

V&V Reference Report

L2 ASCDS Version : 10

Observation 14541 - L2 Version 2
Chandra X-Ray Center

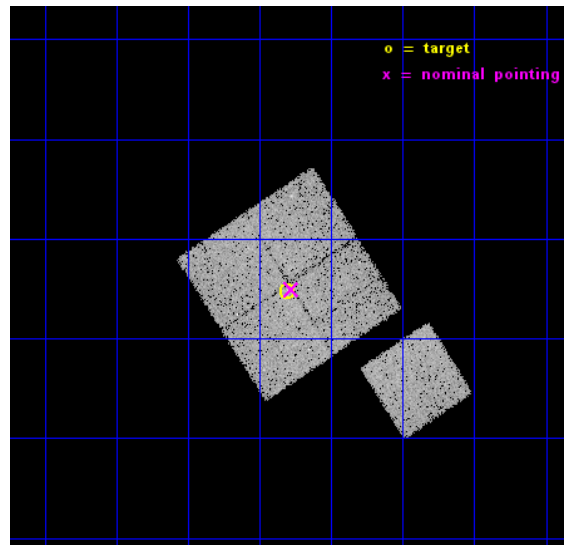
L2 Processing Date : Dec 3 2014

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1 Front

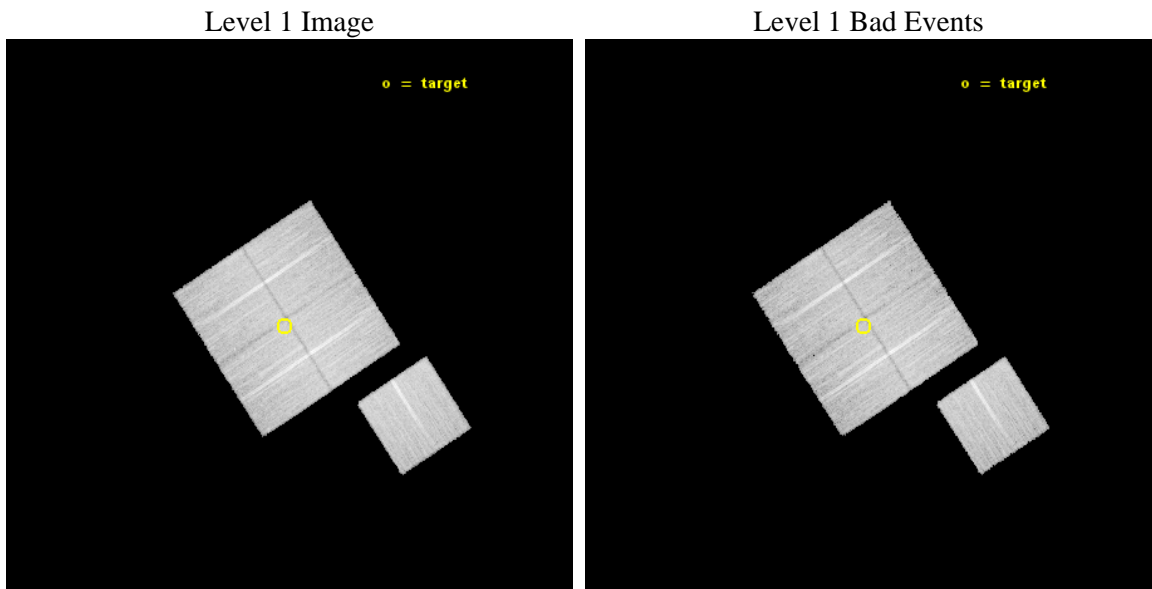
seq_num	200842	Sequence number
obs_id	14541	Observation id
title	An X-ray Census of the Young Stellar Population in Infrared Dark Clouds	Proposal title
observer	Assoc. Prof. Jonathan Tan	Principal investigator
object	IRDC G34.4+0.23 (IRDC F)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	283.327083	Observer's specified target RA [deg]
dec_targ	1.413333	Observer's specified target Dec [deg]
ra_nom	283.31927720586	Nominal RA [deg]
dec_nom	1.4155341793615	Nominal Dec [deg]
roll_nom	146.89594156174	Nominal Roll [deg]
revision	2	Processing version of data
ontime	28498.300219178	Sum of GTIs [s]
livetime	28125.948946671	Livetime [s]
ontime0	28498.300219178	Sum of GTIs [s]
ontime1	28498.300219178	Sum of GTIs [s]
ontime2	28498.300219178	Sum of GTIs [s]
ontime3	28498.300219178	Sum of GTIs [s]
ontime6	28495.159178913	Sum of GTIs [s]
l2events	64800	Number of level 2 events



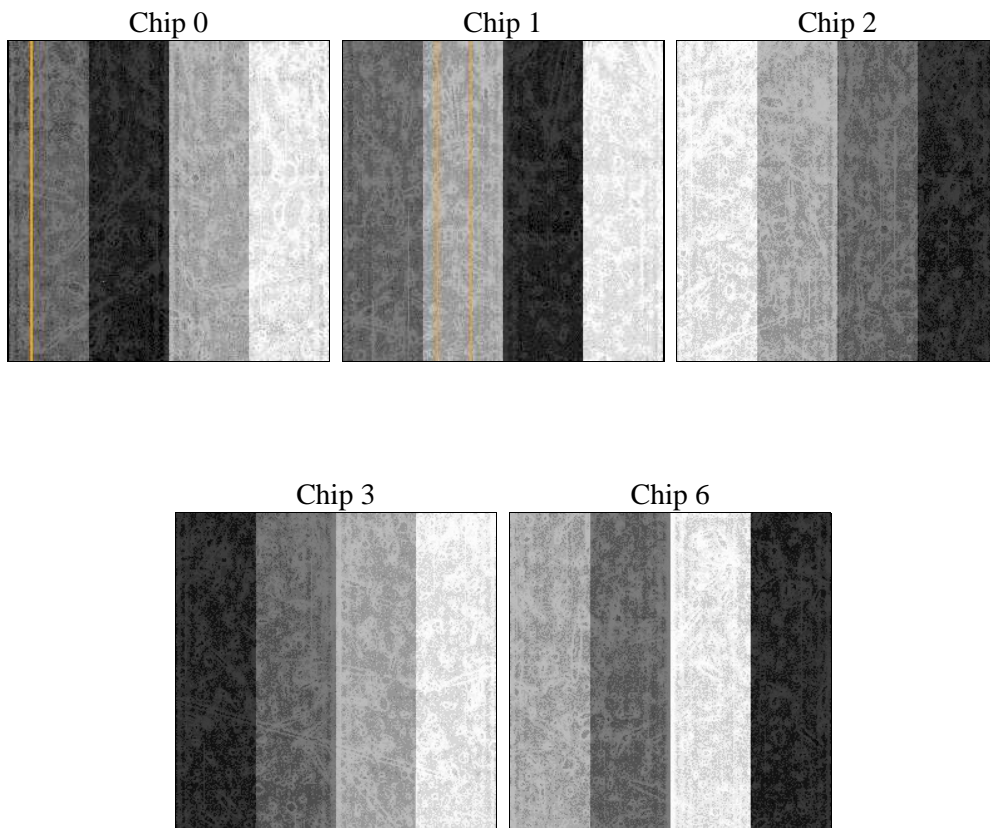
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	28415.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	28498.300219178	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	28498.300219178	Sum of GTIs [s]
date	2014-12-03T16:56:06	Date and time of file creation	ontime1	28498.300219178	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	28498.300219178	Sum of GTIs [s]
			ontime3	28498.300219178	Sum of GTIs [s]
			ontime6	28495.159178913	Sum of GTIs [s]
			l1events	630216	Number of level 1 events

2.1.4 Events

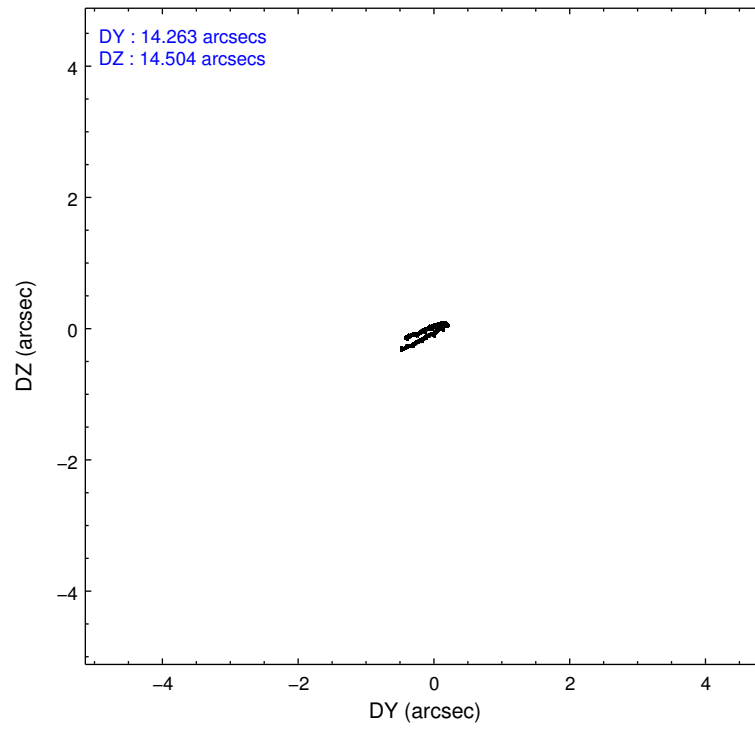
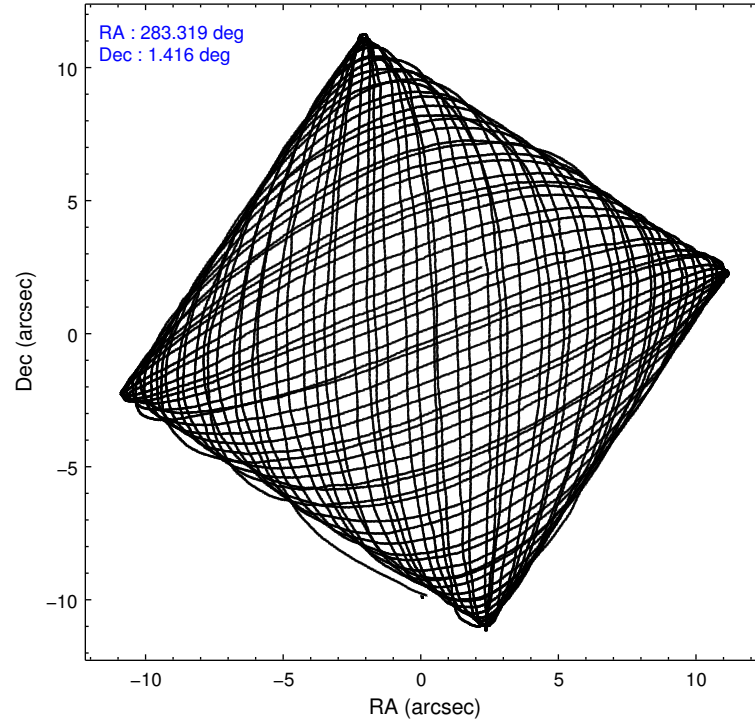
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	119293	118573	137790	126830	127730
rejected events	103807	102554	123113	111797	112197
rejected %	87%	86%	89%	88%	87%

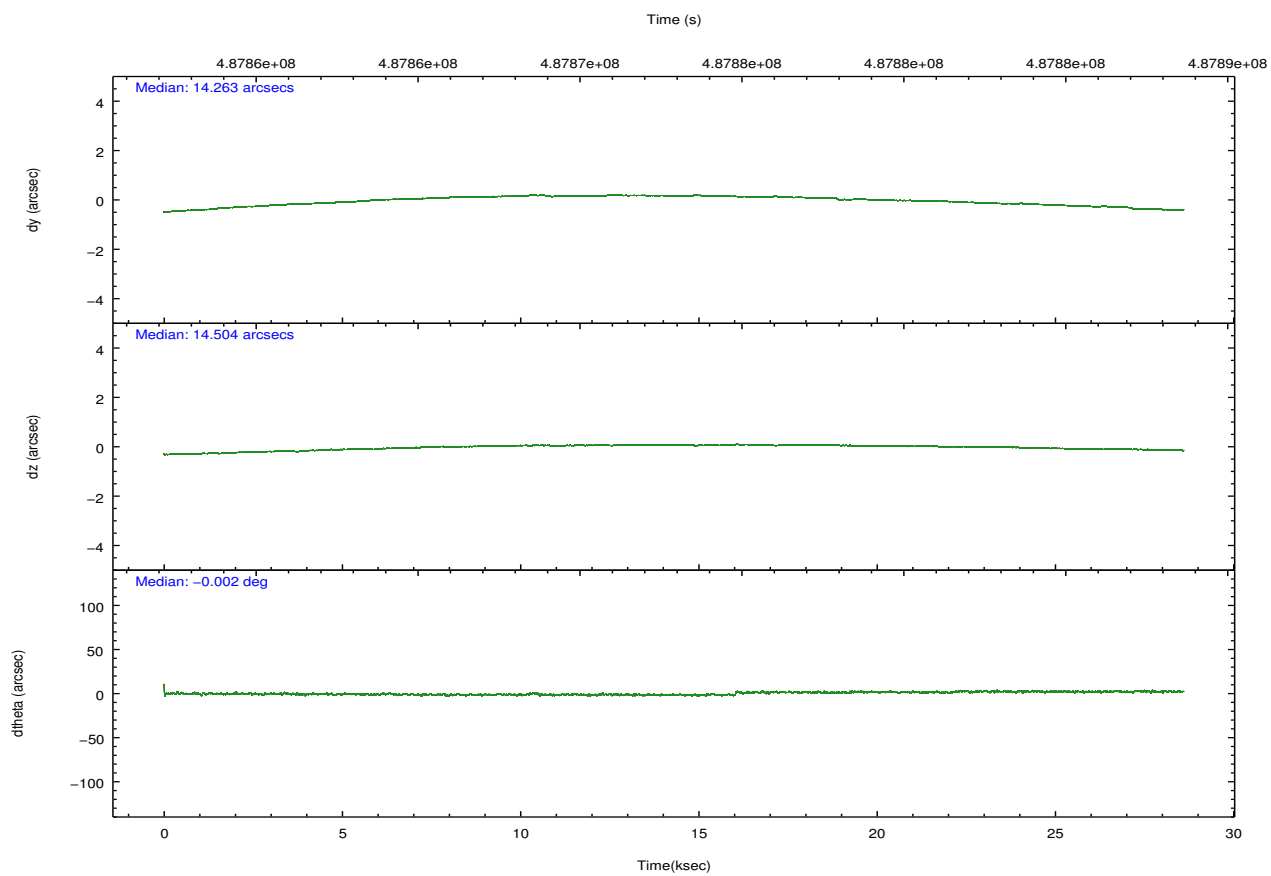
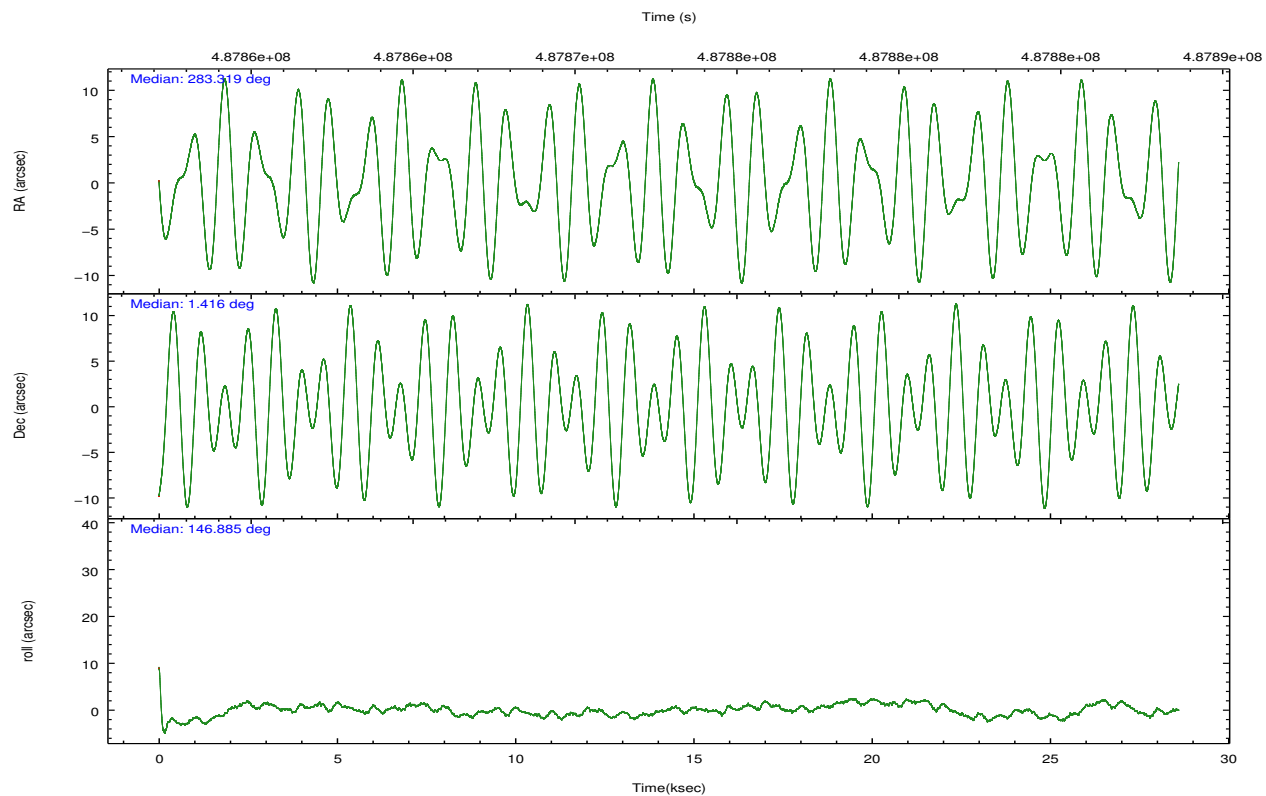
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5701	5470	5549	5649	5619
	4%	4%	4%	4%	4%
grade 1 events	61	82	90	81	71
	0%	0%	0%	0%	0%
grade 2 events	3757	3781	3579	3272	3429
	3%	3%	2%	2%	2%
grade 3 events	1583	1635	1440	1534	1590
	1%	1%	1%	1%	1%
grade 4 events	1512	1668	1491	1581	1544
	1%	1%	1%	1%	1%
grade 5 events	5201	5668	4811	5985	5629
	4%	4%	3%	4%	4%
grade 6 events	2937	3467	2625	3001	3352
	2%	2%	1%	2%	2%
grade 7 events	98541	96802	118205	105727	106496
	82%	81%	85%	83%	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	283.346777	283.3192772058553	CCD I2 on	Y	Y
[deg] Pointing Dec	1.414158	1.415534179361463	CCD I3 on	Y	Y
[deg] Pointing Roll	146.686575	146.8959415617377	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	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	487858773.184000	487857792.54929	CCD S5 on	N	N
Observation start date	2013-06-17T12:18:26	2013-06-17T12:03:12	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	487887188.184000	487887634.40091	On-chip summing requested	N	N
Observation end date	2013-06-17T20:12:01	2013-06-17T20:20:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



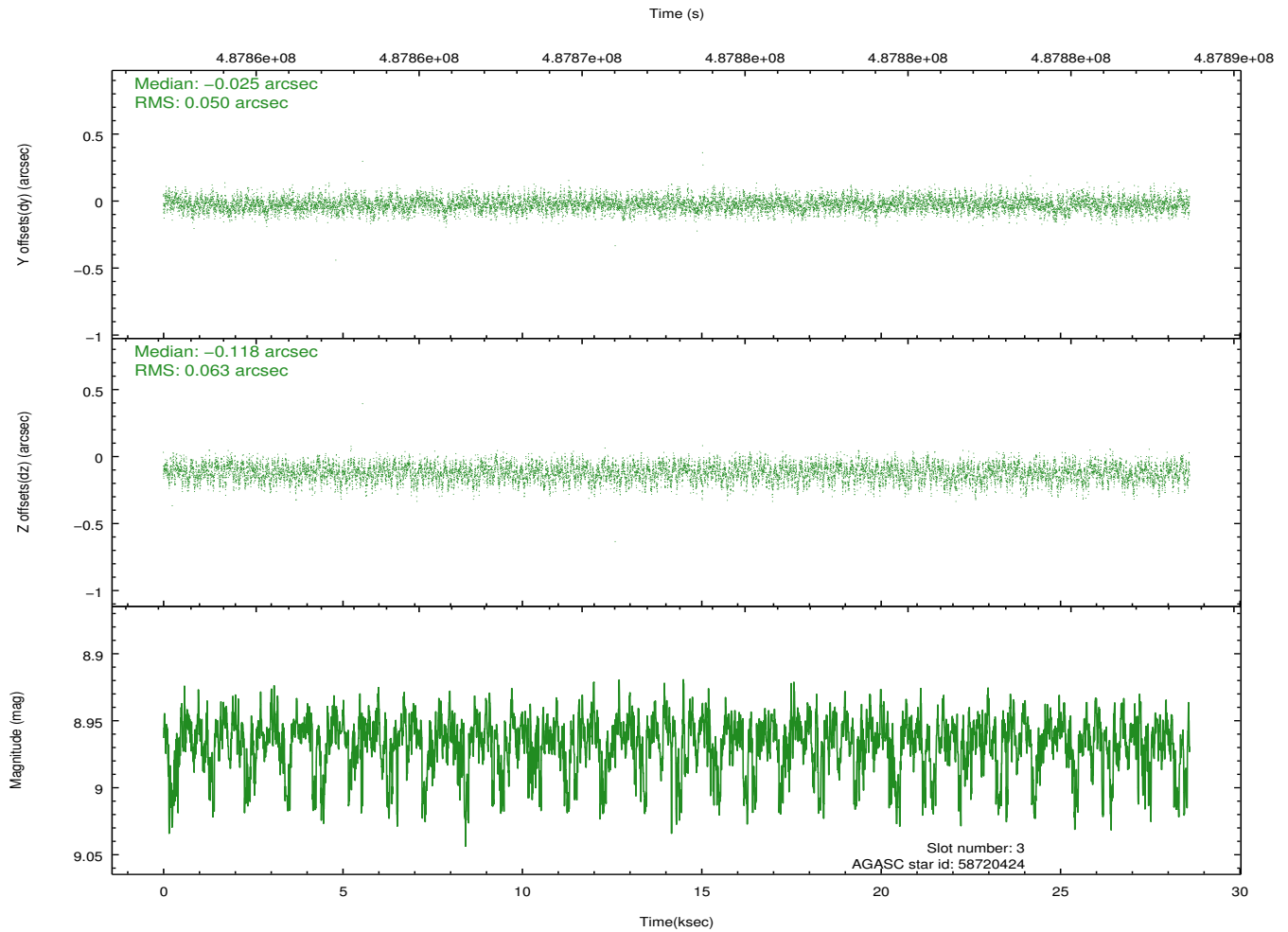
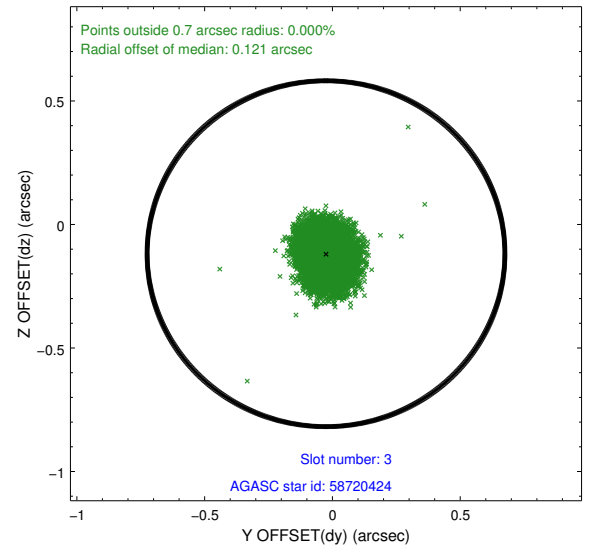
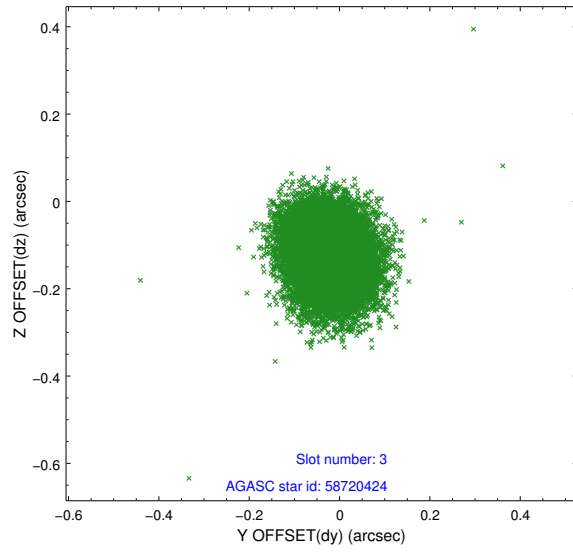


Slot Statistics

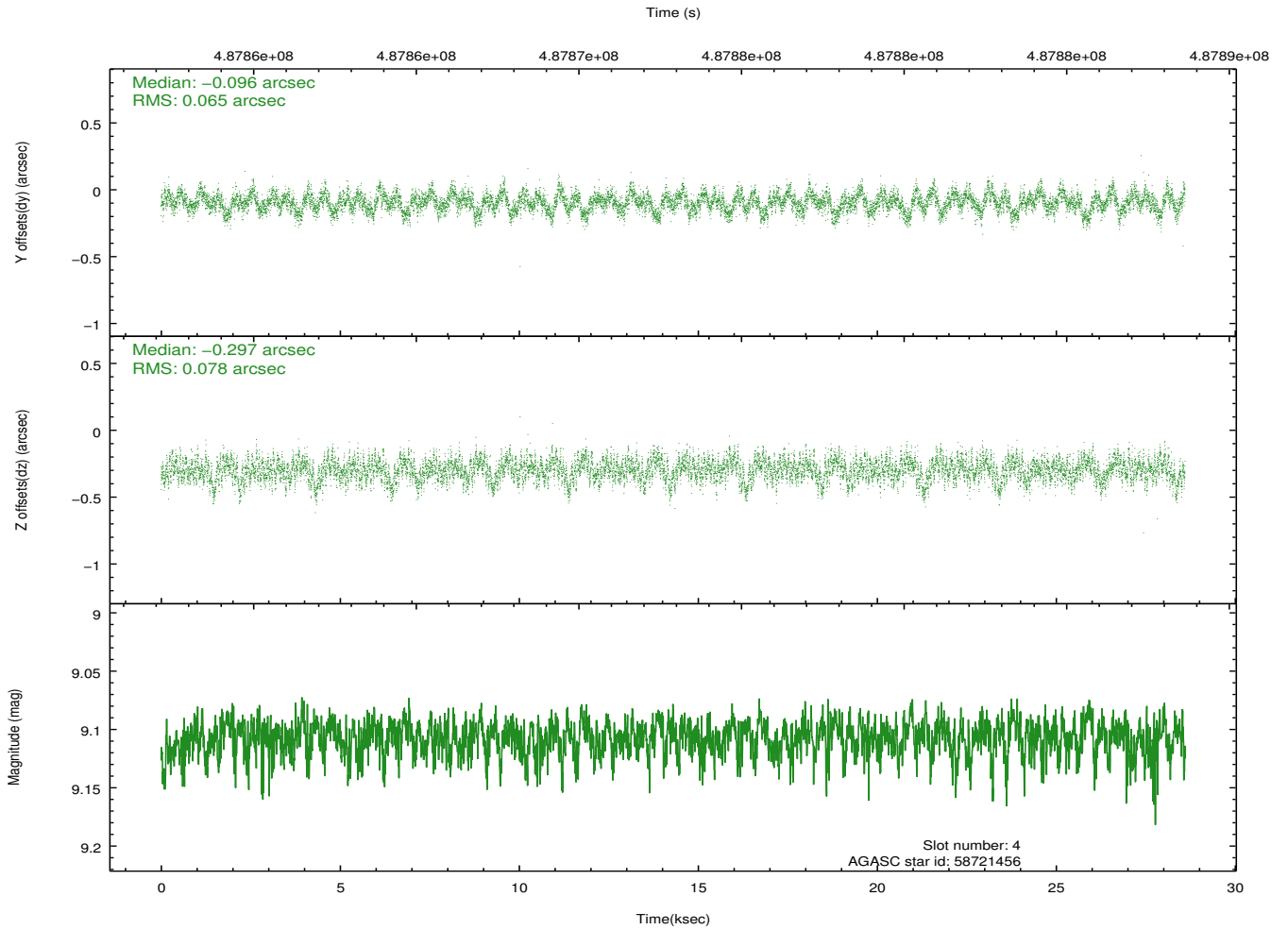
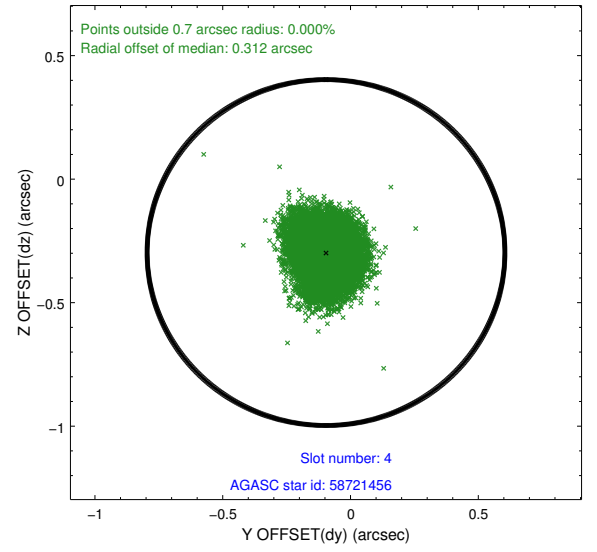
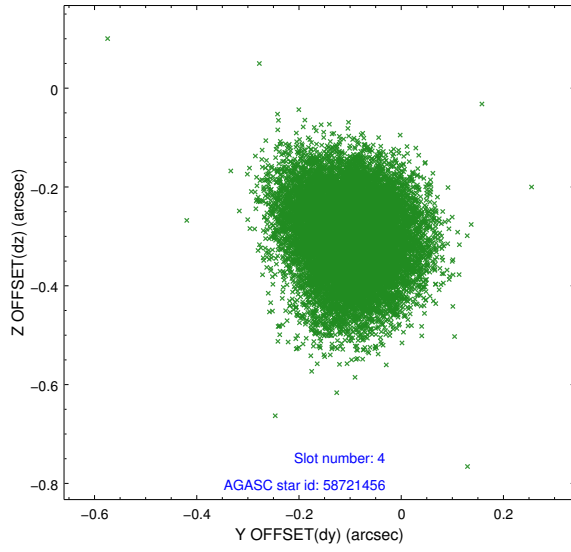
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.07	6975	-0.122	-0.087	0.012	0.021	0.000000	0.000000	-769.04	-844.50
1	FID		ACIS-I-4	7.08	6975	0.263	0.093	0.009	0.016	0.000000	0.000000	2145.38	1061.79
2	FID		ACIS-I-5	7.15	6976	-0.242	0.063	0.013	0.020	0.000000	0.000000	-1822.86	1059.74
3	GUIDE	used	58720424	8.96	13943	-0.025	-0.118	0.086	0.135	282.873634	1.408205	1411.07	953.22
4	GUIDE	used	58721456	9.11	13949	-0.096	-0.297	0.109	0.174	283.027077	0.876858	-100.79	2248.26
5	GUIDE	used	58851592	8.00	13954	0.041	0.151	0.081	0.129	283.282615	1.755471	868.31	-899.73
6	GUIDE	used	58852048	8.38	13948	0.133	-0.016	0.072	0.119	283.366398	0.870285	-1134.25	1597.23
7	GUIDE	used	59377960	7.66	13948	-0.055	0.283	0.080	0.131	283.627467	1.897490	111.67	-2007.67

2.4 Star Slots

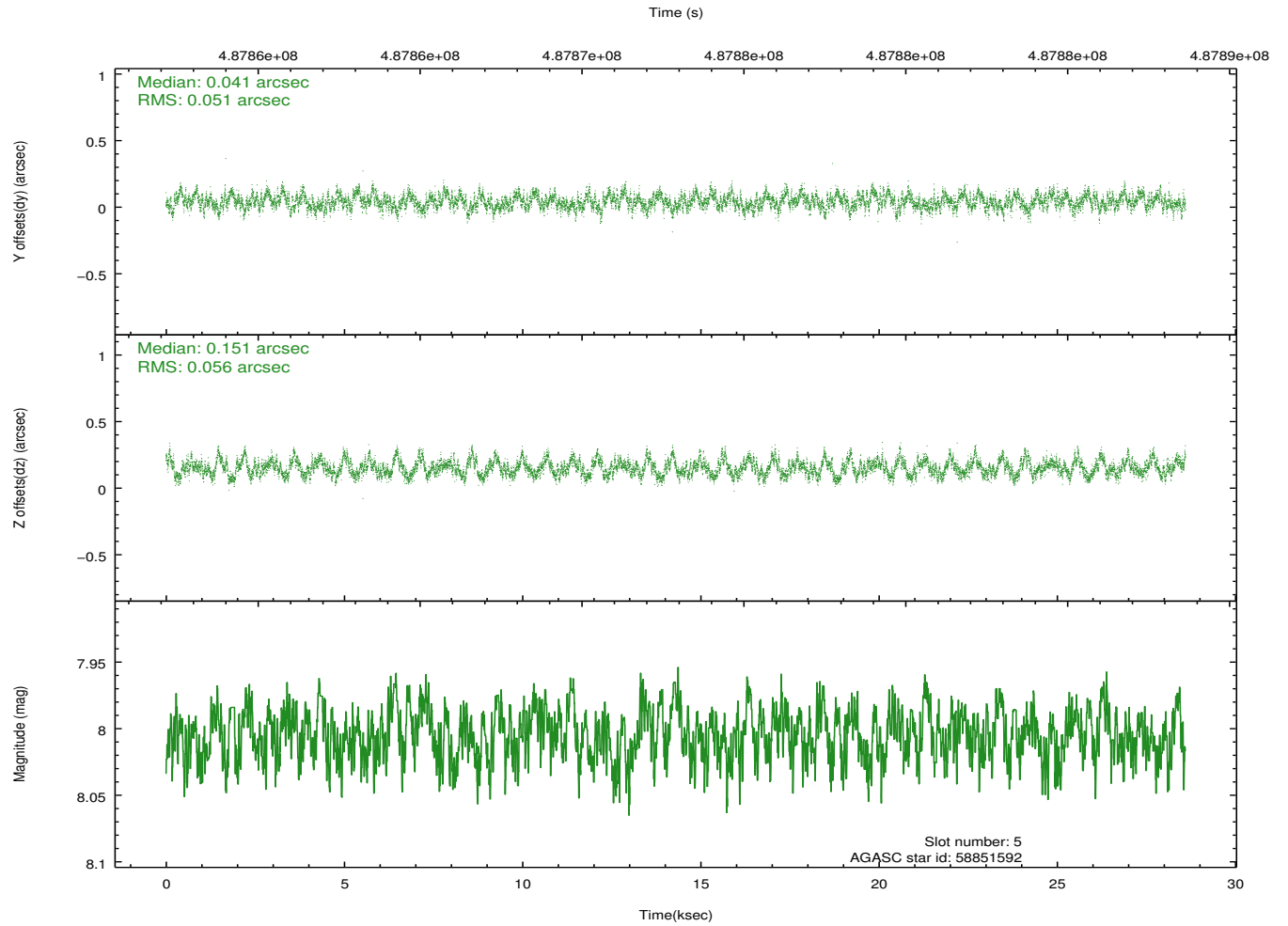
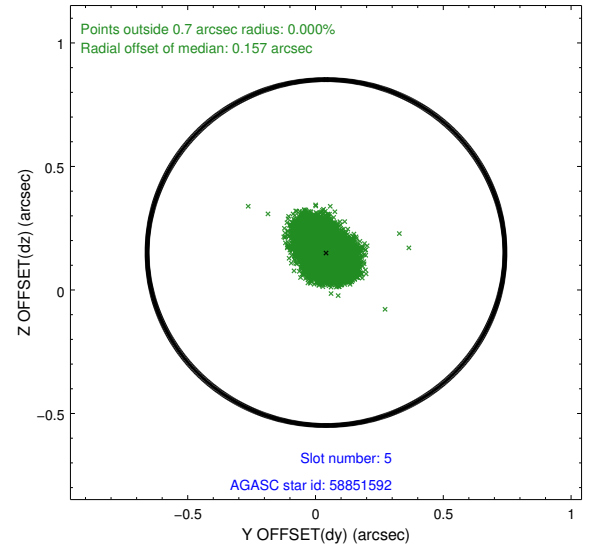
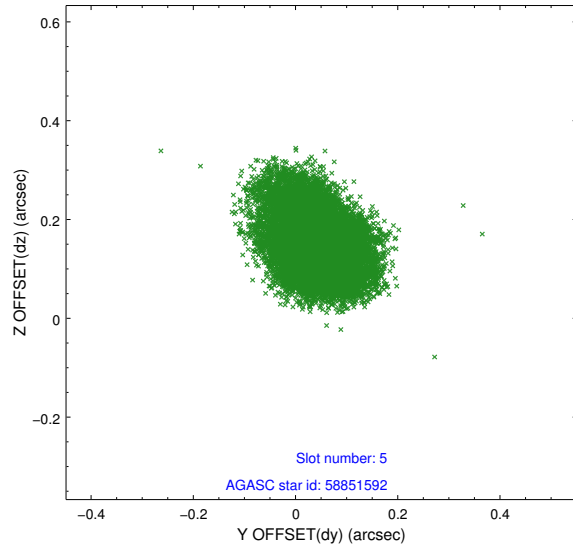
2.4.1 Slot 3



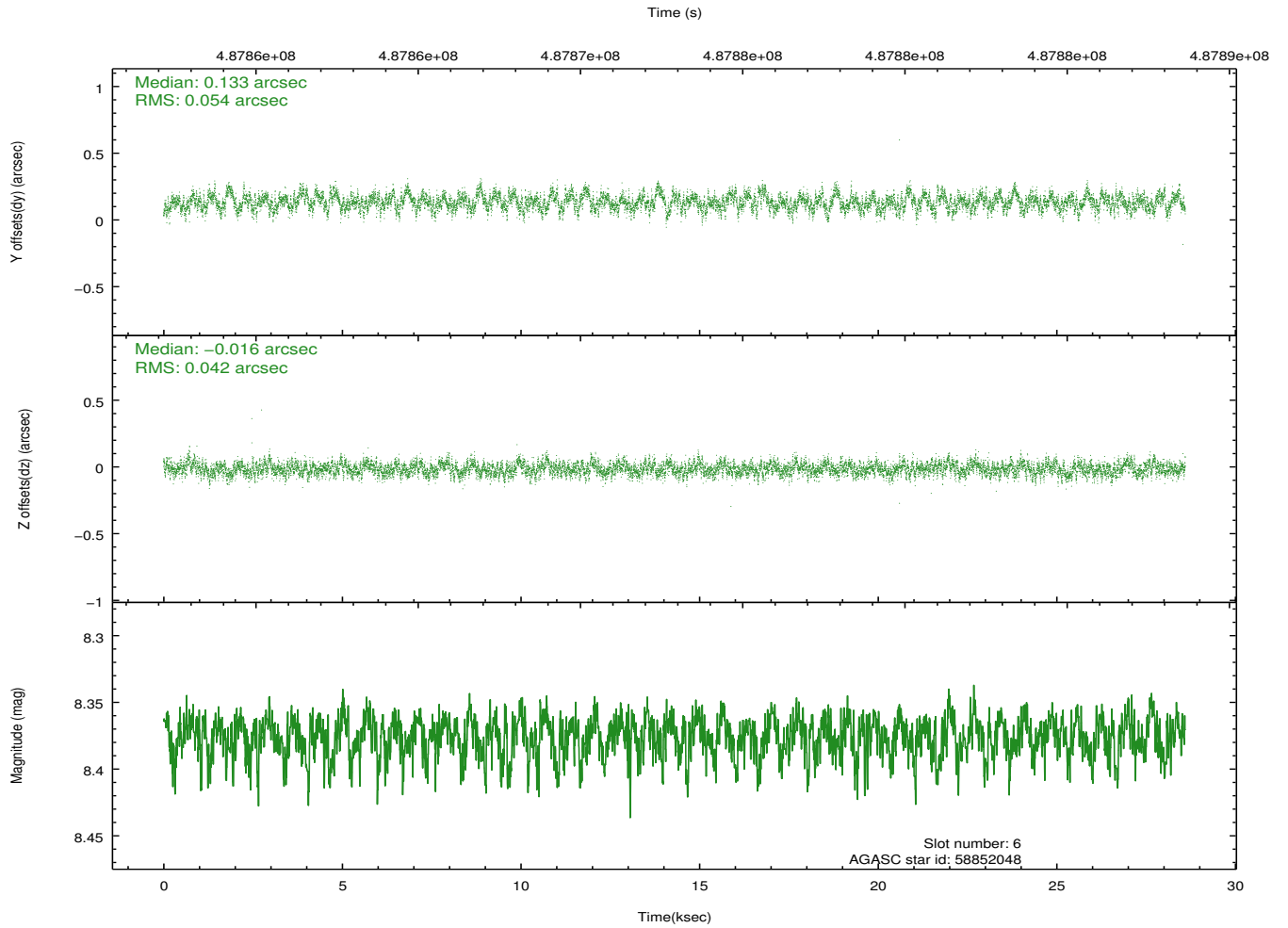
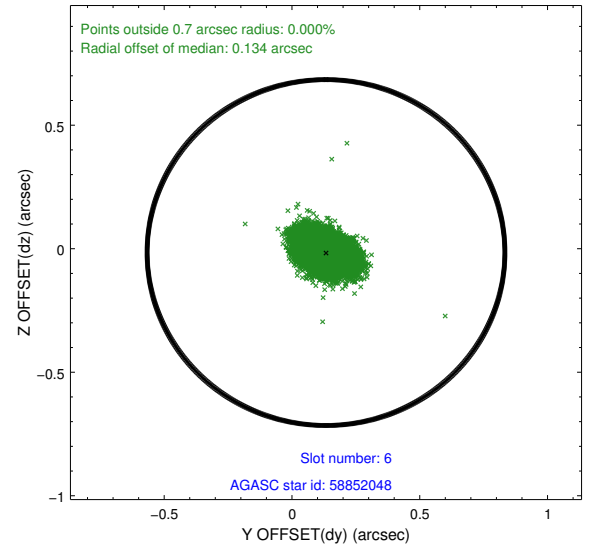
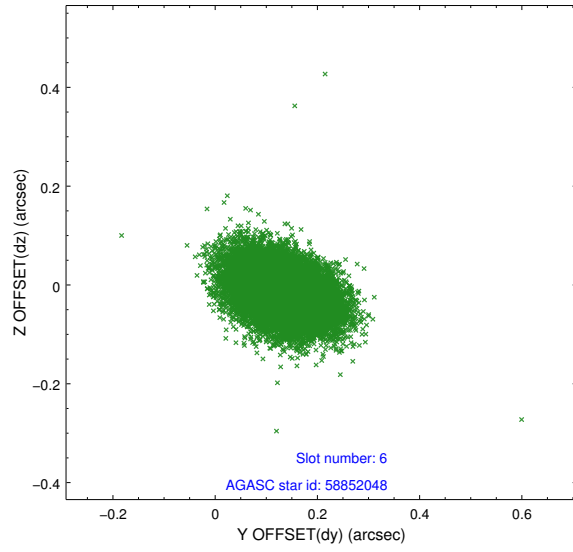
2.4.2 Slot 4



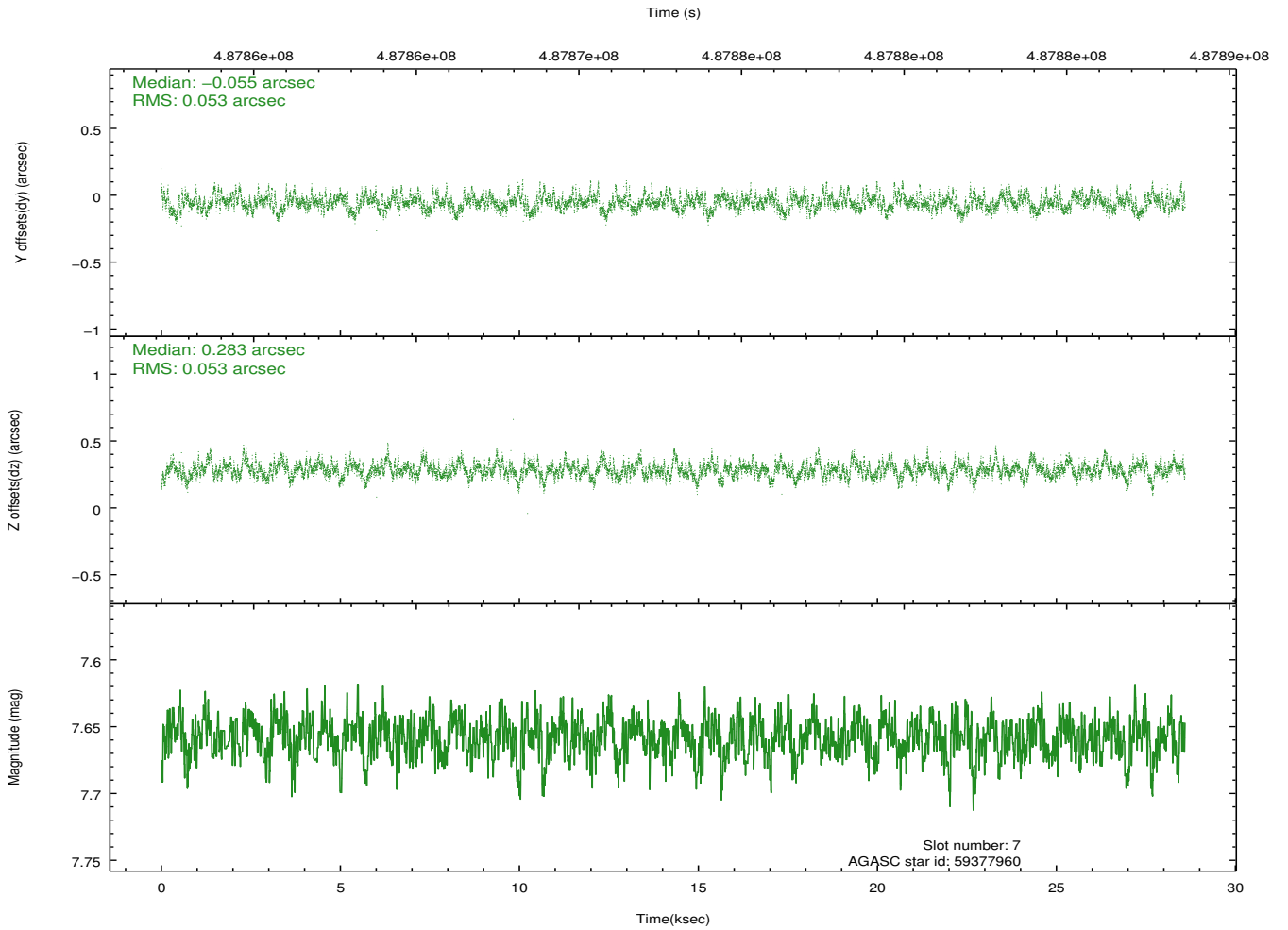
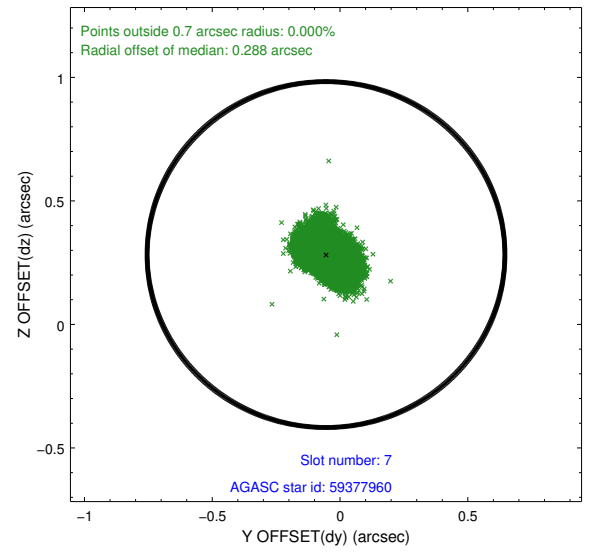
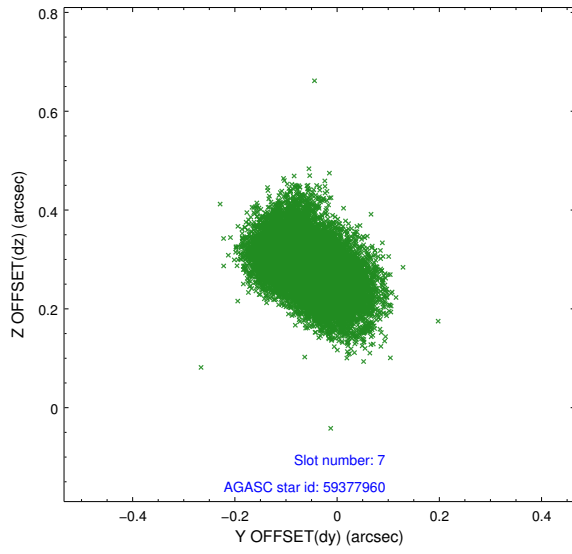
2.4.3 Slot 5



2.4.4 Slot 6

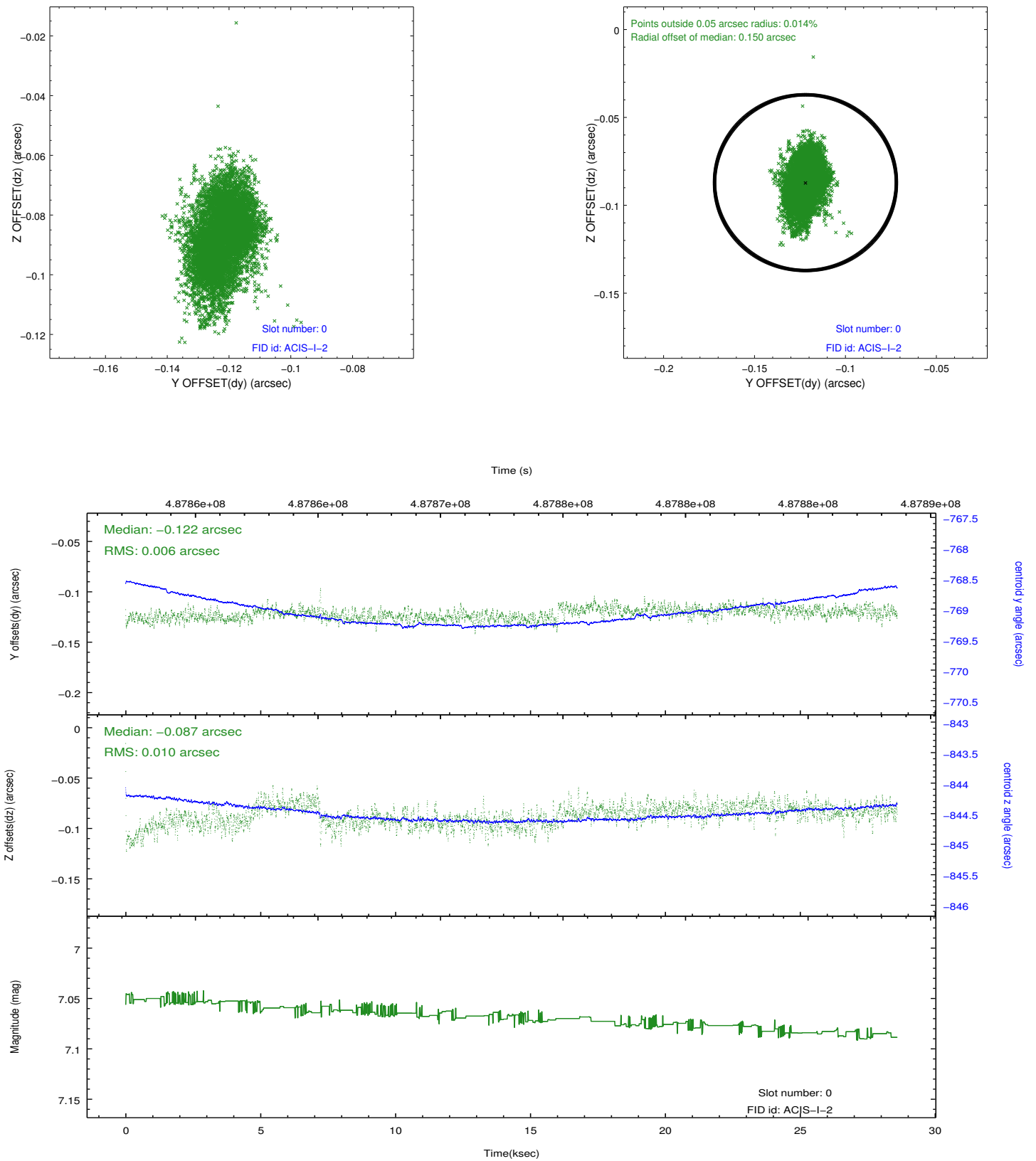


2.4.5 Slot 7

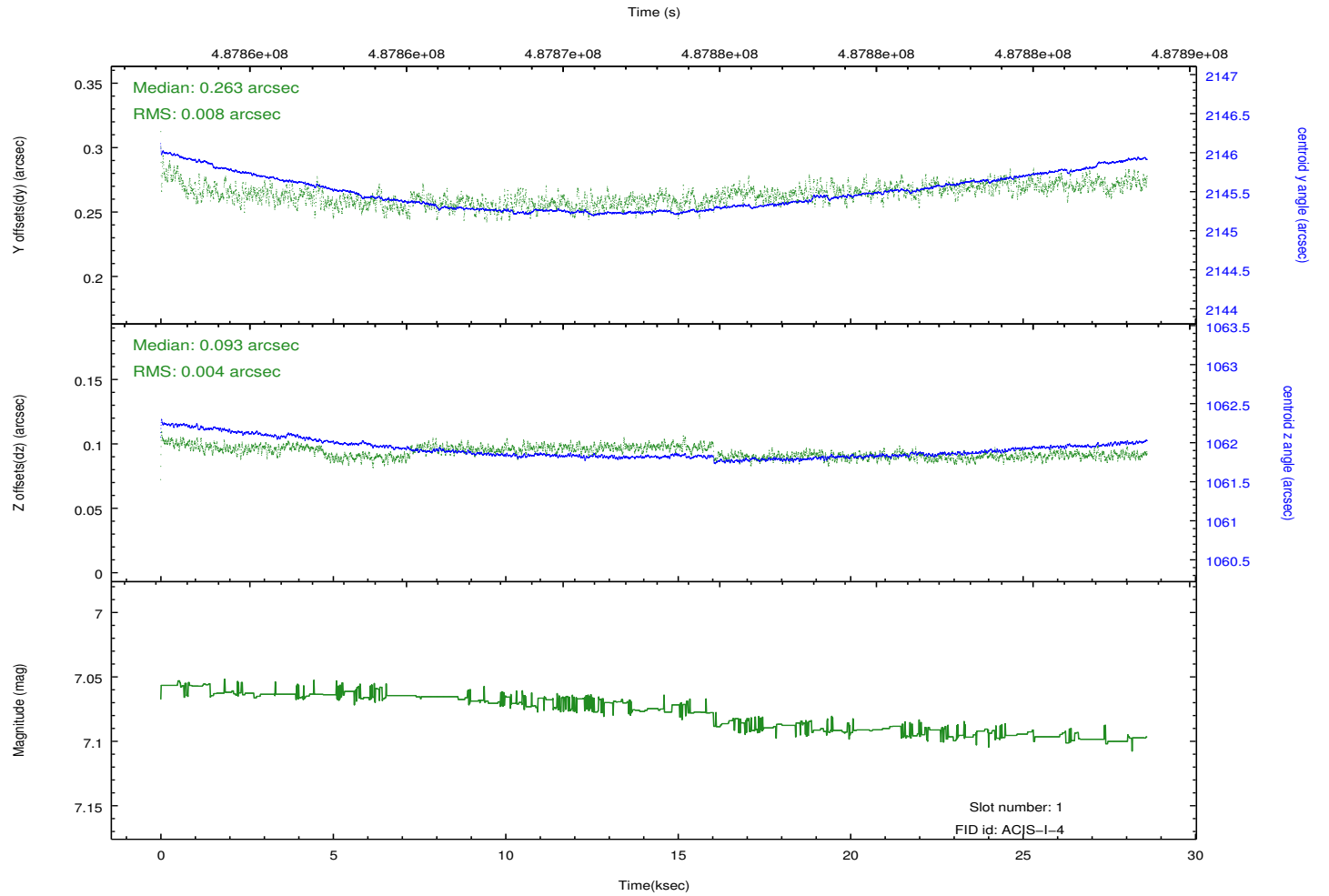
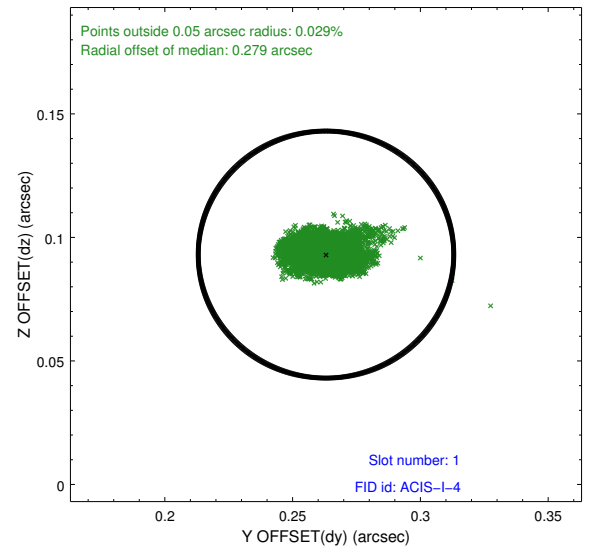
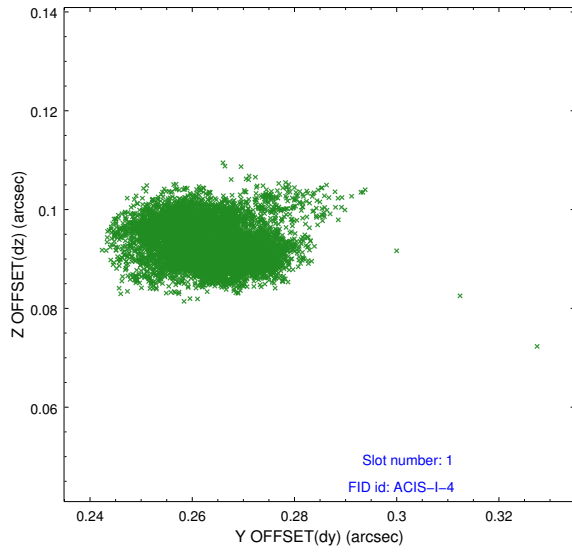


2.5 FID Slots

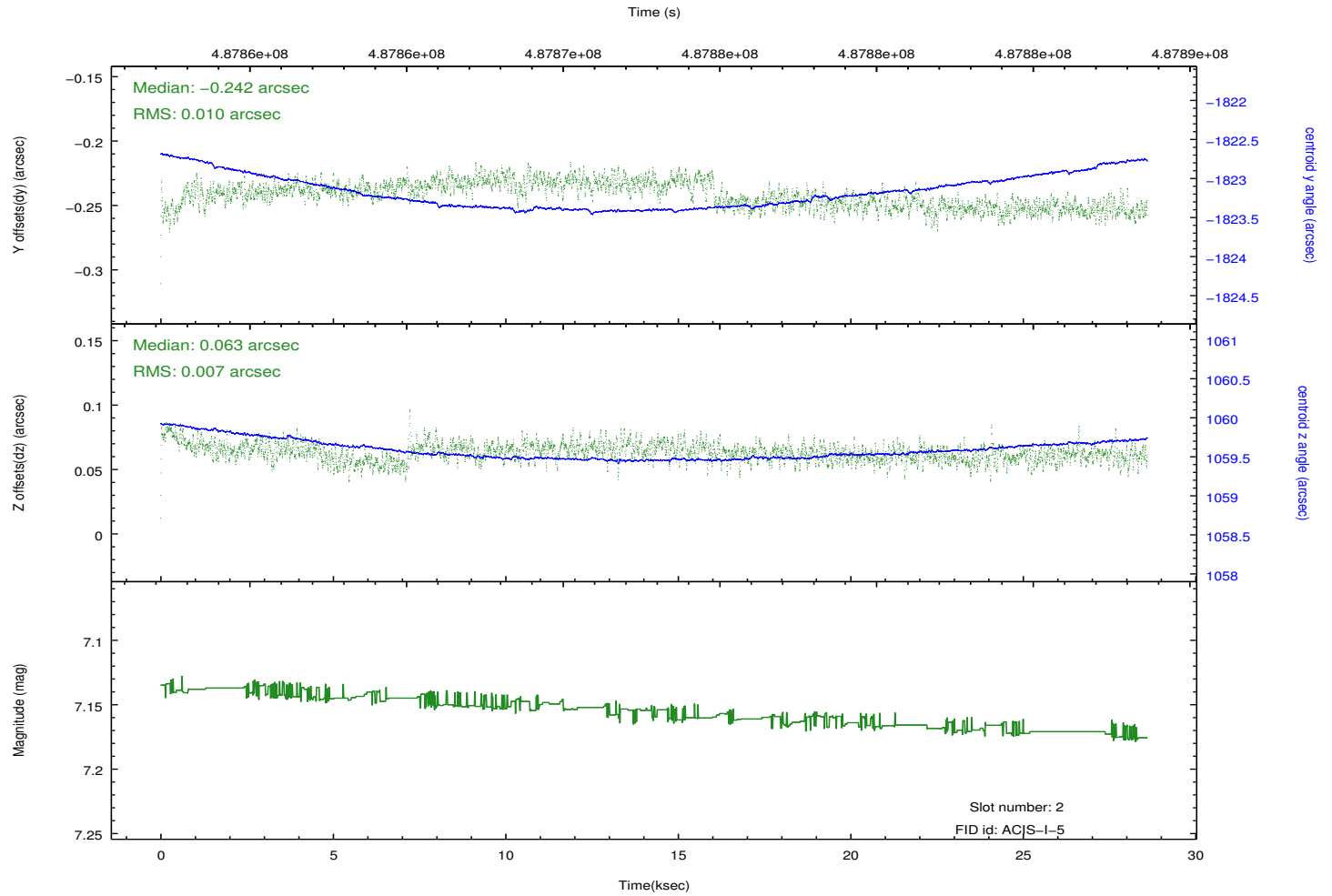
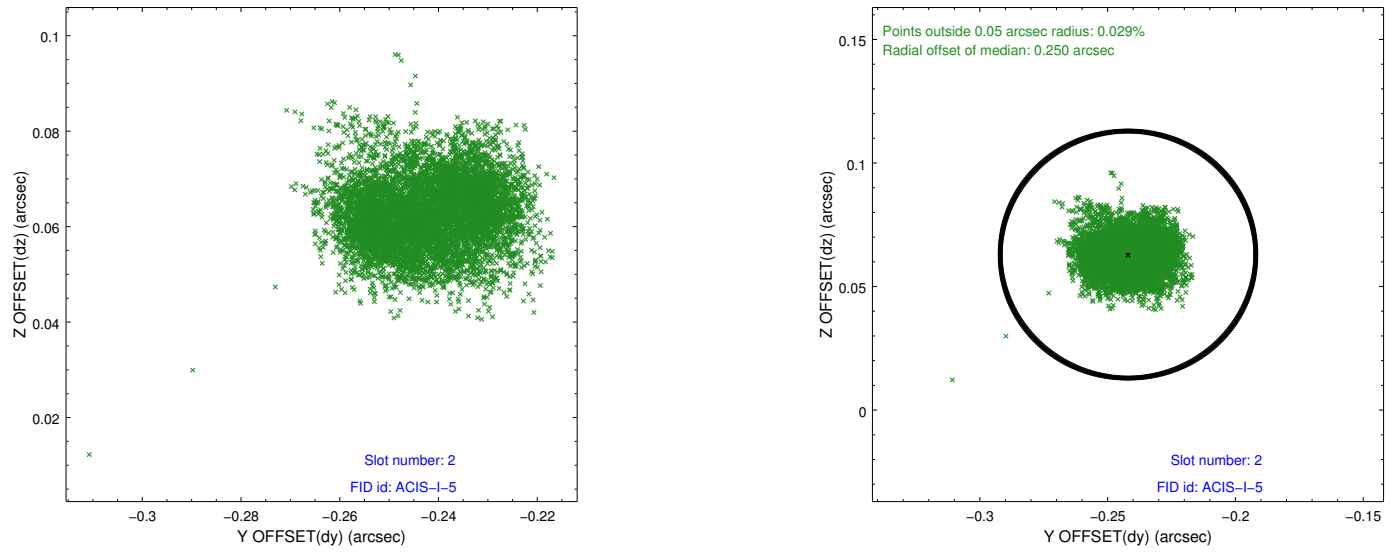
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	28.498300219178

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.