

V&V Reference Report

L2 ASCDS Version : 10.4.2.1

Observation 17263 - L2 Version 1
Chandra X-Ray Center

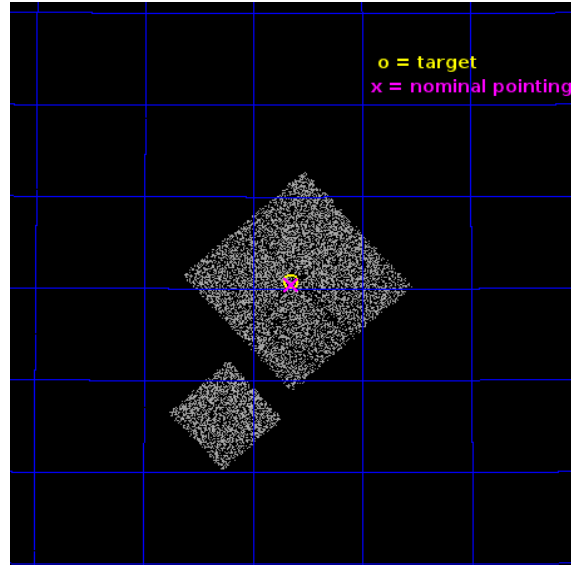
L2 Processing Date : Dec 4 2015

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

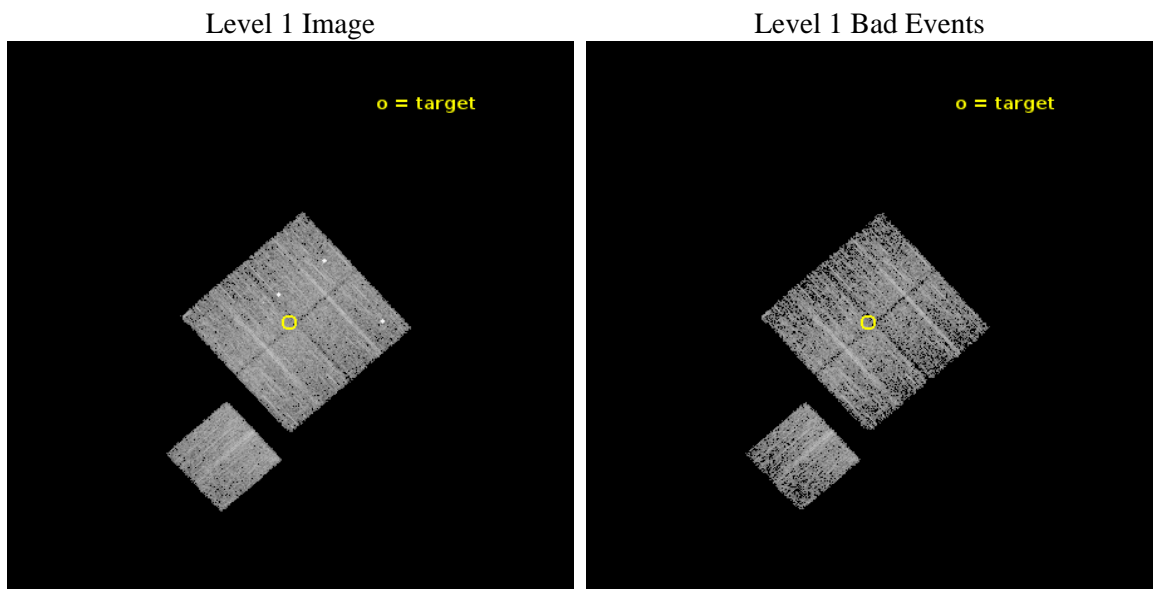
seq_num	801508	Sequence number
obs_id	17263	Observation id
title	Perseus: A New, Low-Redshift Anchor for Cluster Cosmology	Proposal
observer	Prof. Steven Allen	Principal investigator
object	Perseus cluster	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	50.16496	Observer's specified target RA [deg]
dec_targ	40.513172	Observer's specified target Dec [deg]
ra_nom	50.162225843261	Nominal RA [deg]
dec_nom	40.507111205362	Nominal Dec [deg]
roll_nom	228.07461709148	Nominal Roll [deg]
revision	1	Processing version of data
ontime	4773.7009379864	Sum of GTIs [s]
livetime	4711.3290208841	Livetime [s]
ontime0	4776.7188982964	Sum of GTIs [s]
ontime1	4776.7599382401	Sum of GTIs [s]
ontime2	4776.8009582758	Sum of GTIs [s]
ontime3	4773.7009379864	Sum of GTIs [s]
ontime6	4776.6778582335	Sum of GTIs [s]
l2events	13391	Number of level 2 events



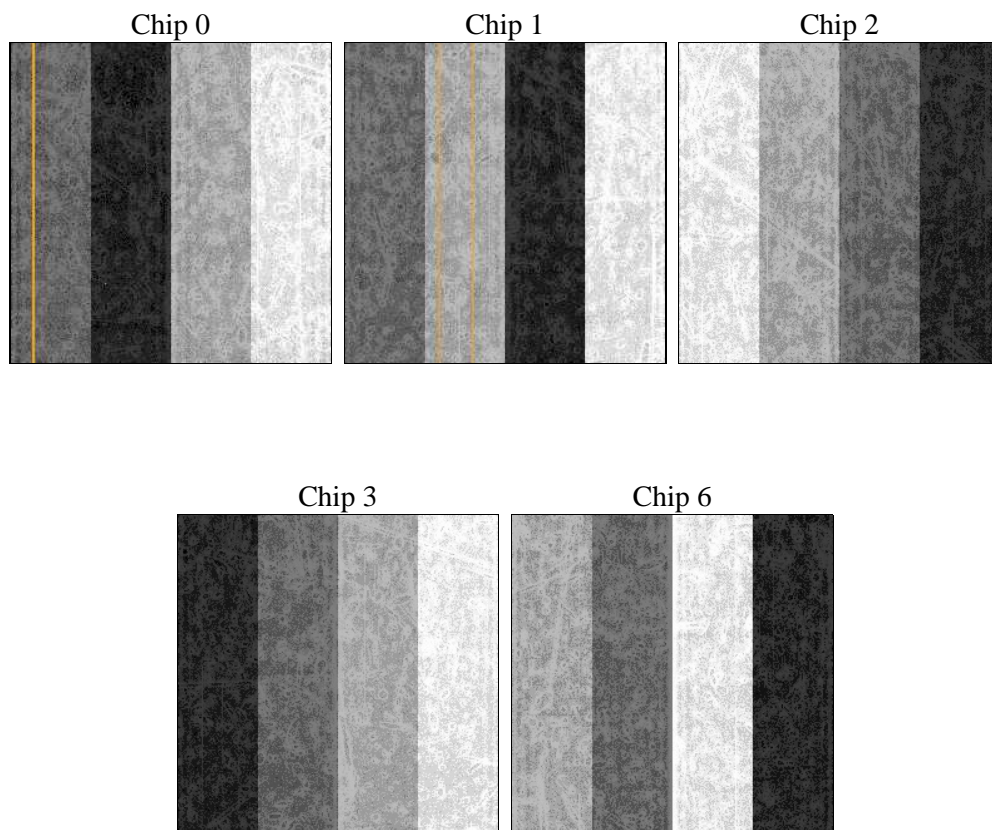
2 OBI

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	4773.7009379864	Sum of GTIs [s]
caldsver	4.6.10a	 	ontime0	4776.7188982964	Sum of GTIs [s]
date	2015-12-04T19:32:19	Date and time of file creation	ontime1	4776.7599382401	Sum of GTIs [s]
revision	1	Processing version of data	ontime2	4776.8009582758	Sum of GTIs [s]
			ontime3	4773.7009379864	Sum of GTIs [s]
			ontime6	4776.6778582335	Sum of GTIs [s]
			l1events	136925	Number of level 1 events

2.1.4 Events

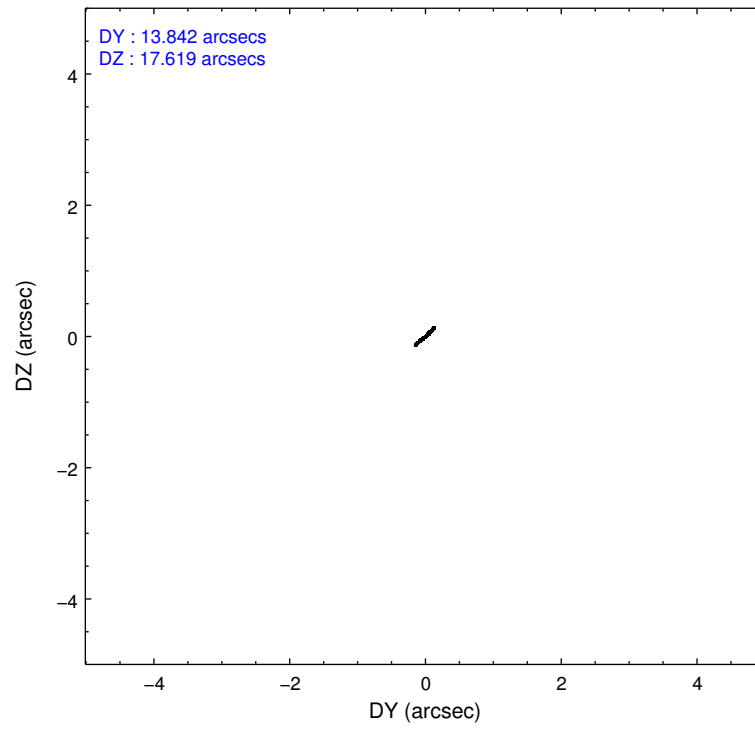
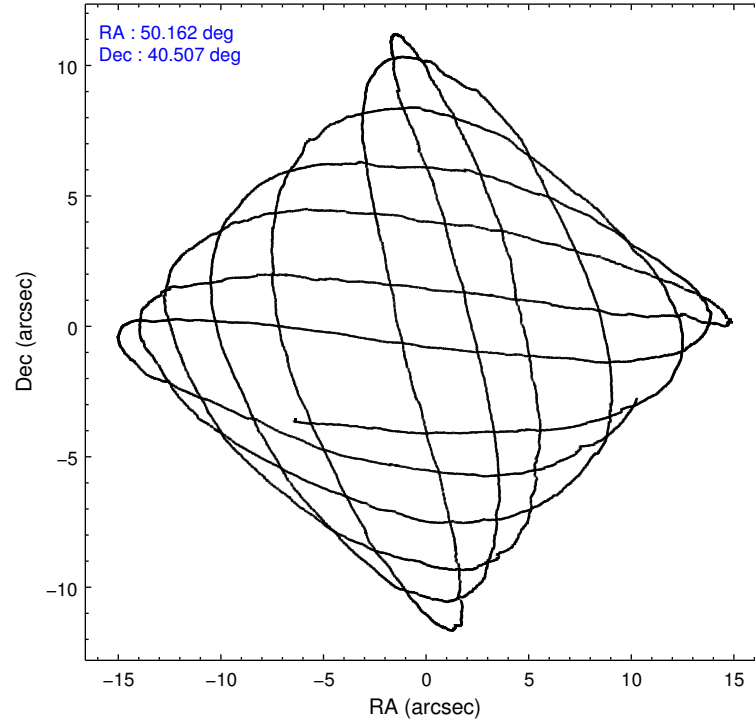
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	25934	29506	27437	26530	27518
rejected events	21288	23482	24491	23568	24275
rejected %	82%	79%	89%	88%	88%

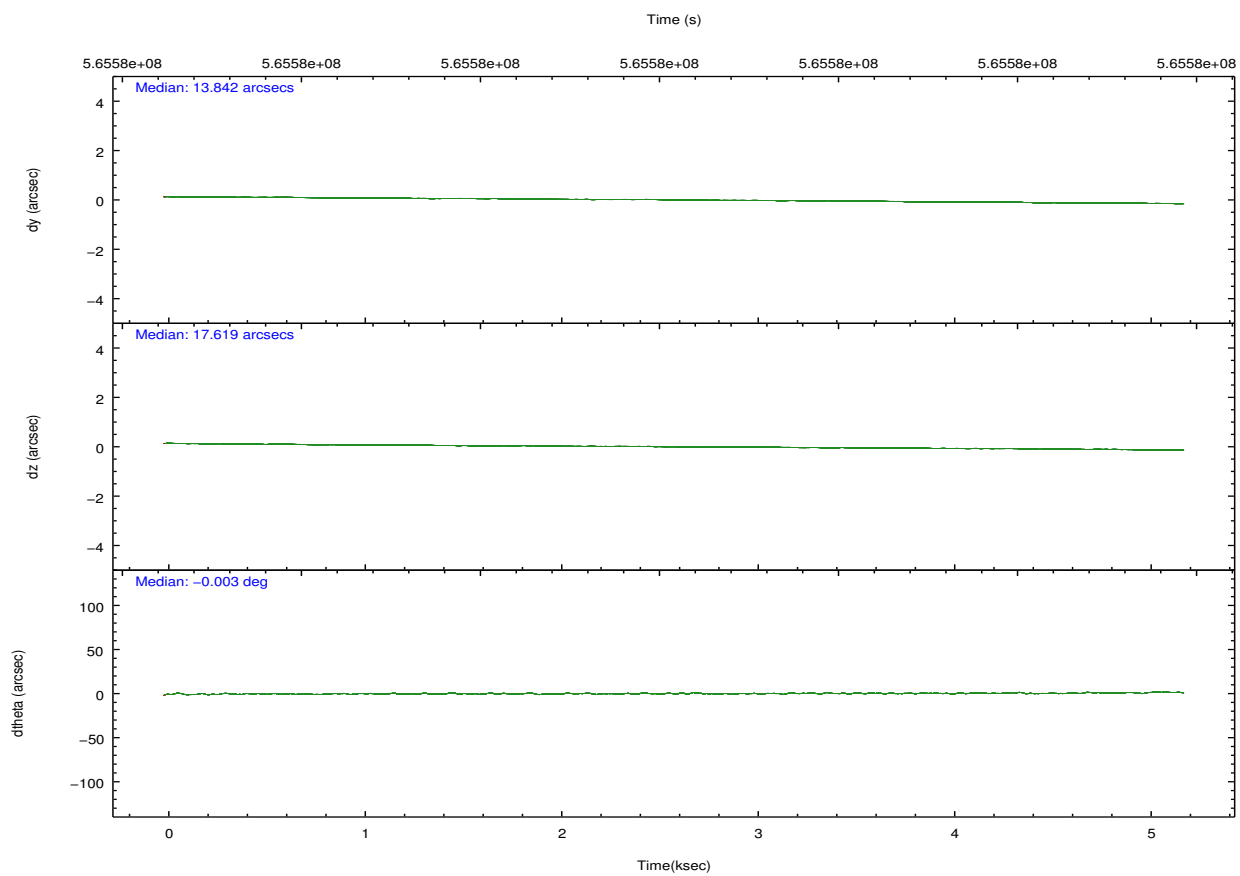
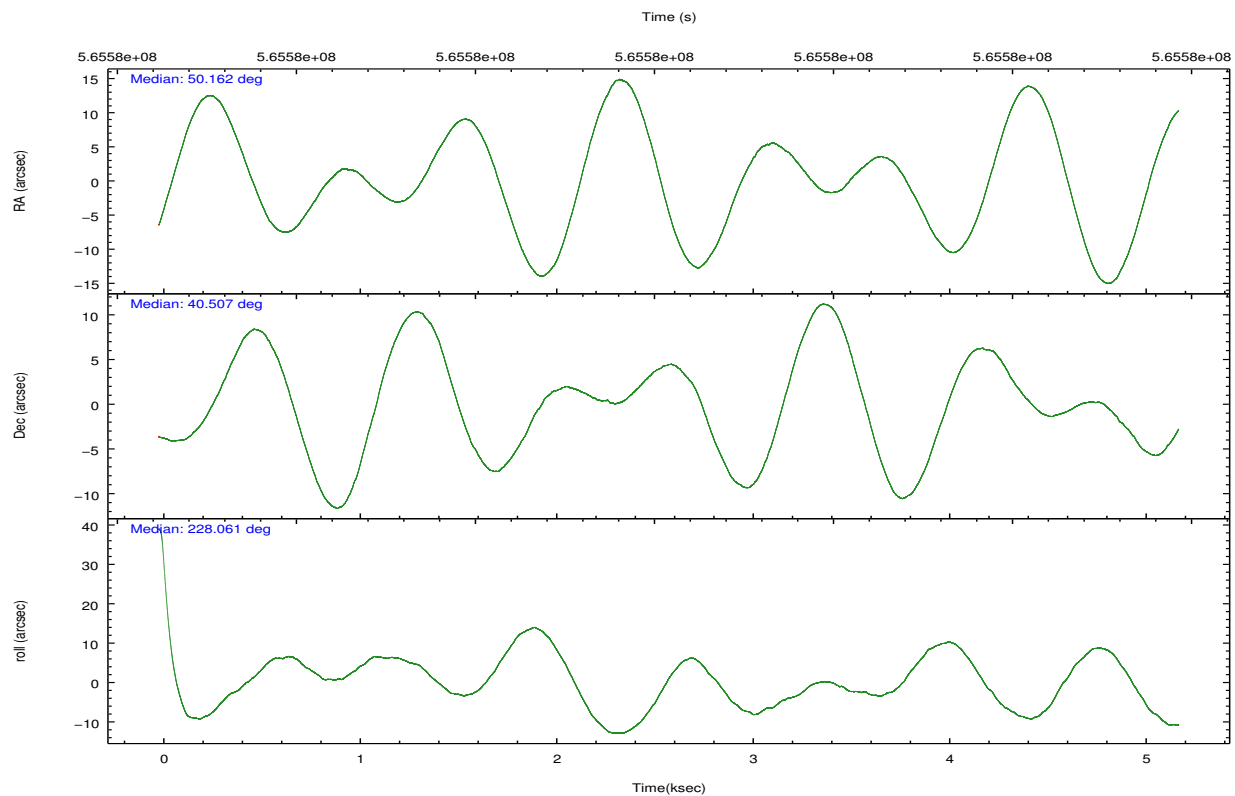
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2568	3778	1091	1091	1111
	9%	12%	3%	4%	4%
grade 1 events	26	25	13	16	13
	0%	0%	0%	0%	0%
grade 2 events	795	798	663	651	738
	3%	2%	2%	2%	2%
grade 3 events	298	335	294	301	338
	1%	1%	1%	1%	1%
grade 4 events	302	312	270	350	333
	1%	1%	0%	1%	1%
grade 5 events	1154	1279	1103	1347	1323
	4%	4%	4%	5%	4%
grade 6 events	687	805	629	573	723
	2%	2%	2%	2%	2%
grade 7 events	20104	22174	23374	22201	22939
	77%	75%	85%	83%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	50.169528	50.16222584326098	CCD I2 on	Y	Y
[deg] Pointing Dec	40.534200	40.50711120536157	CCD I3 on	Y	Y
[deg] Pointing Roll	227.861082	228.0746170914795	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	Y
[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)	565575655.184000	565575278.97772	CCD S5 on	N	N
Observation start date	2015-12-04T00:19:47	2015-12-04T00:14:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	565580655.184000	565580822.17803	On-chip summing requested	N	N
Observation end date	2015-12-04T01:43:07	2015-12-04T01:47:02	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



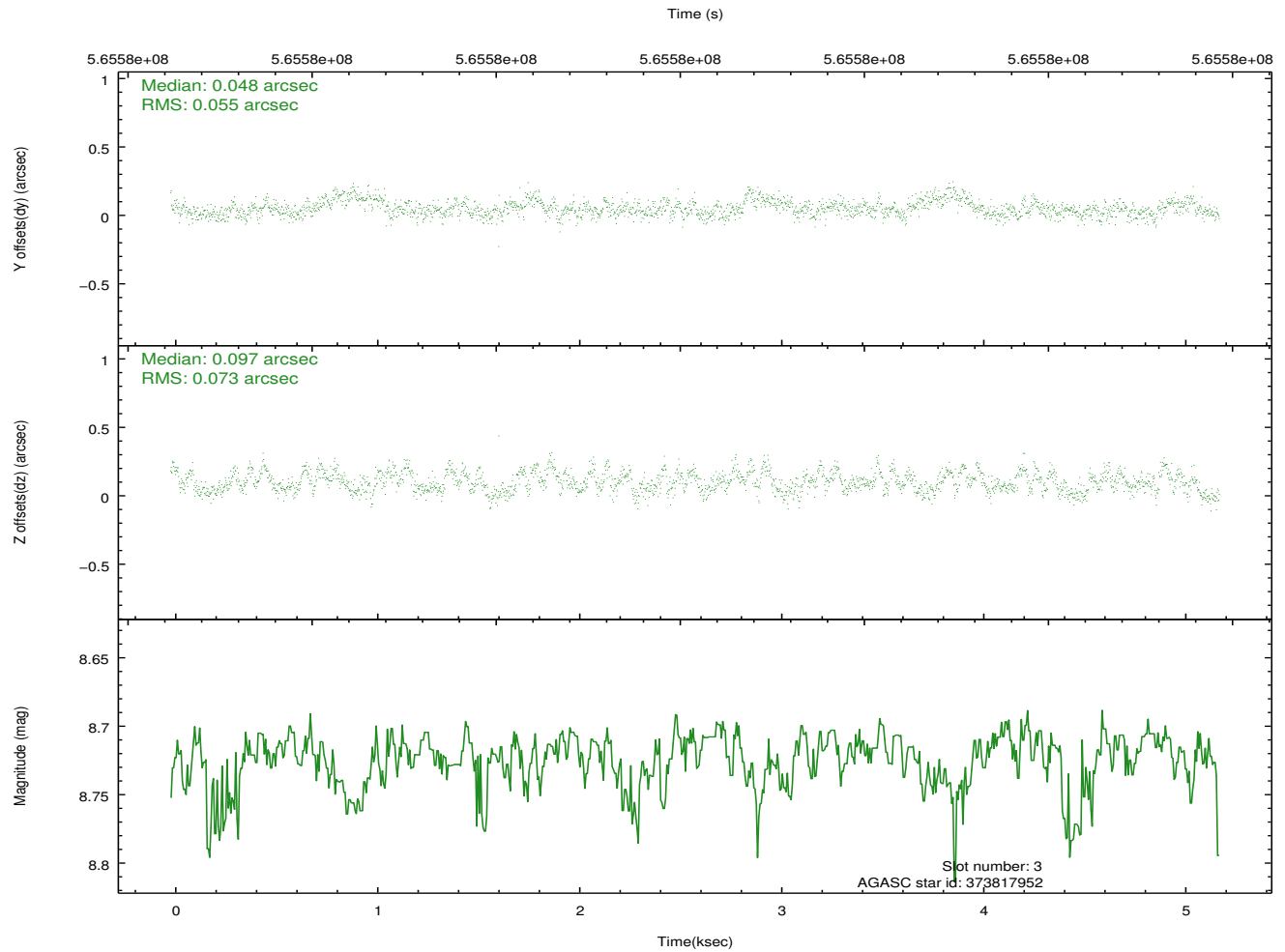
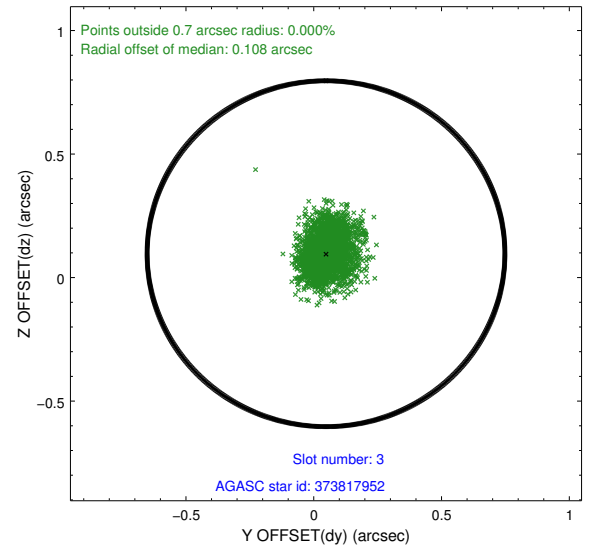
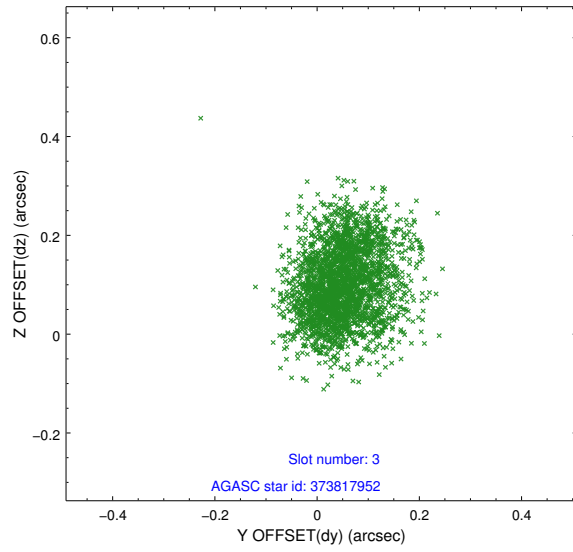


Slot Statistics

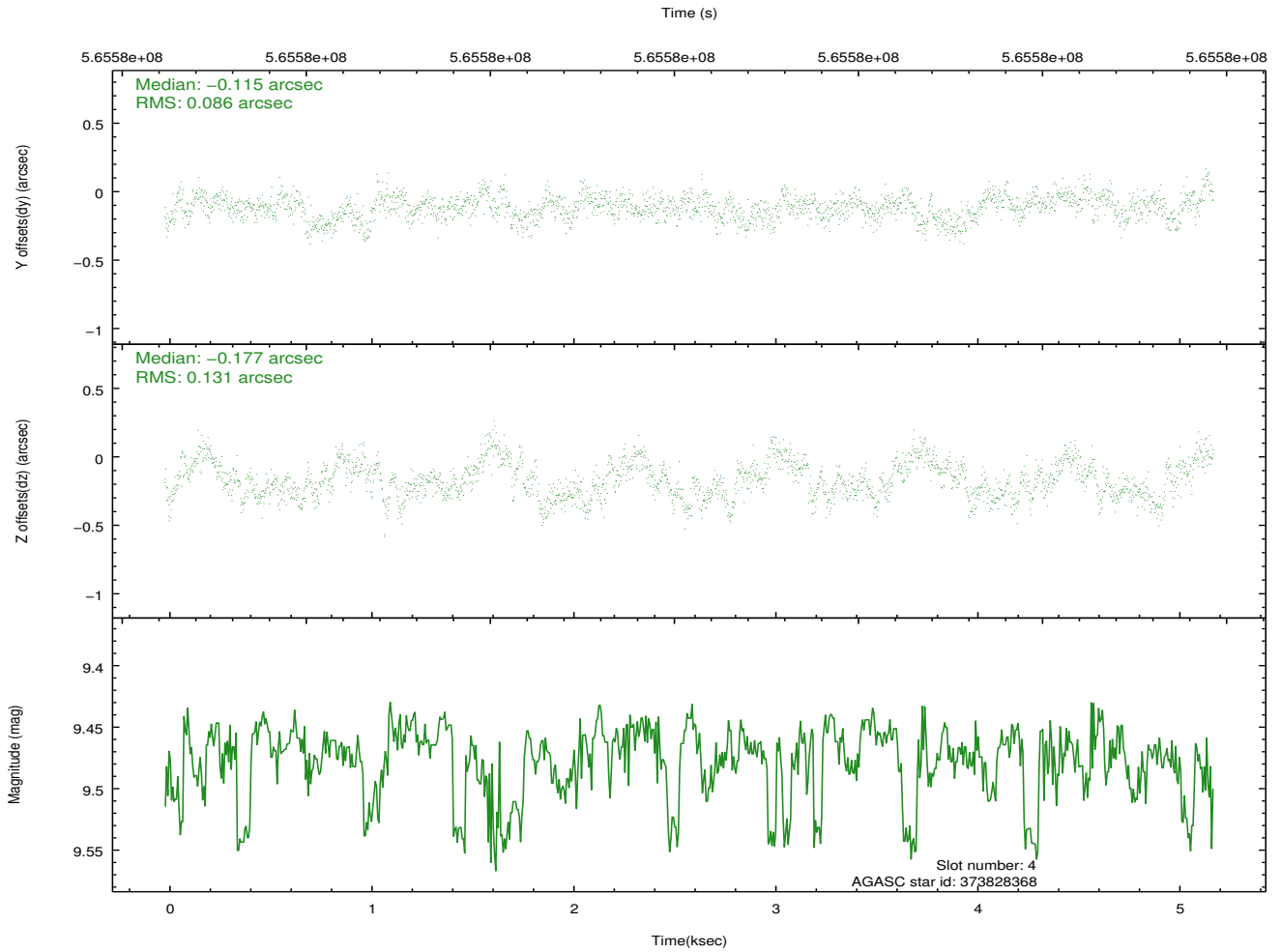
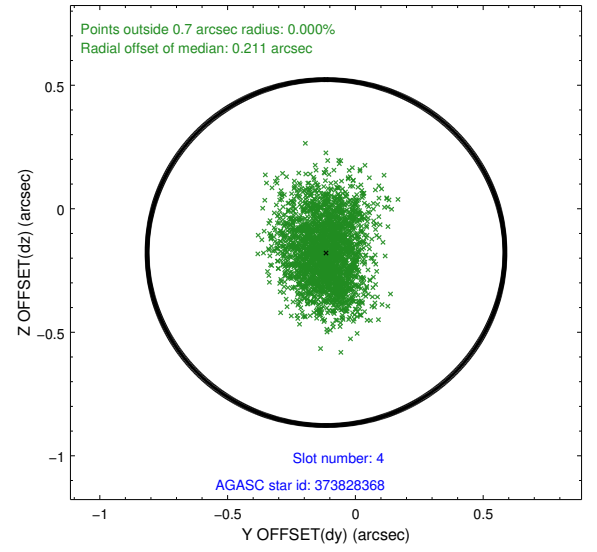
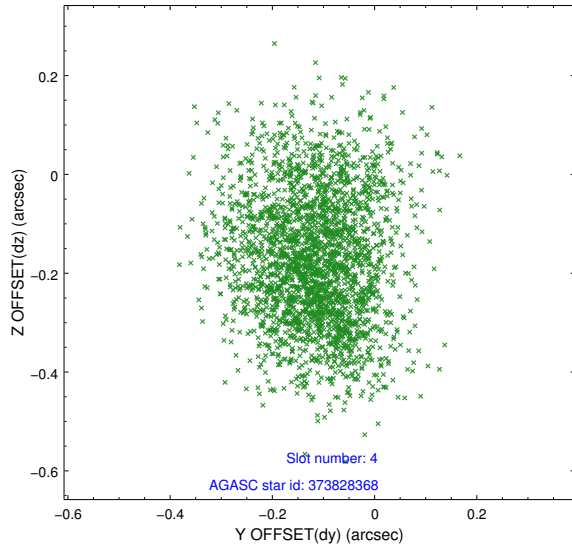
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.26	1267	0.067	-0.021	0.009	0.025	0.000000	0.000000	925.73	-841.29
1	FID		ACIS-I-5	7.27	1267	-0.298	0.048	0.006	0.012	0.000000	0.000000	-1822.13	1055.63
2	FID		ACIS-I-6	7.25	1267	0.139	0.043	0.009	0.018	0.000000	0.000000	390.03	1701.49
3	GUIDE	used	373817952	8.72	2532	0.048	0.097	0.097	0.159	49.913424	40.978510	-719.05	-1589.74
4	GUIDE	used	373828368	9.47	2532	-0.115	-0.177	0.168	0.274	49.507374	40.699462	767.50	-1742.51
5	GUIDE	used	375527168	7.84	2533	-0.005	-0.098	0.101	0.157	50.968367	40.629276	-1725.20	1381.19
6	GUIDE	used	375531296	8.39	2532	-0.075	-0.227	0.090	0.143	50.781952	40.166954	-155.08	2132.77
7	GUIDE	used	373826120	8.89	2531	0.135	0.387	0.116	0.184	49.738165	41.186341	-957.98	-2442.59

2.4 Star Slots

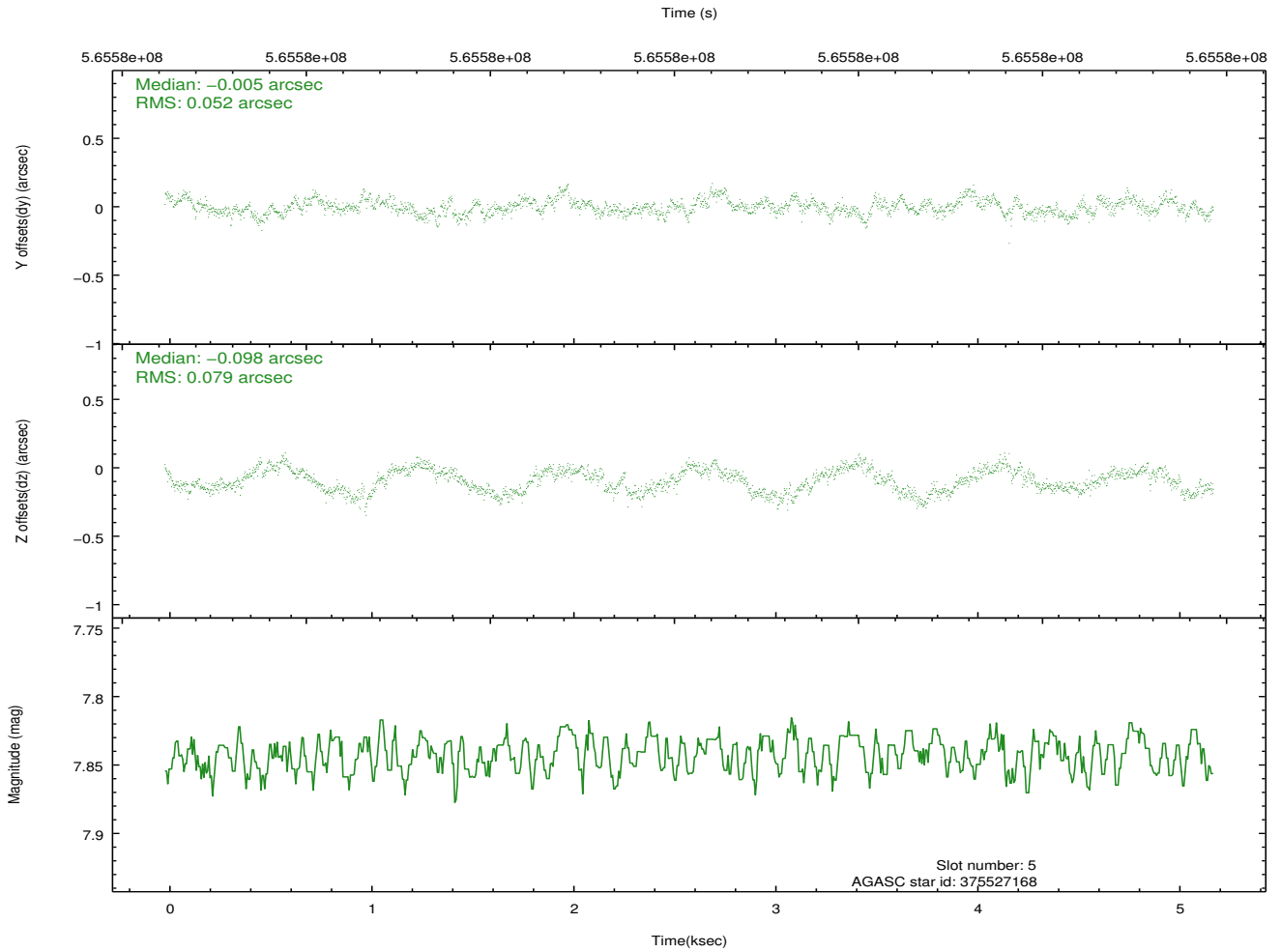
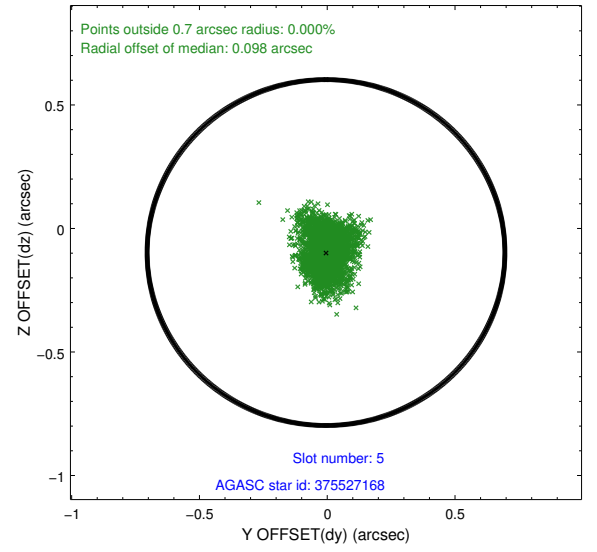
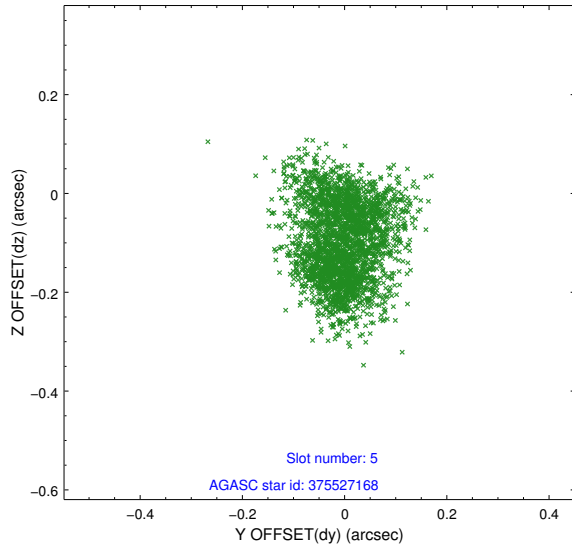
2.4.1 Slot 3



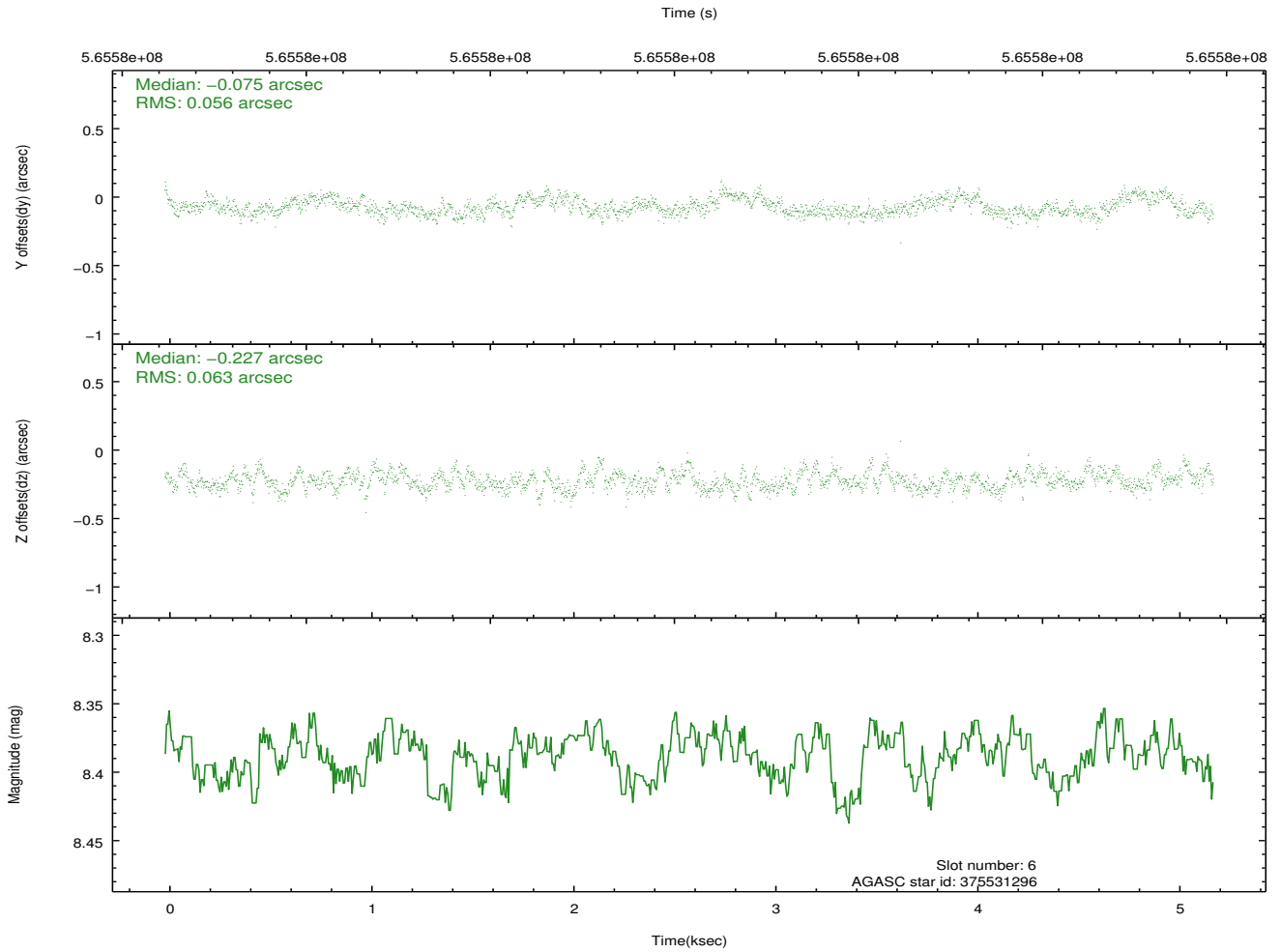
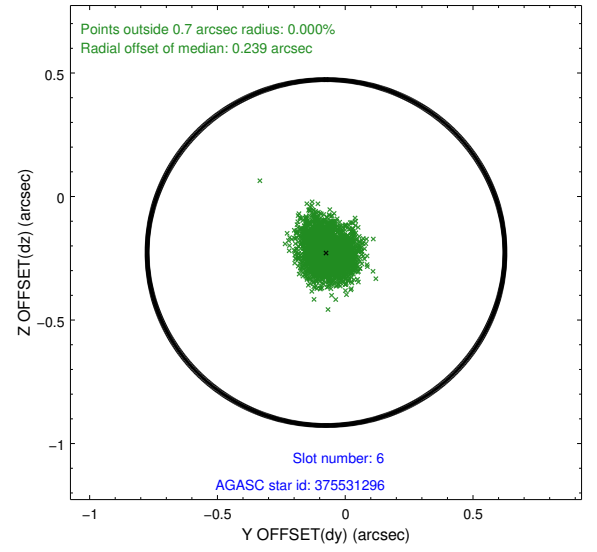
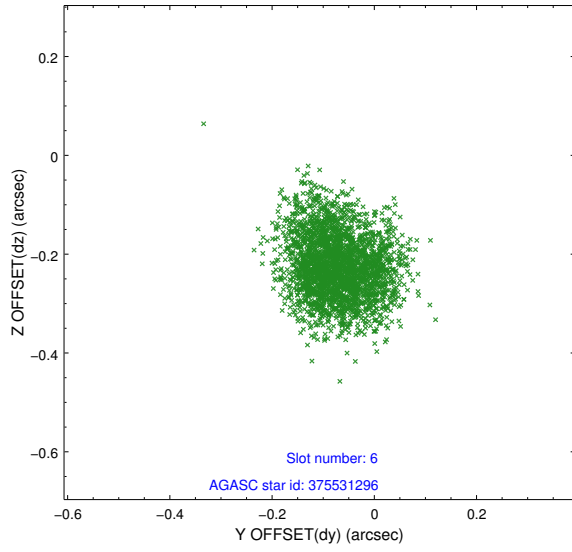
2.4.2 Slot 4



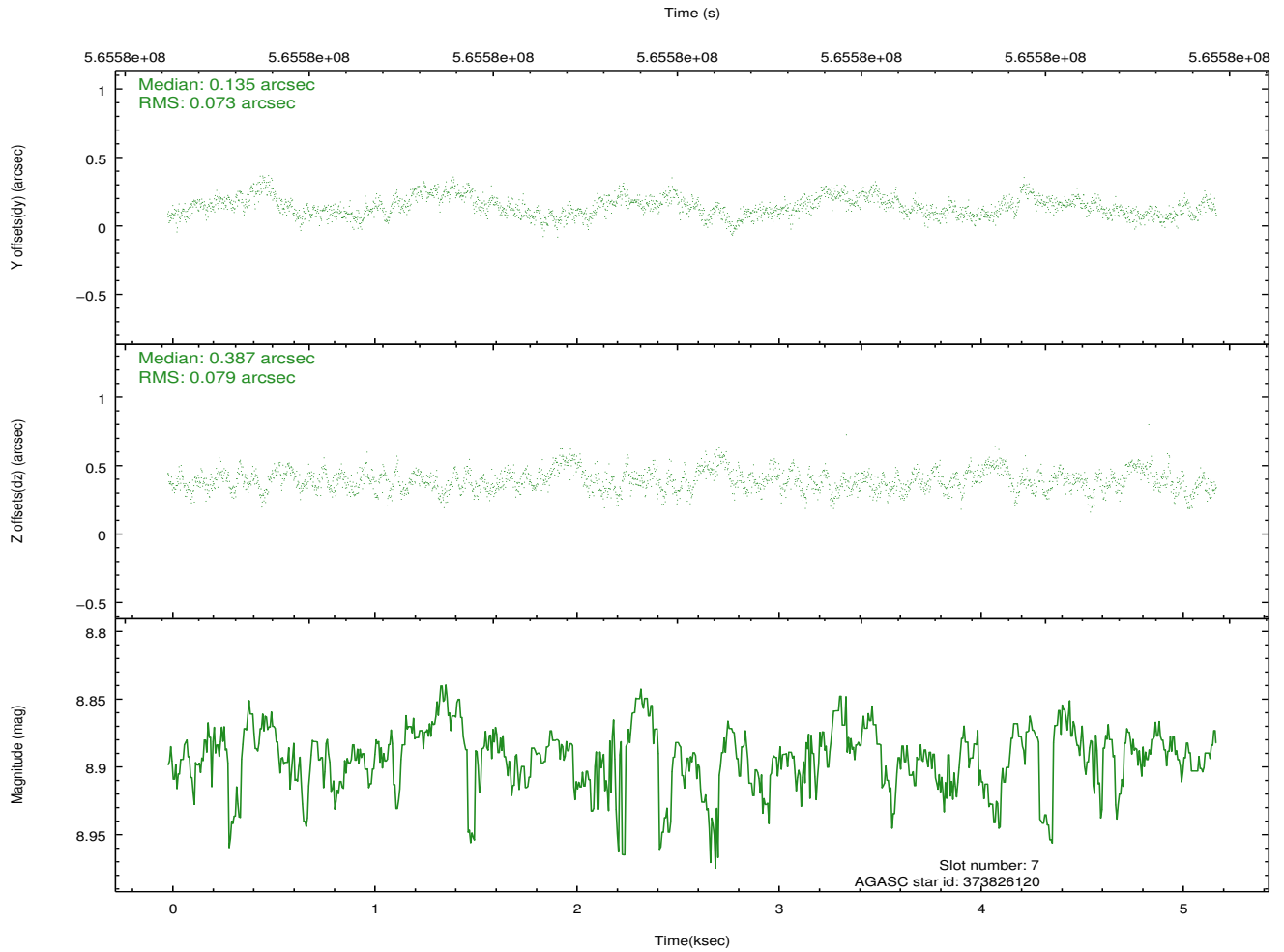
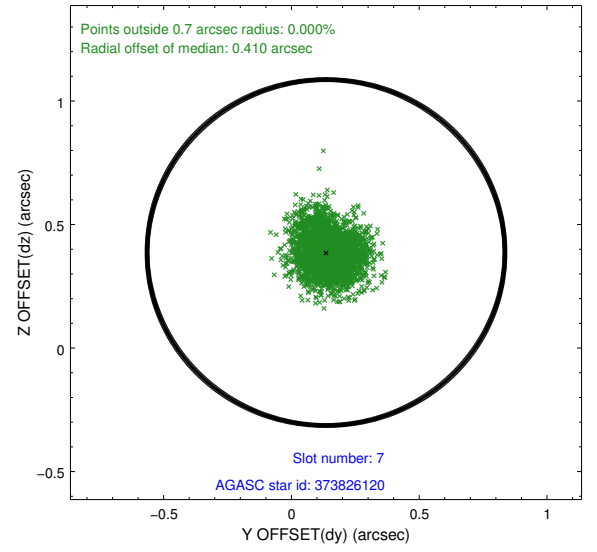
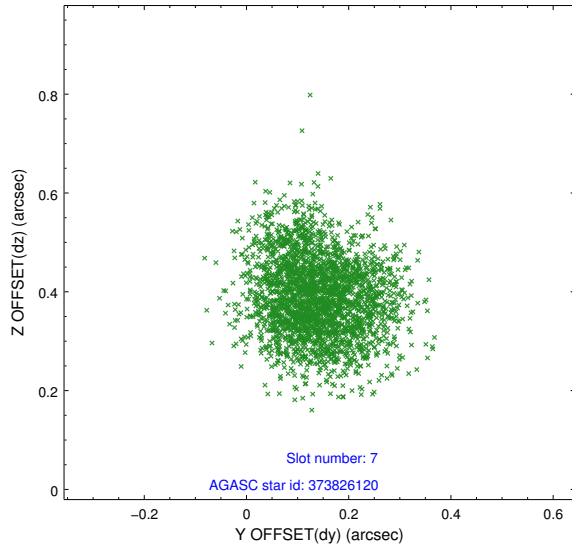
2.4.3 Slot 5



2.4.4 Slot 6

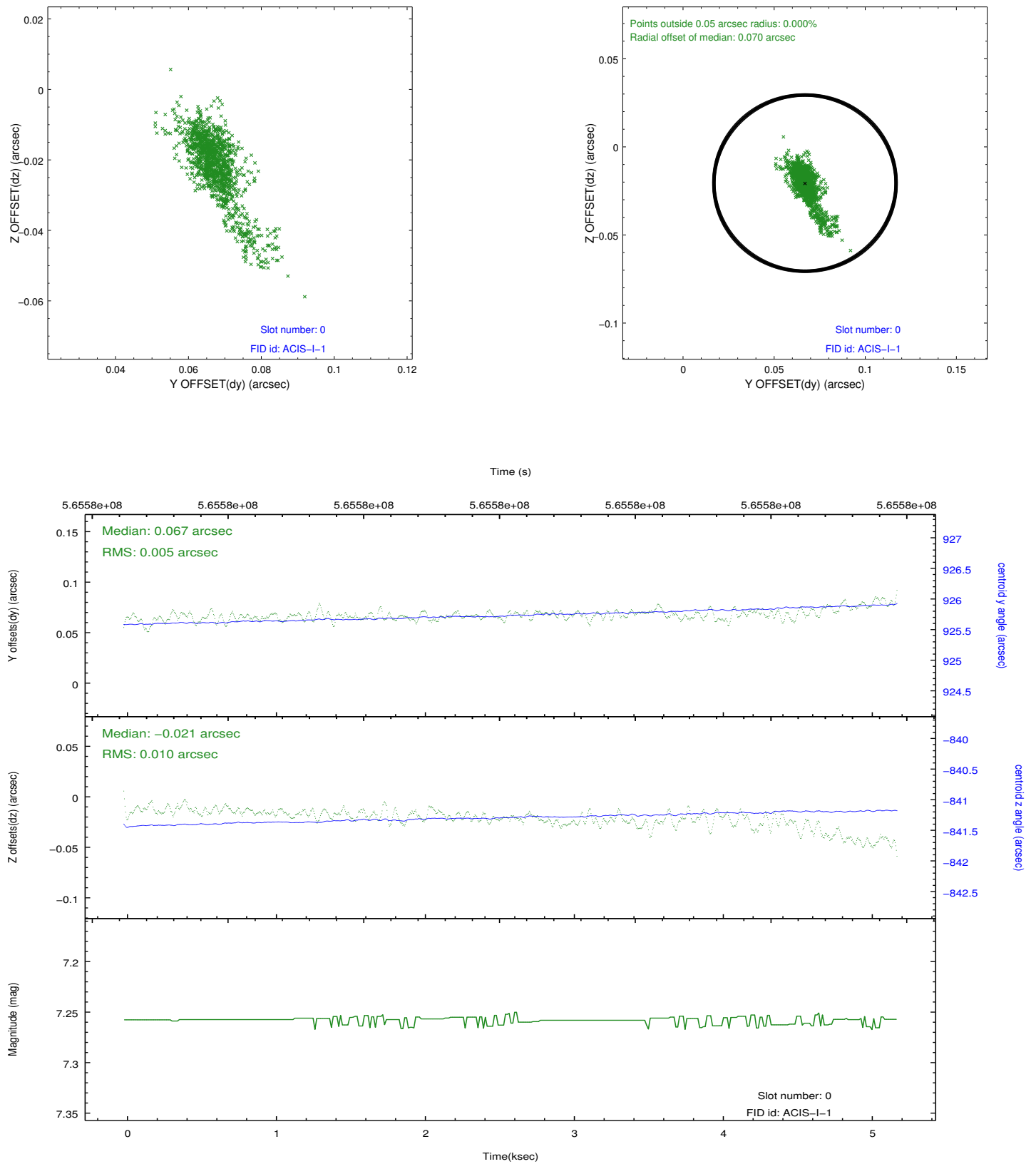


2.4.5 Slot 7

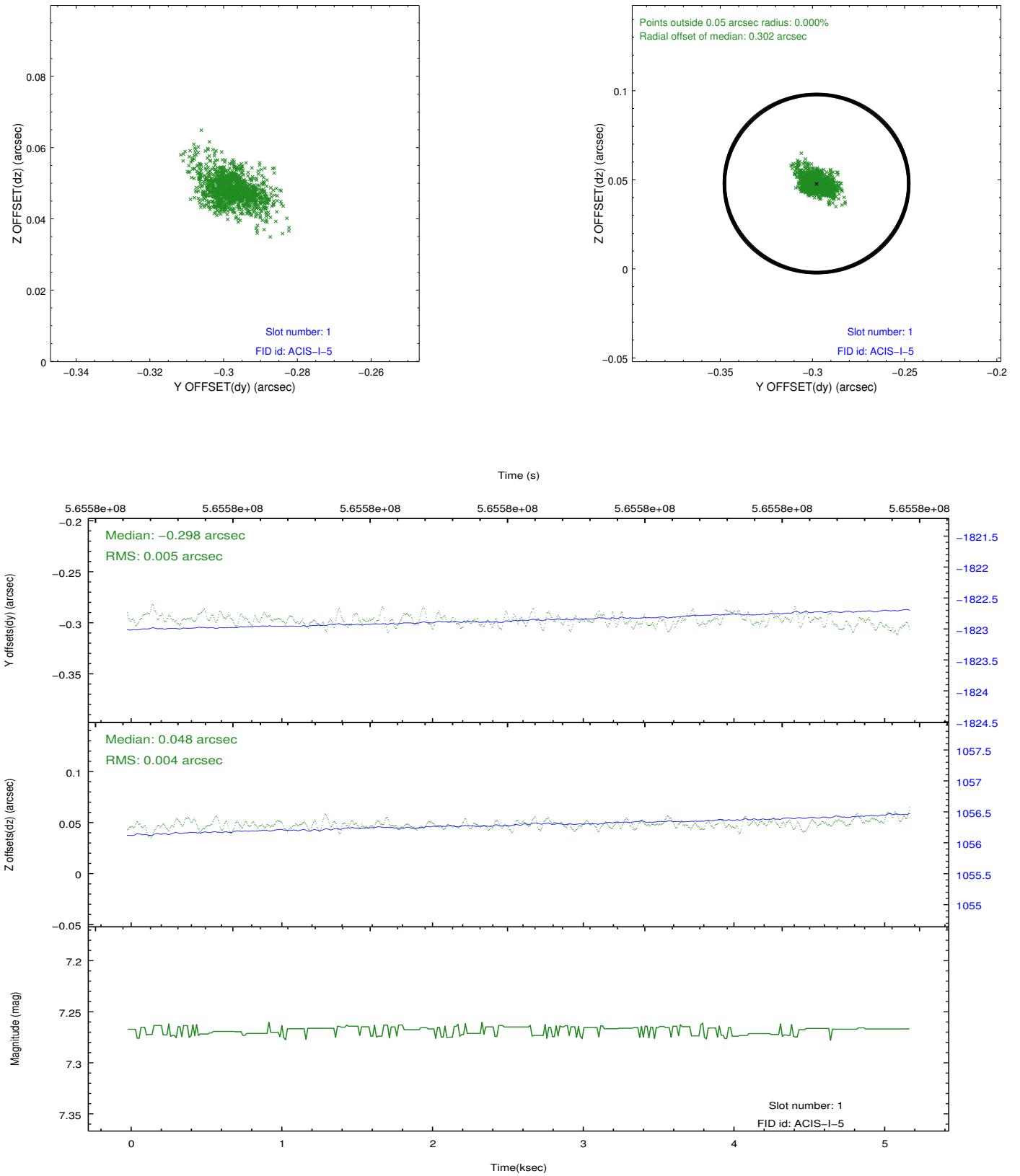


2.5 FID Slots

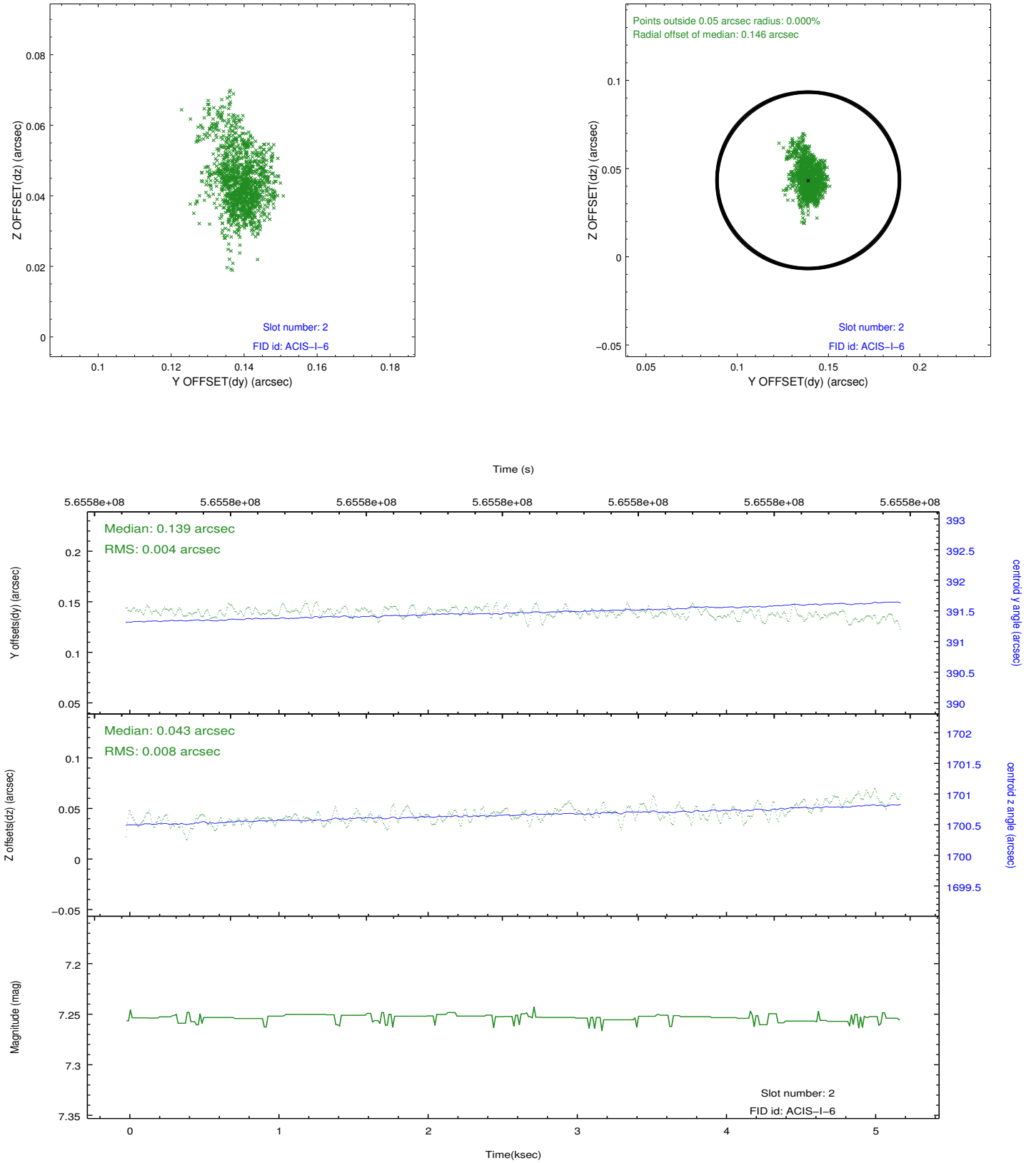
2.5.1 Slot 0



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)	2015.12.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.7737009379864

A.2 Comments