

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 3961 - L2 Version 3  
Chandra X-Ray Center

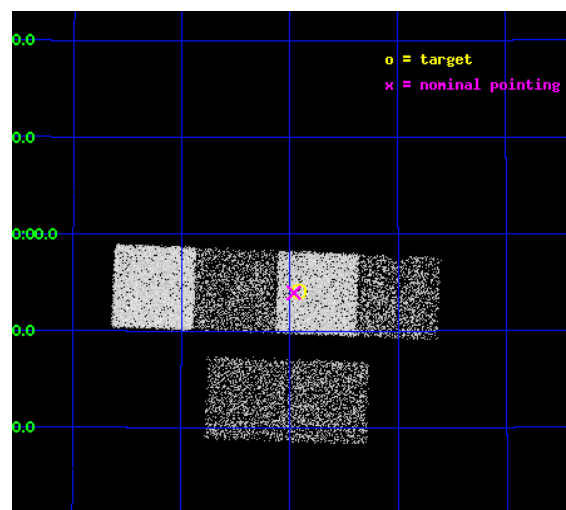
L2 Processing Date : Oct 19 2012

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# 1 Front

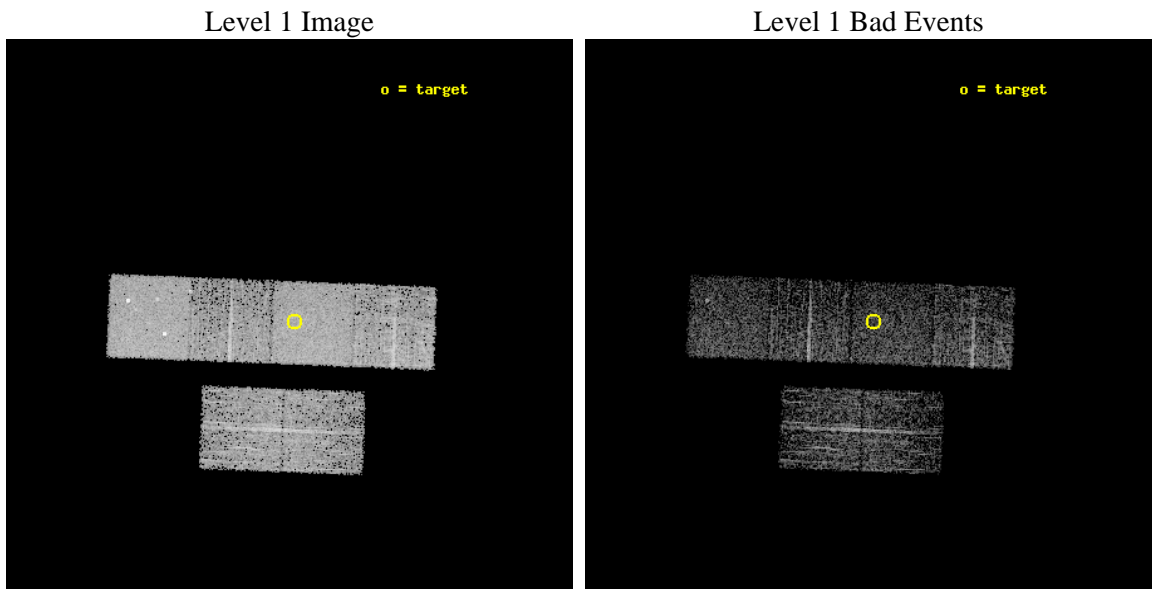
seq_num	700640	Sequence number
obs_id	3961	Observation id
title	A CHANDRA AND XMM-NEWTON STUDY OF THE MOST DISTANT QUASARS: X-RAYING THE FIRST MASSIVE BLACK HOLES	Proposal title
observer	Prof. William Brandt	Principal investigator
object	SDSS J165354+405402	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	253.4775	Observer's specified target RA [deg]
dec_targ	40.900611	Observer's specified target Dec [deg]
ra_nom	253.49040176701	Nominal RA [deg]
dec_nom	40.899287379065	Nominal Dec [deg]
roll_nom	2.2253038346828	Nominal Roll [deg]
revision	3	Processing version of data
ontime	3155.199988246	Sum of GTIs [s]
livetime	3115.2469461615	Livetime [s]
ontime2	3155.199988246	Sum of GTIs [s]
ontime3	3155.199988246	Sum of GTIs [s]
ontime5	3155.199988246	Sum of GTIs [s]
ontime6	3155.199988246	Sum of GTIs [s]
ontime7	3155.199988246	Sum of GTIs [s]
ontime8	3155.199988246	Sum of GTIs [s]
l2events	30522	Number of level 2 events



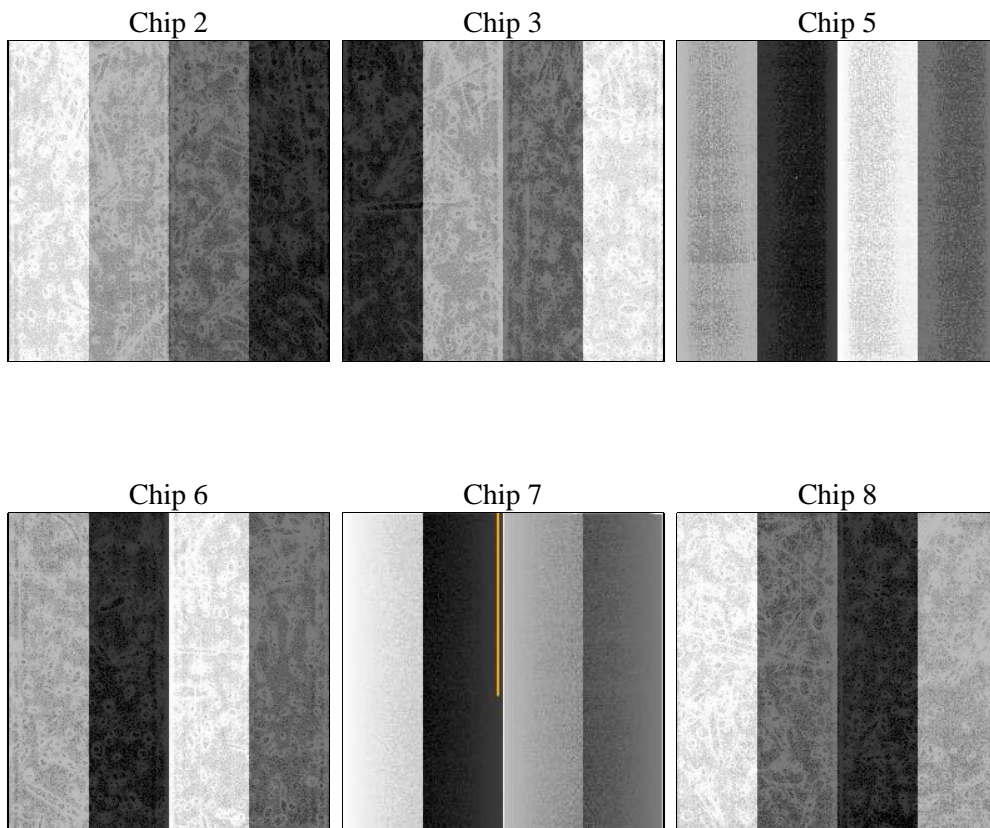
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	3200.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	3155.199988246	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	3155.199988246	Sum of GTIs [s]
date	2012-10-19T04:51:02	Date and time of file creation	ontime3	3155.199988246	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	3155.199988246	Sum of GTIs [s]
			ontime6	3155.199988246	Sum of GTIs [s]
			ontime7	3155.199988246	Sum of GTIs [s]
			ontime8	3155.199988246	Sum of GTIs [s]
			l1events	135970	Number of level 1 events

### 2.1.4 Events

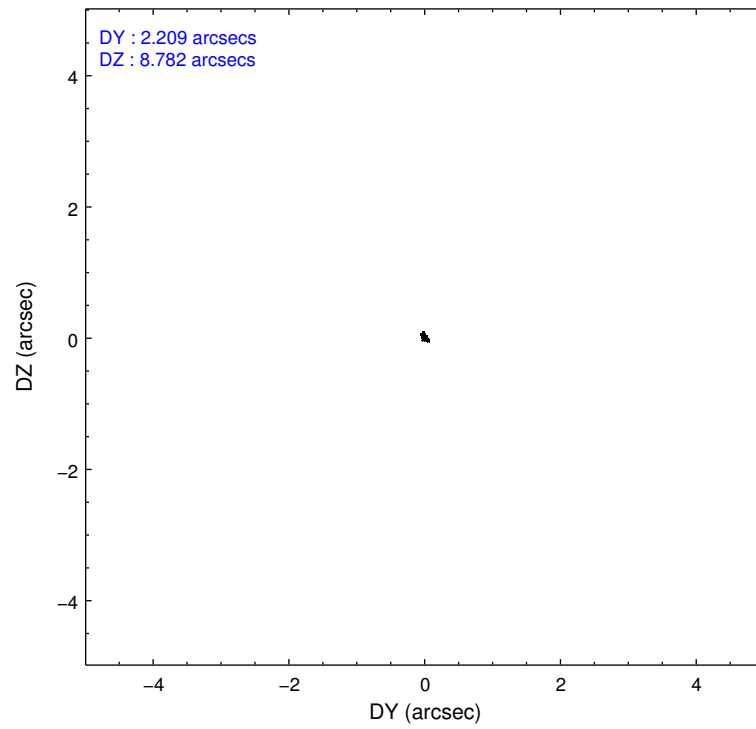
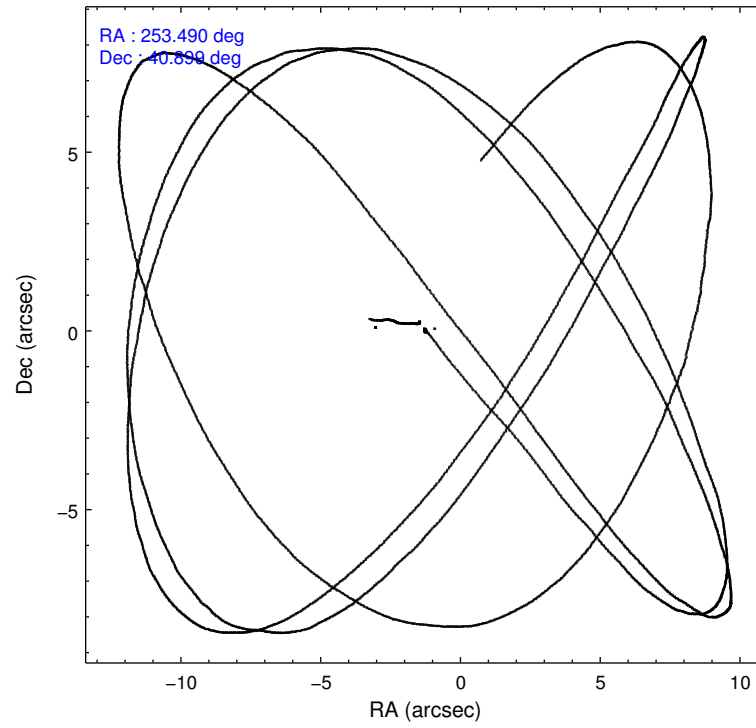
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	20610	18223	29481	18818	25692	23146	grade 0 events	997	1020	2105	988	995	1431
rejected events	18391	15967	15601	16502	15026	18650		4%	5%	7%	5%	3%	6%
rejected %	89%	87%	52%	87%	58%	80%	grade 1 events	10	7	68	6	28	14
								0%	0%	0%	0%	0%	0%
							grade 2 events	462	388	3949	426	2077	980
								2%	2%	13%	2%	8%	4%
							grade 3 events	204	237	573	234	962	440
								0%	1%	1%	1%	3%	1%
							grade 4 events	191	221	484	230	937	438
								0%	1%	1%	1%	3%	1%
							grade 5 events	691	777	2010	879	2416	1016
								3%	4%	6%	4%	9%	4%
							grade 6 events	367	400	6783	439	5703	1215
								1%	2%	23%	2%	22%	5%
							grade 7 events	17688	15173	13509	15616	12574	17612
								85%	83%	45%	82%	48%	76%

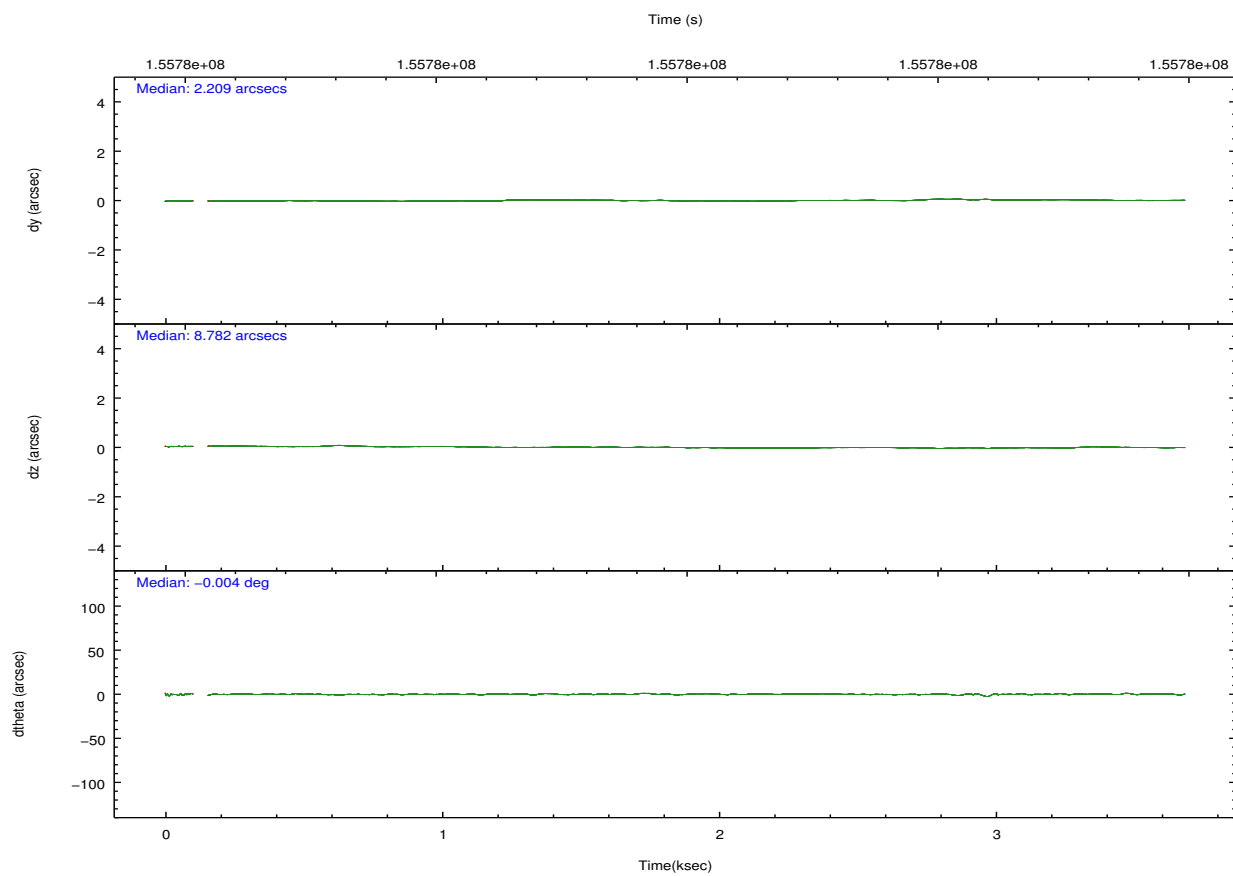
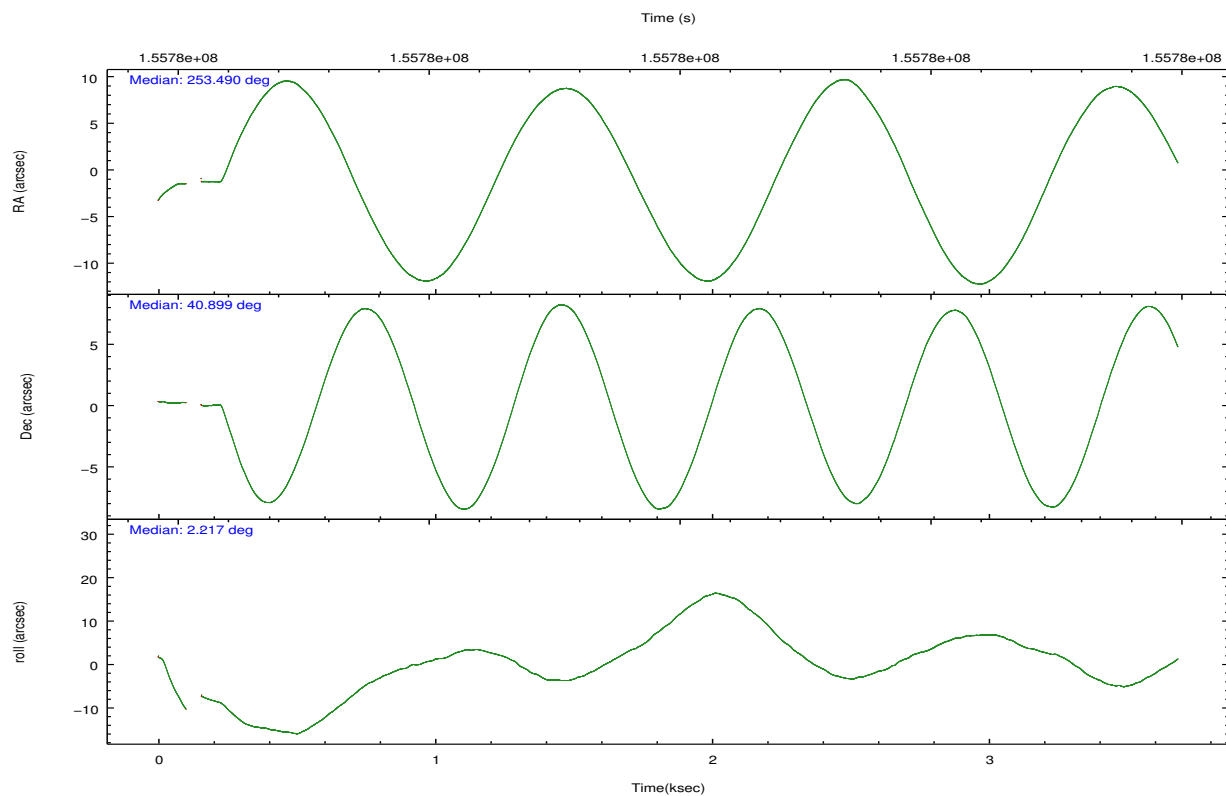


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	253.459960	253.4904017670098	Subarray requested	NONE	NONE
[deg] Pointing Dec	40.884450	40.89928737906495	Alternating exposures requested	N	N
[deg] Pointing Roll	2.088566	2.22530383468281	[s] Primary exposure time	0.000000	3.2
[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)	155778594.184000	155777485.44675			
Observation start date	2002-12-08T23:48:50	2002-12-08T23:31:25			
[s] Observation end time (MET)	155781794.184000	155782582.25947			
Observation end date	2002-12-09T00:42:10	2002-12-09T00:56:22			
Read mode	TIMED	TIMED			

## 2.3 Aspect



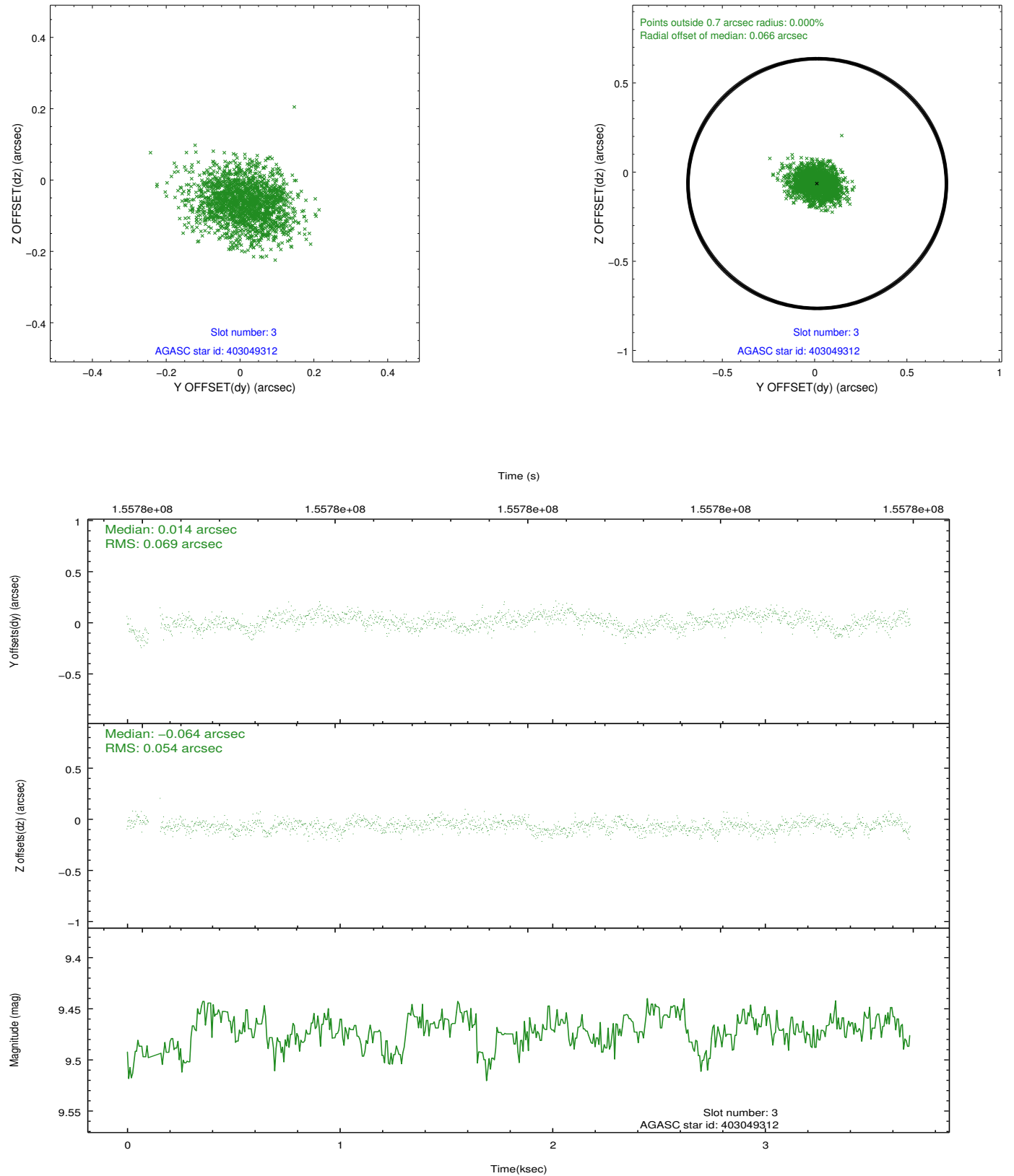


Slot Statistics

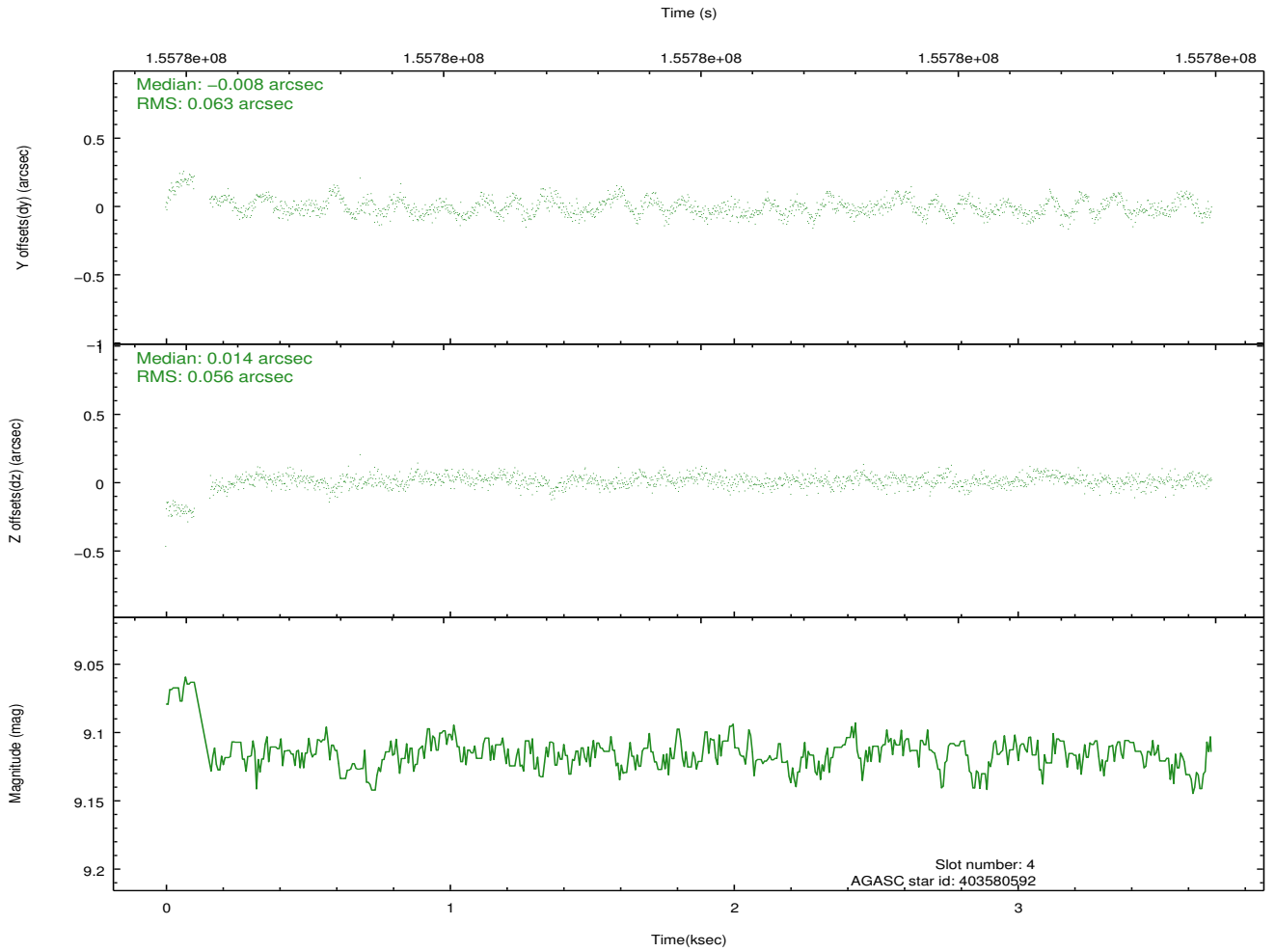
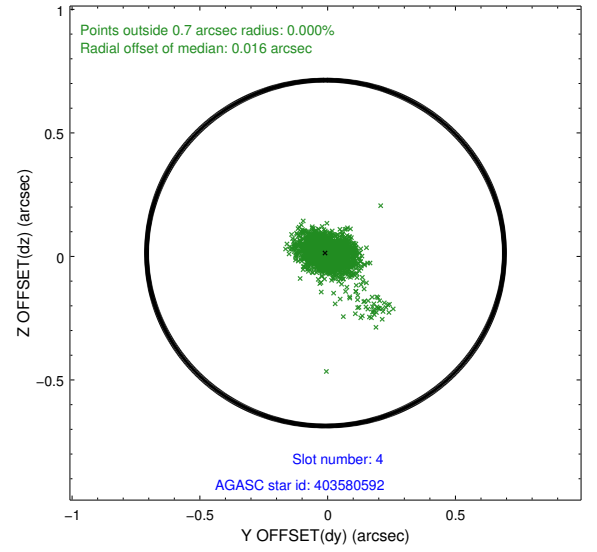
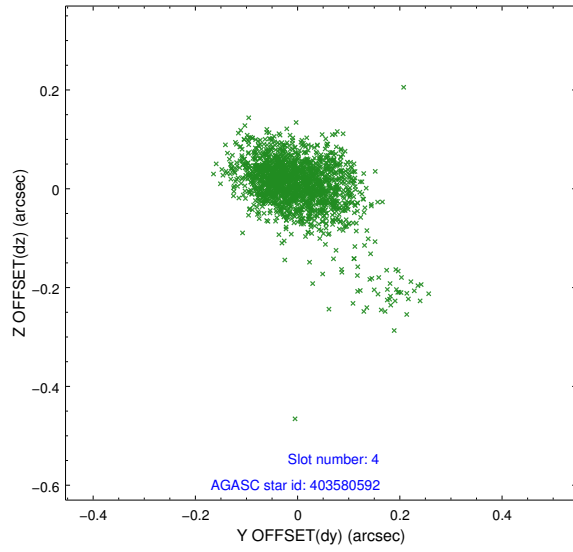
	status	id	mag	n_pts	med_dy	med_dz	drl
	FID	ACIS-S-2	7.10	886	-0.031	-0.016	0.007
	FID	ACIS-S-4	7.20	886	0.003	0.019	0.006
	FID	ACIS-S-5	7.23	886	-0.003	0.005	0.006
	GUIDE	403049312	9.47	1772	0.014	-0.064	0.094
	GUIDE	403580592	9.12	1771	-0.008	0.014	0.077
	GUIDE	403047840	9.26	1769	0.040	-0.022	0.081
	GUIDE	403049576	9.20	1772	-0.052	0.073	0.104
0.0000.0000.0000.0000000.00000000.000.00							

## 2.4 Star Slots

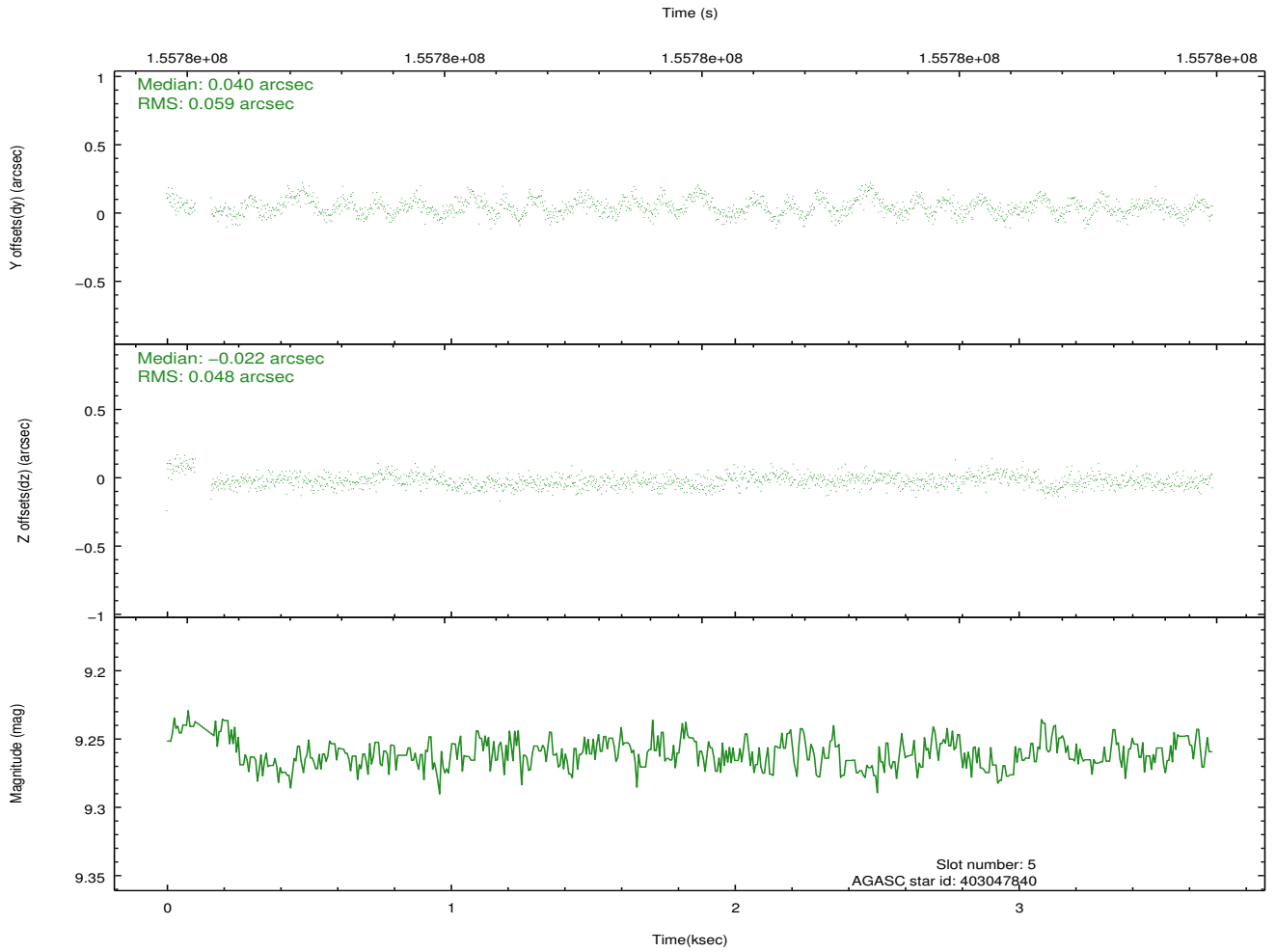
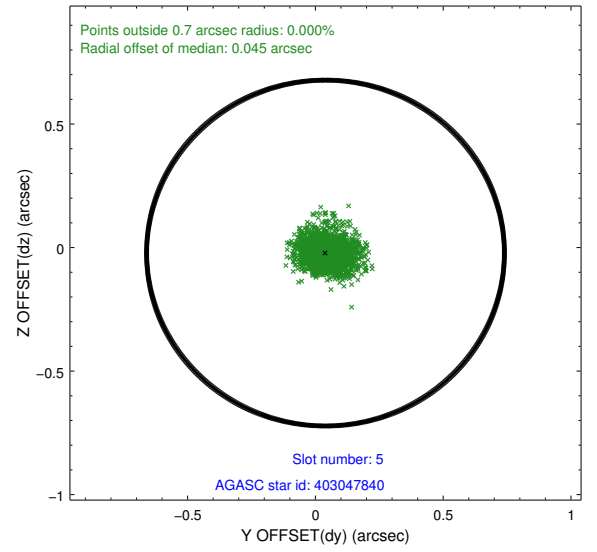
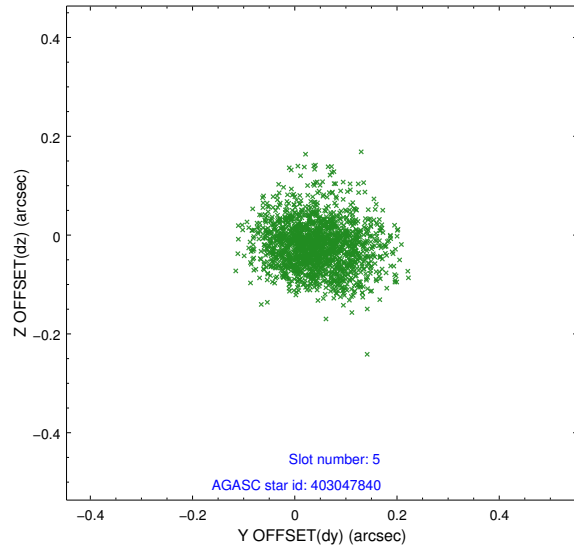
### 2.4.1 Slot 3



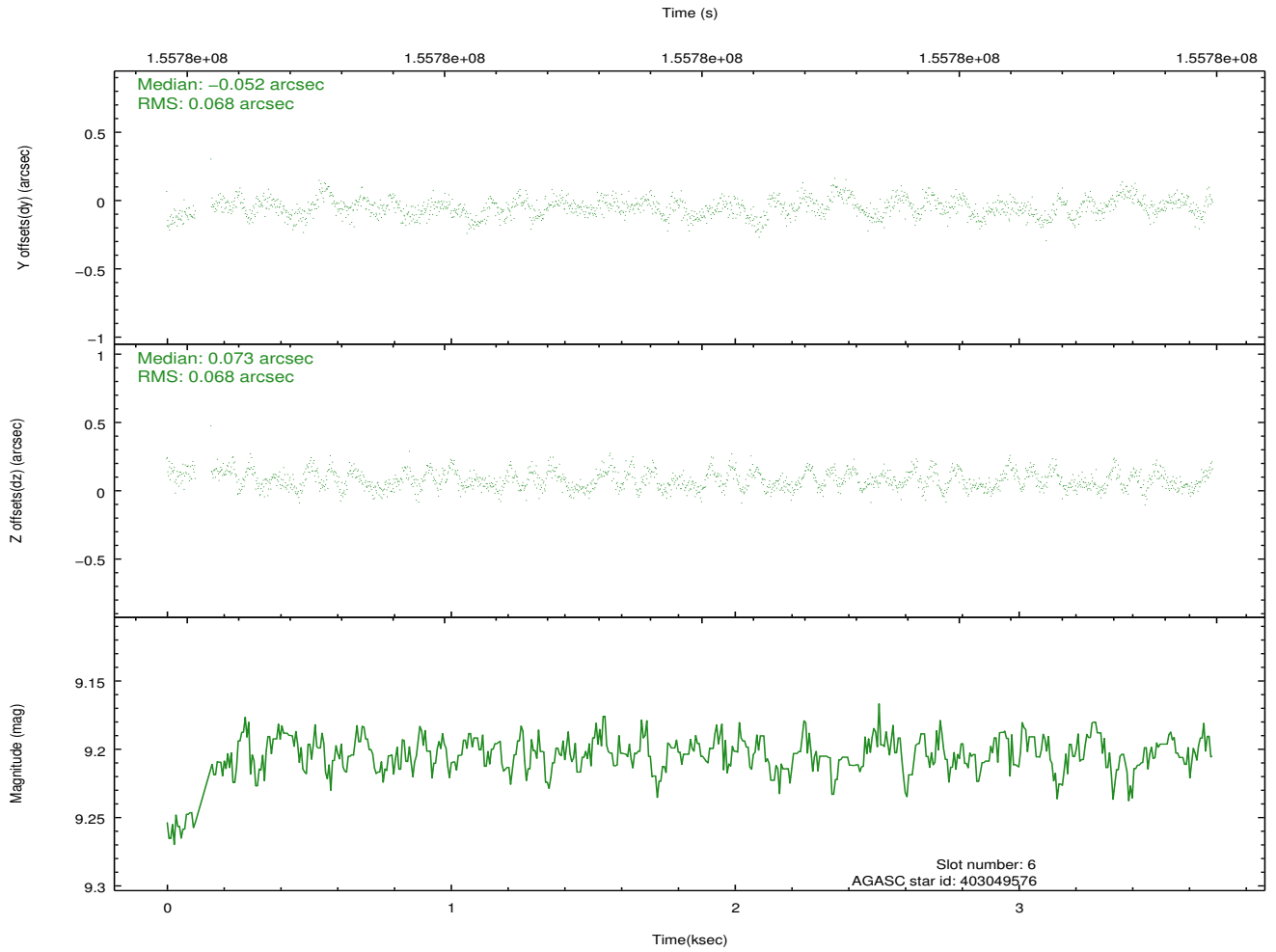
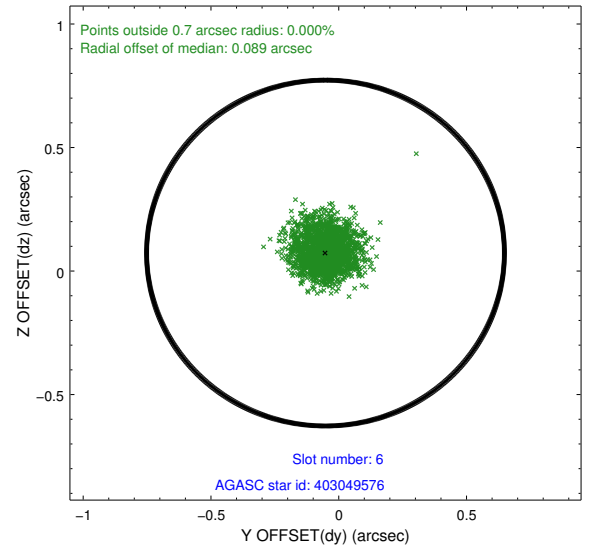
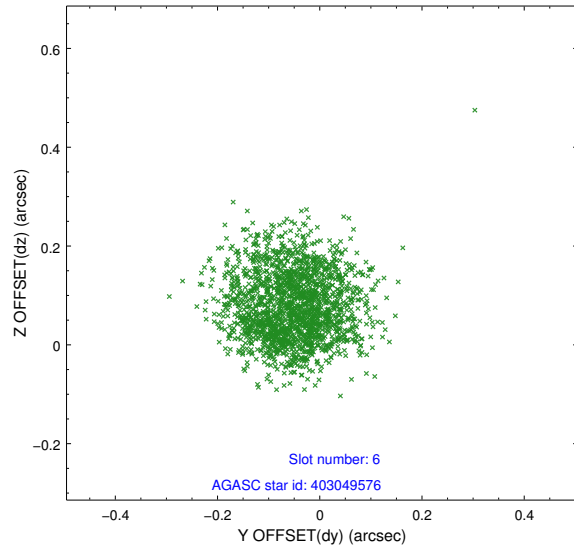
## 2.4.2 Slot 4



### 2.4.3 Slot 5



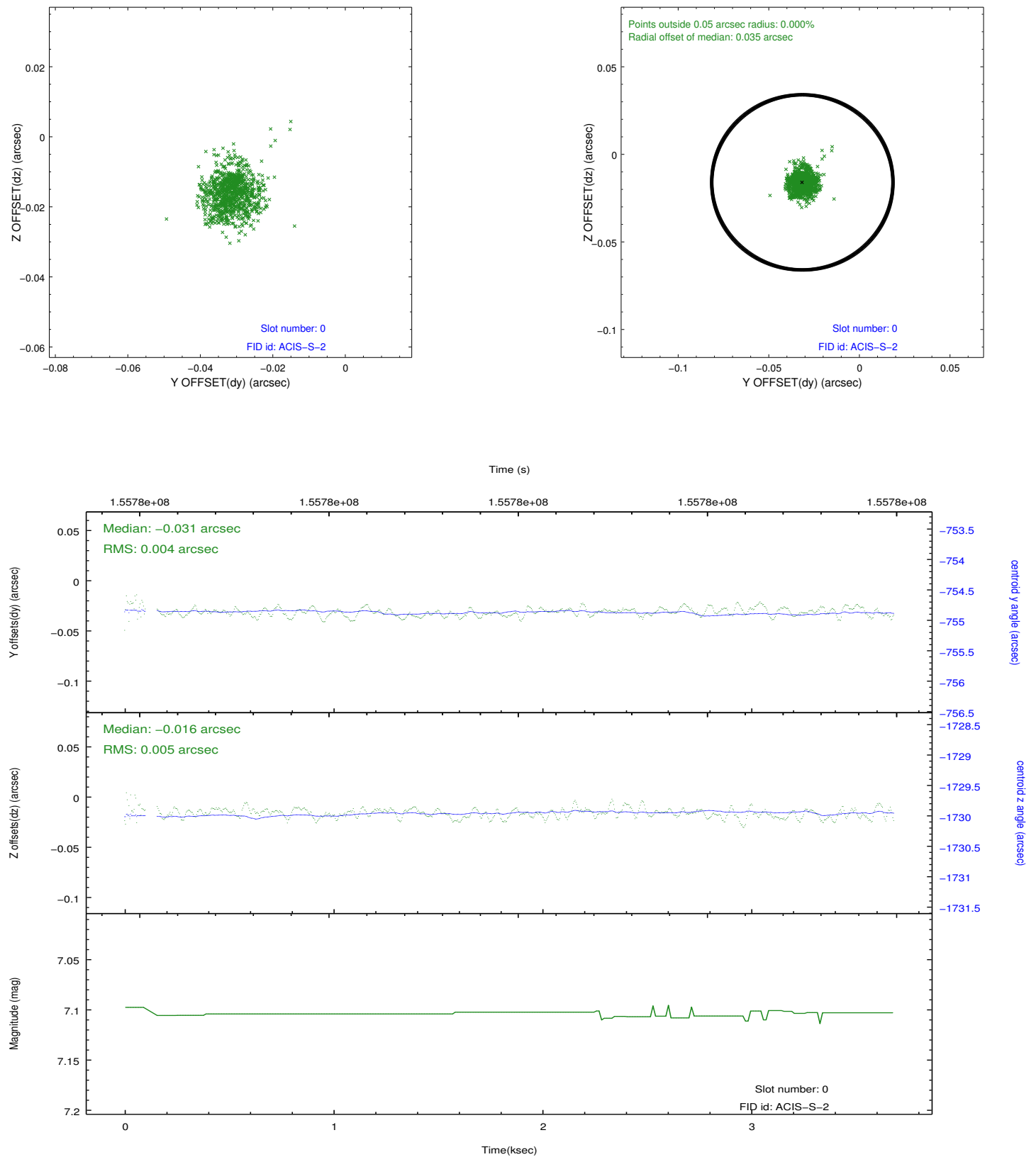
## 2.4.4 Slot 6



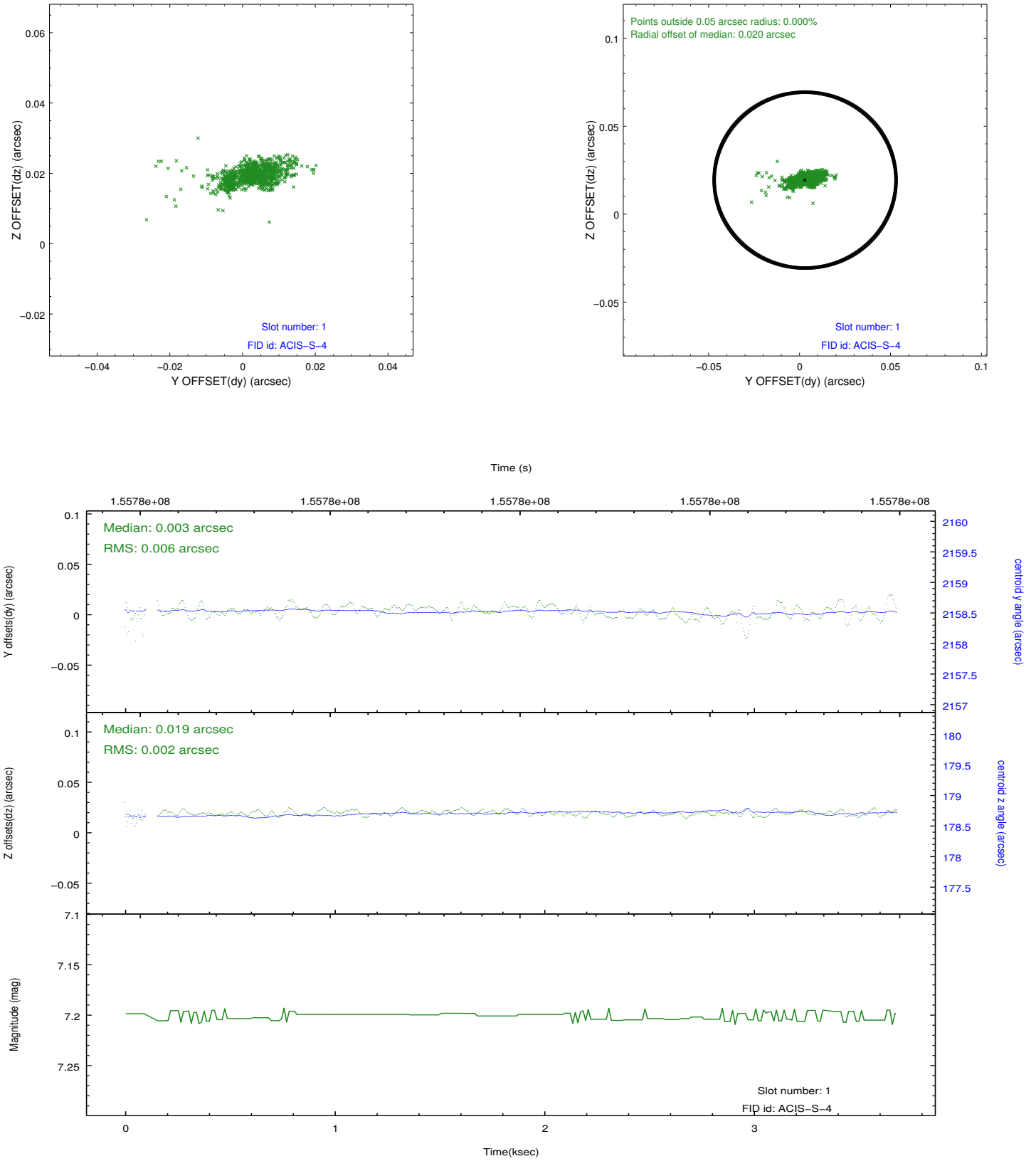


## 2.5 FID Slots

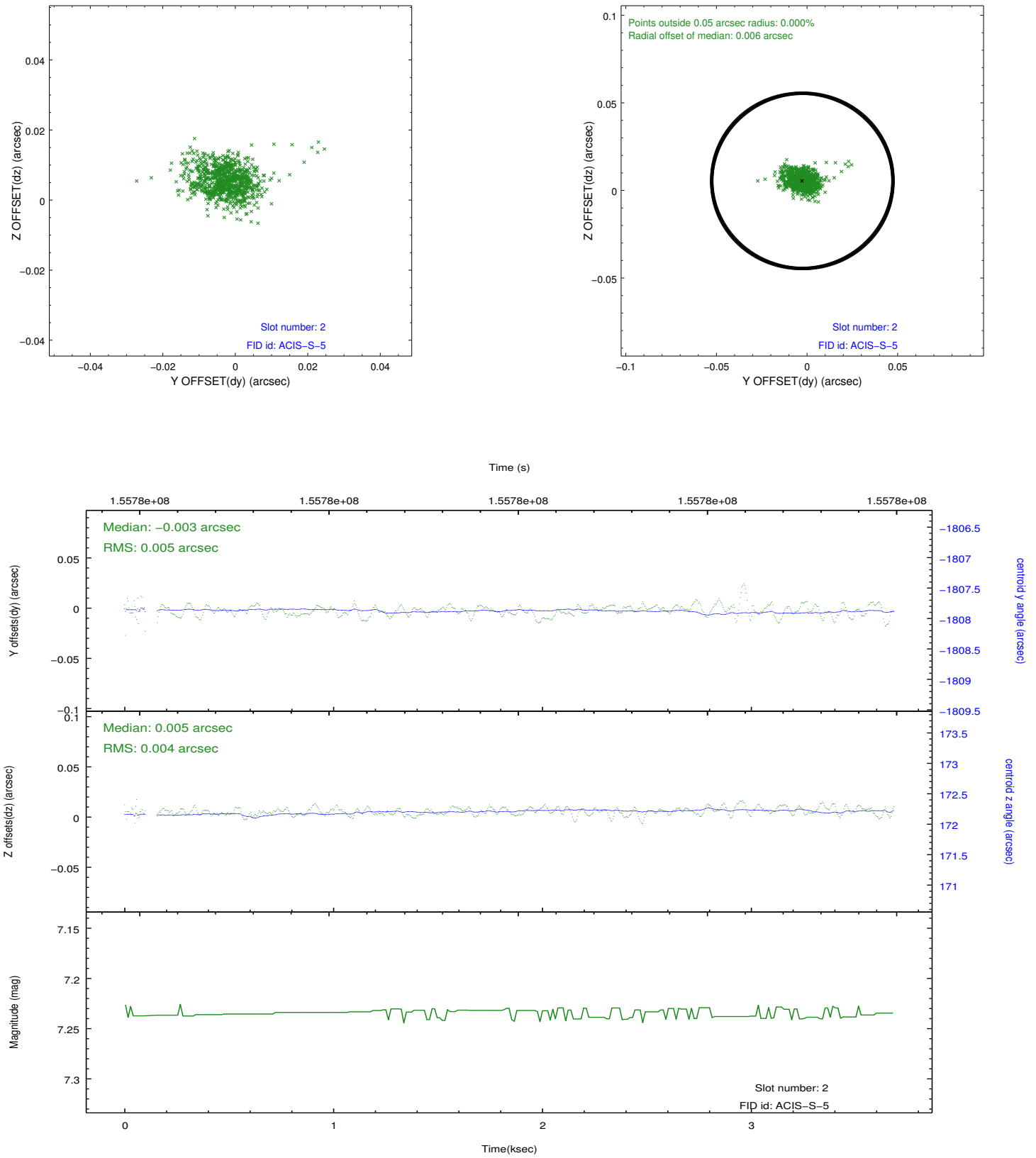
### 2.5.1 Slot 0



## 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)	2012.10.30
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.158

### A.2 Comments