

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16211 - L2 Version 2
Chandra X-Ray Center

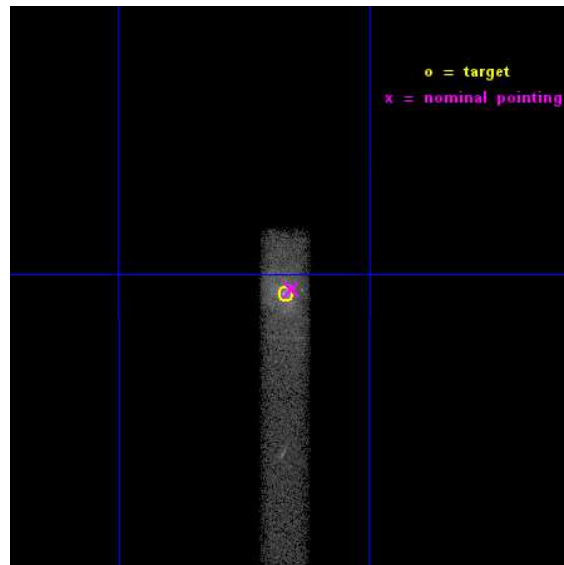
L2 Processing Date : Dec 10 2014

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

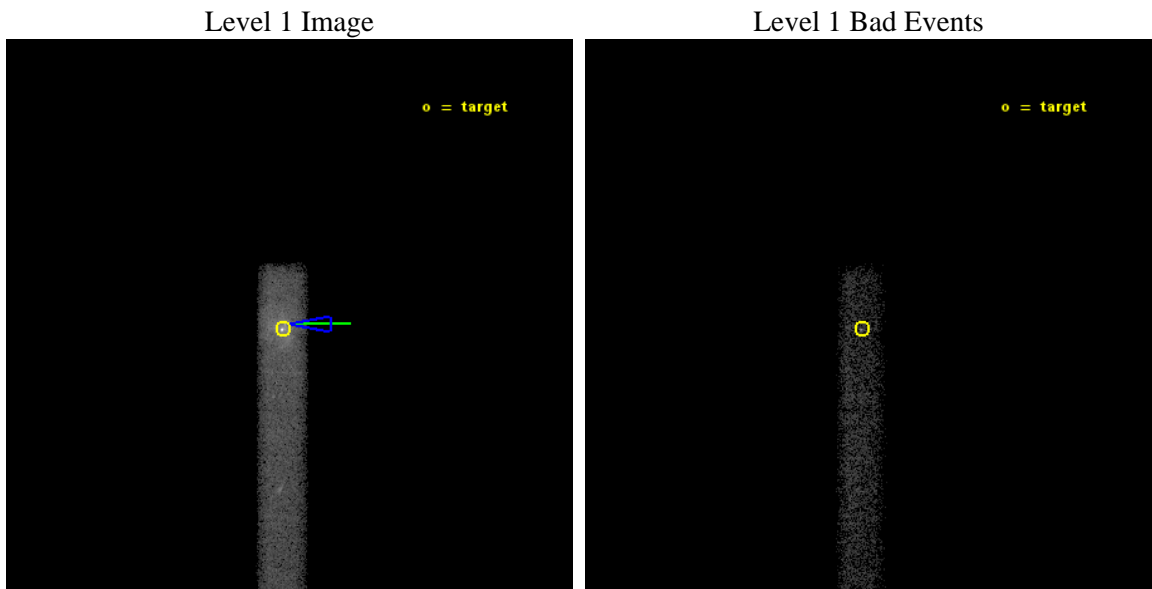
seq_num	601123	Sequence number
obs_id	16211	Observation id
title	Monitoring the Tidal Disruption of the Gas Cloud G2 As It Encounters Sgr A*	Proposal title
observer	Dr. Daryl Haggard	Principal investigator
object	Sgr A*	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	266.416667	Observer's specified target RA [deg]
dec_targ	-29.007806	Observer's specified target Dec [deg]
ra_nom	266.41374128505	Nominal RA [deg]
dec_nom	-29.006191573765	Nominal Dec [deg]
roll_nom	90.155211569044	Nominal Roll [deg]
revision	2	Processing version of data
ontime	46070.368473291	Sum of GTIs [s]
livetime	41783.392411837	Livetime [s]
ontime7	46070.368473291	Sum of GTIs [s]
l2events	46987	Number of level 2 events



2 OBI

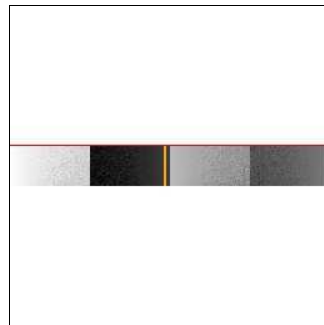
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	46000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	46070.368473291	Sum of GTIs [s]
caldbver	4.6.4	 	ontime7	46070.368473291	Sum of GTIs [s]
date	2014-12-10T22:21:45	Date and time of file creation	l1events	67982	Number of level 1 events
revision	2	Processing version of data			

2.1.4 Events

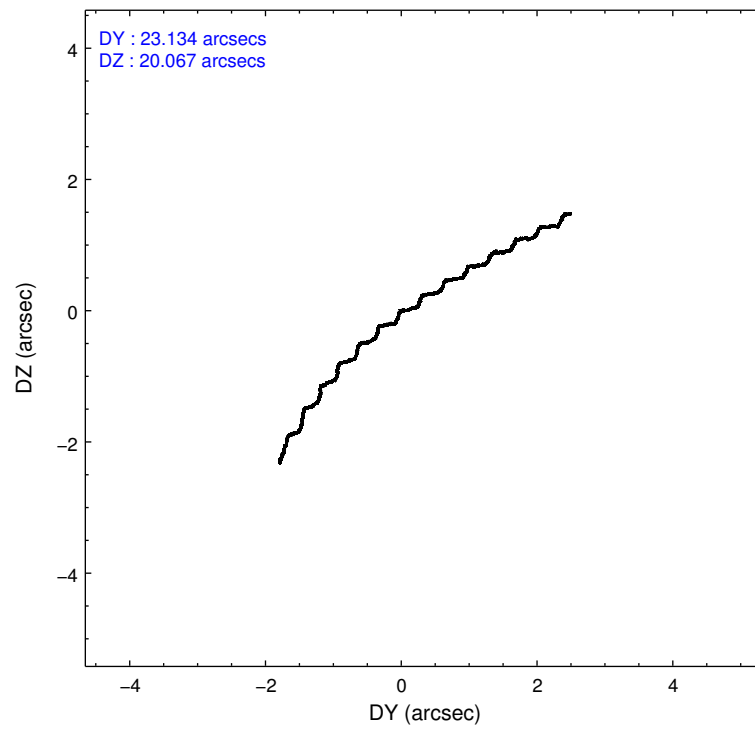
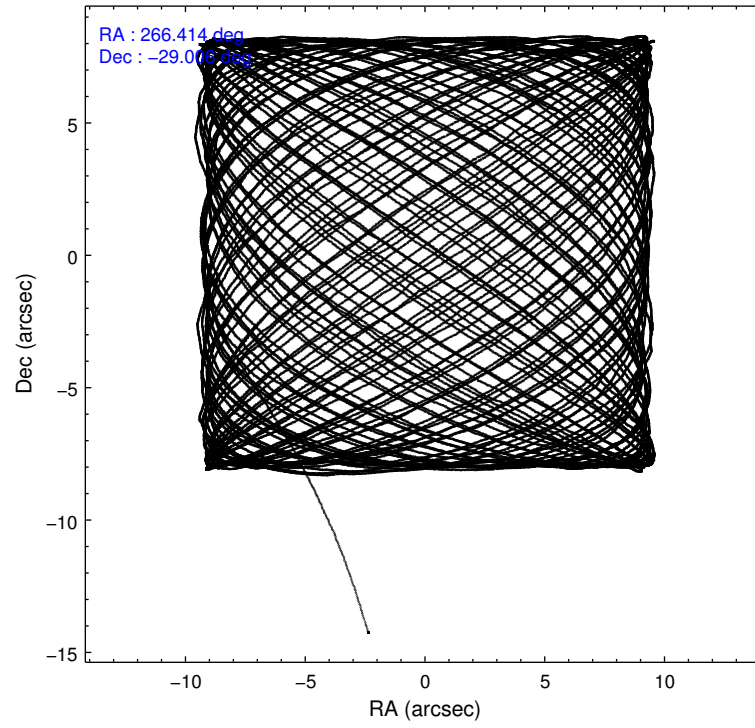
	ccd 7
level 1 events	67982
rejected events	20084
rejected %	29%

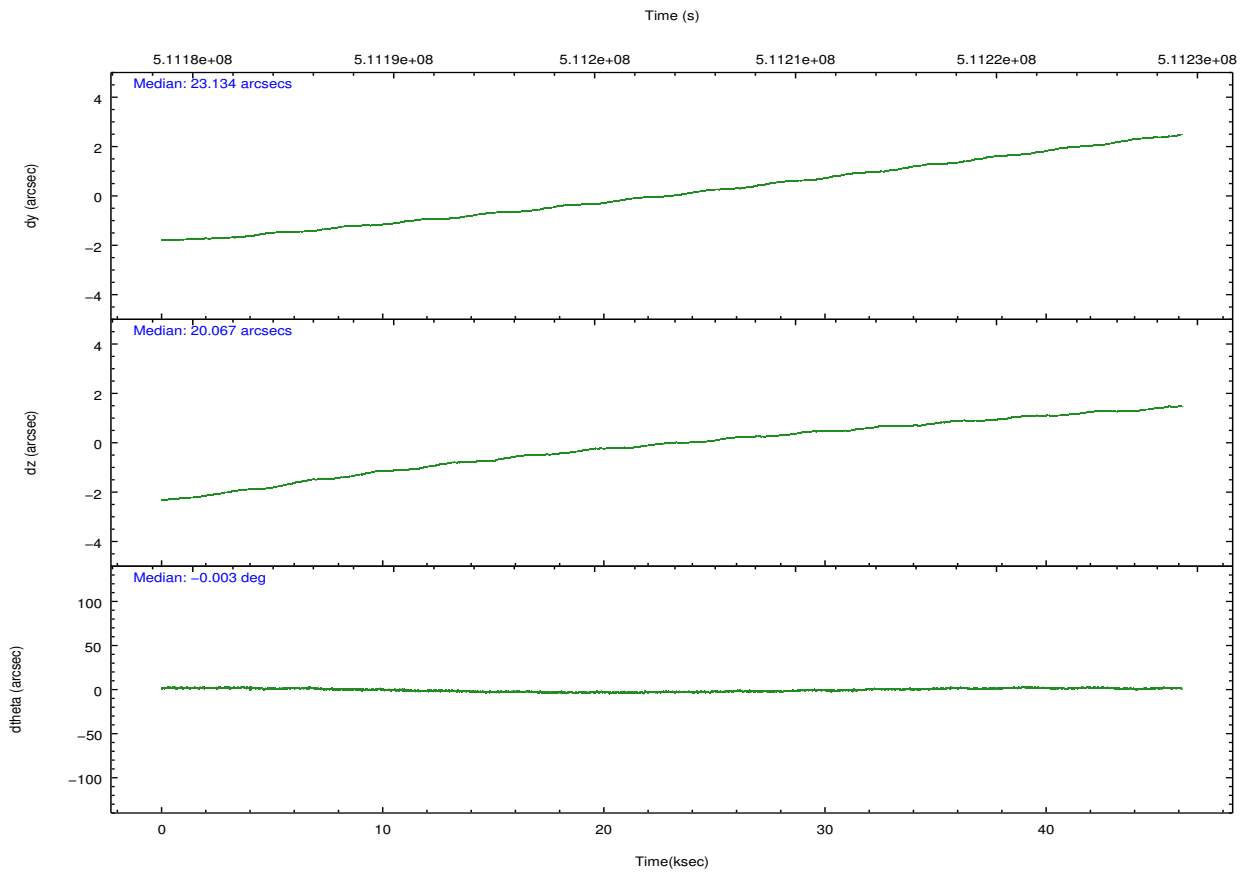
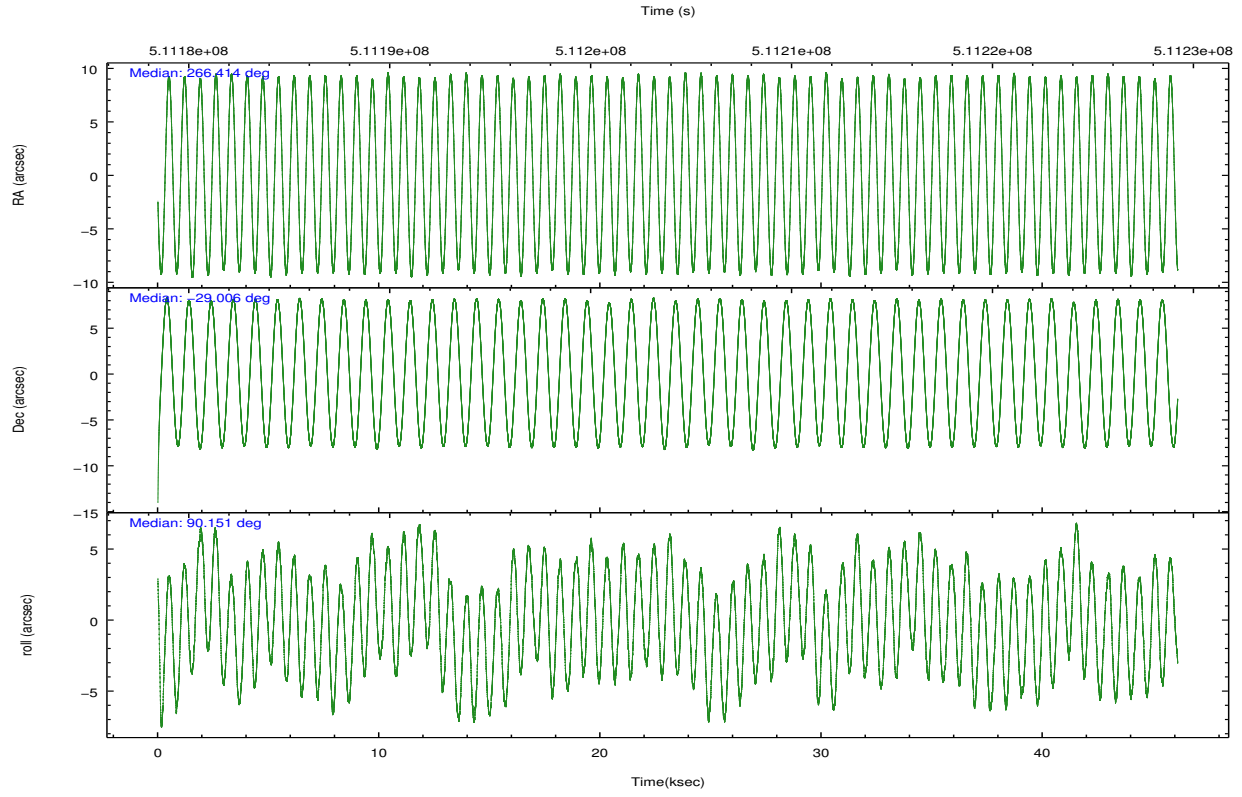
	ccd 7
grade 0 events	7636
	11%
grade 1 events	75
	0%
grade 2 events	10617
	15%
grade 3 events	5653
	8%
grade 4 events	5426
	7%
grade 5 events	4265
	6%
grade 6 events	18568
	27%
grade 7 events	15742
	23%

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	266.413741285049	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	-29.029635	-29.0061915737647	Subarray start row	449	449
[deg] Pointing Roll	90.006390	90.15521156904363	Subarray row count	128	128
[deg] Roll angle	90.000000	90.000000	Alternating exposures requested	N	N
[deg] Roll tolerance	10.000000	10.000000	[s] Primary exposure time	0.000000	0.4
Roll constraint allows 180D rotation	N	N			
[s] Window start time (MET)	510451267.184000	510451267.184000			
[s] Window stop time (MET)	511401667.184000	511401667.184000			
[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)	511180898.184000	511179507.1008			
Observation start date	2014-03-14T10:40:31	2014-03-14T10:18:27			
[s] Observation end time (MET)	511226898.184000	511227934.25347			
Observation end date	2014-03-14T23:27:11	2014-03-14T23:45:34			
Read mode	TIMED	TIMED			

2.3 Aspect





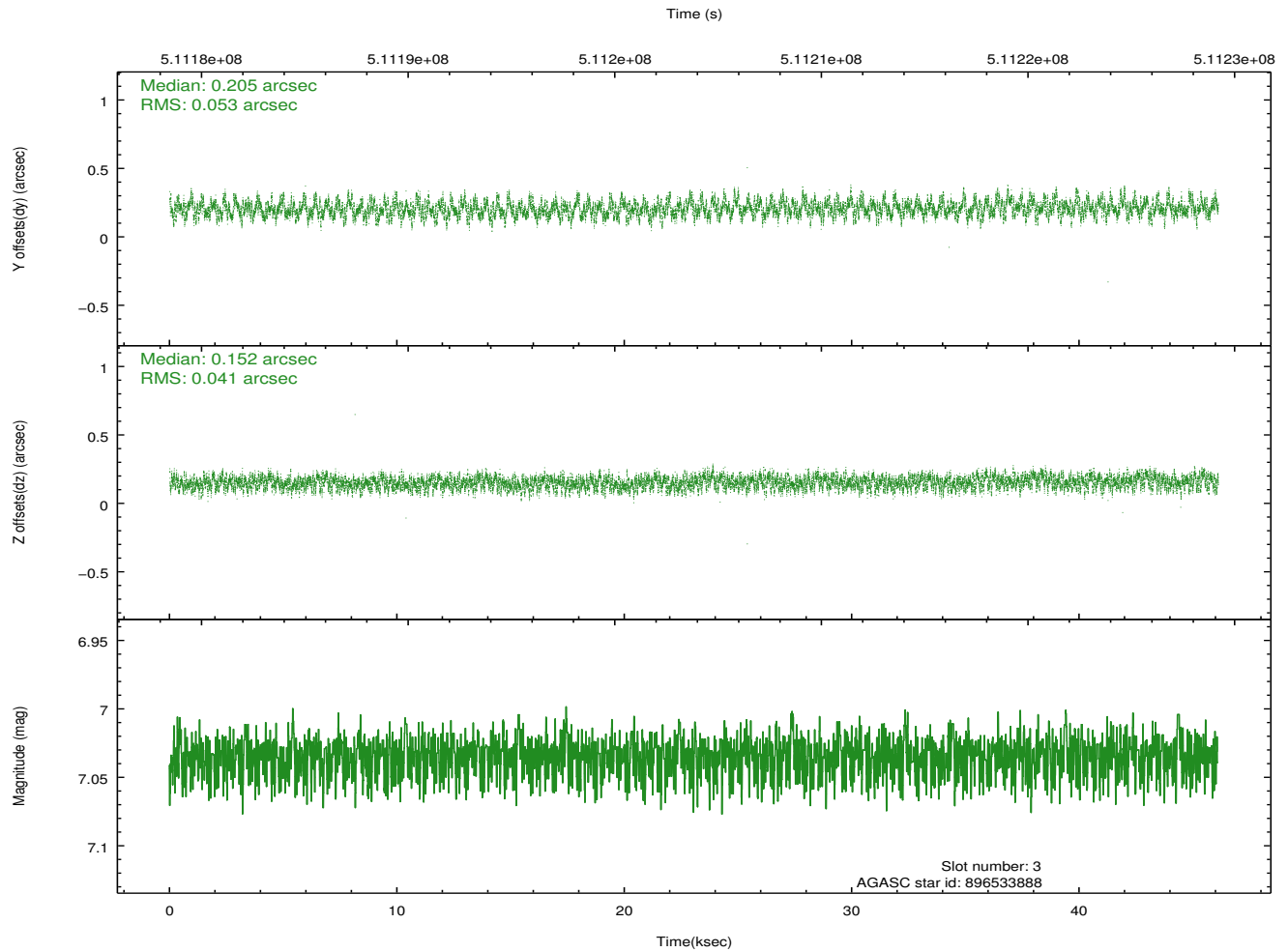
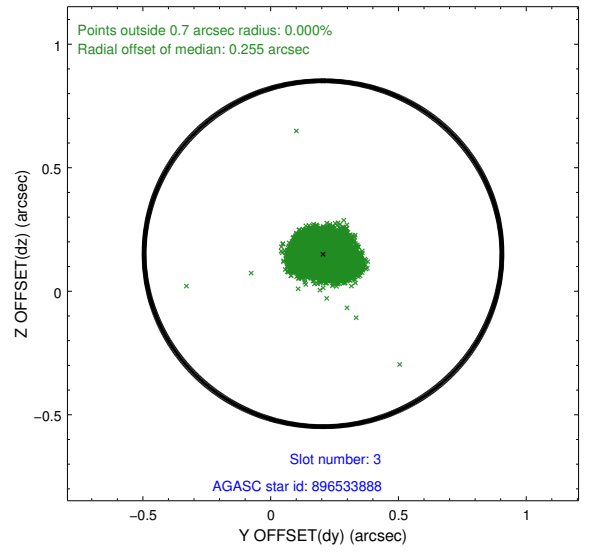
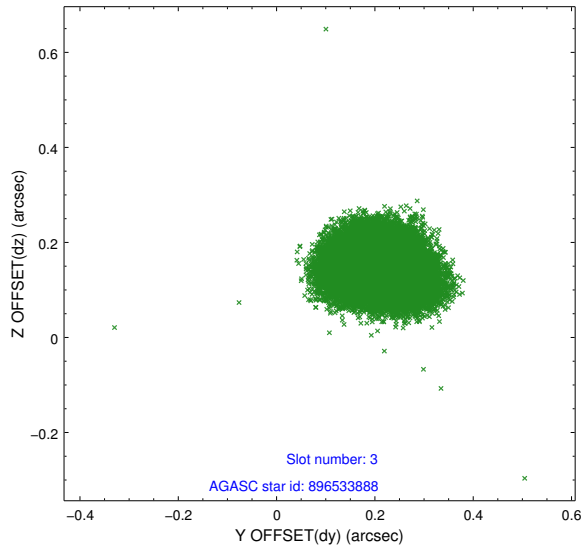
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	11248	-0.034	-0.019	0.029	0.037	0.000000	0.000000	-776.52	-1741.37
1	FID		ACIS-S-5	7.10	11248	-0.119	-0.056	0.041	0.068	0.000000	0.000000	-1829.69	160.60
2	FID		ACIS-S-6	7.20	11248	0.139	0.073	0.048	0.073	0.000000	0.000000	385.29	804.59
3	GUIDE	used	896533888	7.03	22495	0.205	0.152	0.072	0.114	266.666434	-29.392757	-1307.61	-741.86
4	GUIDE	used	896537176	8.02	22423	-0.165	-0.031	0.075	0.128	266.498272	-28.678259	1264.87	-216.19
5	GUIDE	used	896404568	7.85	22492	-0.490	-0.662	0.094	0.149	265.687293	-28.431080	2147.42	2350.15
6	GUIDE	used	896537776	7.52	22493	0.468	0.168	0.073	0.118	266.655684	-29.665673	-2289.69	-706.09
7	GUIDE	used	896538208	7.96	22487	-0.013	0.375	0.079	0.128	267.176969	-28.671626	1281.44	-2359.56

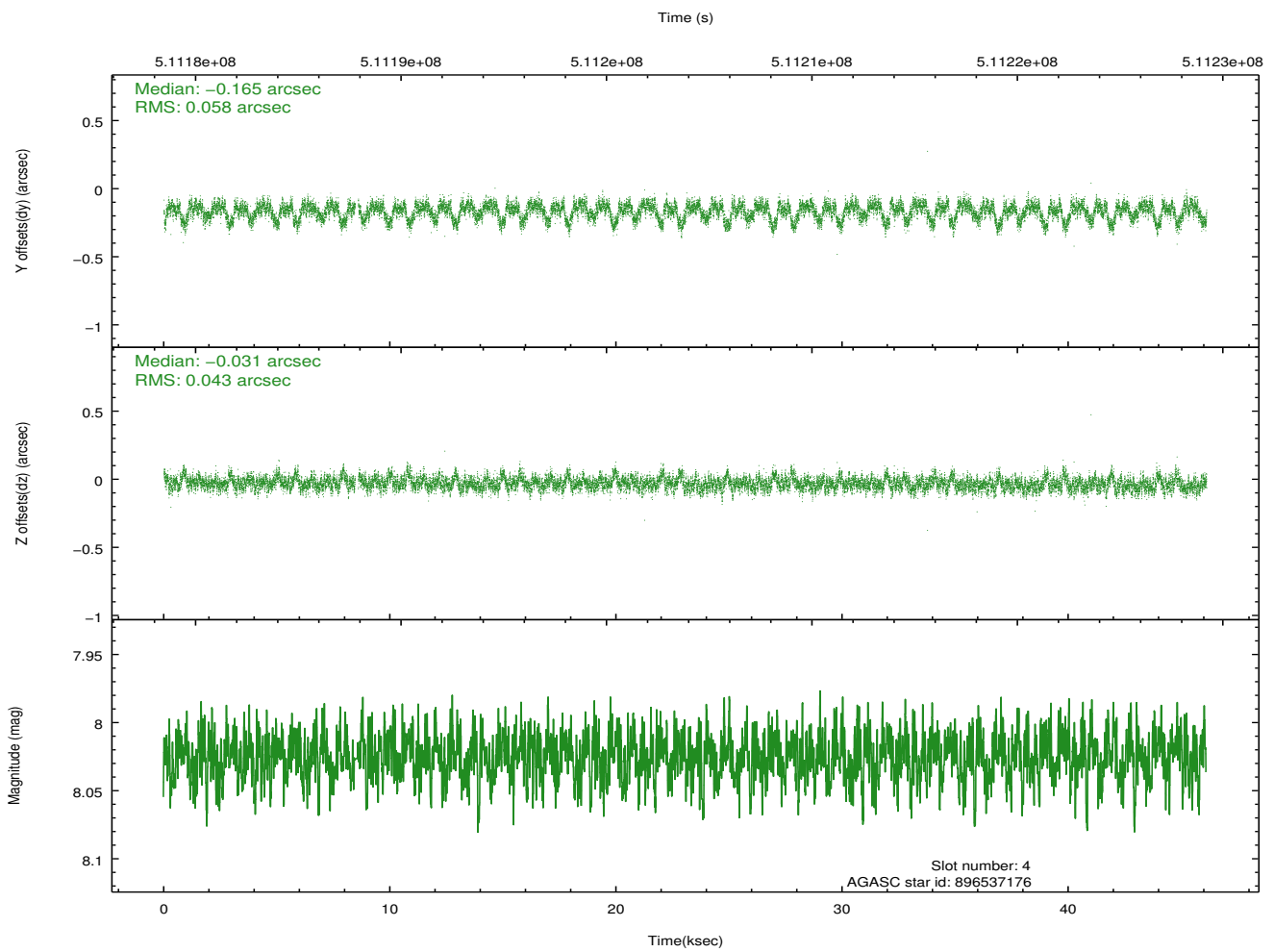
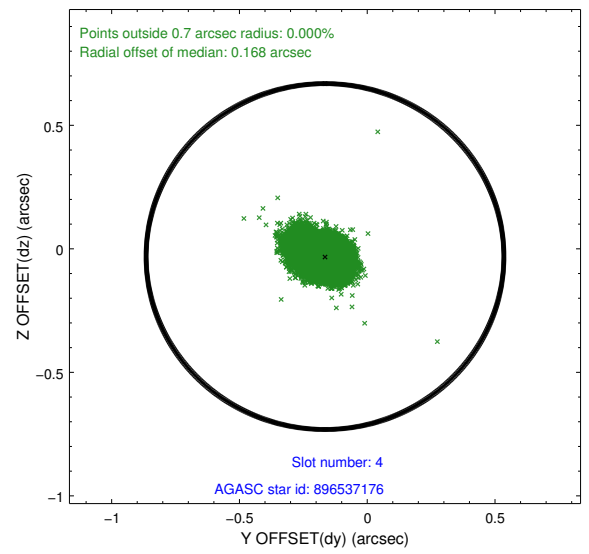
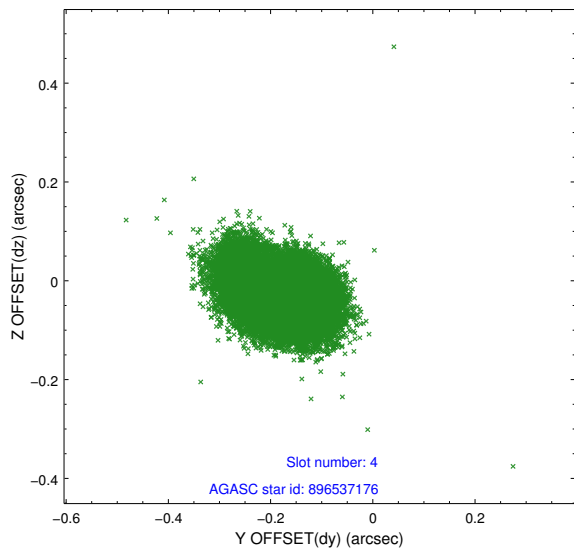
∞

2.4 Star Slots

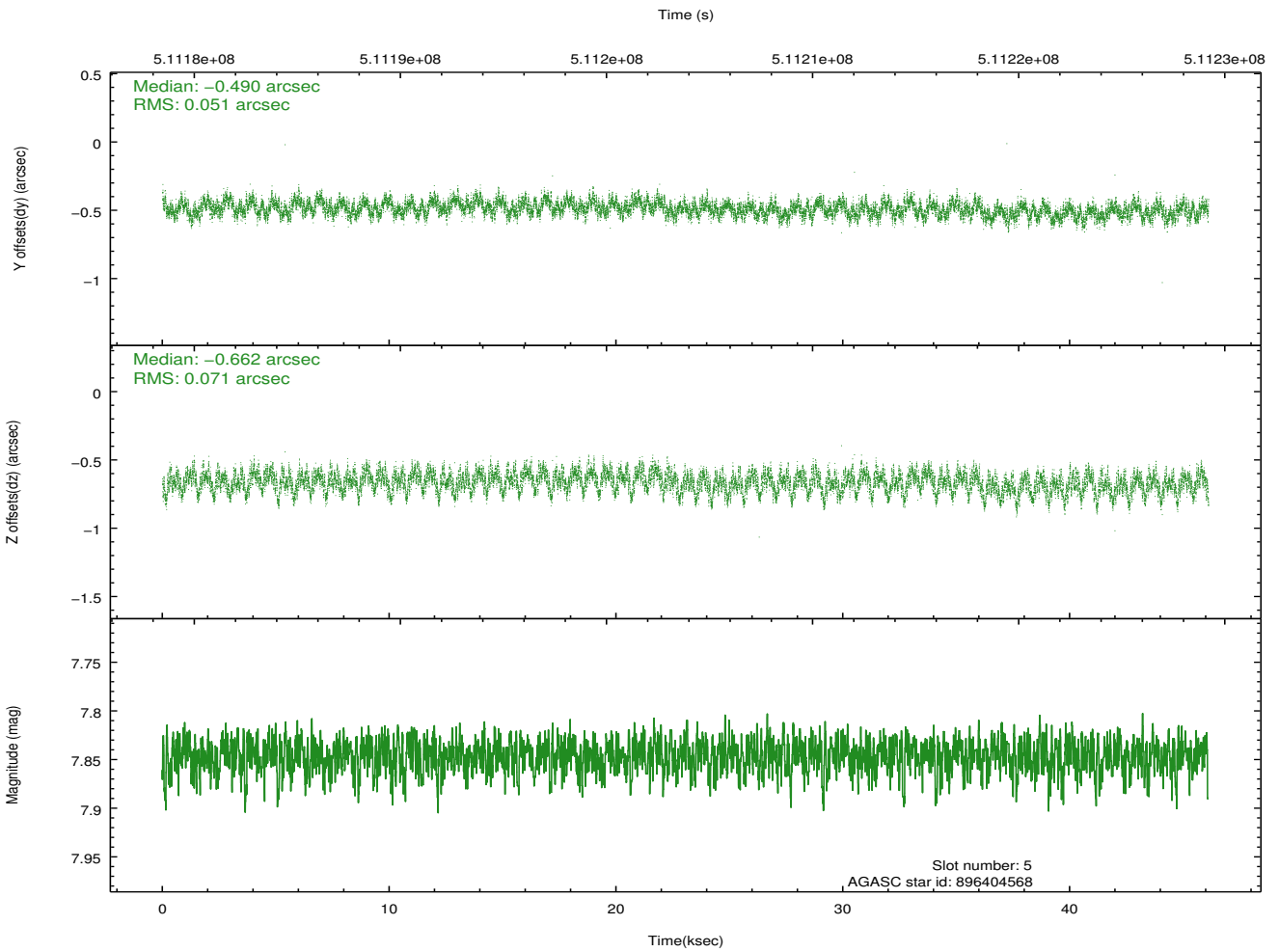
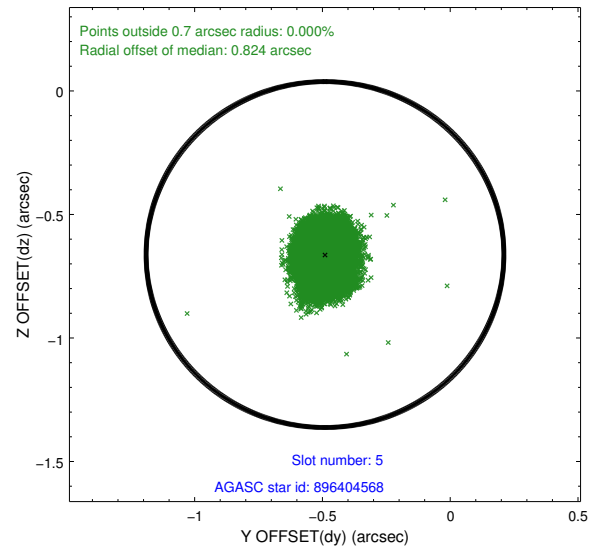
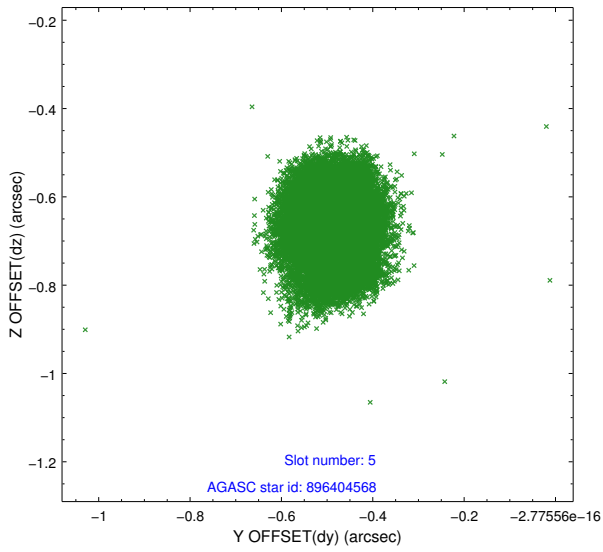
2.4.1 Slot 3



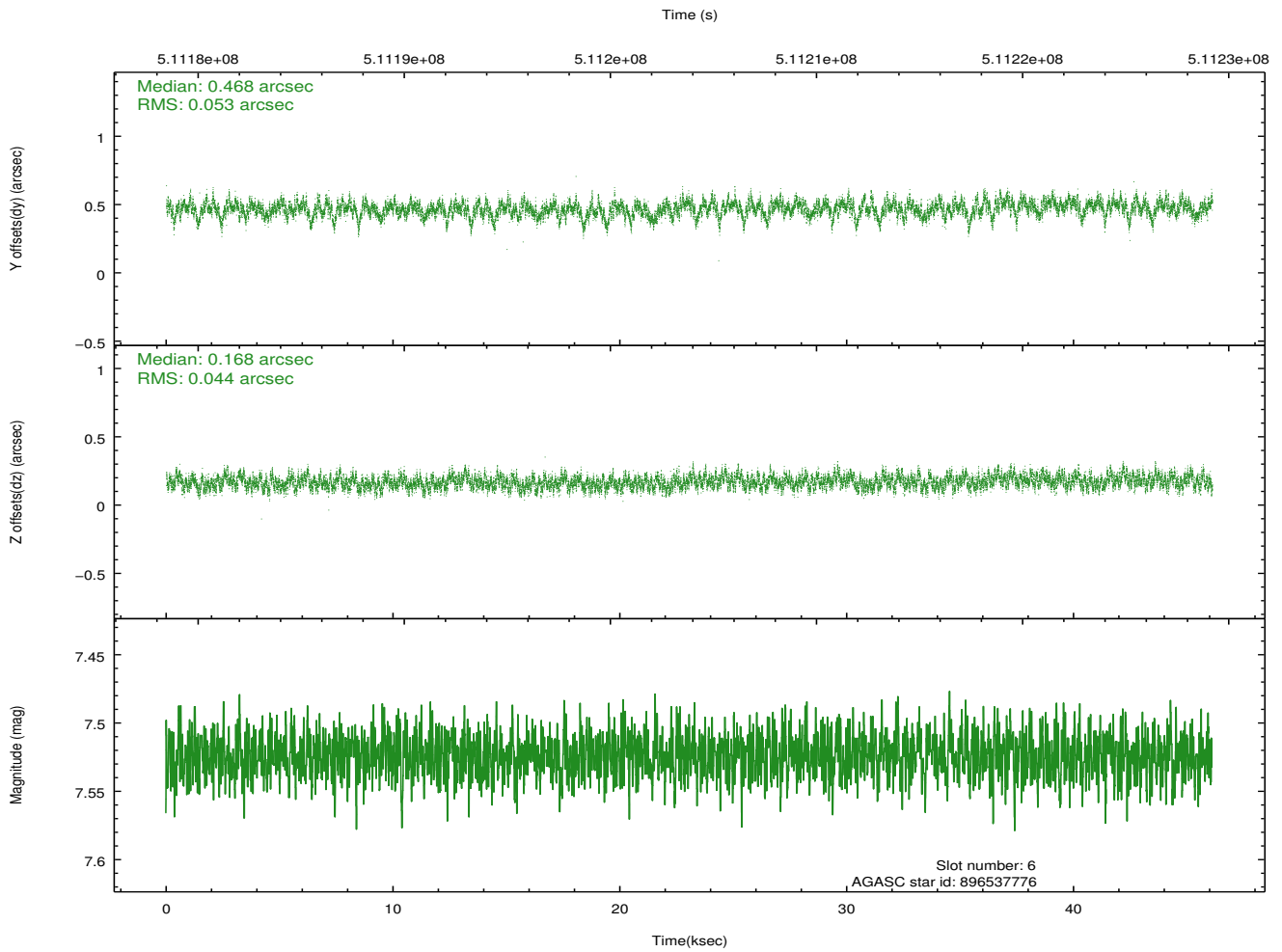
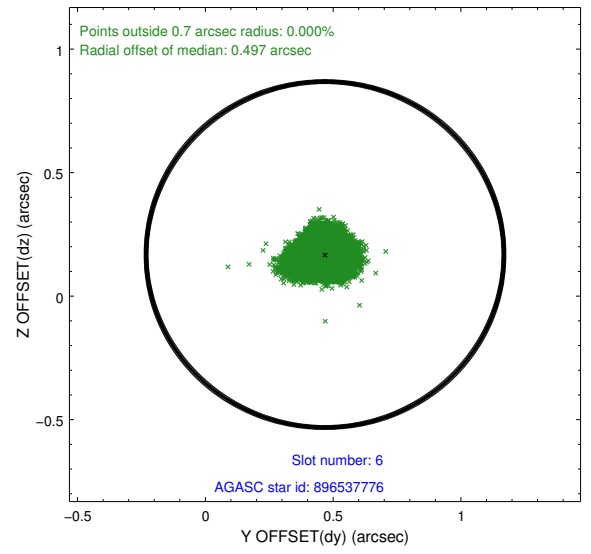
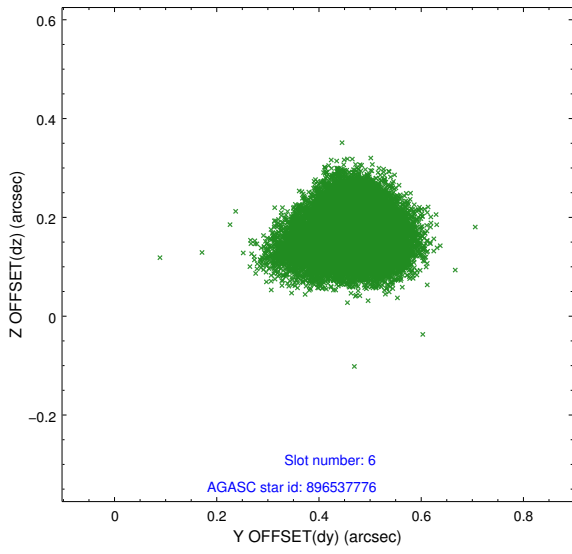
2.4.2 Slot 4



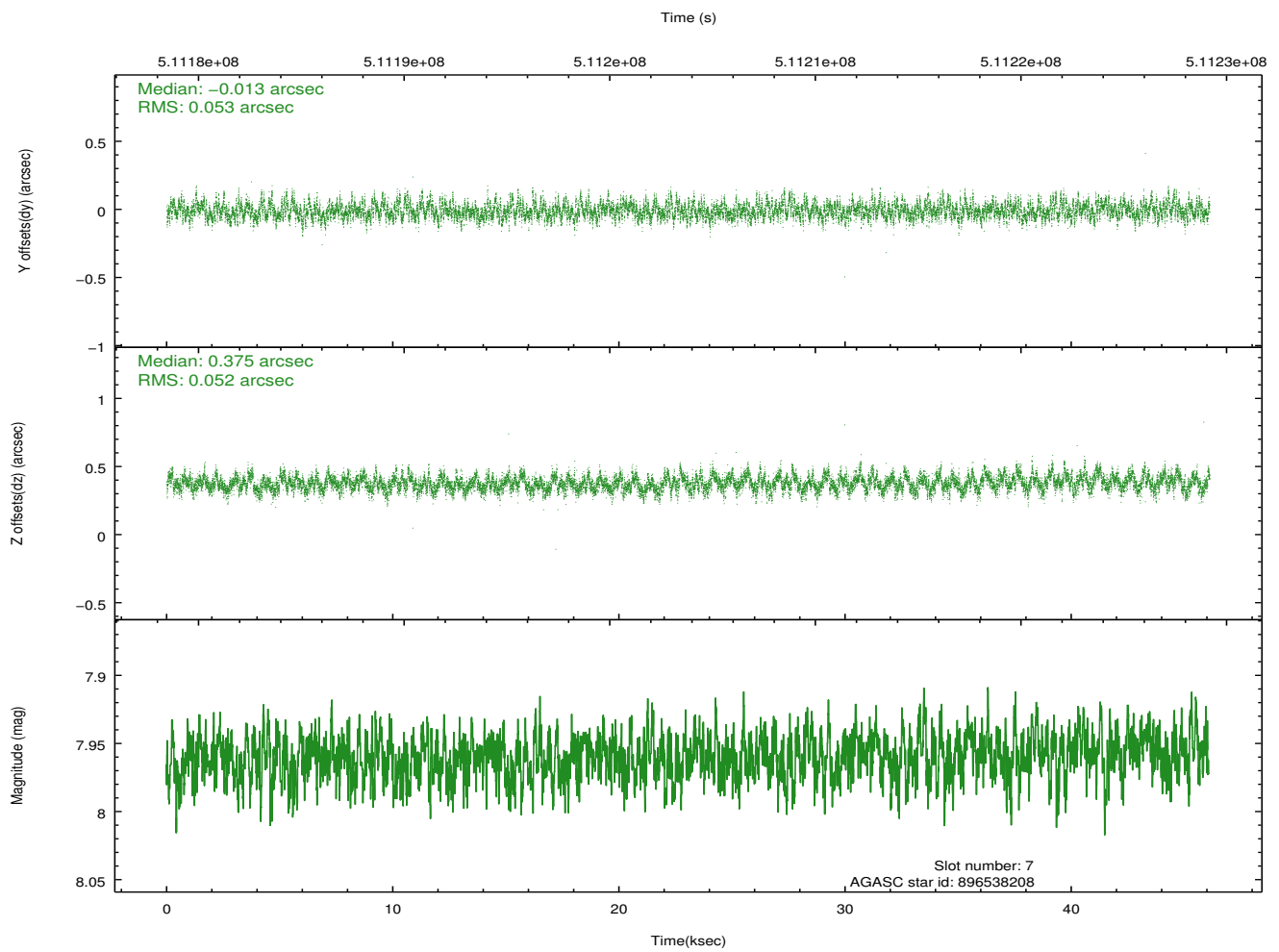
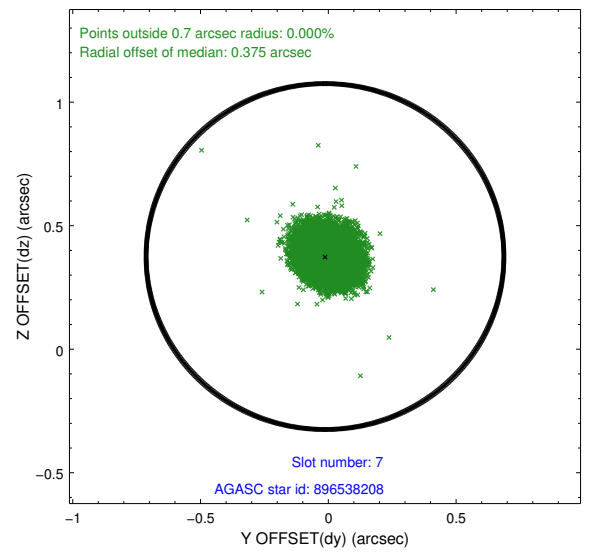
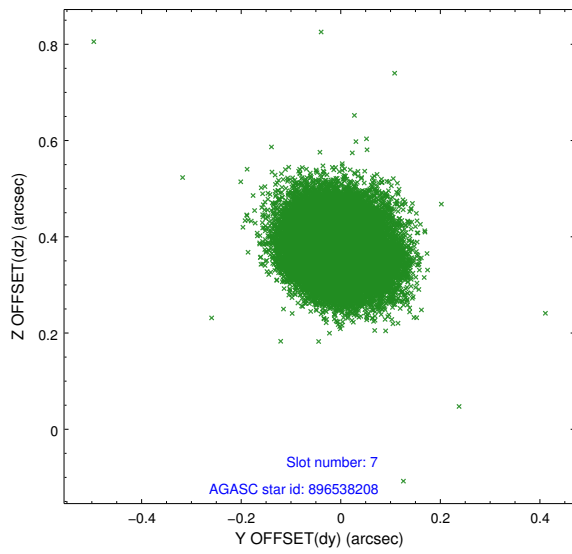
2.4.3 Slot 5



2.4.4 Slot 6

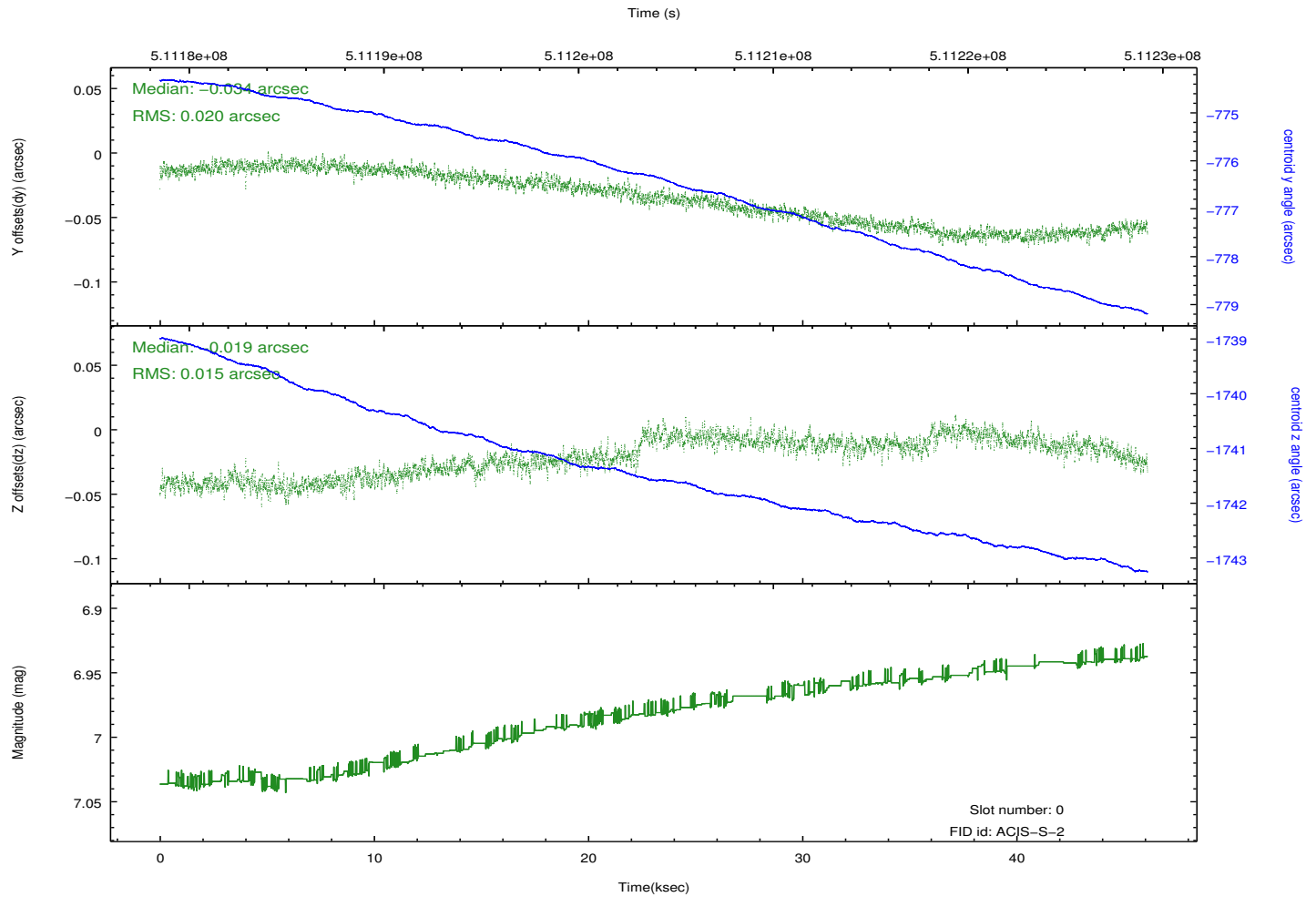
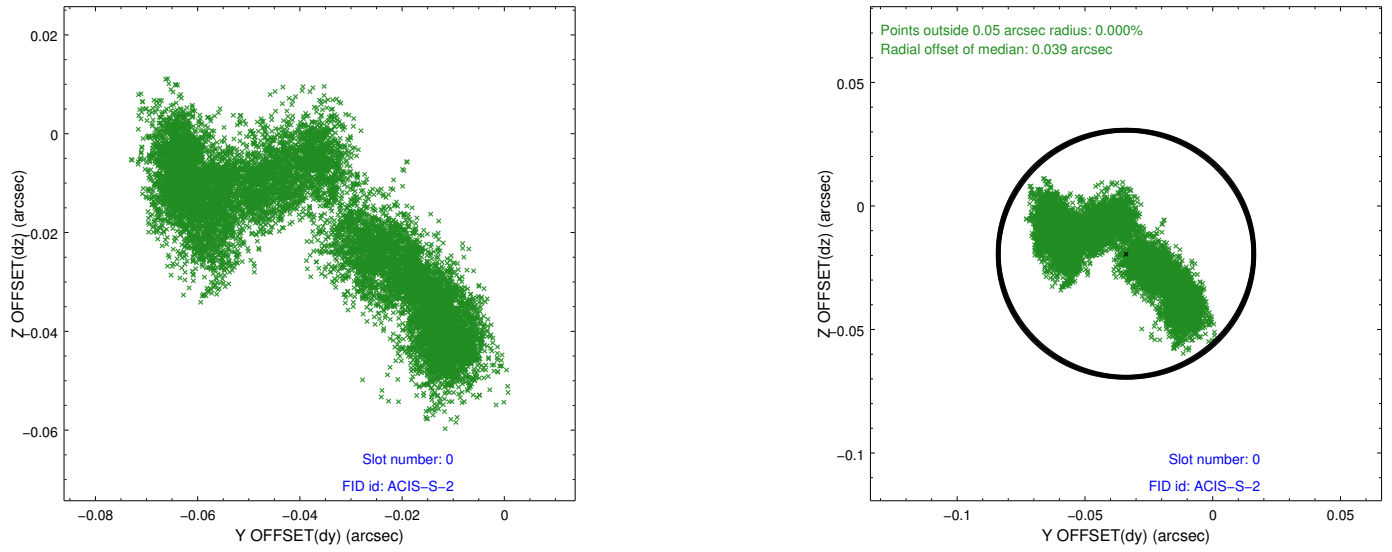


2.4.5 Slot 7

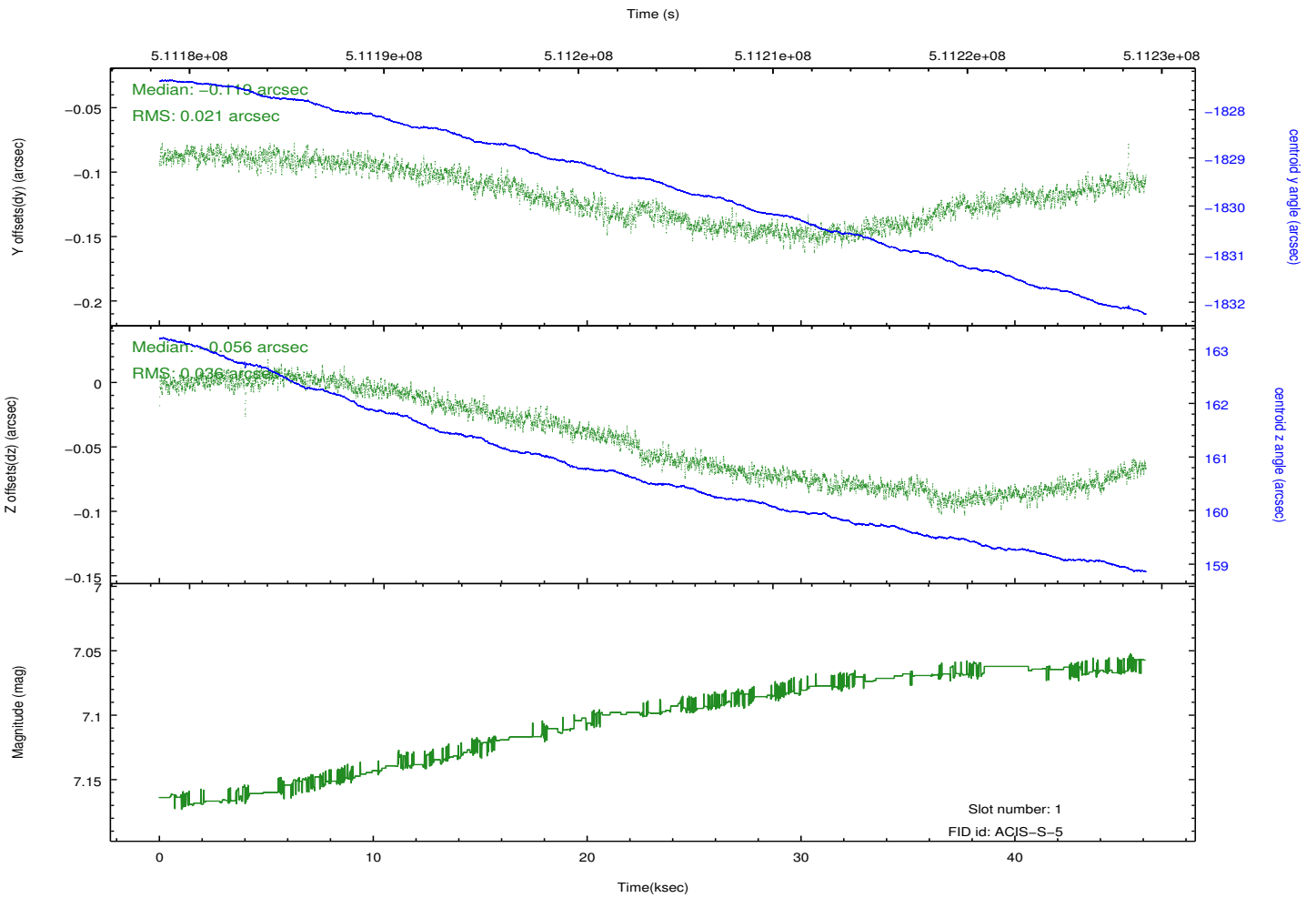
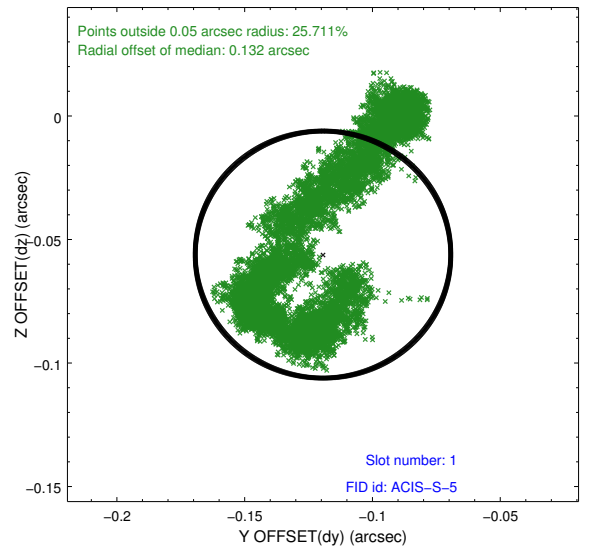
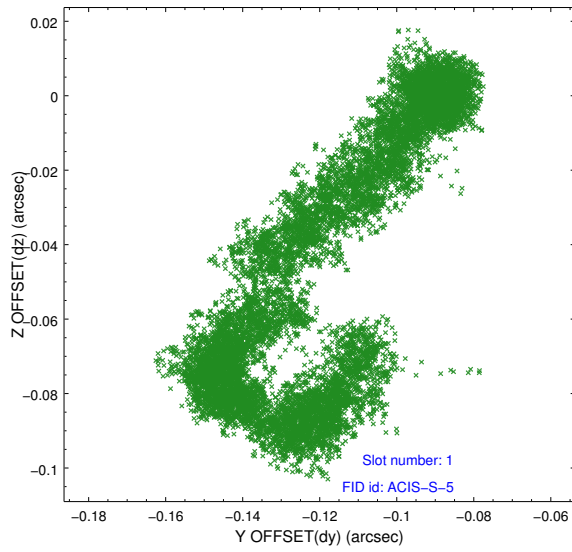


2.5 FID Slots

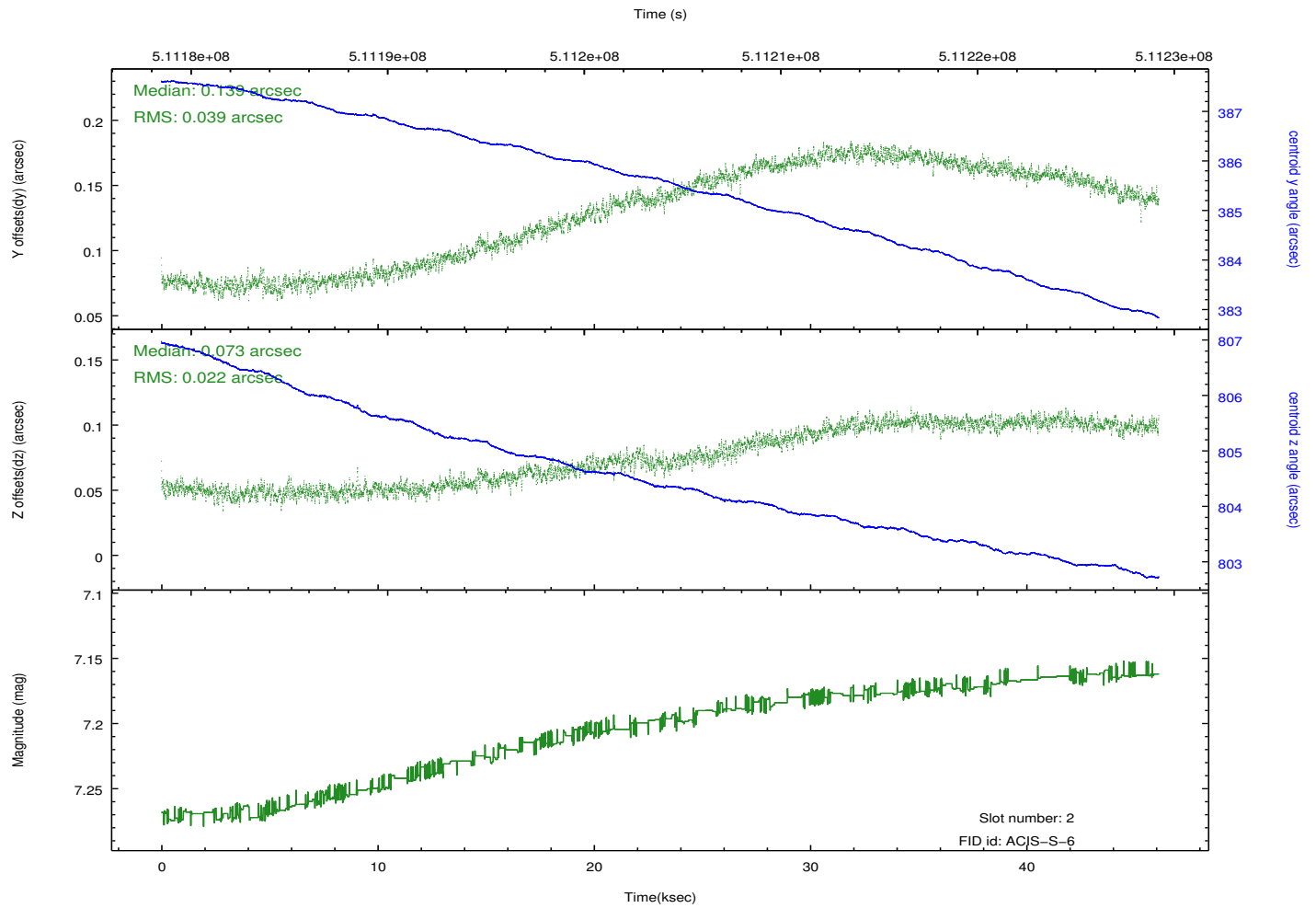
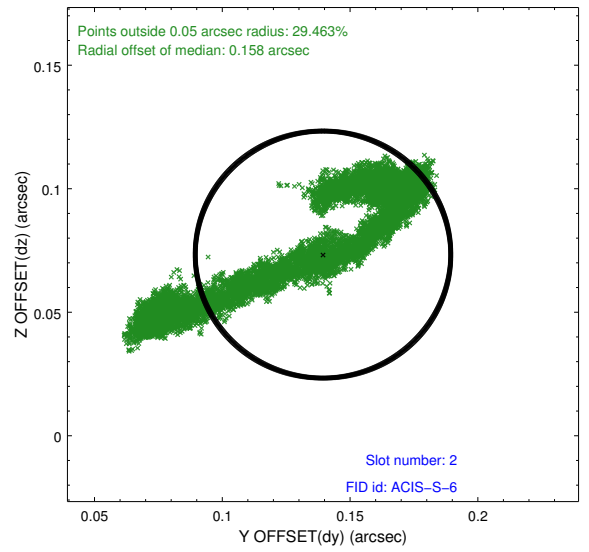
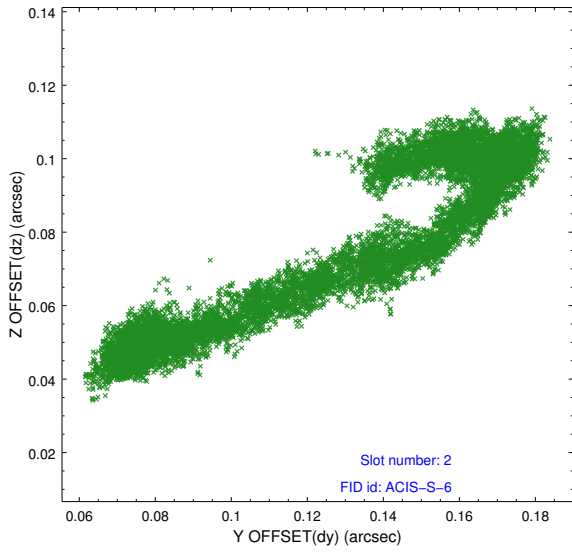
2.5.1 Slot 0



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	46.070368473291

A.2 Comments

Joint proposal with NRAO.

Observation coordinated with VLA.

Window and roll preferences 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.