

# V&V Reference Report

## L2 ASCDS Version : 10.4

Observation 16665 - L2 Version 1  
Chandra X-Ray Center

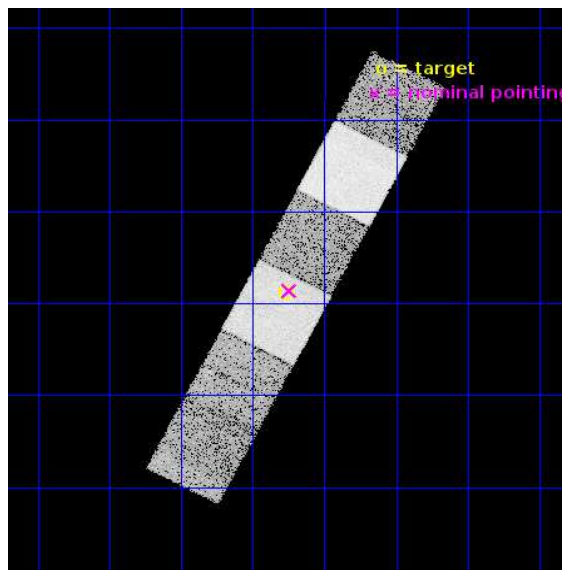
L2 Processing Date : Jun 12 2015

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# 1 Front

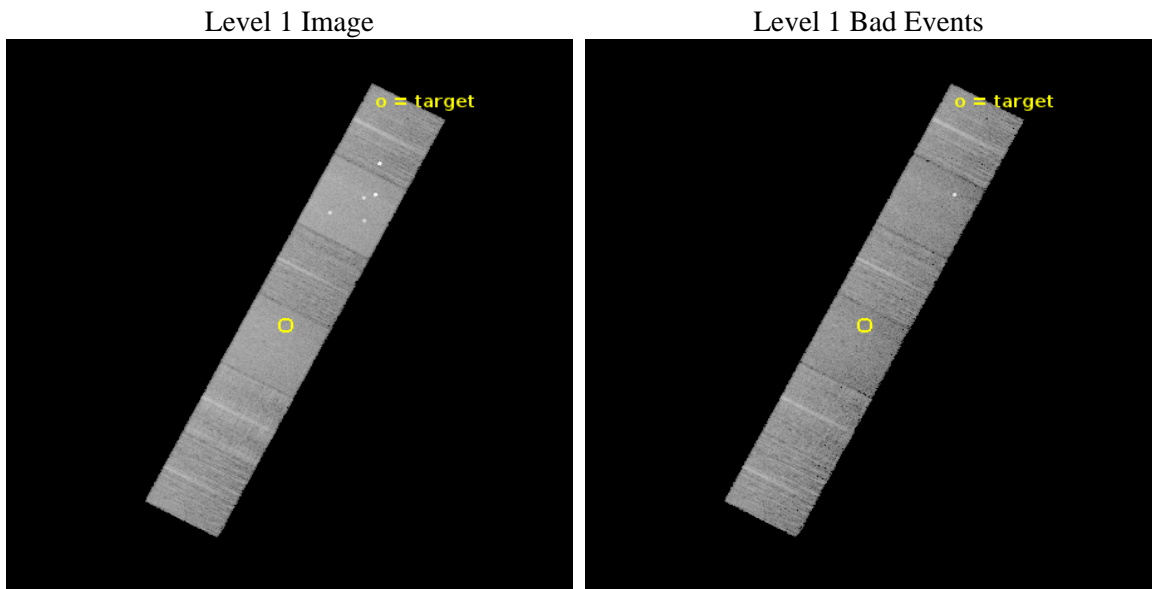
seq_num	200986	Sequence number
obs_id	16665	Observation id
title	An age-activity calibration for old low-mass stars	Proposal title
observer	Dr Katja Poppenhaeger	Principal investigator
object	NLTT4616	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	20.81625	Observer's specified target RA [deg]
dec_targ	-2.145778	Observer's specified target Dec [deg]
ra_nom	20.811254849861	Nominal RA [deg]
dec_nom	-2.1435761073744	Nominal Dec [deg]
roll_nom	117.55444878288	Nominal Roll [deg]
revision	1	Processing version of data
ontime	14928.000222445	Sum of GTIs [s]
liveltime	14738.972895065	Livetime [s]
ontime4	14928.000222445	Sum of GTIs [s]
ontime5	14928.000222445	Sum of GTIs [s]
ontime6	14928.000222445	Sum of GTIs [s]
ontime7	14928.000222445	Sum of GTIs [s]
ontime8	14924.75932169	Sum of GTIs [s]
ontime9	14928.000222445	Sum of GTIs [s]
l2events	139472	Number of level 2 events



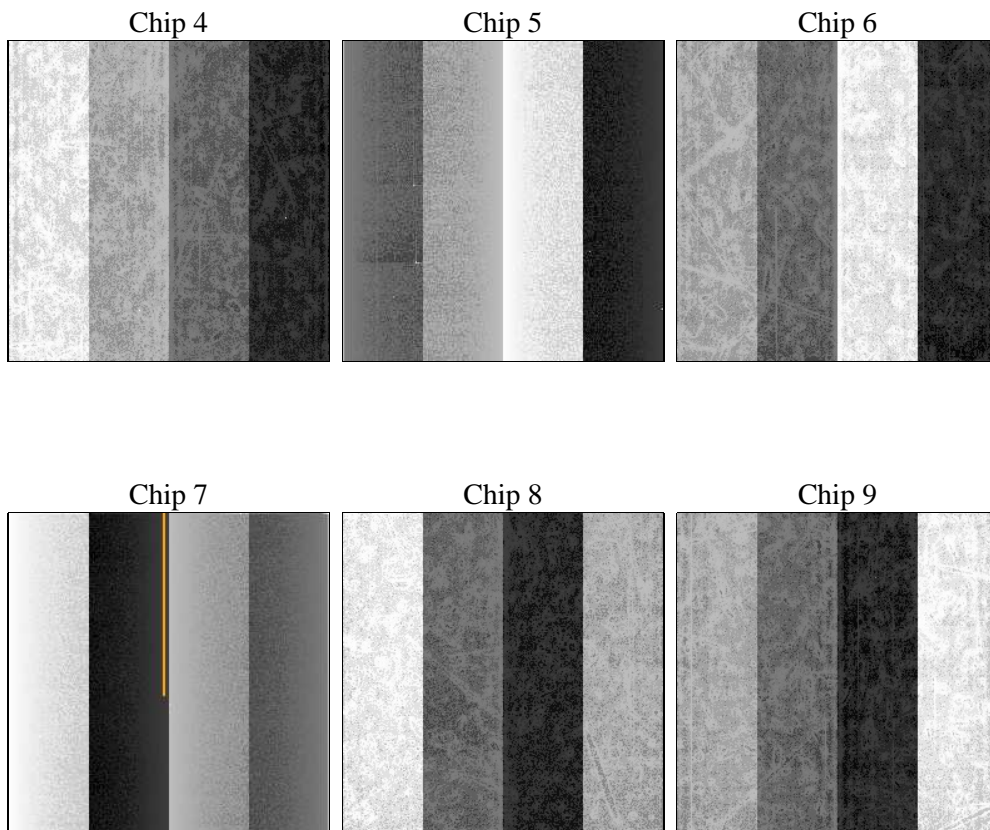
## 2 OBI

### 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	10.4	Processing system revision	ontime	14928.000222445	Sum of GTIs [s]
caldbver	4.6.7	&#160	ontime4	14928.000222445	Sum of GTIs [s]
date	2015-06-13T00:09:23	Date and time of file creation	ontime5	14928.000222445	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	14928.000222445	Sum of GTIs [s]
			ontime7	14928.000222445	Sum of GTIs [s]
			ontime8	14924.75932169	Sum of GTIs [s]
			ontime9	14928.000222445	Sum of GTIs [s]
			l1events	599037	Number of level 1 events

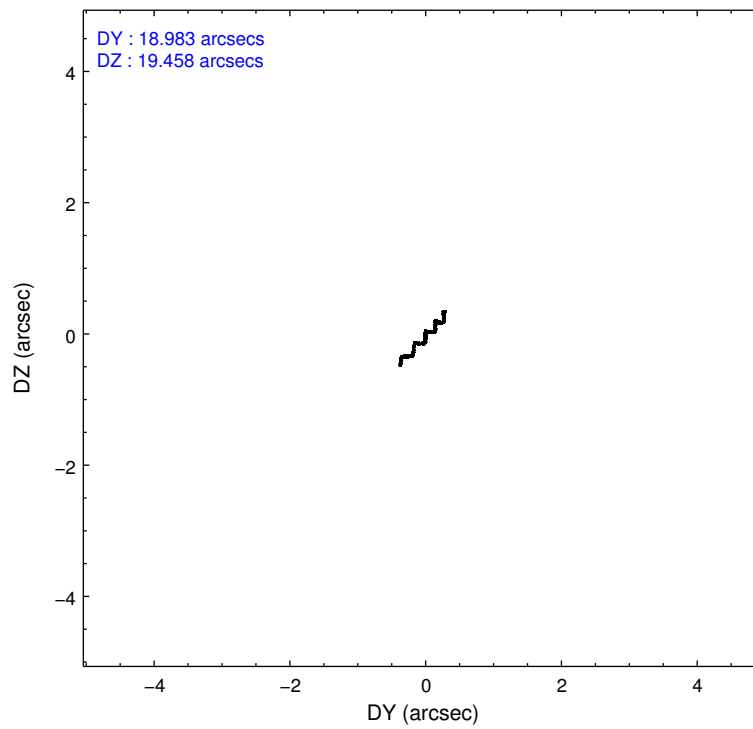
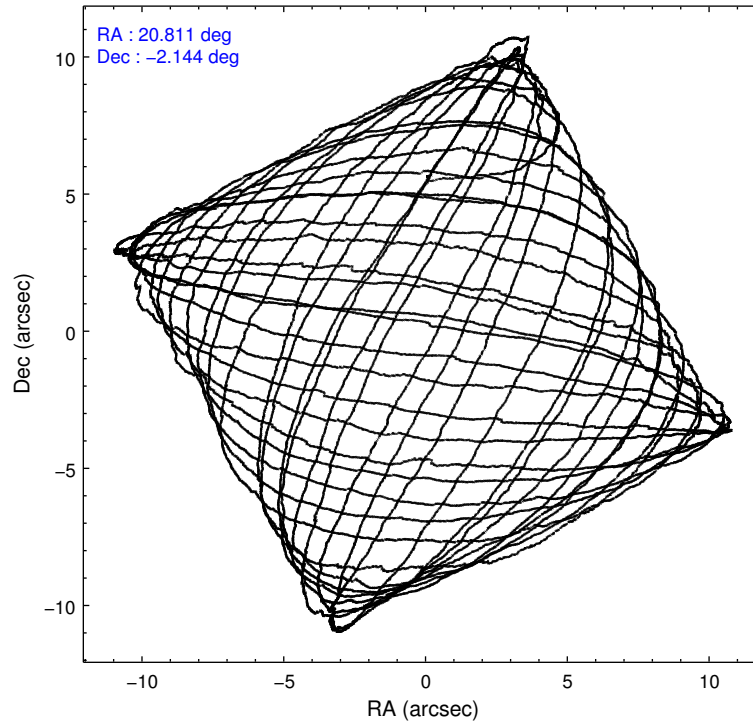
### 2.1.4 Events

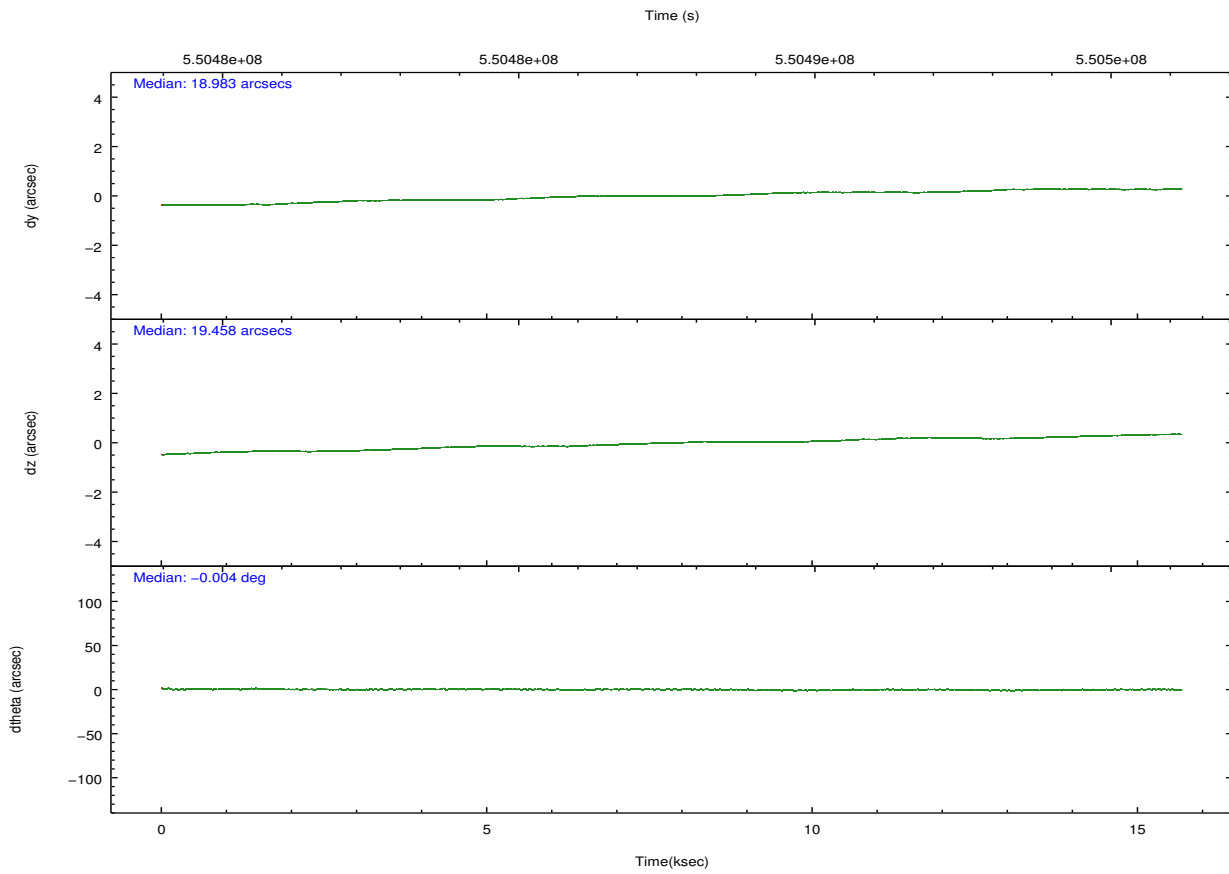
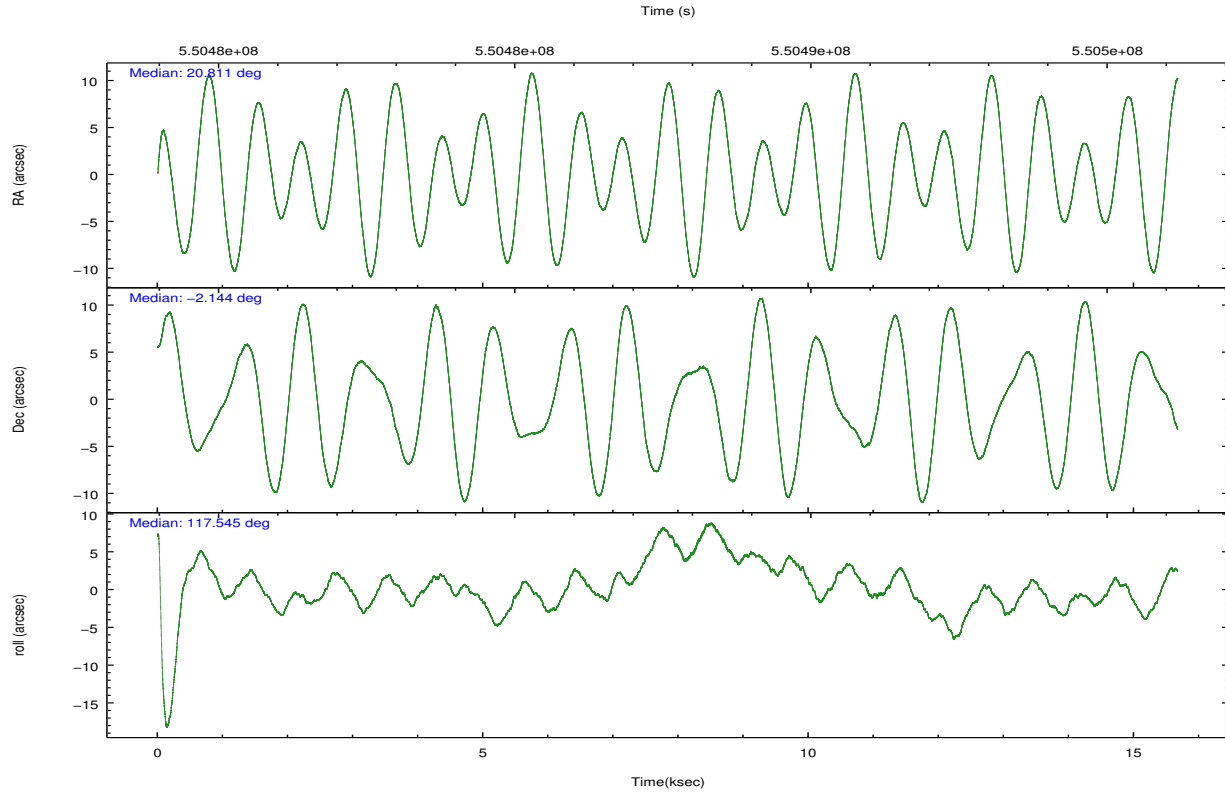
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9		ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	92097	135018	79900	105683	104862	81477	grade 0 events	8225	8076	3101	3998	9319	3475
rejected events	77520	68323	70547	59386	74361	71565		8%	5%	3%	3%	8%	4%
rejected %	84%	50%	88%	56%	70%	87%	grade 1 events	87	240	28	140	70	44
								0%	0%	0%	0%	0%	0%
							grade 2 events	2456	20836	2163	9729	6934	2259
								2%	15%	2%	9%	6%	2%
							grade 3 events	1071	2163	934	3790	3387	1008
								1%	1%	1%	3%	3%	1%
							grade 4 events	1031	2063	928	3779	3220	963
								1%	1%	1%	3%	3%	1%
							grade 5 events	4028	9510	3952	10888	5727	4414
								4%	7%	4%	10%	5%	5%
							grade 6 events	1795	33580	2229	25013	7653	2210
								1%	24%	2%	23%	7%	2%
							grade 7 events	73404	58550	66565	48346	68552	67104
								79%	43%	83%	45%	65%	82%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-456789	ACIS-456789	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	20.834631	20.81125484986127	CCD I2 on	N	N
[deg] Pointing Dec	-2.158029	-2.14357610737436	CCD I3 on	N	N
[deg] Pointing Roll	117.398681	117.5544487828812	CCD S0 on	O1	Y
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O3	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O5	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)	550480423.184000	550479220.32424	CCD S5 on	O2	Y
Observation start date	2015-06-12T07:12:36	2015-06-12T06:53:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	550495423.184000	550496168.7001899	On-chip summing requested	N	N
Observation end date	2015-06-12T11:22:36	2015-06-12T11:36:08	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect





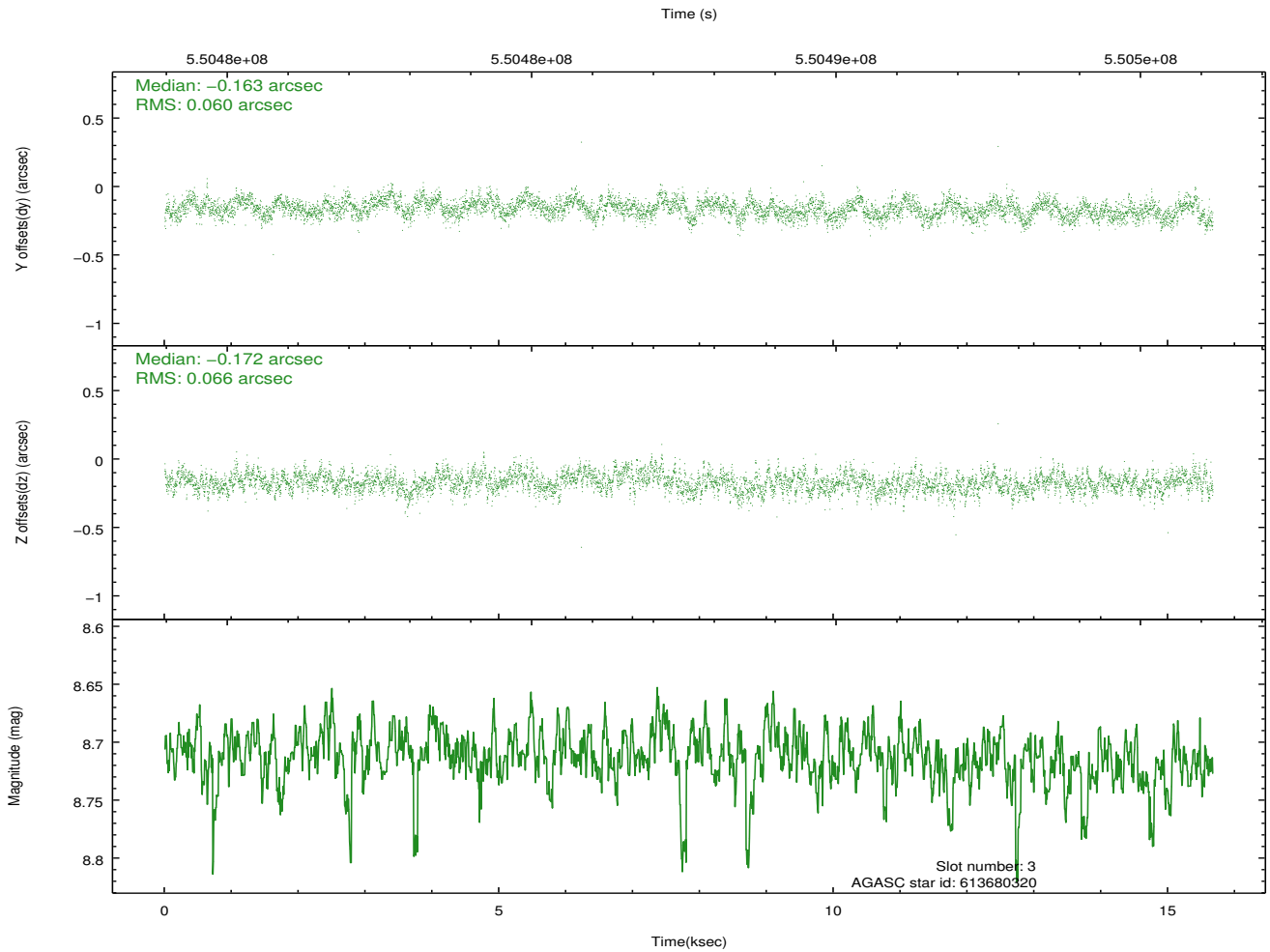
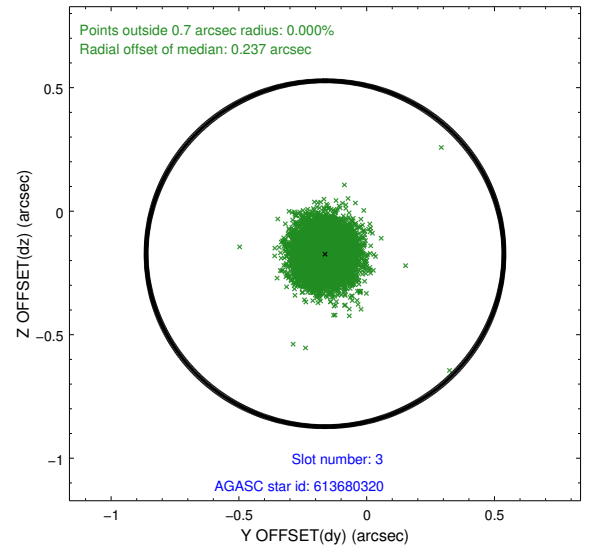
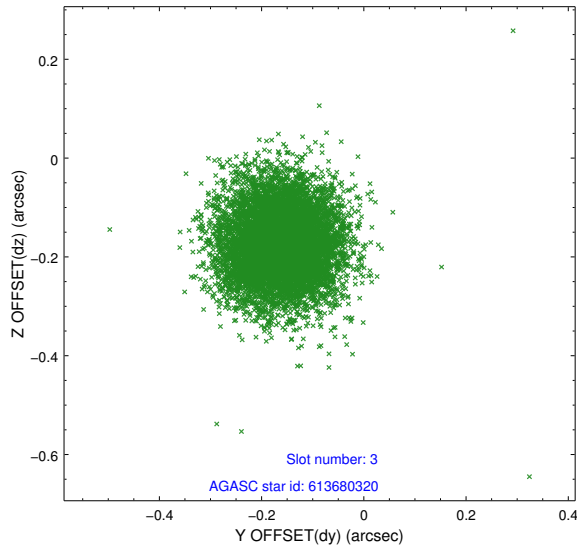
### Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.93	3823	-0.125	-0.040	0.016	0.022	0.000000	0.000000	-772.17	-1740.91
1	FID		ACIS-S-4	7.02	3823	0.310	0.071	0.006	0.012	0.000000	0.000000	2141.40	167.40
2	FID		ACIS-S-5	7.04	3823	-0.216	-0.023	0.016	0.023	0.000000	0.000000	-1824.75	161.29
3	GUIDE	used	613680320	8.71	7642	-0.163	-0.172	0.094	0.153	20.451827	-1.997046	1147.57	956.12
4	GUIDE	used	613682984	7.35	7645	-0.041	0.117	0.086	0.137	21.086300	-2.472004	-1420.06	-283.30
5	GUIDE	used	613685864	9.36	7640	0.116	-0.011	0.124	0.207	20.551631	-2.732856	-1369.51	1855.75
6	GUIDE	used	613696560	7.52	7645	0.159	0.697	0.086	0.135	21.525986	-2.200951	-1282.11	-2135.52
7	GUIDE	used	613679176	9.70	7633	-0.081	-0.629	0.151	0.245	20.761887	-2.639776	-1419.88	1029.38

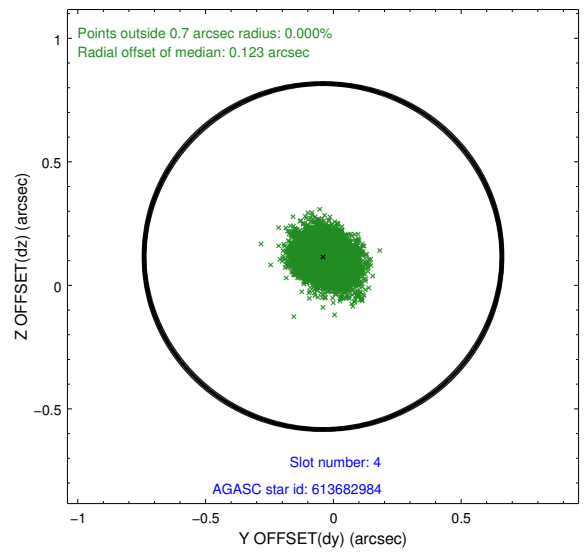
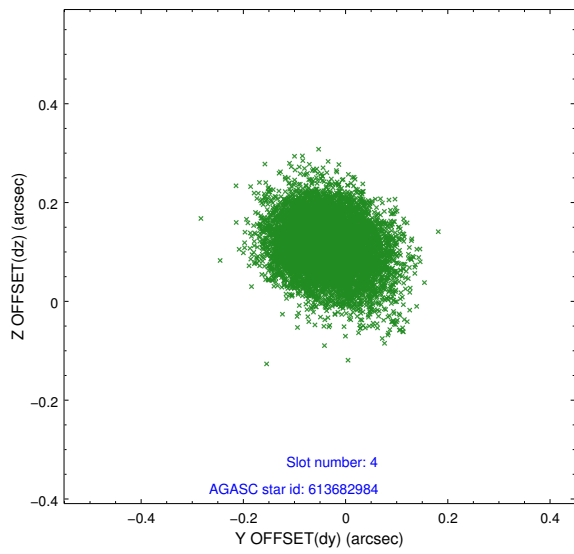
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## 2.4 Star Slots

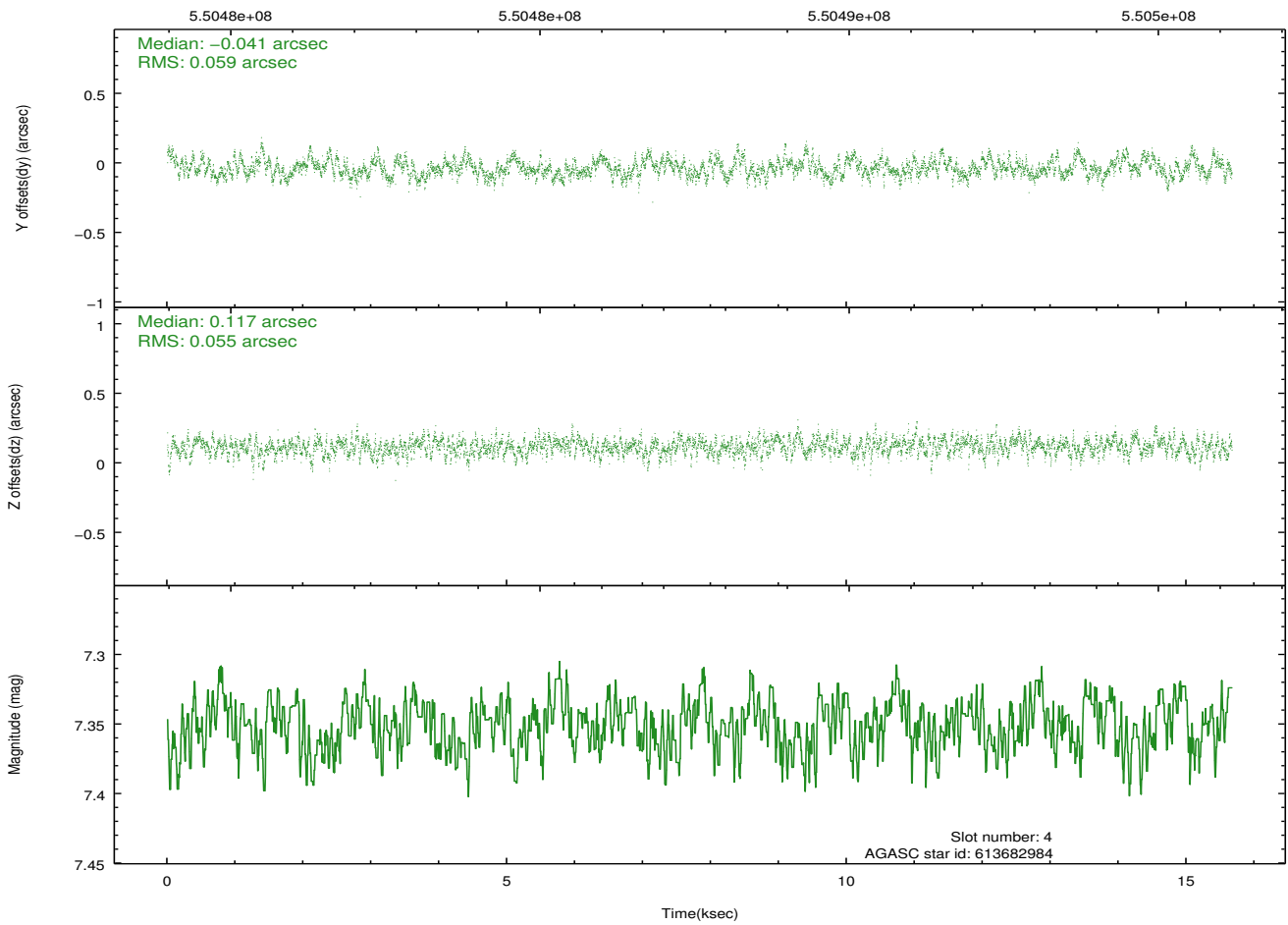
### 2.4.1 Slot 3



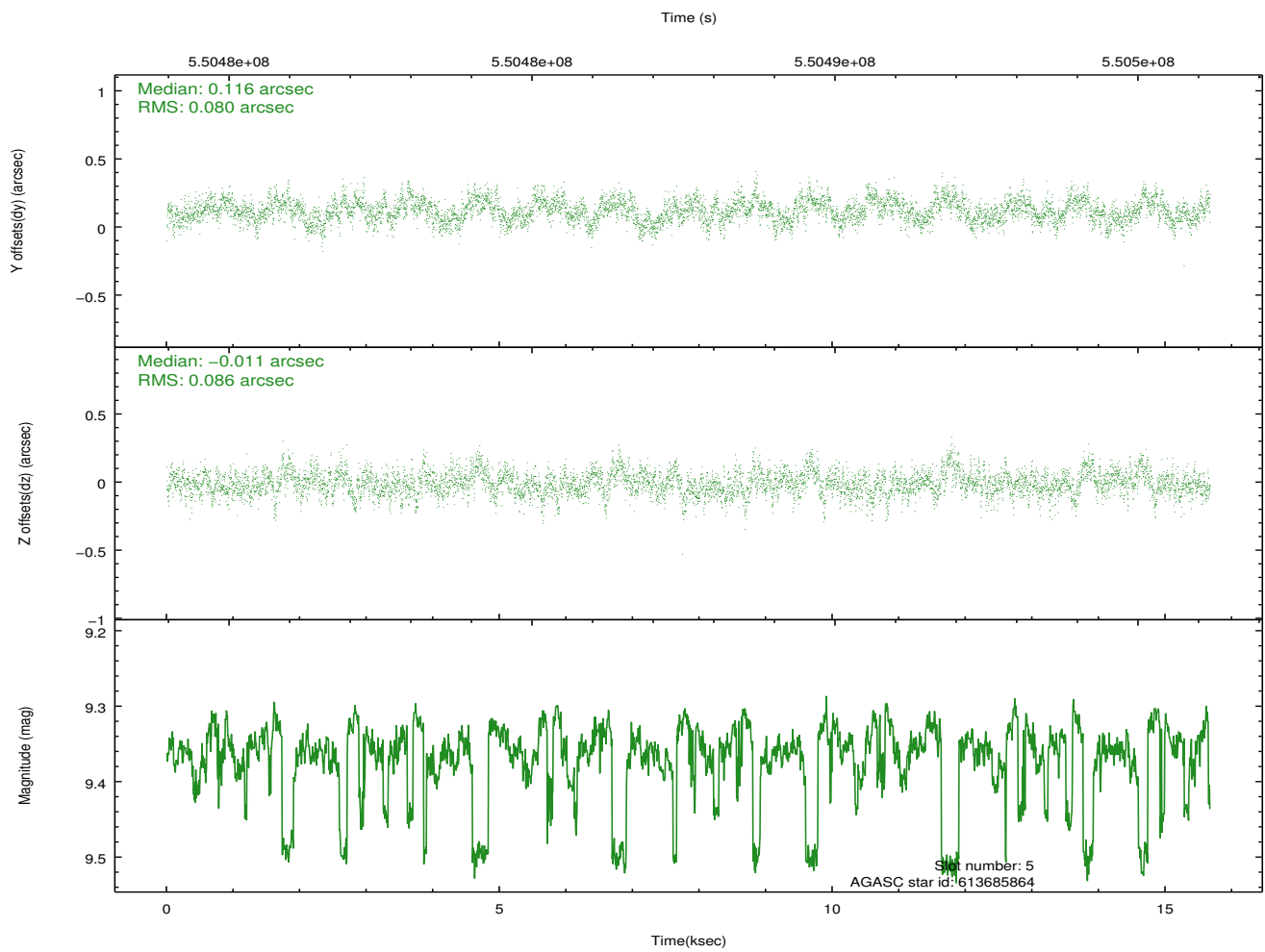
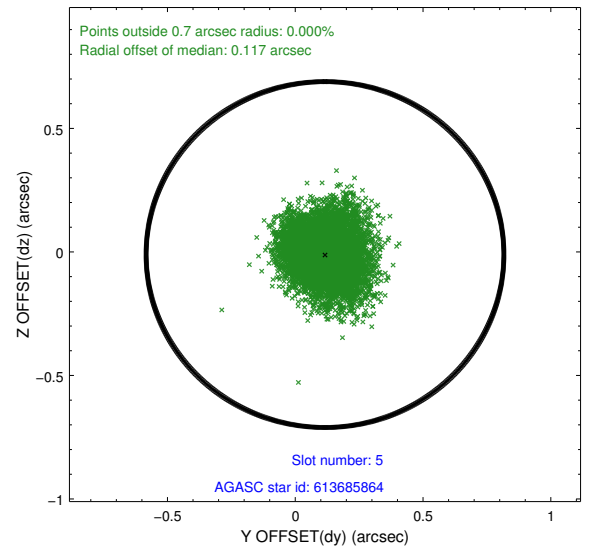
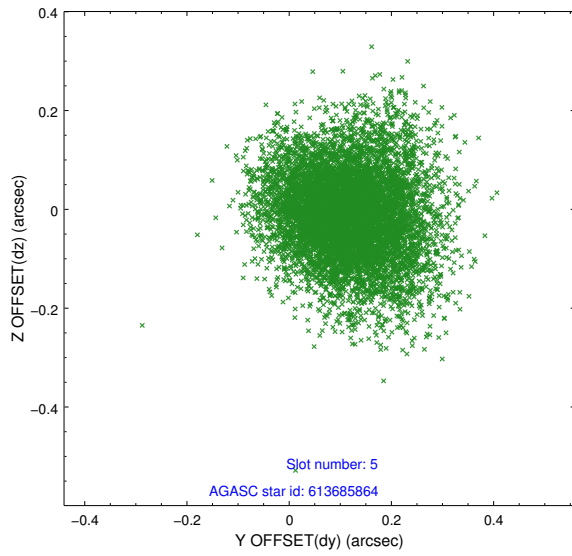
## 2.4.2 Slot 4



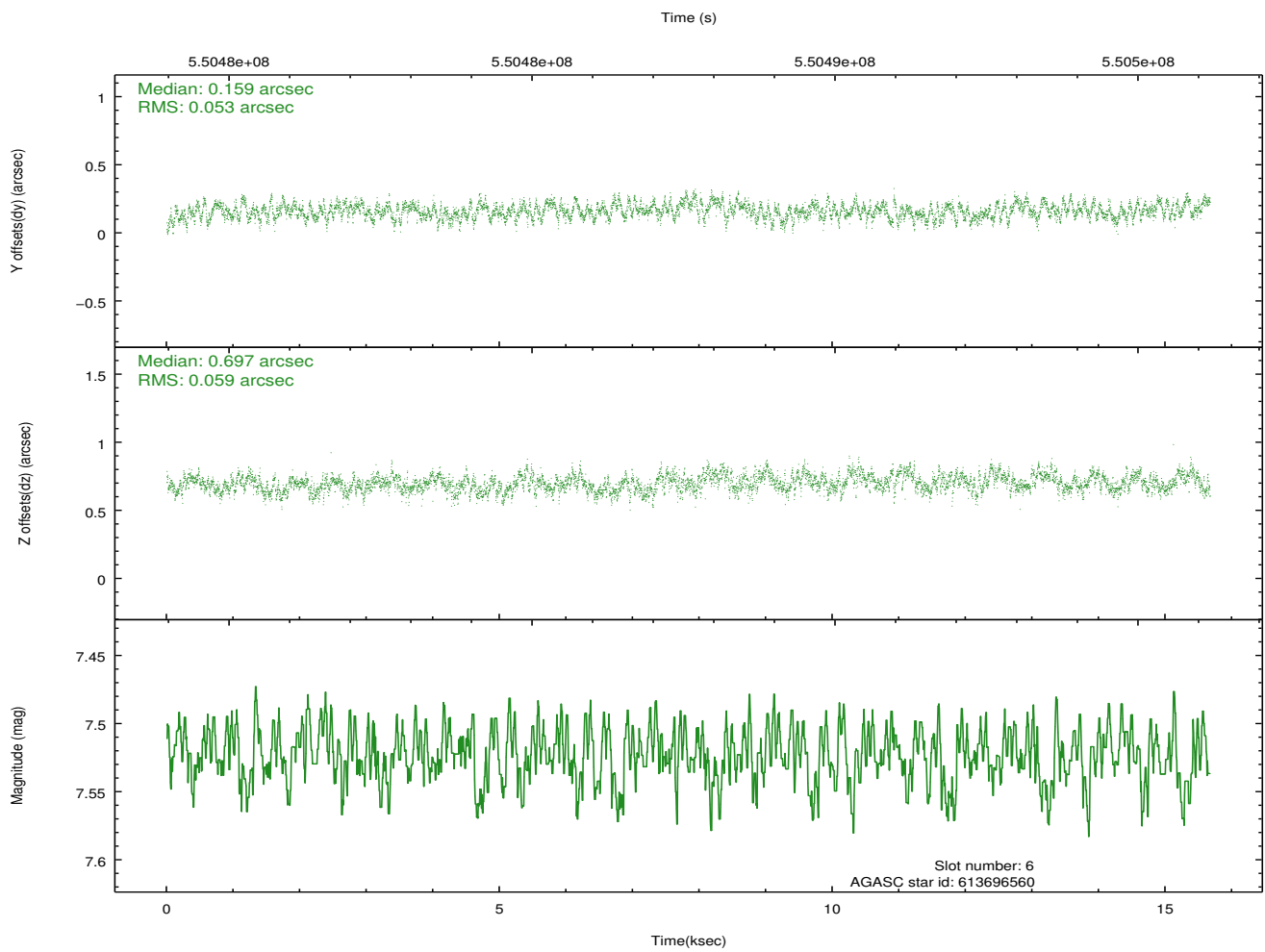
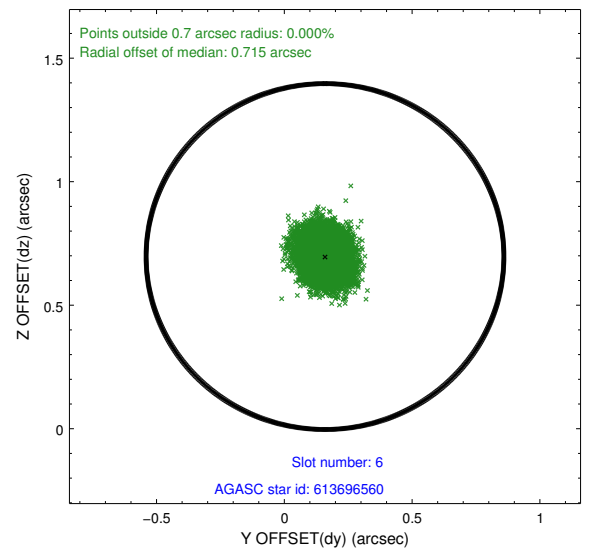
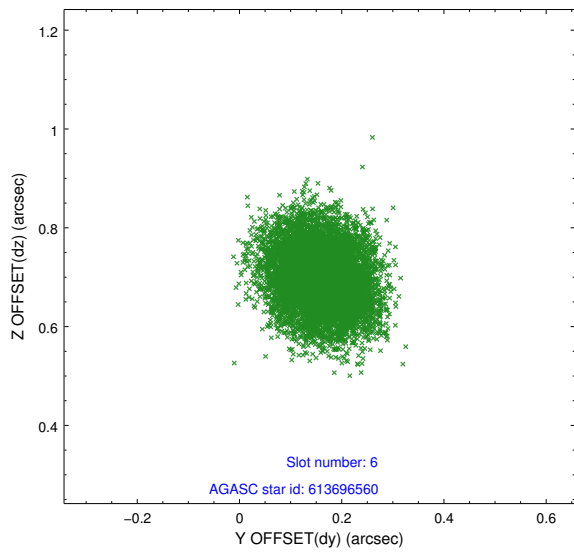
Time (s)



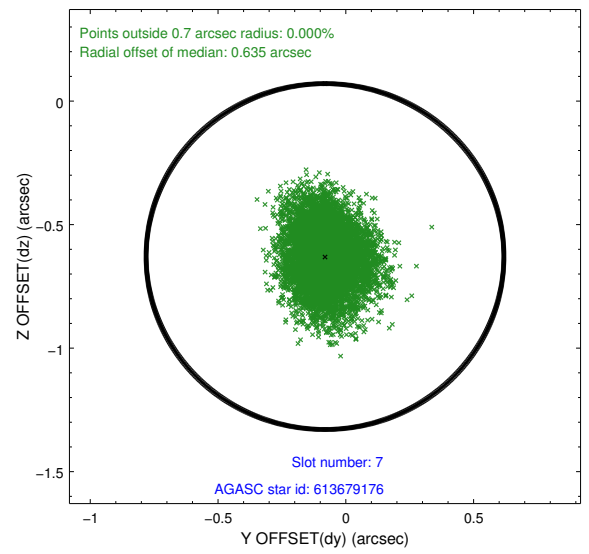
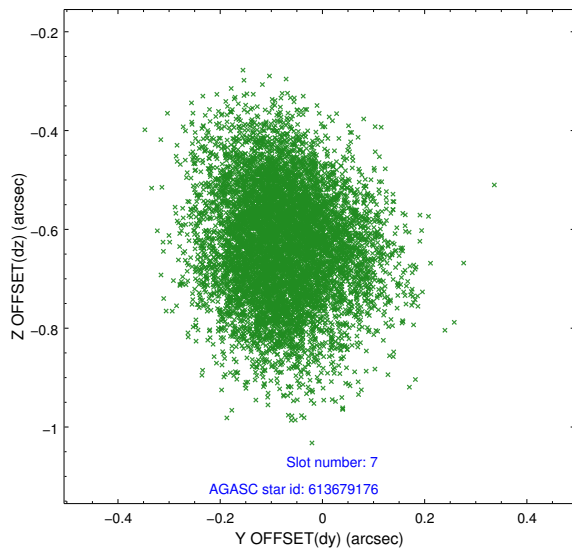
### 2.4.3 Slot 5



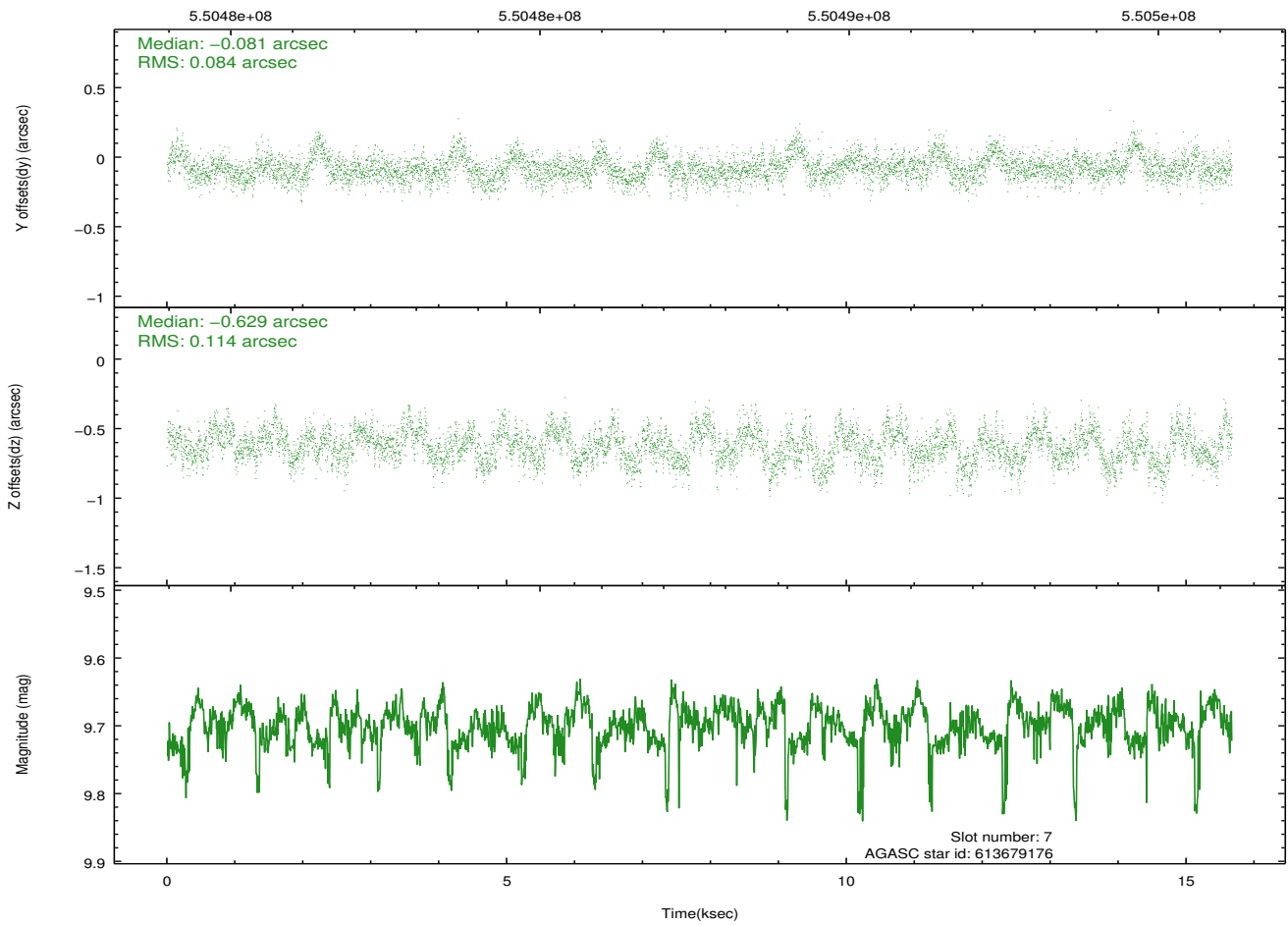
## 2.4.4 Slot 6



## 2.4.5 Slot 7

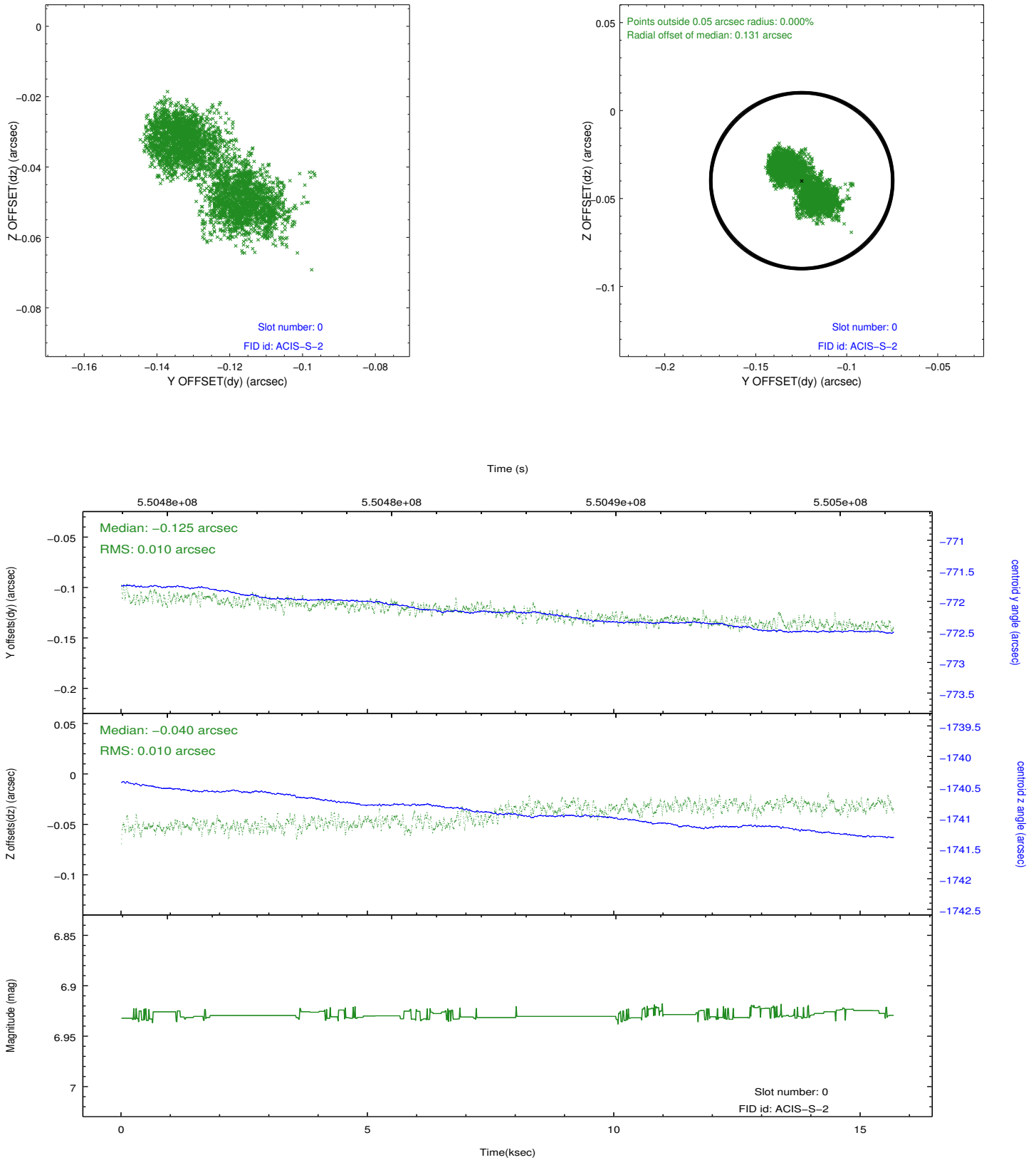


Time (s)

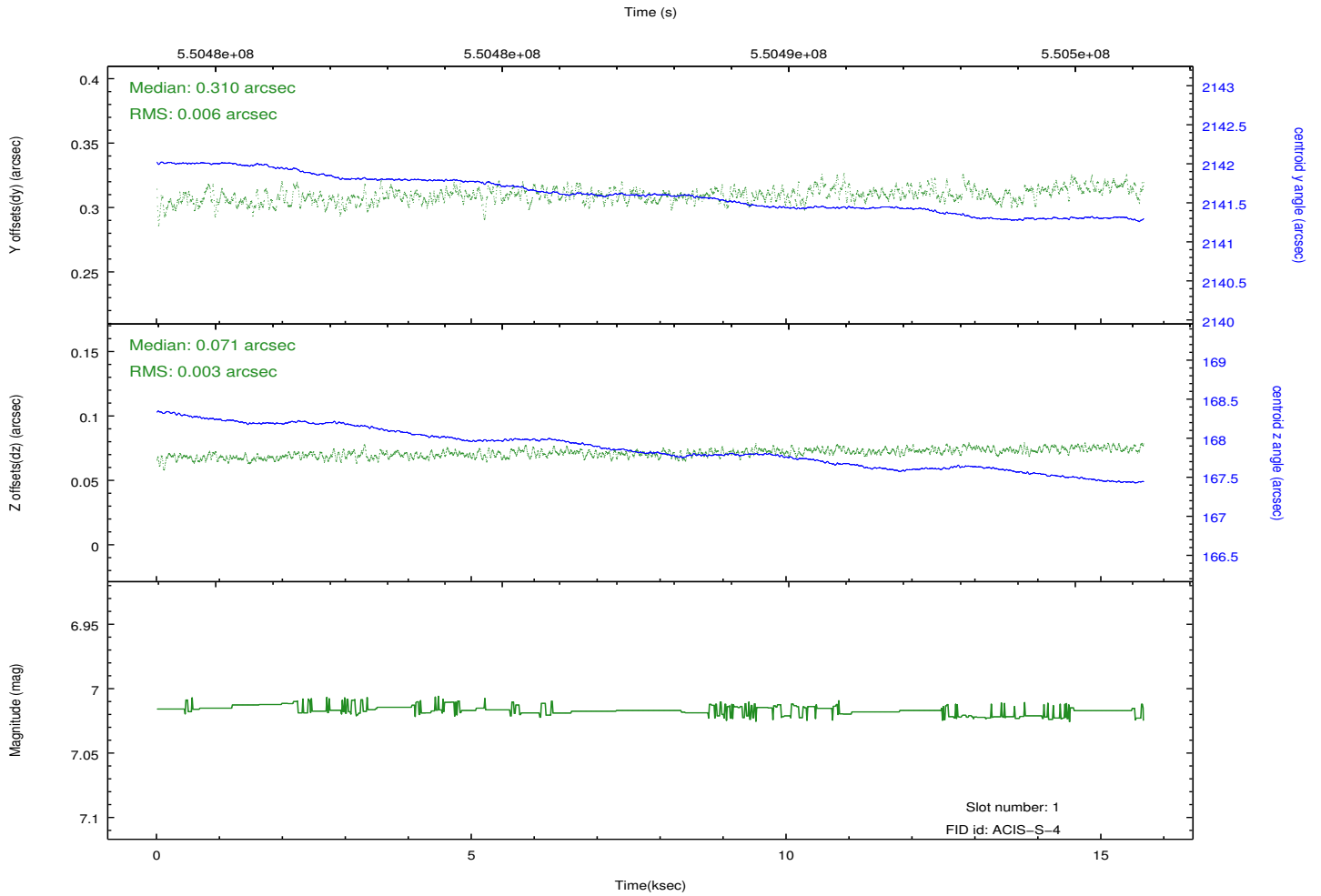
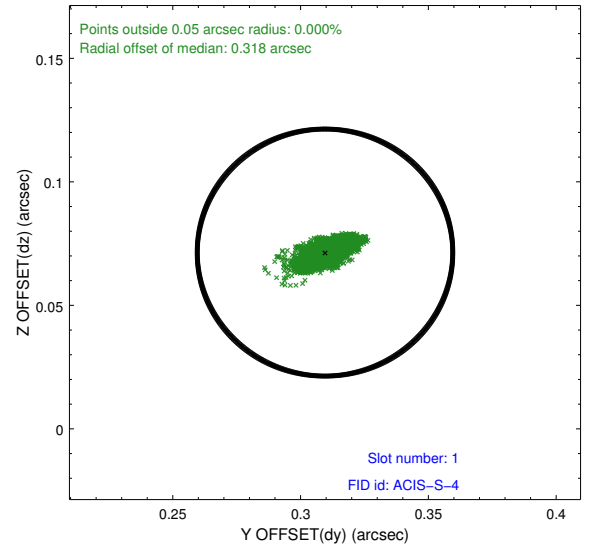
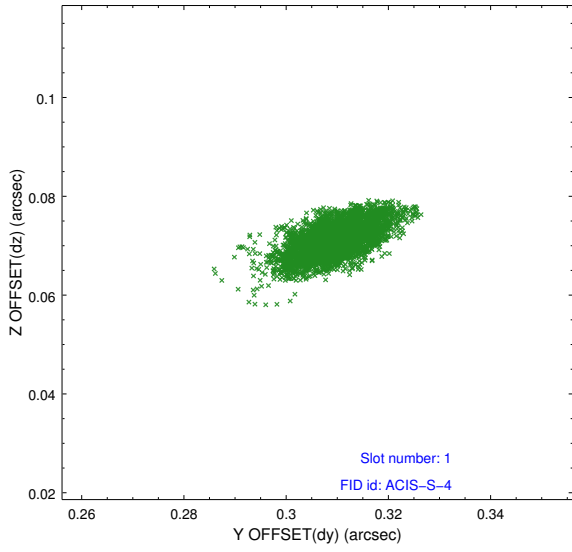


## 2.5 FID Slots

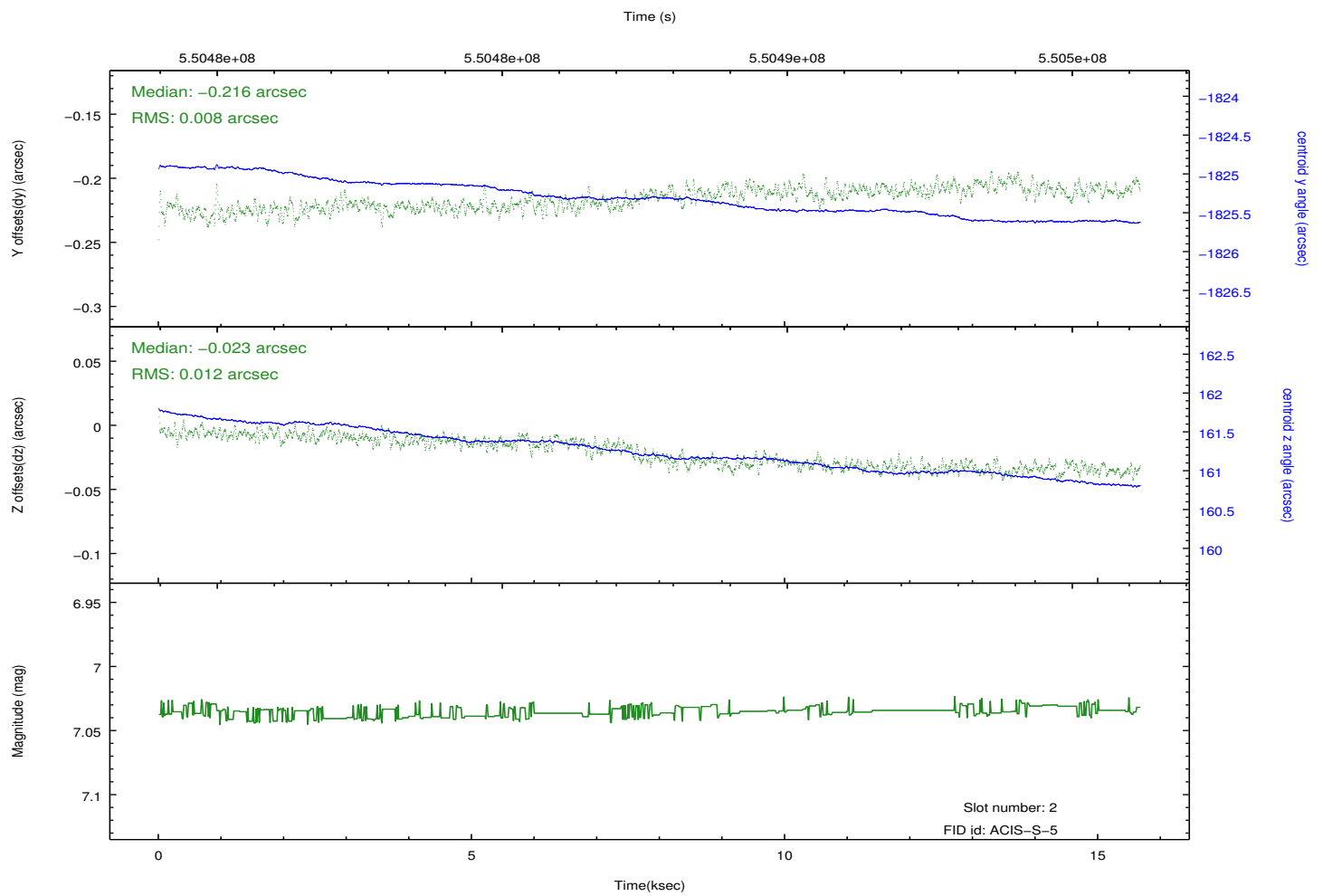
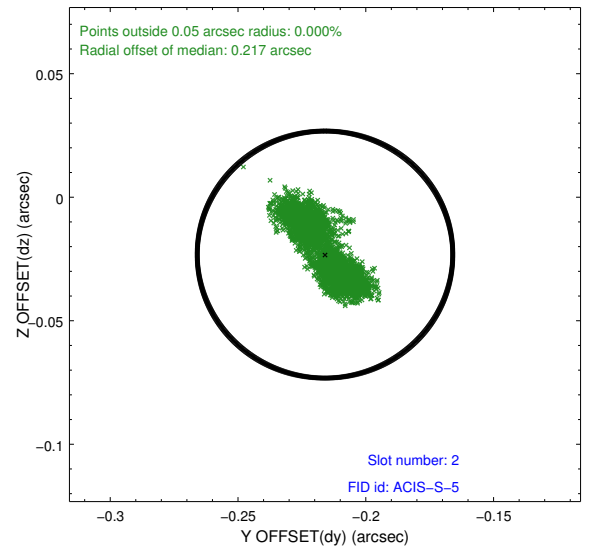
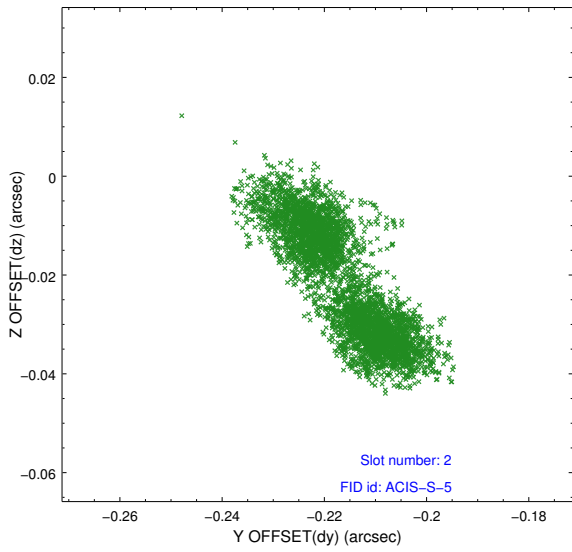
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2015.06.13
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.928000222445

## A.2 Comments