

V&V Reference Report

L2 ASCDS Version : 10.2.1

Observation 16161 - L2 Version 2
Chandra X-Ray Center

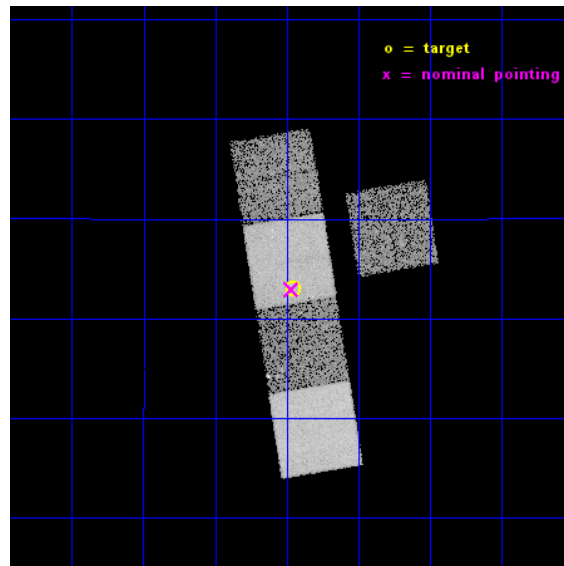
L2 Processing Date : Dec 11 2014

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1 Front

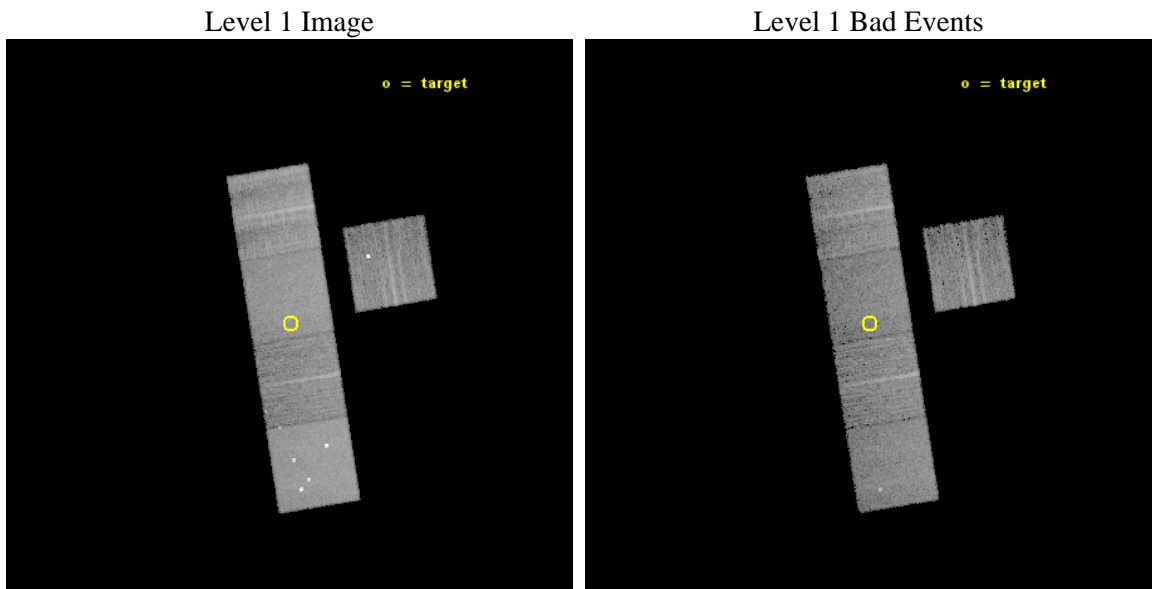
seq_num	901101	Sequence number
obs_id	16161	Observation id
title	The demographics of dark gamma-ray burst hosts	Proposal title
observer	Dr Andrew Levan	Principal investigator
object	GRB140331A	Source name
dtycycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	134.864417	Observer's specified target RA [deg]
dec_targ	2.717306	Observer's specified target Dec [deg]
ra_nom	134.8667205274	Nominal RA [deg]
dec_nom	2.7153021648405	Nominal Dec [deg]
roll_nom	260.76934753513	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15059.800115824	Sum of GTIs [s]
livetime	14863.032740447	Livetime [s]
ontime3	15059.800115824	Sum of GTIs [s]
ontime5	15059.800115824	Sum of GTIs [s]
ontime6	15059.800115824	Sum of GTIs [s]
ontime7	15059.800115824	Sum of GTIs [s]
ontime8	15059.800115824	Sum of GTIs [s]
l2events	116453	Number of level 2 events



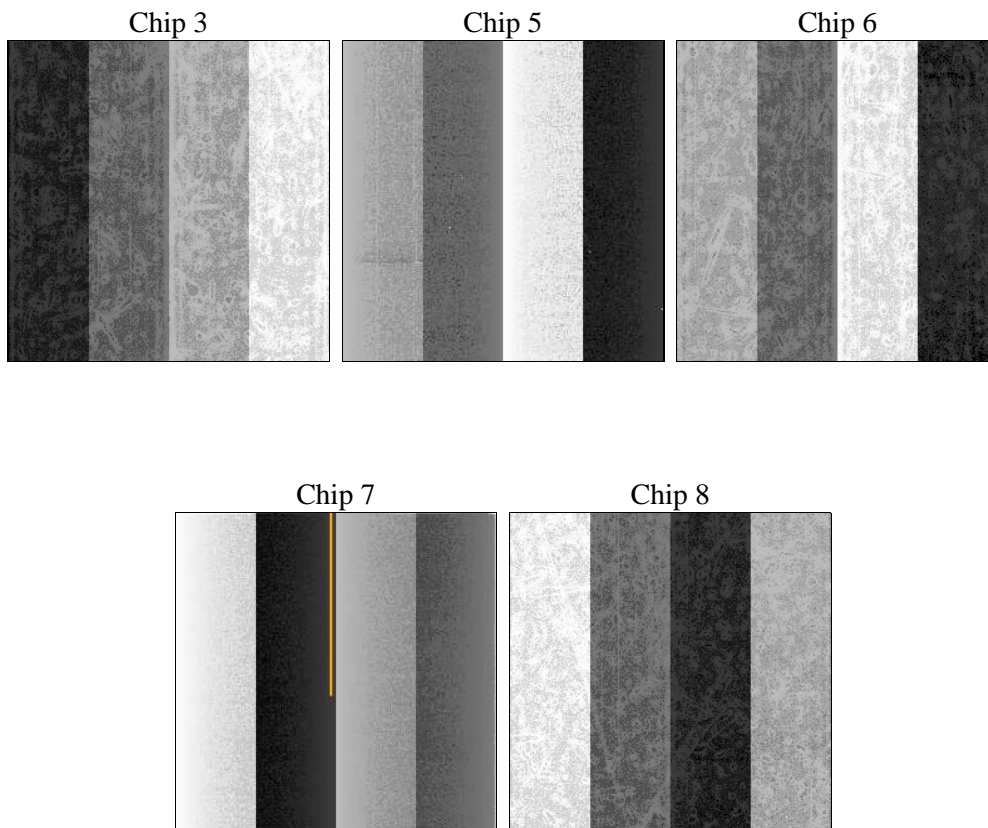
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	15000.000000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	15059.800115824	Sum of GTIs [s]
caldbver	4.6.4	 	ontime3	15059.800115824	Sum of GTIs [s]
date	2014-12-11T05:42:10	Date and time of file creation	ontime5	15059.800115824	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15059.800115824	Sum of GTIs [s]
			ontime7	15059.800115824	Sum of GTIs [s]
			ontime8	15059.800115824	Sum of GTIs [s]
			l1events	473224	Number of level 1 events

2.1.4 Events

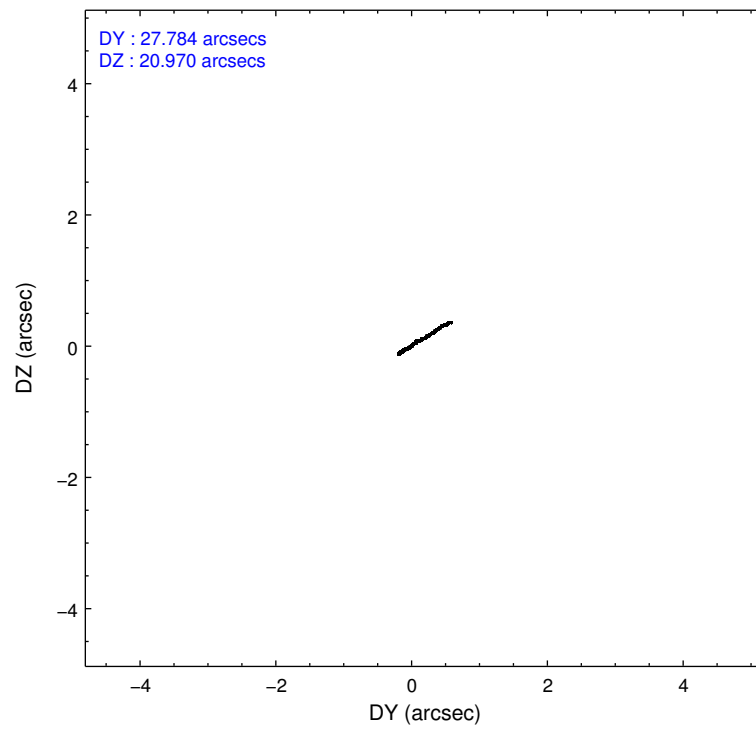
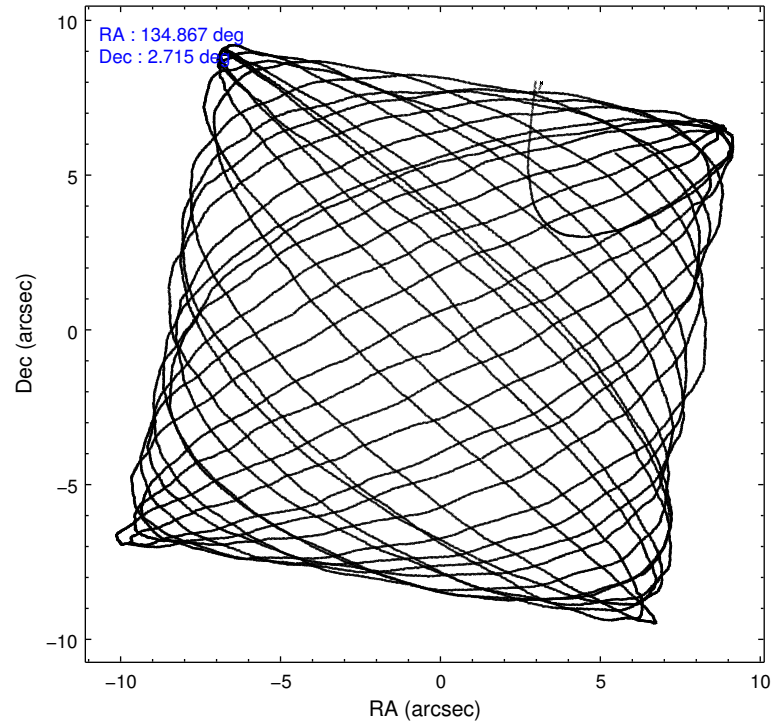
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	72207	128592	71429	97133	103863
rejected events	59760	61608	62663	55189	70732
rejected %	82%	47%	87%	56%	68%

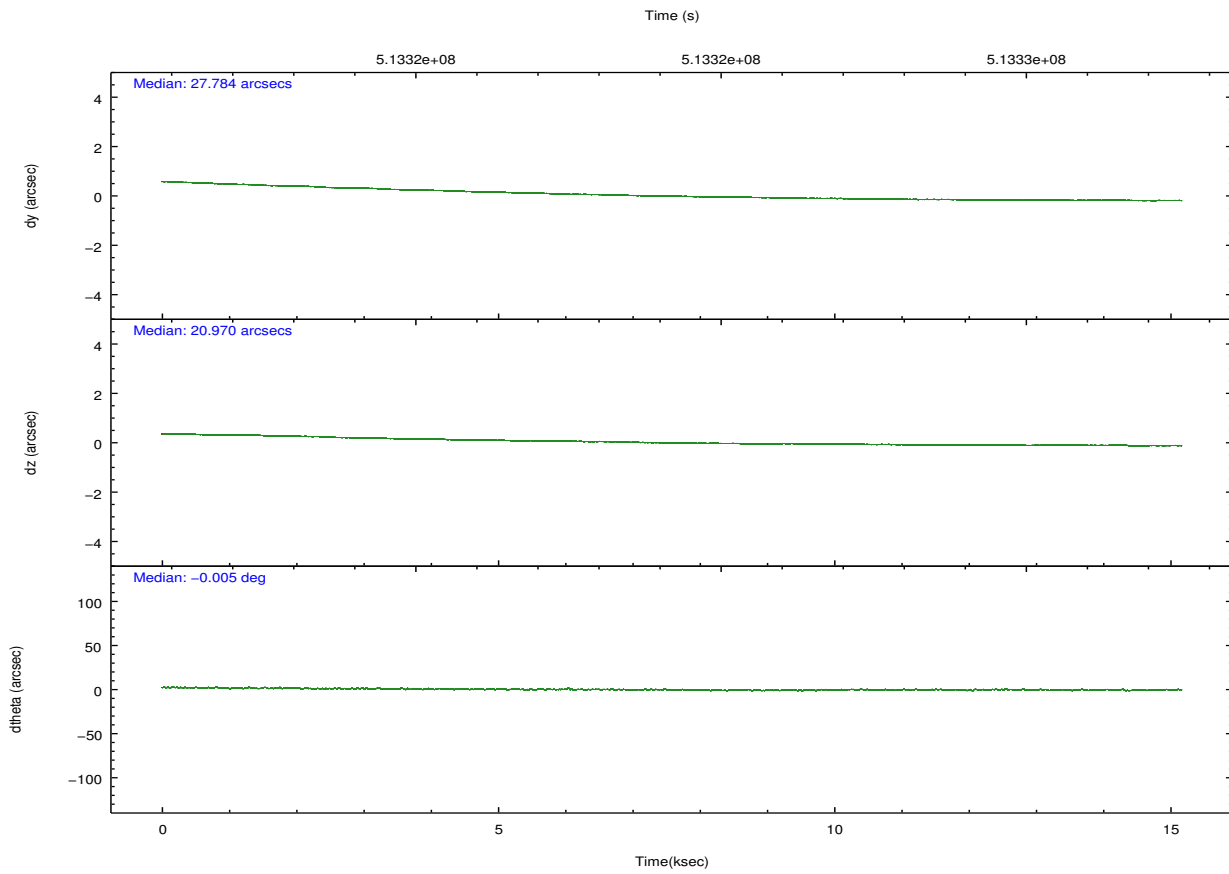
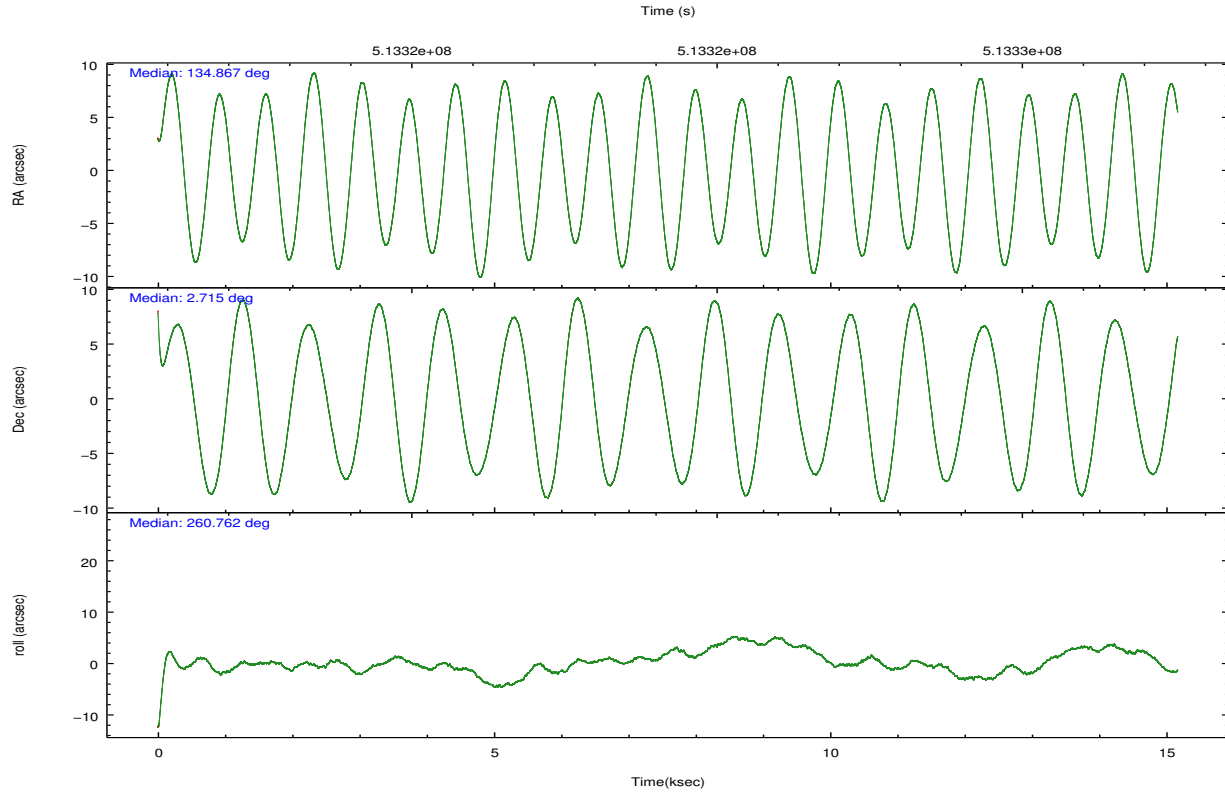
	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
grade 0 events	7296	12242	3057	3735	9600
	10%	9%	4%	3%	9%
grade 1 events	46	731	38	112	74
	0%	0%	0%	0%	0%
grade 2 events	1727	20759	2003	8589	6975
	2%	16%	2%	8%	6%
grade 3 events	846	2042	887	3585	4200
	1%	1%	1%	3%	4%
grade 4 events	846	1924	849	3550	3974
	1%	1%	1%	3%	3%
grade 5 events	3712	8639	3744	10000	5445
	5%	6%	5%	10%	5%
grade 6 events	1738	30072	1975	22510	8402
	2%	23%	2%	23%	8%
grade 7 events	55996	52183	58876	45052	65193
	77%	40%	82%	46%	62%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-35678	ACIS-35678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	134.856620	134.8667205274041	CCD I2 on	N	N
[deg] Pointing Dec	2.740724	2.715302164840458	CCD I3 on	O1	Y
[deg] Pointing Roll	260.613204	260.7693475351286	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O2	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1400660498719	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.00754346686406393	CCD S4 on	O3	Y
[s] Observation start time (MET)	513316767.184000	513315562.63106	CCD S5 on	N	N
Observation start date	2014-04-08T03:58:20	2014-04-08T03:39:22	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	513331767.184000	513332356.74448	On-chip summing requested	N	N
Observation end date	2014-04-08T08:08:20	2014-04-08T08:19:16	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.1

2.3 Aspect



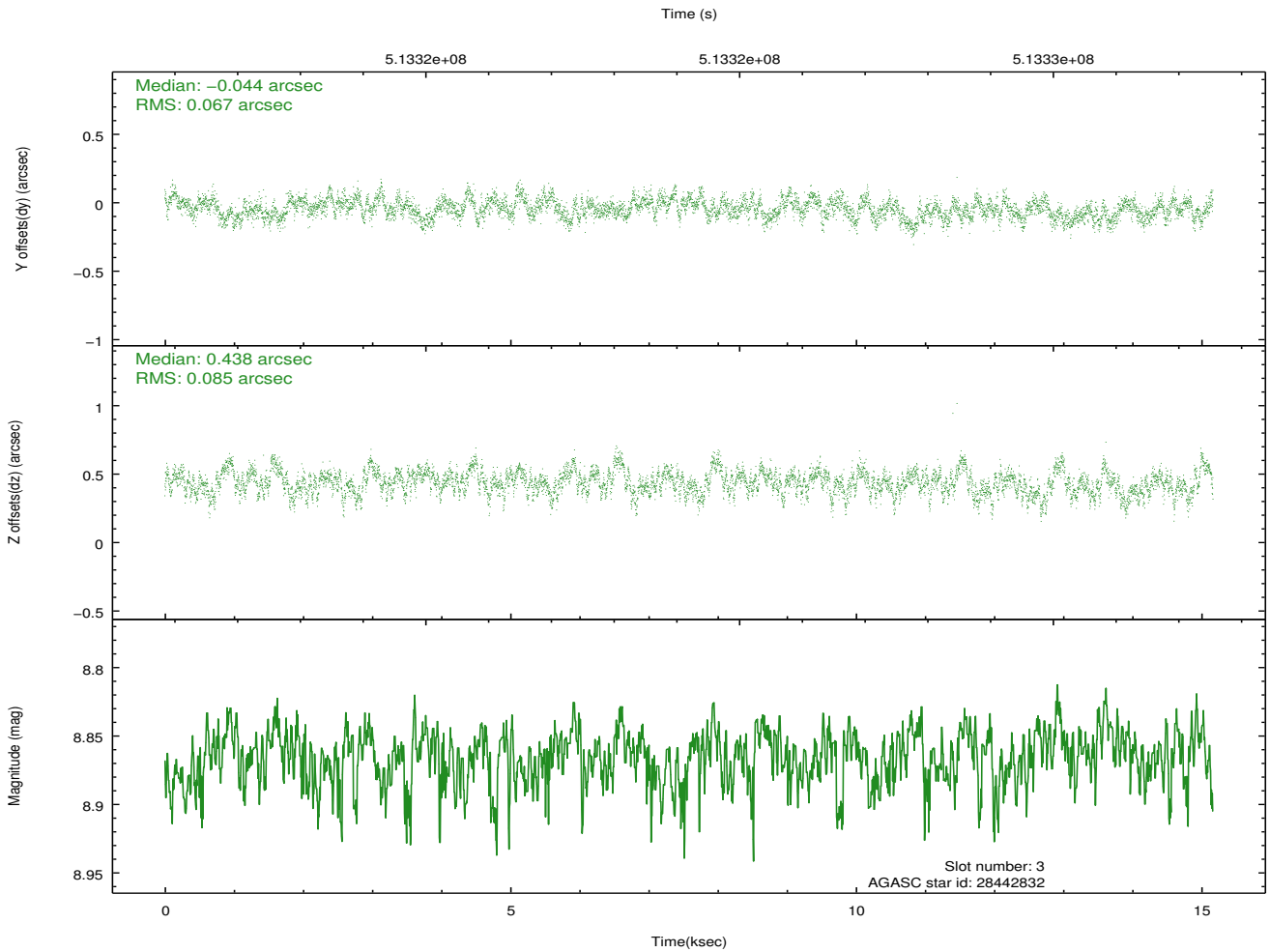
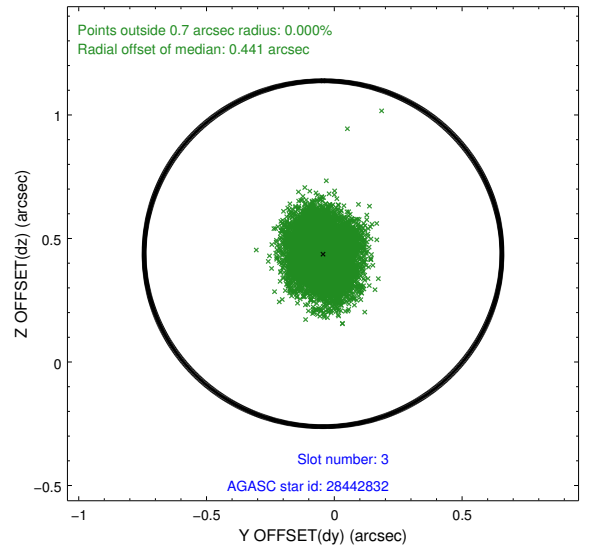
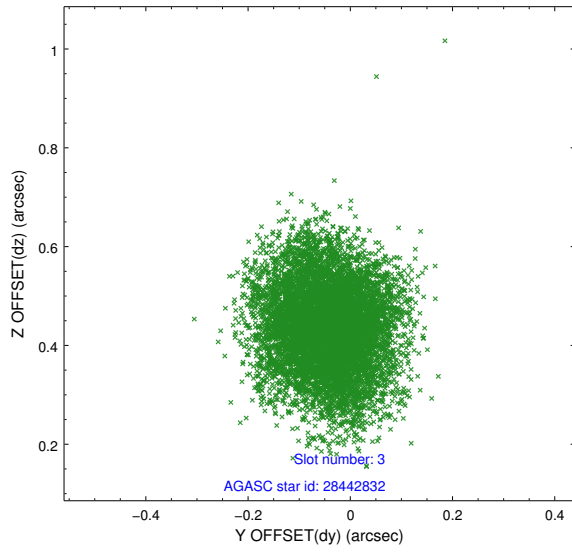


Slot Statistics

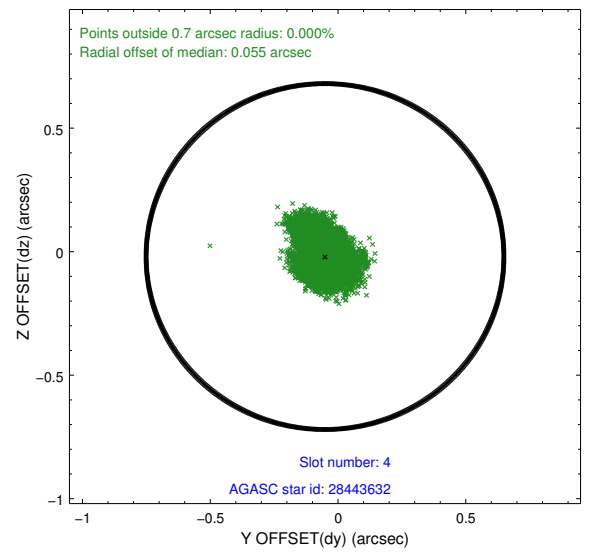
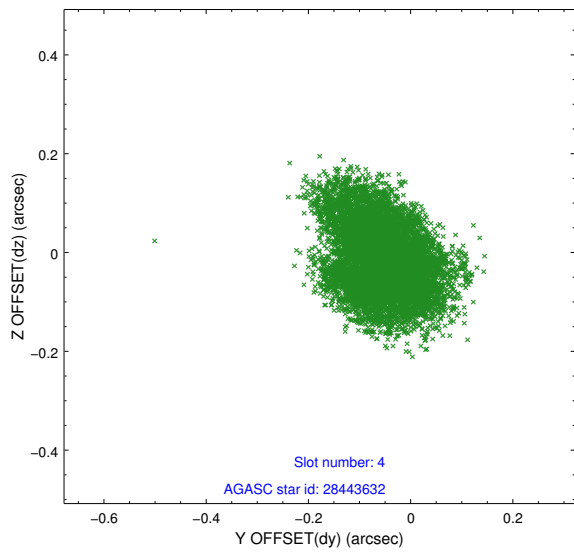
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	7.02	3700	-0.203	-0.019	0.010	0.016	0.000000	0.000000	-781.35	-1742.58
1	FID		ACIS-S-4	7.12	3700	0.426	0.102	0.013	0.023	0.000000	0.000000	2132.40	165.73
2	FID		ACIS-S-5	7.14	3700	-0.257	-0.075	0.009	0.014	0.000000	0.000000	-1833.89	159.53
3	GUIDE	used	28442832	8.86	7396	-0.044	0.438	0.115	0.184	134.452892	3.435697	-2231.02	-1839.21
4	GUIDE	used	28443632	7.20	7398	-0.051	-0.020	0.095	0.155	134.306829	2.524874	1089.48	-1824.55
5	GUIDE	used	28448720	8.70	7397	0.307	0.039	0.097	0.163	134.139253	2.392272	1659.18	-2340.98
6	GUIDE	used	28450728	9.22	7392	-0.020	-0.306	0.166	0.257	134.920169	2.362503	1306.84	447.48
7	GUIDE	used	30028232	7.93	7393	-0.199	-0.158	0.081	0.139	135.519682	3.279992	-2304.51	2034.51

2.4 Star Slots

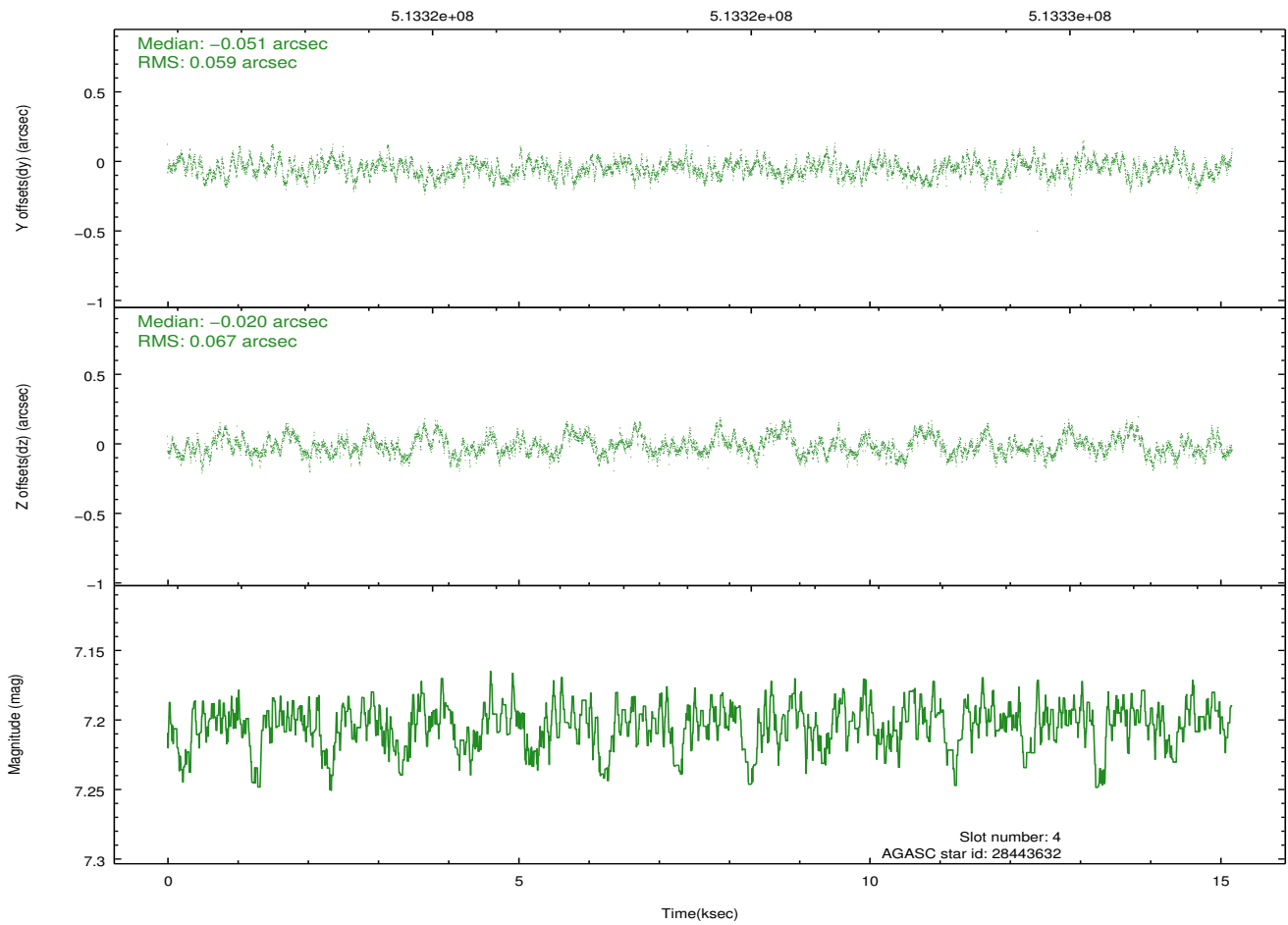
2.4.1 Slot 3



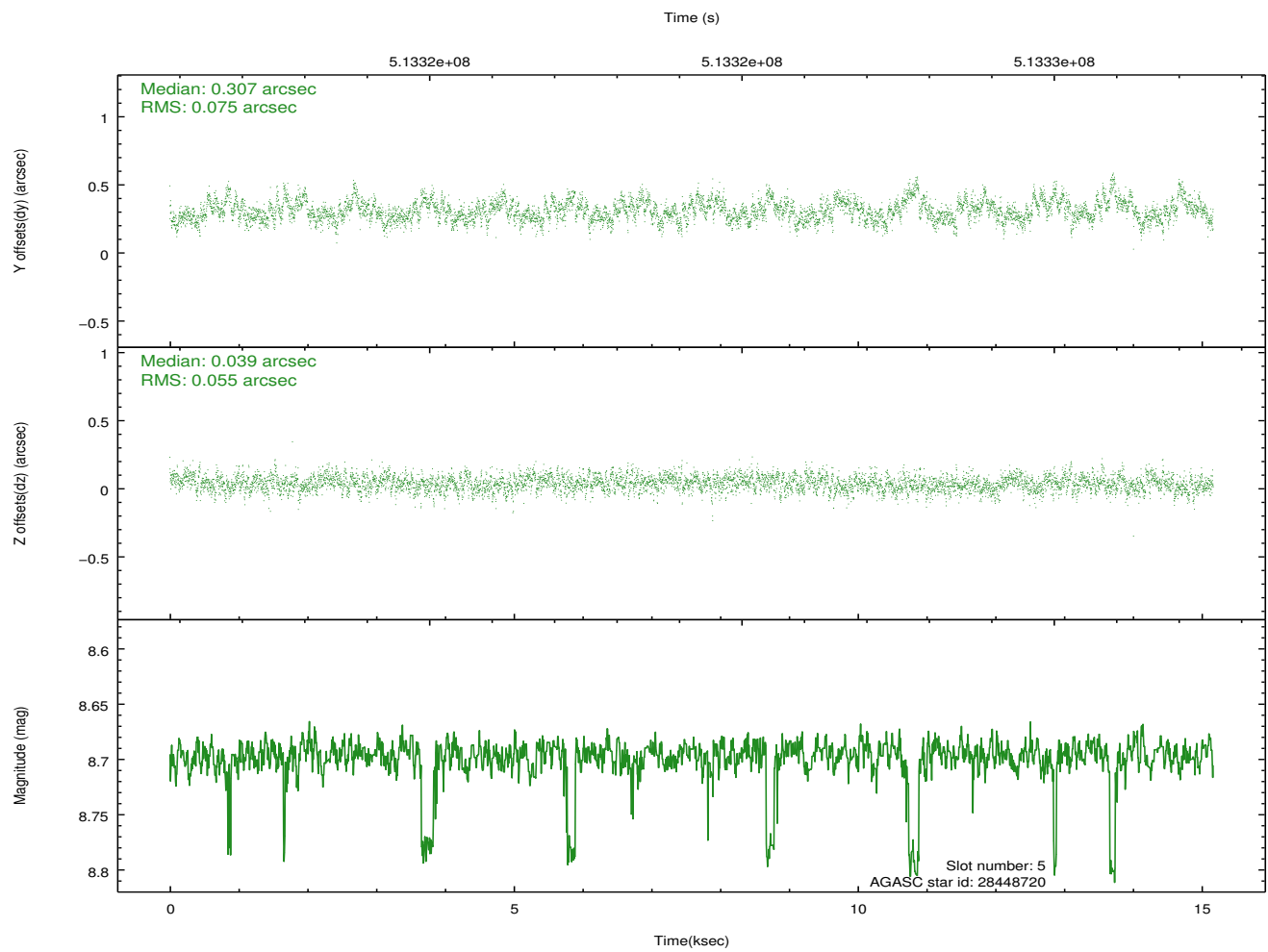
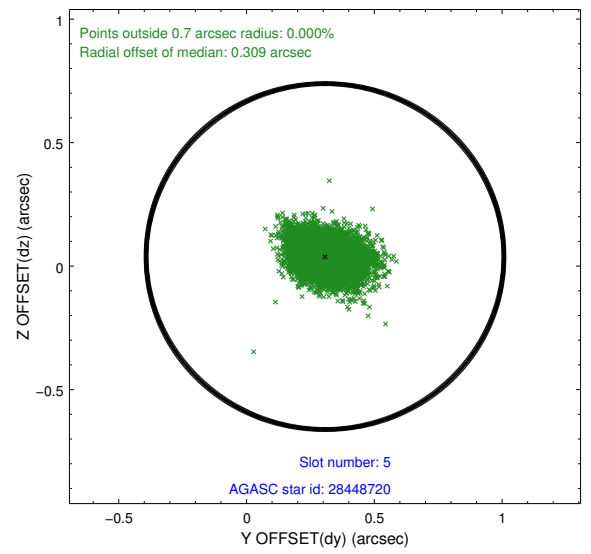
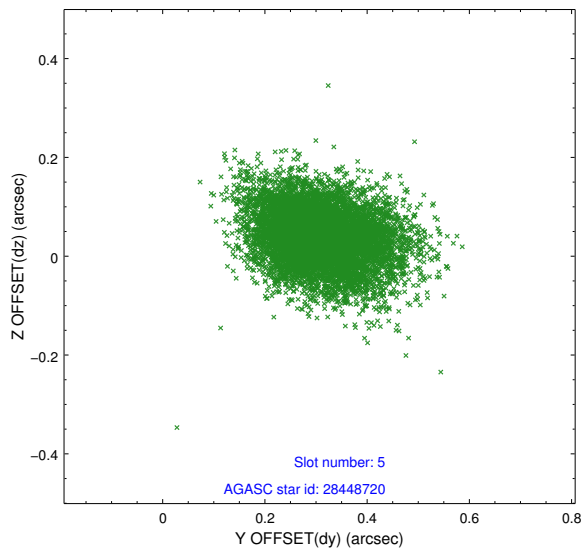
2.4.2 Slot 4



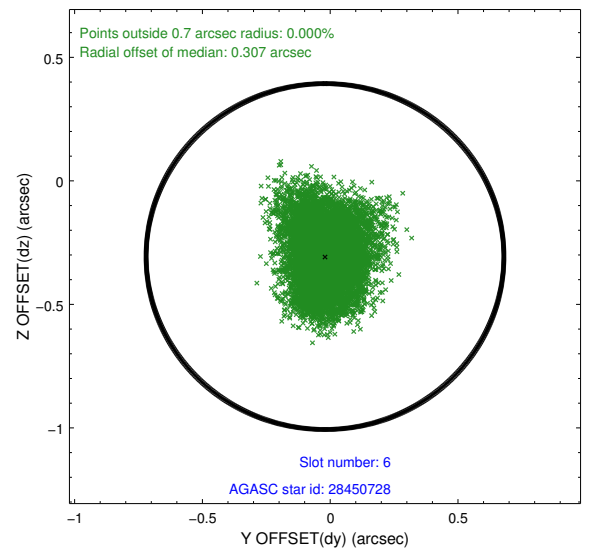
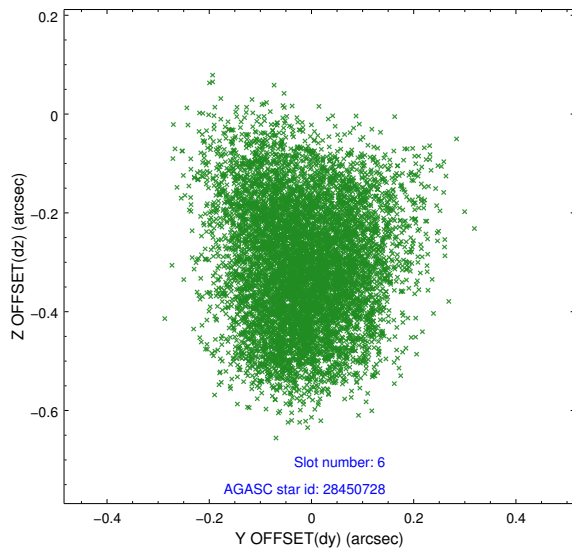
Time (s)



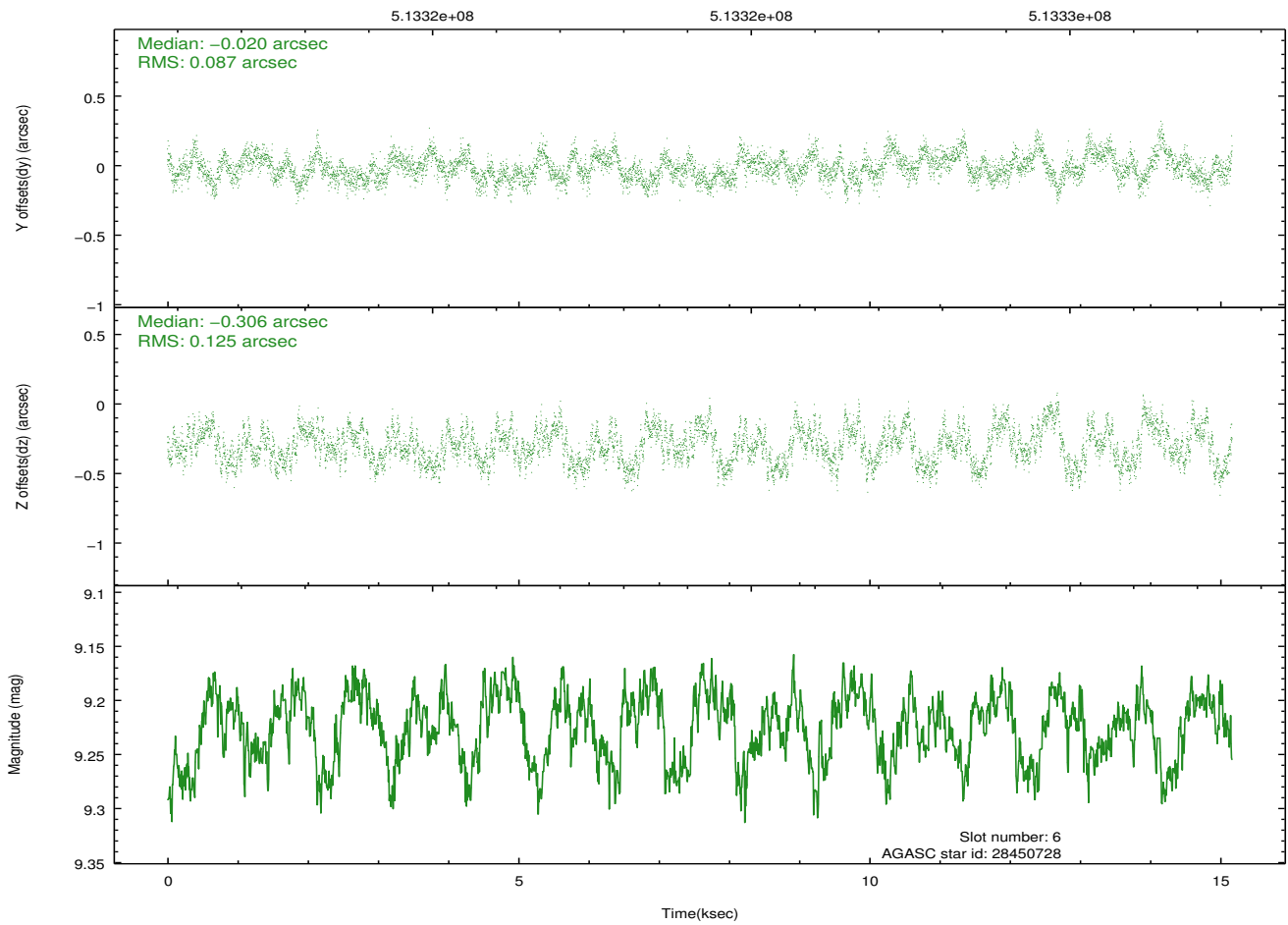
2.4.3 Slot 5



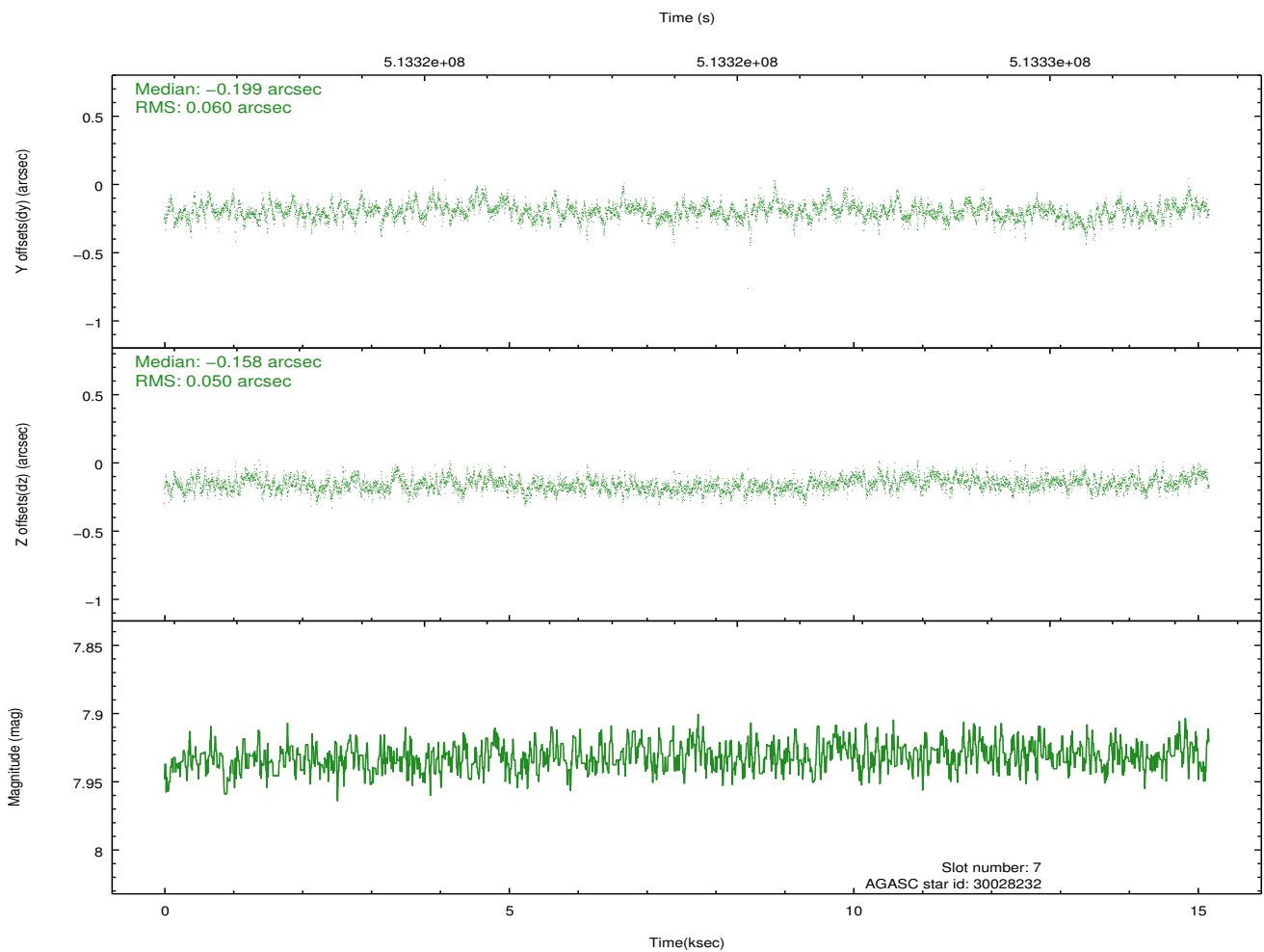
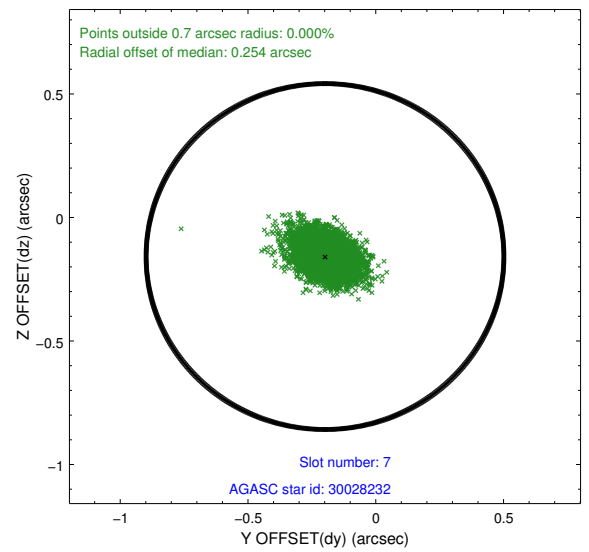
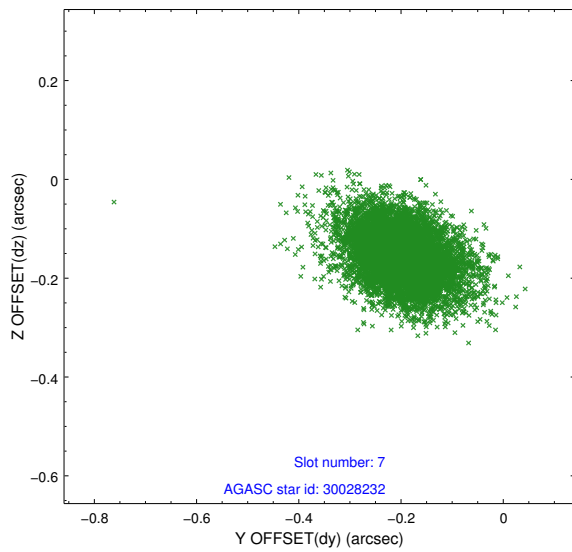
2.4.4 Slot 6



Time (s)

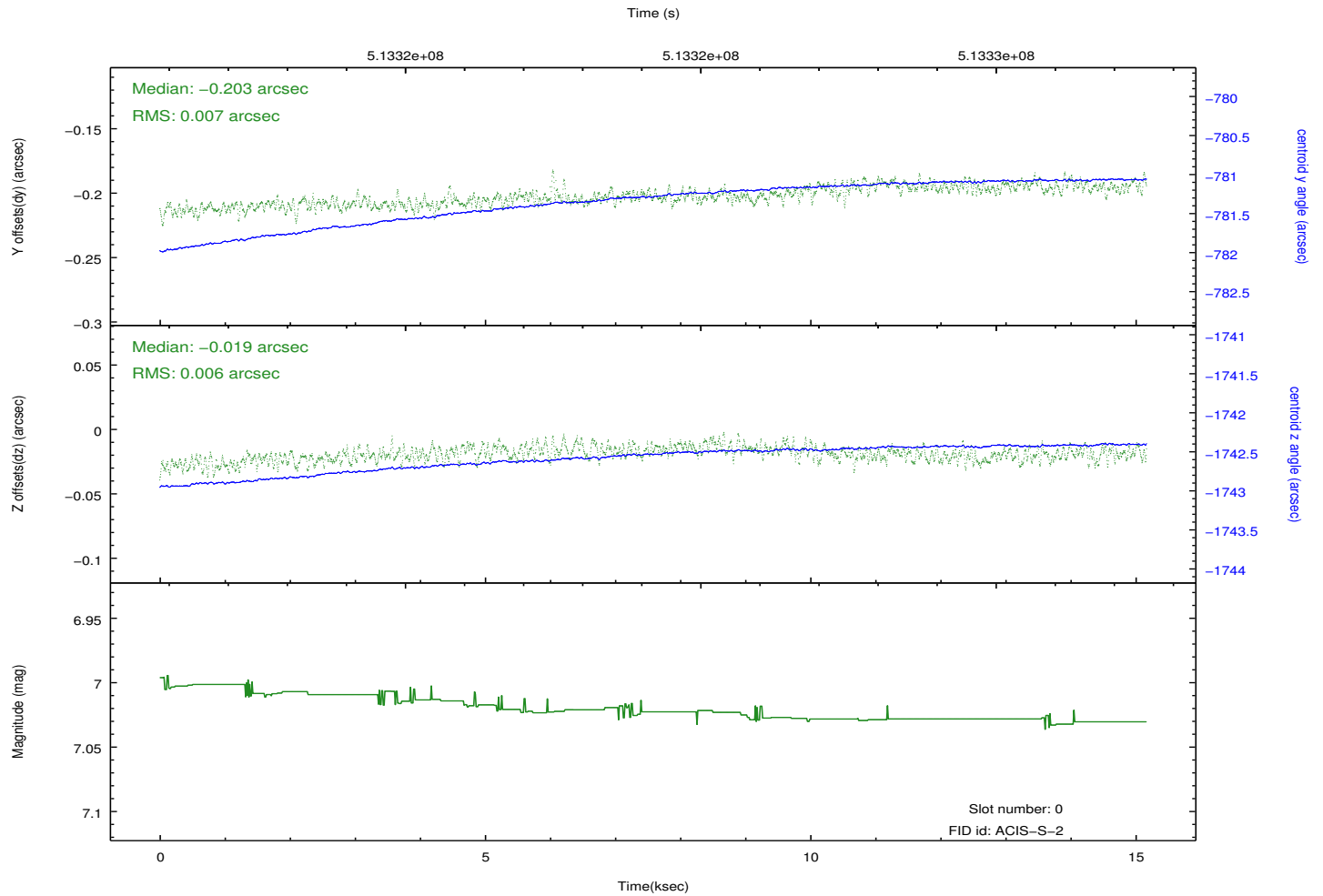
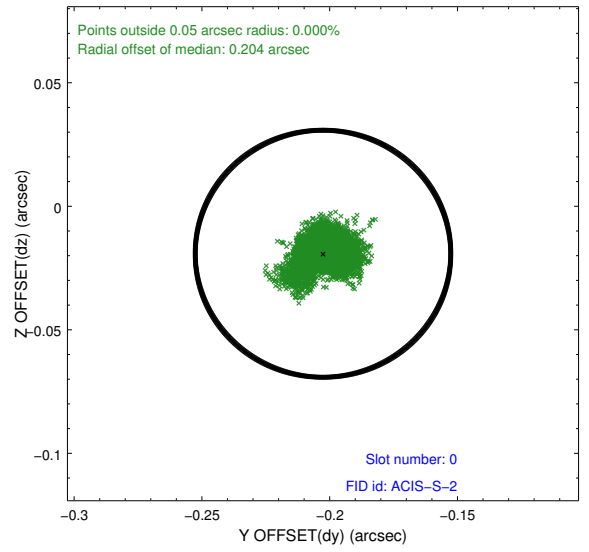
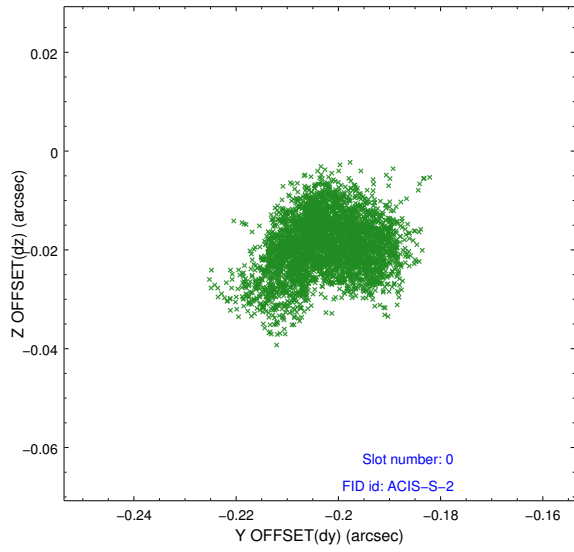


2.4.5 Slot 7

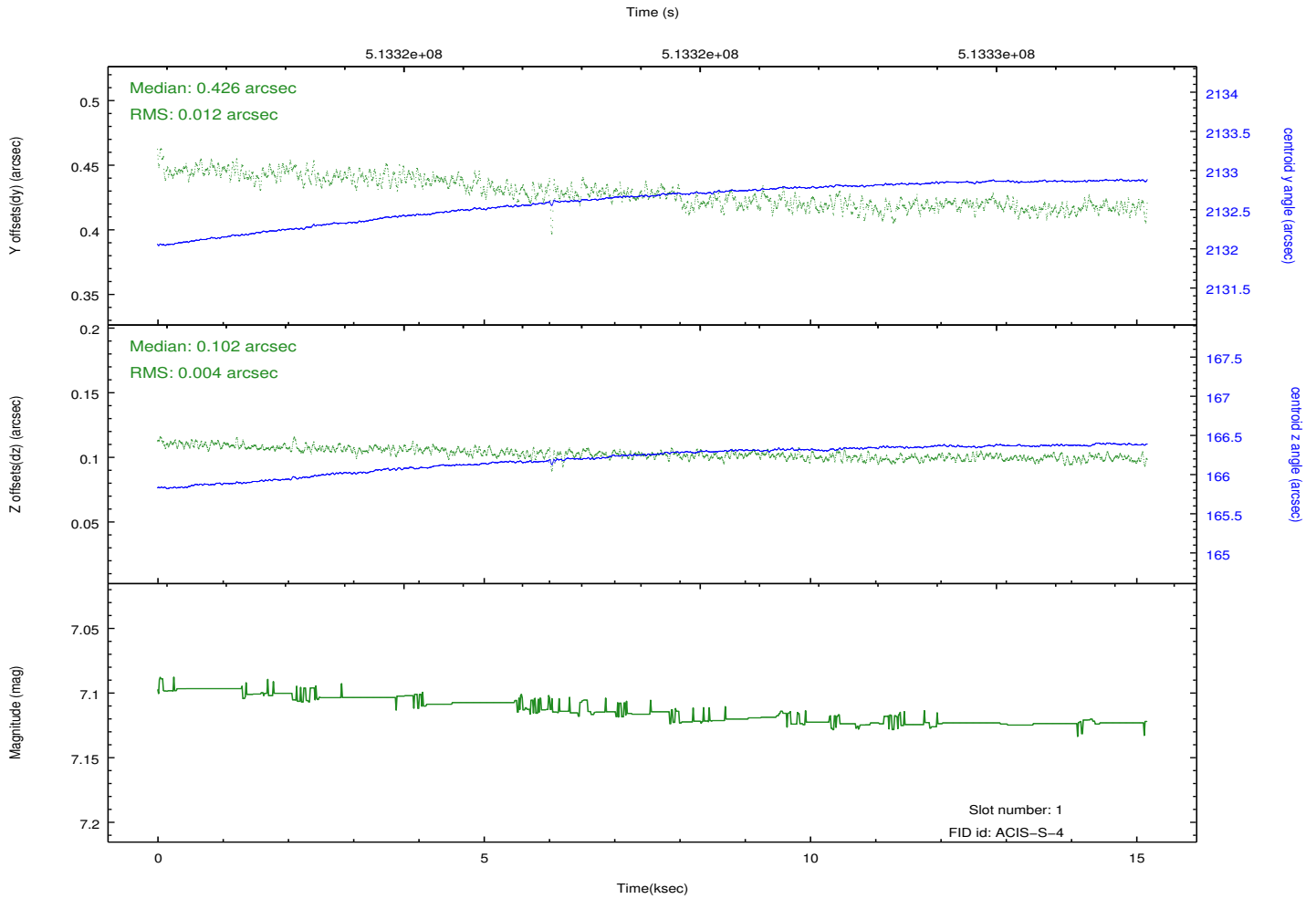
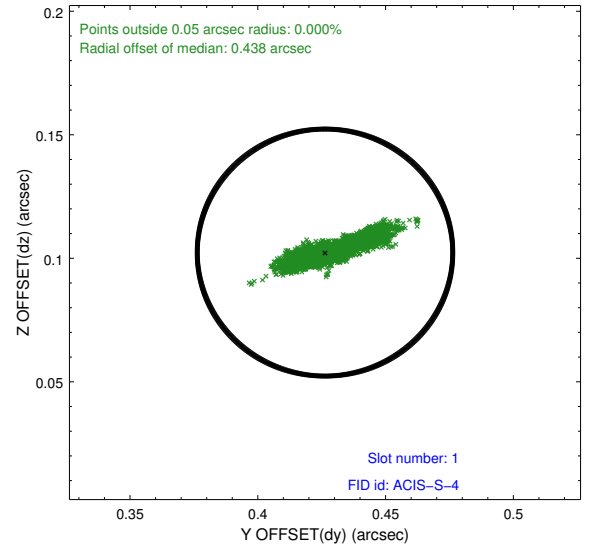
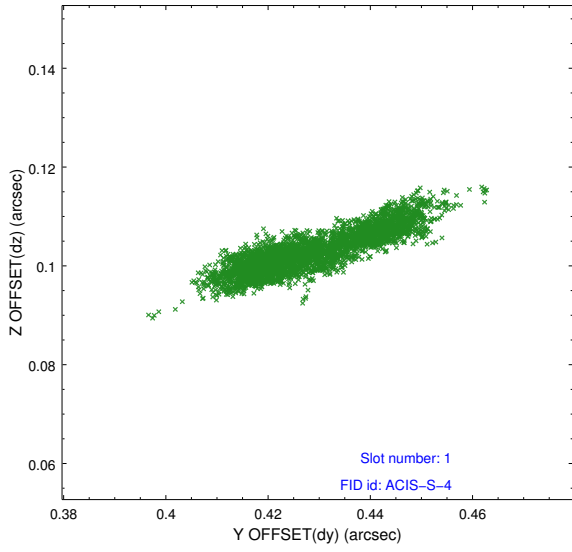


2.5 FID Slots

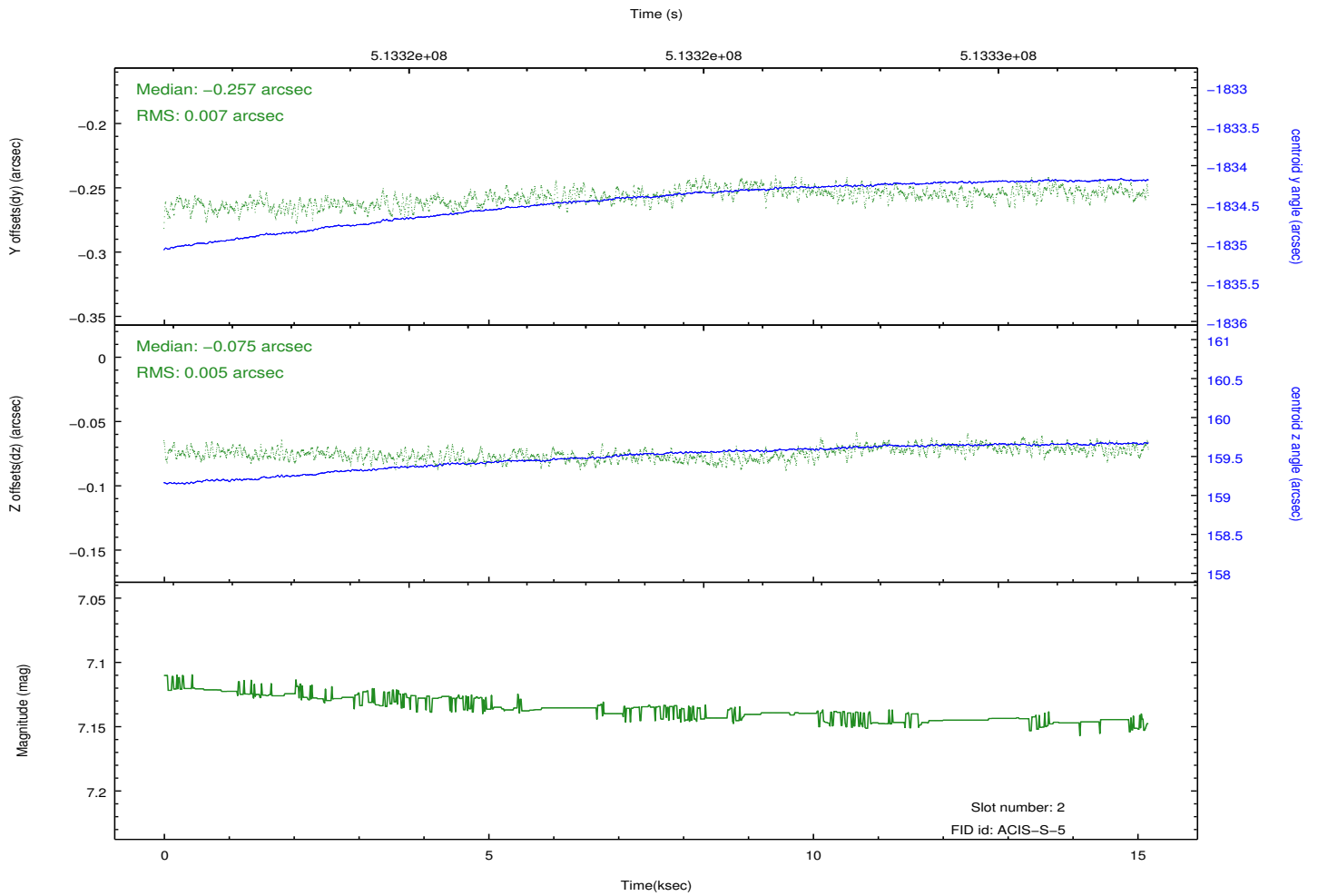
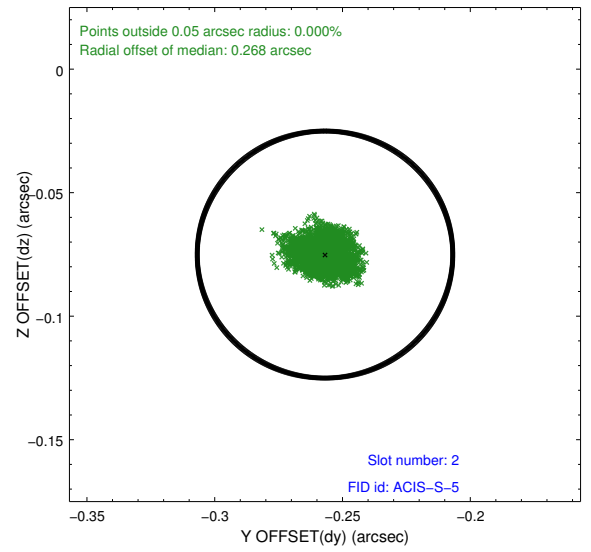
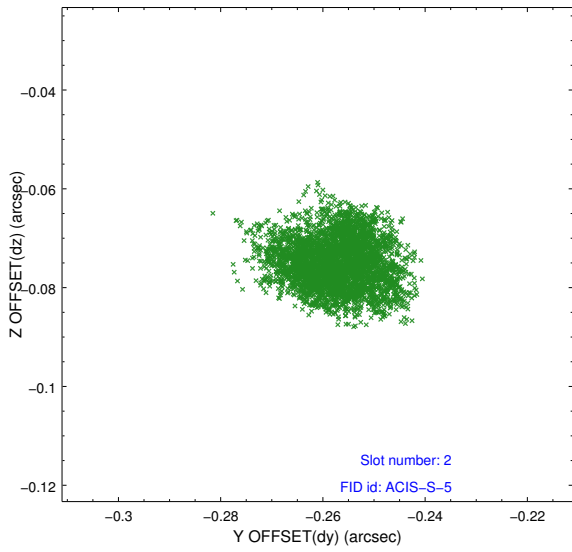
2.5.1 Slot 0



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)	2014.12.18
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.059800115824

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.