

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 9099 - L2 Version 2  
Chandra X-Ray Center

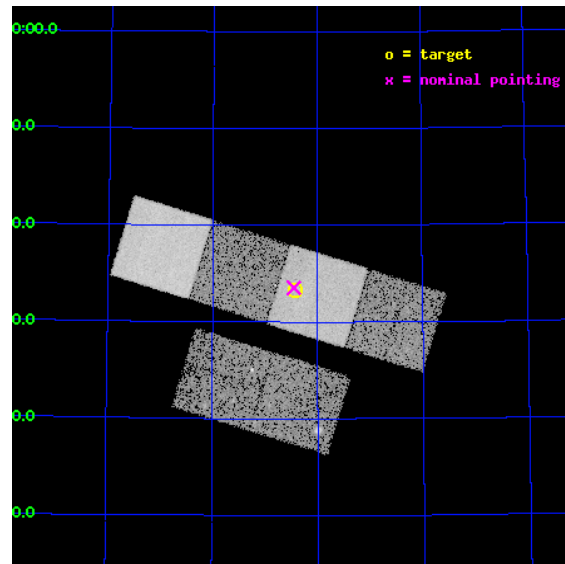
L2 Processing Date : May 23 2012

## Contents

<b>1</b>	<b>Front</b>	<b>2</b>
<b>2</b>	<b>OBI</b>	<b>3</b>
2.1	OBI . . . . .	3
2.1.1	Images . . . . .	3
2.1.2	Bias . . . . .	3
2.1.3	Parameters . . . . .	4
2.1.4	Events . . . . .	4
2.2	Compared Parameters . . . . .	5
2.3	Aspect . . . . .	6
2.4	Star Slots . . . . .	9
2.4.1	Slot 3 . . . . .	9
2.4.2	Slot 4 . . . . .	10
2.4.3	Slot 5 . . . . .	11
2.4.4	Slot 6 . . . . .	12
2.4.5	Slot 7 . . . . .	13
2.5	FID Slots . . . . .	14
2.5.1	Slot 0 . . . . .	14
2.5.2	Slot 1 . . . . .	15
2.5.3	Slot 2 . . . . .	16
<b>A</b>	<b>Summary</b>	<b>17</b>
A.1	Status . . . . .	17
A.2	Comments . . . . .	17

# 1 Front

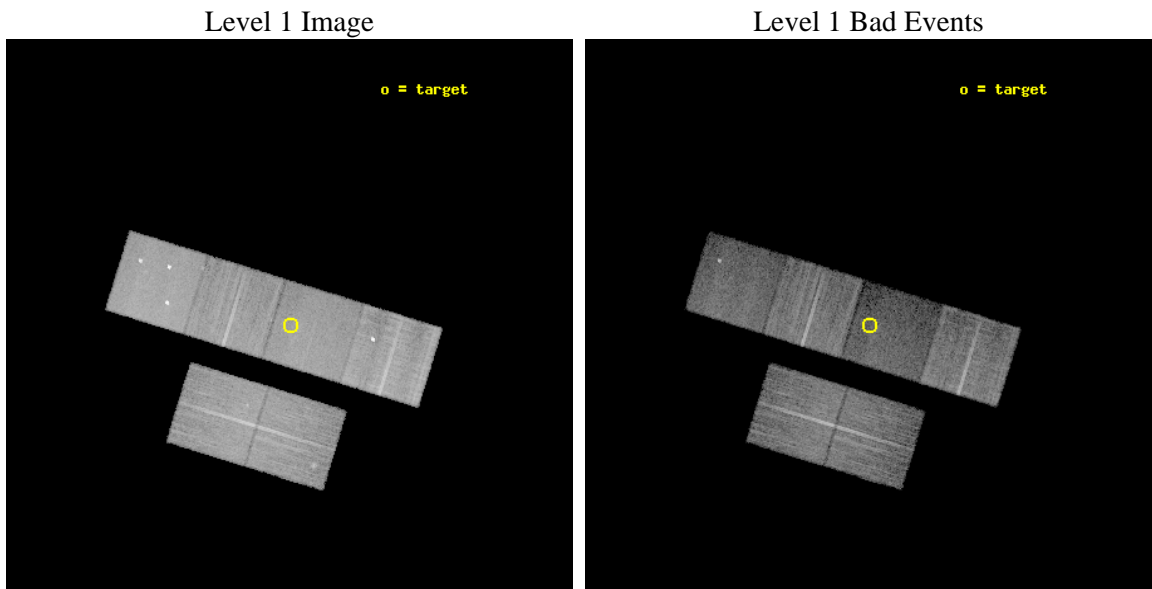
seq_num	500962	Sequence number
obs_id	9099	Observation id
title	Chandra Observations of Young, Energetic Supernovae	Proposal title
observer	Prof. David Pooley	Principal investigator
object	SN 2005bx	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	207.604167	Observer's specified target RA [deg]
dec_targ	68.555389	Observer's specified target Dec [deg]
ra_nom	207.61298631679	Nominal RA [deg]
dec_nom	68.559052788431	Nominal Dec [deg]
roll_nom	17.148472947025	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13222.399950802	Sum of GTIs [s]
livetime	13054.969961052	Livetime [s]
ontime2	13219.158980489	Sum of GTIs [s]
ontime3	13222.399950802	Sum of GTIs [s]
ontime5	13222.399950802	Sum of GTIs [s]
ontime6	13222.399950802	Sum of GTIs [s]
ontime7	13222.399950802	Sum of GTIs [s]
ontime8	13219.158950627	Sum of GTIs [s]
l2events	146295	Number of level 2 events



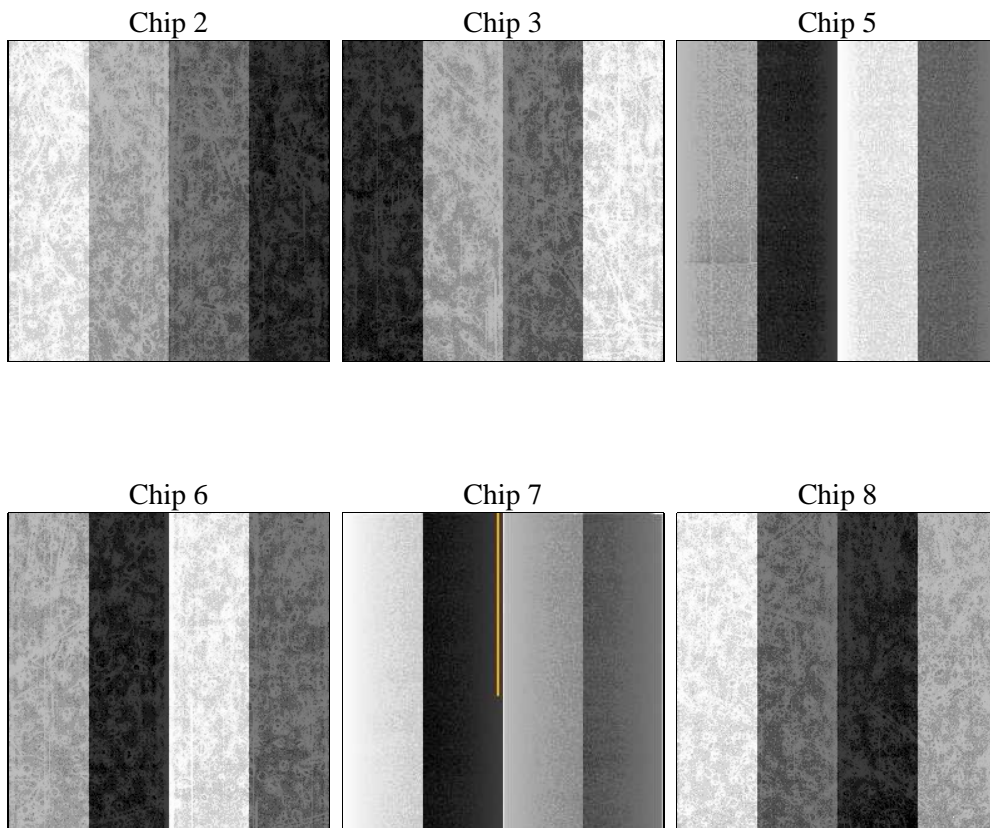
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13111.150000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	13222.399950802	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime2	13219.158980489	Sum of GTIs [s]
date	2012-05-23T12:29:14	Date and time of file creation	ontime3	13222.399950802	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	13222.399950802	Sum of GTIs [s]
			ontime6	13222.399950802	Sum of GTIs [s]
			ontime7	13222.399950802	Sum of GTIs [s]
			ontime8	13219.158950627	Sum of GTIs [s]
			l1events	677356	Number of level 1 events

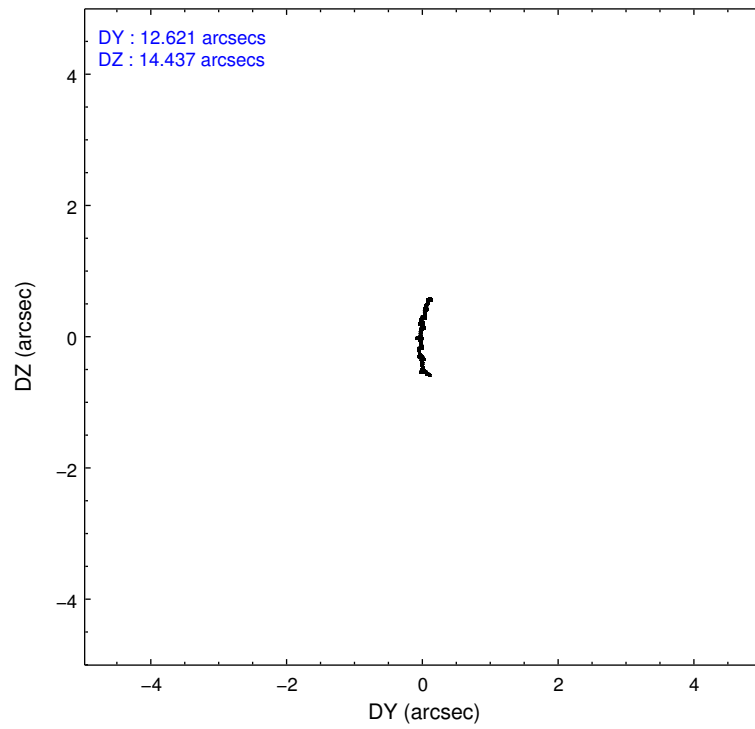
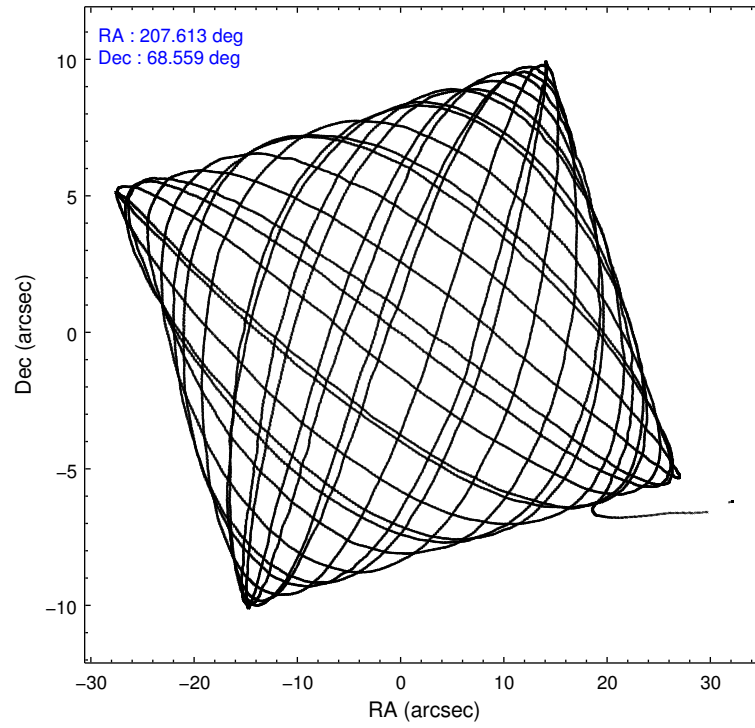
### 2.1.4 Events

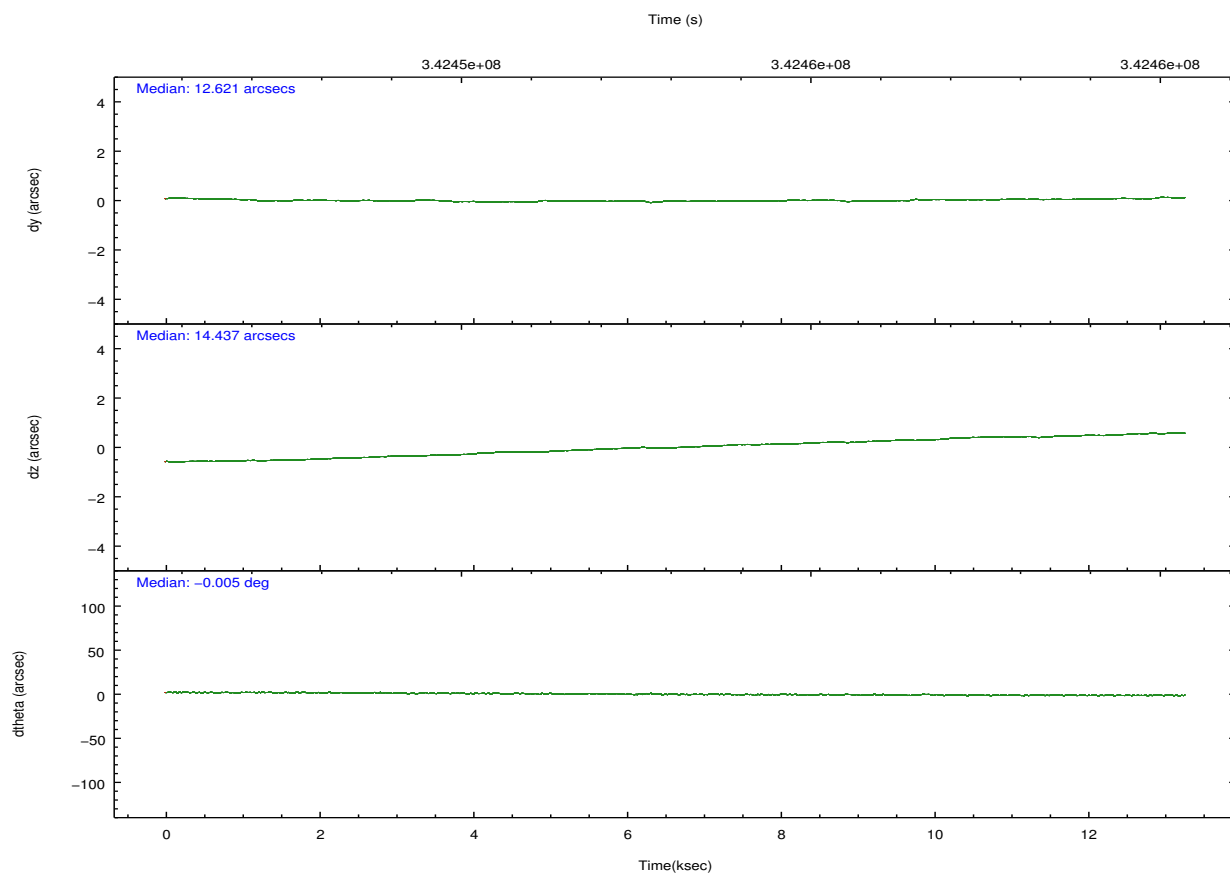
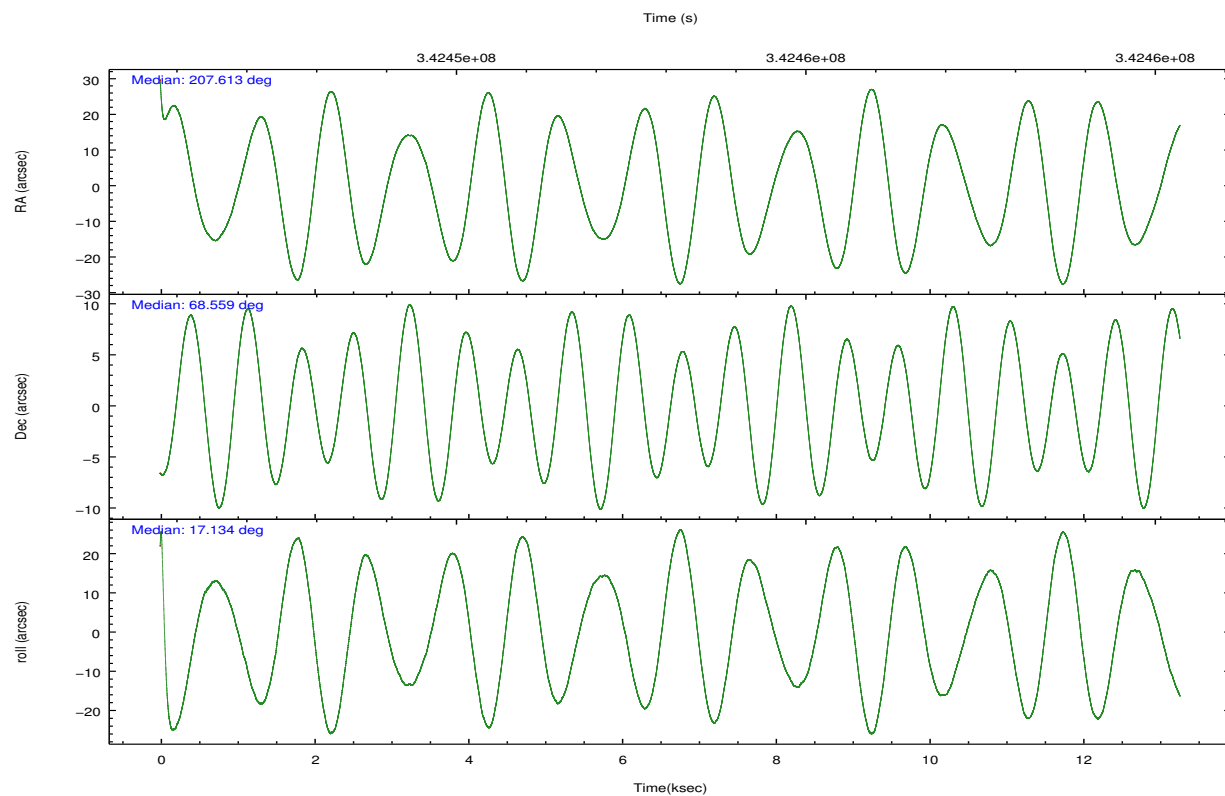
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	110613	99177	135664	102270	97933	131699	grade 0 events	3875	4053	11743	3787	5087	9080
rejected events	100356	89119	62038	91751	49777	94777		3%	4%	8%	3%	5%	6%
rejected %	90%	89%	45%	89%	50%	71%	grade 1 events	63	57	321	49	146	110
								0%	0%	0%	0%	0%	0%
							grade 2 events	2505	2036	21624	2388	10254	7530
								2%	2%	15%	2%	10%	5%
							grade 3 events	1027	1078	3128	1146	4523	7305
								0%	1%	2%	1%	4%	5%
							grade 4 events	1072	1112	2782	1095	4440	3811
								0%	1%	2%	1%	4%	2%
							grade 5 events	3014	3568	10815	3452	10565	5416
								2%	3%	7%	3%	10%	4%
							grade 6 events	1781	1788	34385	2110	23873	9209
								1%	1%	25%	2%	24%	6%
							grade 7 events	97276	85485	50866	88243	39045	89238
								87%	86%	37%	86%	39%	67%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	207.562825	207.6129863167903	CCD I2 on	O1	Y
[deg] Pointing Dec	68.538726	68.55905278843072	CCD I3 on	O2	Y
[deg] Pointing Roll	17.038471	17.14847294702533	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)	342446572.184000	342445530.22753	CCD S5 on	N	N
Observation start date	2008-11-07T12:01:47	2008-11-07T11:45:30	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	342459683.184000	342459896.62824	On-chip summing requested	N	N
Observation end date	2008-11-07T15:40:18	2008-11-07T15:44:56	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



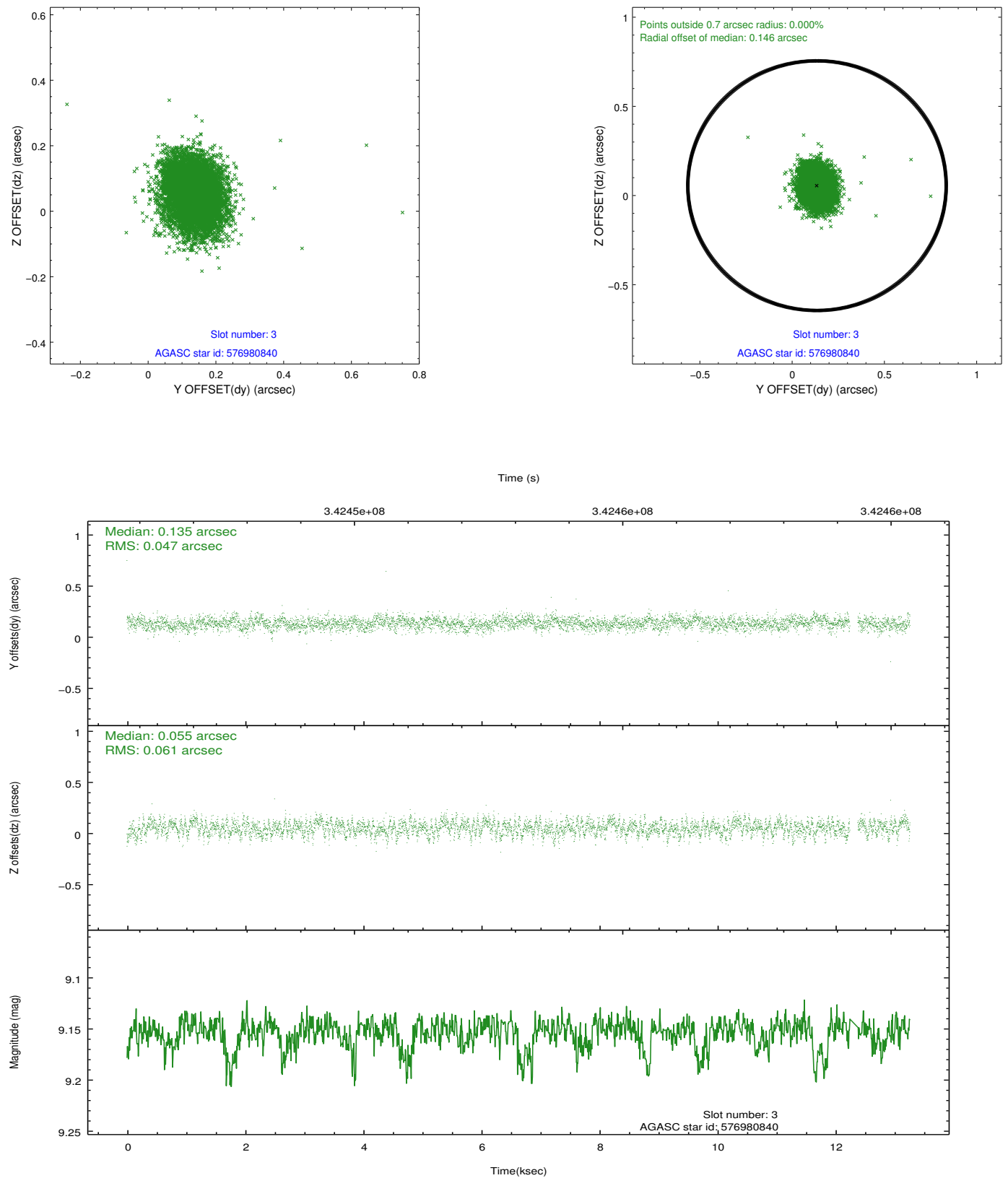


### Slot Statistics

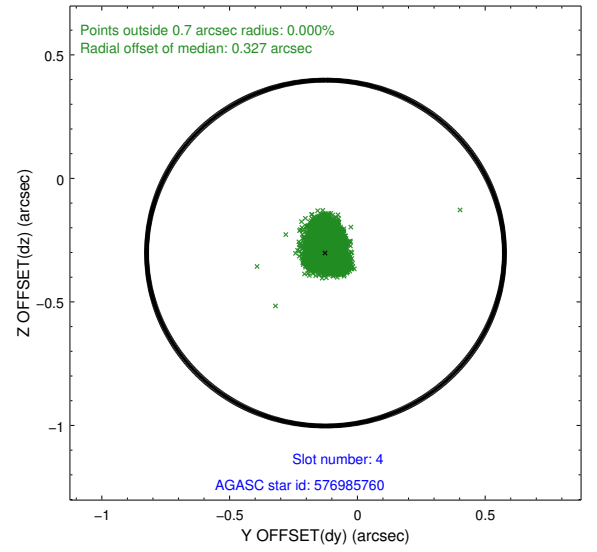
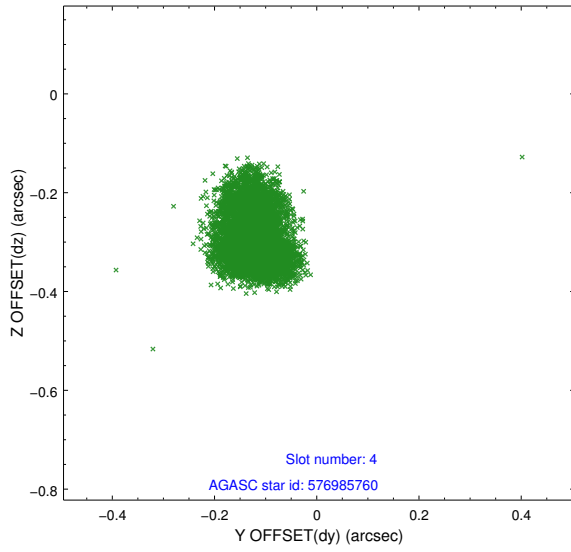
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.92	3236	-0.039	-0.023	0.012	0.018	0.000000	0.000000	-765.56	-1735.83
1	FID	ACIS-S-4	7.00	3236	0.145	0.025	0.008	0.014	0.000000	0.000000	2147.72	172.35
2	FID	ACIS-S-5	7.04	3236	-0.139	0.006	0.010	0.017	0.000000	0.000000	-1818.05	166.38
3	GUIDE	576980840	9.15	6403	0.135	0.055	0.081	0.132	207.452855	68.181640	-517.63	-1185.73
4	GUIDE	576985760	7.41	6471	-0.125	-0.302	0.067	0.113	207.721529	69.153363	842.77	2055.84
5	GUIDE	577110792	8.42	6470	-0.087	0.187	0.075	0.118	209.170624	68.072963	1584.34	-2208.38
6	GUIDE	576989584	8.73	6465	0.115	0.027	0.076	0.122	205.742357	68.734271	-2055.37	1402.40
7	GUIDE	576992152	8.44	6462	-0.038	0.029	0.066	0.105	207.803675	68.326269	81.66	-823.66

## 2.4 Star Slots

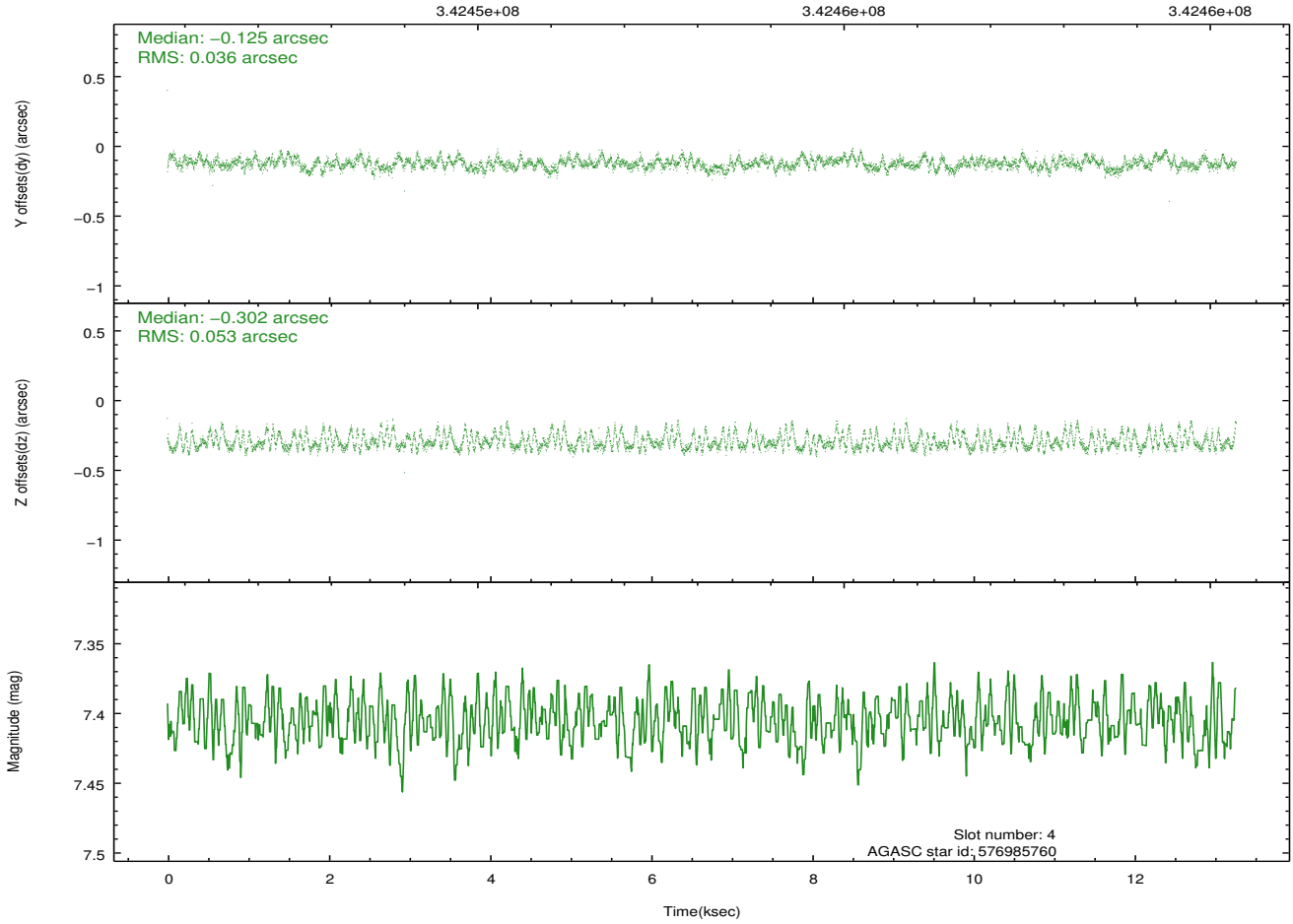
### 2.4.1 Slot 3



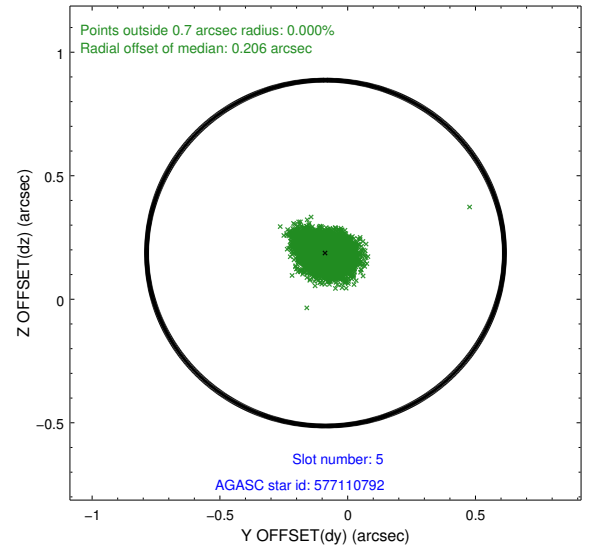
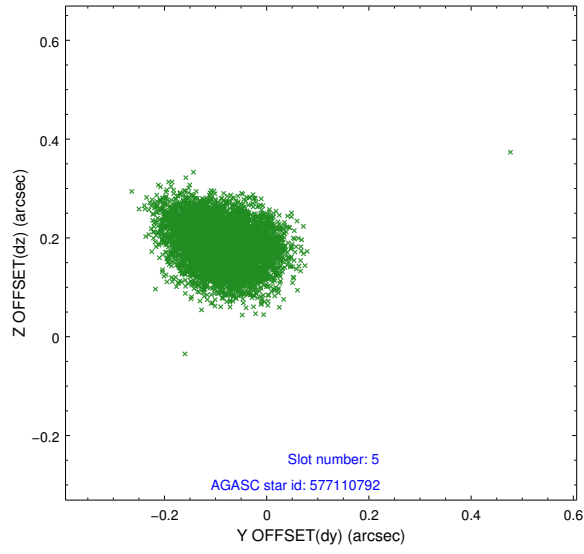
## 2.4.2 Slot 4



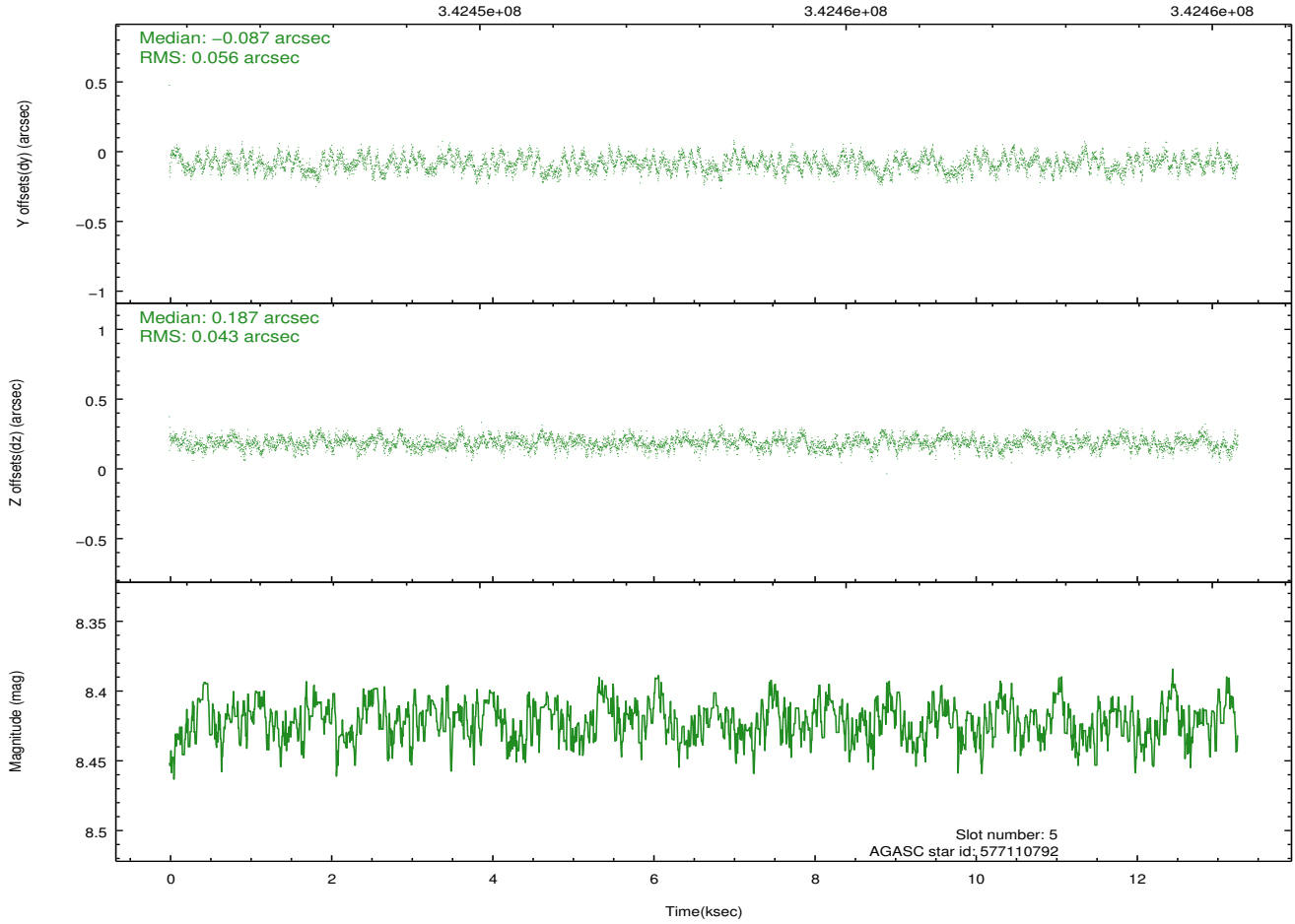
Time (s)



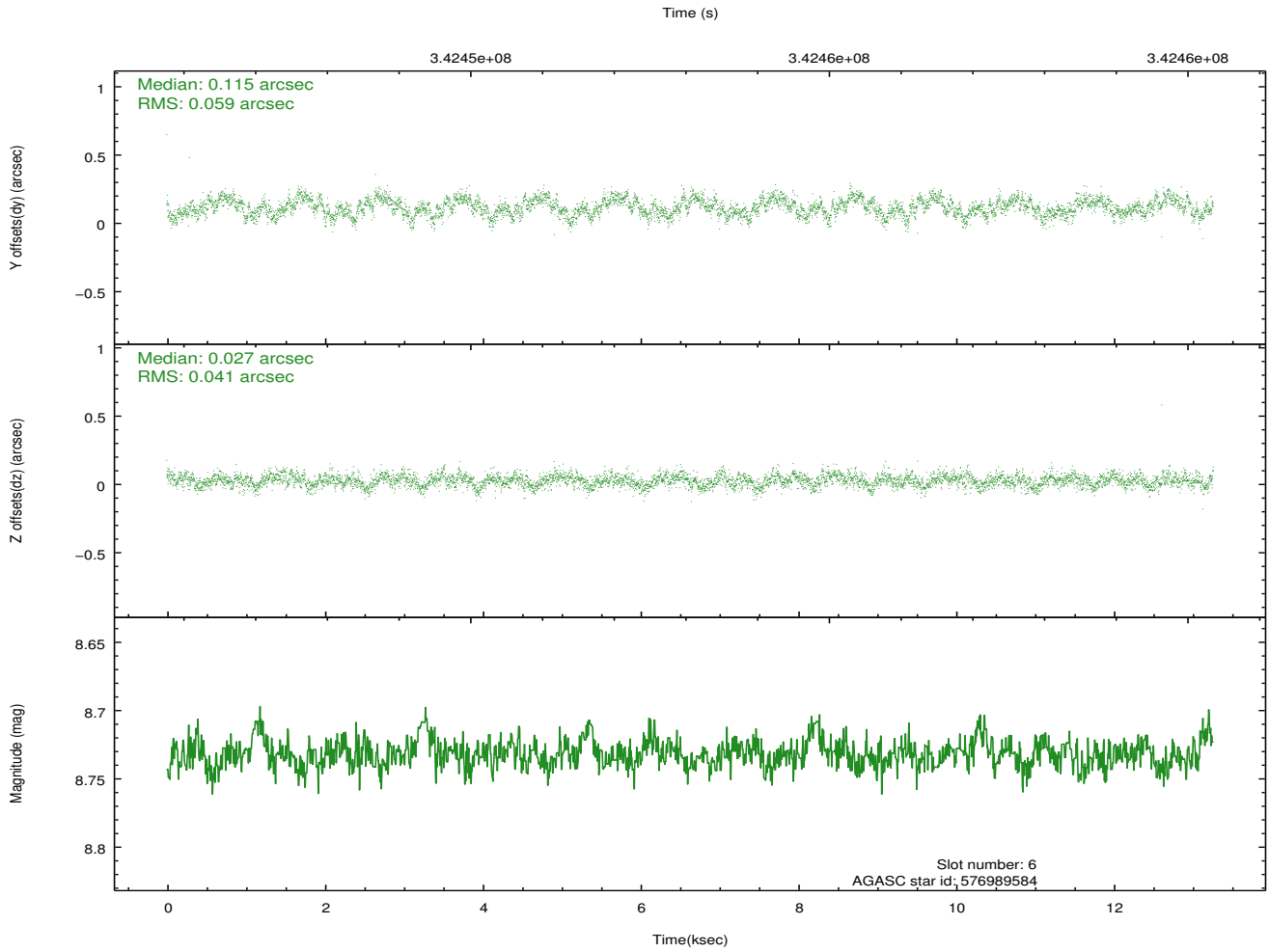
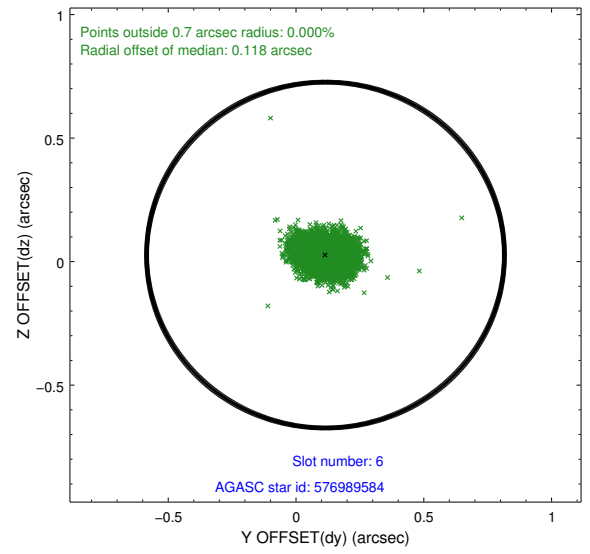
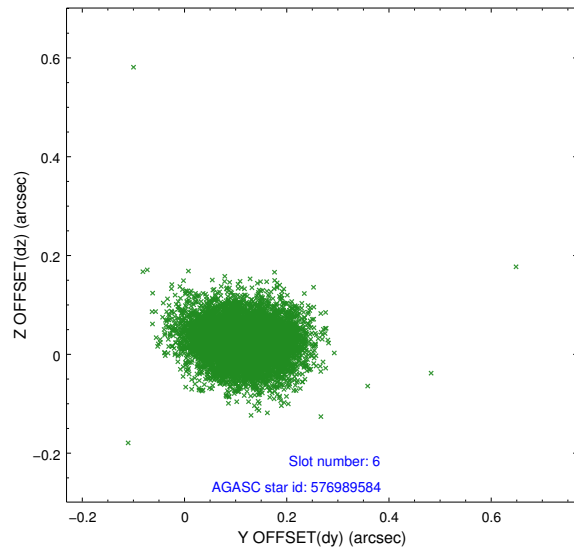
### 2.4.3 Slot 5



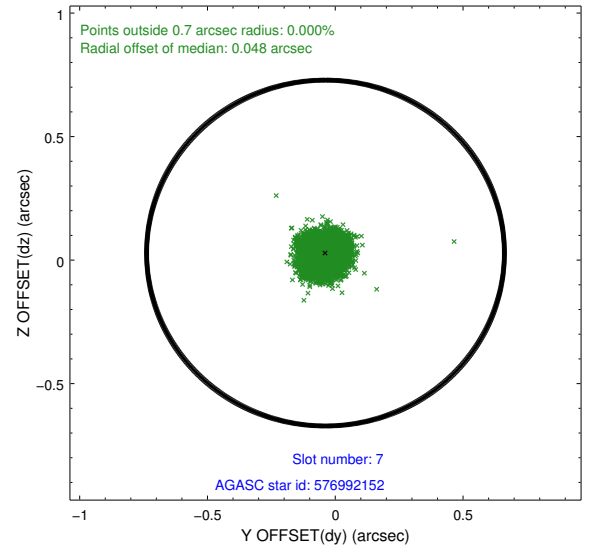
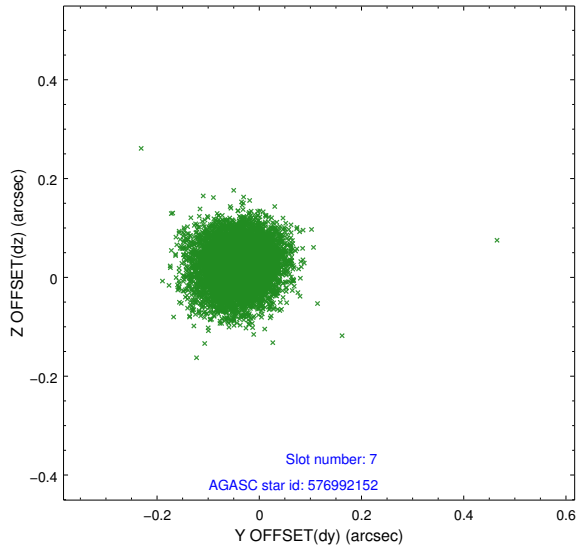
Time (s)



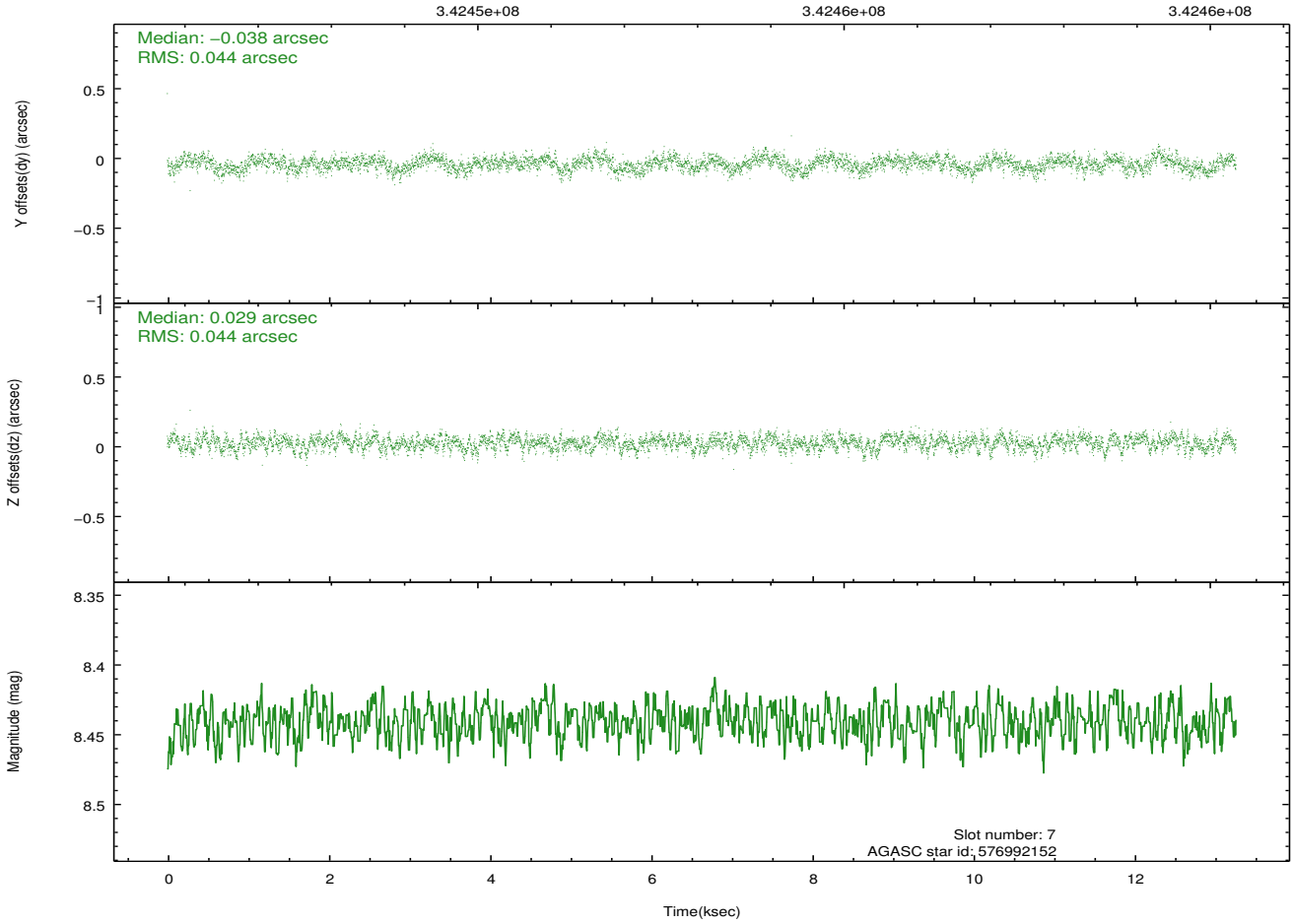
## 2.4.4 Slot 6



### 2.4.5 Slot 7

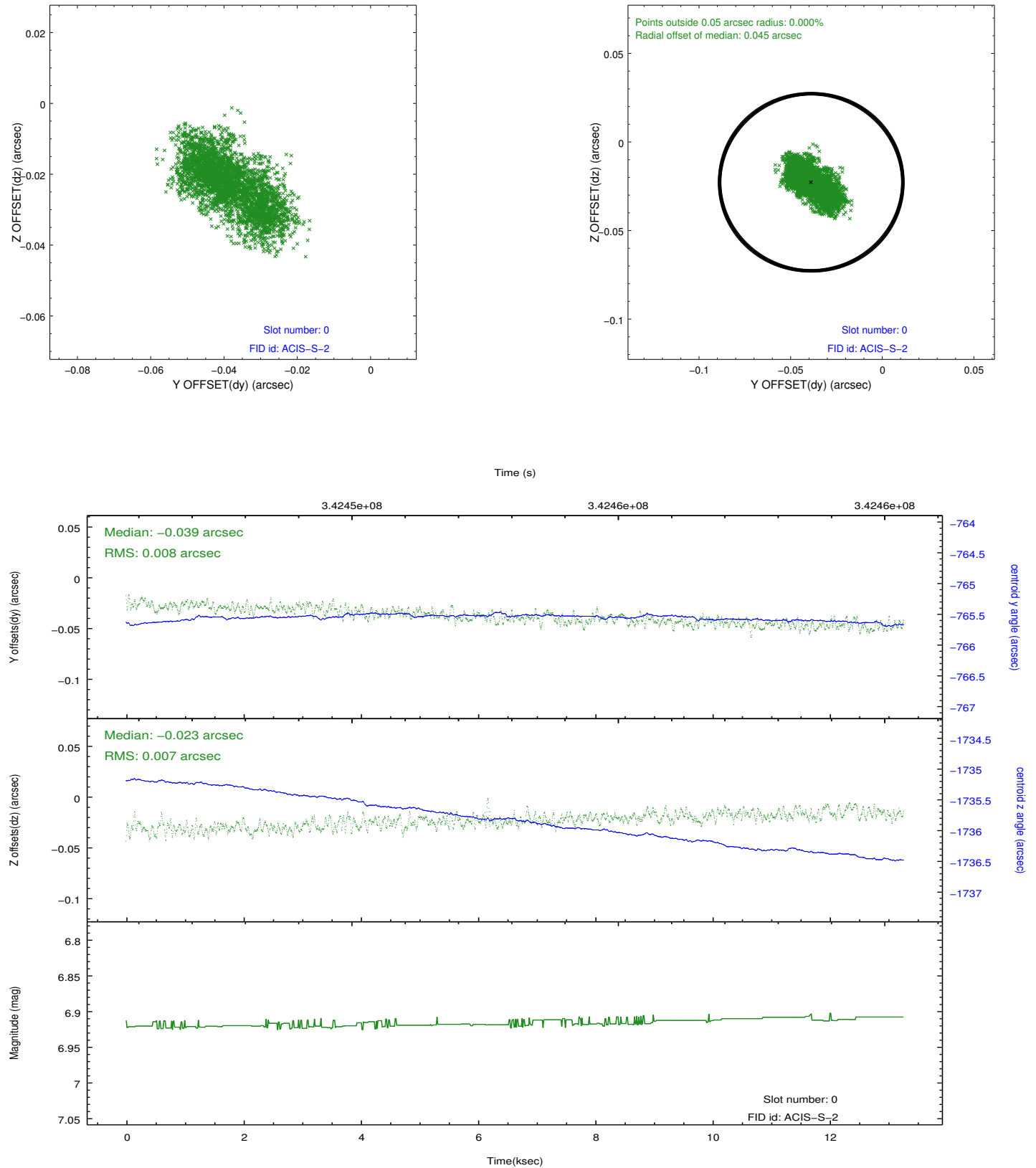


Time (s)

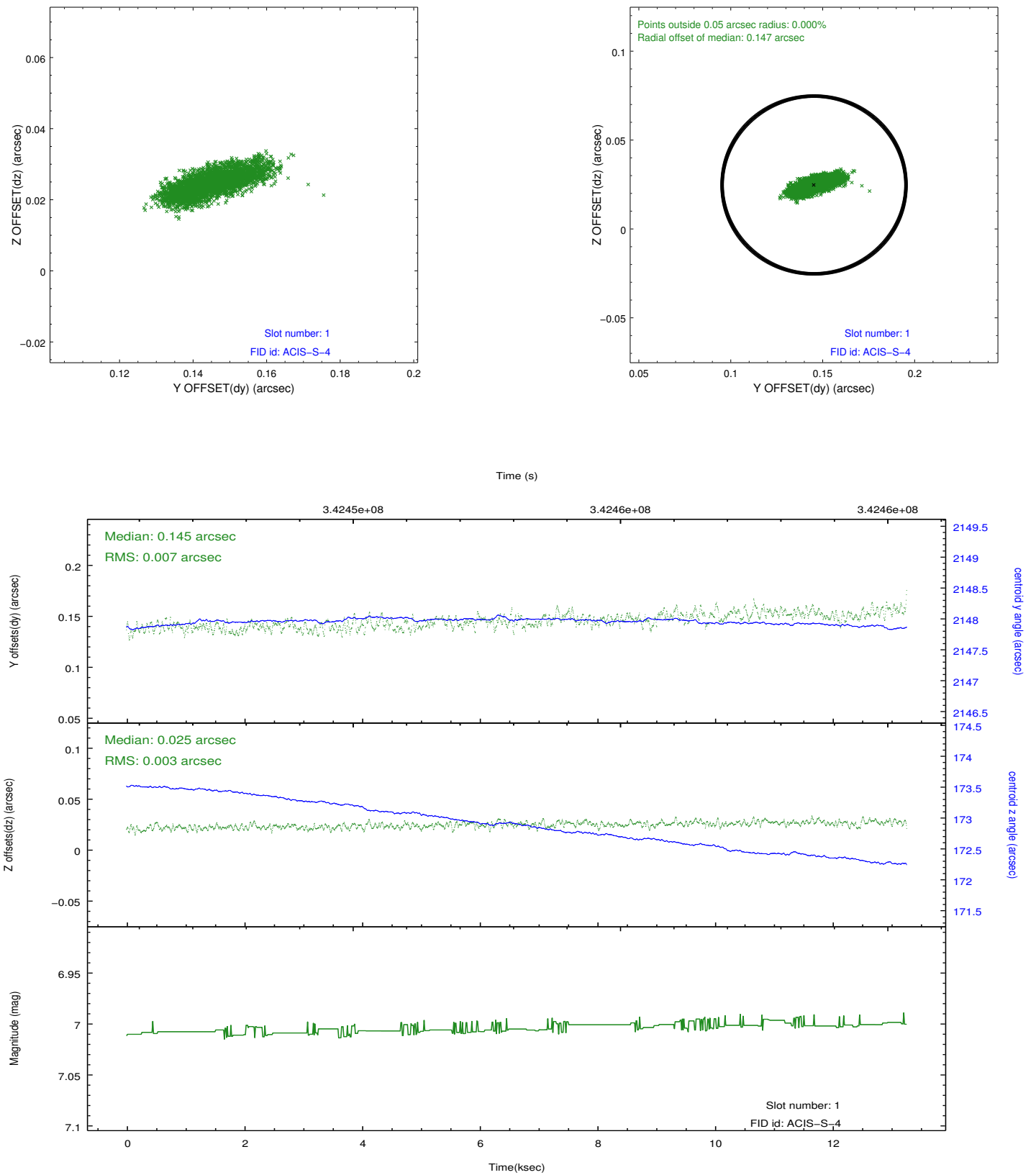


## 2.5 FID Slots

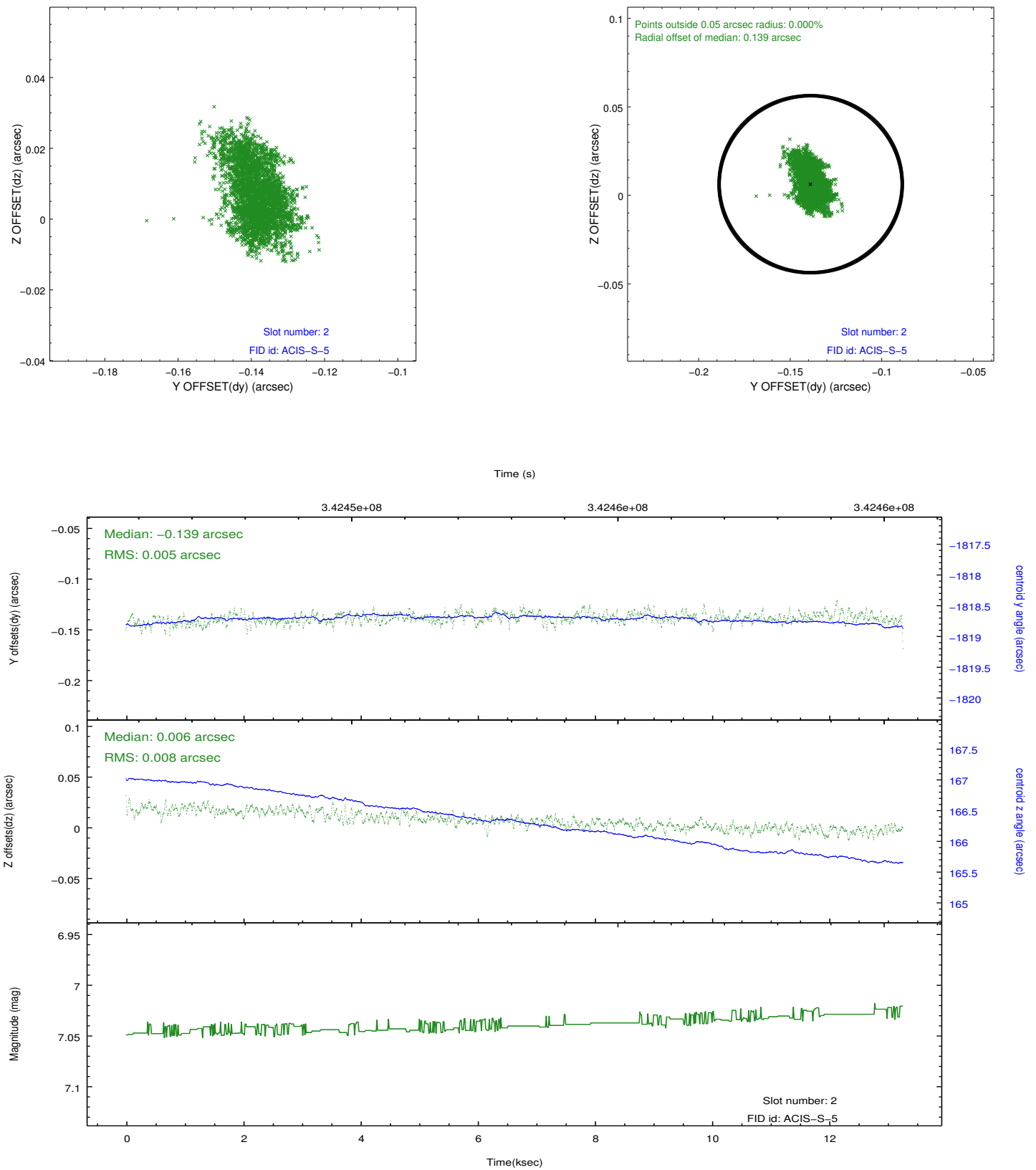
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.05.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.2223999

### A.2 Comments