

# V&V Reference Report

## L2 ASCDS Version : 8.5.1.1

Observation 14908 - L2 Version 2  
Chandra X-Ray Center

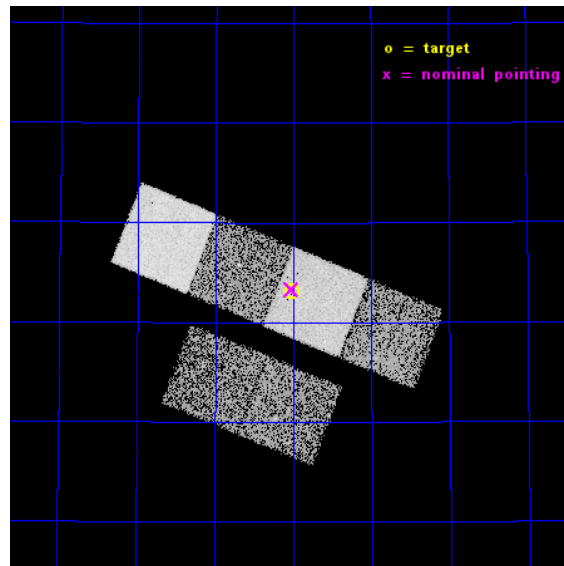
L2 Processing Date : Nov 30 2014

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# 1 Front

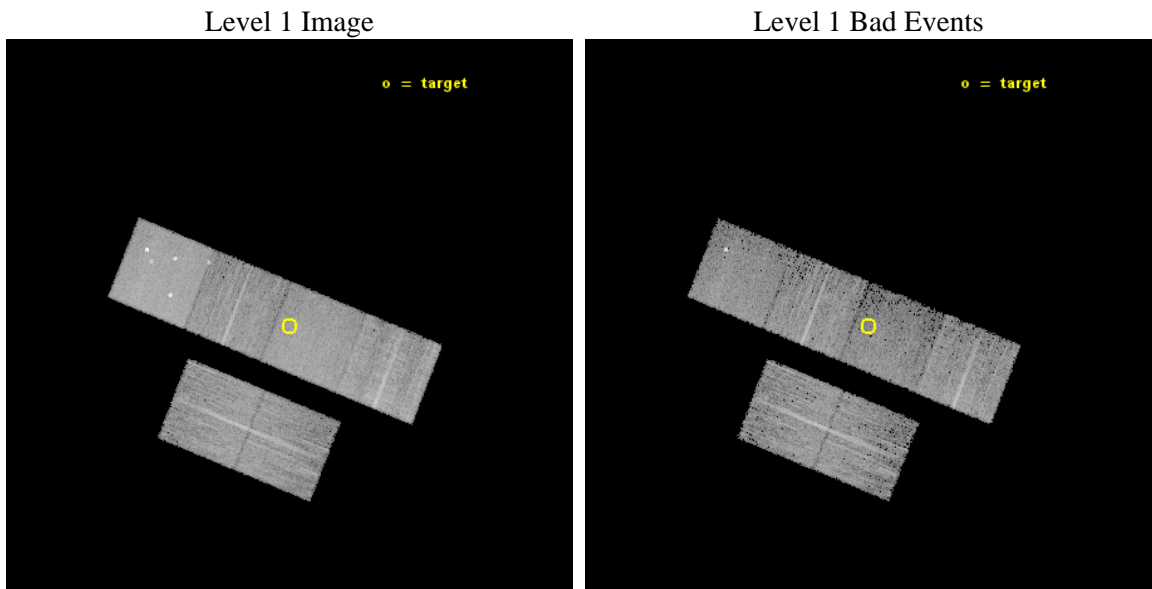
seq_num	601038	Sequence number
obs_id	14908	Observation id
title	The Origin of Elevated X-ray Emission in Strong Halpha Emitting Galaxies	Proposal title
observer	Dr. Ranga Ram Chary	Principal investigator
object	HAE 291	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	263.755	Observer's specified target RA [deg]
dec_targ	57.052389	Observer's specified target Dec [deg]
ra_nom	263.75602765355	Nominal RA [deg]
dec_nom	57.05536070165	Nominal Dec [deg]
roll_nom	21.952363586028	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10470.399961054	Sum of GTIs [s]
livetime	10337.81745223	Livetime [s]
ontime2	10470.399961054	Sum of GTIs [s]
ontime3	10470.399961054	Sum of GTIs [s]
ontime5	10470.399961054	Sum of GTIs [s]
ontime6	10470.399961054	Sum of GTIs [s]
ontime7	10470.399961054	Sum of GTIs [s]
ontime8	10467.158990741	Sum of GTIs [s]
l2events	87940	Number of level 2 events



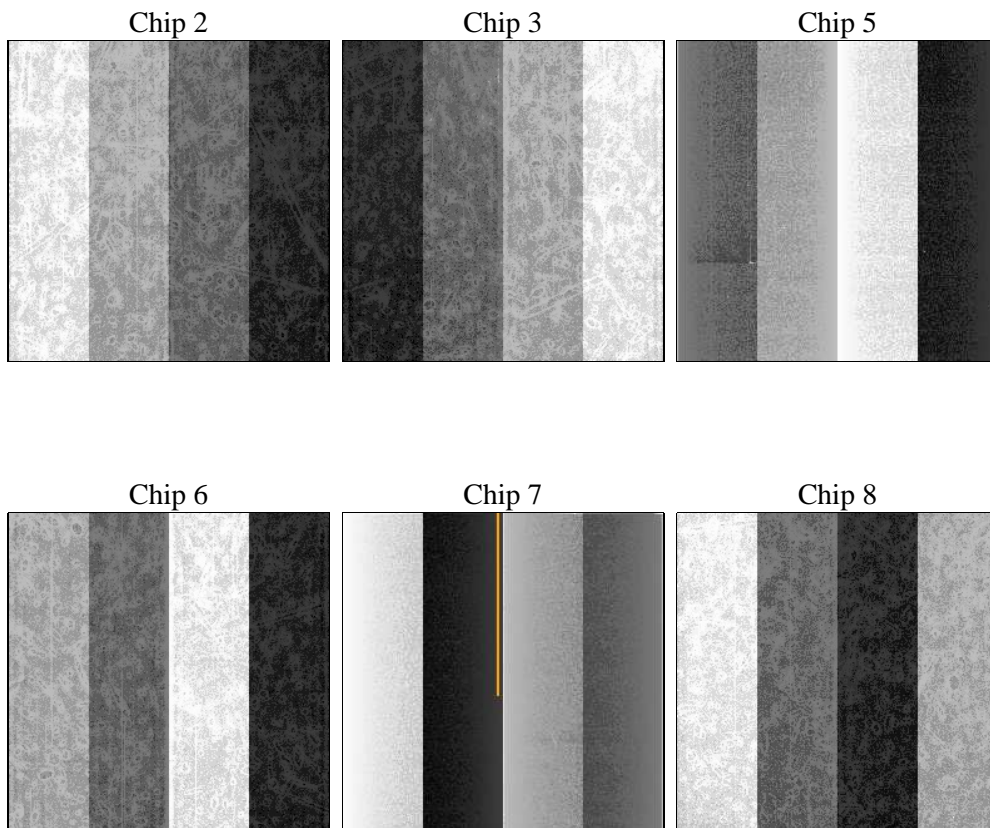
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10503.549000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	10470.399961054	Sum of GTIs [s]
caldsver	4.6.4	&#160	ontime2	10470.399961054	Sum of GTIs [s]
date	2014-11-30T22:16:12	Date and time of file creation	ontime3	10470.399961054	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	10470.399961054	Sum of GTIs [s]
			ontime6	10470.399961054	Sum of GTIs [s]
			ontime7	10470.399961054	Sum of GTIs [s]
			ontime8	10467.158990741	Sum of GTIs [s]
			l1events	366466	Number of level 1 events

### 2.1.4 Events

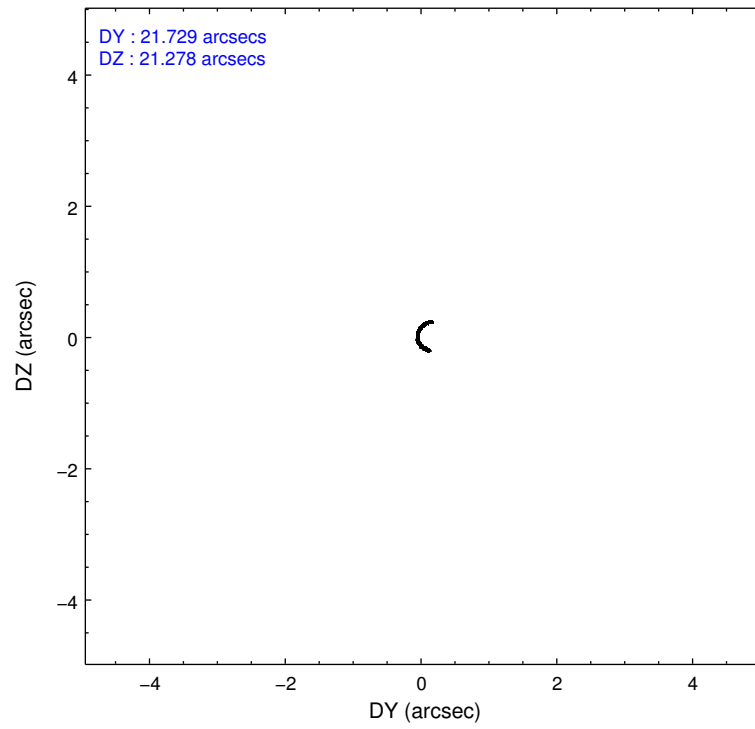
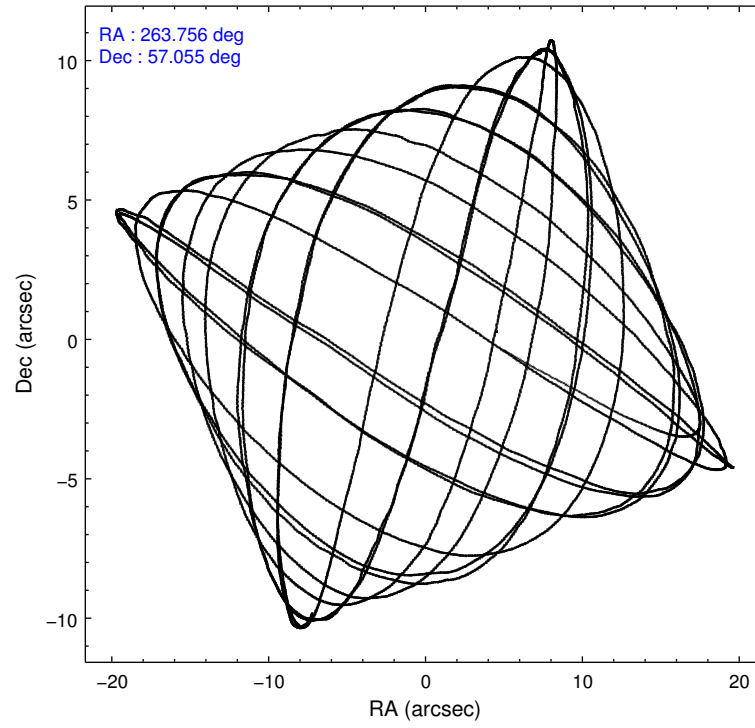
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	54797	49364	84030	50546	60517	67212	grade 0 events	2038	2073	6411	2260	2778	5155
rejected events	48987	43673	39641	44153	31842	48783		3%	4%	7%	4%	4%	7%
rejected %	89%	88%	47%	87%	52%	72%	grade 1 events	31	30	201	27	81	52
								0%	0%	0%	0%	0%	0%
							grade 2 events	1497	1254	13416	1409	6211	4512
								2%	2%	15%	2%	10%	6%
							grade 3 events	570	609	1587	705	2524	1972
								1%	1%	1%	1%	4%	2%
							grade 4 events	563	644	1516	649	2463	1829
								1%	1%	1%	1%	4%	2%
							grade 5 events	1947	2350	6322	2271	6483	3559
								3%	4%	7%	4%	10%	5%
							grade 6 events	1145	1113	21475	1372	14707	4964
								2%	2%	25%	2%	24%	7%
							grade 7 events	47006	41291	33102	41853	25270	45169
								85%	83%	39%	82%	41%	67%

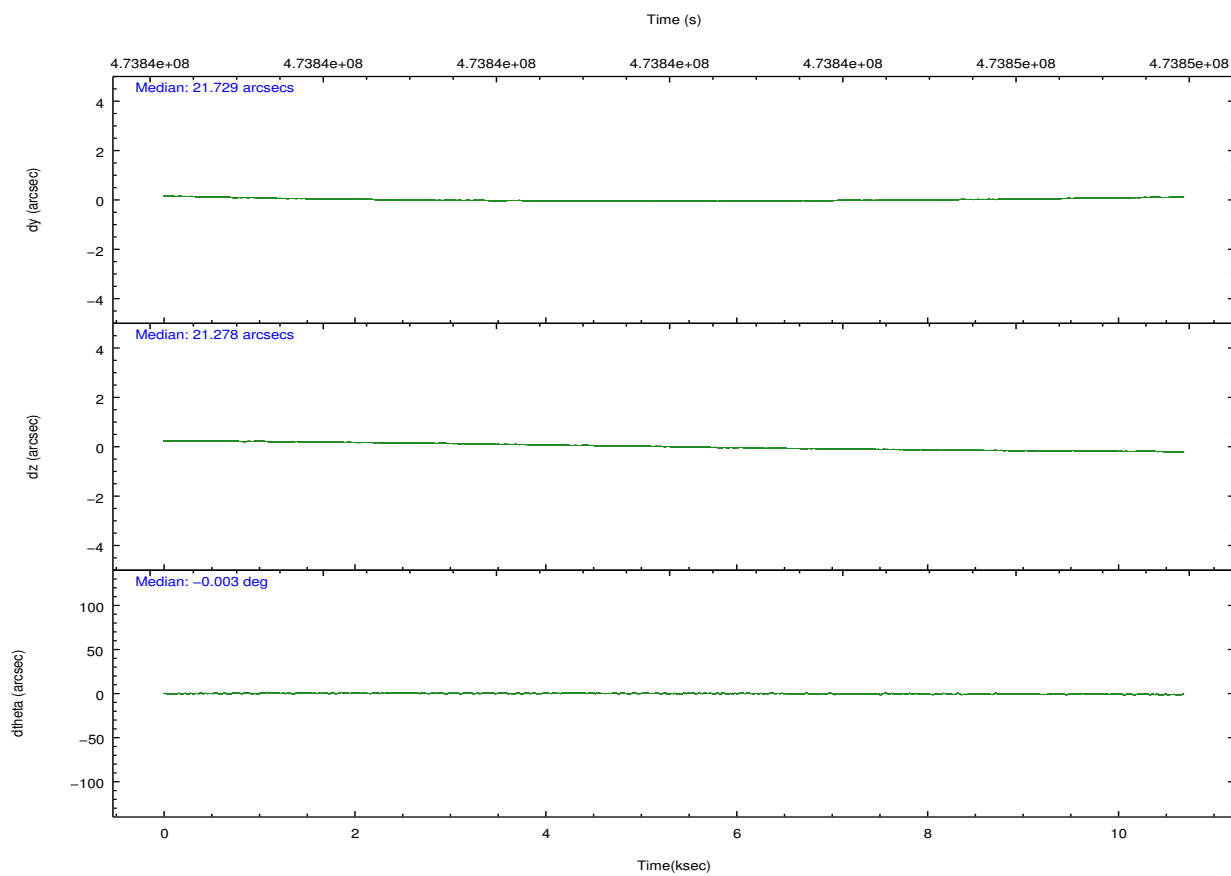
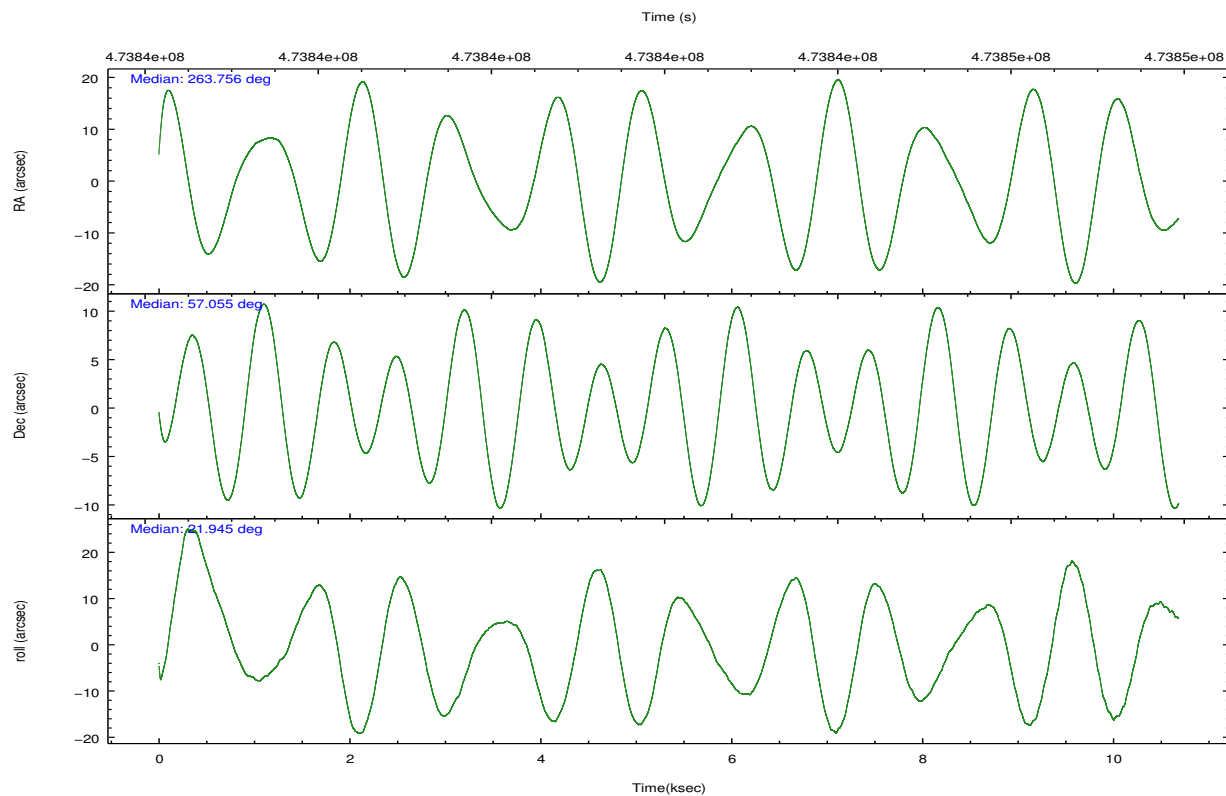


## 2.2 Compared Parameters

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	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	263.725592	263.7560276535549	CCD I2 on	Y	Y
[deg] Pointing Dec	57.033610	57.05536070164961	CCD I3 on	Y	Y
[deg] Pointing Roll	21.821293	21.95236358602776	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	473836883.184000	473835724.65299	CCD S5 on	N	N
Observation start date	2013-01-06T05:20:16	2013-01-06T05:02:04	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	473847386.184000	473847611.57863	On-chip summing requested	N	N
Observation end date	2013-01-06T08:15:19	2013-01-06T08:20:11	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

## 2.3 Aspect



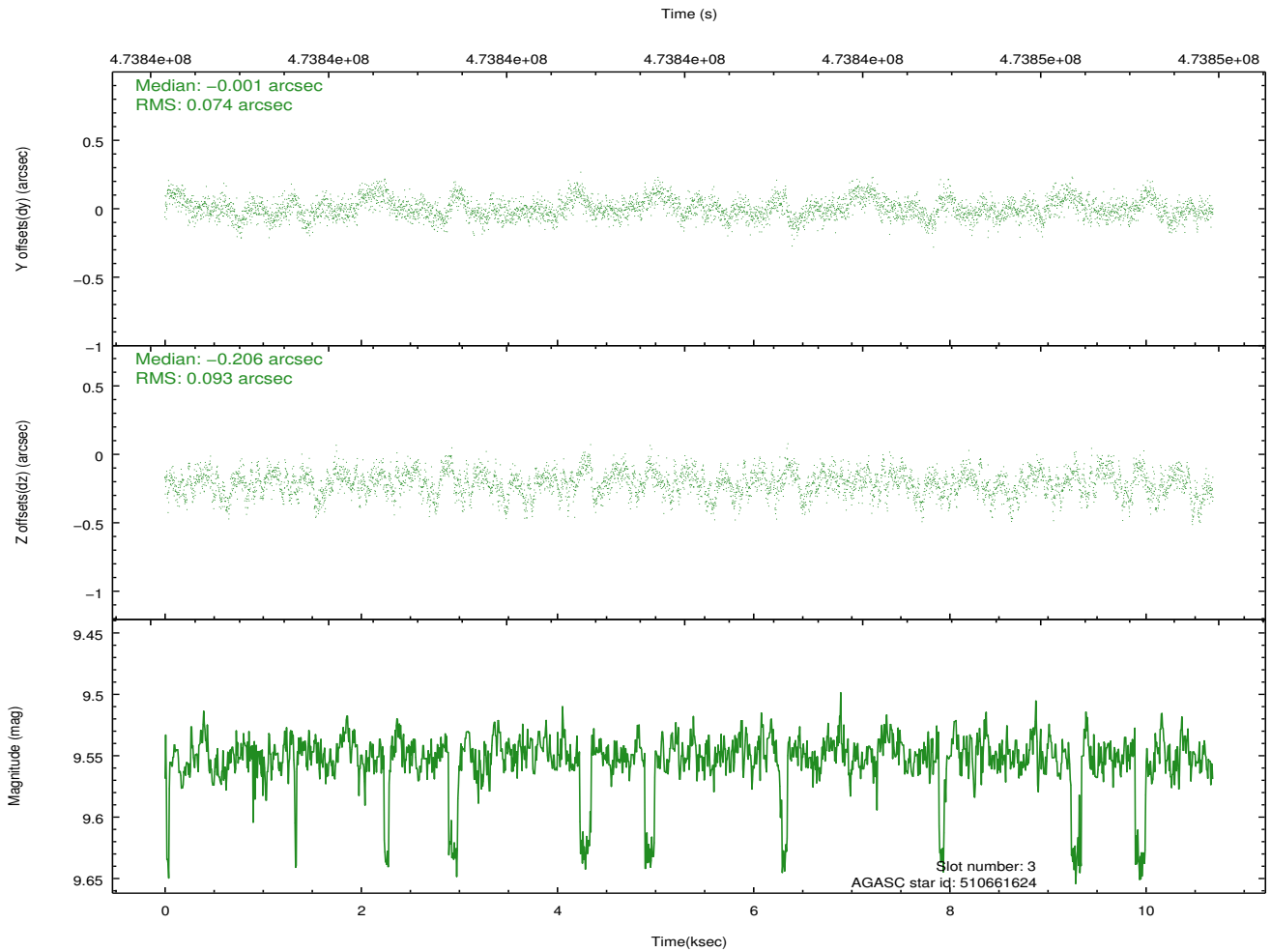
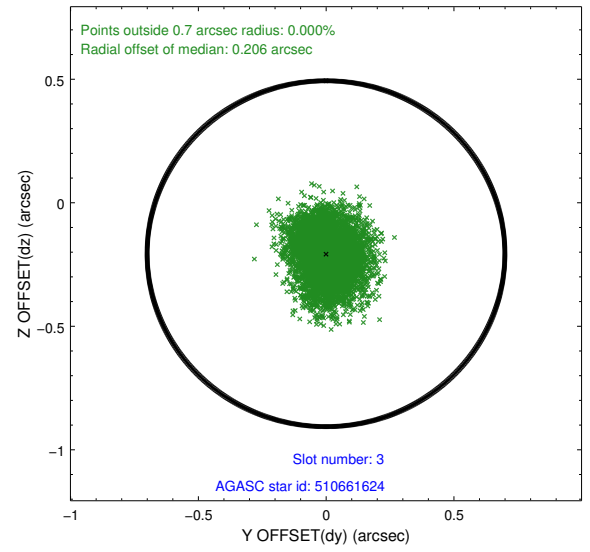
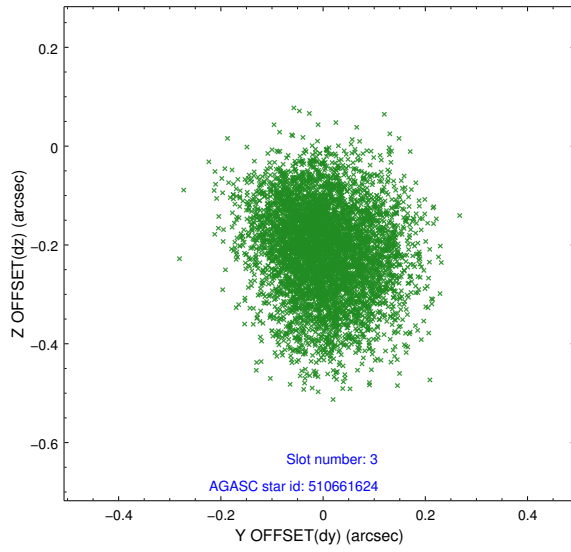


### Slot Statistics

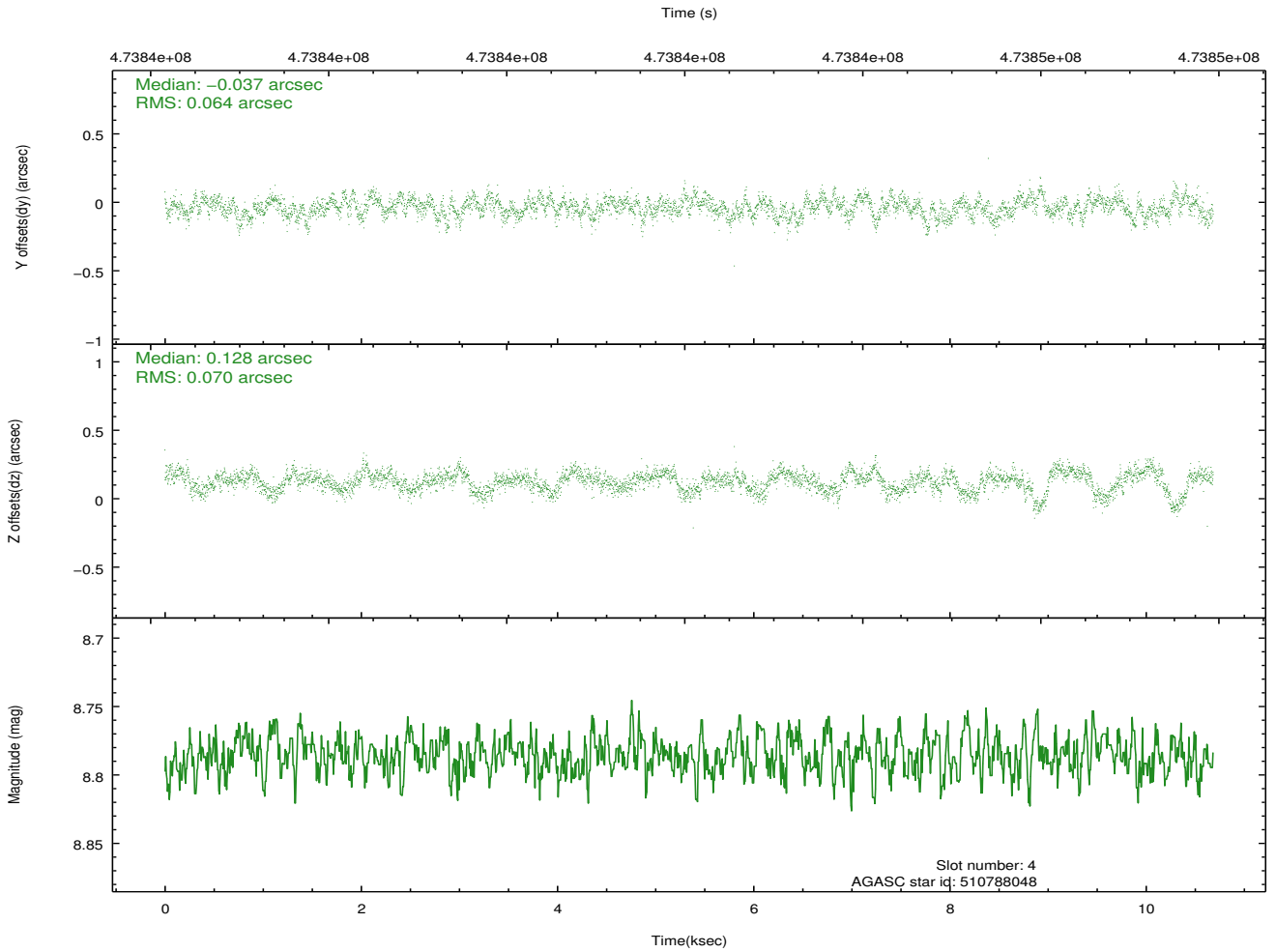
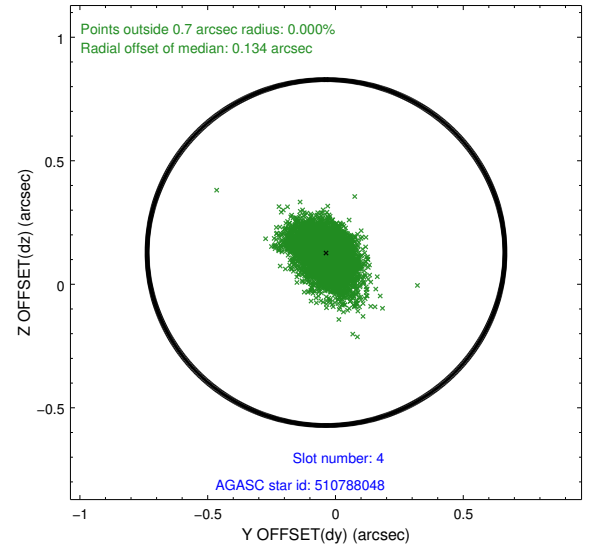
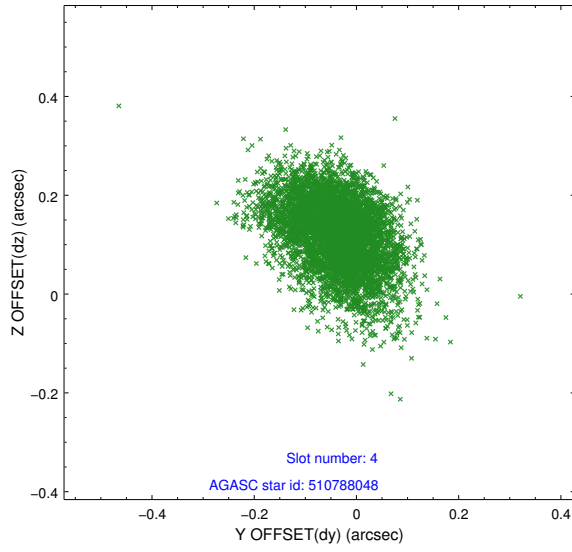
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.92	2606	-0.087	0.000	0.008	0.014	0.000000	0.000000	-775.00	-1742.77
1	FID		ACIS-S-4	7.01	2606	0.192	0.042	0.005	0.010	0.000000	0.000000	2138.35	165.21
2	FID		ACIS-S-5	7.04	2604	-0.136	-0.034	0.008	0.014	0.000000	0.000000	-1827.25	159.40
3	GUIDE	used	510661624	9.55	5194	-0.001	-0.206	0.128	0.203	263.024546	57.462519	-683.38	1944.54
4	GUIDE	used	510788048	8.79	5208	-0.037	0.128	0.098	0.164	264.654384	56.875438	1489.92	-1195.95
5	GUIDE	used	510788496	8.47	5213	-0.098	0.074	0.084	0.139	264.058795	56.694761	159.52	-1375.67
6	GUIDE	used	510789472	8.99	5140	-0.025	-0.258	0.116	0.188	263.687299	57.032321	-70.87	23.33
7	GUIDE	used	510789624	9.06	5210	0.156	0.268	0.128	0.204	263.350110	56.669479	-1175.61	-938.61

## 2.4 Star Slots

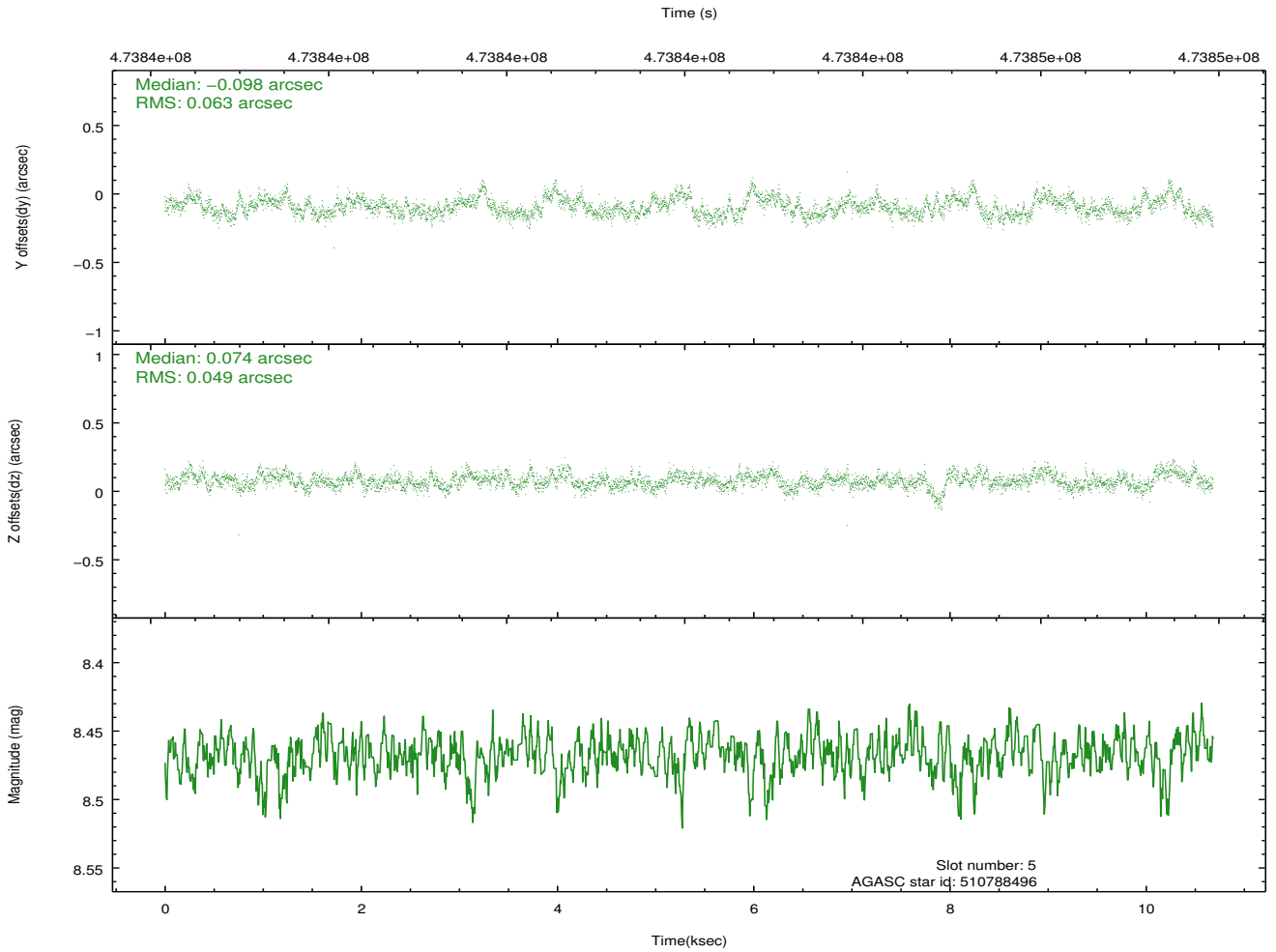
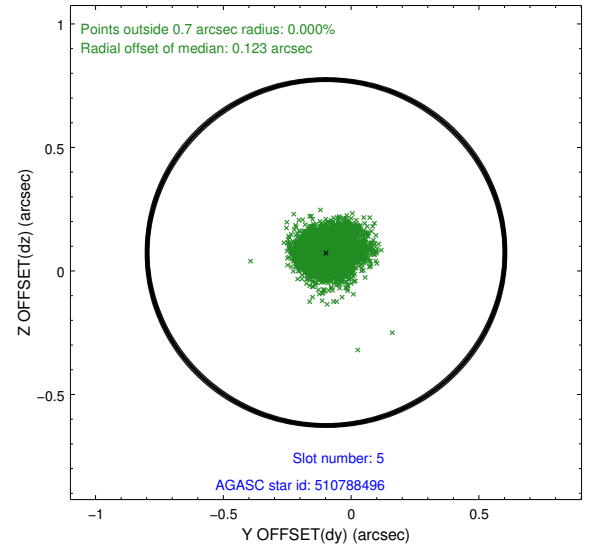
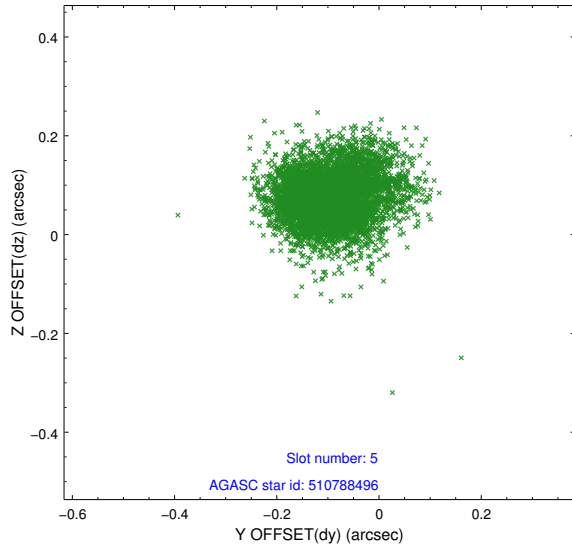
### 2.4.1 Slot 3



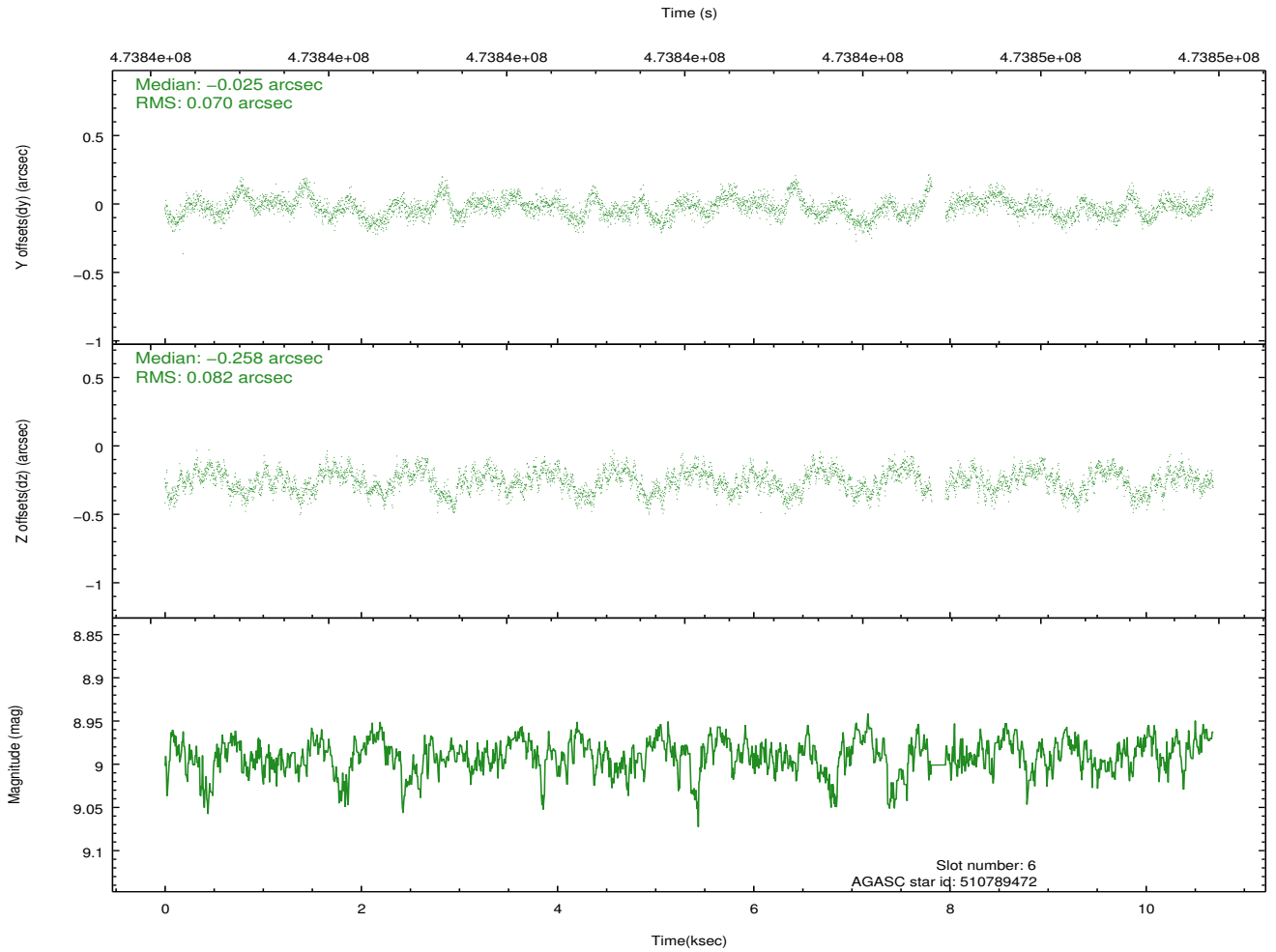
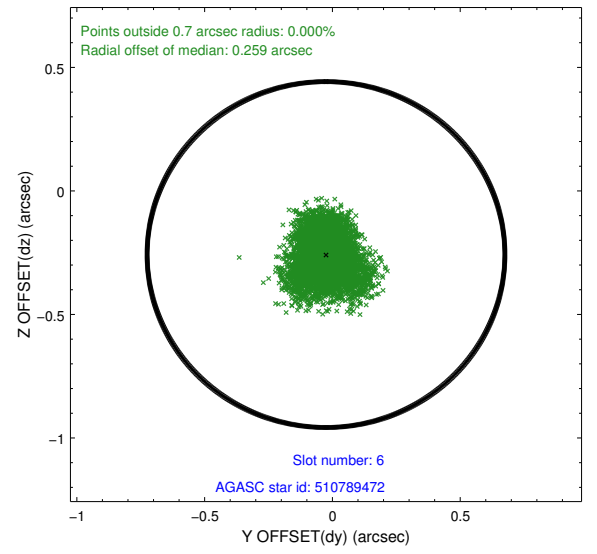
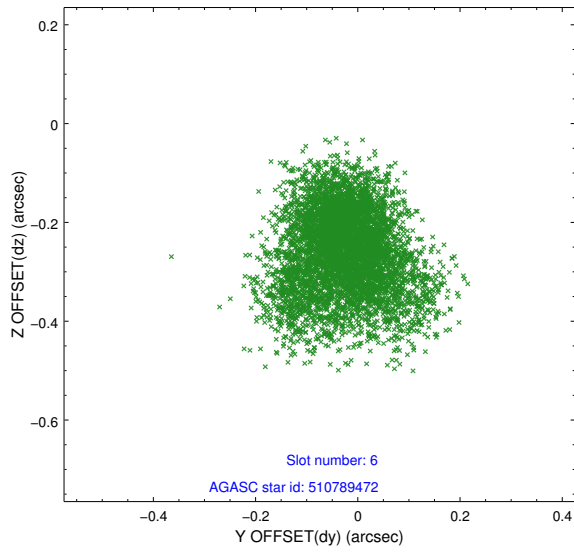
## 2.4.2 Slot 4



### 2.4.3 Slot 5

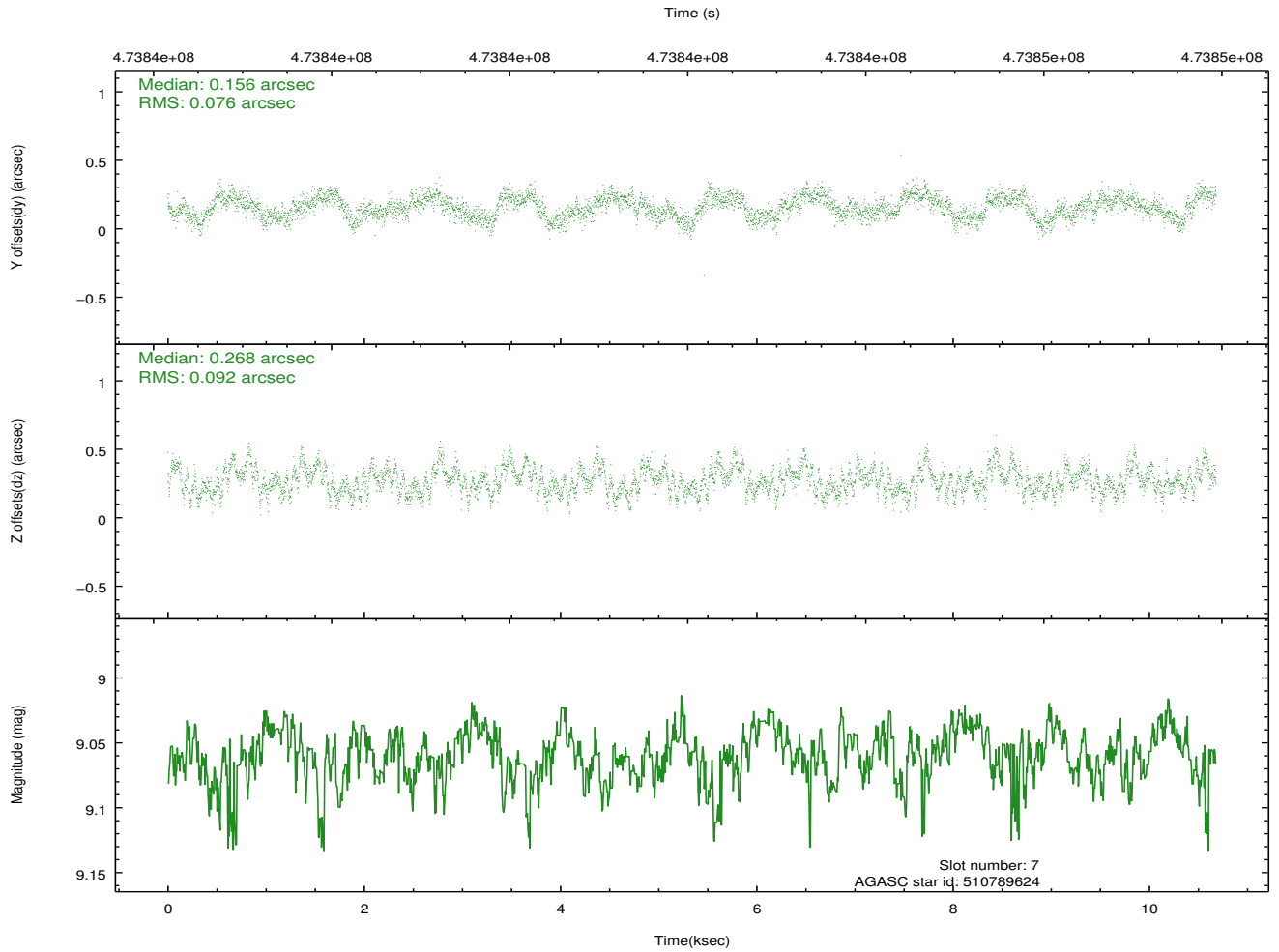
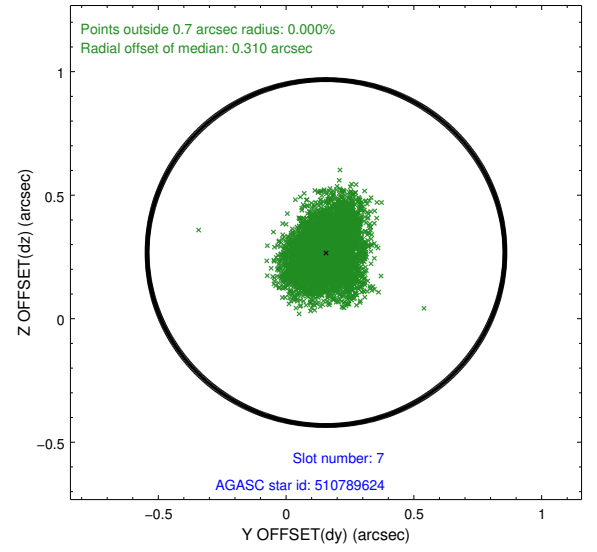
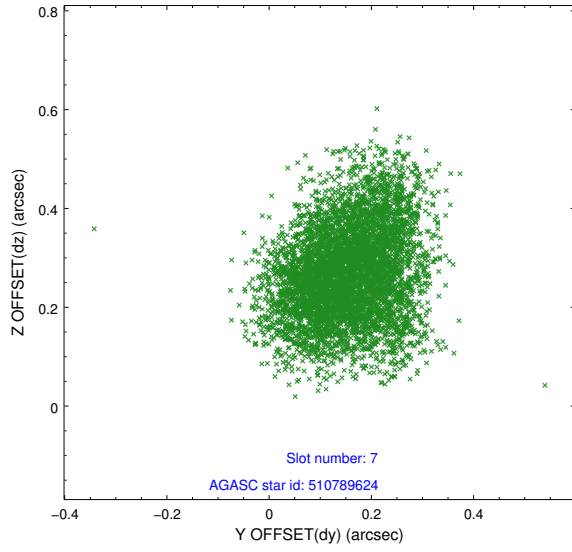


## 2.4.4 Slot 6



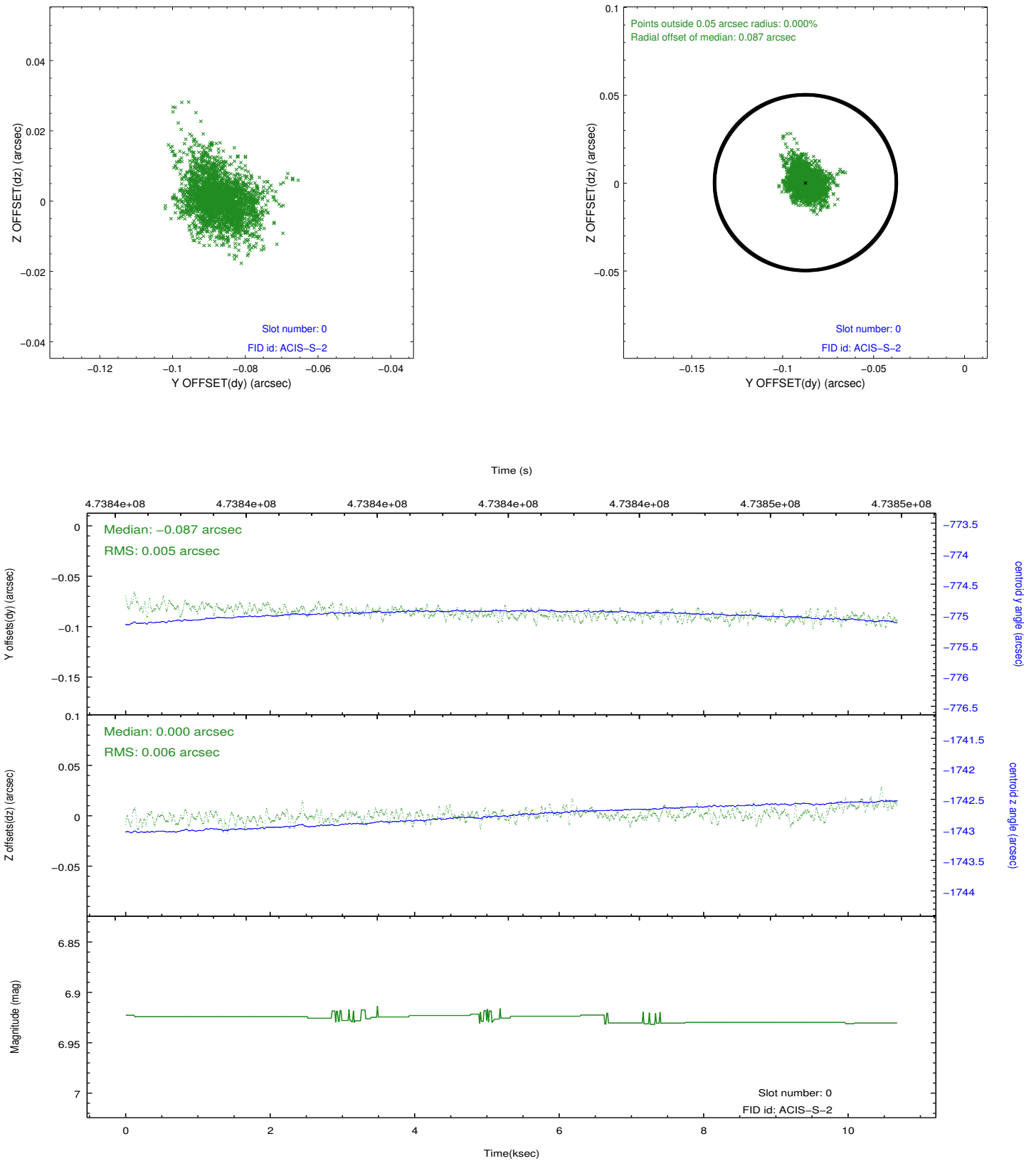


## 2.4.5 Slot 7

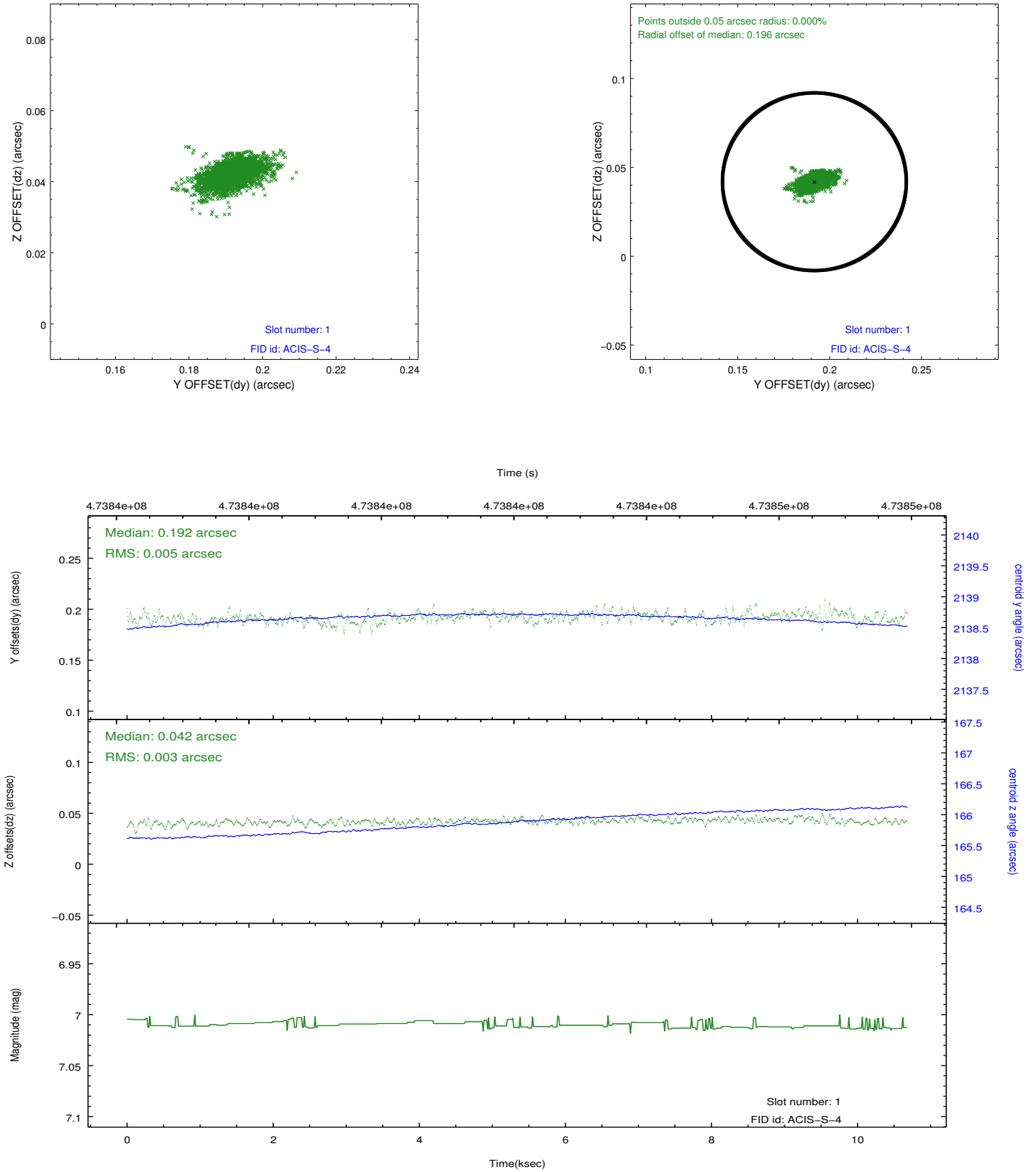


## 2.5 FID Slots

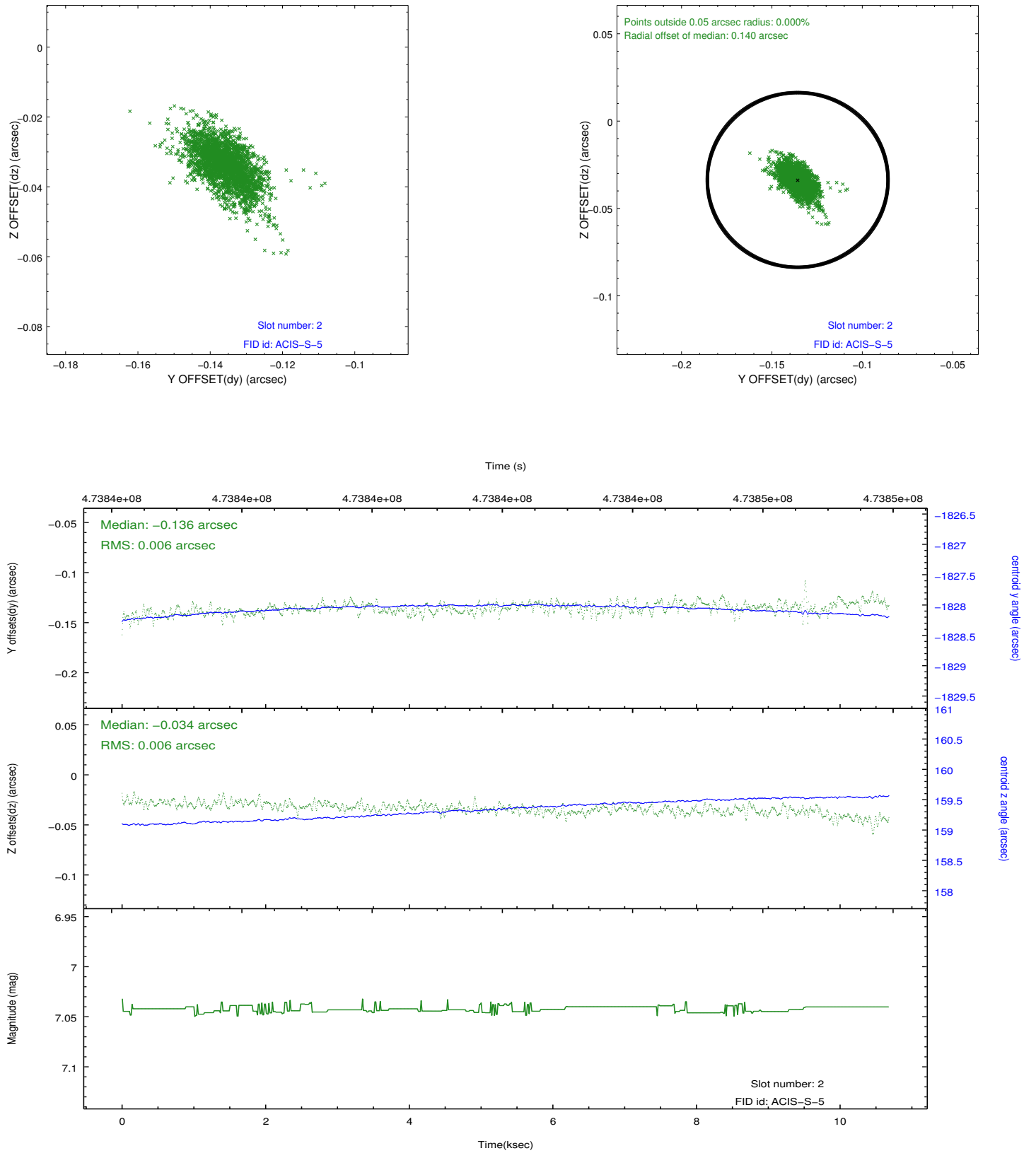
### 2.5.1 Slot 0



## 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)	2014.12.08
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	10.470399961054

## A.2 Comments

These data have been reprocessed with new aspect alignment calibration files that correct small mean offsets (up to 0.4 arcsecs) and improve overall astrometric accuracy. The new calibration was determined using data from the time period being reprocessed and was performed using cross-correlation of X-ray sources with radio and optical counterparts.