

# V&V Reference Report

## L2 ASCDS Version : 10.1.1

Observation 16556 - L2 Version 2  
Chandra X-Ray Center

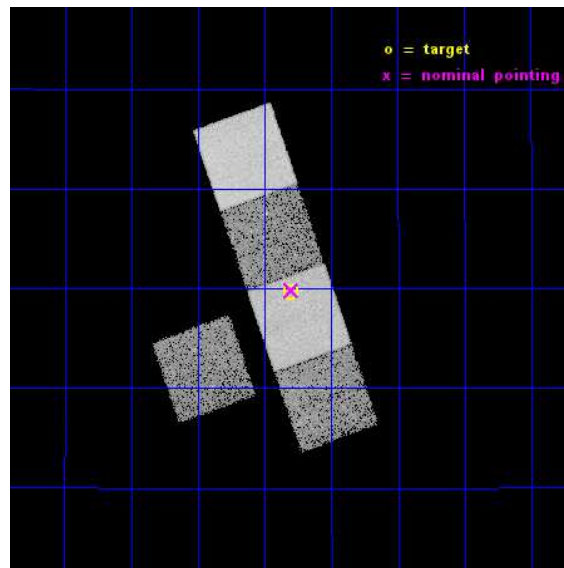
L2 Processing Date : Dec 8 2014

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# 1 Front

seq_num	502268	Sequence number
obs_id	16556	Observation id
title	Constraining the progenitor mass-loss and shock parameters around a very unusual explosion: SN2013ge	Proposal title
observer	Dr Raffaella Margutti	Principal investigator
object	SN2013ge	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	158.702083	Observer's specified target RA [deg]
dec_targ	21.661639	Observer's specified target Dec [deg]
ra_nom	158.70008418118	Nominal RA [deg]
dec_nom	21.663989783865	Nominal Dec [deg]
roll_nom	70.662416631844	Nominal Roll [deg]
revision	2	Processing version of data
ontime	19064.984332919	Sum of GTIs [s]
livetime	18815.886277172	Livetime [s]
ontime3	19064.861212909	Sum of GTIs [s]
ontime5	19064.943292916	Sum of GTIs [s]
ontime6	19064.902252913	Sum of GTIs [s]
ontime7	19064.984332919	Sum of GTIs [s]
ontime8	19058.538122296	Sum of GTIs [s]
l2events	149557	Number of level 2 events

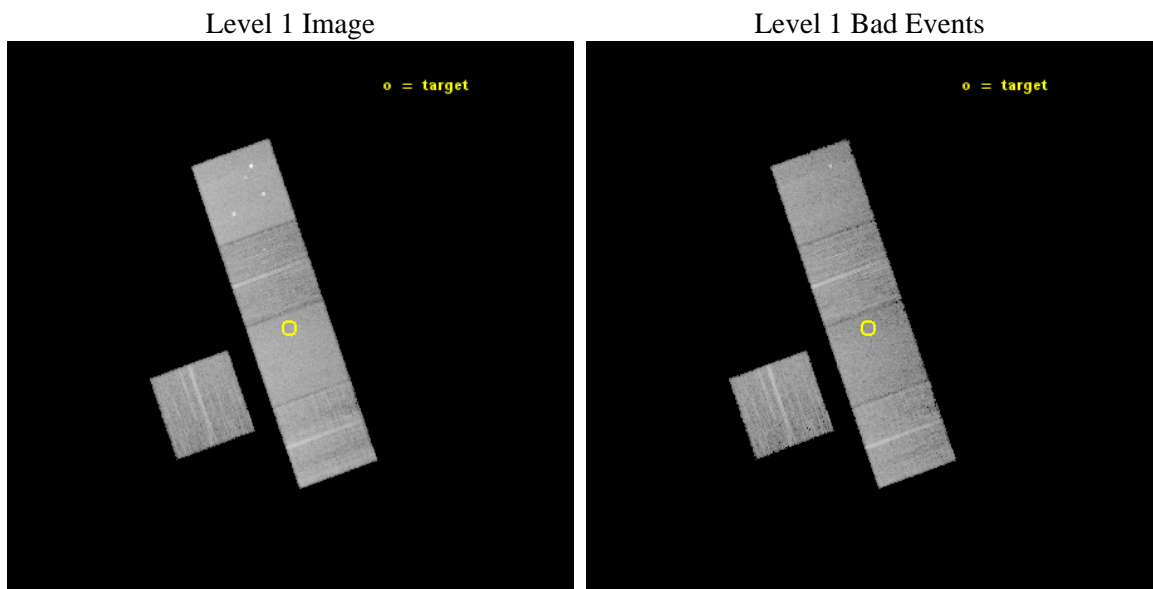




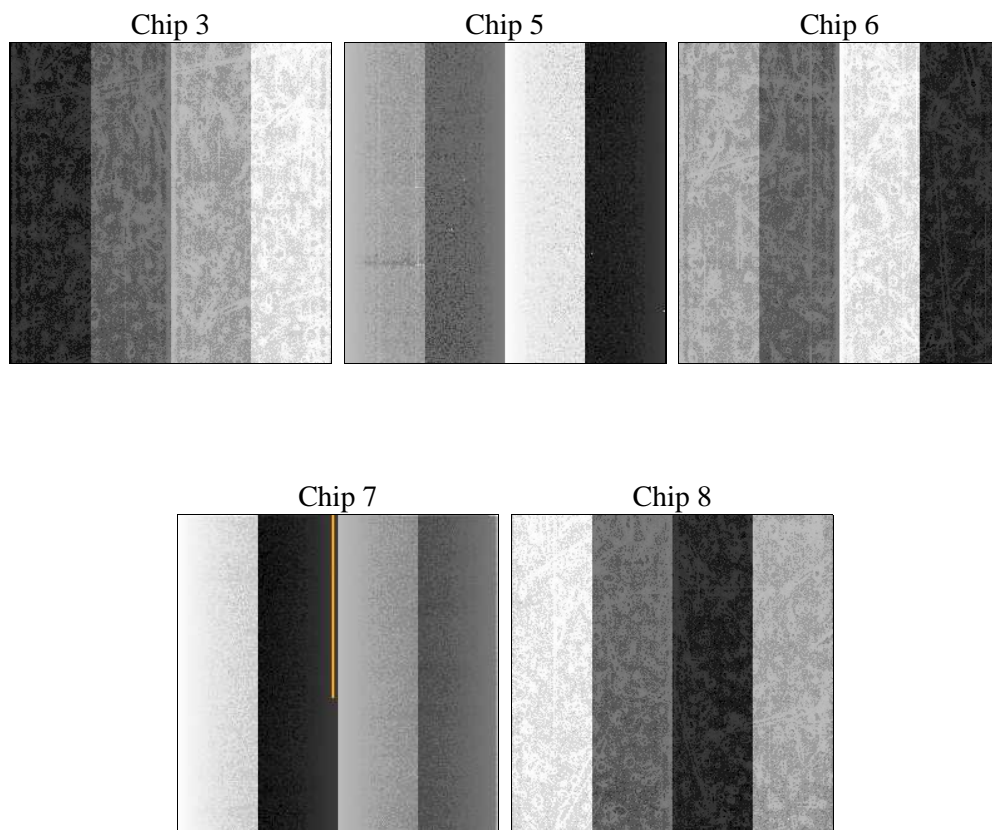
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	19000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	19064.984332919	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime3	19064.861212909	Sum of GTIs [s]
date	2014-12-08T08:43:05	Date and time of file creation	ontime5	19064.943292916	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	19064.902252913	Sum of GTIs [s]
			ontime7	19064.984332919	Sum of GTIs [s]
			ontime8	19058.538122296	Sum of GTIs [s]
			l1events	578440	Number of level 1 events

### 2.1.4 Events

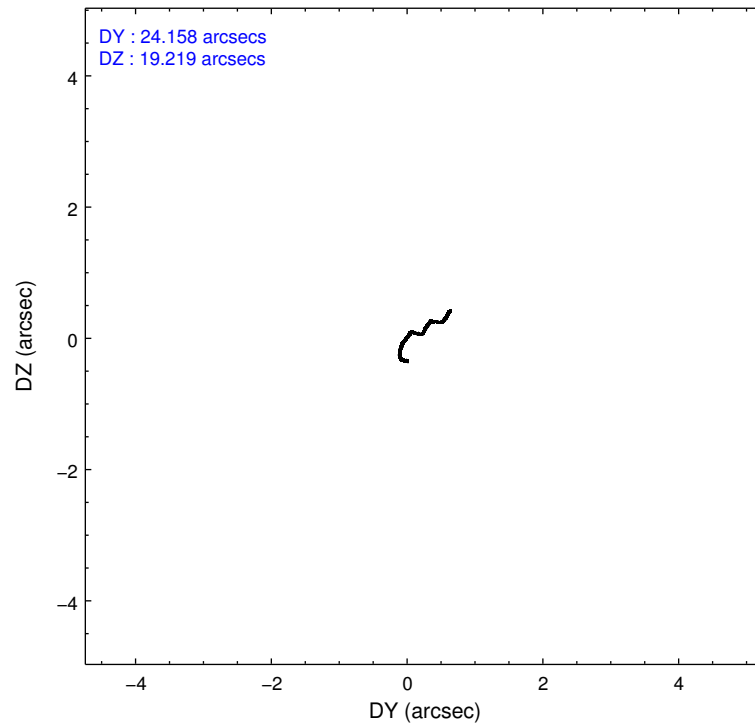
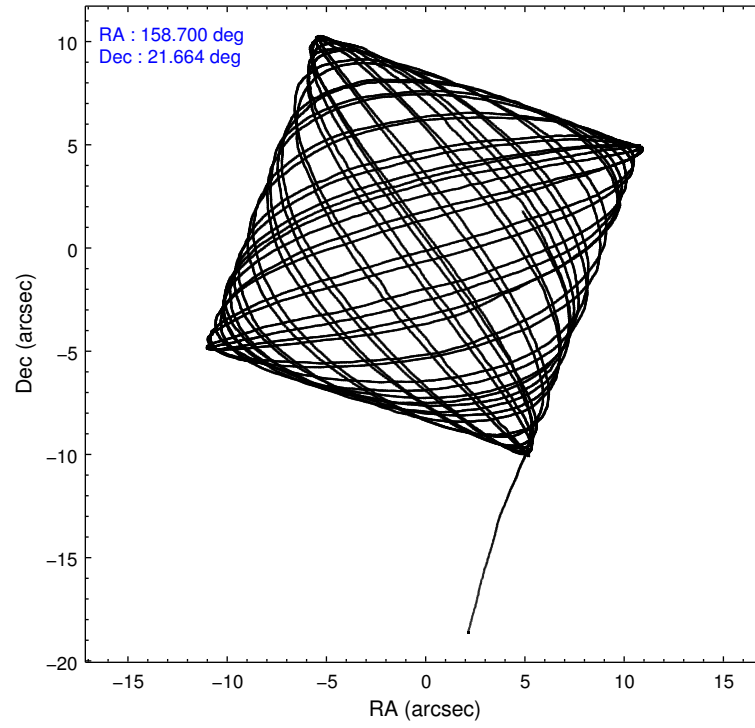
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	88632	153044	91524	124985	120255
rejected events	78664	78838	80215	71347	88360
rejected %	88%	51%	87%	57%	73%

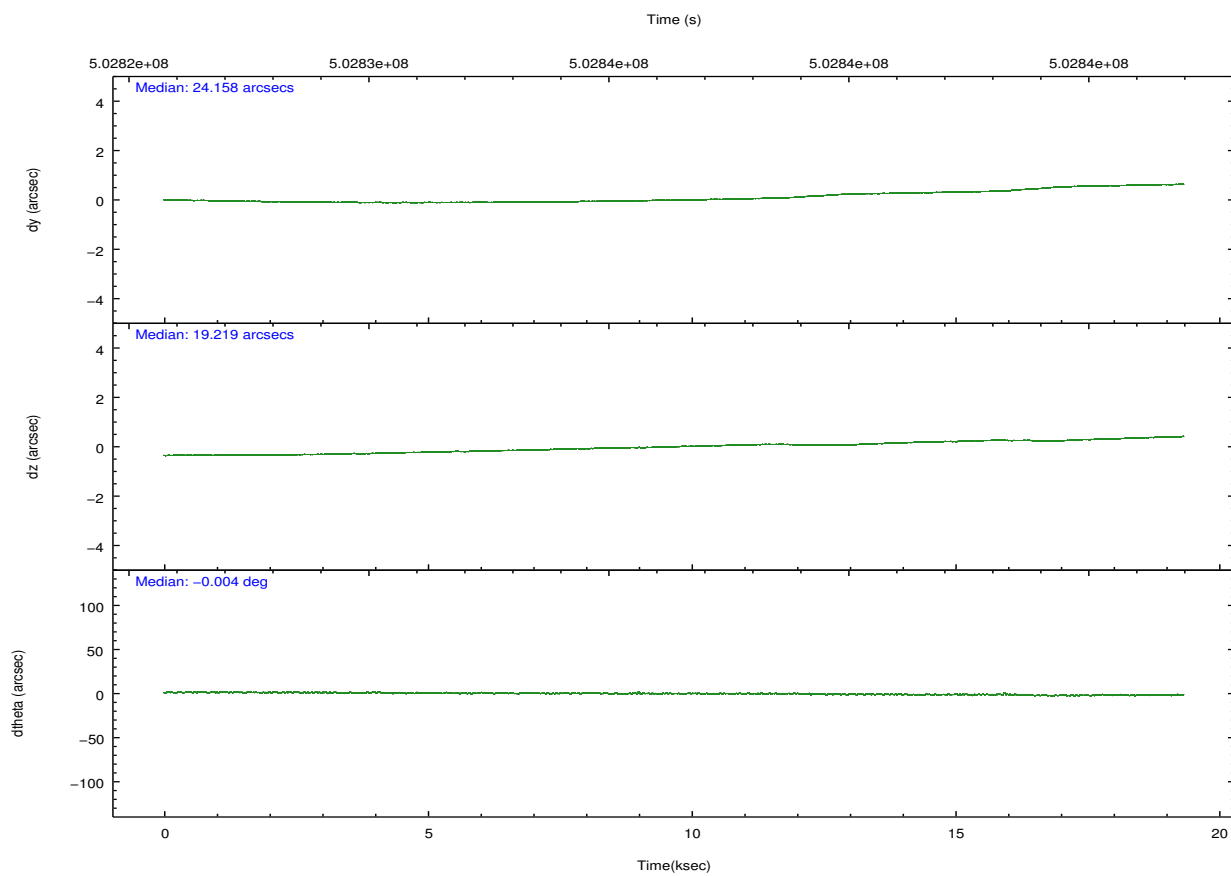
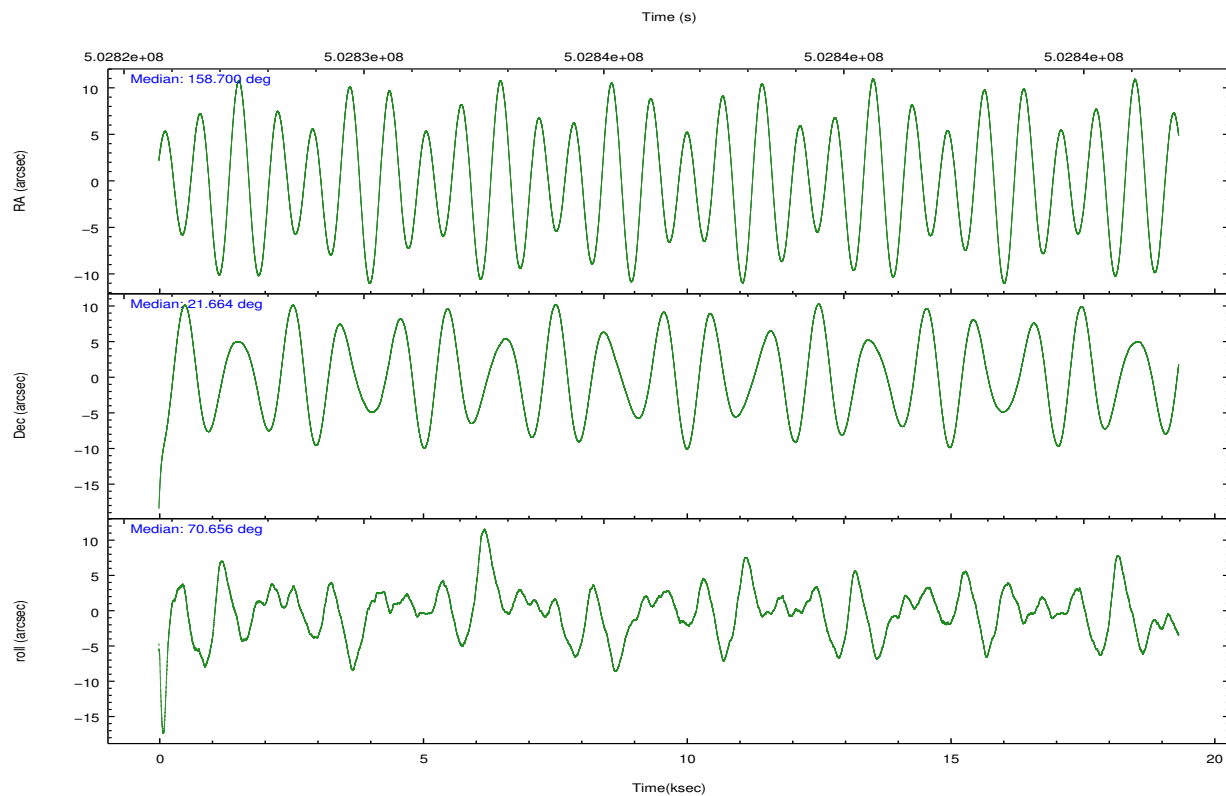
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	3462	8190	3872	4582	8823
	3%	5%	4%	3%	7%
grade 1 events	54	660	45	123	91
	0%	0%	0%	0%	0%
grade 2 events	2184	22154	2512	11048	7849
	2%	14%	2%	8%	6%
grade 3 events	1049	2343	1224	4438	3309
	1%	1%	1%	3%	2%
grade 4 events	1102	2264	1197	4413	3179
	1%	1%	1%	3%	2%
grade 5 events	4919	10807	4764	12722	7129
	5%	7%	5%	10%	5%
grade 6 events	2171	39266	2505	29161	8737
	2%	25%	2%	23%	7%
grade 7 events	73691	67360	75405	58498	81138
	83%	44%	82%	46%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	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	158.705908	158.7000841811834	CCD I2 on	N	N
[deg] Pointing Dec	21.637226	21.66398978386514	CCD I3 on	O1	Y
[deg] Pointing Roll	70.503633	70.66241663184371	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	Y	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	Y	Y
[s] Observation start time (MET)	502827004.184000	502825975.47896	CCD S5 on	N	N
Observation start date	2013-12-07T18:08:57	2013-12-07T17:52:55	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	502846004.184000	502846989.51761	On-chip summing requested	N	N
Observation end date	2013-12-07T23:25:37	2013-12-07T23:43:09	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



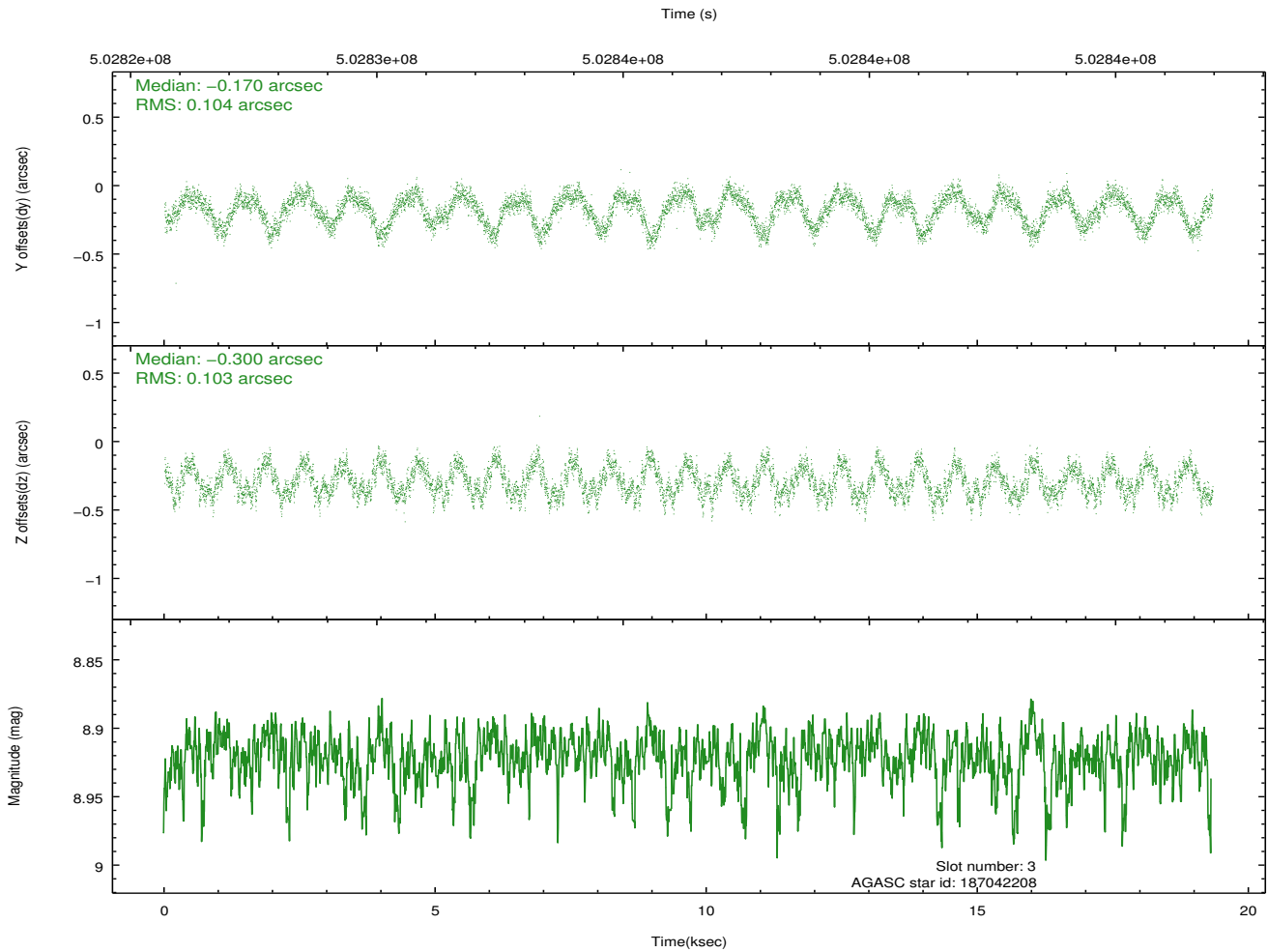
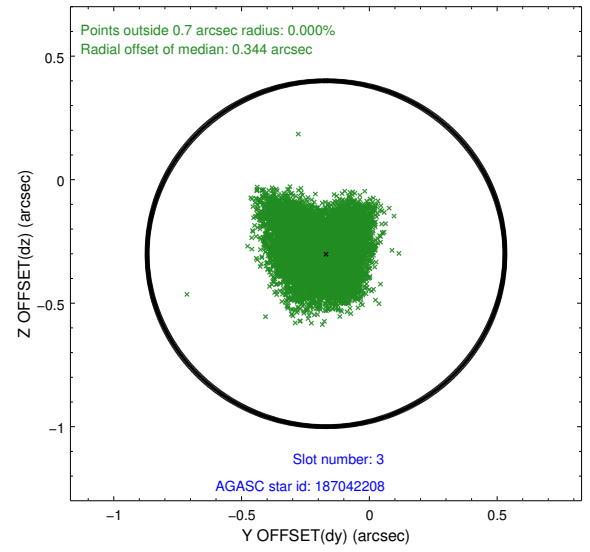
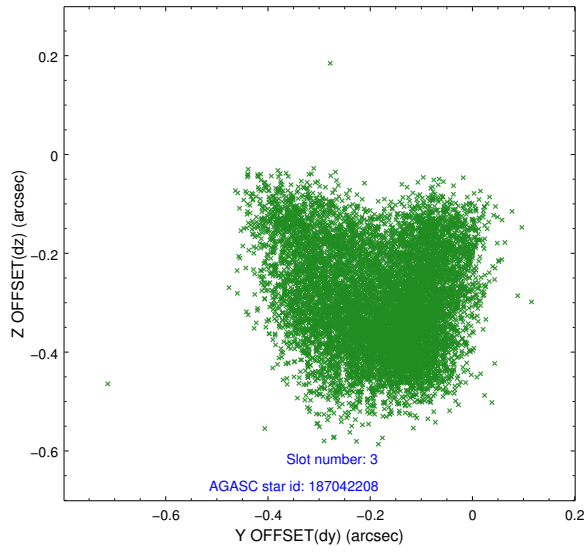


### Slot Statistics

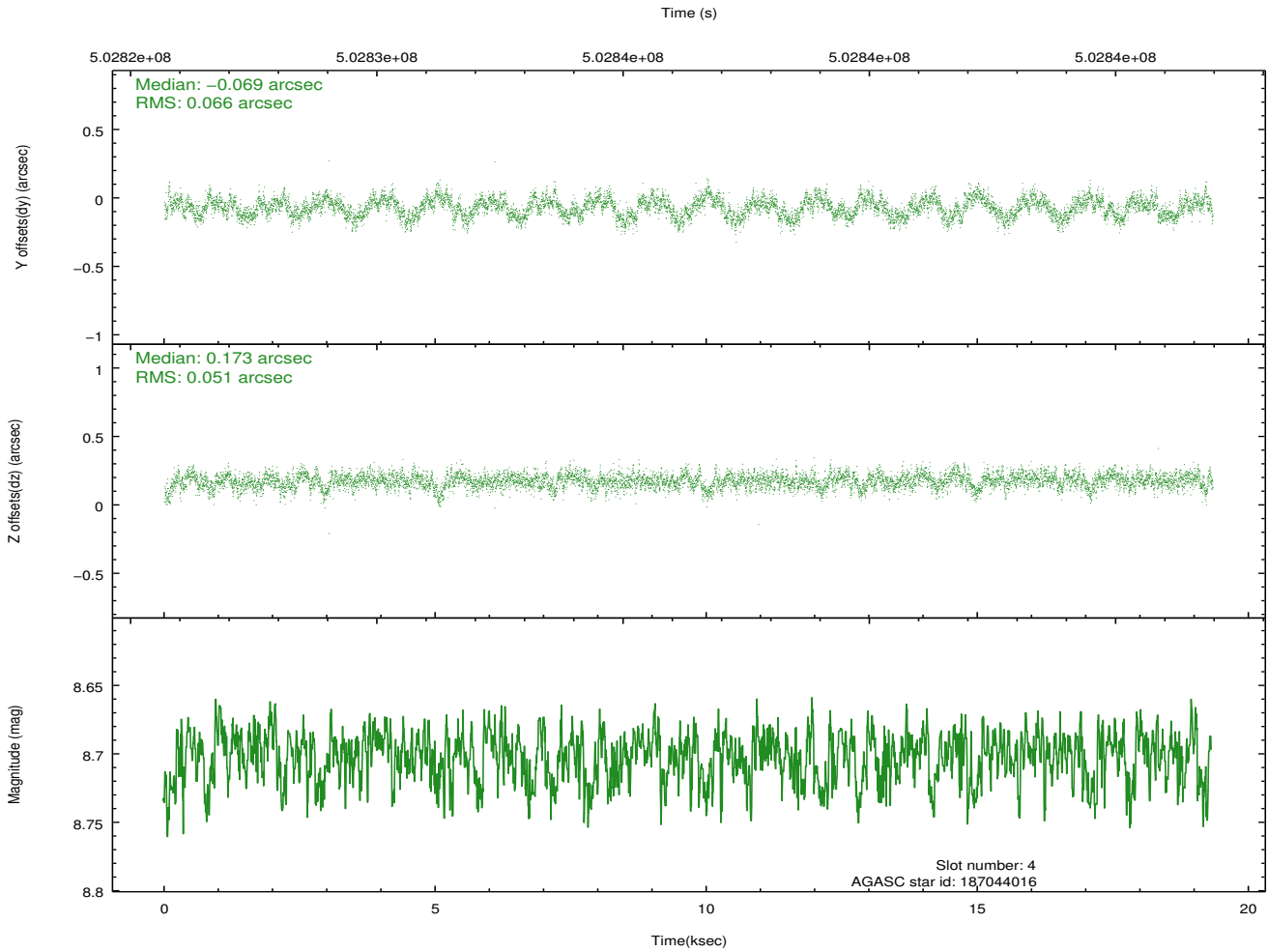
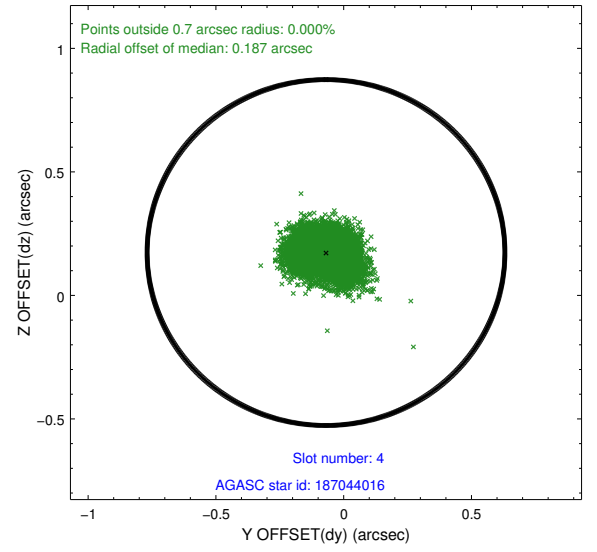
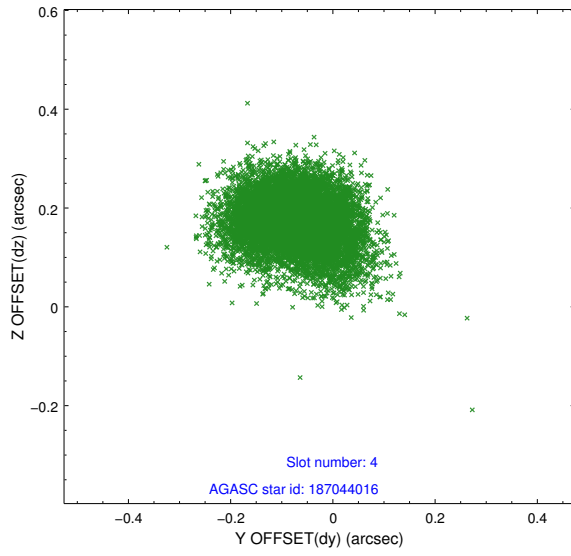
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.05	4715	-0.183	-0.065	0.020	0.038	0.000000	0.000000	-777.69	-1740.75
1	FID		ACIS-S-4	7.15	4715	0.386	0.106	0.006	0.011	0.000000	0.000000	2136.07	167.67
2	FID		ACIS-S-5	7.17	4716	-0.234	-0.032	0.019	0.038	0.000000	0.000000	-1830.32	161.45
3	GUIDE	used	187042208	8.92	9424	-0.170	-0.300	0.157	0.246	158.716505	21.709720	257.96	53.30
4	GUIDE	used	187044016	8.70	9429	-0.069	0.173	0.089	0.144	159.171030	21.603259	404.65	-1504.47
5	GUIDE	used	187044480	9.33	9425	0.106	-0.146	0.109	0.178	158.428011	21.568202	-543.53	794.31
6	GUIDE	used	187046328	7.98	9431	0.101	0.222	0.105	0.166	158.822252	21.378816	-747.36	-676.53
7	GUIDE	used	187048144	9.43	9422	0.050	0.052	0.172	0.283	159.500797	22.074093	2374.81	-1971.84

## 2.4 Star Slots

### 2.4.1 Slot 3

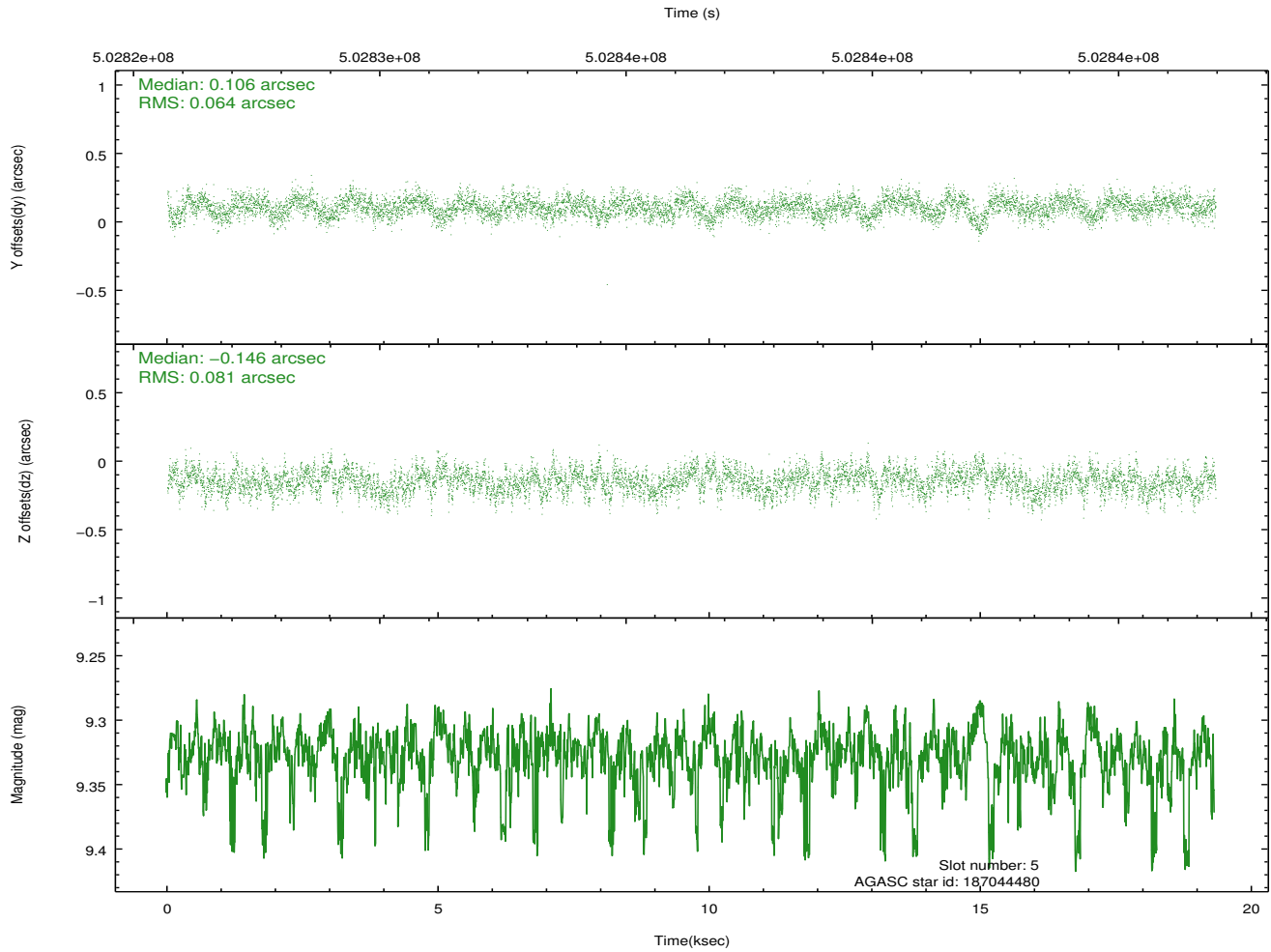
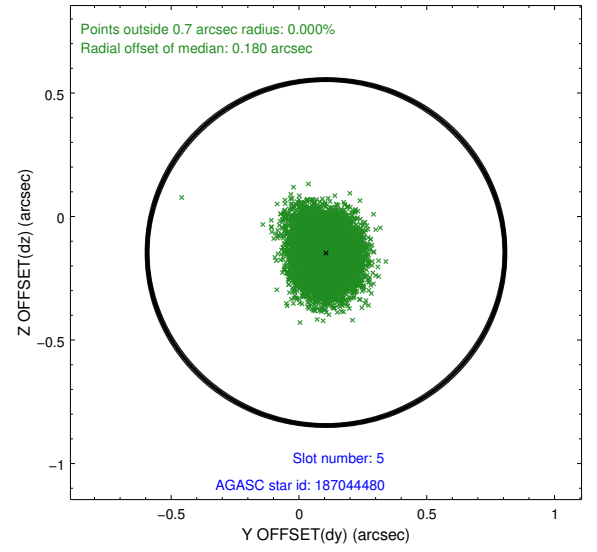
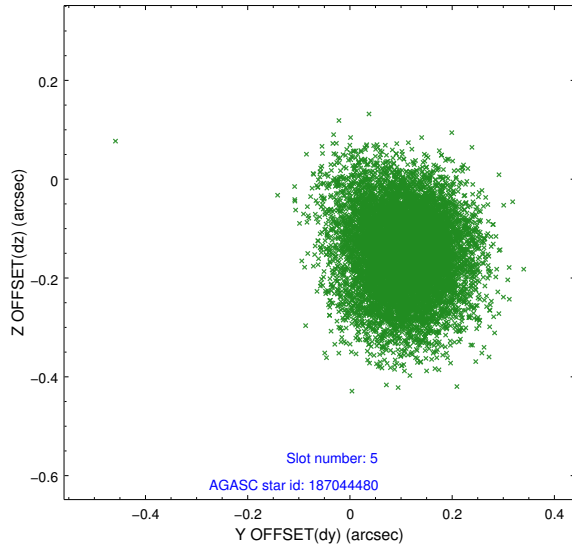


## 2.4.2 Slot 4

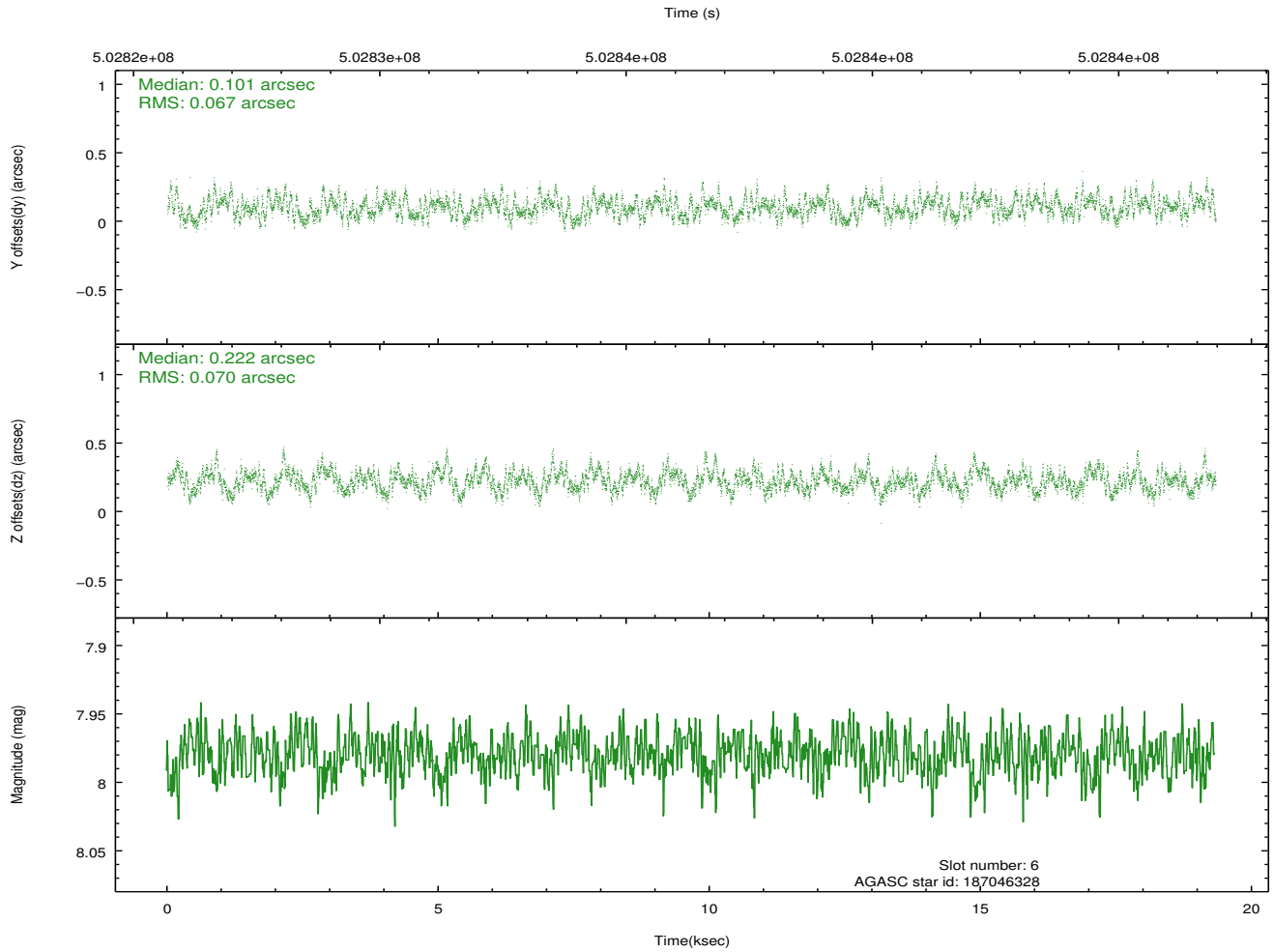
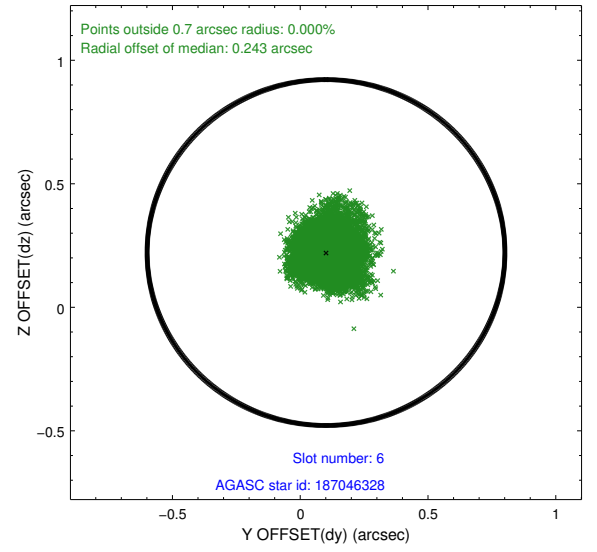
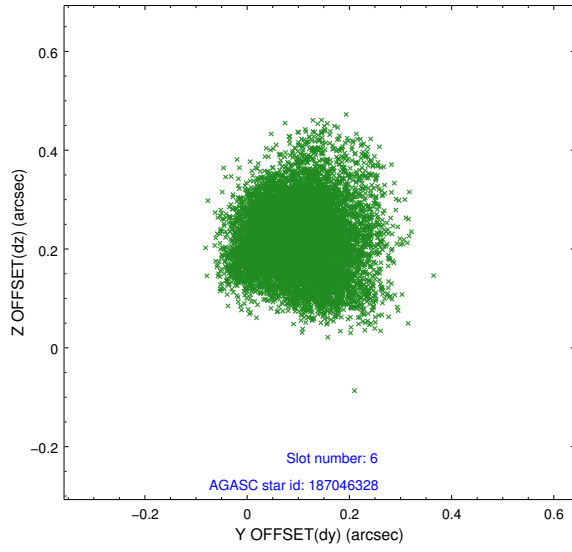




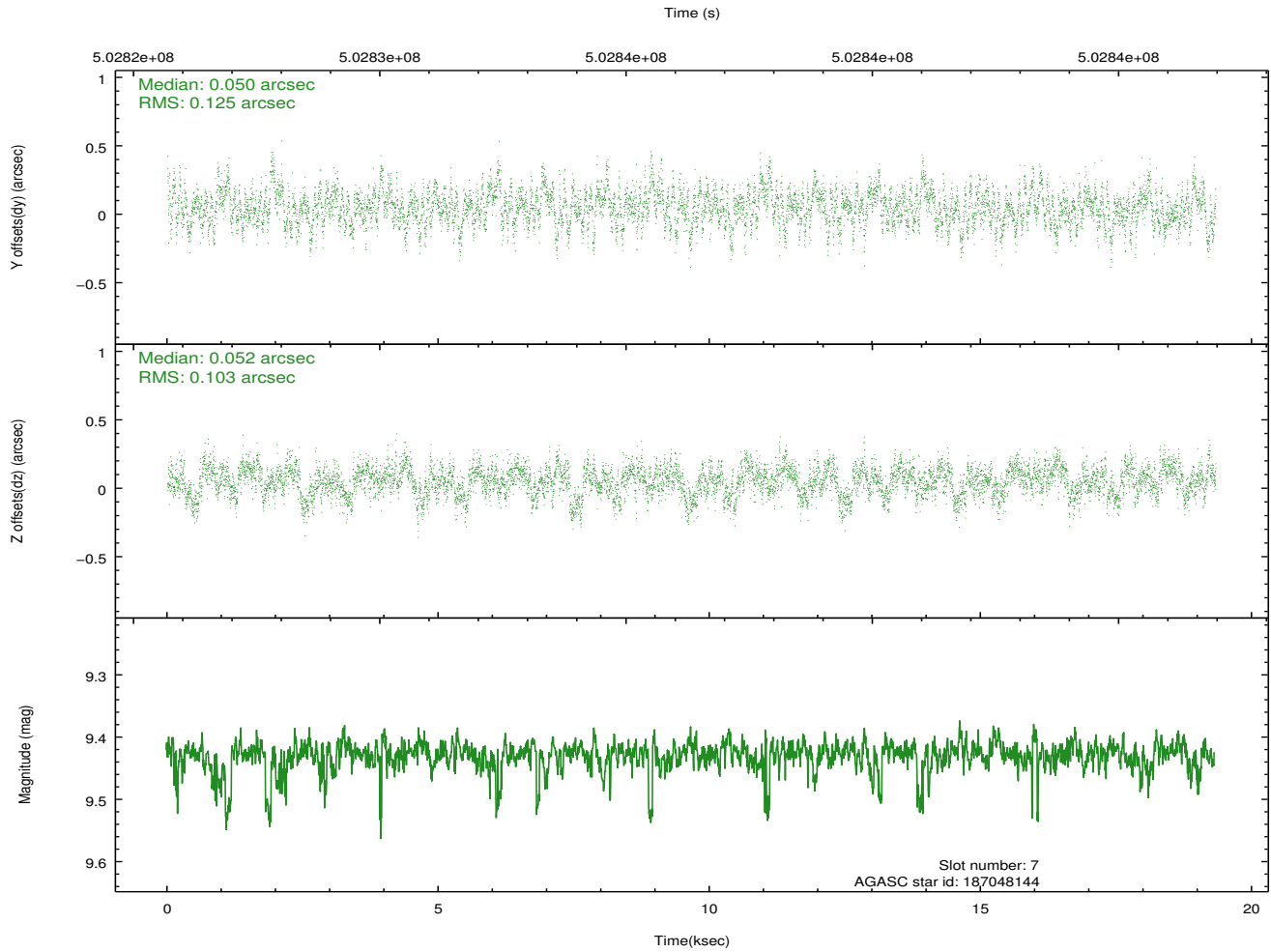
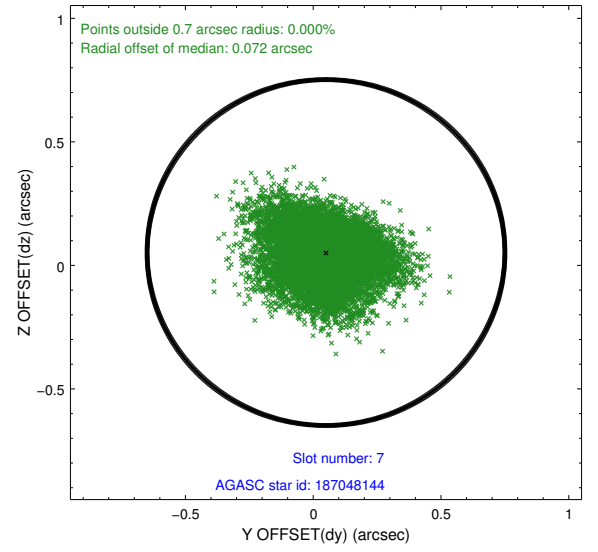
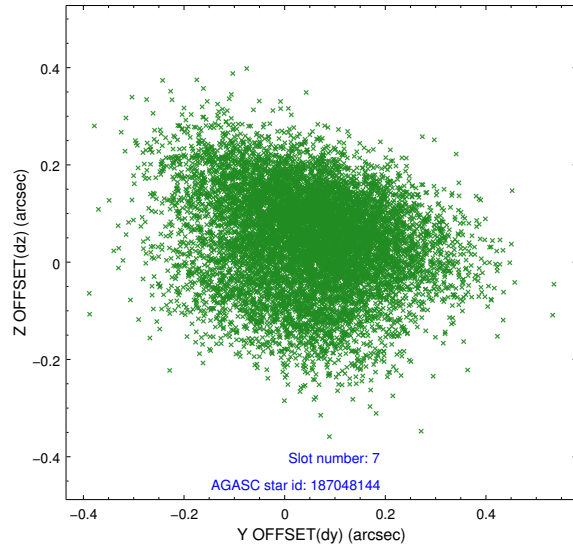
### 2.4.3 Slot 5



## 2.4.4 Slot 6

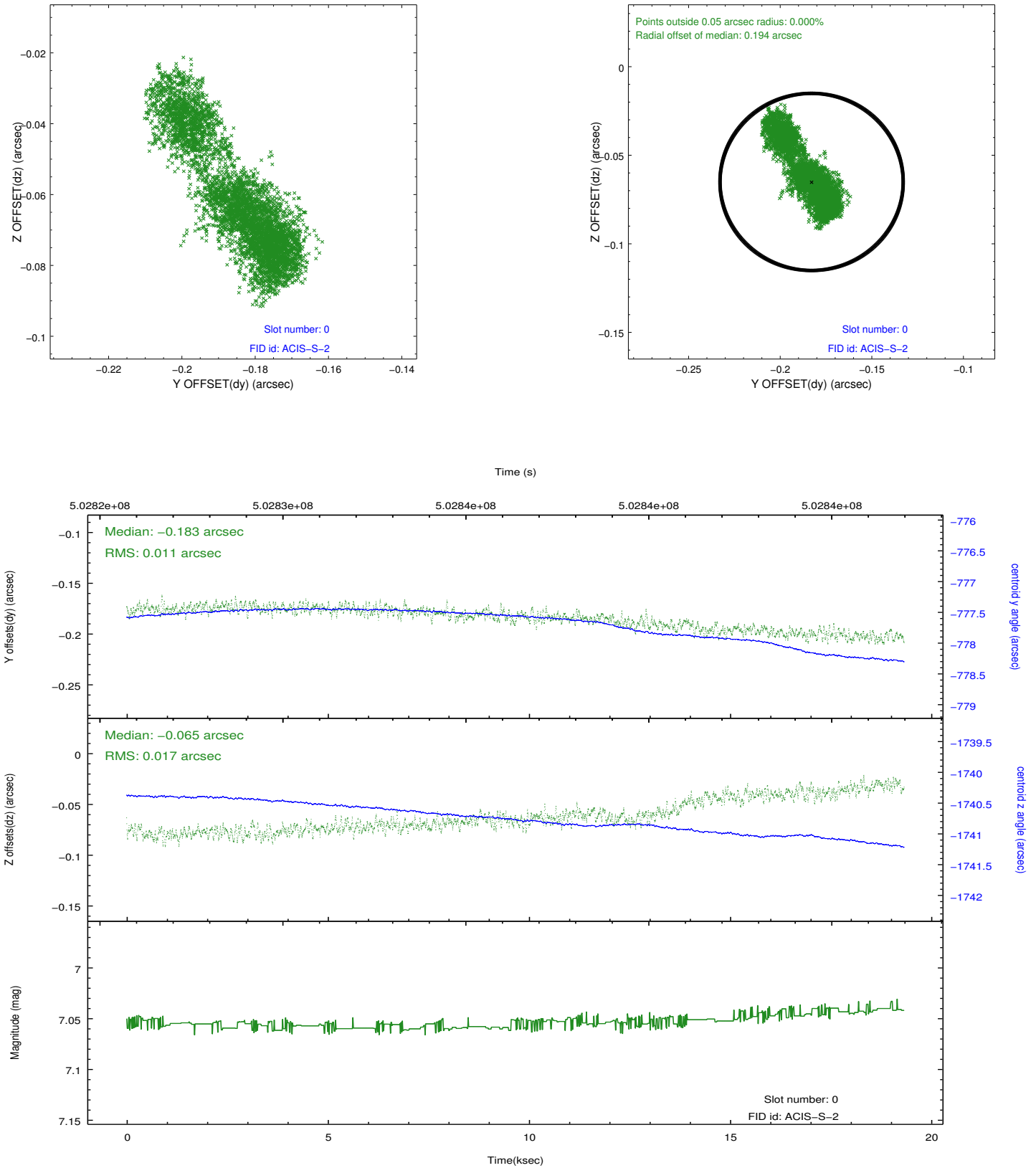


## 2.4.5 Slot 7

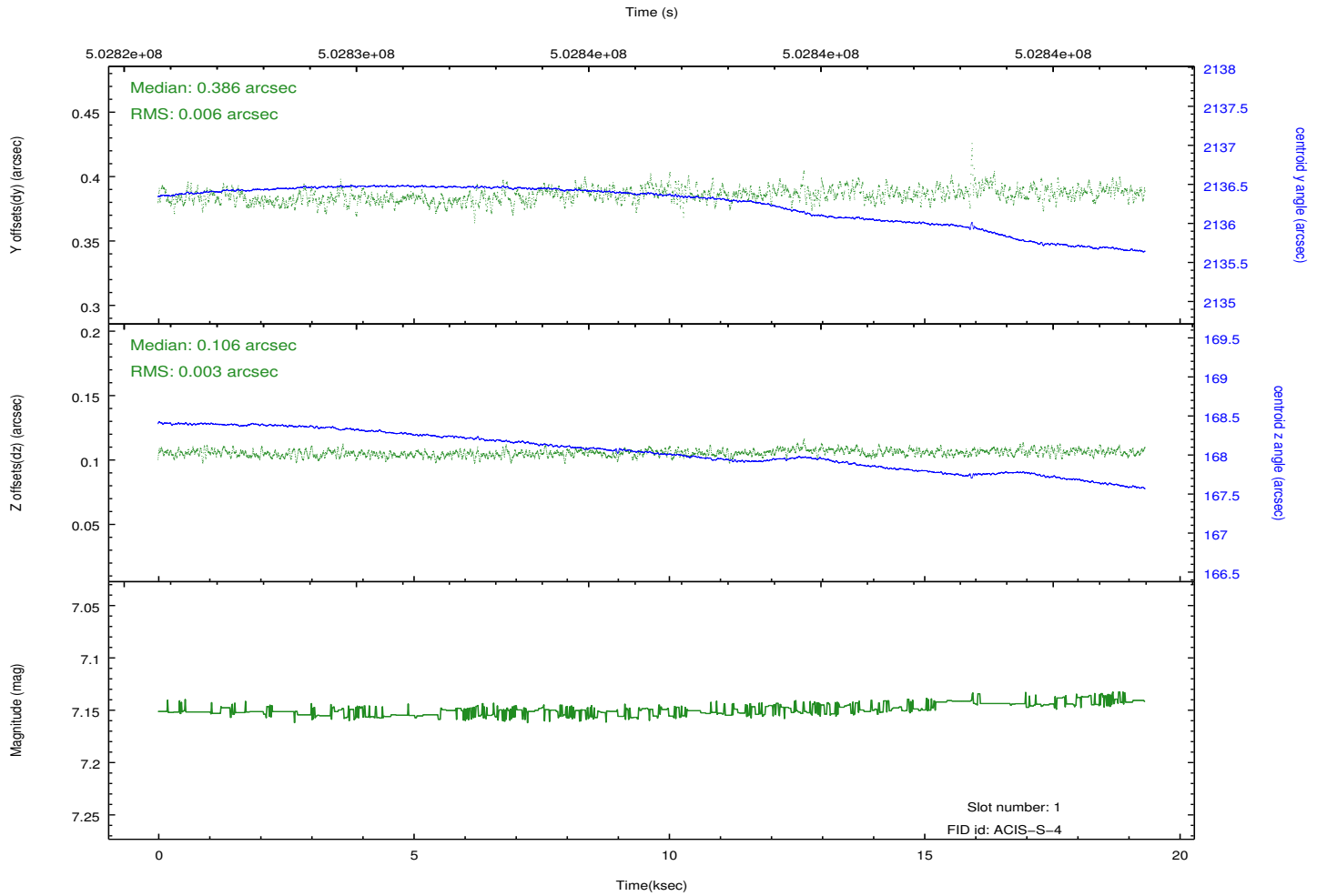
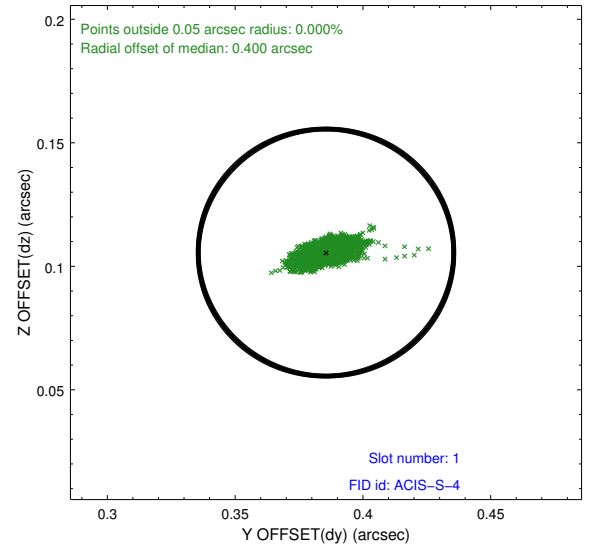
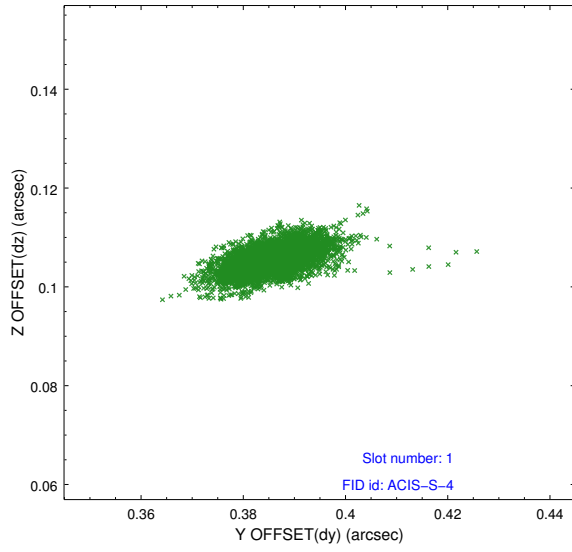


## 2.5 FID Slots

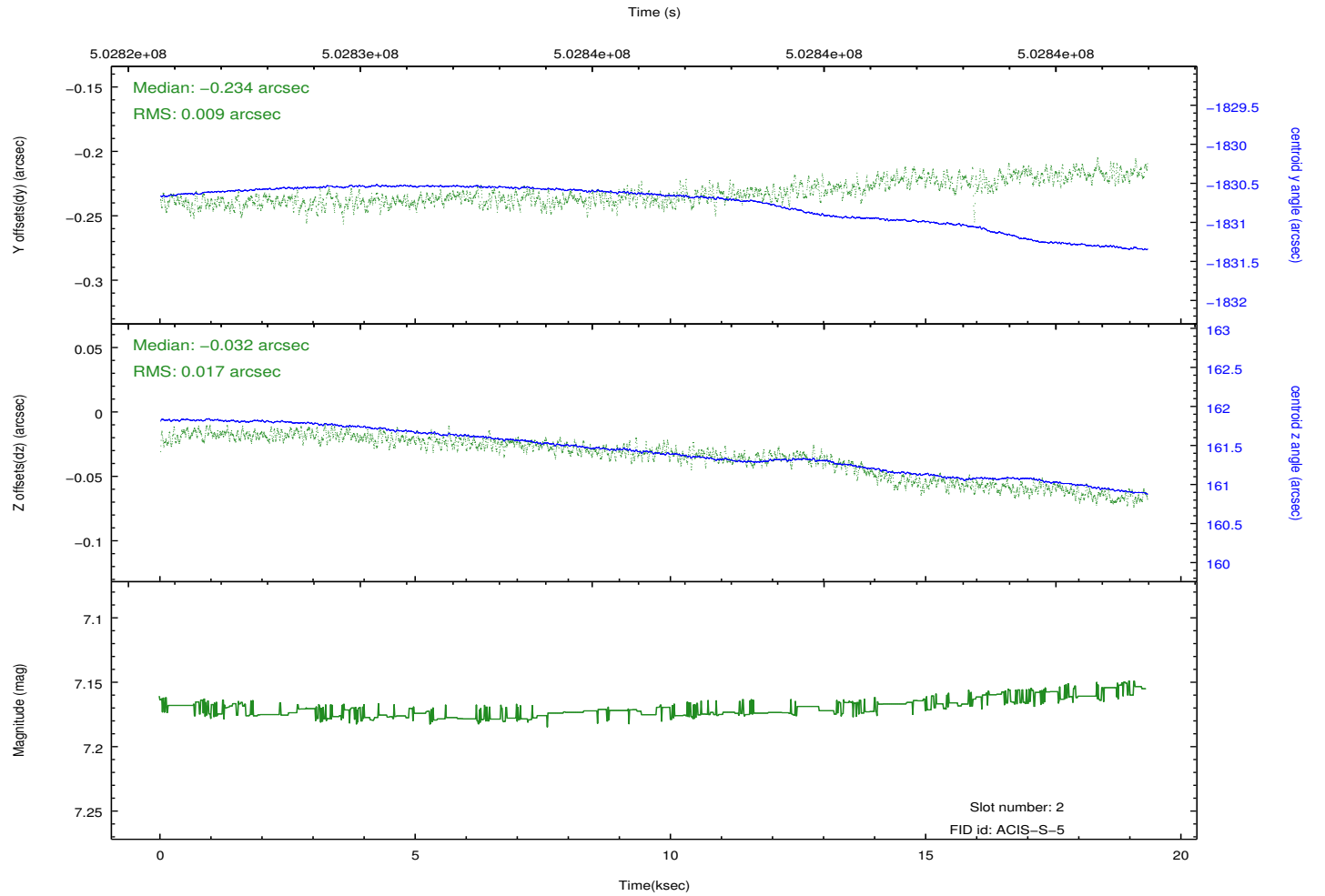
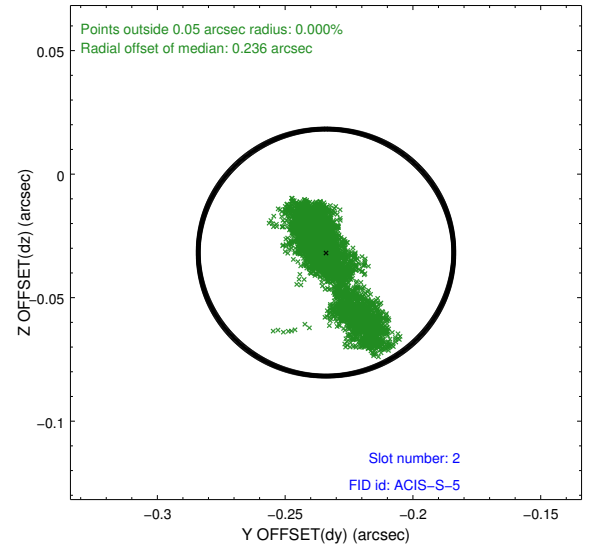
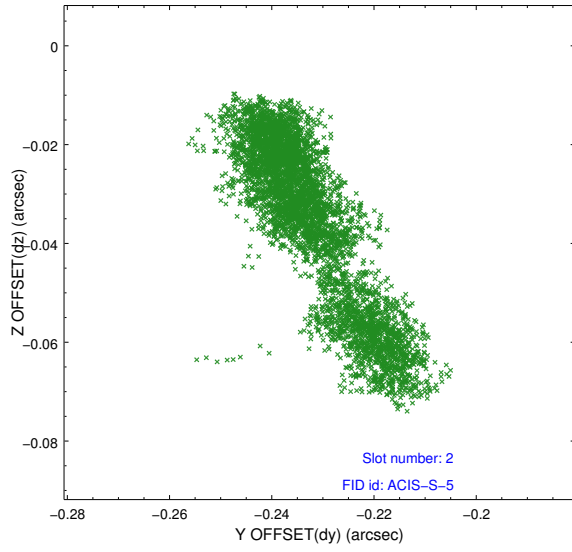
### 2.5.1 Slot 0



## 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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	19.064984332919

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.