

# V&V Reference Report

## L2 ASCDS Version : 8.4.4

Observation 10877 - L2 Version 2  
Chandra X-Ray Center

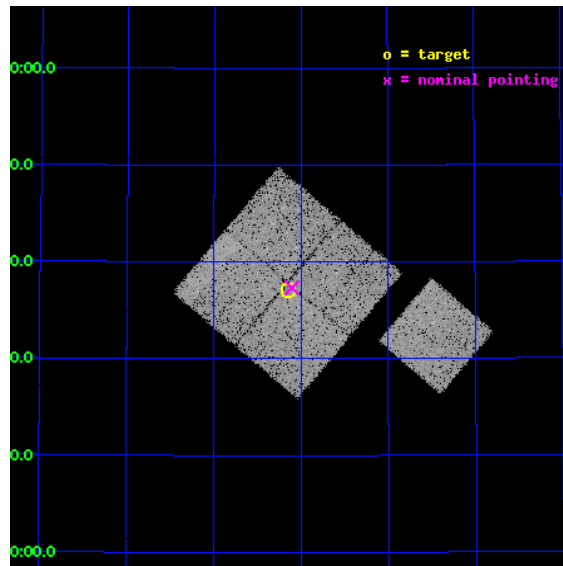
L2 Processing Date : Jun 2 2012

## 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

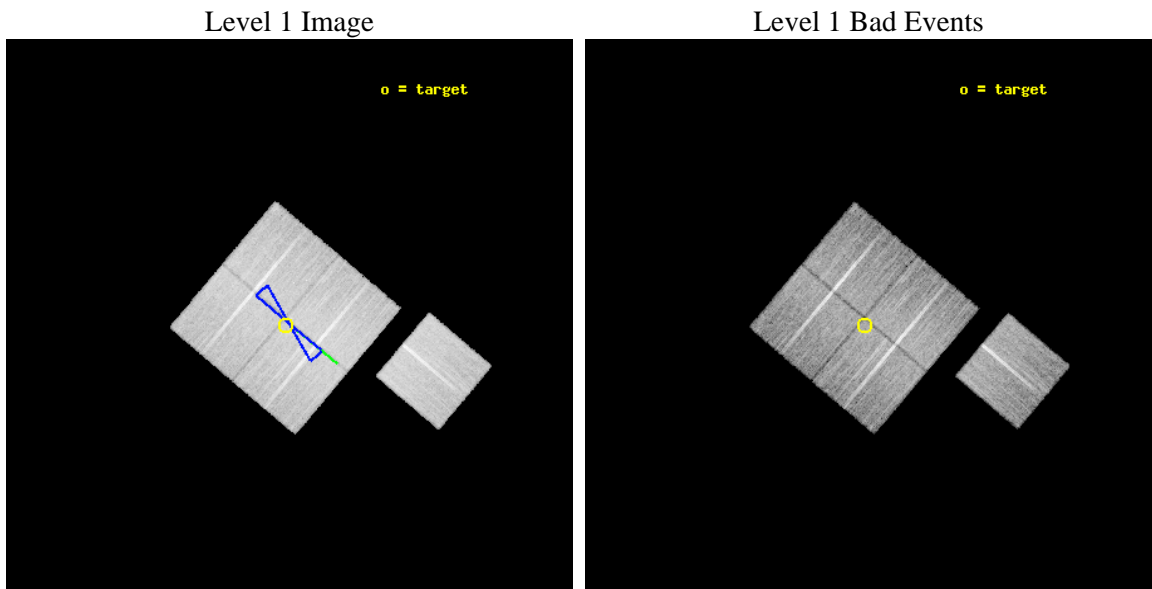
seq_num	900798	Sequence number
obs_id	10877	Observation id
title	The Evolution of Faint AGN at High Redshift	Proposal title
observer	Prof Kirpal Nandra	Principal investigator
object	AEGIS-3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	214.5375	Observer's specified target RA [deg]
dec_targ	52.617889	Observer's specified target Dec [deg]
ra_nom	214.52630460444	Nominal RA [deg]
dec_nom	52.622229789194	Nominal Dec [deg]
roll_nom	130.21758431302	Nominal Roll [deg]
revision	2	Processing version of data
ontime	16435.010464847	Sum of GTIs [s]
livetime	16220.274953845	Livetime [s]
ontime0	16438.028345168	Sum of GTIs [s]
ontime1	16441.210375488	Sum of GTIs [s]
ontime2	16434.969404936	Sum of GTIs [s]
ontime3	16435.010464847	Sum of GTIs [s]
ontime6	16441.128295481	Sum of GTIs [s]
l2events	60042	Number of level 2 events



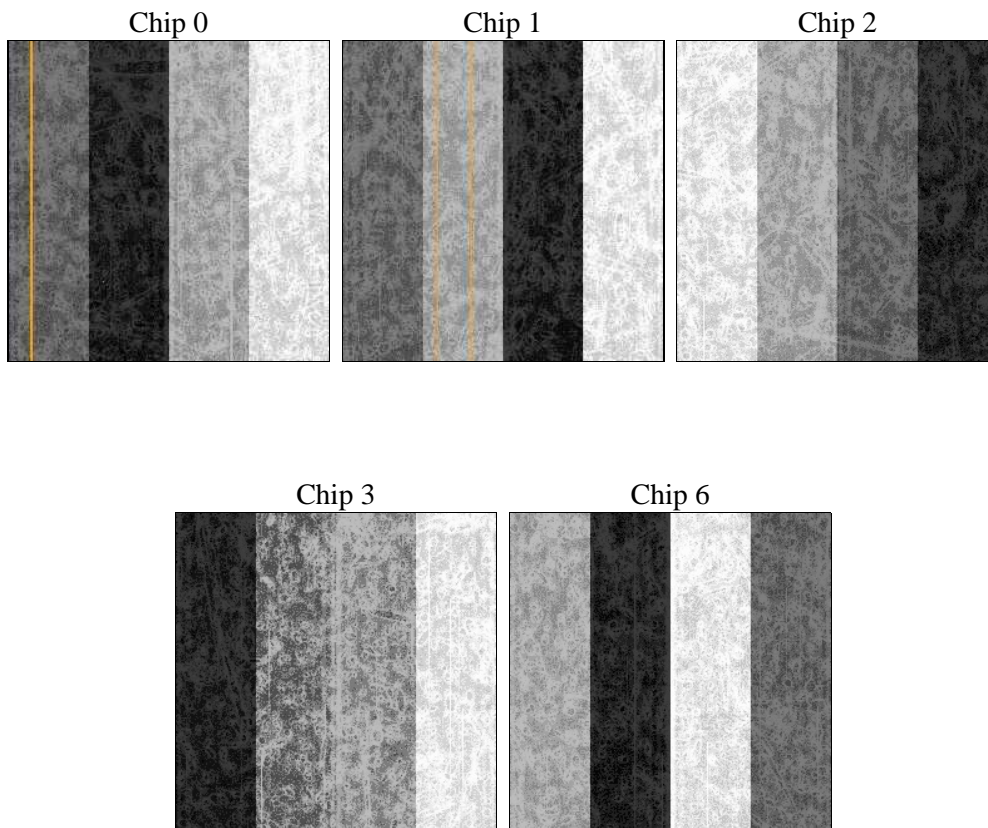
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	16400.000000	[s] Scheduled observation exposure time
ascdsver	8.4.4	Processing system revision	ontime	16435.010464847	Sum of GTIs [s]
caldsver	4.4.9	&#160	ontime0	16438.028345168	Sum of GTIs [s]
date	2012-06-02T14:31:54	Date and time of file creation	ontime1	16441.210375488	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	16434.969404936	Sum of GTIs [s]
			ontime3	16435.010464847	Sum of GTIs [s]
			ontime6	16441.128295481	Sum of GTIs [s]
			l1events	685094	Number of level 1 events

### 2.1.4 Events

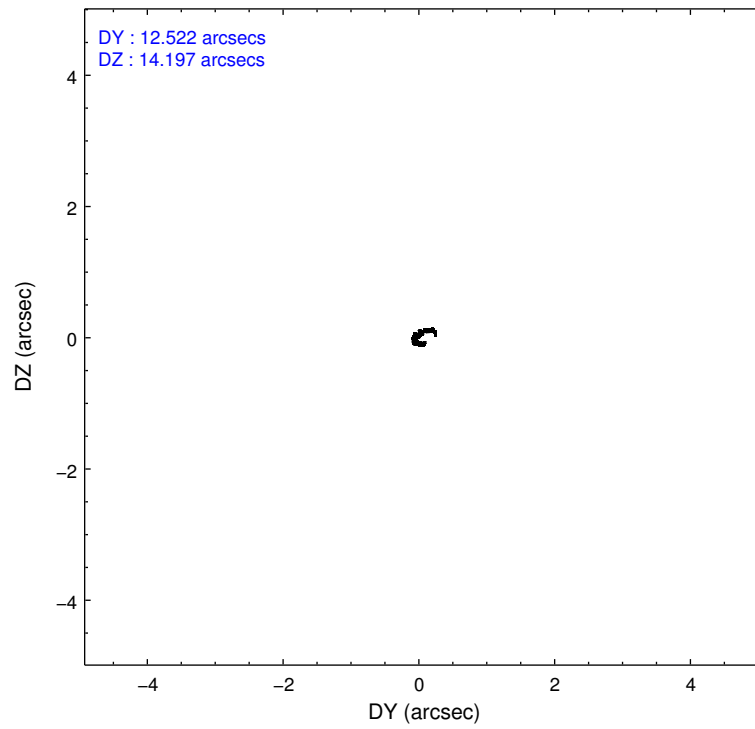
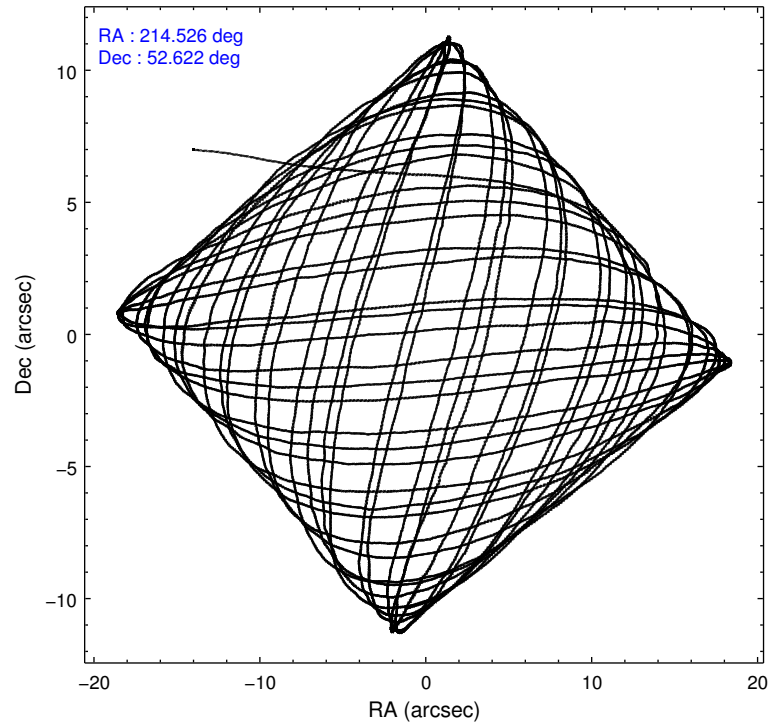
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	129227	131572	144926	138415	140954
rejected events	114861	115480	130777	125045	126558
rejected %	88%	87%	90%	90%	89%

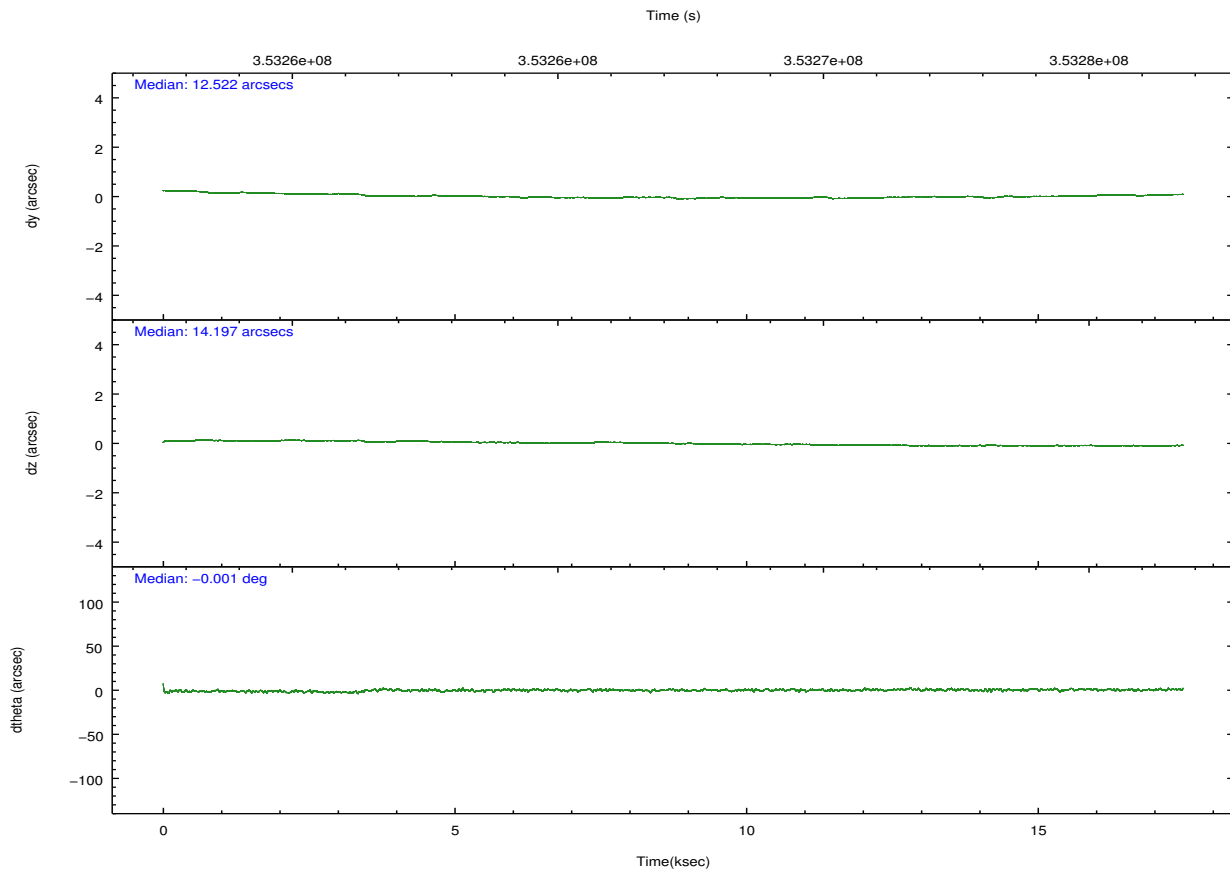
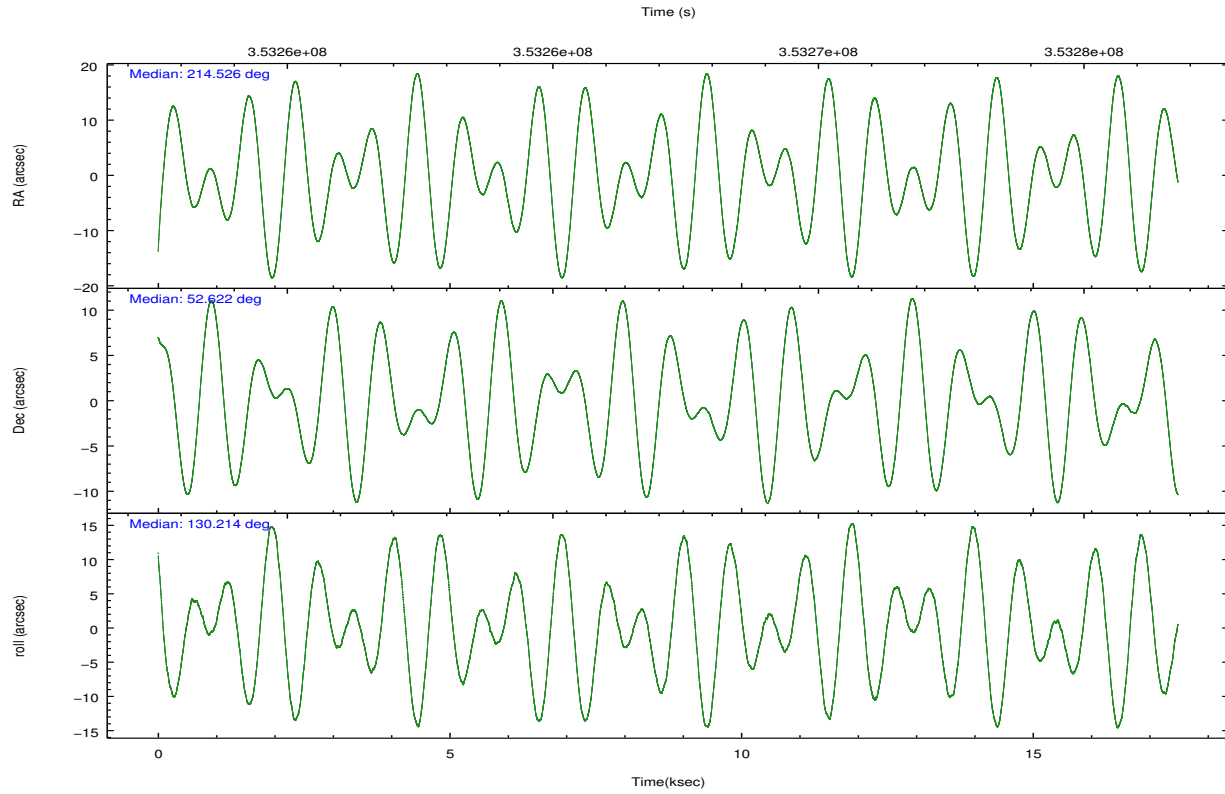
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	5048	5712	5138	4580	5074
	3%	4%	3%	3%	3%
grade 1 events	83	63	74	85	80
	0%	0%	0%	0%	0%
grade 2 events	3477	3716	3480	2977	3224
	2%	2%	2%	2%	2%
grade 3 events	1573	1674	1445	1593	1564
	1%	1%	0%	1%	1%
grade 4 events	1465	1775	1450	1466	1536
	1%	1%	1%	1%	1%
grade 5 events	5185	5626	4888	5747	5698
	4%	4%	3%	4%	4%
grade 6 events	2807	3217	2641	2761	3001
	2%	2%	1%	1%	2%
grade 7 events	109589	109789	125810	119206	120777
	84%	83%	86%	86%	85%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	214.568942	214.5263046044384	CCD I2 on	Y	Y
[deg] Pointing Dec	52.613020	52.62222978919446	CCD I3 on	Y	Y
[deg] Pointing Roll	129.975019	130.21758431302	CCD S0 on	N	N
[deg] Roll angle	50.000000	50.000000	CCD S1 on	N	N
[deg] Roll tolerance	10.000000	10.000000	CCD S2 on	O1	Y
Roll constraint allows 180D rotation	Y	Y	CCD S3 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S4 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S5 on	N	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	Number of optional ACIS chips dropped	0	0
[mm] SIM translation stage offset	0	-0.005018542100998502	On-chip summing requested	N	N
[s] Observation start time (MET)	353259512.184000	353257746.85012	Subarray requested	NONE	NONE
Observation start date	2009-03-12T15:37:26	2009-03-12T15:09:06	Alternating exposures requested	N	N
[s] Observation end time (MET)	353275912.184000	353276828.25107	[s] Primary exposure time	0.000000	3.1
Observation end date	2009-03-12T20:10:46	2009-03-12T20:27:08			
Read mode	TIMED	TIMED			

## 2.3 Aspect





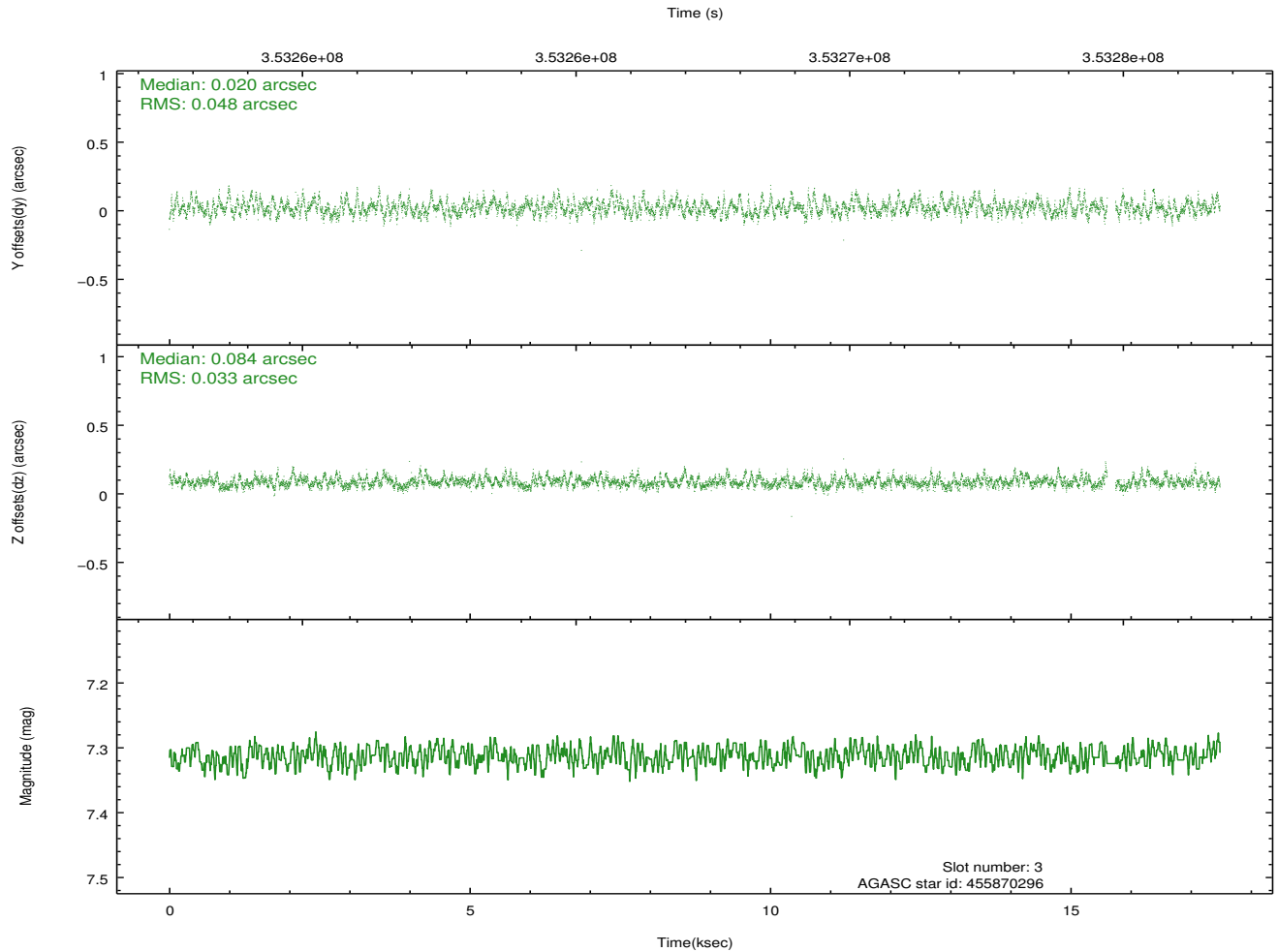
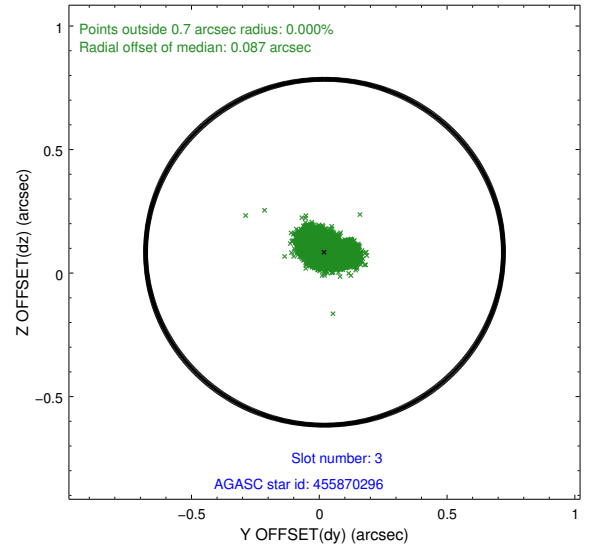
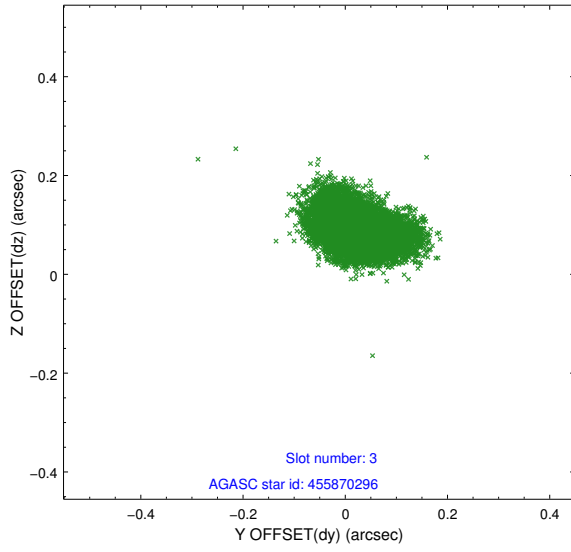
### Slot Statistics

slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.02	4263	-0.062	0.067	0.009	0.015	0.000000	0.000000	926.92	-837.72
1	FID	ACIS-I-2	6.95	4265	-0.141	-0.088	0.009	0.027	0.000000	0.000000	-767.12	-844.41
2	FID	ACIS-I-4	6.94	4264	0.104	0.089	0.009	0.028	0.000000	0.000000	2146.89	1061.98
3	GUIDE	455870296	7.31	8461	0.020	0.084	0.062	0.104	214.629779	52.033323	-1685.61	1237.75
4	GUIDE	455871352	8.10	8527	-0.113	-0.056	0.069	0.113	215.099961	52.172669	-1964.81	117.55
5	GUIDE	505806936	7.01	8466	0.008	-0.069	0.074	0.117	213.820815	52.535927	846.17	1428.51
6	GUIDE	505812088	8.17	8524	0.010	0.094	0.071	0.116	214.186617	53.263562	2325.69	-874.42
7	GUIDE	505812376	7.67	8525	0.067	-0.061	0.048	0.079	214.039537	52.937930	1638.09	126.29

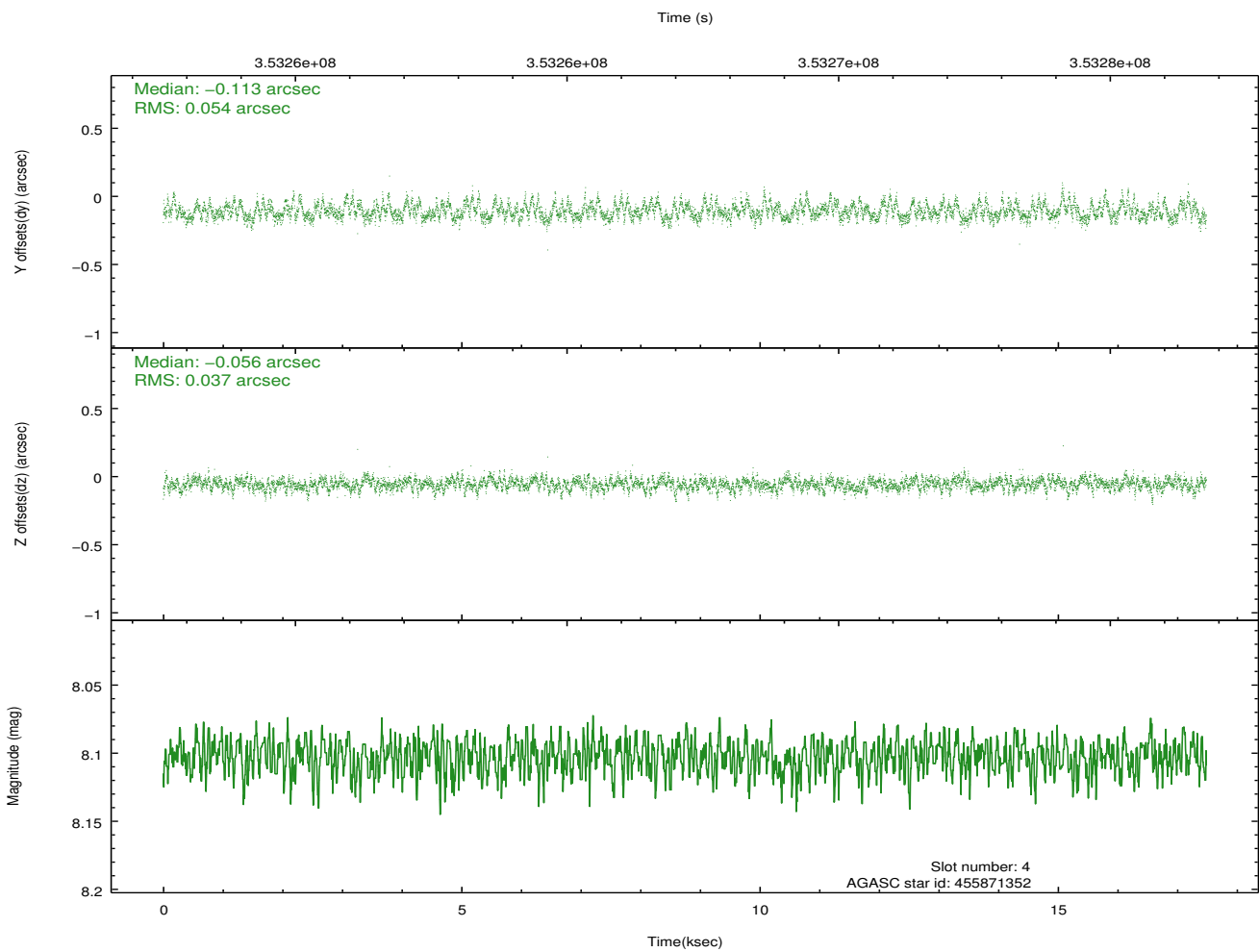
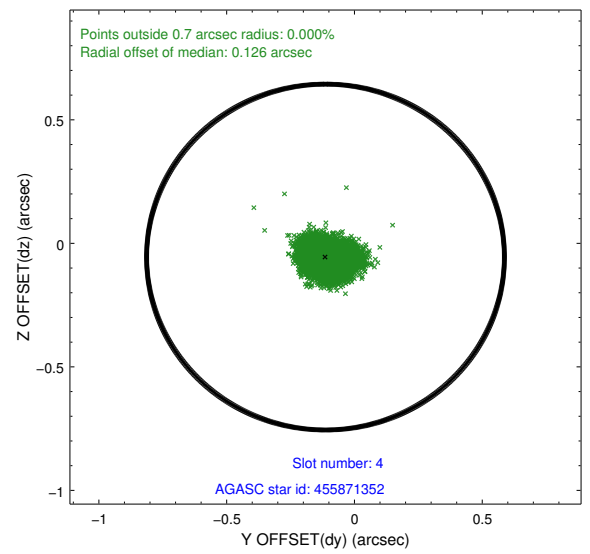
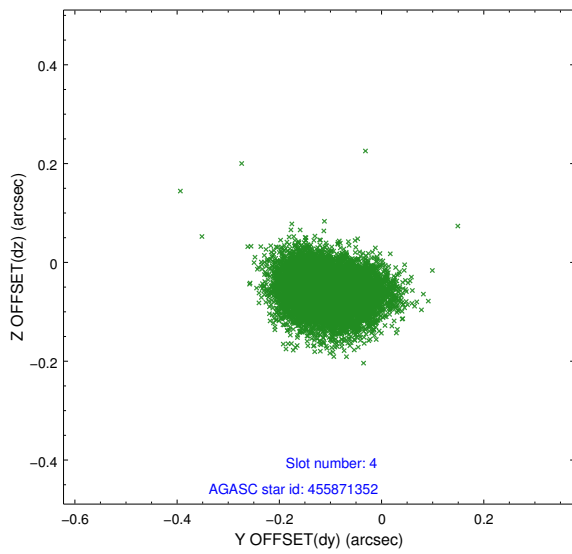
∞

## 2.4 Star Slots

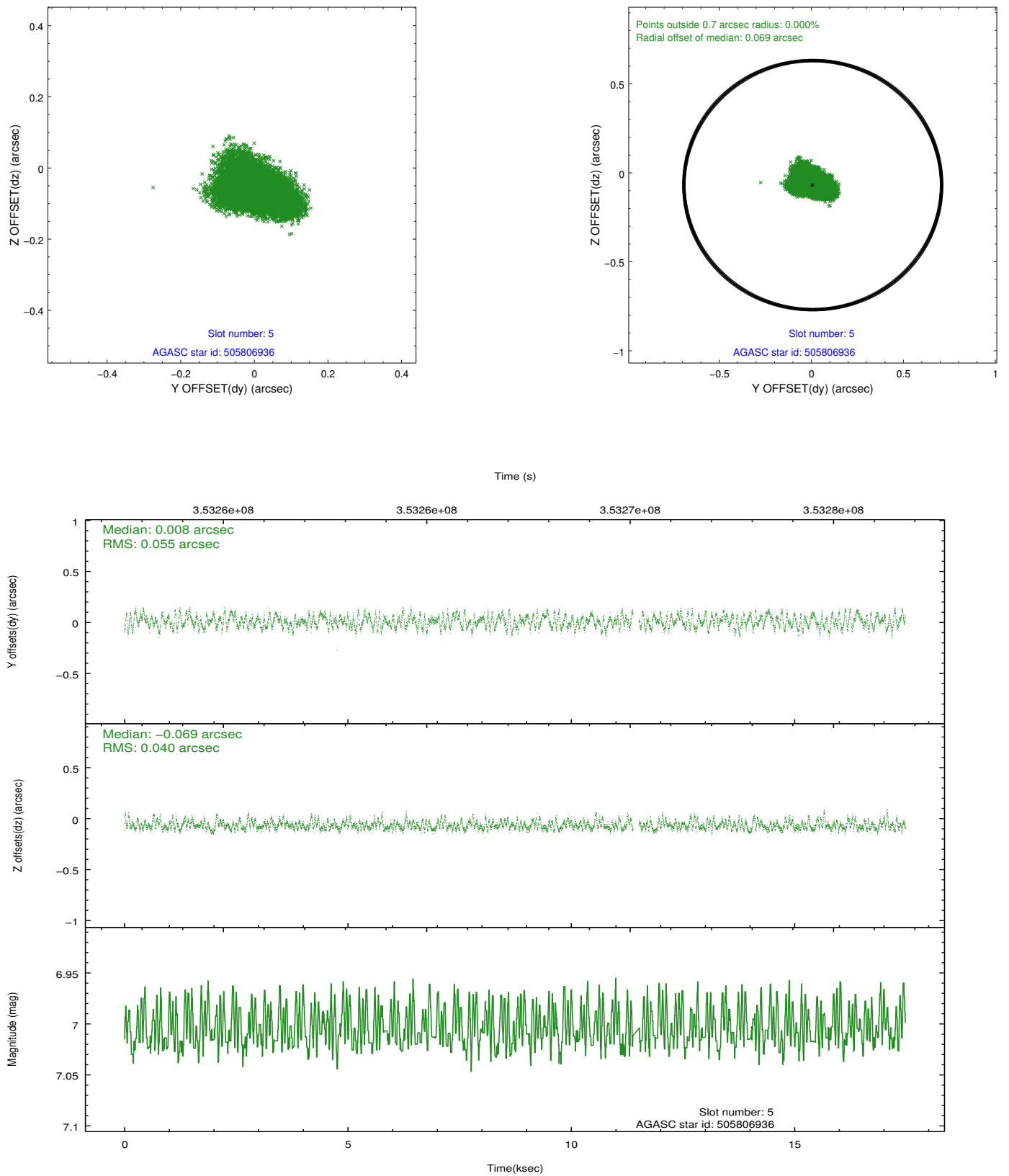
### 2.4.1 Slot 3



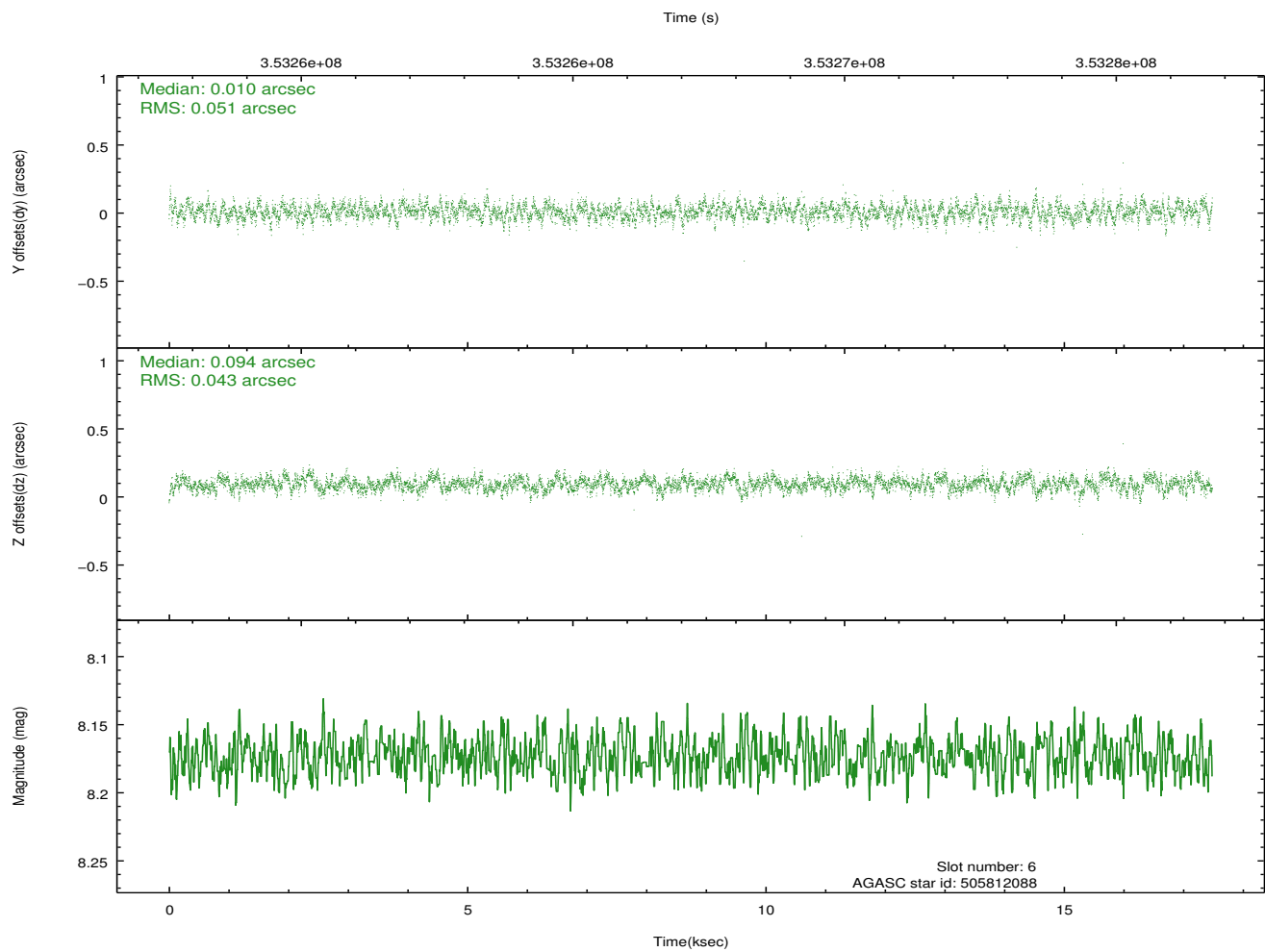
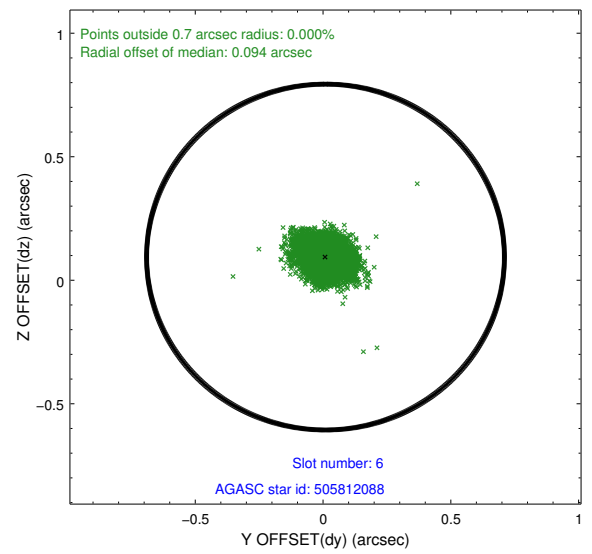
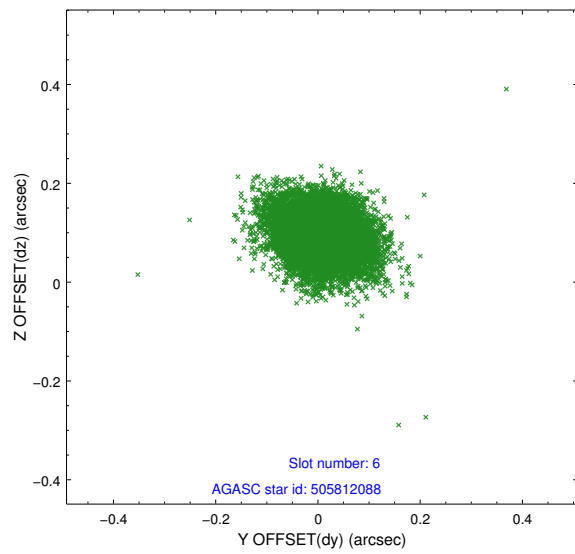
## 2.4.2 Slot 4



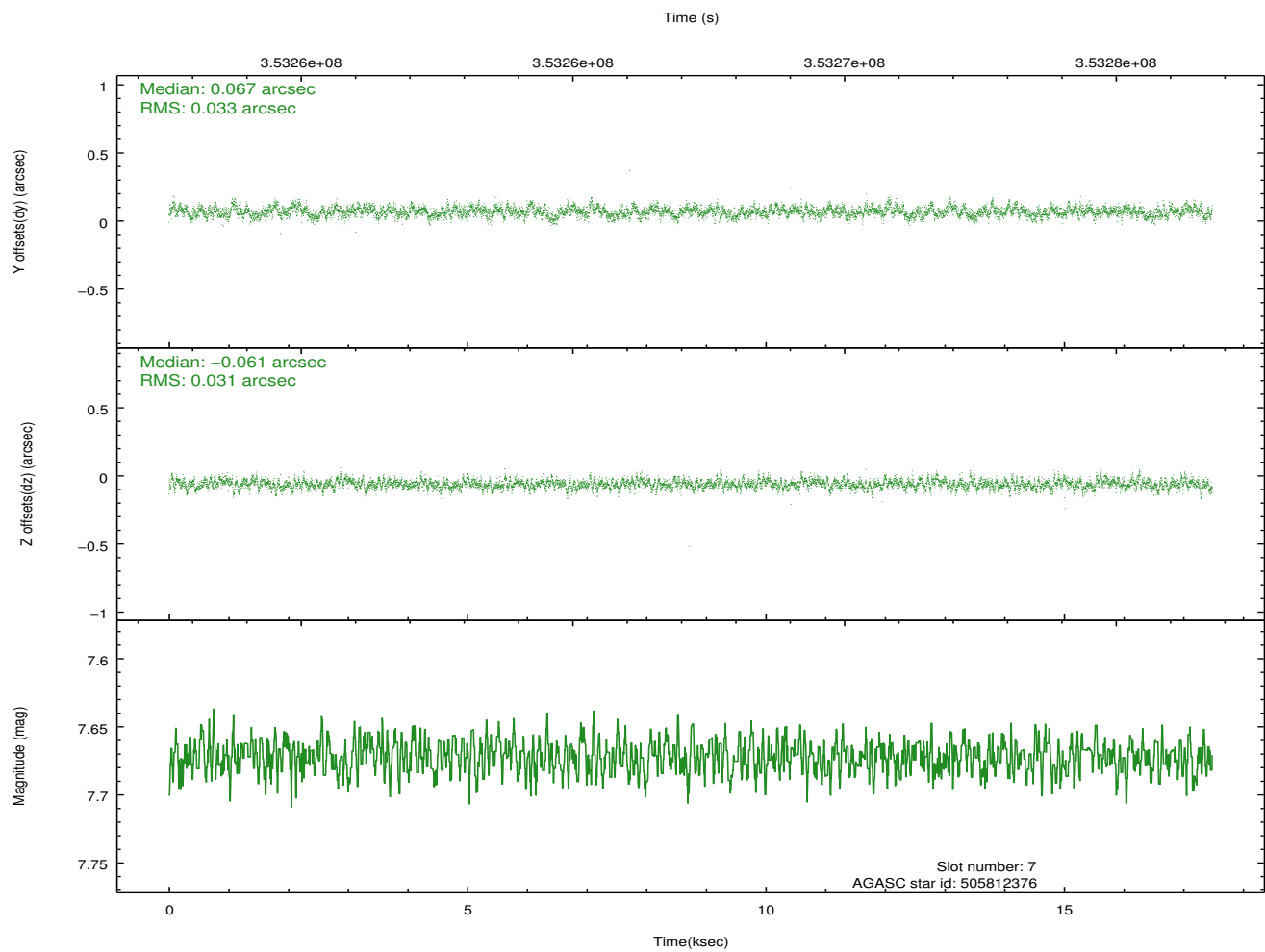
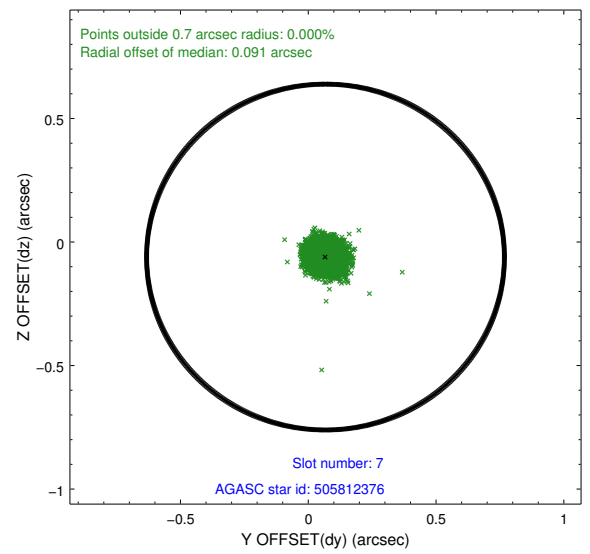
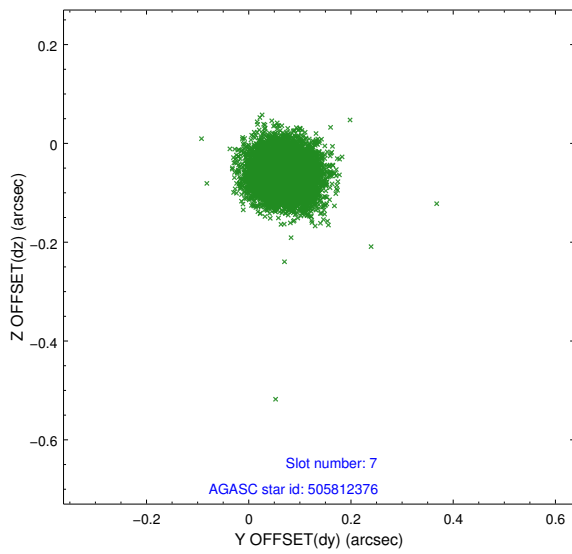
### 2.4.3 Slot 5



## 2.4.4 Slot 6

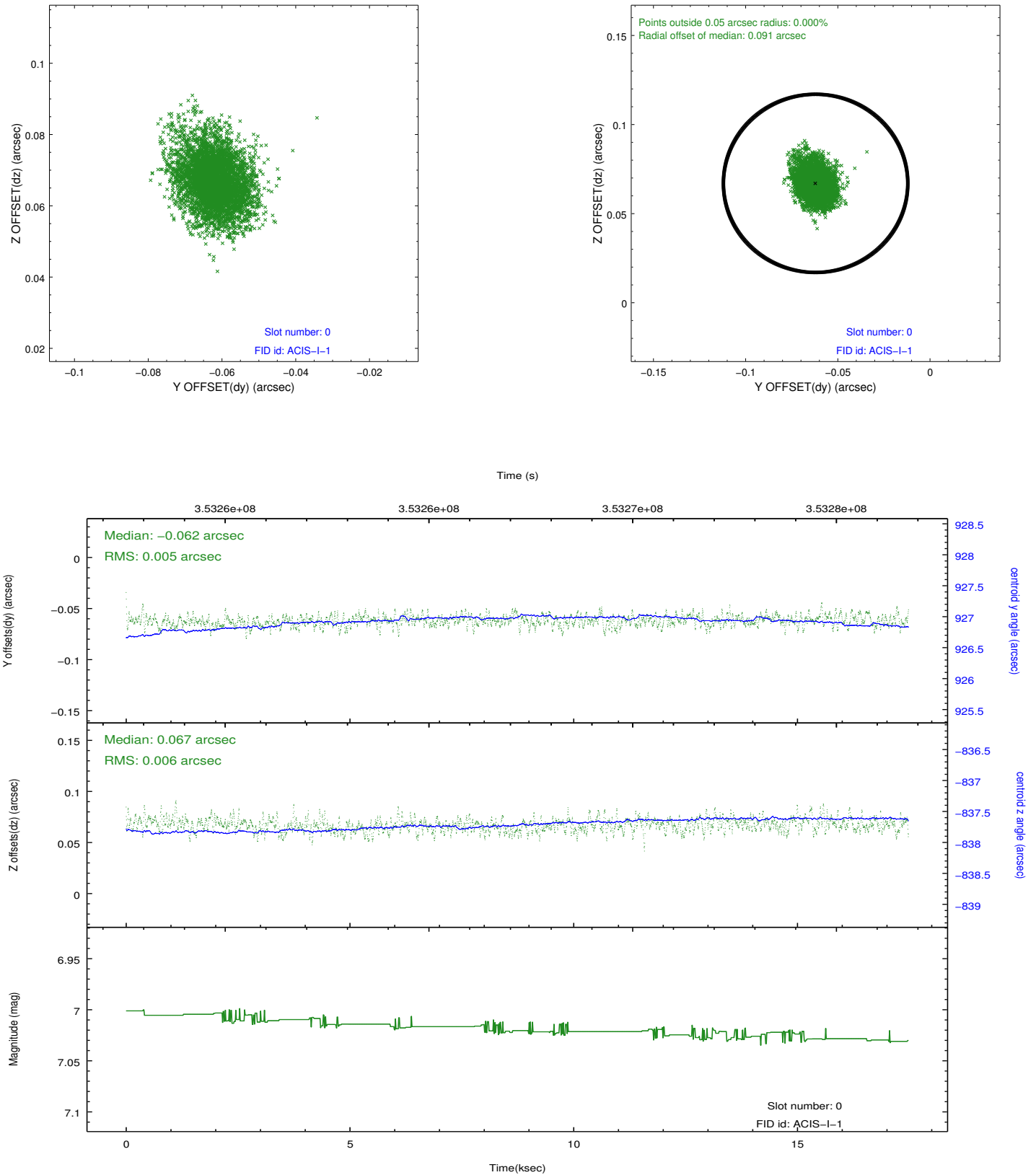


## 2.4.5 Slot 7

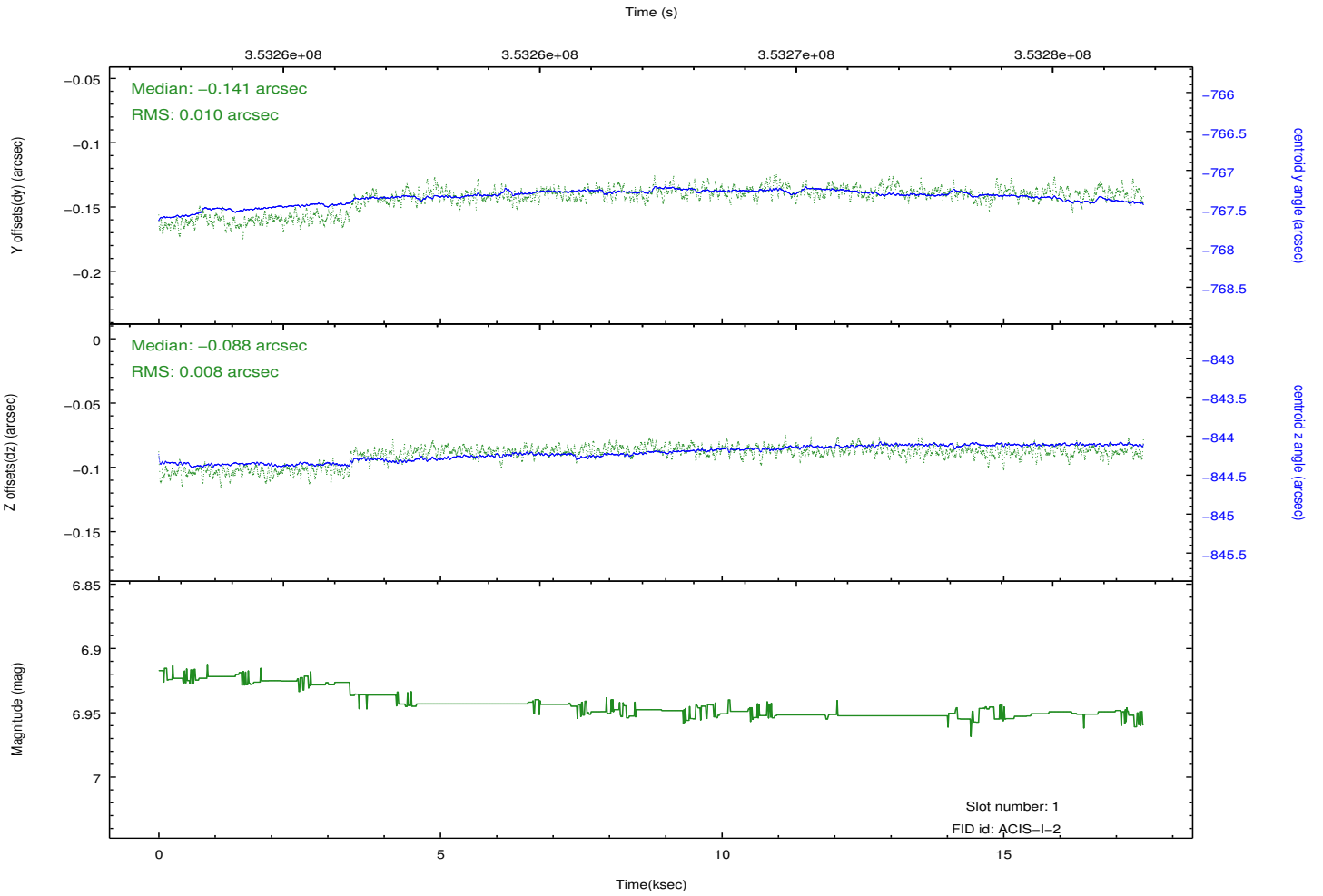
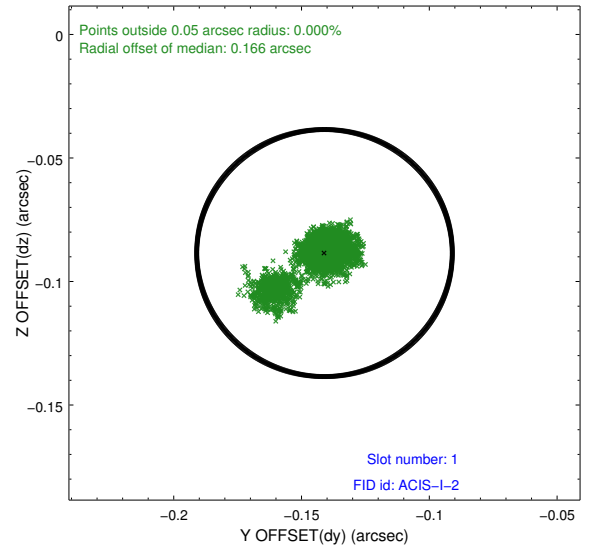
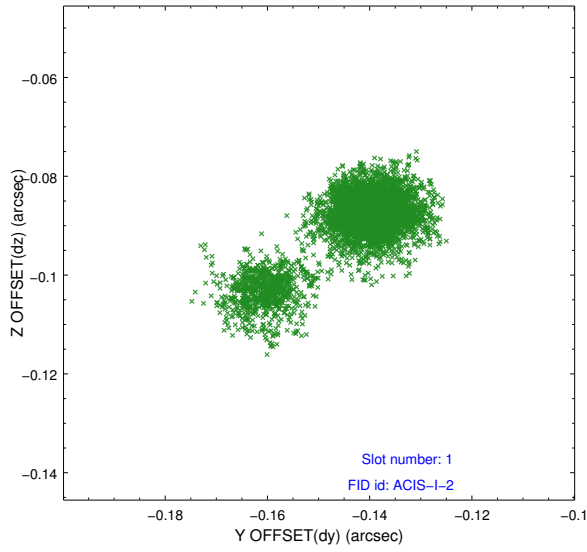


## 2.5 FID Slots

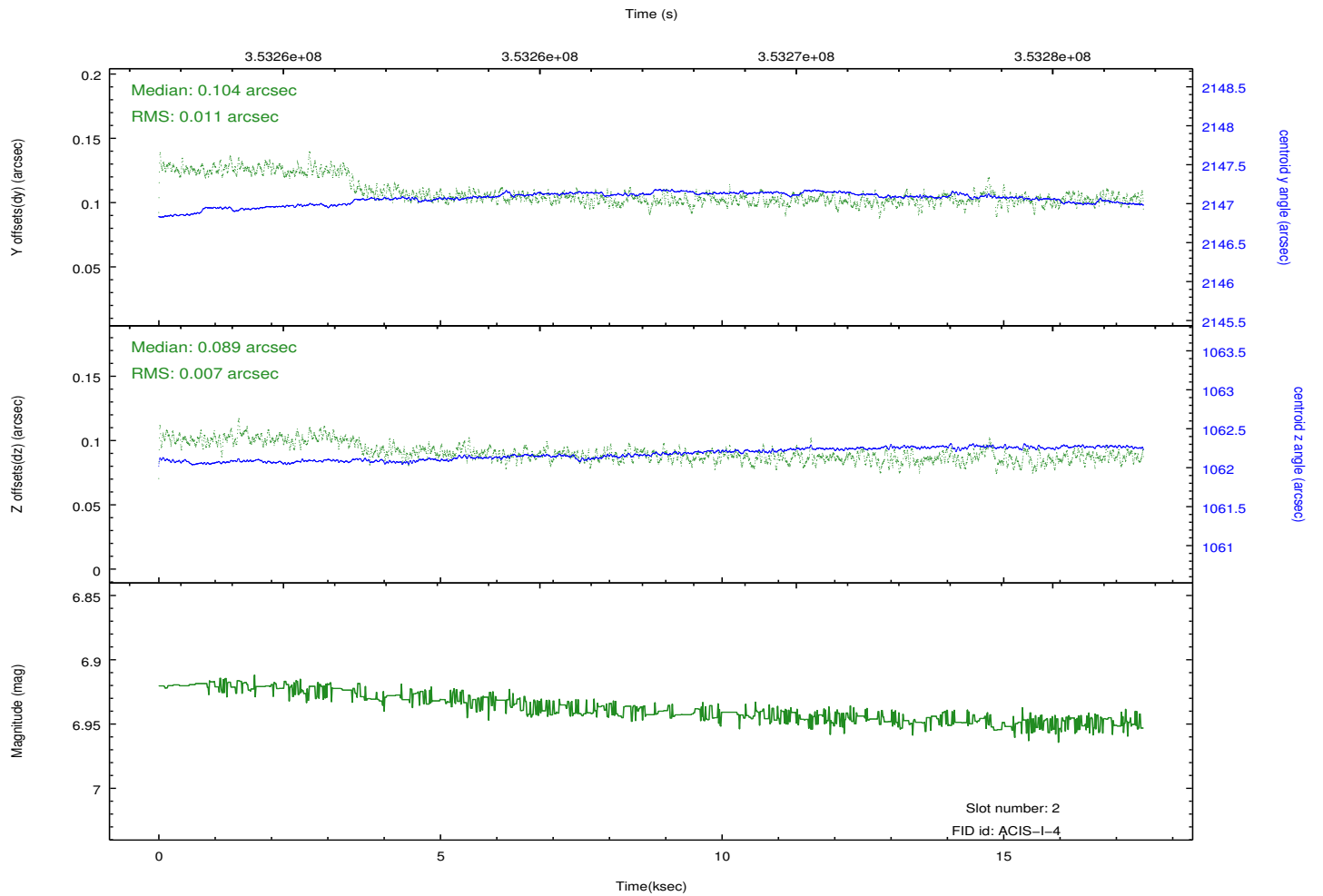
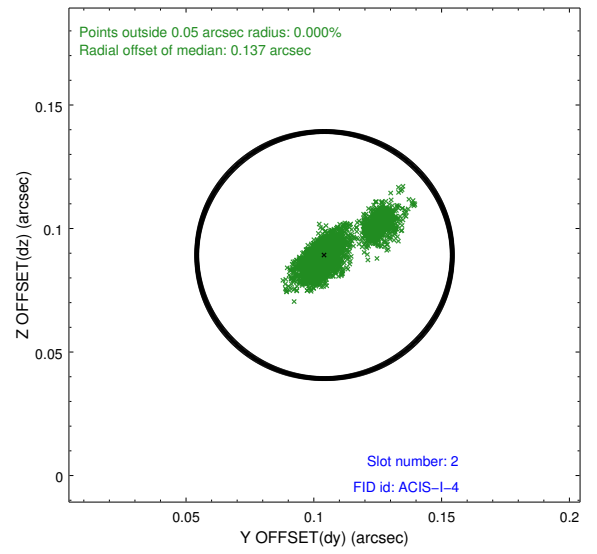
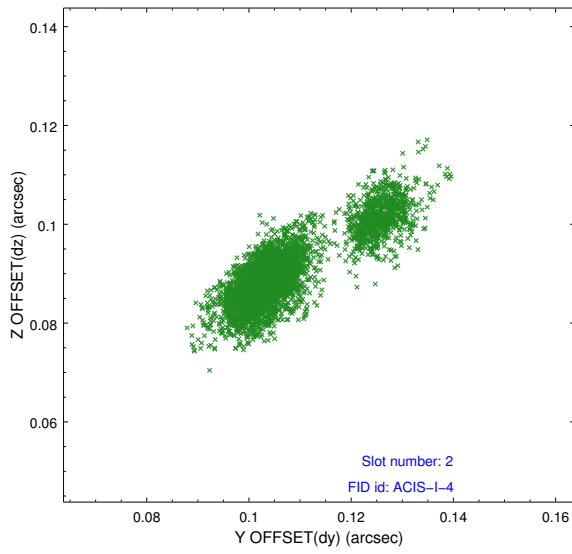
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



# A Summary

## A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2012.06.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	16.4361181

## A.2 Comments

Joint Proposal: Spitzer. Roll constraint met.