

V&V Reference Report

L2 ASCDS Version : 10.2.2

Observation 14481 - L2 Version 2
Chandra X-Ray Center

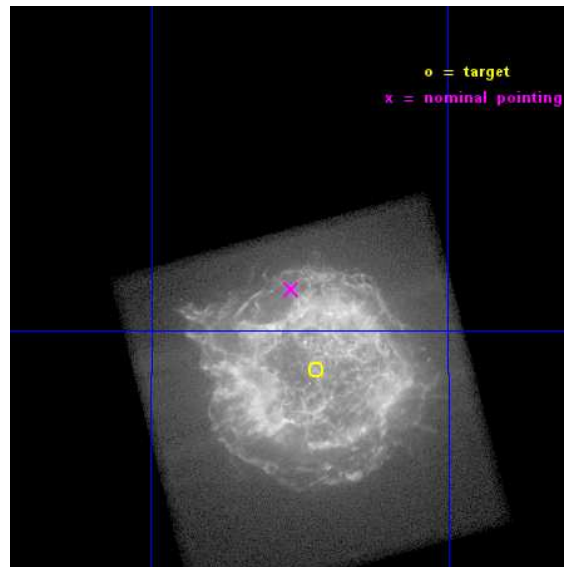
L2 Processing Date : Dec 11 2014

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1 Front

seq_num	501802	Sequence number
obs_id	14481	Observation id
title	Multicycle Monitoring of the Young Galactic Supernova Remnant Cassiopeia A	Proposal title
observer	Dr Daniel Patnaude	Principal investigator
object	Cassiopeia A	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.86125	Observer's specified target RA [deg]
dec_targ	58.8175	Observer's specified target Dec [deg]
ra_nom	350.88174999582	Nominal RA [deg]
dec_nom	58.850845751005	Nominal Dec [deg]
roll_nom	75.139091412019	Nominal Roll [deg]
revision	2	Processing version of data
ontime	50092.828208566	Sum of GTIs [s]
livetime	49416.806298404	Livetime [s]
ontime7	50092.828208566	Sum of GTIs [s]
l2events	12779041	Number of level 2 events

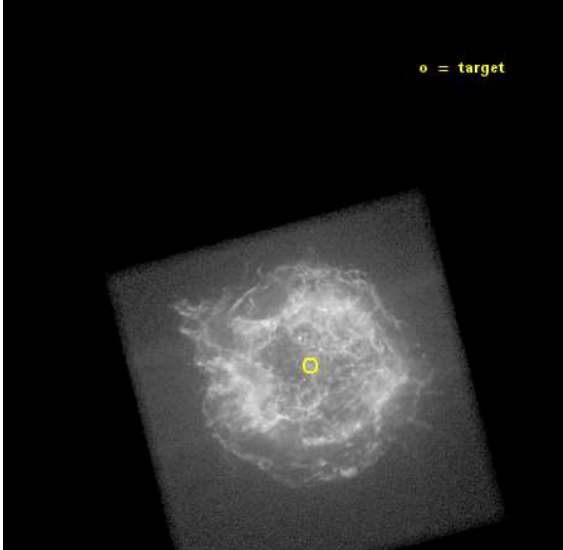


2 OBI

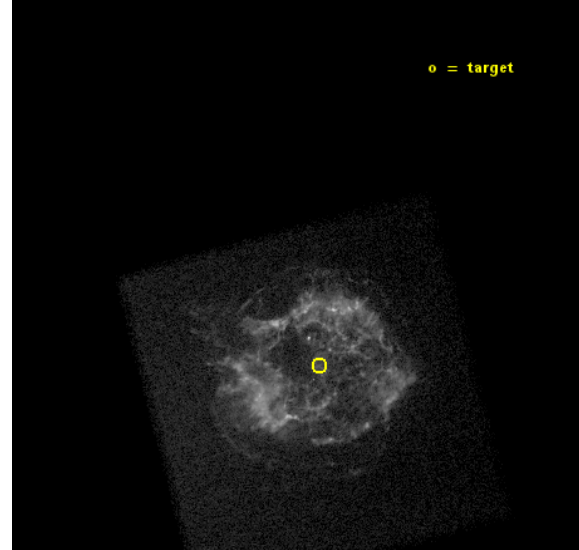
2.1 OBI

2.1.1 Images

Level 1 Image



Level 1 Bad Events



2.1.2 Parameters

obi_num	0	Obi number	sched_exp_time	50000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	50092.828208566	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	50092.828208566	Sum of GTIs [s]
date	2014-12-11T13:13:51	Date and time of file creation	l1events	13708985	Number of level 1 events
revision	2	Processing version of data			

2.1.3 Events

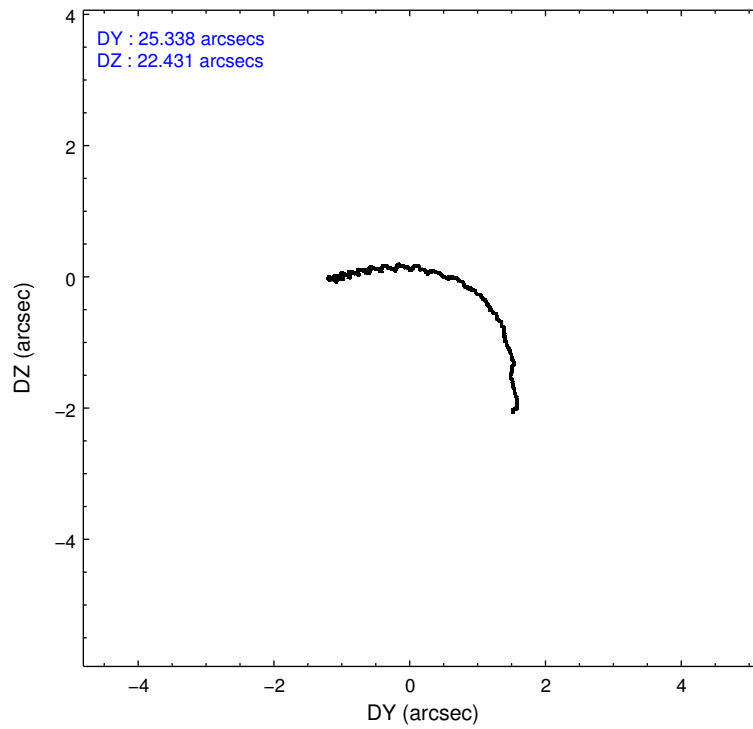
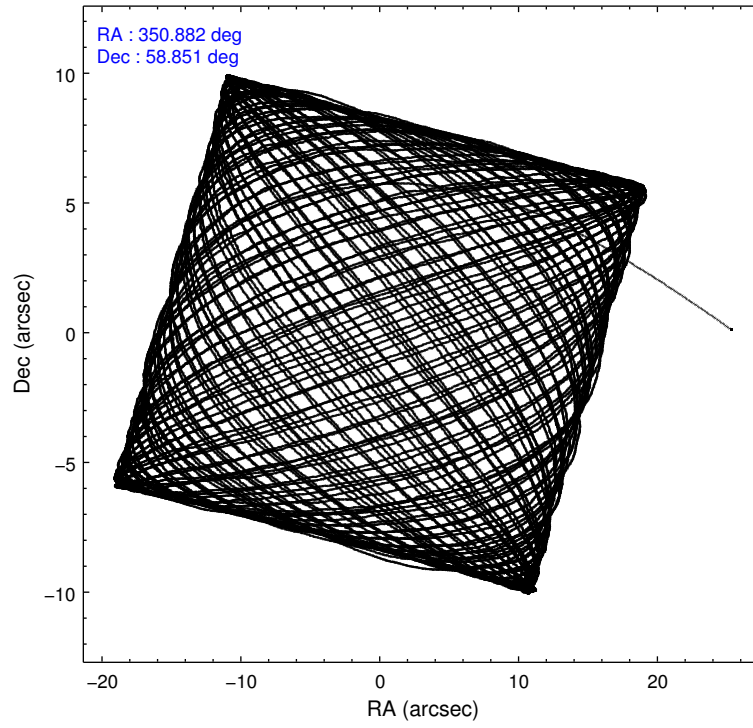
	ccd 7
level 1 events	13708985
rejected events	737475
rejected %	5%

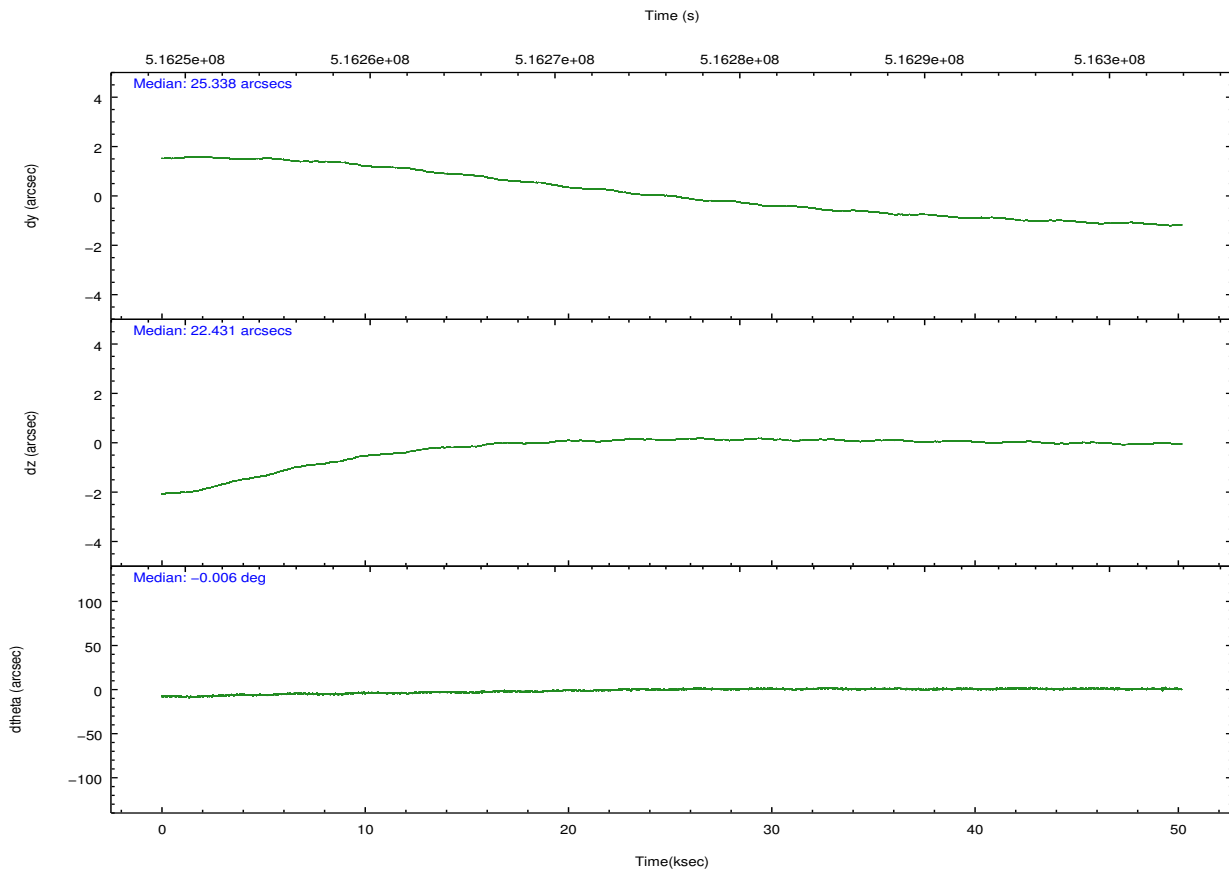
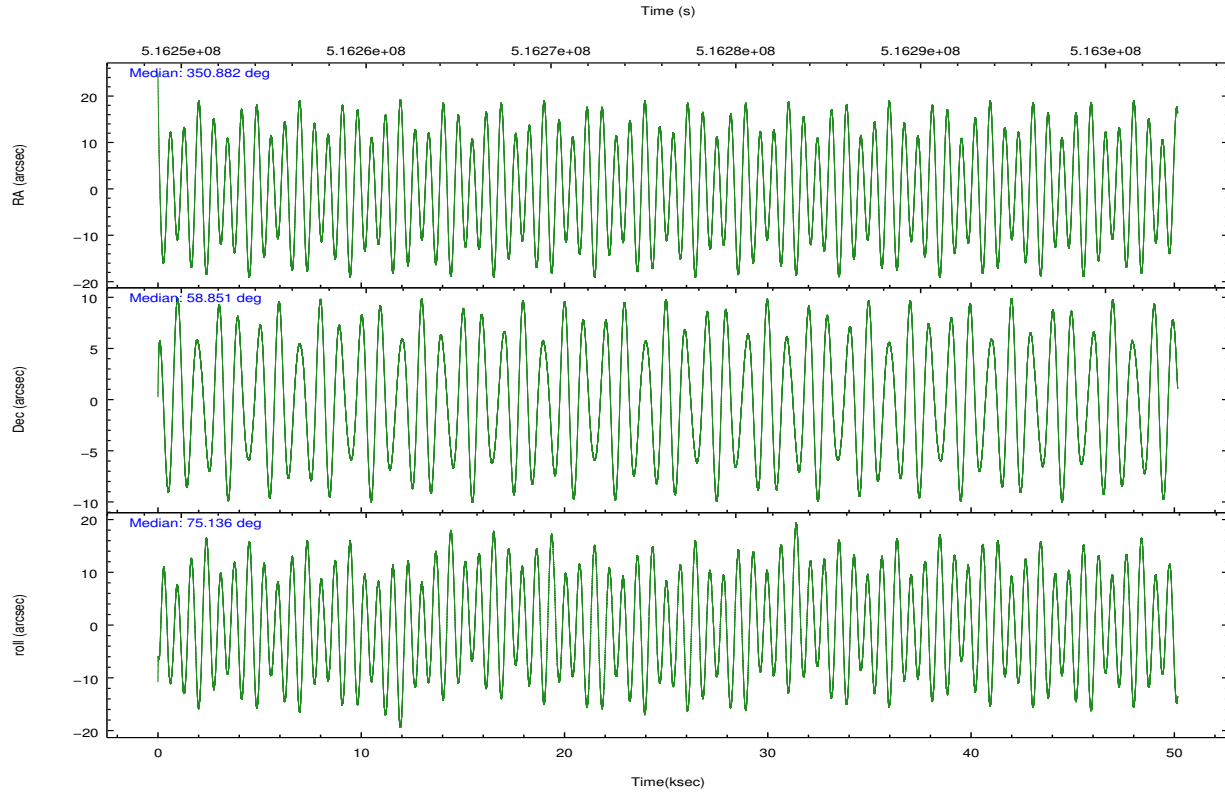
	ccd 7
grade 0 events	2707024
	19%
grade 1 events	42182
	0%
grade 2 events	3963323
	28%
grade 3 events	1328009
	9%
grade 4 events	1303126
	9%
grade 5 events	226331
	1%
grade 6 events	3671523
	26%
grade 7 events	467467
	3%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	GRADED	GRADED	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	350.896238	350.8817499958229	Subarray requested	NONE	NONE
[deg] Pointing Dec	58.824555	58.85084575100452	Alternating exposures requested	N	N
[deg] Pointing Roll	74.970060	75.13909141201933	[s] Primary exposure time	0.000000	3
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	516251396.184000	516250320.75547			
Observation start date	2014-05-12T03:08:49	2014-05-12T02:52:00			
[s] Observation end time (MET)	516301396.184000	516302842.27086			
Observation end date	2014-05-12T17:02:09	2014-05-12T17:27:22			
Read mode	TIMED	TIMED			

2.3 Aspect





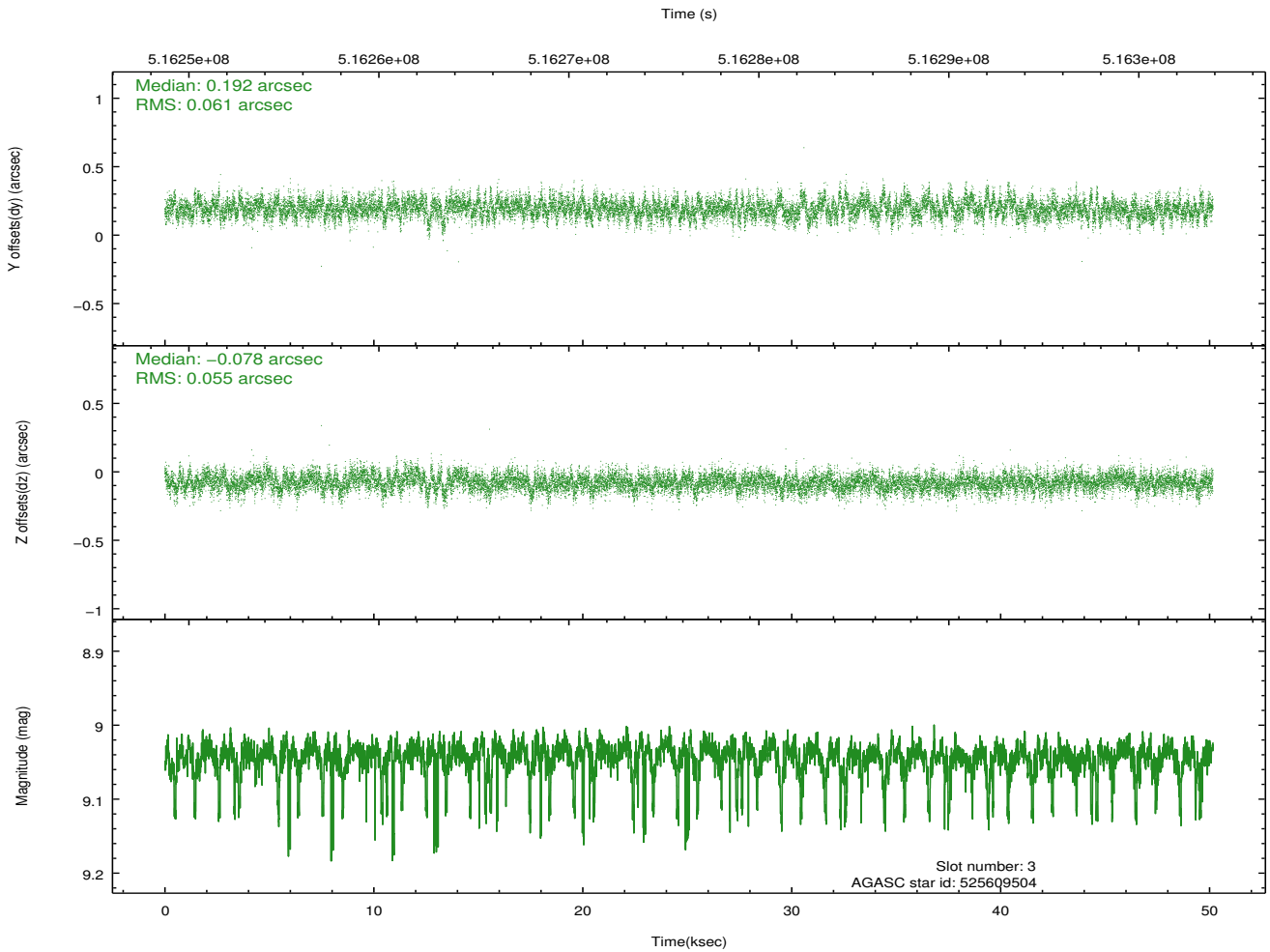
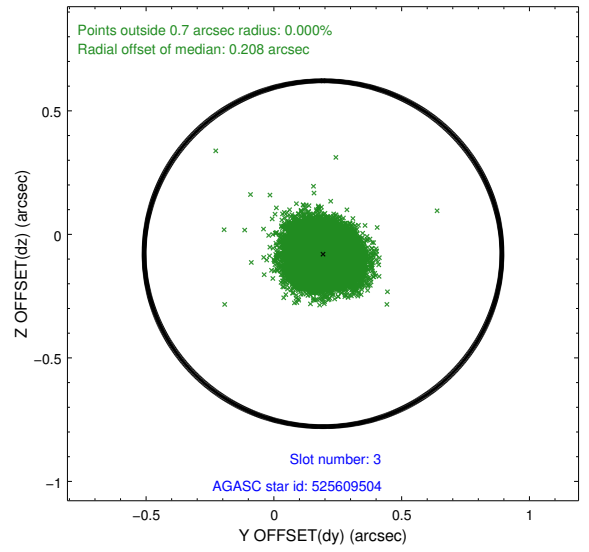
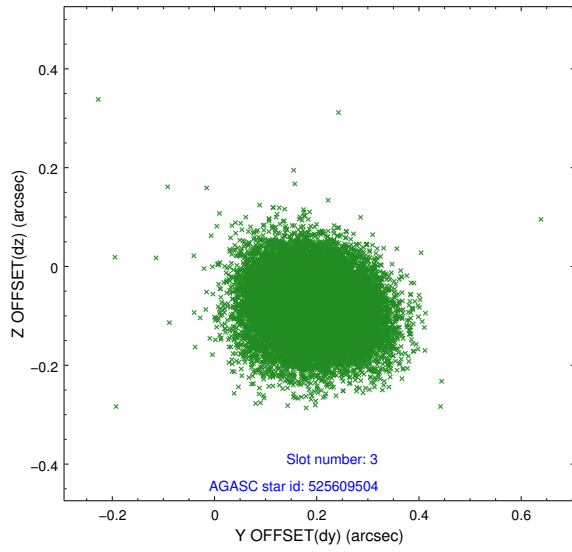
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.05	12232	0.070	-0.034	0.023	0.052	0.000000	0.000000	917.42	-1739.35
1	FID		ACIS-S-5	7.09	12235	-0.194	0.029	0.020	0.030	0.000000	0.000000	-1831.87	158.27
2	FID		ACIS-S-6	7.18	12236	0.103	0.013	0.022	0.054	0.000000	0.000000	383.00	802.22
3	GUIDE	used	525609504	9.04	24450	0.192	-0.078	0.087	0.143	349.896632	58.356658	-2102.63	1390.69
4	GUIDE	used	525735456	6.83	24472	-0.436	-0.242	0.068	0.106	350.628183	59.307249	1550.96	926.86
5	GUIDE	used	525732488	8.40	24458	0.111	-0.083	0.082	0.137	350.087090	58.516915	-1454.88	1184.34
6	GUIDE	used	525735976	8.85	24470	0.209	0.123	0.096	0.153	350.142956	58.277622	-2263.50	869.01
7	GUIDE	used	525737896	7.02	24467	-0.072	0.278	0.061	0.101	352.012180	59.335036	2322.90	-1497.44

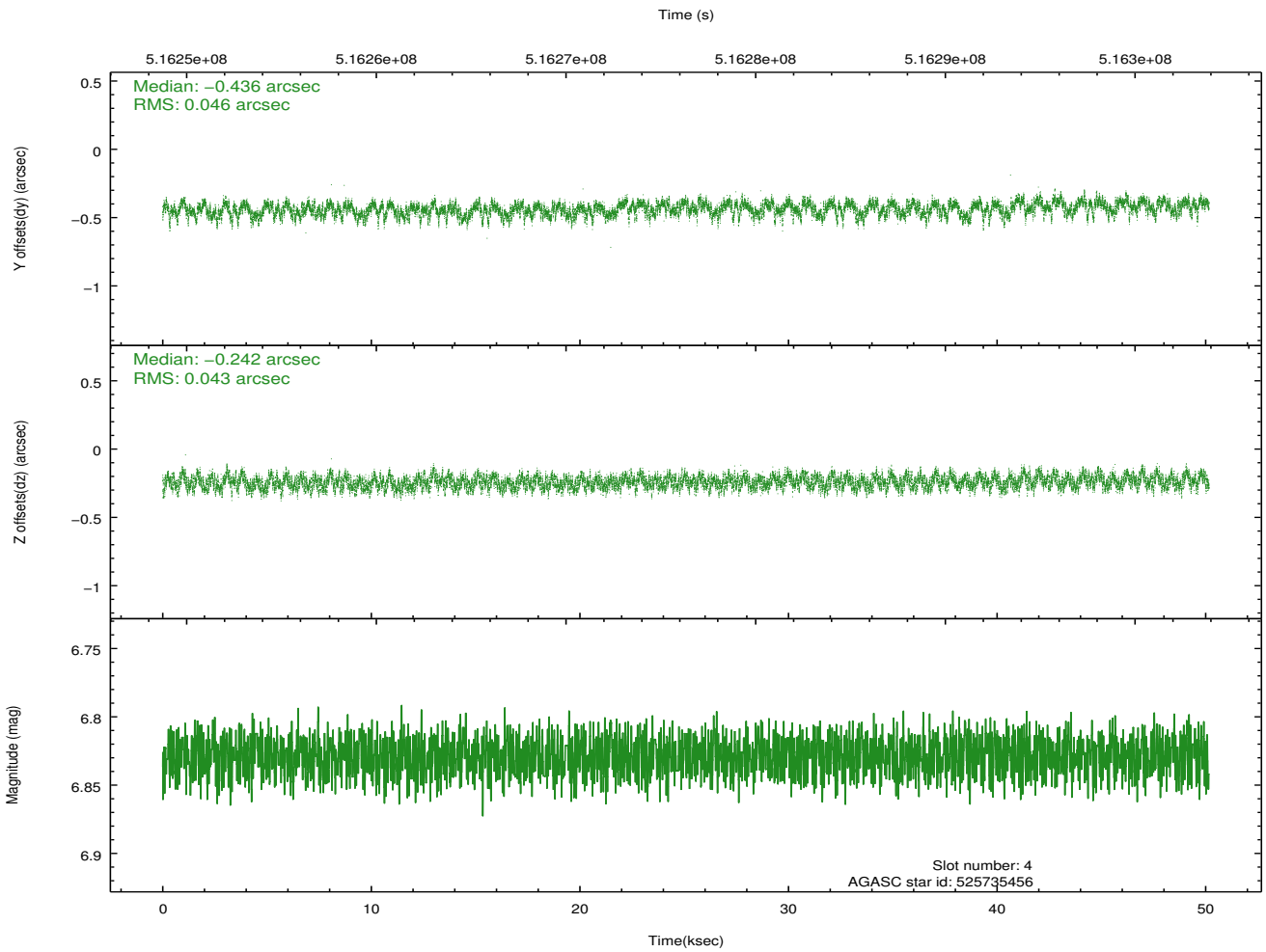
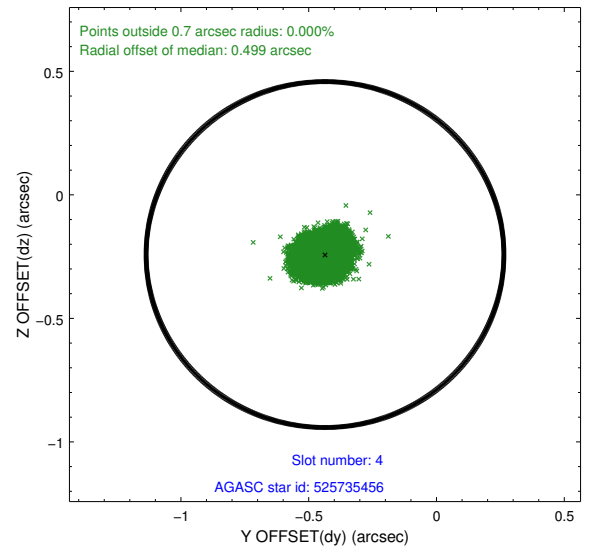
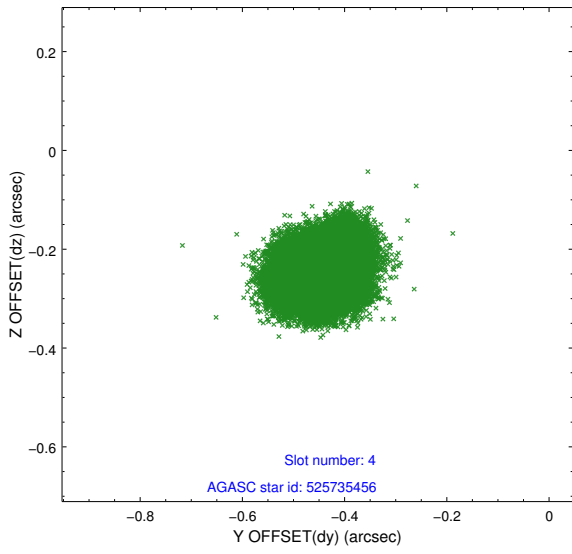
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2.4 Star Slots

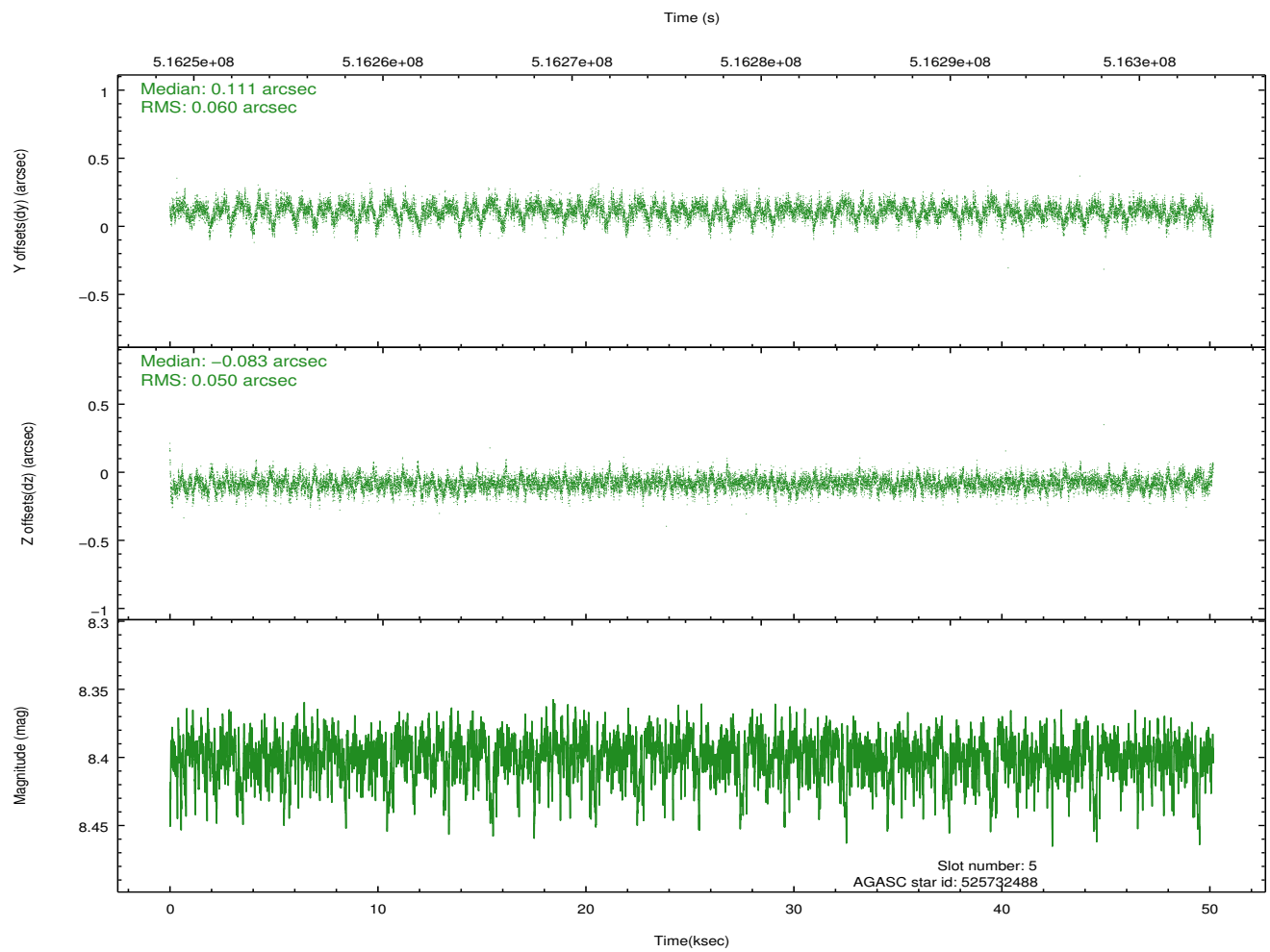
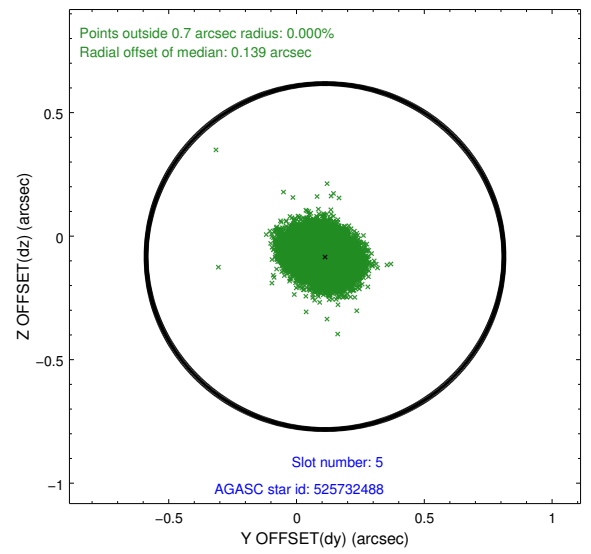
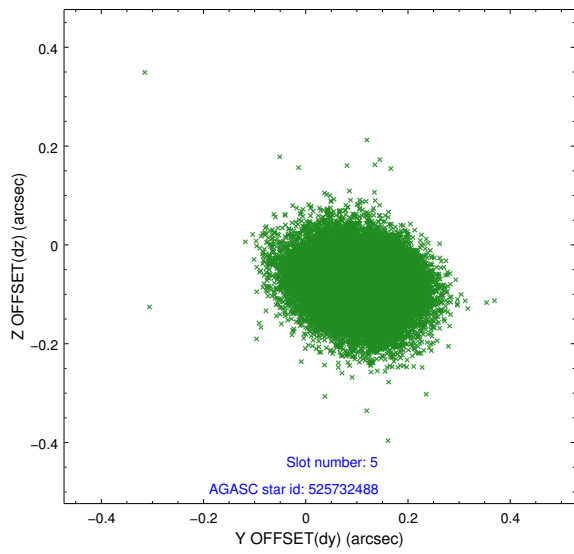
2.4.1 Slot 3



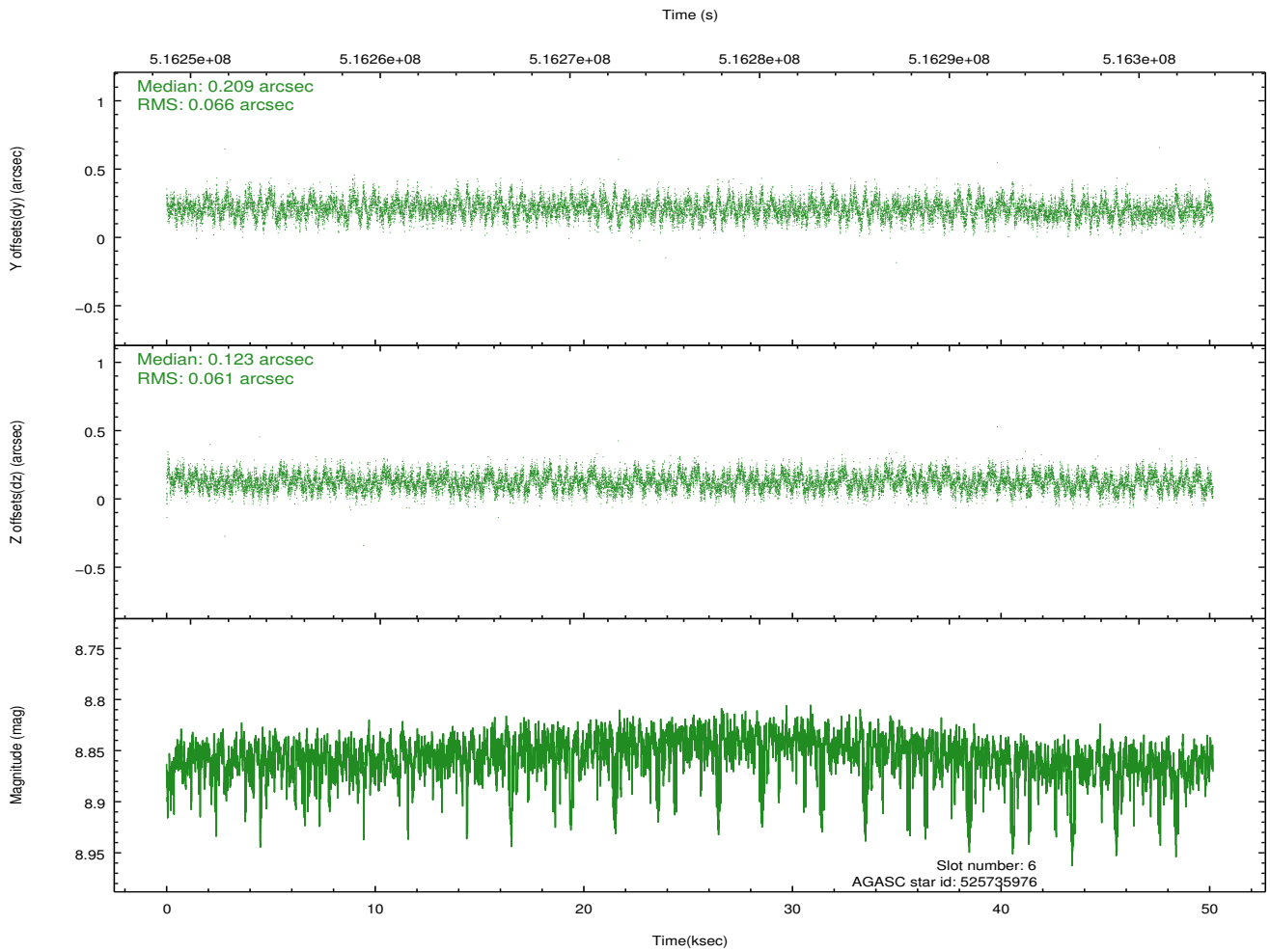
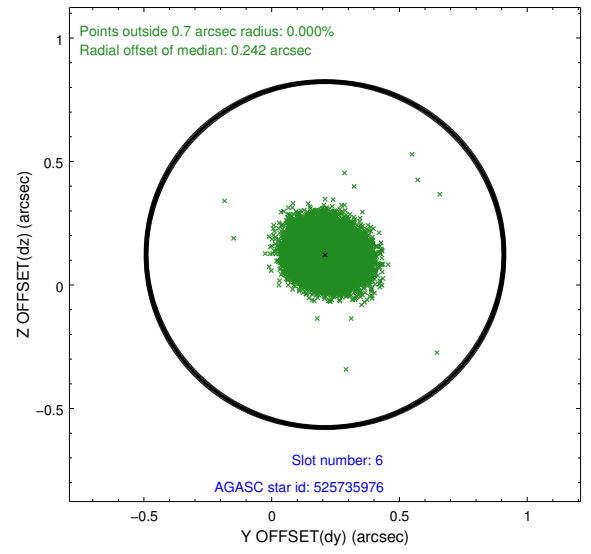
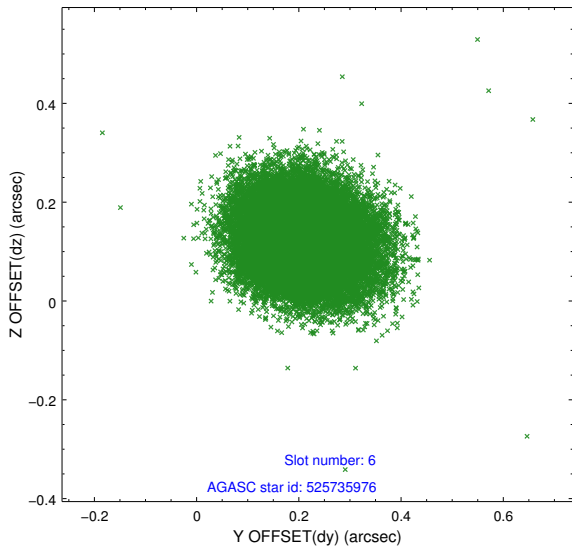
2.4.2 Slot 4



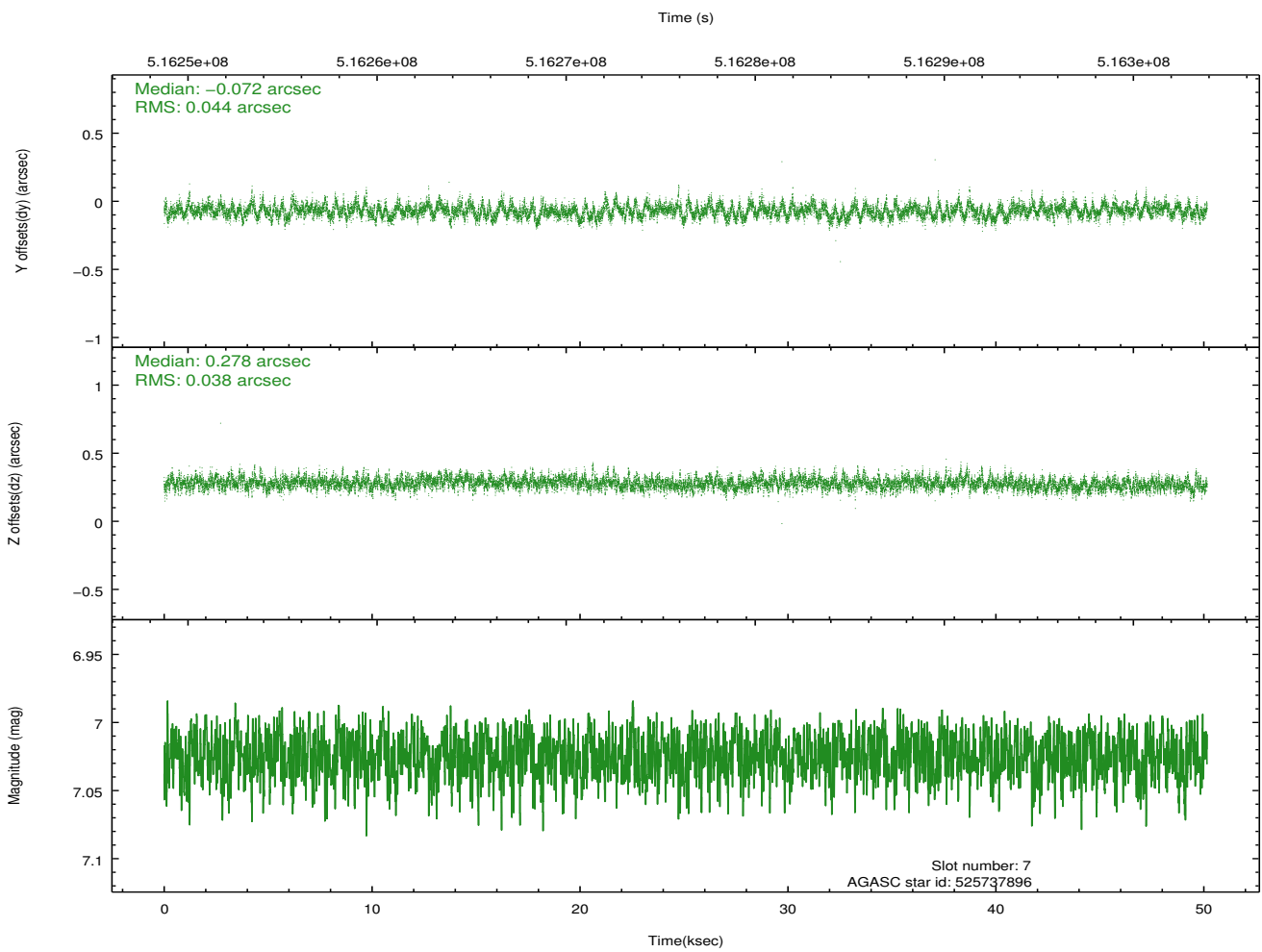
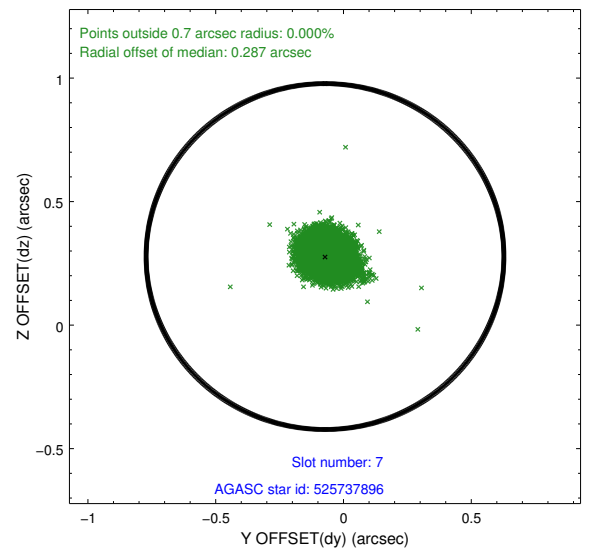
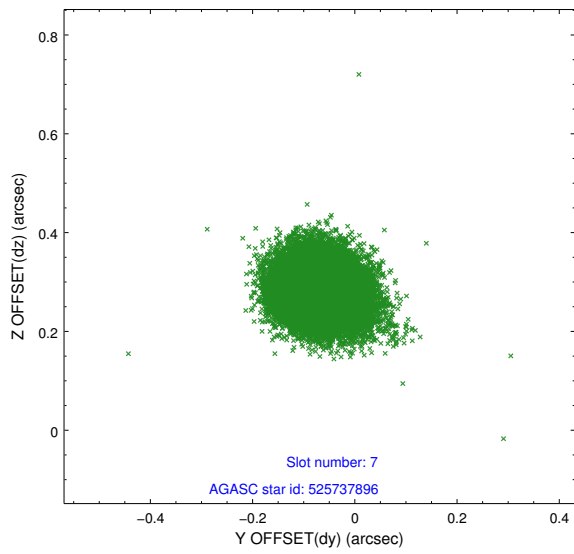
2.4.3 Slot 5



2.4.4 Slot 6

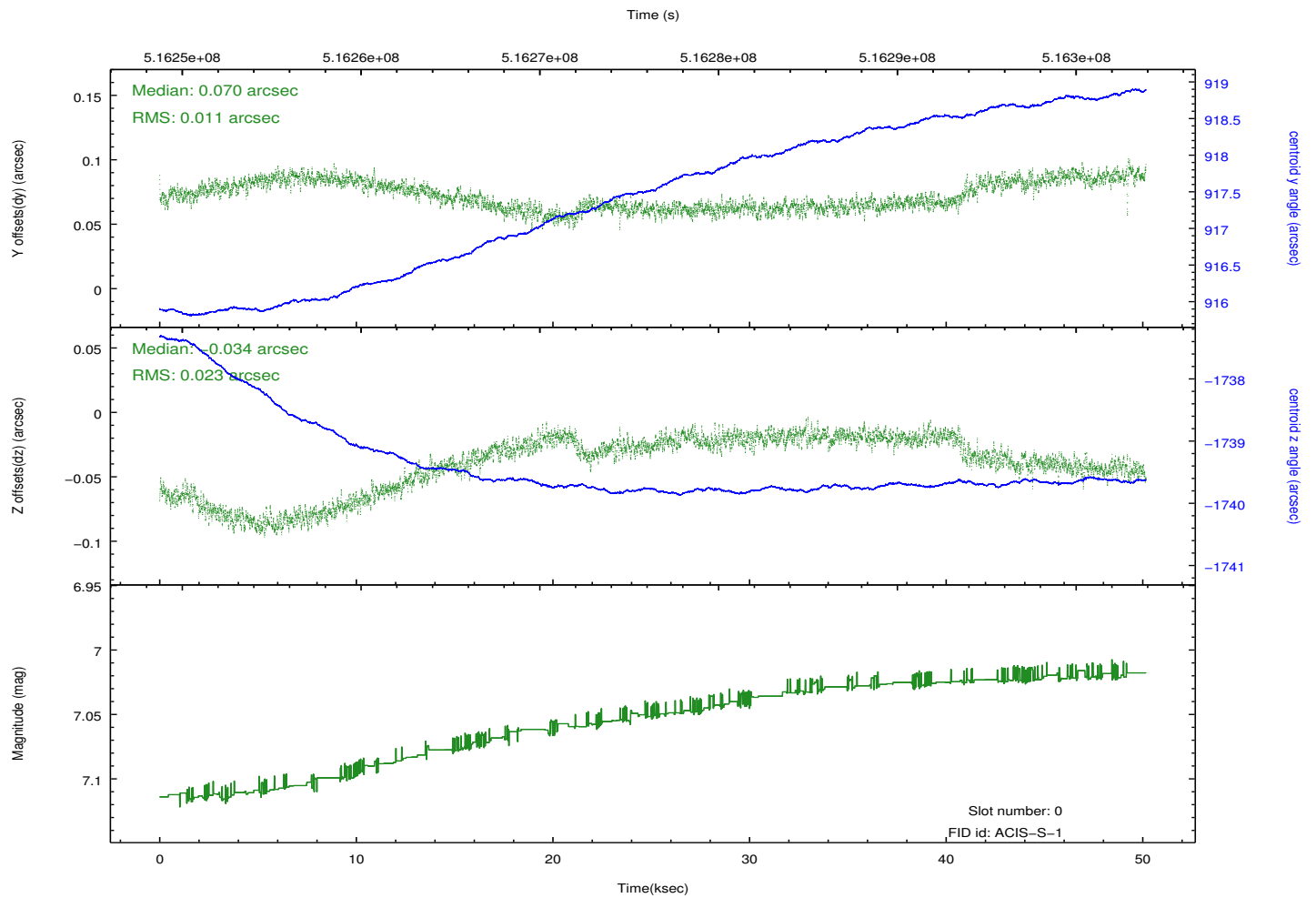
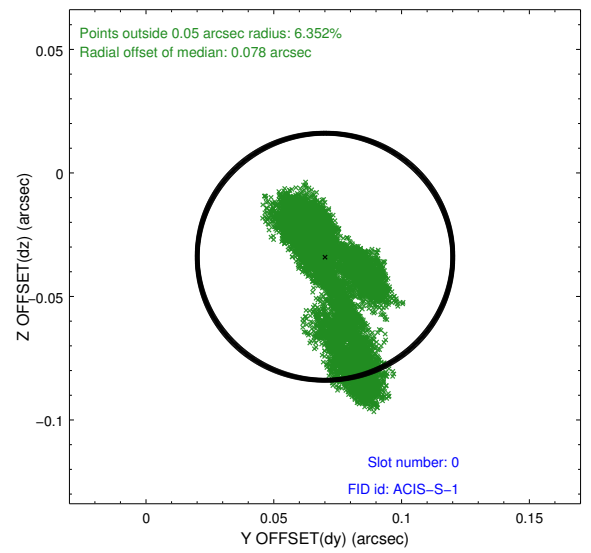
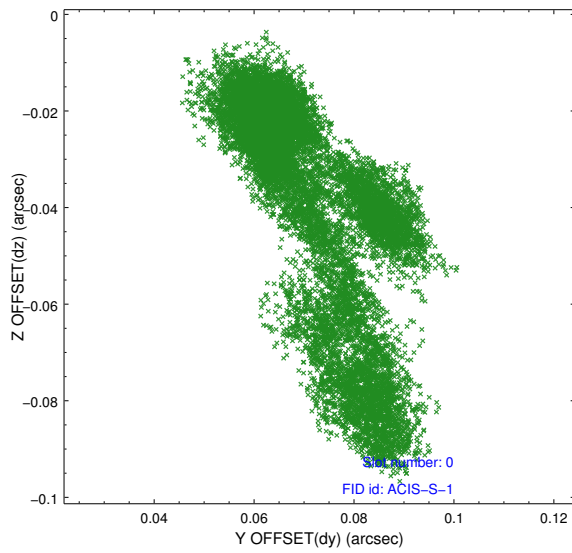


2.4.5 Slot 7

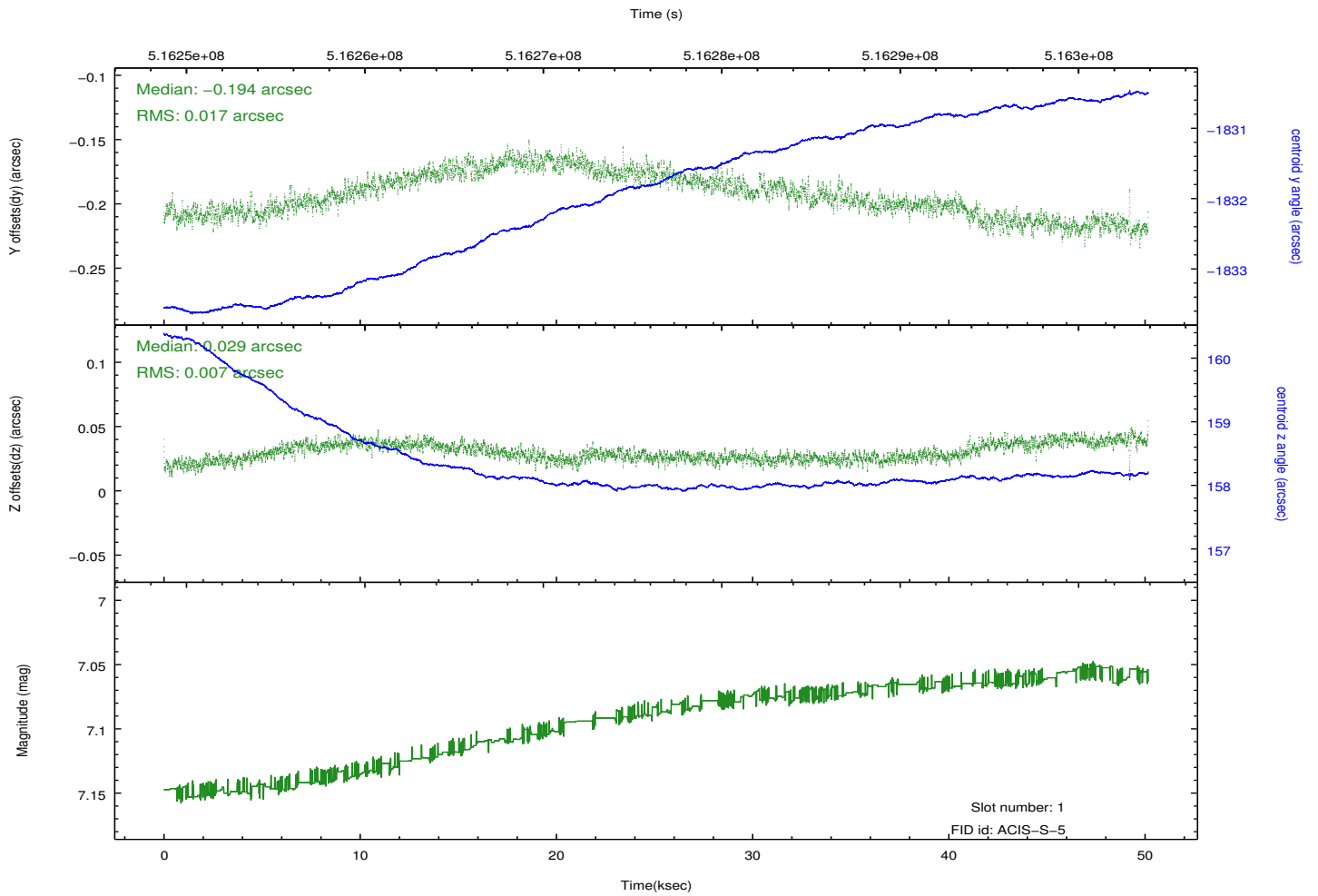
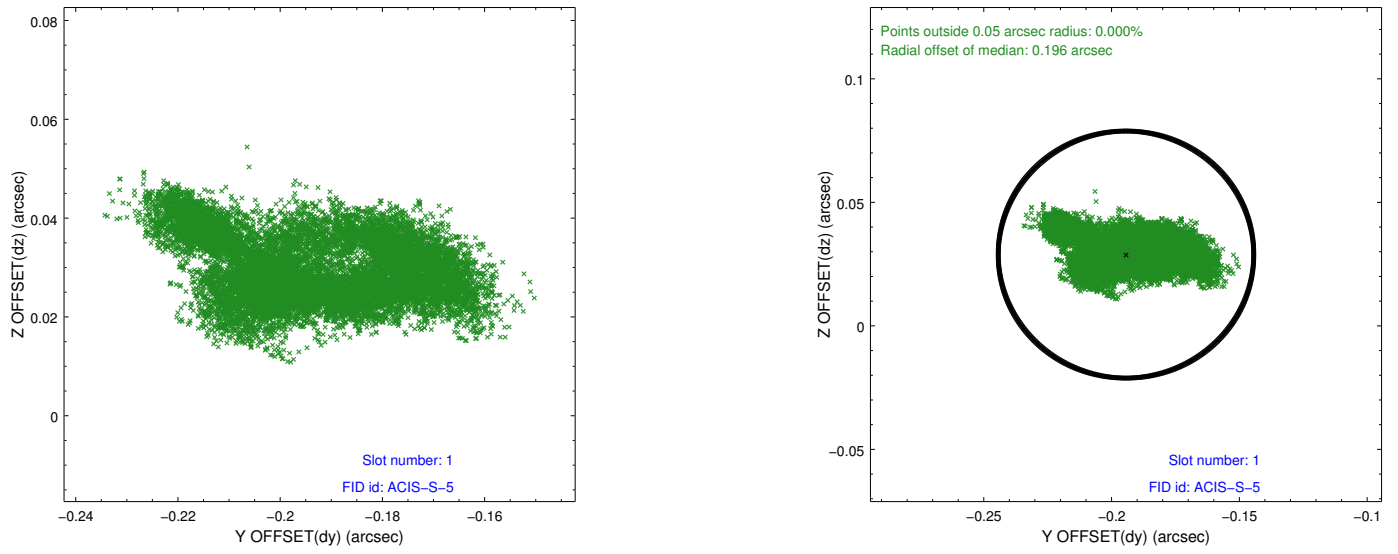


2.5 FID Slots

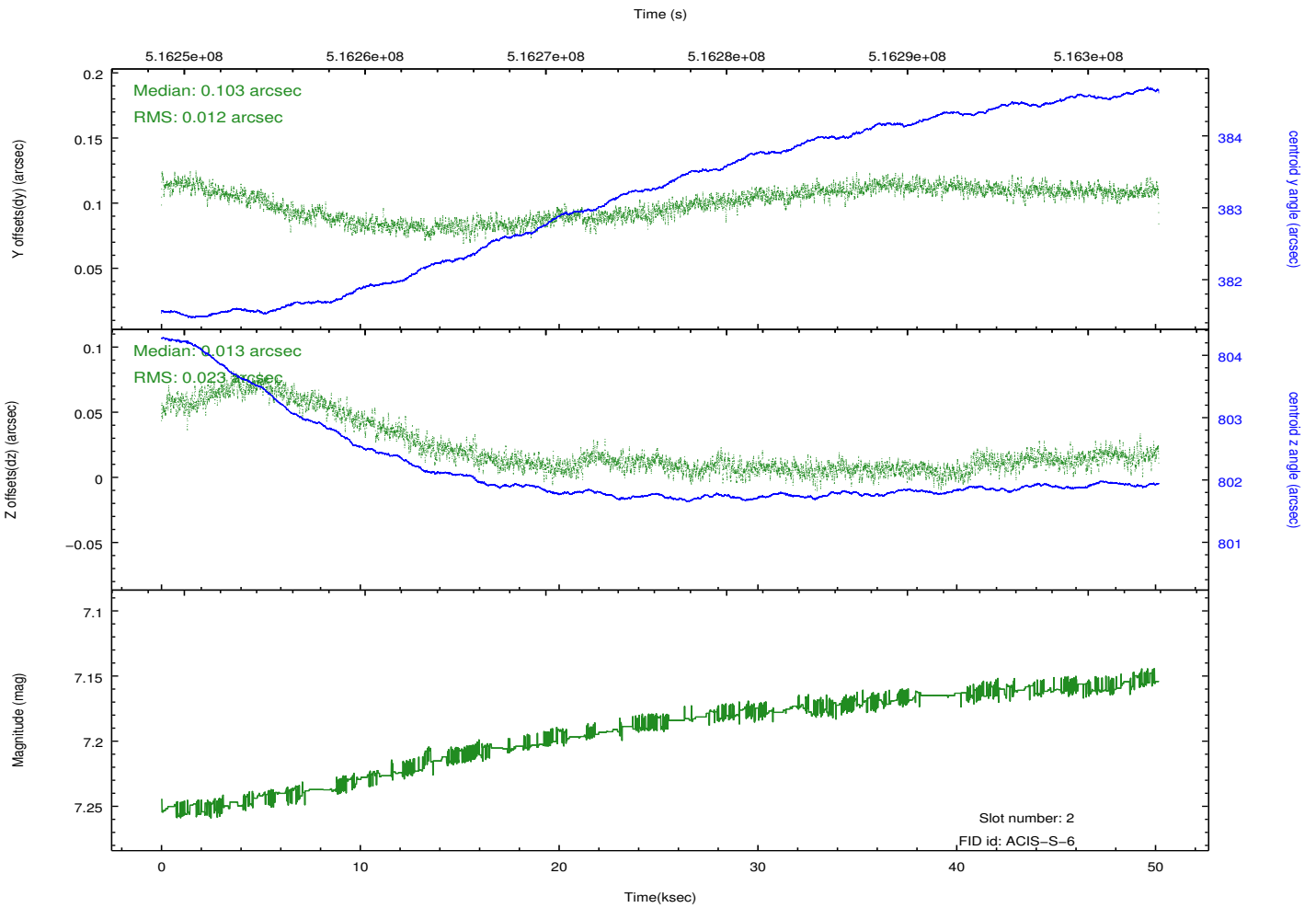
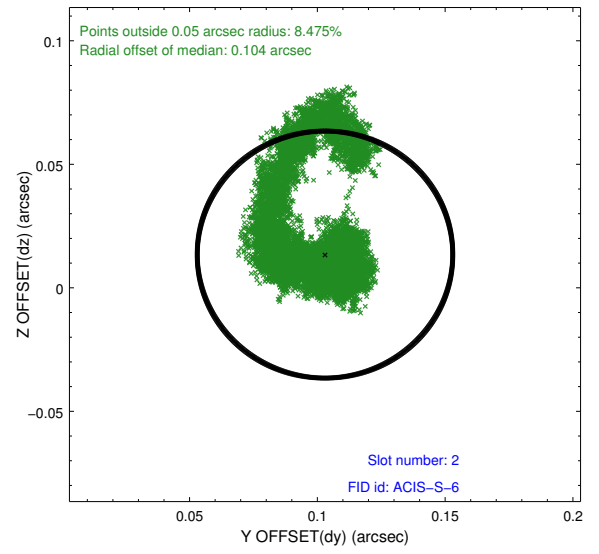
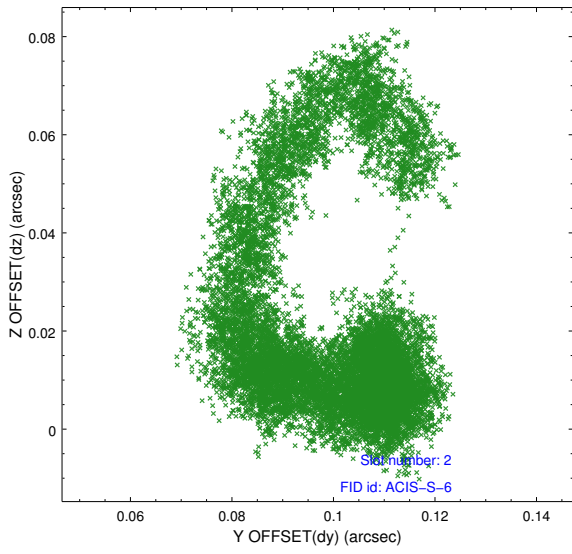
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.092828208566

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.