

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9512 - L2 Version 2  
Chandra X-Ray Center

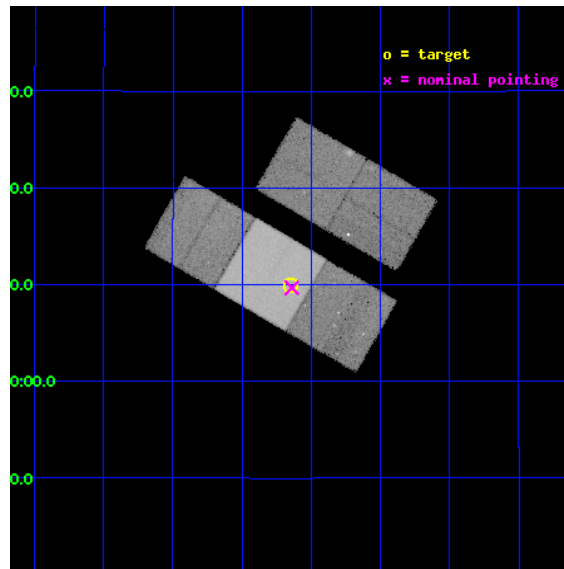
L2 Processing Date : May 13 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
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
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

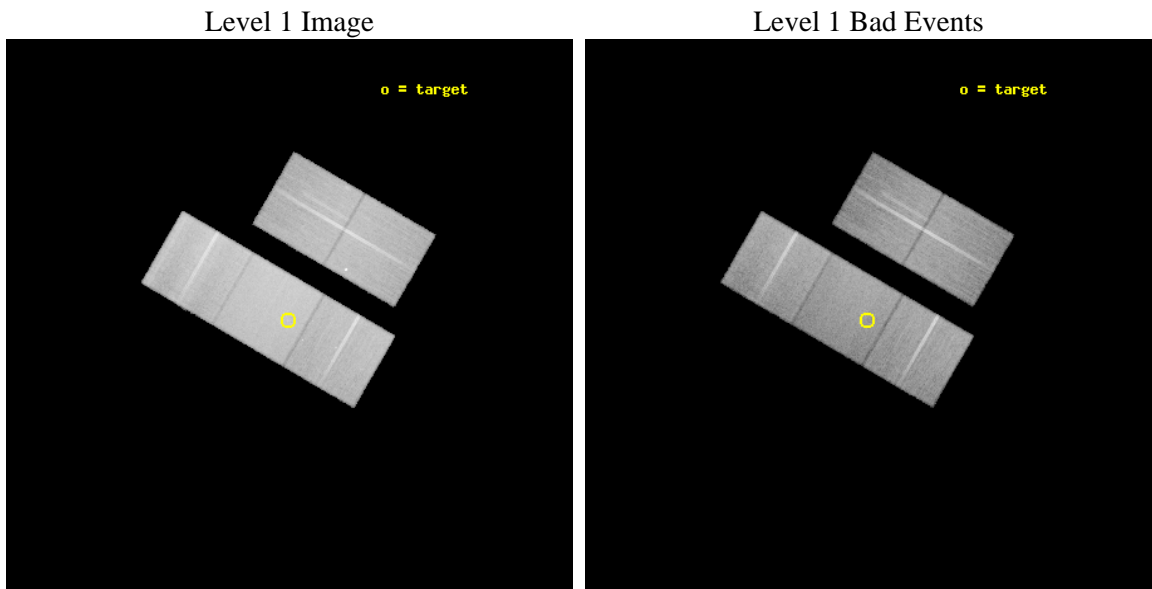
seq_num	600653	Sequence number
obs_id	9512	Observation id
title	DUST DISKS AND THE EVOLUTION OF S0 GALAXIES	Proposal title
observer	Dr. Raymond White	Principal investigator
object	NGC 4710	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	192.412083	Observer's specified target RA [deg]
dec_targ	15.165556	Observer's specified target Dec [deg]
ra_nom	192.40971649155	Nominal RA [deg]
dec_nom	15.161279706368	Nominal Dec [deg]
roll_nom	210.17248967907	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30159.900231957	Sum of GTIs [s]
livetime	29765.838932031	Livetime [s]
ontime2	30153.618251264	Sum of GTIs [s]
ontime3	30156.759251535	Sum of GTIs [s]
ontime6	30156.759261549	Sum of GTIs [s]
ontime7	30159.900231957	Sum of GTIs [s]
ontime8	30159.900231957	Sum of GTIs [s]
l2events	293978	Number of level 2 events



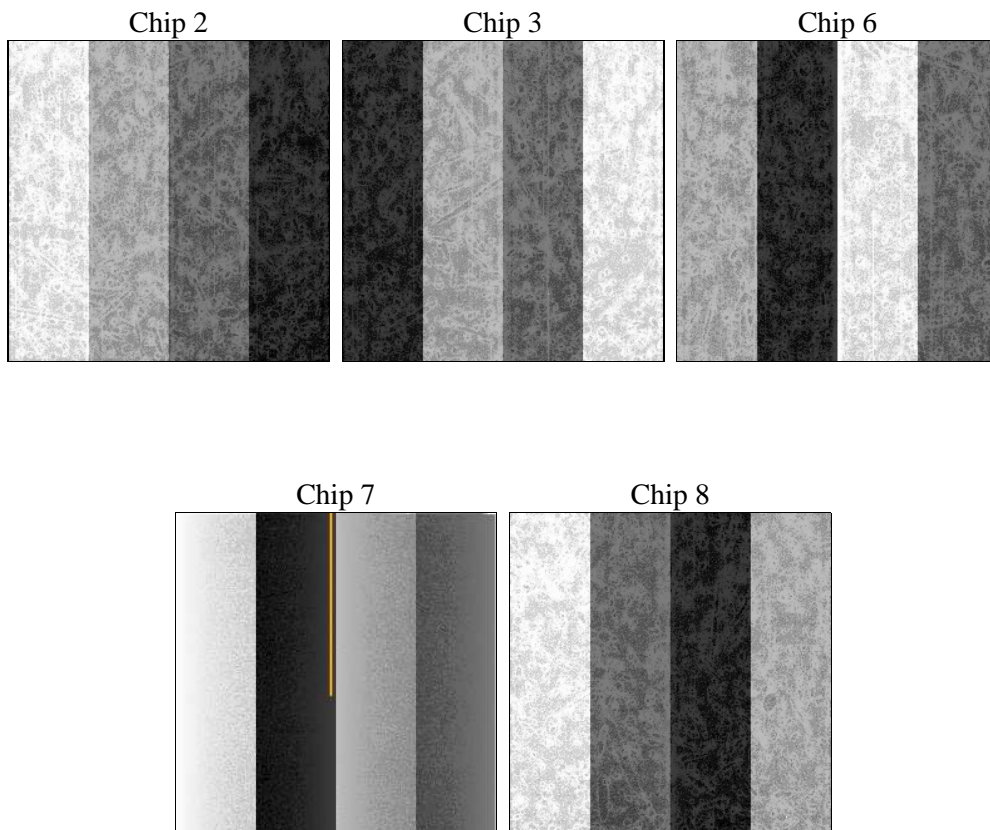
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	30159.900231957	Sum of GTIs [s]
caldbver	4.4.9	&#160	ontime2	30153.618251264	Sum of GTIs [s]
date	2012-05-13T02:42:04	Date and time of file creation	ontime3	30156.759251535	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	30156.759261549	Sum of GTIs [s]
			ontime7	30159.900231957	Sum of GTIs [s]
			ontime8	30159.900231957	Sum of GTIs [s]
			l1events	1653798	Number of level 1 events

### 2.1.4 Events

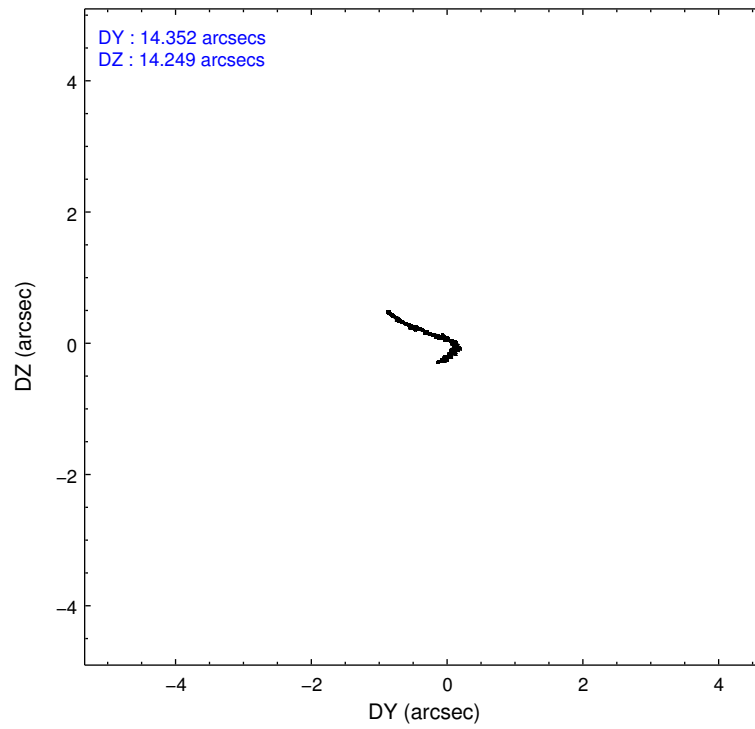
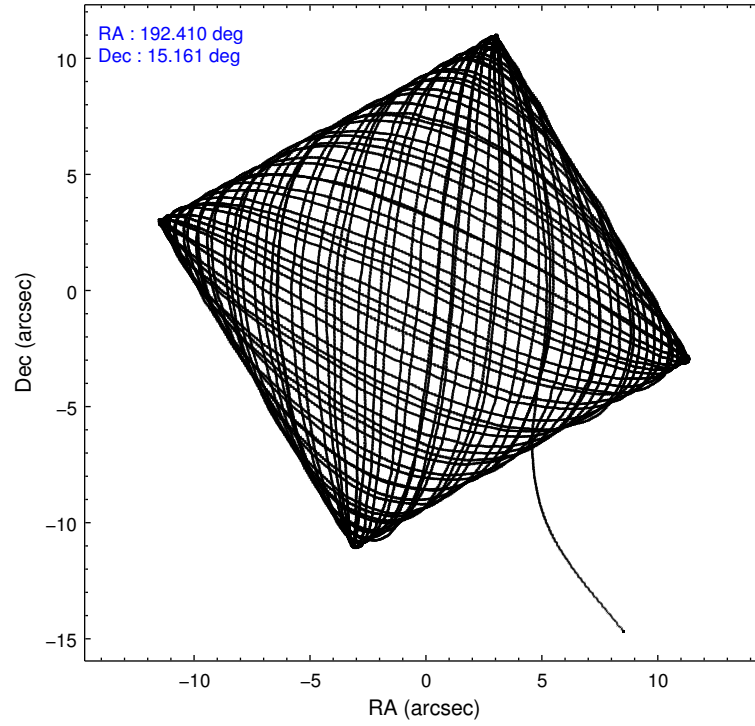
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	286832	280371	301882	407827	376886
rejected events	251256	245111	265500	239714	292849
rejected %	87%	87%	87%	58%	77%

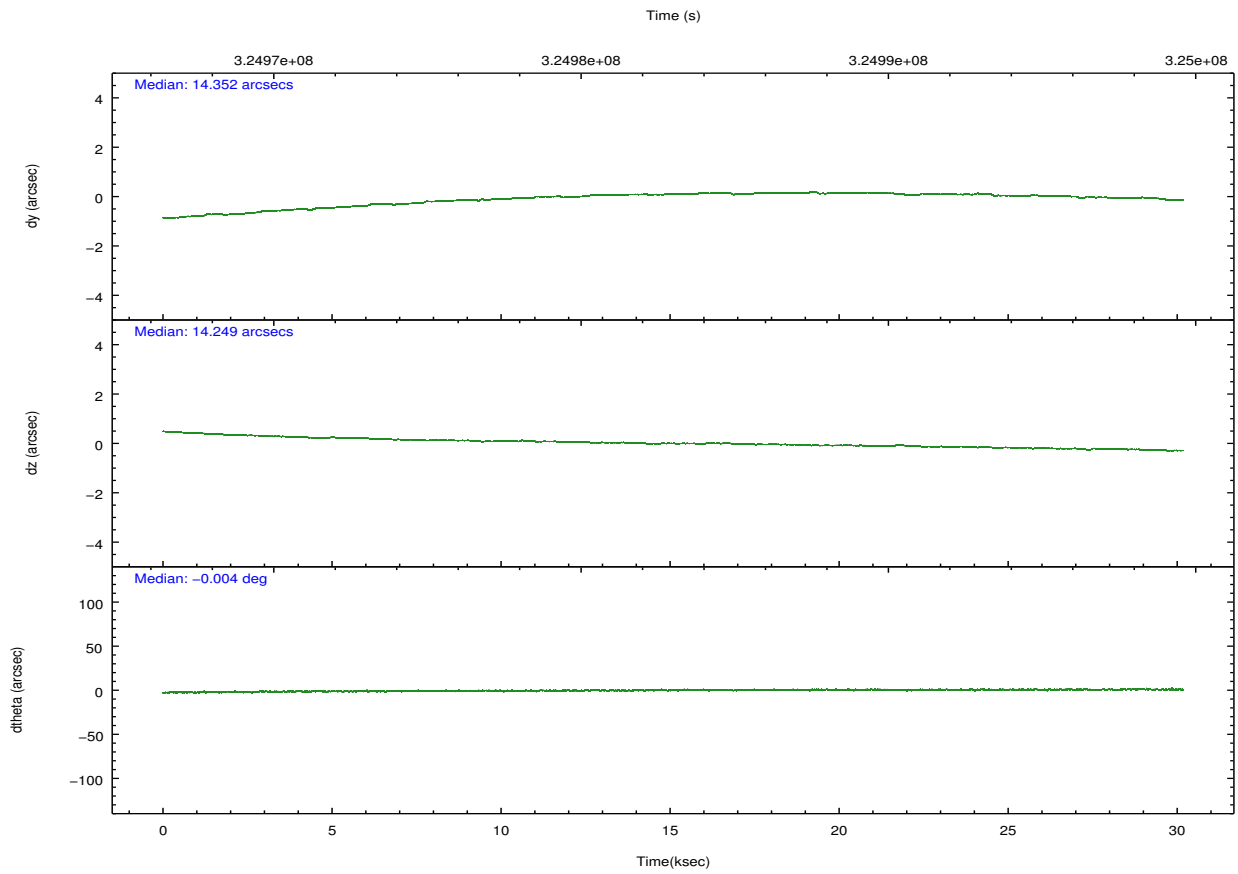
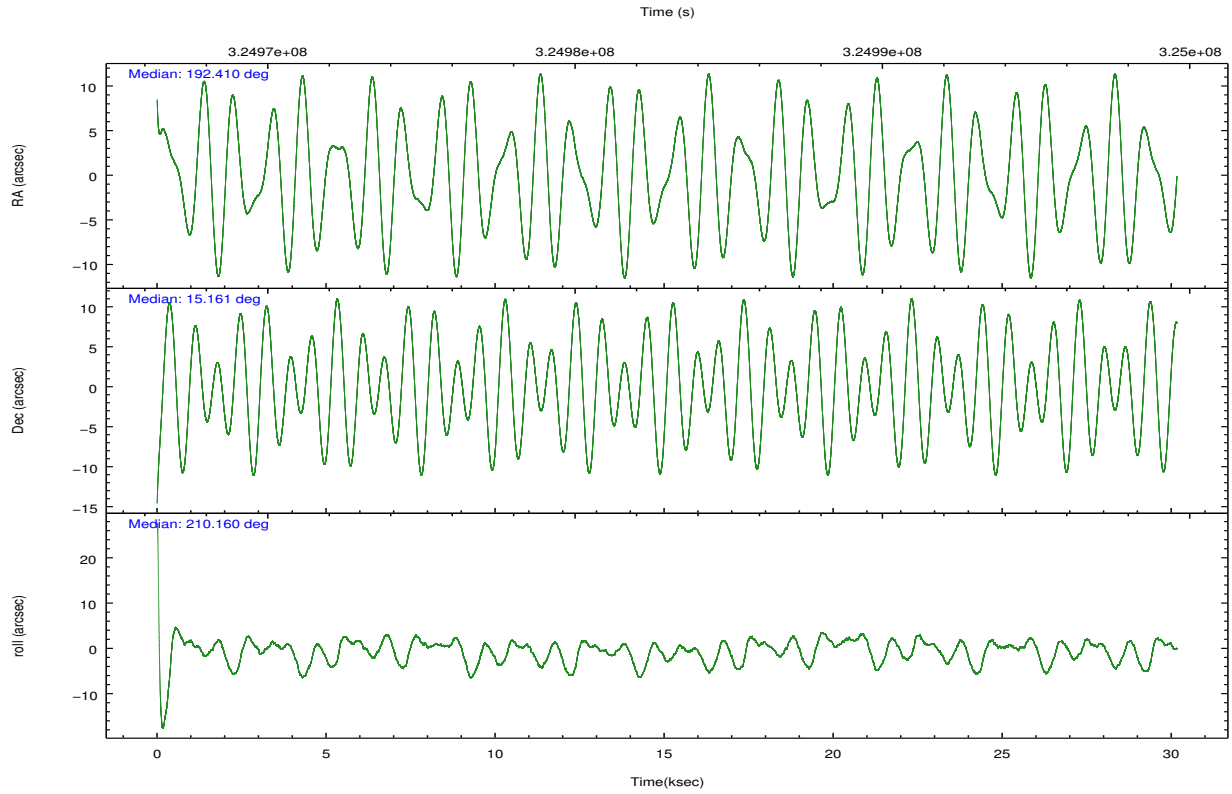
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	15847	15362	14279	14686	26259
	5%	5%	4%	3%	6%
grade 1 events	182	181	160	456	278
	0%	0%	0%	0%	0%
grade 2 events	7350	6944	8009	34345	19453
	2%	2%	2%	8%	5%
grade 3 events	3280	3327	3305	14406	8646
	1%	1%	1%	3%	2%
grade 4 events	3270	3450	3407	13911	7915
	1%	1%	1%	3%	2%
grade 5 events	11806	13657	14130	37989	18845
	4%	4%	4%	9%	5%
grade 6 events	5910	6252	7440	91139	21946
	2%	2%	2%	22%	5%
grade 7 events	239187	231198	251152	200895	273544
	83%	82%	83%	49%	72%

## 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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	192.423468	192.4097164915498	CCD I2 on	O1	Y
[deg] Pointing Dec	15.185183	15.16127970636835	CCD I3 on	O2	Y
[deg] Pointing Roll	210.012238	210.1724896790693	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O4	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O3	Y
[s] Observation start time (MET)	324968074.184000	324967051.24858	CCD S5 on	N	N
Observation start date	2008-04-19T04:53:29	2008-04-19T04:37:31	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	324998074.184000	324998847.77513	On-chip summing requested	N	N
Observation end date	2008-04-19T13:13:29	2008-04-19T13:27:27	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



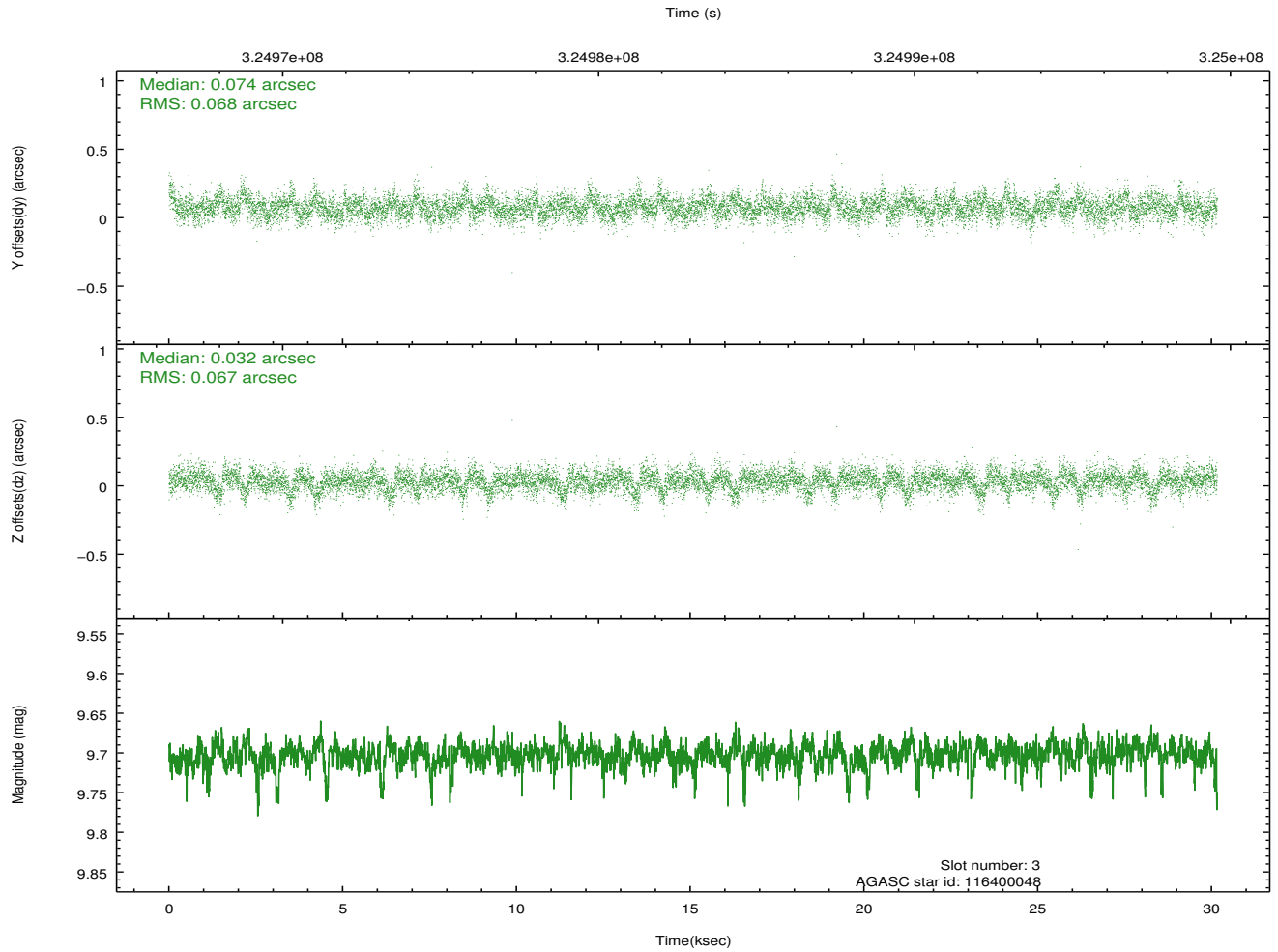
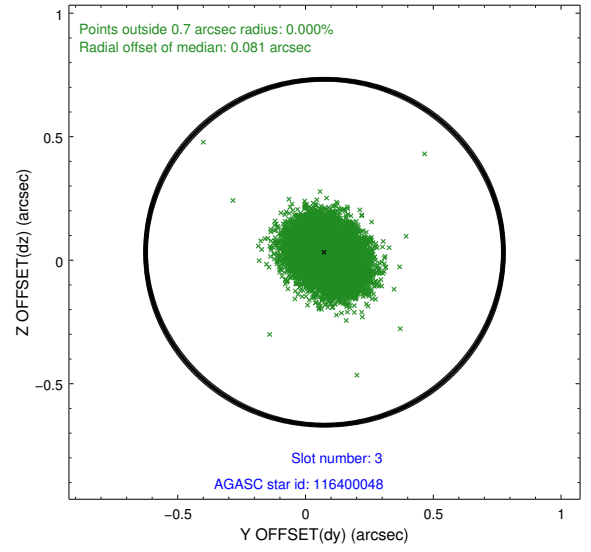
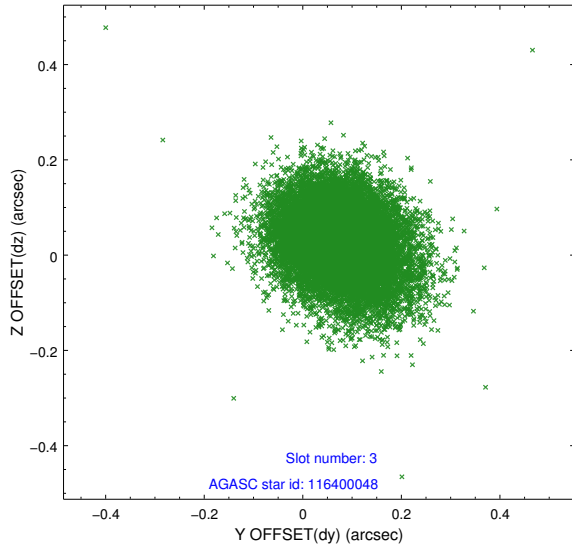


### Slot Statistics

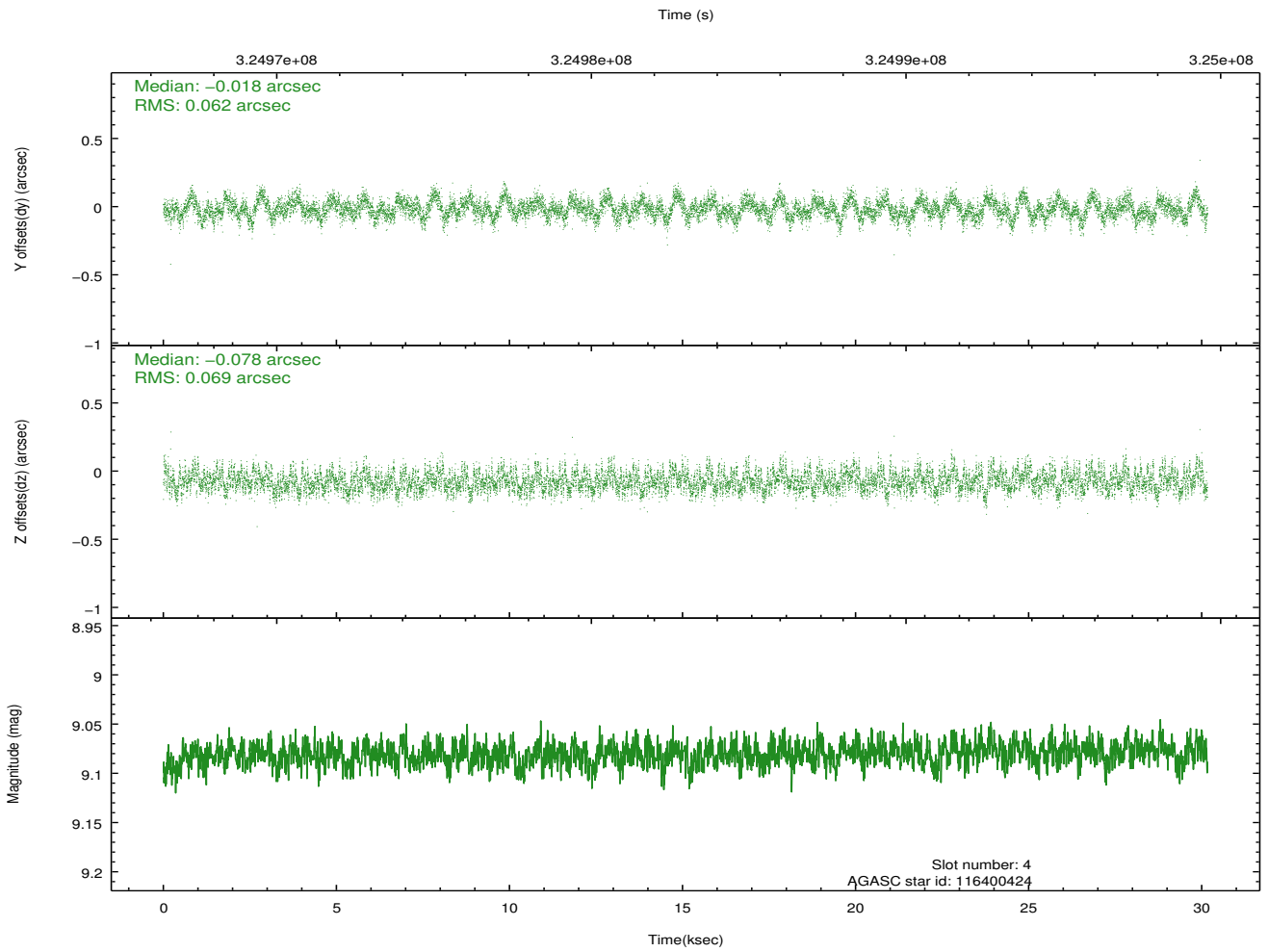
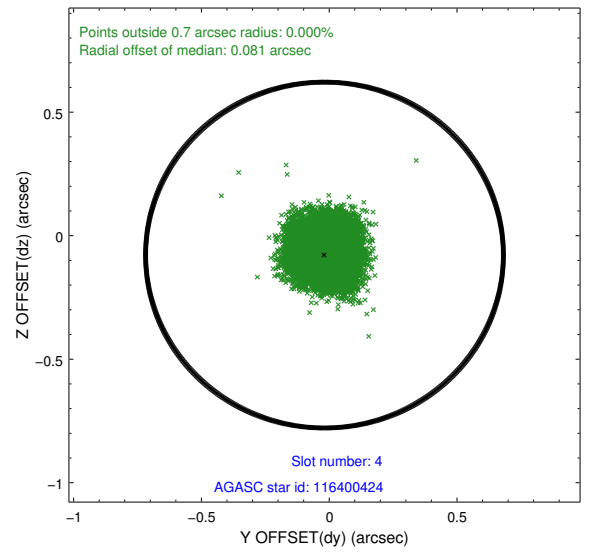
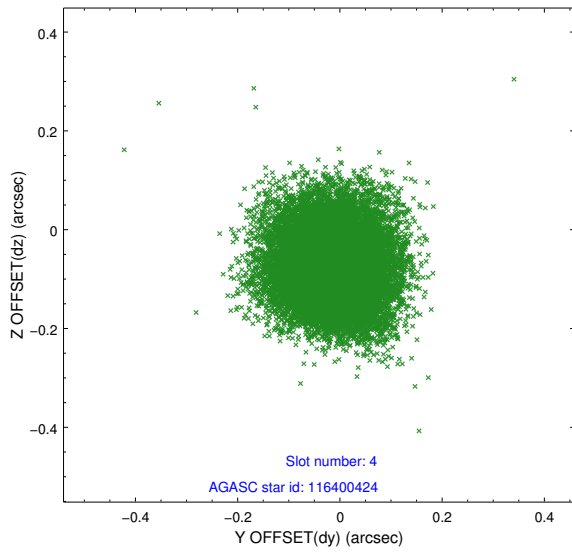
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.88	7358	-0.063	-0.024	0.010	0.018	0.000000	0.000000	-767.24	-1735.66
1	FID	ACIS-S-4	6.97	7358	0.159	0.037	0.008	0.016	0.000000	0.000000	2146.22	172.82
2	FID	ACIS-S-5	6.99	7358	-0.126	-0.005	0.007	0.013	0.000000	0.000000	-1820.06	166.52
3	GUIDE	116400048	9.70	14687	0.074	0.032	0.100	0.166	192.201130	14.758403	1438.79	943.74
4	GUIDE	116400424	9.08	14707	-0.018	-0.078	0.099	0.156	192.853312	14.858898	-708.09	1764.16
5	GUIDE	189548384	9.74	14591	0.034	0.054	0.135	0.214	191.890357	15.598736	855.84	-2215.50
6	GUIDE	189549888	6.63	14716	-0.094	0.046	0.072	0.124	191.794089	15.591672	1157.17	-2361.01
7	GUIDE	189930304	8.80	14708	-0.003	-0.055	0.096	0.164	192.214251	15.414361	216.59	-1077.86

## 2.4 Star Slots

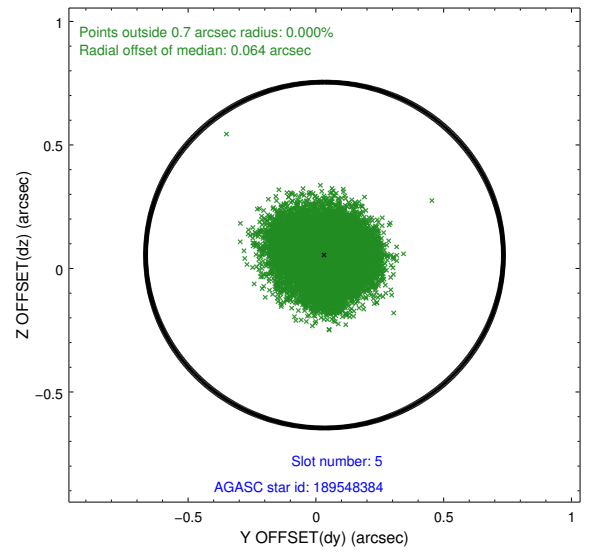
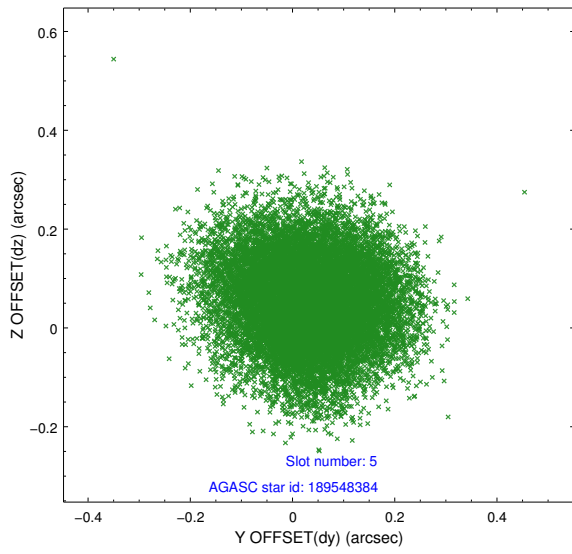
### 2.4.1 Slot 3



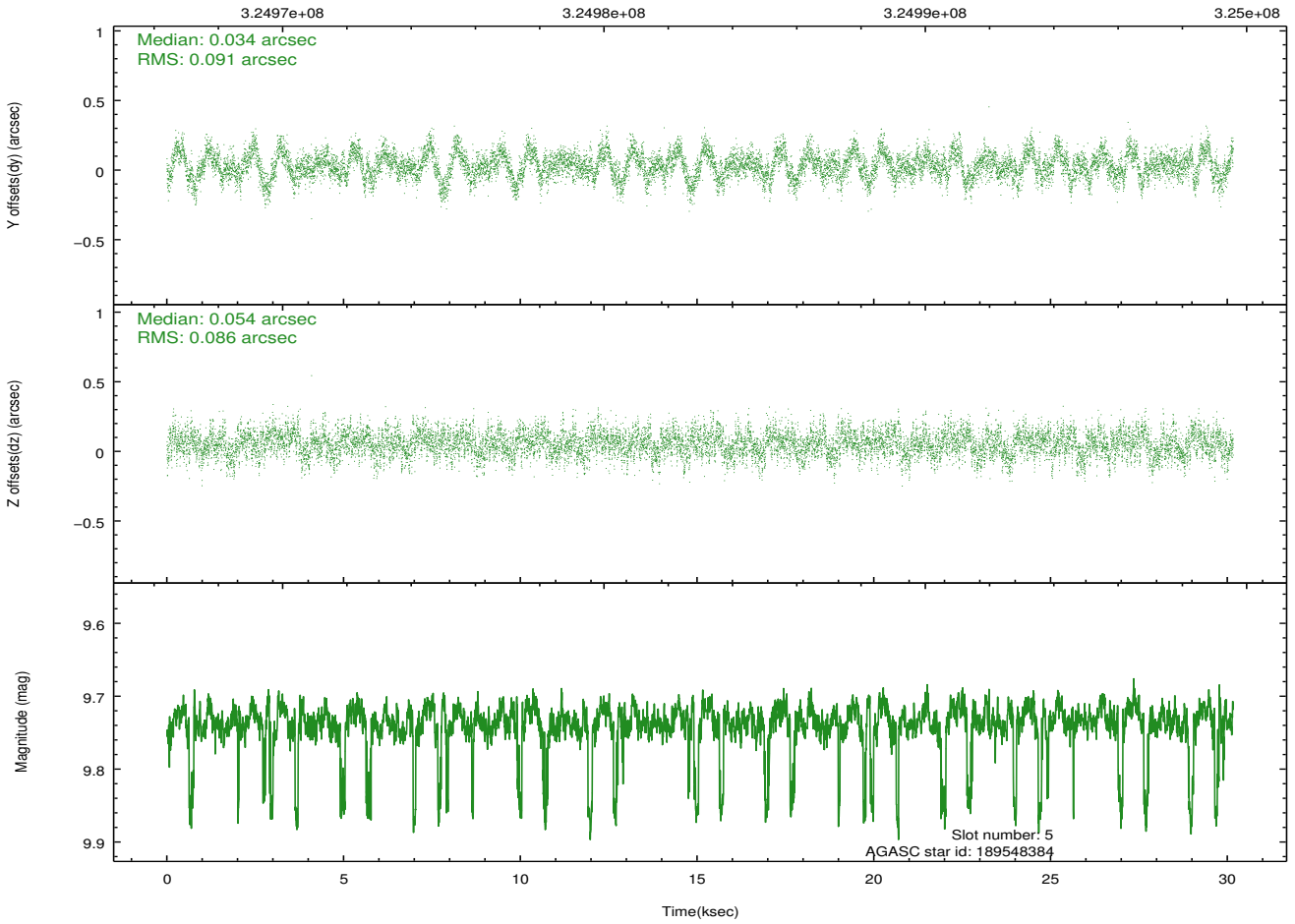
## 2.4.2 Slot 4



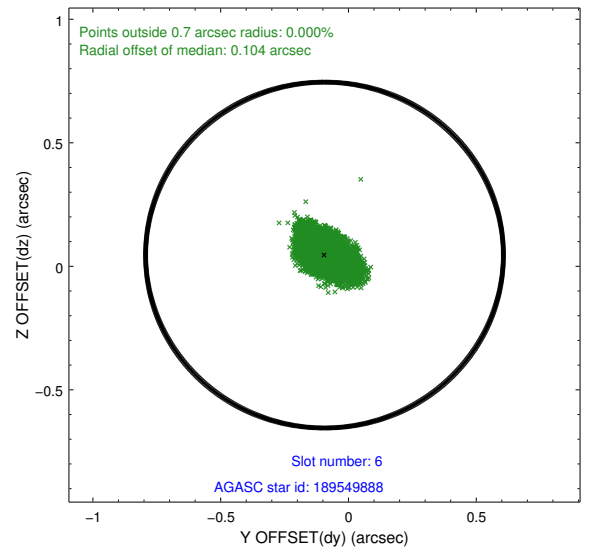
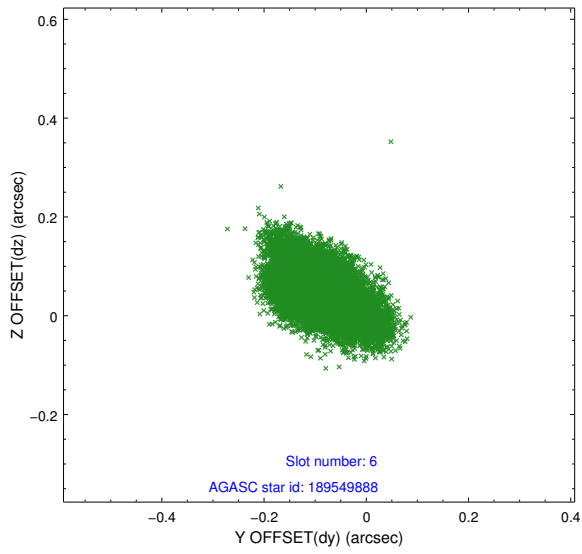
### 2.4.3 Slot 5



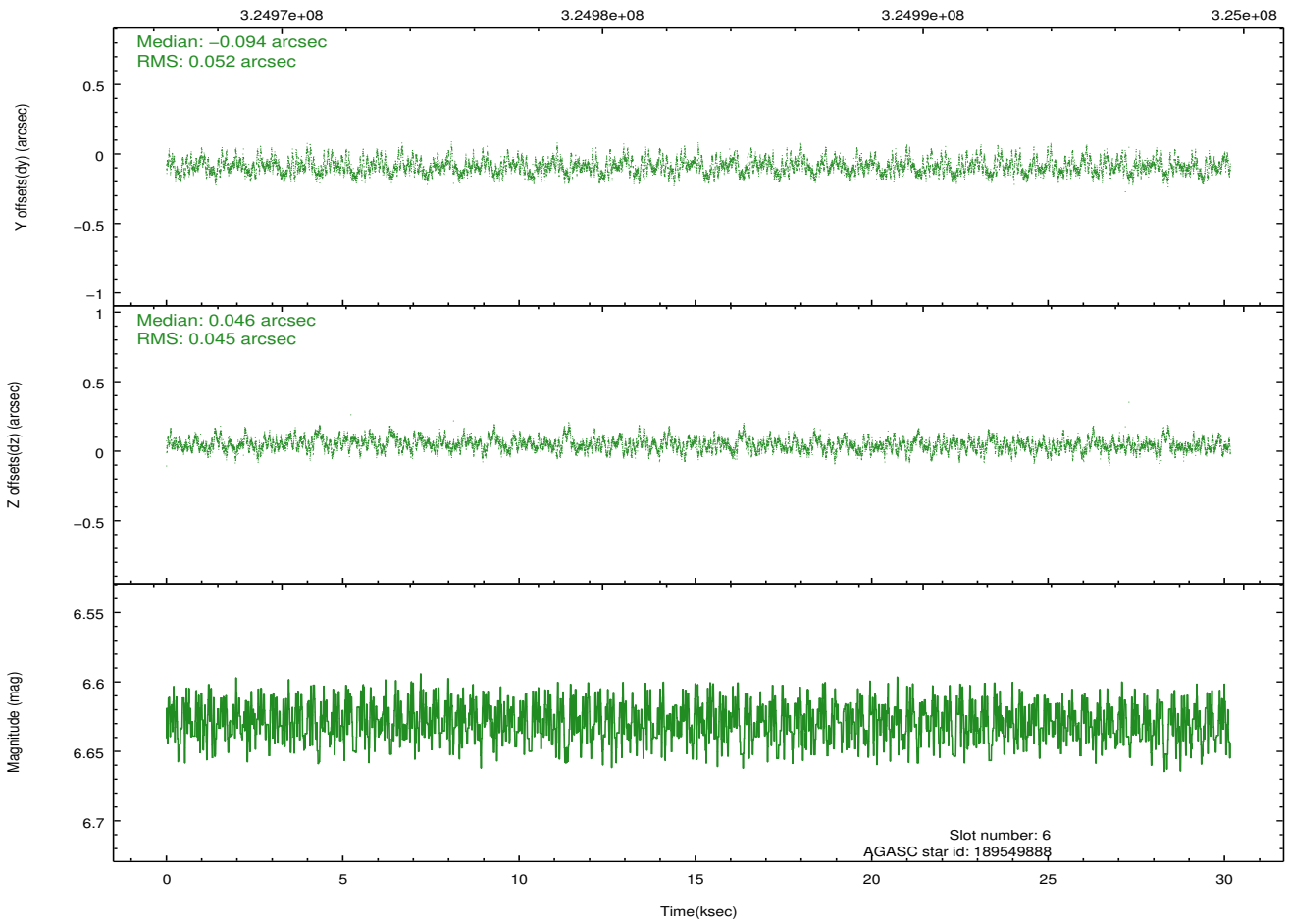
Time (s)



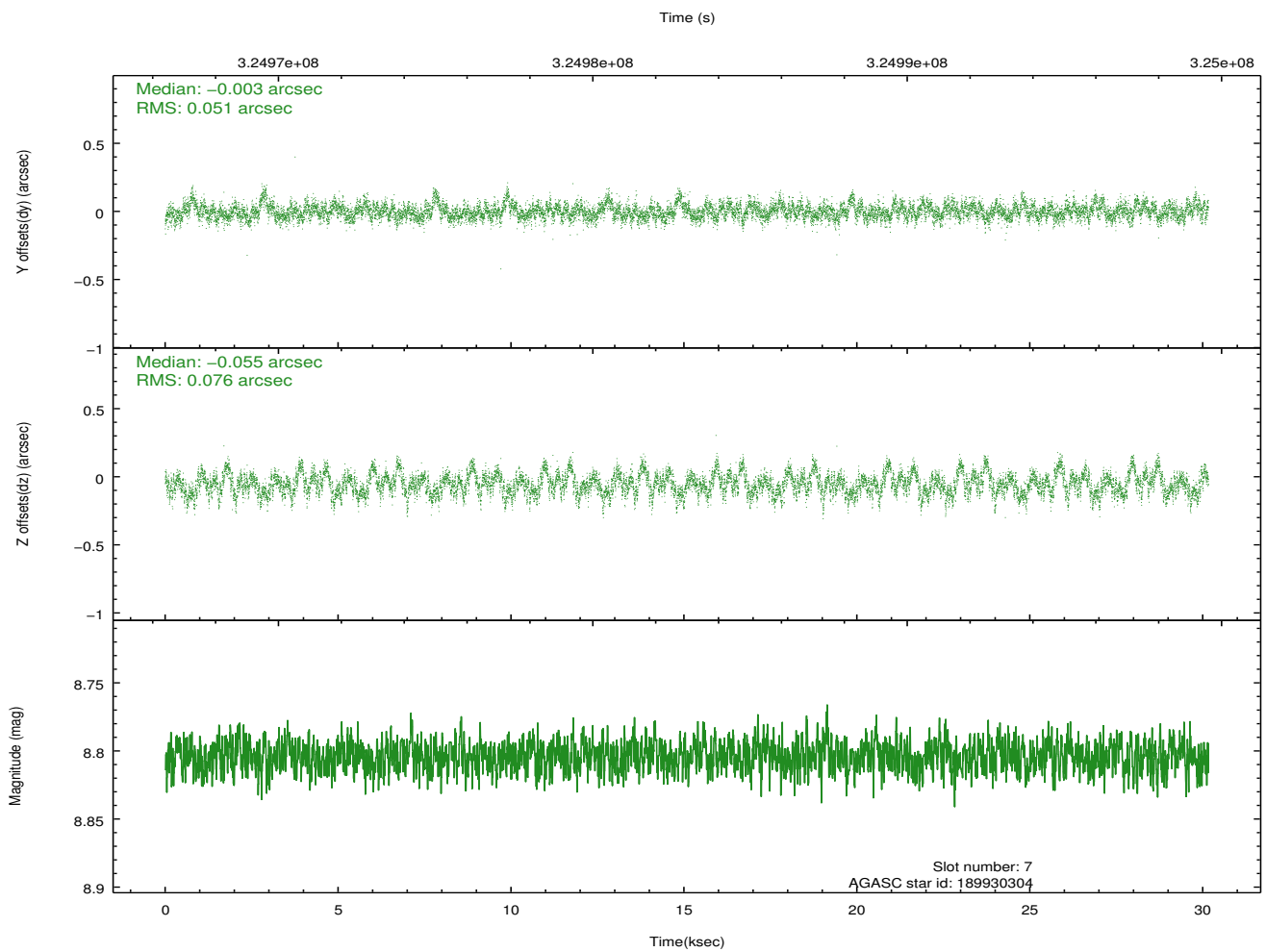
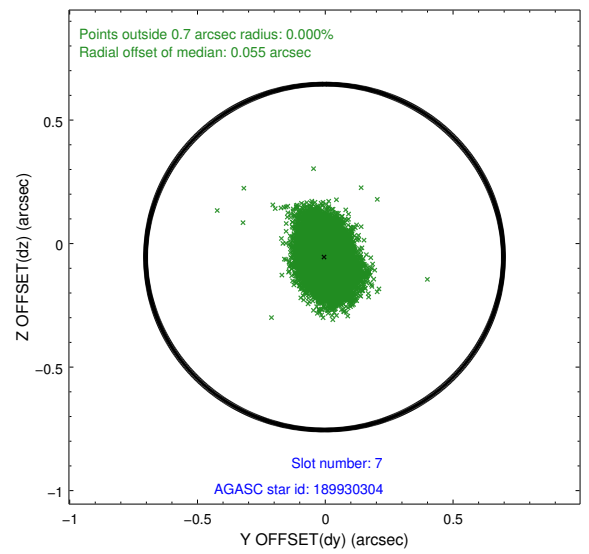
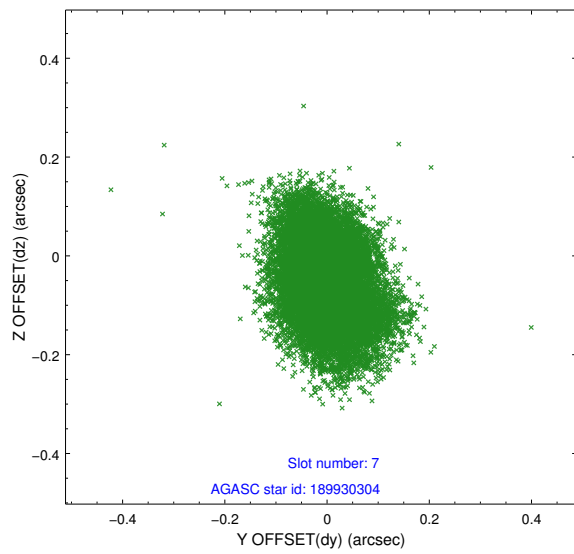
## 2.4.4 Slot 6



Time (s)

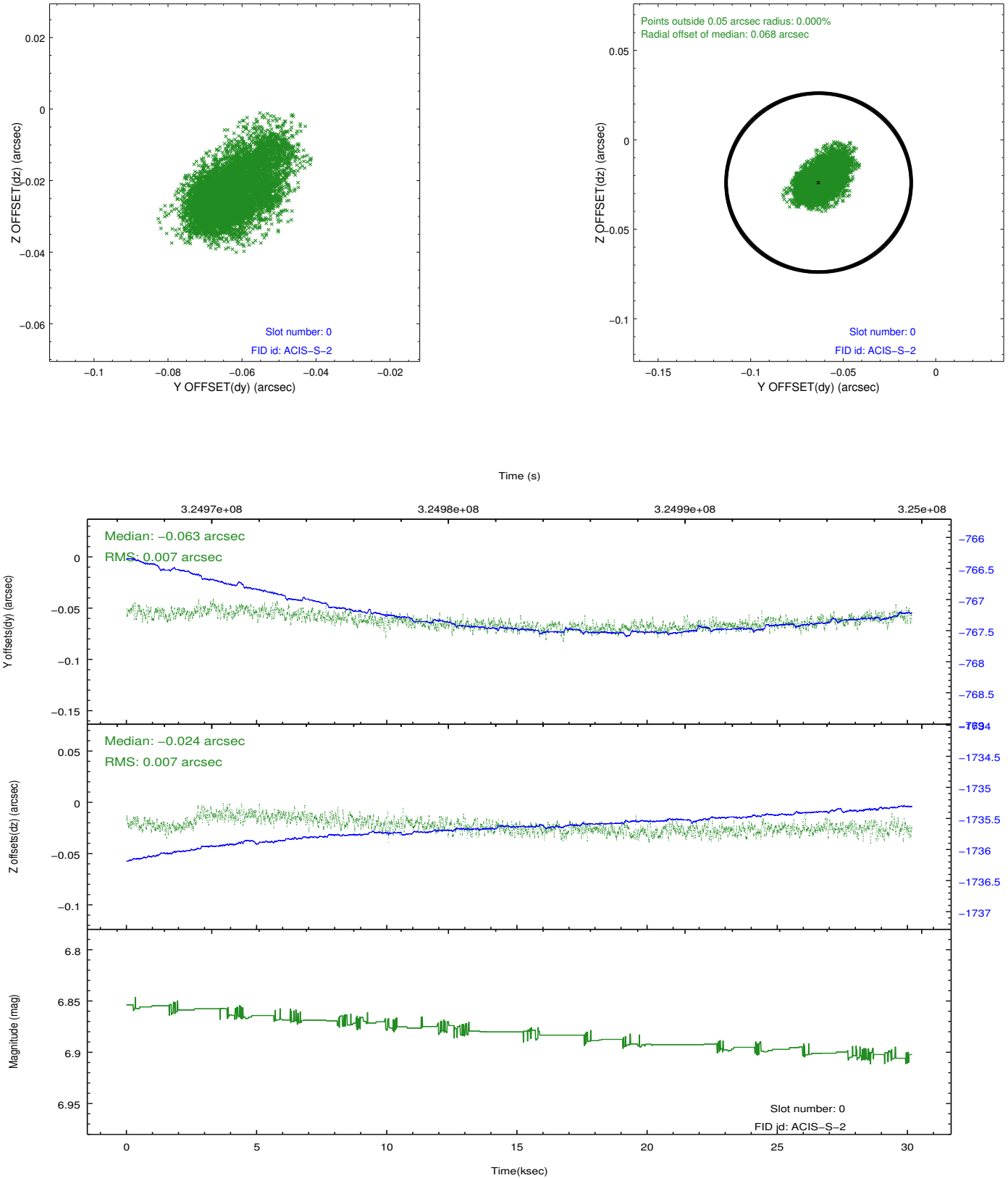


## 2.4.5 Slot 7

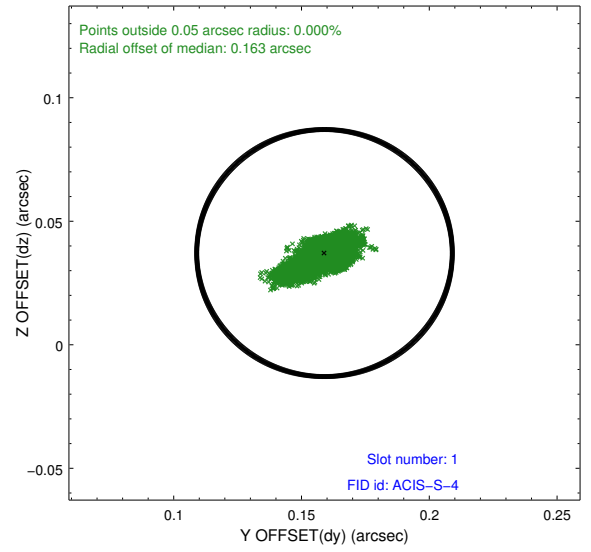
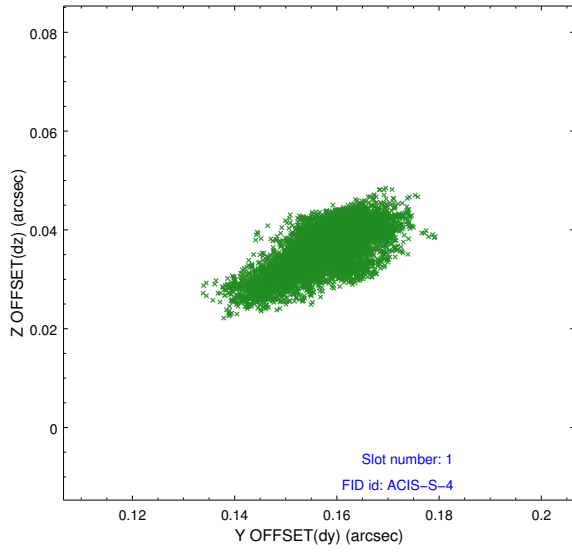


## 2.5 FID Slots

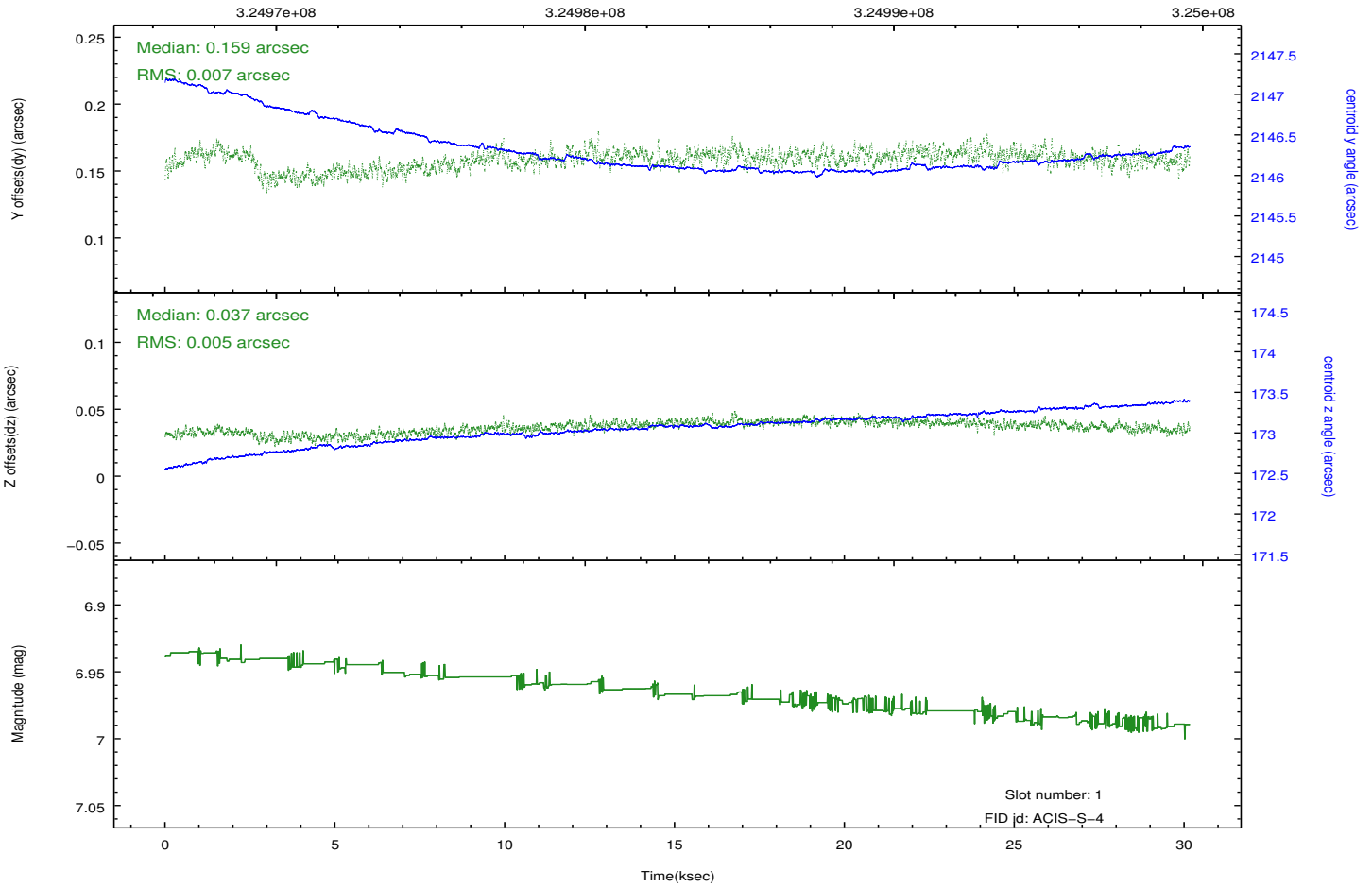
### 2.5.1 Slot 0



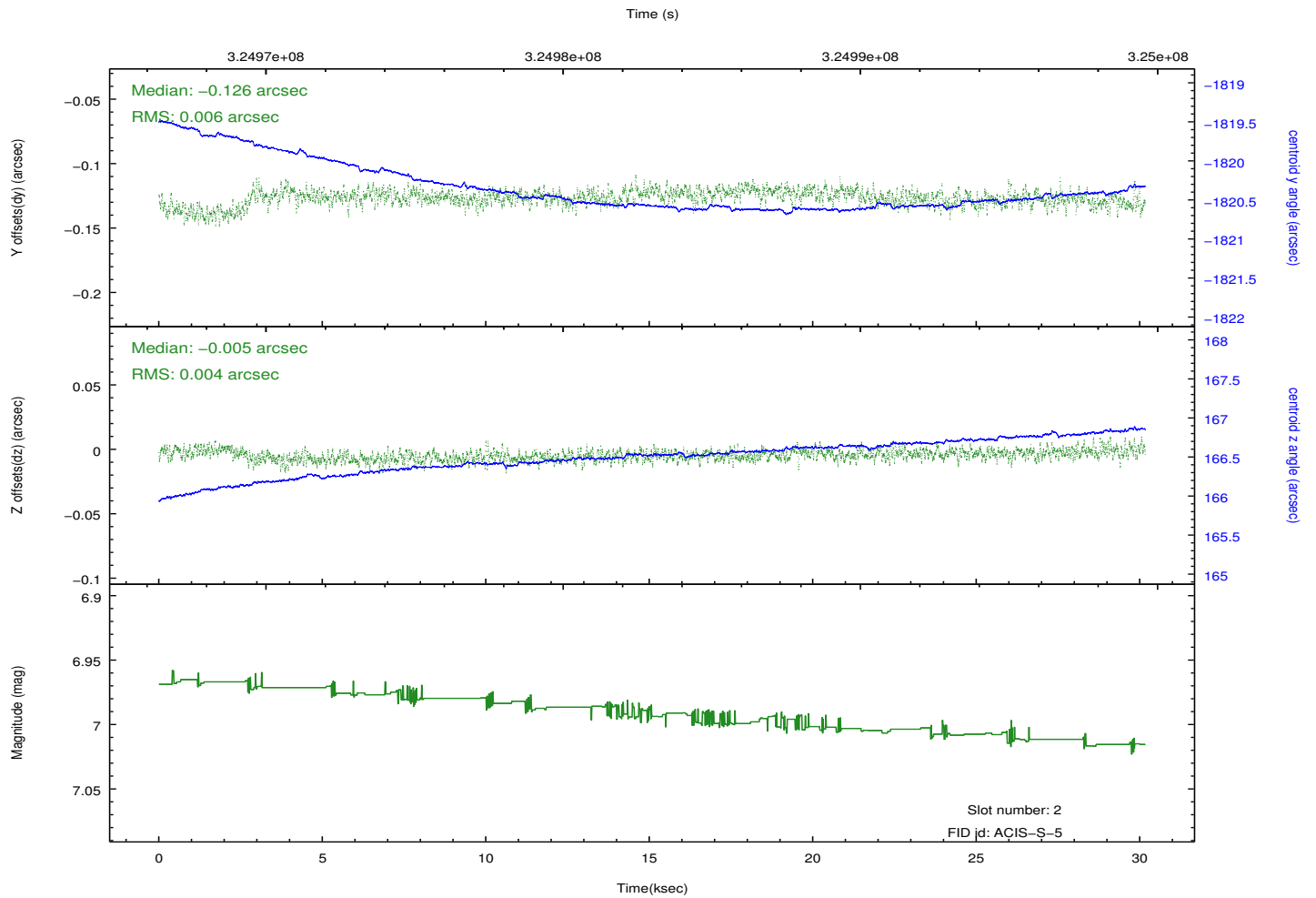
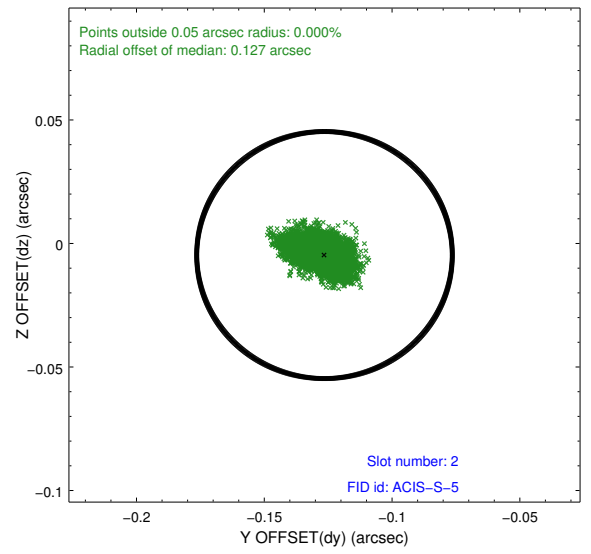
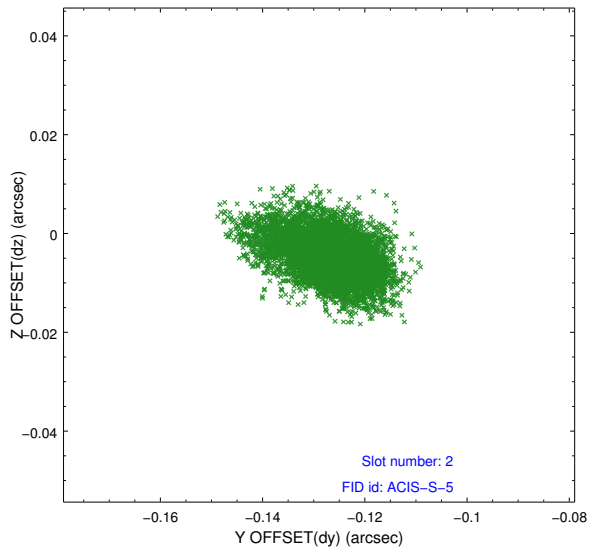
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.1599002

## A.2 Comments