

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 19413 - L2 Version 1
Chandra X-Ray Center

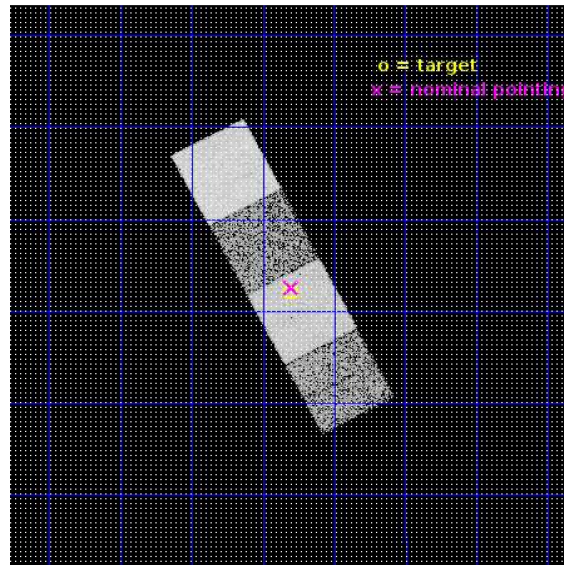
L2 Processing Date : Dec 1 2017

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

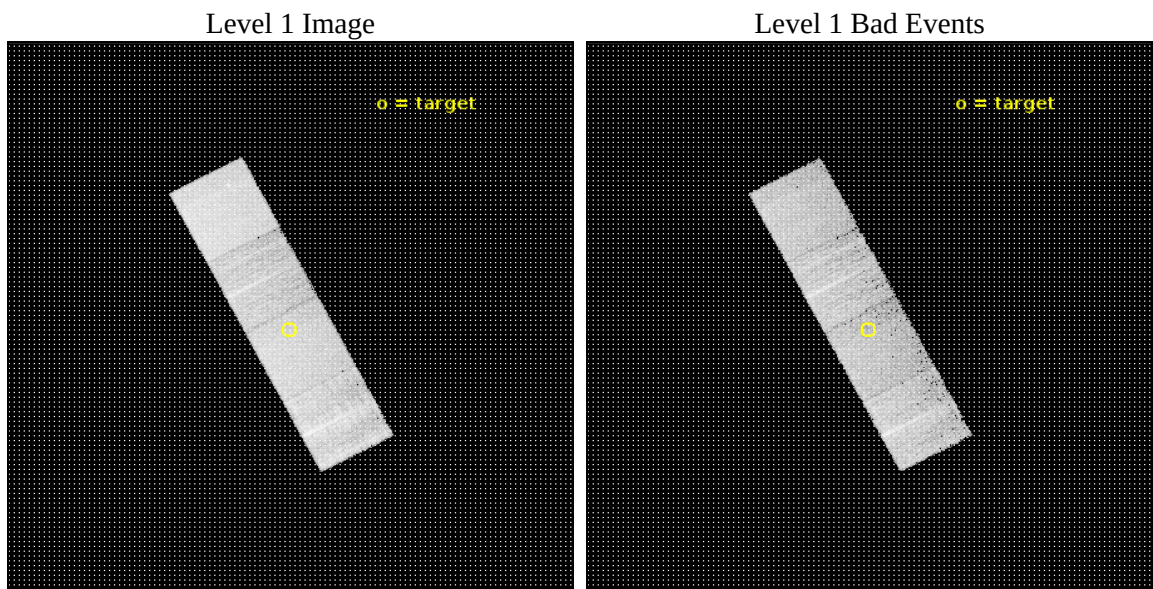
seq_num	601370	Sequence number
obs_id	19413	Observation id
title	Spiral galaxies of the Virgo cluster	Proposal title
observer	Roberto Soria	Principal investigator
object	NGC 4580	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	189.451667	Observer's specified target RA [deg]
dec_targ	5.368528	Observer's specified target Dec [deg]
ra_nom	189.44969930429	Nominal RA [deg]
dec_nom	5.3756060956836	Nominal Dec [deg]
roll_nom	62.316090884234	Nominal Roll [deg]
revision	1	Processing version of data
ontime	8136.7421998978	Sum of GTIs [s]
livetime	8030.4296728736	Livetime [s]
ontime5	8136.7011599541	Sum of GTIs [s]
ontime6	8136.6601198912	Sum of GTIs [s]
ontime7	8136.7421998978	Sum of GTIs [s]
ontime8	8136.6190799475	Sum of GTIs [s]
l2events	84952	Number of level 2 events



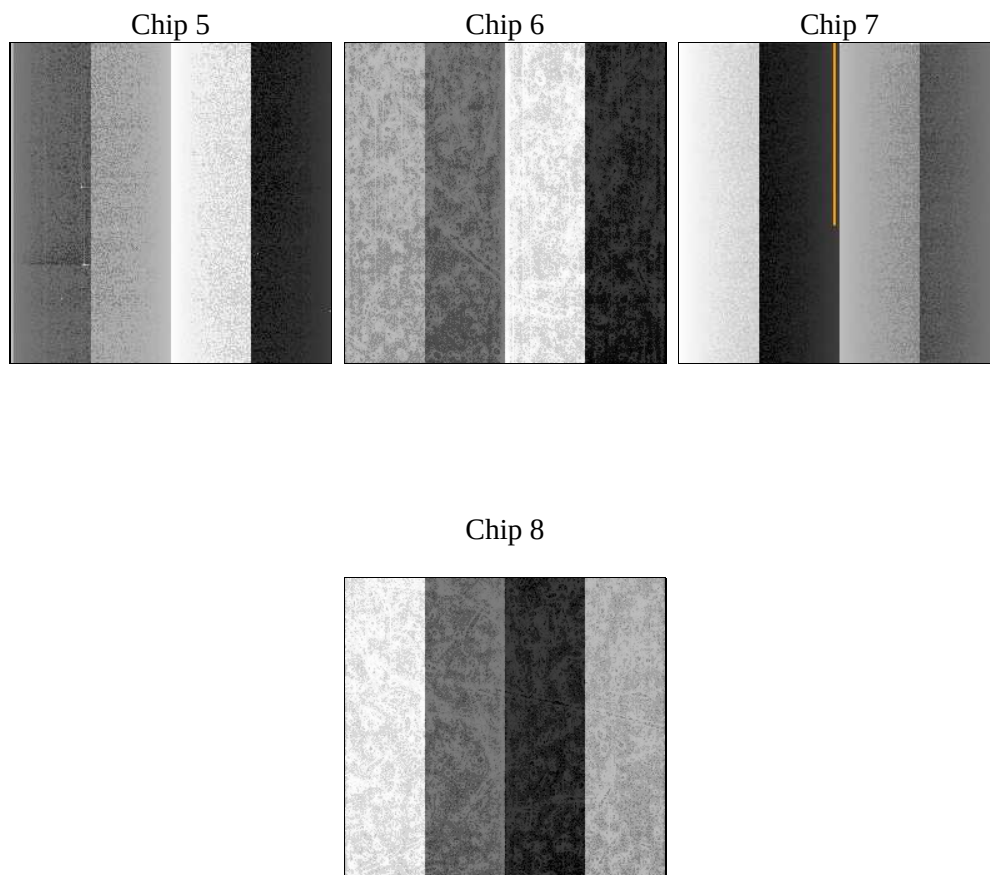
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8071.177000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	8136.7421998978	Sum of GTIs [s]
caldsver	4.7.6	 	ontime5	8136.7011599541	Sum of GTIs [s]
date	2017-12-01T23:38:05	Date and time of file creation	ontime6	8136.6601198912	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	8136.7421998978	Sum of GTIs [s]
			ontime8	8136.6190799475	Sum of GTIs [s]
			l1events	293339	Number of level 1 events

2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	88576	57205	72234	75324
rejected events	45912	50707	40575	53979
rejected %	51%	88%	56%	71%

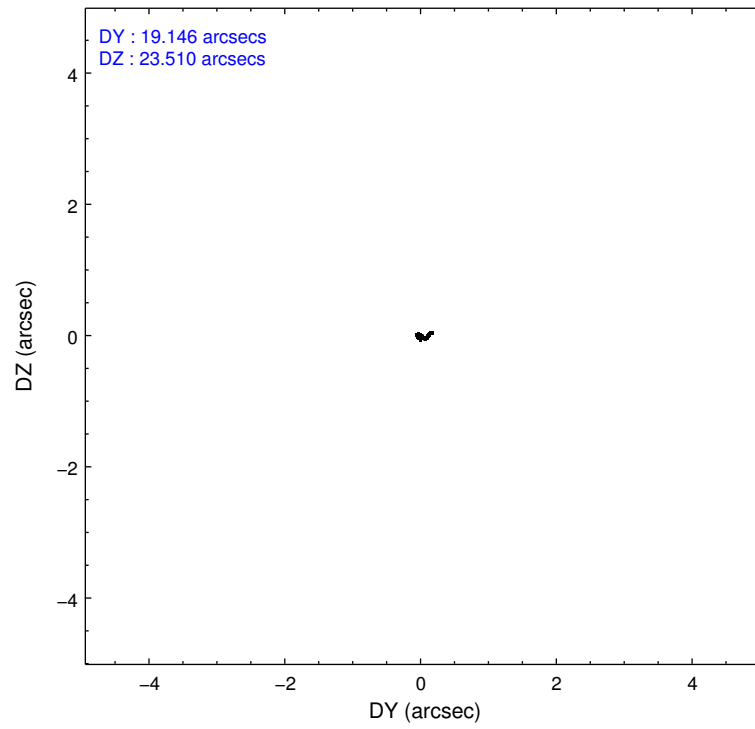
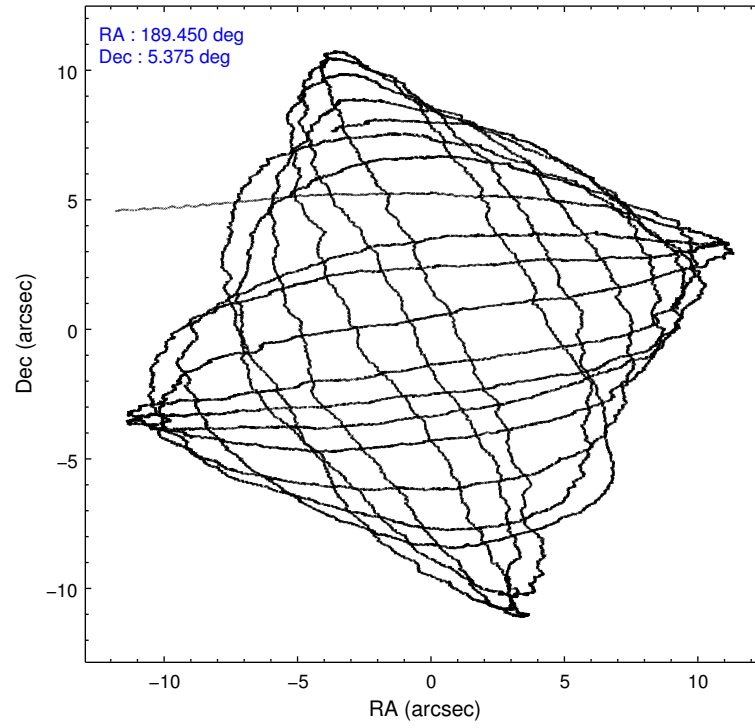
	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2498	2271	2710	6297
	2%	3%	3%	8%
grade 1 events	195	28	114	62
	0%	0%	0%	0%
grade 2 events	13599	1509	6763	5131
	15%	2%	9%	6%
grade 3 events	1461	654	2478	2245
	1%	1%	3%	2%
grade 4 events	1368	626	2550	2035
	1%	1%	3%	2%
grade 5 events	6443	2764	7207	4065
	7%	4%	9%	5%
grade 6 events	23766	1447	17186	5662
	26%	2%	23%	7%
grade 7 events	39246	47906	33226	49827
	44%	83%	45%	66%

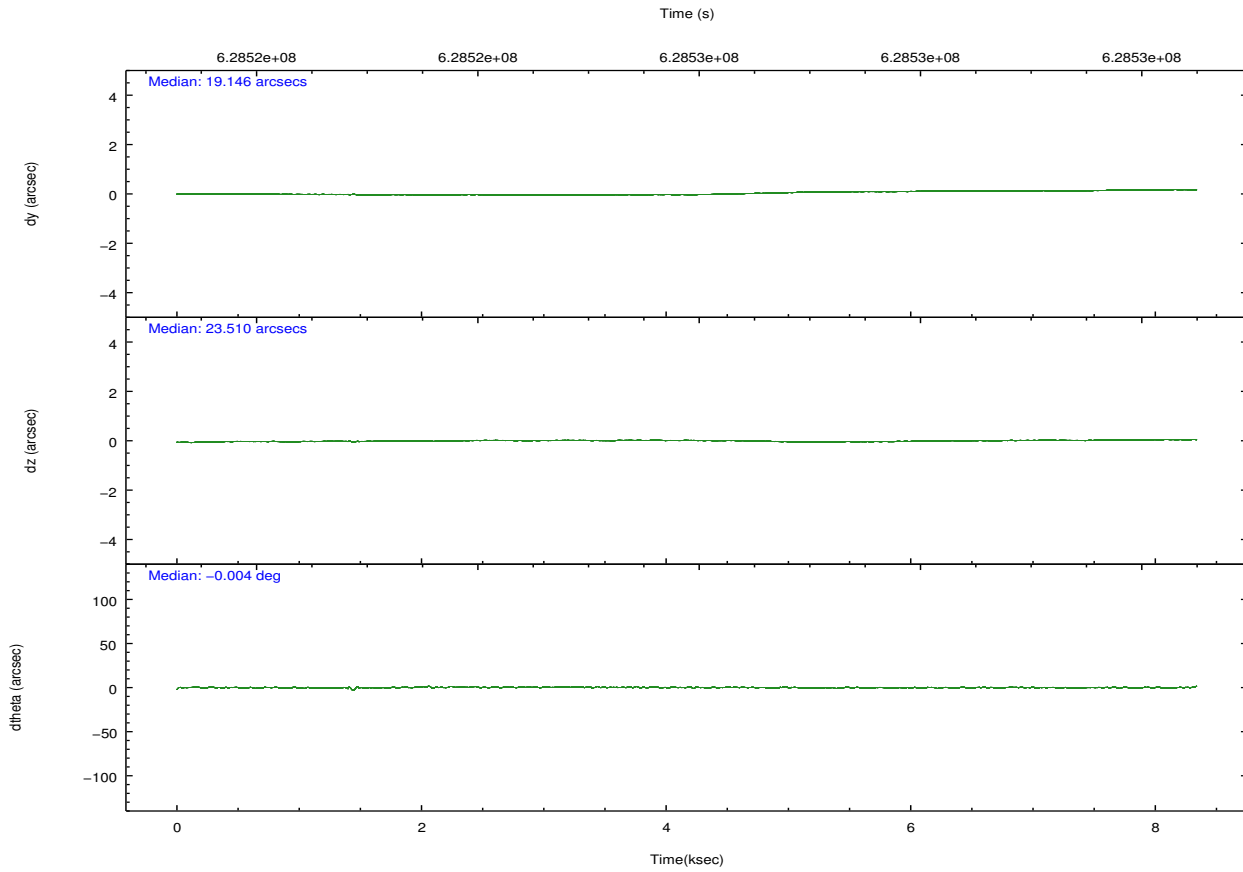
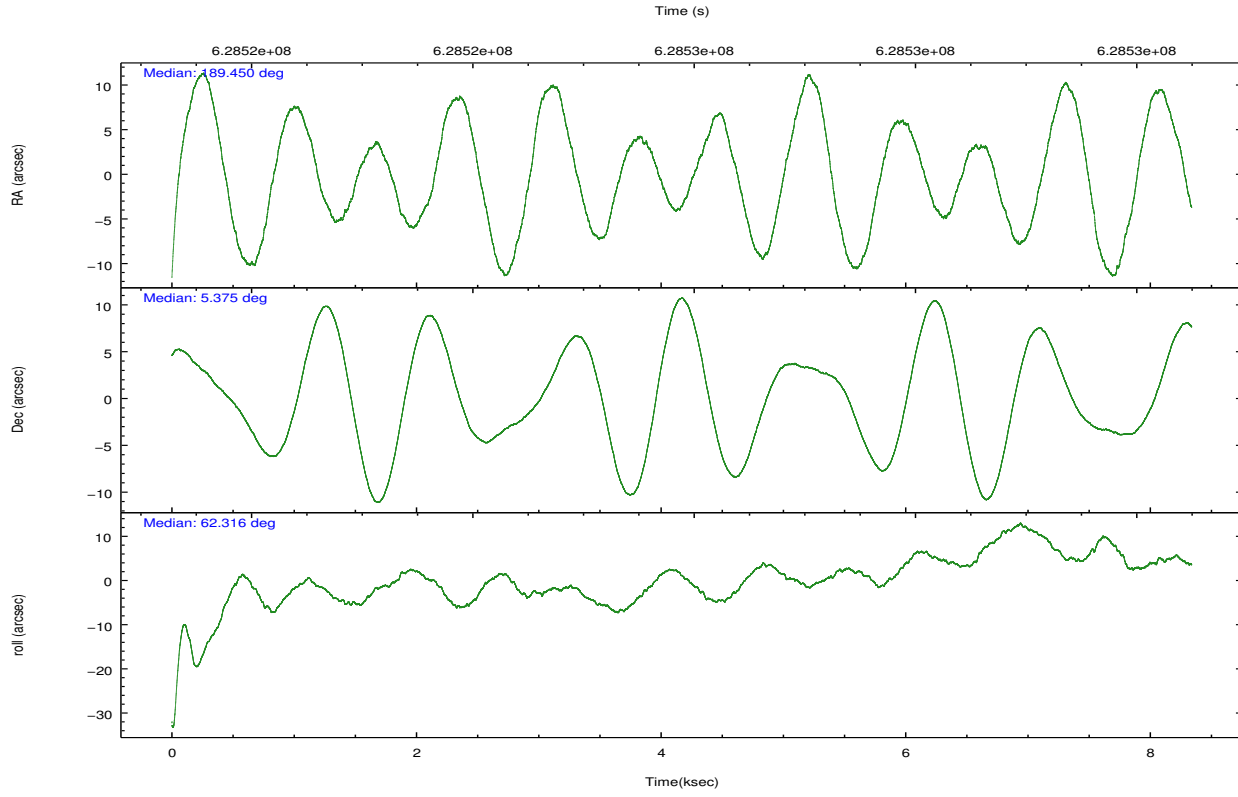
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	189.451125	189.4496993042881
[deg] Pointing Dec	5.348152	5.375606095683566
[deg] Pointing Roll	62.159372	62.31609088423364
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	628521987.184000	628521058.37244
Observation start date	2017-12-01T13:25:18	2017-12-01T13:10:58
[s] Observation end time (MET)	628530058.184000	628531059.8105299
Observation end date	2017-12-01T15:39:49	2017-12-01T15:57:39
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

2.3 Aspect



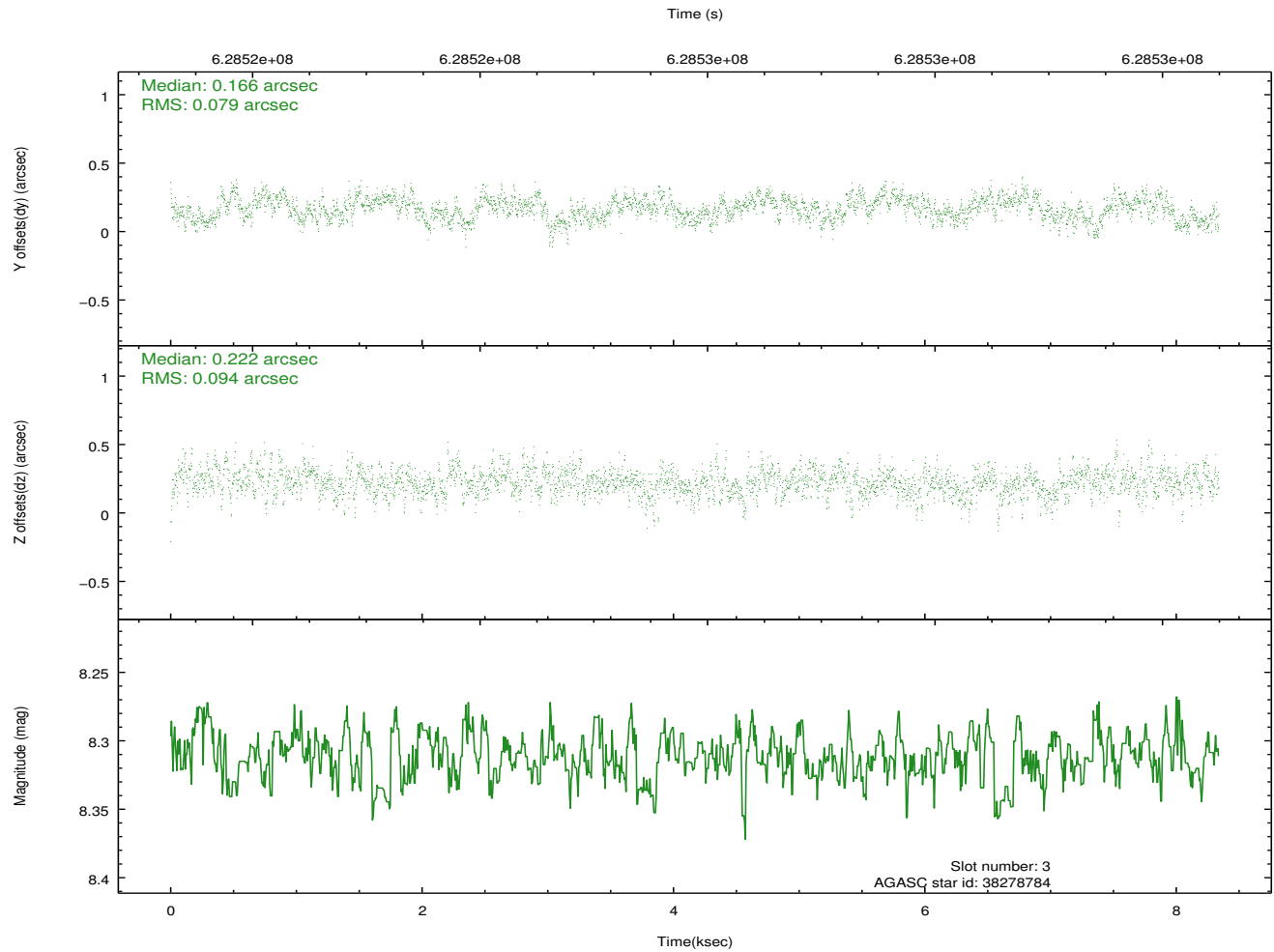
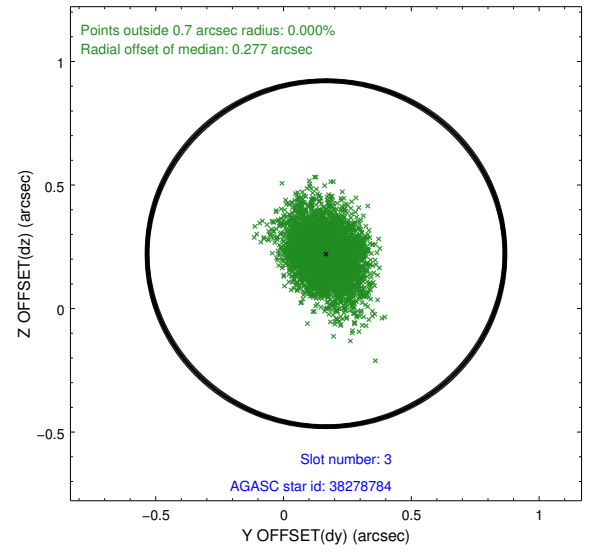
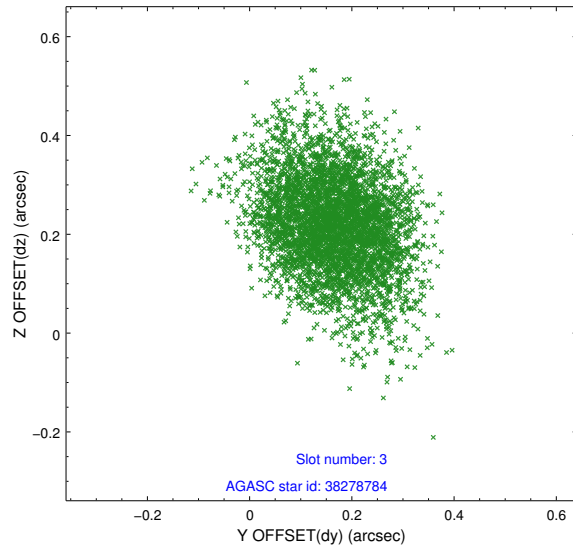


Slot Statistics

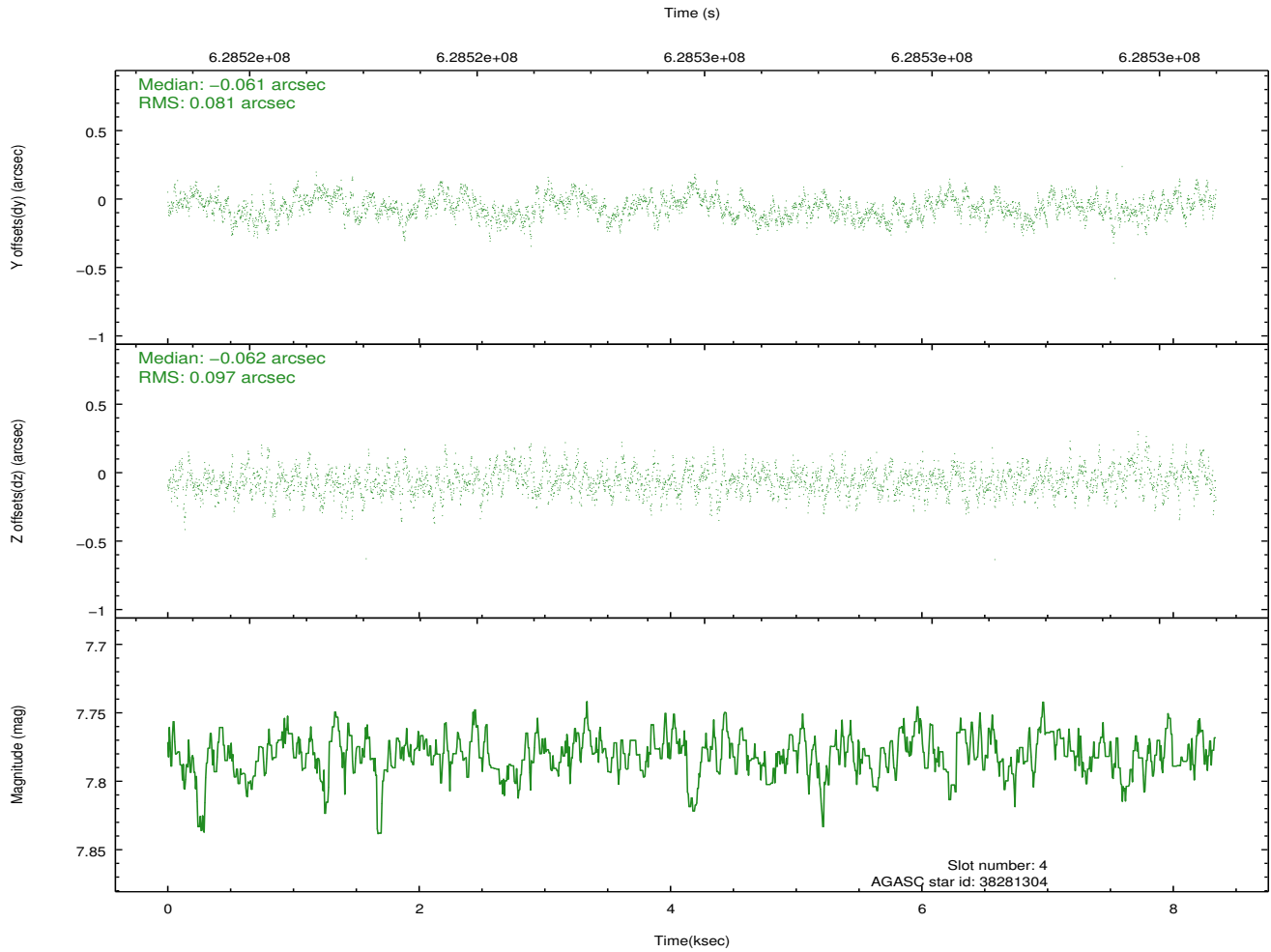
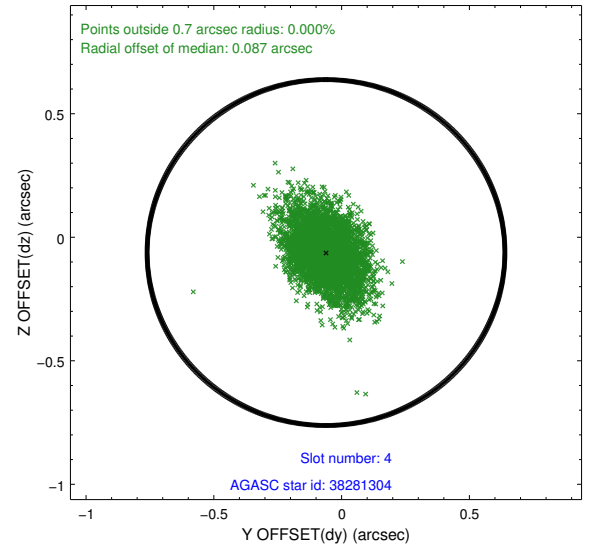
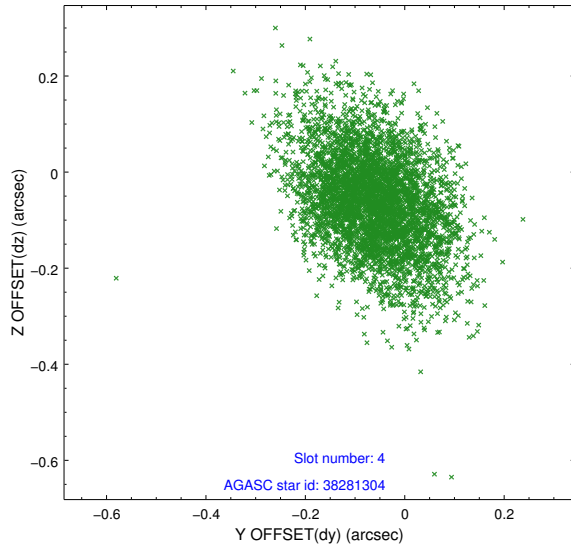
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.04	2034	-0.238	-0.140	0.008	0.013	0.000000	0.000000	-772.51	-1745.20
1	FID		ACIS-S-4	7.15	2034	0.513	0.153	0.007	0.014	0.000000	0.000000	2141.22	162.87
2	FID		ACIS-S-5	7.15	2034	-0.305	-0.003	0.008	0.013	0.000000	0.000000	-1824.56	157.15
3	GUIDE	used	38278784	8.31	4067	0.166	0.222	0.129	0.219	189.868198	4.894633	-745.18	-2083.06
4	GUIDE	used	38281304	7.78	4066	-0.061	-0.062	0.131	0.225	189.450174	4.985357	-1157.23	-606.42
5	GUIDE	used	38668592	9.00	4067	-0.275	-0.074	0.205	0.348	189.974835	5.445729	1187.27	-1495.65
6	GUIDE	used	38672200	8.47	4064	0.148	-0.014	0.156	0.254	189.817195	5.040858	-363.66	-1676.54
7	GUIDE	used	38672272	9.25	4065	0.039	-0.073	0.188	0.303	189.672368	5.171146	-192.90	-998.87

2.4 Star Slots

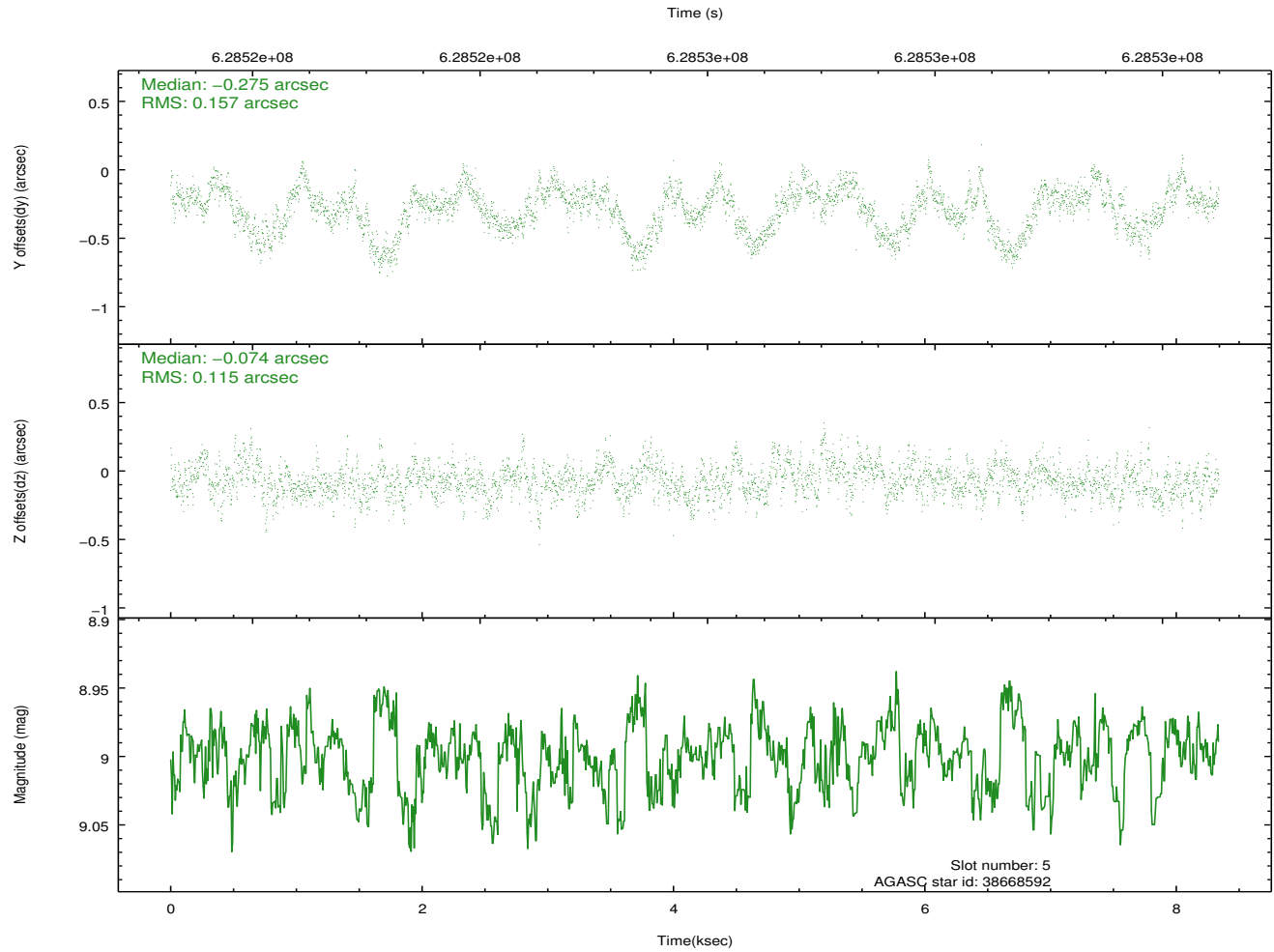
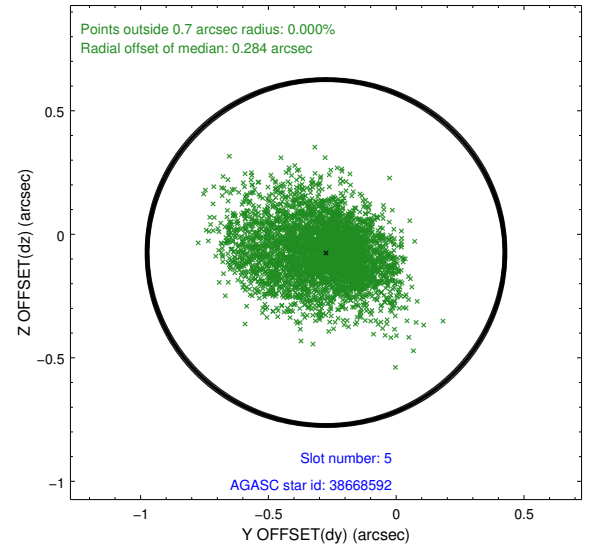
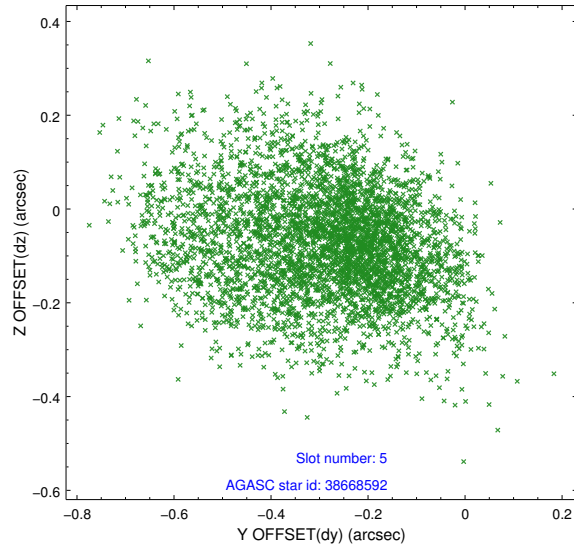
2.4.1 Slot 3



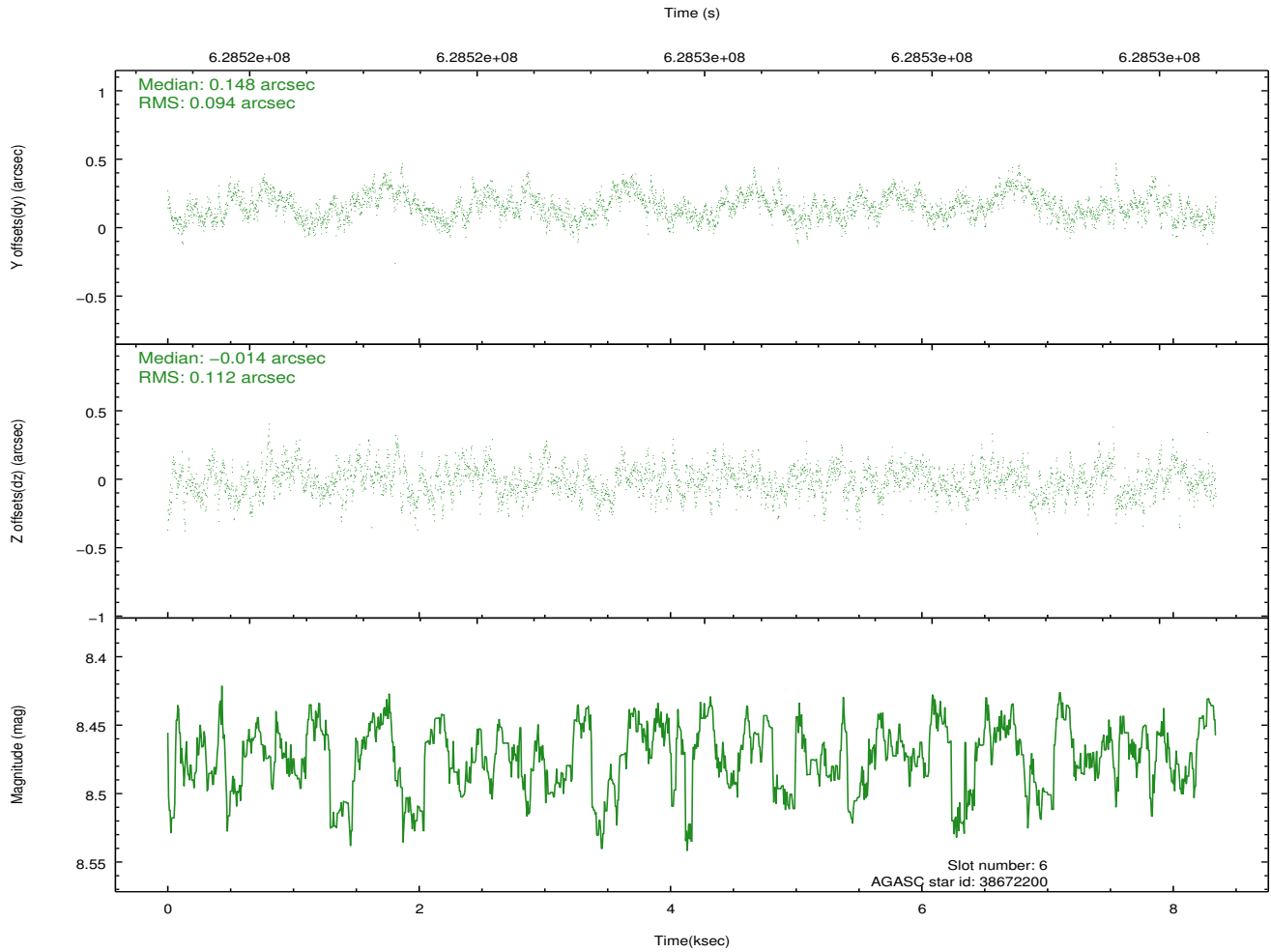
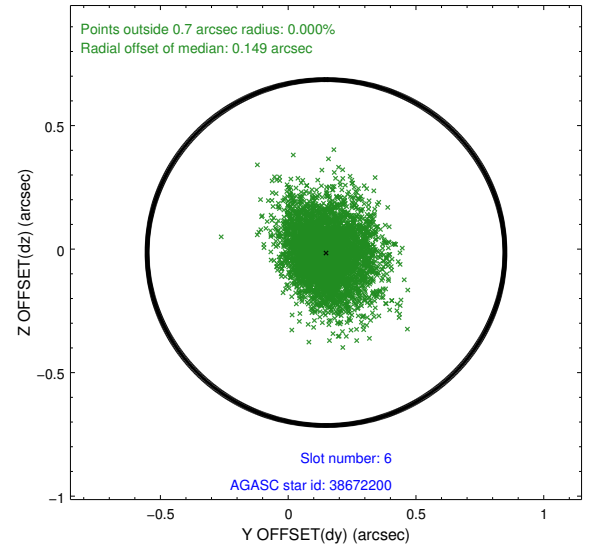
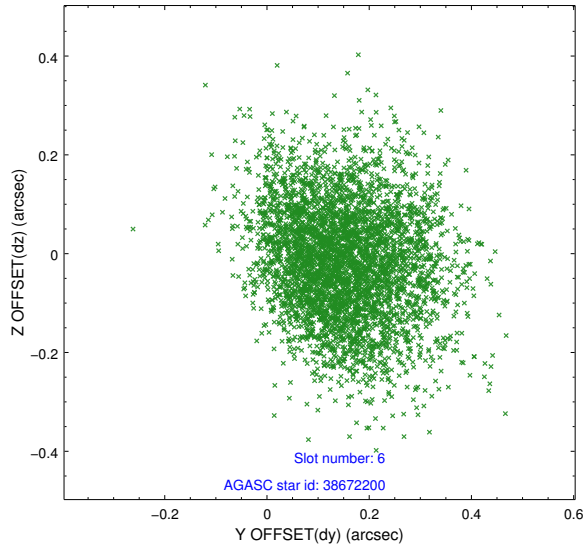
2.4.2 Slot 4



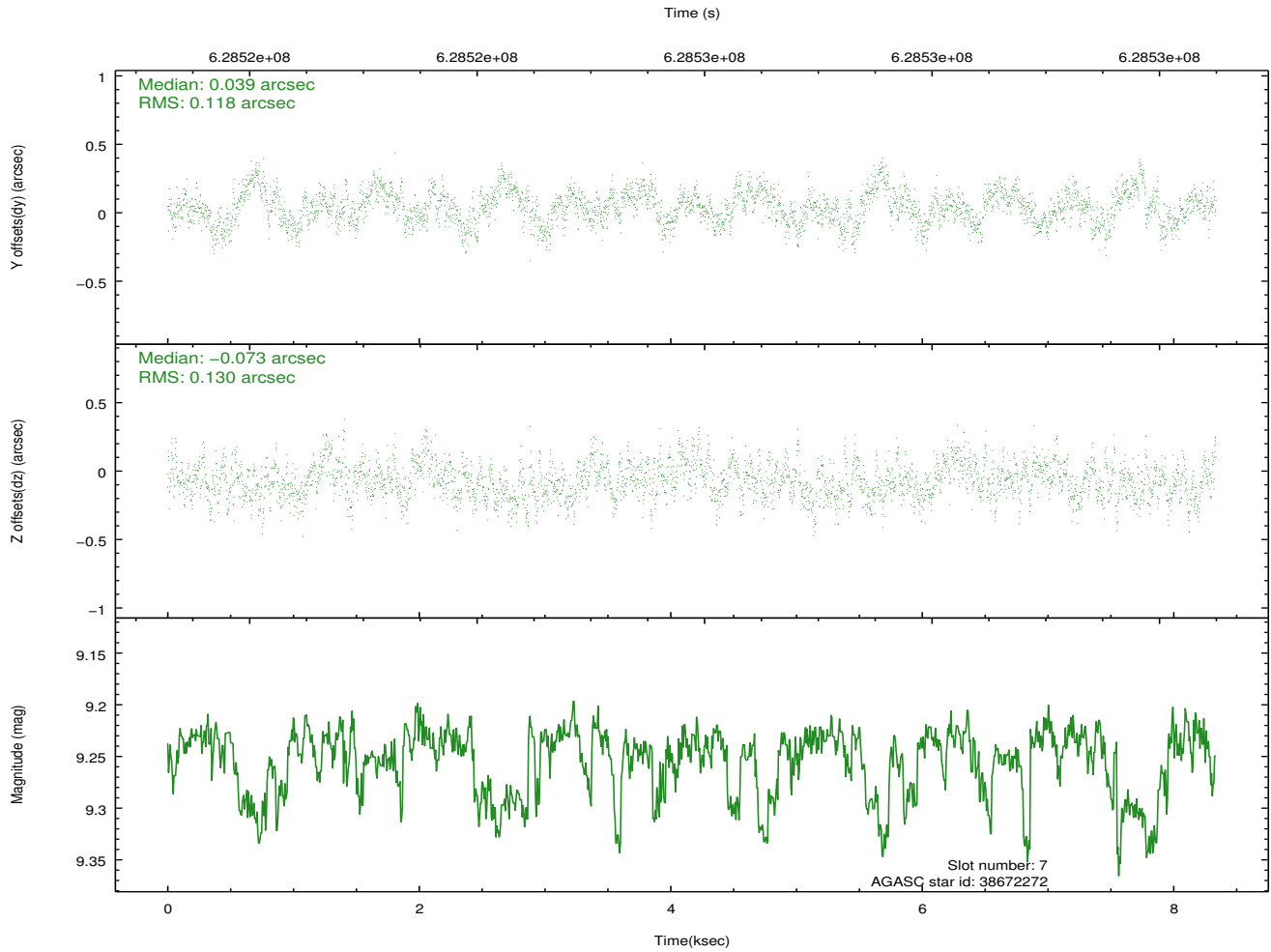
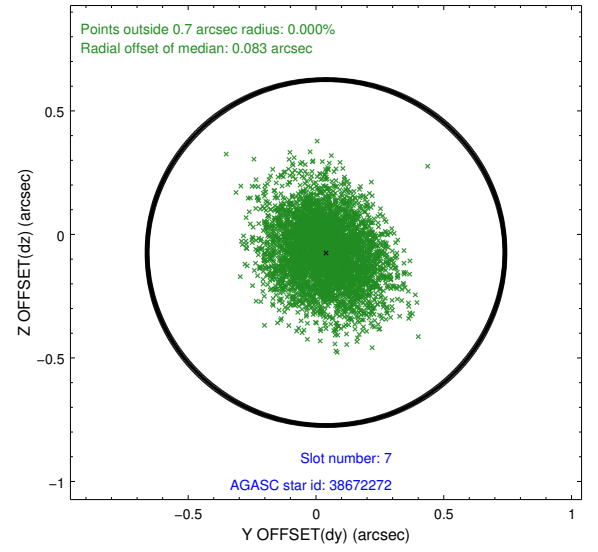
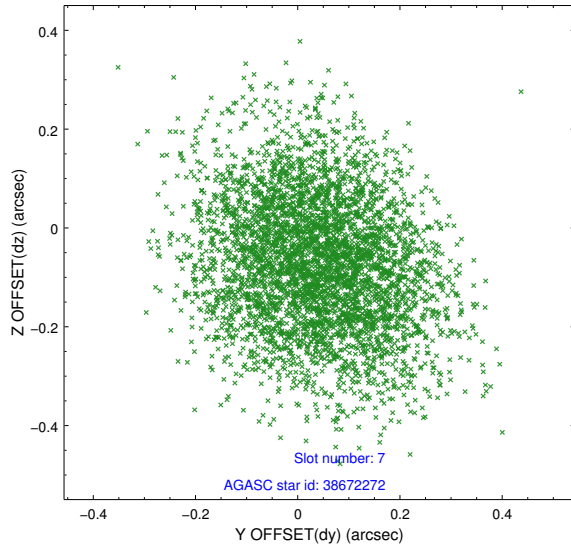
2.4.3 Slot 5



2.4.4 Slot 6

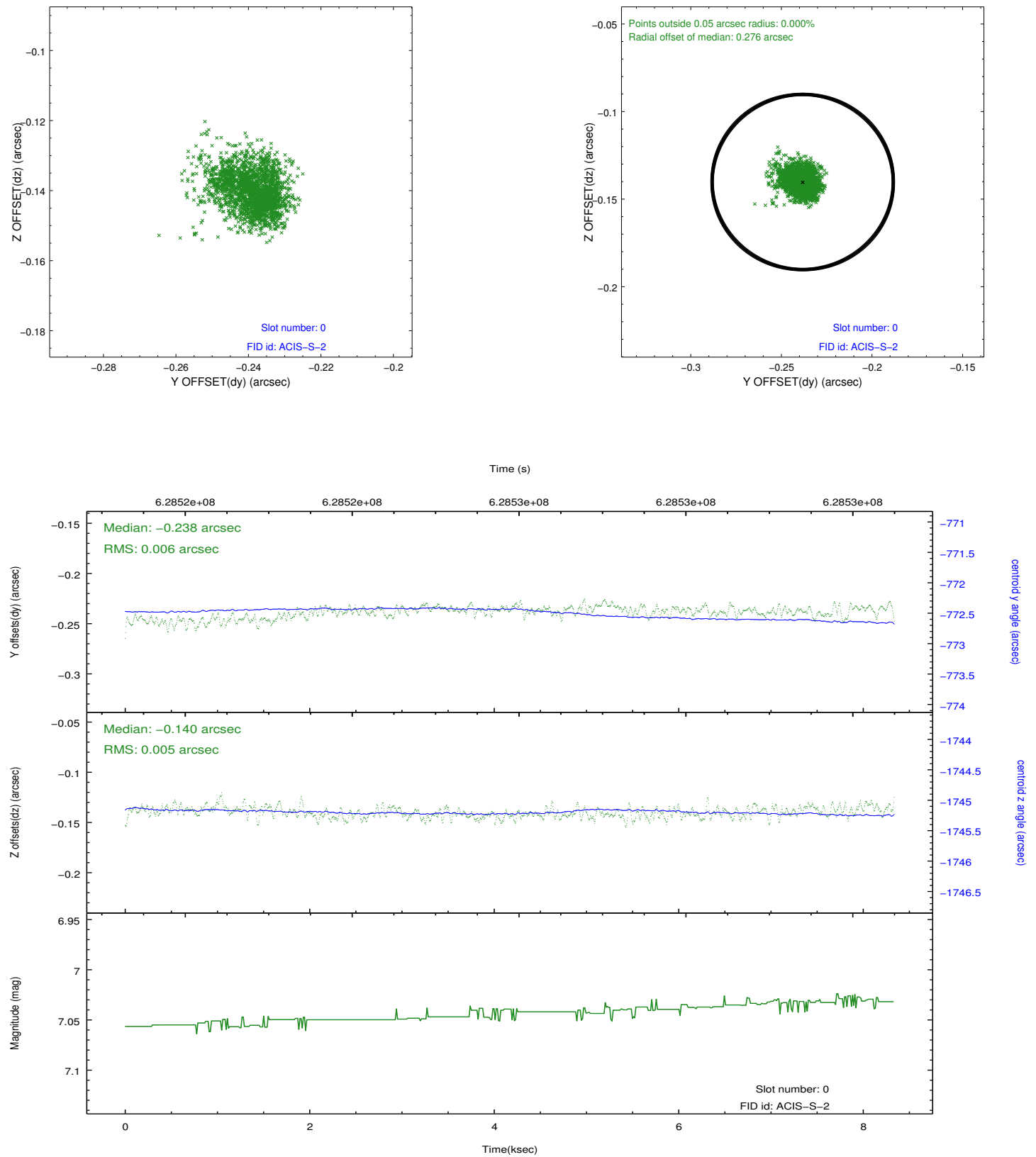


2.4.5 Slot 7

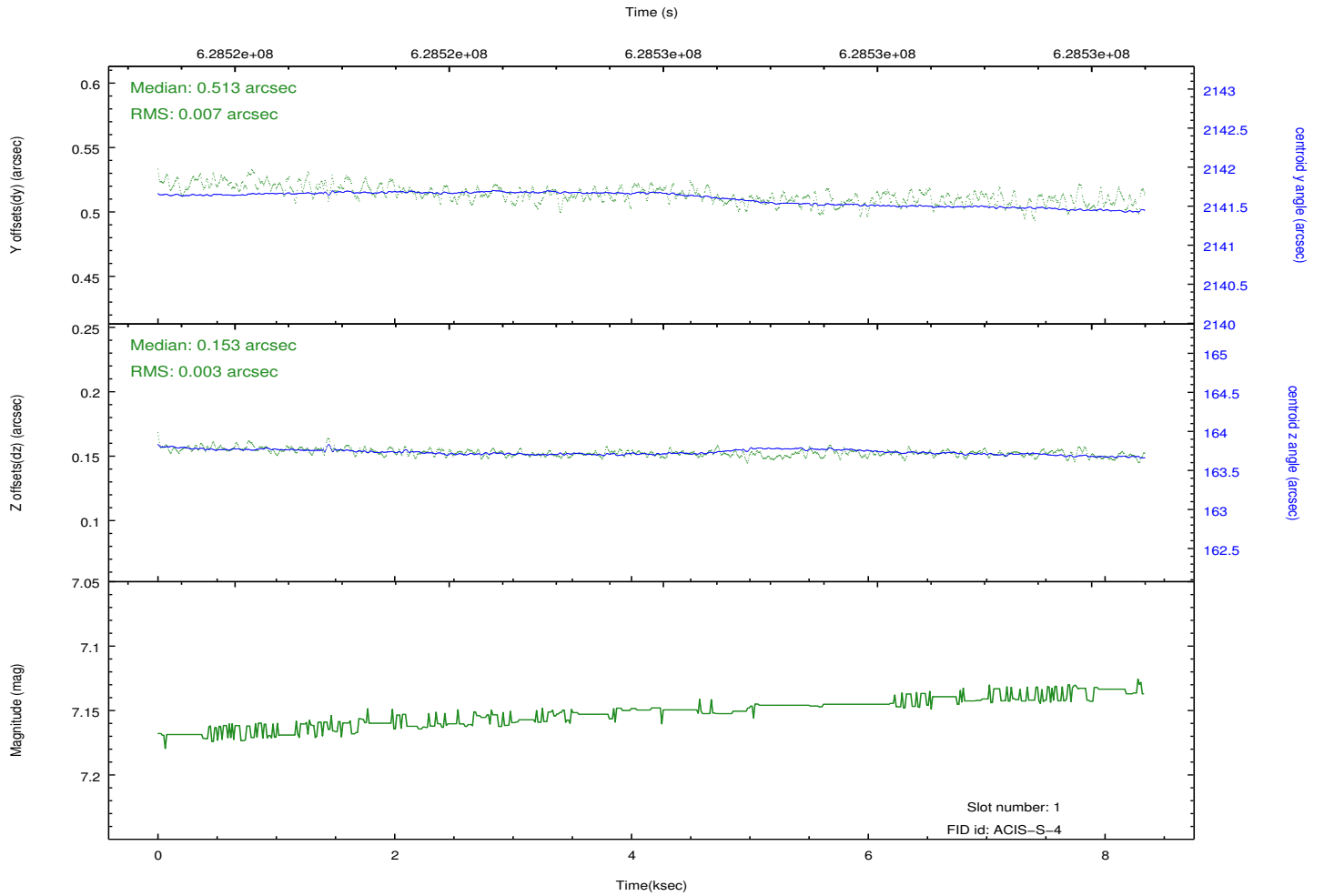
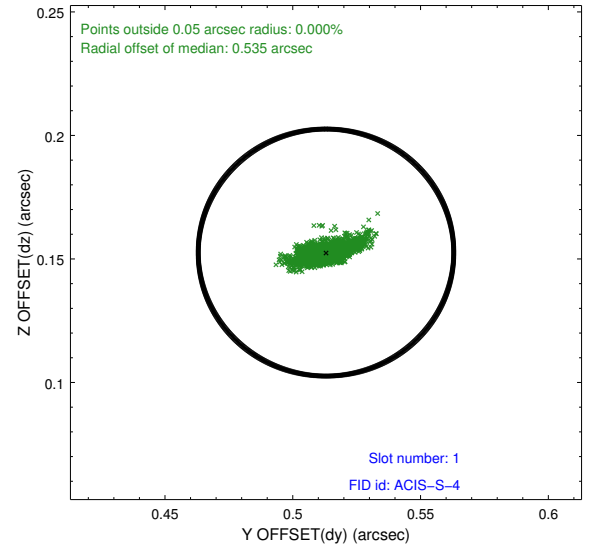
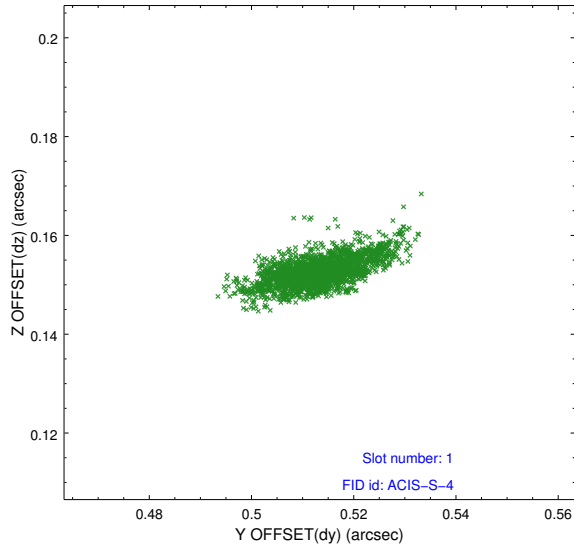


2.5 FID Slots

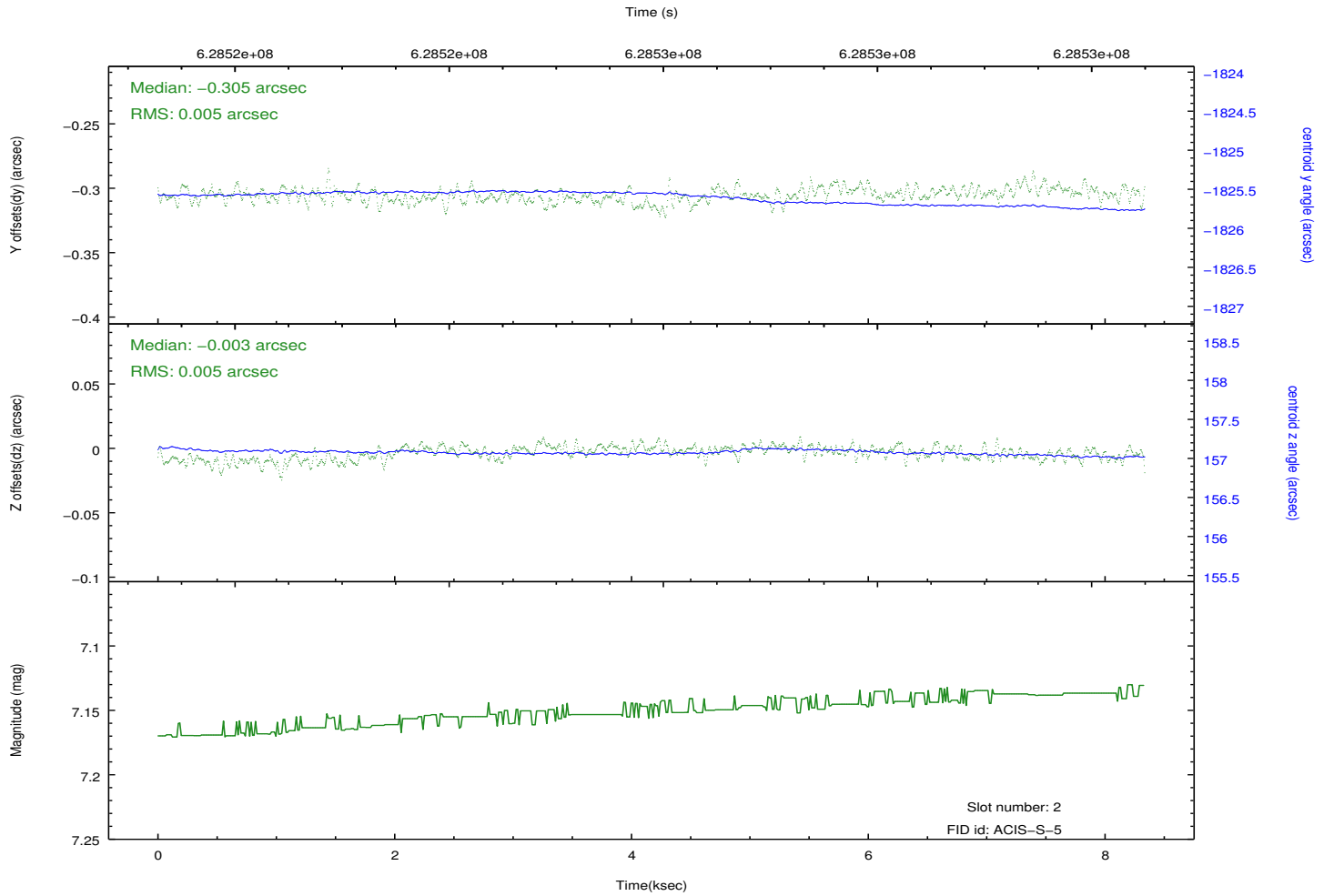
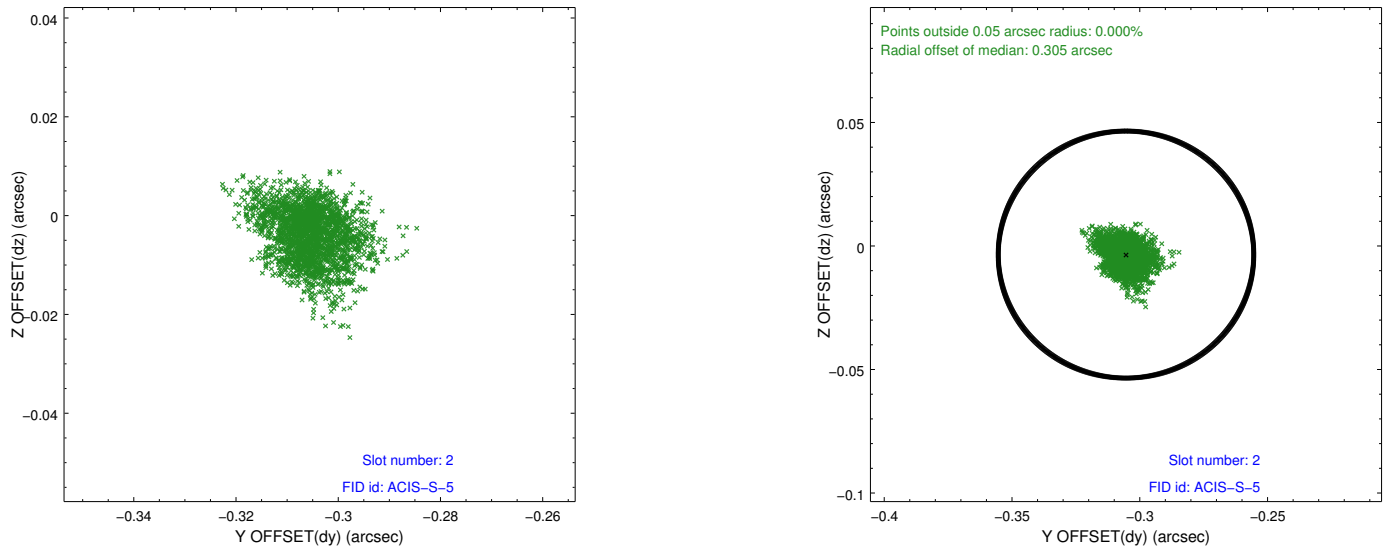
2.5.1 Slot 0



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)	2017.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	8.1367421998978

A.2 Comments