

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 17006 - L2 Version 1  
Chandra X-Ray Center

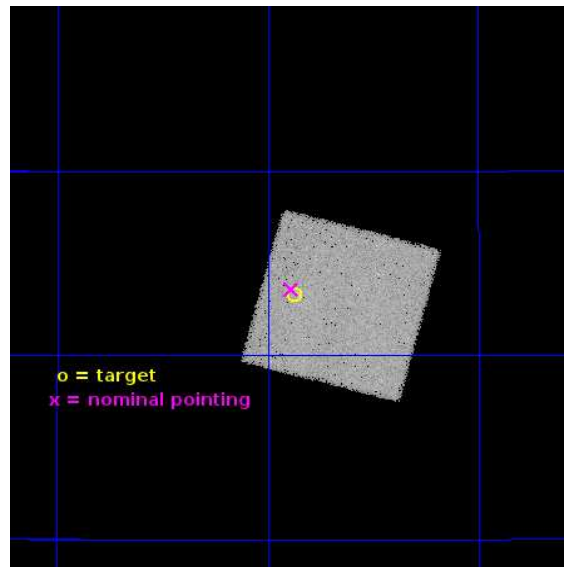
L2 Processing Date : Oct 5 2014

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# 1 Front

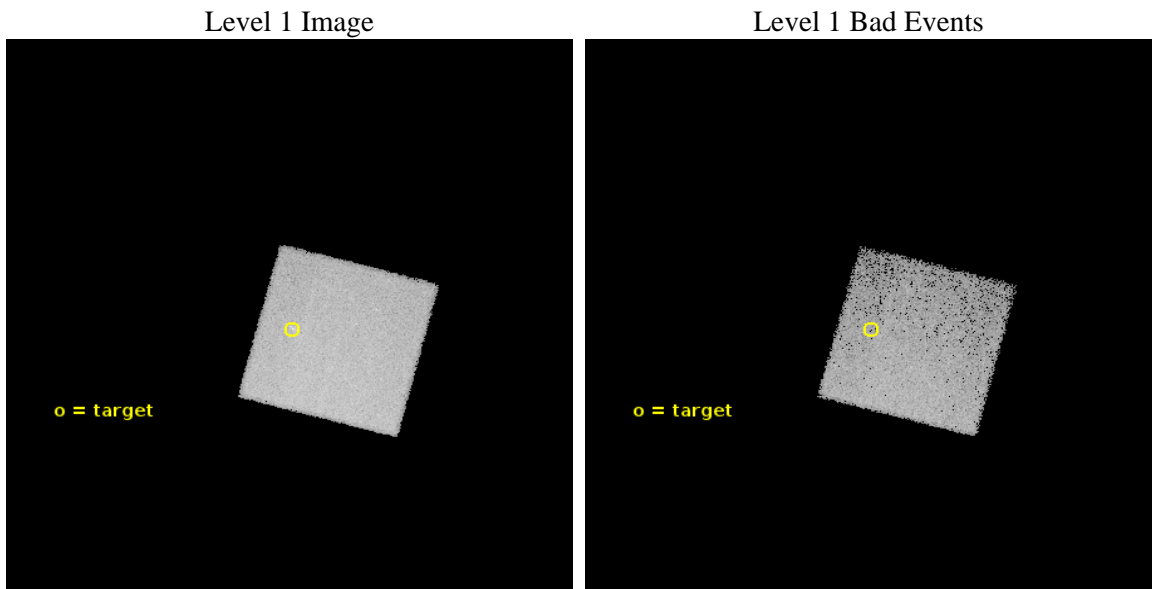
seq_num	601199	Sequence number
obs_id	17006	Observation id
title	Massive Black Holes in Water Maser Merging Galaxies	Proposal title
observer	Jeremy Darling	Principal investigator
object	IC750	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	179.7175	Observer's specified target RA [deg]
dec_targ	42.722278	Observer's specified target Dec [deg]
ra_nom	179.72188825344	Nominal RA [deg]
dec_nom	42.726646445208	Nominal Dec [deg]
roll_nom	14.772222532115	Nominal Roll [deg]
revision	1	Processing version of data
ontime	30093.0	Sum of GTIs [s]
liveltime	29686.883434615	Livetime [s]
ontime7	30093.0	Sum of GTIs [s]
l2events	85265	Number of level 2 events



## 2 OBI

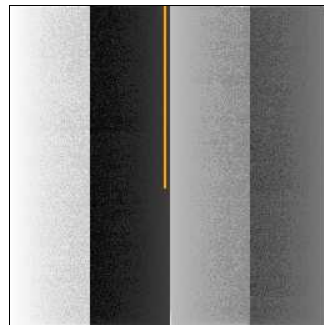
### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias

Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	30093.0	Sum of GTIs [s]
caldbver	4.6.3	&#160	ontime7	30093.0	Sum of GTIs [s]
date	2014-10-05T18:45:31	Date and time of file creation	l1events	196867	Number of level 1 events
revision	1	Processing version of data			

### 2.1.4 Events

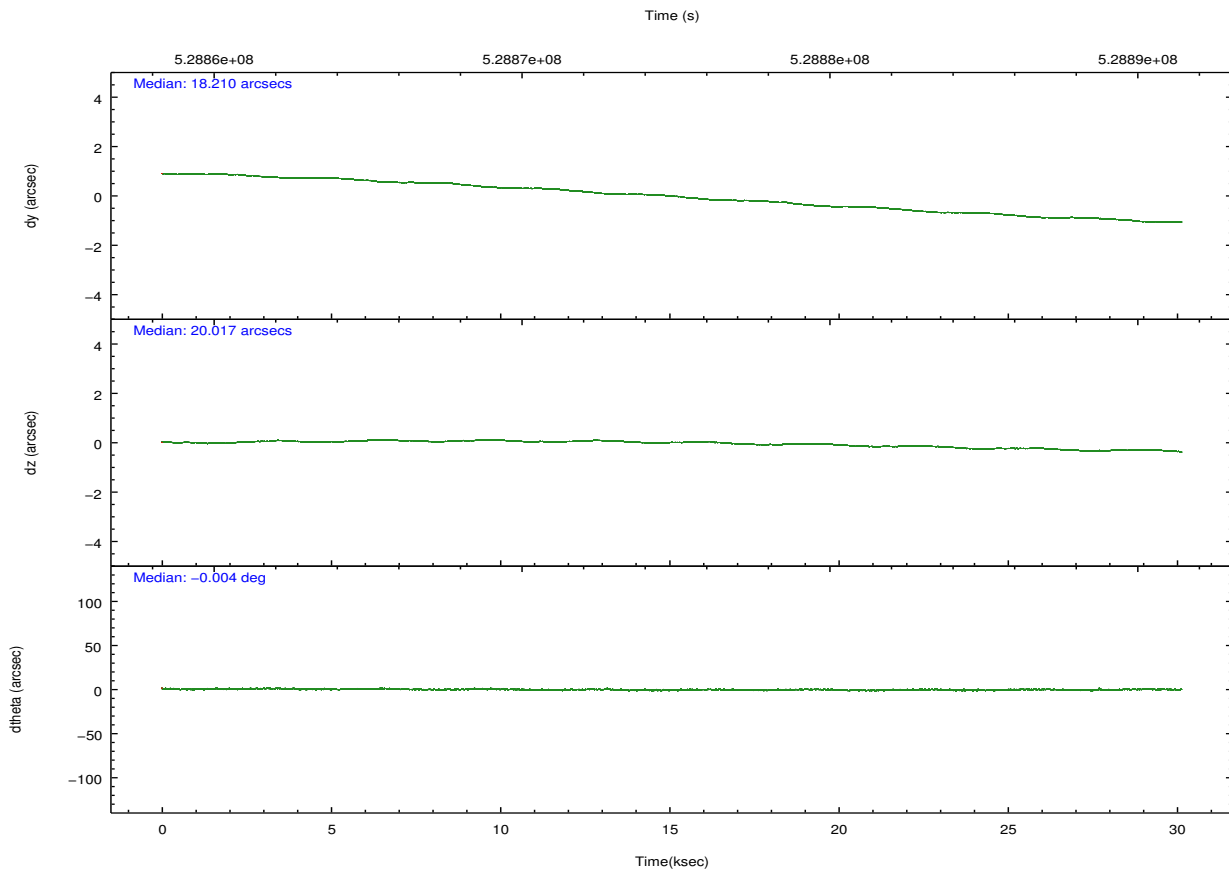
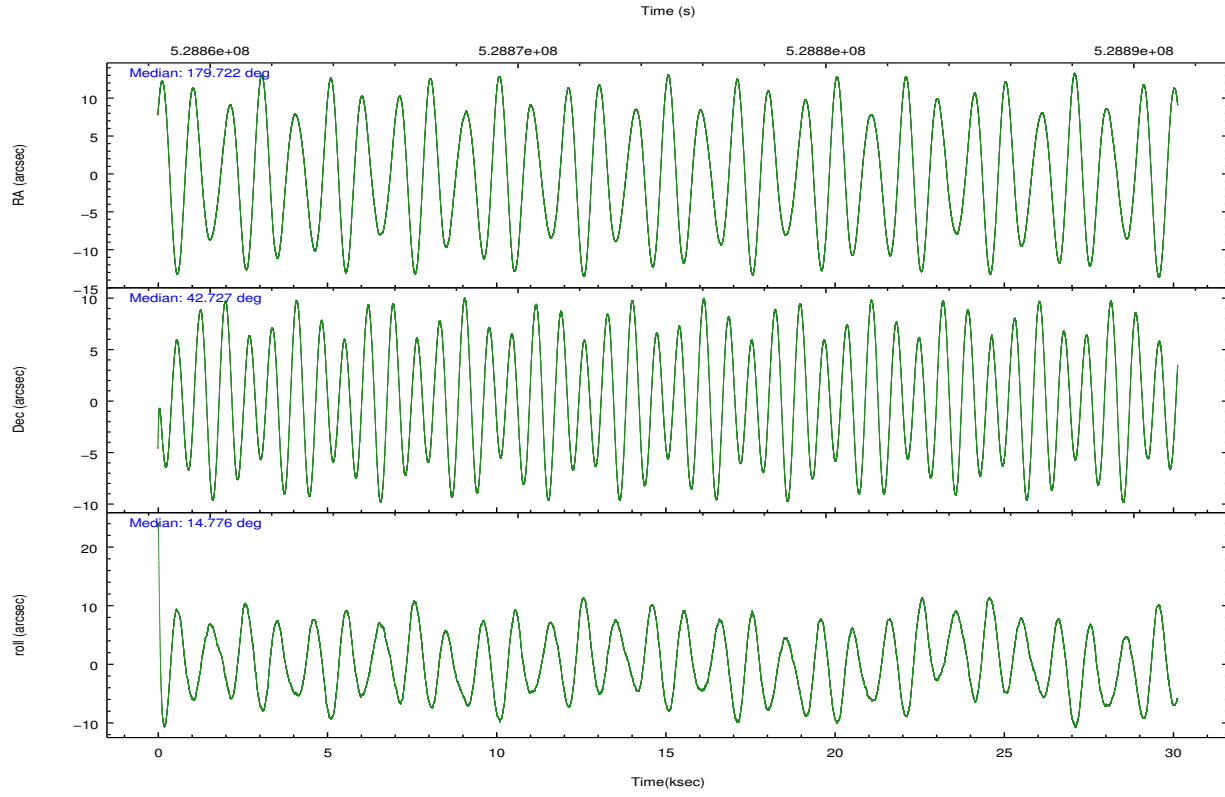
	<b>ccd 7</b>
level 1 events	196867
rejected events	109497
rejected %	<b>55%</b>

	<b>ccd 7</b>
grade 0 events	7955
	4%
grade 1 events	239
	0%
grade 2 events	17695
	8%
grade 3 events	7435
	3%
grade 4 events	7398
	3%
grade 5 events	20299
	10%
grade 6 events	46897
	23%
grade 7 events	88949
	45%

## 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	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	179.695706	179.7218882534449	Subarray requested	NONE	NONE
[deg] Pointing Dec	42.707083	42.72664644520834	Alternating exposures requested	N	N
[deg] Pointing Roll	14.633350	14.77222253211483	[s] Primary exposure time	0.000000	3
[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)	528859931.184000	528858935.11651			
Observation start date	2014-10-05T01:31:04	2014-10-05T01:15:35			
[s] Observation end time (MET)	528889931.184000	528891028.89329			
Observation end date	2014-10-05T09:51:04	2014-10-05T10:10:28			
Read mode	TIMED	TIMED			

## 2.3 Aspect

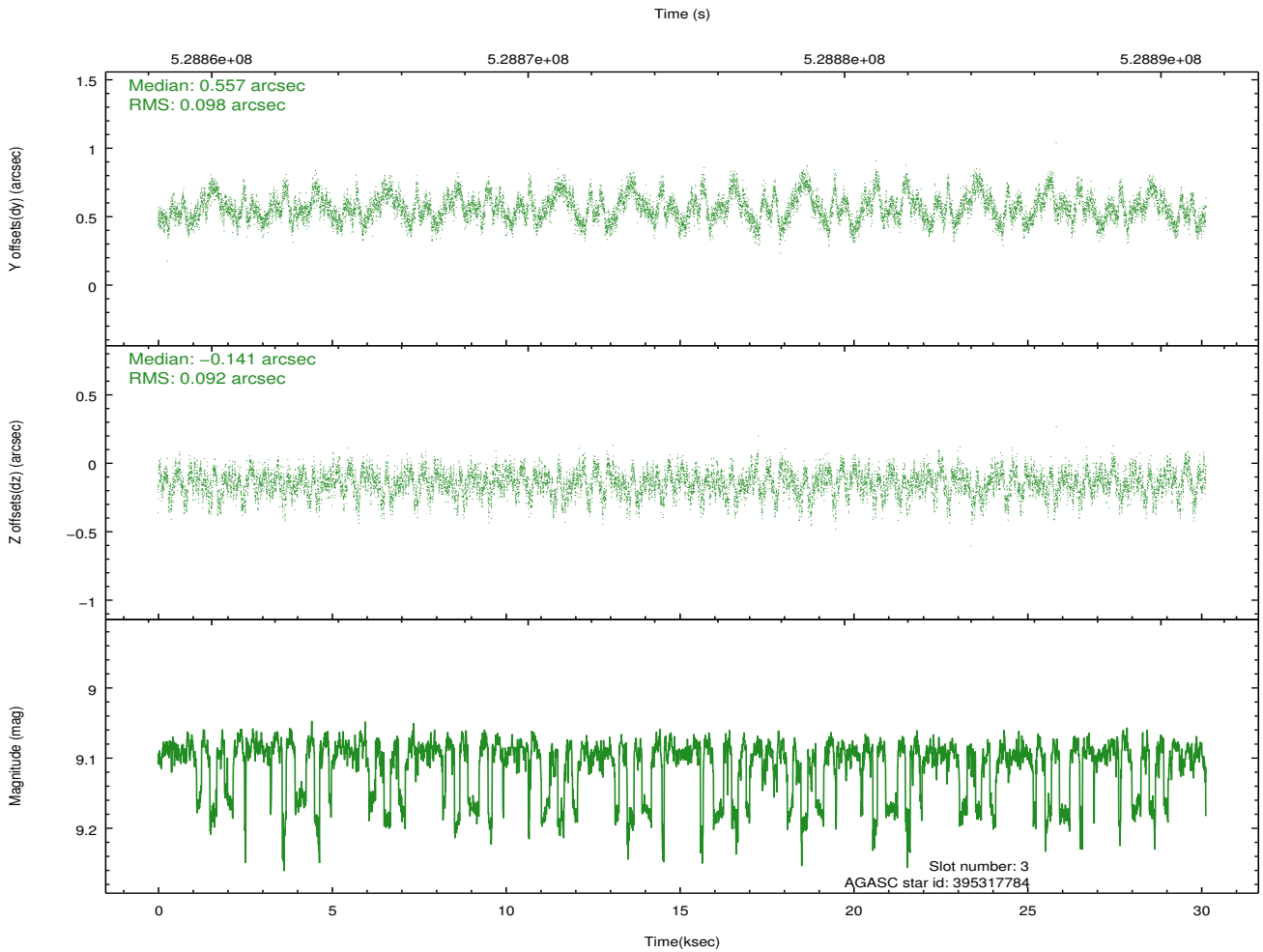
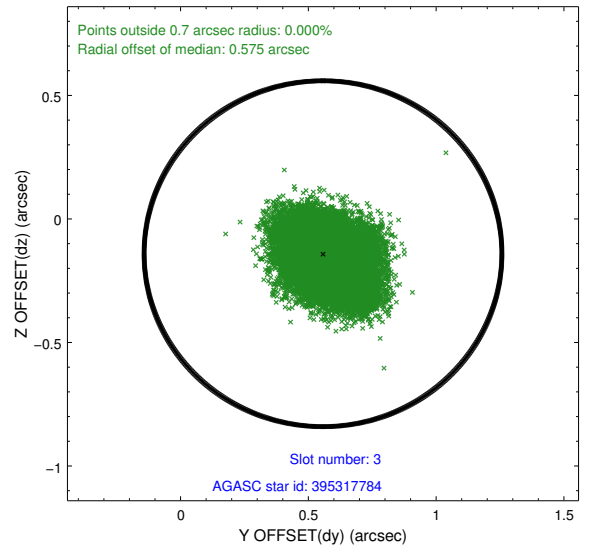
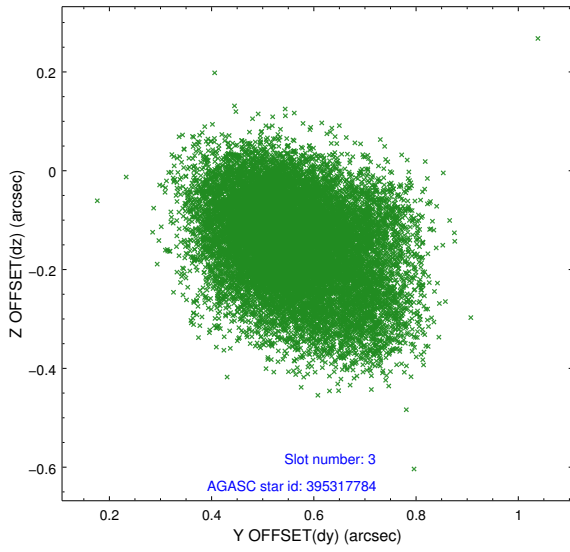


### Slot Statistics

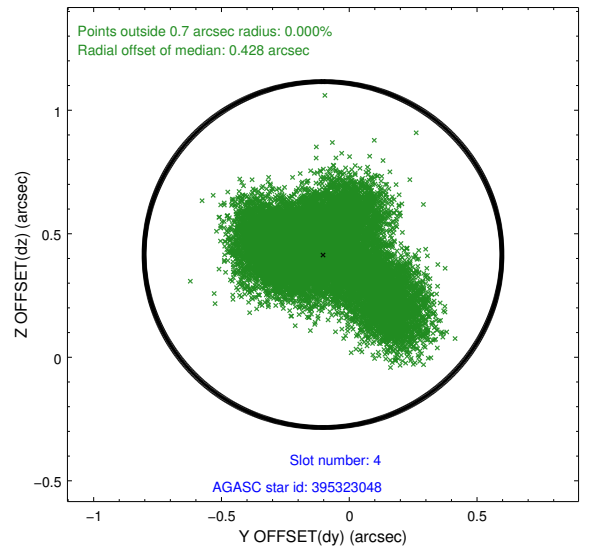
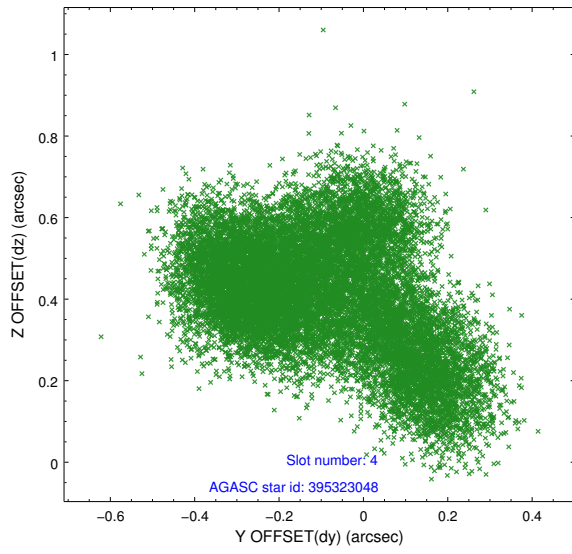
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.97	7351	-0.111	-0.009	0.015	0.028	0.000000	0.000000	-771.33	-1741.44
1	FID	ACIS-S-4	7.06	7351	0.251	0.056	0.022	0.032	0.000000	0.000000	2142.27	167.06
2	FID	ACIS-S-5	7.09	7350	-0.168	-0.041	0.012	0.021	0.000000	0.000000	-1824.14	160.68
3	GUIDE	395317784	9.10	14690	0.557	-0.141	0.144	0.233	179.596945	42.695129	-262.69	24.12
4	GUIDE	395323048	9.76	14690	-0.103	0.416	0.250	0.396	179.174758	42.484121	-1540.11	-422.38
5	GUIDE	395330560	6.95	14699	0.013	0.414	0.102	0.160	179.095087	42.013818	-2183.87	-2002.76
6	GUIDE	395710848	8.29	14697	-0.449	-0.281	0.088	0.138	180.004806	43.343617	1361.81	2013.90
7	GUIDE	395317272	9.85	14679	-0.041	-0.396	0.170	0.283	178.611353	43.163531	-2335.54	2327.74

## 2.4 Star Slots

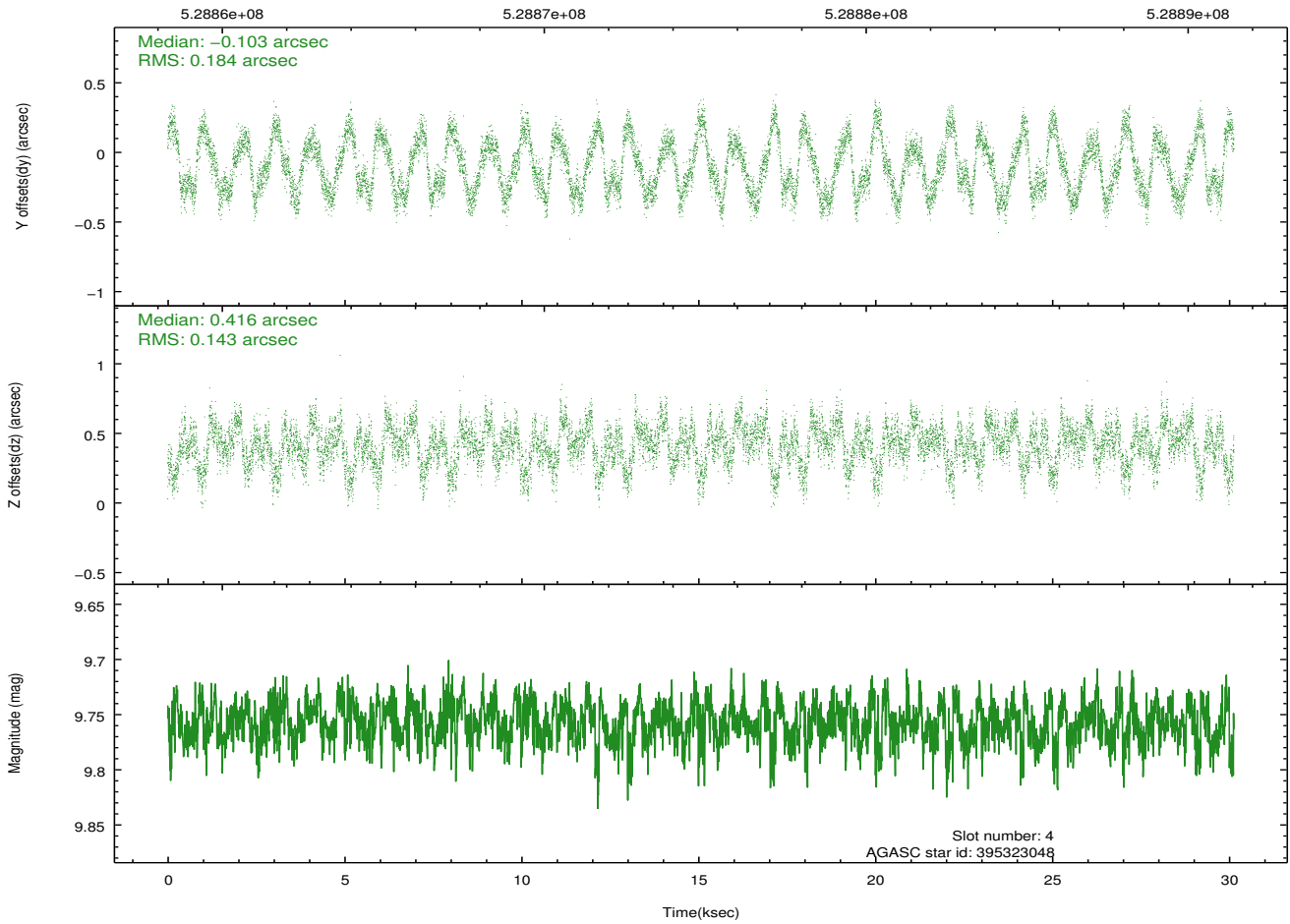
### 2.4.1 Slot 3



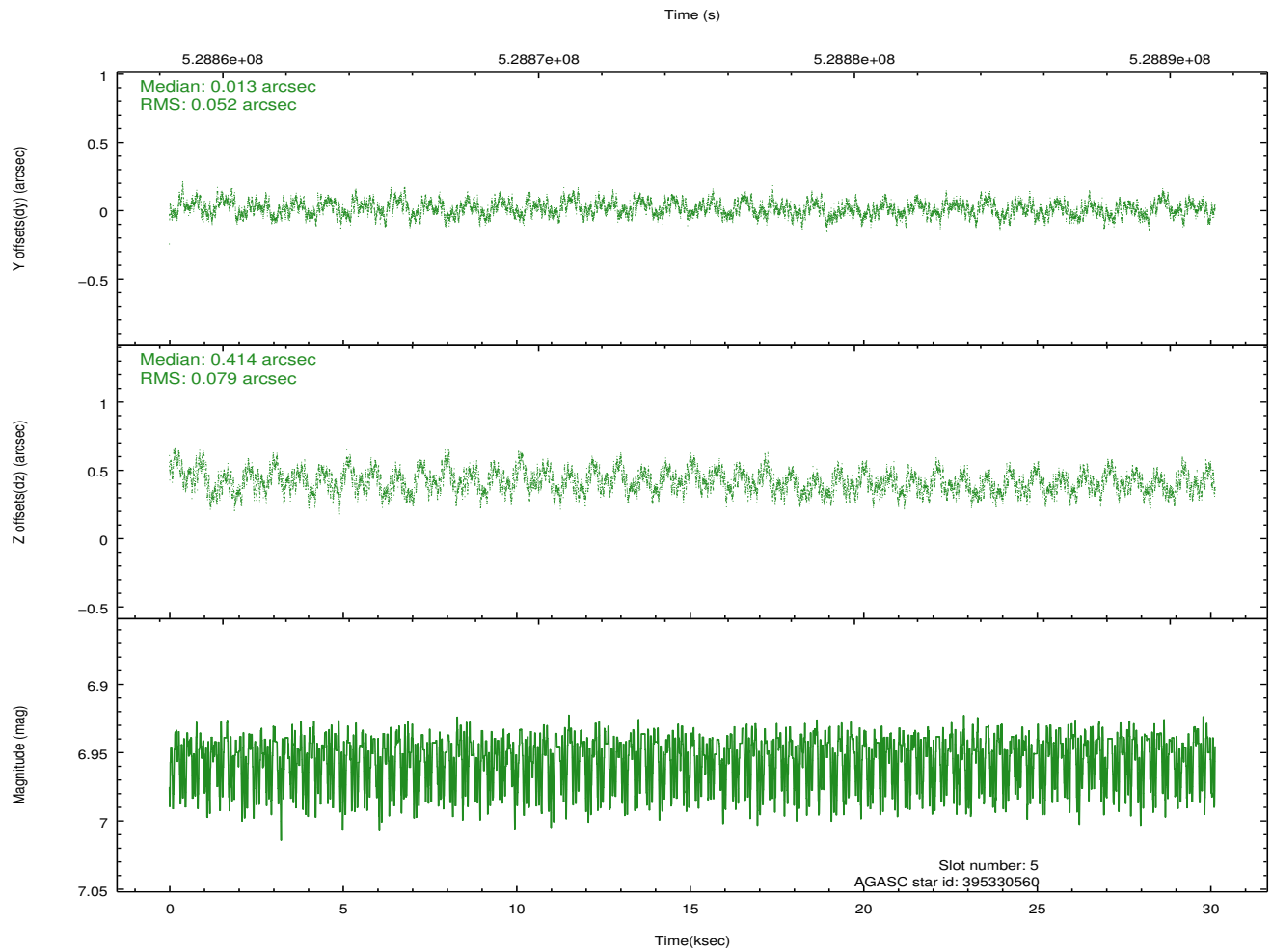
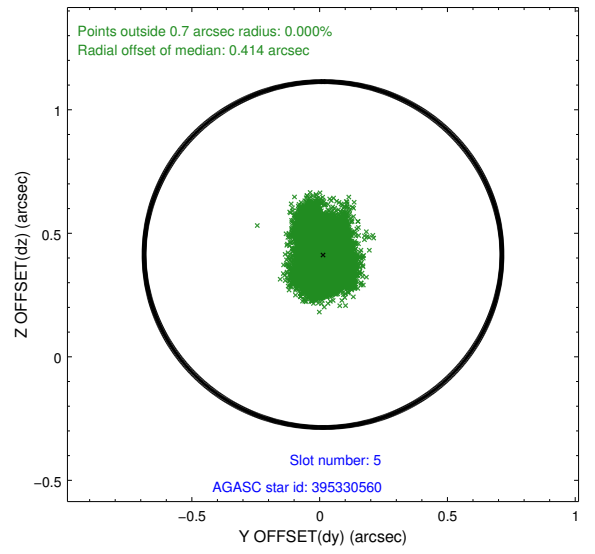
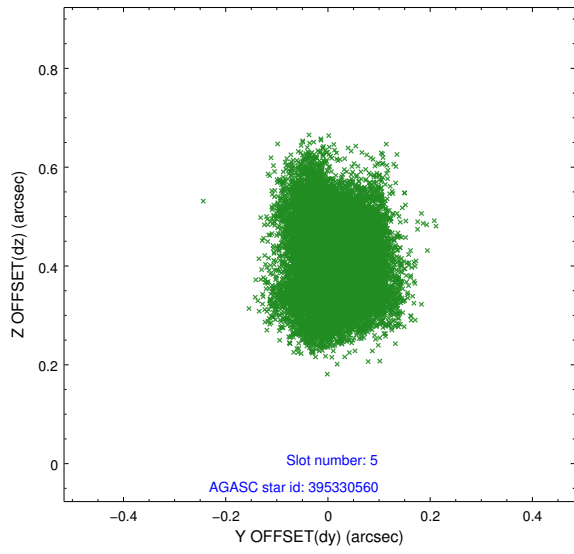
## 2.4.2 Slot 4



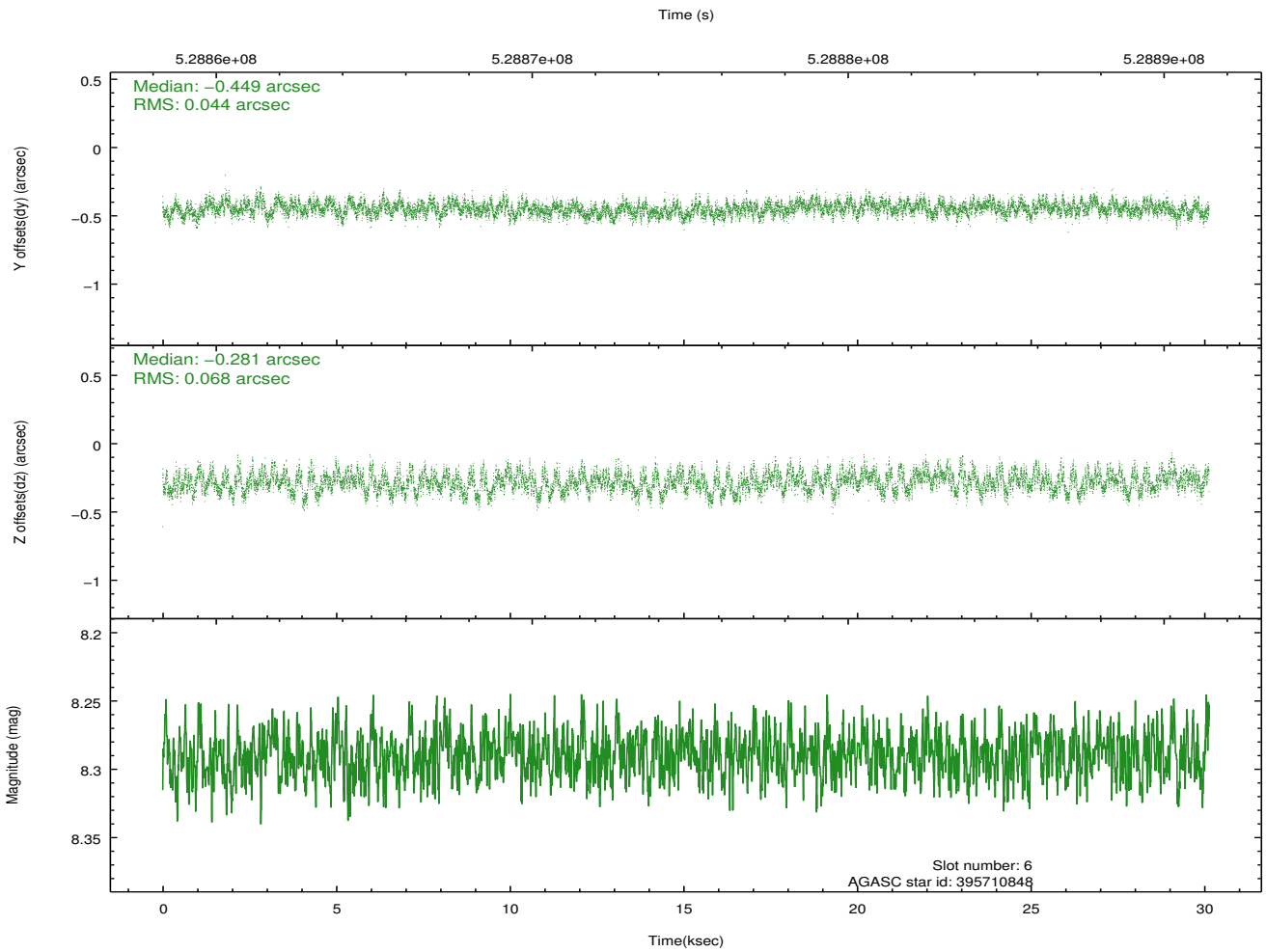
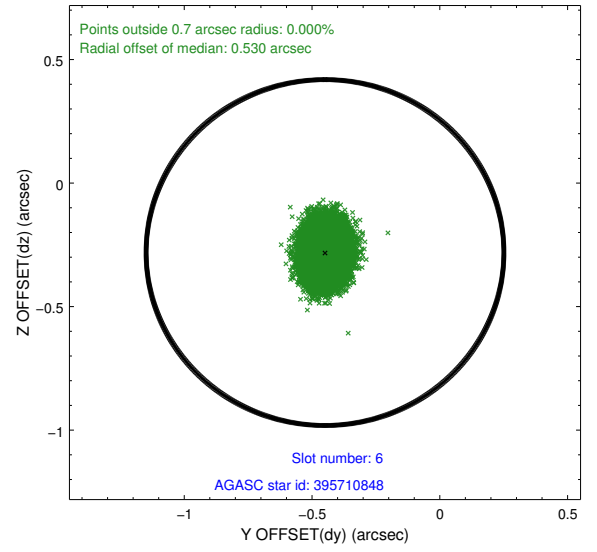
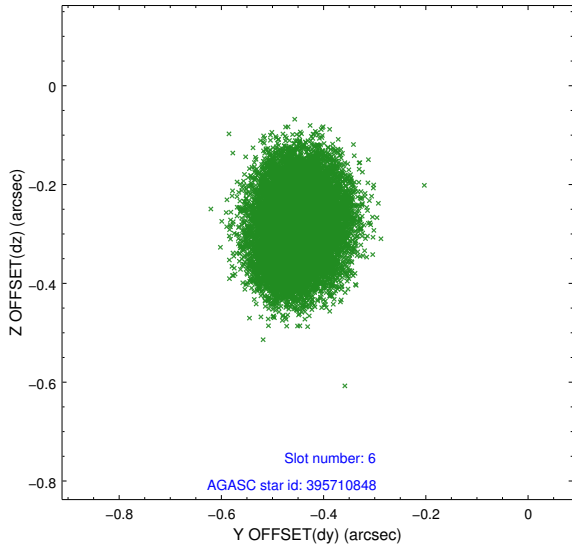
Time (s)



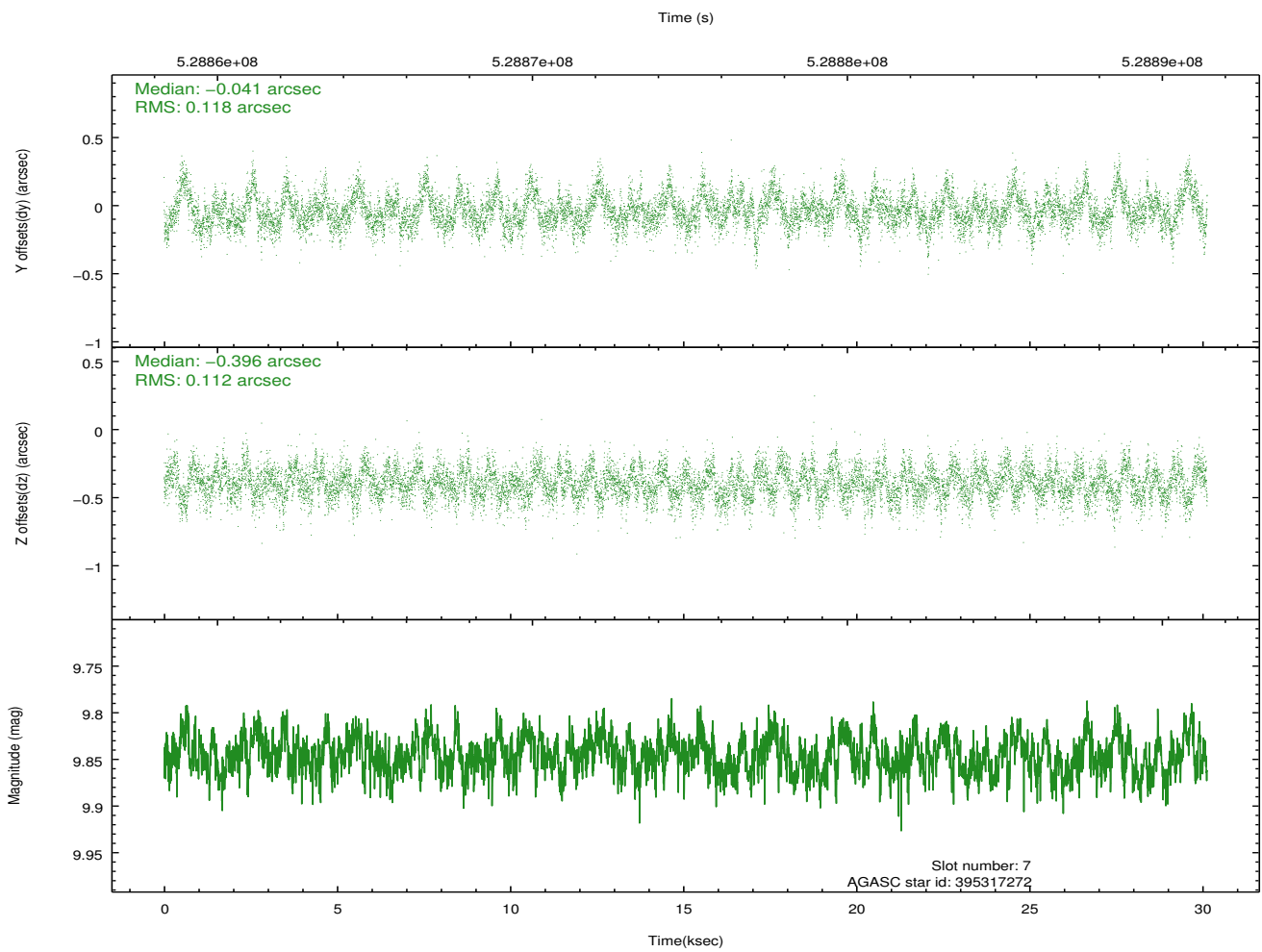
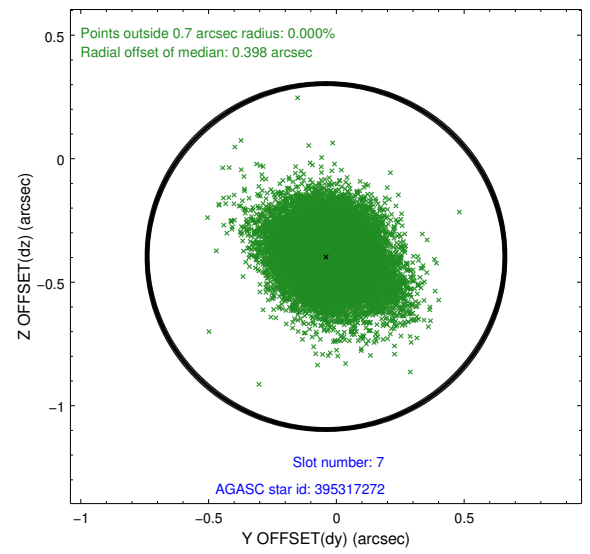
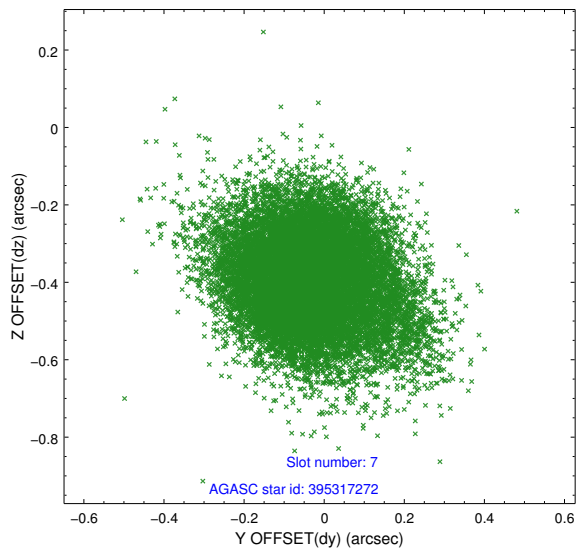
### 2.4.3 Slot 5



## 2.4.4 Slot 6

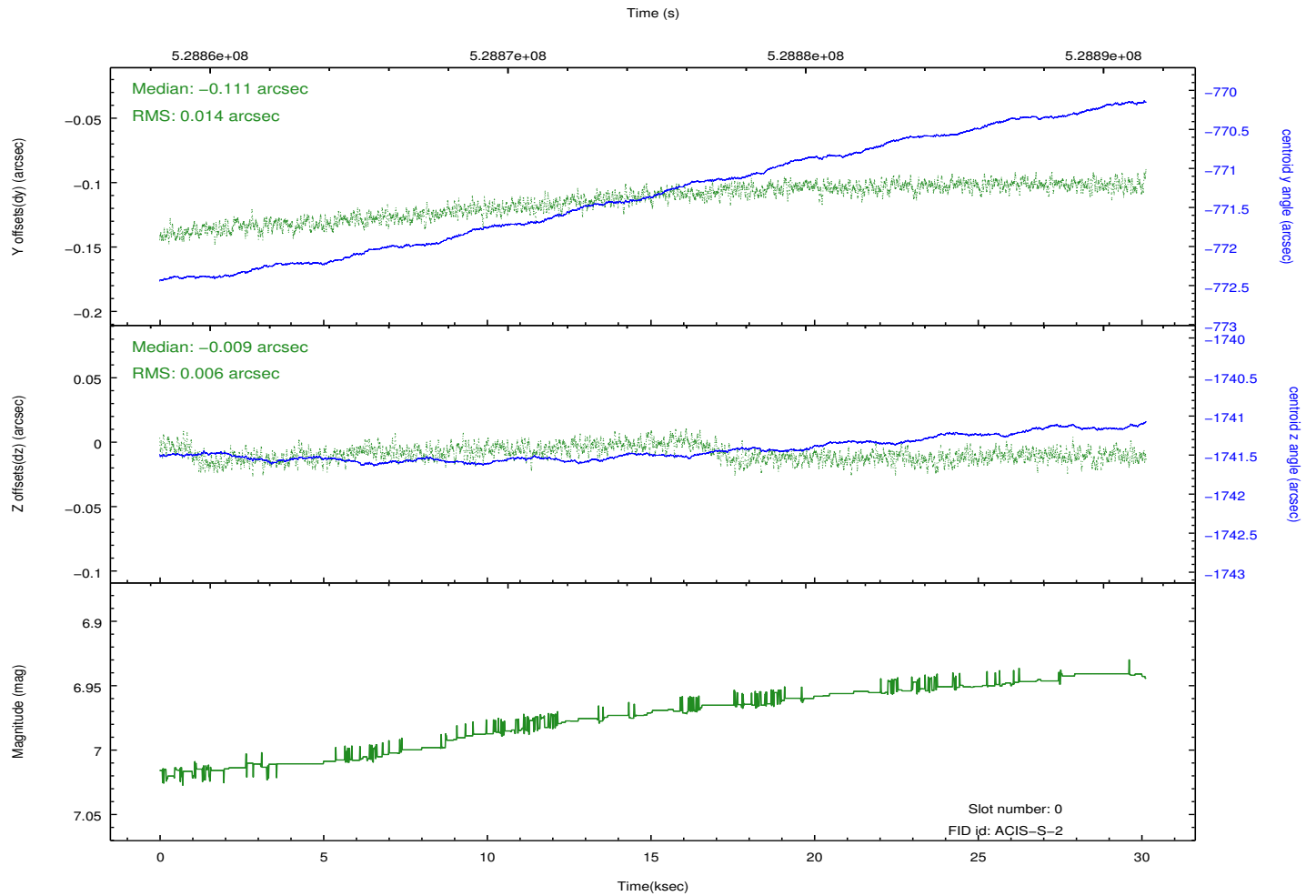
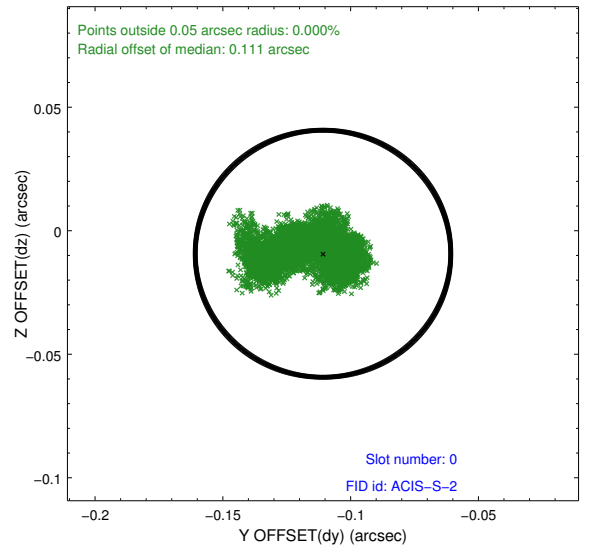
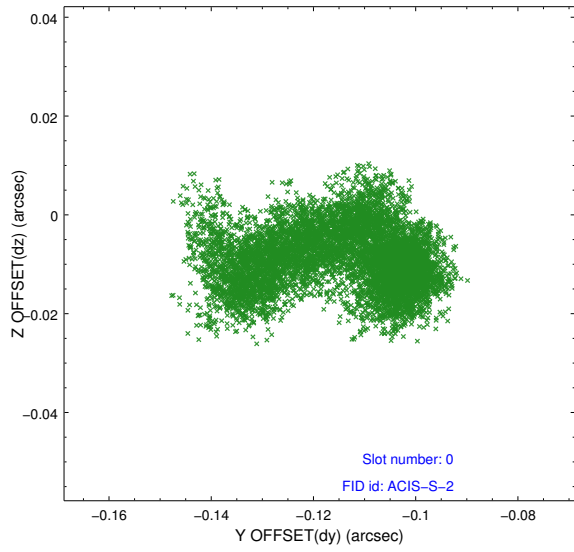


## 2.4.5 Slot 7

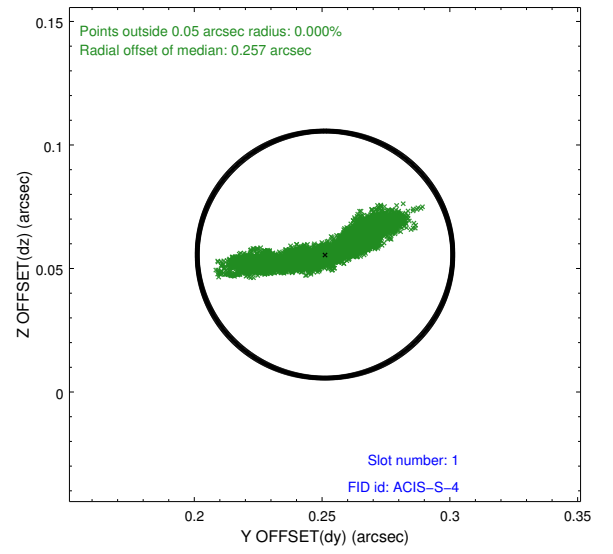
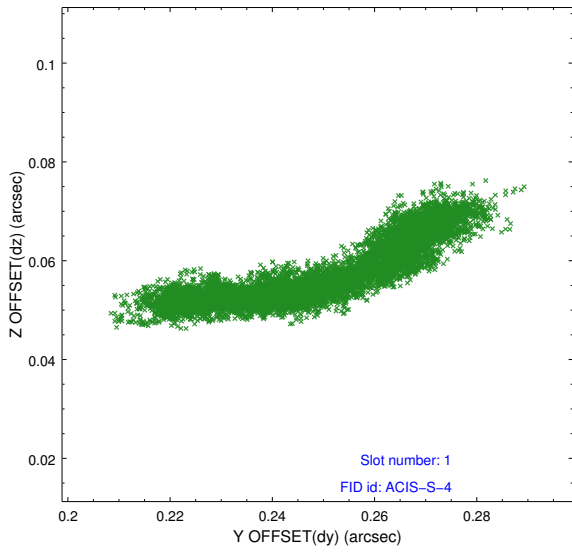


## 2.5 FID Slots

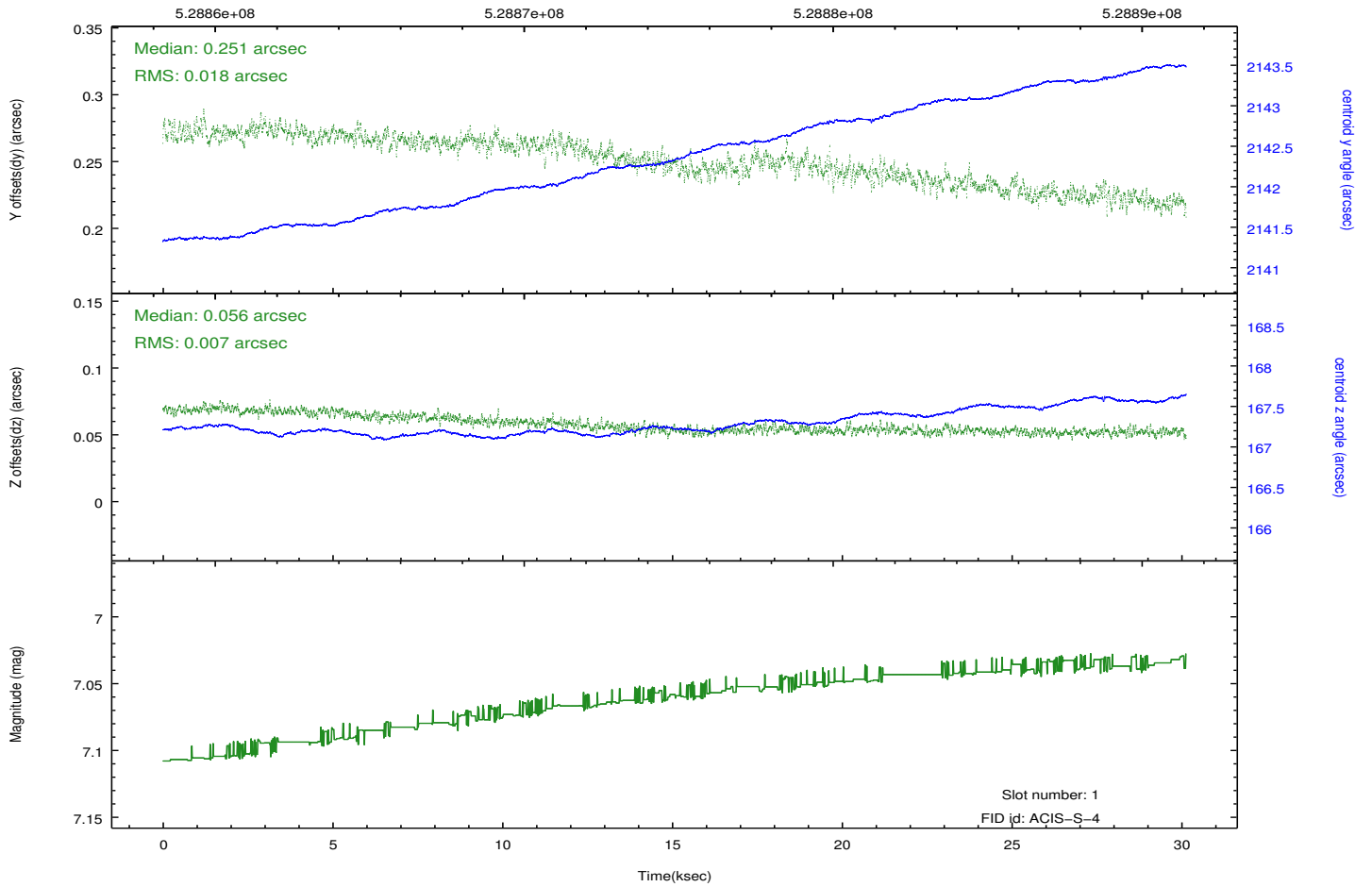
### 2.5.1 Slot 0



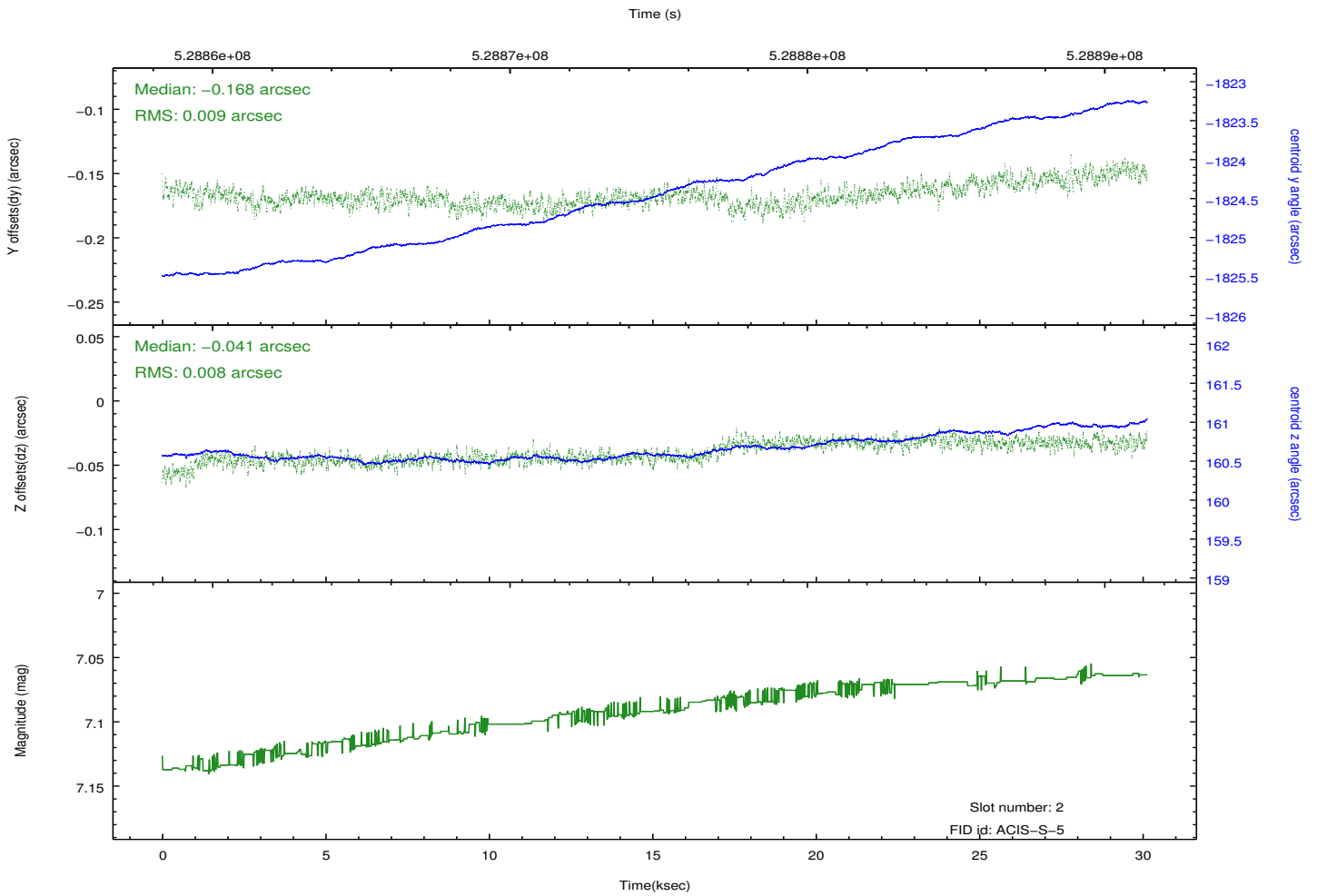
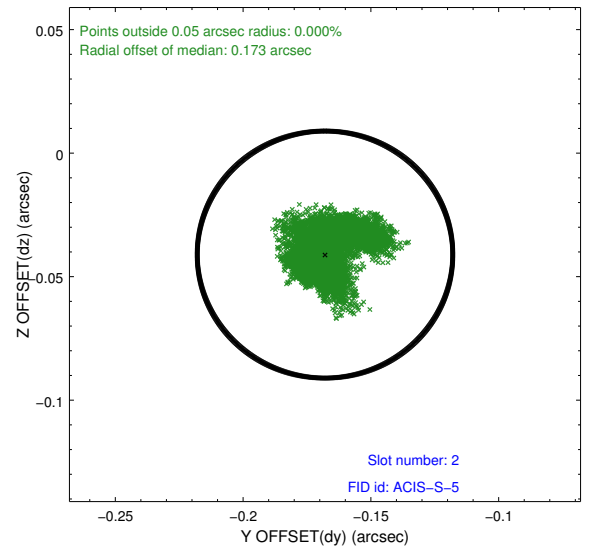
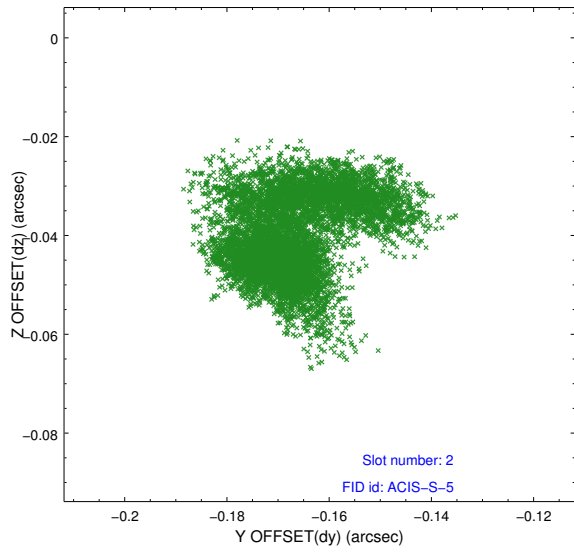
## 2.5.2 Slot 1



Time (s)



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2014.10.06
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.093

## A.2 Comments