

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 13290 - L2 Version 2
Chandra X-Ray Center

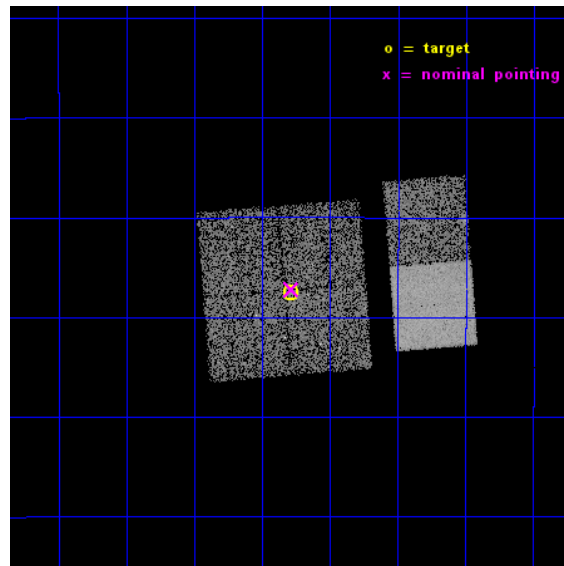
L2 Processing Date : Dec 1 2014

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1 Front

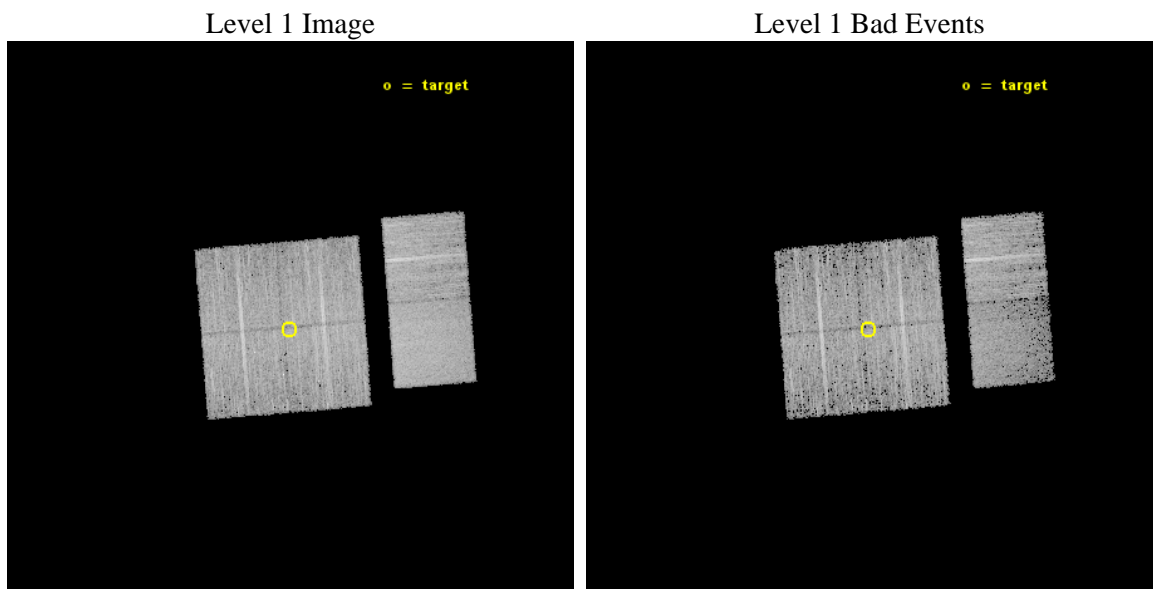
seq_num	501558	Sequence number
obs_id	13290	Observation id
title	Snap-shot survey of new galactic gamma-ray sources	Proposal title
observer	Professor Gordon Garmire	Principal investigator
object	PSR J1731-1847	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	262.823333	Observer's specified target RA [deg]
dec_targ	-18.792417	Observer's specified target Dec [deg]
ra_nom	262.82122650863	Nominal RA [deg]
dec_nom	-18.786975457266	Nominal Dec [deg]
roll_nom	85.426033028297	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9966.4944620132	Sum of GTIs [s]
livetime	9840.2927080327	Livetime [s]
ontime0	9966.3713420033	Sum of GTIs [s]
ontime1	9966.4123820066	Sum of GTIs [s]
ontime2	9966.4534220099	Sum of GTIs [s]
ontime3	9966.4944620132	Sum of GTIs [s]
ontime6	9966.5765420198	Sum of GTIs [s]
ontime7	9966.5355020165	Sum of GTIs [s]
l2events	53481	Number of level 2 events



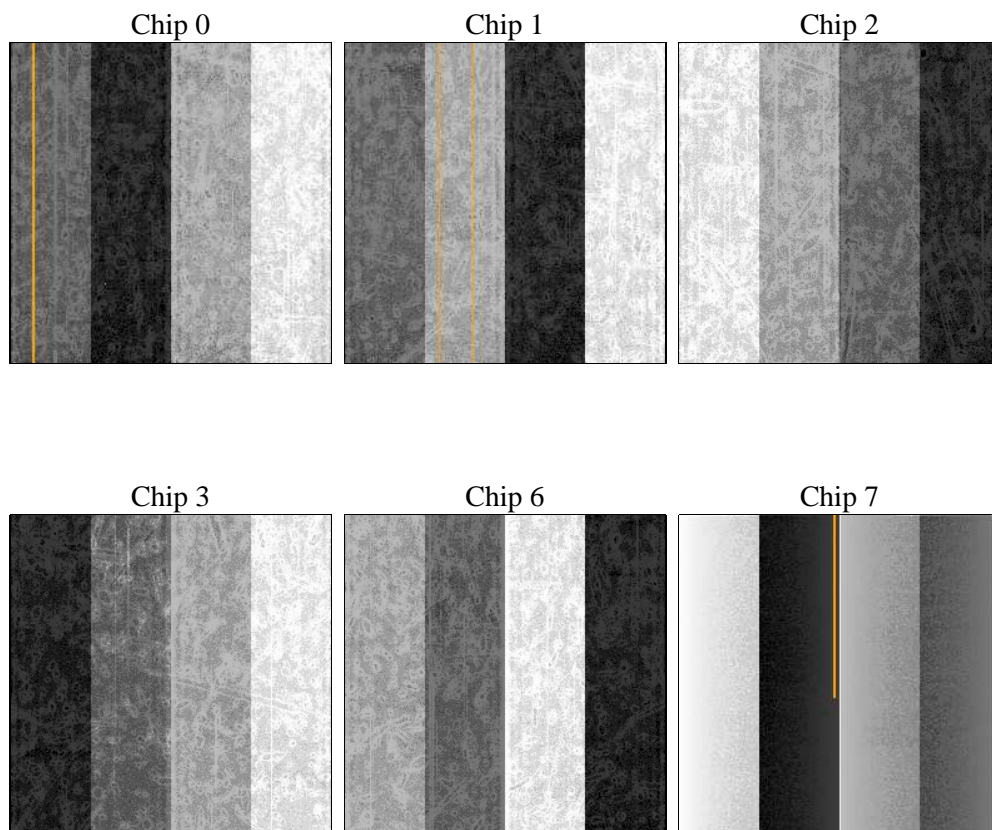
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	9966.4944620132	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9966.3713420033	Sum of GTIs [s]
date	2014-12-01T13:28:00	Date and time of file creation	ontime1	9966.4123820066	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9966.4534220099	Sum of GTIs [s]
			ontime3	9966.4944620132	Sum of GTIs [s]
			ontime6	9966.5765420198	Sum of GTIs [s]
			ontime7	9966.5355020165	Sum of GTIs [s]
			l1events	303814	Number of level 1 events

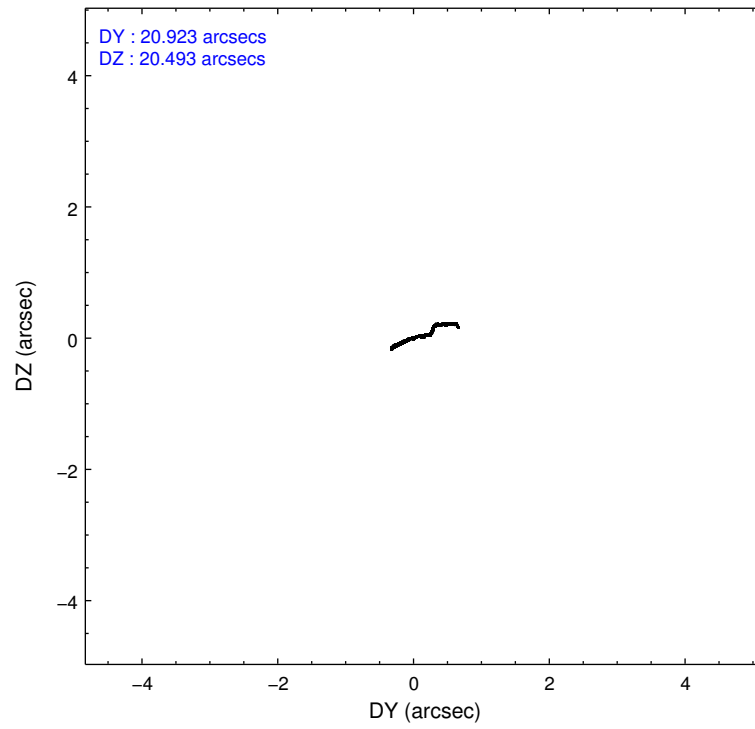
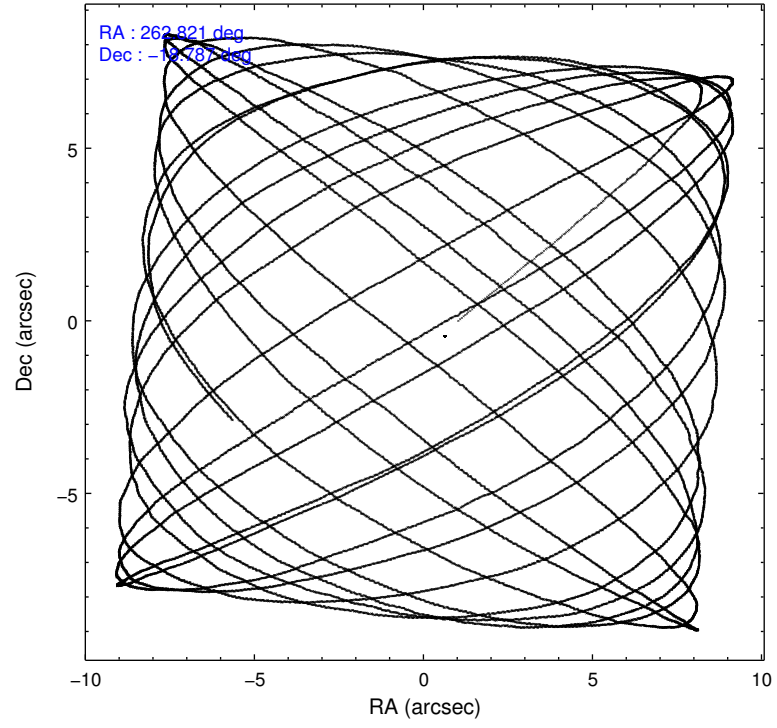
2.1.4 Events

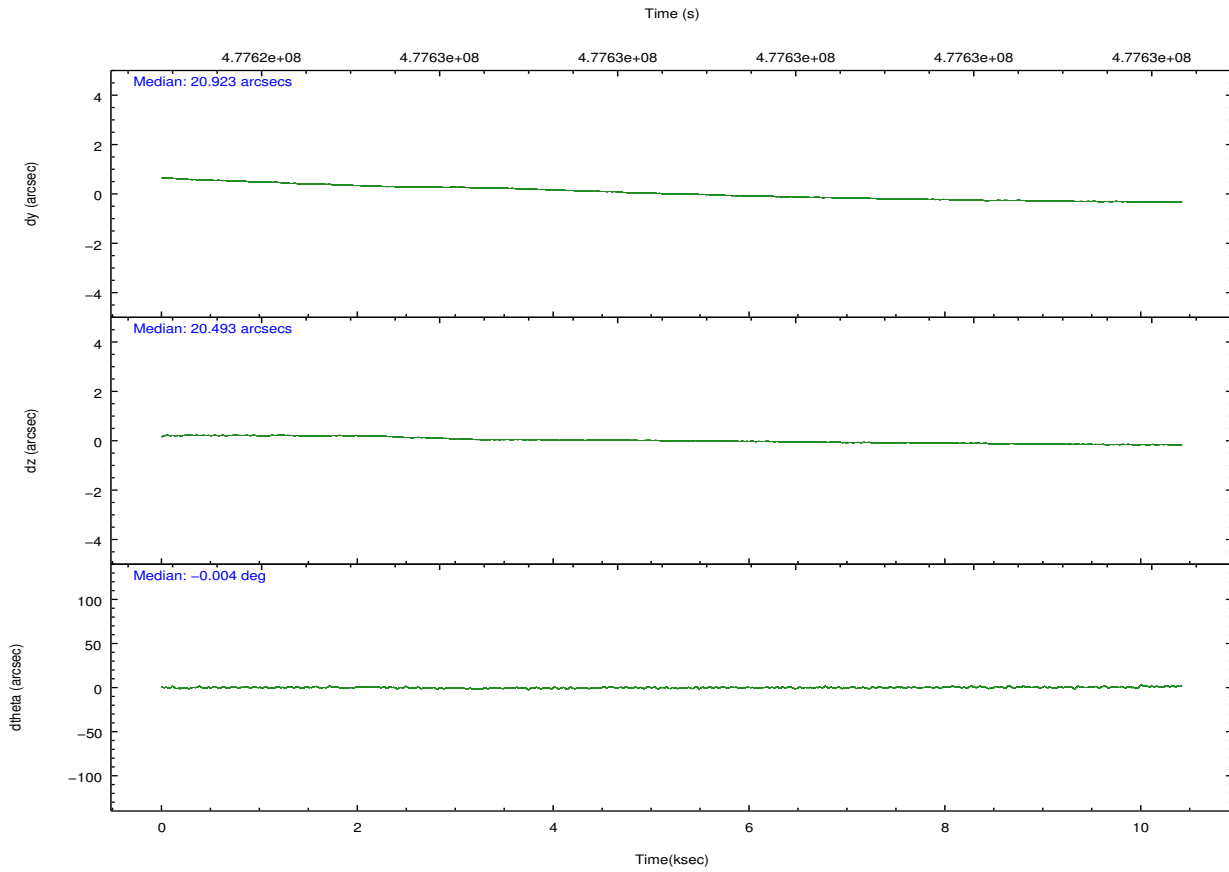
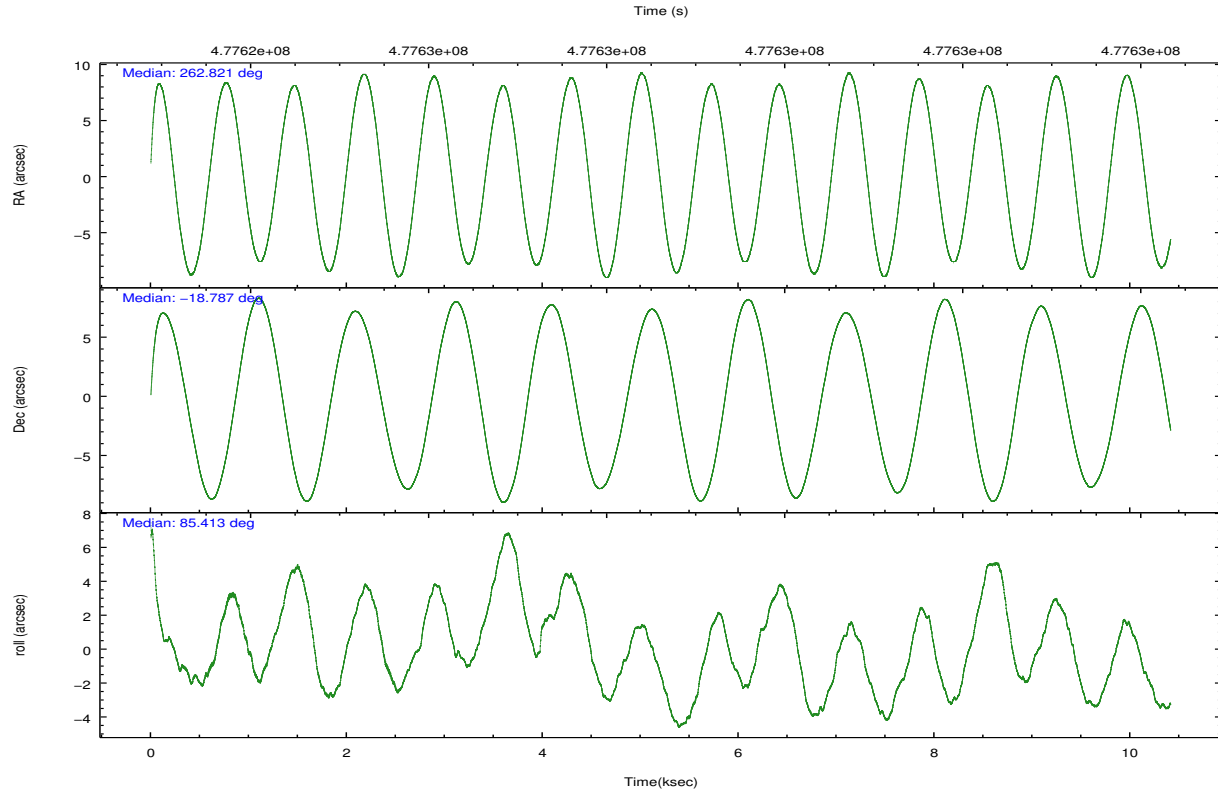
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	45309	47484	48747	50612	53085	58577	grade 0 events	2270	2544	2289	2403	2499	2811
rejected events	39322	40892	42928	44623	46503	30408		5%	5%	4%	4%	4%	4%
rejected %	86%	86%	88%	88%	87%	51%	grade 1 events	30	30	29	40	41	99
								0%	0%	0%	0%	0%	0%
							grade 2 events	1455	1481	1411	1328	1421	6081
								3%	3%	2%	2%	2%	10%
							grade 3 events	639	592	568	576	674	2619
								1%	1%	1%	1%	1%	4%
							grade 4 events	547	667	522	557	627	2463
								1%	1%	1%	1%	1%	4%
							grade 5 events	1951	2092	1808	2356	2223	6264
								4%	4%	3%	4%	4%	10%
							grade 6 events	1080	1311	1031	1131	1366	14206
								2%	2%	2%	2%	2%	24%
							grade 7 events	37337	38767	41089	42221	44234	24034
								82%	81%	84%	83%	83%	41%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	262.833808	262.8212265086311	CCD I2 on	Y	Y
[deg] Pointing Dec	-18.811804	-18.78697545726612	CCD I3 on	Y	Y
[deg] Pointing Roll	85.221396	85.4260330282966	CCD S0 on	N	N
[mm] SIM focus pos	-0.782348	-0.7809083437167272	CCD S1 on	N	N
[mm] SIM defocus	0	0.001439871863259334	CCD S2 on	O2	Y
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	O1	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	477623809.184000	477622725.21992	CCD S5 on	N	N
Observation start date	2013-02-19T01:15:42	2013-02-19T00:58:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	477633809.184000	477634750.52057	On-chip summing requested	N	N
Observation end date	2013-02-19T04:02:22	2013-02-19T04:19:10	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



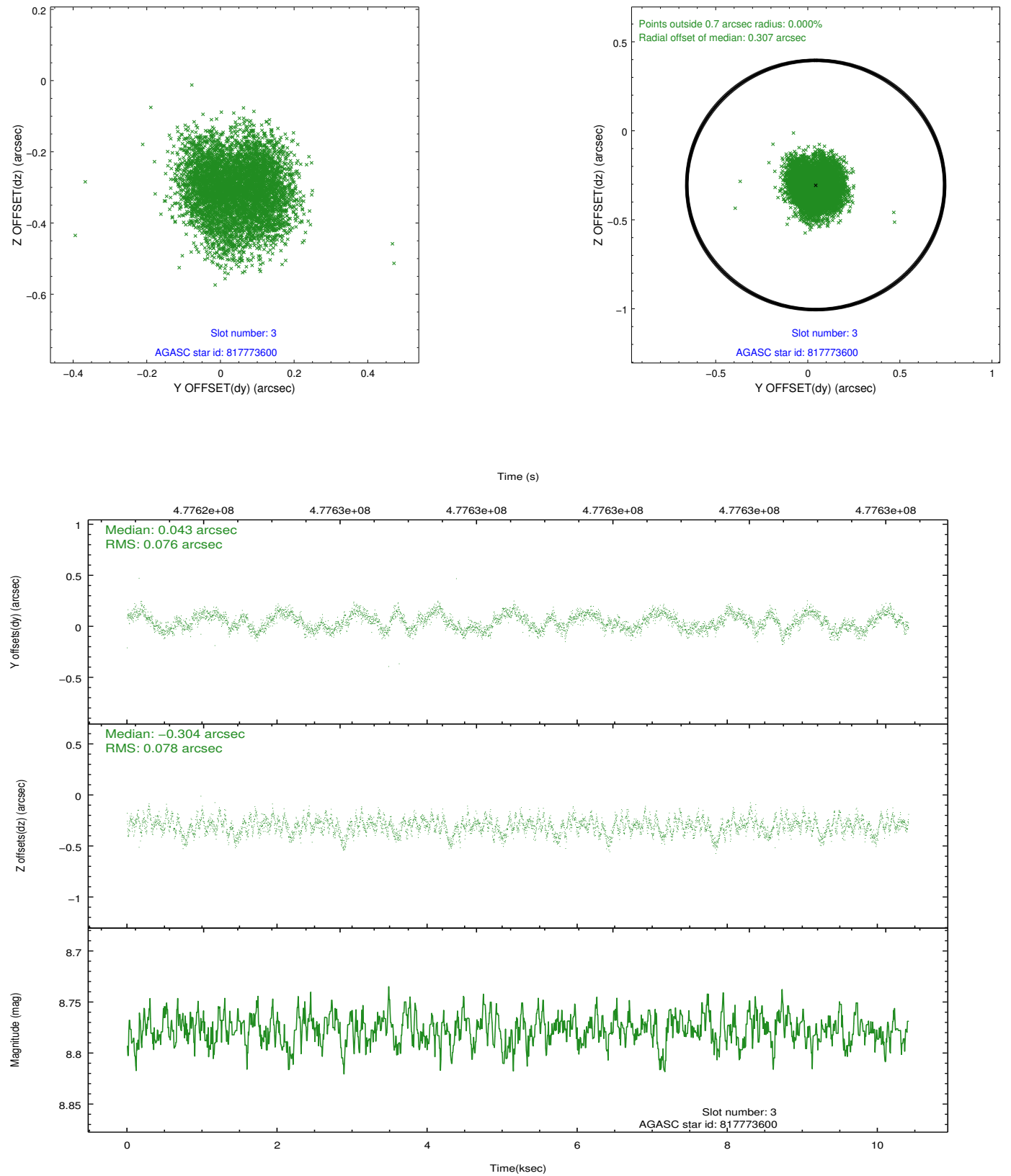


Slot Statistics

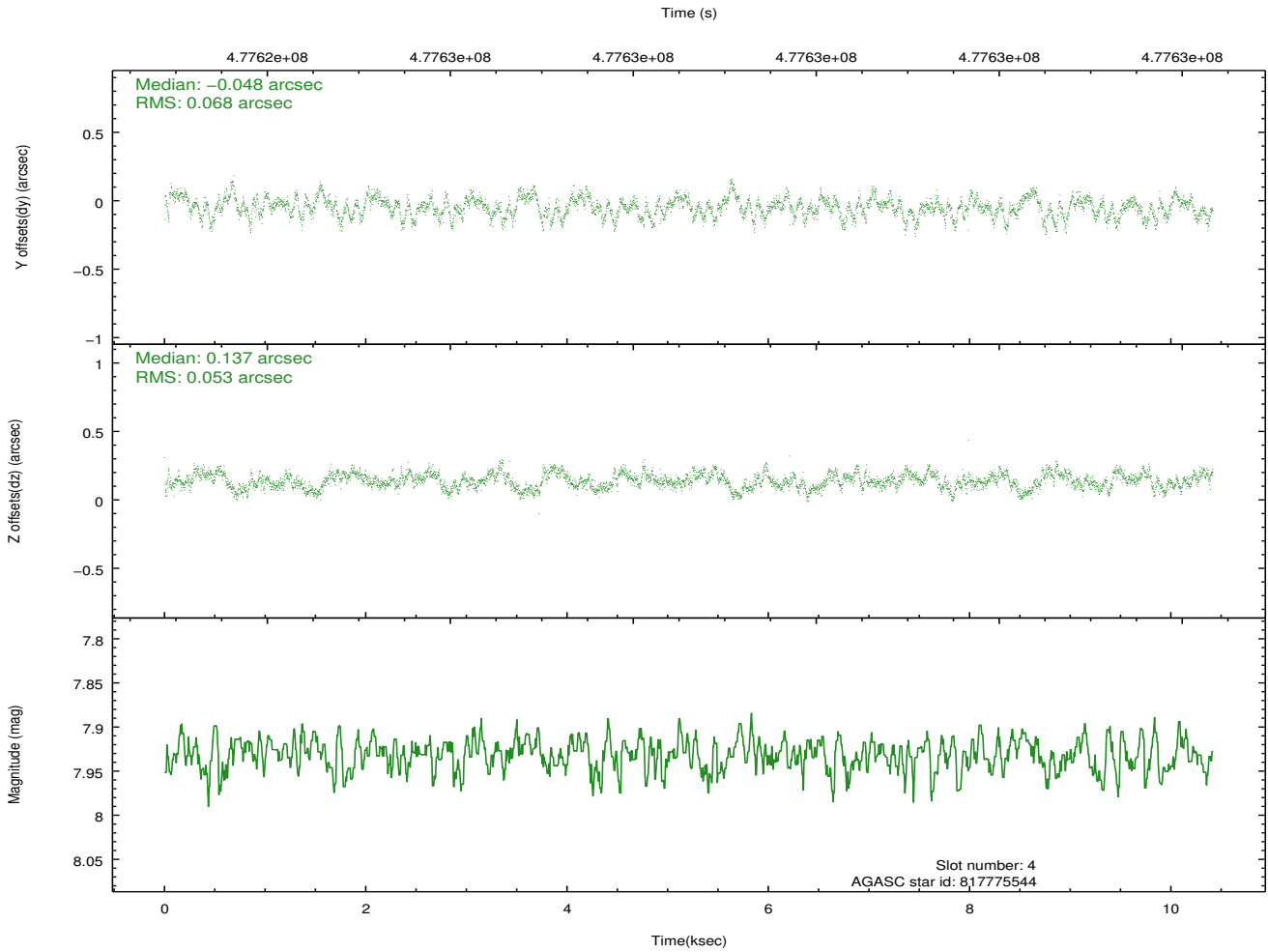
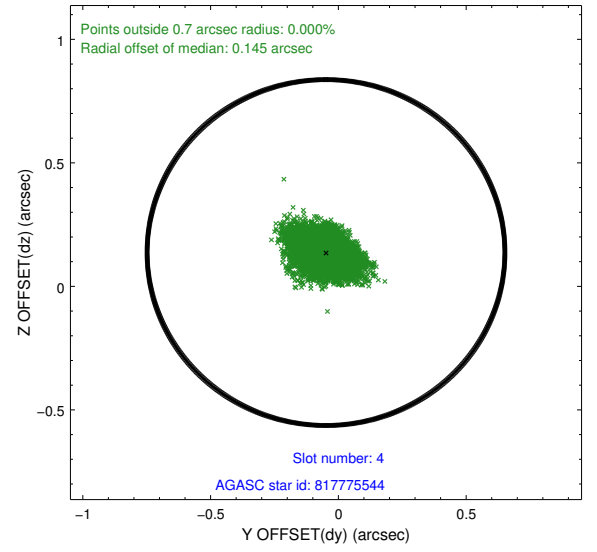
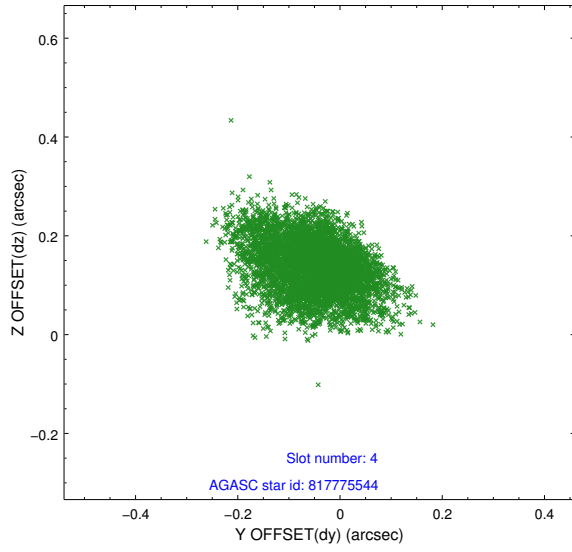
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	6.96	2540	-0.096	-0.097	0.011	0.020	0.000000	0.000000	-775.92	-850.74
1	FID		ACIS-I-4	6.98	2539	0.223	0.083	0.012	0.024	0.000000	0.000000	2138.16	1055.45
2	FID		ACIS-I-5	7.04	2541	-0.229	0.082	0.013	0.022	0.000000	0.000000	-1829.30	1053.75
3	GUIDE	used	817773600	8.78	5077	0.043	-0.304	0.118	0.179	262.312445	-18.664760	376.42	1815.72
4	GUIDE	used	817775544	7.93	5079	-0.048	0.137	0.092	0.153	263.362492	-18.339790	1841.32	-1658.03
5	GUIDE	used	818282928	8.62	5078	-0.129	-0.020	0.094	0.155	262.669982	-19.115116	-1134.71	463.79
6	GUIDE	used	817772544	9.54	5060	0.226	-0.115	0.153	0.268	262.361269	-18.664222	392.65	1650.26
7	GUIDE	used	817775016	9.76	5011	-0.091	0.303	0.216	0.352	263.331121	-18.373238	1712.66	-1561.18

2.4 Star Slots

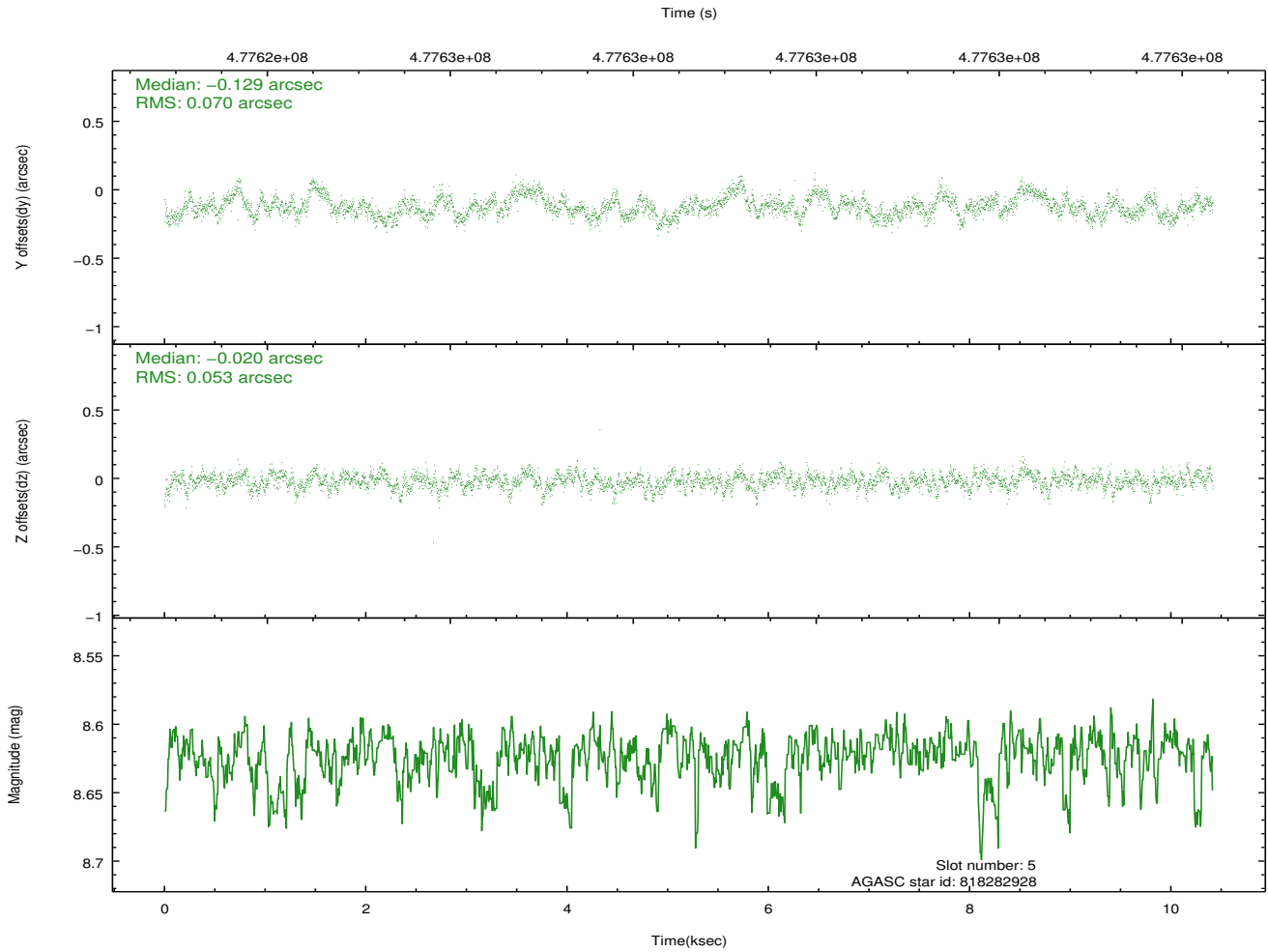
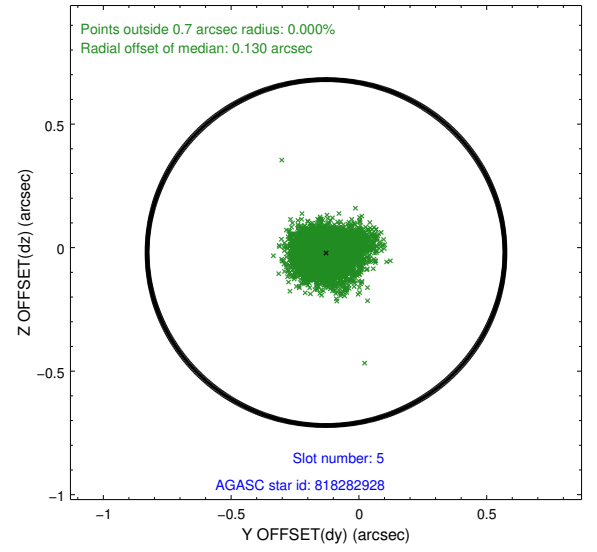
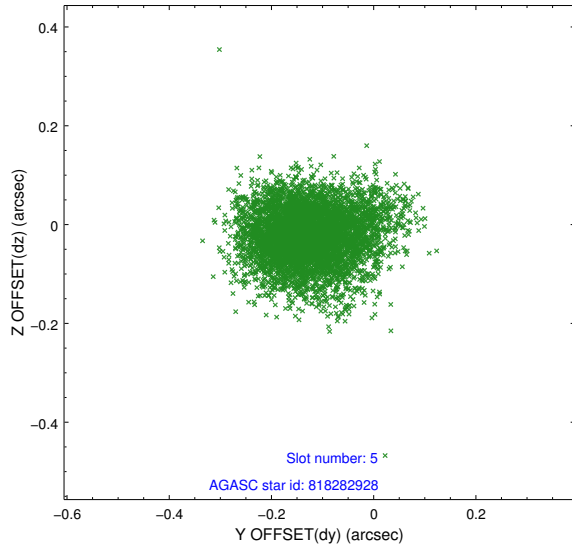
2.4.1 Slot 3



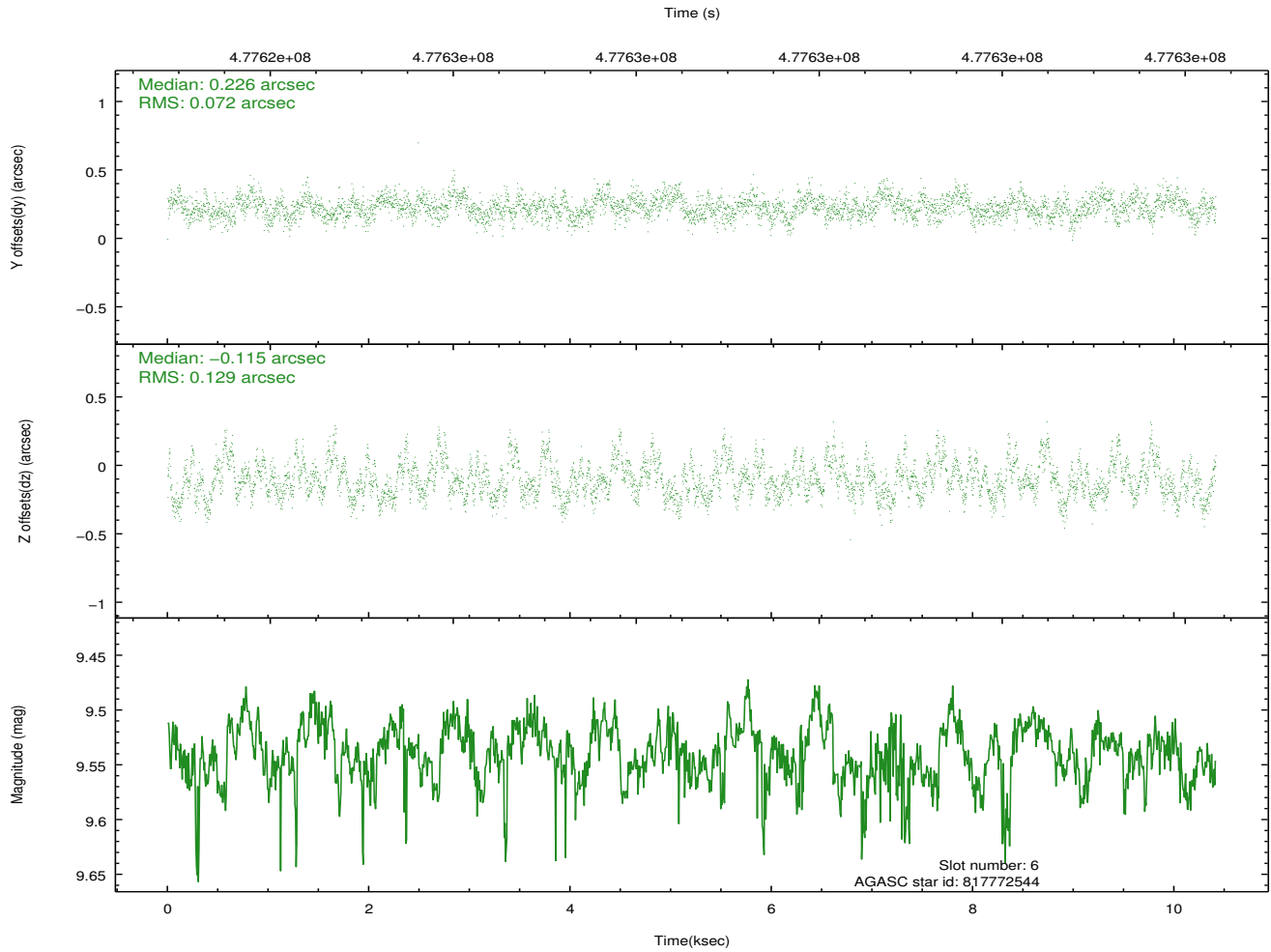
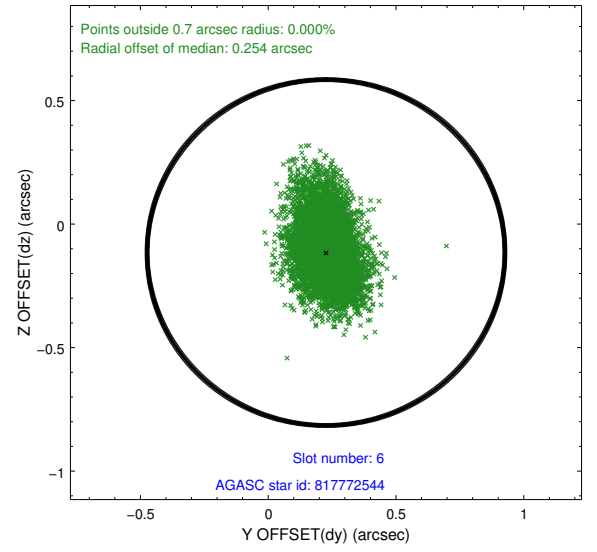
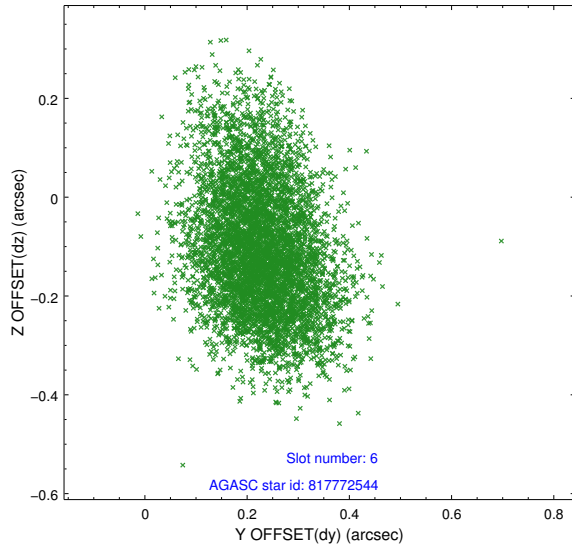
2.4.2 Slot 4



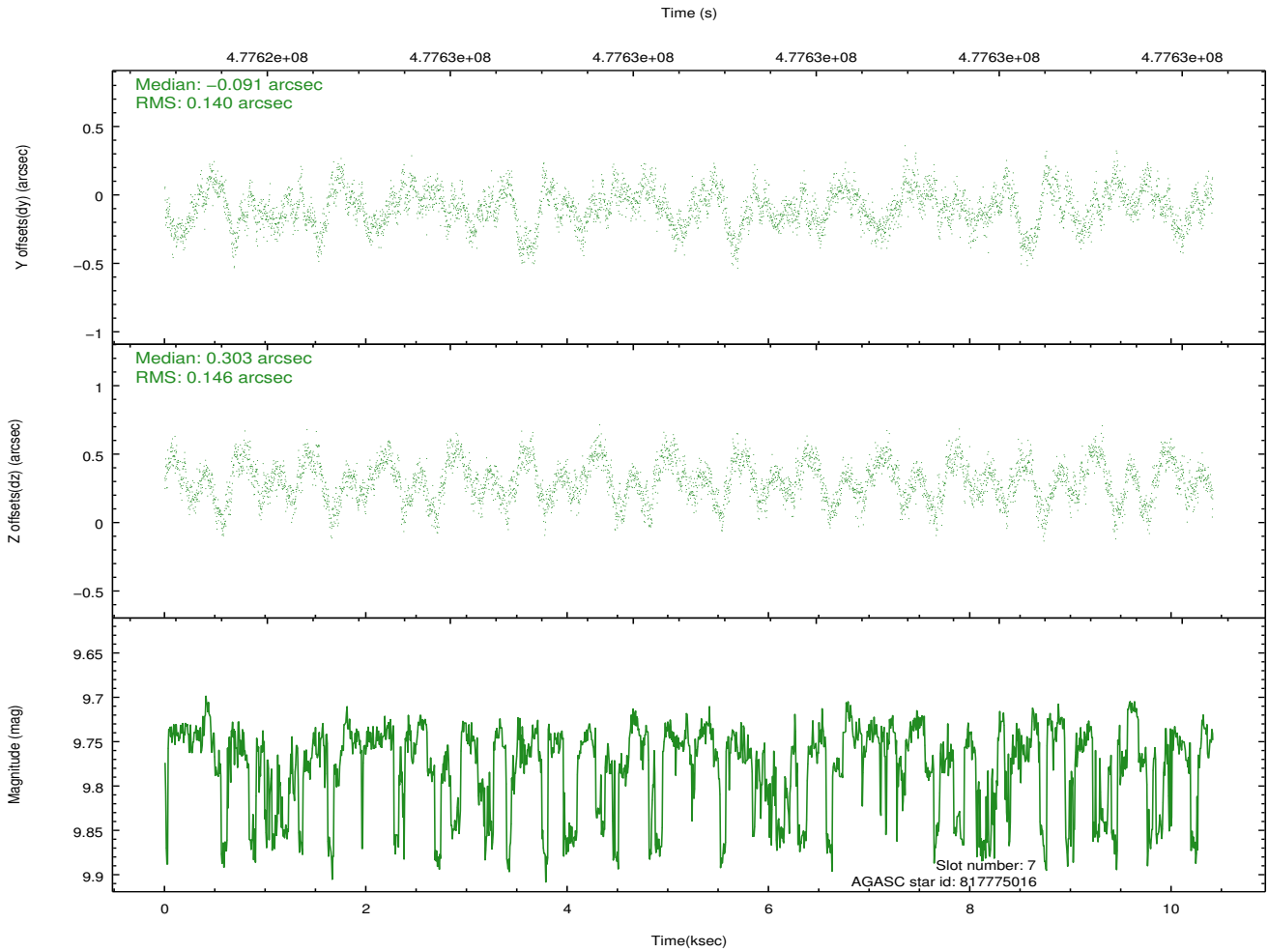
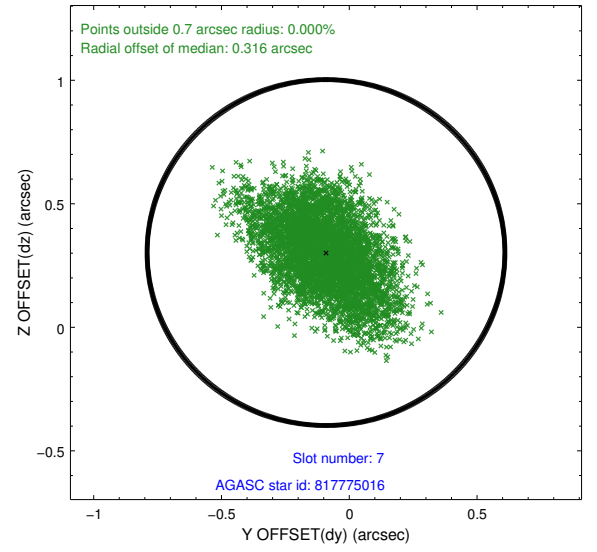
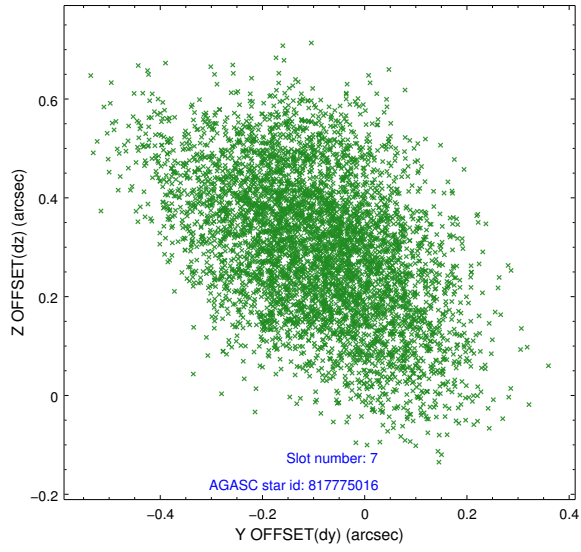
2.4.3 Slot 5



2.4.4 Slot 6

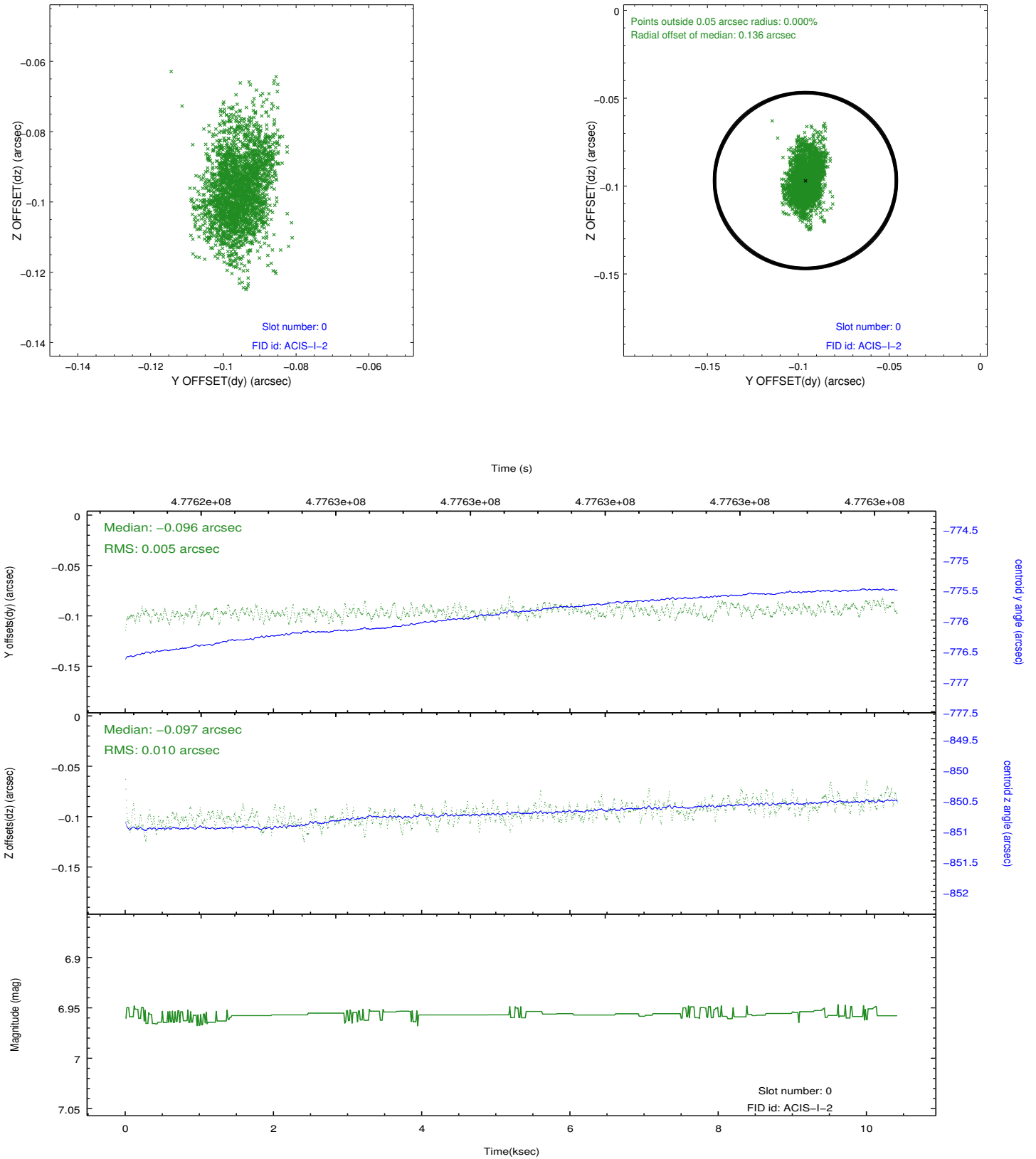


2.4.5 Slot 7

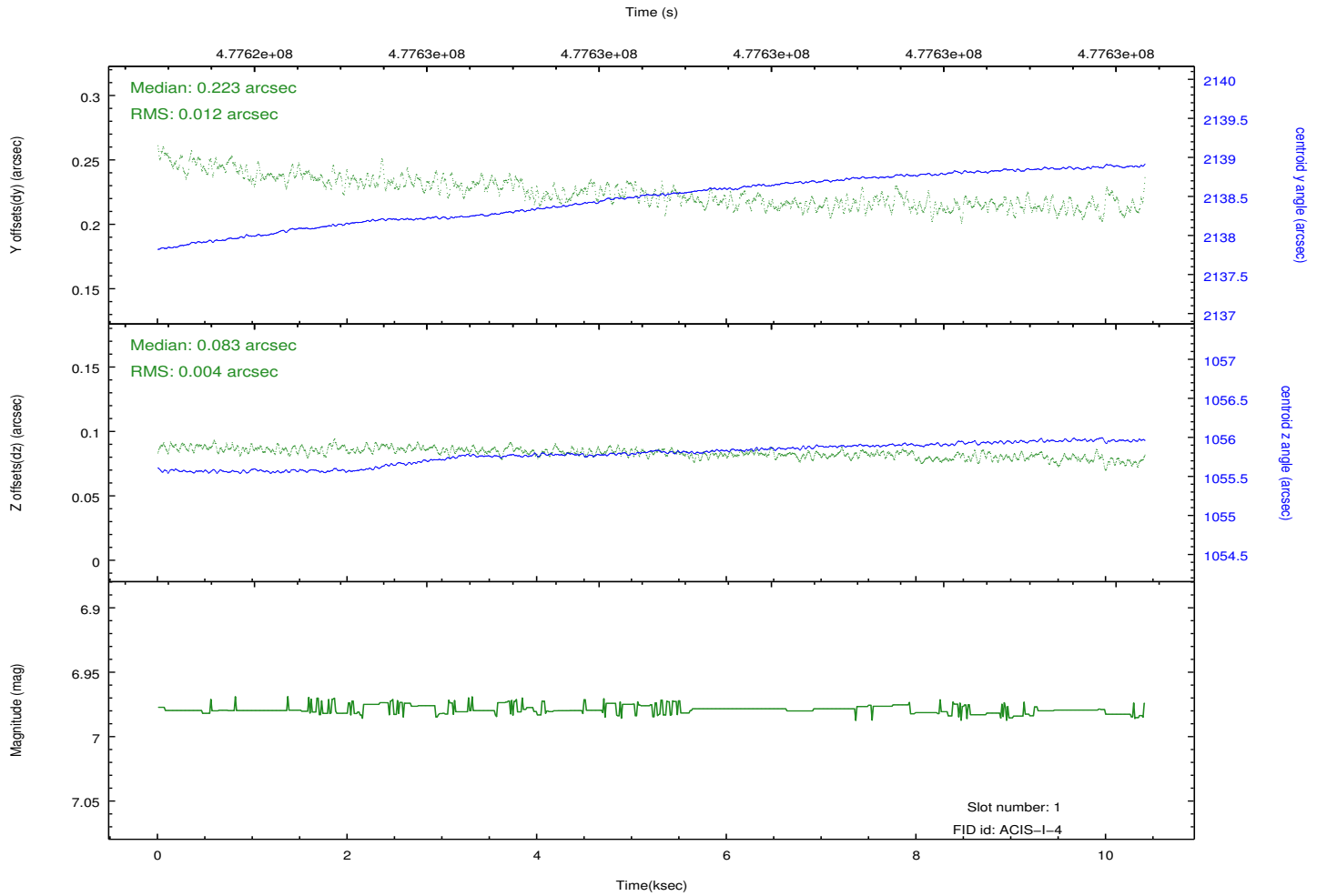
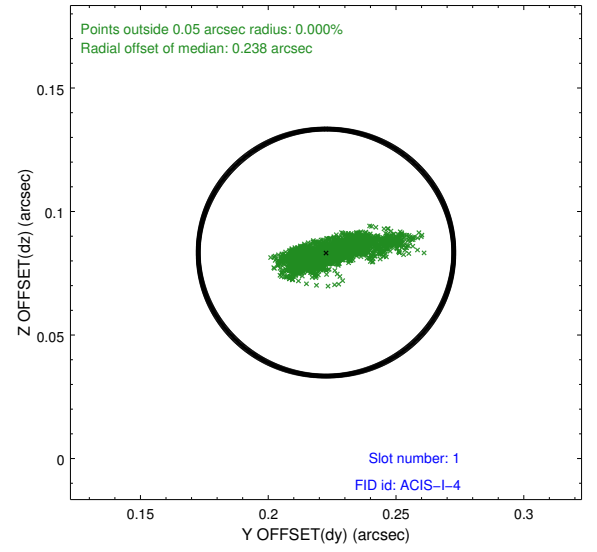
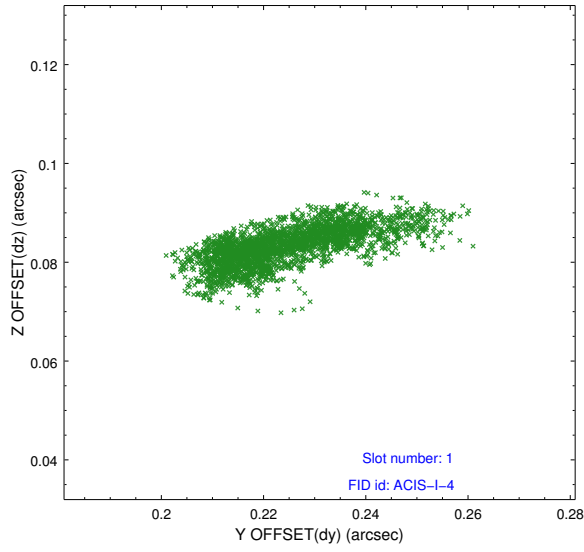


2.5 FID Slots

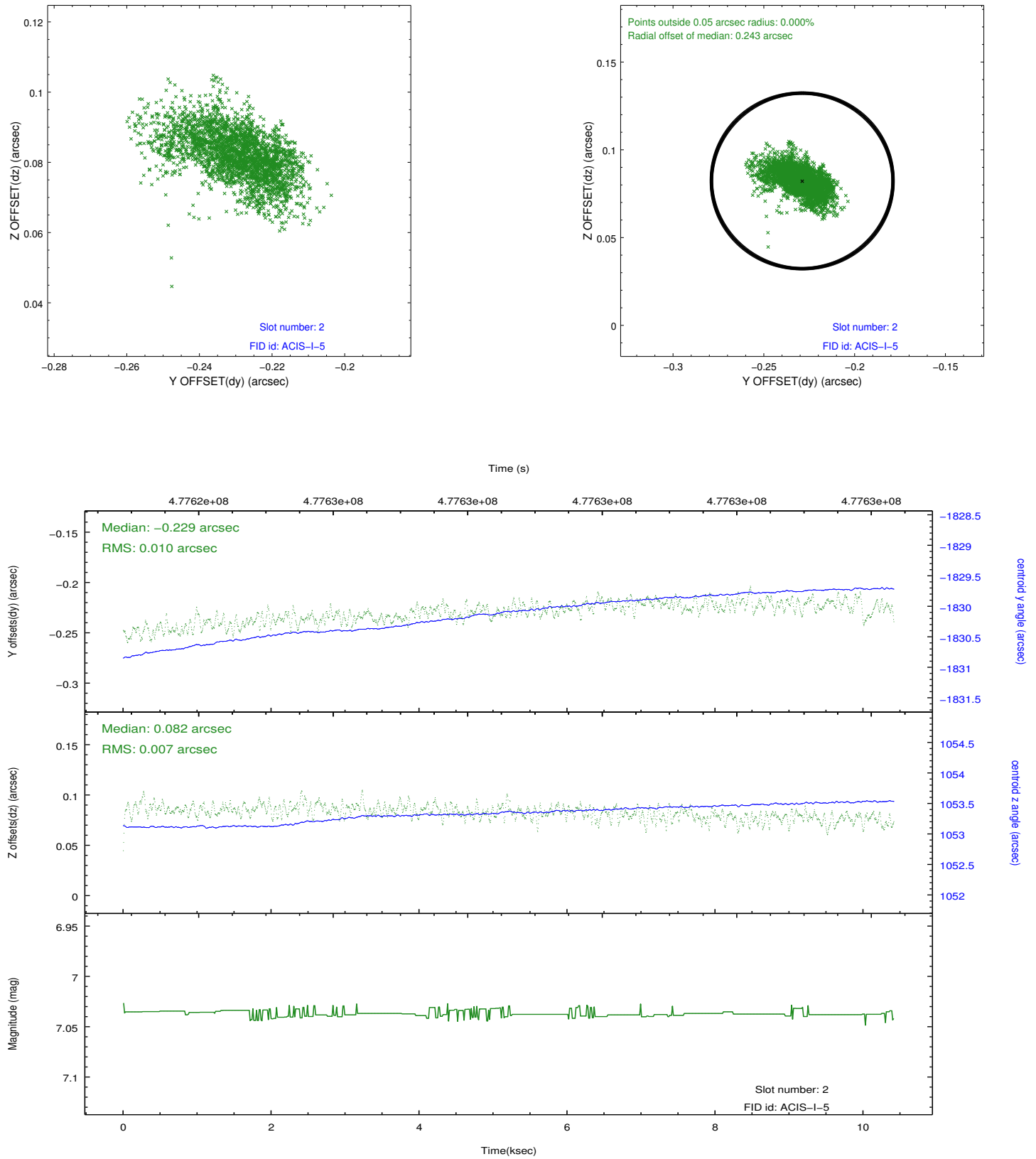
2.5.1 Slot 0



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)	2014.12.04
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.9664944620132

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.