

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15188 - L2 Version 2
Chandra X-Ray Center

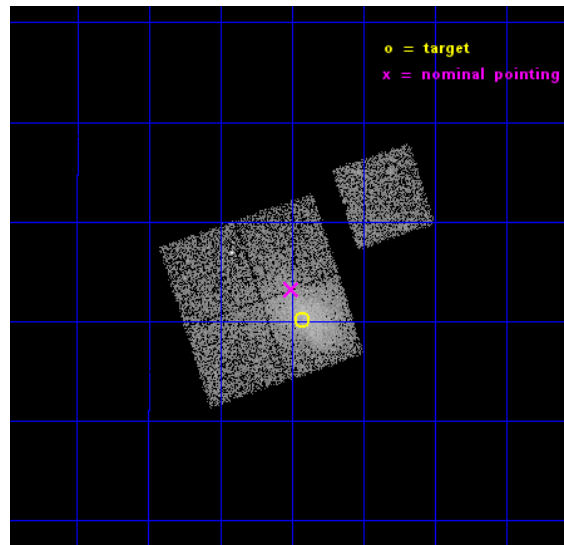
L2 Processing Date : Dec 10 2014

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1 Front

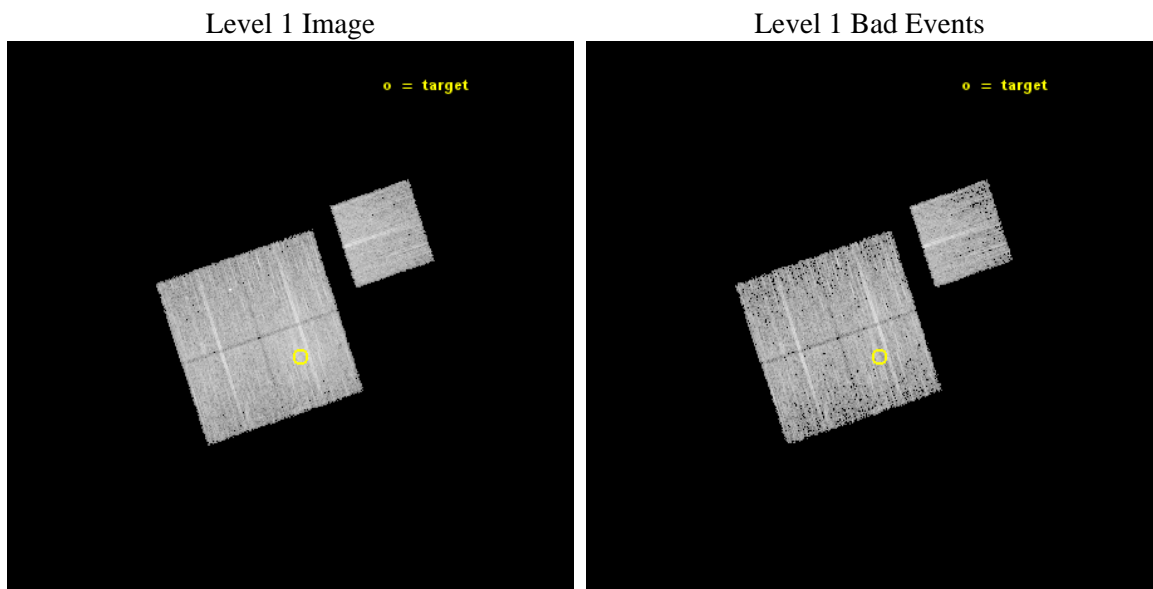
seq_num	801313	Sequence number
obs_id	15188	Observation id
title	X-ray Properties of Massive Clusters in the Local Universe	Proposa
observer	Dr Stephen Murray	Principal investigator
object	G273.64+63.28	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	180.10625	Observer's specified target RA [deg]
dec_targ	3.335972	Observer's specified target Dec [deg]
ra_nom	180.12534885199	Nominal RA [deg]
dec_nom	3.3869385482205	Nominal Dec [deg]
roll_nom	71.53037541243	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9486.0000729561	Sum of GTIs [s]
livetime	9362.0584985113	Livetime [s]
ontime0	9486.0000729561	Sum of GTIs [s]
ontime1	9479.717962563	Sum of GTIs [s]
ontime2	9486.0000729561	Sum of GTIs [s]
ontime3	9486.0000729561	Sum of GTIs [s]
ontime6	9486.0000729561	Sum of GTIs [s]
l2events	33249	Number of level 2 events



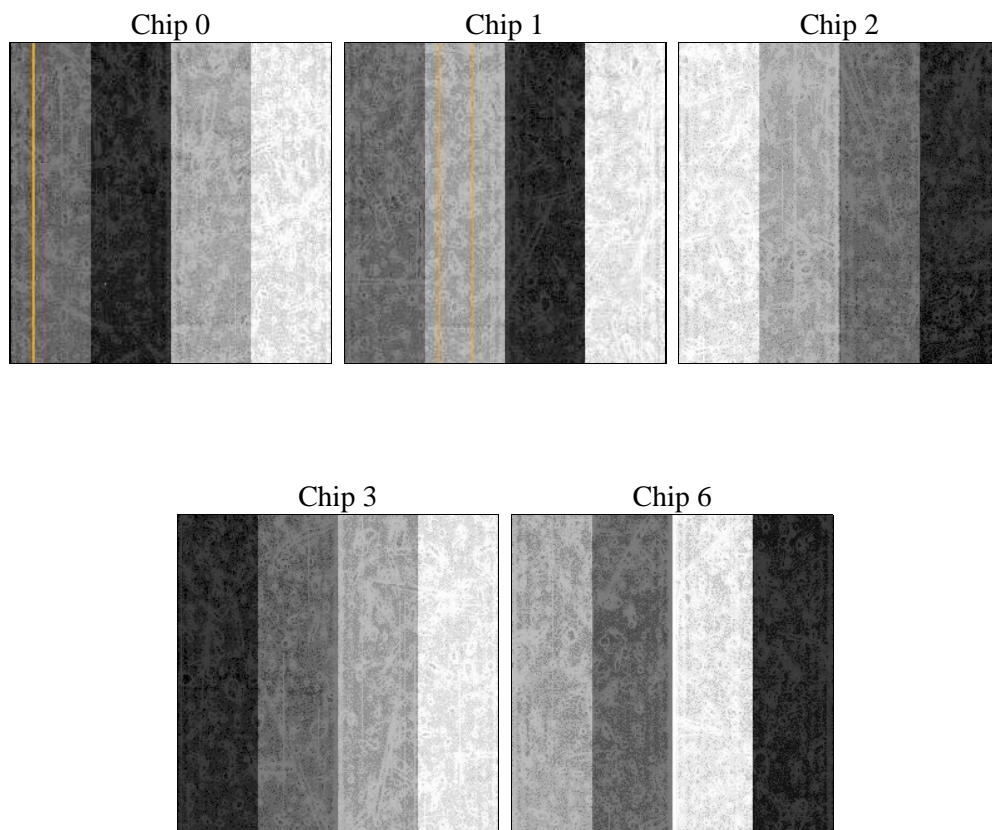
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	9400.781000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9486.0000729561	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9486.0000729561	Sum of GTIs [s]
date	2014-12-10T09:45:34	Date and time of file creation	ontime1	9479.717962563	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9486.0000729561	Sum of GTIs [s]
			ontime3	9486.0000729561	Sum of GTIs [s]
			ontime6	9486.0000729561	Sum of GTIs [s]
			l1events	229767	Number of level 1 events

2.1.4 Events

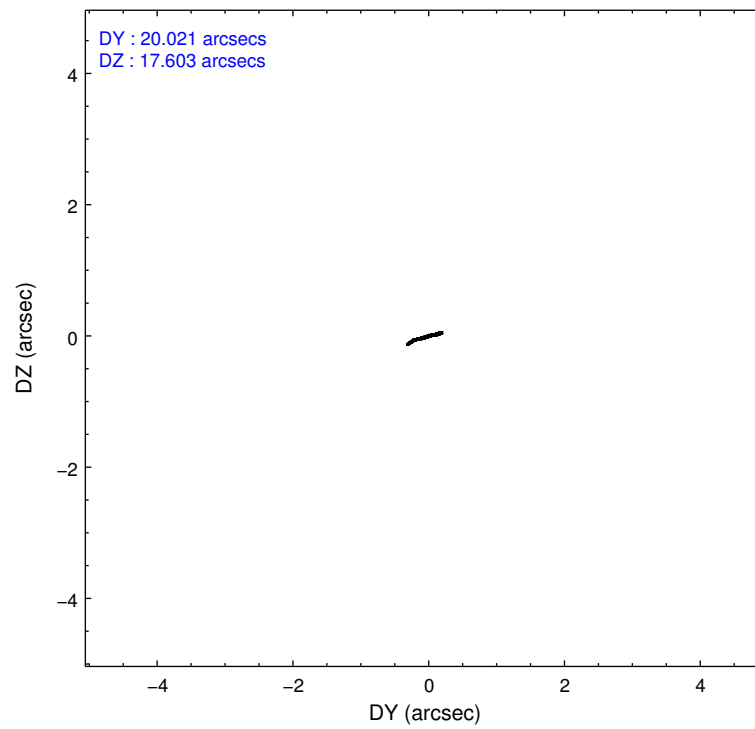
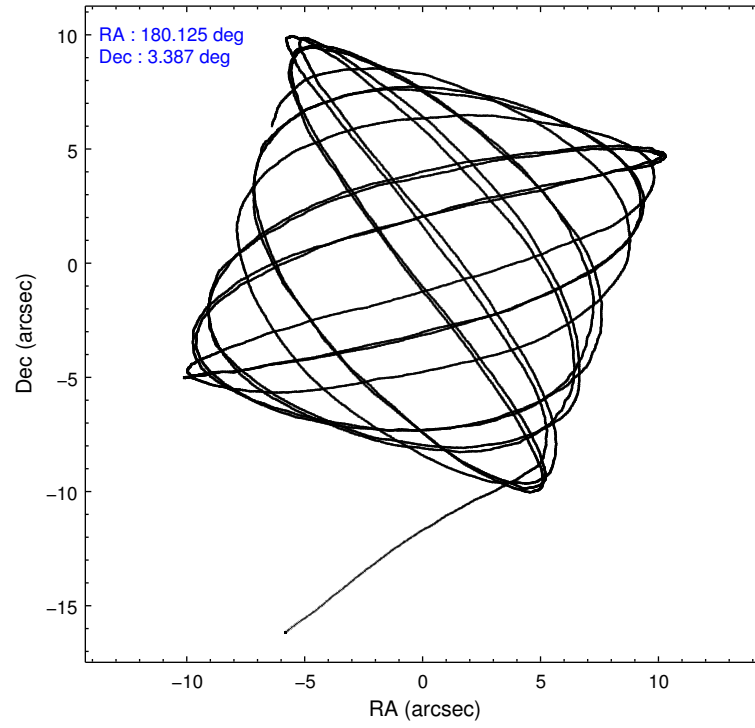
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	41934	41311	46809	53419	46294
rejected events	36182	34966	40633	39723	40725
rejected %	86%	84%	86%	74%	87%

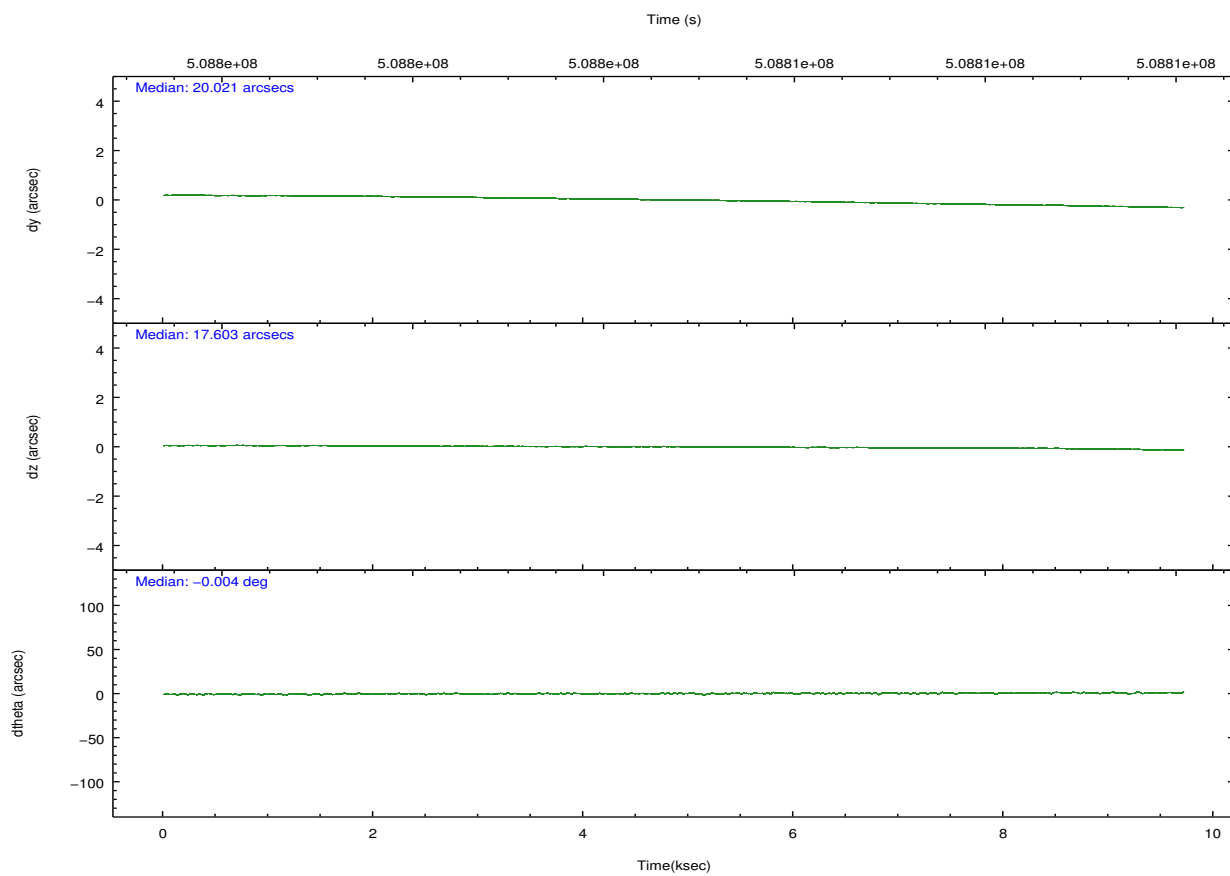
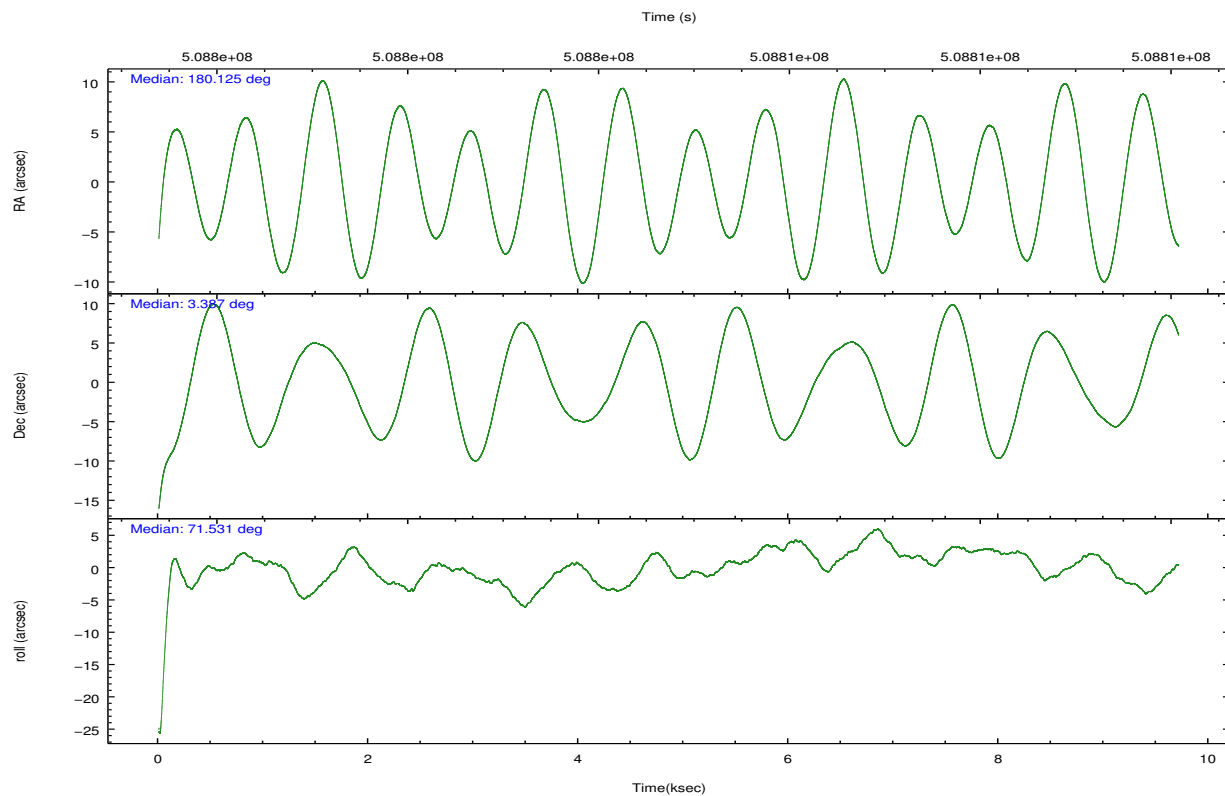
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2240	2407	2678	8824	1785
	5%	5%	5%	16%	3%
grade 1 events	28	20	25	54	17
	0%	0%	0%	0%	0%
grade 2 events	1290	1343	1274	1929	1313
	3%	3%	2%	3%	2%
grade 3 events	556	585	586	850	547
	1%	1%	1%	1%	1%
grade 4 events	506	584	556	792	560
	1%	1%	1%	1%	1%
grade 5 events	2158	2186	2078	2477	2276
	5%	5%	4%	4%	4%
grade 6 events	1163	1432	1086	1306	1366
	2%	3%	2%	2%	2%
grade 7 events	33993	32754	38526	37187	38430
	81%	79%	82%	69%	83%

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	180.130961	180.1253488519878	CCD I2 on	Y	Y
[deg] Pointing Dec	3.360006	3.386938548220483	CCD I3 on	Y	Y
[deg] Pointing Roll	71.321390	71.53037541242989	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	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.752	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	508800194.184000	508799041.84471	CCD S5 on	N	N
Observation start date	2014-02-14T21:22:07	2014-02-14T21:04:01	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	508809595.184000	508809829.97031	On-chip summing requested	N	N
Observation end date	2014-02-14T23:58:48	2014-02-15T00:03:49	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



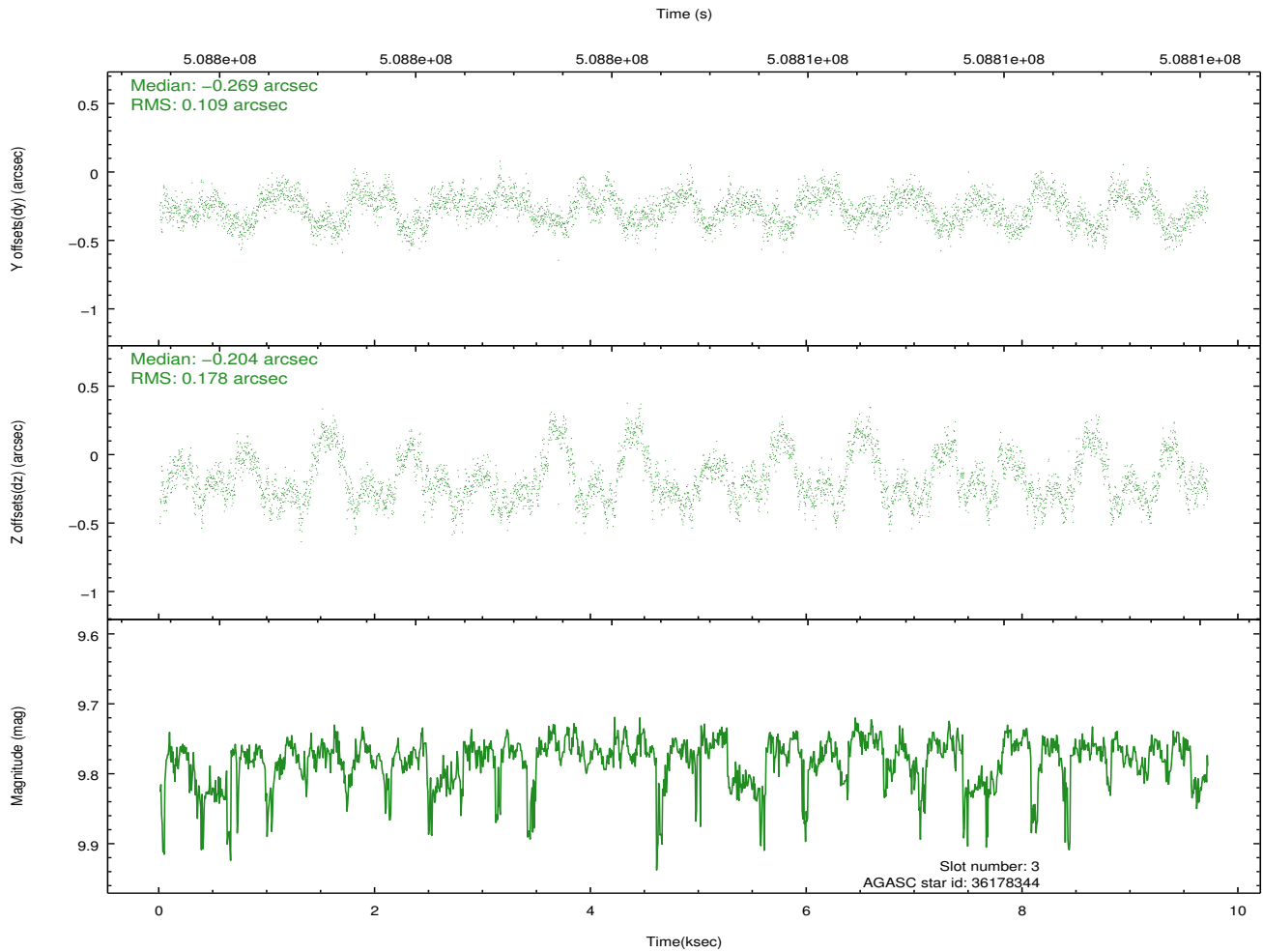
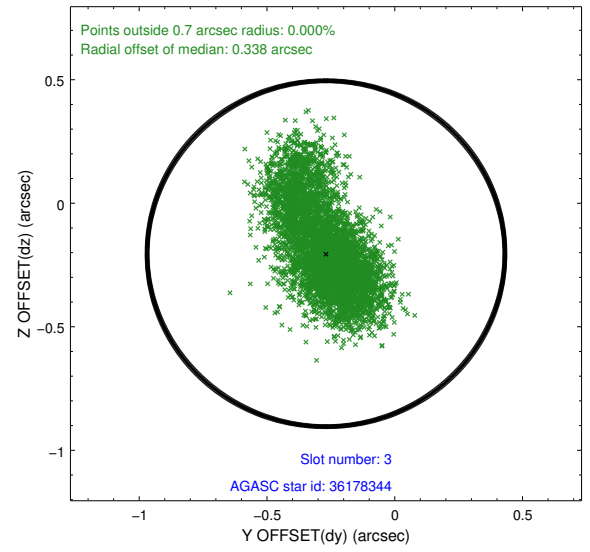
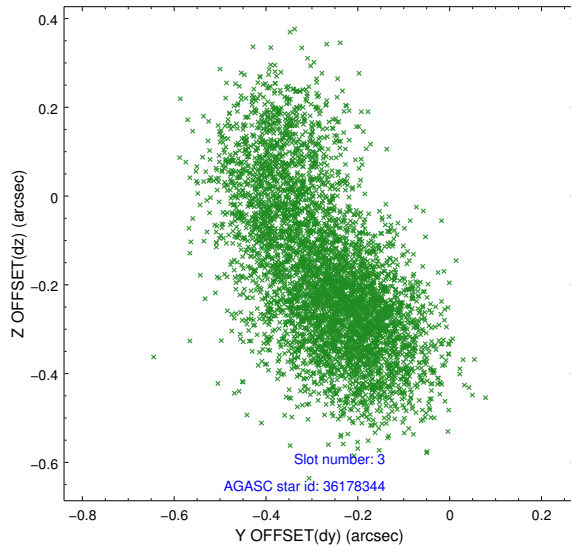


Slot Statistics

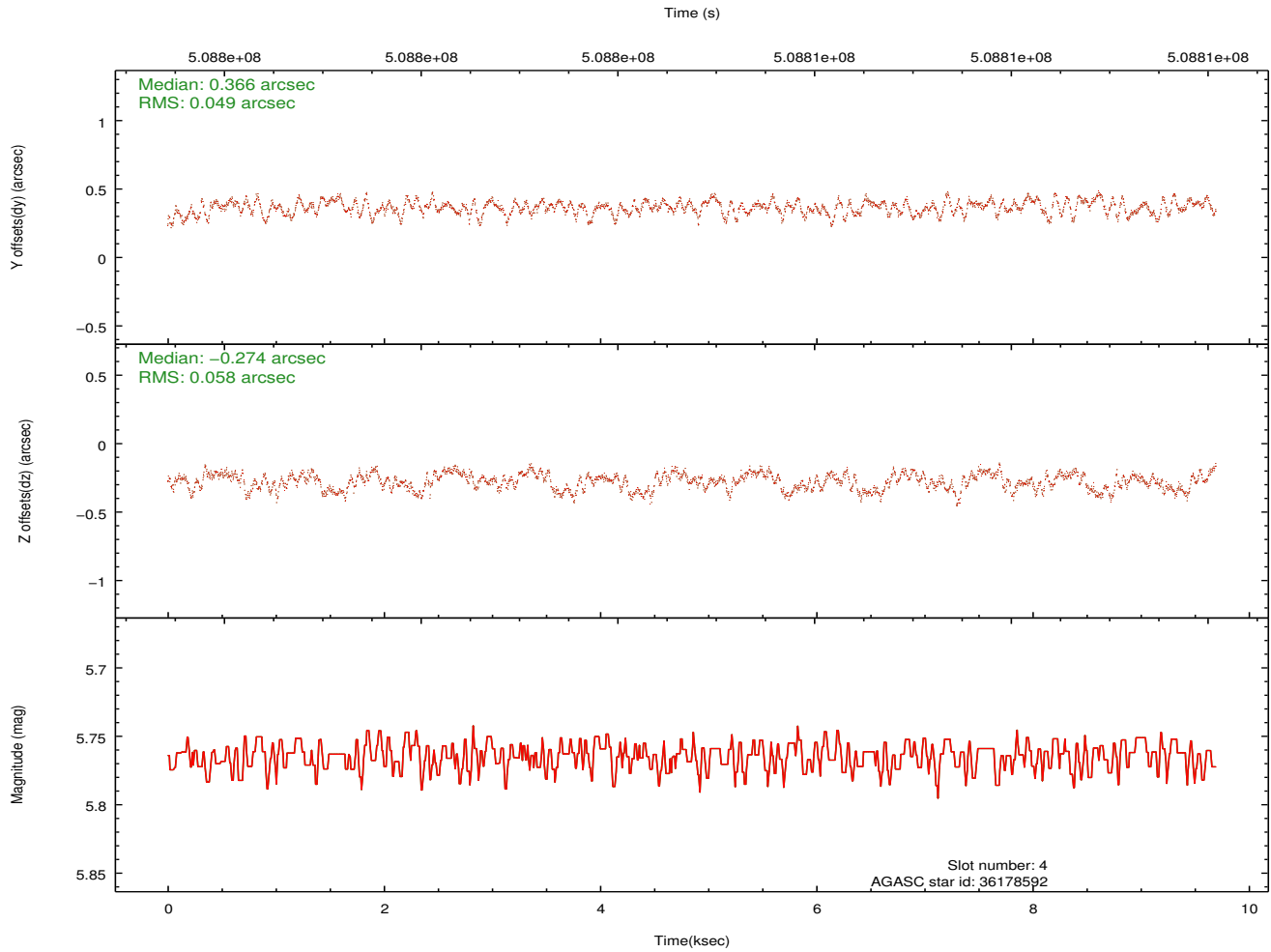
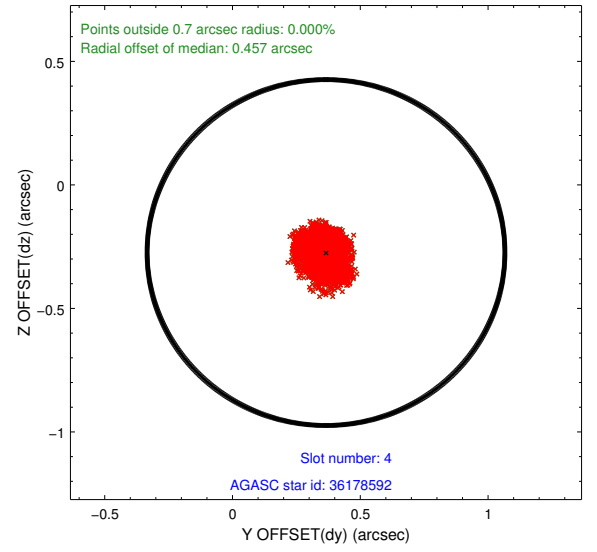
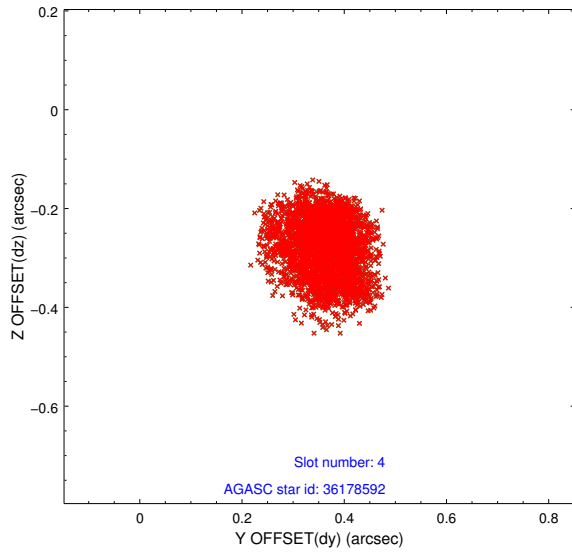
lot	status	used	id	mag	n_pts	med_dy	med_dz	drl	dr2	ra	dec	mean_y	mean_x
0	FID		ACIS-I-1	7.24	2369	0.191	-0.146	0.006	0.011	0.000000	0.000000	919.40	-1000.45
1	FID		ACIS-I-5	7.22	2369	-0.380	0.136	0.006	0.010	0.000000	0.000000	-1829.04	896.85
2	FID		ACIS-I-6	7.25	2369	0.097	0.081	0.007	0.011	0.000000	0.000000	384.17	1542.04
3	GUIDE	used	36178344	9.78	4730	-0.269	-0.204	0.217	0.382	179.664826	3.970826	1546.85	2290.70
4	BAD	used	36178592	5.76	2957	0.366	-0.274	0.083	0.124	179.558038	3.482007	-242.43	2091.55
5	GUIDE	used	36179496	9.03	4736	-0.115	0.195	0.099	0.163	179.348534	3.050231	-1956.44	2308.83
6	GUIDE	used	36185320	9.17	4734	0.197	-0.039	0.129	0.196	179.866360	2.888914	-1911.87	358.84
7	GUIDE	used	37094120	7.94	4737	-0.044	0.195	0.106	0.170	180.291928	3.632326	1113.01	-232.70

2.4 Star Slots

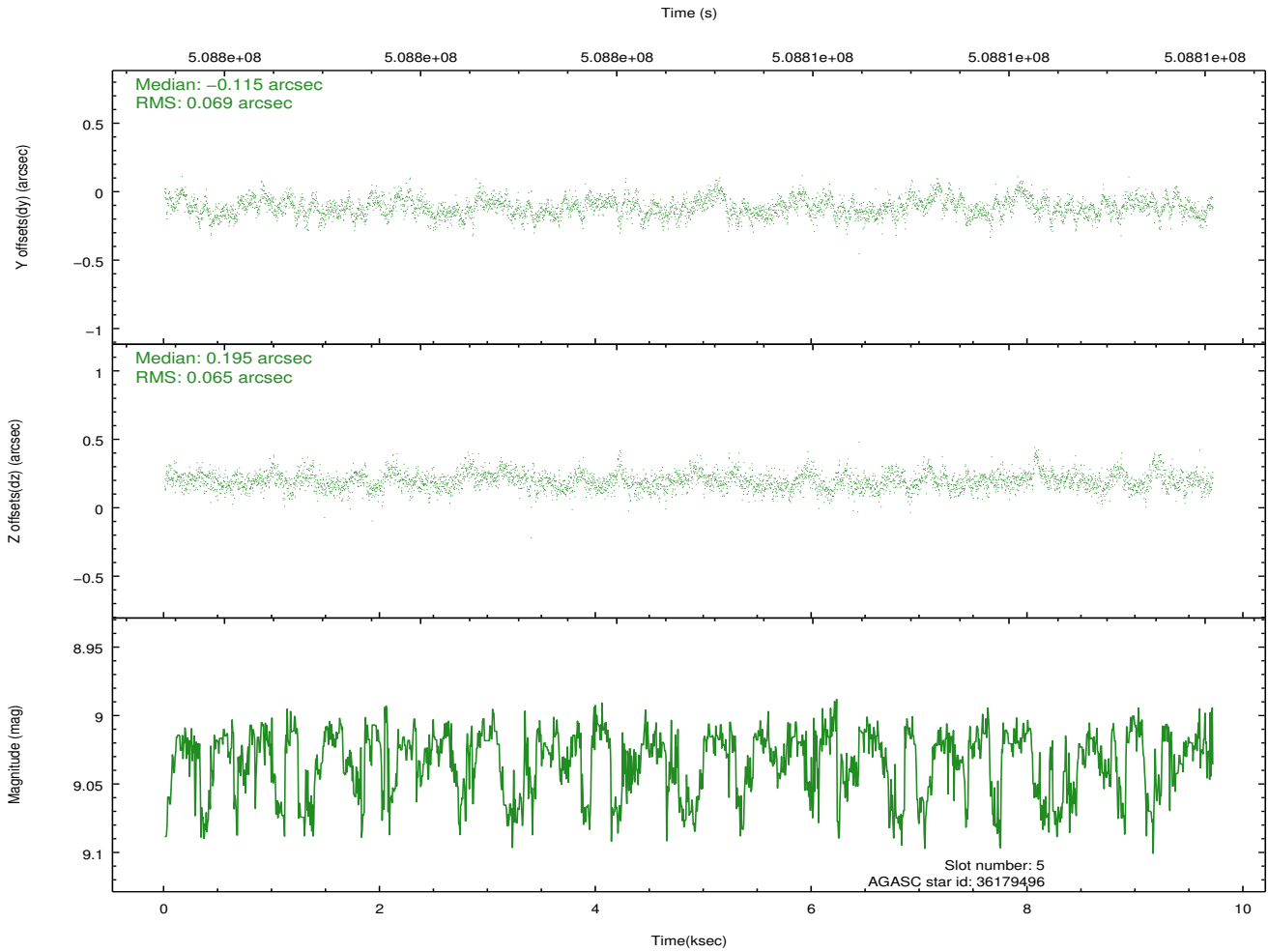
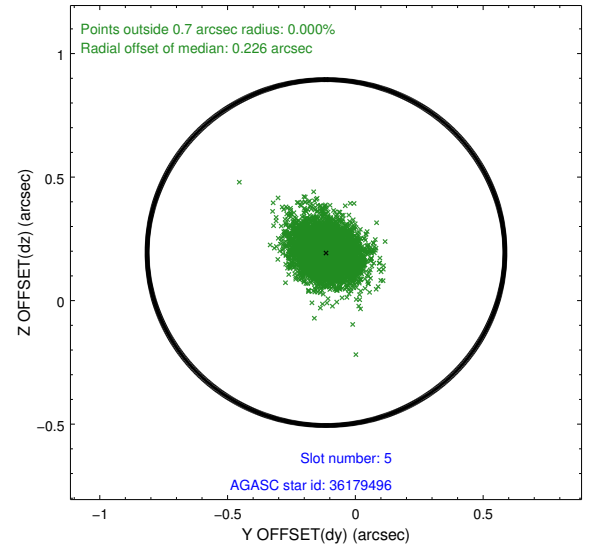
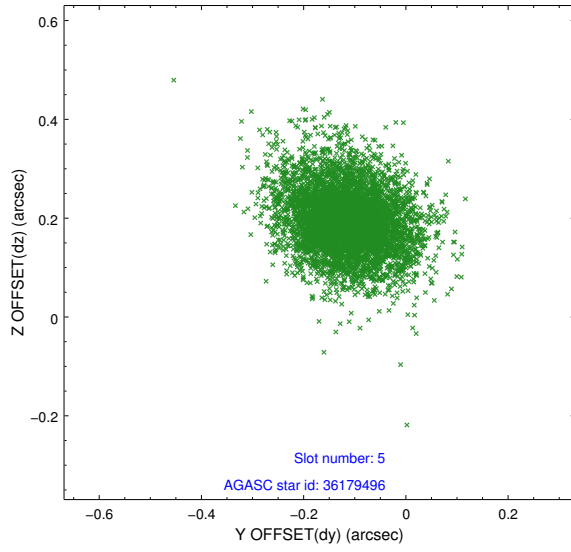
2.4.1 Slot 3



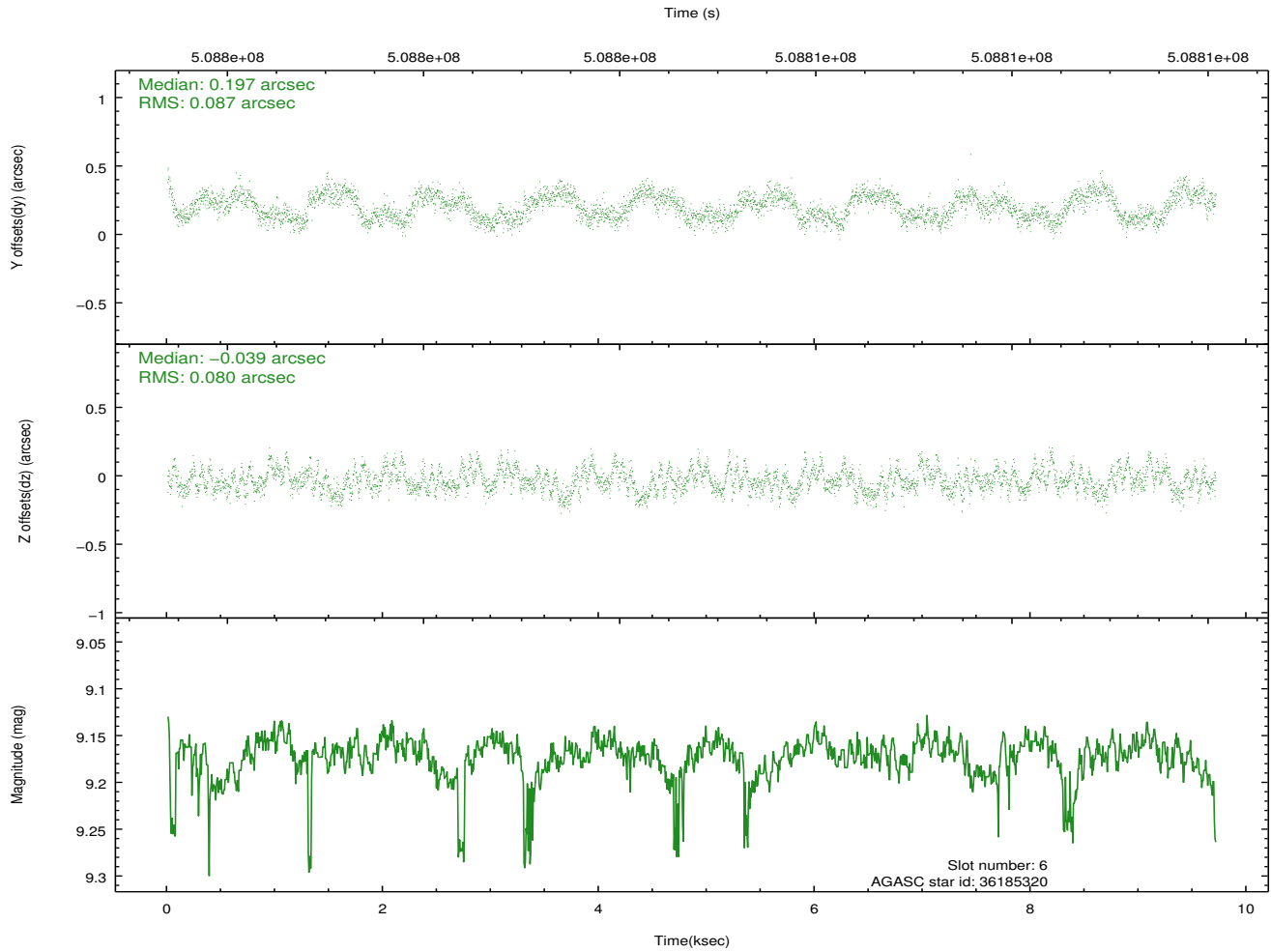
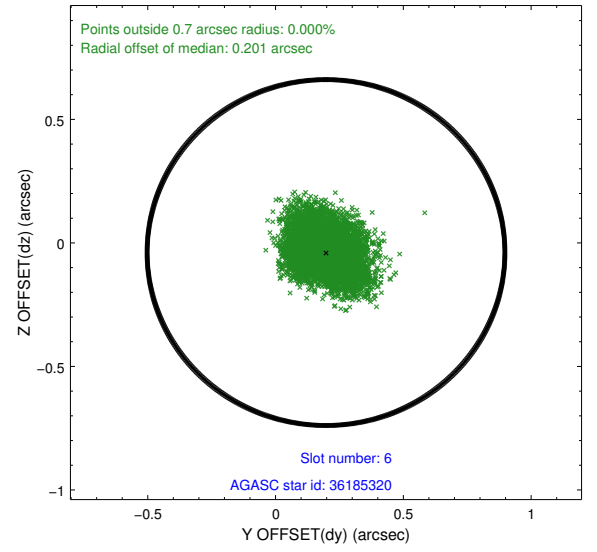
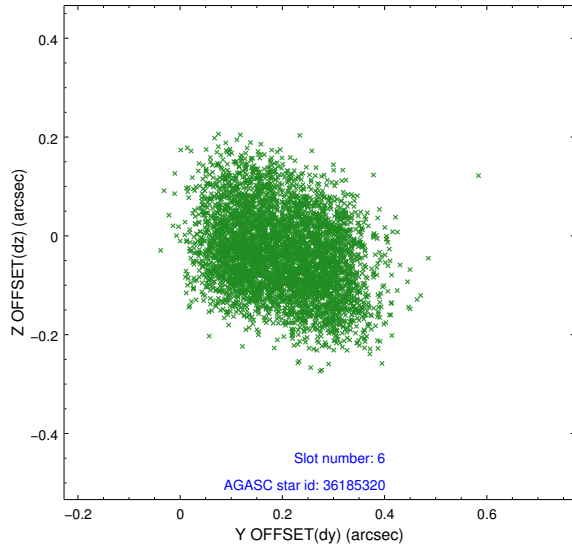
2.4.2 Slot 4



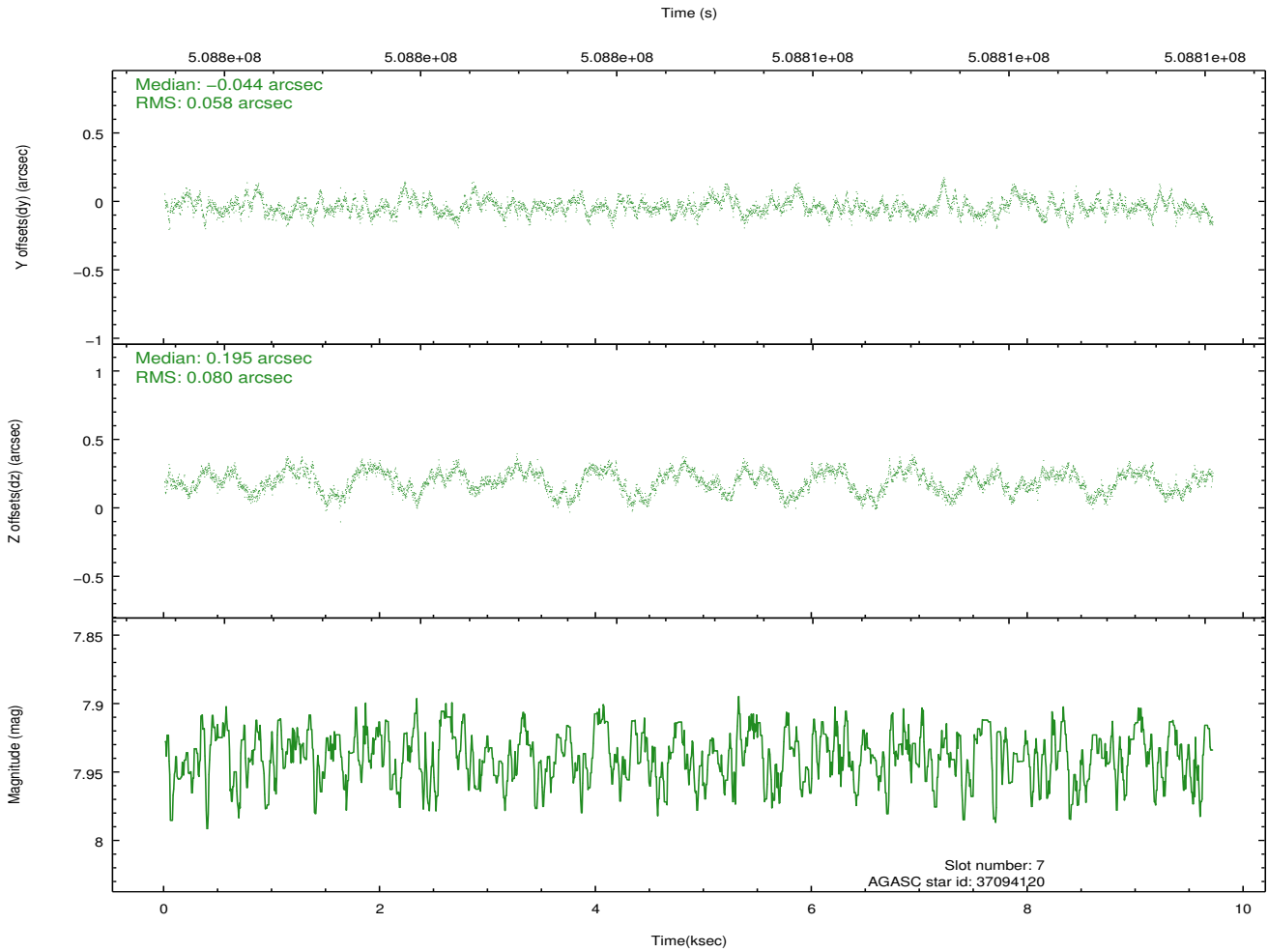
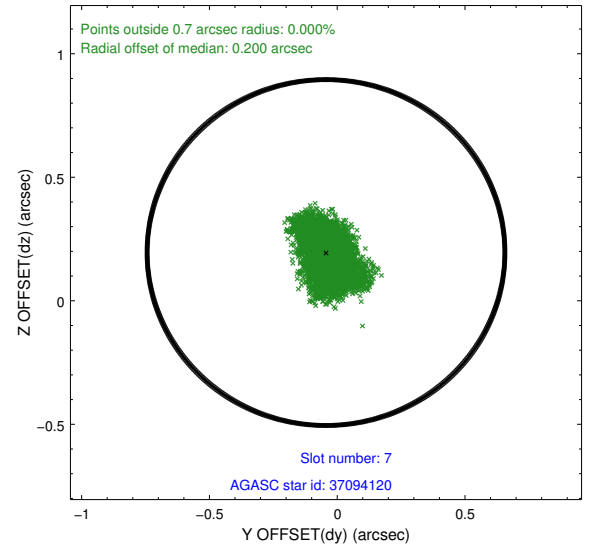
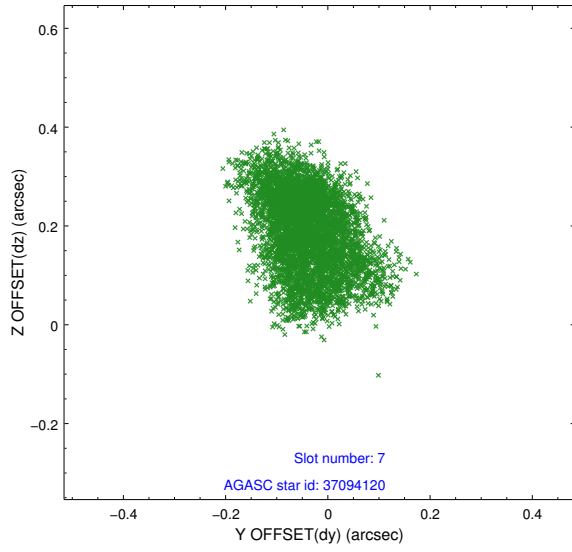
2.4.3 Slot 5



2.4.4 Slot 6

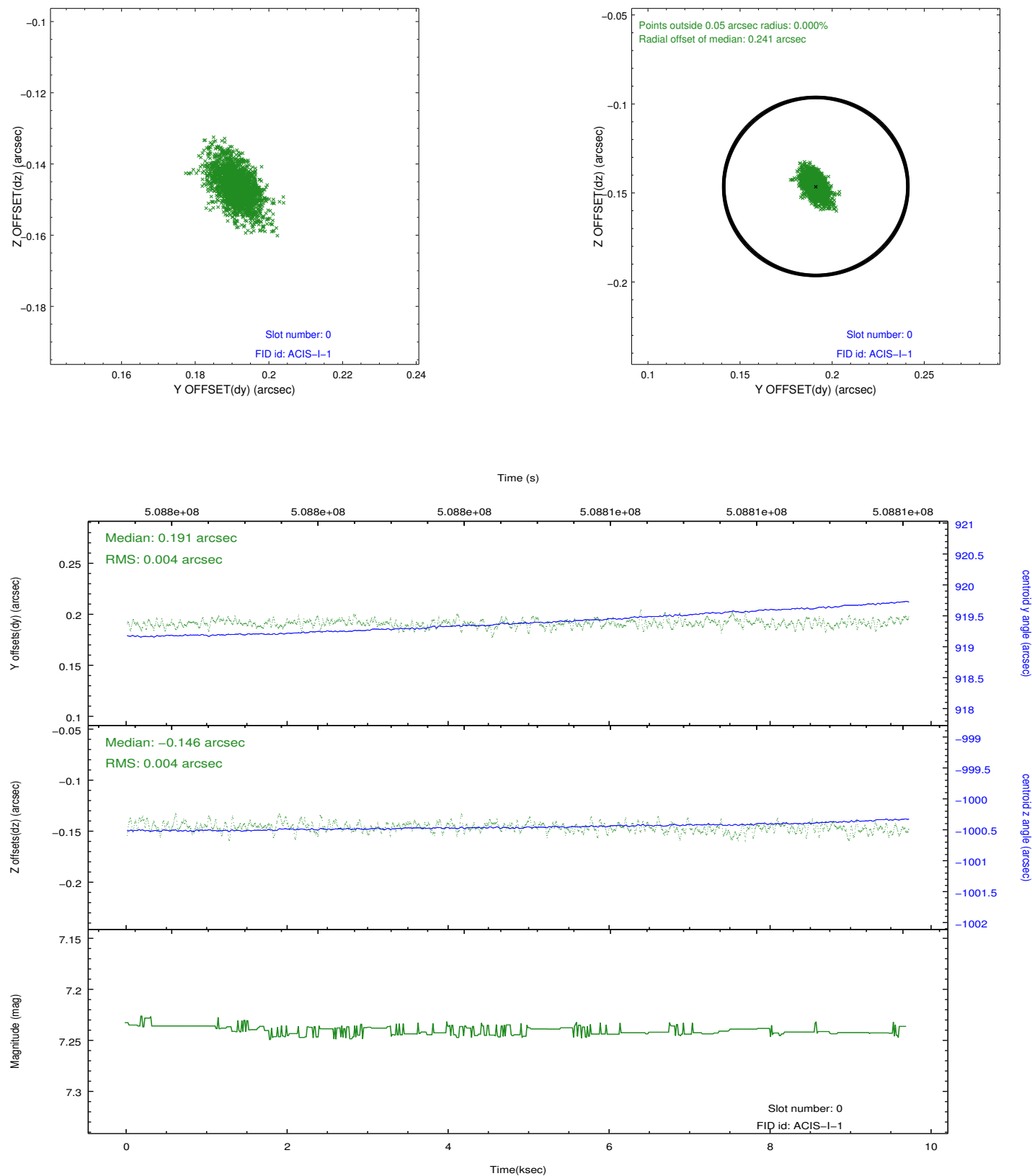


2.4.5 Slot 7

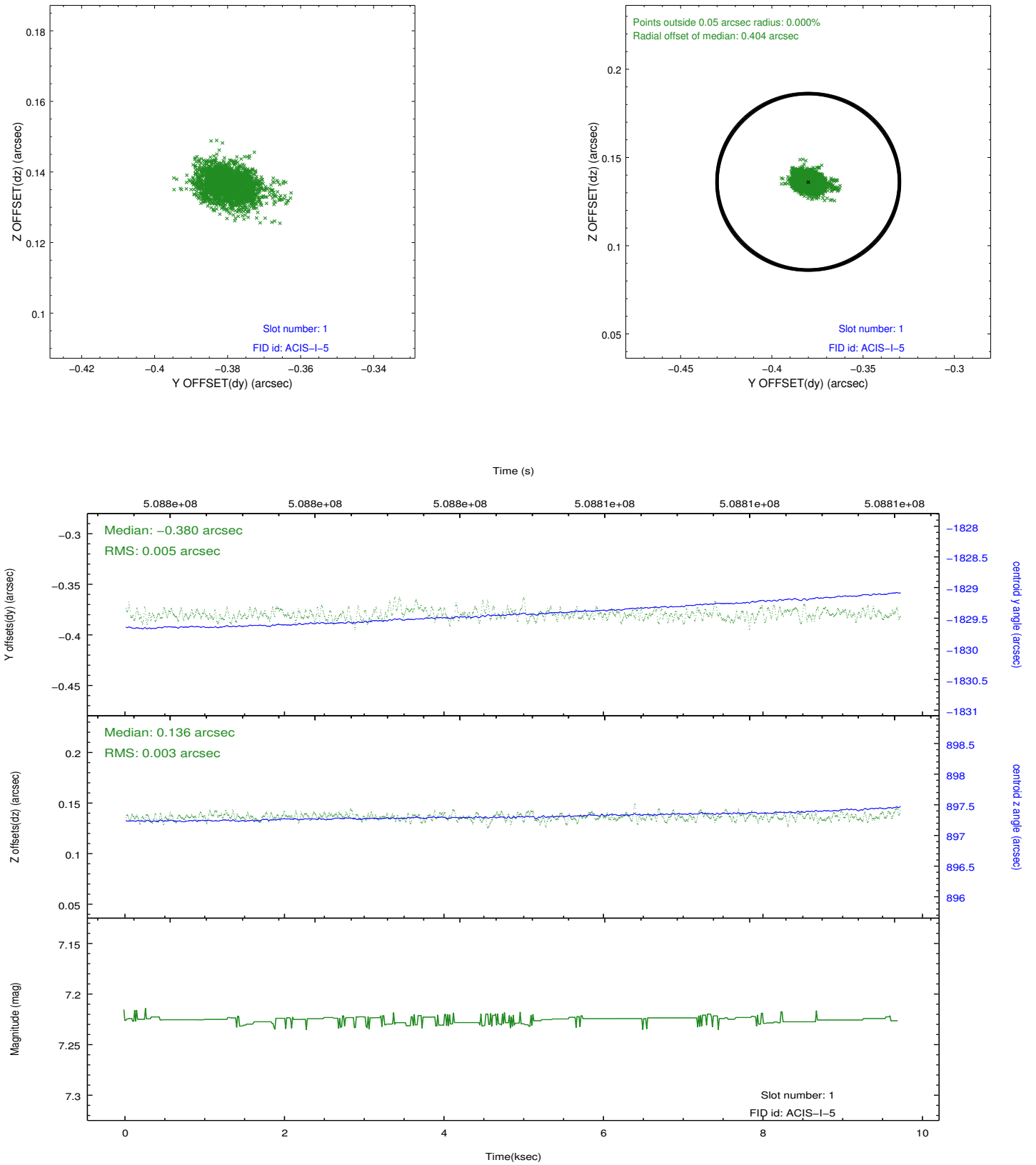


2.5 FID Slots

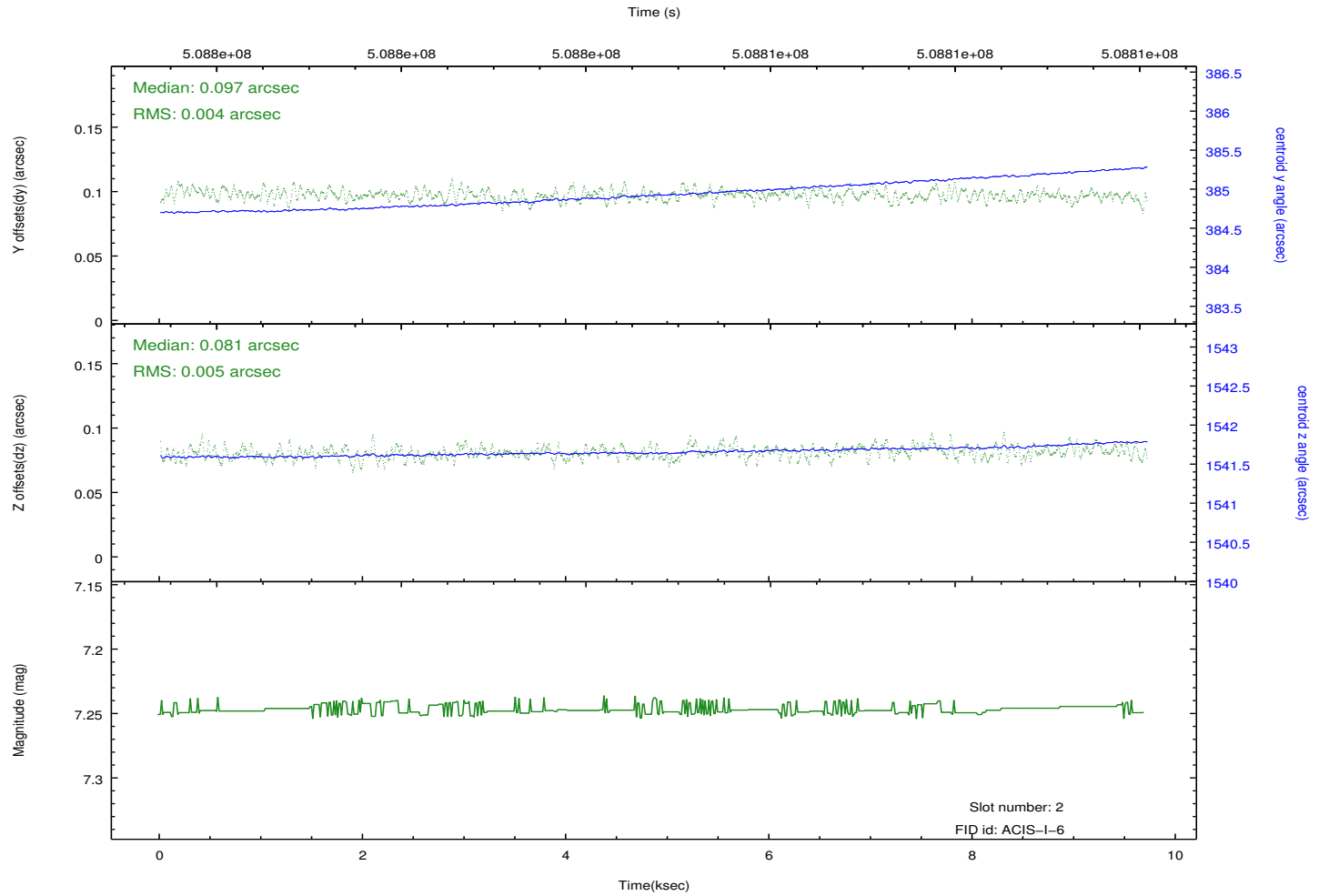
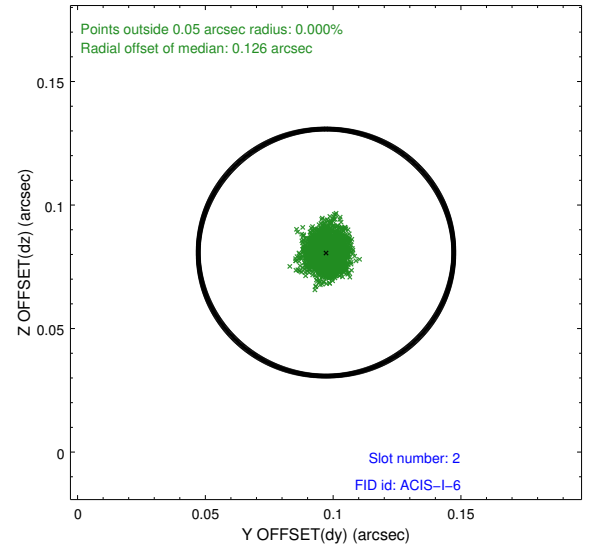
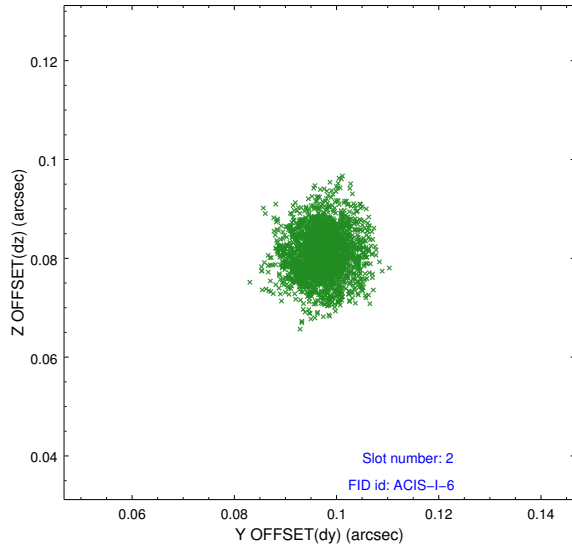
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2014.12.17
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.4860000729561

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.