

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 1312 - L2 Version 4  
Chandra X-Ray Center

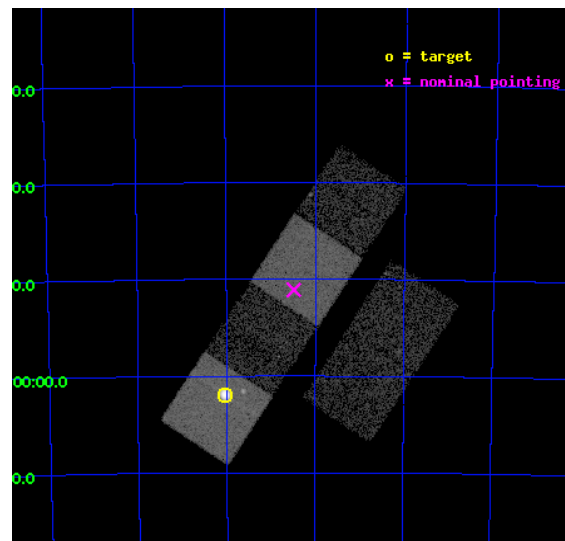
L2 Processing Date : Oct 1 2012

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# 1 Front

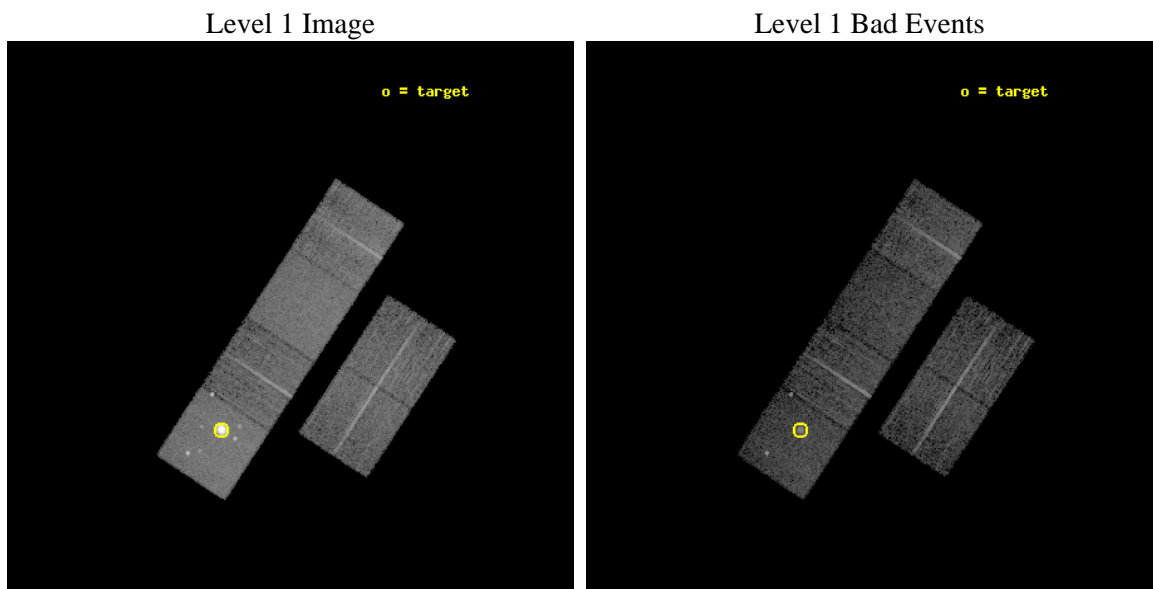
seq_num	590126	Sequence number
obs_id	1312	Observation id
title	ACIS CALIBRATION OBSERVATION OF THE SUPERNOVA REMNANT E0102-72 (DEC 2000)	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72.3 [Chip S1, T=120, Offsets=-13,0,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.620068551368	Nominal RA [deg]
dec_nom	-71.851463301954	Nominal Dec [deg]
roll_nom	303.29670594132	Nominal Roll [deg]
revision	4	Processing version of data
ontime	7756.8000072092	Sum of GTIs [s]
livetime	7658.5787349337	Livetime [s]
ontime2	7756.8000072092	Sum of GTIs [s]
ontime3	7756.8000072092	Sum of GTIs [s]
ontime5	7756.8000072092	Sum of GTIs [s]
ontime6	7756.8000072092	Sum of GTIs [s]
ontime7	7756.8000072092	Sum of GTIs [s]
ontime8	7753.5590668768	Sum of GTIs [s]
l2events	133813	Number of level 2 events



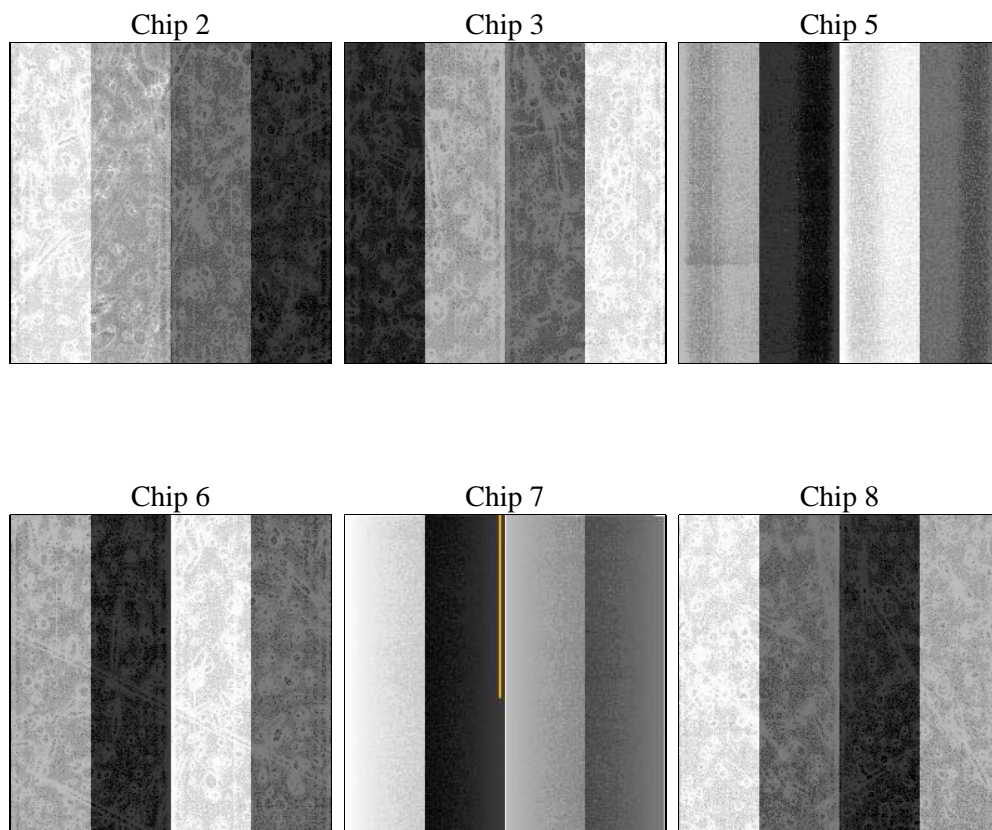
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	8000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7756.8000072092	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime2	7756.8000072092	Sum of GTIs [s]
date	2012-10-01T22:00:50	Date and time of file creation	ontime3	7756.8000072092	Sum of GTIs [s]
revision	4	Processing version of data	ontime5	7756.8000072092	Sum of GTIs [s]
			ontime6	7756.8000072092	Sum of GTIs [s]
			ontime7	7756.8000072092	Sum of GTIs [s]
			ontime8	7753.5590668768	Sum of GTIs [s]
			l1events	390006	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	45836	45918	128762	46476	62773	60241	grade 0 events	2445	2440	32476	2492	3271	3761
rejected events	40421	40540	37095	40900	33878	48223		5%	5%	25%	5%	5%	6%
rejected %	88%	88%	28%	88%	53%	80%	grade 1 events	25	18	577	16	51	35
								0%	0%	0%	0%	0%	0%
							grade 2 events	1107	1003	25178	1057	5662	2517
								2%	2%	19%	2%	9%	4%
							grade 3 events	502	520	6586	546	2665	1332
								1%	1%	5%	1%	4%	2%
							grade 4 events	444	491	6557	497	2621	1208
								0%	1%	5%	1%	4%	2%
							grade 5 events	1558	1732	5762	1890	5639	2417
								3%	3%	4%	4%	8%	4%
							grade 6 events	920	927	20987	992	14713	3204
								2%	2%	16%	2%	23%	5%
							grade 7 events	38835	38787	30639	38986	28151	45767
								84%	84%	23%	83%	44%	75%

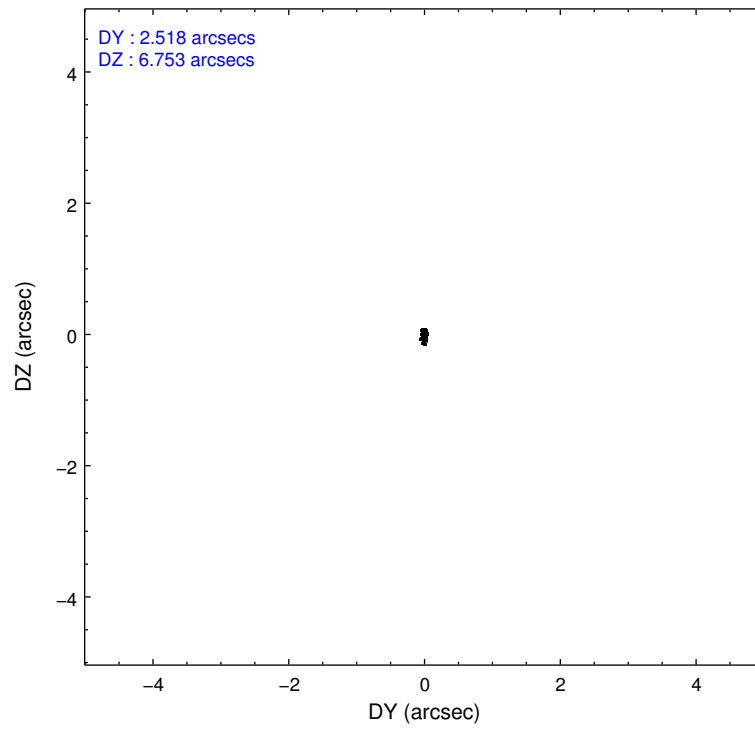
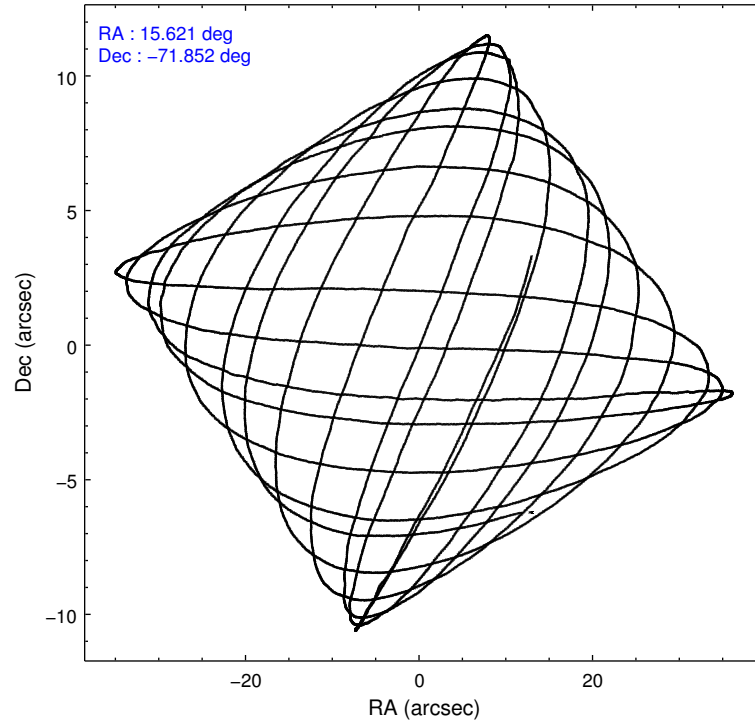


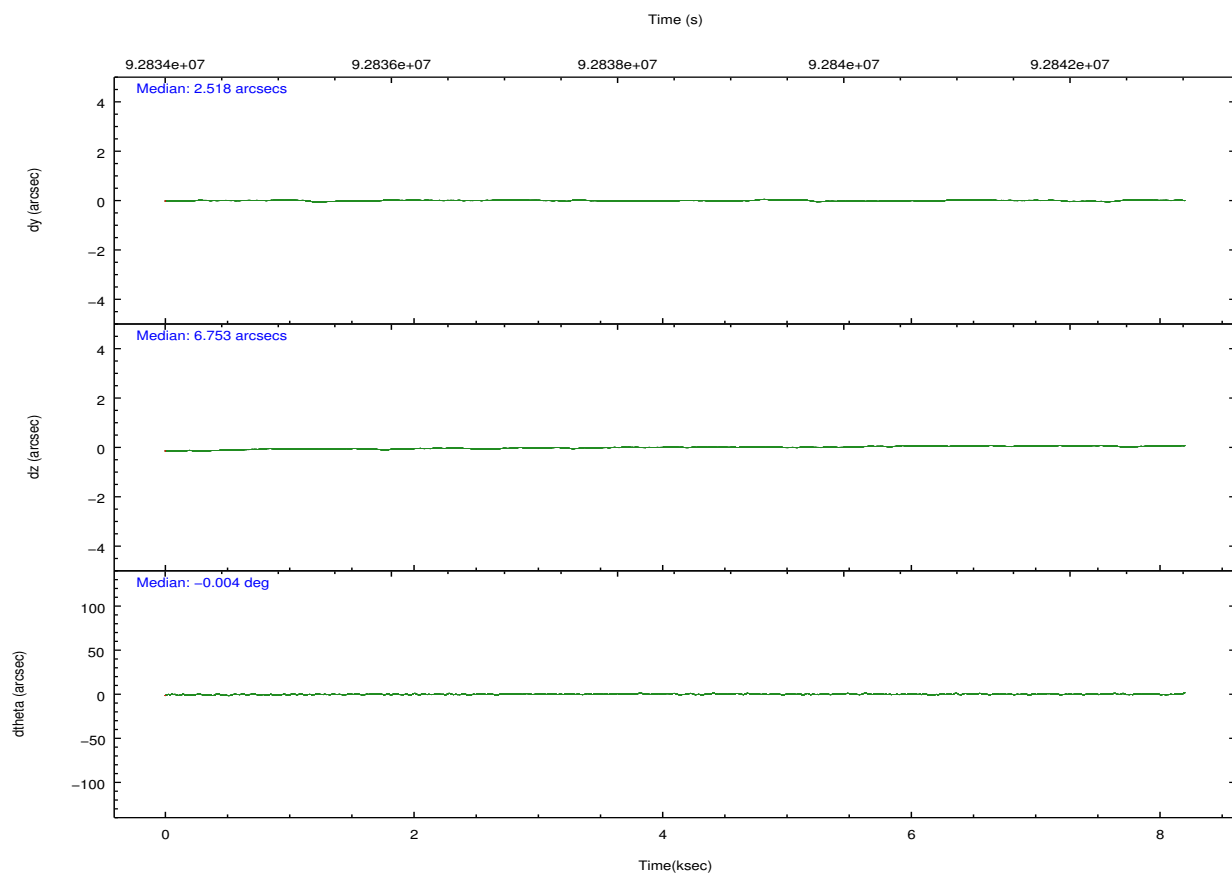
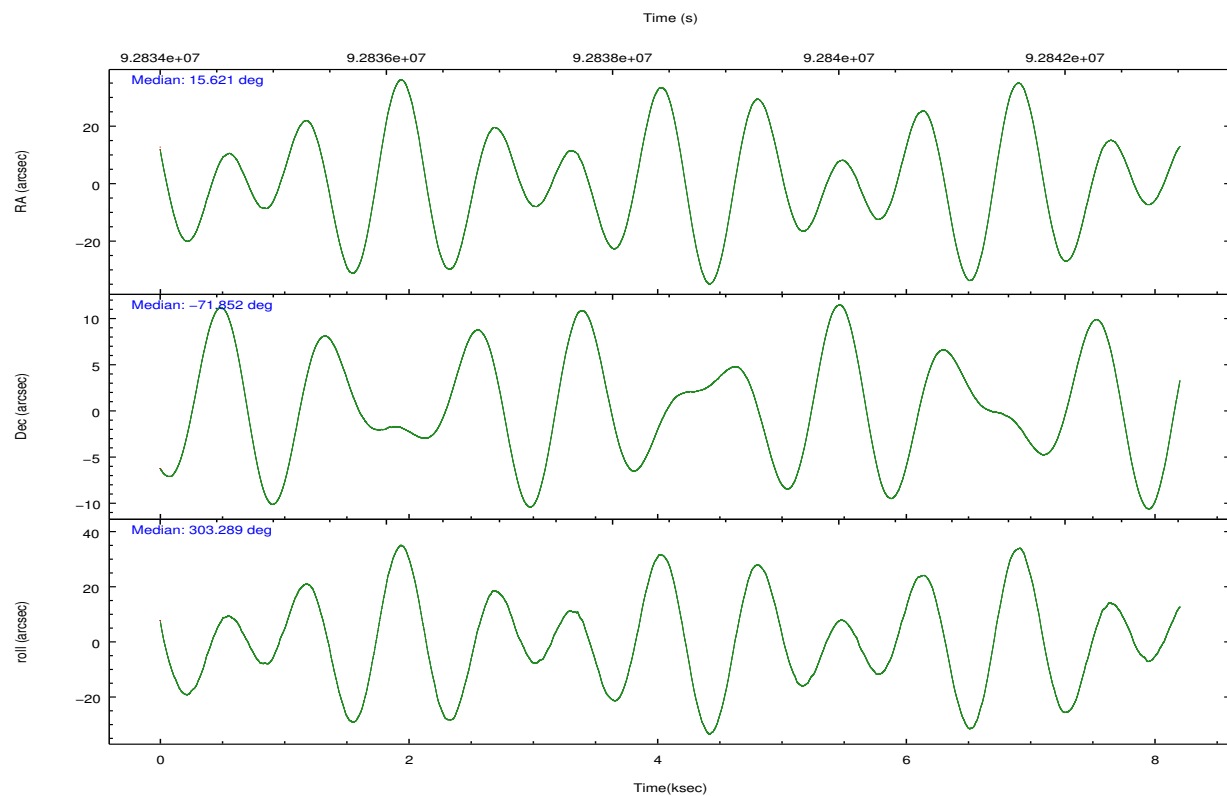
## 2.2 Compared Parameters

Parameter	Planned	Actual
Instrument	ACIS	ACIS
Detector	ACIS-235678	ACIS-235678
Grating	NONE	NONE
Data mode	FAINT	FAINT
Observation mode	POINTING	POINTING
[deg] Pointing RA	15.541475	15.62006855136799
[deg] Pointing Dec	-71.839299	-71.85146330195377
[deg] Pointing Roll	303.065402	303.2967059413239
[s] Window start time (MET)	92016064.184000	92016064.184000
[s] Window stop time (MET)	94608064.184000	94608064.184000
[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)	92834608.184000	92834231.68010201
Observation start date	2000-12-10T11:22:24	2000-12-10T11:17:11
[s] Observation end time (MET)	92842608.184000	92842742.255427
Observation end date	2000-12-10T13:35:44	2000-12-10T13:39:02
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



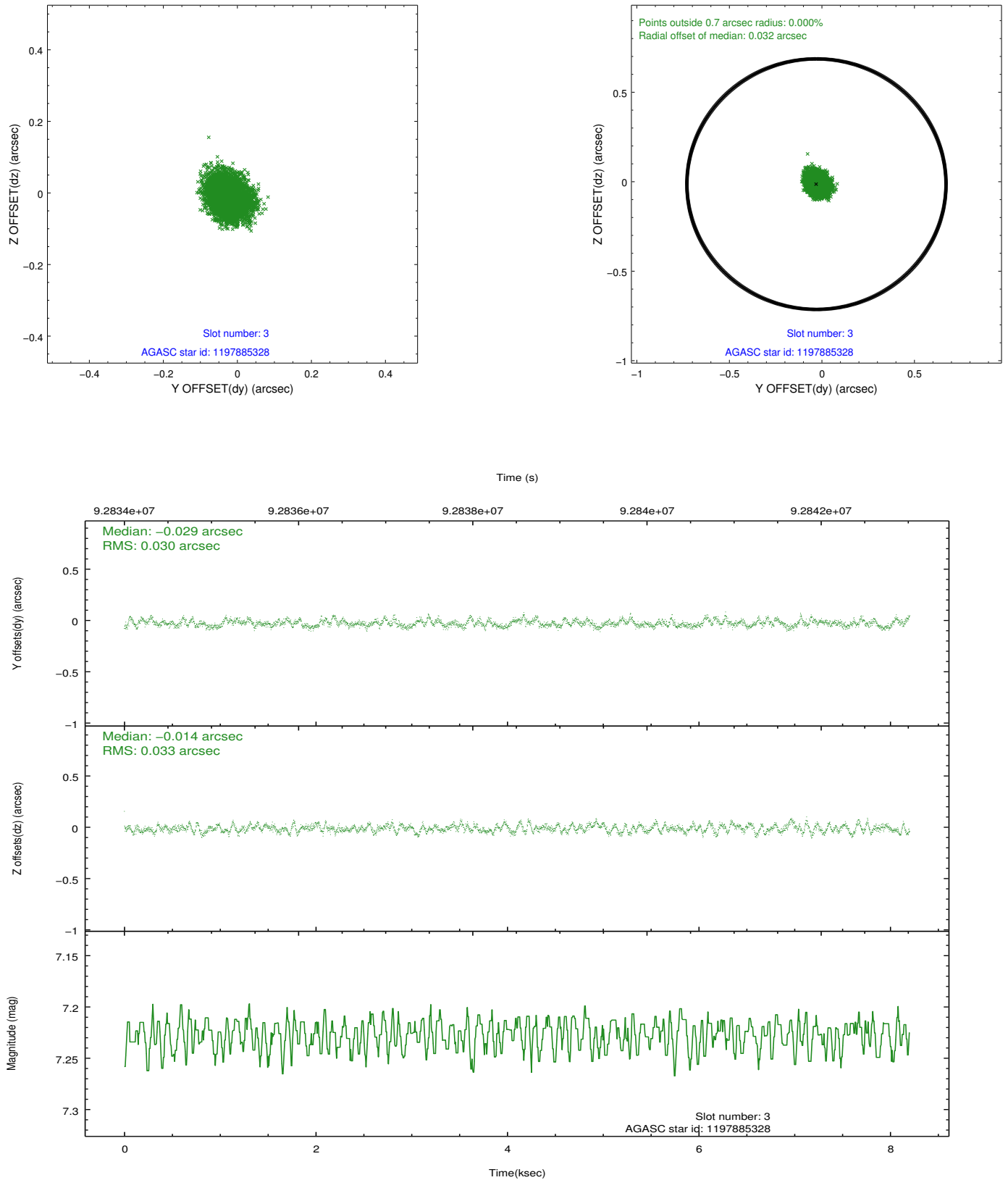


### Slot Statistics

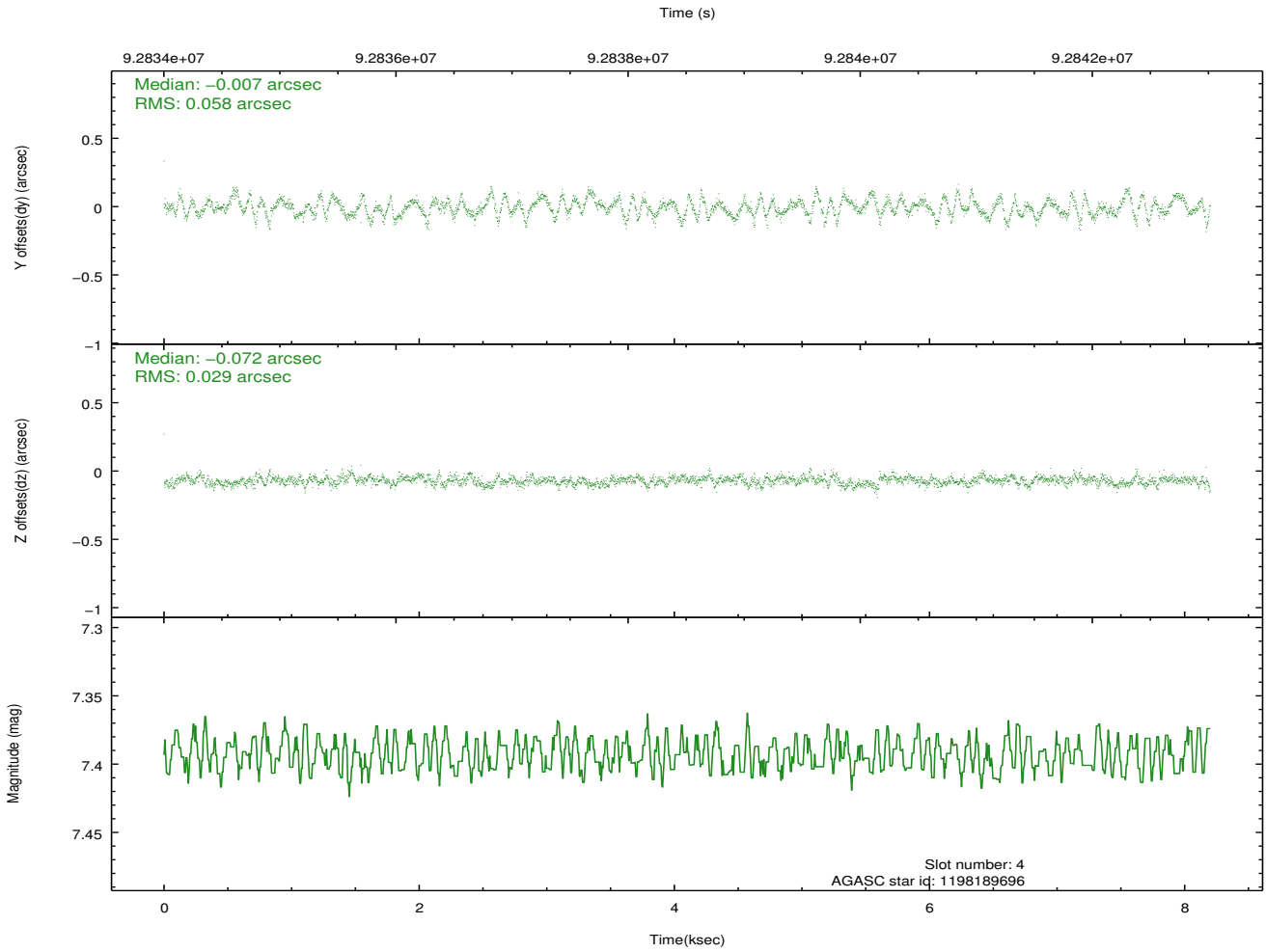
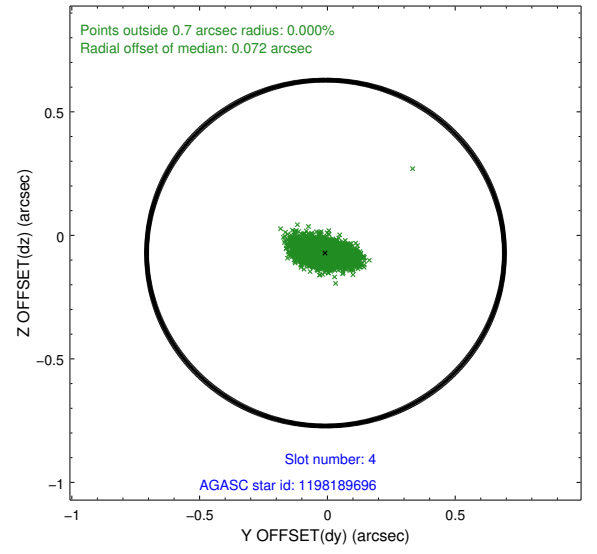
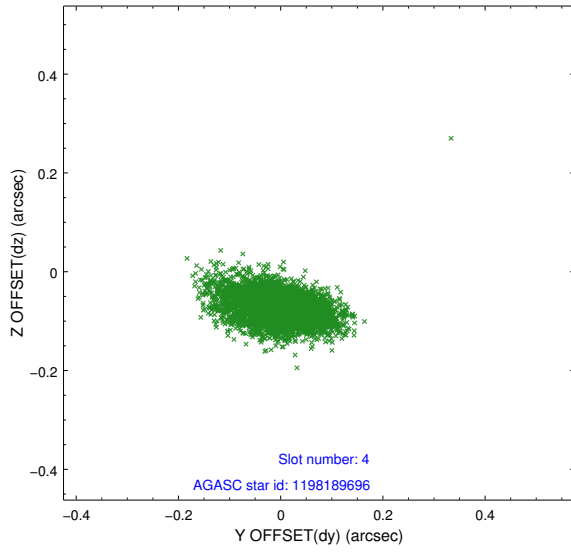
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.12	2001	-0.008	-0.020	0.006	0.011	0.000000	0.000000	-755.15	-1727.92
1	FID	ACIS-S-4	7.20	2000	0.004	-0.015	0.006	0.010	0.000000	0.000000	2157.83	179.87
2	FID	ACIS-S-6	7.35	2000	-0.024	0.042	0.006	0.011	0.000000	0.000000	407.69	818.09
3	GUIDE	1197885328	7.23	4000	-0.029	-0.014	0.048	0.076	16.283090	-71.733943	142.33	905.27
4	GUIDE	1198189696	7.39	4001	-0.007	-0.072	0.065	0.117	15.223750	-72.697522	2404.24	-1971.09
5	GUIDE	1197750936	7.56	4002	-0.092	-0.035	0.050	0.081	15.387940	-71.549550	-969.46	421.49
6	GUIDE	1197884536	8.50	4002	0.056	0.055	0.057	0.092	17.160729	-71.835289	998.83	1517.43
7	GUIDE	1197884712	8.31	4000	0.072	0.064	0.055	0.090	16.087398	-72.252690	1576.15	-310.97

## 2.4 Star Slots

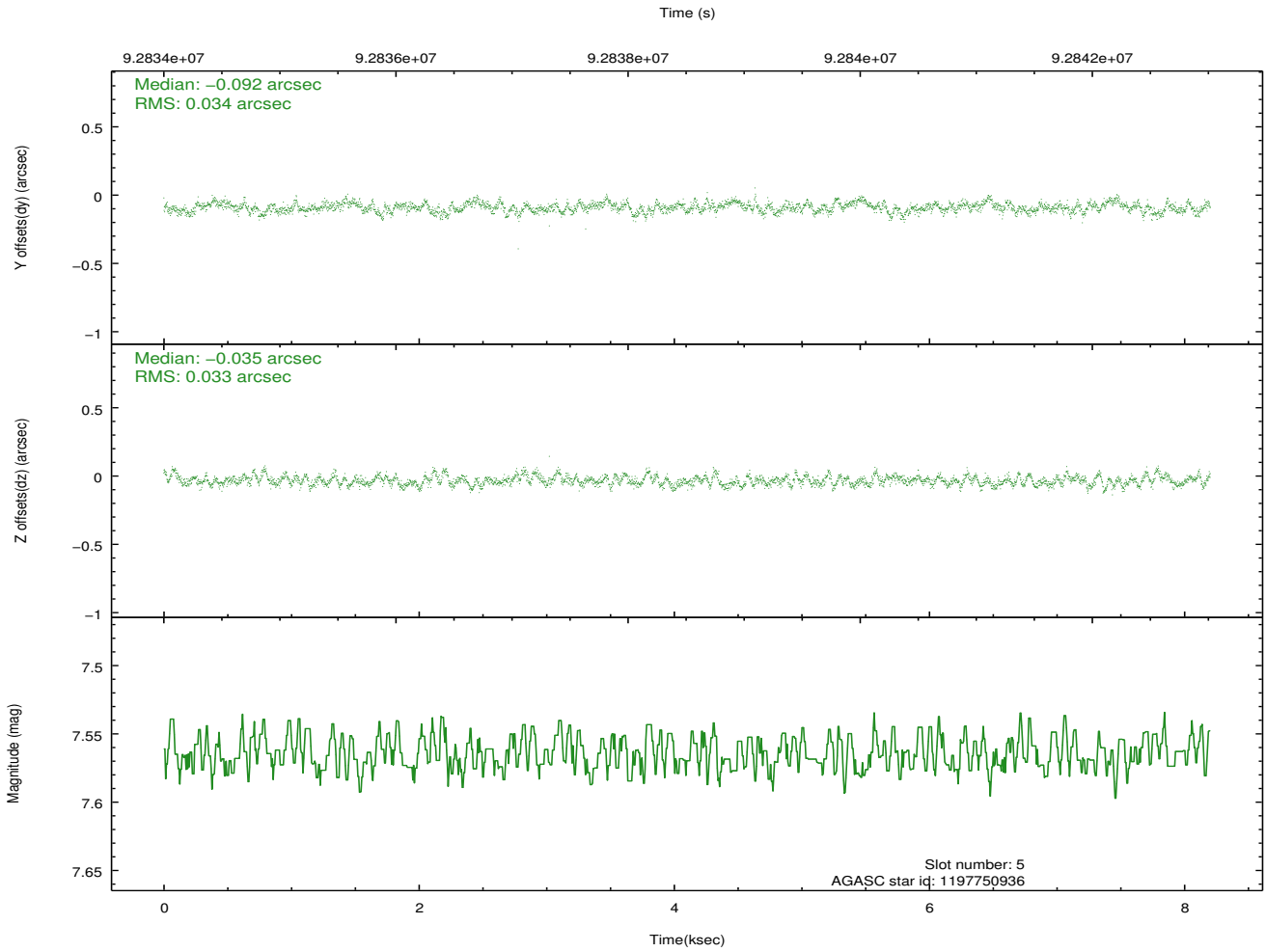
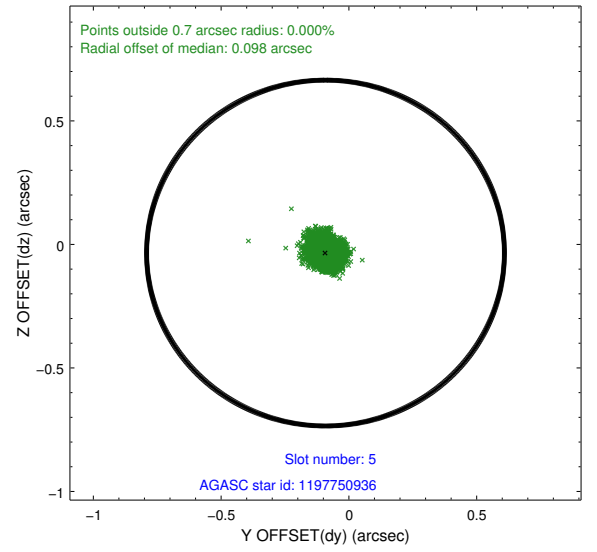
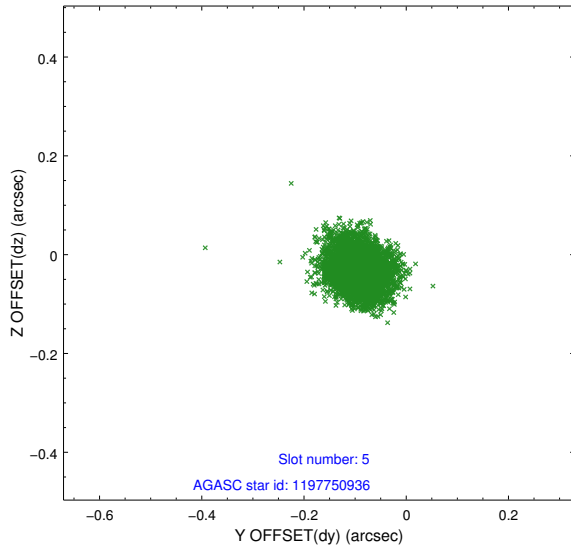
### 2.4.1 Slot 3



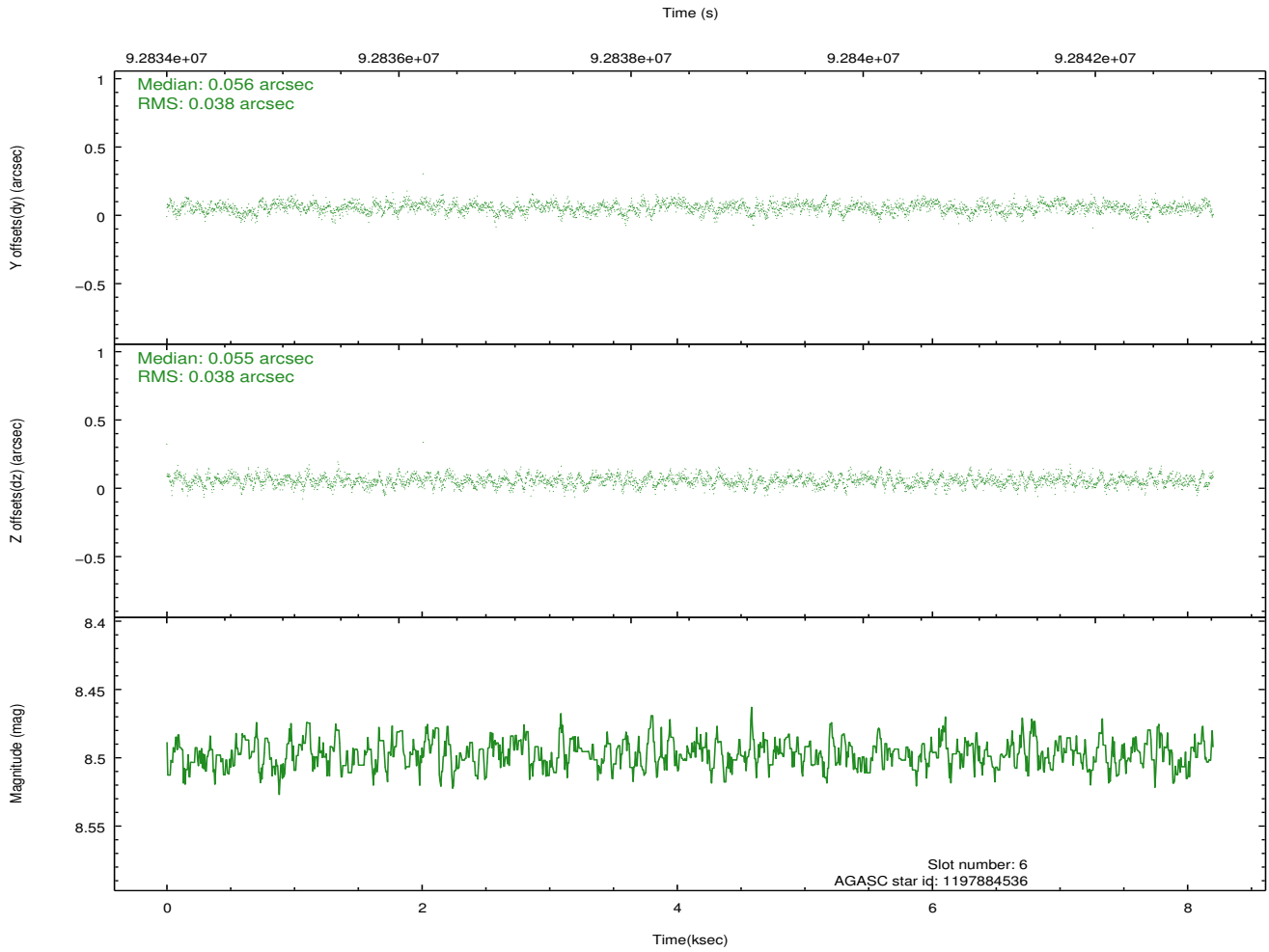
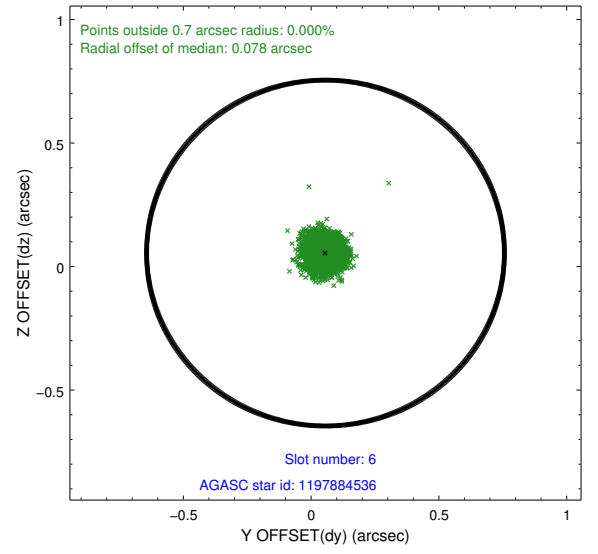
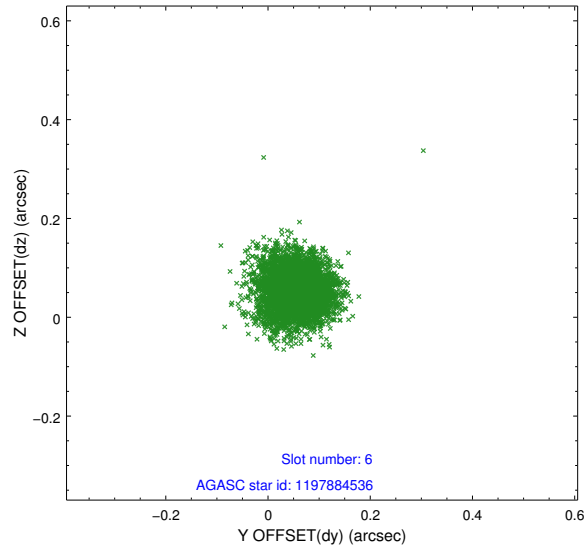
## 2.4.2 Slot 4



### 2.4.3 Slot 5

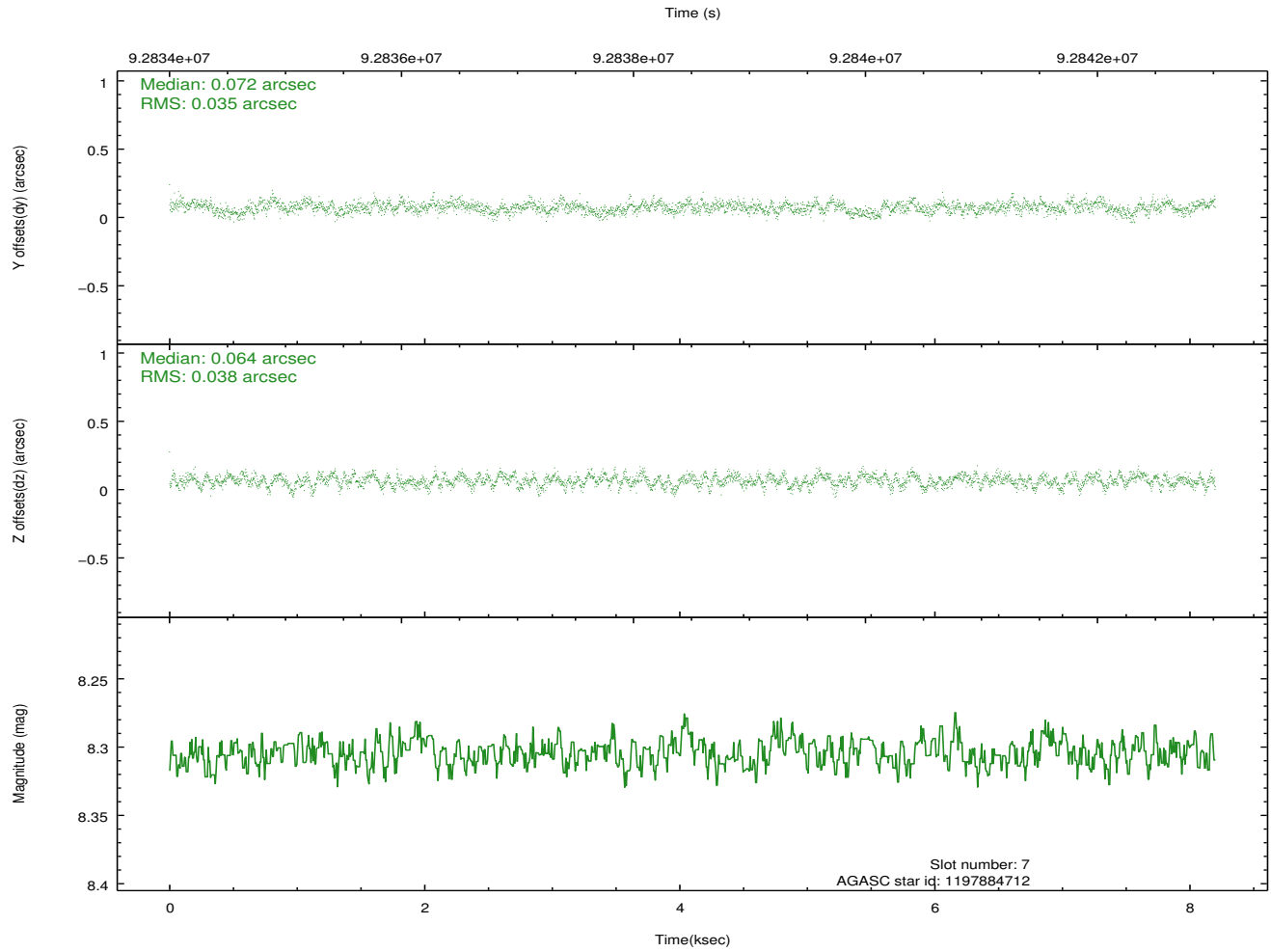
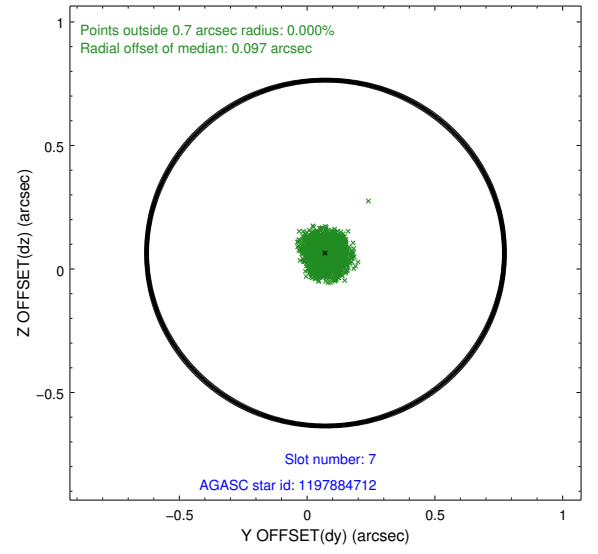
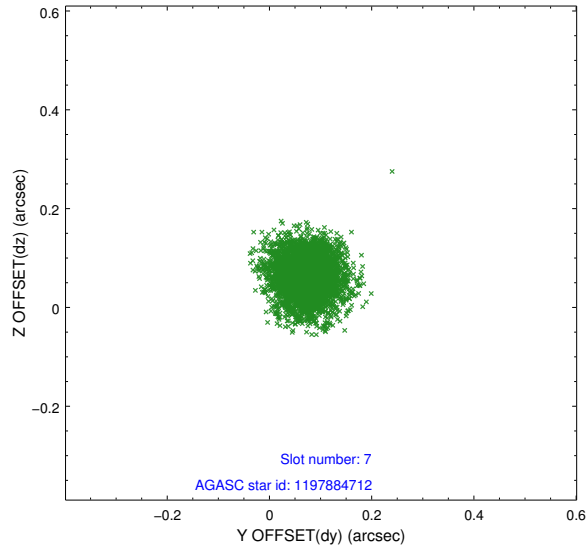


## 2.4.4 Slot 6



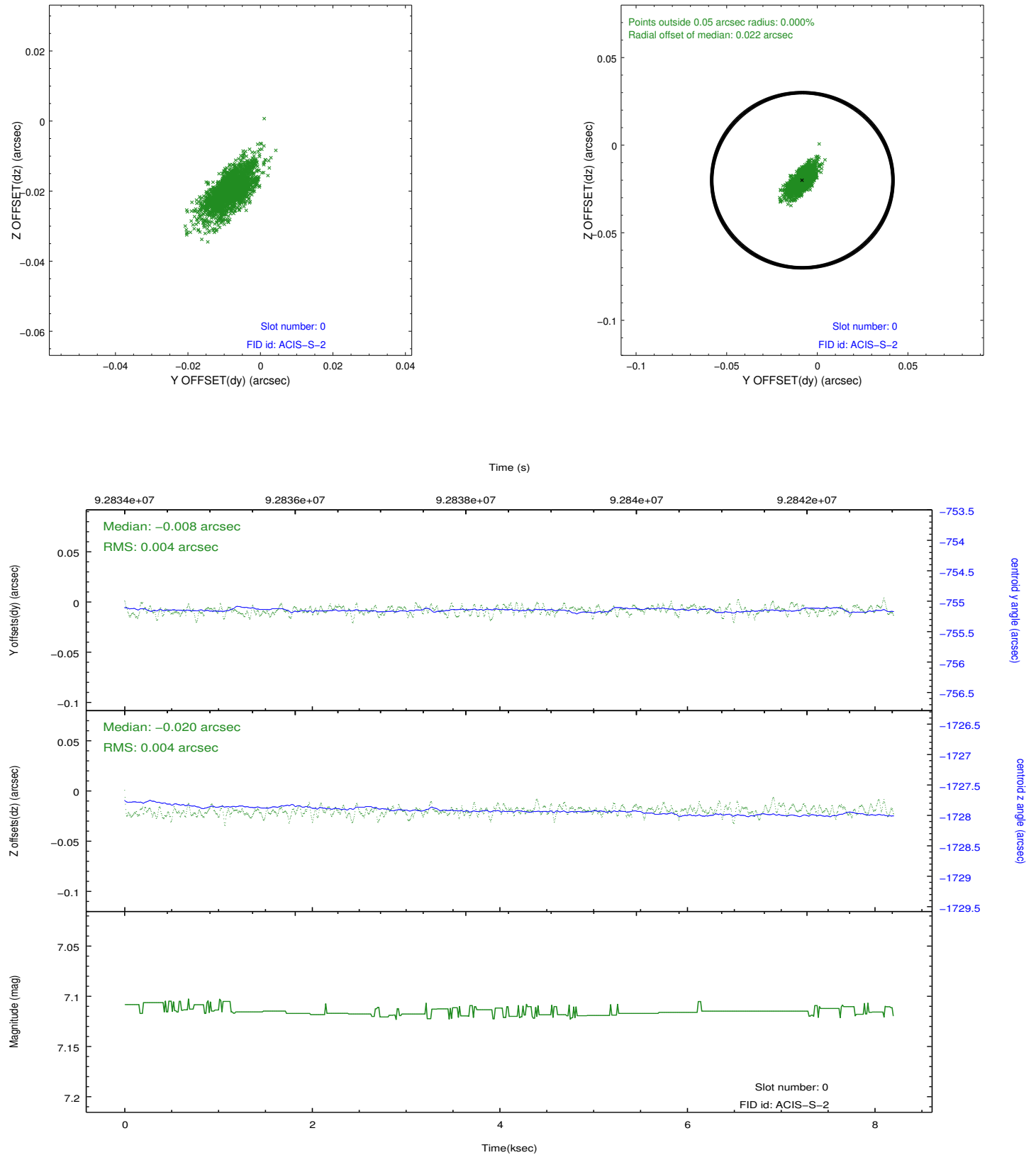


## 2.4.5 Slot 7

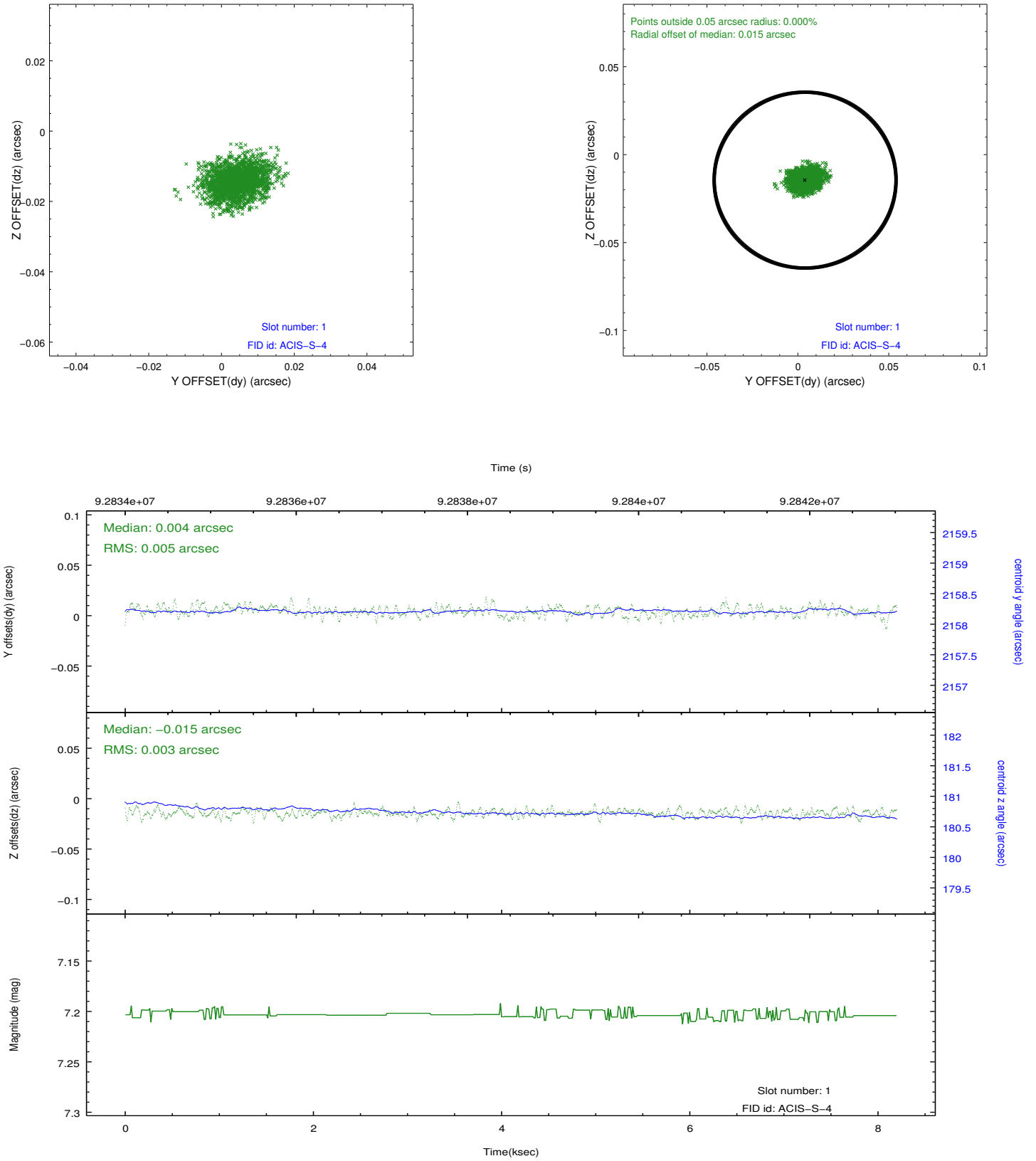


## 2.5 FID Slots

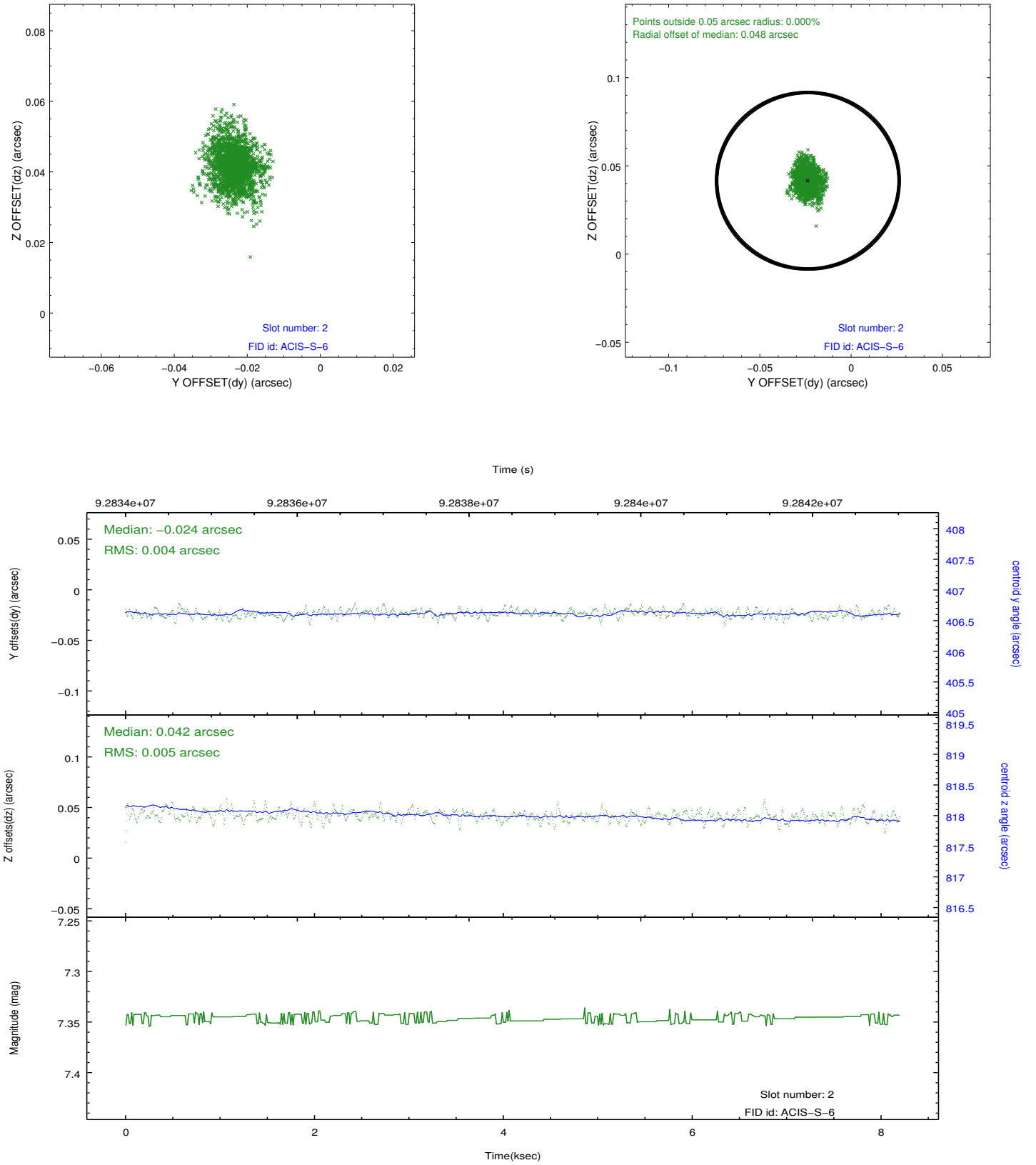
### 2.5.1 Slot 0



## 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)	2012.10.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	6.6

## A.2 Comments

Charge time for this ObsId remains at original value of 6.600 ksec, although with the current processing the charge time would have been 7.757 ksec. There are 2 observations with the obsid number 1312. They appear in separate spacecraft loads with these duplicate numbers. Because the 2 obsids used different instrument configurations, the telemetry file of the other obsid 1312 was edited to create a new obsid number, obsid 62865. This obsid retains the 1312 designation.