

V&V Reference Report

L2 ASCDS Version : 10.5.2

Observation 19458 - L2 Version 1
Chandra X-Ray Center

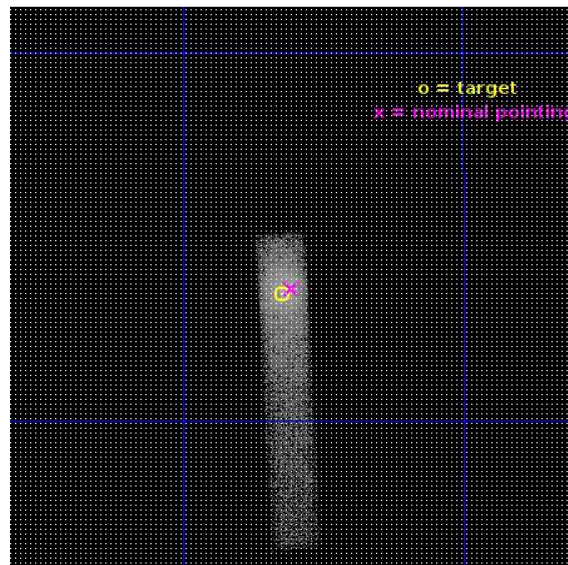
L2 Processing Date : Feb 16 2017

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

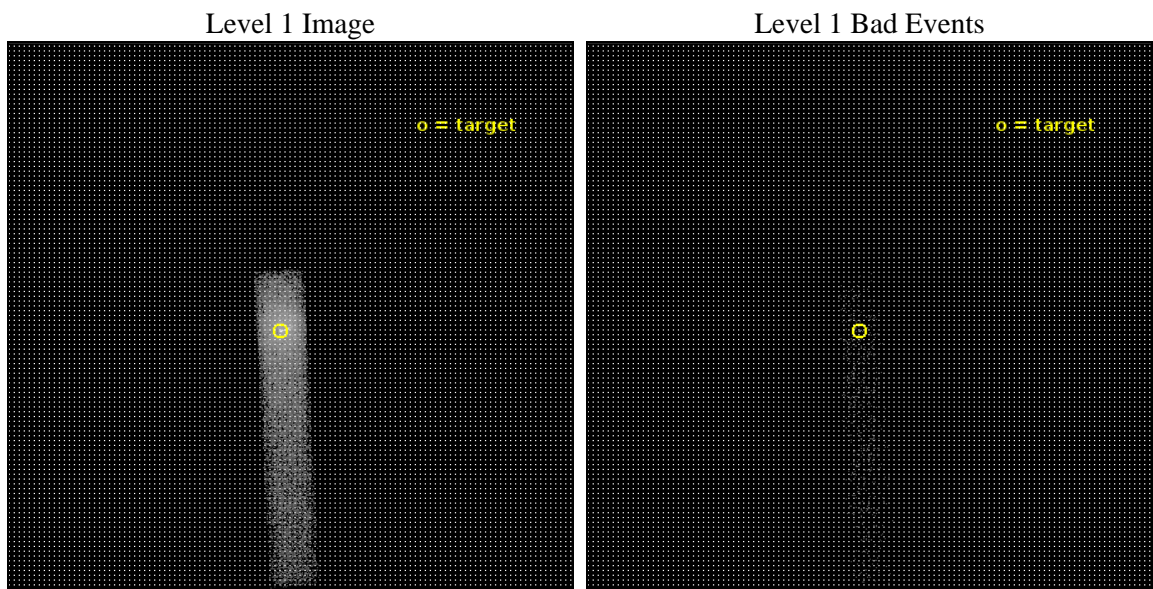
seq_num	703307	Sequence number
obs_id	19458	Observation id
title	Completing a Missing Chapter in Hard X-ray of the M87 AGN	Proposal
observer	Ka-Wah Wong	Principal investigator
object	M87	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	187.705833	Observer's specified target RA [deg]
dec_targ	12.391111	Observer's specified target Dec [deg]
ra_nom	187.70168306916	Nominal RA [deg]
dec_nom	12.393378985398	Nominal Dec [deg]
roll_nom	87.157518755326	Nominal Roll [deg]
revision	1	Processing version of data
ontime	5049.199698925	Sum of GTIs [s]
livetime	4579.3576083122	Livetime [s]
ontime7	5049.199698925	Sum of GTIs [s]
l2events	30468	Number of level 2 events



2 OBI

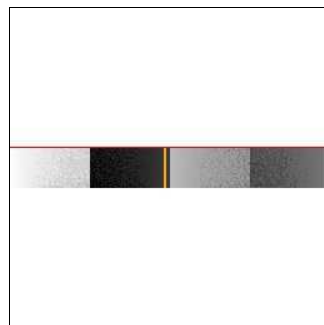
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4979.580000	[s] Scheduled observation exposure time
ascdsver	10.5.2	Processing system revision	ontime	5049.199698925	Sum of GTIs [s]
caldsver	4.7.3	 	ontime7	5049.199698925	Sum of GTIs [s]
date	2017-02-16T19:47:47	Date and time of file creation	l1events	34189	Number of level 1 events
revision	1	Processing version of data			

2.1.4 Events

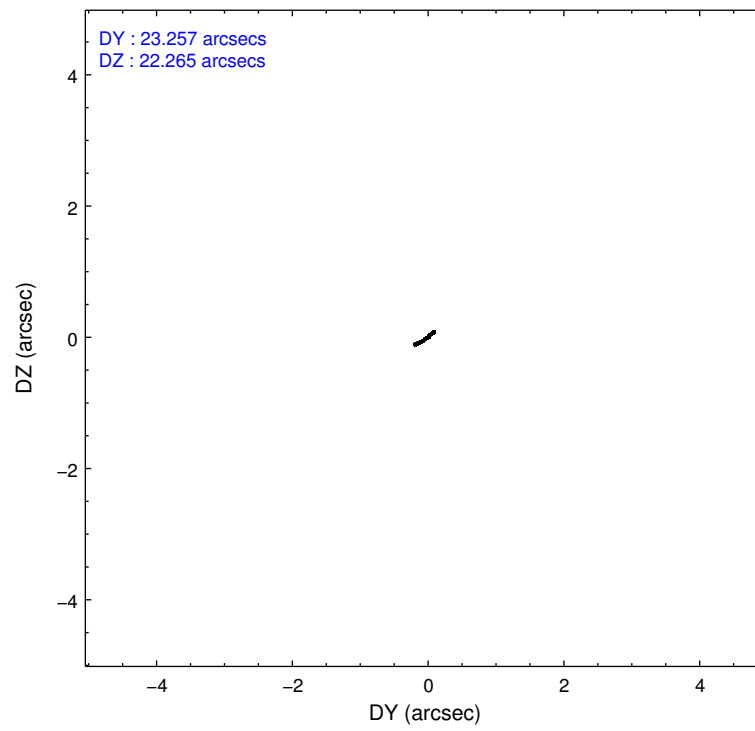
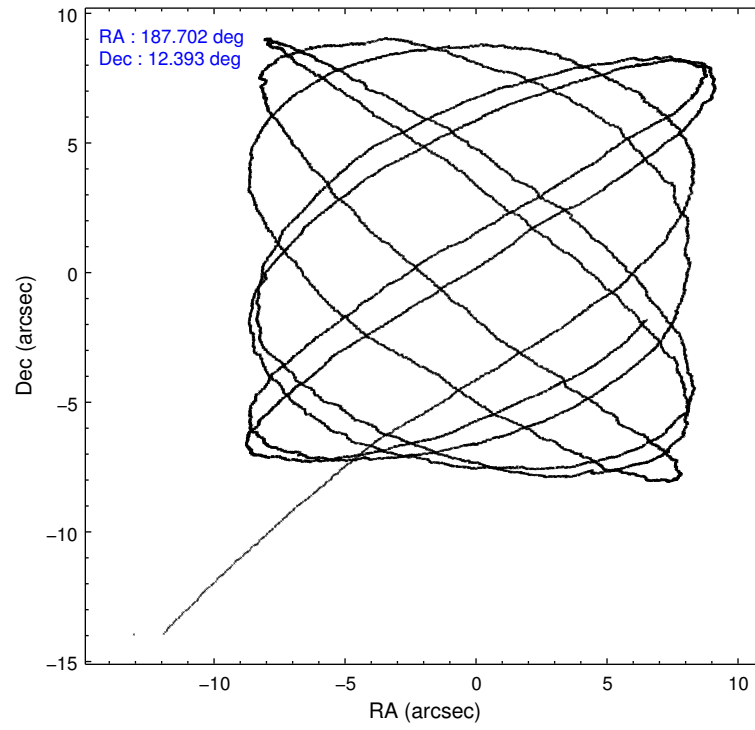
	ccd 7
level 1 events	34189
rejected events	3418
rejected %	9%

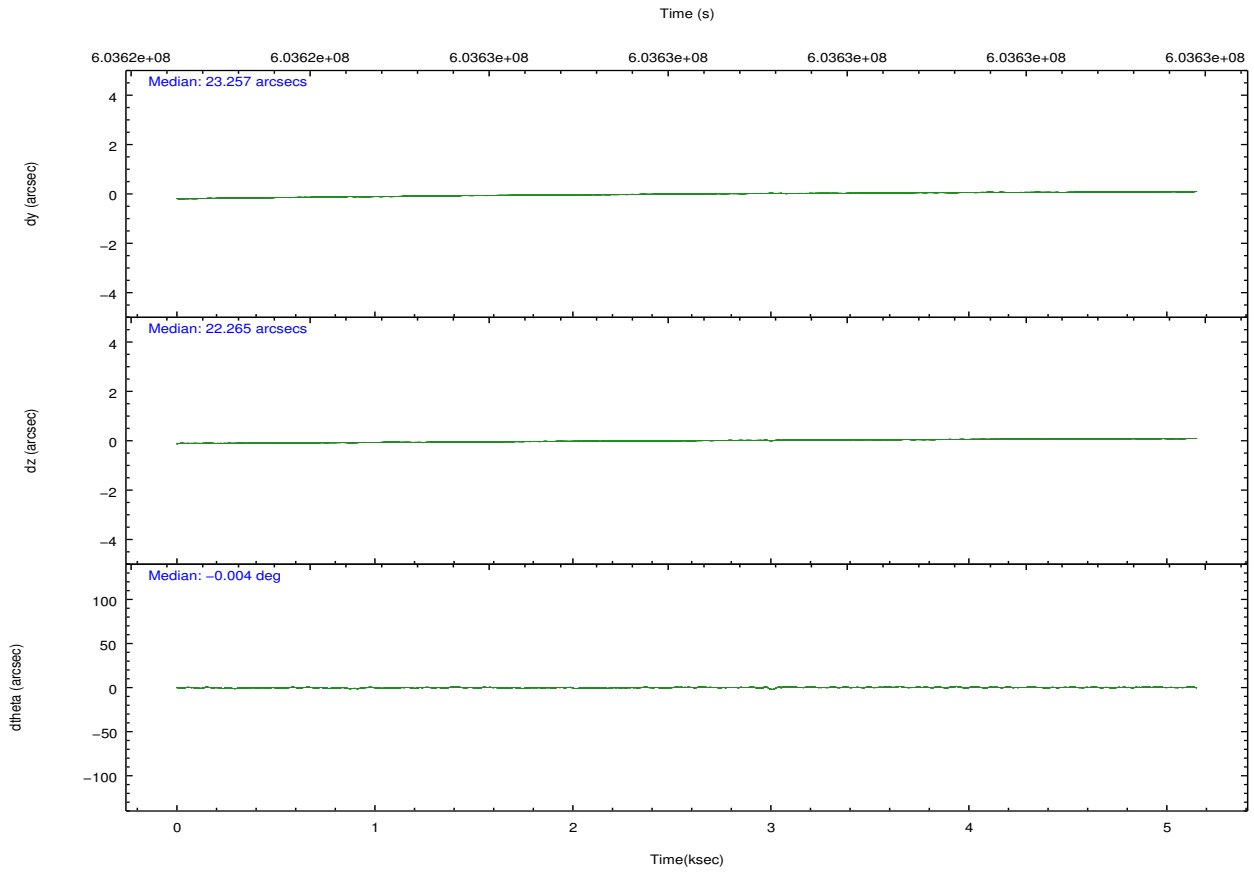
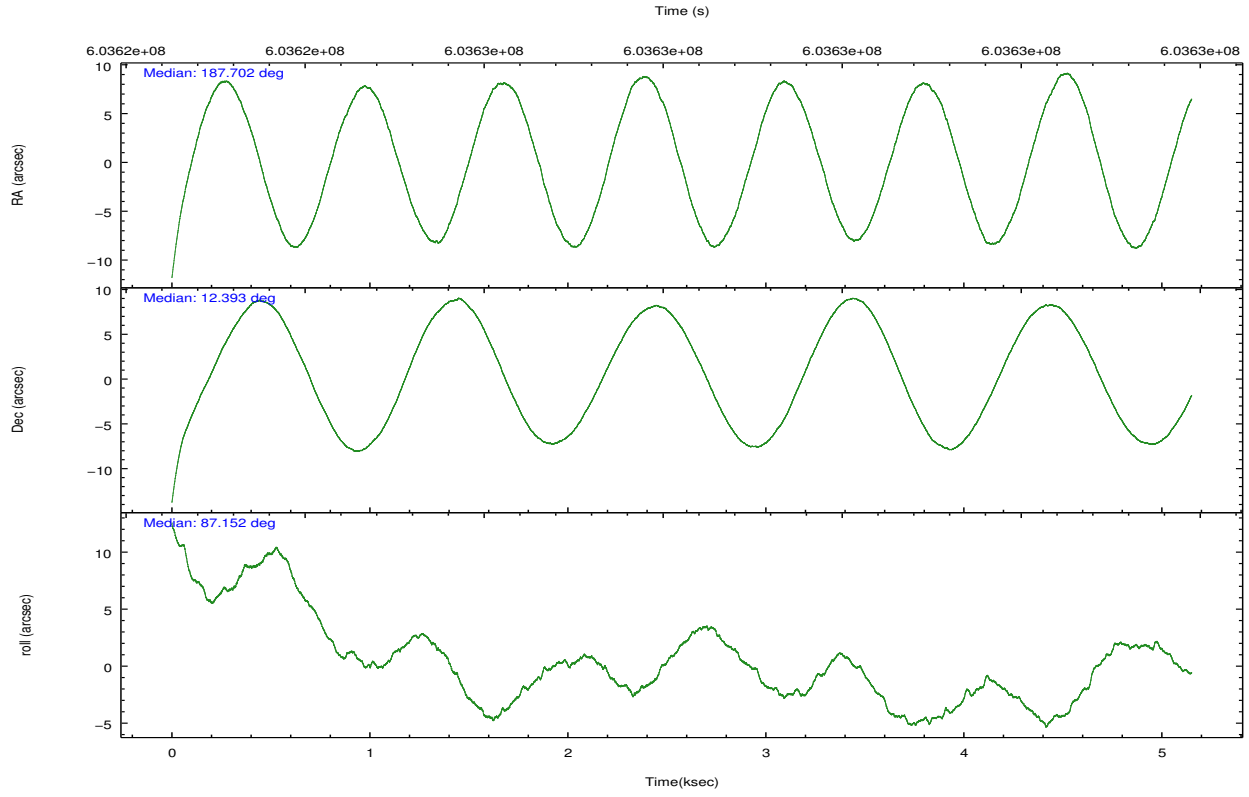
	ccd 7
grade 0 events	8347
	24%
grade 1 events	15
	0%
grade 2 events	8111
	23%
grade 3 events	3440
	10%
grade 4 events	3523
	10%
grade 5 events	807
	2%
grade 6 events	7353
	21%
grade 7 events	2593
	7%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-7	ACIS-7	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	187.714877	187.7016830691592	Subarray requested	CUSTOM	1/8
[deg] Pointing Dec	12.369182	12.39337898539791	Subarray start row	449	449
[deg] Pointing Roll	86.998060	87.15751875532594	Subarray row count	128	128
[mm] SIM focus pos	-0.684267	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0	0.001444936568705701	[s] Primary exposure time	0.000000	0.4
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	603624703.184000	603623698.78292			
Observation start date	2017-02-16T09:30:34	2017-02-16T09:14:58			
[s] Observation end time (MET)	603629683.184000	603629907.20828			
Observation end date	2017-02-16T10:53:34	2017-02-16T10:58:27			
Read mode	TIMED	TIMED			

2.3 Aspect



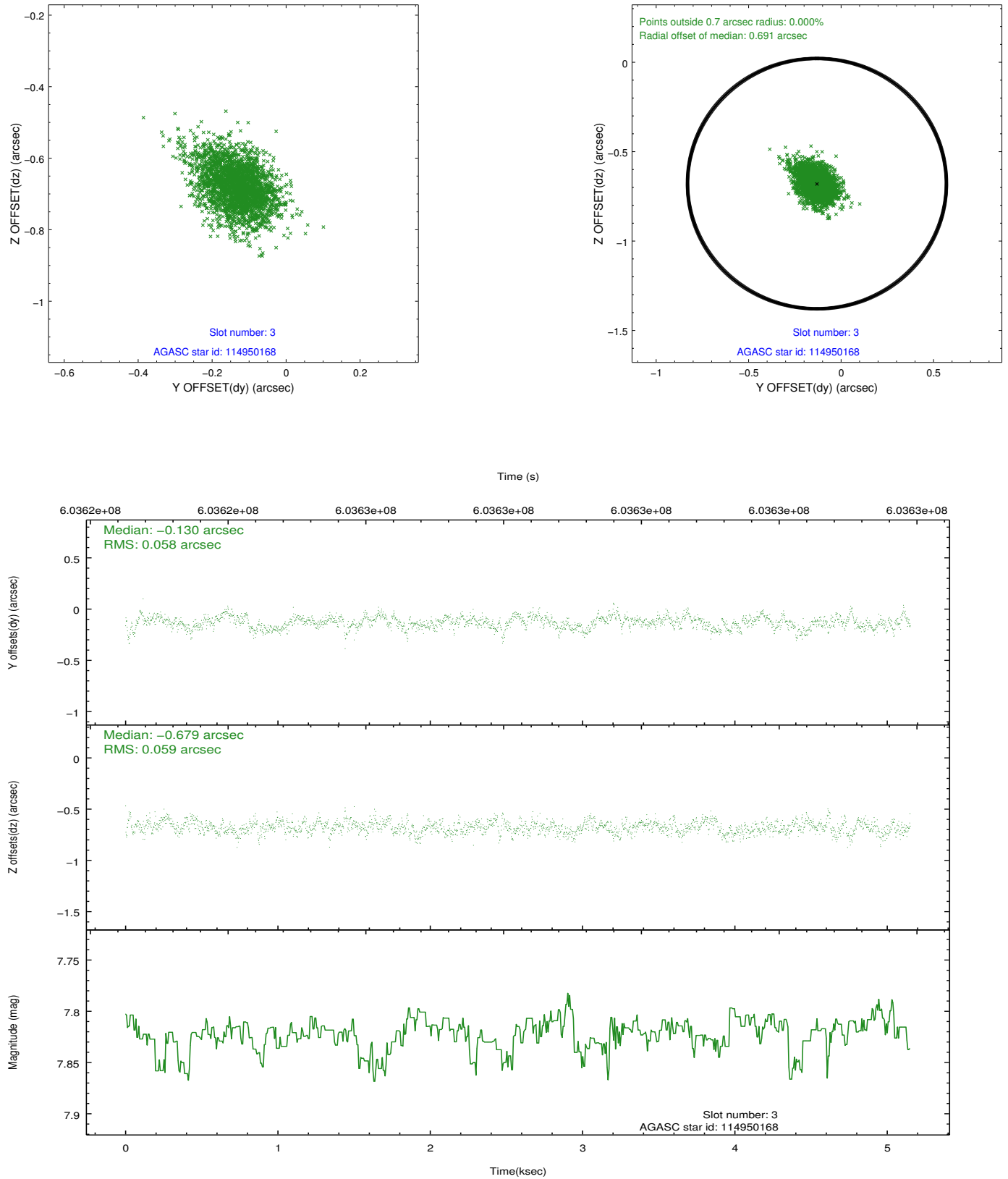


Slot Statistics

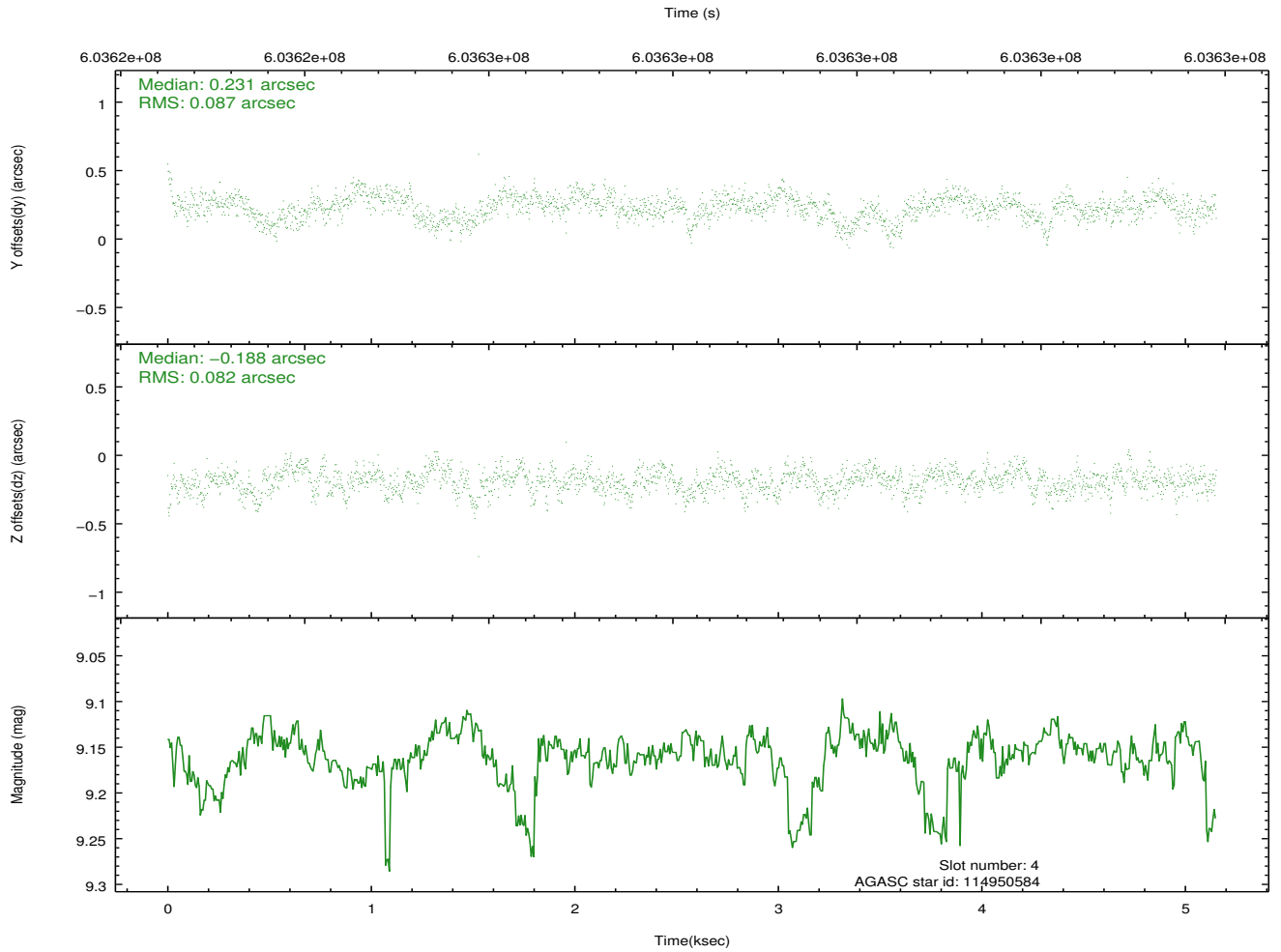
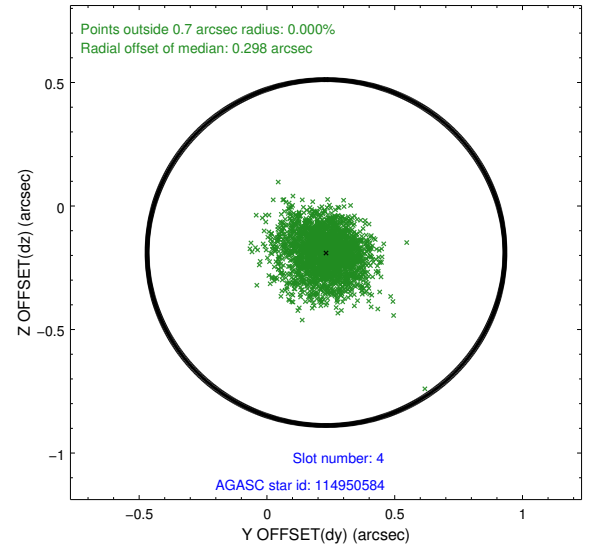
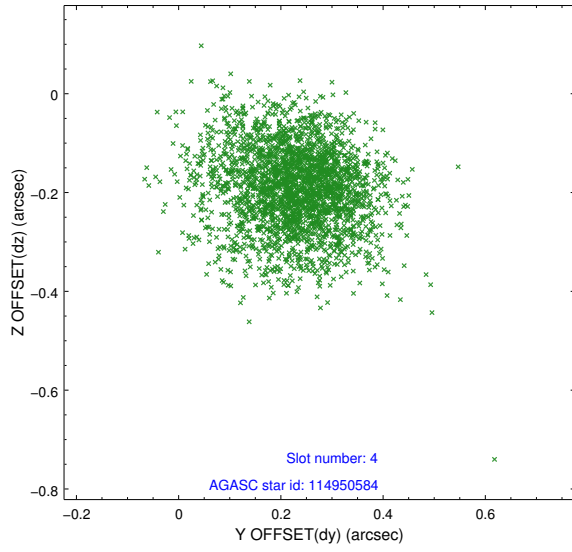
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	1257	-0.219	-0.133	0.008	0.013	0.000000	0.000000	-776.64	-1743.97
1	FID		ACIS-S-4	7.15	1257	0.517	0.141	0.008	0.016	0.000000	0.000000	2136.82	163.57
2	FID		ACIS-S-5	7.16	1257	-0.329	0.000	0.007	0.012	0.000000	0.000000	-1828.10	158.42
3	GUIDE	used	114950168	7.82	2514	-0.130	-0.679	0.086	0.143	187.143398	12.117441	-1008.59	1960.86
4	GUIDE	used	114950584	9.16	2511	0.231	-0.188	0.126	0.207	187.487323	11.827248	-1990.01	699.86
5	GUIDE	used	114952824	8.55	2514	-0.234	-0.477	0.124	0.206	187.703904	12.486727	419.72	61.51
6	GUIDE	used	114955056	8.31	2514	0.296	0.999	0.128	0.198	187.914001	12.127854	-829.74	-743.87
7	GUIDE	used	114955568	7.50	2513	-0.156	0.345	0.096	0.186	187.061916	11.826551	-2068.96	2195.94

2.4 Star Slots

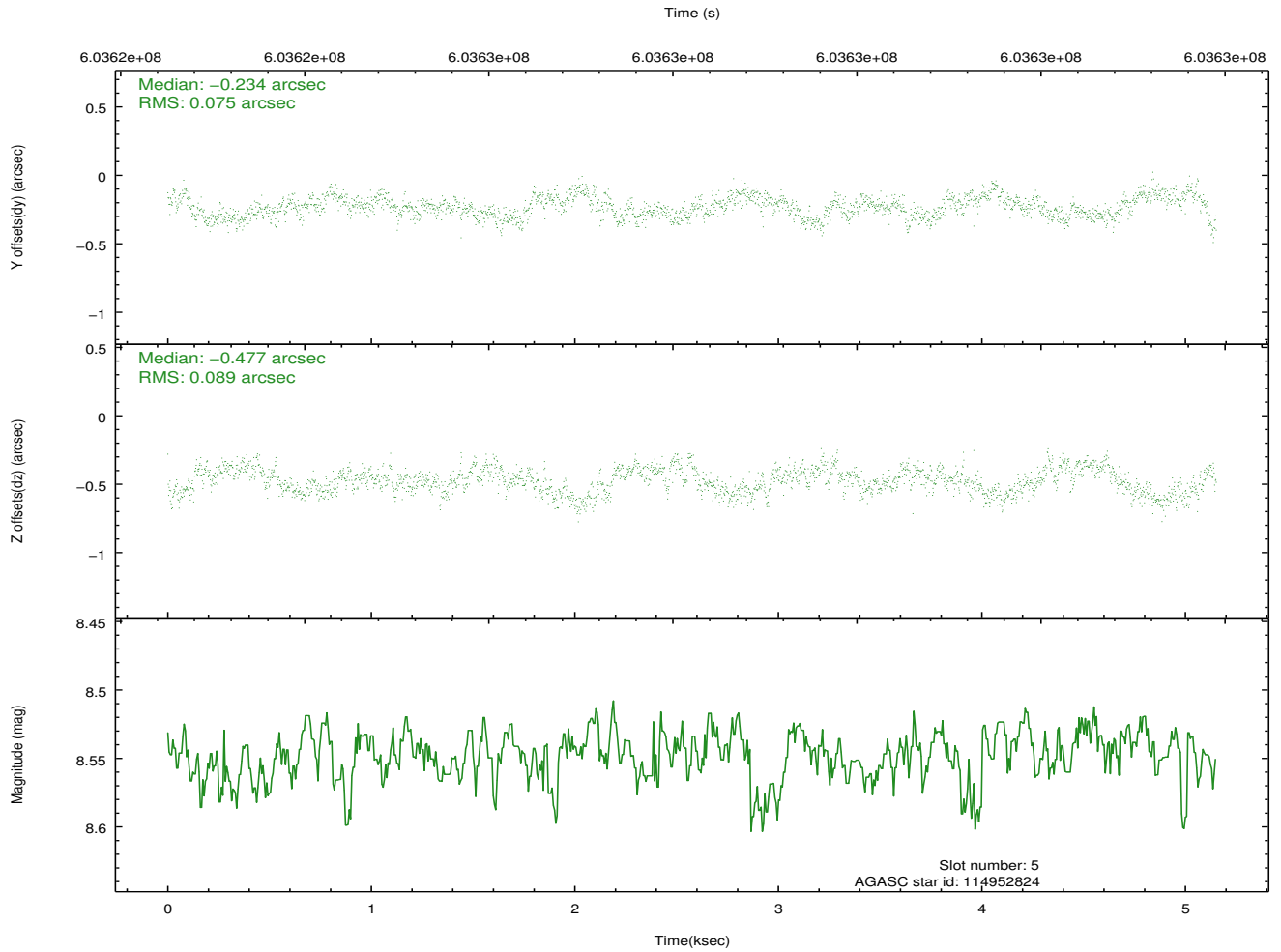
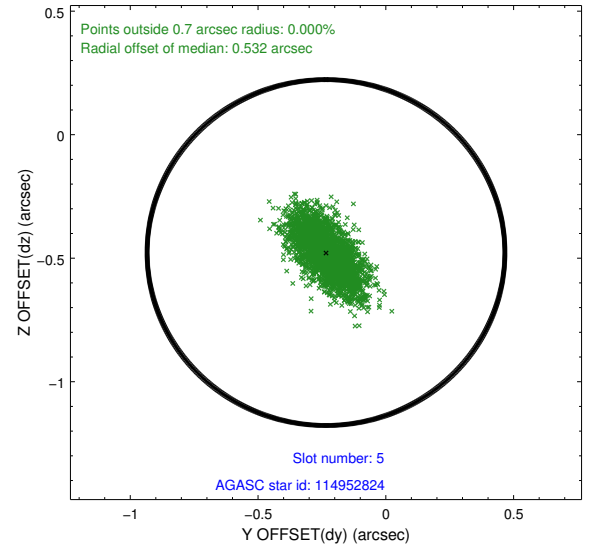
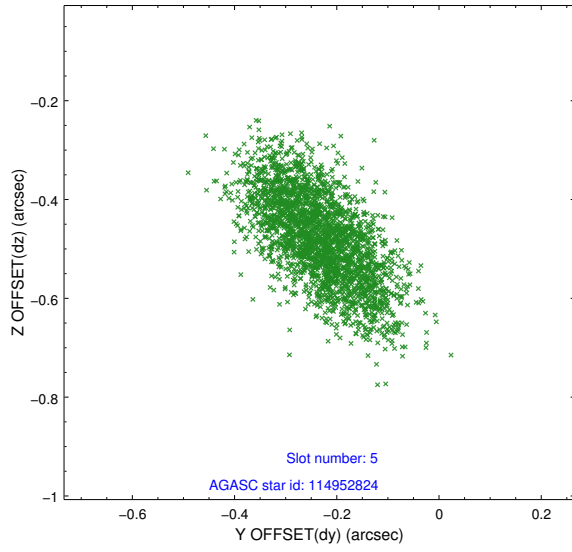
2.4.1 Slot 3



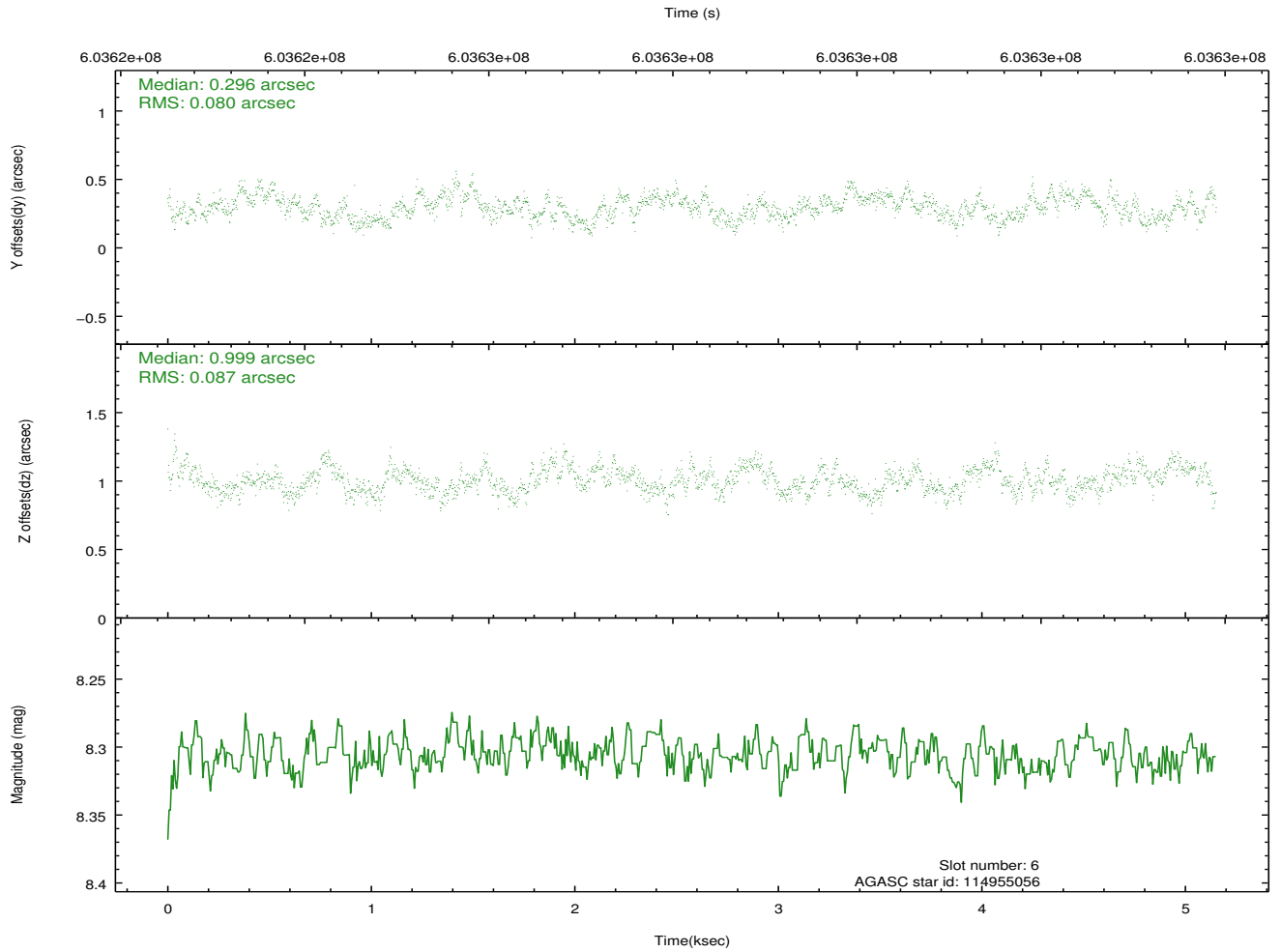
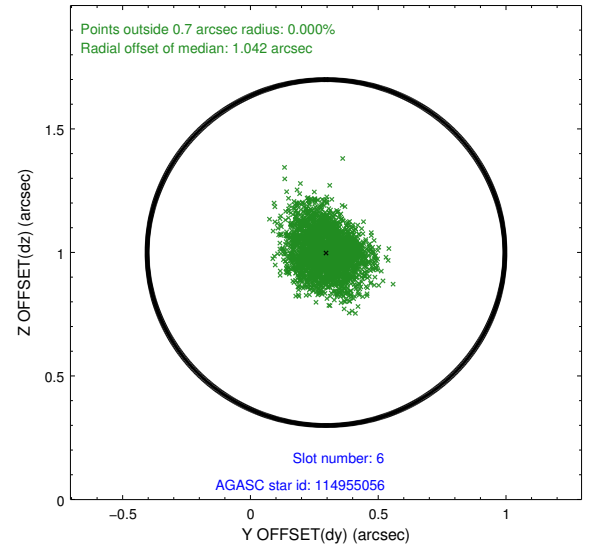
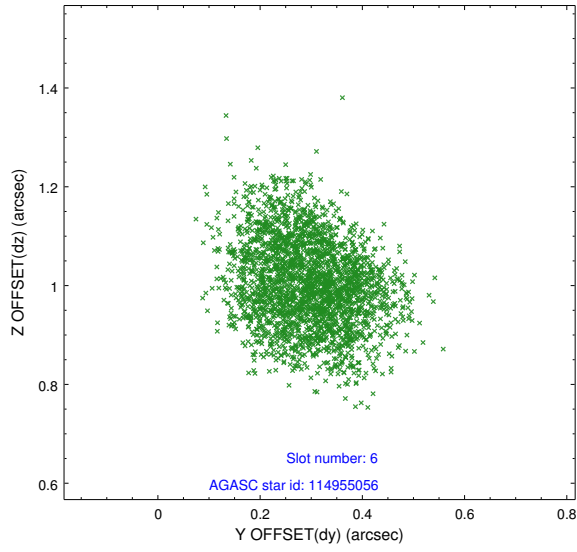
2.4.2 Slot 4



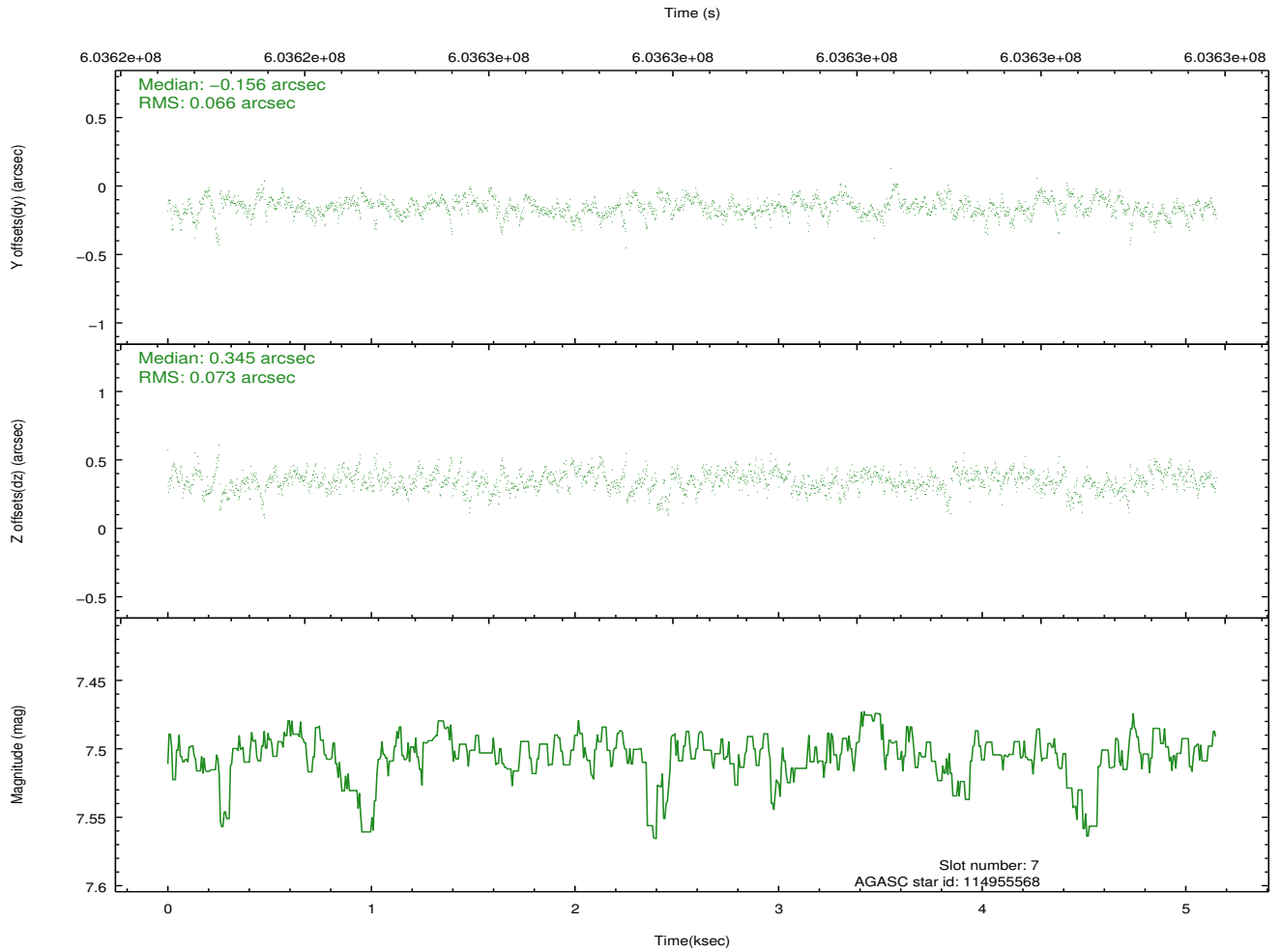
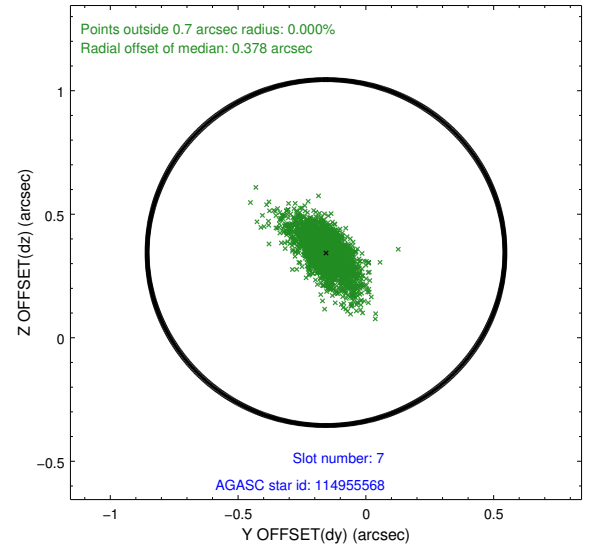
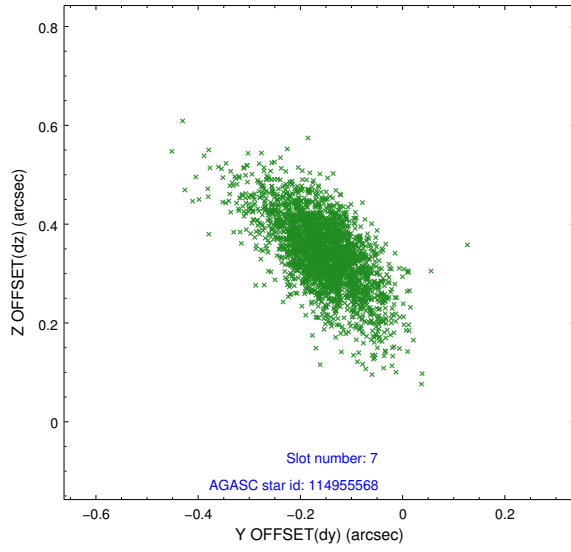
2.4.3 Slot 5



2.4.4 Slot 6

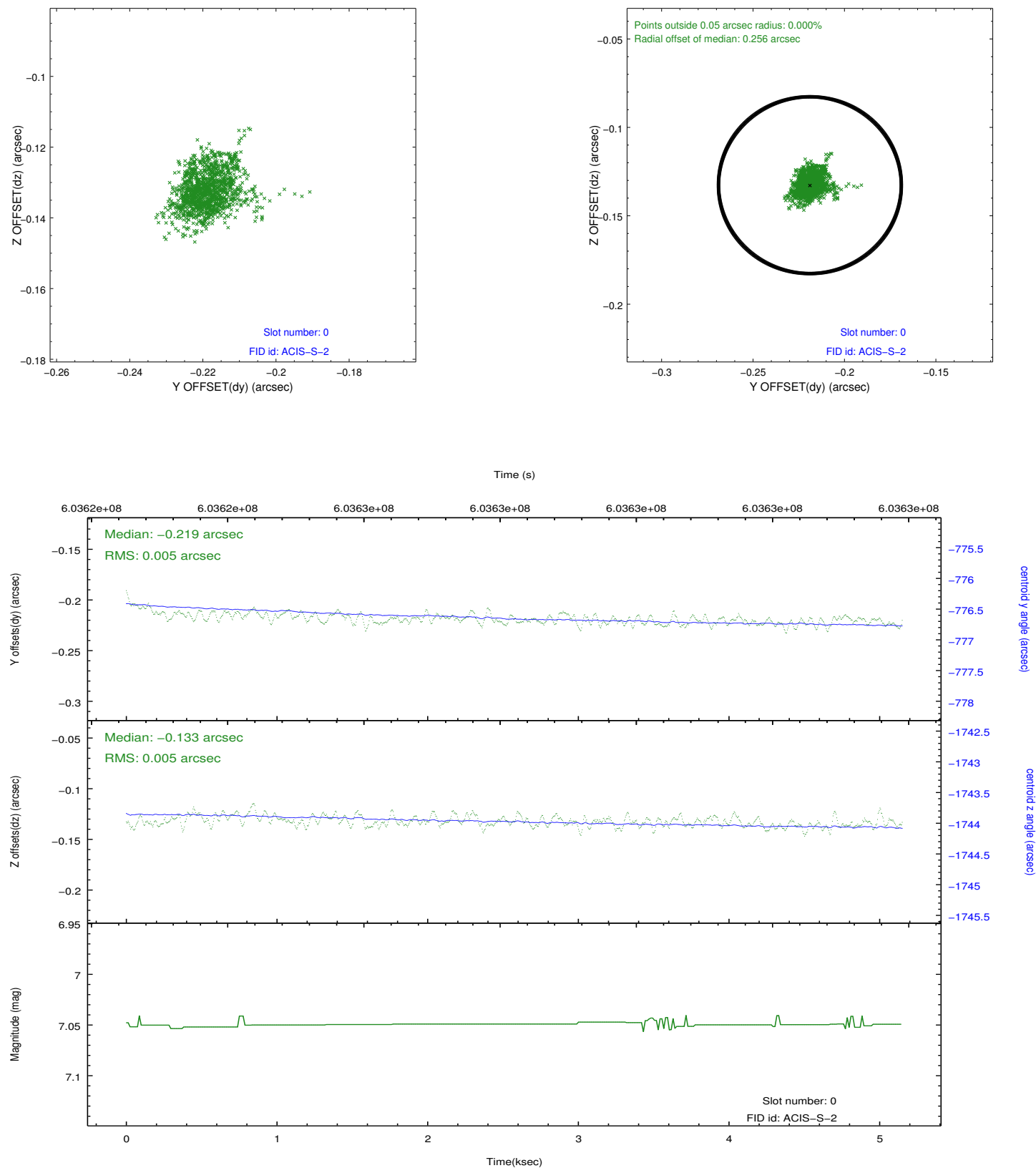


2.4.5 Slot 7

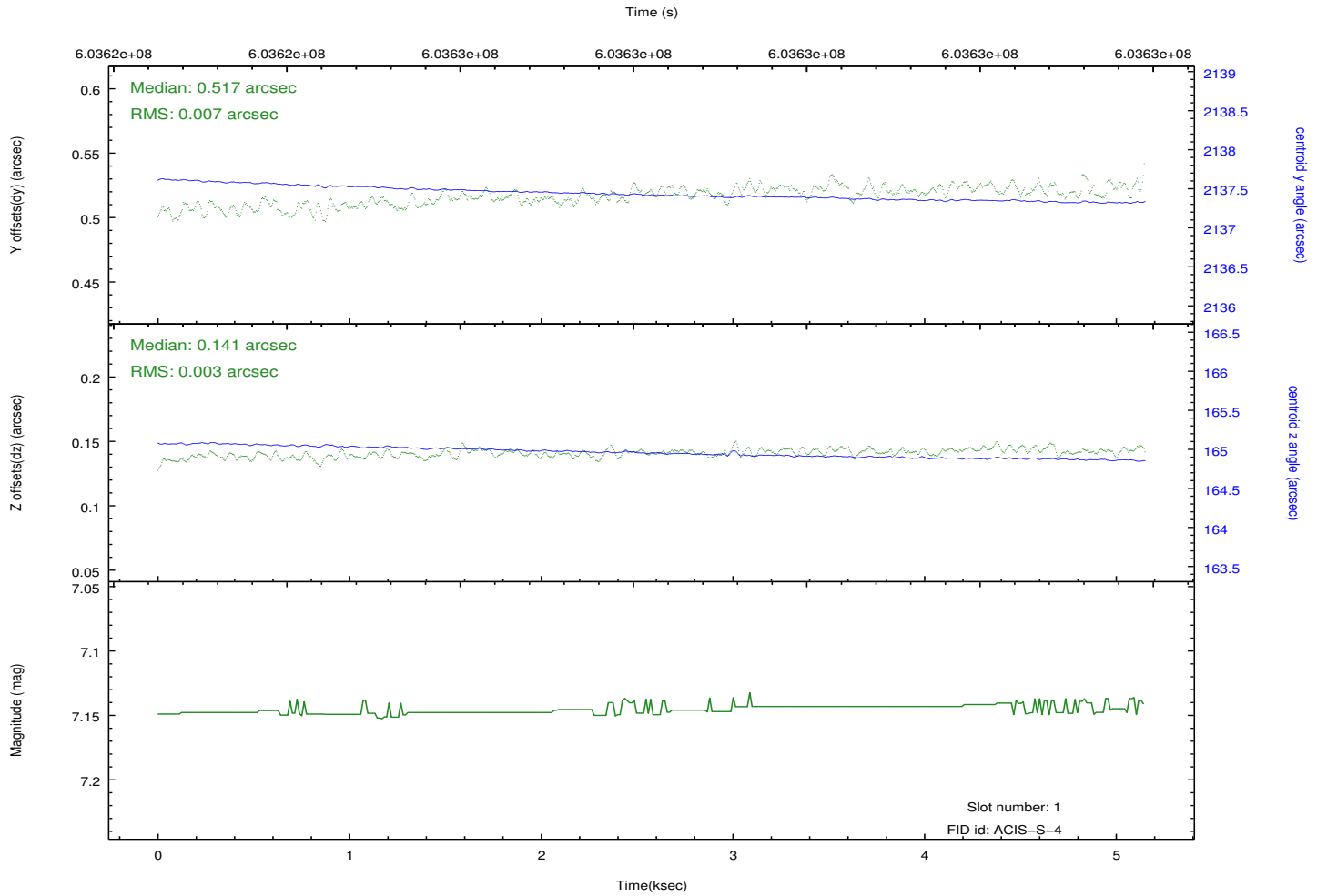
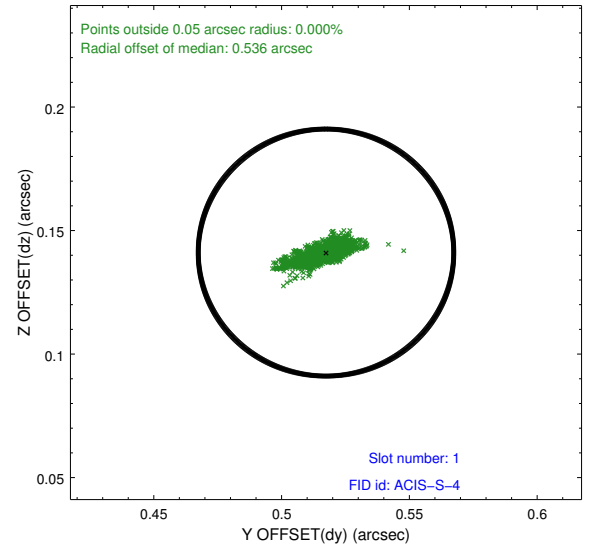
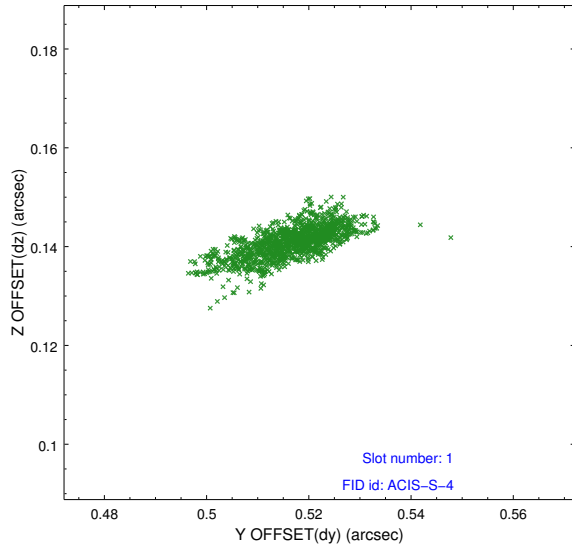


2.5 FID Slots

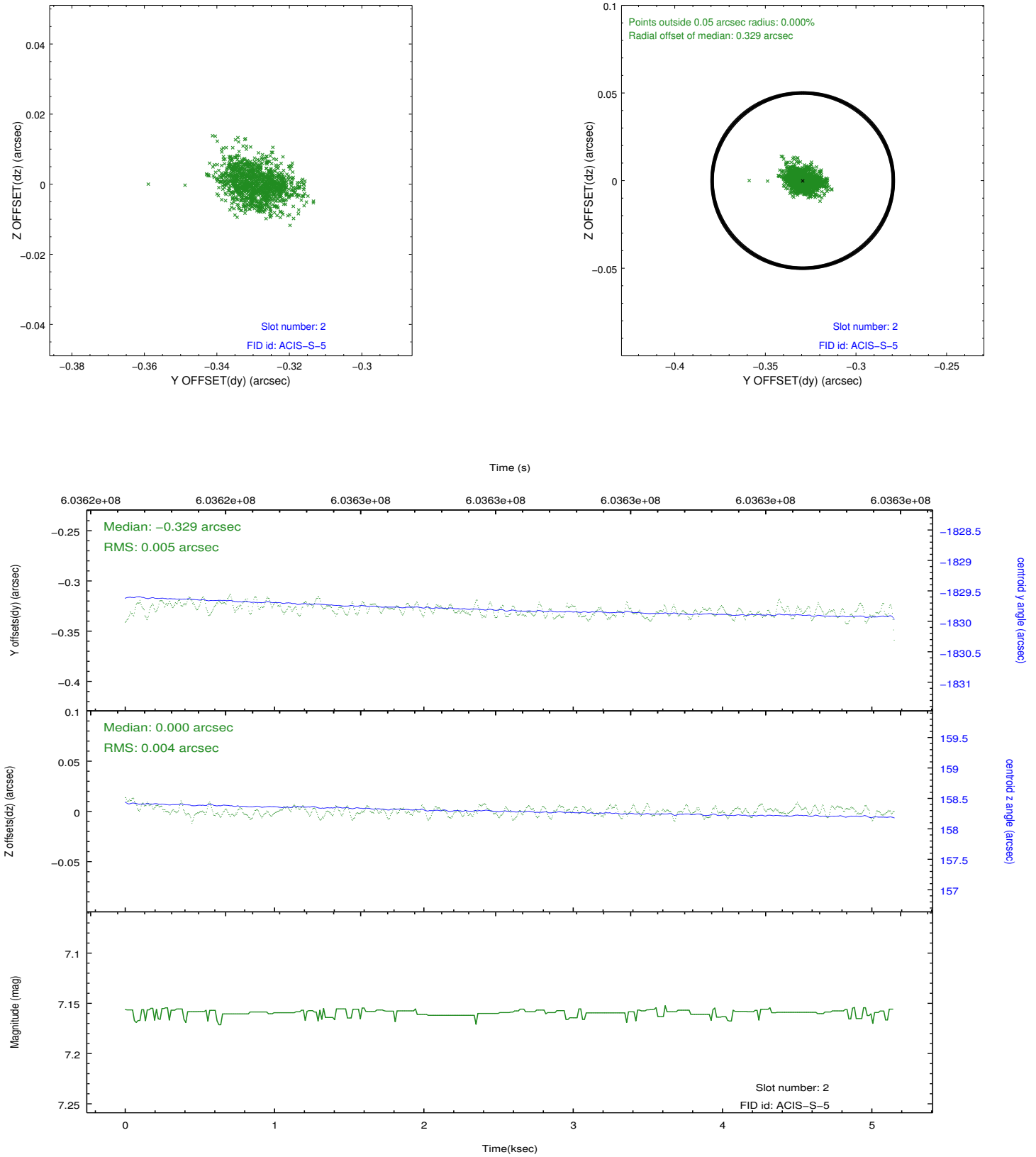
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2017.02.16
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.049199698925

A.2 Comments

Monitor constraint met.