

# V&V Reference Report

## L2 ASCDS Version : 10.2.4

Observation 17419 - L2 Version 1  
Chandra X-Ray Center

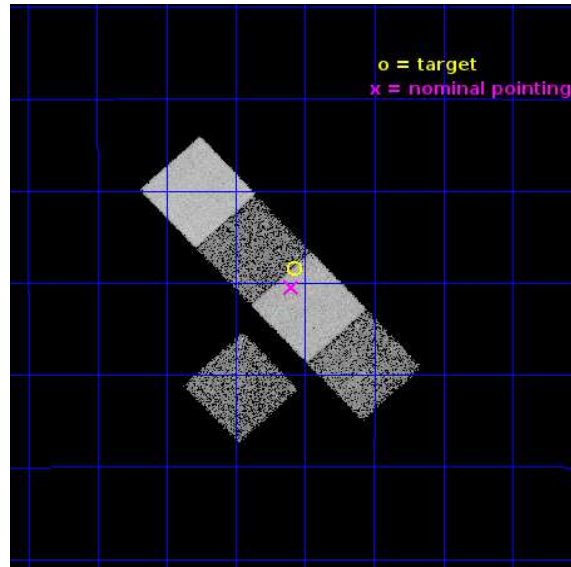
L2 Processing Date : Sep 29 2014

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# 1 Front

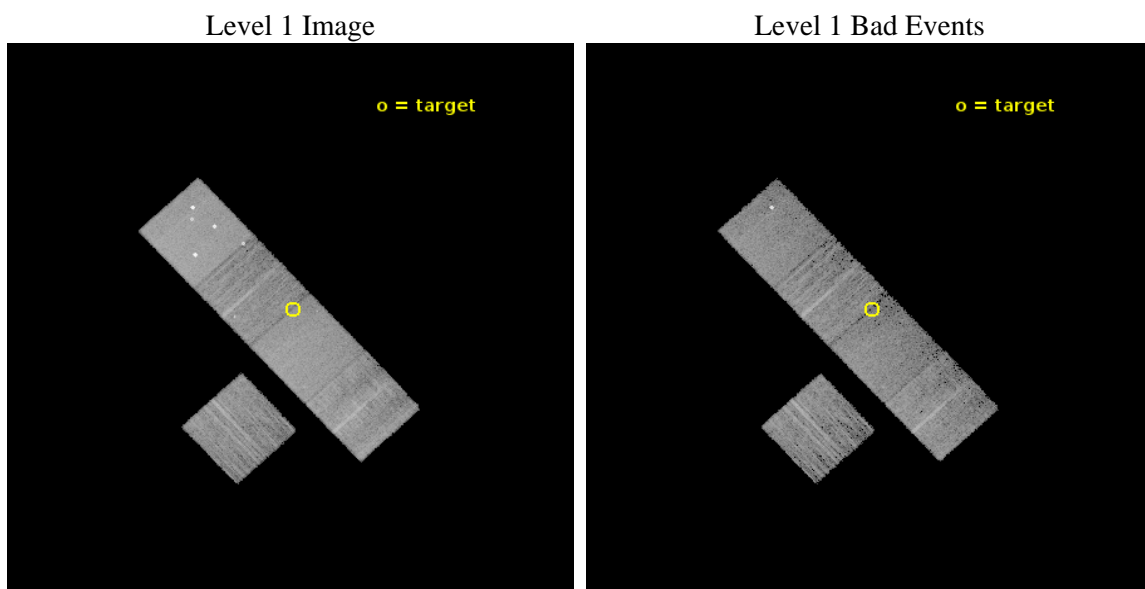
seq_num	601131	Sequence number
obs_id	17419	Observation id
title	The Missing Baryons Around Early-Type Galaxies	Proposal title
observer	Dr. Joel Bregman	Principal investigator
object	NGC 682	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	27.269167	Observer's specified target RA [deg]
dec_targ	-14.974722	Observer's specified target Dec [deg]
ra_nom	27.274592261334	Nominal RA [deg]
dec_nom	-15.008002186077	Nominal Dec [deg]
roll_nom	47.158025314768	Nominal Roll [deg]
revision	1	Processing version of data
ontime	11063.803117394	Sum of GTIs [s]
livetime	10919.246384612	Livetime [s]
ontime3	11063.679997385	Sum of GTIs [s]
ontime5	11063.762077391	Sum of GTIs [s]
ontime6	11063.721037388	Sum of GTIs [s]
ontime7	11063.803117394	Sum of GTIs [s]
ontime8	11063.638957381	Sum of GTIs [s]
l2events	94550	Number of level 2 events



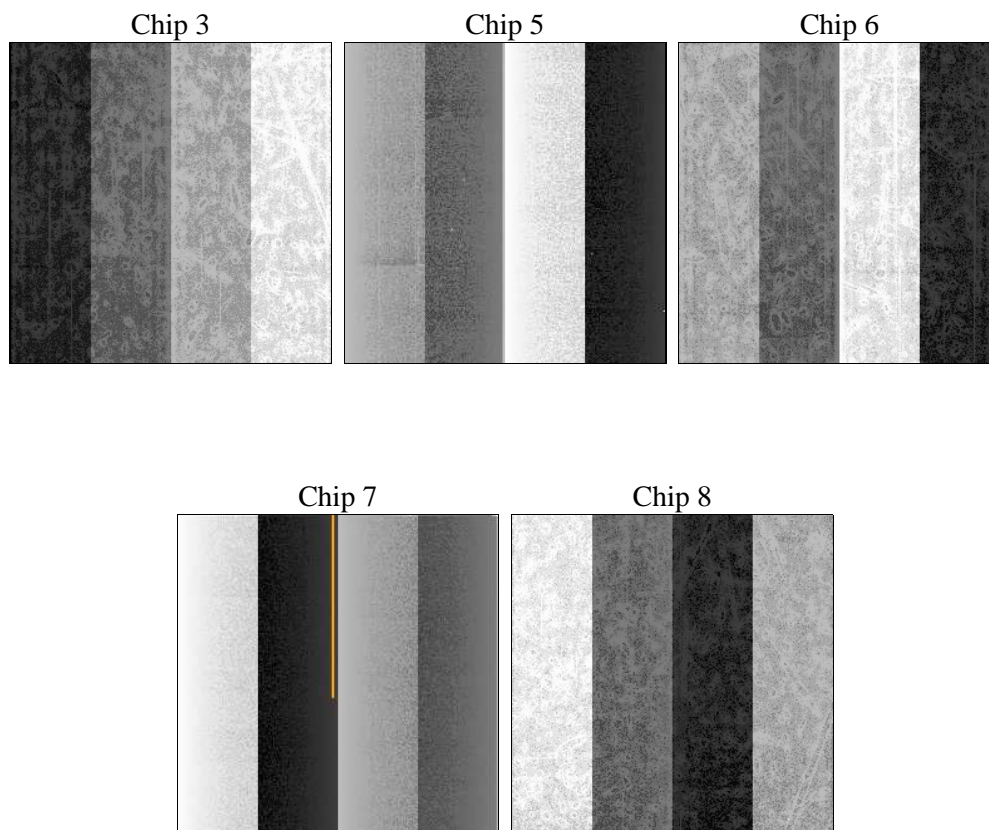
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	11000.000000	[s] Scheduled observation exposure time
ascdsver	10.2.4	Processing system revision	ontime	11063.803117394	Sum of GTIs [s]
caldsver	4.6.3	&#160	ontime3	11063.679997385	Sum of GTIs [s]
date	2014-09-29T06:40:31	Date and time of file creation	ontime5	11063.762077391	Sum of GTIs [s]
revision	1	Processing version of data	ontime6	11063.721037388	Sum of GTIs [s]
			ontime7	11063.803117394	Sum of GTIs [s]
			ontime8	11063.638957381	Sum of GTIs [s]
			l1events	367838	Number of level 1 events

### 2.1.4 Events

	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	56135	103610	57133	77803	73157
rejected events	49939	50608	50184	44209	53416
rejected %	88%	48%	87%	56%	73%

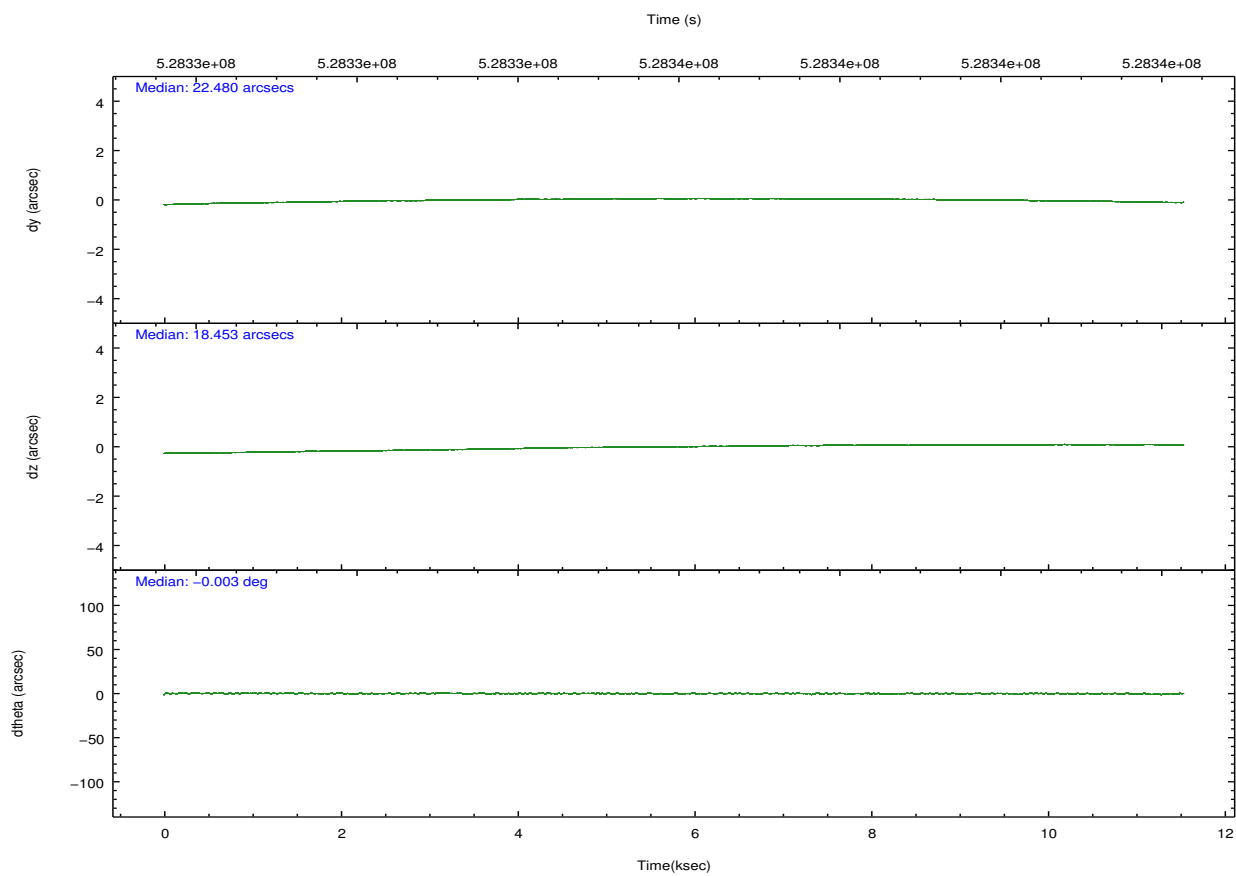
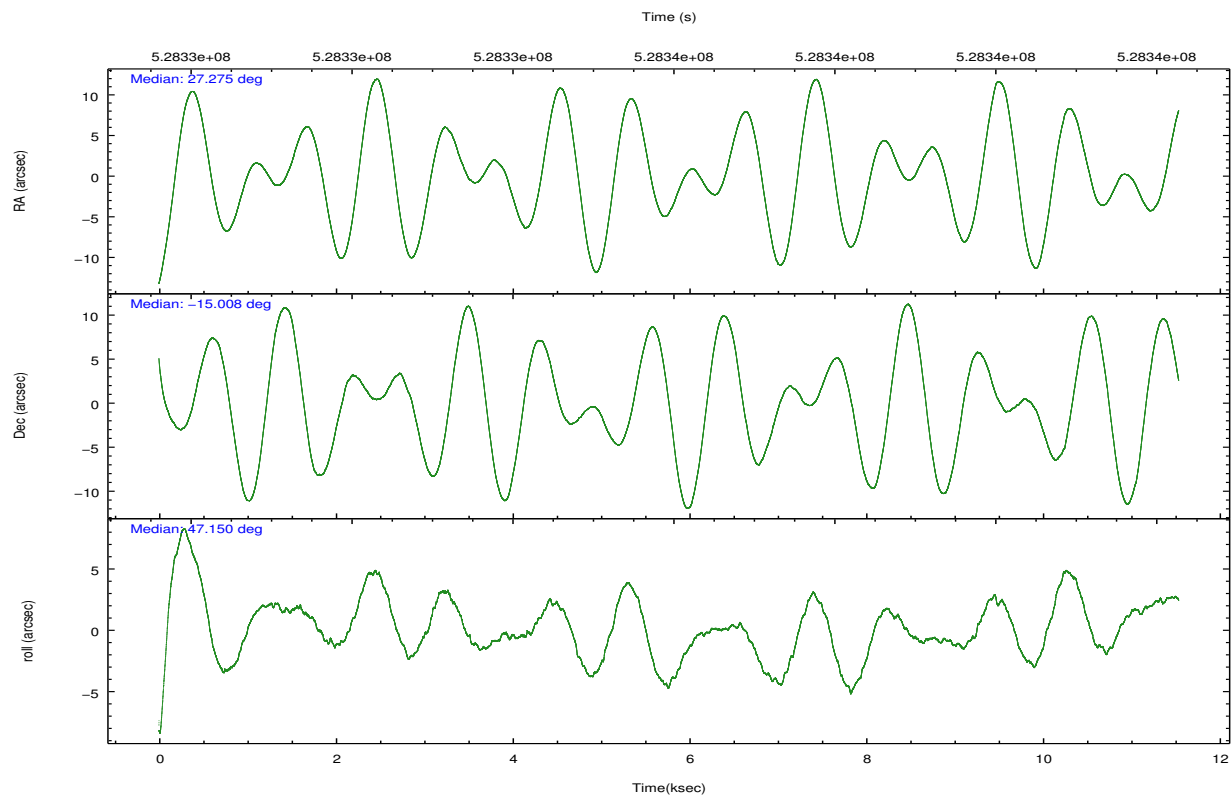
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	2157	9969	2491	2908	5517
	3%	9%	4%	3%	7%
grade 1 events	29	185	24	105	51
	0%	0%	0%	0%	0%
grade 2 events	1388	15258	1528	6803	4812
	2%	14%	2%	8%	6%
grade 3 events	660	1578	693	2817	2017
	1%	1%	1%	3%	2%
grade 4 events	634	1557	673	2720	1904
	1%	1%	1%	3%	2%
grade 5 events	2941	7092	3081	7977	4394
	5%	6%	5%	10%	6%
grade 6 events	1361	24669	1567	18362	5502
	2%	23%	2%	23%	7%
grade 7 events	46965	43302	47076	36111	48960
	83%	41%	82%	46%	66%



## 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	27.268663	27.27459226133409	CCD I2 on	N	N
[deg] Pointing Dec	-15.034883	-15.0080021860768	CCD I3 on	Y	Y
[deg] Pointing Roll	46.999859	47.15802531476839	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[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	O1	Y
[s] Observation start time (MET)	528330704.184000	528329588.69959	CCD S5 on	N	N
Observation start date	2014-09-28T22:30:37	2014-09-28T22:13:08	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	528341704.184000	528342698.96282	On-chip summing requested	N	N
Observation end date	2014-09-29T01:33:57	2014-09-29T01:51:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect

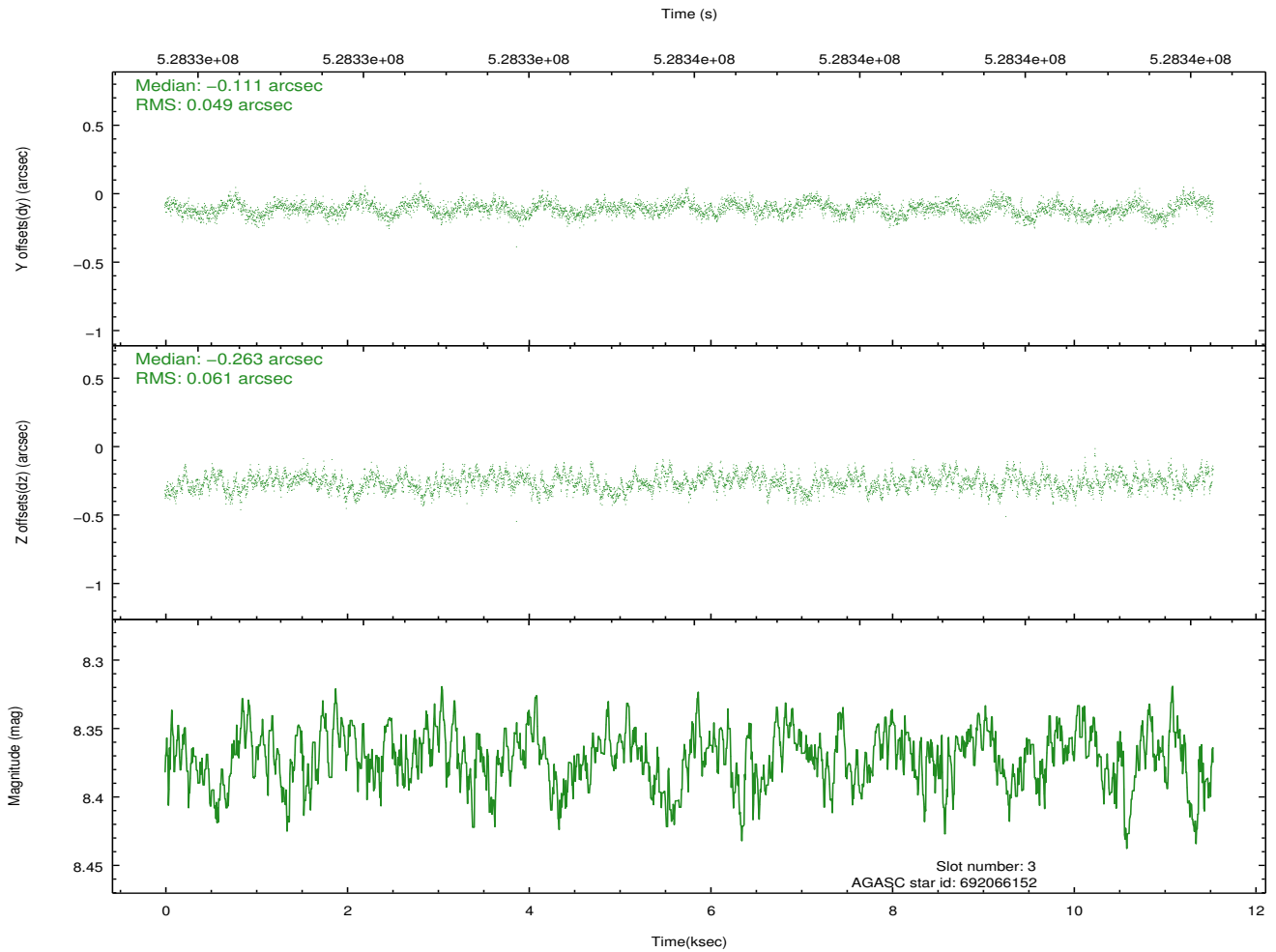
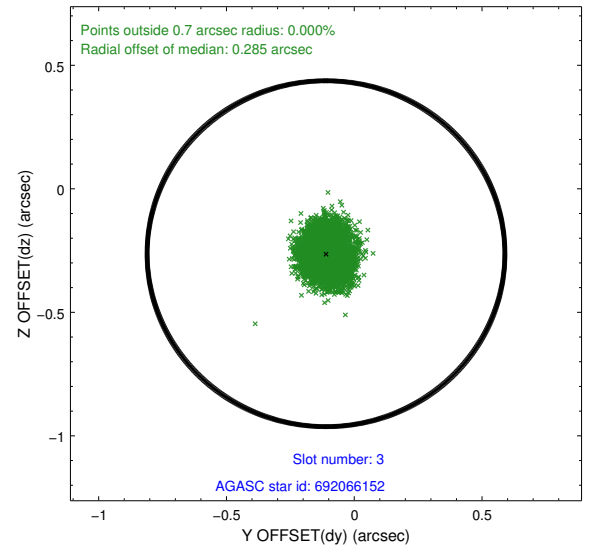
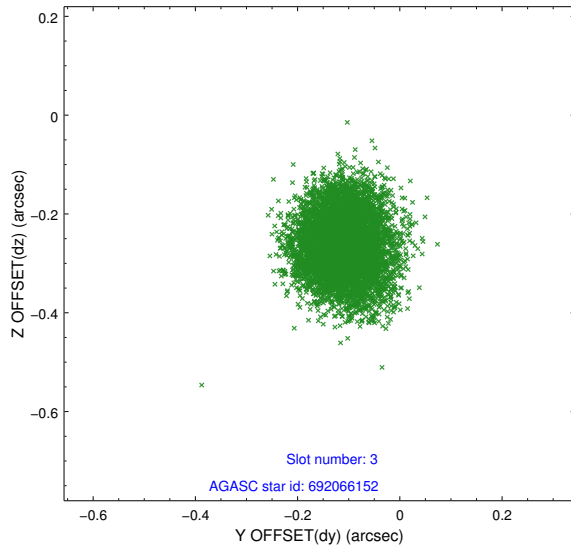


### Slot Statistics

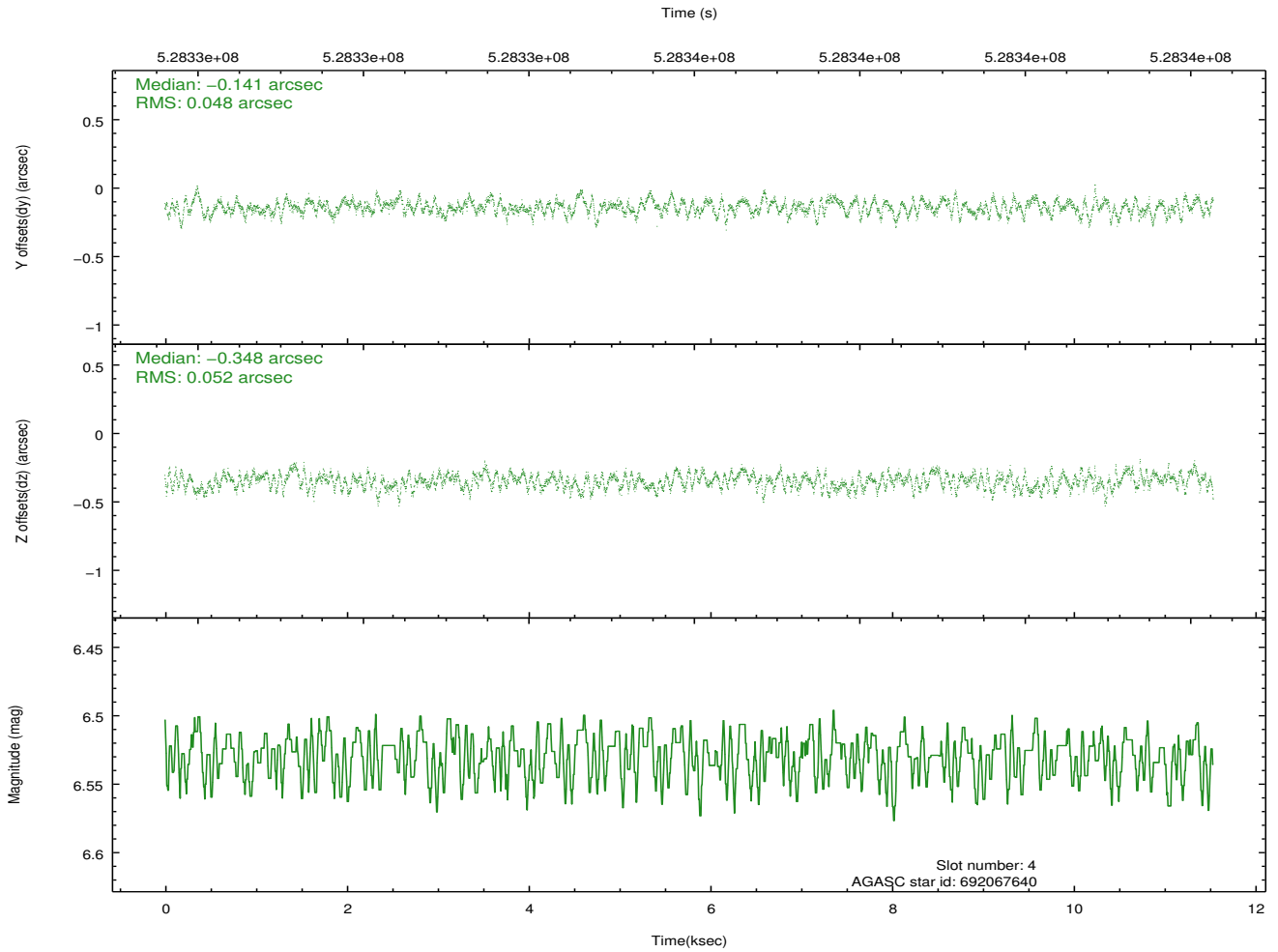
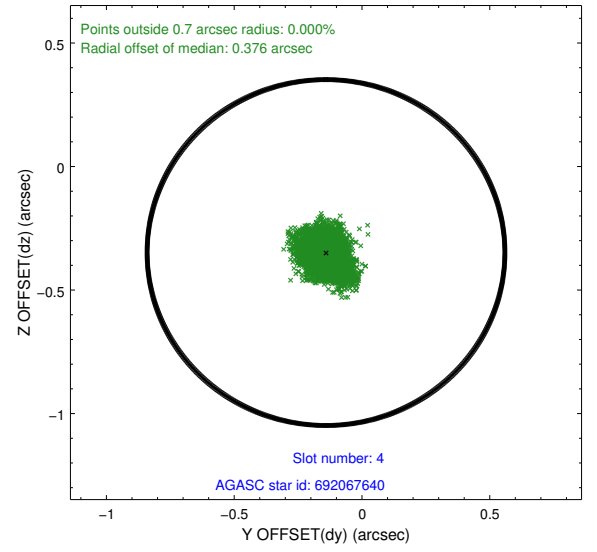
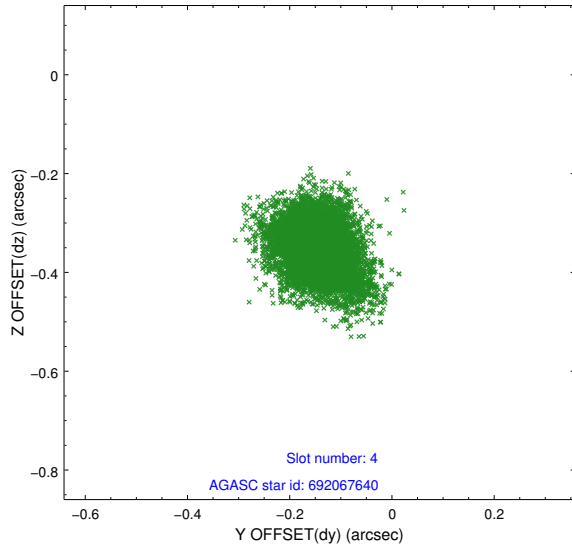
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.00	2815	-0.108	-0.062	0.007	0.012	0.000000	0.000000	-775.76	-1739.89
1	FID	ACIS-S-4	7.09	2815	0.286	0.068	0.008	0.016	0.000000	0.000000	2137.72	168.24
2	FID	ACIS-S-5	7.11	2815	-0.208	0.002	0.008	0.014	0.000000	0.000000	-1828.12	162.38
3	GUIDE	692066152	8.37	5629	-0.111	-0.263	0.084	0.132	26.984652	-14.673478	276.07	1609.65
4	GUIDE	692067640	6.53	5630	-0.141	-0.348	0.076	0.122	27.153512	-14.765242	436.41	954.98
5	GUIDE	767432880	8.74	5629	0.099	0.037	0.104	0.166	27.909221	-15.153897	1202.09	-1922.17
6	GUIDE	767558584	8.72	5625	-0.100	0.017	0.100	0.163	28.088259	-15.088418	1798.84	-2218.61
7	GUIDE	767429904	9.24	5625	0.258	0.554	0.117	0.195	27.508778	-15.769061	-1363.31	-2411.72

## 2.4 Star Slots

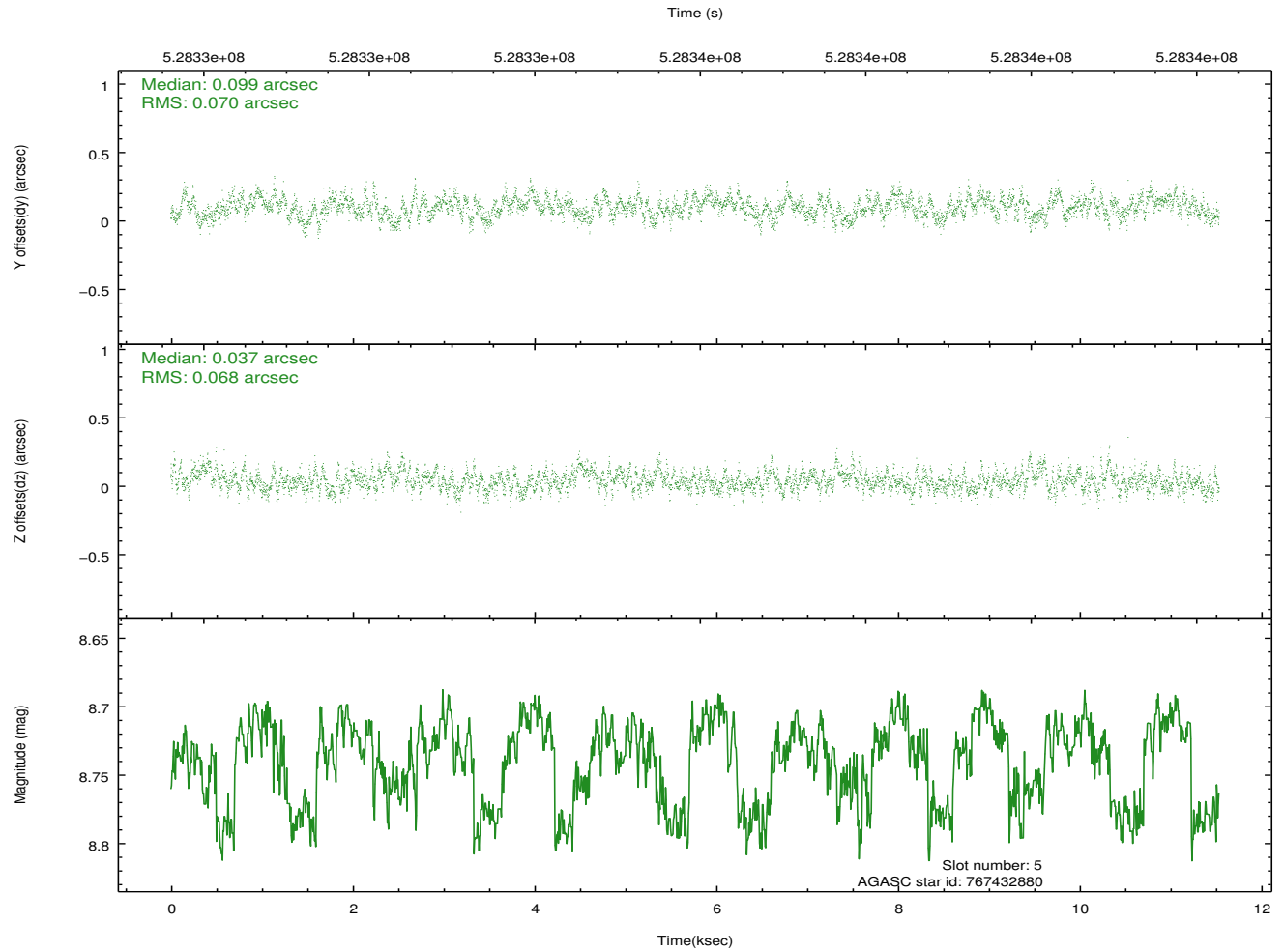
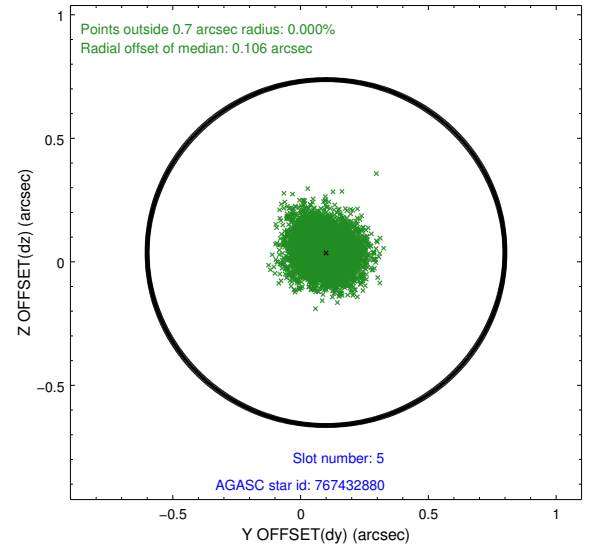
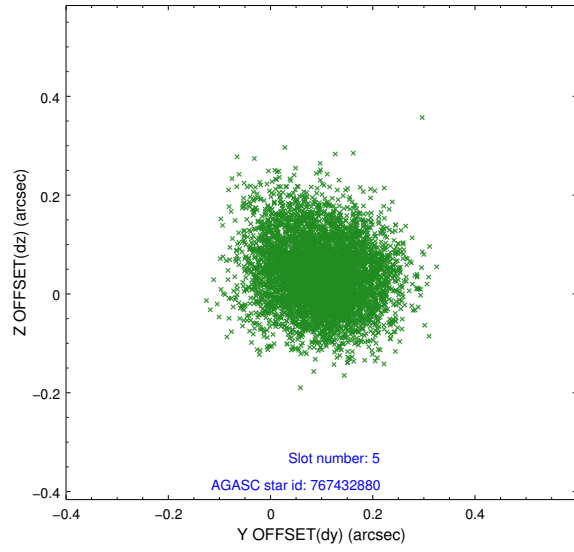
### 2.4.1 Slot 3



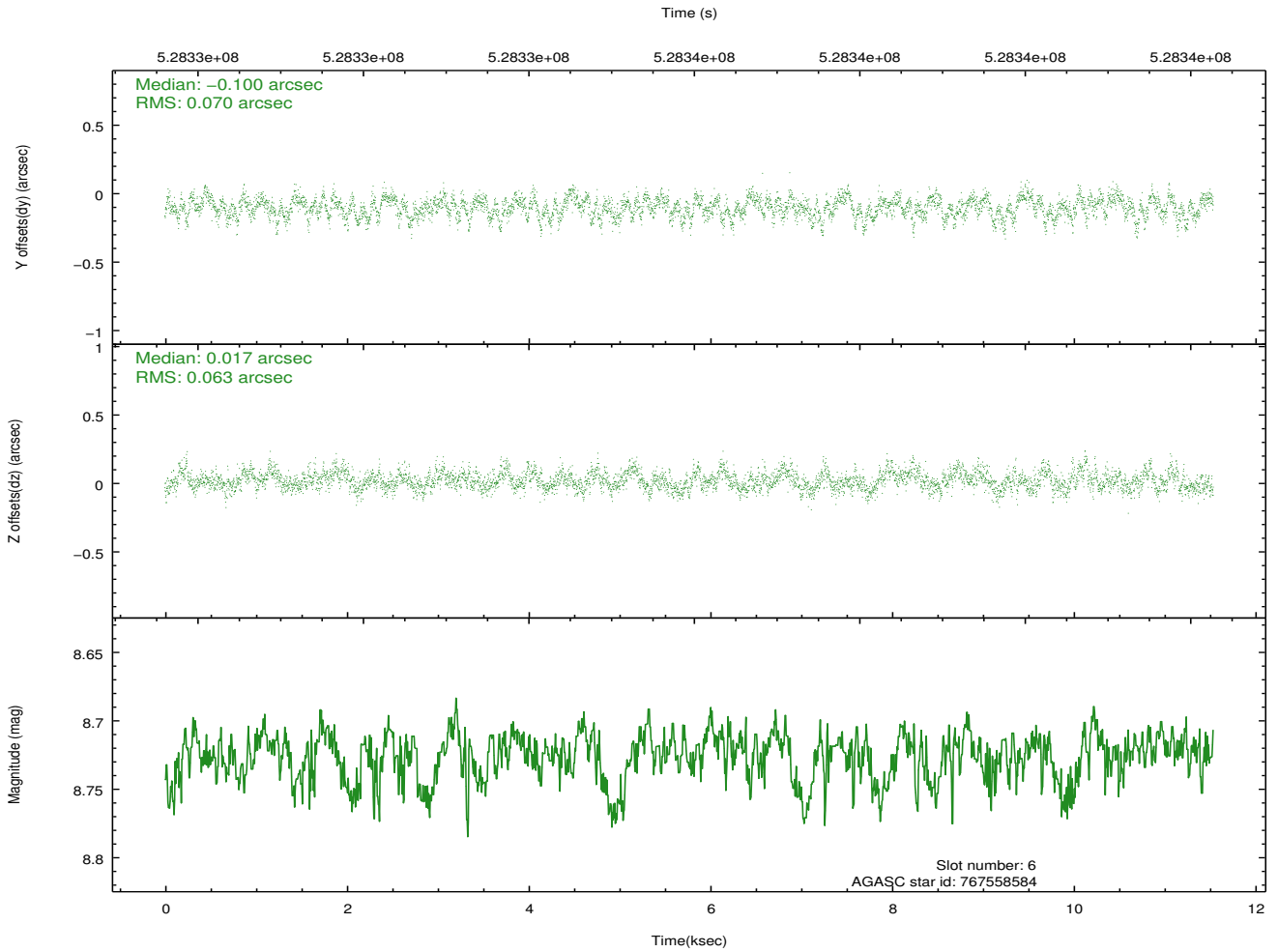
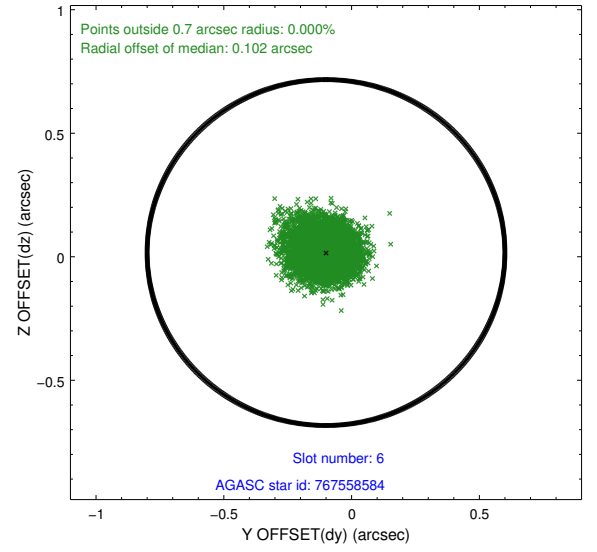
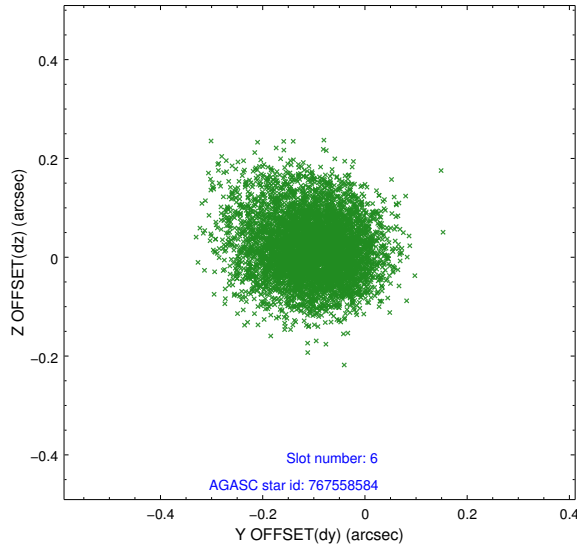
## 2.4.2 Slot 4



### 2.4.3 Slot 5

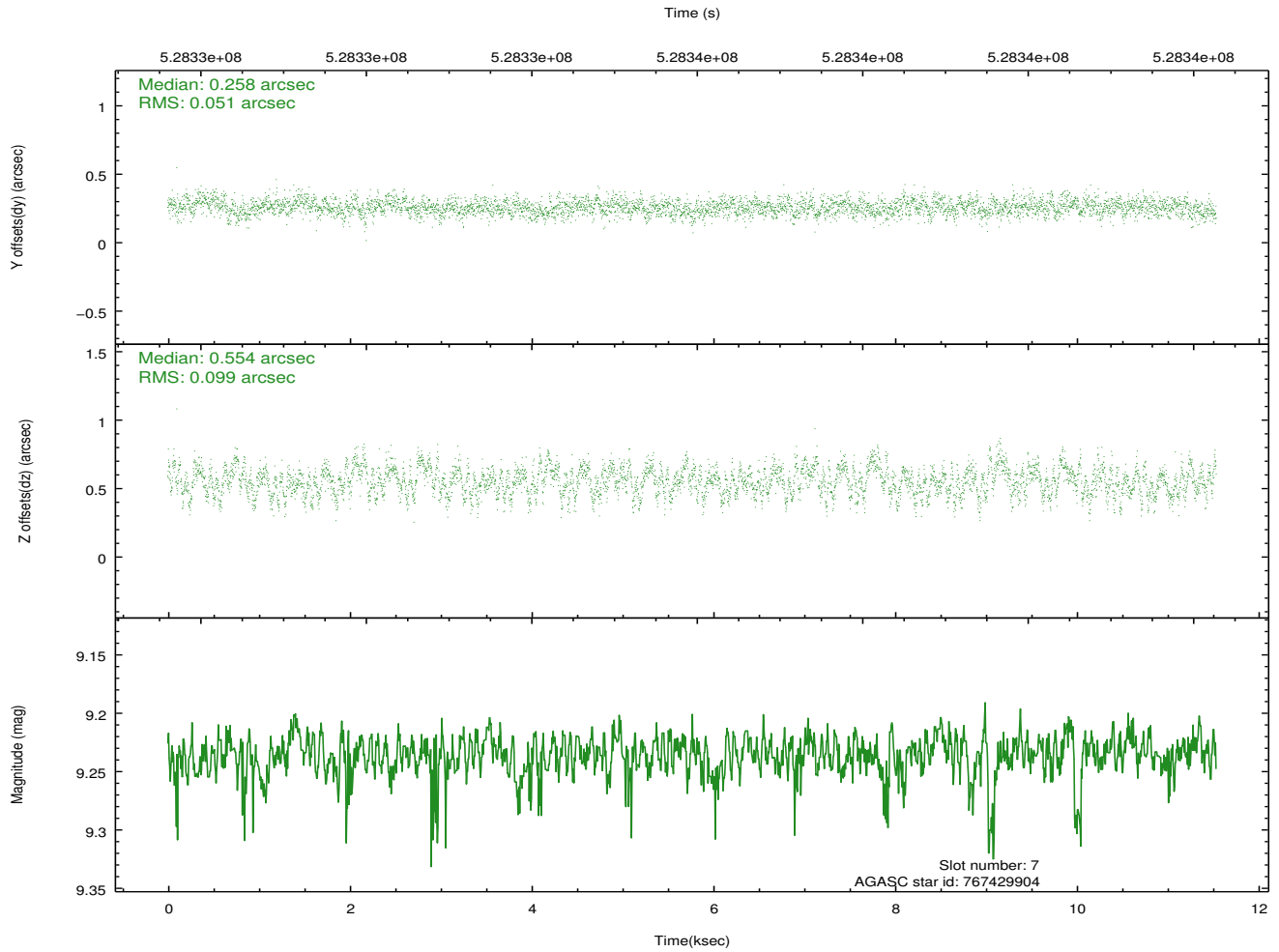
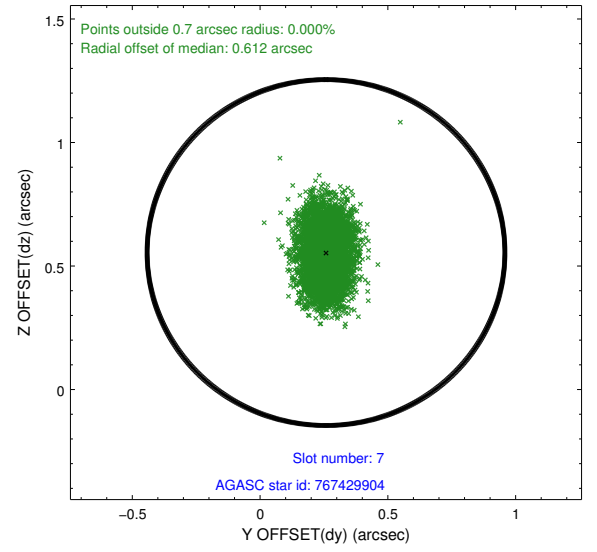
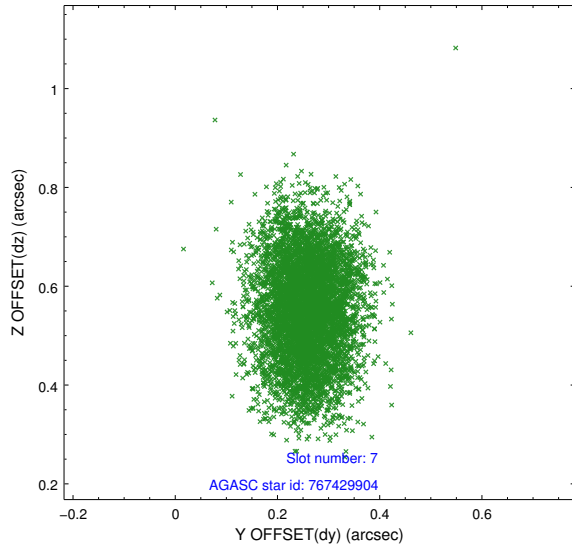


## 2.4.4 Slot 6



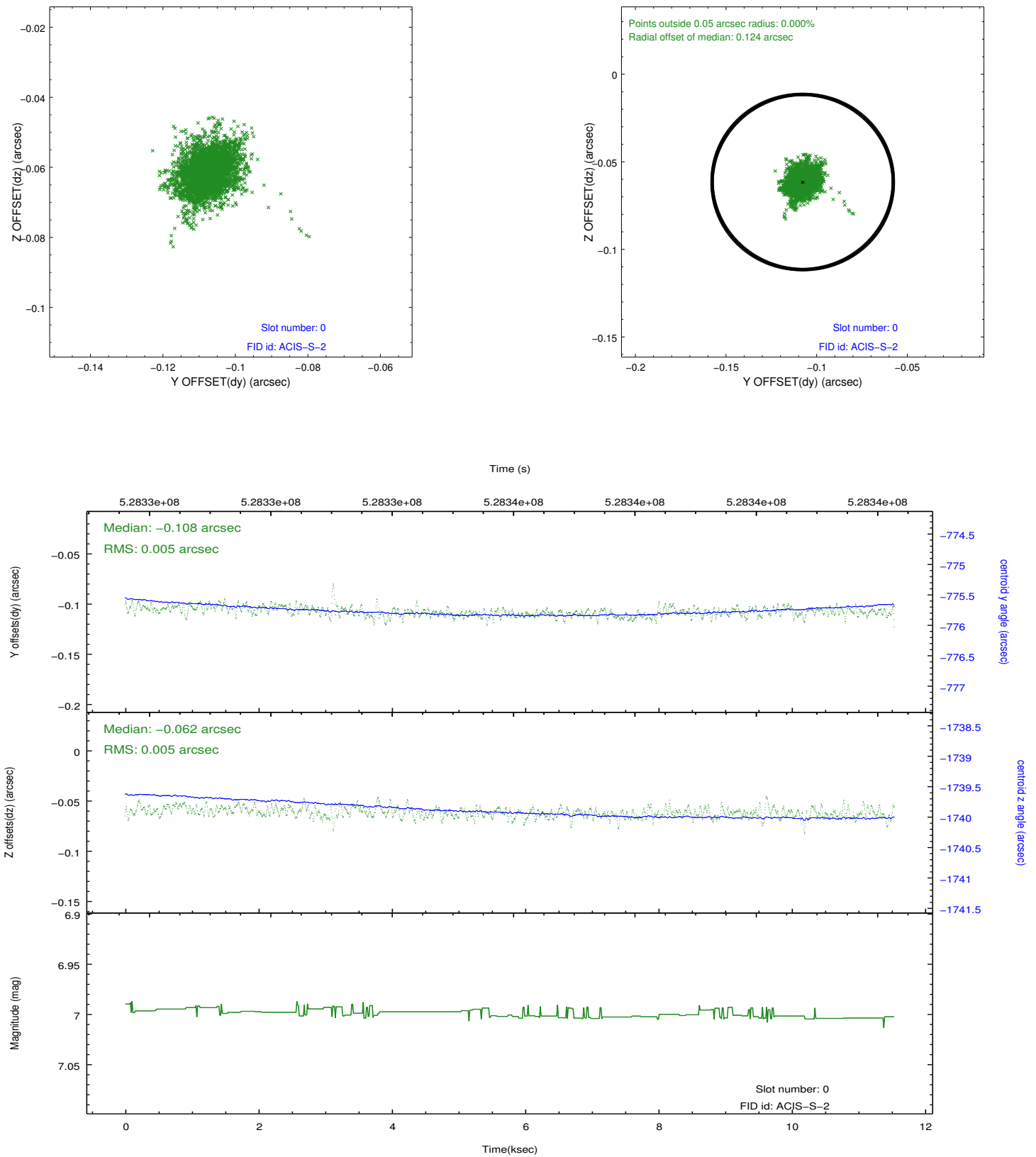


## 2.4.5 Slot 7

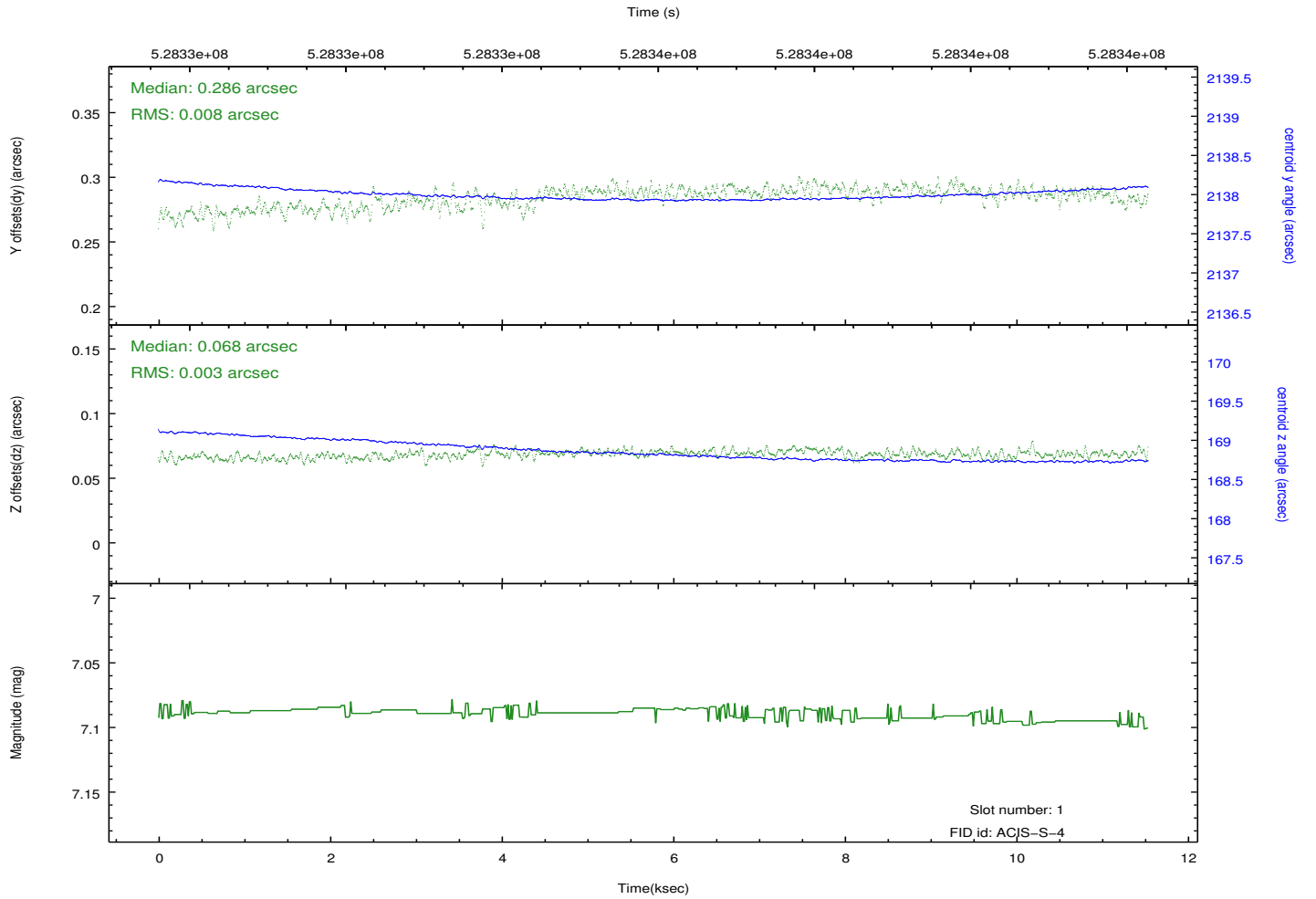
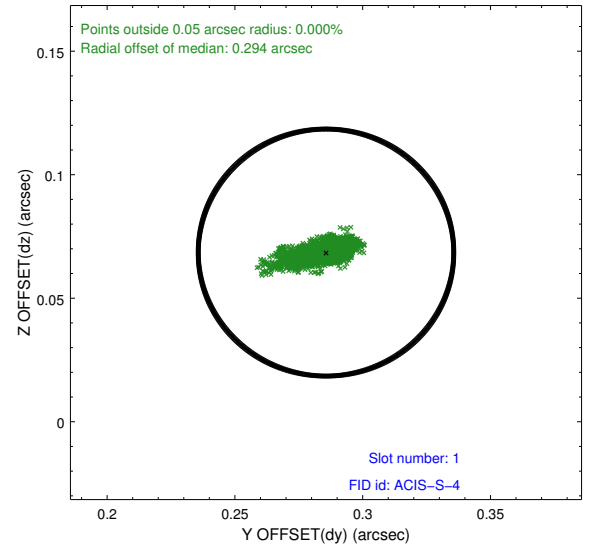
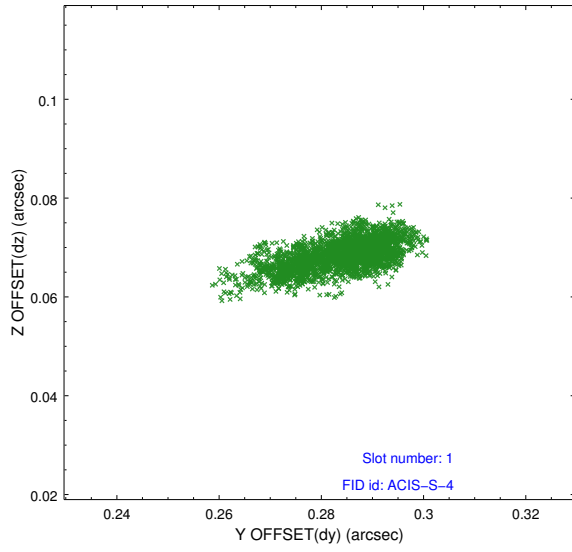


## 2.5 FID Slots

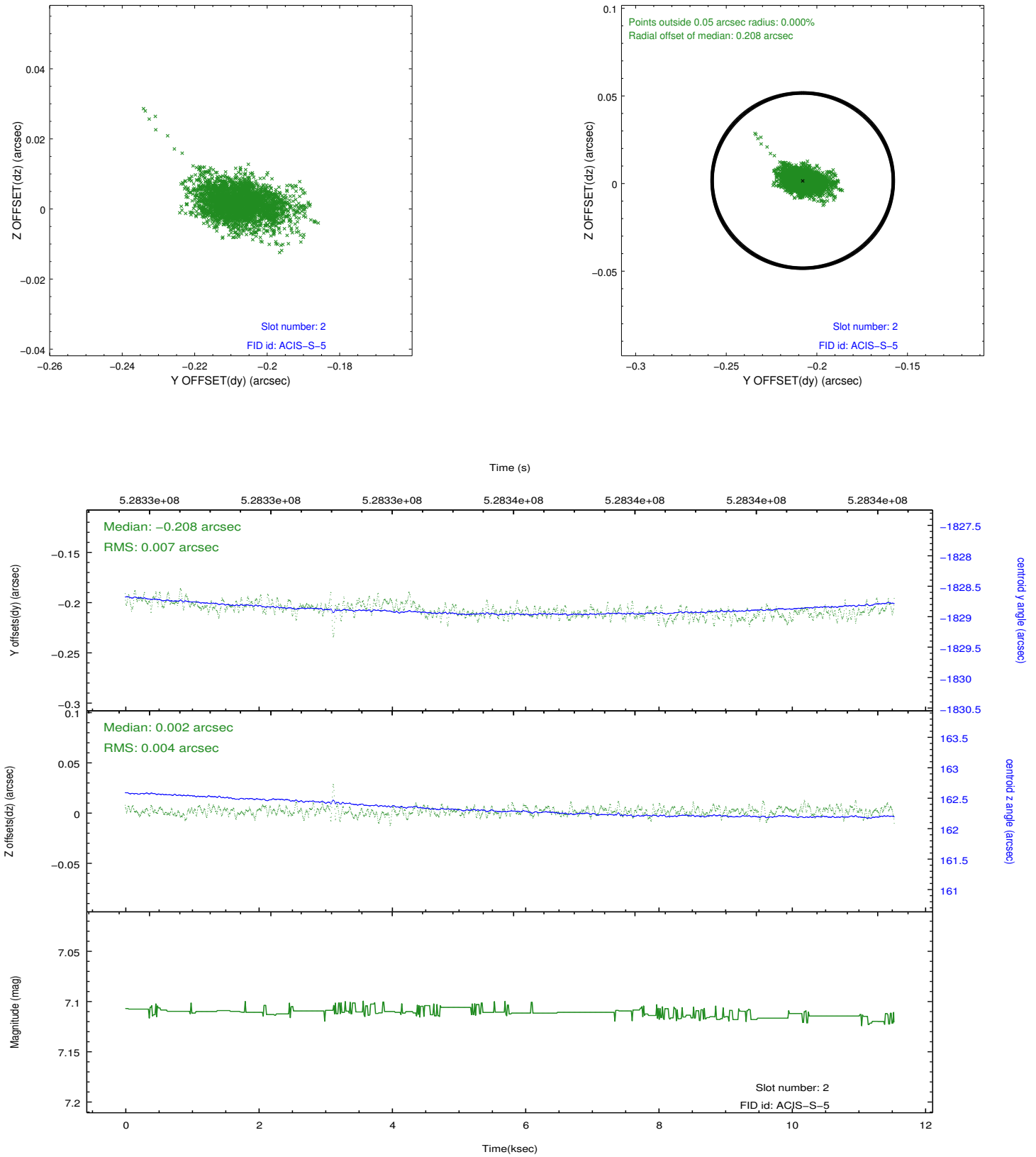
### 2.5.1 Slot 0



## 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)	2014.09.29
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	11.063803117394

### A.2 Comments