

V&V Reference Report

L2 ASCDS Version : 8.4.3

Observation 5544 - L2 Version 3
Chandra X-Ray Center

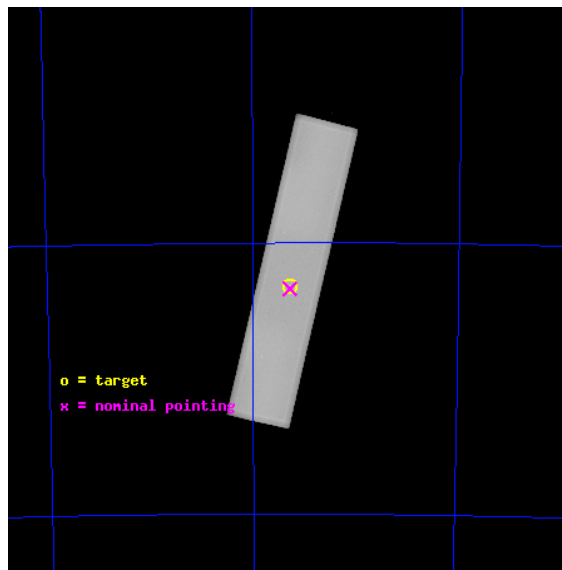
L2 Processing Date : Aug 10 2012

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1 Front

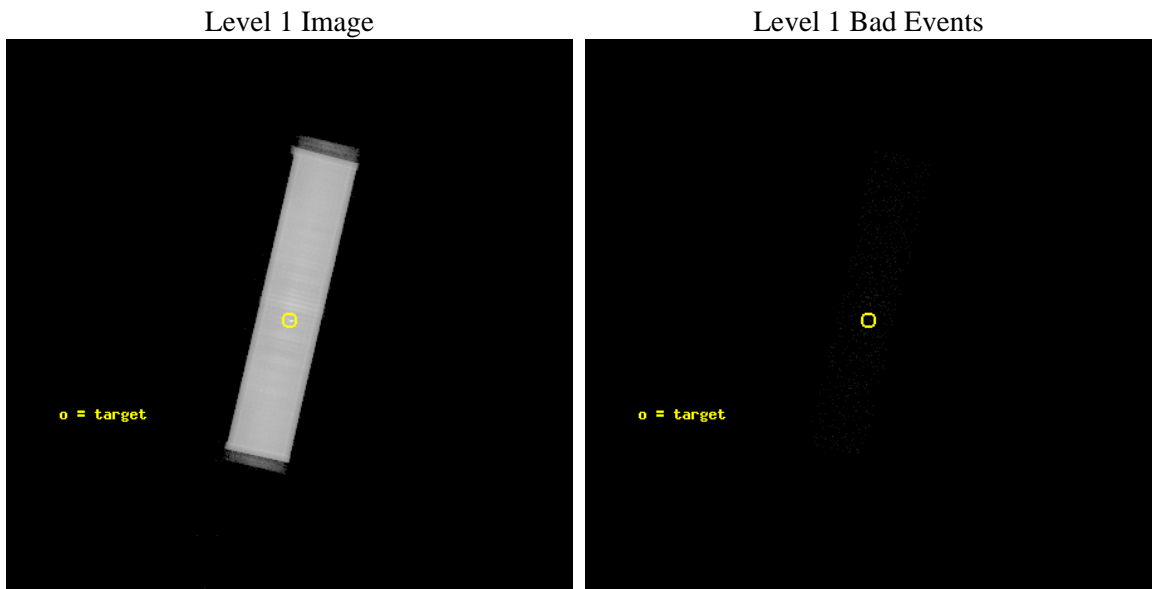
seq_num	500535	Sequence number
obs_id	5544	Observation id
title	Search for Sub-Millisecond Pulsars in 47 Tuc	Proposal title
observer	Prof. Robert Rutledge	Principal investigator
object	47 Tuc	Source name
ra_targ	6.021667	Observer's specified target RA [deg]
dec_targ	-72.080528	Observer's specified target Dec [deg]
ra_nom	6.0247591009276	Nominal RA [deg]
dec_nom	-72.085103543075	Nominal Dec [deg]
roll_nom	283.14519994053	Nominal Roll [deg]
revision	3	Processing version of data
ontime	50140.183570951	[s]
livetime	49829.004092301	Ontime multiplied by DTCOR
l2events	2972842	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	50000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	50140.183570951	[s]
caldsver	4.5.1.1	 	l1events	3954359	Number of level 1 events
date	2012-08-10T19:38:32	Date and time of file creation			
revision	3	Processing version of data			

2.1.3 Events

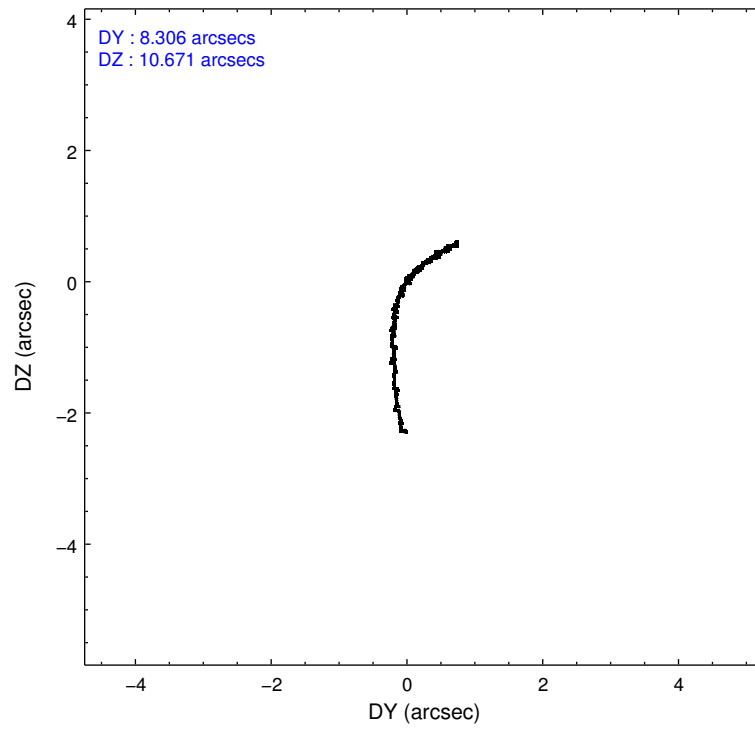
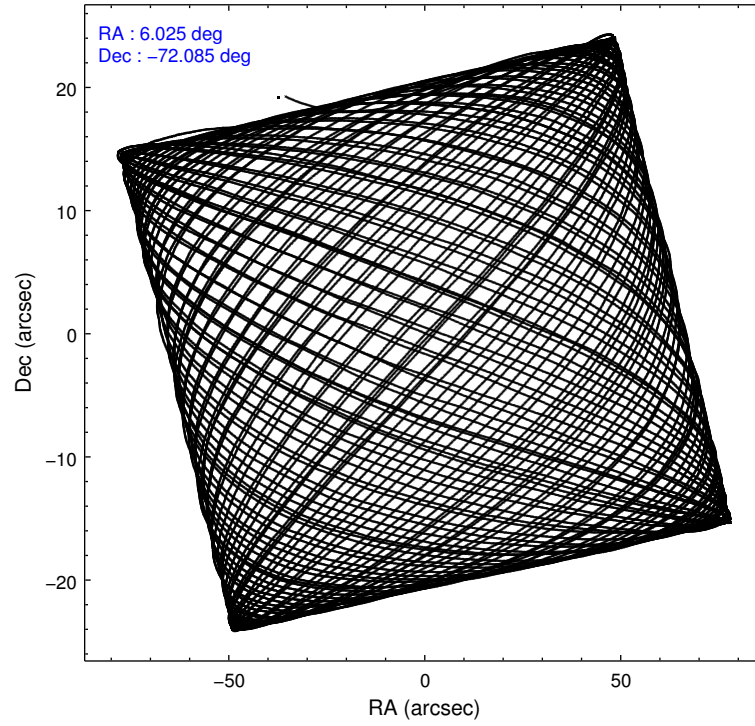
Level 1 Events

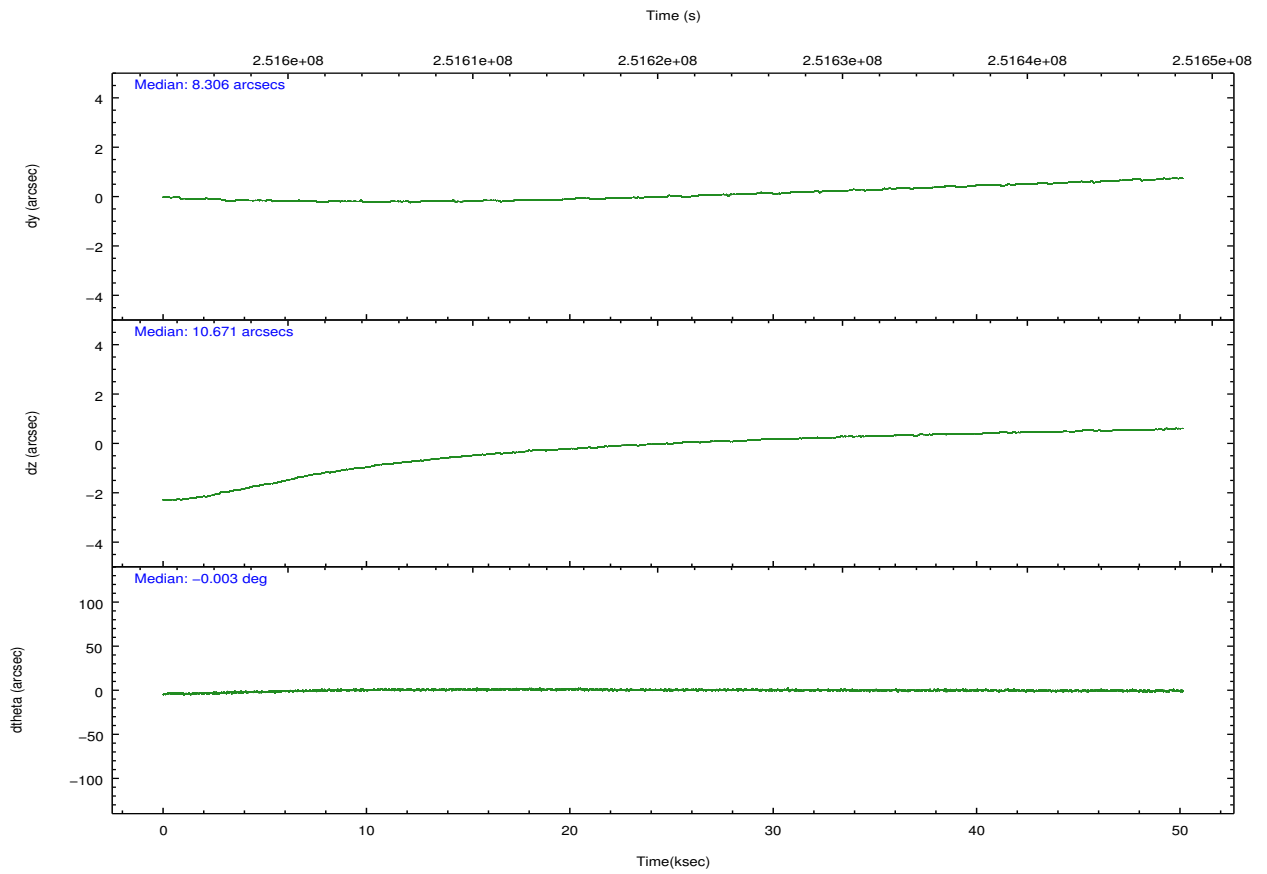
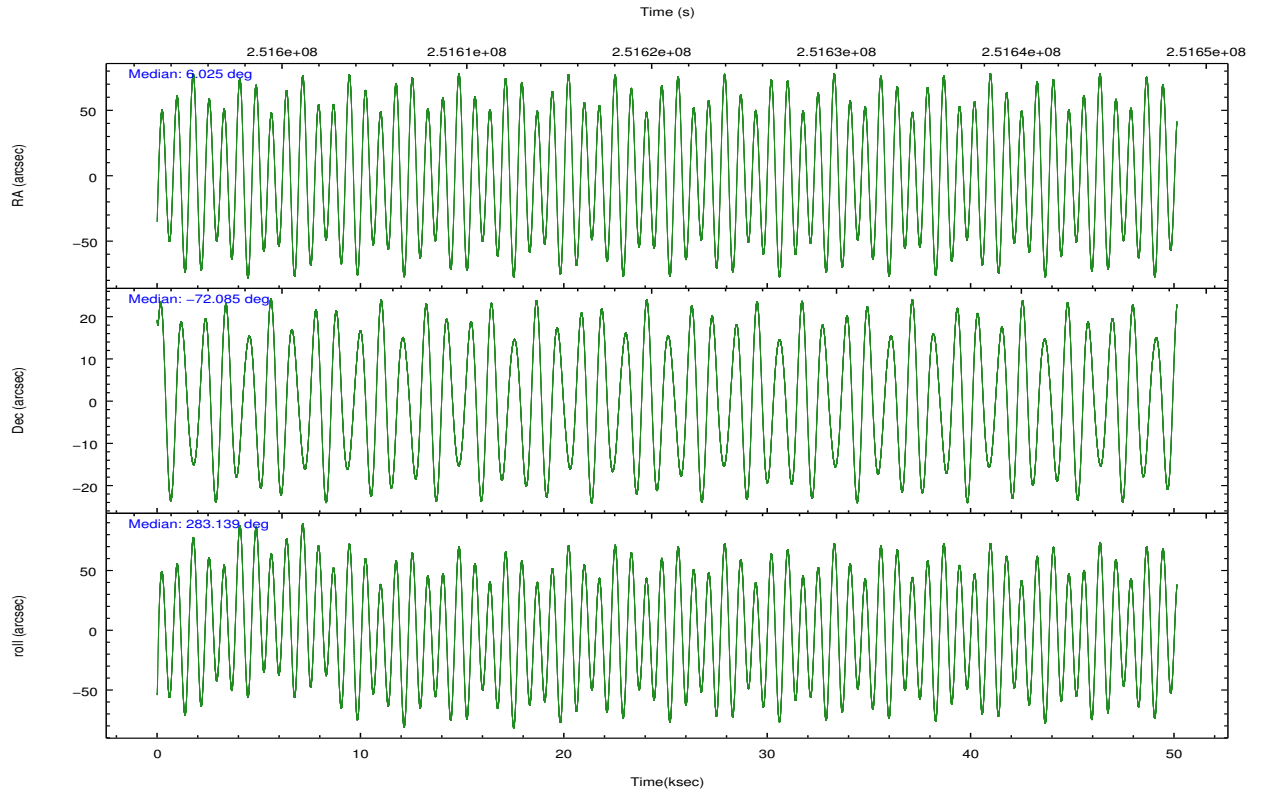
	segment 1	segment 2	segment 3
level 1 events	3810	3950537	12
rejected events	76	63110	7
rejected %	1%	1%	58%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	7	7
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
[deg] Pointing RA	5.957889	6.024759100927611			
[deg] Pointing Dec	-72.065231	-72.08510354307494			
[deg] Pointing Roll	283.014247	283.1451999405329			
[mm] SIM focus pos	-1.533336	-1.526339935833849			
[mm] SIM defocus	7.710433287538843e-07	0.006996703570447904			
[mm] SIM translation stage pos	250.455976	250.466033080201			
[mm] SIM translation stage offset	0	-0.01005468664627074			
[s] Observation start time (MET)	251595915.184000	251594783.85085			
Observation start date	2005-12-21T23:44:11	2005-12-21T23:26:23			
[s] Observation end time (MET)	251645915.184000	251646920.47826			
Observation end date	2005-12-22T13:37:31	2005-12-22T13:55:20			

2.3 Aspect



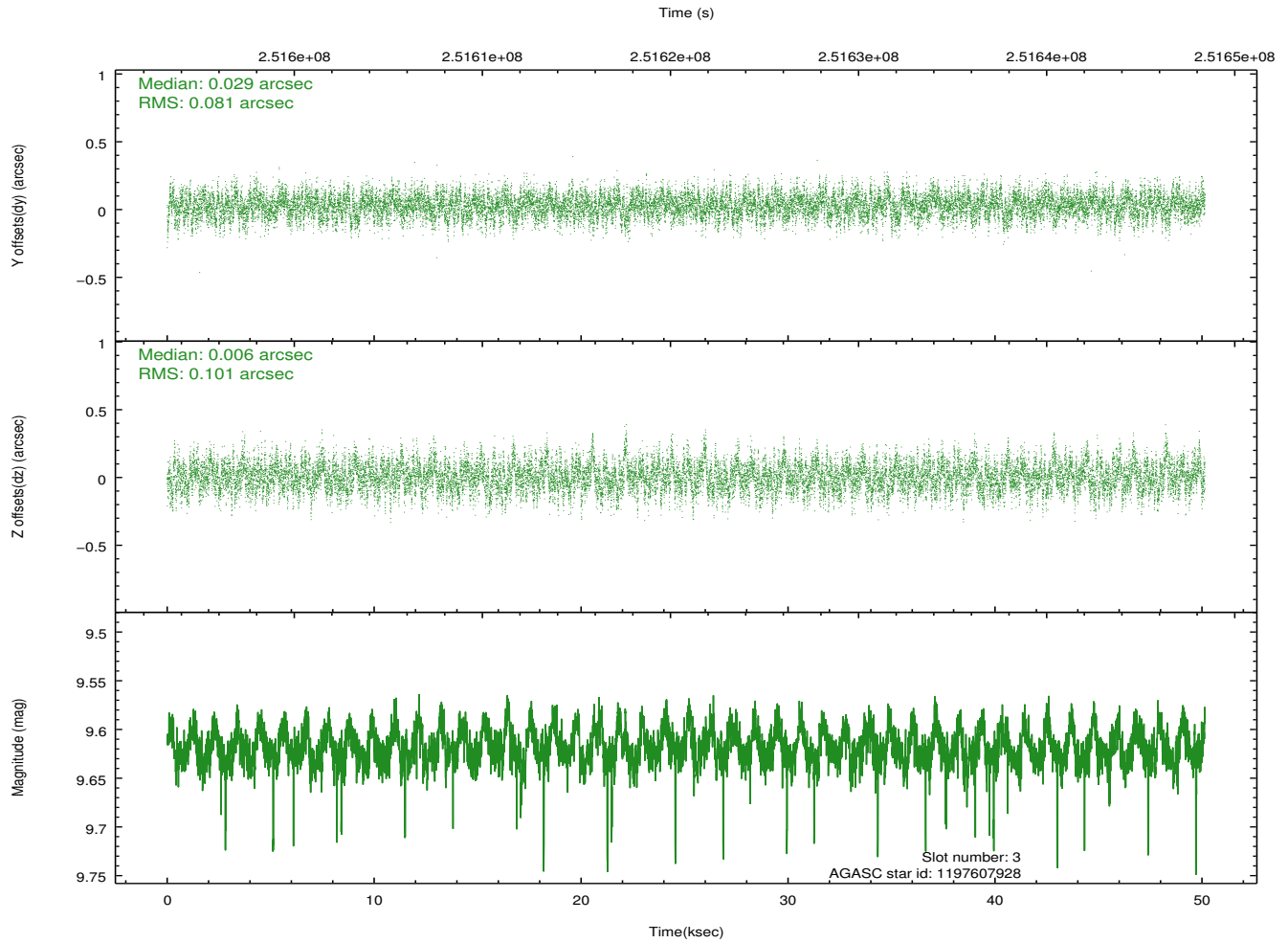
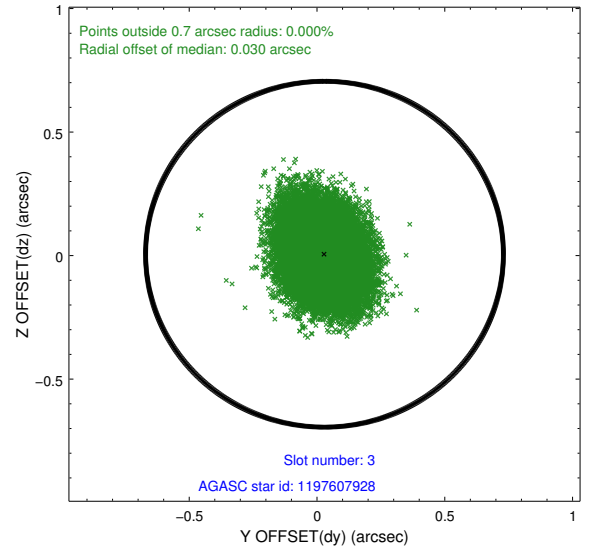
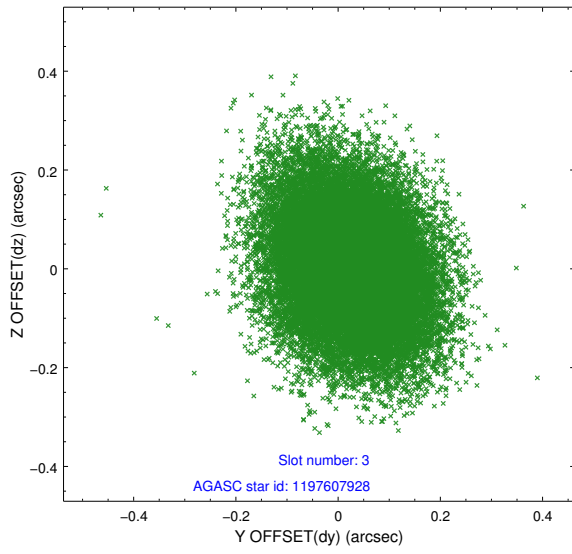


Slot Statistics

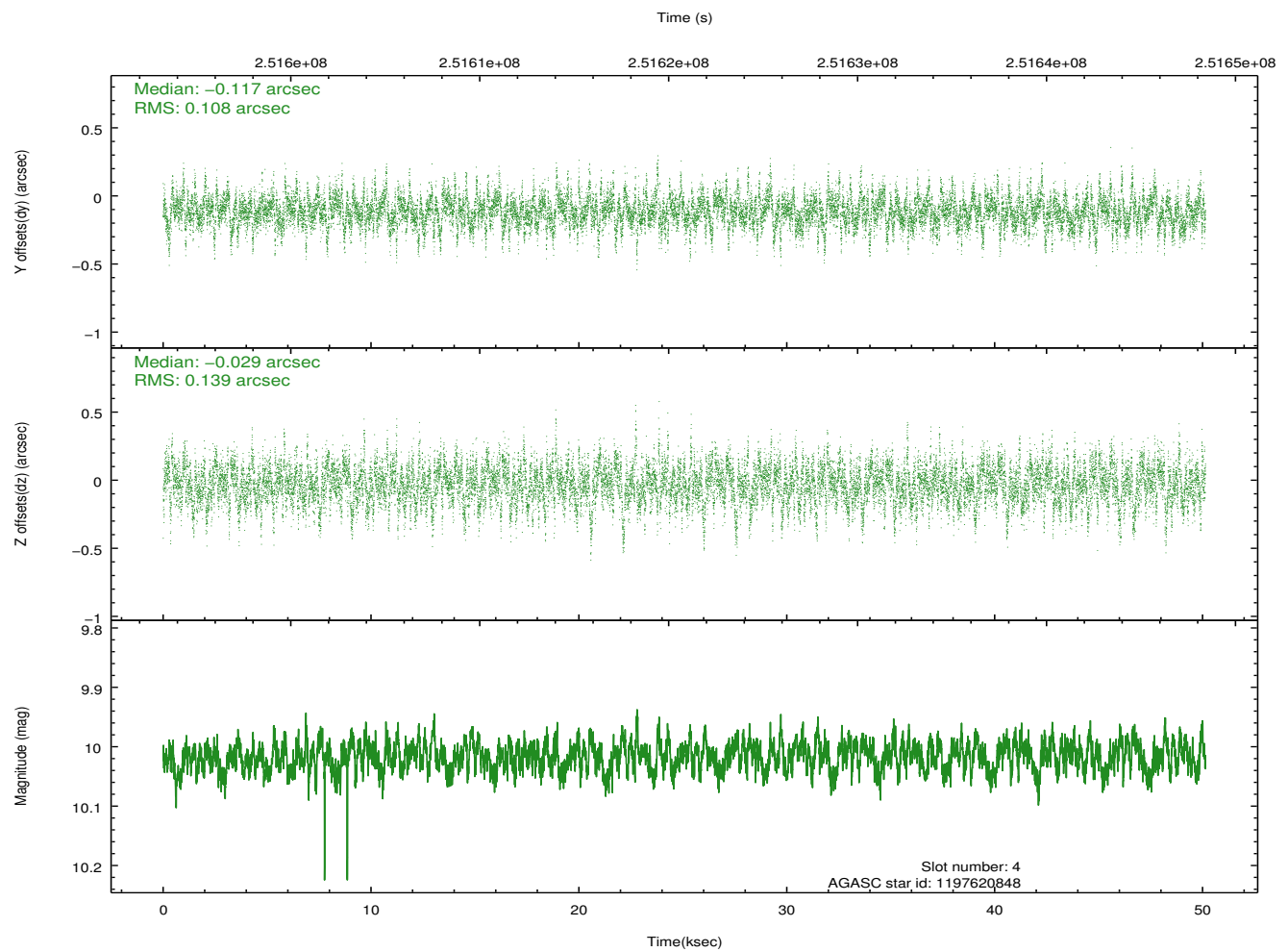
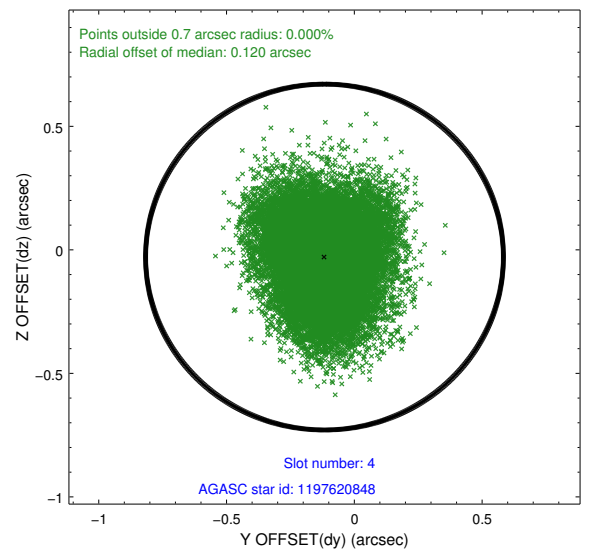
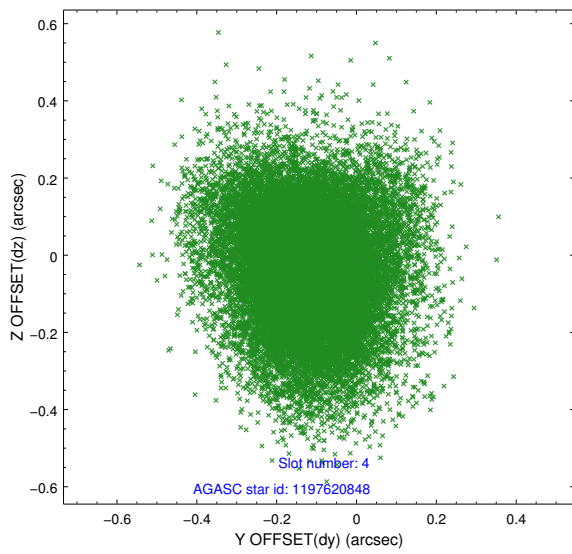
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	12229	0.147	-0.178	0.017	0.028	0.000000	0.000000	-1162.58	-459.09
1	FID	HRC-S-2	7.01	12229	0.140	-0.112	0.008	0.013	0.000000	0.000000	1236.98	-451.73
2	FID	HRC-S-3	7.02	12229	0.102	-0.012	0.020	0.032	0.000000	0.000000	-1165.24	570.55
3	GUIDE	1197607928	9.62	24445	0.029	0.006	0.138	0.225	7.837743	-72.165759	851.01	1930.48
4	GUIDE	1197620848	10.02	24429	-0.117	-0.029	0.184	0.316	3.913465	-71.739620	-1622.85	-1991.68
5	BAD	1197635184	8.92	189	-50.807	14.249	7.069	13.313	6.018453	-72.095535	72.45	43.05
6	GUIDE	1197621088	9.94	24352	-0.039	-0.020	0.160	0.262	3.823480	-72.180366	-84.10	-2392.32
7	GUIDE	1198000776	9.89	24430	0.131	0.048	0.171	0.278	4.972441	-72.805451	2369.32	-1623.77

2.4 Star Slots

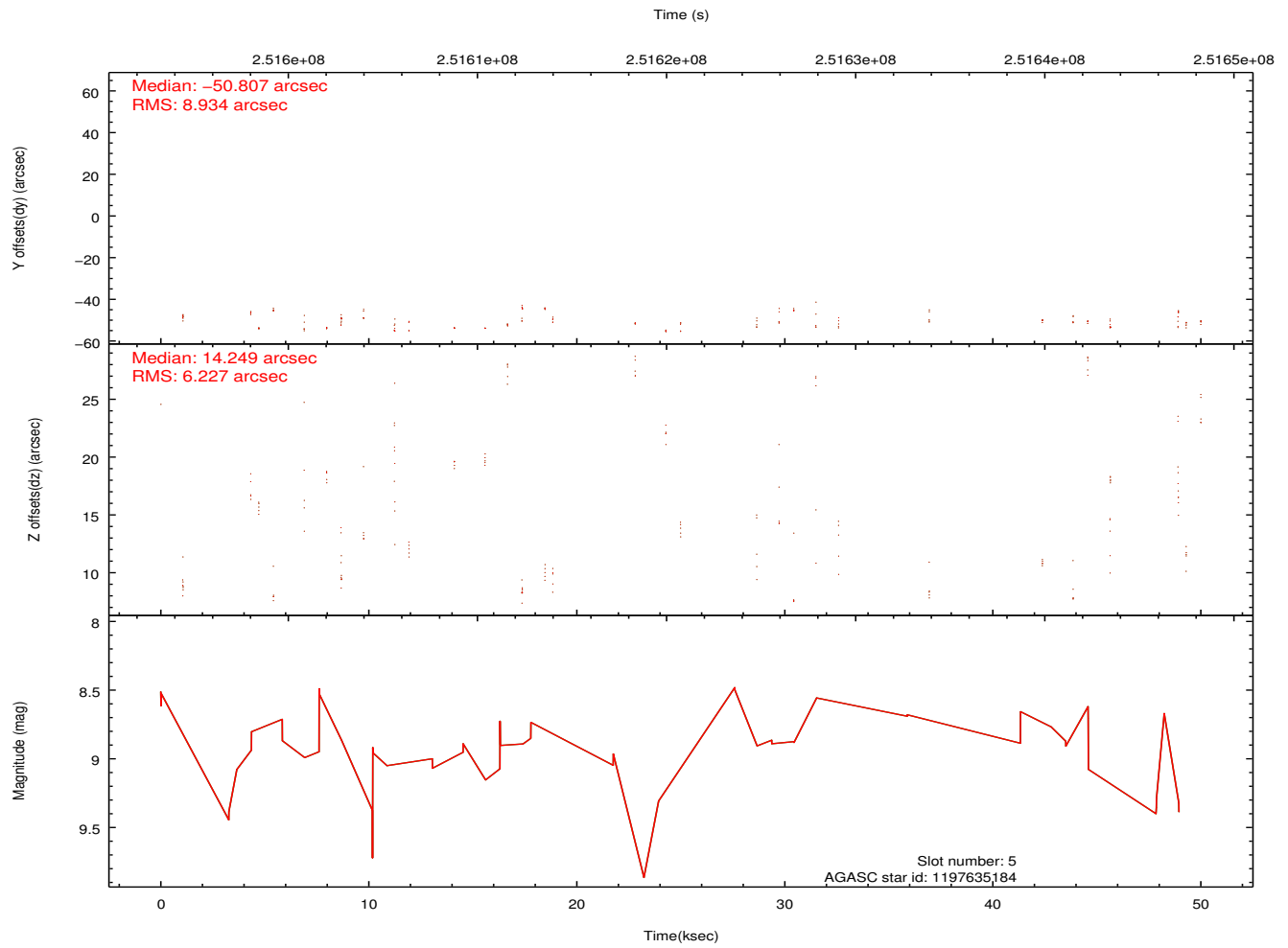
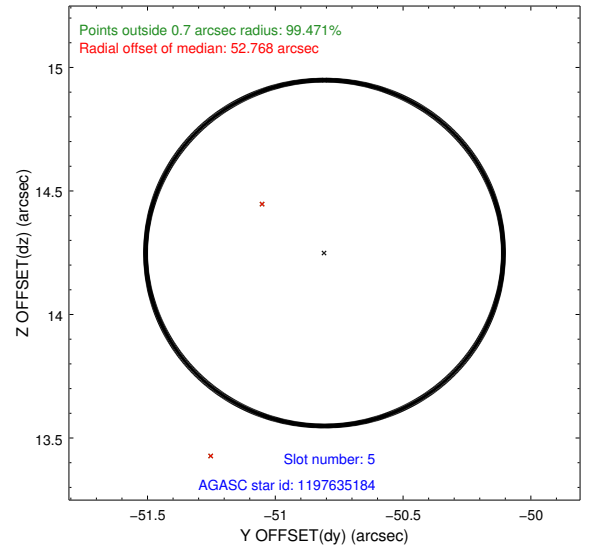
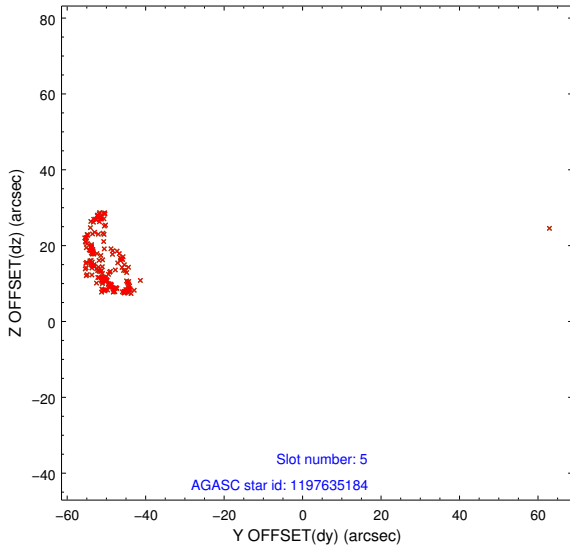
2.4.1 Slot 3



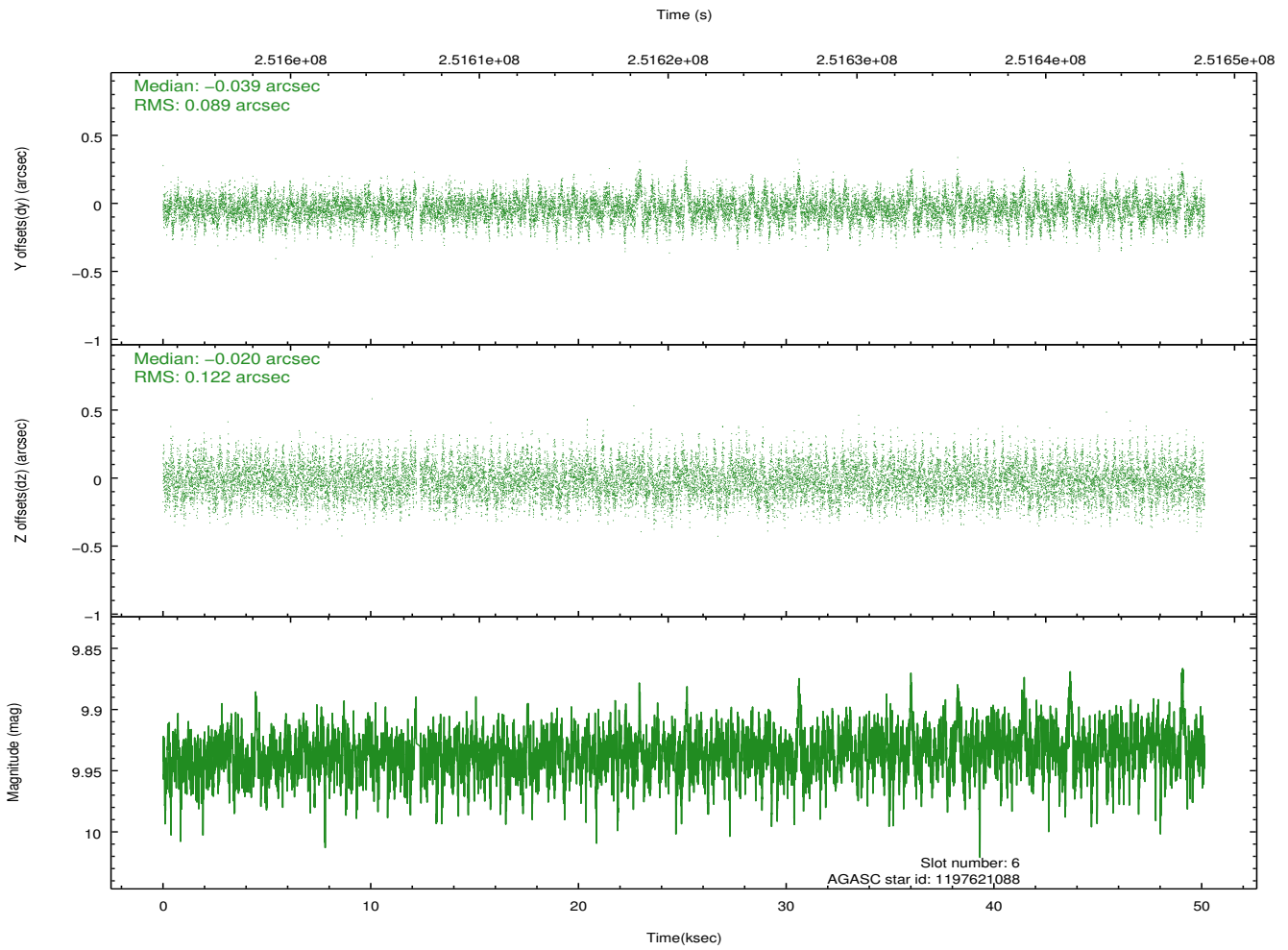
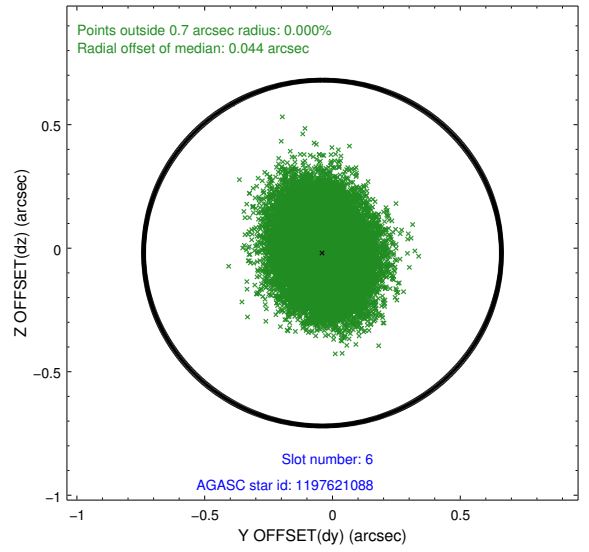
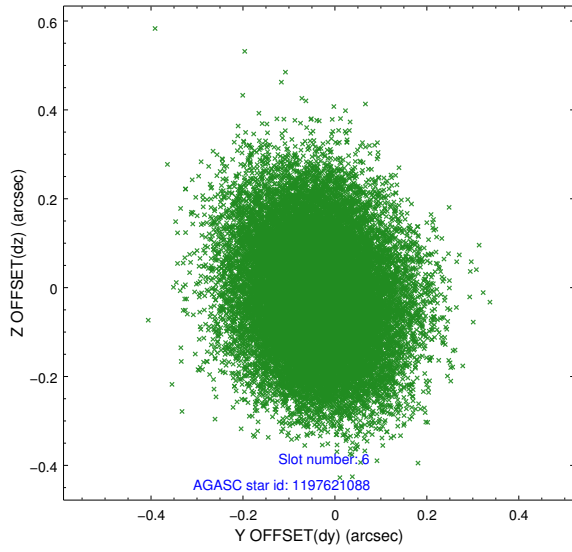
2.4.2 Slot 4



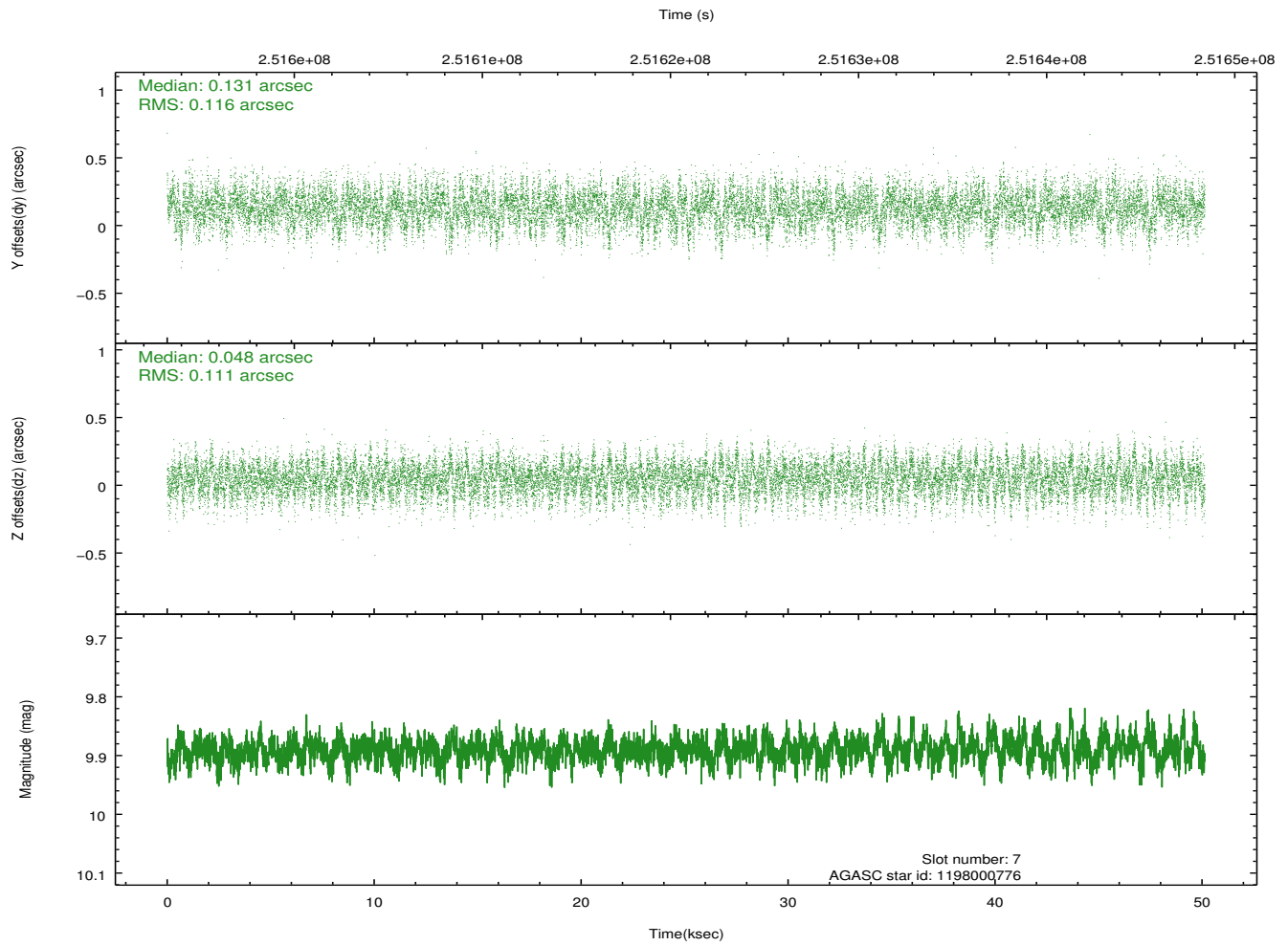
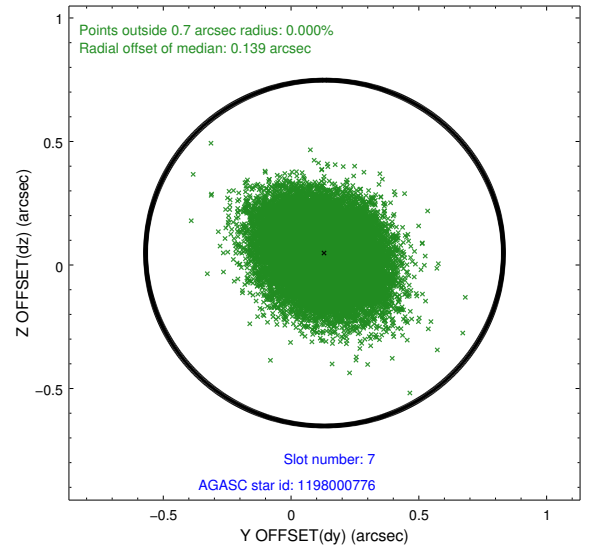
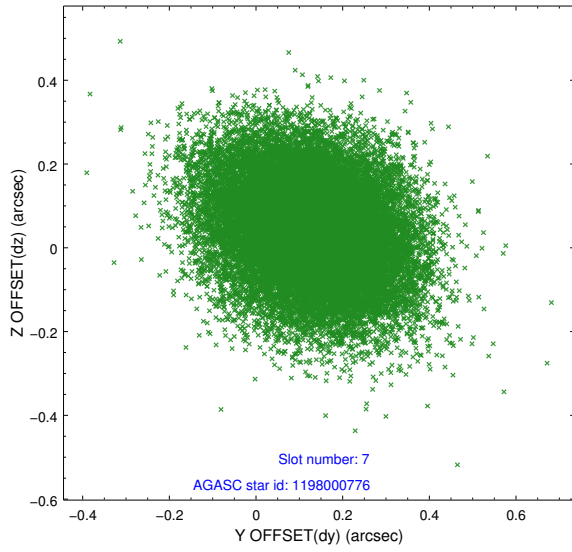
2.4.3 Slot 5



2.4.4 Slot 6

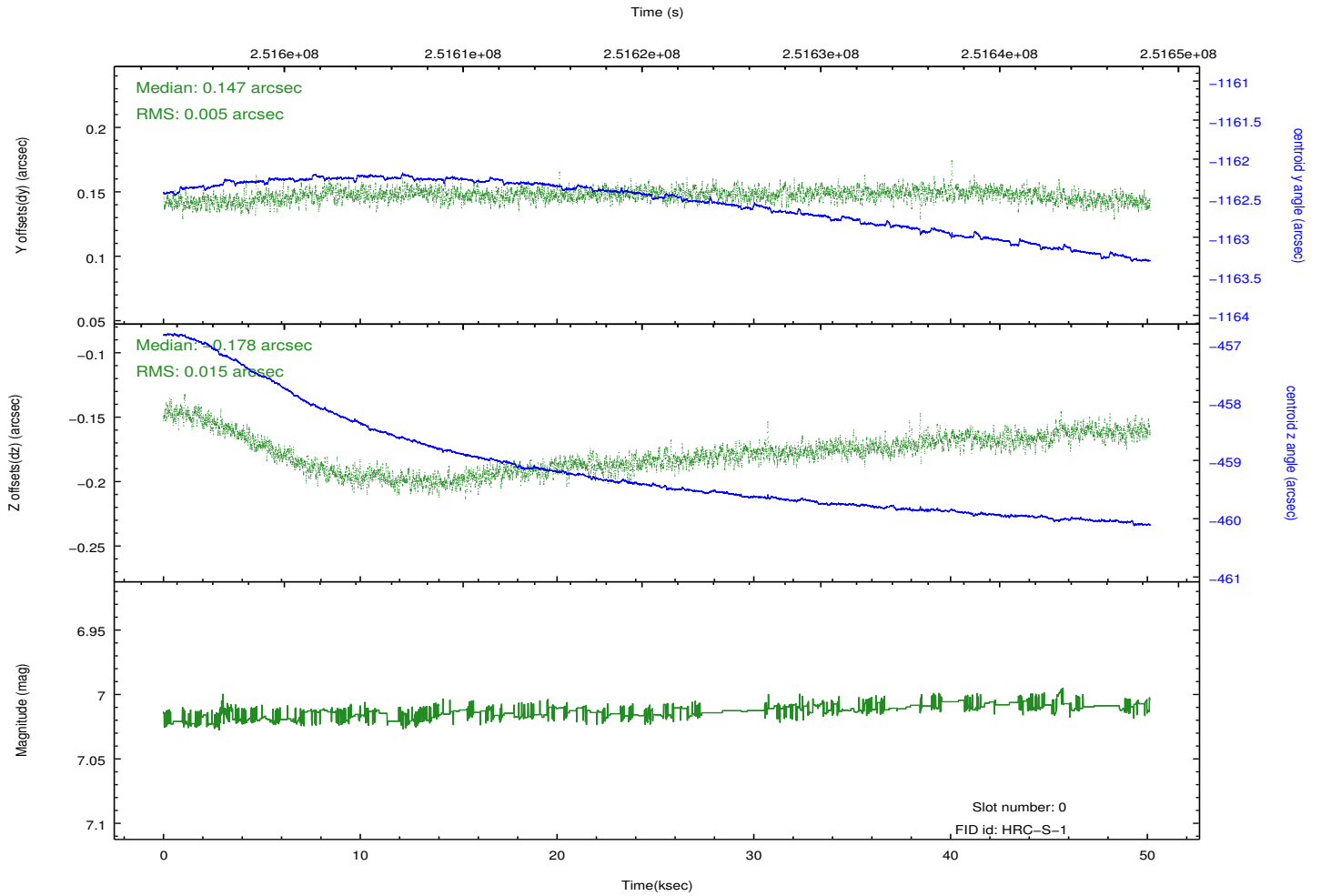
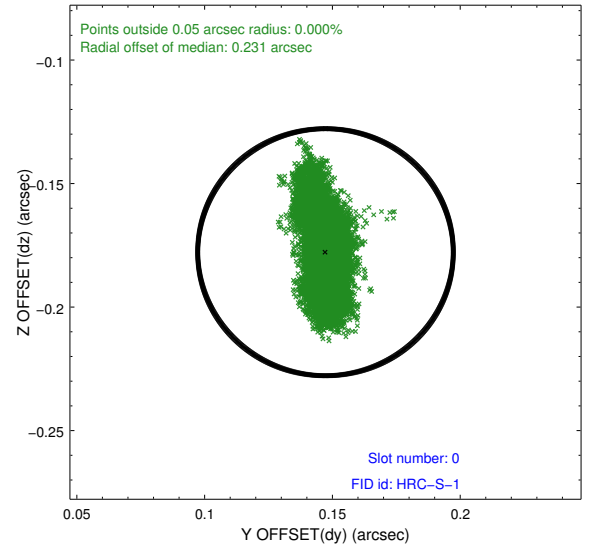
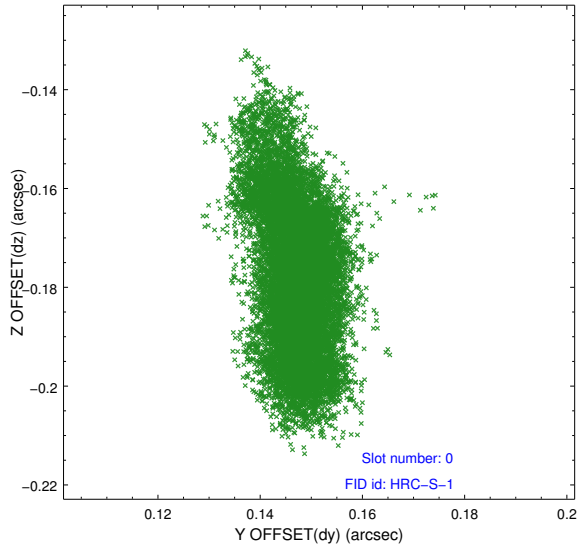


2.4.5 Slot 7

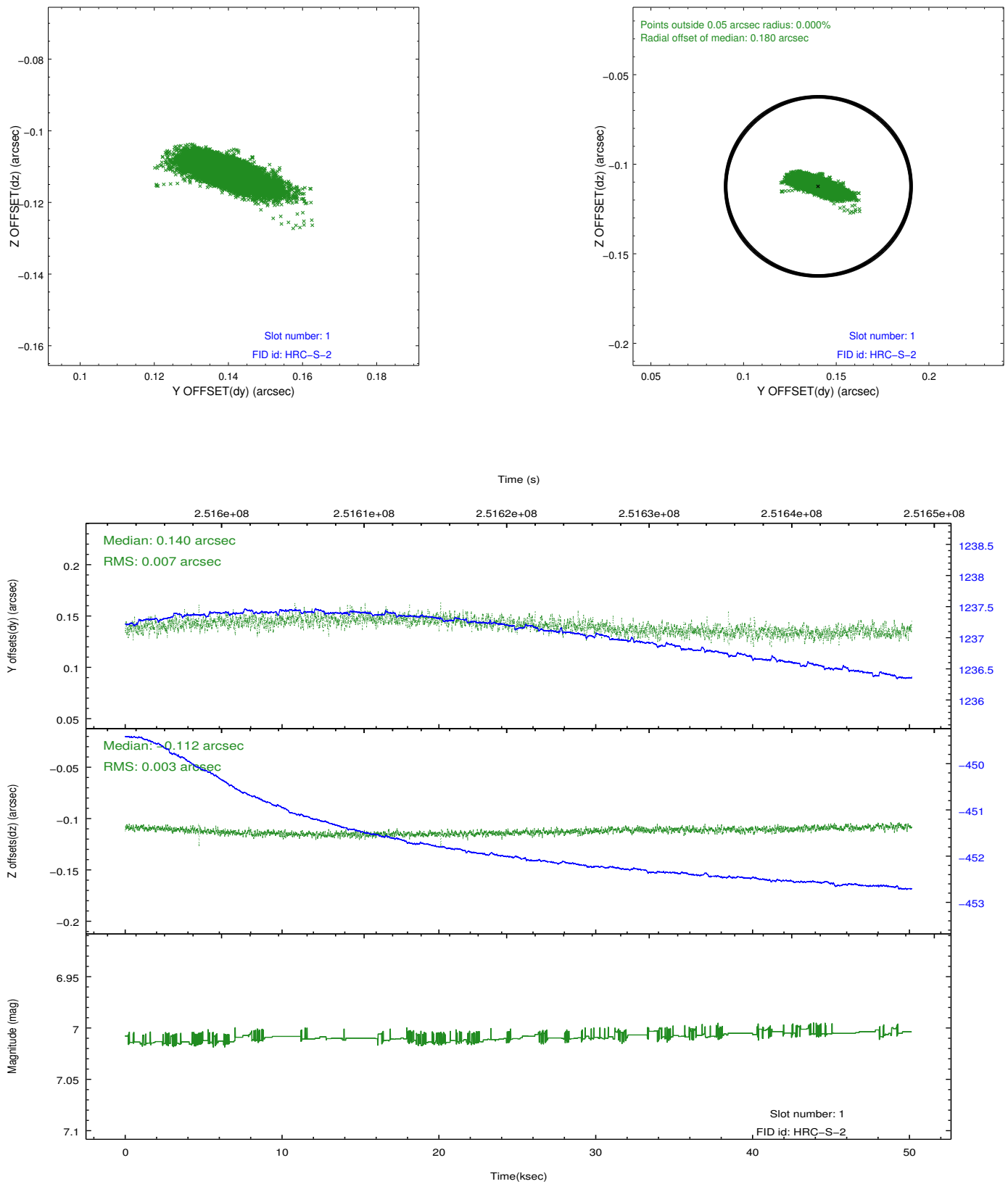


2.5 FID Slots

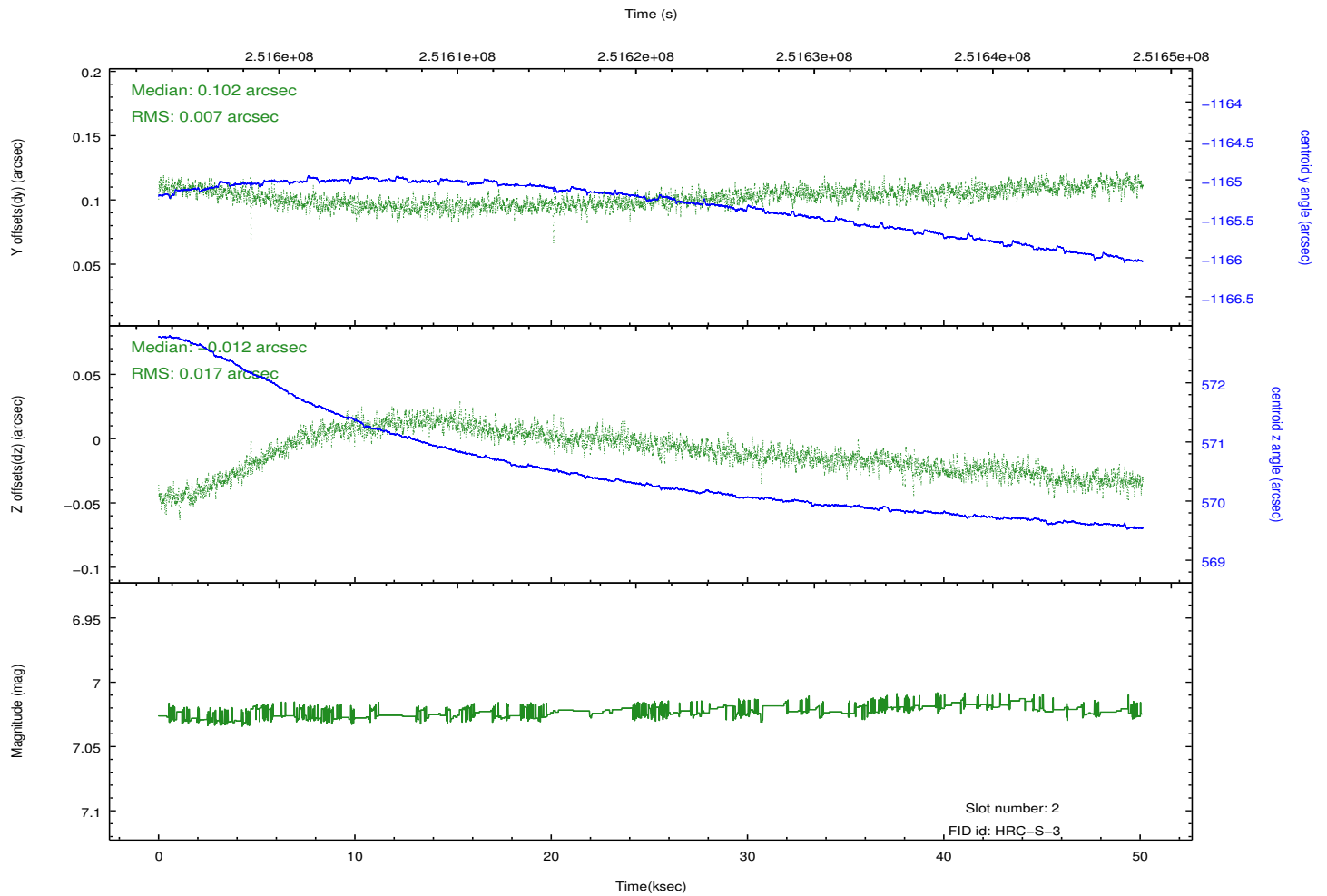
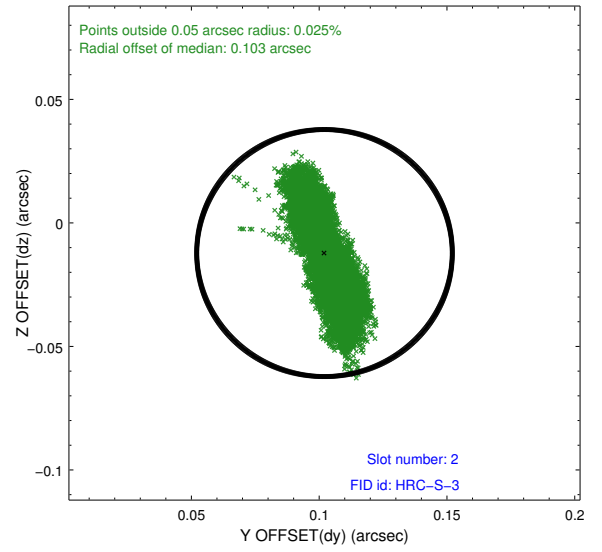
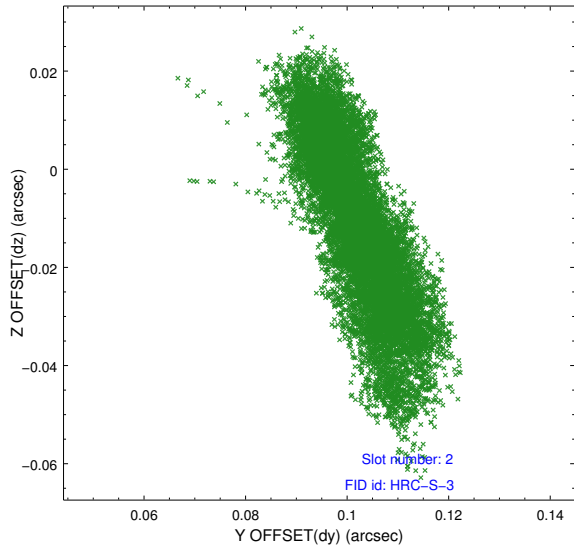
2.5.1 Slot 0



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)	2012.08.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.14018

A.2 Comments

Slot 5 was automatically excluded from the aspect solution due to poor data quality.

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Solar activity during this observation possibly resulted in elevated event rates in the data stream and depressed and/or noisy values of PHA in the level 2 science data, most noticeably at 30 - 50 ksec into the observation. The final processed event data has been examined by the HRC team and appears unaffected by the solar radiation, but caution should be used because the final PHA values may be depressed or noisy during the periods of high radiation.