

V&V Reference Report

L2 ASCDS Version : 10.1

Observation 15499 - L2 Version 3
Chandra X-Ray Center

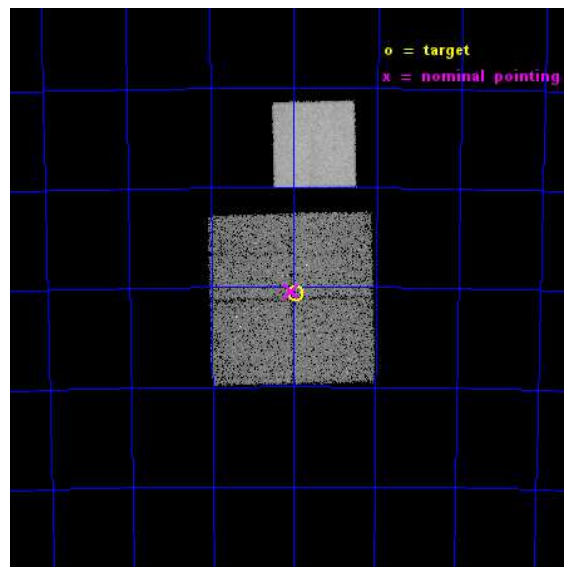
L2 Processing Date : Dec 6 2014

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1 Front

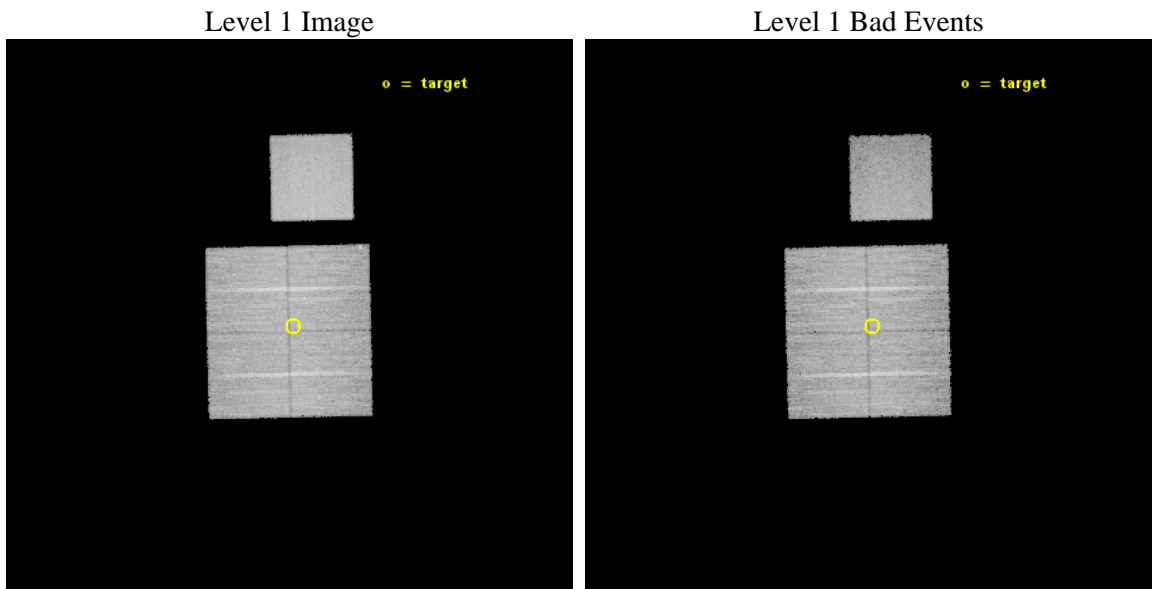
seq_num	401499	Sequence number
obs_id	15499	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	Deep Field 03	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	18.487083	Observer's specified target RA [deg]
dec_targ	-73.342778	Observer's specified target Dec [deg]
ra_nom	18.514110185064	Nominal RA [deg]
dec_nom	-73.34054911293	Nominal Dec [deg]
roll_nom	358.73455818736	Nominal Roll [deg]
revision	3	Processing version of data
ontime	24266.759126246	Sum of GTIs [s]
livetime	23949.696053333	Livetime [s]
ontime0	24269.900186658	Sum of GTIs [s]
ontime1	24269.900186658	Sum of GTIs [s]
ontime2	24266.759156287	Sum of GTIs [s]
ontime3	24266.759126246	Sum of GTIs [s]
ontime7	24269.900186658	Sum of GTIs [s]
l2events	102862	Number of level 2 events



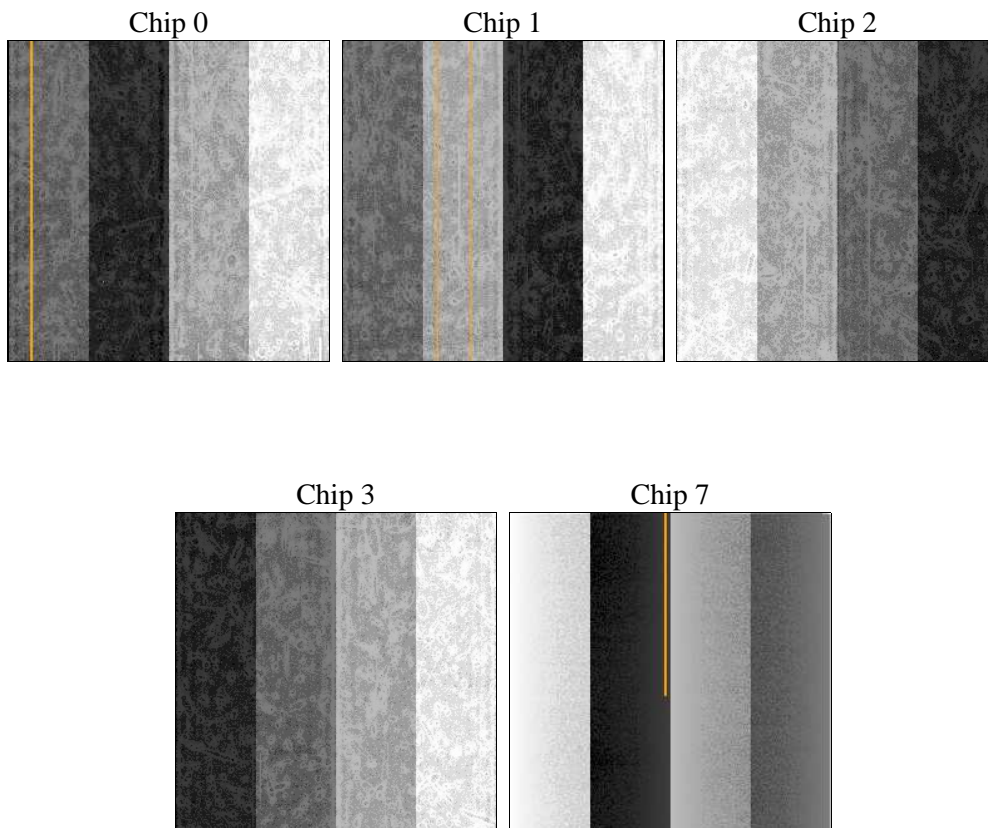
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	24500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	24266.759126246	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	24269.900186658	Sum of GTIs [s]
date	2014-12-07T02:05:33	Date and time of file creation	ontime1	24269.900186658	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	24266.759156287	Sum of GTIs [s]
			ontime3	24266.759126246	Sum of GTIs [s]
			ontime7	24269.900186658	Sum of GTIs [s]
			l1events	549079	Number of level 1 events

2.1.4 Events

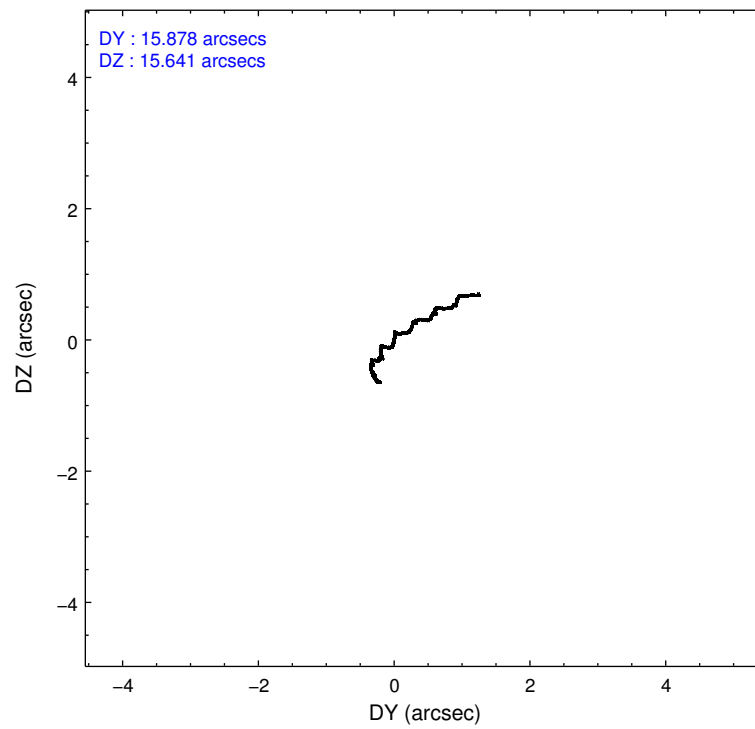
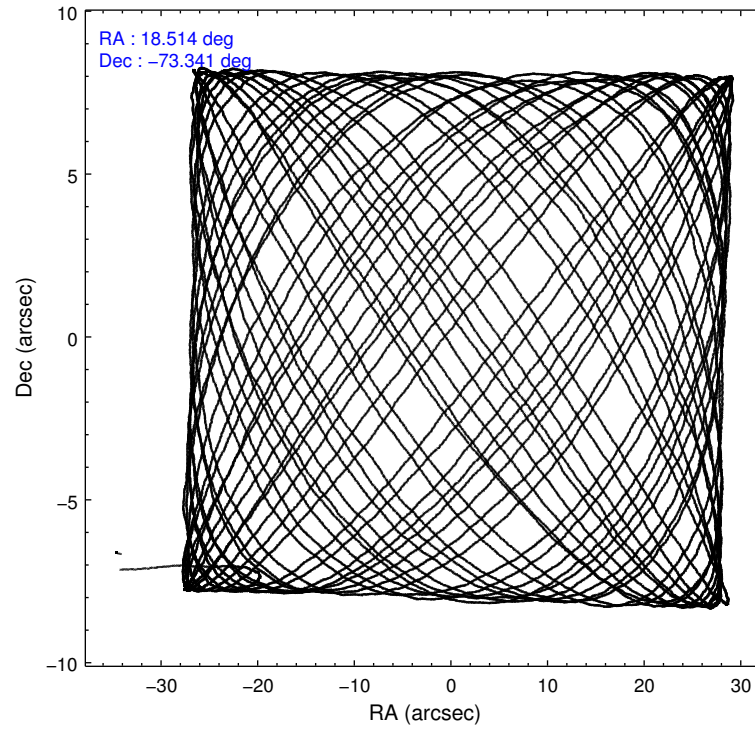
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	100487	102293	109213	105499	131587
rejected events	87286	88461	96628	92531	70369
rejected %	86%	86%	88%	87%	53%

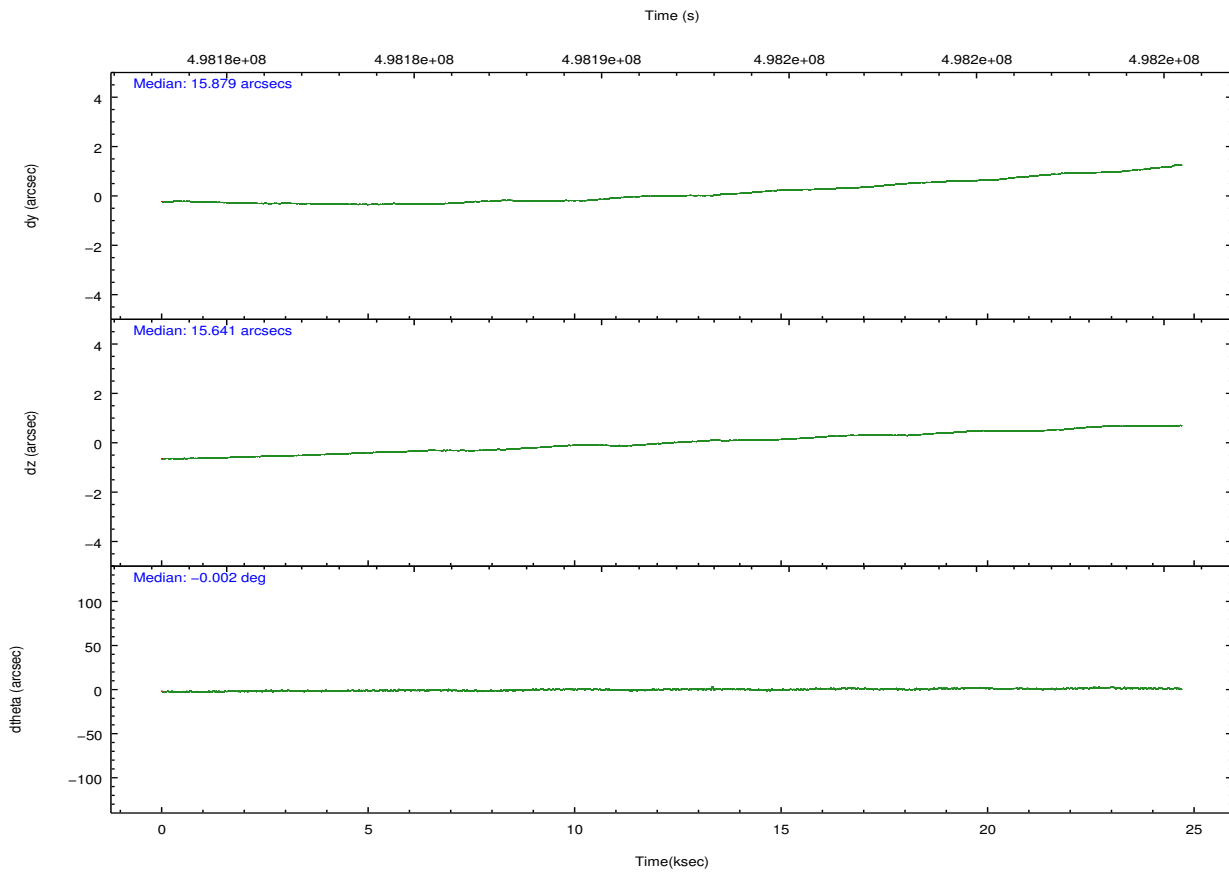
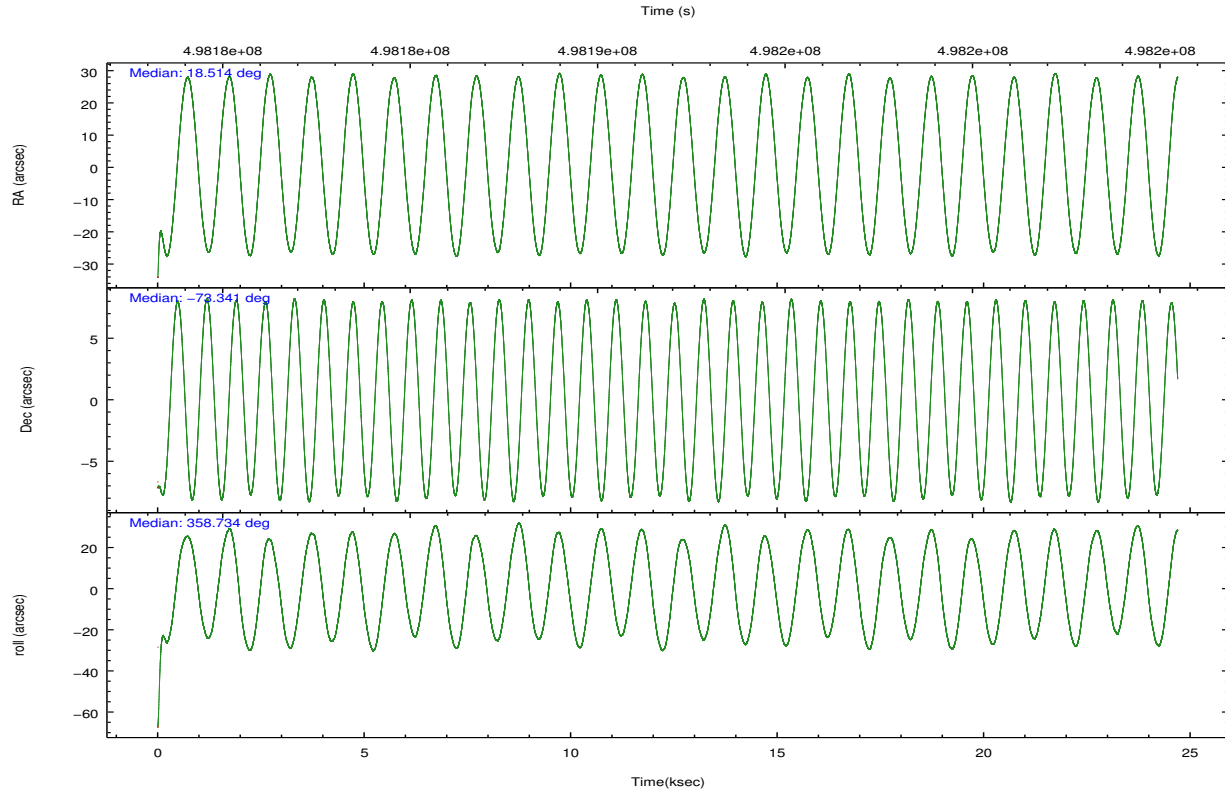
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	4943	4893	4754	4969	5868
	4%	4%	4%	4%	4%
grade 1 events	51	44	62	73	177
	0%	0%	0%	0%	0%
grade 2 events	3269	3188	2998	2821	12972
	3%	3%	2%	2%	9%
grade 3 events	1313	1410	1194	1329	5322
	1%	1%	1%	1%	4%
grade 4 events	1242	1382	1289	1319	5070
	1%	1%	1%	1%	3%
grade 5 events	4339	4925	4114	5071	13779
	4%	4%	3%	4%	10%
grade 6 events	2440	2962	2350	2532	32003
	2%	2%	2%	2%	24%
grade 7 events	82890	83489	92452	87385	56396
	82%	81%	84%	82%	42%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	18.430219	18.5141101850645	Subarray requested	NONE	NONE
[deg] Pointing Dec	-73.353821	-73.3405491129304	Alternating exposures requested	N	N
[deg] Pointing Roll	358.445518	358.7345581873588	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	498179719.184000	498178744.6369			
Observation start date	2013-10-14T23:14:12	2013-10-14T22:59:04			
[s] Observation end time (MET)	498204219.184000	498205285.98835			
Observation end date	2013-10-15T06:02:32	2013-10-15T06:21:25			
Read mode	TIMED	TIMED			

2.3 Aspect





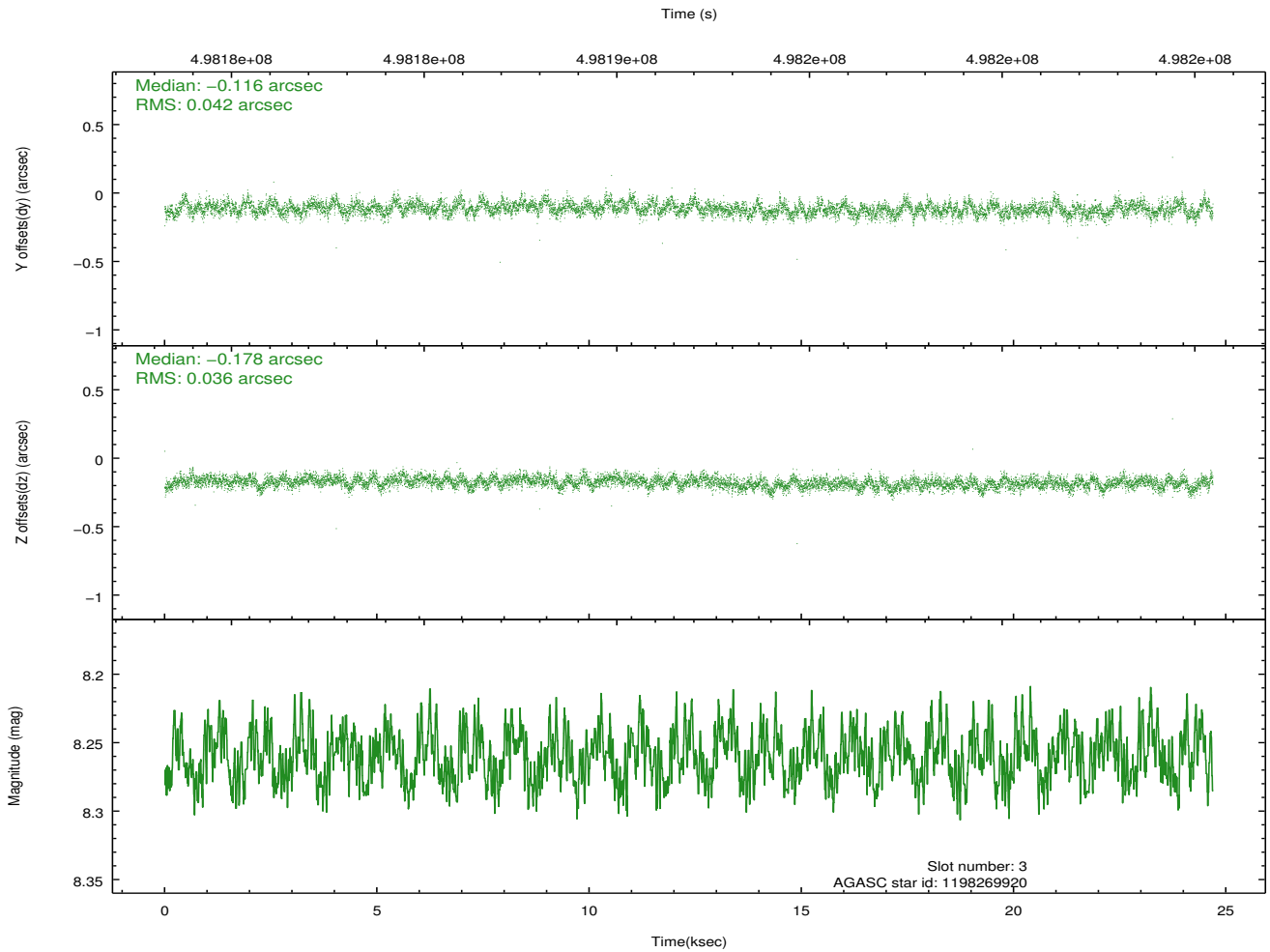
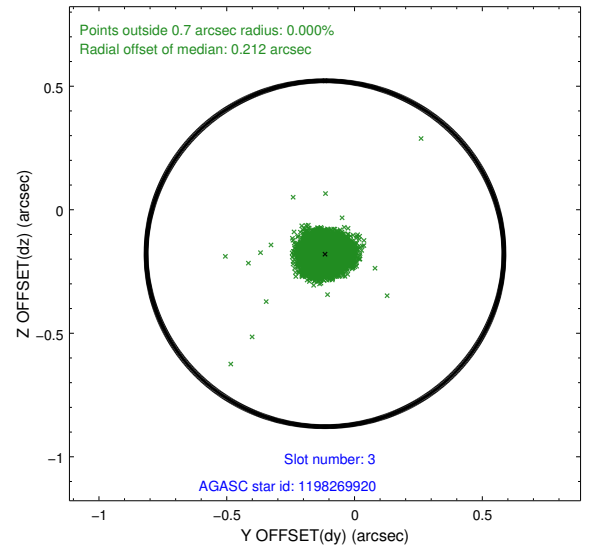
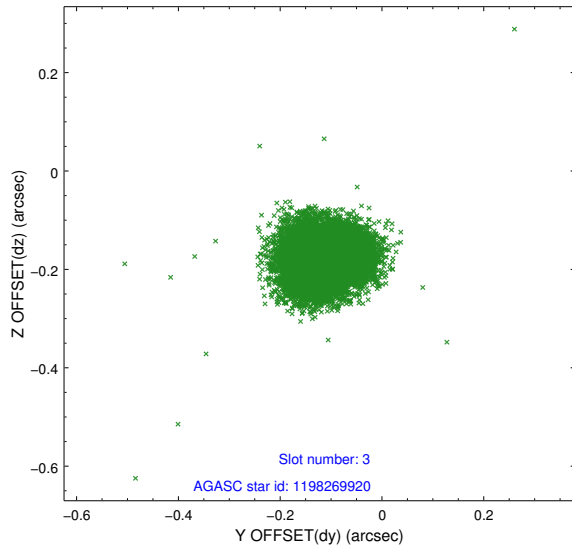
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.17	6023	0.063	-0.049	0.018	0.033	0.000000	0.000000	923.47	-839.31
1	FID		ACIS-I-5	7.16	6022	-0.244	0.052	0.012	0.031	0.000000	0.000000	-1824.90	1058.20
2	FID		ACIS-I-6	7.17	6023	0.091	0.066	0.009	0.016	0.000000	0.000000	388.89	1702.87
3	GUIDE	used	1198269920	8.26	12041	-0.116	-0.178	0.058	0.095	20.316466	-73.033728	1950.63	1174.57
4	GUIDE	used	1198272400	9.17	11961	0.110	0.088	0.115	0.188	20.411923	-73.620598	2038.27	-938.48
5	GUIDE	used	1198273408	9.32	12029	0.035	0.110	0.123	0.192	17.532323	-73.621495	-884.00	-994.54
6	GUIDE	used	1198282744	9.01	12041	-0.019	0.018	0.077	0.126	17.028326	-73.013356	-1506.23	1167.84
7	GUIDE	used	1198282824	7.32	12044	-0.010	-0.042	0.070	0.114	18.044095	-73.907062	-329.57	-2001.94

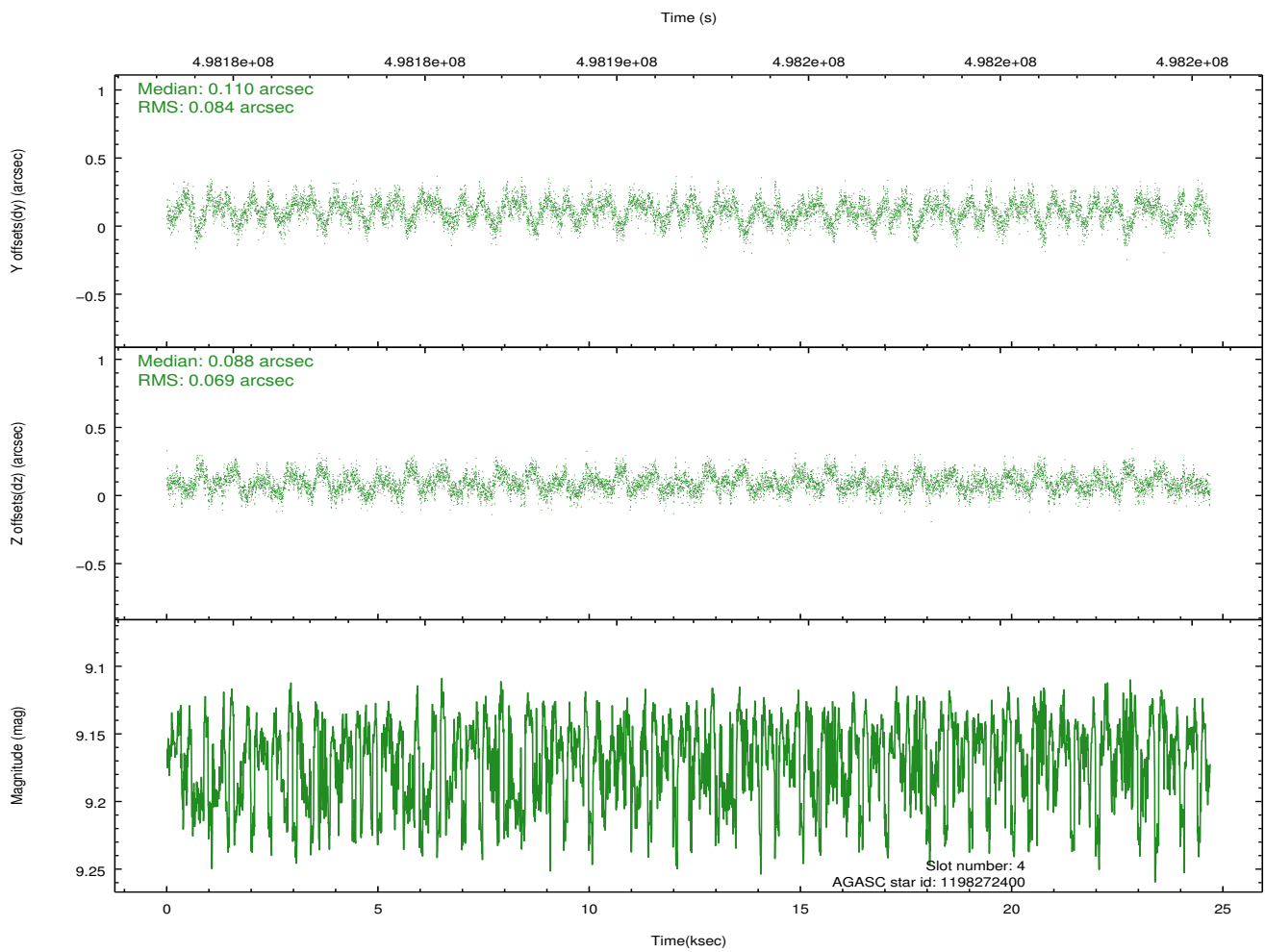
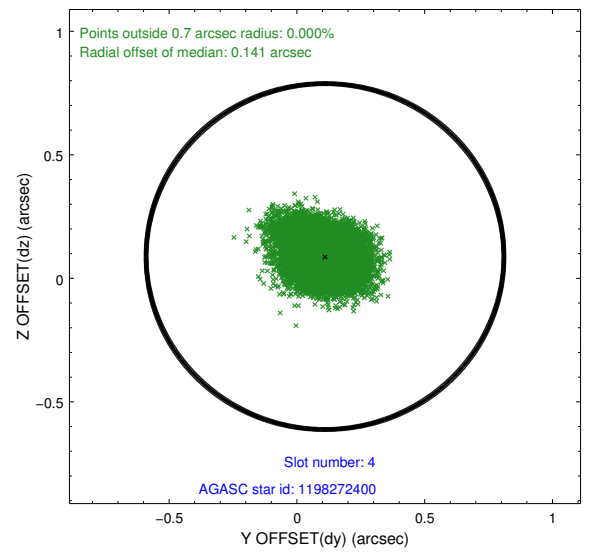
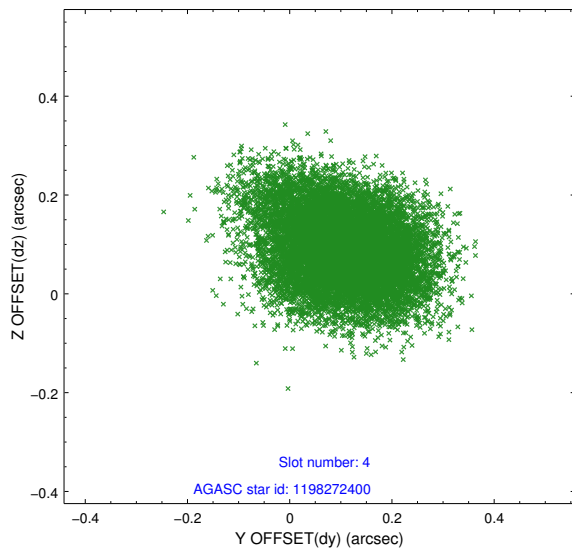
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2.4 Star Slots

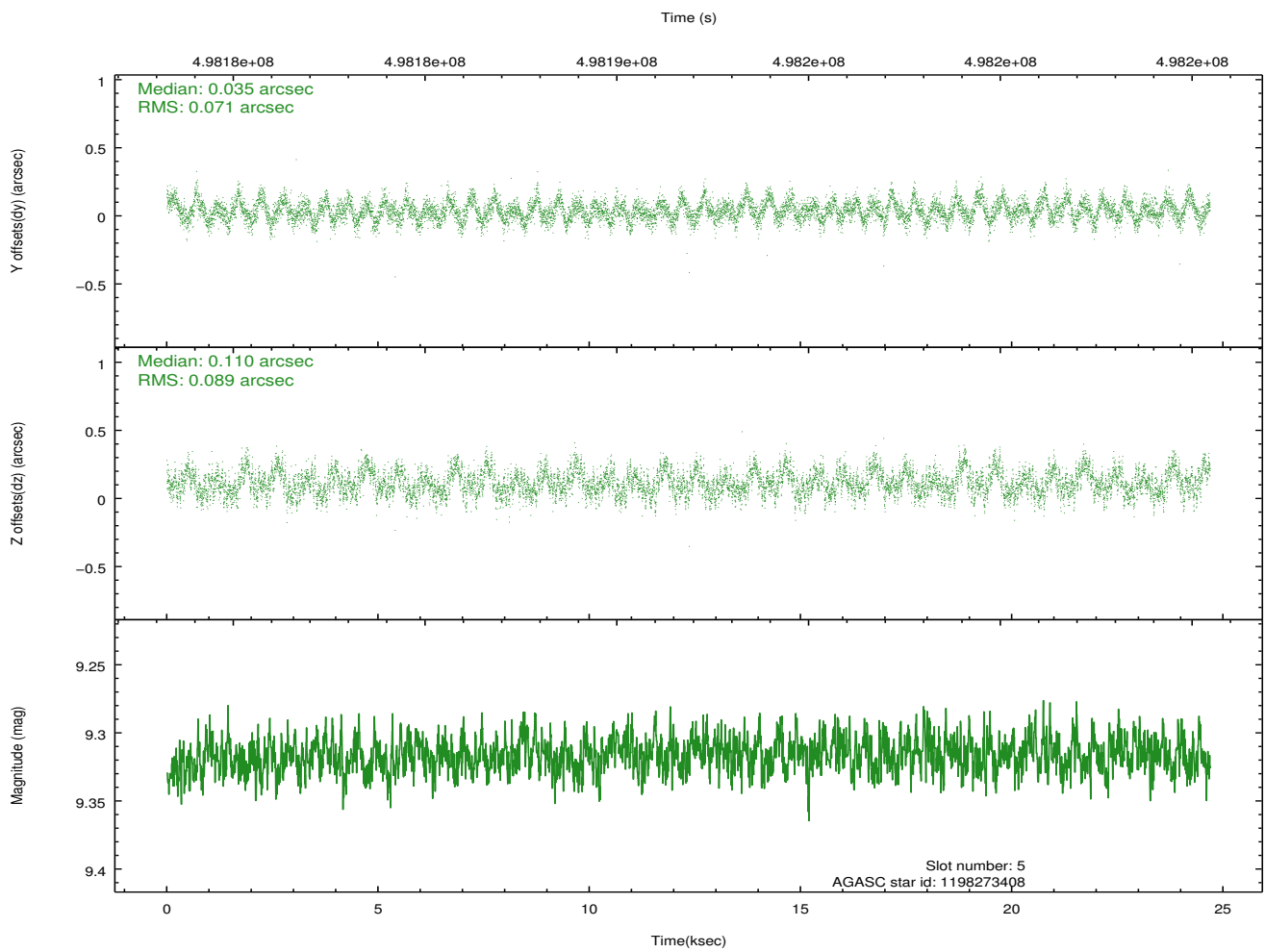
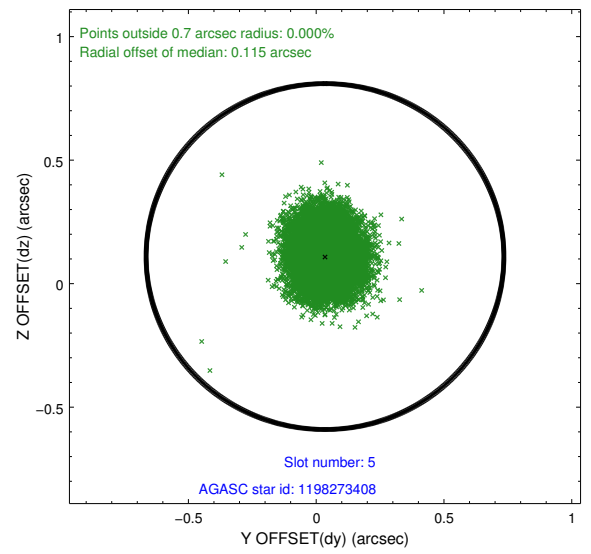
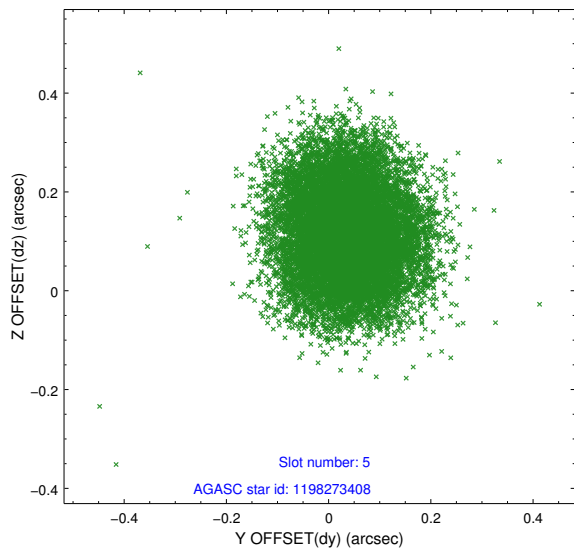
2.4.1 Slot 3



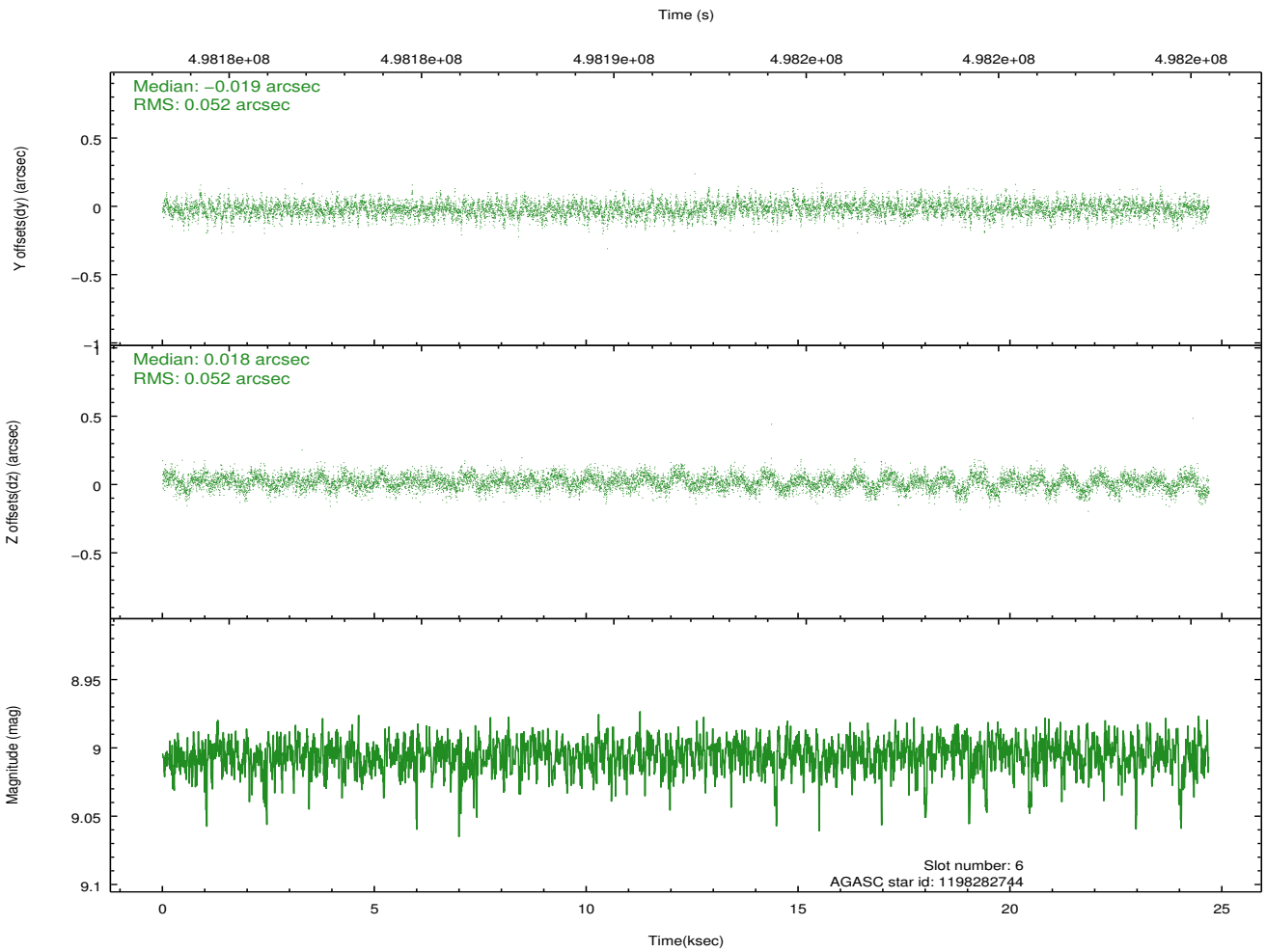
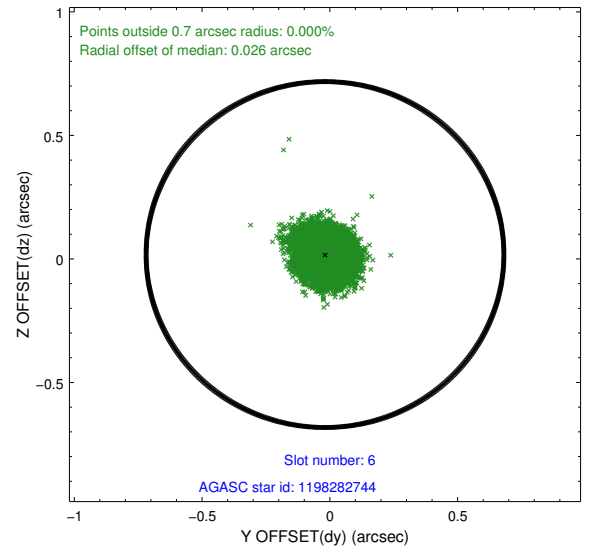
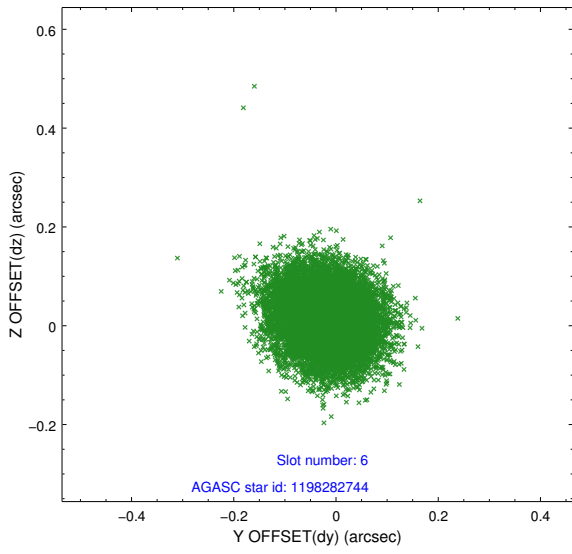
2.4.2 Slot 4



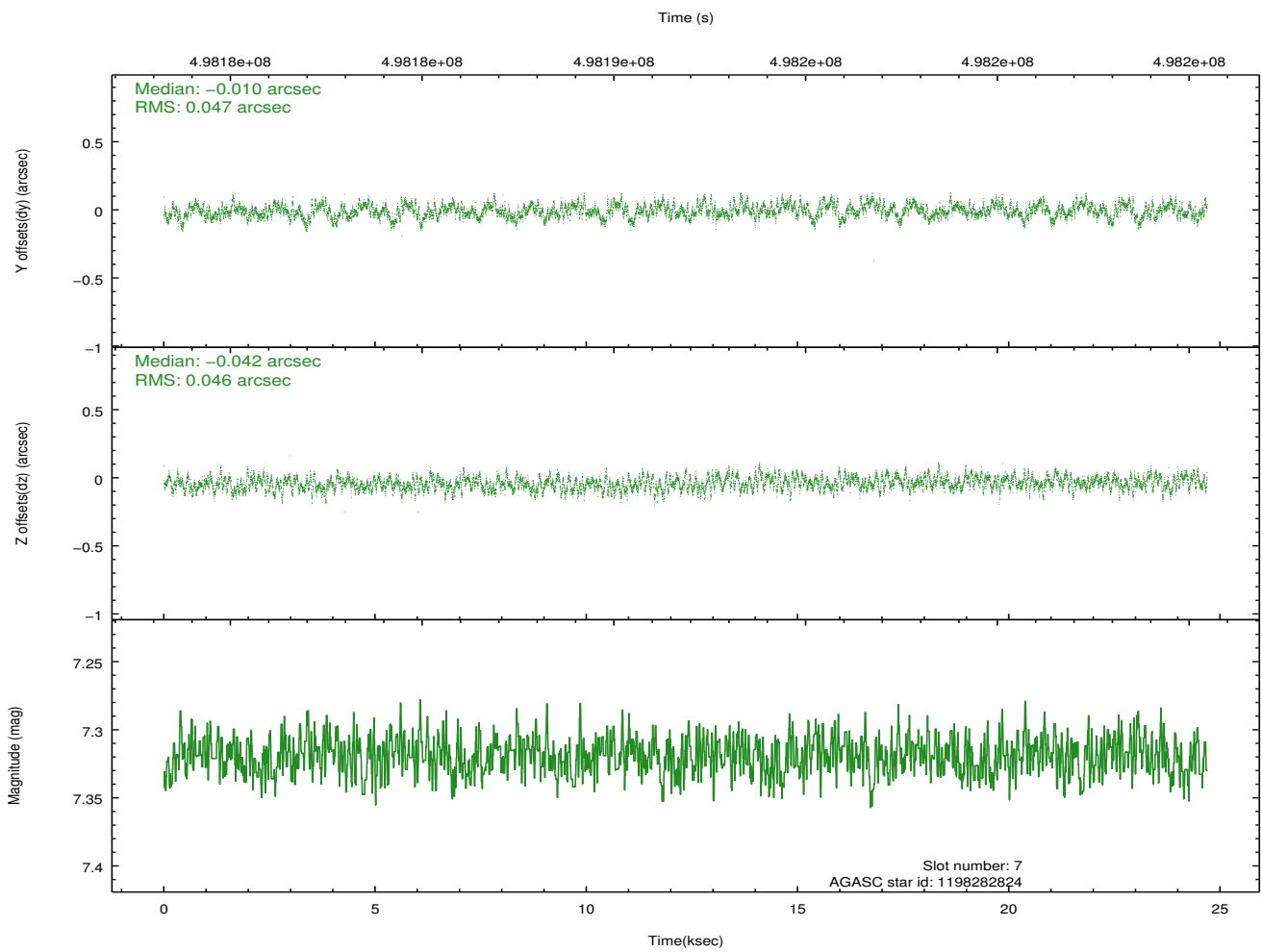
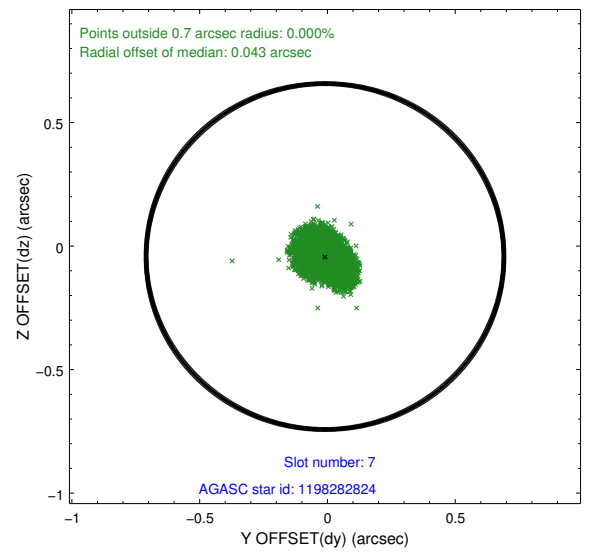
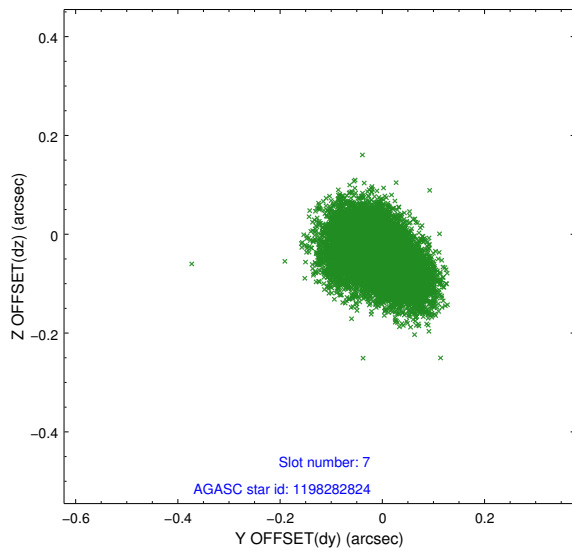
2.4.3 Slot 5



2.4.4 Slot 6

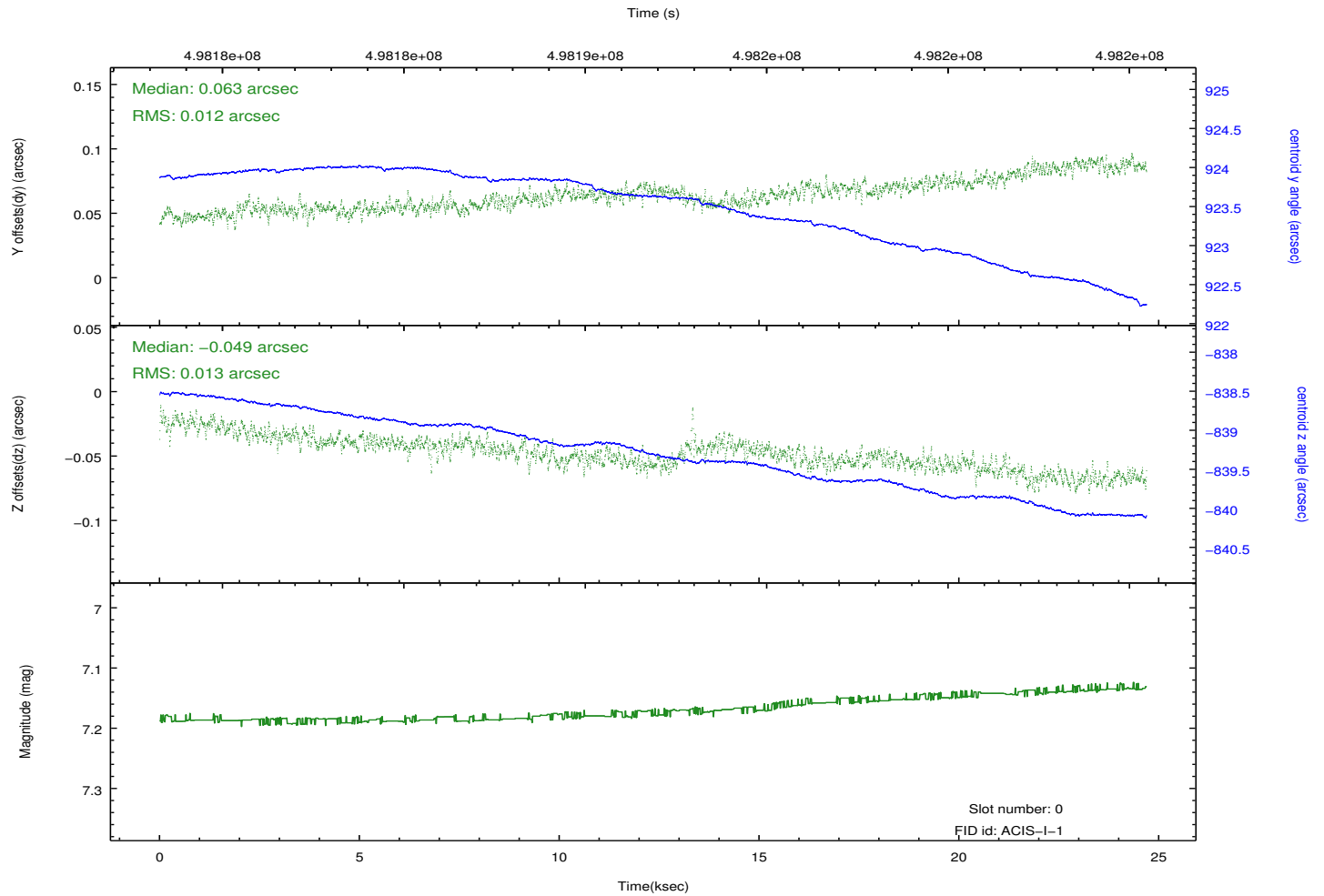
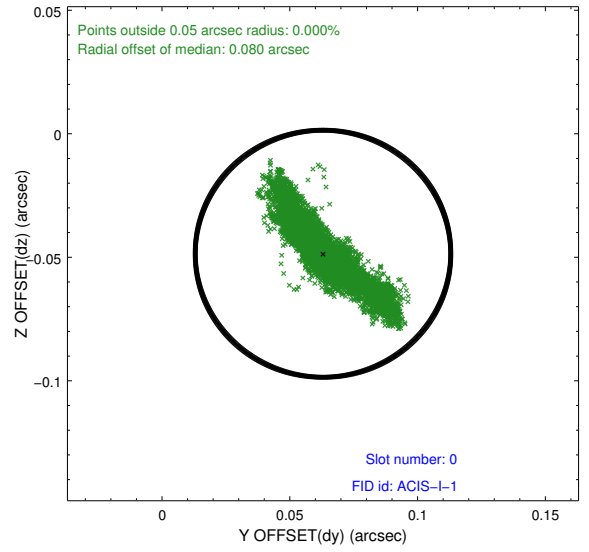
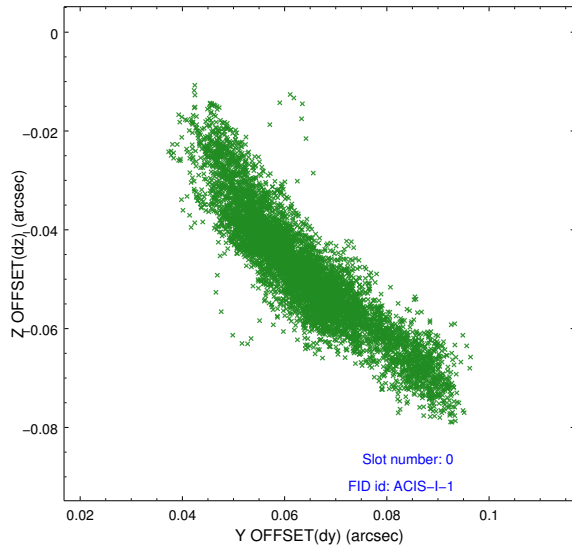


2.4.5 Slot 7

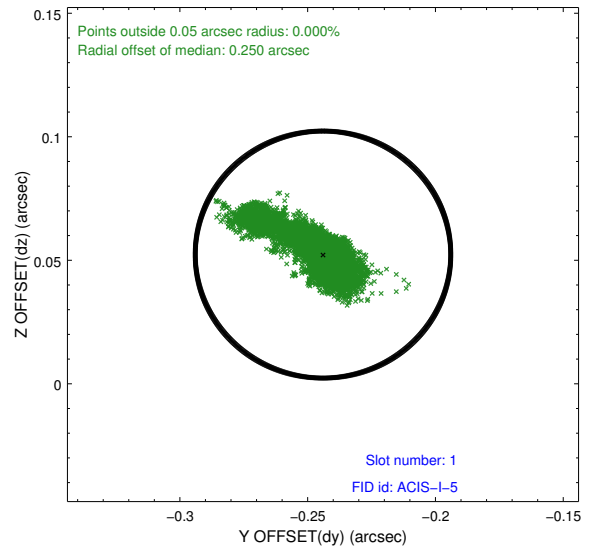
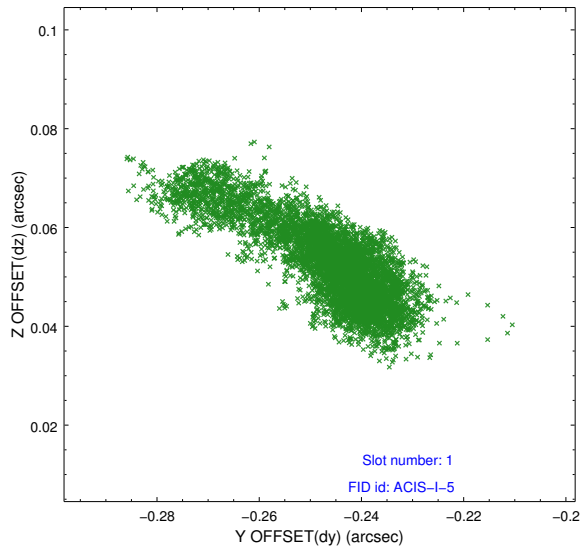


2.5 FID Slots

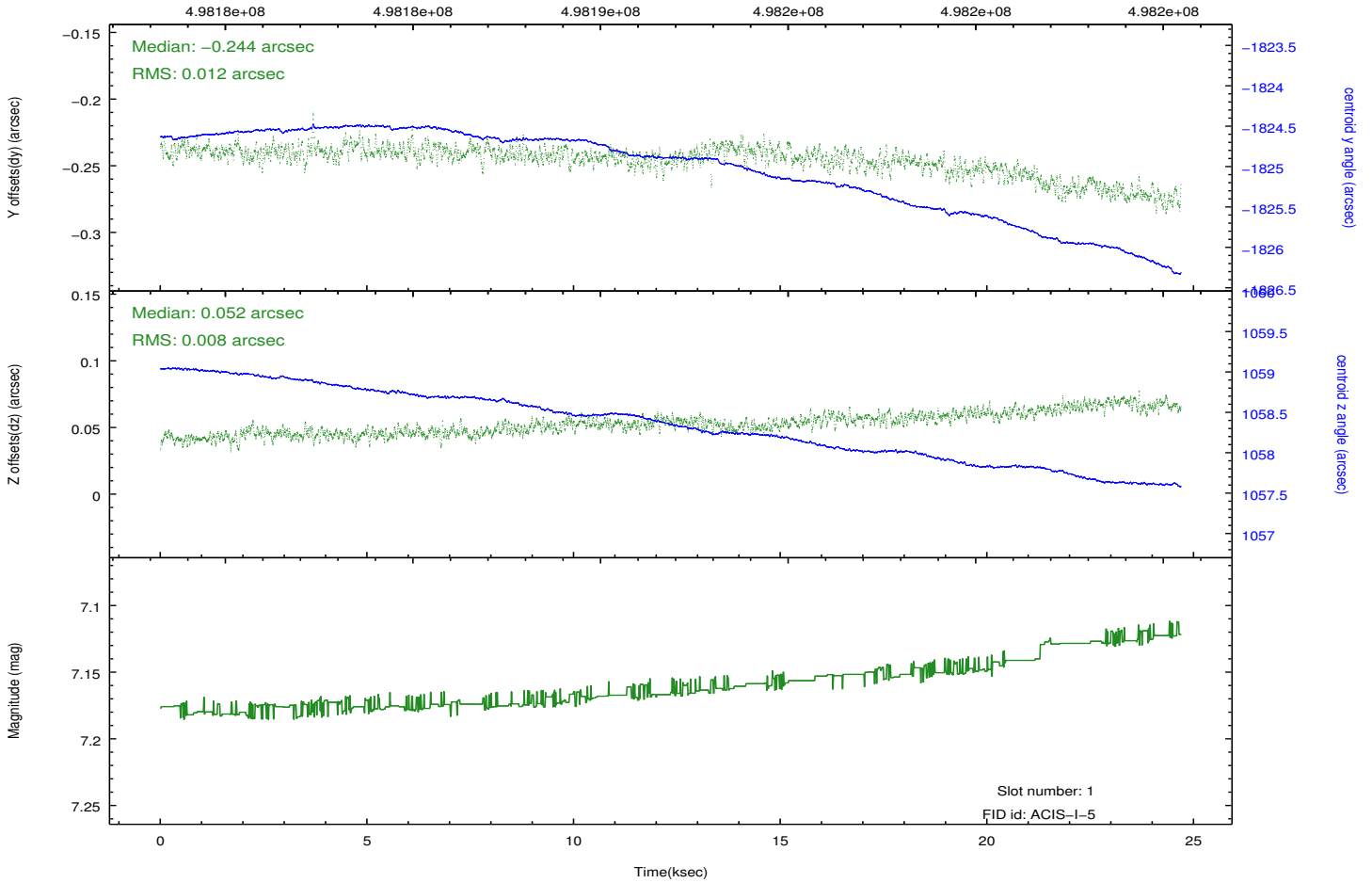
2.5.1 Slot 0



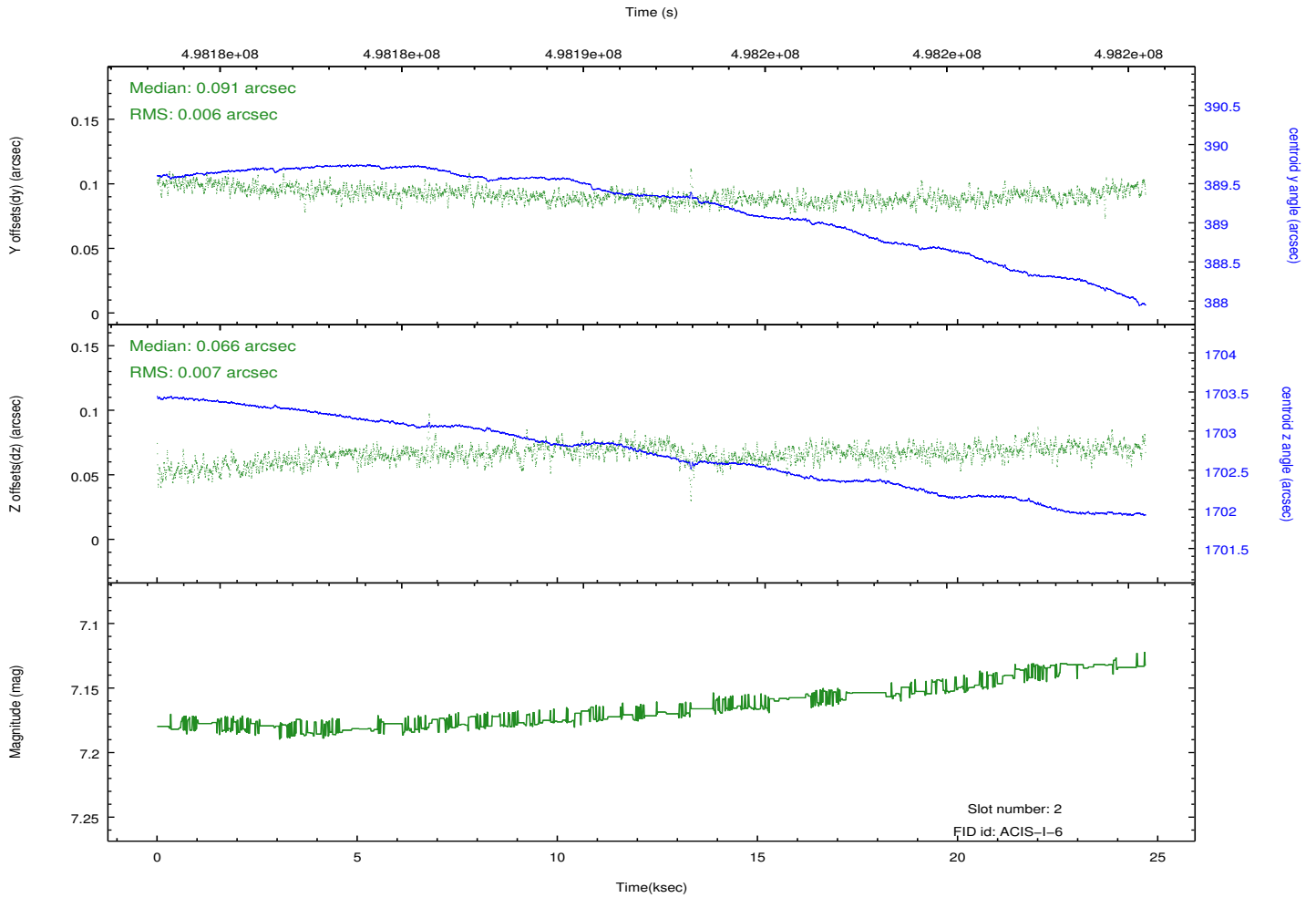
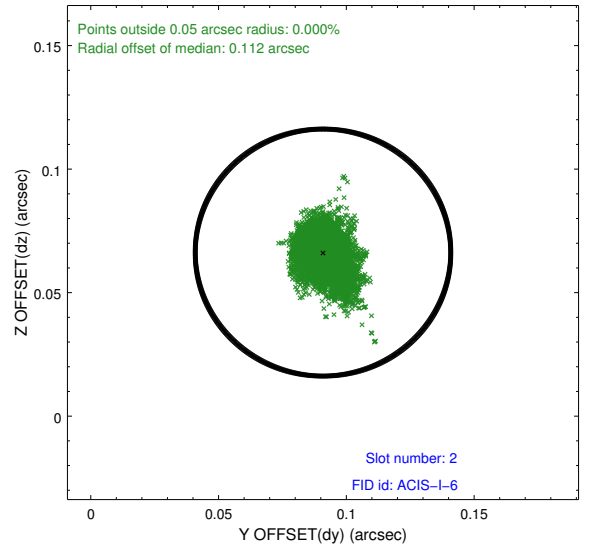
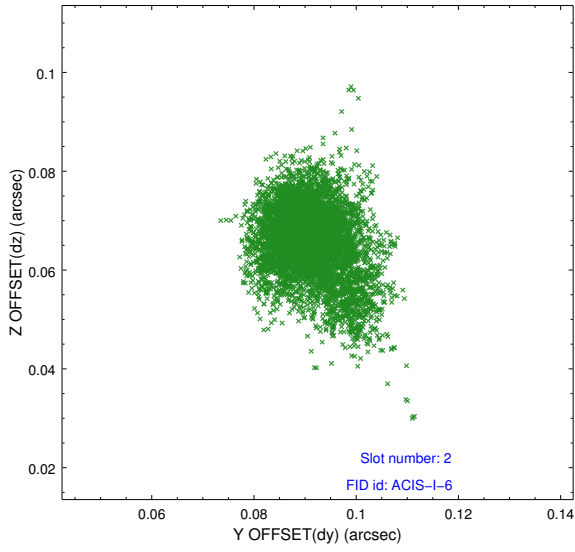
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	24.266759126246

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.