

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 10473 - L2 Version 2  
Chandra X-Ray Center

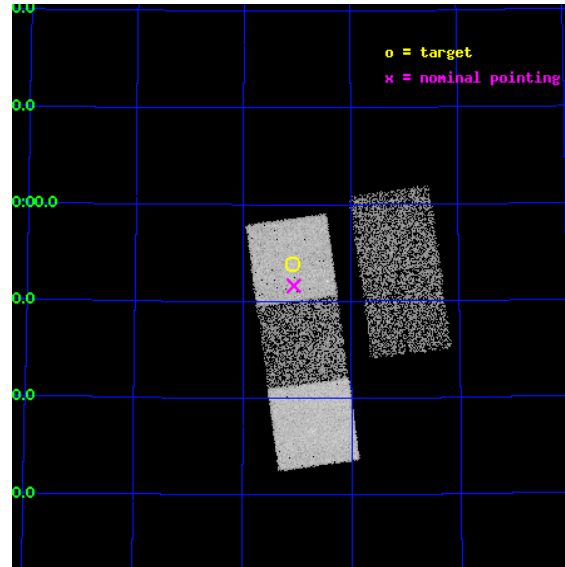
L2 Processing Date : Jun 9 2012

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# 1 Front

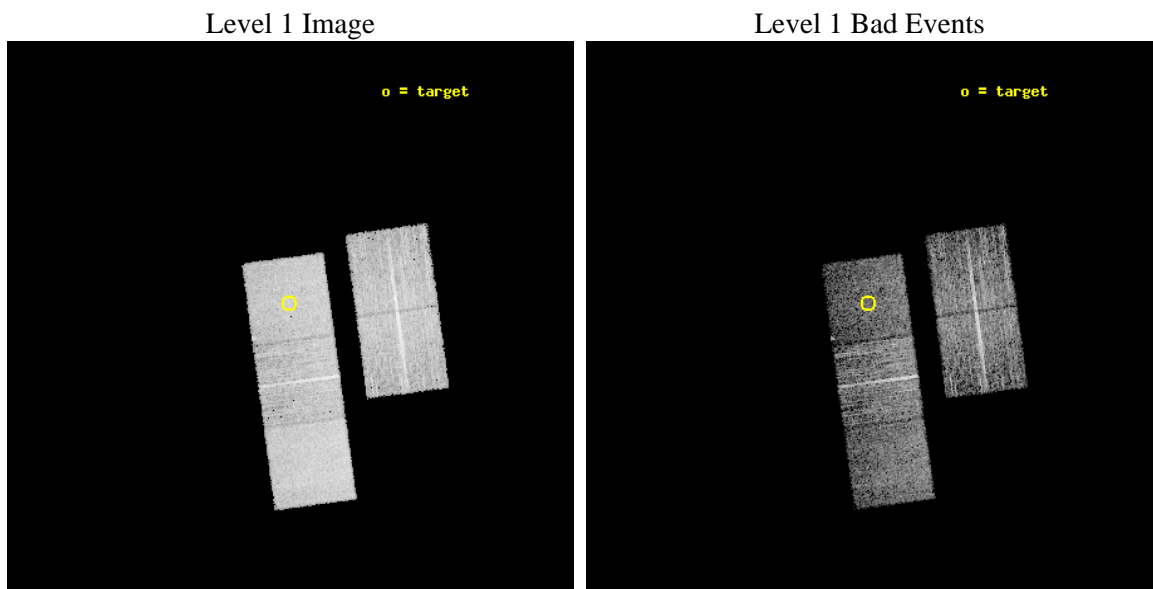
seq_num	800831	Sequence number
obs_id	10473	Observation id
title	The Origin and Evolution of Fossil Groups	Proposal title
observer	Dr. Eli Rykoff	Principal investigator
object	SDSS J1153+6753	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	178.272083	Observer's specified target RA [deg]
dec_targ	67.897667	Observer's specified target Dec [deg]
ra_nom	178.26503912013	Nominal RA [deg]
dec_nom	67.860188095329	Nominal Dec [deg]
roll_nom	262.18987301756	Nominal Roll [deg]
revision	2	Processing version of data
ontime	5034.4000387192	Sum of GTIs [s]
livetime	4968.6218959419	Livetime [s]
ontime2	5034.2821351886	Sum of GTIs [s]
ontime3	5034.3231751919	Sum of GTIs [s]
ontime5	5034.4000387192	Sum of GTIs [s]
ontime6	5034.3642151952	Sum of GTIs [s]
ontime7	5034.4000387192	Sum of GTIs [s]
l2events	61932	Number of level 2 events



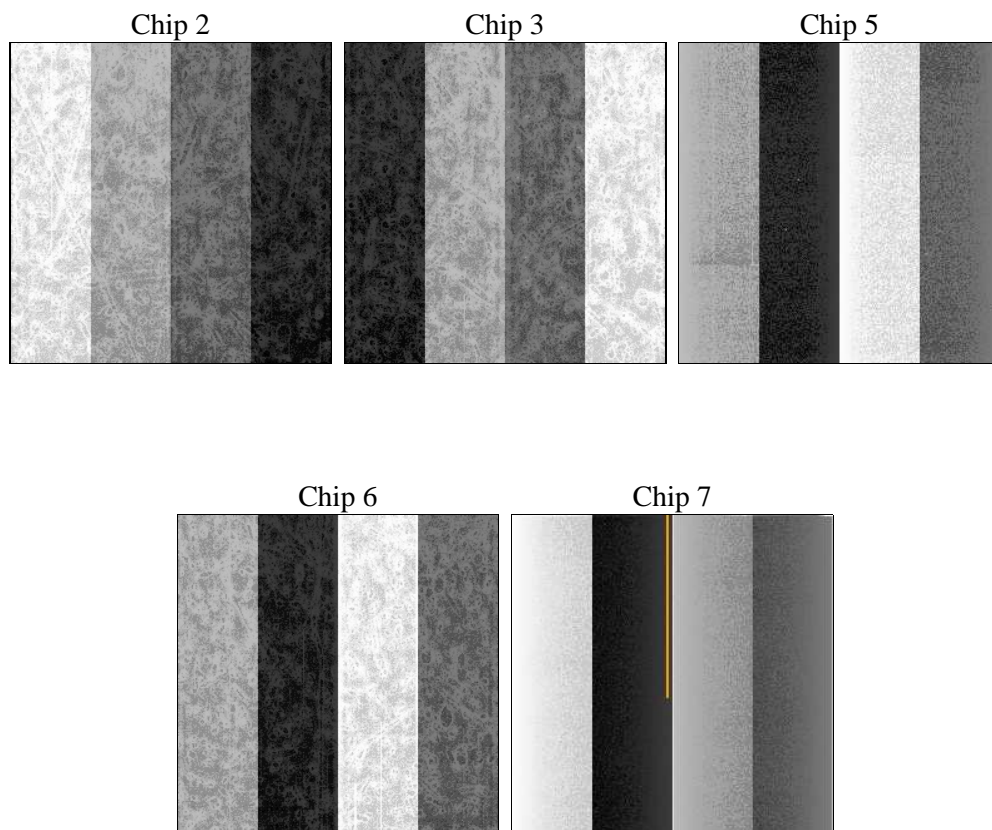
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	5000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	5034.4000387192	Sum of GTIs [s]
caldsver	4.4.10	&#160	ontime2	5034.2821351886	Sum of GTIs [s]
date	2012-06-09T07:26:14	Date and time of file creation	ontime3	5034.3231751919	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	5034.4000387192	Sum of GTIs [s]
			ontime6	5034.3642151952	Sum of GTIs [s]
			ontime7	5034.4000387192	Sum of GTIs [s]
			l1events	240199	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	44434	42727	59508	44402	49128
rejected events	40199	38683	30220	39808	26150
rejected %	90%	90%	50%	89%	53%

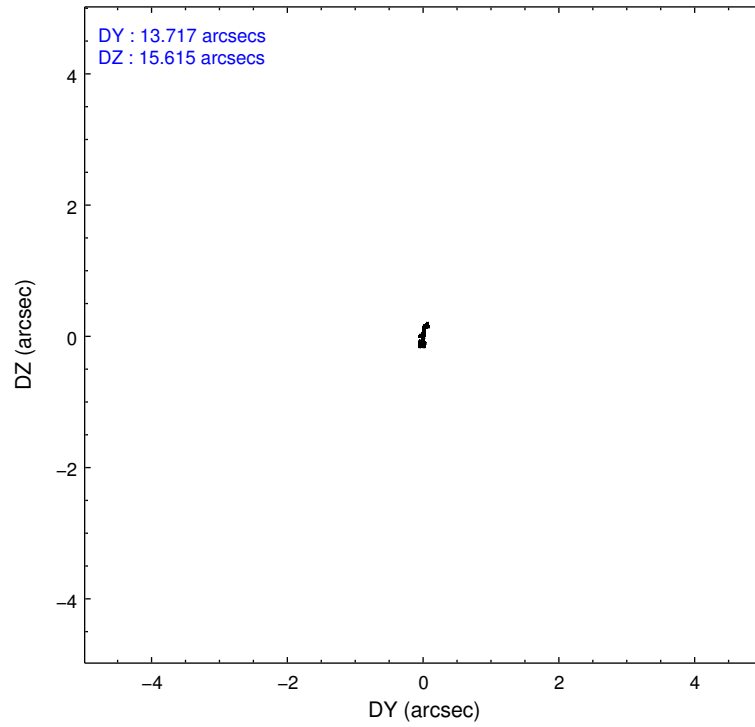
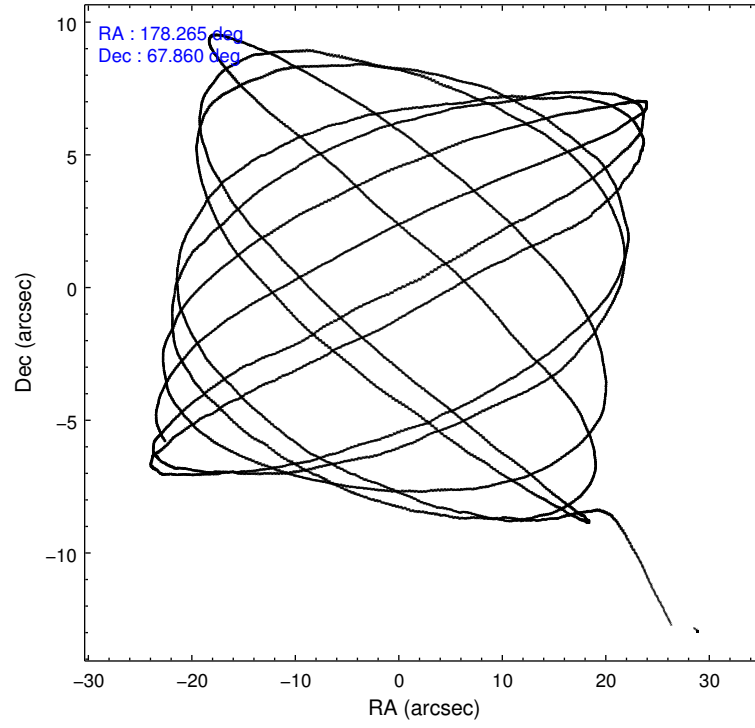
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	1584	1382	1986	1534	2321
	3%	3%	3%	3%	4%
grade 1 events	26	24	115	30	61
	0%	0%	0%	0%	0%
grade 2 events	1018	888	8962	1063	4767
	2%	2%	15%	2%	9%
grade 3 events	424	482	1202	502	2132
	0%	1%	2%	1%	4%
grade 4 events	453	452	1144	518	2114
	1%	1%	1%	1%	4%
grade 5 events	1377	1710	4822	1784	5096
	3%	4%	8%	4%	10%
grade 6 events	758	842	16006	978	11654
	1%	1%	26%	2%	23%
grade 7 events	38794	36947	25271	37993	20983
	87%	86%	42%	85%	42%

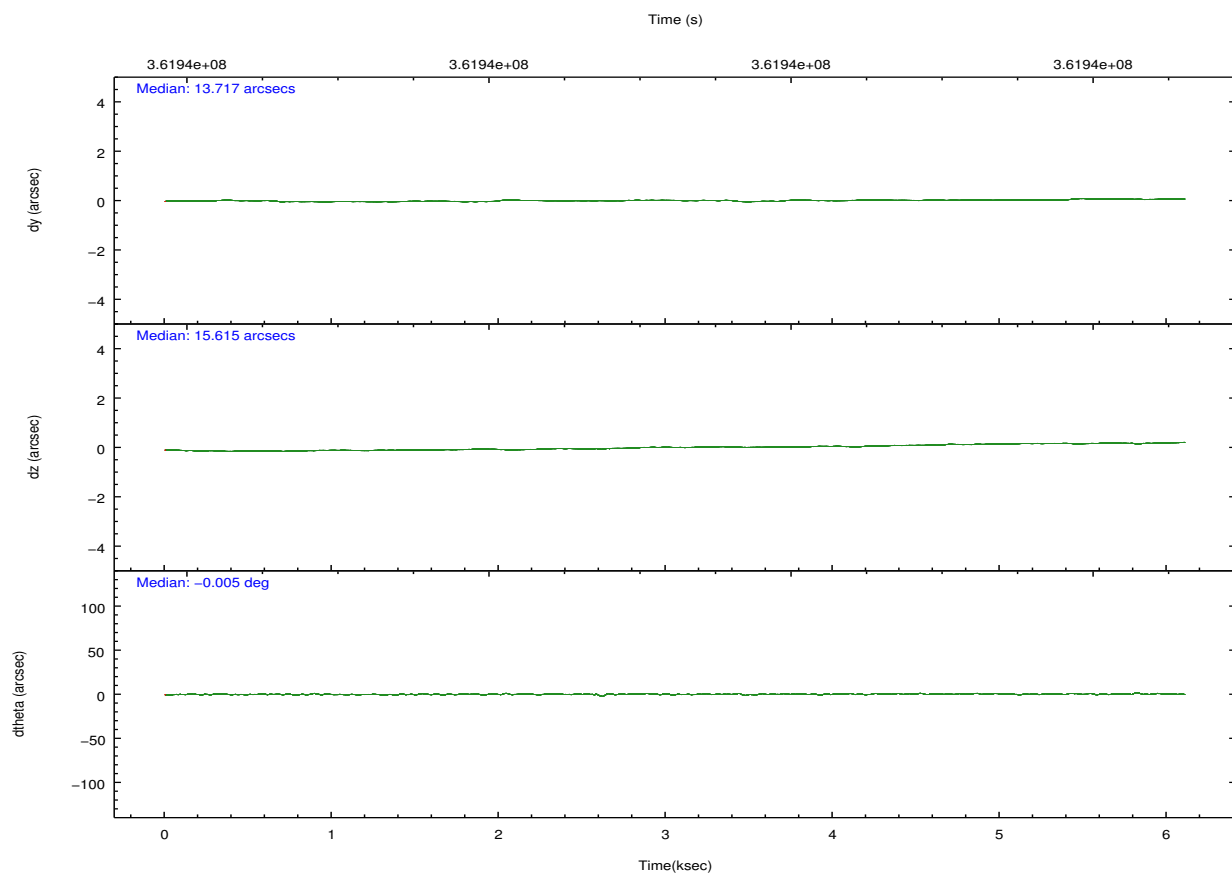
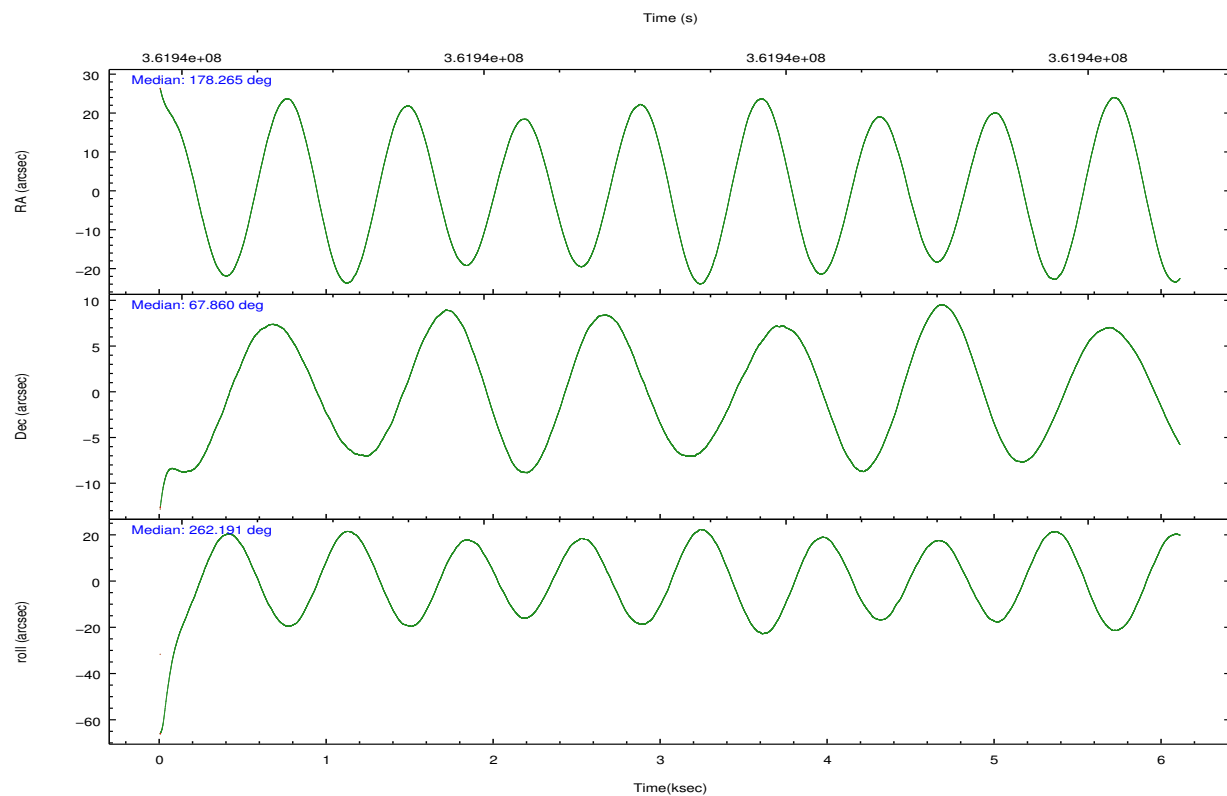


## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	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	178.236673	178.2650391201281	CCD I2 on	O1	Y
[deg] Pointing Dec	67.885397	67.86018809532912	CCD I3 on	O2	Y
[deg] Pointing Roll	262.059597	262.1898730175555	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	N	N
[s] Observation start time (MET)	361939290.184000	361936989.61985	CCD S5 on	N	N
Observation start date	2009-06-21T02:40:24	2009-06-21T02:03:09	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	361944290.184000	361944472.63272	On-chip summing requested	N	N
Observation end date	2009-06-21T04:03:44	2009-06-21T04:07:52	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

## 2.3 Aspect



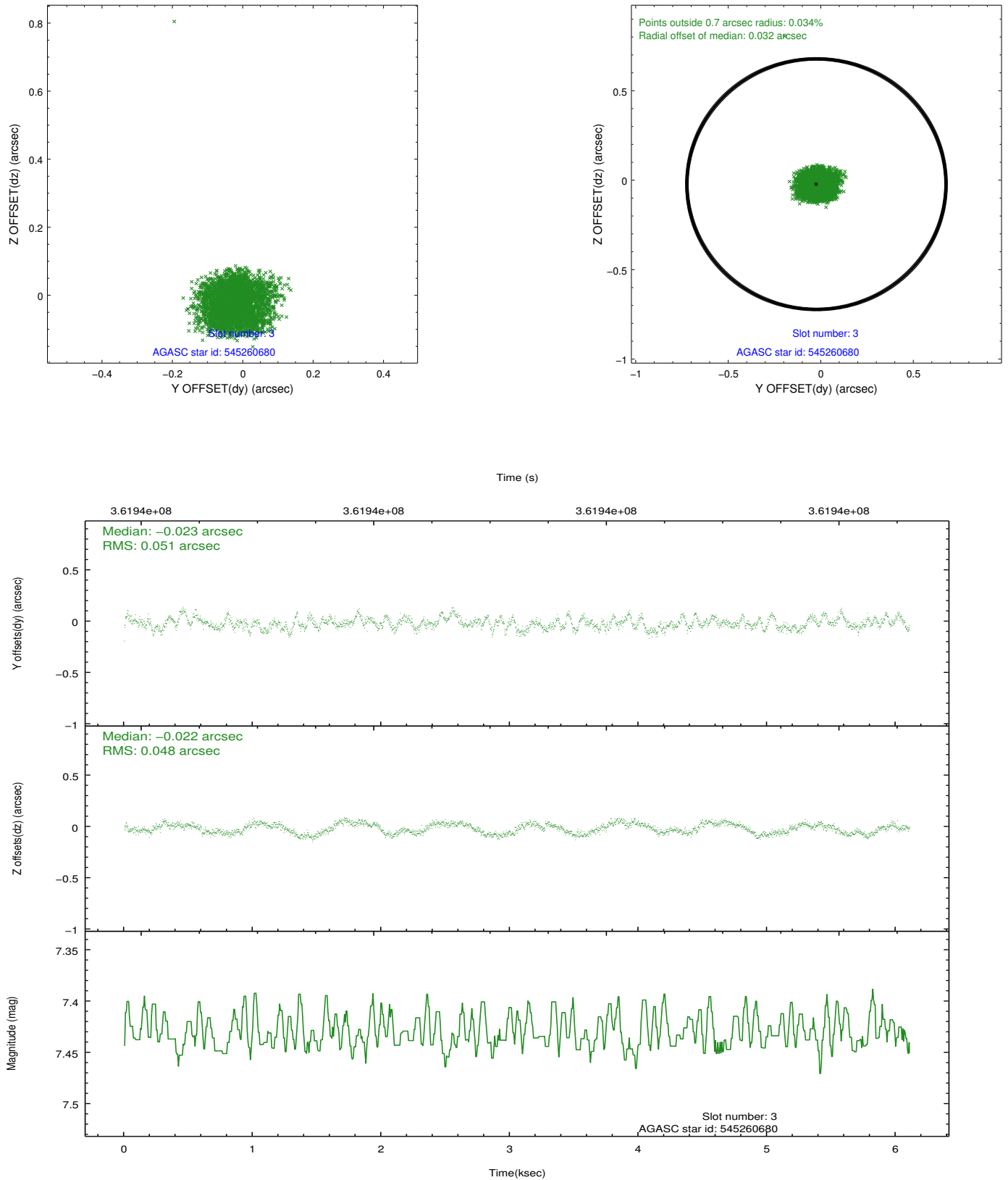


### Slot Statistics

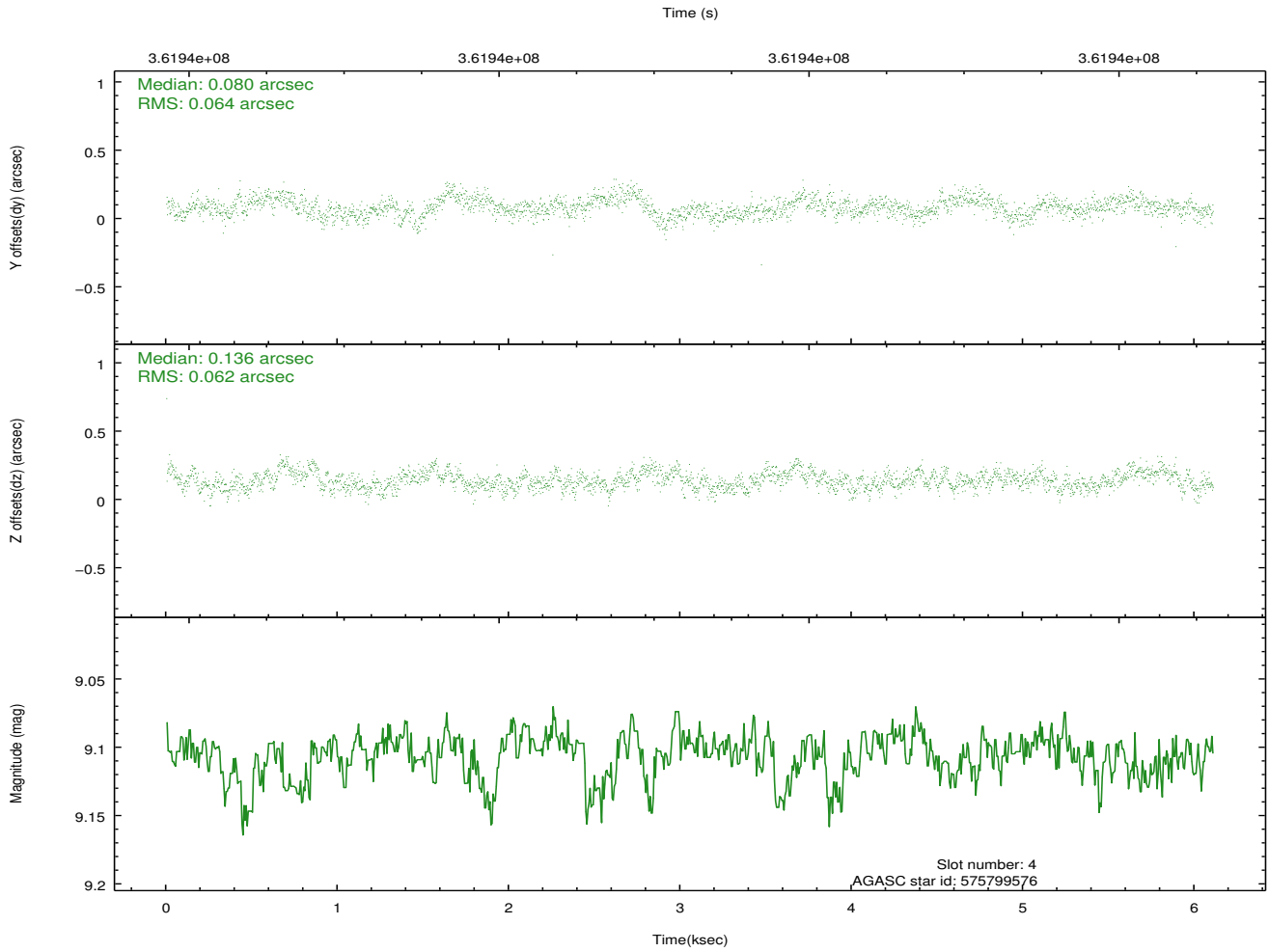
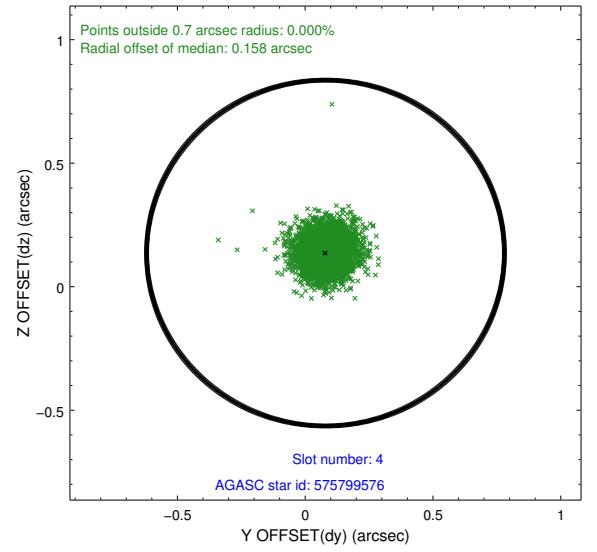
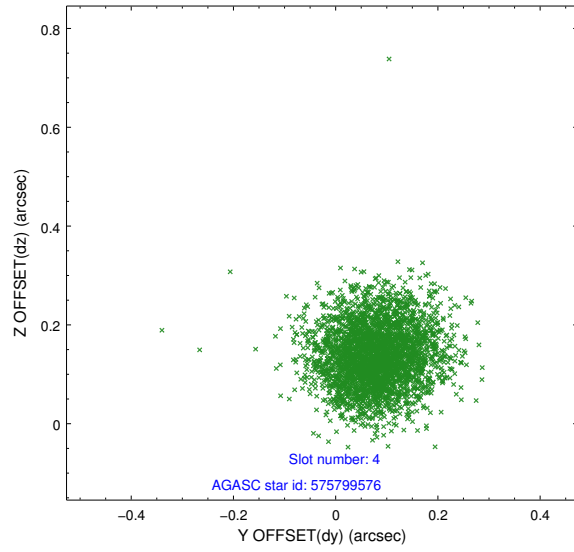
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	6.87	1489	-0.052	-0.003	0.007	0.012	0.000000	0.000000	-766.68	-1737.02
1	FID	ACIS-S-4	6.95	1490	0.166	0.026	0.006	0.010	0.000000	0.000000	2146.35	170.52
2	FID	ACIS-S-5	6.98	1490	-0.145	-0.014	0.007	0.011	0.000000	0.000000	-1818.40	165.21
3	GUIDE	545260680	7.43	2980	-0.023	-0.022	0.075	0.112	178.918790	67.264924	2076.27	1248.10
4	GUIDE	575799576	9.10	2976	0.080	0.136	0.095	0.150	177.974806	67.856242	153.29	-336.87
5	GUIDE	575801488	8.63	2978	-0.133	-0.023	0.074	0.117	177.117891	67.976582	-129.95	-1543.04
6	GUIDE	575805736	9.52	2974	0.123	-0.210	0.148	0.218	178.144735	68.393505	-1794.64	-374.05
7	GUIDE	575806776	9.80	2964	-0.050	0.116	0.131	0.209	178.728614	68.470346	-2178.44	352.53

## 2.4 Star Slots

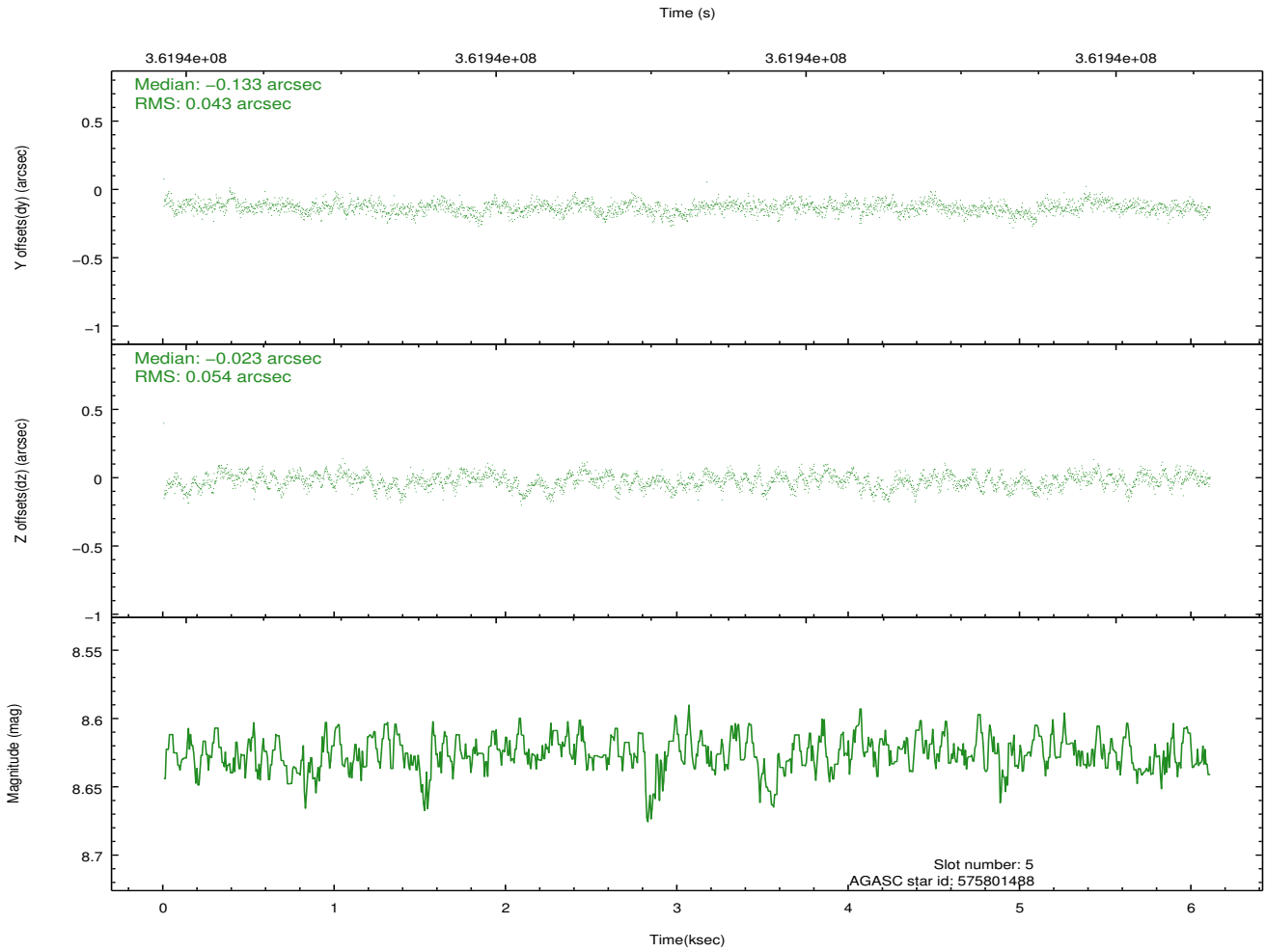
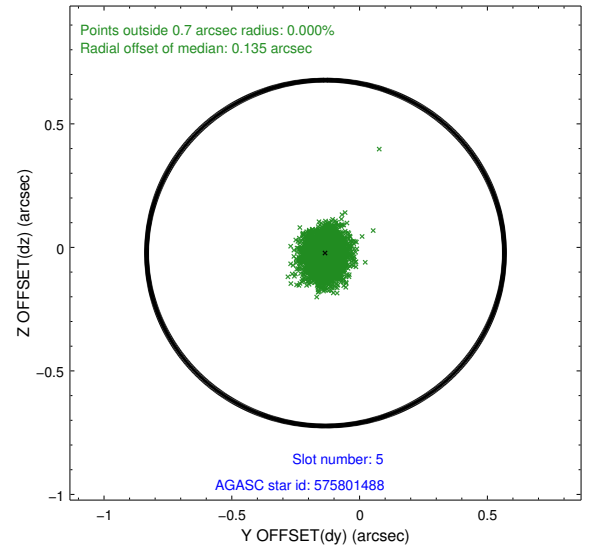
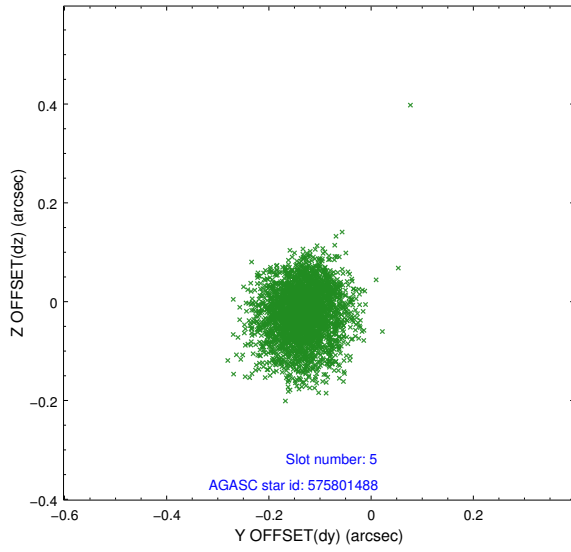
### 2.4.1 Slot 3



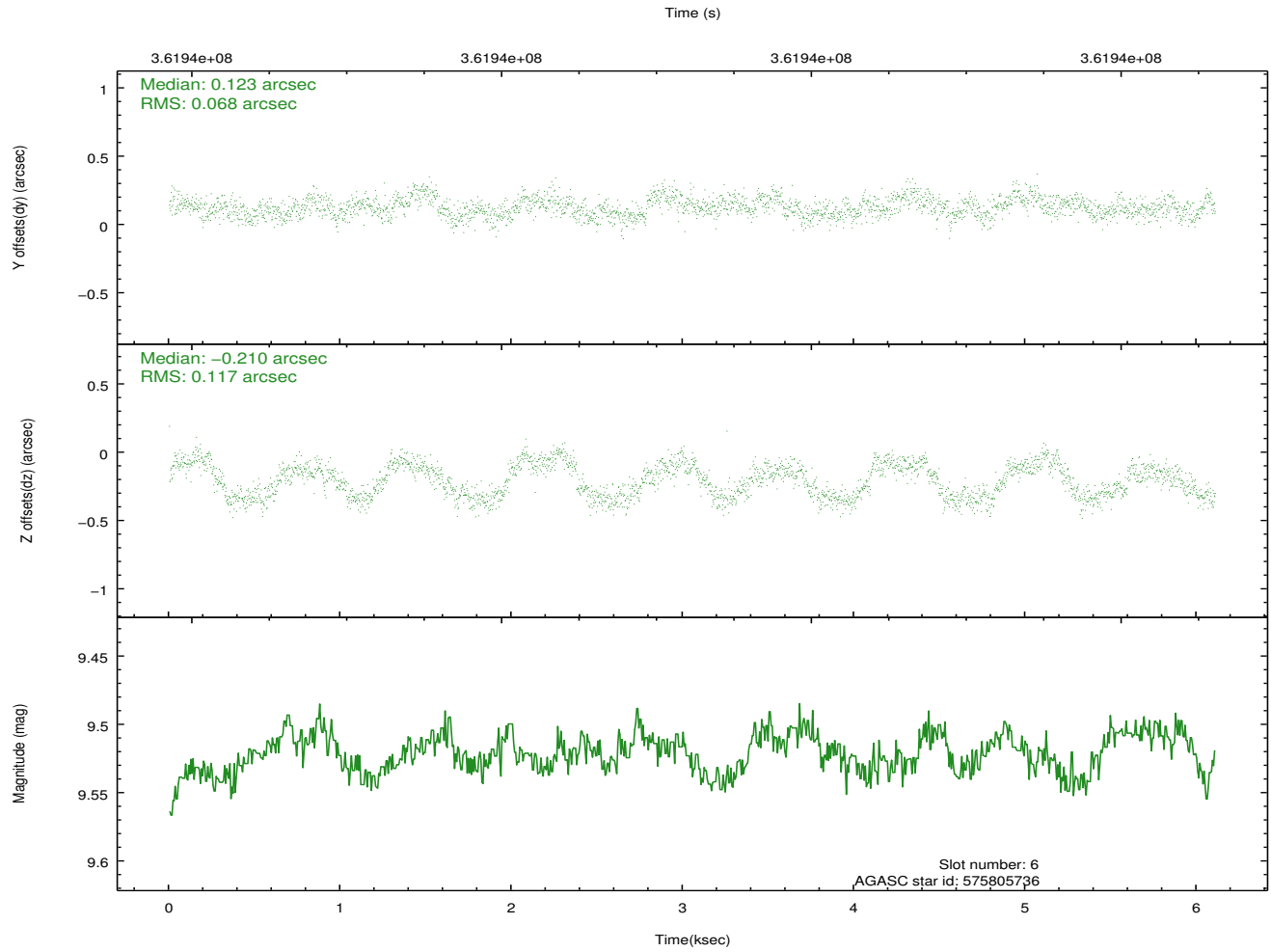
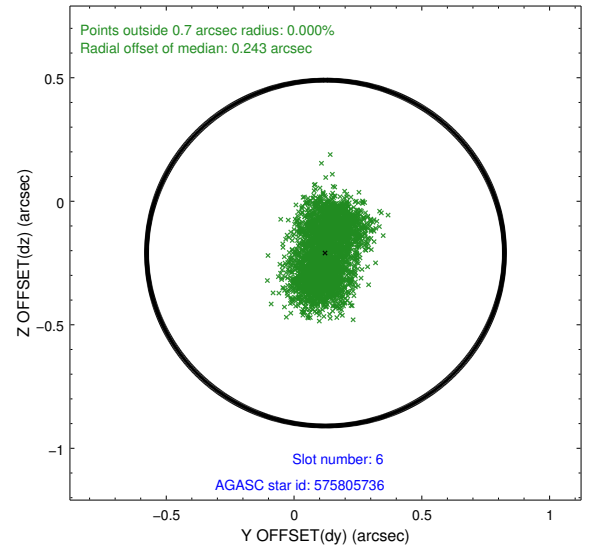
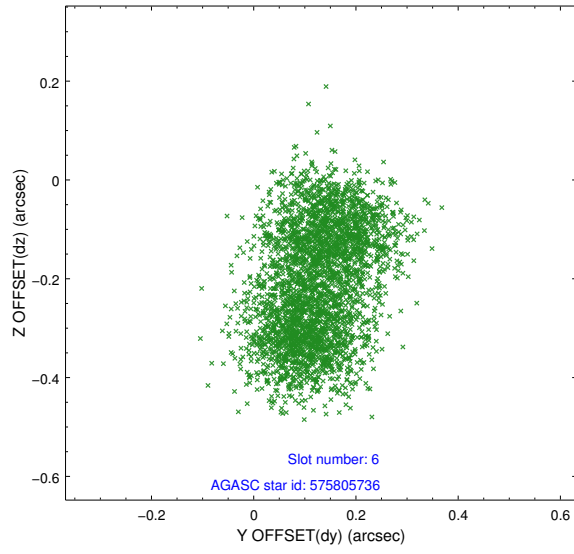
## 2.4.2 Slot 4



### 2.4.3 Slot 5

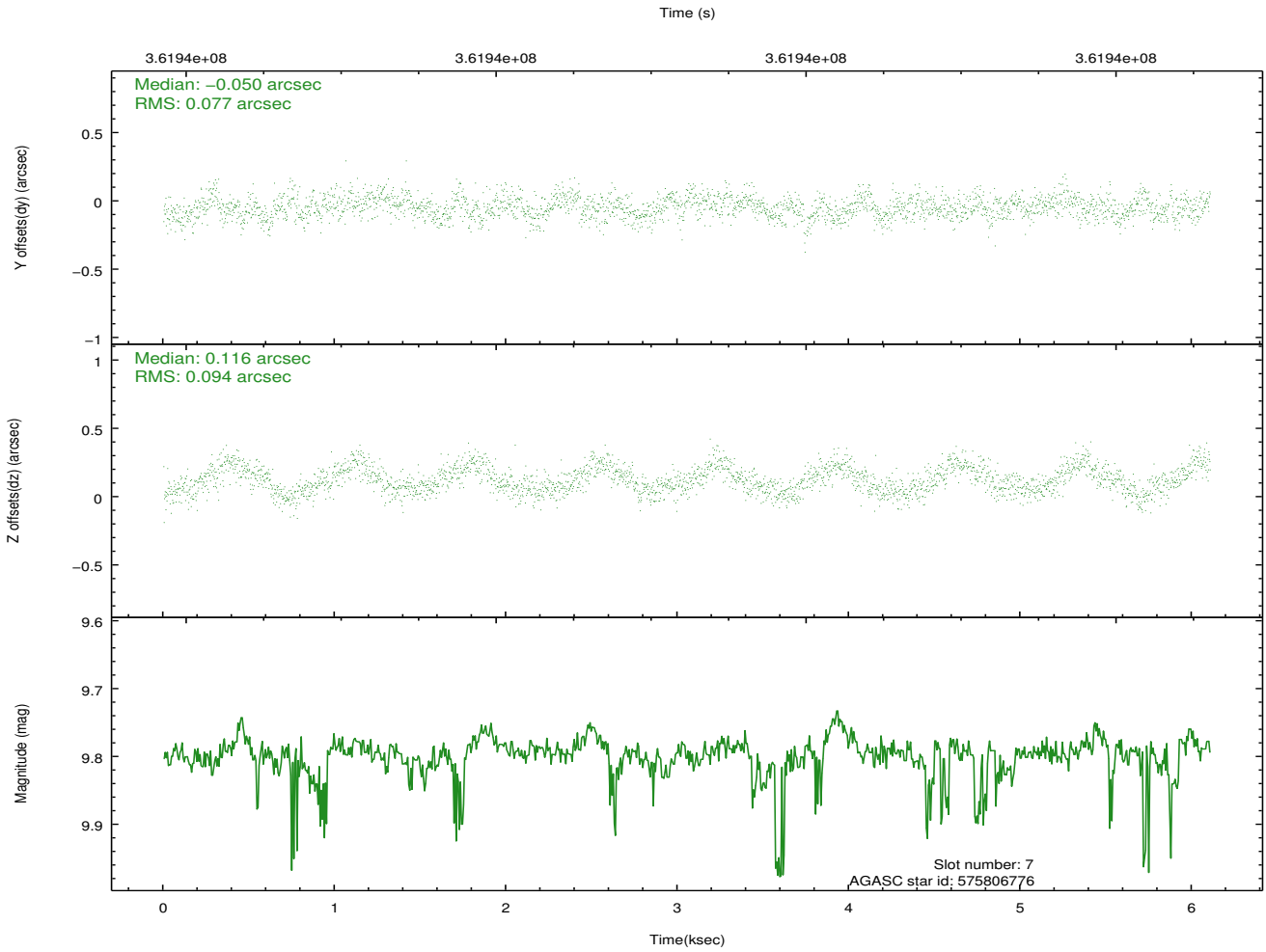
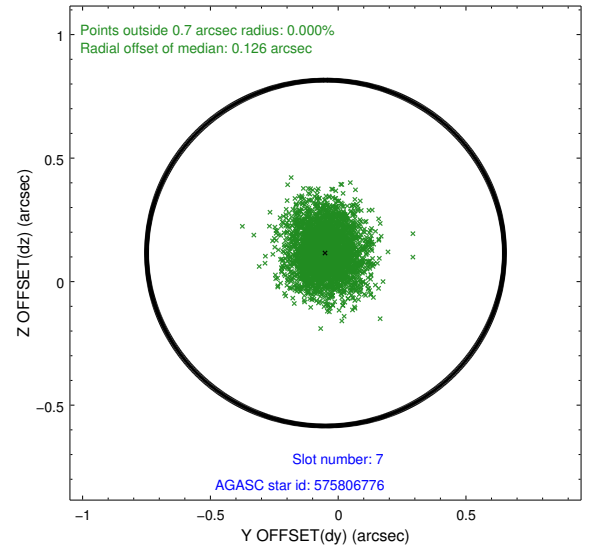
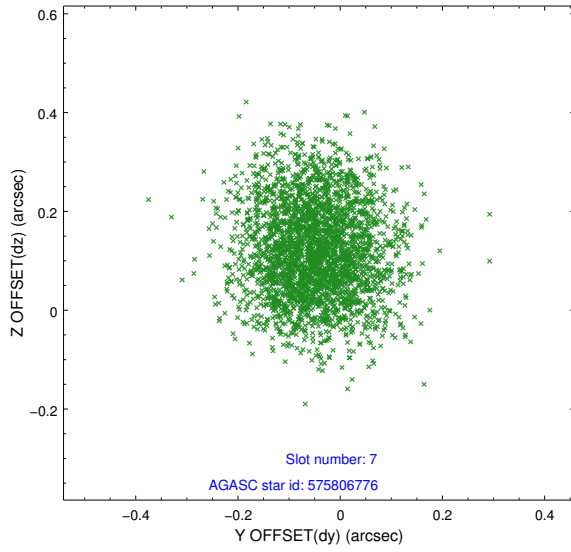


## 2.4.4 Slot 6



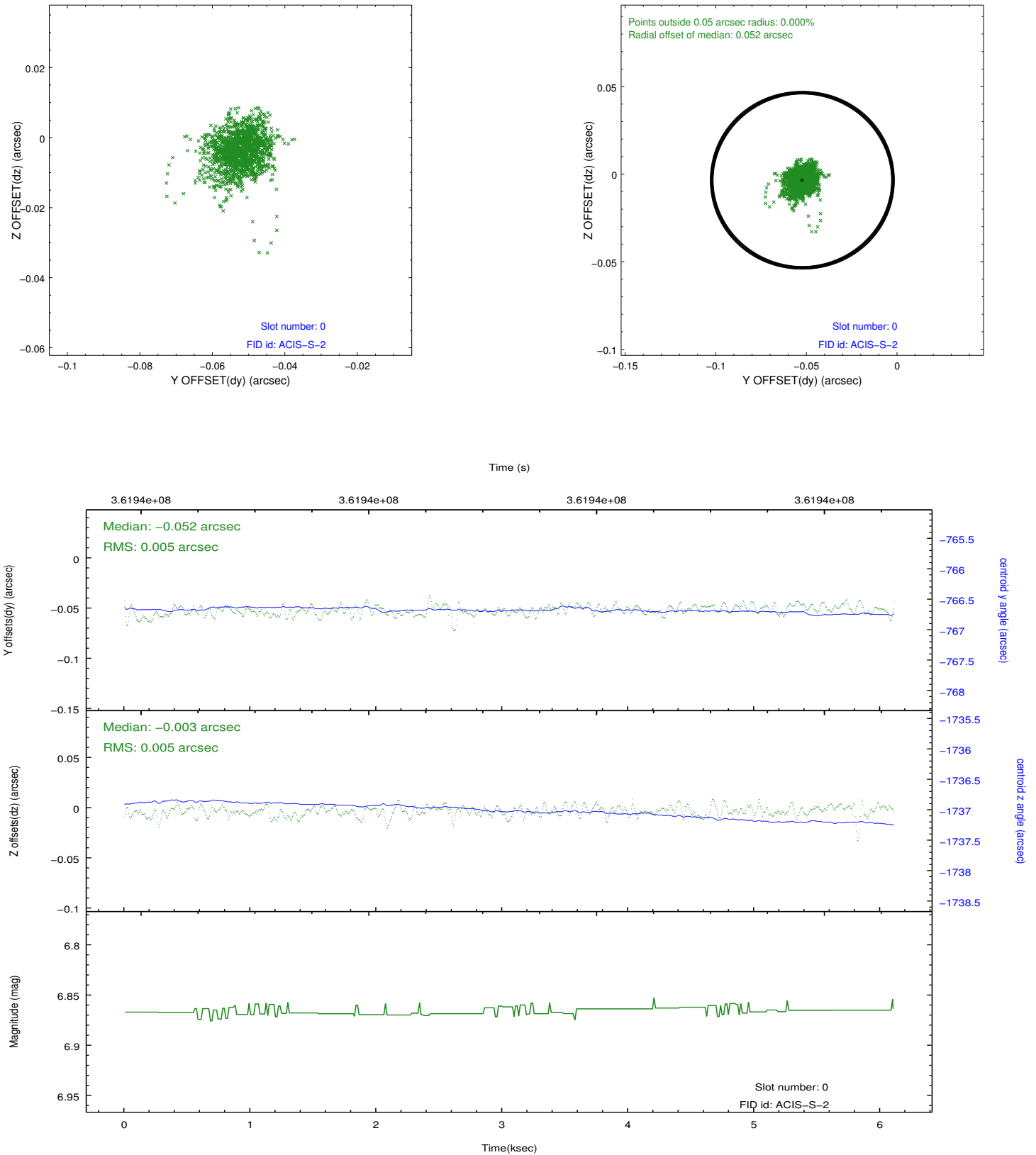


## 2.4.5 Slot 7

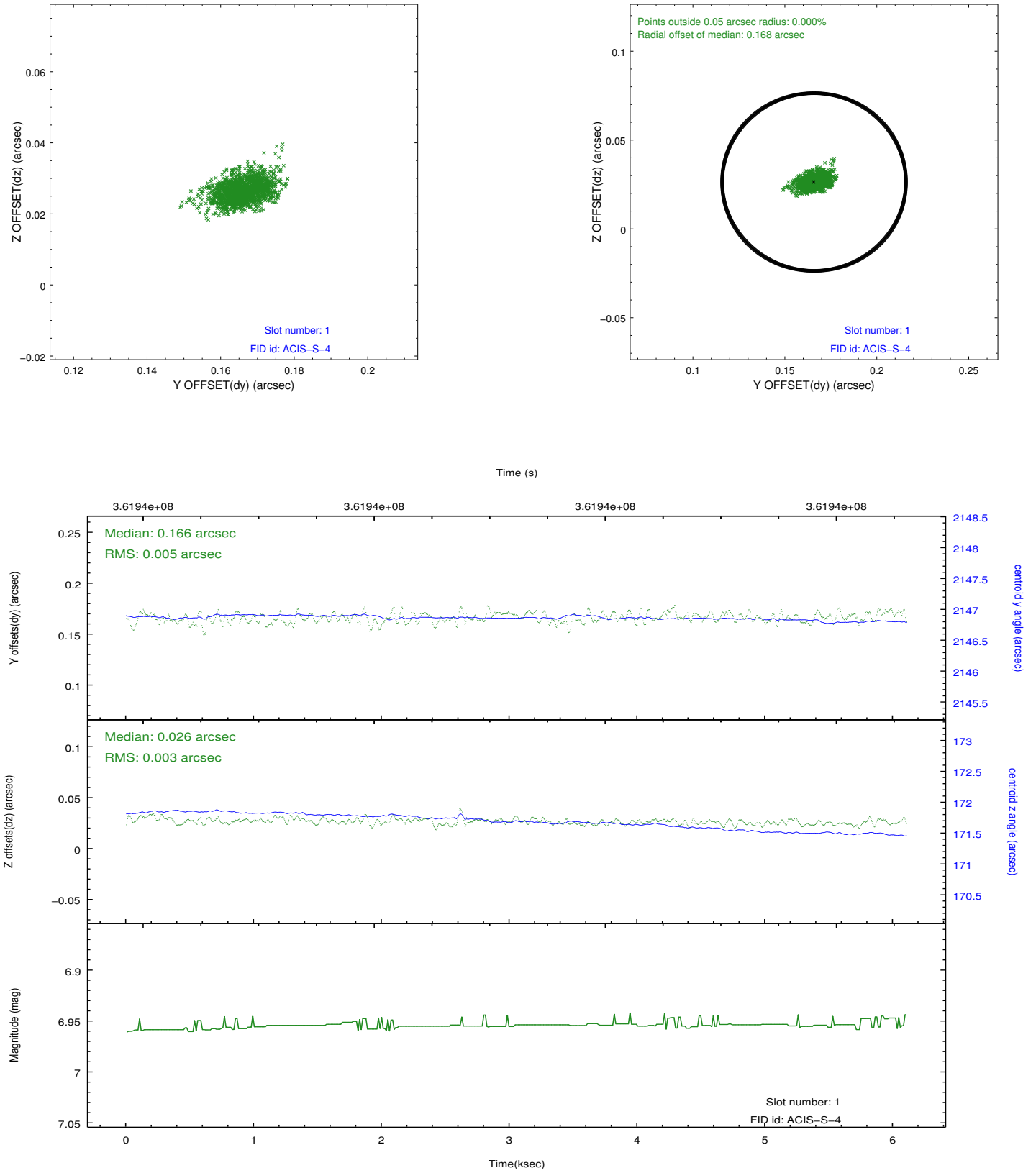


## 2.5 FID Slots

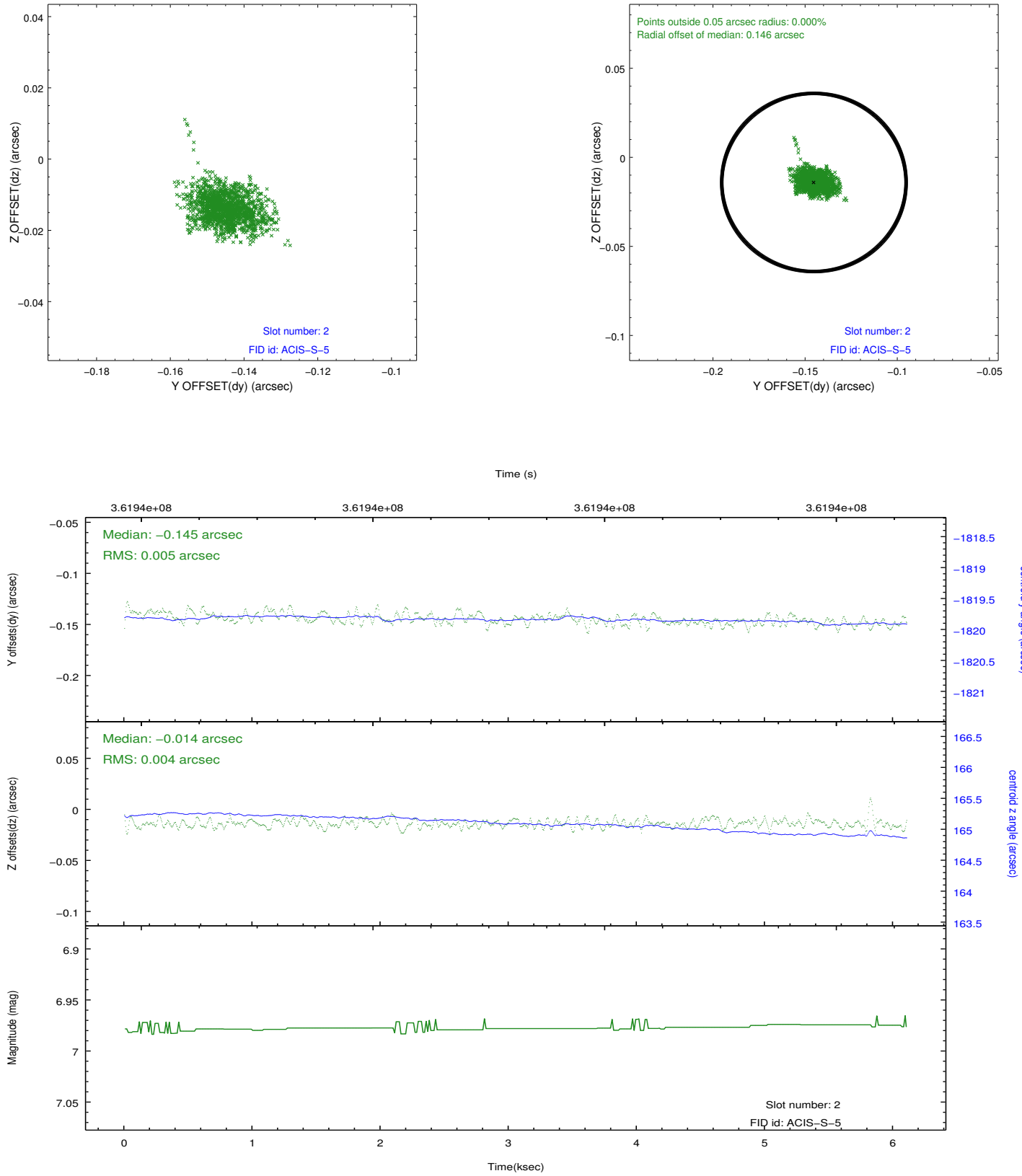
### 2.5.1 Slot 0



## 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)	2012.06.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	5.03130003

### A.2 Comments