

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15373 - L2 Version 2
Chandra X-Ray Center

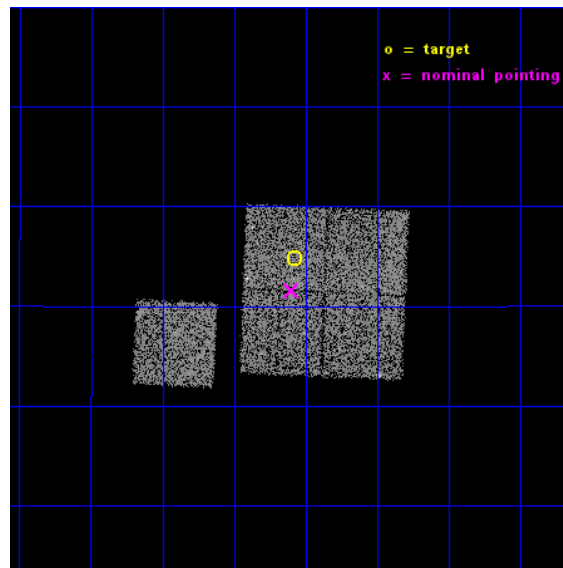
L2 Processing Date : Dec 1 2014

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

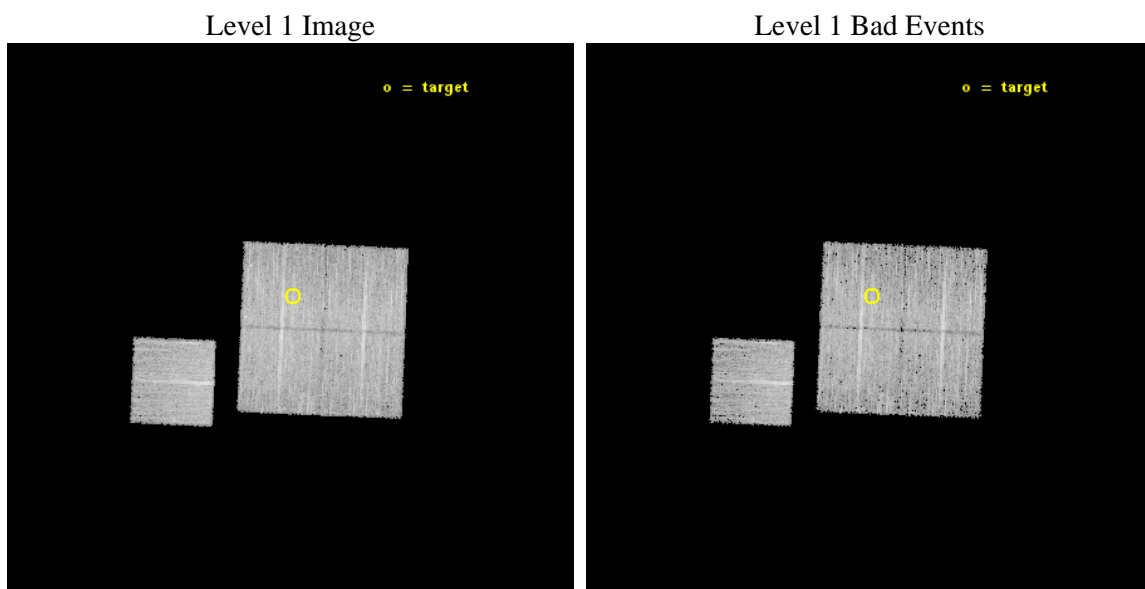
seq_num	801363	Sequence number
obs_id	15373	Observation id
title	A Search for Cool Cores in a Sample of $z = 0.4$ Galaxy Clusters	Pro
observer	Professor Gordon Garmire	Principal investigator
object	GMBCG J135.77018+03.58053	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	135.77	Observer's specified target RA [deg]
dec_targ	3.580556	Observer's specified target Dec [deg]
ra_nom	135.77453499702	Nominal RA [deg]
dec_nom	3.5263283540251	Nominal Dec [deg]
roll_nom	272.40742011599	Nominal Roll [deg]
revision	2	Processing version of data
ontime	10080.683988094	Sum of GTIs [s]
livetime	9948.9724304983	Livetime [s]
ontime0	10080.560868084	Sum of GTIs [s]
ontime1	10080.601908088	Sum of GTIs [s]
ontime2	10080.642948091	Sum of GTIs [s]
ontime3	10080.683988094	Sum of GTIs [s]
ontime6	10080.519828081	Sum of GTIs [s]
l2events	28292	Number of level 2 events



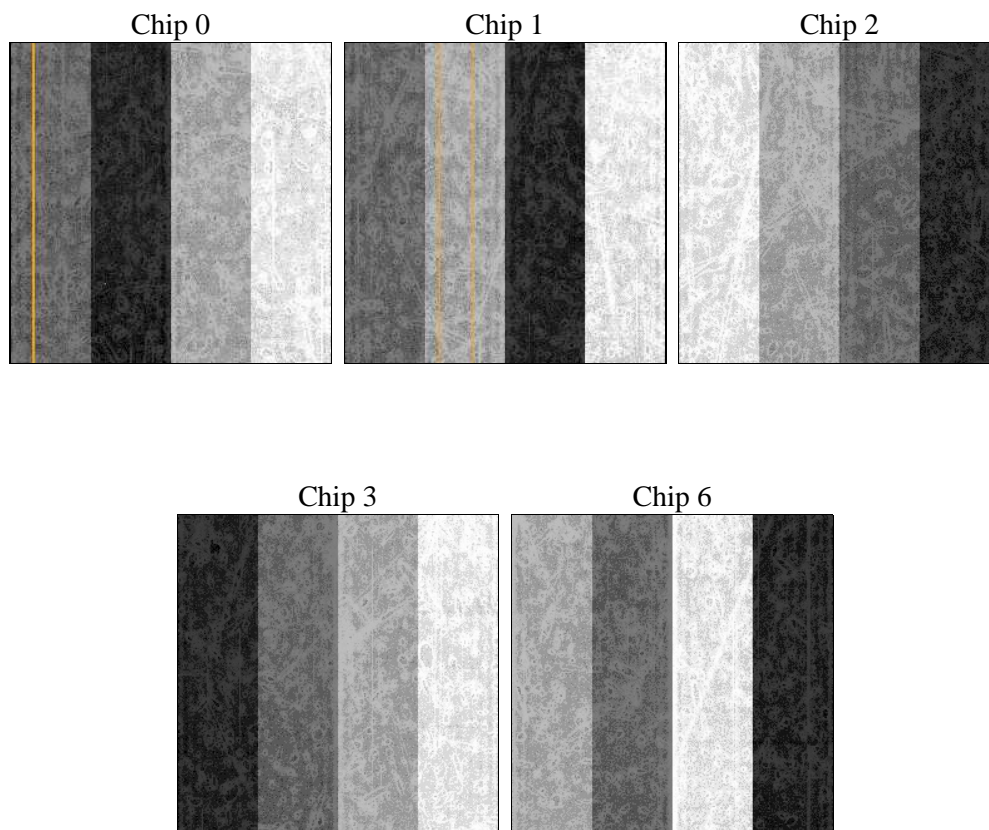
2 OBI

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	10080.683988094	Sum of GTIs [s]
caldsver	4.6.4	 	ontime0	10080.560868084	Sum of GTIs [s]
date	2014-12-02T00:27:03	Date and time of file creation	ontime1	10080.601908088	Sum of GTIs [s]
revision	2	Processing version of data	ontime2	10080.642948091	Sum of GTIs [s]
			ontime3	10080.683988094	Sum of GTIs [s]
			ontime6	10080.519828081	Sum of GTIs [s]
			l1events	280161	Number of level 1 events

2.1.4 Events

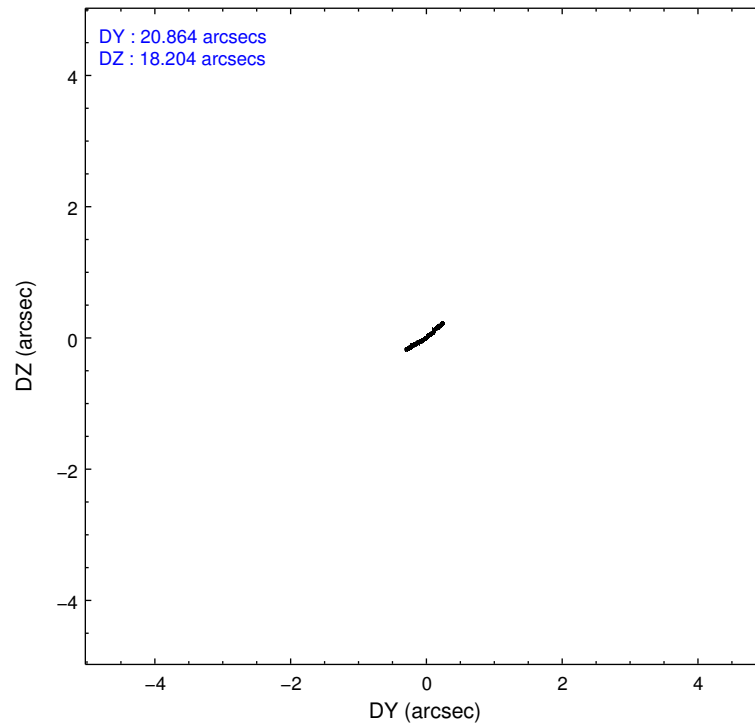
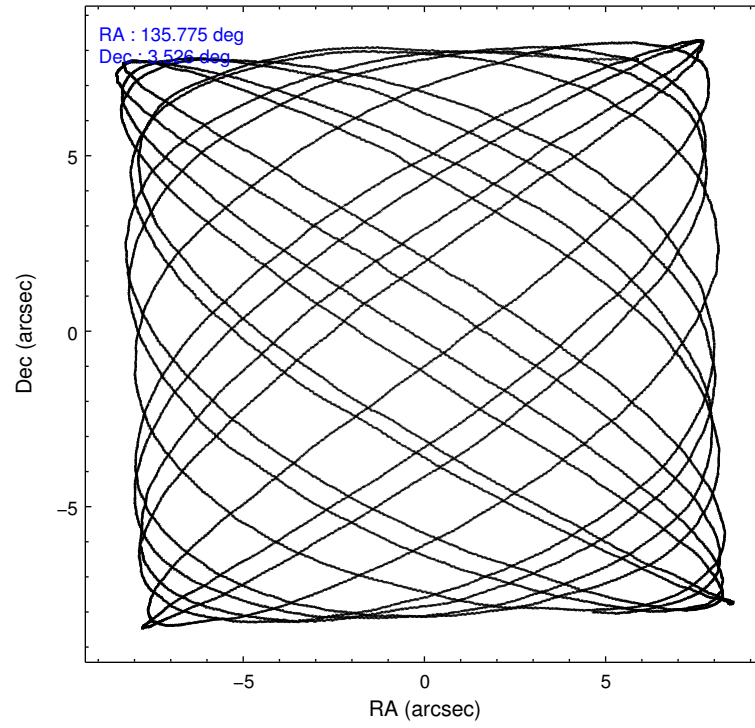
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
level 1 events	51924	56063	57587	57020	57567
rejected events	45343	48810	51087	50509	50833
rejected %	87%	87%	88%	88%	88%

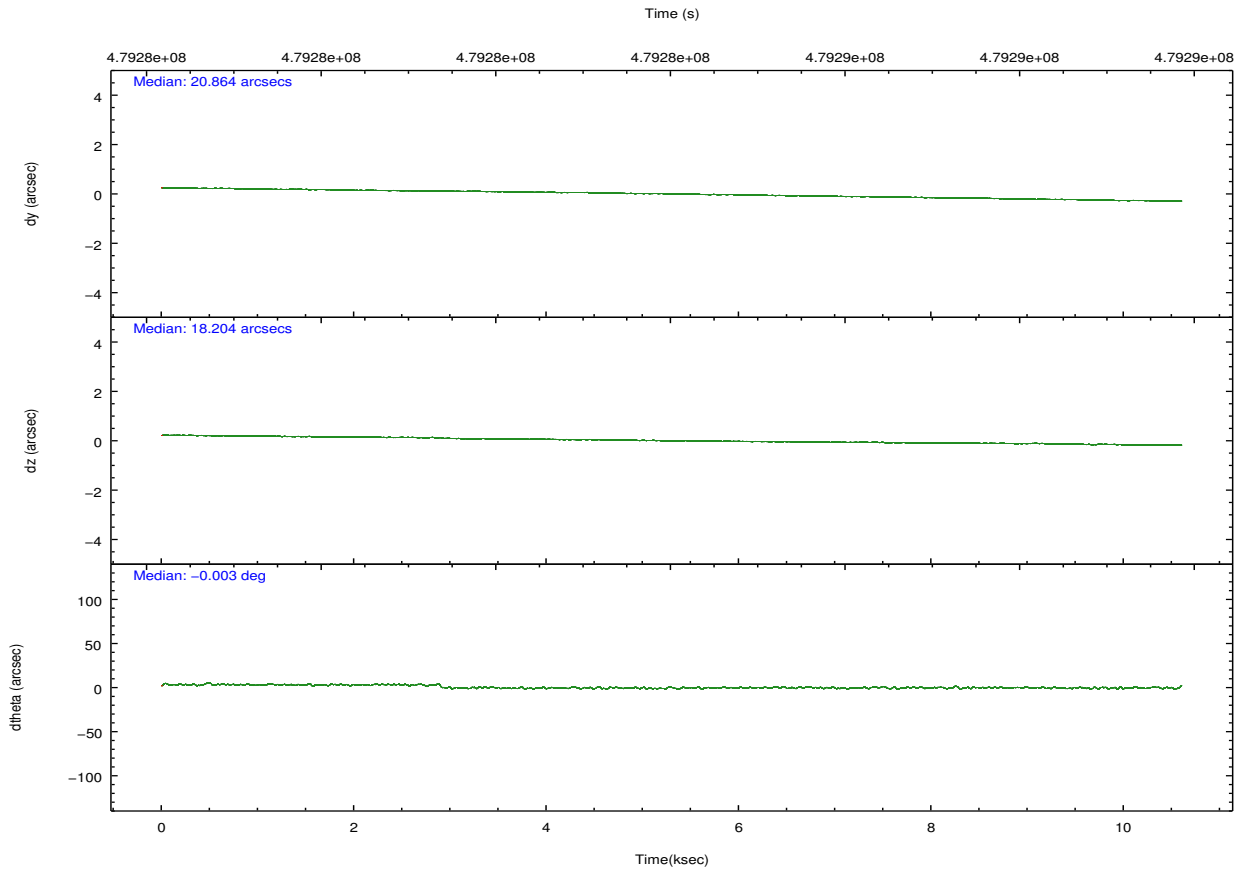
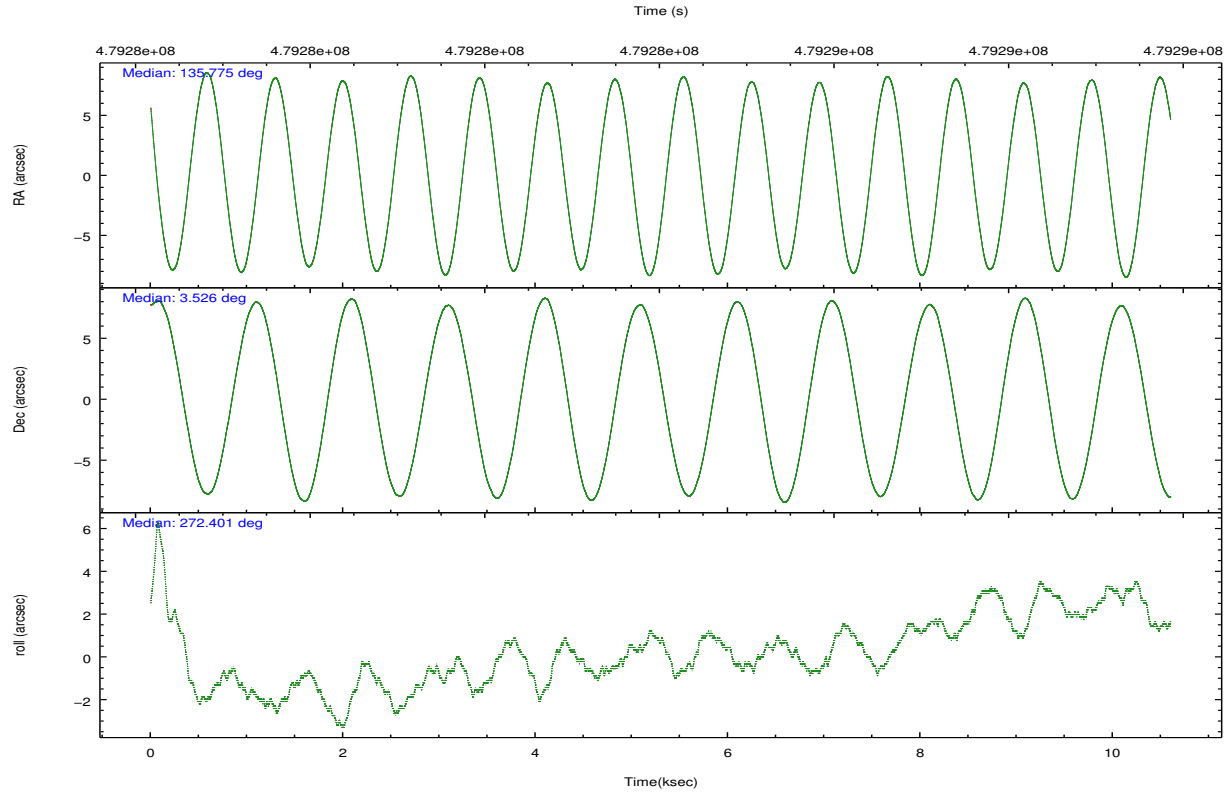
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6
grade 0 events	2276	2494	2351	2476	2247
	4%	4%	4%	4%	3%
grade 1 events	25	38	33	40	32
	0%	0%	0%	0%	0%
grade 2 events	1644	1751	1653	1405	1555
	3%	3%	2%	2%	2%
grade 3 events	700	712	636	679	690
	1%	1%	1%	1%	1%
grade 4 events	634	680	670	633	704
	1%	1%	1%	1%	1%
grade 5 events	2582	2729	2376	2877	2896
	4%	4%	4%	5%	5%
grade 6 events	1332	1621	1190	1323	1545
	2%	2%	2%	2%	2%
grade 7 events	42731	46038	48678	47587	47898
	82%	82%	84%	83%	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	135.759669	135.7745349970192	CCD I2 on	Y	Y
[deg] Pointing Dec	3.549466	3.526328354025051	CCD I3 on	Y	Y
[deg] Pointing Roll	272.199645	272.4074201159933	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)	479279328.184000	479278183.84696	CCD S5 on	N	N
Observation start date	2013-03-10T05:07:41	2013-03-10T04:49:43	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	479289328.184000	479290038.9976	On-chip summing requested	N	N
Observation end date	2013-03-10T07:54:21	2013-03-10T08:07:18	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



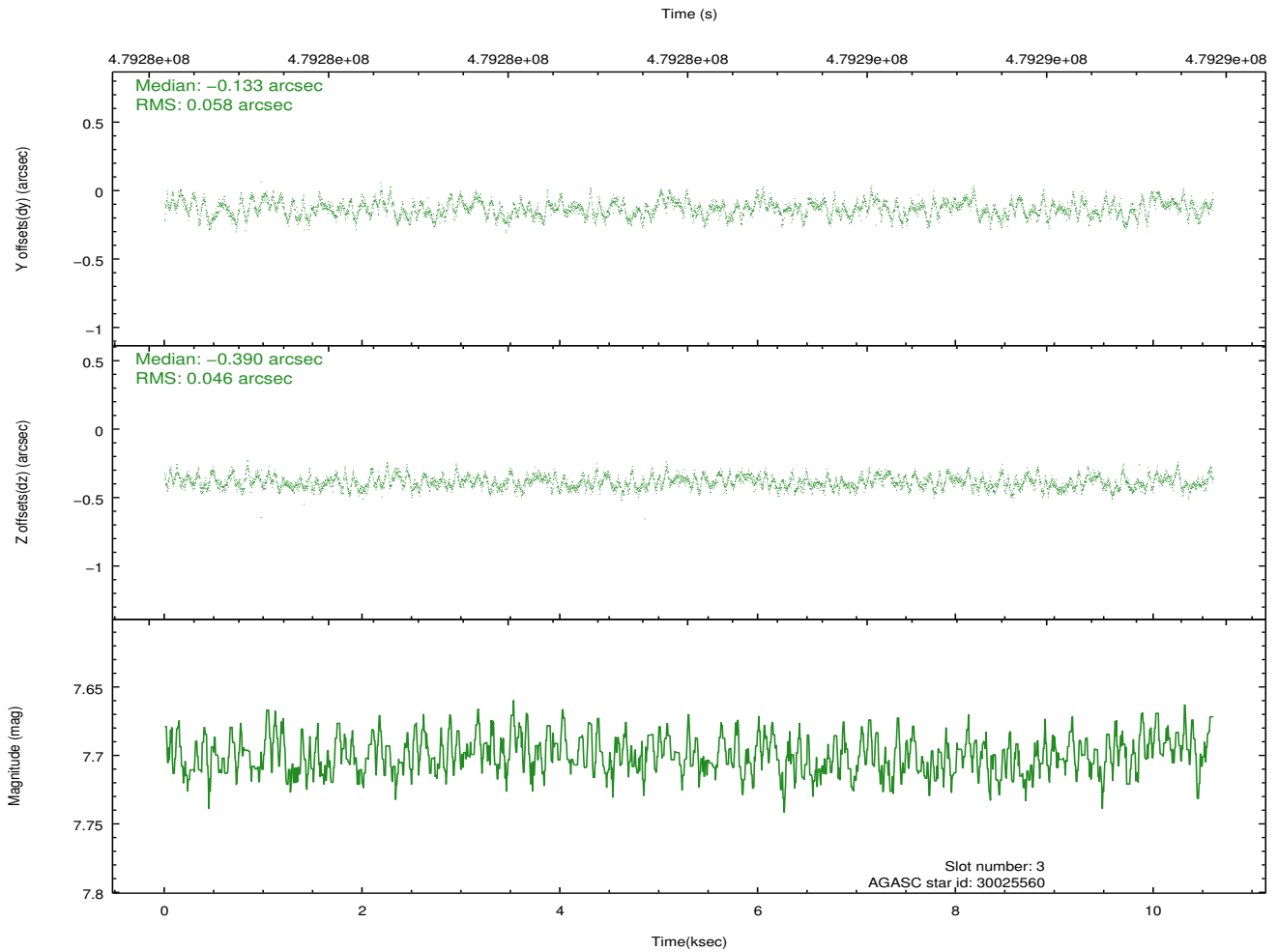
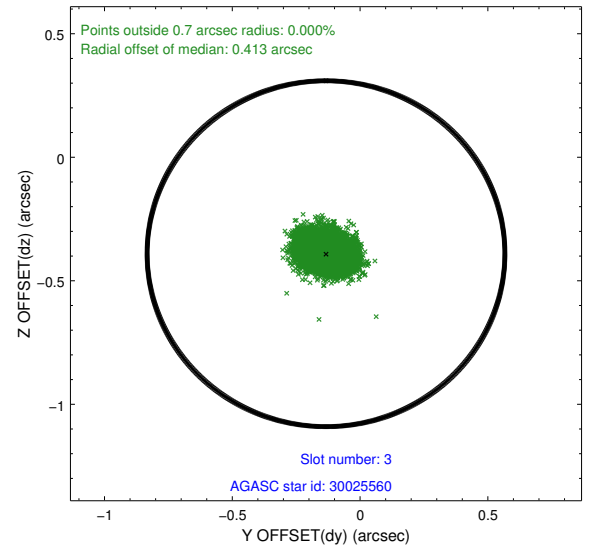
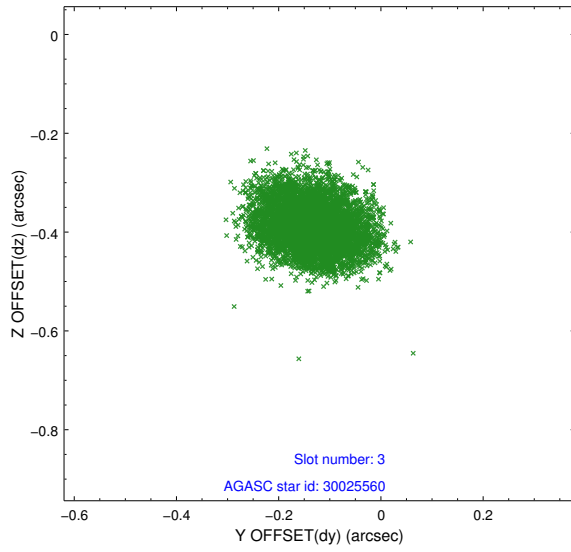


Slot Statistics

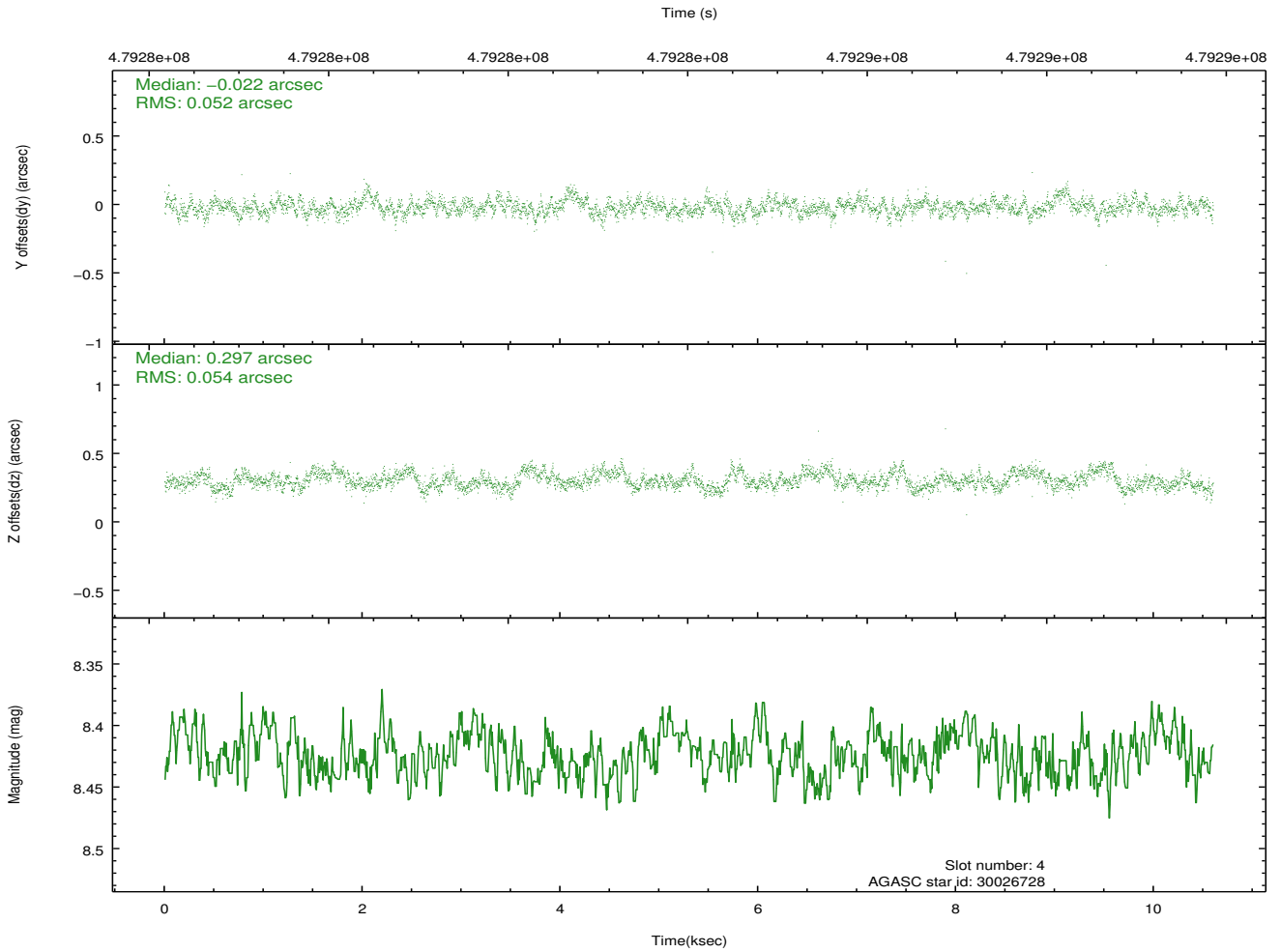
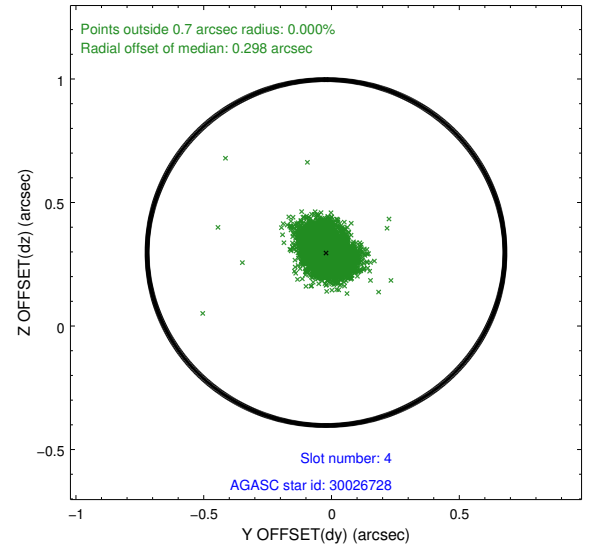
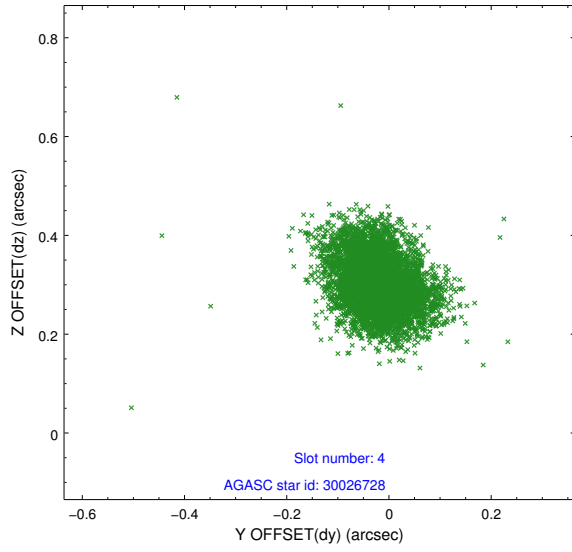
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-I-2	7.11	2586	-0.142	-0.083	0.011	0.019	0.000000	0.000000	-776.40	-1006.40
1	FID		ACIS-I-4	7.07	2586	0.261	0.103	0.014	0.031	0.000000	0.000000	2137.77	899.64
2	FID		ACIS-I-5	7.14	2586	-0.219	0.049	0.017	0.038	0.000000	0.000000	-1829.31	896.94
3	GUIDE	used	30025560	7.70	5172	-0.133	-0.390	0.080	0.125	136.165394	3.541087	85.83	1455.27
4	GUIDE	used	30026728	8.42	5168	-0.022	0.297	0.078	0.127	135.448963	3.354366	659.29	-1142.05
5	GUIDE	used	30027528	8.41	5169	-0.007	0.185	0.070	0.112	135.988247	3.862589	-1094.64	863.57
6	GUIDE	used	30028232	7.94	5171	0.078	-0.118	0.064	0.105	135.519682	3.279992	936.51	-898.94
7	GUIDE	used	30030552	8.70	5171	0.078	0.018	0.069	0.111	136.276122	2.942537	2254.79	1771.61

2.4 Star Slots

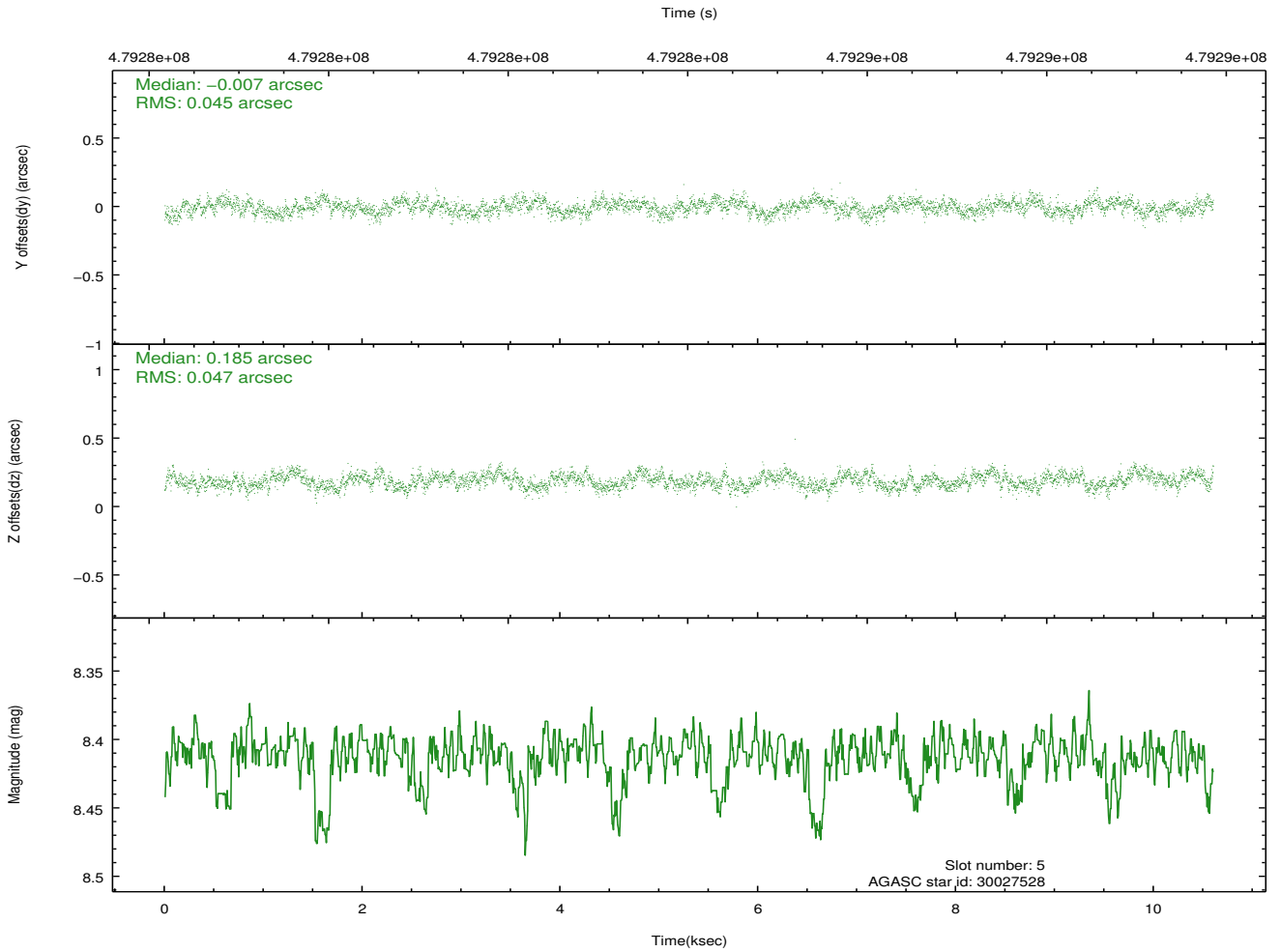
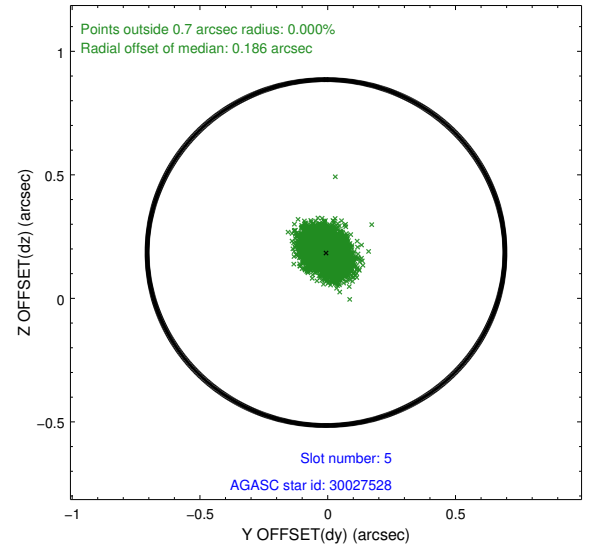
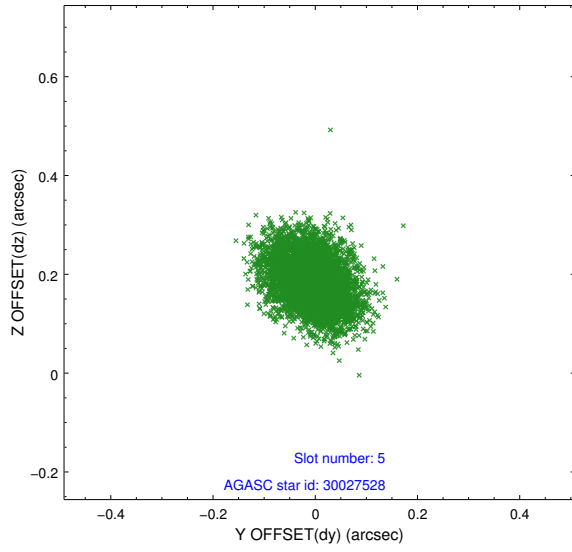
2.4.1 Slot 3



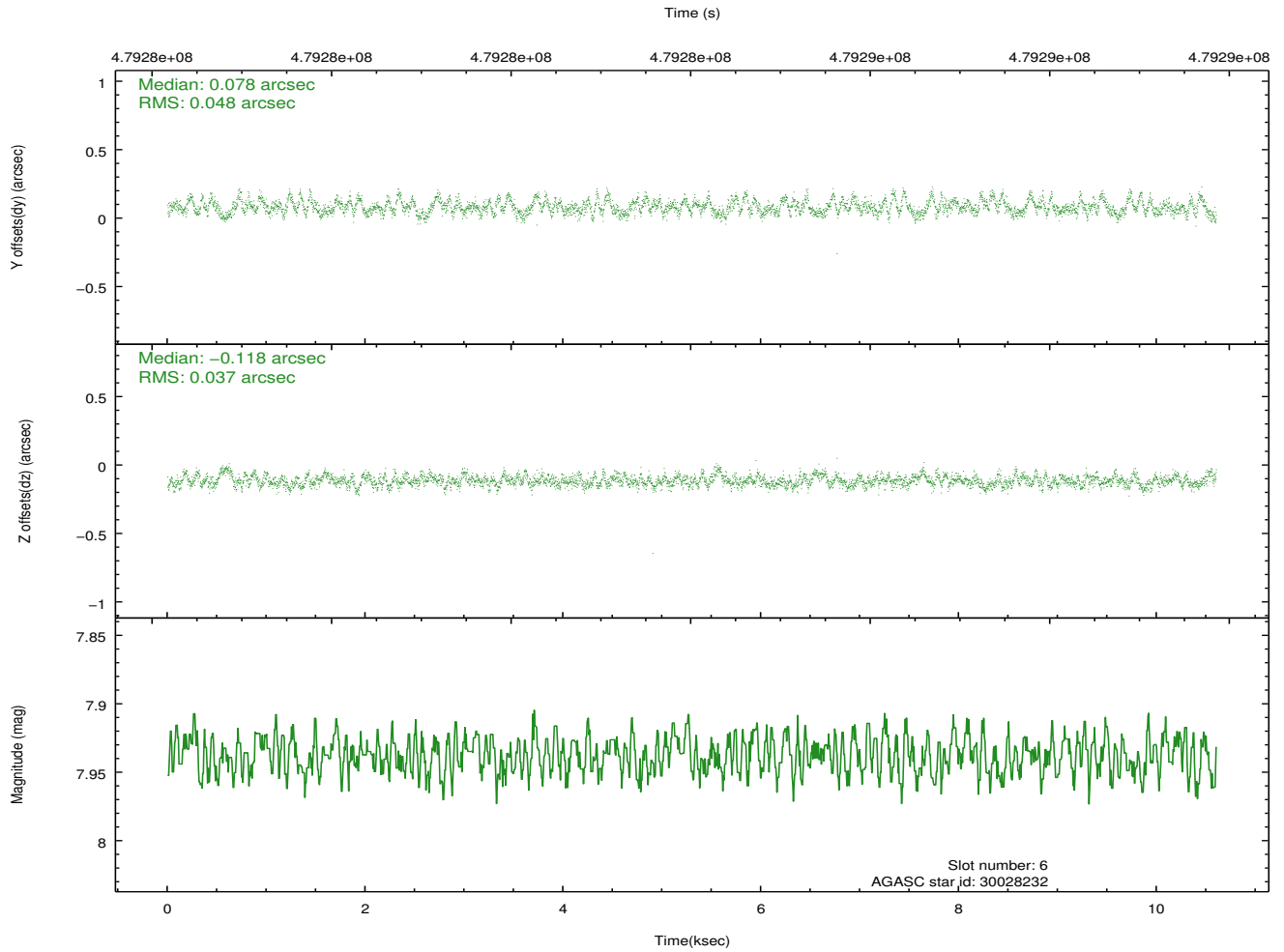
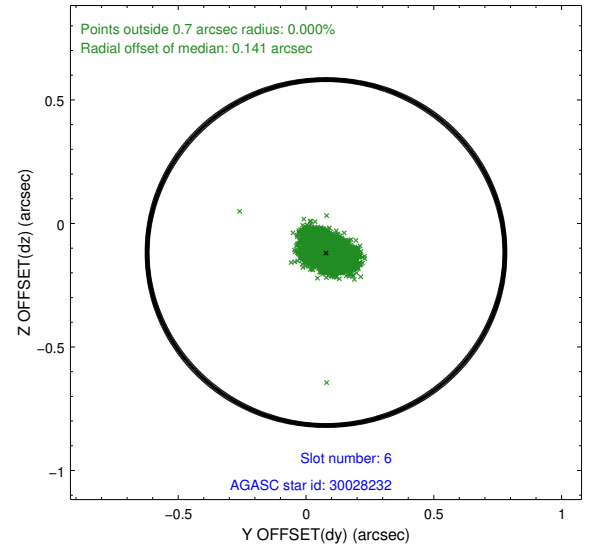
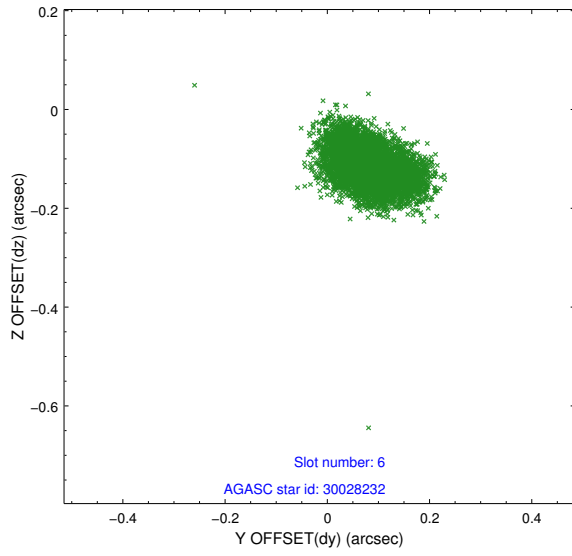
2.4.2 Slot 4



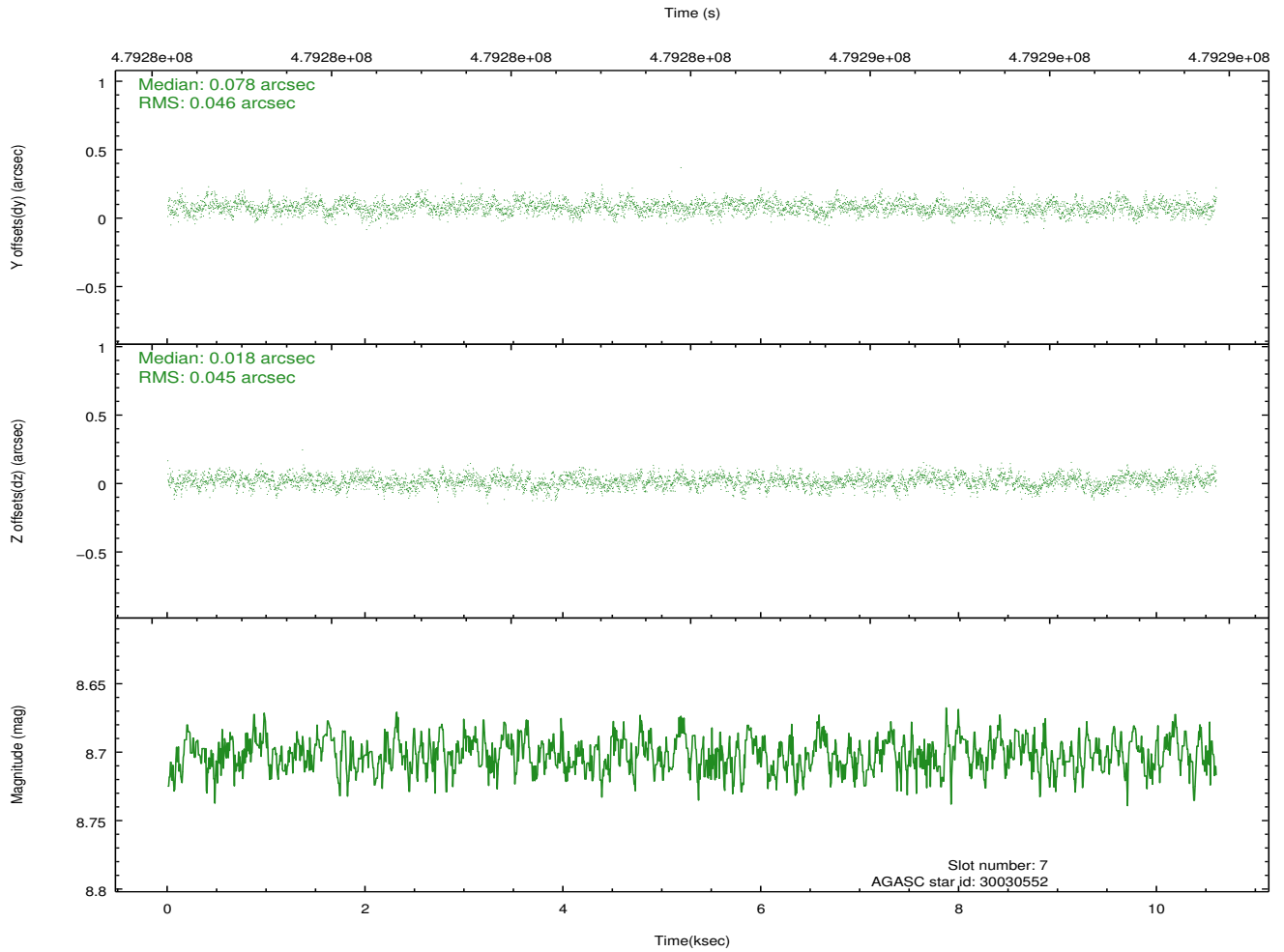
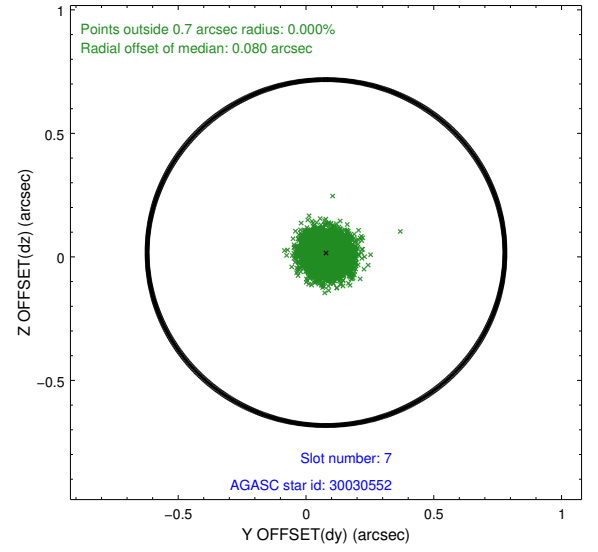
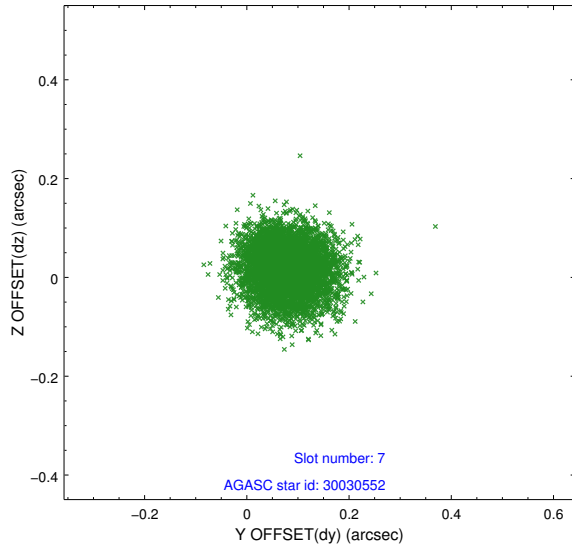
2.4.3 Slot 5



2.4.4 Slot 6

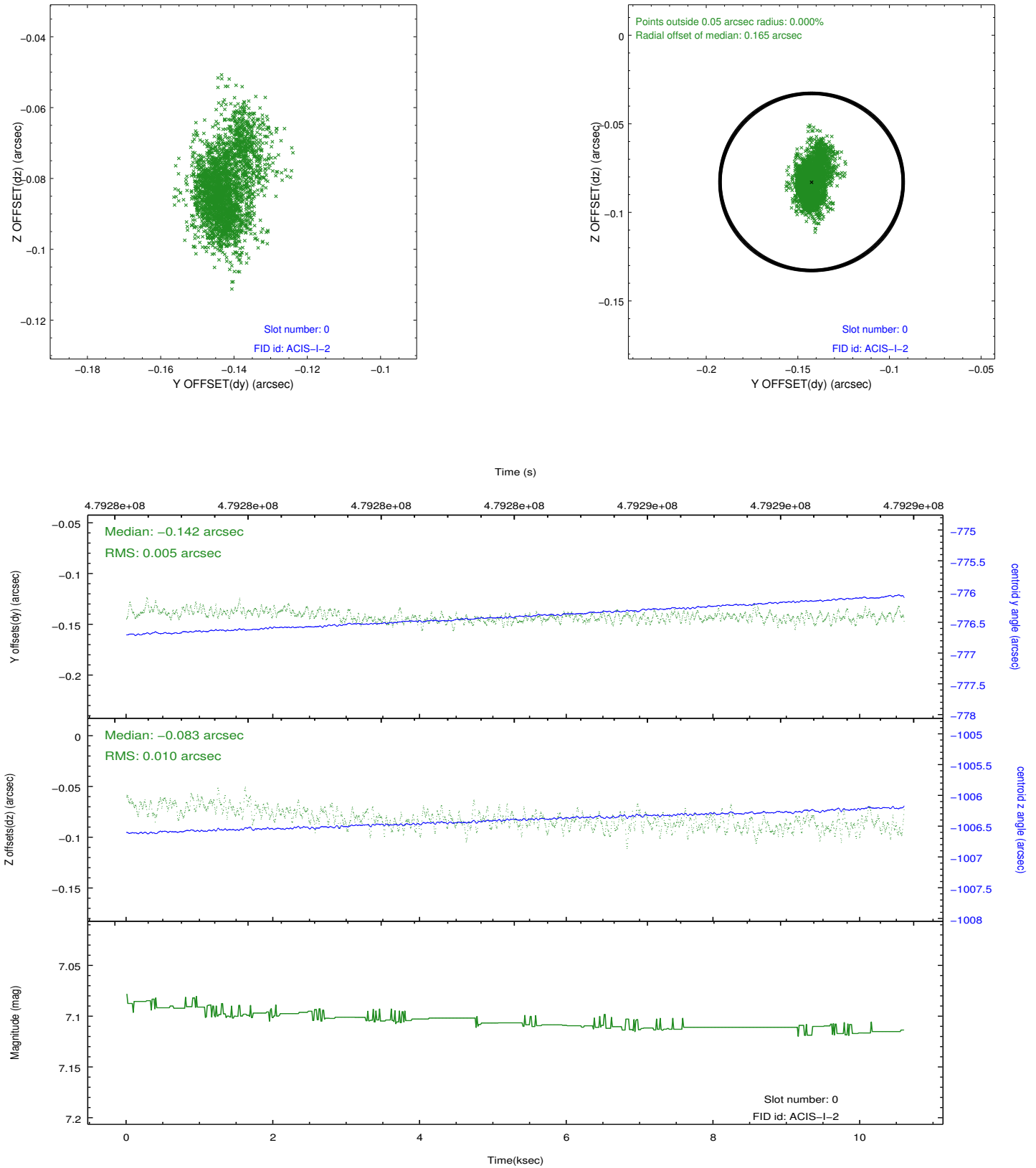


2.4.5 Slot 7

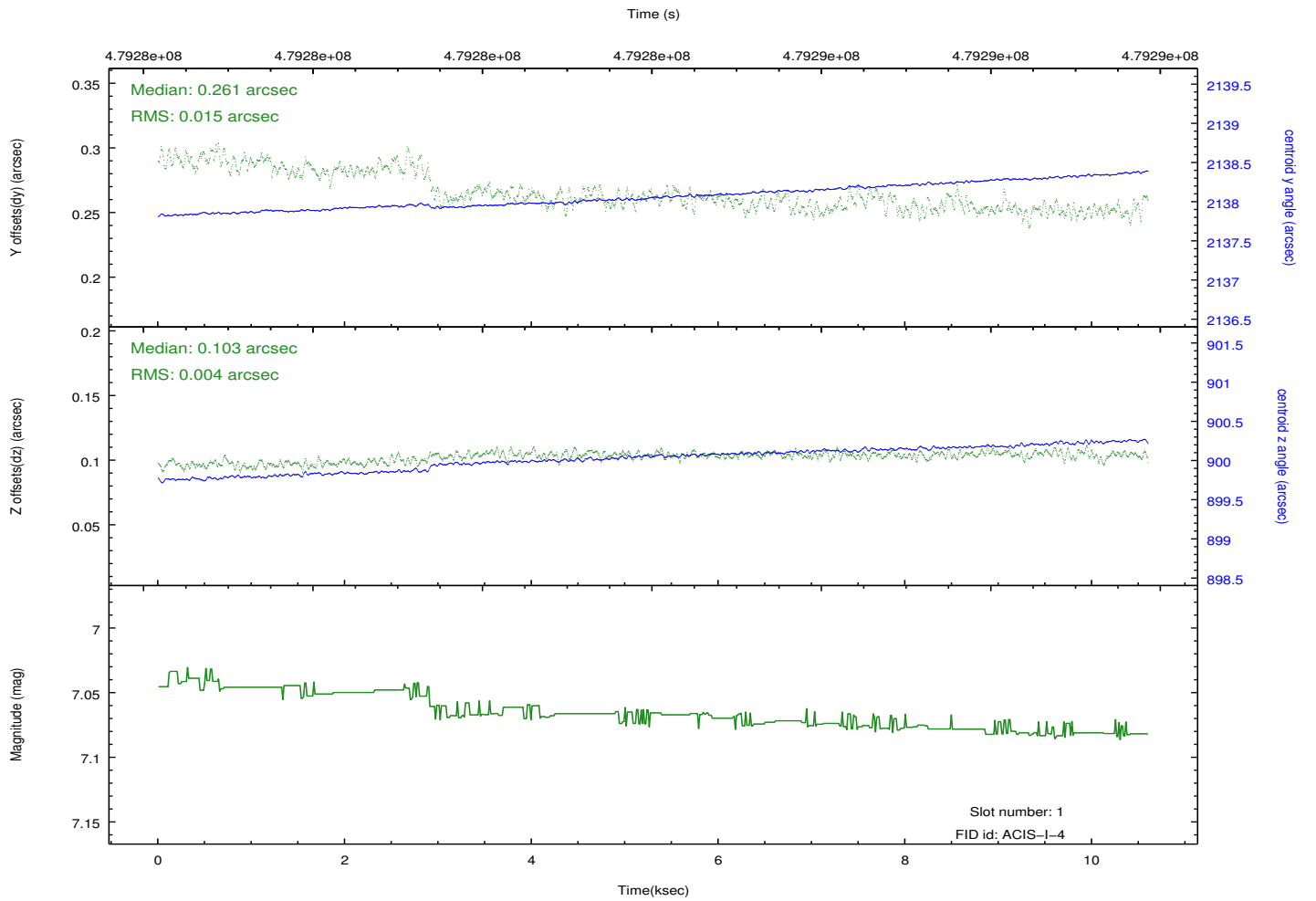
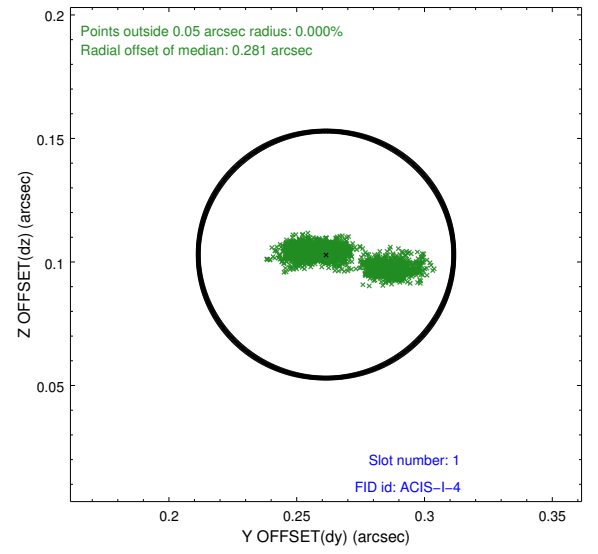
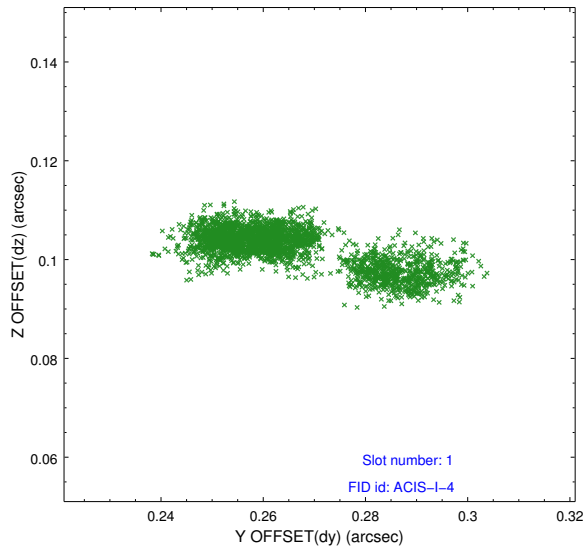


2.5 FID Slots

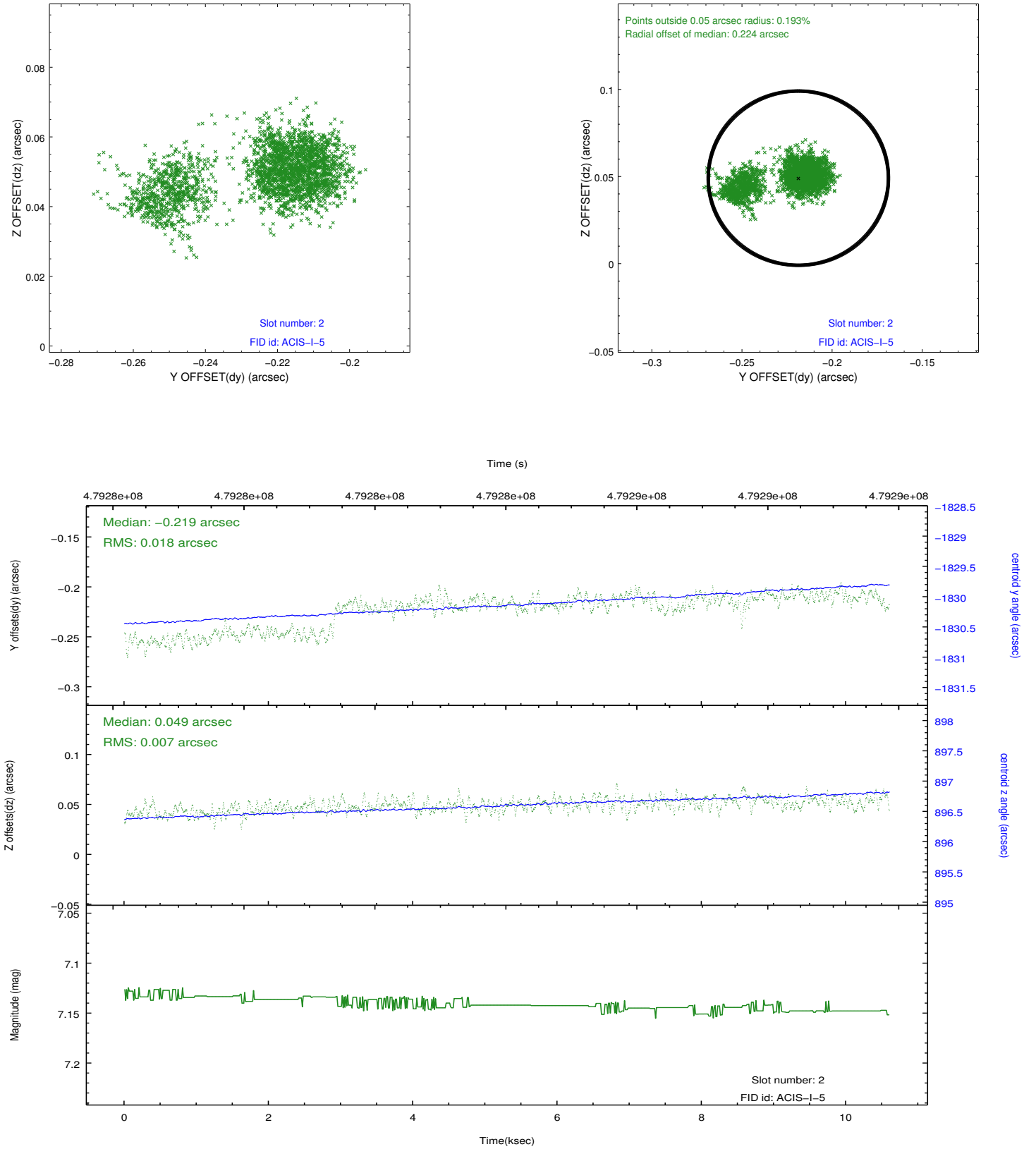
2.5.1 Slot 0



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	10.080683988094

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.