

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16213 - L2 Version 2
Chandra X-Ray Center

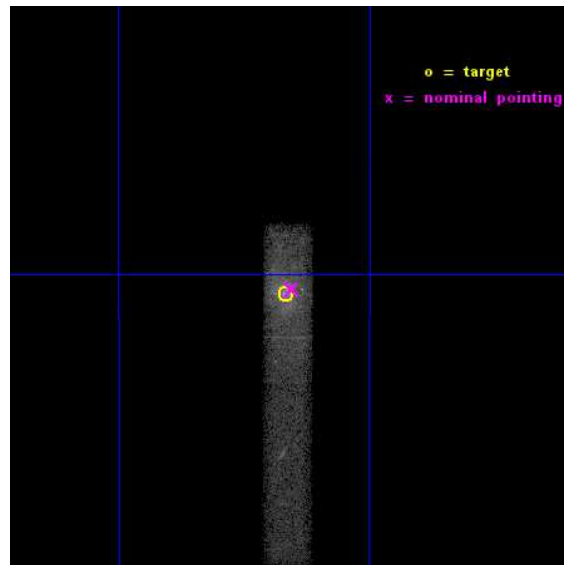
L2 Processing Date : Dec 11 2014

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

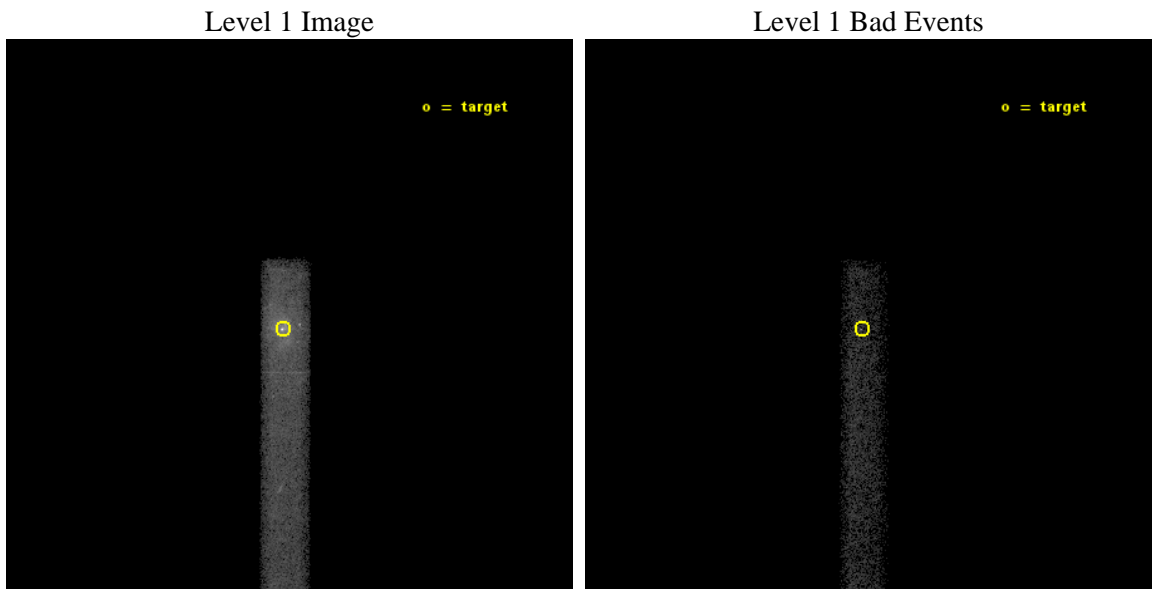
seq_num	601125	Sequence number
obs_id	16213	Observation id
title	Monitoring the Tidal Disruption of the Gas Cloud G2 As It Encounters Sgr A*	Proposal title
observer	Dr. Daryl Haggard	Principal investigator
object	Sgr A*	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.41374741902	Nominal RA [deg]
dec_nom	-29.006197400485	Nominal Dec [deg]
roll_nom	90.155226135393	Nominal Roll [deg]
revision	2	Processing version of data
ontime	49568.315991461	Sum of GTIs [s]
livetime	44955.846174008	Livetime [s]
ontime7	49568.315991461	Sum of GTIs [s]
l2events	50718	Number of level 2 events



2 OBI

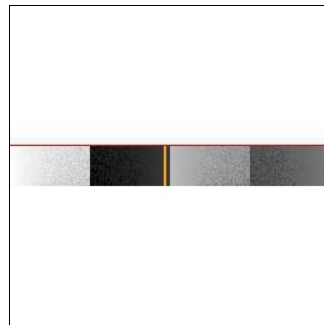
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	49500.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	49568.315991461	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	49568.315991461	Sum of GTIs [s]
date	2014-12-11T09:29:23	Date and time of file creation	l1events	74200	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

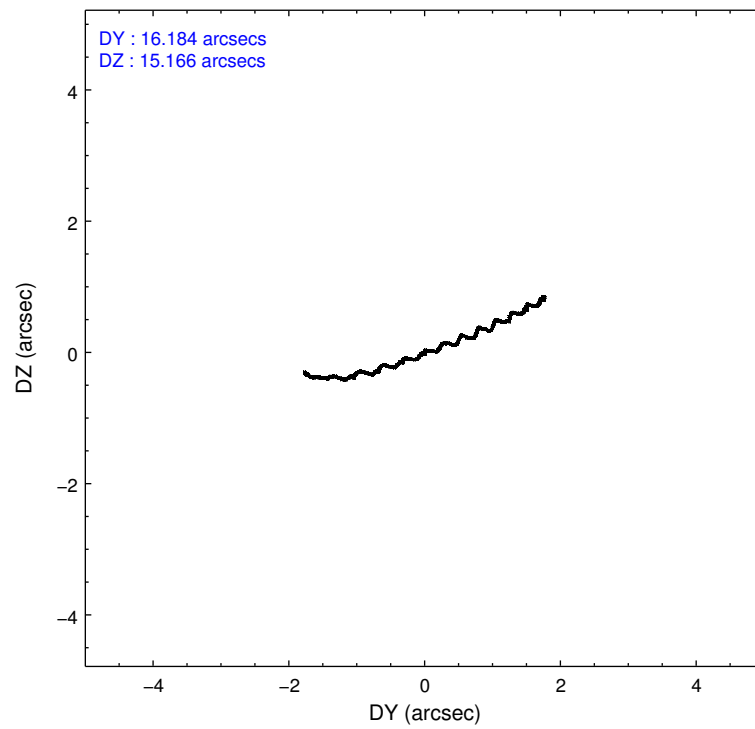
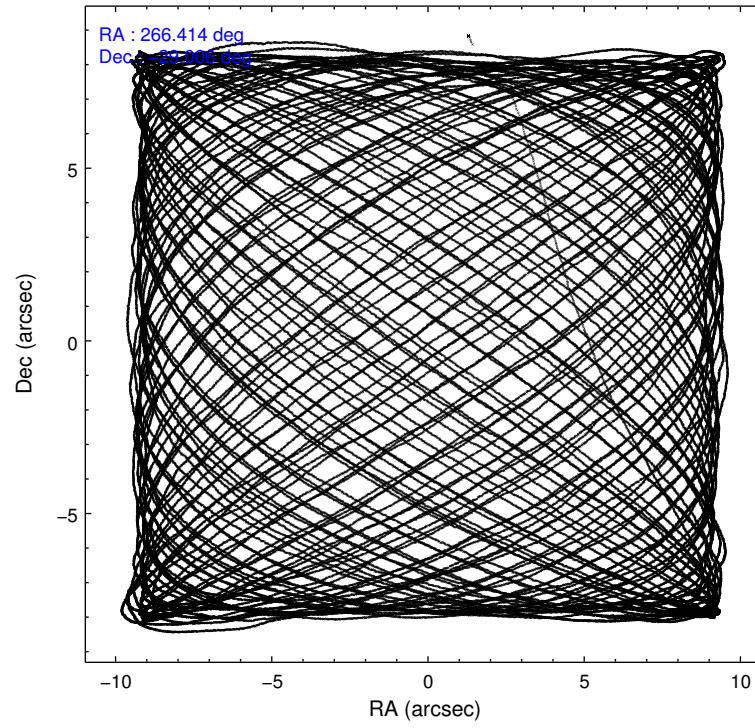
	ccd 7
level 1 events	74200
rejected events	22474
rejected %	30%

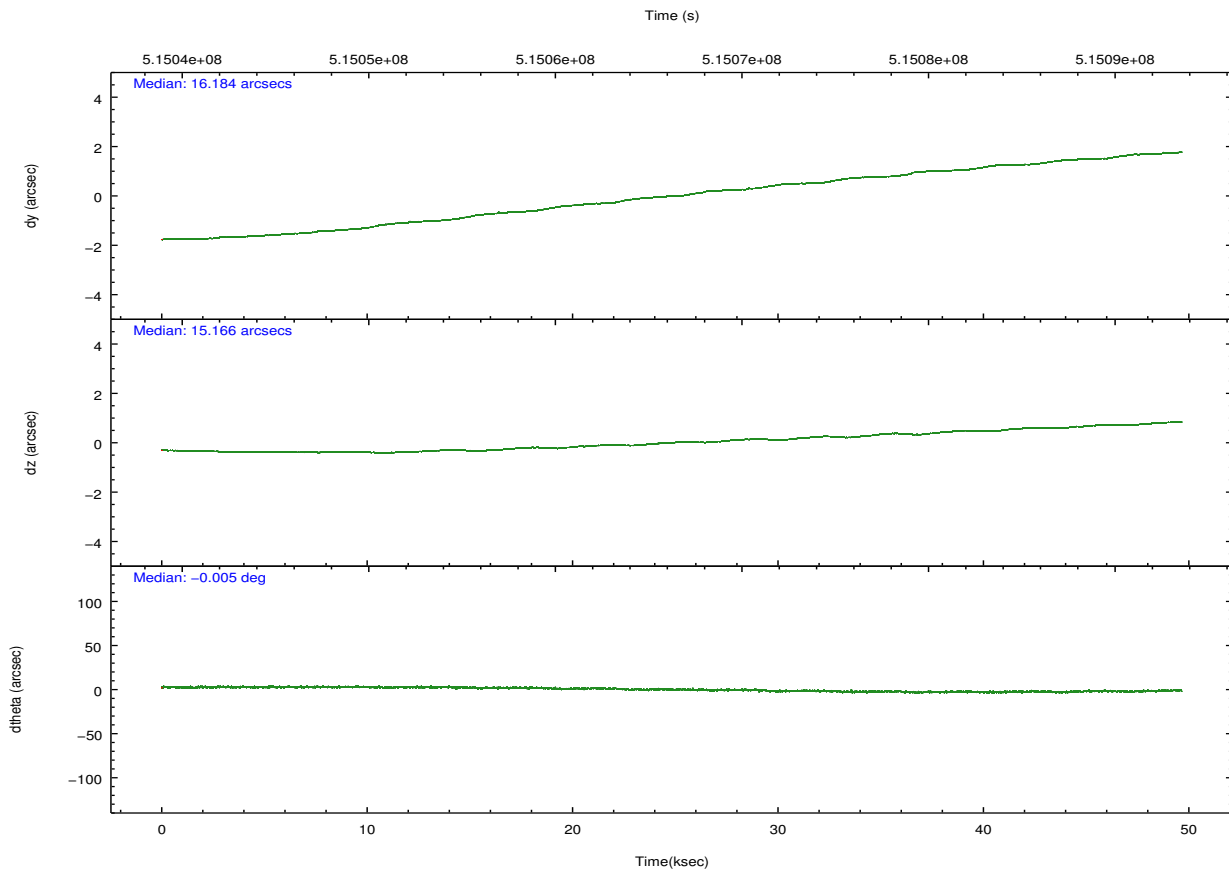
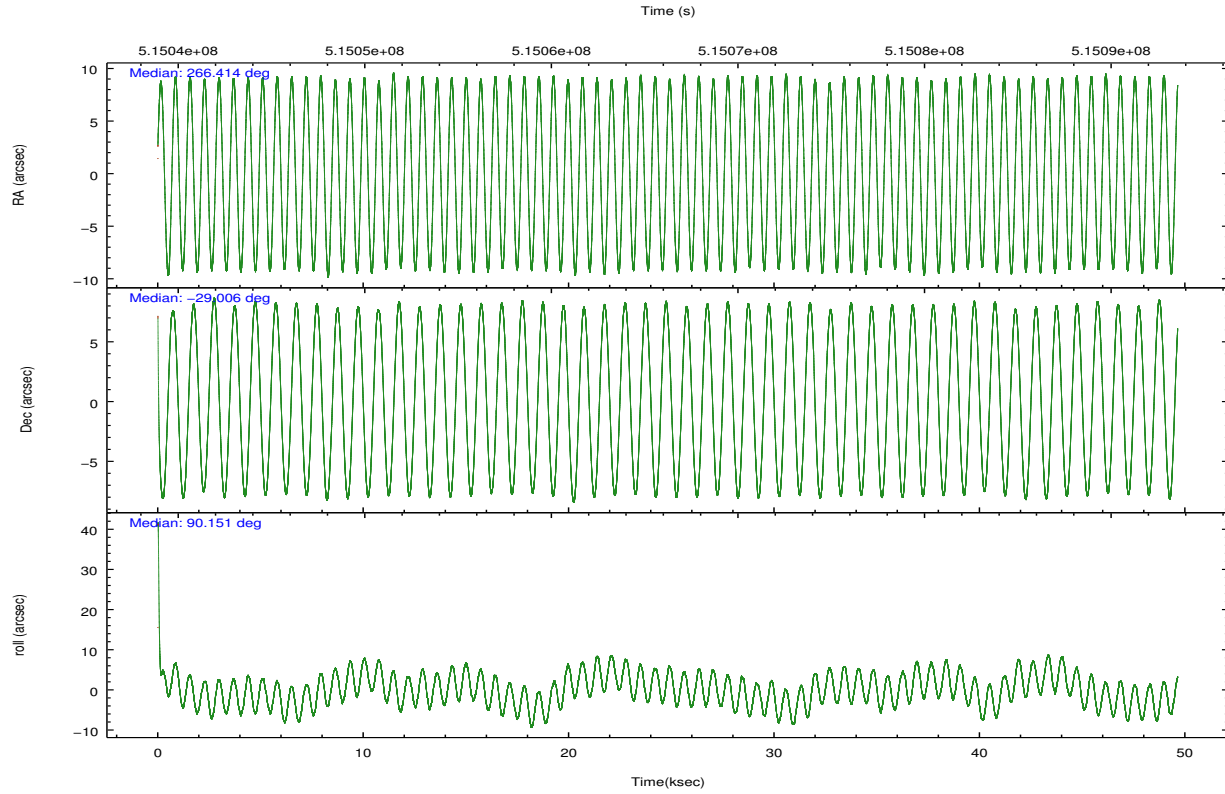
	ccd 7
grade 0 events	8133
	10%
grade 1 events	63
	0%
grade 2 events	11486
	15%
grade 3 events	5902
	7%
grade 4 events	5891
	7%
grade 5 events	4667
	6%
grade 6 events	20315
	27%
grade 7 events	17743
	23%

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	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	266.429825	266.4137474190194	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-29.029635	-29.00619740048526	Subarray start row	449	449
[deg] Pointing Roll	90.006390	90.15522613539251	Subarray row count	128	128
[s] Window start time (MET)	515041267.184000	515041267.184000	Alternating exposures requested	N	N
[s] Window stop time (MET)	515091667.184000	515091667.184000	[s] Primary exposure time	0.000000	0.4
[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)	515041559.184000	515040305.6262			
Observation start date	2014-04-28T03:04:52	2014-04-28T02:45:05			
[s] Observation end time (MET)	515091059.184000	515092437.12907			
Observation end date	2014-04-28T16:49:52	2014-04-28T17:13:57			
Read mode	TIMED	TIMED			

2.3 Aspect





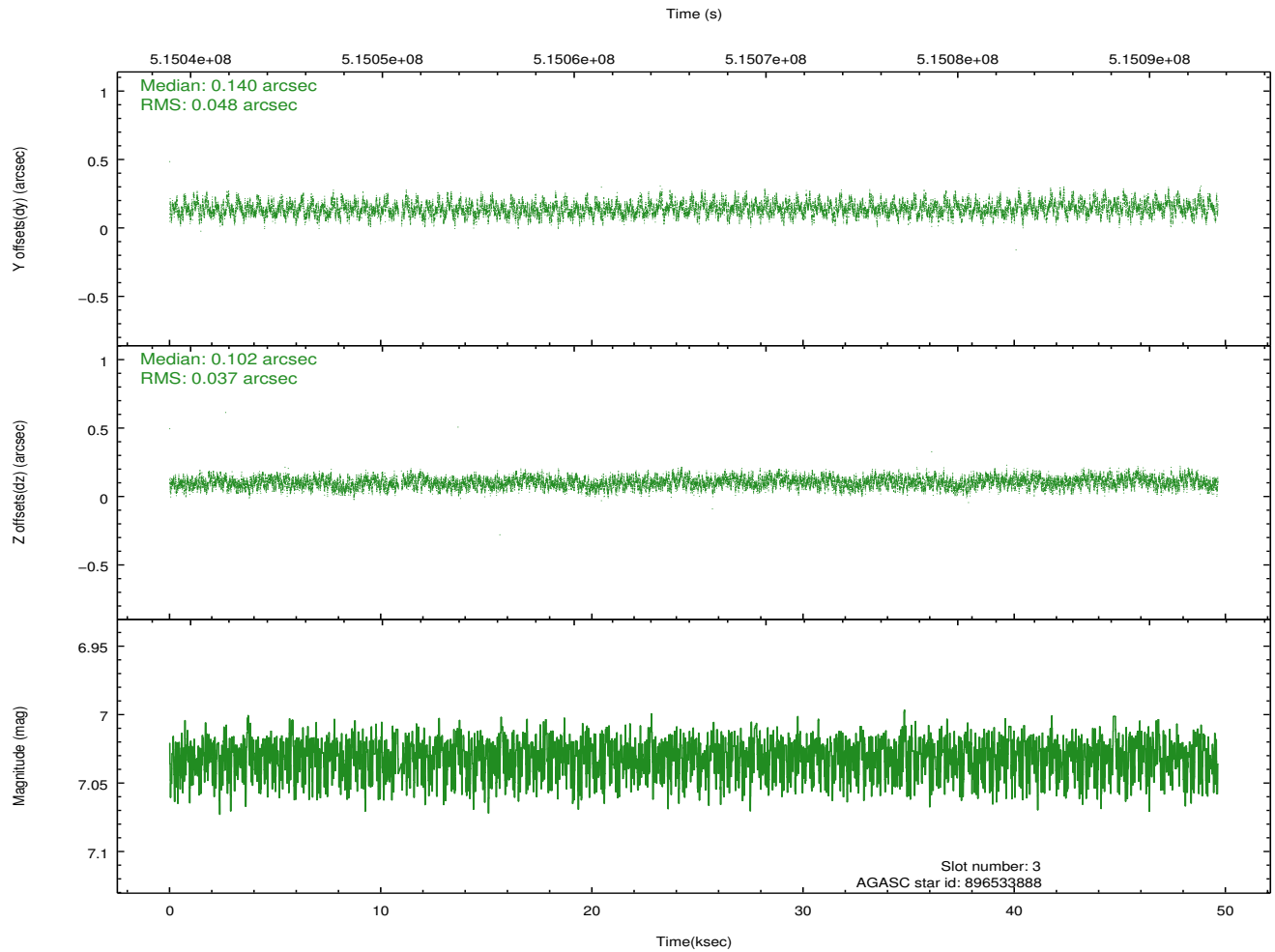
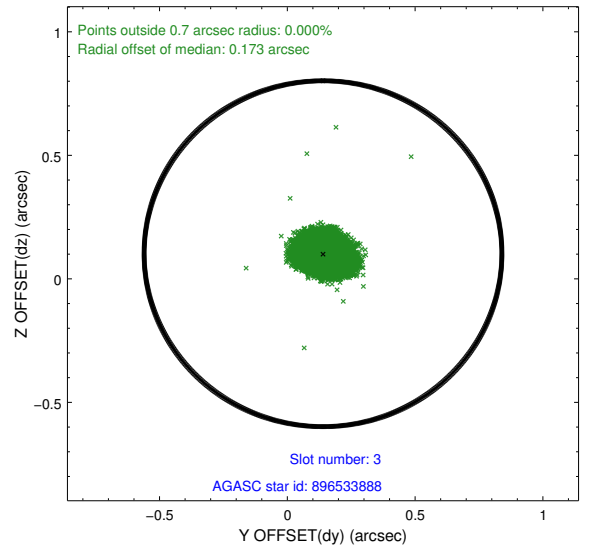
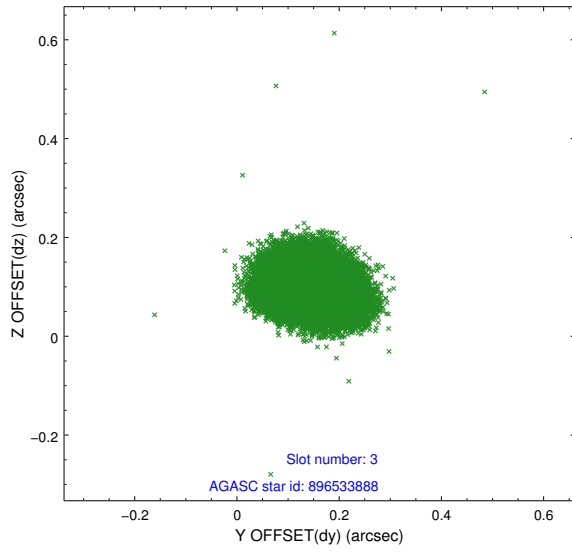
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	12107	-0.037	-0.011	0.013	0.023	0.000000	0.000000	-769.16	-1736.62
1	FID		ACIS-S-5	7.11	12108	-0.086	-0.042	0.022	0.033	0.000000	0.000000	-1822.34	165.33
2	FID		ACIS-S-6	7.22	12108	0.094	0.059	0.014	0.023	0.000000	0.000000	392.57	809.33
3	GUIDE	used	896533888	7.03	24146	0.140	0.102	0.064	0.103	266.666434	-29.392757	-1307.66	-741.89
4	GUIDE	used	896537176	8.02	24208	-0.125	-0.008	0.066	0.108	266.498272	-28.678259	1264.91	-216.16
5	GUIDE	used	896404568	7.84	24211	-0.341	-0.503	0.091	0.147	265.687293	-28.431080	2147.57	2350.33
6	GUIDE	used	896537776	7.52	24212	0.360	0.099	0.065	0.105	266.655684	-29.665673	-2289.80	-706.15
7	GUIDE	used	896538208	7.95	24213	-0.032	0.320	0.088	0.137	267.176969	-28.671626	1281.44	-2359.60

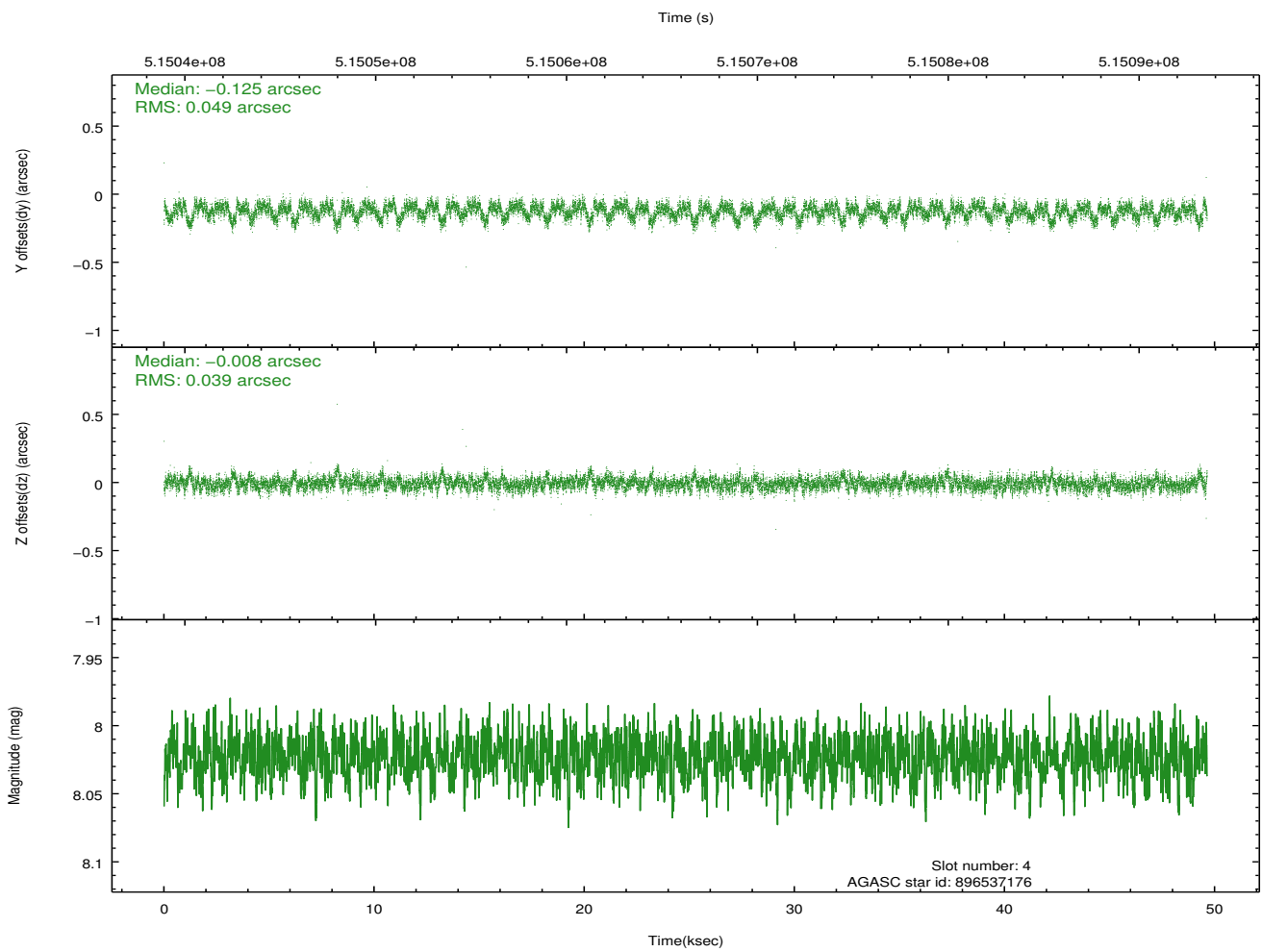
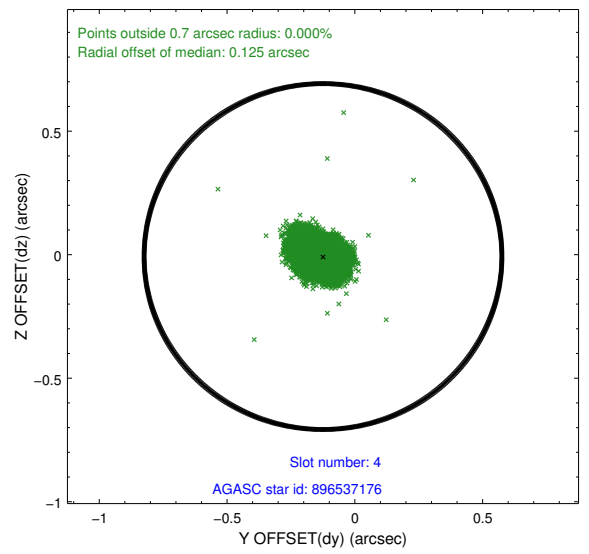
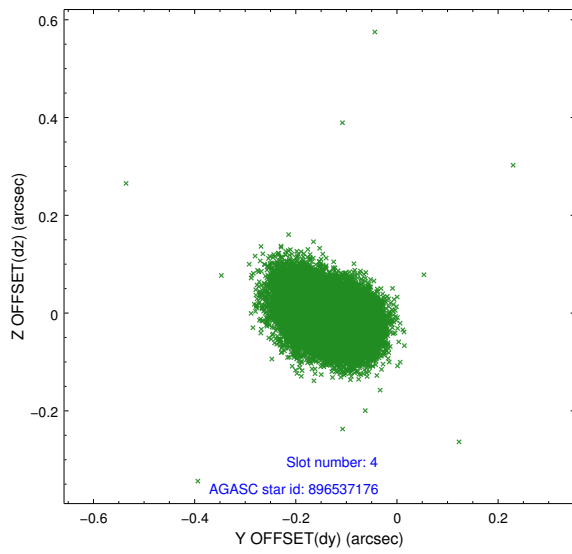
∞

2.4 Star Slots

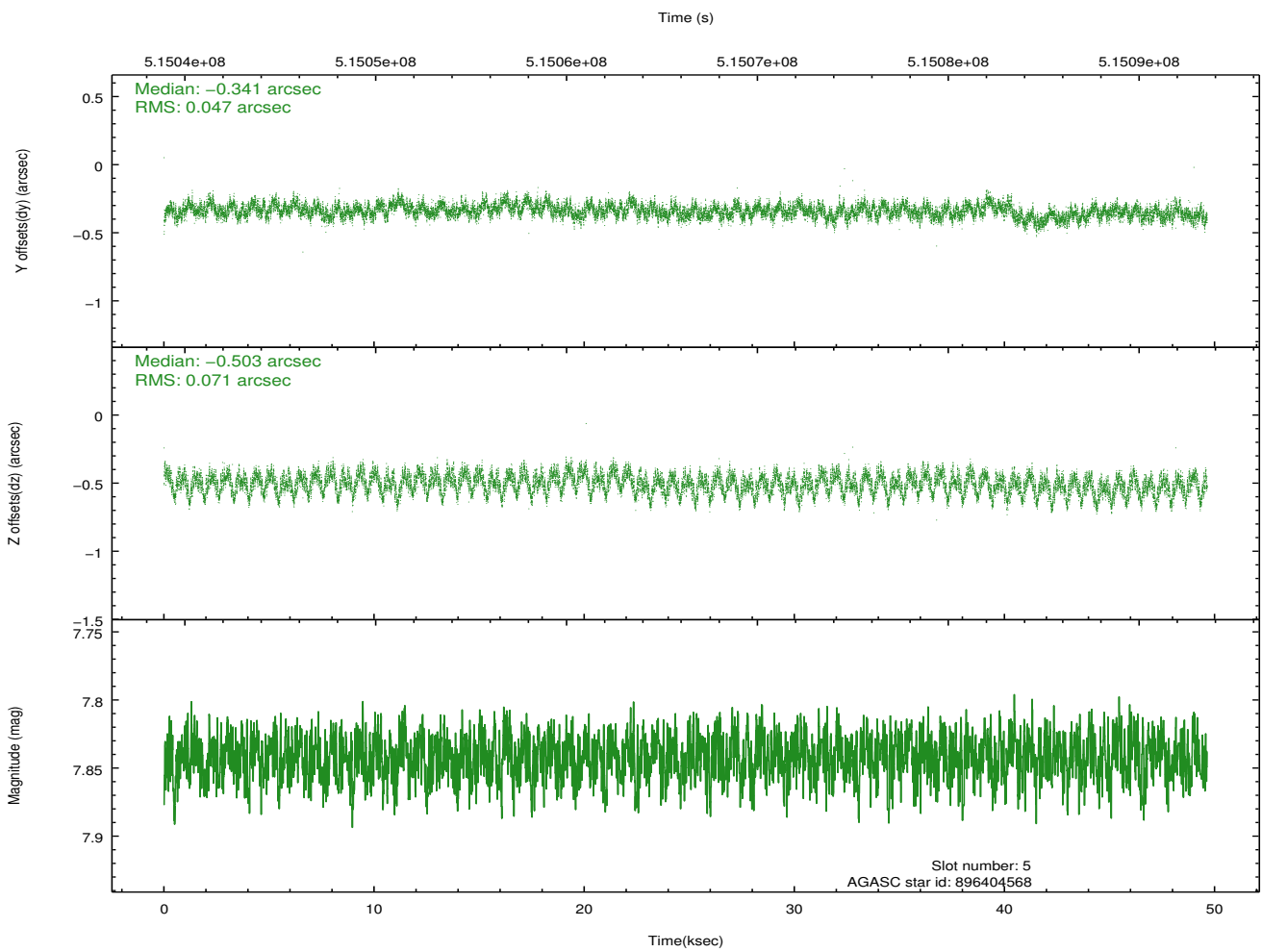
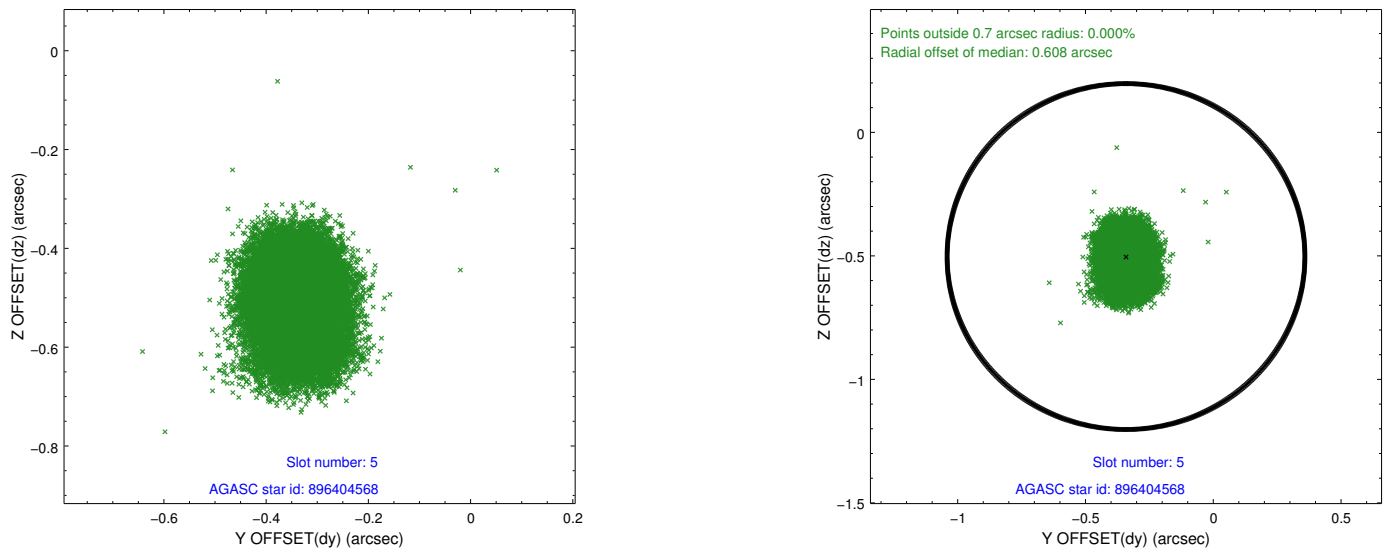
2.4.1 Slot 3



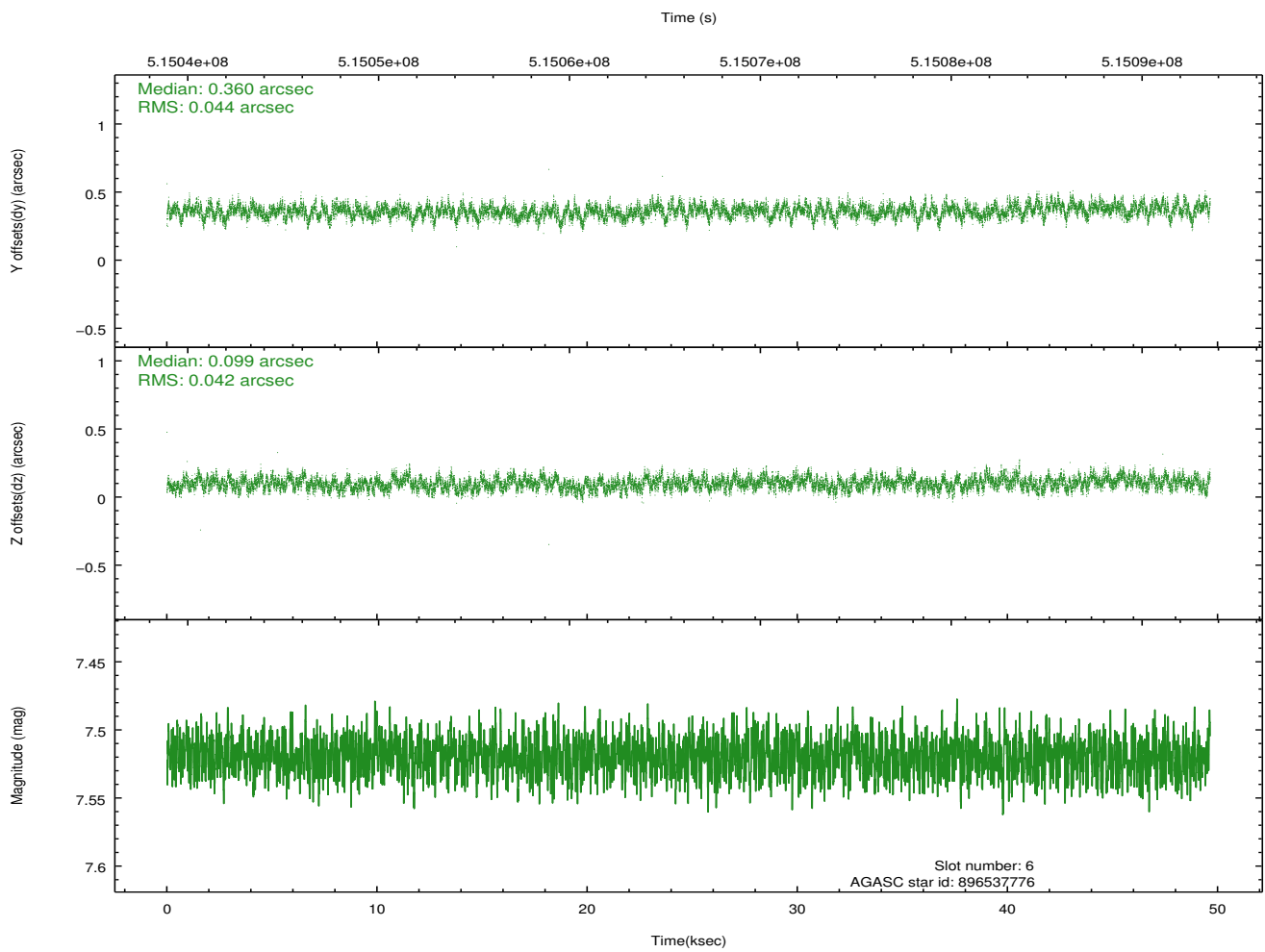
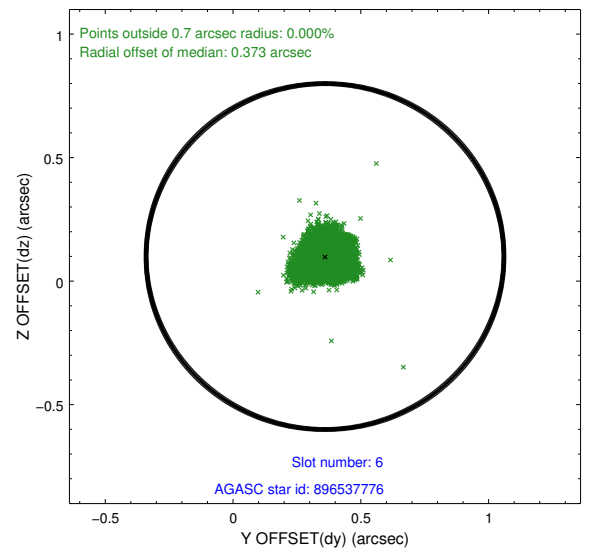
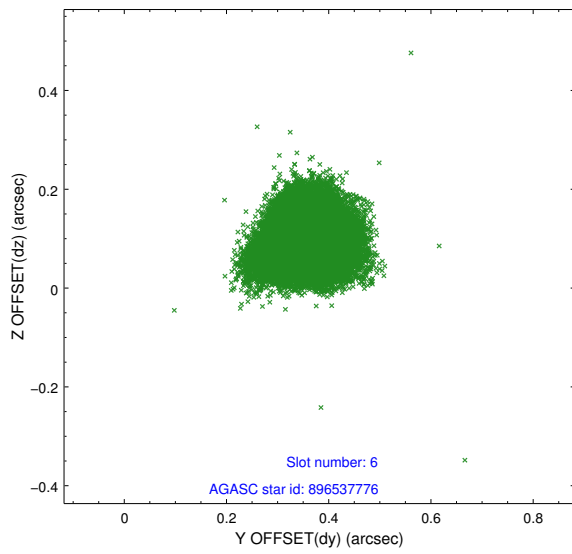
2.4.2 Slot 4



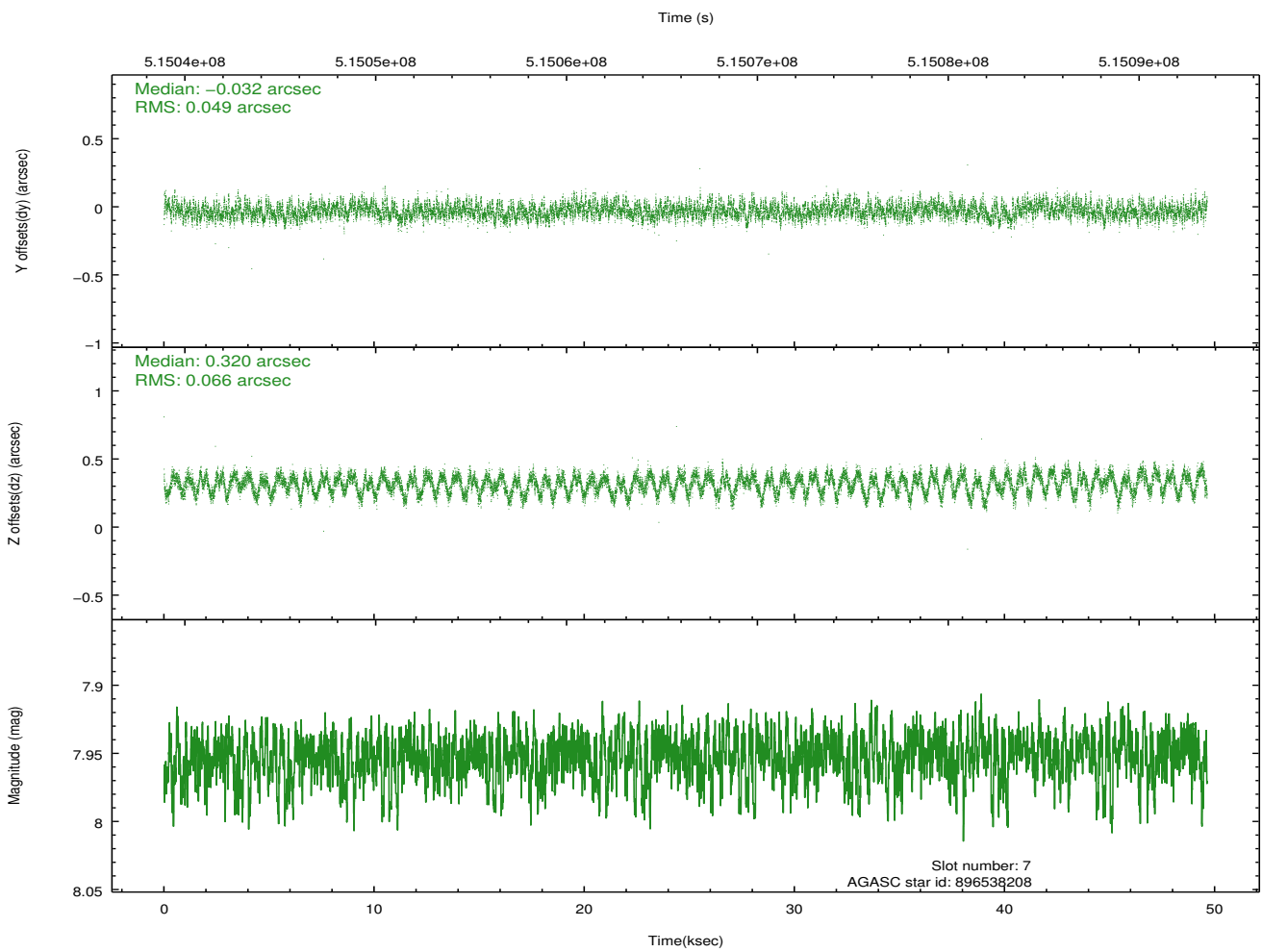
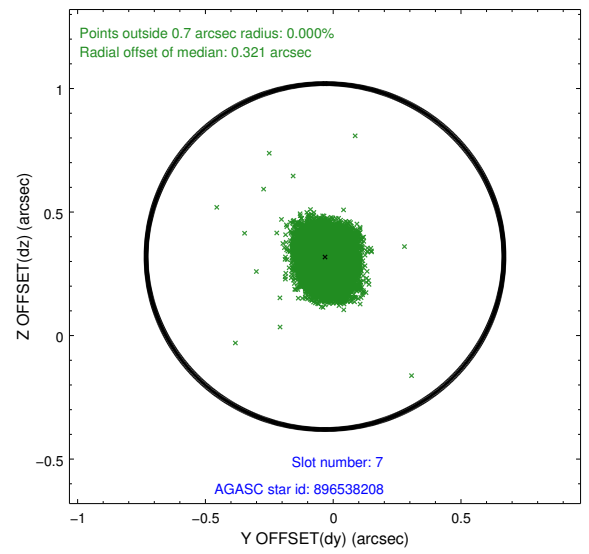
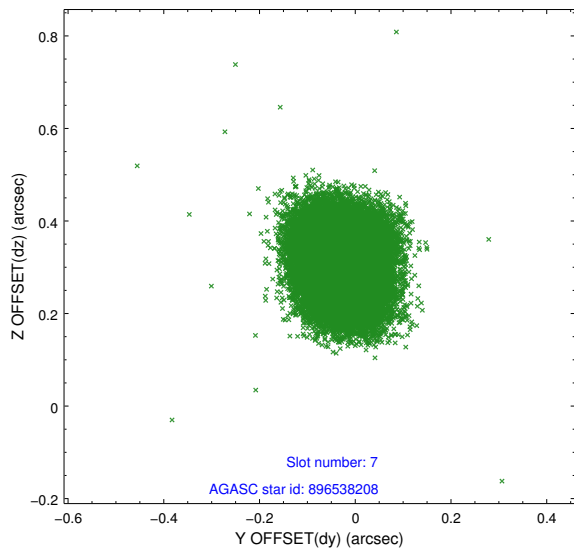
2.4.3 Slot 5



2.4.4 Slot 6

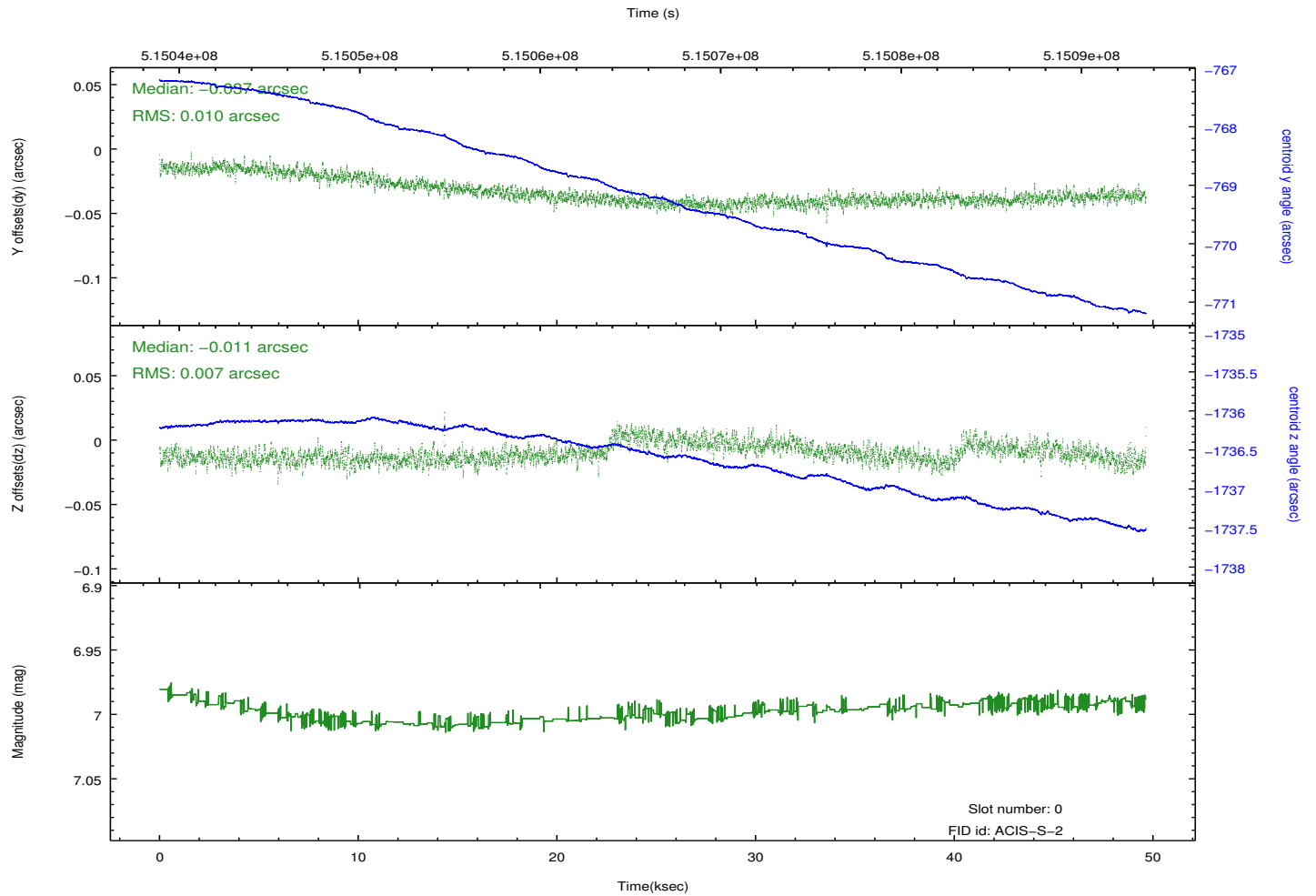
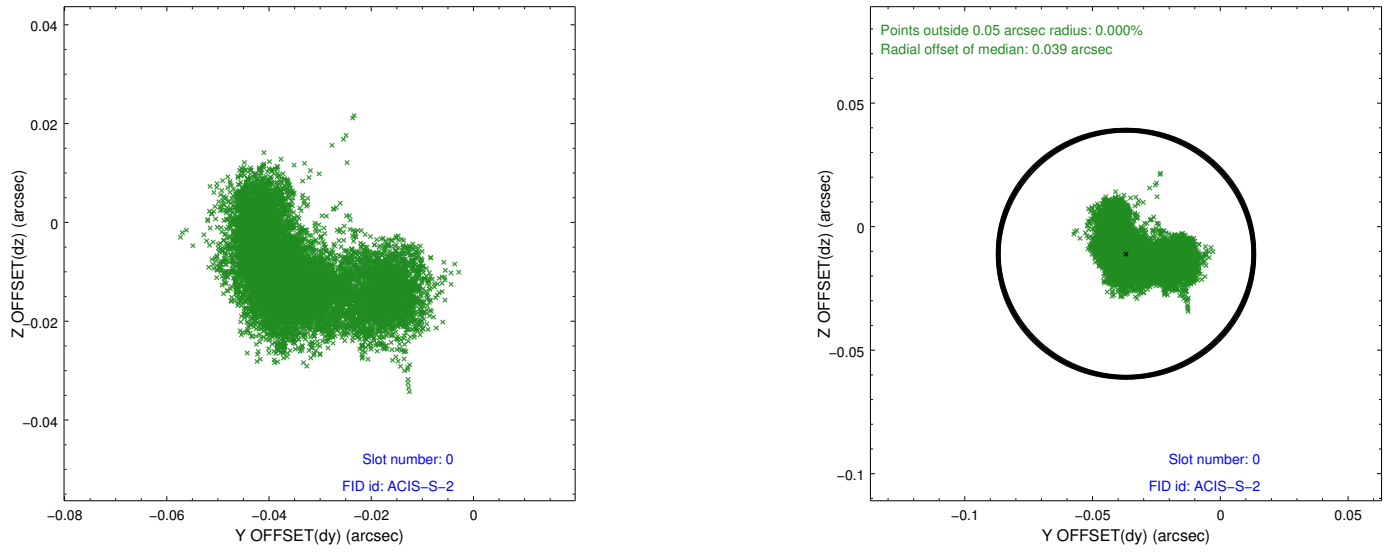


2.4.5 Slot 7

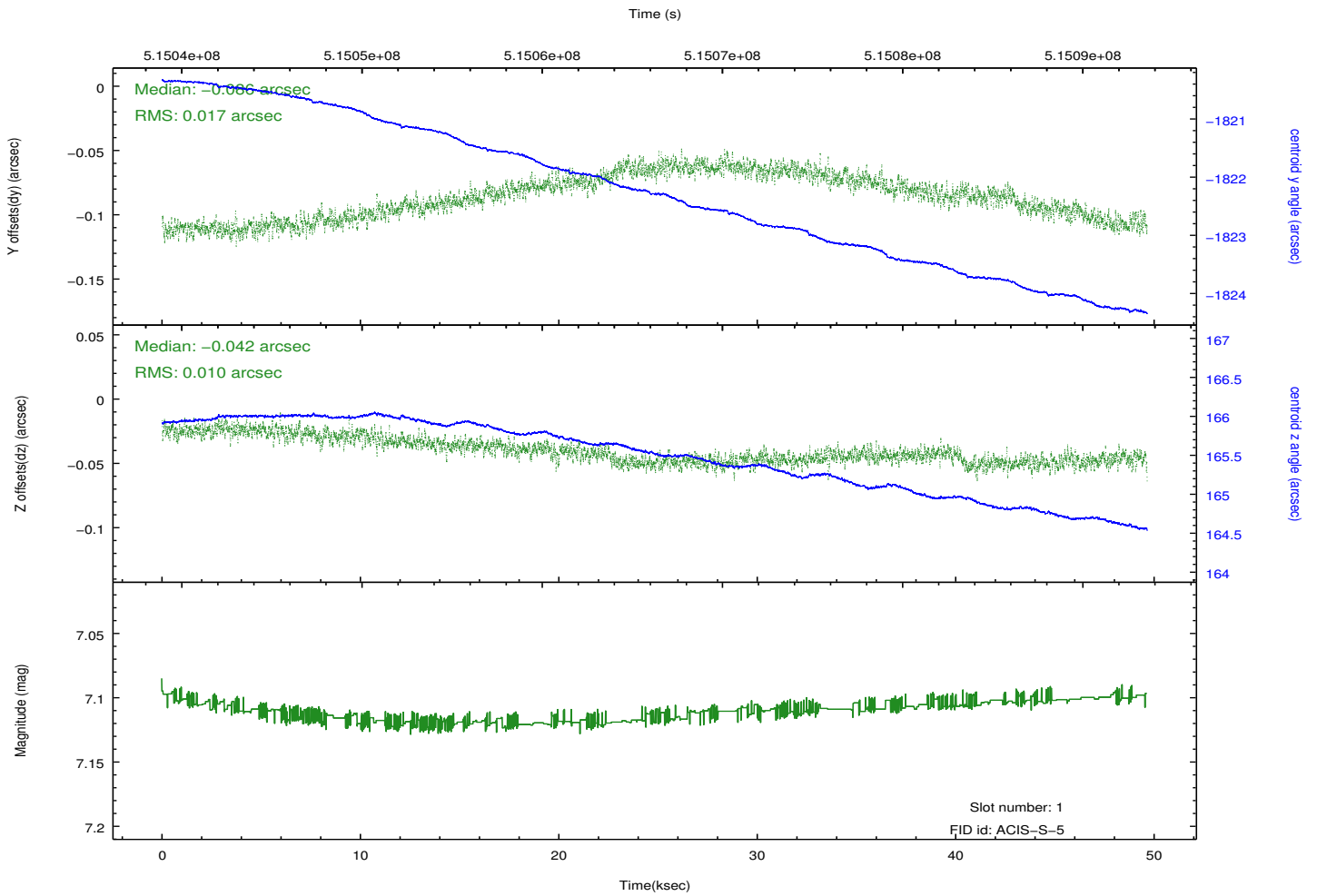
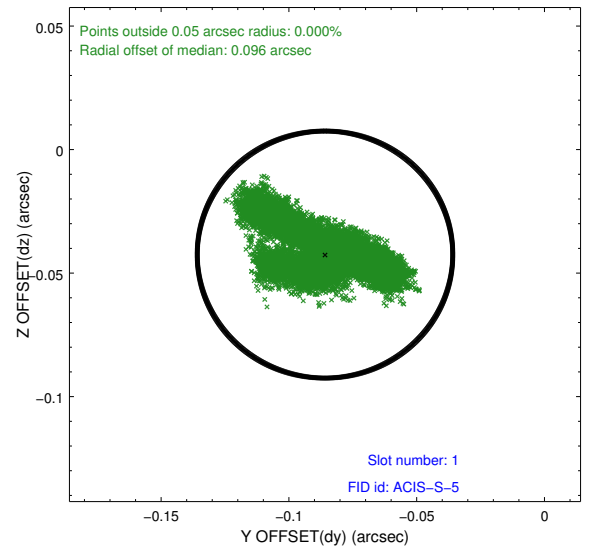
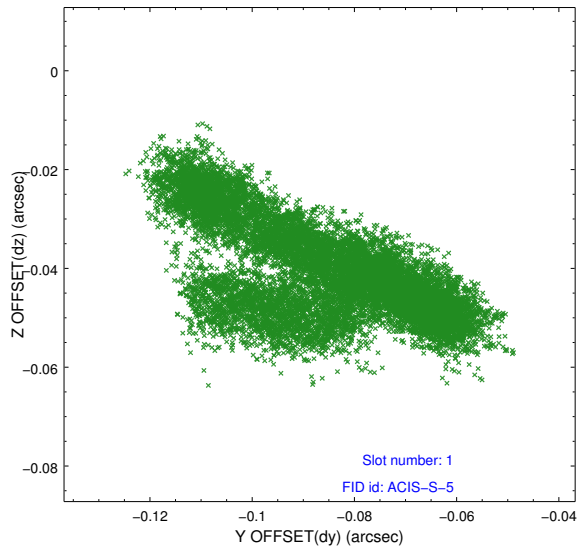


2.5 FID Slots

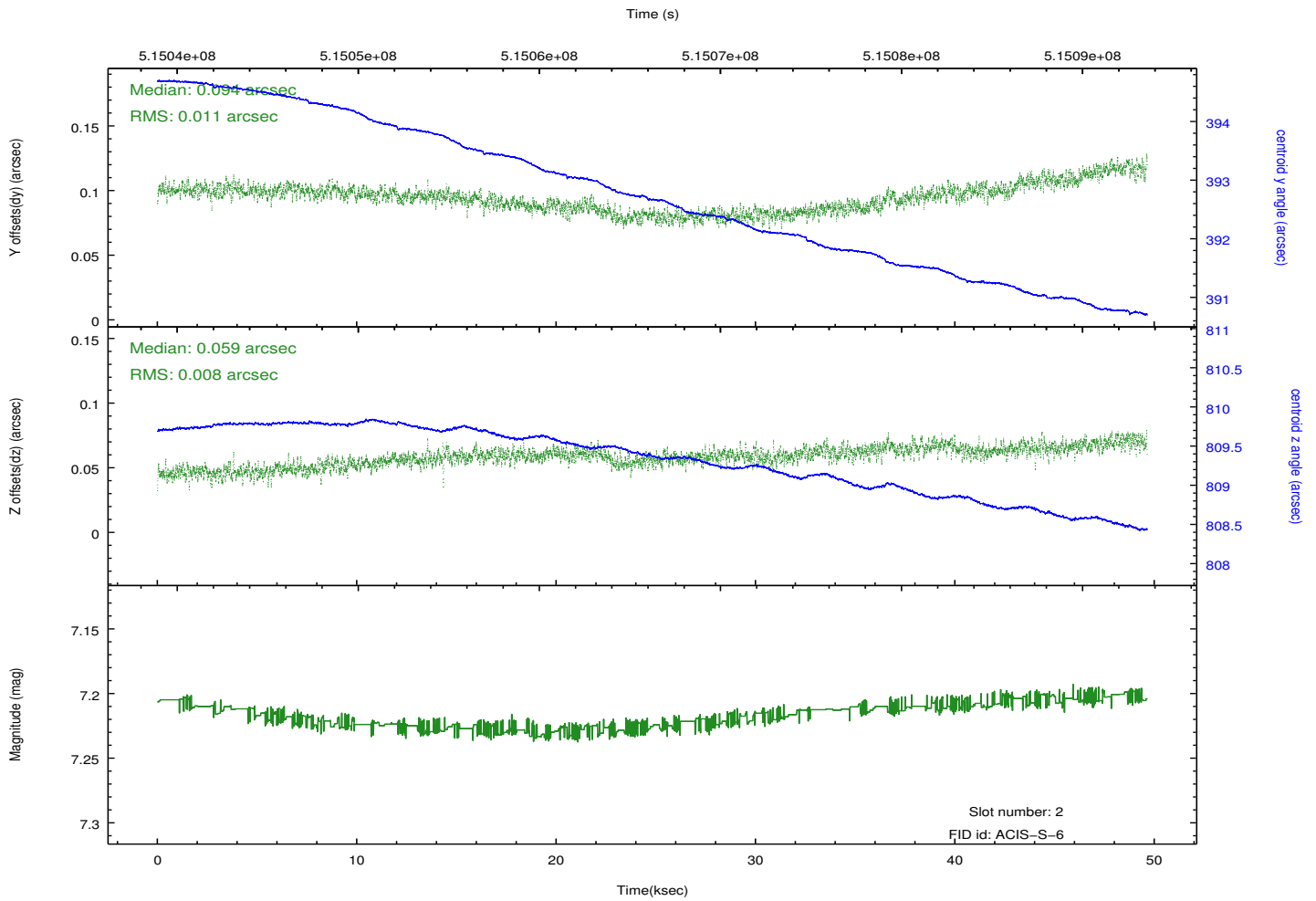
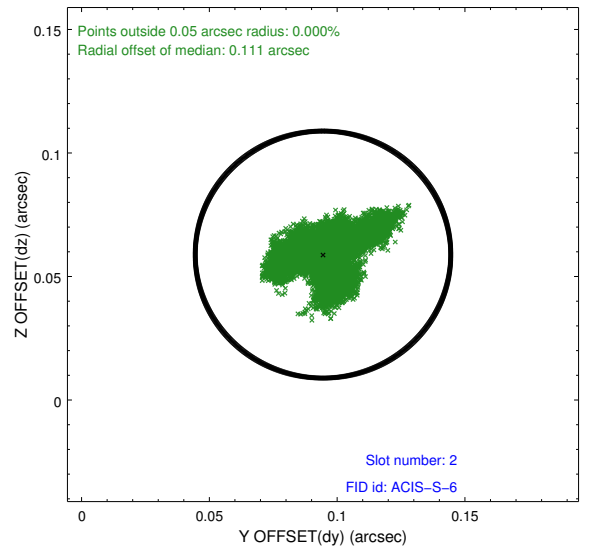
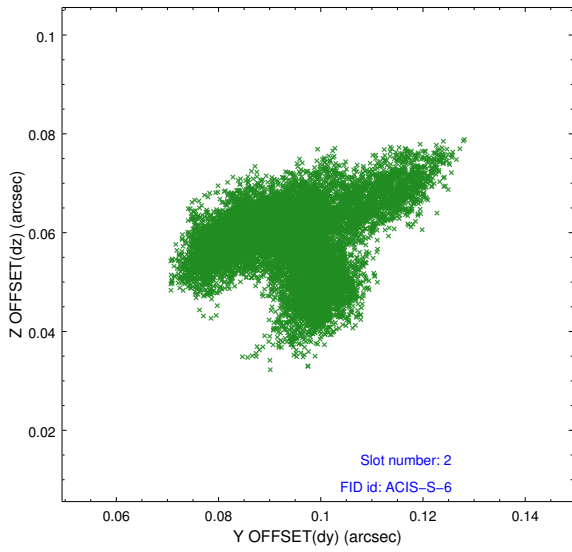
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	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	49.568315991461

A.2 Comments

Joint proposal with NRAO.

Observation coordinated with VLA.

Window preference met.

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.