

# V&V Reference Report

## L2 ASCDS Version : 10.6

Observation 18920 - L2 Version 1  
Chandra X-Ray Center

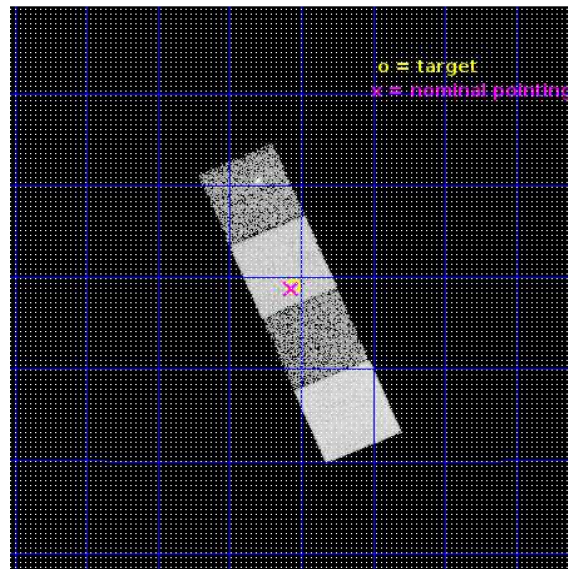
L2 Processing Date : Jul 4 2017

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# 1 Front

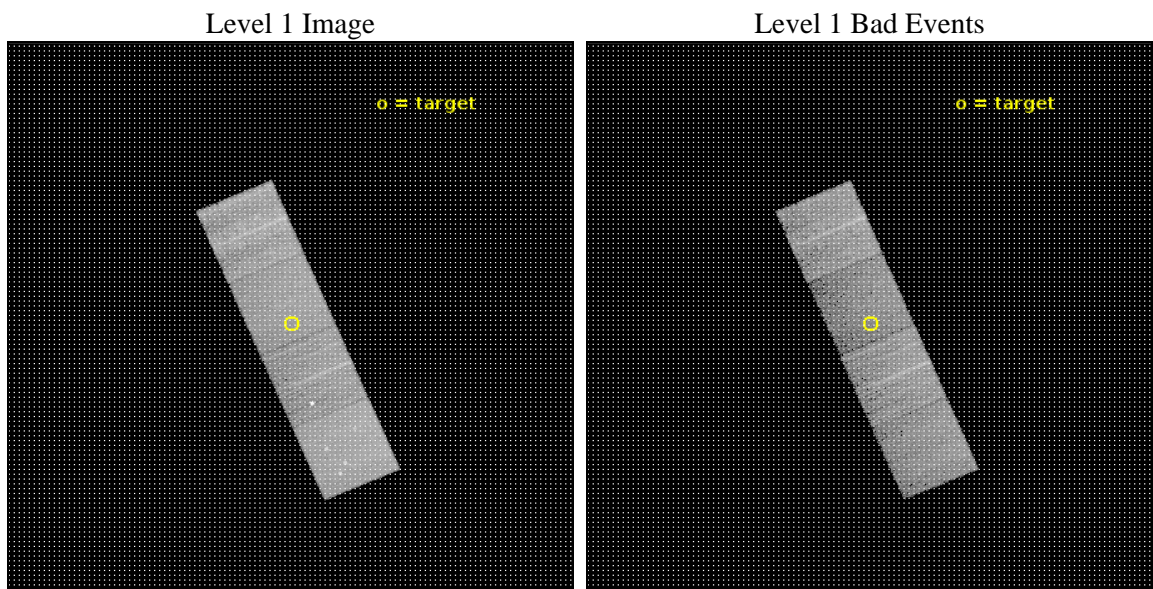
seq_num	201113	Sequence number
obs_id	18920	Observation id
title	Direct Detection of Accreting White Dwarf Pollutants	Proposal titl
observer	Saul Rappaport	Principal investigator
object	WD 1145+017	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.14	Observer's specified target RA [deg]
dec_targ	1.483139	Observer's specified target Dec [deg]
ra_nom	177.14239440022	Nominal RA [deg]
dec_nom	1.4793767171282	Nominal Dec [deg]
roll_nom	246.83817541655	Nominal Roll [deg]
revision	1	Processing version of data
ontime	10062.60007751	Sum of GTIs [s]
livetime	9931.1247995188	Livetime [s]
ontime5	10062.60007751	Sum of GTIs [s]
ontime6	10062.60007751	Sum of GTIs [s]
ontime7	10062.60007751	Sum of GTIs [s]
ontime8	10062.60007751	Sum of GTIs [s]
l2events	94205	Number of level 2 events



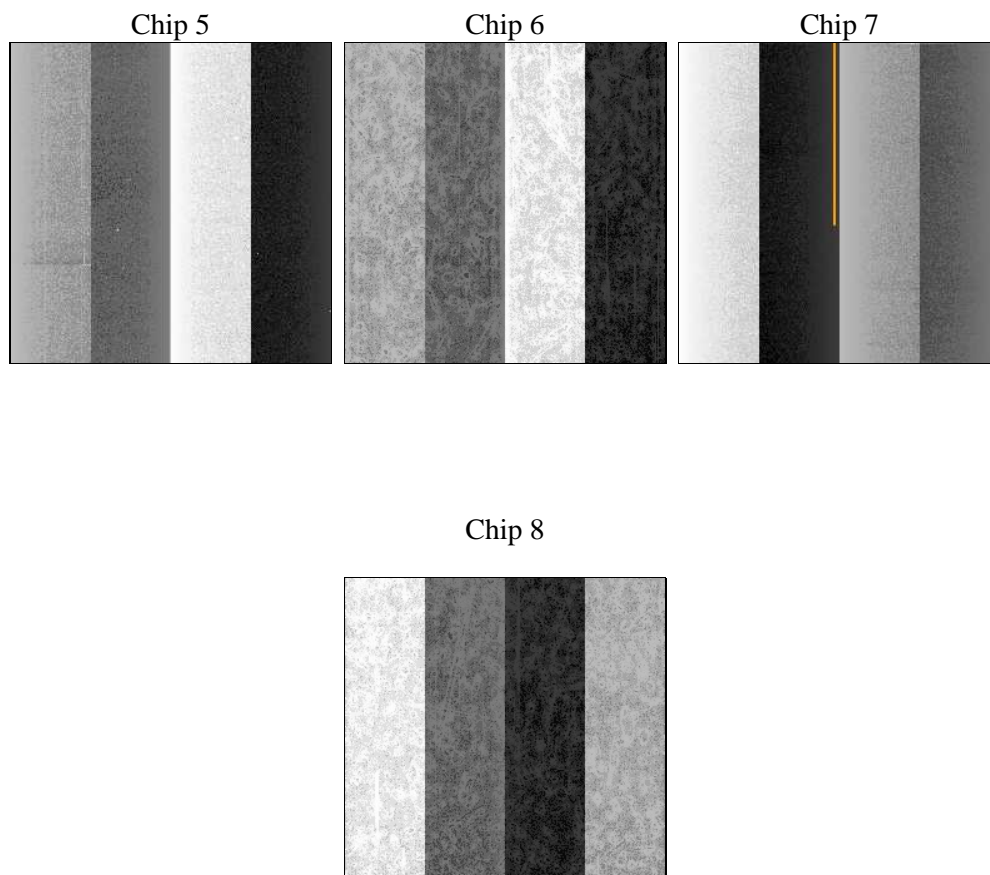
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.6	Processing system revision	ontime	10062.60007751	Sum of GTIs [s]
caldsver	4.7.5	&#160	ontime5	10062.60007751	Sum of GTIs [s]
date	2017-07-05T00:32:39	Date and time of file creation	ontime6	10062.60007751	Sum of GTIs [s]
revision	1	Processing version of data	ontime7	10062.60007751	Sum of GTIs [s]
			ontime8	10062.60007751	Sum of GTIs [s]
			l1events	327045	Number of level 1 events

### 2.1.4 Events

	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	96669	69694	72521	88161
rejected events	46435	59133	38188	63279
rejected %	48%	84%	52%	71%

	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	5306	5712	3209	7024
	5%	8%	4%	7%
grade 1 events	313	55	118	78
	0%	0%	0%	0%
grade 2 events	15652	1709	7685	6081
	16%	2%	10%	6%
grade 3 events	1673	753	2858	2638
	1%	1%	3%	2%
grade 4 events	1656	724	2915	2562
	1%	1%	4%	2%
grade 5 events	6981	2647	7607	4183
	7%	3%	10%	4%
grade 6 events	25964	1666	17679	6582
	26%	2%	24%	7%
grade 7 events	39124	56428	30450	59013
	40%	80%	41%	66%

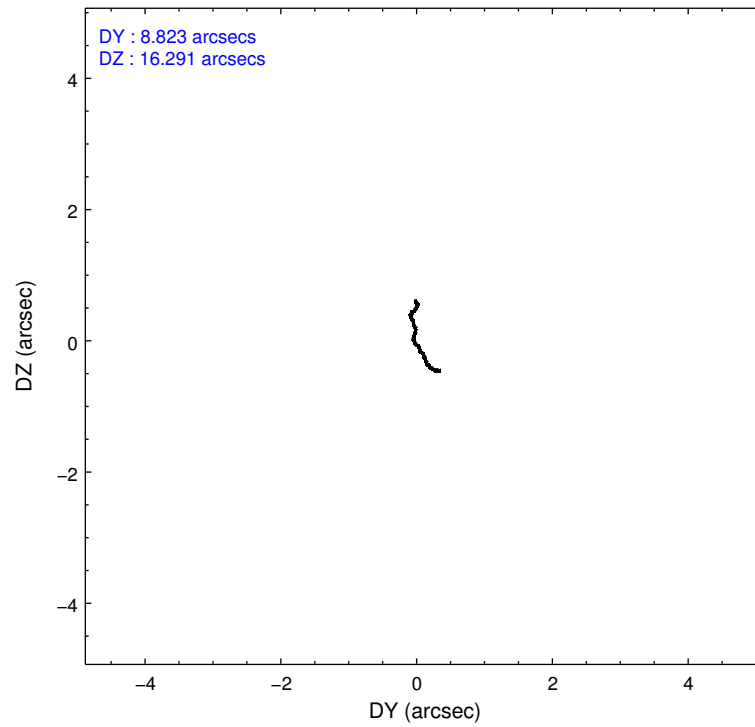
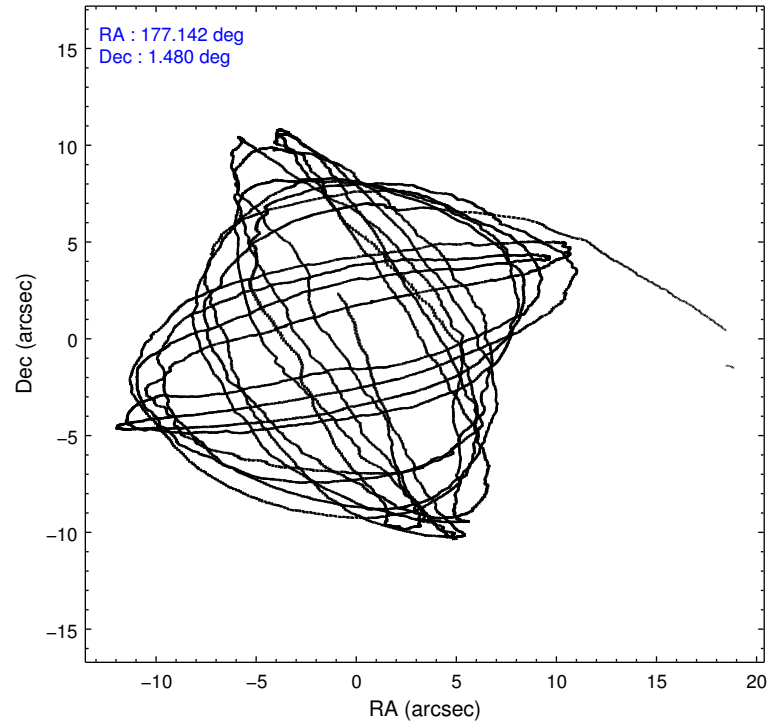


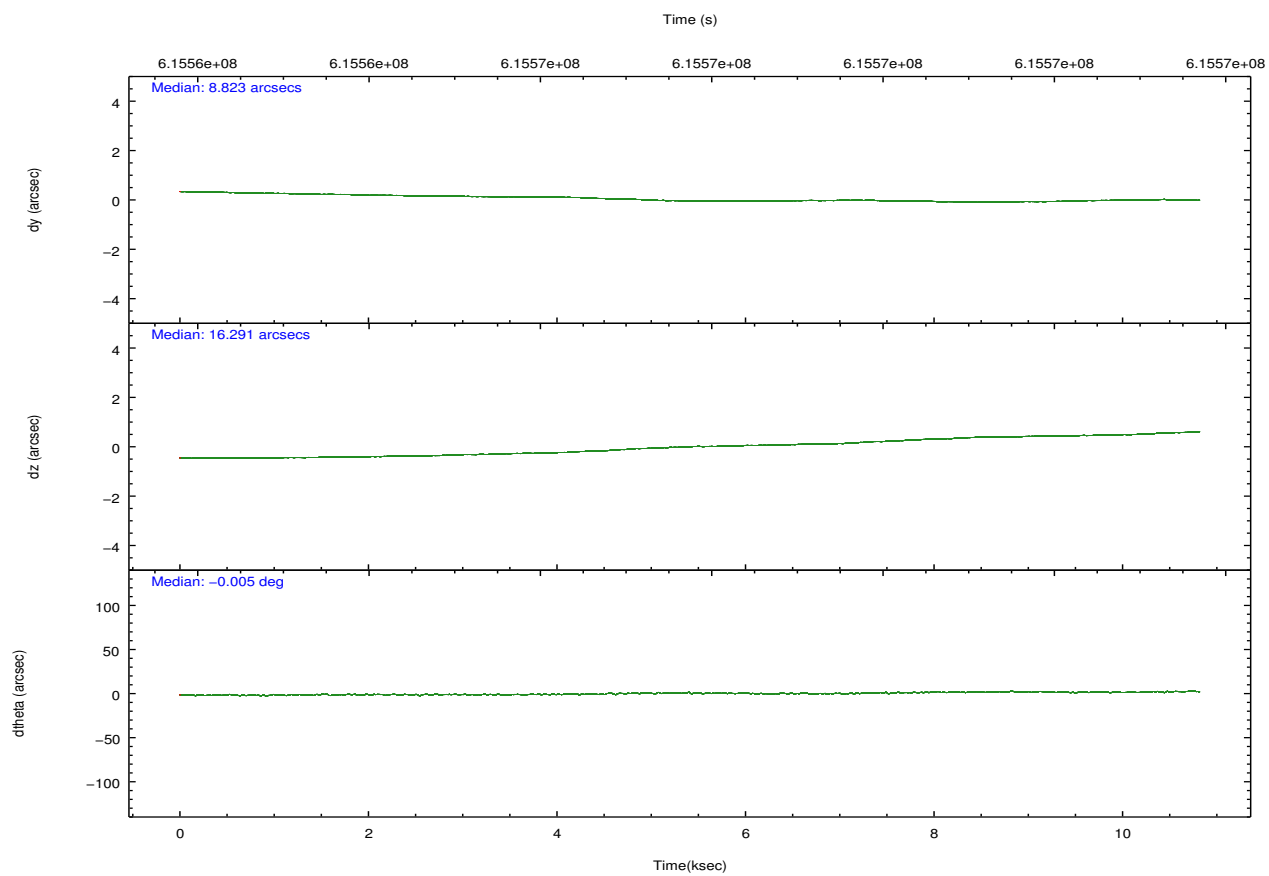
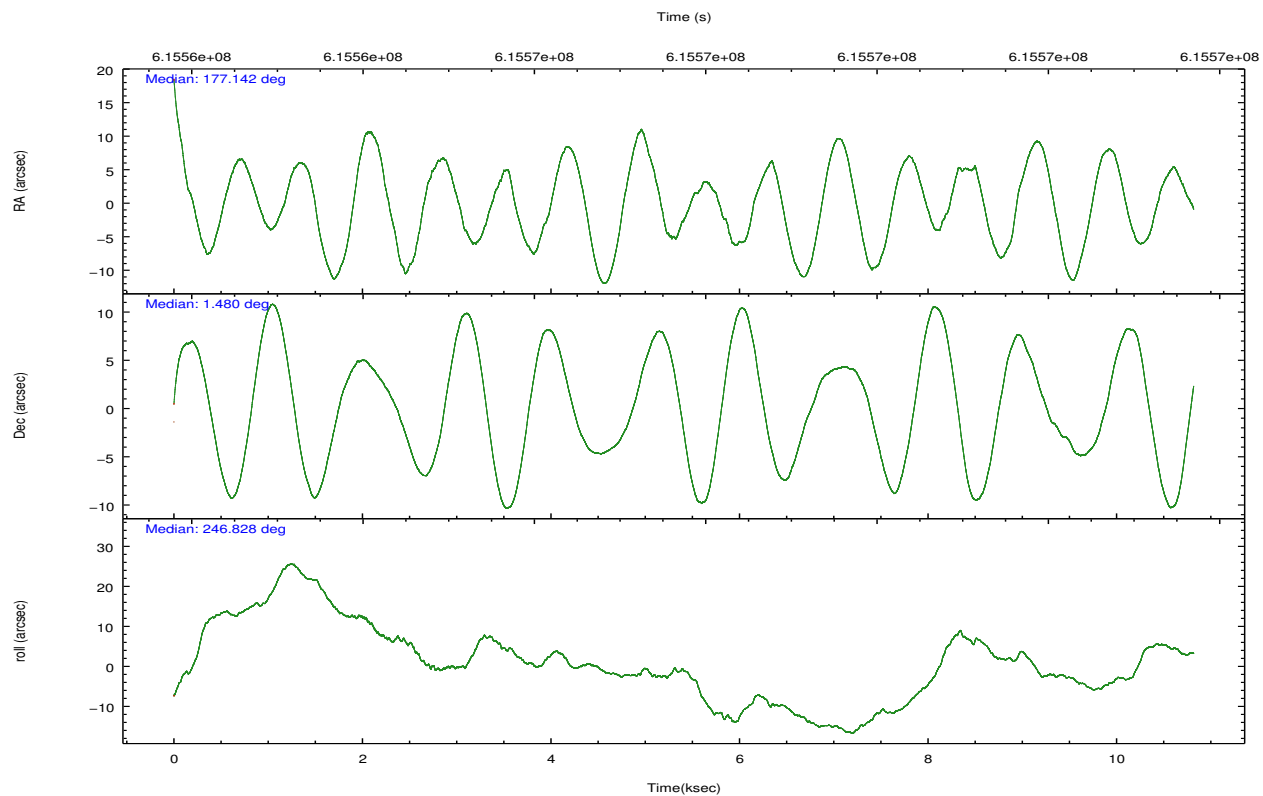
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-5678	ACIS-5678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	177.138759	177.1423944002235
[deg] Pointing Dec	1.506617	1.479376717128173
[deg] Pointing Roll	246.681665	246.8381754165472
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1400660498719
[mm] SIM translation stage offset	0	0.00754346686406393
[s] Observation start time (MET)	615563150.184000	615561323.5391901
Observation start date	2017-07-04T13:44:41	2017-07-04T13:15:23
[s] Observation end time (MET)	615573150.184000	615573656.33991
Observation end date	2017-07-04T16:31:21	2017-07-04T16:40:56
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
CCD I0 on	N	N
CCD I1 on	N	N
CCD I2 on	N	N
CCD I3 on	N	N
CCD S0 on	N	N
CCD S1 on	O1	Y
CCD S2 on	Y	Y
CCD S3 on	Y	Y
CCD S4 on	O2	Y
CCD S5 on	N	N
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



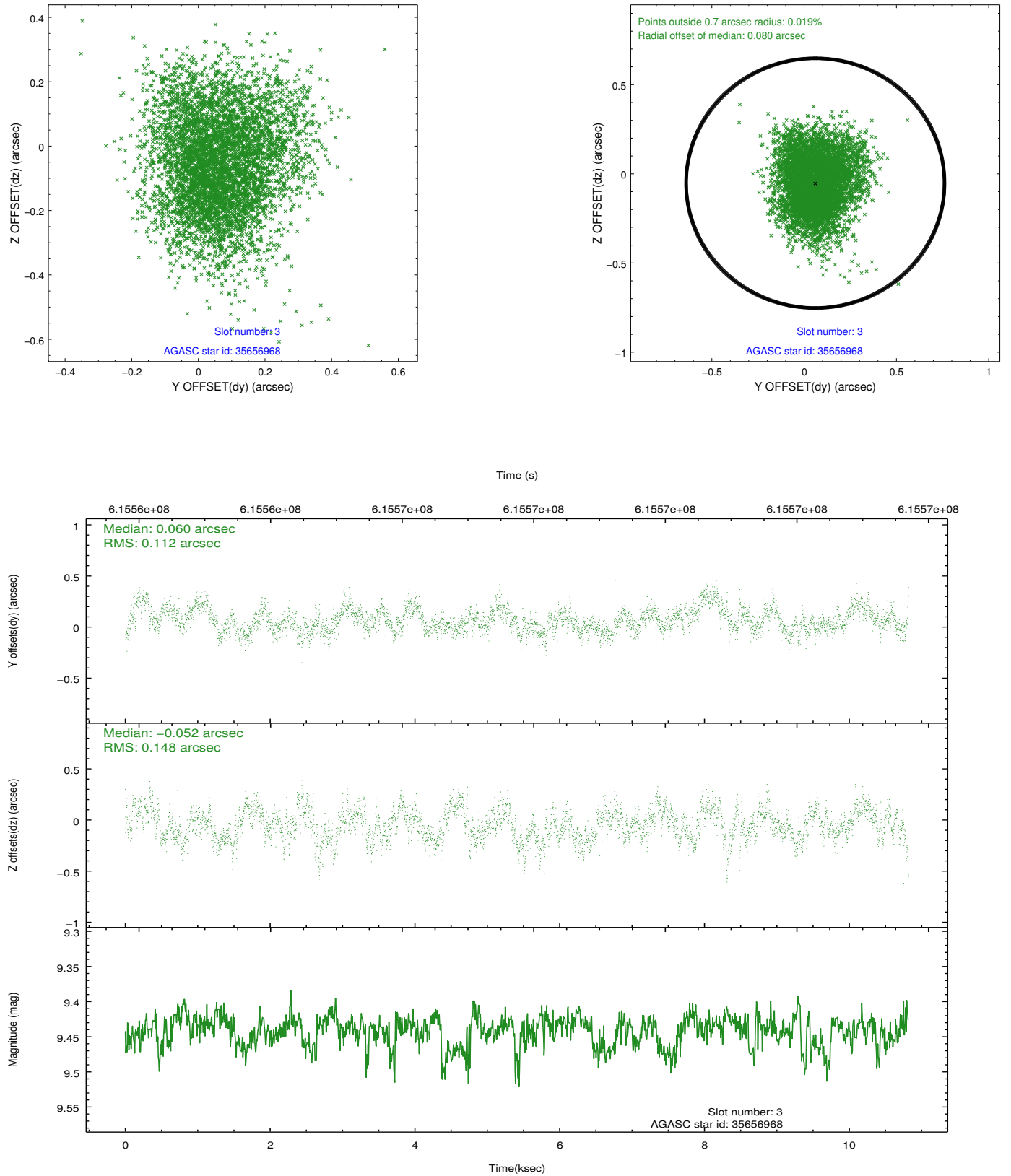


### Slot Statistics

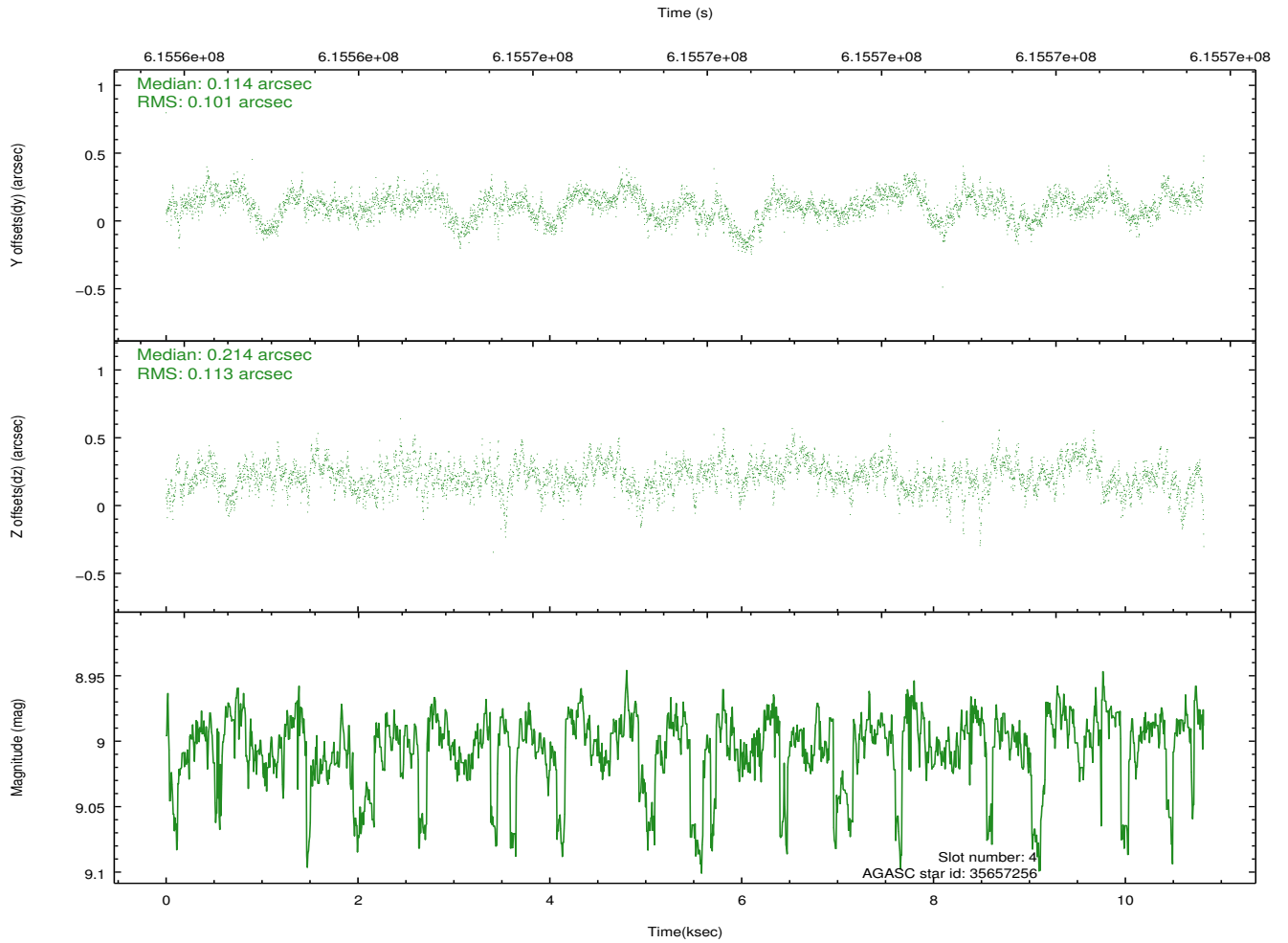
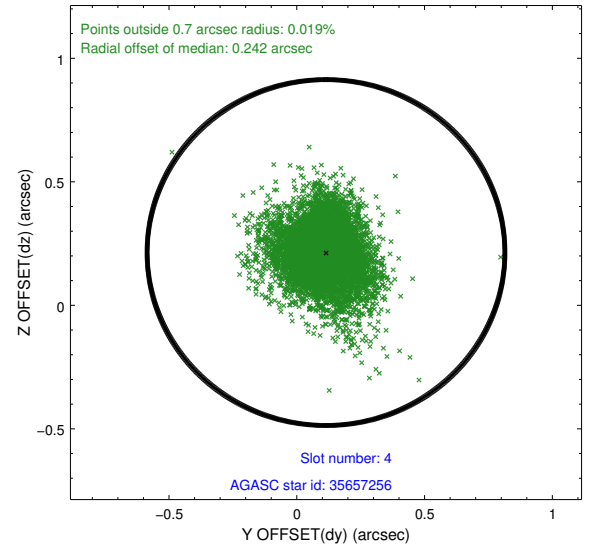
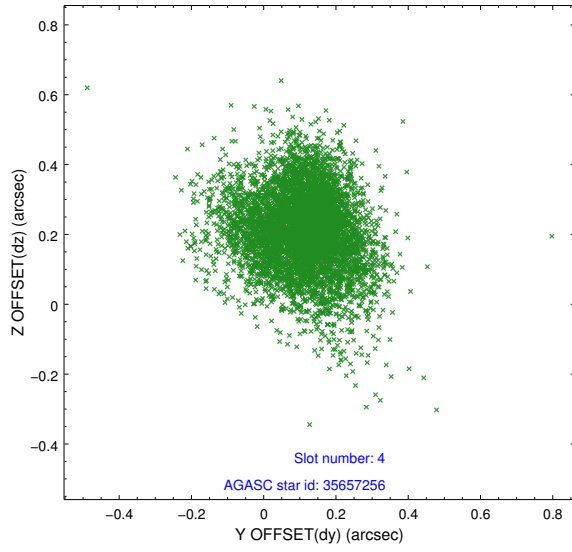
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.00	2639	-0.144	-0.044	0.016	0.025	0.000000	0.000000	-761.81	-1737.75
1	FID		ACIS-S-4	7.12	2639	0.363	0.083	0.014	0.024	0.000000	0.000000	2151.74	170.40
2	FID		ACIS-S-5	7.11	2639	-0.251	-0.029	0.014	0.022	0.000000	0.000000	-1814.17	164.45
3	GUIDE	used	35656968	9.44	5275	0.060	-0.052	0.198	0.315	176.560047	1.542359	706.71	-1964.41
4	GUIDE	used	35657256	9.00	5272	0.114	0.214	0.158	0.267	176.857006	2.013332	-1273.41	-1654.10
5	GUIDE	used	35658416	7.86	5276	0.093	-0.322	0.128	0.205	176.725004	1.604214	266.97	-1506.90
6	GUIDE	used	35786024	9.47	5271	-0.169	0.252	0.170	0.278	177.790022	1.785804	-1850.64	1752.99
7	GUIDE	used	35788008	9.38	5271	-0.091	-0.089	0.188	0.316	177.612047	1.006805	977.34	2277.20

## 2.4 Star Slots

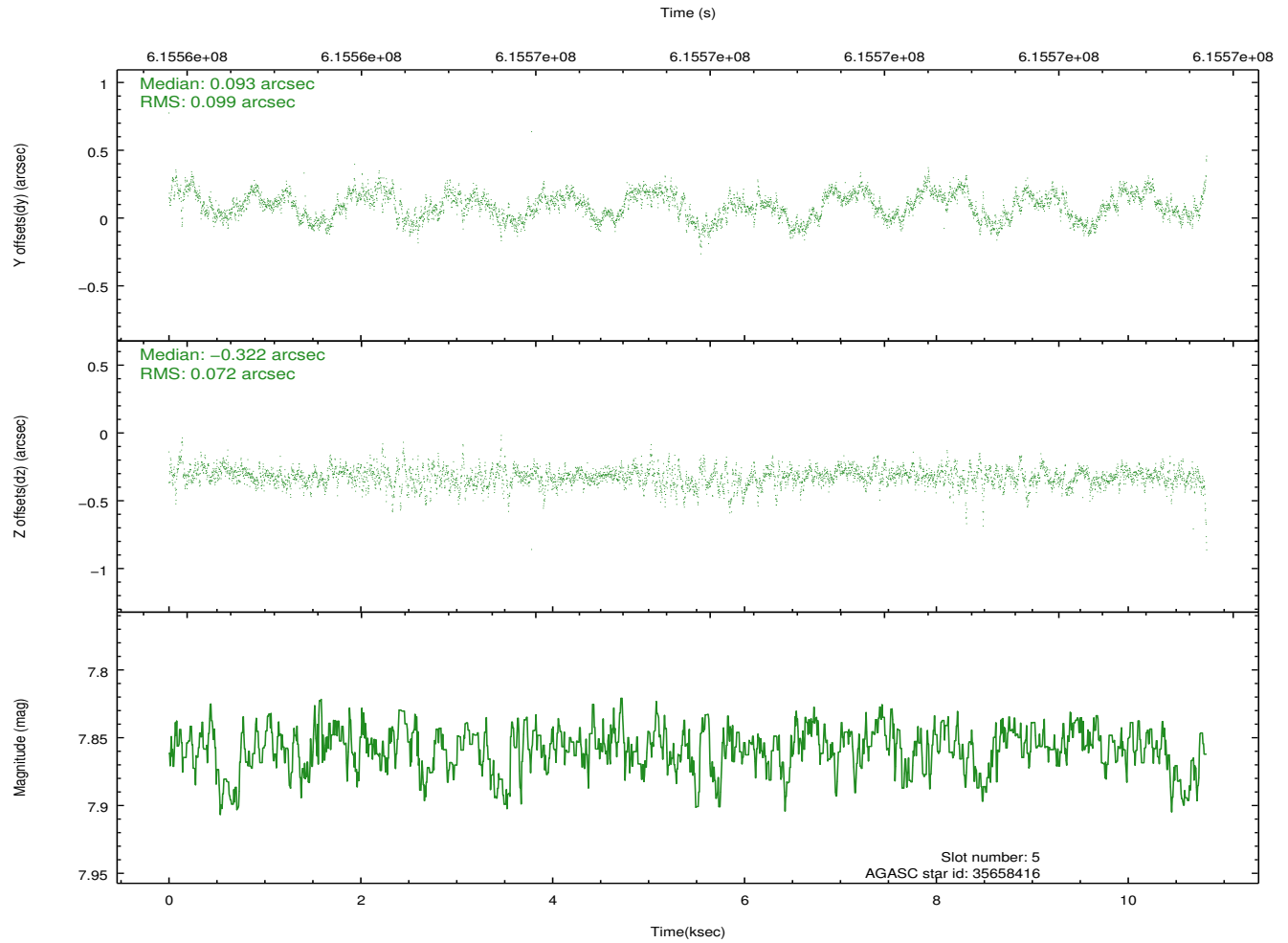
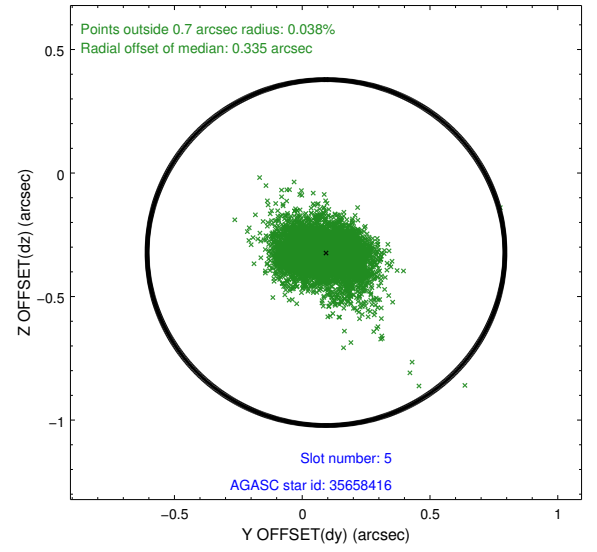
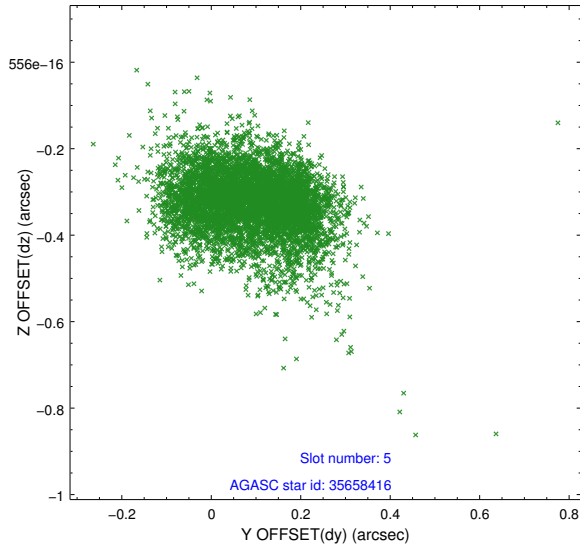
### 2.4.1 Slot 3



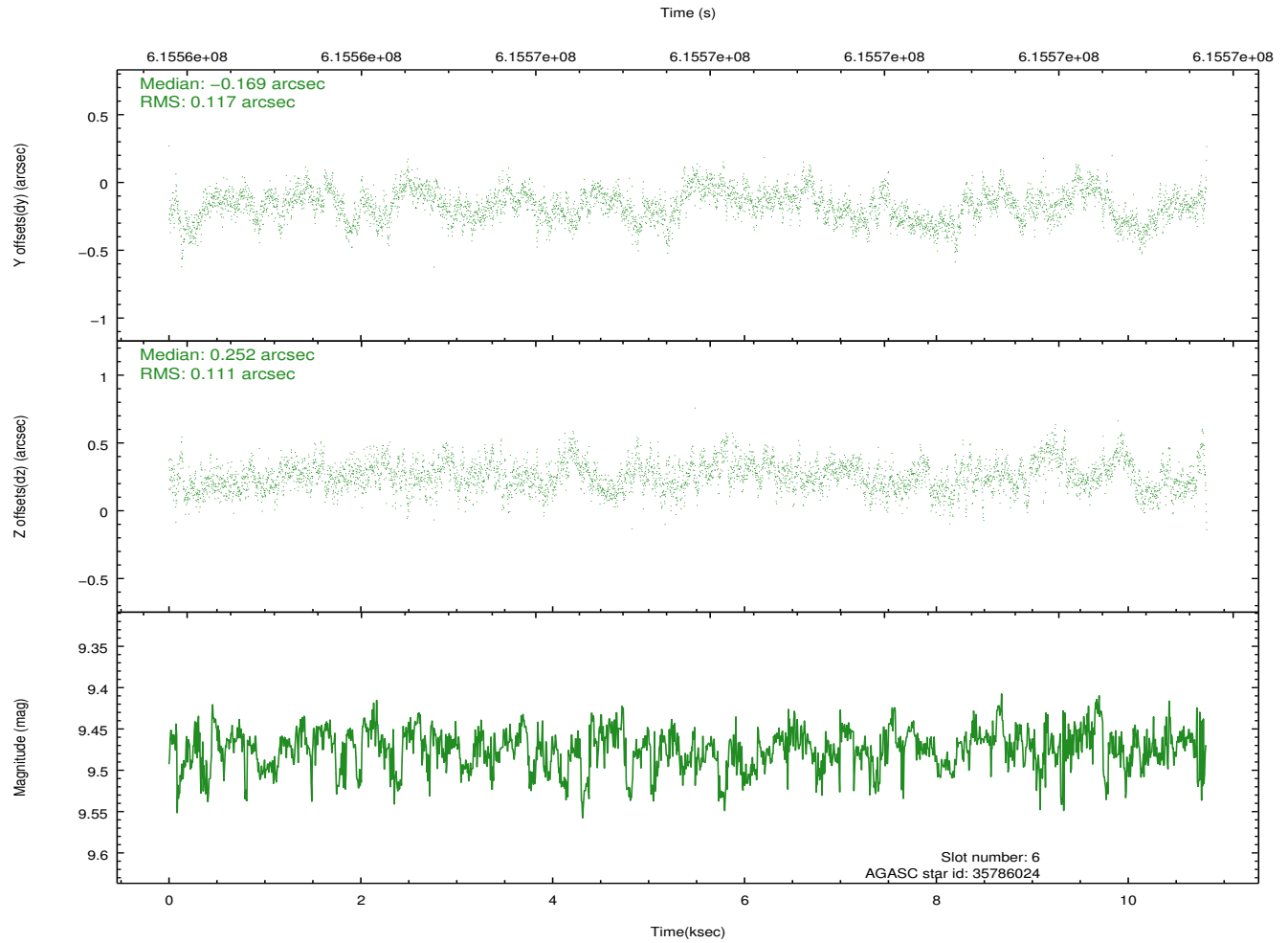
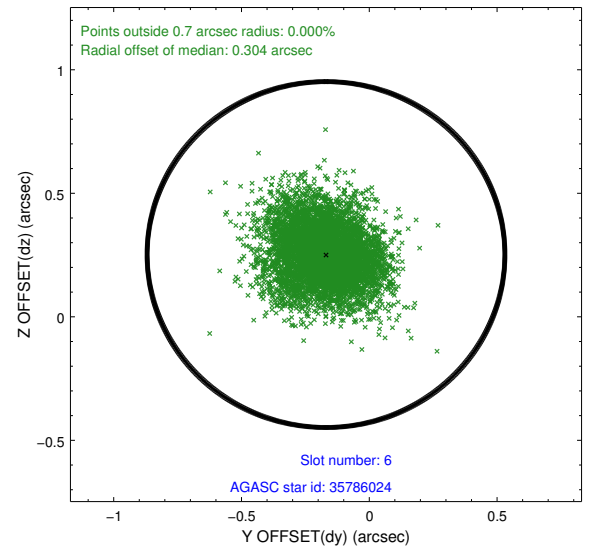
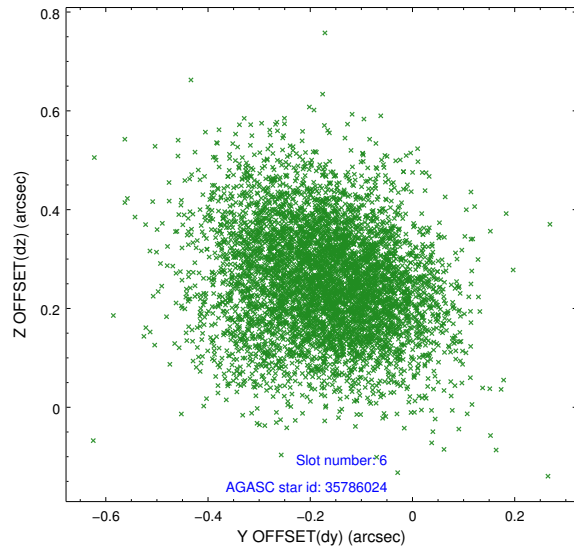
## 2.4.2 Slot 4



### 2.4.3 Slot 5

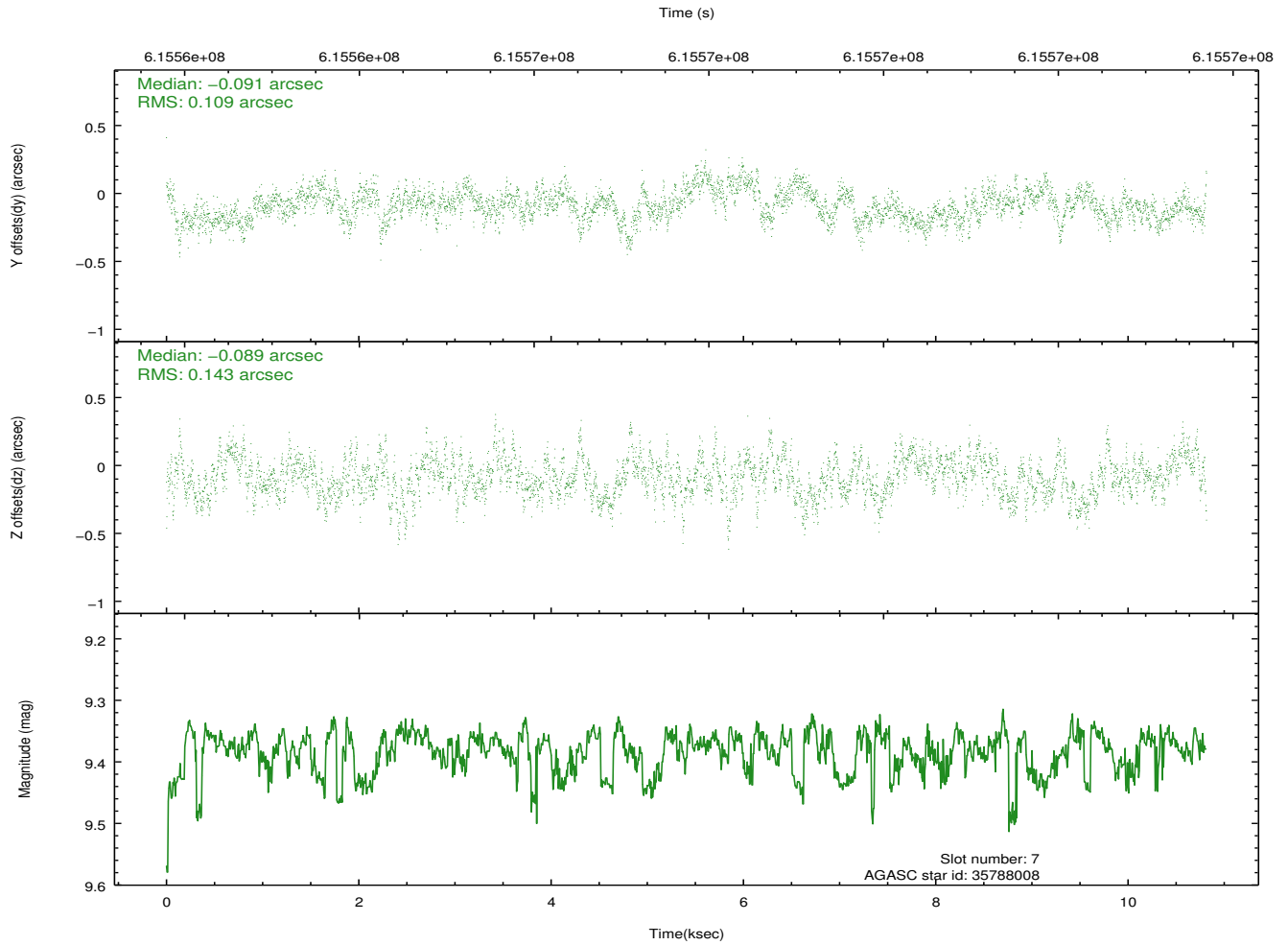
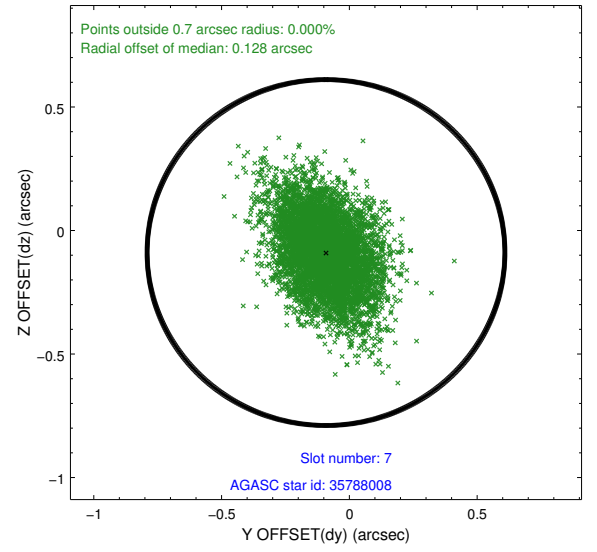
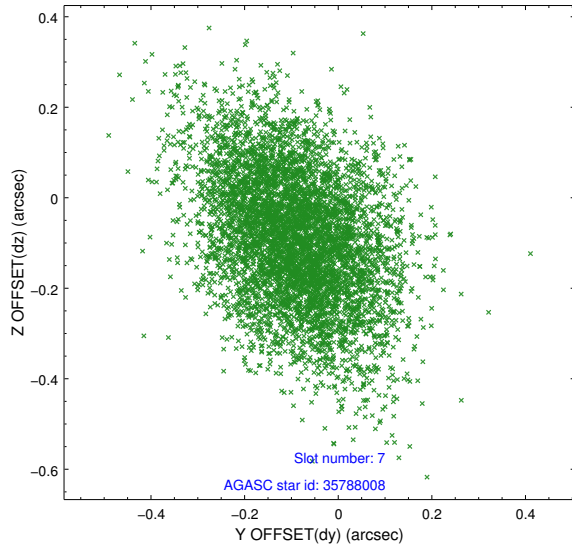


## 2.4.4 Slot 6



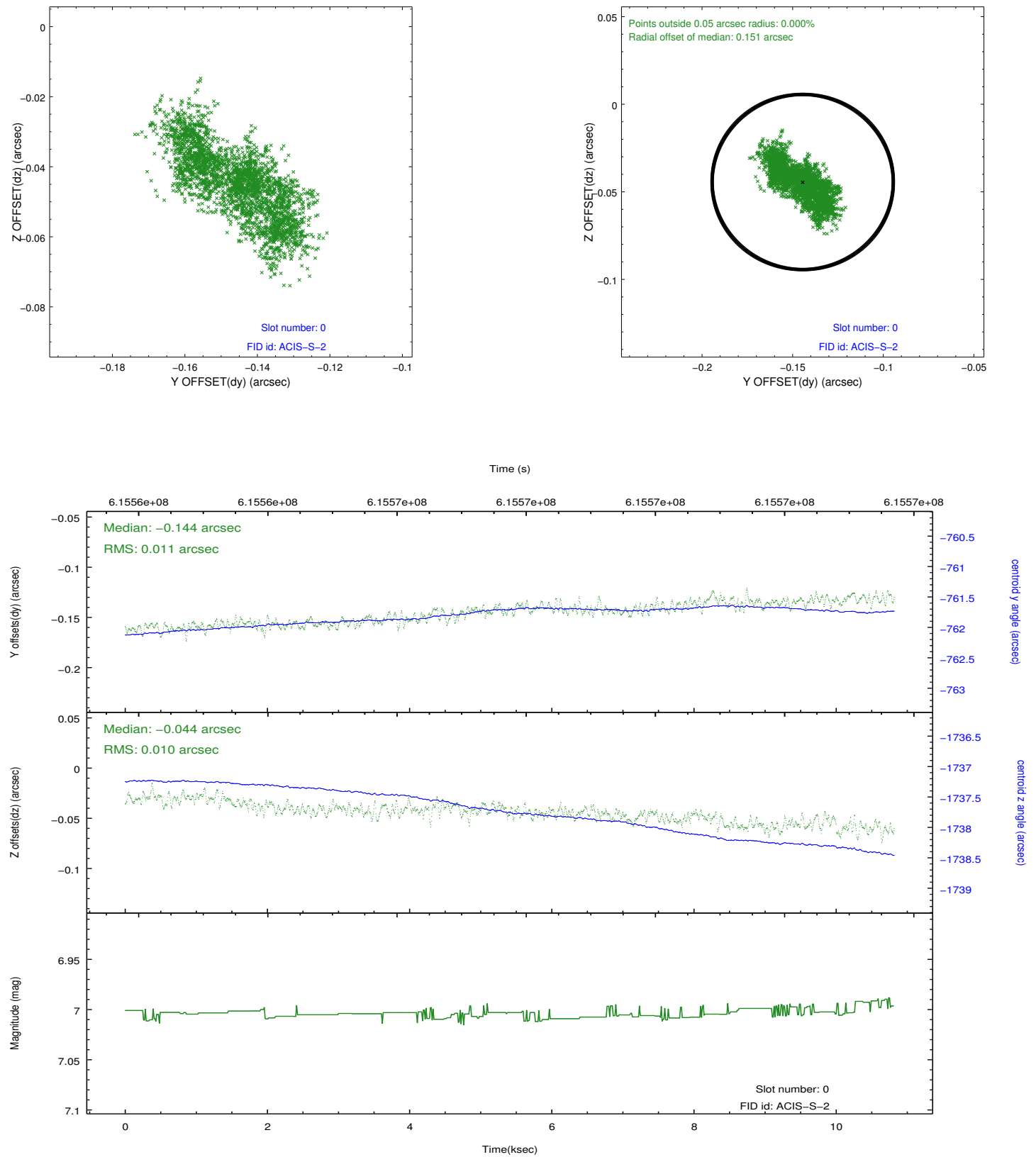


## 2.4.5 Slot 7

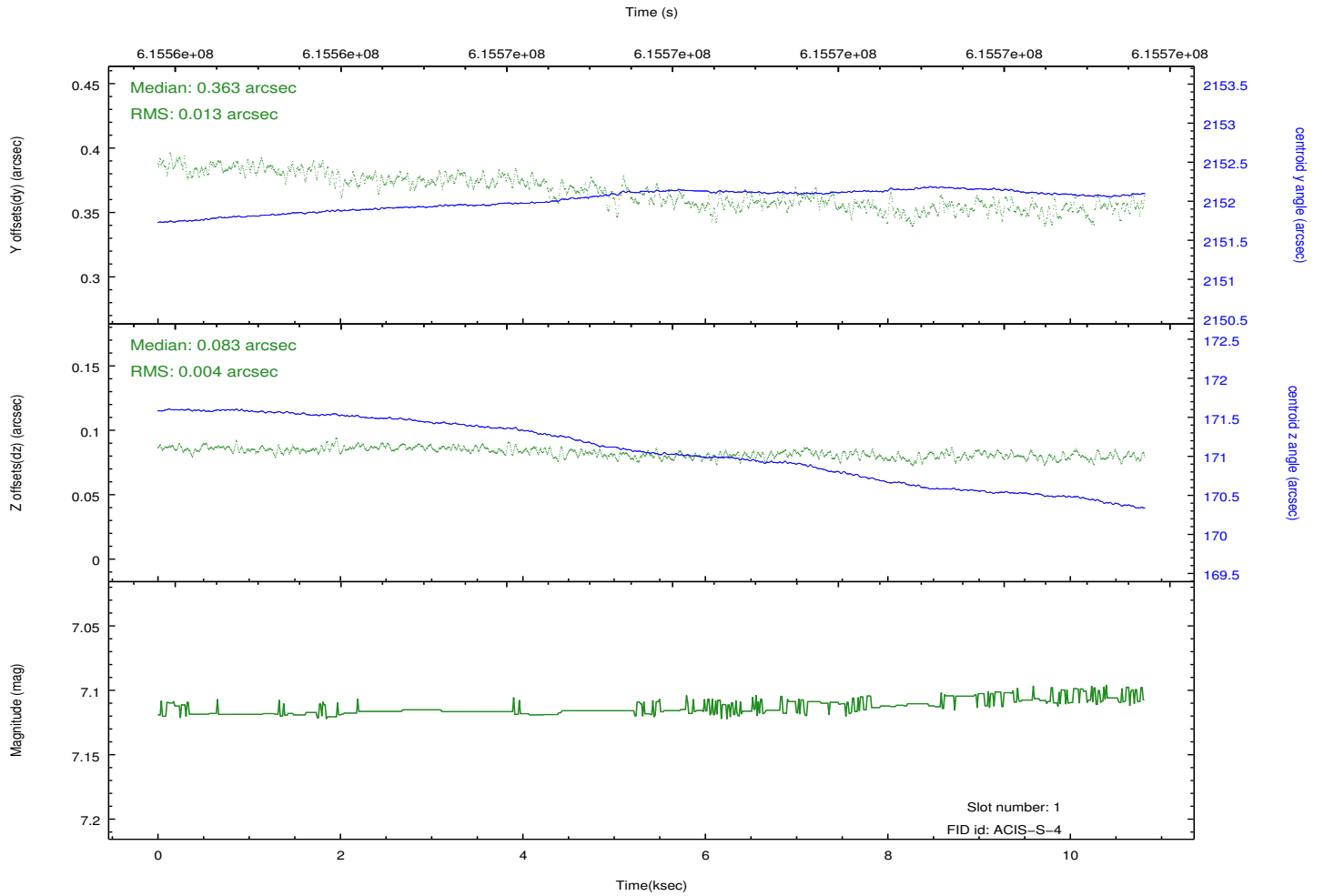
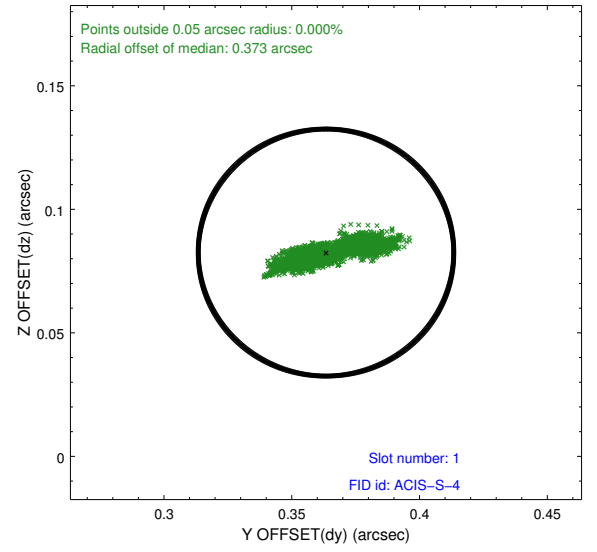
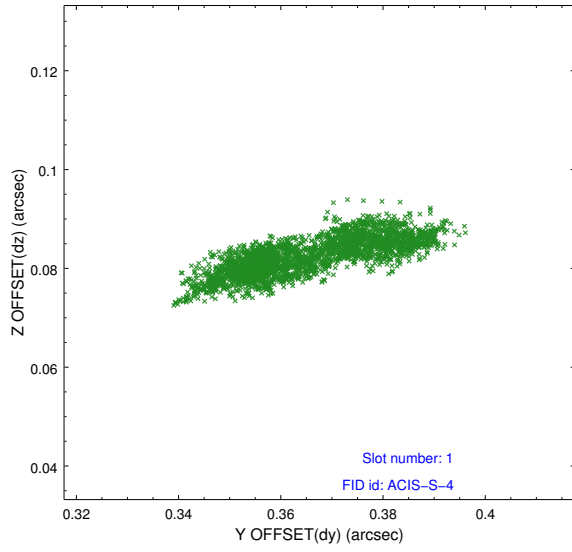


## 2.5 FID Slots

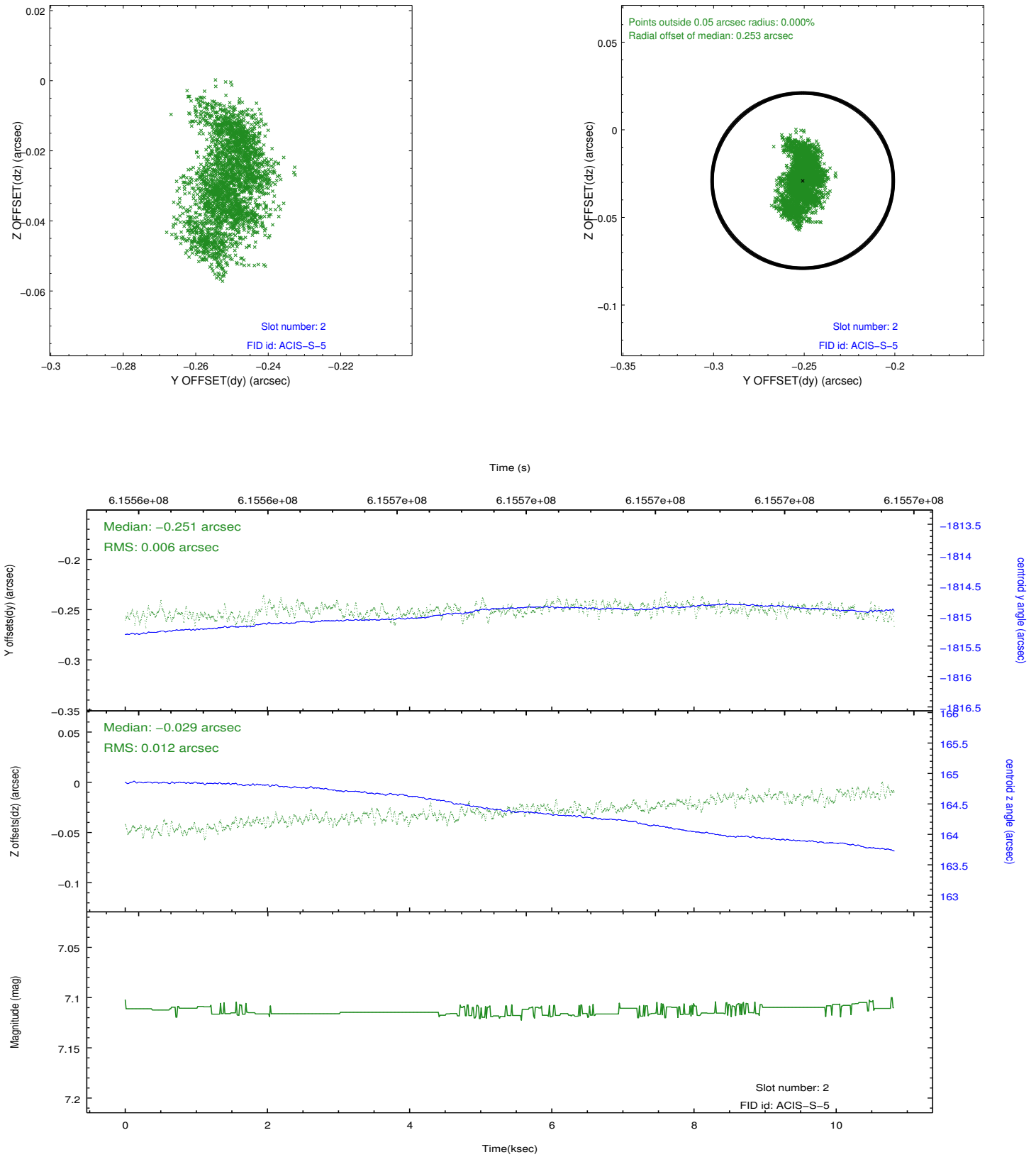
### 2.5.1 Slot 0



## 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)	2017.07.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.06260007751

### A.2 Comments