

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 2783 - L2 Version 6
Chandra X-Ray Center

L2 Processing Date : Feb 21 2013

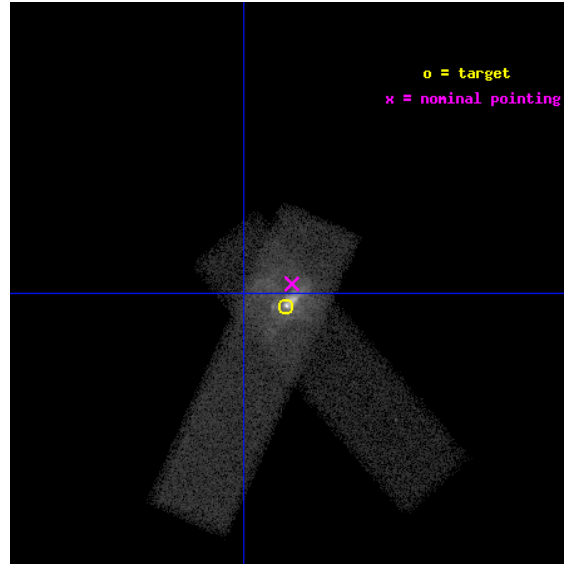
Contents

1	Front	3
2	OBI	4
2.1	OBI	4
2.1.1	Images	4
2.1.2	Bias	4
2.1.3	Parameters	5
2.1.4	Events	5
2.2	Compared Parameters	6
2.3	Aspect	7
2.4	Star Slots	10
2.4.1	Slot 3	10
2.4.2	Slot 4	11
2.4.3	Slot 5	12
2.4.4	Slot 6	13
2.4.5	Slot 7	14
2.5	FID Slots	15
2.5.1	Slot 0	15
2.5.2	Slot 1	16
2.5.3	Slot 2	17
3	OBI	18
3.1	OBI	18
3.1.1	Images	18
3.1.2	Bias	18
3.1.3	Parameters	19
3.1.4	Events	19
3.2	Compared Parameters	20
3.3	Aspect	21
3.4	Star Slots	24
3.4.1	Slot 3	24
3.4.2	Slot 4	25
3.4.3	Slot 5	26
3.4.4	Slot 6	27

3.4.5	Slot 7	28
3.5	FID Slots	29
3.5.1	Slot 0	29
3.5.2	Slot 1	30
3.5.3	Slot 2	31
A	Summary	32
A.1	Status	32
A.2	Comments	32

1 Front

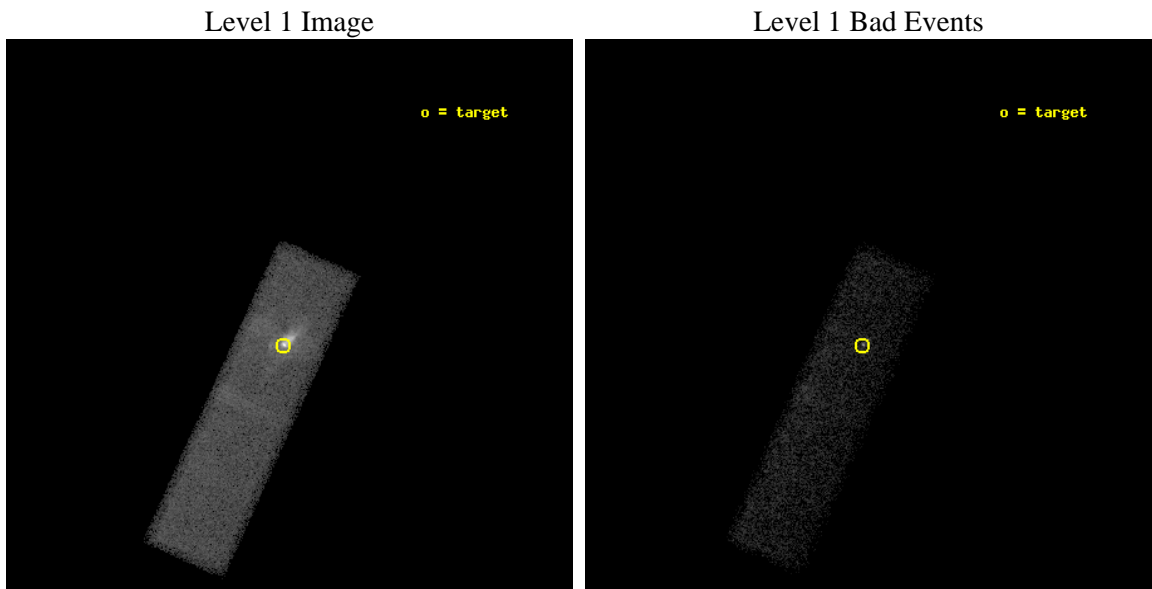
seq_num	500233	Sequence number
obs_id	2783	Observation id
title	X-RAY SPECTROSCOPY OF SNR N157B, ITS PULSAR AND WIND NEBULA	Propos
observer	Prof. Q. Daniel Wang	Principal investigator
object	SNR N157B	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	84.448333	Observer's specified target RA [deg]
dec_targ	-69.172222	Observer's specified target Dec [deg]
ra_nom	84.441543935812	Nominal RA [deg]
dec_nom	-69.162839440272	Nominal Dec [deg]
roll_nom	114.60434361869	Nominal Roll [deg]
revision	6	Processing version of data
ontime	50303.795649379	Sum of GTIs [s]
livetime	47849.135022714	Livetime [s]
ontime7	50303.795649379	Sum of GTIs [s]
l2events	127529	Number of level 2 events



2 OBI

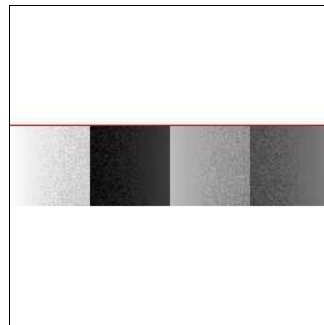
2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 7



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	45000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	29582.236360669	Sum of GTIs [s]
caldbver	4.5.5	 	ontime7	29582.236360669	Sum of GTIs [s]
date	2013-02-21T05:07:00	Date and time of file creation	l1events	121964	Number of level 1 events
revision	4	Processing version of data			

2.1.4 Events

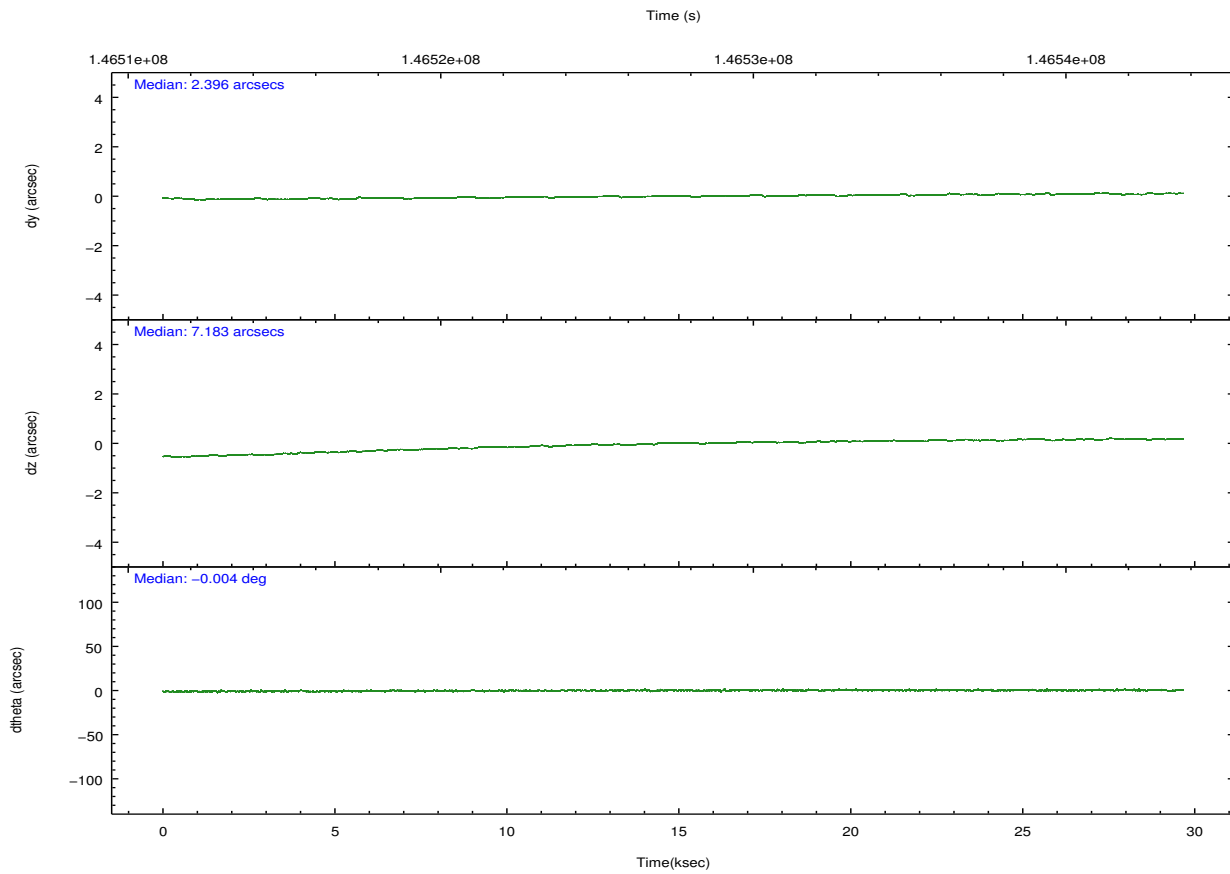
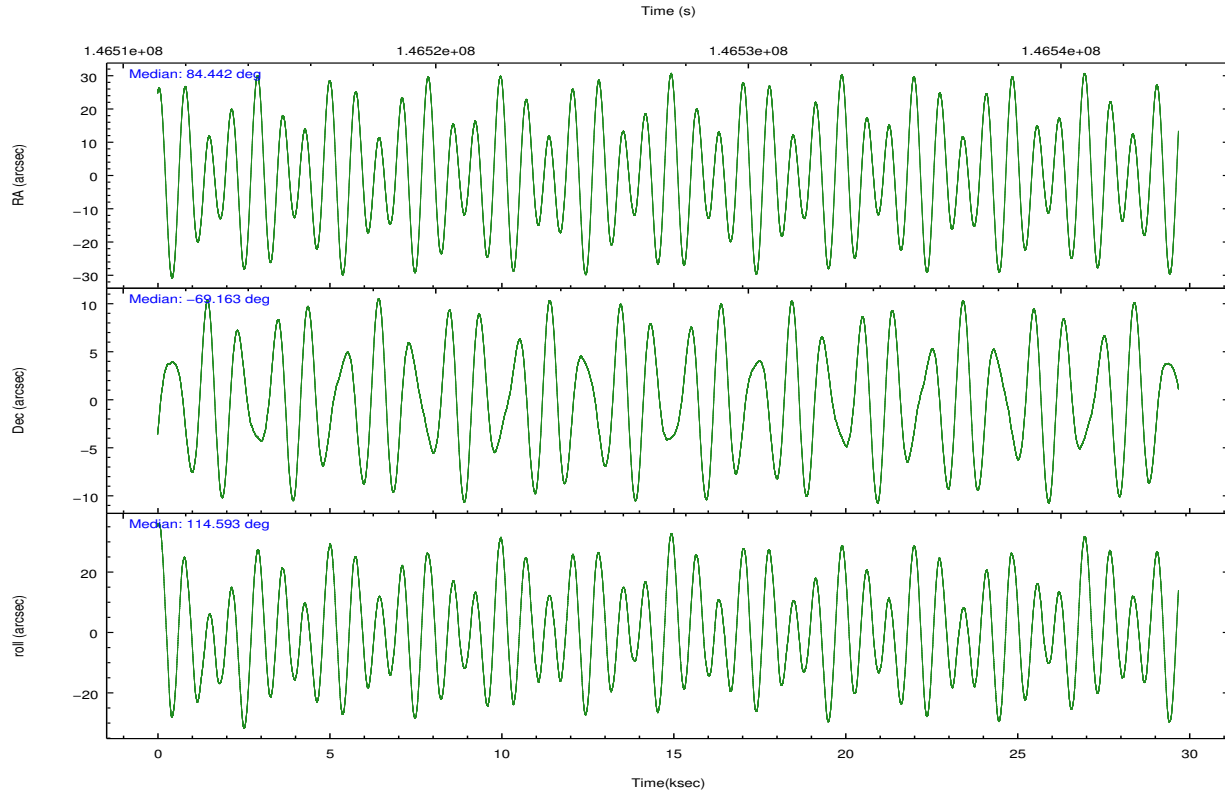
	ccd 7
level 1 events	121964
rejected events	39766
rejected %	32%

	ccd 7
grade 0 events	15990
	13%
grade 1 events	214
	0%
grade 2 events	19985
	16%
grade 3 events	10031
	8%
grade 4 events	9667
	7%
grade 5 events	7165
	5%
grade 6 events	27371
	22%
grade 7 events	31541
	25%

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	OVERRIDE	OVERRIDE
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	84.504572	84.44154393581184	Subarray requested	CUSTOM	CUSTOM
[deg] Pointing Dec	-69.178321	-69.16283944027232	Subarray start row	385	385
[deg] Pointing Roll	114.506624	114.6043436186863	Subarray row count	256	256
[mm] SIM focus pos	-0.6828225247311905	-0.6828225247311905	Alternating exposures requested	N	N
[mm] SIM defocus	0.001444942264670179	0.001444942264670179	[s] Primary exposure time	0.8	0.8
[mm] SIM translation stage pos	-190.1425803651734	-190.1425803651734			
[mm] SIM translation stage offset	0.01005726120618533	0.01005726120618533			
[s] Observation start time (MET)	146512583.184000	146512583.184			
Observation start date	2002-08-23T17:55:19	2002-08-23T17:56:23			
[s] Observation end time (MET)	146542267.000000	146542267			
Observation end date	2002-08-24T02:11:07	2002-08-24T02:11:06			
Read mode	TIMED	TIMED			

2.3 Aspect

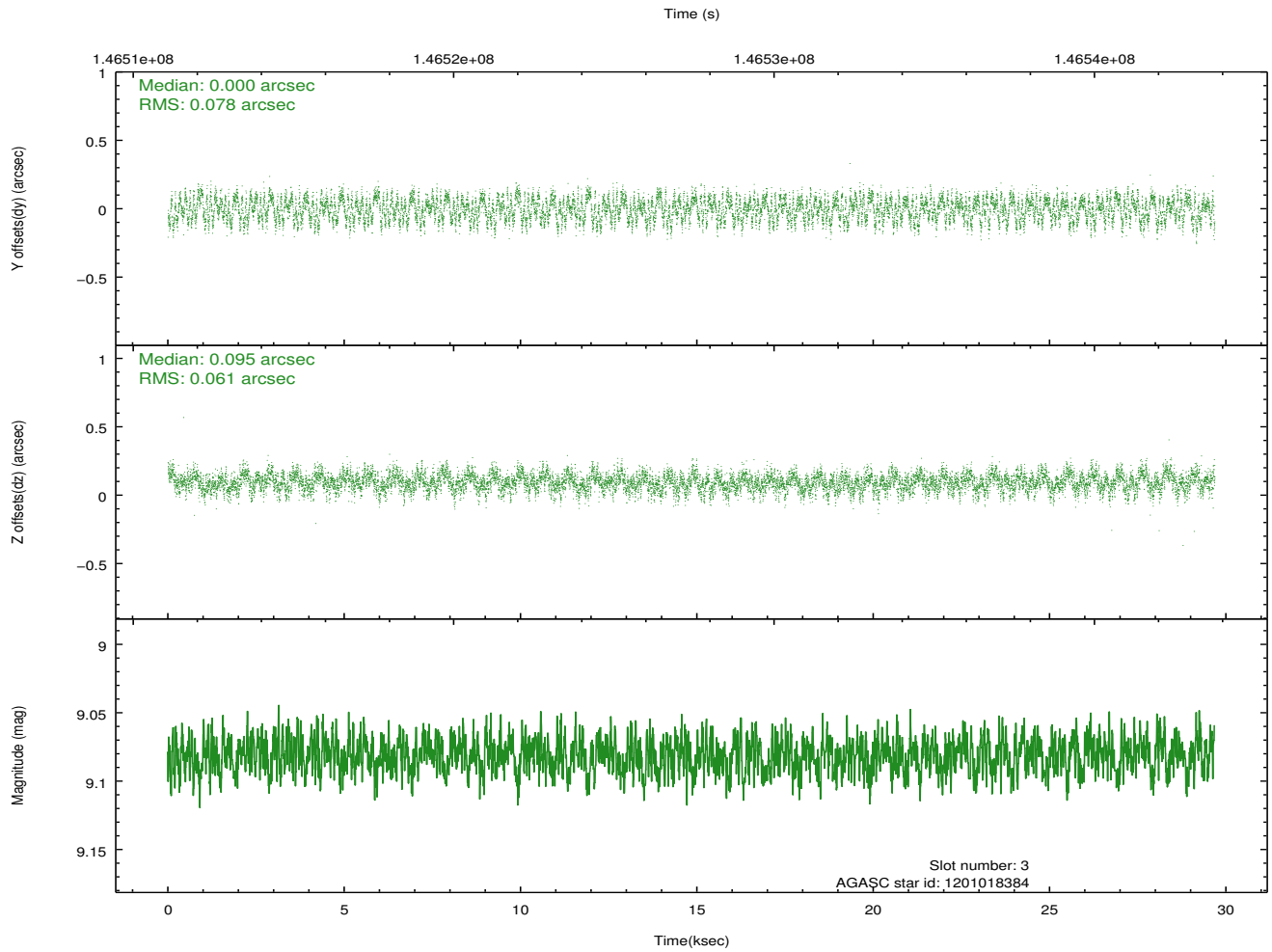
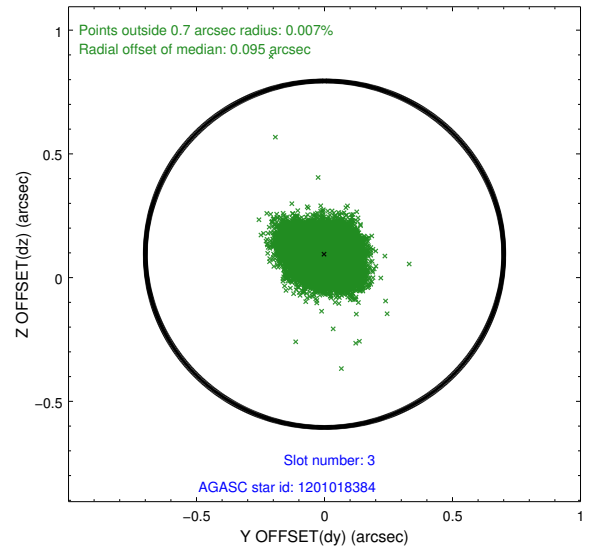
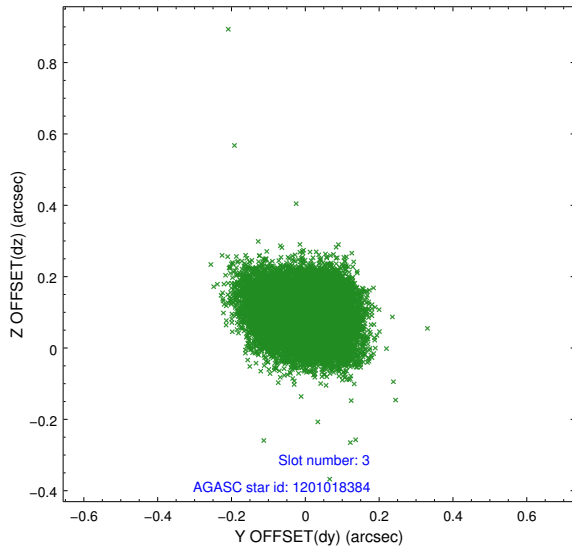


Slot Statistics

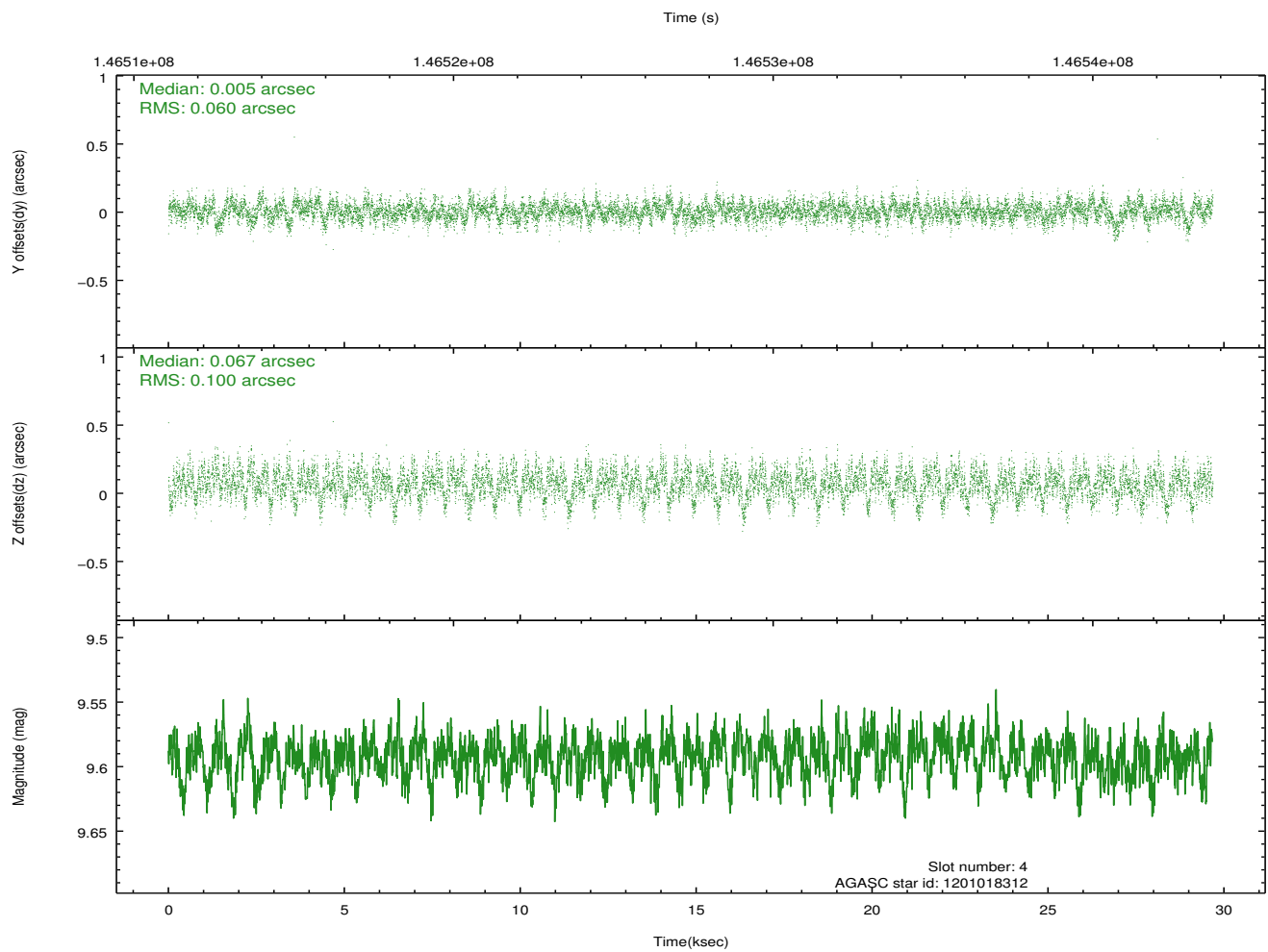
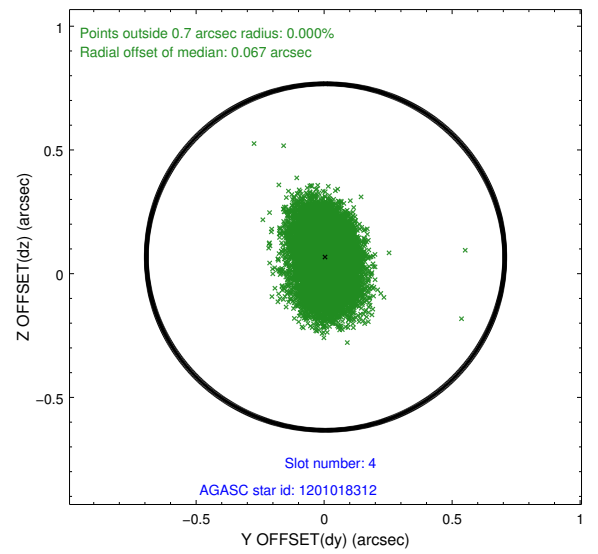
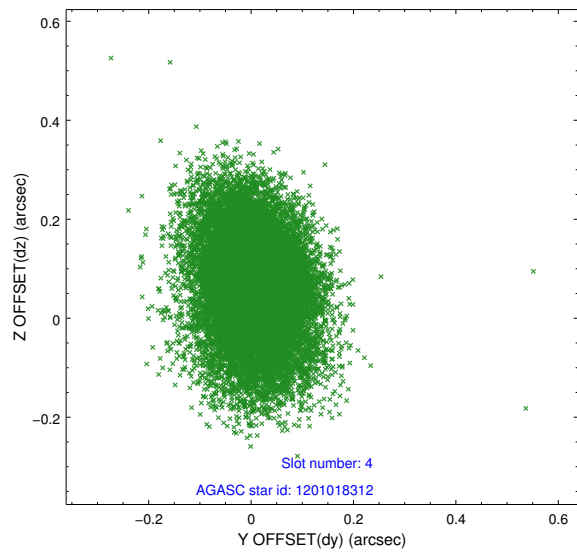
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	7238	-0.006	-0.001	0.007	0.013	0.000000	0.000000	-755.02	-1728.22
1	FID	ACIS-S-4	7.20	7235	-0.009	0.000	0.006	0.010	0.000000	0.000000	2158.22	180.19
2	FID	ACIS-S-6	7.35	7237	-0.013	0.007	0.008	0.014	0.000000	0.000000	407.05	817.67
3	GUIDE	1201018384	9.08	14448	0.000	0.095	0.108	0.163	85.801362	-68.593260	1193.37	-2415.58
4	GUIDE	1201018312	9.59	14270	0.005	0.067	0.122	0.208	86.298231	-69.115627	-779.92	-2173.36
5	GUIDE	1200883536	9.88	14423	-0.055	-0.087	0.129	0.209	83.119228	-69.218429	583.31	1678.78
6	GUIDE	1201406992	9.26	14459	0.042	-0.045	0.103	0.162	83.682859	-69.471866	-538.32	1385.80
7	GUIDE	1200887248	9.67	14392	0.013	-0.019	0.125	0.203	82.362845	-68.868028	2124.21	2086.78

2.4 Star Slots

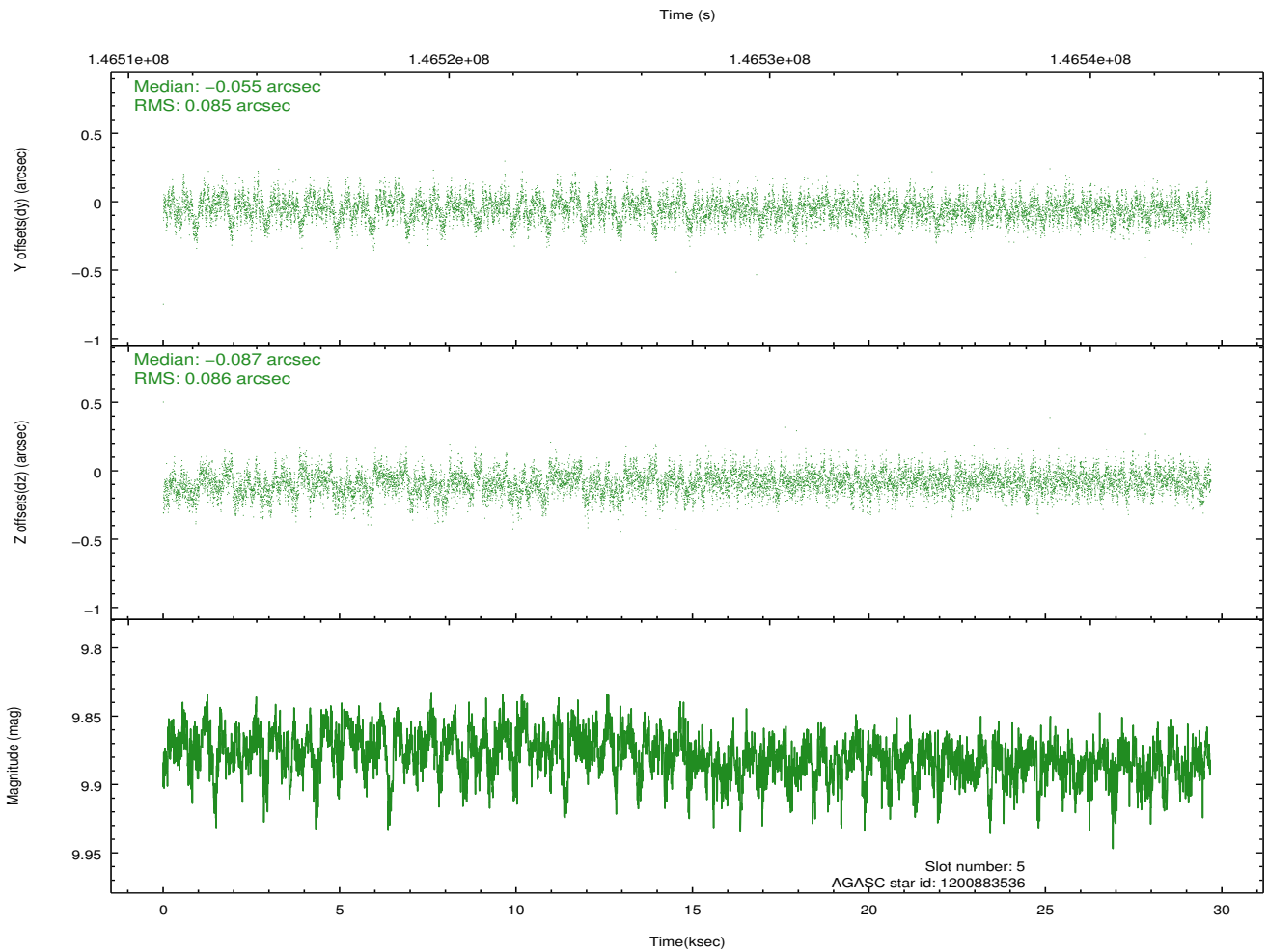
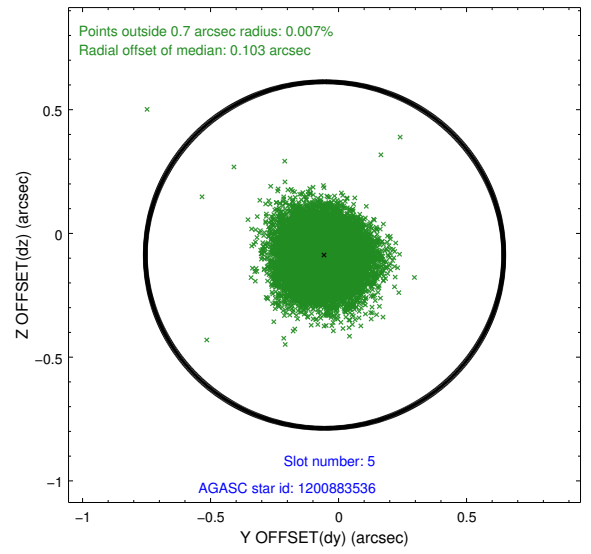
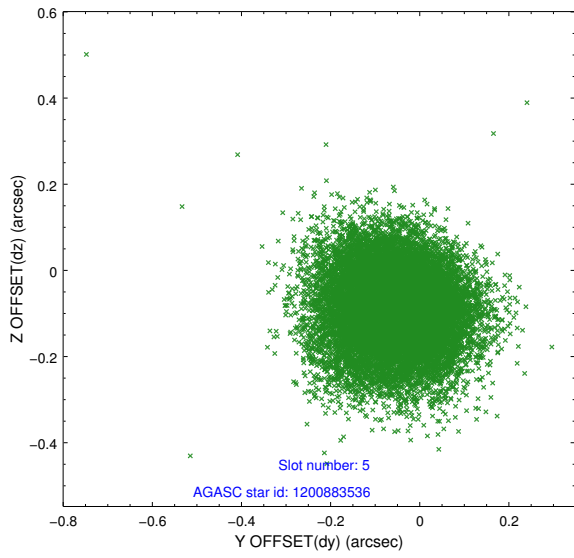
2.4.1 Slot 3



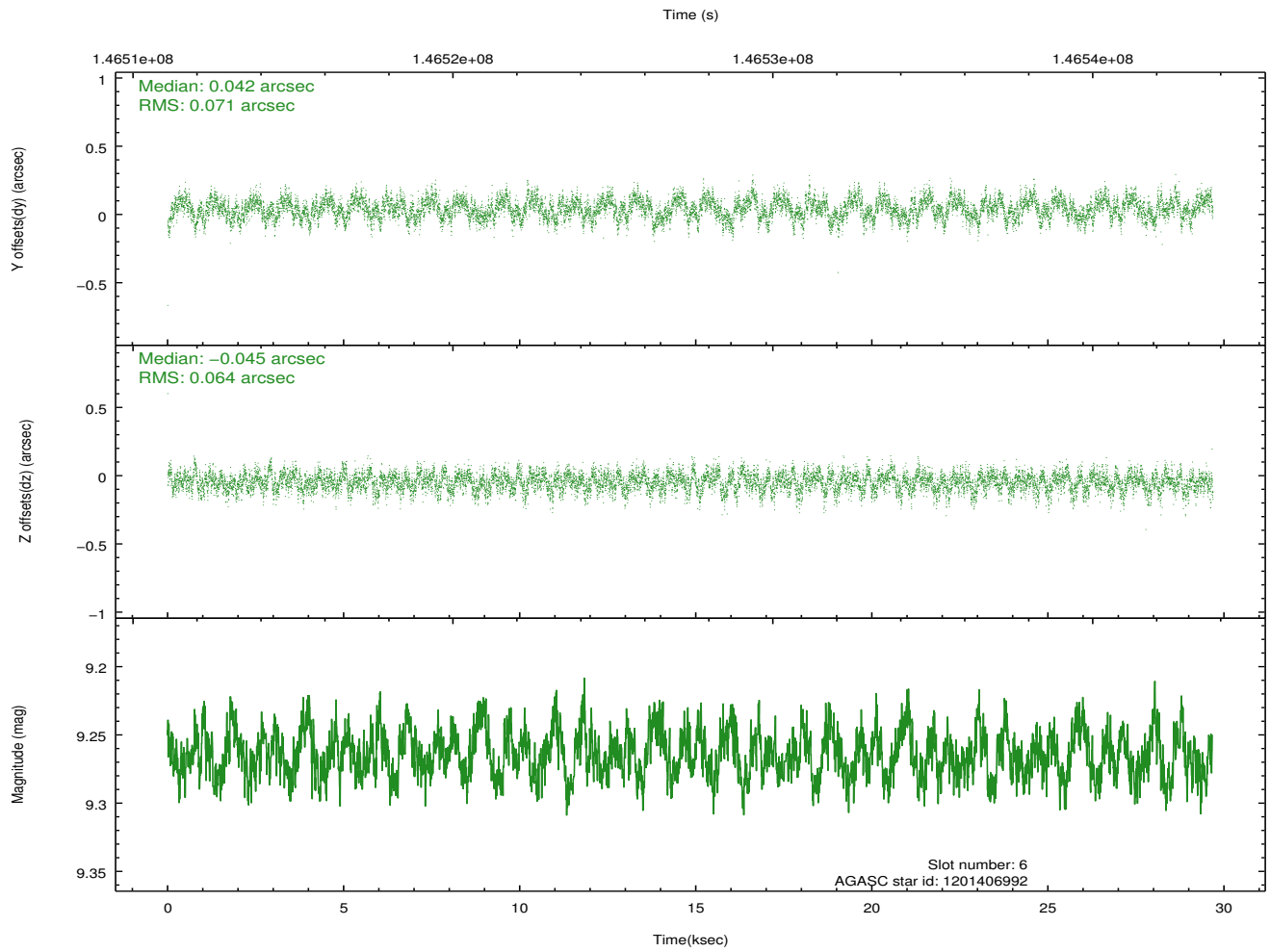
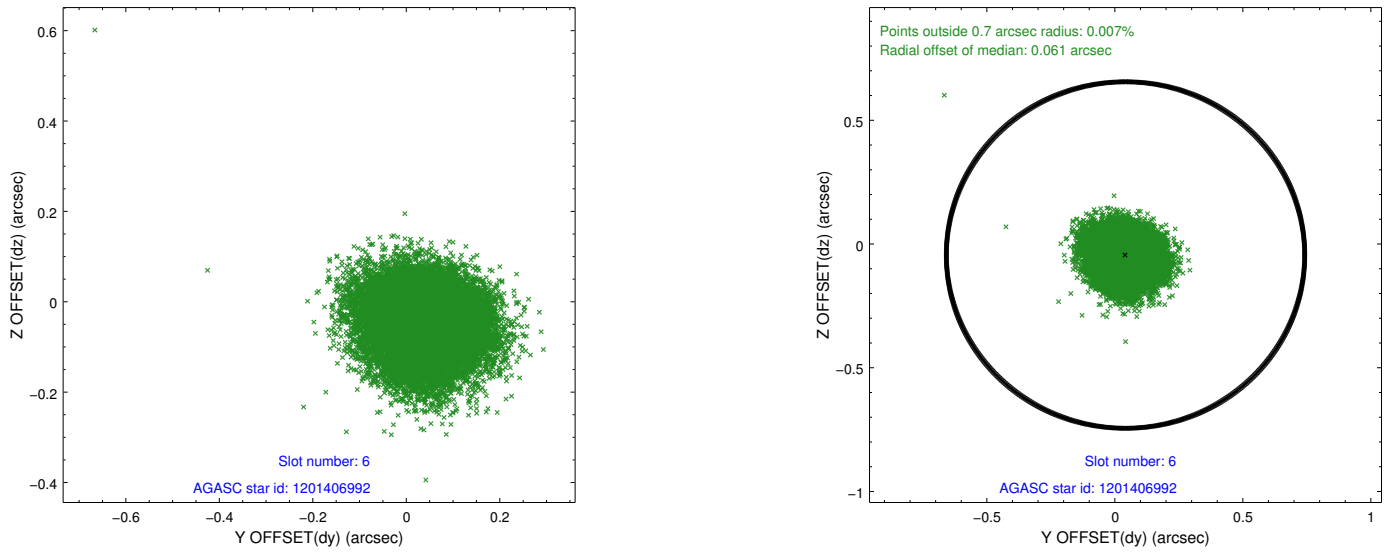
2.4.2 Slot 4



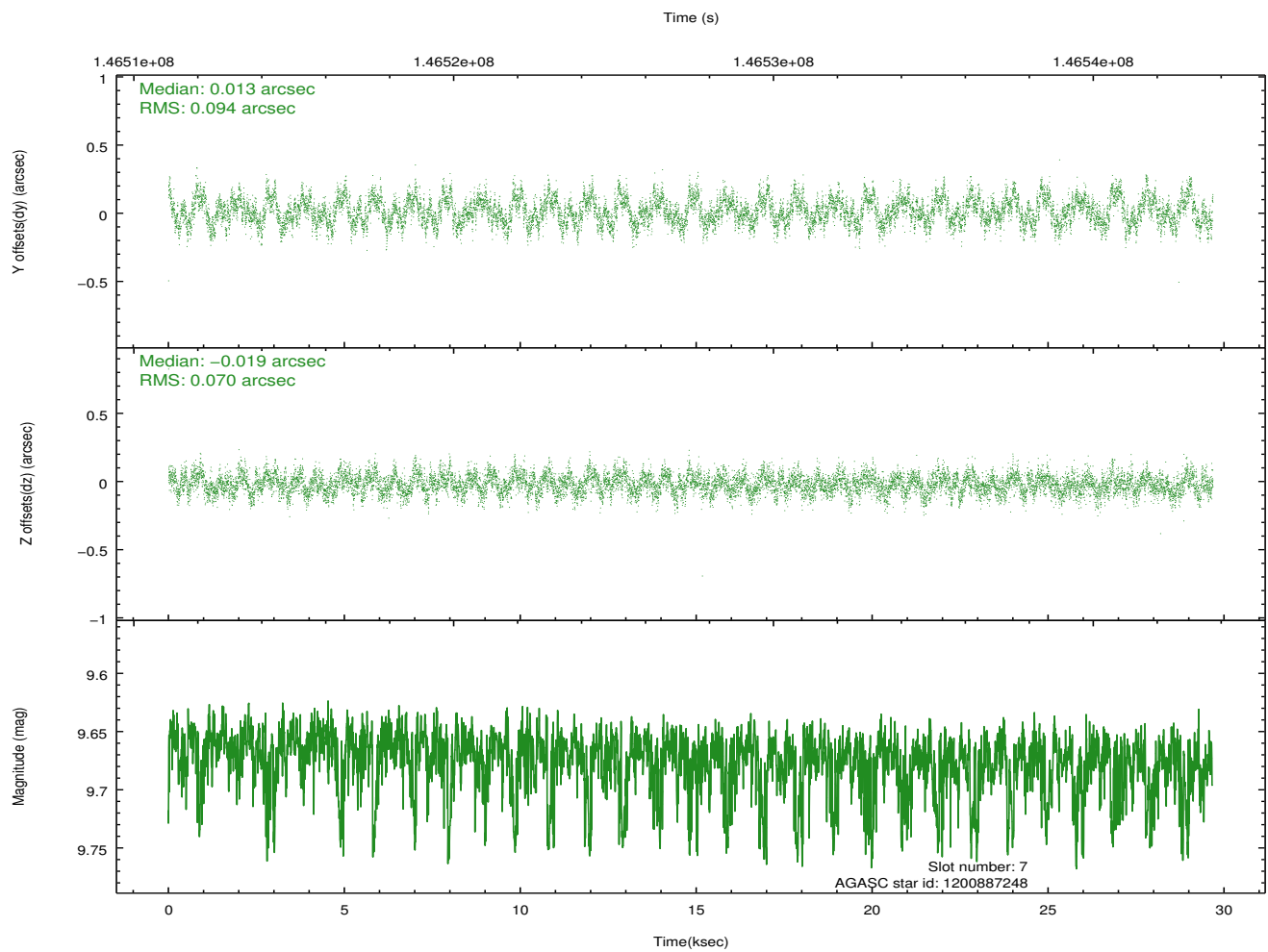
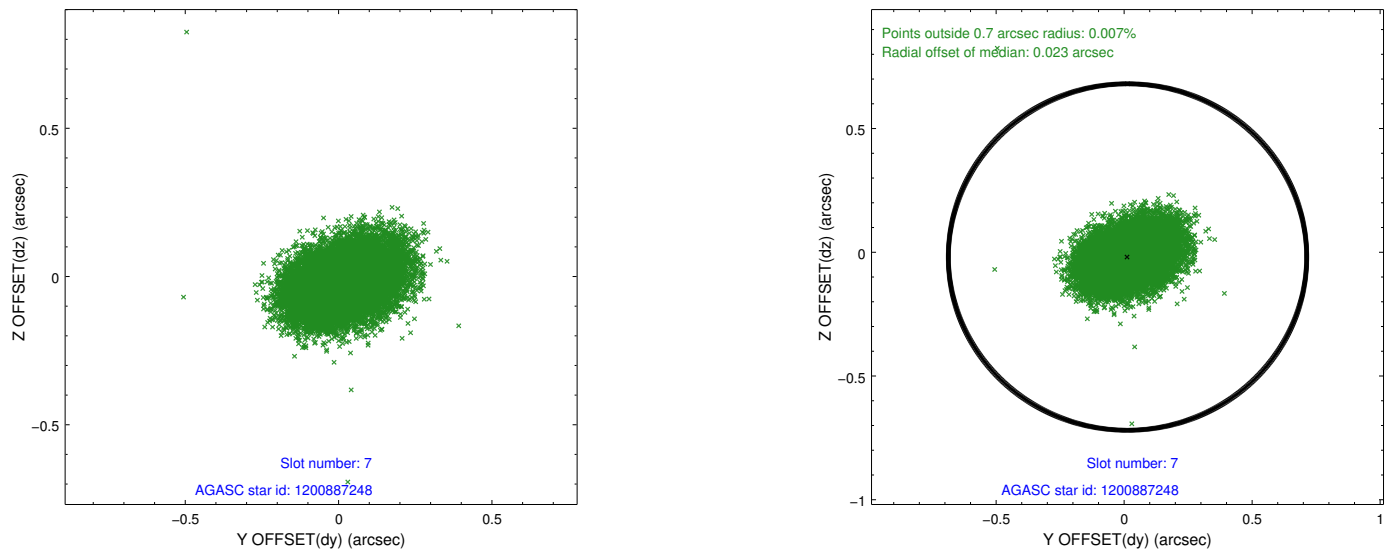
2.4.3 Slot 5



2.4.4 Slot 6

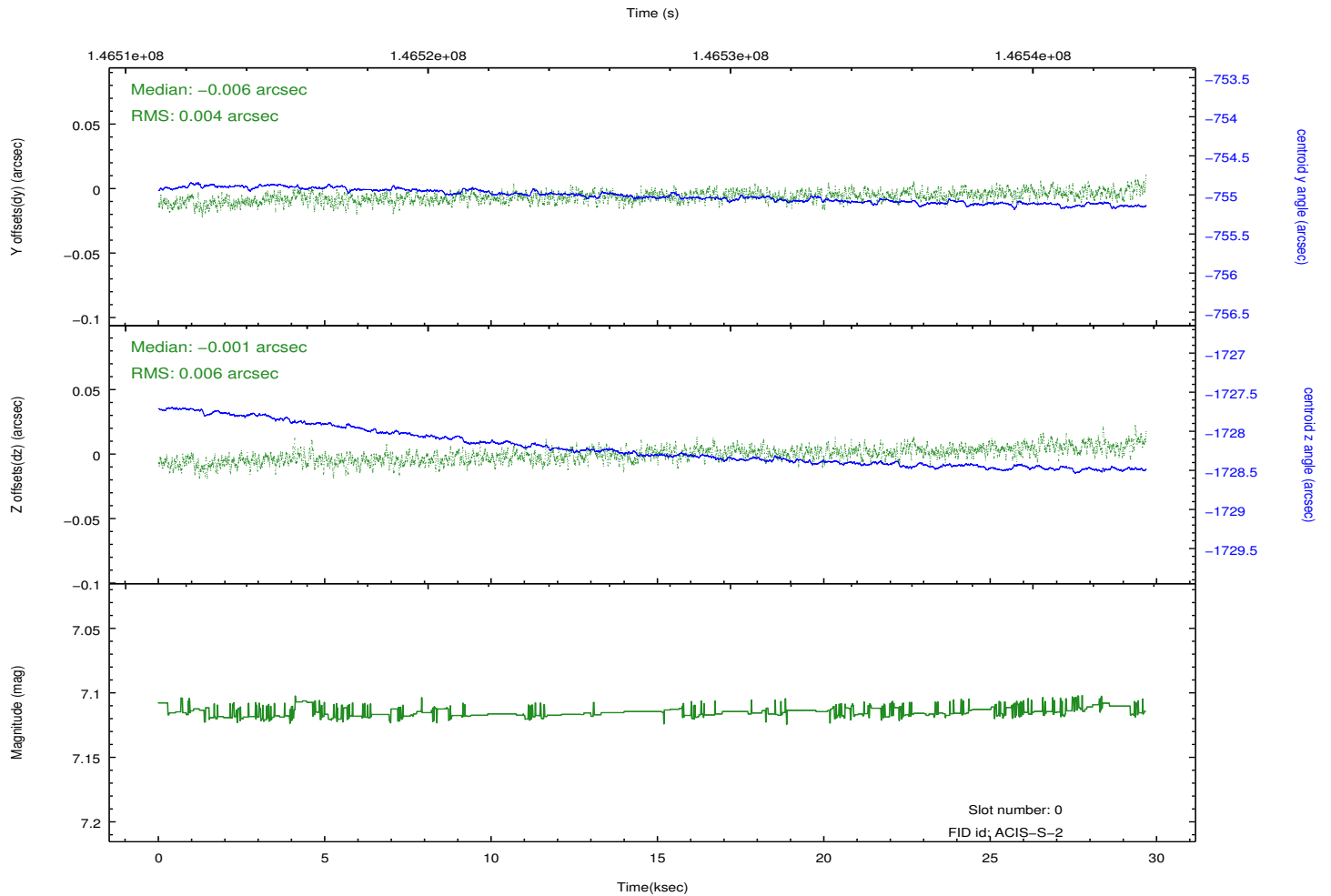
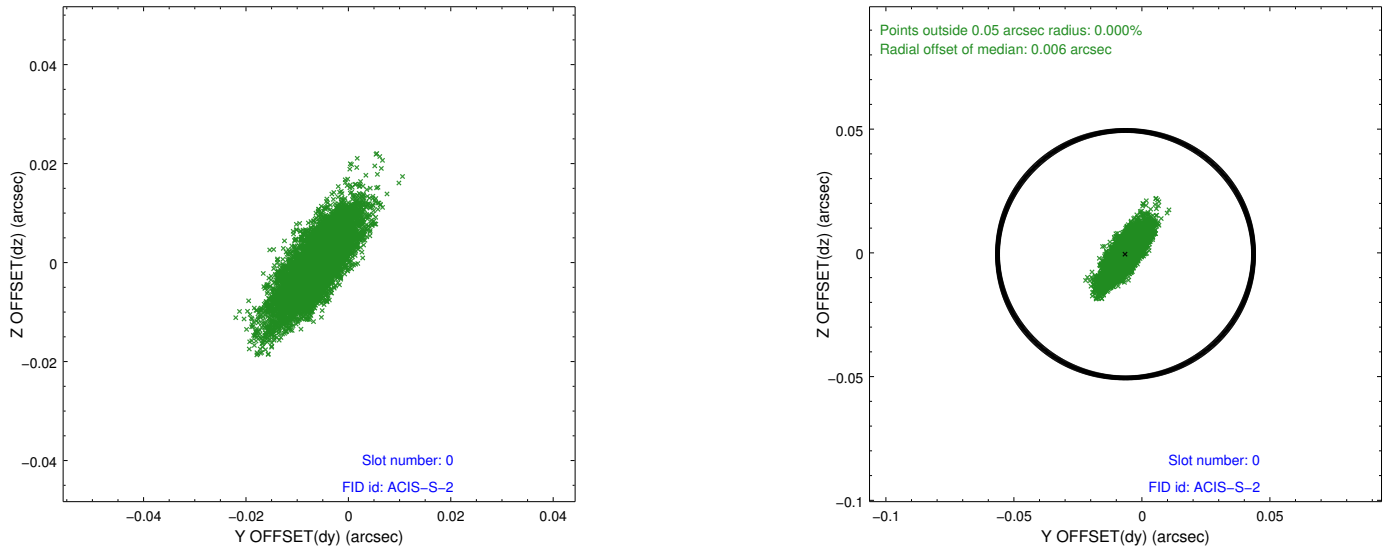


2.4.5 Slot 7

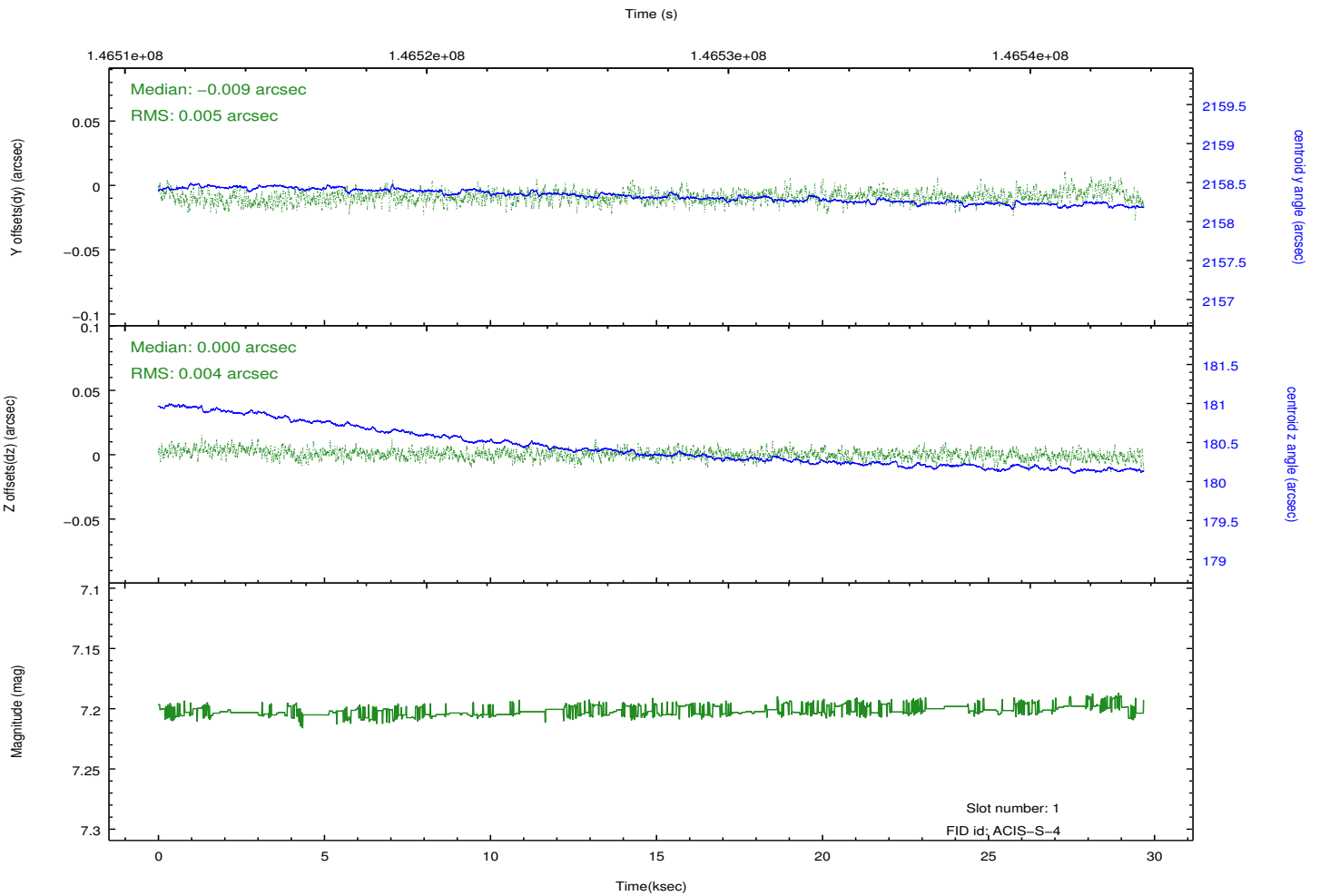
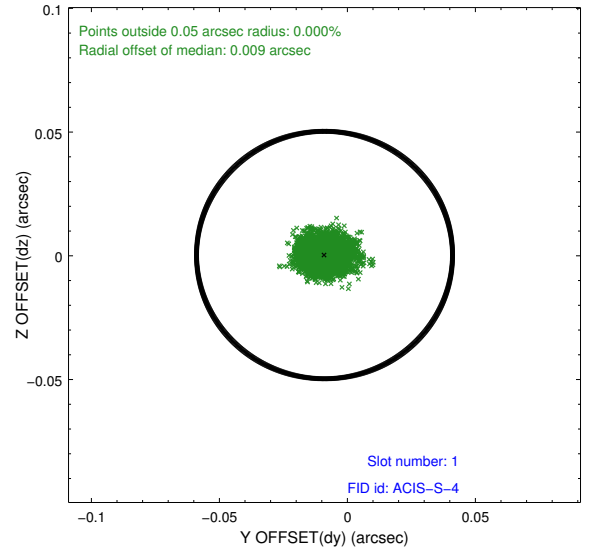
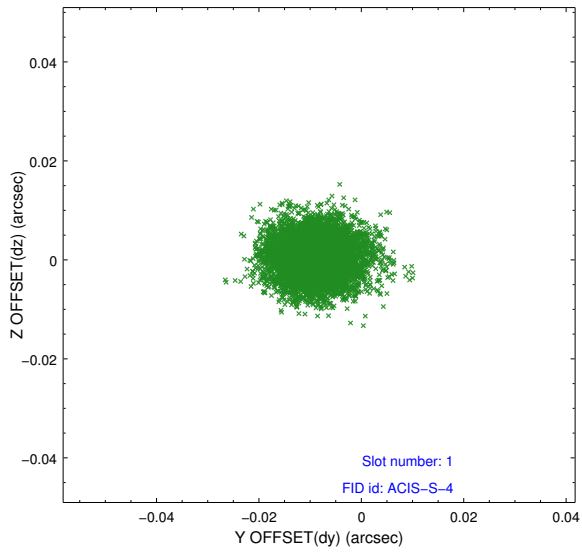


2.5 FID Slots

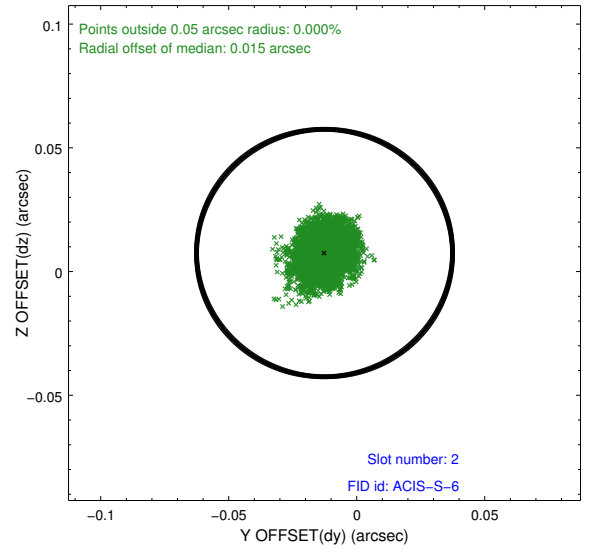
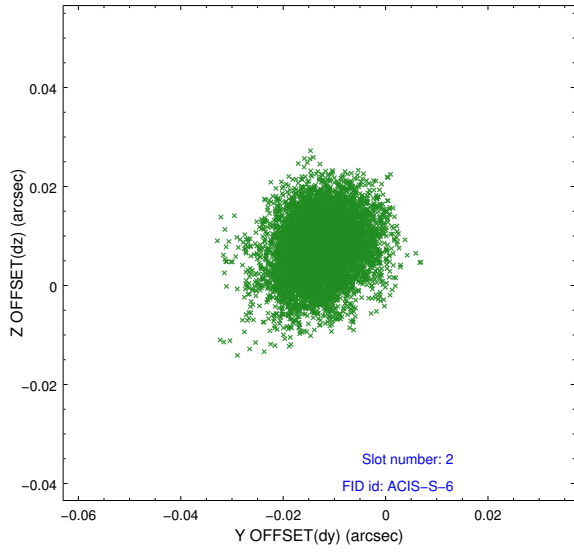
2.5.1 Slot 0



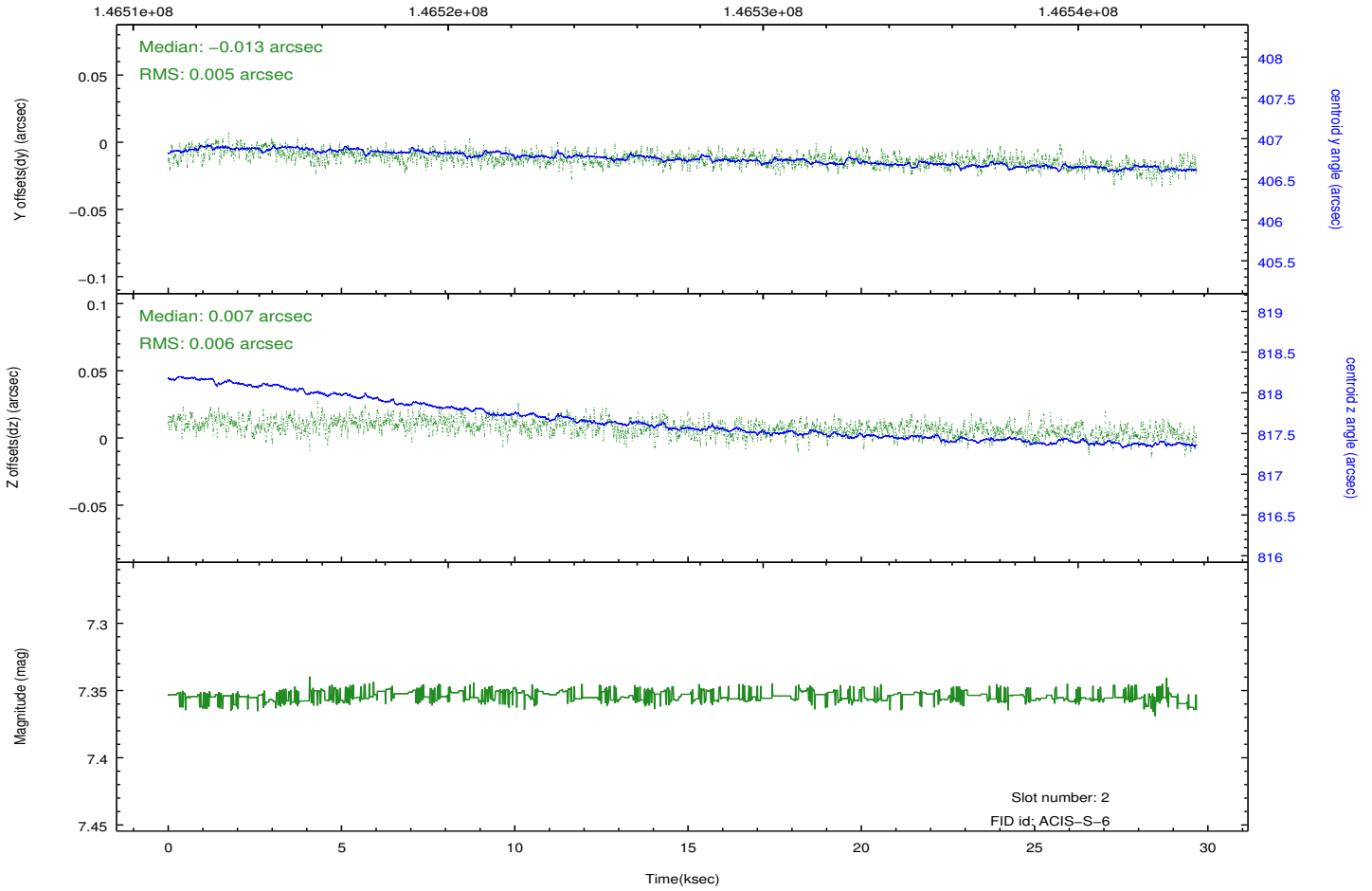
2.5.2 Slot 1



2.5.3 Slot 2



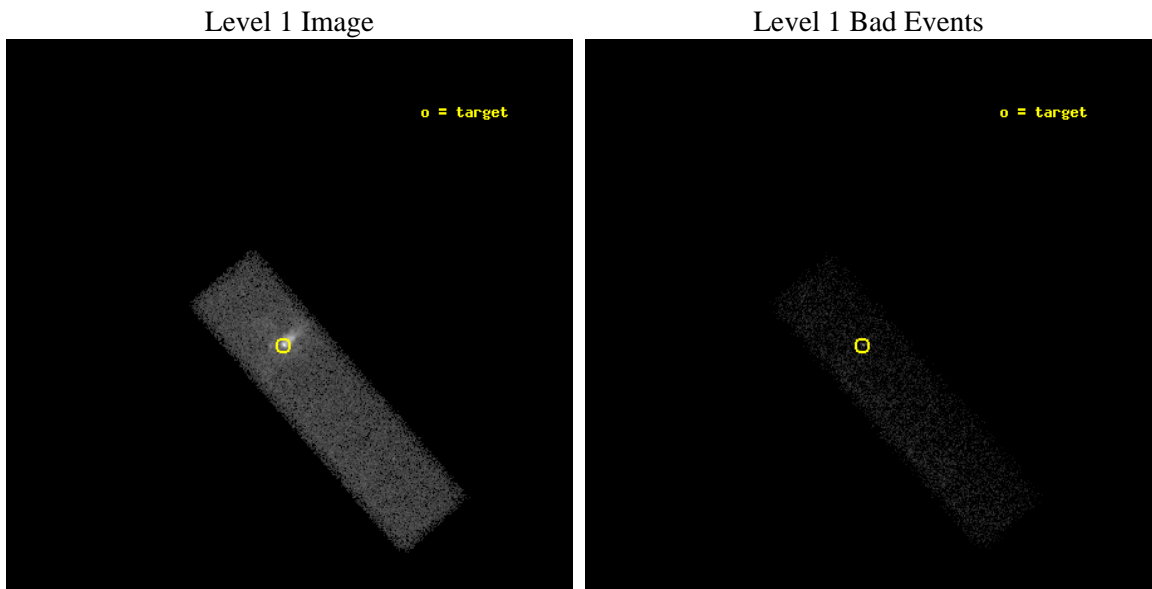
Time (s)



3 OBI

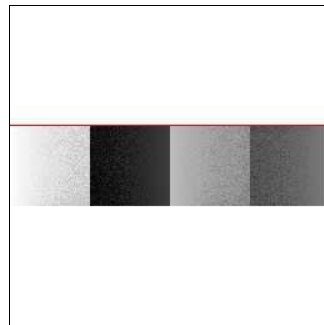
3.1 OBI

3.1.1 Images



3.1.2 Bias

Chip 7



3.1.3 Parameters

obi_num	3	Obi number	sched_exp_time	20100.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	20721.55928871	Sum of GTIs [s]
caldsver	4.5.5	 	ontime7	20721.55928871	Sum of GTIs [s]
date	2013-02-21T04:15:26	Date and time of file creation	l1events	74019	Number of level 1 events
revision	5	Processing version of data			

3.1.4 Events

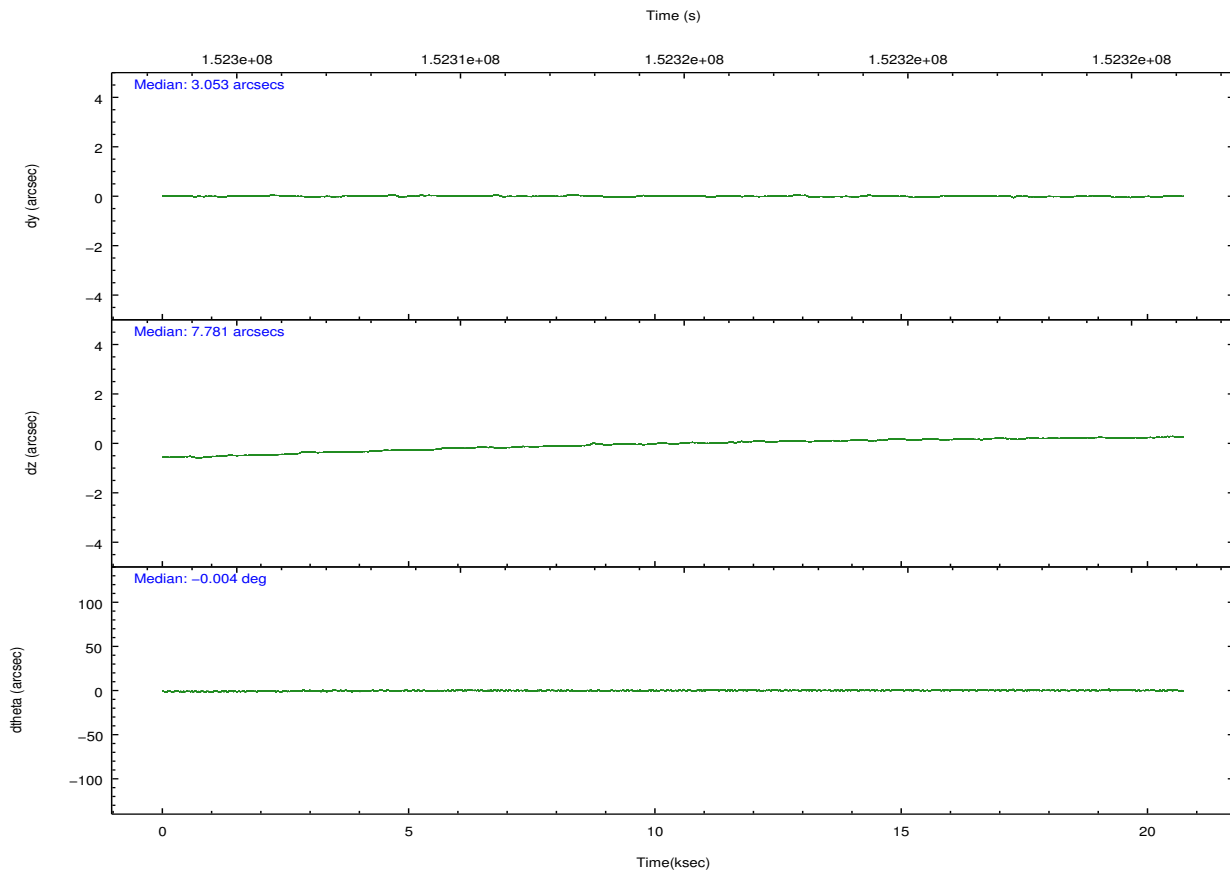
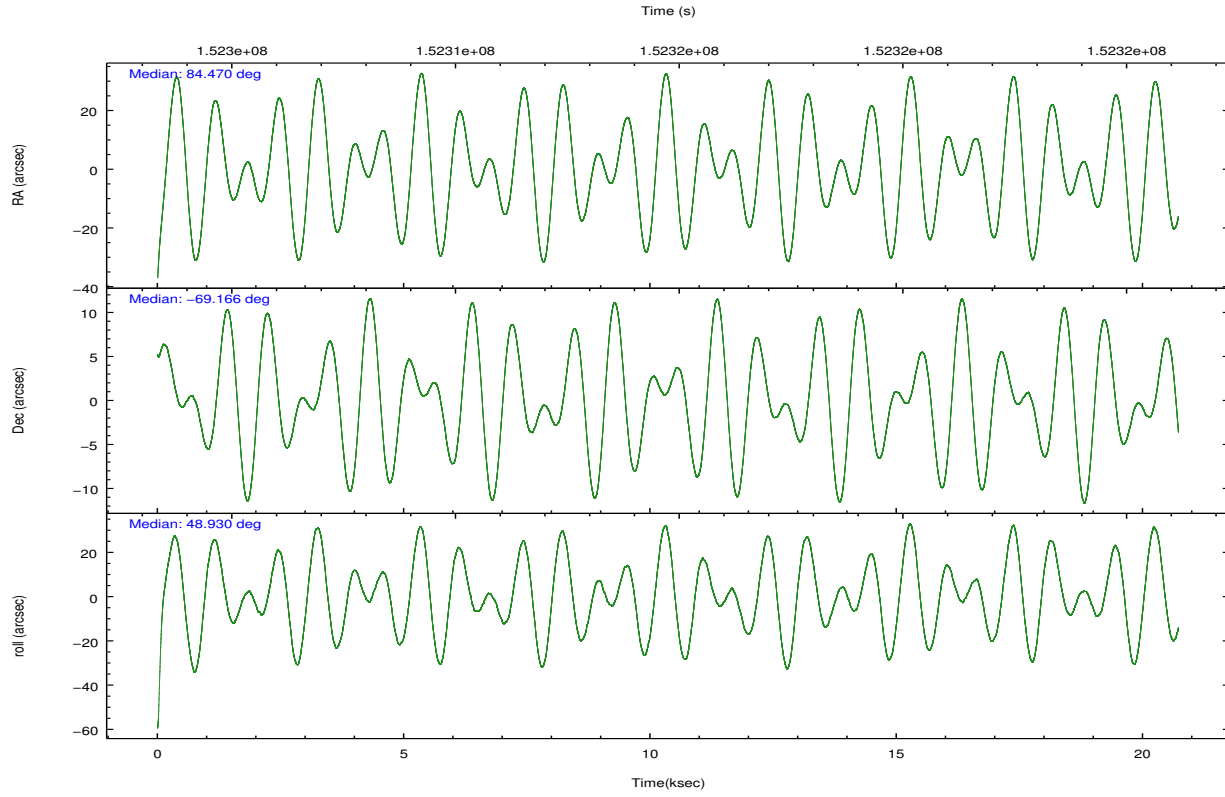
	ccd 7
level 1 events	74019
rejected events	25245
rejected %	34%

	ccd 7
grade 0 events	10078
	13%
grade 1 events	79
	0%
grade 2 events	11537
	15%
grade 3 events	5636
	7%
grade 4 events	5496
	7%
grade 5 events	4526
	6%
grade 6 events	16464
	22%
grade 7 events	20203
	27%

3.2 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	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	84.455836	84.4695586869415	Subarray requested	CUSTOM	1/4
[deg] Pointing Dec	-69.192953	-69.16612432609037	Subarray start row	385	385
[deg] Pointing Roll	48.762896	48.93232995276079	Subarray row count	256	256
[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	0.8
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	152305015.184000	152303833.58963			
Observation start date	2002-10-29T18:55:51	2002-10-29T18:37:13			
[s] Observation end time (MET)	152325115.184000	152325946.94055			
Observation end date	2002-10-30T00:30:51	2002-10-30T00:45:46			
Read mode	TIMED	TIMED			

3.3 Aspect

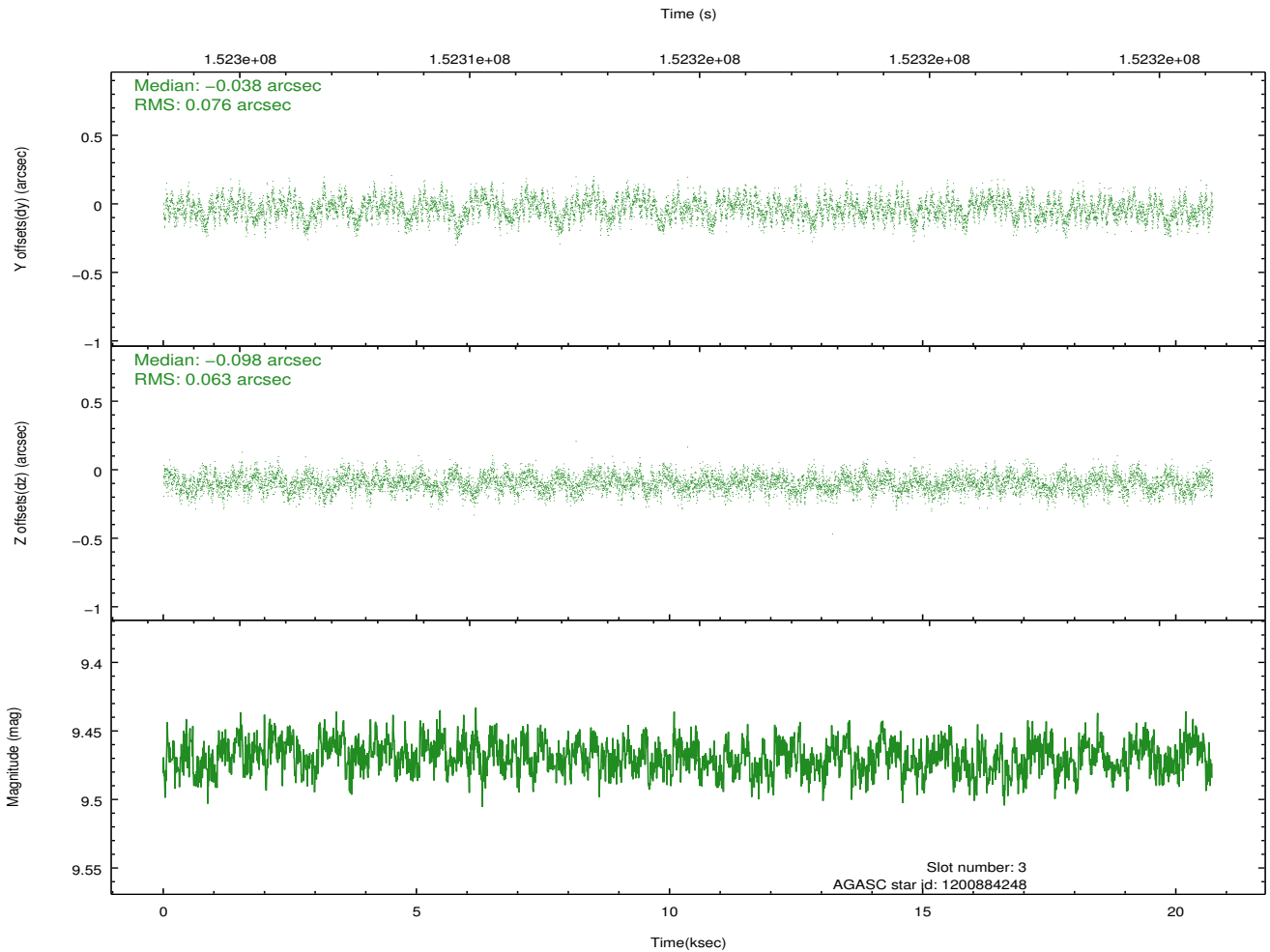
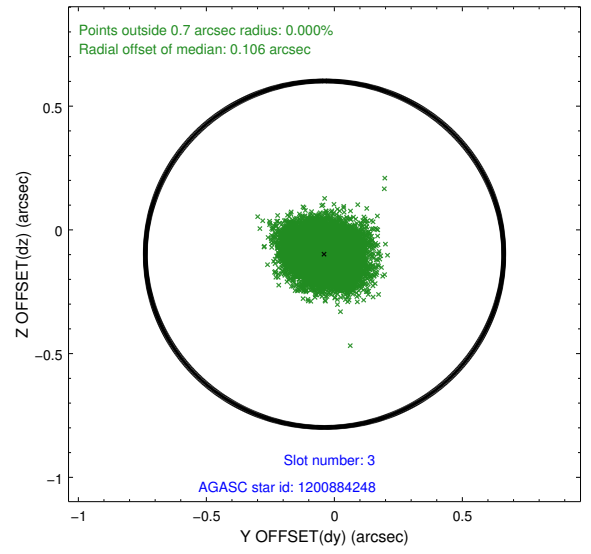
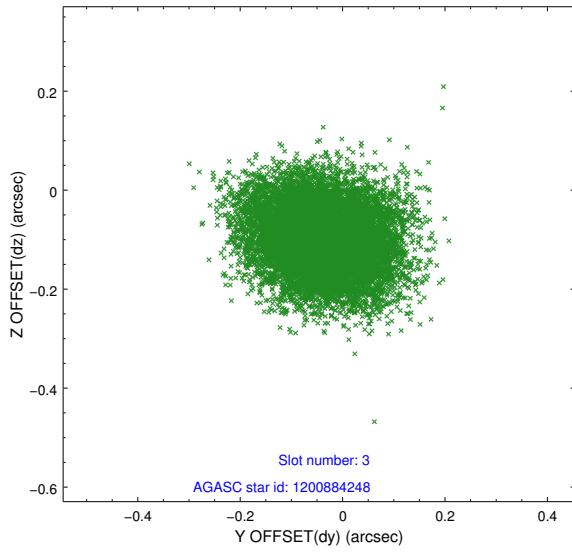


Slot Statistics

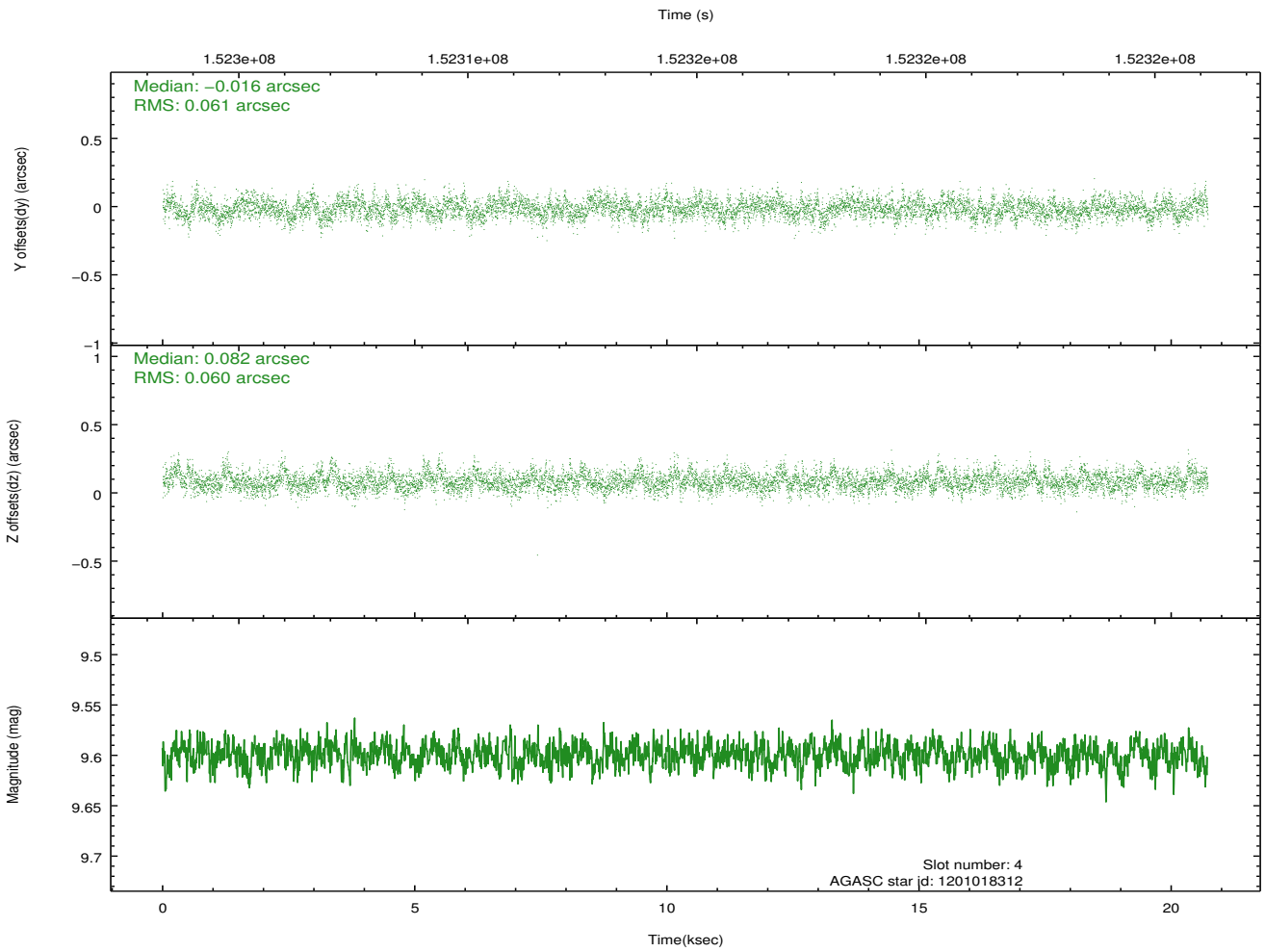
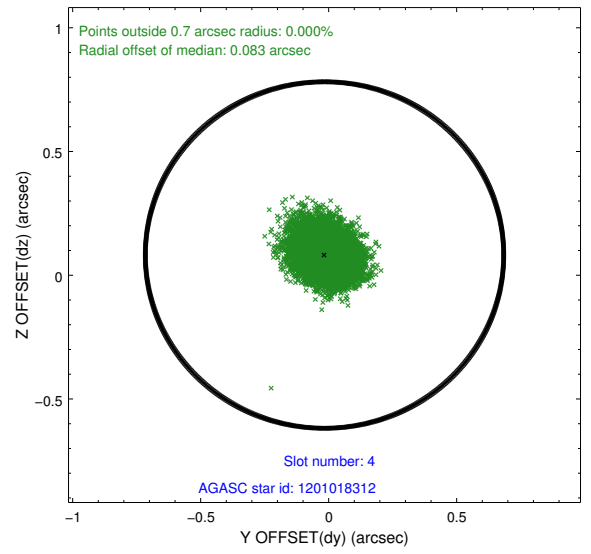
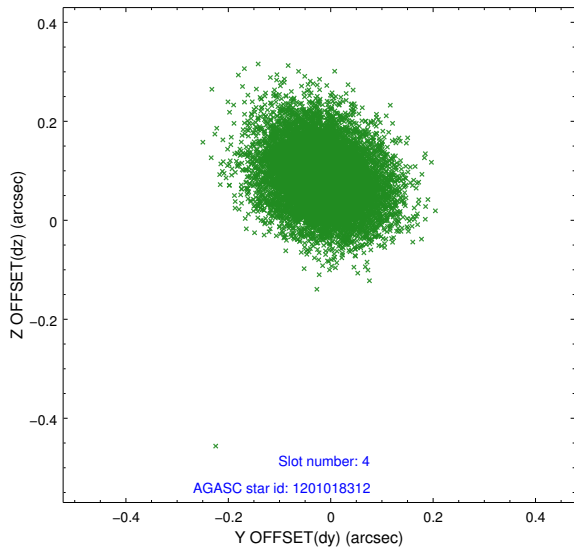
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	7238	-0.006	-0.001	0.007	0.013	0.000000	0.000000	-755.02	-1728.22
1	FID	ACIS-S-4	7.20	7235	-0.009	0.000	0.006	0.010	0.000000	0.000000	2158.22	180.19
2	FID	ACIS-S-6	7.35	7237	-0.013	0.007	0.008	0.014	0.000000	0.000000	407.05	817.67
3	GUIDE	1201018384	9.08	14448	0.000	0.095	0.108	0.163	85.801362	-68.593260	1193.37	-2415.58
4	GUIDE	1201018312	9.59	14270	0.005	0.067	0.122	0.208	86.298231	-69.115627	-779.92	-2173.36
5	GUIDE	1200883536	9.88	14423	-0.055	-0.087	0.129	0.209	83.119228	-69.218429	583.31	1678.78
6	GUIDE	1201406992	9.26	14459	0.042	-0.045	0.103	0.162	83.682859	-69.471866	-538.32	1385.80
7	GUIDE	1200887248	9.67	14392	0.013	-0.019	0.125	0.203	82.362845	-68.868028	2124.21	2086.78

3.4 Star Slots

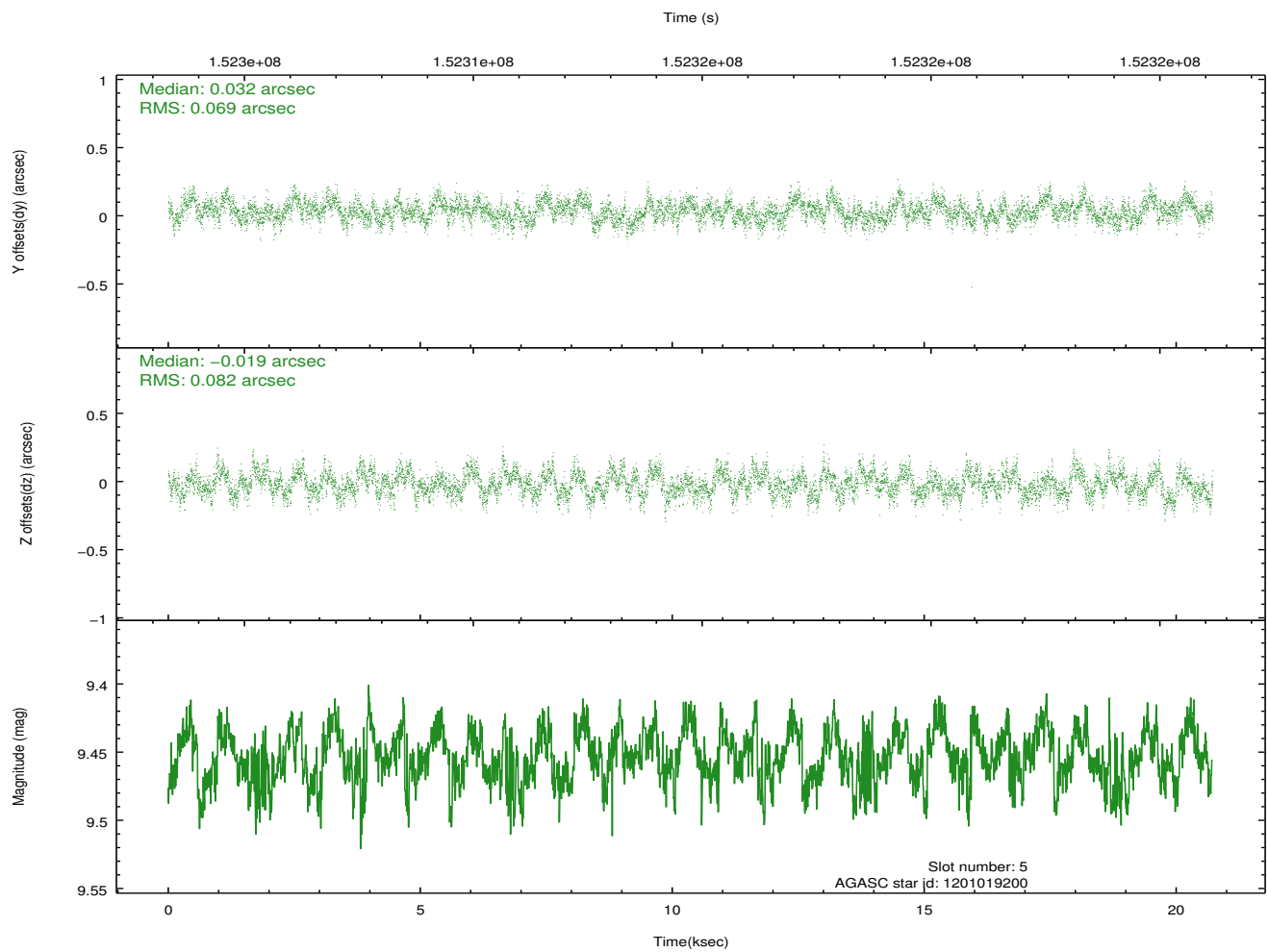
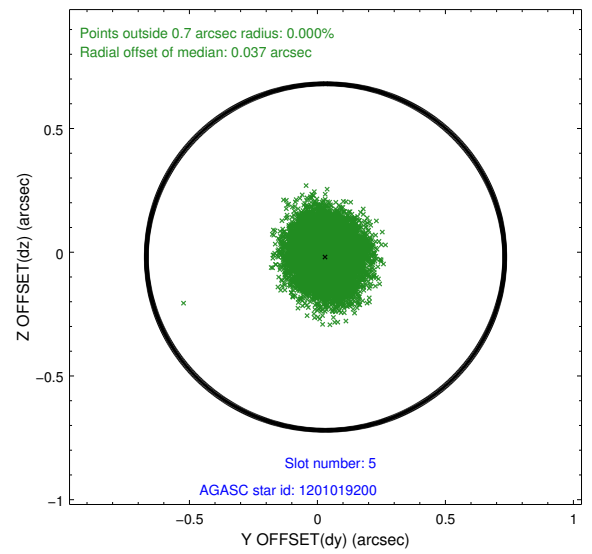
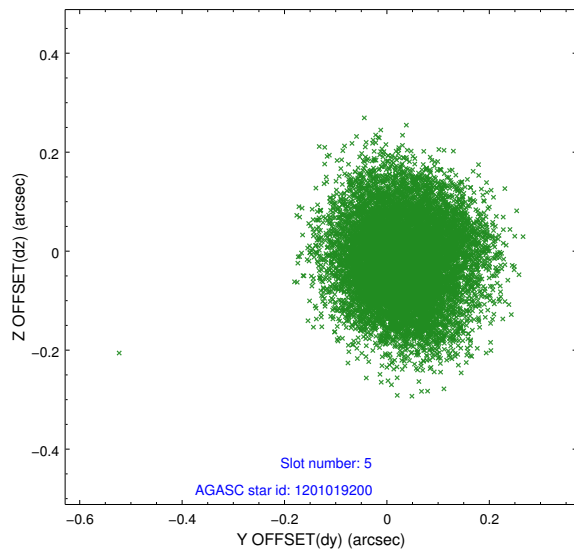
3.4.1 Slot 3



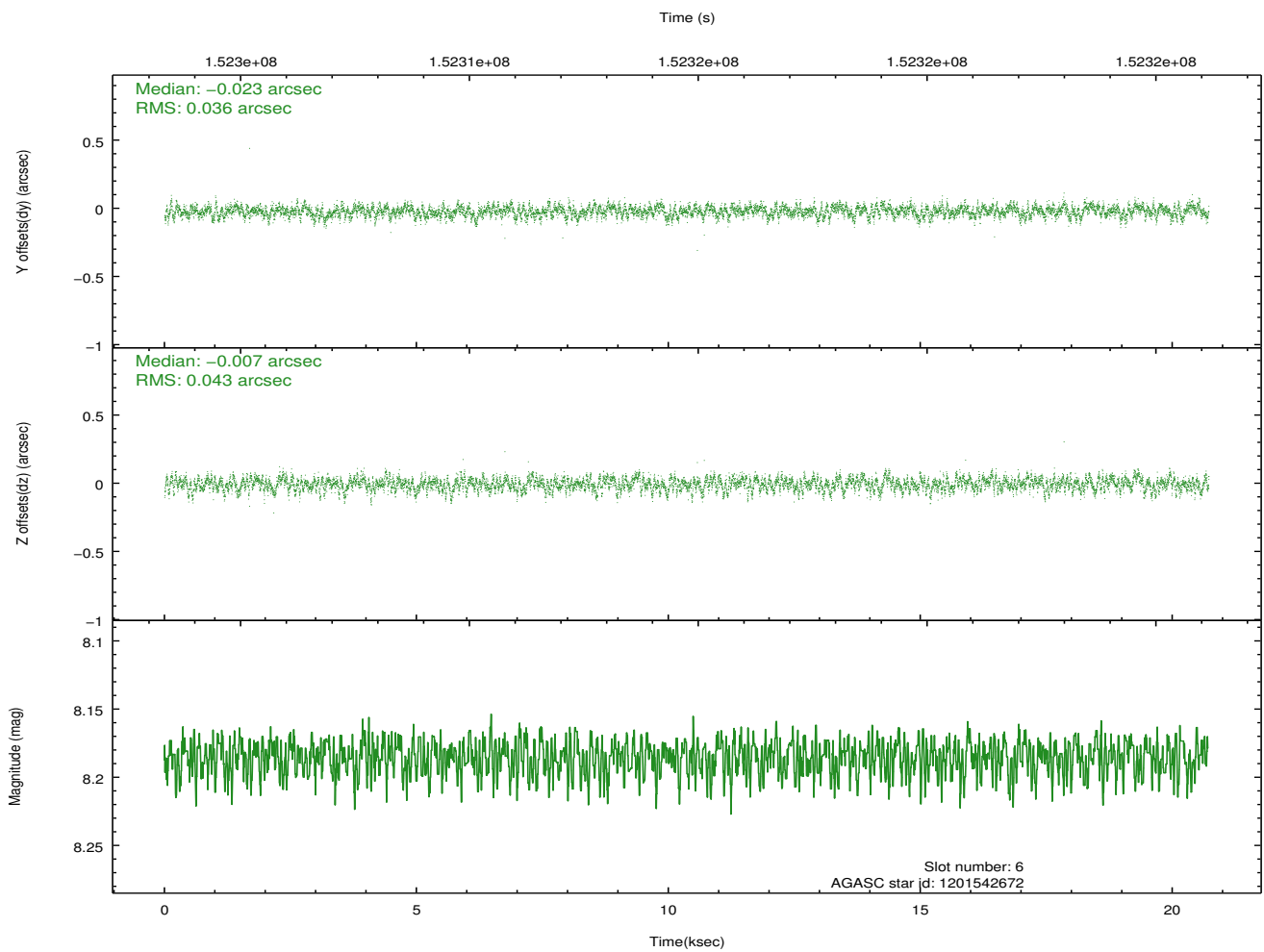
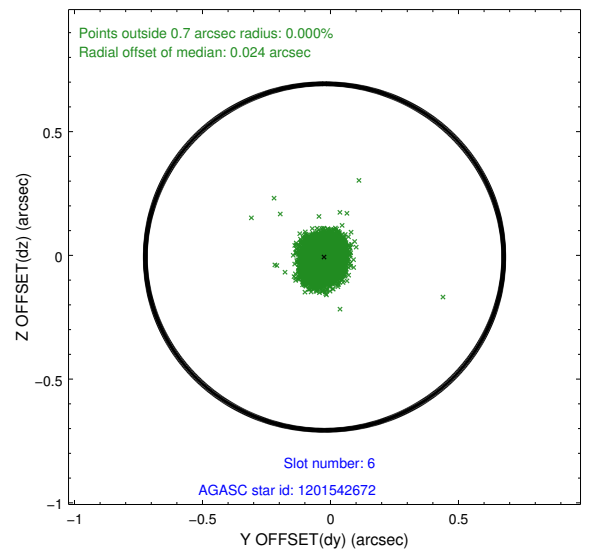
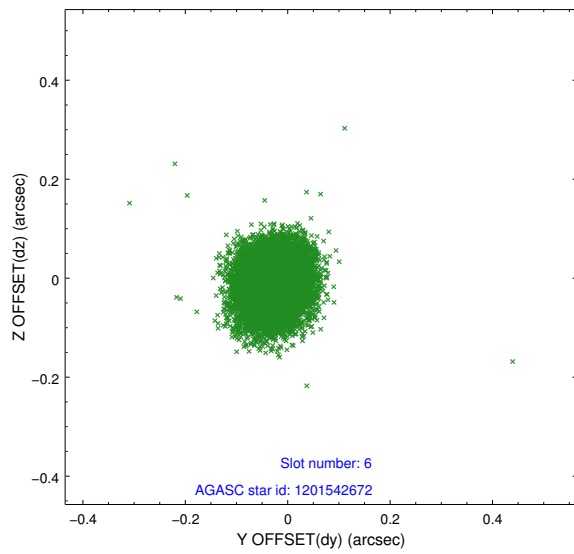
3.4.2 Slot 4



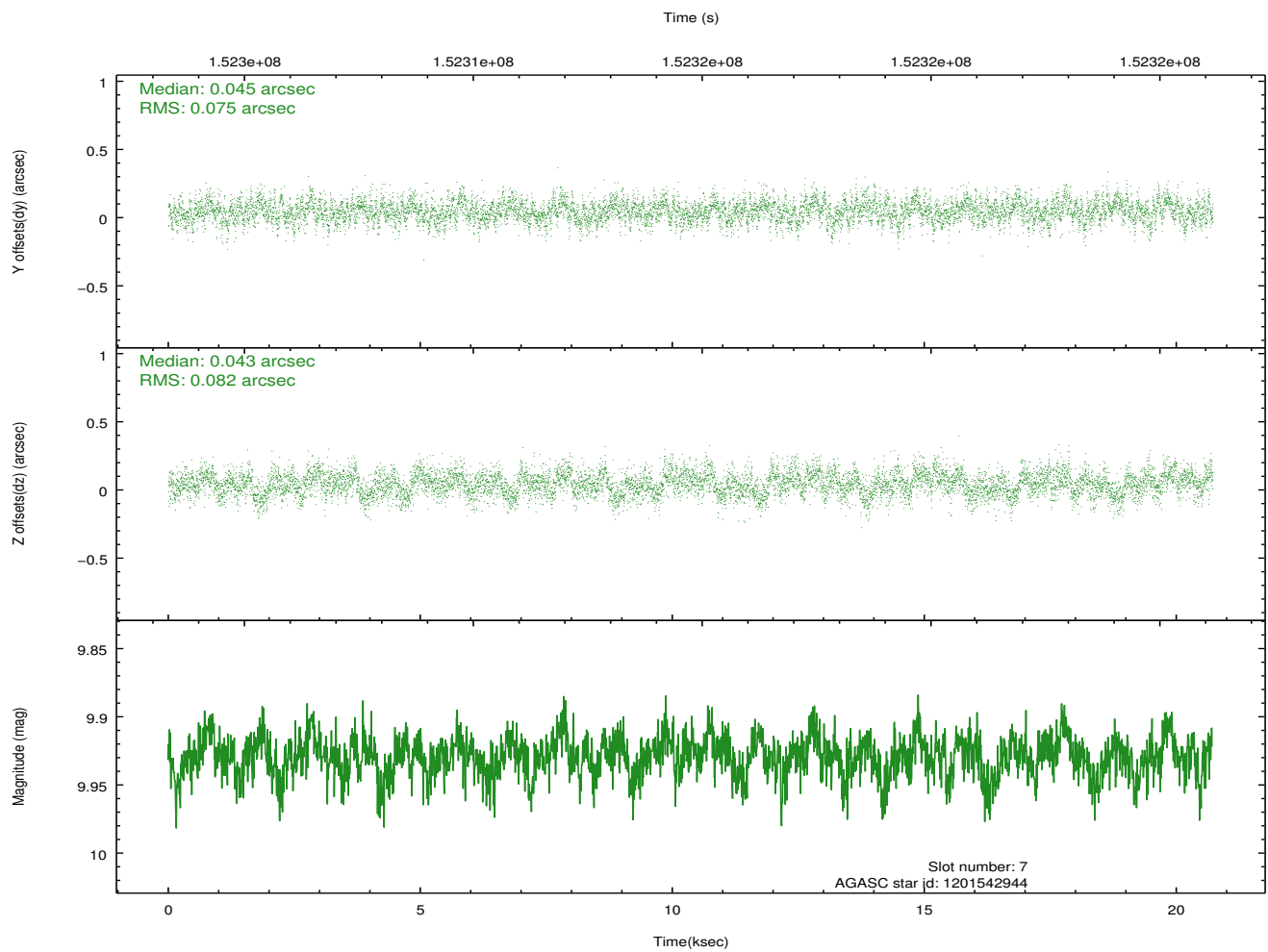
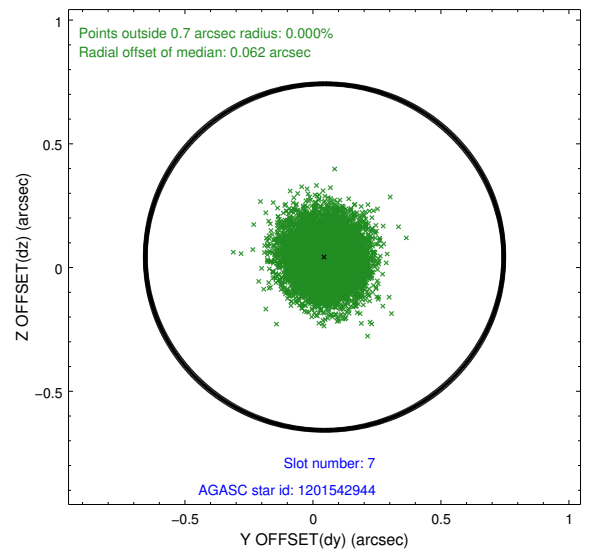
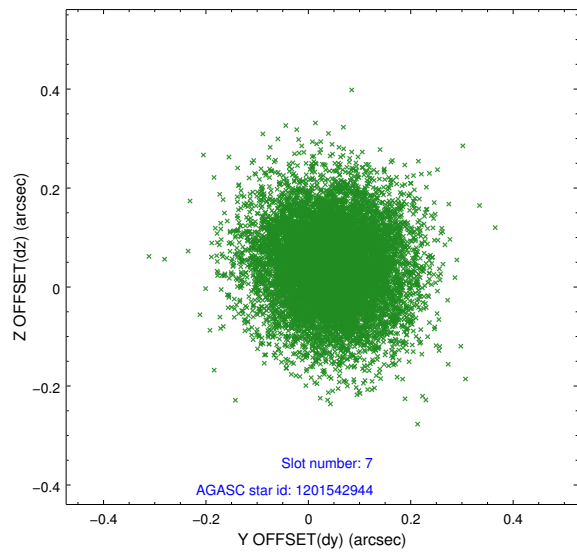
3.4.3 Slot 5



3.4.4 Slot 6

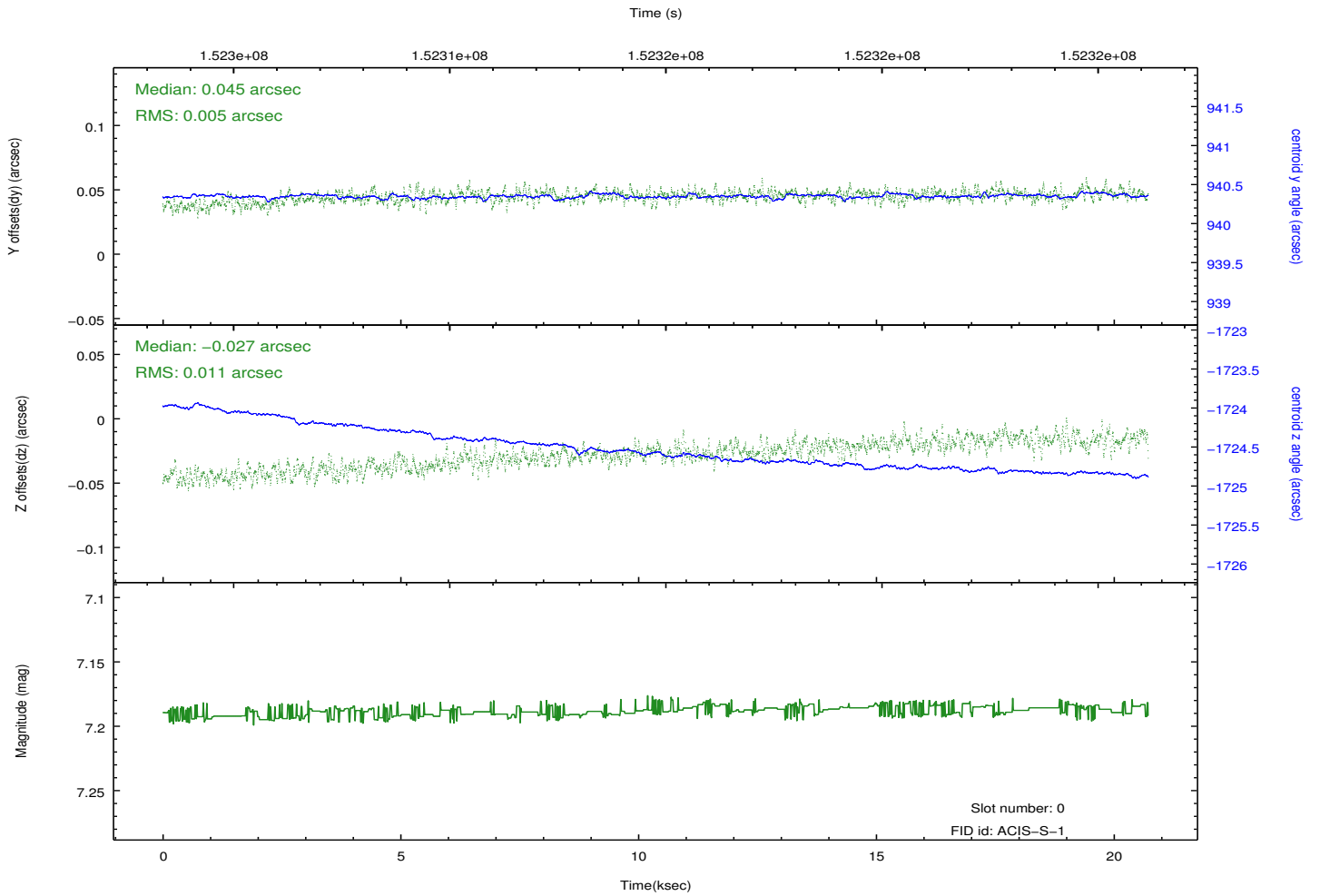
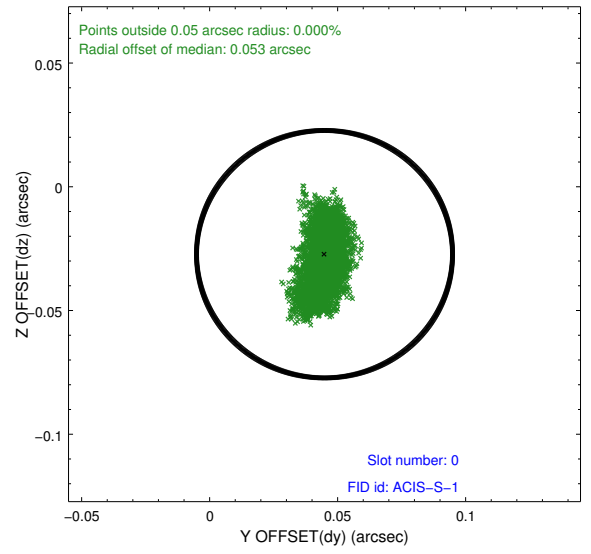
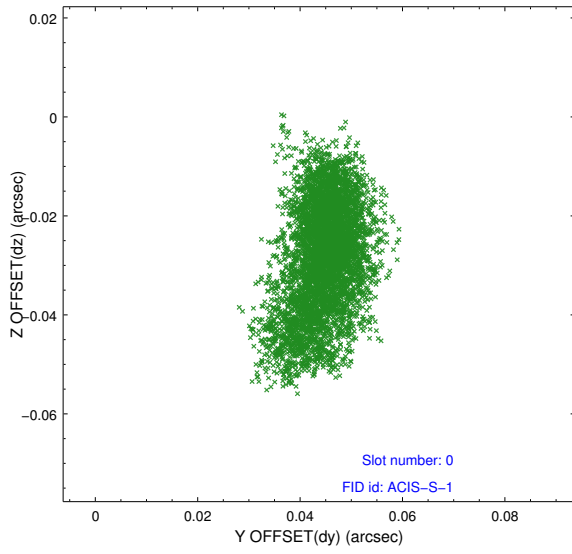


3.4.5 Slot 7

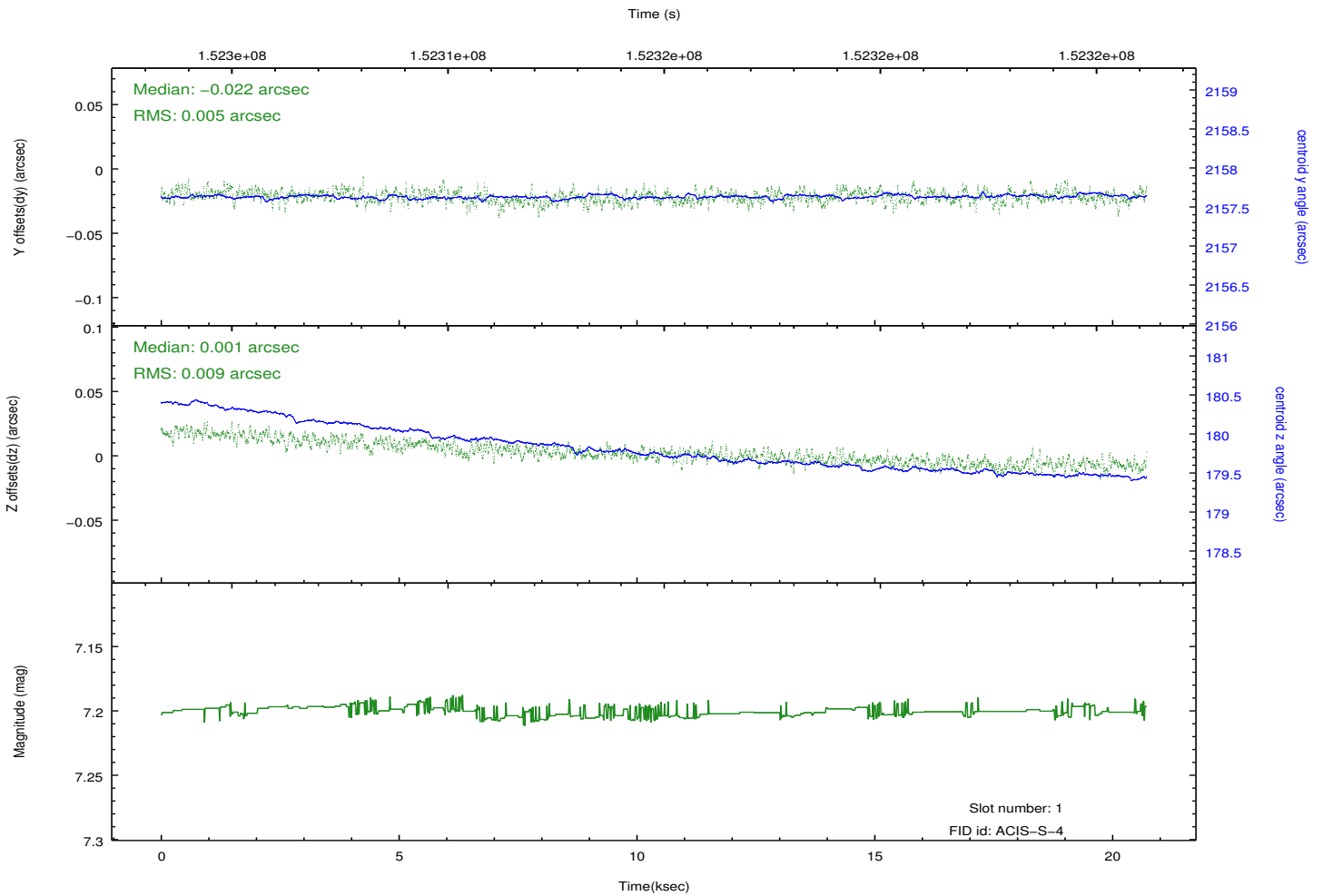
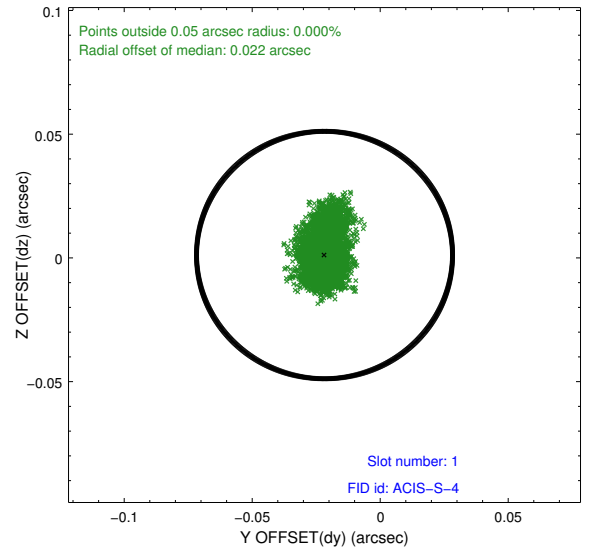
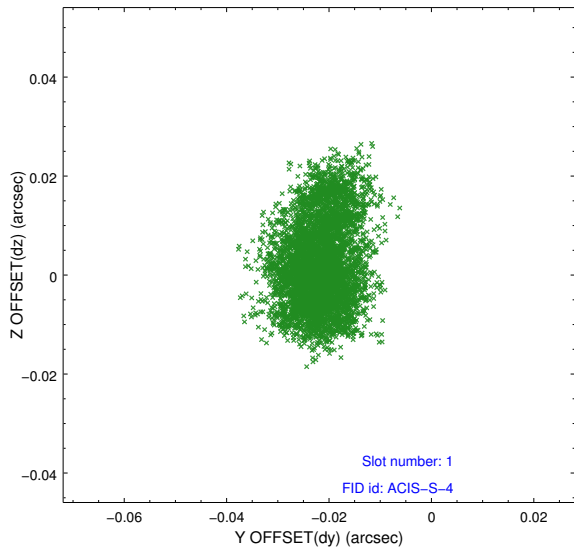


3.5 FID Slots

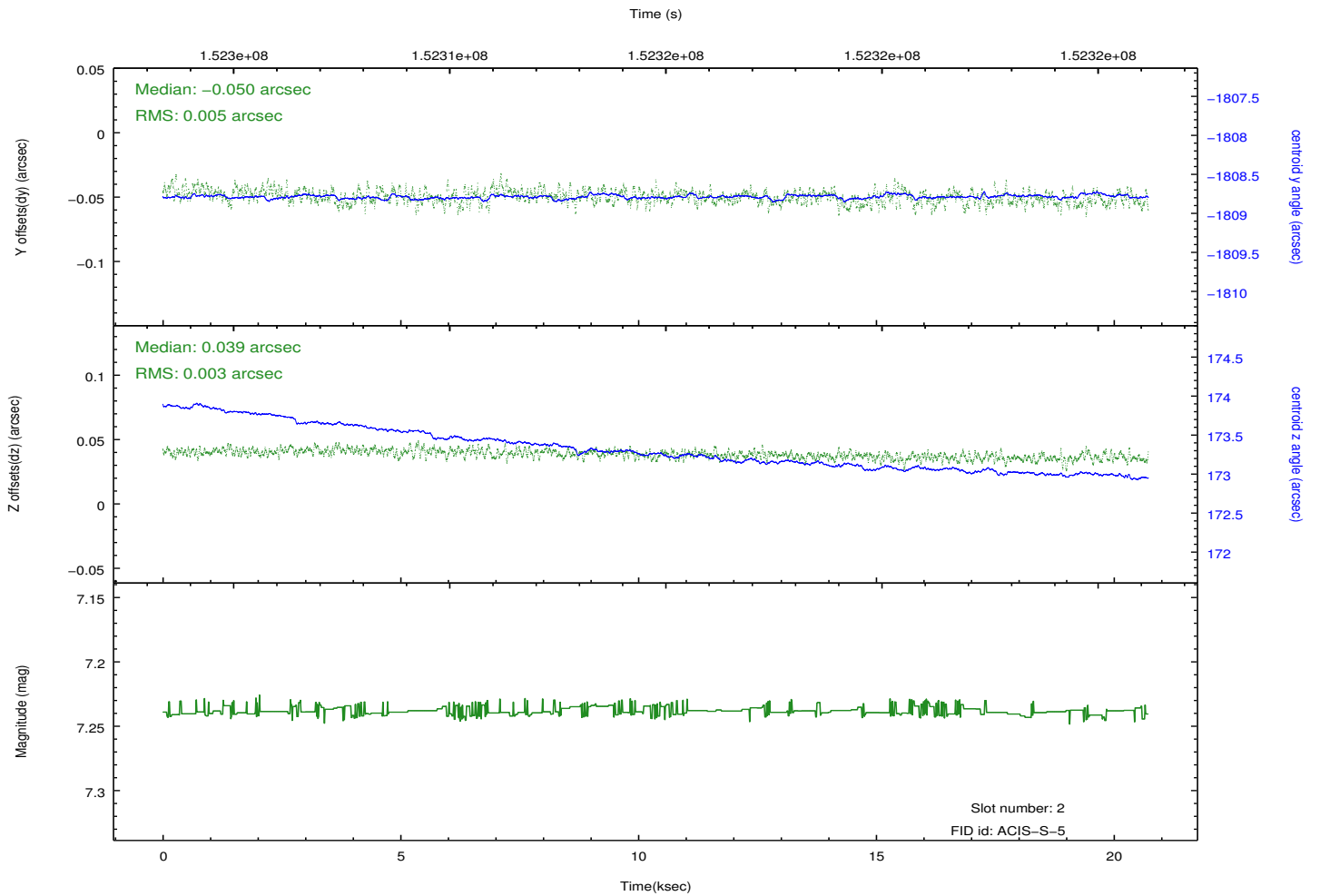
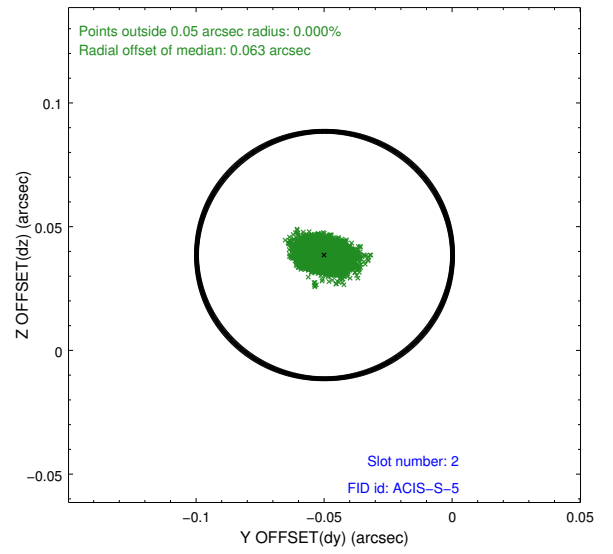
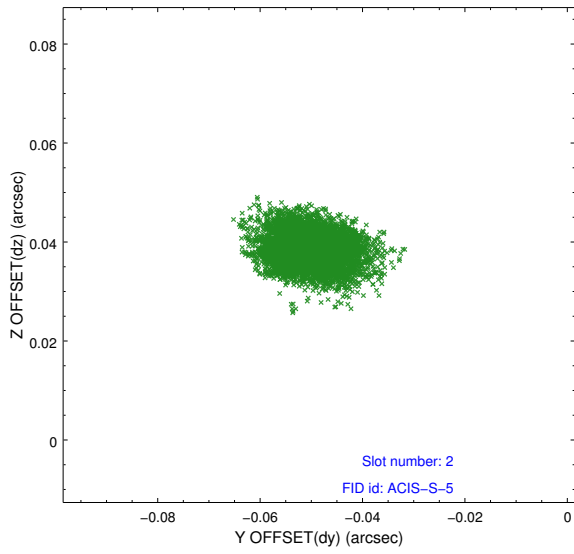
3.5.1 Slot 0



3.5.2 Slot 1



3.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2013.03.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	50.622

A.2 Comments

OBI 1 was interrupted by safing of the science instruments due to high solar radiation environment. The observation was interrupted at 236:02:11:29 UT.

The last 2 ks of the observation are strongly affected by the radiation environment with anomalously high count rates.

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Charge time for this ObsId remains at previous value of 50.622 ks, although with the current processing the charge time would be 50.304 ks.