

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 6948 - L2 Version 3  
Chandra X-Ray Center

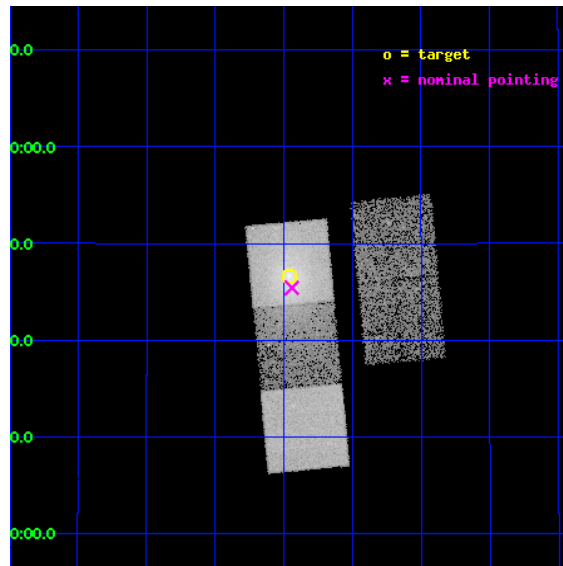
L2 Processing Date : Dec 30 2012

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# 1 Front

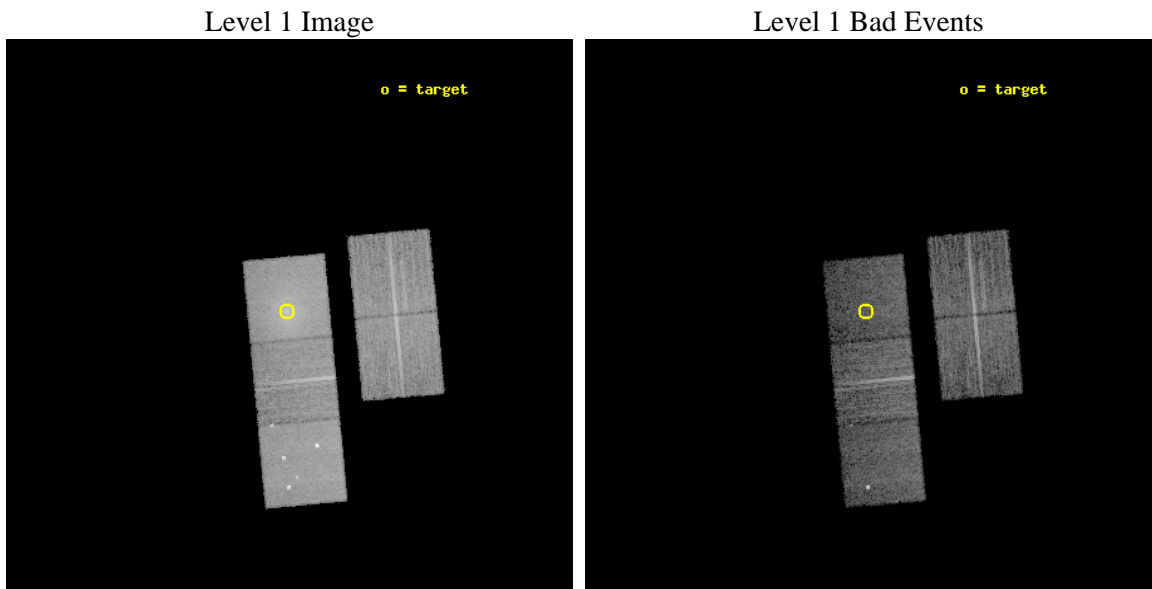
seq_num	800581	Sequence number
obs_id	6948	Observation id
title	Dark Matter in the Core of the Relaxed Cluster A2589	Proposal titl
observer	Dr. DAVID BUOTE	Principal investigator
object	Abell 2589	Source name
dtycycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.989167	Observer's specified target RA [deg]
dec_targ	16.7775	Observer's specified target Dec [deg]
ra_nom	350.98535591805	Nominal RA [deg]
dec_nom	16.757106370865	Nominal Dec [deg]
roll_nom	264.62586106147	Nominal Roll [deg]
revision	3	Processing version of data
ontime	10471.799979836	Sum of GTIs [s]
livetime	10334.978203872	Livetime [s]
ontime2	10465.518019289	Sum of GTIs [s]
ontime3	10471.799979836	Sum of GTIs [s]
ontime5	10471.799979836	Sum of GTIs [s]
ontime6	10471.799979836	Sum of GTIs [s]
ontime7	10471.799979836	Sum of GTIs [s]
l2events	134706	Number of level 2 events



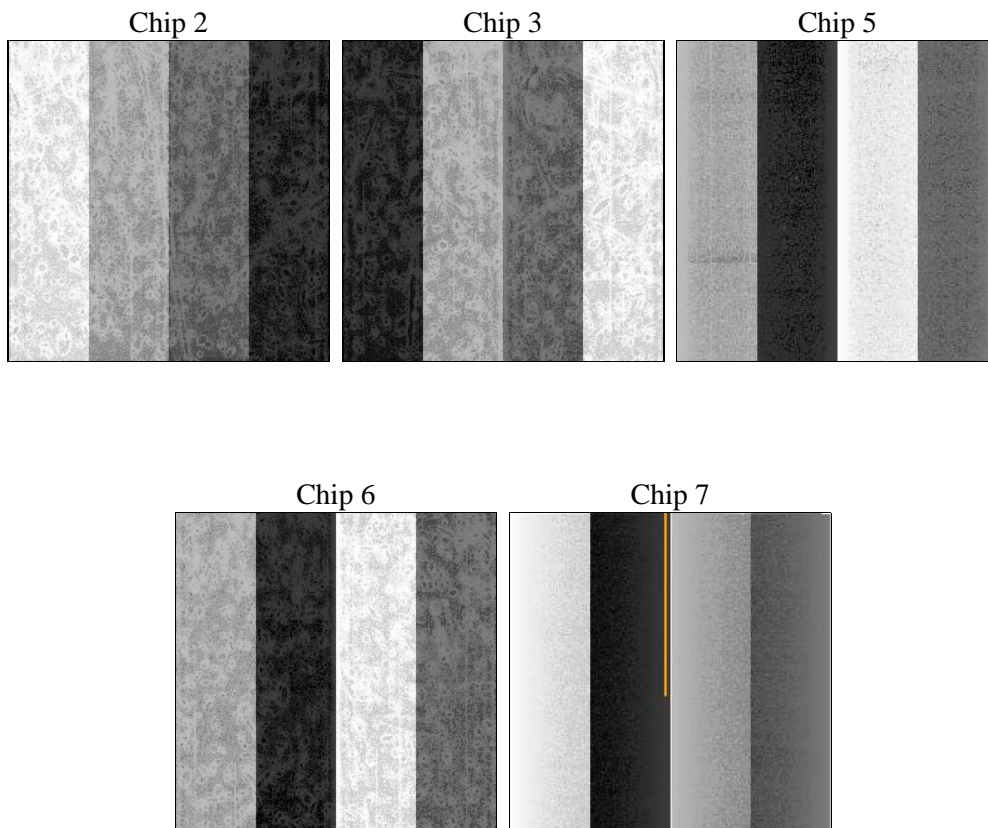
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10299.108000	[s] Scheduled observation exposure time
ascdsver	8.5.1.1	Processing system revision	ontime	10471.799979836	Sum of GTIs [s]
caldbver	4.5.5	&#160	ontime2	10465.518019289	Sum of GTIs [s]
date	2012-12-30T20:21:32	Date and time of file creation	ontime3	10471.799979836	Sum of GTIs [s]
revision	3	Processing version of data	ontime5	10471.799979836	Sum of GTIs [s]
			ontime6	10471.799979836	Sum of GTIs [s]
			ontime7	10471.799979836	Sum of GTIs [s]
			l1events	427554	Number of level 1 events

### 2.1.4 Events

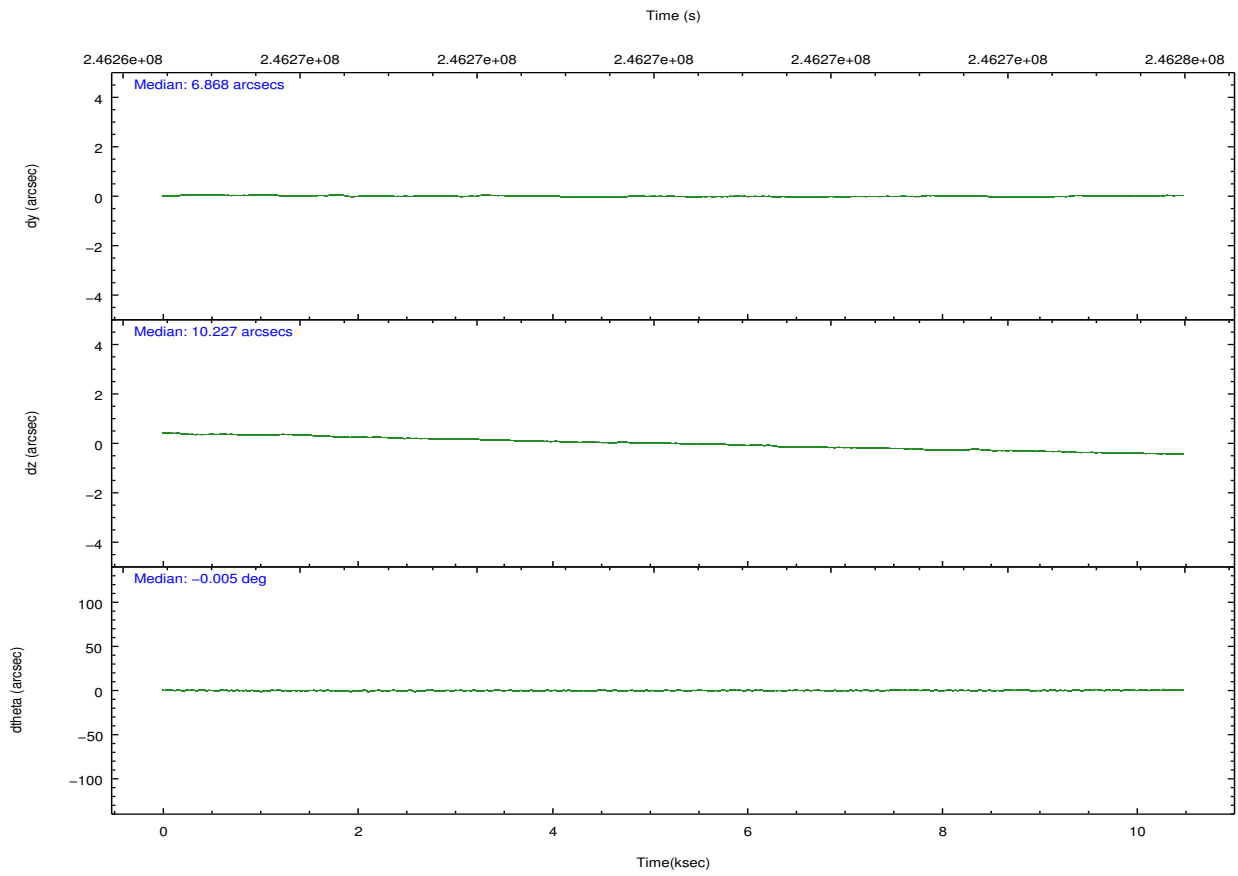
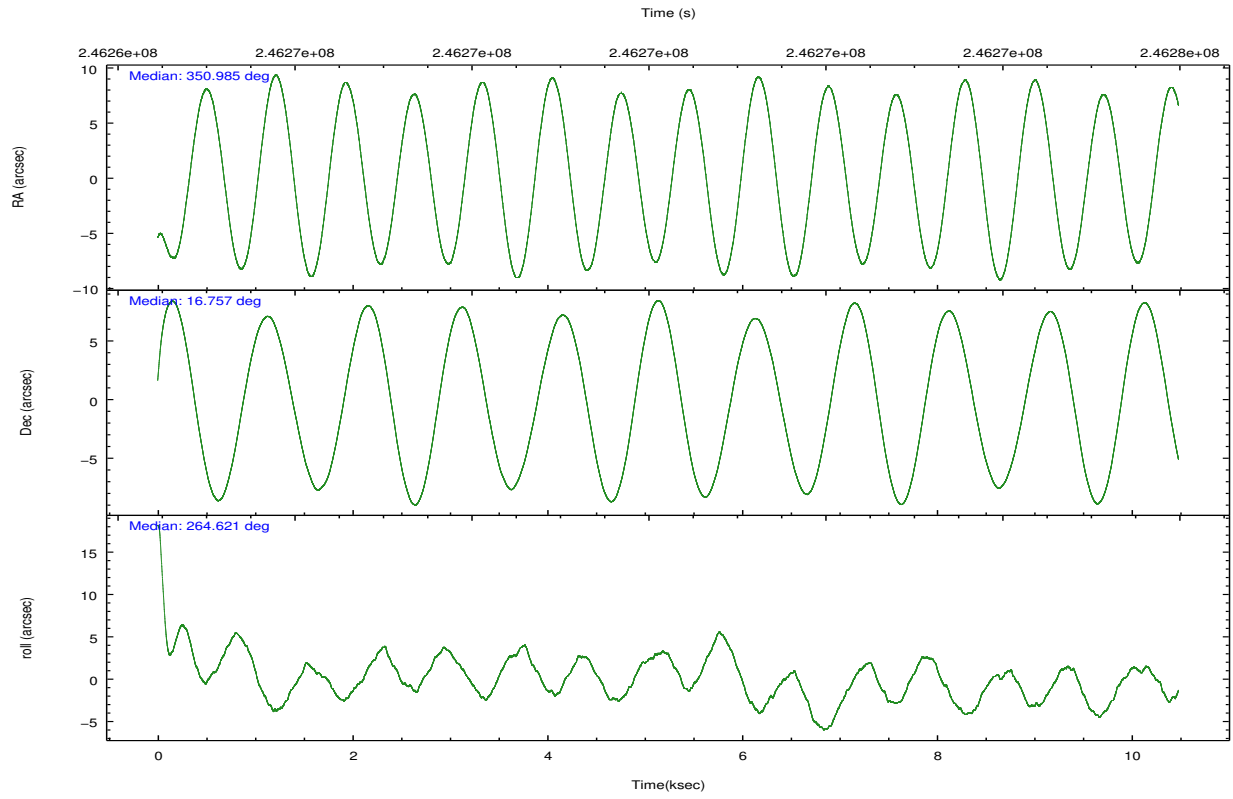
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	71122	69706	101119	74274	111333
rejected events	64007	62861	49408	62296	42688
rejected %	89%	90%	48%	83%	38%

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	2716	2662	8212	6523	13191
	3%	3%	8%	8%	11%
grade 1 events	28	31	155	59	74
	0%	0%	0%	0%	0%
grade 2 events	1624	1452	14524	1931	15842
	2%	2%	14%	2%	14%
grade 3 events	760	744	2173	919	7434
	1%	1%	2%	1%	6%
grade 4 events	767	696	2074	939	7113
	1%	0%	2%	1%	6%
grade 5 events	2200	2611	8139	2824	8470
	3%	3%	8%	3%	7%
grade 6 events	1255	1298	24761	1672	25096
	1%	1%	24%	2%	22%
grade 7 events	61772	60212	41081	59407	34113
	86%	86%	40%	79%	30%

## 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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	350.973151	350.9853559180501	Subarray requested	NONE	NONE
[deg] Pointing Dec	16.781664	16.75710637086456	Alternating exposures requested	N	N
[deg] Pointing Roll	264.472739	264.6258610614732	[s] Primary exposure time	0.000000	3.1
[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)	246265152.184000	246264154.76716			
Observation start date	2005-10-21T06:58:08	2005-10-21T06:42:34			
[s] Observation end time (MET)	246275451.184000	246275671.15519			
Observation end date	2005-10-21T09:49:47	2005-10-21T09:54:31			
Read mode	TIMED	TIMED			

## 2.3 Aspect



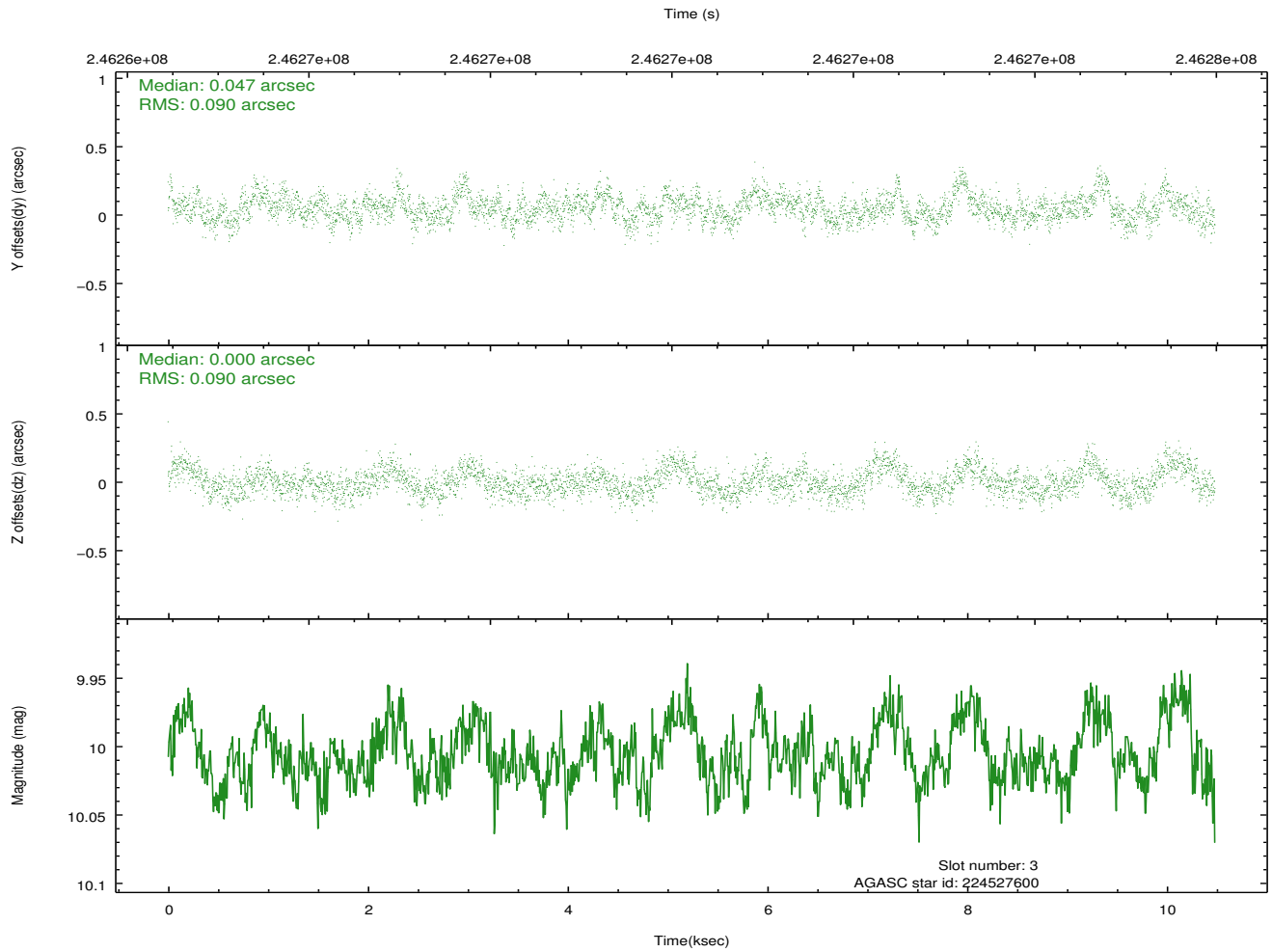
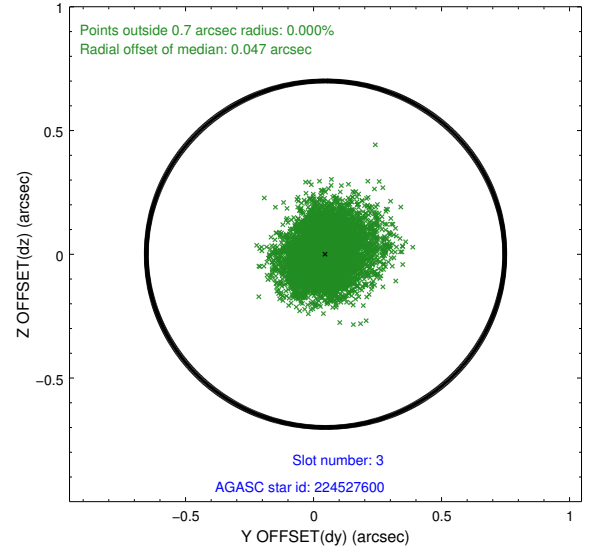
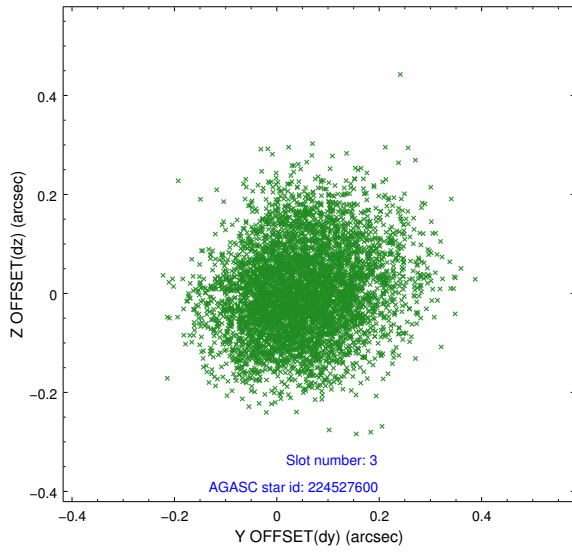
### Slot Statistics

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	2557	-0.056	-0.023	0.008	0.013	0.000000	0.000000	-759.64	-1731.50
1	FID	ACIS-S-4	7.21	2557	0.098	0.033	0.006	0.010	0.000000	0.000000	2153.53	176.58
2	FID	ACIS-S-5	7.23	2557	-0.073	-0.001	0.007	0.012	0.000000	0.000000	-1811.89	170.70
3	GUIDE	224527600	10.01	5103	0.047	0.000	0.137	0.219	351.354290	17.243672	-1782.35	1144.33
4	GUIDE	224528320	8.45	5114	-0.049	-0.002	0.071	0.112	350.399607	17.080070	-881.72	-2067.91
5	GUIDE	224528984	8.96	5114	0.071	-0.006	0.088	0.143	350.492856	16.632535	692.61	-1595.24
6	GUIDE	224531944	9.24	5109	0.126	0.113	0.081	0.131	350.741588	16.203421	2149.58	-596.27
7	GUIDE	224536712	9.33	5106	-0.201	-0.109	0.087	0.142	350.322096	17.433192	-2122.03	-2452.33

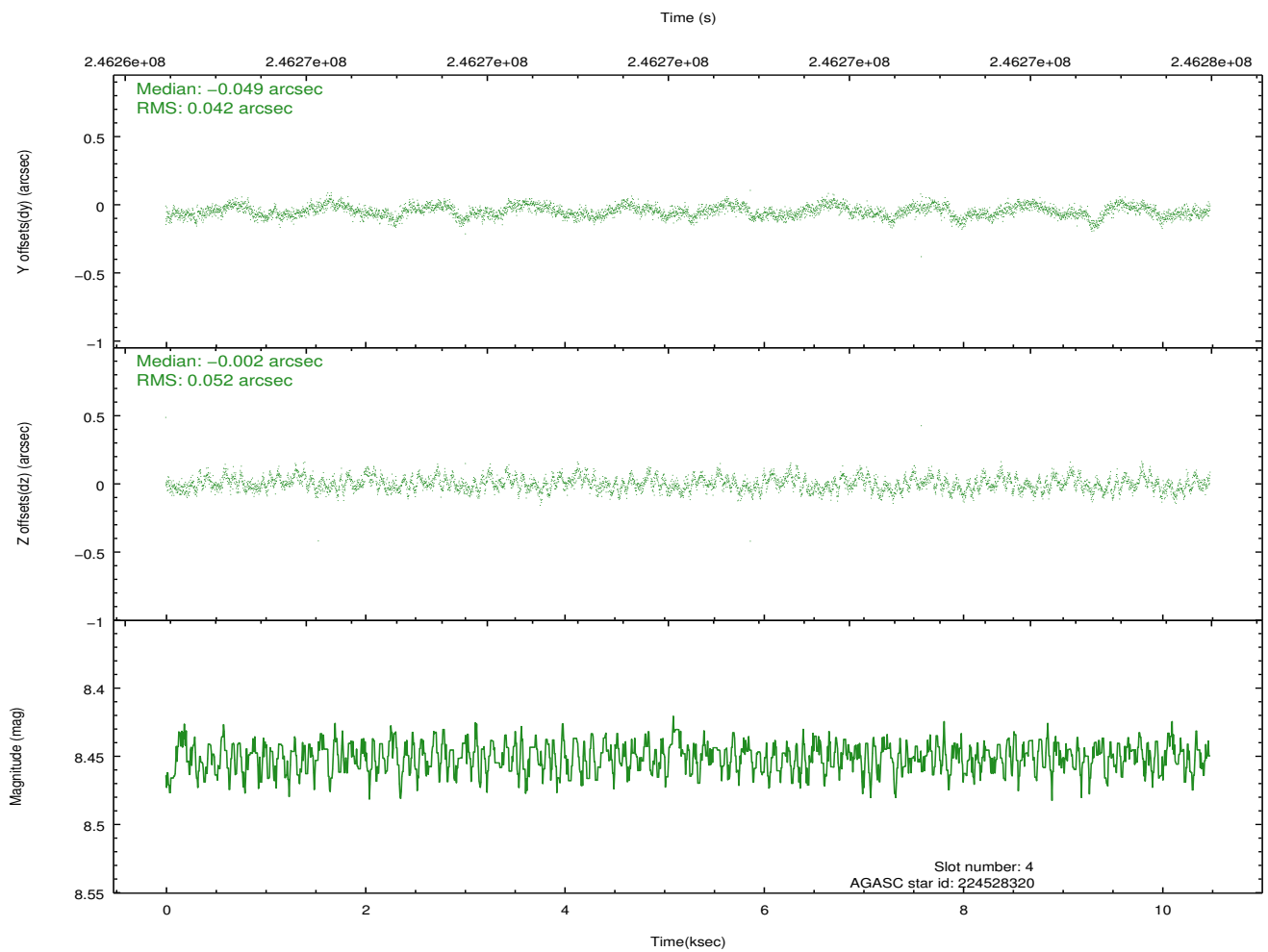
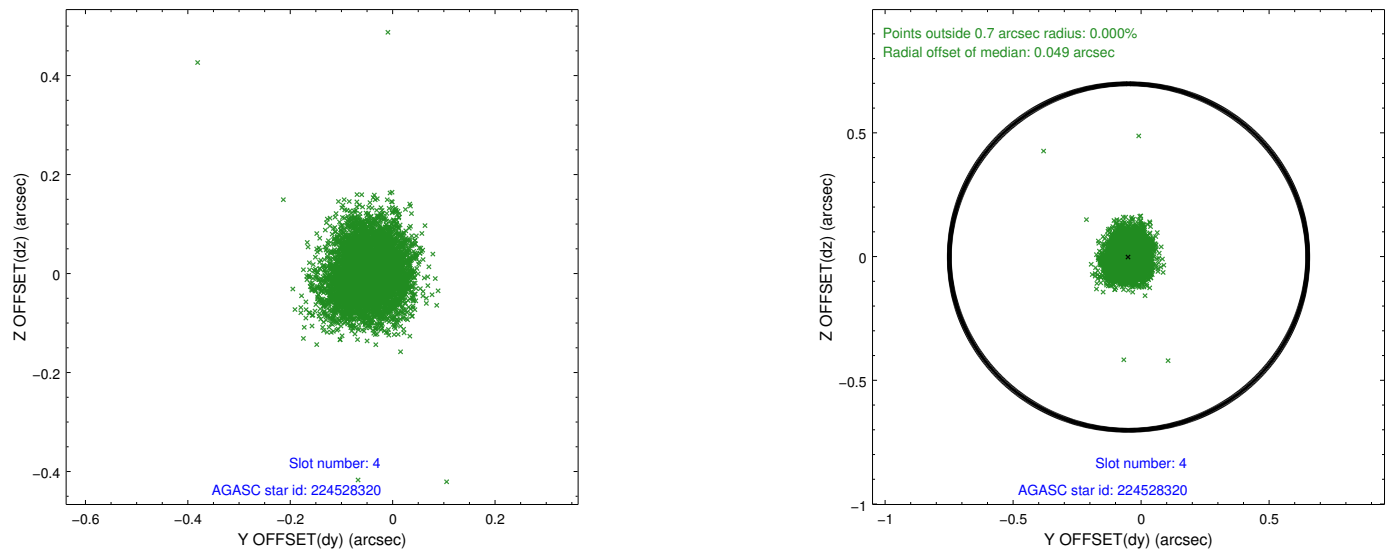
∞

## 2.4 Star Slots

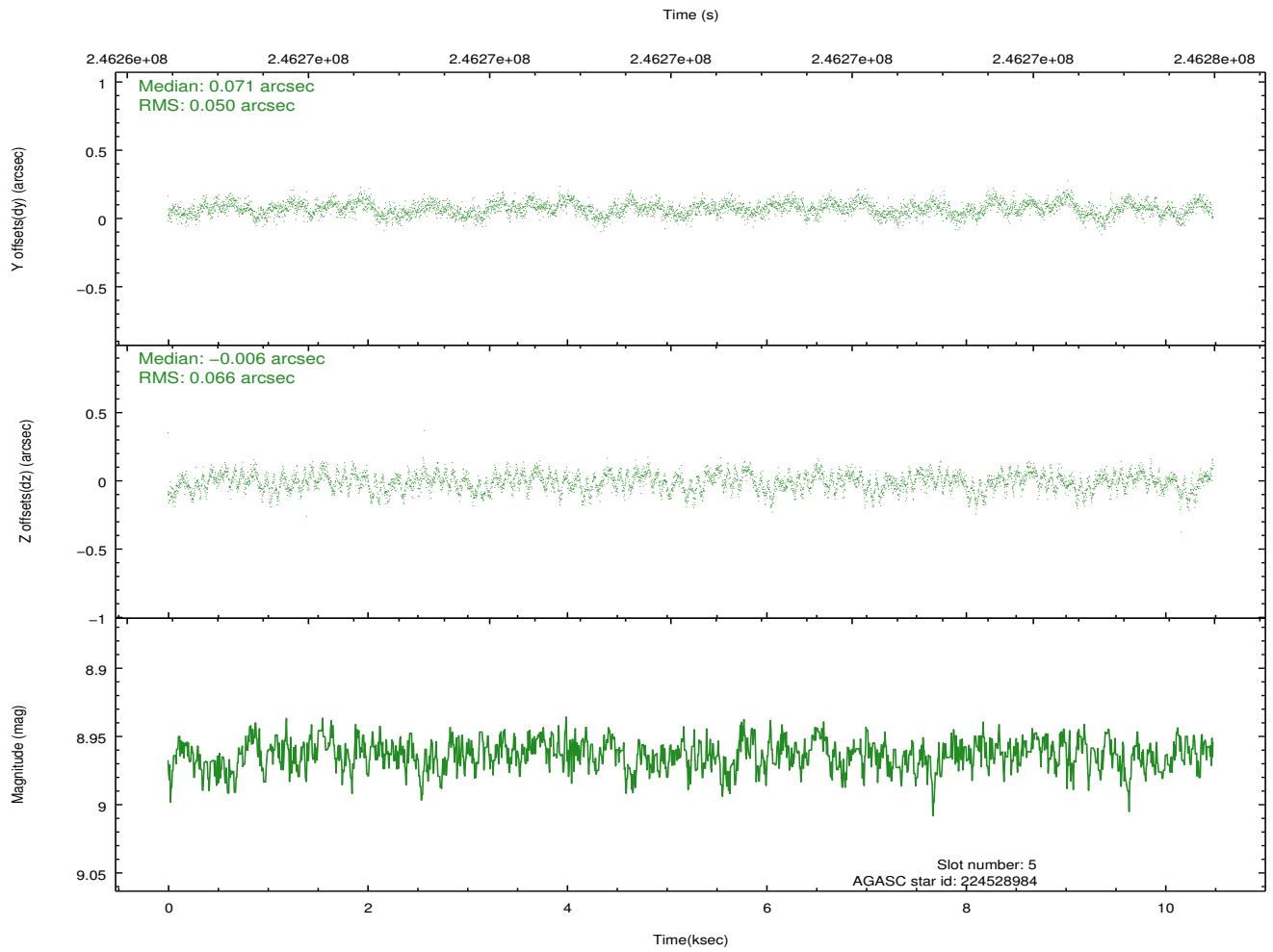
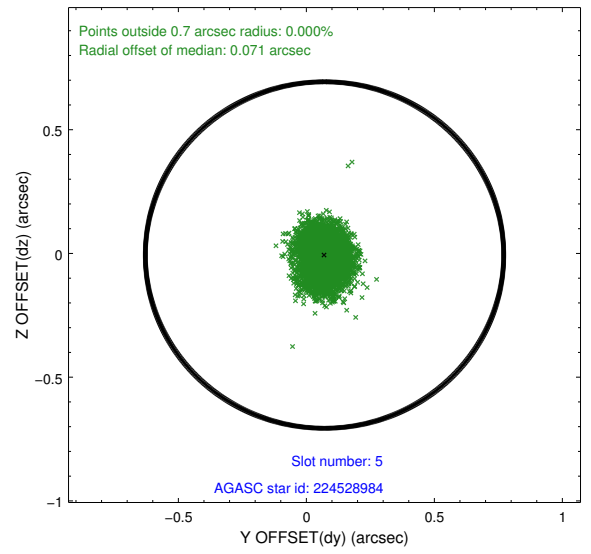
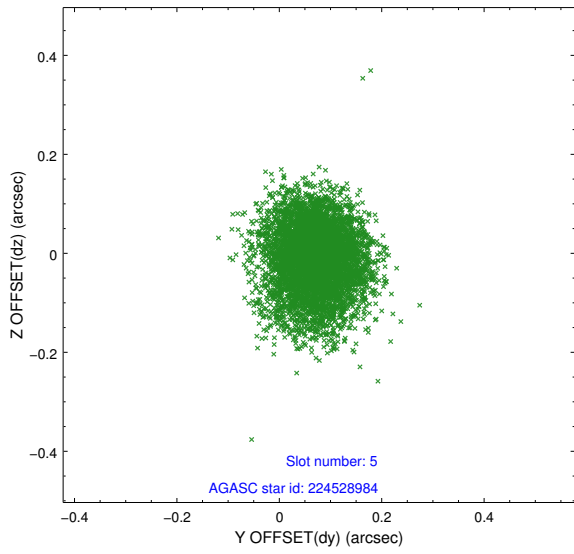
### 2.4.1 Slot 3



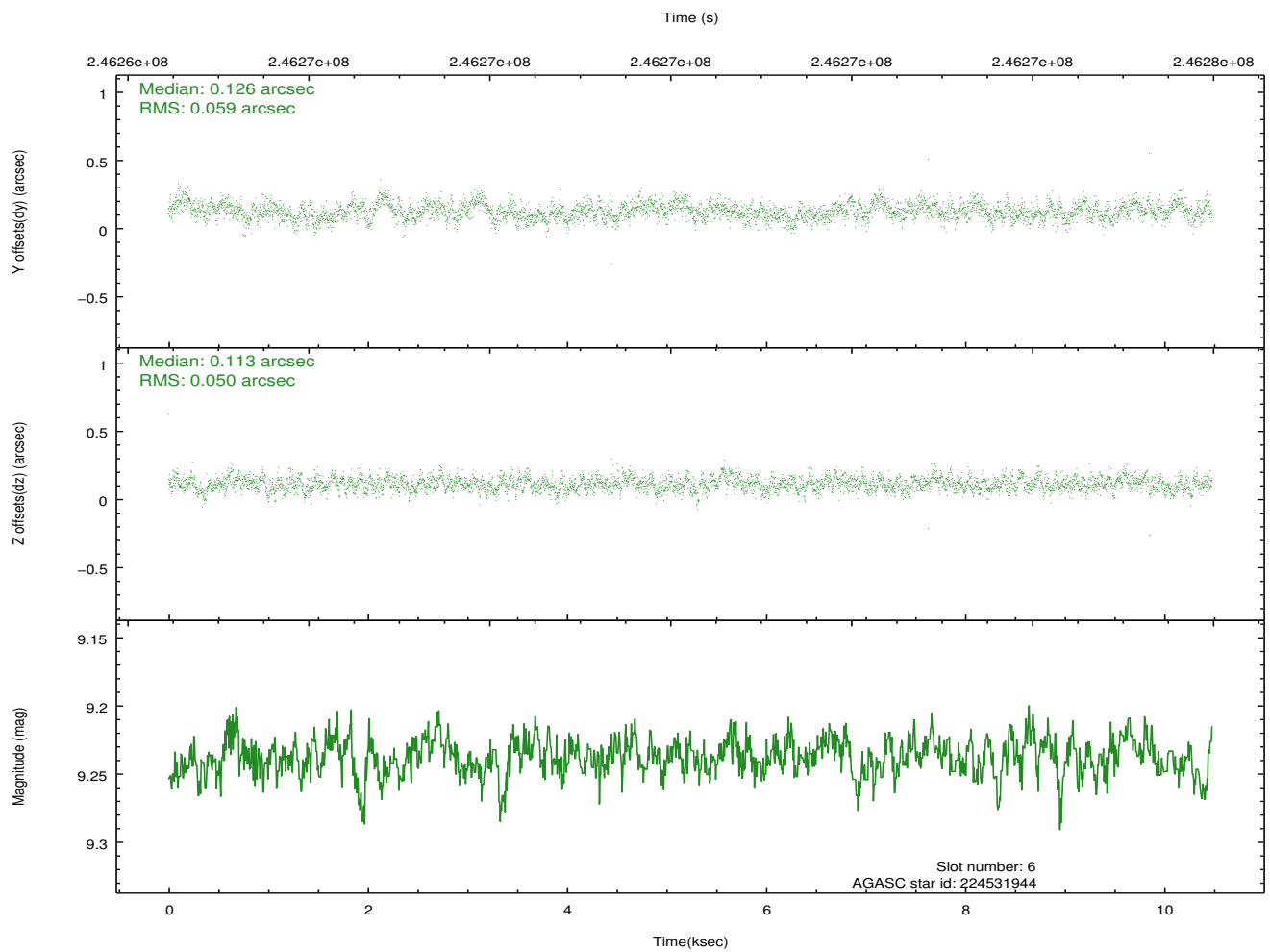
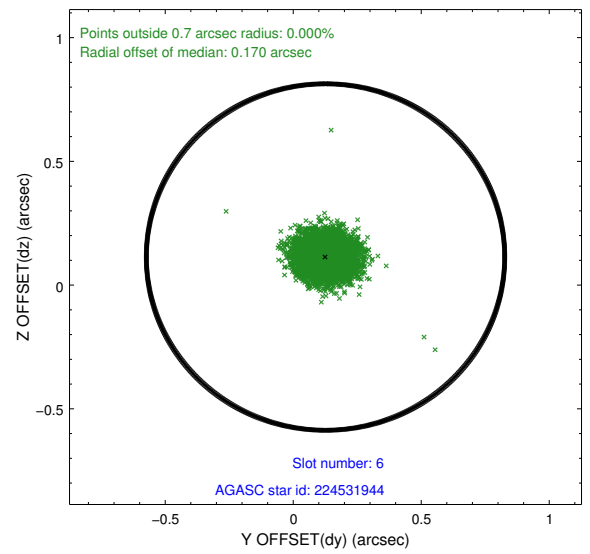
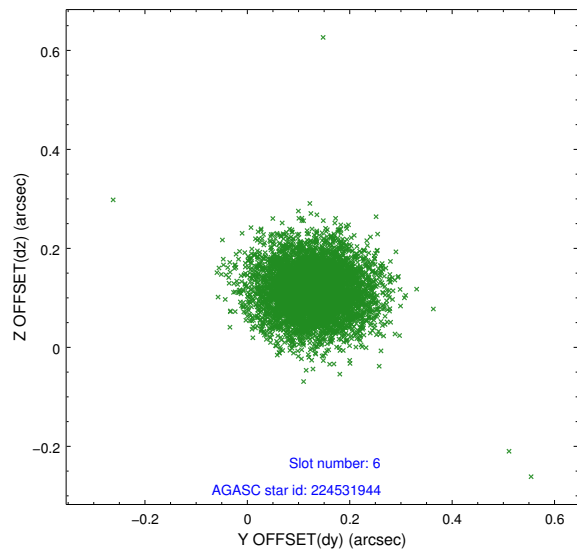
## 2.4.2 Slot 4



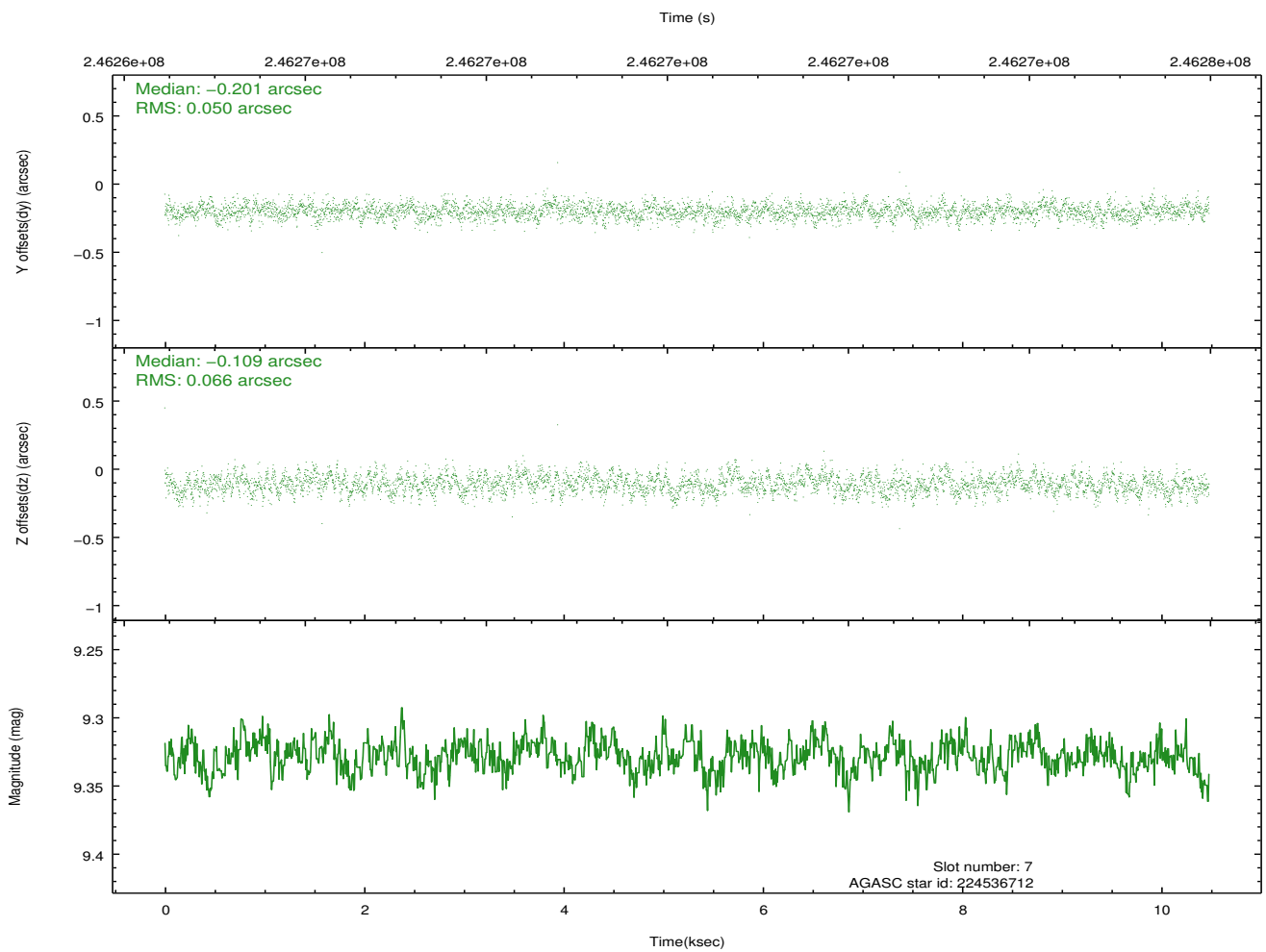
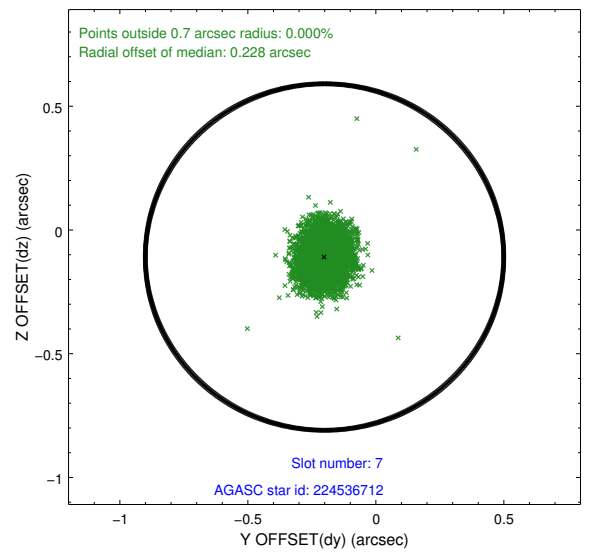
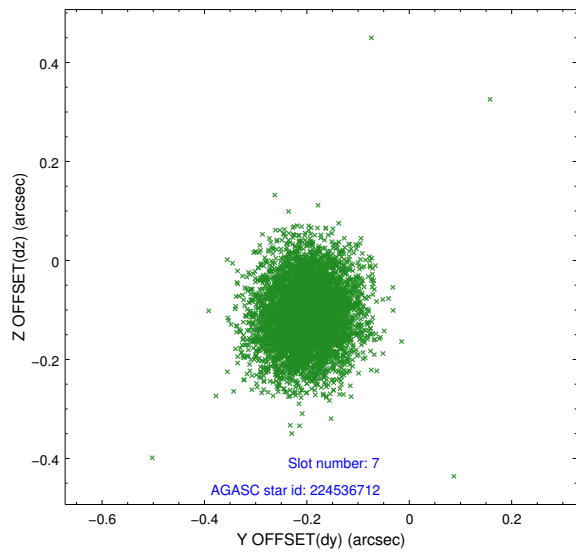
### 2.4.3 Slot 5



## 2.4.4 Slot 6

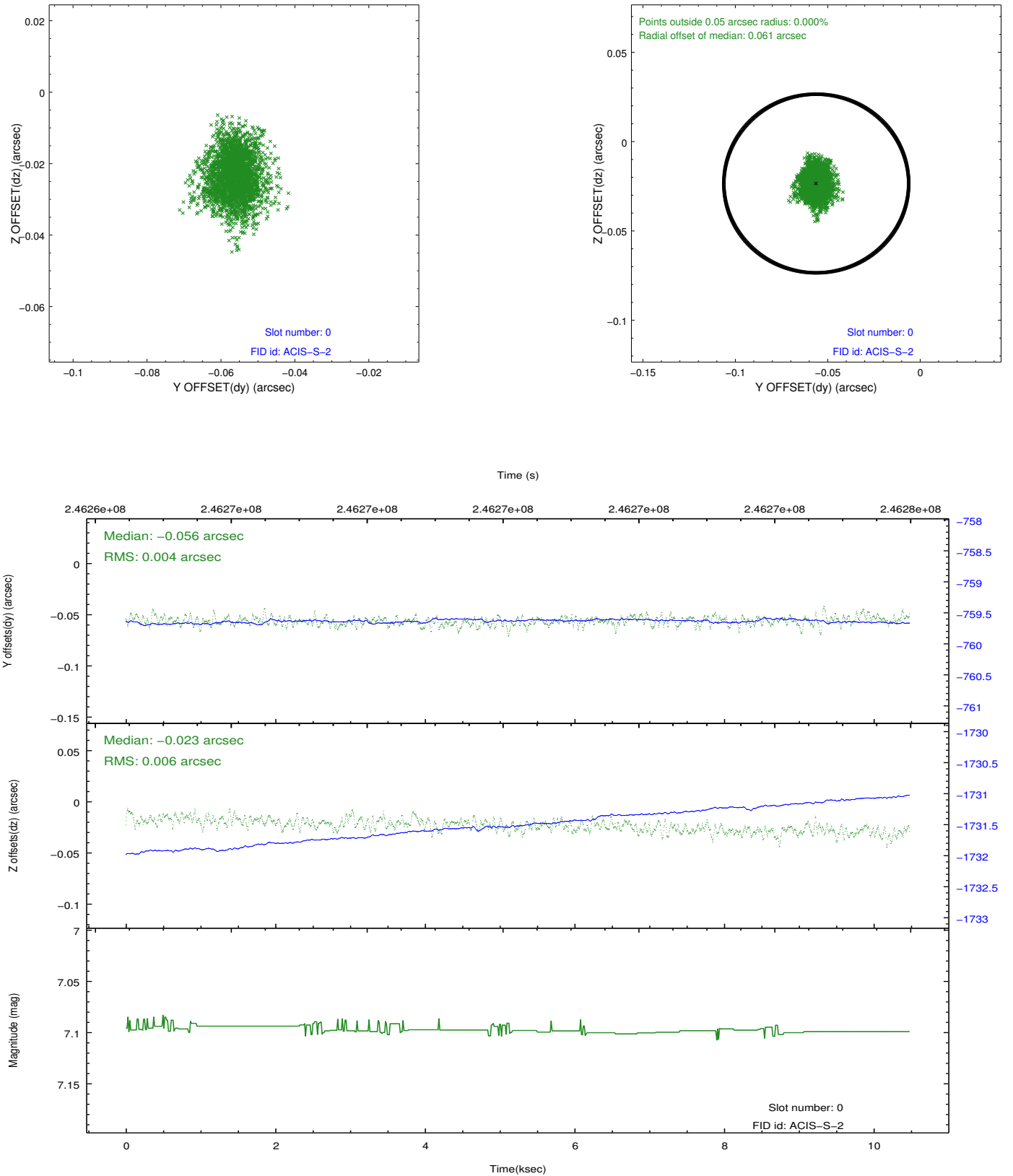


### 2.4.5 Slot 7

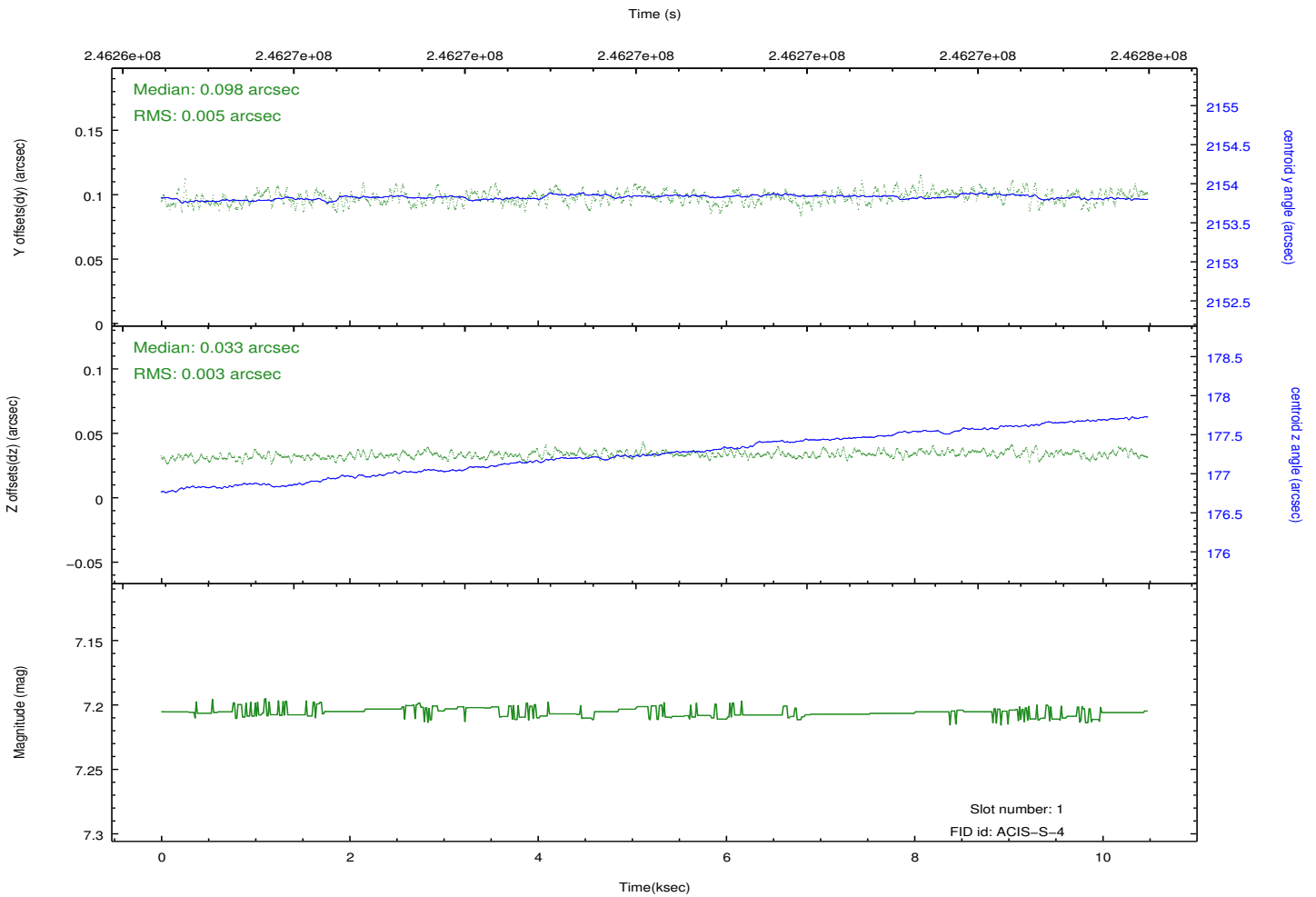
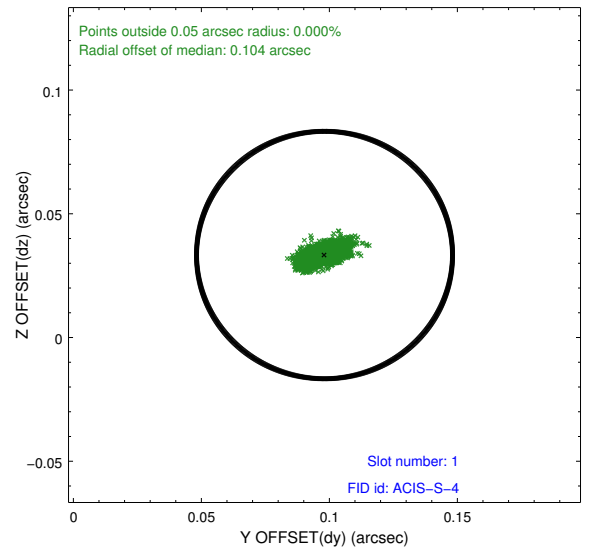
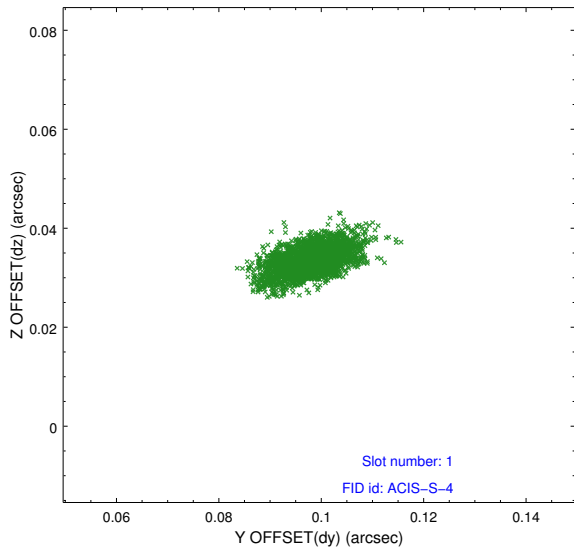


## 2.5 FID Slots

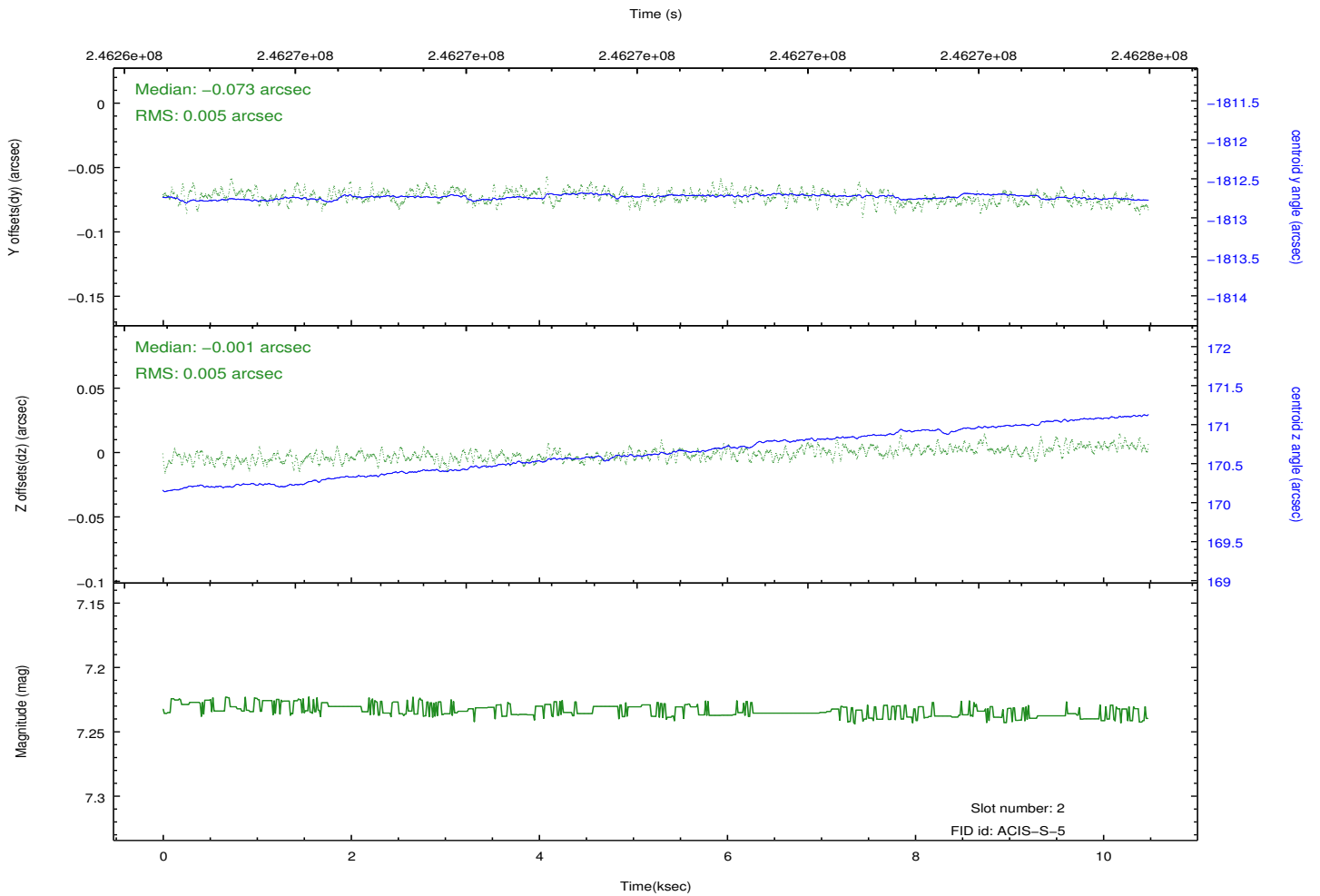
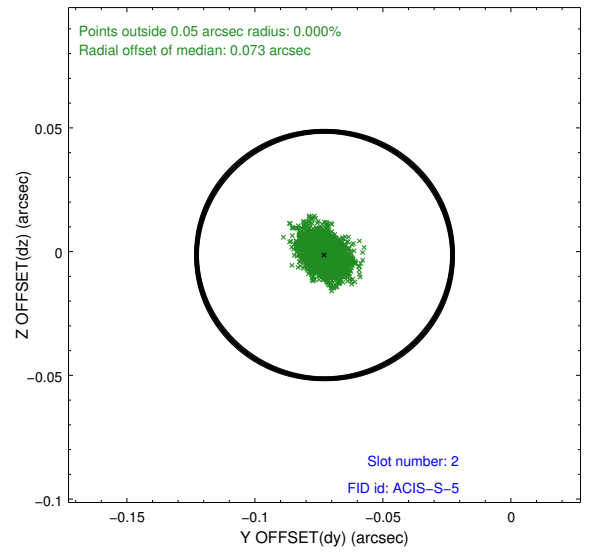
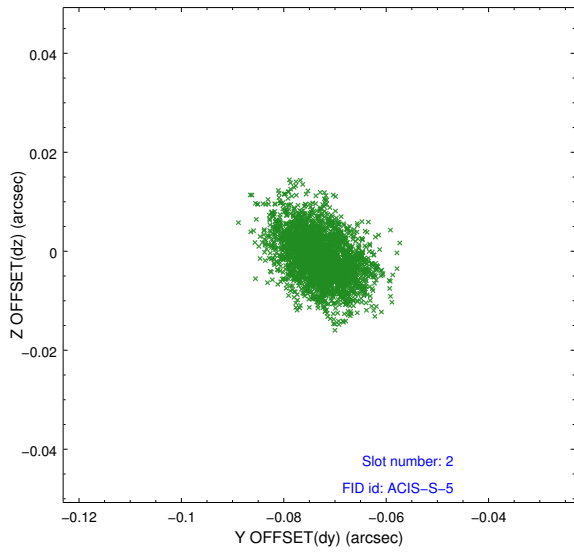
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2013.01.27
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.47179

### A.2 Comments