

V&V Reference Report

L2 ASCDS Version : 10.1.1

Observation 15677 - L2 Version 4
Chandra X-Ray Center

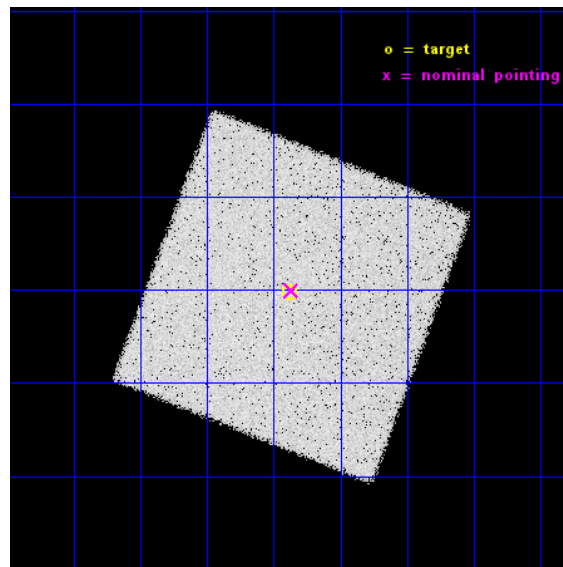
L2 Processing Date : Dec 8 2014

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1 Front

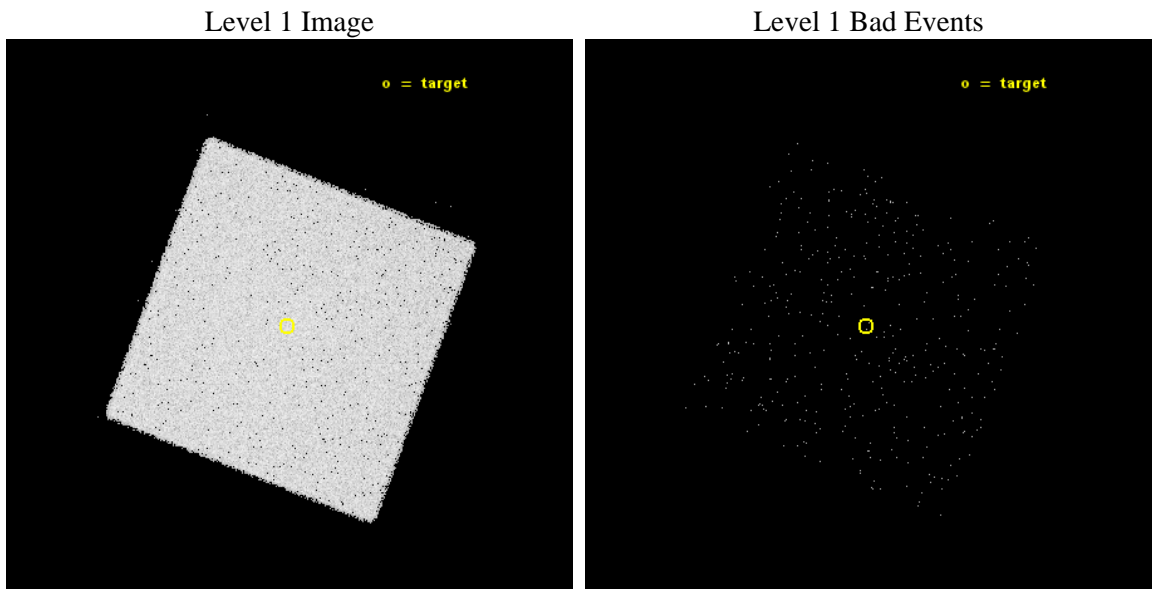
seq_num	100106	Sequence number
obs_id	15677	Observation id
title	Plumbing the Heights of the Solar Wind With Comet ISON	Proposal ti
observer	Dr. Carey Lisse	Principal investigator
object	Comet C/2012 S1 (ISON)	Source name
ra_targ	170.97	Observer's specified target RA [deg]
dec_targ	4.83	Observer's specified target Dec [deg]
ra_nom	170.96680274213	Nominal RA [deg]
dec_nom	4.8330017187192	Nominal Dec [deg]
roll_nom	66.038716631616	Nominal Roll [deg]
revision	4	Processing version of data
ontime	2796.4564030766	[s]
livetime	2772.9073597902	Ontime multiplied by DTCOR
l2events	181434	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	3000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	2796.4564030766	[s]
caldsver	4.6.4	 	l1events	250235	Number of level 1 events
date	2014-12-08T17:14:47	Date and time of file creation			
revision	4	Processing version of data			

2.1.3 Events

Level 1 Events

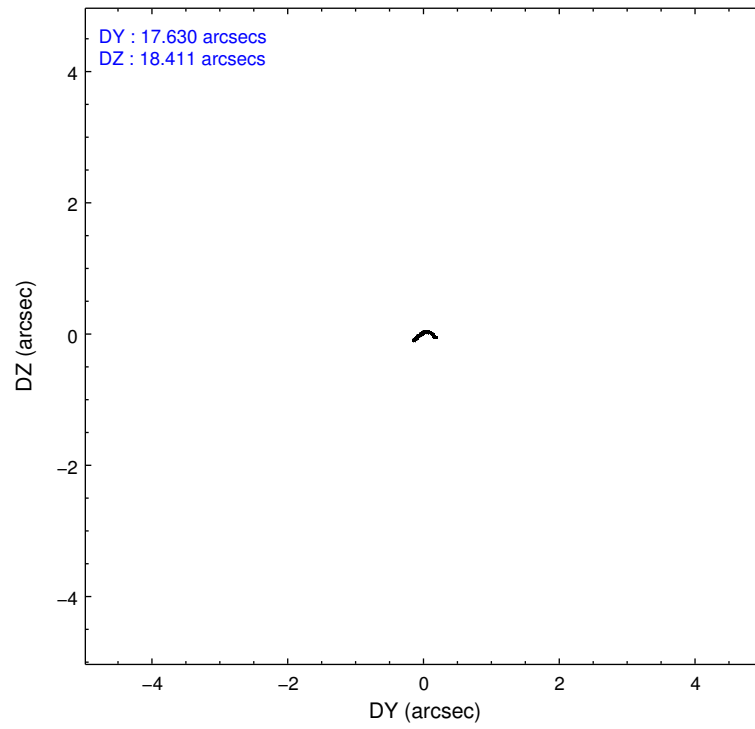
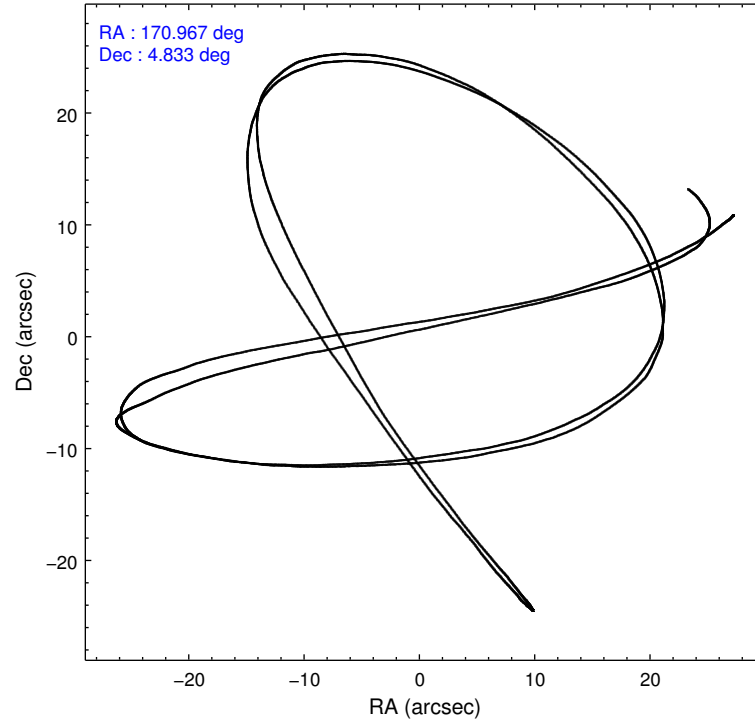
	segment 0
level 1 events	250235
rejected events	6567
rejected %	2%

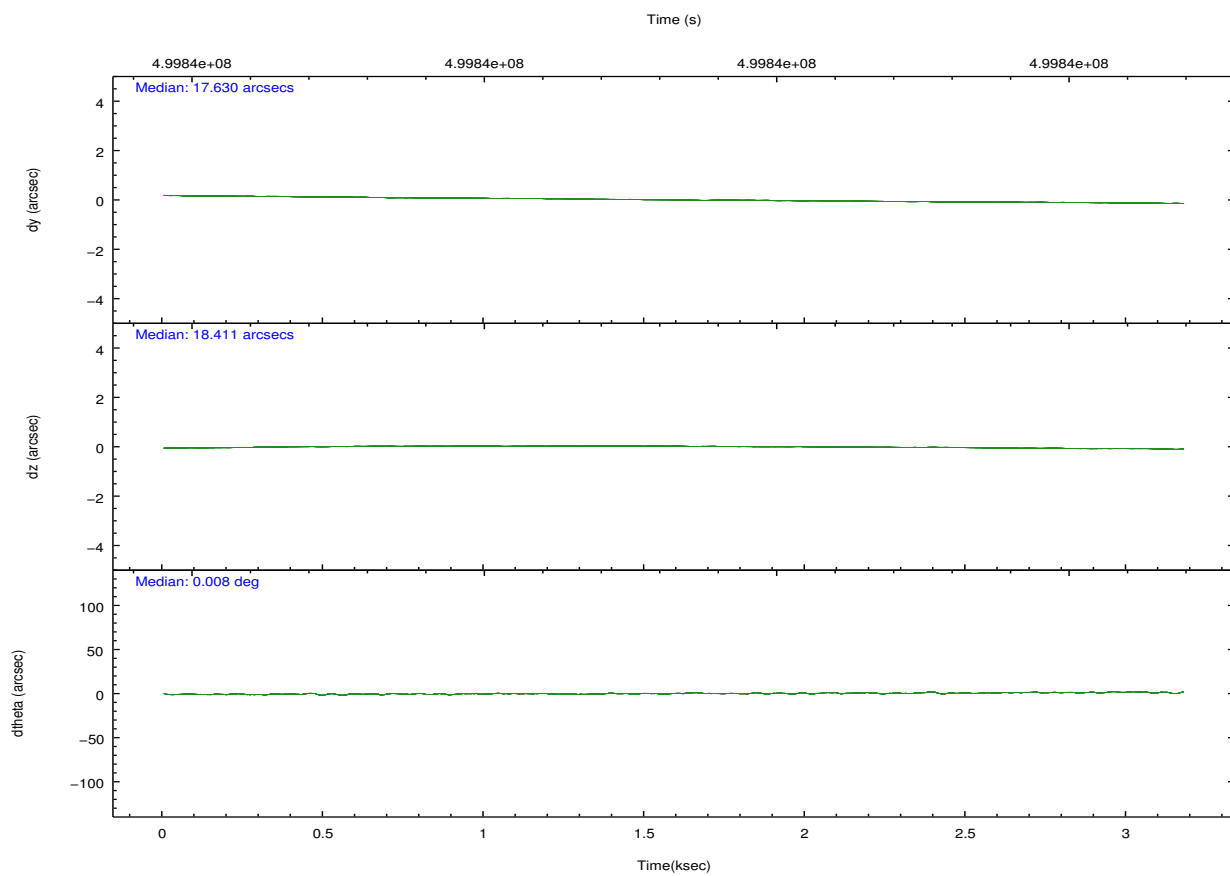
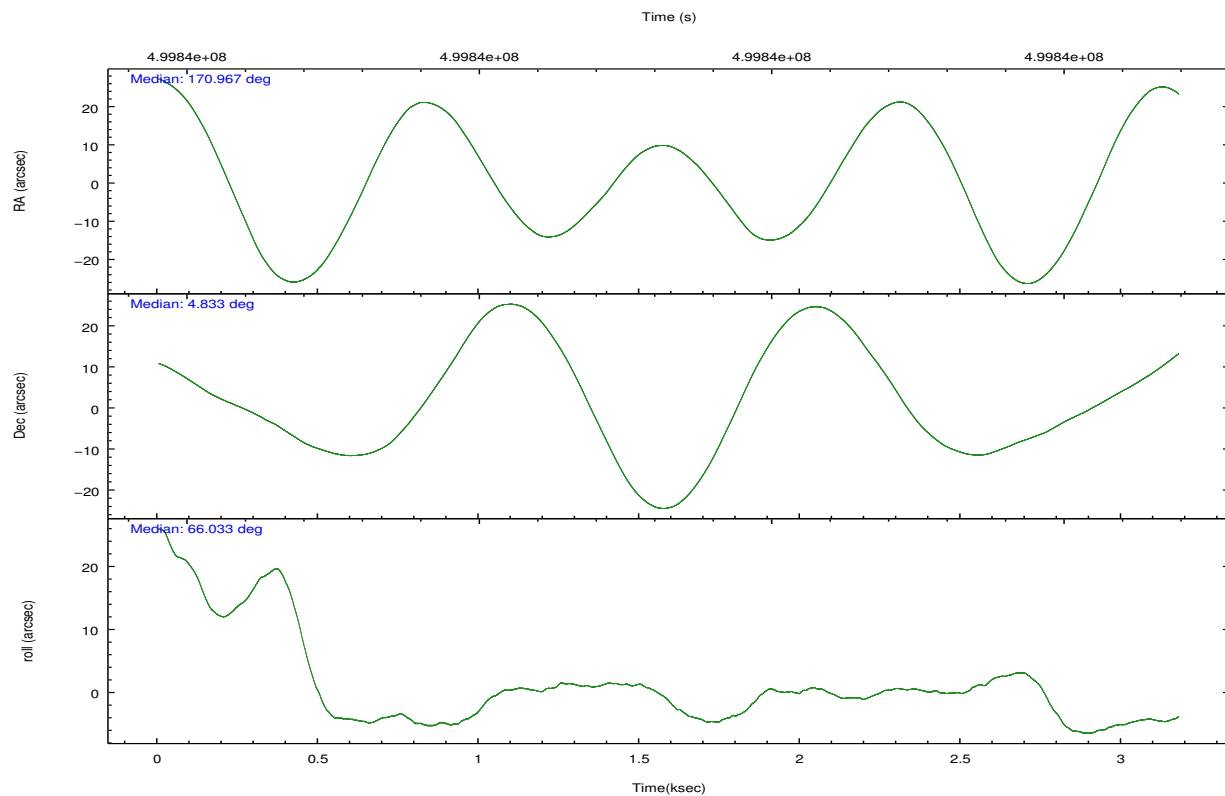
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	HRC	HRC
Detector	HRC-I	HRC-I
Grating	NONE	NONE
Data mode	OBSERVING	OBSERVING
Observation mode	POINTING	POINTING
[deg] Pointing RA	170.970207	170.9668027421275
[deg] Pointing Dec	4.806218	4.833001718719244
[deg] Pointing Roll	66.133936	66.03871663161551
[mm] SIM focus pos	-1.040293	-1.038866356238299
[mm] SIM defocus	0	0.001426264420575141
[mm] SIM translation stage pos	126.985494	126.9804656746847
[mm] SIM translation stage offset	0	0.005023216916882234
[s] Observation start time (MET)	499836245.184000	499835818.1526
Observation start date	2013-11-03T03:22:58	2013-11-03T03:16:58
[s] Observation end time (MET)	499839245.184000	499840125.20283
Observation end date	2013-11-03T04:12:58	2013-11-03T04:28:45

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED

2.3 Aspect



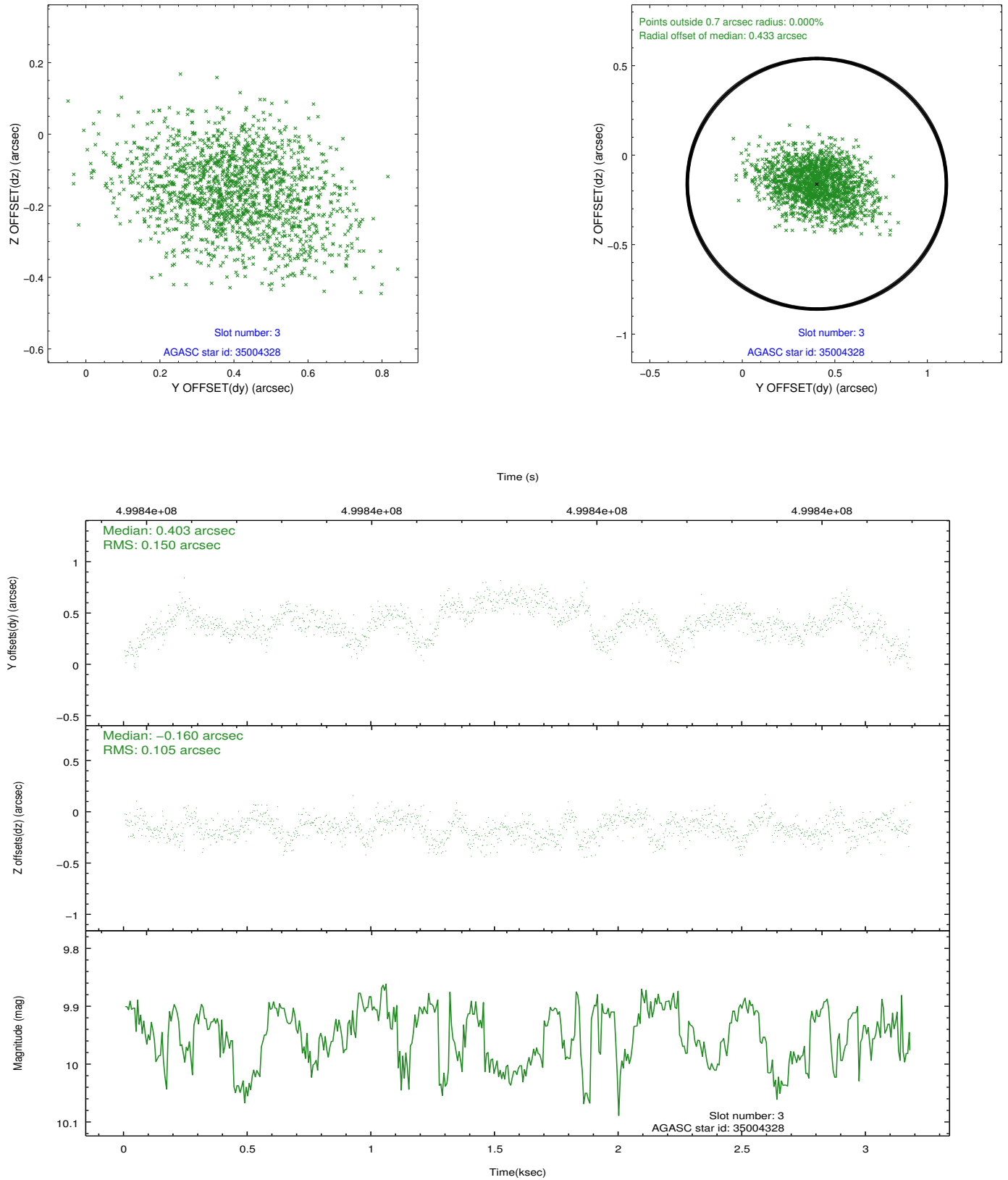


Slot Statistics

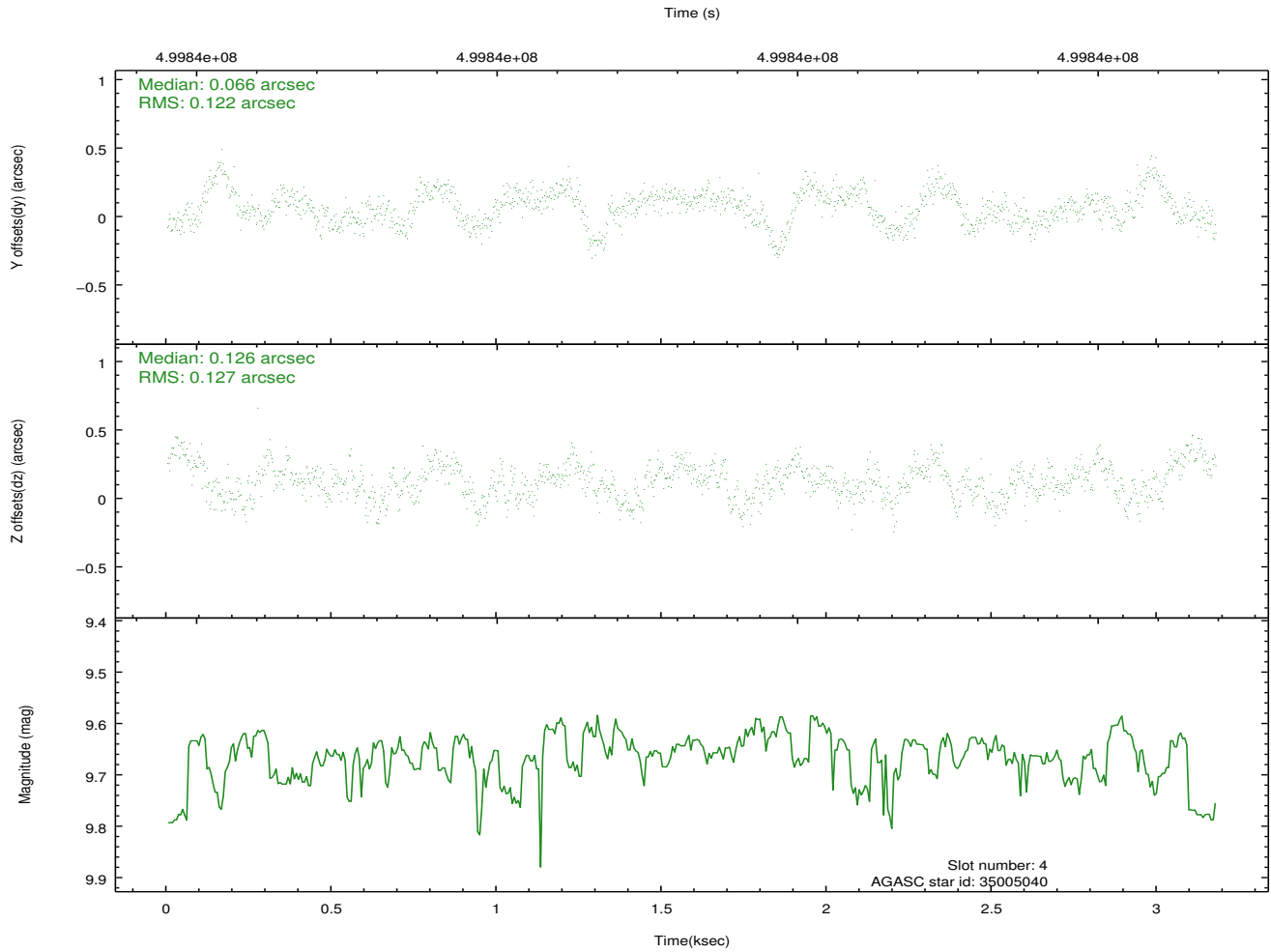
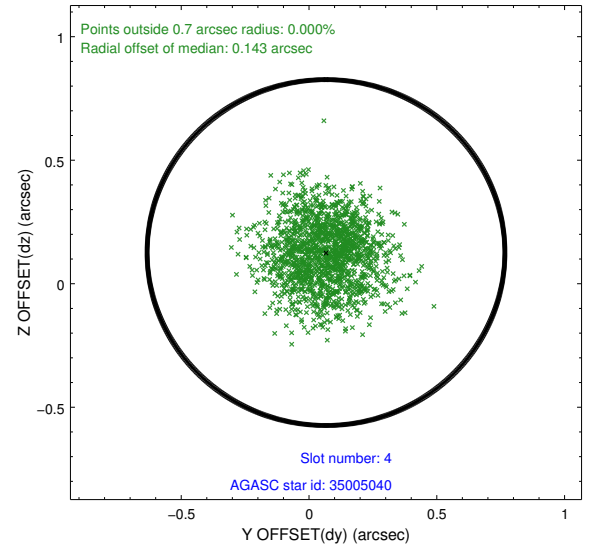
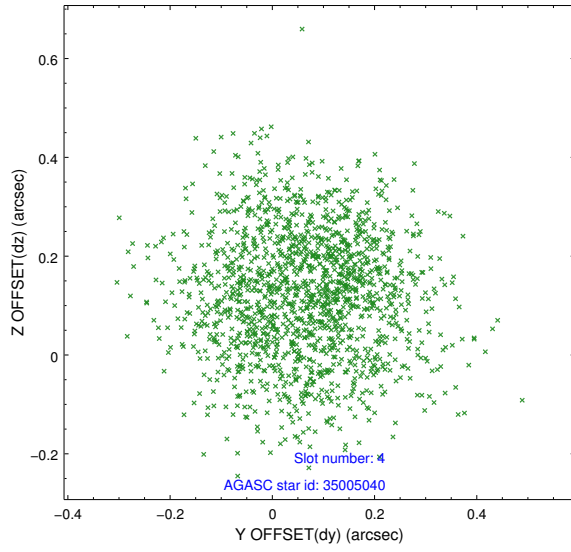
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		HRC-I-1	7.00	775	-0.108	0.055	0.007	0.012	0.000000	0.000000	-773.60	-1306.48
1	FID		HRC-I-2	7.03	775	0.272	-0.145	0.006	0.011	0.000000	0.000000	838.41	-1309.92
2	FID		HRC-I-3	7.07	775	-0.046	0.001	0.006	0.011	0.000000	0.000000	-1200.97	996.34
3	GUIDE	used	35004328	9.95	1549	0.403	-0.160	0.195	0.323	170.461941	4.343562	-2259.45	995.50
4	GUIDE	used	35005040	9.66	1548	0.066	0.126	0.191	0.302	170.763404	4.828006	-230.28	710.87
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	35398072	9.99	1549	-0.475	0.030	0.264	0.450	171.222058	5.399121	2317.73	40.36
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

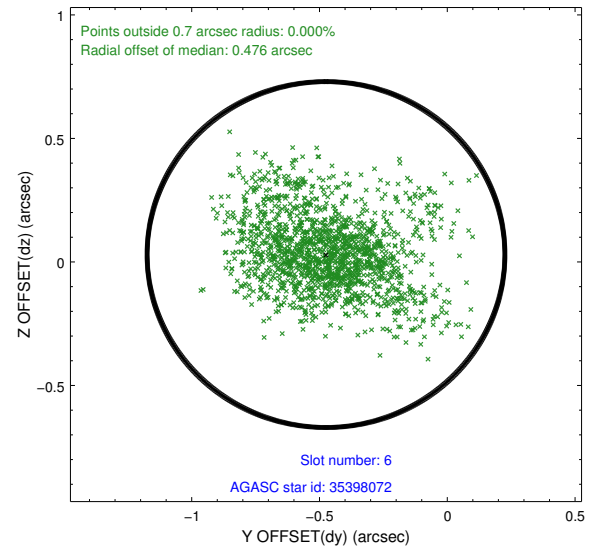
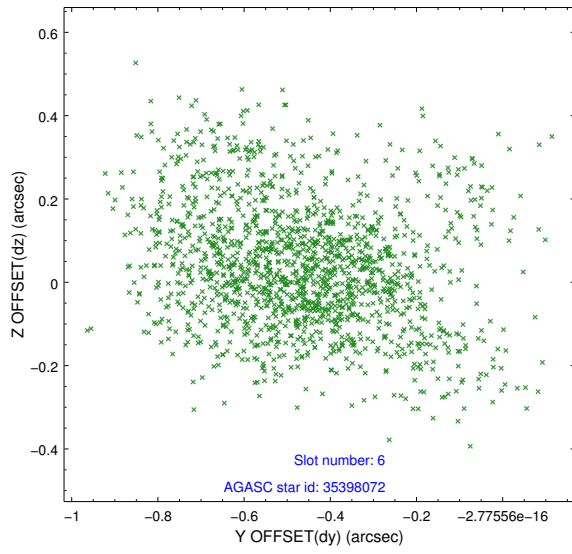
2.4.1 Slot 3



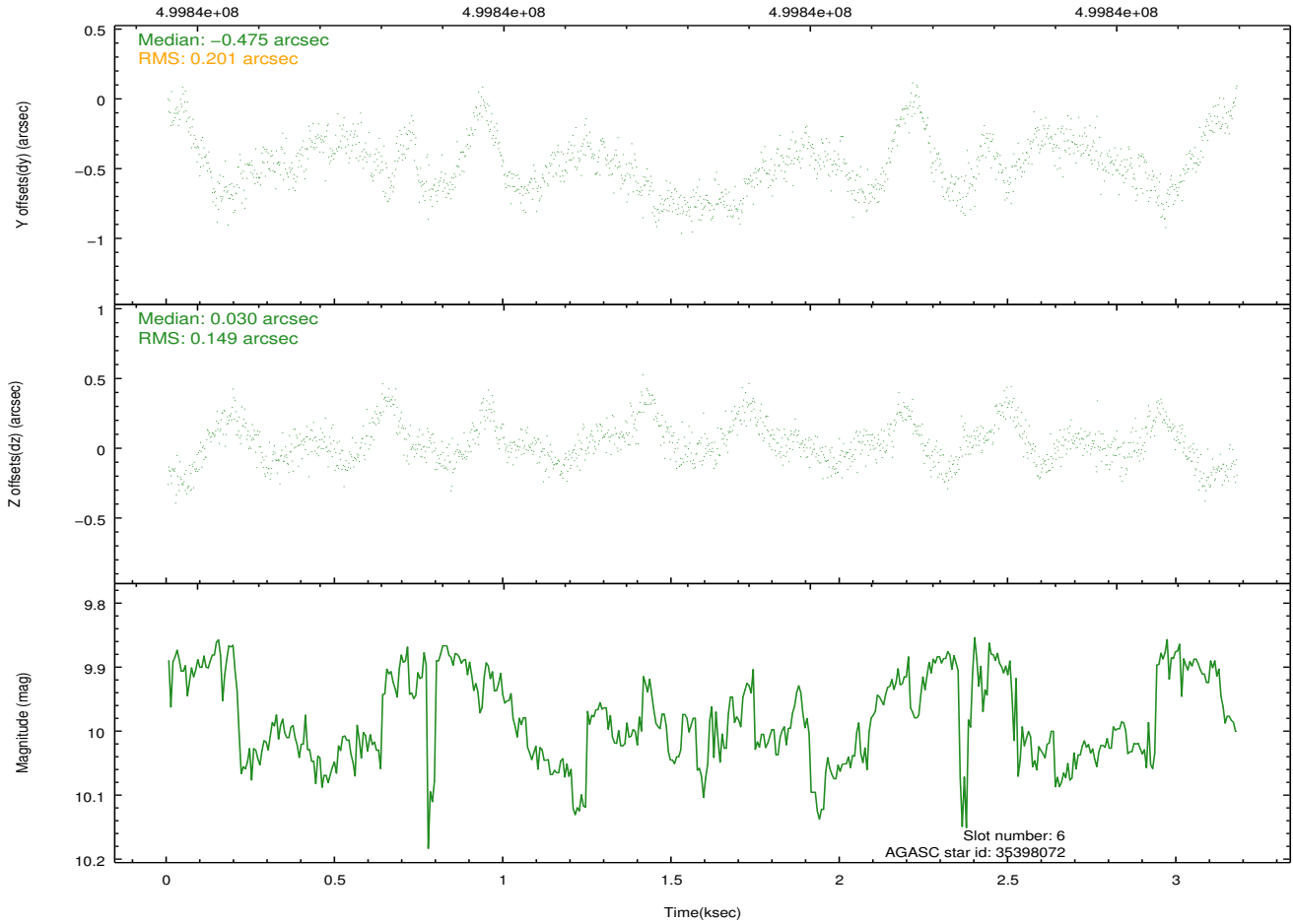
2.4.2 Slot 4



2.4.3 Slot 6

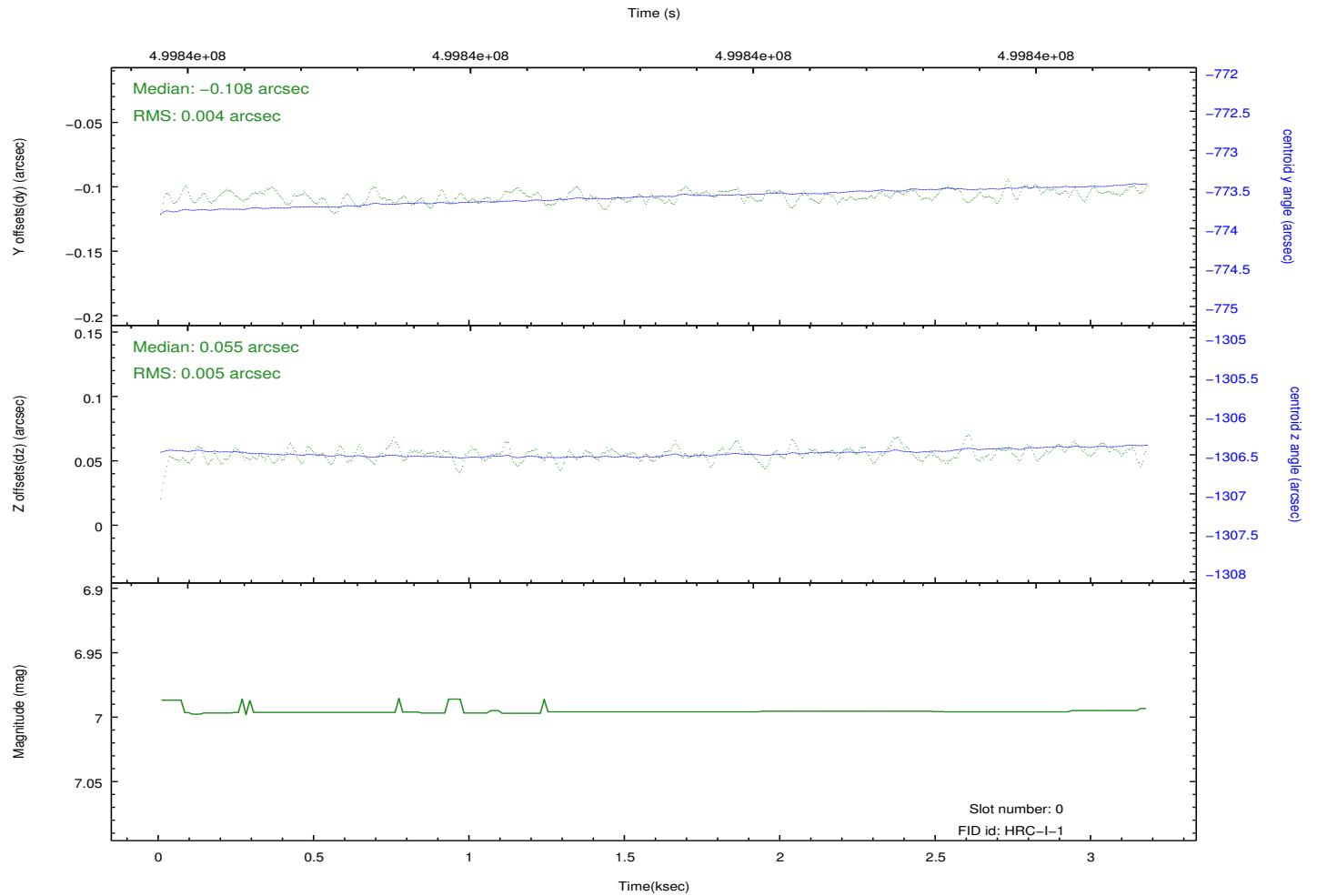
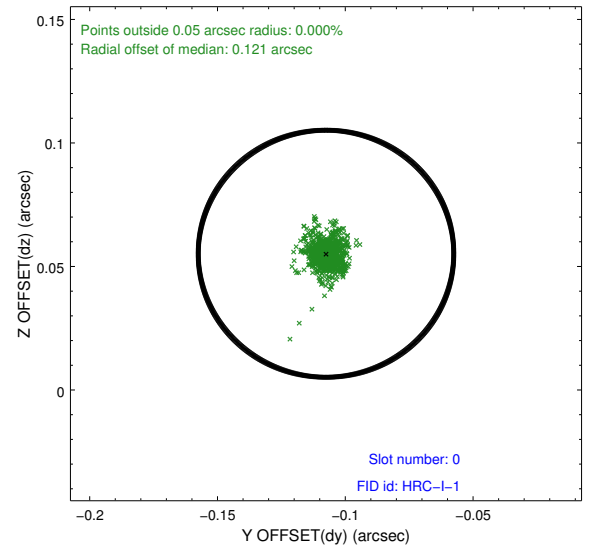
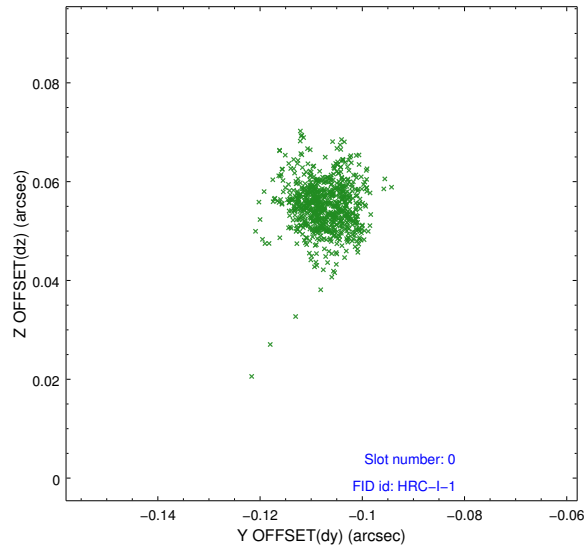


Time (s)

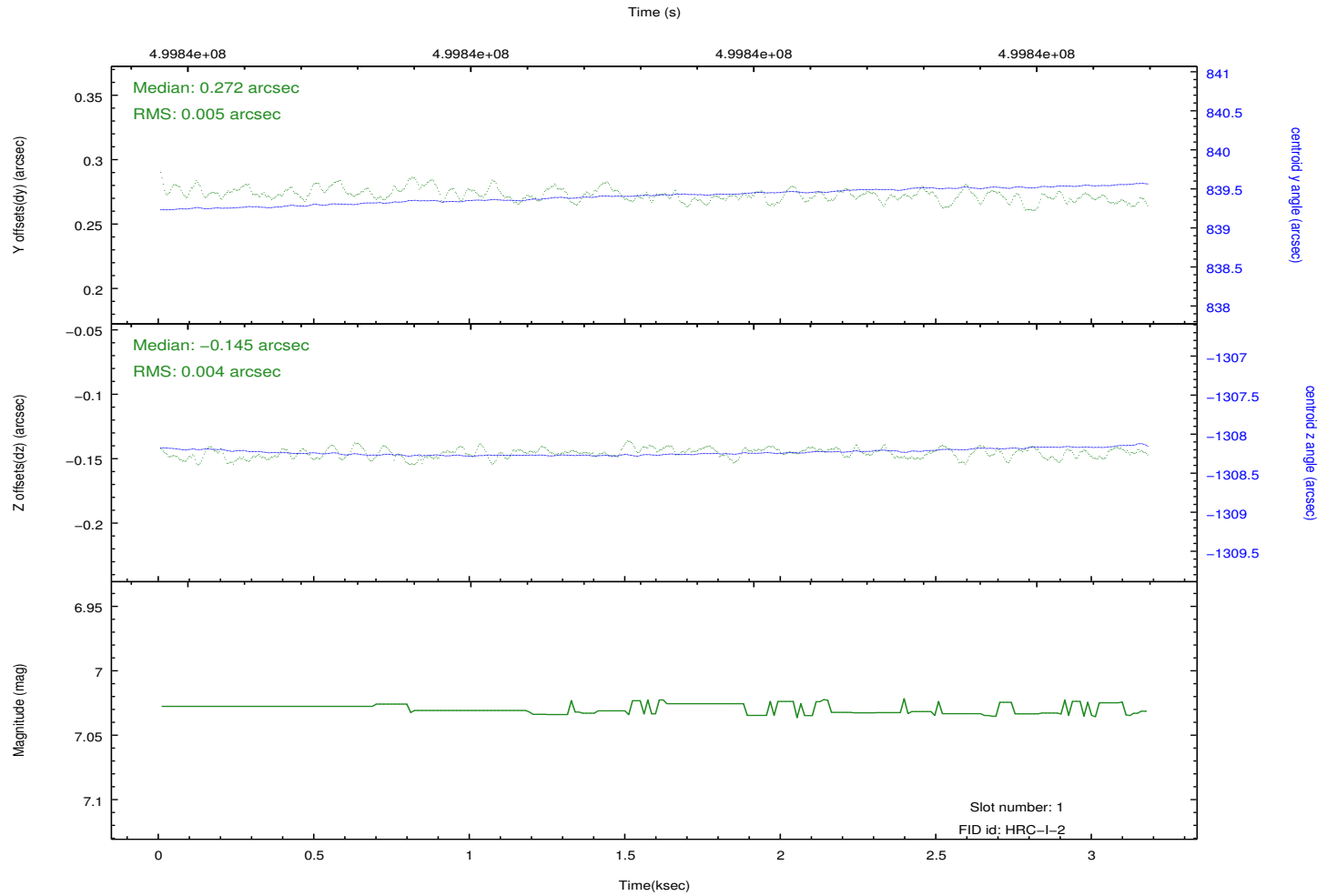
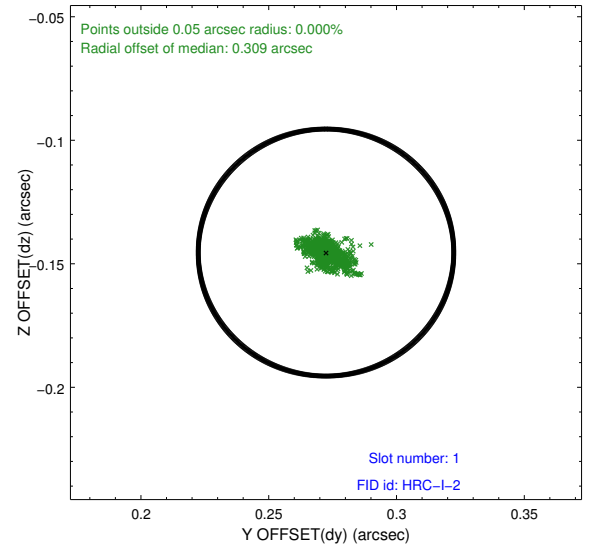
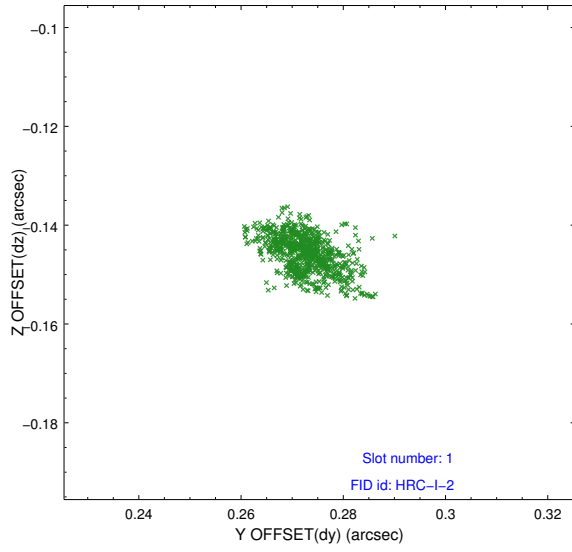


2.5 FID Slots

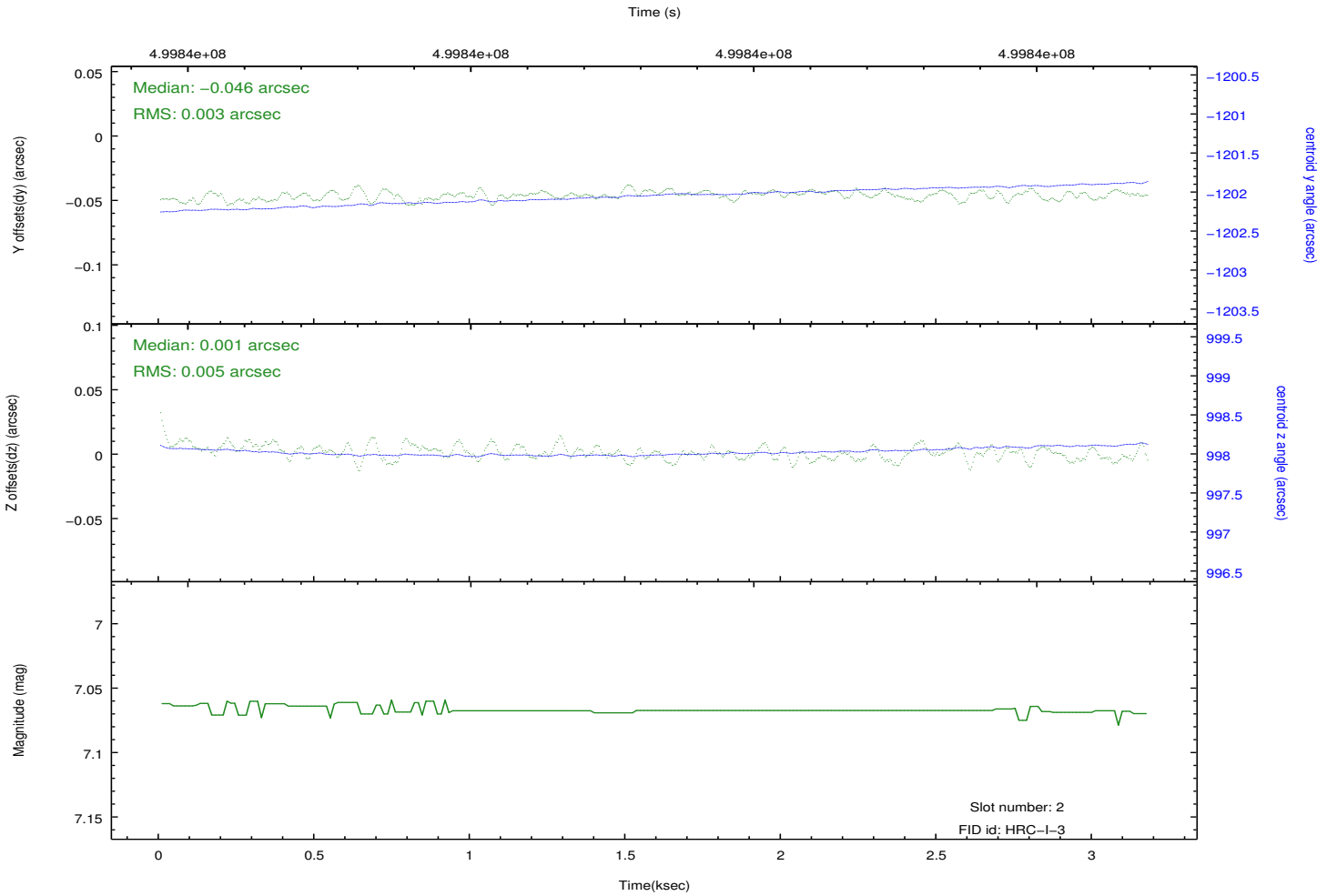
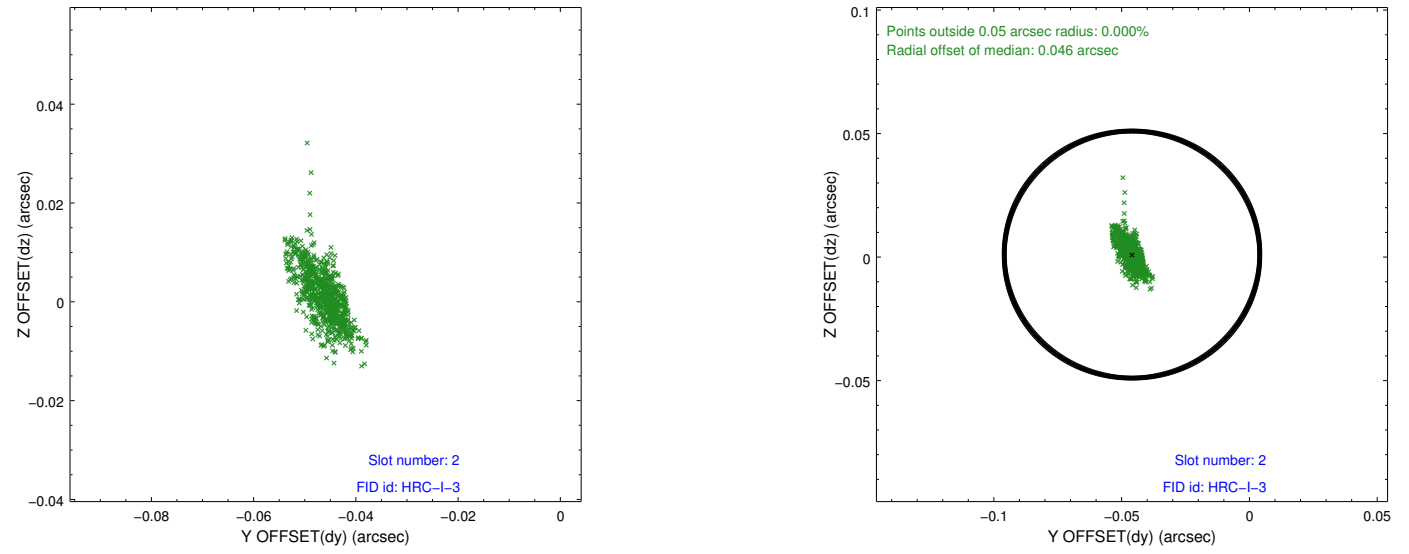
2.5.1 Slot 0



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)	2014.12.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.7964564030766

A.2 Comments

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

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The guide stars in slots 5 and 7 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these guide stars from the solution.

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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.