

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 20424 - L2 Version 1  
Chandra X-Ray Center

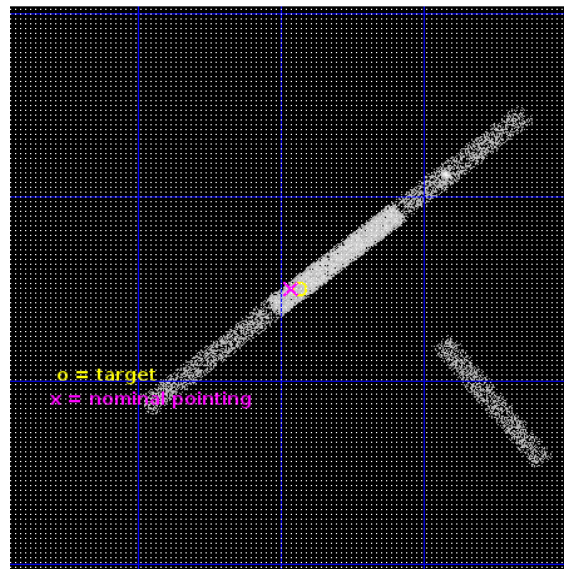
L2 Processing Date : Nov 29 2017

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# 1 Front

seq_num	703529	Sequence number
obs_id	20424	Observation id
title	X-ray detection of unexplored so far population of AGN	Proposal ti
observer	Magdalena Kunert-Bajraszewska	Principal investigator
object	VTC0309+0114	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	47.358333	Observer's specified target RA [deg]
dec_targ	1.249417	Observer's specified target Dec [deg]
ra_nom	47.365856723641	Nominal RA [deg]
dec_nom	1.249974168414	Nominal Dec [deg]
roll_nom	321.1564646214	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15088.800599694	Sum of GTIs [s]
livetime	14122.801010571	Livetime [s]
ontime3	15088.718941331	Sum of GTIs [s]
ontime6	15088.759981394	Sum of GTIs [s]
ontime7	15088.800599694	Sum of GTIs [s]
ontime8	15088.677901387	Sum of GTIs [s]
l2events	14006	Number of level 2 events

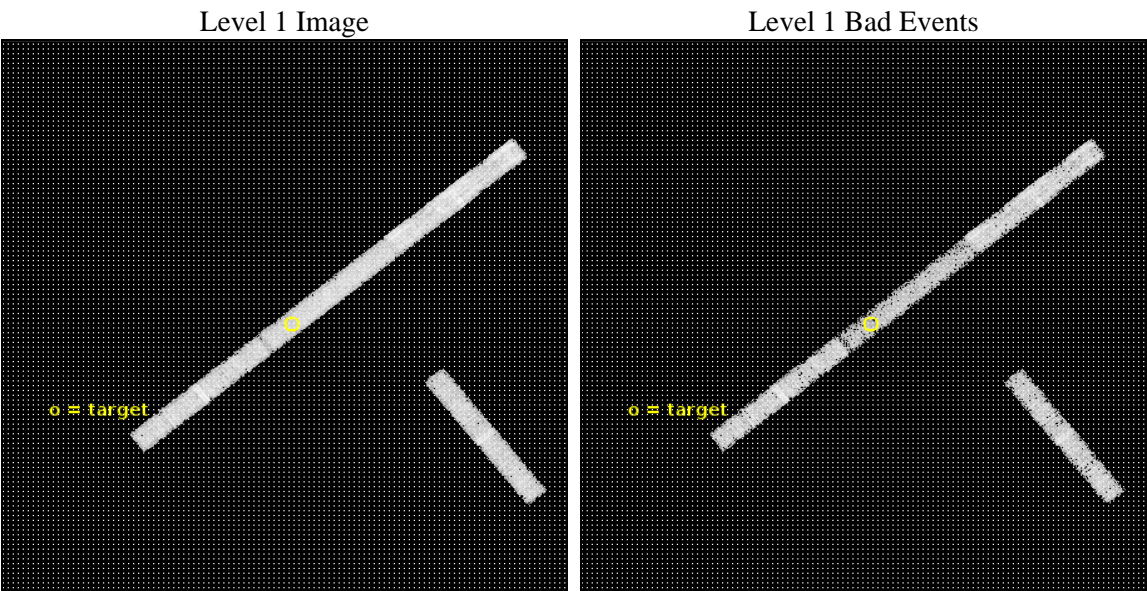




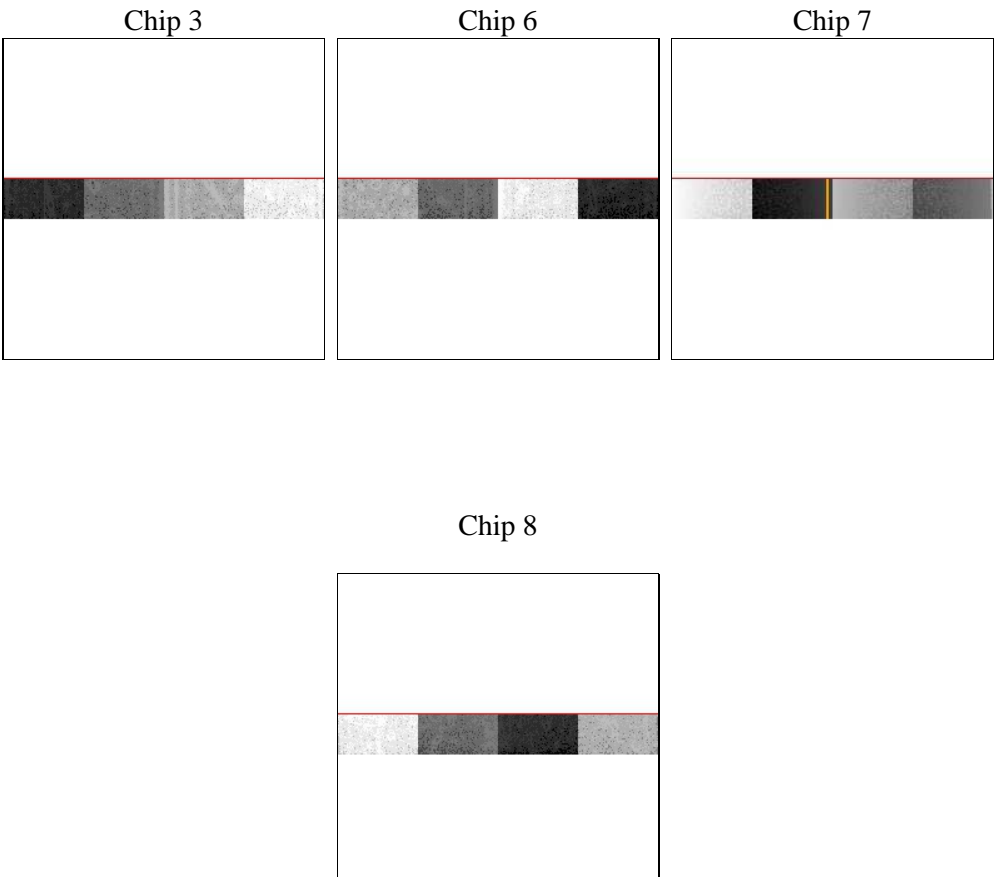
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	15088.800599694	Sum of GTIs [s]
caldsver	4.7.6	&#160	ontime3	15088.718941331	Sum of GTIs [s]
date	2017-11-29T06:03:16	Date and time of file creation	ontime6	15088.759981394	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	15088.800599694	Sum of GTIs [s]
			ontime8	15088.677901387	Sum of GTIs [s]
			l1events	83512	Number of level 1 events

### 2.1.4 Events

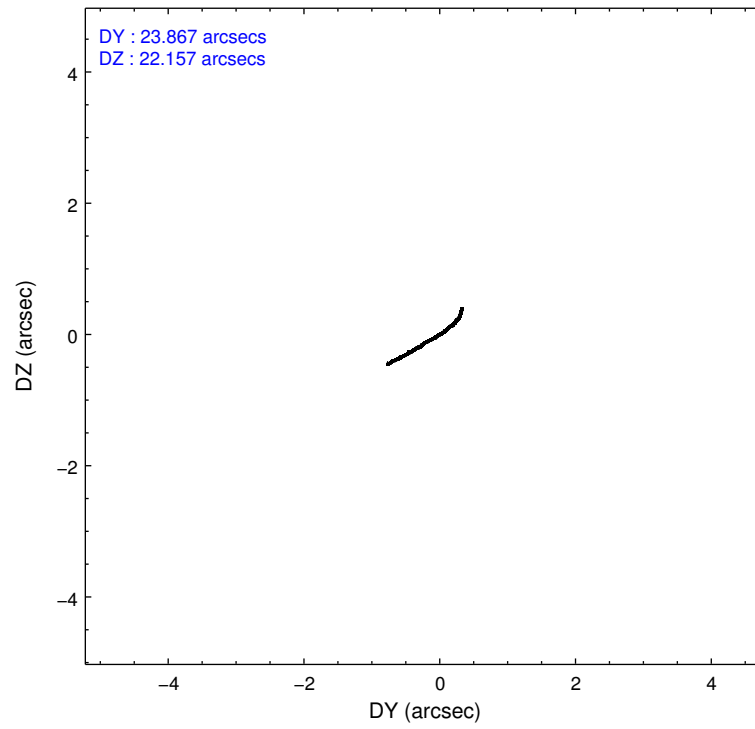
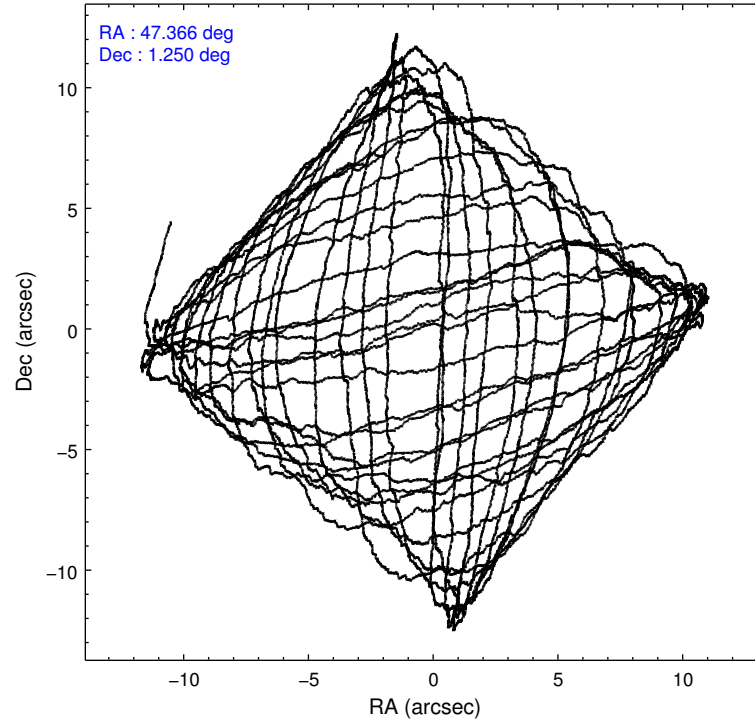
	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	17372	19785	20131	26224
rejected events	15541	17650	10945	19935
rejected %	89%	89%	54%	76%

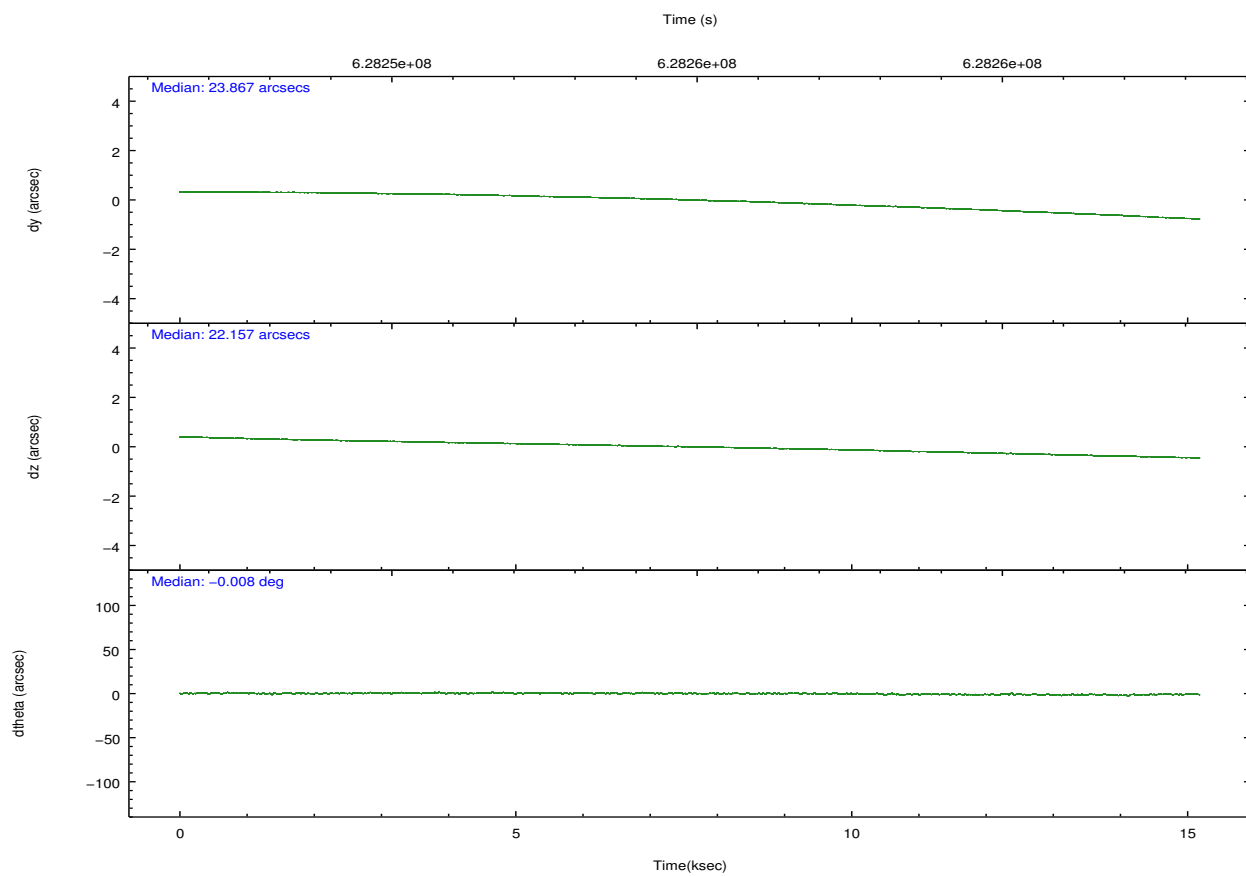
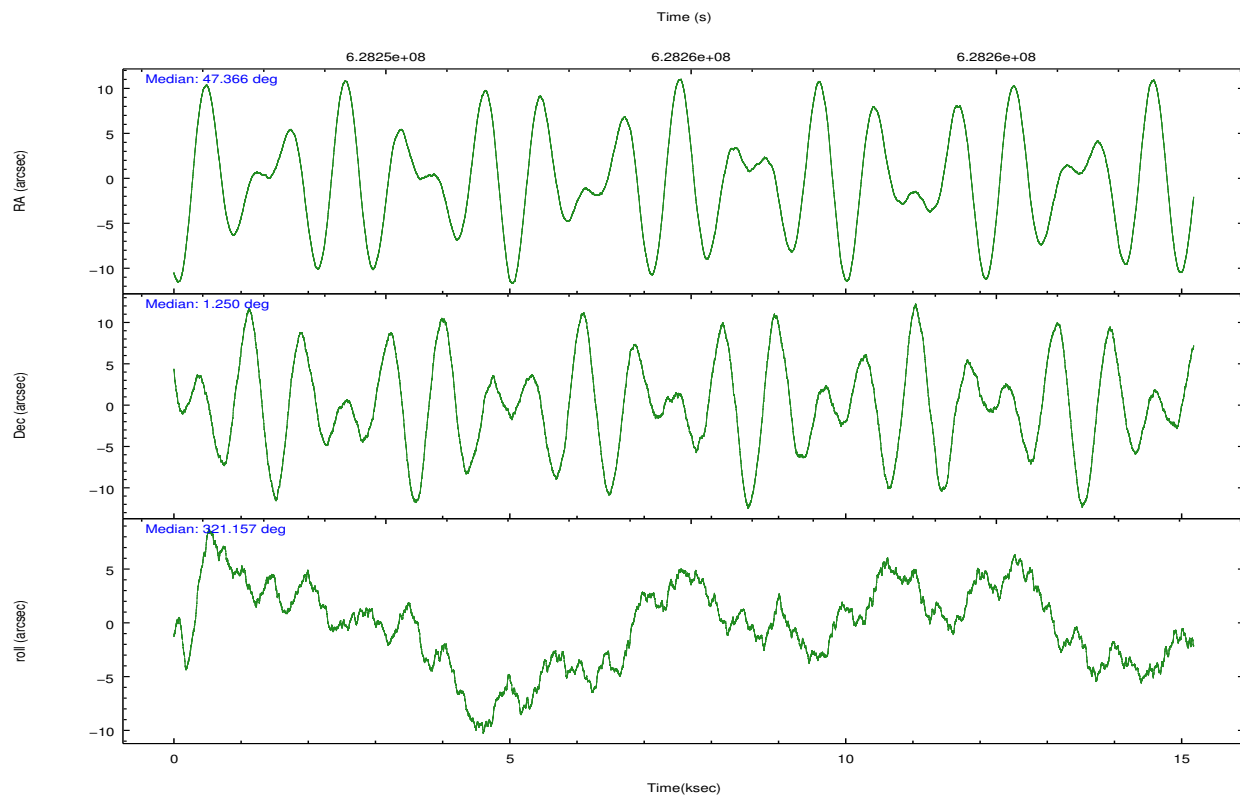
	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	509	615	904	1514
	2%	3%	4%	5%
grade 1 events	6	6	39	13
	0%	0%	0%	0%
grade 2 events	346	383	1861	1313
	1%	1%	9%	5%
grade 3 events	339	339	1054	808
	1%	1%	5%	3%
grade 4 events	302	376	1086	738
	1%	1%	5%	2%
grade 5 events	680	736	1986	1057
	3%	3%	9%	4%
grade 6 events	336	422	4281	1916
	1%	2%	21%	7%
grade 7 events	14854	16908	8920	18865
	85%	85%	44%	71%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-3678	ACIS-3678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	47.338709	47.36585672364077	CCD I2 on	O1	N
[deg] Pointing Dec	1.253833	1.249974168414	CCD I3 on	O2	Y
[deg] Pointing Roll	321.000431	321.1564646213958	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	O3	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	O4	Y
[s] Observation start time (MET)	628247497.184000	628246587.44382	CCD S5 on	N	N
Observation start date	2017-11-28T09:10:28	2017-11-28T08:56:27	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	628262497.184000	628263716.21983	On-chip summing requested	N	N
Observation end date	2017-11-28T13:20:28	2017-11-28T13:41:56	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	449	449
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.6

## 2.3 Aspect



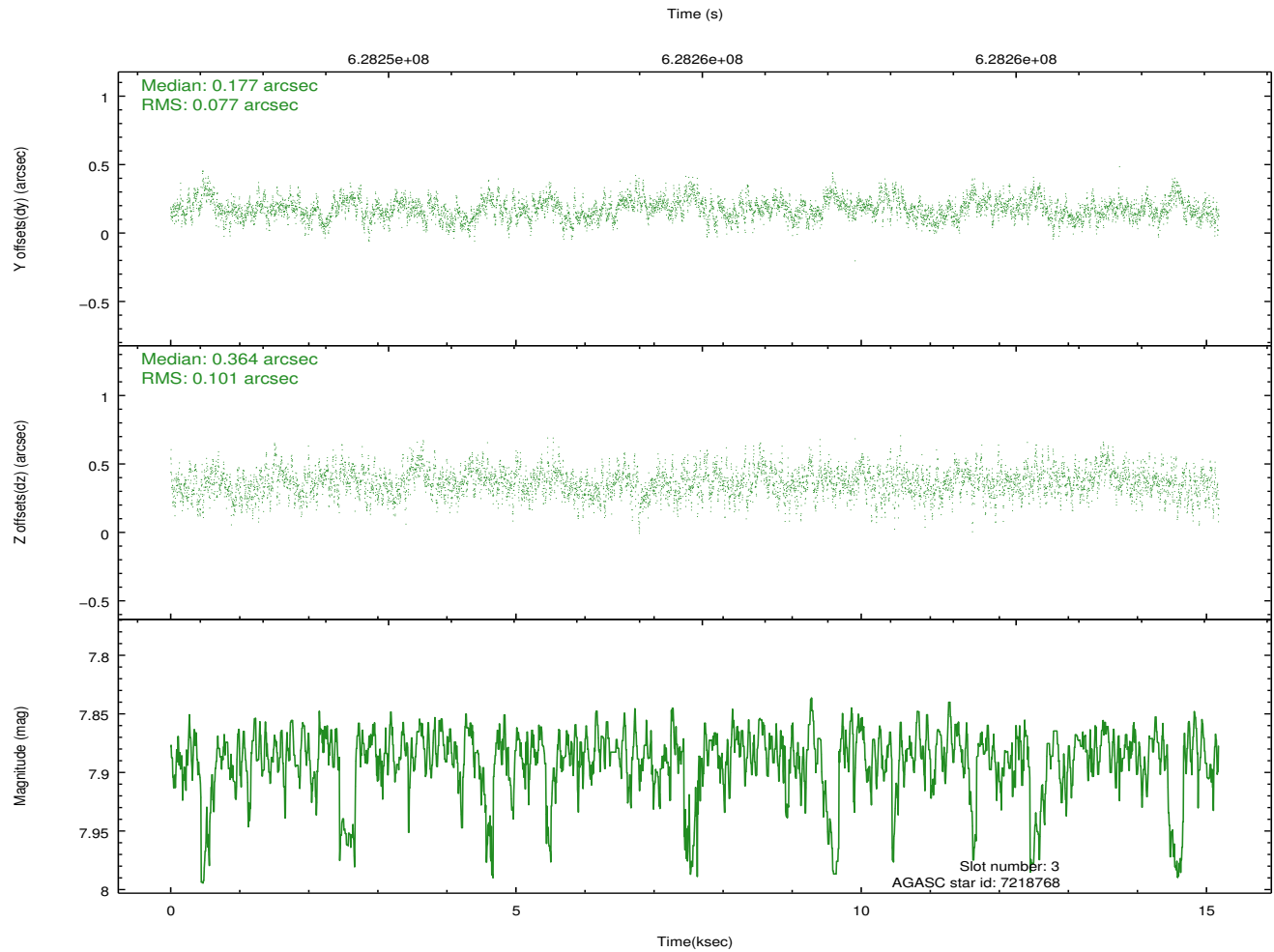
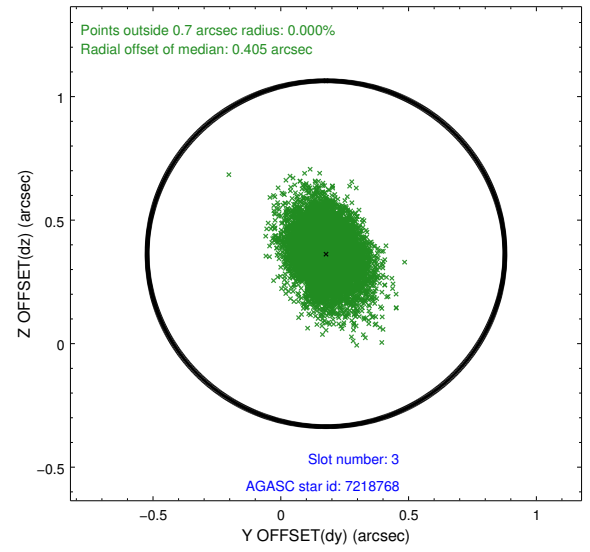
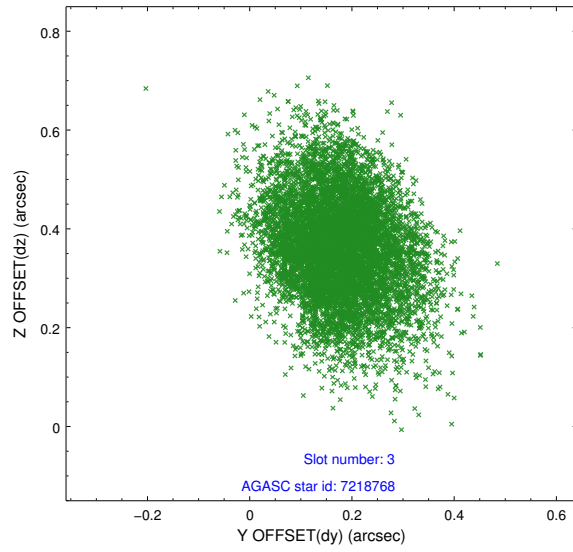


### Slot Statistics

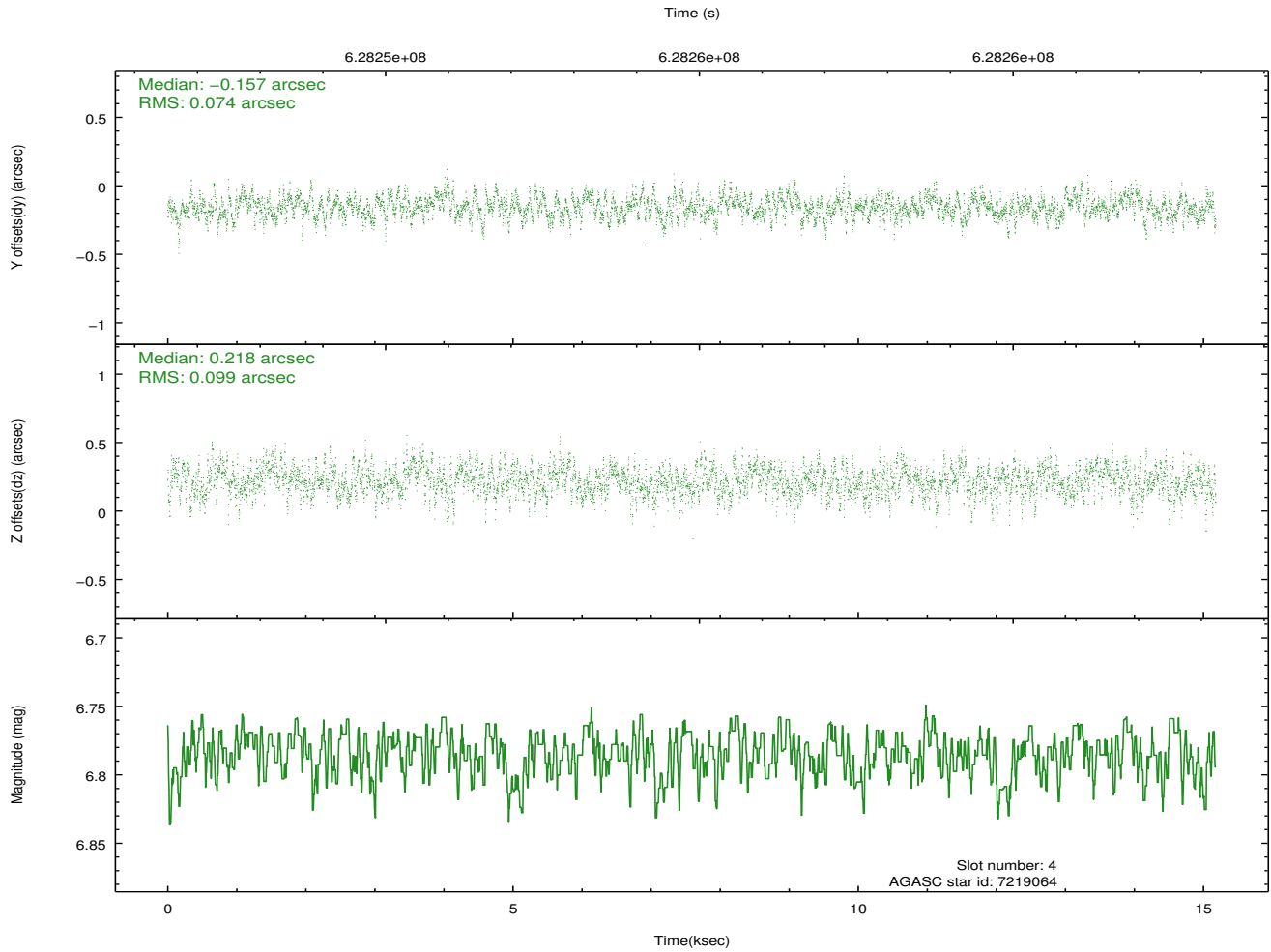
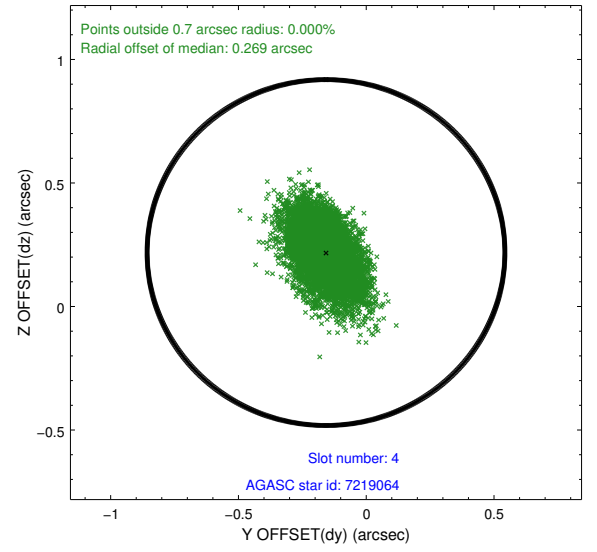
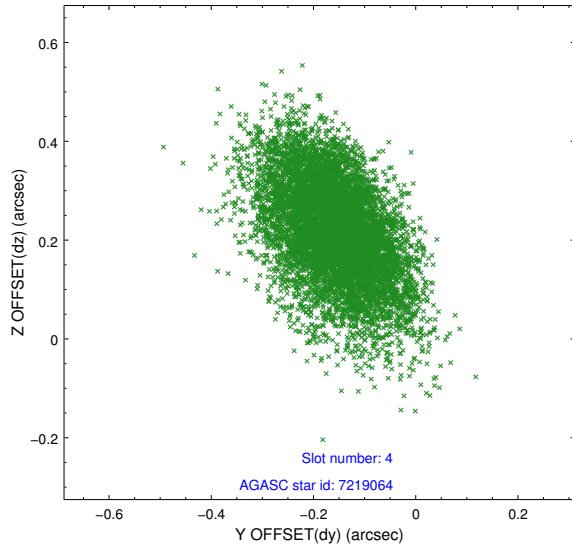
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.16	3703	0.139	-0.069	0.028	0.049	0.000000	0.000000	919.24	-1739.33
1	FID		ACIS-S-5	7.18	3703	-0.387	0.043	0.017	0.026	0.000000	0.000000	-1830.19	157.93
2	FID		ACIS-S-6	7.33	3703	0.226	0.038	0.012	0.030	0.000000	0.000000	384.46	802.31
3	GUIDE	used	7218768	7.89	7405	0.177	0.364	0.134	0.220	46.488715	1.206678	-2270.09	-2056.03
4	GUIDE	used	7219064	6.79	7405	-0.157	0.218	0.130	0.220	46.915859	1.405960	-1527.35	-531.74
5	GUIDE	used	7219576	8.93	7396	0.436	0.139	0.154	0.269	46.931678	0.861328	-247.72	-2020.96
6	GUIDE	used	7218856	9.27	7393	-0.042	-0.284	0.214	0.366	47.335767	1.452442	-457.43	548.90
7	GUIDE	used	7346600	8.52	7397	-0.414	-0.433	0.196	0.302	47.853300	1.270711	1400.93	1212.85

## 2.4 Star Slots

### 2.4.1 Slot 3

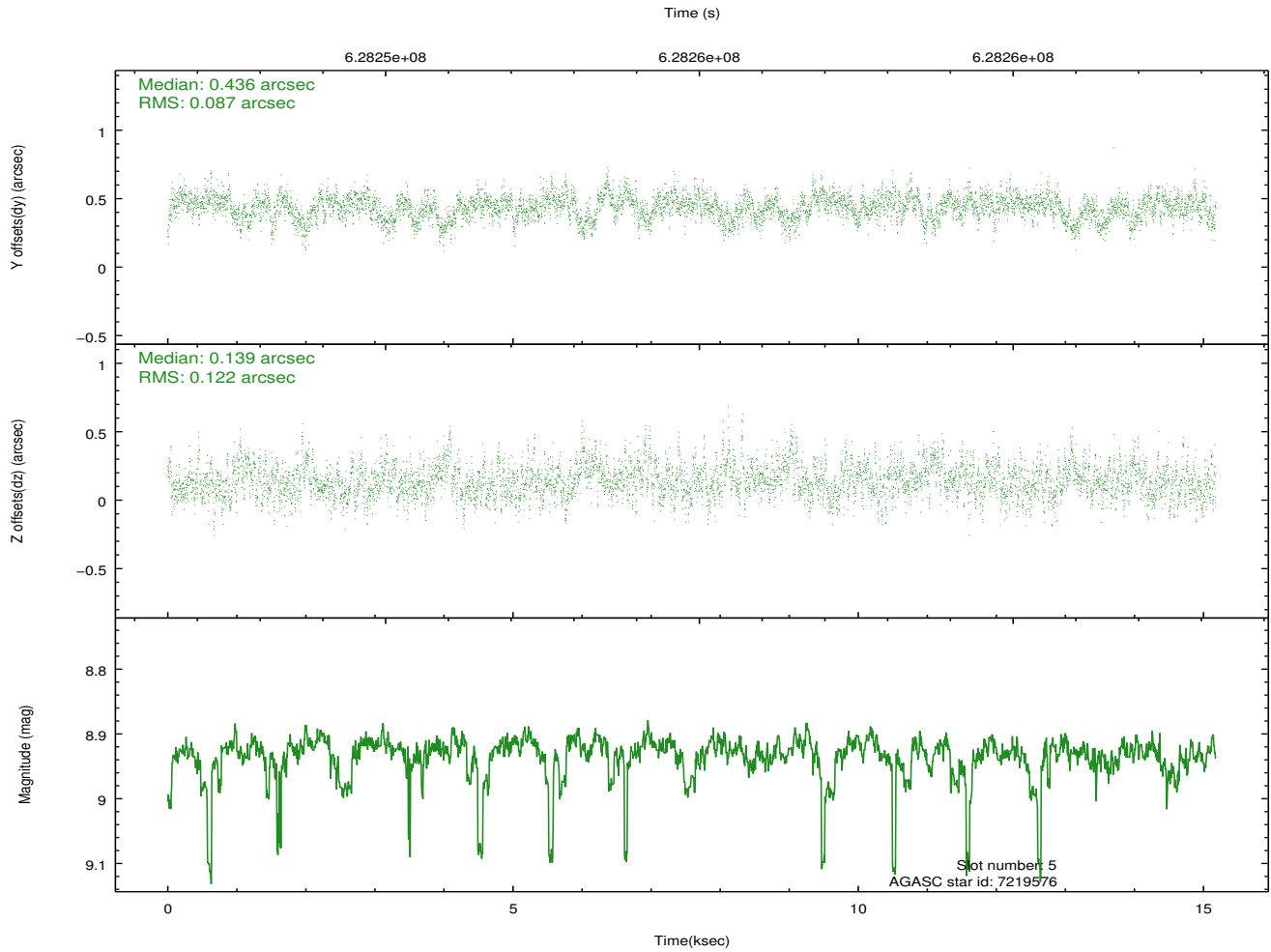
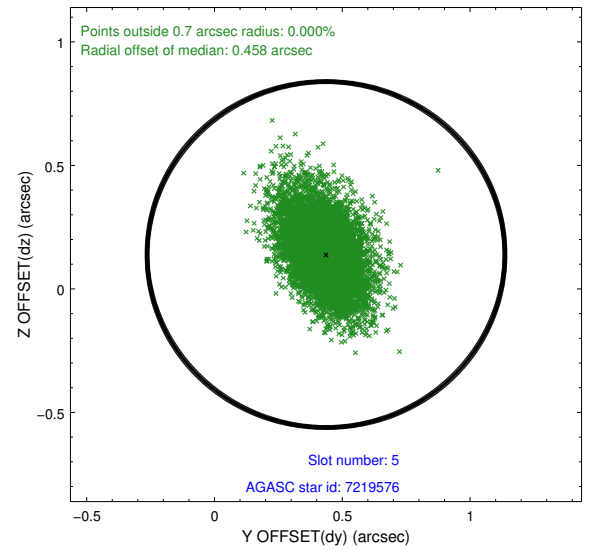
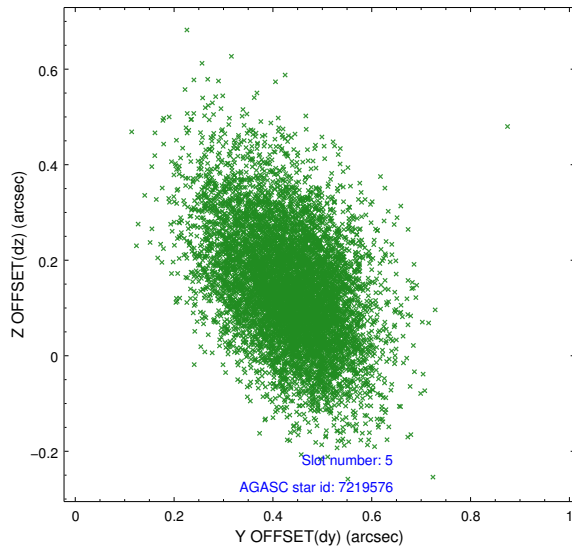


## 2.4.2 Slot 4

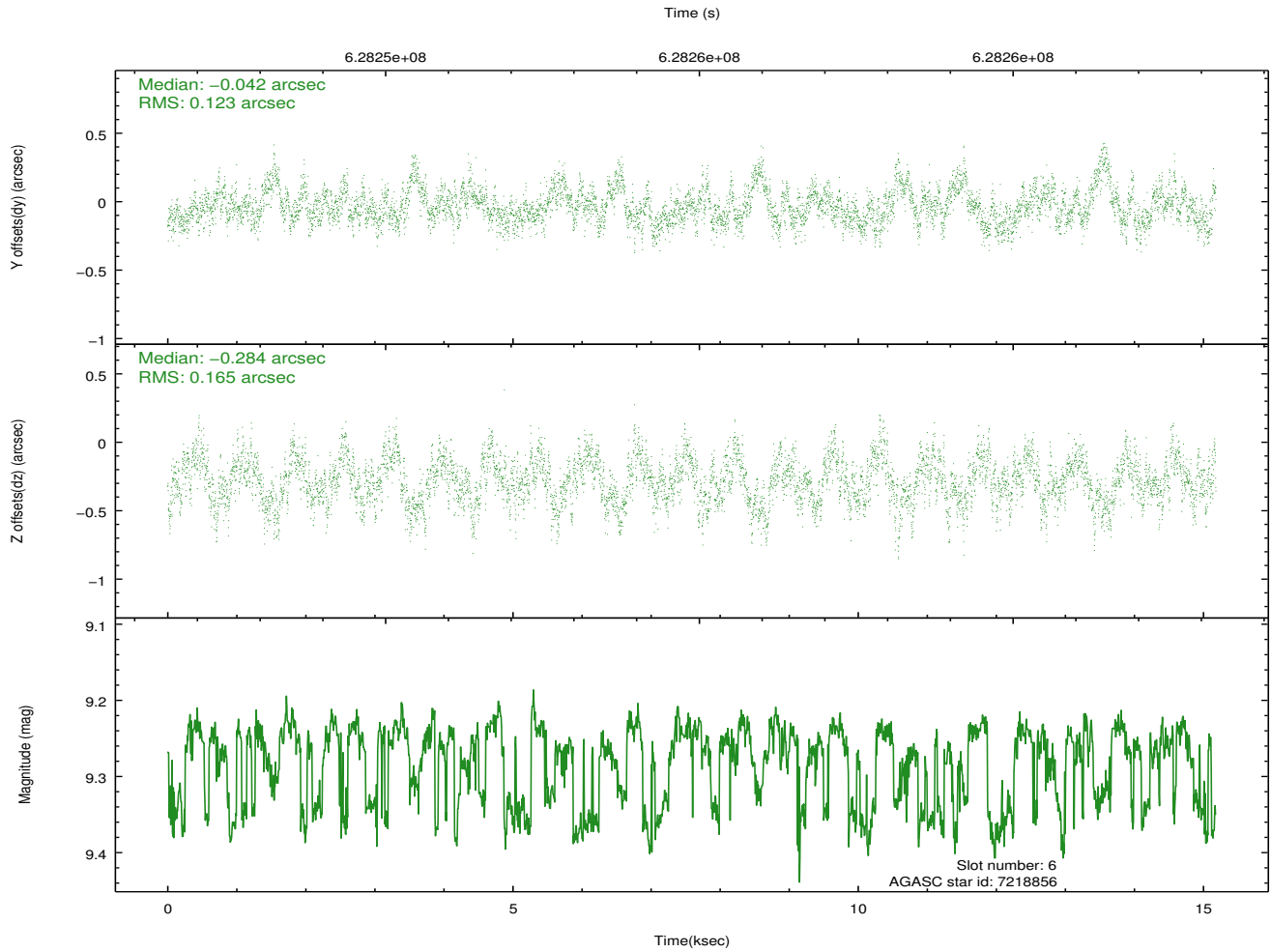
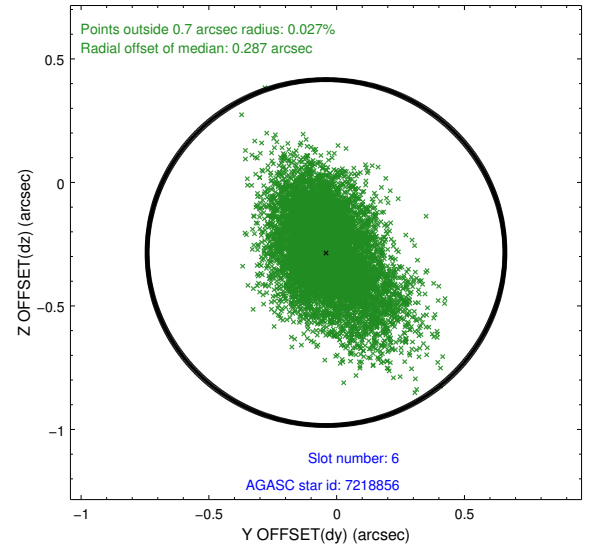
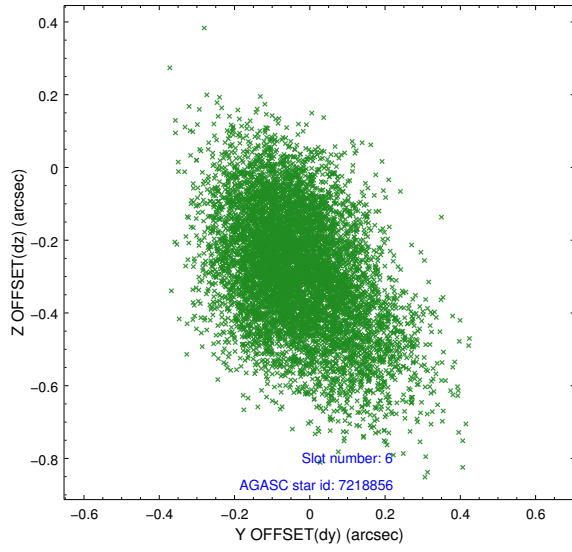




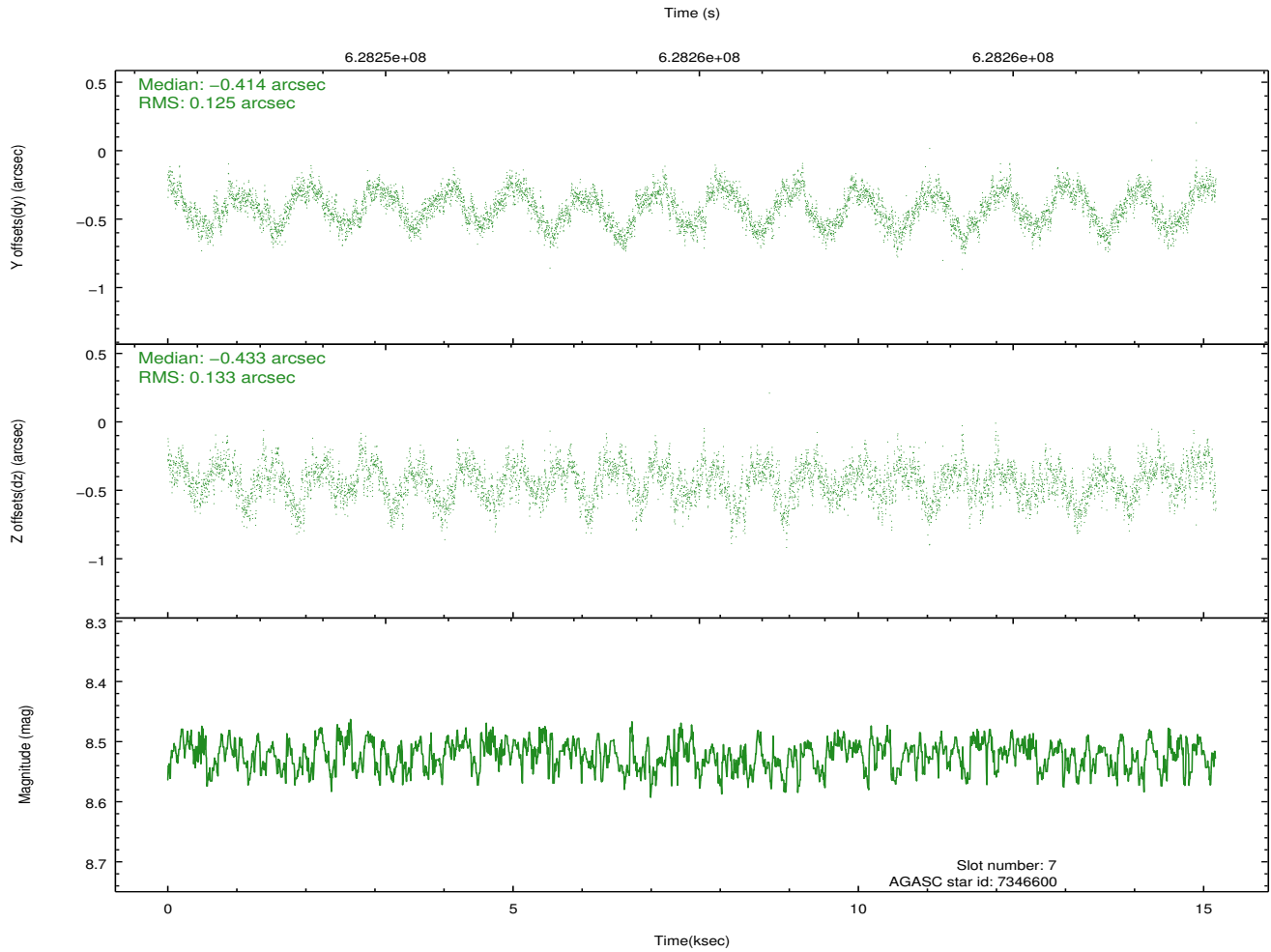
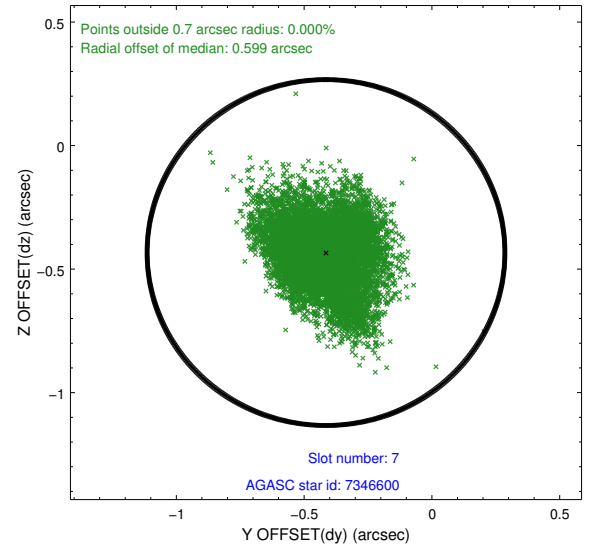
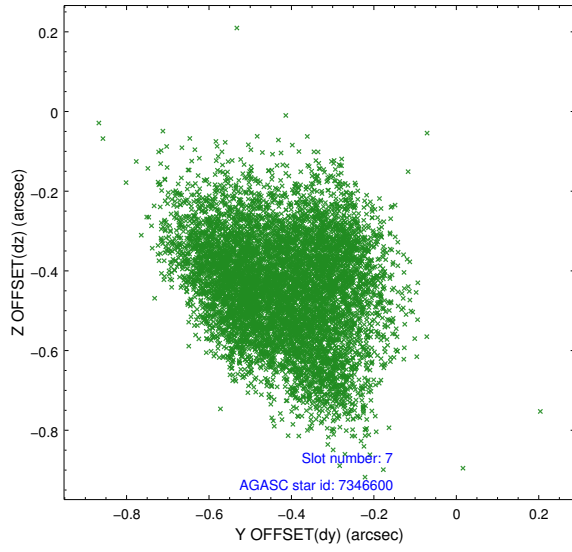
### 2.4.3 Slot 5



## 2.4.4 Slot 6

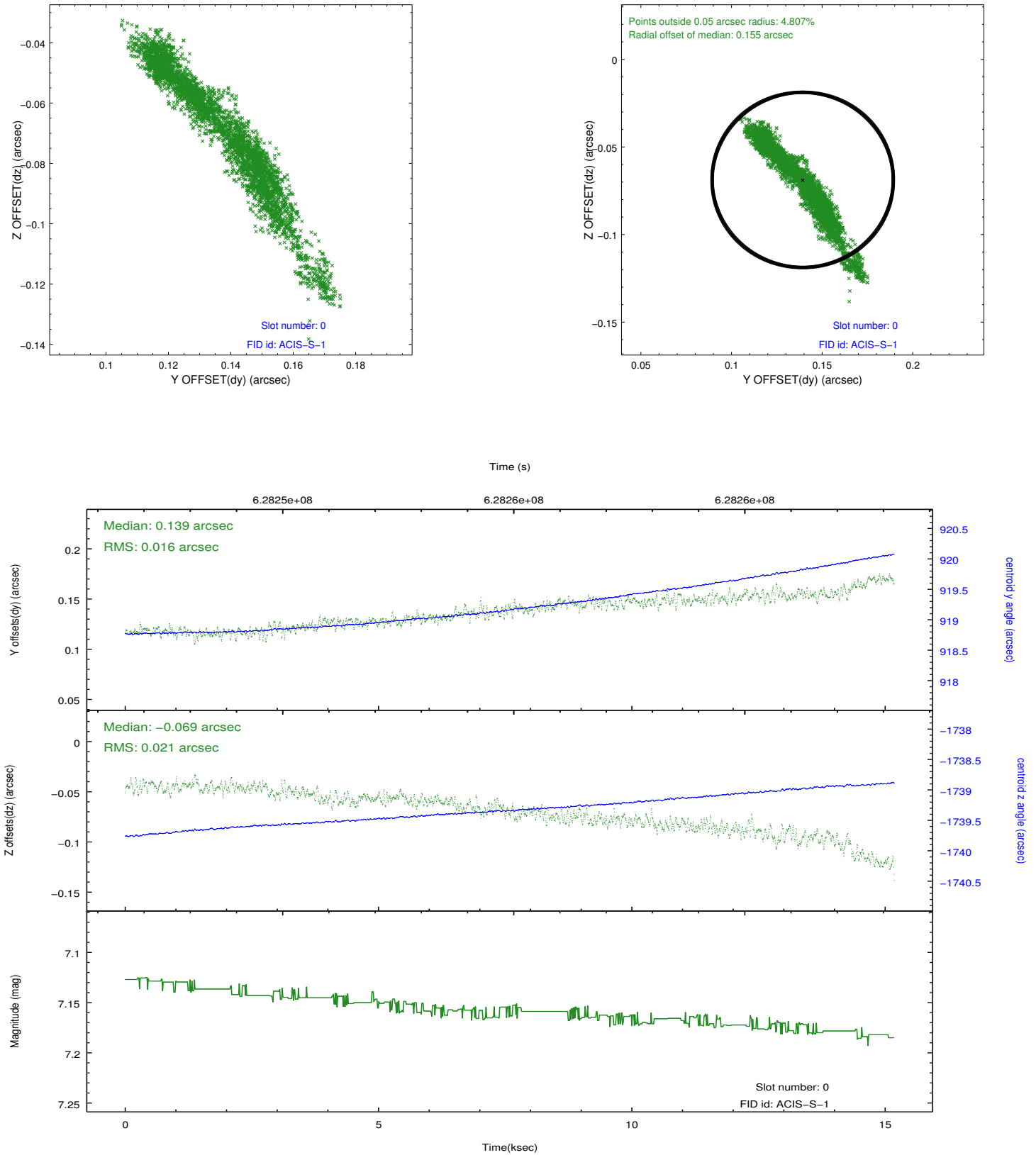


## 2.4.5 Slot 7

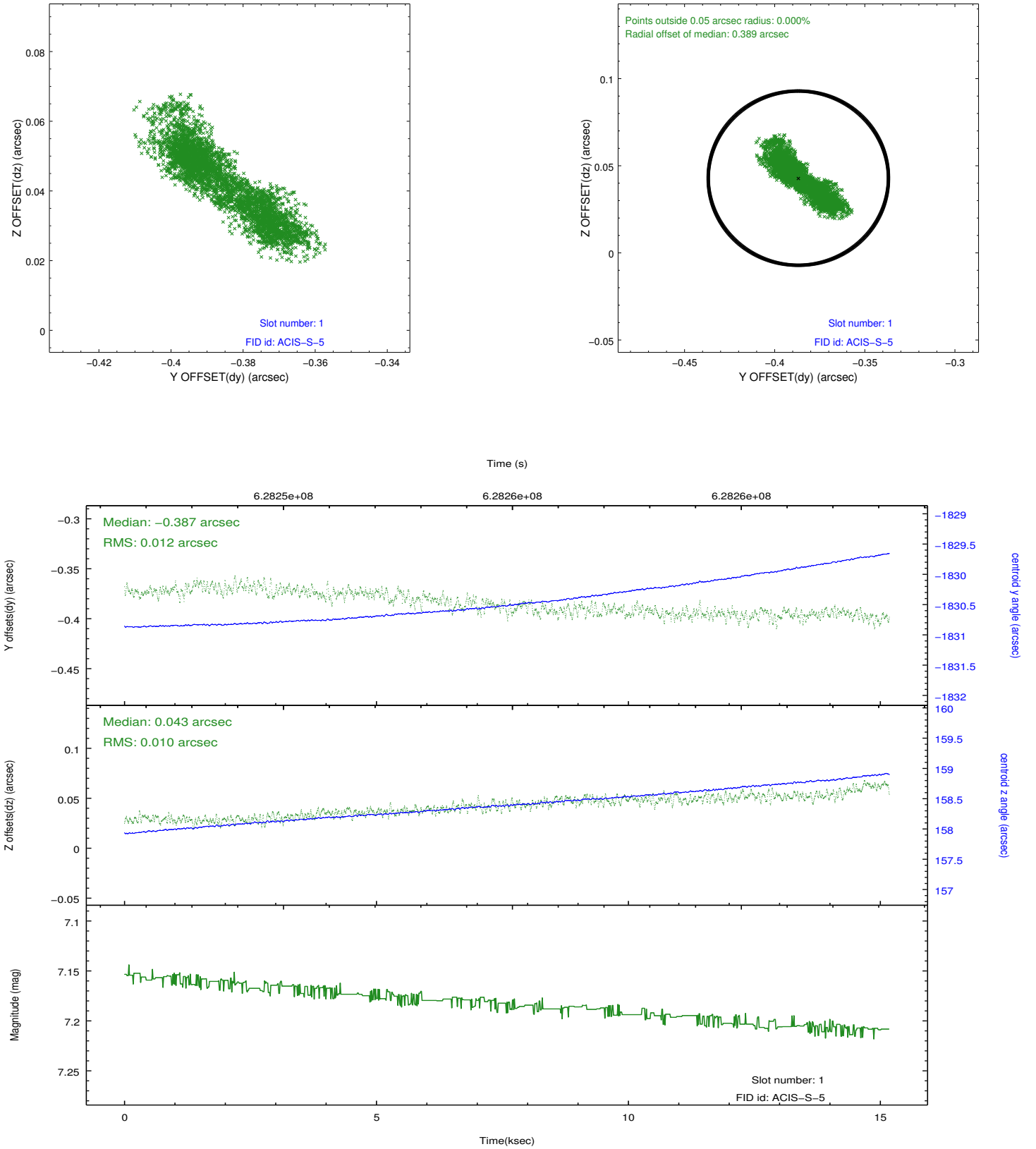


## 2.5 FID Slots

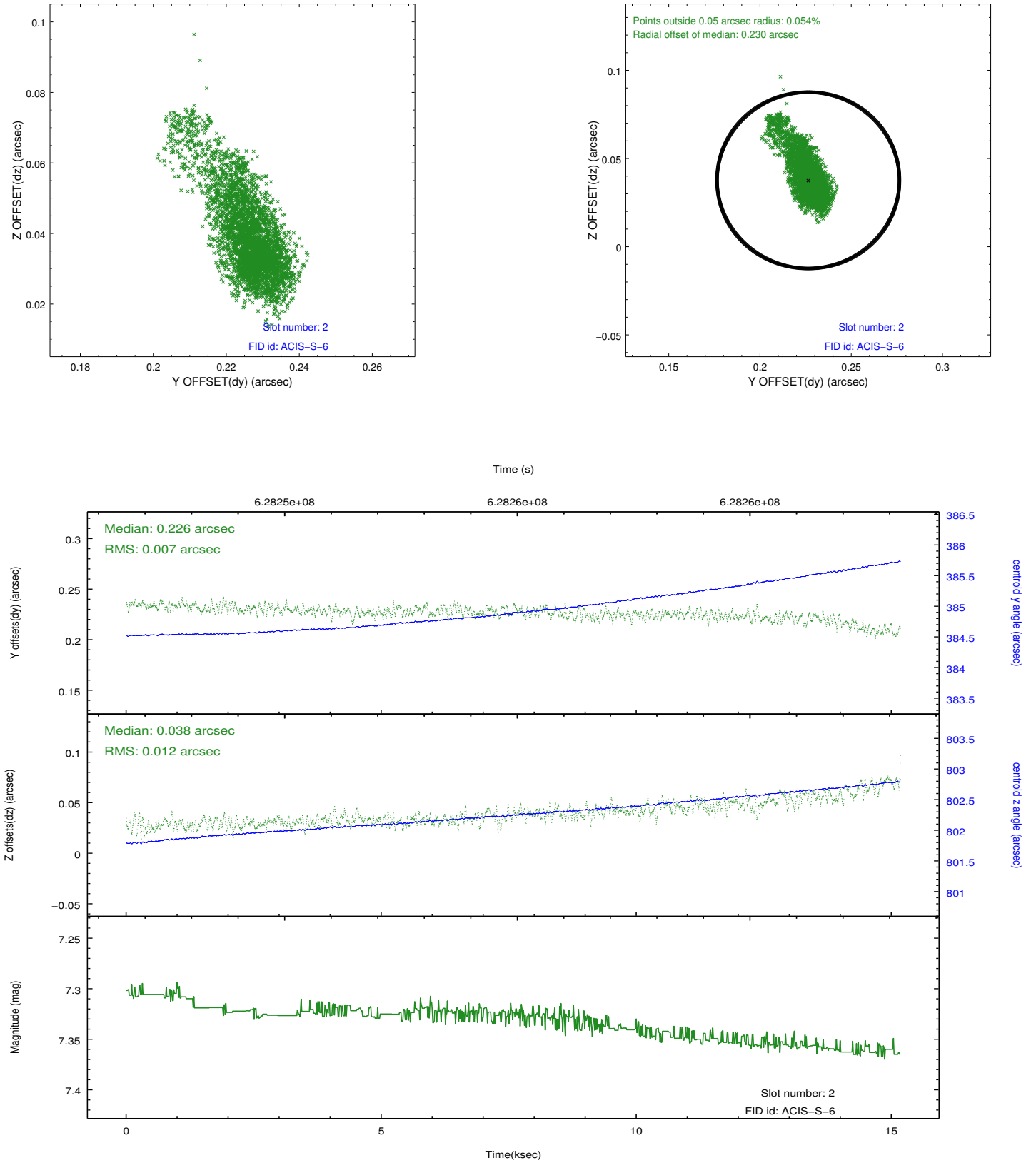
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2017.11.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.088800599694

### A.2 Comments