

V&V Reference Report

L2 ASCDS Version : 10

Observation 15507 - L2 Version 2
Chandra X-Ray Center

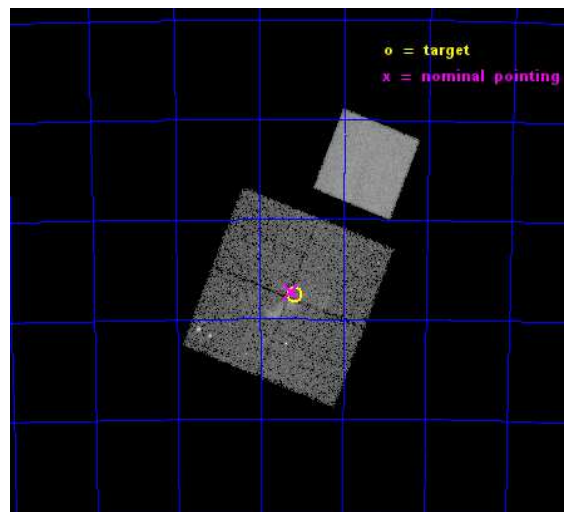
L2 Processing Date : Dec 6 2014

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1 Front

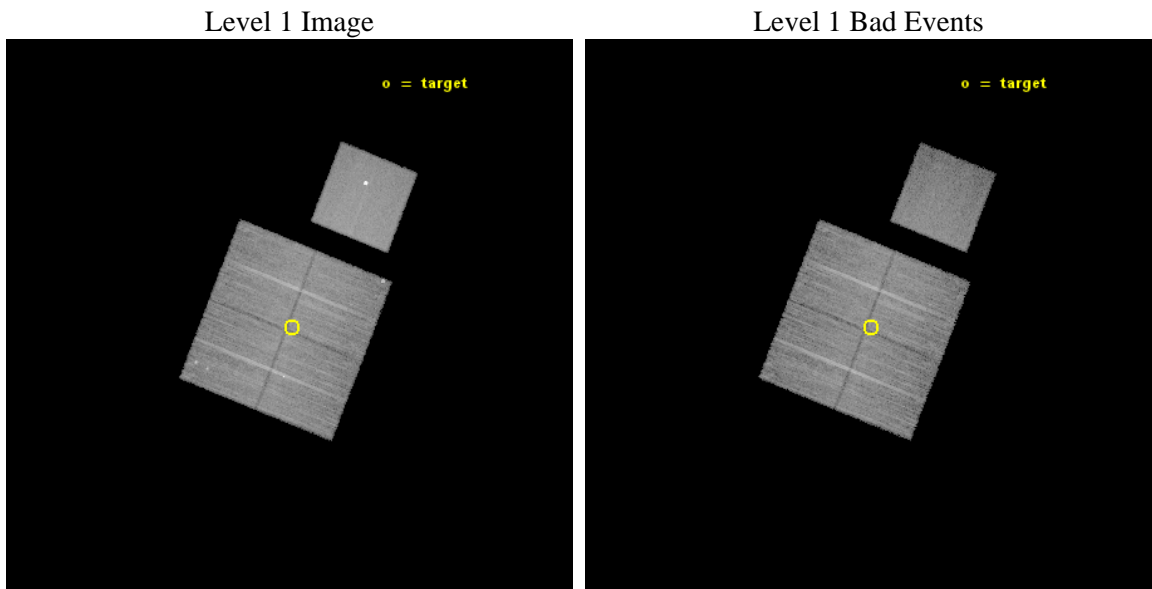
seq_num	401507	Sequence number
obs_id	15507	Observation id
title	The Small Magellanic Cloud - A Case Study of X-ray Populations at Low Metallicity	Proposal title
observer	Dr Andreas Zezas	Principal investigator
object	Deep Field 11	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	11.79	Observer's specified target RA [deg]
dec_targ	-73.125833	Observer's specified target Dec [deg]
ra_nom	11.811633150144	Nominal RA [deg]
dec_nom	-73.120781726045	Nominal Dec [deg]
roll_nom	21.625439887512	Nominal Roll [deg]
revision	2	Processing version of data
ontime	25069.176453352	Sum of GTIs [s]
livetime	24741.62920733	Livetime [s]
ontime0	25069.053333342	Sum of GTIs [s]
ontime1	25065.953343034	Sum of GTIs [s]
ontime2	25069.135413349	Sum of GTIs [s]
ontime3	25069.176453352	Sum of GTIs [s]
ontime7	25069.217493355	Sum of GTIs [s]
l2events	106690	Number of level 2 events



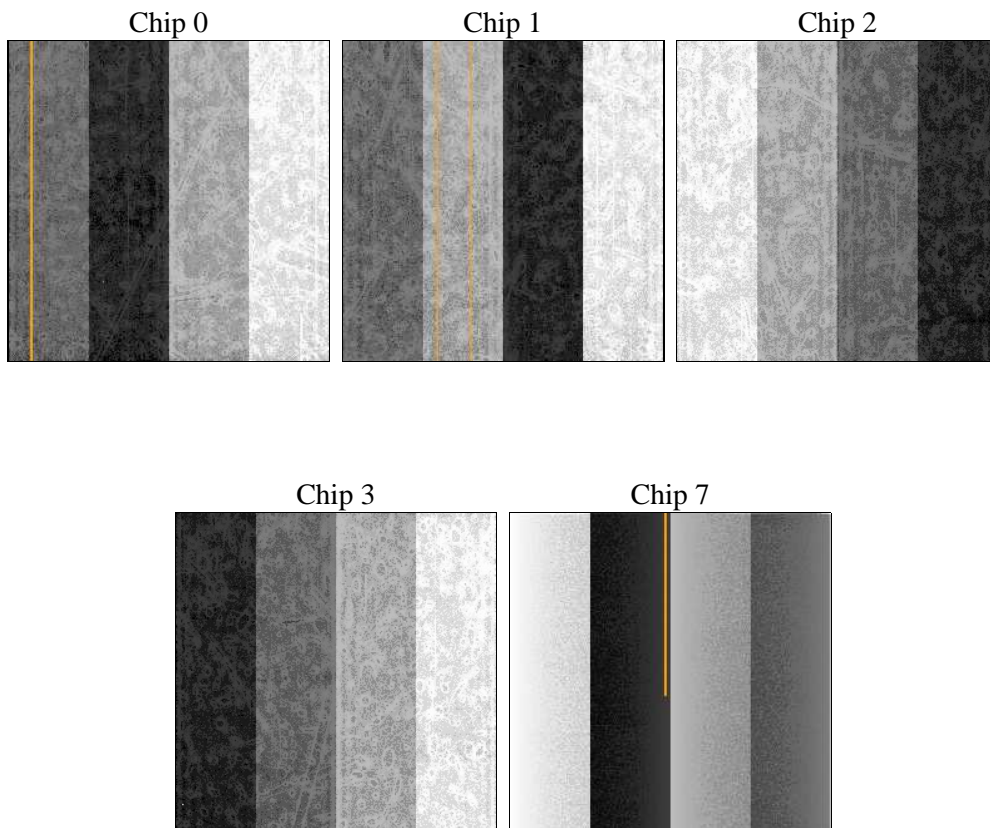
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	25000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	25069.176453352	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	25069.053333342	Sum of GTIs [s]
date	2014-12-06T16:08:17	Date and time of file creation	ontime1	25065.953343034	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	25069.135413349	Sum of GTIs [s]
			ontime3	25069.176453352	Sum of GTIs [s]
			ontime7	25069.217493355	Sum of GTIs [s]
			l1events	565414	Number of level 1 events

2.1.4 Events

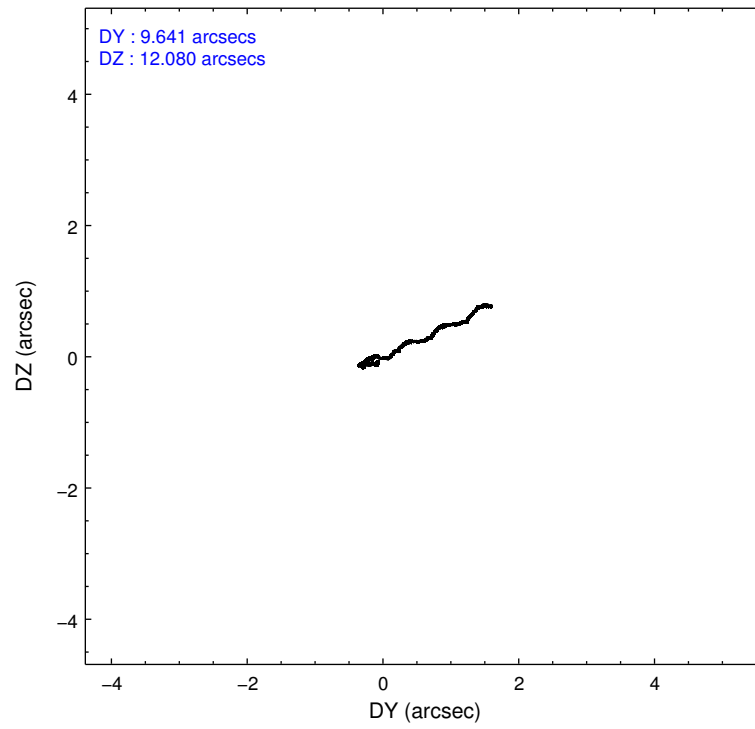
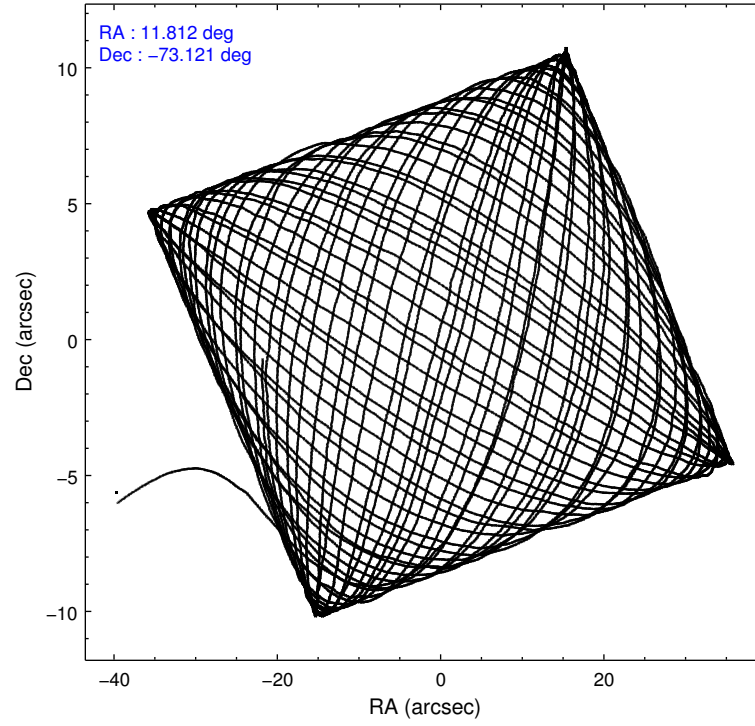
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	102519	103546	109252	109328	140769
rejected events	87208	88424	96615	95297	71359
rejected %	85%	85%	88%	87%	50%

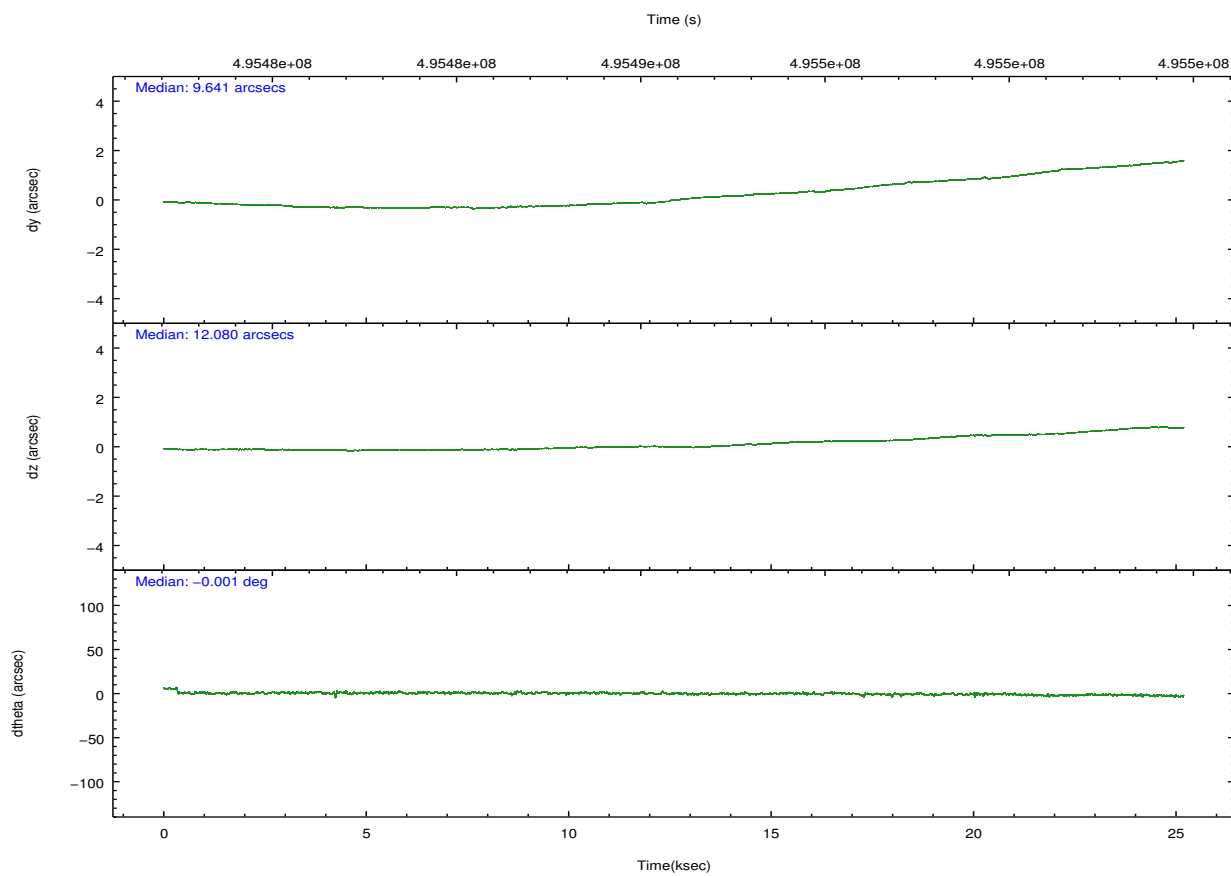
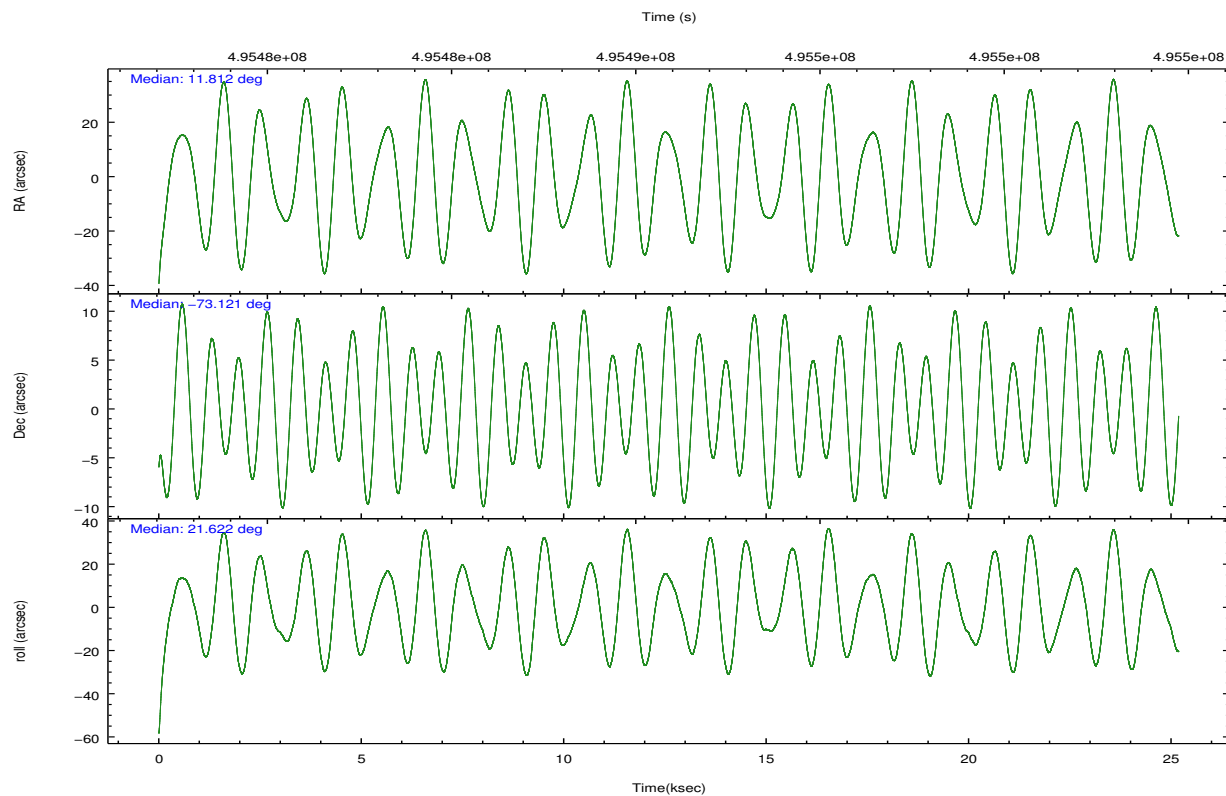
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	6522	5842	4757	6038	13823
	6%	5%	4%	5%	9%
grade 1 events	79	62	64	64	184
	0%	0%	0%	0%	0%
grade 2 events	3431	3328	2968	2824	13165
	3%	3%	2%	2%	9%
grade 3 events	1387	1416	1268	1288	5208
	1%	1%	1%	1%	3%
grade 4 events	1346	1414	1317	1328	5038
	1%	1%	1%	1%	3%
grade 5 events	4439	4902	4051	5155	13732
	4%	4%	3%	4%	9%
grade 6 events	2626	3123	2330	2554	32203
	2%	3%	2%	2%	22%
grade 7 events	82689	83459	92497	90077	57416
	80%	80%	84%	82%	40%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	11.753099	11.81163315014433	Subarray requested	NONE	NONE
[deg] Pointing Dec	-73.142376	-73.12078172604481	Alternating exposures requested	N	N
[deg] Pointing Roll	21.360741	21.62543988751219	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	495478492.184000	495477497.92676			
Observation start date	2013-09-13T16:53:45	2013-09-13T16:38:17			
[s] Observation end time (MET)	495503492.184000	495504292.96572			
Observation end date	2013-09-13T23:50:25	2013-09-14T00:04:52			
Read mode	TIMED	TIMED			

2.3 Aspect



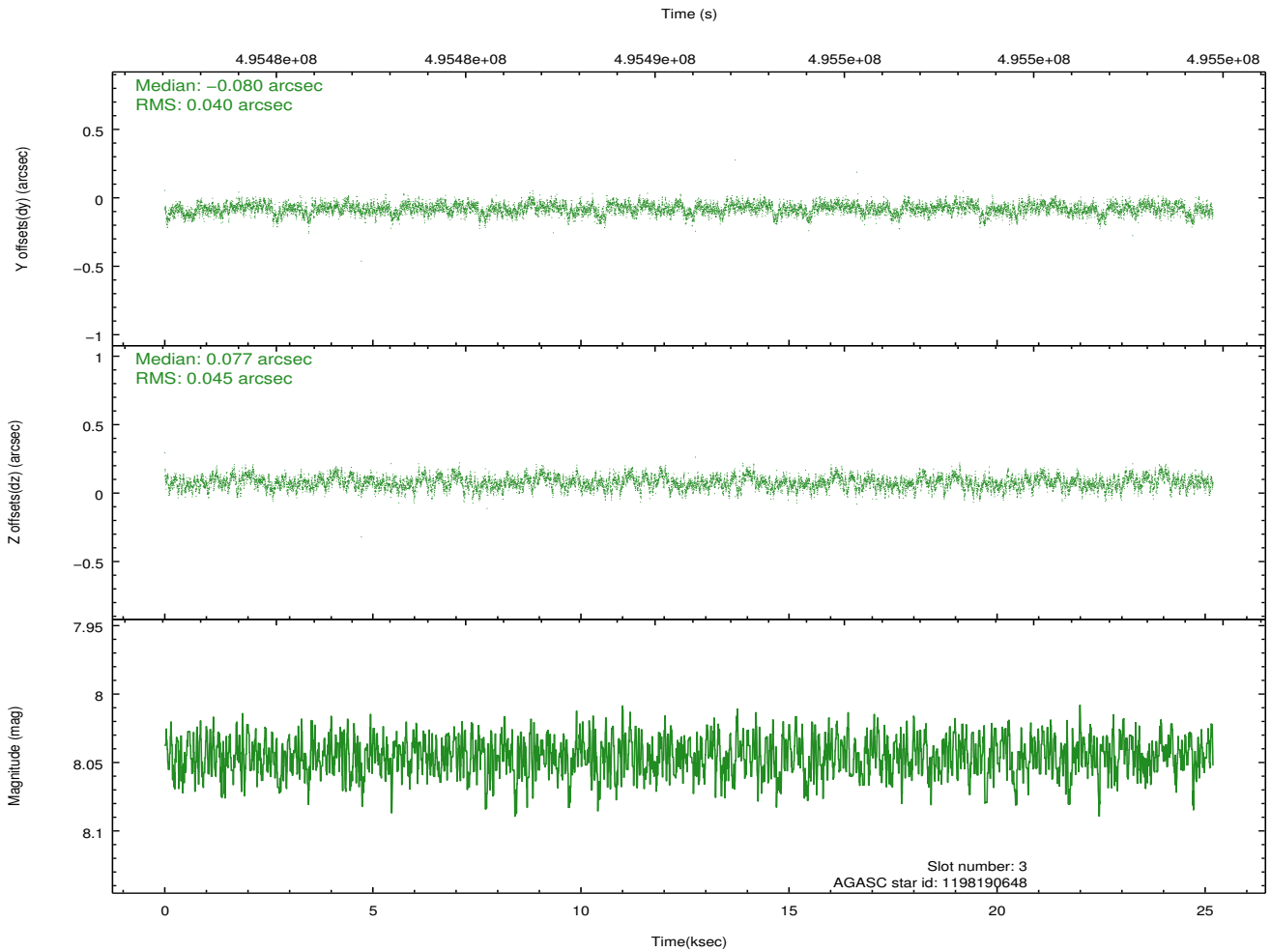
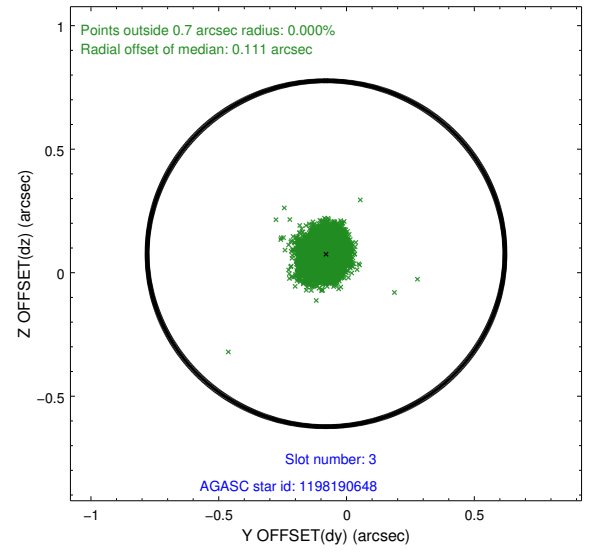
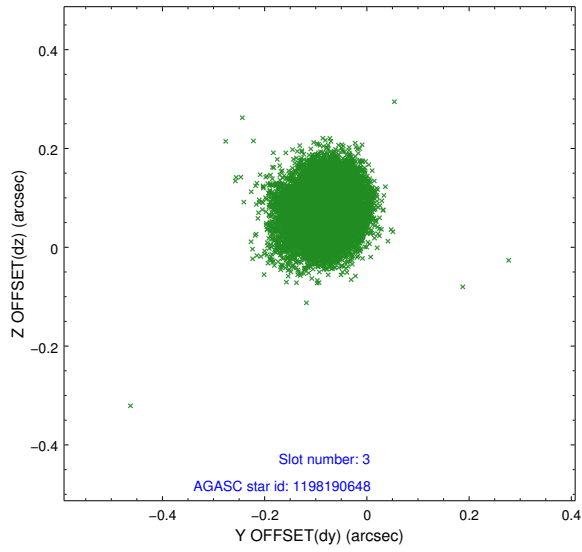


Slot Statistics

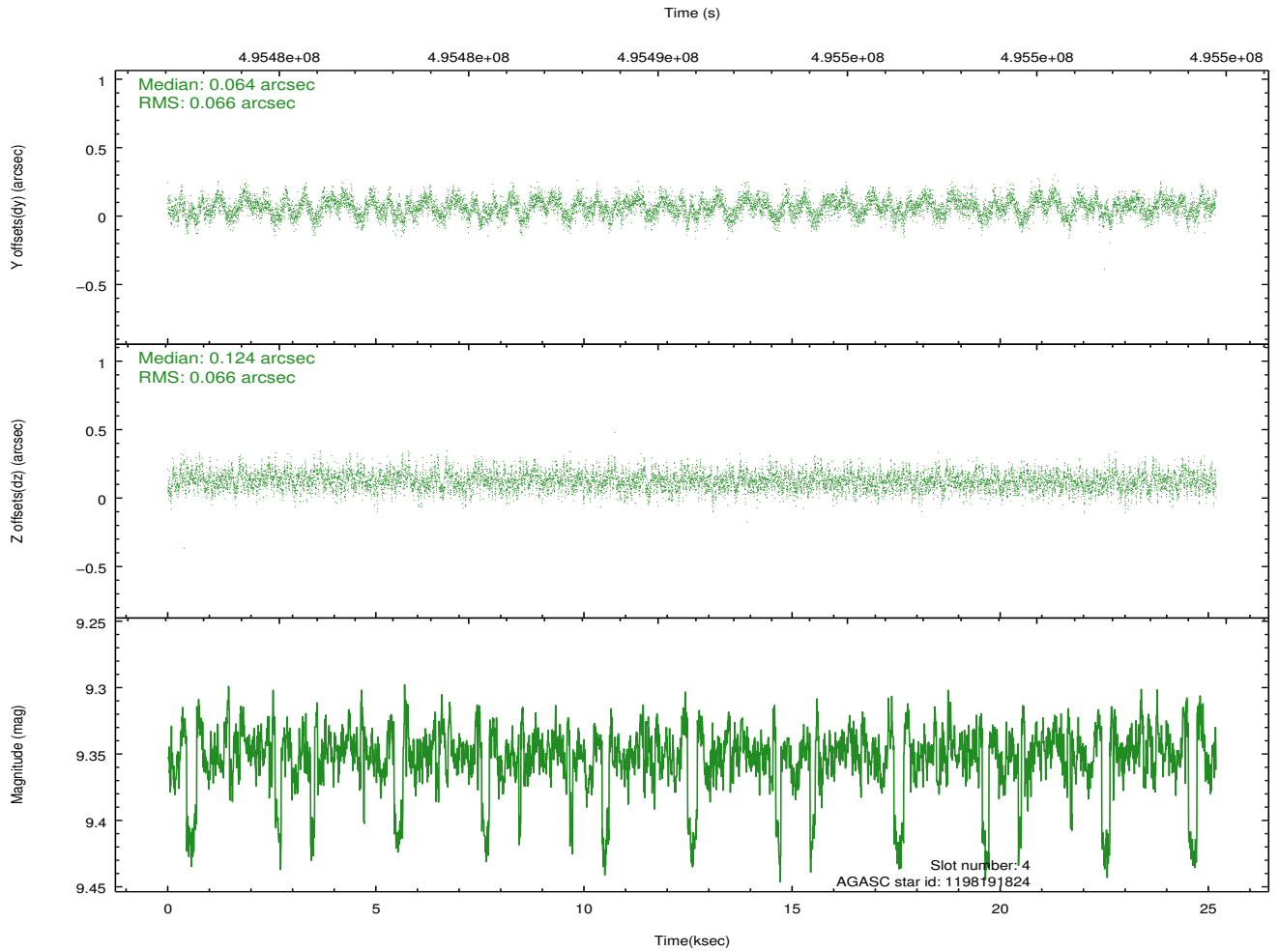
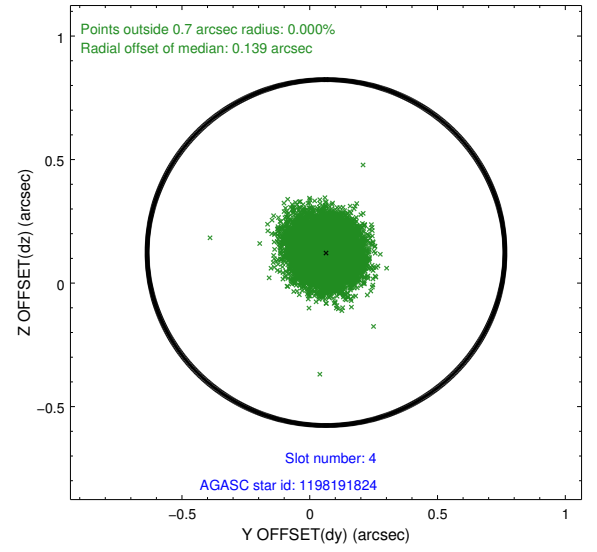
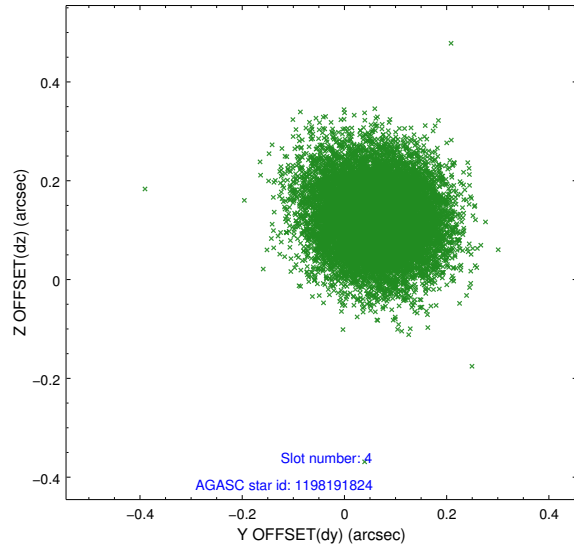
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-4	7.12	6142	0.167	0.016	0.021	0.037	0.000000	0.000000	2149.84	1064.12
1	FID		ACIS-I-5	7.18	6142	-0.268	0.012	0.013	0.026	0.000000	0.000000	-1818.39	1062.04
2	FID		ACIS-I-6	7.18	6142	0.003	0.039	0.015	0.026	0.000000	0.000000	395.15	1706.36
3	GUIDE	used	1198190648	8.05	12285	-0.080	0.077	0.064	0.103	12.344115	-73.478663	121.73	-1350.56
4	GUIDE	used	1198191824	9.35	12214	0.064	0.124	0.100	0.160	11.519918	-73.478175	-662.15	-1039.04
5	GUIDE	used	1198192176	9.49	12258	-0.097	0.105	0.176	0.328	14.042526	-73.121350	2239.62	-842.84
6	GUIDE	used	1198150512	8.37	12265	0.037	-0.106	0.090	0.162	9.044301	-72.846944	-2313.58	1977.13
7	GUIDE	used	1198191400	8.39	12279	0.069	-0.193	0.105	0.155	11.617890	-72.595865	580.98	1885.41

2.4 Star Slots

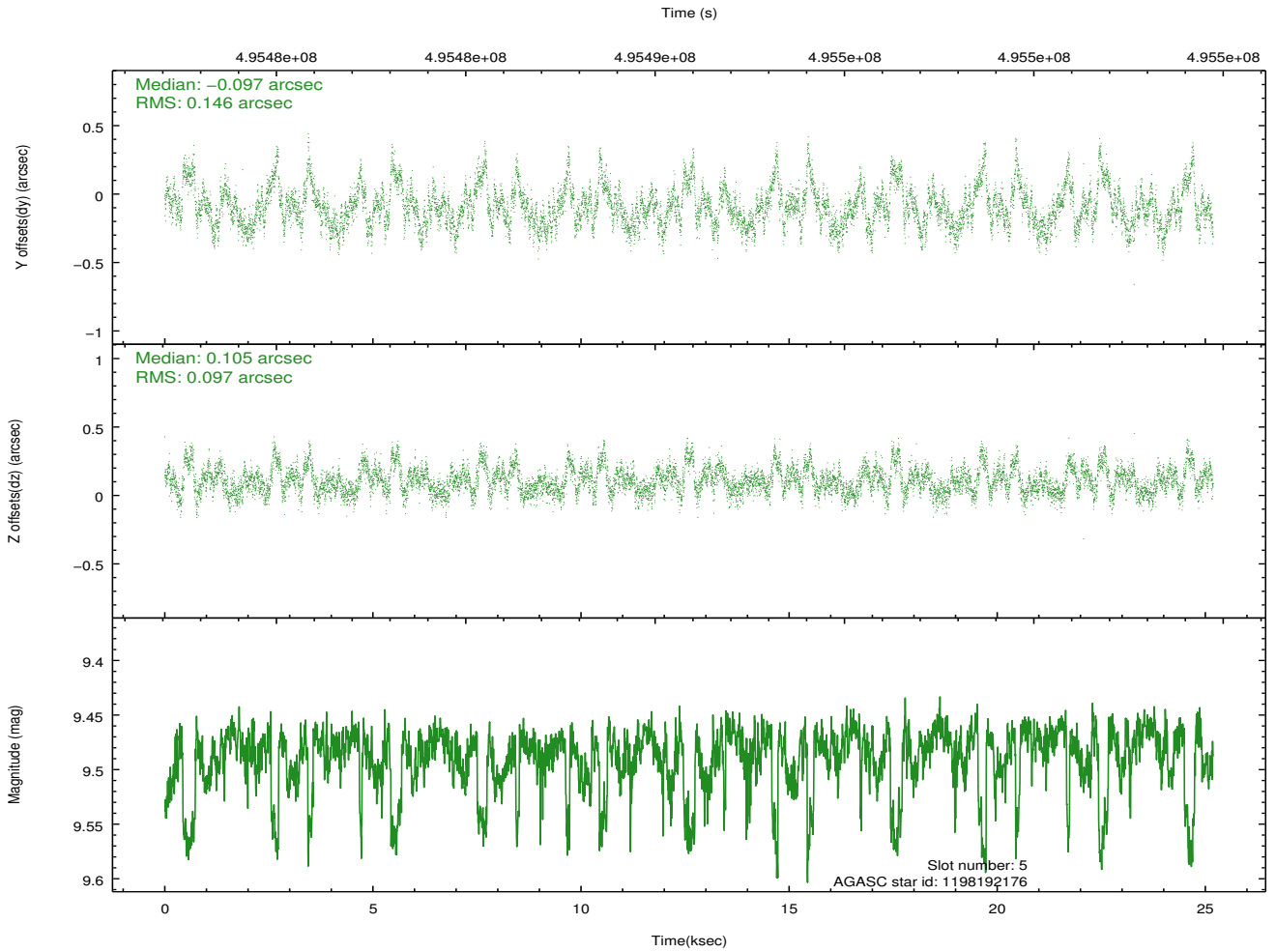
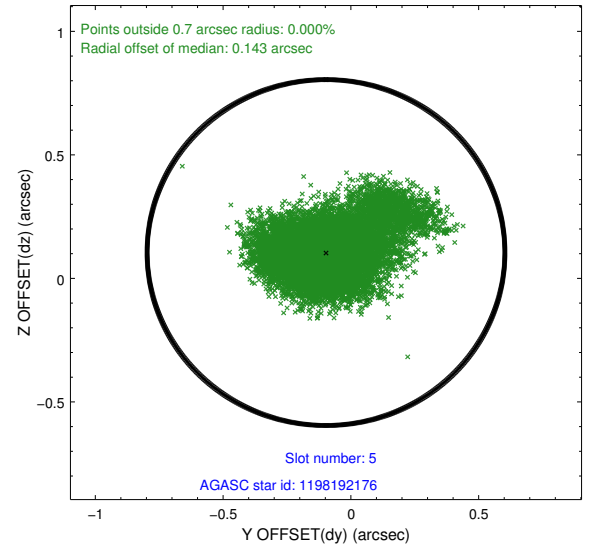
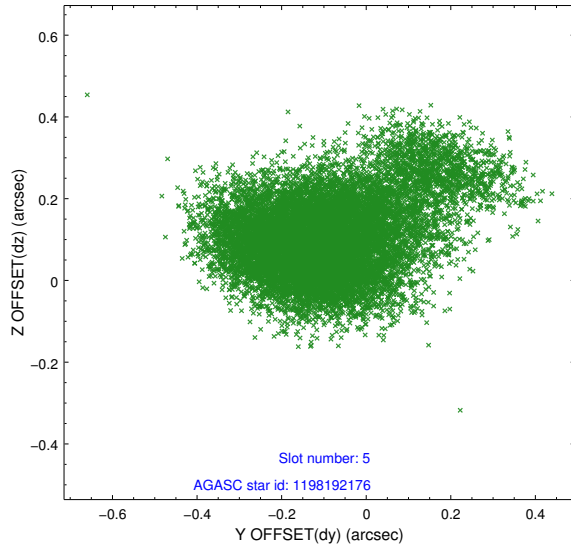
2.4.1 Slot 3



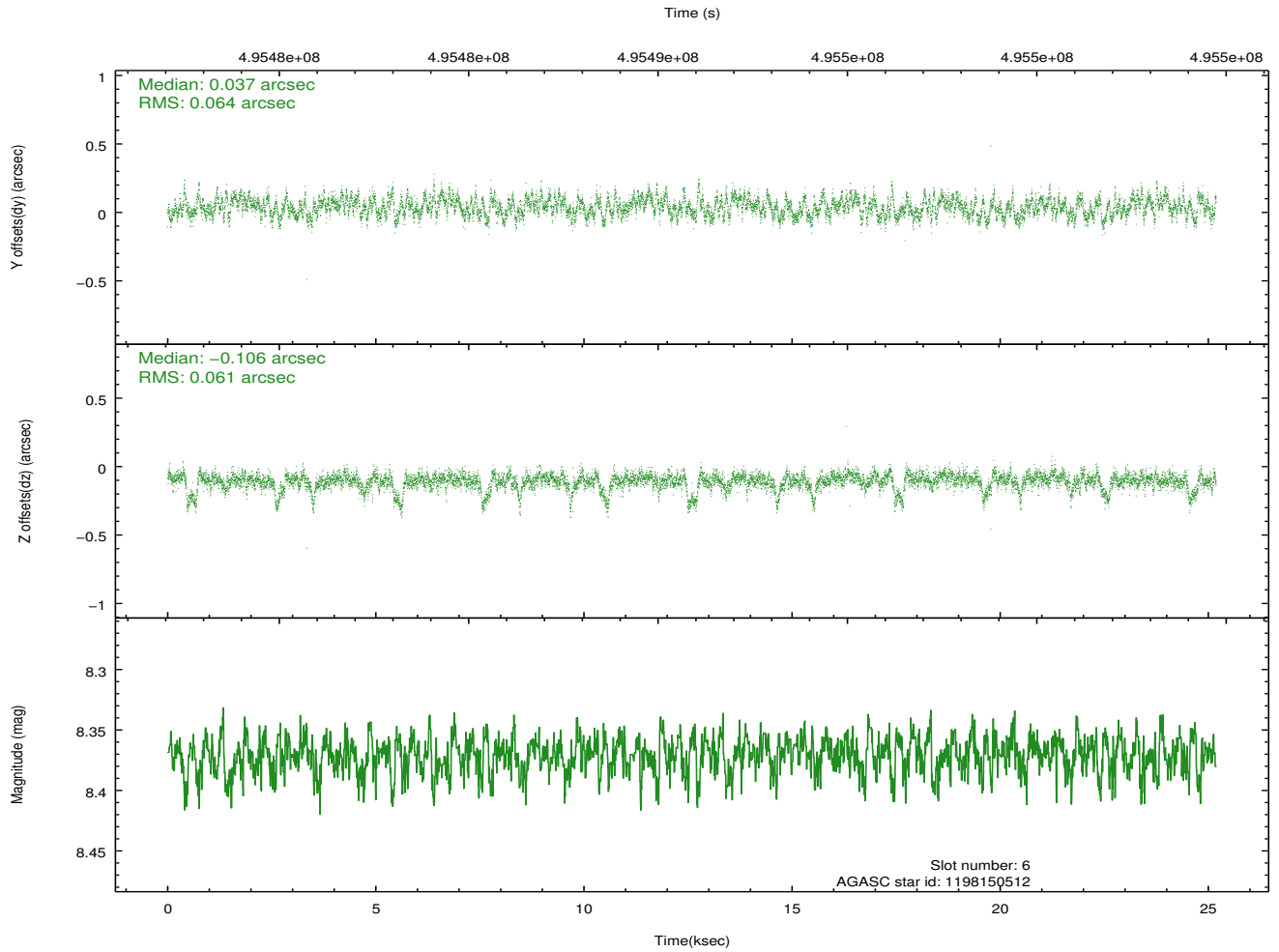
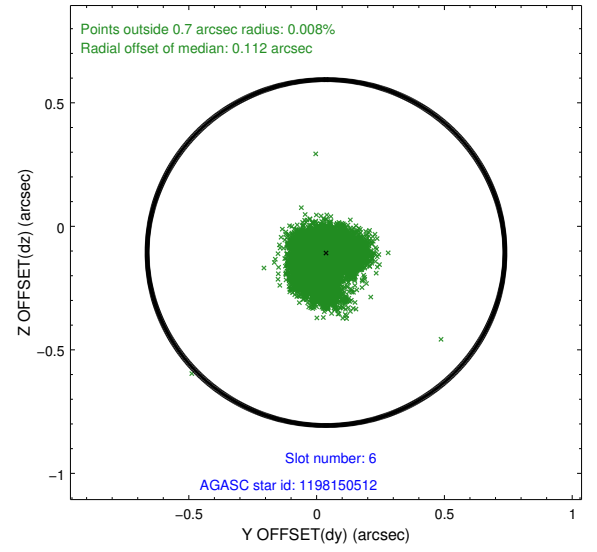
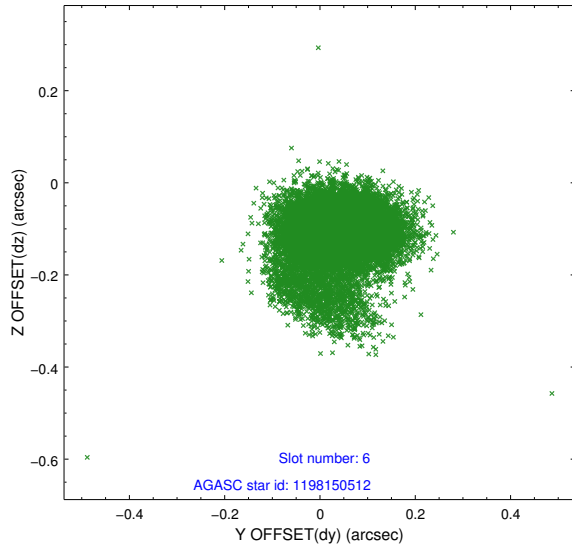
2.4.2 Slot 4



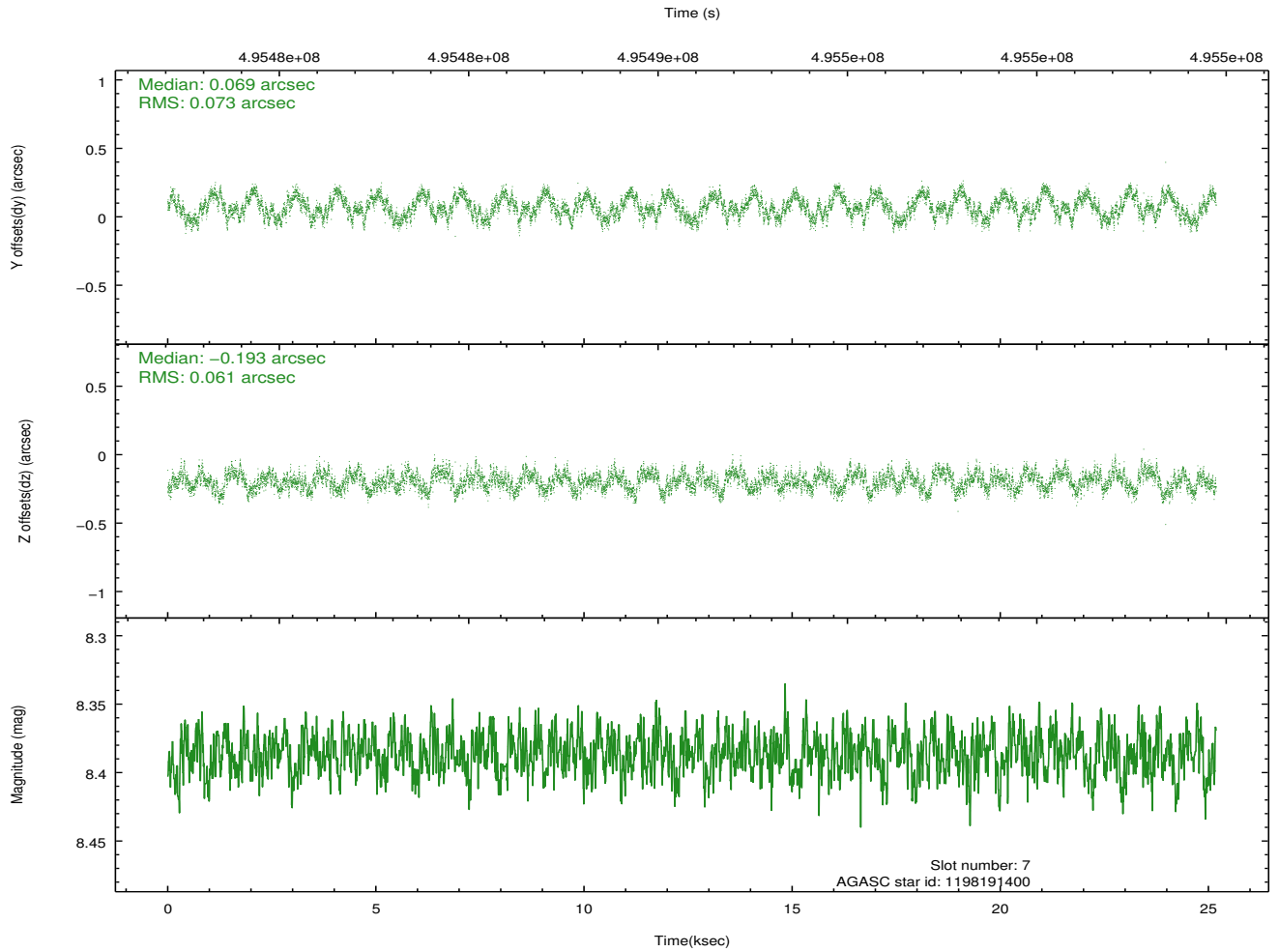
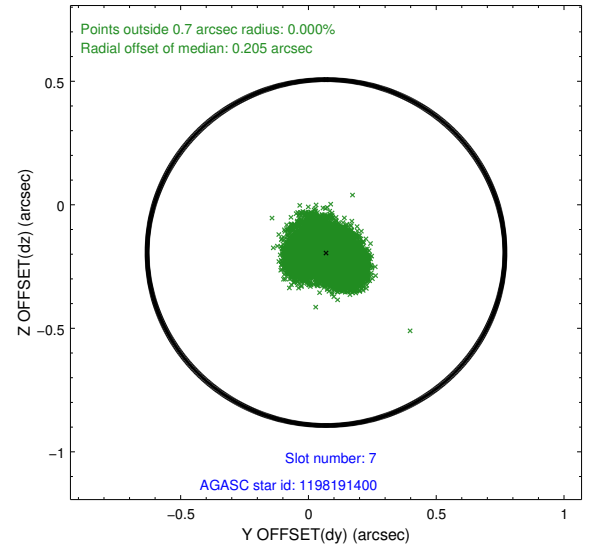
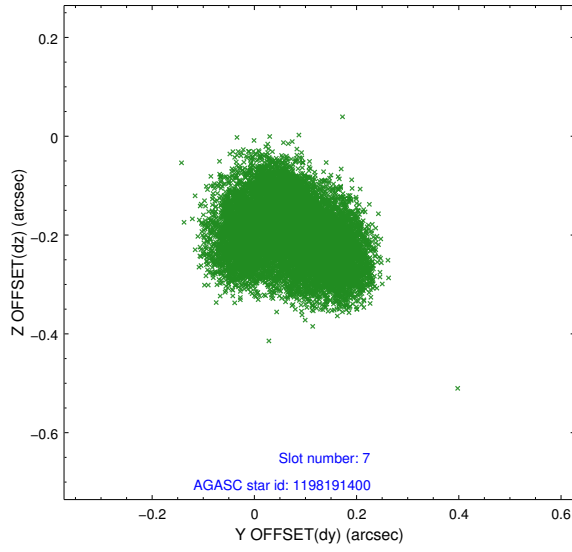
2.4.3 Slot 5



2.4.4 Slot 6

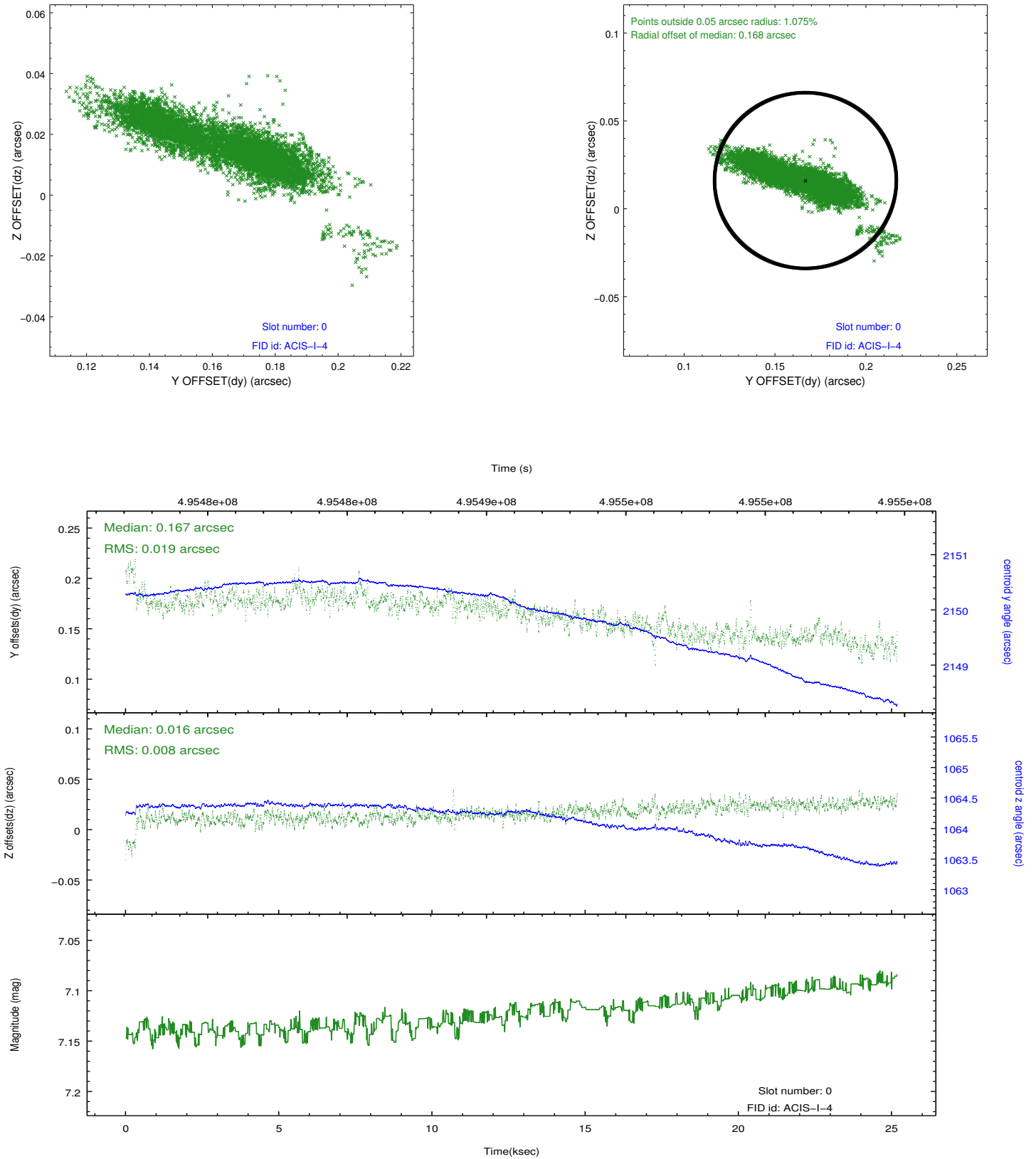


2.4.5 Slot 7

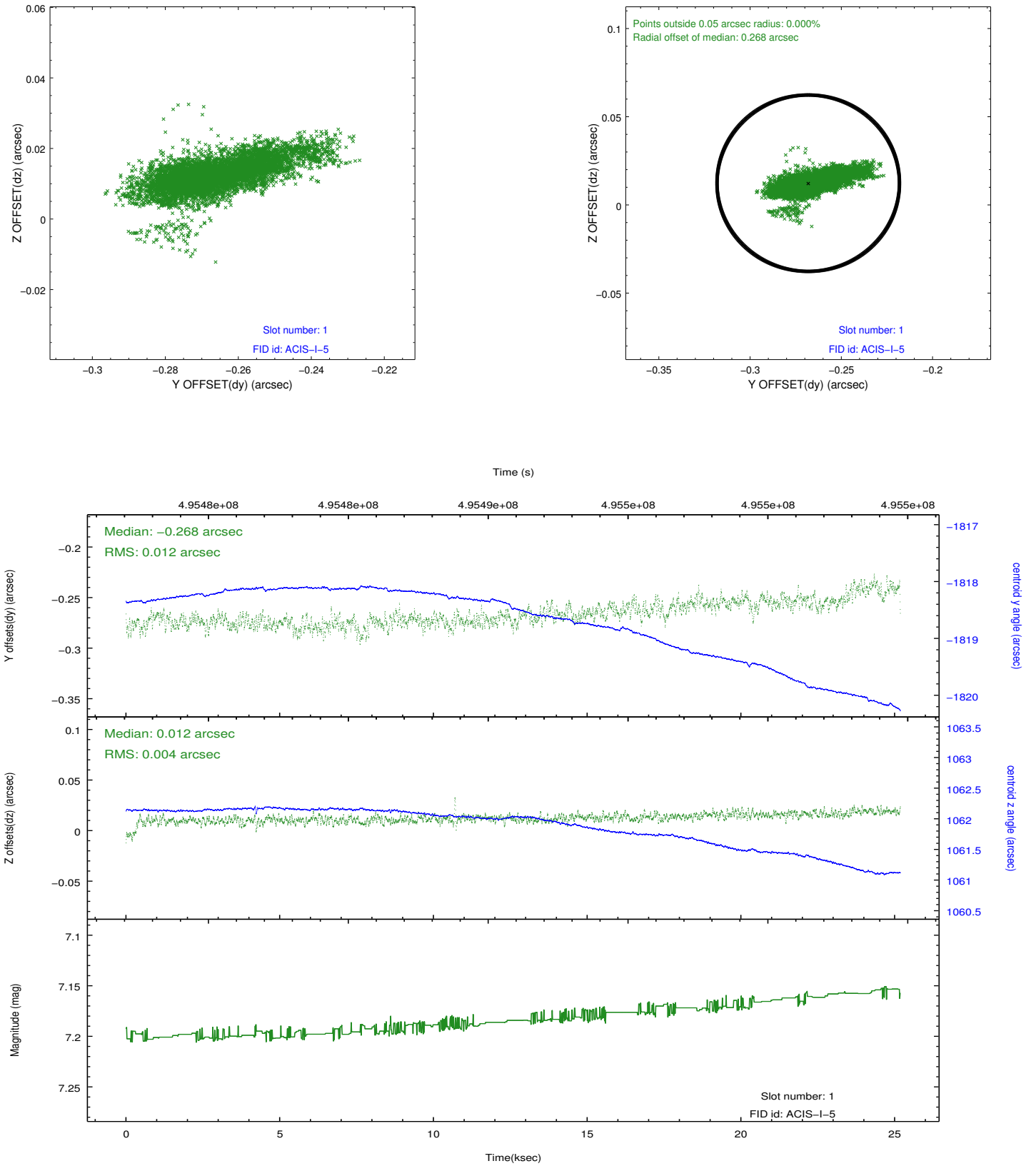


2.5 FID Slots

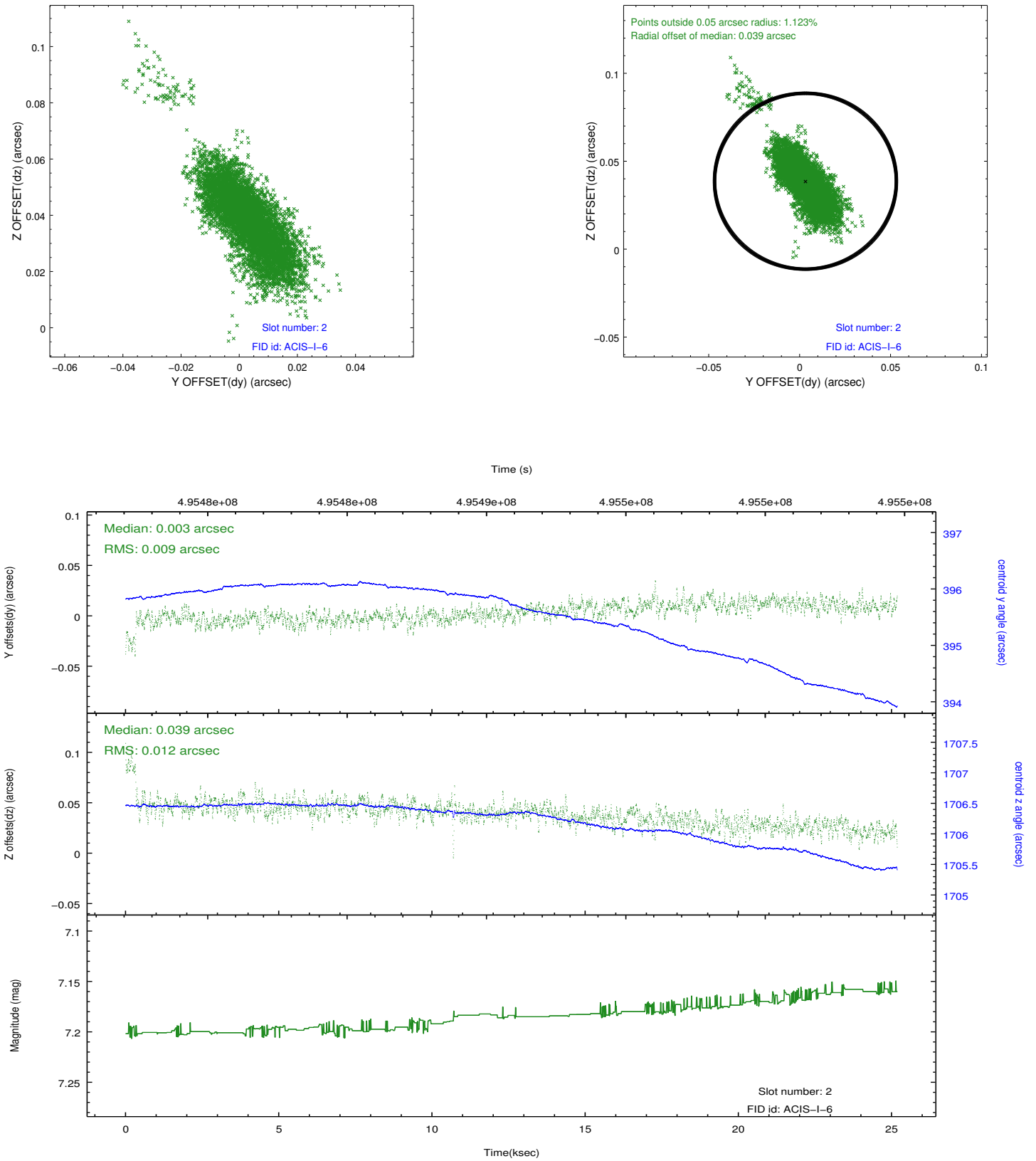
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	25.069176453352

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.