

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 16047 - L2 Version 2  
Chandra X-Ray Center

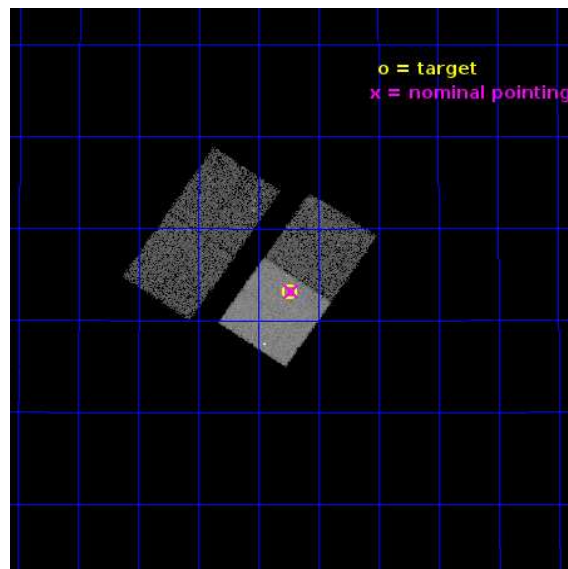
L2 Processing Date : Sep 5 2014

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# 1 Front

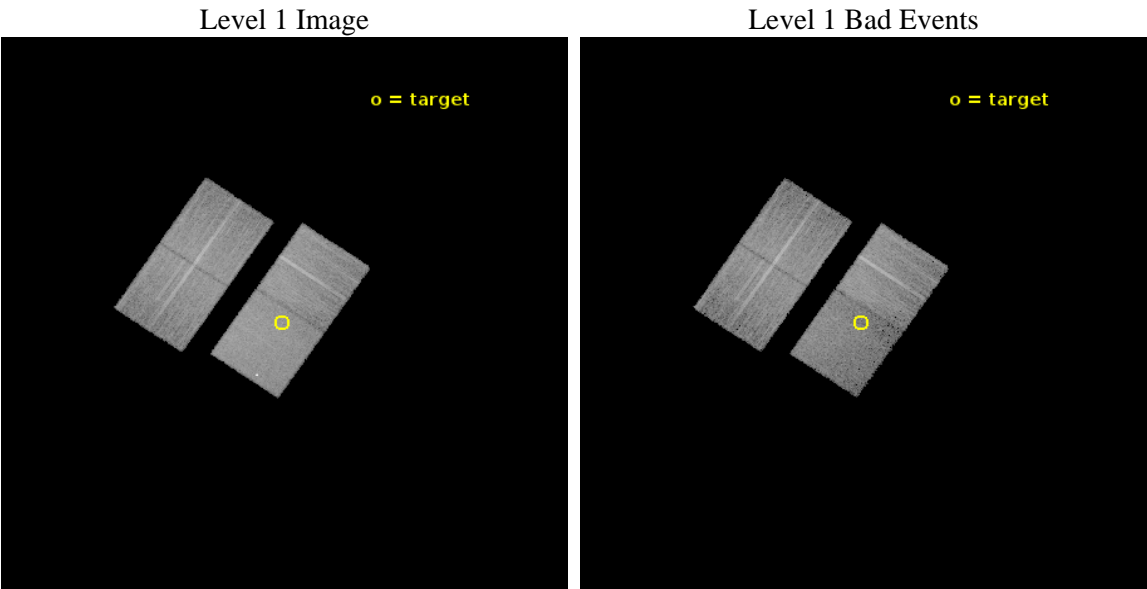
seq_num	702941	Sequence number
obs_id	16047	Observation id
title	Continuing the Chandra 3CR Snapshot Survey: 23 Radio Sources with 0.5	Proposal title
observer	Dr. Francesco Massaro	Principal investigator
object	3C41	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	21.685	Observer's specified target RA [deg]
dec_targ	33.219778	Observer's specified target Dec [deg]
ra_nom	21.681291734367	Nominal RA [deg]
dec_nom	33.219731132885	Nominal Dec [deg]
roll_nom	124.15861351892	Nominal Roll [deg]
revision	2	Processing version of data
ontime	12049.700092673	Sum of GTIs [s]
livetime	11892.261890102	Livetime [s]
ontime2	12049.700092673	Sum of GTIs [s]
ontime3	12049.700092673	Sum of GTIs [s]
ontime6	12049.700092673	Sum of GTIs [s]
ontime7	12049.700092673	Sum of GTIs [s]
l2events	72100	Number of level 2 events



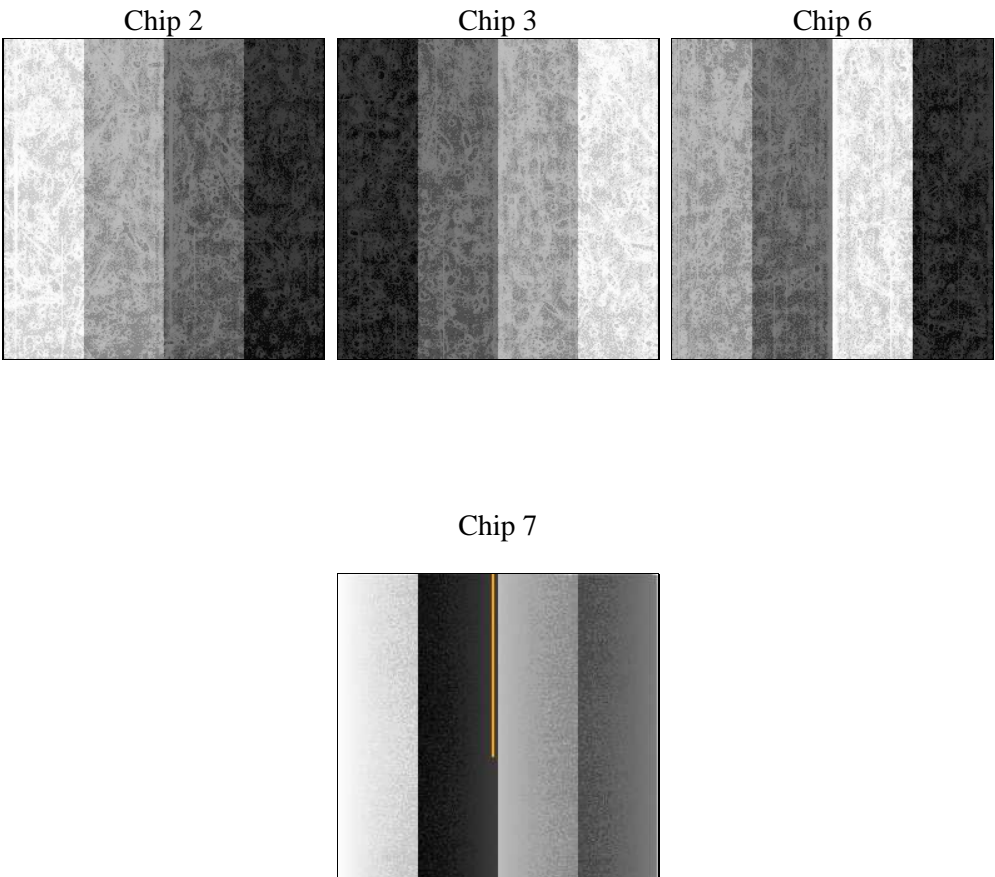
# 2 OBI

## 2.1 OBI

### 2.1.1 Images



### 2.1.2 Bias



Chip 7



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11979.935000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	12049.700092673	Sum of GTIs [s]
caldsver	4.6.3	&#160	ontime2	12049.700092673	Sum of GTIs [s]
date	2014-09-05T15:08:44	Date and time of file creation	ontime3	12049.700092673	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	12049.700092673	Sum of GTIs [s]
			ontime7	12049.700092673	Sum of GTIs [s]
			l1events	363202	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	88193	83723	91941	99345
rejected events	78193	74800	81682	50863
rejected %	88%	89%	88%	51%

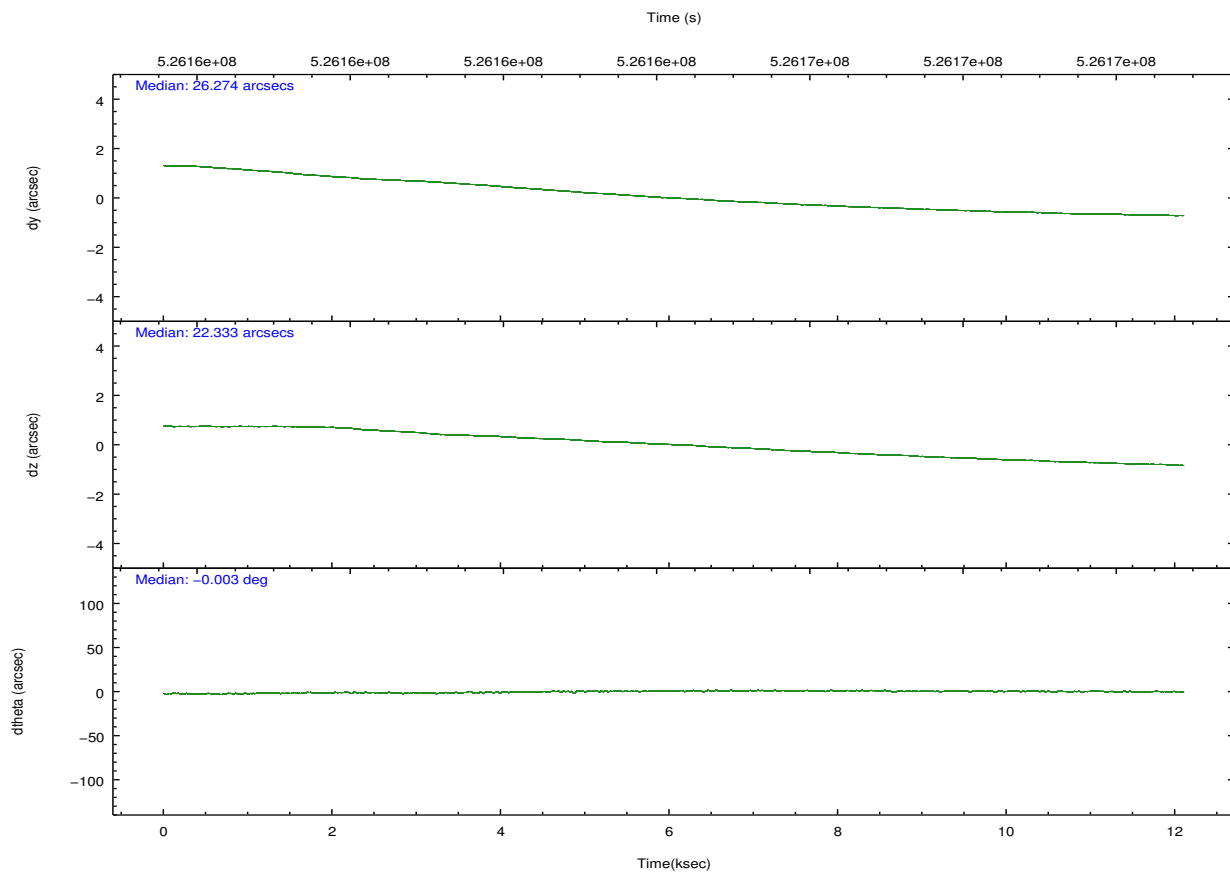
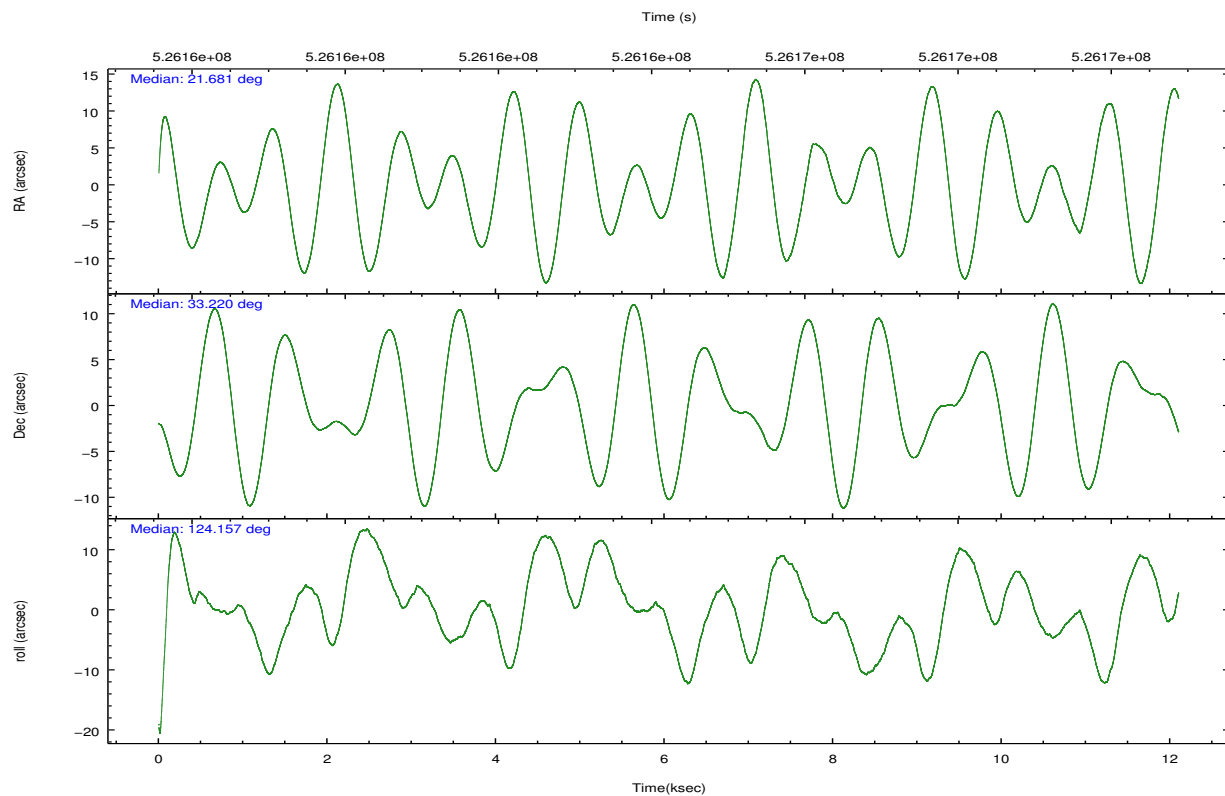
	ccd 2	ccd 3	ccd 6	ccd 7
grade 0 events	3992	3552	3913	5100
	4%	4%	4%	5%
grade 1 events	52	49	44	161
	0%	0%	0%	0%
grade 2 events	2326	1831	2171	10878
	2%	2%	2%	10%
grade 3 events	904	947	966	4125
	1%	1%	1%	4%
grade 4 events	994	932	988	4224
	1%	1%	1%	4%
grade 5 events	2690	3225	3333	9460
	3%	3%	3%	9%
grade 6 events	1787	1665	2225	24187
	2%	1%	2%	24%
grade 7 events	75448	71522	78301	41210
	85%	85%	85%	41%



## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-2367	ACIS-2367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	21.710987	21.68129173436697	CCD I2 on	O1	Y
[deg] Pointing Dec	33.208106	33.21973113288482	CCD I3 on	O2	Y
[deg] Pointing Roll	123.985773	124.1586135189173	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	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	N	N
[s] Observation start time (MET)	526158304.184000	526157204.09147	CCD S5 on	N	N
Observation start date	2014-09-03T19:03:57	2014-09-03T18:46:44	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	526170284.184000	526170509.61721	On-chip summing requested	N	N
Observation end date	2014-09-03T22:23:37	2014-09-03T22:28:29	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

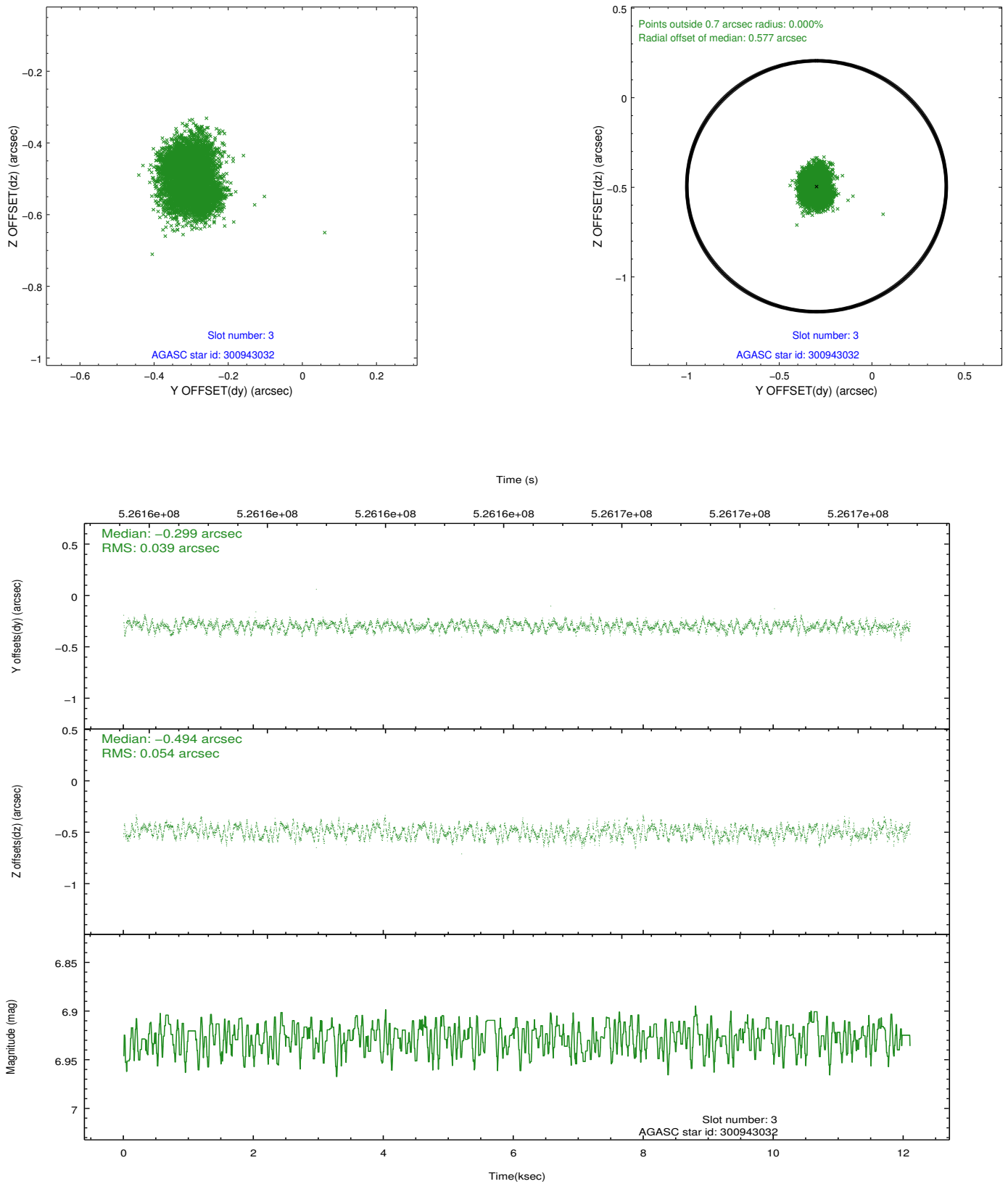


Slot Statistics

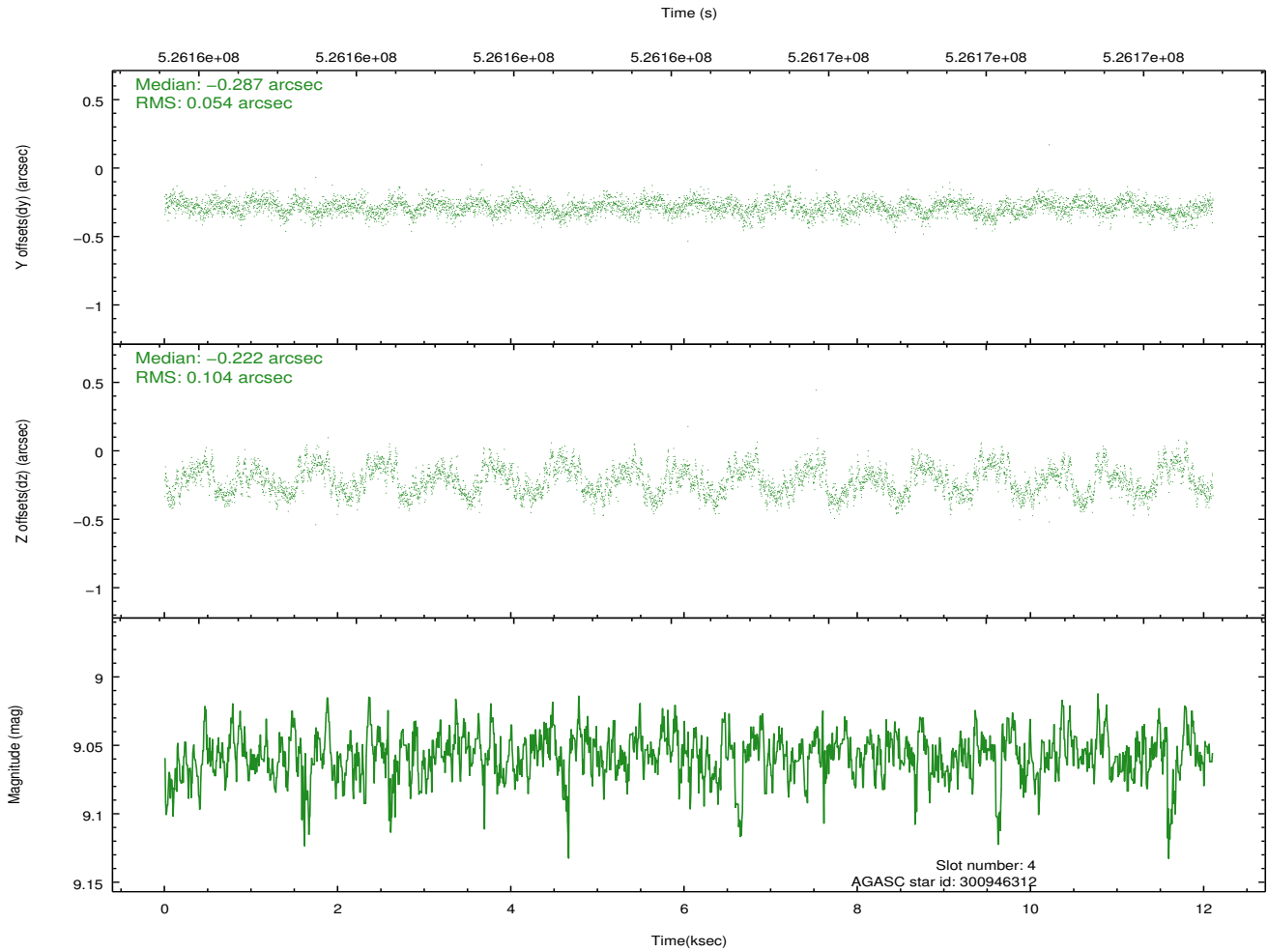
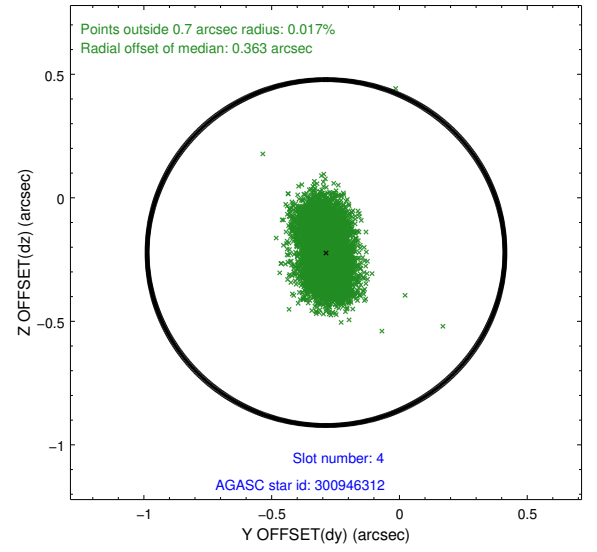
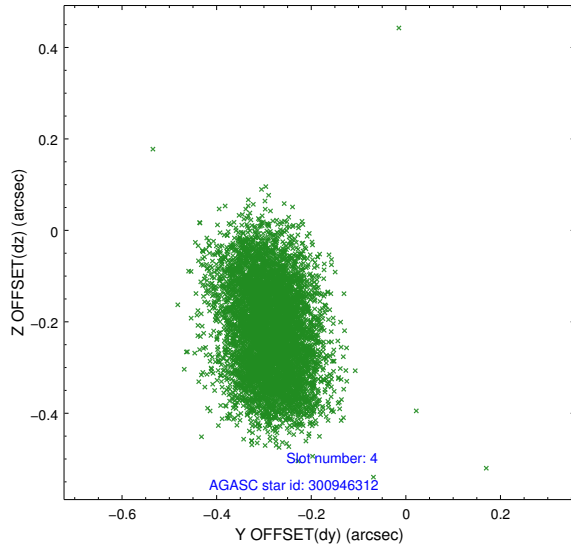
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.99	2952	-0.173	-0.048	0.024	0.037	0.000000	0.000000	-779.86	-1743.90
1	FID	ACIS-S-4	7.08	2952	0.351	0.096	0.011	0.037	0.000000	0.000000	2133.77	164.27
2	FID	ACIS-S-5	7.11	2952	-0.206	-0.038	0.031	0.044	0.000000	0.000000	-1832.20	158.31
3	GUIDE	300943032	6.93	5900	-0.299	-0.494	0.072	0.109	20.800487	33.289899	1785.31	2100.50
4	GUIDE	300946312	9.06	5900	-0.287	-0.222	0.126	0.201	21.172860	33.025821	367.24	1711.73
5	GUIDE	300948240	8.10	5903	-0.014	-0.107	0.073	0.116	21.318271	32.949093	-108.14	1504.19
6	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
7	GUIDE	301078856	8.75	5900	0.599	0.822	0.125	0.203	22.571949	33.128942	-1677.77	-1997.58

## 2.4 Star Slots

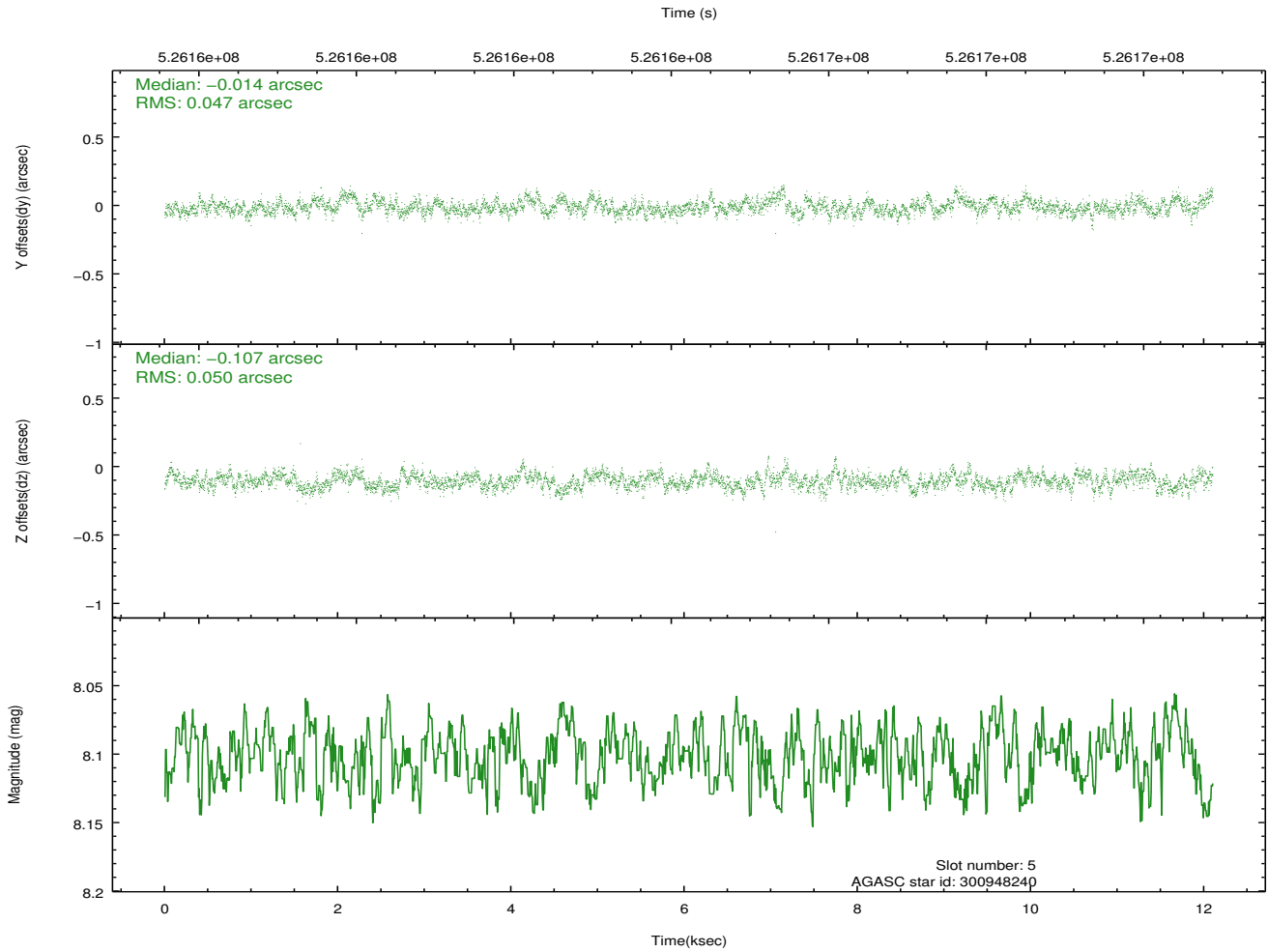
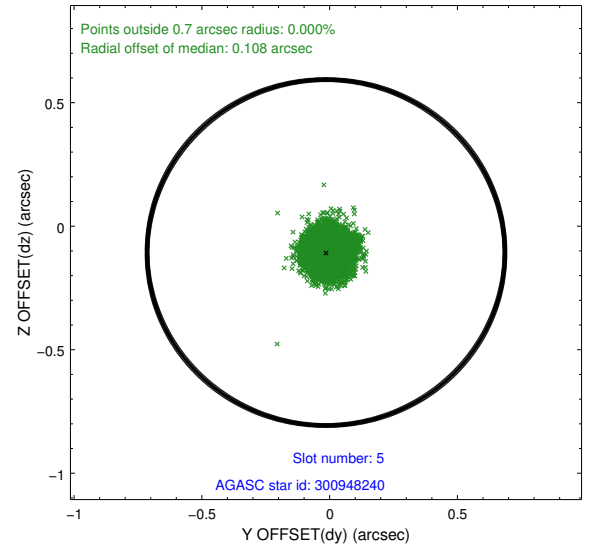
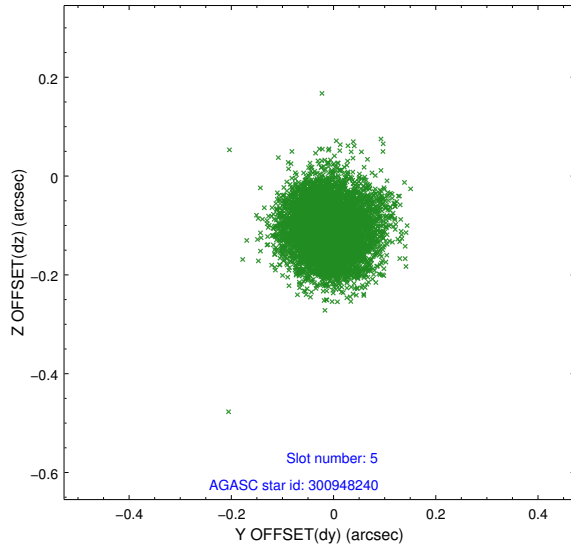
### 2.4.1 Slot 3



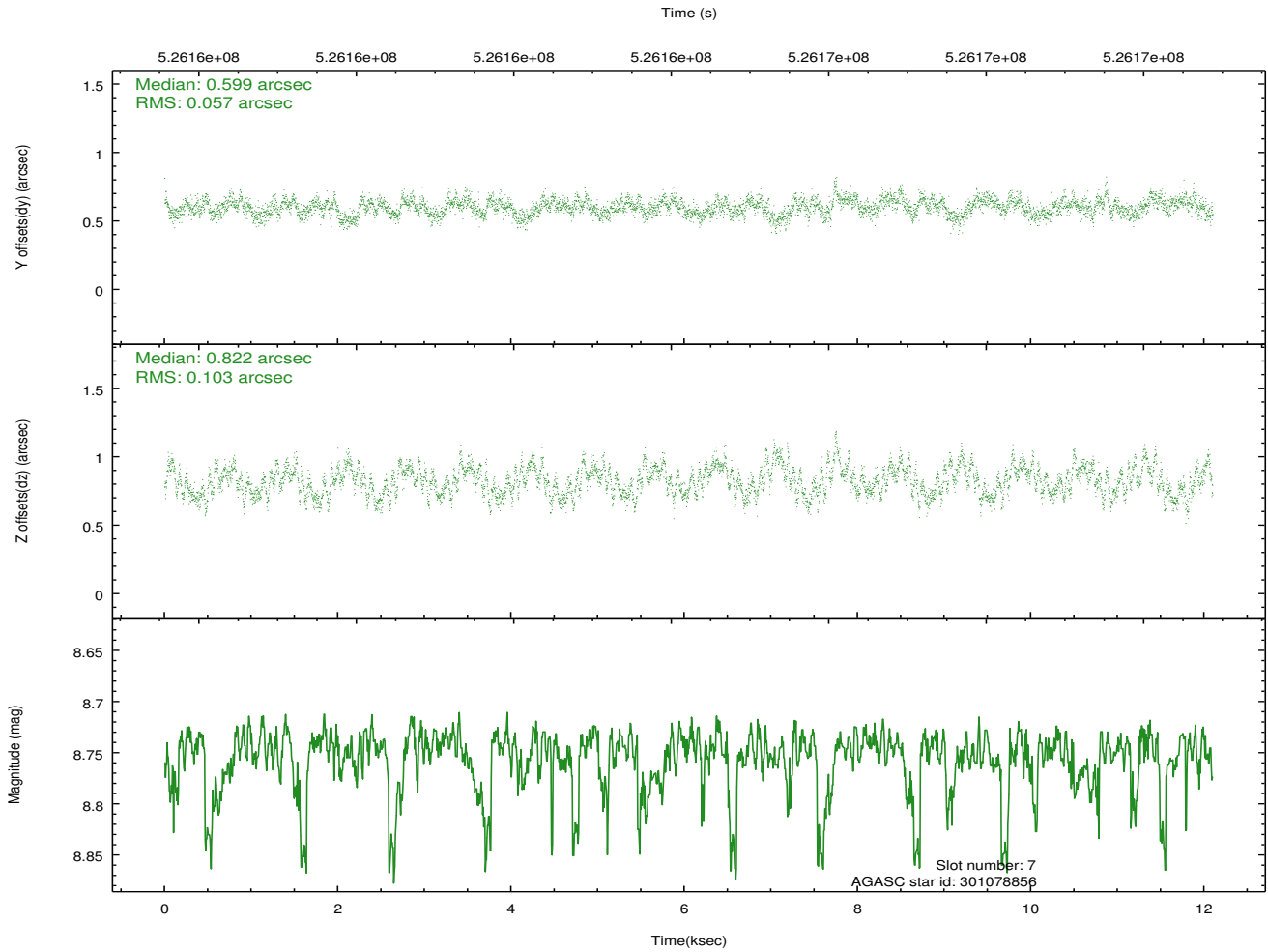
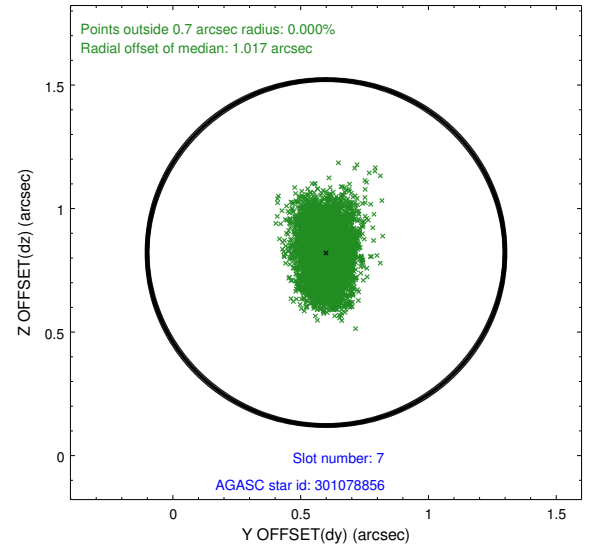
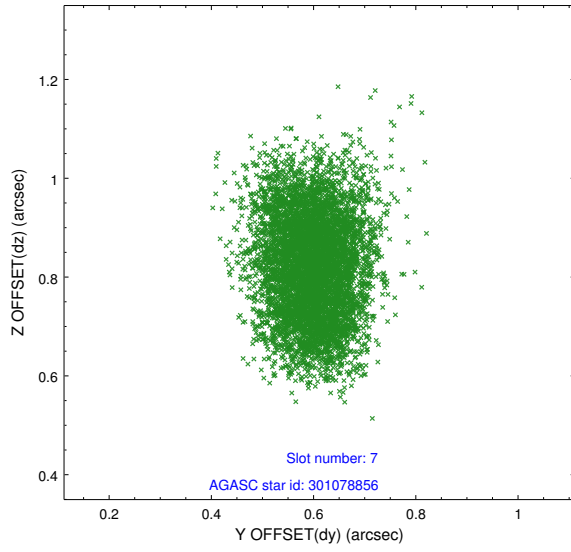
## 2.4.2 Slot 4



### 2.4.3 Slot 5



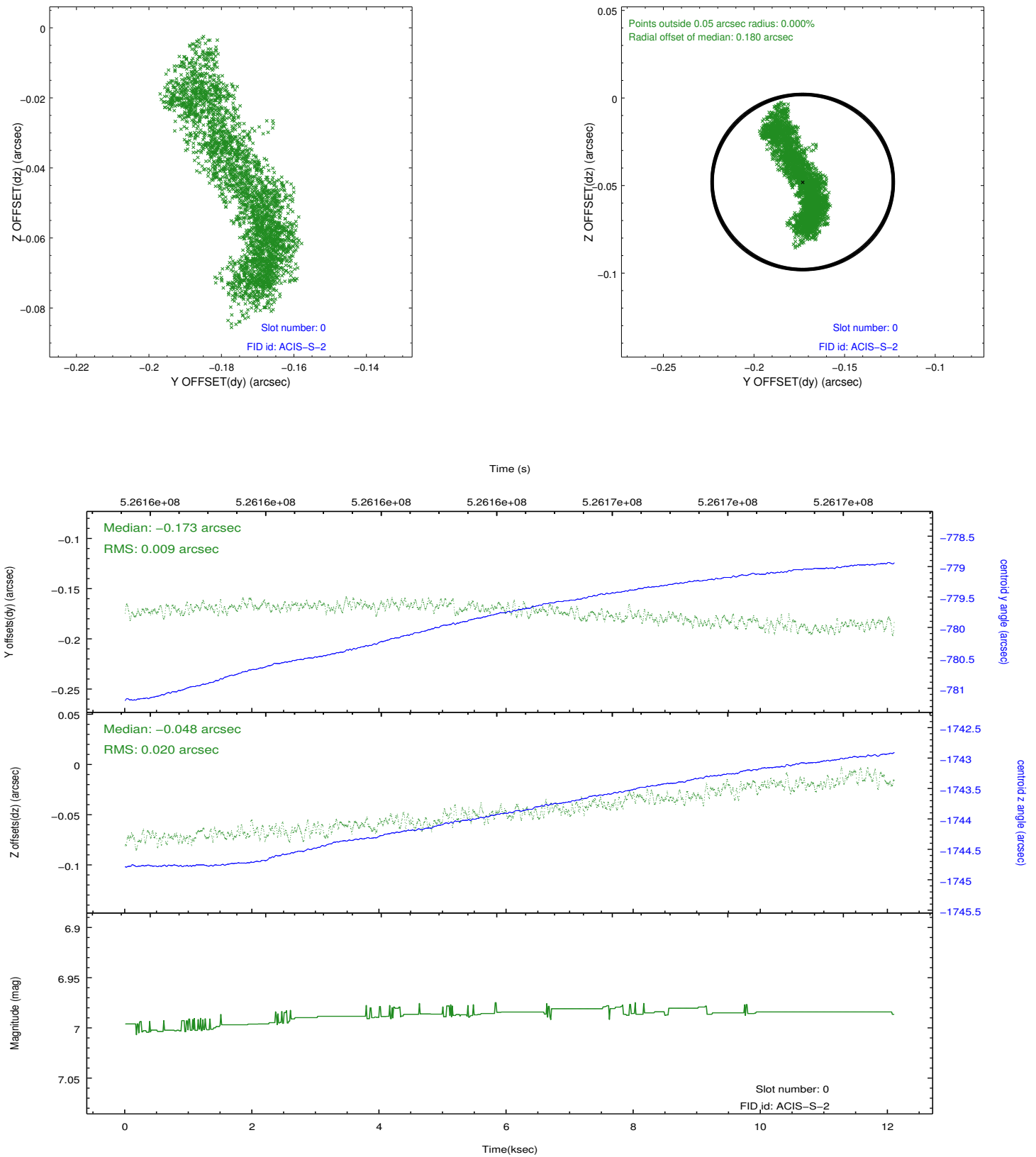
## 2.4.4 Slot 7



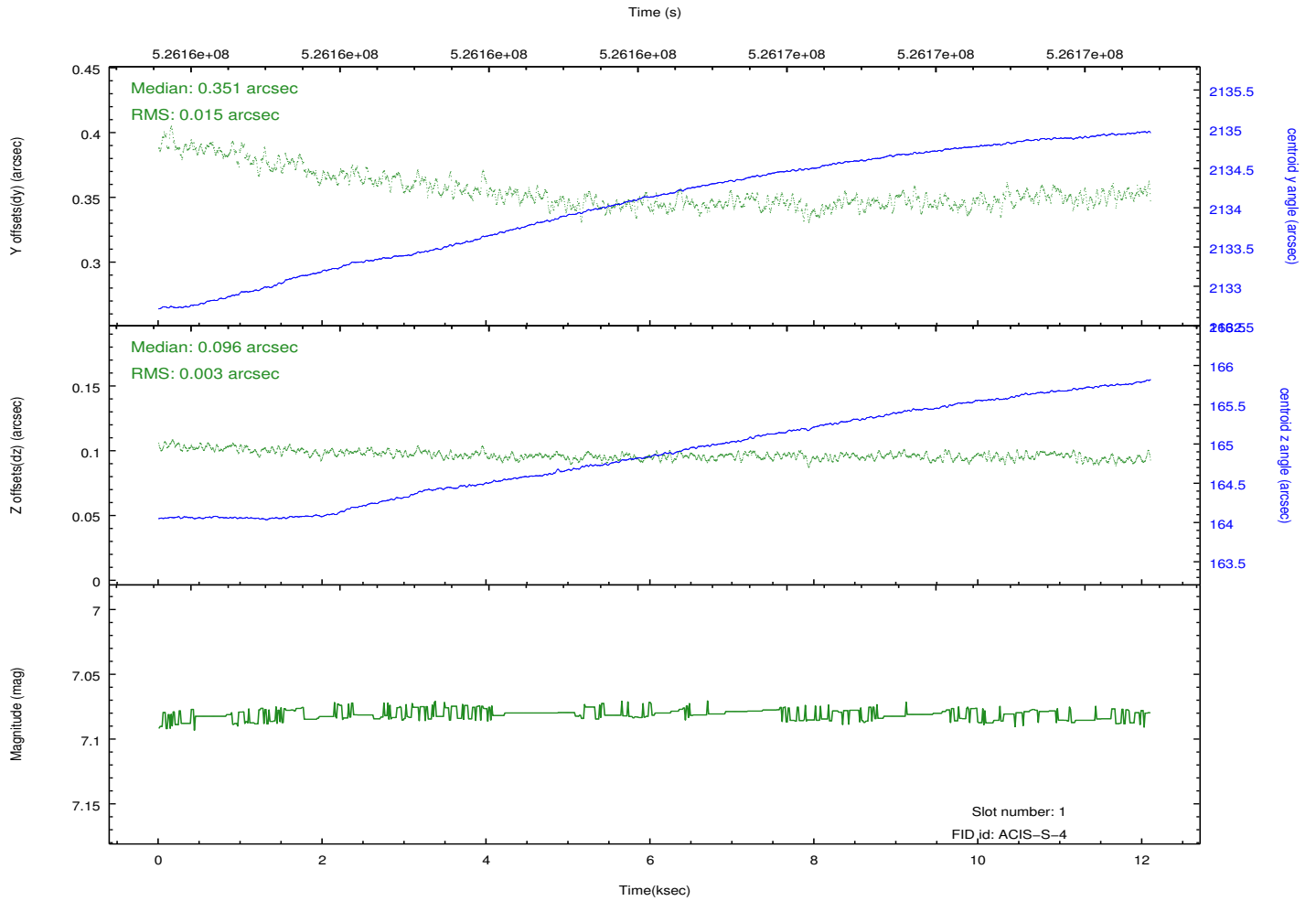
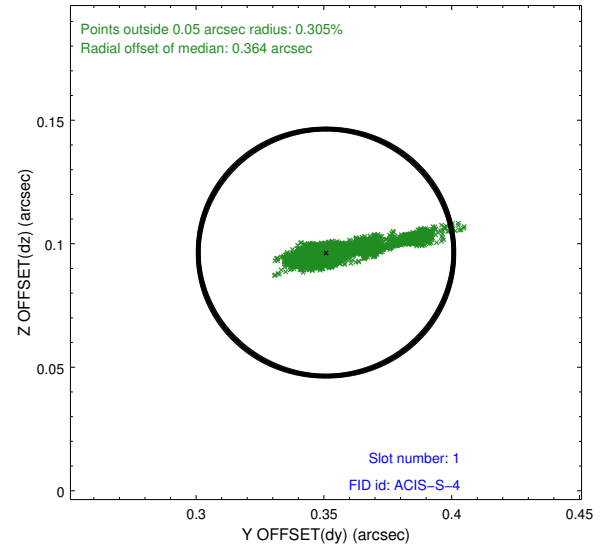
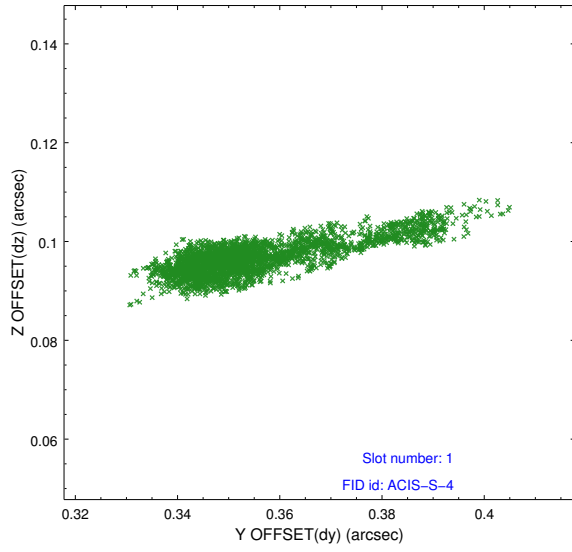


## 2.5 FID Slots

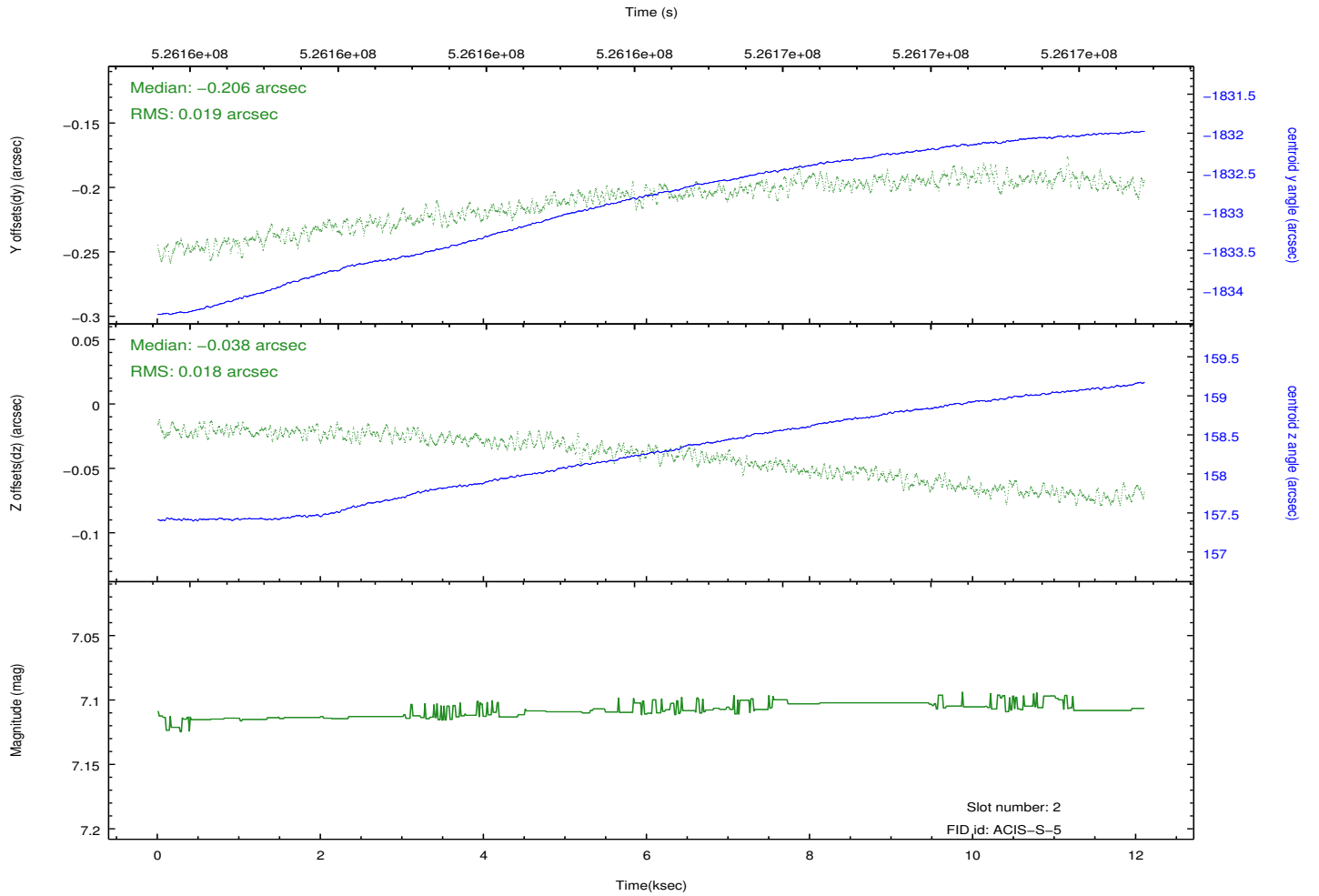
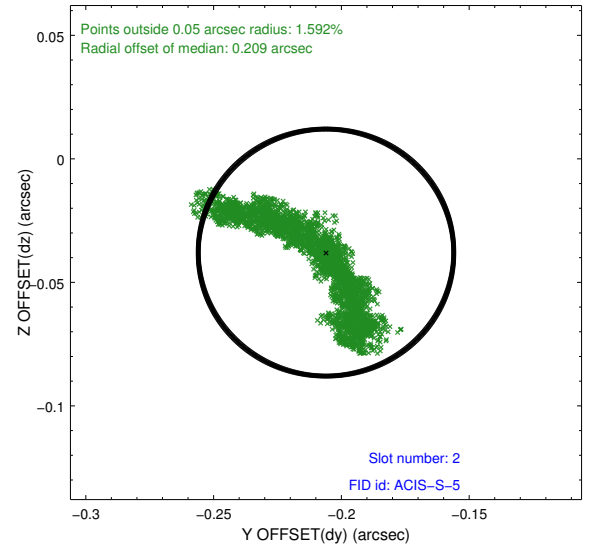
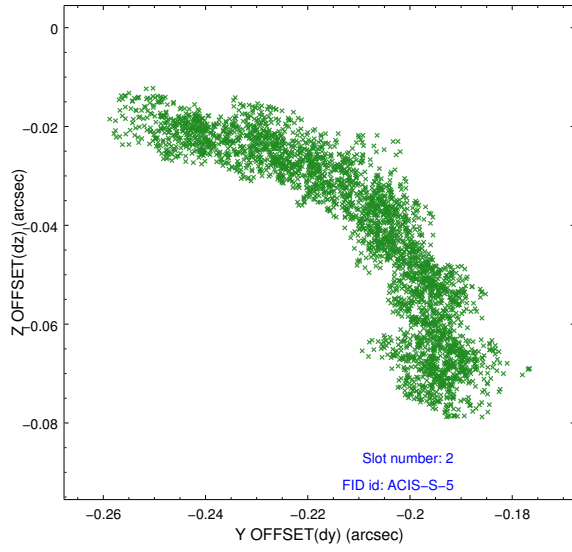
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.09.05
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	12.049700092673

### A.2 Comments

The guide star in slot 6 was removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of this star from the solution.