

V&V Reference Report

L2 ASCDS Version : 10.8

Observation 22850 - L2 Version 2
Chandra X-Ray Center

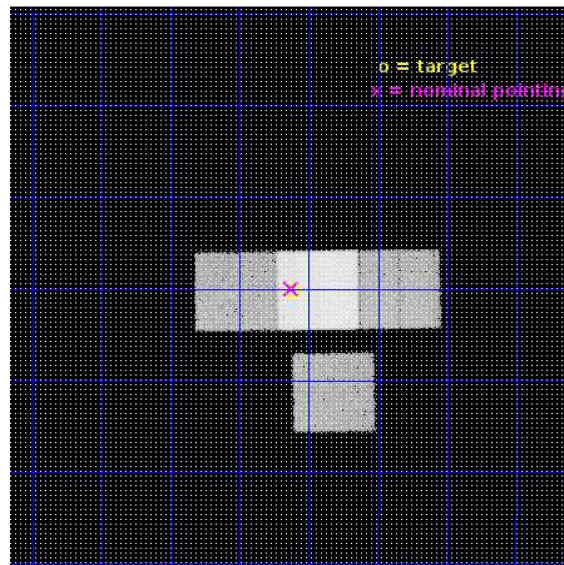
L2 Processing Date : Sep 19 2019

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1 Front

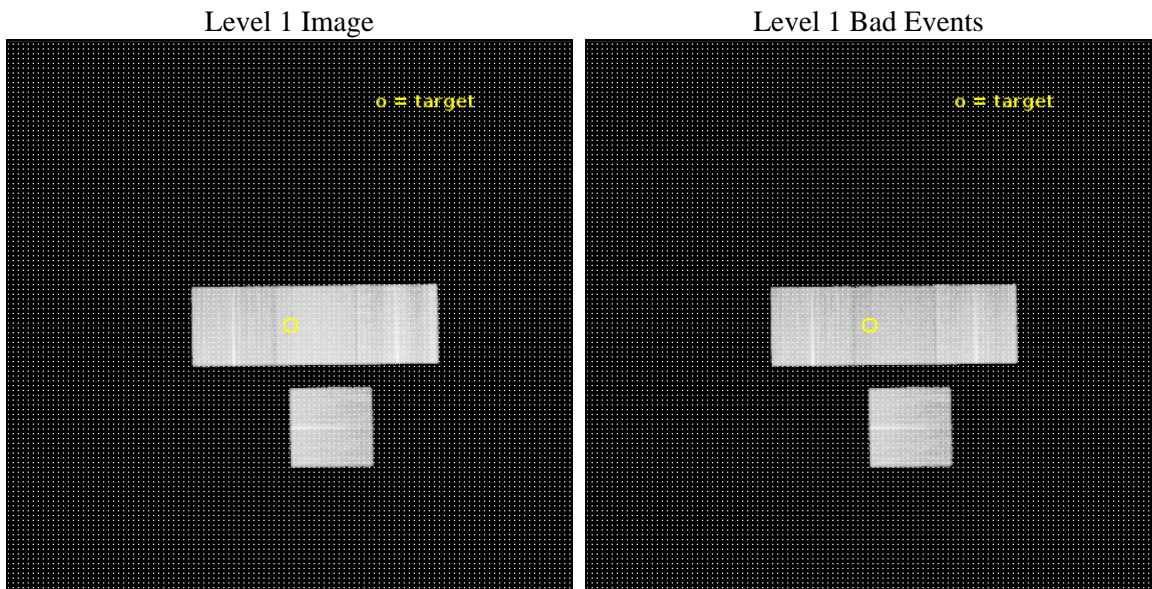
seq_num	703713	Sequence number
obs_id	22850	Observation id
title	X-rays from the brightest radio source at z~6	Proposal title
observer	Eduardo Banados	Principal investigator
object	P352-15	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	352.403333	Observer's specified target RA [deg]
dec_targ	-15.337333	Observer's specified target Dec [deg]
ra_nom	352.40672561821	Nominal RA [deg]
dec_nom	-15.333185176927	Nominal Dec [deg]
roll_nom	359.15748396962	Nominal Roll [deg]
revision	2	Processing version of data
ontime	31854.517222881	Sum of GTIs [s]
livetime	31438.31450441	Livetime [s]
ontime3	31851.294122577	Sum of GTIs [s]
ontime6	31851.335142732	Sum of GTIs [s]
ontime7	31854.517222881	Sum of GTIs [s]
ontime8	31854.394102931	Sum of GTIs [s]
l2events	206286	Number of level 2 events



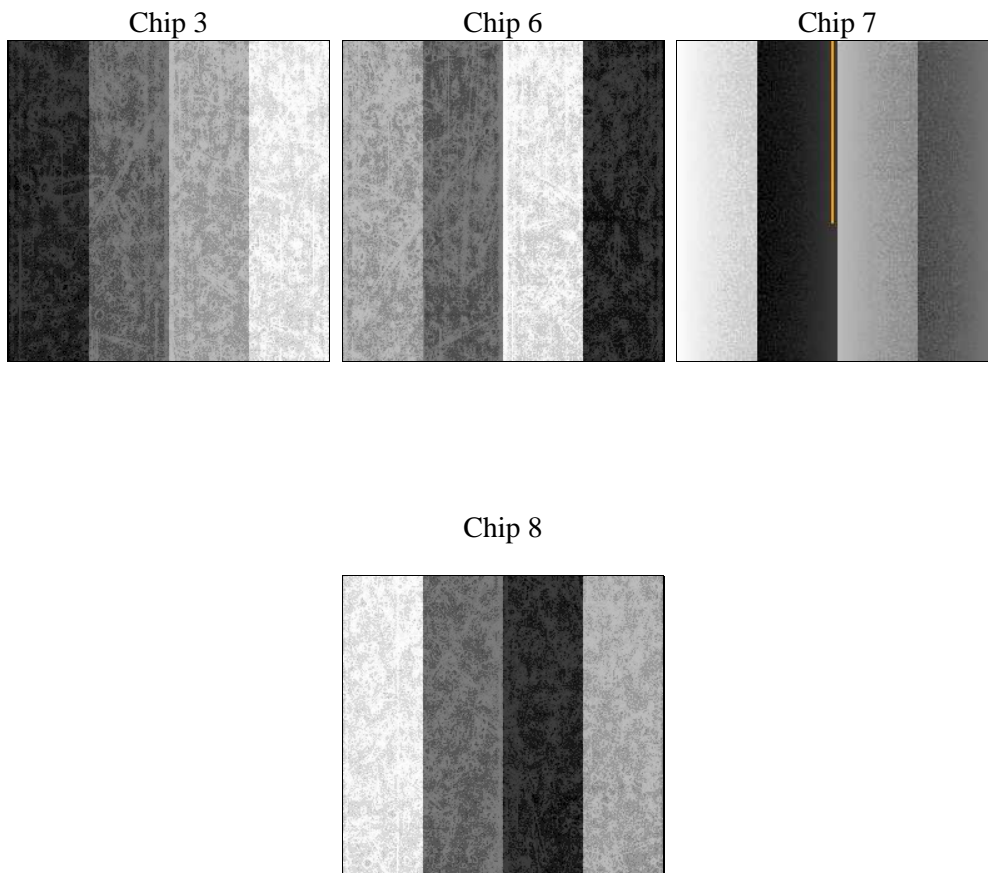
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	31787.000000	[s] Scheduled observation exposure time
ascdsver	10.8	Processing system revision	ontime	31854.51722881	Sum of GTIs [s]
caldsver	4.8.4.1	 	ontime3	31851.294122577	Sum of GTIs [s]
date	2019-09-19T22:01:23	Date and time of file creation	ontime6	31851.335142732	Sum of GTIs [s]
revision	2	Processing version of data	ontime7	31854.51722881	Sum of GTIs [s]
			ontime8	31854.394102931	Sum of GTIs [s]
			l1events	1126296	Number of level 1 events

2.1.4 Events

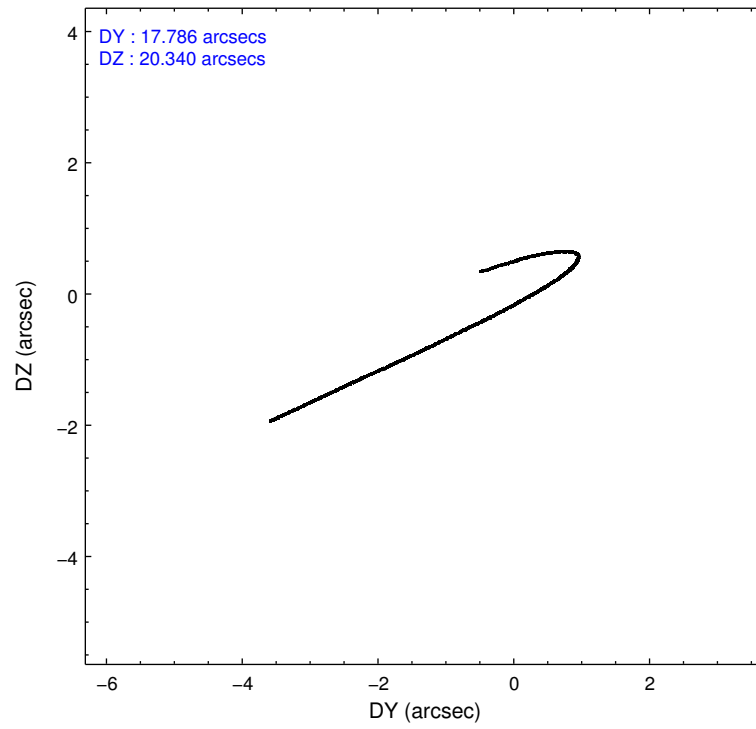
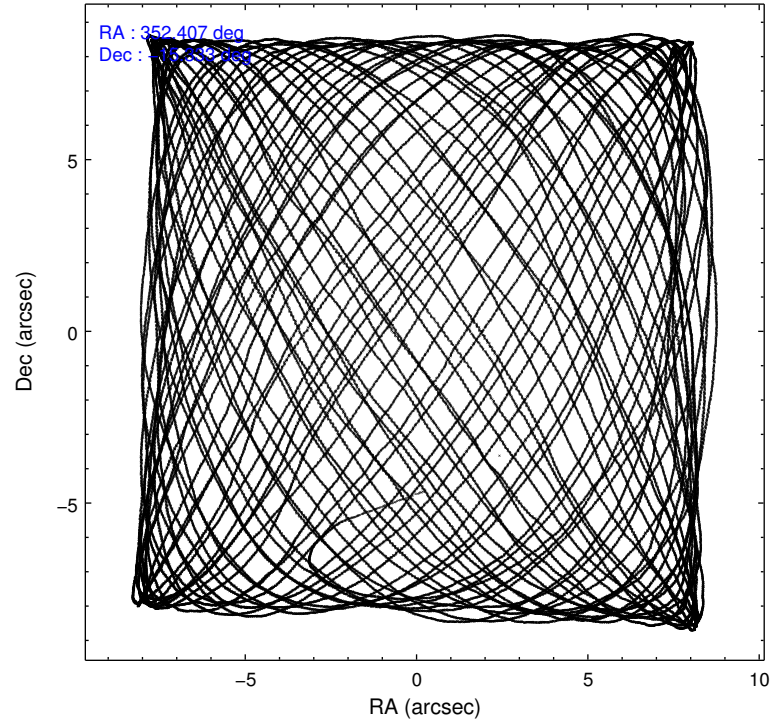
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	232481	253789	316730	323296
rejected events	207465	226135	180558	237162
rejected %	89%	89%	57%	73%

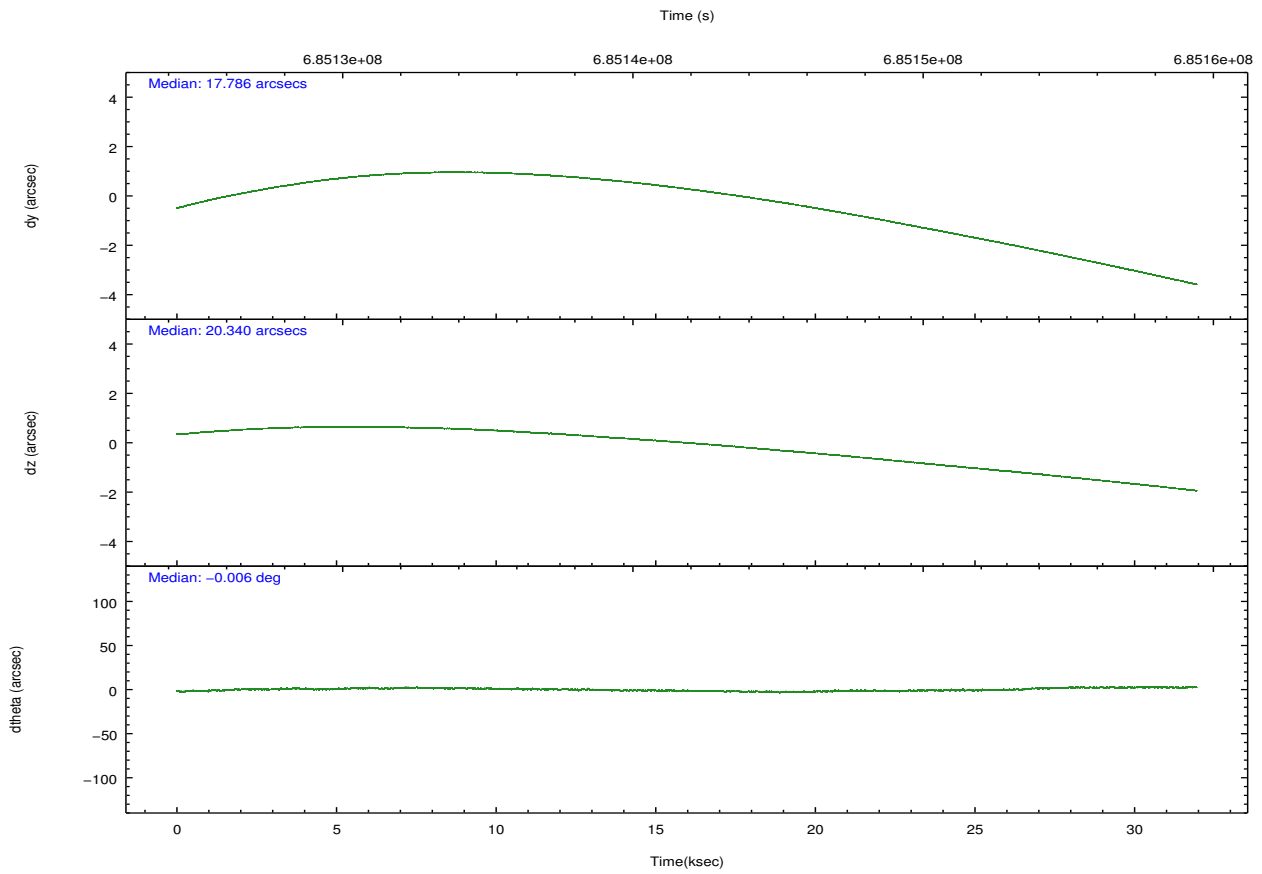
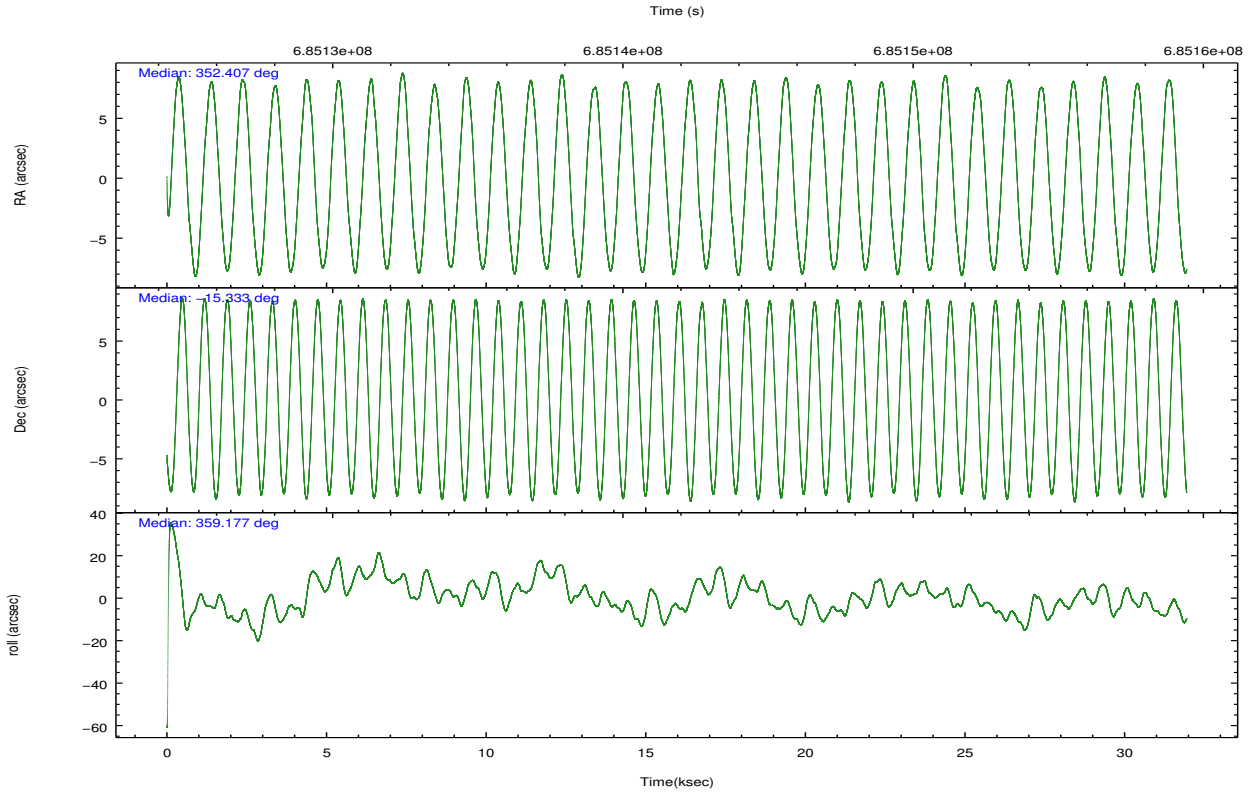
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	8660	8591	11212	23693
	3%	3%	3%	7%
grade 1 events	113	106	467	269
	0%	0%	0%	0%
grade 2 events	5536	6891	29209	21312
	2%	2%	9%	6%
grade 3 events	2583	2650	10587	8853
	1%	1%	3%	2%
grade 4 events	2666	2562	10587	8466
	1%	1%	3%	2%
grade 5 events	11323	11345	31018	17505
	4%	4%	9%	5%
grade 6 events	5574	6965	74600	23816
	2%	2%	23%	7%
grade 7 events	196026	214679	149050	219382
	84%	84%	47%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	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	352.382050	352.4067256182095	CCD I2 on	O1	N
[deg] Pointing Dec	-15.346861	-15.33318517692663	CCD I3 on	Y	Y
[deg] Pointing Roll	358.994371	359.1574839696204	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[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	Y	Y
[s] Observation start time (MET)	685126058.184000	685124950.46921	CCD S5 on	N	N
Observation start date	2019-09-17T16:46:29	2019-09-17T16:29:10	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	685157845.184000	685158034.3961999	On-chip summing requested	N	N
Observation end date	2019-09-18T01:36:16	2019-09-18T01:40:34	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





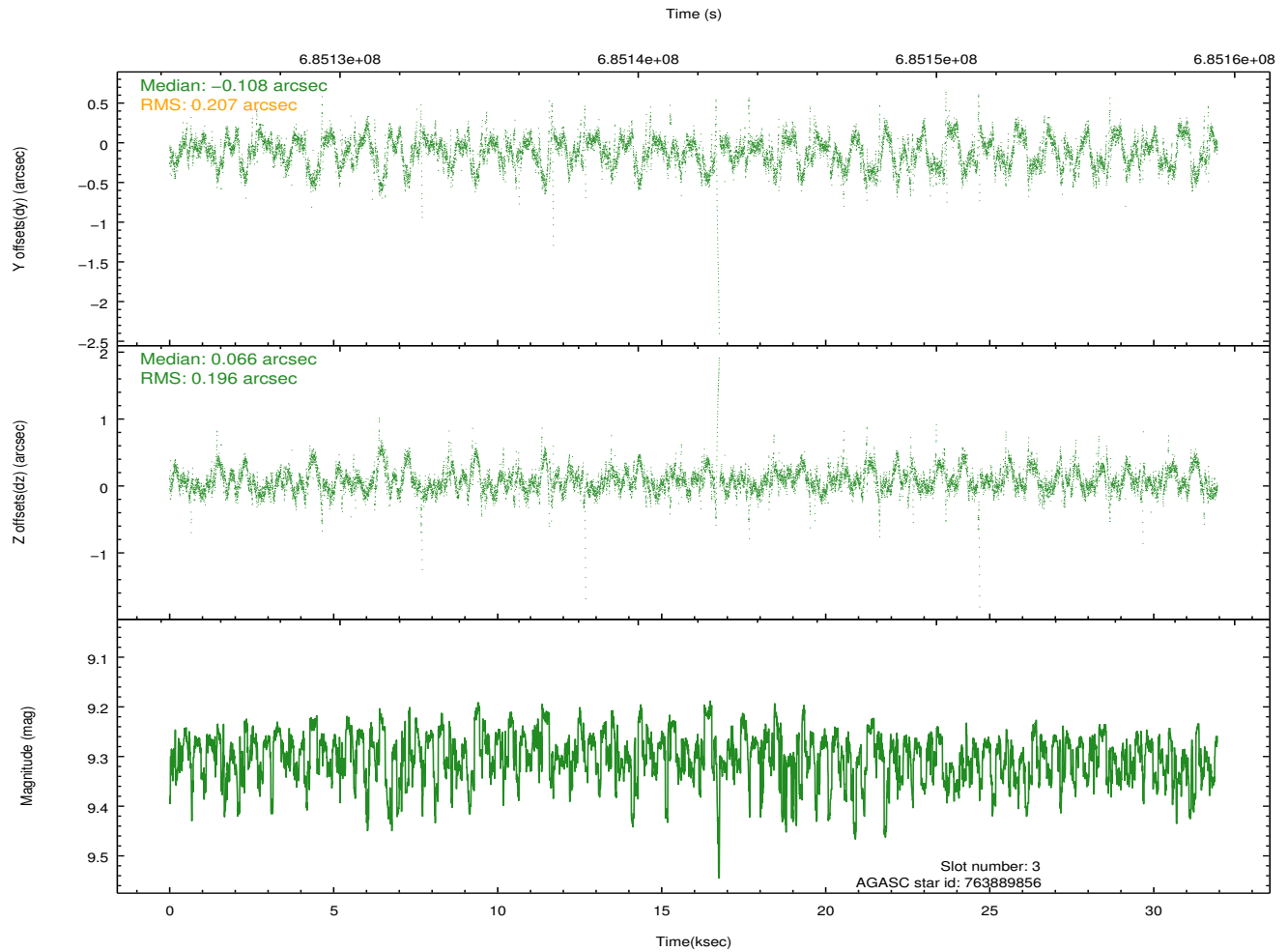
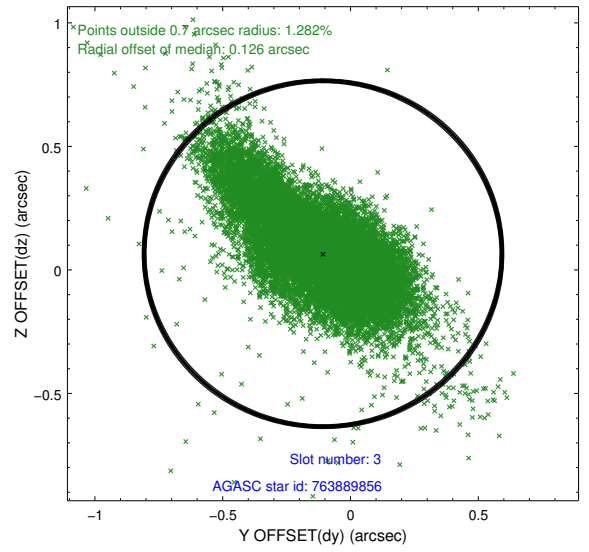
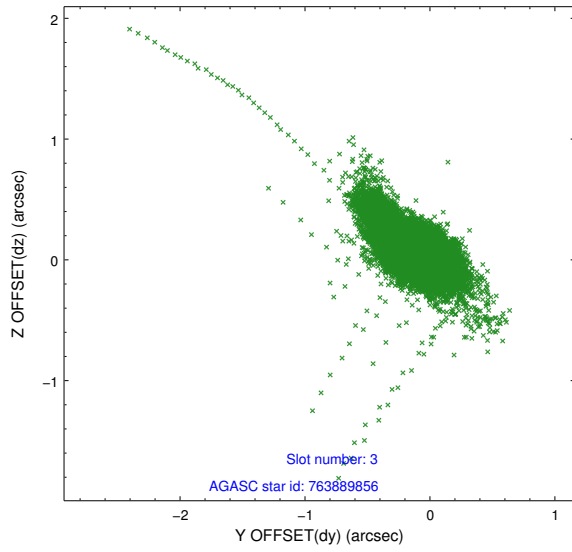
Slot Statistics

pt	status	used	id	mag	n_pts	frac_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mea
0	FID		ACIS-S-2	7.06	7791	1.000	-0.320	-0.251	0.021	0.037	0.000000	0.000000	-770.61	-1741
1	FID		ACIS-S-4	7.18	7792	1.000	0.822	0.221	0.018	0.039	0.000000	0.000000	2143.70	167
2	FID		ACIS-S-5	7.13	7791	1.000	-0.532	0.039	0.020	0.036	0.000000	0.000000	-1823.67	160
3	GUIDE	used	763889856	9.30	15522	1.000	-0.108	0.066	0.260	0.507	351.806840	-14.828602	-2034.01	1827
4	GUIDE	used	764808424	8.68	15568	1.000	-0.533	-0.260	0.287	0.405	352.864993	-14.696878	1641.18	2364
5	GUIDE	used	839255272	9.56	14800	1.000	0.112	-0.177	0.221	0.363	352.744944	-15.268463	1255.27	301
6	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0
7	GUIDE	used	839262176	10.14	15498	1.000	0.514	0.364	0.353	0.566	352.214109	-15.129954	-596.13	770

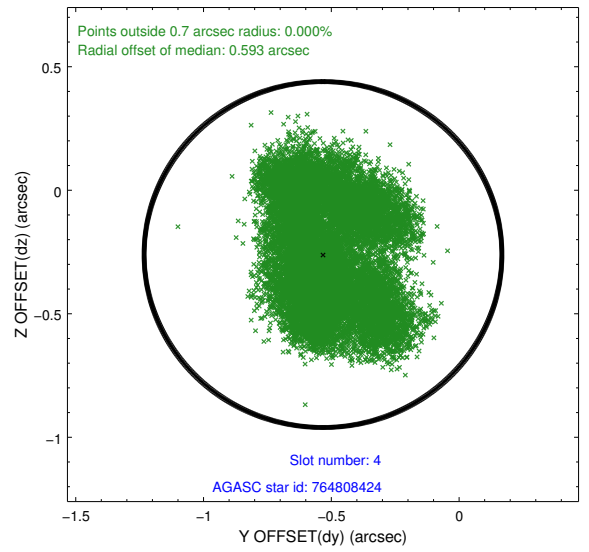
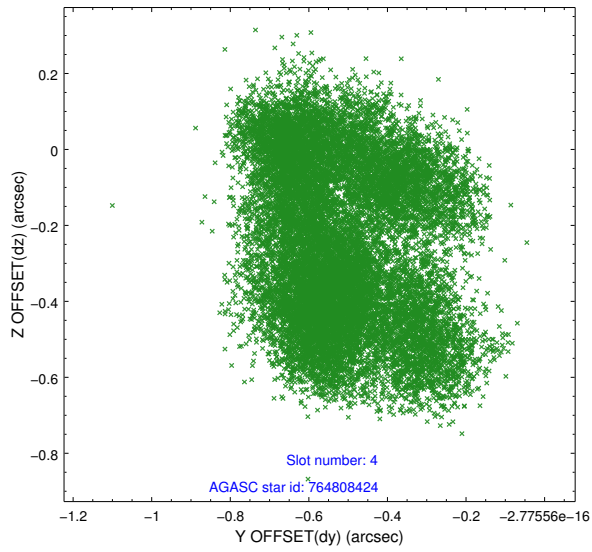
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2.4 Star Slots

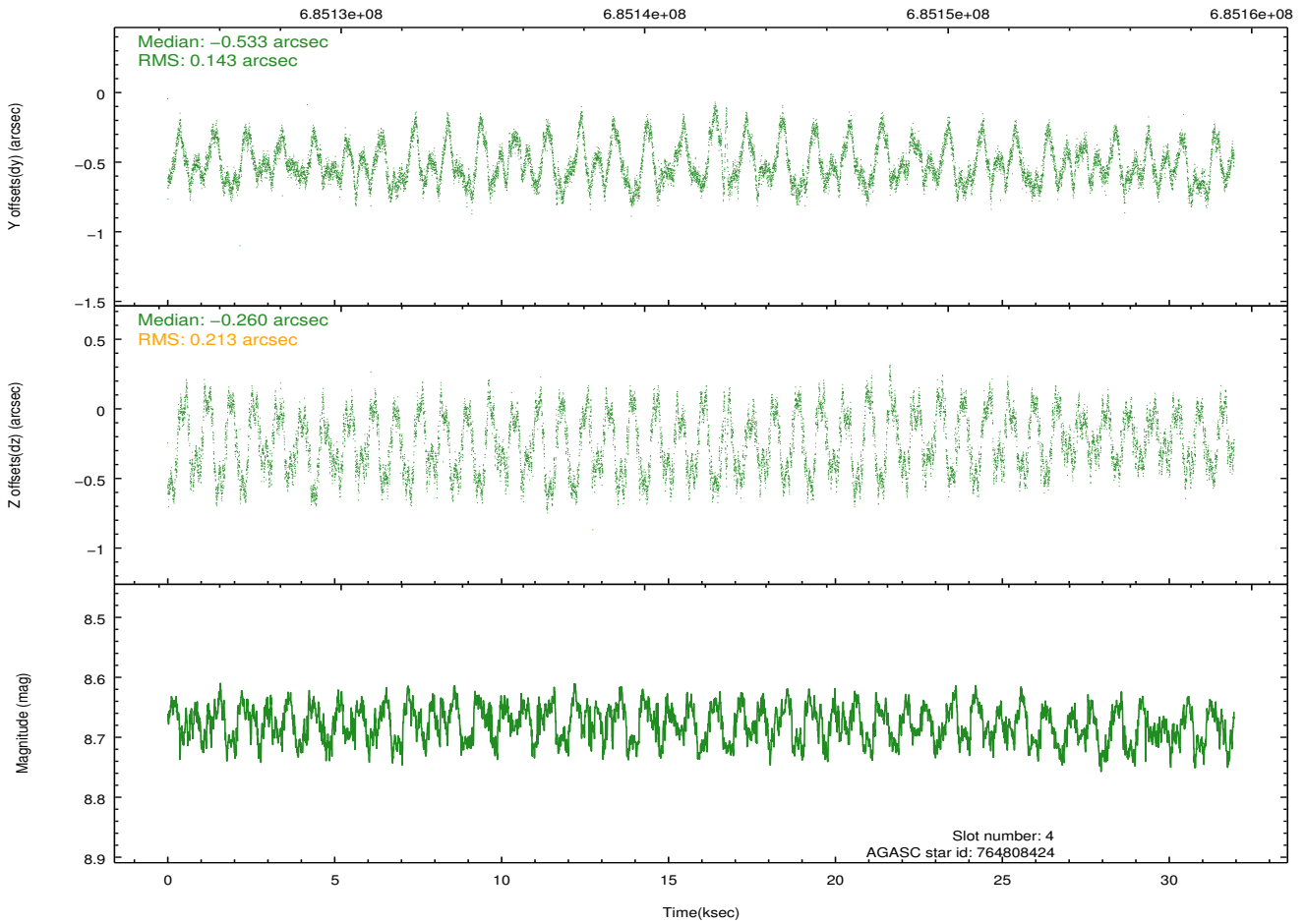
2.4.1 Slot 3



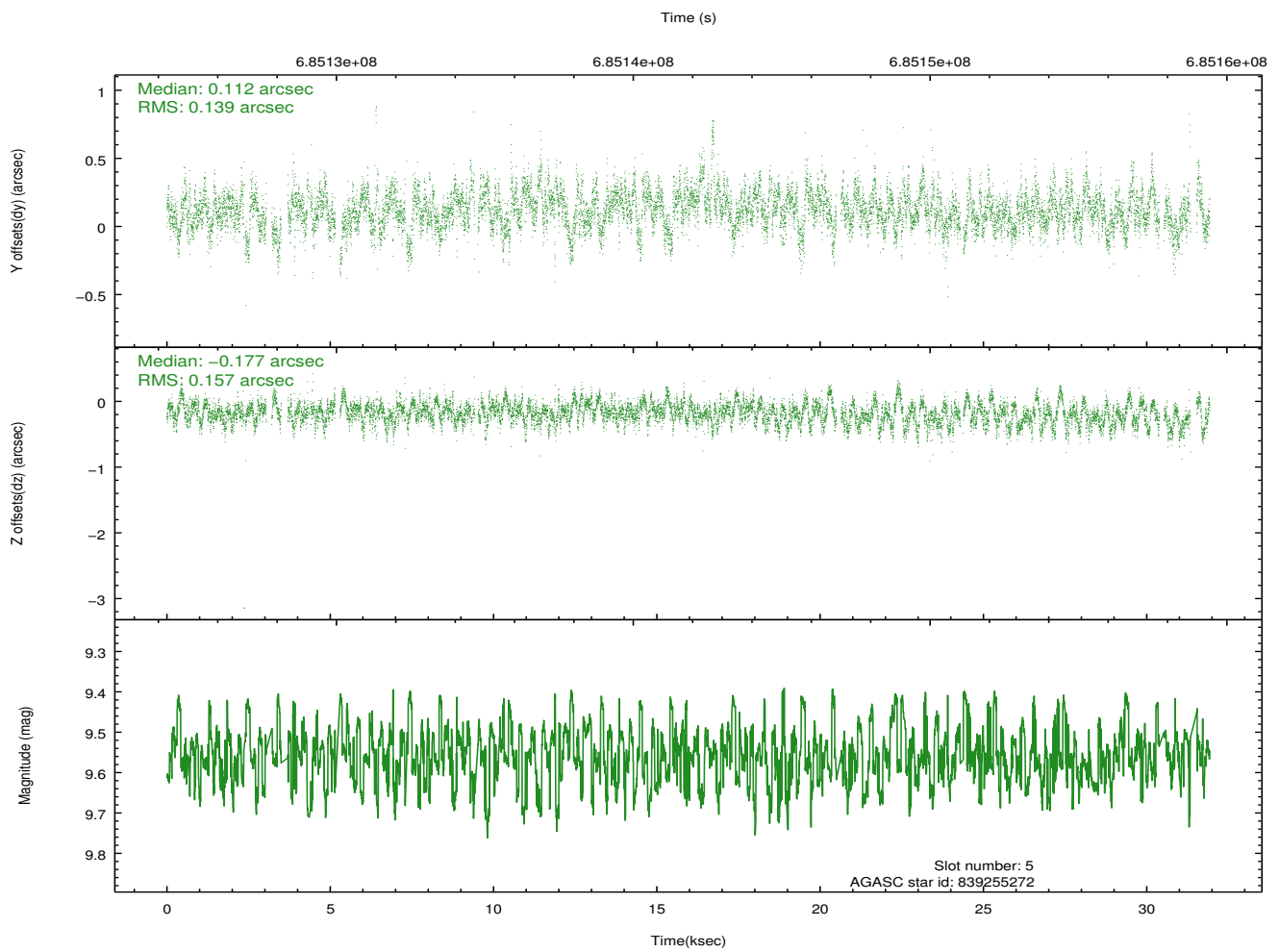
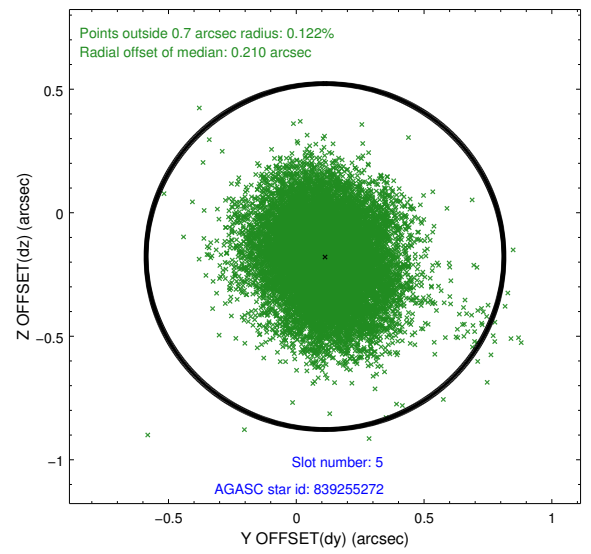
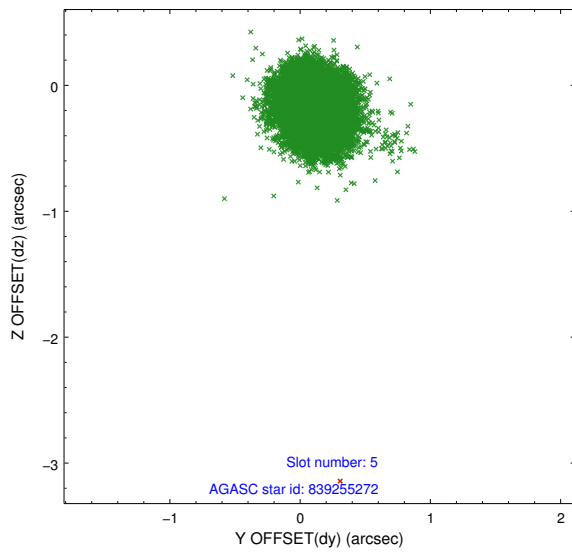
2.4.2 Slot 4



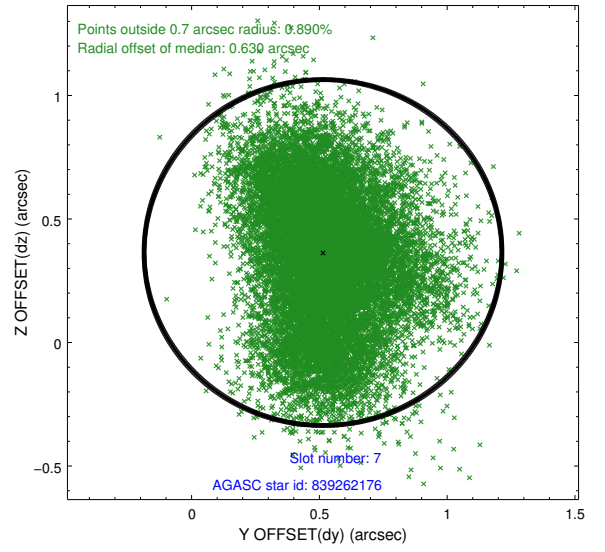
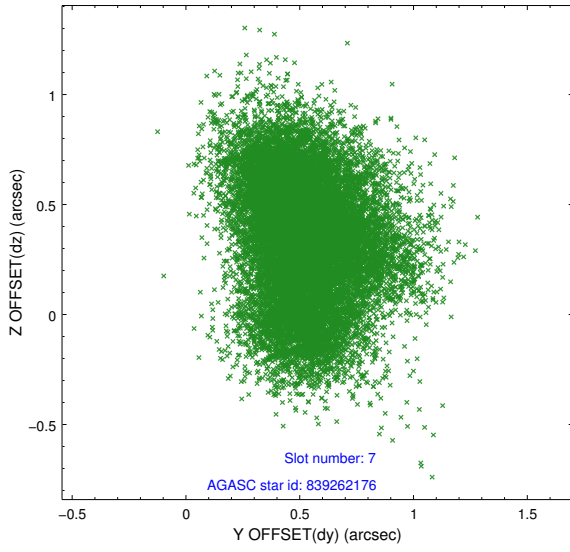
Time (s)



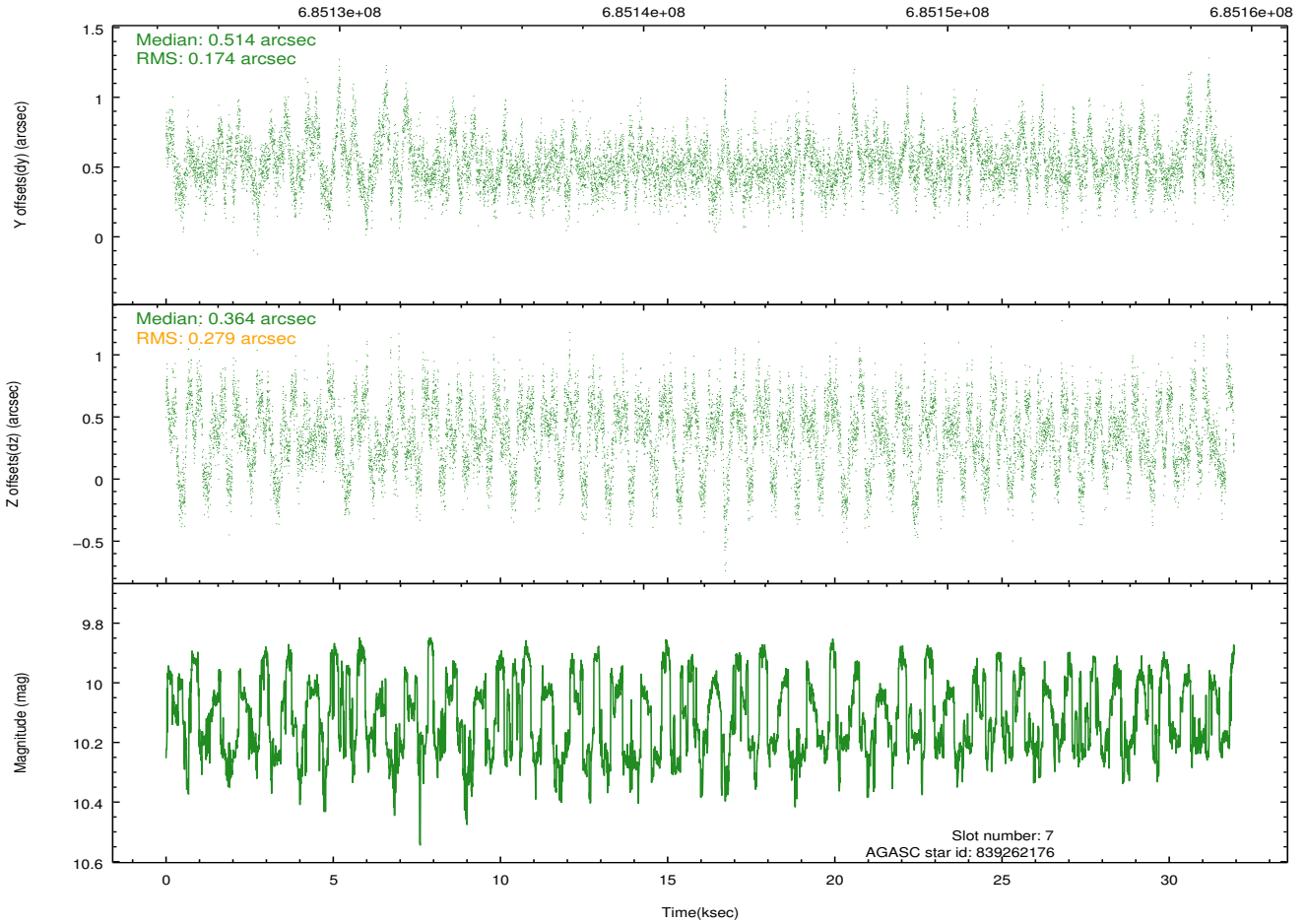
2.4.3 Slot 5



2.4.4 Slot 7

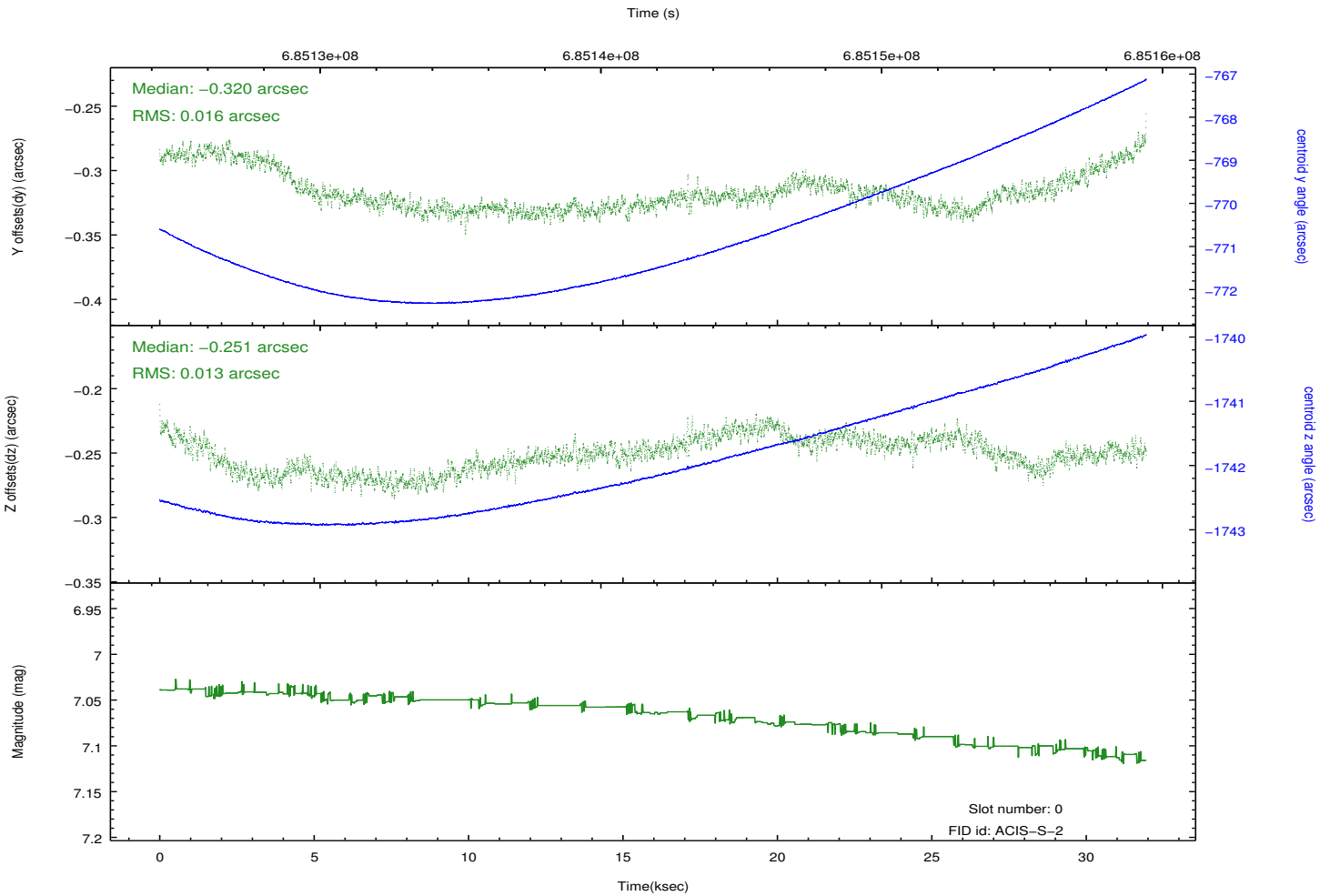
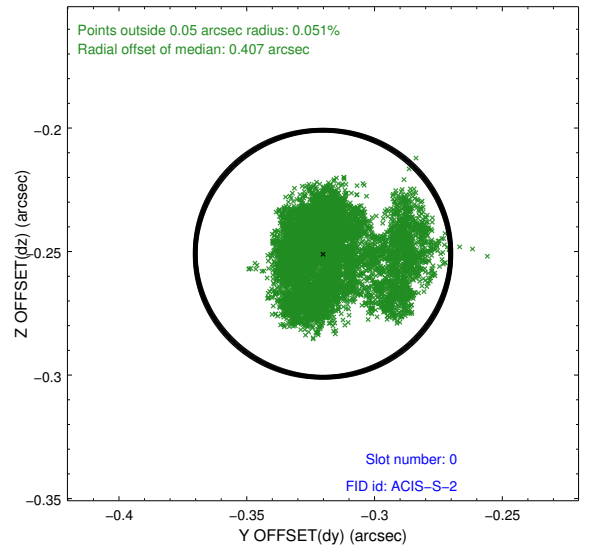
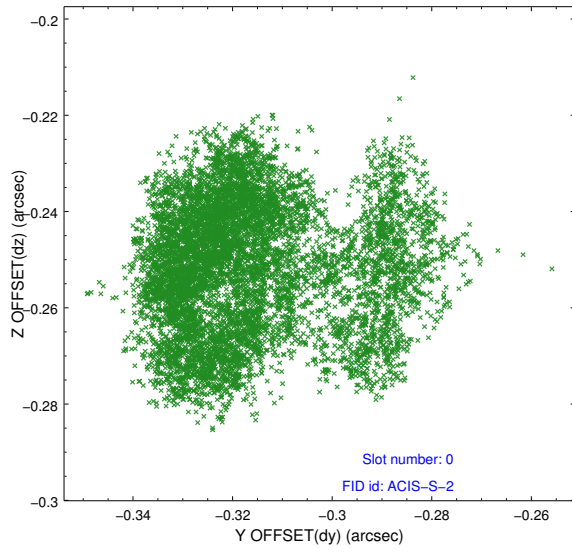


Time (s)

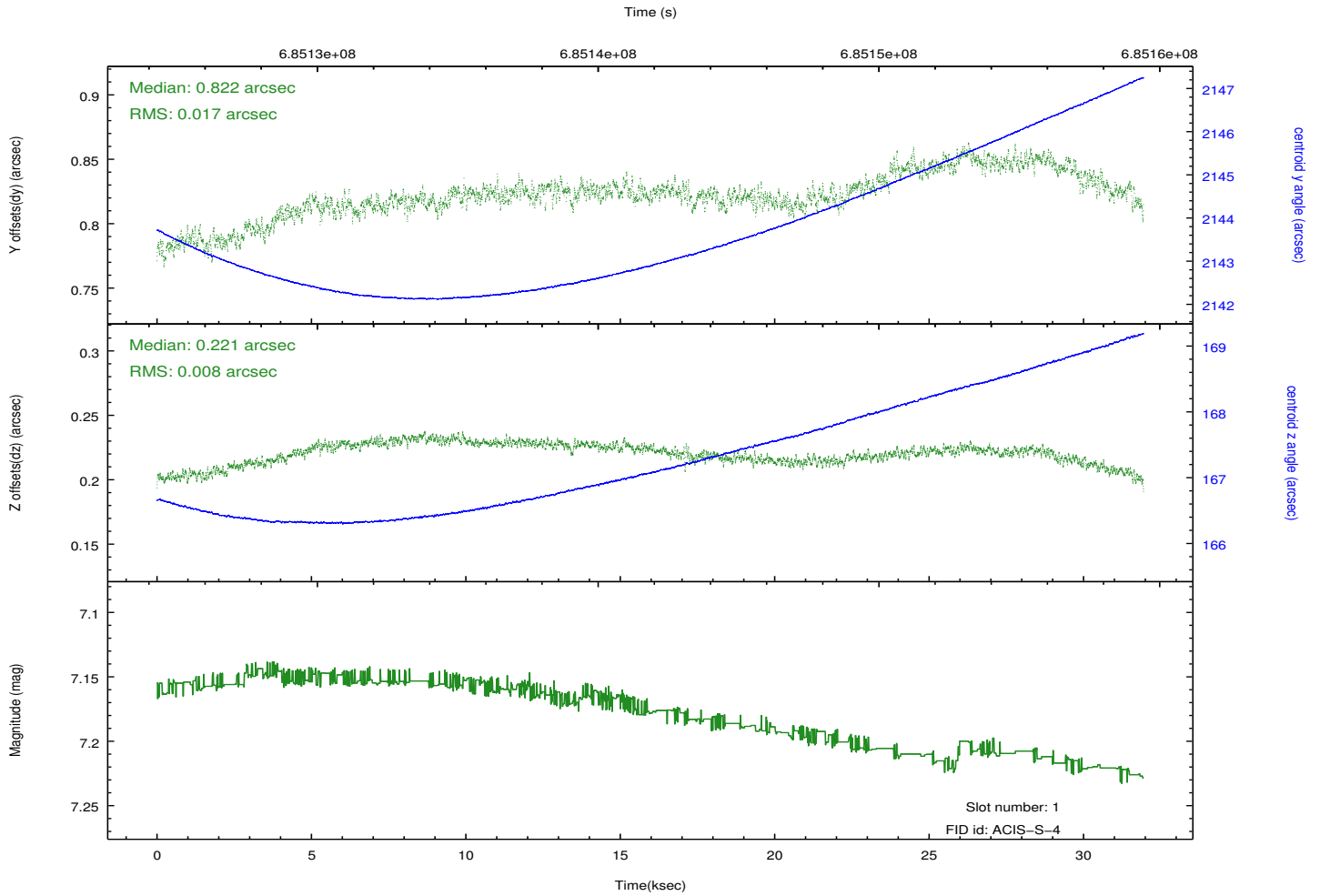
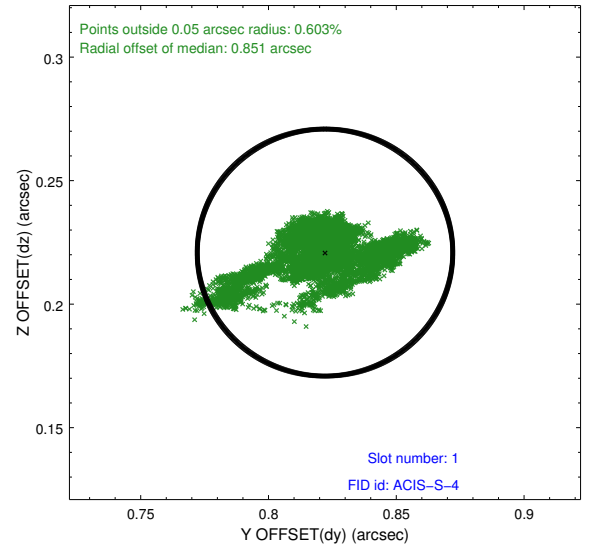
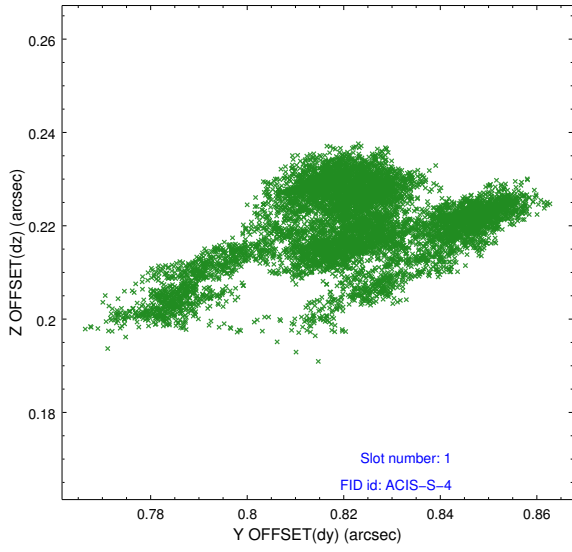


2.5 FID Slots

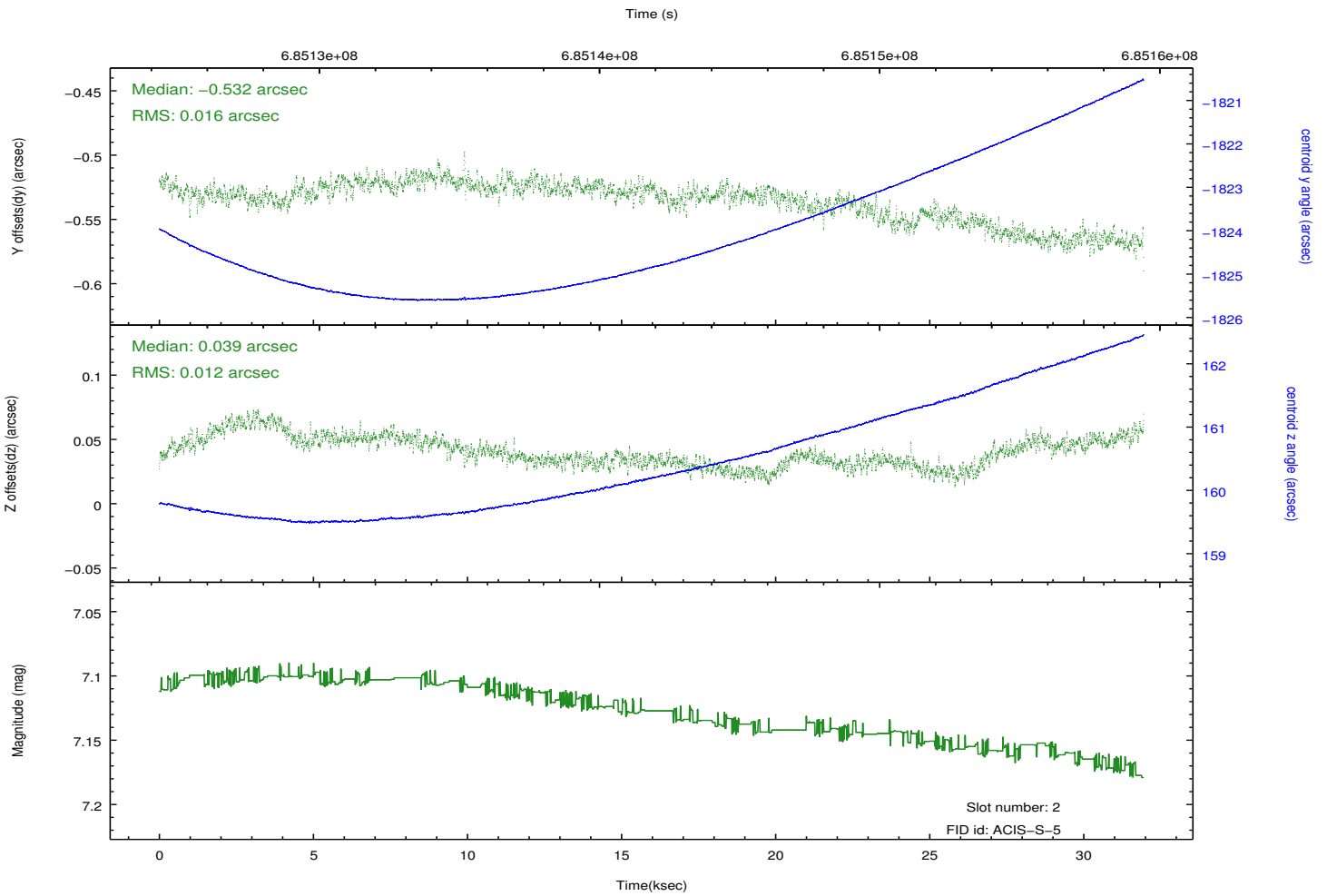
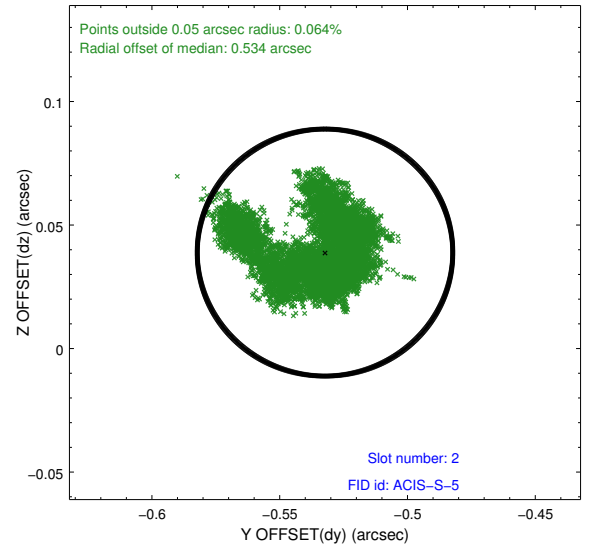
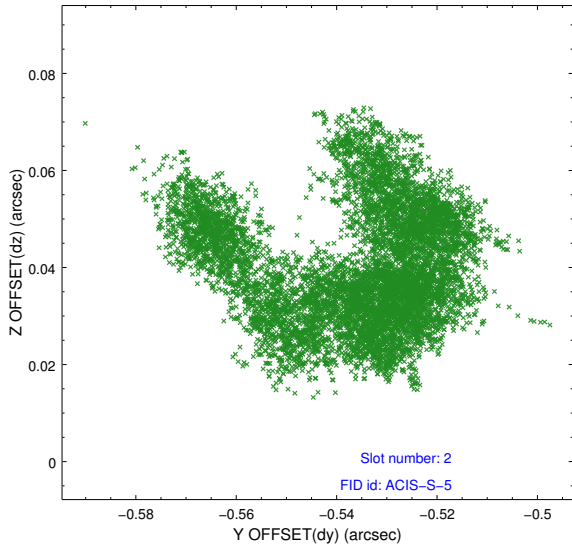
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2019.09.20
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	31.854517222881

A.2 Comments

One optional chip was dropped.

The guide star in slot 6 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.