

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 15808 - L2 Version 1  
Chandra X-Ray Center

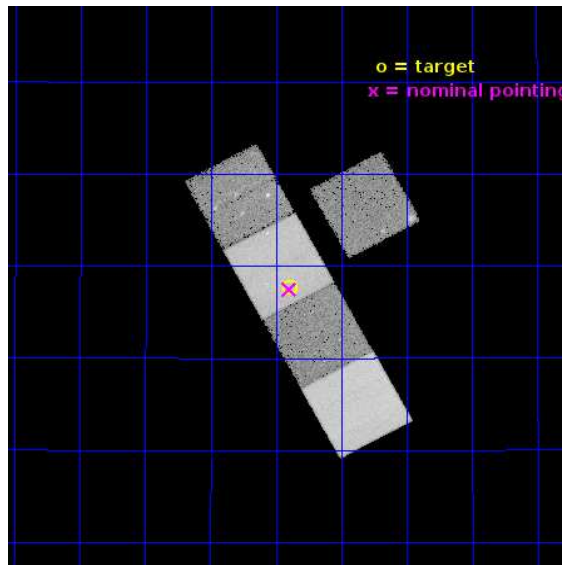
L2 Processing Date : Oct 24 2014

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# 1 Front

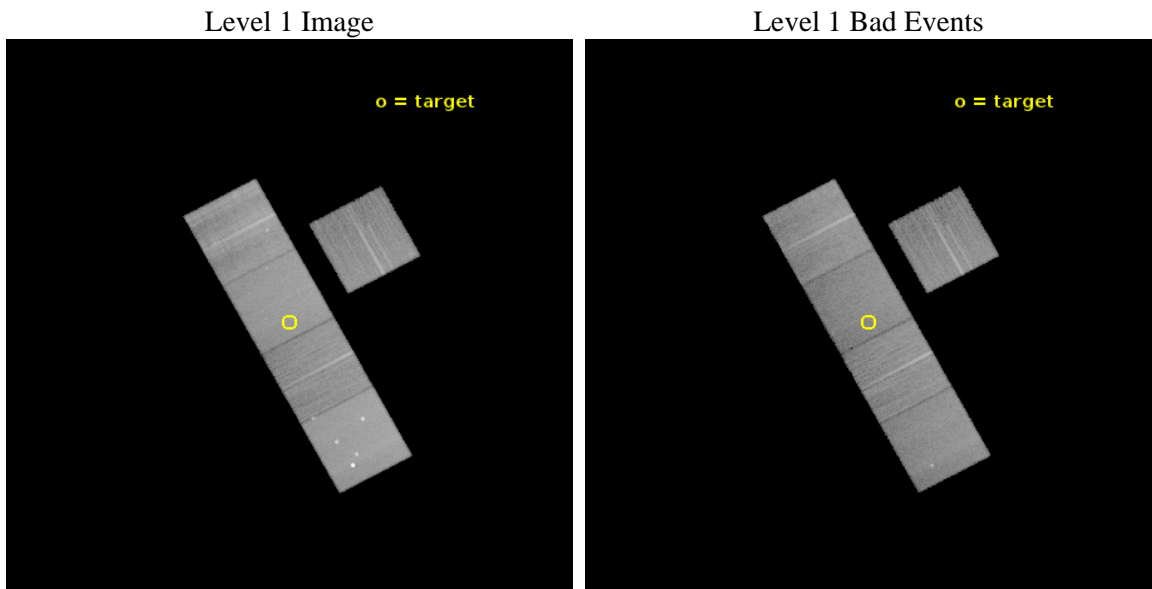
seq_num	502041	Sequence number
obs_id	15808	Observation id
title	Measuring the Explosion Geometry of Short GRBs: Implications for Energetics and Rates	Proposal title
observer	Fong Wen-fai	Principal investigator
object	GRB 140930B	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	6.347708	Observer's specified target RA [deg]
dec_targ	24.294167	Observer's specified target Dec [deg]
ra_nom	6.3493240100757	Nominal RA [deg]
dec_nom	24.29141481519	Nominal Dec [deg]
roll_nom	241.47512079976	Nominal Roll [deg]
revision	1	Processing version of data
ontime	34771.651733696	Sum of GTIs [s]
livetime	34317.334505278	Livetime [s]
ontime3	34765.246462464	Sum of GTIs [s]
ontime5	34771.610693693	Sum of GTIs [s]
ontime6	34771.56965369	Sum of GTIs [s]
ontime7	34771.651733696	Sum of GTIs [s]
ontime8	34752.641272962	Sum of GTIs [s]
l2events	294827	Number of level 2 events



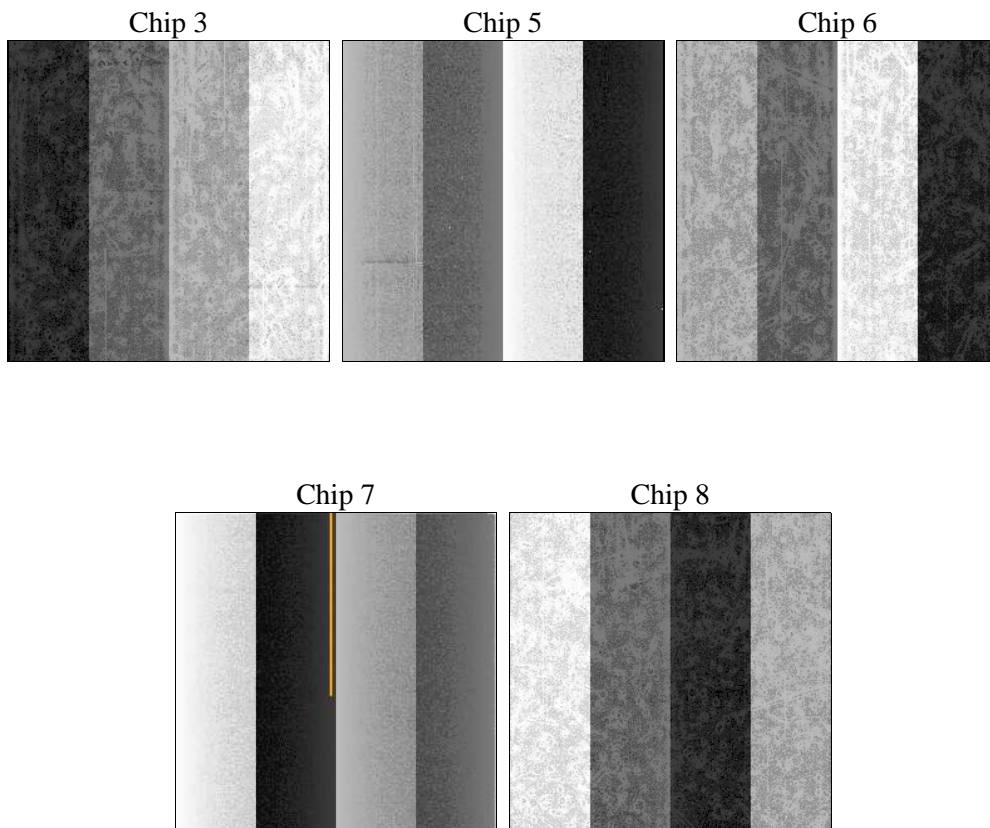
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	35000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	34771.651733696	Sum of GTIs [s]
caldbver	4.6.3	&#160	ontime3	34765.246462464	Sum of GTIs [s]
date	2014-10-24T06:32:20	Date and time of file creation	ontime5	34771.610693693	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	34771.56965369	Sum of GTIs [s]
			ontime7	34771.651733696	Sum of GTIs [s]
			ontime8	34752.641272962	Sum of GTIs [s]
			l1events	1165609	Number of level 1 events

### 2.1.4 Events

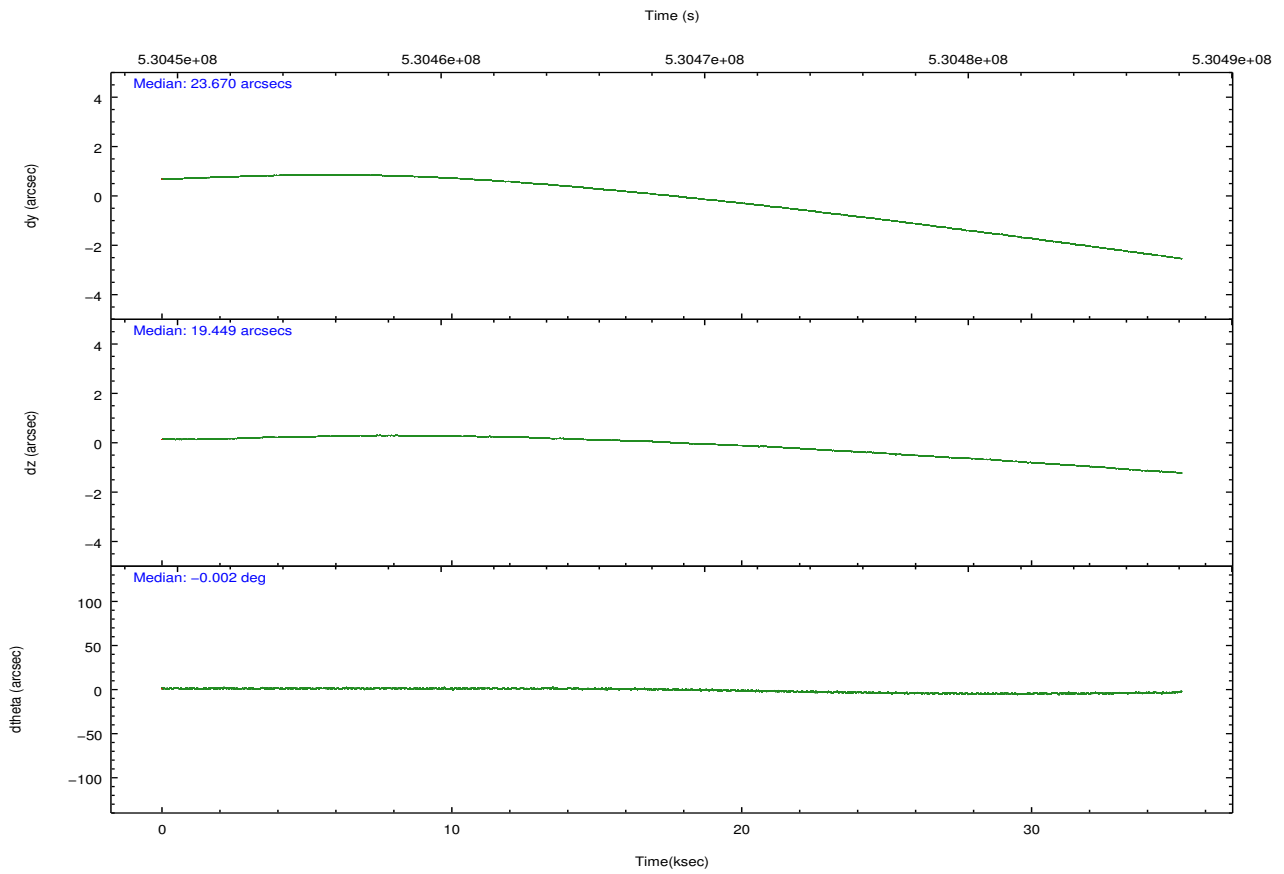
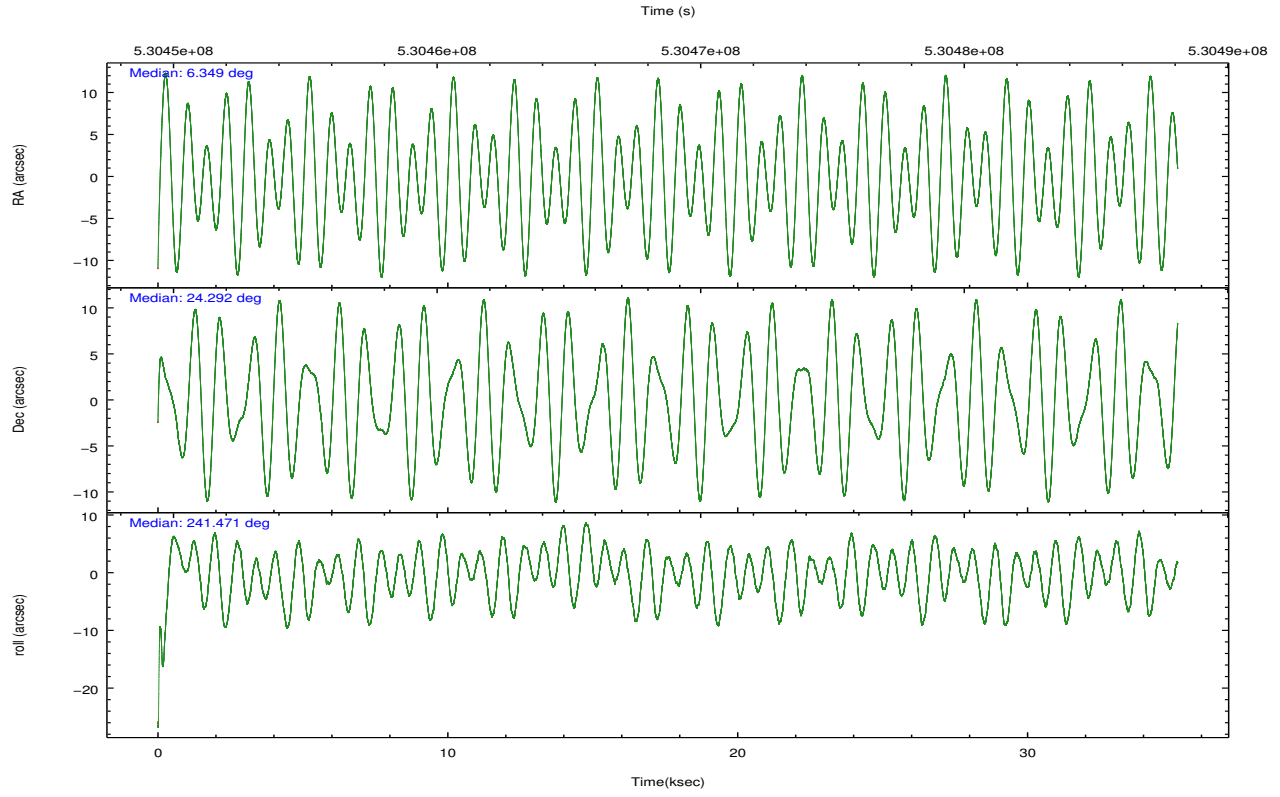
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	172312	313893	189075	245189	245140
rejected events	152605	157214	167603	140267	179696
rejected %	88%	50%	88%	57%	73%

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7085	22342	7141	8737	19026
	4%	7%	3%	3%	7%
grade 1 events	95	1196	88	273	185
	0%	0%	0%	0%	0%
grade 2 events	4196	45646	4948	21667	15456
	2%	14%	2%	8%	6%
grade 3 events	2153	5502	2153	8342	6834
	1%	1%	1%	3%	2%
grade 4 events	2112	4763	2058	8029	6417
	1%	1%	1%	3%	2%
grade 5 events	9154	20526	9112	23929	13581
	5%	6%	4%	9%	5%
grade 6 events	4164	78452	5175	58162	17718
	2%	24%	2%	23%	7%
grade 7 events	143353	135466	158400	116050	165923
	83%	43%	83%	47%	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	6.348138	6.349324010075691	CCD I2 on	O1	N
[deg] Pointing Dec	24.318843	24.29141481519011	CCD I3 on	O2	Y
[deg] Pointing Roll	241.318986	241.4751207997579	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)	530451346.184000	530450527.01744	CCD S5 on	N	N
Observation start date	2014-10-23T11:34:39	2014-10-23T11:22:07	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	530486346.184000	530487449.057	On-chip summing requested	N	N
Observation end date	2014-10-23T21:17:59	2014-10-23T21:37:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

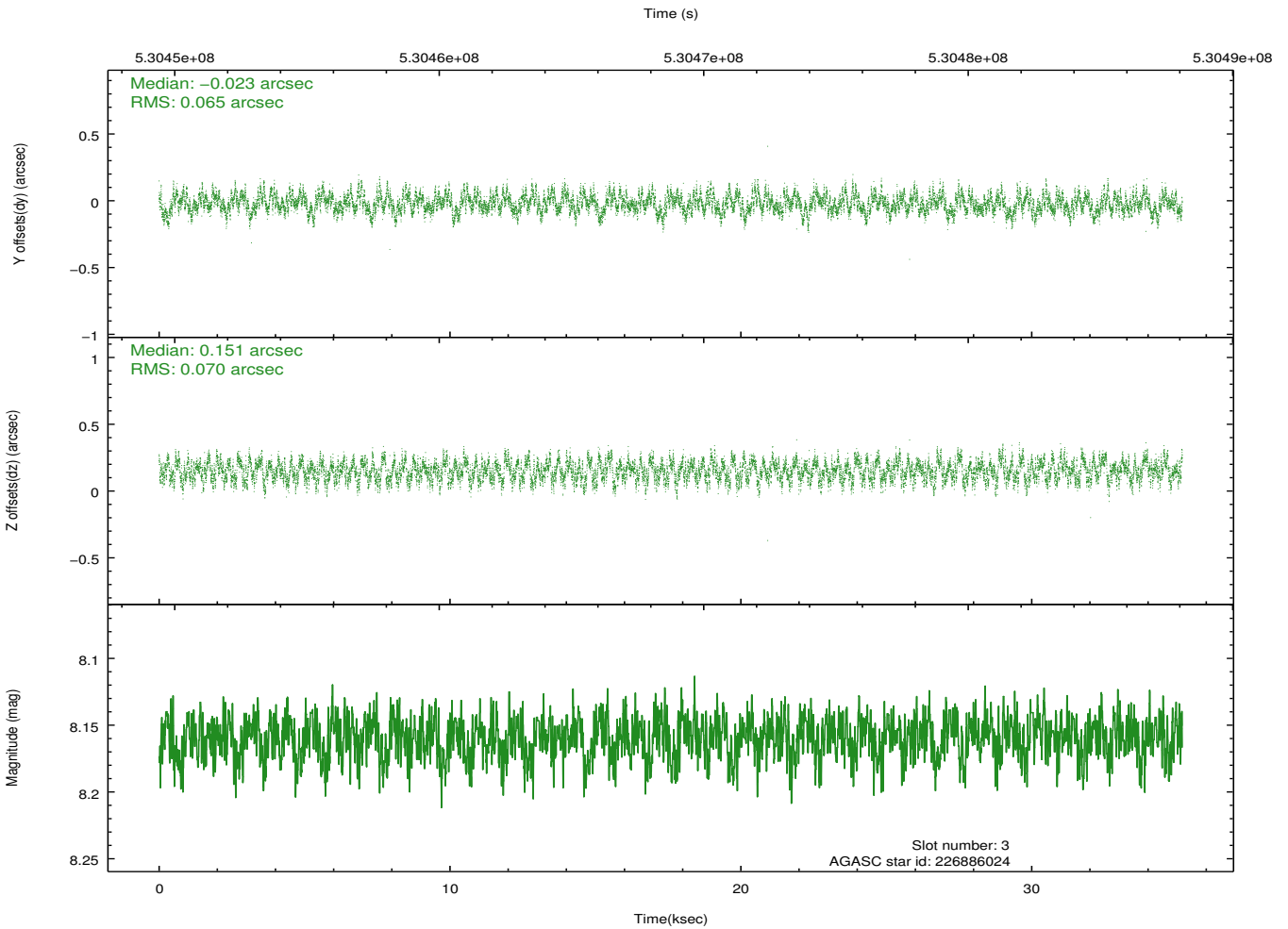
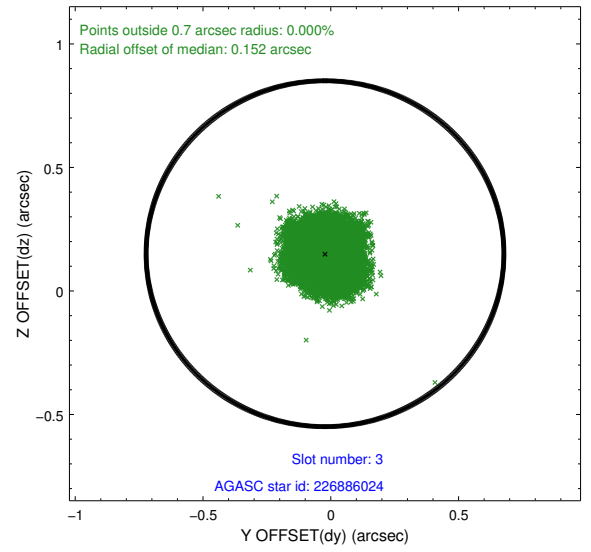
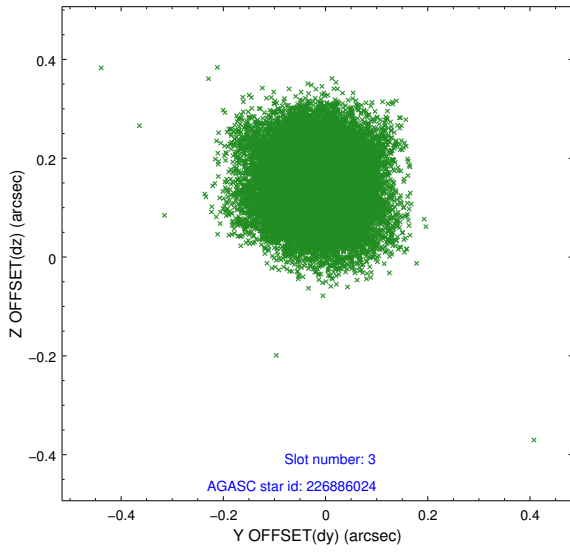


### Slot Statistics

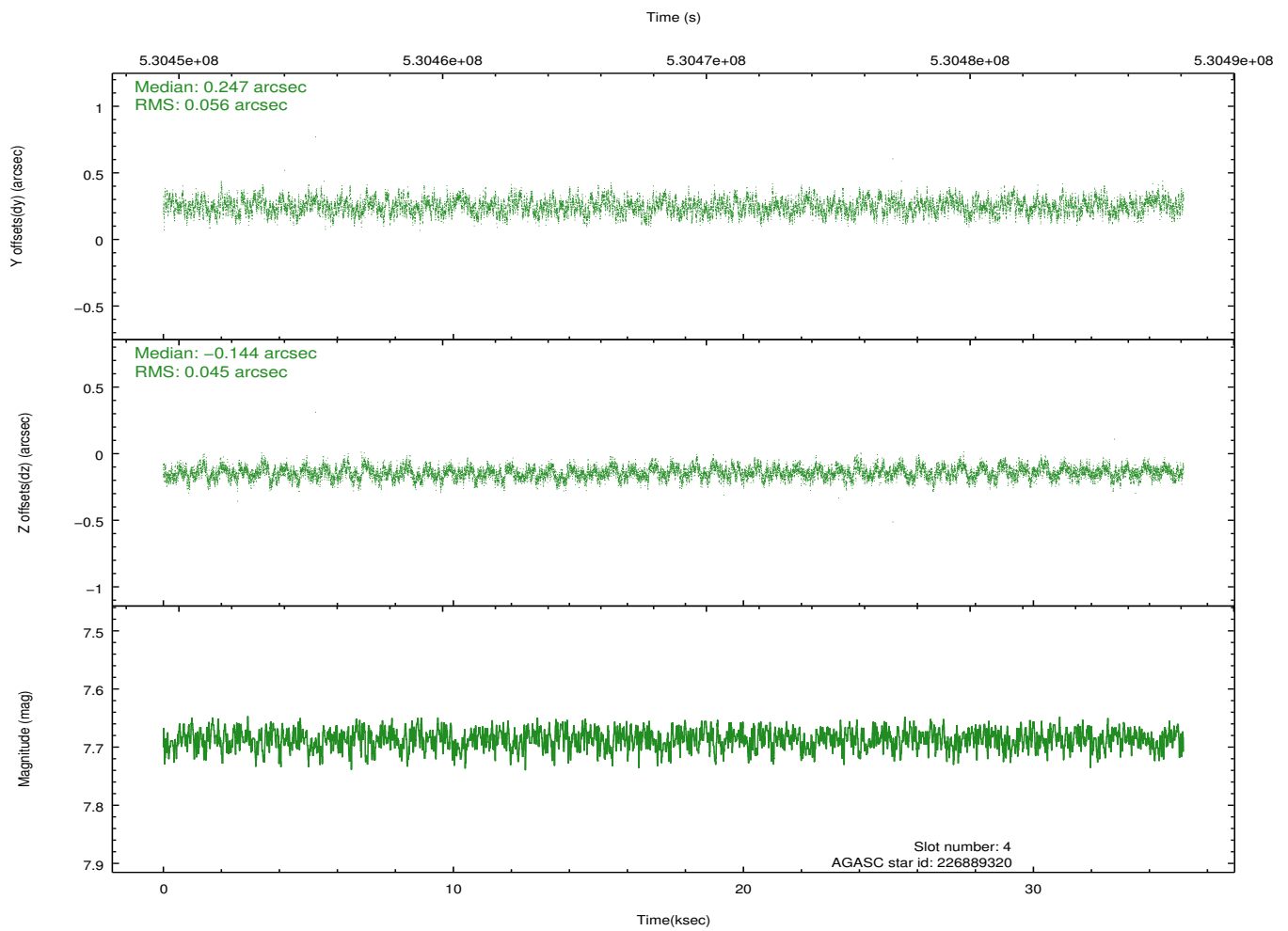
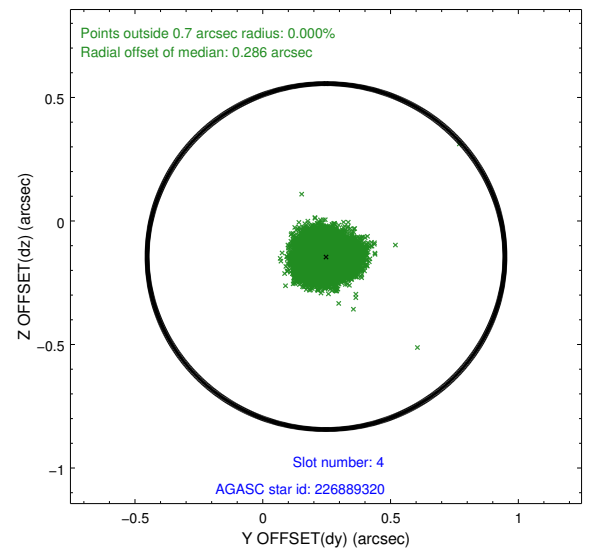
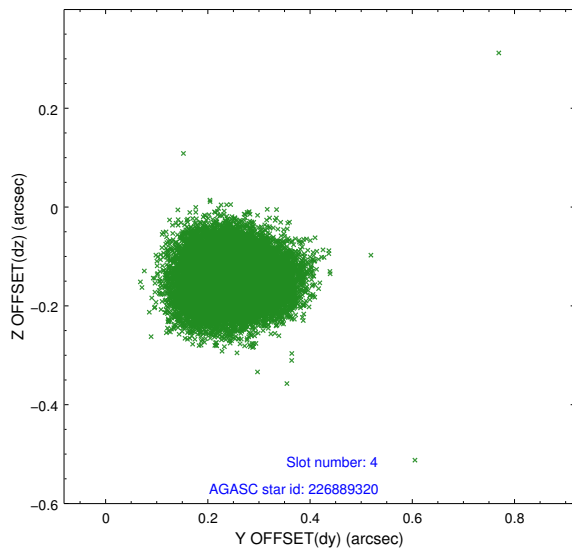
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	8581	-0.247	-0.149	0.035	0.065	0.000000	0.000000	-776.87	-1740.87
1	FID	ACIS-S-4	7.20	8581	0.272	0.146	0.032	0.059	0.000000	0.000000	2136.95	167.73
2	FID	ACIS-S-6	7.33	8581	-0.058	0.014	0.015	0.027	0.000000	0.000000	385.43	805.12
3	GUIDE	226886024	8.16	17152	-0.023	0.151	0.103	0.159	6.276796	24.575235	-697.22	-647.50
4	GUIDE	226889320	7.69	17162	0.247	-0.144	0.078	0.121	6.716953	24.630274	-1563.61	520.05
5	GUIDE	226889608	9.25	17147	0.123	-0.027	0.147	0.261	5.858625	24.814588	-800.35	-2259.52
6	GUIDE	226889736	9.02	17149	-0.145	0.041	0.141	0.213	6.219261	24.171865	667.48	-117.21
7	GUIDE	226897208	8.93	17134	-0.216	-0.007	0.147	0.235	5.673939	23.909788	2352.53	-1241.99

## 2.4 Star Slots

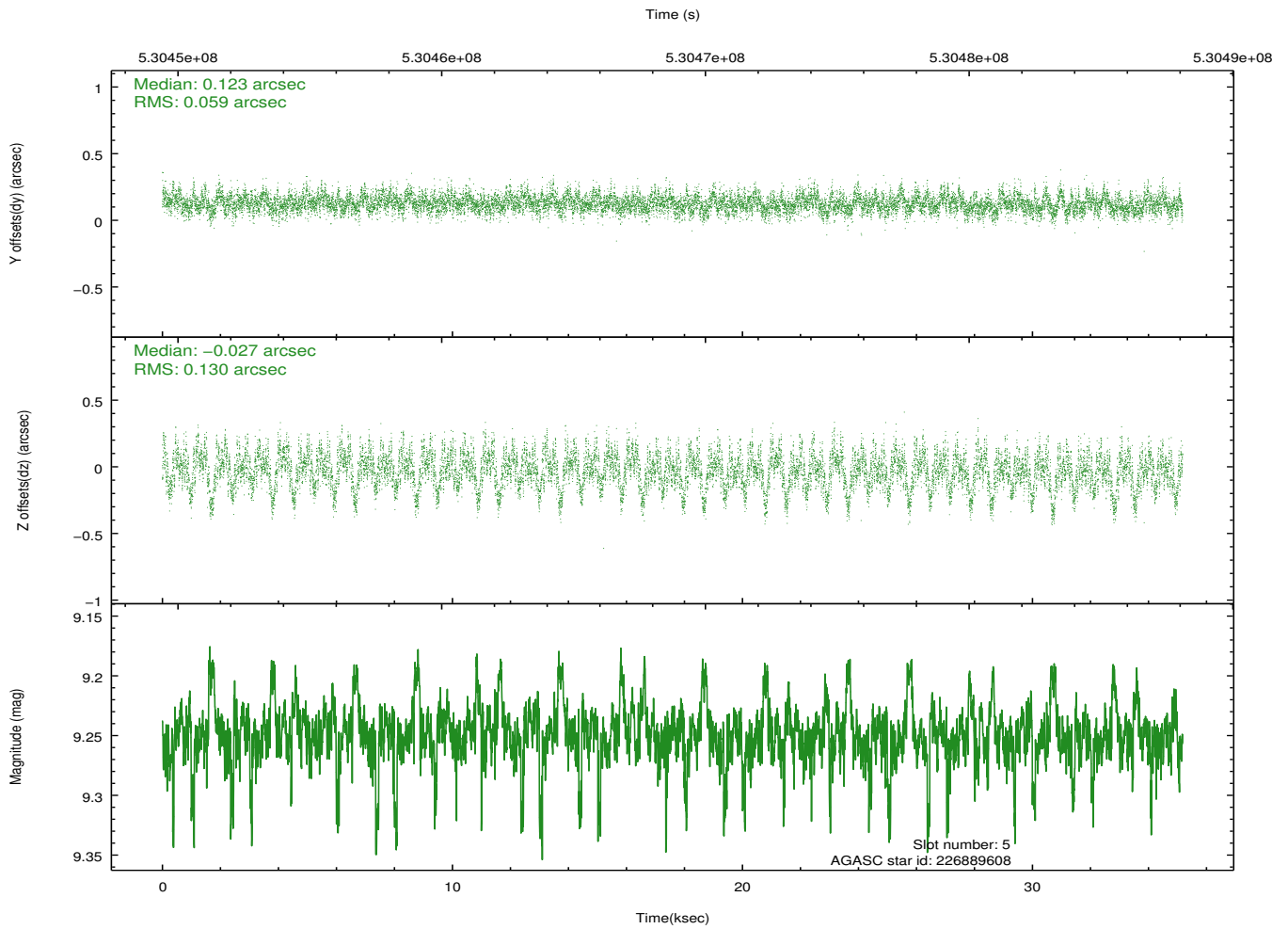
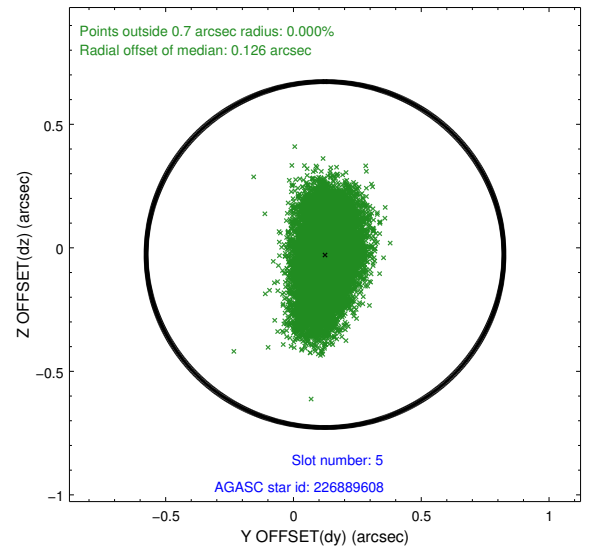
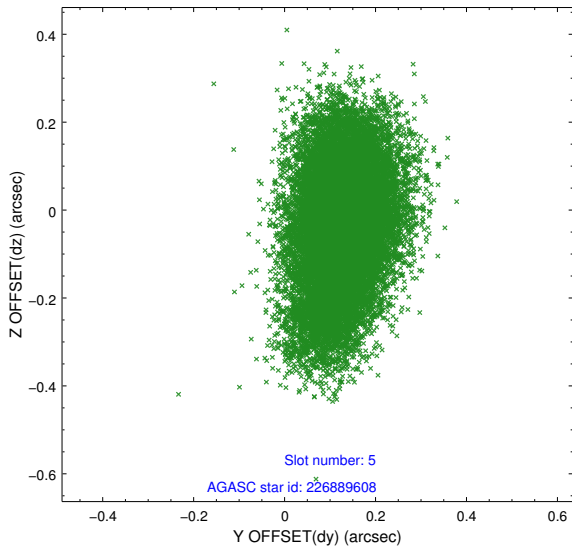
### 2.4.1 Slot 3



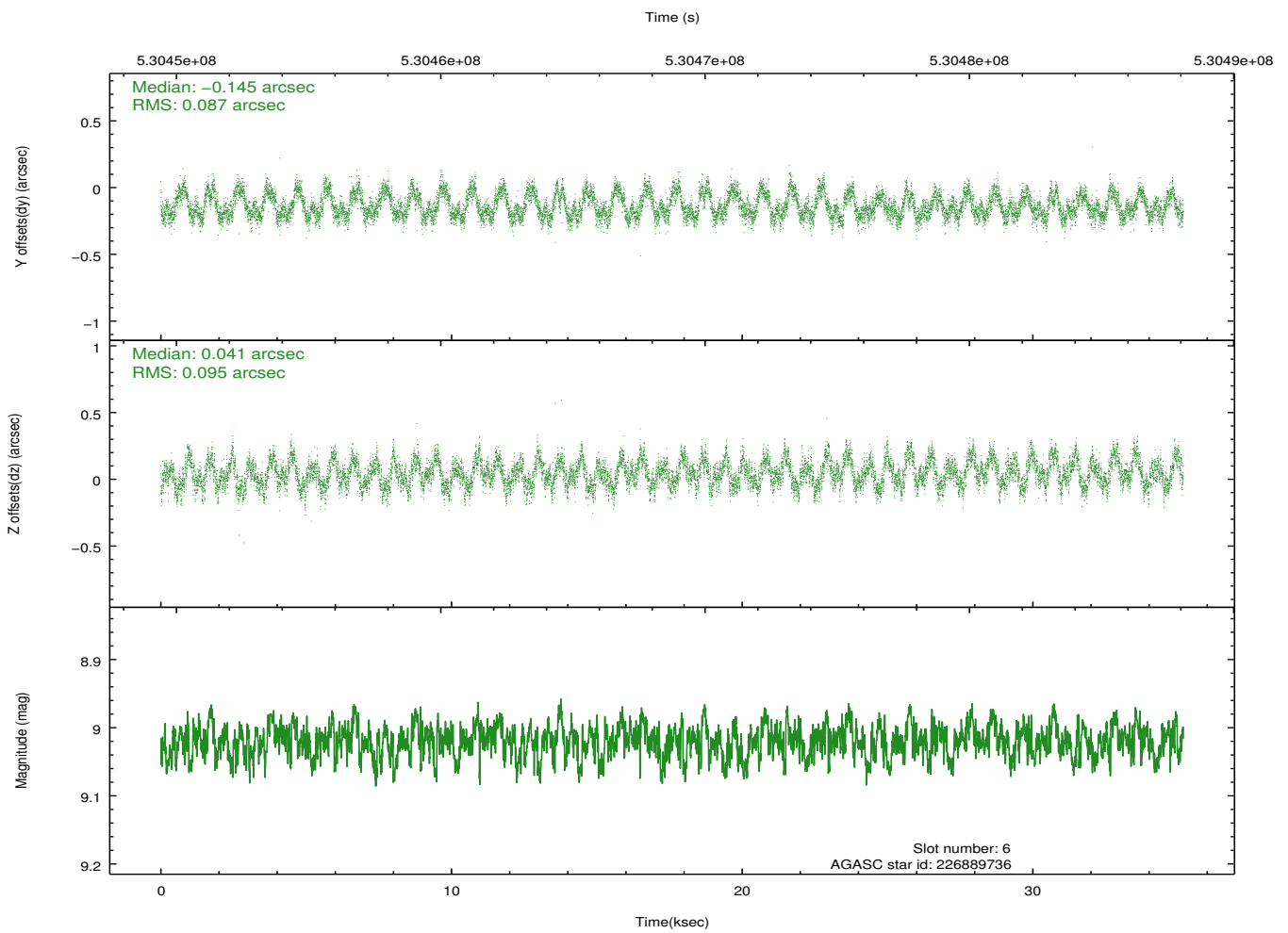
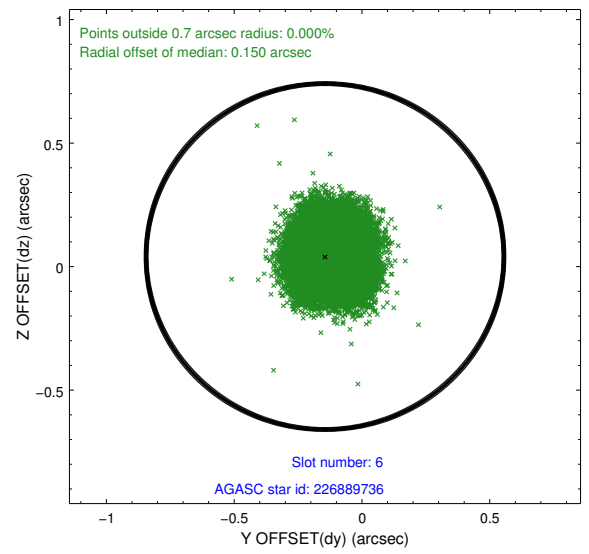
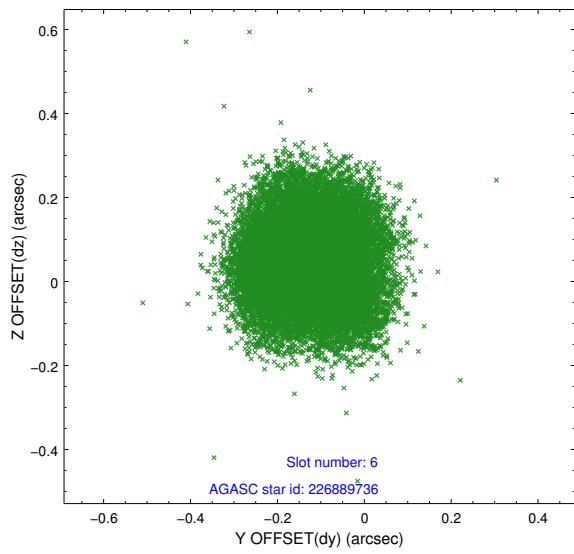
## 2.4.2 Slot 4



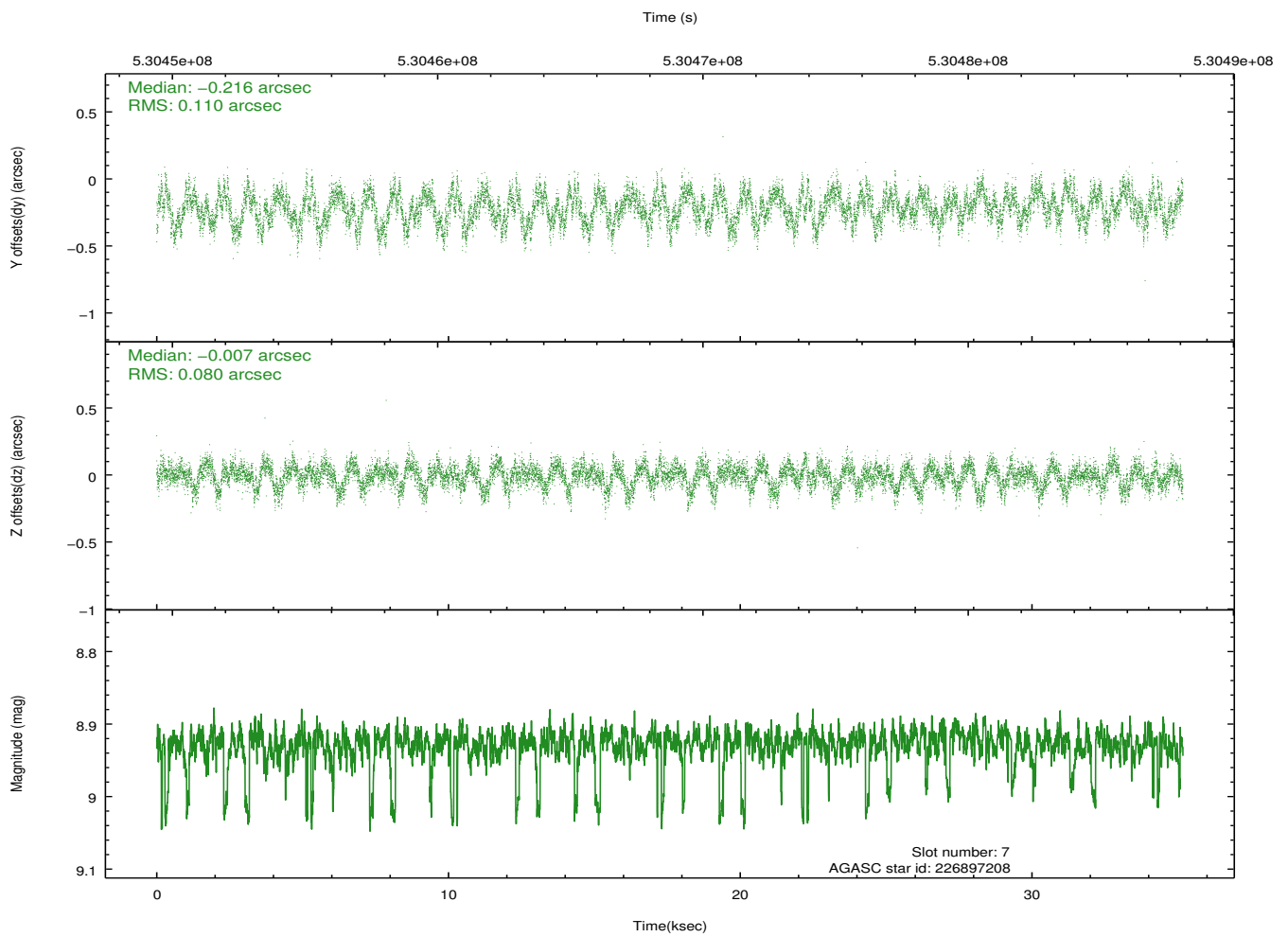
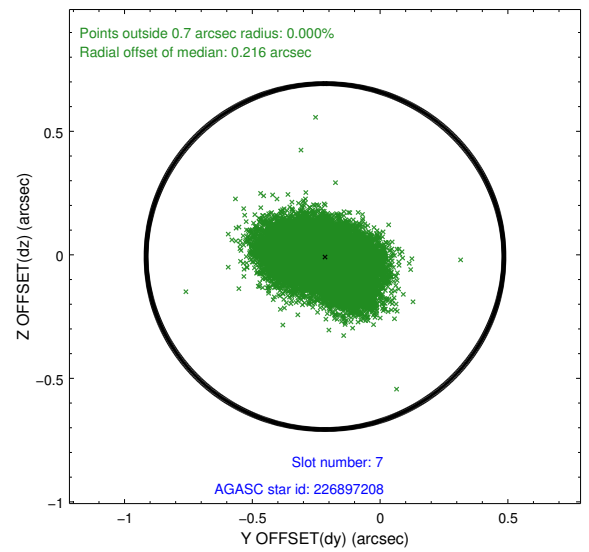
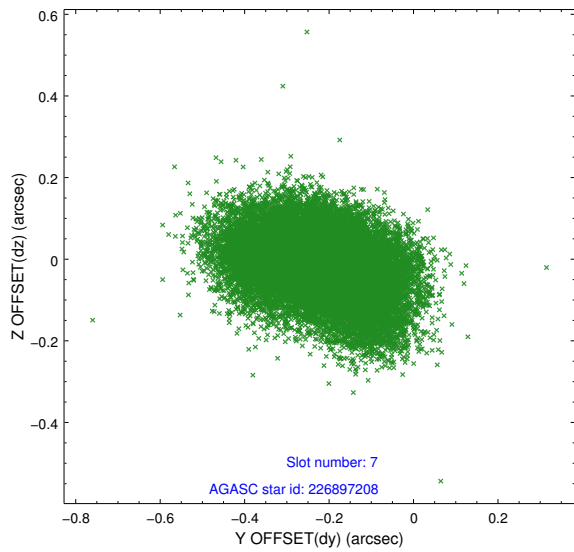
### 2.4.3 Slot 5



## 2.4.4 Slot 6

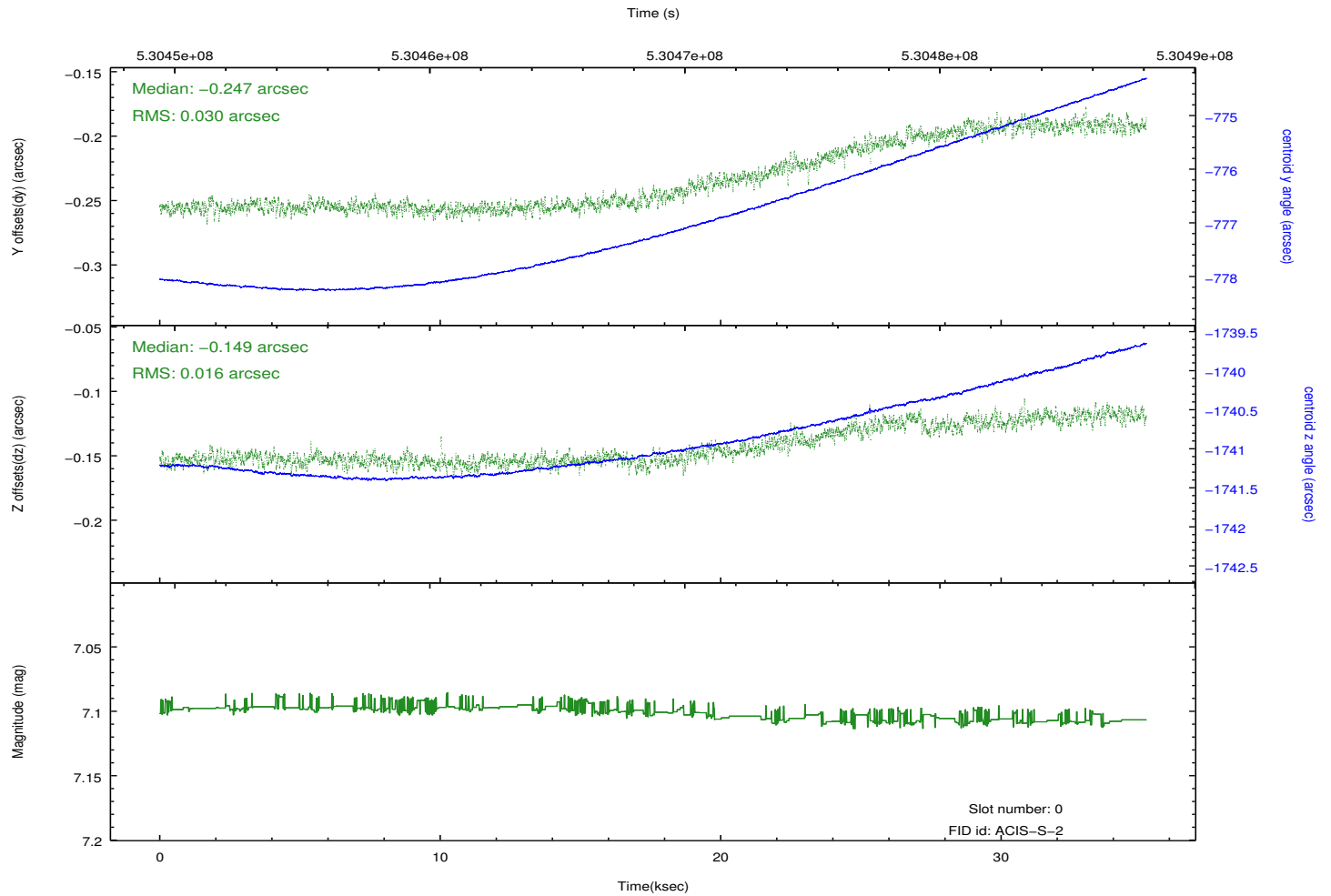
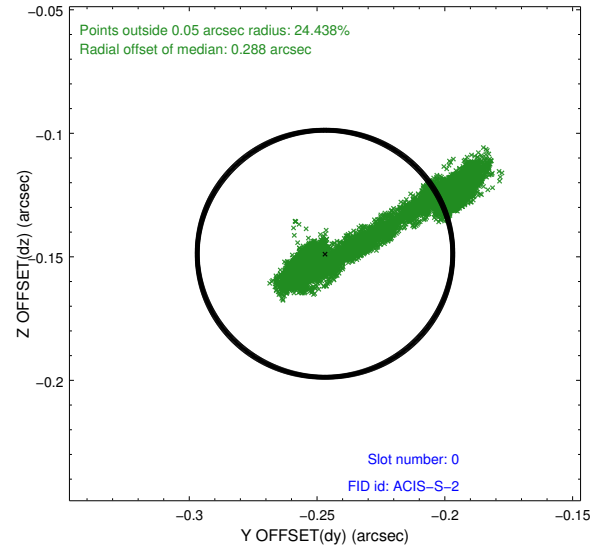
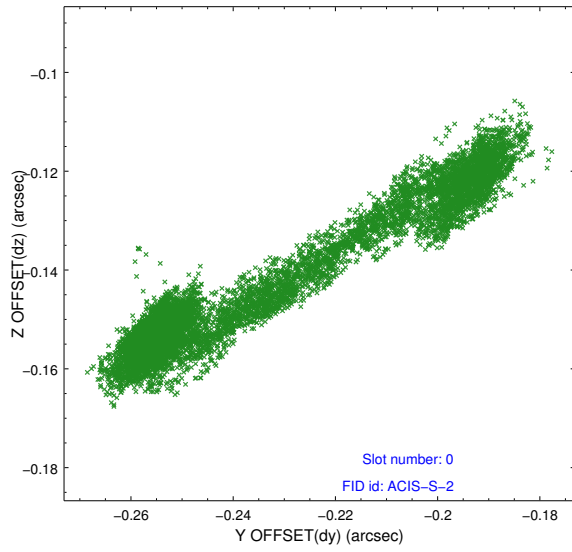


## 2.4.5 Slot 7

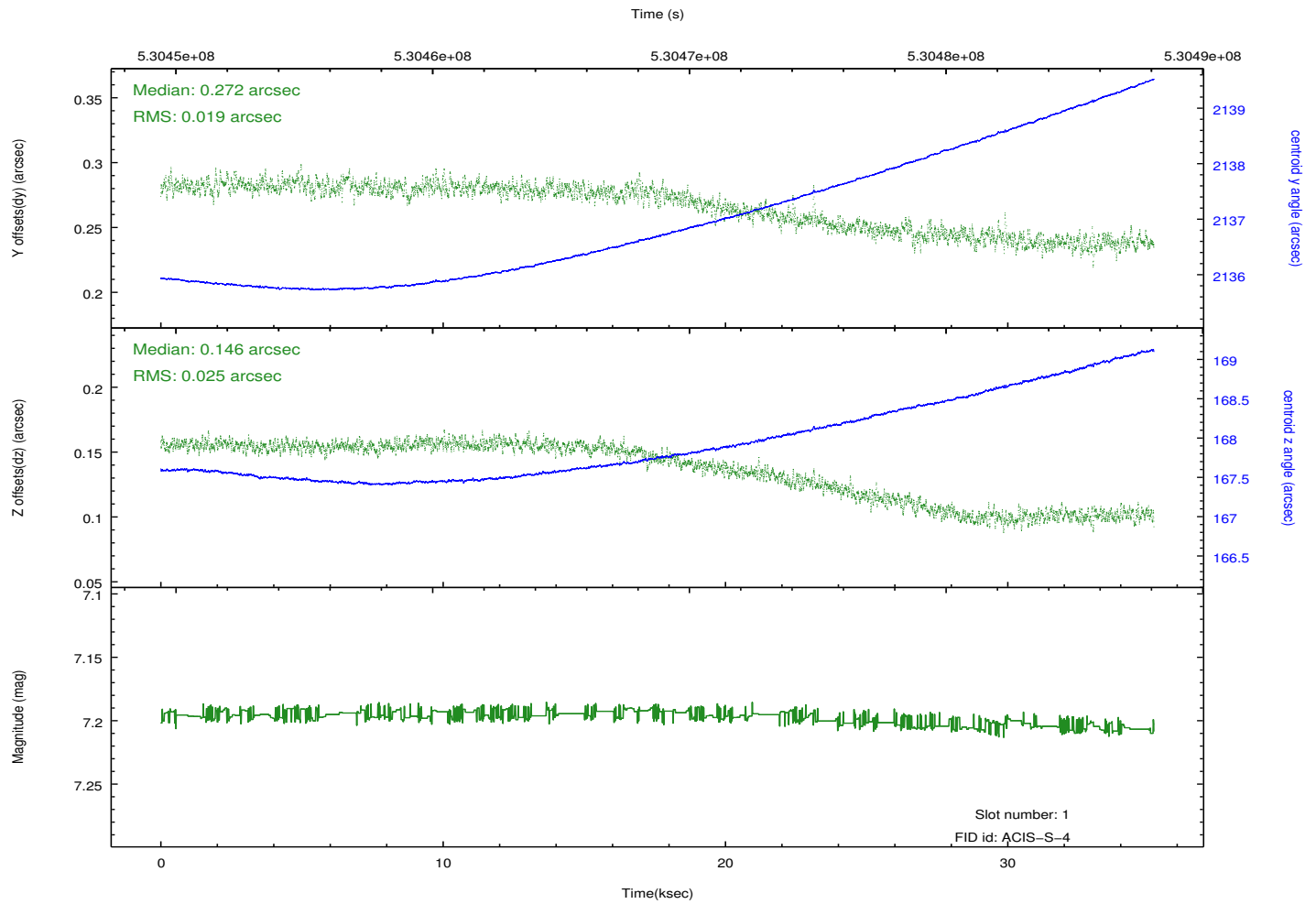
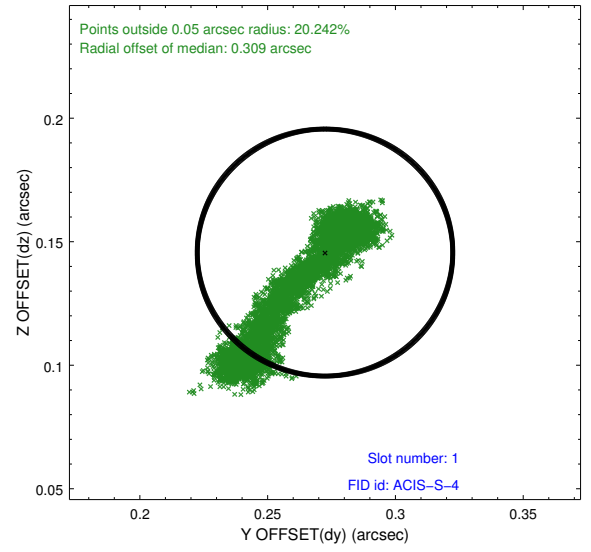
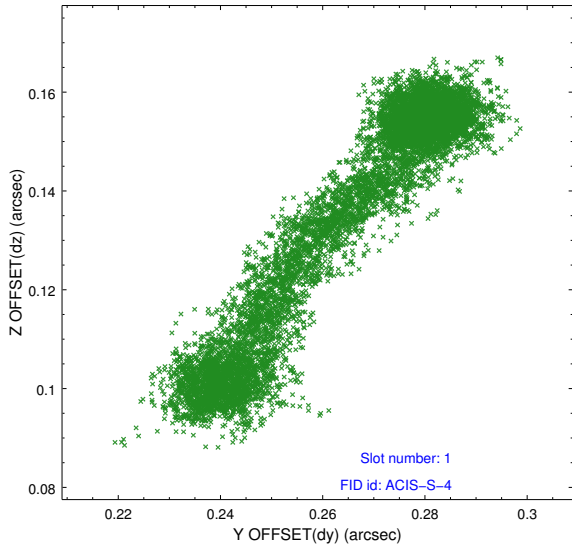


## 2.5 FID Slots

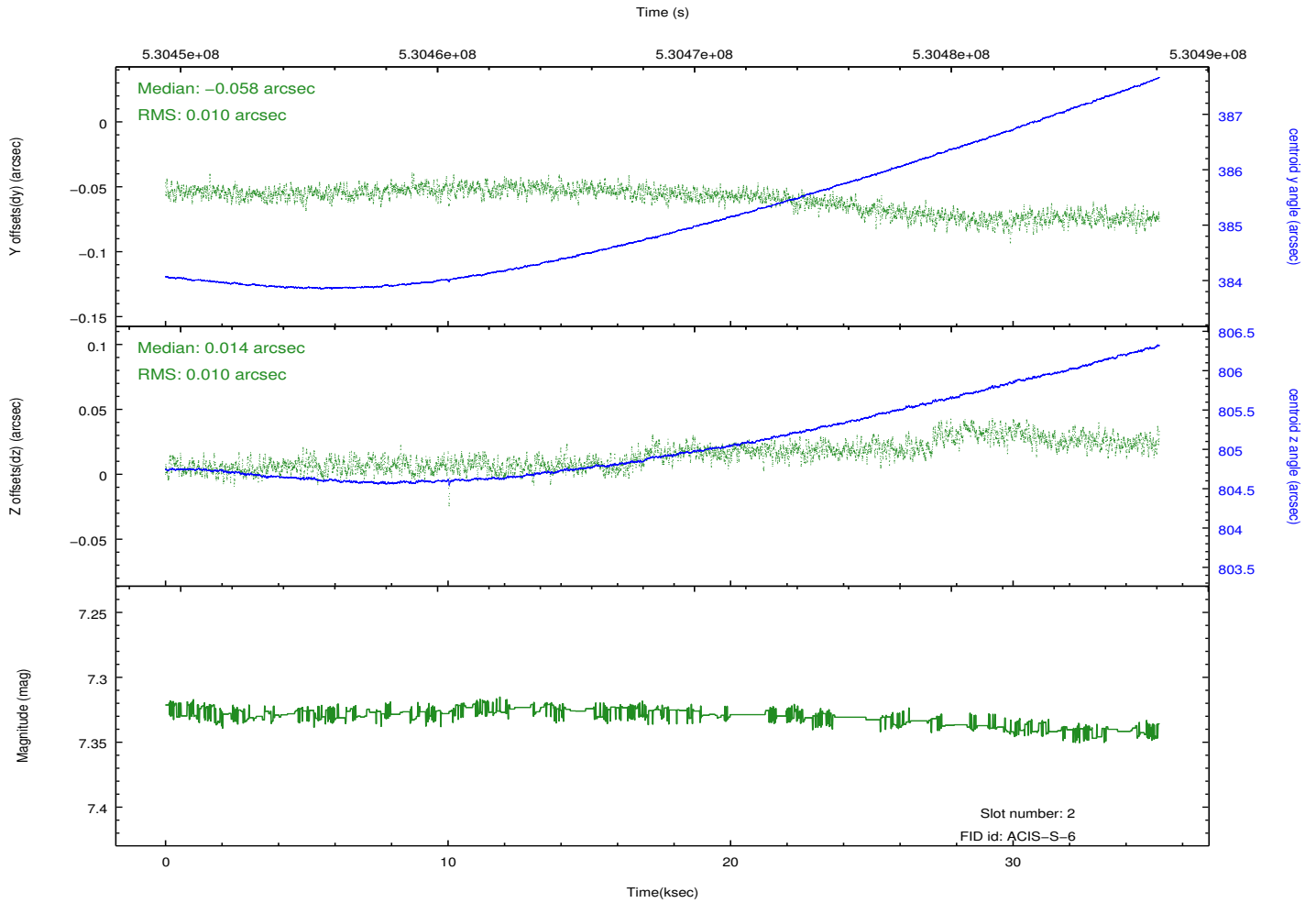
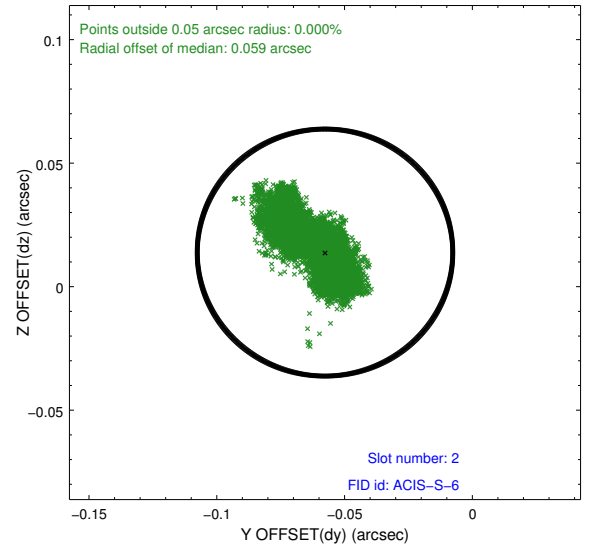
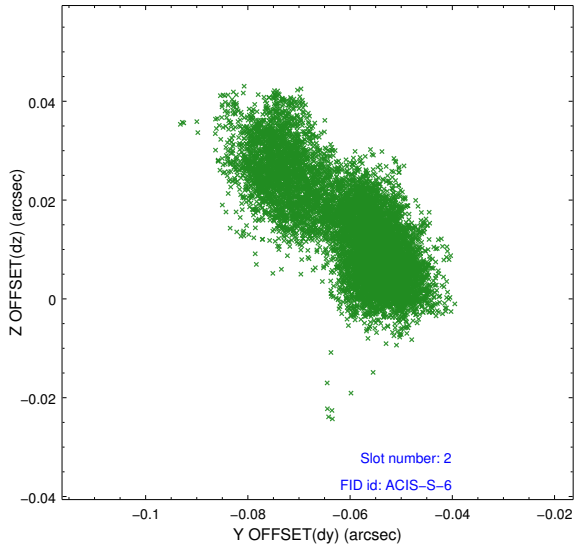
### 2.5.1 Slot 0



## 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)	2014.10.24
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	34.771651733696

### A.2 Comments

Monitor constraint met, follows obsid 15807 by 18 days. Optional chip I2 not used.