

V&V Reference Report

L2 ASCDS Version : 10

Observation 15280 - L2 Version 2
Chandra X-Ray Center

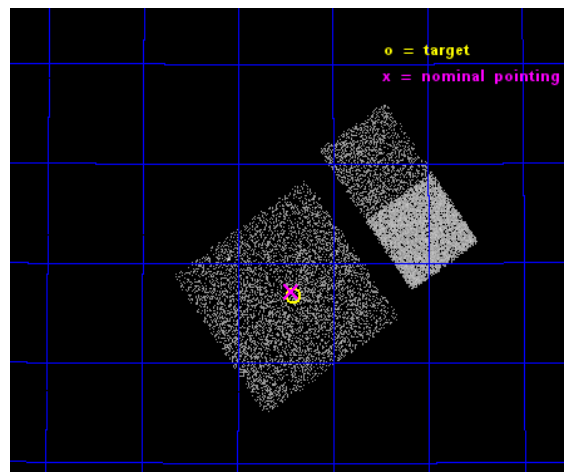
L2 Processing Date : Dec 6 2014

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1 Front

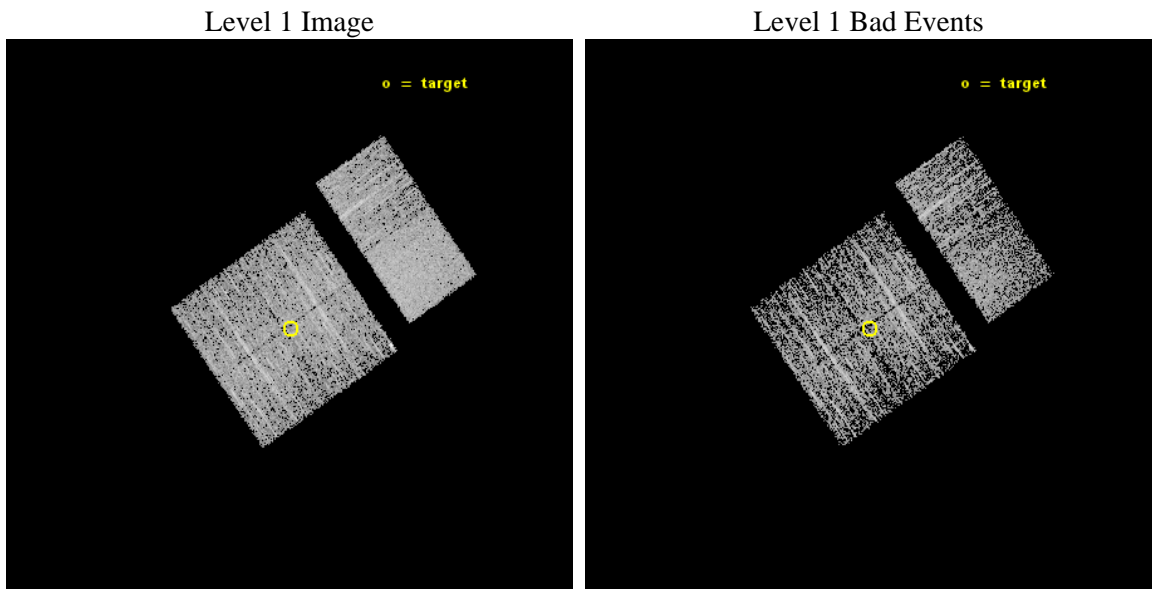
seq_num	801318	Sequence number
obs_id	15280	Observation id
title	Paving the way for eROSITA: with Chandra observations of the CODEX-BOSS clusters	Proposal title
observer	Dr. Peter Predehl	Principal investigator
object	CODEX 16463	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	120.855417	Observer's specified target RA [deg]
dec_targ	48.27925	Observer's specified target Dec [deg]
ra_nom	120.85916811793	Nominal RA [deg]
dec_nom	48.286923747829	Nominal Dec [deg]
roll_nom	55.101974718059	Nominal Roll [deg]
revision	2	Processing version of data
ontime	3753.5999860764	Sum of GTIs [s]
livetime	3706.0696429061	Livetime [s]
ontime0	3753.5999860764	Sum of GTIs [s]
ontime1	3753.5999860764	Sum of GTIs [s]
ontime2	3753.5999860764	Sum of GTIs [s]
ontime3	3753.5999860764	Sum of GTIs [s]
ontime6	3753.5999860764	Sum of GTIs [s]
ontime7	3753.5999860764	Sum of GTIs [s]
l2events	18718	Number of level 2 events



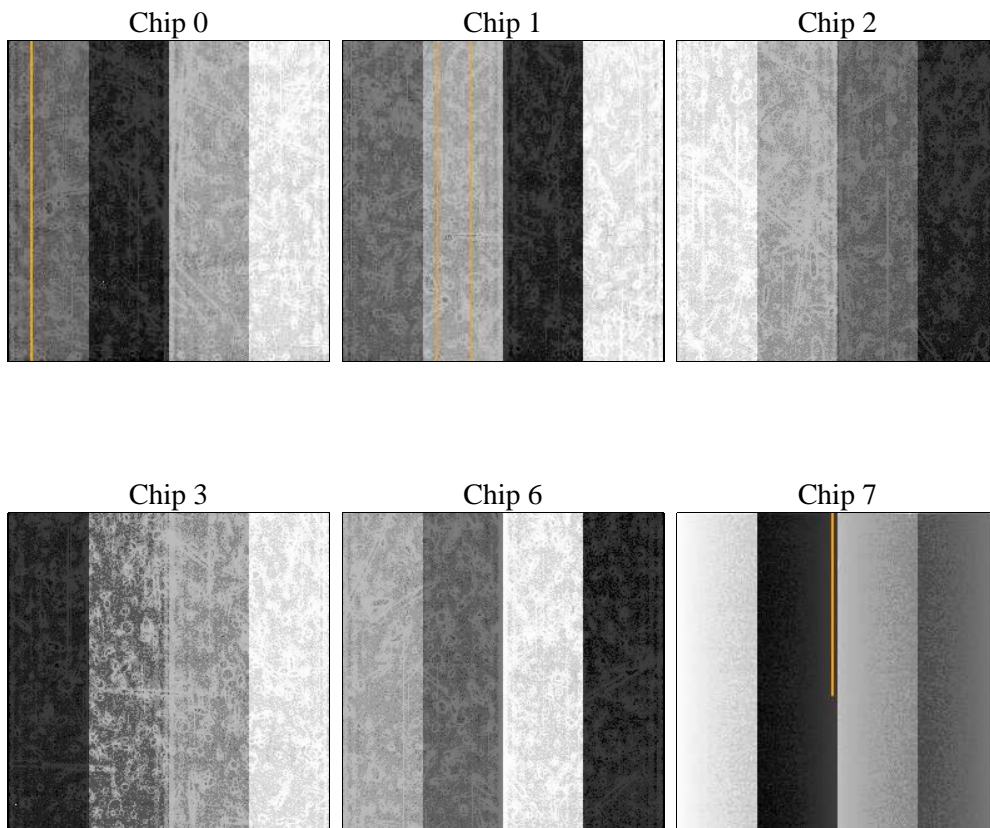
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	4000.166000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	3753.5999860764	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	3753.5999860764	Sum of GTIs [s]
date	2014-12-06T10:15:17	Date and time of file creation	ontime1	3753.5999860764	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	3753.5999860764	Sum of GTIs [s]
			ontime3	3753.5999860764	Sum of GTIs [s]
			ontime6	3753.5999860764	Sum of GTIs [s]
			ontime7	3753.5999860764	Sum of GTIs [s]
			l1events	104500	Number of level 1 events

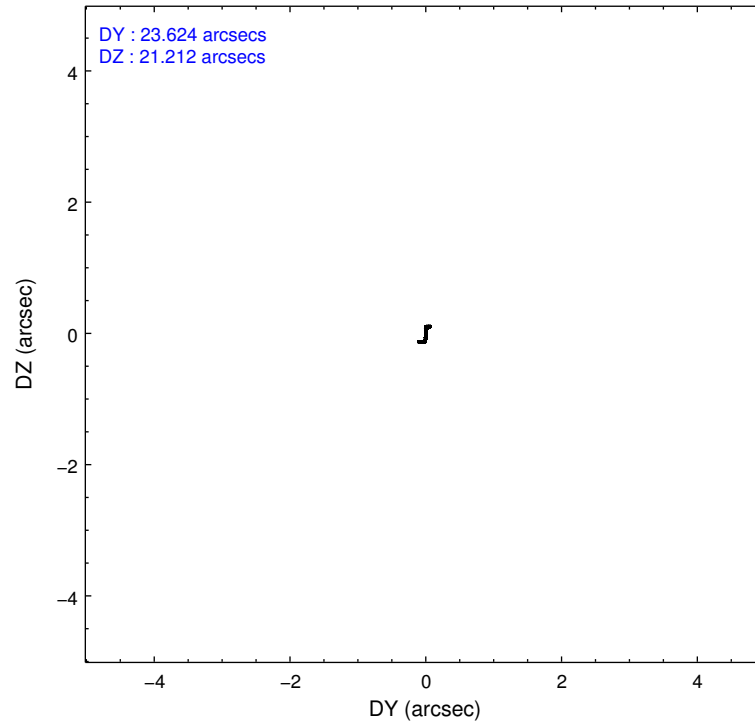
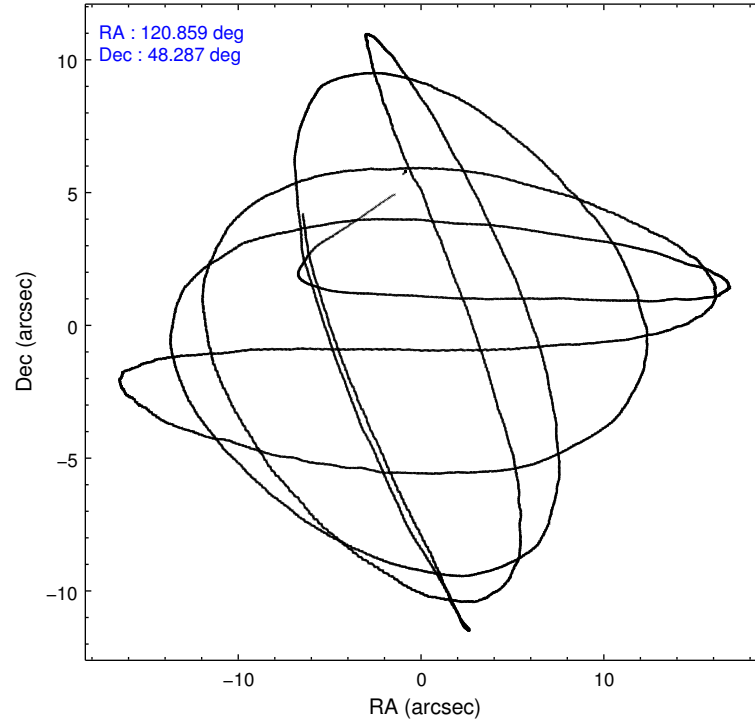
2.1.4 Events

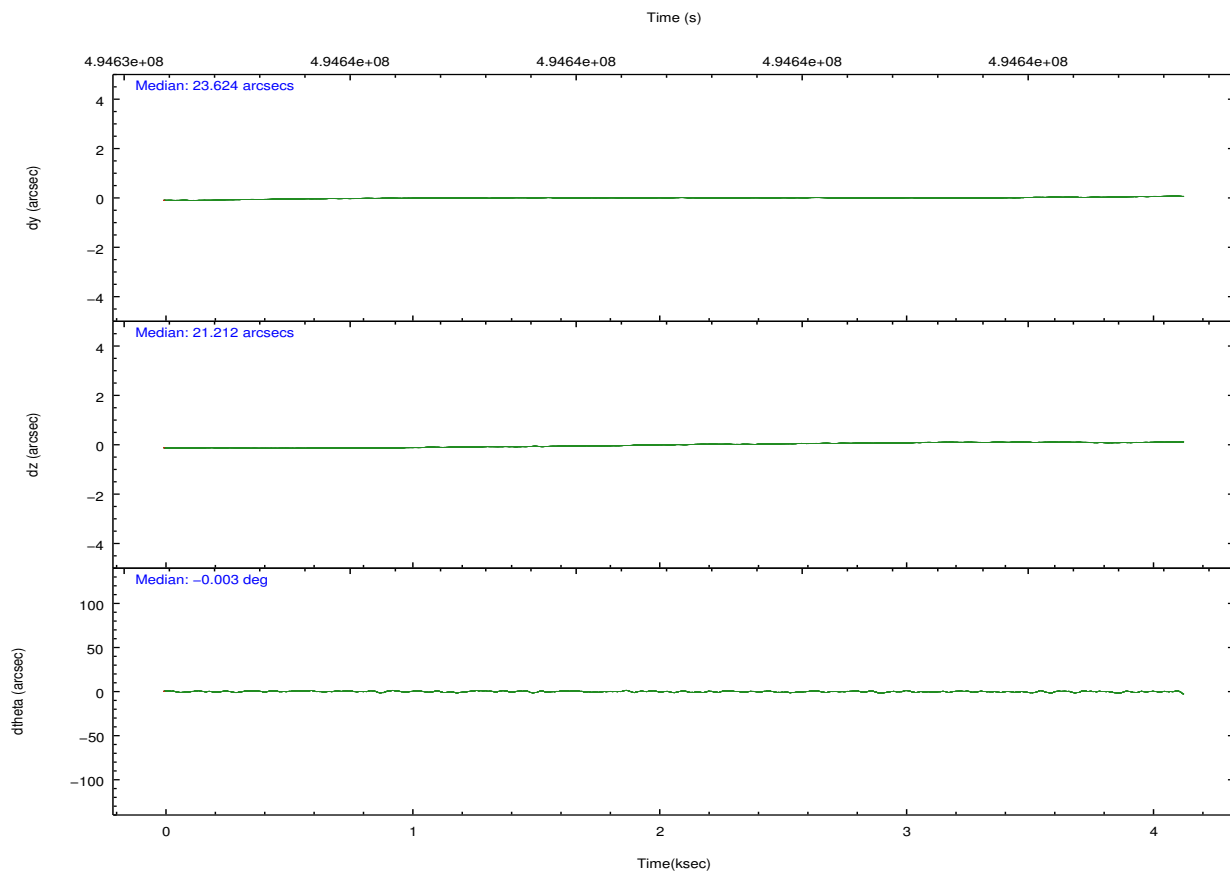
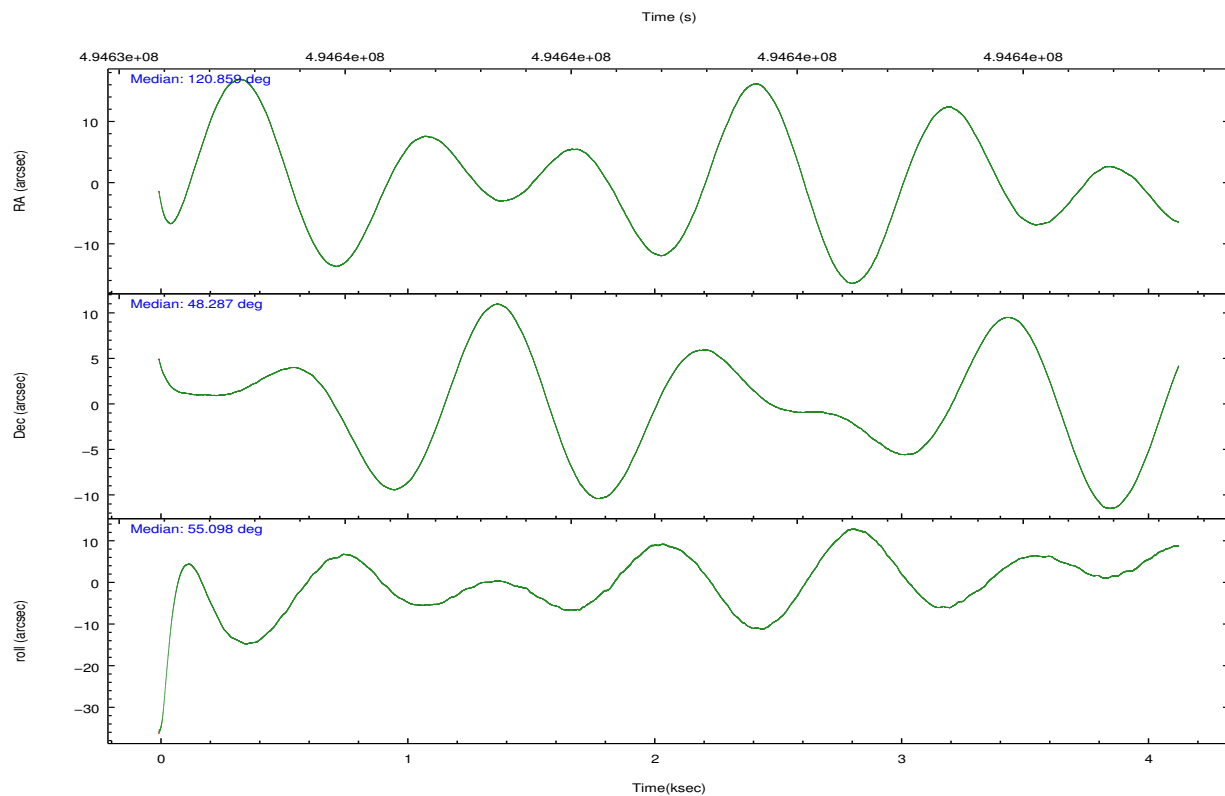
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	14654	16108	16560	16140	17276	23762	grade 0 events	704	782	732	1027	739	851
rejected events	12634	13893	14570	13906	15128	13545		4%	4%	4%	6%	4%	3%
rejected %	86%	86%	87%	86%	87%	57%	grade 1 events	9	6	8	11	7	29
								0%	0%	0%	0%	0%	0%
							grade 2 events	507	532	484	425	520	2152
								3%	3%	2%	2%	3%	9%
							grade 3 events	195	224	188	175	207	874
								1%	1%	1%	1%	1%	3%
							grade 4 events	194	214	192	202	220	872
								1%	1%	1%	1%	1%	3%
							grade 5 events	781	881	721	889	900	2498
								5%	5%	4%	5%	5%	10%
							grade 6 events	424	463	395	407	469	5486
								2%	2%	2%	2%	2%	23%
							grade 7 events	11840	13006	13840	13004	14214	11000
								80%	80%	83%	80%	82%	46%

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	VFAINT	VFAINT	CCD I0 on	Y	Y
Observation mode	POINTING	POINTING	CCD I1 on	Y	Y
[deg] Pointing RA	120.855725	120.8591681179278	CCD I2 on	Y	Y
[deg] Pointing Dec	48.259556	48.28692374782904	CCD I3 on	Y	Y
[deg] Pointing Roll	54.896008	55.10197471805902	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)	494634491.184000	494632949.13066	CCD S5 on	N	N
Observation start date	2013-09-03T22:27:04	2013-09-03T22:02:29	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	494638491.184000	494638728.08097	On-chip summing requested	N	N
Observation end date	2013-09-03T23:33:44	2013-09-03T23:38:48	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



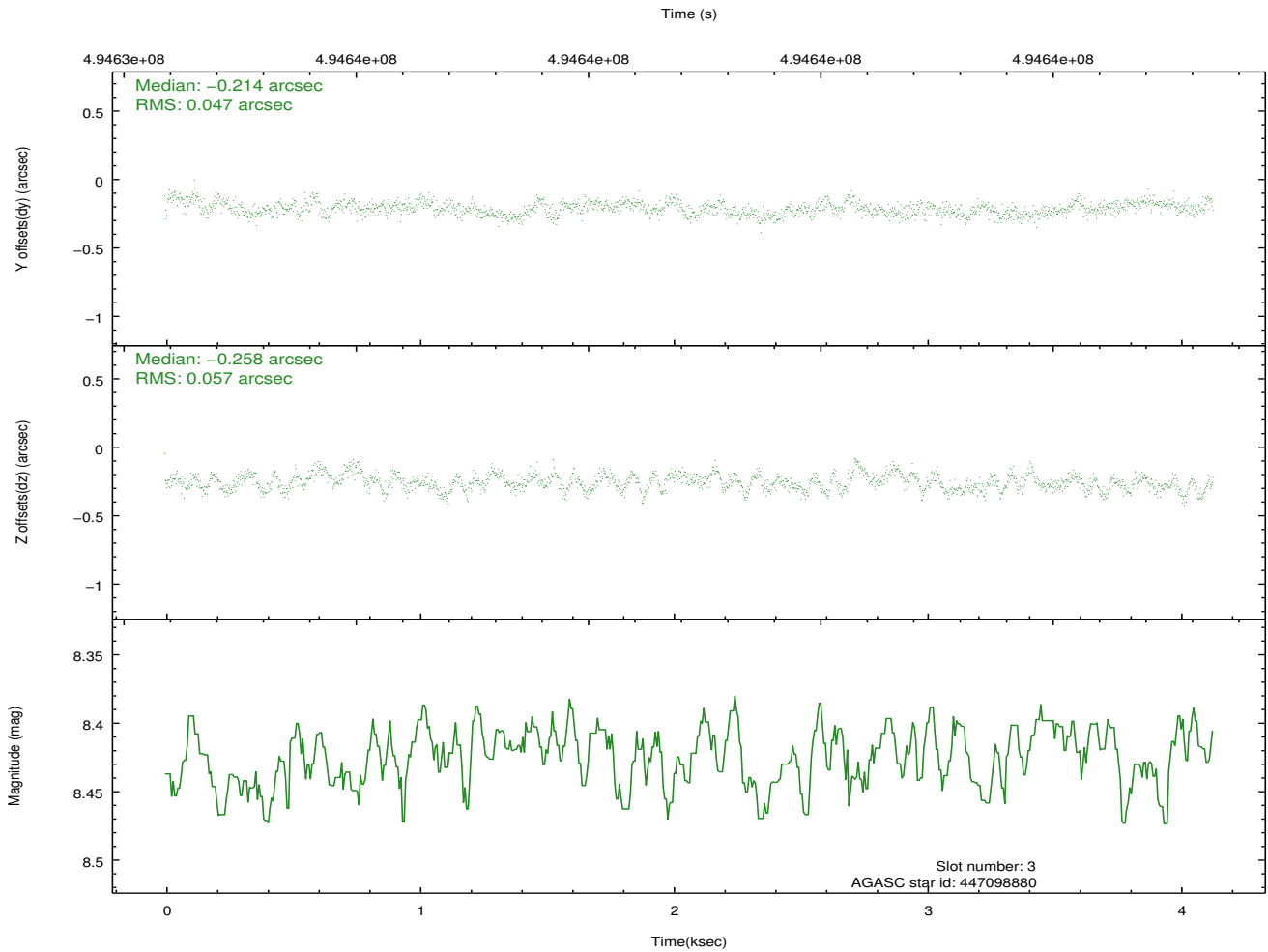
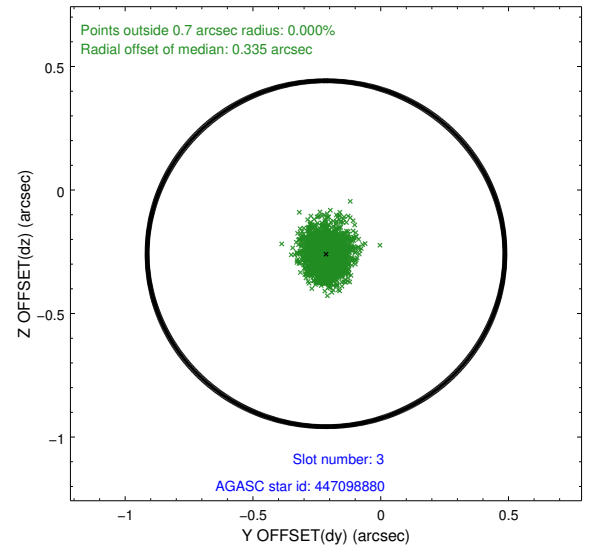
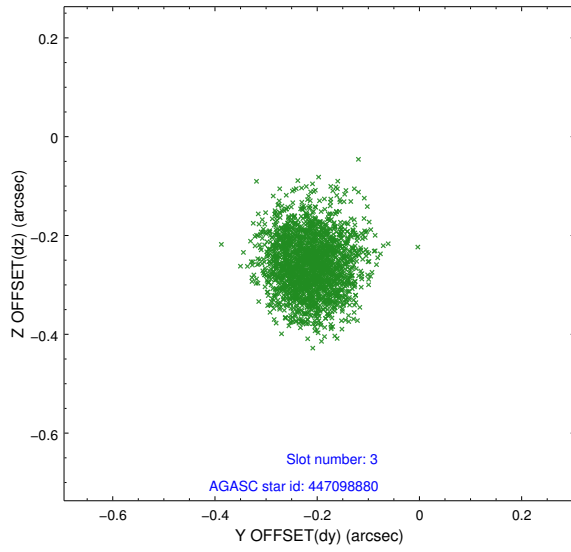


Slot Statistics

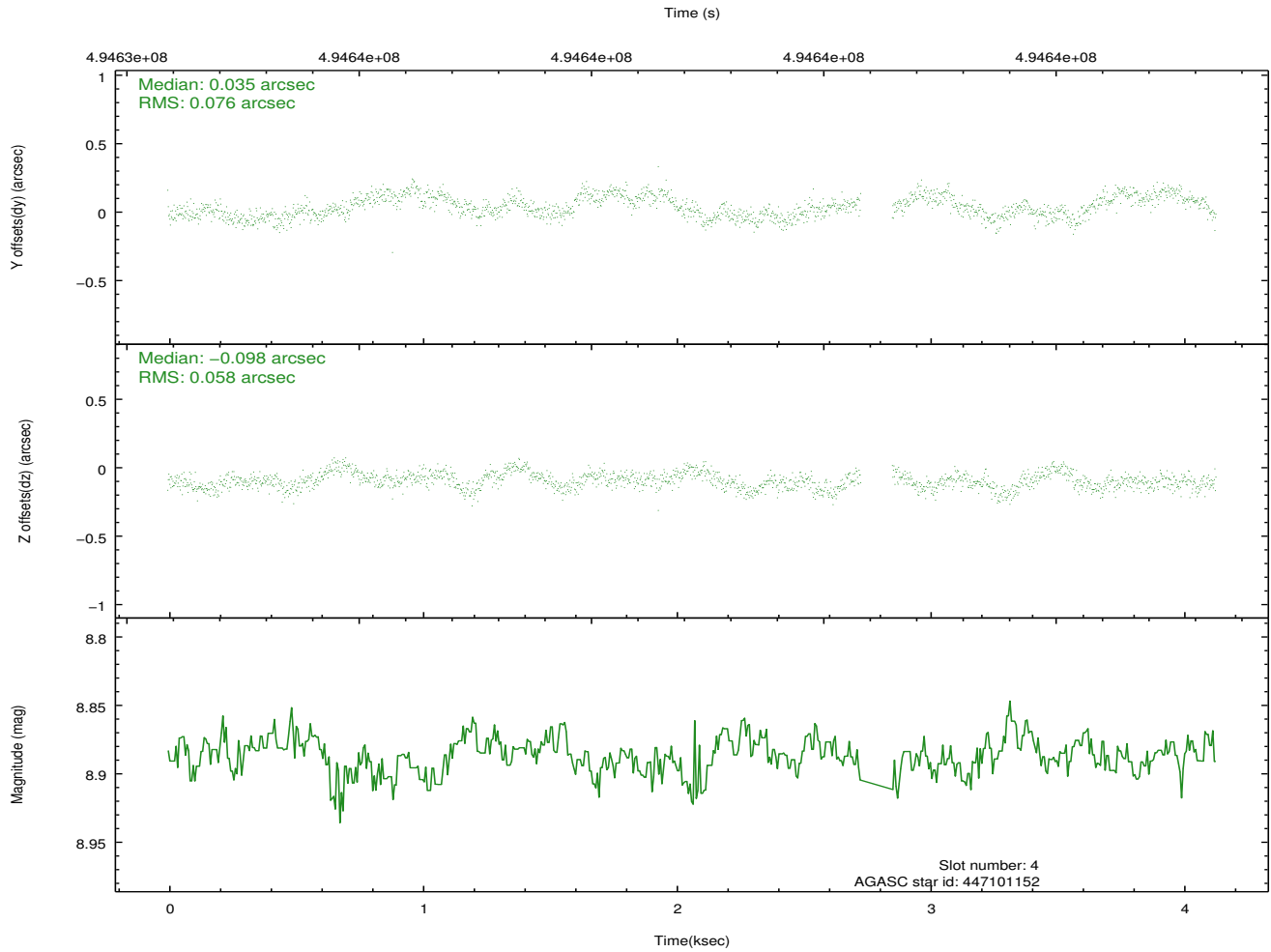
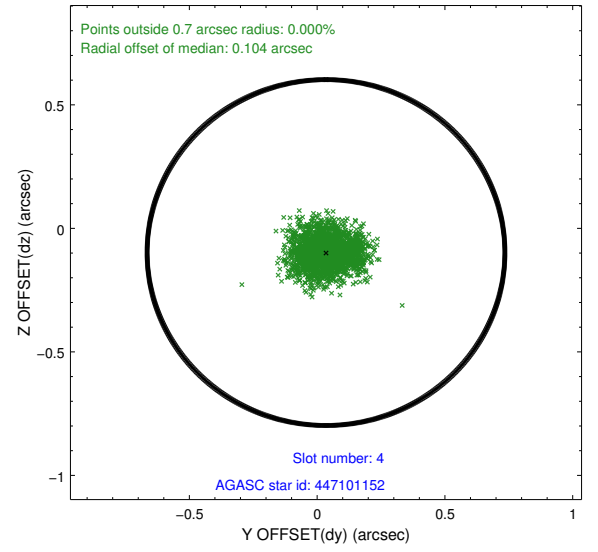
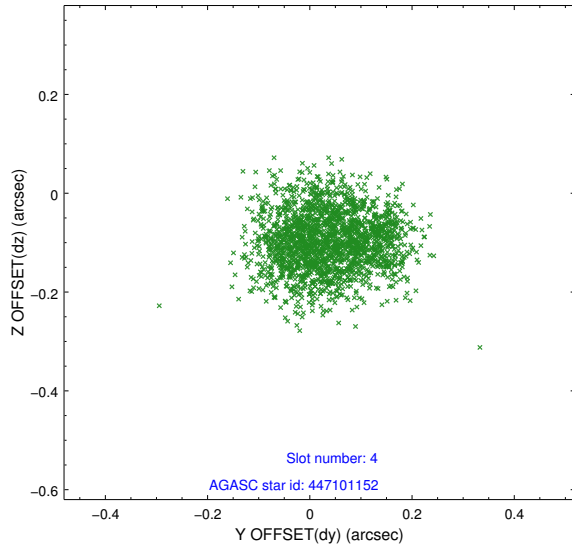
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.05	1008	-0.123	-0.065	0.008	0.014	0.000000	0.000000	915.49	-845.01
1	FID		ACIS-I-4	6.98	1008	0.096	0.135	0.008	0.015	0.000000	0.000000	2136.55	1054.25
2	FID		ACIS-I-6	7.04	1008	-0.070	-0.005	0.009	0.019	0.000000	0.000000	383.34	1697.98
3	GUIDE	used	447098880	8.42	2016	-0.214	-0.258	0.080	0.125	120.922708	48.611717	1128.63	598.87
4	GUIDE	used	447101152	8.89	1955	0.035	-0.098	0.103	0.159	120.021662	47.987608	-1946.91	1088.07
5	GUIDE	used	447104936	7.71	2016	0.079	0.311	0.070	0.110	121.274374	47.905746	-459.34	-1556.29
6	GUIDE	used	447105488	8.39	2015	0.182	0.211	0.080	0.125	121.069797	47.947851	-620.73	-1067.43
7	GUIDE	used	447106016	9.01	2013	-0.075	-0.168	0.119	0.189	120.839277	48.347787	237.29	214.55

2.4 Star Slots

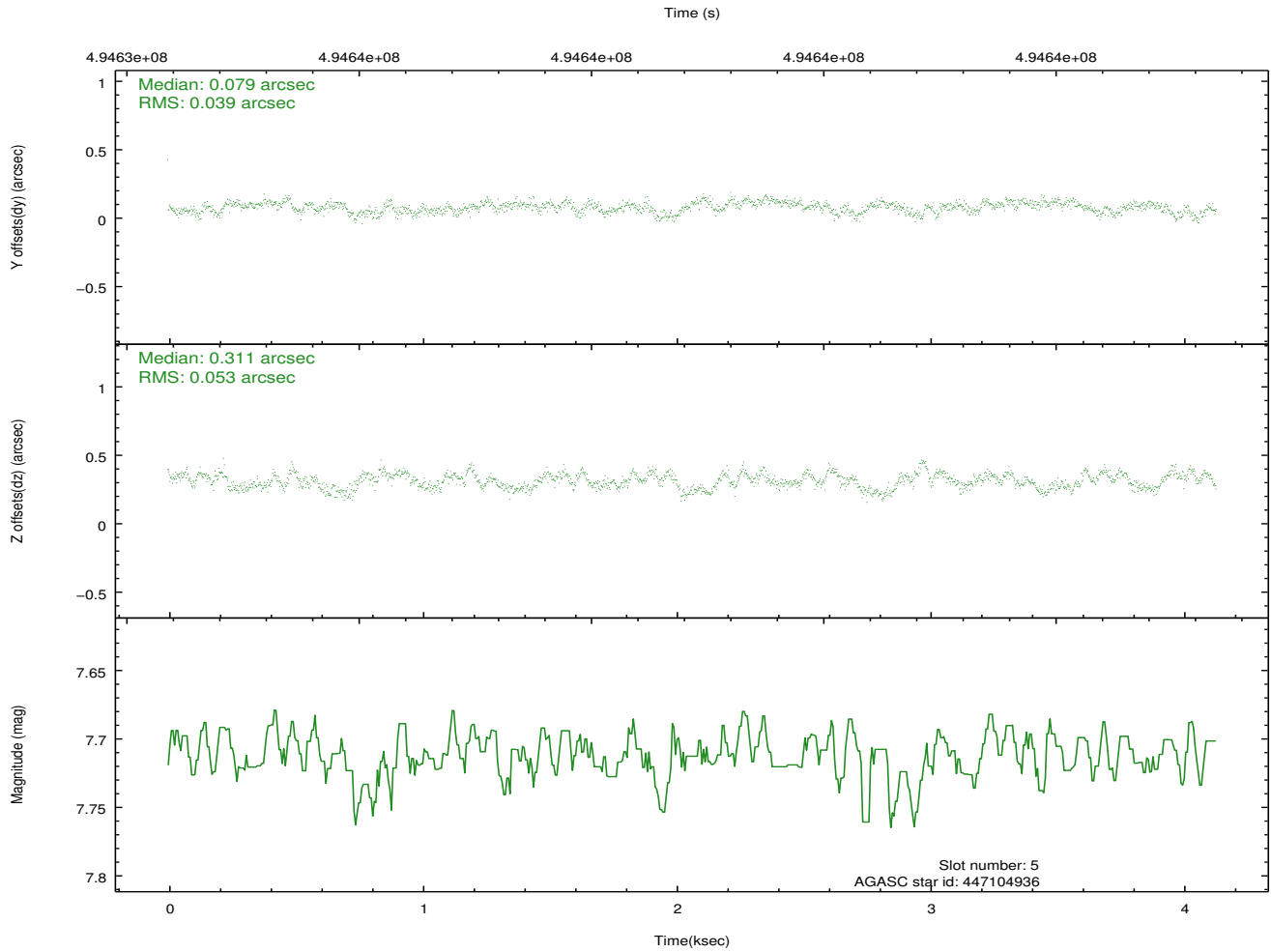
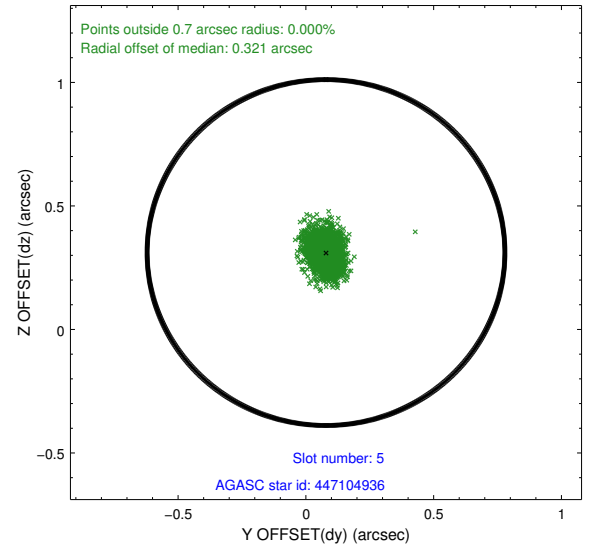
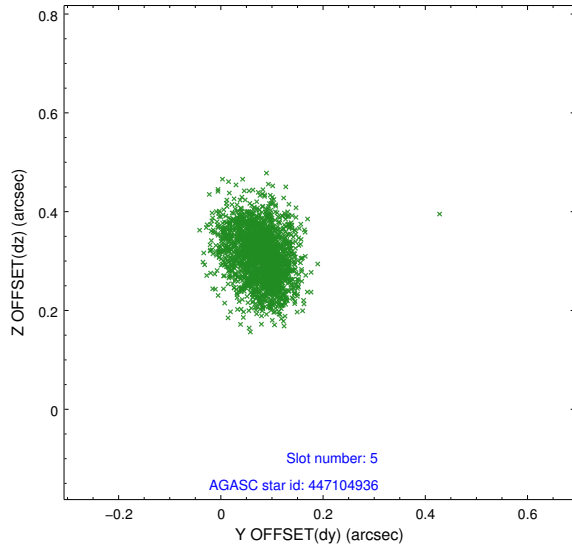
2.4.1 Slot 3



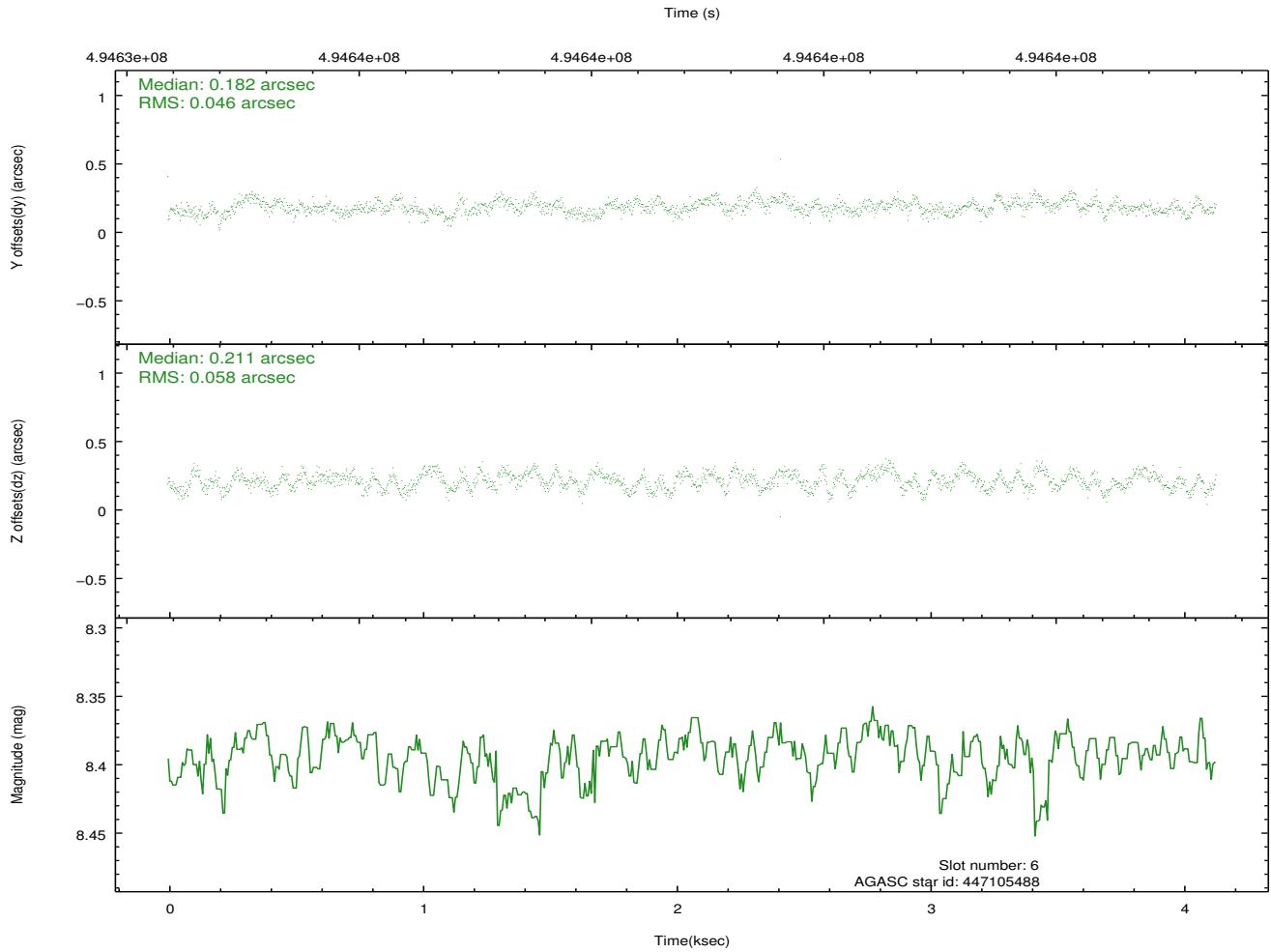
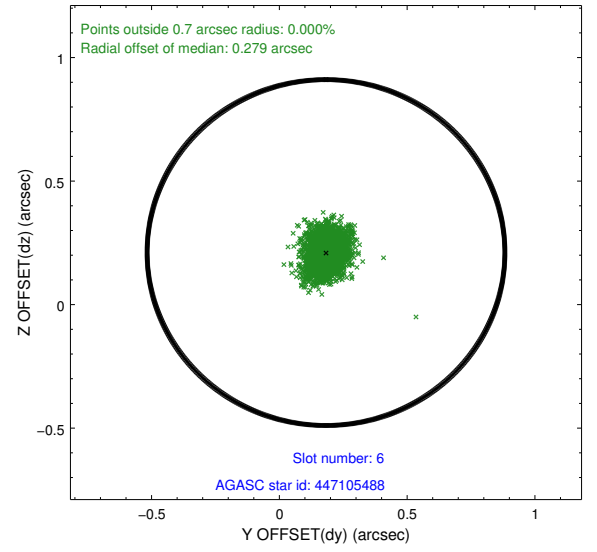
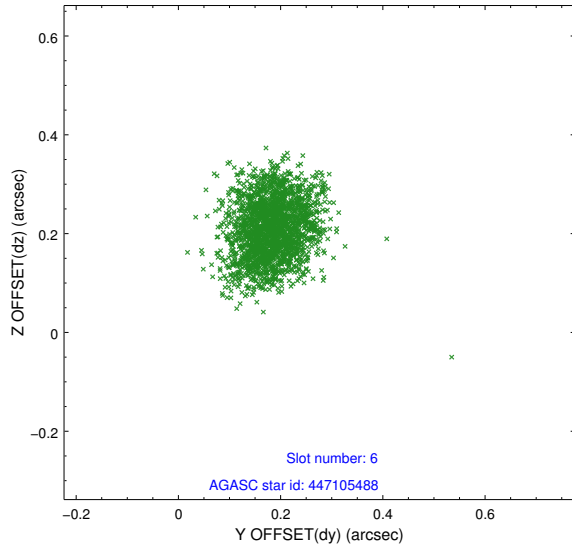
2.4.2 Slot 4



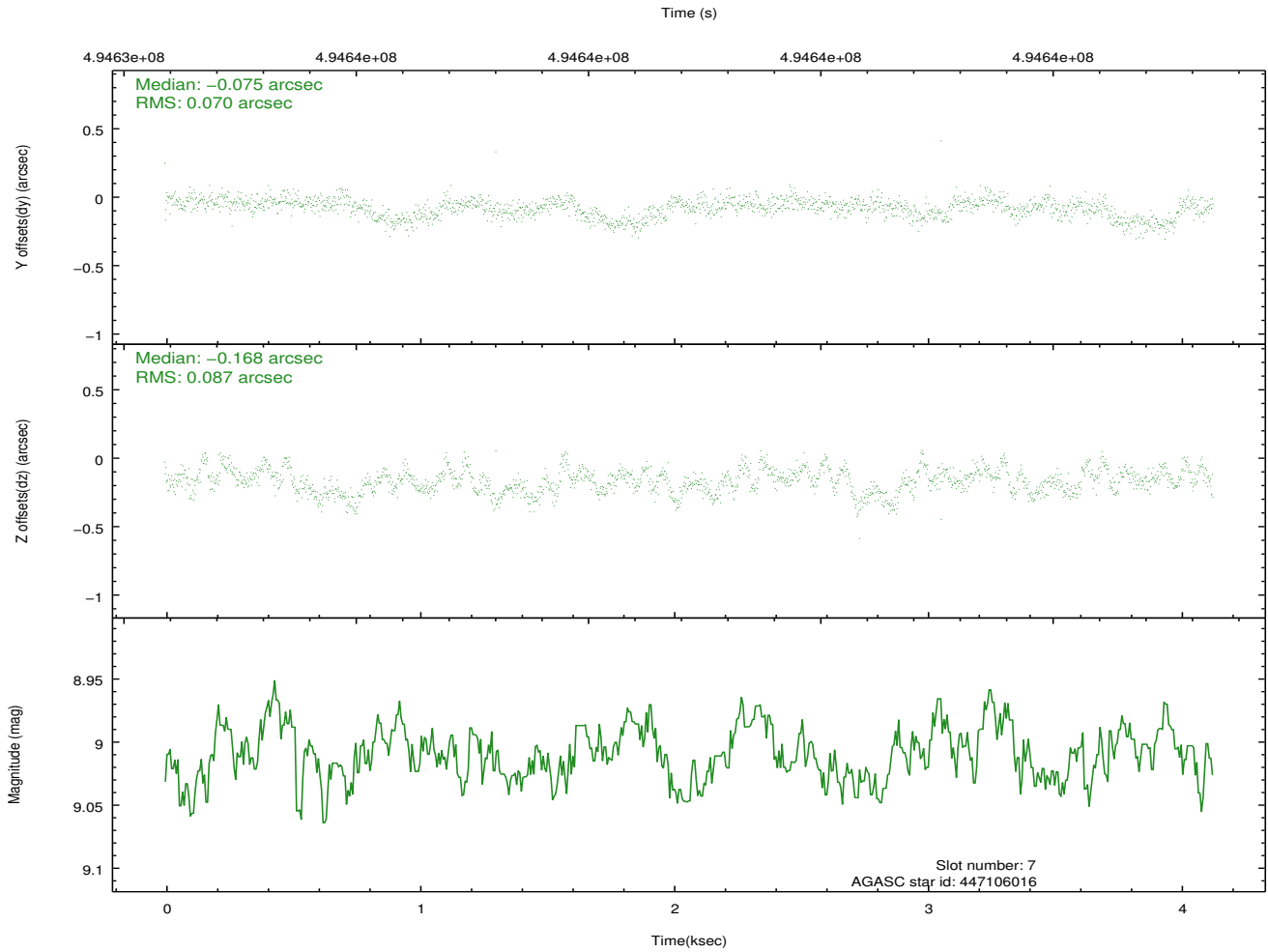
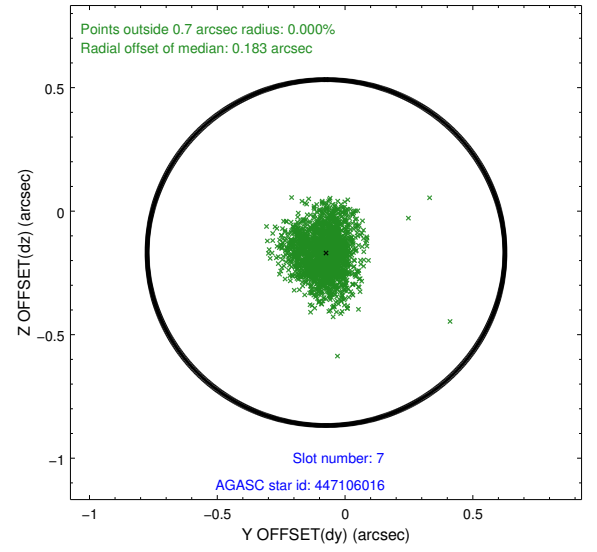
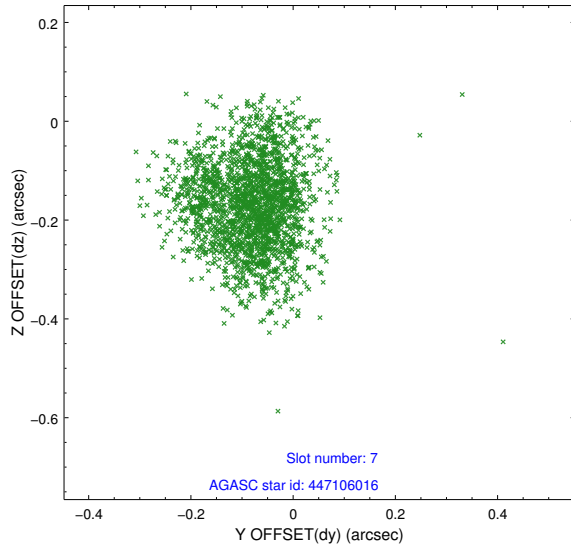
2.4.3 Slot 5



2.4.4 Slot 6

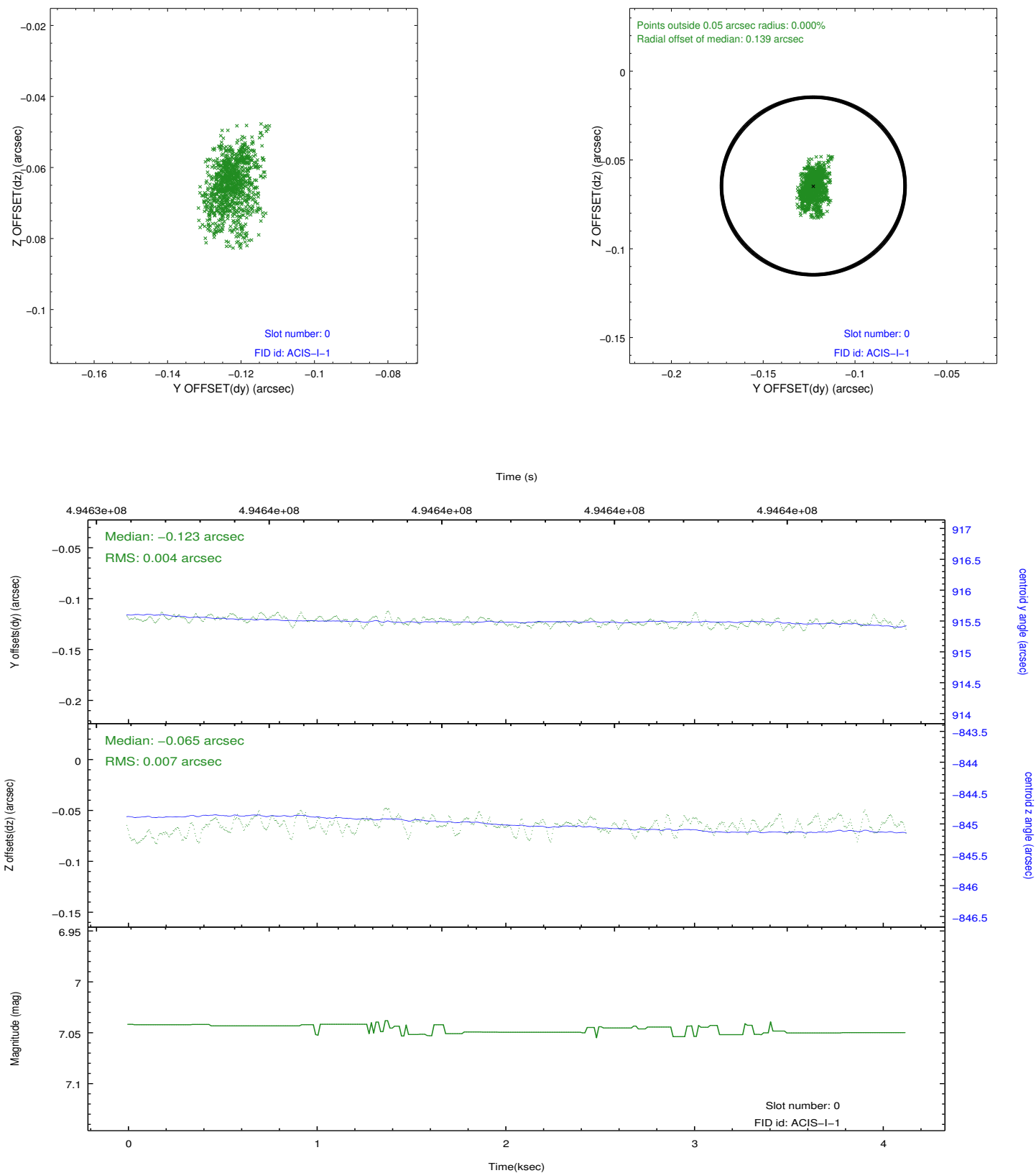


2.4.5 Slot 7

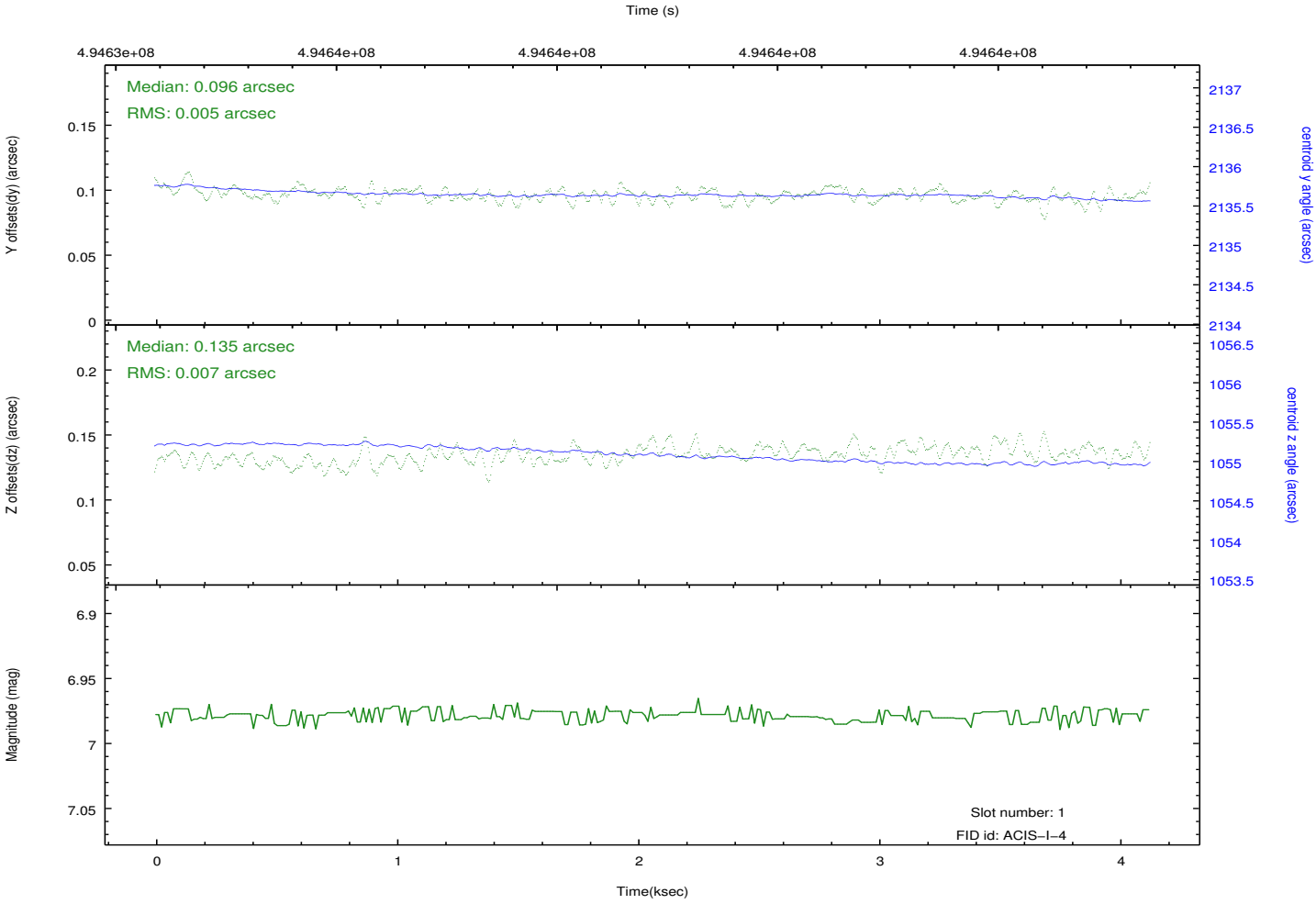
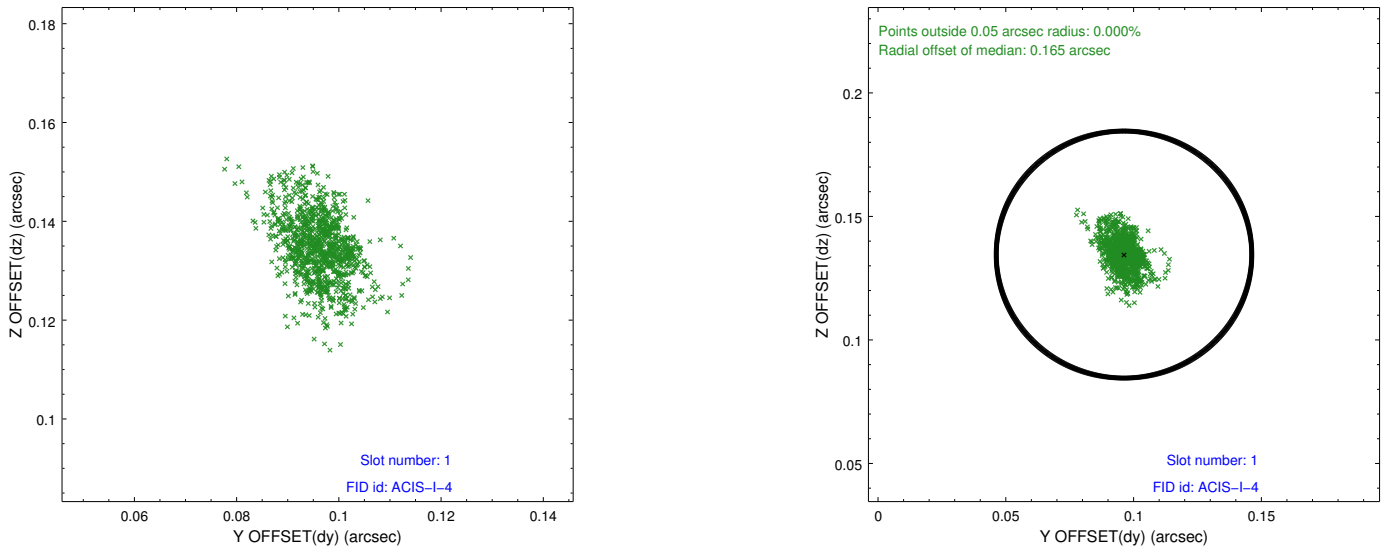


2.5 FID Slots

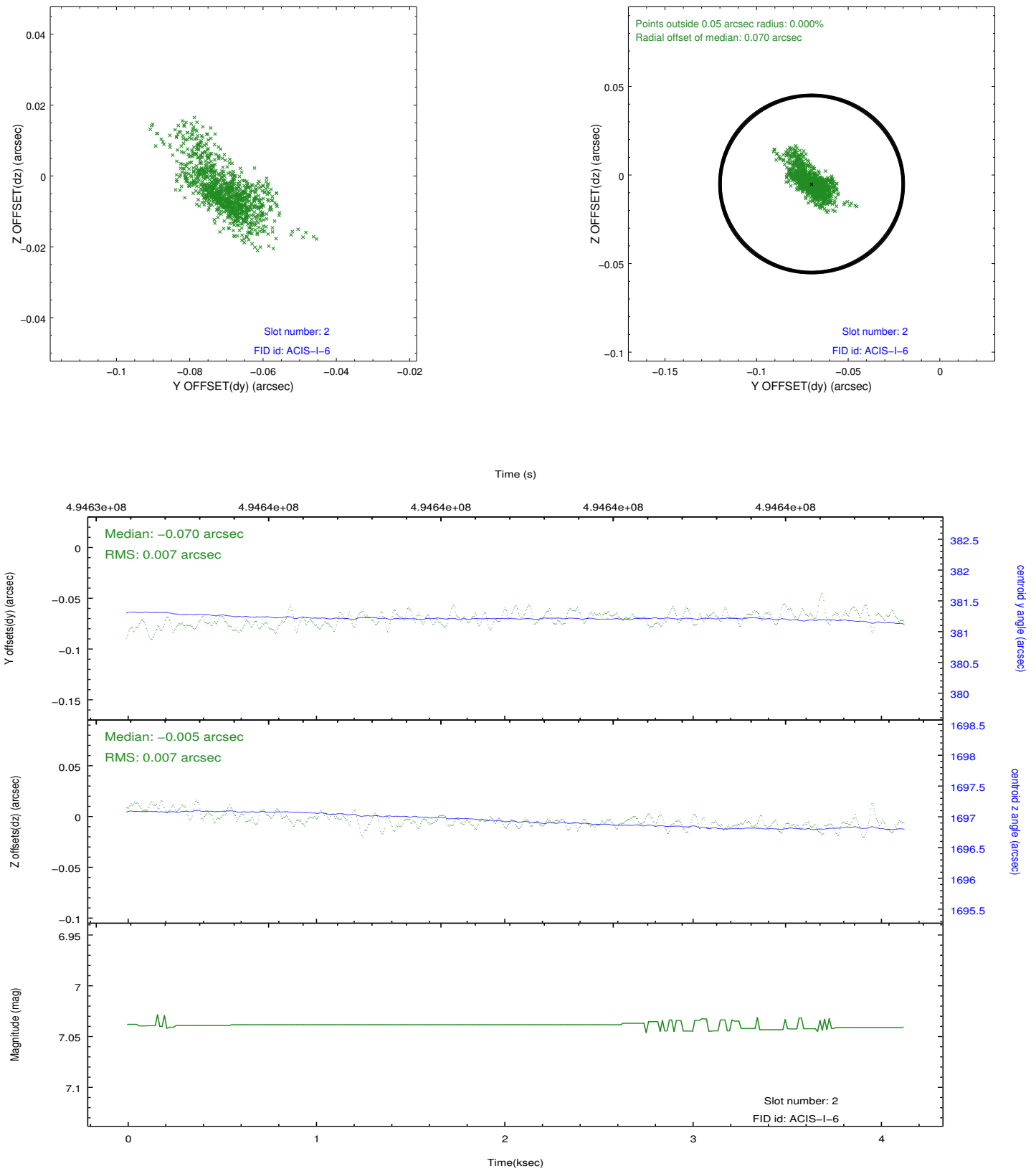
2.5.1 Slot 0



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)	2014.12.12
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	3.7535999860764

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.