

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15084 - L2 Version 2
Chandra X-Ray Center

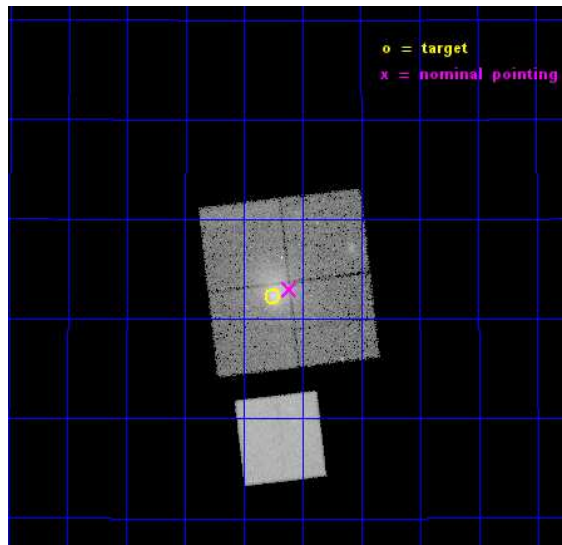
L2 Processing Date : Dec 1 2014

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1 Front

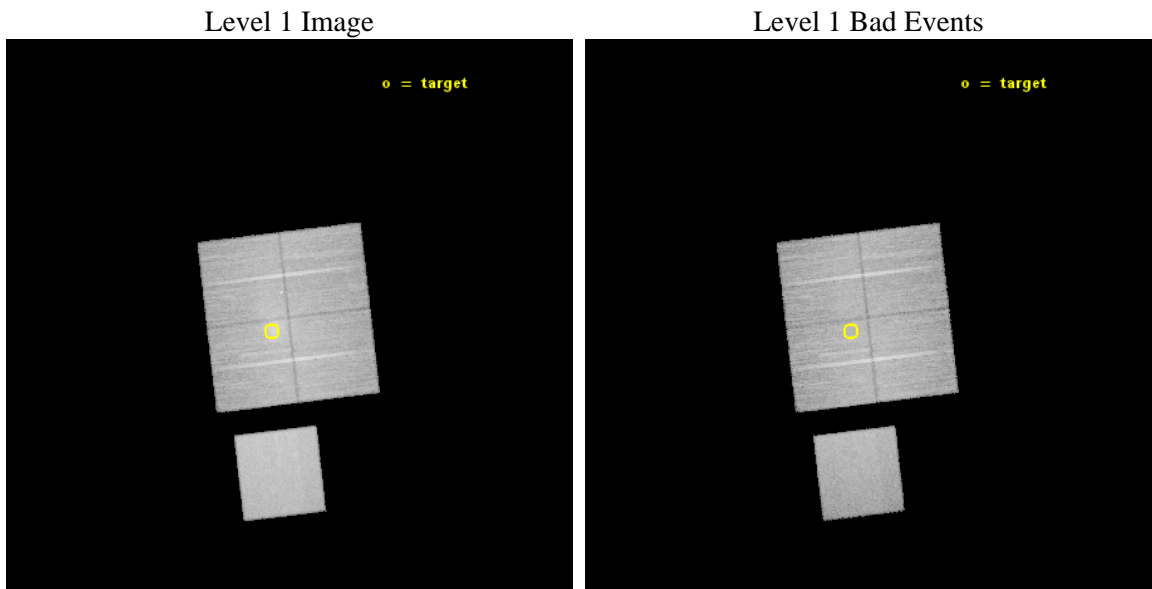
seq_num	801216	Sequence number
obs_id	15084	Observation id
title	The front in Abell 1033, a cluster with a speeding BCG	Proposal ti
observer	Dr Fabio Gastaldello	Principal investigator
object	Abell 1033	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	157.939167	Observer's specified target RA [deg]
dec_targ	35.037694	Observer's specified target Dec [deg]
ra_nom	157.90277868271	Nominal RA [deg]
dec_nom	35.04980299831	Nominal Dec [deg]
roll_nom	173.22959553404	Nominal Roll [deg]
revision	2	Processing version of data
ontime	30068.995779097	Sum of GTIs [s]
livetime	29676.122212771	Livetime [s]
ontime0	30065.731598854	Sum of GTIs [s]
ontime1	30068.91369909	Sum of GTIs [s]
ontime2	30059.531627893	Sum of GTIs [s]
ontime3	30068.995779097	Sum of GTIs [s]
ontime7	30069.0368191	Sum of GTIs [s]
l2events	185695	Number of level 2 events



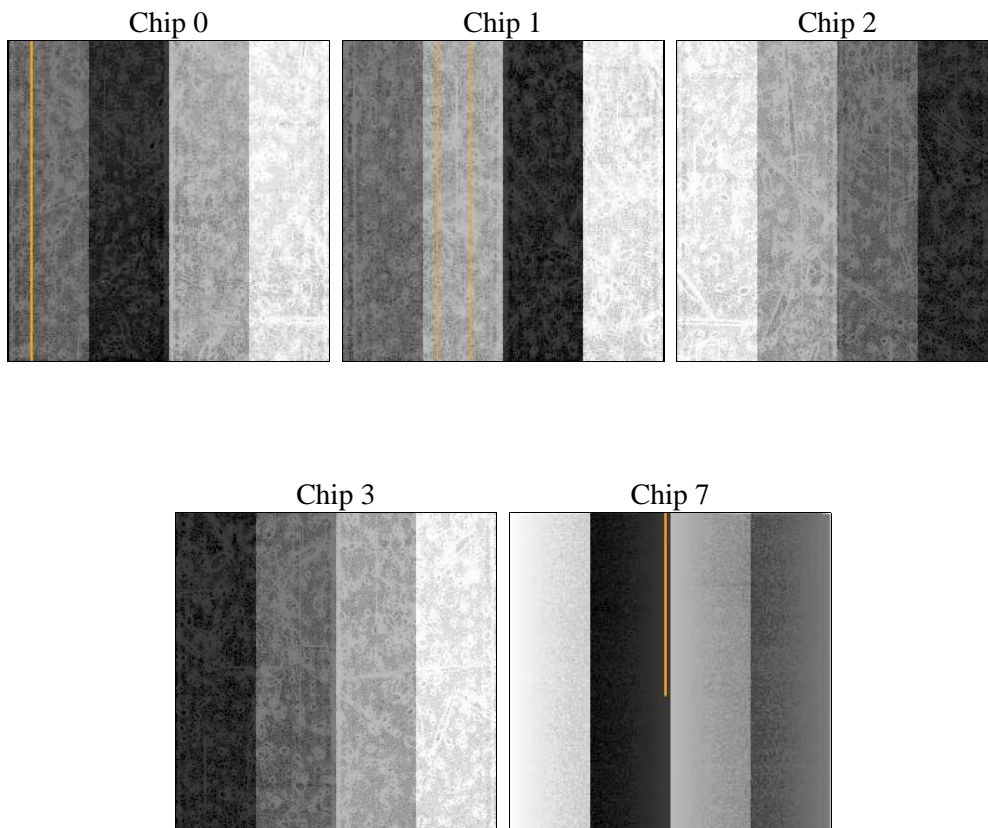
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	30000.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	30068.995779097	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	30065.731598854	Sum of GTIs [s]
date	2014-12-01T18:46:40	Date and time of file creation	ontime1	30068.91369909	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	30059.531627893	Sum of GTIs [s]
			ontime3	30068.995779097	Sum of GTIs [s]
			ontime7	30069.0368191	Sum of GTIs [s]
			l1events	883891	Number of level 1 events

2.1.4 Events

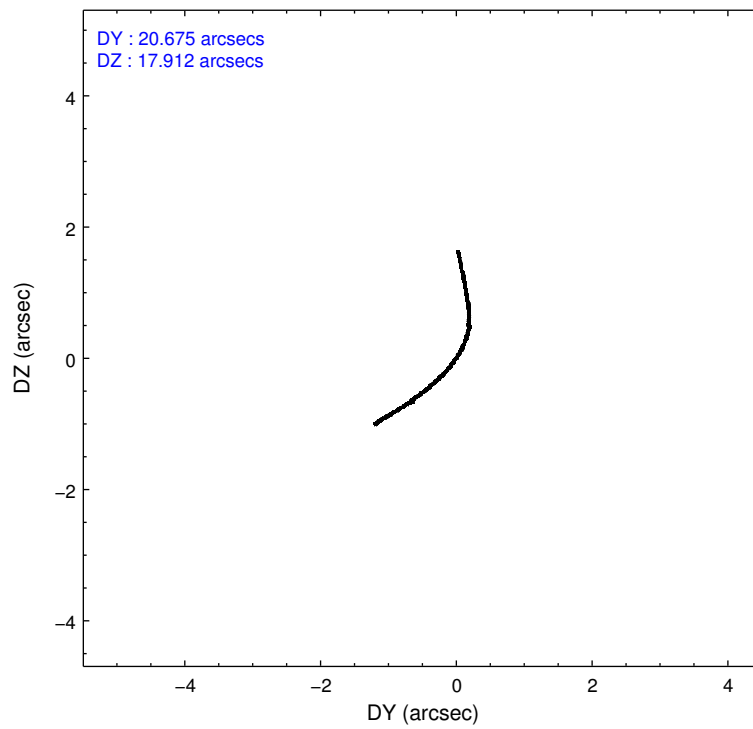
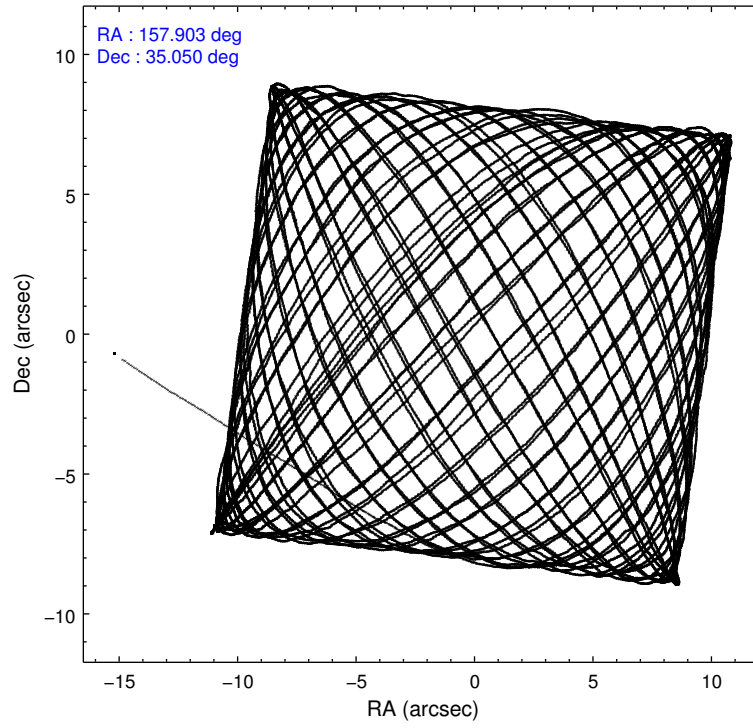
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	153804	162939	166173	177289	223686
rejected events	132445	134493	144790	144192	126160
rejected %	86%	82%	87%	81%	56%

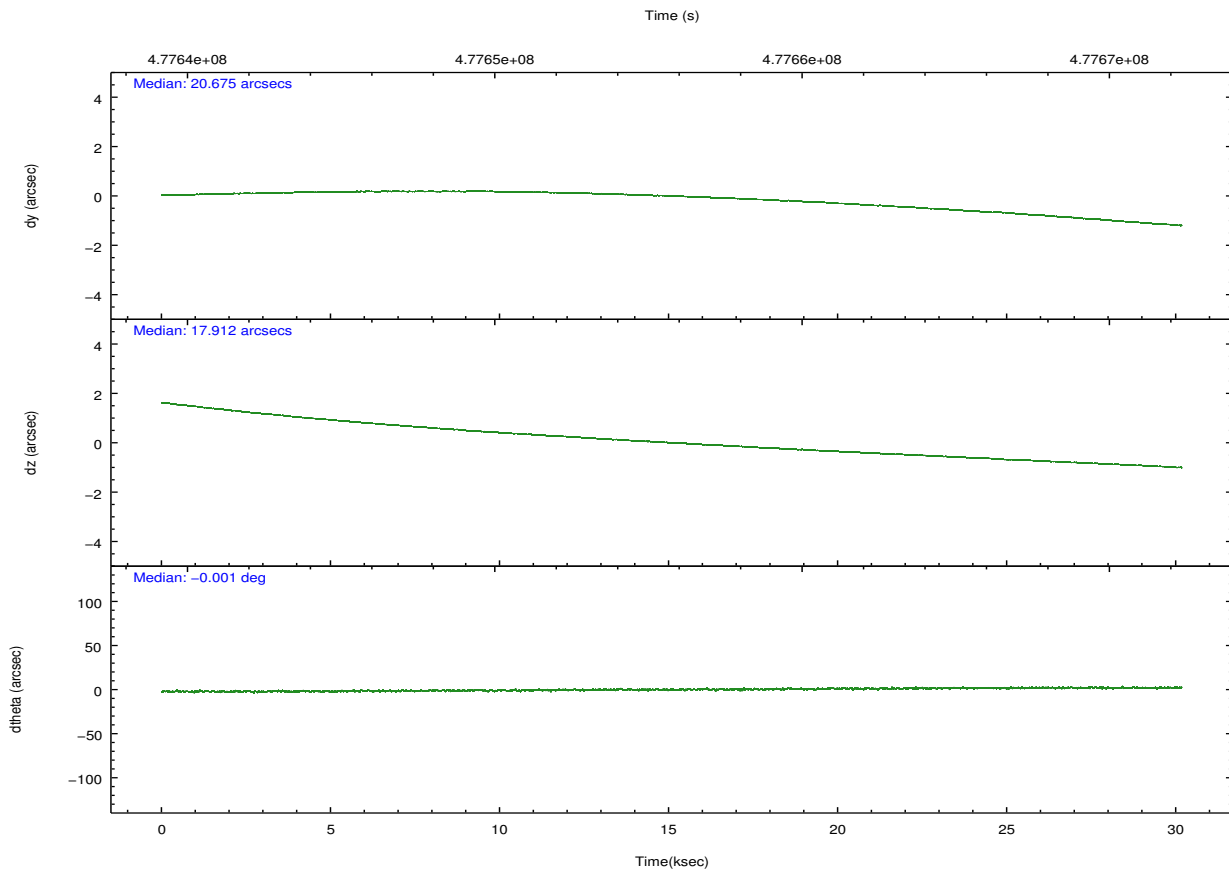
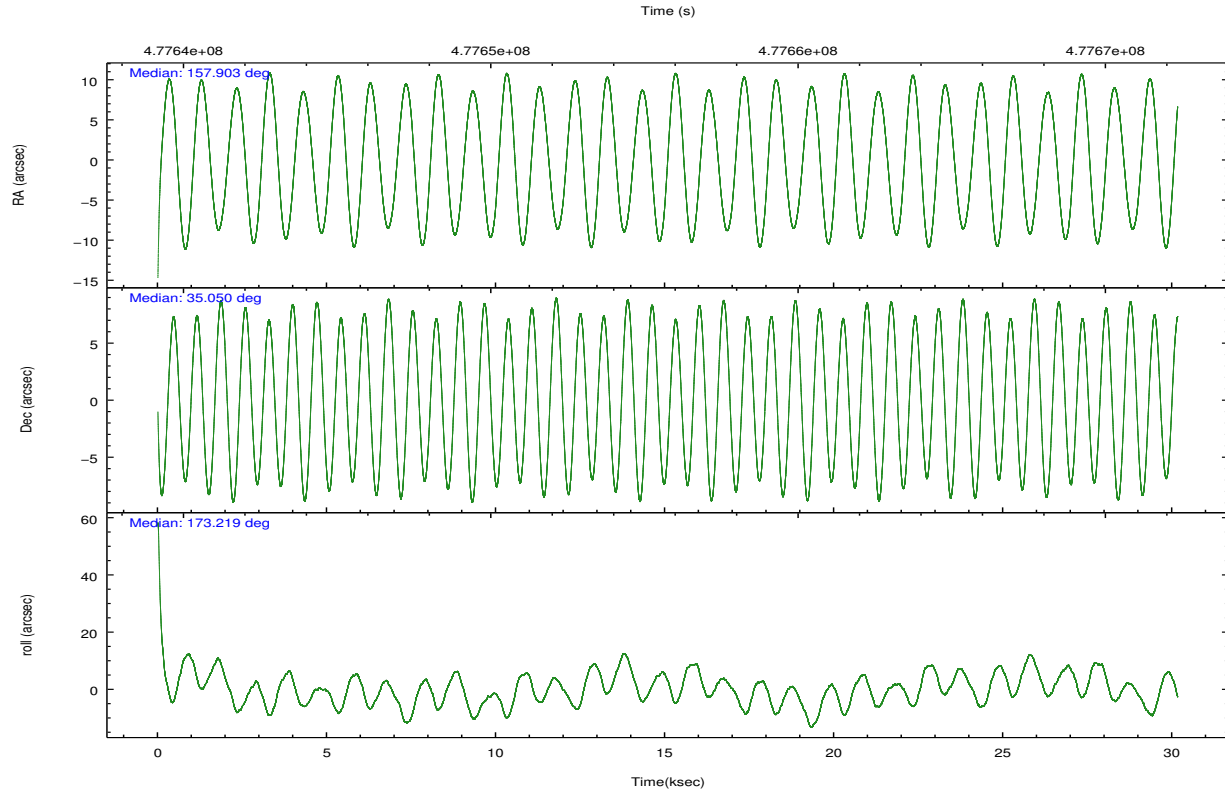
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	8323	13059	8736	18416	8358
	5%	8%	5%	10%	3%
grade 1 events	107	99	111	153	265
	0%	0%	0%	0%	0%
grade 2 events	4996	5874	4853	5573	19893
	3%	3%	2%	3%	8%
grade 3 events	2037	2317	2012	2384	8449
	1%	1%	1%	1%	3%
grade 4 events	1912	2385	2002	2431	8400
	1%	1%	1%	1%	3%
grade 5 events	7453	8347	7061	8534	23100
	4%	5%	4%	4%	10%
grade 6 events	4099	4813	3783	4296	52437
	2%	2%	2%	2%	23%
grade 7 events	124877	126045	137615	135502	102784
	81%	77%	82%	76%	45%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01237	ACIS-01237	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	157.933602	157.9027786827097	CCD I2 on	Y	Y
[deg] Pointing Dec	35.060759	35.04980299830976	CCD I3 on	Y	Y
[deg] Pointing Roll	173.003194	173.2295955340377	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	O1	N
[mm] SIM translation stage pos	-233.592463	-233.5874344608287	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	-0.005018542100998502	CCD S4 on	N	N
[s] Observation start time (MET)	477640849.184000	477639520.35832	CCD S5 on	N	N
Observation start date	2013-02-19T05:59:42	2013-02-19T05:38:40	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	477670849.184000	477671480.88505	On-chip summing requested	N	N
Observation end date	2013-02-19T14:19:42	2013-02-19T14:31:20	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





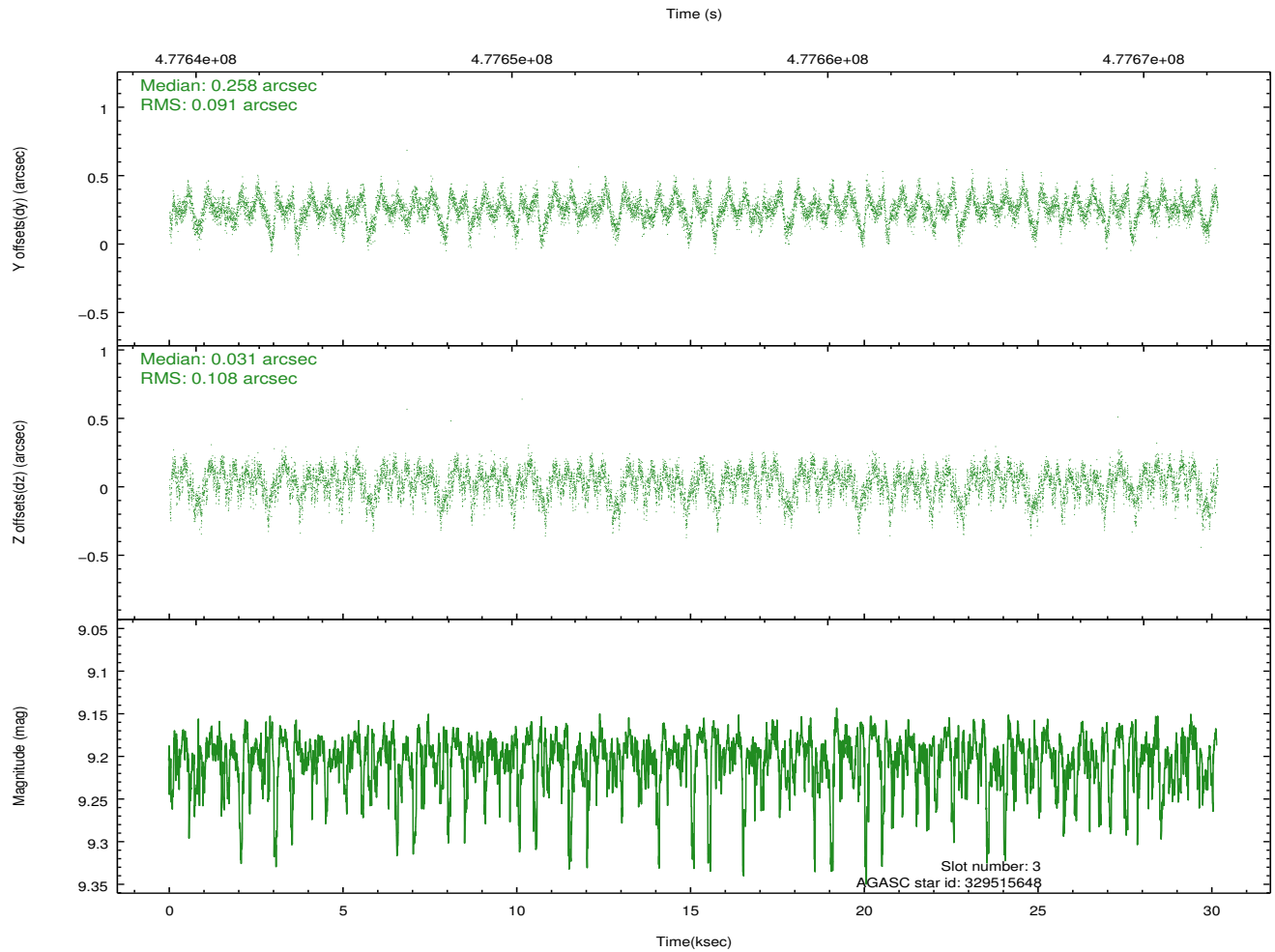
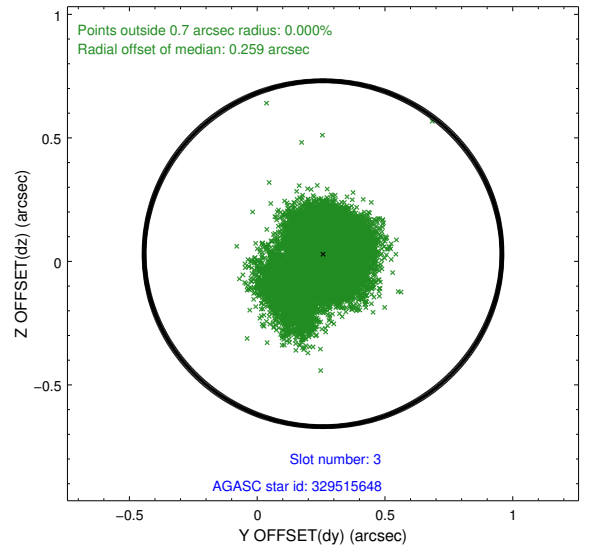
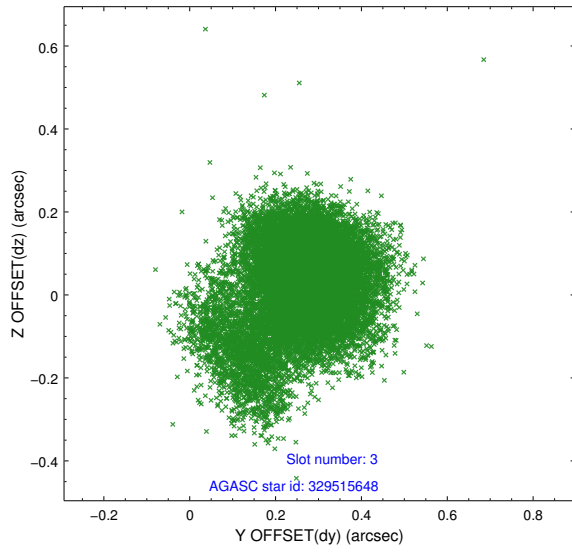
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.00	7357	0.014	-0.072	0.015	0.025	0.000000	0.000000	-775.34	-848.10
1	FID		ACIS-I-5	7.09	7354	-0.235	0.070	0.012	0.023	0.000000	0.000000	-1829.69	1055.86
2	FID		ACIS-I-6	7.11	7357	0.128	0.072	0.008	0.014	0.000000	0.000000	384.45	1700.43
3	GUIDE	used	329515648	9.20	14604	0.258	0.031	0.145	0.257	158.047758	34.982334	-368.58	239.46
4	GUIDE	used	329515984	7.94	14714	-0.165	-0.092	0.078	0.126	157.214123	34.885674	2034.29	878.02
5	GUIDE	used	329519744	7.86	14713	-0.132	-0.047	0.084	0.138	157.439044	34.827497	1348.85	1008.07
6	GUIDE	used	329916968	9.35	14642	-0.038	0.036	0.148	0.249	157.833853	35.436726	455.88	-1307.85
7	GUIDE	used	329524256	9.23	14707	0.063	0.081	0.121	0.187	157.051602	34.556062	2376.14	2111.30

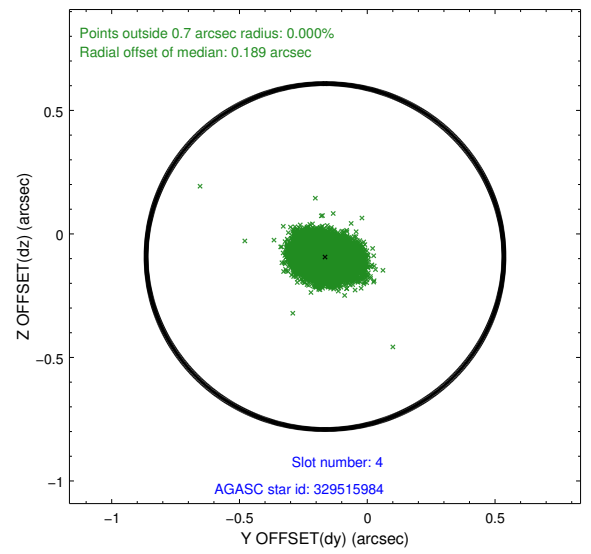
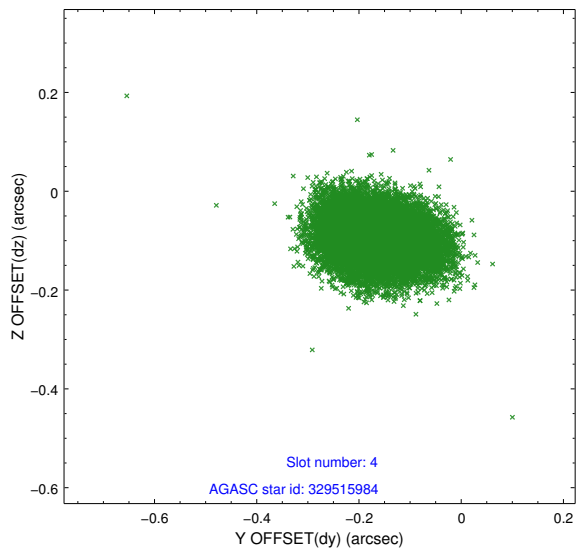
∞

2.4 Star Slots

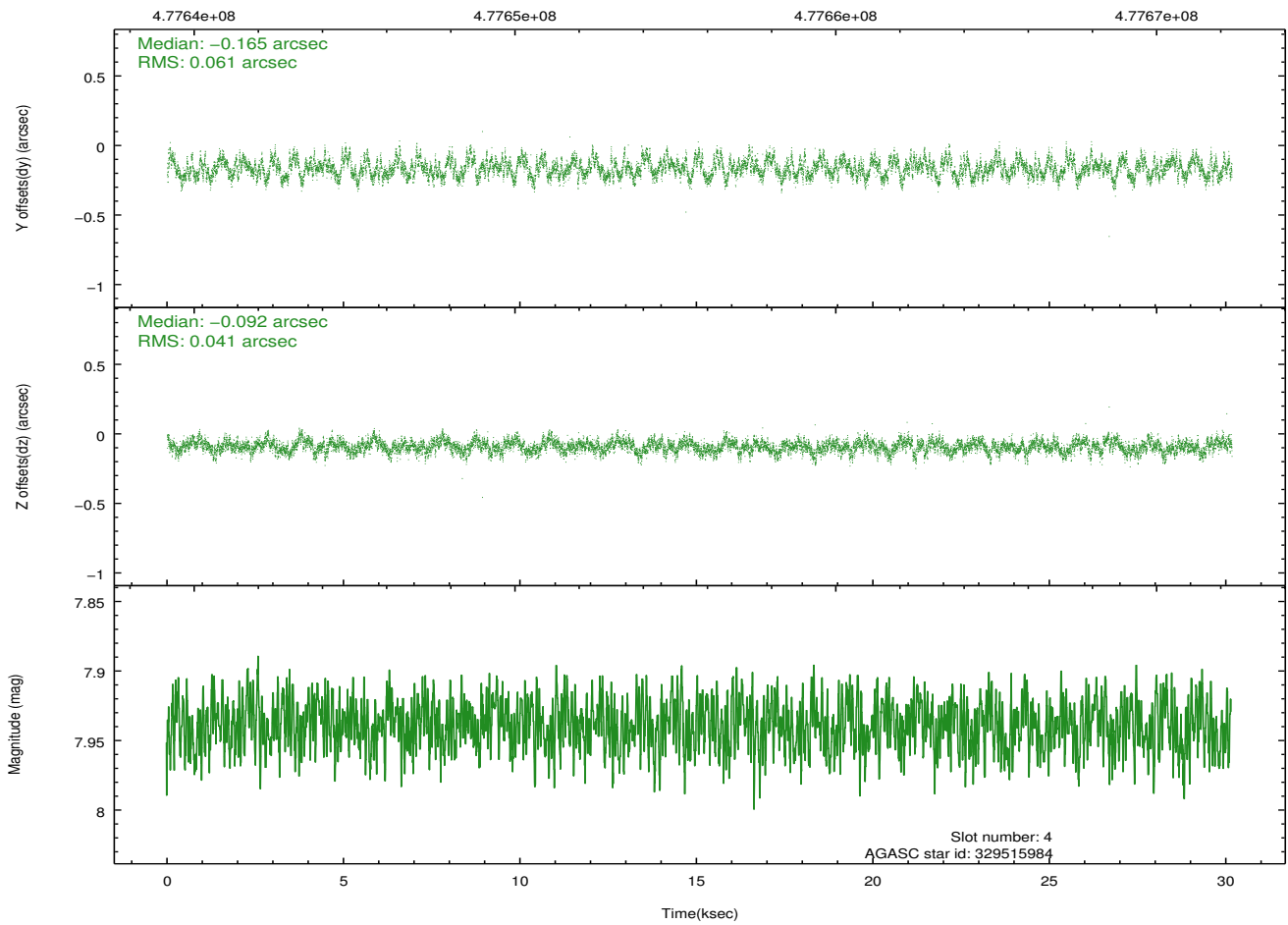
2.4.1 Slot 3



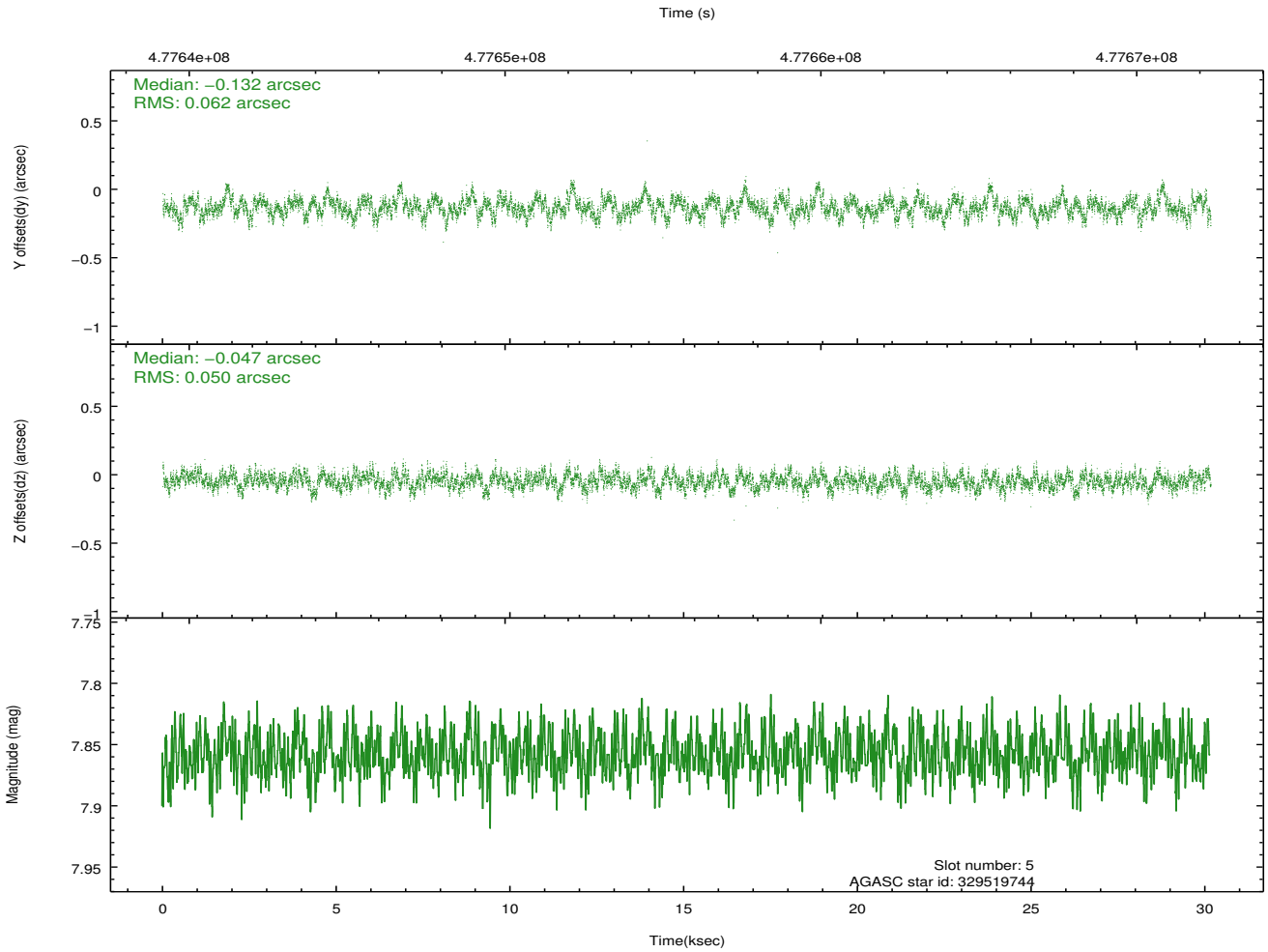
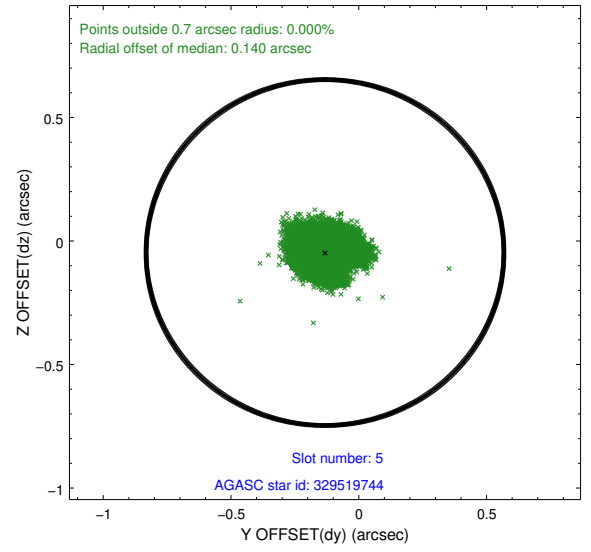
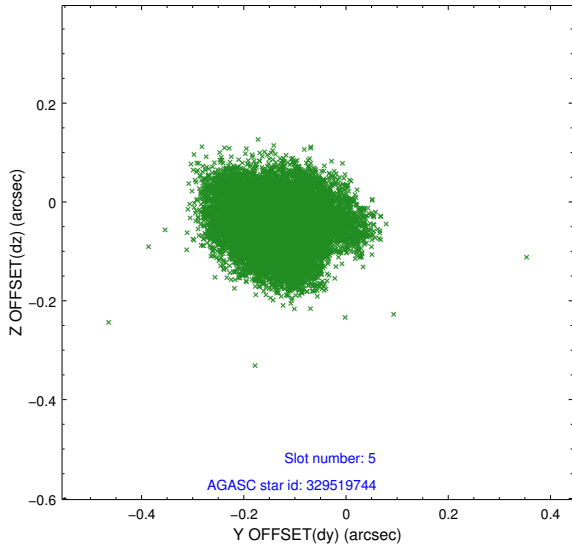
2.4.2 Slot 4



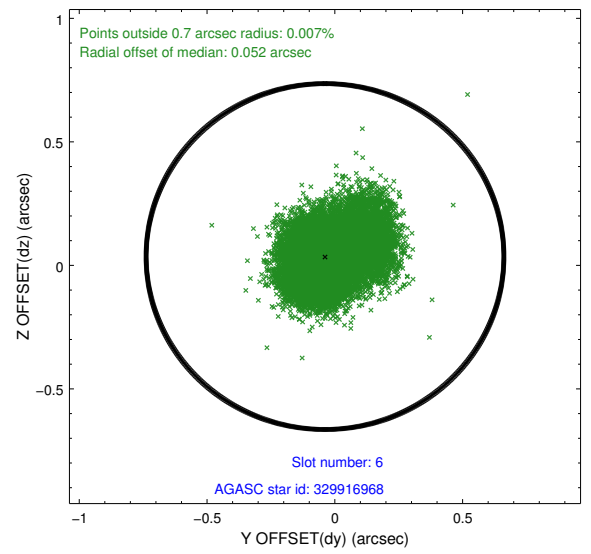
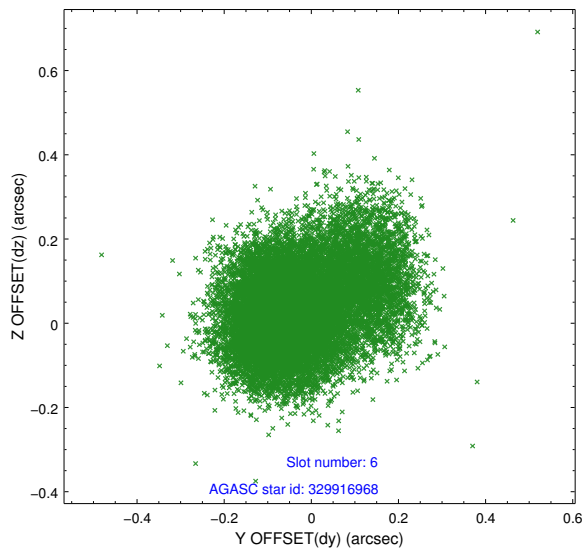
Time (s)



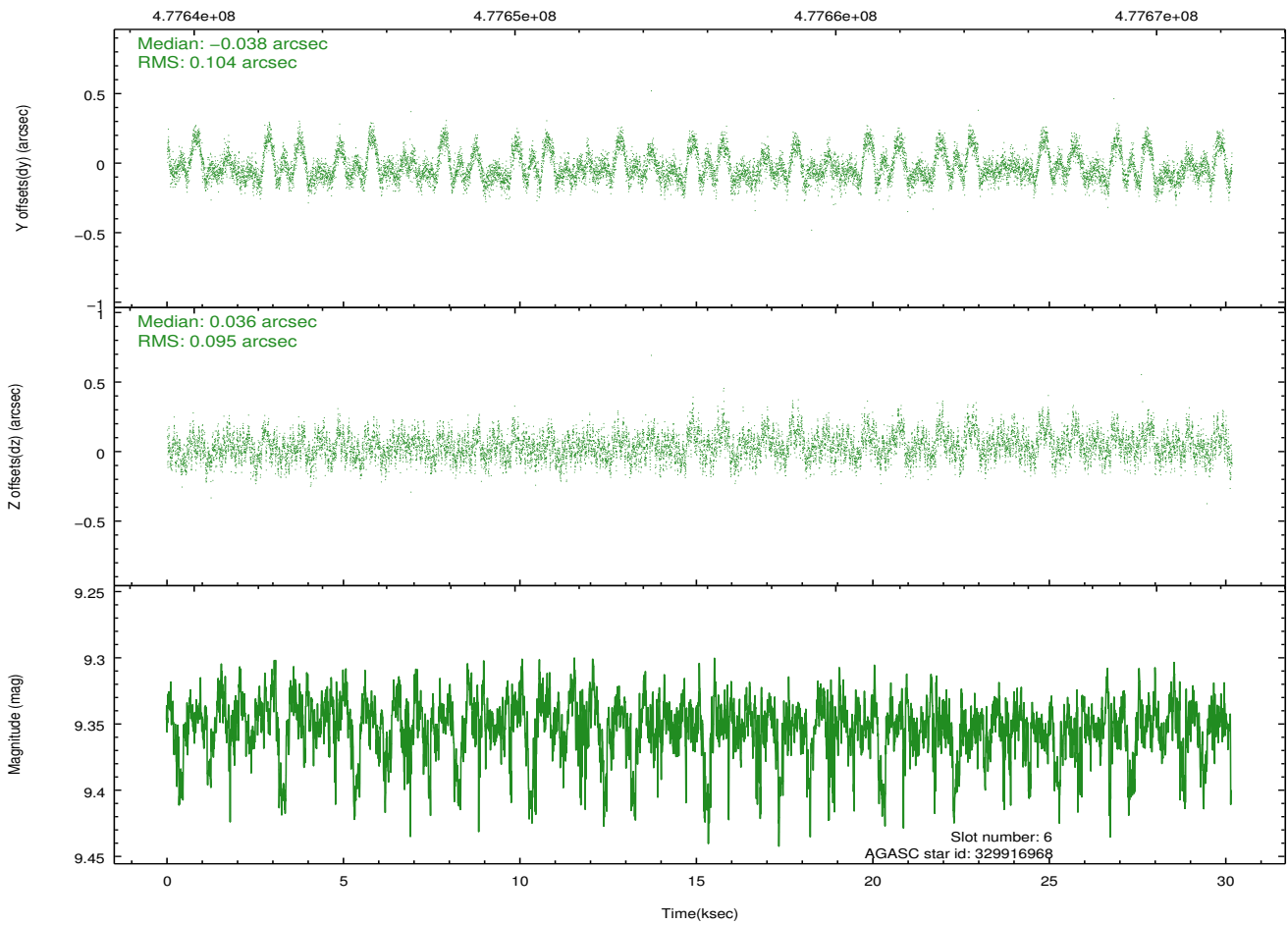
2.4.3 Slot 5



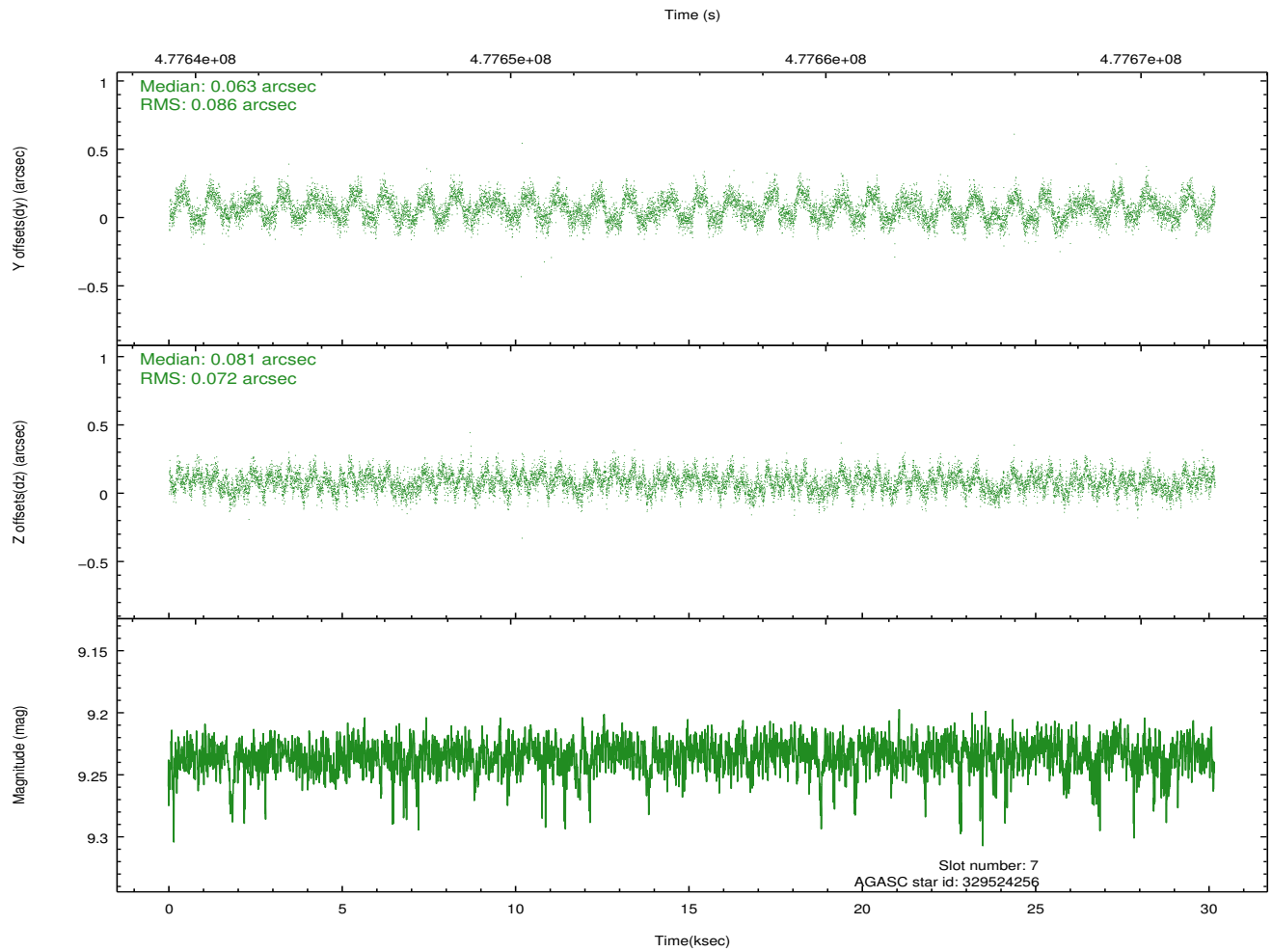
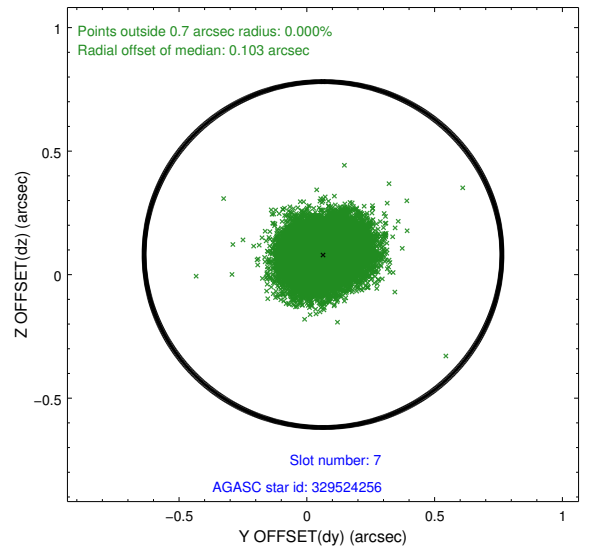
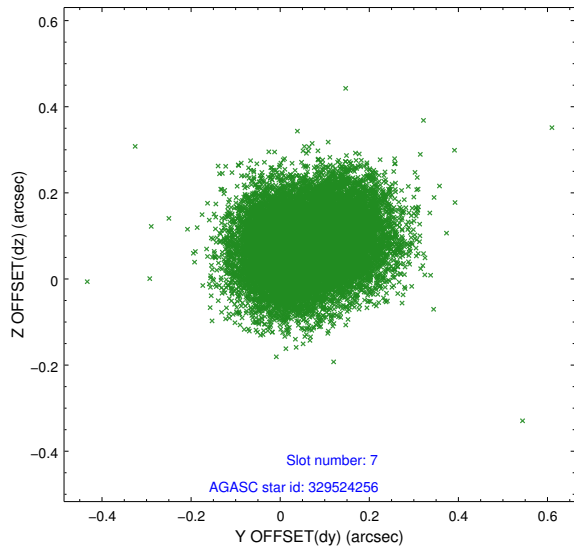
2.4.4 Slot 6



Time (s)

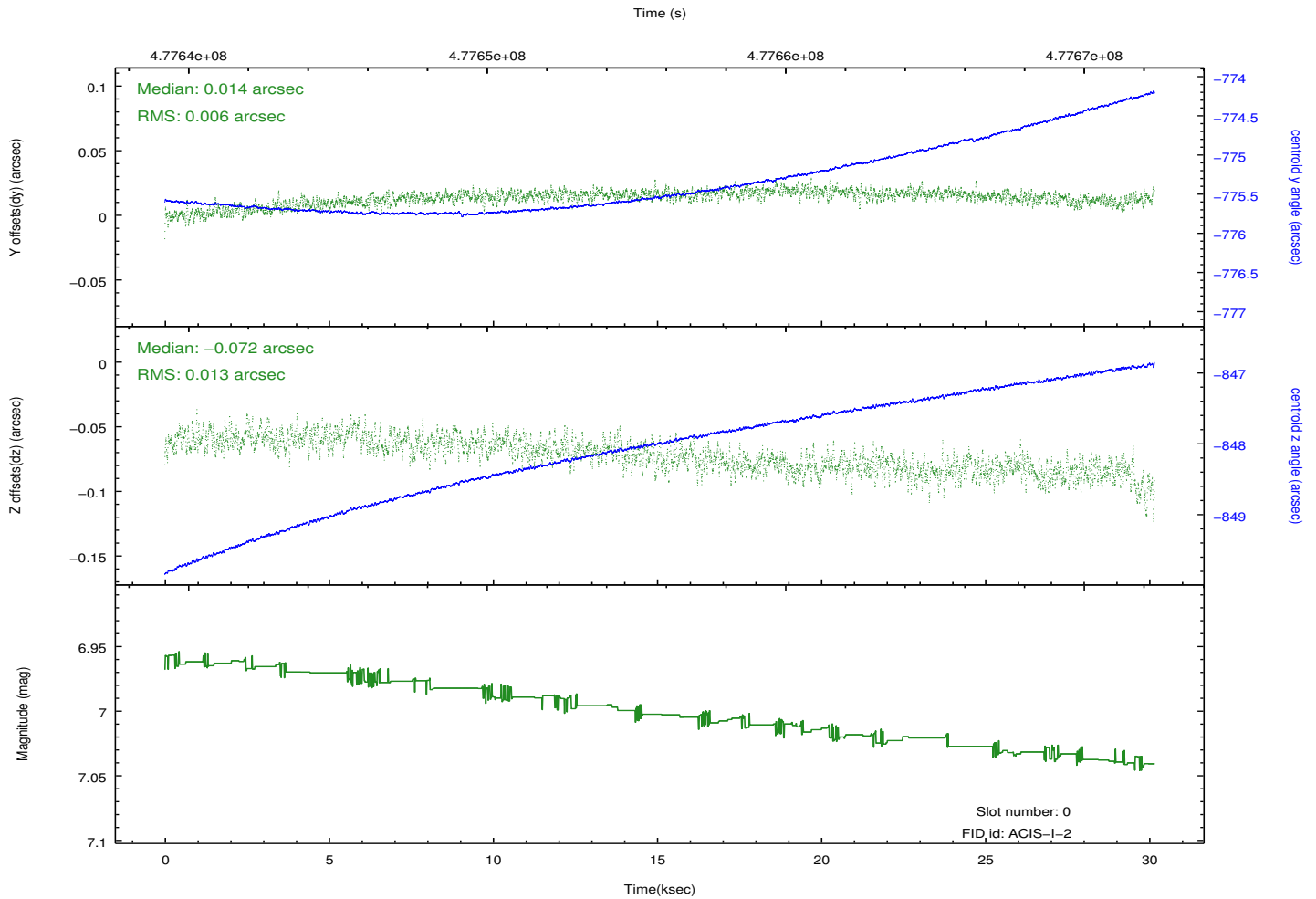
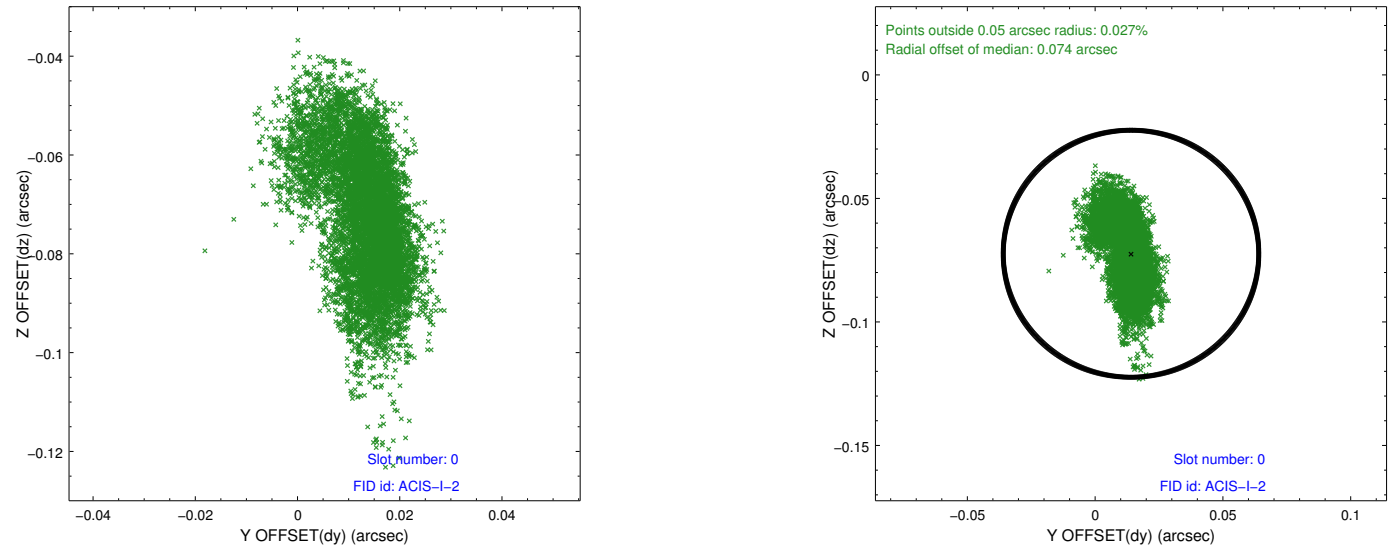


2.4.5 Slot 7

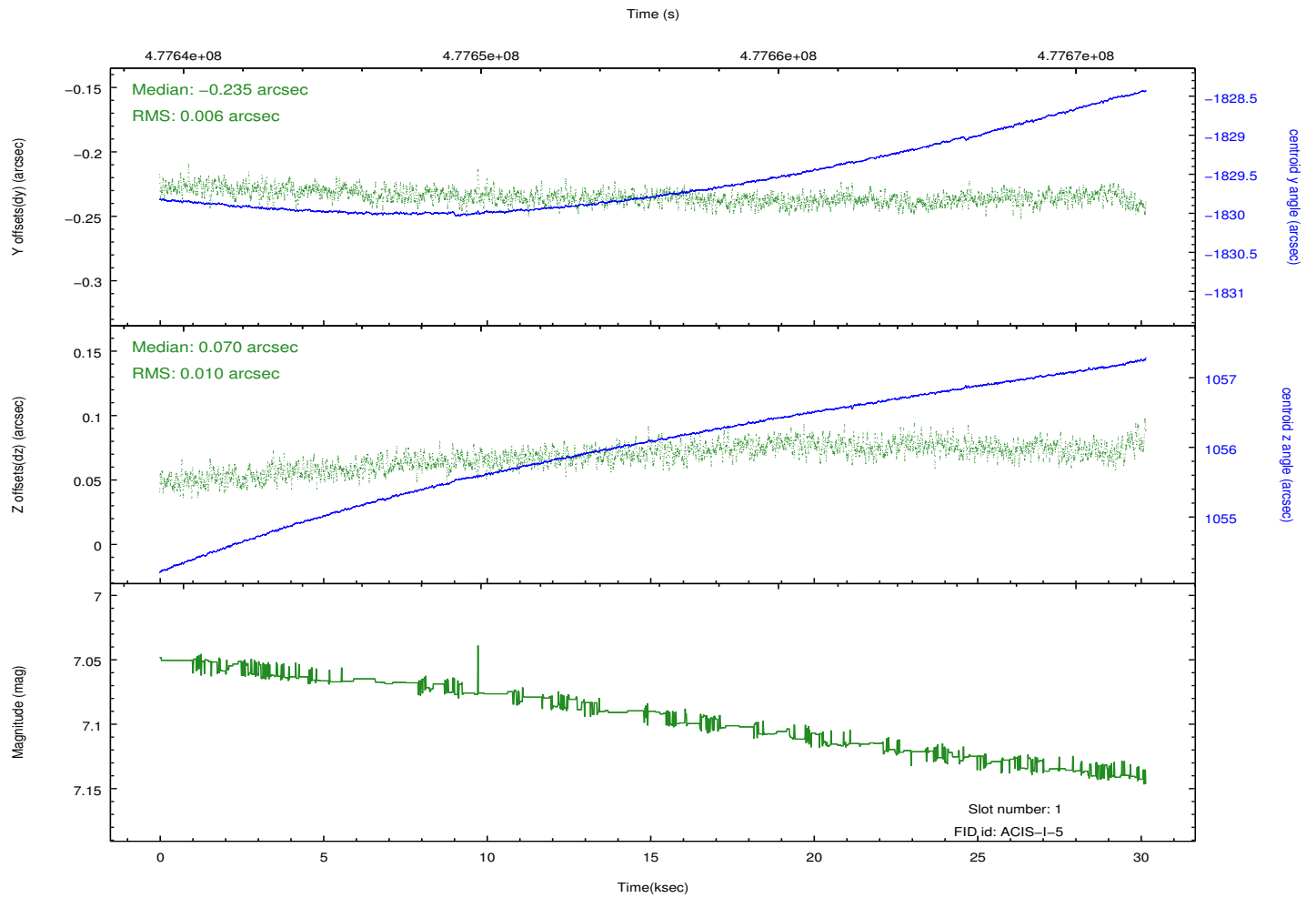
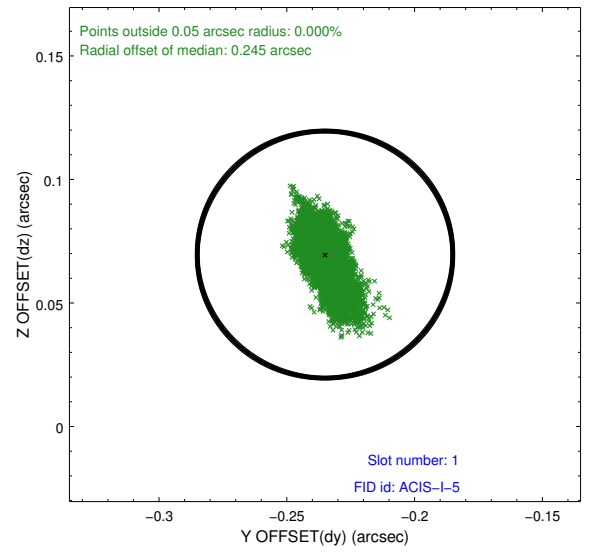
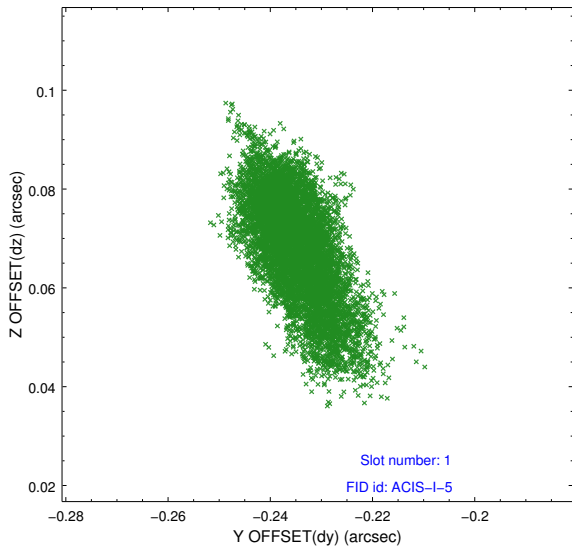


2.5 FID Slots

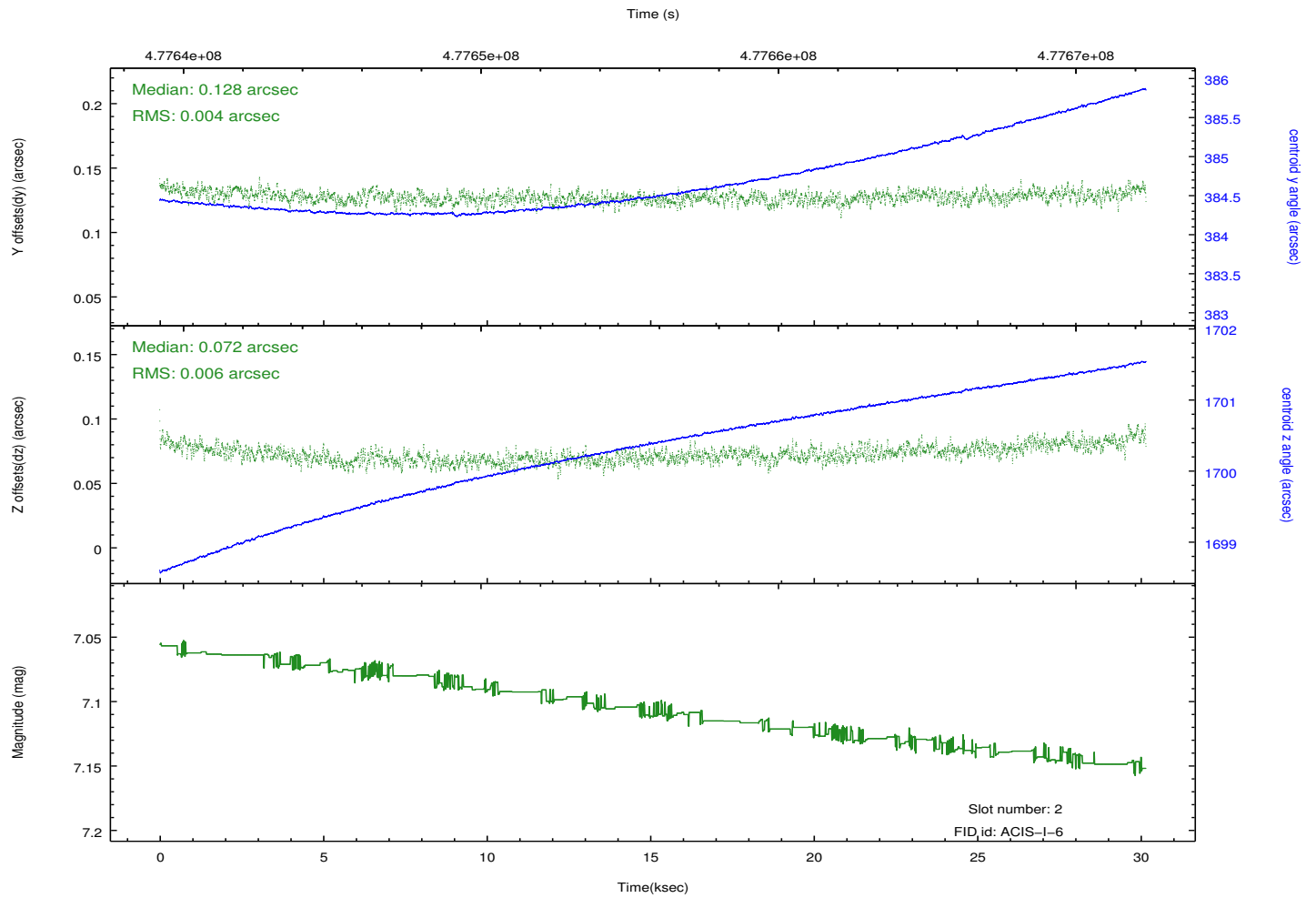
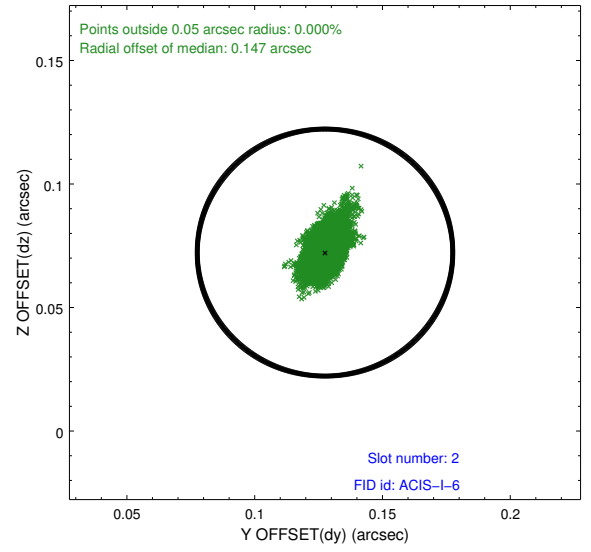
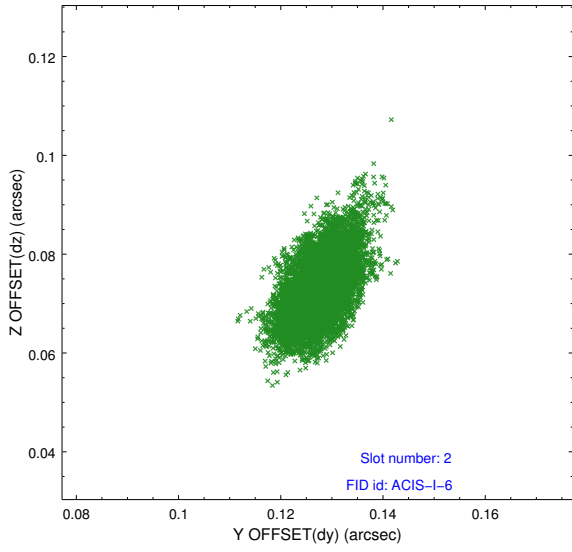
2.5.1 Slot 0



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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	30.068995779097

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.