

V&V Reference Report

L2 ASCDS Version : 10.3.1

Observation 16144 - L2 Version 2
Chandra X-Ray Center

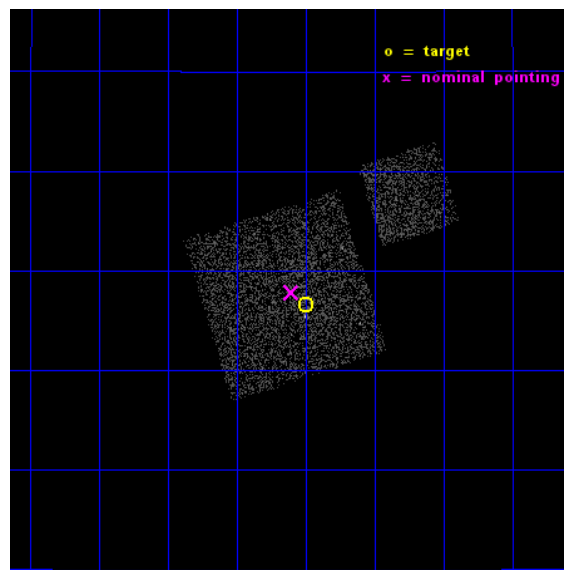
L2 Processing Date : Jan 2 2015

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 4	9
2.4.2	Slot 5	10
2.4.3	Slot 6	11
2.4.4	Slot 7	12
2.5	FID Slots	13
2.5.1	Slot 0	13
2.5.2	Slot 1	14
2.5.3	Slot 2	15
A	Summary	16
A.1	Status	16
A.2	Comments	16

1 Front

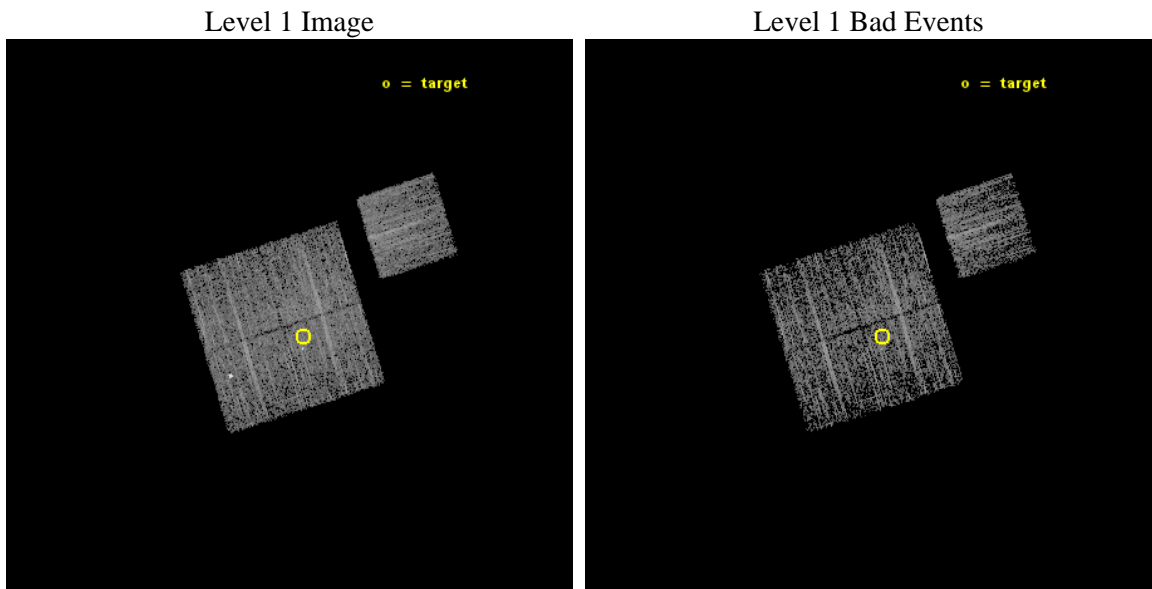
seq_num	801397	Sequence number
obs_id	16144	Observation id
title	Setting the Scale: Supporting precision cluster cosmology with Chandra observations of low-z lensing clusters	Proposal title
observer	Dr Adam Mantz	Principal investigator
object	A763	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	138.124167	Observer's specified target RA [deg]
dec_targ	15.943	Observer's specified target Dec [deg]
ra_nom	138.15107469901	Nominal RA [deg]
dec_nom	15.963930670243	Nominal Dec [deg]
roll_nom	72.665818004501	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5127.4000394344	Sum of GTIs [s]
livetime	5060.4067831822	Livetime [s]
ontime0	5127.4000394344	Sum of GTIs [s]
ontime1	5127.4000394344	Sum of GTIs [s]
ontime2	5127.4000394344	Sum of GTIs [s]
ontime3	5127.4000394344	Sum of GTIs [s]
ontime6	5127.4000394344	Sum of GTIs [s]
l2events	10487	Number of level 2 events



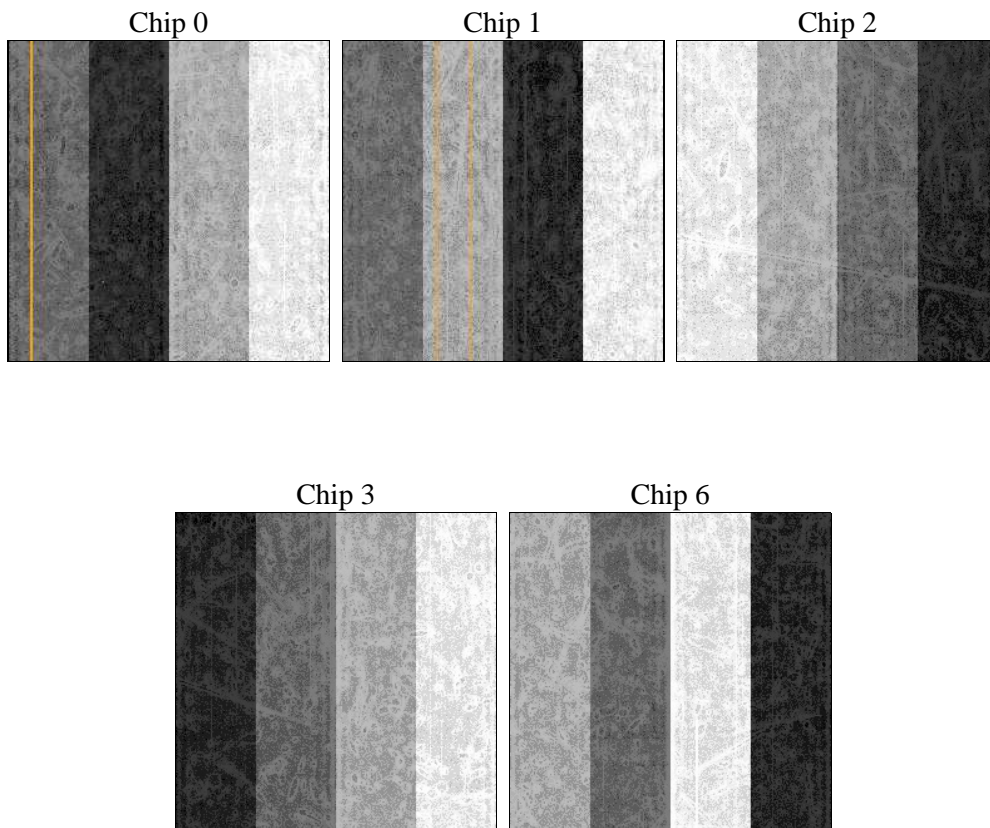
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	5127.4000394344	Sum of GTIs [s]
caldbver	4.6.5	 	ontime0	5127.4000394344	Sum of GTIs [s]
date	2015-01-02T19:43:27	Date and time of file creation	ontime1	5127.4000394344	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	5127.4000394344	Sum of GTIs [s]
			ontime3	5127.4000394344	Sum of GTIs [s]
			ontime6	5127.4000394344	Sum of GTIs [s]
			l1events	95197	Number of level 1 events

2.1.4 Events

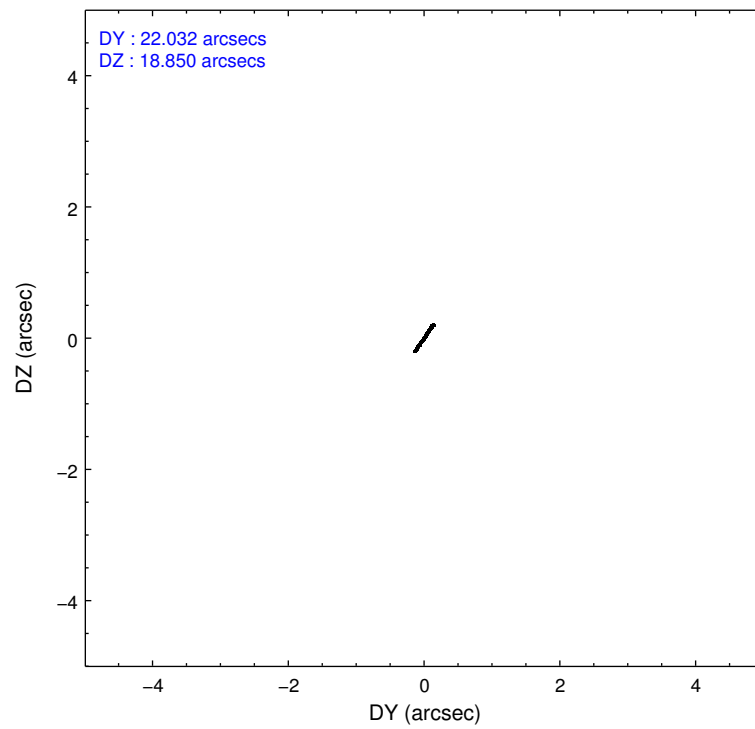
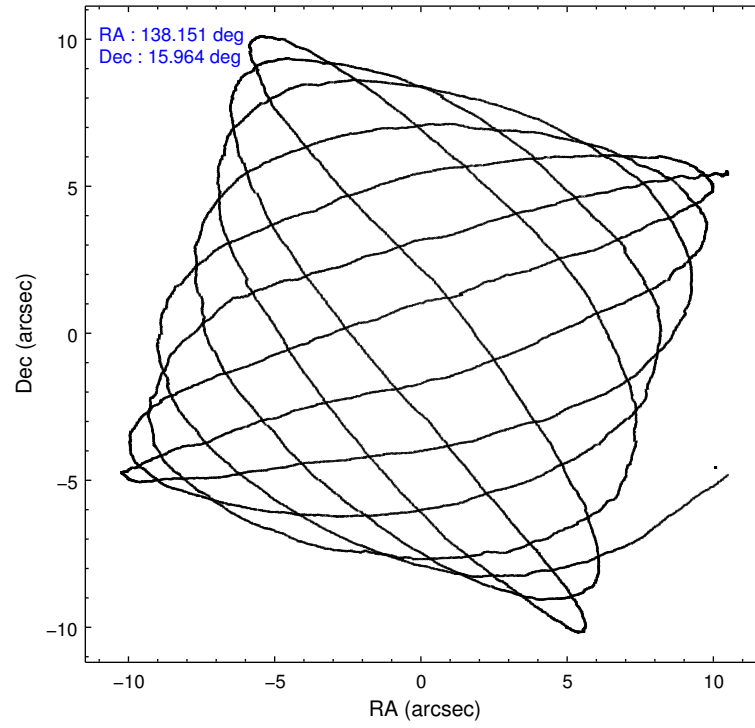
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	17804	19079	19776	19246	19292
rejected events	15403	15188	17312	16275	17020
rejected %	86%	79%	87%	84%	88%

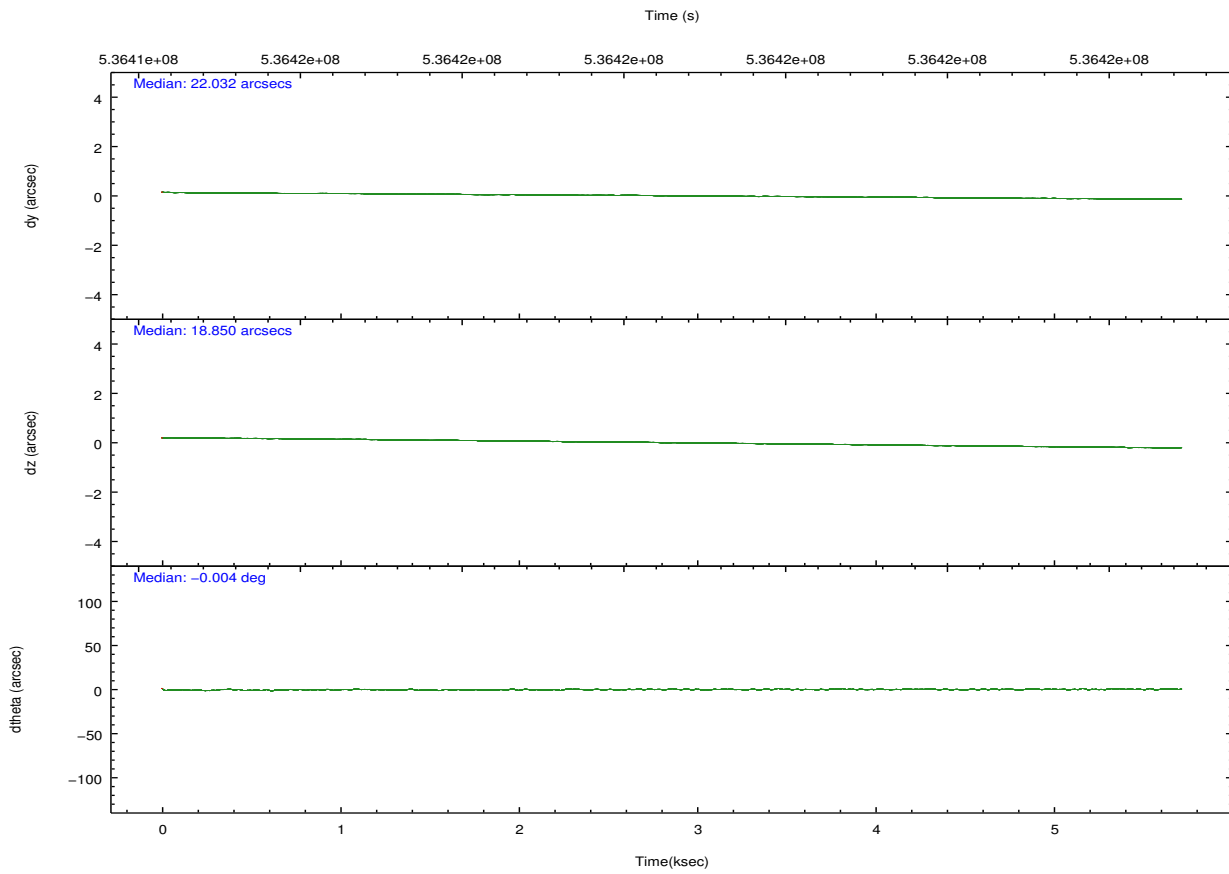
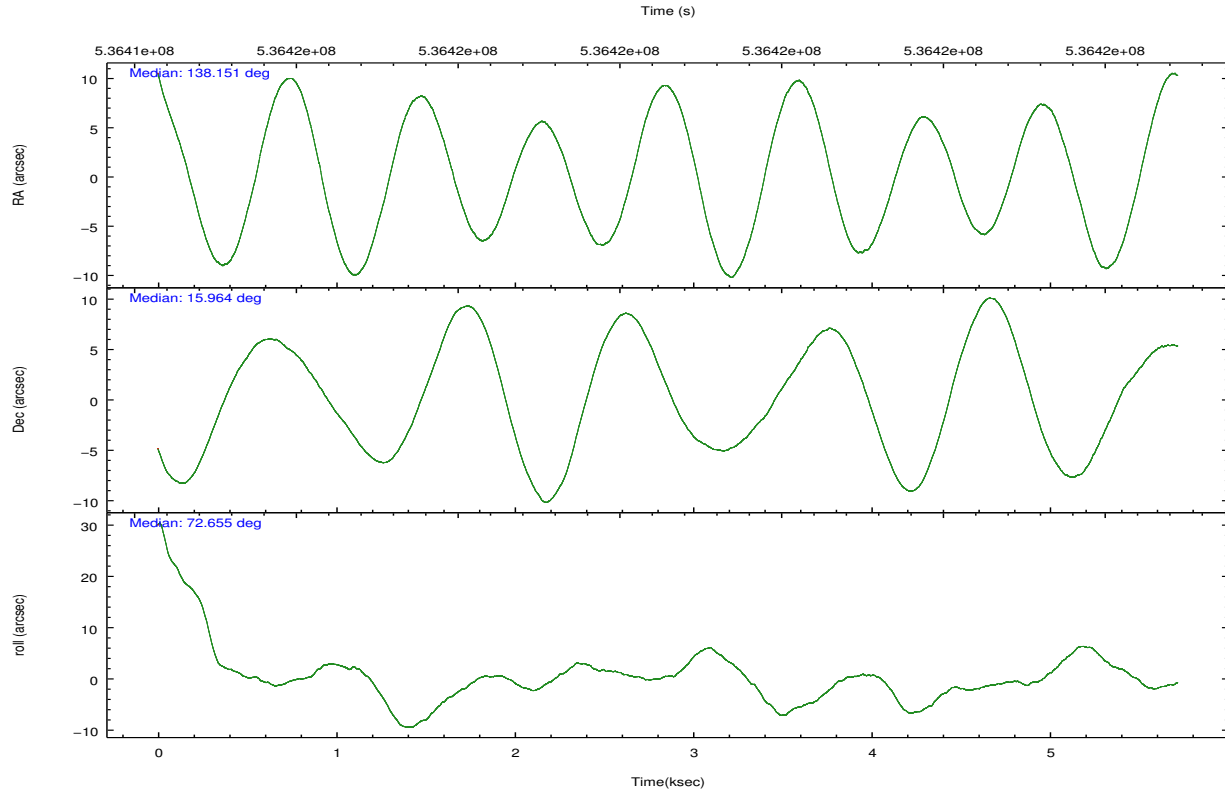
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	857	2408	1056	1485	812
	4%	12%	5%	7%	4%
grade 1 events	7	13	11	46	12
	0%	0%	0%	0%	0%
grade 2 events	627	575	572	569	543
	3%	3%	2%	2%	2%
grade 3 events	263	207	238	249	247
	1%	1%	1%	1%	1%
grade 4 events	243	232	218	263	238
	1%	1%	1%	1%	1%
grade 5 events	708	766	585	797	722
	3%	4%	2%	4%	3%
grade 6 events	411	471	385	409	434
	2%	2%	1%	2%	2%
grade 7 events	14688	14407	16711	15428	16284
	82%	75%	84%	80%	84%

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	138.157484	138.1510746990068	CCD I2 on	Y	Y
[deg] Pointing Dec	15.937075	15.96393067024307	CCD I3 on	Y	Y
[deg] Pointing Roll	72.455353	72.66581800450065	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)	536415145.184000	536413916.87453	CCD S5 on	N	N
Observation start date	2014-12-31T12:11:18	2014-12-31T11:51:56	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	536420145.184000	536421424.99994	On-chip summing requested	N	N
Observation end date	2014-12-31T13:34:38	2014-12-31T13:57:04	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





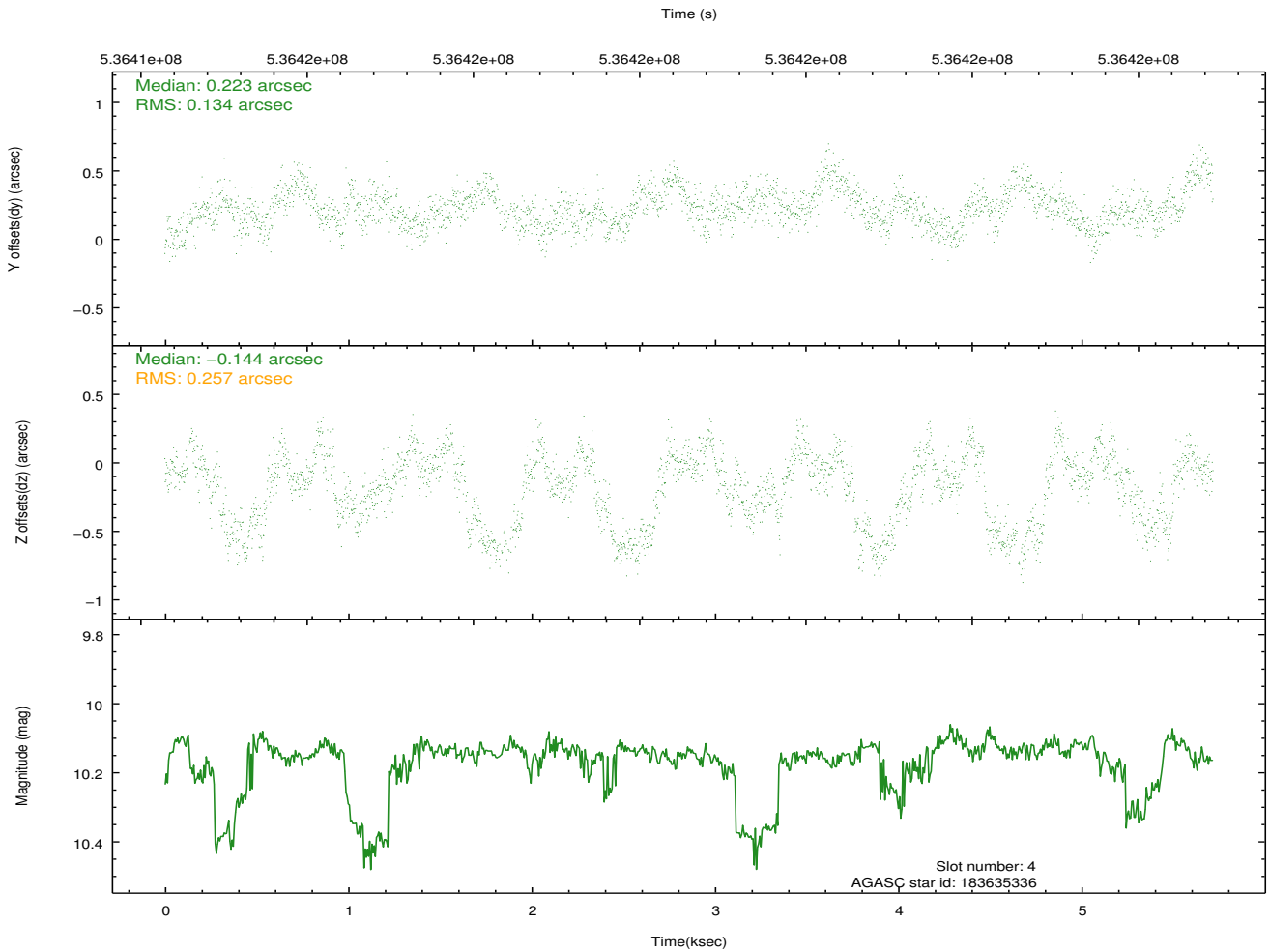
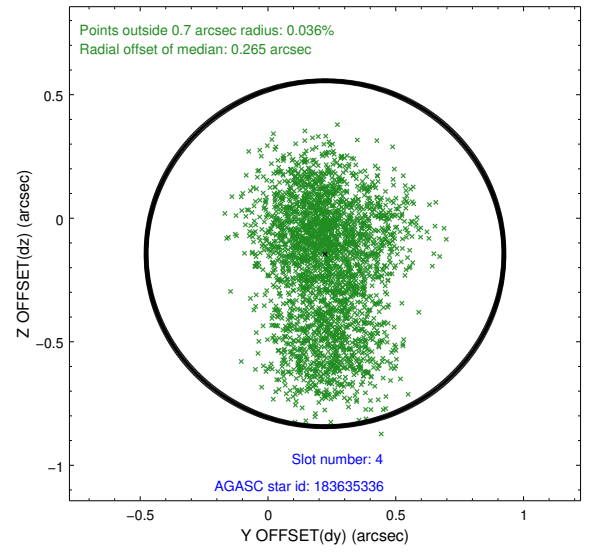
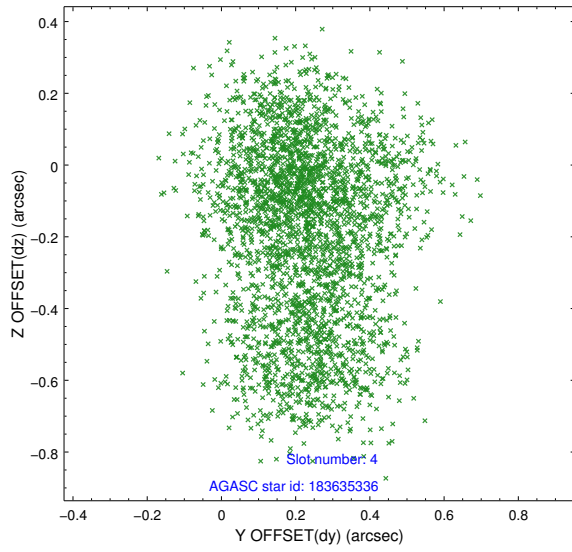
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.11	1394	0.037	0.025	0.006	0.011	0.000000	0.000000	917.30	-842.49
1	FID		ACIS-I-5	7.10	1394	-0.273	0.031	0.006	0.010	0.000000	0.000000	-1830.61	1054.38
2	FID		ACIS-I-6	7.10	1395	0.145	0.013	0.007	0.011	0.000000	0.000000	381.72	1700.13
3	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
4	GUIDE	used	183635336	10.15	2759	0.223	-0.144	0.311	0.509	138.067392	15.689622	-942.77	28.92
5	GUIDE	used	183648816	9.36	2786	0.227	0.230	0.214	0.315	137.856210	15.577677	-1547.68	606.34
6	GUIDE	used	183777272	9.77	2771	0.086	-0.210	0.240	0.453	138.700783	16.428762	2255.82	-1254.01
7	GUIDE	used	183633280	8.07	2789	-0.518	0.179	0.168	0.328	138.198230	16.630333	2422.65	618.53

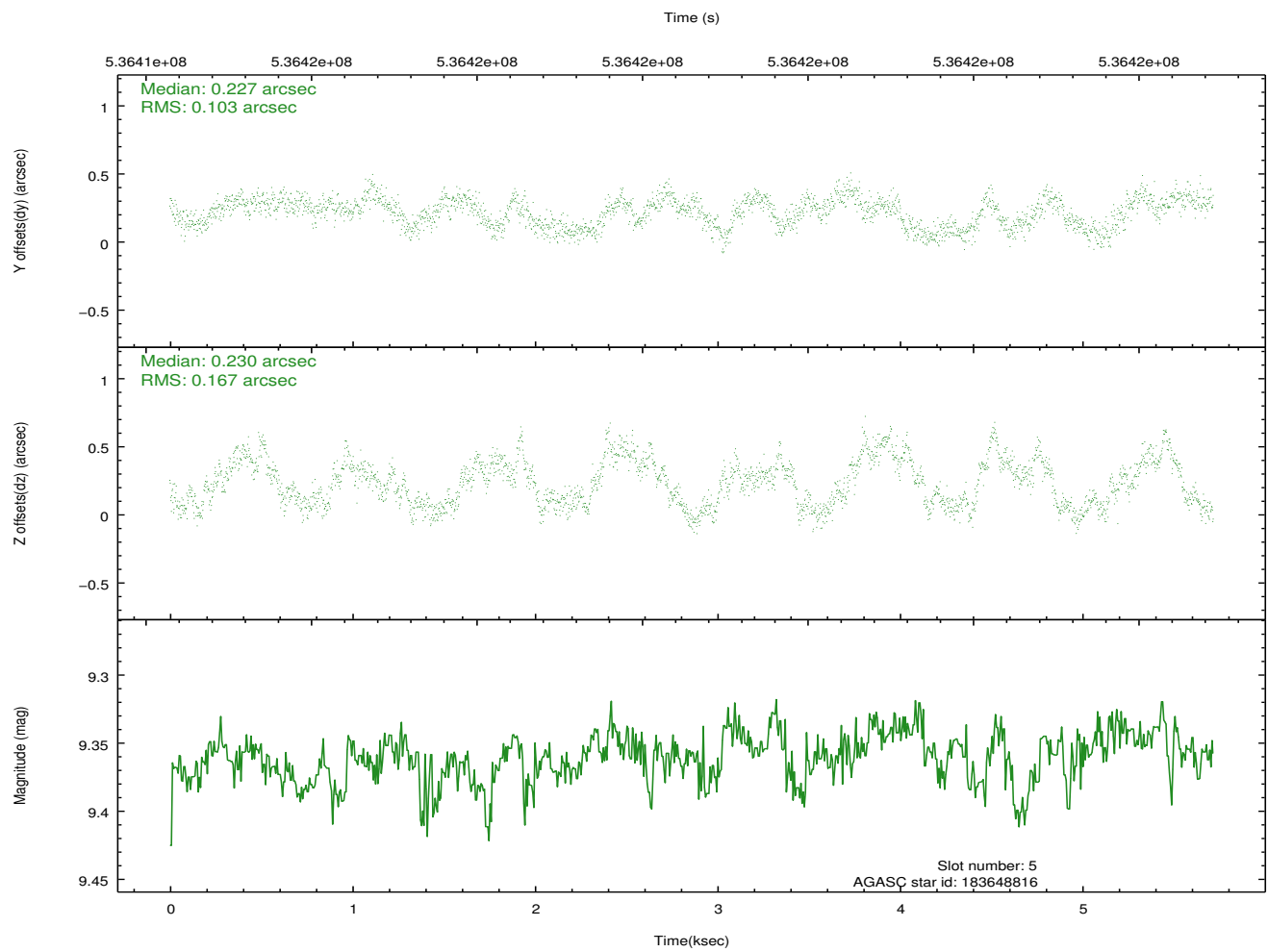
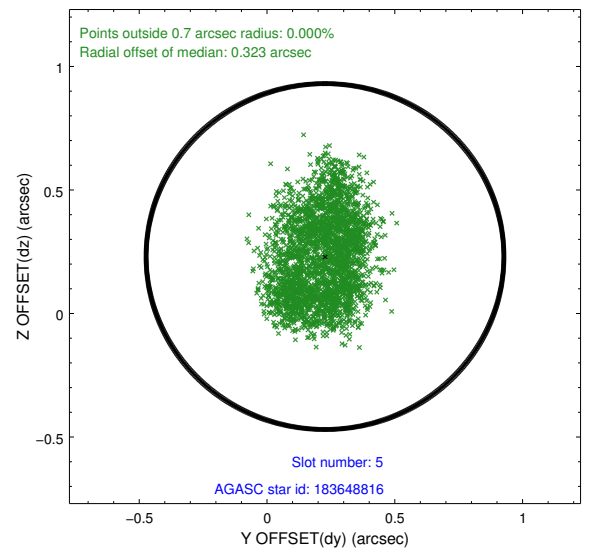
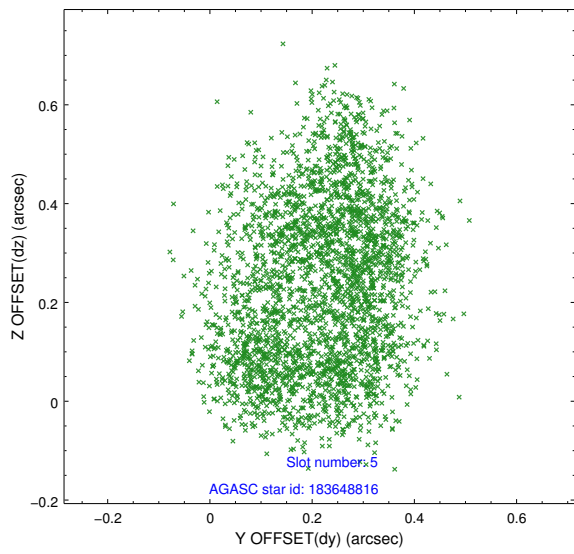
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2.4 Star Slots

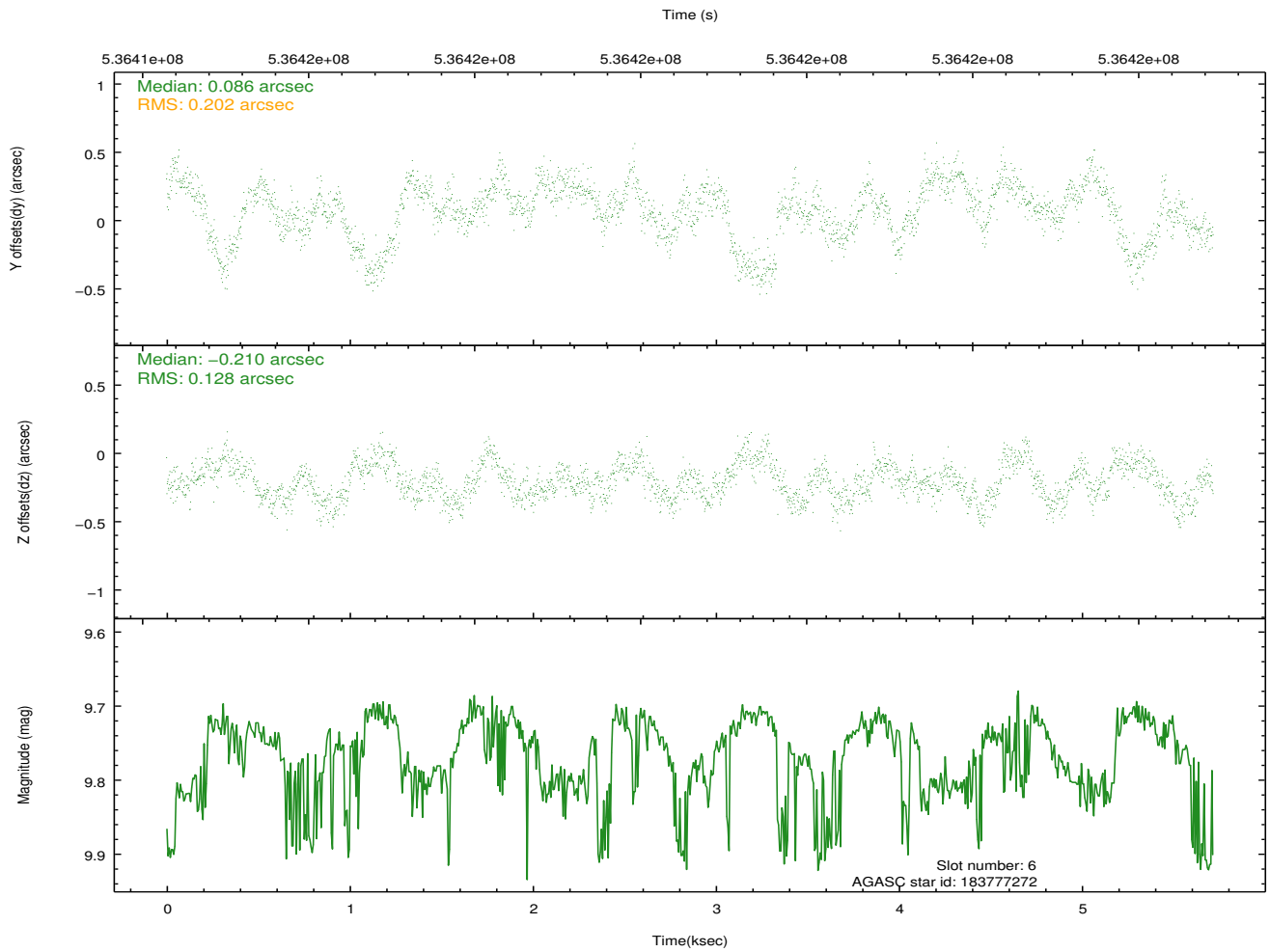
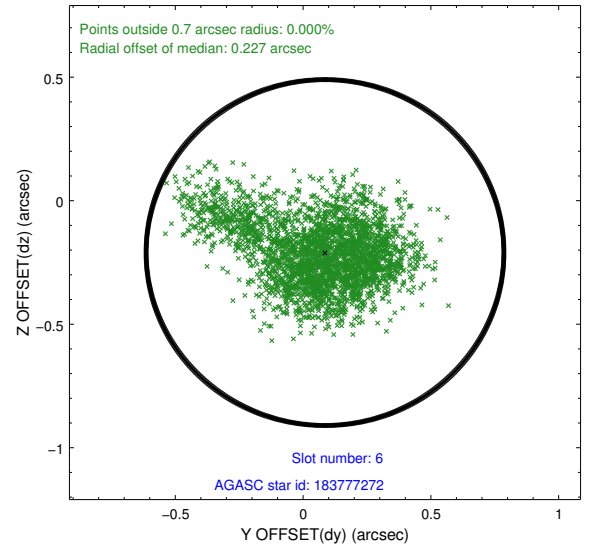
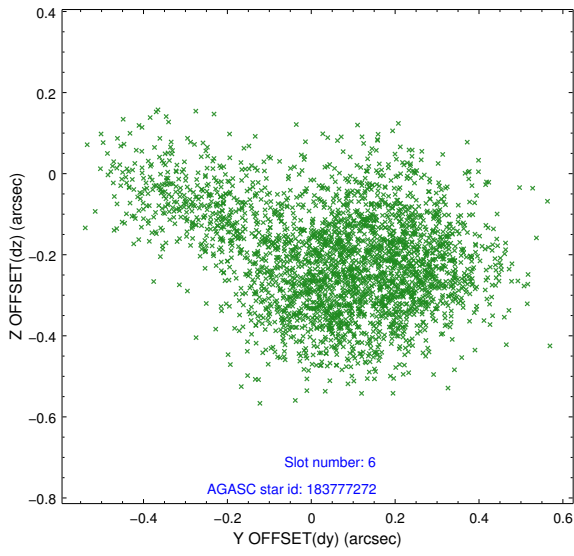
2.4.1 Slot 4



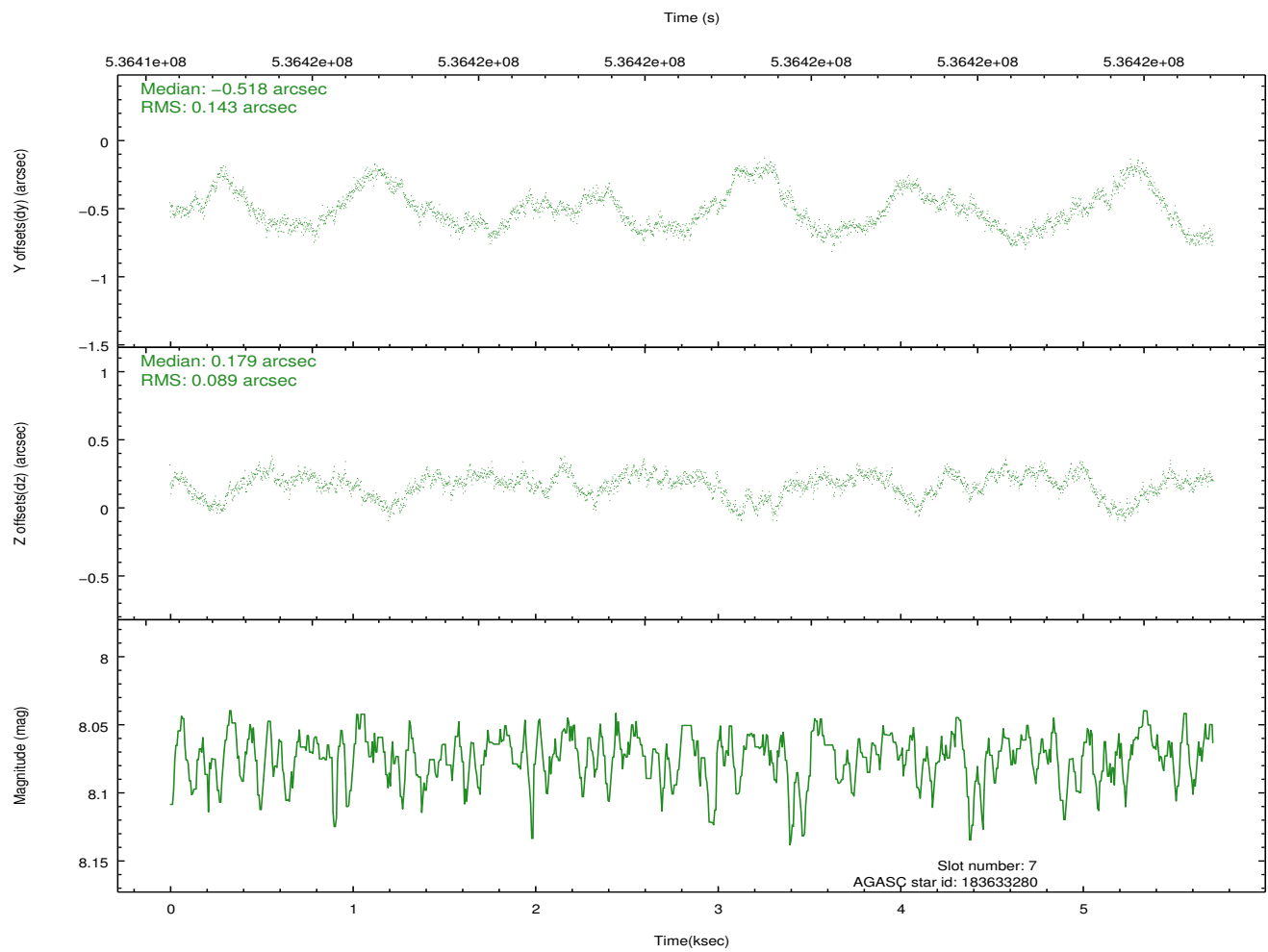
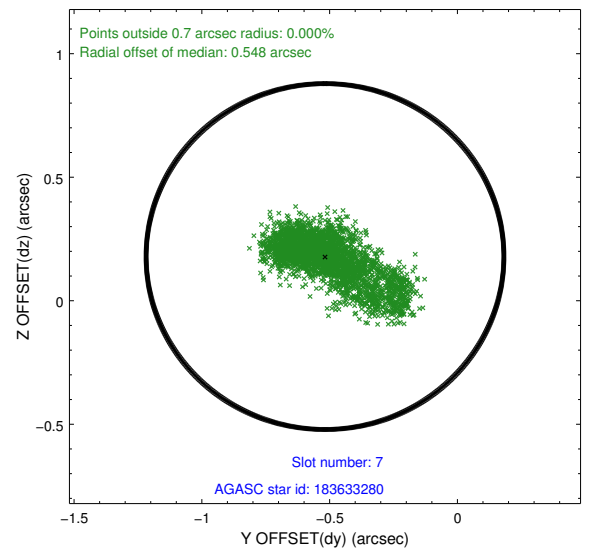
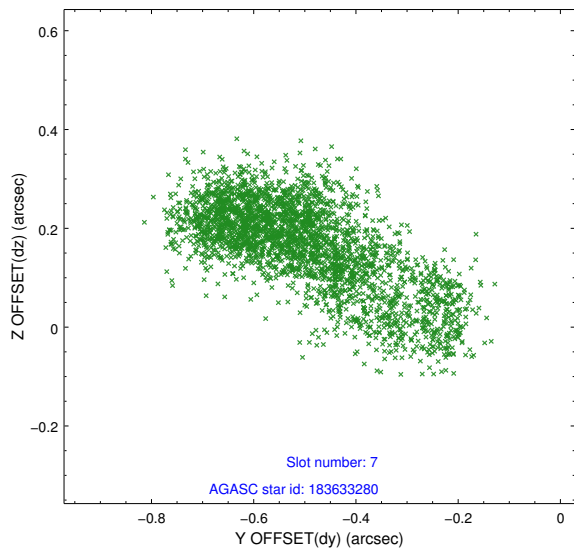
2.4.2 Slot 5



2.4.3 Slot 6

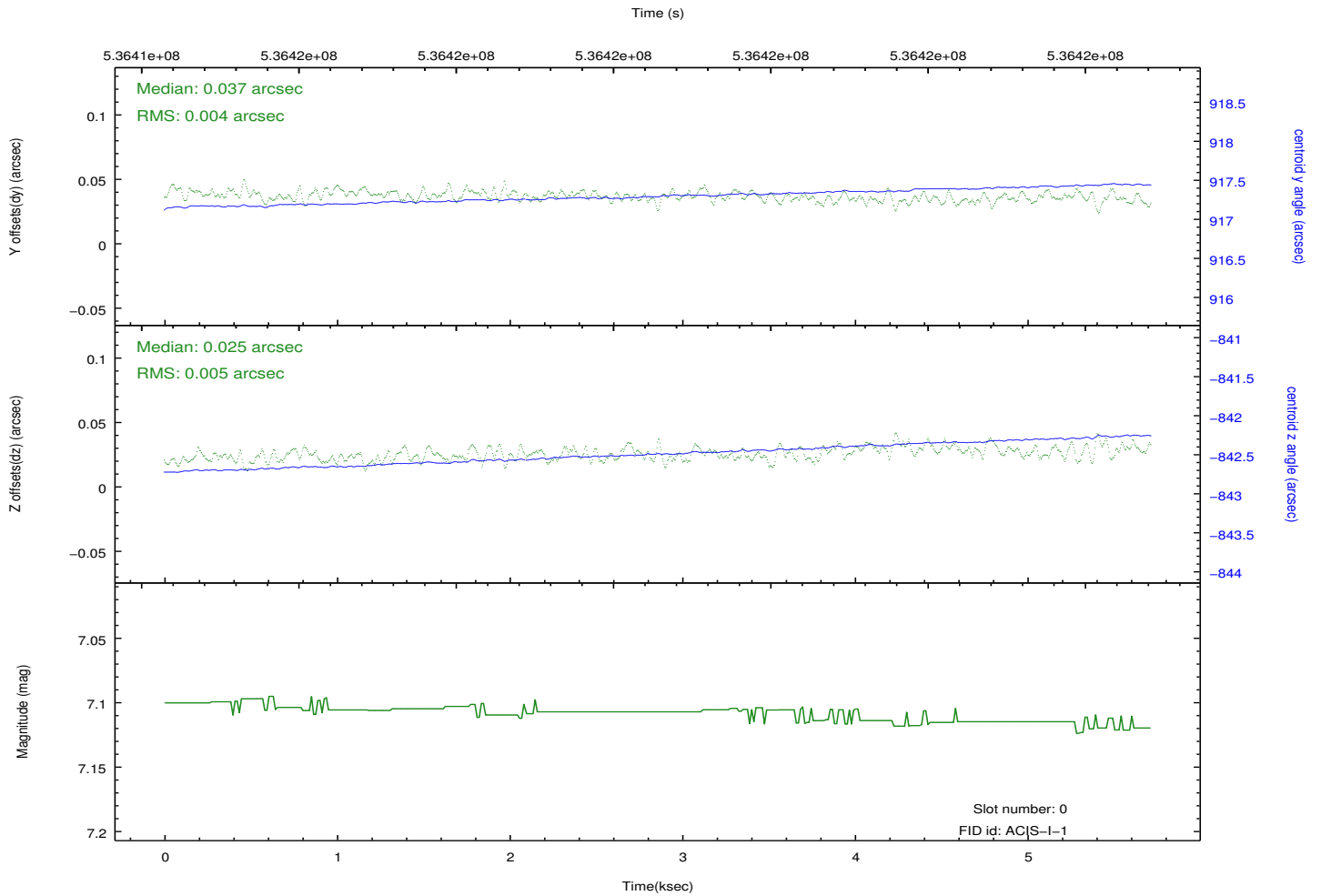
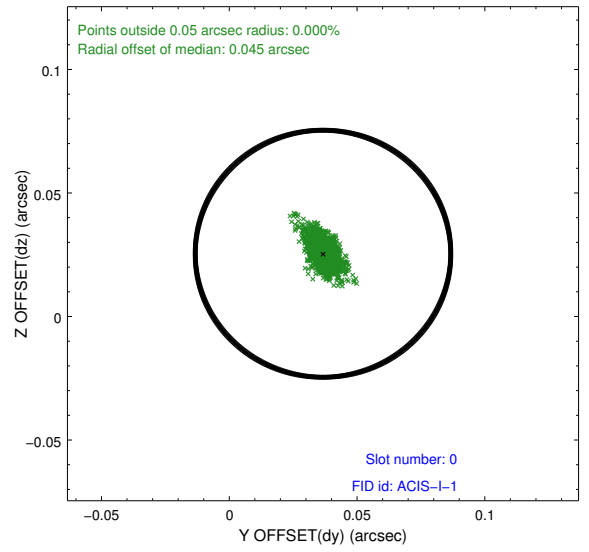
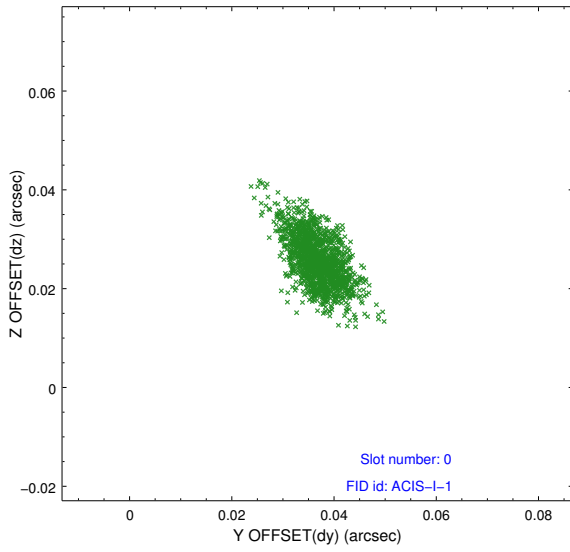


2.4.4 Slot 7

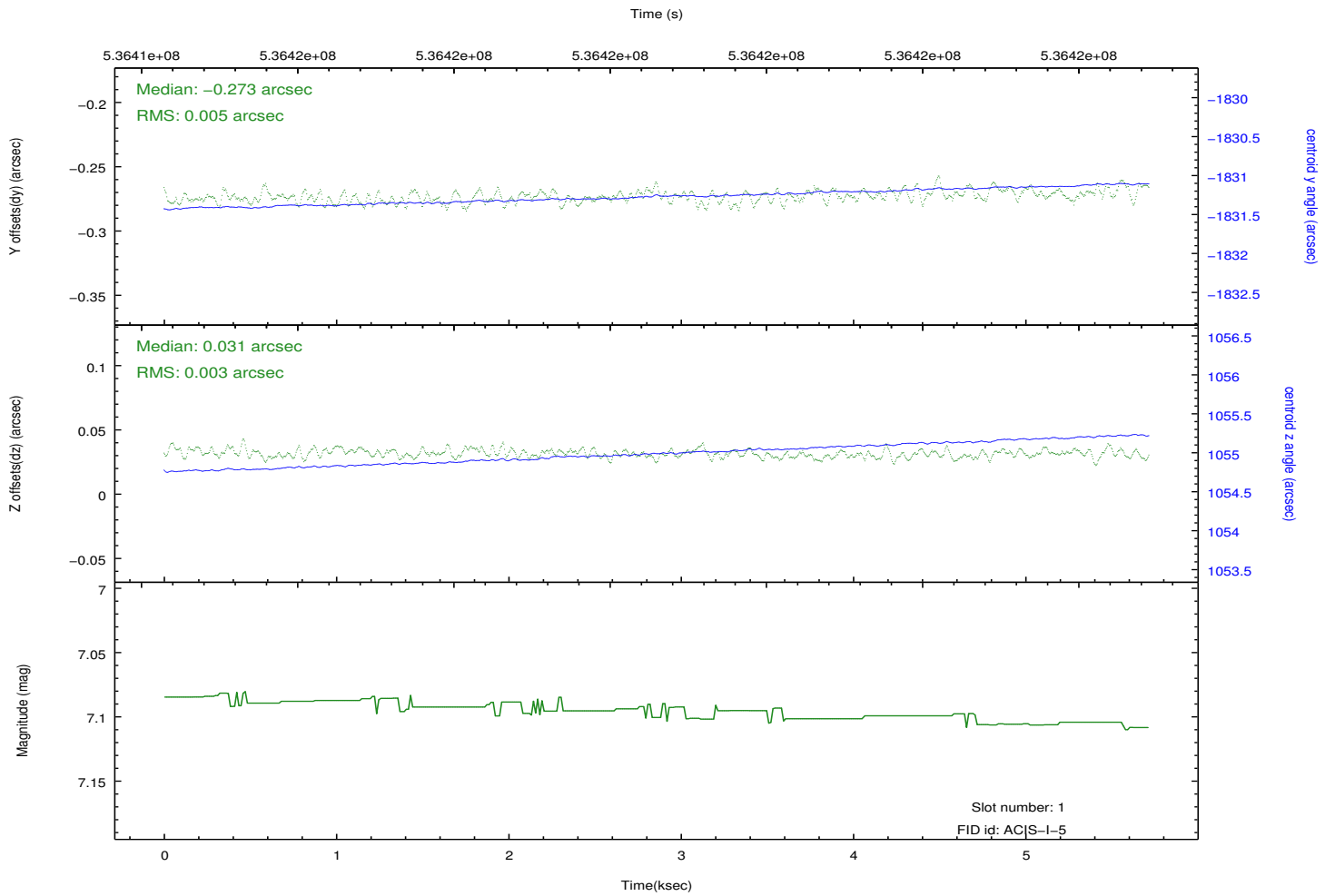
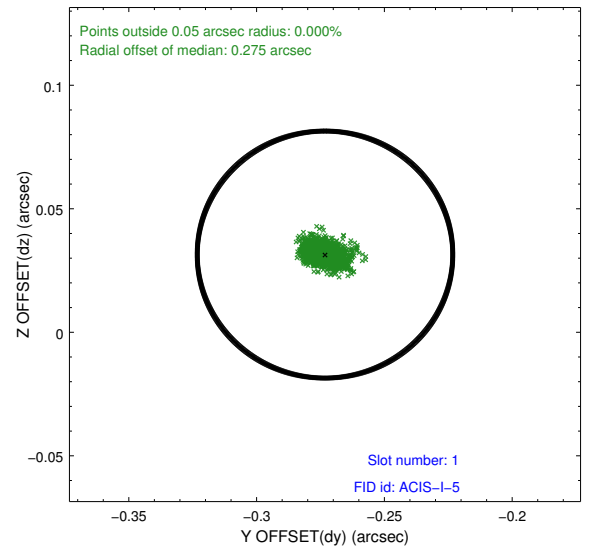
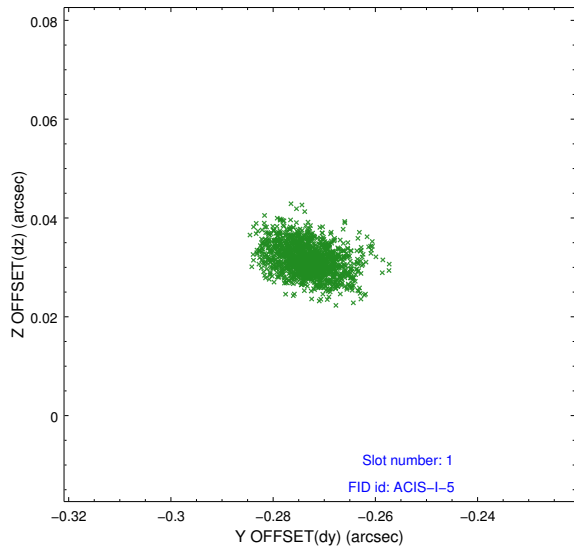


2.5 FID Slots

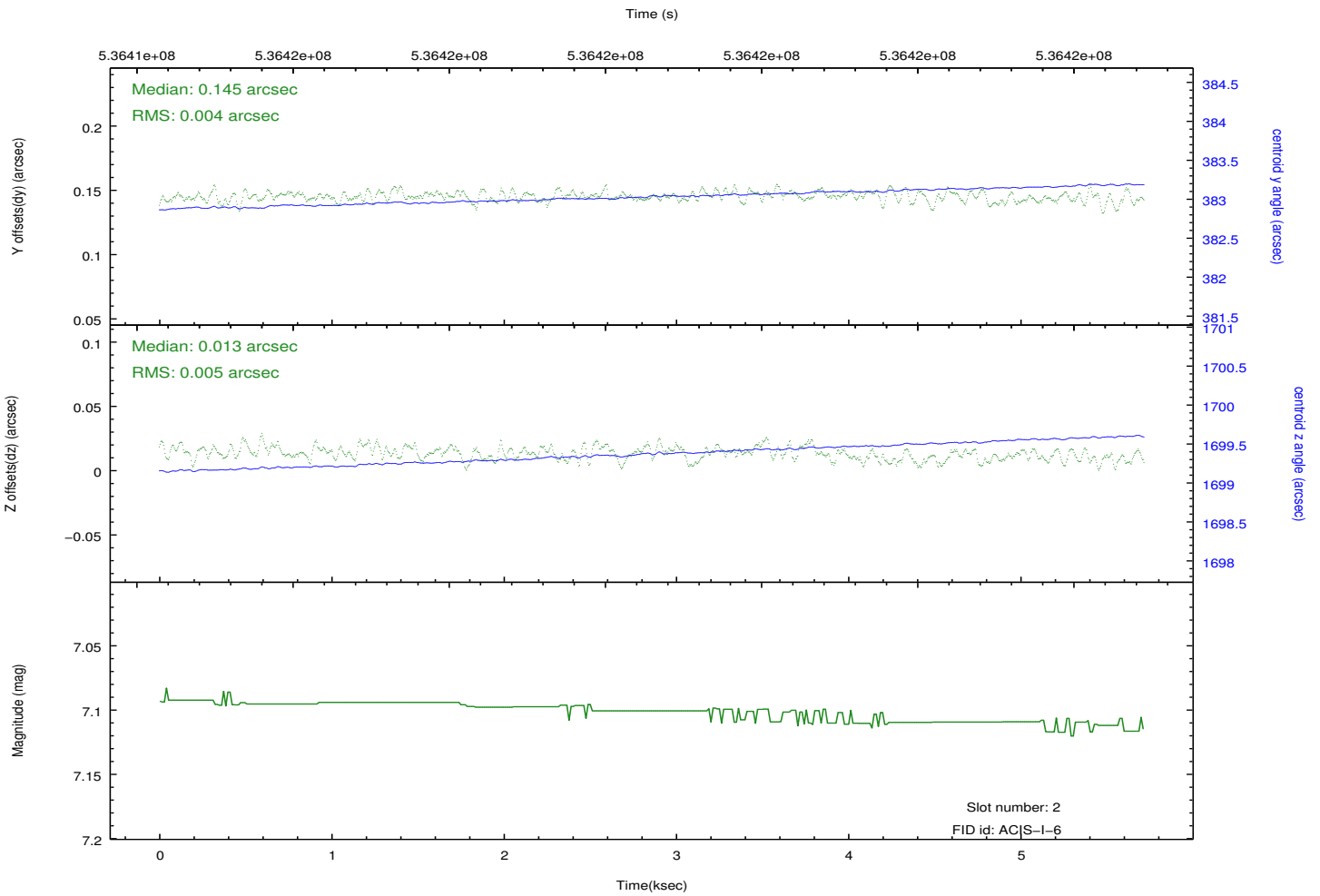
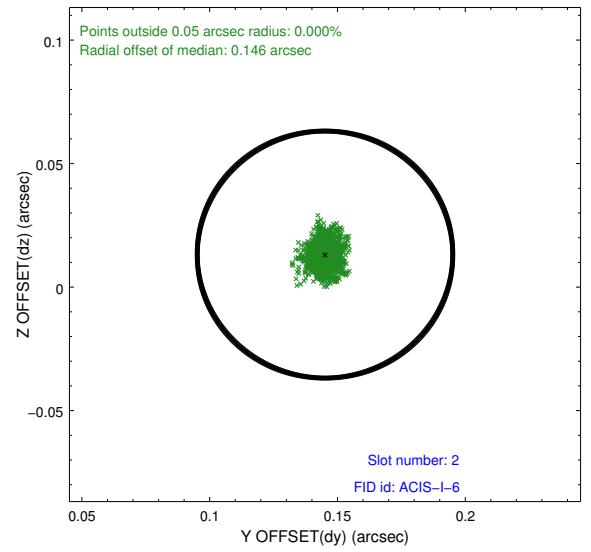
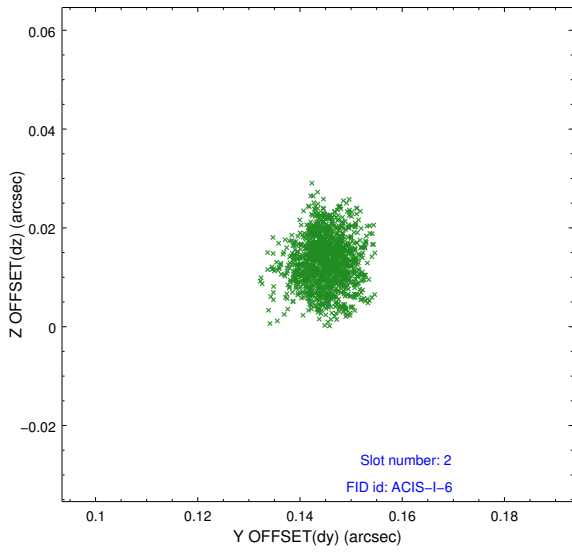
2.5.1 Slot 0



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)	2015.01.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.1274000394344

A.2 Comments

The guide star in slot 3 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.