

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 16982 - L2 Version 1
Chandra X-Ray Center

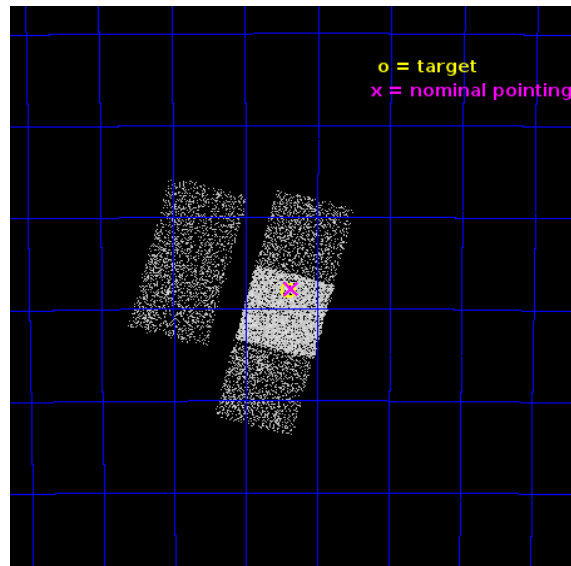
L2 Processing Date : Aug 23 2015

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

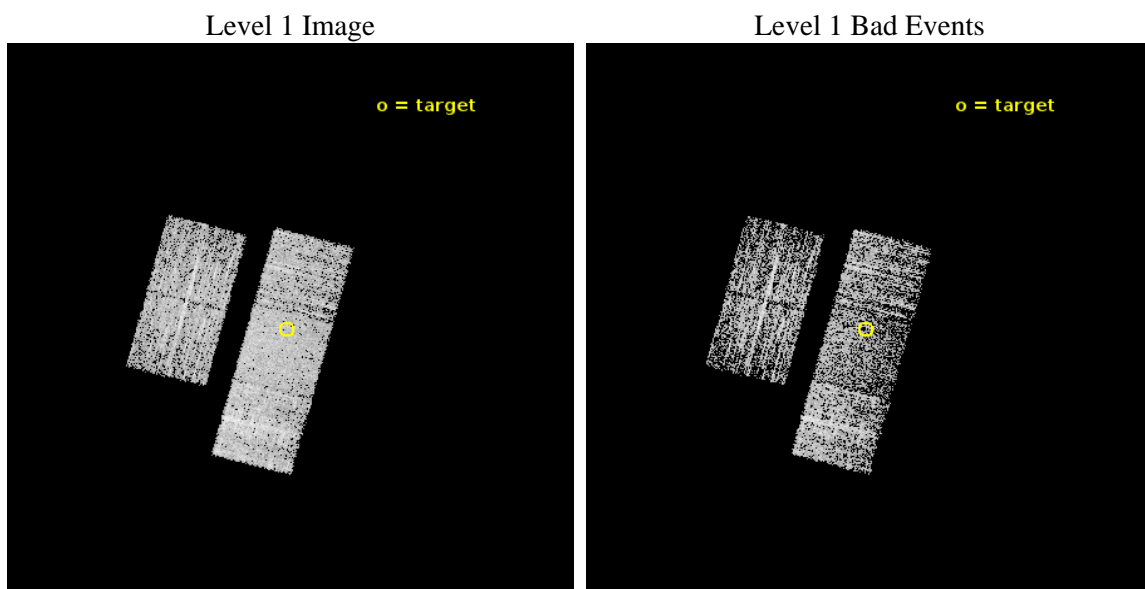
seq_num	601175	Sequence number
obs_id	16982	Observation id
title	Super-massive black holes and nuclear star clusters in late type galaxies	Proposal title
observer	Elena Gallo	Principal investigator
object	NGC1688	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	72.099167	Observer's specified target RA [deg]
dec_targ	-59.800306	Observer's specified target Dec [deg]
ra_nom	72.090594461913	Nominal RA [deg]
dec_nom	-59.797094091507	Nominal Dec [deg]
roll_nom	104.91312357301	Nominal Roll [deg]
revision	1	Processing version of data
ontime	2571.665815711	Sum of GTIs [s]
livetime	2538.0651085959	Livetime [s]
ontime2	2571.5016556978	Sum of GTIs [s]
ontime3	2571.5837357044	Sum of GTIs [s]
ontime6	2571.6247757673	Sum of GTIs [s]
ontime7	2571.665815711	Sum of GTIs [s]
ontime8	2565.2607252598	Sum of GTIs [s]
l2events	13392	Number of level 2 events



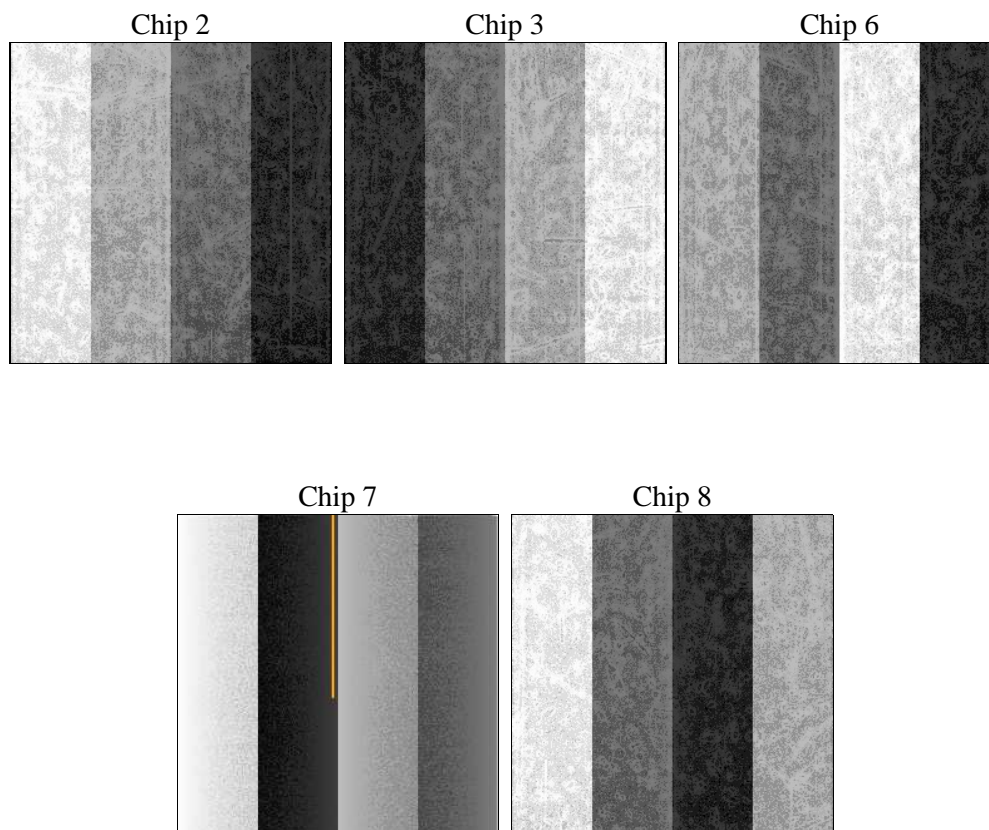
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2800.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	2571.665815711	Sum of GTIs [s]
caldsver	4.6.8	 	ontime2	2571.5016556978	Sum of GTIs [s]
date	2015-08-23T19:45:17	Date and time of file creation	ontime3	2571.5837357044	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	2571.6247757673	Sum of GTIs [s]
			ontime7	2571.665815711	Sum of GTIs [s]
			ontime8	2565.2607252598	Sum of GTIs [s]
			l1events	81160	Number of level 1 events

2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	13518	14080	14183	17998	21381
rejected events	12084	12509	12576	10087	16451
rejected %	89%	88%	88%	56%	76%

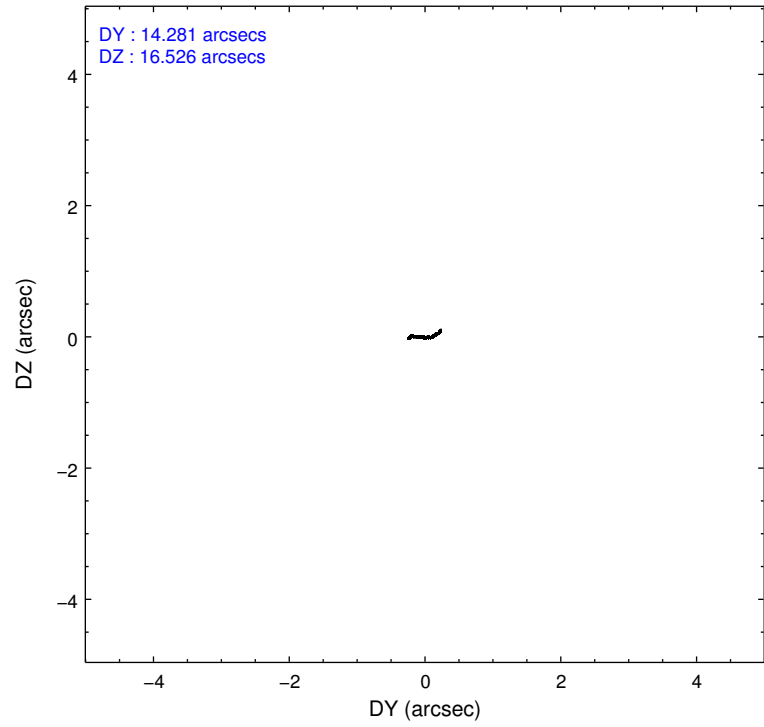
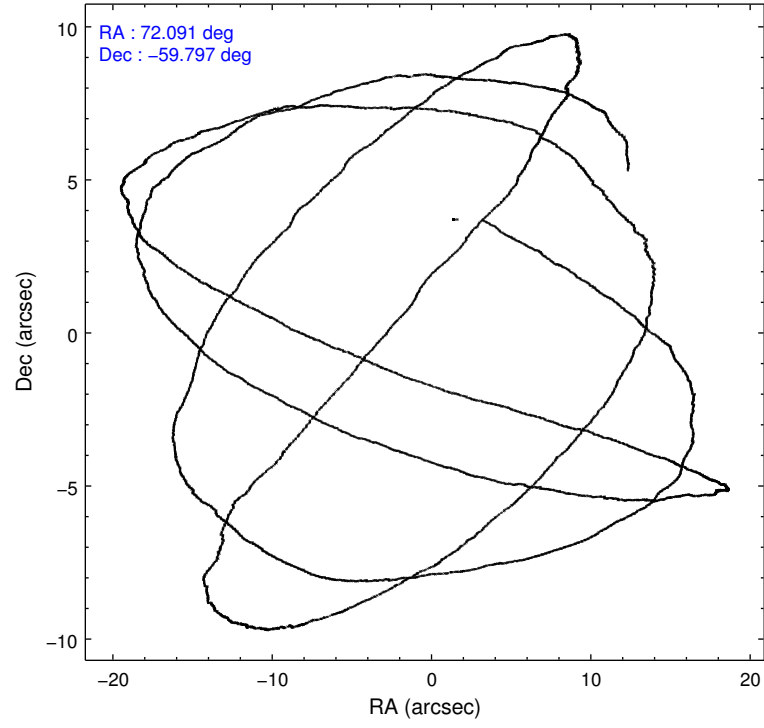
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	512	605	559	683	1501
	3%	4%	3%	3%	7%
grade 1 events	9	7	8	21	18
	0%	0%	0%	0%	0%
grade 2 events	352	341	394	1650	1095
	2%	2%	2%	9%	5%
grade 3 events	132	160	153	680	487
	0%	1%	1%	3%	2%
grade 4 events	150	151	141	696	500
	1%	1%	0%	3%	2%
grade 5 events	530	762	707	1868	974
	3%	5%	4%	10%	4%
grade 6 events	289	316	363	4213	1349
	2%	2%	2%	23%	6%
grade 7 events	11544	11738	11858	8187	15457
	85%	83%	83%	45%	72%

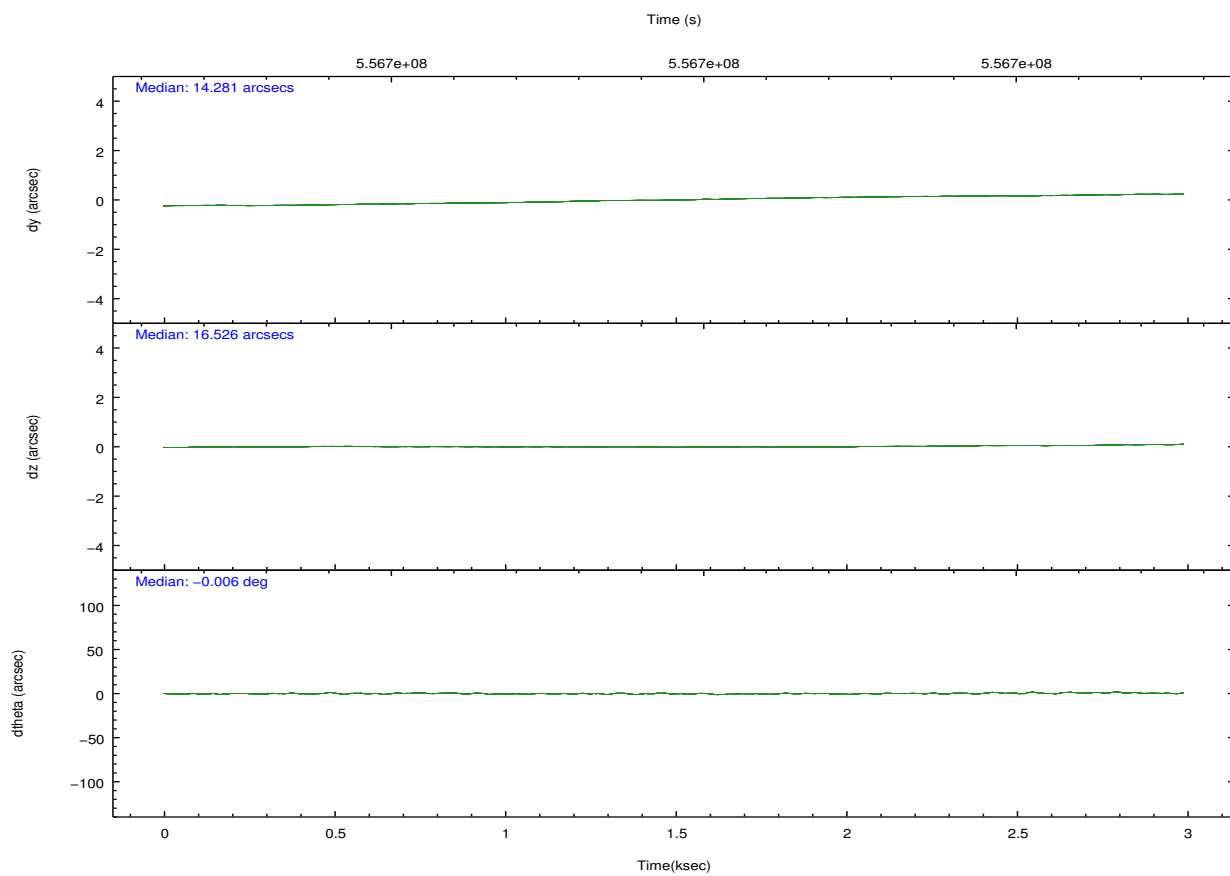
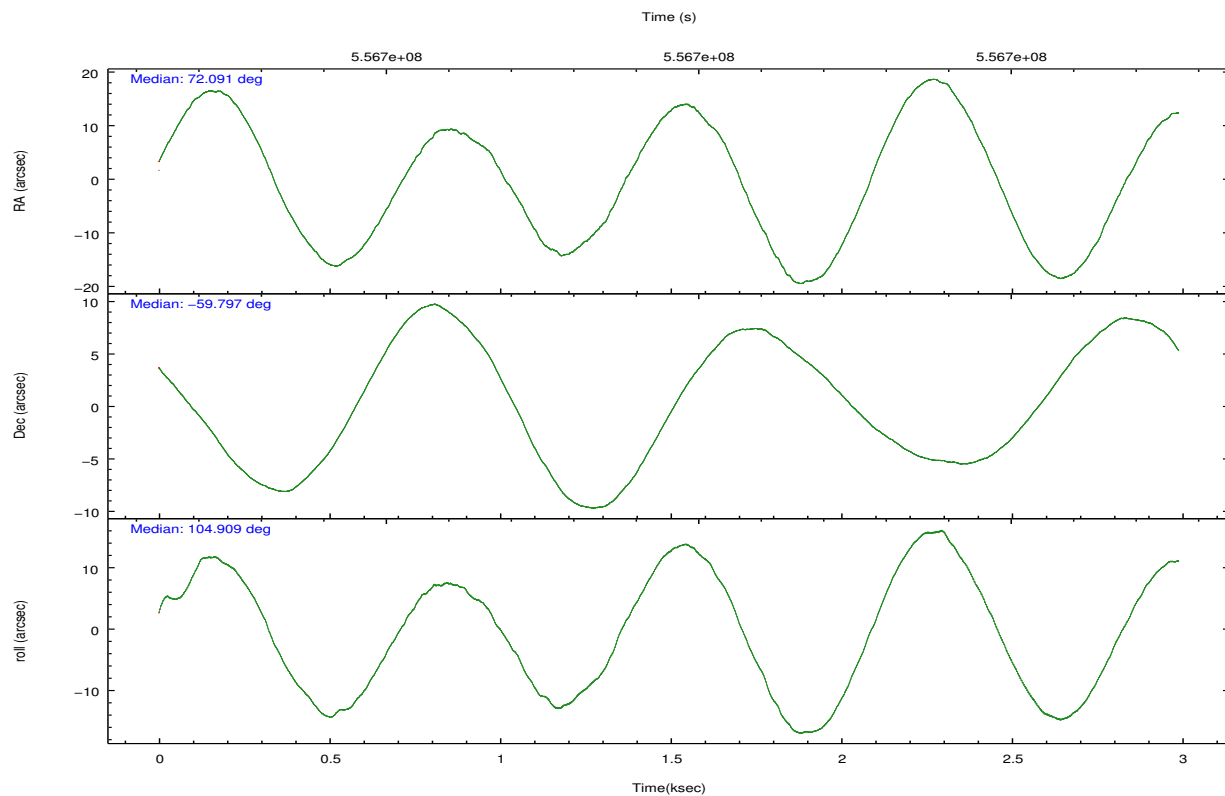
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-23678	ACIS-23678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	72.129495	72.09059446191317
[deg] Pointing Dec	-59.816281	-59.79709409150726
[deg] Pointing Roll	104.790106	104.9131235730122
[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)	556694588.184000	556694078.5740401
Observation start date	2015-08-23T05:22:00	2015-08-23T05:14:38
[s] Observation end time (MET)	556697388.184000	556698375.88678
Observation end date	2015-08-23T06:08:40	2015-08-23T06:26:15
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	O2	Y
CCD I3 on	O1	Y
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	Y	Y
CCD S5 on	N	N
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



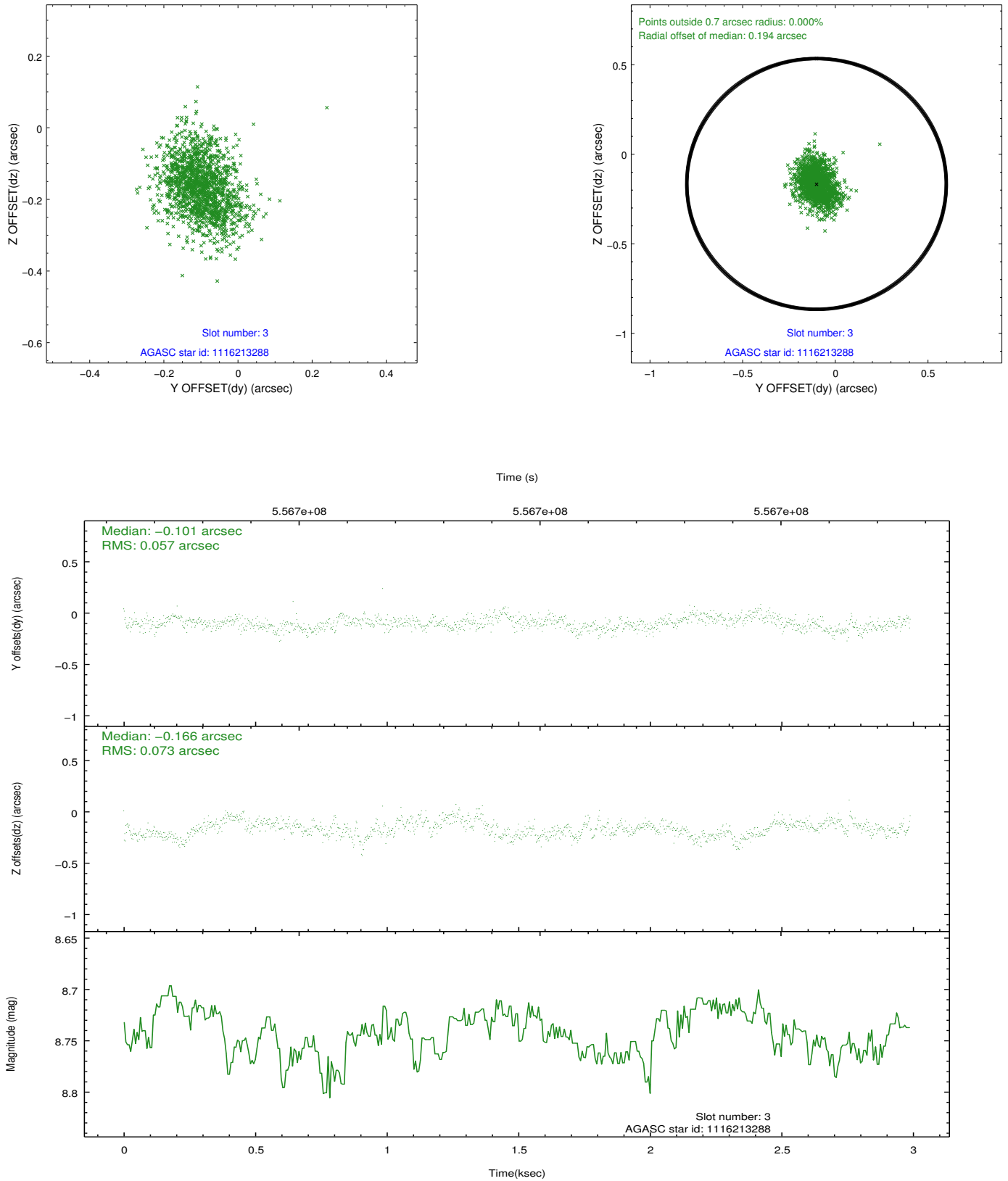


Slot Statistics

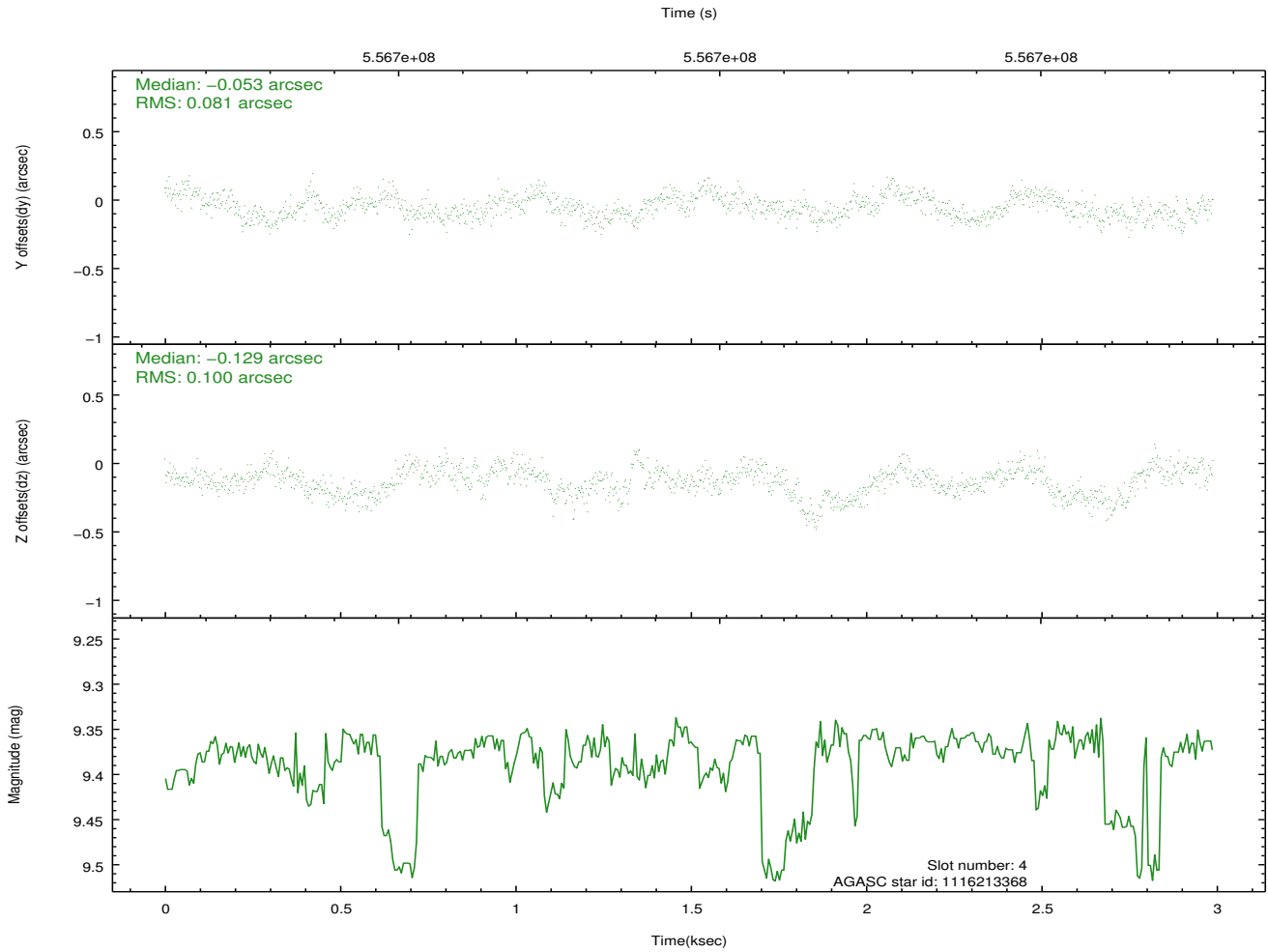
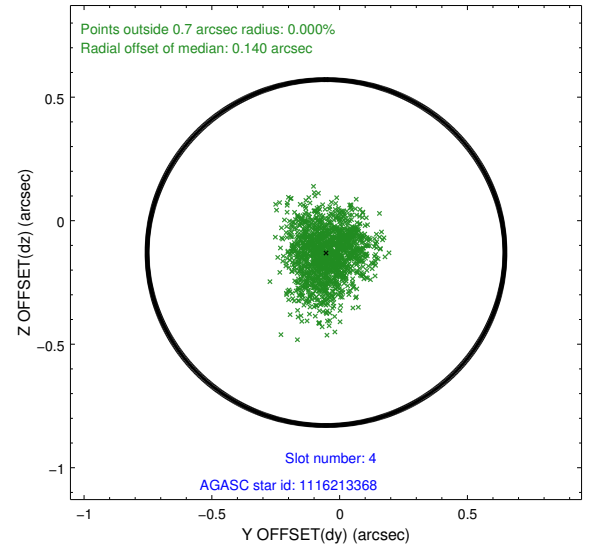
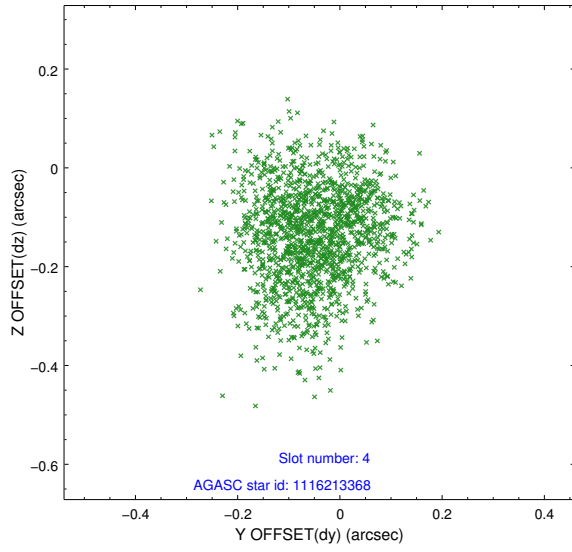
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.20	730	0.153	-0.113	0.007	0.012	0.000000	0.000000	928.99	-1733.64
1	FID		ACIS-S-5	7.24	730	-0.253	0.088	0.006	0.012	0.000000	0.000000	-1819.25	161.87
2	FID		ACIS-S-6	7.35	730	0.078	0.037	0.006	0.012	0.000000	0.000000	392.11	808.23
3	GUIDE	used	1116213288	8.74	1458	-0.101	-0.166	0.096	0.164	71.629957	-59.225093	2289.76	347.38
4	GUIDE	used	1116213368	9.38	1457	-0.053	-0.129	0.137	0.218	71.111872	-59.321779	2187.13	1355.95
5	GUIDE	used	1163396000	6.62	1459	-0.080	0.066	0.109	0.168	72.195946	-60.258939	-1569.51	293.30
6	GUIDE	used	1163398984	9.01	1459	-0.017	0.153	0.146	0.220	71.550746	-60.017670	-440.26	1193.28
7	GUIDE	used	1116213528	8.85	1458	0.239	0.085	0.142	0.257	72.912428	-59.010325	2425.83	-2139.21

2.4 Star Slots

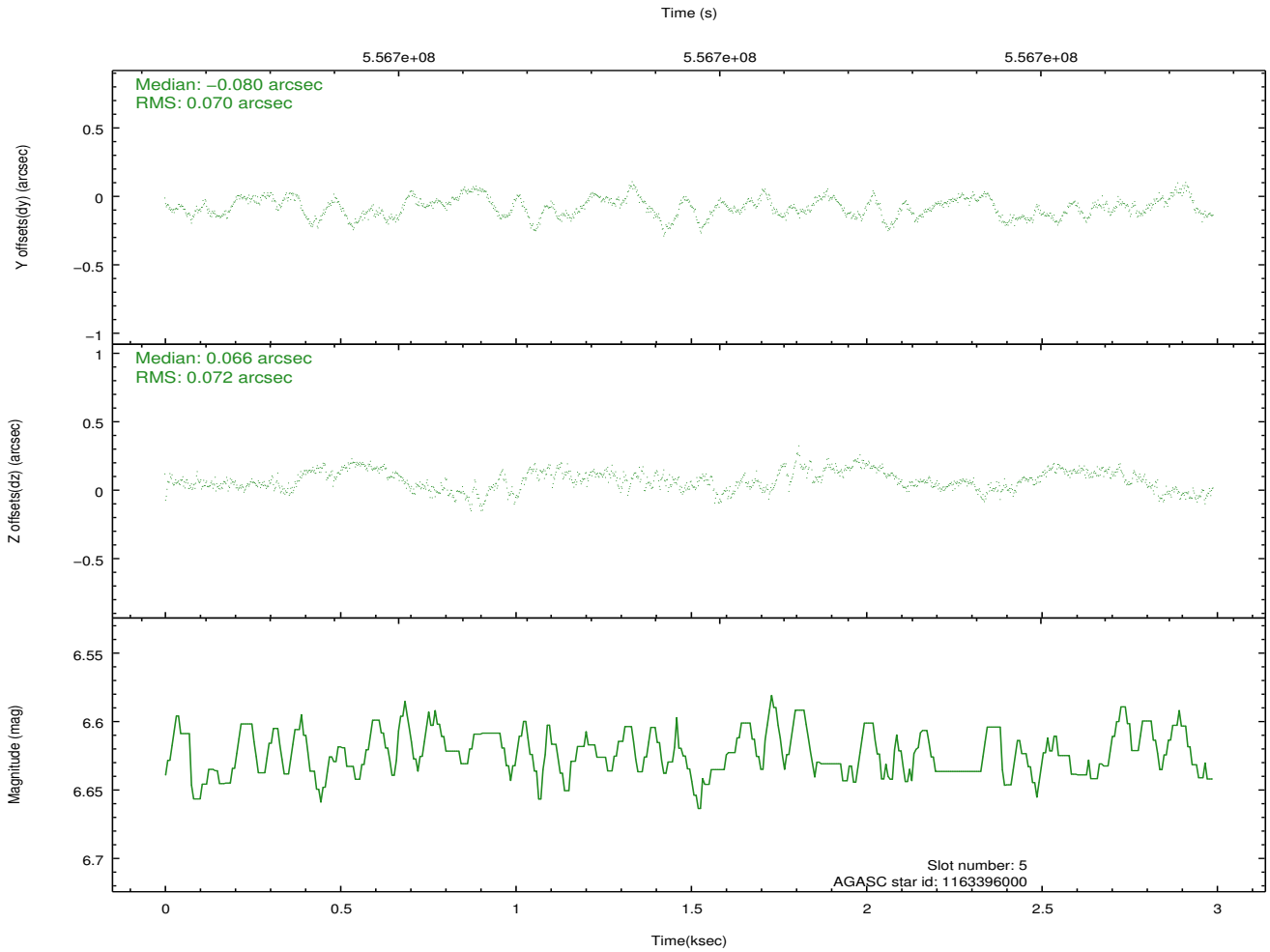
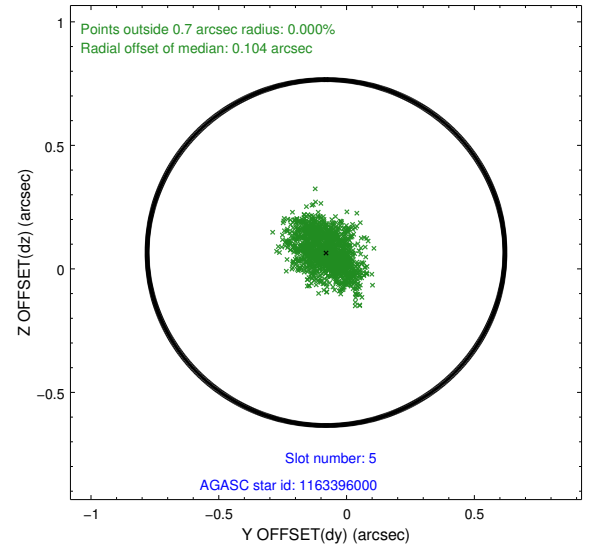
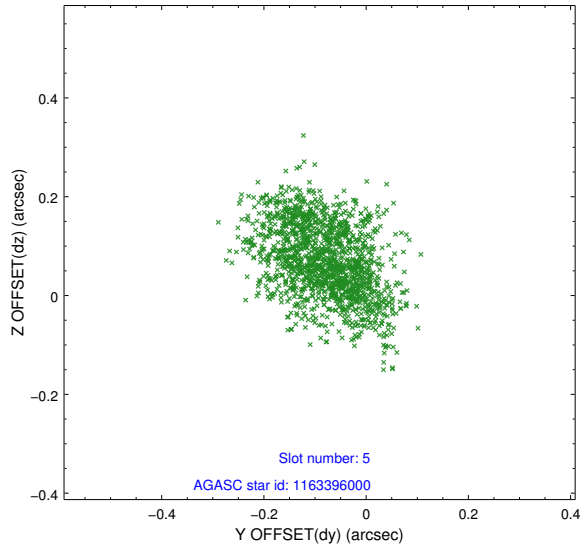
2.4.1 Slot 3



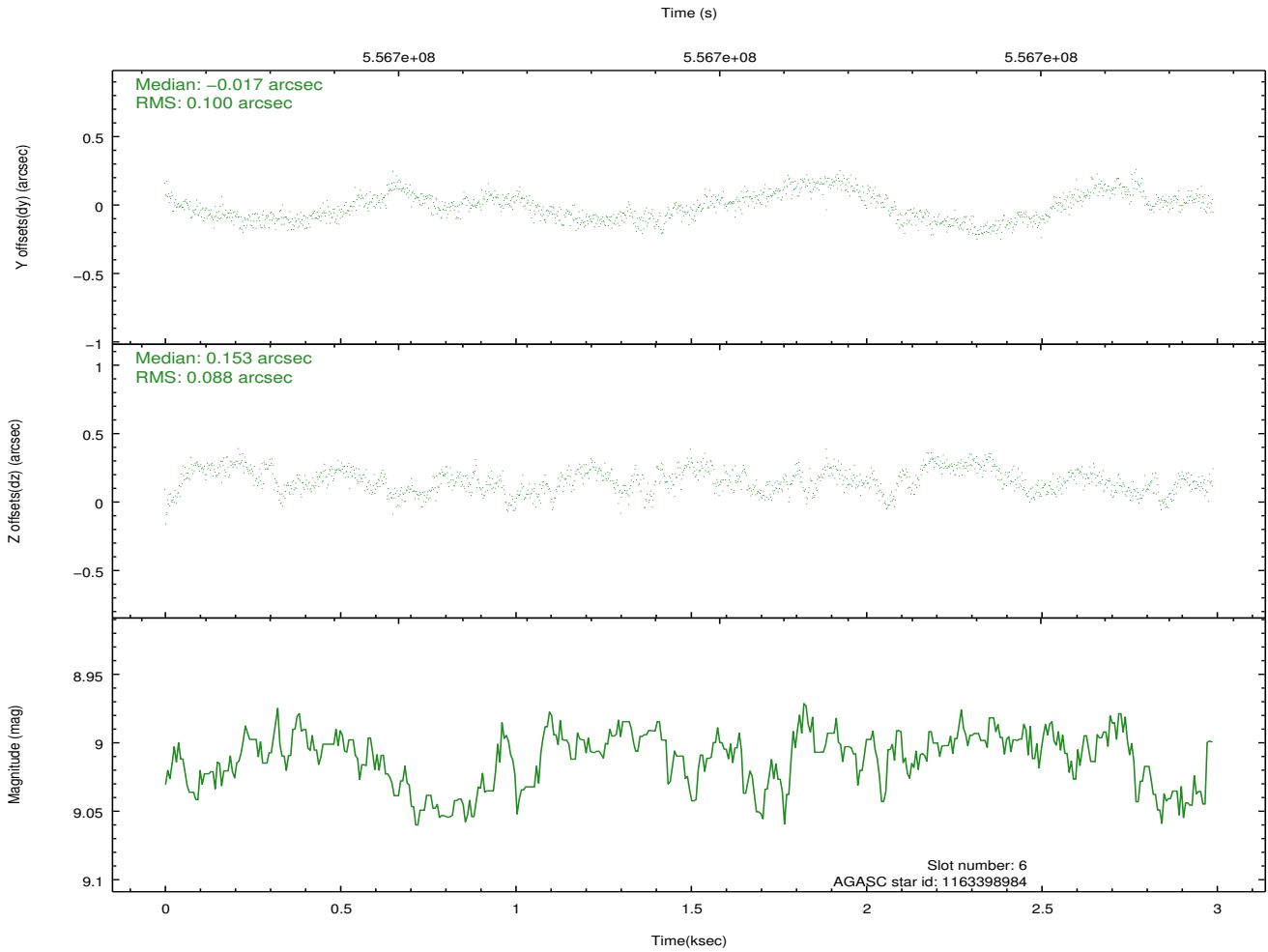
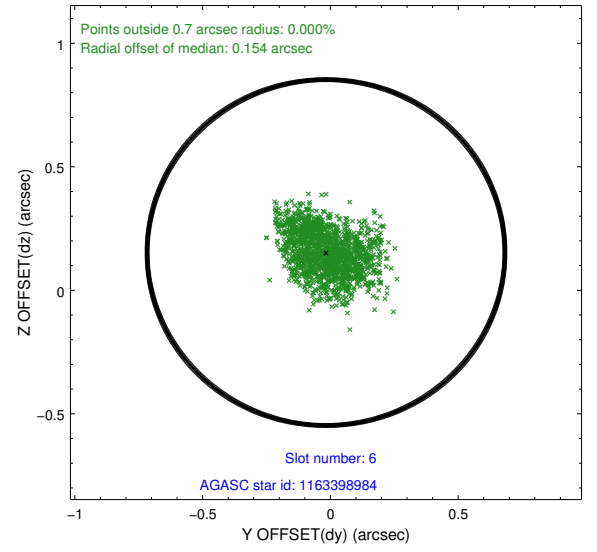
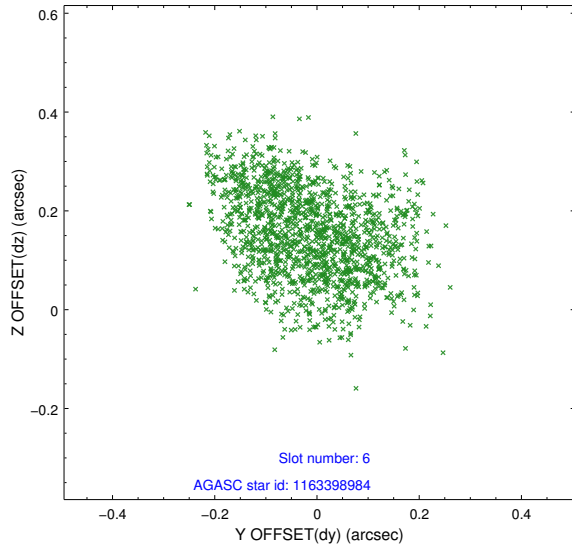
2.4.2 Slot 4



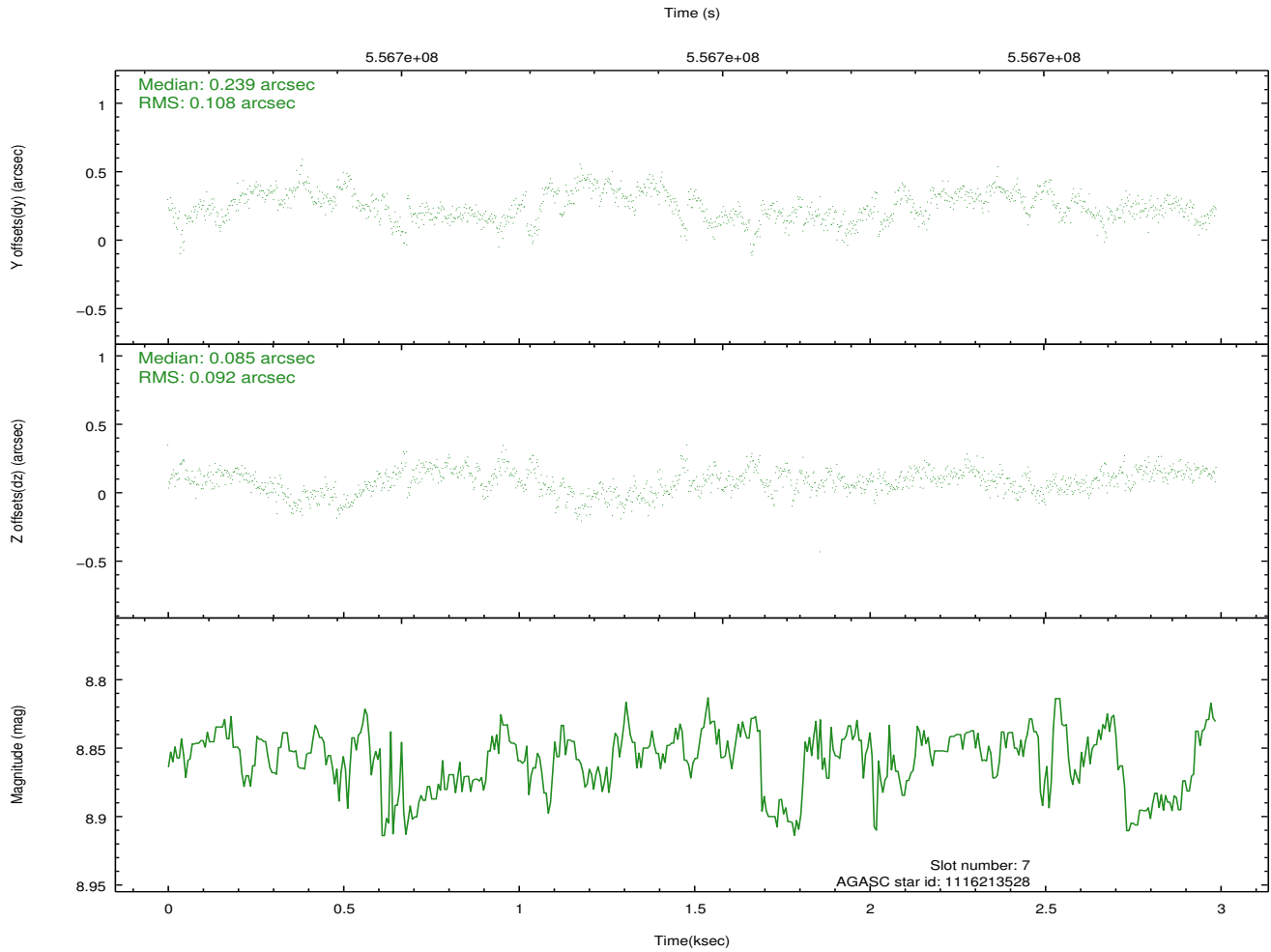
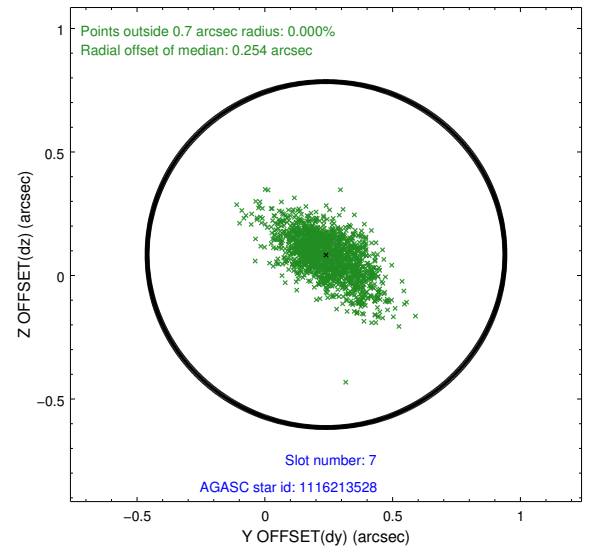
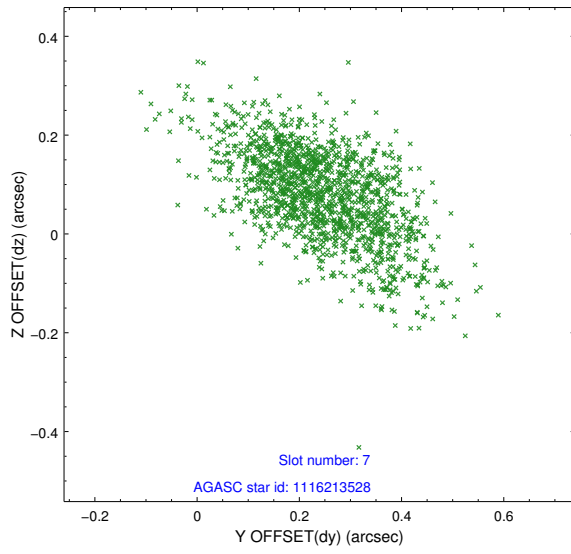
2.4.3 Slot 5



2.4.4 Slot 6

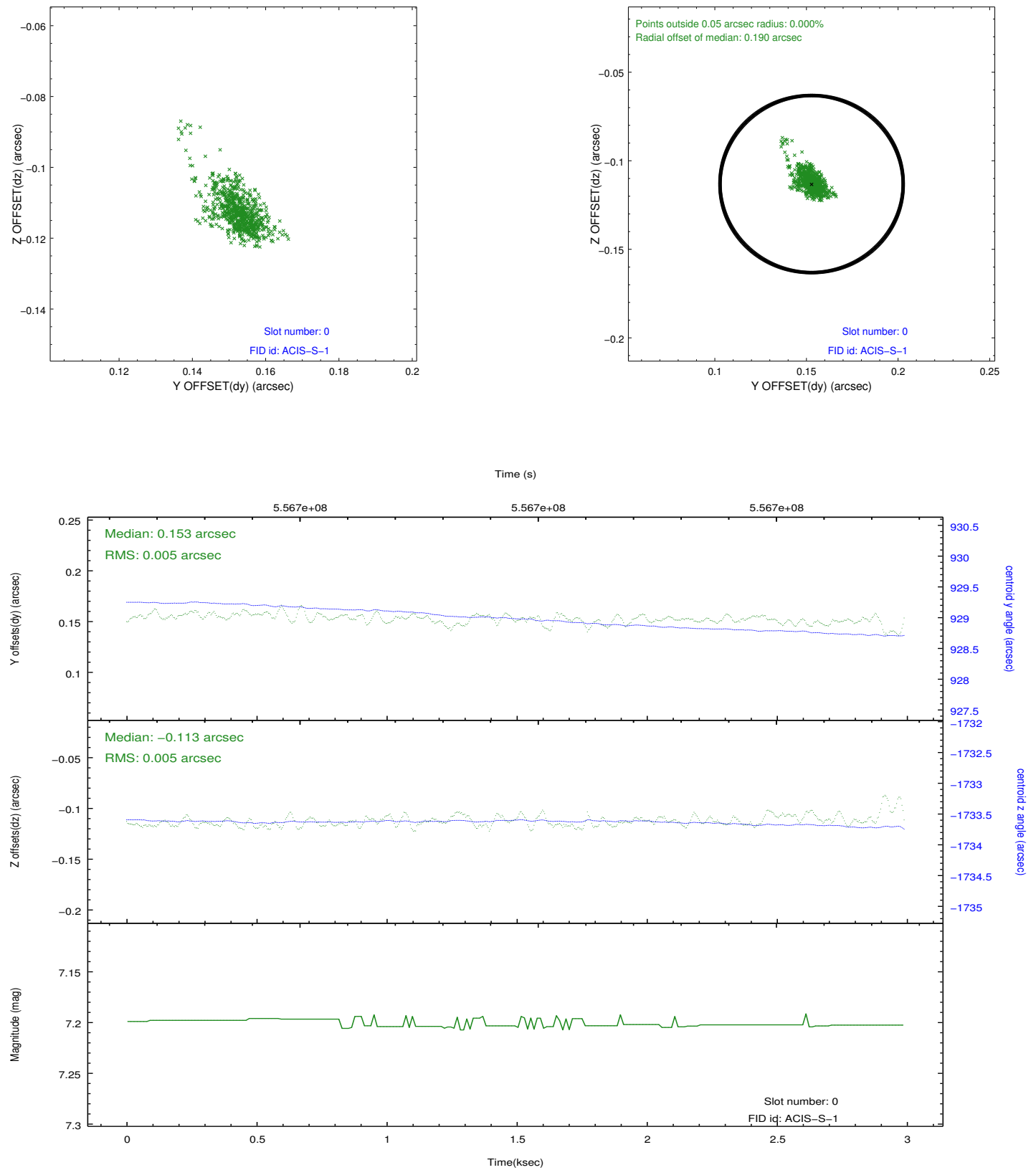


2.4.5 Slot 7

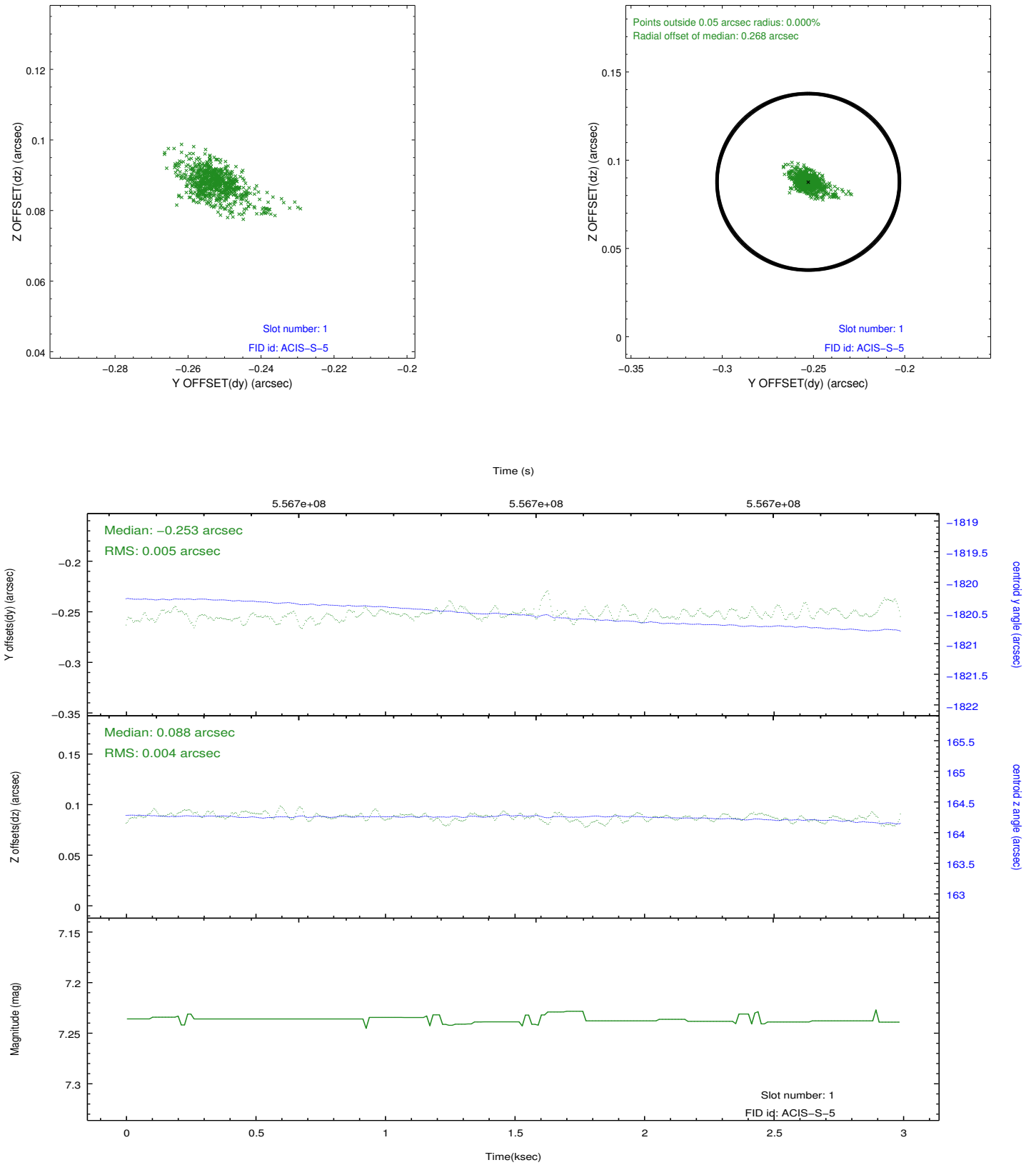


2.5 FID Slots

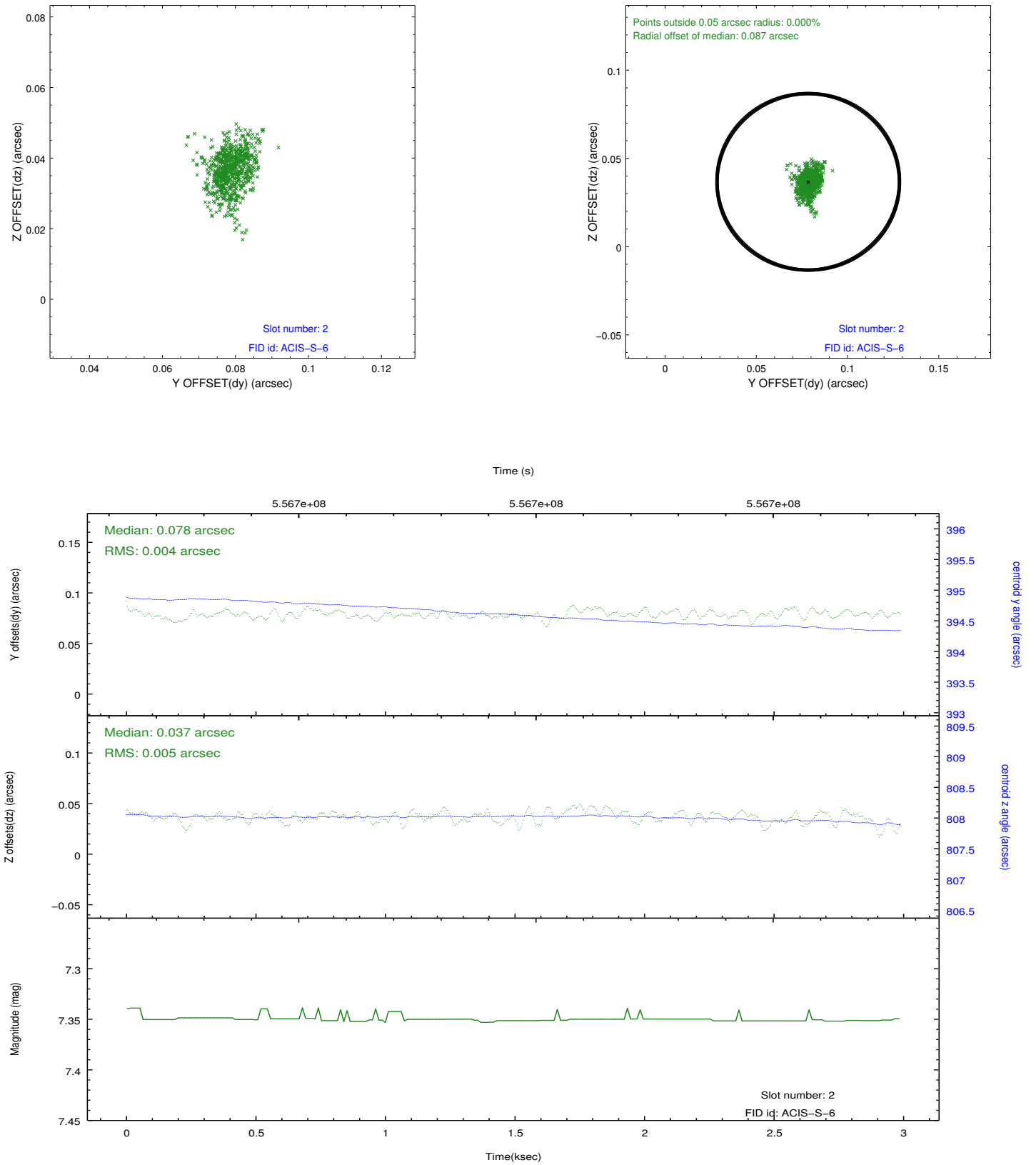
2.5.1 Slot 0



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)	2015.08.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.571665815711

A.2 Comments