

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 15098 - L2 Version 2
Chandra X-Ray Center

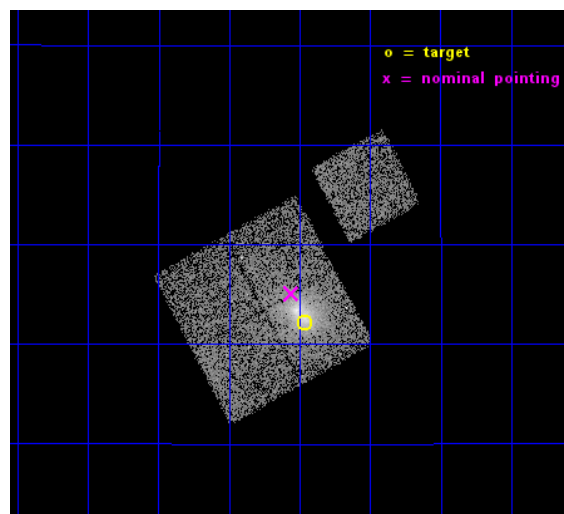
L2 Processing Date : Dec 10 2014

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1 Front

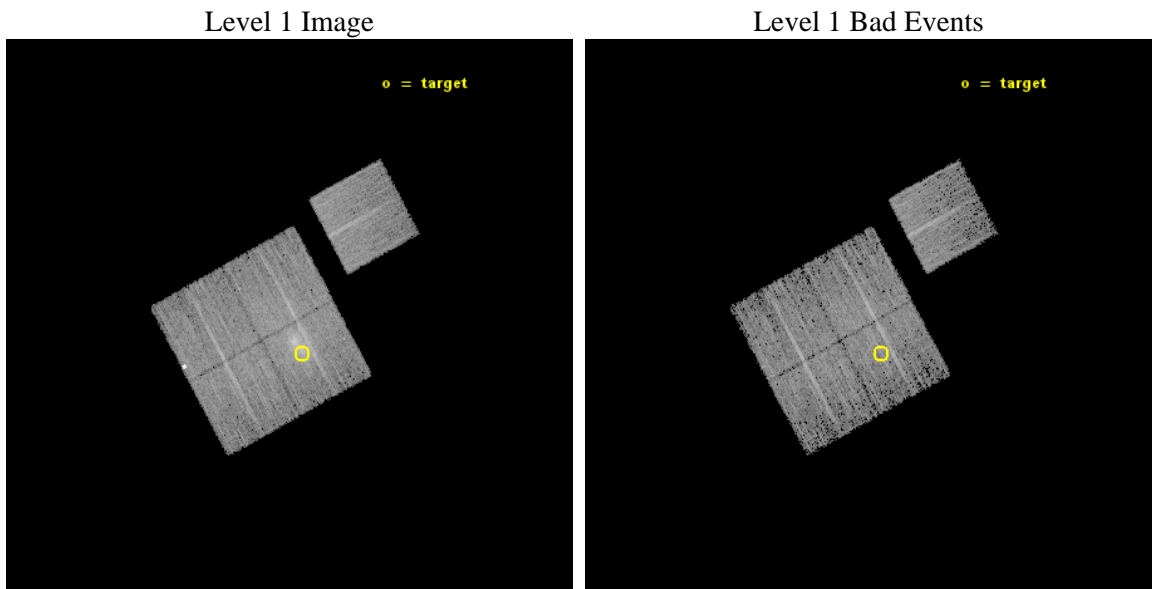
seq_num	801227	Sequence number
obs_id	15098	Observation id
title	A Chandra-Planck Legacy Program for Massive Clusters of Galaxies	P
observer	Dr. Christine Jones	Principal investigator
object	G036.72+14.92	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	271.115	Observer's specified target RA [deg]
dec_targ	10.036	Observer's specified target Dec [deg]
ra_nom	271.13941900052	Nominal RA [deg]
dec_nom	10.084858939688	Nominal Dec [deg]
roll_nom	61.502536234023	Nominal Roll [deg]
revision	2	Processing version of data
ontime	9771.2000751495	Sum of GTIs [s]
livetime	9643.5321527149	Livetime [s]
ontime0	9771.2000751495	Sum of GTIs [s]
ontime1	9771.2000751495	Sum of GTIs [s]
ontime2	9768.0590347648	Sum of GTIs [s]
ontime3	9771.2000751495	Sum of GTIs [s]
ontime6	9764.9180144072	Sum of GTIs [s]
l2events	35546	Number of level 2 events



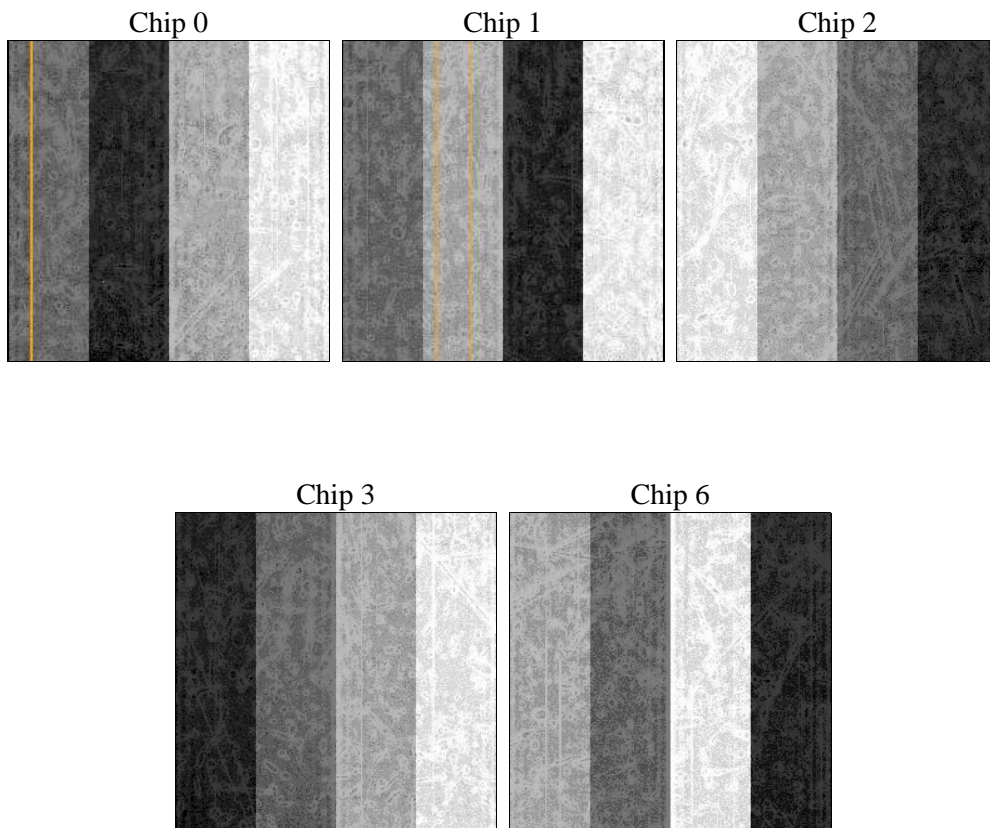
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	10000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	9771.2000751495	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	9771.2000751495	Sum of GTIs [s]
date	2014-12-10T06:25:45	Date and time of file creation	ontime1	9771.2000751495	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	9768.0590347648	Sum of GTIs [s]
			ontime3	9771.2000751495	Sum of GTIs [s]
			ontime6	9764.9180144072	Sum of GTIs [s]
			l1events	237980	Number of level 1 events

2.1.4 Events

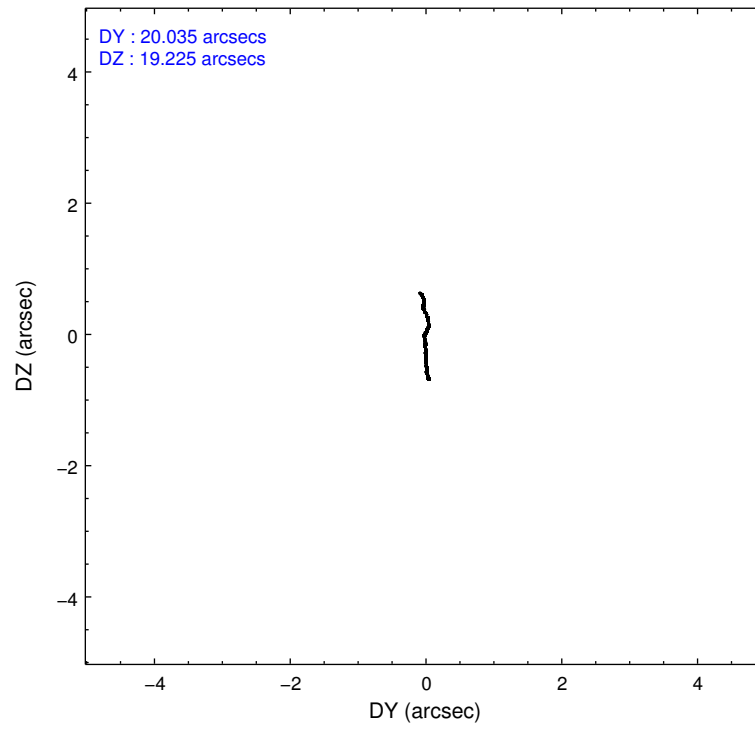
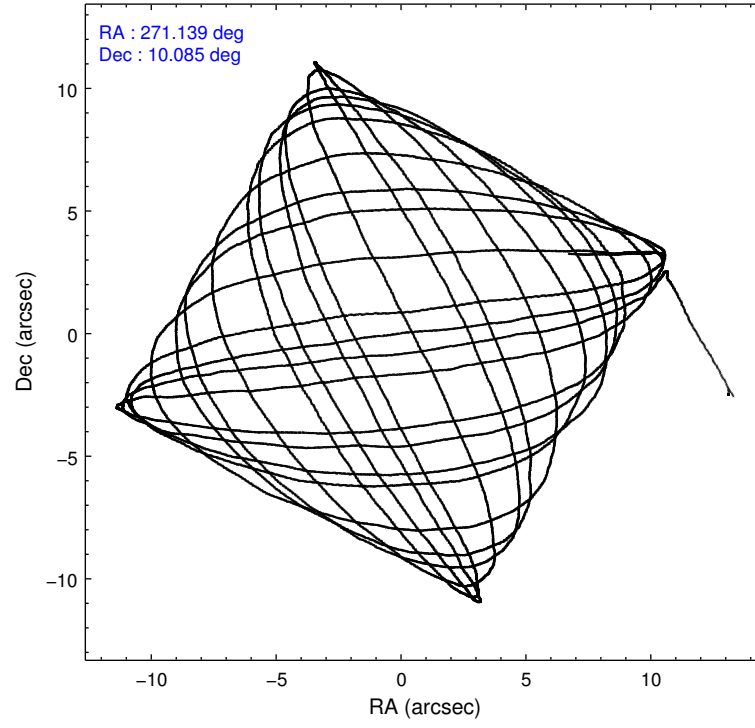
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	46029	43245	48182	54500	46024
rejected events	37448	36822	41890	38116	40545
rejected %	81%	85%	86%	69%	88%

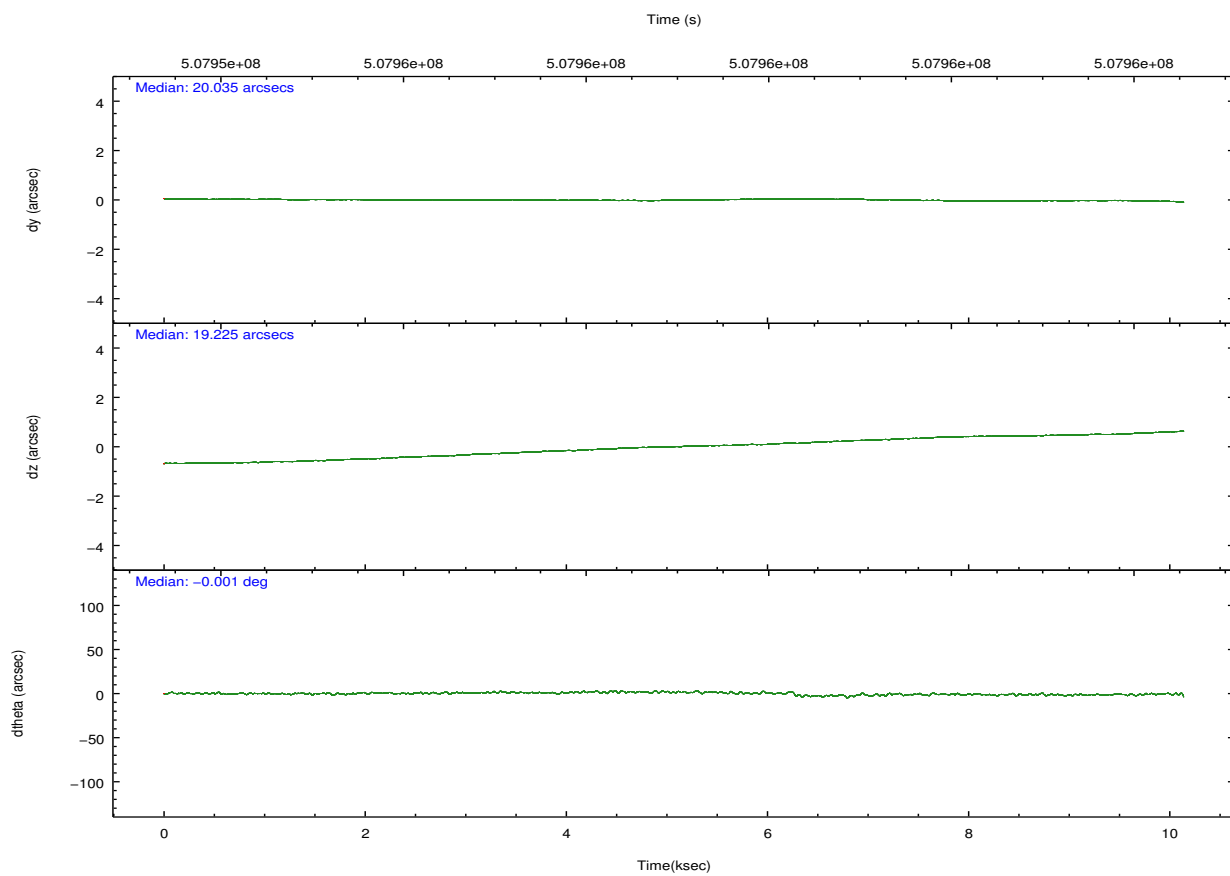
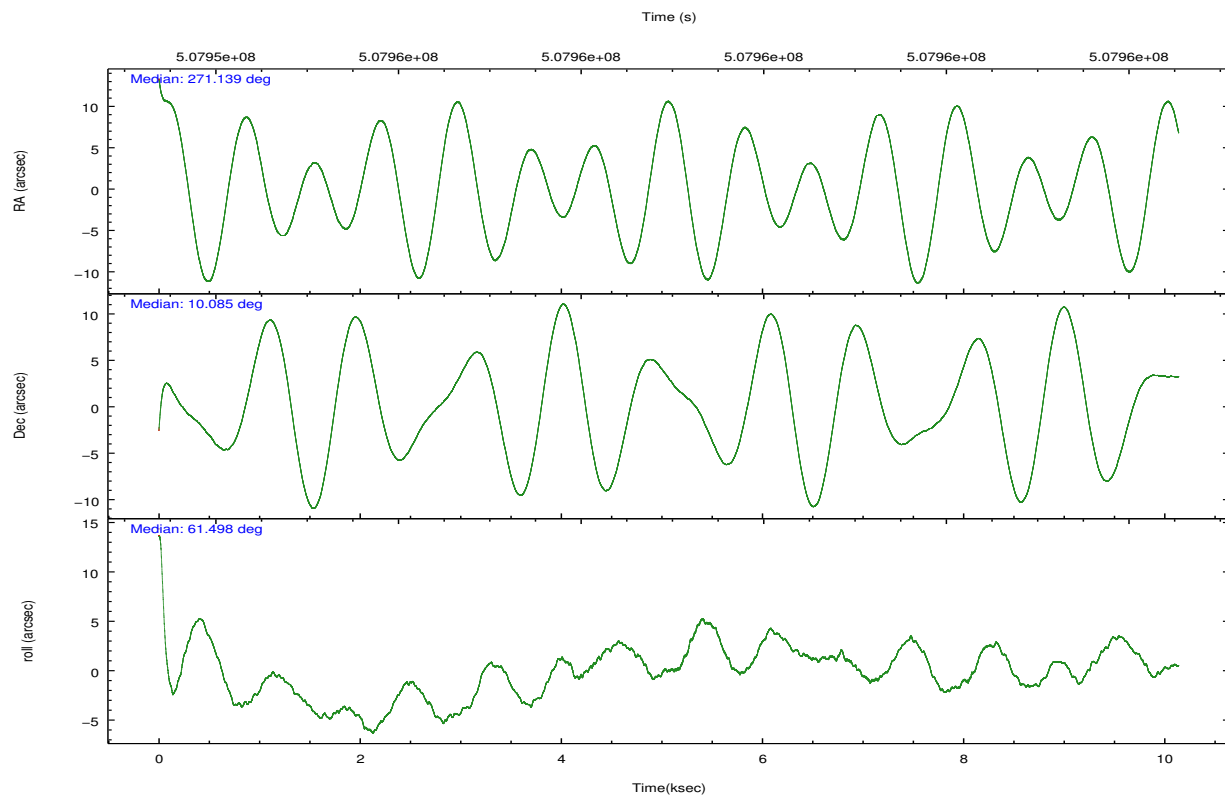
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	4987	2381	2715	10815	1857
	10%	5%	5%	19%	4%
grade 1 events	30	22	26	58	26
	0%	0%	0%	0%	0%
grade 2 events	1366	1516	1406	2341	1200
	2%	3%	2%	4%	2%
grade 3 events	562	549	574	881	556
	1%	1%	1%	1%	1%
grade 4 events	502	640	536	901	541
	1%	1%	1%	1%	1%
grade 5 events	2222	2330	2112	2484	2455
	4%	5%	4%	4%	5%
grade 6 events	1170	1340	1064	1456	1328
	2%	3%	2%	2%	2%
grade 7 events	35190	34467	39749	35564	38061
	76%	79%	82%	65%	82%

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	271.140206	271.1394190005176	CCD I2 on	Y	Y
[deg] Pointing Dec	10.057373	10.08485893968775	CCD I3 on	Y	Y
[deg] Pointing Roll	61.293703	61.50253623402318	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	-225.842463	-225.8433433320239	CCD S3 on	N	N
[mm] SIM translation stage offset	-7.75	-7.749109670905796	CCD S4 on	N	N
[s] Observation start time (MET)	507954027.184000	507952785.91061	CCD S5 on	N	N
Observation start date	2014-02-05T02:19:20	2014-02-05T01:59:45	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	507964027.184000	507964704.61127	On-chip summing requested	N	N
Observation end date	2014-02-05T05:06:00	2014-02-05T05:18:24	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



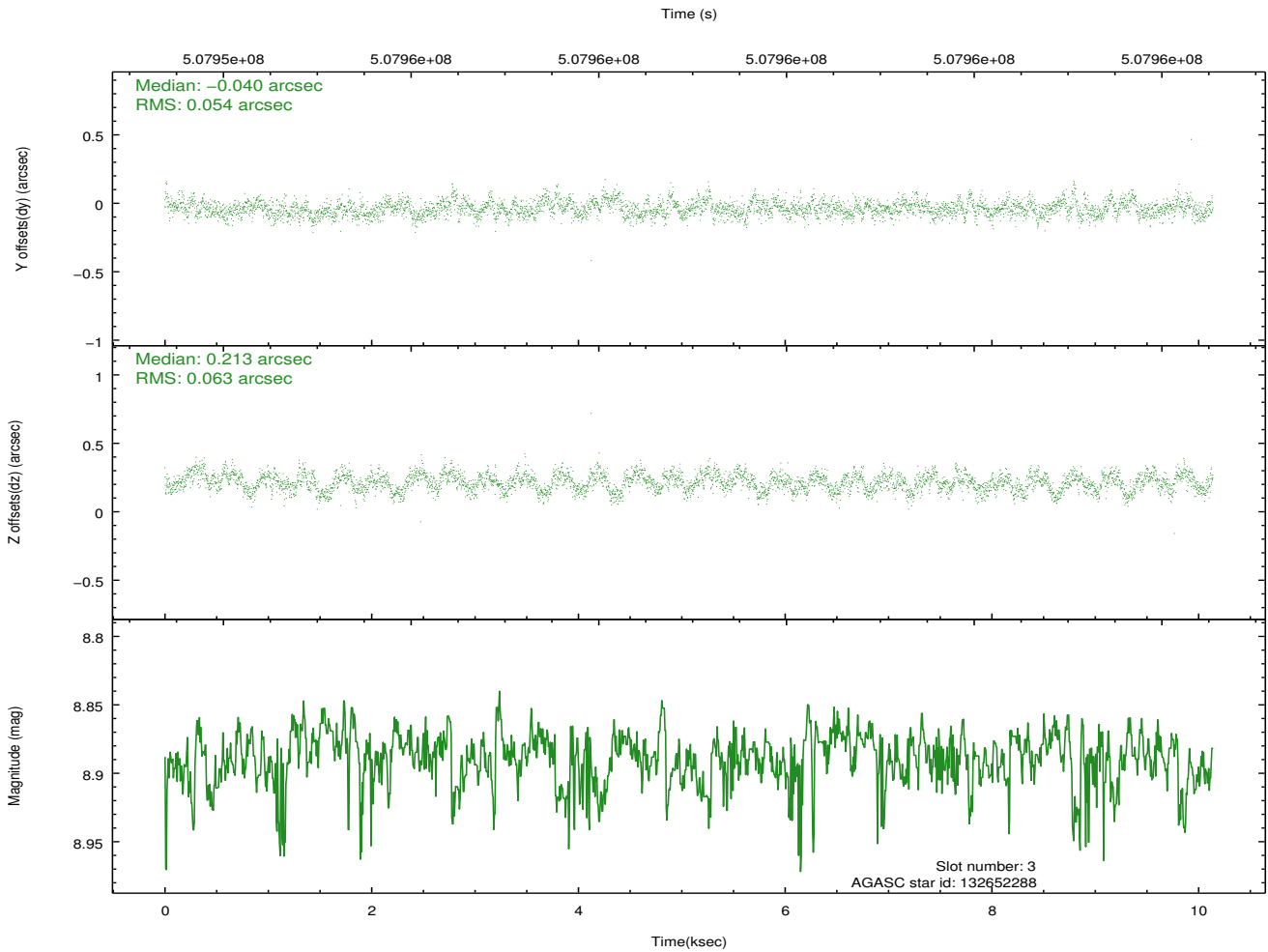
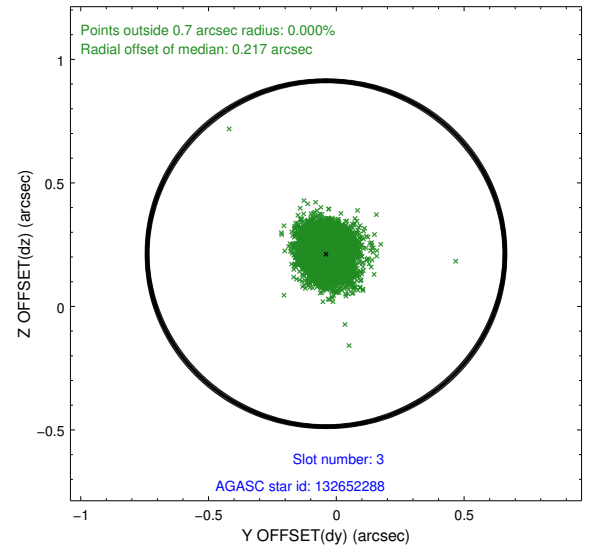
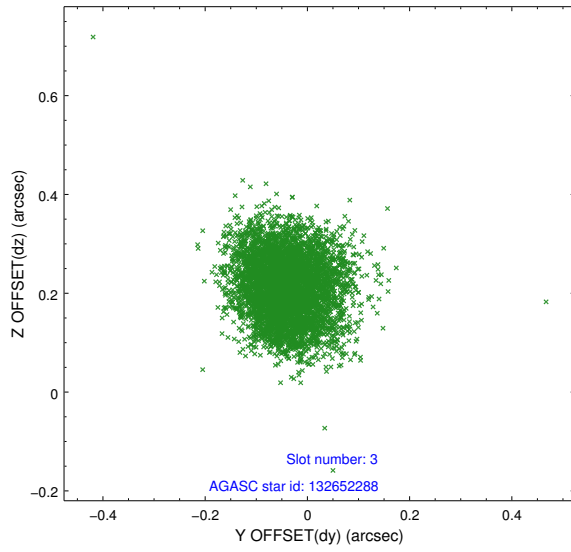


Slot Statistics

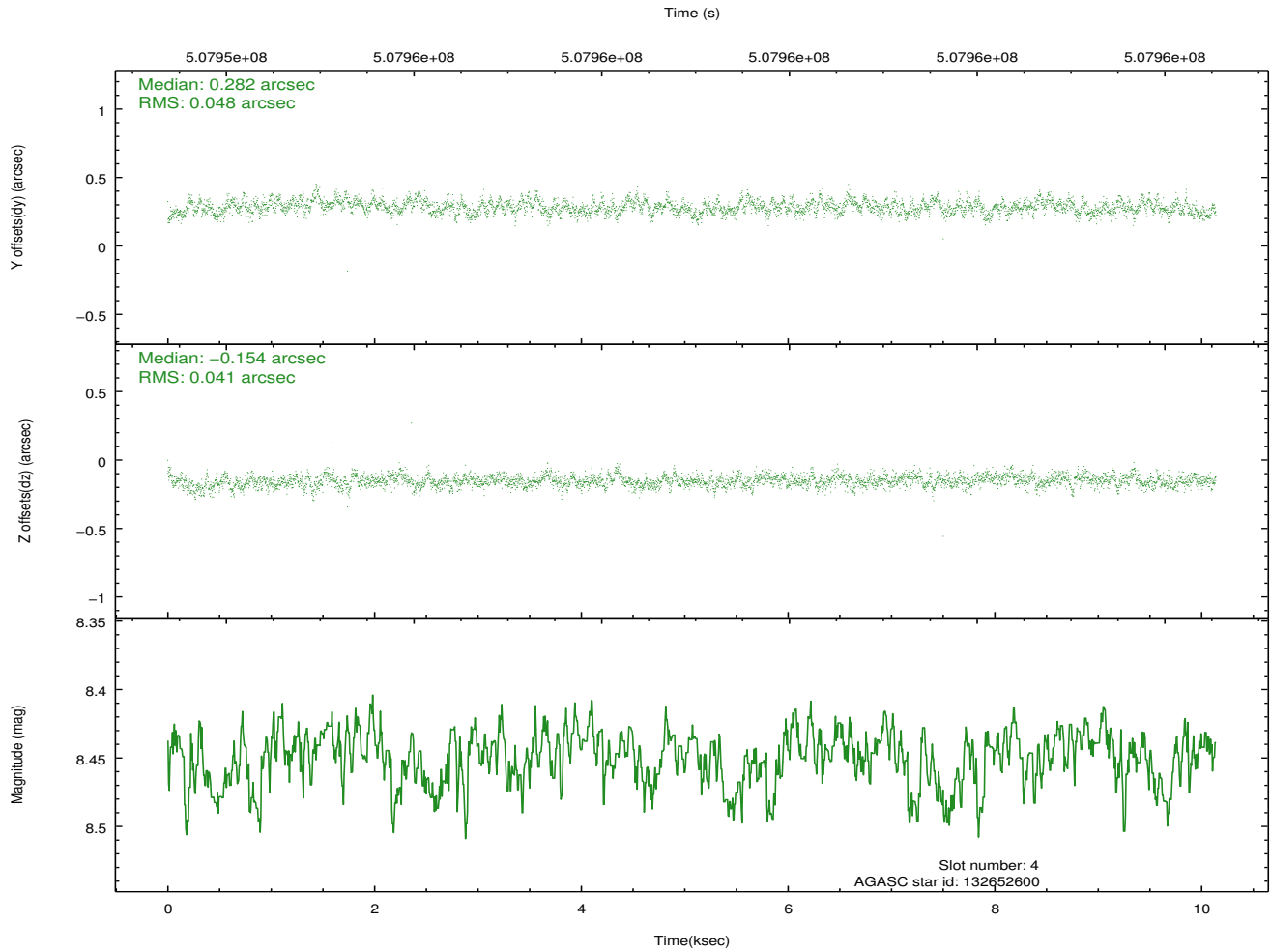
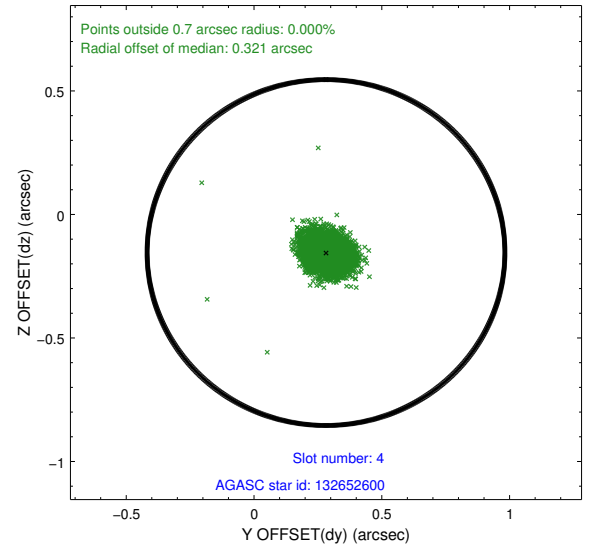
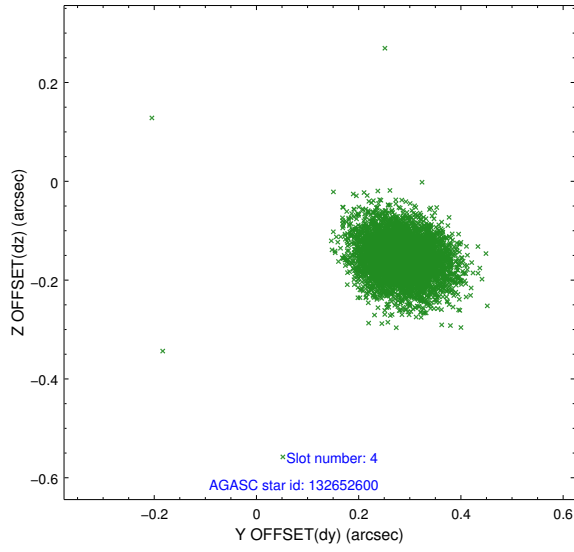
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.08	2474	-0.226	-0.119	0.010	0.017	0.000000	0.000000	-775.68	-1007.42
1	FID		ACIS-I-4	7.04	2474	0.103	0.161	0.022	0.033	0.000000	0.000000	2138.46	898.60
2	FID		ACIS-I-6	7.15	2474	0.023	0.022	0.026	0.039	0.000000	0.000000	385.77	1540.30
3	GUIDE	used	132652288	8.89	4942	-0.040	0.213	0.088	0.140	271.675253	10.264643	1566.42	-1302.60
4	GUIDE	used	132652600	8.45	4947	0.282	-0.154	0.065	0.107	270.729161	9.728842	-1736.44	711.36
5	GUIDE	used	132653792	7.79	4947	-0.252	-0.282	0.069	0.112	270.874187	10.296617	302.35	1240.60
6	GUIDE	used	132654336	8.83	4944	-0.366	-0.060	0.087	0.142	271.716810	10.209791	1464.07	-1526.78
7	GUIDE	used	132657952	8.75	4945	0.370	0.284	0.092	0.145	271.285129	9.383627	-1879.13	-1616.65

2.4 Star Slots

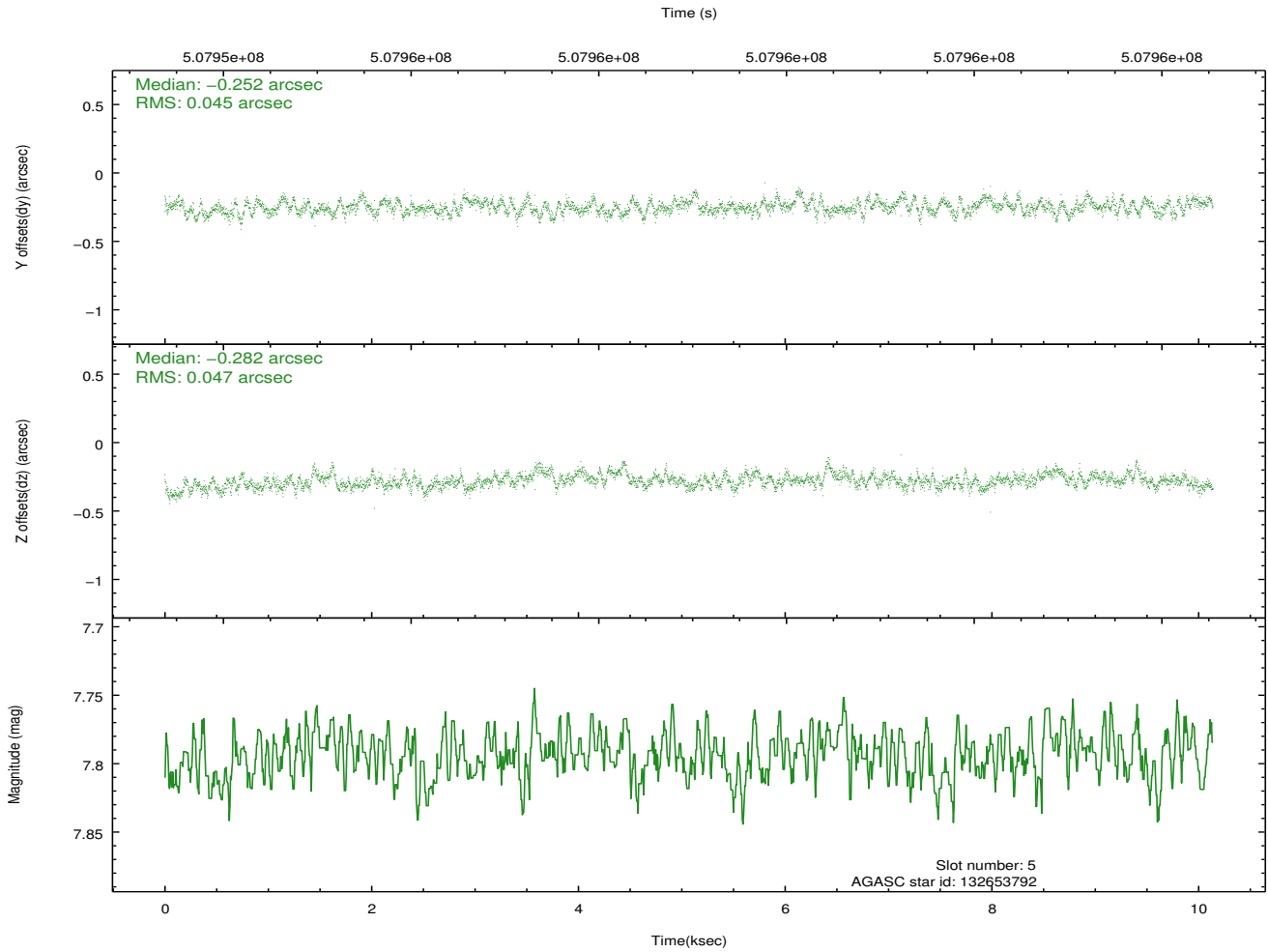
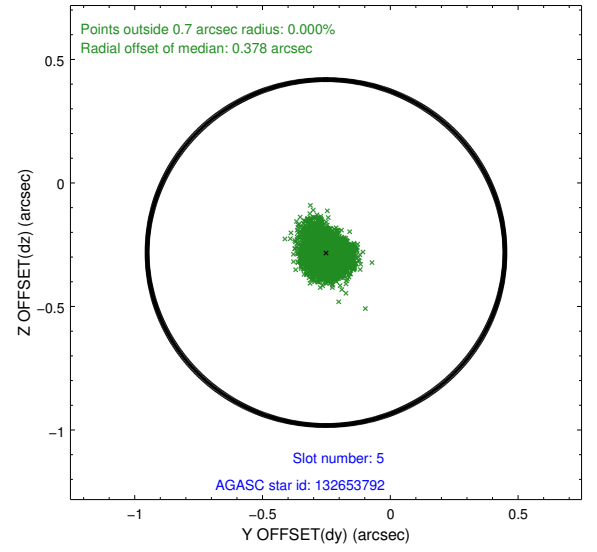
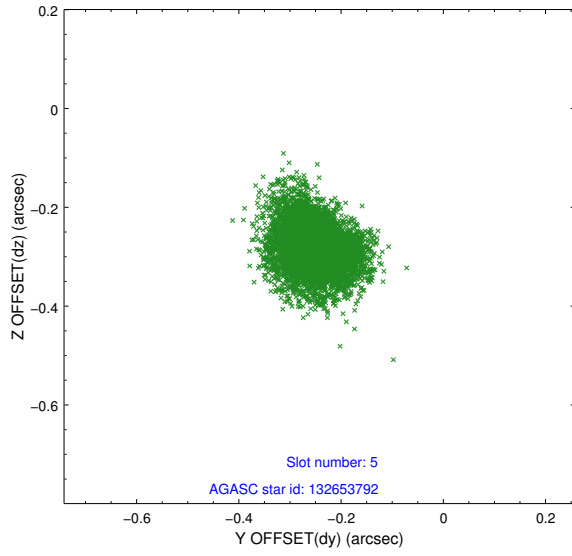
2.4.1 Slot 3



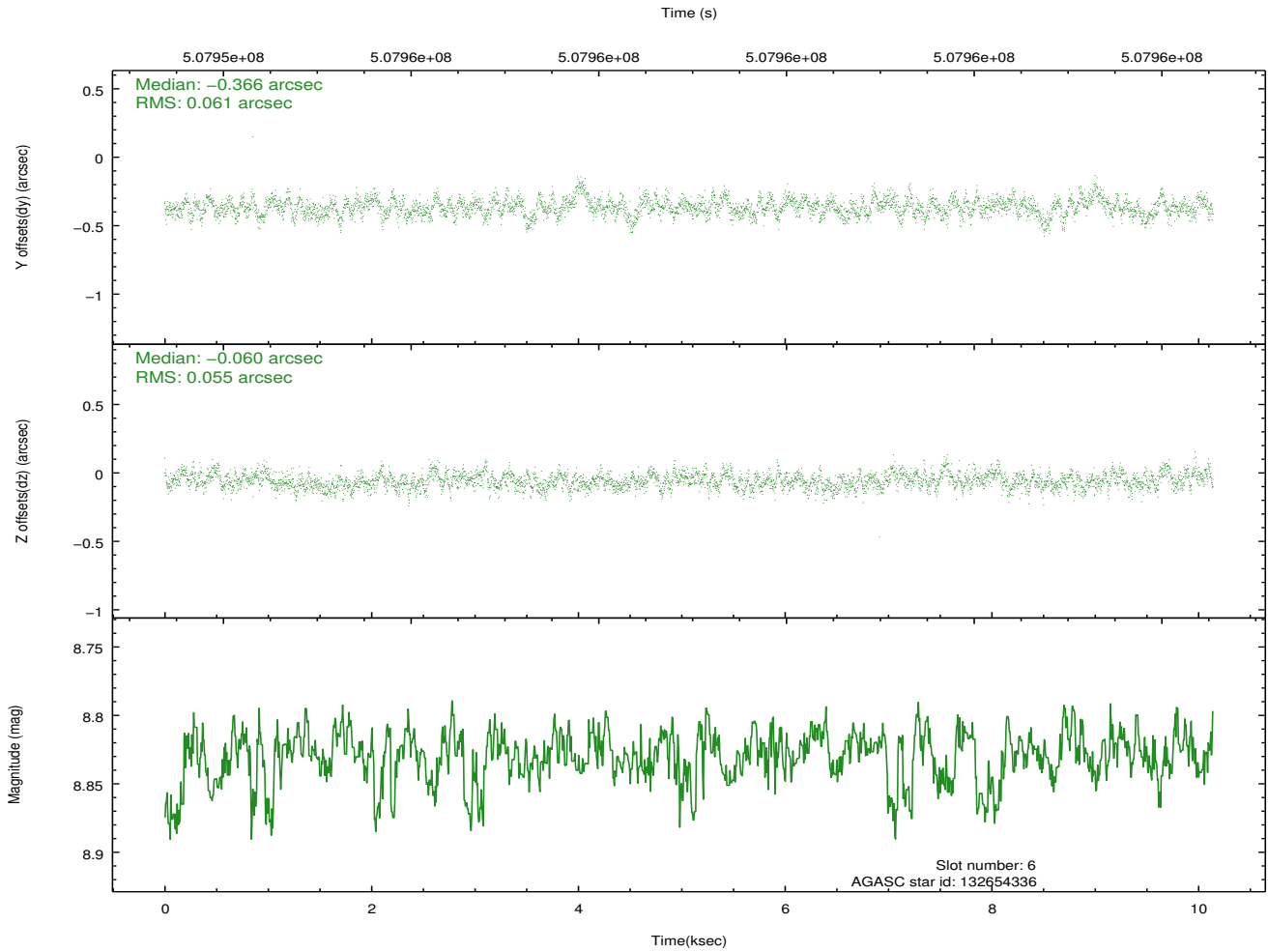
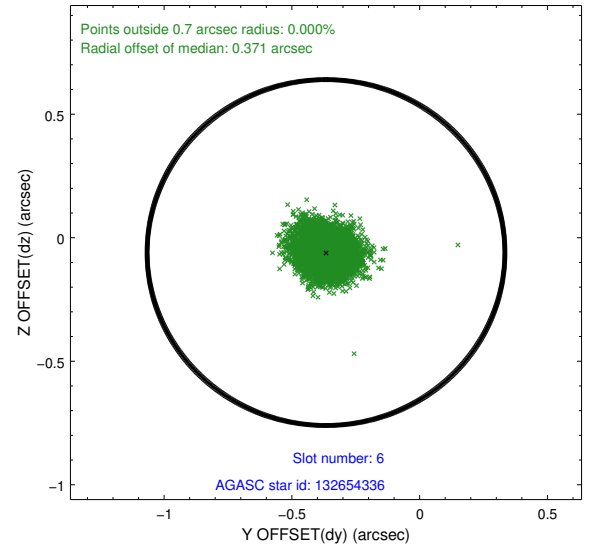
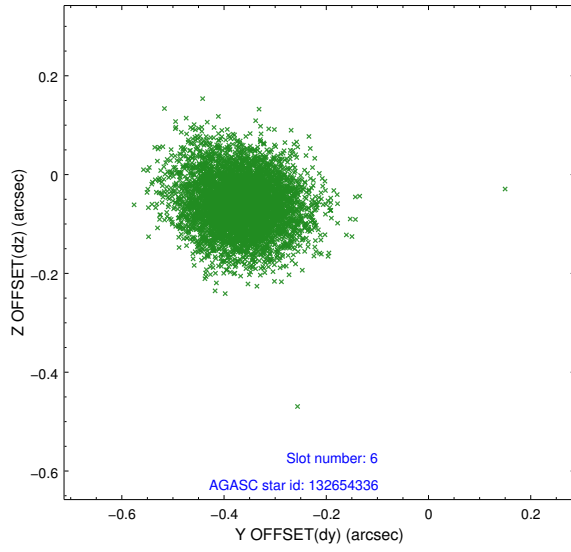
2.4.2 Slot 4



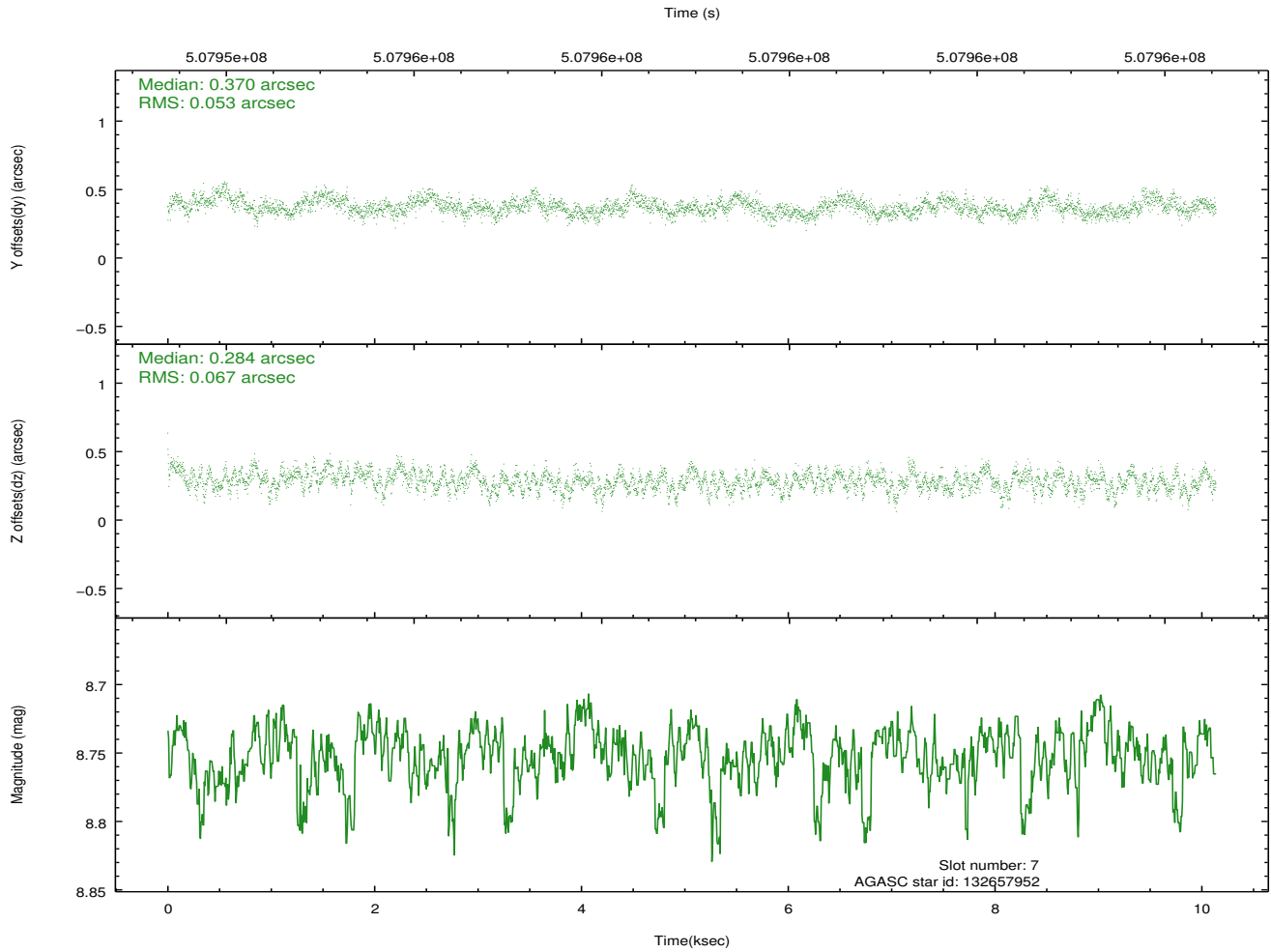
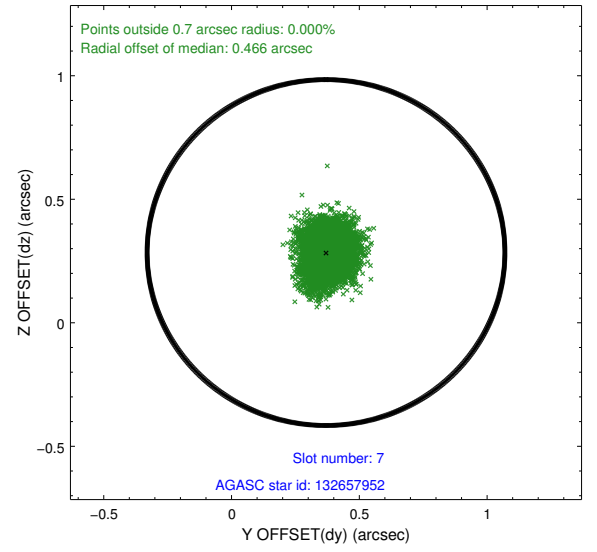
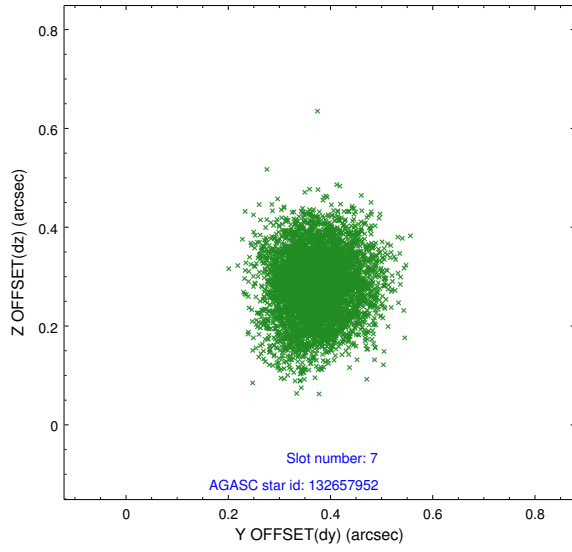
2.4.3 Slot 5



2.4.4 Slot 6

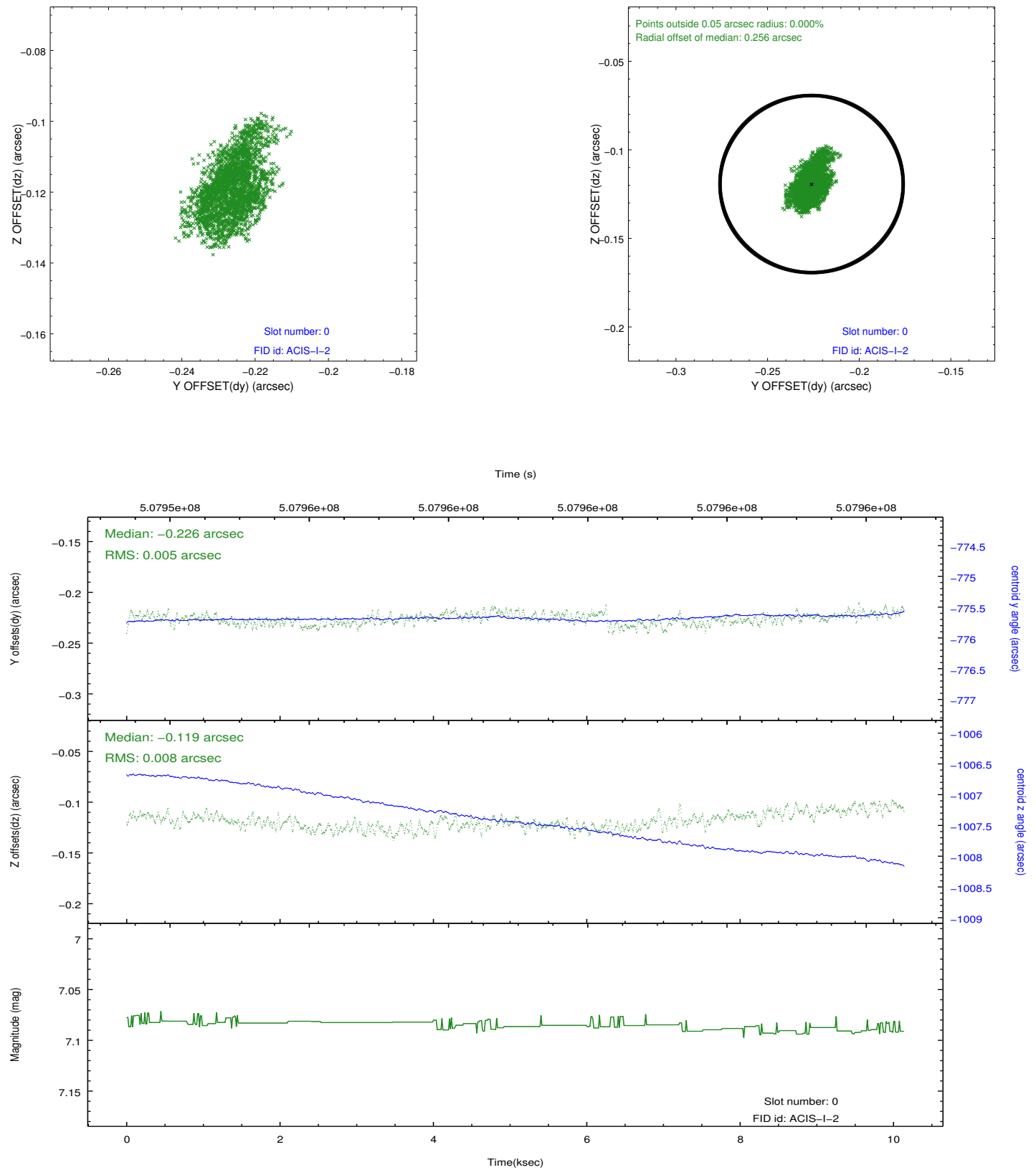


2.4.5 Slot 7

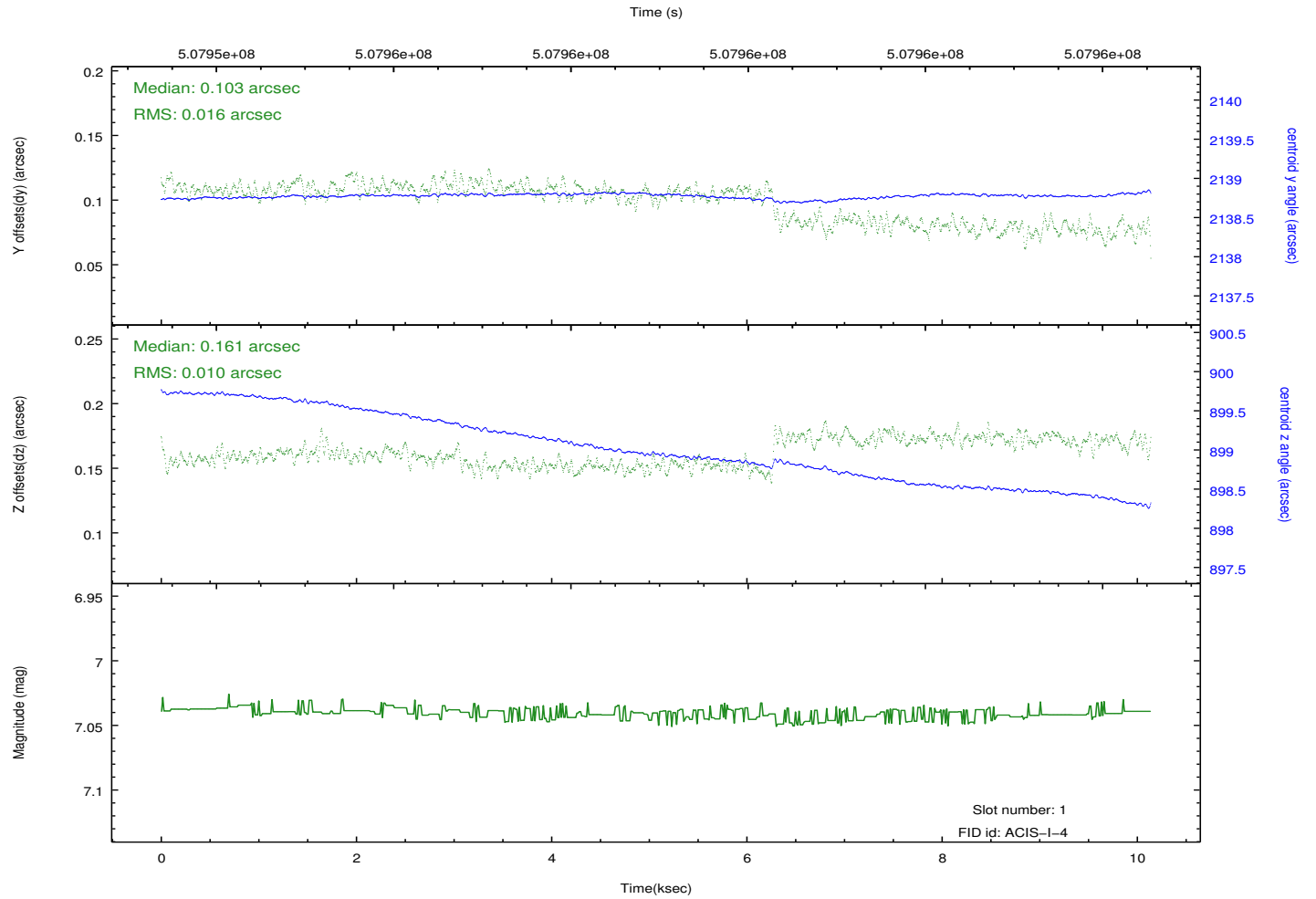
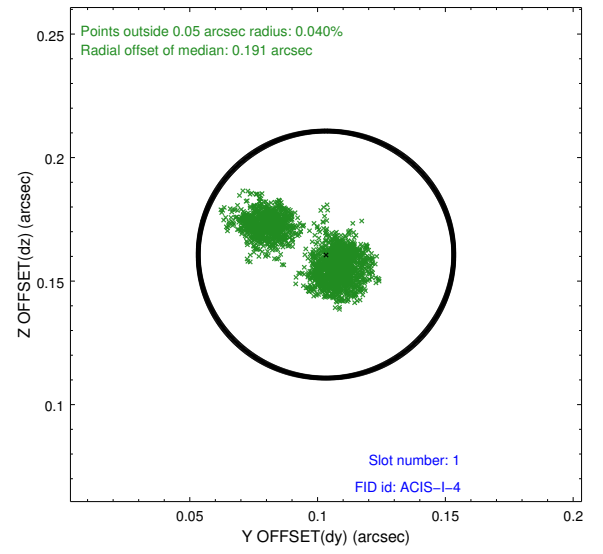
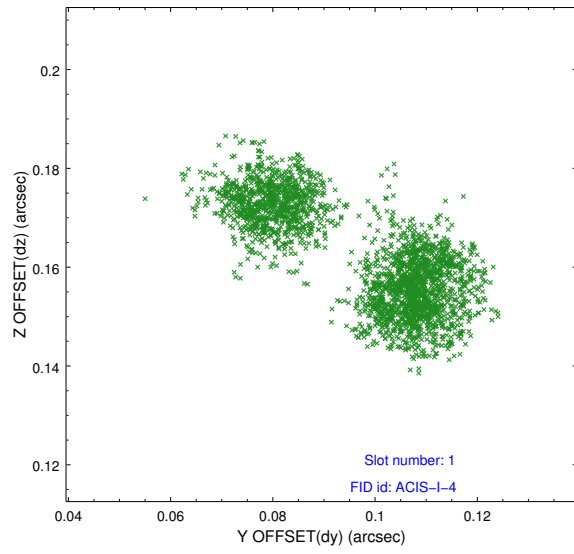


2.5 FID Slots

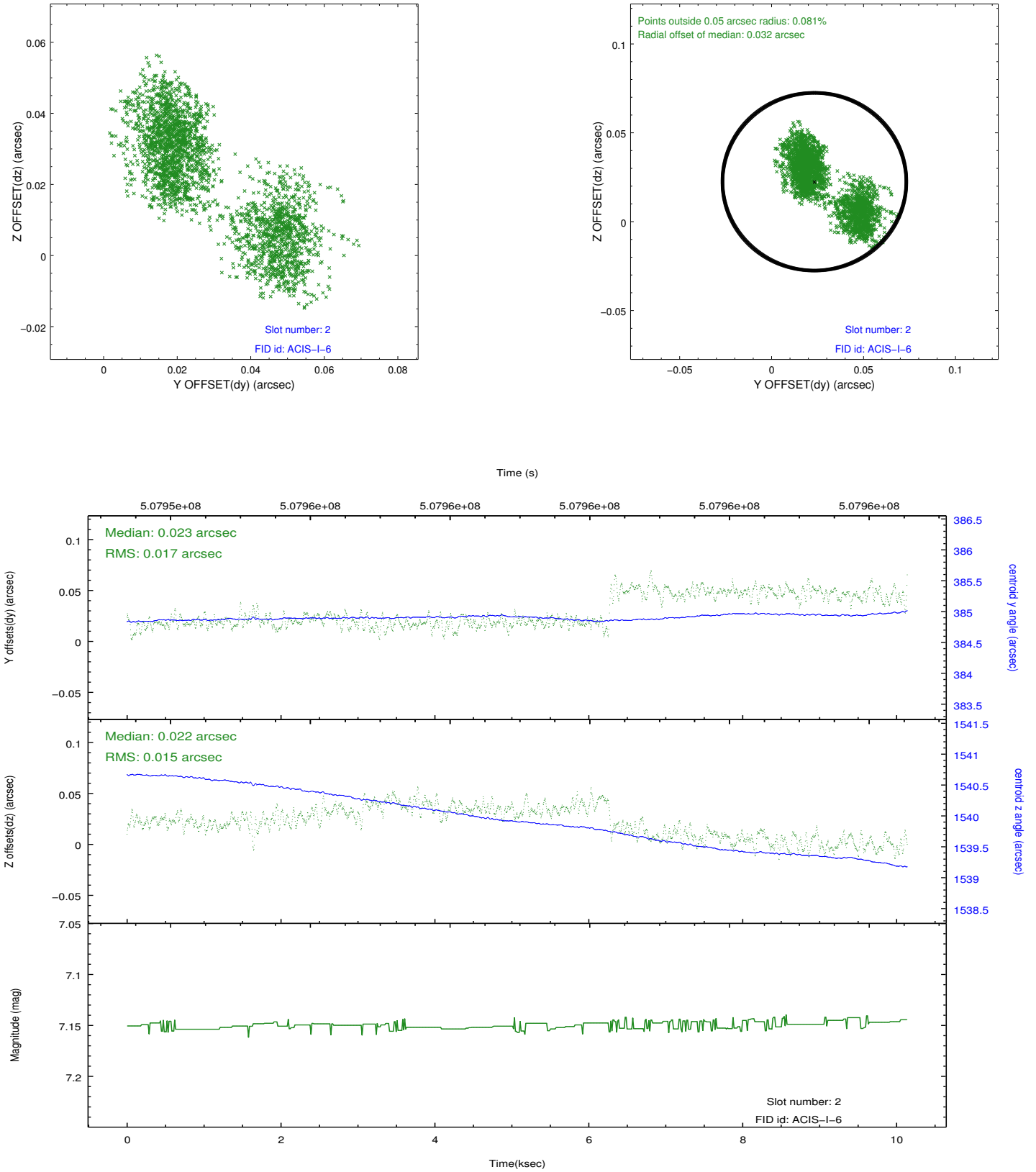
2.5.1 Slot 0



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)	2014.12.15
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	9.7712000751495

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.