

# V&V Reference Report

## L2 ASCDS Version : 10.4.1

Observation 17700 - L2 Version 1  
Chandra X-Ray Center

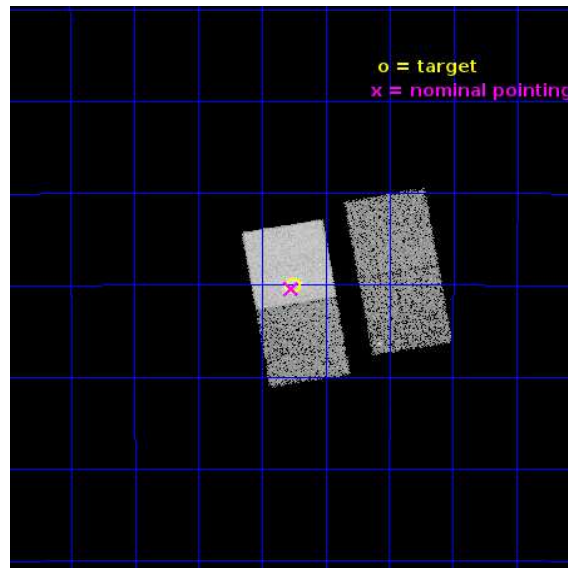
L2 Processing Date : Sep 1 2015

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# 1 Front

seq_num	502465	Sequence number
obs_id	17700	Observation id
title	Nonuniform expansion and brightening of the youngest Galactic SNR G1.9+0.3	Proposal title
observer	Dr. Kazimierz Borkowski	Principal investigator
object	G1.9+0.3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	267.189167	Observer's specified target RA [deg]
dec_targ	-27.168889	Observer's specified target Dec [deg]
ra_nom	267.19211444518	Nominal RA [deg]
dec_nom	-27.173609197437	Nominal Dec [deg]
roll_nom	260.1579785619	Nominal Roll [deg]
revision	1	Processing version of data
ontime	15075.300116062	Sum of GTIs [s]
livetime	14878.330221771	Livetime [s]
ontime2	15075.291924834	Sum of GTIs [s]
ontime3	15075.300116062	Sum of GTIs [s]
ontime6	15075.300116062	Sum of GTIs [s]
ontime7	15075.300116062	Sum of GTIs [s]
l2events	68666	Number of level 2 events

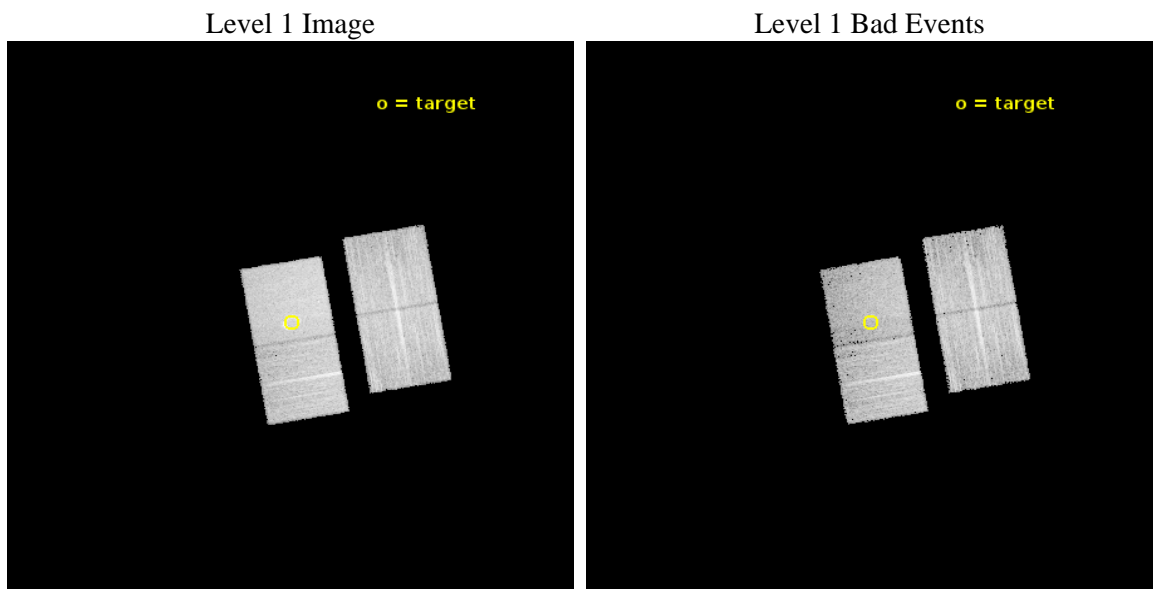




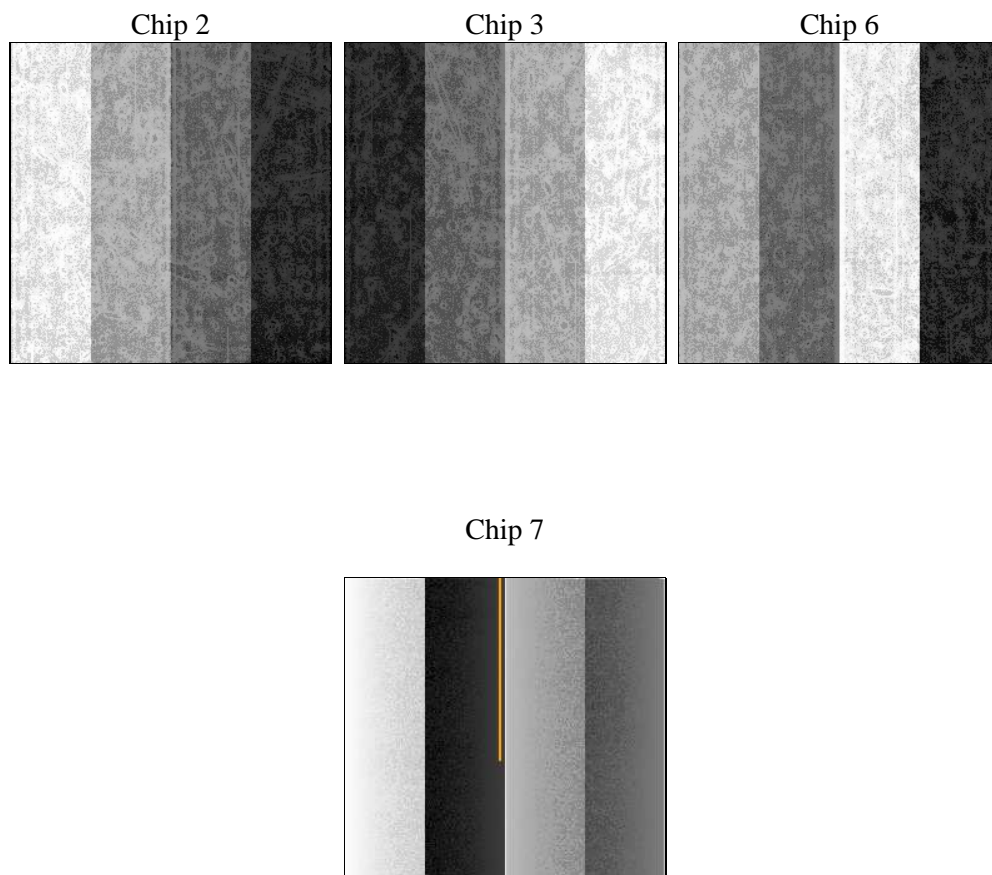
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	2	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	15075.300116062	Sum of GTIs [s]
caldsver	4.6.8	&#160	ontime2	15075.291924834	Sum of GTIs [s]
date	2015-09-01T13:49:47	Date and time of file creation	ontime3	15075.300116062	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	15075.300116062	Sum of GTIs [s]
			ontime7	15075.300116062	Sum of GTIs [s]
			l1events	313181	Number of level 1 events

### 2.1.4 Events

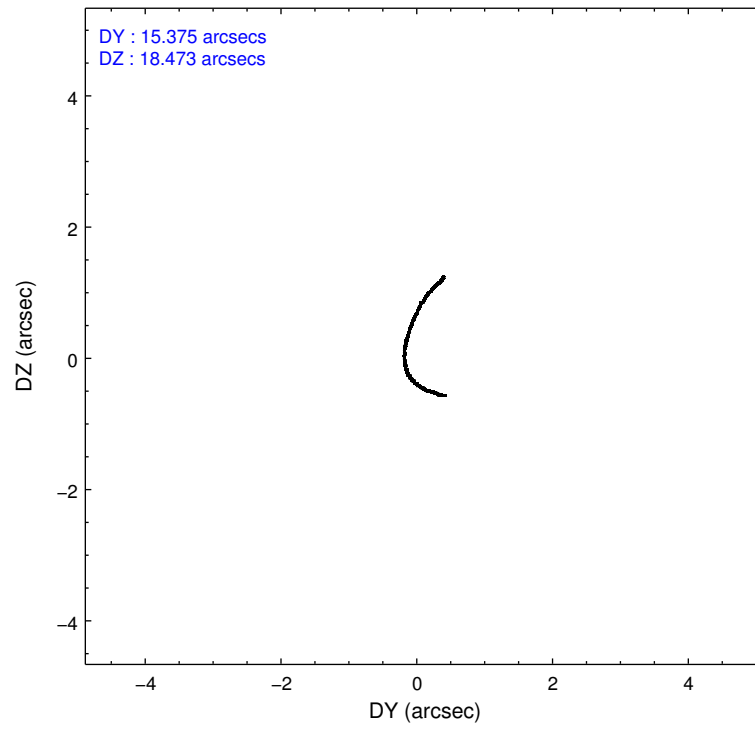
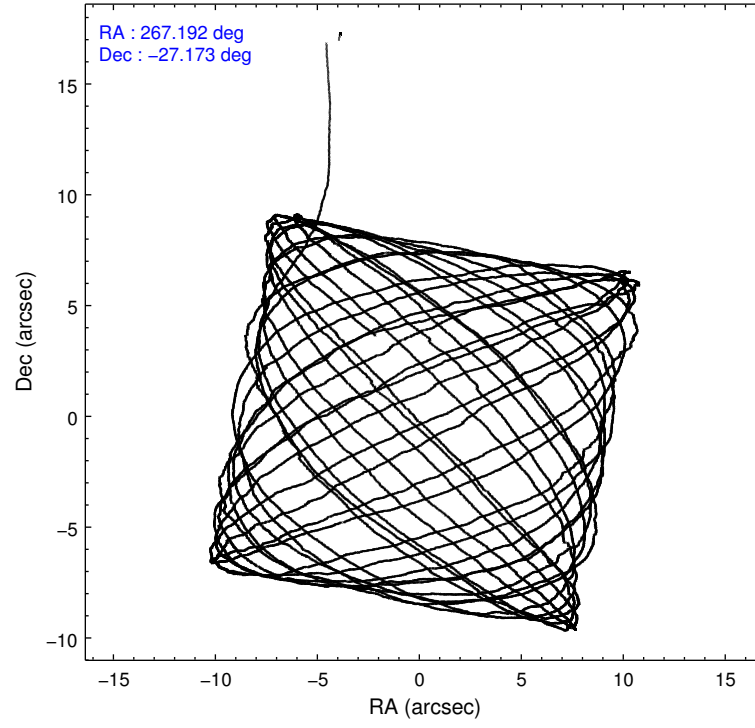
	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	76671	72542	73261	90707
rejected events	67498	63029	63422	45670
rejected %	88%	86%	86%	50%

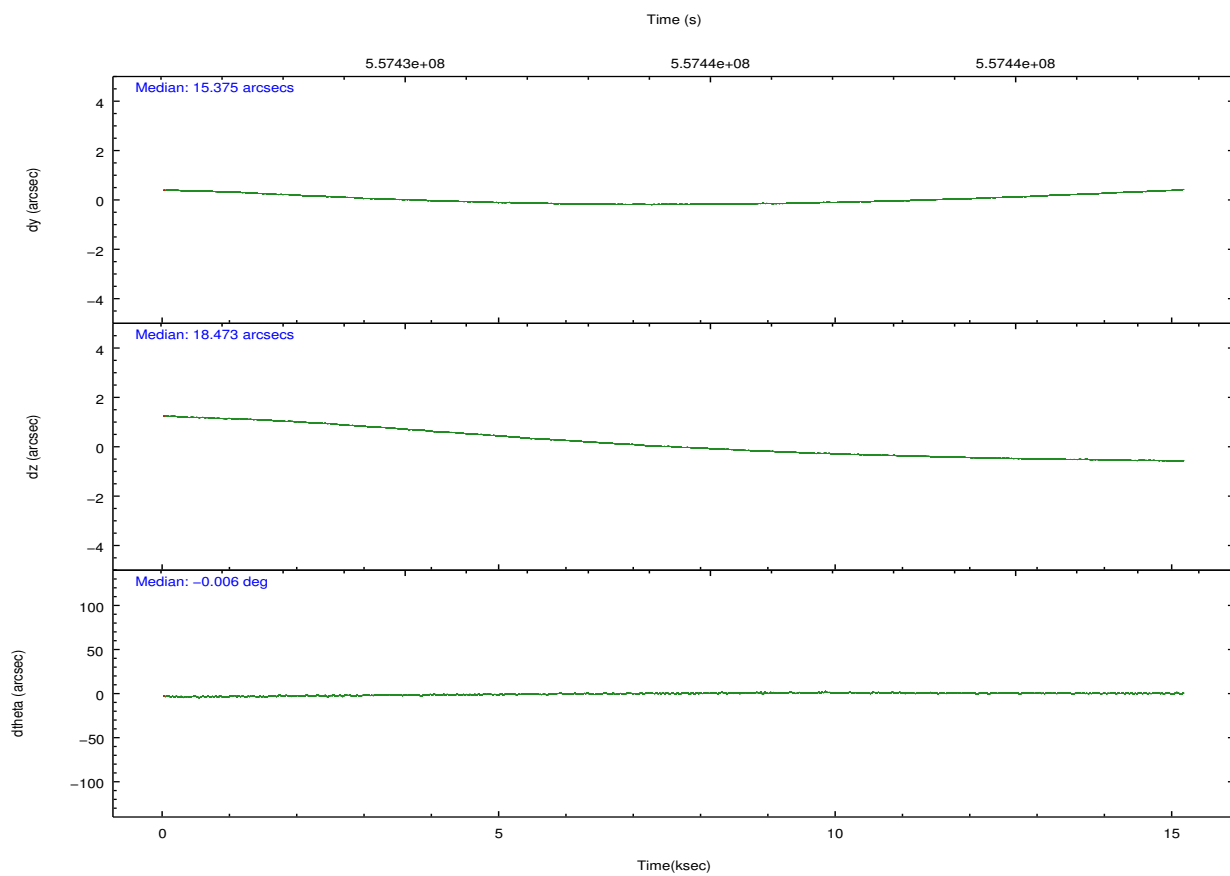
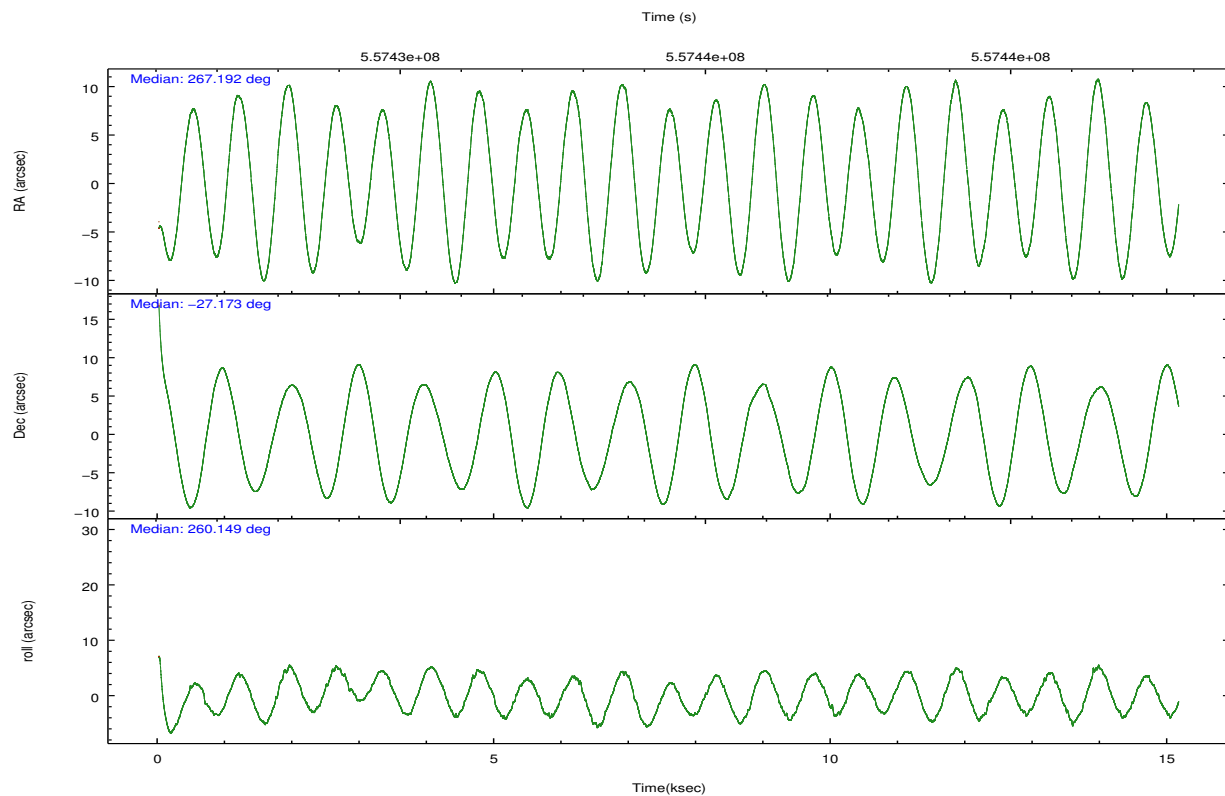
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	3704	3940	3997	4716
	4%	5%	5%	5%
grade 1 events	41	46	55	138
	0%	0%	0%	0%
grade 2 events	2222	2000	2181	9844
	2%	2%	2%	10%
grade 3 events	819	936	939	3988
	1%	1%	1%	4%
grade 4 events	885	885	831	3860
	1%	1%	1%	4%
grade 5 events	2549	3236	3441	8980
	3%	4%	4%	9%
grade 6 events	1546	1757	1894	22641
	2%	2%	2%	24%
grade 7 events	64905	59742	59923	36540
	84%	82%	81%	40%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	267.181131	267.192114445182	CCD I2 on	O1	Y
[deg] Pointing Dec	-27.147999	-27.17360919743684	CCD I3 on	O2	Y
[deg] Pointing Roll	259.996329	260.1579785619046	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	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	N	N
[s] Observation start time (MET)	557426994.184000	557425872.24028	CCD S5 on	N	N
Observation start date	2015-08-31T16:48:46	2015-08-31T16:31:12	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	557441994.184000	557443028.69125	On-chip summing requested	N	N
Observation end date	2015-08-31T20:58:46	2015-08-31T21:17:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



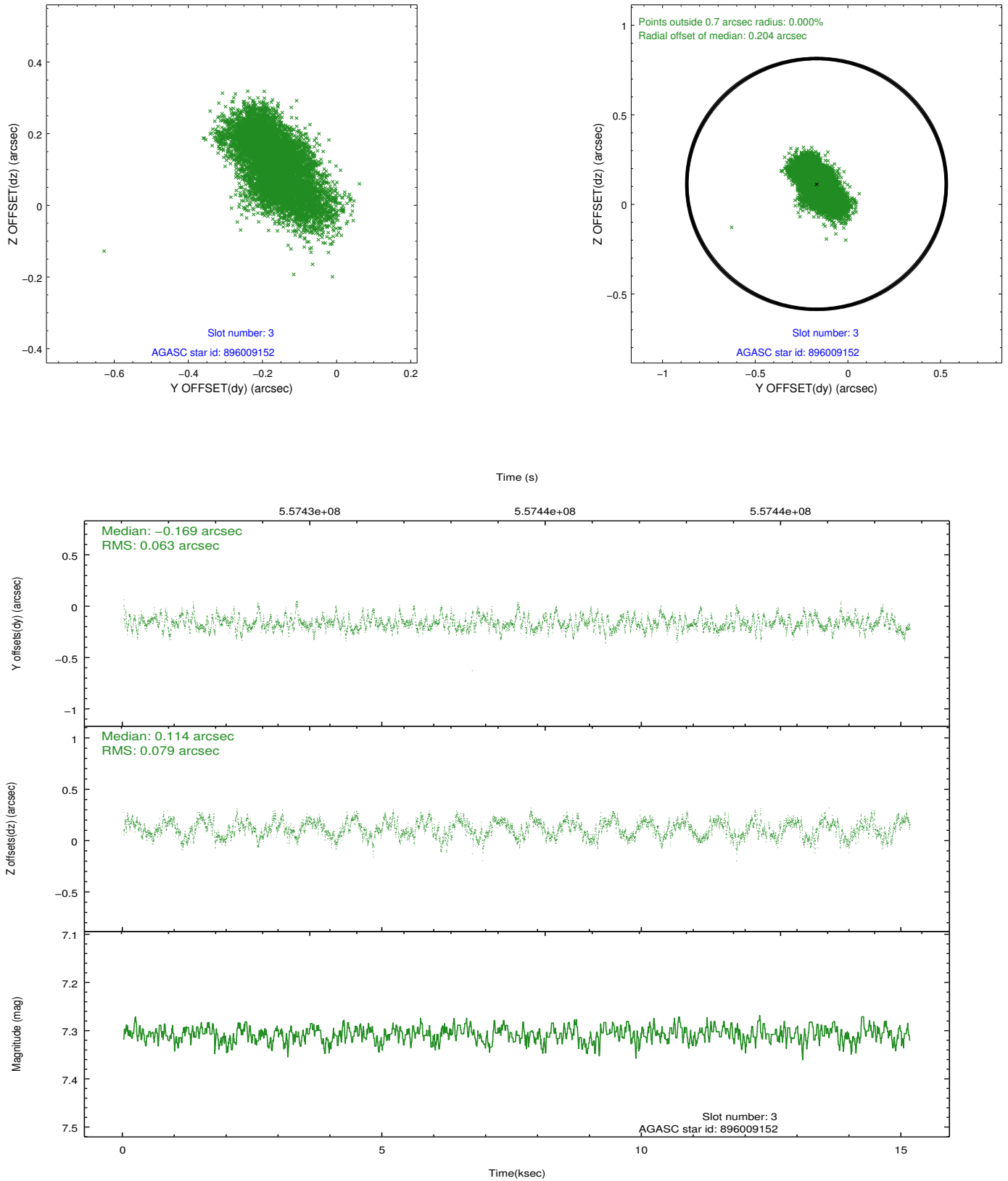


### Slot Statistics

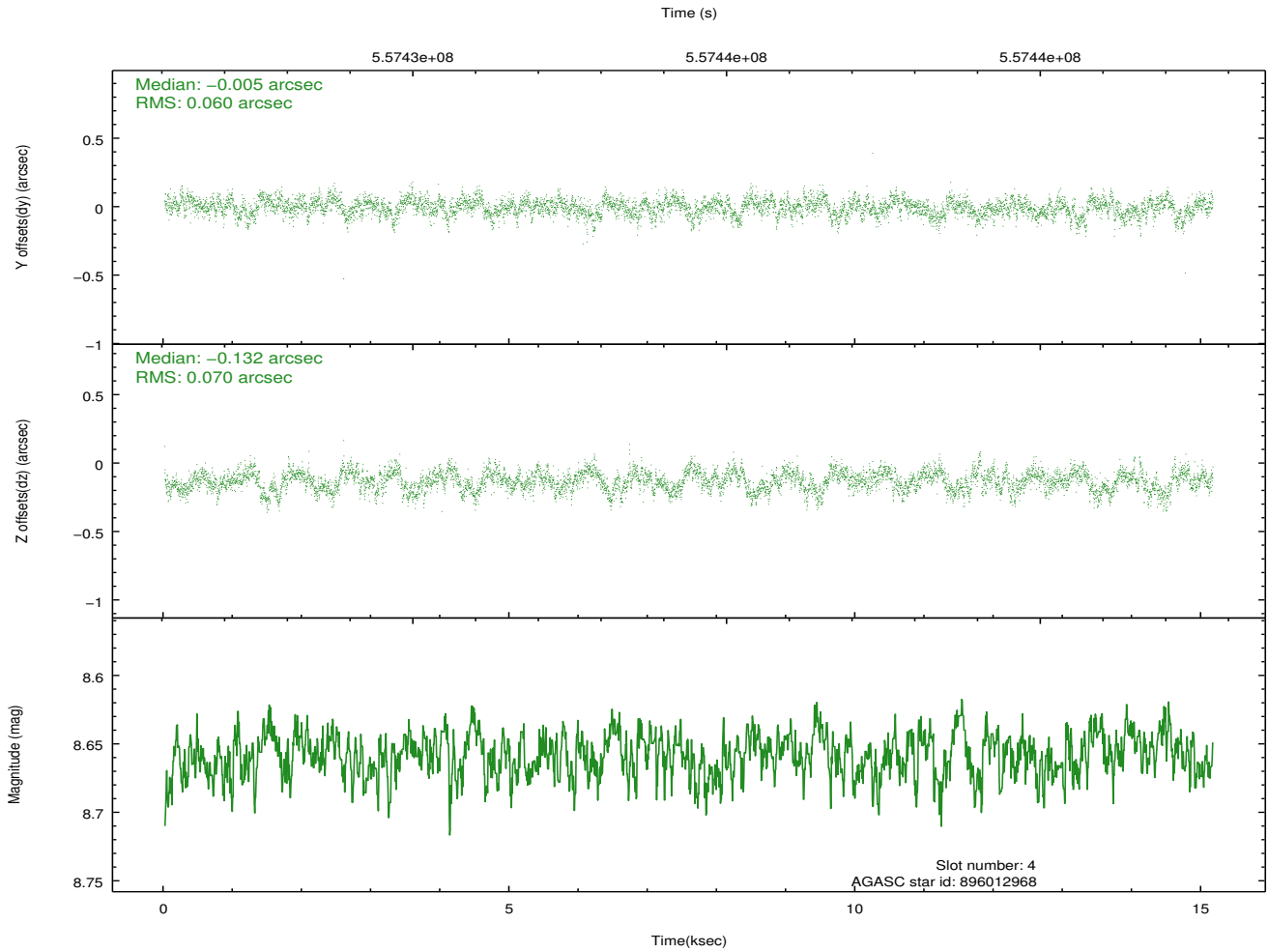
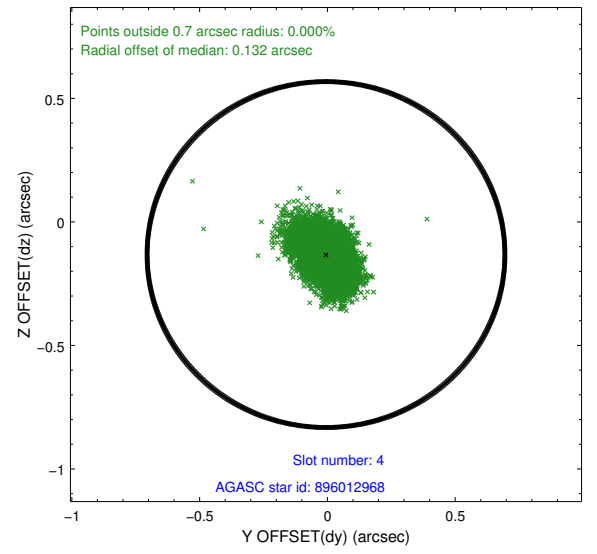
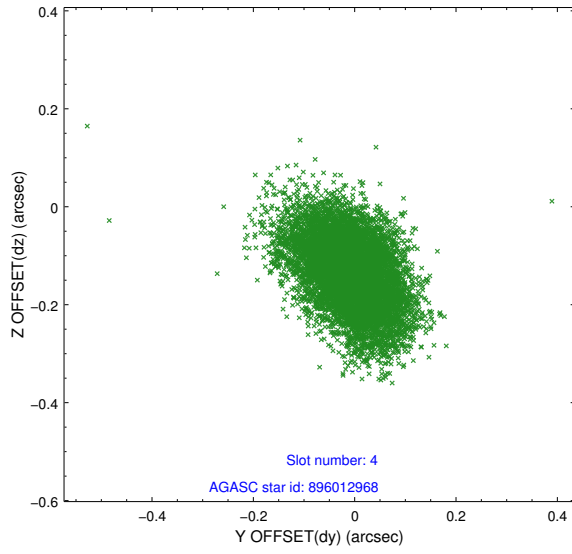
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.20	3696	0.113	-0.019	0.015	0.027	0.000000	0.000000	927.76	-1735.69
1	FID		ACIS-S-5	7.24	3696	-0.214	0.078	0.016	0.029	0.000000	0.000000	-1821.40	161.64
2	FID		ACIS-S-6	7.35	3696	0.083	-0.047	0.019	0.043	0.000000	0.000000	392.95	805.83
3	GUIDE	used	896009152	7.31	7375	-0.169	0.114	0.107	0.177	267.588100	-27.061669	-529.81	1231.42
4	GUIDE	used	896012968	8.66	7387	-0.005	-0.132	0.097	0.162	266.634547	-27.600471	1911.41	-1433.07
5	GUIDE	used	896013040	7.33	7390	0.079	0.011	0.074	0.116	266.506589	-26.972299	-240.14	-2240.09
6	GUIDE	used	896014528	7.67	7392	0.023	0.035	0.063	0.106	266.628858	-27.438607	1341.32	-1555.07
7	GUIDE	used	897717296	8.23	7387	0.068	-0.021	0.100	0.158	267.921819	-26.875322	-1372.70	2172.89

## 2.4 Star Slots

### 2.4.1 Slot 3

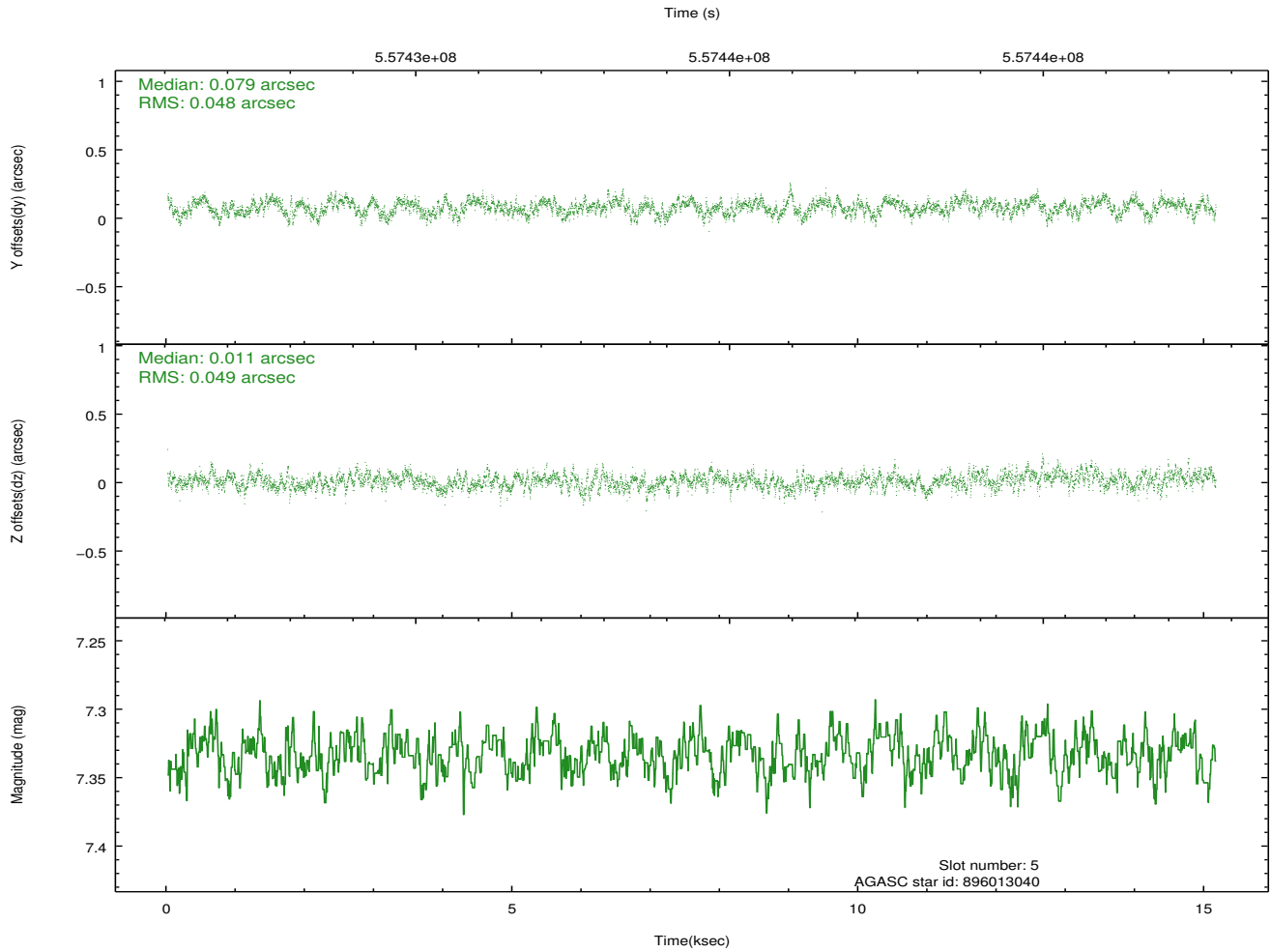
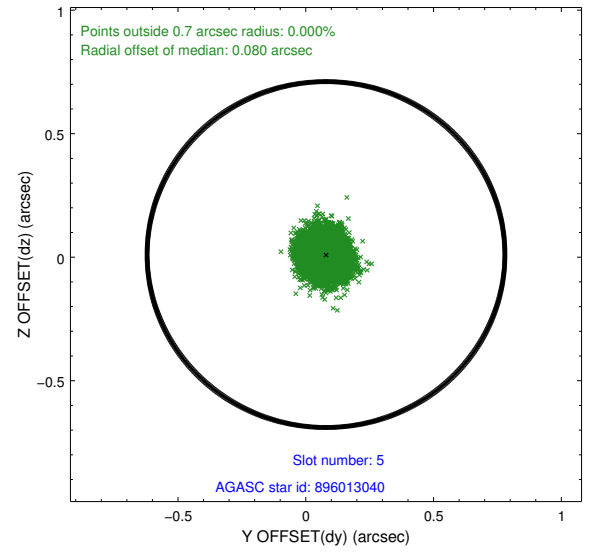
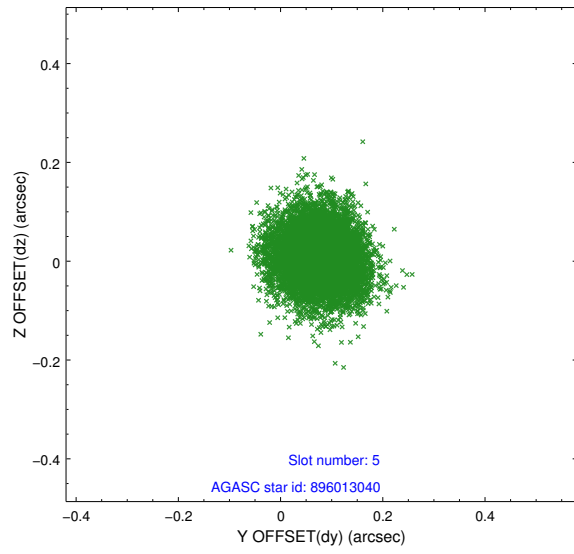


## 2.4.2 Slot 4

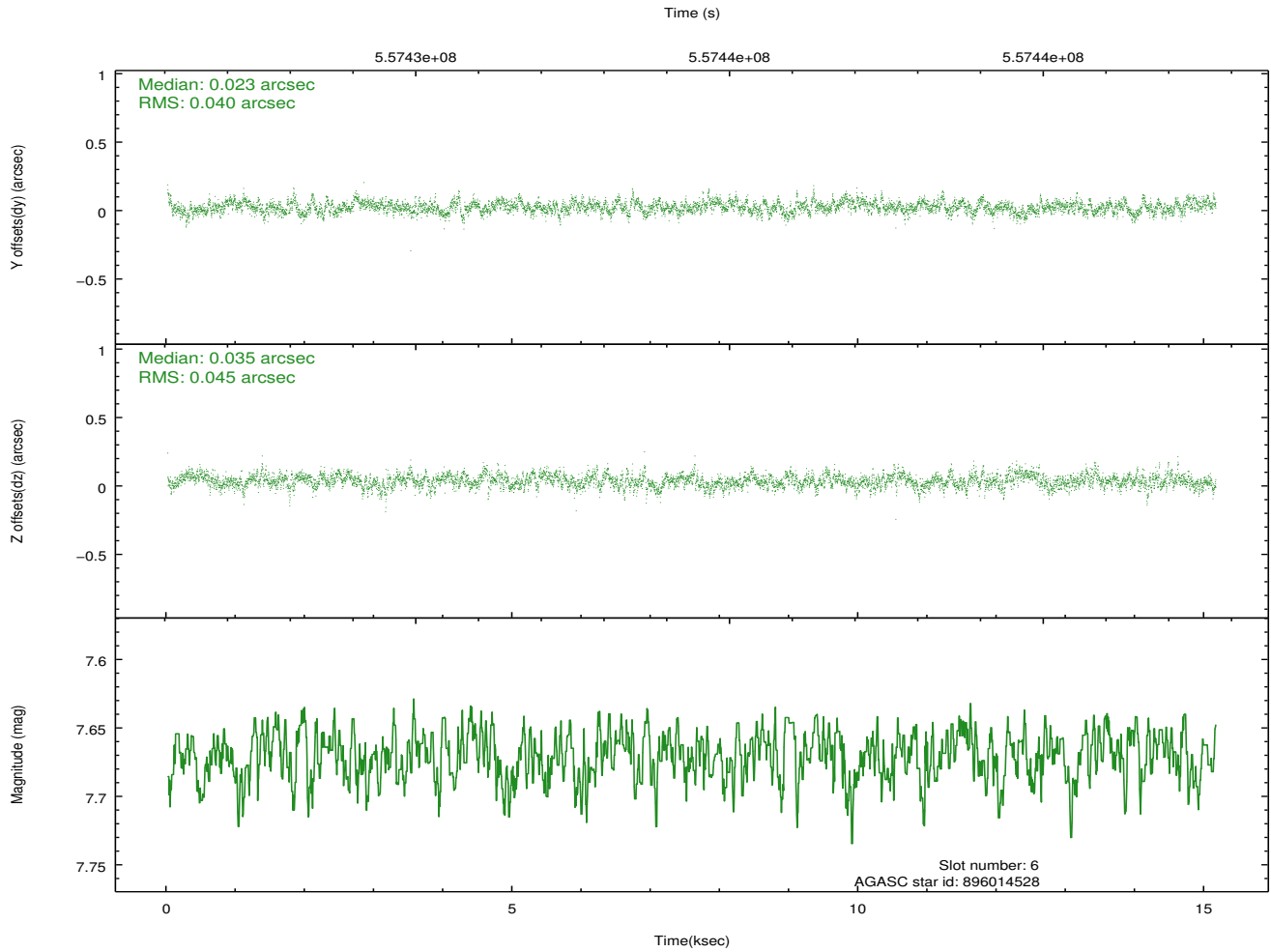
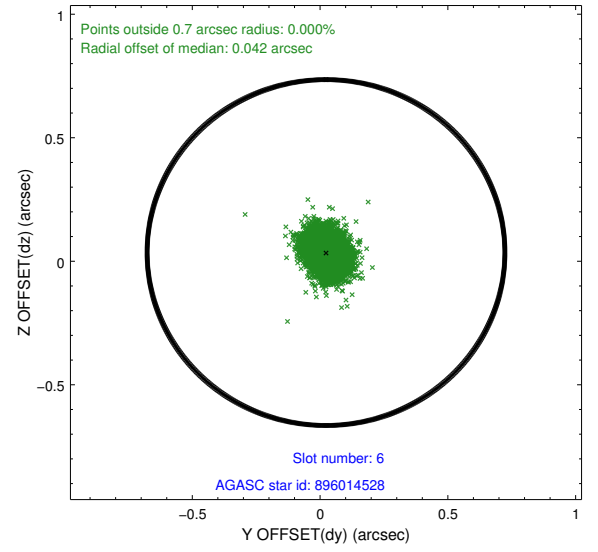
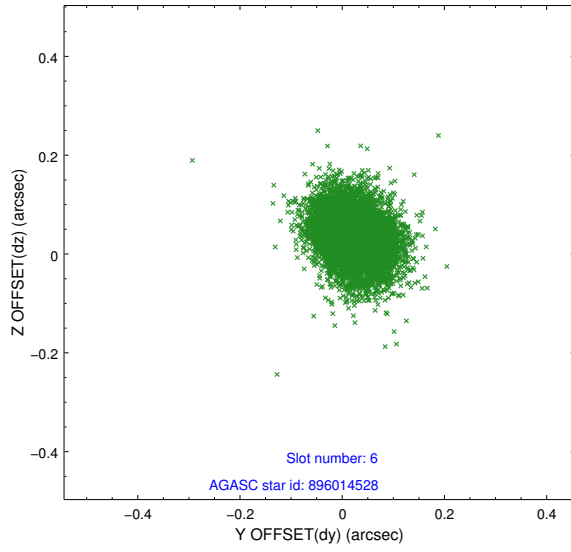




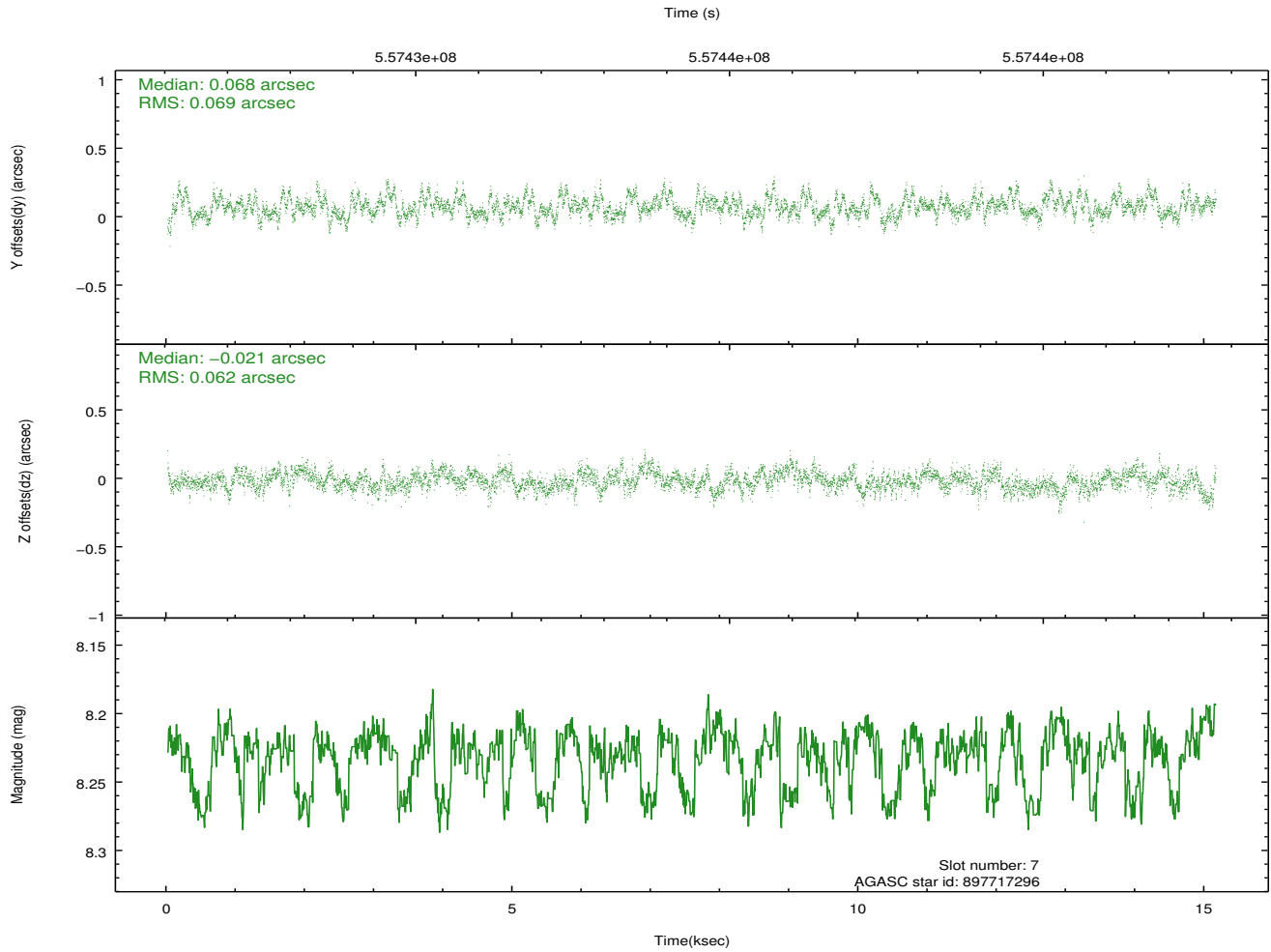
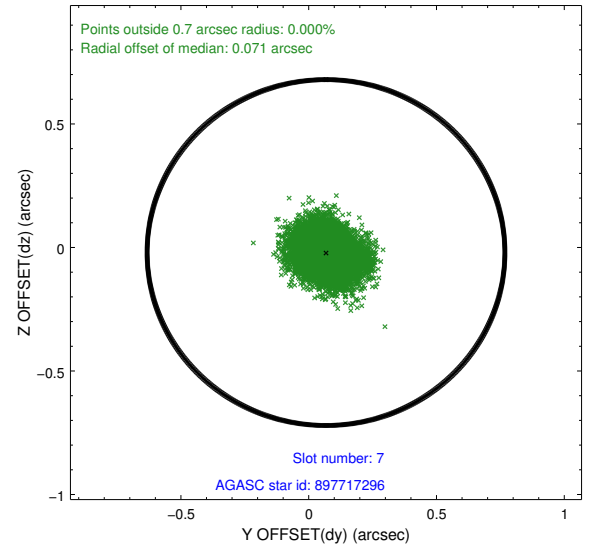
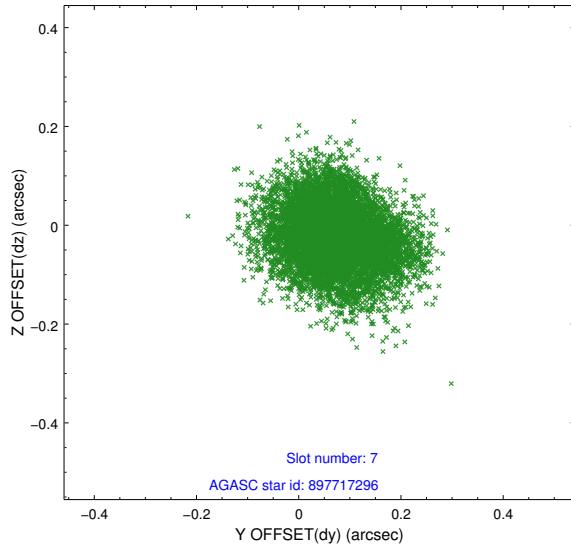
### 2.4.3 Slot 5



## 2.4.4 Slot 6

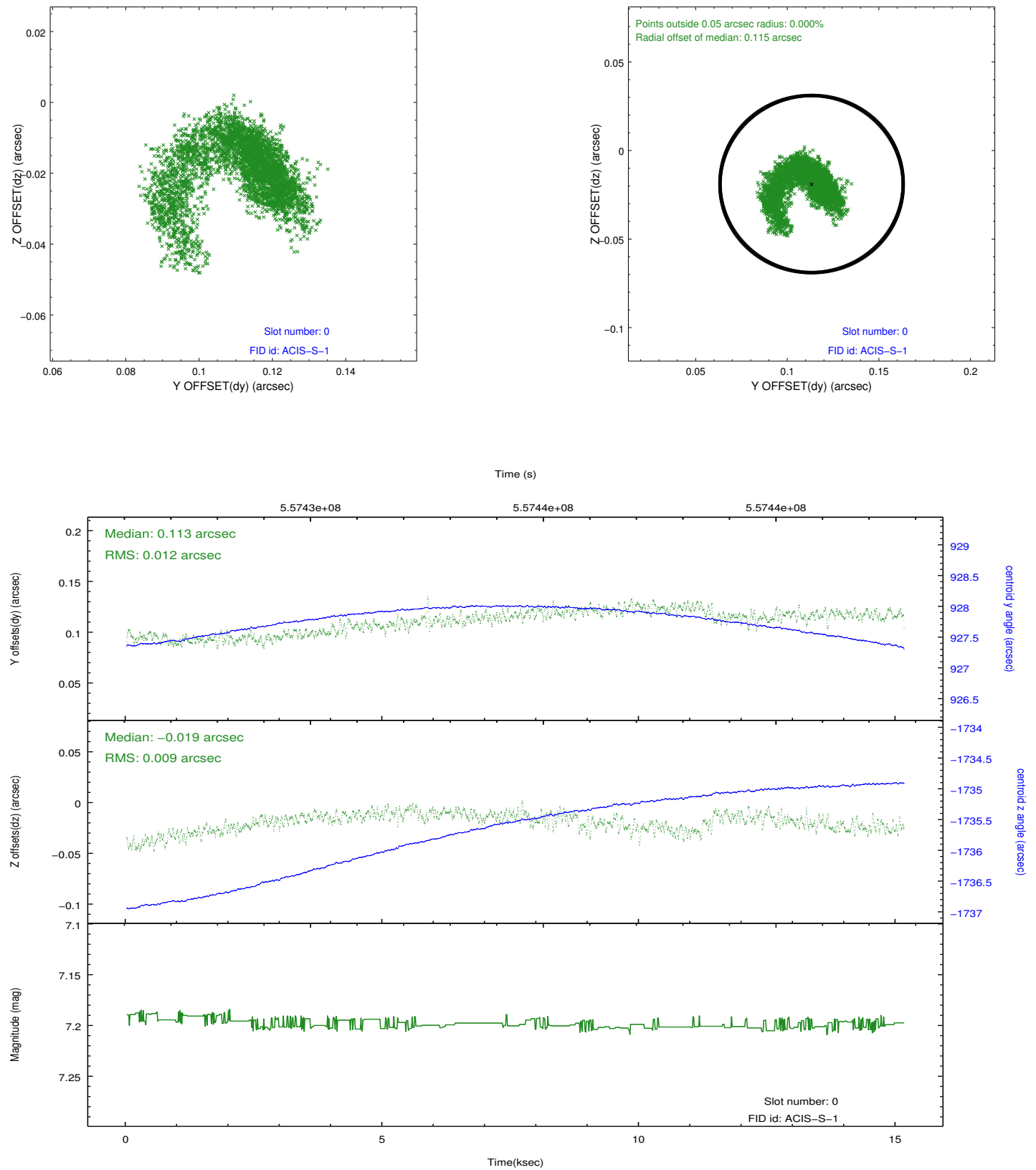


## 2.4.5 Slot 7

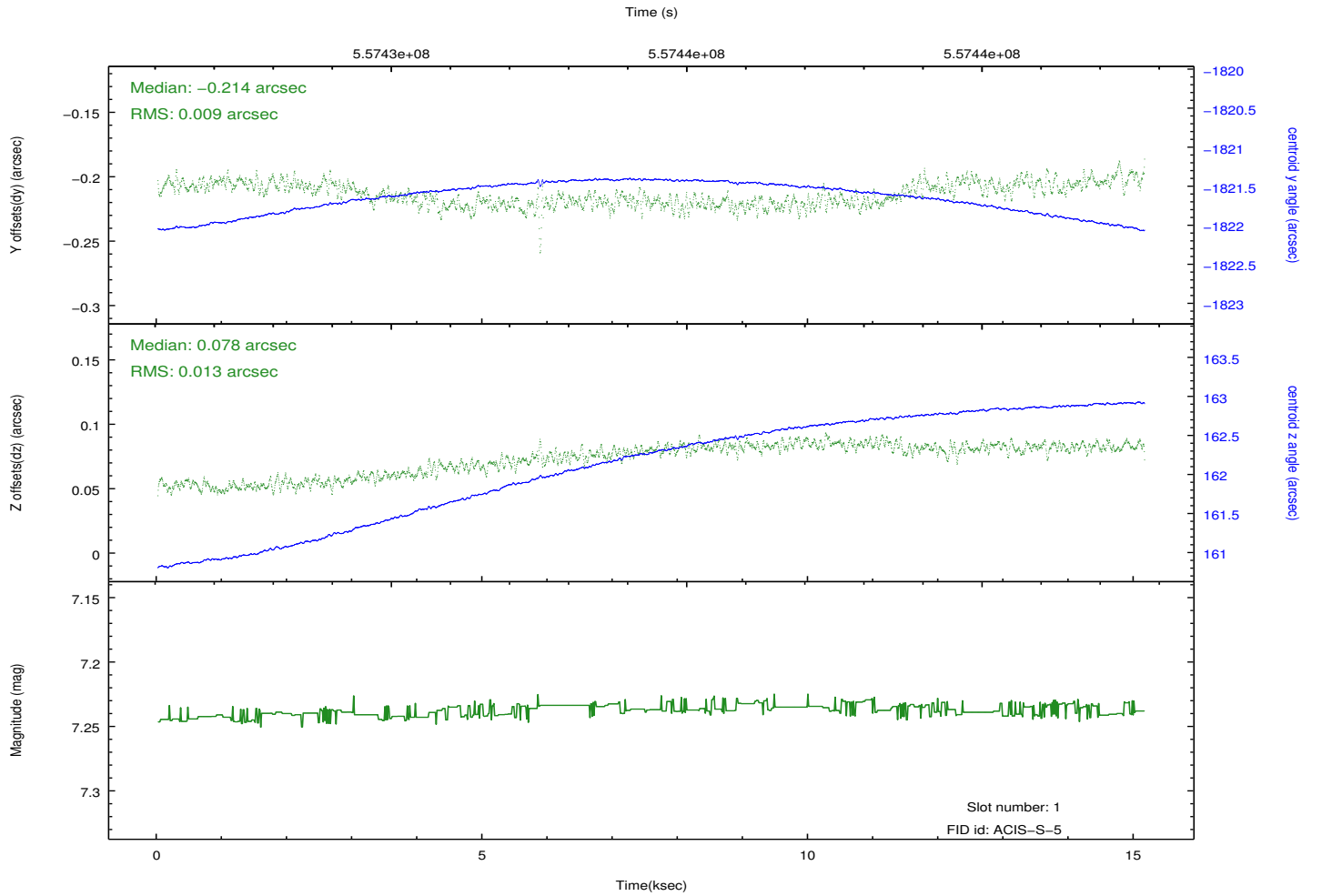
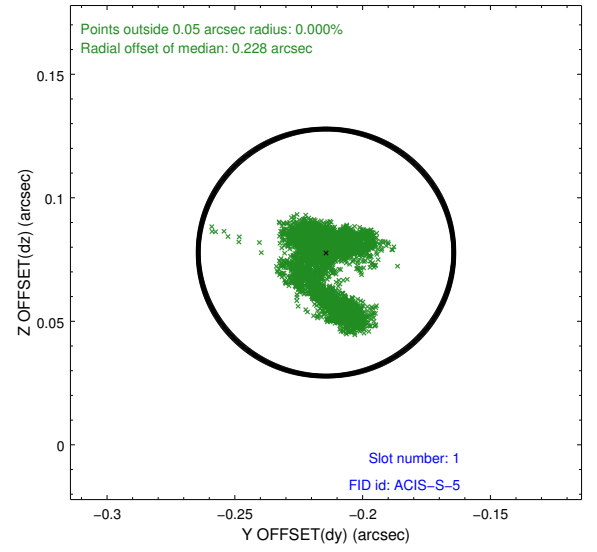
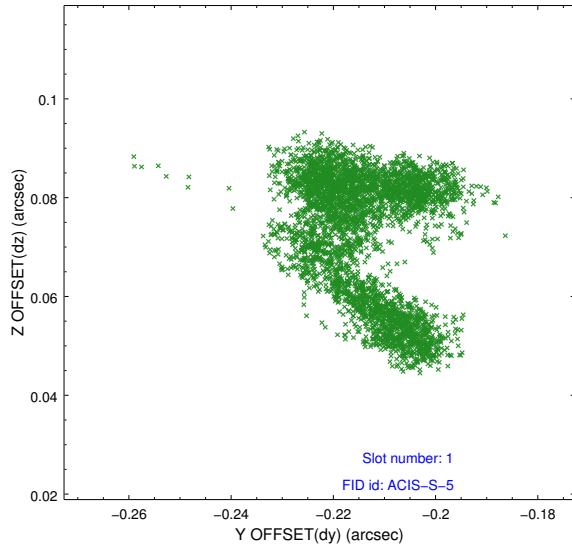


## 2.5 FID Slots

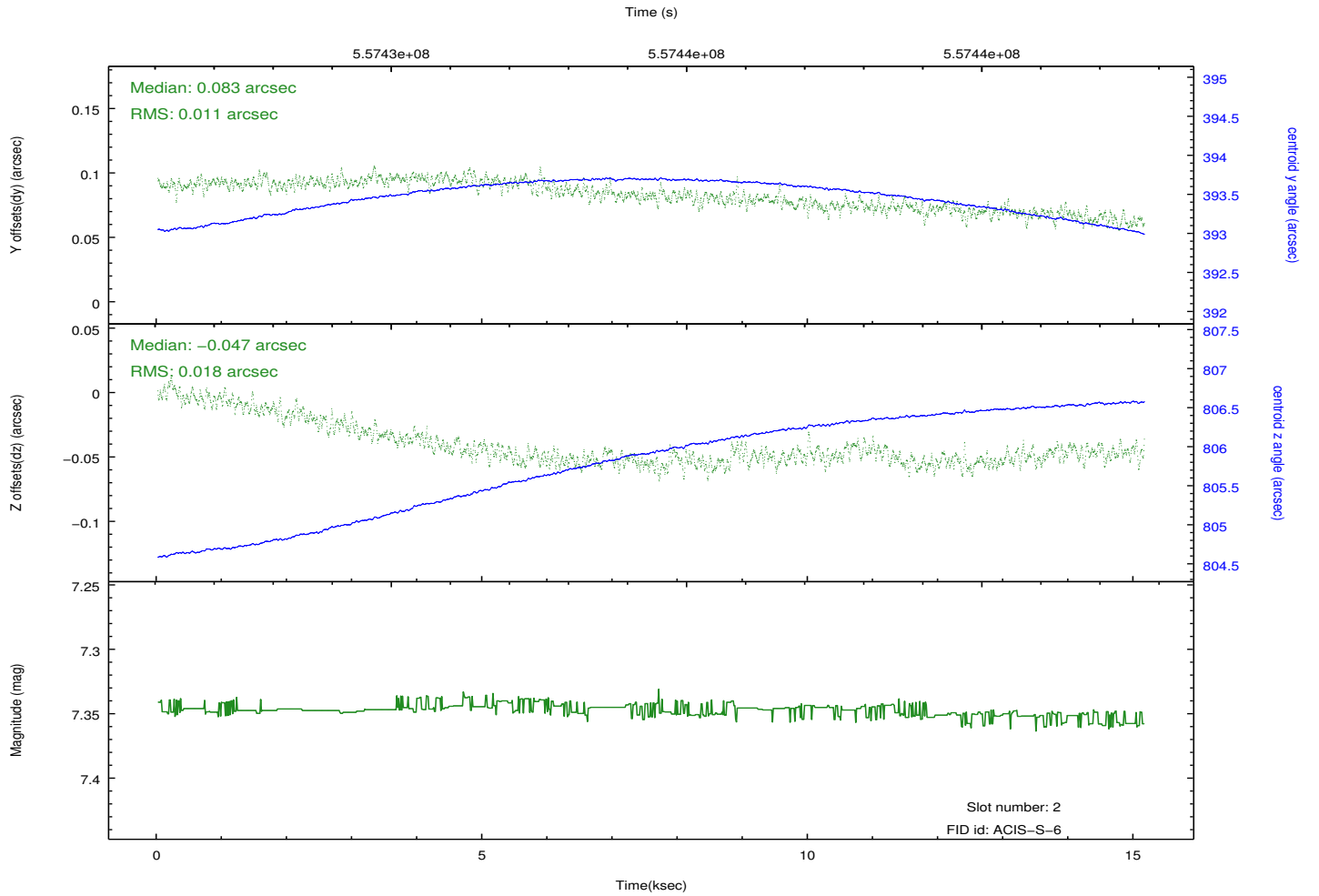
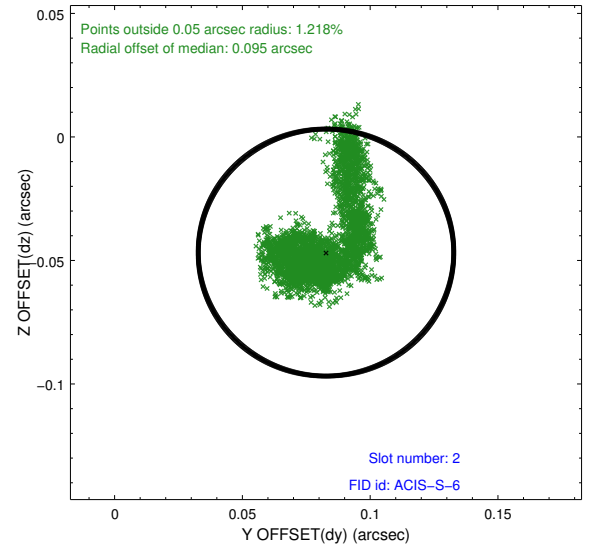
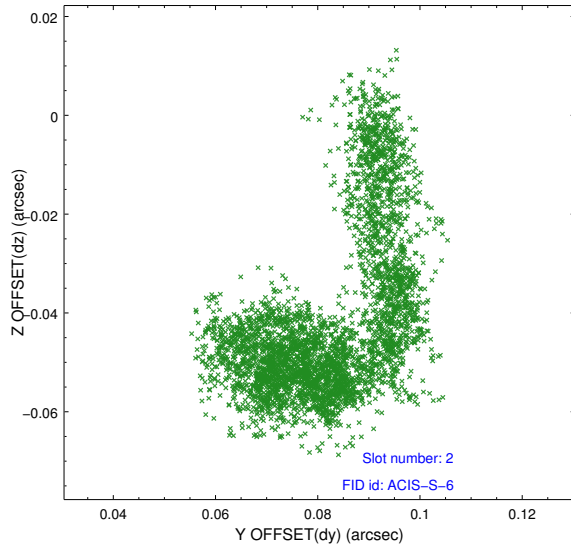
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.09.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.075300116062

### A.2 Comments