

V&V Reference Report

L2 ASCDS Version : 8.4.5

Observation 15047 - L2 Version 2
Chandra X-Ray Center

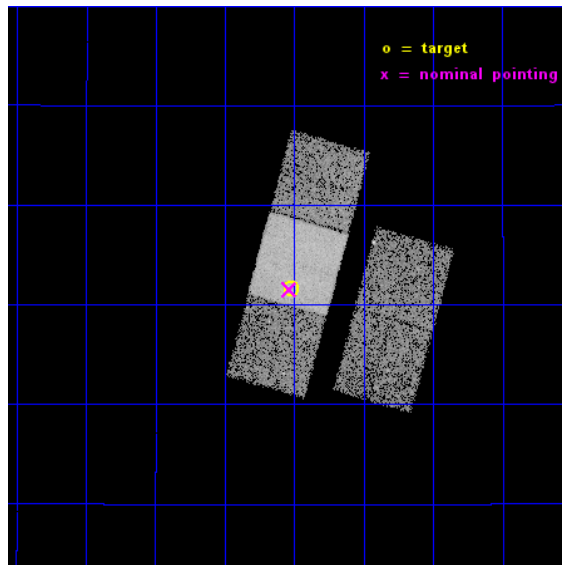
L2 Processing Date : Nov 29 2014

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1 Front

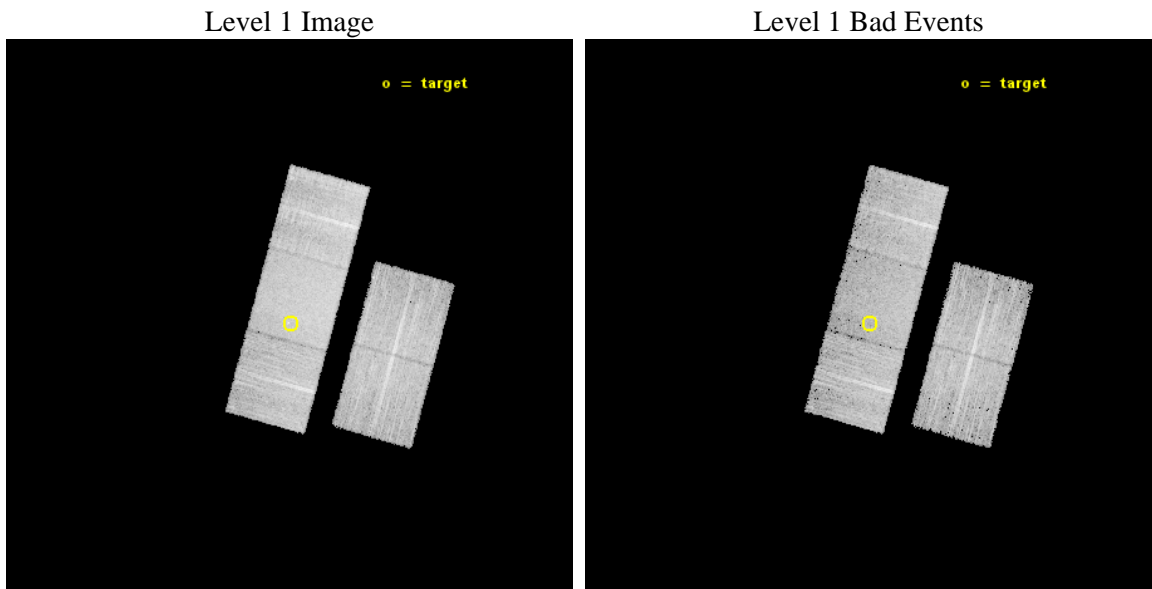
seq_num	702854	Sequence number
obs_id	15047	Observation id
title	C-GOALS: The Chandra-RBGS Survey of a Complete Sample of Major-Merger LIRGs	Proposal title
observer	Professor David Sanders	Principal investigator
object	CGCG 436-030	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	20.005833	Observer's specified target RA [deg]
dec_targ	14.359722	Observer's specified target Dec [deg]
ra_nom	20.008838175909	Nominal RA [deg]
dec_nom	14.358819179315	Nominal Dec [deg]
roll_nom	285.47216602974	Nominal Roll [deg]
revision	2	Processing version of data
ontime	14002.700107694	Sum of GTIs [s]
livetime	13819.744522149	Livetime [s]
ontime2	14002.700107694	Sum of GTIs [s]
ontime3	13999.55909735	Sum of GTIs [s]
ontime6	14002.700107694	Sum of GTIs [s]
ontime7	14002.700107694	Sum of GTIs [s]
ontime8	13999.559127331	Sum of GTIs [s]
l2events	69797	Number of level 2 events



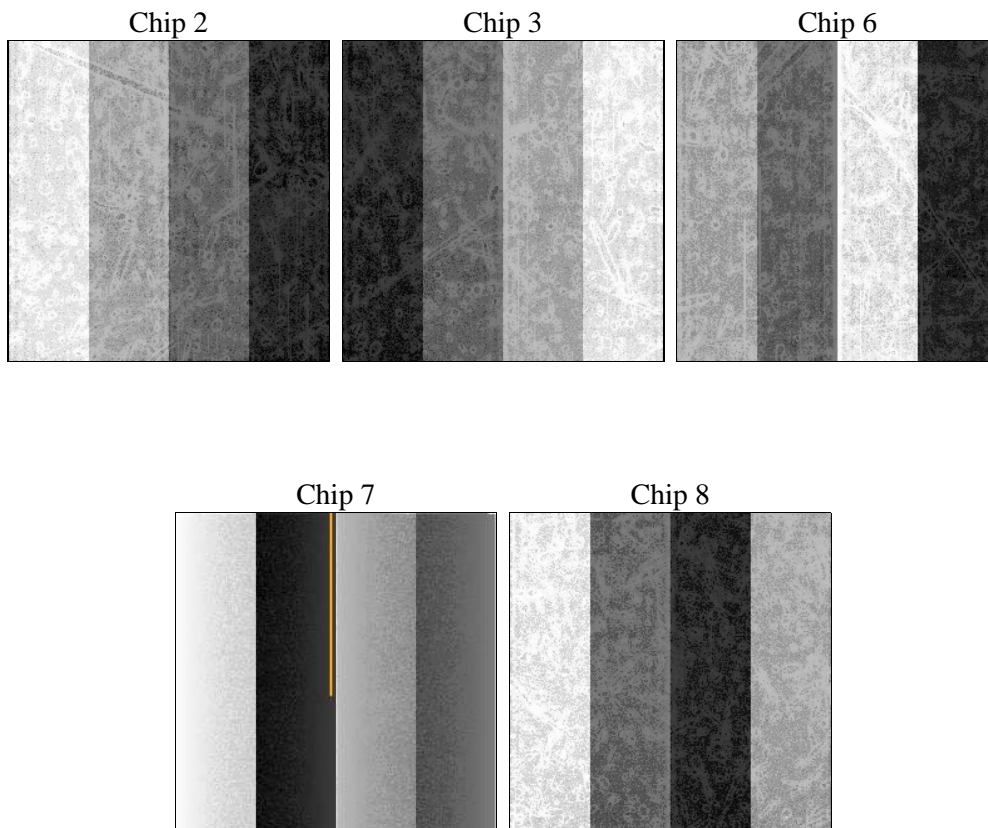
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	13936.958000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	14002.700107694	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	14002.700107694	Sum of GTIs [s]
date	2014-11-29T20:28:11	Date and time of file creation	ontime3	13999.55909735	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	14002.700107694	Sum of GTIs [s]
			ontime7	14002.700107694	Sum of GTIs [s]
			ontime8	13999.559127331	Sum of GTIs [s]
			l1events	391175	Number of level 1 events

2.1.4 Events

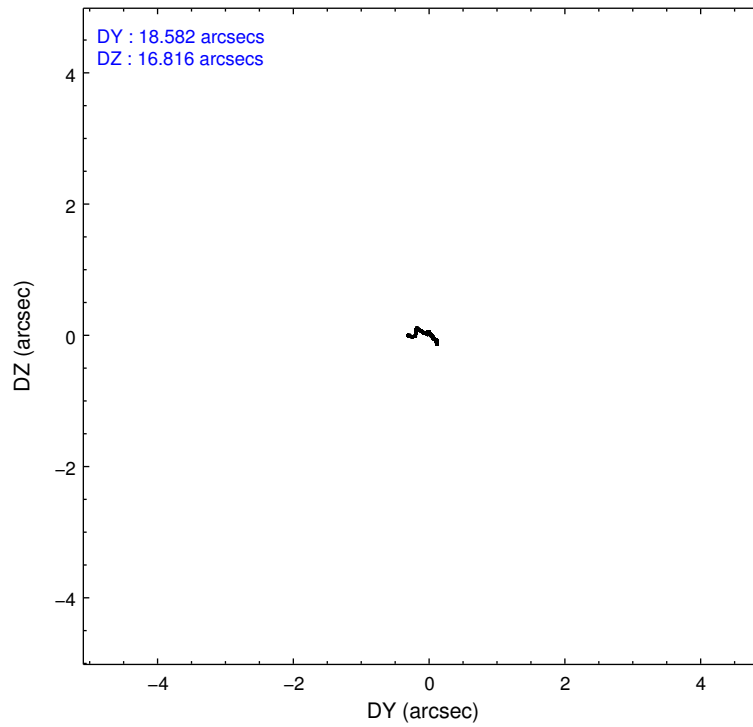
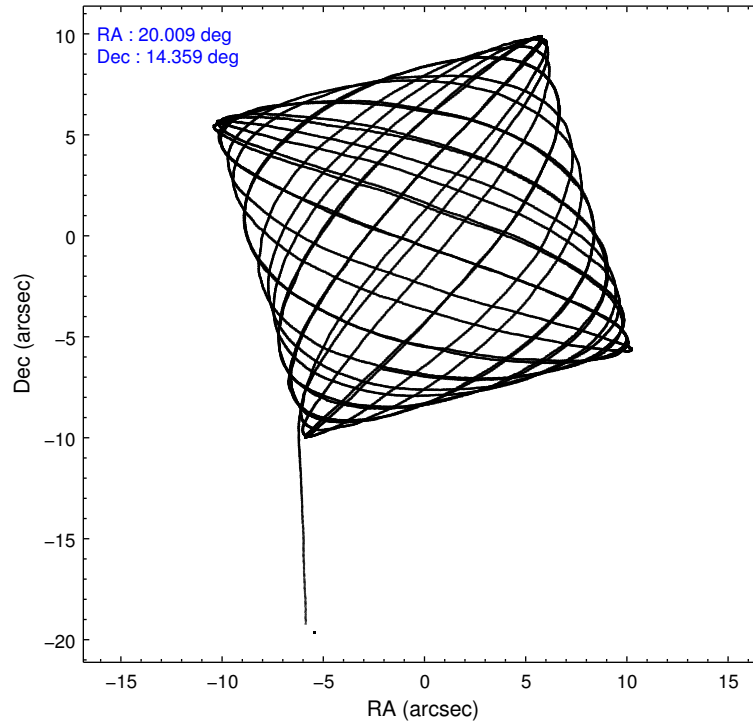
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	67216	68159	70522	93421	91857
rejected events	59211	60478	61817	52605	66739
rejected %	88%	88%	87%	56%	72%

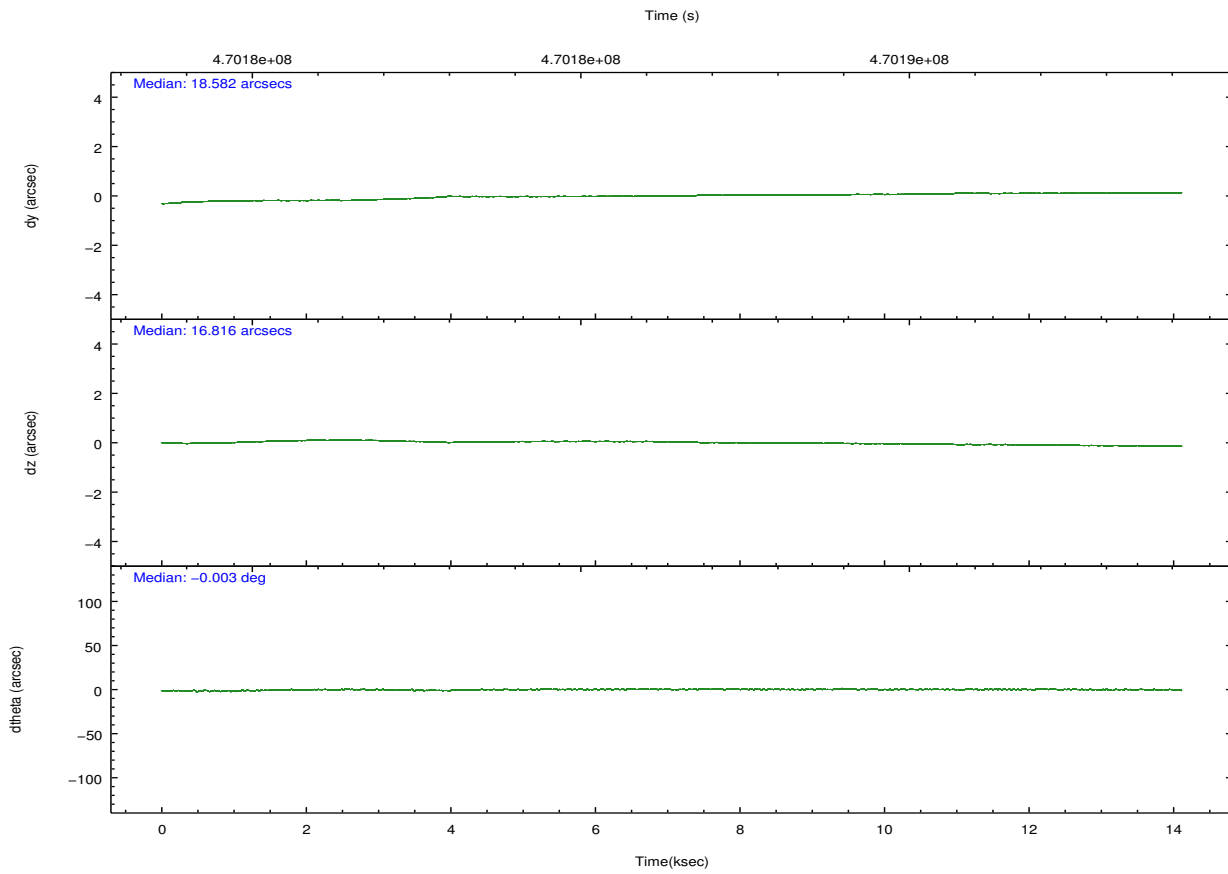
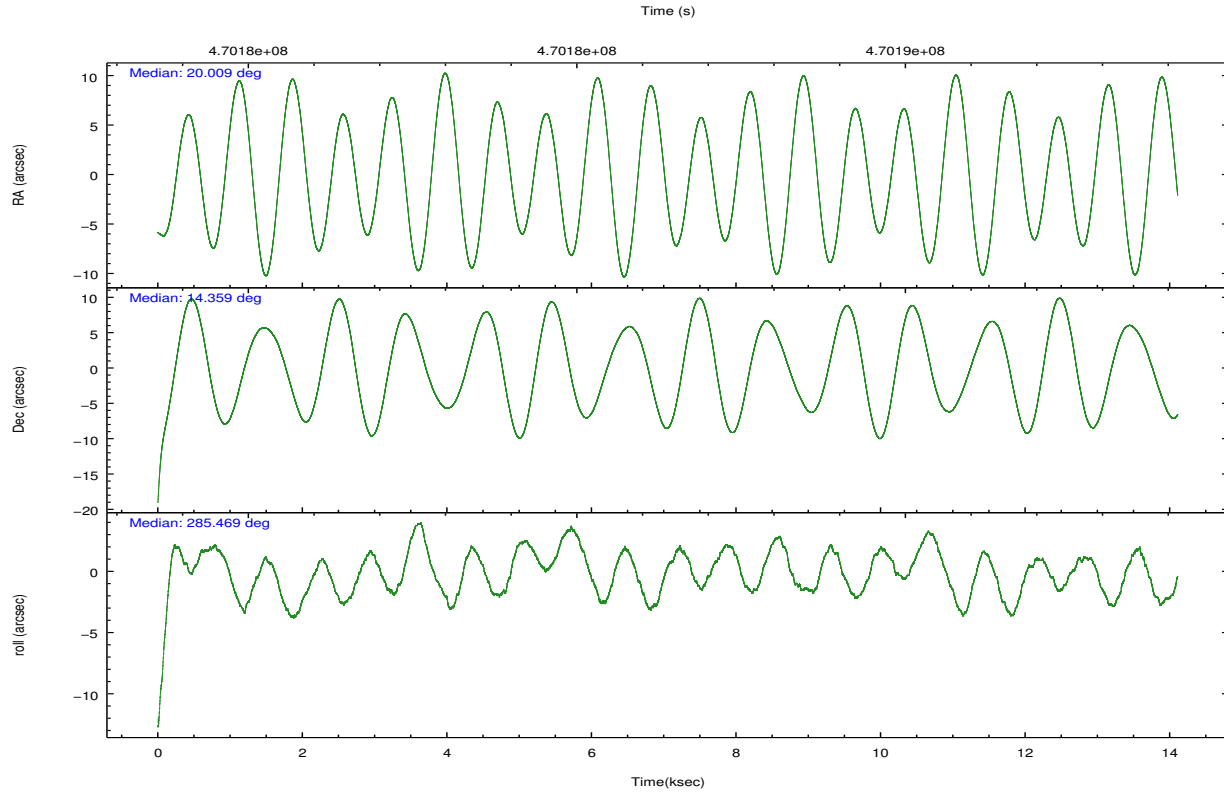
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	2892	2729	3085	3604	7515
	4%	4%	4%	3%	8%
grade 1 events	34	41	33	117	63
	0%	0%	0%	0%	0%
grade 2 events	1917	1675	1919	8466	5802
	2%	2%	2%	9%	6%
grade 3 events	829	819	872	3443	2613
	1%	1%	1%	3%	2%
grade 4 events	805	830	884	3471	2535
	1%	1%	1%	3%	2%
grade 5 events	2813	3638	3677	9633	5279
	4%	5%	5%	10%	5%
grade 6 events	1564	1632	1946	21850	6656
	2%	2%	2%	23%	7%
grade 7 events	56362	56795	58106	42837	61394
	83%	83%	82%	45%	66%

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	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	19.988430	20.00883817590935	CCD I2 on	O2	Y
[deg] Pointing Dec	14.377744	14.35881917931548	CCD I3 on	Y	Y
[deg] Pointing Roll	285.320610	285.4721660297371	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	N
[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)	470179502.184000	470178541.36862	CCD S5 on	N	N
Observation start date	2012-11-24T21:23:55	2012-11-24T21:09:01	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	470193439.184000	470193667.80693	On-chip summing requested	N	N
Observation end date	2012-11-25T01:16:12	2012-11-25T01:21:07	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



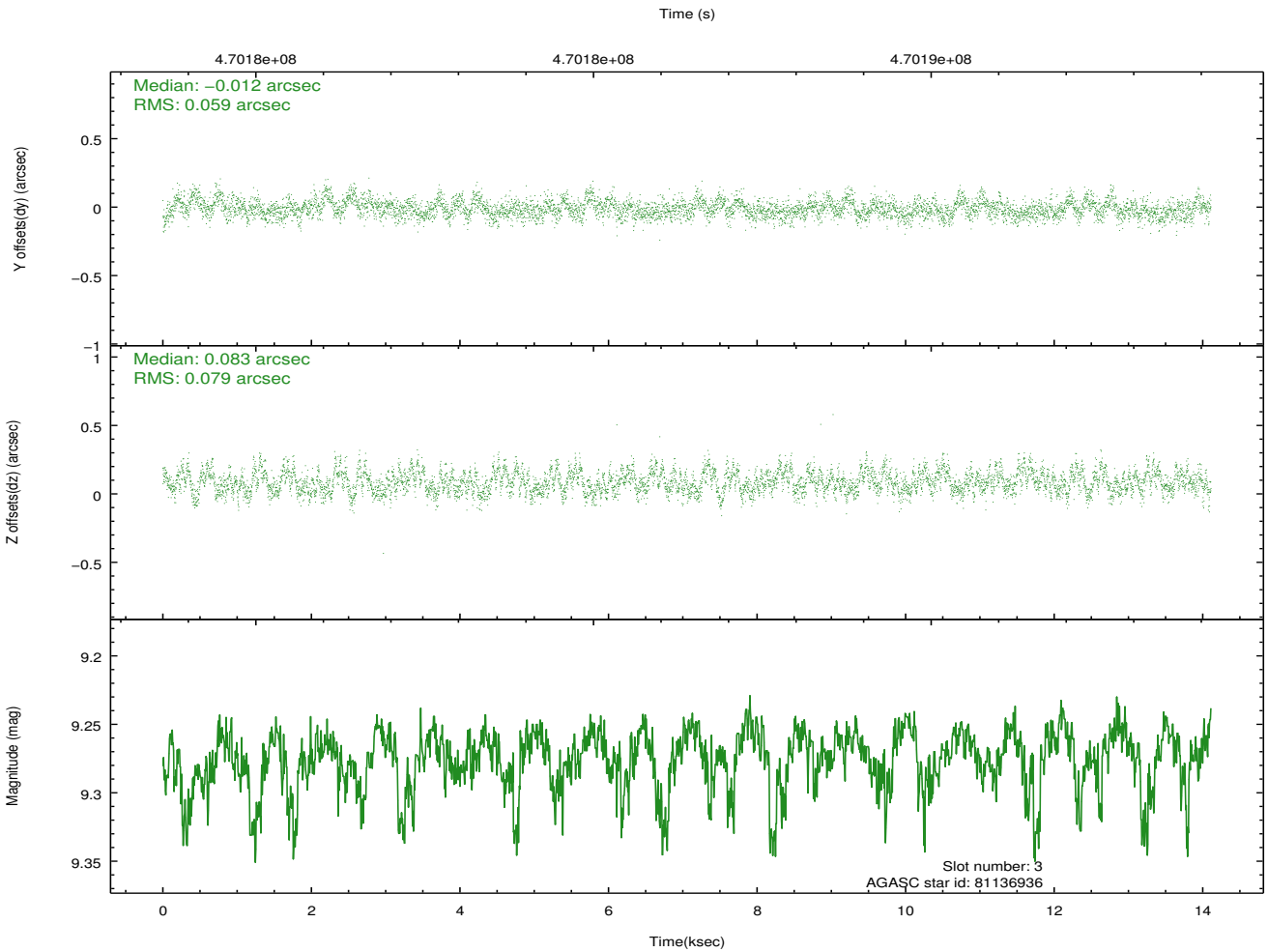
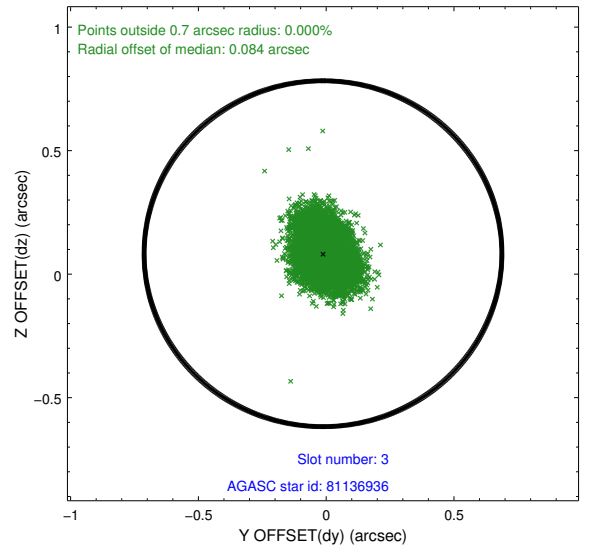
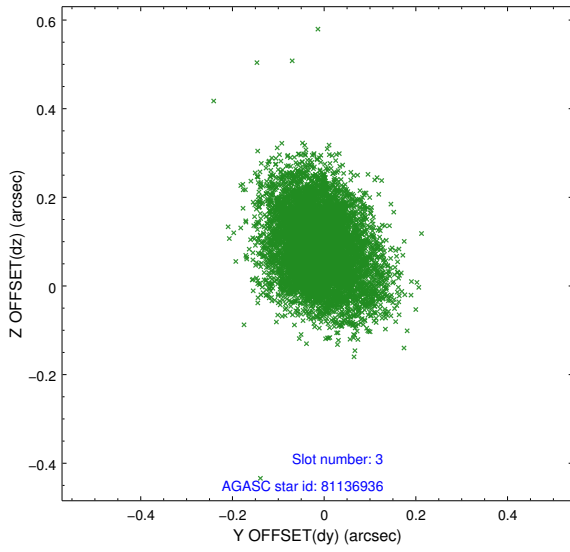


Slot Statistics

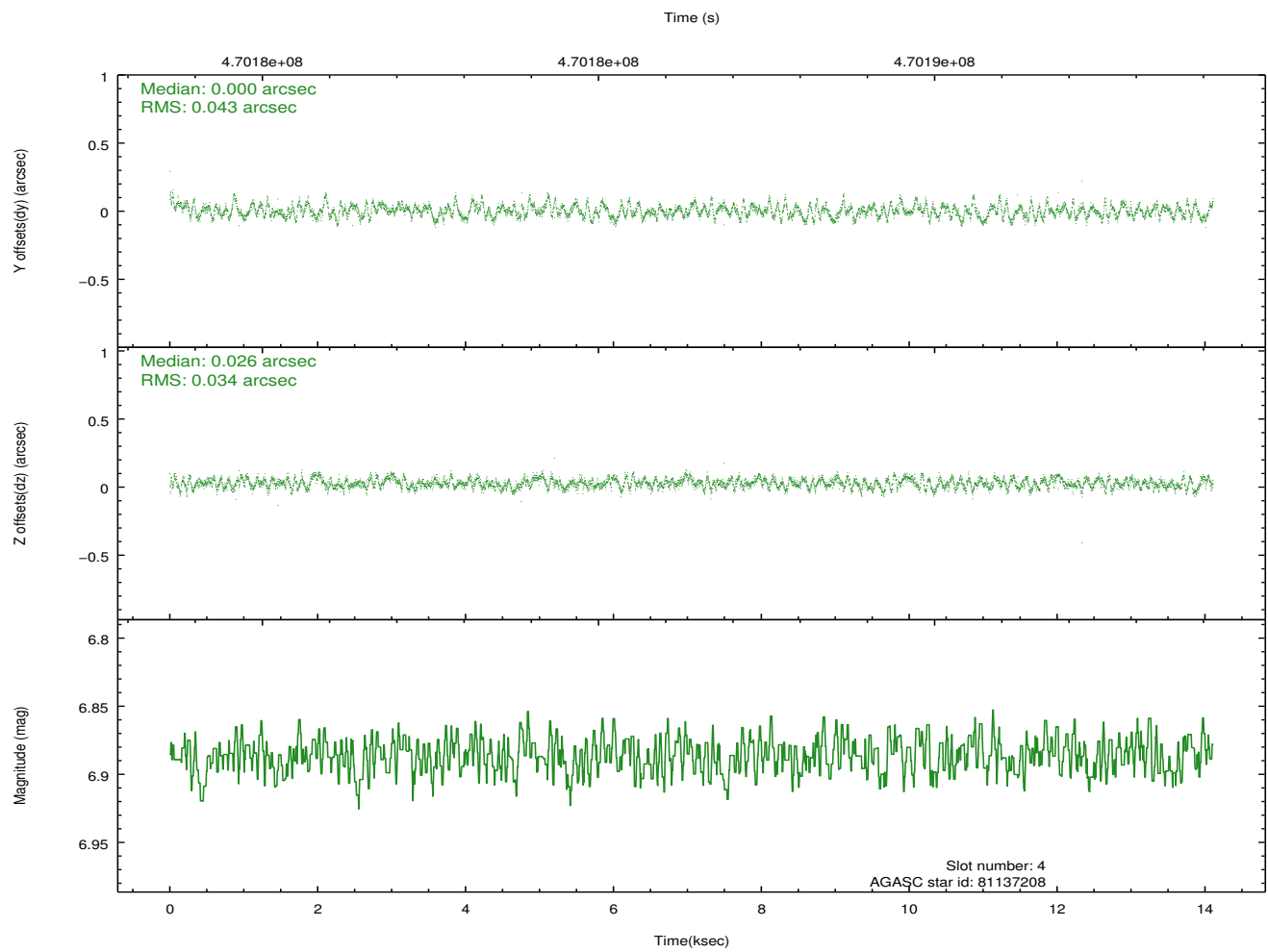
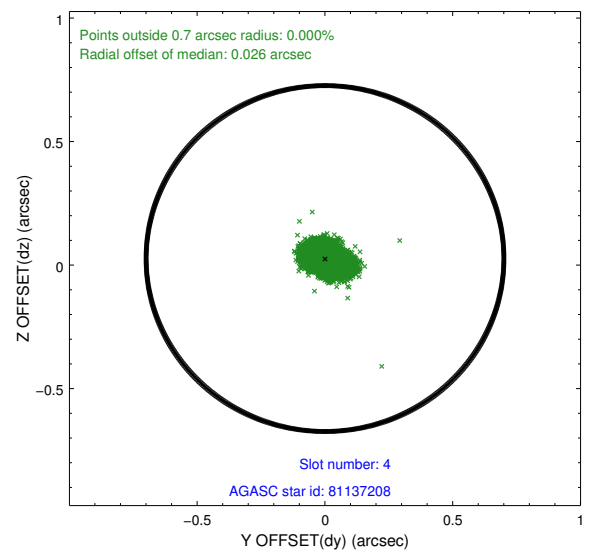
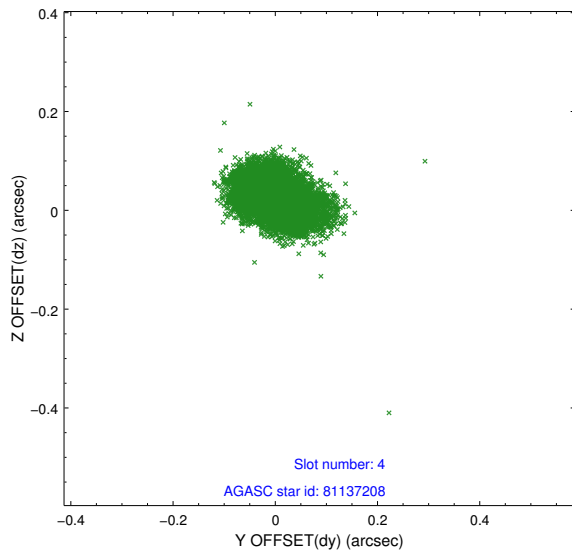
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.99	3442	-0.103	-0.037	0.008	0.013	0.000000	0.000000	-771.75	-1738.22
1	FID		ACIS-S-4	7.07	3442	0.289	0.060	0.009	0.018	0.000000	0.000000	2141.78	169.99
2	FID		ACIS-S-5	7.11	3442	-0.216	-0.014	0.007	0.013	0.000000	0.000000	-1824.26	164.00
3	GUIDE	used	81136936	9.27	6846	-0.012	0.083	0.103	0.171	20.170416	14.571803	-505.60	797.02
4	GUIDE	used	81137208	6.89	6882	0.000	0.026	0.058	0.093	19.387437	14.242685	-87.04	-2149.98
5	GUIDE	used	81139392	8.56	6883	0.019	-0.006	0.087	0.142	19.808446	13.891739	1521.95	-1067.98
6	GUIDE	used	81141256	9.22	6875	0.130	0.040	0.150	0.231	19.534123	14.382155	-434.32	-1523.22
7	GUIDE	used	81142856	8.78	6881	-0.145	-0.141	0.101	0.153	20.353945	13.922774	1916.64	799.37

2.4 Star Slots

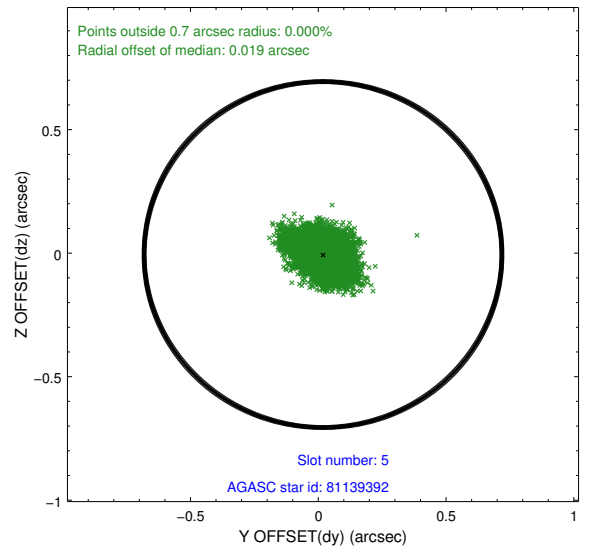
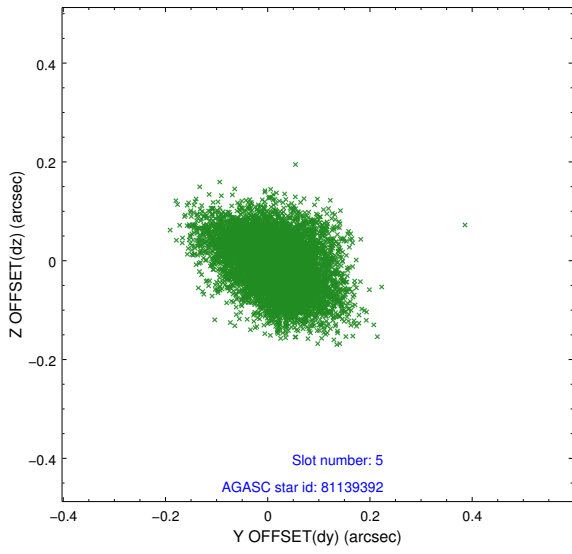
2.4.1 Slot 3



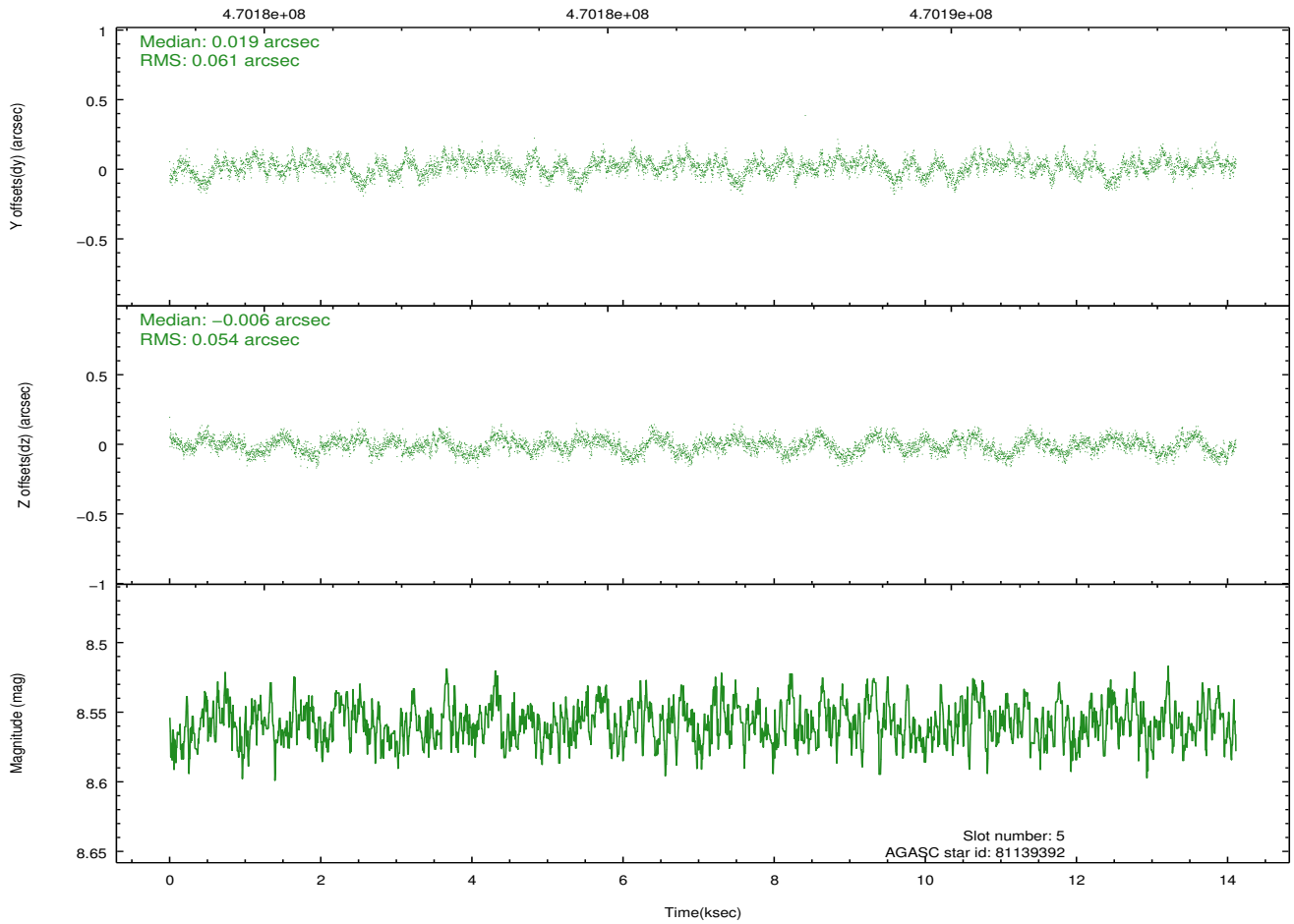
2.4.2 Slot 4



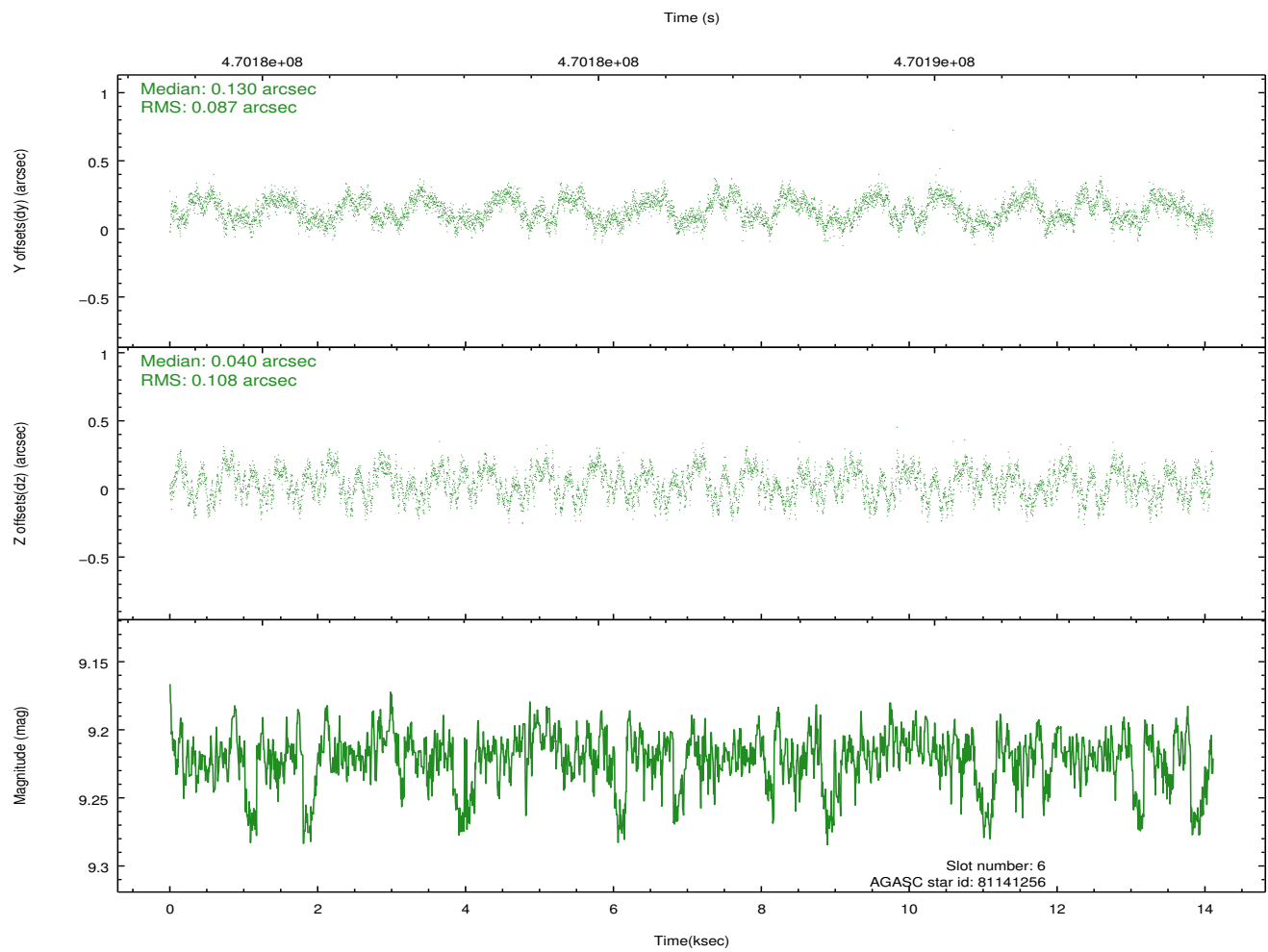
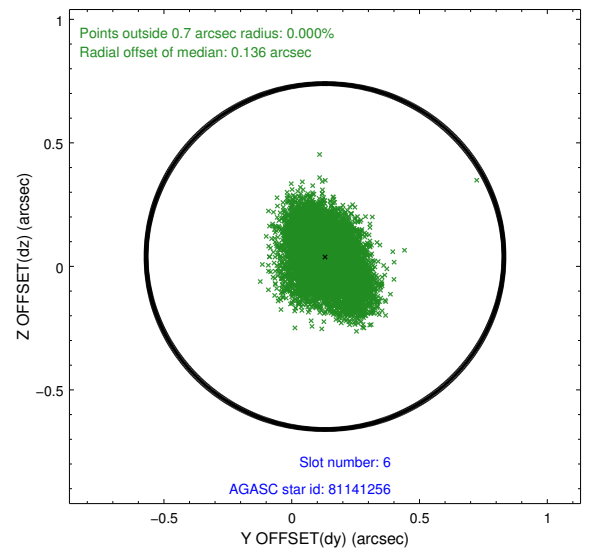
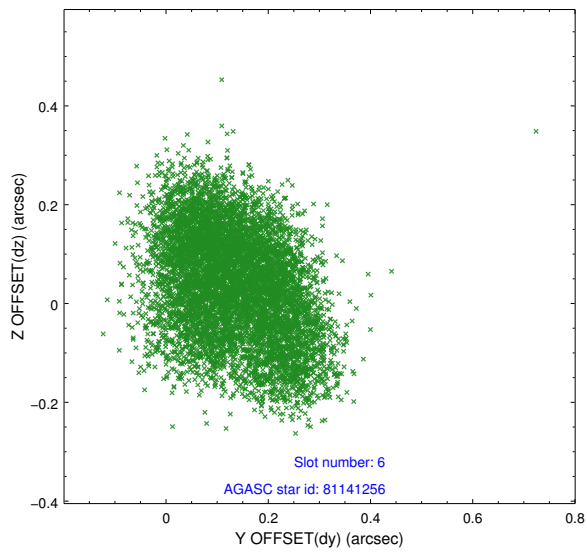
2.4.3 Slot 5



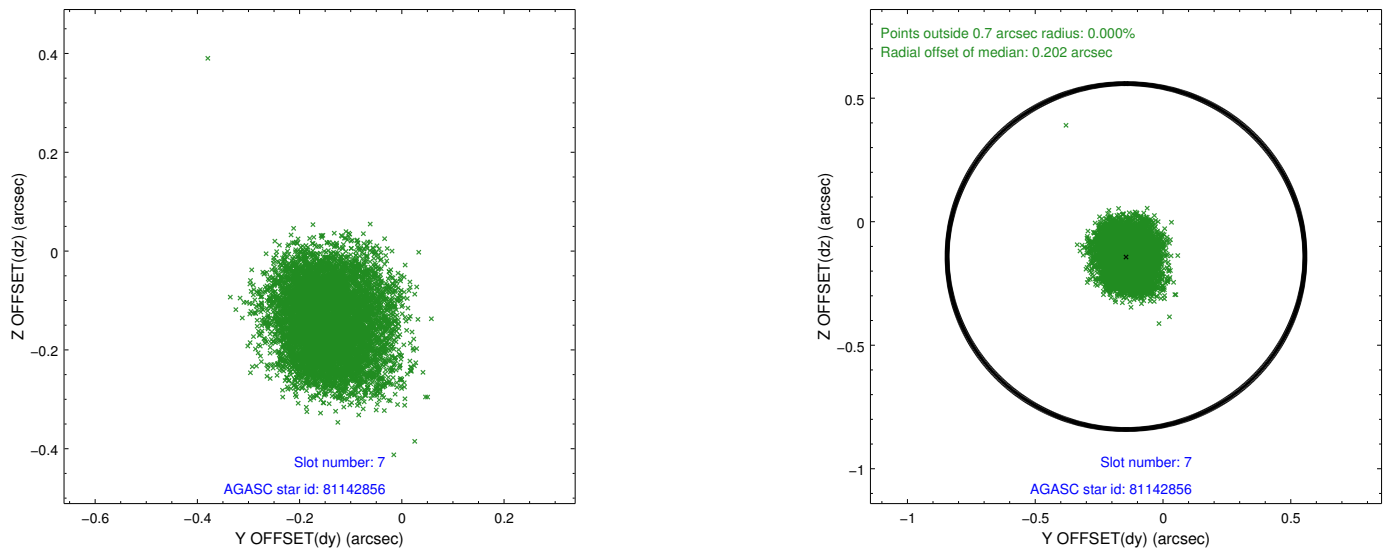
Time (s)



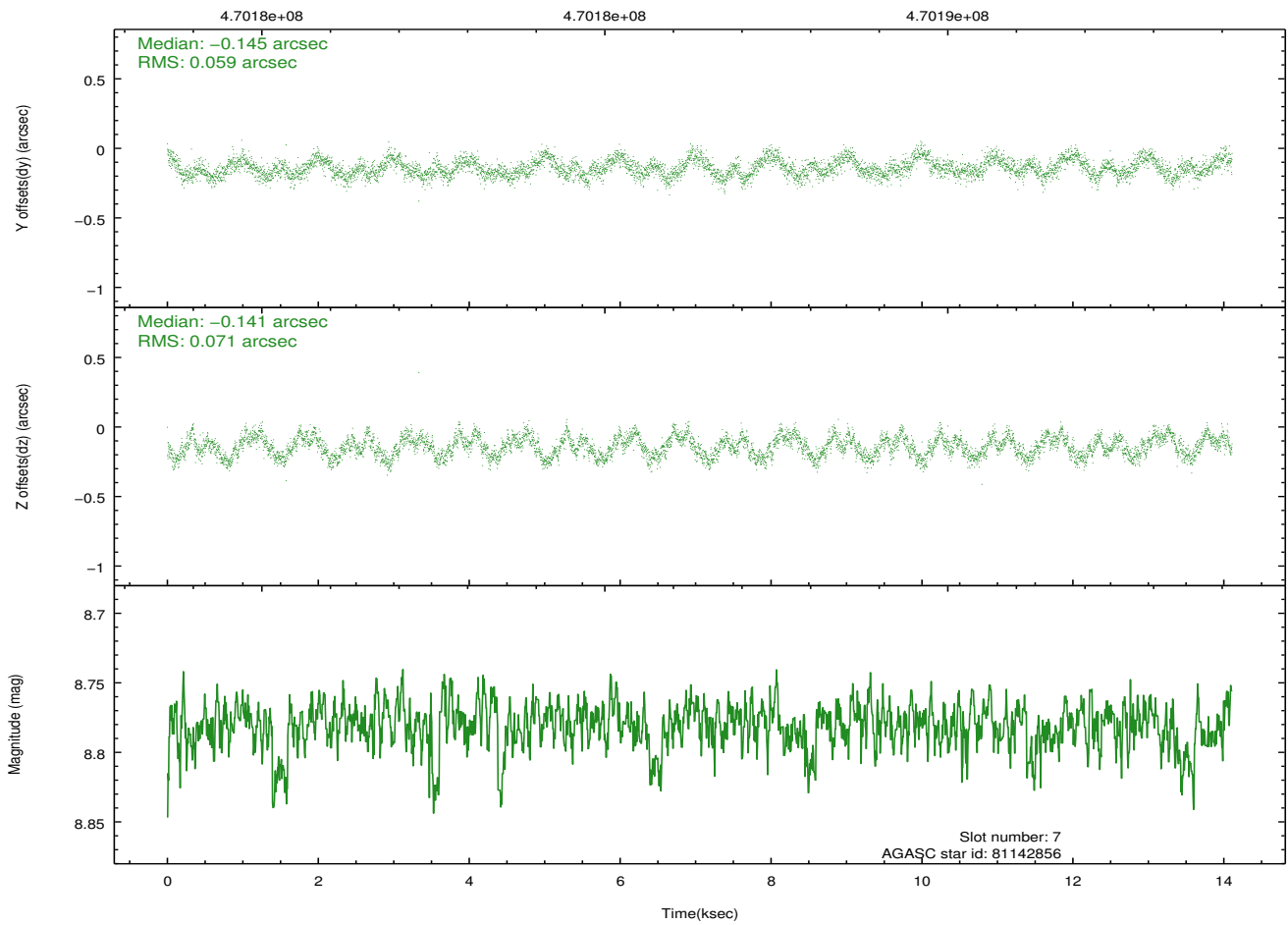
2.4.4 Slot 6



2.4.5 Slot 7

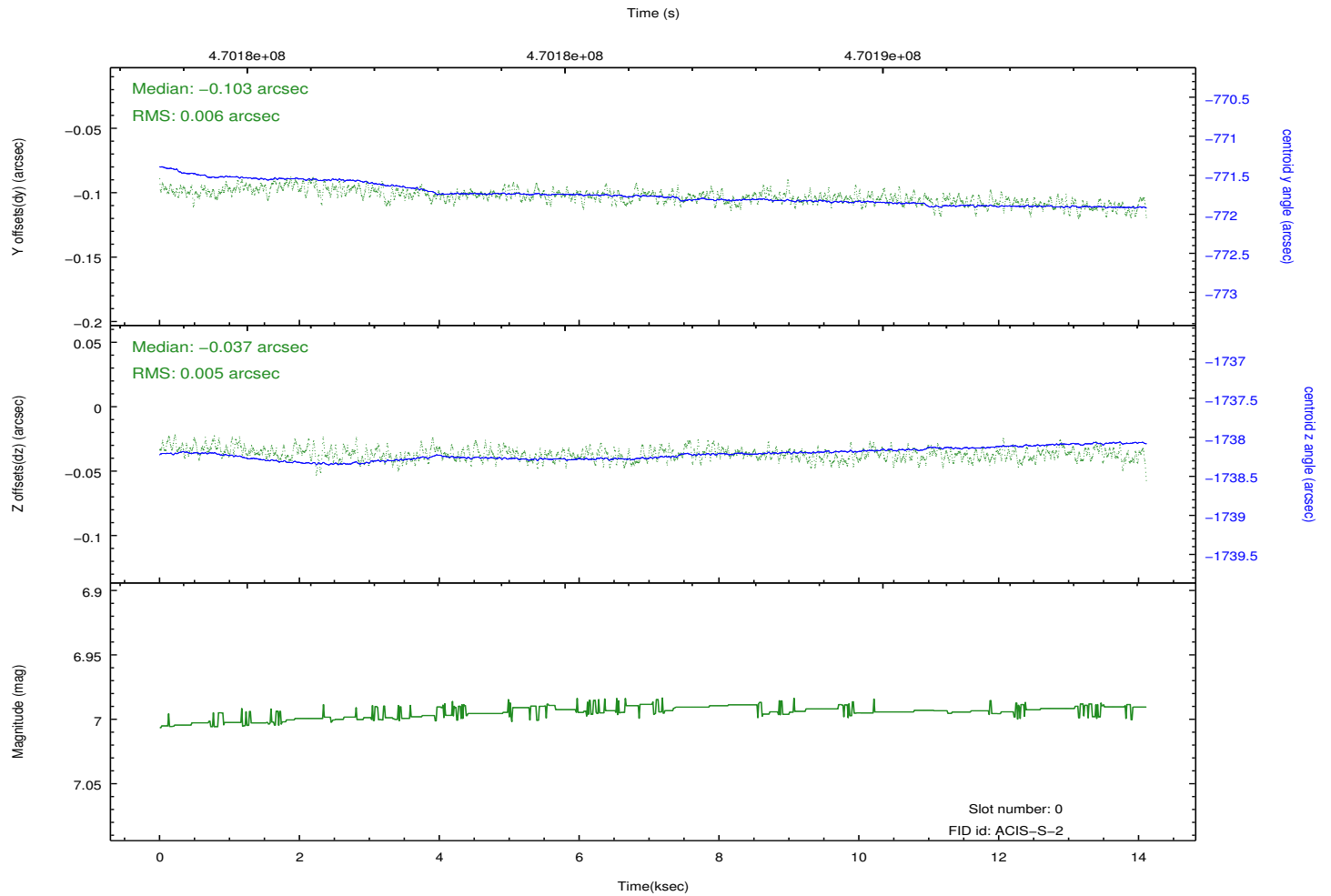
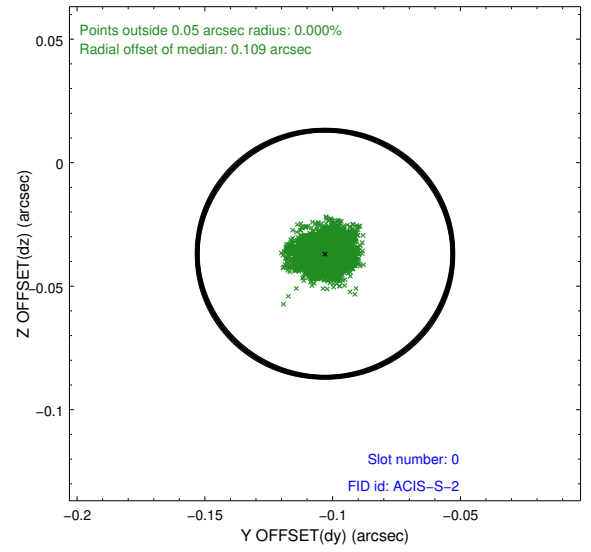
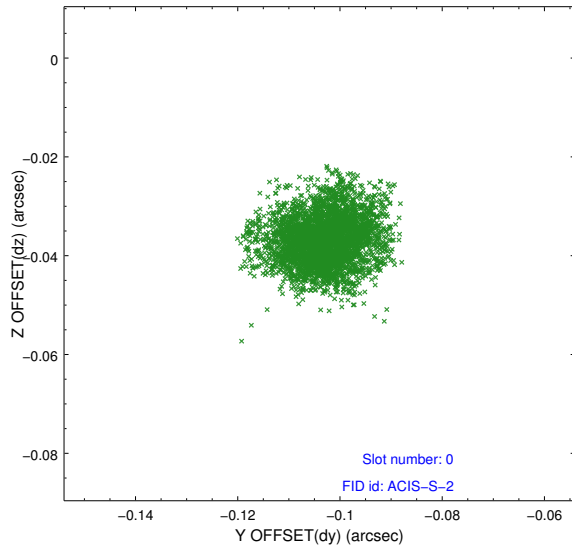


Time (s)

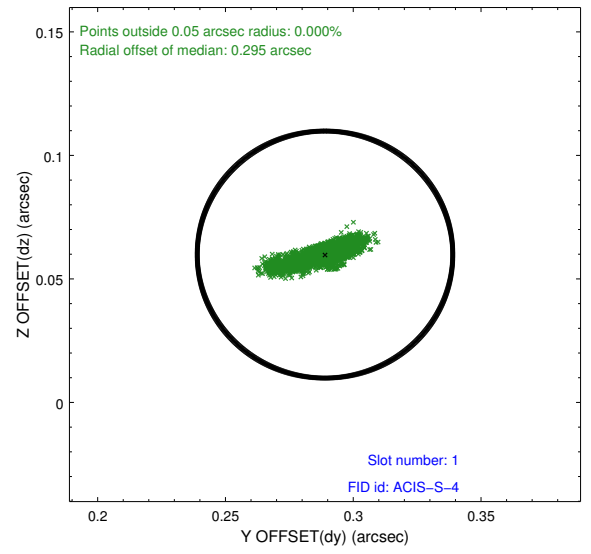
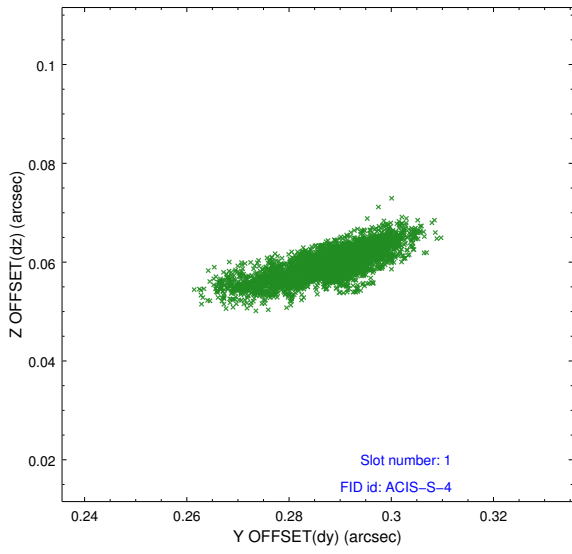


2.5 FID Slots

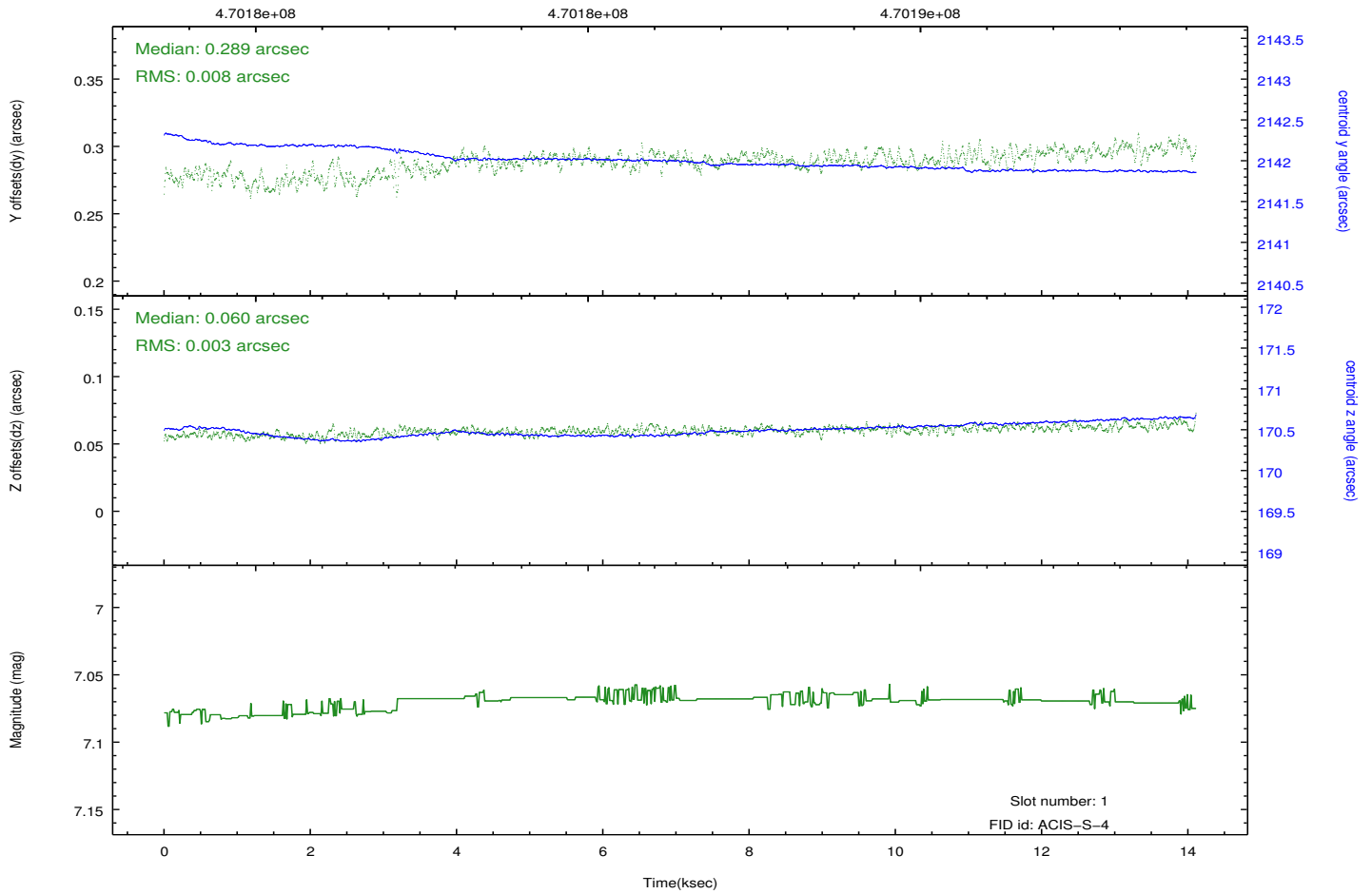
2.5.1 Slot 0



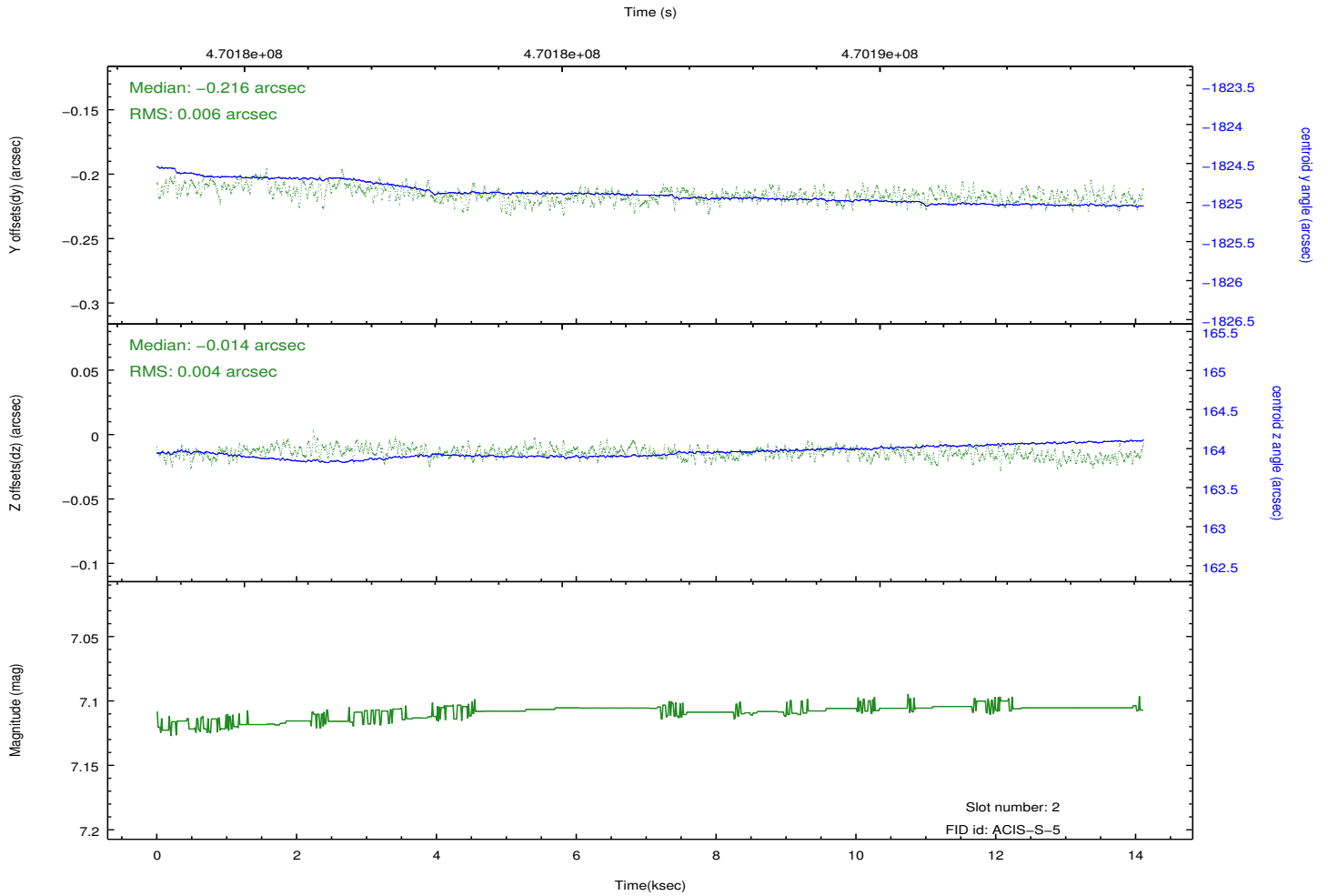
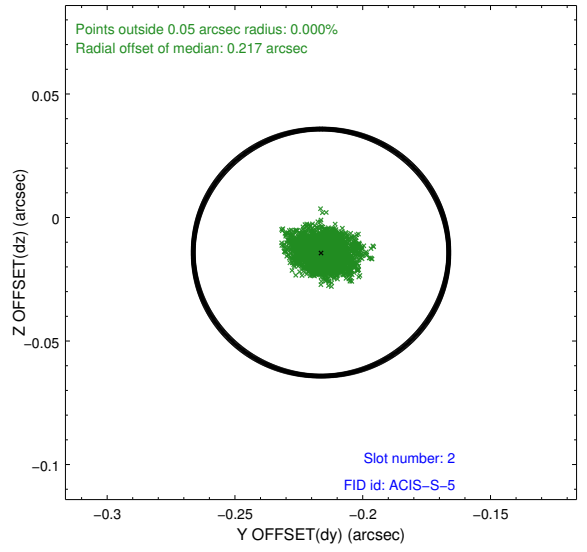
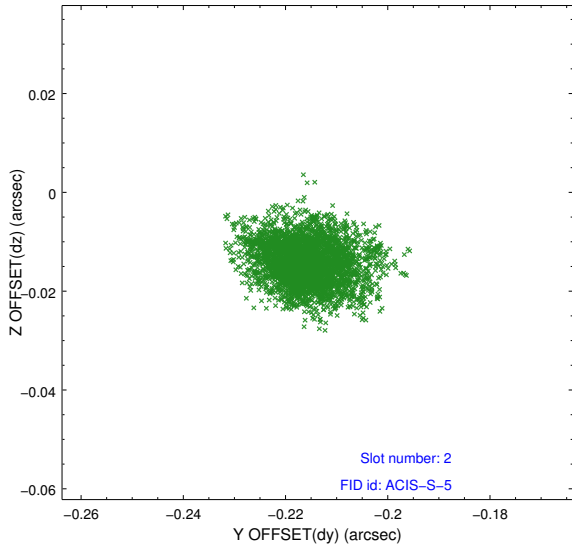
2.5.2 Slot 1



Time (s)



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Beth Sundheim
V&V Date (YYYY-MM-DD)	2014.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	14.002700107694

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.