

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13788 - L2 Version 2
Chandra X-Ray Center

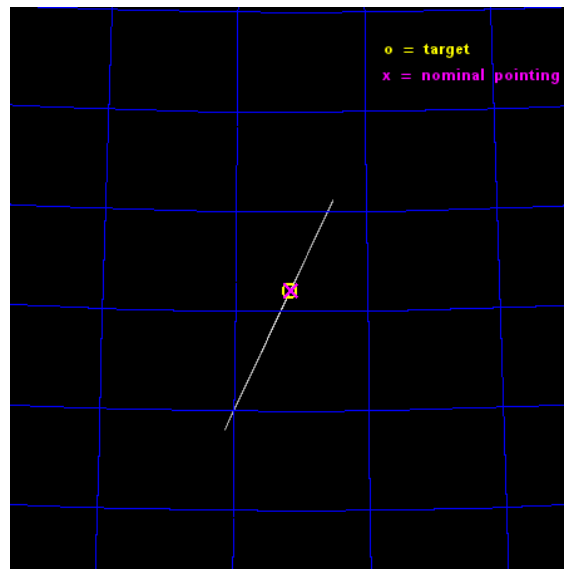
L2 Processing Date : Dec 1 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

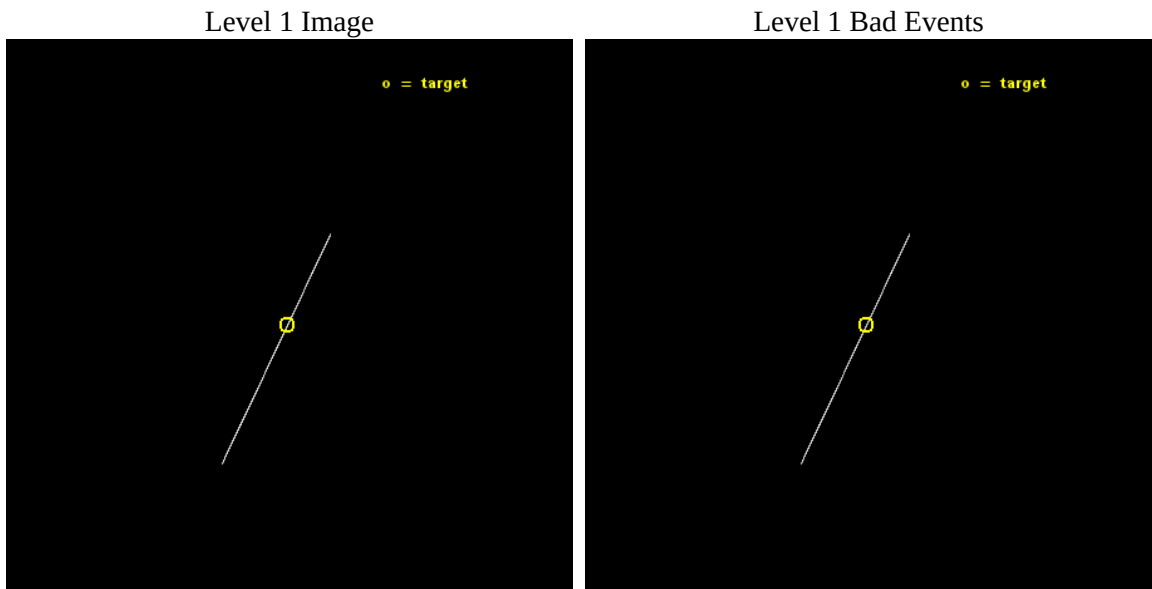
seq_num	501620	Sequence number
obs_id	13788	Observation id
title	Investigating the Nature of the Unusual 59 ms Pulsar 'Calvera	P
observer	Prof. Jules Halpern	Principal investigator
object	1RXS J141256.0+792204	Source name
ra_targ	213.2325	Observer's specified target RA [deg]
dec_targ	79.367694	Observer's specified target Dec [deg]
ra_nom	213.21626863076	Nominal RA [deg]
dec_nom	79.36800997653	Nominal Dec [deg]
roll_nom	116.17261120499	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19756.25	Sum of GTIs [s]
livetime	19679.077148438	Livetime [s]
ontime6	19756.25	Sum of GTIs [s]
ontime7	19756.25	Sum of GTIs [s]
ontime8	19756.25	Sum of GTIs [s]
l2events	106408	Number of level 2 events



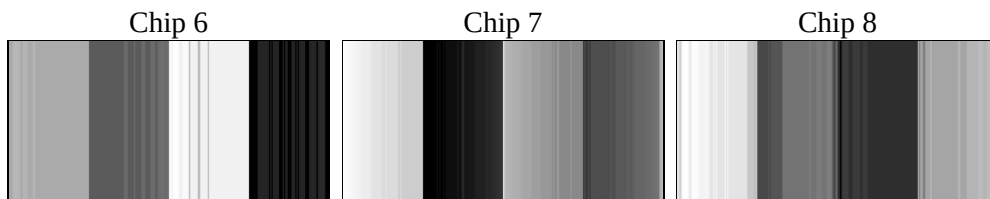
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19600.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	19756.25	Sum of GTIs [s]
caldbver	4.6.4	 	ontime6	19756.25	Sum of GTIs [s]
date	2014-12-01T11:24:17	Date and time of file creation	ontime7	19756.25	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	19756.25	Sum of GTIs [s]
			l1events	727024	Number of level 1 events

2.1.4 Events

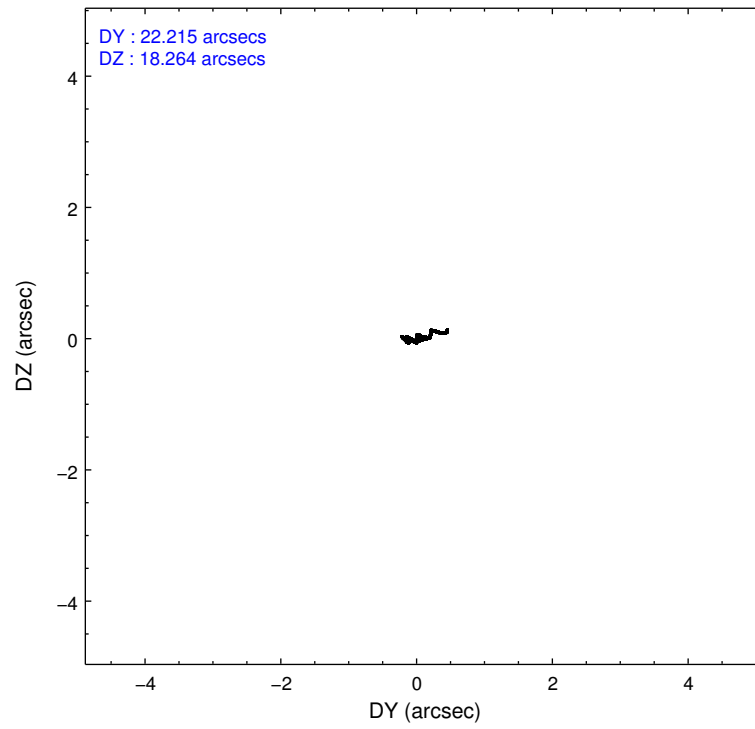
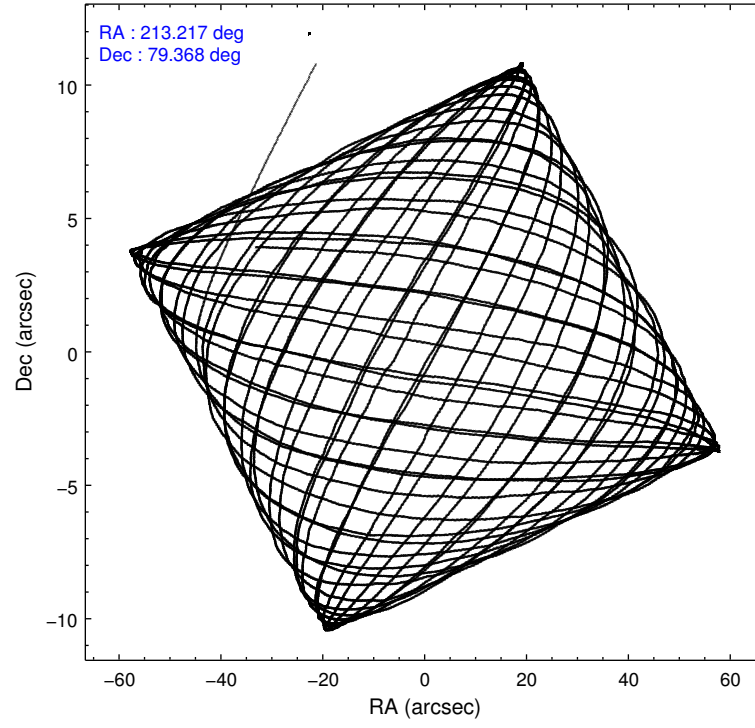
	ccd 6	ccd 7	ccd 8
level 1 events	192839	222097	312088
rejected events	172852	150336	259272
rejected %	89%	67%	83%

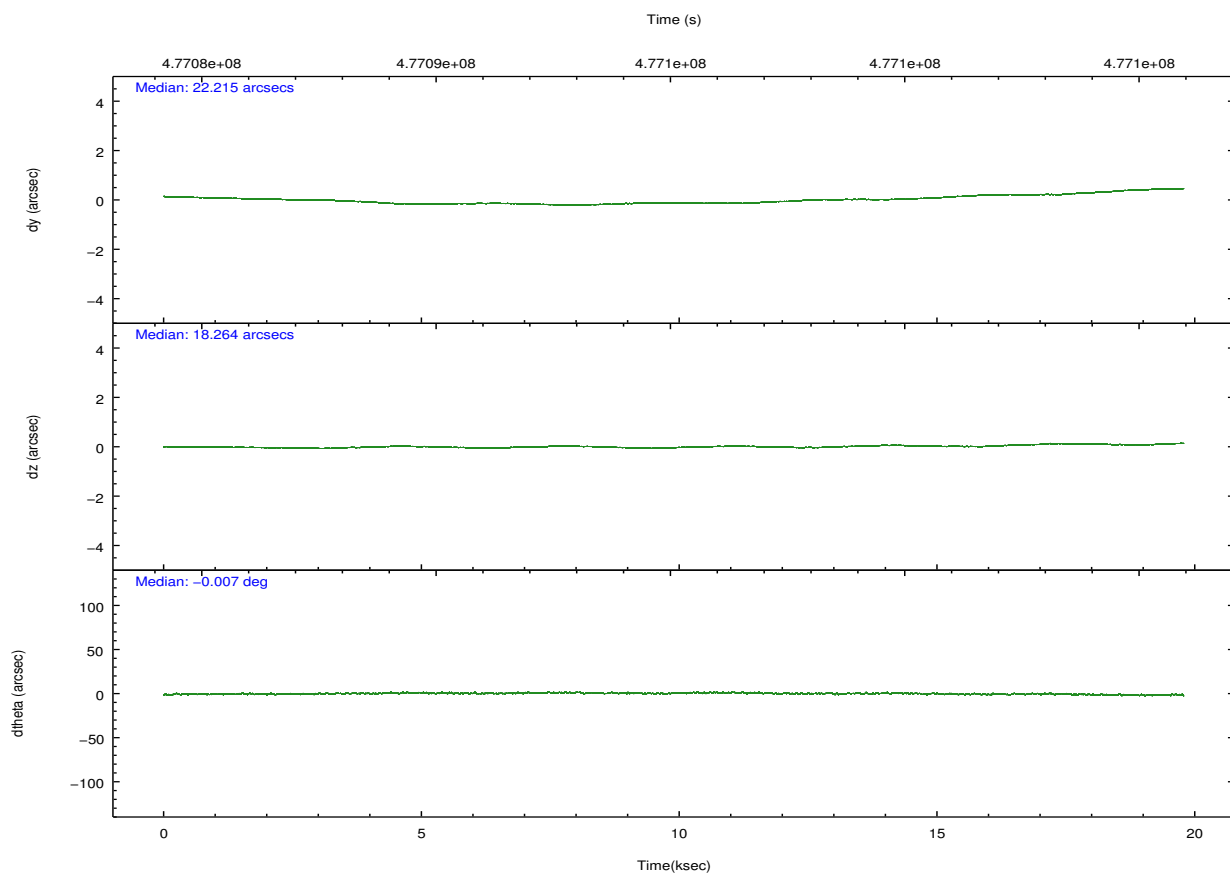
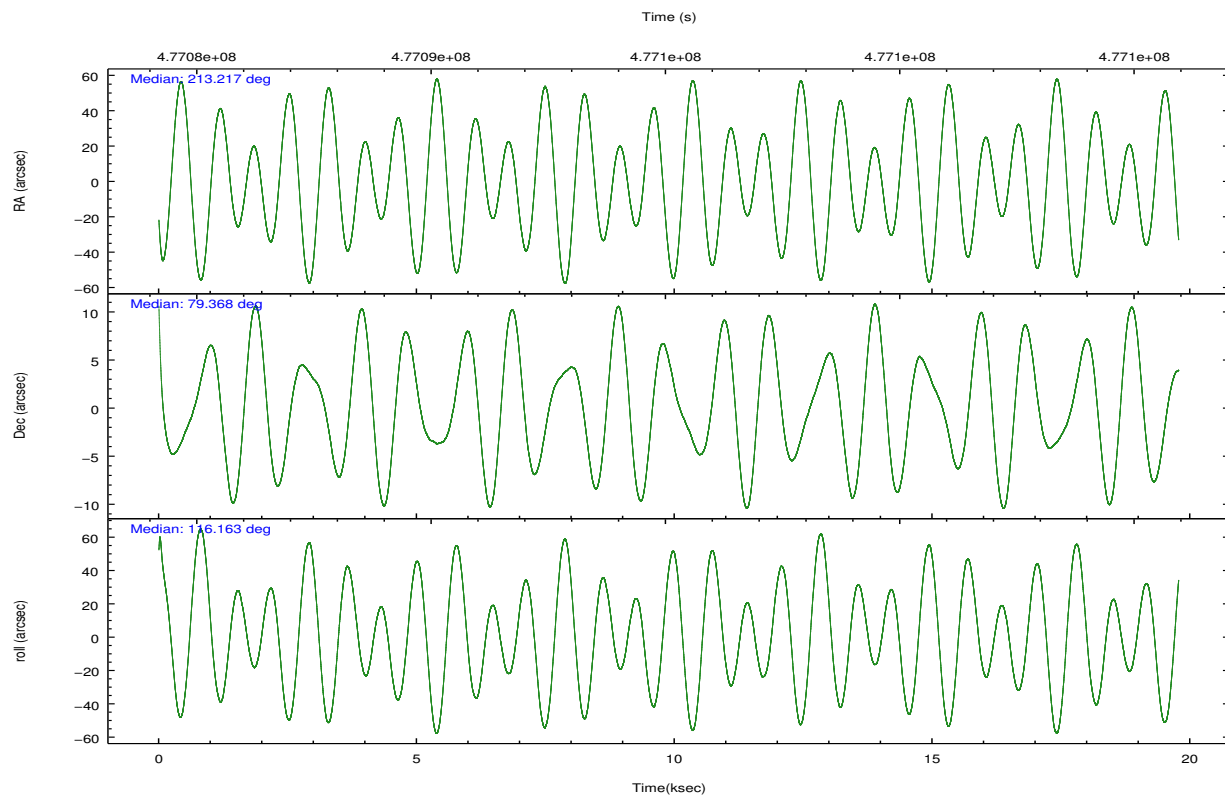
	ccd 6	ccd 7	ccd 8
grade 0 events	2333	6022	11566
	1%	2%	3%
grade 1 events	106	198	221
	0%	0%	0%
grade 2 events	7281	18893	15711
	3%	8%	5%
grade 3 events	2613	3976	5707
	1%	1%	1%
grade 4 events	2427	3934	5584
	1%	1%	1%
grade 5 events	5892	15112	8785
	3%	6%	2%
grade 6 events	5337	38956	14252
	2%	17%	4%
grade 7 events	166850	135006	250262
	86%	60%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-678	ACIS-678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	CC33_FAINT	CC33_FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	213.340238	213.2162686307607	Subarray requested	NONE	NONE
[deg] Pointing Dec	79.353105	79.3680099765303	Alternating exposures requested	N	N
[deg] Pointing Roll	115.894119	116.1726112049852	[s] Primary exposure time	0.000000	0
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	477085369.184000	477084487.44086			
Observation start date	2013-02-12T19:41:42	2013-02-12T19:28:07			
[s] Observation end time (MET)	477104969.184000	477105898.667			
Observation end date	2013-02-13T01:08:22	2013-02-13T01:24:58			
Read mode	CONTINUOUS	CONTINUOUS			

2.3 Aspect



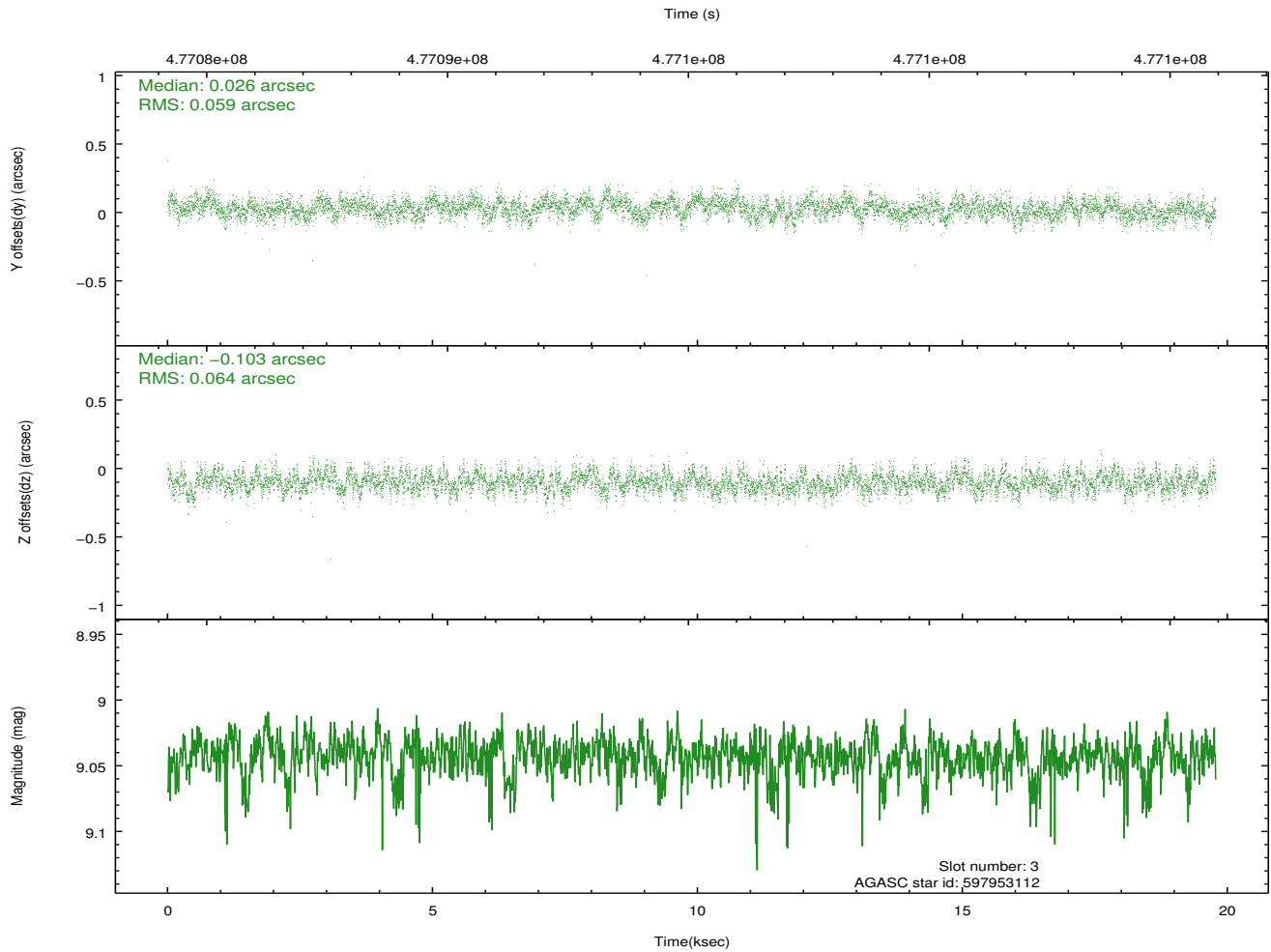
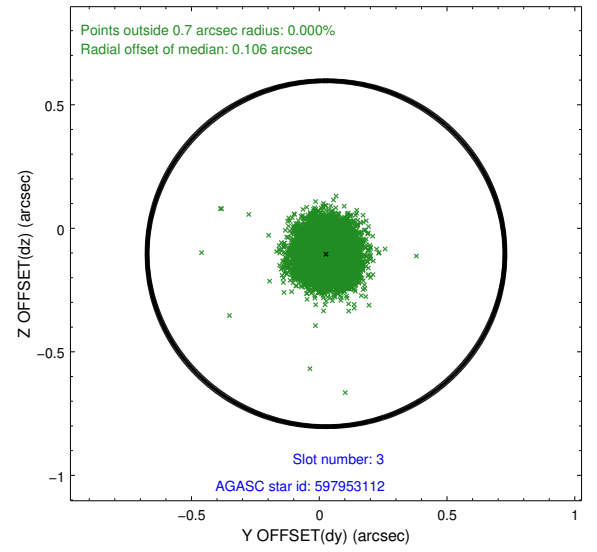
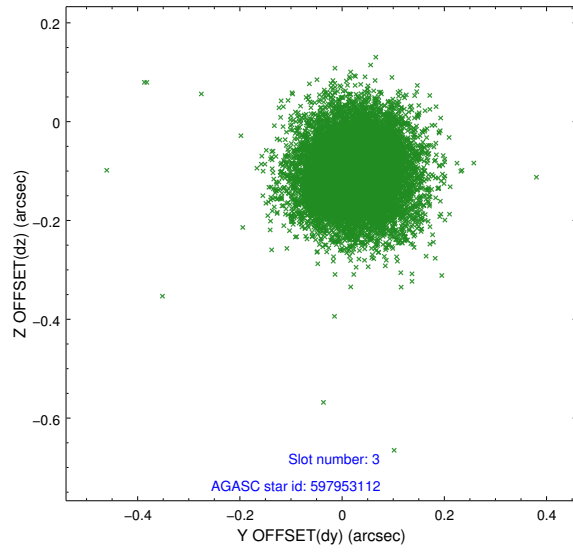


Slot Statistics

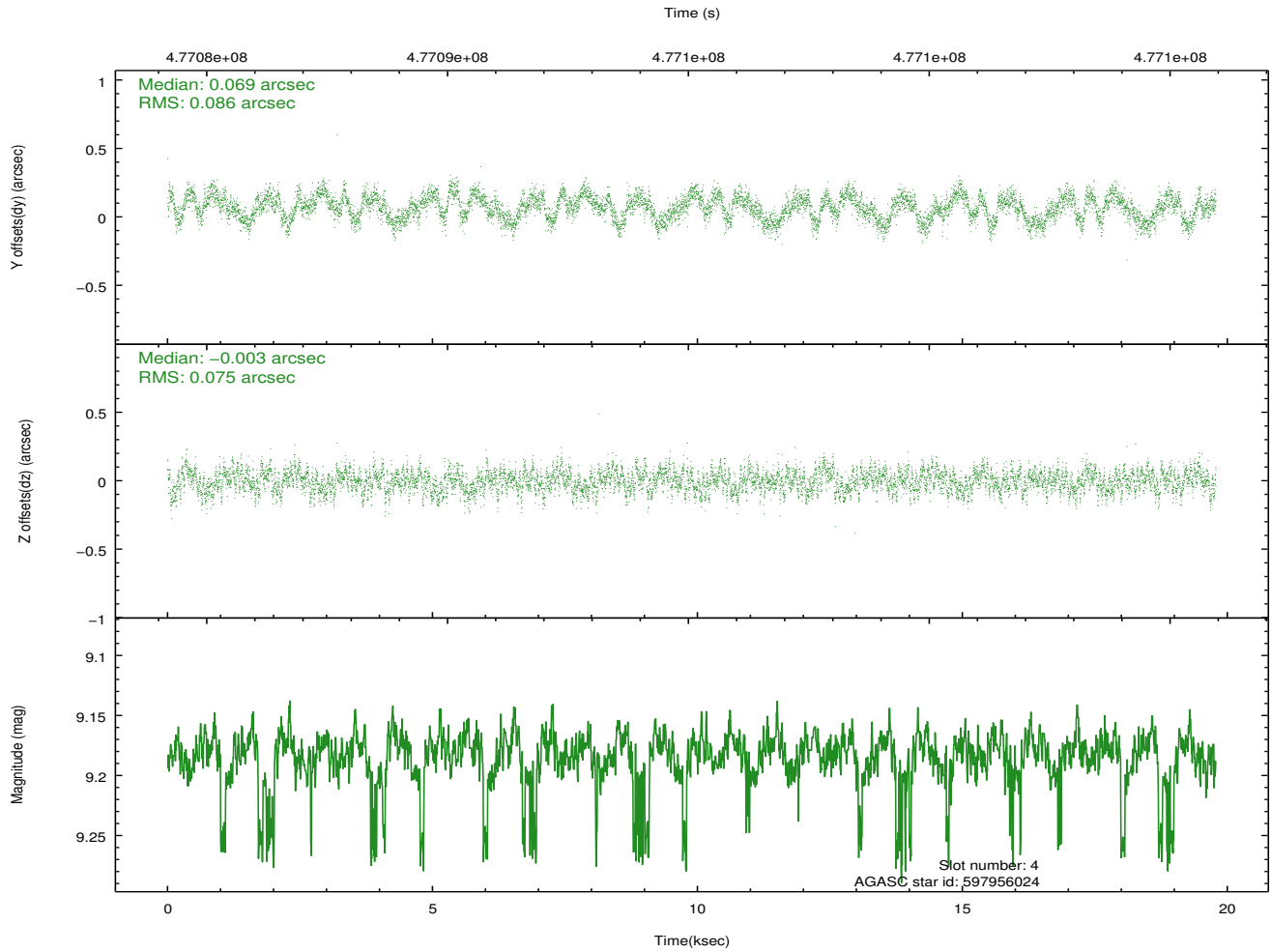
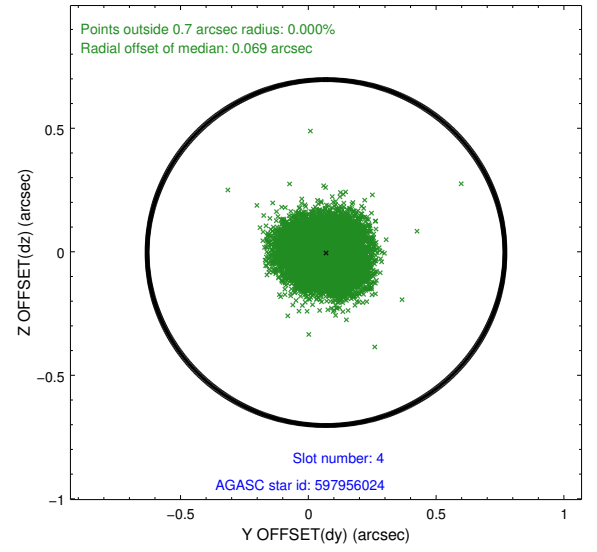
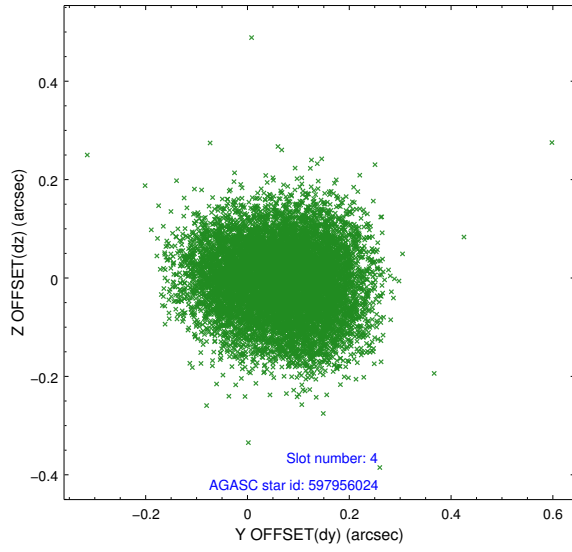
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.08	4824	0.179	-0.035	0.007	0.013	0.000000	0.000000	920.87	-1735.38
1	FID		ACIS-S-2	7.00	4825	-0.112	-0.049	0.007	0.011	0.000000	0.000000	-775.22	-1740.19
2	FID		ACIS-S-5	7.11	4824	-0.090	0.090	0.007	0.014	0.000000	0.000000	-1828.69	162.03
3	GUIDE	used	597953112	9.04	9635	0.026	-0.103	0.092	0.148	214.009845	78.760089	-2122.71	508.51
4	GUIDE	used	597956024	9.18	9601	0.069	-0.003	0.124	0.187	215.481244	79.329736	-674.73	-1257.97
5	GUIDE	used	597956800	8.99	9643	-0.056	-0.097	0.102	0.165	213.871920	79.999122	1948.38	-1315.03
6	GUIDE	used	597957536	9.33	9630	-0.081	0.150	0.102	0.166	214.978754	79.574657	265.69	-1314.56
7	GUIDE	used	597826088	9.71	9602	0.051	0.052	0.148	0.238	213.246436	79.535232	616.95	-230.09

2.4 Star Slots

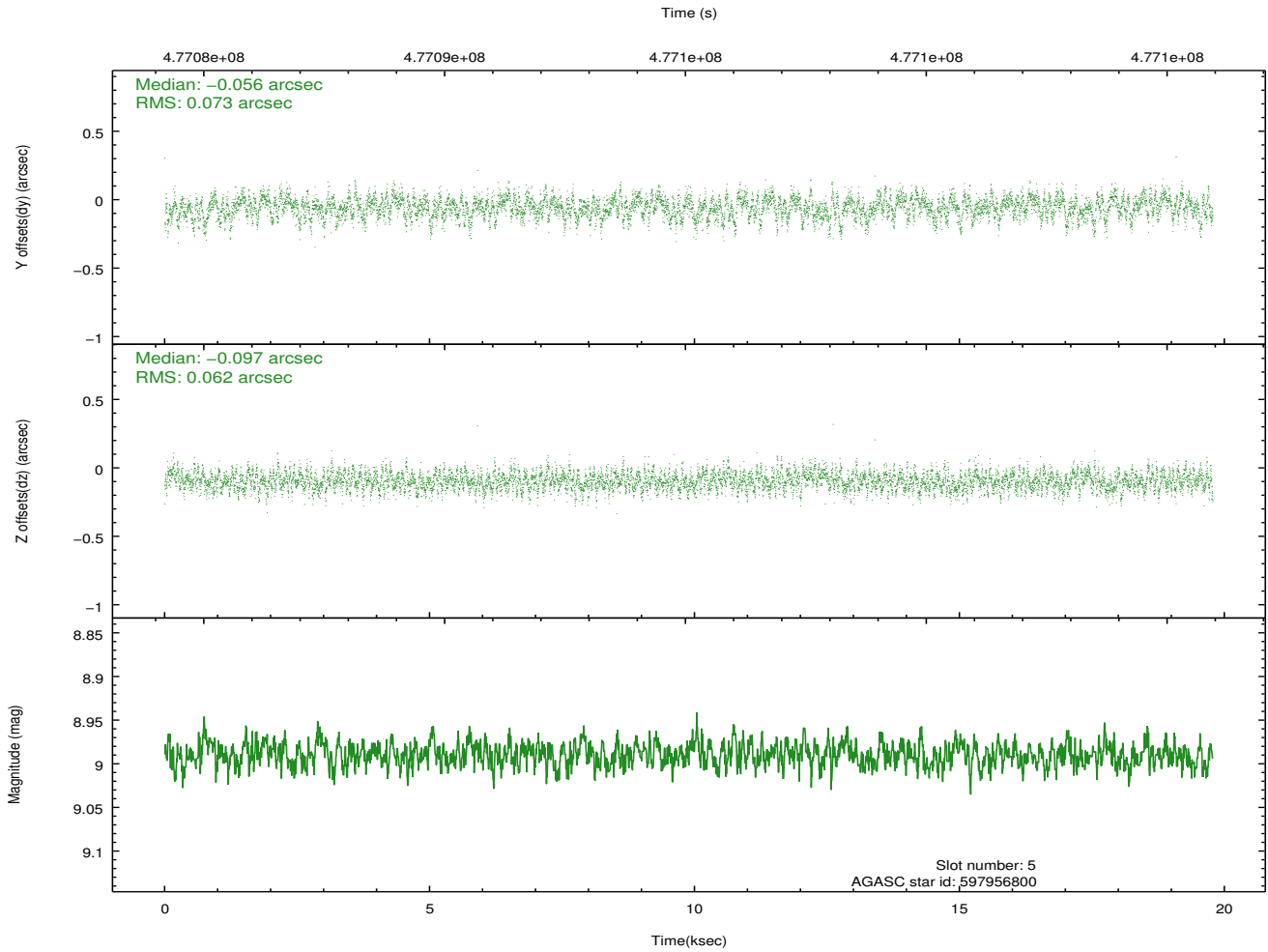
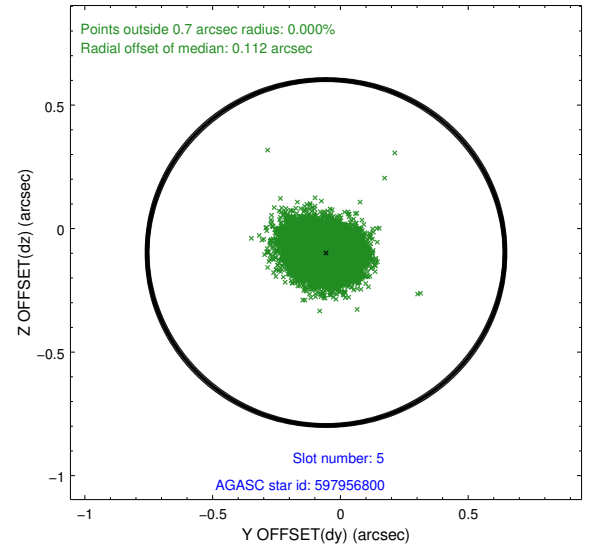
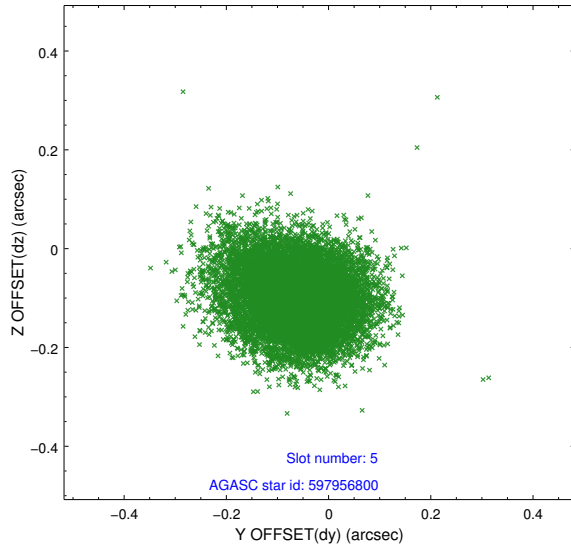
2.4.1 Slot 3



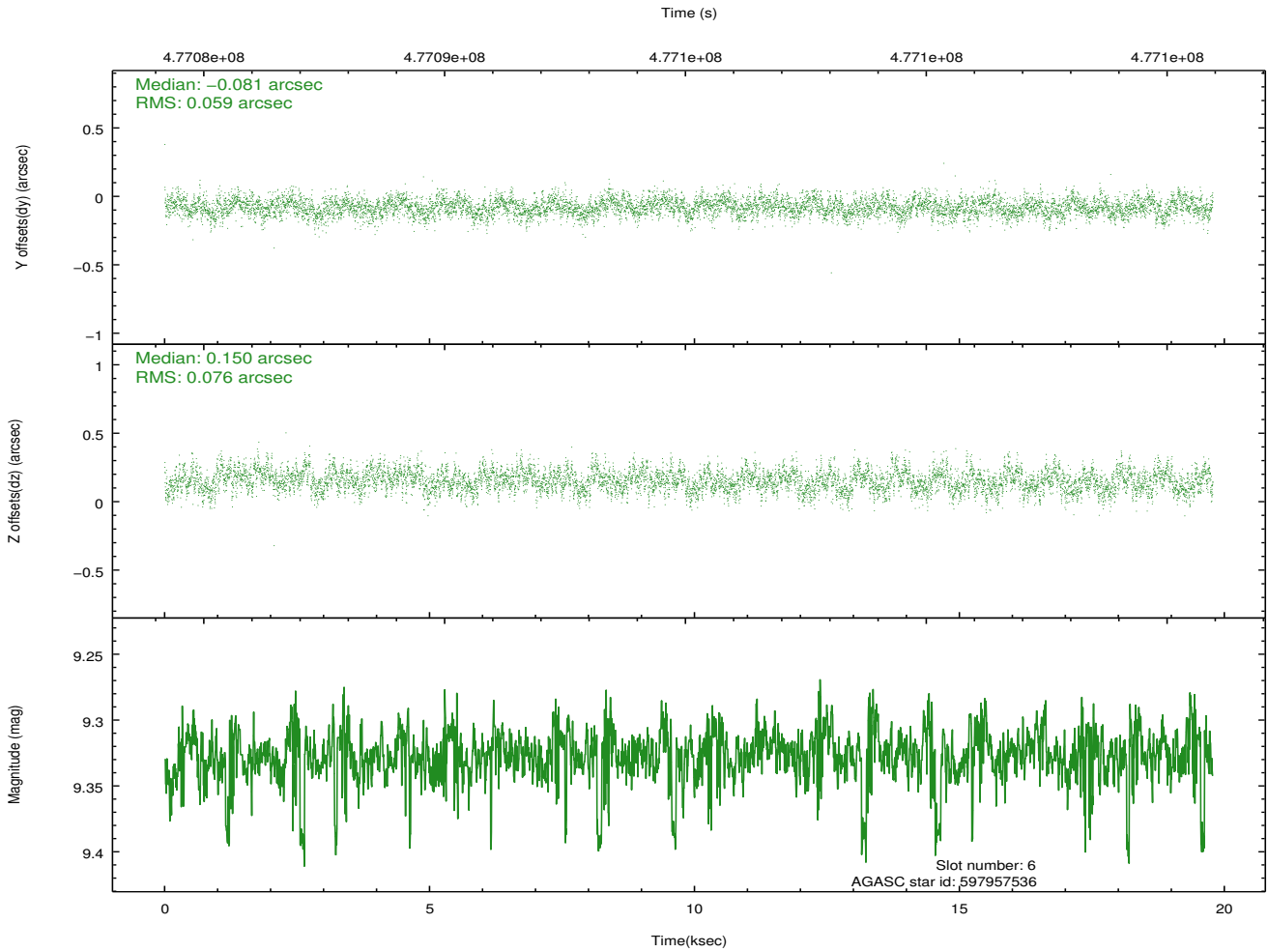
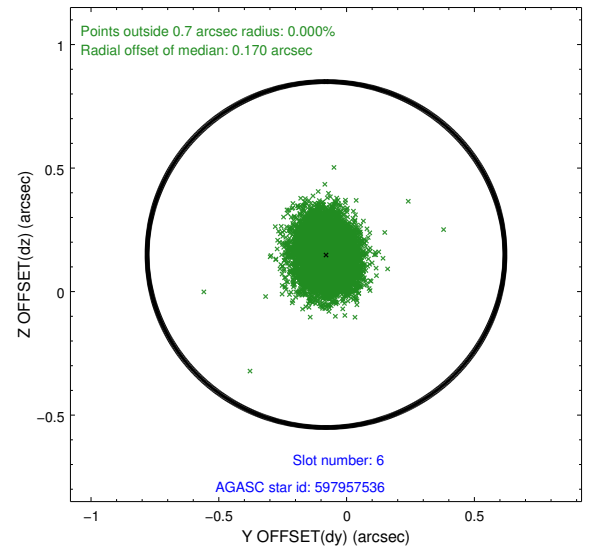
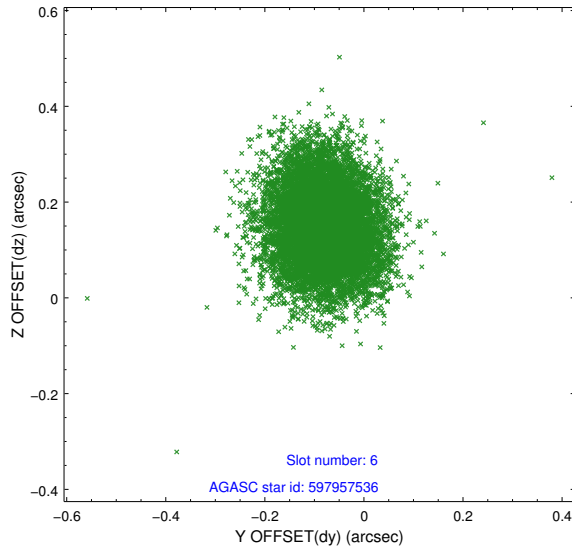
2.4.2 Slot 4



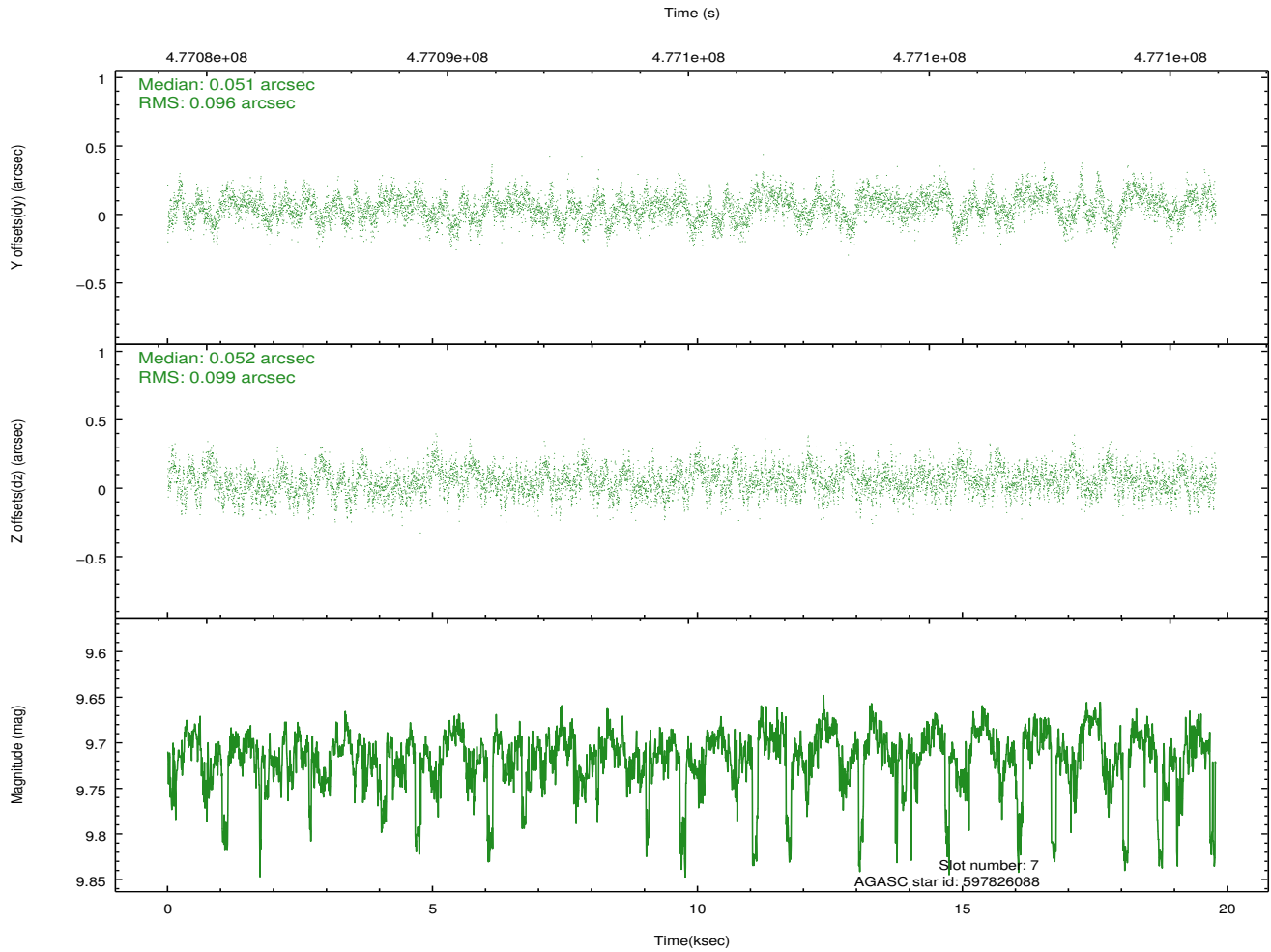
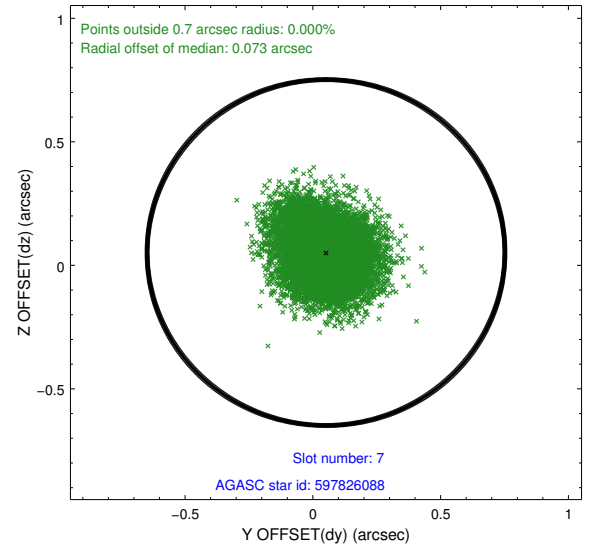
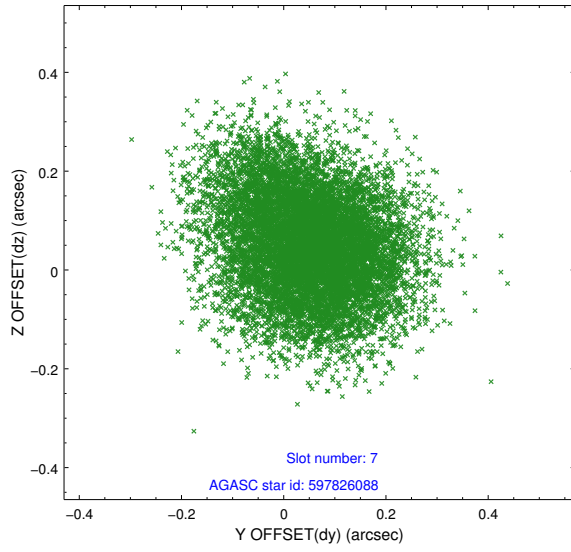
2.4.3 Slot 5



2.4.4 Slot 6

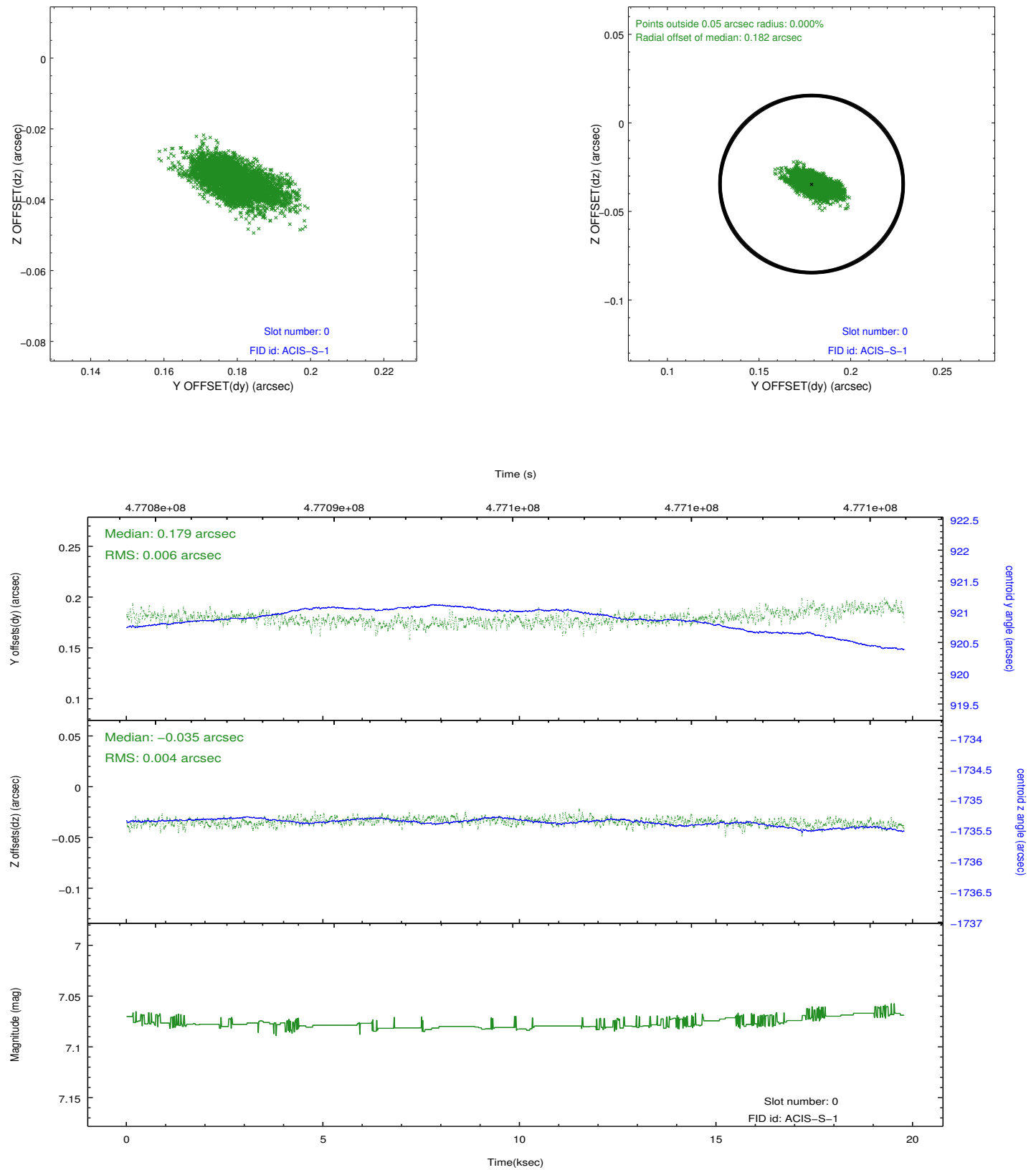


2.4.5 Slot 7

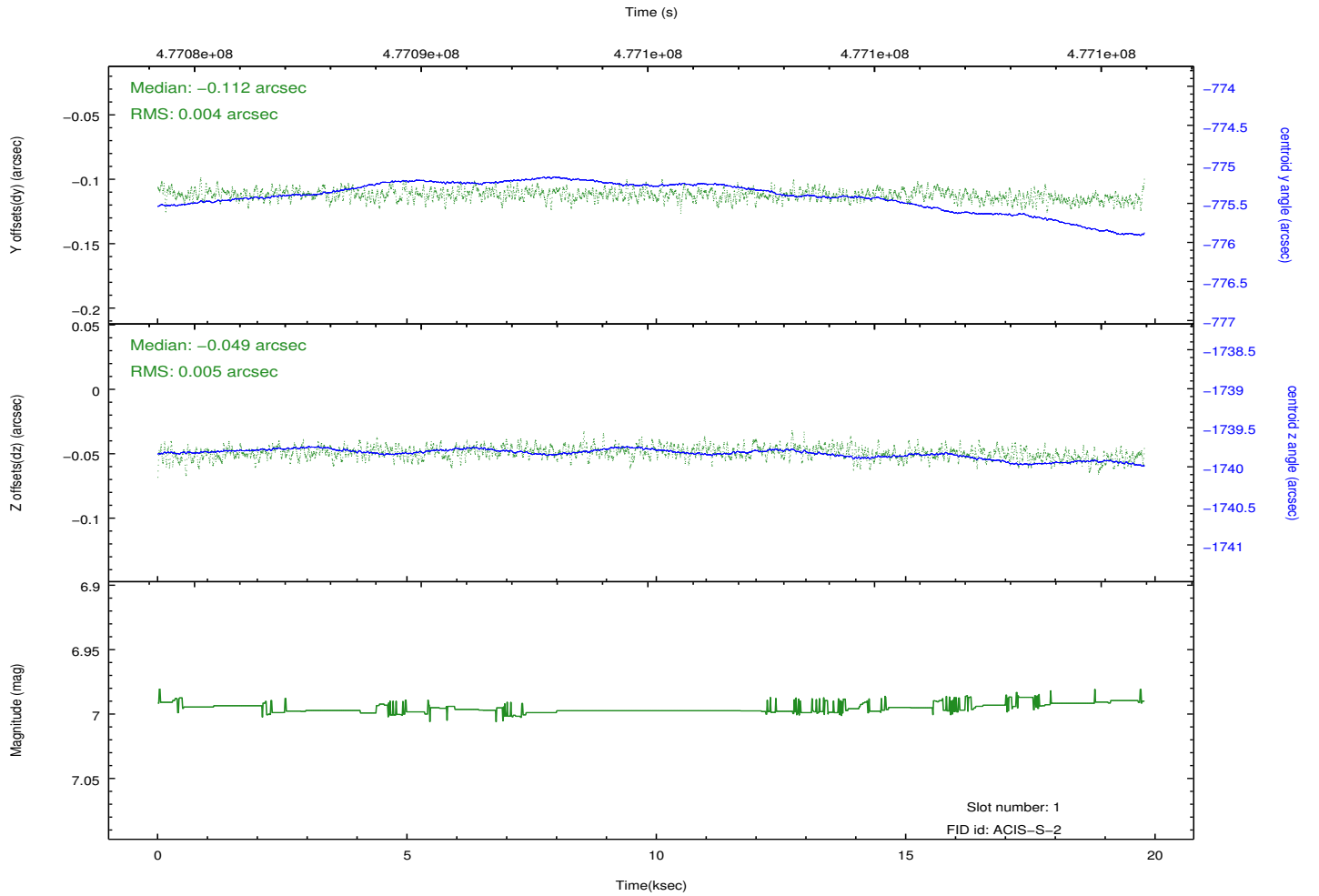
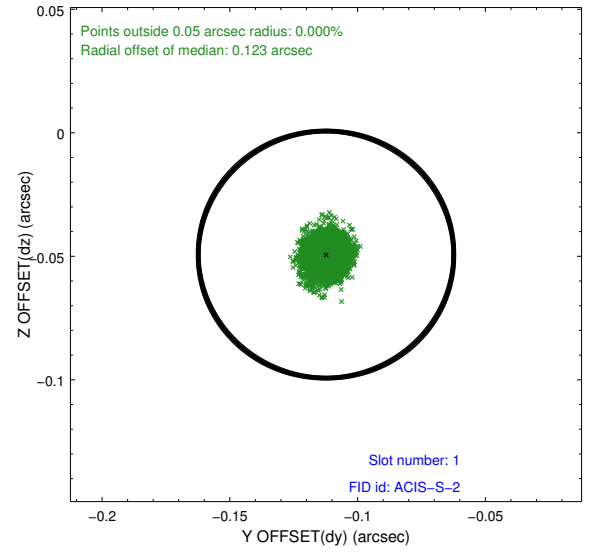
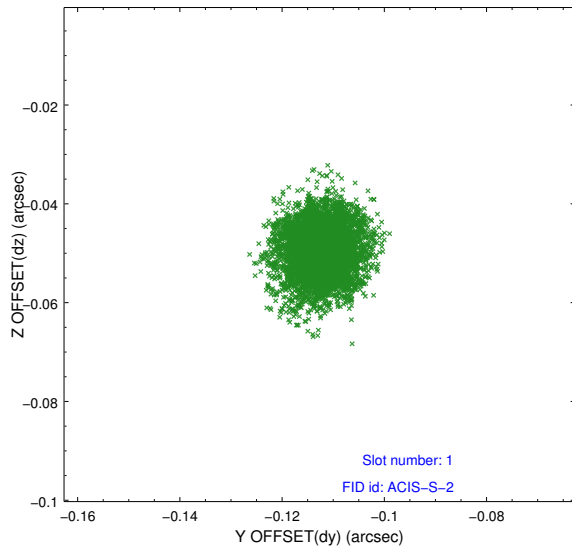


2.5 FID Slots

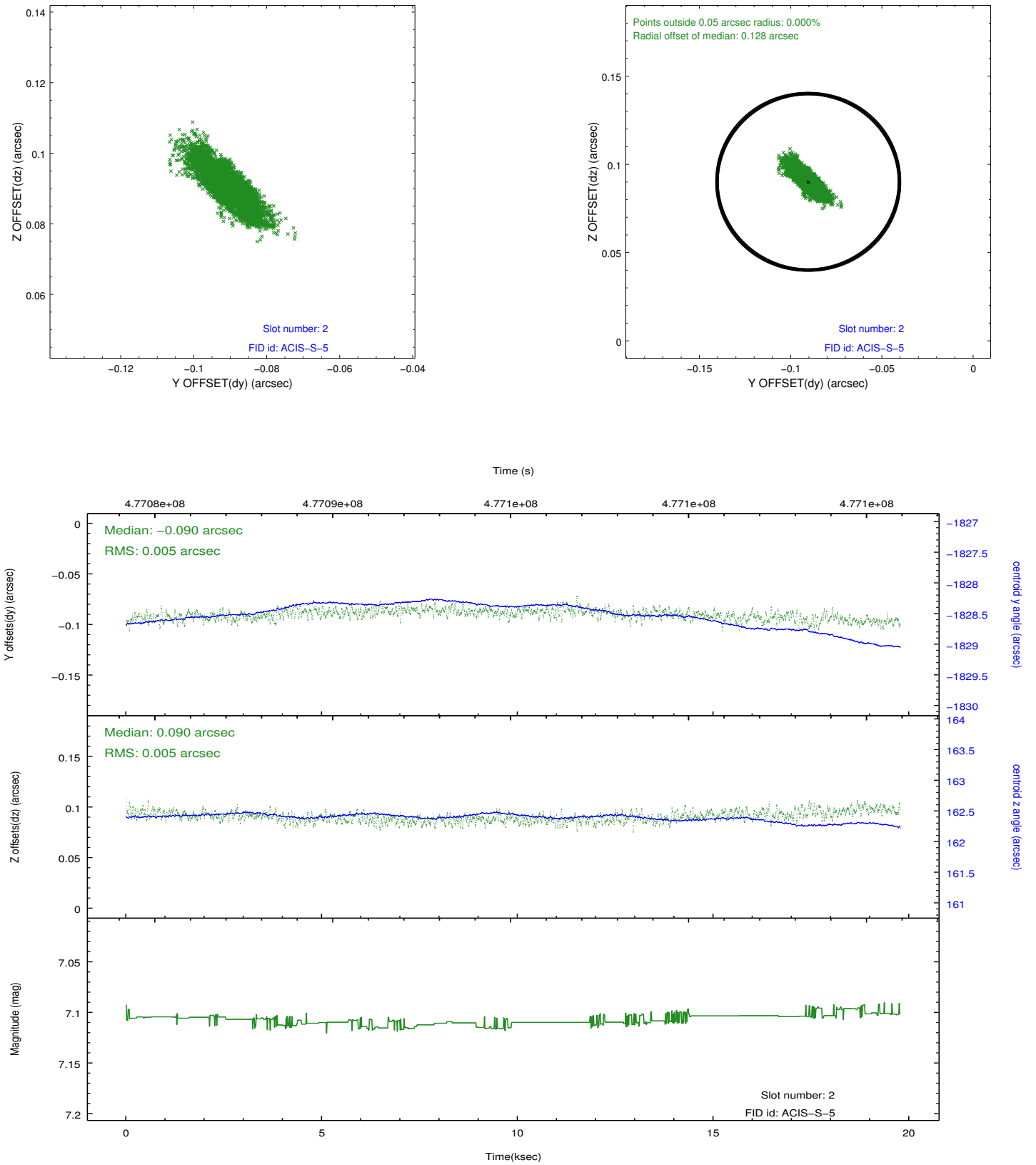
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.75625

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.