

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15388 - L2 Version 2
Chandra X-Ray Center

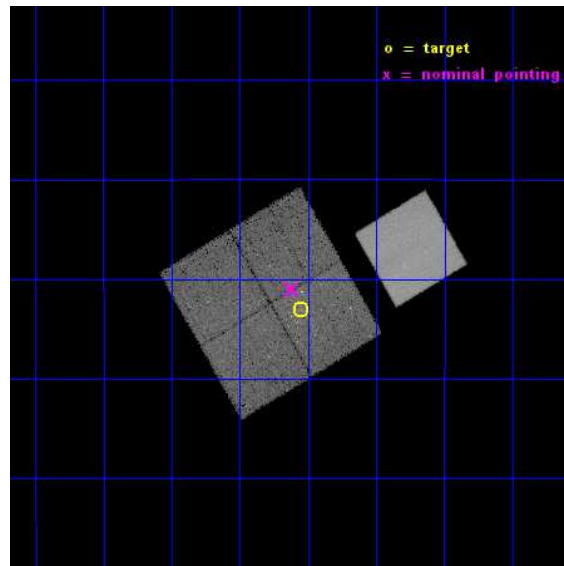
L2 Processing Date : Dec 1 2014

Contents

1	Front	2
2	OBI	3
2.1	OBI	3
2.1.1	Images	3
2.1.2	Bias	3
2.1.3	Parameters	4
2.1.4	Events	4
2.2	Compared Parameters	5
2.3	Aspect	6
2.4	Star Slots	9
2.4.1	Slot 3	9
2.4.2	Slot 4	10
2.4.3	Slot 5	11
2.4.4	Slot 6	12
2.4.5	Slot 7	13
2.5	FID Slots	14
2.5.1	Slot 0	14
2.5.2	Slot 1	15
2.5.3	Slot 2	16
A	Summary	17
A.1	Status	17
A.2	Comments	17

1 Front

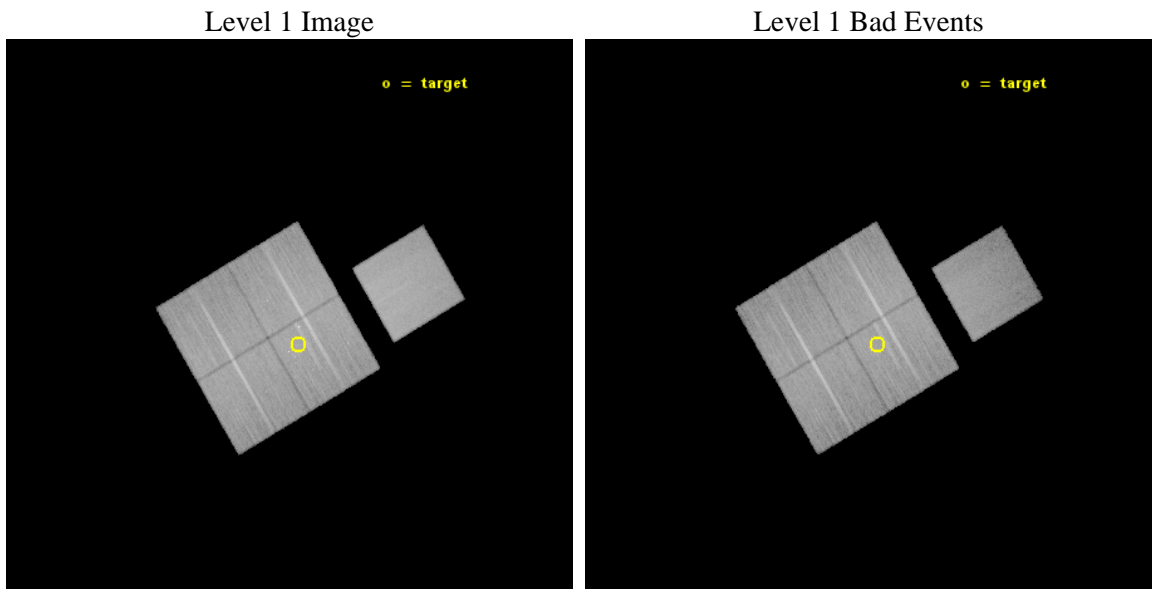
seq_num	601094	Sequence number
obs_id	15388	Observation id
title	Search for evidence of dwarf galaxy collisions in X-rays	Proposal
observer	Professor Gordon Garmire	Principal investigator
object	ngc5247	Source name
dtycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	204.5125	Observer's specified target RA [deg]
dec_targ	-17.884167	Observer's specified target Dec [deg]
ra_nom	204.53049646023	Nominal RA [deg]
dec_nom	-17.850473483954	Nominal Dec [deg]
roll_nom	59.571172749196	Nominal Roll [deg]
revision	2	Processing version of data
ontime	47562.516570807	Sum of GTIs [s]
livetime	46941.077276794	Livetime [s]
ontime0	47559.25235045	Sum of GTIs [s]
ontime1	47562.434450805	Sum of GTIs [s]
ontime2	47559.334410429	Sum of GTIs [s]
ontime3	47562.516570807	Sum of GTIs [s]
ontime7	47565.698591173	Sum of GTIs [s]
l2events	228691	Number of level 2 events



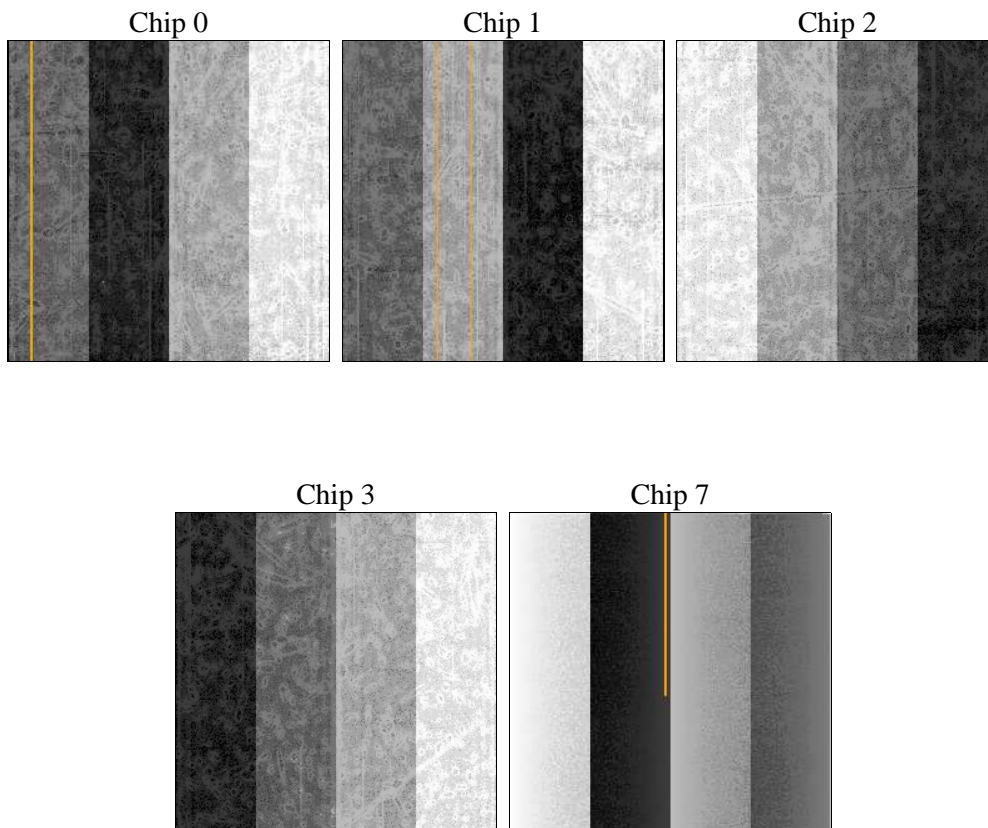
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	47500.000000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	47562.516570807	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	47559.25235045	Sum of GTIs [s]
date	2014-12-02T02:06:23	Date and time of file creation	ontime1	47562.434450805	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	47559.334410429	Sum of GTIs [s]
			ontime3	47562.516570807	Sum of GTIs [s]
			ontime7	47565.698591173	Sum of GTIs [s]
			l1events	1231528	Number of level 1 events

2.1.4 Events

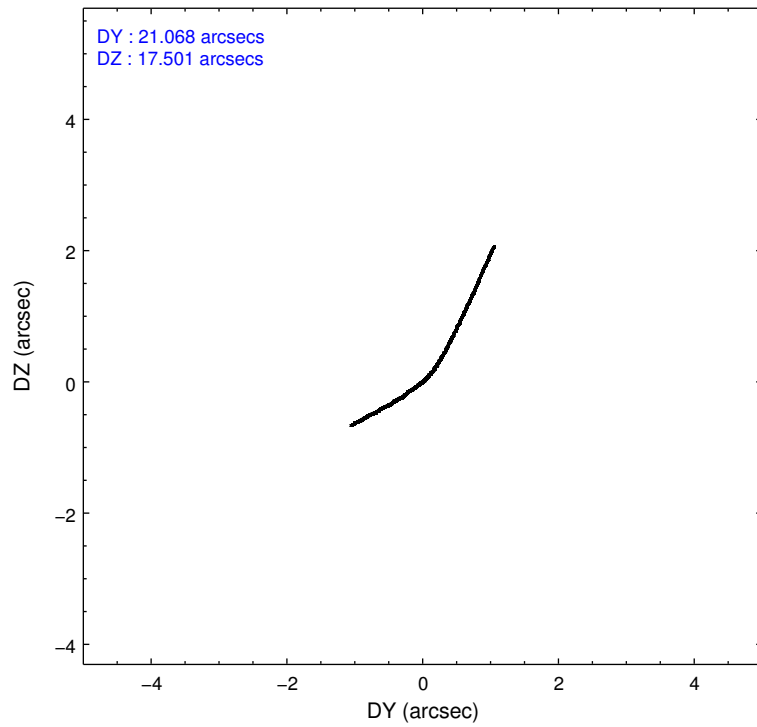
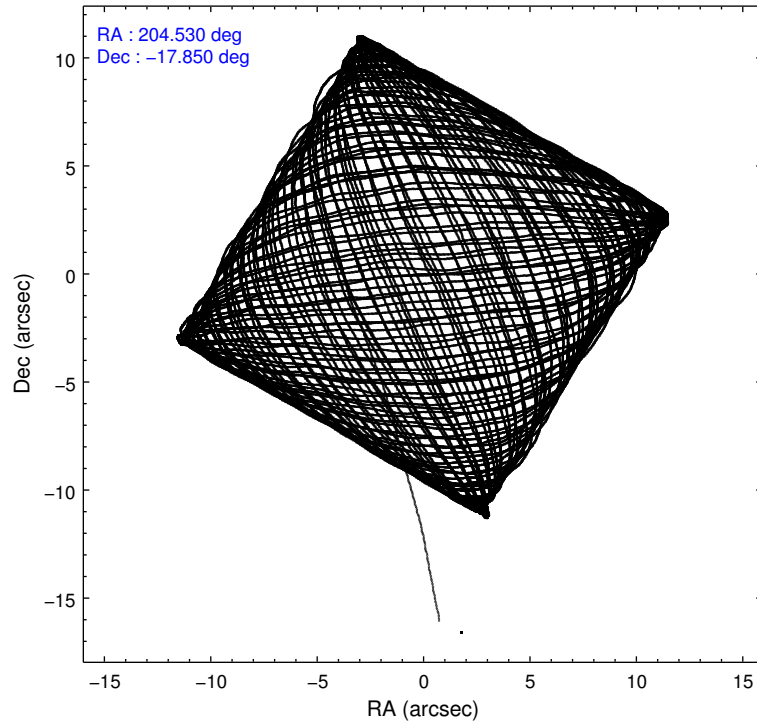
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
level 1 events	222229	226580	246631	249756	286332
rejected events	193725	197272	219240	218469	151008
rejected %	87%	87%	88%	87%	52%

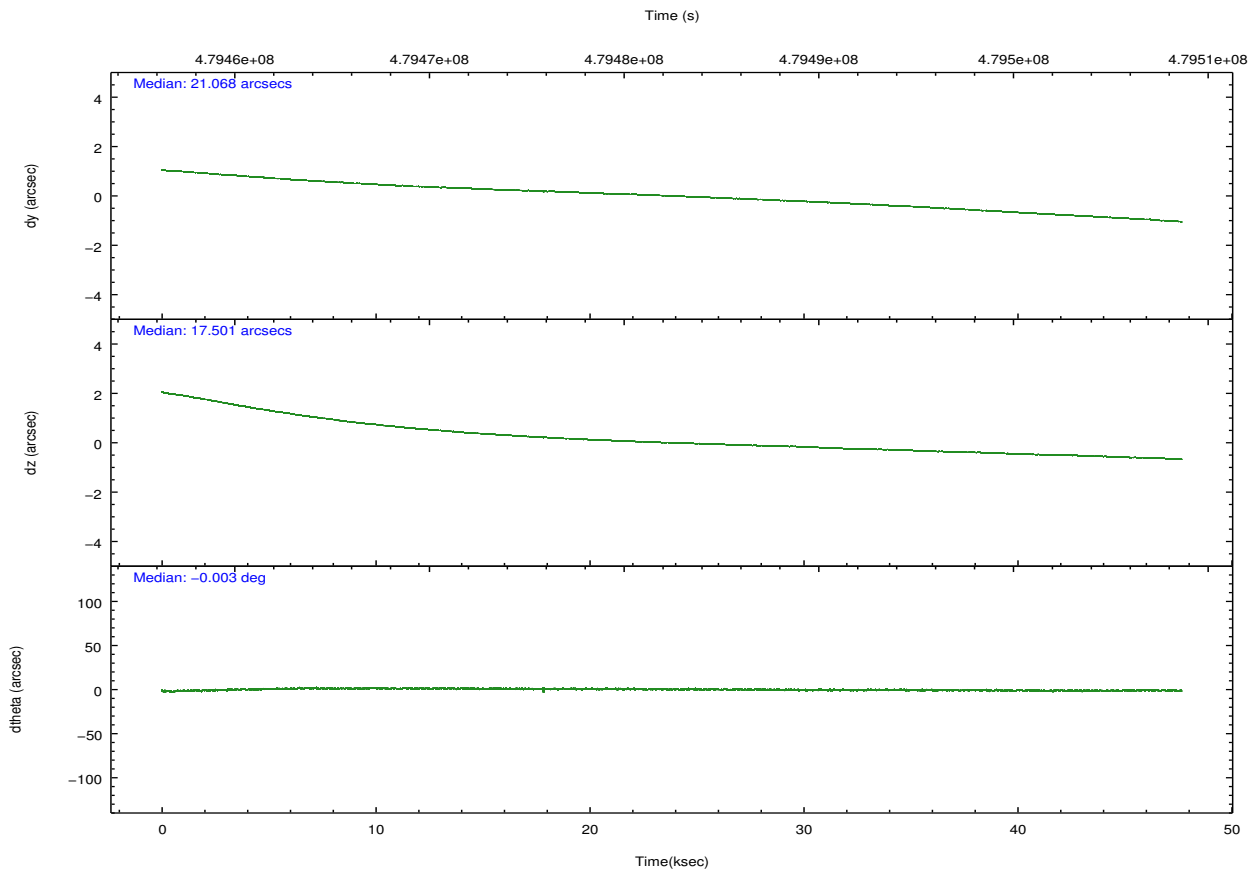
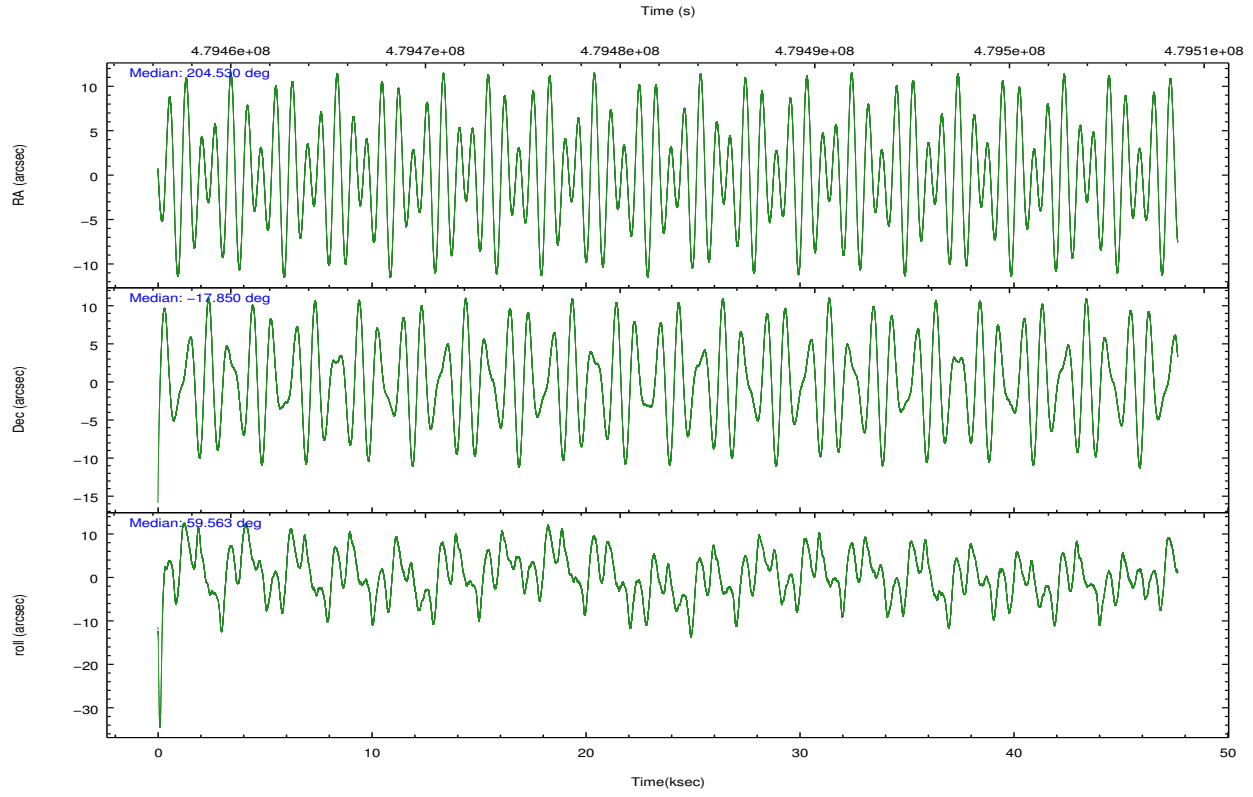
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 7
grade 0 events	10261	9913	10108	13253	13040
	4%	4%	4%	5%	4%
grade 1 events	128	151	159	177	411
	0%	0%	0%	0%	0%
grade 2 events	7120	6772	6686	6450	29005
	3%	2%	2%	2%	10%
grade 3 events	2966	3076	2726	3082	11911
	1%	1%	1%	1%	4%
grade 4 events	2762	3063	2820	3052	11757
	1%	1%	1%	1%	4%
grade 5 events	9607	10248	8956	10975	30292
	4%	4%	3%	4%	10%
grade 6 events	5400	6486	5056	5452	69633
	2%	2%	2%	2%	24%
grade 7 events	183985	186871	210120	207315	120283
	82%	82%	85%	83%	42%

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	204.530393	204.5304964602279	CCD I2 on	Y	Y
[deg] Pointing Dec	-17.877985	-17.85047348395424	CCD I3 on	Y	Y
[deg] Pointing Roll	59.362452	59.57117274919639	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	-228.092463	-228.0961698422217	CCD S3 on	O2	Y
[mm] SIM translation stage offset	-5.5	-5.496283160708032	CCD S4 on	N	N
[s] Observation start time (MET)	479458775.184000	479457729.51918	CCD S5 on	N	N
Observation start date	2013-03-12T06:58:28	2013-03-12T06:42:09	Number of optional ACIS chips dropped	1	1
[s] Observation end time (MET)	479506275.184000	479507378.98437	On-chip summing requested	N	N
Observation end date	2013-03-12T20:10:08	2013-03-12T20:29:38	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



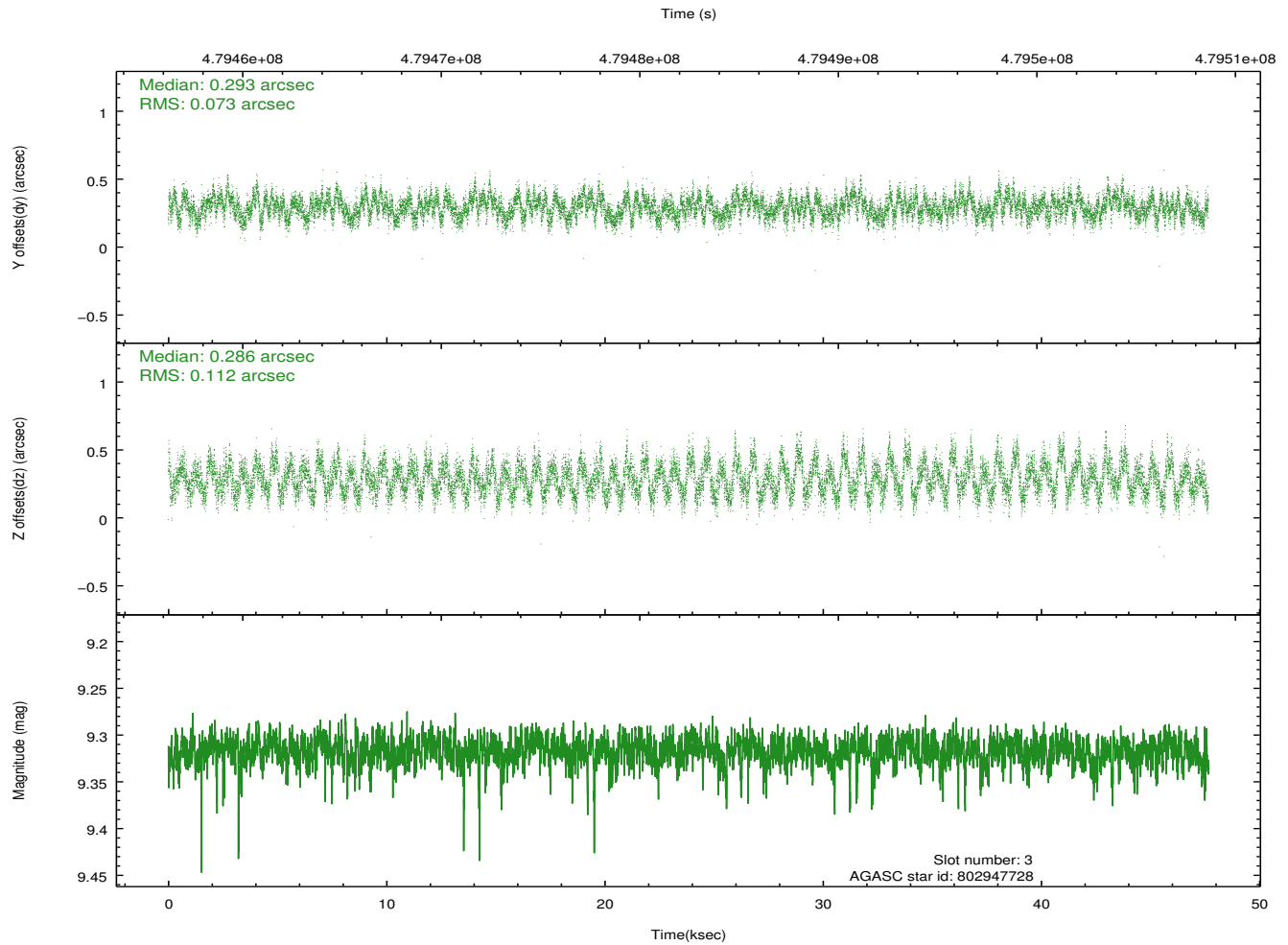
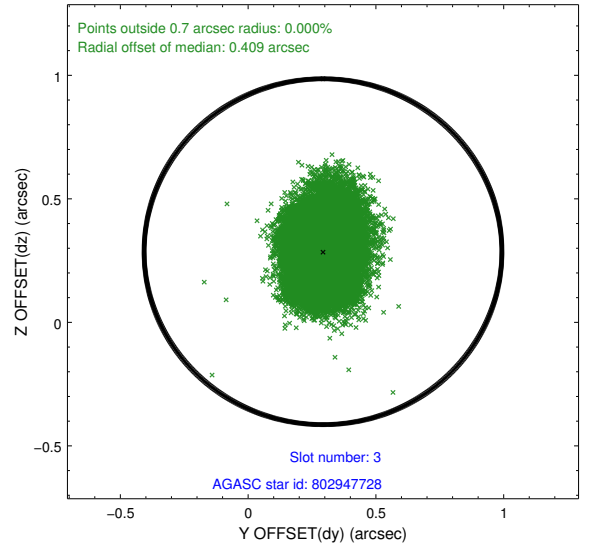
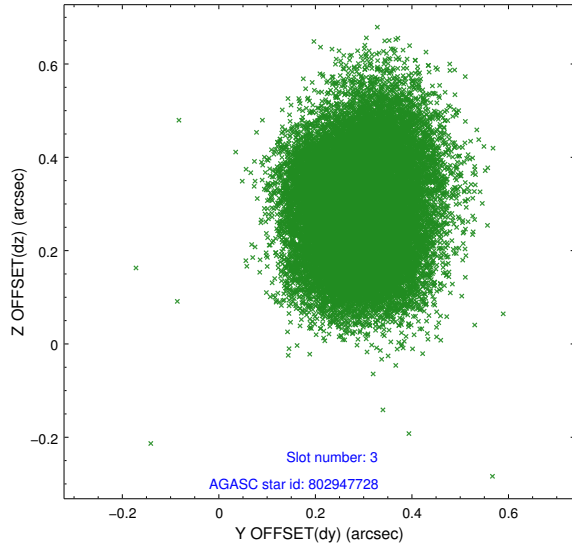


Slot Statistics

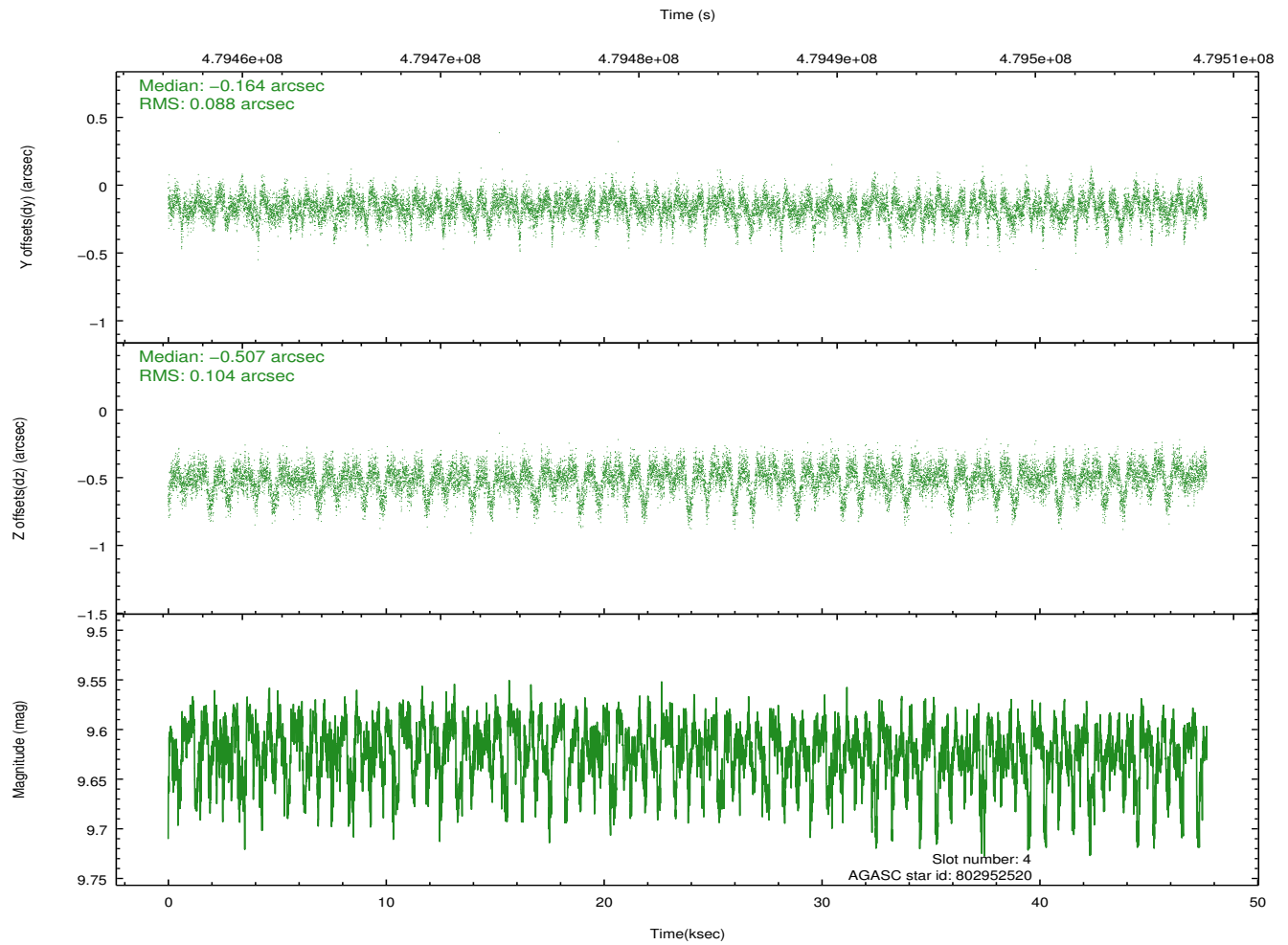
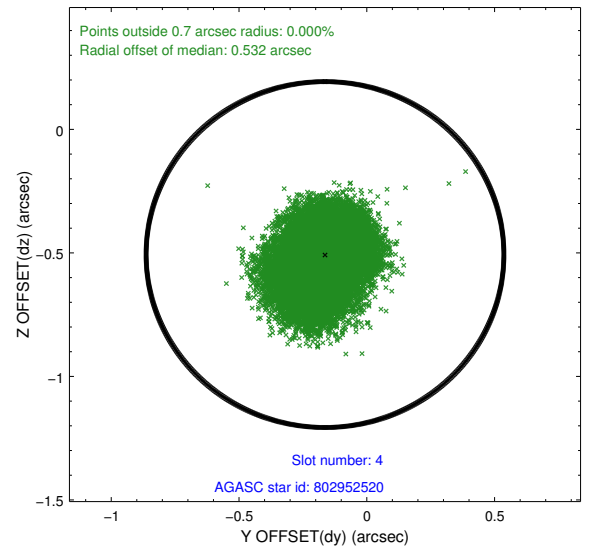
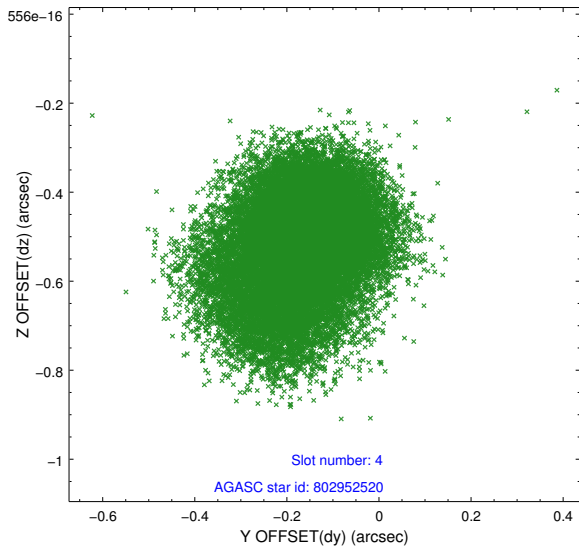
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.12	11625	0.129	-0.103	0.013	0.042	0.000000	0.000000	918.29	-954.25
1	FID		ACIS-I-5	7.10	11624	-0.329	0.090	0.009	0.015	0.000000	0.000000	-1830.31	943.37
2	FID		ACIS-I-6	7.11	11625	0.108	0.084	0.012	0.037	0.000000	0.000000	383.78	1587.89
3	GUIDE	used	802947728	9.32	23060	0.293	0.286	0.143	0.226	205.004422	-18.390456	-763.31	-2334.45
4	GUIDE	used	802952520	9.62	23211	-0.164	-0.507	0.143	0.244	204.297486	-17.321037	1315.26	1708.77
5	GUIDE	used	802953304	9.26	23016	-0.000	0.040	0.185	0.291	205.052971	-17.483920	2132.77	-821.41
6	GUIDE	used	802953816	8.10	23176	-0.134	0.040	0.093	0.176	205.211345	-17.792673	1450.30	-1853.57
7	GUIDE	used	802953840	9.32	23168	0.018	0.155	0.125	0.194	204.605465	-17.805560	355.51	-88.56

2.4 Star Slots

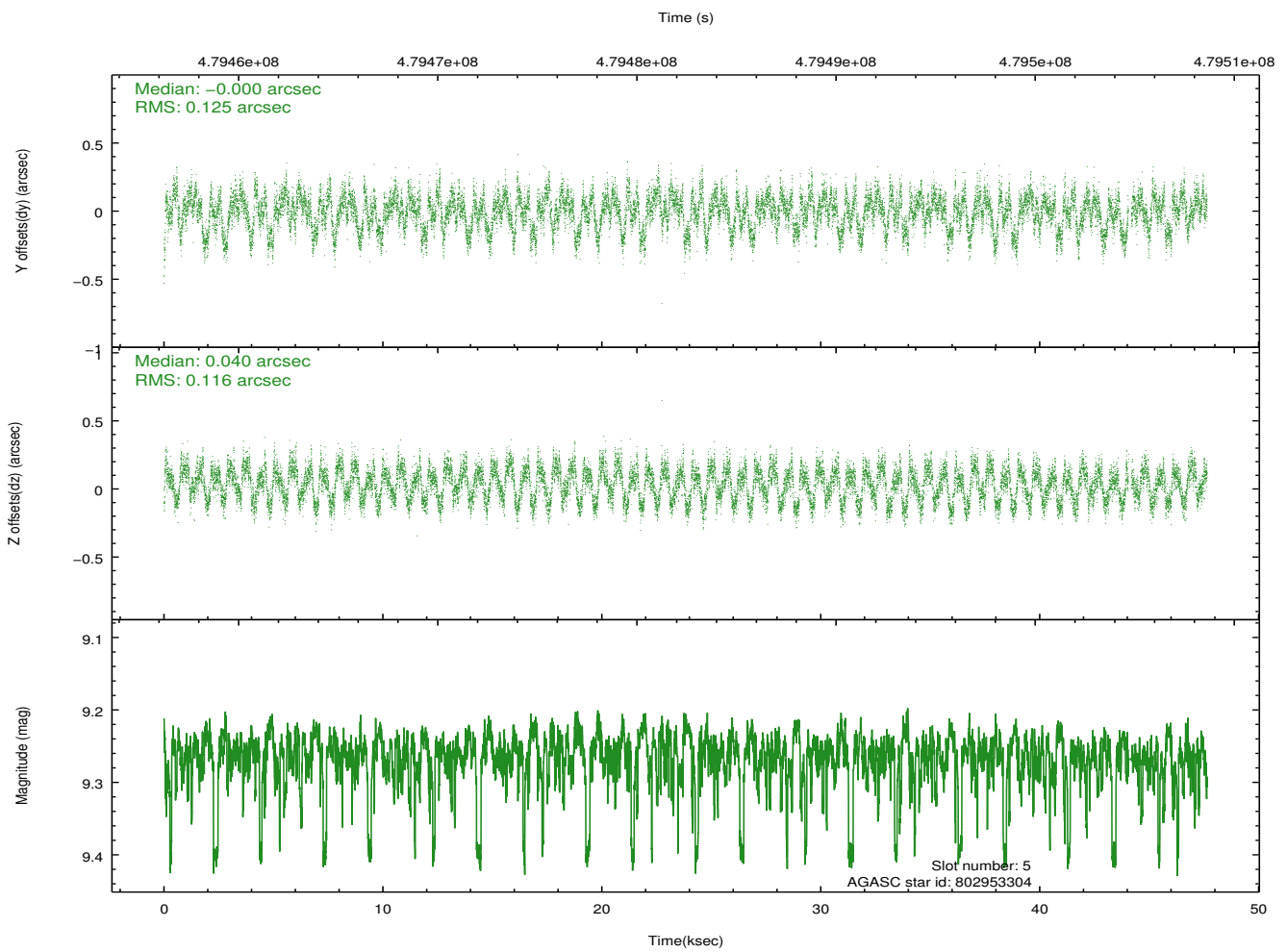
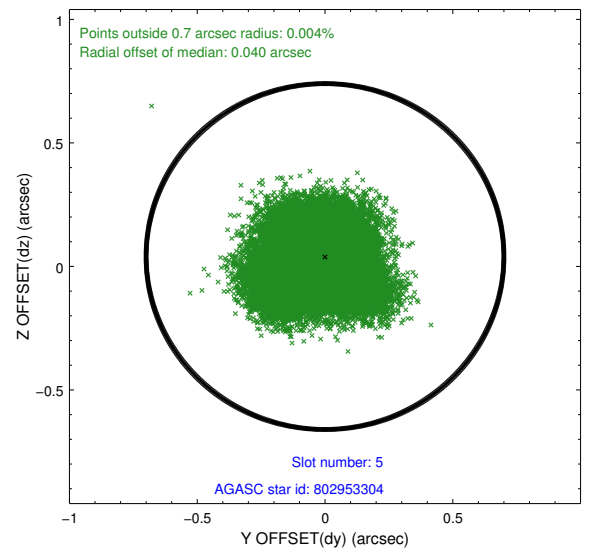
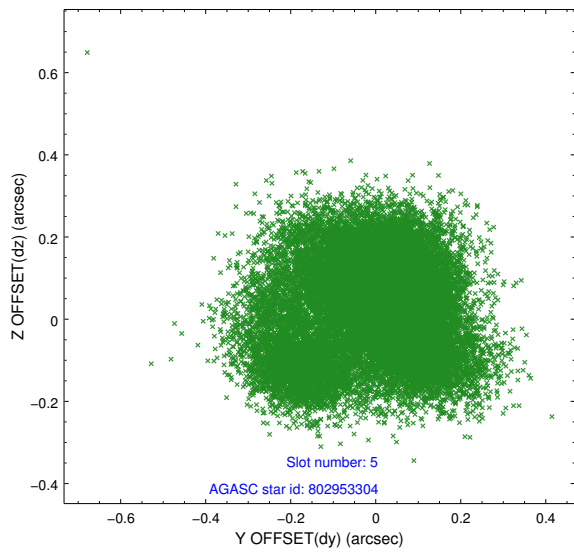
2.4.1 Slot 3



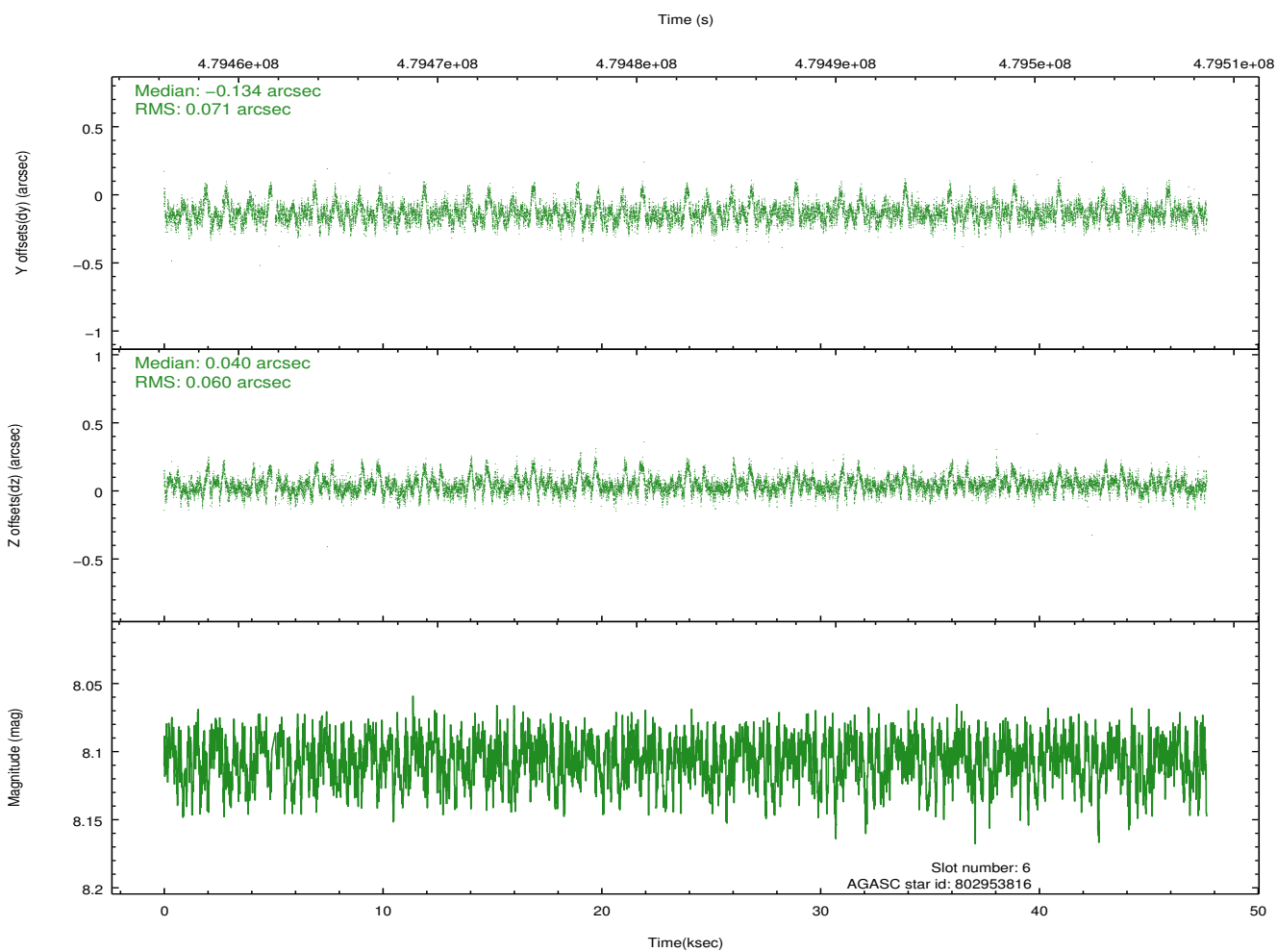
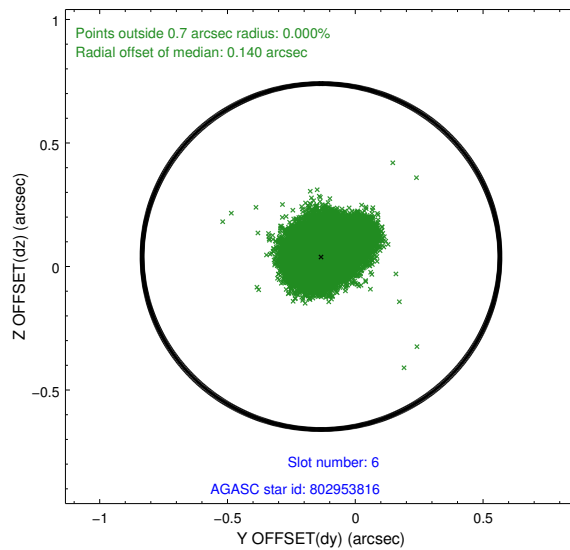
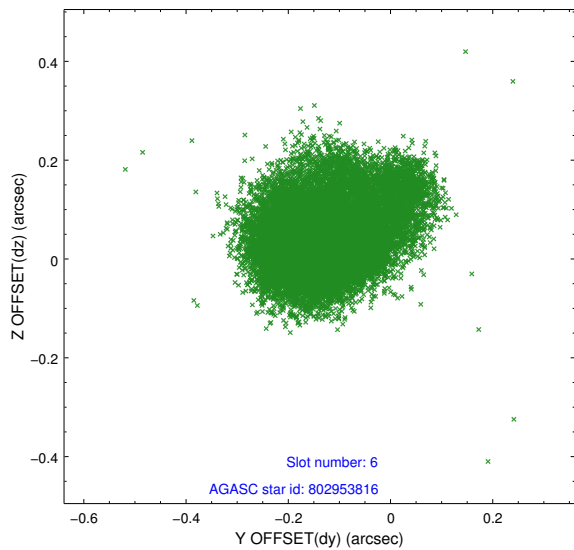
2.4.2 Slot 4



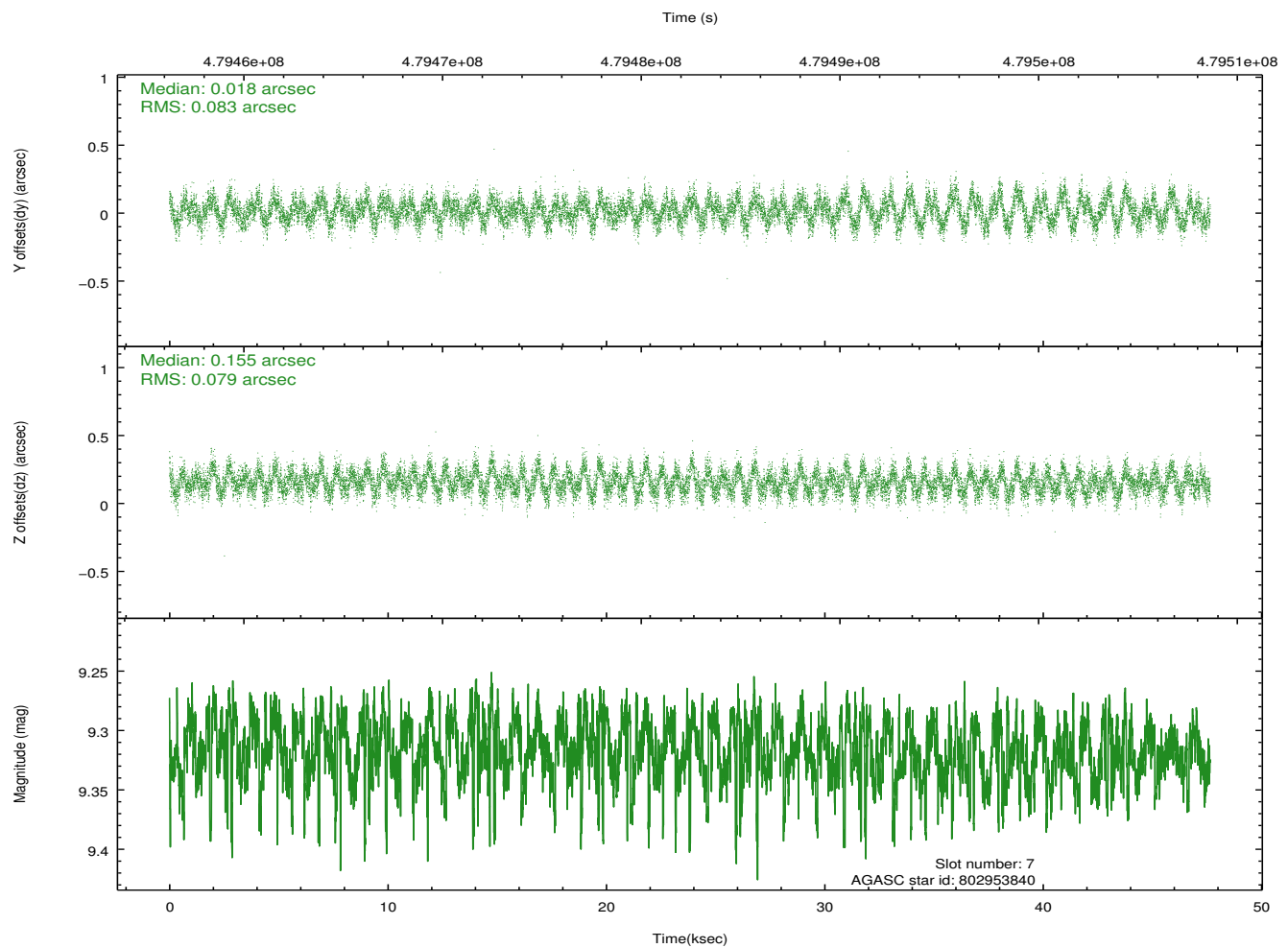
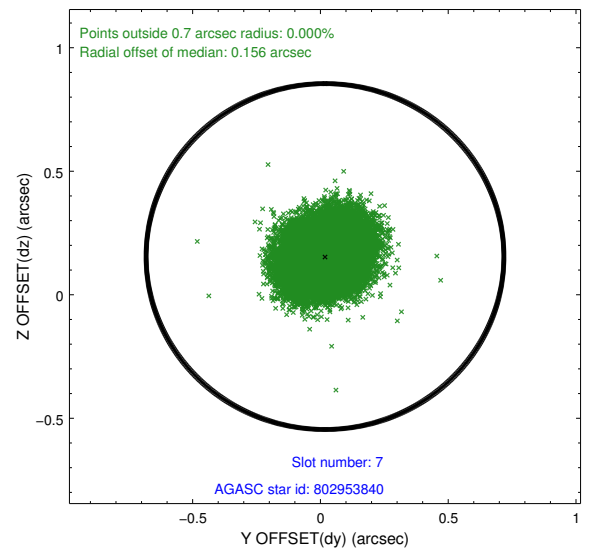
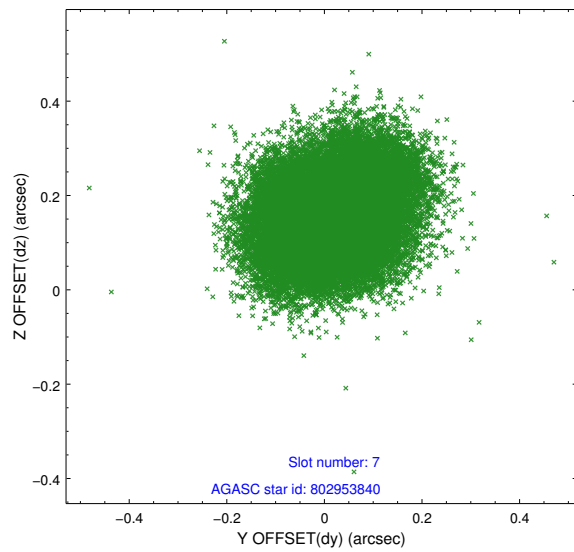
2.4.3 Slot 5



2.4.4 Slot 6

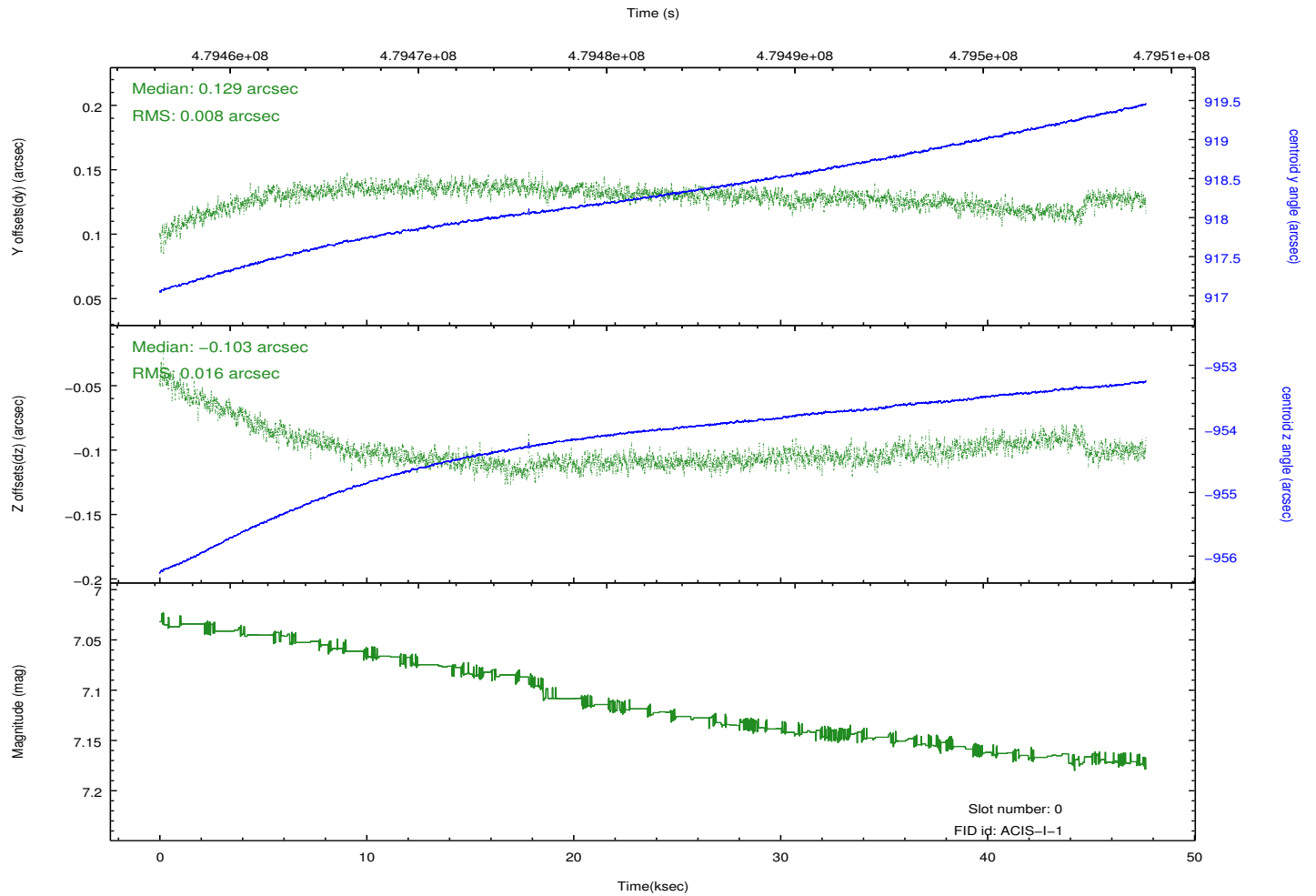
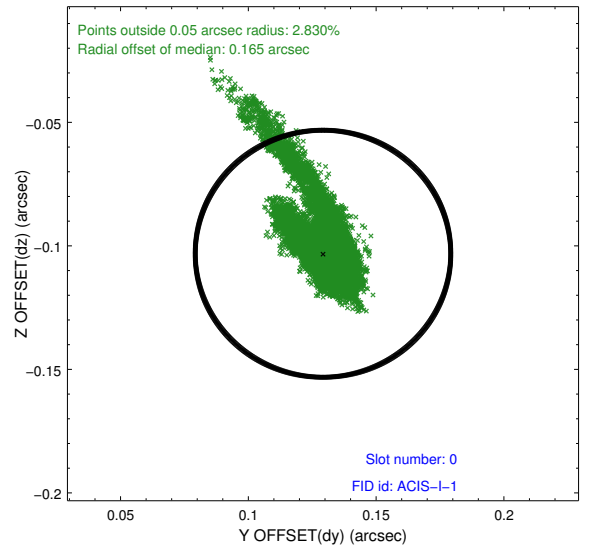
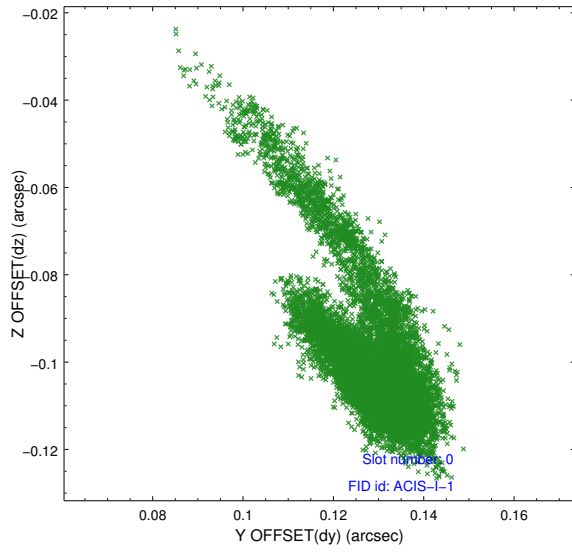


2.4.5 Slot 7

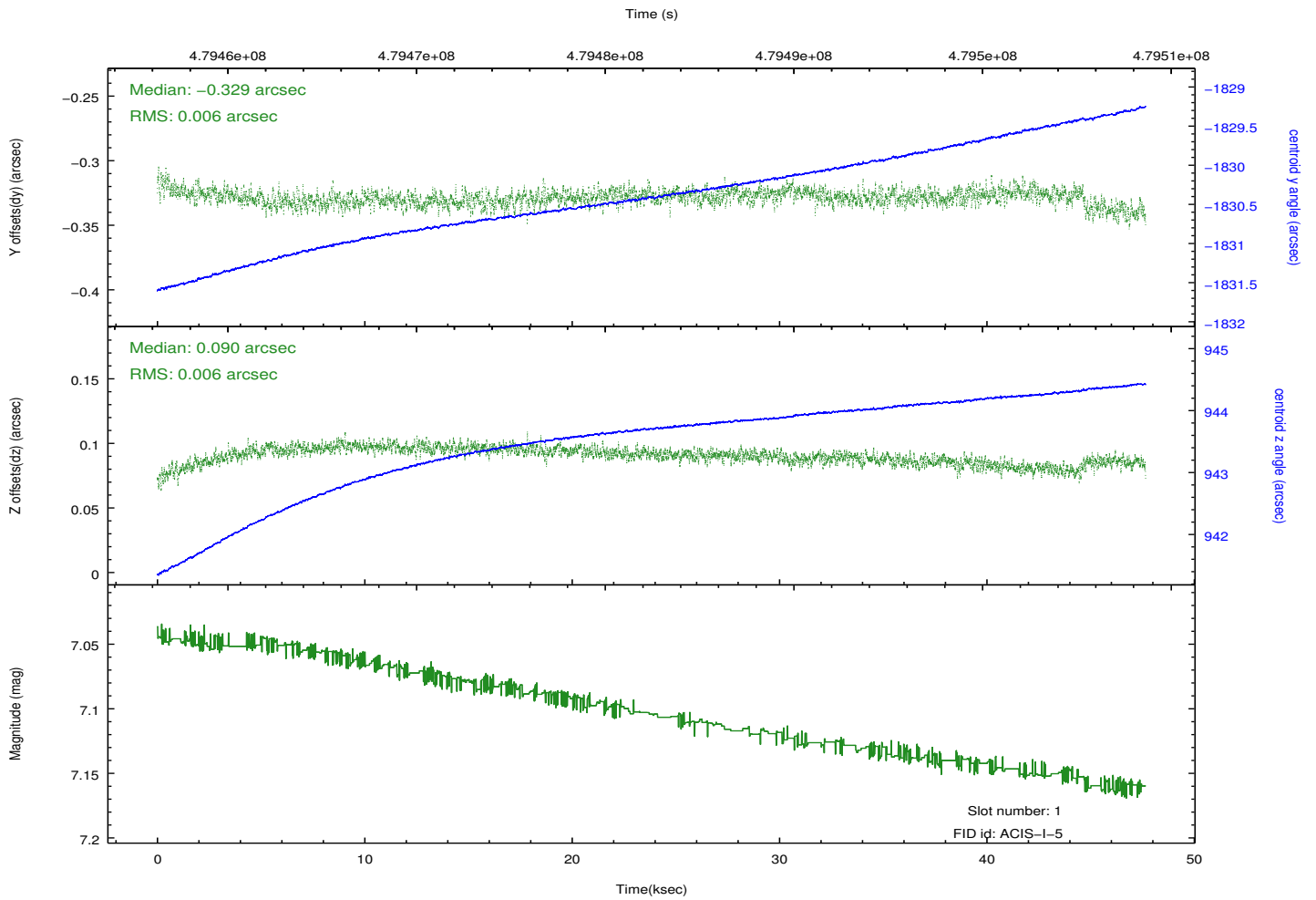
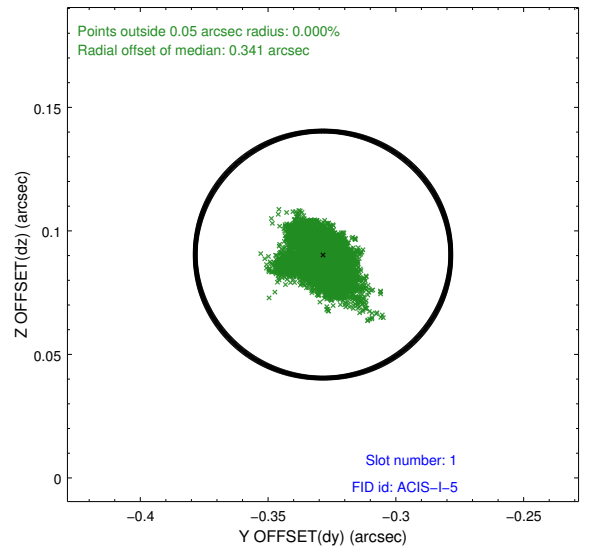
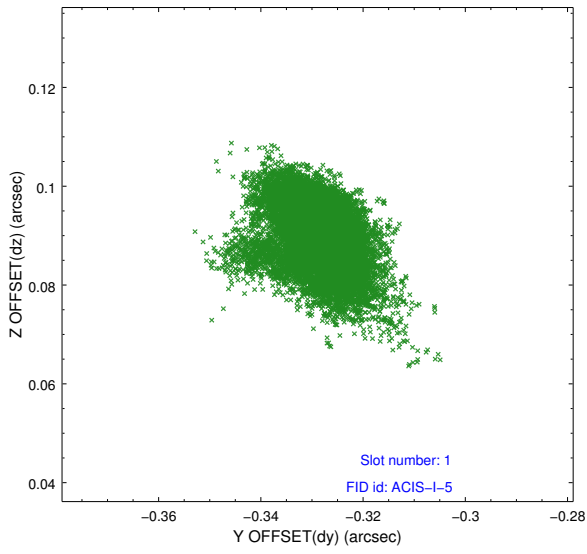


2.5 FID Slots

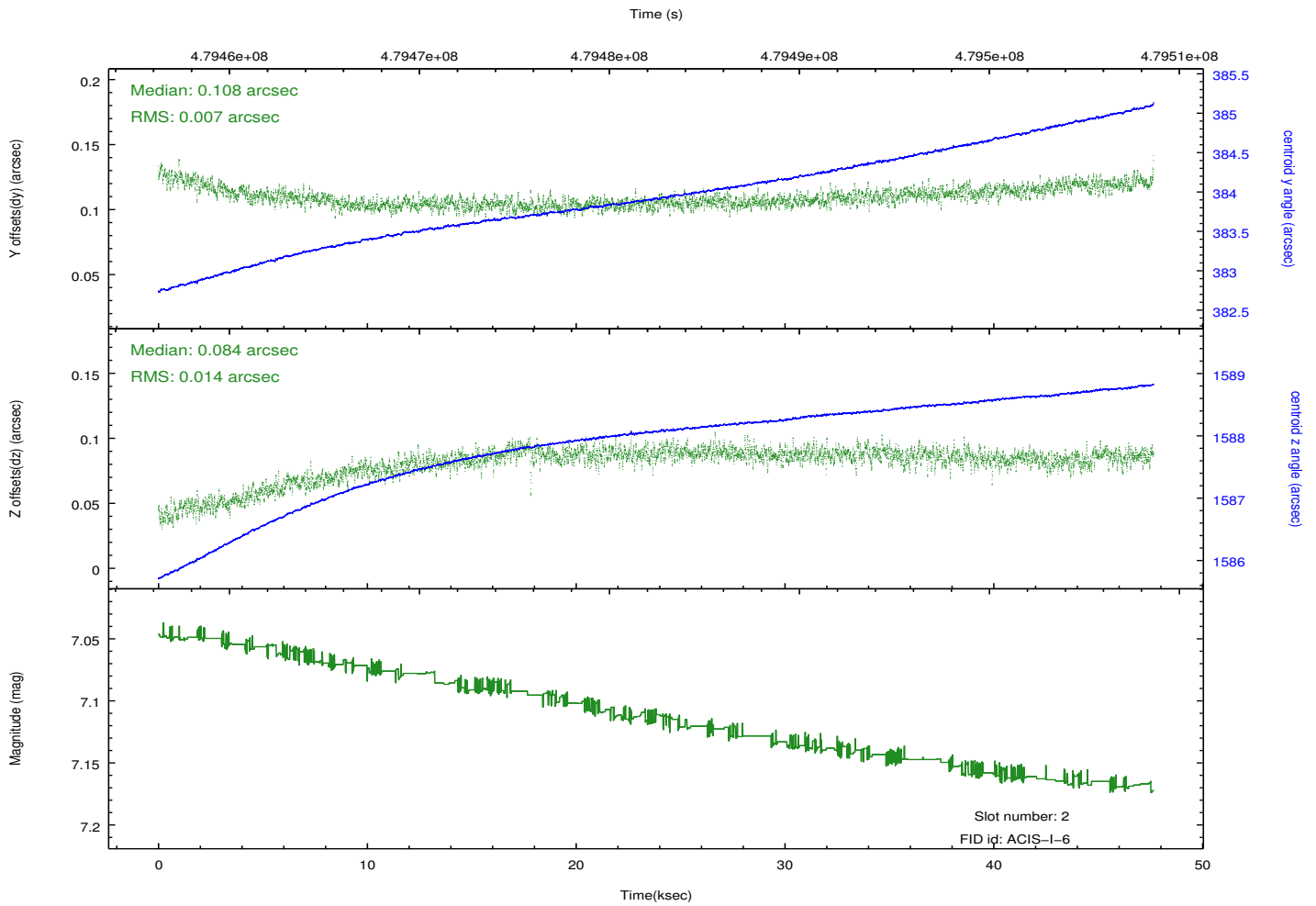
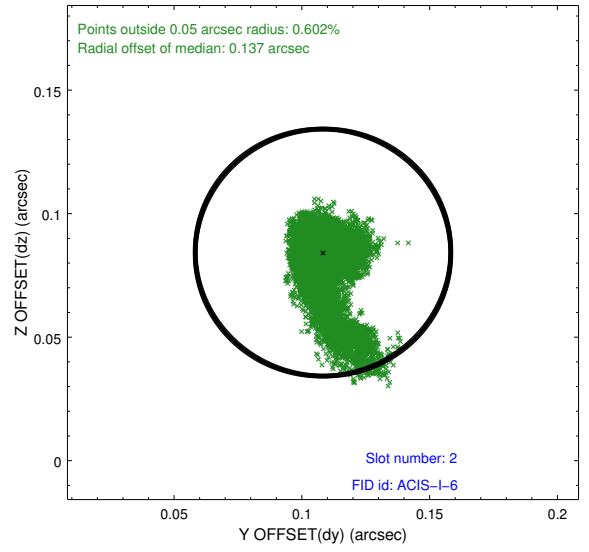
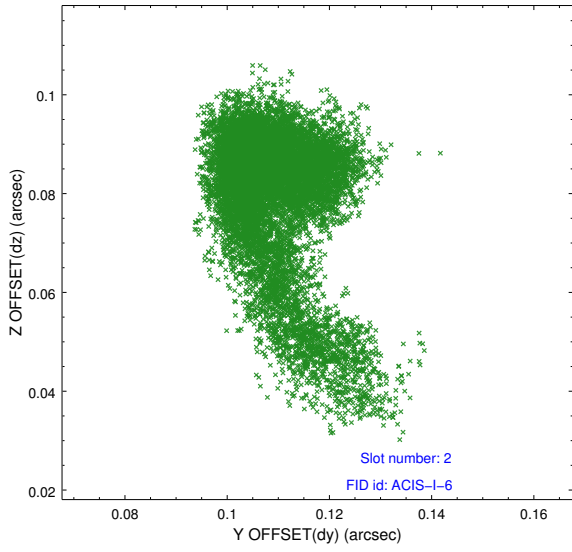
2.5.1 Slot 0



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)	2014.12.09
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	47.562516570807

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.