

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15314 - L2 Version 2
Chandra X-Ray Center

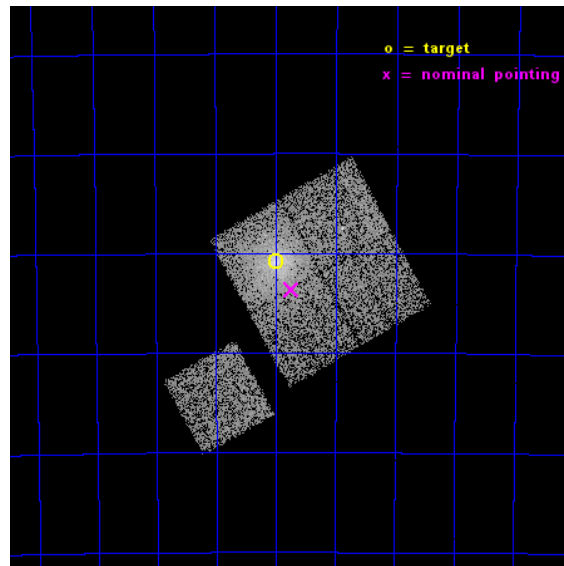
L2 Processing Date : Dec 9 2014

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1 Front

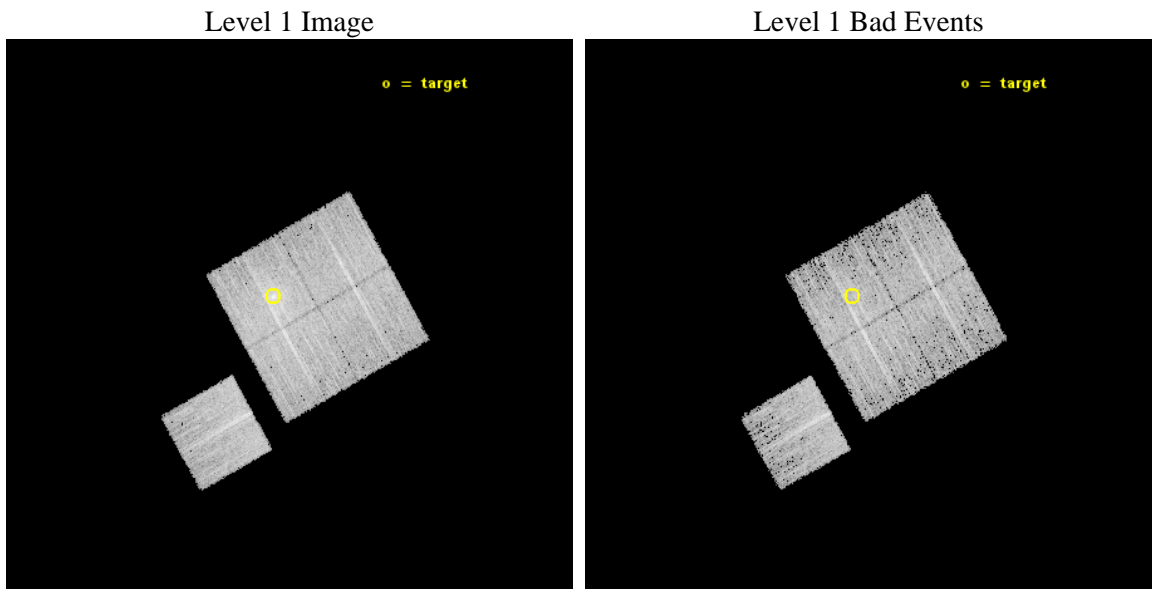
seq_num	801347	Sequence number
obs_id	15314	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G324.49-44.97	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	334.502	Observer's specified target RA [deg]
dec_targ	-65.181	Observer's specified target Dec [deg]
ra_nom	334.4346250418	Nominal RA [deg]
dec_nom	-65.227454479789	Nominal Dec [deg]
roll_nom	240.72716669123	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9773.5892778039	Sum of GTIs [s]
livetime	9645.8901386776	Livetime [s]
ontime0	9773.466157794	Sum of GTIs [s]
ontime1	9773.5071977973	Sum of GTIs [s]
ontime2	9773.5482378006	Sum of GTIs [s]
ontime3	9773.5892778039	Sum of GTIs [s]
ontime6	9773.4251177907	Sum of GTIs [s]
l2events	32717	Number of level 2 events



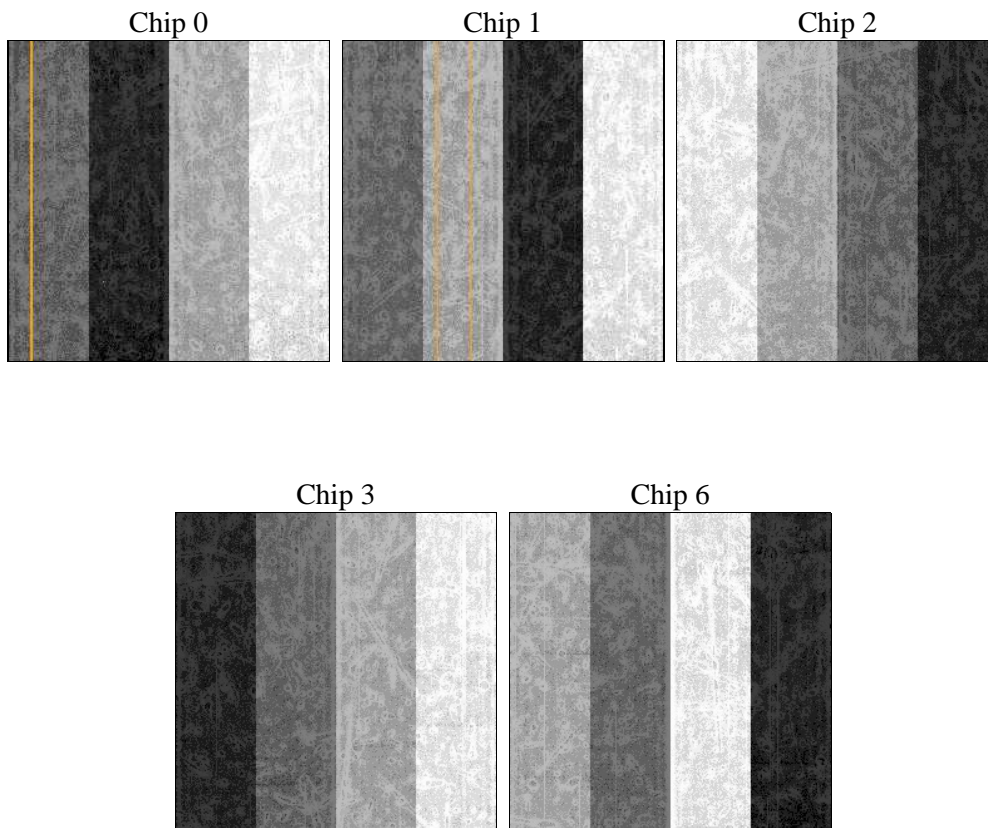
2 OBI

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	10.3.1	Processing system revision	ontime	9773.5892778039	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	9773.466157794	Sum of GTIs [s]
date	2014-12-09T21:55:47	Date and time of file creation	ontime1	9773.5071977973	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9773.5482378006	Sum of GTIs [s]
			ontime3	9773.5892778039	Sum of GTIs [s]
			ontime6	9773.4251177907	Sum of GTIs [s]
			l1events	235929	Number of level 1 events

2.1.4 Events

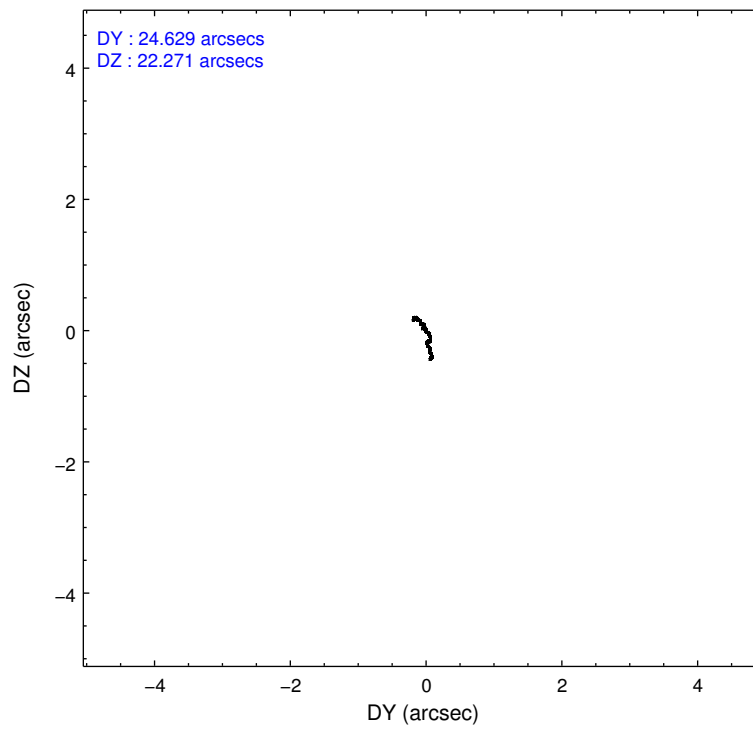
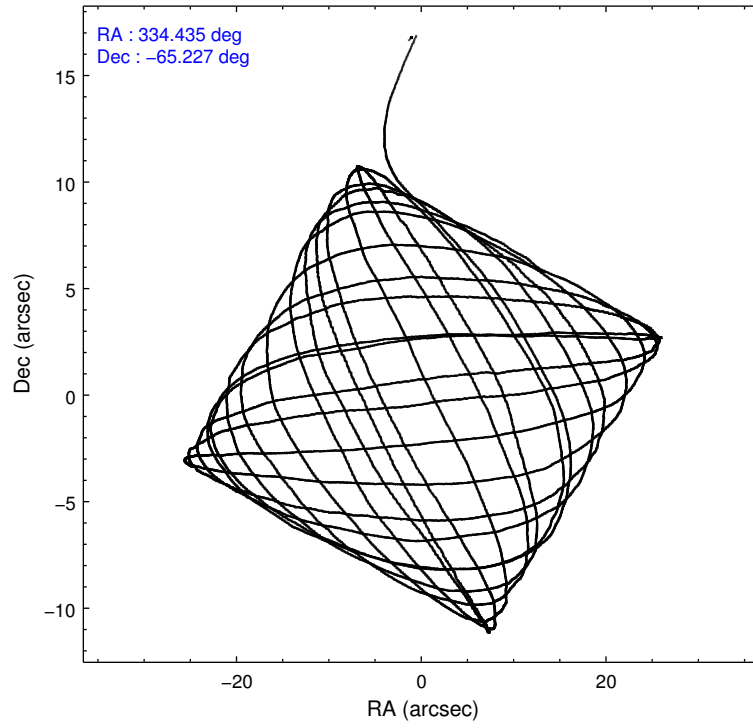
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	42494	43910	47742	54343	47440
rejected events	36855	37121	41513	41283	41798
rejected %	86%	84%	86%	75%	88%

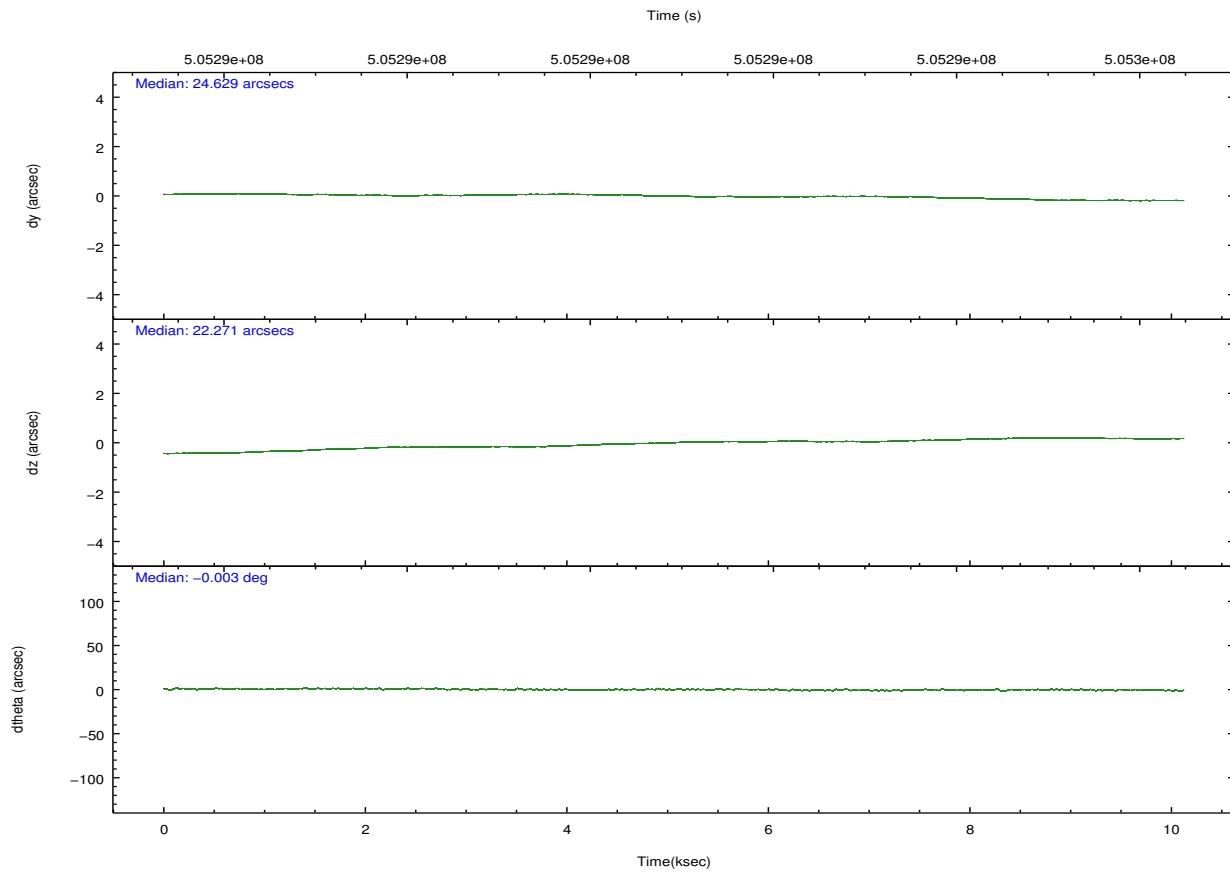
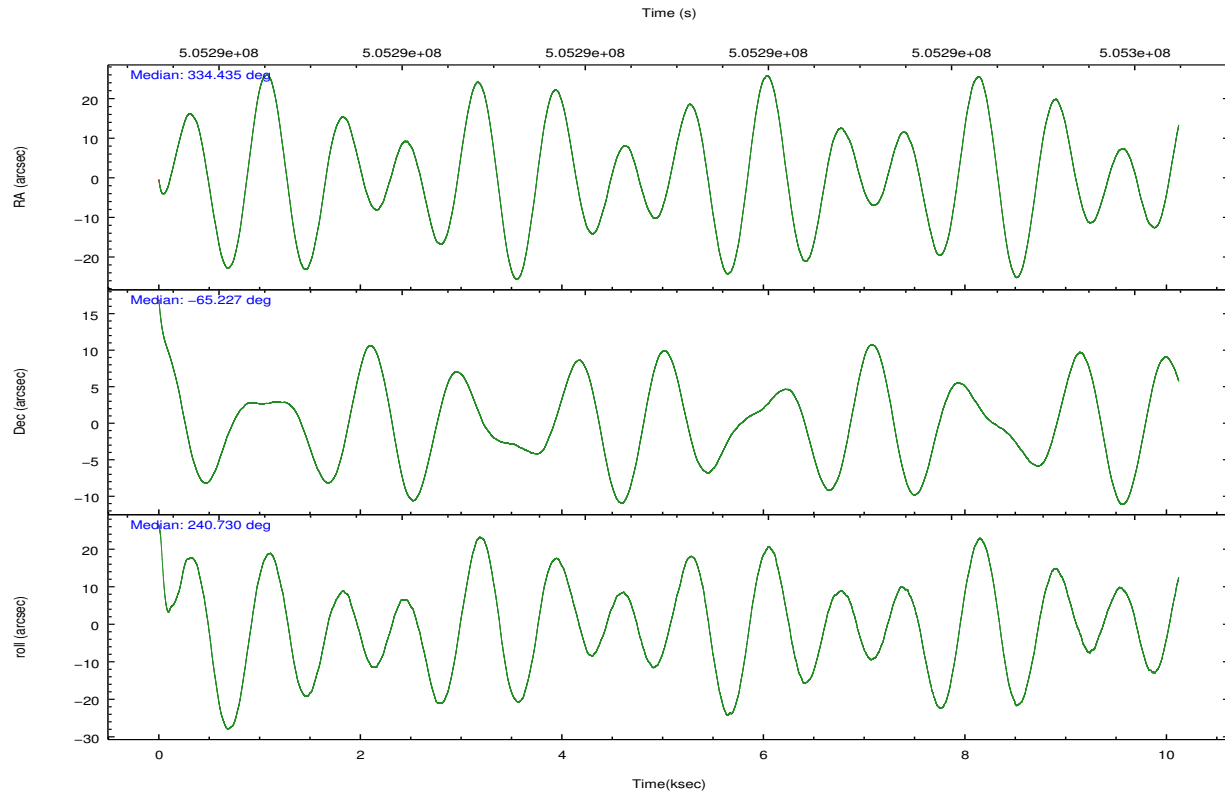
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	1937	2658	2525	8080	1925
	4%	6%	5%	14%	4%
grade 1 events	25	22	33	41	19
	0%	0%	0%	0%	0%
grade 2 events	1444	1561	1480	1938	1249
	3%	3%	3%	3%	2%
grade 3 events	570	611	559	843	592
	1%	1%	1%	1%	1%
grade 4 events	561	660	594	800	585
	1%	1%	1%	1%	1%
grade 5 events	2259	2377	2237	2547	2361
	5%	5%	4%	4%	4%
grade 6 events	1128	1299	1073	1402	1291
	2%	2%	2%	2%	2%
grade 7 events	34570	34722	39241	38692	39418
	81%	79%	82%	71%	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	334.433542	334.4346250417953	CCD I2 on	Y	Y
[deg] Pointing Dec	-65.200009	-65.227454479789	CCD I3 on	Y	Y
[deg] Pointing Roll	240.517473	240.7271666912335	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	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	505285978.184000	505284291.02643	CCD S5 on	N	N
Observation start date	2014-01-05T05:11:51	2014-01-05T04:44:51	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	505295978.184000	505296902.11462	On-chip summing requested	N	N
Observation end date	2014-01-05T07:58:31	2014-01-05T08:15:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





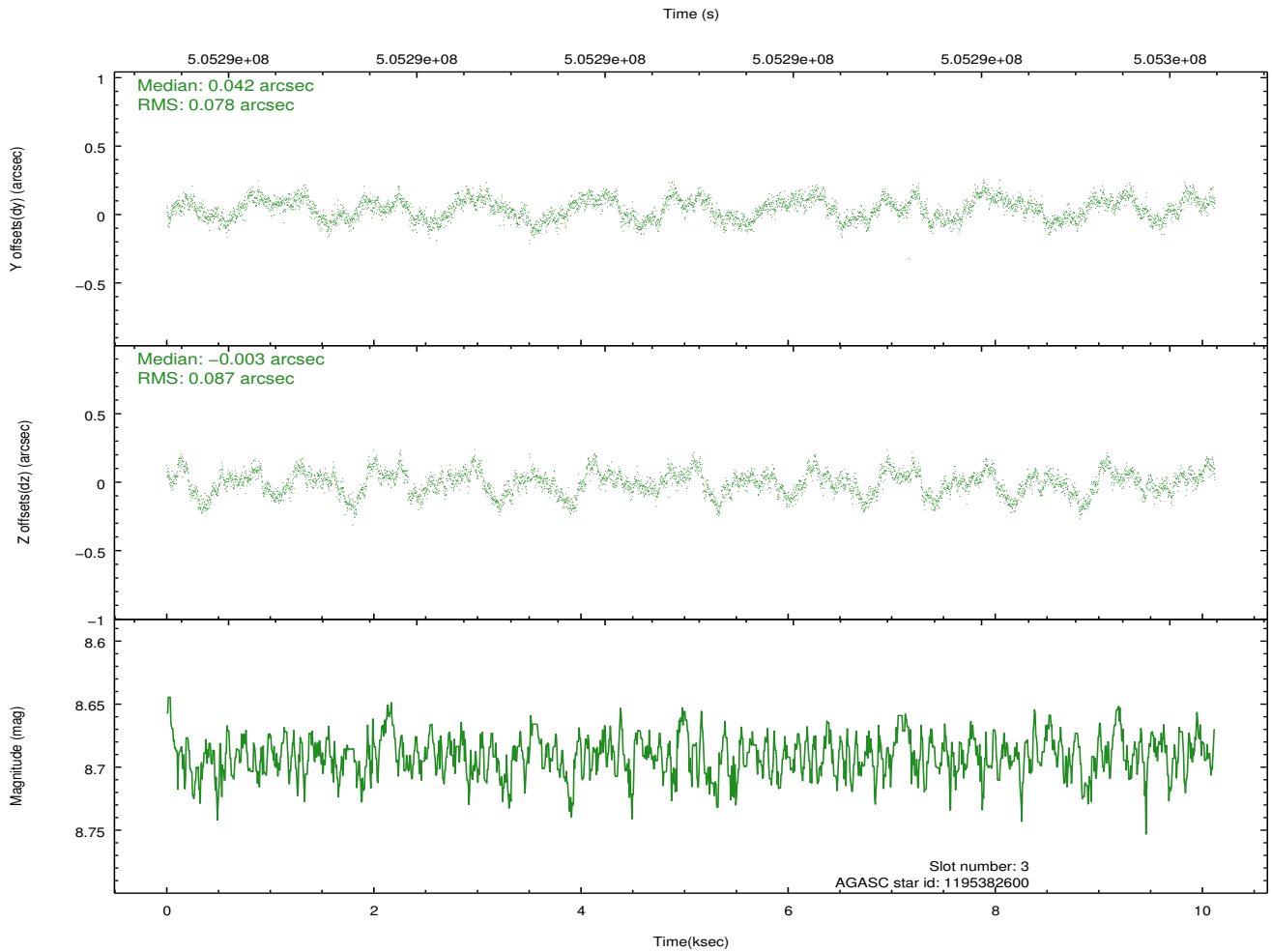
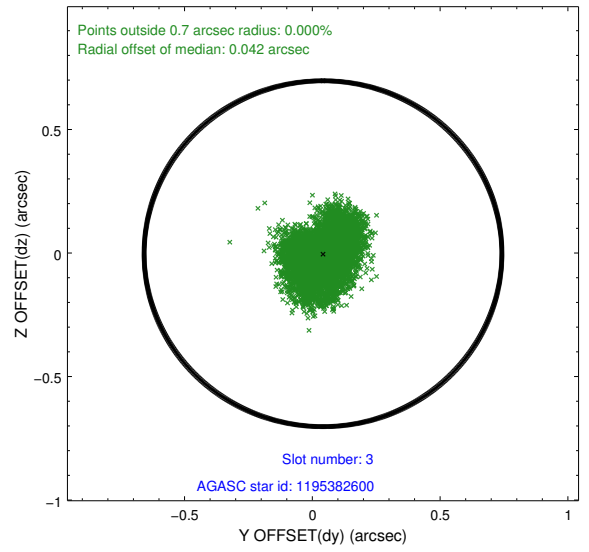
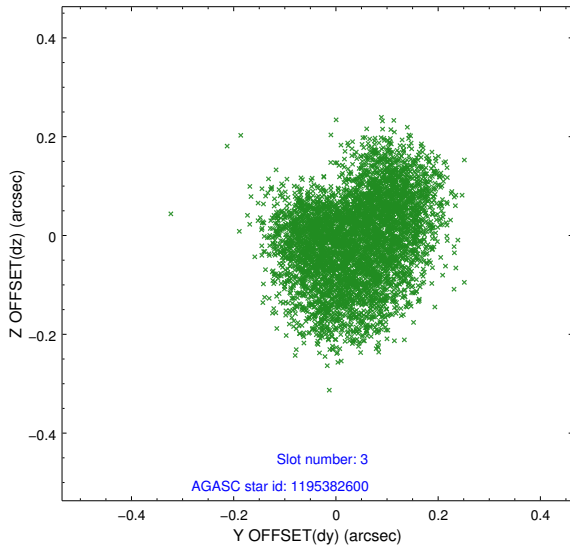
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	2469	0.151	-0.094	0.013	0.022	0.000000	0.000000	914.61	-1005.10
1	FID		ACIS-I-5	7.10	2469	-0.385	0.101	0.007	0.011	0.000000	0.000000	-1833.78	892.19
2	FID		ACIS-I-6	7.11	2469	0.143	0.063	0.010	0.017	0.000000	0.000000	379.52	1537.30
3	GUIDE	used	1195382600	8.69	4935	0.042	-0.003	0.128	0.192	334.586474	-64.557589	-2128.55	-932.12
4	GUIDE	used	1195775504	8.35	4937	-0.134	0.122	0.098	0.152	334.438342	-65.018596	-571.84	-314.79
5	GUIDE	used	1195779952	9.72	4887	0.013	0.022	0.136	0.219	333.047897	-65.581362	2230.31	-1108.11
6	GUIDE	used	1195777136	8.73	4932	-0.112	-0.153	0.102	0.165	333.306295	-65.671957	2316.17	-610.77
7	GUIDE	used	1195390136	9.63	4913	0.192	0.015	0.191	0.300	333.698178	-64.429961	-1843.85	-2355.14

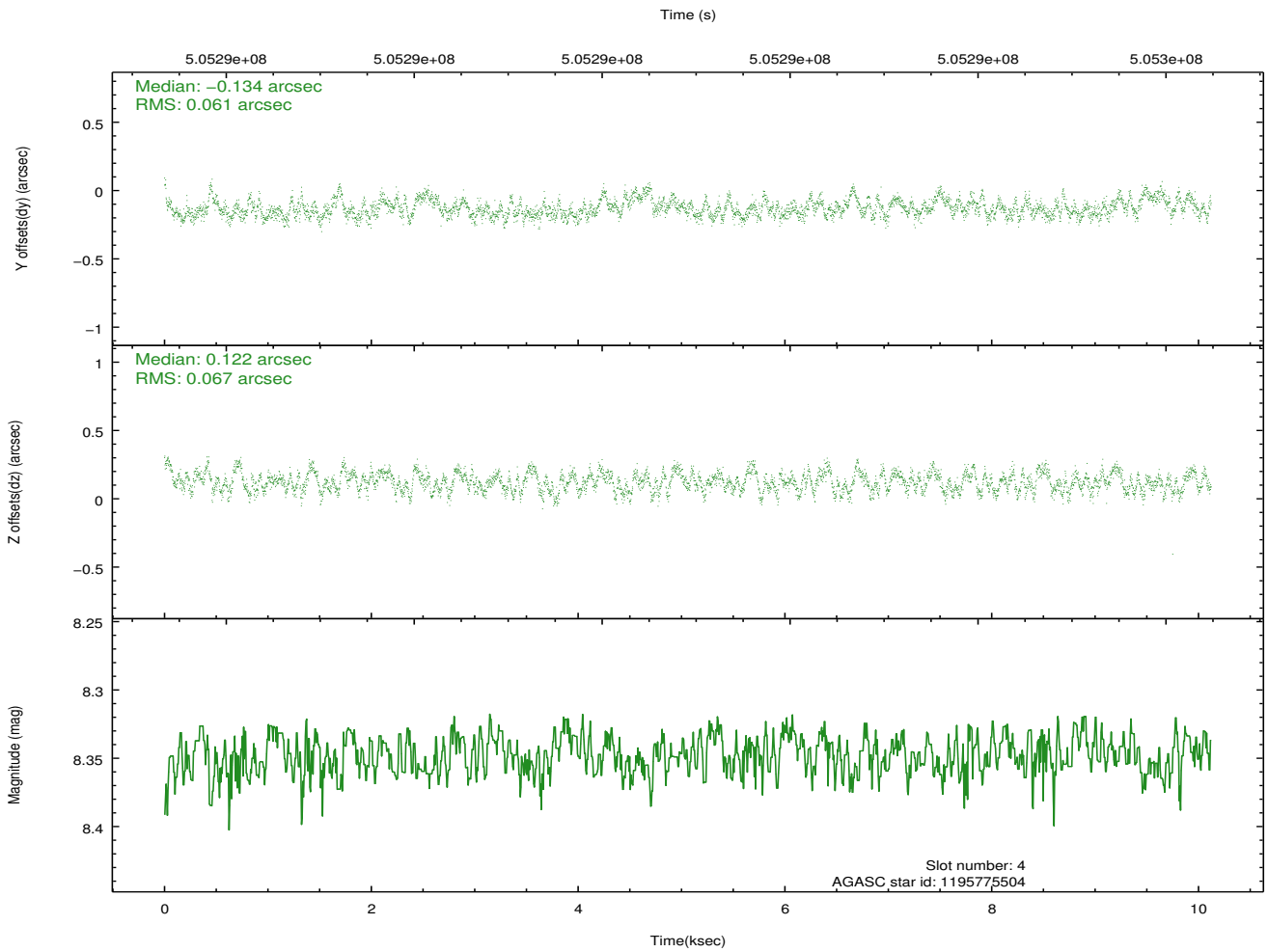
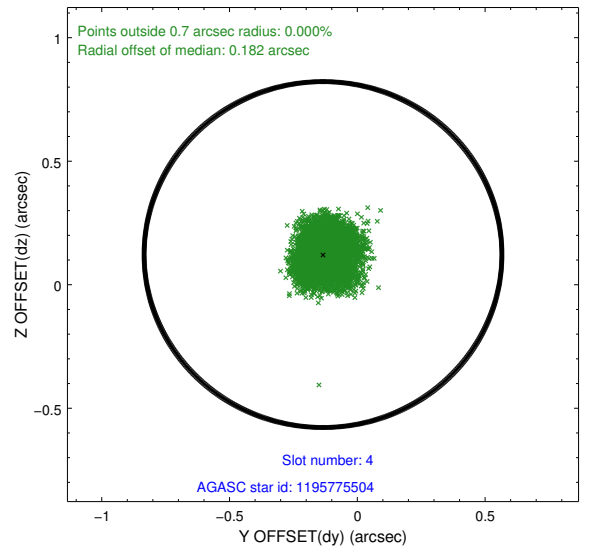
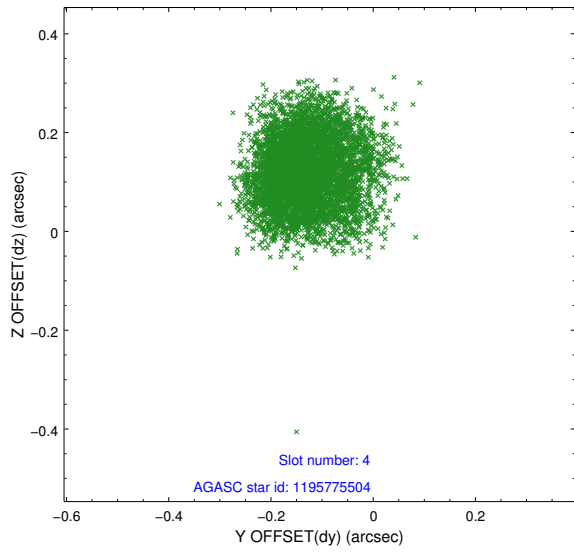
∞

2.4 Star Slots

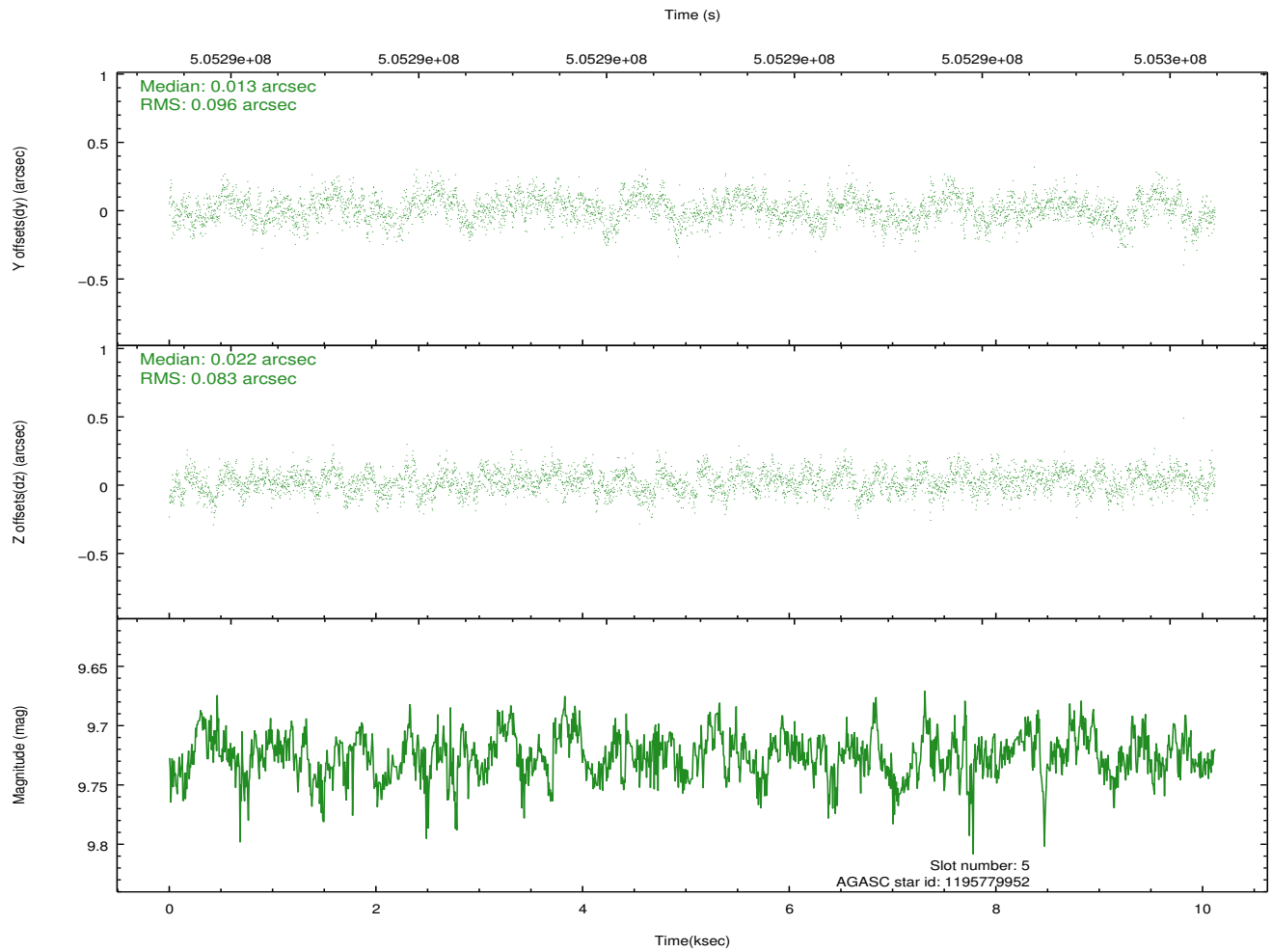
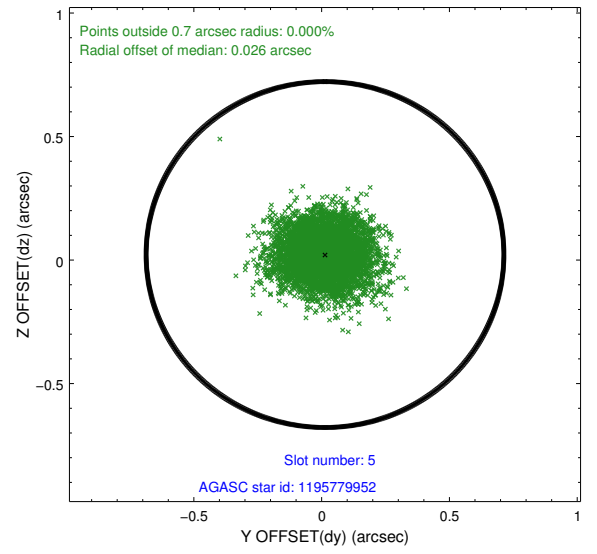
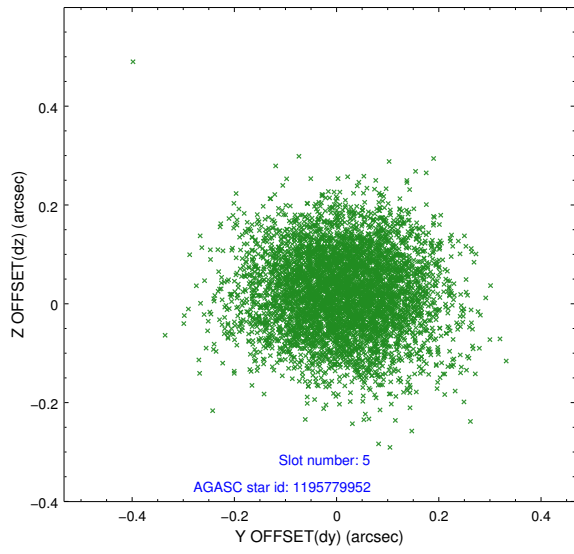
2.4.1 Slot 3



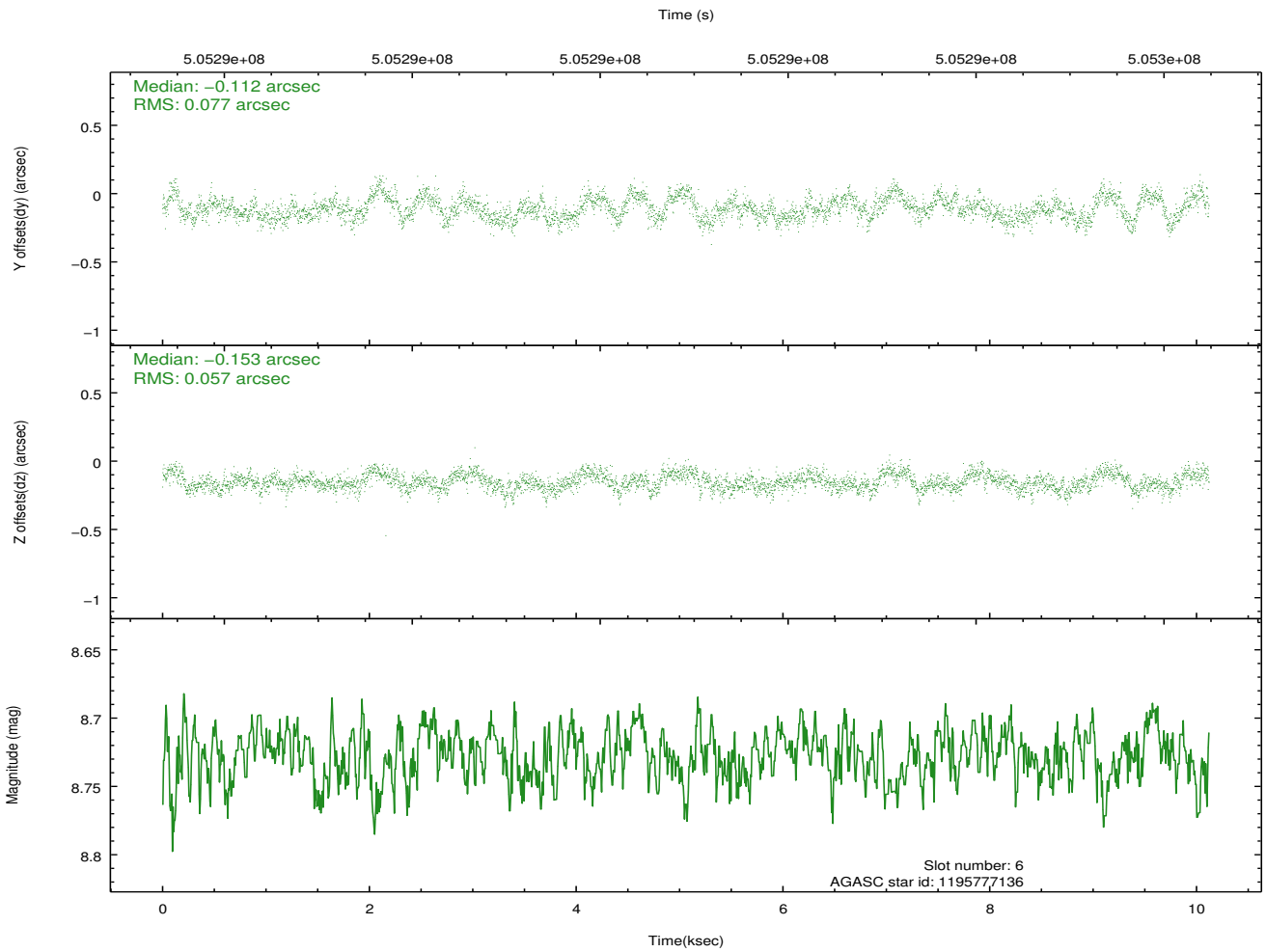
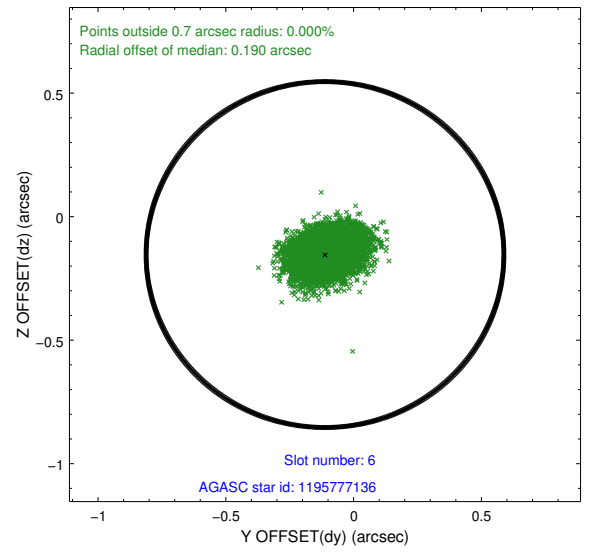
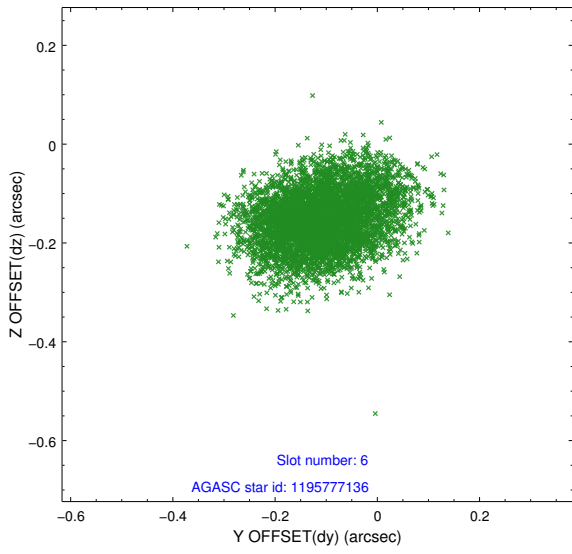
2.4.2 Slot 4



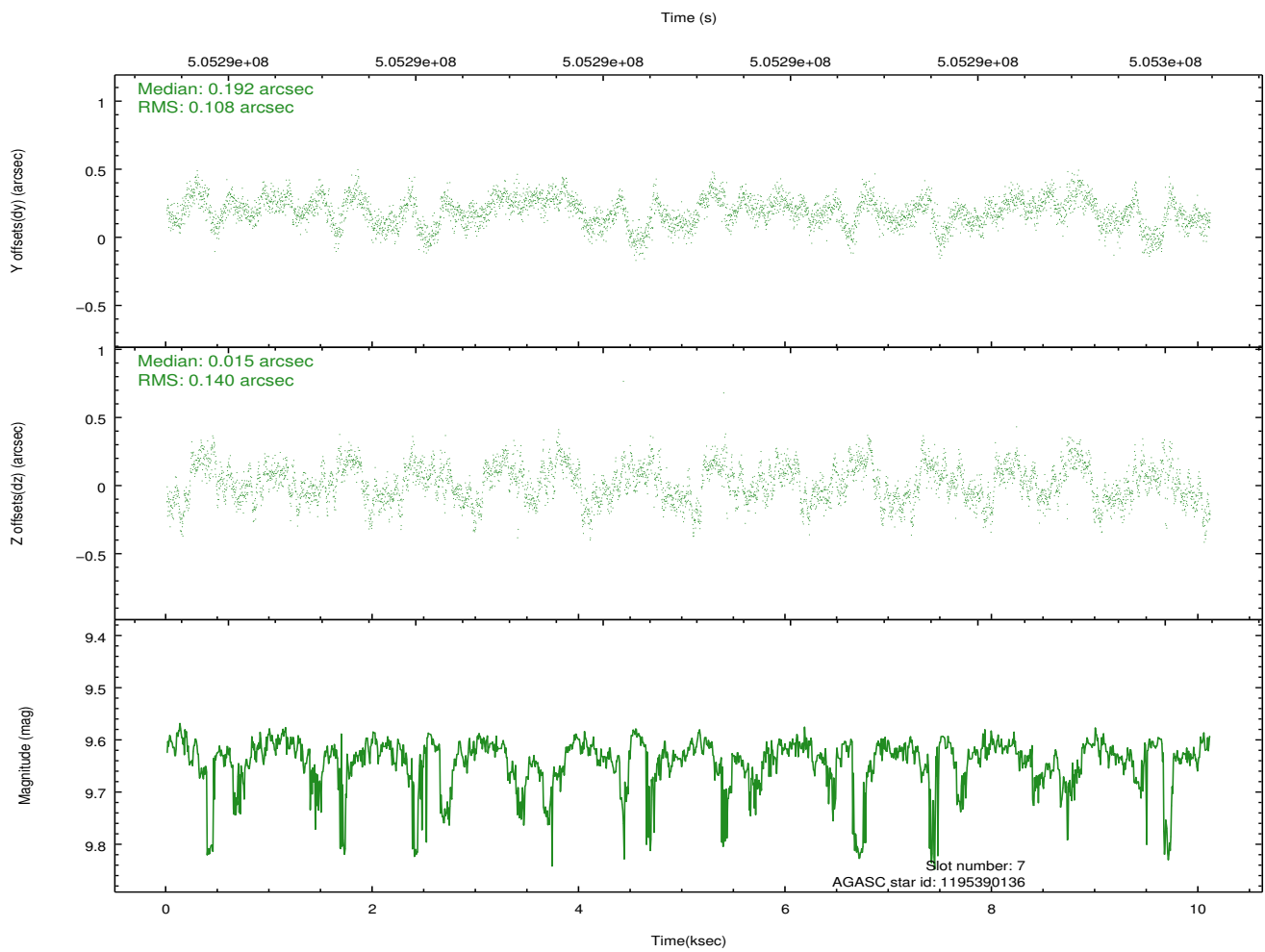
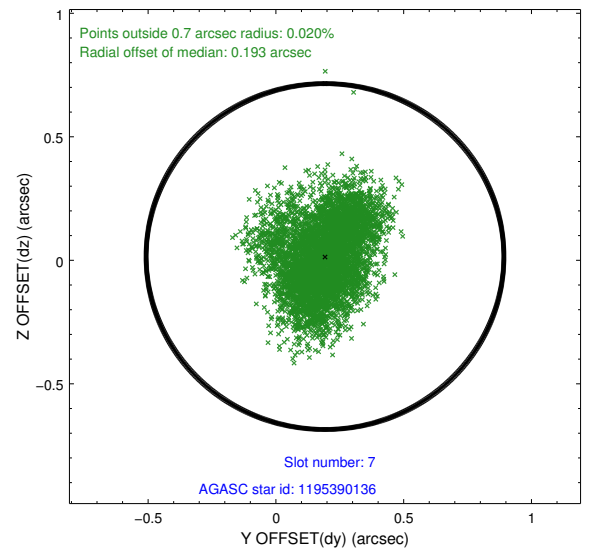
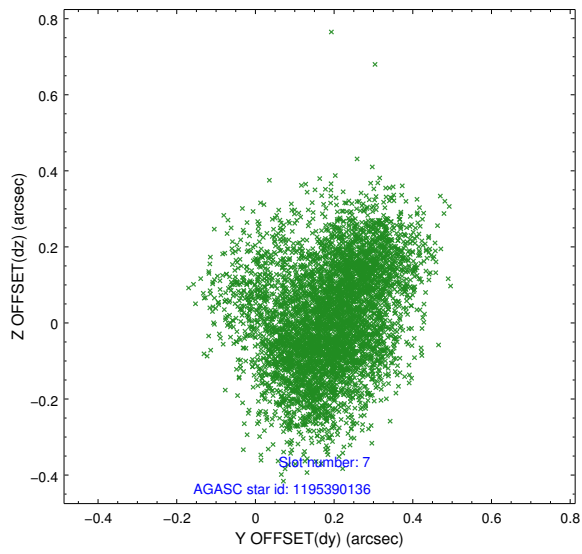
2.4.3 Slot 5



2.4.4 Slot 6

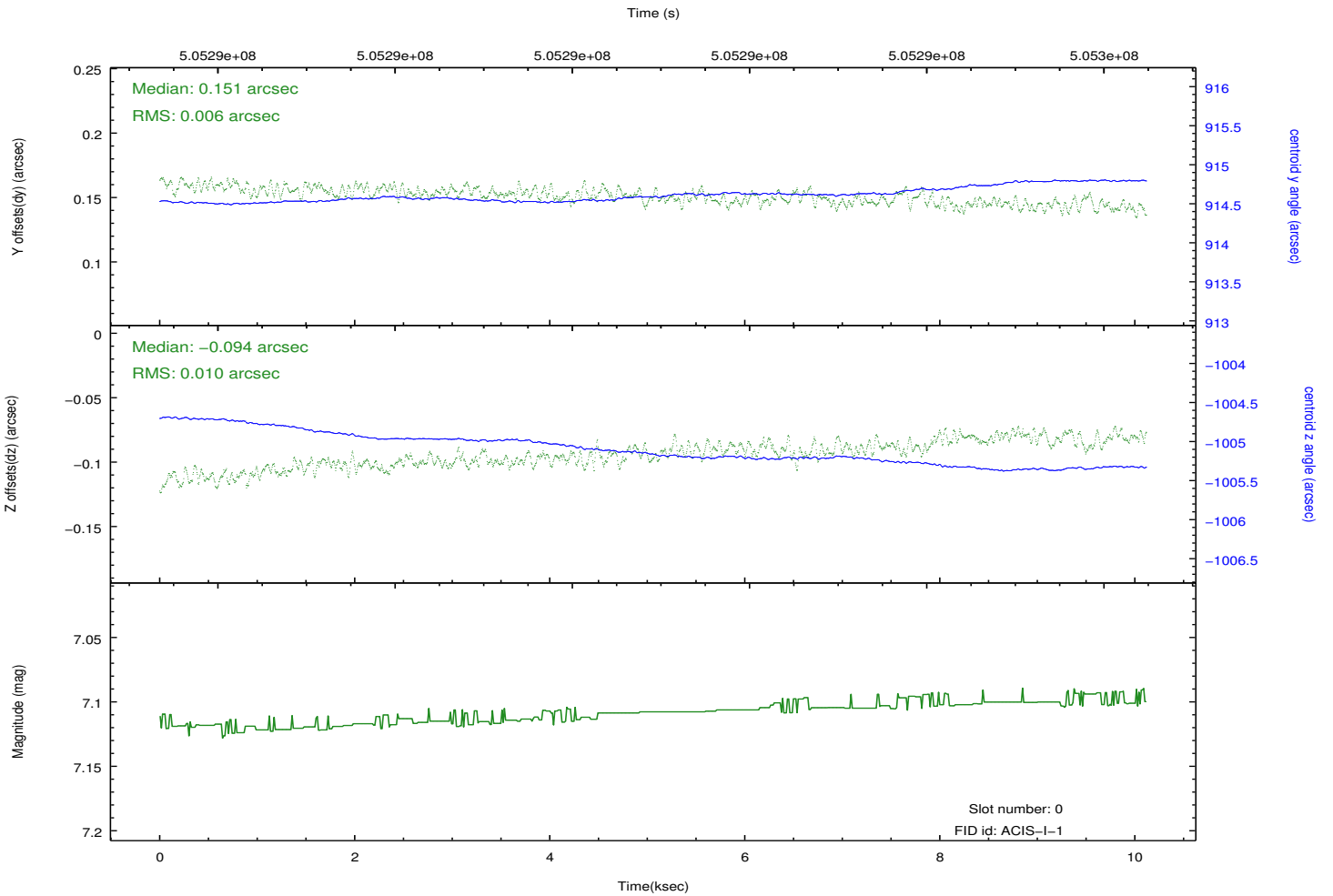
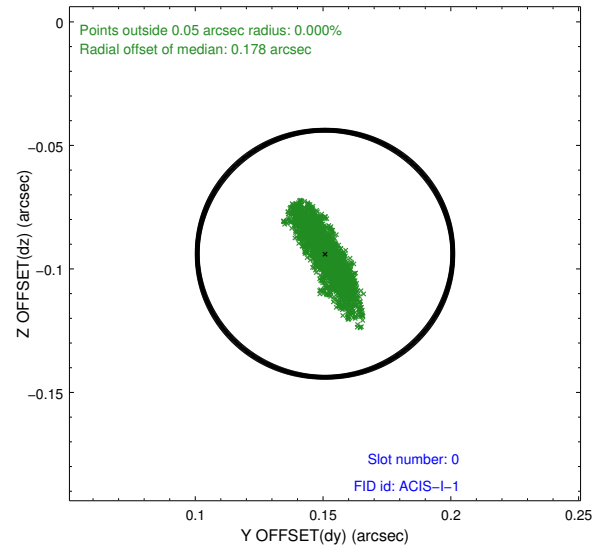
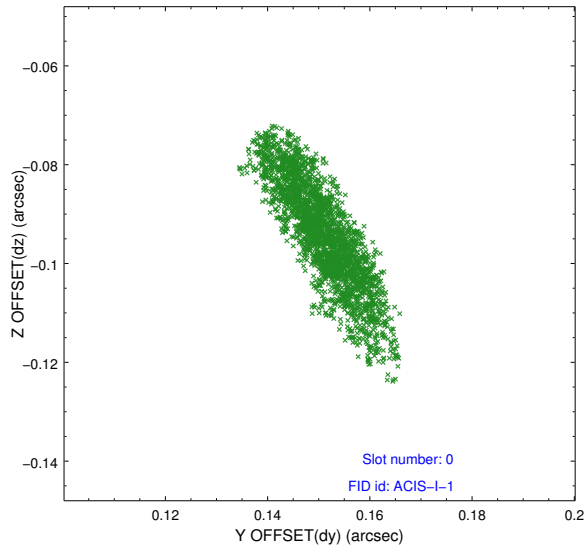


2.4.5 Slot 7

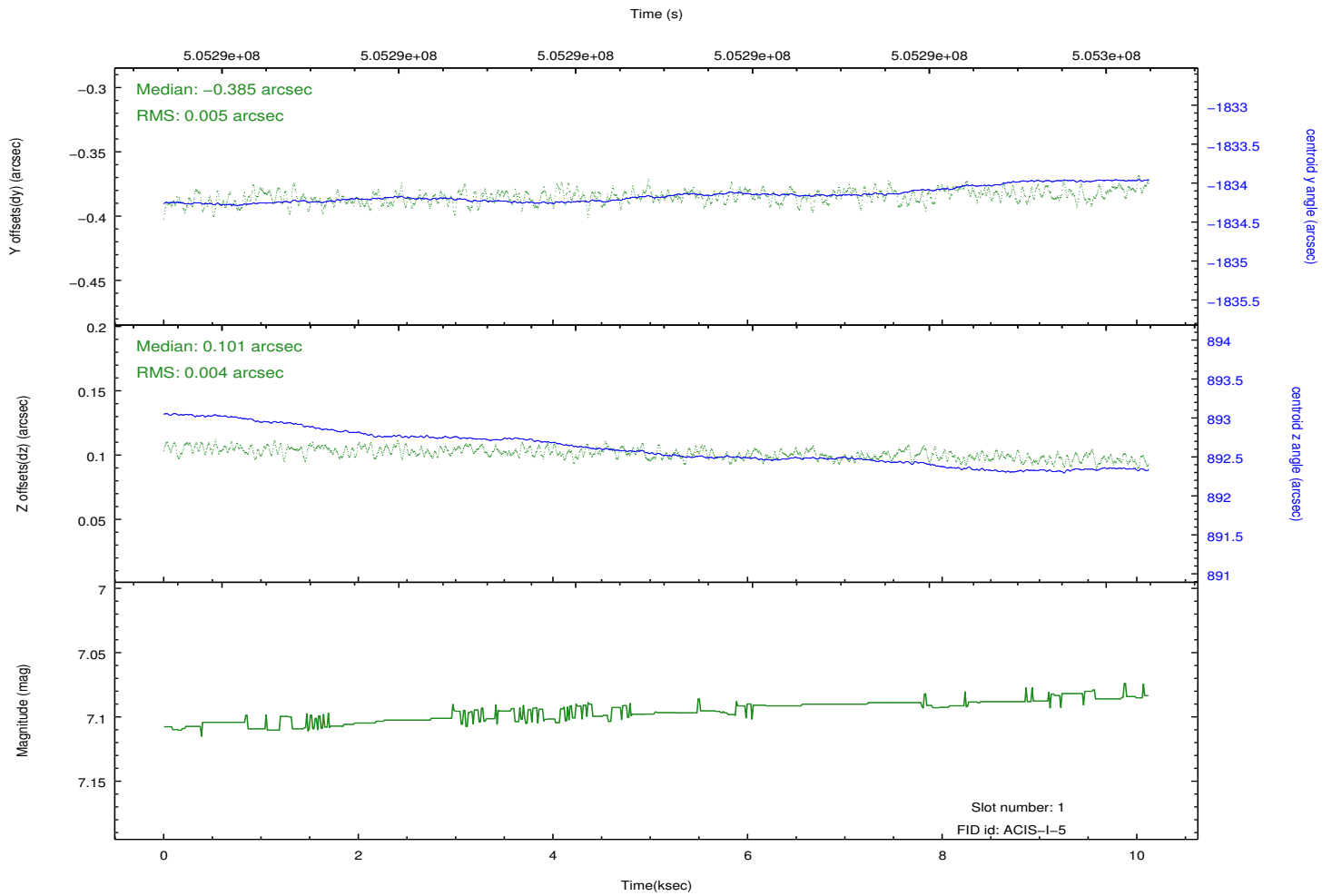
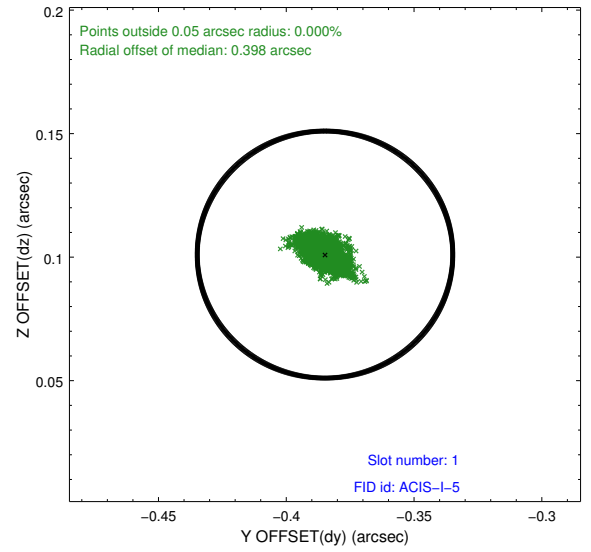
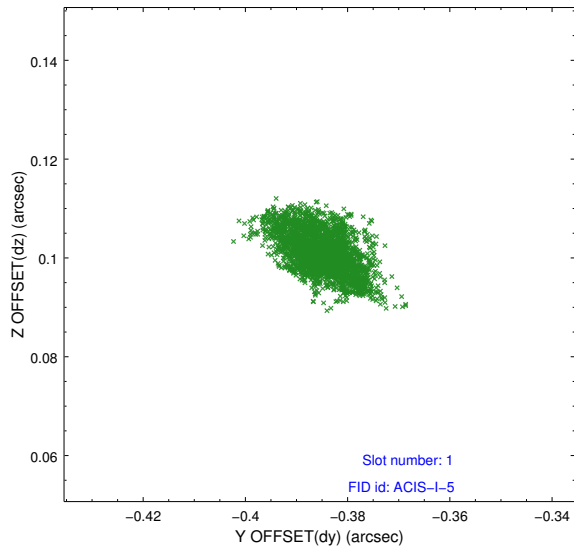


2.5 FID Slots

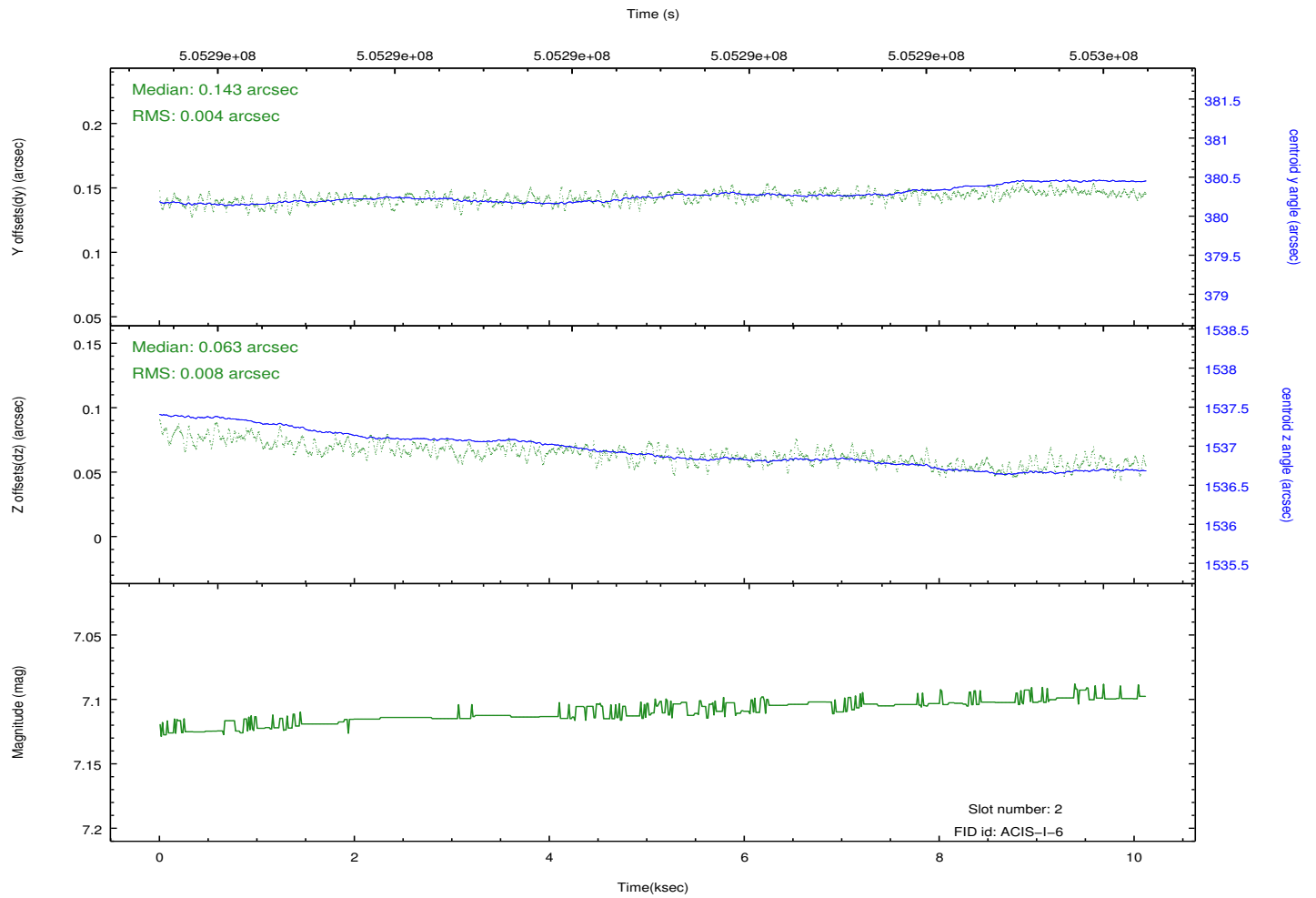
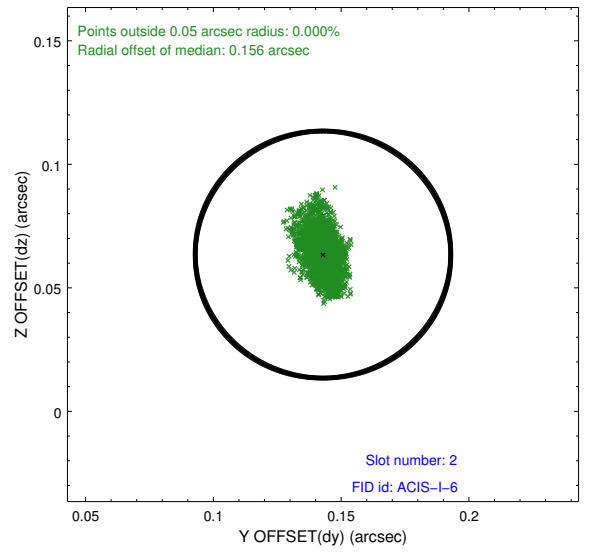
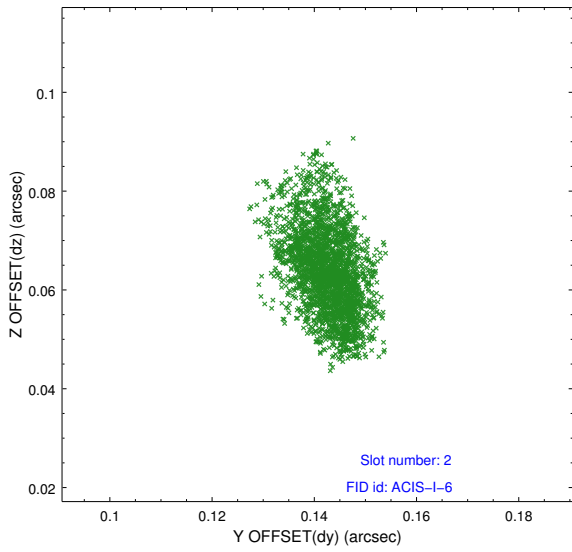
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7735892778039

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.