

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1747 - L2 Version 6  
Chandra X-Ray Center

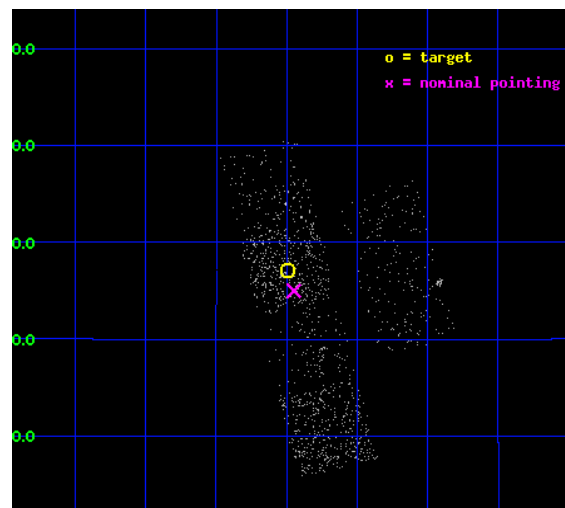
L2 Processing Date : Sep 17 2012

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# 1 Front

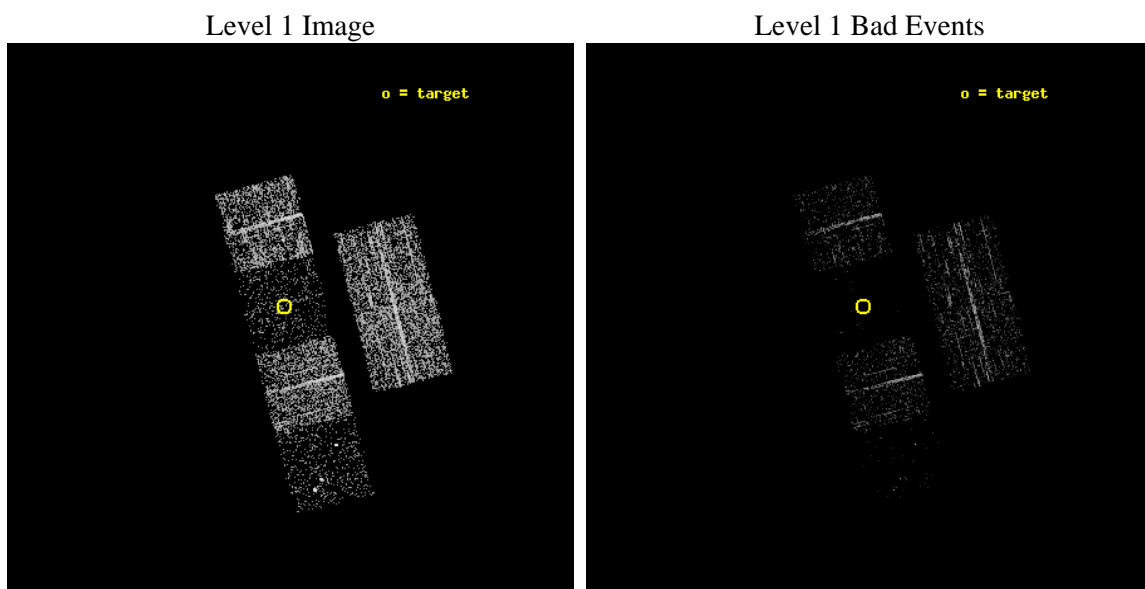
seq_num	100018	Sequence number
obs_id	1747	Observation id
title	AXAF LOW ENERGY SPECTROSCOPY AND PHOTOMETRIC IMAGING OF COMETARY X-RAY EMISSION FROM COMET P/TEMPEL 2	Proposal title
observer	Dr. Carey Lisse	Principal investigator
object	Comet c/LINEAR 1999 S4	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	182.62338	Observer's specified target RA [deg]
dec_targ	10.45266	Observer's specified target Dec [deg]
ra_nom	182.61222190538	Nominal RA [deg]
dec_nom	10.416613390667	Nominal Dec [deg]
roll_nom	255.59669316782	Nominal Roll [deg]
revision	6	Processing version of data
ontime	1193.6000010967	Sum of GTIs [s]
livetime	1178.4859191832	Livetime [s]
ontime2	1193.6000010967	Sum of GTIs [s]
ontime3	1193.6000010967	Sum of GTIs [s]
ontime5	1193.6000010967	Sum of GTIs [s]
ontime6	1193.6000010967	Sum of GTIs [s]
ontime7	1193.6000010967	Sum of GTIs [s]
ontime8	1193.6000010967	Sum of GTIs [s]
l2events	1397	Number of level 2 events



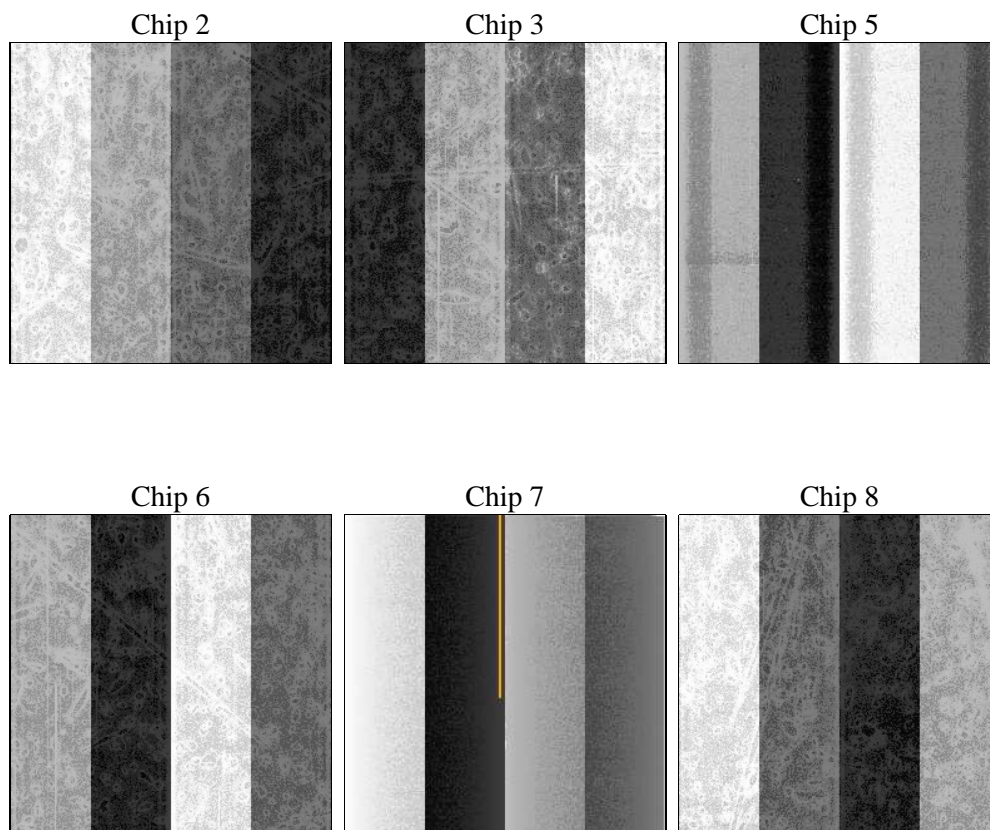
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	1270.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	1193.6000010967	Sum of GTIs [s]
caldsver	4.5.1.1	&#160	ontime2	1193.6000010967	Sum of GTIs [s]
date	2012-09-17T17:53:41	Date and time of file creation	ontime3	1193.6000010967	Sum of GTIs [s]
revision	6	Processing version of data	ontime5	1193.6000010967	Sum of GTIs [s]
			ontime6	1193.6000010967	Sum of GTIs [s]
			ontime7	1193.6000010967	Sum of GTIs [s]
			ontime8	1193.6000010967	Sum of GTIs [s]
			l1events	24046	Number of level 1 events

### 2.1.4 Events

	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	6088	5538	1251	4714	767	5688
rejected events	5887	5407	432	4542	235	4624
rejected %	96%	97%	34%	96%	30%	81%

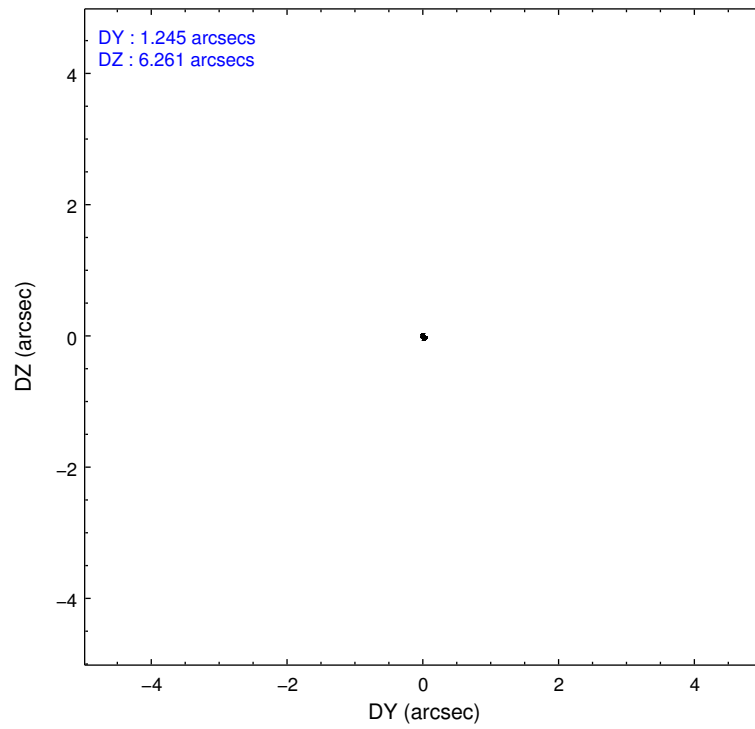
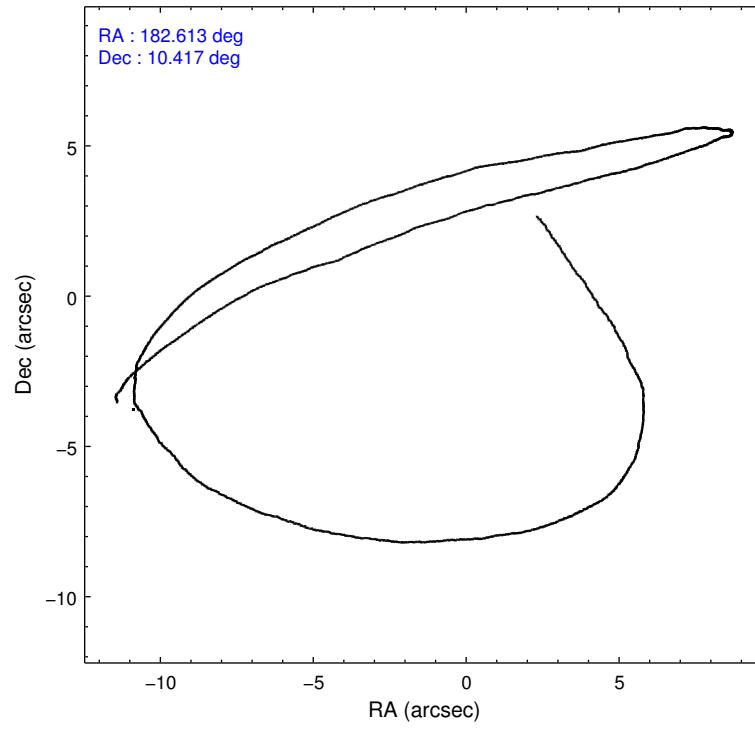
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	131	65	518	115	198	373
	2%	1%	41%	2%	25%	6%
grade 1 events	0	0	11	1	2	2
	0%	0%	0%	0%	0%	0%
grade 2 events	36	22	315	35	228	299
	0%	0%	25%	0%	29%	5%
grade 3 events	27	34	77	27	112	141
	0%	0%	6%	0%	14%	2%
grade 4 events	32	28	74	31	83	144
	0%	0%	5%	0%	10%	2%
grade 5 events	2	6	36	3	15	21
	0%	0%	2%	0%	1%	0%
grade 6 events	20	12	60	18	56	286
	0%	0%	4%	0%	7%	5%
grade 7 events	5840	5371	160	4484	73	4422
	95%	96%	12%	95%	9%	77%

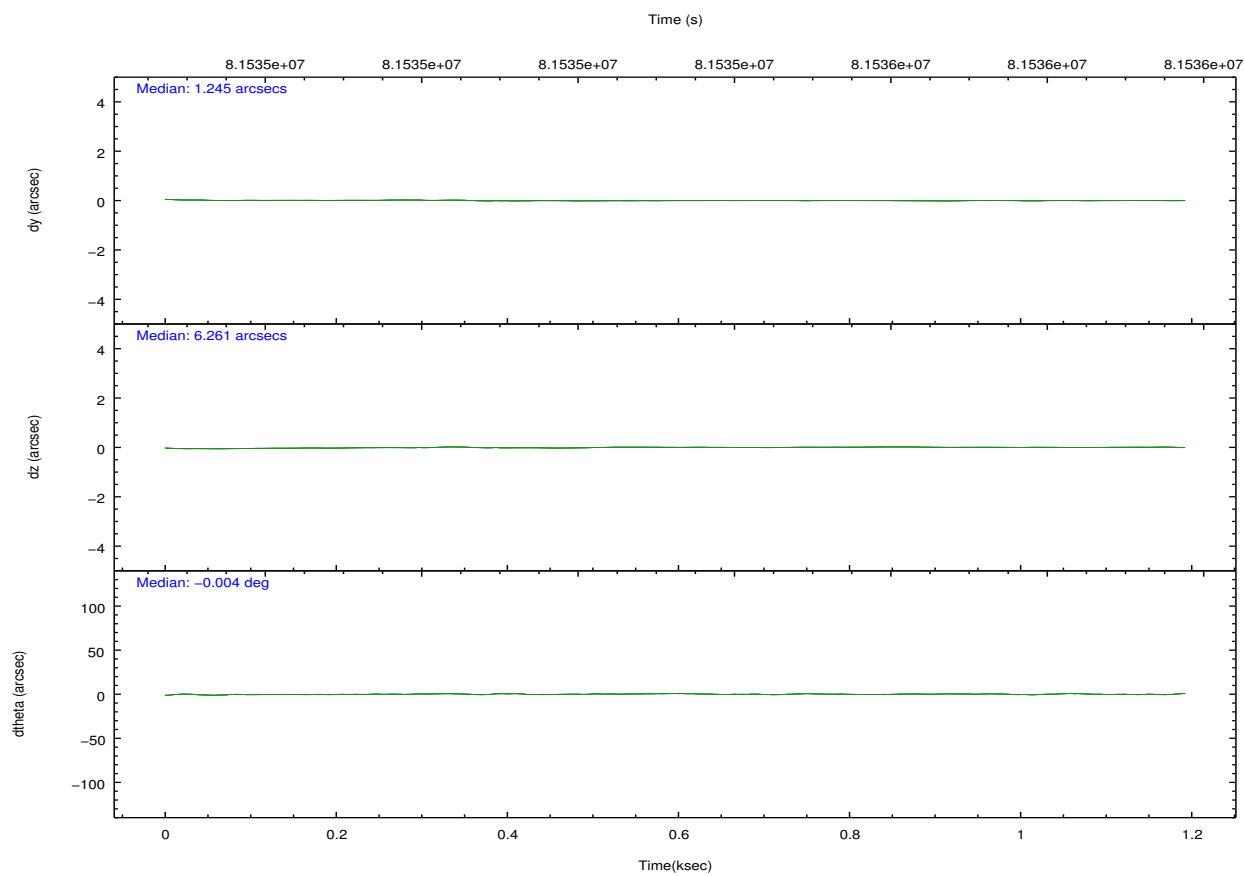
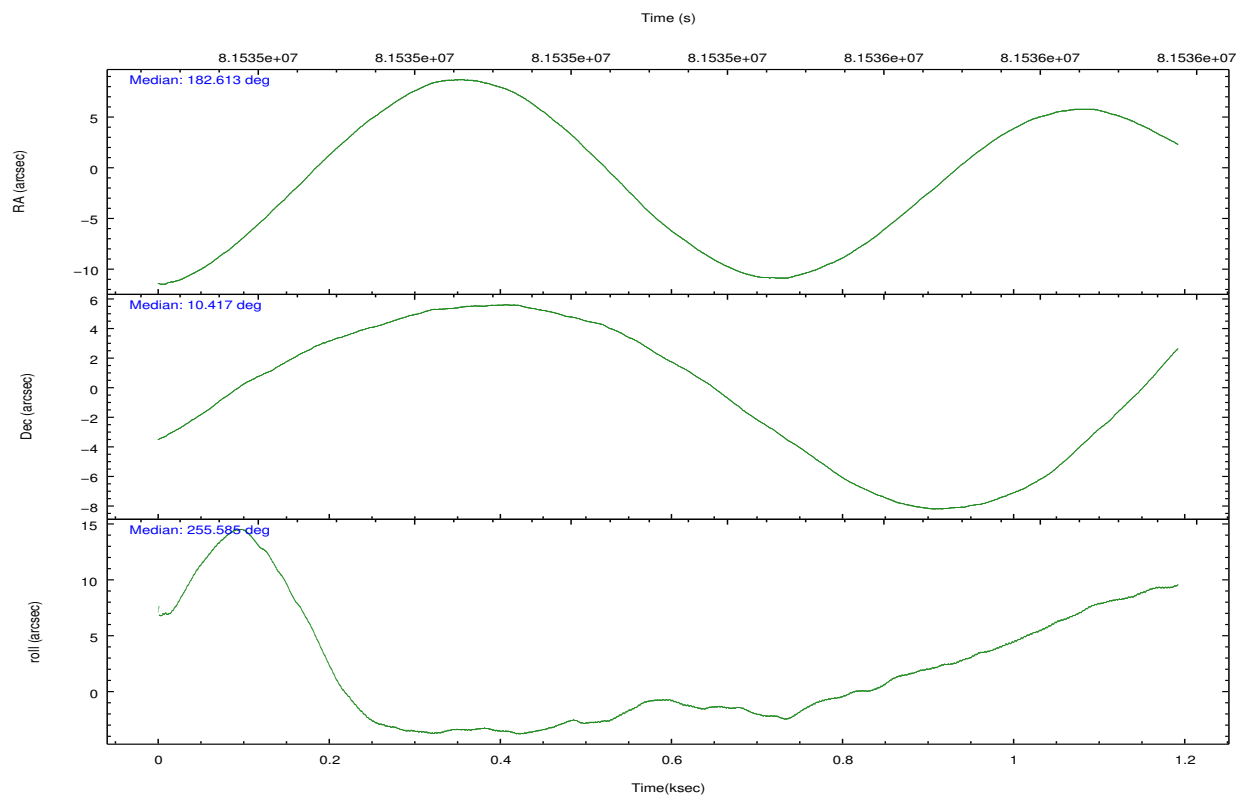
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	VFAINT	VFAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	182.604388	182.6122219053845
[deg] Pointing Dec	10.443049	10.41661339066686
[deg] Pointing Roll	255.441576	255.5966931678225
[s] Window start time (MET)	81216064.184000	81216064.184000
[s] Window stop time (MET)	81734464.184000	81734464.184000
[mm] SIM focus pos	-0.684267	-0.6828225247311905
[mm] SIM defocus	0	0.001444936568705701
[mm] SIM translation stage pos	-190.132523	-190.1425803651734
[mm] SIM translation stage offset	0	0.01005778216563158
[s] Observation start time (MET)	81534650.184000	81534544.12861501
Observation start date	2000-08-01T16:29:46	2000-08-01T16:29:04
[s] Observation end time (MET)	81535920.184000	81536054.466171
Observation end date	2000-08-01T16:50:56	2000-08-01T16:54:14
Read mode	TIMED	TIMED

Parameter	Planned	Actual
Obspar format version number	7	7
Obspar file type	PREDICTED	ACTUAL
Obspar update status	NONE	UPDATED
Number of optional ACIS chips dropped	0	0
On-chip summing requested	N	N
Subarray requested	NONE	NONE
Alternating exposures requested	N	N
[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



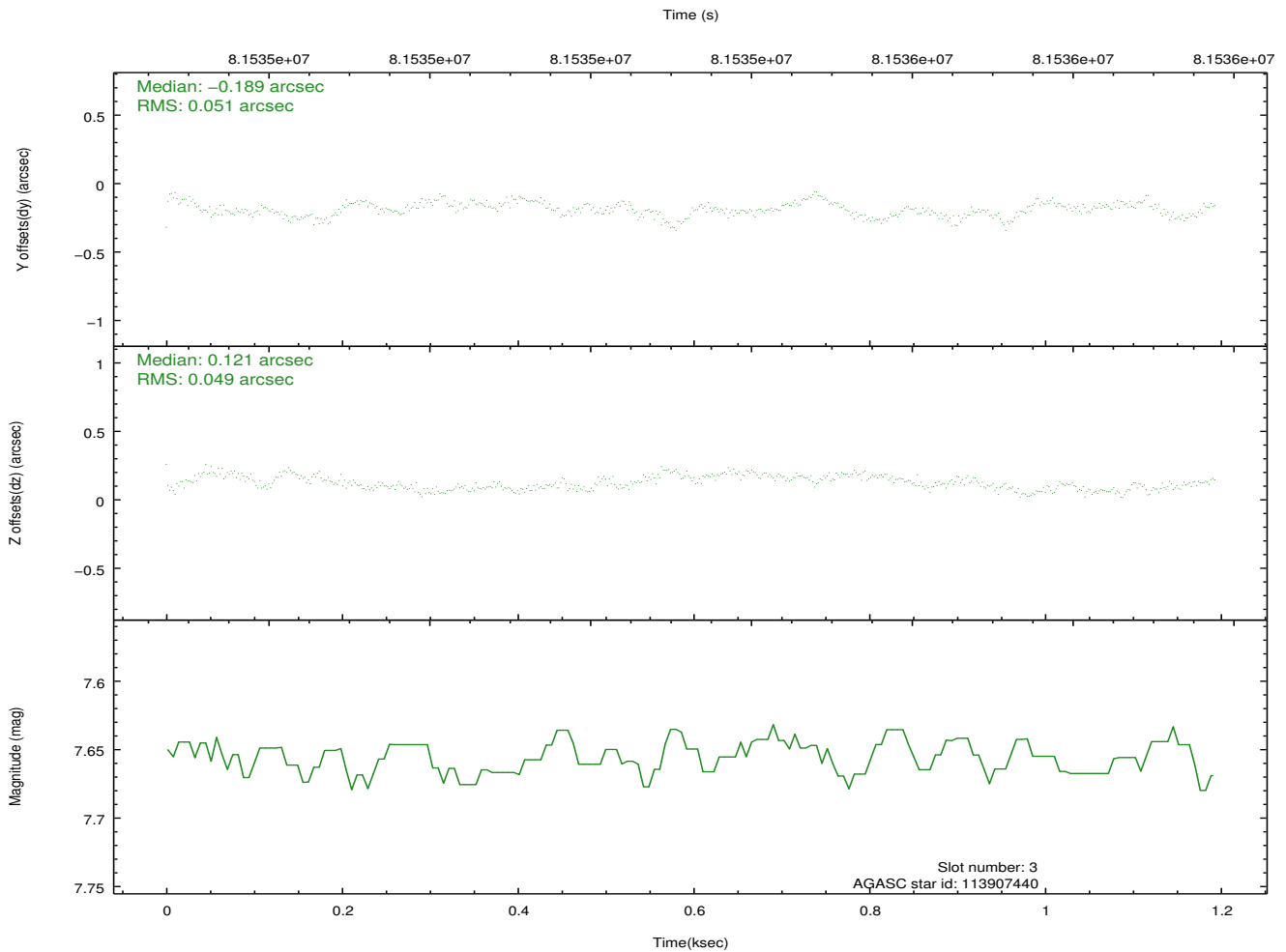
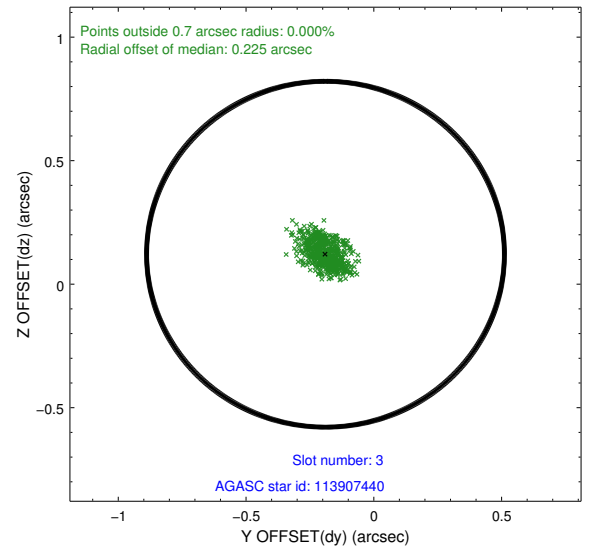
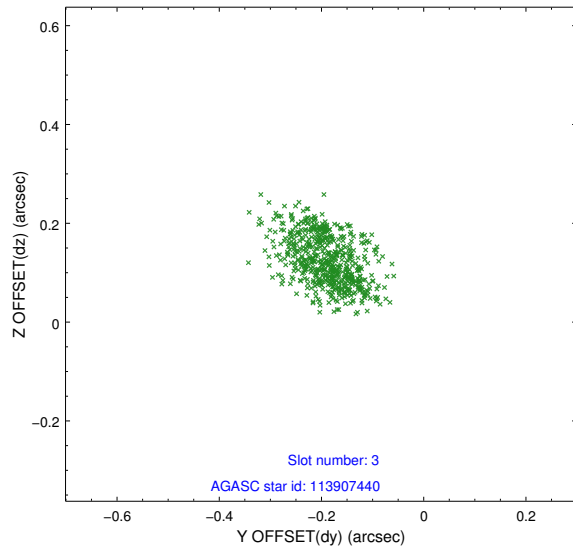


Slot Statistics

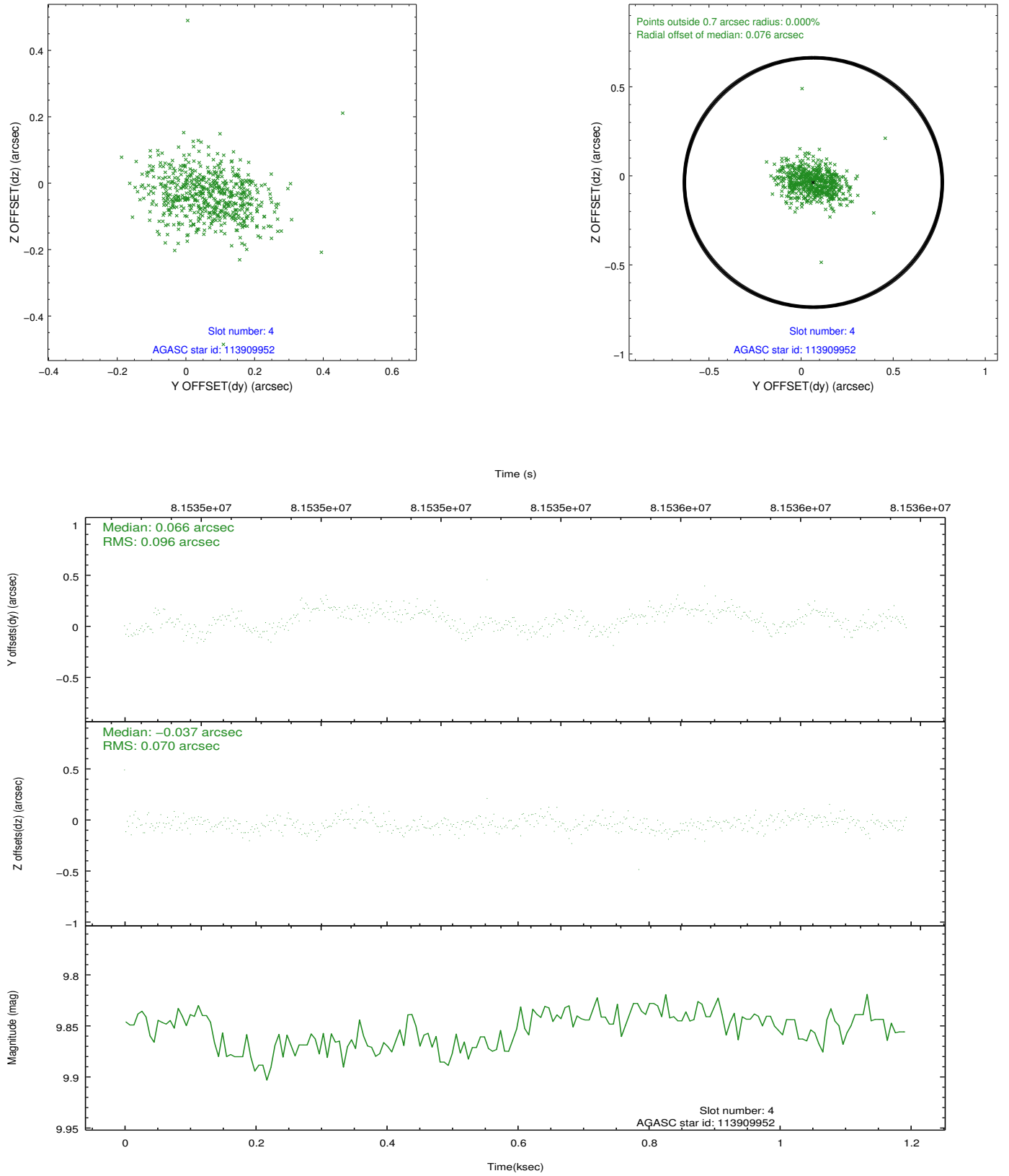
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	291	-0.045	-0.006	0.006	0.013	0.000000	0.000000	-753.88	-1727.36
1	FID	ACIS-S-4	7.21	291	0.008	0.023	0.006	0.012	0.000000	0.000000	2156.92	175.40
2	FID	ACIS-S-5	7.23	291	0.006	-0.008	0.007	0.010	0.000000	0.000000	-1799.47	175.37
3	GUIDE	113907440	7.66	583	-0.189	0.121	0.076	0.121	183.304663	10.821652	-1944.00	2051.81
4	GUIDE	113909952	9.85	583	0.066	-0.037	0.121	0.198	182.703120	10.082649	1165.02	667.11
5	OMITTED		0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	113910808	10.24	582	-0.068	-0.046	0.135	0.218	183.289541	10.594003	-1135.87	2208.82
7	GUIDE	113511280	10.46	580	0.199	-0.039	0.187	0.301	182.700155	9.746408	2340.65	962.12

## 2.4 Star Slots

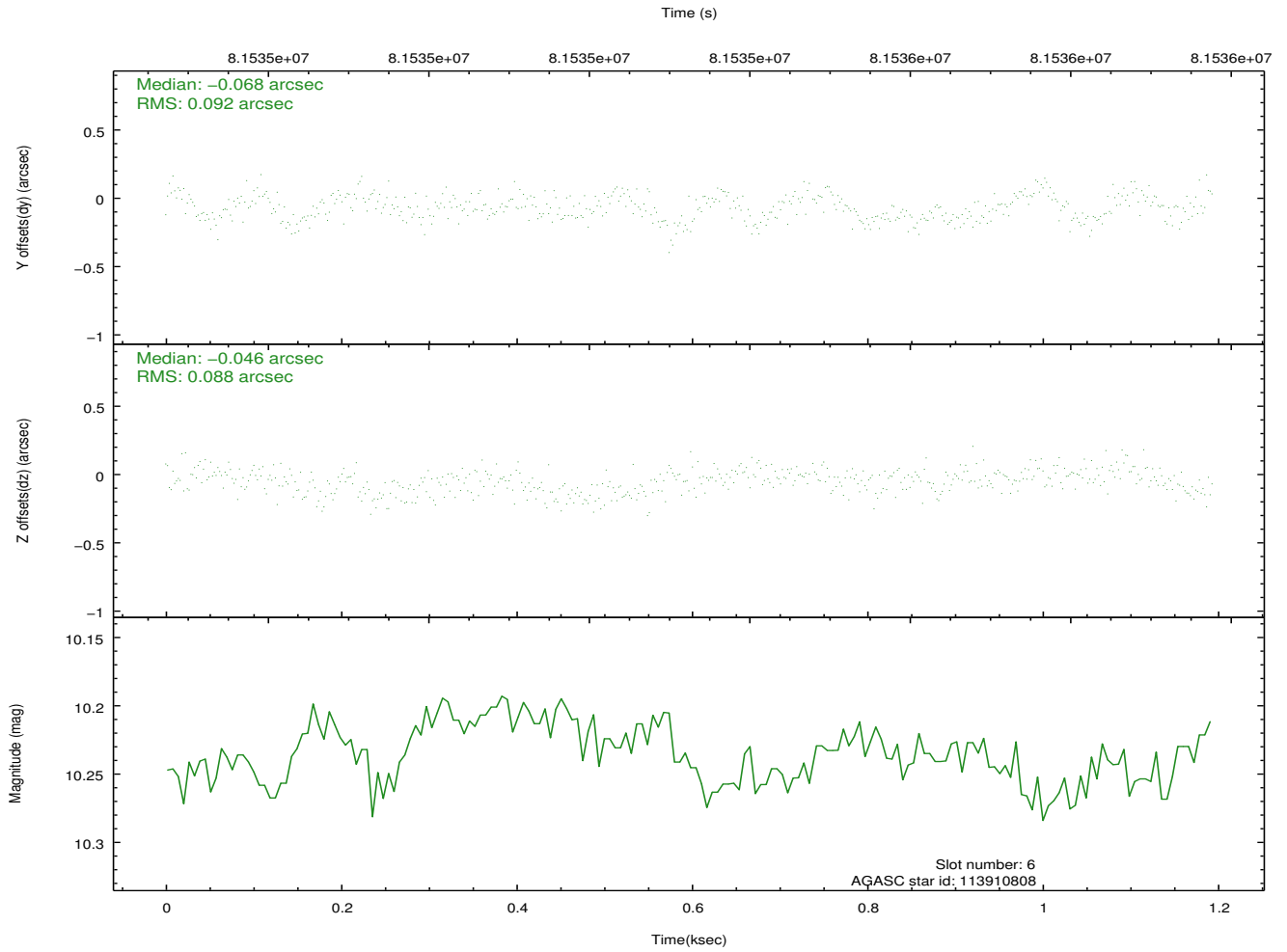
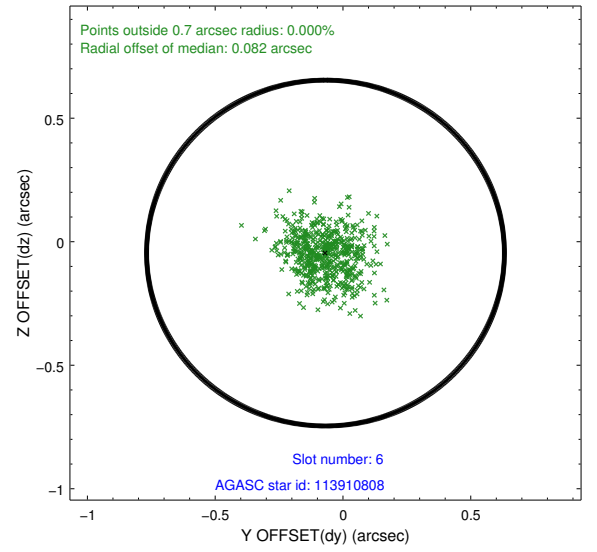
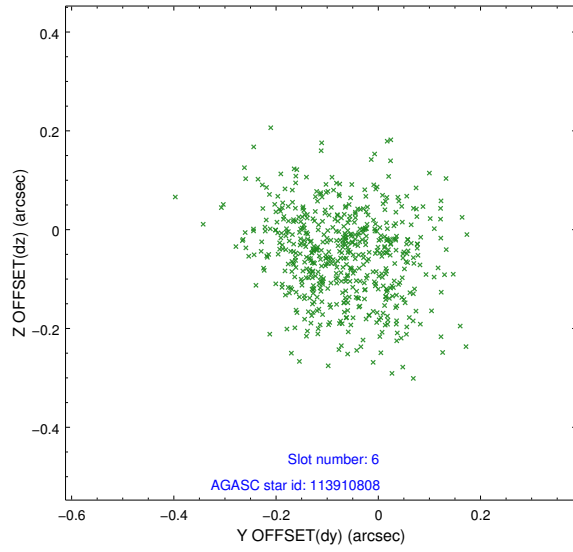
### 2.4.1 Slot 3



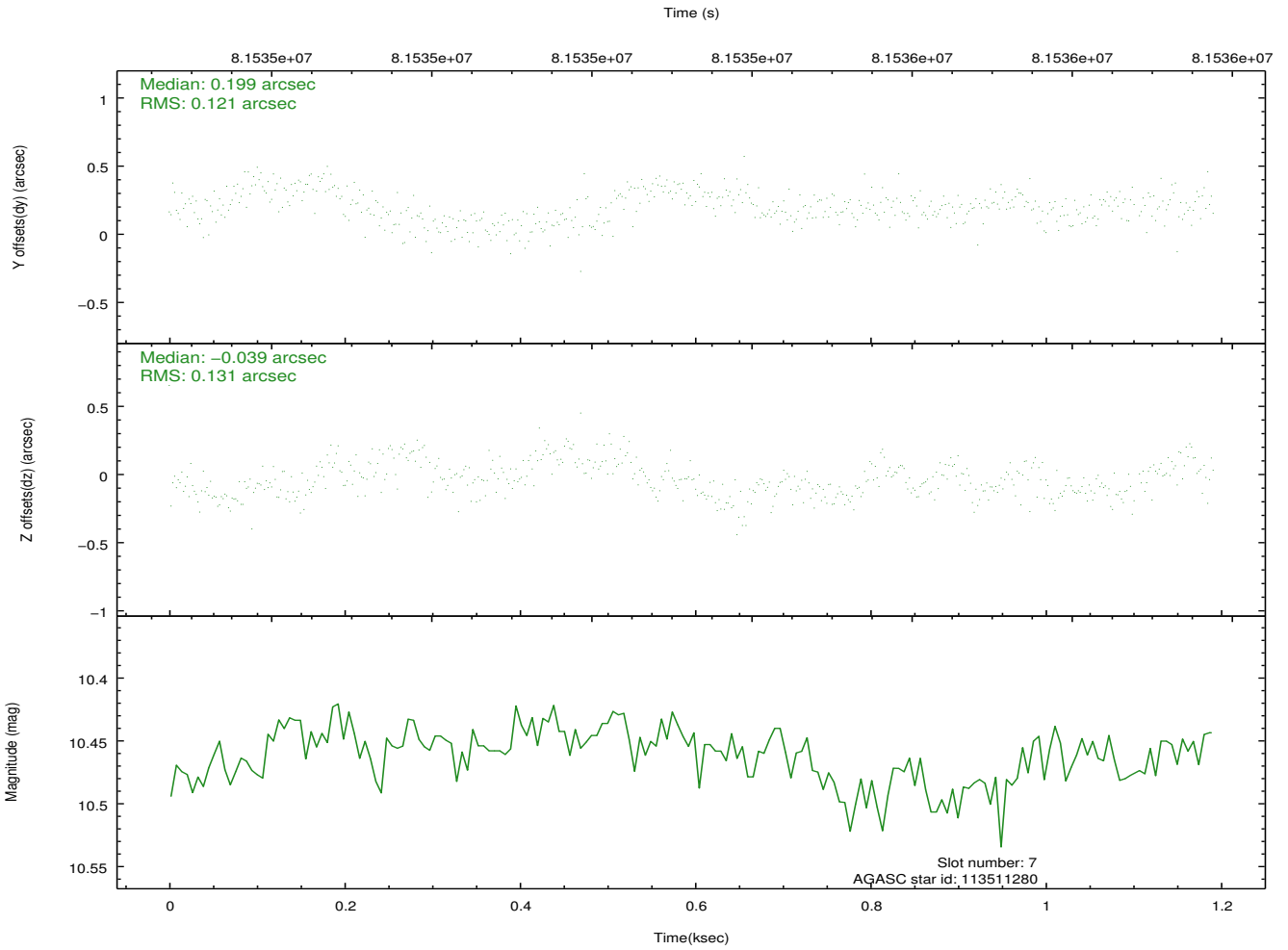
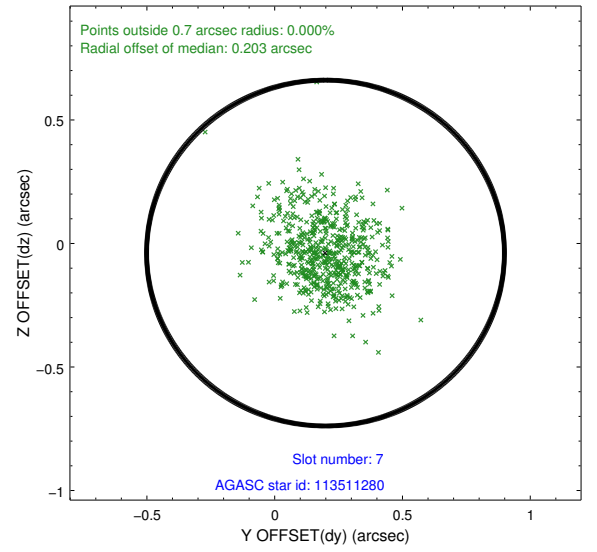
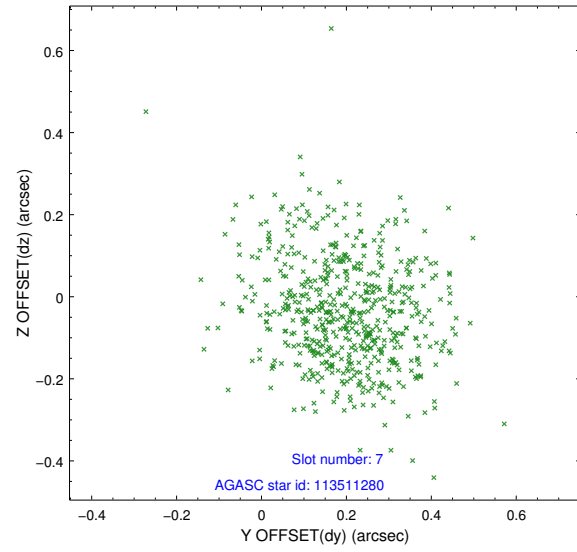
## 2.4.2 Slot 4



### 2.4.3 Slot 6

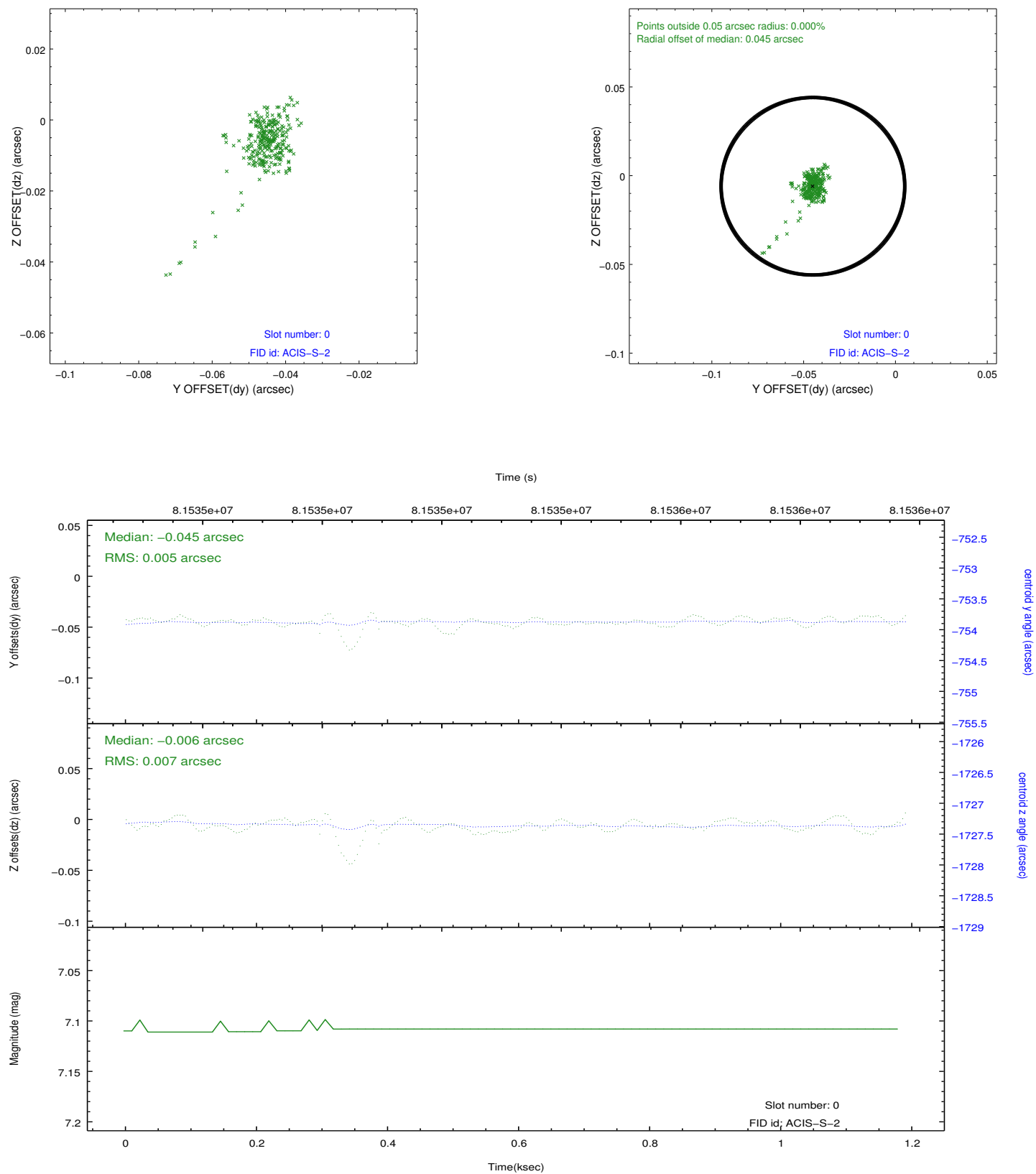


## 2.4.4 Slot 7

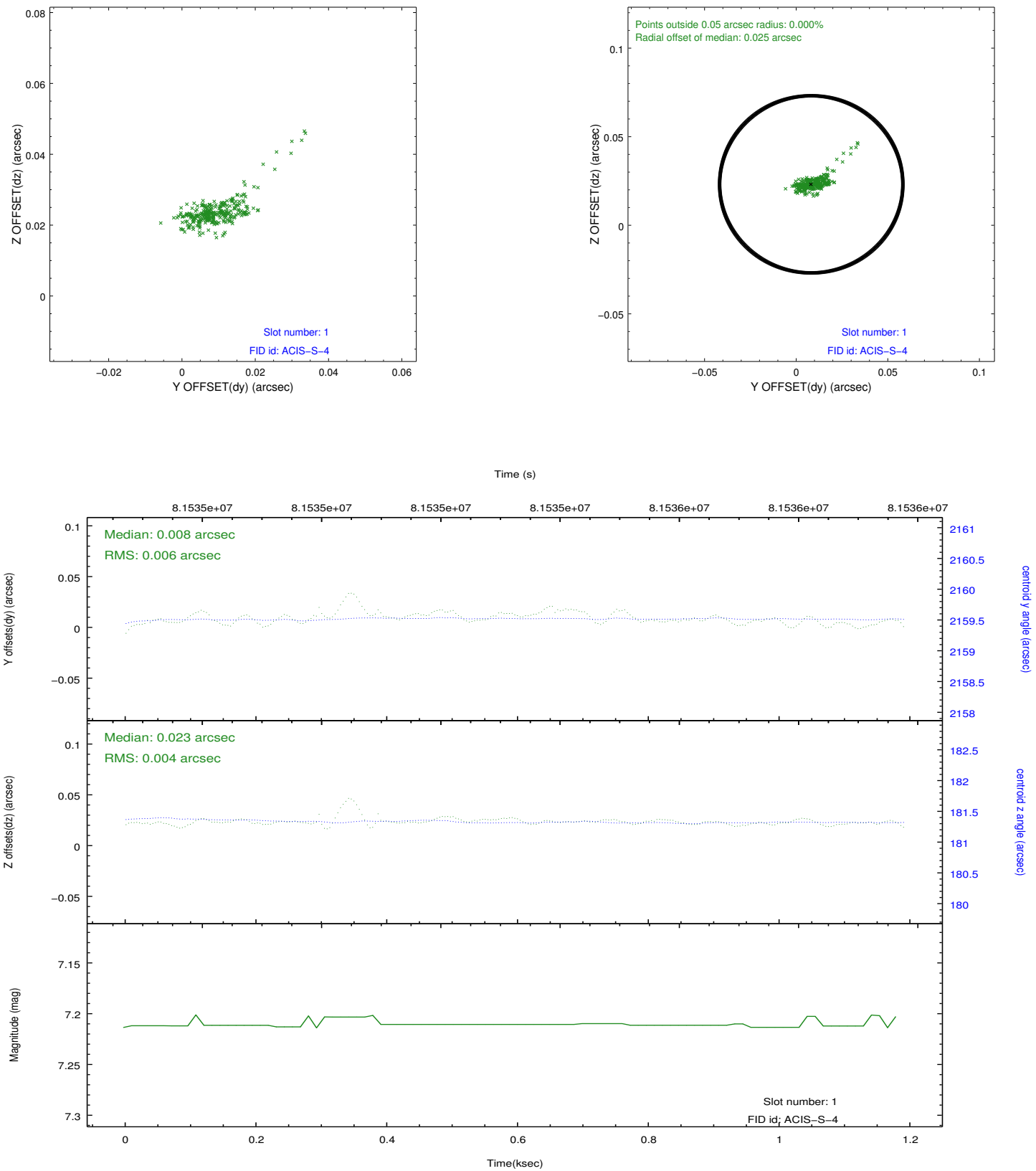


## 2.5 FID Slots

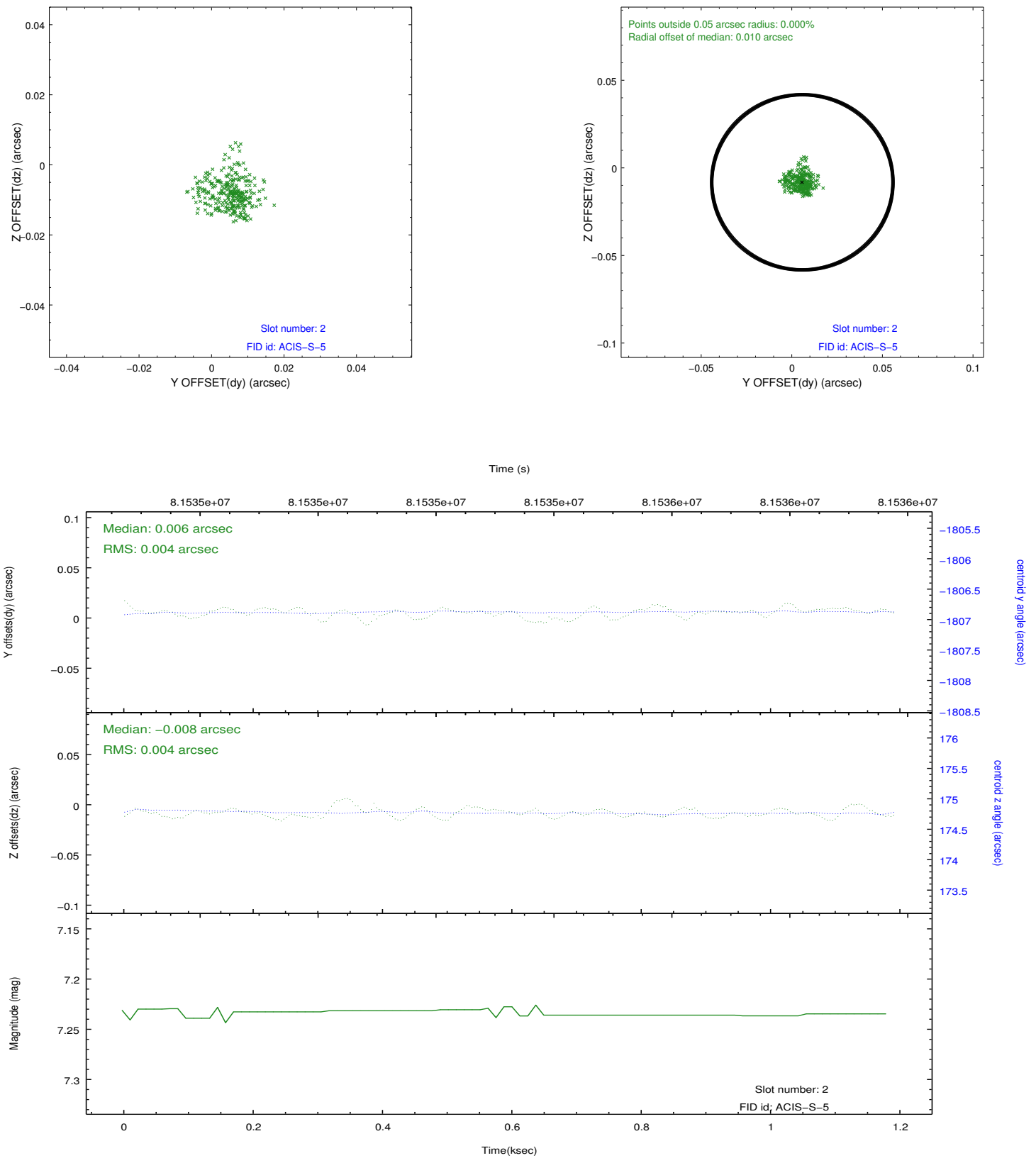
### 2.5.1 Slot 0



## 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)	2012.09.19
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.193

## A.2 Comments

Window preference met.

The guide star in slot 5 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.