

# V&V Reference Report

## L2 ASCDS Version : 8.5.1

Observation 4740 - L2 Version 3  
Chandra X-Ray Center

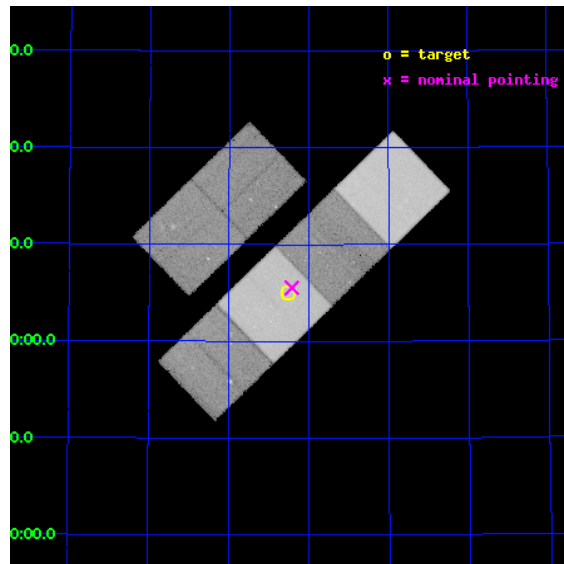
L2 Processing Date : Dec 17 2012

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# 1 Front

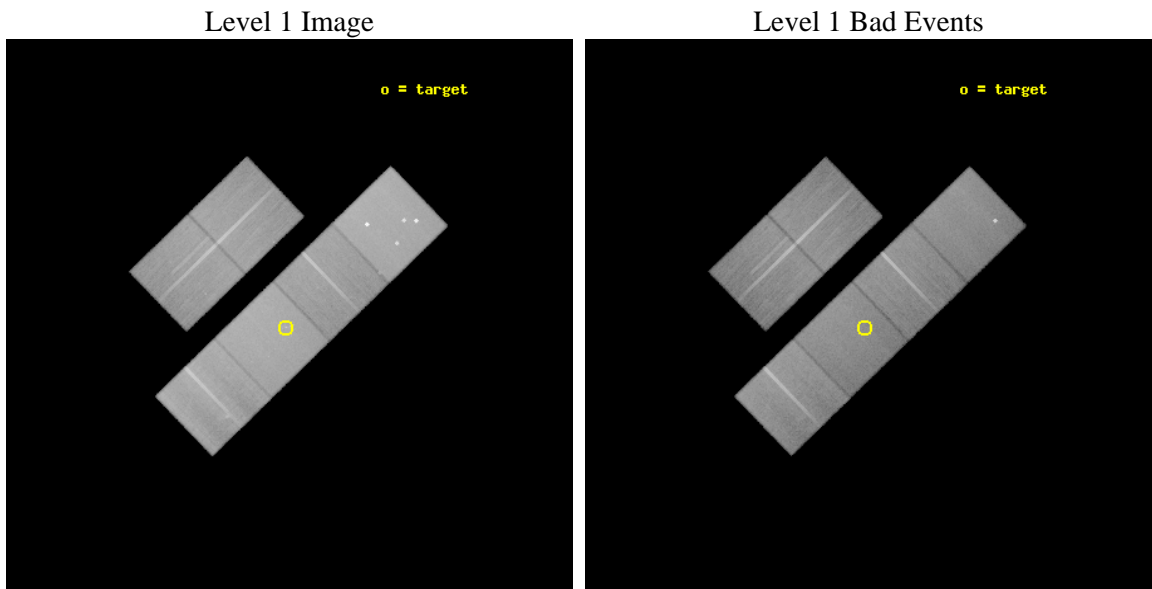
seq_num	600395	Sequence number
obs_id	4740	Observation id
title	How Does Hot and Cold Gas Interact in Galaxies?	Proposal title
observer	Professor JIMMY IRWIN	Principal investigator
object	NGC3898	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	177.313333	Observer's specified target RA [deg]
dec_targ	56.084444	Observer's specified target Dec [deg]
ra_nom	177.30315554837	Nominal RA [deg]
dec_nom	56.092284691762	Nominal Dec [deg]
roll_nom	135.9445466947	Nominal Roll [deg]
revision	3	Processing version of data
ontime	58175.999783278	Sum of GTIs [s]
livetime	57439.34024464	Livetime [s]
ontime2	58175.999783278	Sum of GTIs [s]
ontime3	58172.758783072	Sum of GTIs [s]
ontime5	58175.999783278	Sum of GTIs [s]
ontime6	58175.999783278	Sum of GTIs [s]
ontime7	58175.999783278	Sum of GTIs [s]
ontime8	58172.758882523	Sum of GTIs [s]
l2events	674599	Number of level 2 events



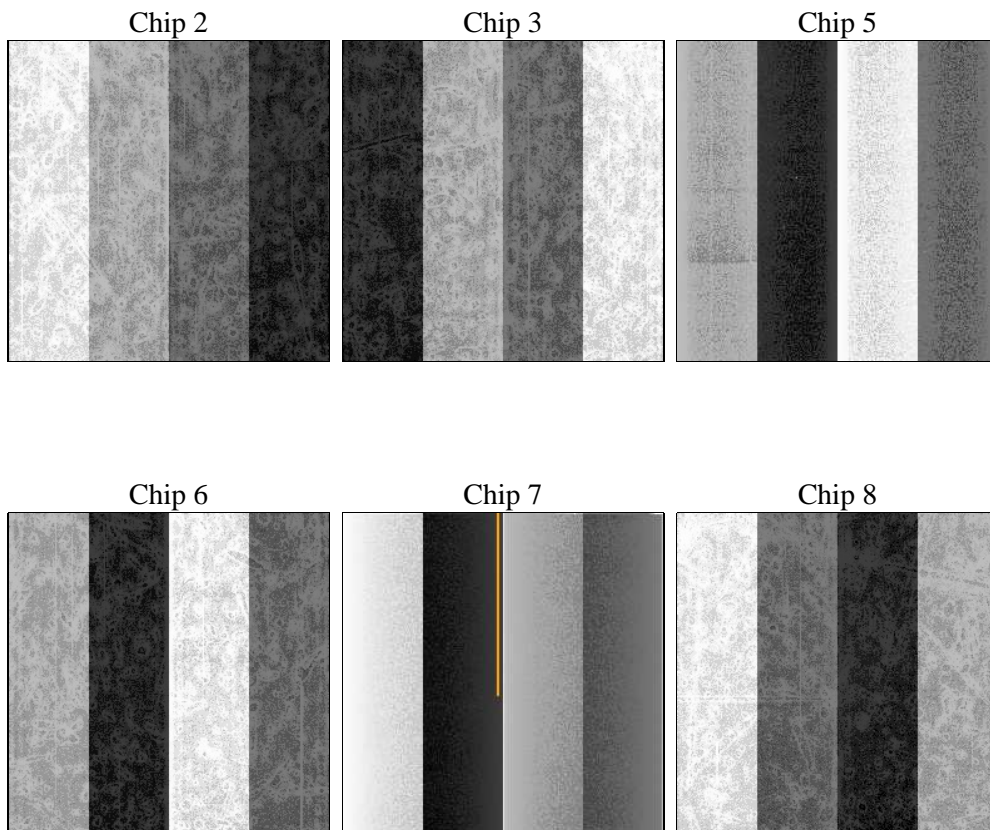
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	58000.000000	[s] Scheduled observation exposure time
ascdsver	8.5.1	Processing system revision	ontime	58175.999783278	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	58175.999783278	Sum of GTIs [s]
date	2012-12-17T08:29:10	Date and time of file creation	ontime3	58172.758783072	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	58175.999783278	Sum of GTIs [s]
			ontime6	58175.999783278	Sum of GTIs [s]
			ontime7	58175.999783278	Sum of GTIs [s]
			ontime8	58172.758882523	Sum of GTIs [s]
			l1events	2987393	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	420109	405052	647058	418617	567143	529414	grade 0 events	21933	21555	44401	19908	21729	37445
rejected events	370565	356285	344045	368331	331642	413516		5%	5%	6%	4%	3%	7%
rejected %	88%	87%	53%	87%	58%	78%	grade 1 events	245	275	766	205	557	374
								0%	0%	0%	0%	0%	0%
							grade 2 events	10154	9331	86778	10548	47183	25458
								2%	2%	13%	2%	8%	4%
							grade 3 events	4563	4662	11654	4912	20778	12122
								1%	1%	1%	1%	3%	2%
							grade 4 events	4666	4742	10280	4764	20629	11244
								1%	1%	1%	1%	3%	2%
							grade 5 events	16757	18961	48154	19768	54674	25463
								3%	4%	7%	4%	9%	4%
							grade 6 events	8272	8529	150178	10194	125385	29716
								1%	2%	23%	2%	22%	5%
							grade 7 events	353519	336997	294847	348318	276208	387592
								84%	83%	45%	83%	48%	73%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	177.350691	177.3031555483718	Subarray requested	NONE	NONE
[deg] Pointing Dec	56.086015	56.09228469176246	Alternating exposures requested	N	N
[deg] Pointing Roll	135.748478	135.9445466946975	[s] Primary exposure time	0.000000	3.2
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	224455358.184000	224454264.24634			
Observation start date	2005-02-10T20:41:34	2005-02-10T20:24:24			
[s] Observation end time (MET)	224513358.184000	224514182.67405			
Observation end date	2005-02-11T12:48:14	2005-02-11T13:03:02			
Read mode	TIMED	TIMED			

## 2.3 Aspect

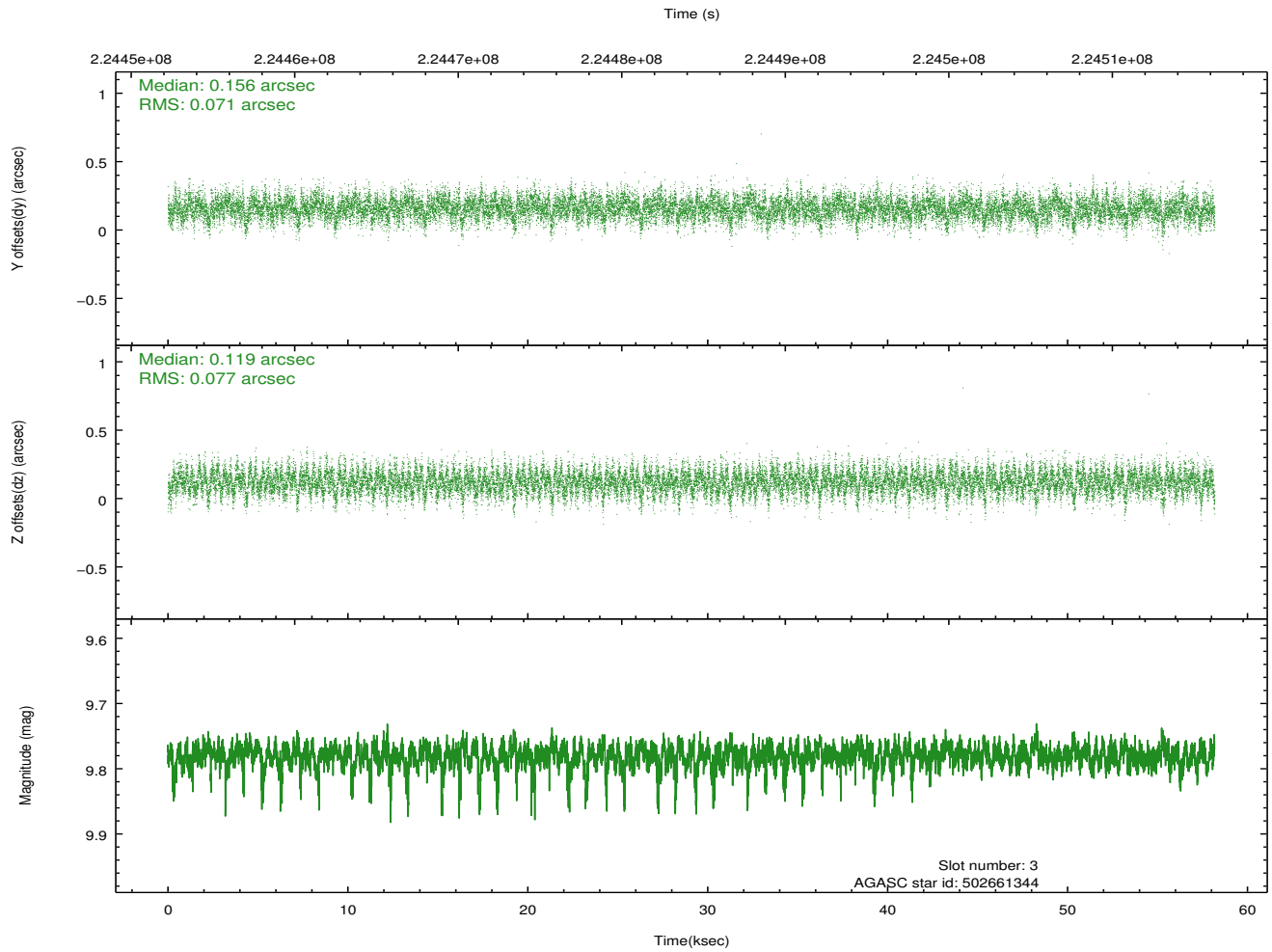
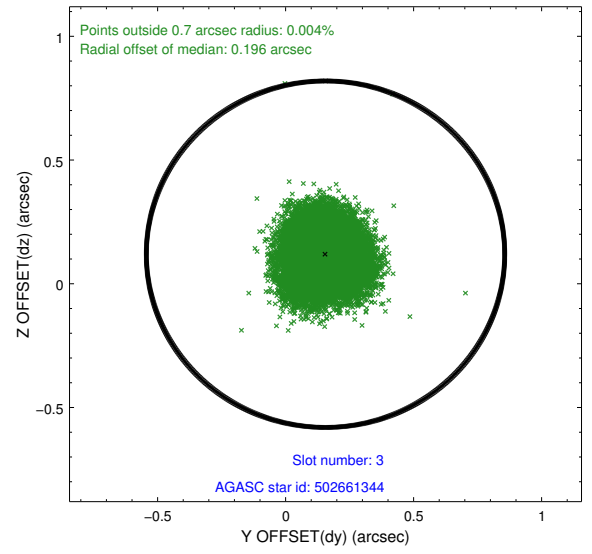
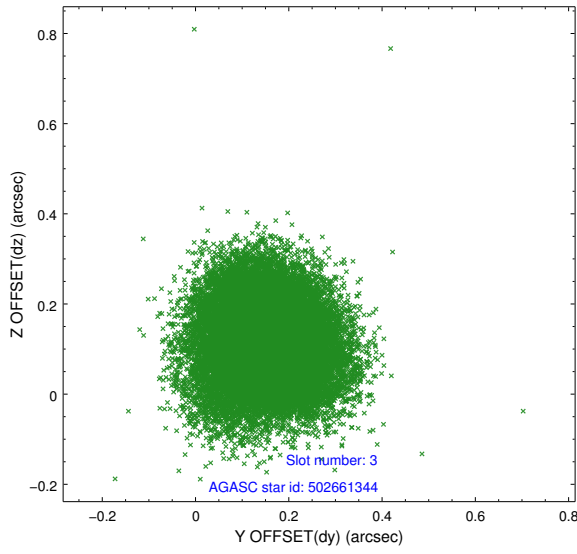


### Slot Statistics

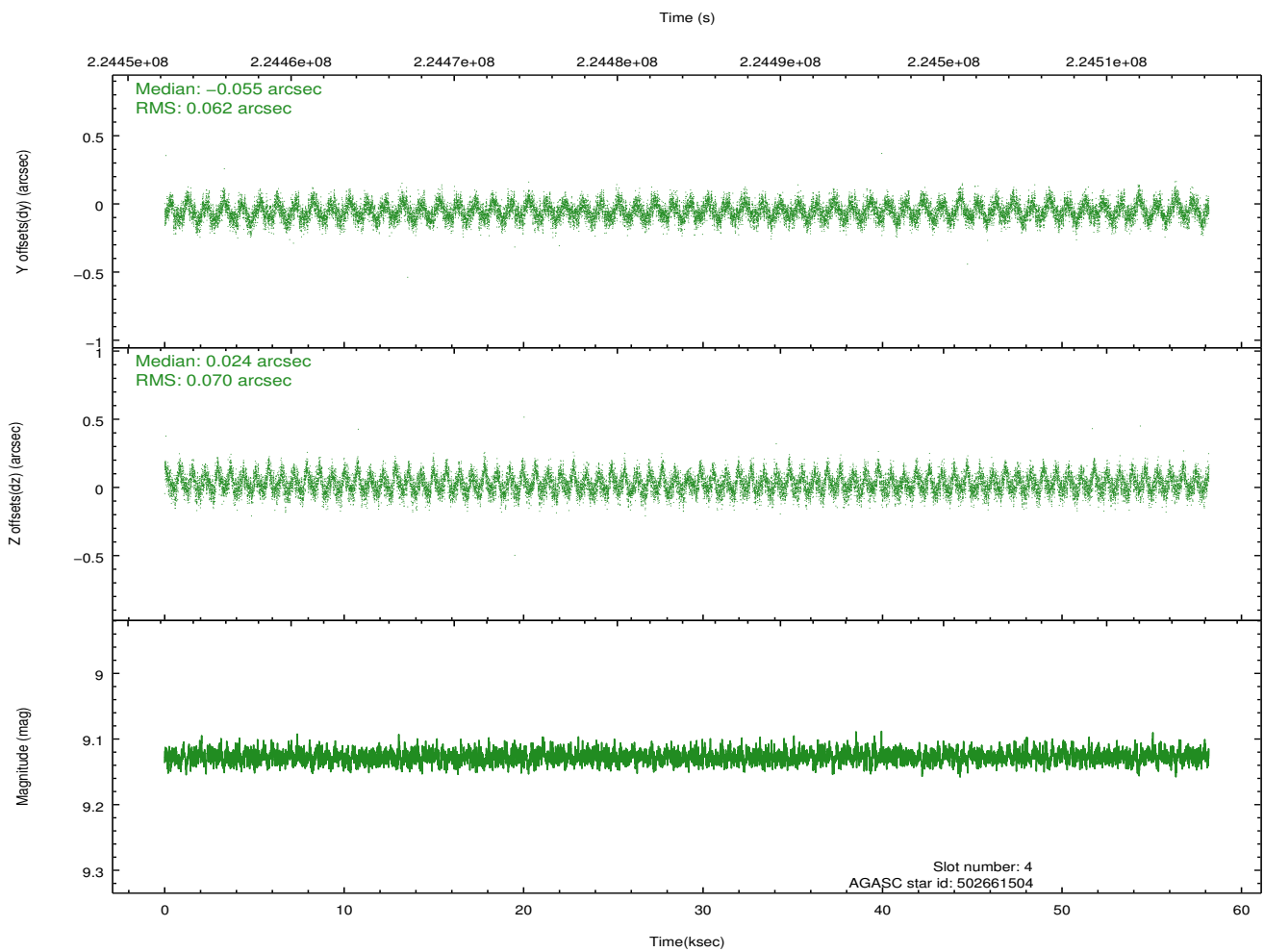
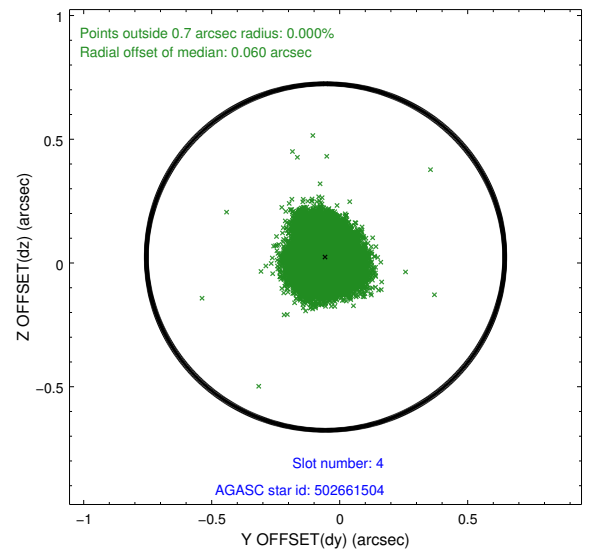
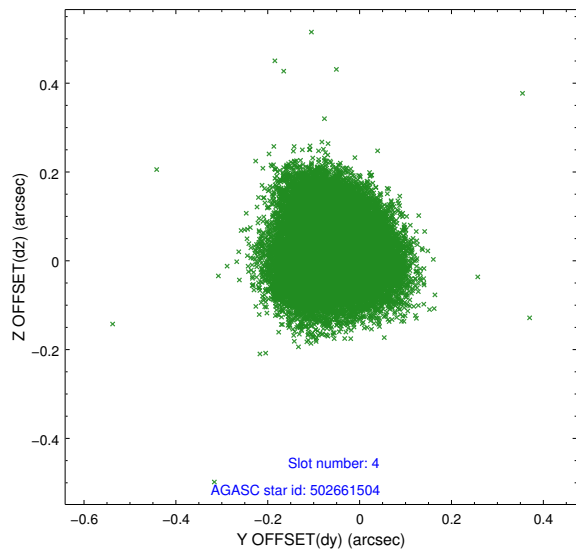
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.10	14192	-0.038	-0.032	0.013	0.027	0.000000	0.000000	-760.13	-1730.82
1	FID	ACIS-S-4	7.21	14191	0.091	0.029	0.012	0.021	0.000000	0.000000	2153.27	177.80
2	FID	ACIS-S-5	7.23	14190	-0.087	0.015	0.020	0.040	0.000000	0.000000	-1813.09	171.35
3	GUIDE	502661344	9.78	28339	0.156	0.119	0.111	0.183	176.994635	56.171799	728.00	275.62
4	GUIDE	502661504	9.13	28372	-0.055	0.024	0.101	0.156	176.644118	56.055641	946.10	1064.79
5	GUIDE	502661768	7.72	28379	0.079	-0.200	0.070	0.113	177.146660	55.540024	-1073.45	1697.41
6	GUIDE	502794304	9.86	28296	-0.031	0.167	0.118	0.203	177.861749	55.580199	-2013.04	576.17
7	GUIDE	502664824	6.93	28382	-0.148	-0.110	0.083	0.125	175.793574	56.019745	2101.93	2331.94

## 2.4 Star Slots

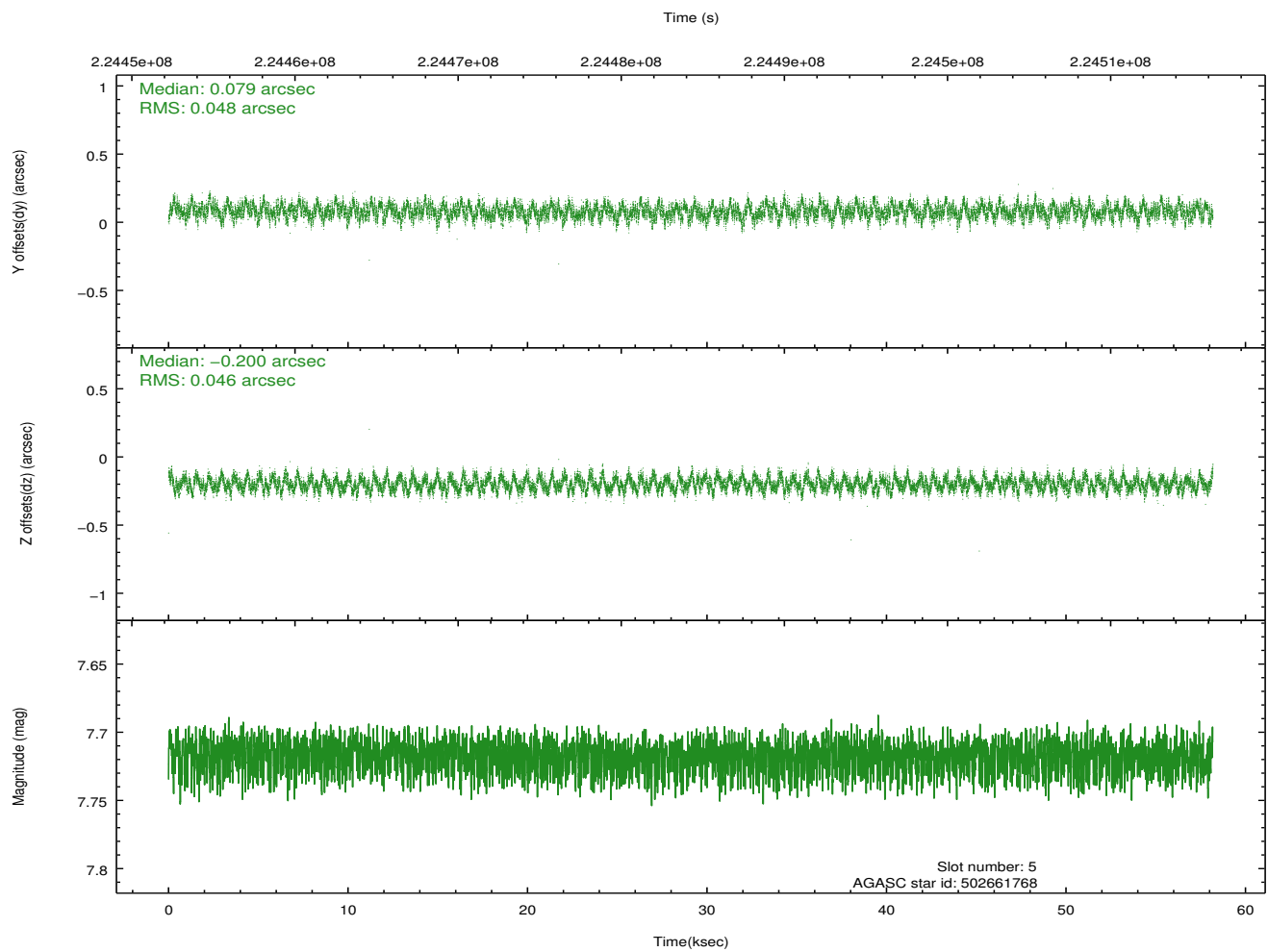
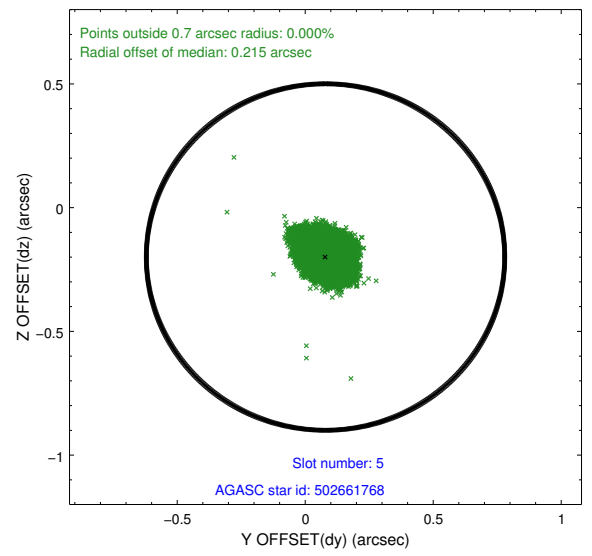
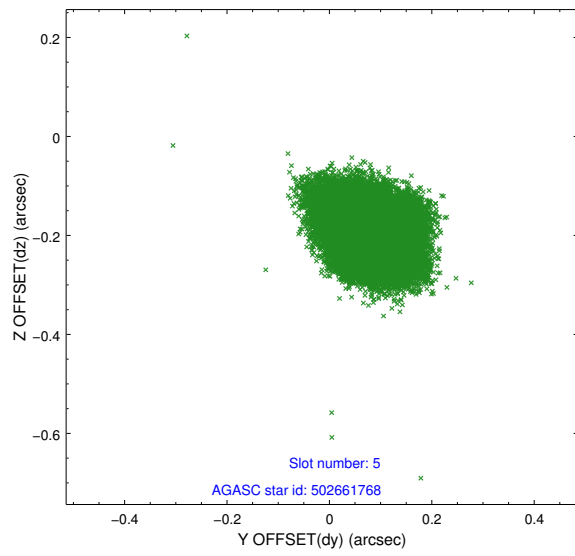
### 2.4.1 Slot 3



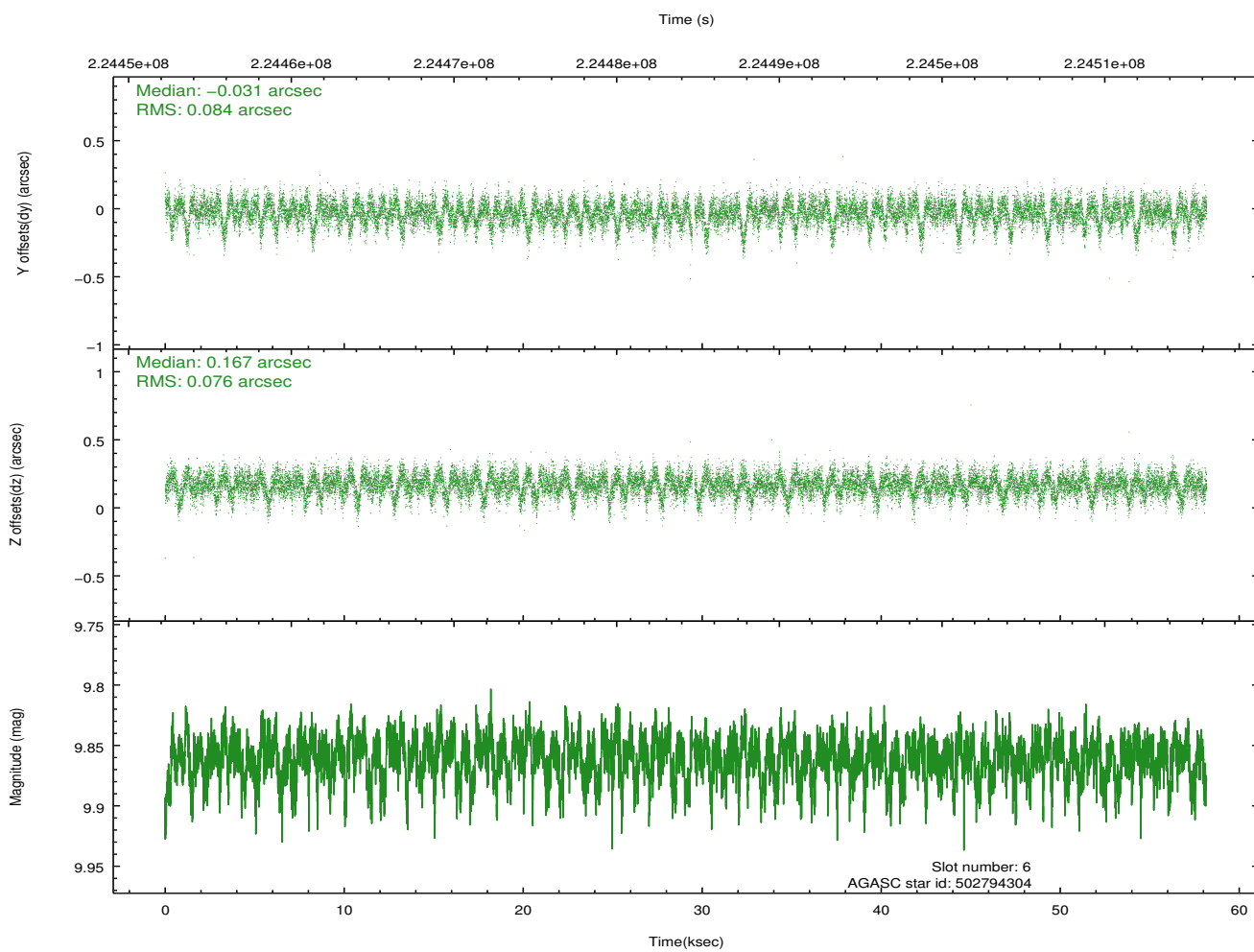
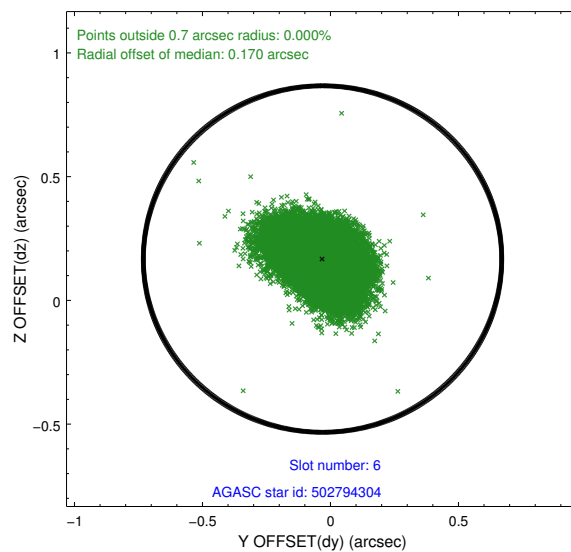
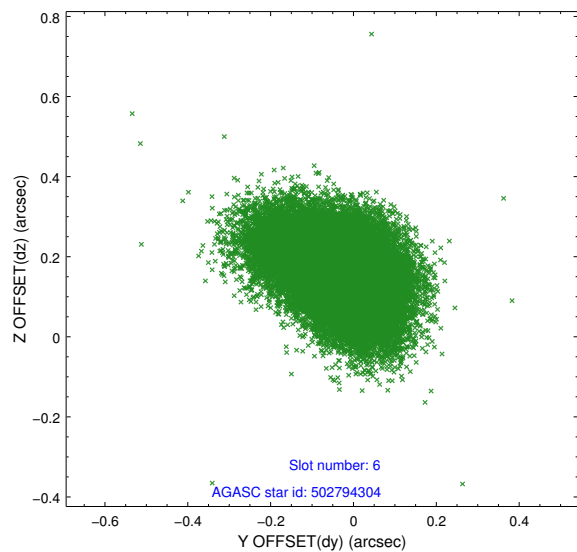
## 2.4.2 Slot 4



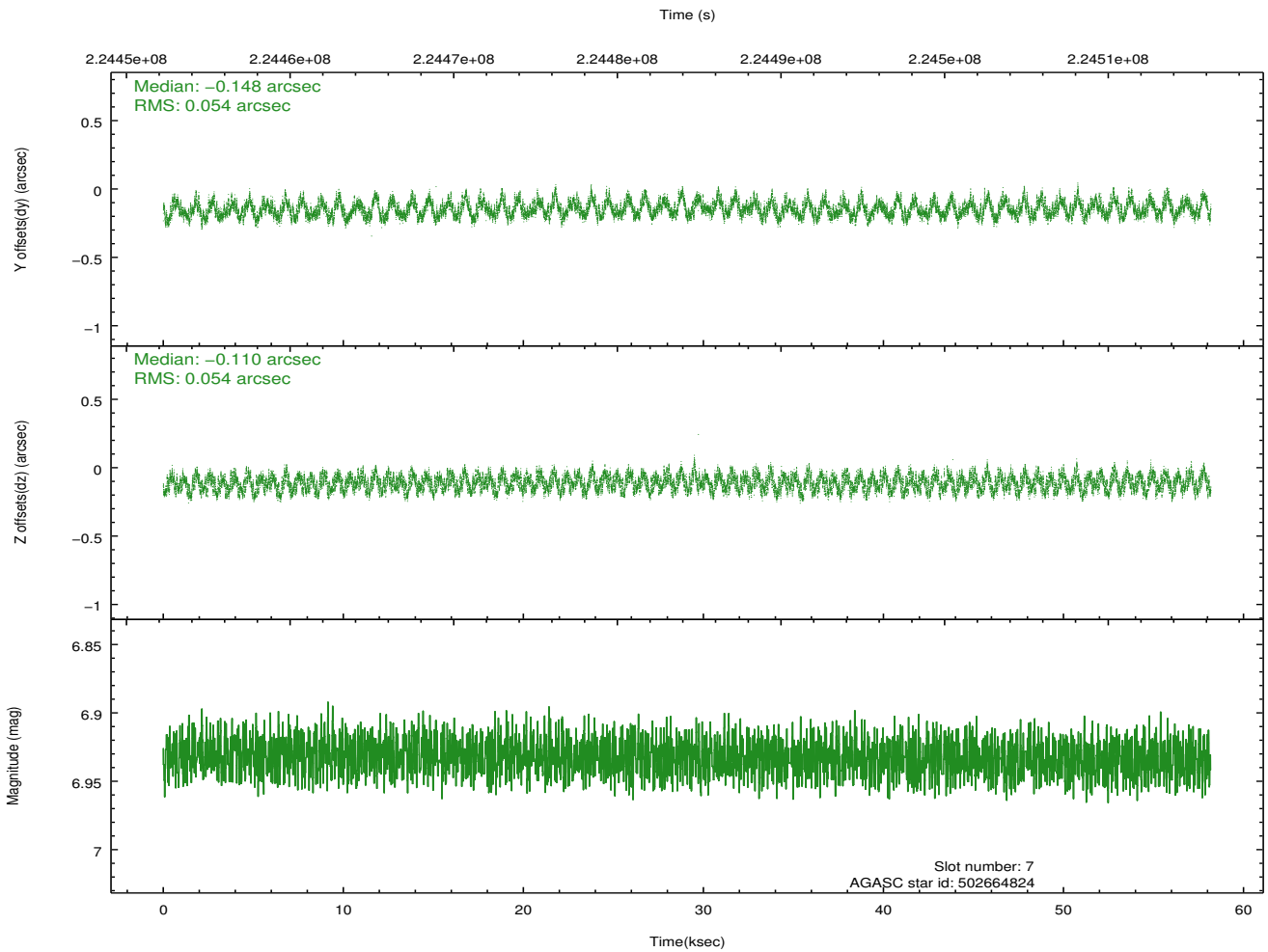
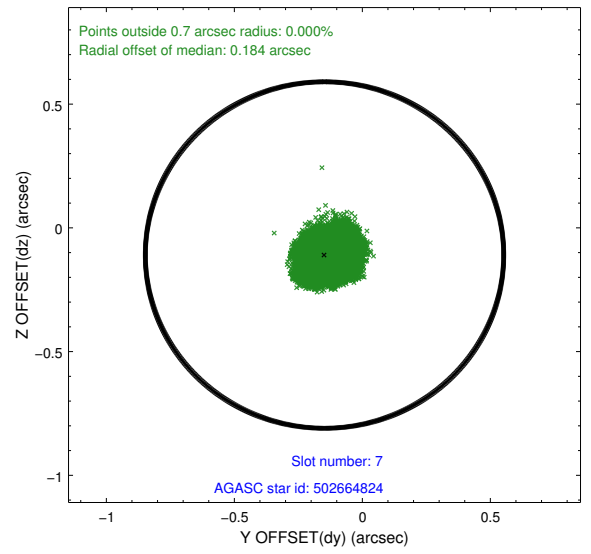
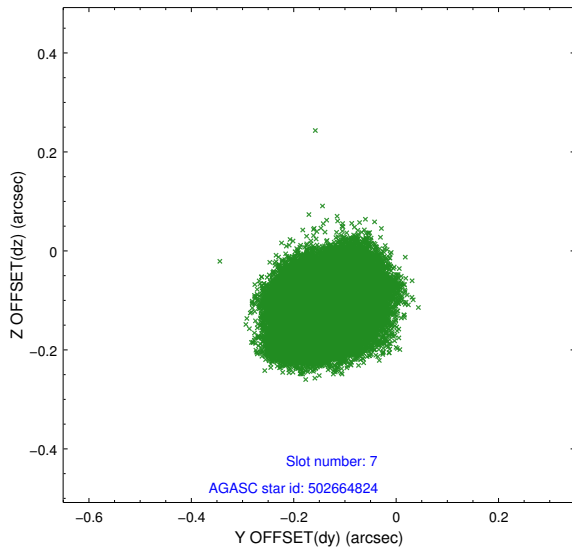
### 2.4.3 Slot 5



## 2.4.4 Slot 6

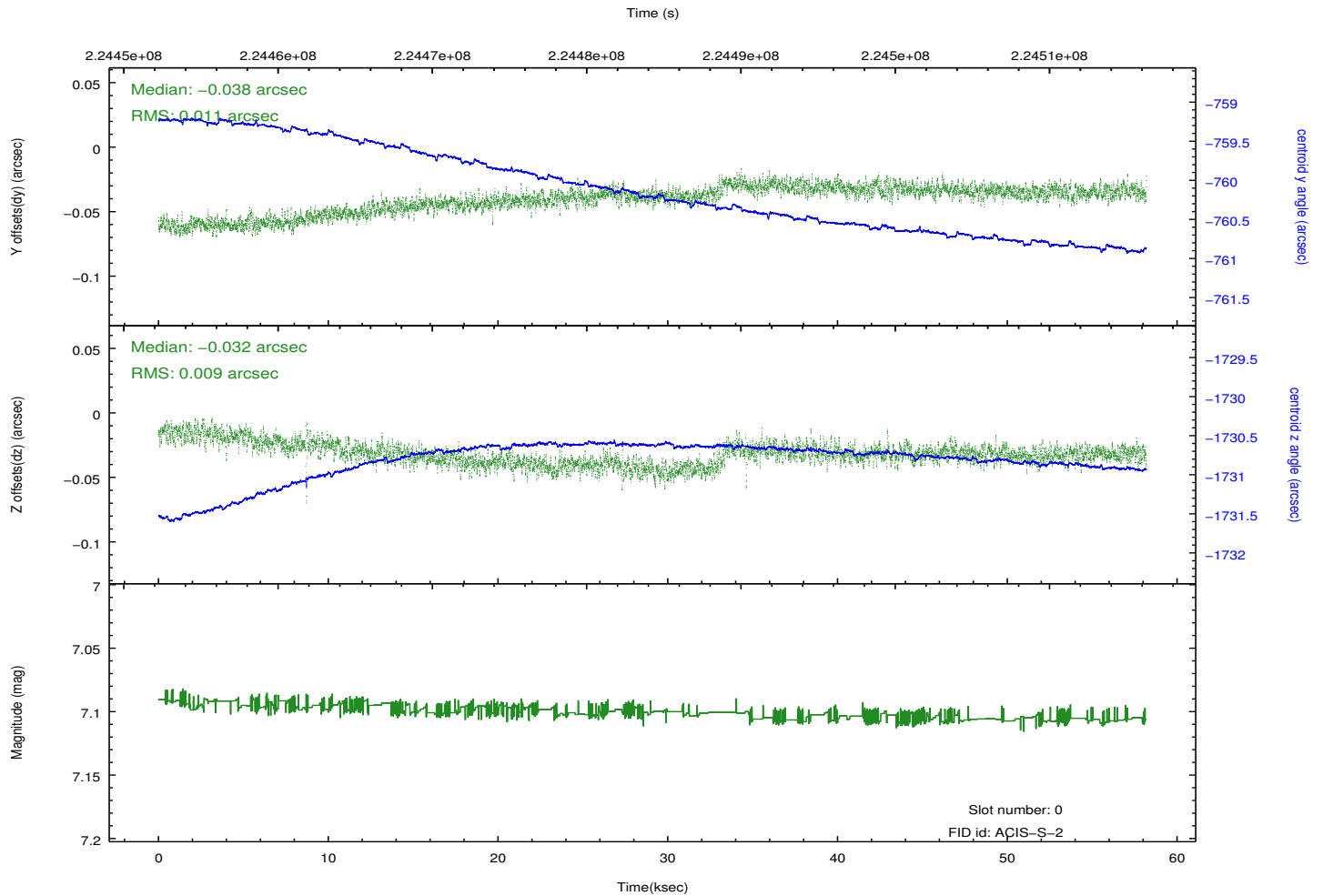
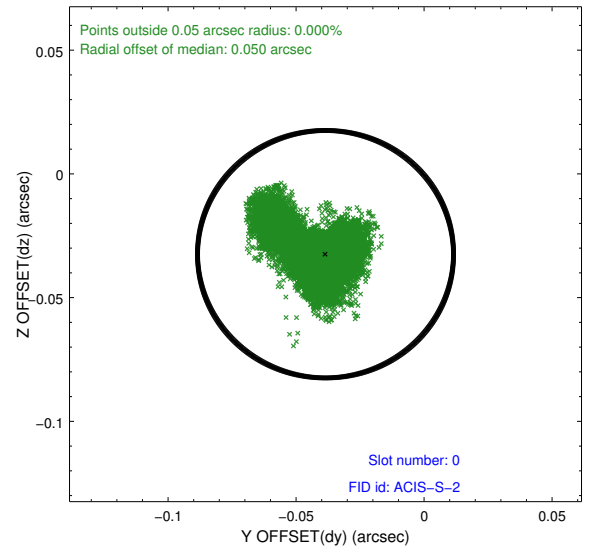
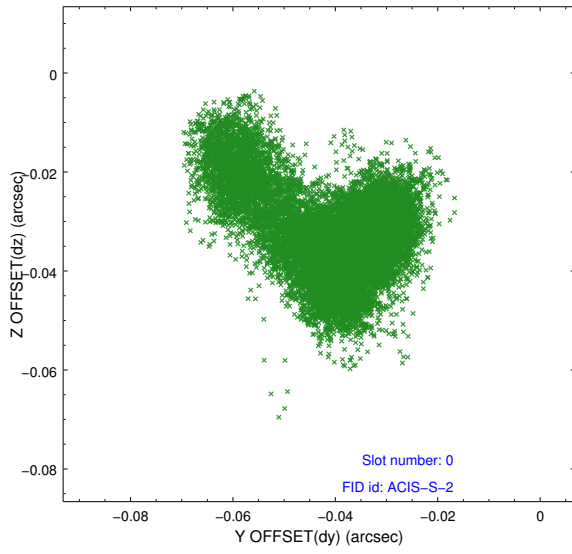


### 2.4.5 Slot 7

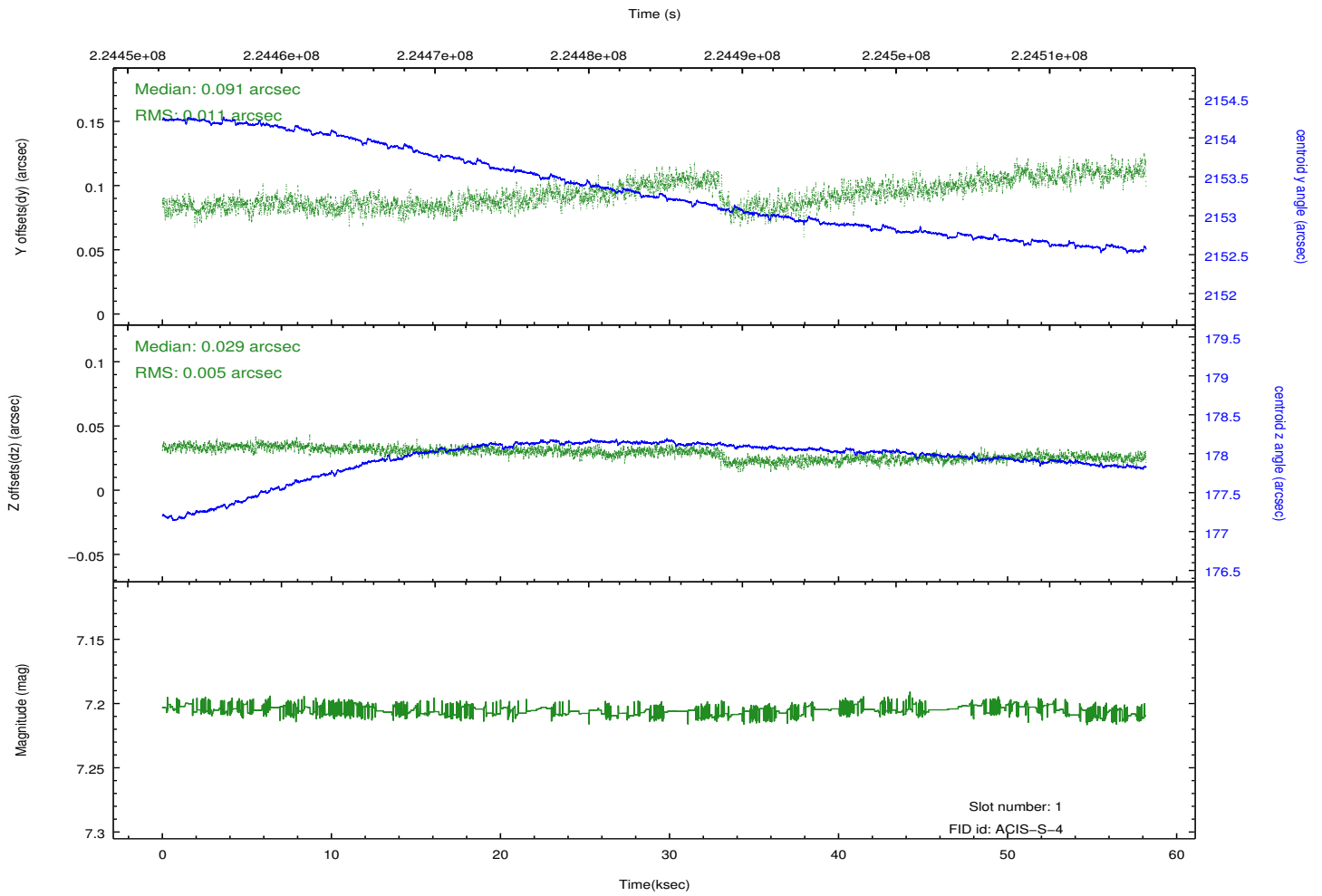
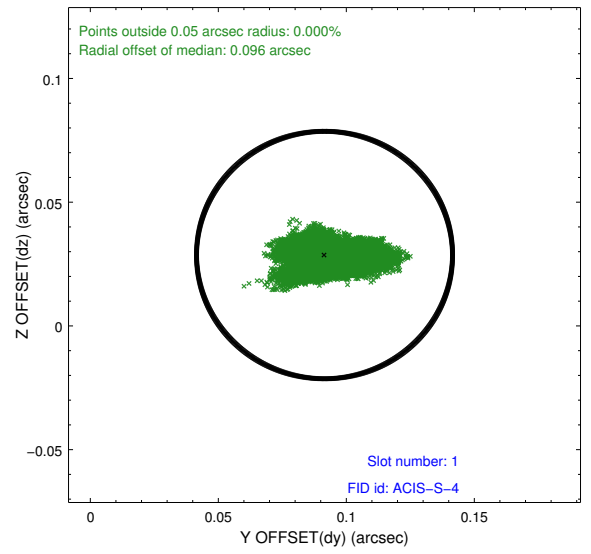
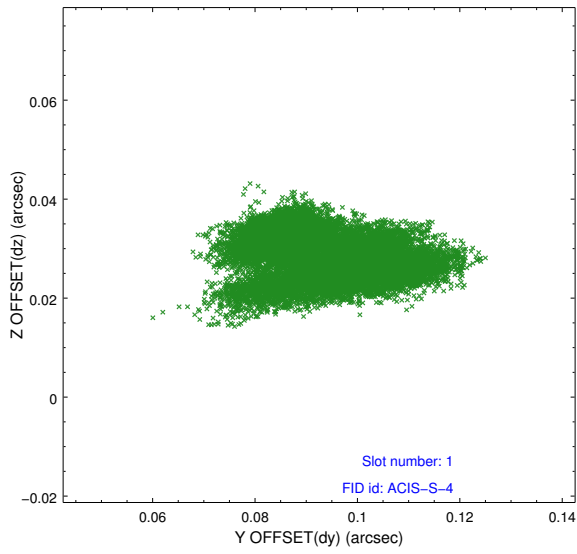


## 2.5 FID Slots

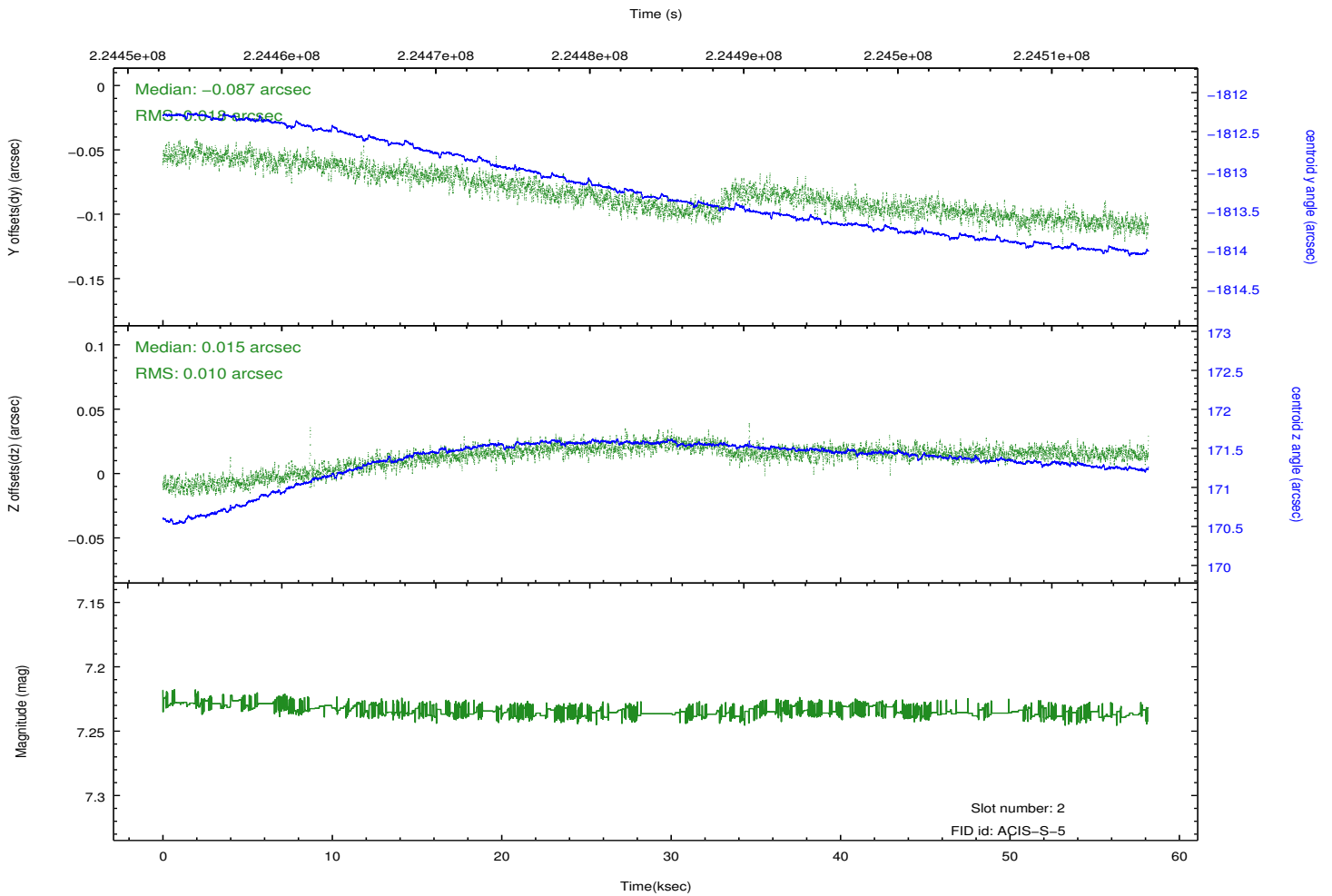
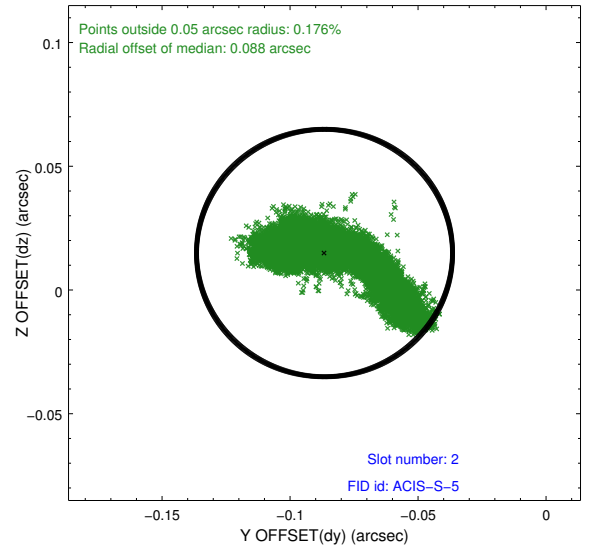
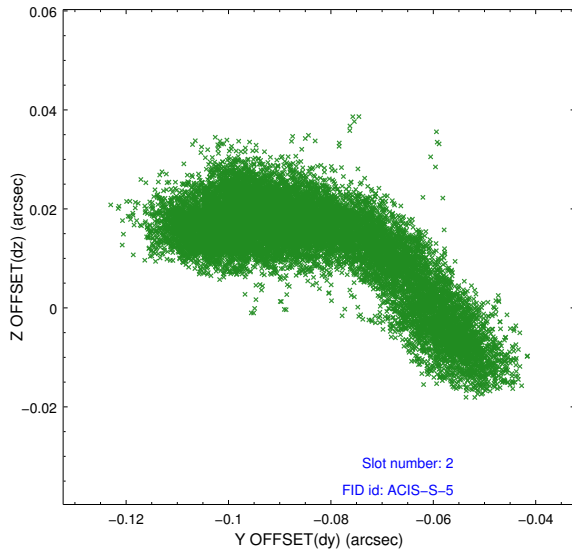
### 2.5.1 Slot 0



## 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)	2013.01.10
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	58.17599

## A.2 Comments