

V&V Reference Report

L2 ASCDS Version : 10.4.3.1

Observation 18139 - L2 Version 2
Chandra X-Ray Center

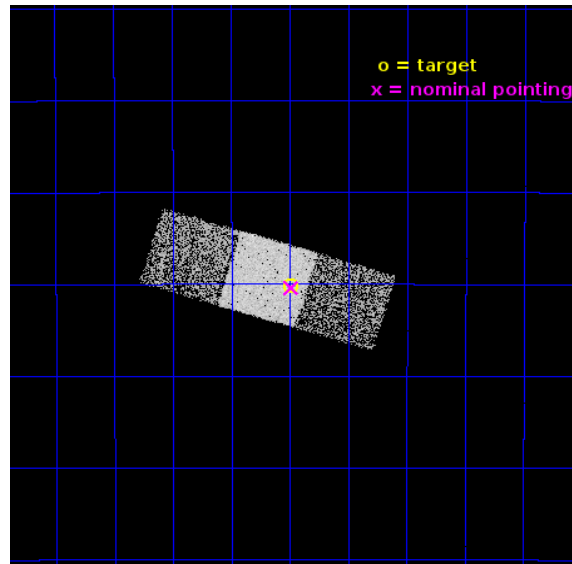
L2 Processing Date : May 4 2016

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1 Front

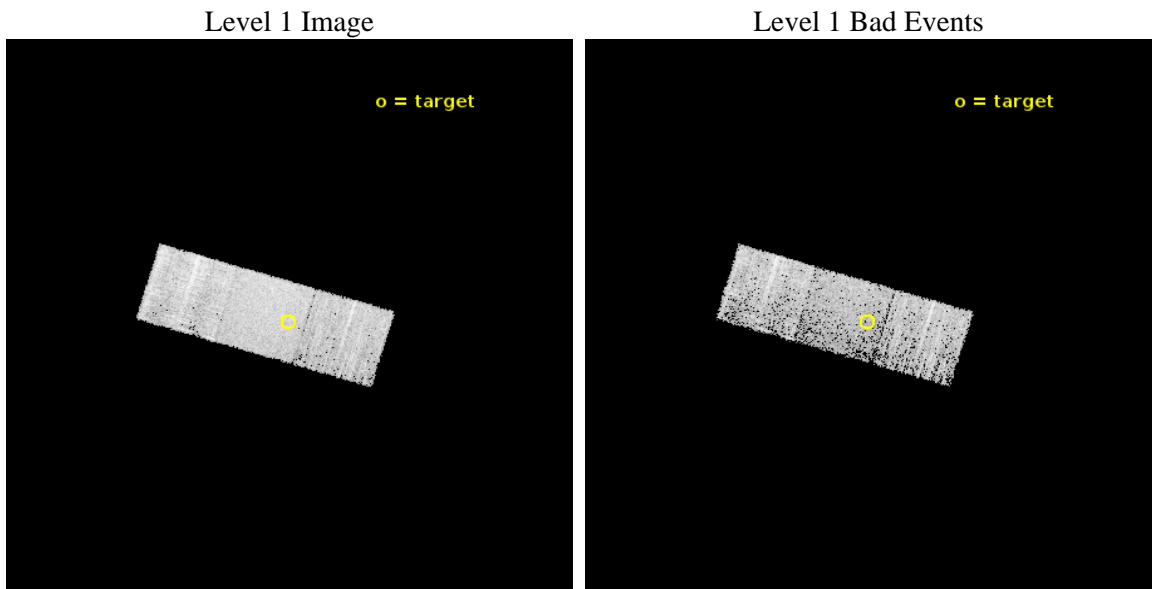
seq_num	703205	Sequence number
obs_id	18139	Observation id
title	X-RAYING FORNAX	Proposal title
observer	Elena Gallo	Principal investigator
object	fcc143	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	53.746667	Observer's specified target RA [deg]
dec_targ	-35.171111	Observer's specified target Dec [deg]
ra_nom	53.746706026813	Nominal RA [deg]
dec_nom	-35.173656512638	Nominal Dec [deg]
roll_nom	196.77391654383	Nominal Roll [deg]
revision	2	Processing version of data
ontime	4913.5000379086	Sum of GTIs [s]
livetime	4849.3015426472	Livetime [s]
ontime6	4913.5000379086	Sum of GTIs [s]
ontime7	4913.5000379086	Sum of GTIs [s]
ontime8	4913.5000379086	Sum of GTIs [s]
l2events	23707	Number of level 2 events



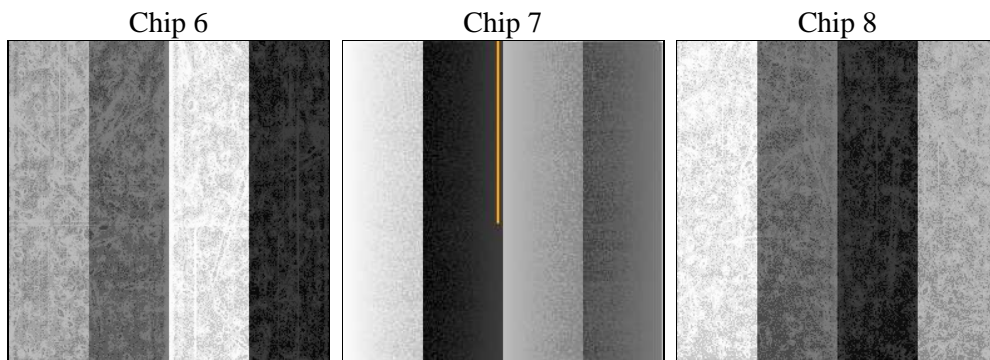
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	4800.000000	[s] Scheduled observation exposure time
ascdsver	10.4.3.1	Processing system revision	ontime	4913.5000379086	Sum of GTIs [s]
caldsver	4.7.1	 	ontime6	4913.5000379086	Sum of GTIs [s]
date	2016-05-04T19:06:50	Date and time of file creation	ontime7	4913.5000379086	Sum of GTIs [s]
revision	2	Processing version of data	ontime8	4913.5000379086	Sum of GTIs [s]
			l1events	110065	Number of level 1 events

2.1.4 Events

	ccd 6	ccd 7	ccd 8
level 1 events	29998	38734	41333
rejected events	26434	21514	30068
rejected %	88%	55%	72%

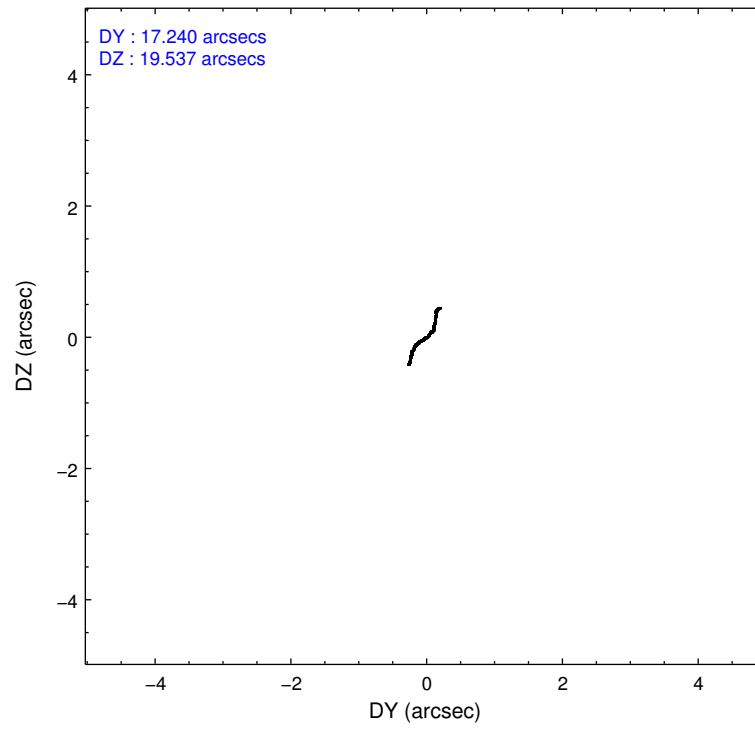
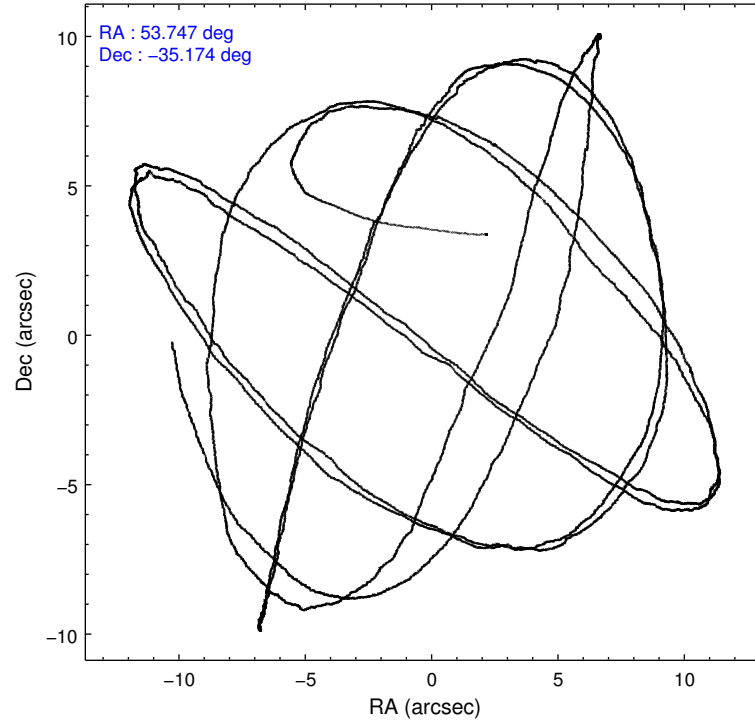
	ccd 6	ccd 7	ccd 8
grade 0 events	1248	1489	3295
	4%	3%	7%
grade 1 events	19	50	26
	0%	0%	0%
grade 2 events	775	3642	2834
	2%	9%	6%
grade 3 events	362	1422	1008
	1%	3%	2%
grade 4 events	366	1405	1005
	1%	3%	2%
grade 5 events	1446	3869	2212
	4%	9%	5%
grade 6 events	820	9282	3133
	2%	23%	7%
grade 7 events	24962	17575	27820
	83%	45%	67%

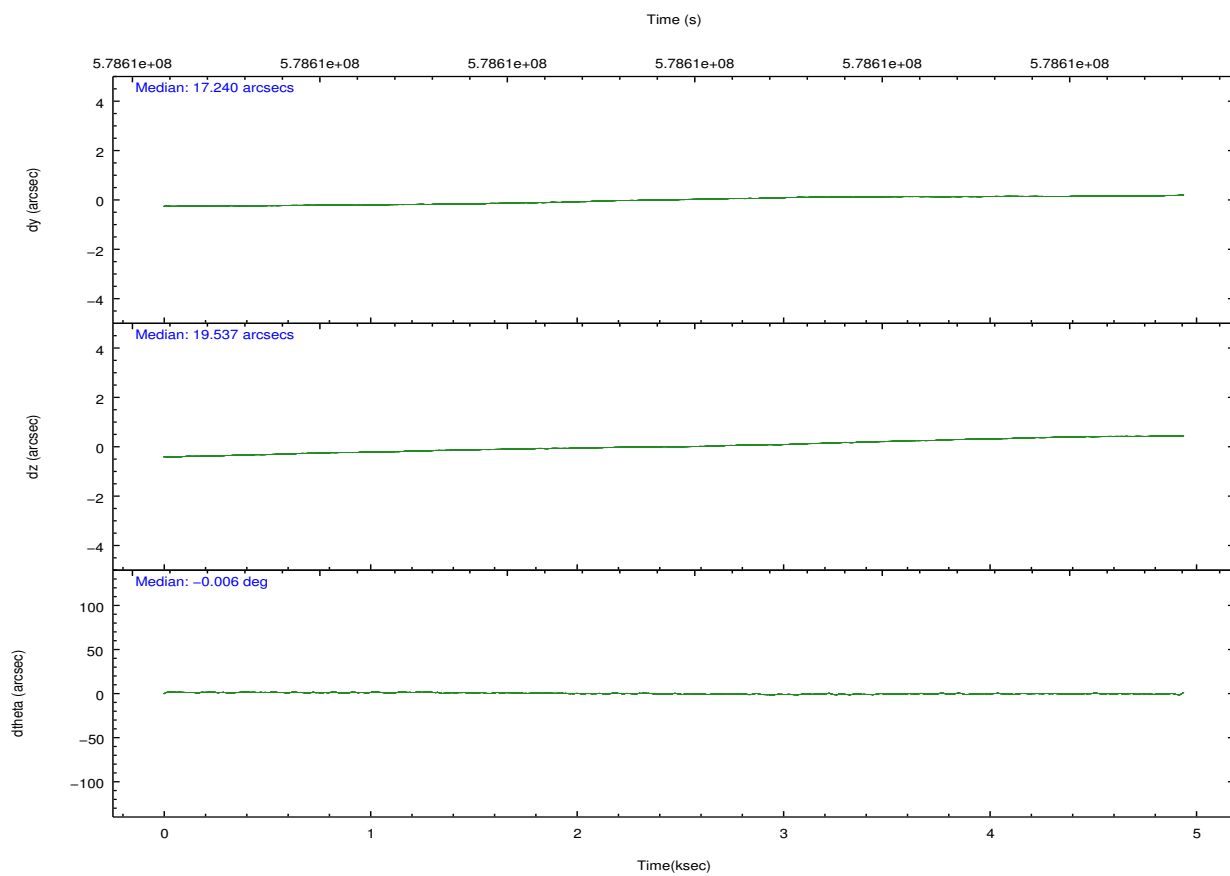
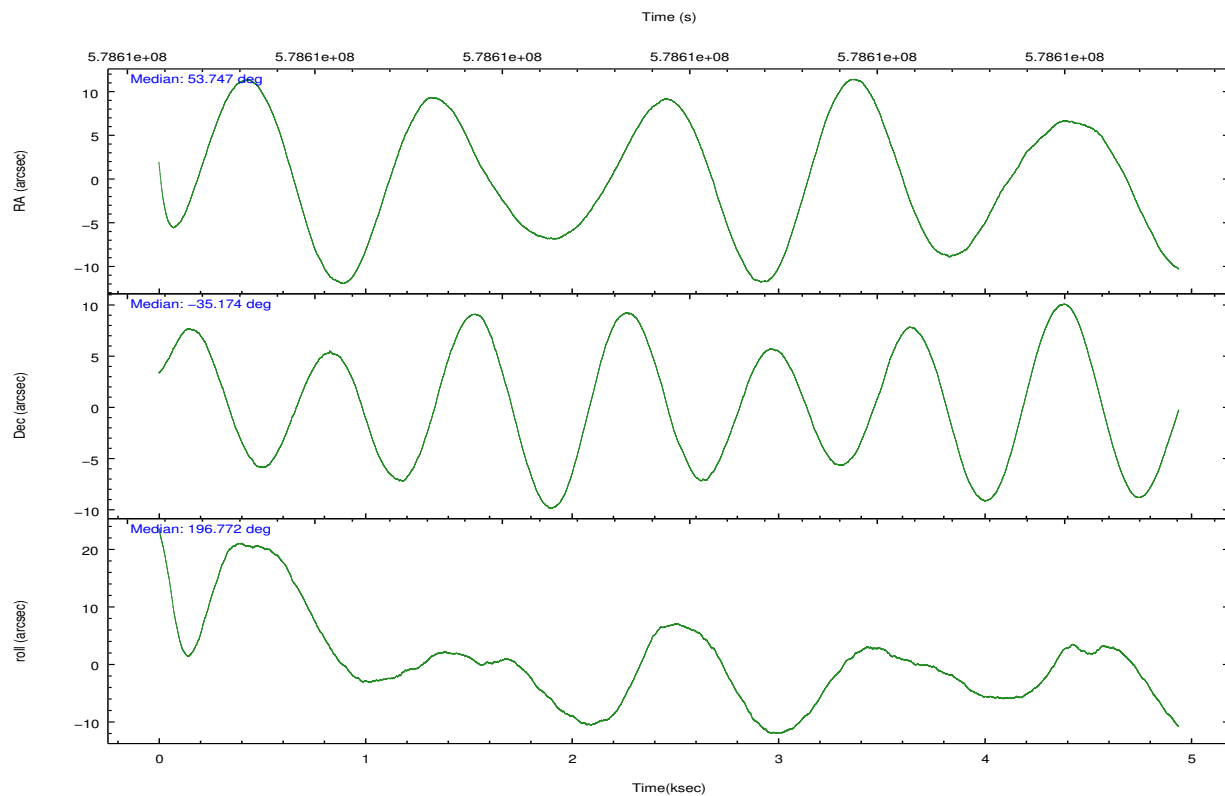
2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-678	ACIS-678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	53.769320	53.74670602681346
[deg] Pointing Dec	-35.153419	-35.17365651263768
[deg] Pointing Roll	196.630275	196.7739165438274
[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)	578607562.184000	578606122.08004
Observation start date	2016-05-02T20:18:14	2016-05-02T19:55:22
[s] Observation end time (MET)	578612362.184000	578613402.1429501
Observation end date	2016-05-02T21:38:14	2016-05-02T21:56:42
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	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	N	N
CCD S2 on	O2	Y
CCD S3 on	Y	Y
CCD S4 on	O1	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



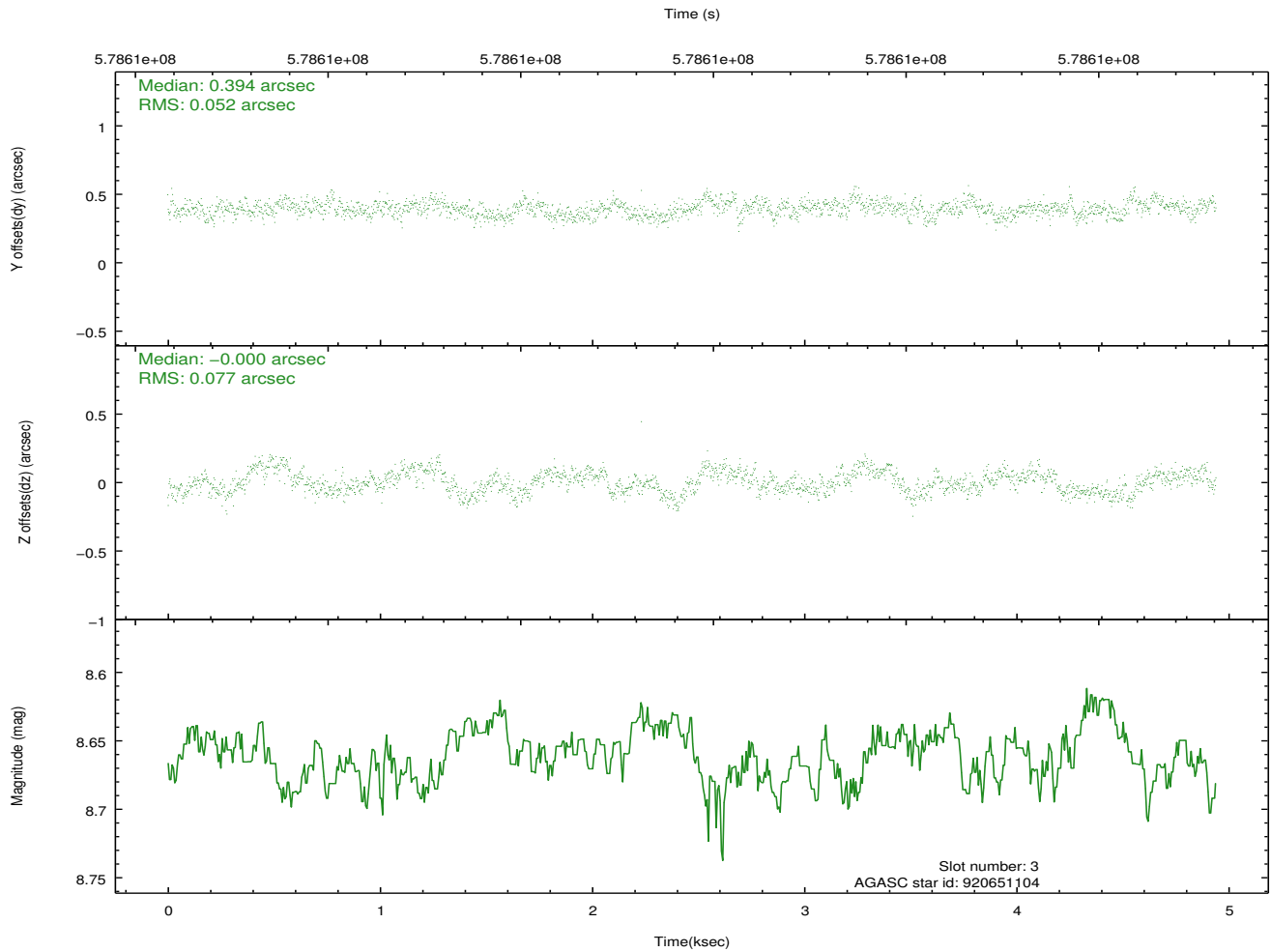
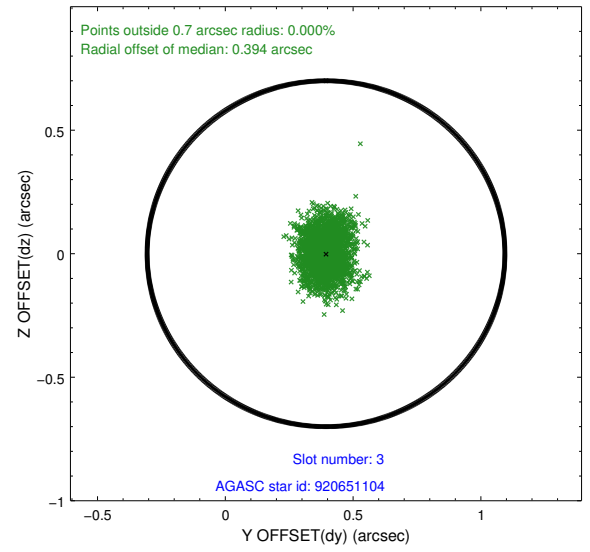
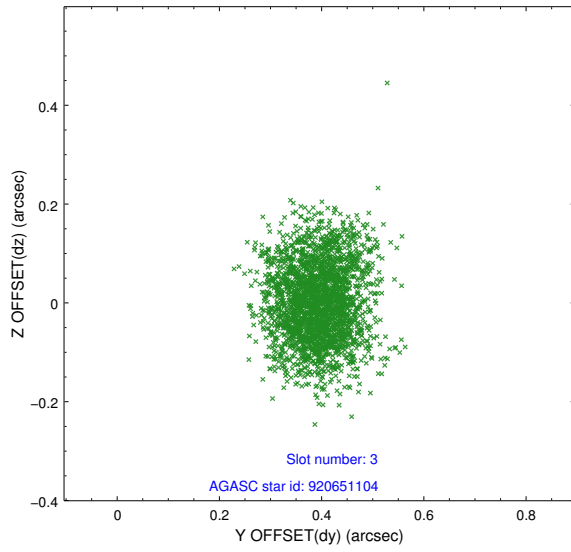


Slot Statistics

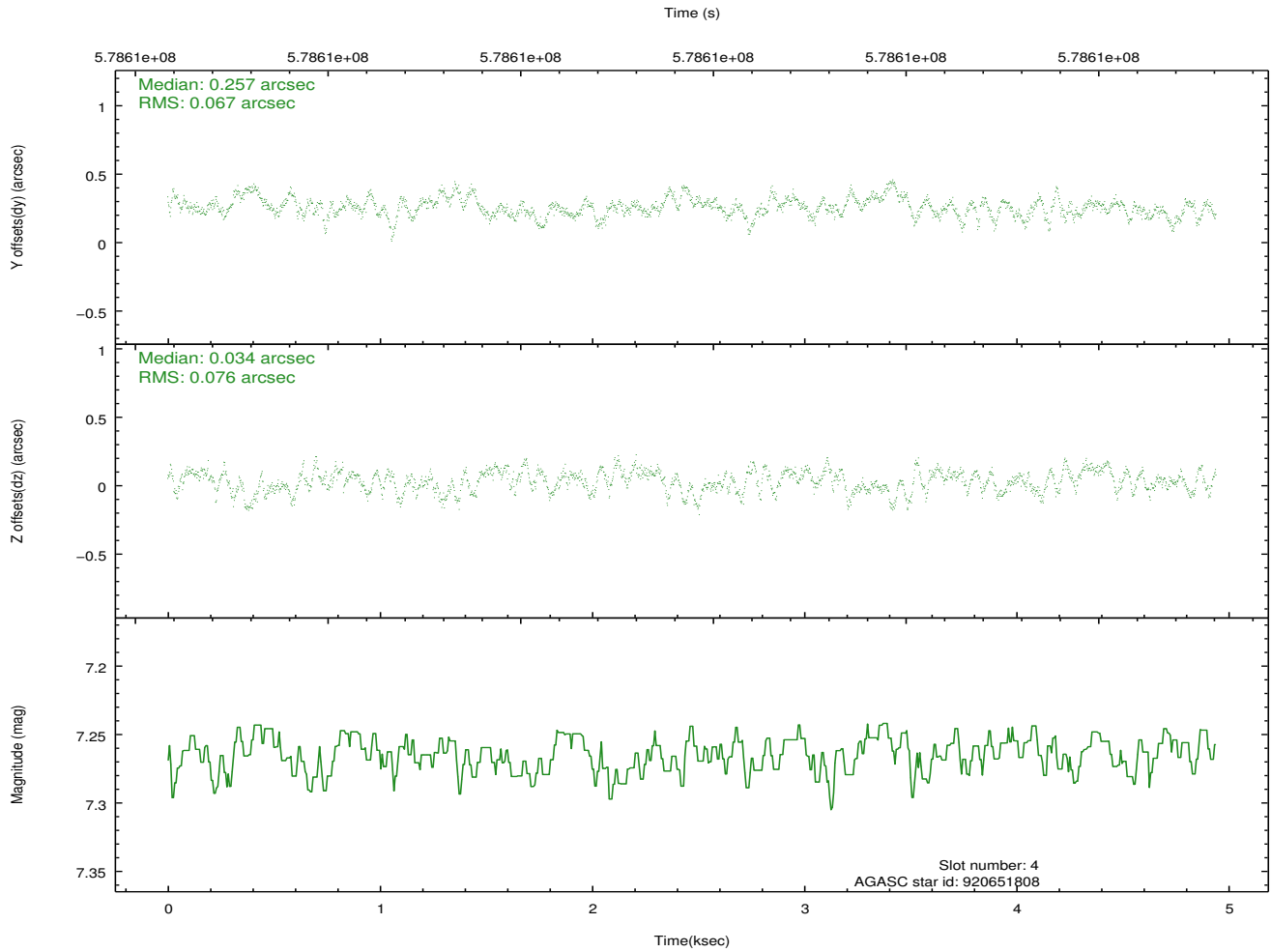
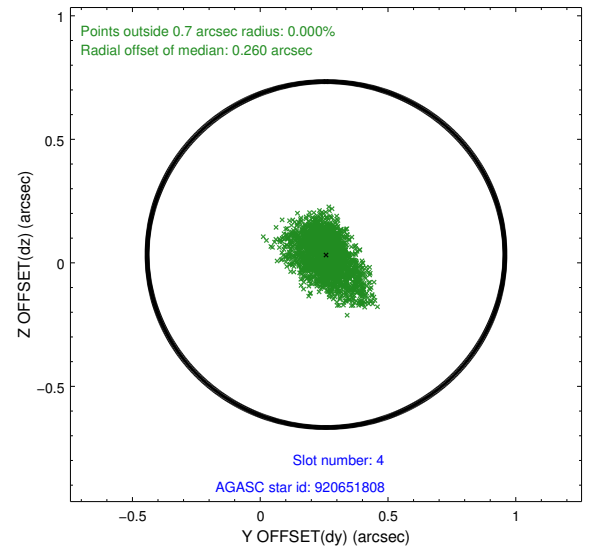
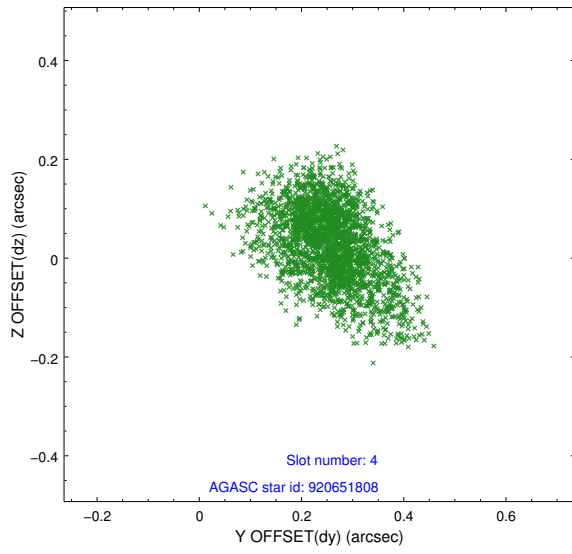
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.10	1205	-0.193	-0.132	0.008	0.015	0.000000	0.000000	-770.40	-1741.17
1	FID		ACIS-S-4	7.22	1205	0.473	0.129	0.007	0.012	0.000000	0.000000	2142.93	166.36
2	FID		ACIS-S-5	7.23	1205	-0.311	0.012	0.008	0.014	0.000000	0.000000	-1821.83	161.22
3	GUIDE	used	920651104	8.66	2408	0.394	-0.000	0.098	0.162	53.495721	-34.796351	408.37	-1461.59
4	GUIDE	used	920651808	7.26	2411	0.257	0.034	0.106	0.181	53.624364	-34.832415	80.98	-1229.03
5	GUIDE	used	921571056	8.53	2410	-0.820	0.419	0.107	0.165	54.339011	-34.649674	-2134.69	-1249.97
6	GUIDE	used	921572720	8.71	2408	0.323	0.065	0.099	0.158	54.127171	-34.789534	-1388.34	-950.71
7	GUIDE	used	921970112	9.55	2406	-0.161	-0.516	0.145	0.235	54.291262	-35.695592	-902.94	2310.23

2.4 Star Slots

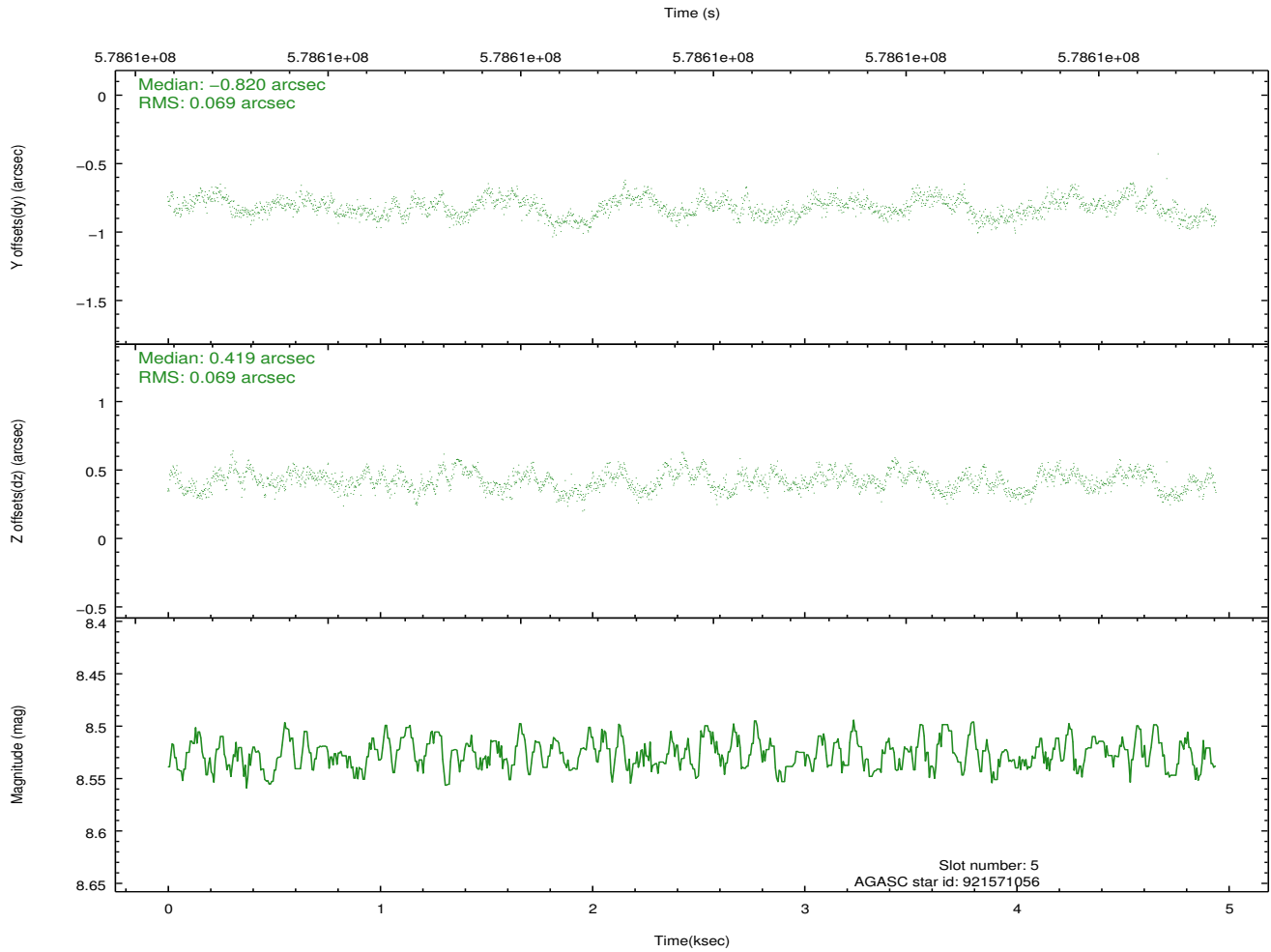
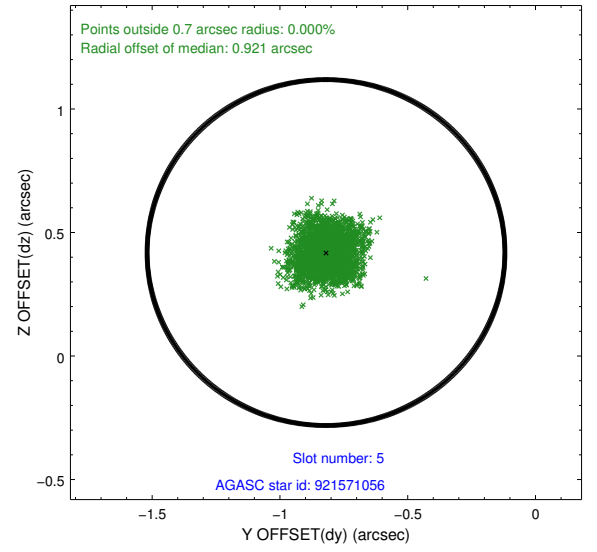
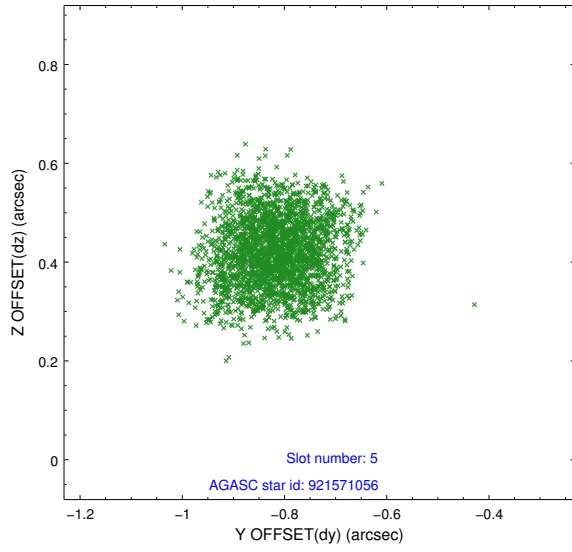
2.4.1 Slot 3



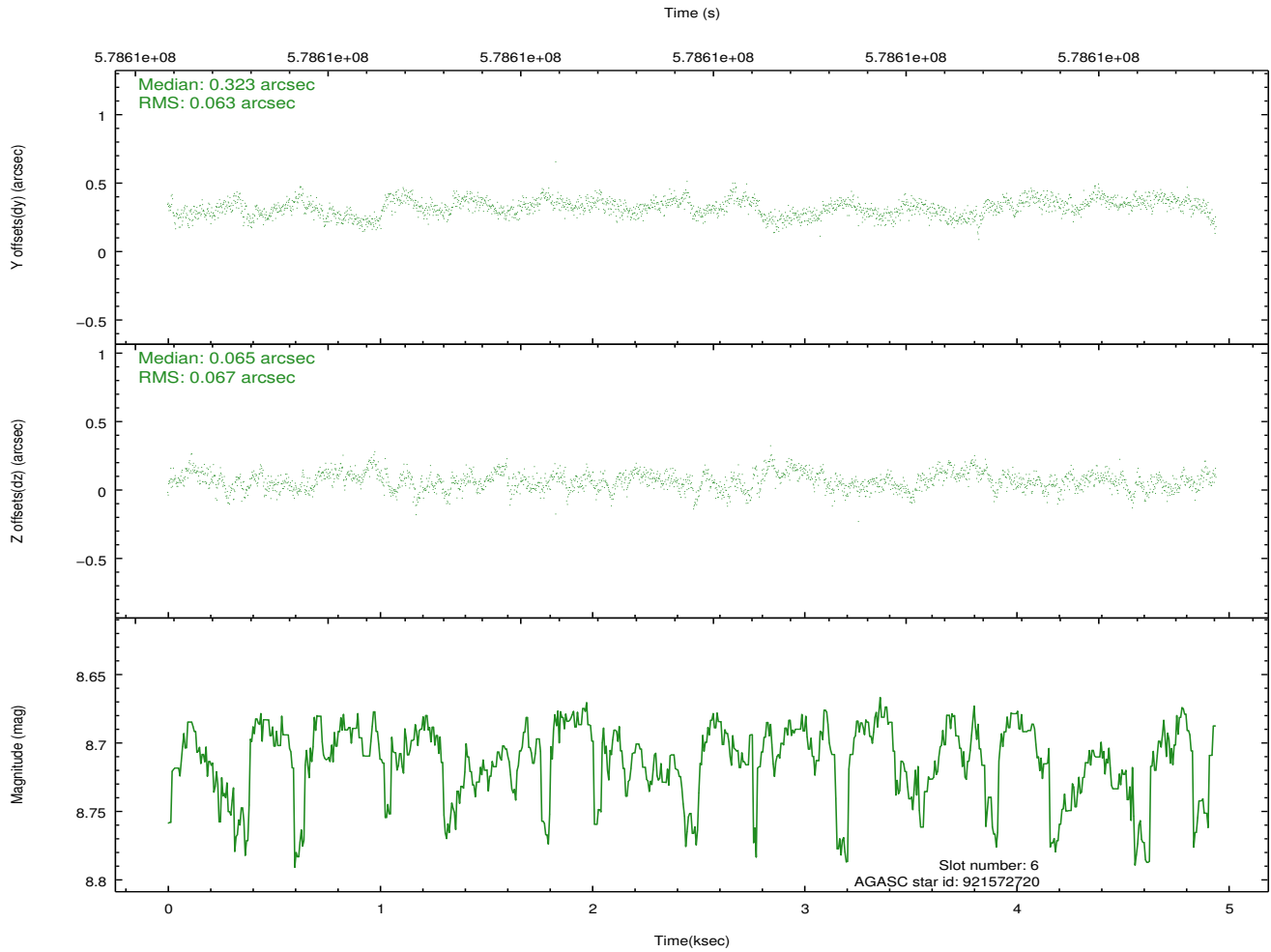
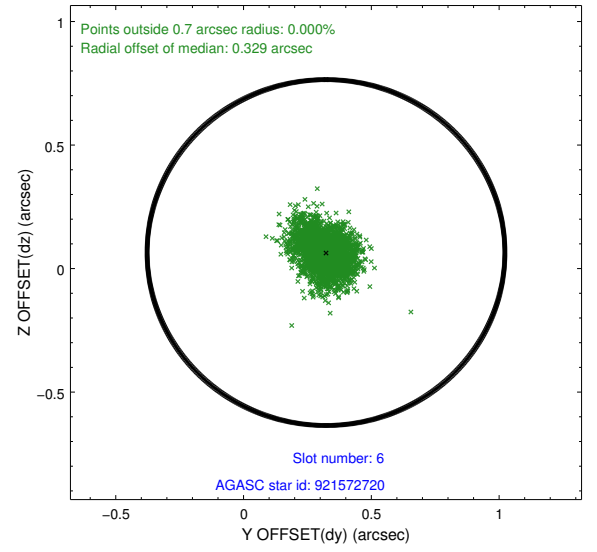
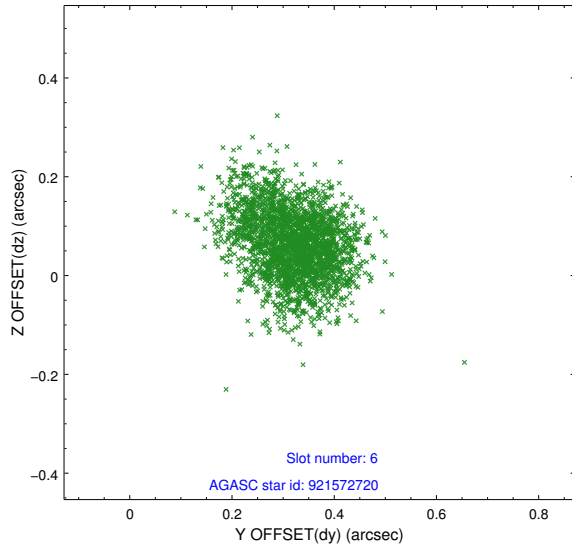
2.4.2 Slot 4



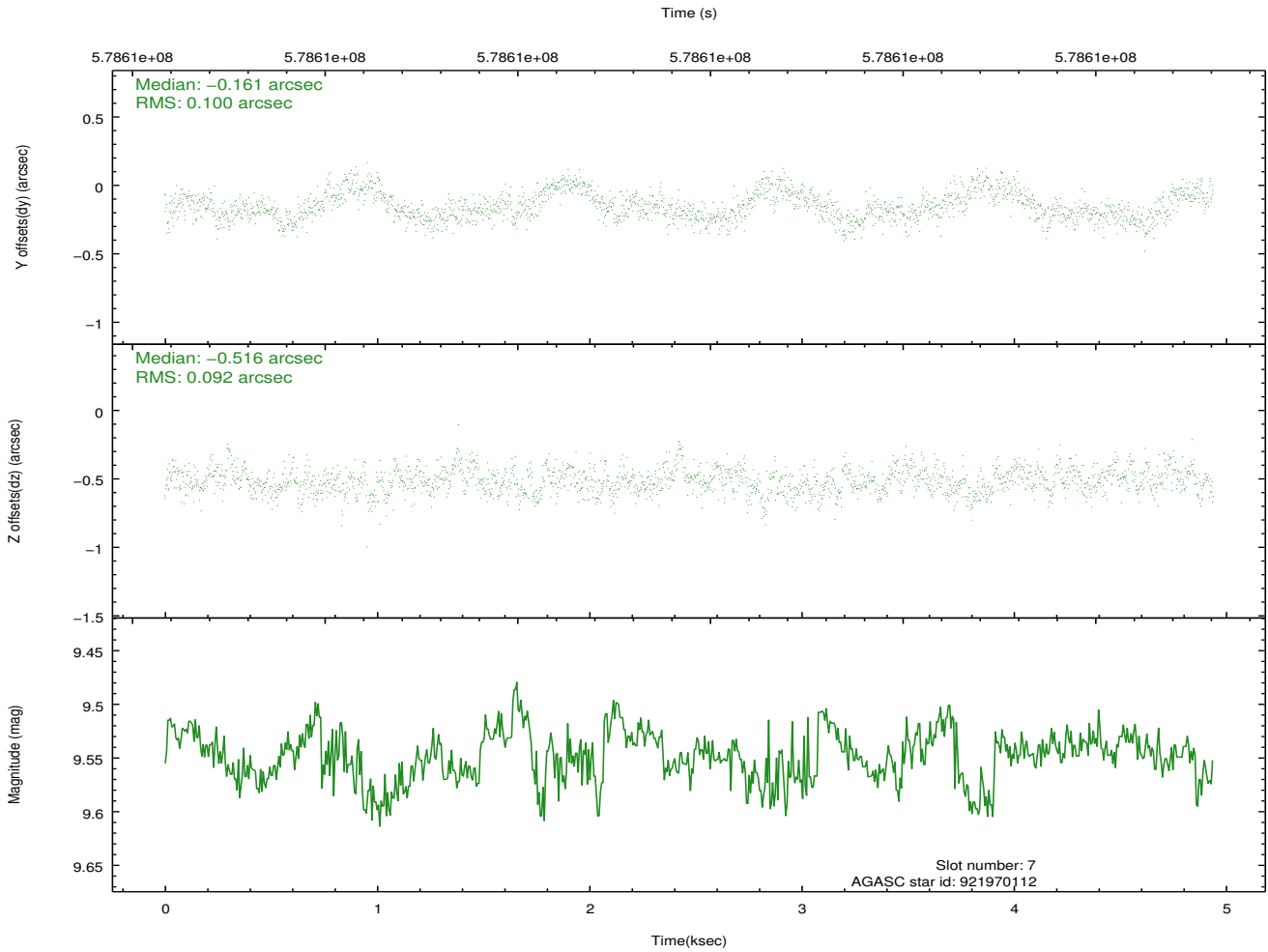
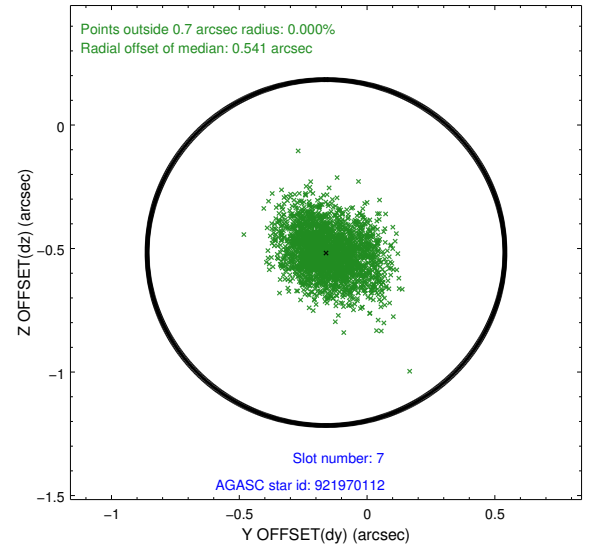
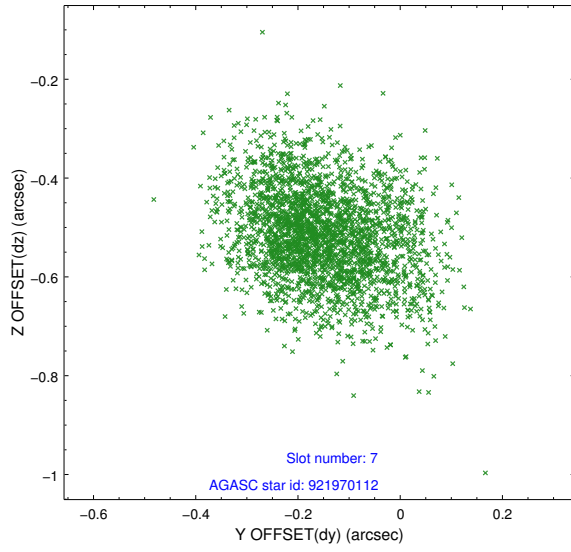
2.4.3 Slot 5



2.4.4 Slot 6

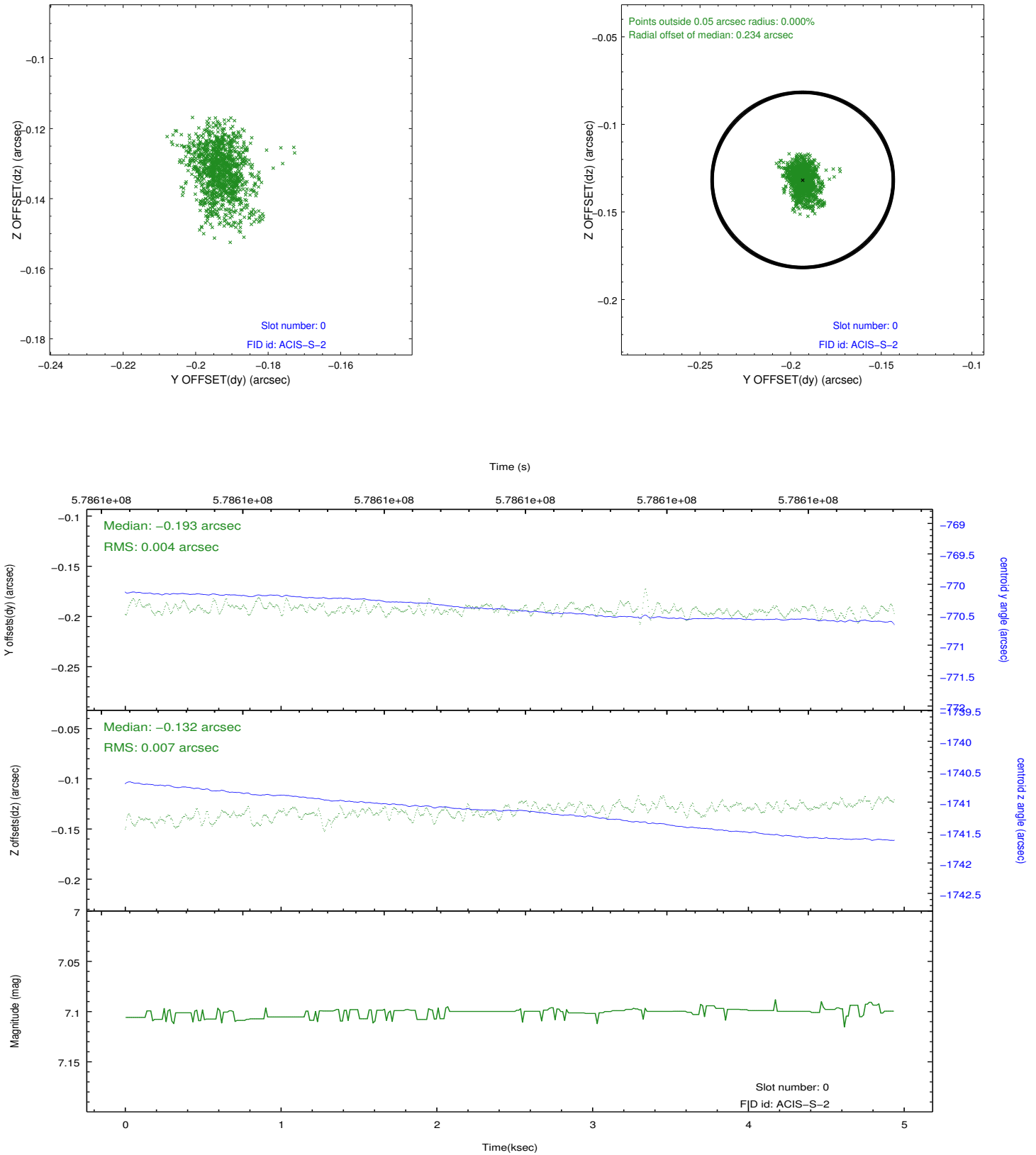


2.4.5 Slot 7

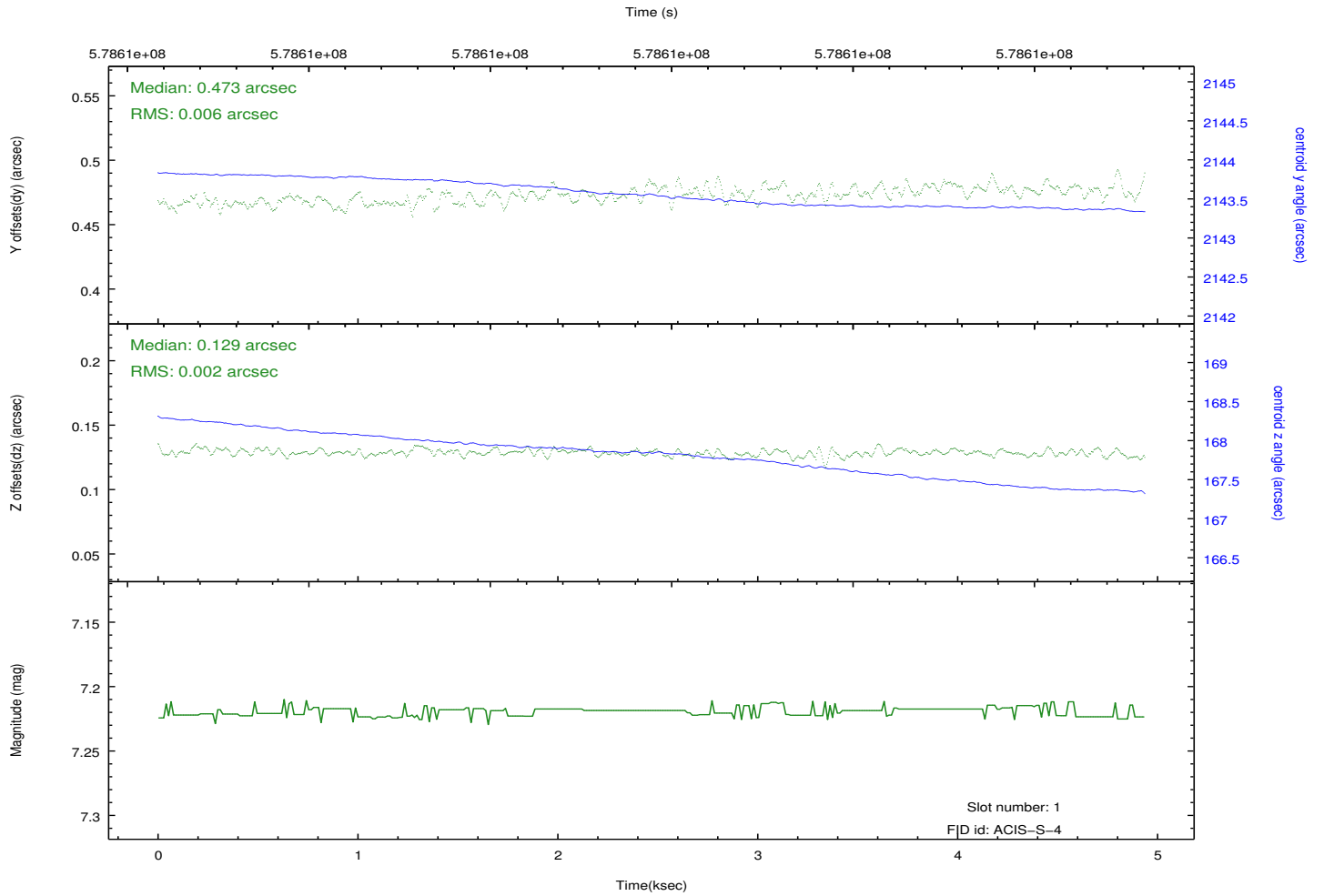
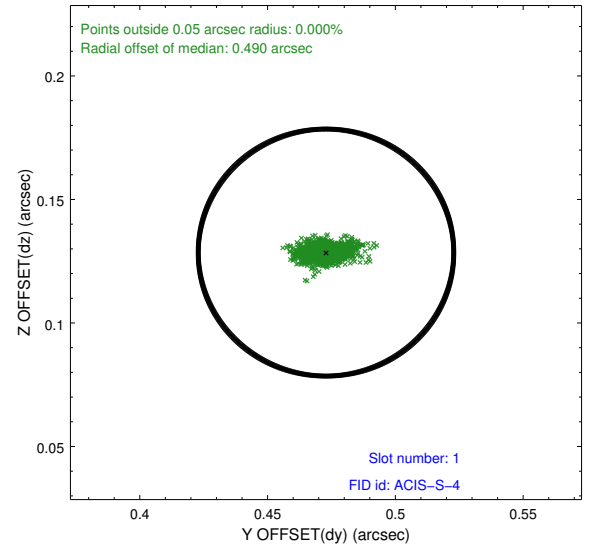
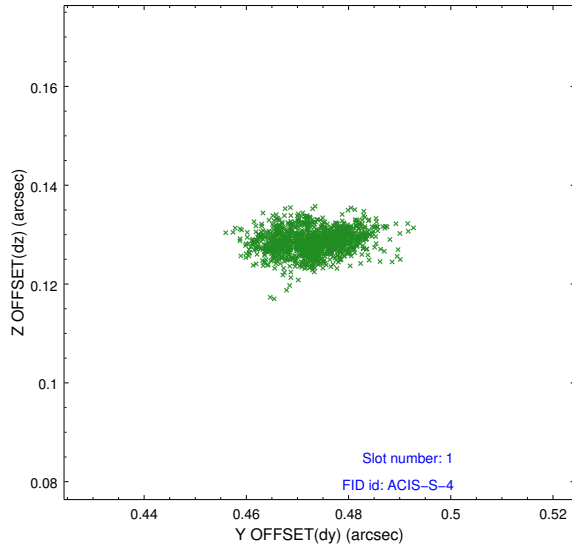


2.5 FID Slots

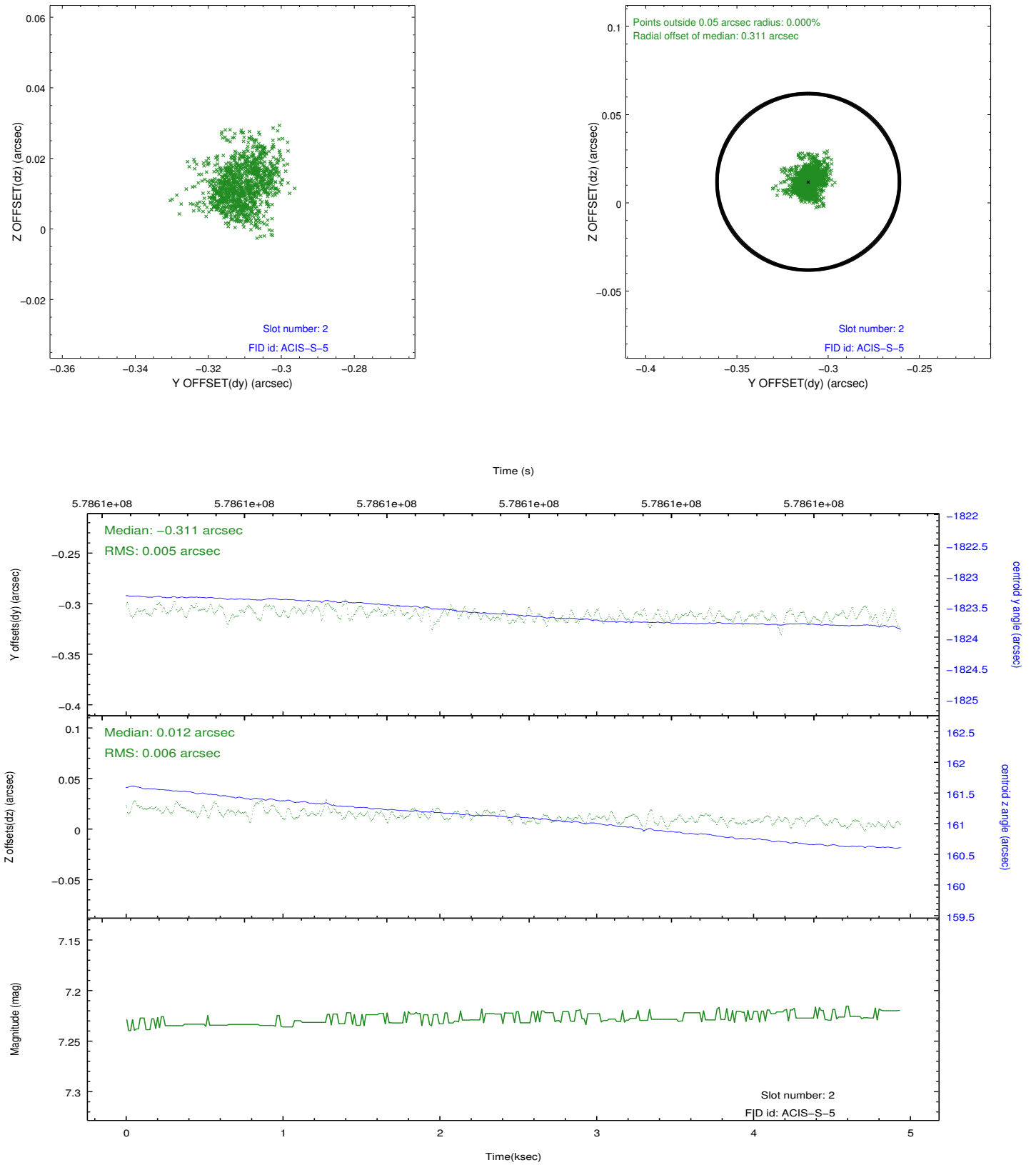
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2016.05.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	4.9135000379086

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(53.59499, -35.28092), (53.59708, -35.28040), (53.54789, -35.14669), (53.54581, -35.14720).