

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17272 - L2 Version 1
Chandra X-Ray Center

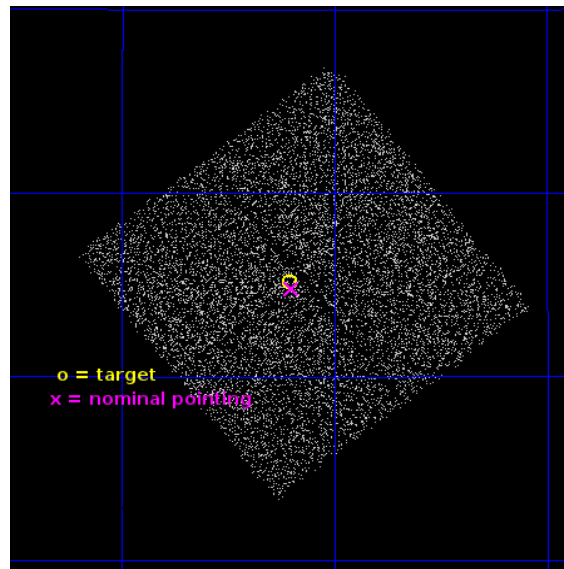
L2 Processing Date : Dec 7 2015

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1 Front

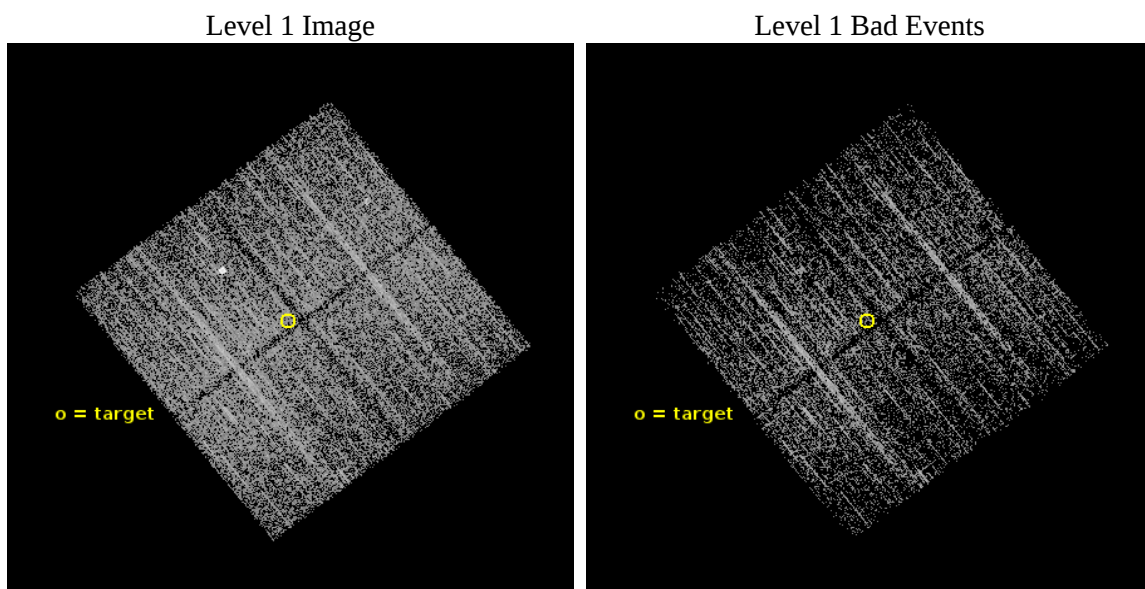
seq_num	801517	Sequence number
obs_id	17272	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.55274	Observer's specified target RA [deg]
dec_targ	42.086128	Observer's specified target Dec [deg]
ra_nom	50.550474517506	Nominal RA [deg]
dec_nom	42.079980109297	Nominal Dec [deg]
roll_nom	232.01868340468	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5084.0000392199	Sum of GTIs [s]
livetime	5017.5738359211	Livetime [s]
ontime0	5084.0000392199	Sum of GTIs [s]
ontime1	5084.0000392199	Sum of GTIs [s]
ontime2	5084.0000392199	Sum of GTIs [s]
ontime3	5084.0000392199	Sum of GTIs [s]
l2events	11803	Number of level 2 events



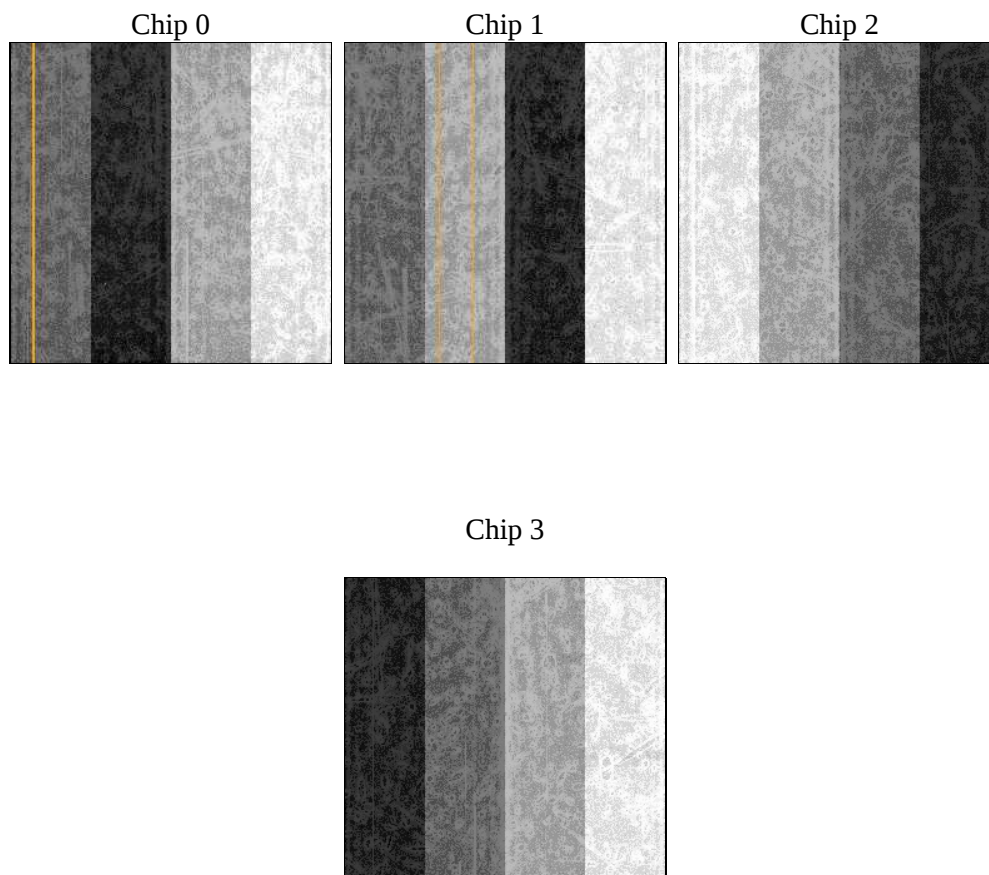
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.2.1	Processing system revision	ontime	5084.0000392199	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	5084.0000392199	Sum of GTIs [s]
date	2015-12-07T20:44:06	Date and time of file creation	ontime1	5084.0000392199	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	5084.0000392199	Sum of GTIs [s]
			ontime3	5084.0000392199	Sum of GTIs [s]
			l1events	110003	Number of level 1 events

2.1.4 Events

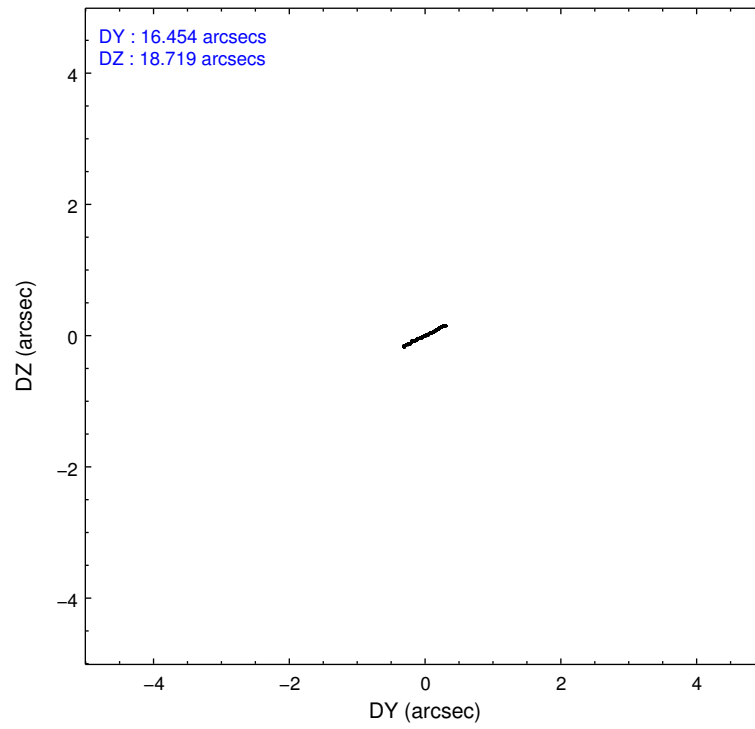
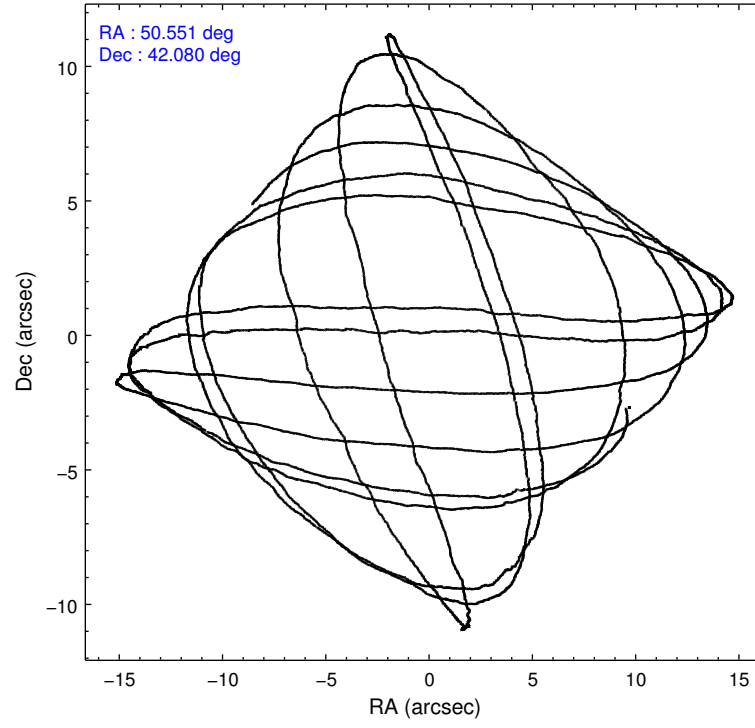
	ccd 0	ccd 1	ccd 2	ccd 3
level 1 events	25886	26295	27465	30357
rejected events	22360	22524	24111	25737
rejected %	86%	85%	87%	84%

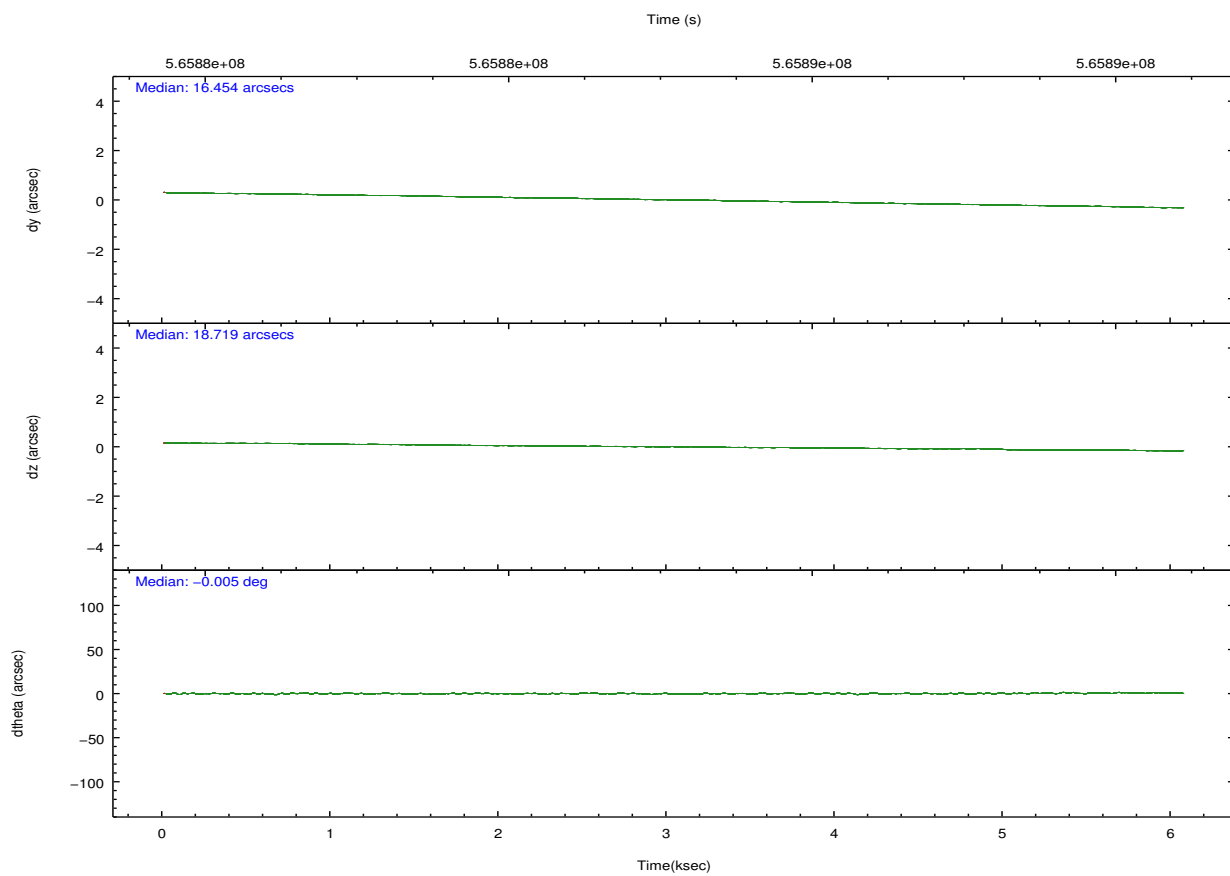
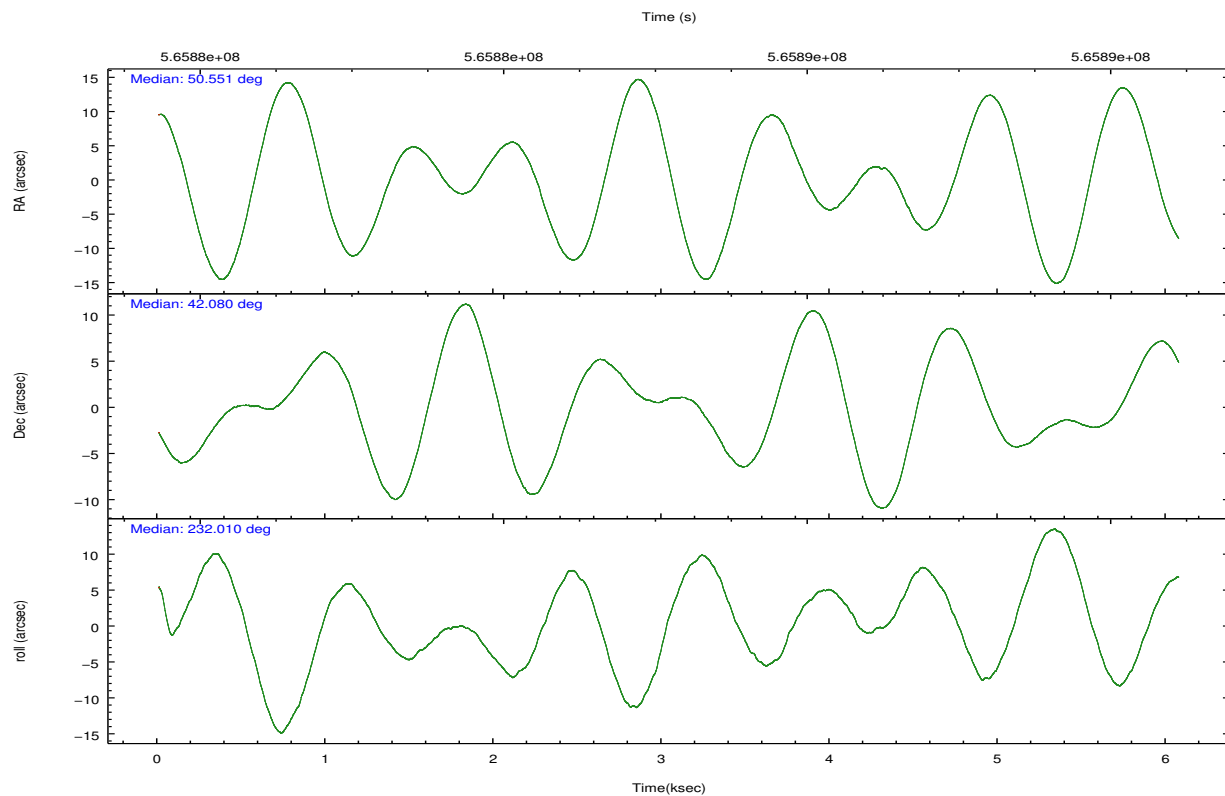
	ccd 0	ccd 1	ccd 2	ccd 3
grade 0 events	1348	1381	1341	1231
	5%	5%	4%	4%
grade 1 events	15	12	9	18
	0%	0%	0%	0%
grade 2 events	771	882	746	2003
	2%	3%	2%	6%
grade 3 events	377	348	316	332
	1%	1%	1%	1%
grade 4 events	309	335	326	338
	1%	1%	1%	1%
grade 5 events	1142	1211	1140	1406
	4%	4%	4%	4%
grade 6 events	724	828	633	718
	2%	3%	2%	2%
grade 7 events	21200	21298	22954	24311
	81%	80%	83%	80%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-0123	ACIS-0123	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	50.555460	50.55047451750595	CCD I2 on	Y	Y
[deg] Pointing Dec	42.107344	42.07998010929724	CCD I3 on	Y	Y
[deg] Pointing Roll	231.806645	232.0186834046815	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	N	N
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	565883128.184000	565881805.75758	CCD S5 on	N	N
Observation start date	2015-12-07T13:44:20	2015-12-07T13:23:25	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	565888128.184000	565889149.3705	On-chip summing requested	N	N
Observation end date	2015-12-07T15:07:40	2015-12-07T15:25:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



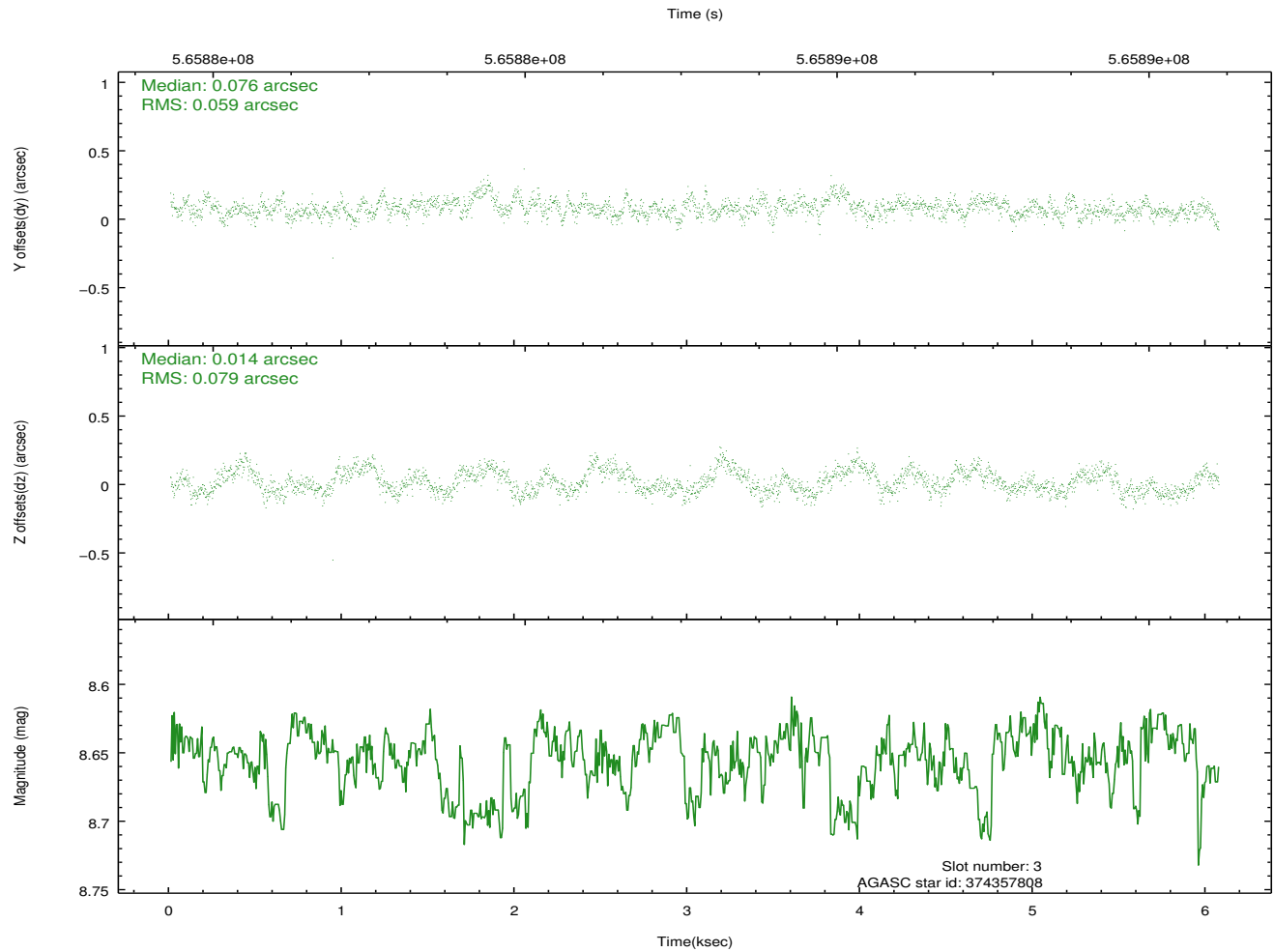
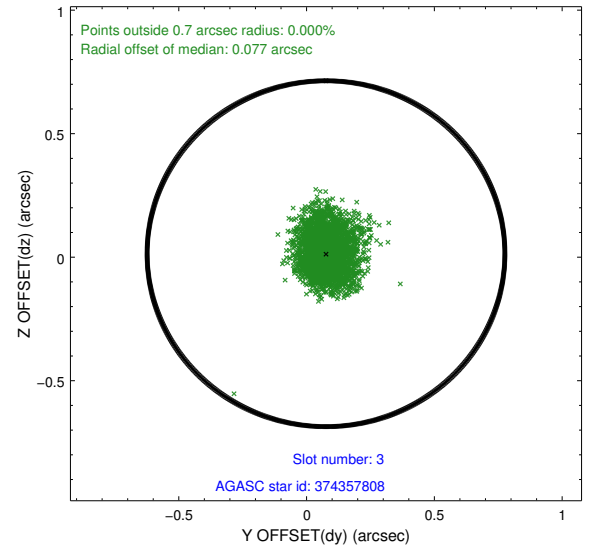
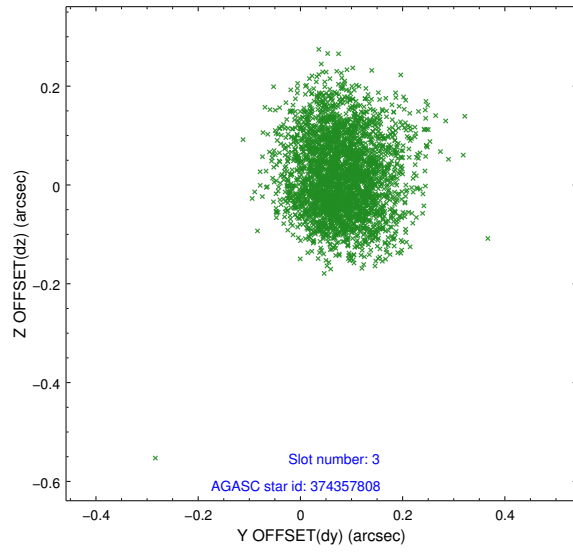


Slot Statistics

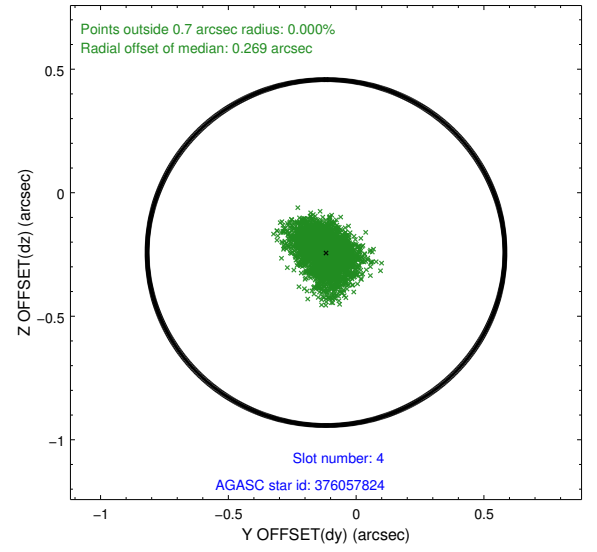
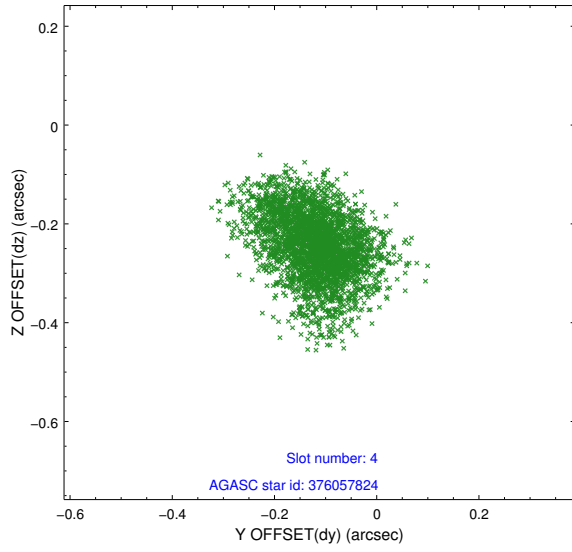
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.27	1481	0.064	-0.002	0.007	0.012	0.000000	0.000000	923.07	-842.37
1	FID		ACIS-I-5	7.26	1480	-0.358	0.031	0.008	0.013	0.000000	0.000000	-1825.01	1054.53
2	FID		ACIS-I-6	7.28	1481	0.204	0.041	0.008	0.014	0.000000	0.000000	387.57	1700.25
3	GUIDE	used	374357808	8.65	2961	0.076	0.014	0.105	0.169	49.921429	42.176083	847.15	-1485.80
4	GUIDE	used	376057824	8.32	2960	-0.118	-0.242	0.096	0.157	50.665569	41.926280	330.53	634.77
5	GUIDE	used	376070040	8.38	2960	0.089	0.042	0.161	0.266	50.072031	41.897206	1393.48	-551.81
6	GUIDE	used	376066648	7.70	2960	0.033	0.286	0.111	0.165	50.550240	42.822138	-2012.56	-1600.98
7	GUIDE	used	376061424	9.23	2958	-0.106	-0.084	0.123	0.208	51.403542	42.058446	-1272.61	1882.68

2.4 Star Slots

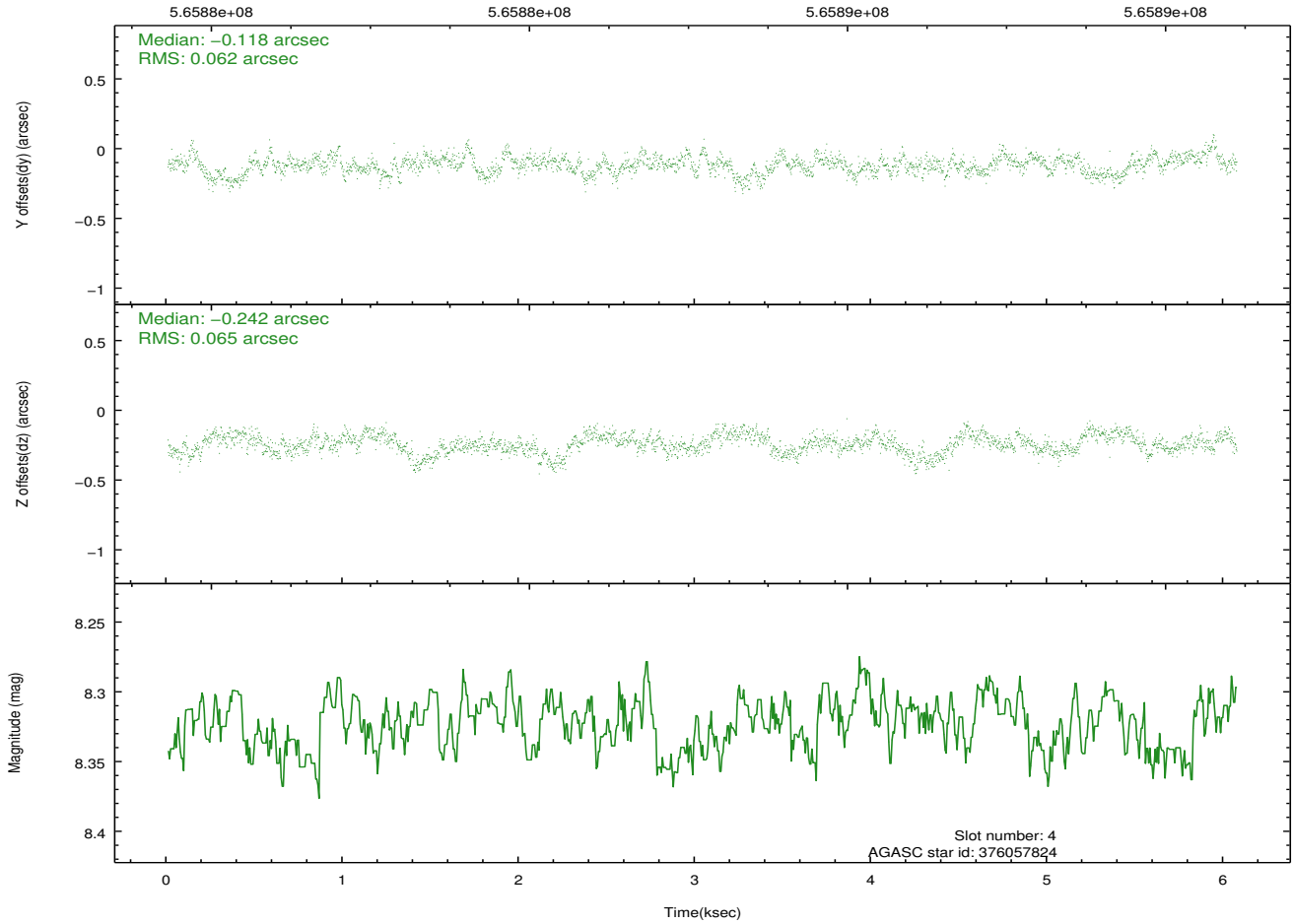
2.4.1 Slot 3



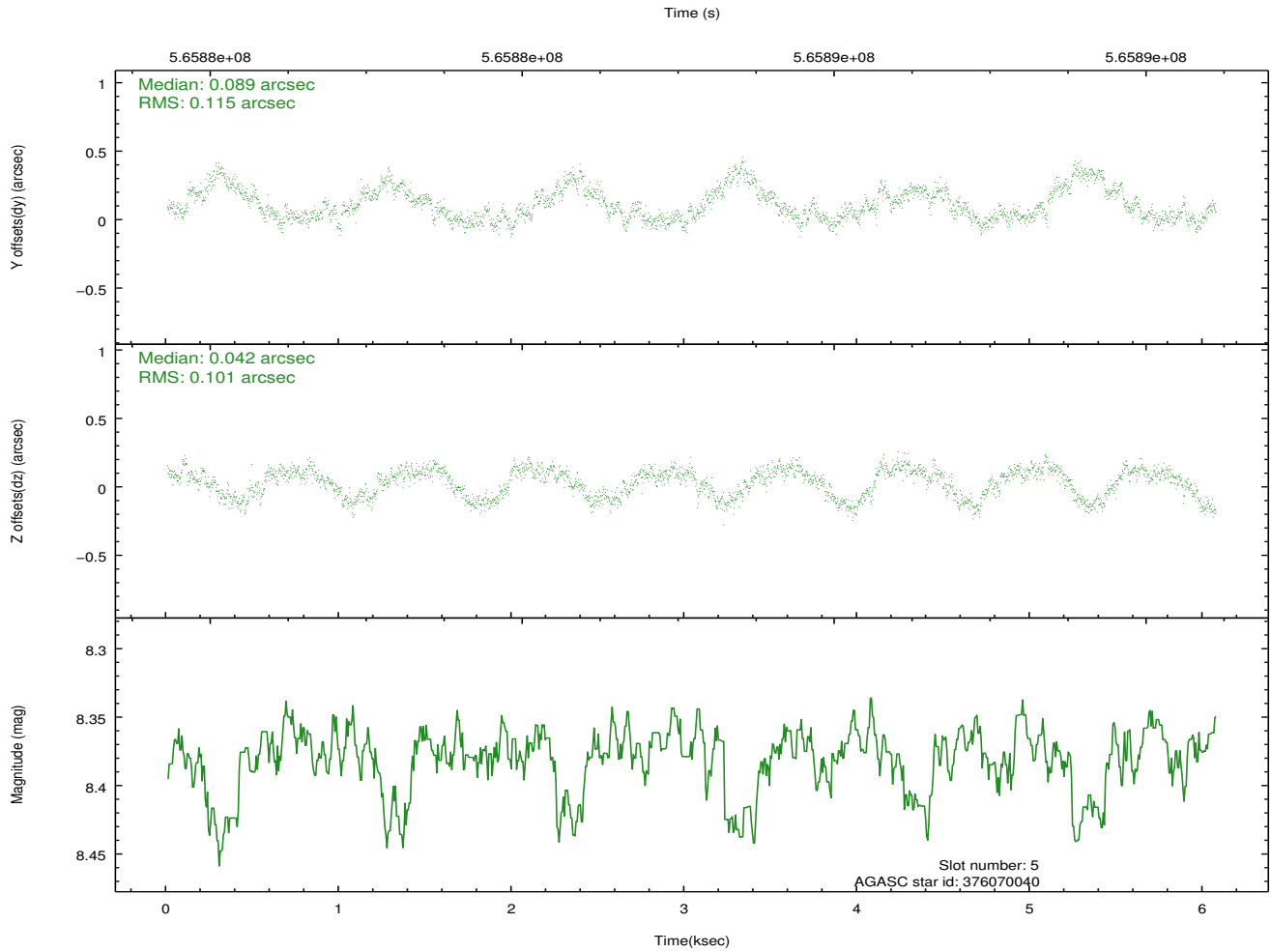
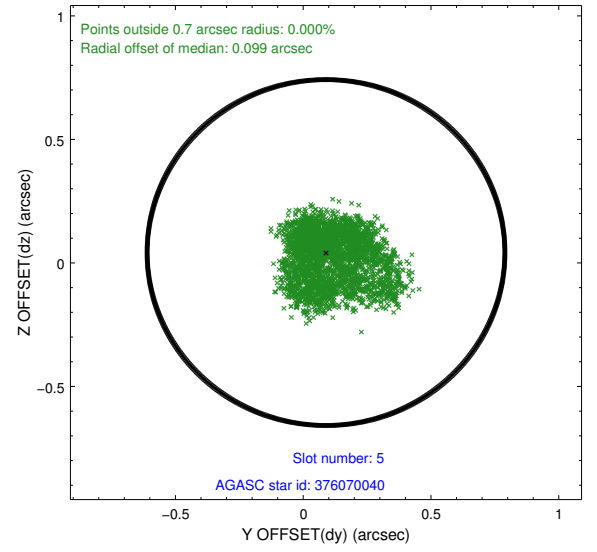
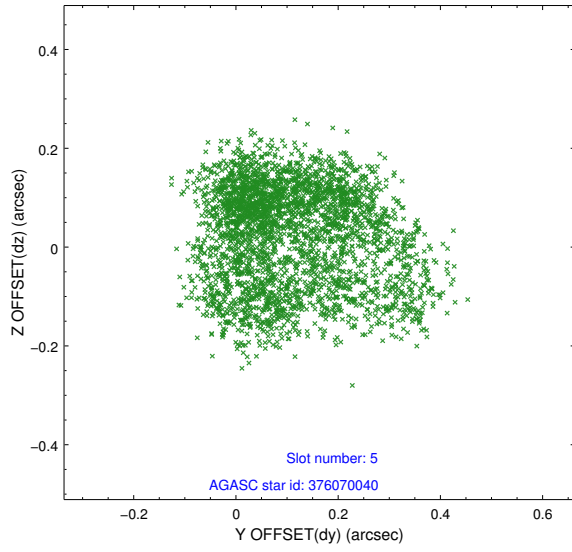
2.4.2 Slot 4



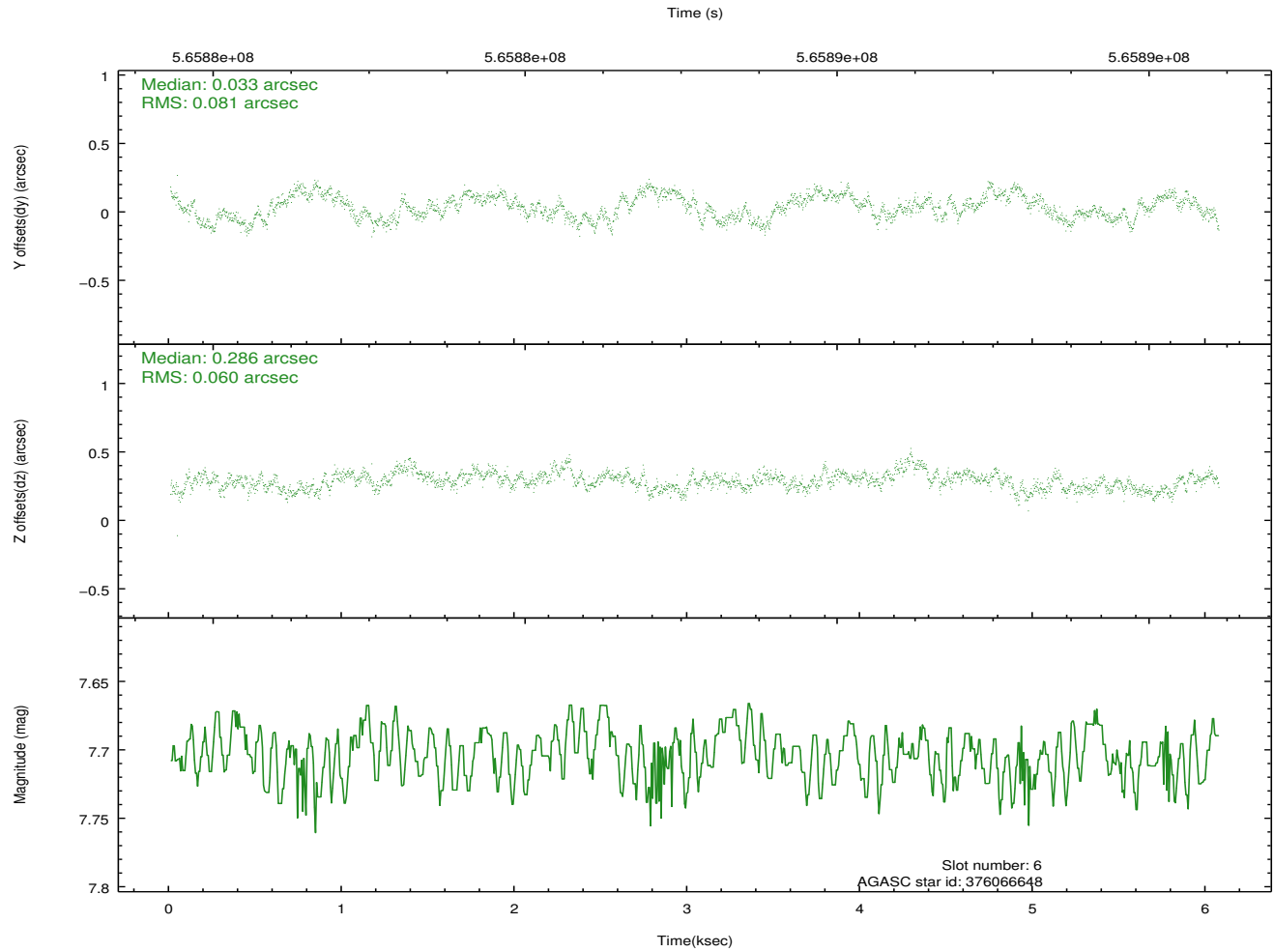
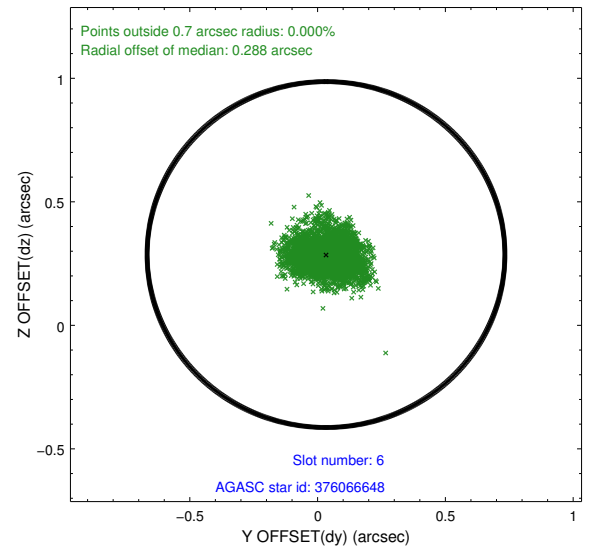
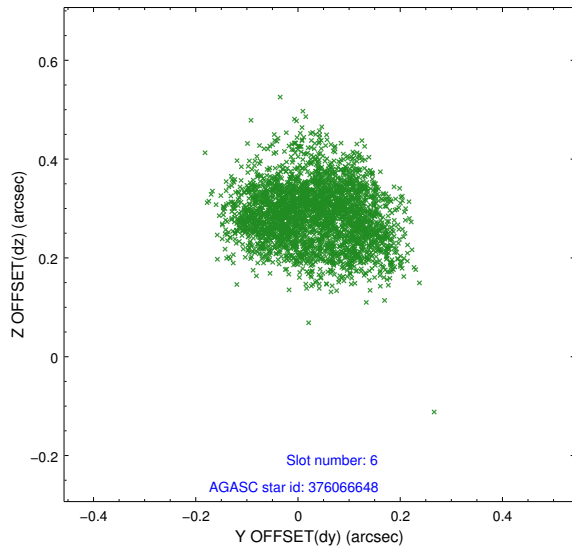
Time (s)



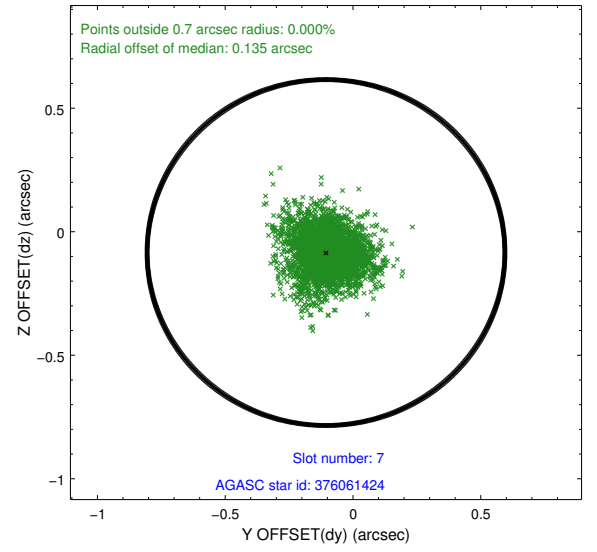
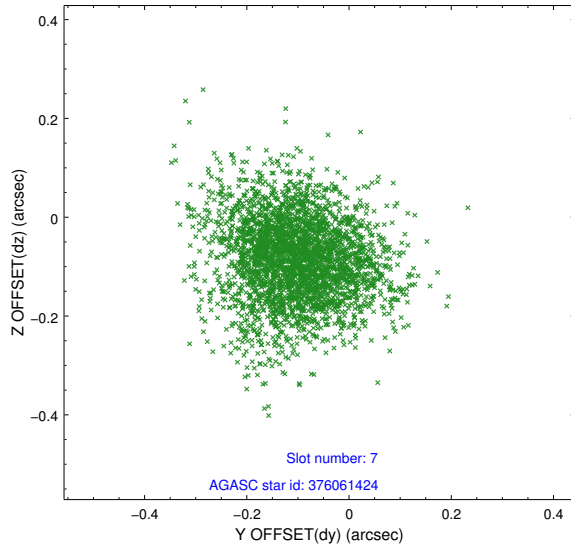
2.4.3 Slot 5



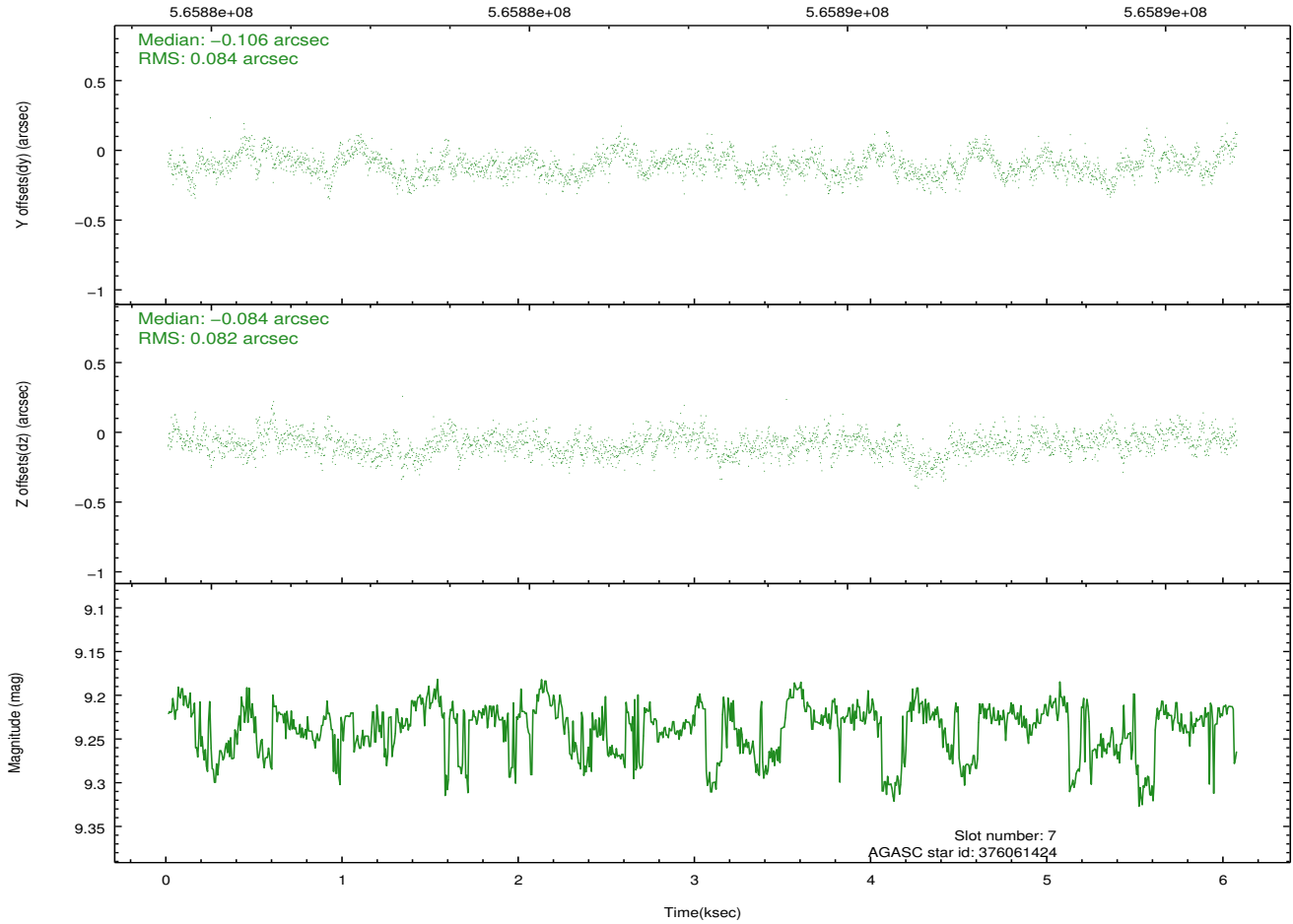
2.4.4 Slot 6



2.4.5 Slot 7

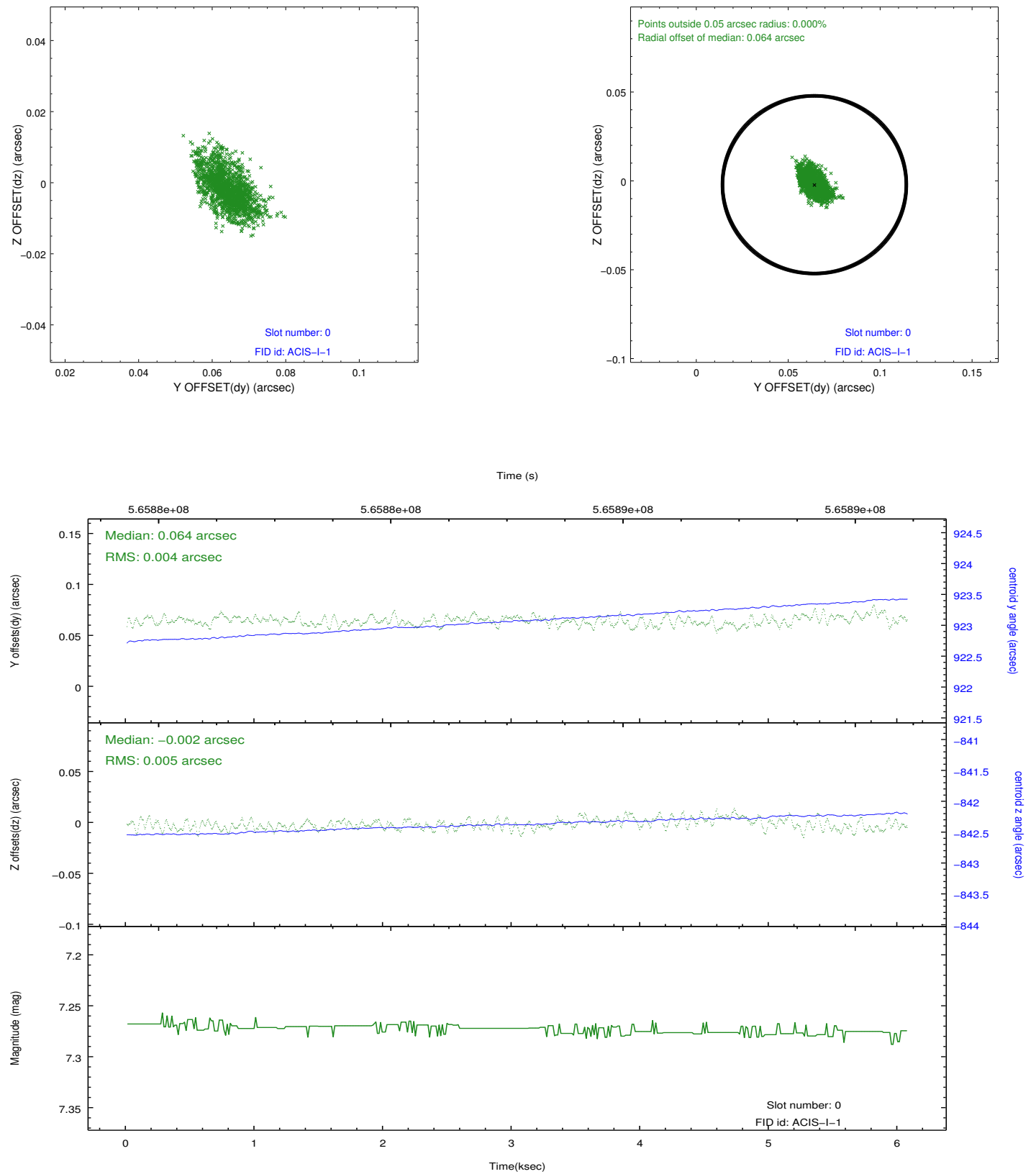


Time (s)

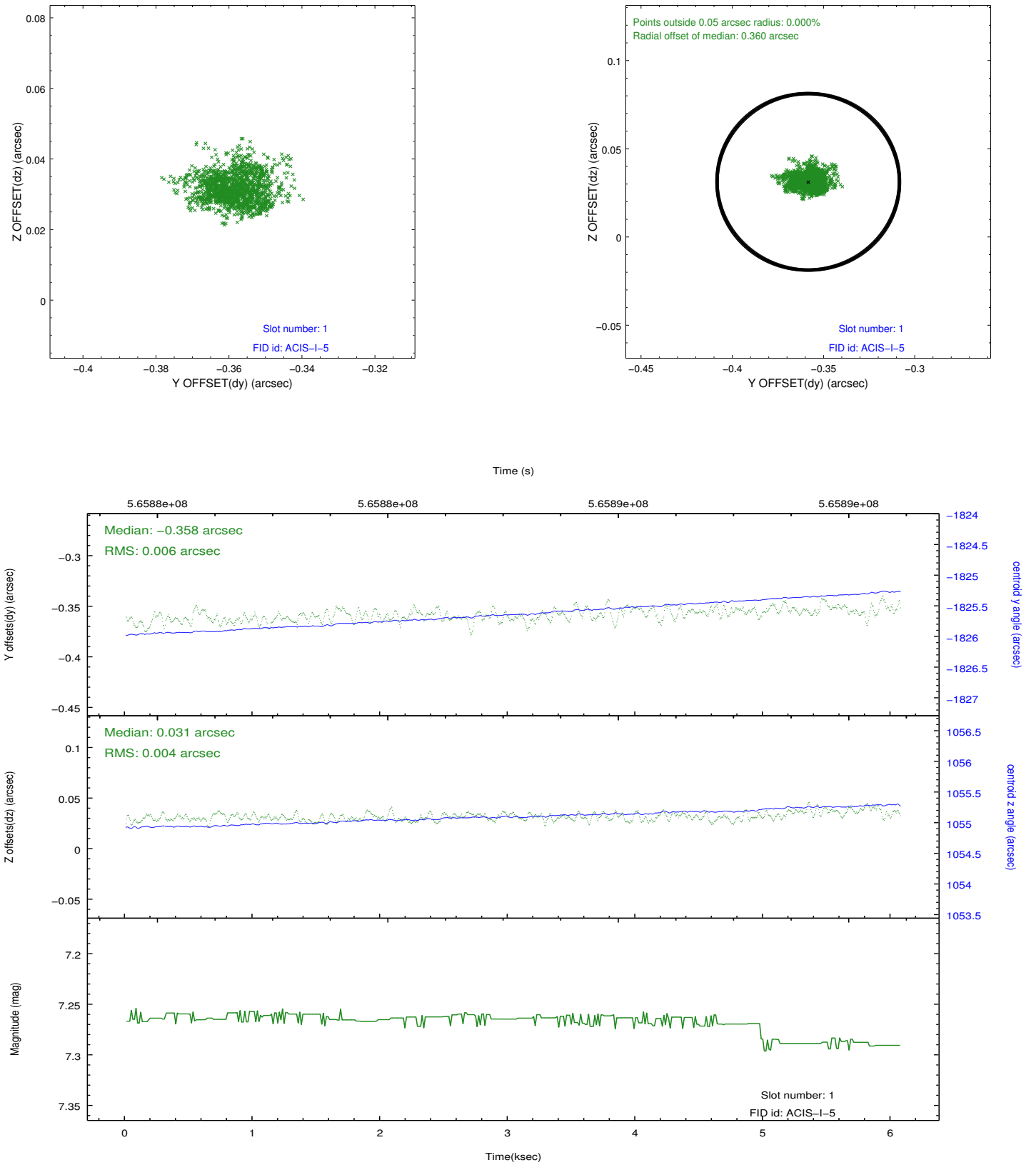


2.5 FID Slots

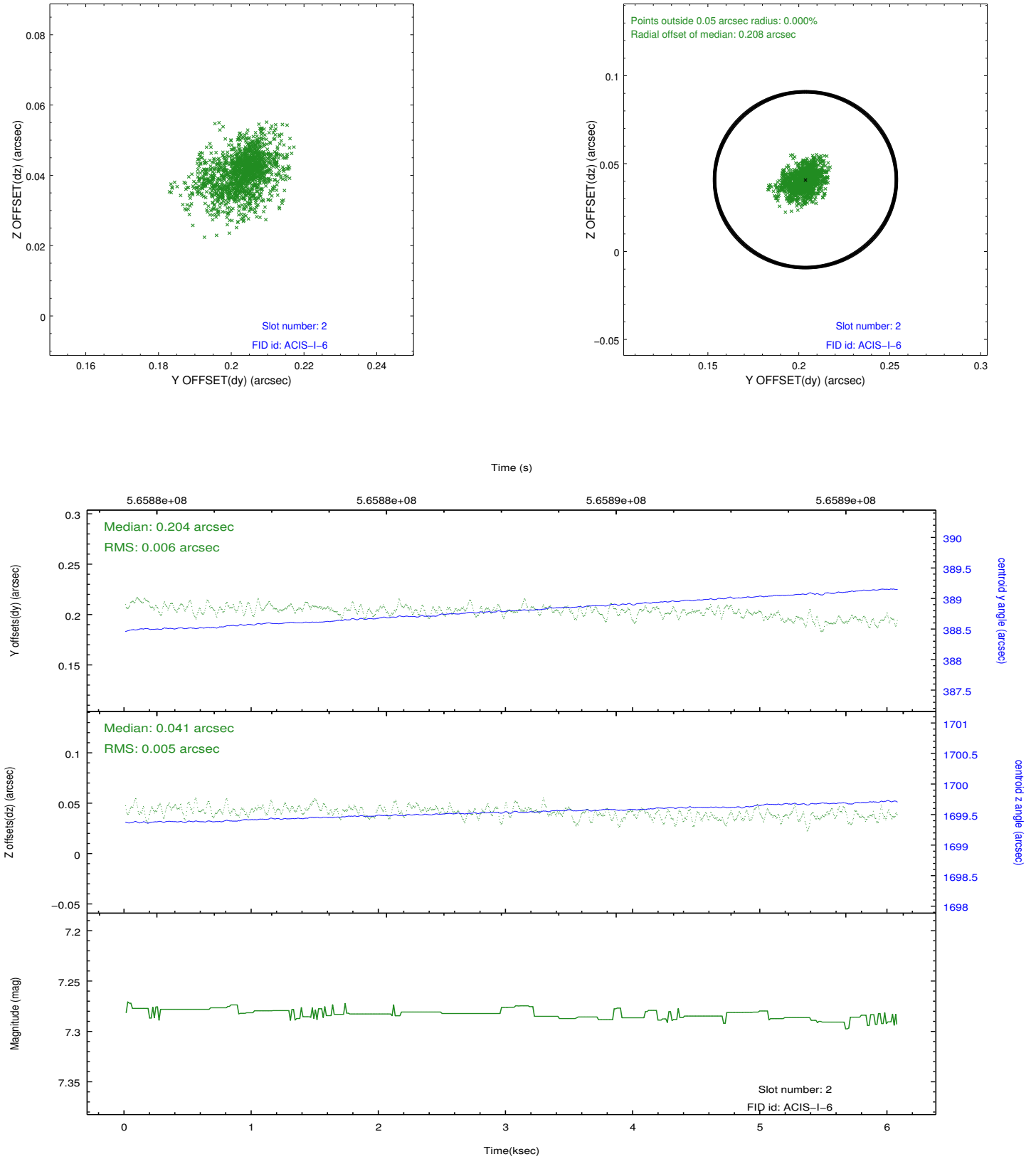
2.5.1 Slot 0



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)	2015.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.0840000392199

A.2 Comments