

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 4111 - L2 Version 4
Chandra X-Ray Center

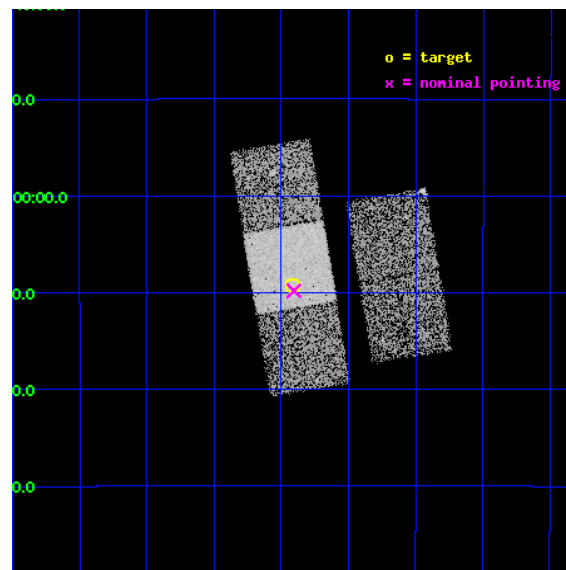
L2 Processing Date : Oct 29 2012

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1 Front

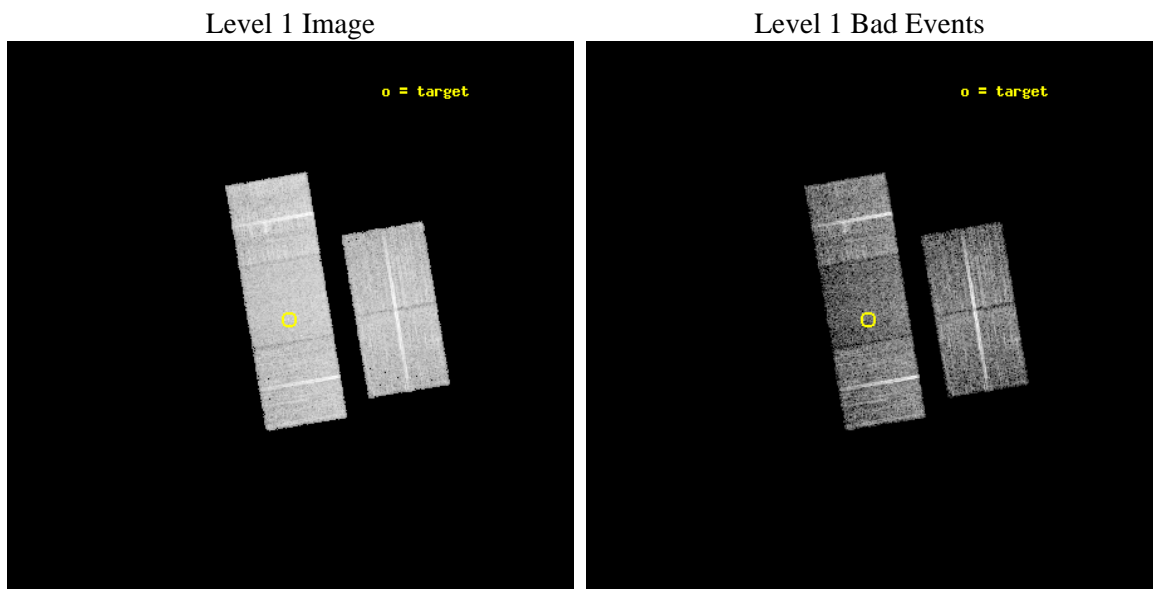
seq_num	700790	Sequence number
obs_id	4111	Observation id
title	THE X-RAY PROPERTIES OF ULTRALUMINOUS INFRARED GALAXIES (ULIGS)	Pr
observer	Professor Andrew Wilson	Principal investigator
object	F15130-1958	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	228.98	Observer's specified target RA [deg]
dec_targ	-20.154722	Observer's specified target Dec [deg]
ra_nom	228.97659553044	Nominal RA [deg]
dec_nom	-20.163780974676	Nominal Dec [deg]
roll_nom	260.48655893378	Nominal Roll [deg]
revision	4	Processing version of data
ontime	9957.1999808252	Sum of GTIs [s]
livetime	9827.1018326917	Livetime [s]
ontime2	9954.0589806736	Sum of GTIs [s]
ontime3	9957.1999808252	Sum of GTIs [s]
ontime6	9957.1999808252	Sum of GTIs [s]
ontime7	9957.1999808252	Sum of GTIs [s]
ontime8	9957.1999808252	Sum of GTIs [s]
l2events	43621	Number of level 2 events



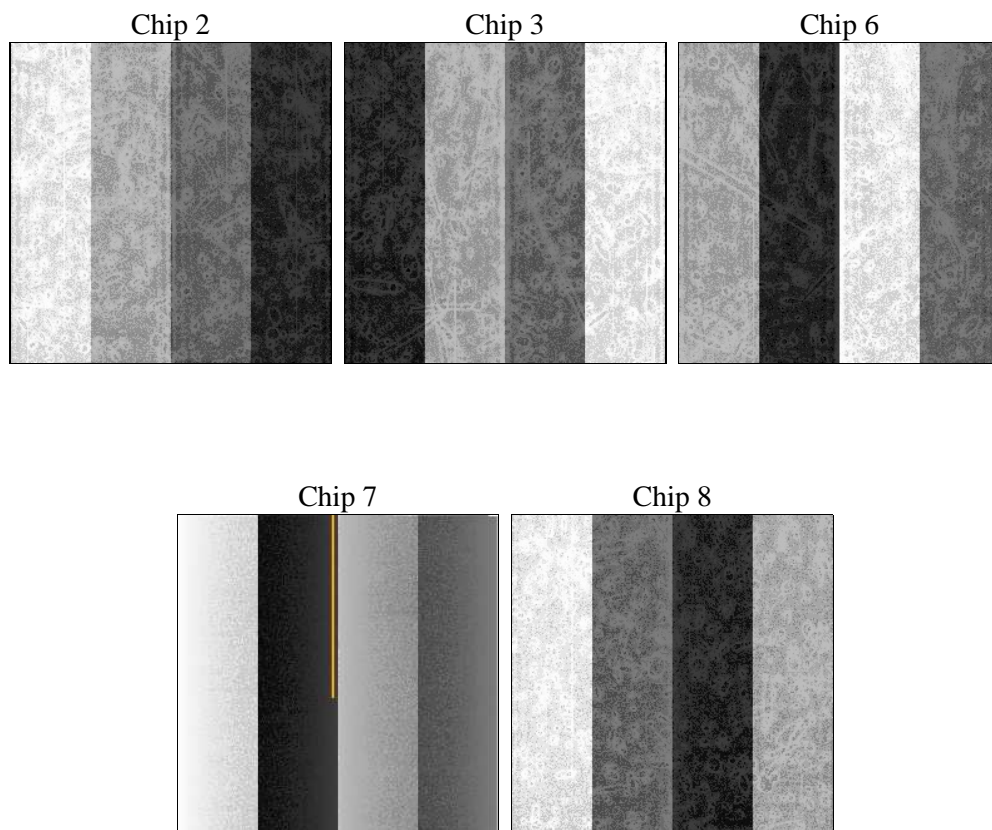
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	9957.1999808252	Sum of GTIs [s]
caldsver	4.5.2	 	ontime2	9954.0589806736	Sum of GTIs [s]
date	2012-10-29T04:26:21	Date and time of file creation	ontime3	9957.1999808252	Sum of GTIs [s]
revision	4	Processing version of data	ontime6	9957.1999808252	Sum of GTIs [s]
			ontime7	9957.1999808252	Sum of GTIs [s]
			ontime8	9957.1999808252	Sum of GTIs [s]
			l1events	270383	Number of level 1 events

2.1.4 Events

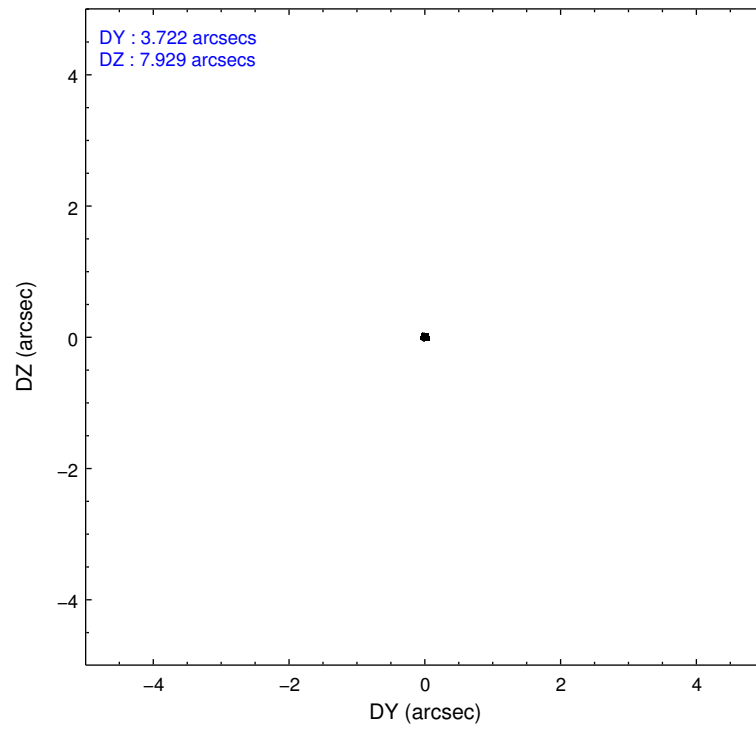
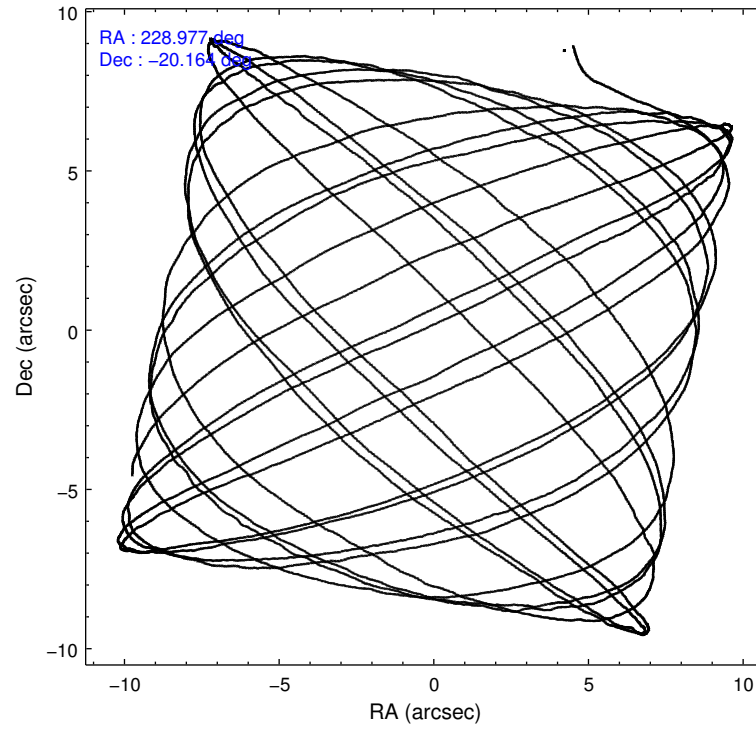
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	49847	48318	52052	55082	65084
rejected events	44913	43434	46542	29684	50260
rejected %	90%	89%	89%	53%	77%

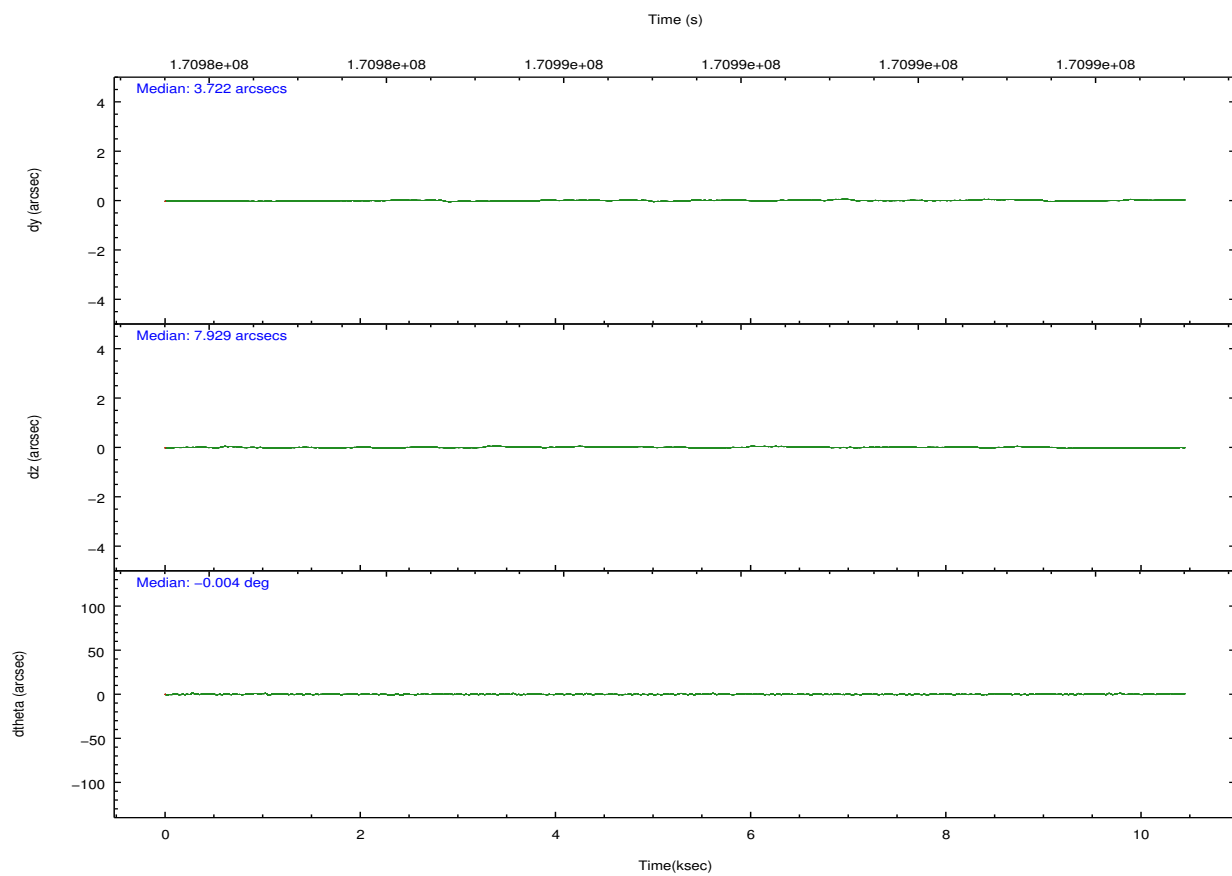
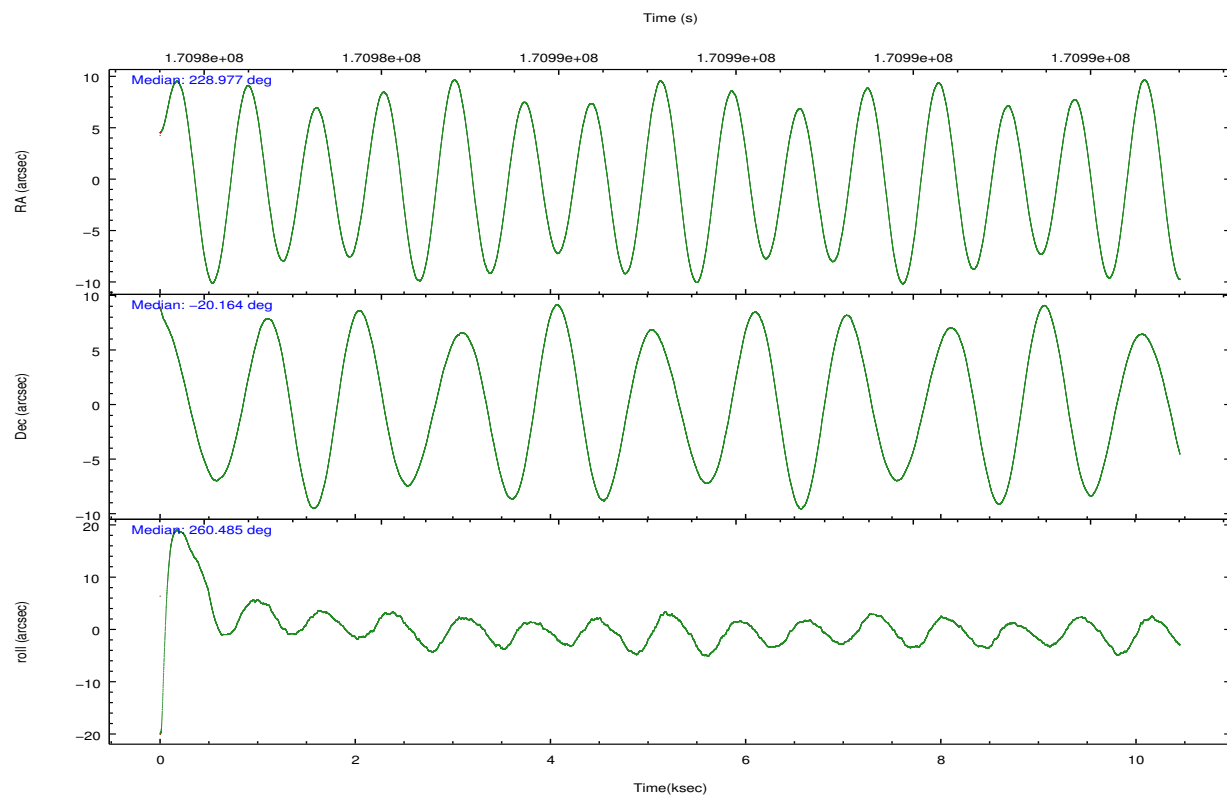
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	1933	1917	2121	2473	4642
	3%	3%	4%	4%	7%
grade 1 events	27	21	26	47	34
	0%	0%	0%	0%	0%
grade 2 events	1105	971	1121	5294	3187
	2%	2%	2%	9%	4%
grade 3 events	544	557	603	2475	1560
	1%	1%	1%	4%	2%
grade 4 events	519	553	564	2392	1414
	1%	1%	1%	4%	2%
grade 5 events	1589	1908	2004	5784	2791
	3%	3%	3%	10%	4%
grade 6 events	834	887	1102	12769	4042
	1%	1%	2%	23%	6%
grade 7 events	43296	41504	44511	23848	47414
	86%	85%	85%	43%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	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	228.966028	228.976595530444	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.138459	-20.16378097467638	Alternating exposures requested	N	N
[deg] Pointing Roll	260.326332	260.4865589337814	[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)	170982481.184000	170981391.03642			
Observation start date	2003-06-02T23:06:57	2003-06-02T22:49:51			
[s] Observation end time (MET)	170992481.184000	170993208.26192			
Observation end date	2003-06-03T01:53:37	2003-06-03T02:06:48			
Read mode	TIMED	TIMED			

2.3 Aspect



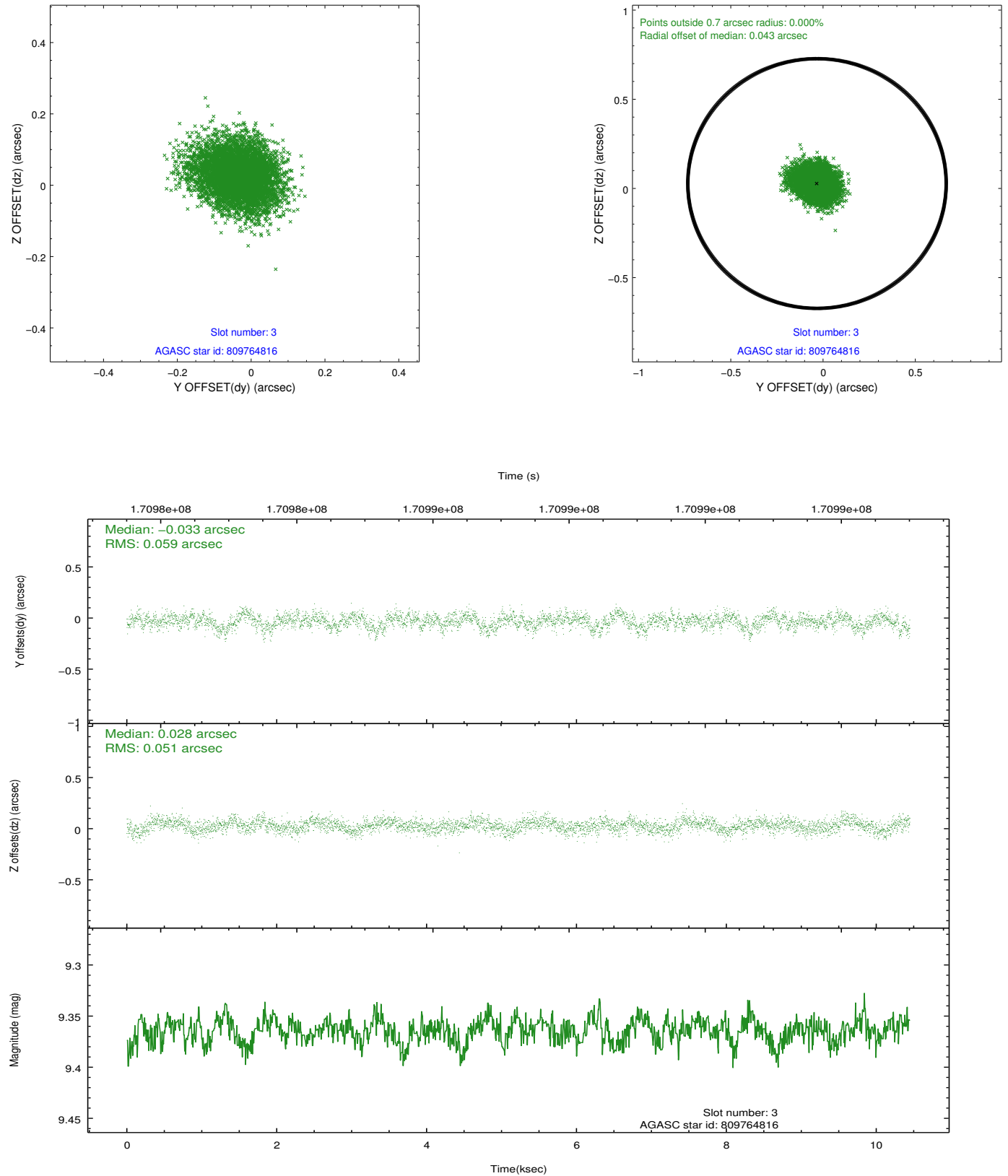


Slot Statistics

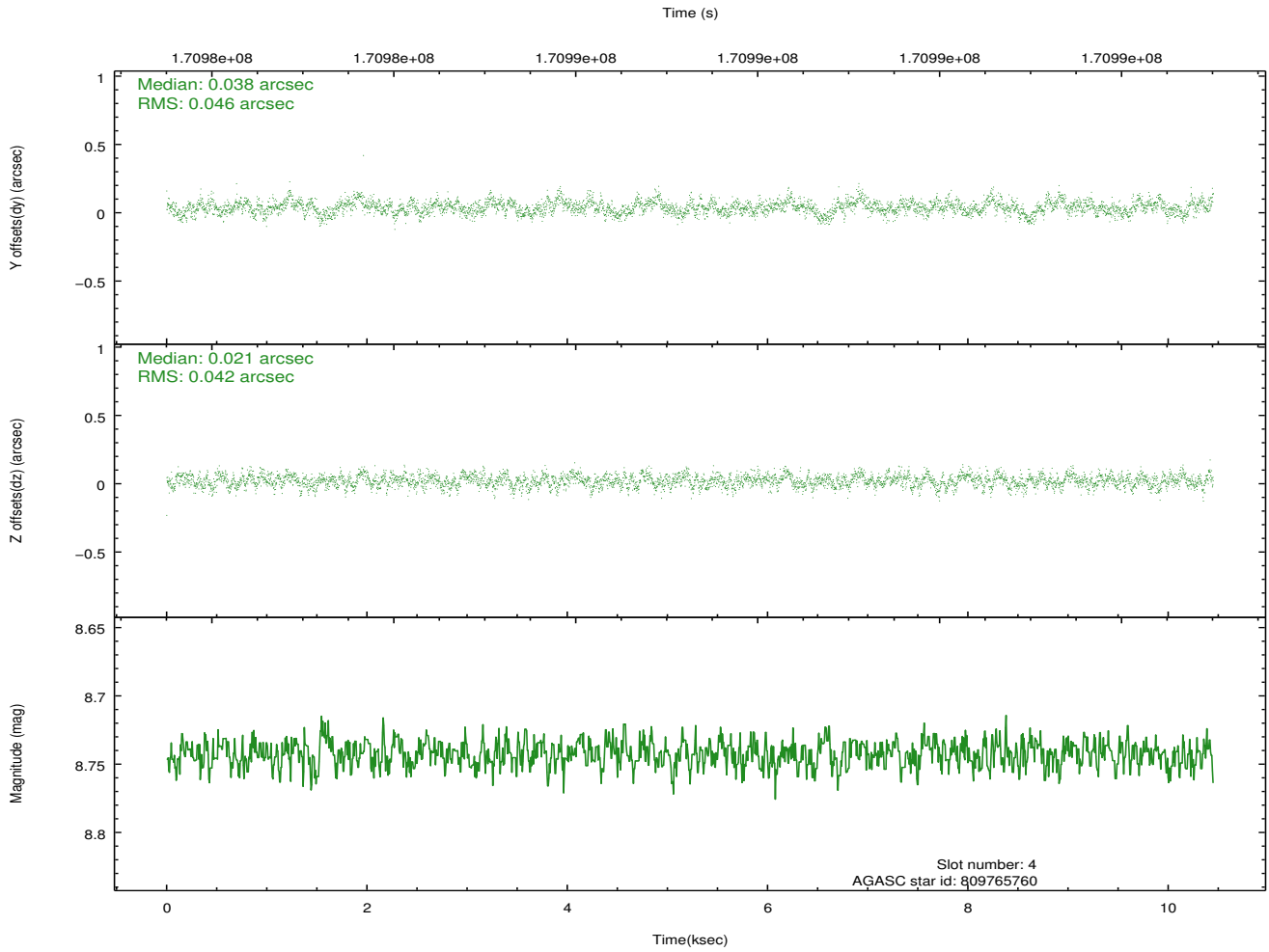
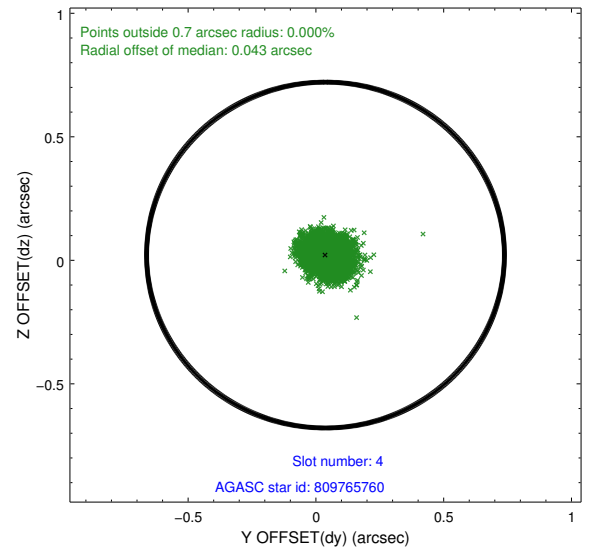
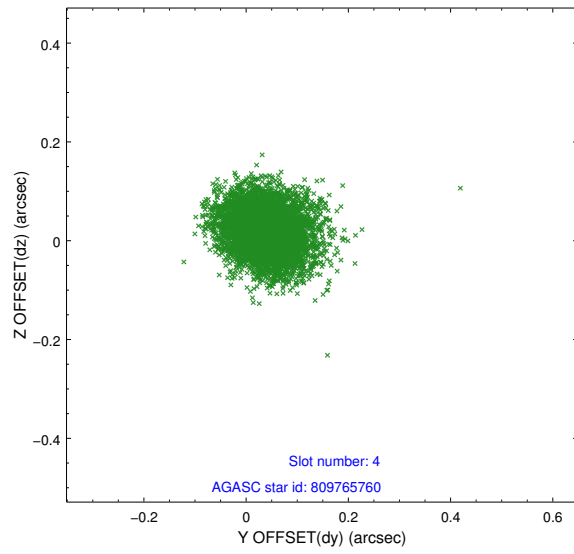
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	2548	-0.016	-0.024	0.007	0.011	0.000000	0.000000	-756.41	-1729.14
1	FID	ACIS-S-4	7.20	2548	0.044	0.014	0.005	0.010	0.000000	0.000000	2156.71	178.85
2	FID	ACIS-S-5	7.24	2549	-0.059	0.019	0.006	0.011	0.000000	0.000000	-1808.64	173.12
3	GUIDE	809764816	9.36	5096	-0.033	0.028	0.083	0.136	229.258328	-20.607527	1500.34	1254.79
4	GUIDE	809765760	8.74	5094	0.038	0.021	0.066	0.109	229.188364	-20.001489	-611.16	658.90
5	GUIDE	809766088	9.33	5091	-0.010	-0.040	0.085	0.136	229.034100	-20.426907	985.25	400.94
6	GUIDE	810293160	9.39	5096	0.024	0.018	0.092	0.154	229.357046	-20.836198	2257.13	1719.44
7	GUIDE	810296608	7.93	5097	-0.018	-0.024	0.056	0.090	229.462165	-20.722168	1794.05	2000.75

2.4 Star Slots

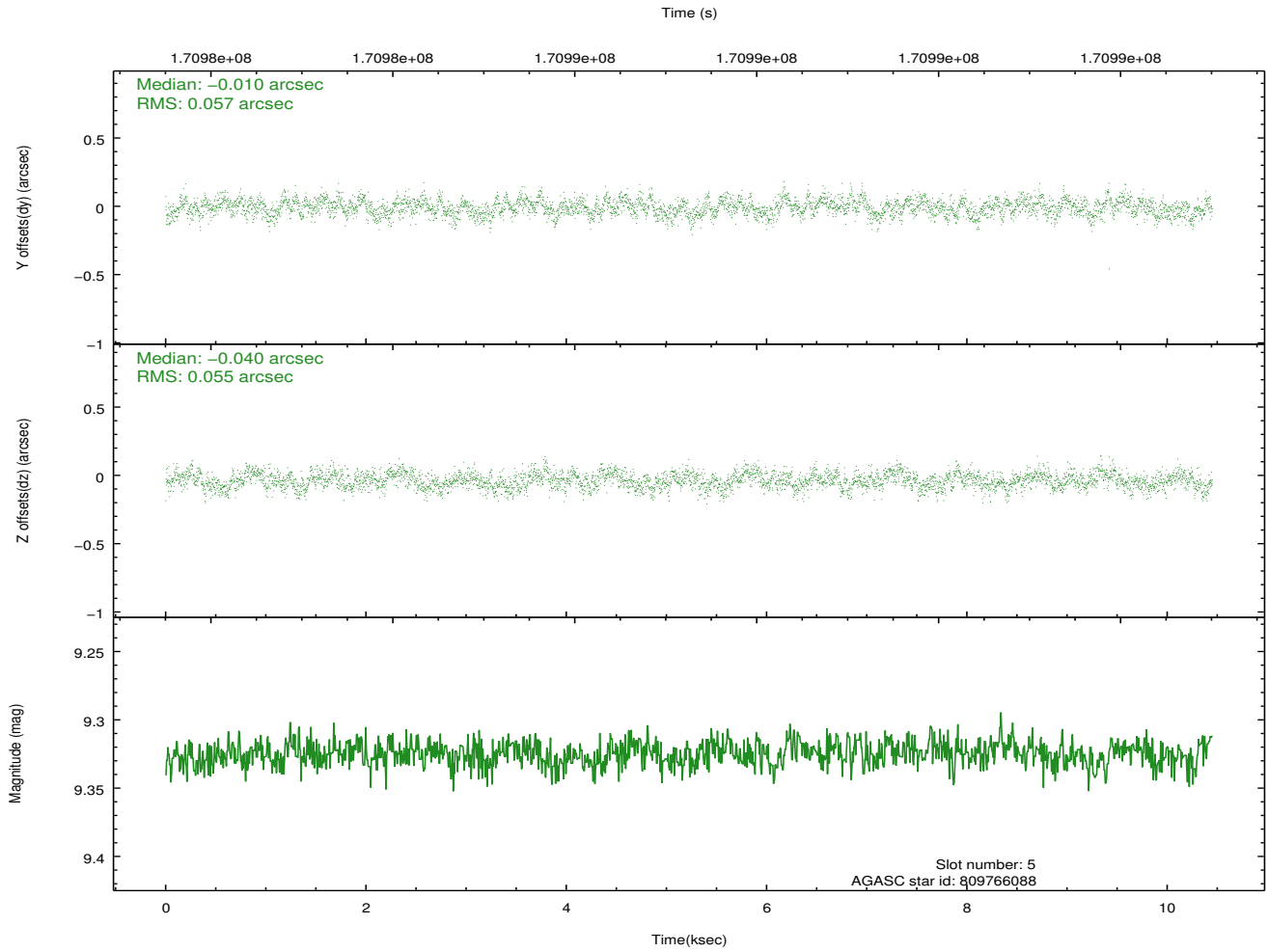
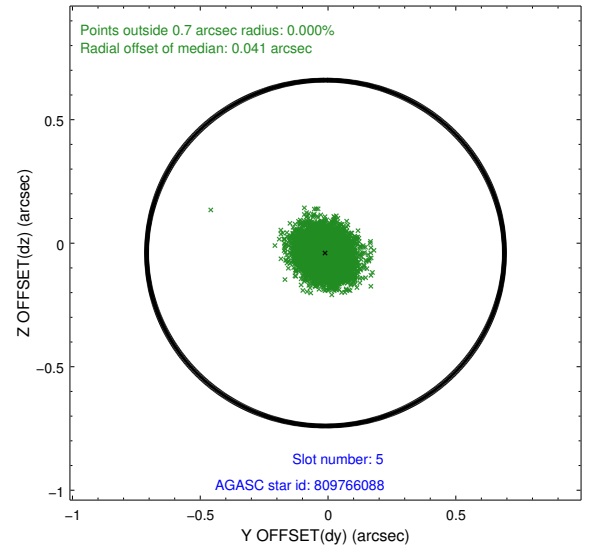
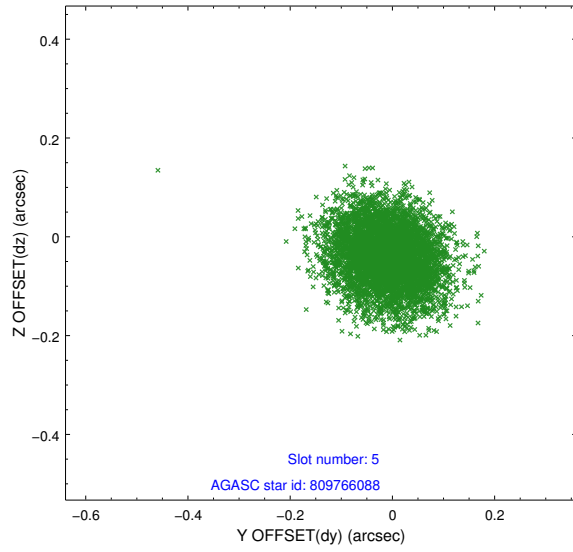
2.4.1 Slot 3



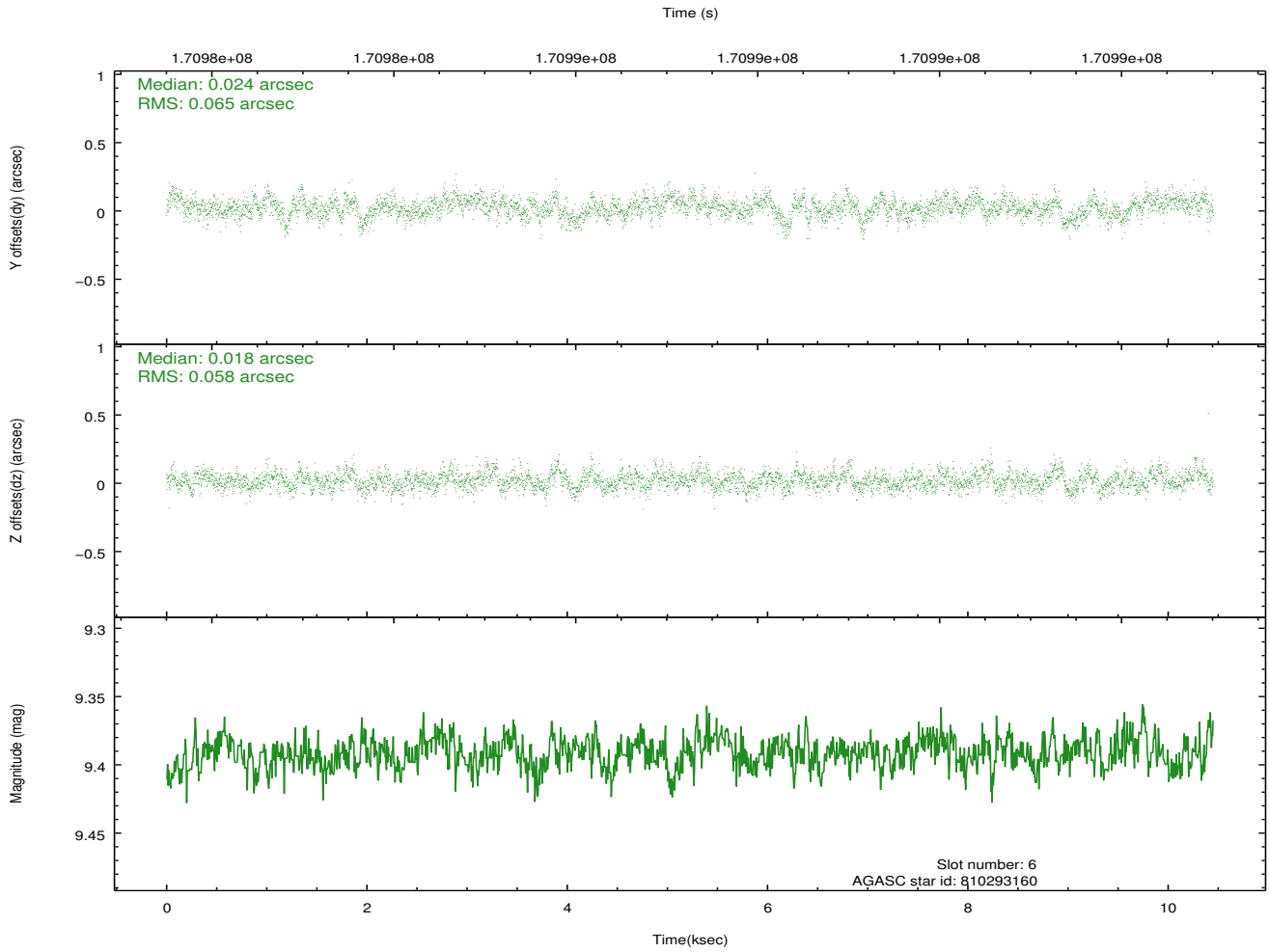
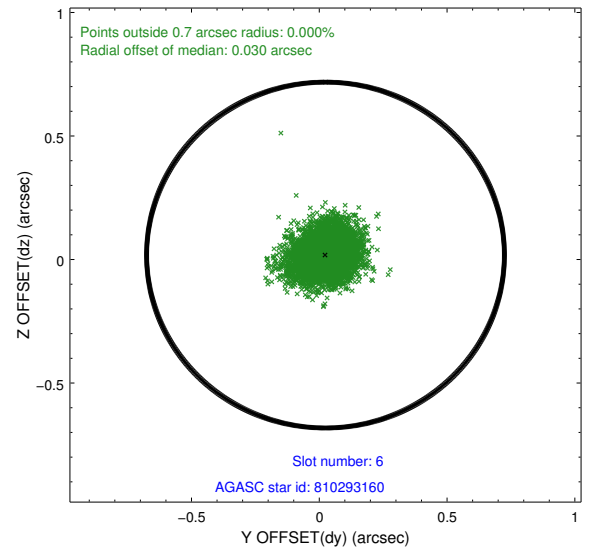
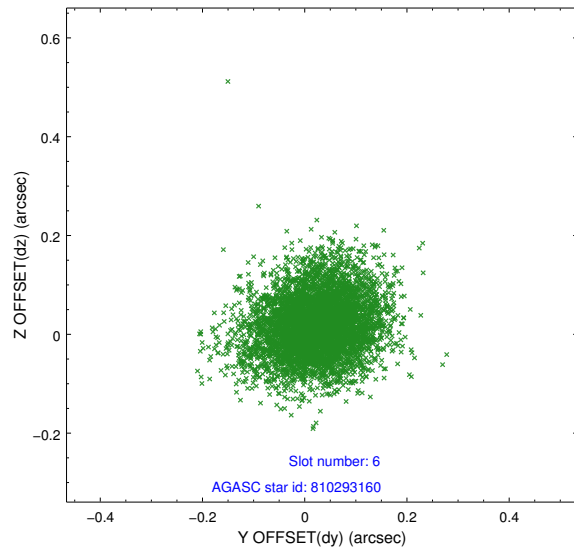
2.4.2 Slot 4



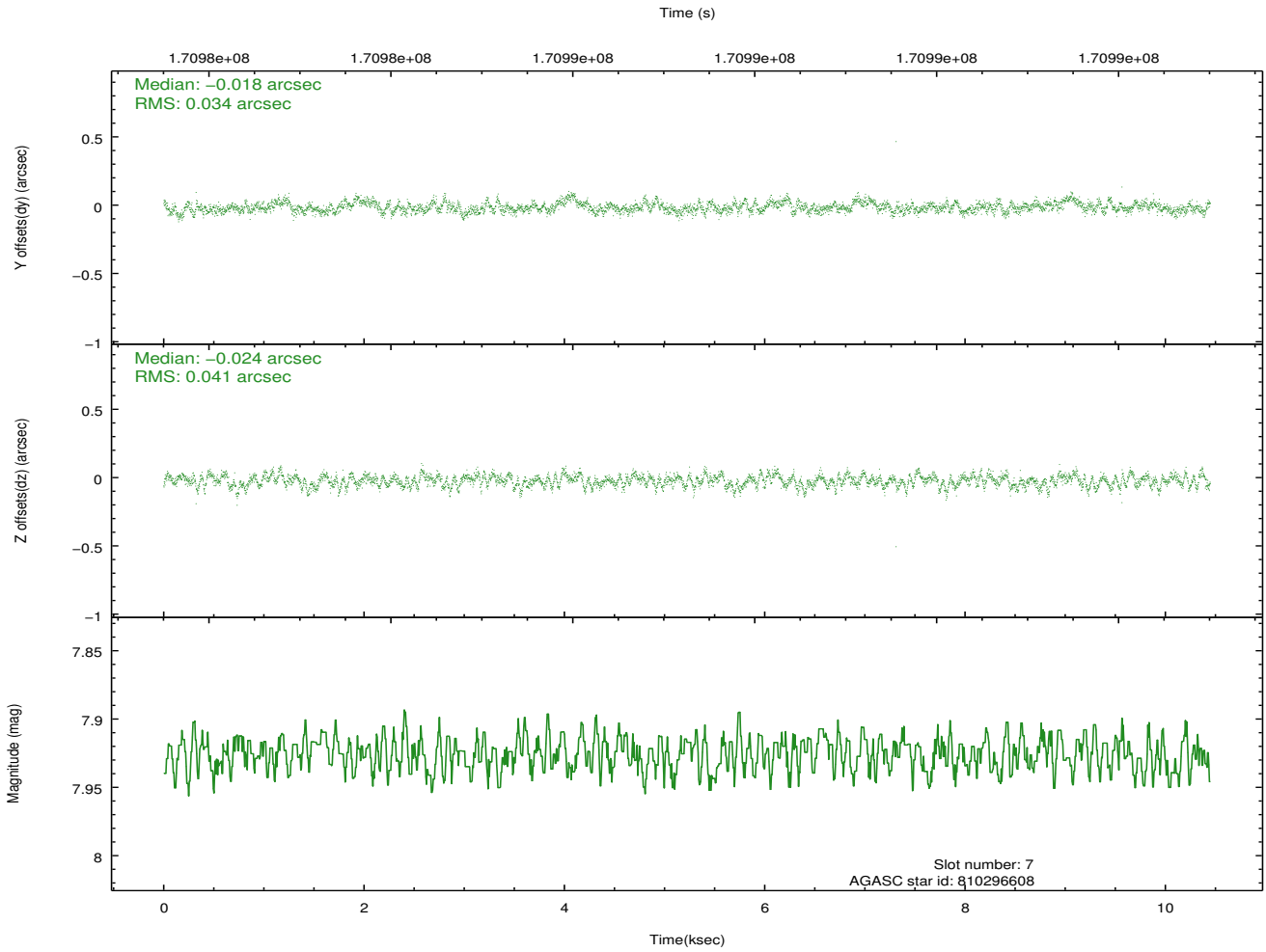
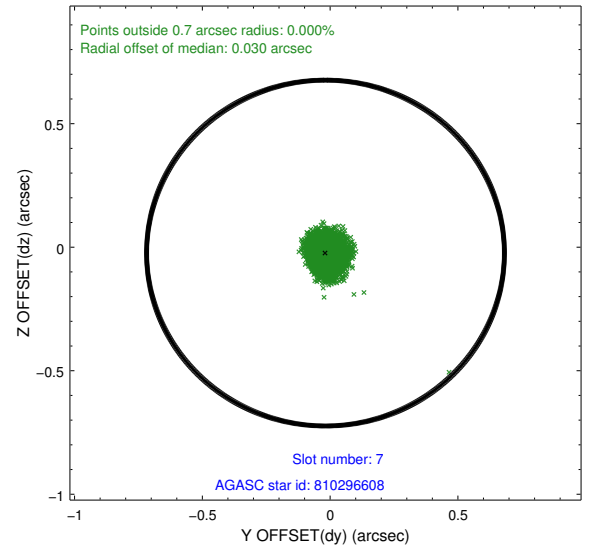
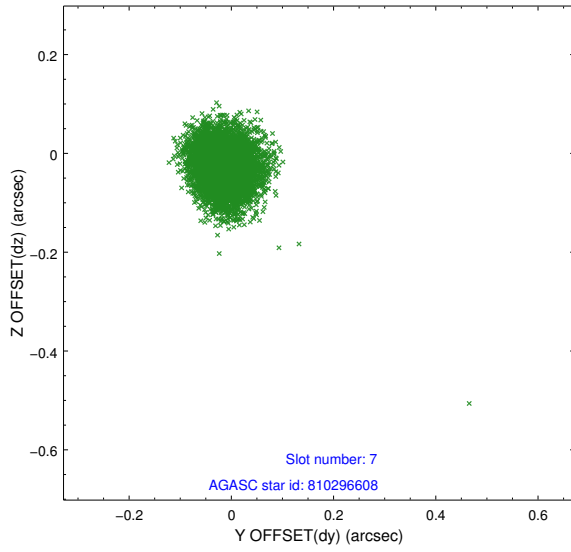
2.4.3 Slot 5



2.4.4 Slot 6

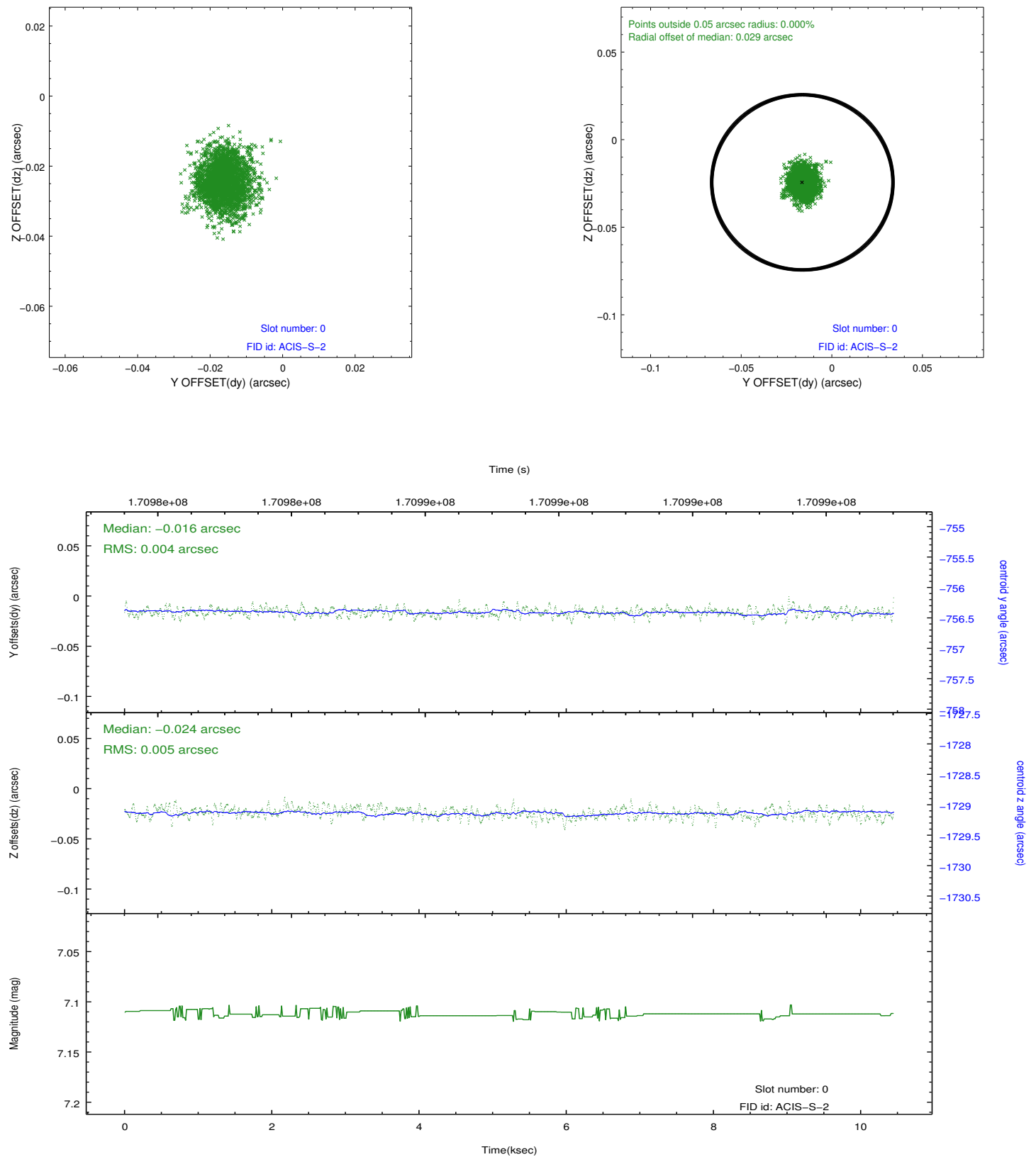


2.4.5 Slot 7

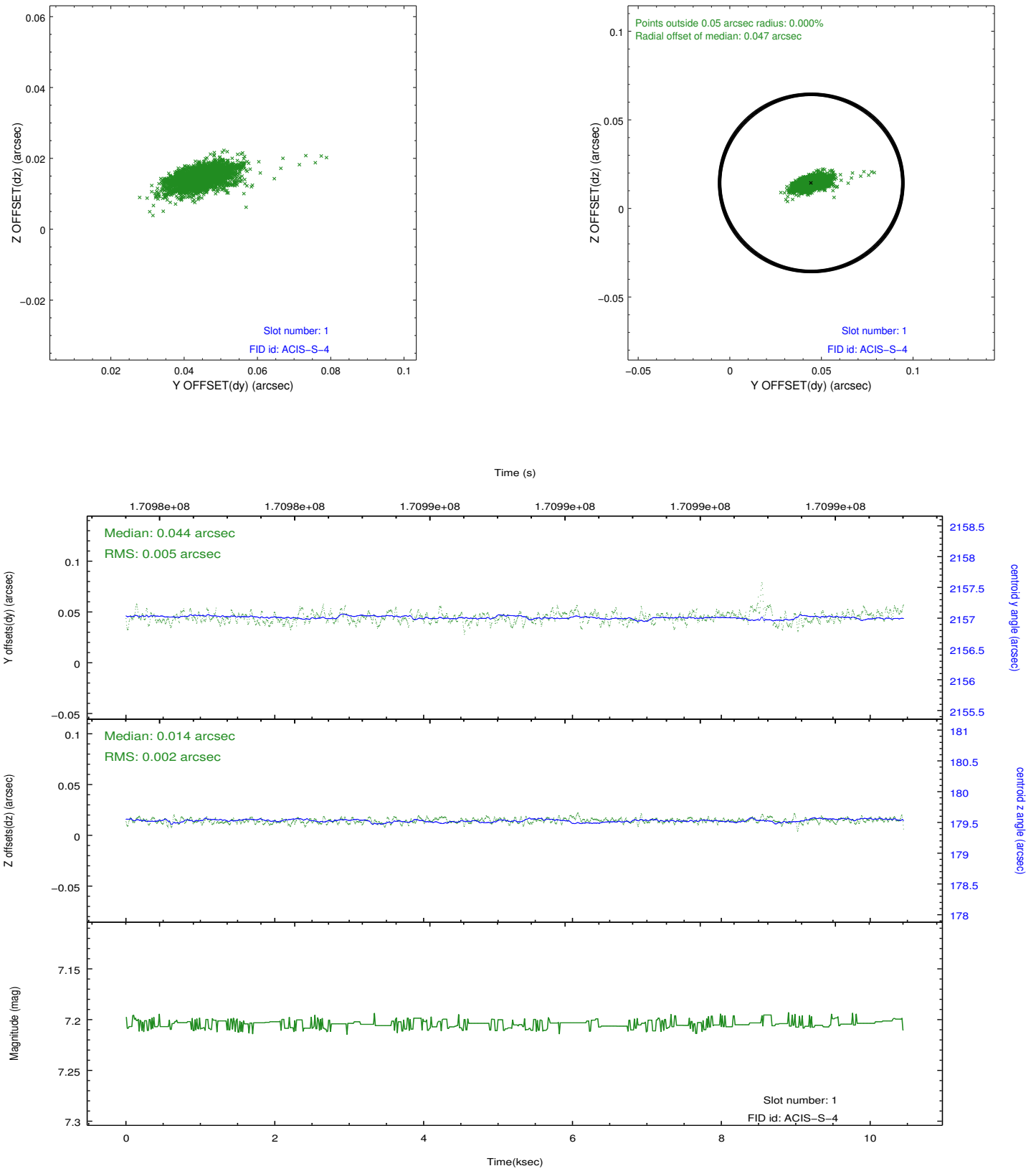


2.5 FID Slots

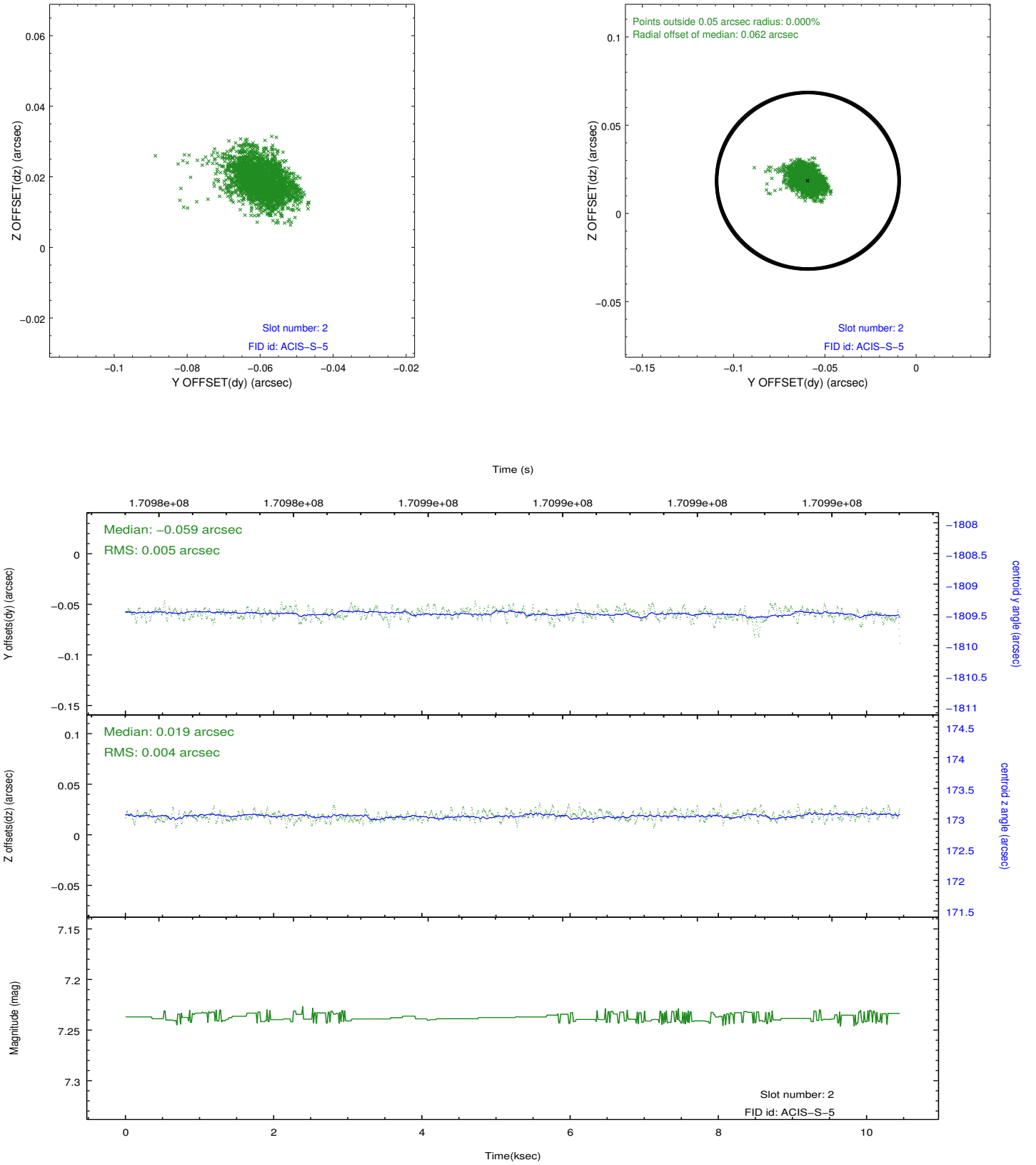
2.5.1 Slot 0



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)	2012.11.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.96

A.2 Comments

A spatial region of the original bias map for CCD = 6 suffered from anomalously high data values. Pixels in the event data that were bias-corrected by one of the original affected bias pixels may have an apparent energy shift. While the change in energy is expected to be small (~ 20 eV), it depends on many parameters that have not yet been fully explored for this bias anomaly. The bias map for CCD = 6 has been reconstructed for this processing to remove this anomaly using scaled data from a comparable bias map from another observation. The pixels affected by the anomaly are bounded by sky coords:
(229.03526, -20.26059), (229.04154, -20.22518), (228.99390, -20.21774), (229.00627, -20.25606)