

# V&V Reference Report

## L2 ASCDS Version : 10.3

Observation 16162 - L2 Version 1  
Chandra X-Ray Center

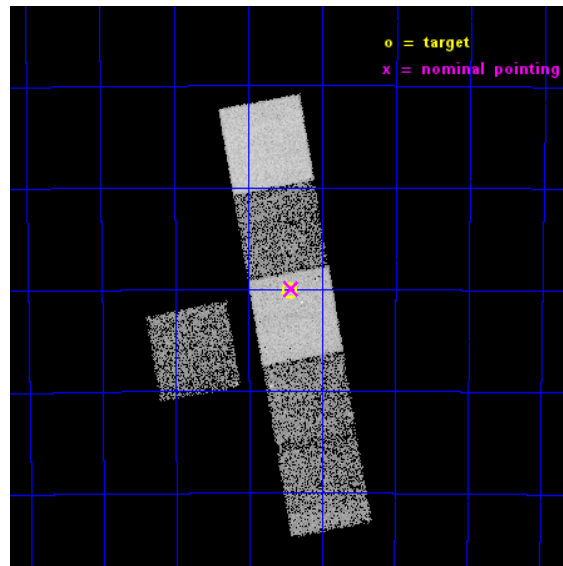
L2 Processing Date : Nov 6 2014

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# 1 Front

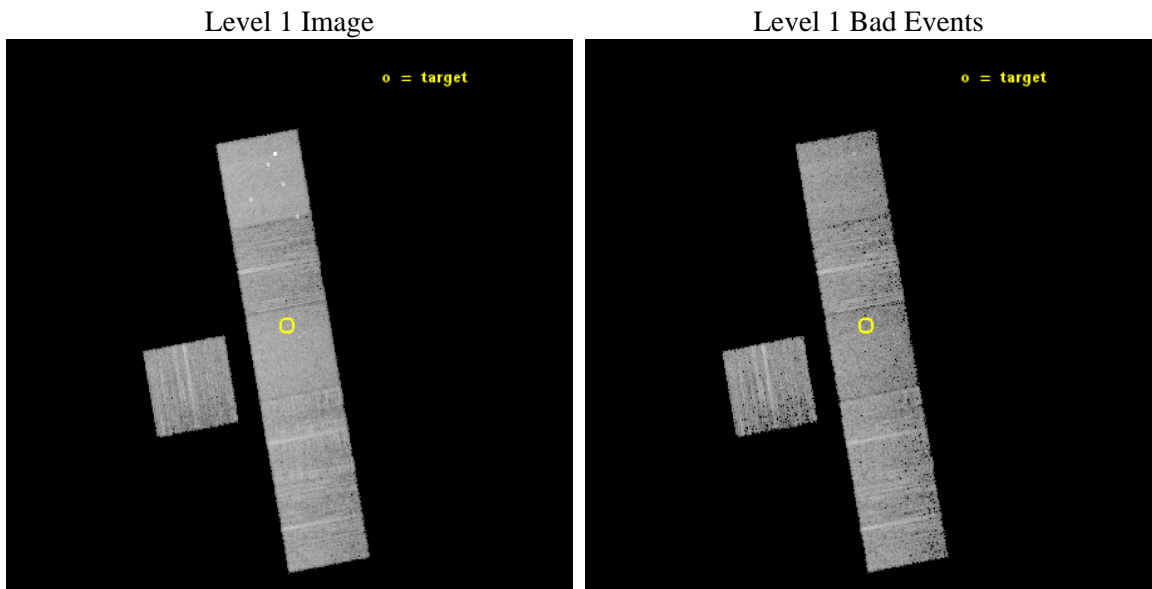
seq_num	901102	Sequence number
obs_id	16162	Observation id
title	The demographics of dark gamma-ray burst hosts	Proposal title
observer	Dr Andrew Levan	Principal investigator
object	GRB141031A	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	128.608625	Observer's specified target RA [deg]
dec_targ	-59.168278	Observer's specified target Dec [deg]
ra_nom	128.60426707435	Nominal RA [deg]
dec_nom	-59.16606926663	Nominal Dec [deg]
roll_nom	79.706029884073	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10316.799961627	Sum of GTIs [s]
livetime	10186.162428481	Livetime [s]
ontime3	10316.799961627	Sum of GTIs [s]
ontime5	10316.799961627	Sum of GTIs [s]
ontime6	10316.799961627	Sum of GTIs [s]
ontime7	10316.799961627	Sum of GTIs [s]
ontime8	10316.799961627	Sum of GTIs [s]
ontime9	10316.799961627	Sum of GTIs [s]
l2events	86136	Number of level 2 events



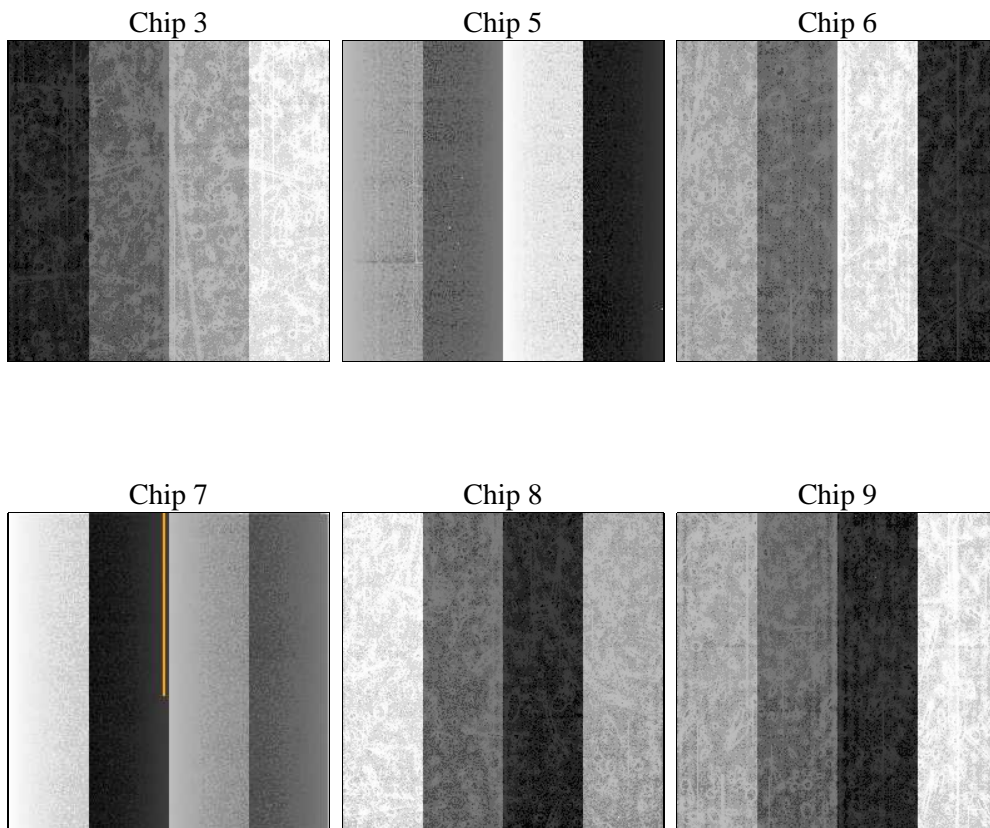
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10354.567000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10316.799961627	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime3	10316.799961627	Sum of GTIs [s]
date	2014-11-07T02:32:01	Date and time of file creation	ontime5	10316.799961627	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	10316.799961627	Sum of GTIs [s]
			ontime7	10316.799961627	Sum of GTIs [s]
			ontime8	10316.799961627	Sum of GTIs [s]
			ontime9	10316.799961627	Sum of GTIs [s]
			l1events	368853	Number of level 1 events

### 2.1.4 Events

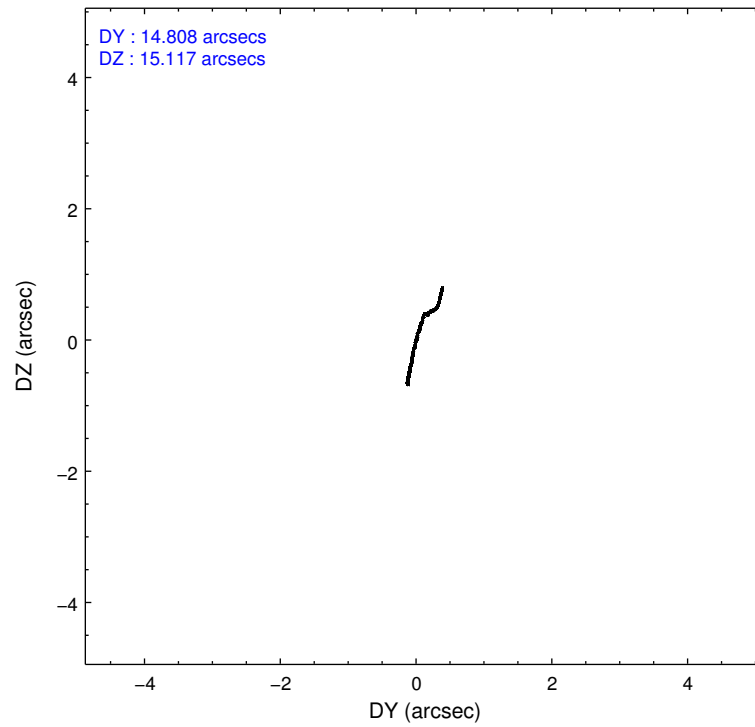
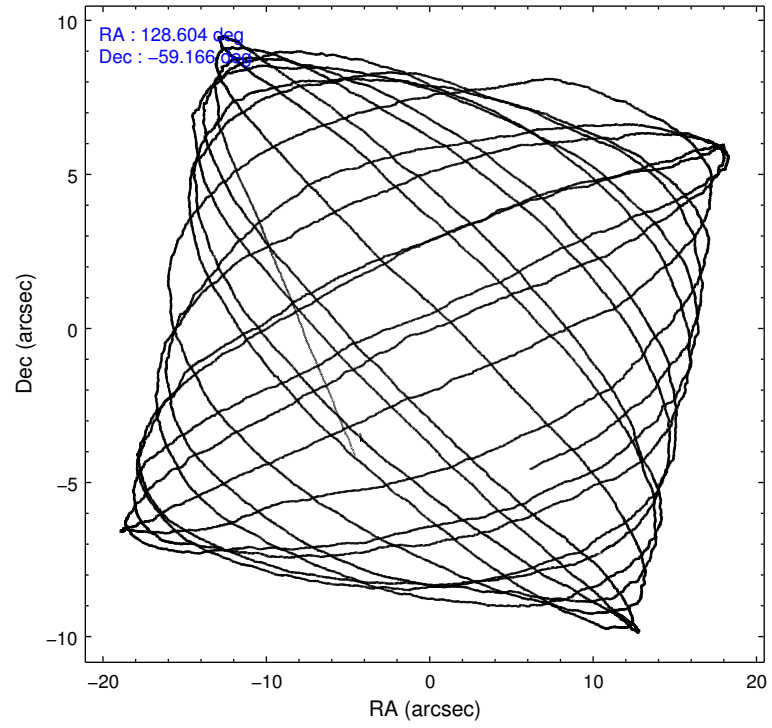
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 3	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	48156	85182	51159	66868	65731	51757	grade 0 events	1774	4556	1954	2413	5192	2316
rejected events	42914	42989	45204	38416	48269	45229		3%	5%	3%	3%	7%	4%
rejected %	89%	50%	88%	57%	73%	87%	grade 1 events	22	298	18	78	49	37
								0%	0%	0%	0%	0%	0%
							grade 2 events	1115	13539	1423	5977	3861	1552
								2%	15%	2%	8%	5%	2%
							grade 3 events	565	1241	540	2257	2057	624
								1%	1%	1%	3%	3%	1%
							grade 4 events	588	1152	599	2182	1867	605
								1%	1%	1%	3%	2%	1%
							grade 5 events	2424	5468	2456	6392	3601	2846
								5%	6%	4%	9%	5%	5%
							grade 6 events	1206	21739	1443	15644	4492	1436
								2%	25%	2%	23%	6%	2%
							grade 7 events	40462	37189	42726	31925	44612	42341
								84%	43%	83%	47%	67%	81%

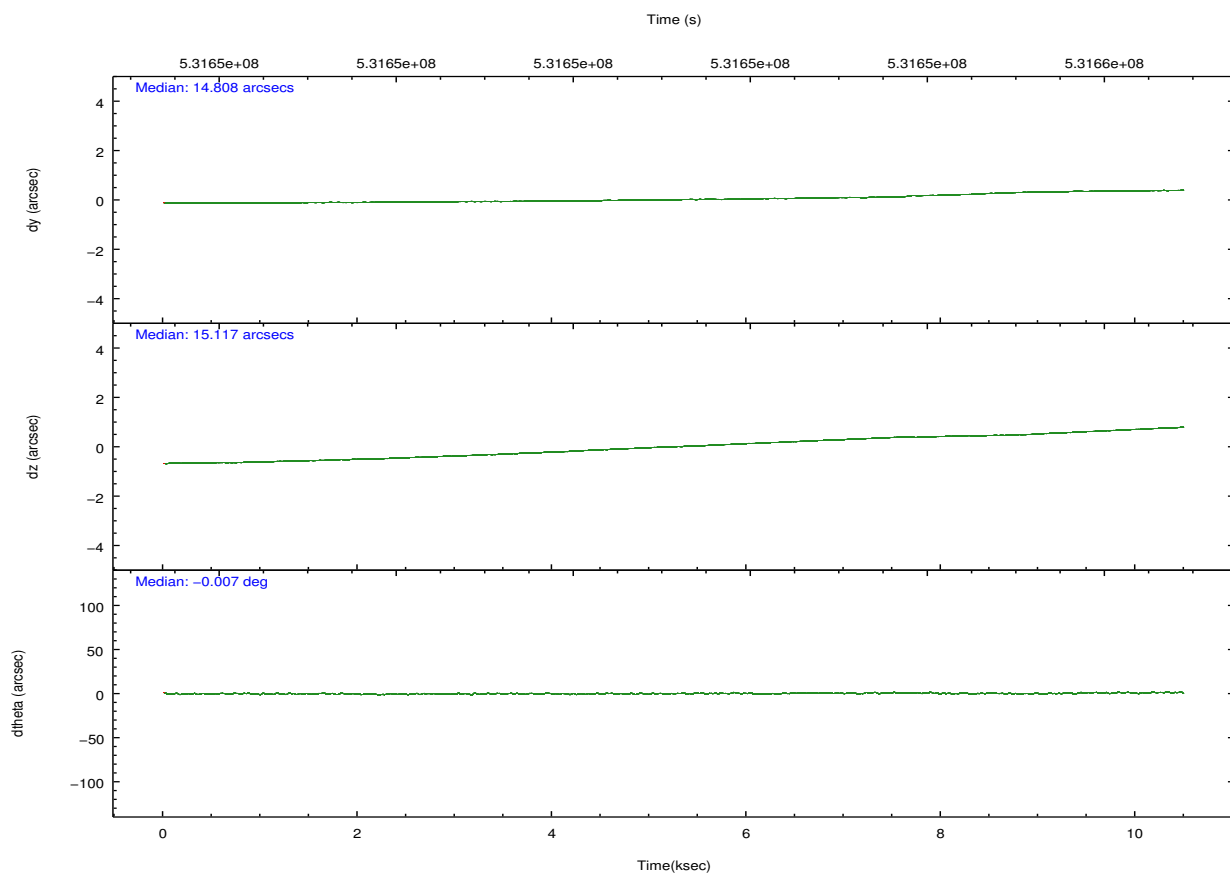
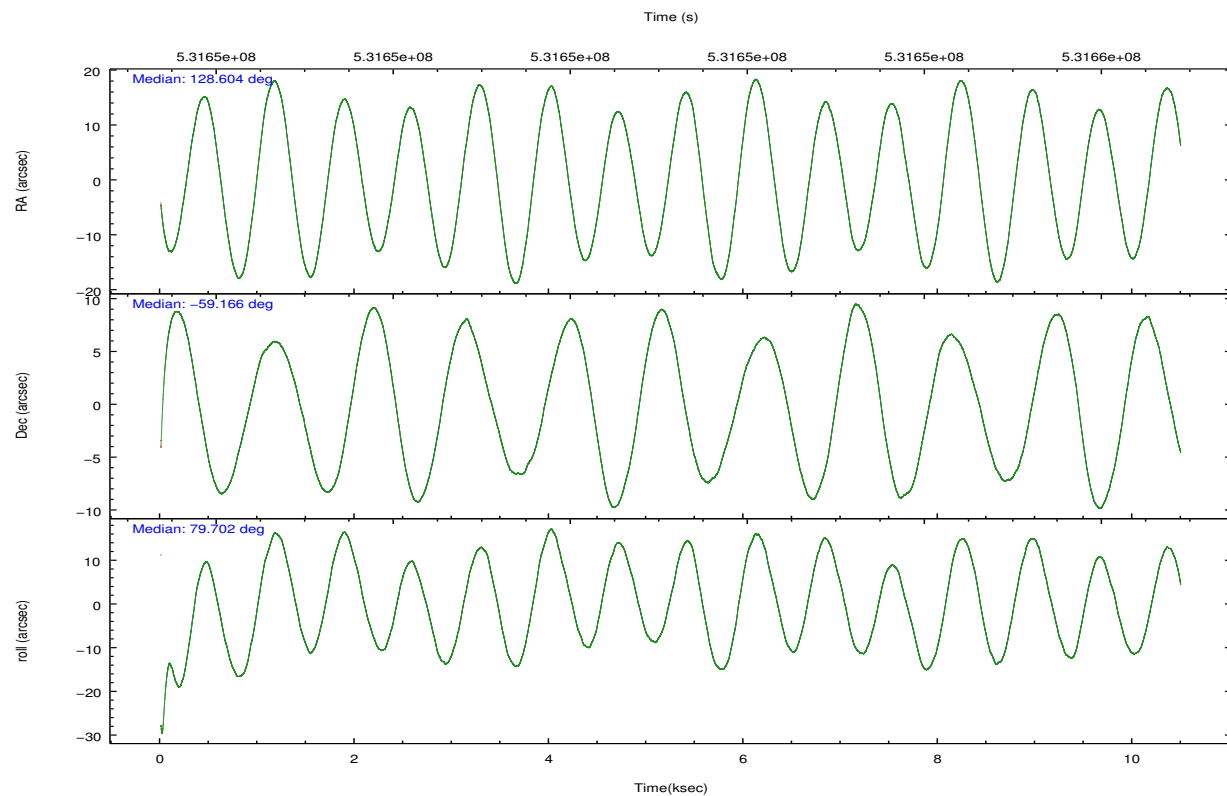


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-356789	ACIS-356789	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	128.622973	128.6042670743472	CCD I2 on	N	N
[deg] Pointing Dec	-59.191832	-59.16606926662958	CCD I3 on	O2	Y
[deg] Pointing Roll	79.565500	79.7060298840732	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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)	531646037.184000	531644828.38386	CCD S5 on	O1	Y
Observation start date	2014-11-06T07:26:10	2014-11-06T07:07:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	531656391.184000	531656617.42202	On-chip summing requested	N	N
Observation end date	2014-11-06T10:18:44	2014-11-06T10:23:37	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



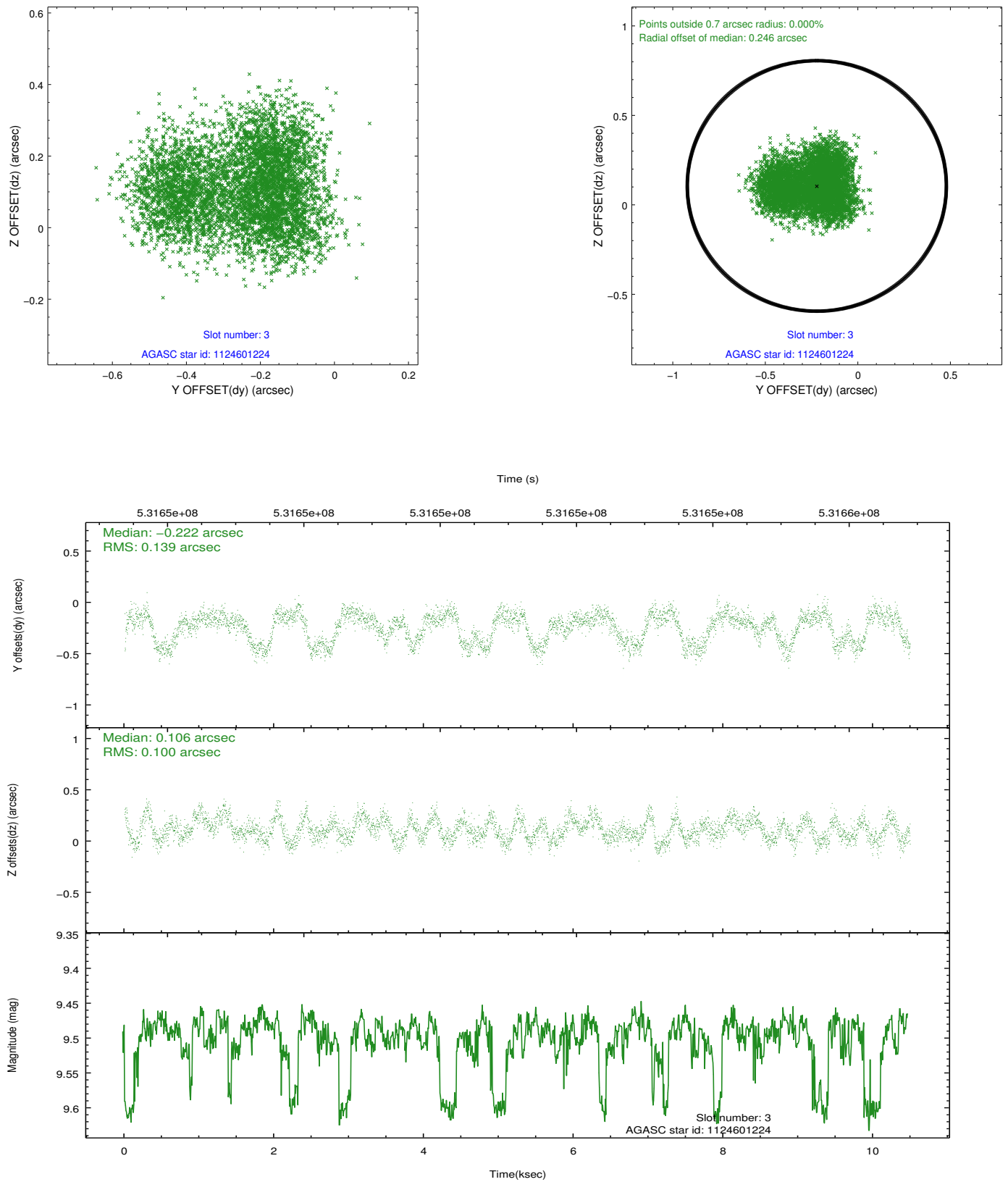


### Slot Statistics

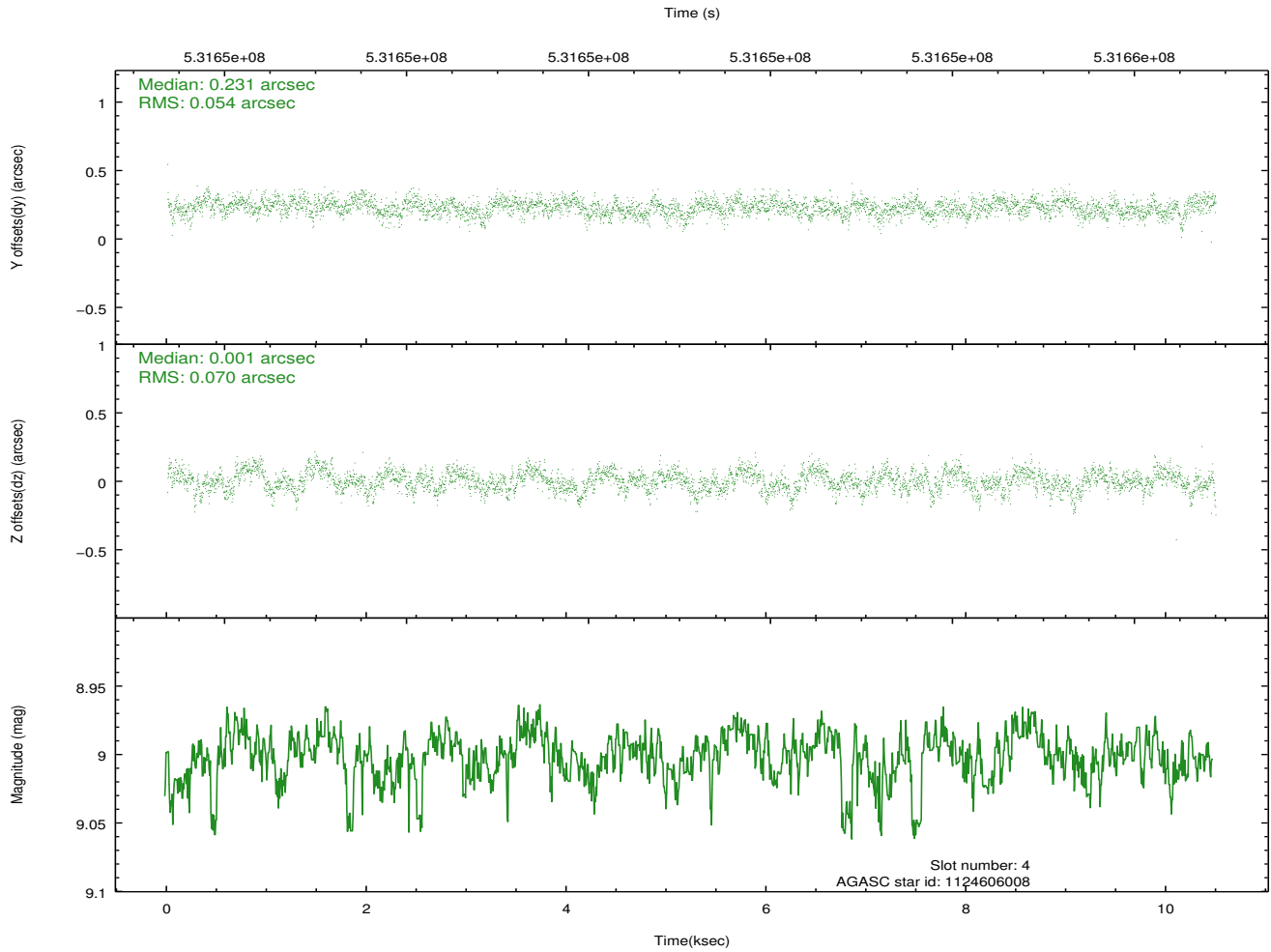
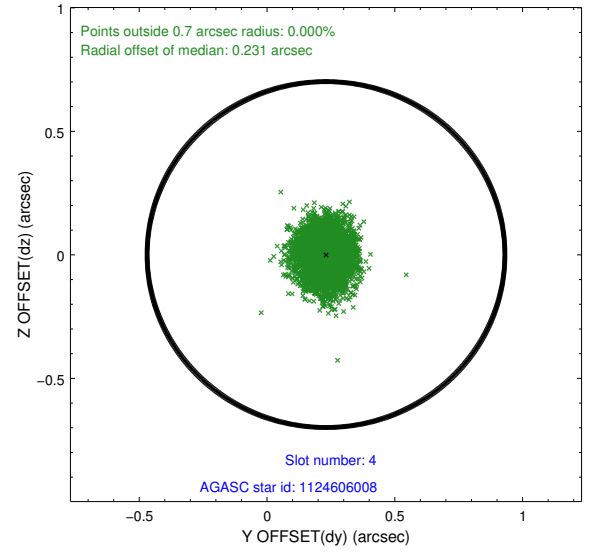
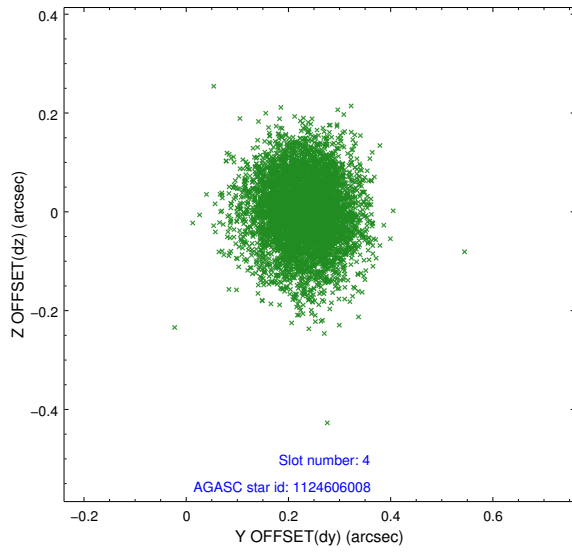
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.21	2559	0.081	-0.060	0.022	0.031	0.000000	0.000000	928.32	-1732.12
1	FID		ACIS-S-5	7.24	2559	-0.167	0.043	0.008	0.015	0.000000	0.000000	-1820.68	164.98
2	FID		ACIS-S-6	7.35	2558	0.064	0.030	0.027	0.036	0.000000	0.000000	393.27	809.53
3	GUIDE	used	1124601224	9.50	5108	-0.222	0.106	0.190	0.284	129.705939	-58.867480	1497.43	-1773.29
4	GUIDE	used	1124606008	9.00	5115	0.231	0.001	0.094	0.153	128.911278	-59.578840	-1275.36	-769.56
5	GUIDE	used	1124607592	9.77	5107	0.023	-0.343	0.172	0.270	127.593514	-59.511287	-1485.83	1638.38
6	GUIDE	used	1124598224	9.43	5118	0.067	0.191	0.117	0.187	129.475233	-59.935141	-2362.68	-1997.34
7	GUIDE	used	1124600960	9.46	5113	-0.069	0.042	0.164	0.260	129.856072	-58.648059	2322.42	-1920.67

## 2.4 Star Slots

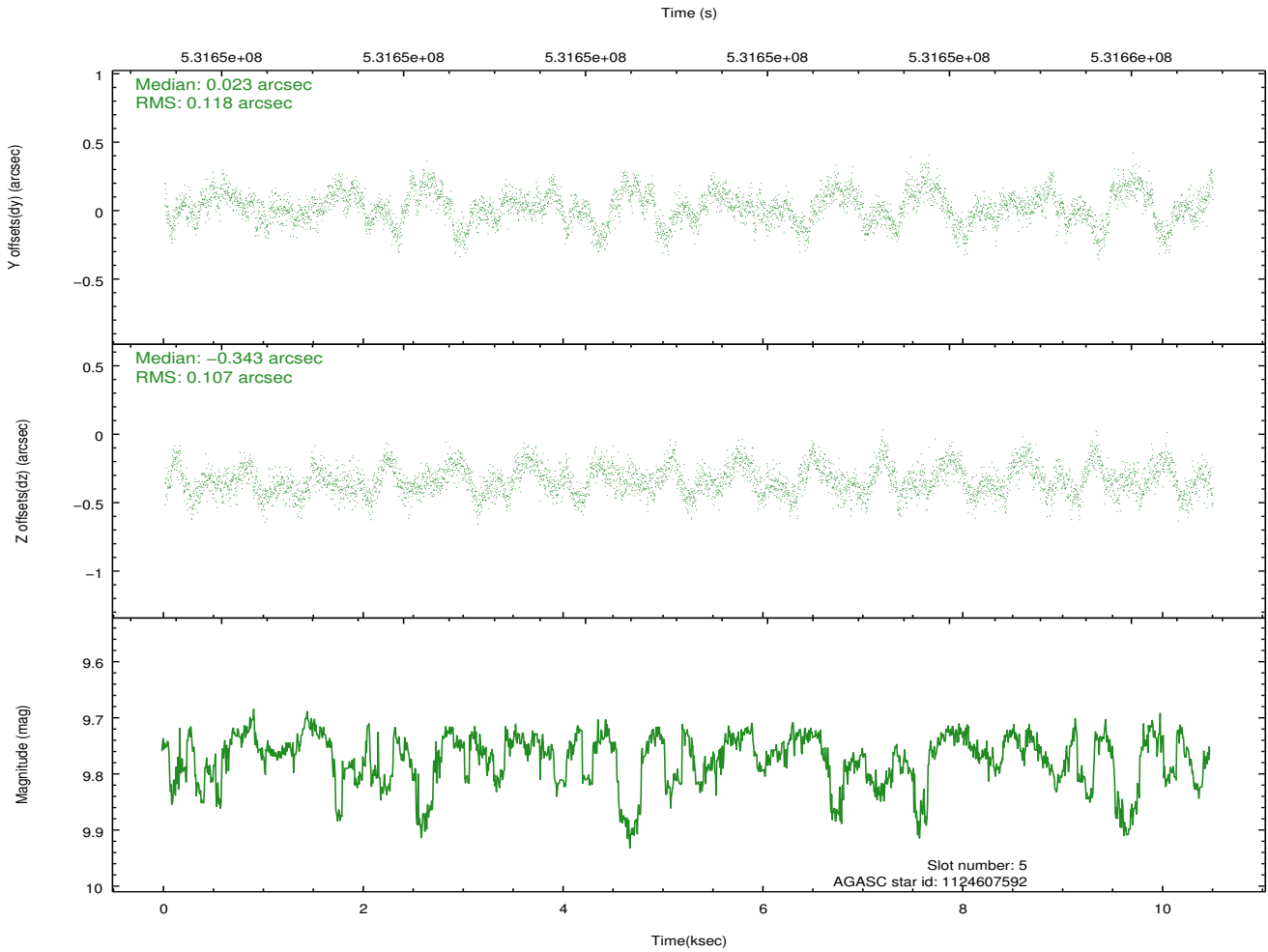
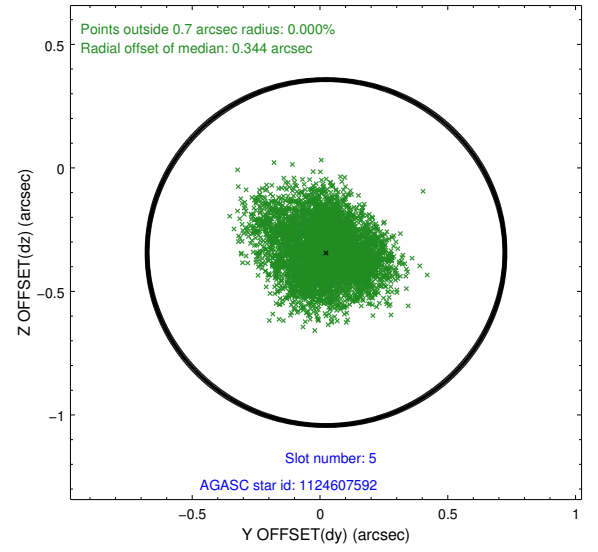
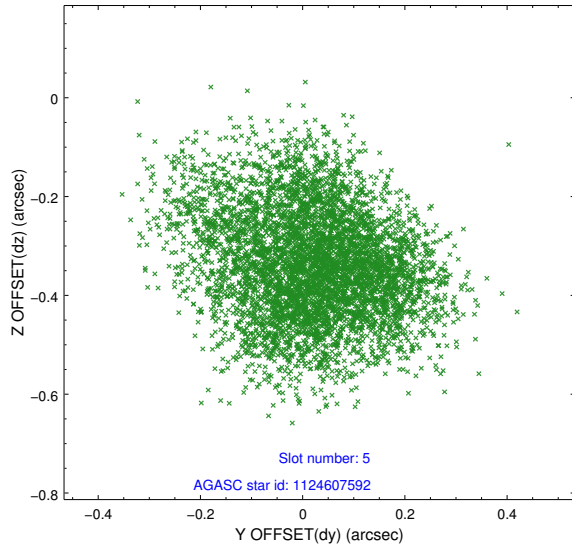
### 2.4.1 Slot 3



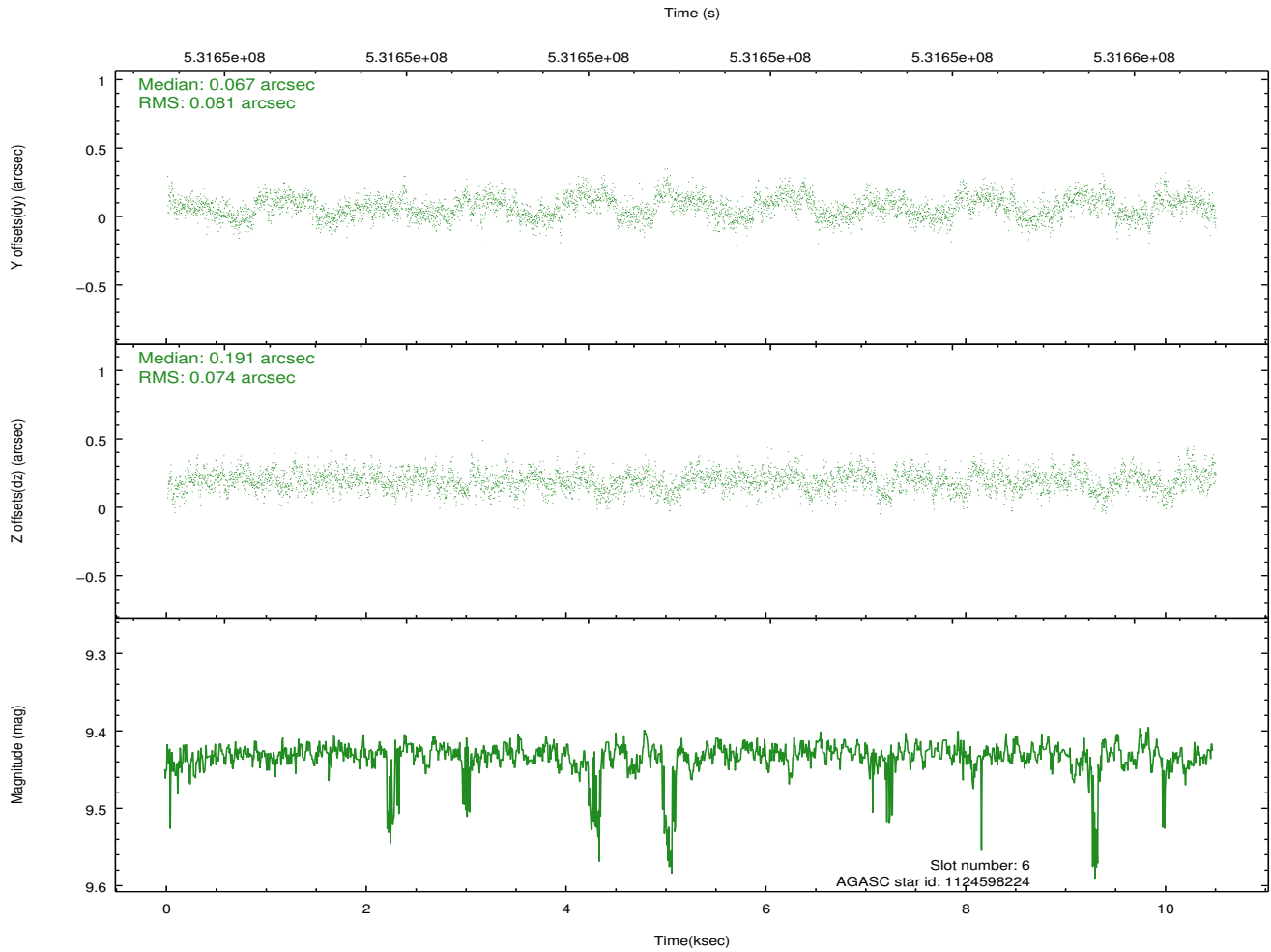
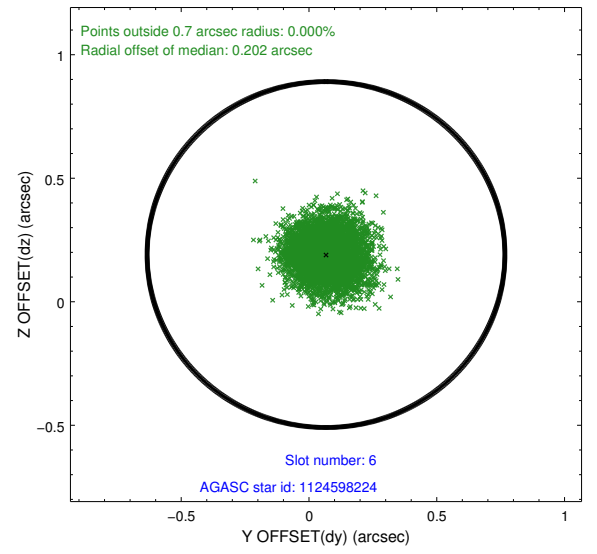
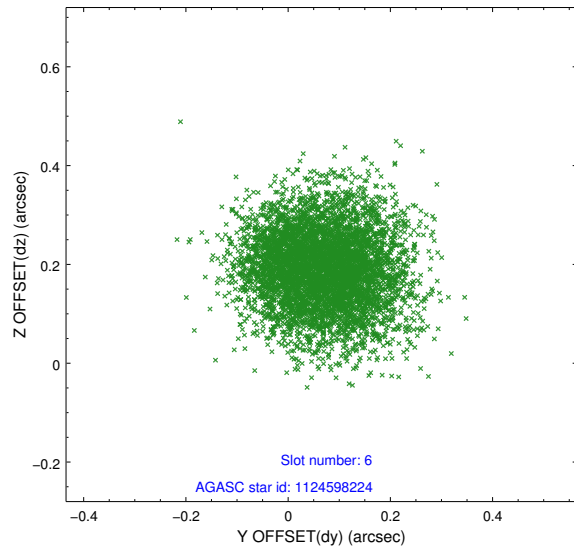
## 2.4.2 Slot 4



### 2.4.3 Slot 5

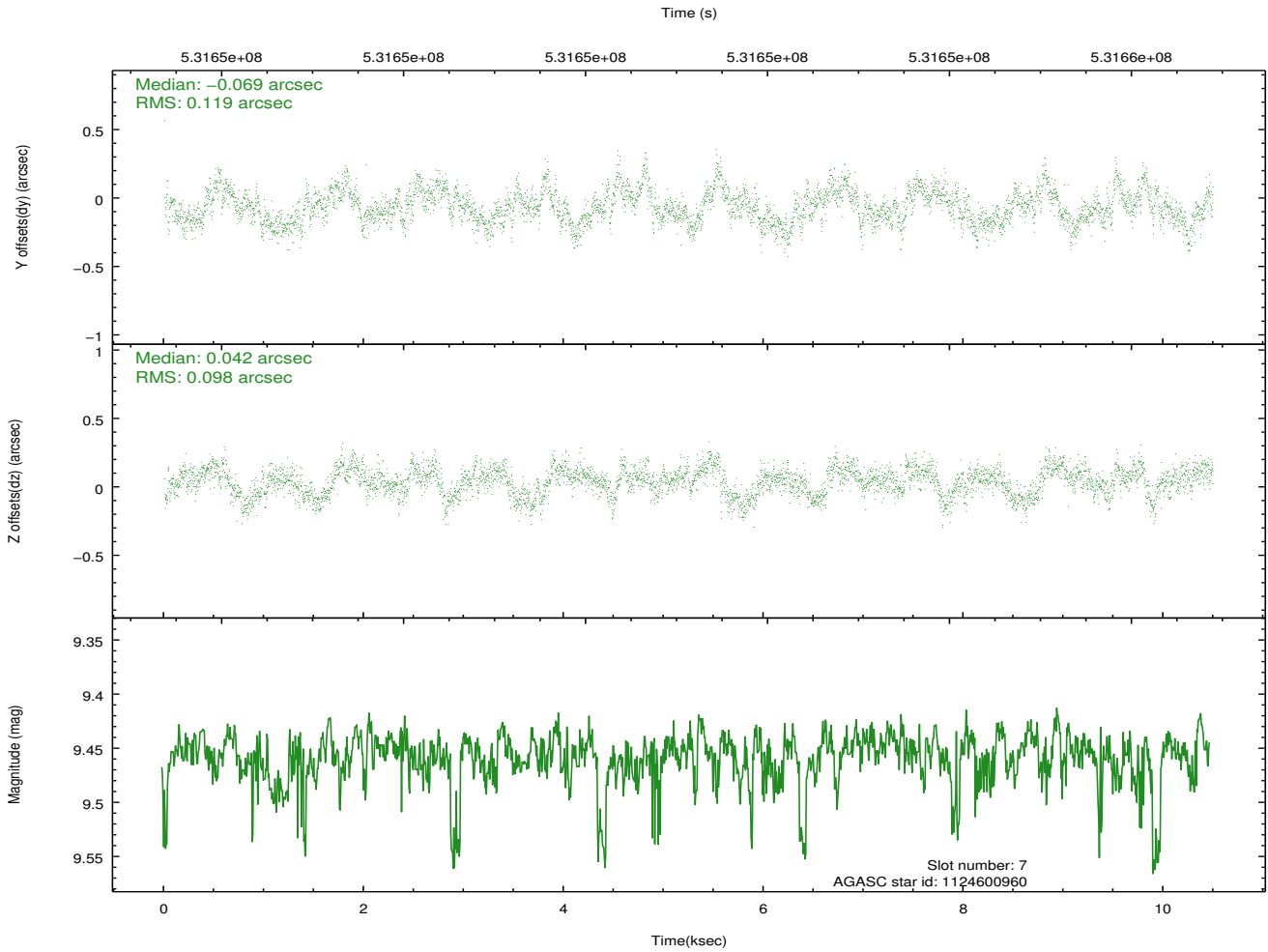
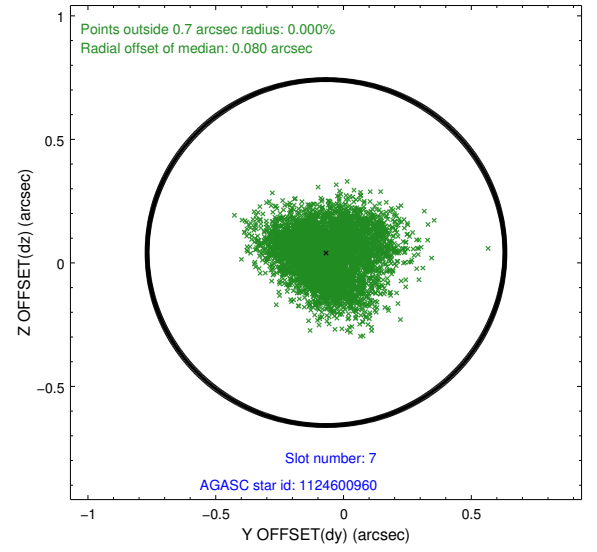
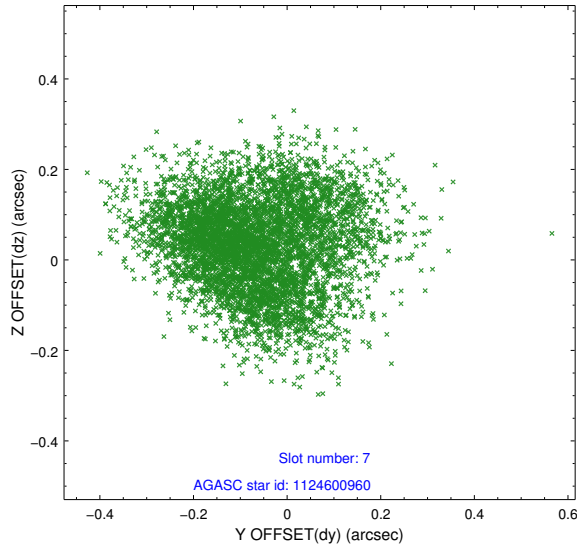


## 2.4.4 Slot 6



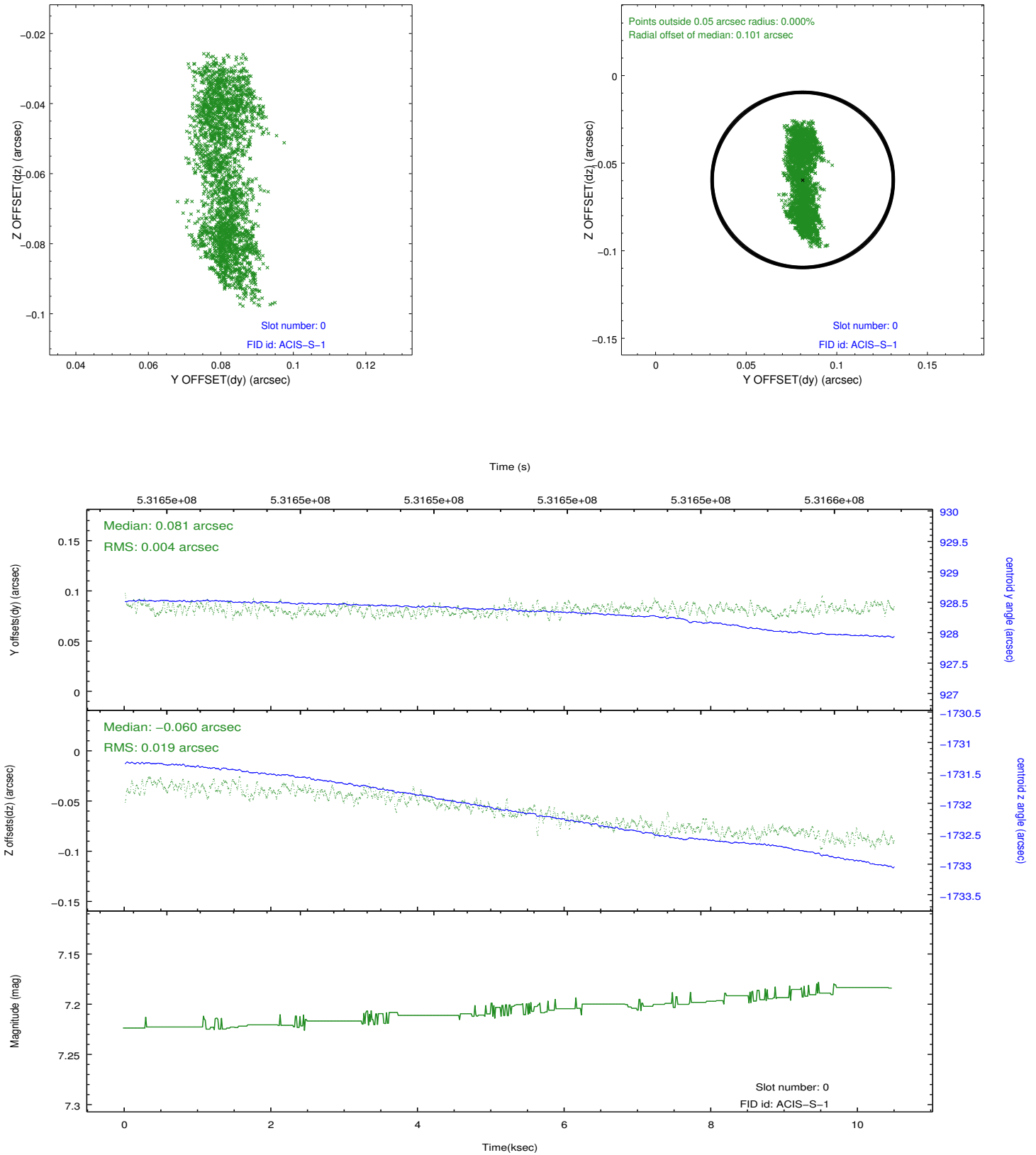


## 2.4.5 Slot 7

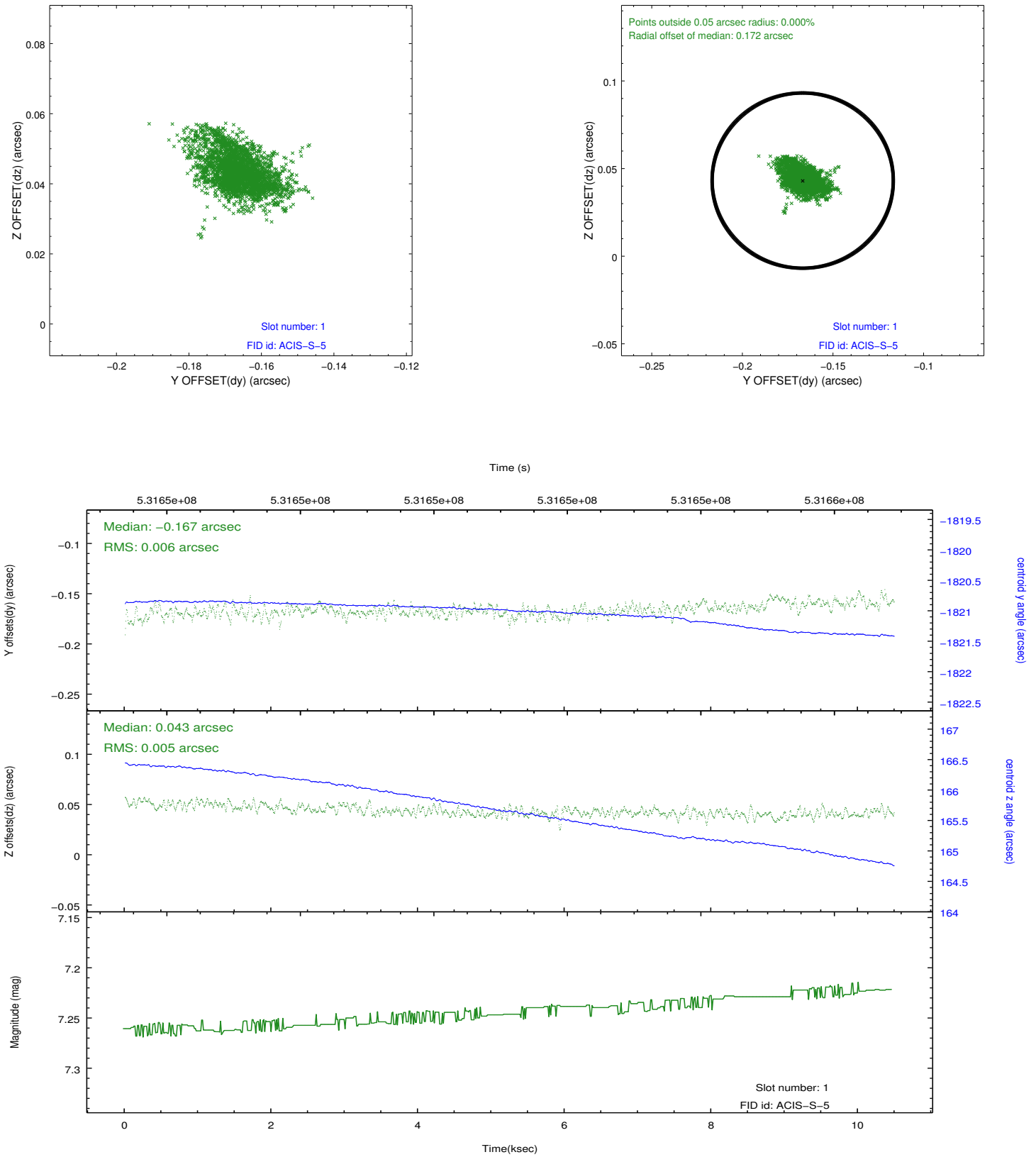


## 2.5 FID Slots

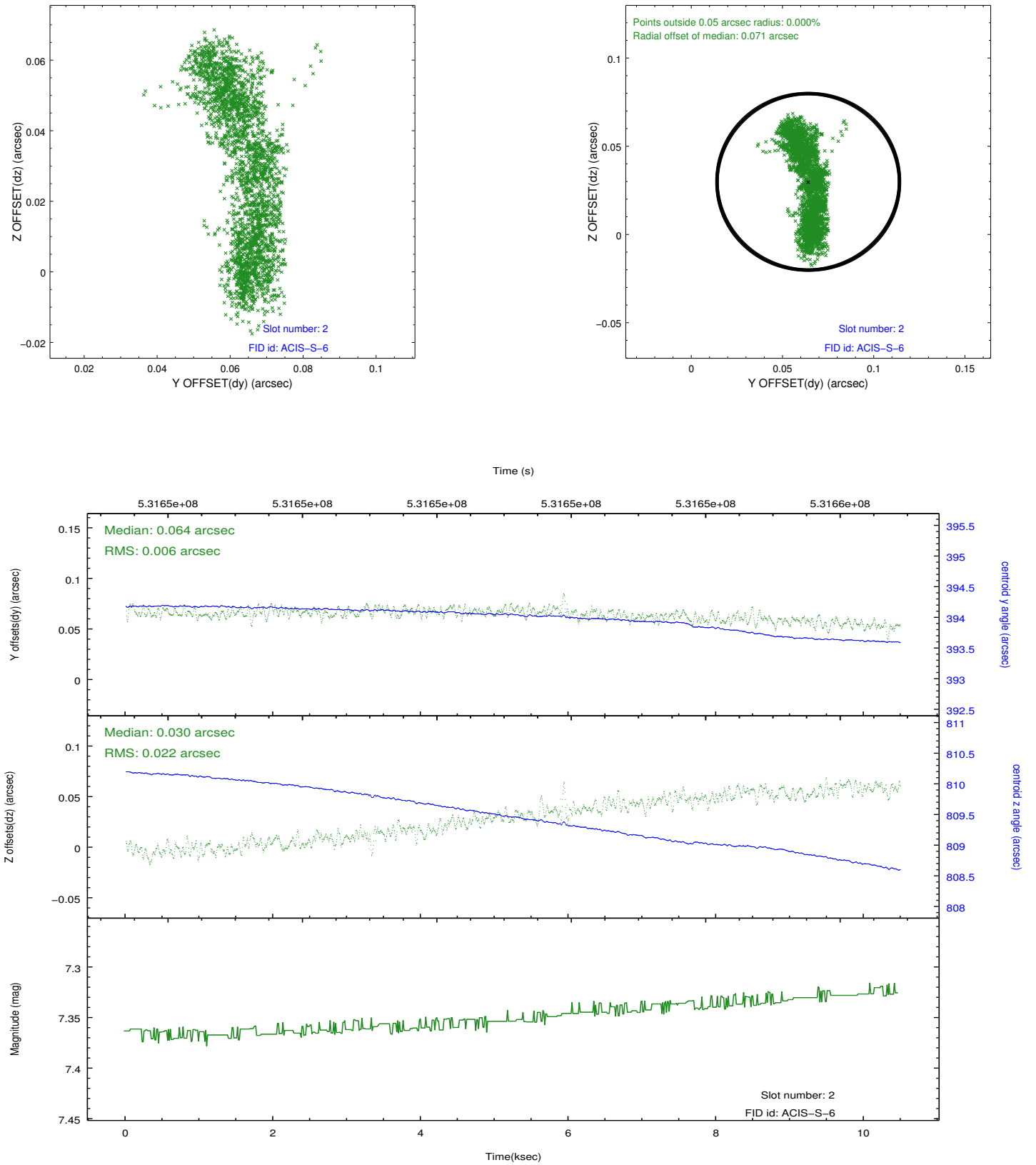
### 2.5.1 Slot 0



## 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)	2014.11.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.316799961627

### A.2 Comments