

V&V Reference Report

L2 ASCDS Version : 10

Observation 15120 - L2 Version 2
Chandra X-Ray Center

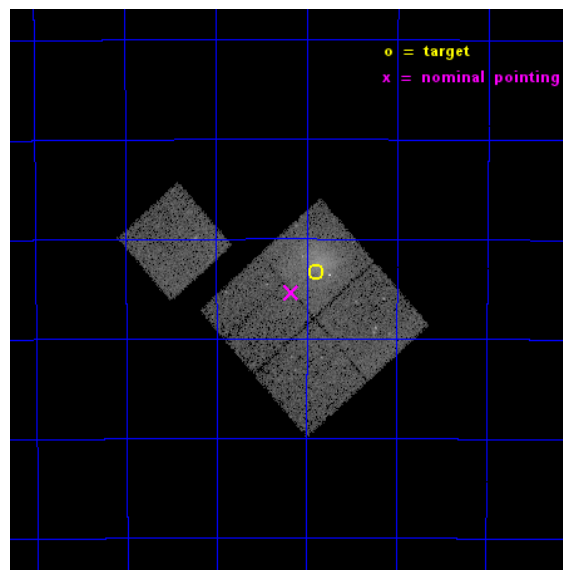
L2 Processing Date : Dec 5 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

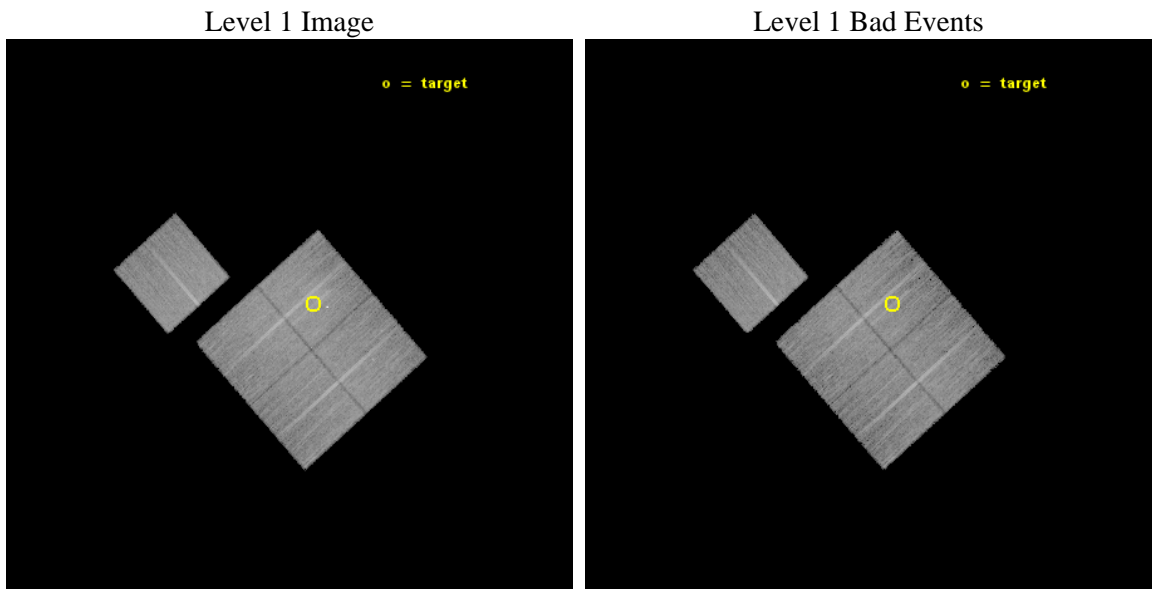
seq_num	801249	Sequence number
obs_id	15120	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G347.18-27.35	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	293.725	Observer's specified target RA [deg]
dec_targ	-50.888556	Observer's specified target Dec [deg]
ra_nom	293.79178614286	Nominal RA [deg]
dec_nom	-50.923031302508	Nominal Dec [deg]
roll_nom	318.38254895912	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25082.059162736	Sum of GTIs [s]
livetime	24754.343594631	Livetime [s]
ontime0	25082.059152663	Sum of GTIs [s]
ontime1	25082.059182525	Sum of GTIs [s]
ontime2	25082.059172571	Sum of GTIs [s]
ontime3	25082.059162736	Sum of GTIs [s]
ontime6	25085.200192928	Sum of GTIs [s]
l2events	76585	Number of level 2 events



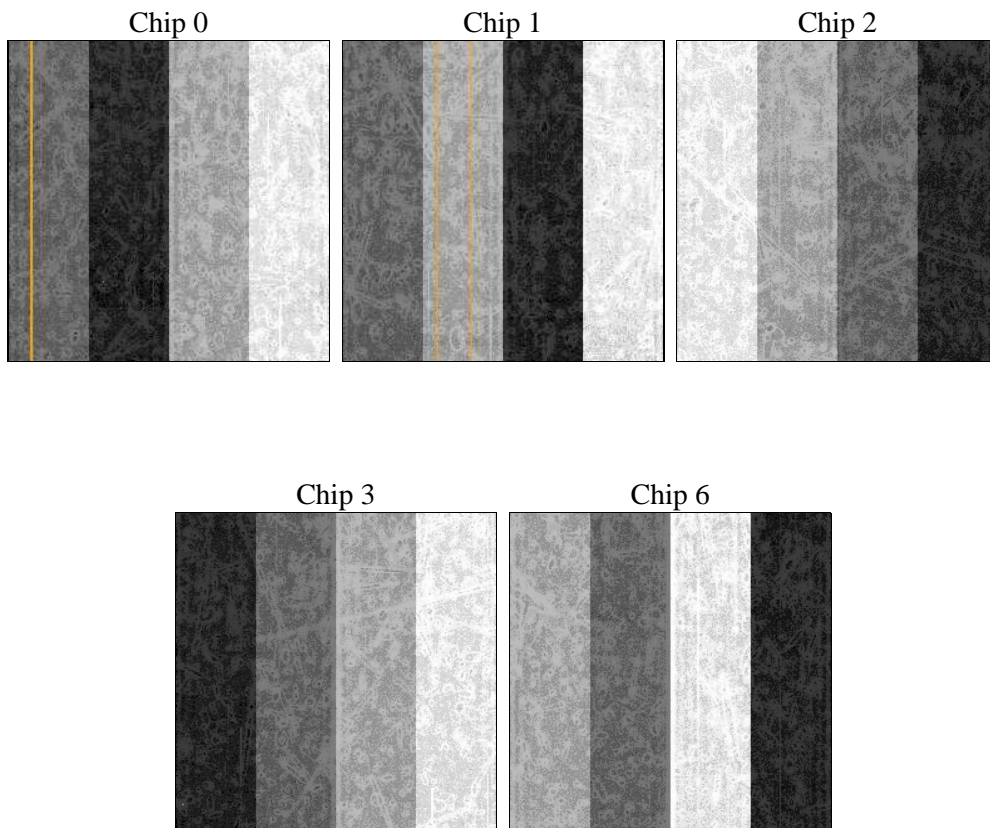
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	25082.059162736	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	25082.059152663	Sum of GTIs [s]
date	2014-12-06T03:50:53	Date and time of file creation	ontime1	25082.059182525	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25082.059172571	Sum of GTIs [s]
			ontime3	25082.059162736	Sum of GTIs [s]
			ontime6	25085.200192928	Sum of GTIs [s]
			l1events	595988	Number of level 1 events

2.1.4 Events

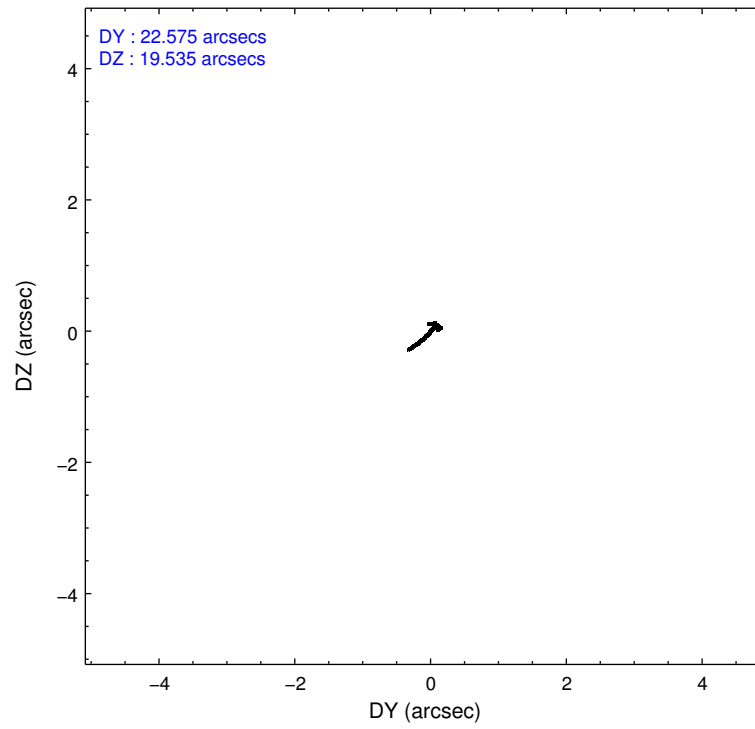
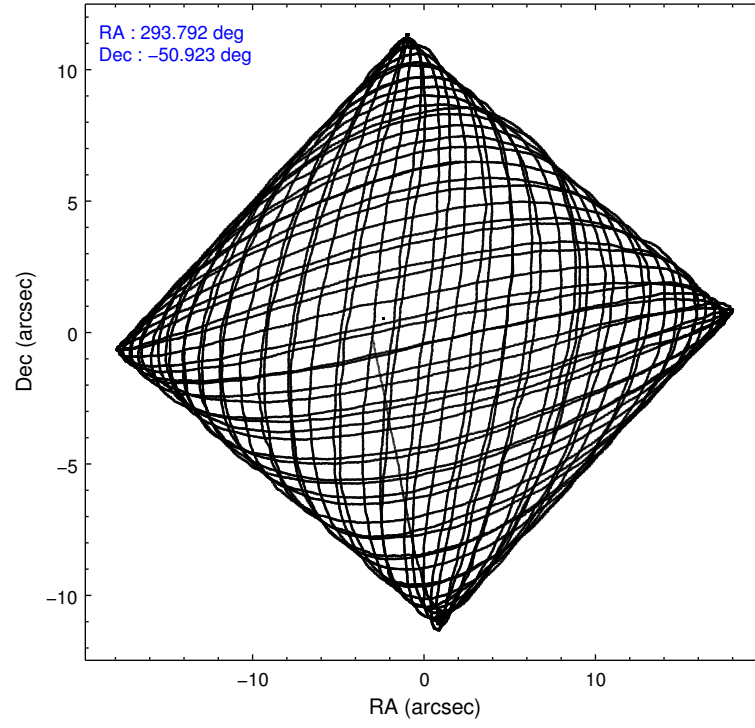
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	111423	115190	119363	130103	119909
rejected events	96469	98847	104820	102766	104921
rejected %	86%	85%	87%	78%	87%

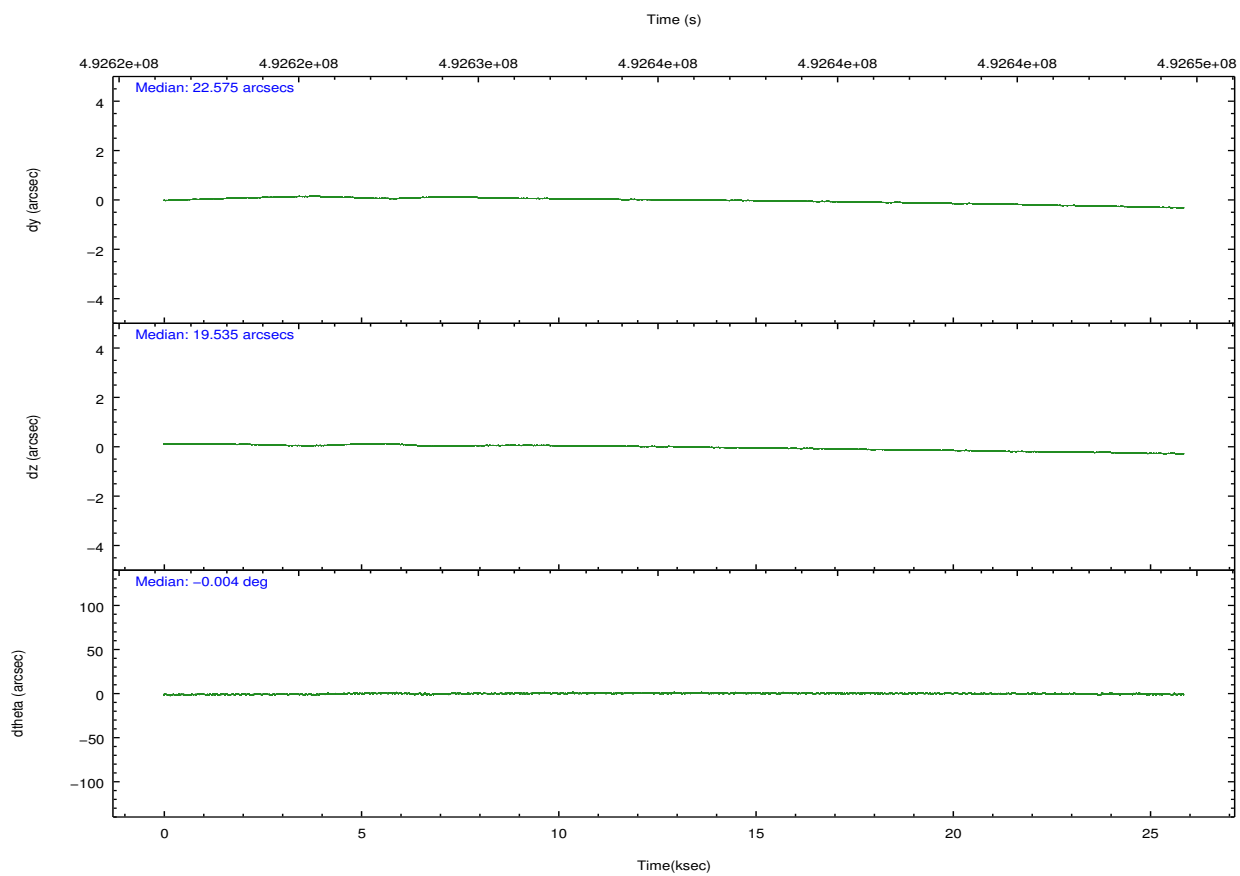
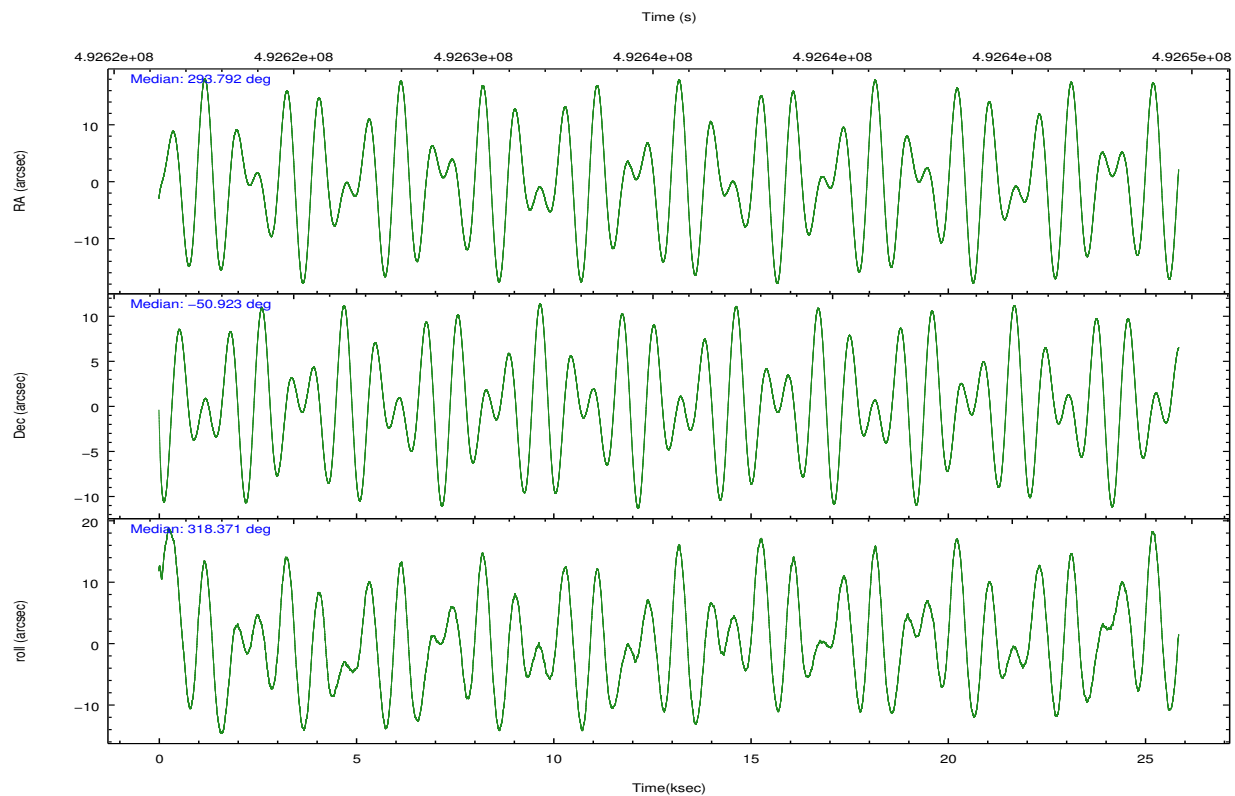
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5365	6066	5238	15884	5204
	4%	5%	4%	12%	4%
grade 1 events	61	65	73	134	65
	0%	0%	0%	0%	0%
grade 2 events	3653	3782	3621	4381	3300
	3%	3%	3%	3%	2%
grade 3 events	1442	1603	1437	1927	1543
	1%	1%	1%	1%	1%
grade 4 events	1438	1566	1430	1854	1493
	1%	1%	1%	1%	1%
grade 5 events	5941	6212	5515	6670	6286
	5%	5%	4%	5%	5%
grade 6 events	3060	3329	2823	3293	3452
	2%	2%	2%	2%	2%
grade 7 events	90463	92567	99226	95960	98566
	81%	80%	83%	73%	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	293.749042	293.7917861428575	CCD I2 on	Y	Y
[deg] Pointing Dec	-50.917578	-50.92303130250837	CCD I3 on	Y	Y
[deg] Pointing Roll	318.140678	318.3825489591208	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	492623368.184000	492621704.78347	CCD S5 on	N	N
Observation start date	2013-08-11T15:48:21	2013-08-11T15:21:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	492648368.184000	492649078.94746	On-chip summing requested	N	N
Observation end date	2013-08-11T22:45:01	2013-08-11T22:57:58	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



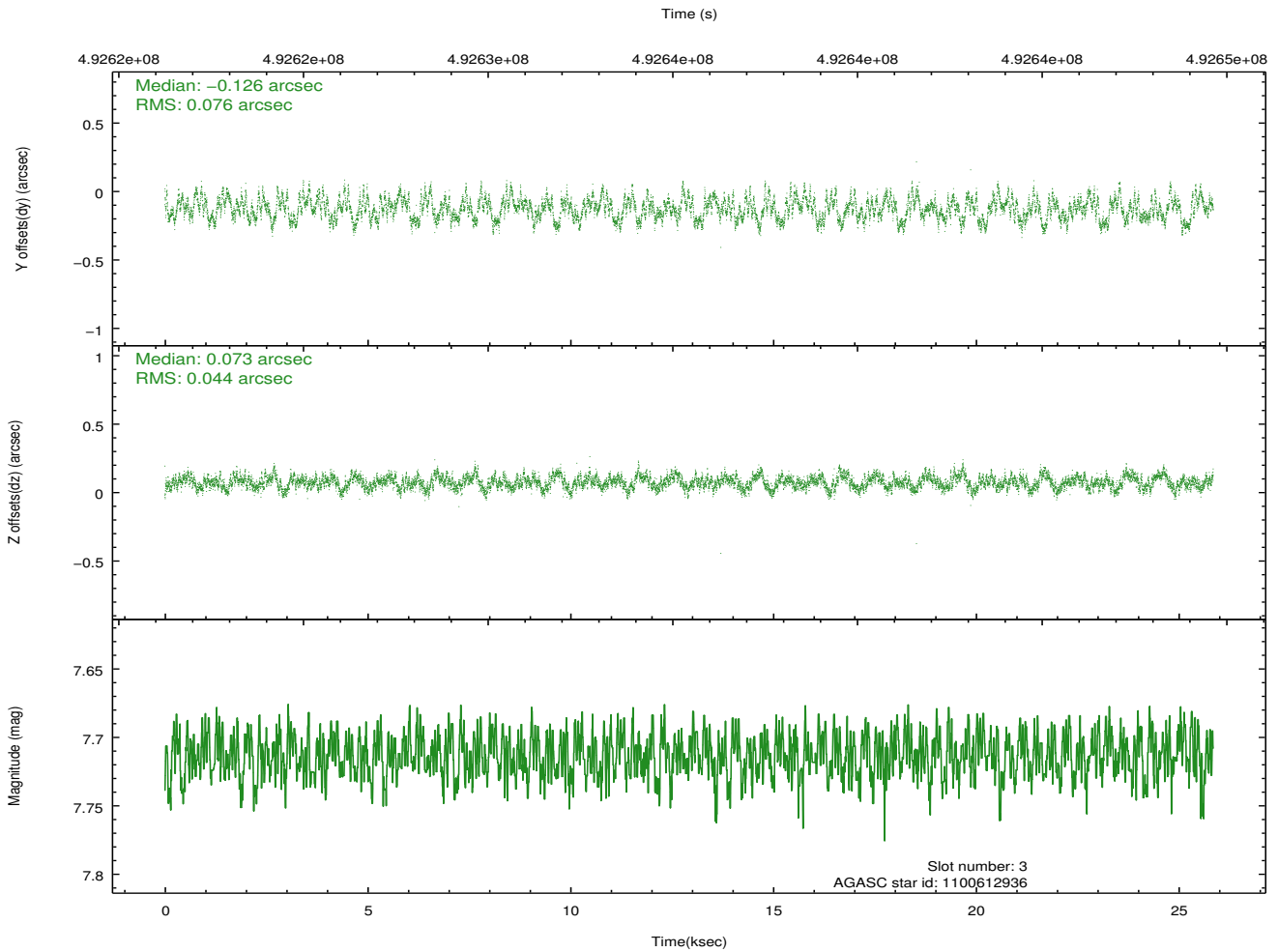
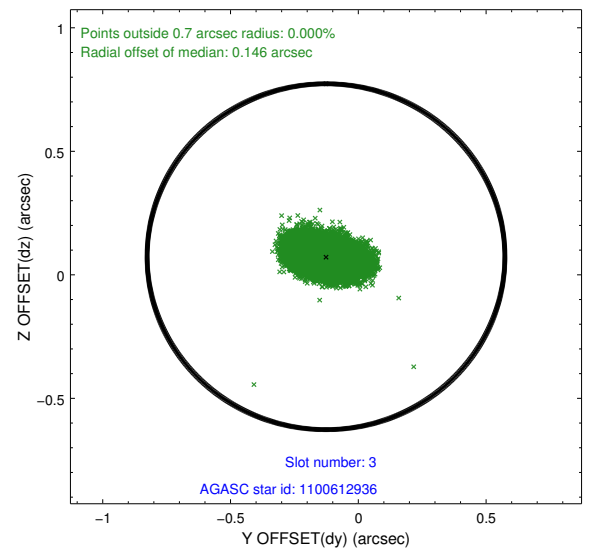
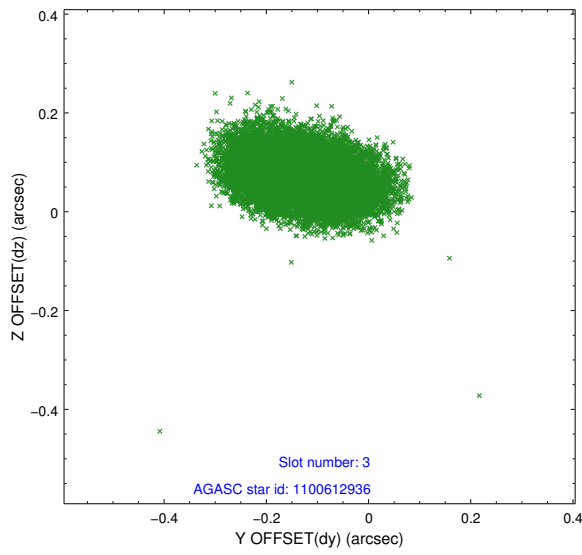


Slot Statistics

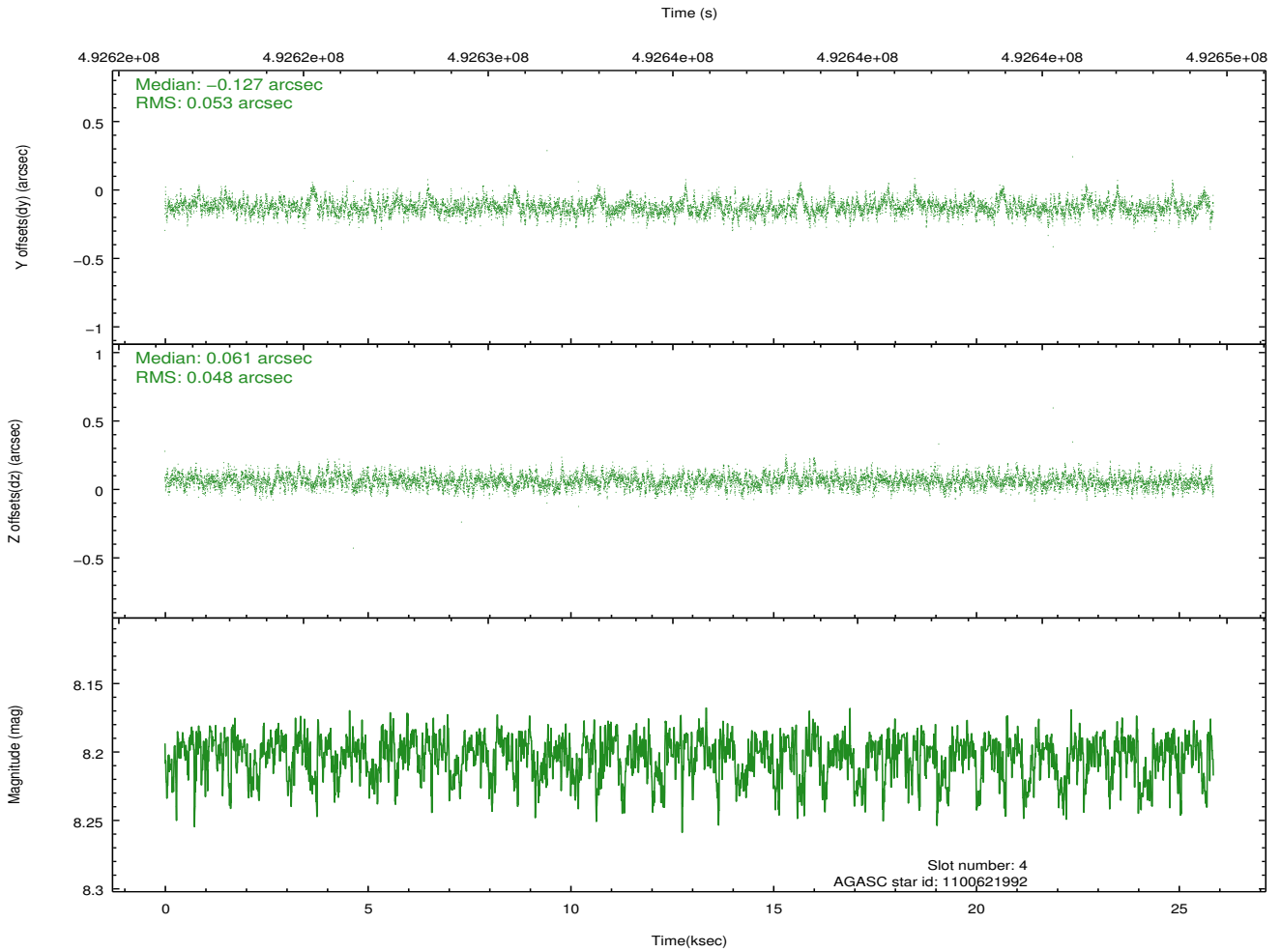
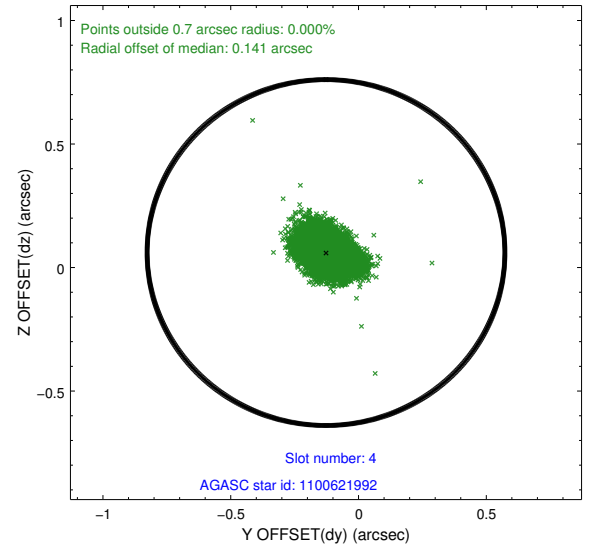
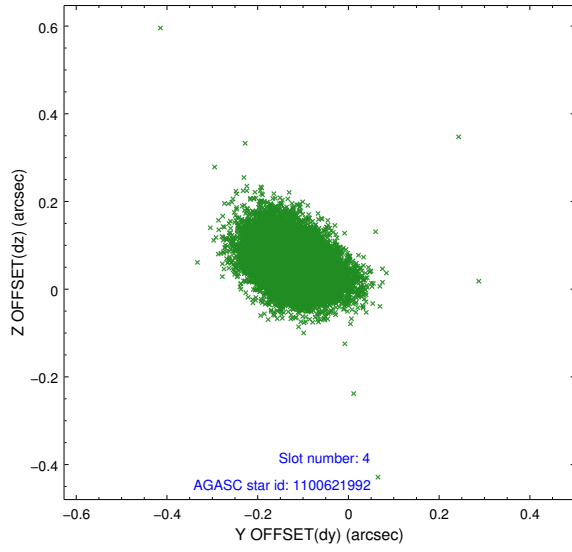
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	6305	0.130	-0.107	0.008	0.013	0.000000	0.000000	916.74	-1002.35
1	FID		ACIS-I-5	7.11	6305	-0.358	0.082	0.006	0.011	0.000000	0.000000	-1831.88	895.12
2	FID		ACIS-I-6	7.12	6305	0.136	0.096	0.008	0.013	0.000000	0.000000	382.06	1539.86
3	GUIDE	used	1100612936	7.71	12609	-0.126	0.073	0.095	0.151	293.556421	-50.564992	-1174.68	651.19
4	GUIDE	used	1100621992	8.20	12609	-0.127	0.061	0.074	0.125	293.762426	-50.124682	-1882.01	2146.71
5	GUIDE	used	1101137904	9.28	12476	0.339	0.046	0.176	0.258	293.702419	-50.800157	-360.66	244.50
6	GUIDE	used	1101144224	9.32	12511	0.076	-0.248	0.132	0.206	294.200643	-51.083220	1161.28	234.64
7	GUIDE	used	1100622312	8.21	12608	-0.162	0.062	0.111	0.180	293.902488	-50.135379	-1614.98	2333.11

2.4 Star Slots

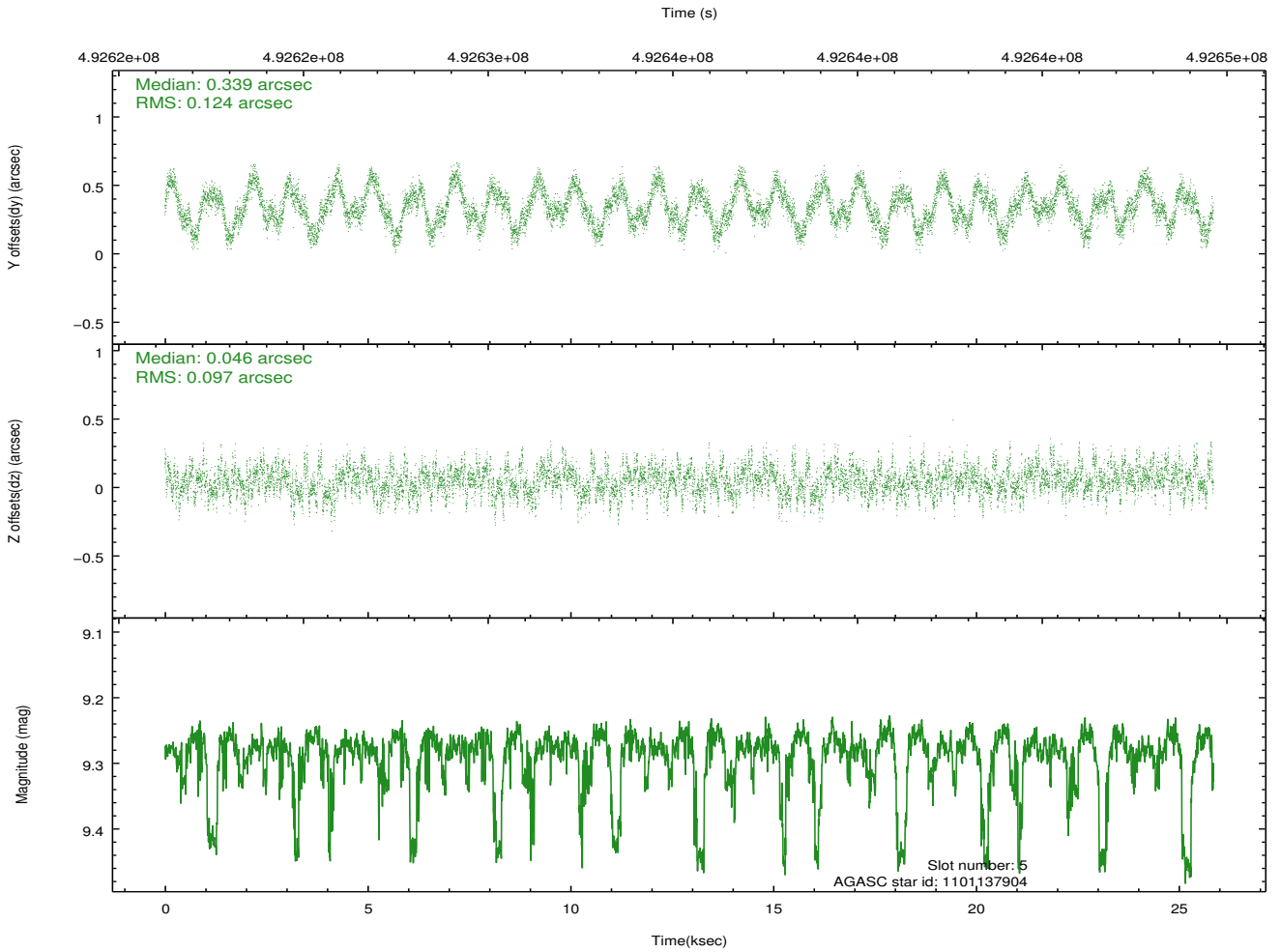
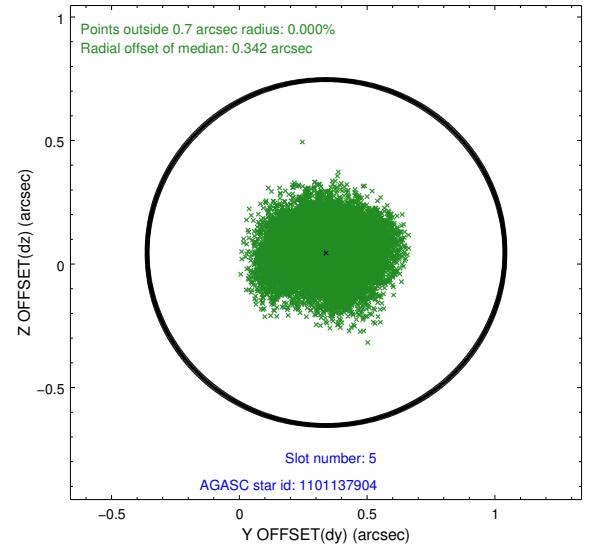
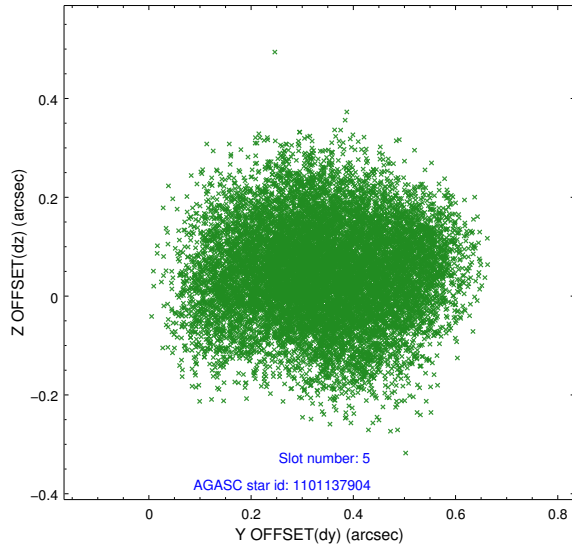
2.4.1 Slot 3



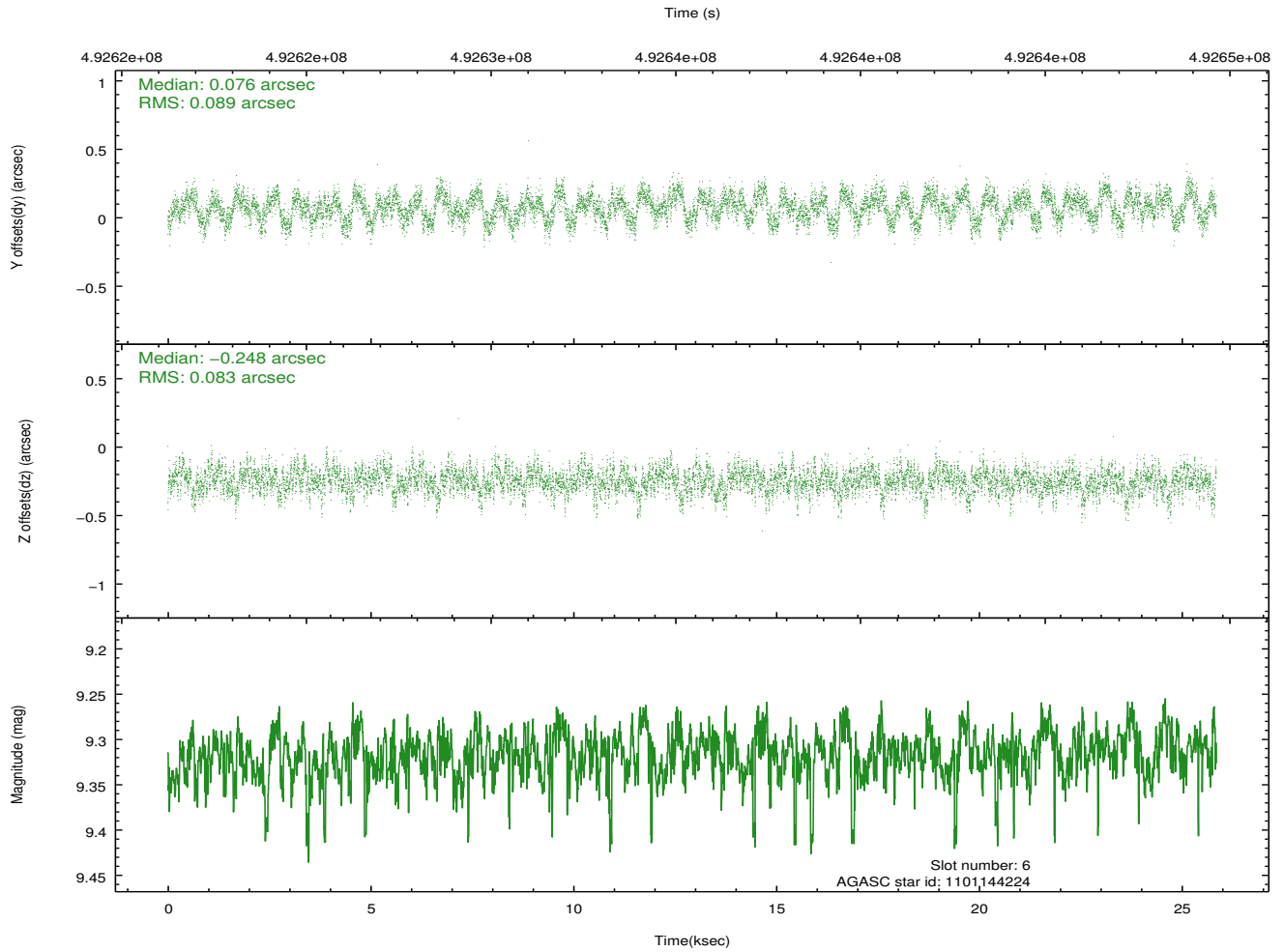
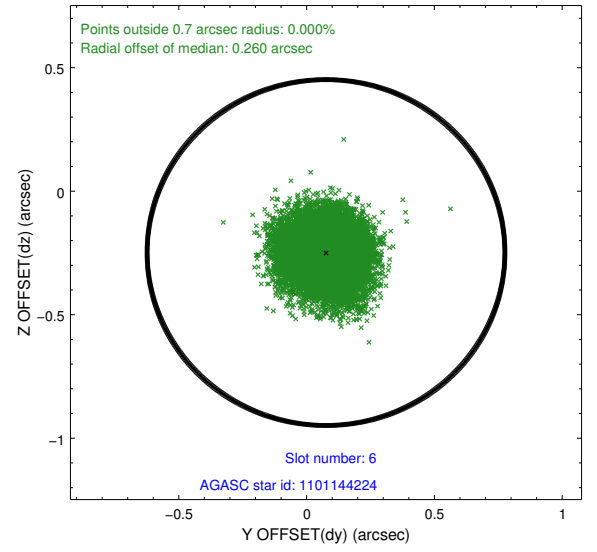
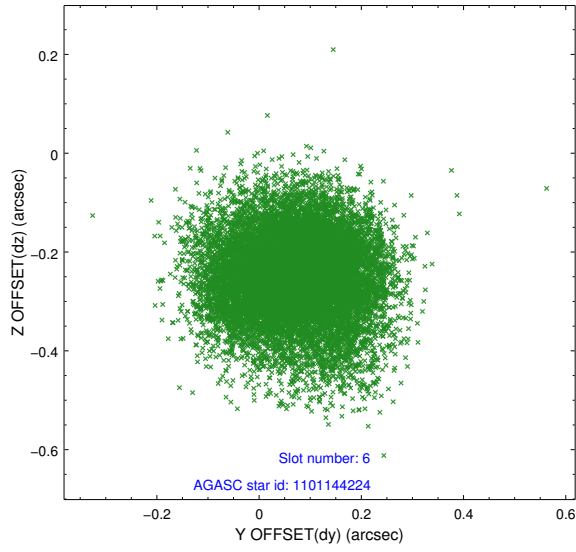
2.4.2 Slot 4



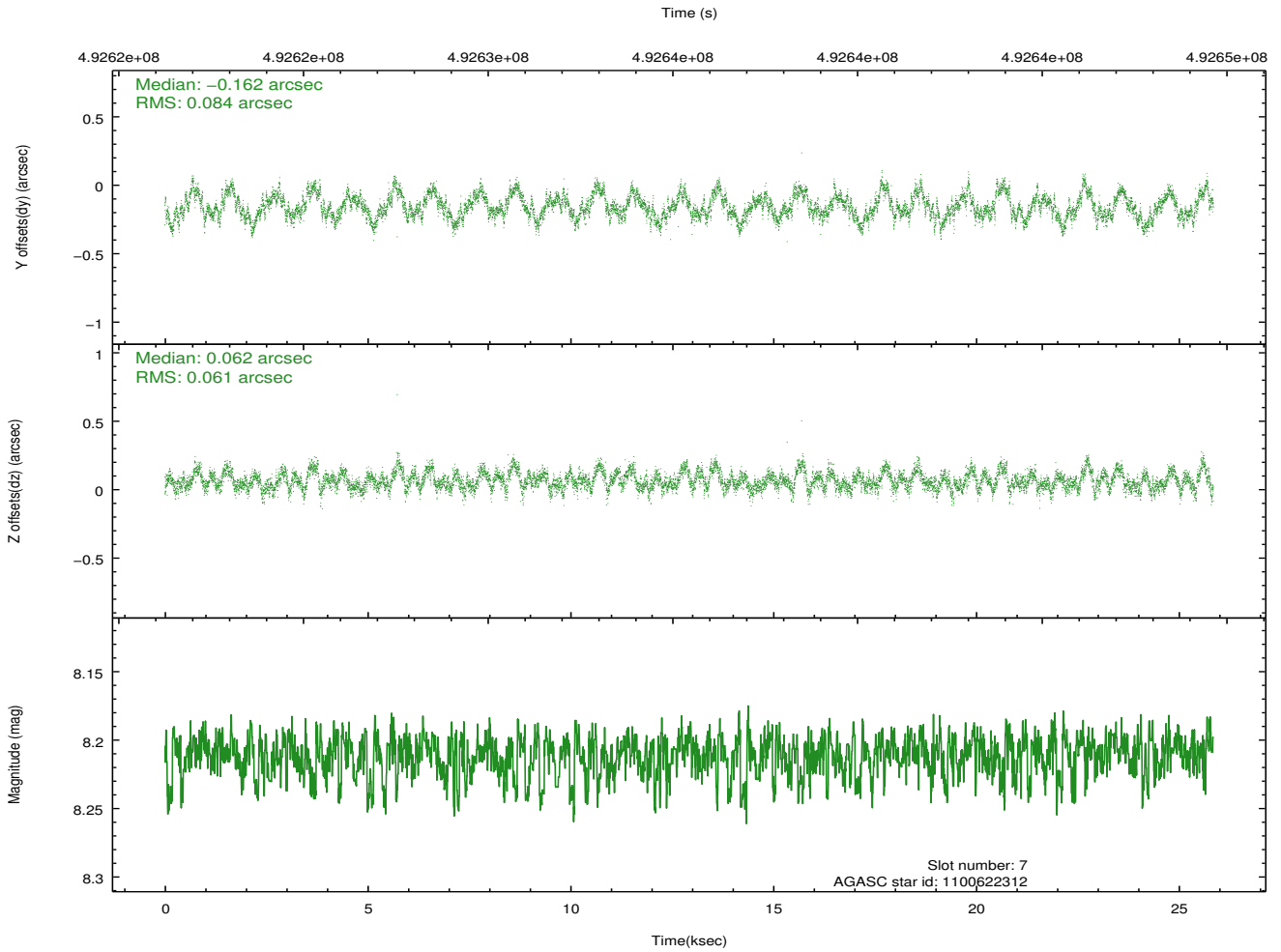
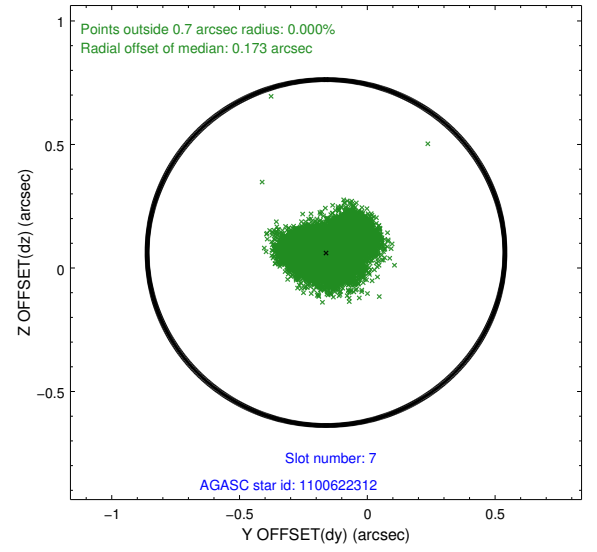
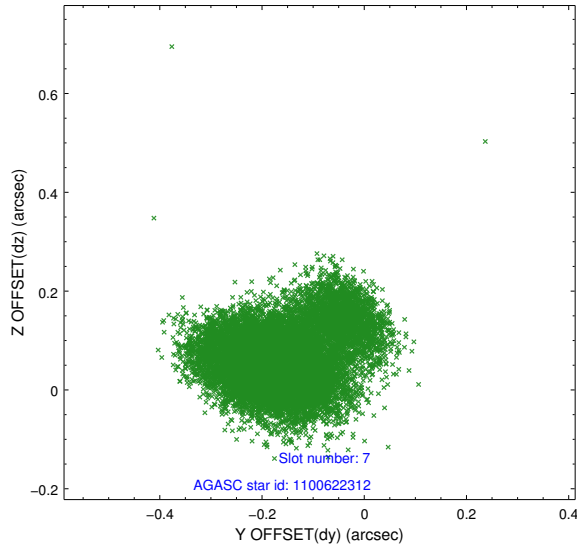
2.4.3 Slot 5



2.4.4 Slot 6

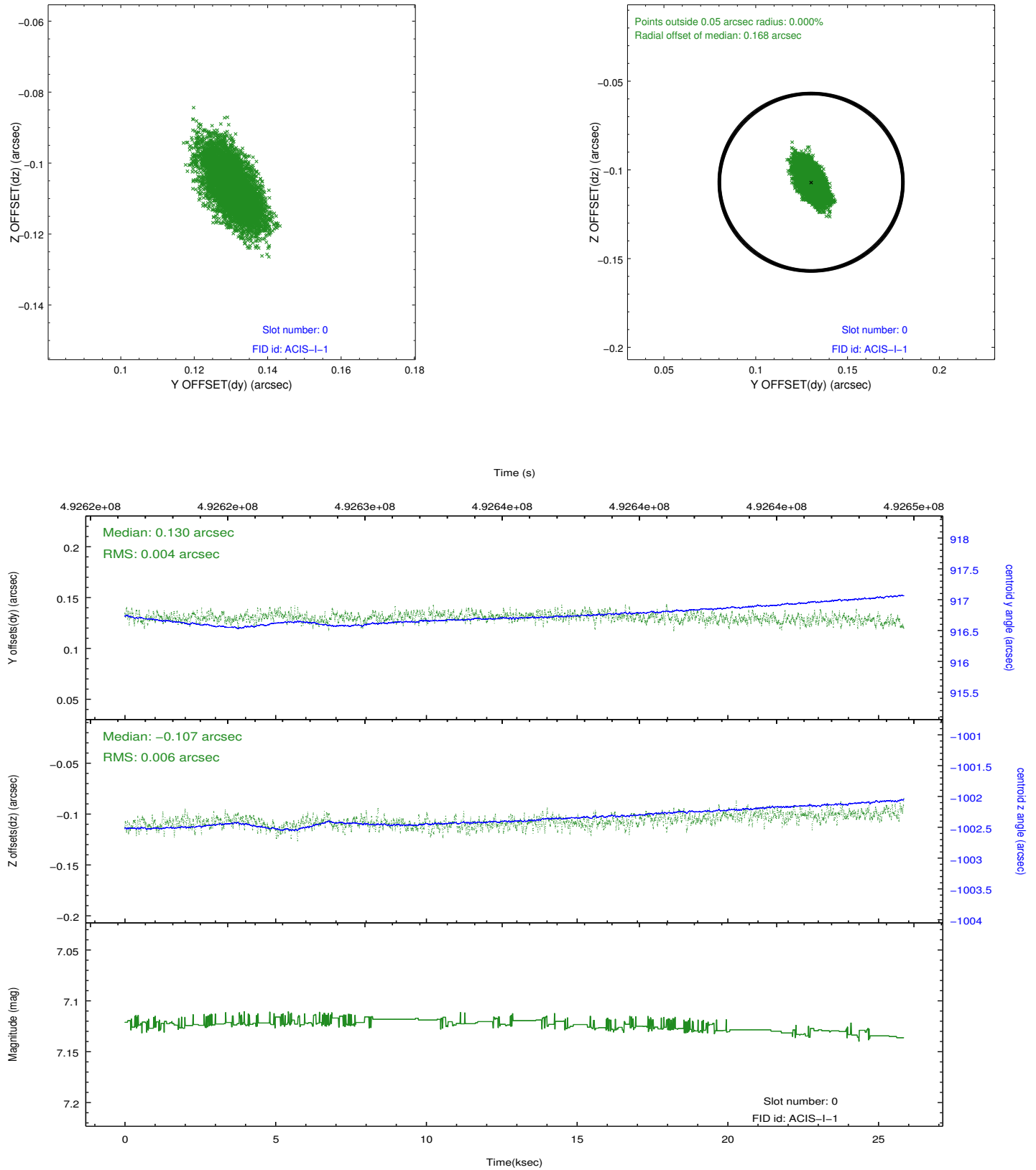


2.4.5 Slot 7

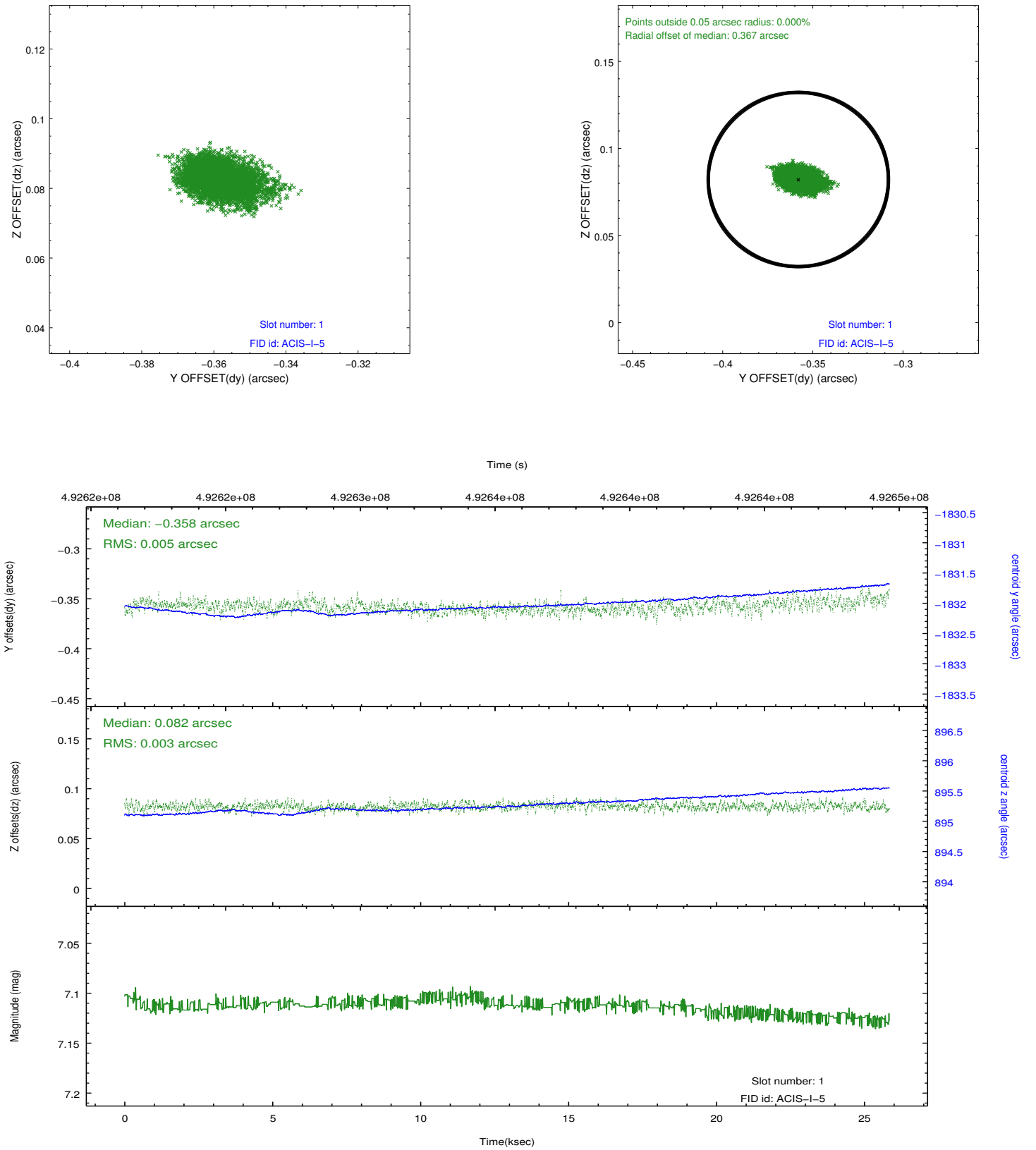


2.5 FID Slots

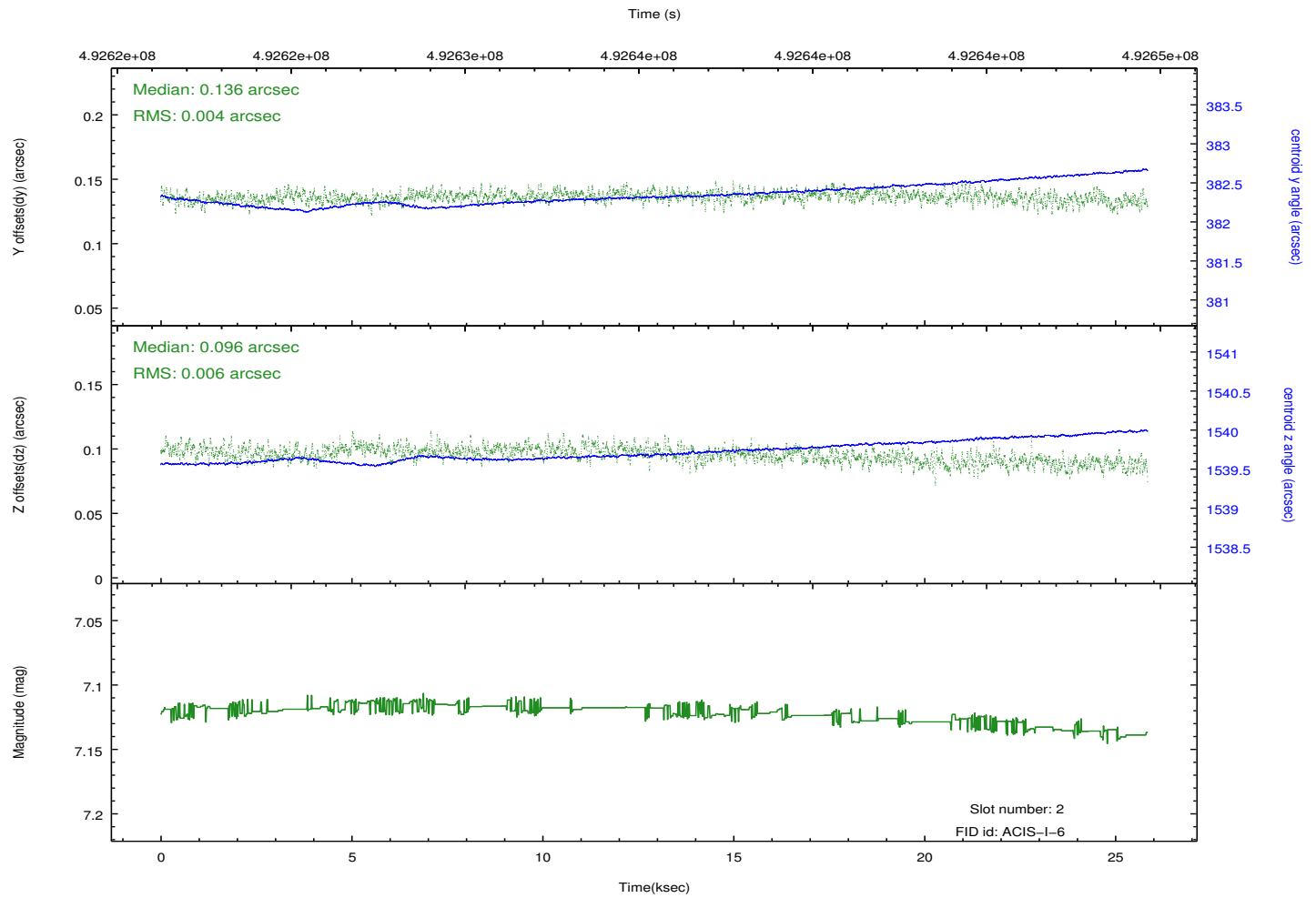
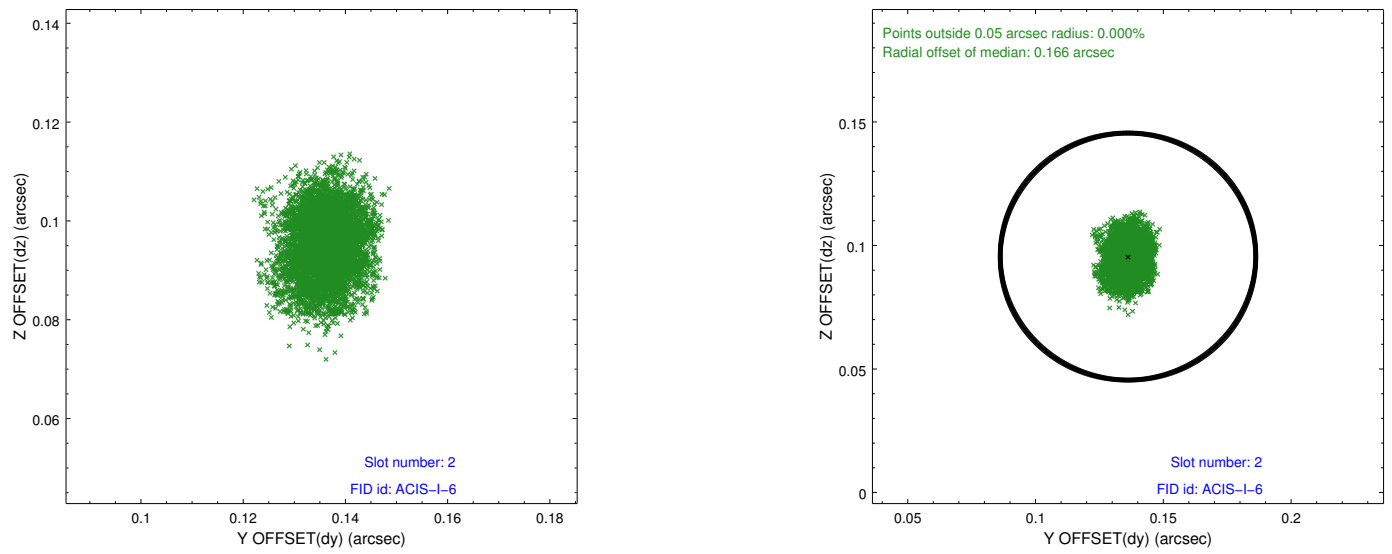
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.082059162736

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.