

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19699 - L2 Version 2
Chandra X-Ray Center

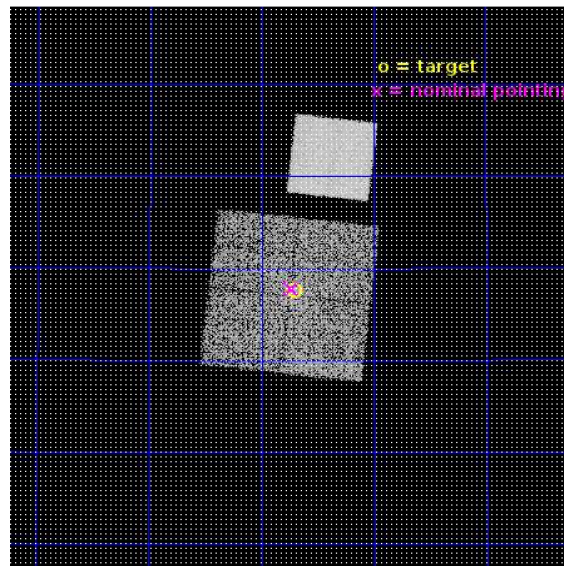
L2 Processing Date : Nov 2 2016

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1 Front

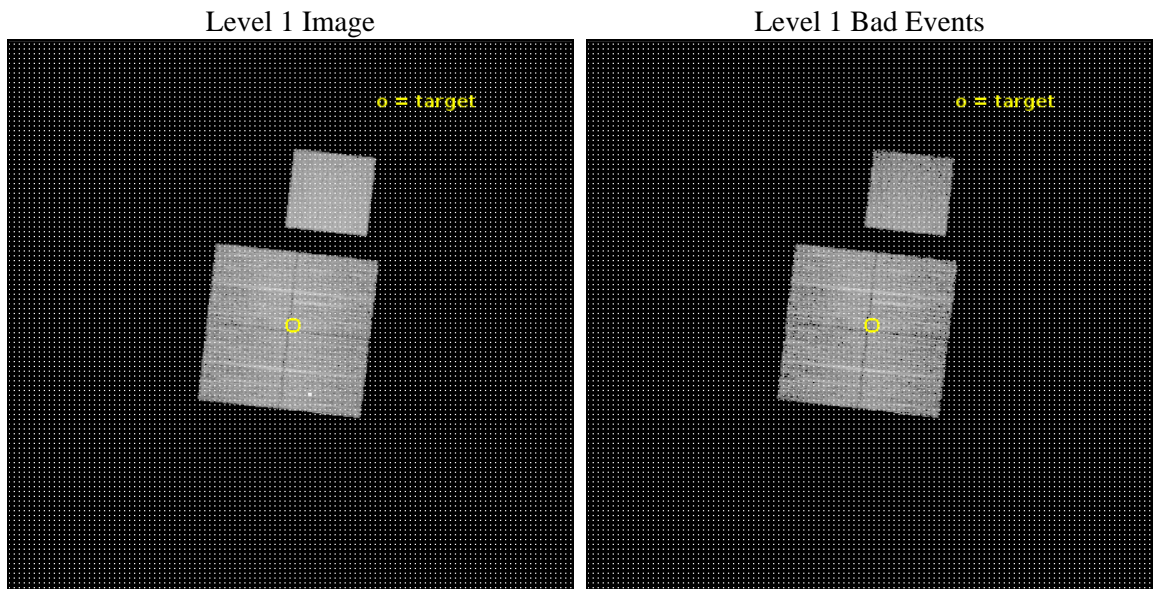
seq_num	801633	Sequence number
obs_id	19699	Observation id
title	Lensing Calibration of the Evolution of Cluster Scaling Relations for eROSITA	Proposal title
observer	Peter Predehl	Principal investigator
object	CODEX 25953	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	210.927083	Observer's specified target RA [deg]
dec_targ	38.460444	Observer's specified target Dec [deg]
ra_nom	210.93354503221	Nominal RA [deg]
dec_nom	38.463179063428	Nominal Dec [deg]
roll_nom	6.4254334903346	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9058.2000697851	Sum of GTIs [s]
livetime	8939.8480173235	Livetime [s]
ontime0	9058.2000697851	Sum of GTIs [s]
ontime1	9058.2000697851	Sum of GTIs [s]
ontime2	9055.059019804	Sum of GTIs [s]
ontime3	9058.2000697851	Sum of GTIs [s]
ontime7	9058.2000697851	Sum of GTIs [s]
l2events	56329	Number of level 2 events



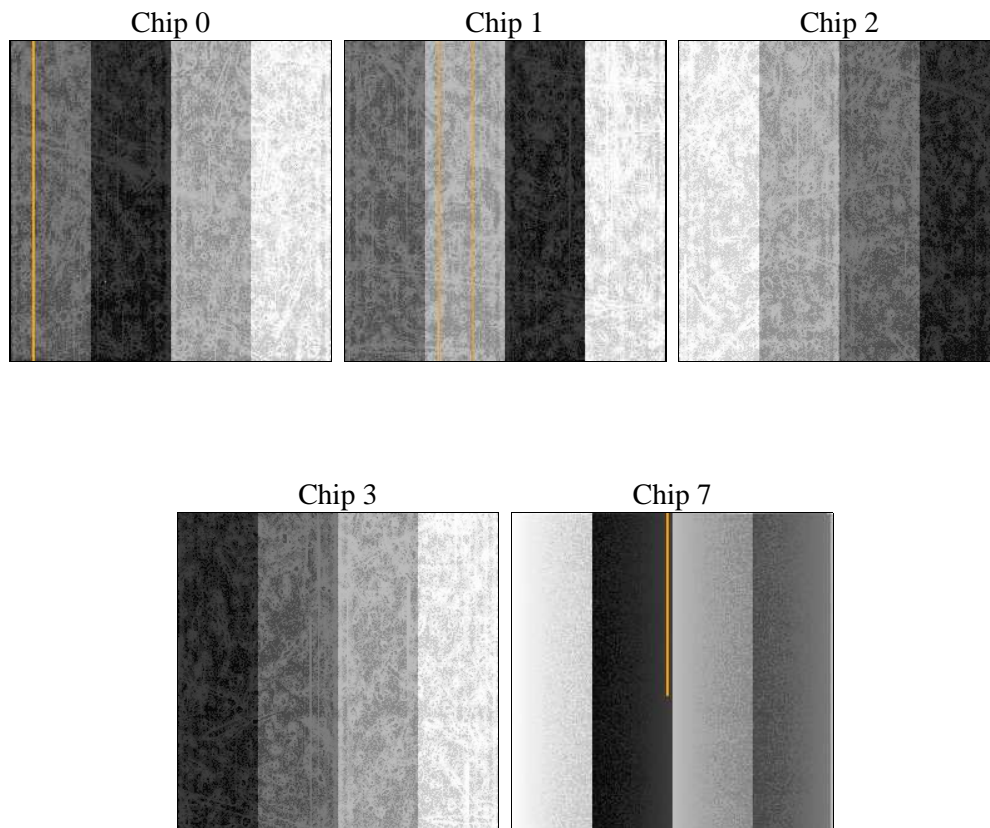
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9000.000000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	9058.2000697851	Sum of GTIs [s]
caldbver	4.7.2	 	ontime0	9058.2000697851	Sum of GTIs [s]
date	2016-11-02T16:00:02	Date and time of file creation	ontime1	9058.2000697851	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9055.059019804	Sum of GTIs [s]
			ontime3	9058.2000697851	Sum of GTIs [s]
			ontime7	9058.2000697851	Sum of GTIs [s]
			l1events	319991	Number of level 1 events

2.1.4 Events

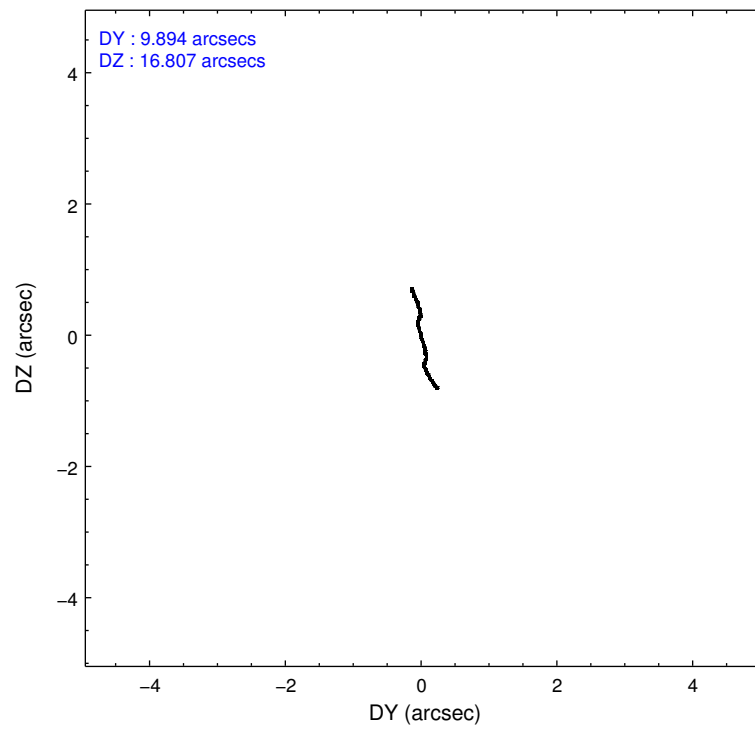
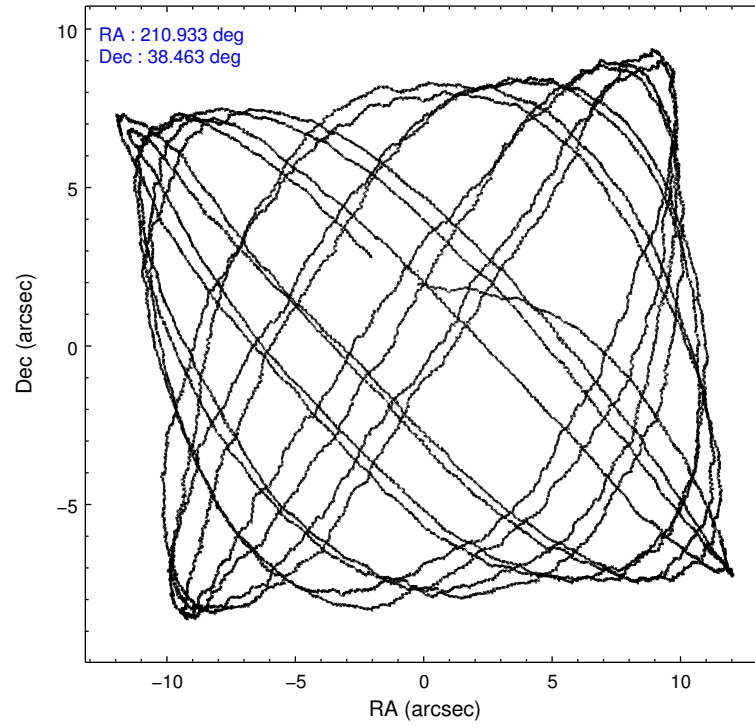
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	54541	59740	64118	62743	78849
rejected events	47835	49937	57289	56199	44956
rejected %	87%	83%	89%	89%	57%

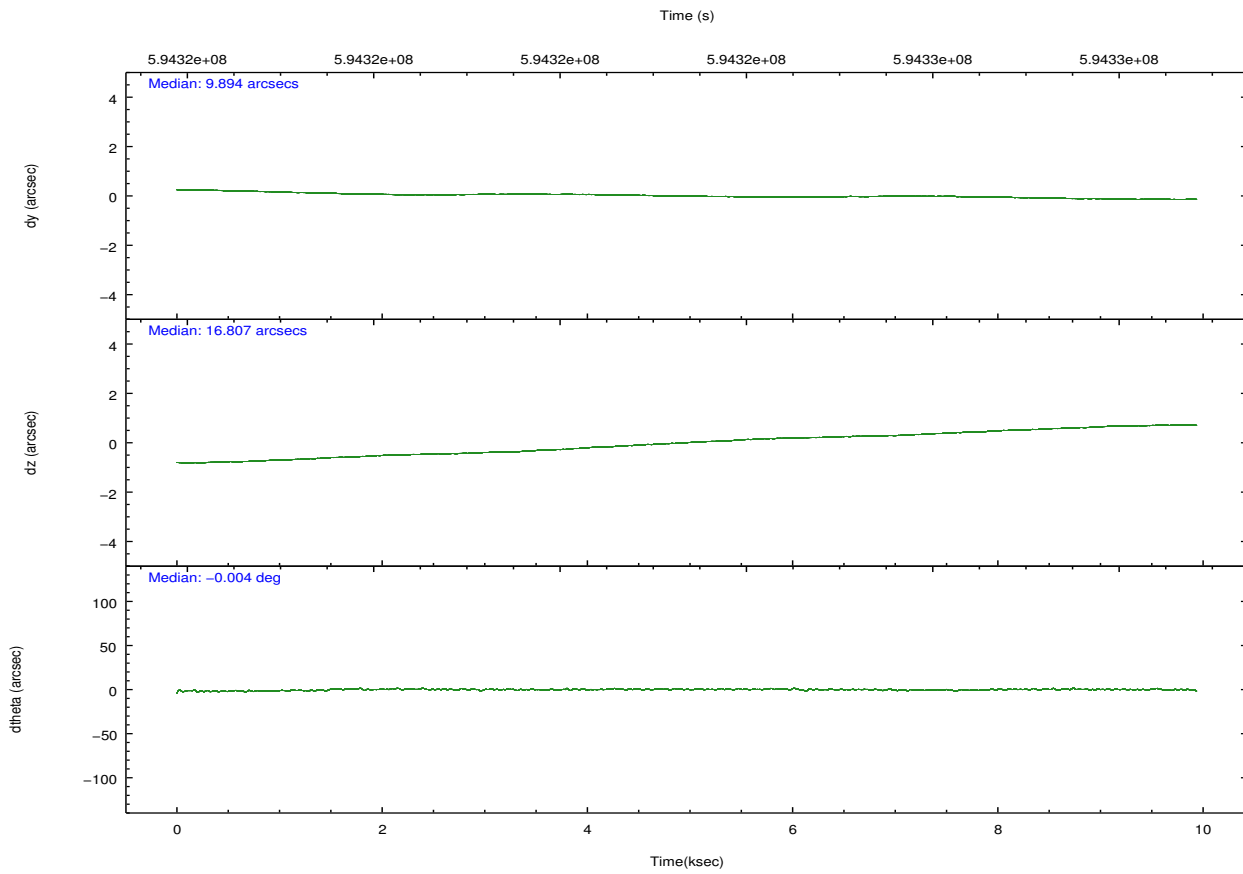
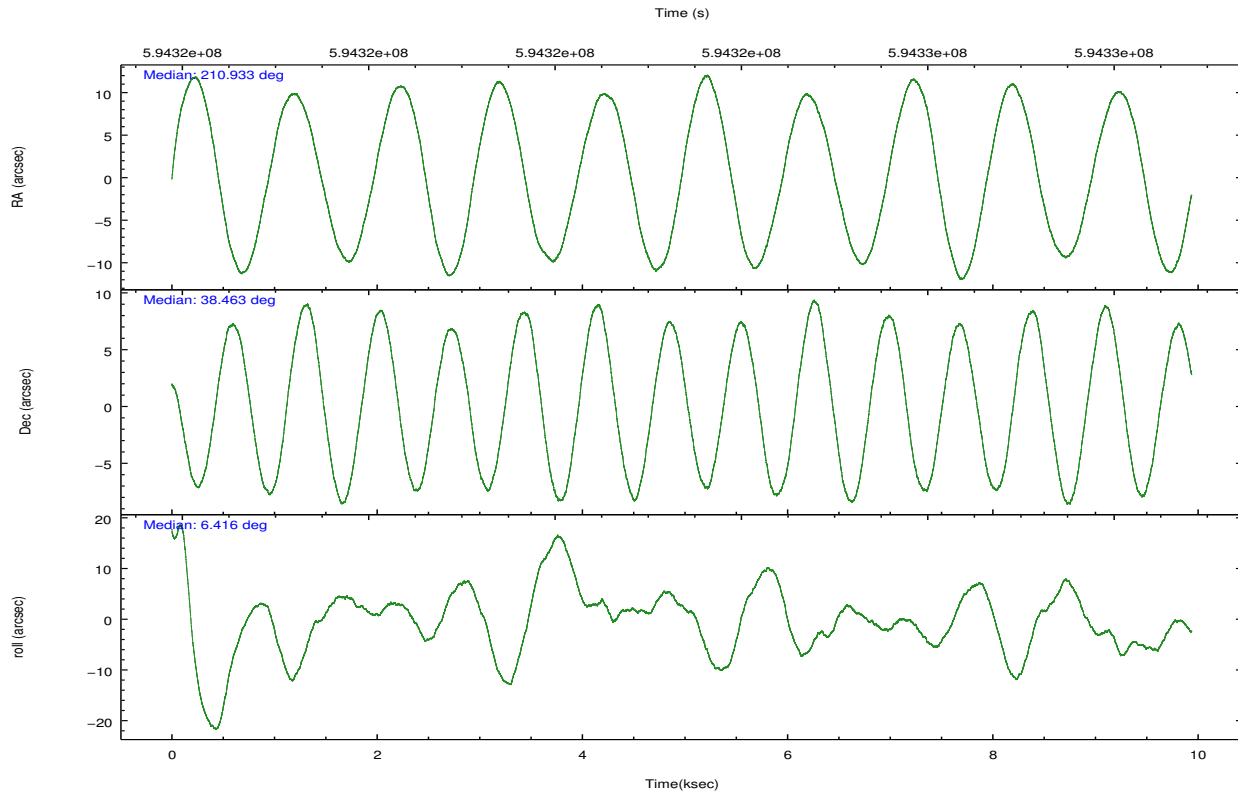
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	2304	4817	2547	2447	2772
	4%	8%	3%	3%	3%
grade 1 events	17	45	36	47	110
	0%	0%	0%	0%	0%
grade 2 events	1583	1899	1610	1386	7065
	2%	3%	2%	2%	8%
grade 3 events	715	696	673	658	2673
	1%	1%	1%	1%	3%
grade 4 events	685	663	692	684	2667
	1%	1%	1%	1%	3%
grade 5 events	2516	2618	2390	2949	7714
	4%	4%	3%	4%	9%
grade 6 events	1421	1737	1313	1376	18729
	2%	2%	2%	2%	23%
grade 7 events	45300	47265	54857	53196	37119
	83%	79%	85%	84%	47%

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	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	210.905270	210.9335450322142	CCD I2 on	Y	Y
[deg] Pointing Dec	38.446698	38.4631790634277	CCD I3 on	Y	Y
[deg] Pointing Roll	6.234345	6.425433490334559	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	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	594319327.184000	594317263.01981	CCD S5 on	N	N
Observation start date	2016-10-31T16:40:59	2016-10-31T16:07:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	594328327.184000	594329469.2330199	On-chip summing requested	N	N
Observation end date	2016-10-31T19:10:59	2016-10-31T19:31:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





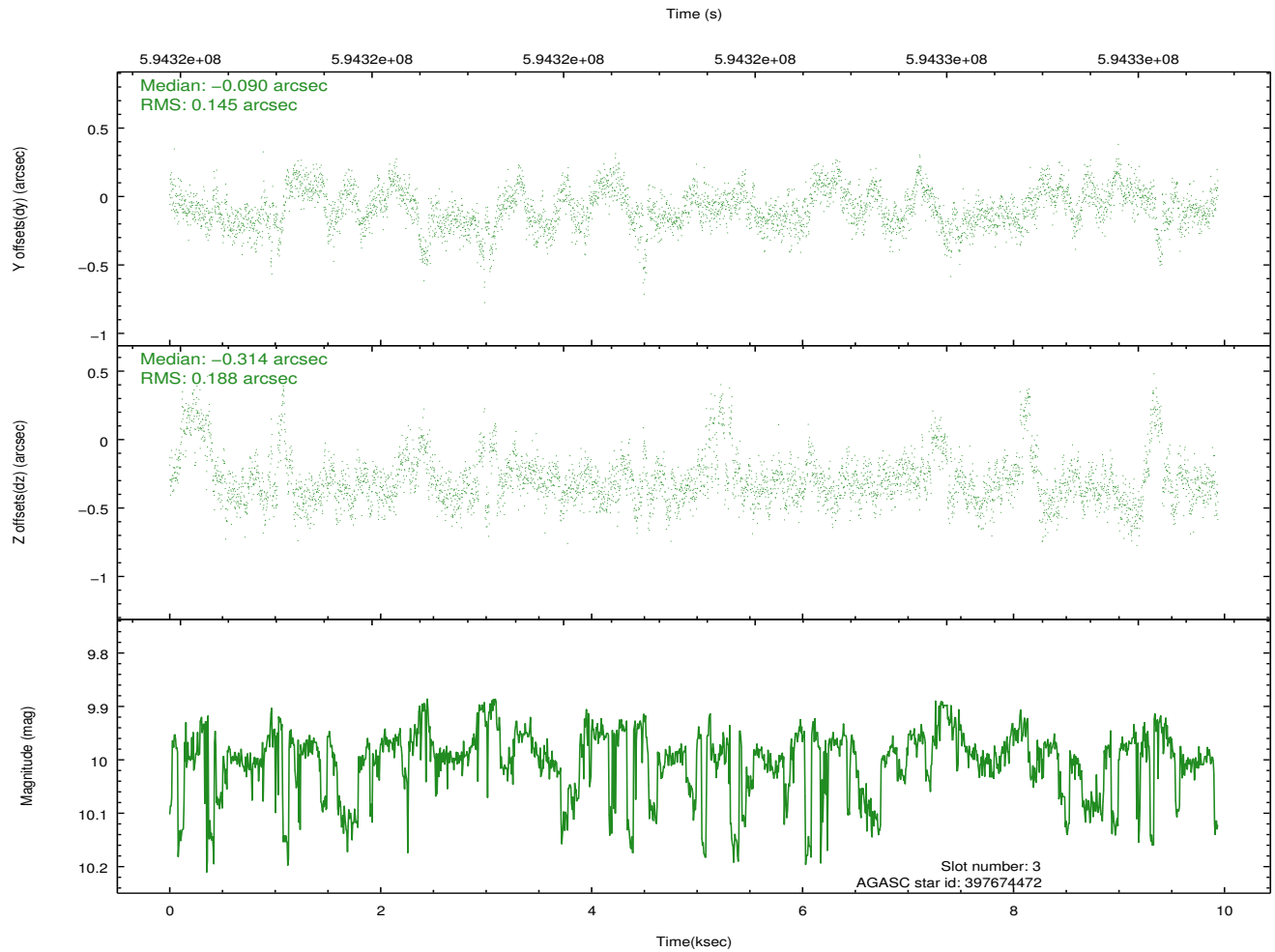
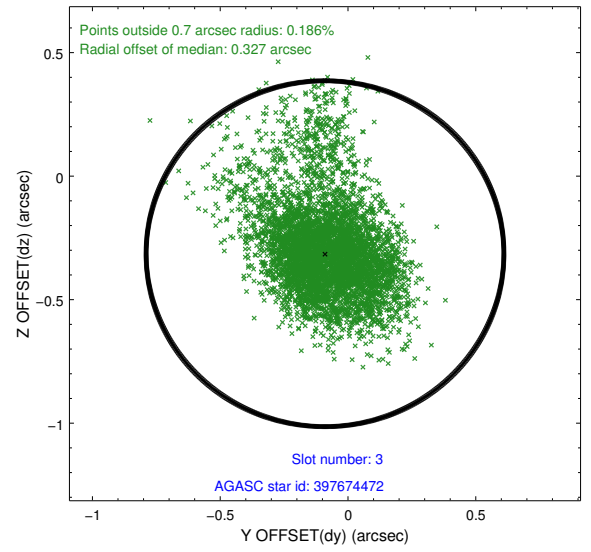
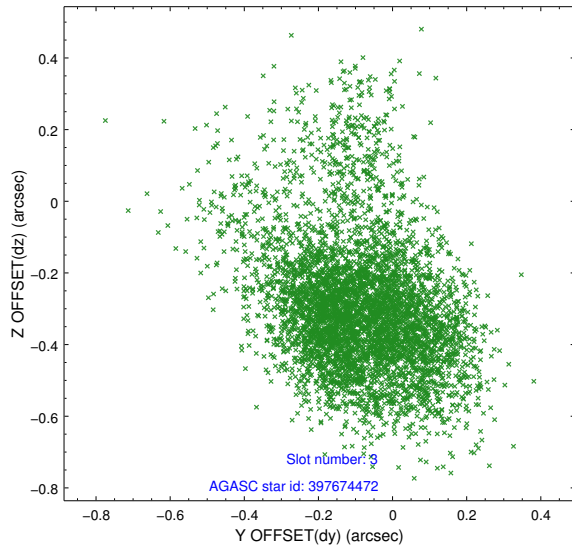
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.19	2424	-0.000	-0.083	0.009	0.015	0.000000	0.000000	929.72	-840.48
1	FID		ACIS-I-4	7.13	2423	0.280	0.081	0.009	0.015	0.000000	0.000000	2150.27	1059.26
2	FID		ACIS-I-5	7.17	2424	-0.378	0.072	0.008	0.014	0.000000	0.000000	-1818.04	1057.58
3	GUIDE	used	397674472	9.99	4844	-0.090	-0.314	0.229	0.470	210.469127	38.903464	-1035.40	1769.79
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	GUIDE	used	397679944	10.19	4806	-0.197	0.161	0.348	0.534	211.708194	37.976449	2082.98	-1919.59
6	GUIDE	used	397680904	9.91	4837	0.192	0.425	0.192	0.304	210.279103	38.218924	-1848.13	-616.75
7	GUIDE	used	397673760	6.36	4847	0.110	-0.304	0.195	0.305	210.097642	39.029938	-2016.10	2341.75

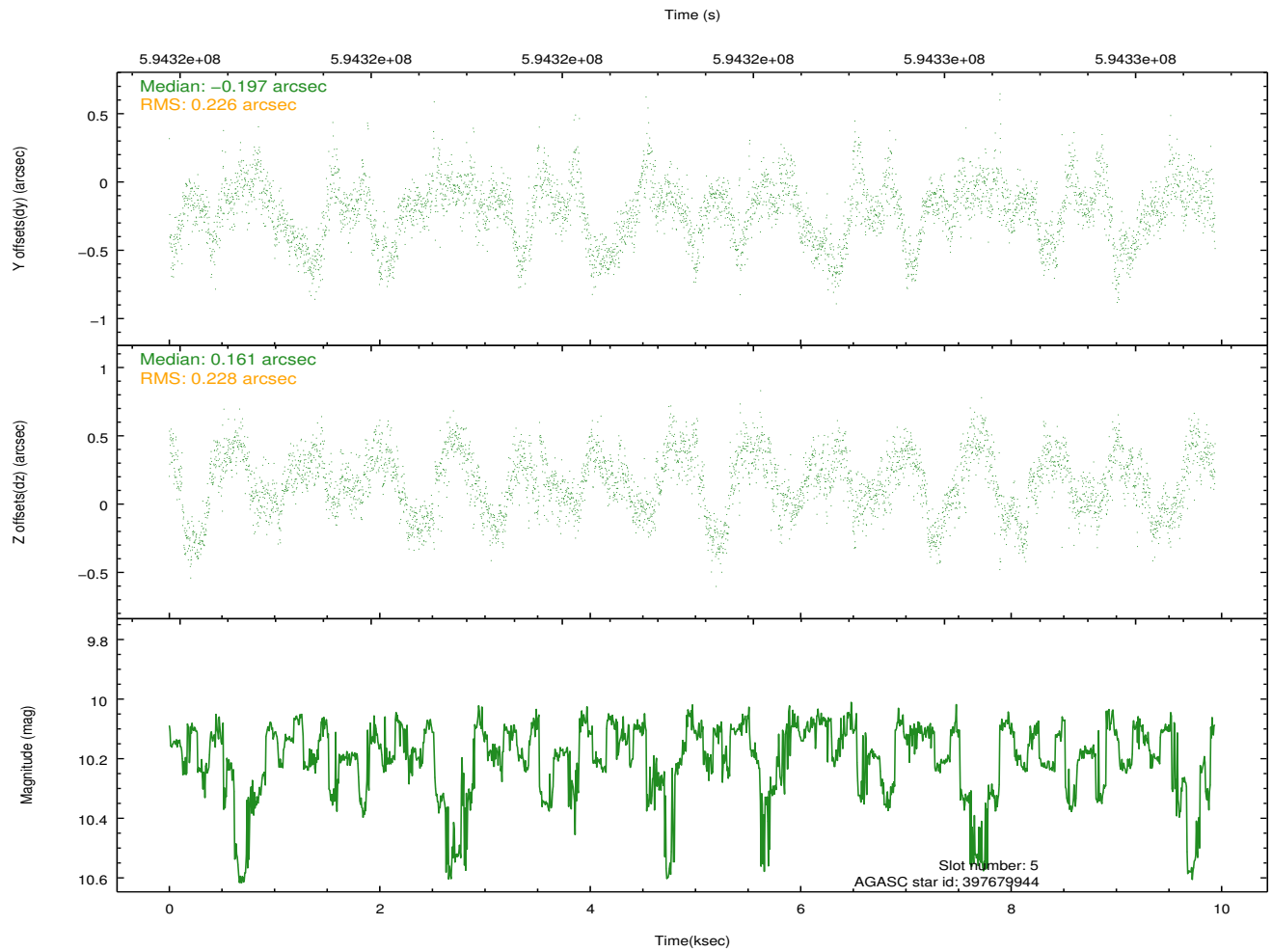
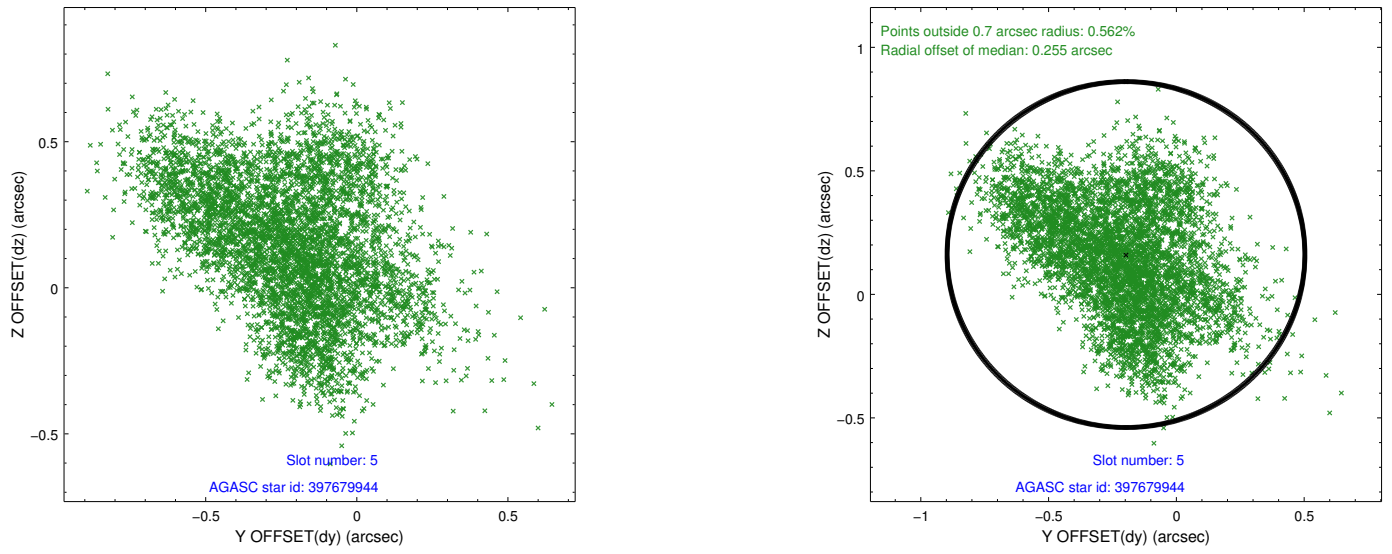
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2.4 Star Slots

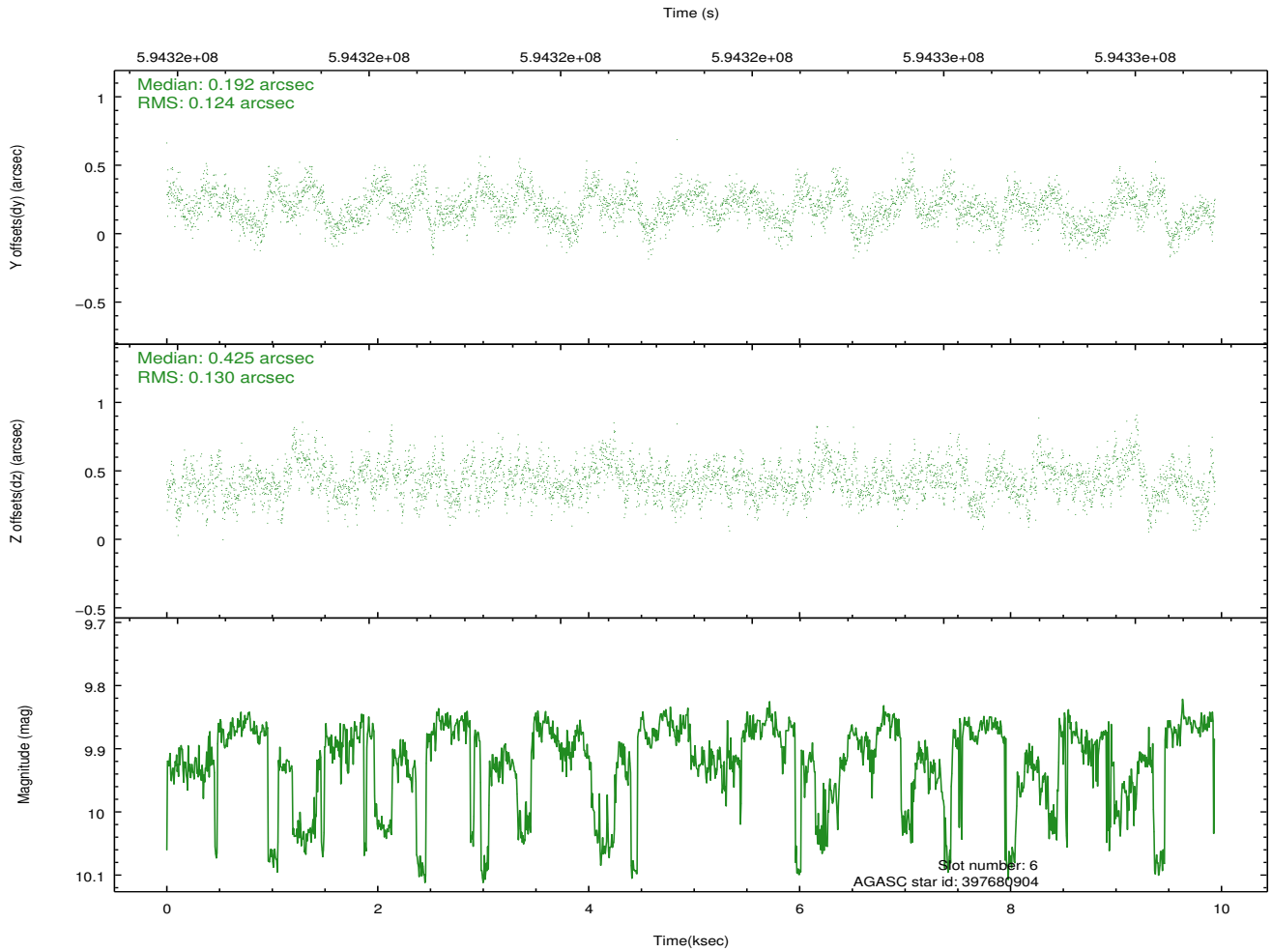
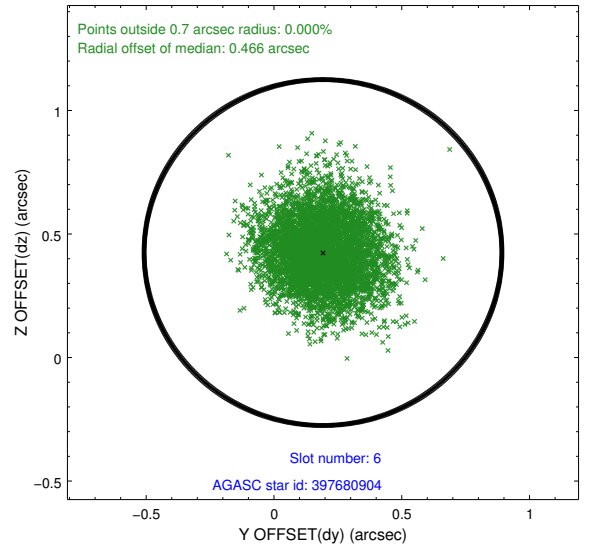
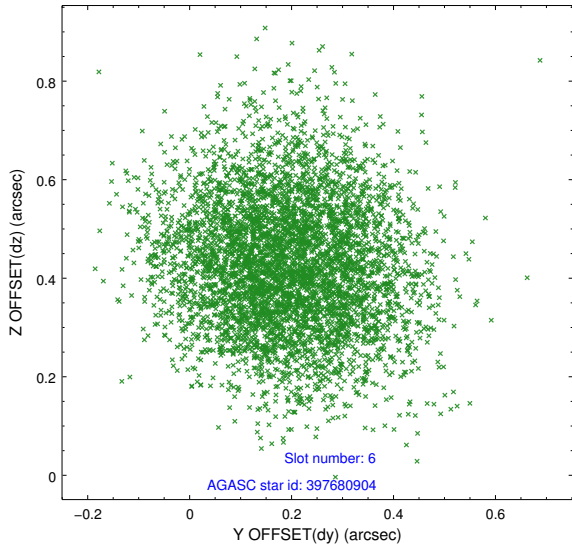
2.4.1 Slot 3



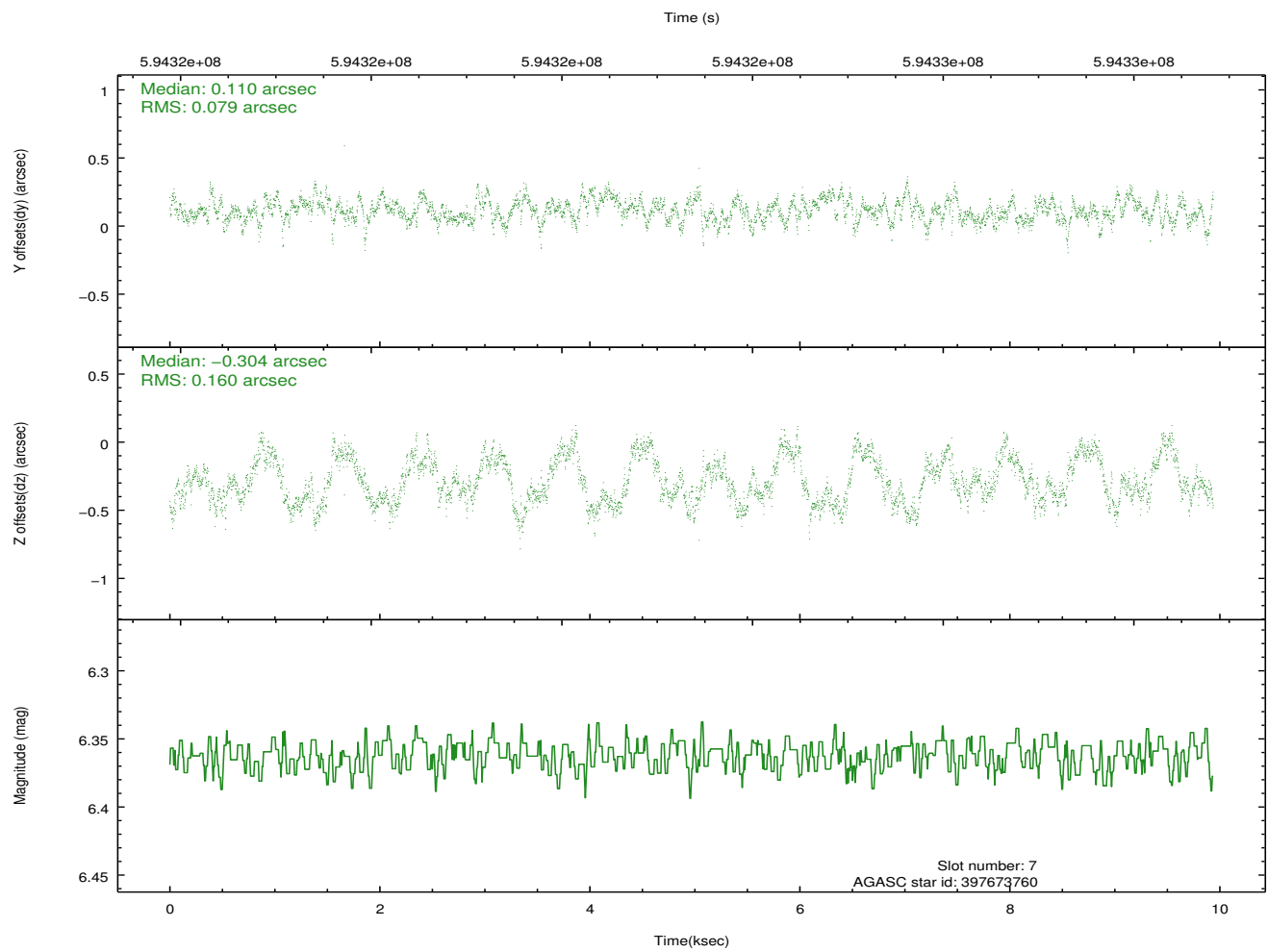
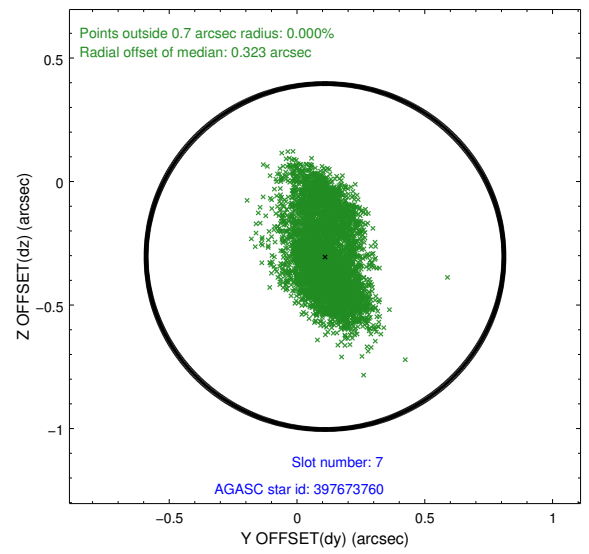
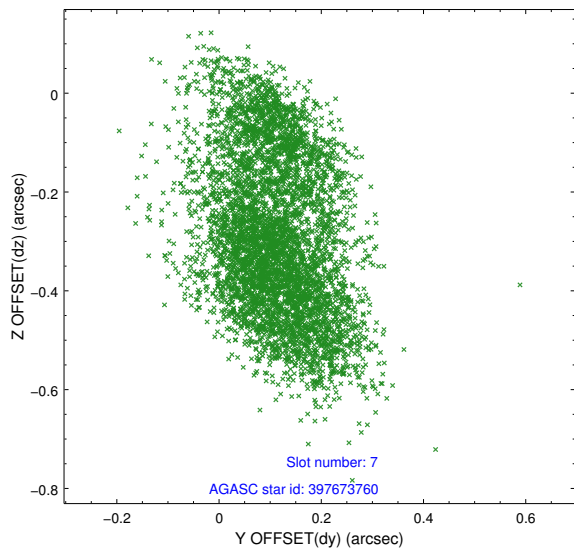
2.4.2 Slot 5



2.4.3 Slot 6

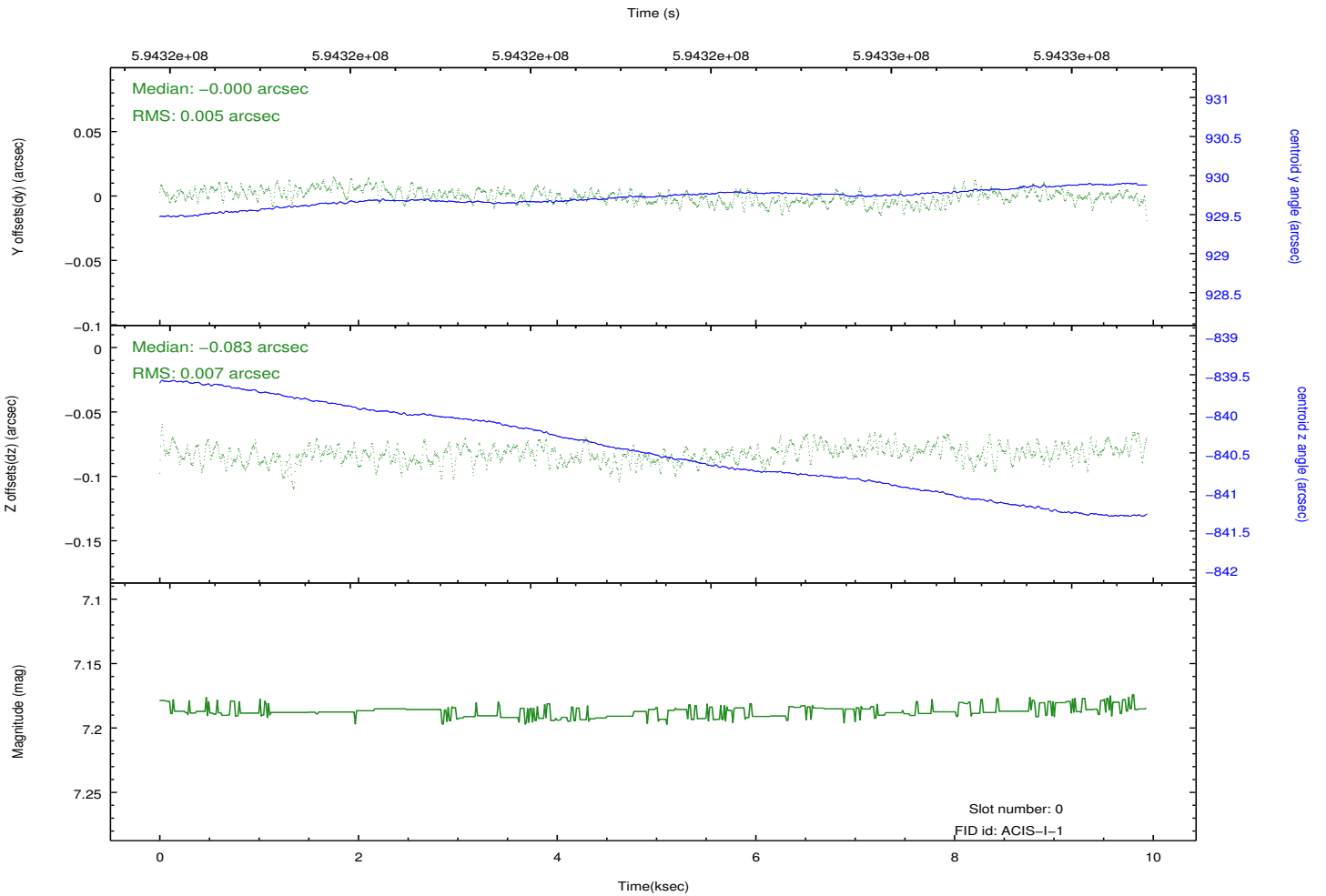
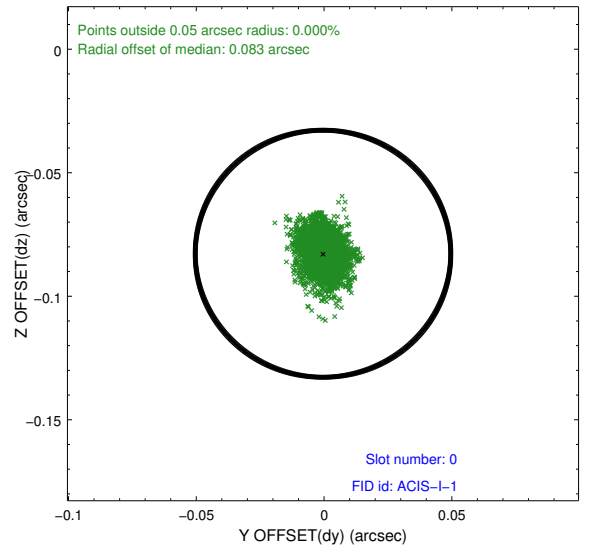
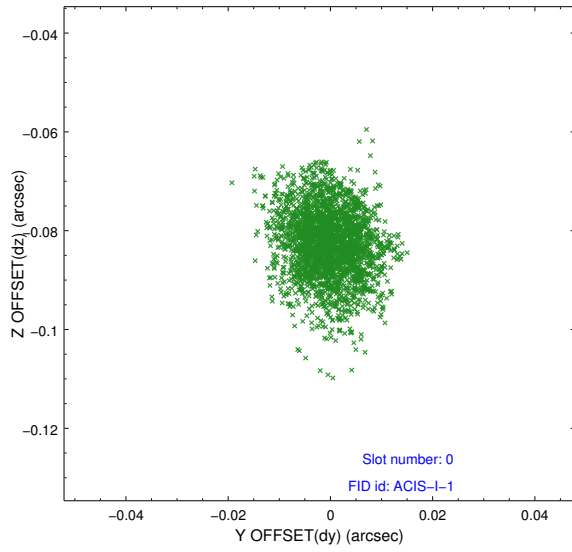


2.4.4 Slot 7

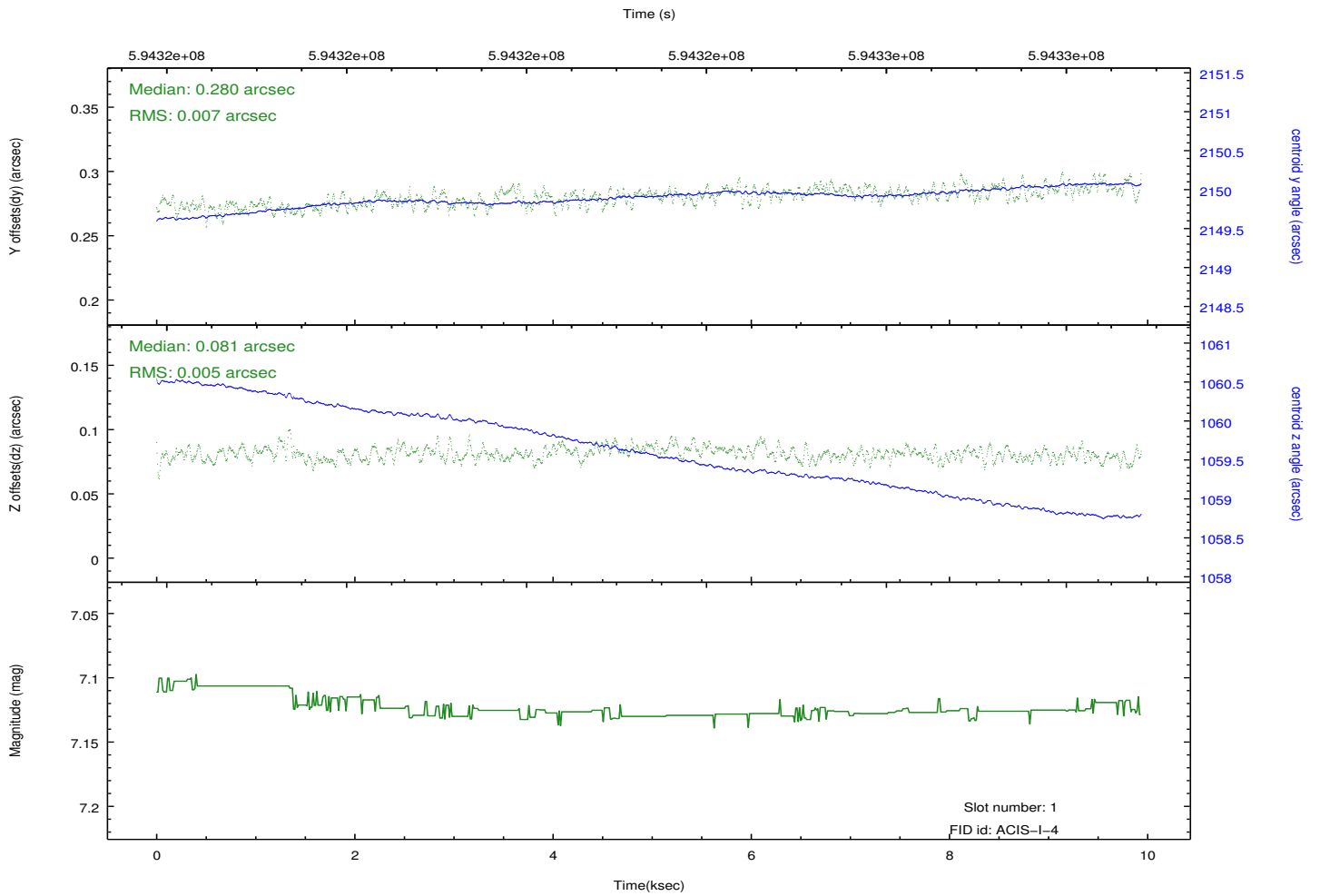
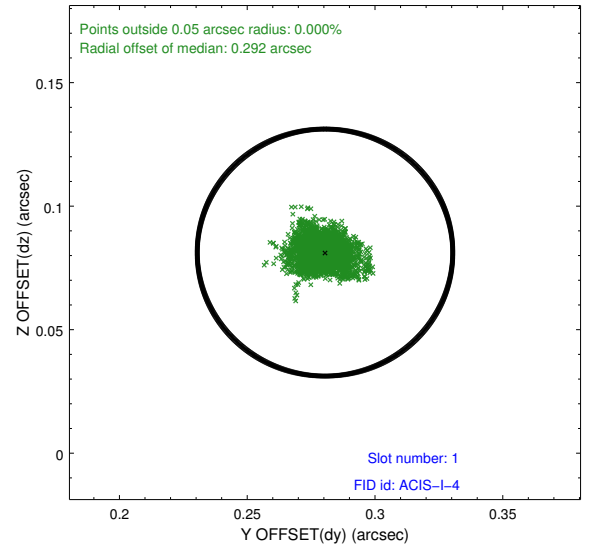
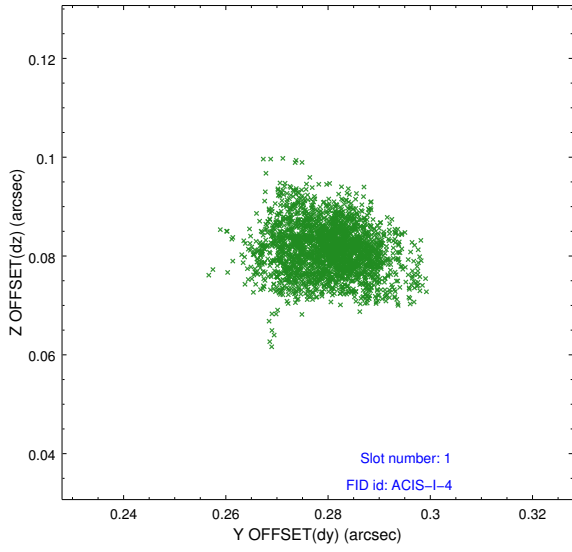


2.5 FID Slots

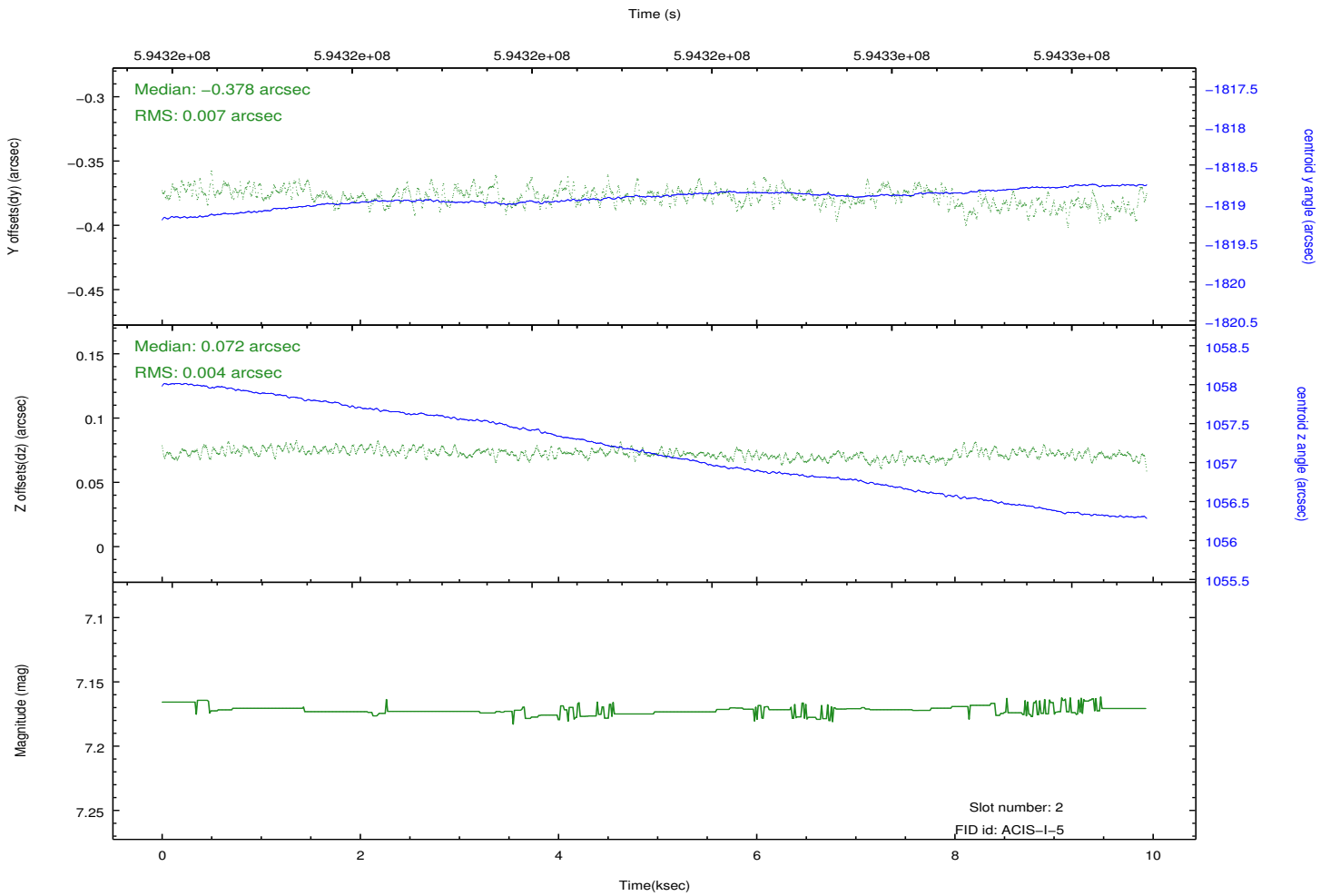
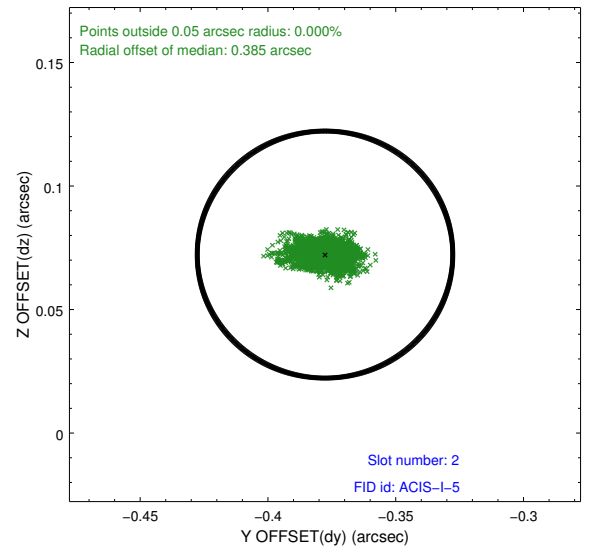
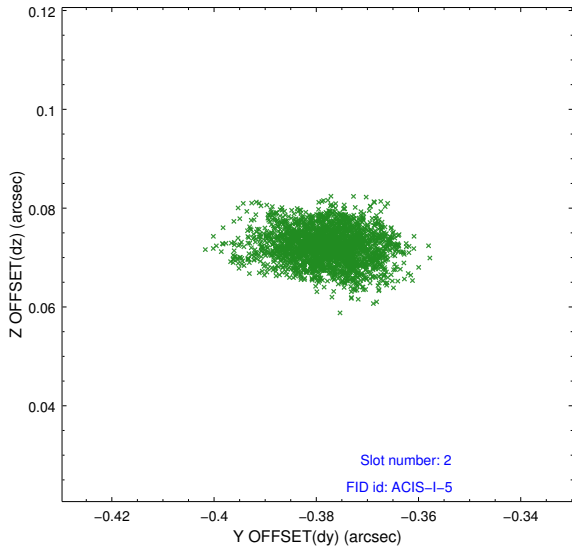
2.5.1 Slot 0



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)	2016.11.02
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.0582000697851

A.2 Comments

The guide star in slot 4 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this slot from the solution.