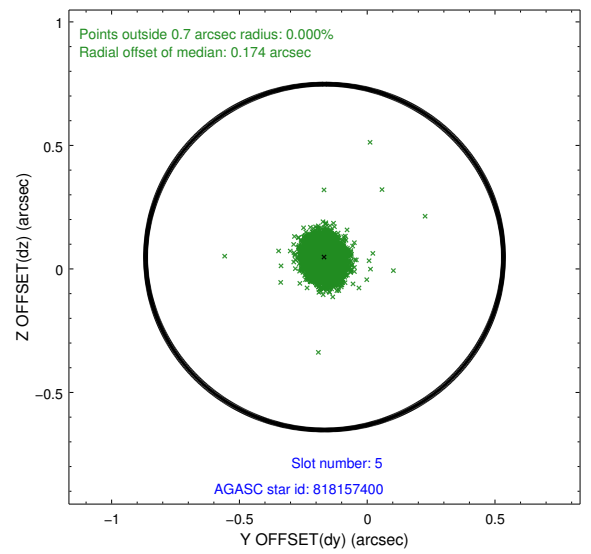
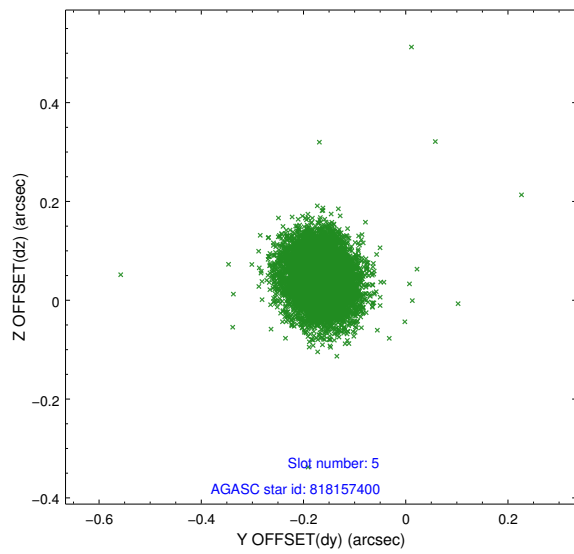
2.4.1 Slot 3



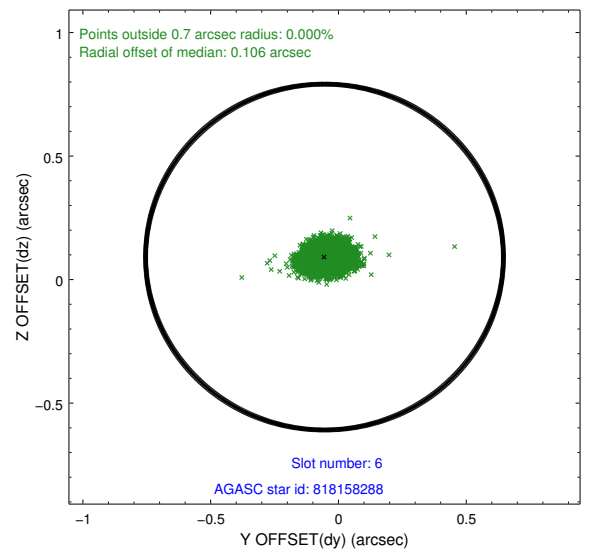
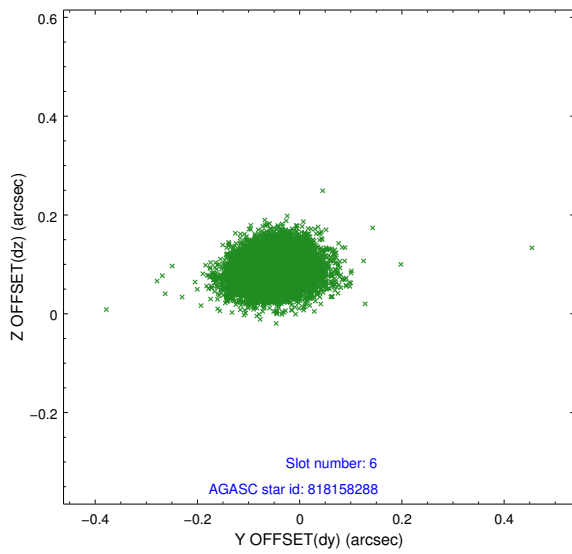
2.4.2 Slot 4



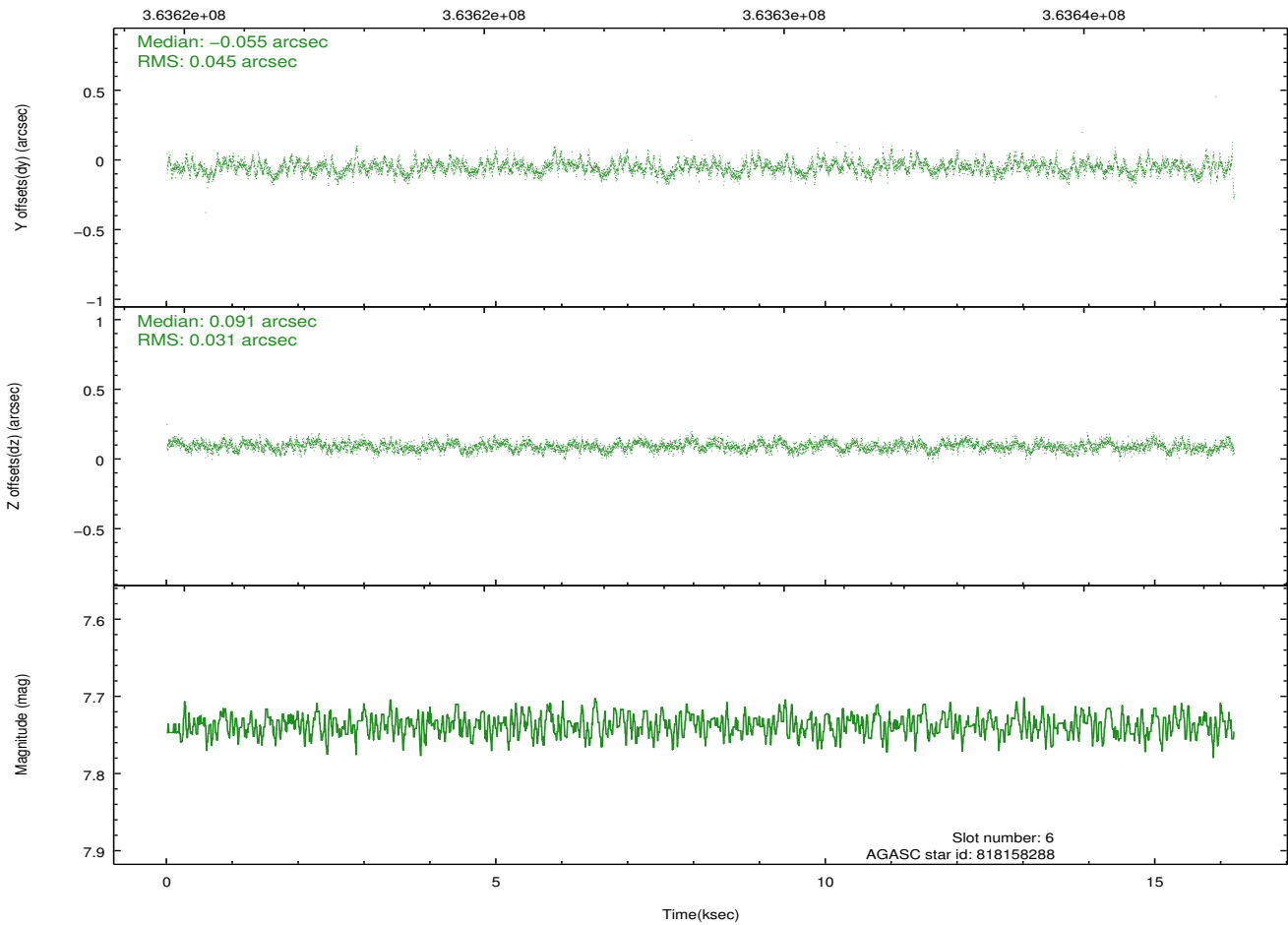
2.4.3 Slot 5



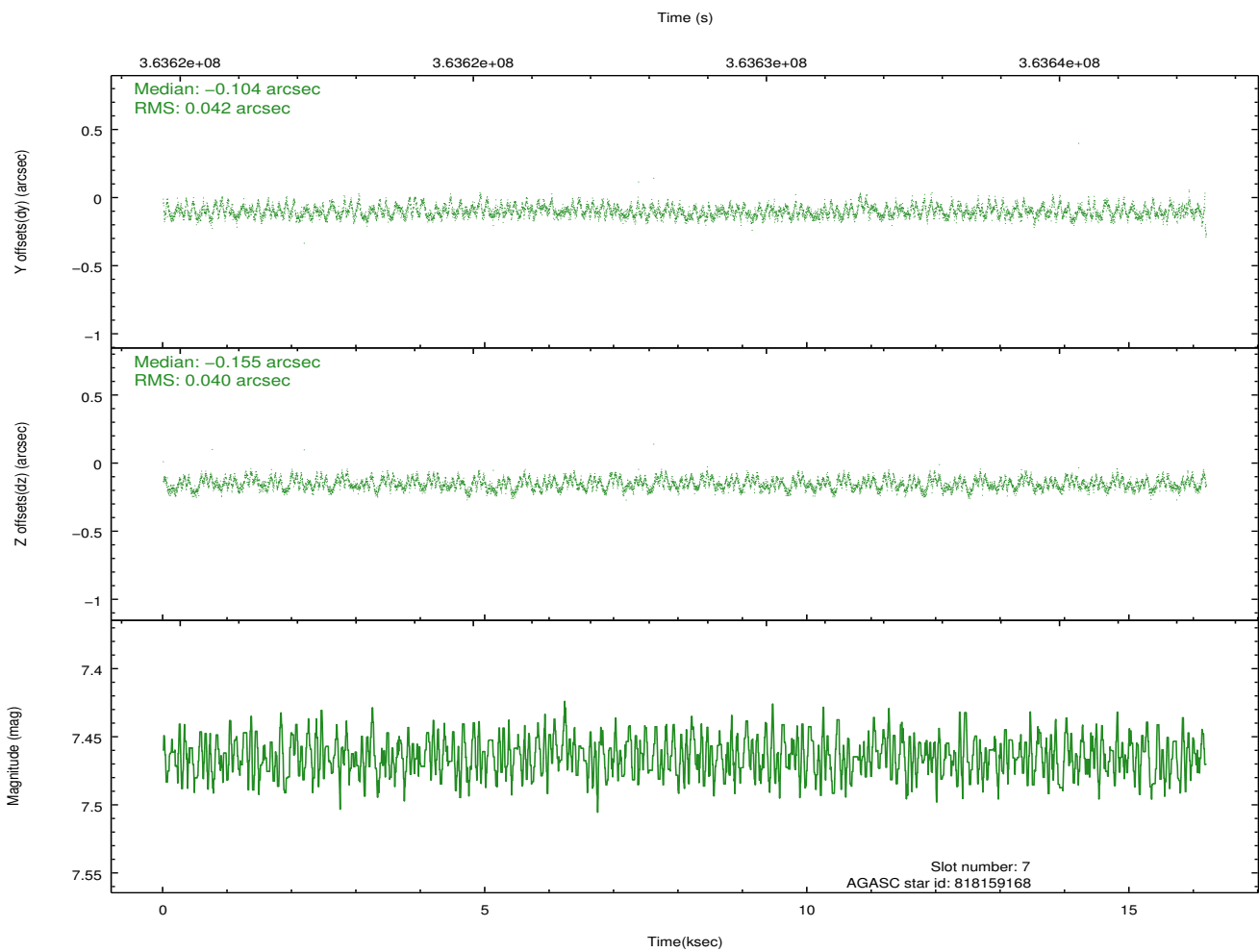
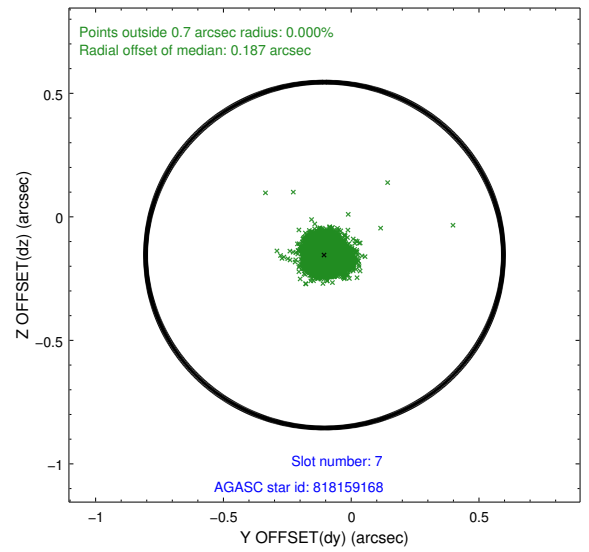
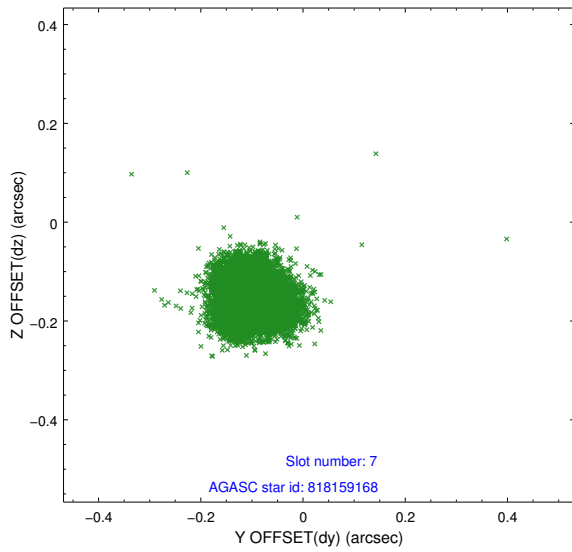
2.4.4 Slot 6



Time (s)

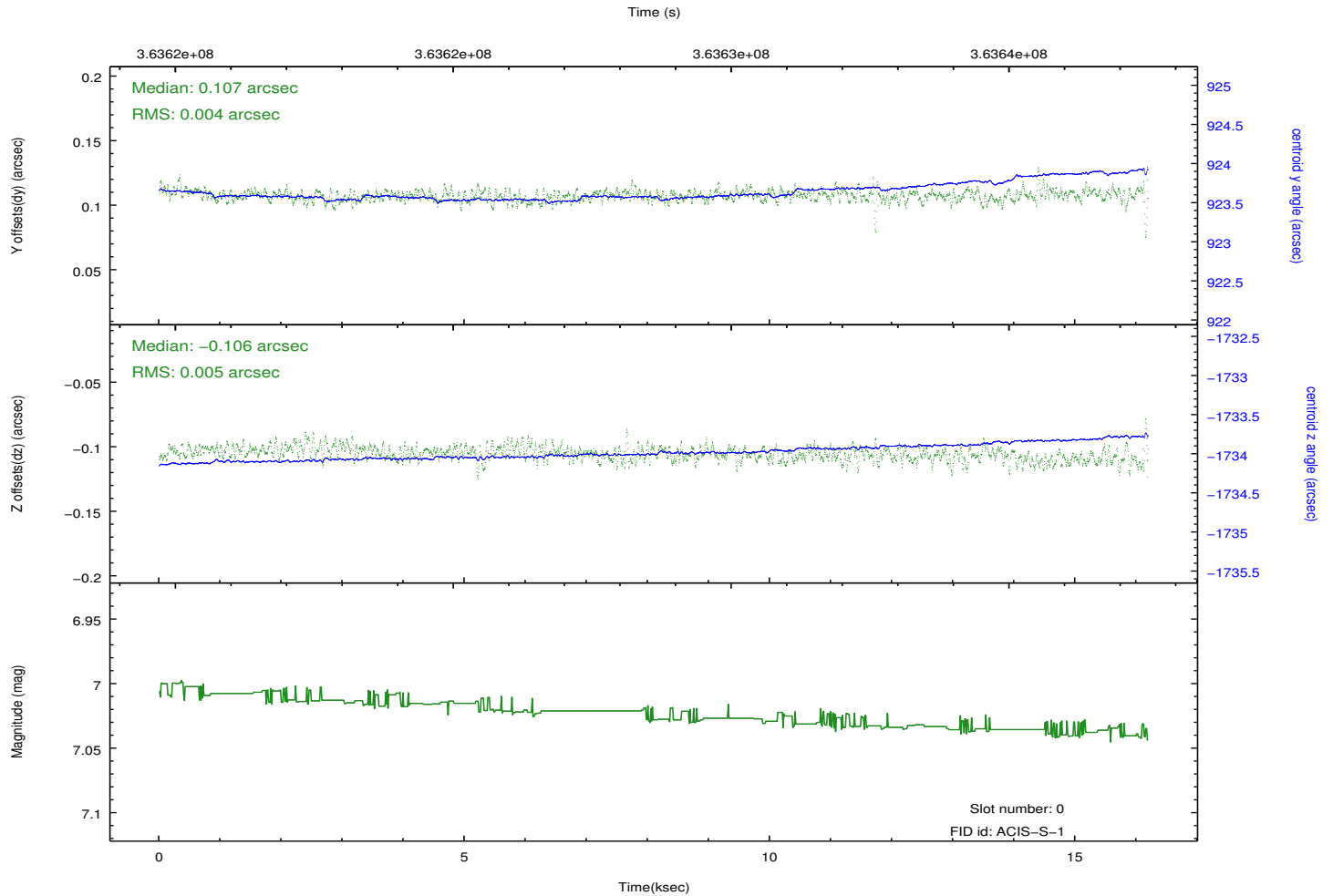
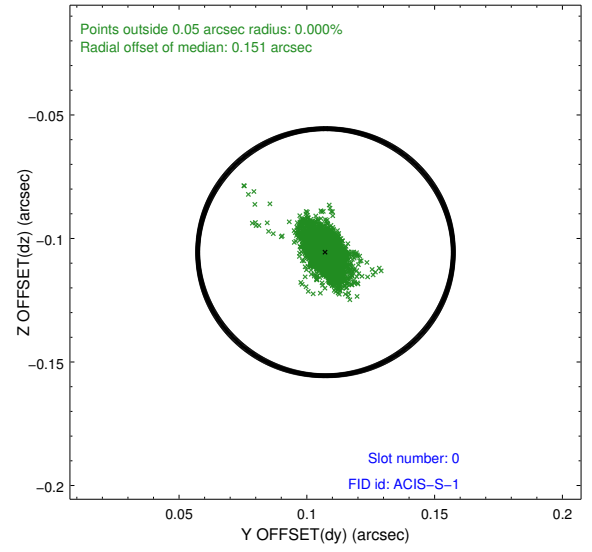
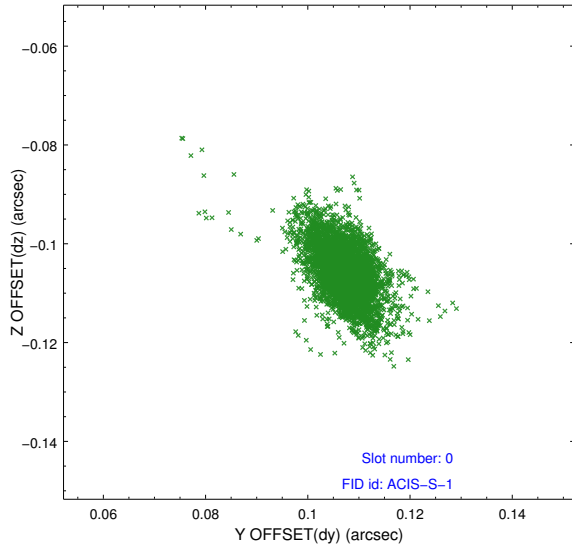


2.4.5 Slot 7

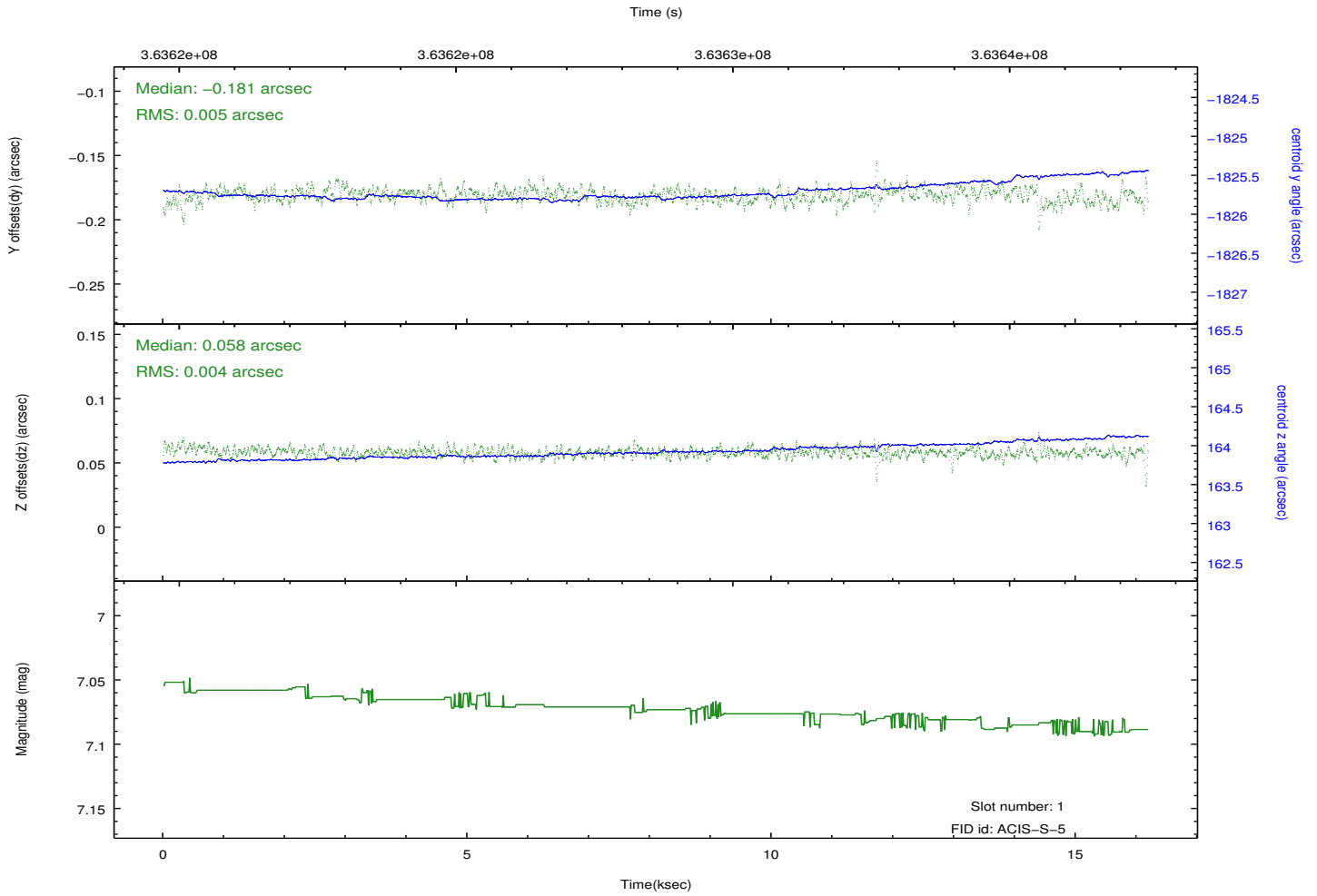
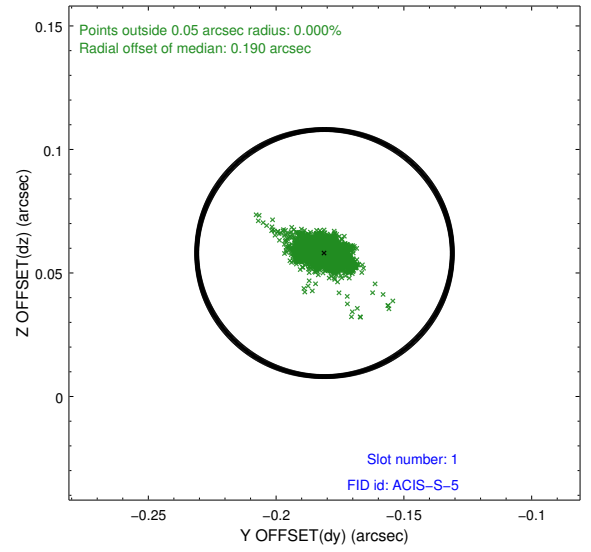
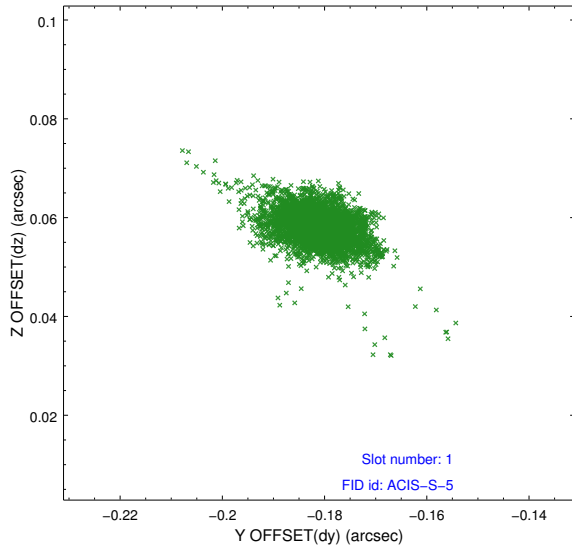


2.5 FID Slots

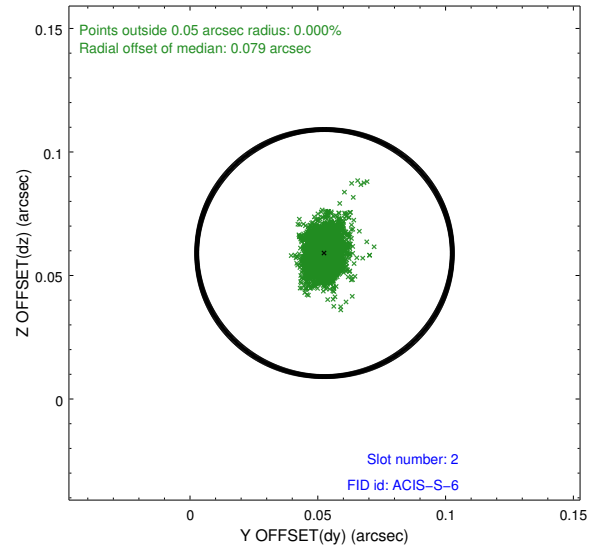
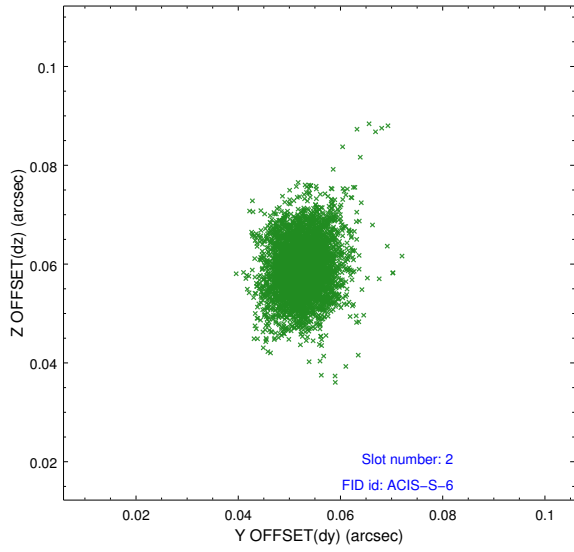
2.5.1 Slot 0



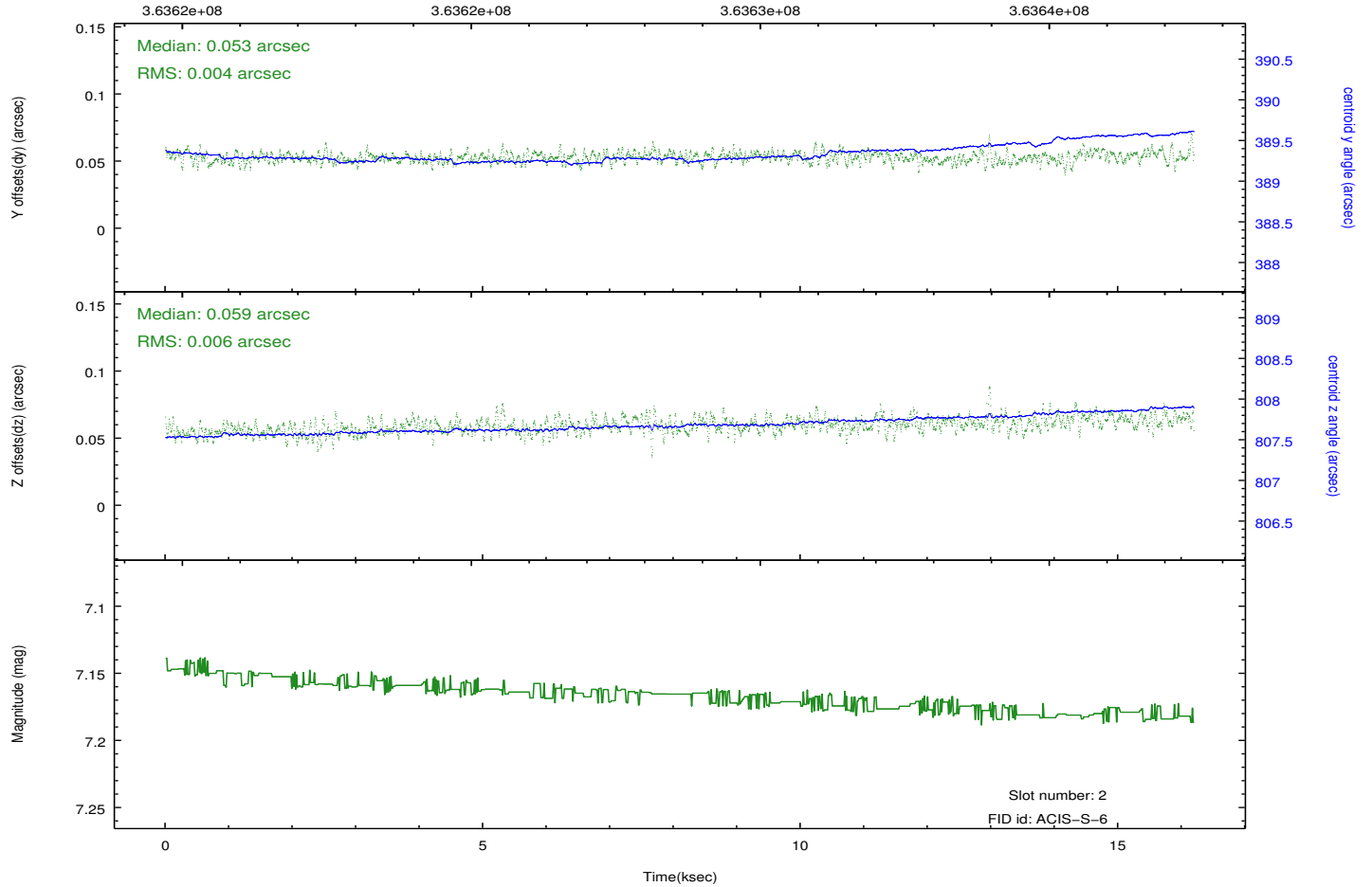
2.5.2 Slot 1



2.5.3 Slot 2



Time (s)



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.06.14
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.042

A.2 Comments

A spatial region of the original bias map for CCD = 8 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 8 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(260.40843, -19.38046), (260.40983, -19.37322), (260.26427, -19.34805), (260.26286, -19.35530)