

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 3726 - L2 Version 4
Chandra X-Ray Center

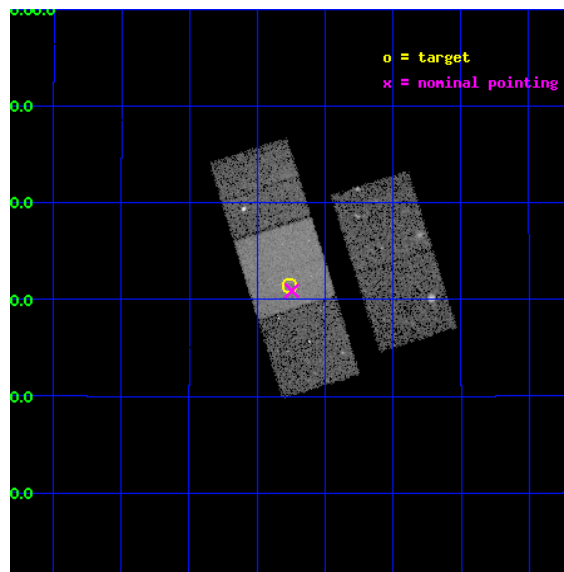
L2 Processing Date : Oct 23 2012

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

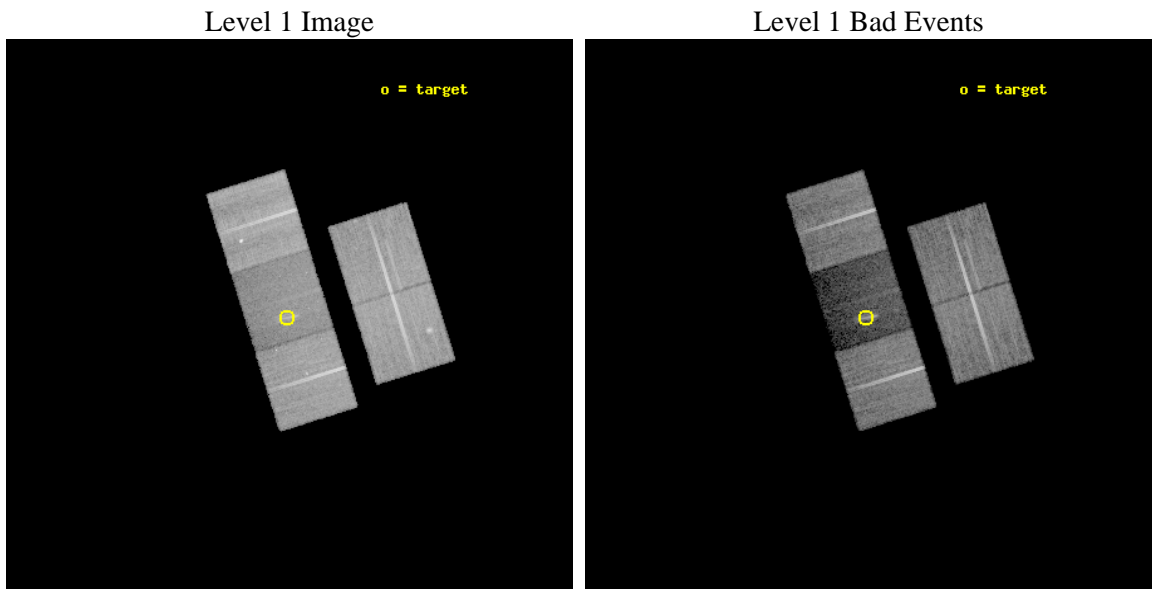
seq_num	100036	Sequence number
obs_id	3726	Observation id
title	MULTIWAVELENGTH OBSERVATIONS OF JUPITER'S AURORAL HOT SPOT	Propos
observer	Dr. Ronald Elsner	Principal investigator
object	JUPITER	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	132.94081	Observer's specified target RA [deg]
dec_targ	18.52364	Observer's specified target Dec [deg]
ra_nom	132.93610060221	Nominal RA [deg]
dec_nom	18.515081774029	Nominal Dec [deg]
roll_nom	252.58483405273	Nominal Roll [deg]
revision	4	Processing version of data
ontime	30014.199942261	Sum of GTIs [s]
livetime	29622.042323883	Livetime [s]
ontime2	30011.058952034	Sum of GTIs [s]
ontime3	30014.199942261	Sum of GTIs [s]
ontime6	30007.917981803	Sum of GTIs [s]
ontime7	30014.199942261	Sum of GTIs [s]
ontime8	30014.199942261	Sum of GTIs [s]
l2events	85346	Number of level 2 events



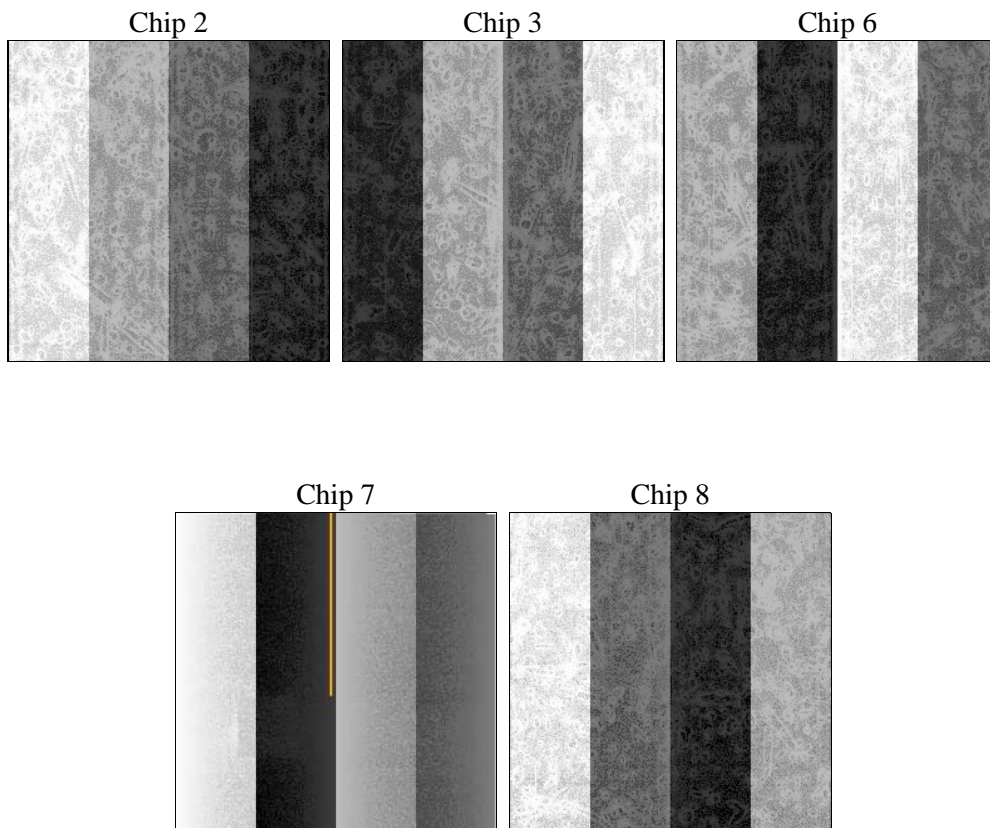
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	29923.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	30014.199942261	Sum of GTIs [s]
caldbver	4.5.2	 	ontime2	30011.058952034	Sum of GTIs [s]
date	2012-10-23T17:26:22	Date and time of file creation	ontime3	30014.199942261	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	30007.917981803	Sum of GTIs [s]
			ontime7	30014.199942261	Sum of GTIs [s]
			ontime8	30014.199942261	Sum of GTIs [s]
			l1events	662661	Number of level 1 events

2.1.4 Events

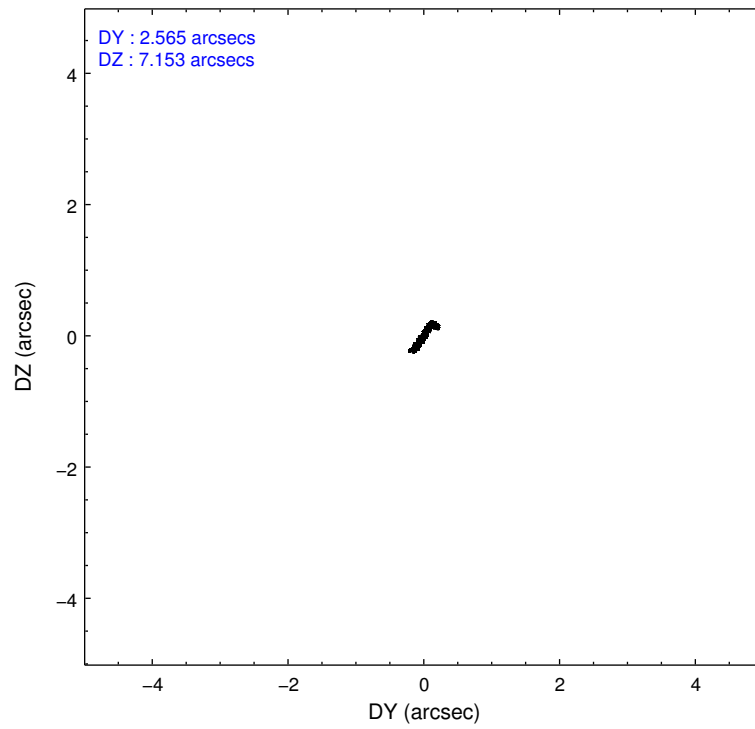
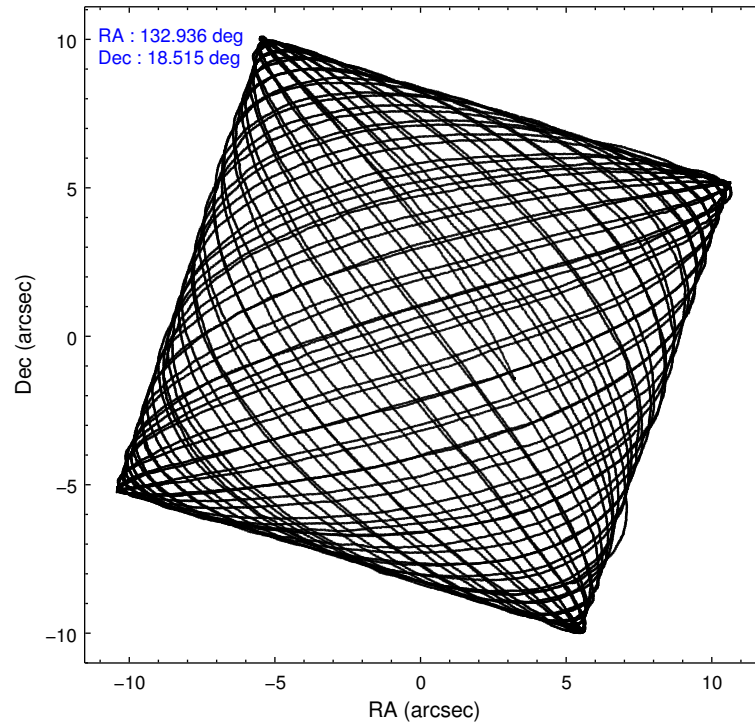
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	145420	133935	137513	79256	166537
rejected events	132233	122497	124622	37535	126344
rejected %	90%	91%	90%	47%	75%

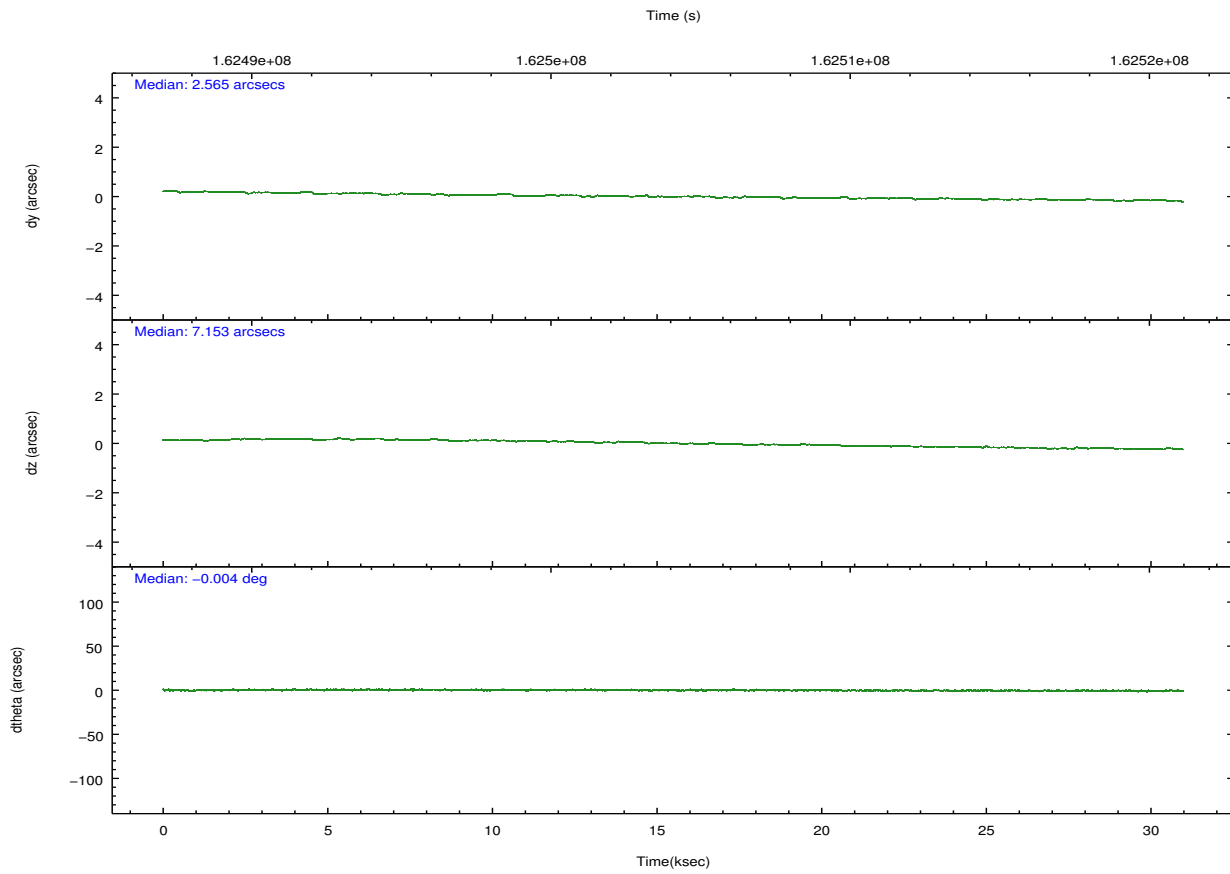
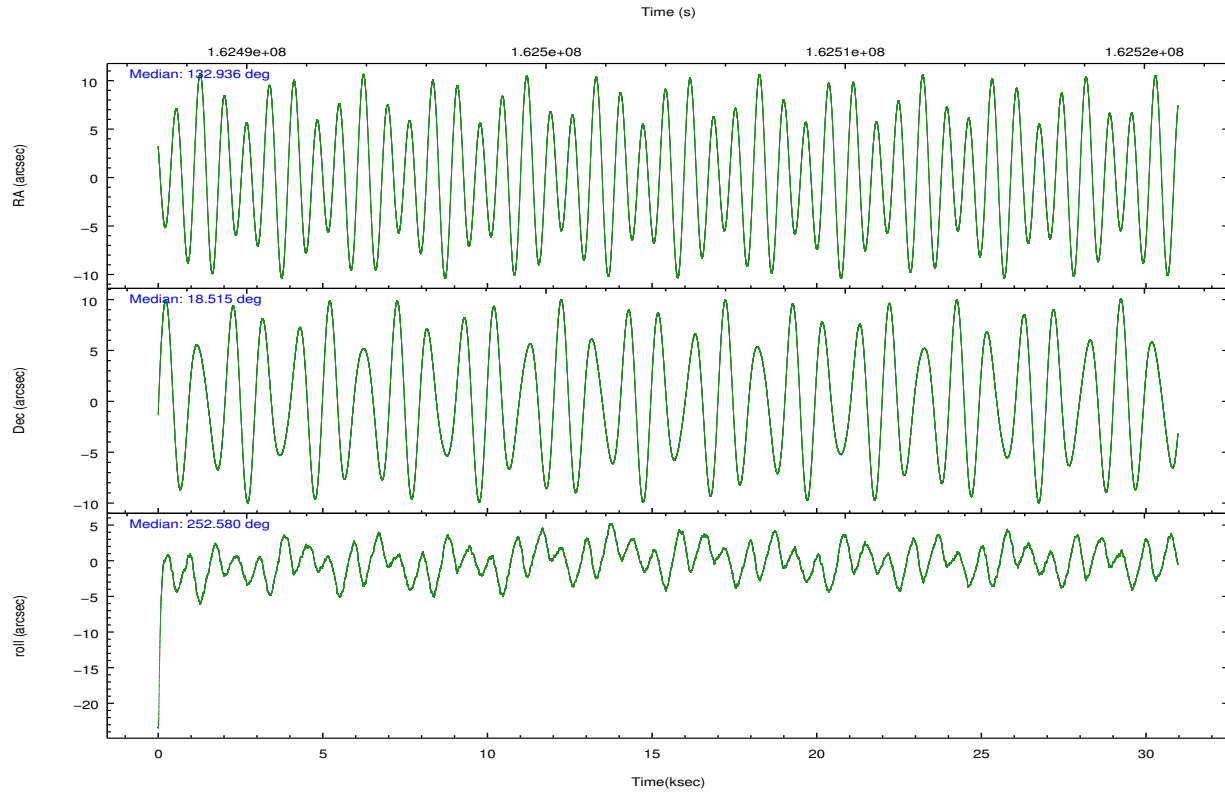
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	6164	4900	5553	5055	12464
	4%	3%	4%	6%	7%
grade 1 events	75	64	51	142	129
	0%	0%	0%	0%	0%
grade 2 events	2701	2200	2566	9702	8643
	1%	1%	1%	12%	5%
grade 3 events	1301	1364	1392	3872	4609
	0%	1%	1%	4%	2%
grade 4 events	1352	1257	1395	3859	4368
	0%	0%	1%	4%	2%
grade 5 events	2180	2496	2768	8141	4438
	1%	1%	2%	10%	2%
grade 6 events	1672	1718	1986	19235	10109
	1%	1%	1%	24%	6%
grade 7 events	129975	119936	121802	29250	121777
	89%	89%	88%	36%	73%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	132.929464	132.9361006022077	Subarray requested	NONE	NONE
[deg] Pointing Dec	18.541559	18.51508177402871	Alternating exposures requested	N	N
[deg] Pointing Roll	252.430317	252.5848340527324	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	162489640.184000	162488245.80274			
Observation start date	2003-02-24T15:59:36	2003-02-24T15:37:25			
[s] Observation end time (MET)	162519563.184000	162519744.56657			
Observation end date	2003-02-25T00:18:19	2003-02-25T00:22:24			
Read mode	TIMED	TIMED			

2.3 Aspect



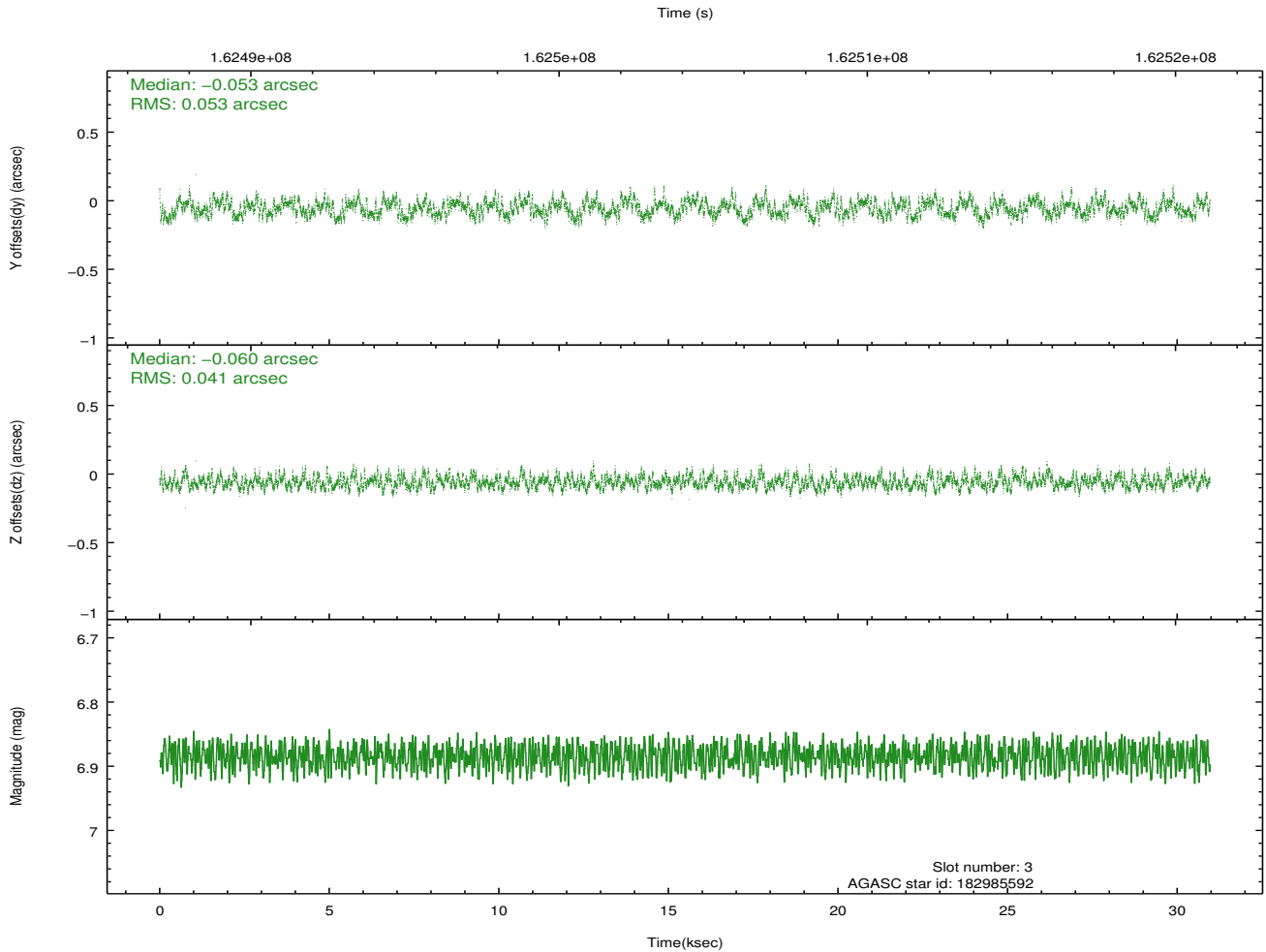
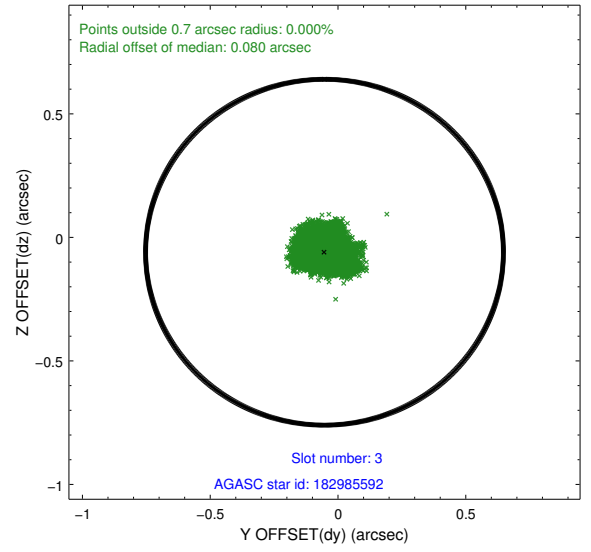
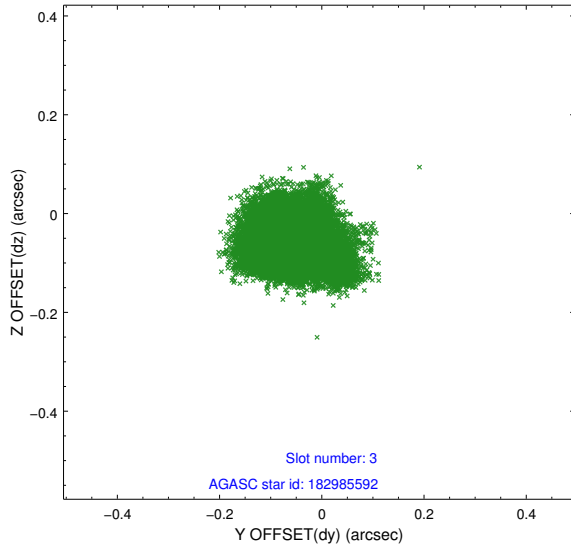


Slot Statistics

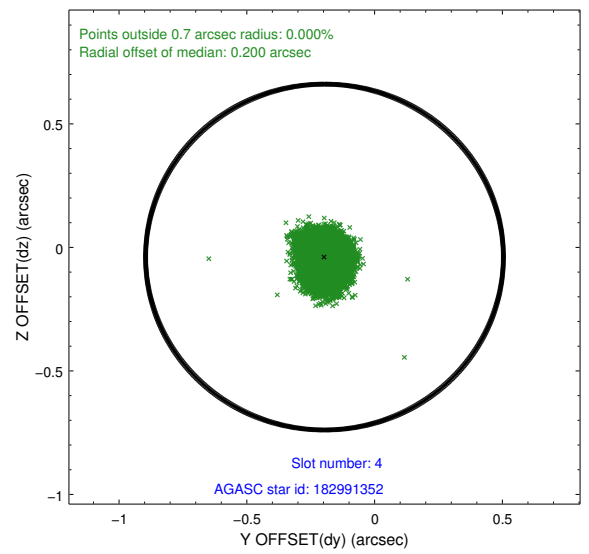
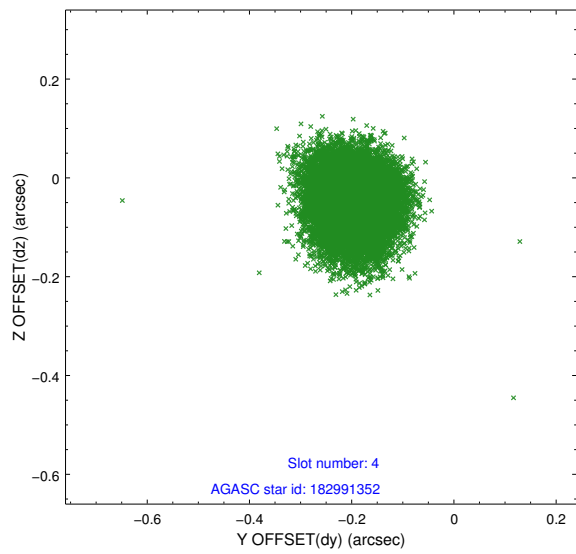
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	7555	-0.029	-0.006	0.008	0.013	0.000000	0.000000	-755.22	-1728.33
1	FID	ACIS-S-4	7.20	7553	-0.003	0.016	0.007	0.011	0.000000	0.000000	2158.04	180.12
2	FID	ACIS-S-5	7.24	7554	0.000	-0.001	0.010	0.018	0.000000	0.000000	-1807.96	173.83
3	GUIDE	182985592	6.88	15108	-0.053	-0.060	0.073	0.112	132.688010	18.832182	-749.28	-1100.26
4	GUIDE	182991352	8.87	15105	-0.196	-0.039	0.071	0.117	132.561076	19.276214	-2144.57	-1992.53
5	GUIDE	182992528	9.47	15082	0.214	0.019	0.090	0.147	132.603309	18.193633	1530.22	-685.47
6	GUIDE	182989392	9.26	15100	0.075	0.023	0.091	0.150	132.825117	17.883707	2365.98	374.43
7	GUIDE	183112280	7.88	15107	-0.029	0.060	0.077	0.126	133.483665	18.233589	482.47	2140.82

2.4 Star Slots

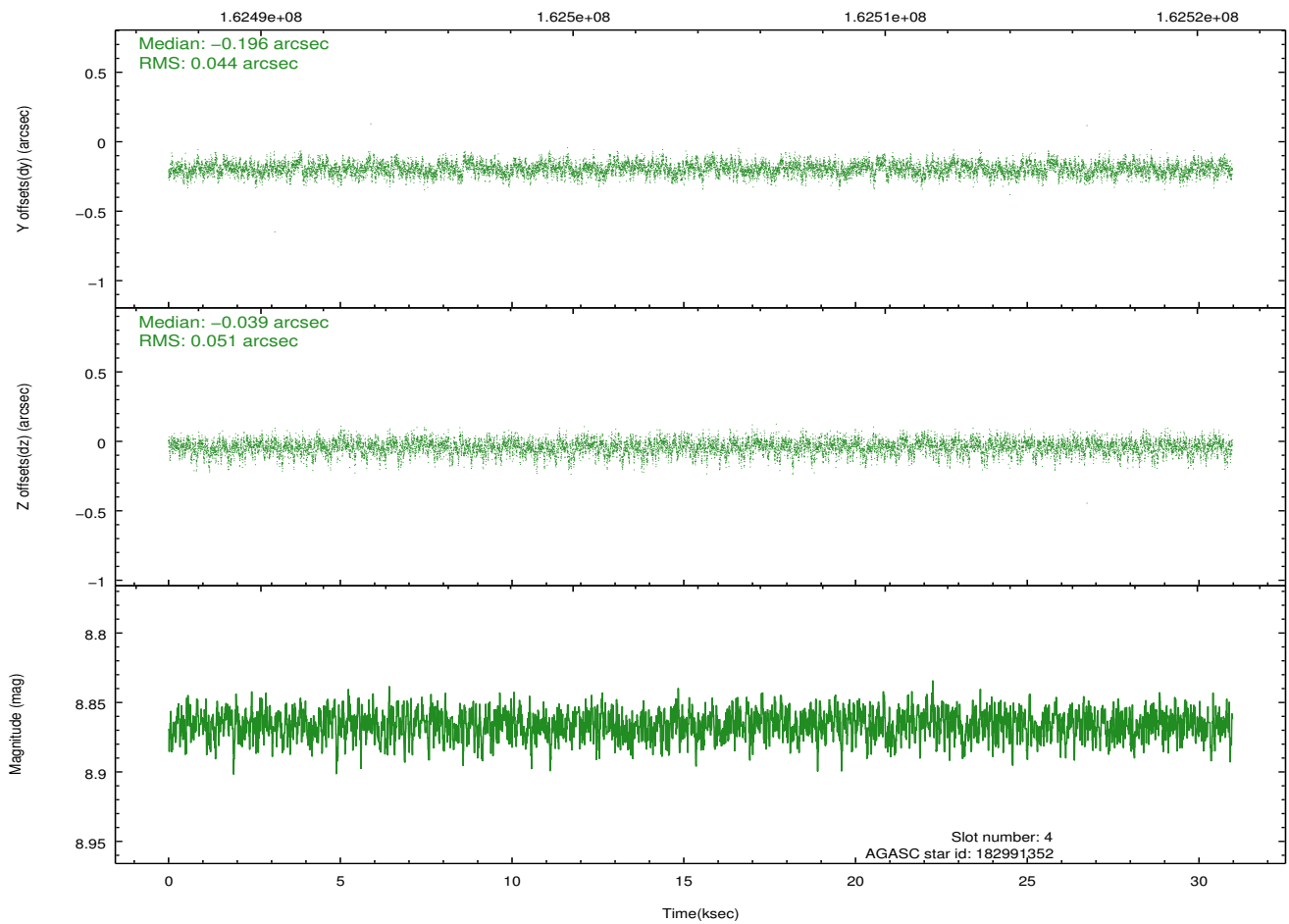
2.4.1 Slot 3



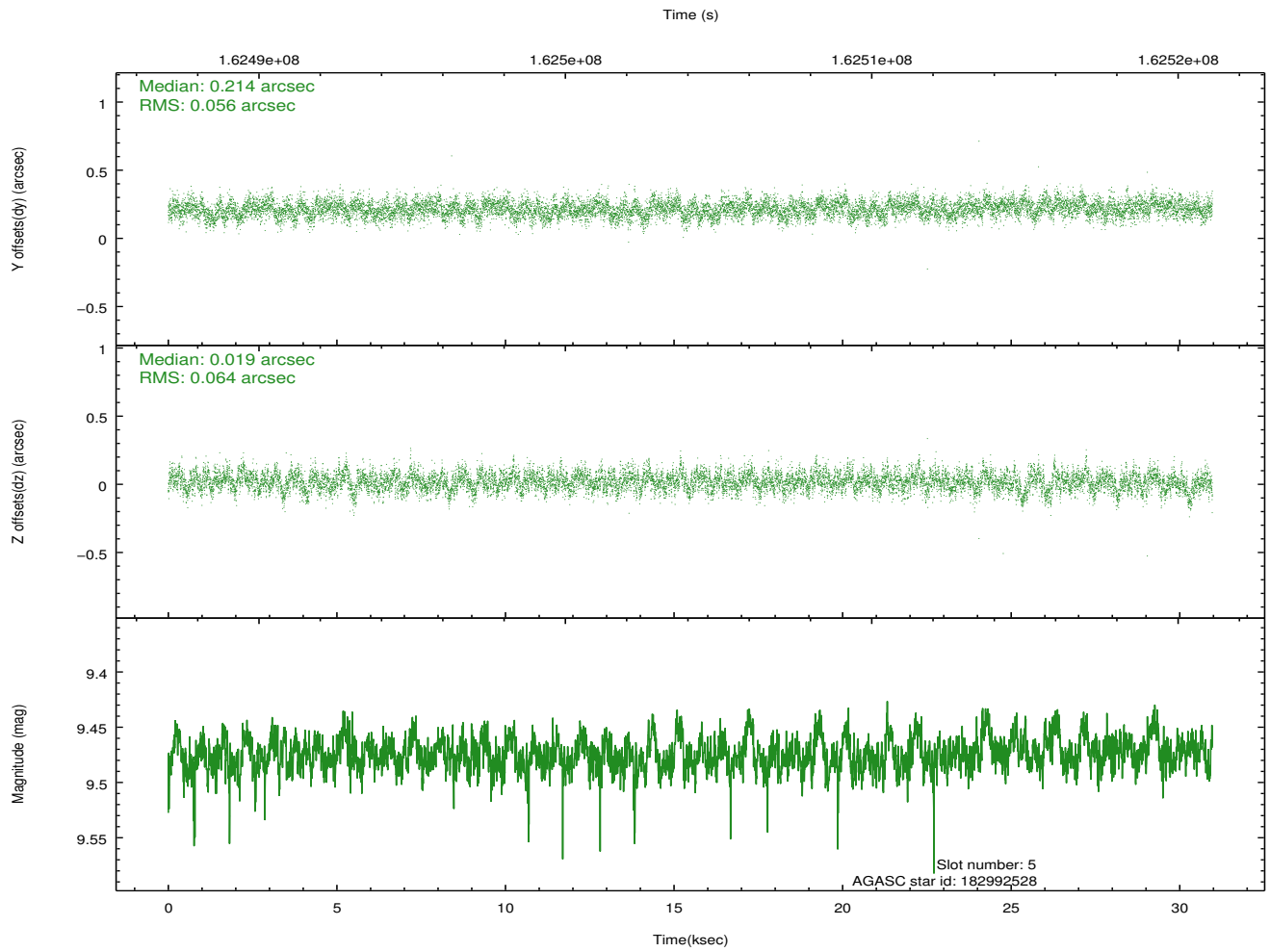
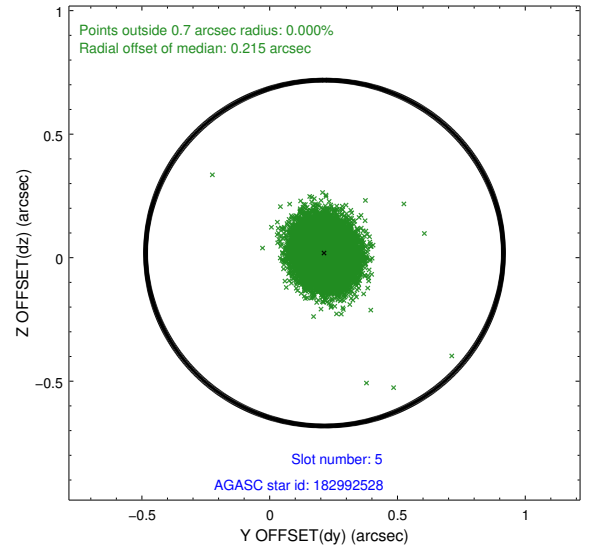
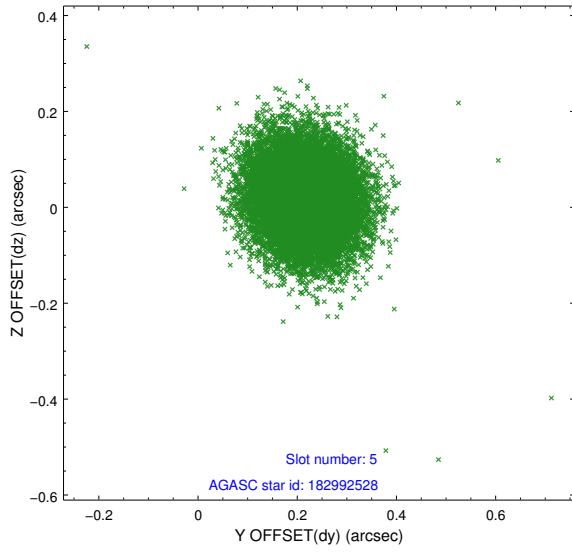
2.4.2 Slot 4



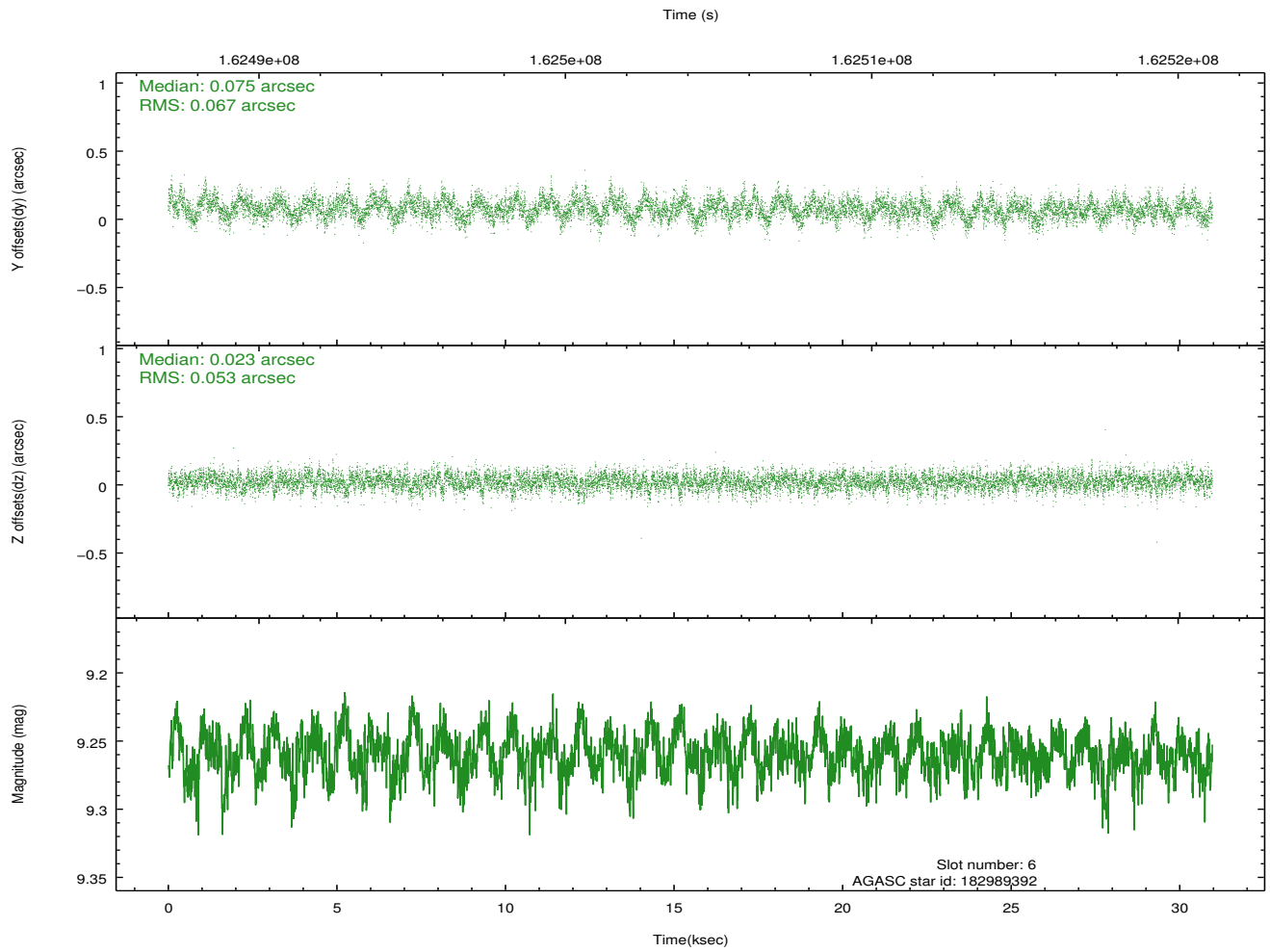
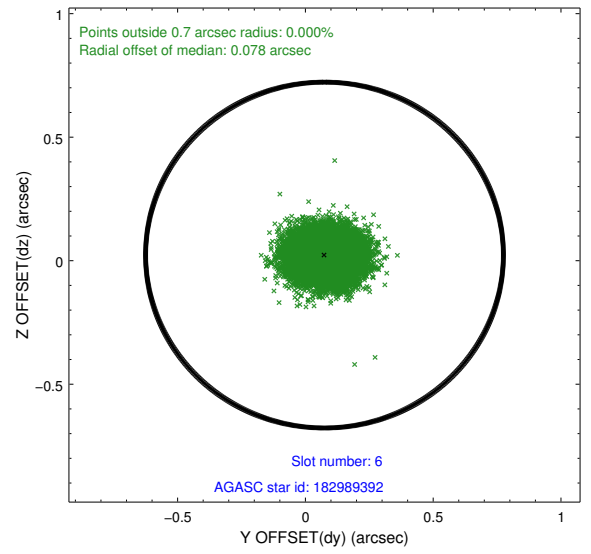
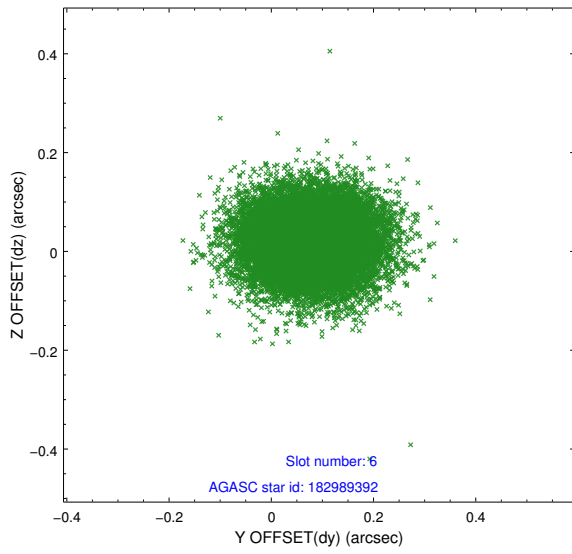
Time (s)



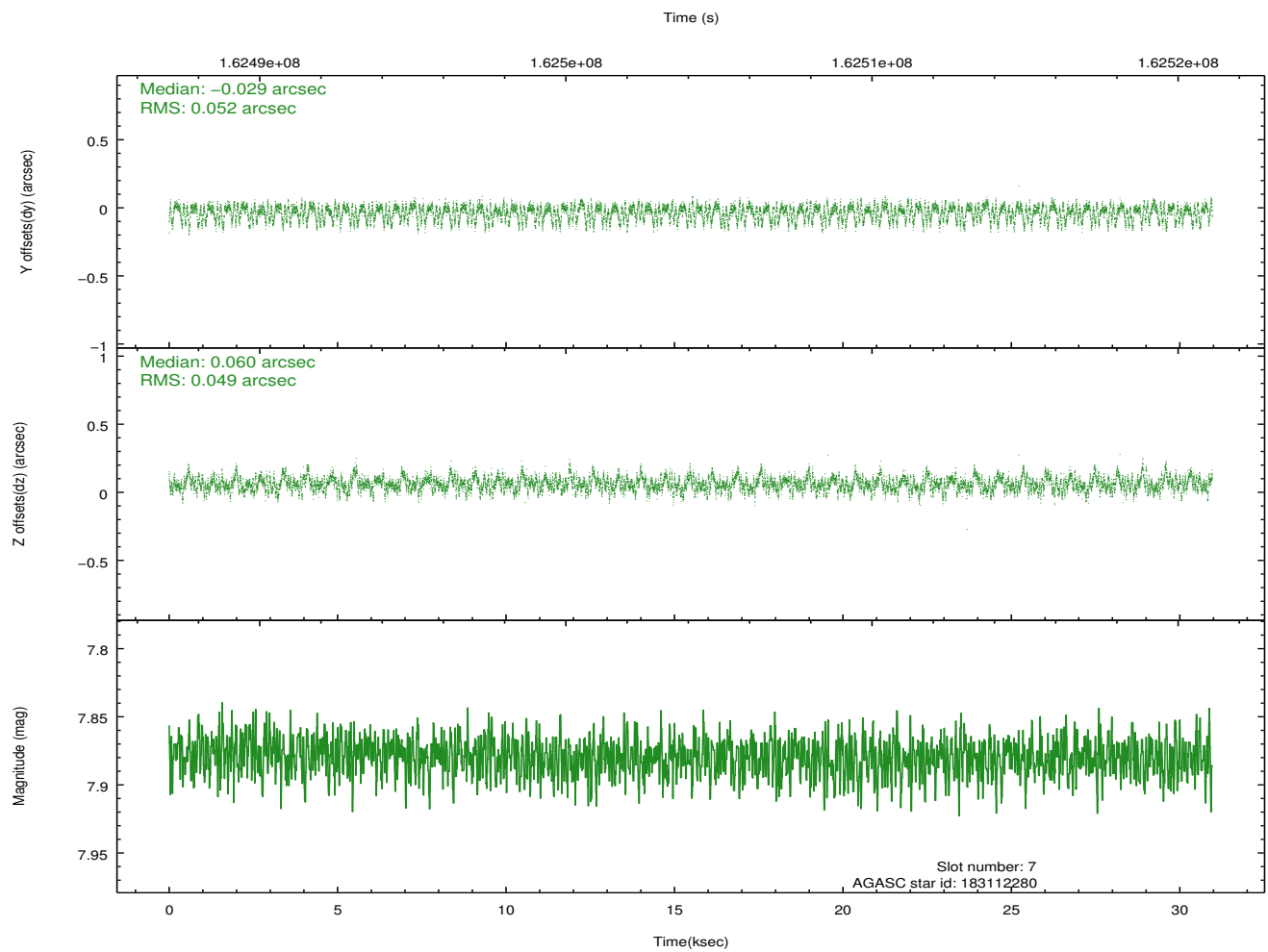
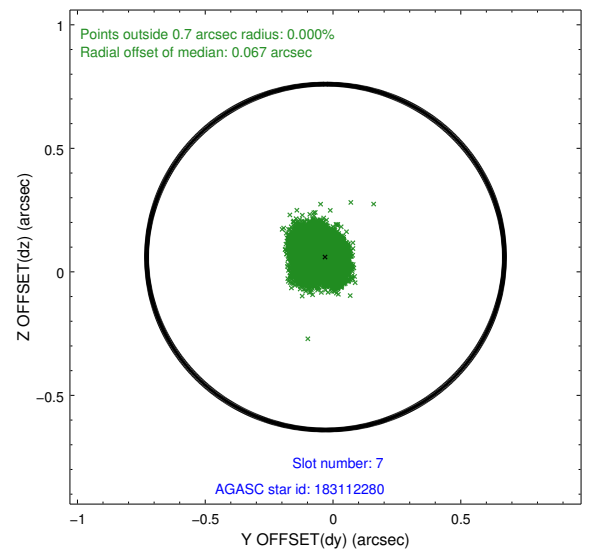
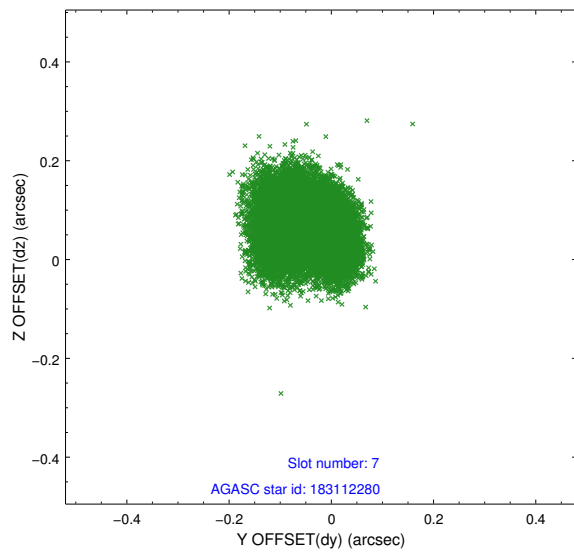
2.4.3 Slot 5



2.4.4 Slot 6

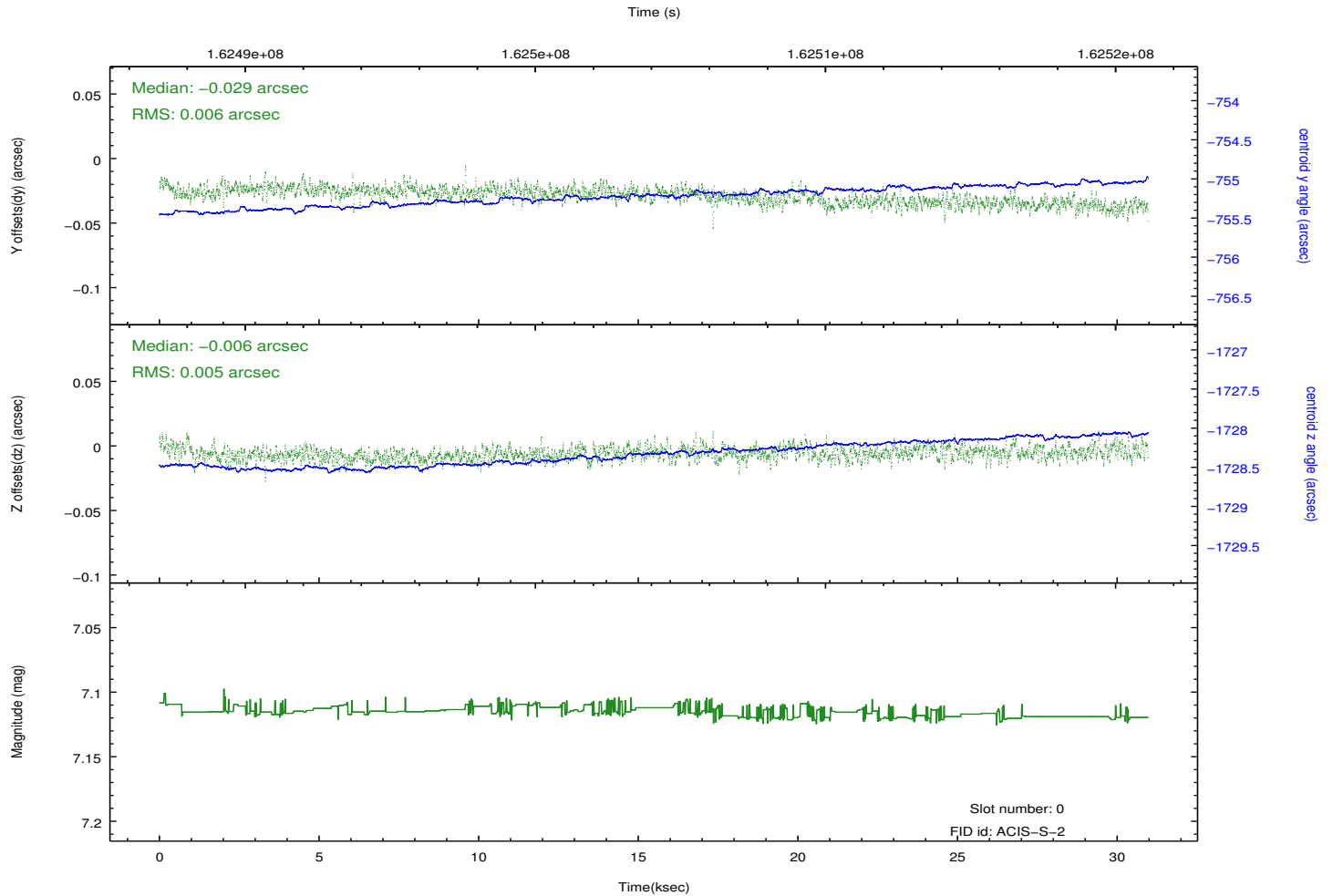
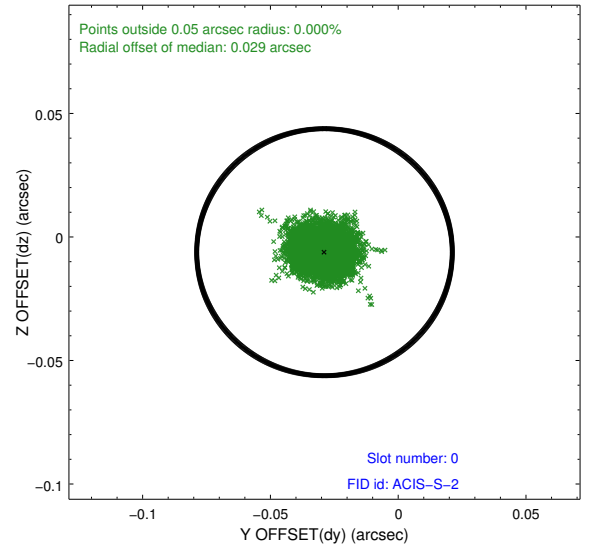
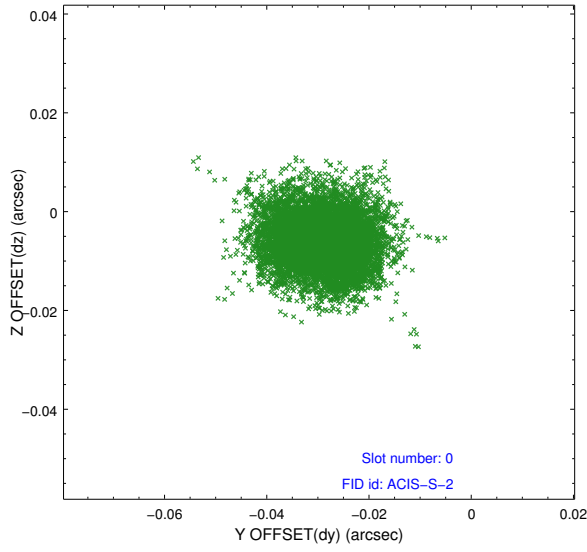


2.4.5 Slot 7

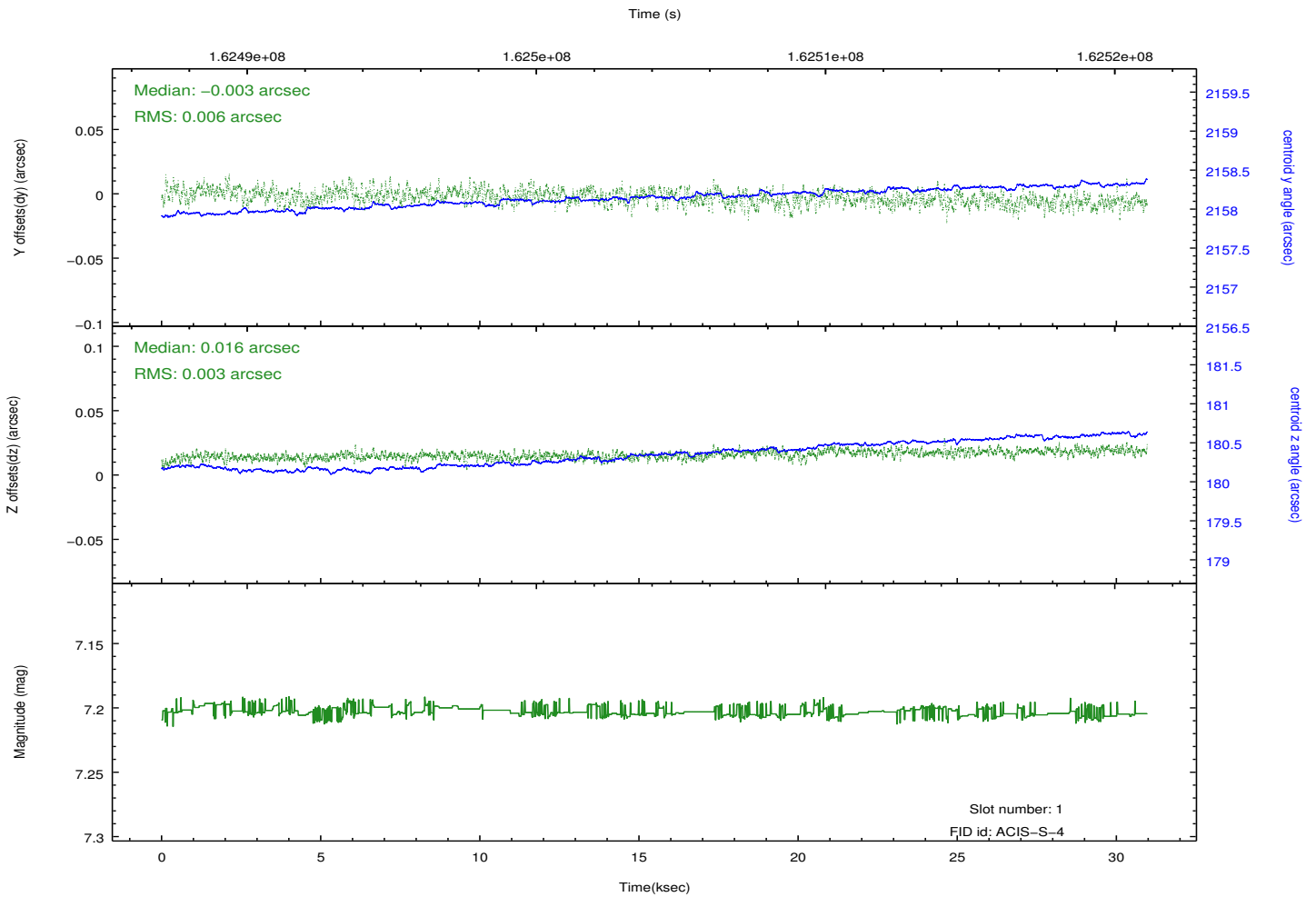
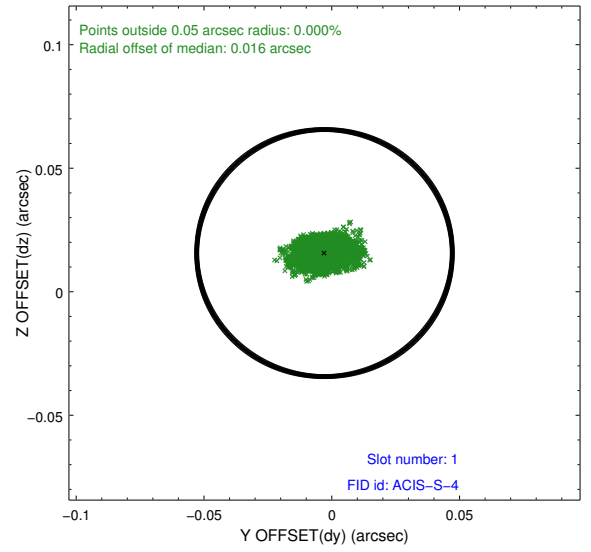
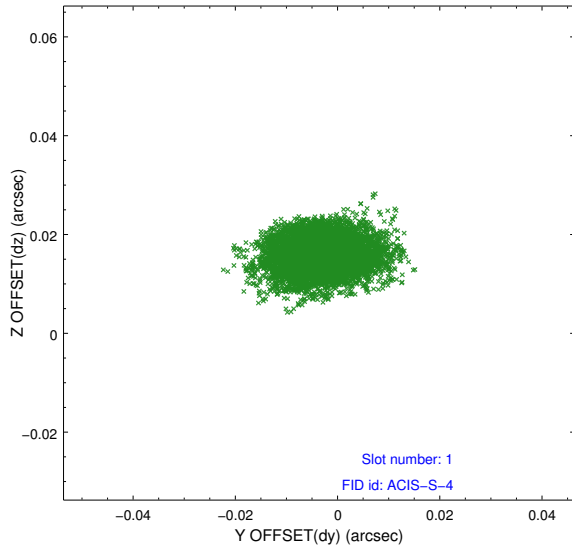


2.5 FID Slots

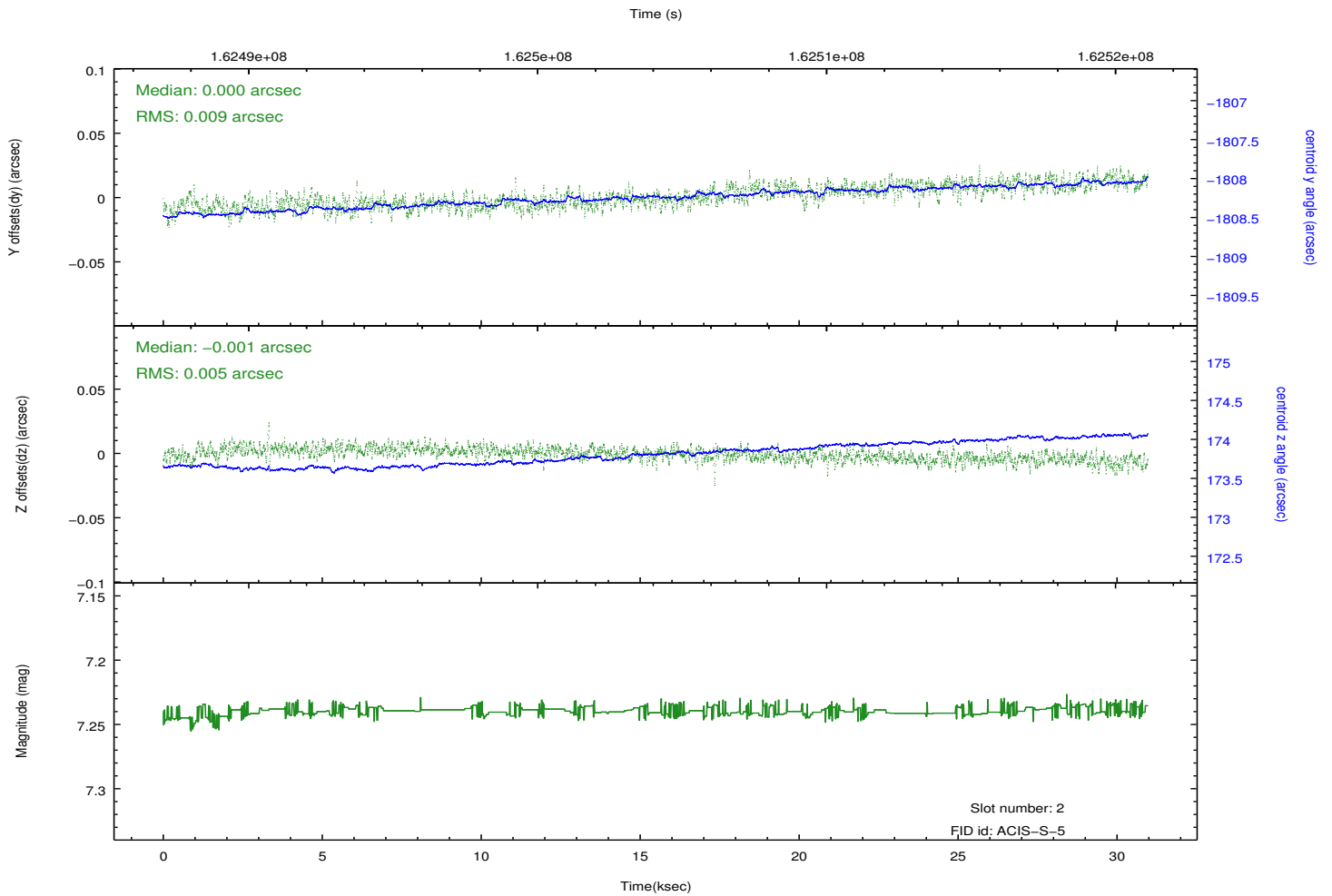
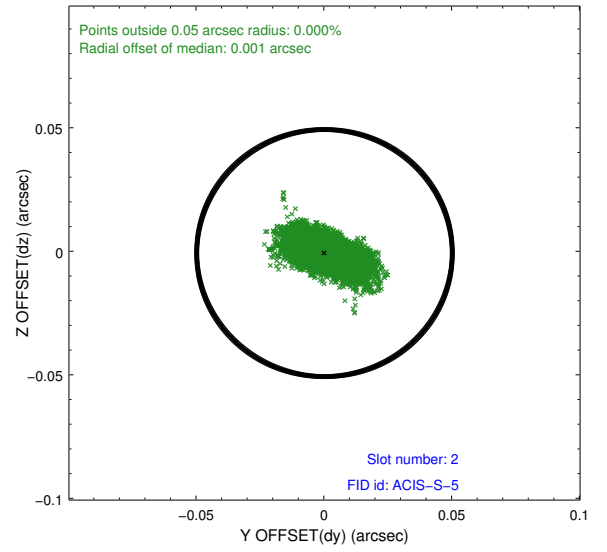
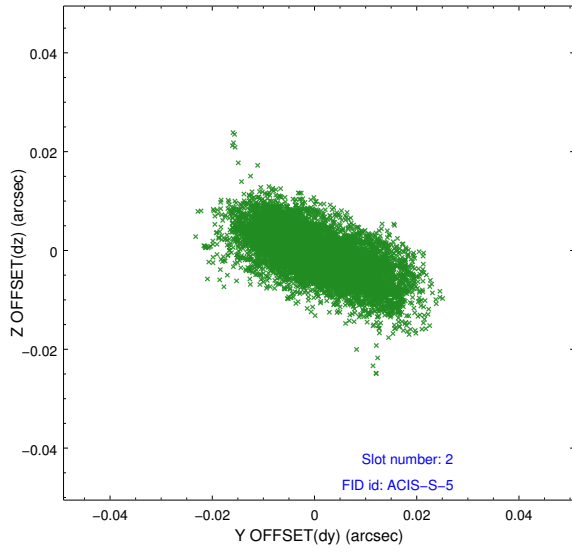
2.5.1 Slot 0



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)	2012.11.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	29.976

A.2 Comments

Charge time for this ObsId remains at original value of 29.98 ks, although with the current processing the charge time would have been 30.01 ksec. Preferred time constraint to achieve full overlap with HST observations was met. Bias map for CCD chip 7 was inadvertently exposed to the image of Jupiter, raising the bias values at that position. The bias map was repaired by removing a square area that includes most of the Jupiter image, then replacing the square area with appropriate pixel values modeled from another bias file. The region affected is bounded by the sky coords:

(132.97288,18.50168), (132.98105,18.52642), (132.95495,18.53417), (132.94678,18.50943)