

V&V Reference Report

L2 ASCDS Version : 10.8.1

Observation 23105 - L2 Version 1
Chandra X-Ray Center

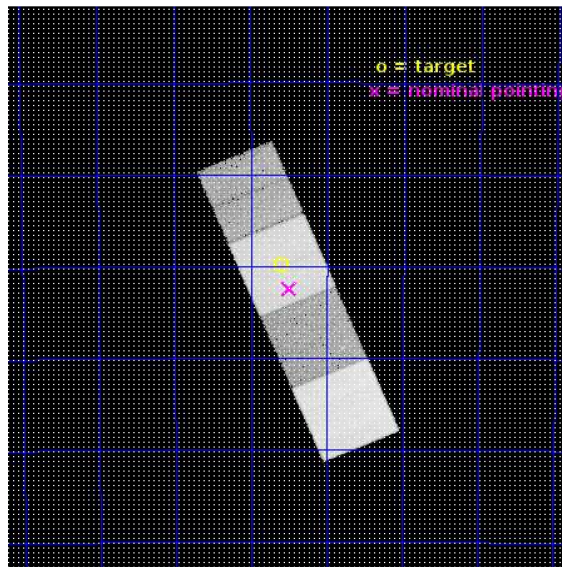
L2 Processing Date : Dec 22 2019

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1 Front

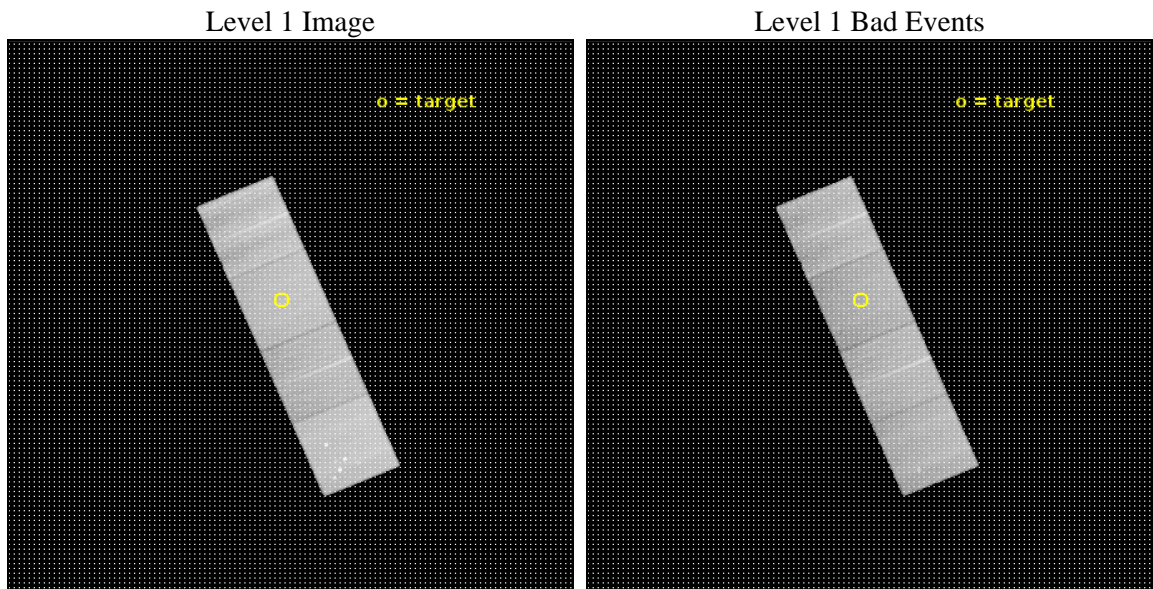
seq_num	801901	Sequence number
obs_id	23105	Observation id
title	Enabling Dark Energy Constraints from Optically Selected Galaxy Clusters	Proposal title
observer	Adam Mantz	Principal investigator
object	CLJ211235.8-574950	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	318.149078	Observer's specified target RA [deg]
dec_targ	-57.830555	Observer's specified target Dec [deg]
ra_nom	318.12340349189	Nominal RA [deg]
dec_nom	-57.87403766872	Nominal Dec [deg]
roll_nom	247.05332656087	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30060.700231314	Sum of GTIs [s]
livetime	29667.935052426	Livetime [s]
ontime5	30060.700231314	Sum of GTIs [s]
ontime6	30057.559271097	Sum of GTIs [s]
ontime7	30060.700231314	Sum of GTIs [s]
ontime8	30060.700231314	Sum of GTIs [s]
l2events	344273	Number of level 2 events



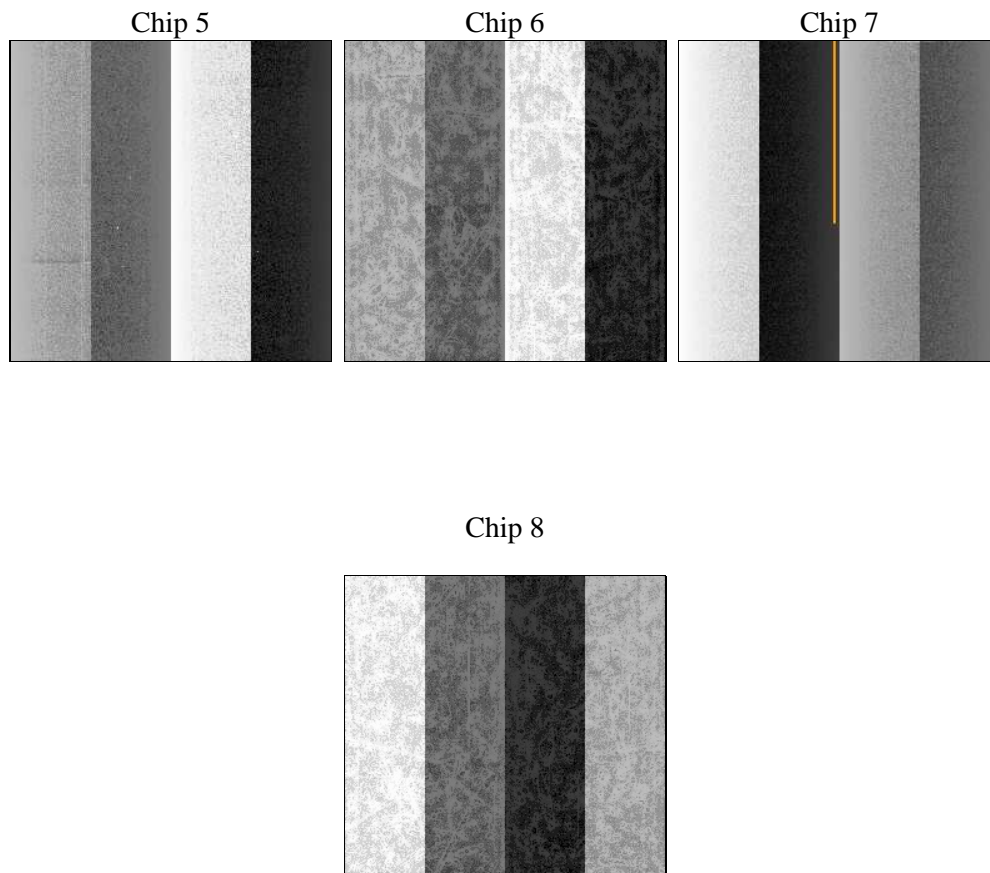
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.8.1	Processing system revision	ontime	30060.700231314	Sum of GTIs [s]
caldbver	4.8.4.2	 	ontime5	30060.700231314	Sum of GTIs [s]
date	2019-12-22T06:10:16	Date and time of file creation	ontime6	30057.559271097	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	30060.700231314	Sum of GTIs [s]
			ontime8	30060.700231314	Sum of GTIs [s]
			l1events	1228306	Number of level 1 events

2.1.4 Events

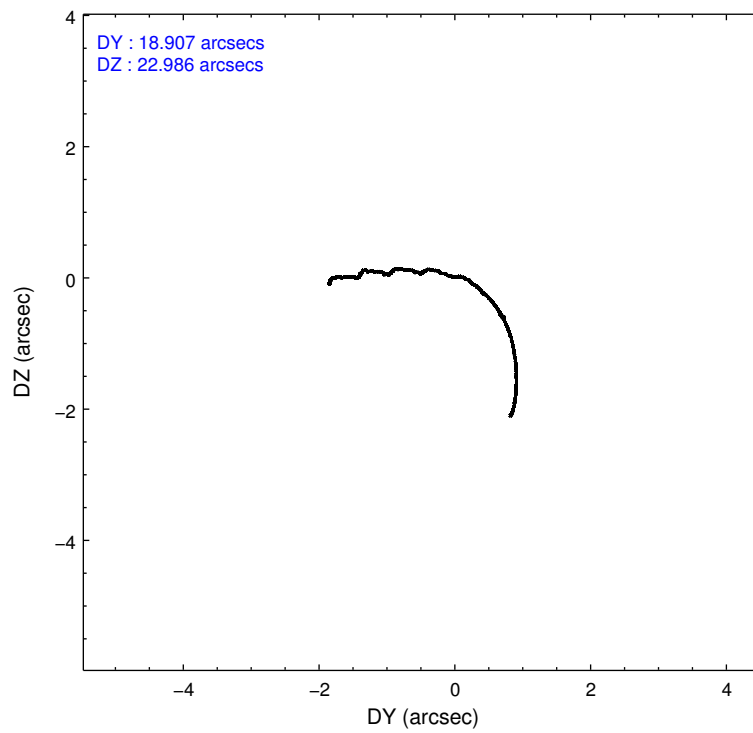
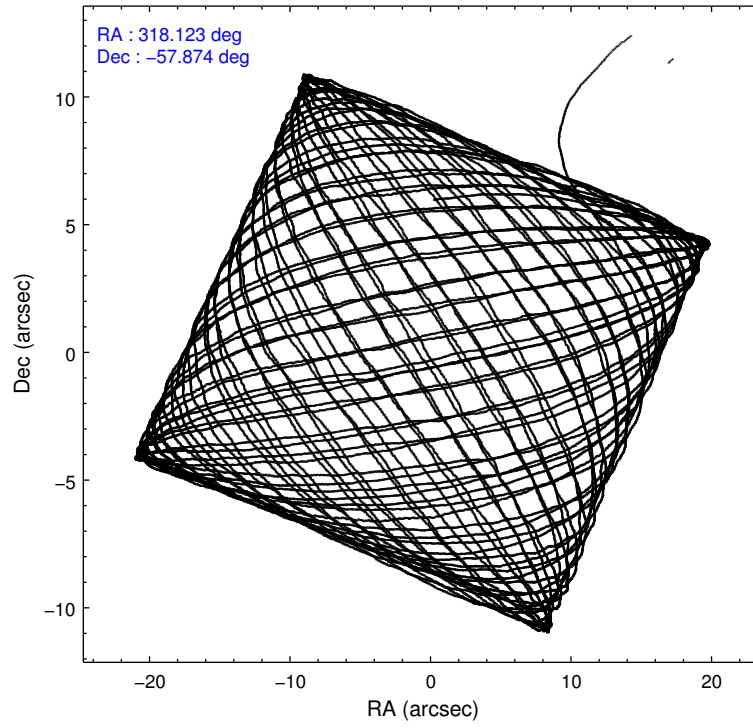
	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	377865	241699	297718	311024
rejected events	193295	215328	168831	228131
rejected %	51%	89%	56%	73%

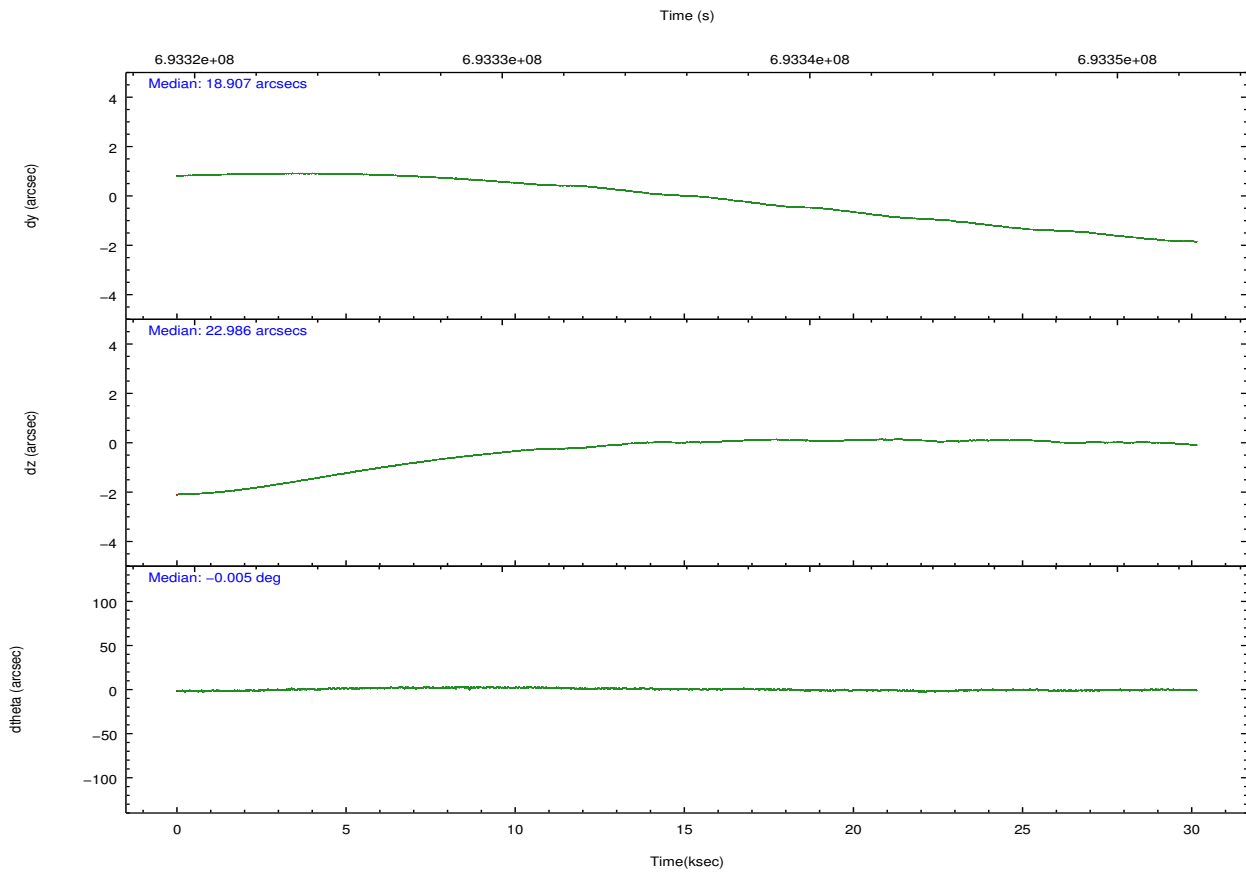
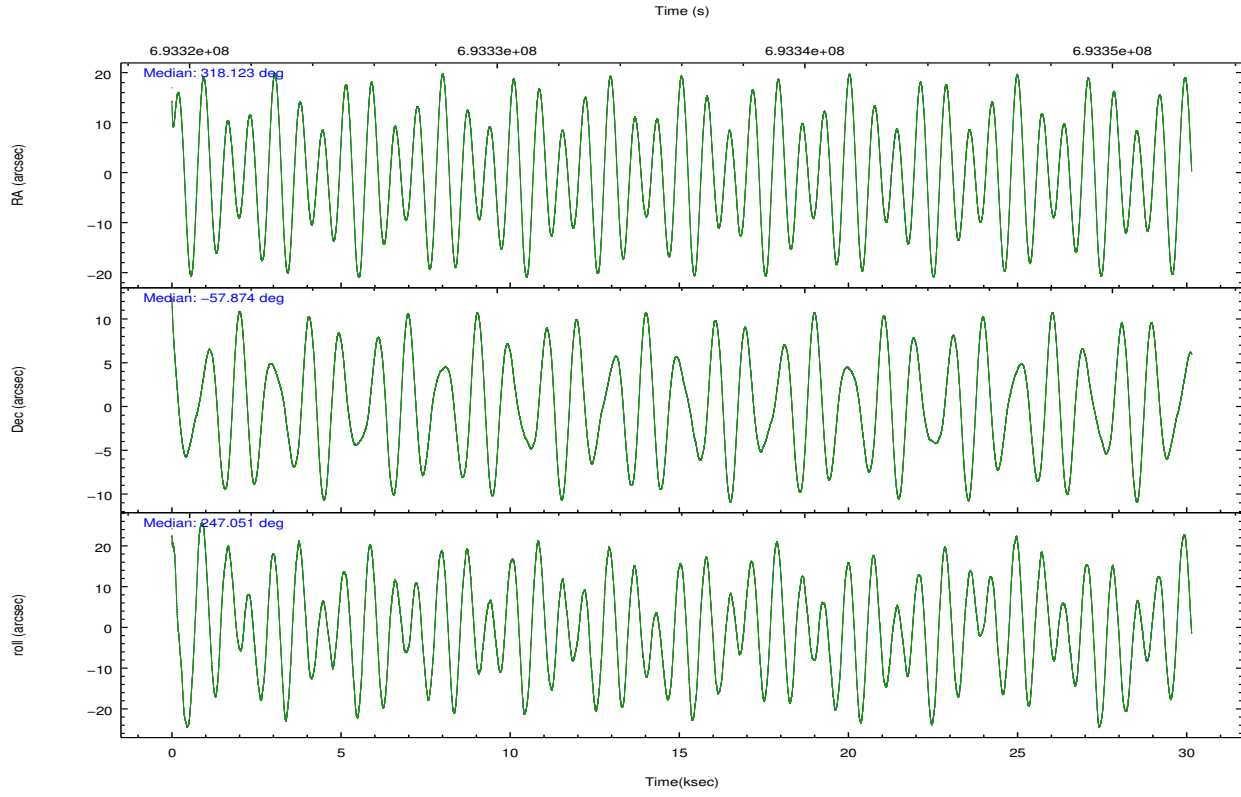
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	18517	8175	10772	23538
	4%	3%	3%	7%
grade 1 events	1482	105	428	238
	0%	0%	0%	0%
grade 2 events	56736	6795	27637	20500
	15%	2%	9%	6%
grade 3 events	5446	2340	9802	8104
	1%	0%	3%	2%
grade 4 events	5268	2384	10017	7920
	1%	0%	3%	2%
grade 5 events	24481	10158	28838	16297
	6%	4%	9%	5%
grade 6 events	98627	6681	70675	22846
	26%	2%	23%	7%
grade 7 events	167308	205061	139549	211581
	44%	84%	46%	68%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-5678	ACIS-5678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	318.116352	318.123403491885	CCD I2 on	N	N
[deg] Pointing Dec	-57.846858	-57.87403766872001	CCD I3 on	N	N
[deg] Pointing Roll	246.890722	247.0533265608692	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O1	Y
[s] Observation start time (MET)	693321060.184000	693319784.96342	CCD S5 on	N	N
Observation start date	2019-12-21T13:09:51	2019-12-21T12:49:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	693351060.184000	693352092.9653701	On-chip summing requested	N	N
Observation end date	2019-12-21T21:29:51	2019-12-21T21:48:12	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





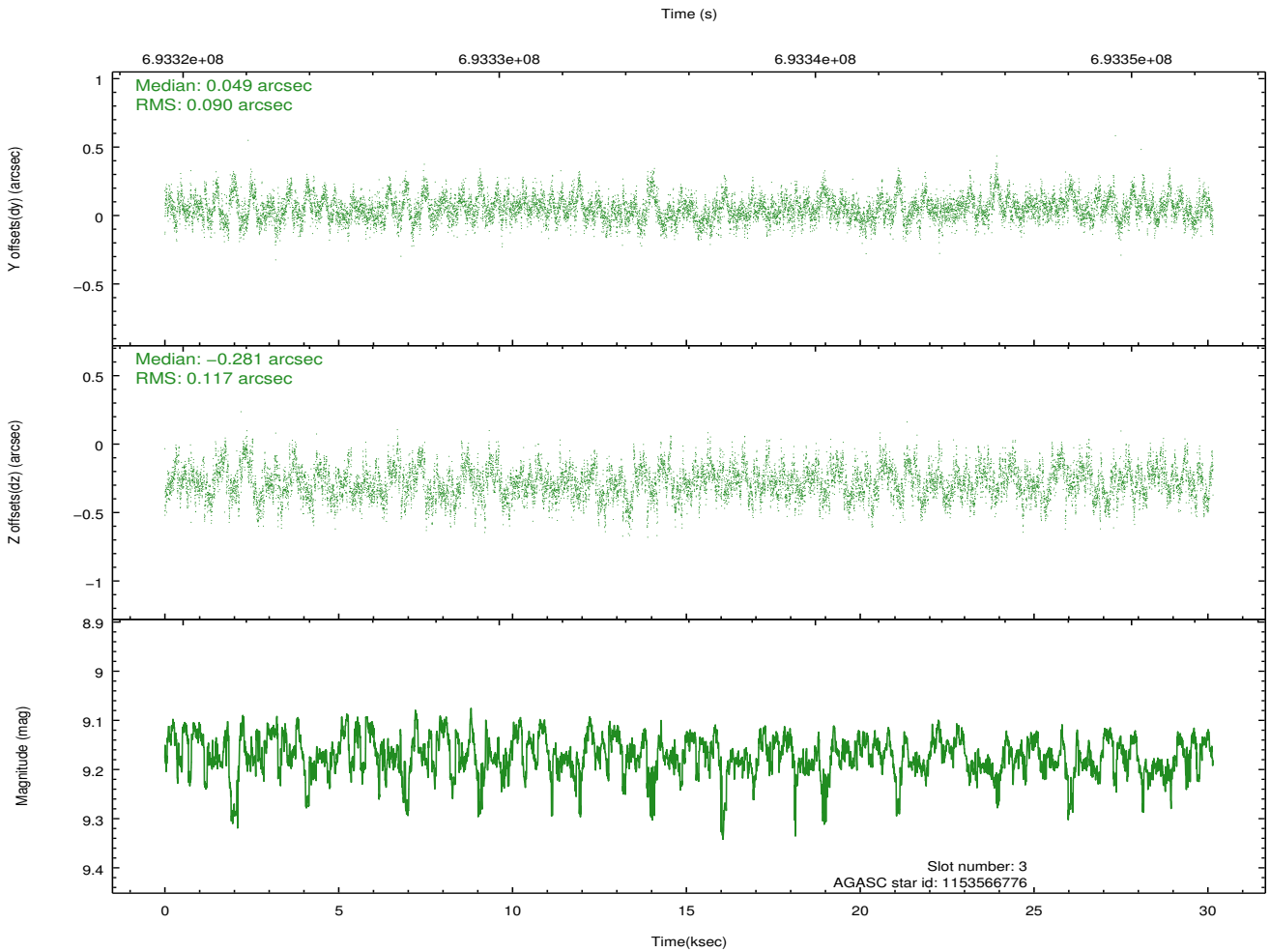
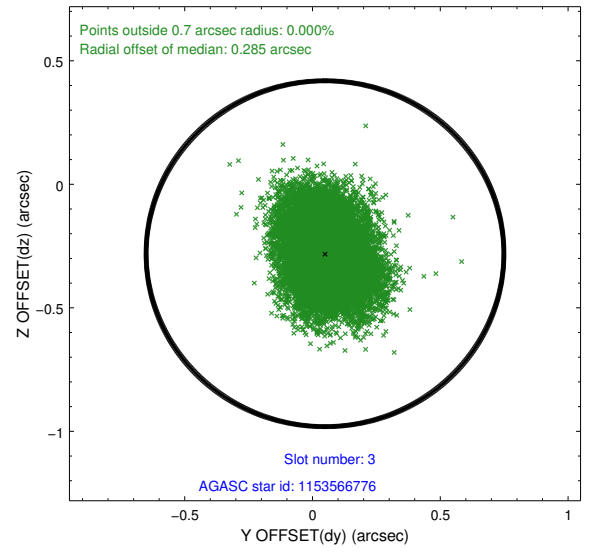
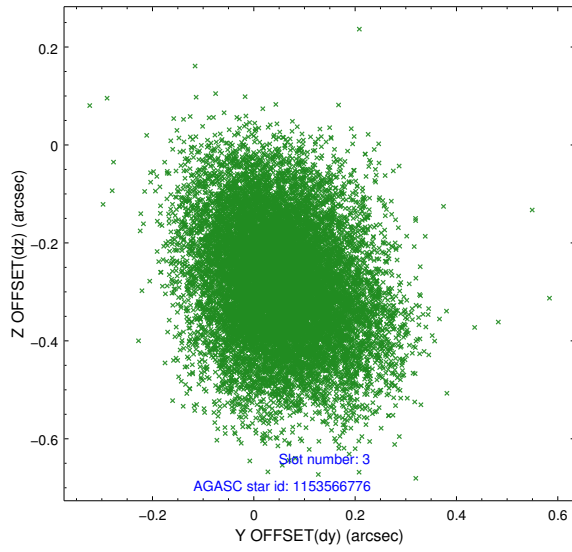
Slot Statistics

slot	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.09	7353	1.000	-0.336	-0.305	0.038	0.053	0.000000	0.000000	-772.11	-1744
1	FID		ACIS-S-4	7.20	7354	1.000	0.794	0.245	0.024	0.048	0.000000	0.000000	2142.22	164
2	FID		ACIS-S-5	7.18	7354	1.000	-0.487	0.073	0.018	0.050	0.000000	0.000000	-1825.04	158
3	GUIDE	used	1153566776	9.17	14688	1.000	0.049	-0.281	0.157	0.259	318.433450	-57.580996	-1117.90	188
4	GUIDE	used	1153566936	8.07	14692	1.000	-0.262	-0.197	0.131	0.216	318.832210	-57.603192	-1341.14	929
5	GUIDE	used	1153572760	9.57	14686	1.000	0.523	0.725	0.310	0.498	317.762601	-57.300174	-1536.77	-1403
6	GUIDE	used	1153572808	9.55	14621	1.000	0.183	0.416	0.333	0.539	317.260575	-57.536599	-366.98	-1954
7	GUIDE	used	1154089008	8.99	14687	1.000	-0.480	-0.631	0.259	0.382	318.199901	-58.350687	1607.07	856

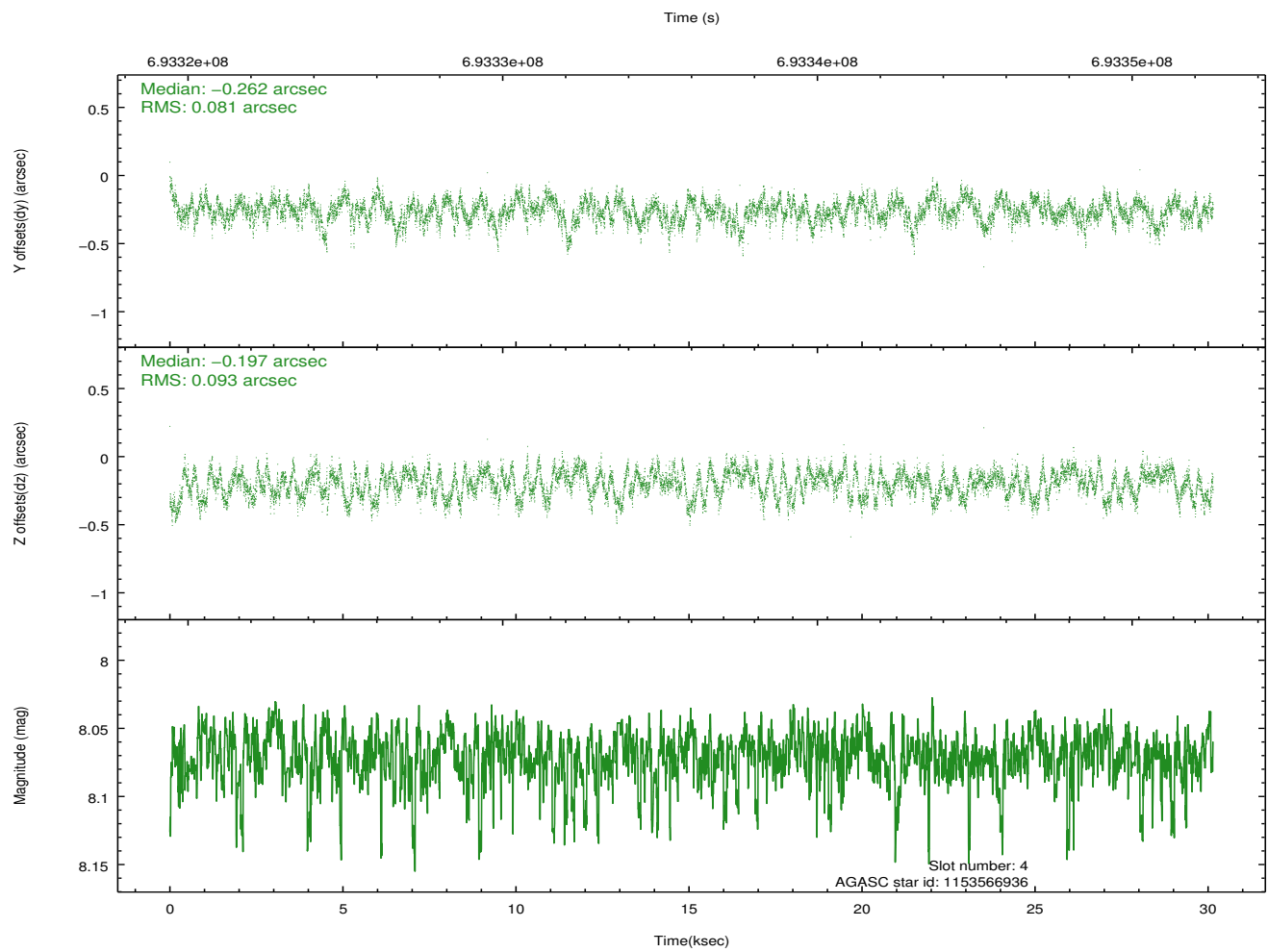
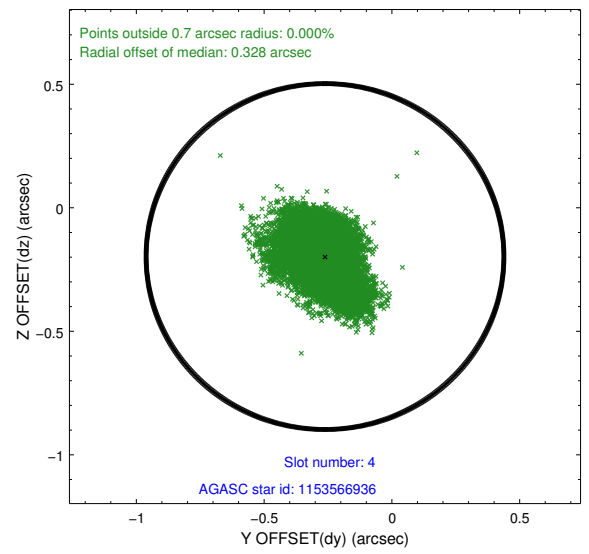
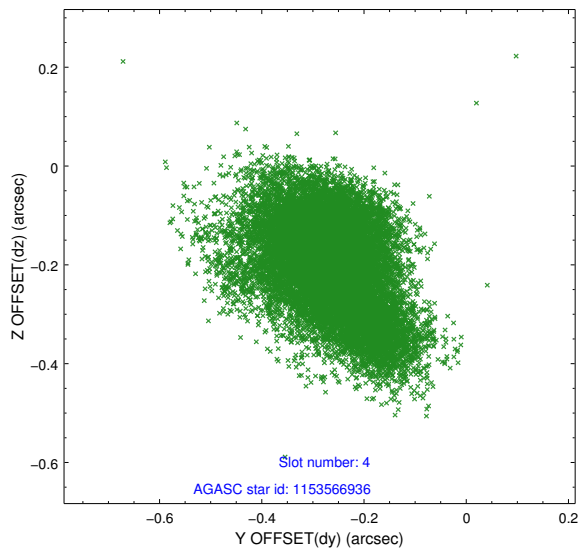
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2.4 Star Slots

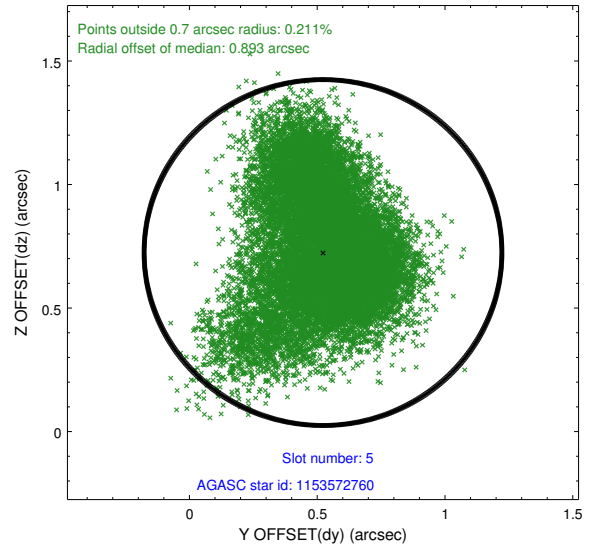
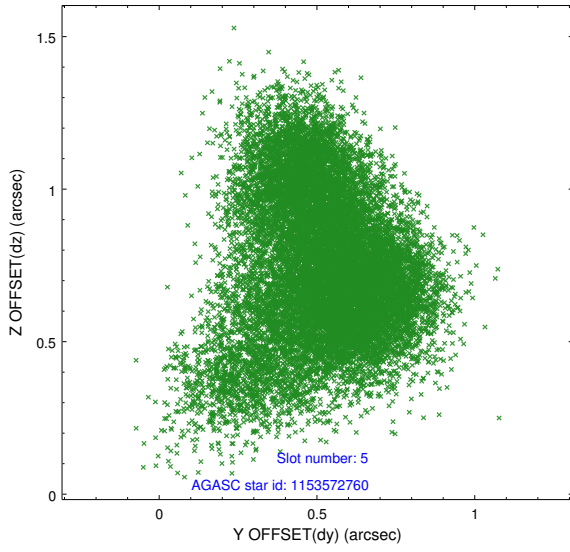
2.4.1 Slot 3



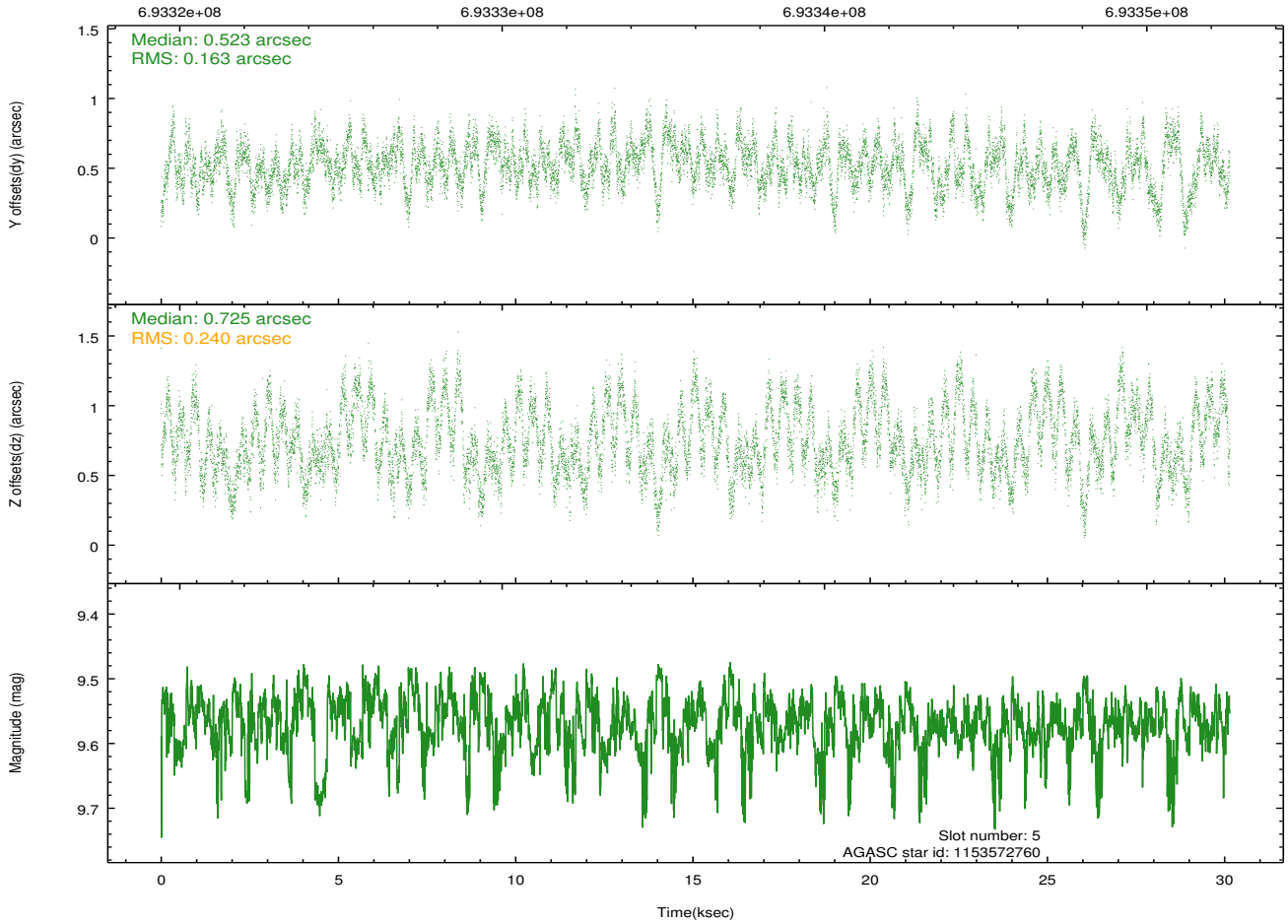
2.4.2 Slot 4



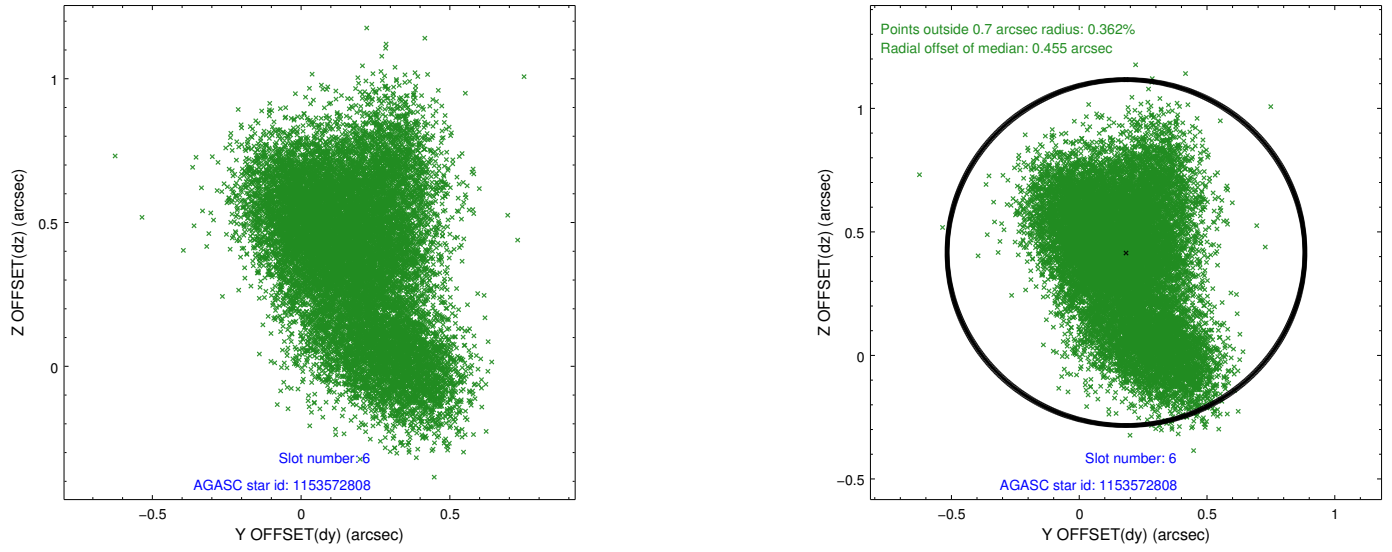
2.4.3 Slot 5



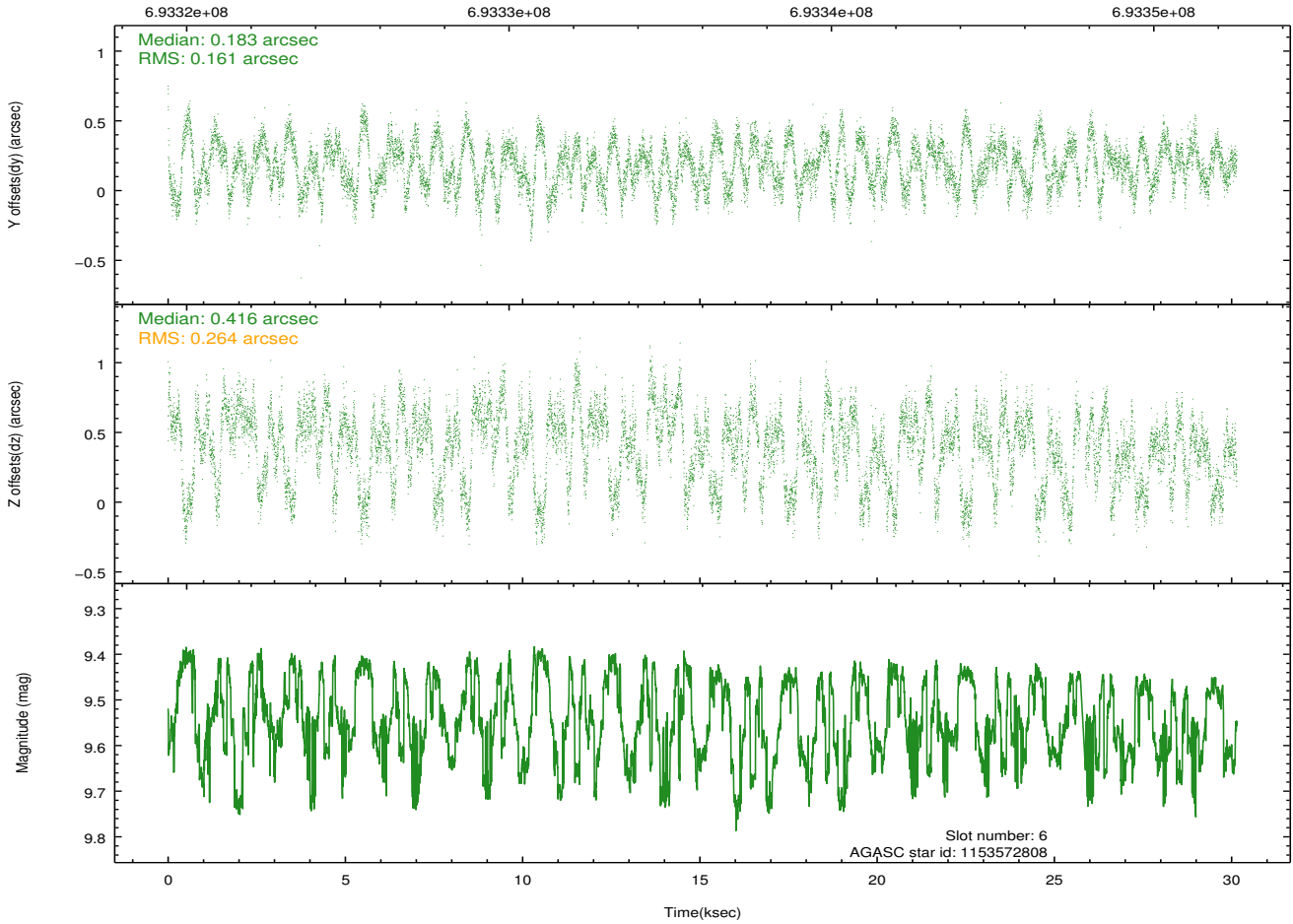
Time (s)



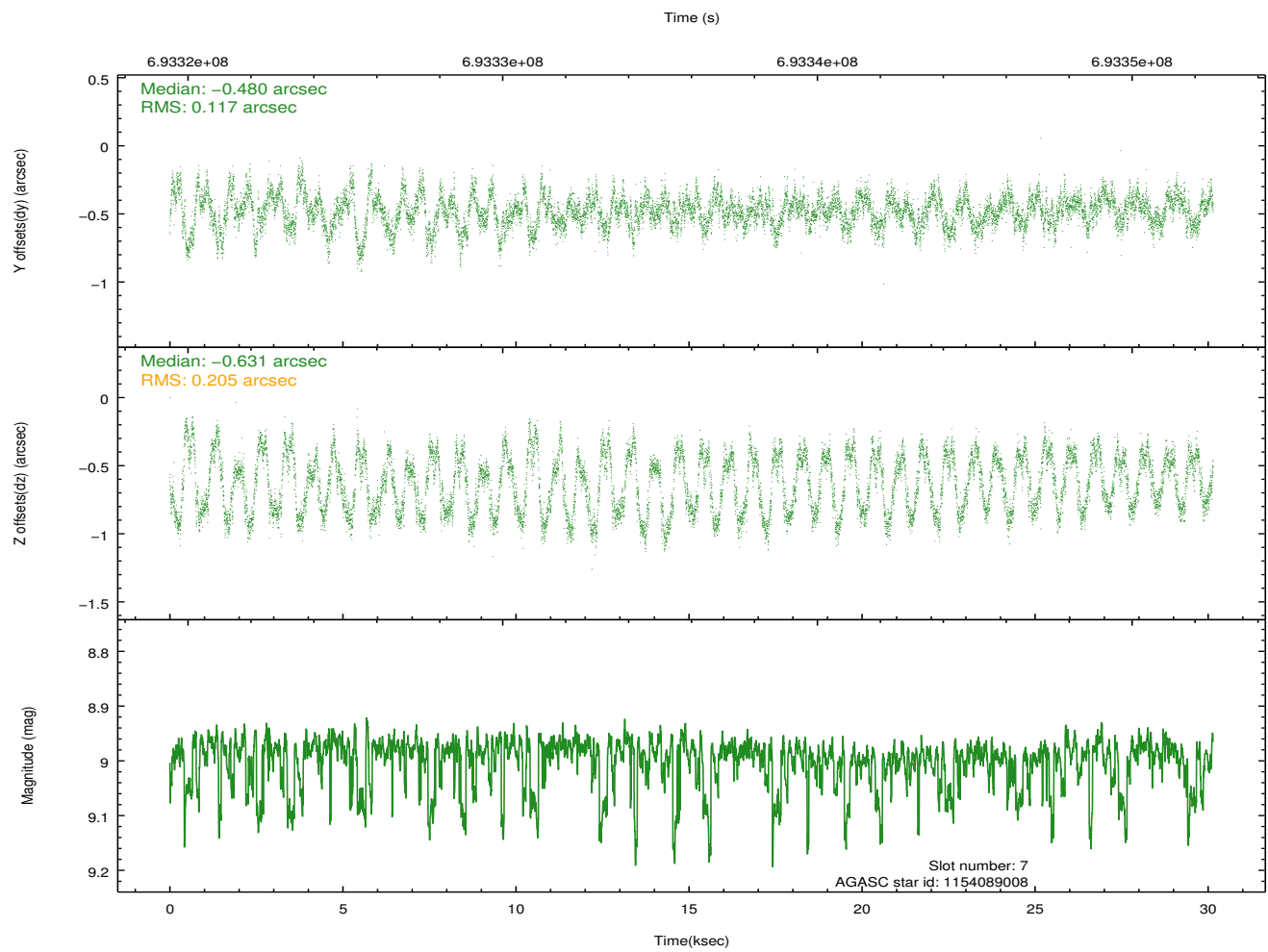
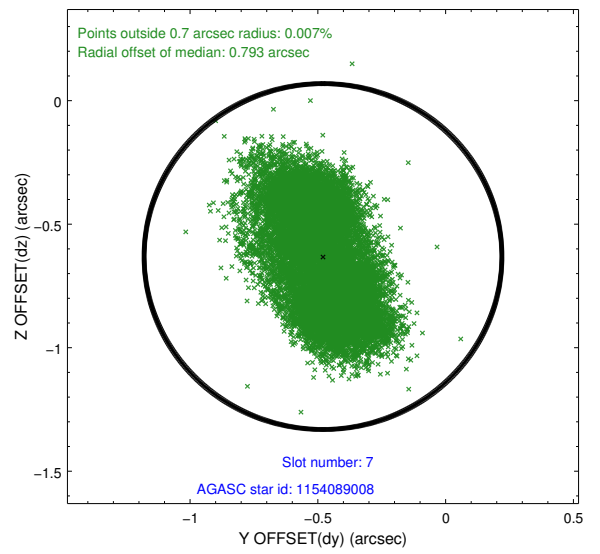
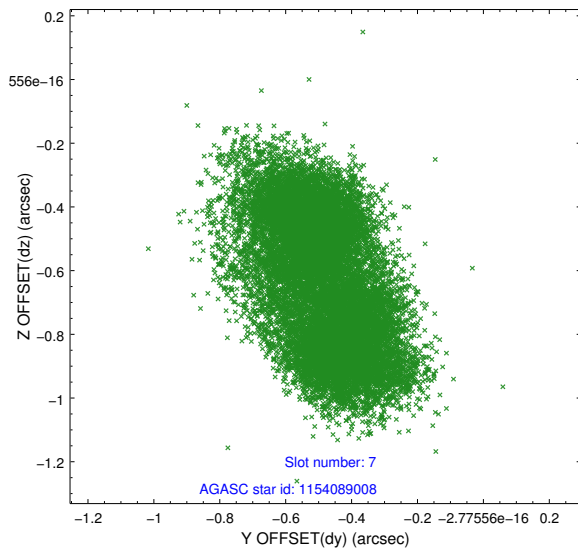
2.4.4 Slot 6



Time (s)

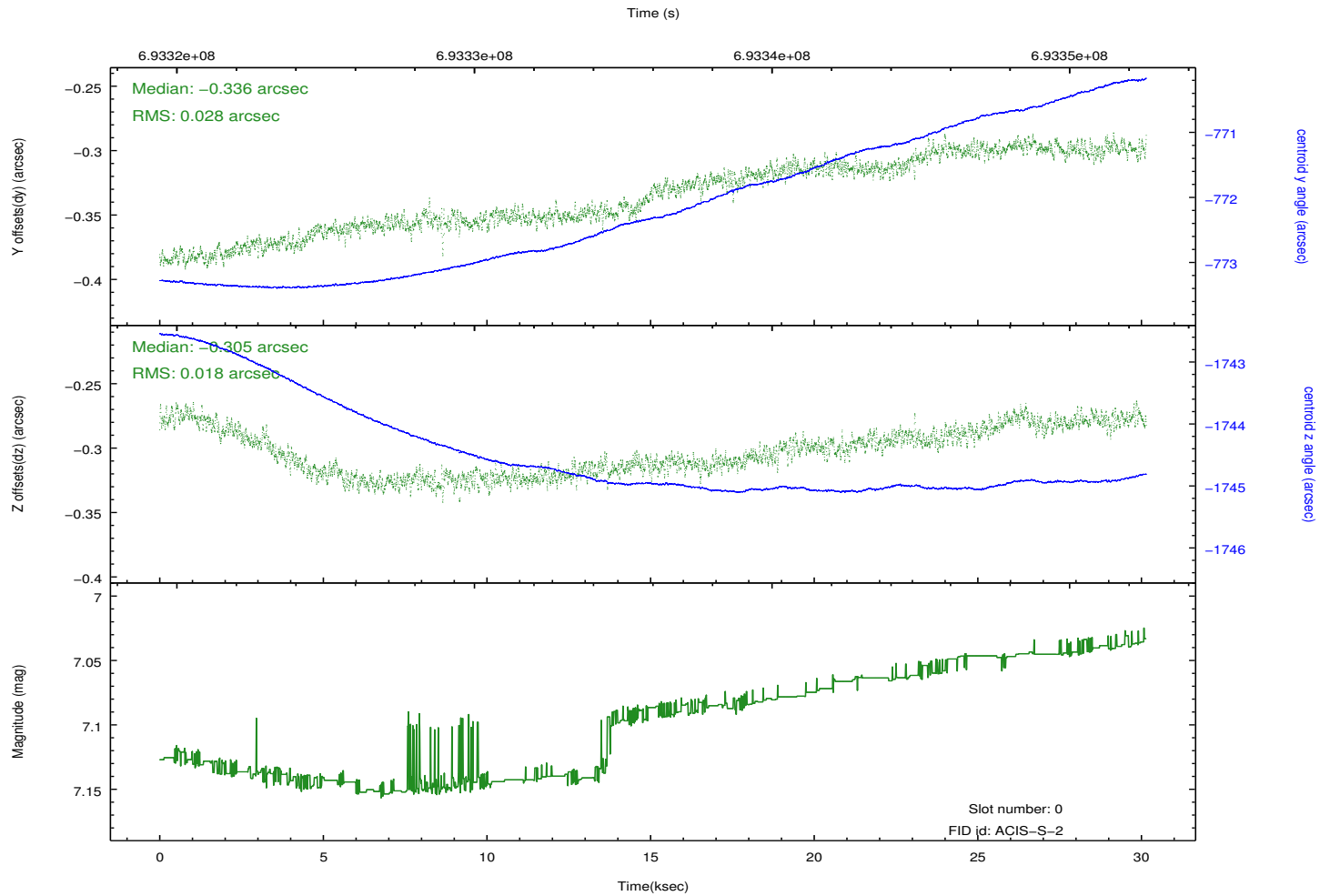
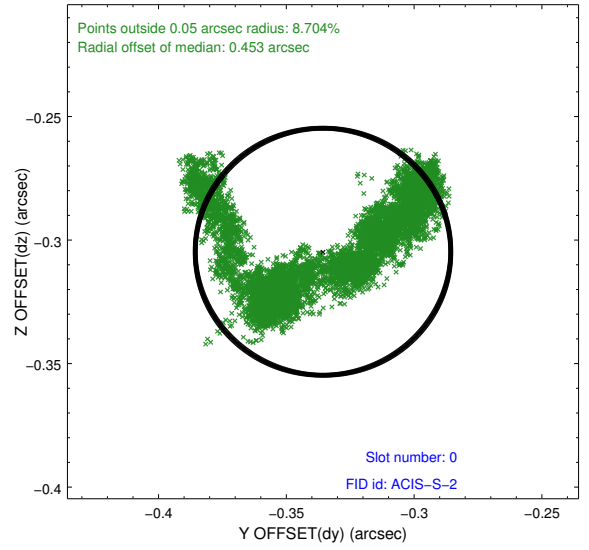
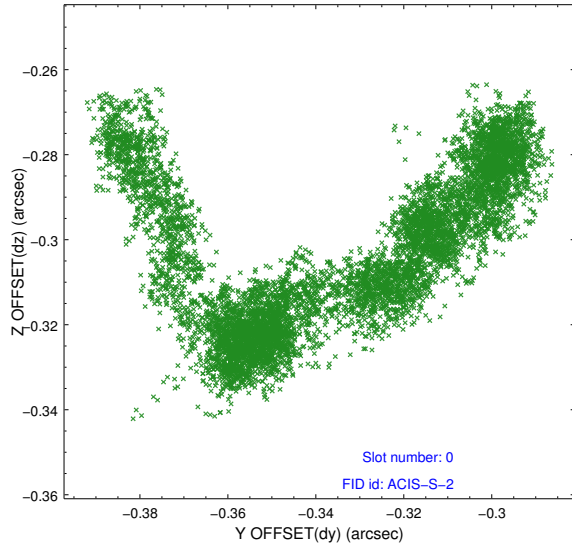


2.4.5 Slot 7

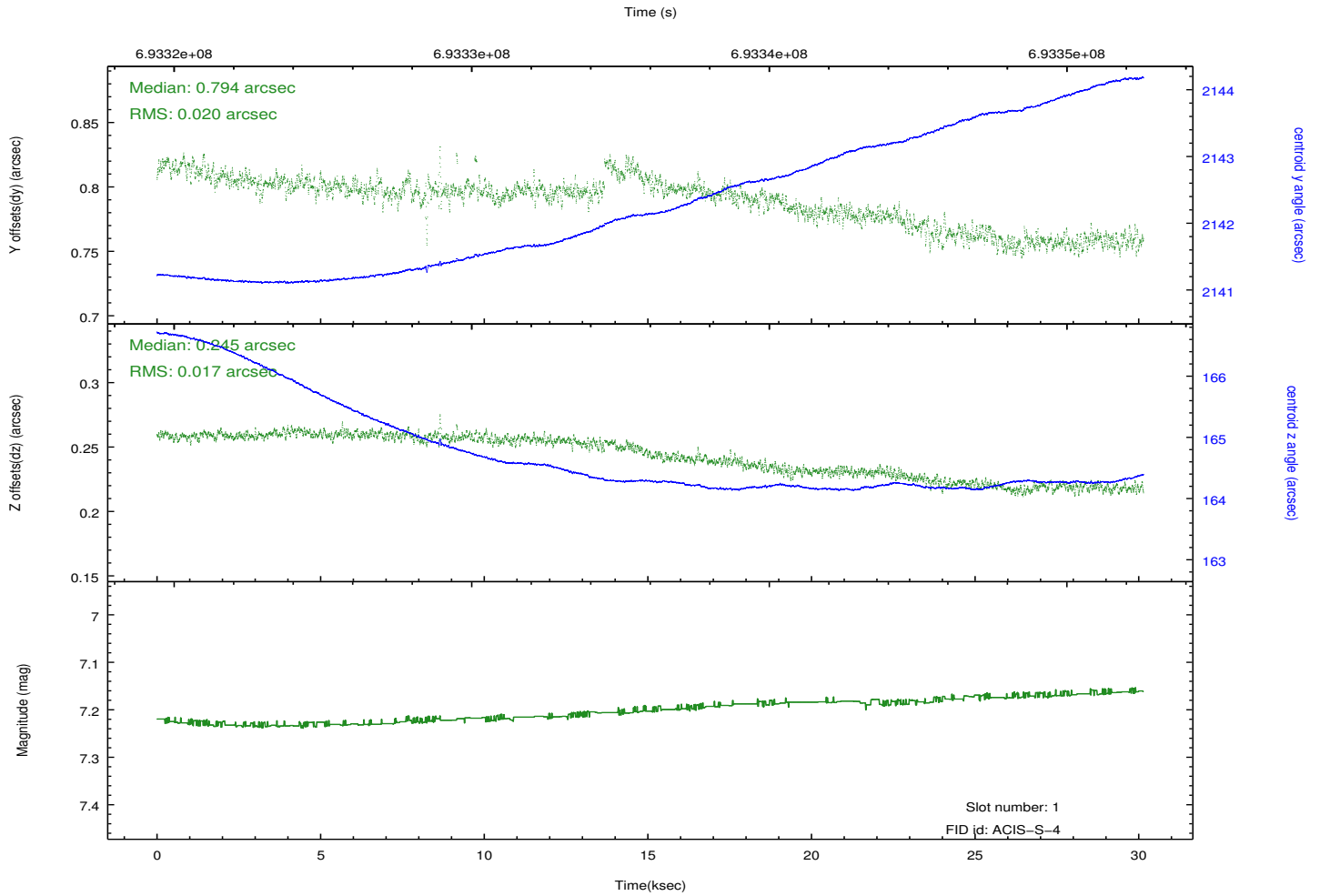
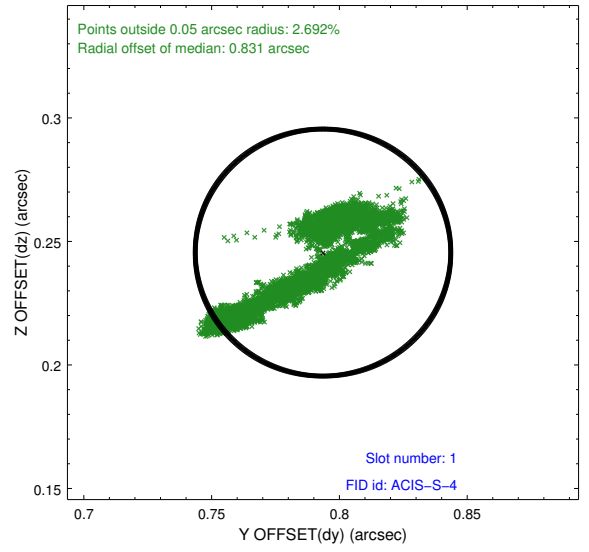
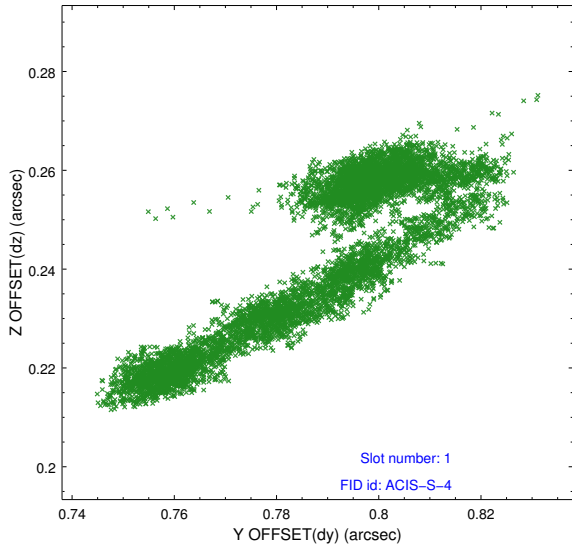


2.5 FID Slots

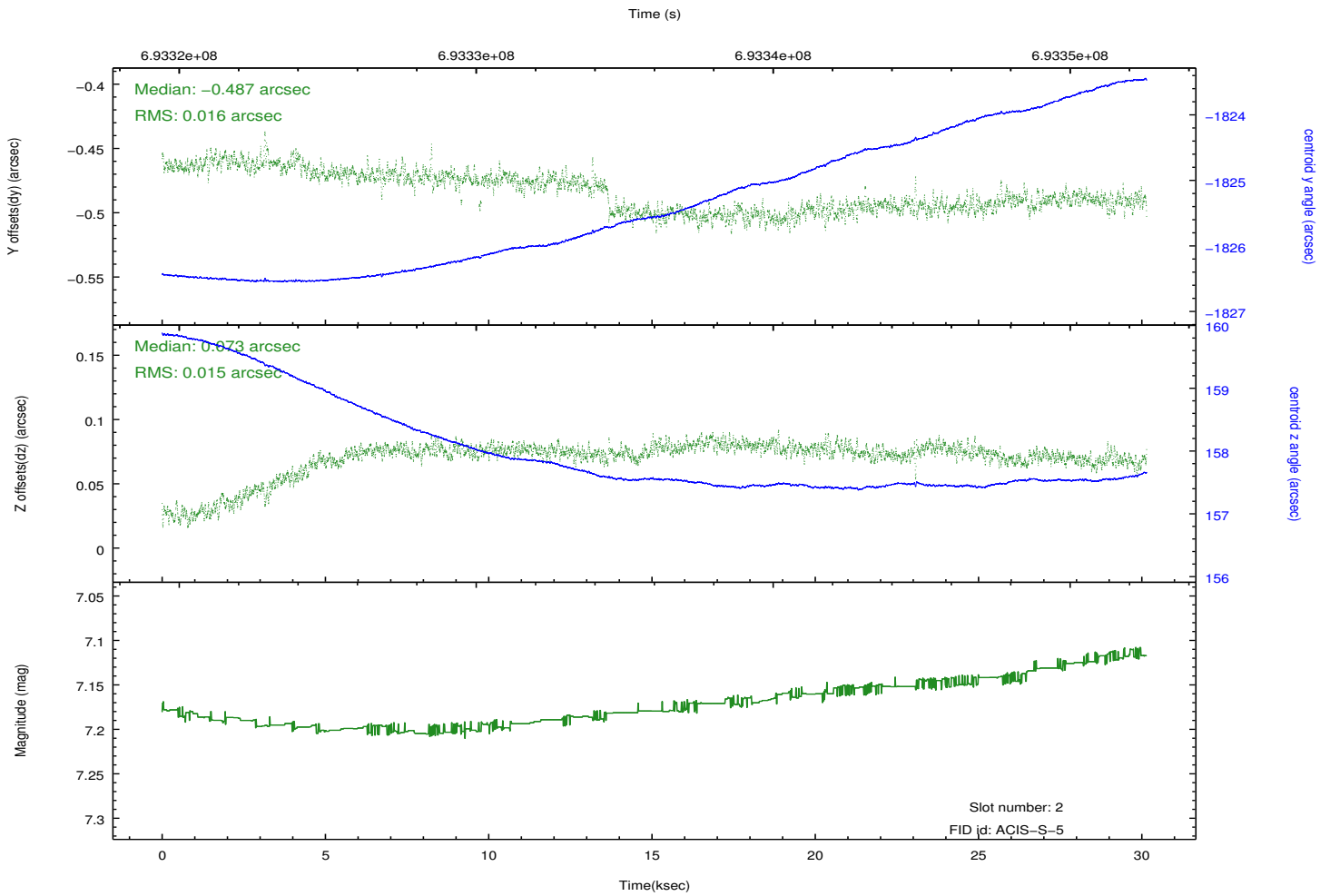
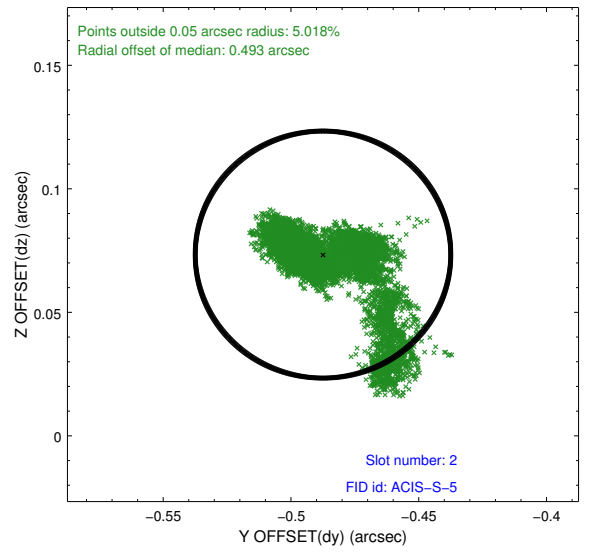
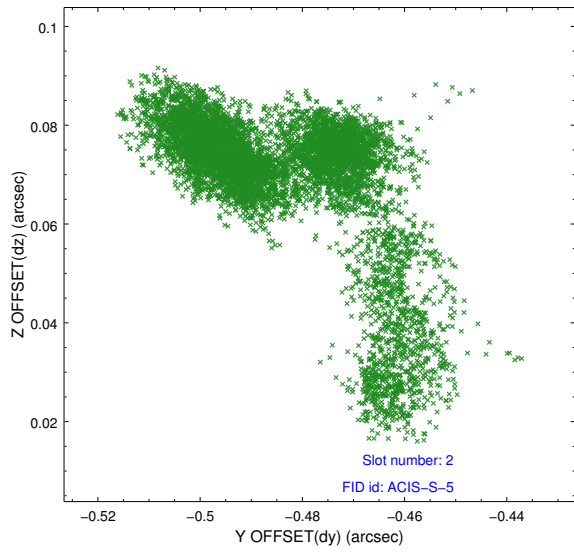
2.5.1 Slot 0



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)	2019.12.23
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.060700231314

A.2 Comments