

V&V Reference Report

L2 ASCDS Version : 10

Observation 15309 - L2 Version 2
Chandra X-Ray Center

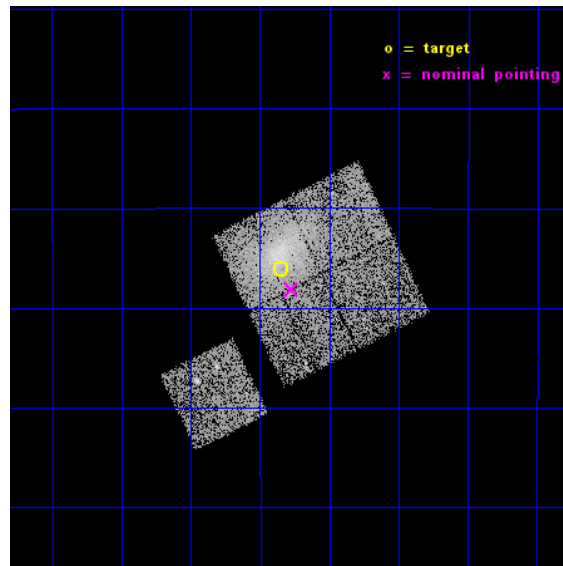
L2 Processing Date : Dec 3 2014

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1 Front

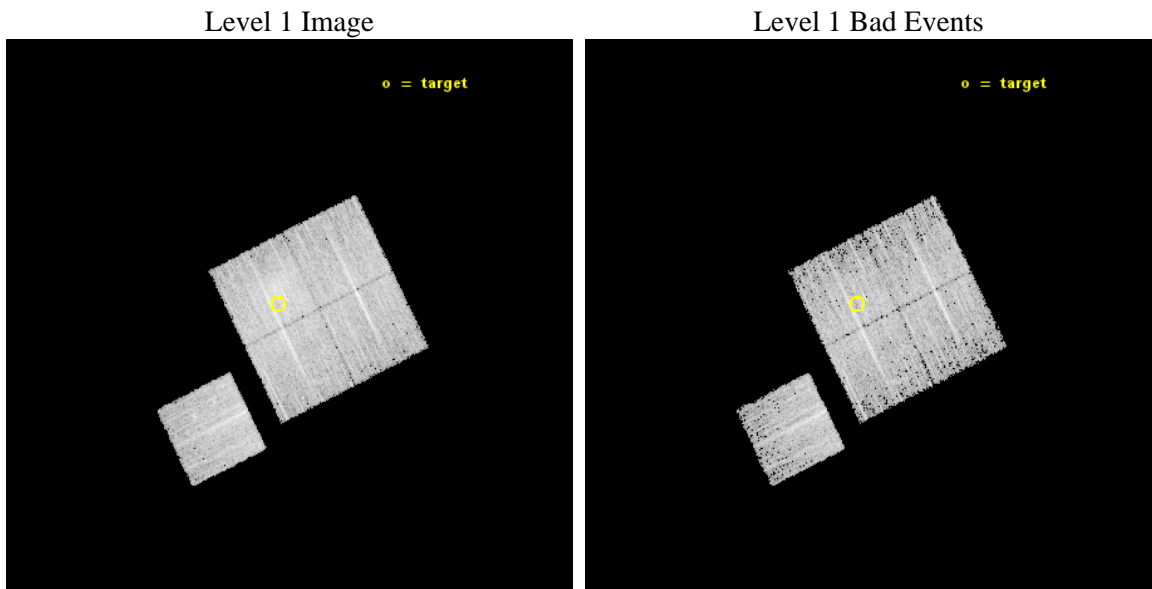
seq_num	801342	Sequence number
obs_id	15309	Observation id
title	Characterizing the Most Massive Clusters in the z	Proposal title
observer	Dr Stephen Murray	Principal investigator
object	G275.21+43.92	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	172.5875	Observer's specified target RA [deg]
dec_targ	-14.602833	Observer's specified target Dec [deg]
ra_nom	172.56840885644	Nominal RA [deg]
dec_nom	-14.635722753765	Nominal Dec [deg]
roll_nom	243.5770977001	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9772.9281488061	Sum of GTIs [s]
livetime	9645.2376478169	Livetime [s]
ontime0	9772.8050287962	Sum of GTIs [s]
ontime1	9769.7050784826	Sum of GTIs [s]
ontime2	9772.8871088028	Sum of GTIs [s]
ontime3	9772.9281488061	Sum of GTIs [s]
ontime6	9772.7639887929	Sum of GTIs [s]
l2events	35369	Number of level 2 events



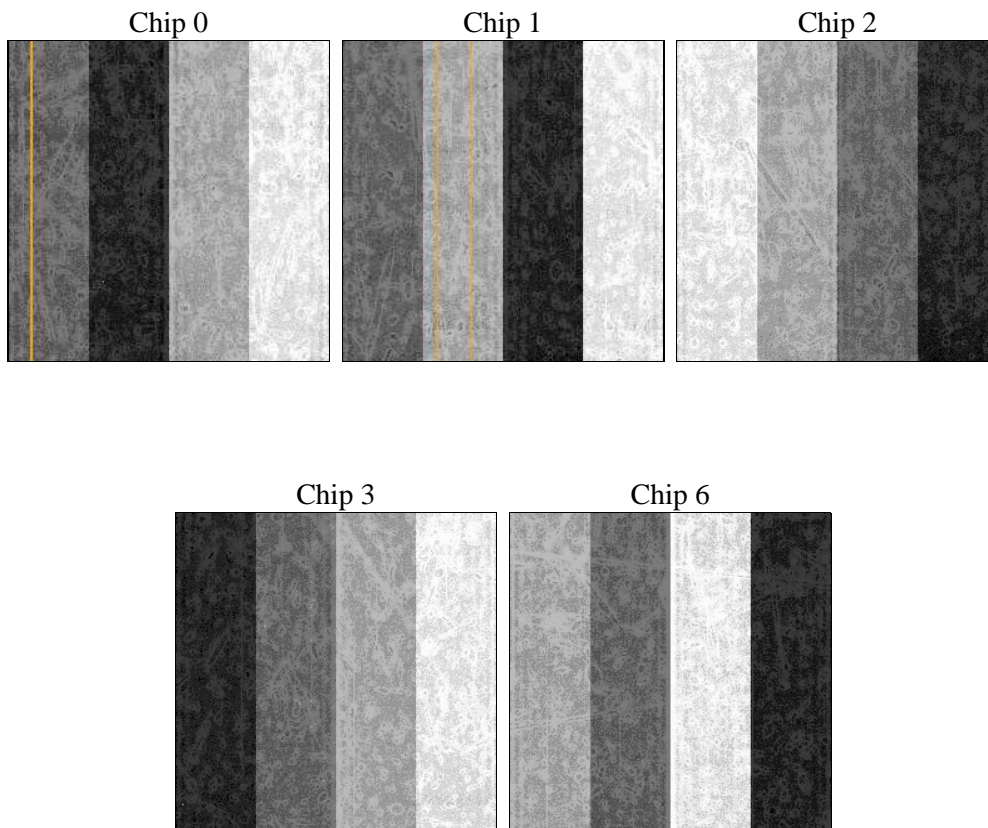
2 OBI

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	9772.9281488061	Sum of GTIs [s]
caldbver	4.6.4	 	ontime0	9772.8050287962	Sum of GTIs [s]
date	2014-12-04T00:56:27	Date and time of file creation	ontime1	9769.7050784826	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9772.8871088028	Sum of GTIs [s]
			ontime3	9772.9281488061	Sum of GTIs [s]
			ontime6	9772.7639887929	Sum of GTIs [s]
			l1events	239706	Number of level 1 events

2.1.4 Events

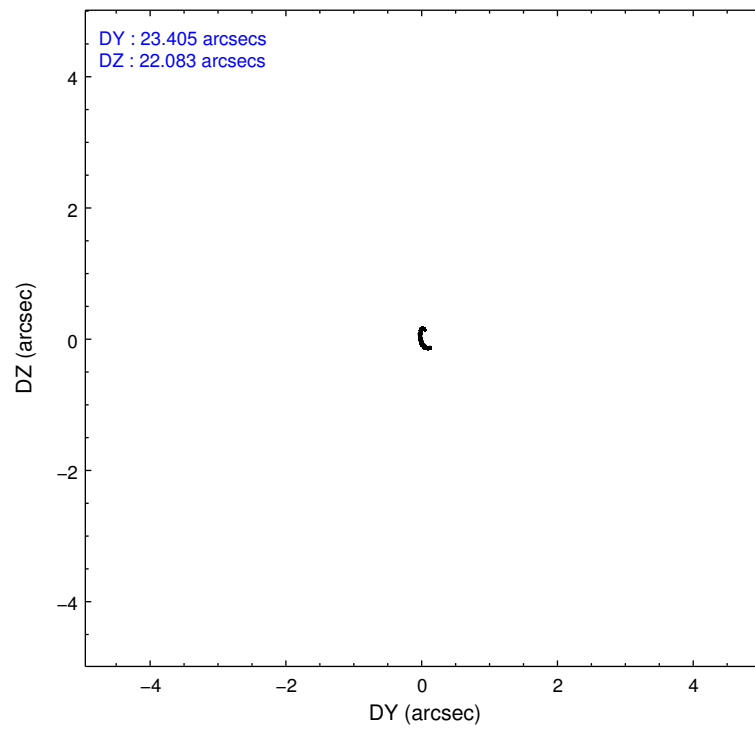
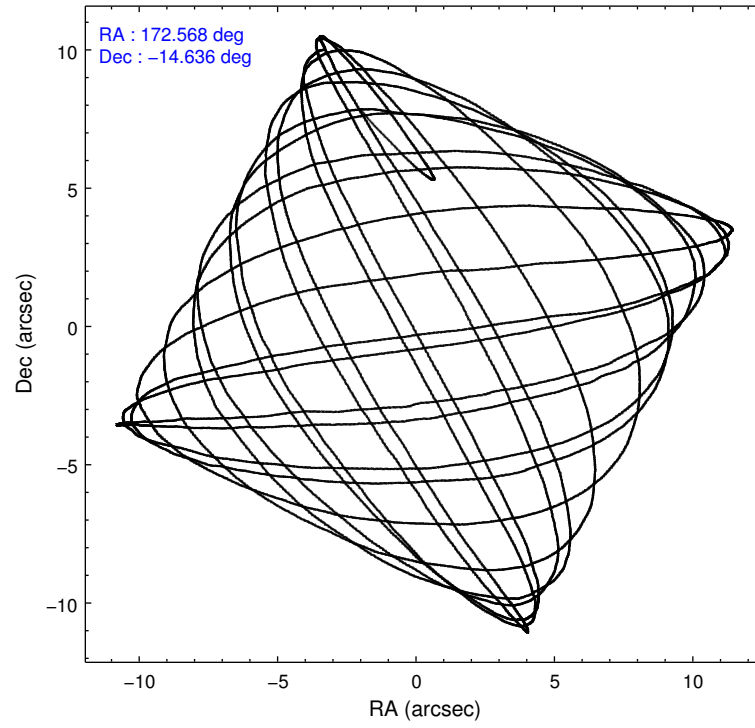
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	43772	46538	46745	56138	46513
rejected events	37692	38564	40325	41682	40400
rejected %	86%	82%	86%	74%	86%

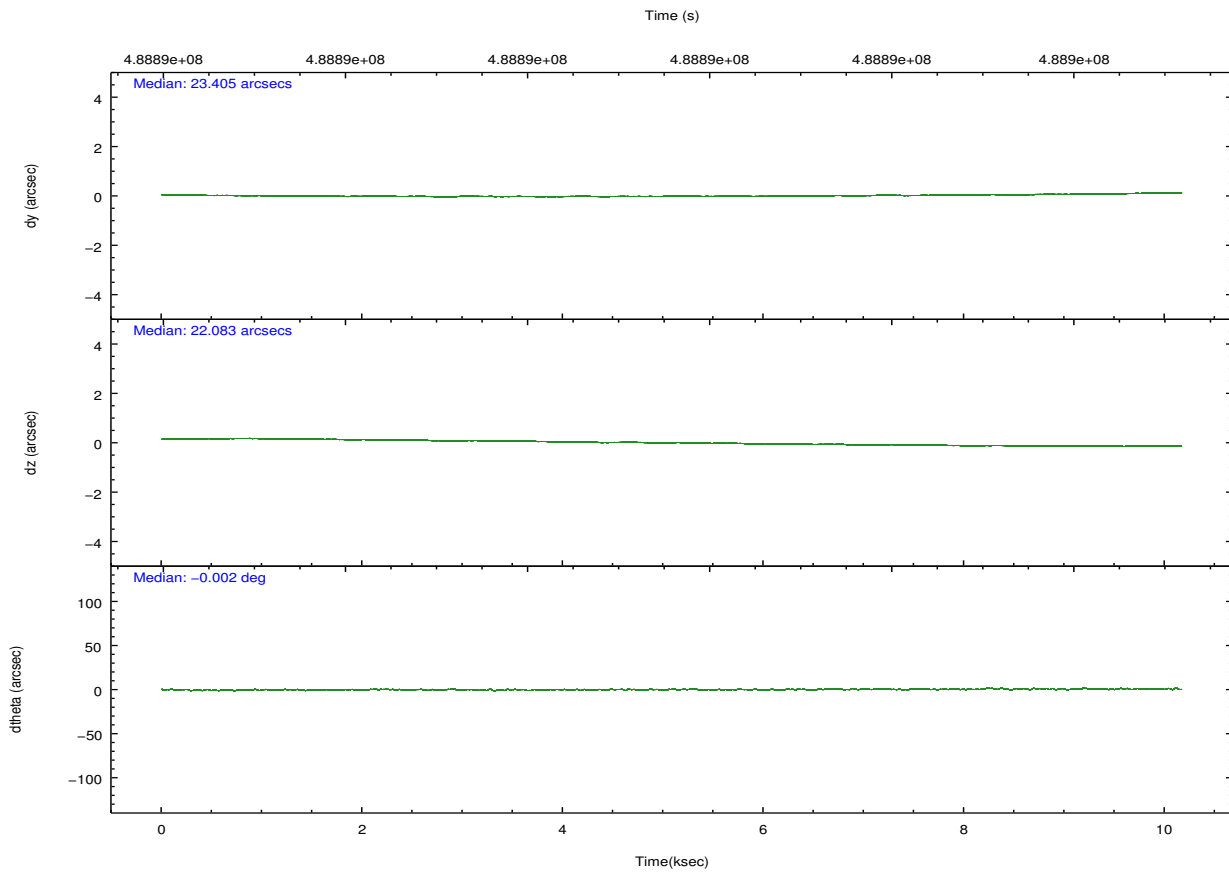
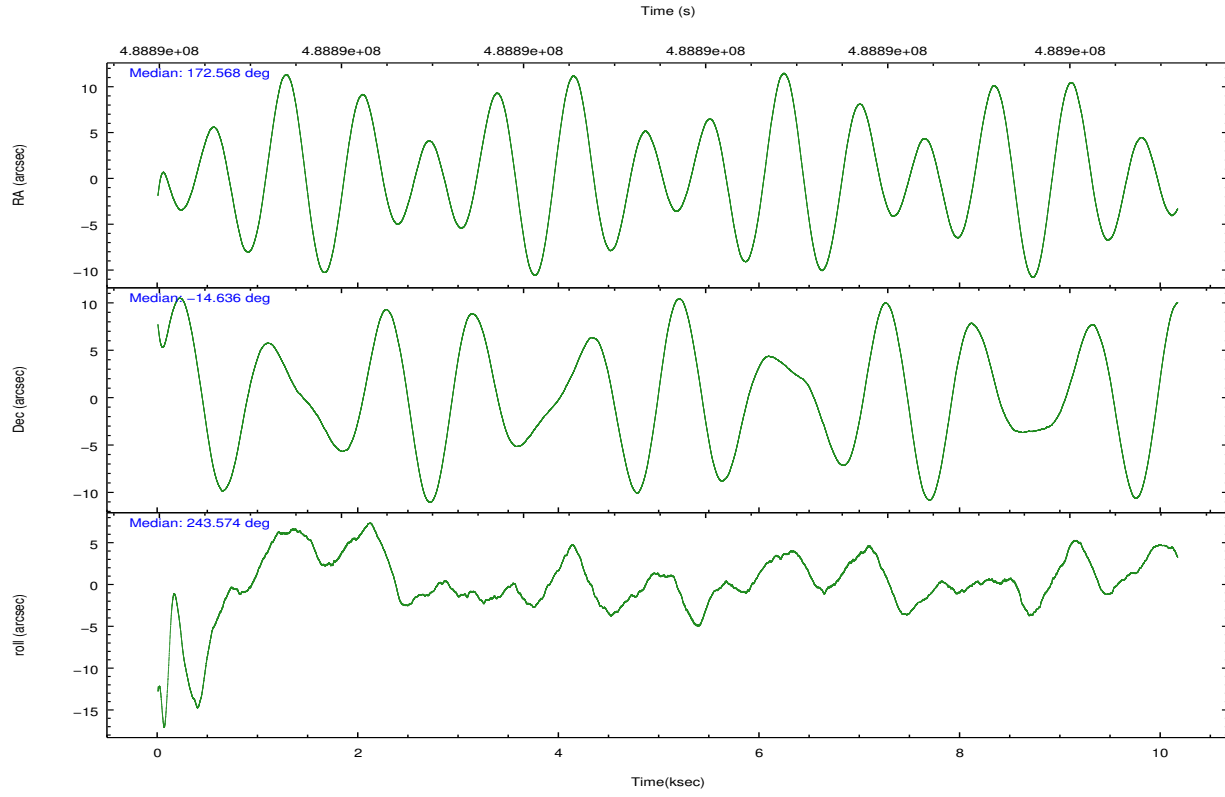
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2352	3582	2781	9344	2363
	5%	7%	5%	16%	5%
grade 1 events	34	33	38	59	22
	0%	0%	0%	0%	0%
grade 2 events	1504	1666	1408	2129	1374
	3%	3%	3%	3%	2%
grade 3 events	571	665	574	819	547
	1%	1%	1%	1%	1%
grade 4 events	552	656	614	872	571
	1%	1%	1%	1%	1%
grade 5 events	2154	2311	1996	2522	2411
	4%	4%	4%	4%	5%
grade 6 events	1101	1412	1044	1301	1260
	2%	3%	2%	2%	2%
grade 7 events	35504	36213	38290	39092	37965
	81%	77%	81%	69%	81%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-01236	ACIS-01236	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	172.566545	172.5684088564403	CCD I2 on	Y	Y
[deg] Pointing Dec	-14.608330	-14.63572275376497	CCD I3 on	Y	Y
[deg] Pointing Roll	243.367936	243.5770977001048	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	Y
[mm] SIM translation stage pos	-225.840463	-225.8458576473255	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.746595355604228	CCD S4 on	N	N
[s] Observation start time (MET)	488886671.184000	488885573.43009	CCD S5 on	N	N
Observation start date	2013-06-29T09:50:04	2013-06-29T09:32:53	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	488896671.184000	488897439.85574	On-chip summing requested	N	N
Observation end date	2013-06-29T12:36:44	2013-06-29T12:50:39	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect





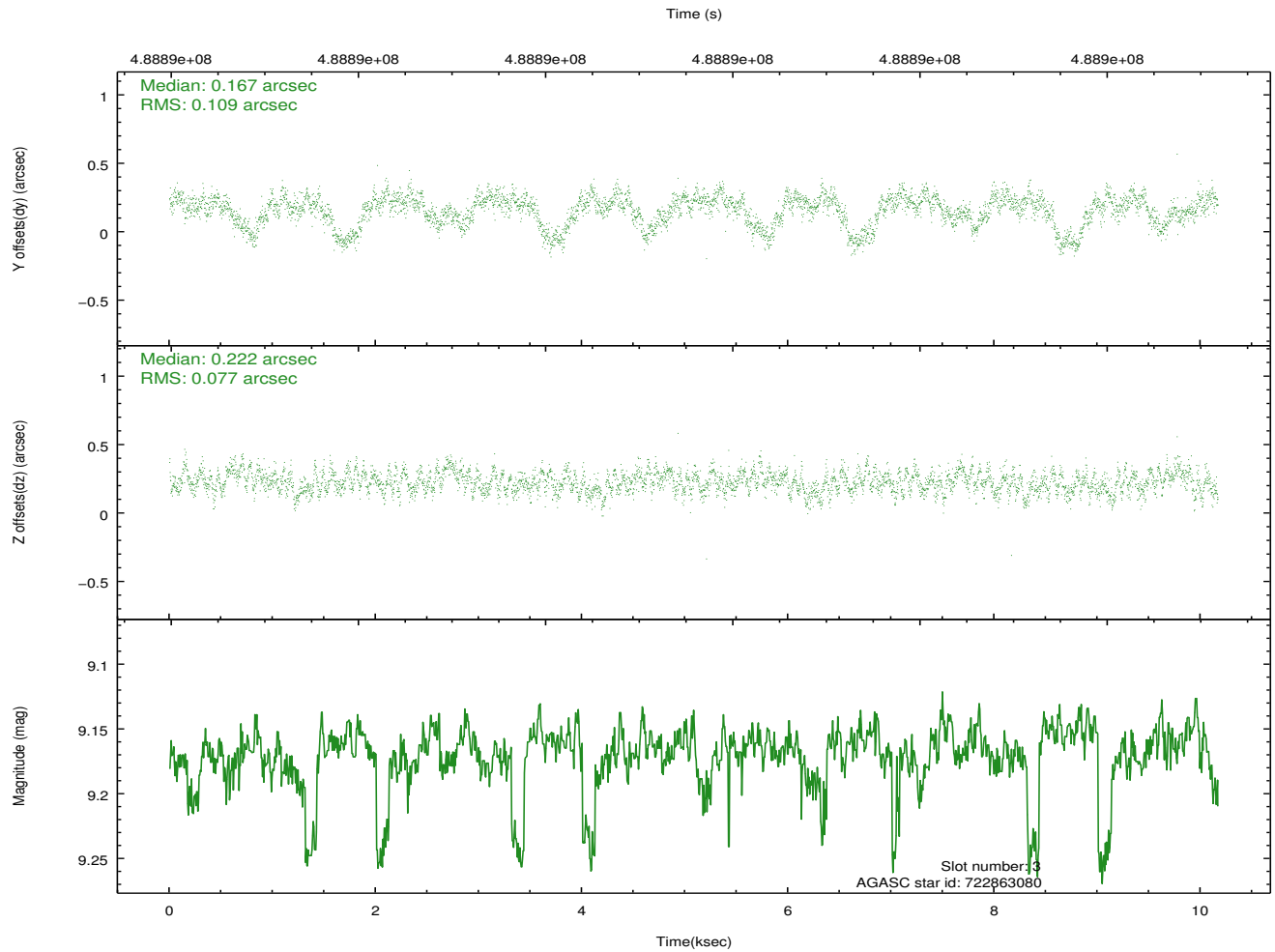
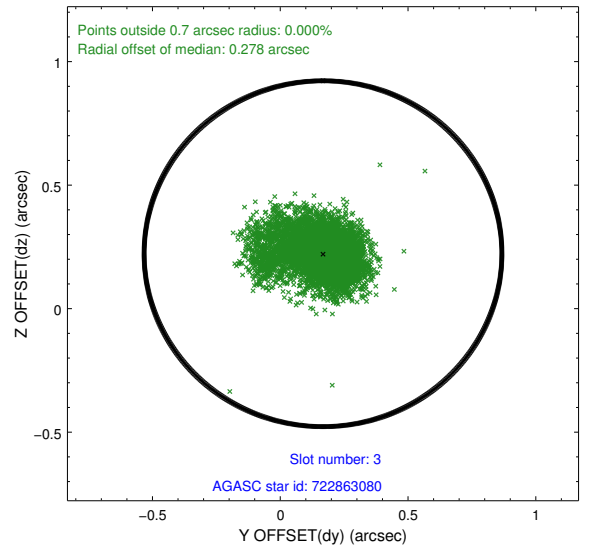
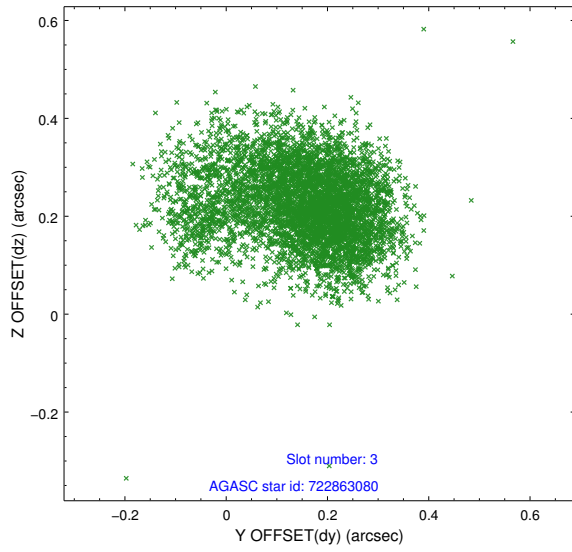
Slot Statistics

slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-1	7.06	2480	0.131	-0.066	0.008	0.014	0.000000	0.000000	915.80	-1004.95
1	FID		ACIS-I-5	7.05	2480	-0.345	0.097	0.006	0.011	0.000000	0.000000	-1832.51	892.35
2	FID		ACIS-I-6	7.06	2480	0.122	0.039	0.008	0.013	0.000000	0.000000	380.75	1537.41
3	GUIDE	used	722863080	9.17	4954	0.167	0.222	0.137	0.243	172.588232	-14.459470	-512.76	-172.38
4	GUIDE	used	722866176	9.64	4932	-0.312	-0.227	0.153	0.248	173.139806	-14.184595	-2258.42	1105.96
5	GUIDE	used	722867888	9.35	4945	0.086	0.219	0.185	0.267	172.336301	-13.800892	-2236.83	-2021.91
6	GUIDE	used	797576528	9.11	4946	0.024	-0.200	0.093	0.148	172.316371	-15.112296	2012.17	36.15
7	GUIDE	used	797578040	9.55	4847	0.052	-0.005	0.119	0.191	172.608699	-15.322154	2232.27	1282.24

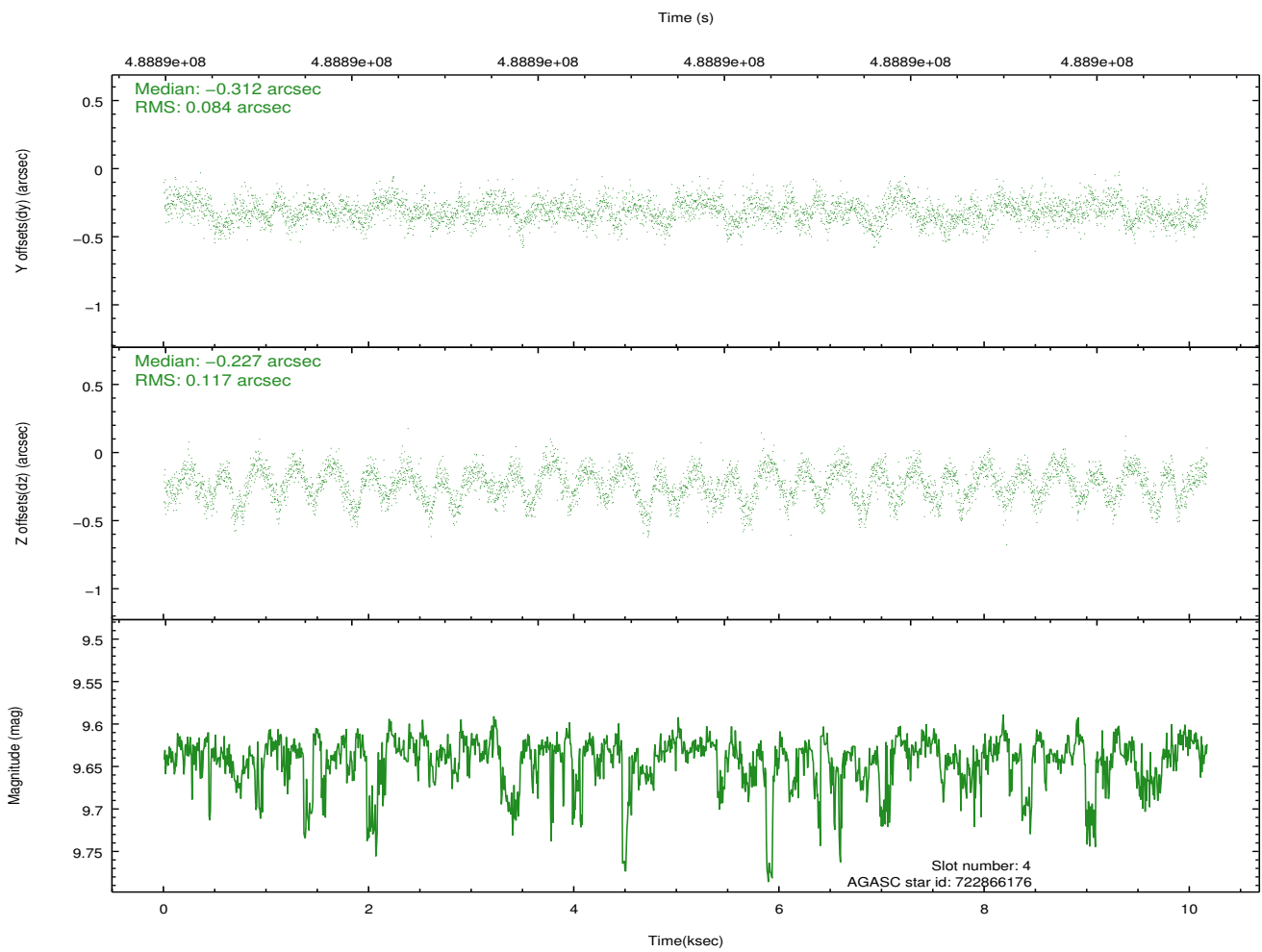
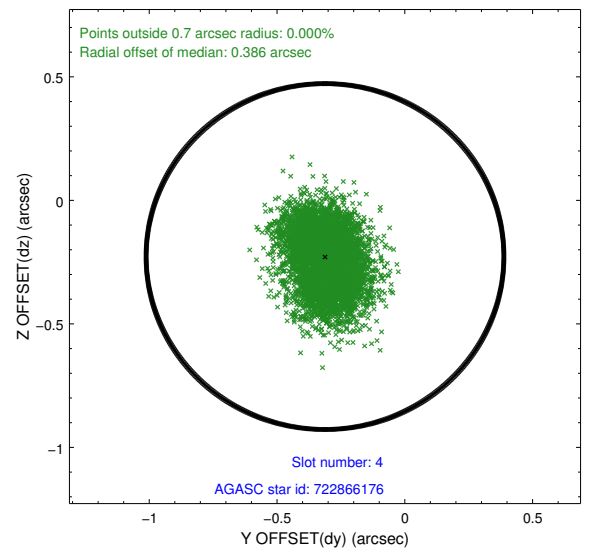
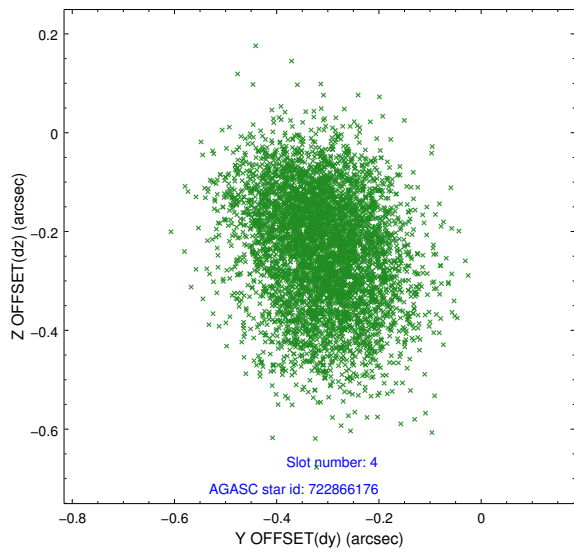
∞

2.4 Star Slots

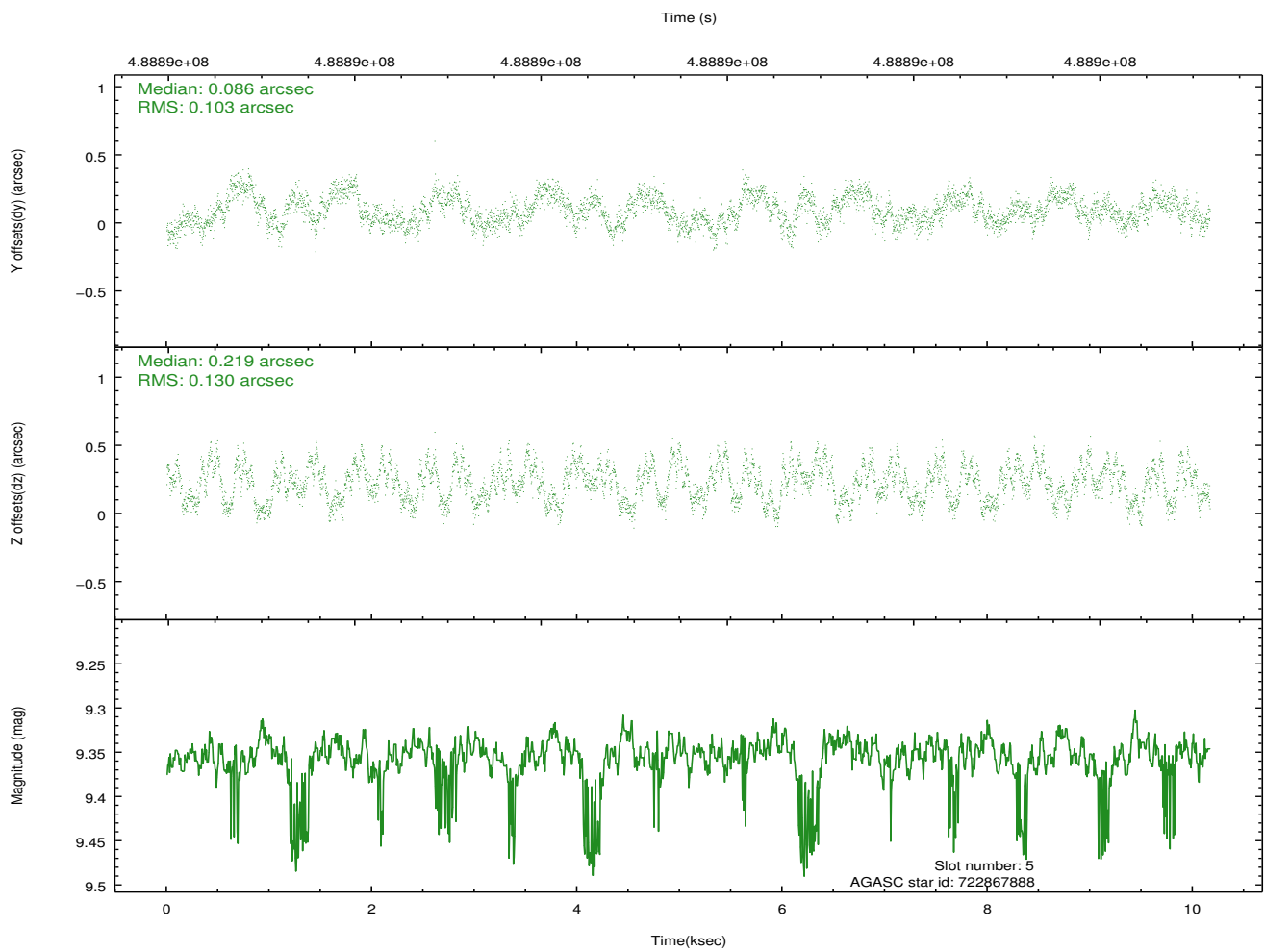
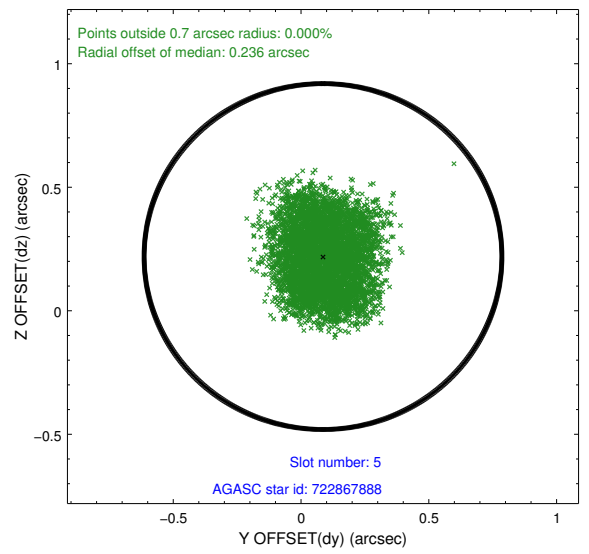
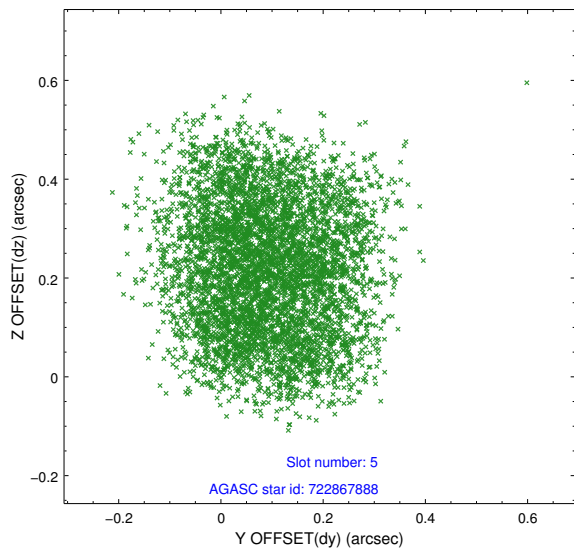
2.4.1 Slot 3



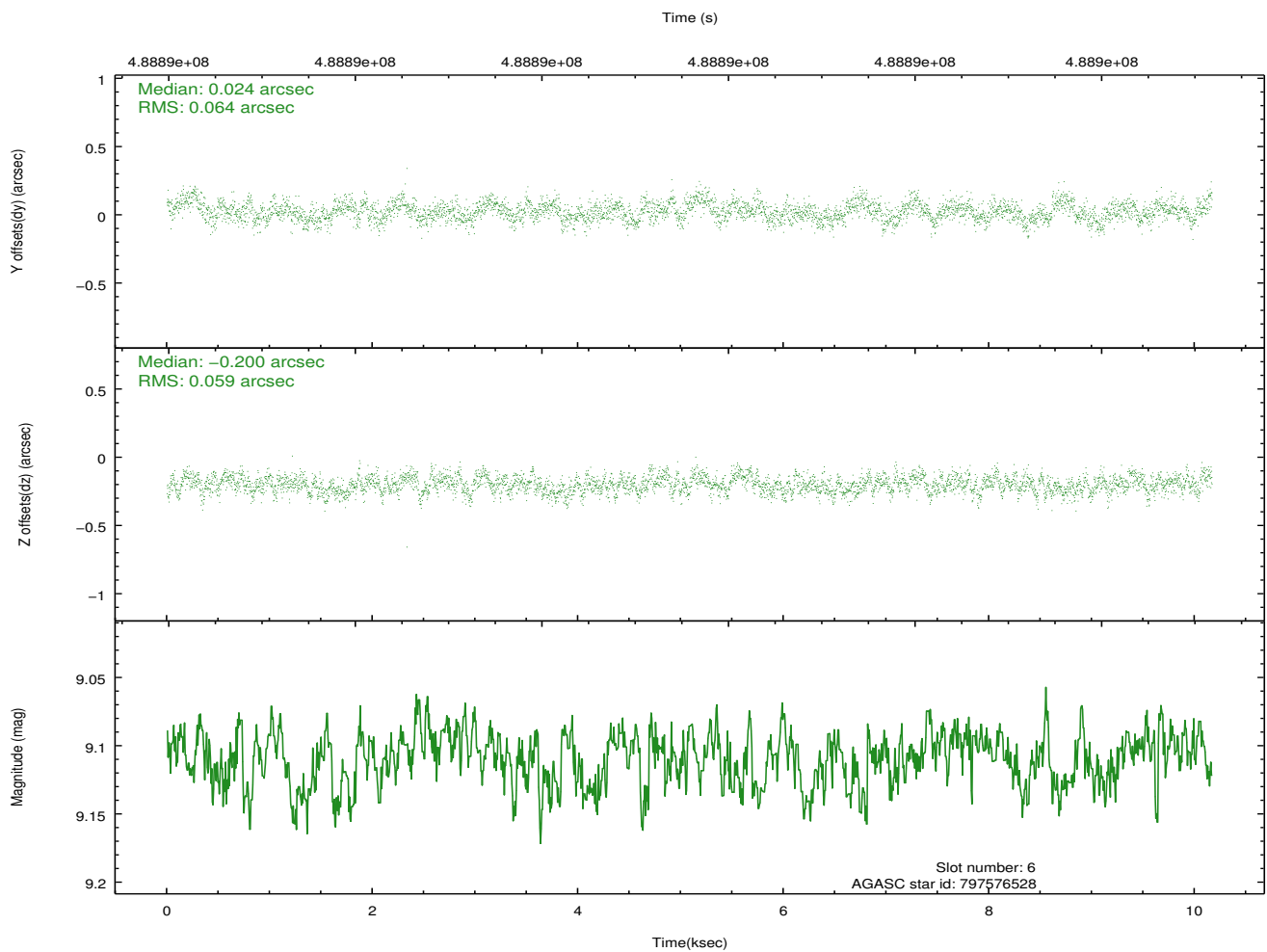
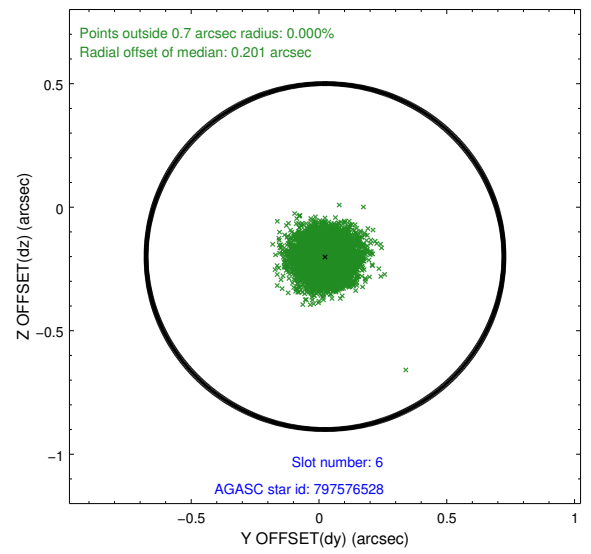
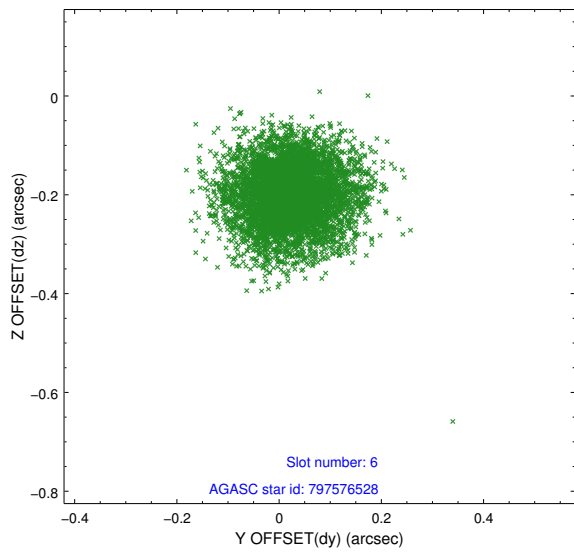
2.4.2 Slot 4



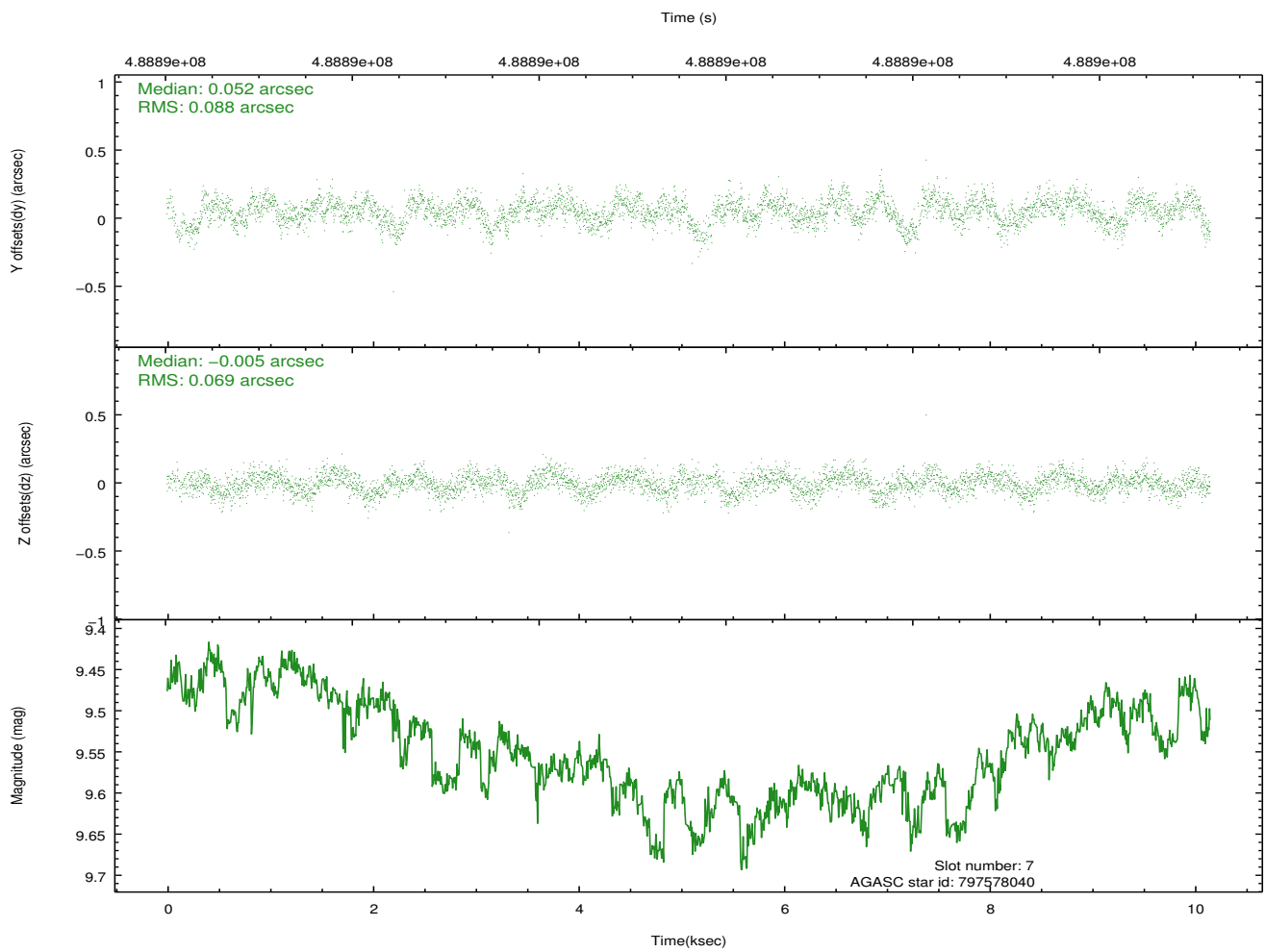
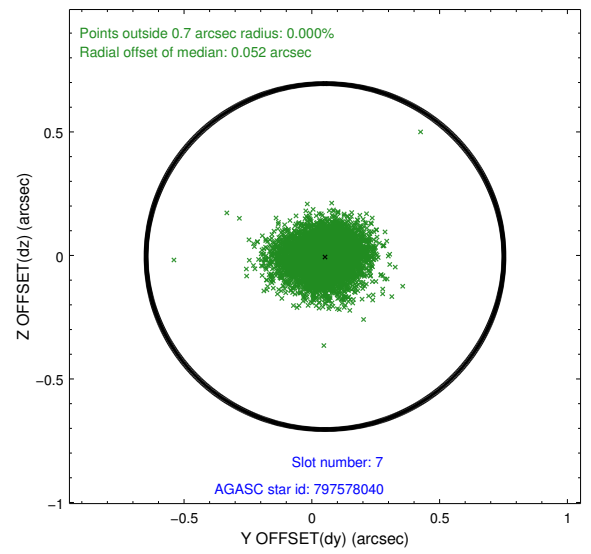
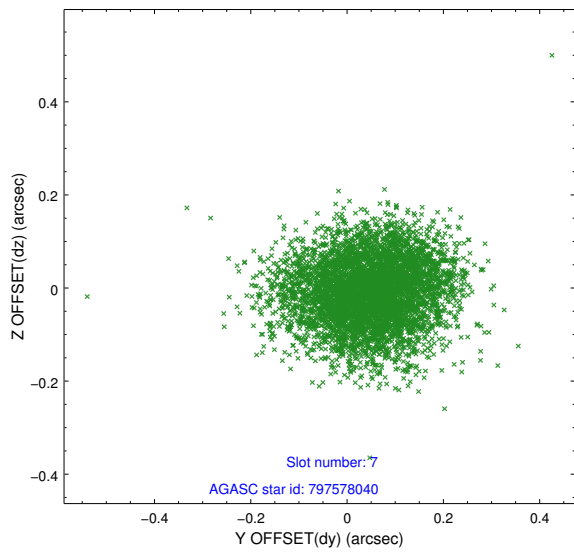
2.4.3 Slot 5



2.4.4 Slot 6

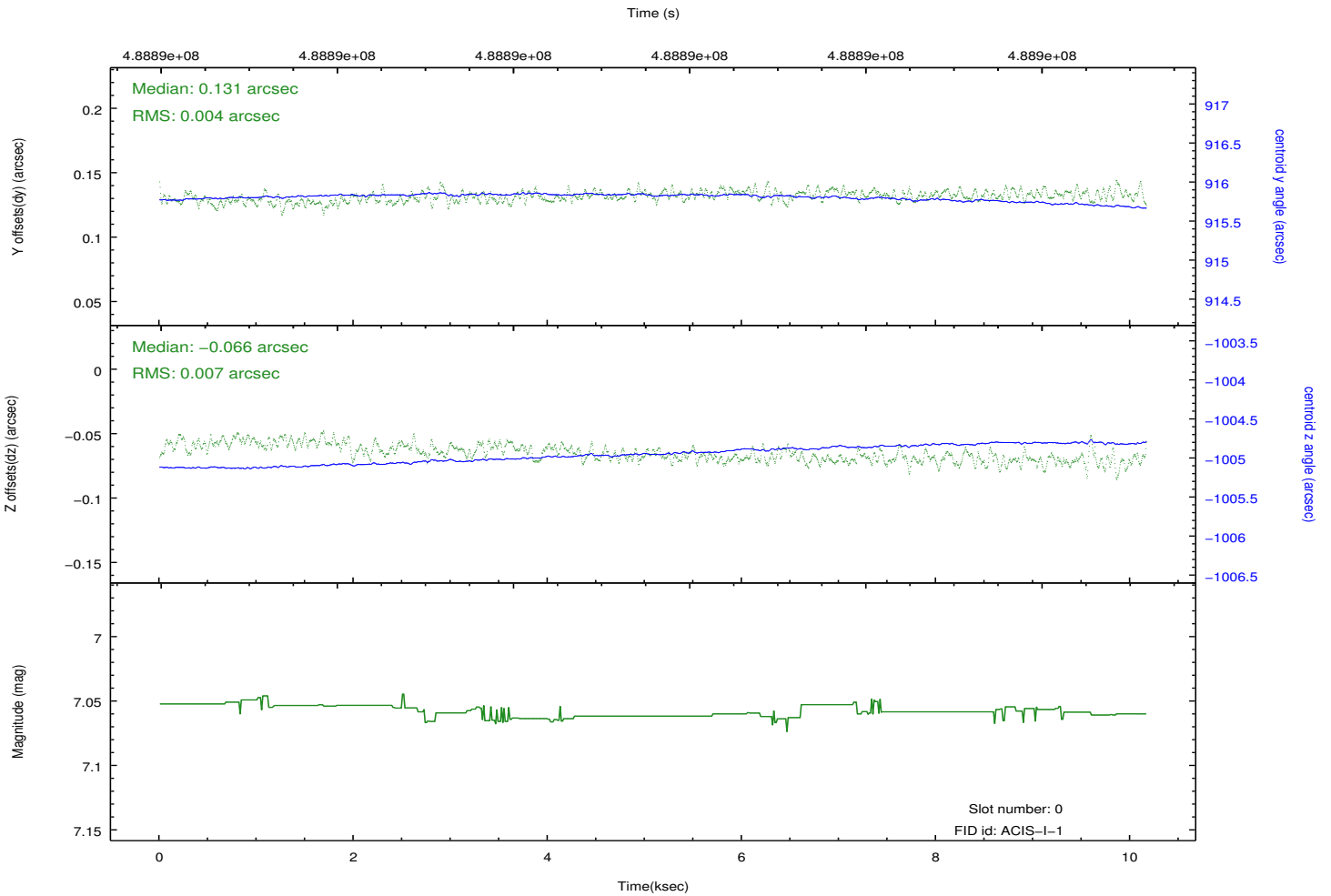
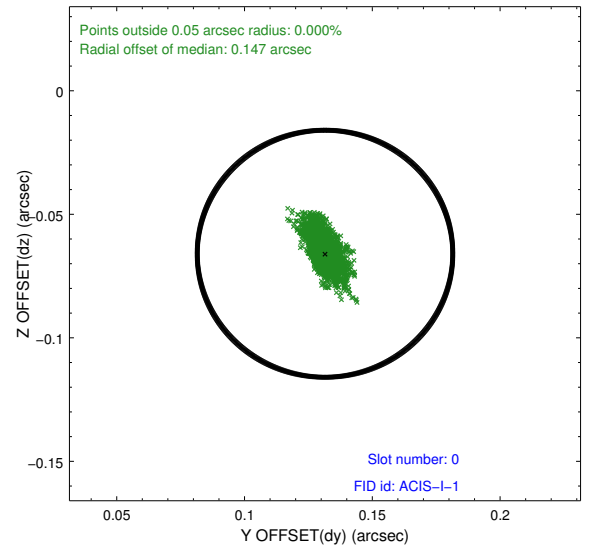
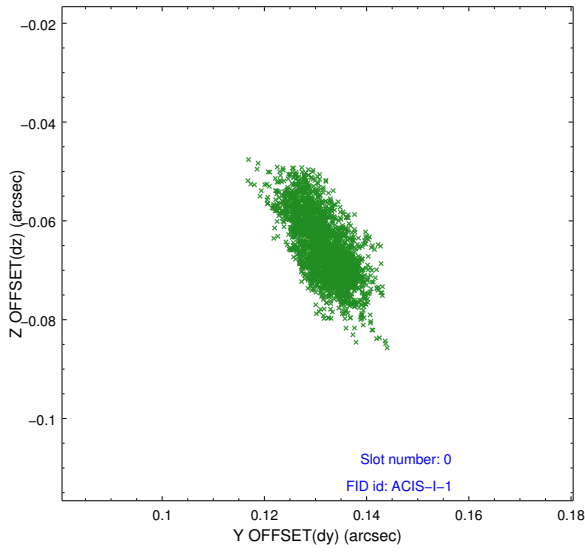


2.4.5 Slot 7

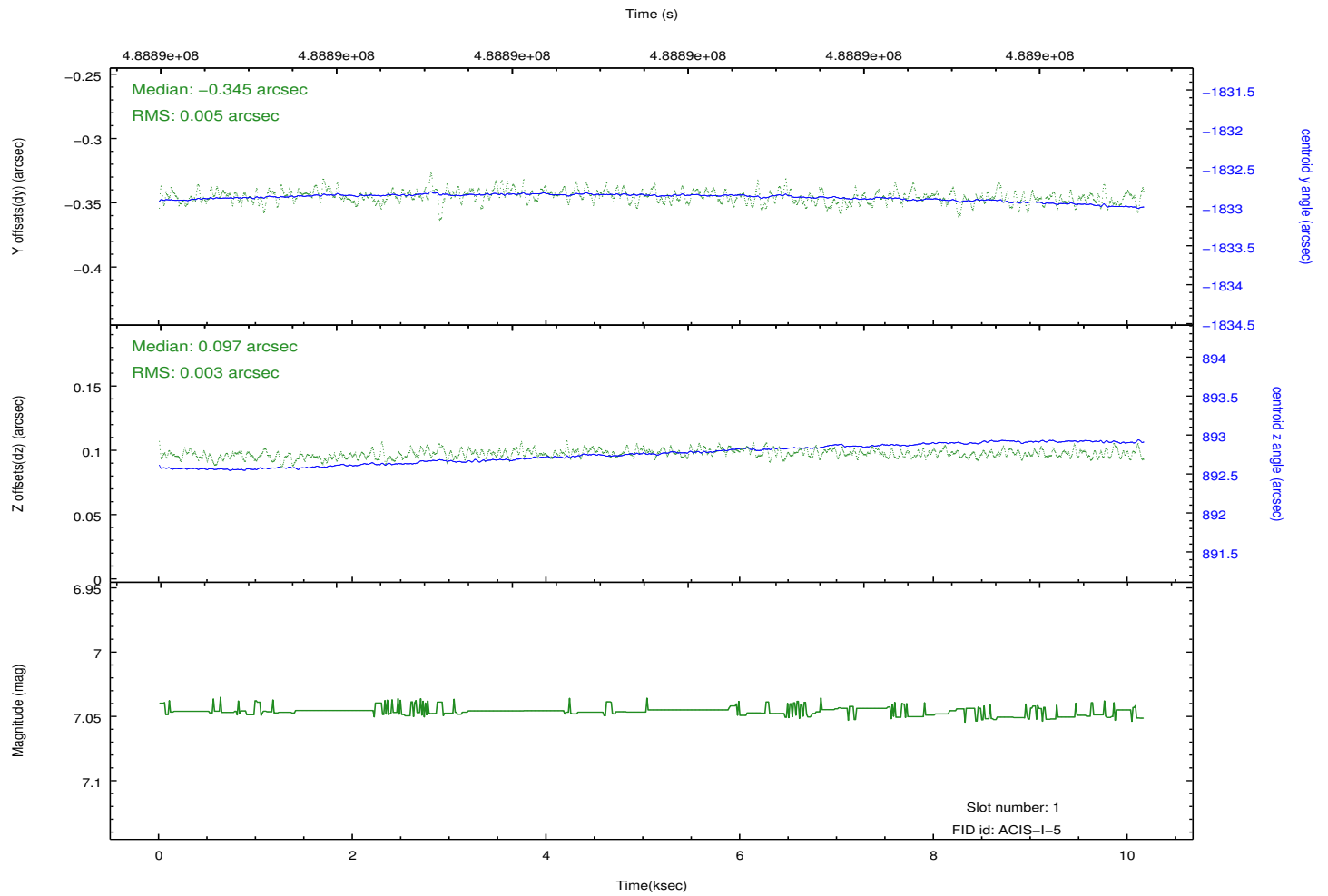
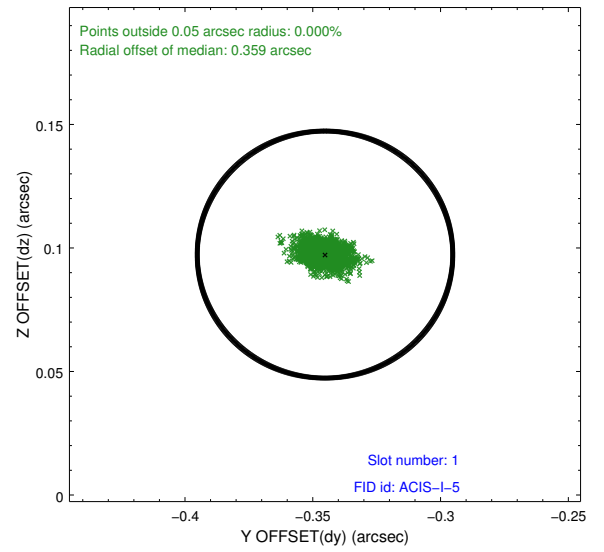
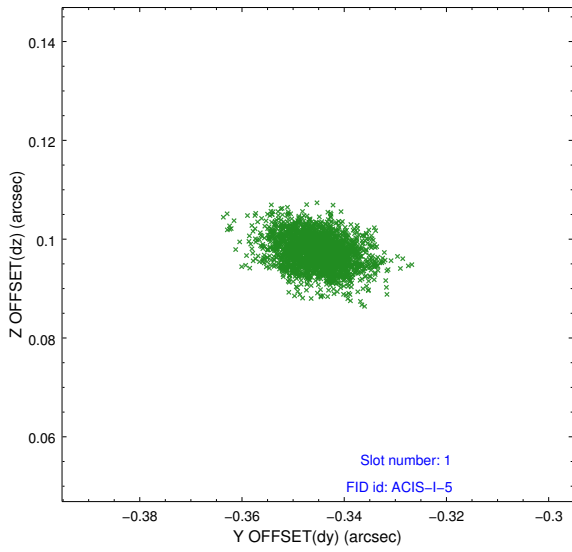


2.5 FID Slots

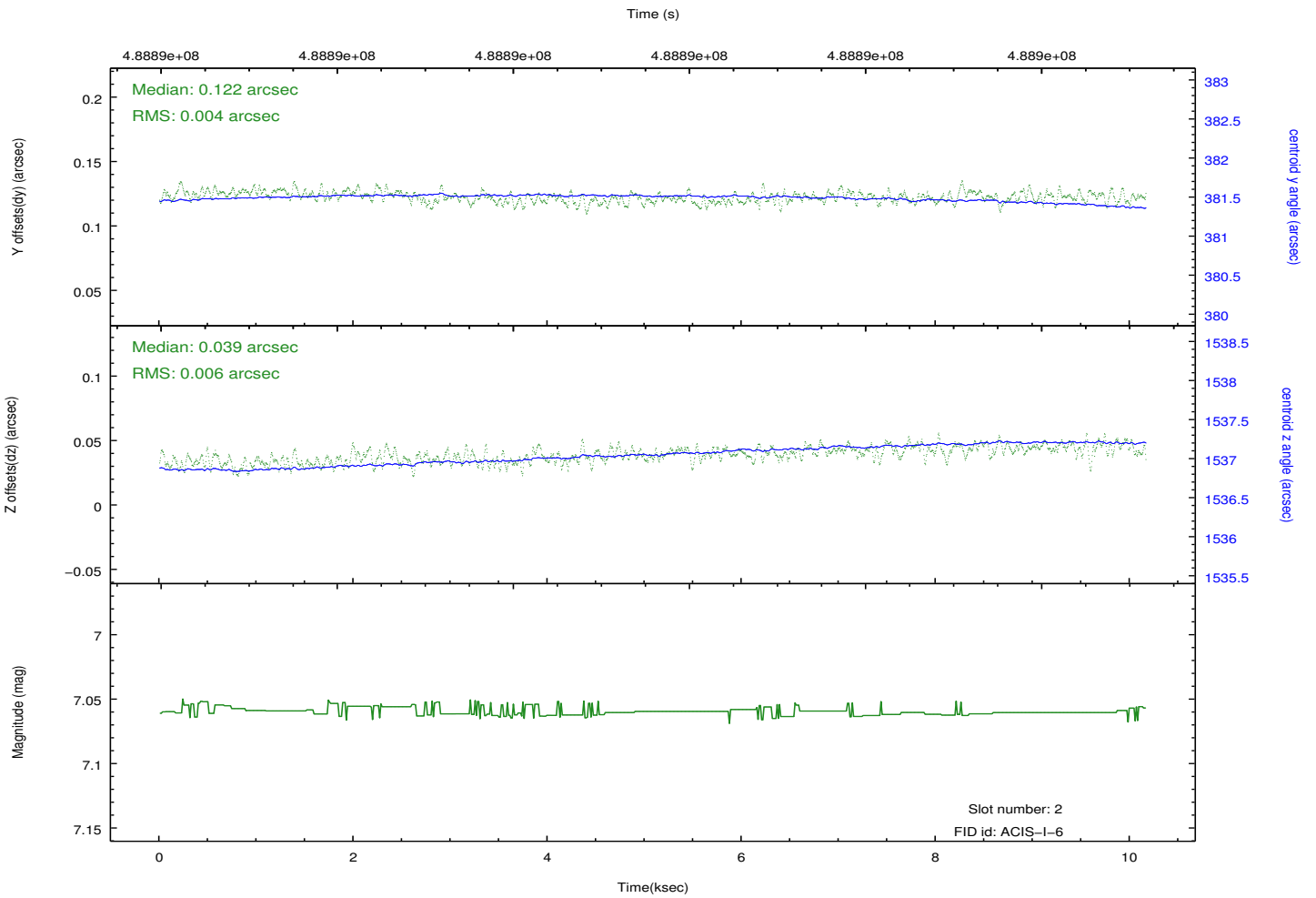
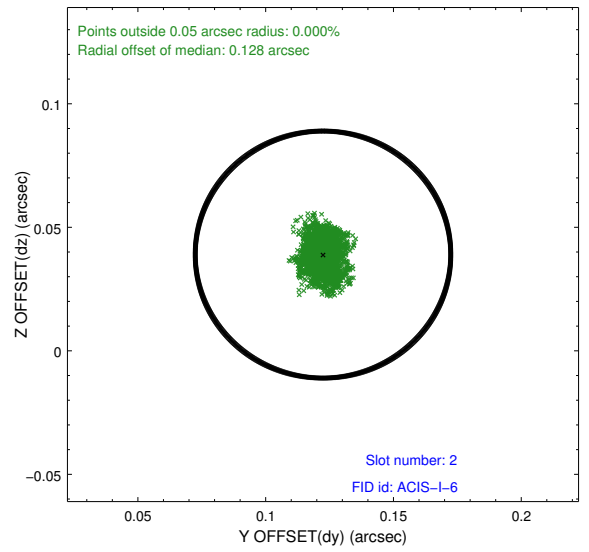
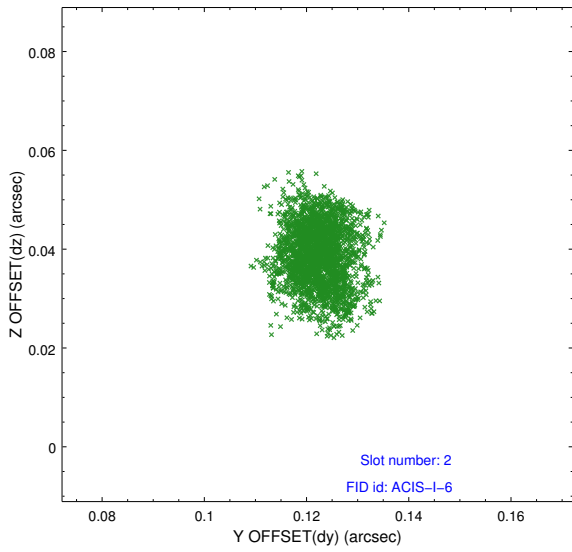
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7729281488061

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.