

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15670 - L2 Version 3
Chandra X-Ray Center

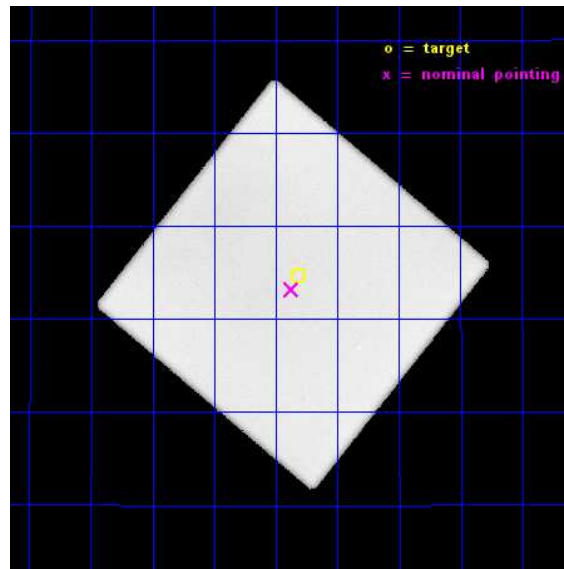
L2 Processing Date : Dec 11 2014

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1 Front

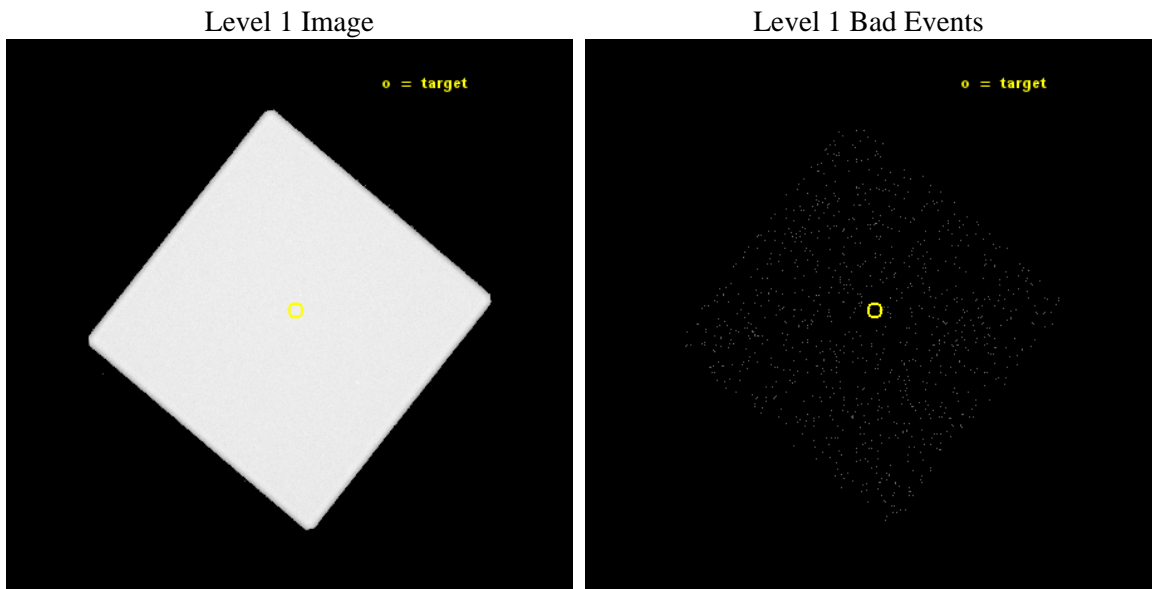
seq_num	100099	Sequence number
obs_id	15670	Observation id
title	Plasma in the Jovian magnetosphere: An X-ray and EUV study of the aurora and the Io plasma torus	Proposal title
observer	Dr. Ralph Kraft	Principal investigator
object	Jupiter	Source name
ra_targ	104.4556	Observer's specified target RA [deg]
dec_targ	23.07806	Observer's specified target Dec [deg]
ra_nom	104.4684798755	Nominal RA [deg]
dec_nom	23.053535375909	Nominal Dec [deg]
roll_nom	264.33243644984	Nominal Roll [deg]
revision	3	Processing version of data
ontime	39795.883445382	[s]
liveltime	23116.295047312	Ontime multiplied by DTCOR
l2events	5302891	Number of level 2 events



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	40000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	39795.883445382	[s]
caldbver	4.6.4	 	l1events	7348963	Number of level 1 events
date	2014-12-11T04:29:16	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

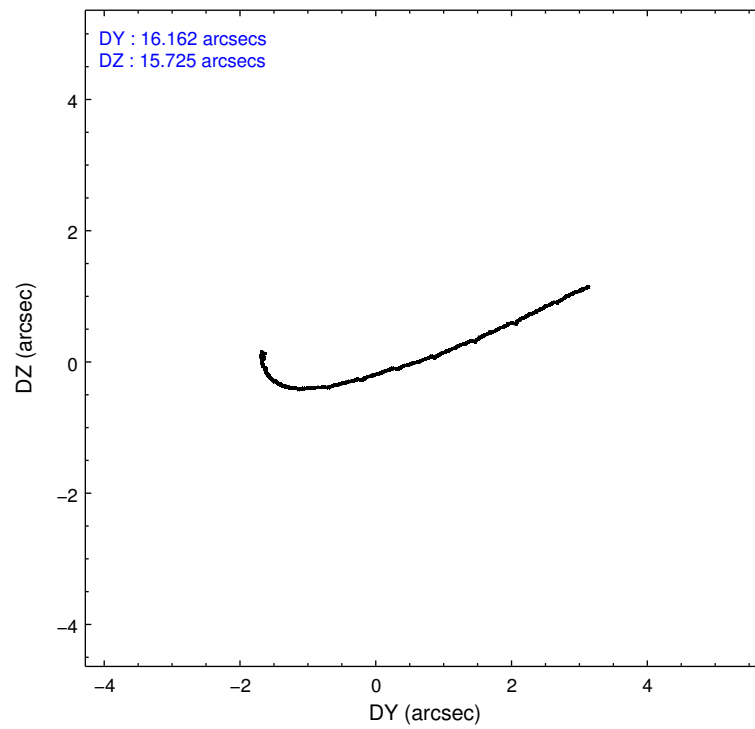
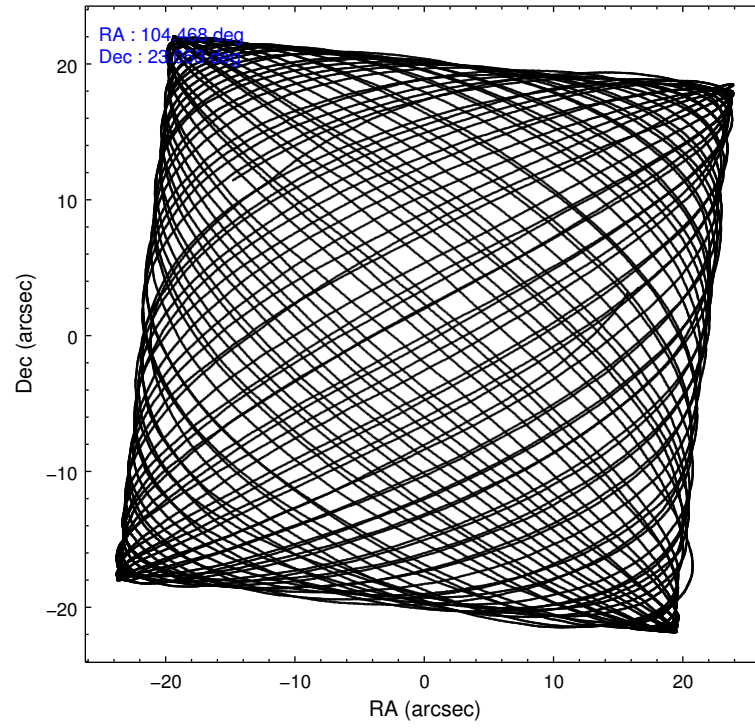
Level 1 Events

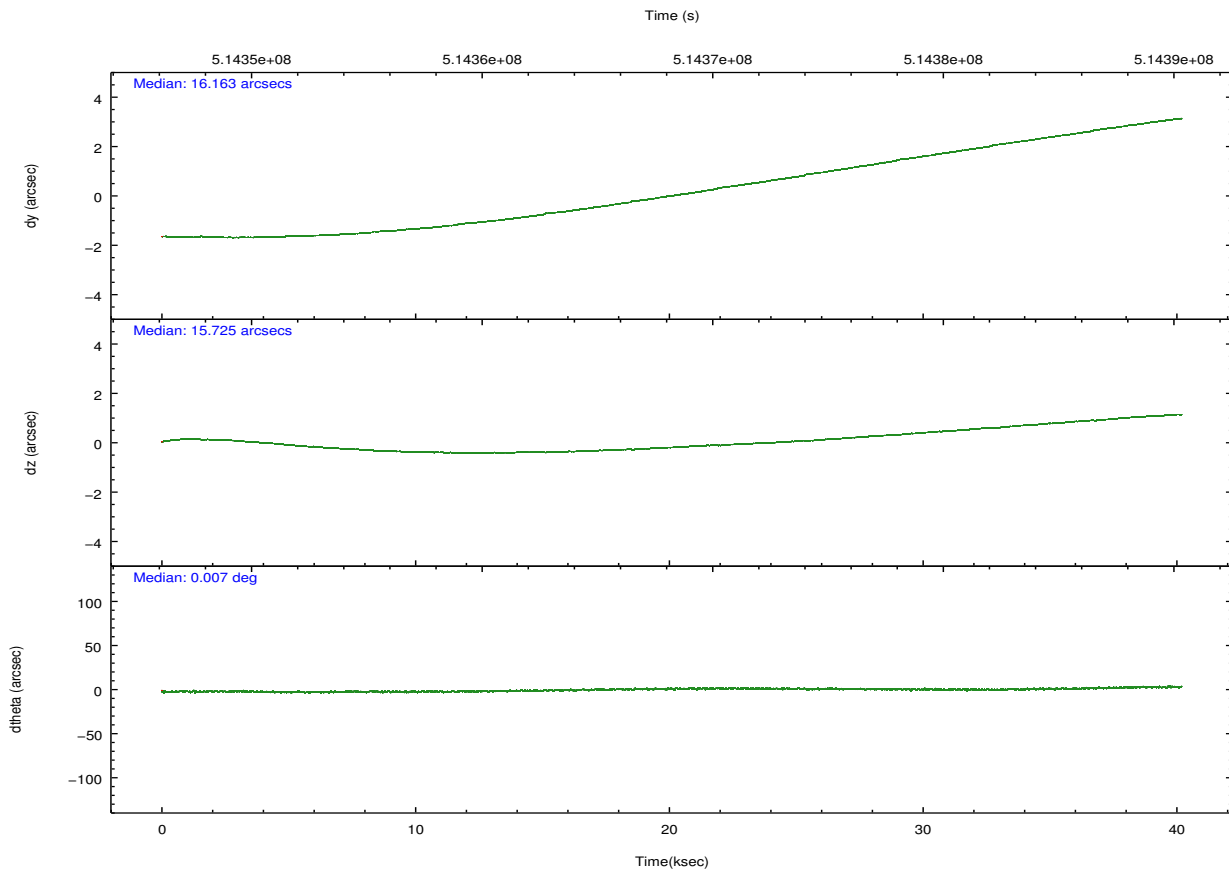
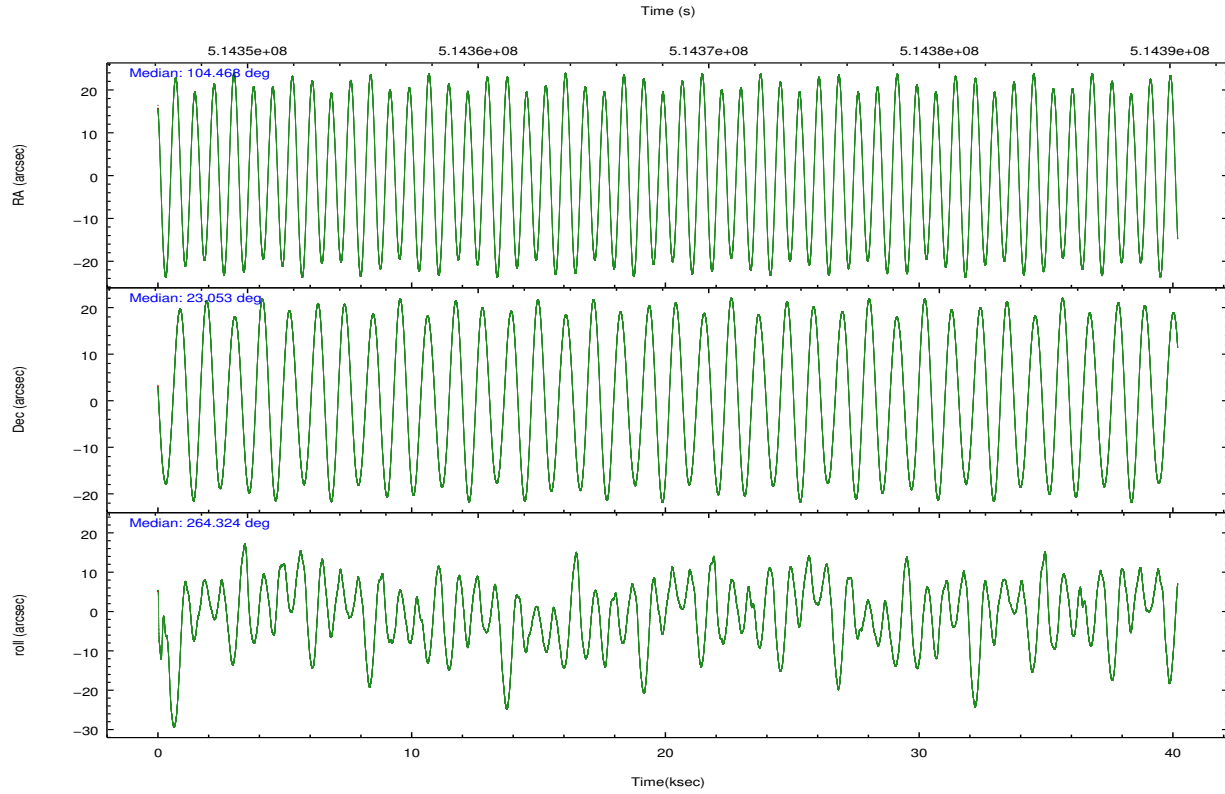
	segment 0
level 1 events	7348963
rejected events	10993
rejected %	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-I	HRC-I	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	104.455681	104.4684798754959			
[deg] Pointing Dec	23.078064	23.05353537590879			
[deg] Pointing Roll	264.432942	264.3324364498398			
[s] Window start time (MET)	513216067.184000	513216067.184000			
[s] Window stop time (MET)	514425607.184000	514425607.184000			
[mm] SIM focus pos	-1.040293	-1.038866356238299			
[mm] SIM defocus	0	0.001426264420575141			
[mm] SIM translation stage pos	126.985494	126.9829799899862			
[mm] SIM translation stage offset	0	0.002508901615314585			
[s] Observation start time (MET)	514348317.184000	514347637.23798			
Observation start date	2014-04-20T02:30:50	2014-04-20T02:20:37			
[s] Observation end time (MET)	514388317.184000	514389197.40278			
Observation end date	2014-04-20T13:37:30	2014-04-20T13:53:17			

2.3 Aspect





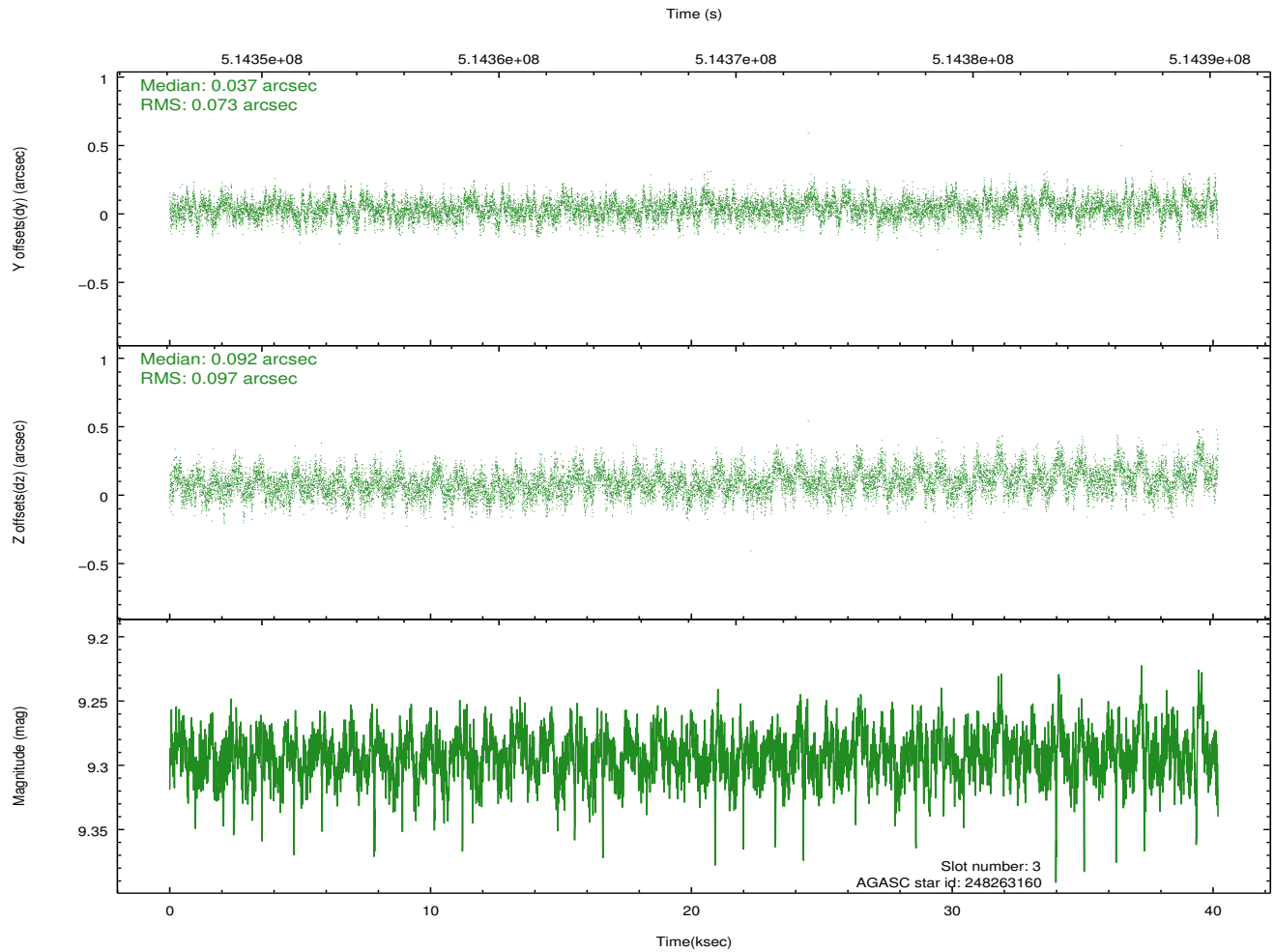
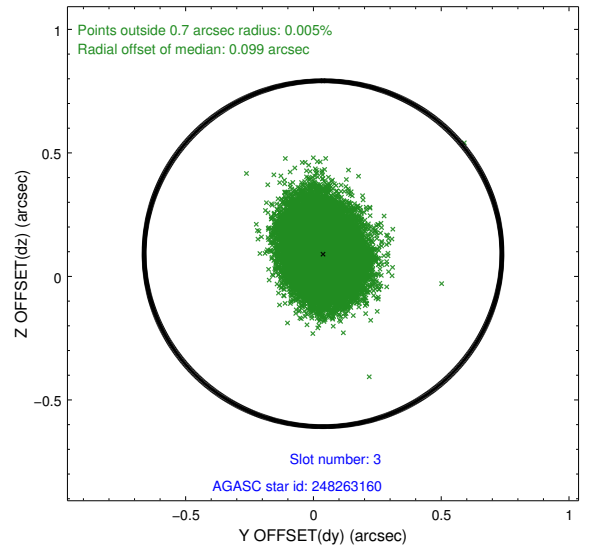
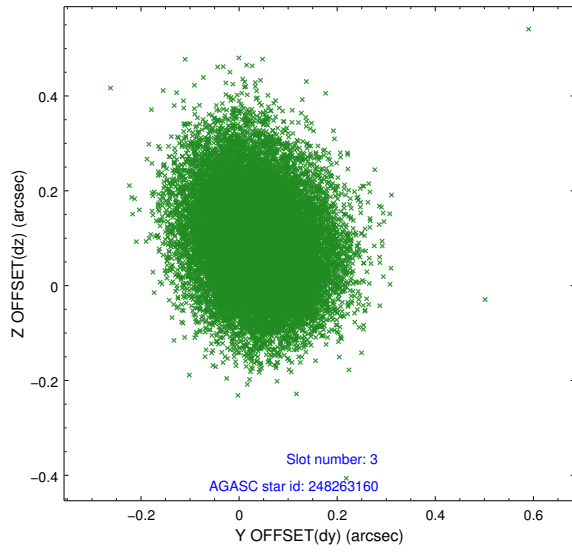
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	6.95	9803	-0.111	0.024	0.015	0.031	0.000000	0.000000	-772.30	-1303.93
1	FID		HRC-I-2	6.99	9803	0.239	-0.092	0.032	0.052	0.000000	0.000000	840.59	-1305.72
2	FID		HRC-I-3	7.04	9803	-0.005	-0.019	0.027	0.045	0.000000	0.000000	-1200.66	1000.45
3	GUIDE	used	248263160	9.29	19591	0.037	0.092	0.128	0.211	103.915522	23.699104	-2055.16	-1989.34
4	GUIDE	used	248384496	8.62	19600	-0.008	-0.009	0.110	0.186	105.212681	23.599570	-2117.61	2302.90
5	GUIDE	used	248253872	9.32	19589	0.009	-0.047	0.145	0.228	104.048591	22.955441	569.55	-1299.09
6	GUIDE	used	248394728	9.96	19576	-0.031	-0.037	0.199	0.319	105.091977	23.310565	-1041.78	2012.38
7	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00

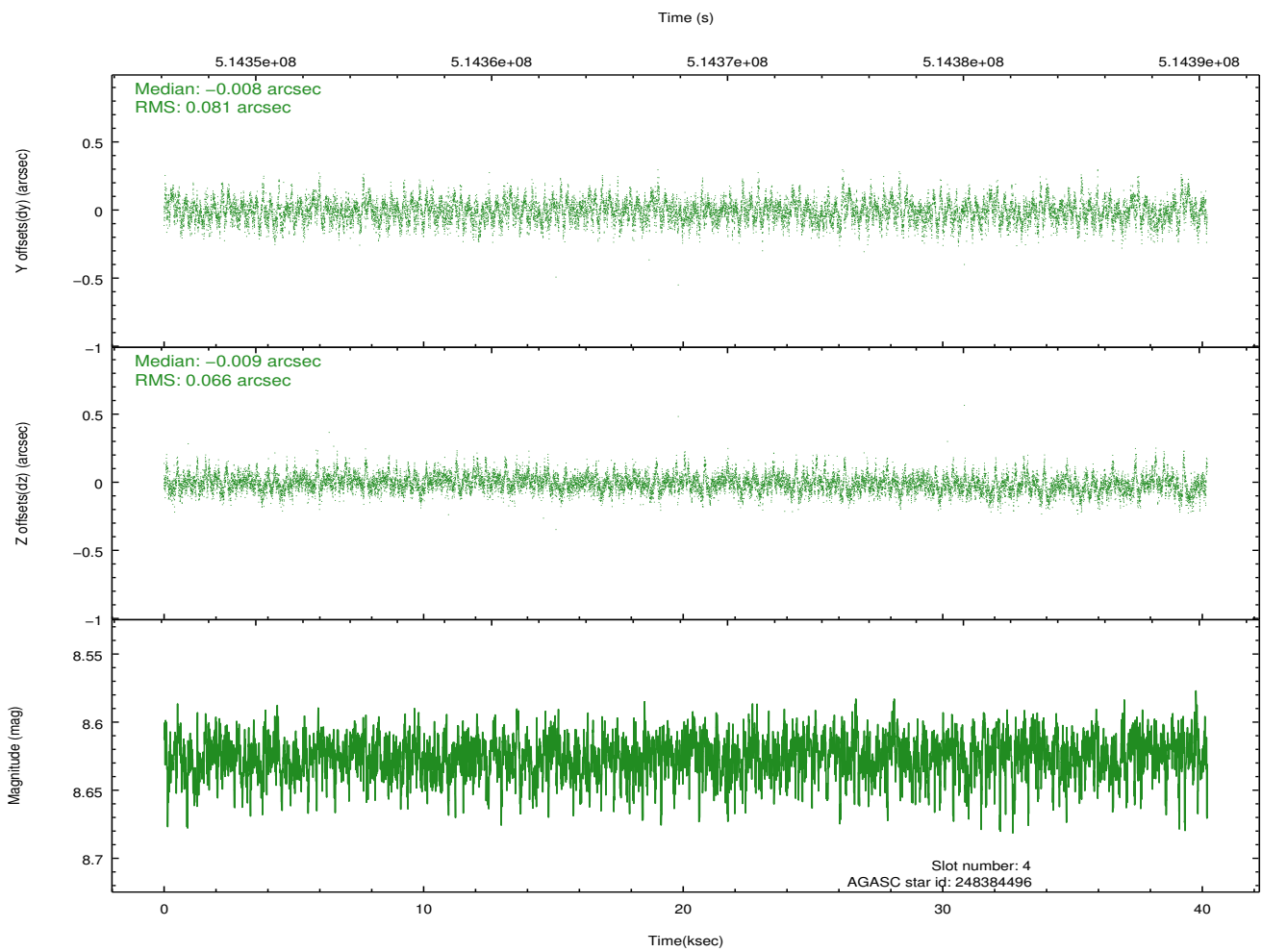
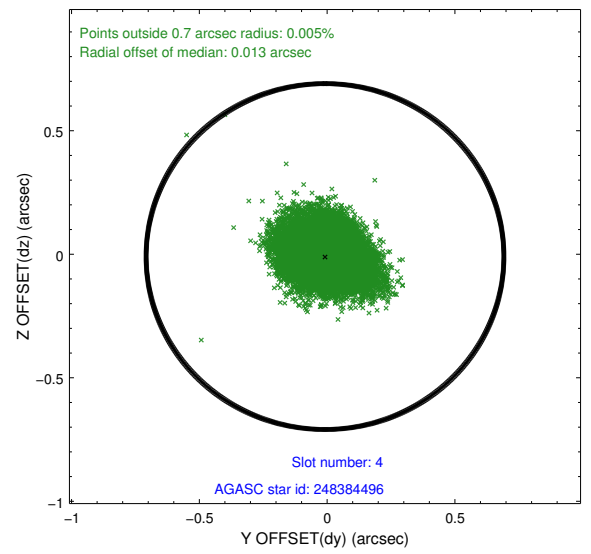
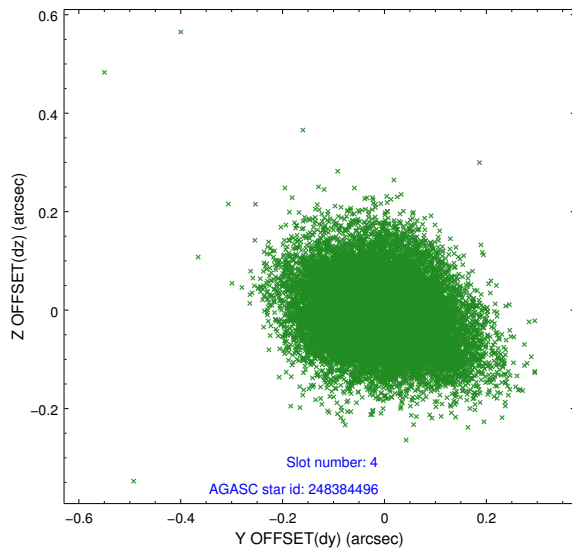
∞

2.4 Star Slots

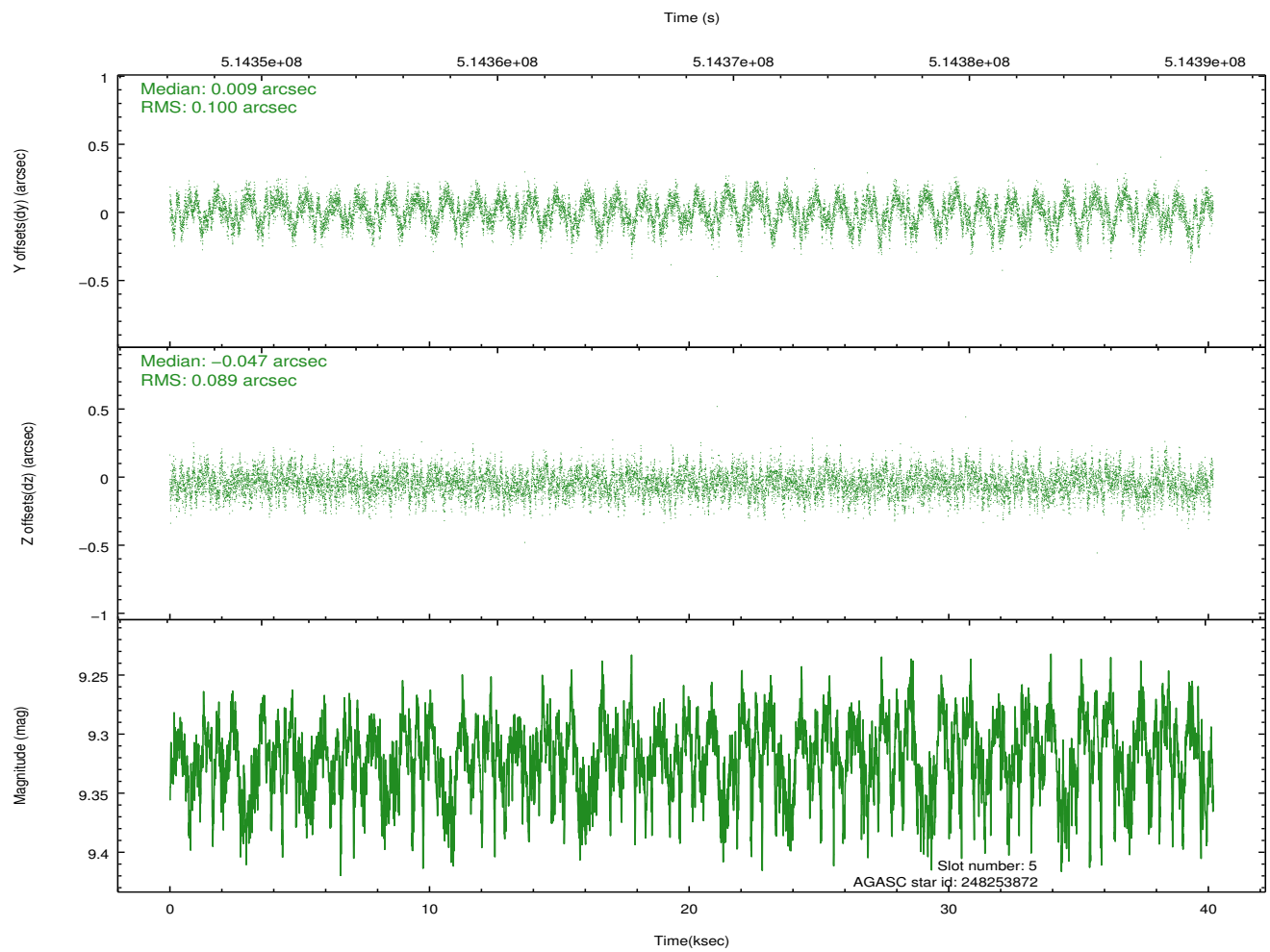
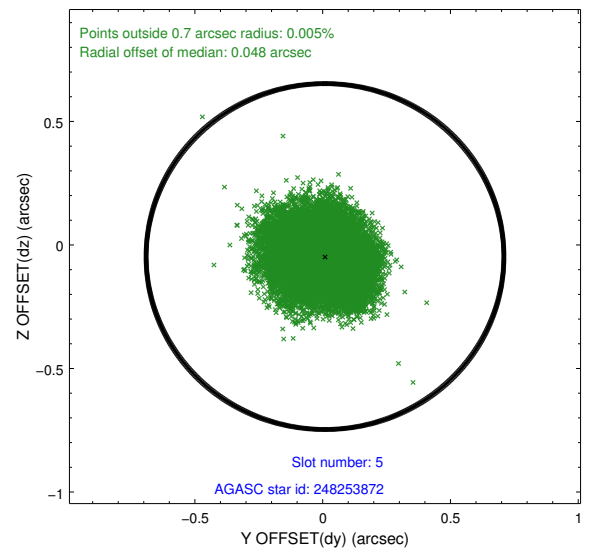
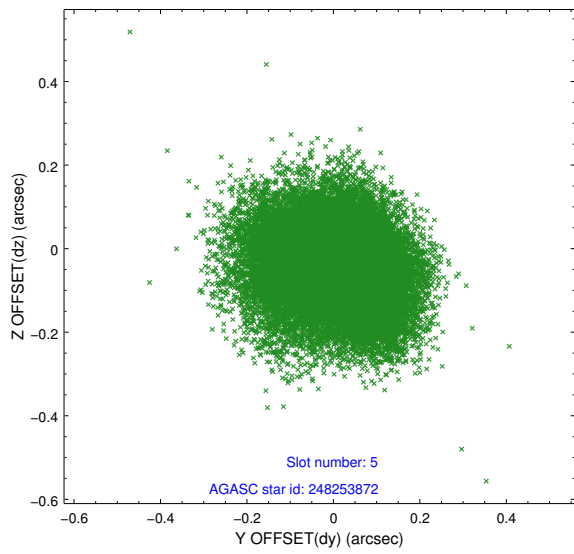
2.4.1 Slot 3



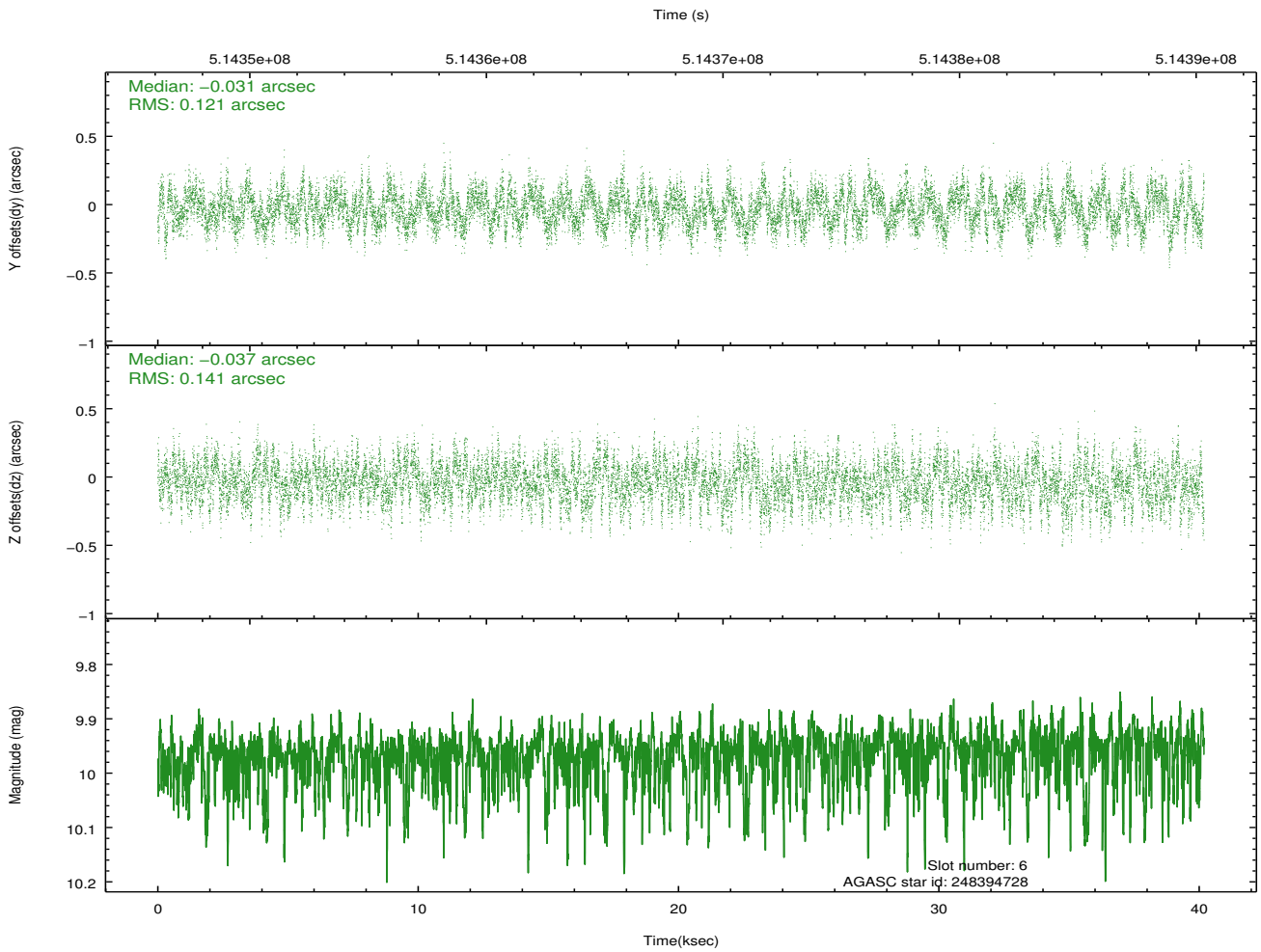
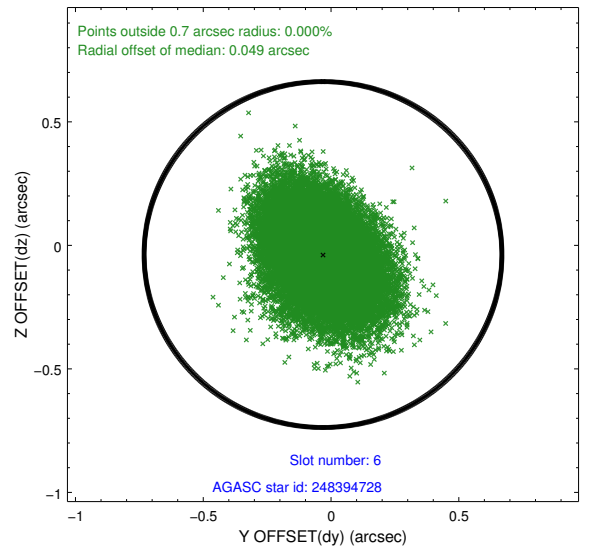
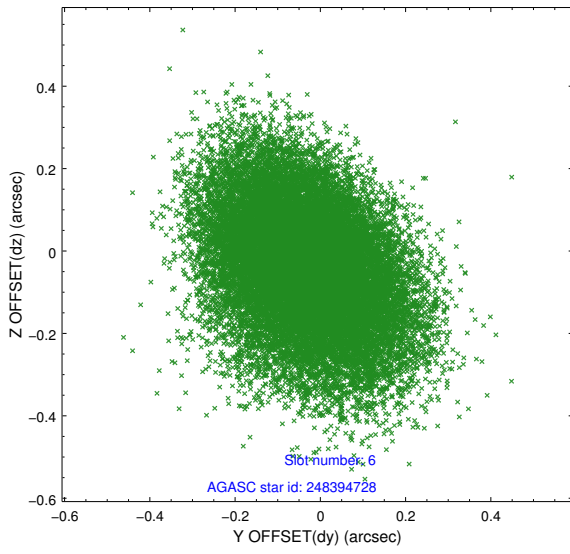
2.4.2 Slot 4



2.4.3 Slot 5

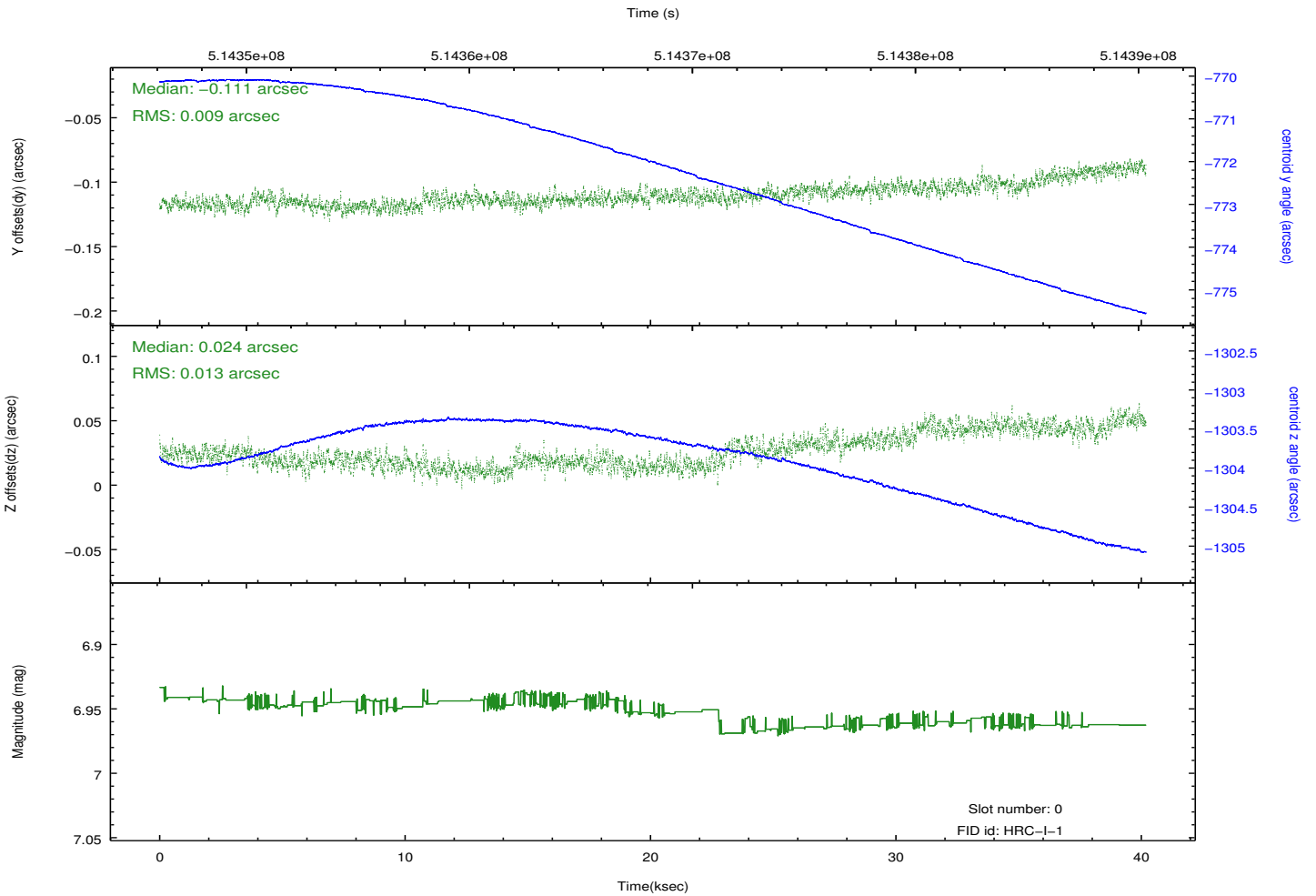
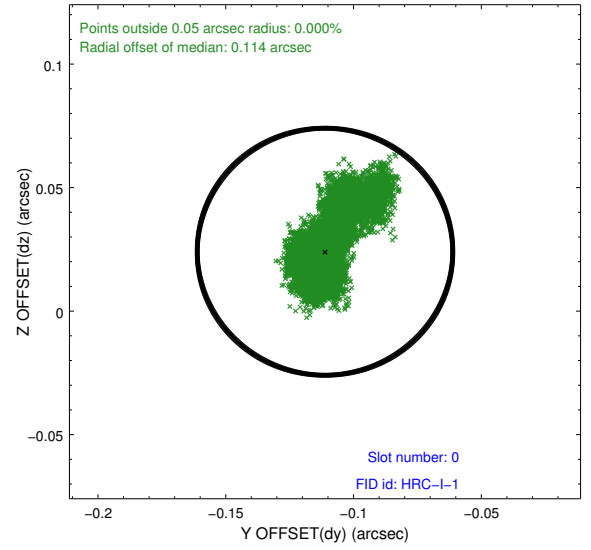
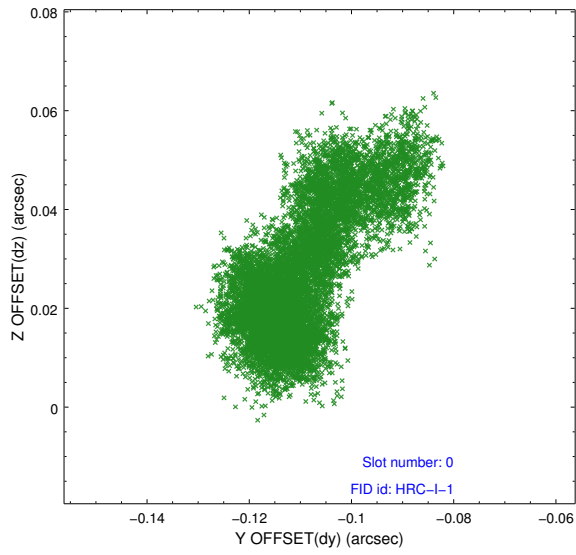


2.4.4 Slot 6

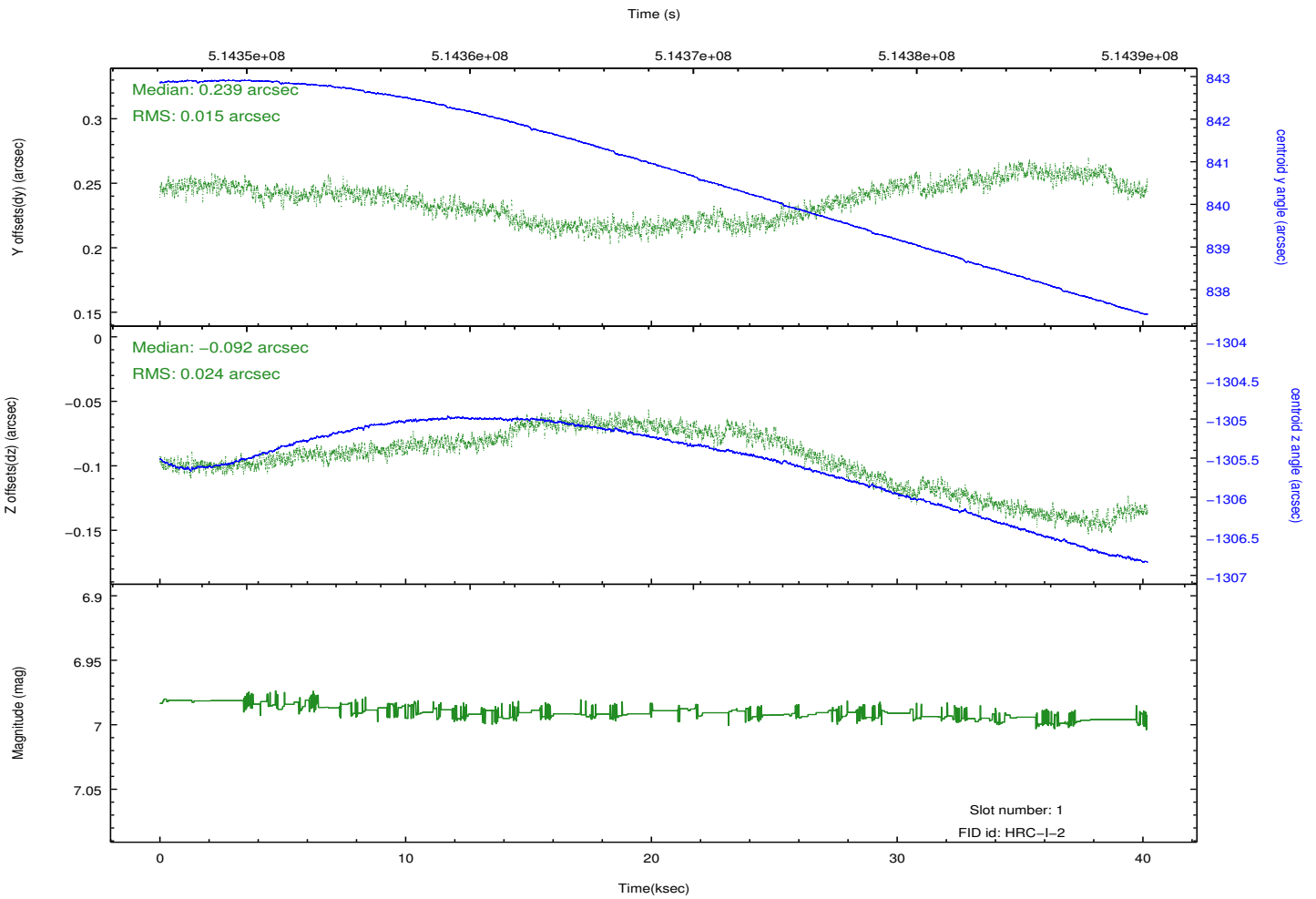
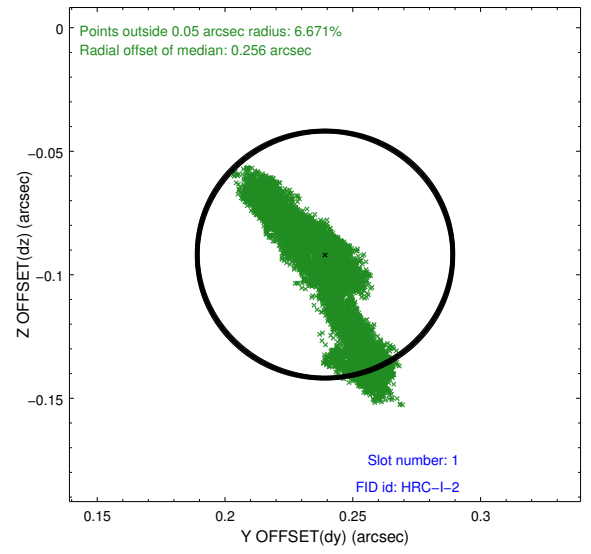
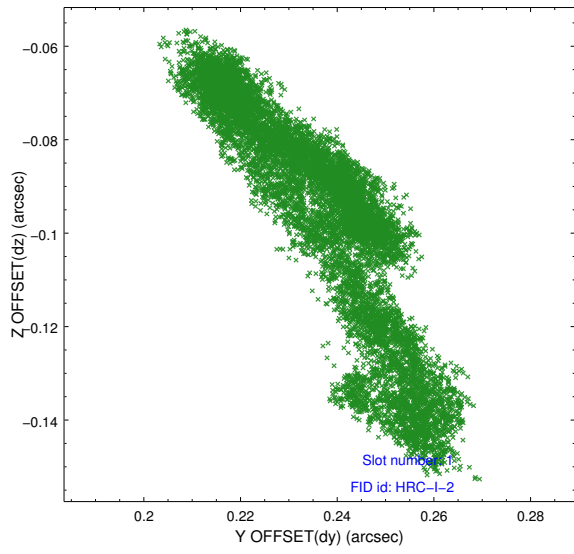


2.5 FID Slots

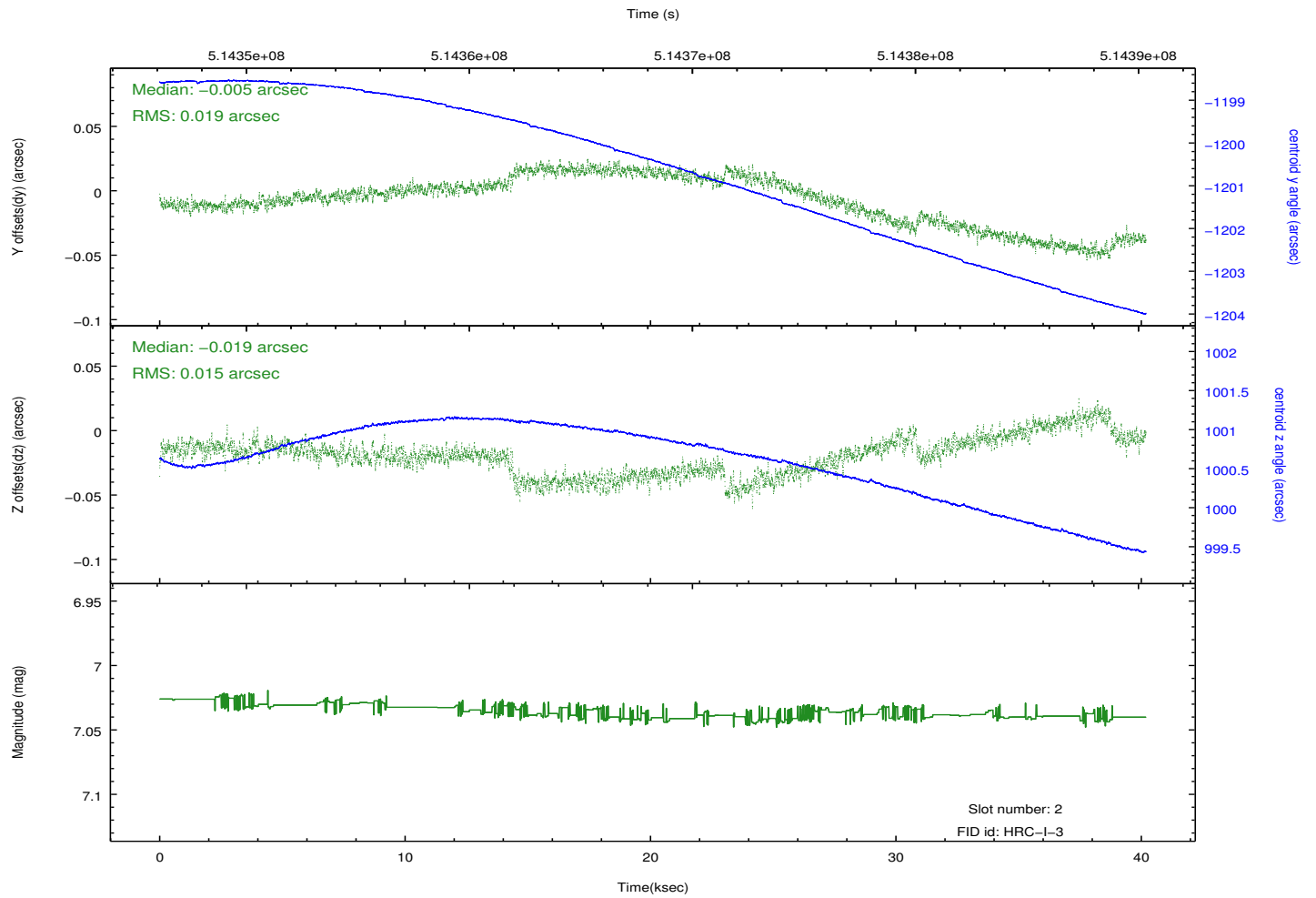
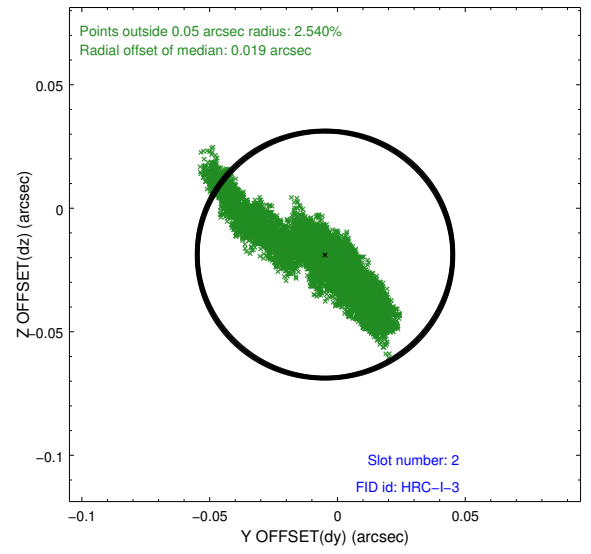
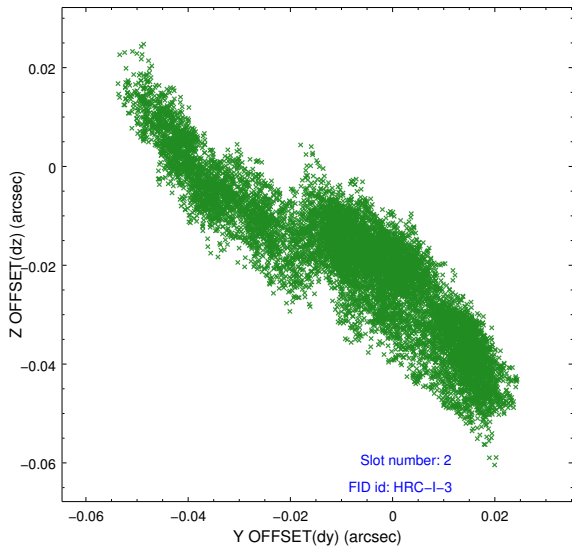
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	39.795883445382

A.2 Comments

Joint proposal with XMM.

Window preference met.

This is an observation of a moving target. Users will need to run `sso_freeze` or similar software to position the events in the reference frame of the target.

The guide star in slot 7 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.

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.