

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 15574 - L2 Version 2  
Chandra X-Ray Center

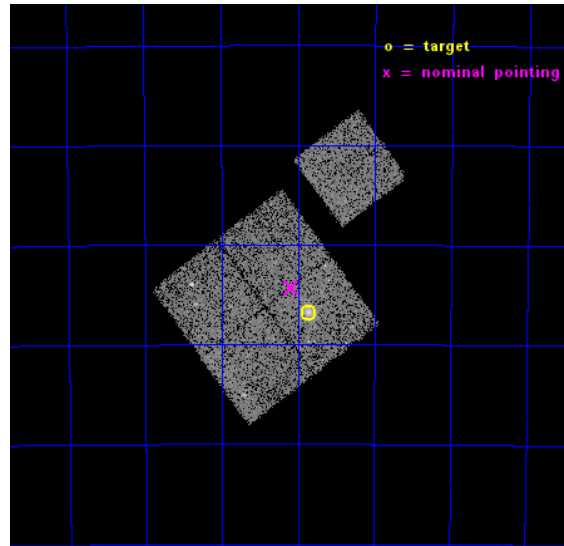
L2 Processing Date : Nov 29 2014

## 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

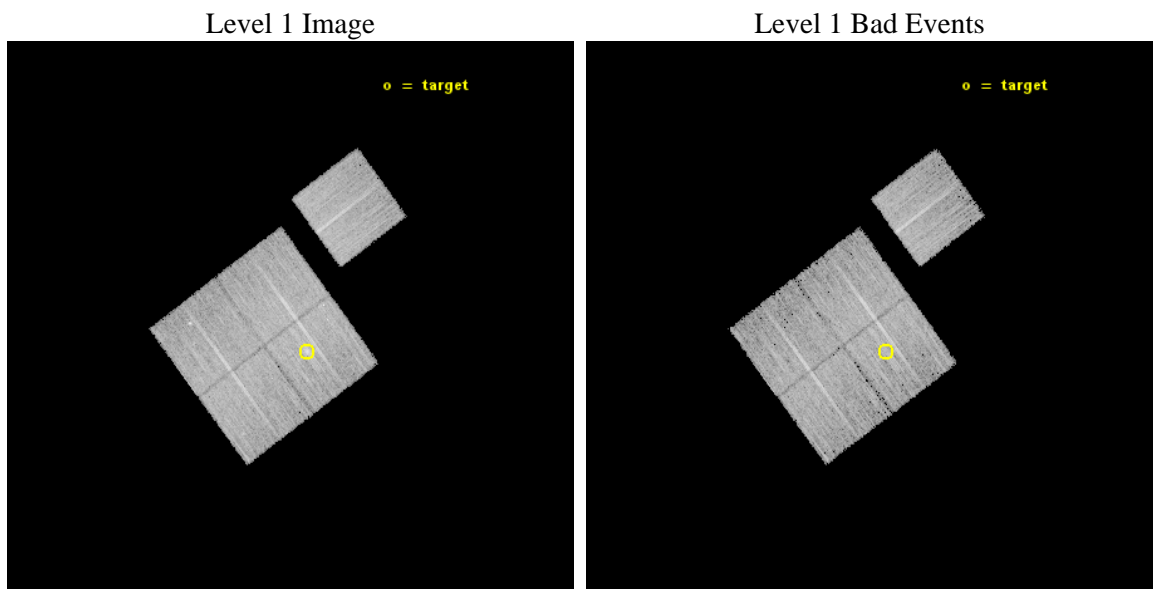
seq_num	801197	Sequence number
obs_id	15574	Observation id
title	A DETAILED CHANDRA/HST STUDY OF THE FIRST z approx 1 CLUSTER BLINDLY DISCOVERED IN THE PLANCK ALL SKY SURVEY	Proposal title
observer	Dr. Pasquale Mazzotta	Principal investigator
object	PLCKG266.6-27.3	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	93.966667	Observer's specified target RA [deg]
dec_targ	-57.781	Observer's specified target Dec [deg]
ra_nom	94.02156105828	Nominal RA [deg]
dec_nom	-57.738067760609	Nominal Dec [deg]
roll_nom	53.255132028033	Nominal Roll [deg]
revision	2	Processing version of data
ontime	13246.259131551	Sum of GTIs [s]
livetime	13073.187004243	Livetime [s]
ontime0	13249.4001019	Sum of GTIs [s]
ontime1	13249.4001019	Sum of GTIs [s]
ontime2	13249.4001019	Sum of GTIs [s]
ontime3	13246.259131551	Sum of GTIs [s]
ontime6	13249.4001019	Sum of GTIs [s]
l2events	37855	Number of level 2 events



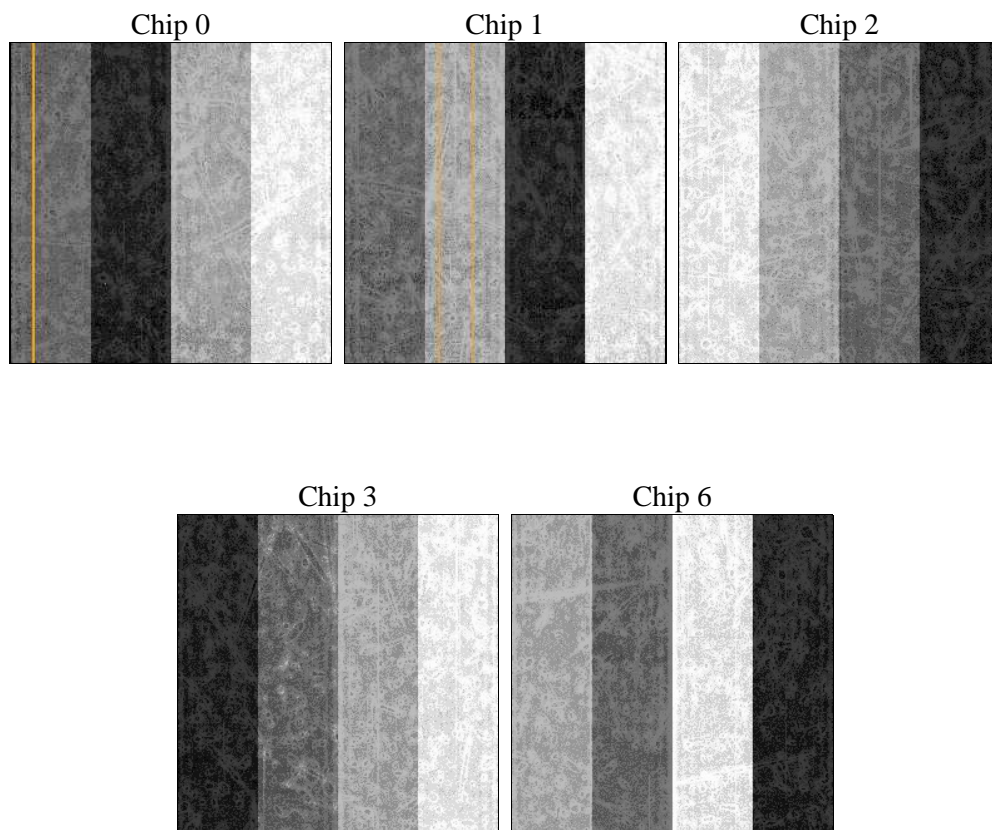
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	13165.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	13246.259131551	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime0	13249.4001019	Sum of GTIs [s]
date	2014-11-29T09:31:11	Date and time of file creation	ontime1	13249.4001019	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	13249.4001019	Sum of GTIs [s]
			ontime3	13246.259131551	Sum of GTIs [s]
			ontime6	13249.4001019	Sum of GTIs [s]
			l1events	334439	Number of level 1 events

### 2.1.4 Events

	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	61844	65993	67665	70768	68169
rejected events	53153	56892	59413	61032	59735
rejected %	85%	86%	87%	86%	87%

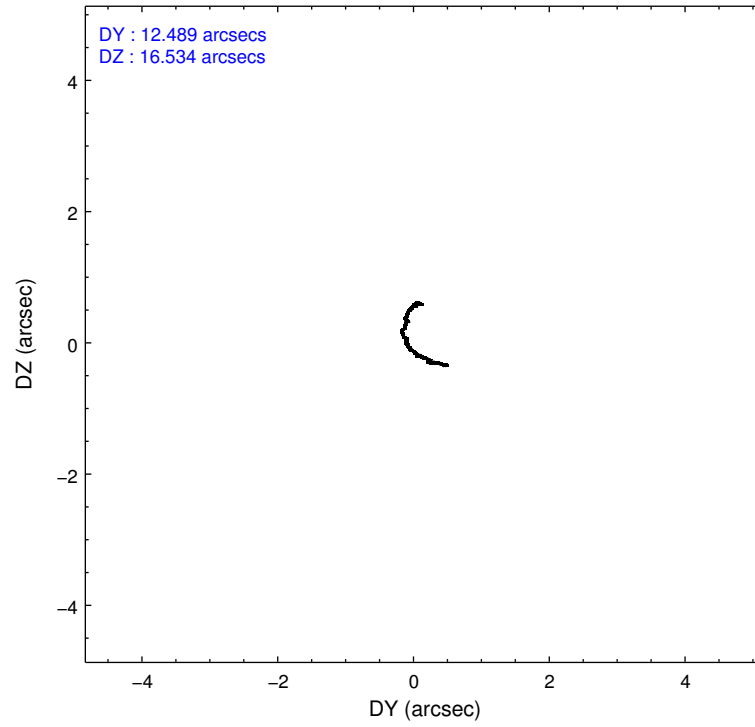
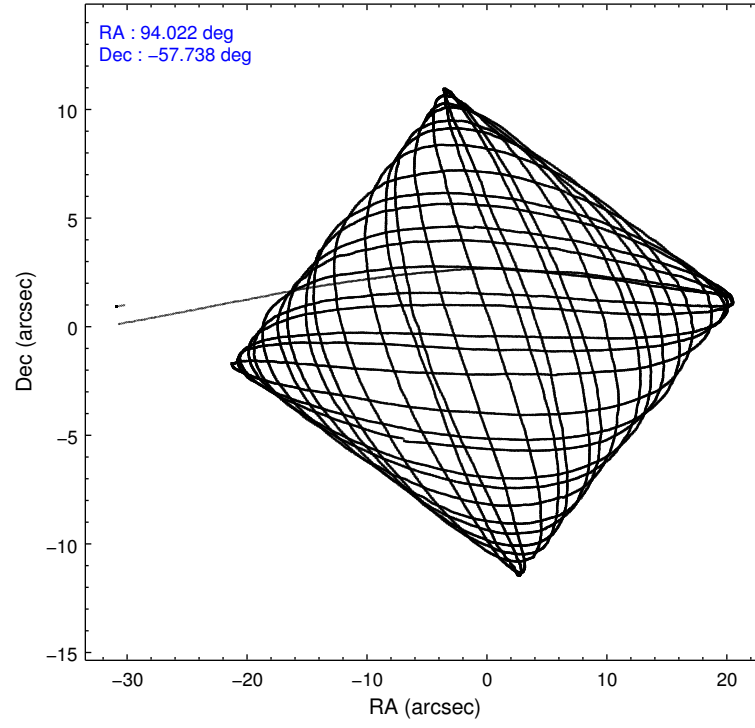
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	3191	3202	2999	4429	3035
	5%	4%	4%	6%	4%
grade 1 events	38	48	36	37	37
	0%	0%	0%	0%	0%
grade 2 events	2099	2187	2035	1981	1829
	3%	3%	3%	2%	2%
grade 3 events	895	865	825	873	852
	1%	1%	1%	1%	1%
grade 4 events	827	855	814	886	867
	1%	1%	1%	1%	1%
grade 5 events	3222	3465	3065	3635	3524
	5%	5%	4%	5%	5%
grade 6 events	1681	1999	1581	1573	1853
	2%	3%	2%	2%	2%
grade 7 events	49891	53372	56310	57354	56172
	80%	80%	83%	81%	82%

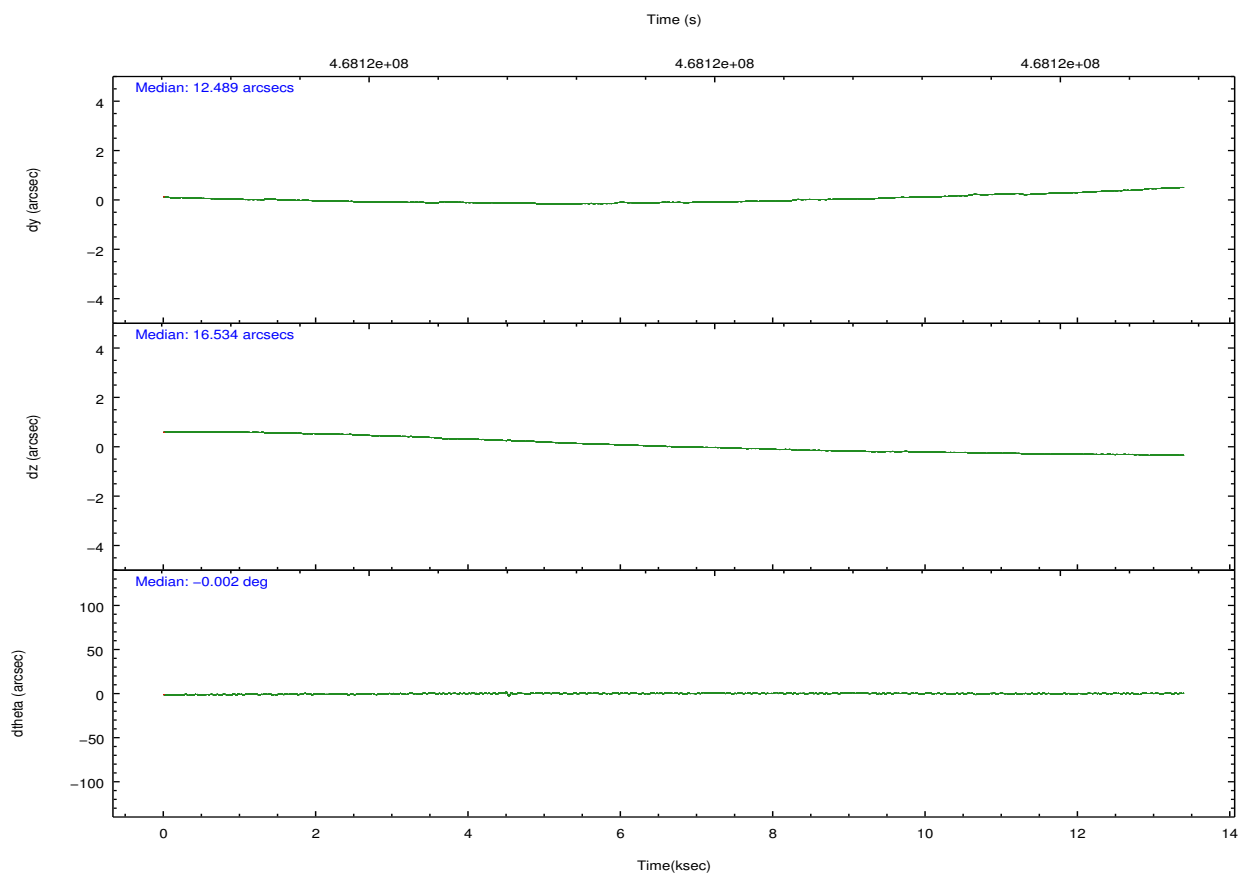
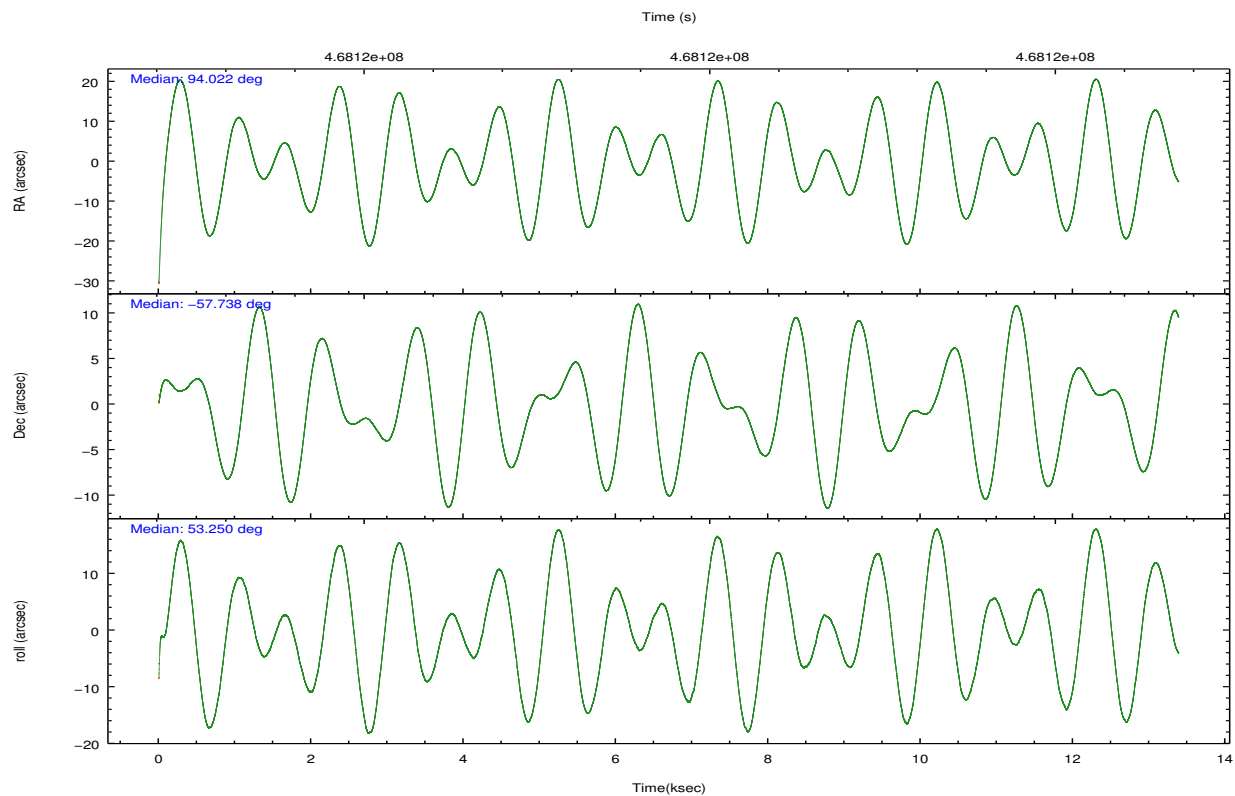


## 2.2 Compared Parameters

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	94.015667	94.02156105828041	CCD I2 on	Y	Y
[deg] Pointing Dec	-57.765429	-57.73806776060919	CCD I3 on	Y	Y
[deg] Pointing Roll	53.041443	53.25513202803302	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O1	Y
[mm] SIM translation stage pos	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	468112934.184000	468111965.98252	CCD S5 on	N	N
Observation start date	2012-10-31T23:21:07	2012-10-31T23:06:05	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	468126099.184000	468126906.38332	On-chip summing requested	N	N
Observation end date	2012-11-01T03:00:32	2012-11-01T03:15:06	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



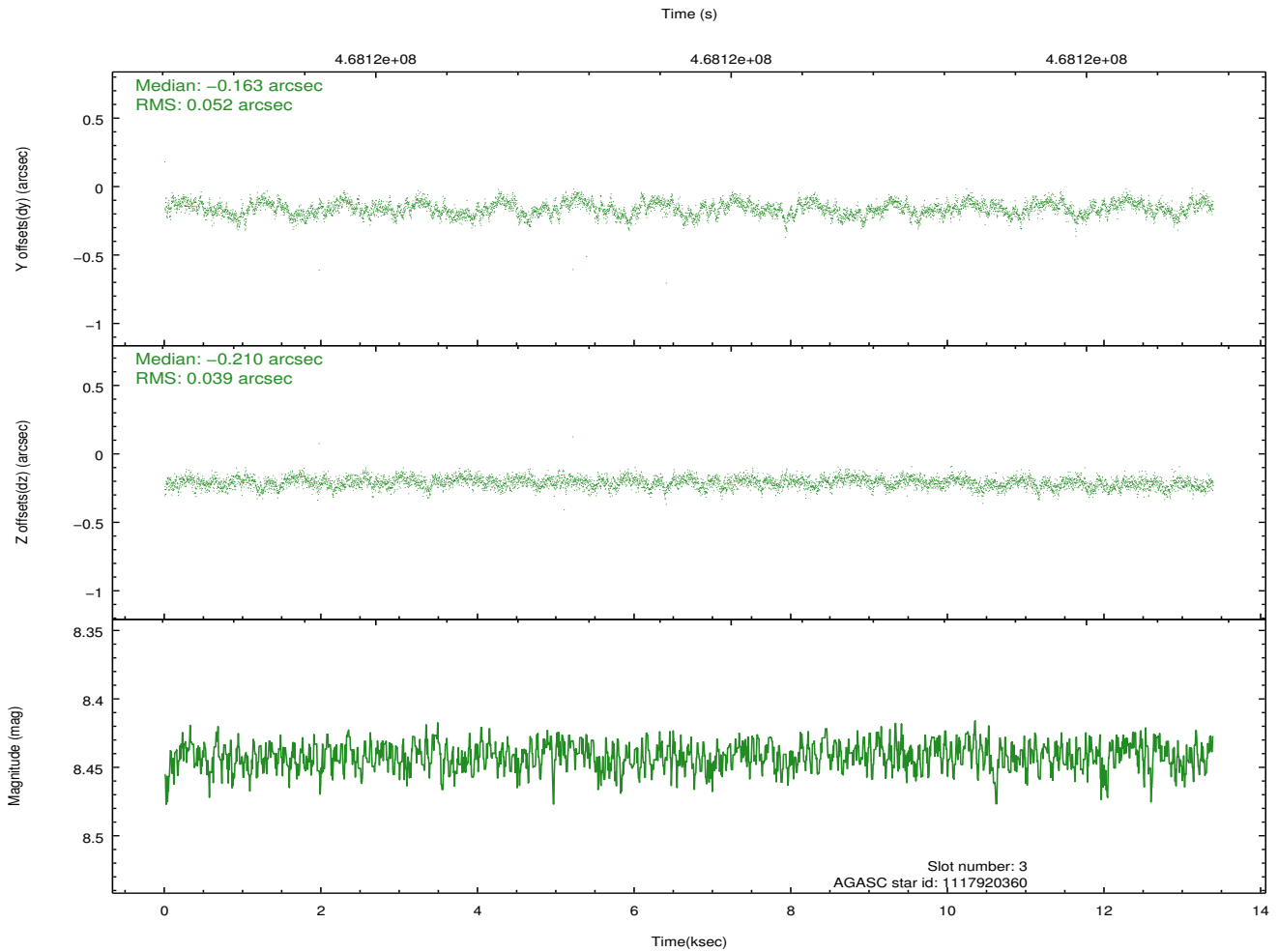
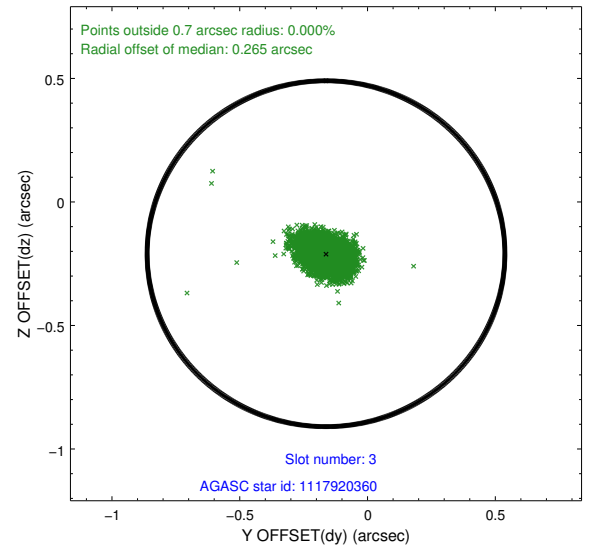
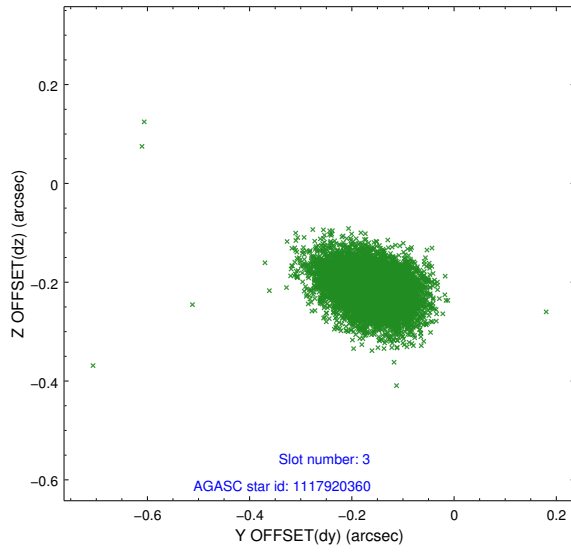


### Slot Statistics

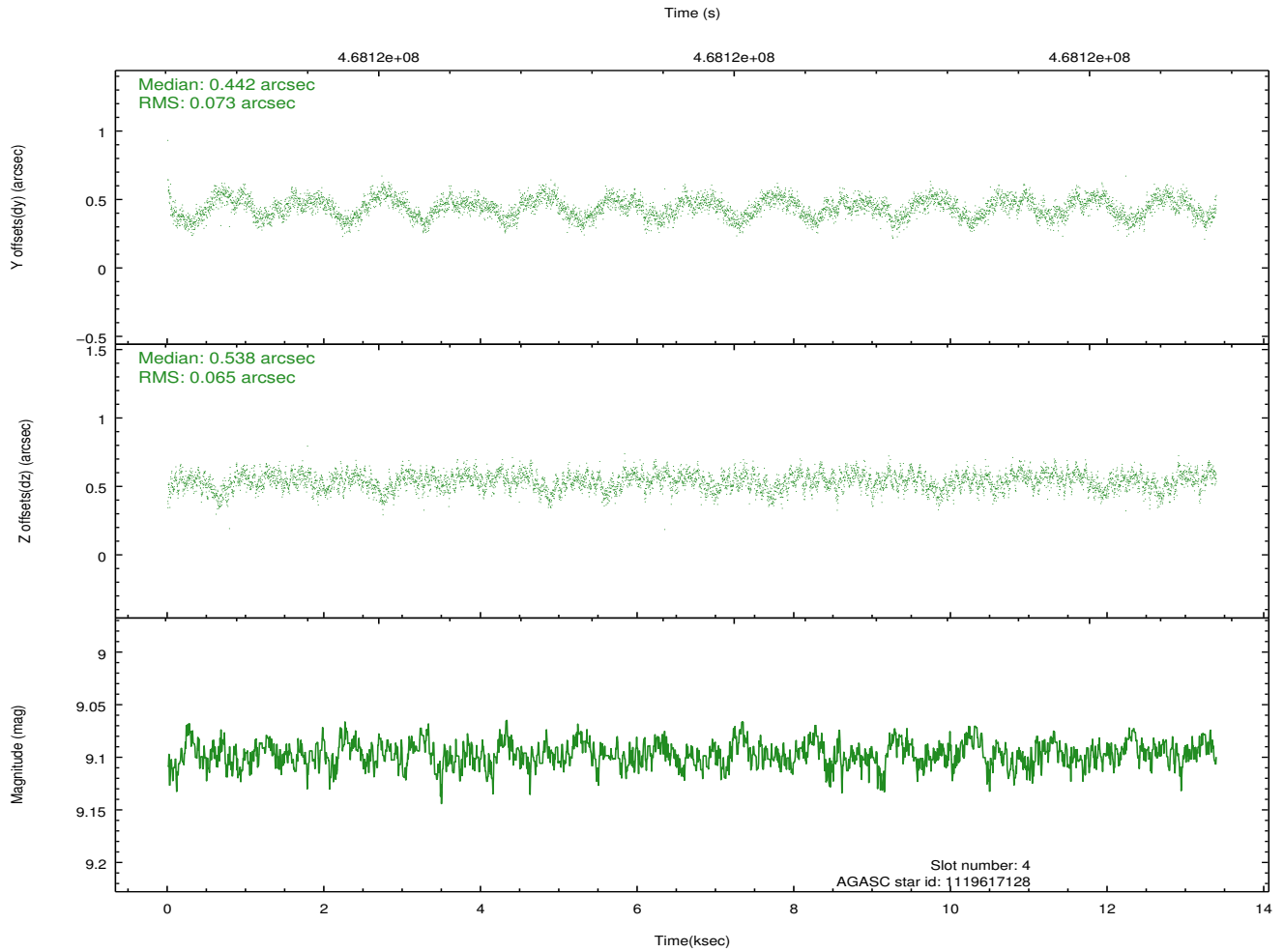
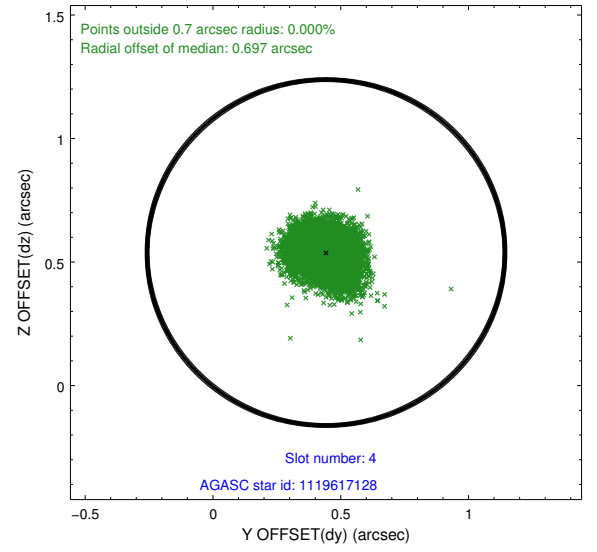
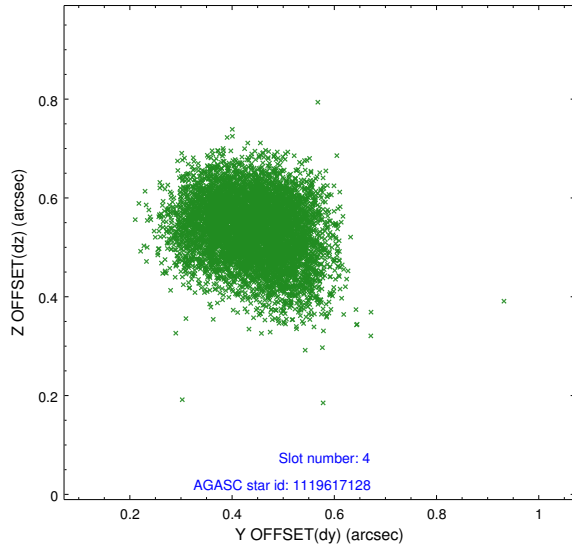
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.04	3266	0.149	-0.120	0.010	0.017	0.000000	0.000000	927.00	-999.46
1	FID		ACIS-I-5	7.03	3266	-0.258	0.130	0.010	0.019	0.000000	0.000000	-1821.31	898.06
2	FID		ACIS-I-6	7.05	3265	0.017	0.065	0.015	0.023	0.000000	0.000000	392.03	1542.90
3	GUIDE	used	1117920360	8.44	6531	-0.163	-0.210	0.068	0.111	92.689586	-57.826981	-1725.40	1882.76
4	GUIDE	used	1119617128	9.10	6512	0.442	0.538	0.106	0.164	93.986624	-58.000911	-710.32	-464.48
5	GUIDE	used	1119617976	8.00	6530	-0.209	-0.255	0.073	0.117	94.543198	-57.336411	1847.27	107.48
6	GUIDE	used	1119619792	9.40	6525	0.043	-0.106	0.113	0.188	93.499770	-57.916921	-1031.41	458.09
7	GUIDE	used	1119625992	9.05	6528	-0.110	0.041	0.117	0.195	95.619183	-57.592105	2329.49	-2118.38

## 2.4 Star Slots

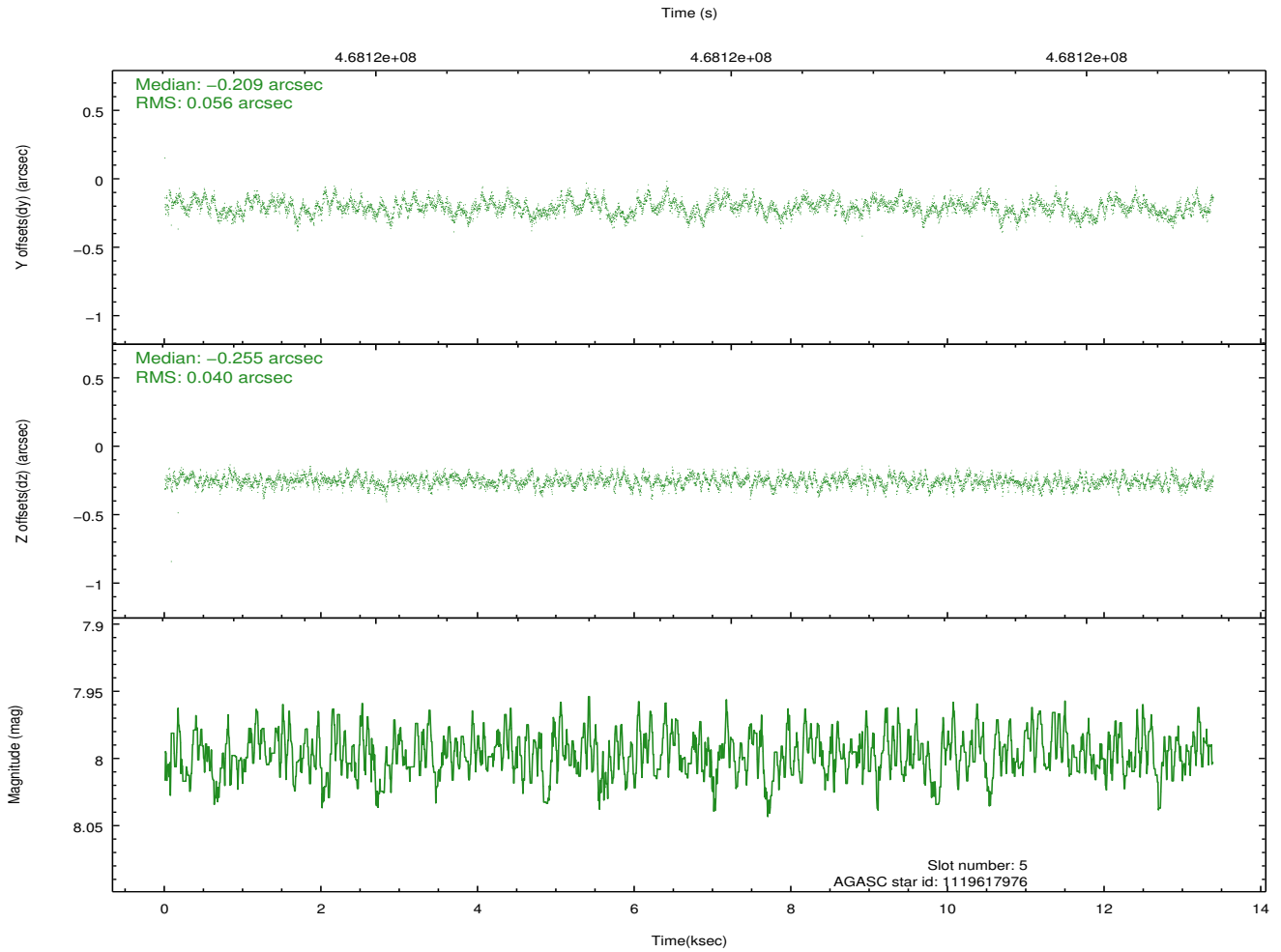
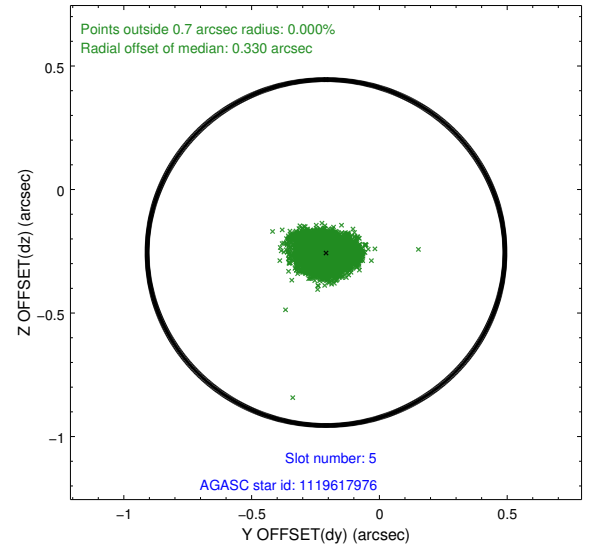
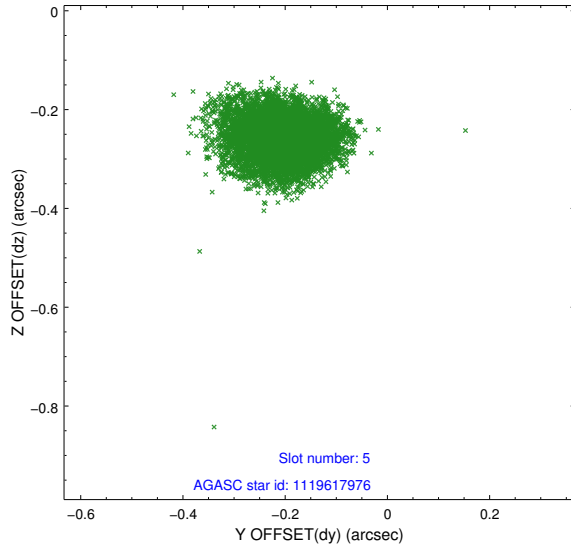
### 2.4.1 Slot 3



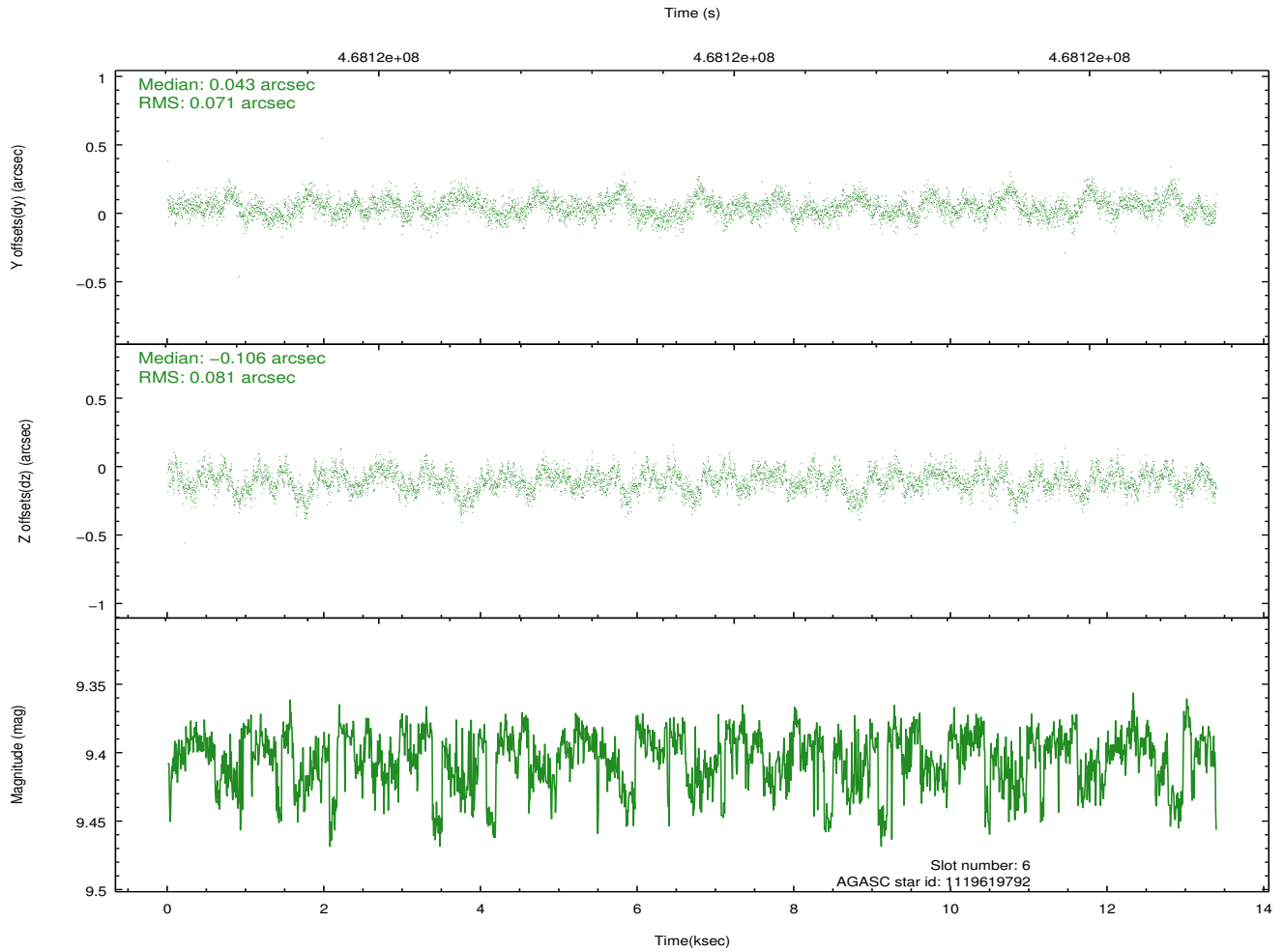
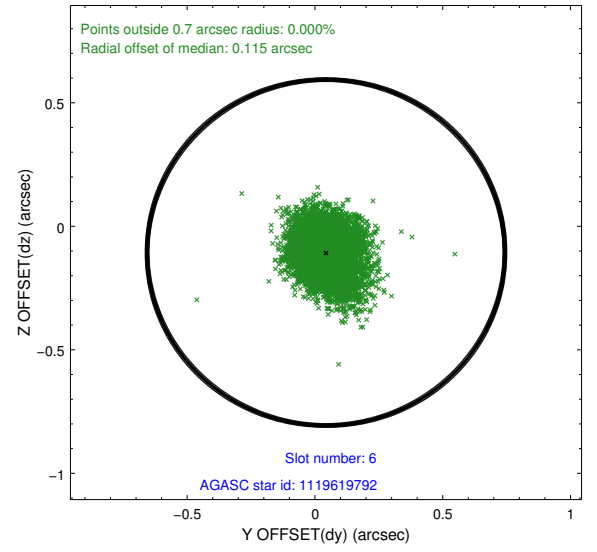
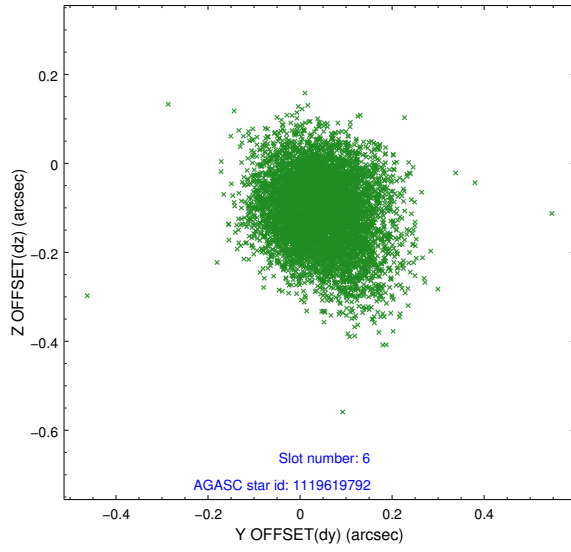
## 2.4.2 Slot 4



### 2.4.3 Slot 5

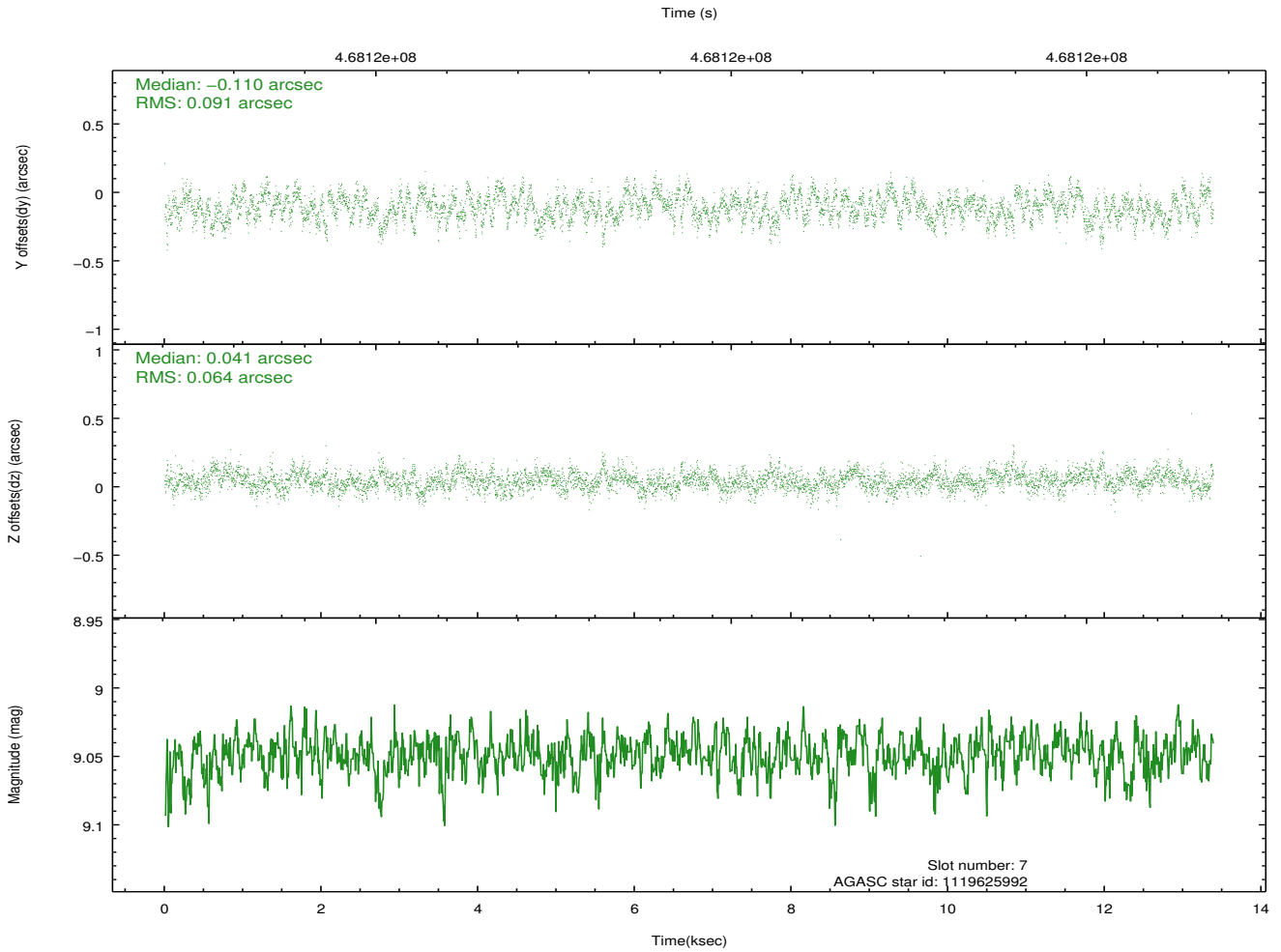
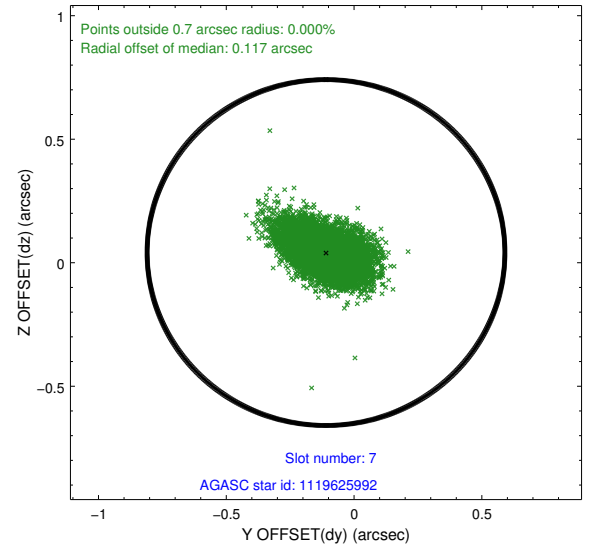
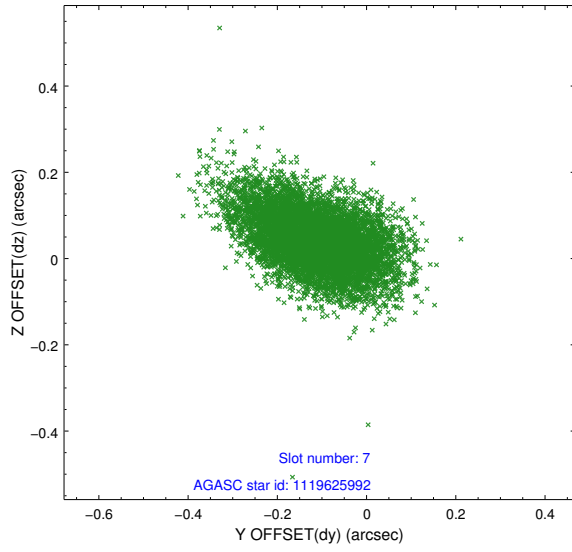


## 2.4.4 Slot 6



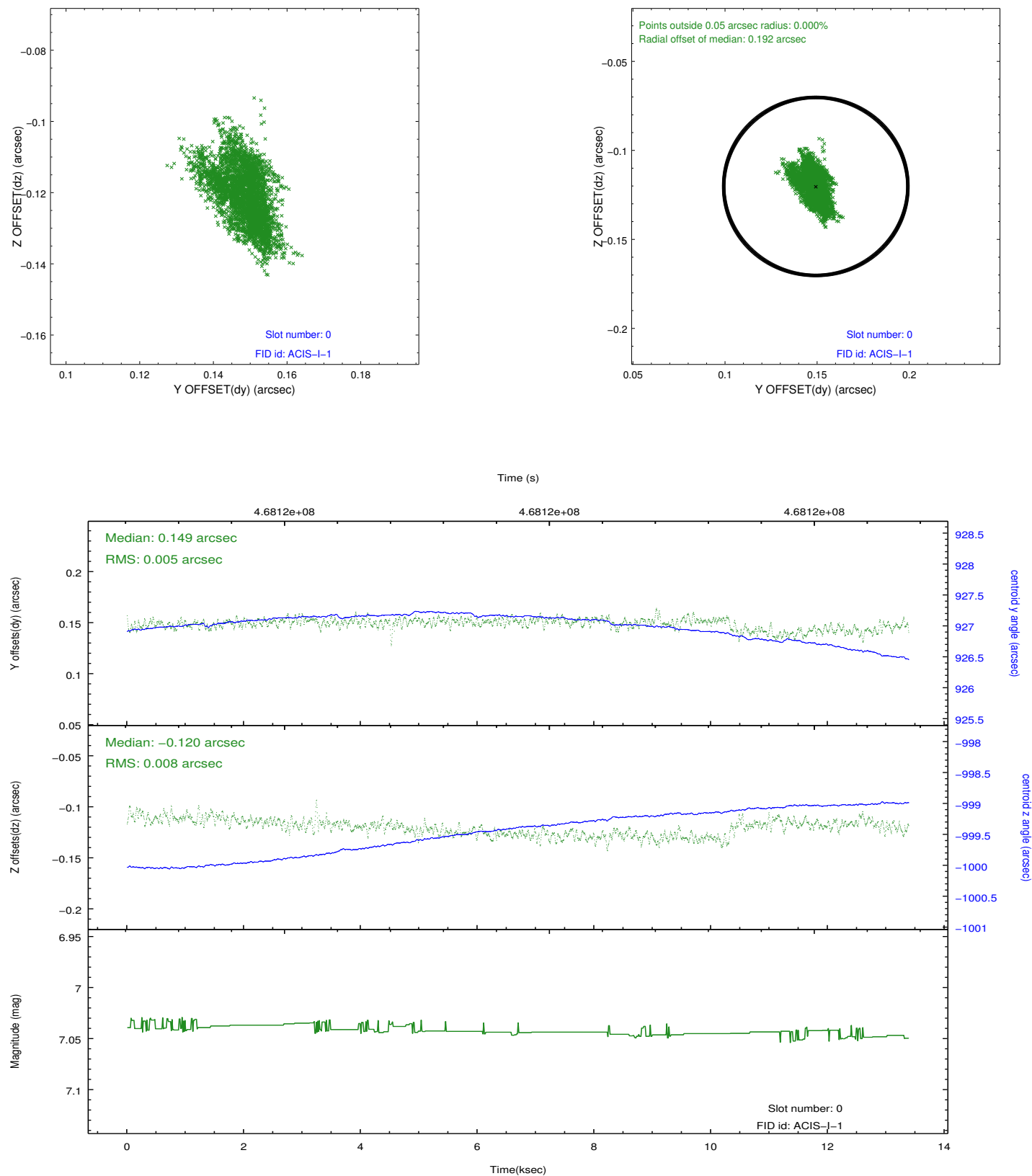


### 2.4.5 Slot 7

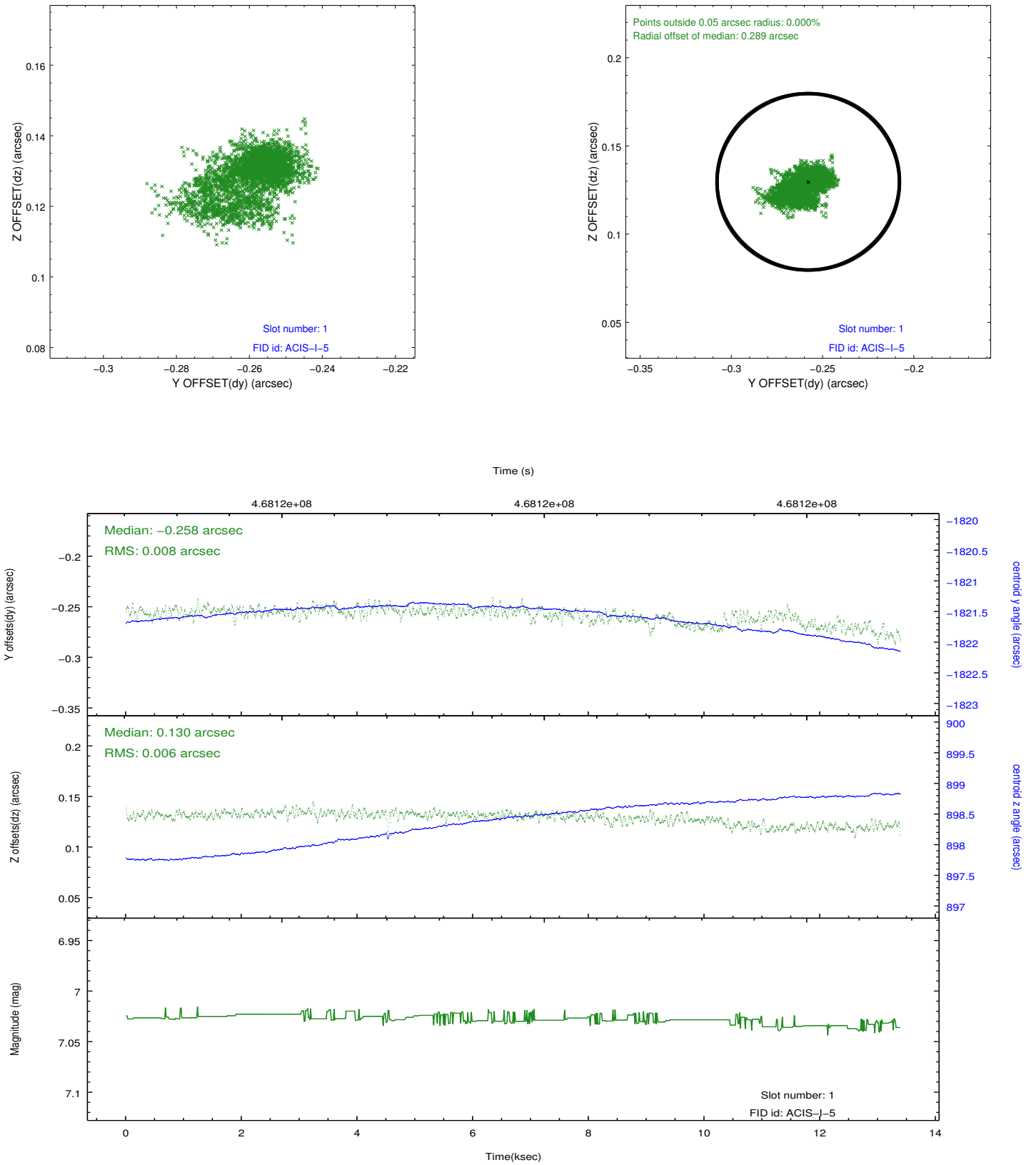


## 2.5 FID Slots

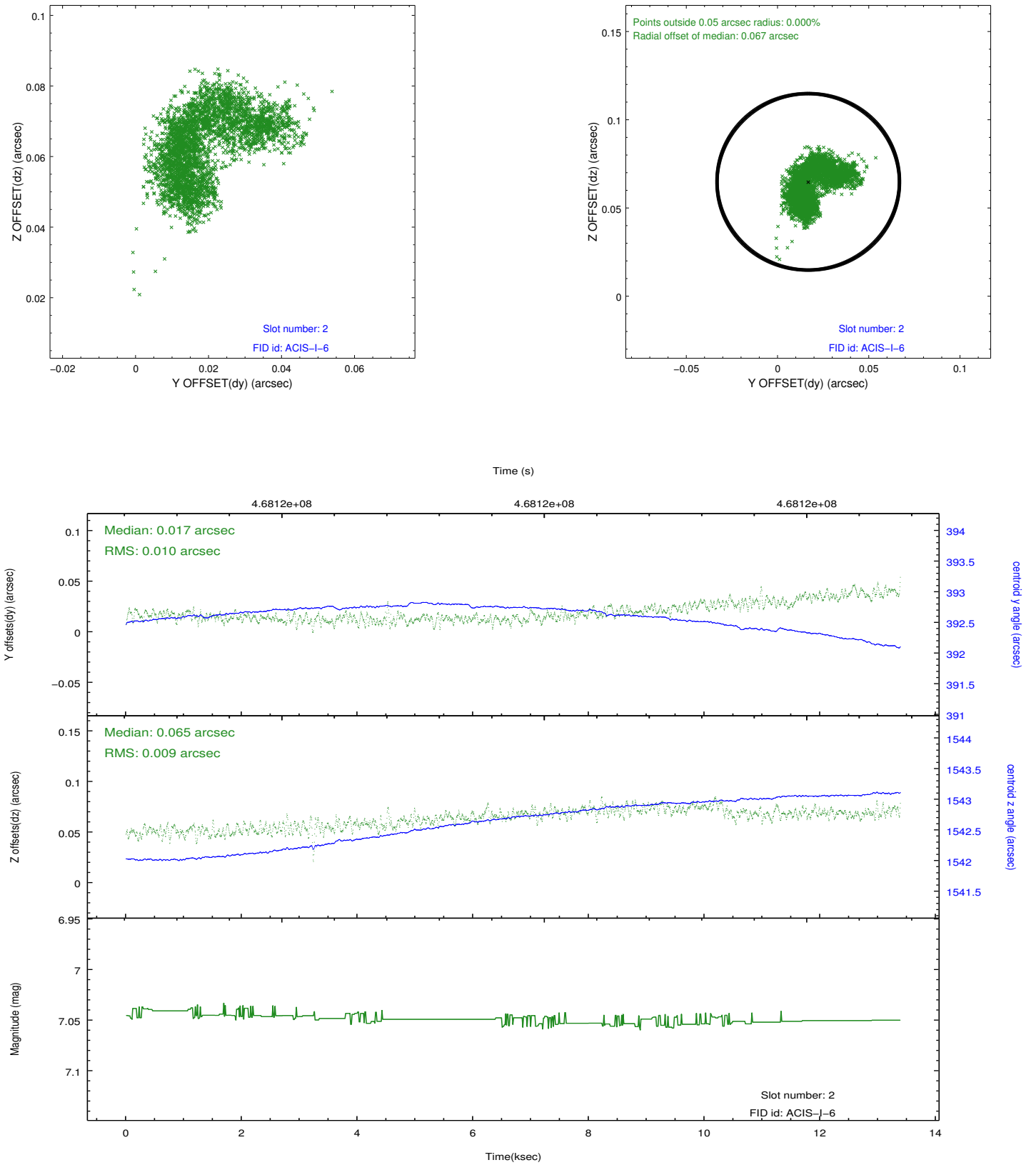
### 2.5.1 Slot 0



## 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)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	13.246259131551

## 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.