

V&V Reference Report

L2 ASCDS Version : 10.6

Observation 20425 - L2 Version 2
Chandra X-Ray Center

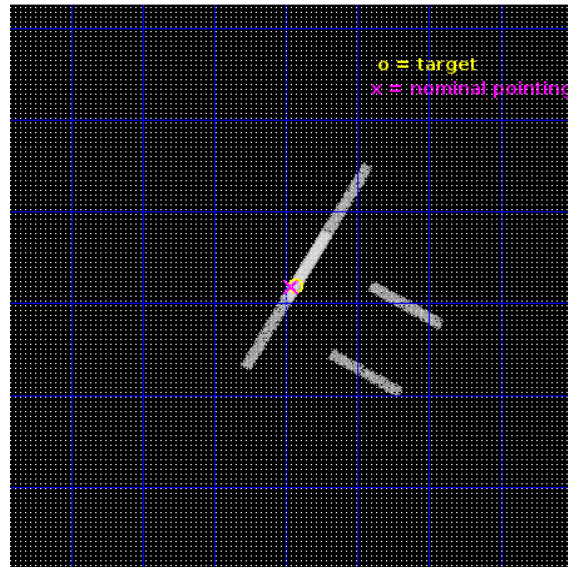
L2 Processing Date : Dec 28 2017

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 6	10
2.4.3	Slot 7	11
2.5	FID Slots	12
2.5.1	Slot 0	12
2.5.2	Slot 1	13
2.5.3	Slot 2	14
A	Summary	15
A.1	Status	15
A.2	Comments	15

1 Front

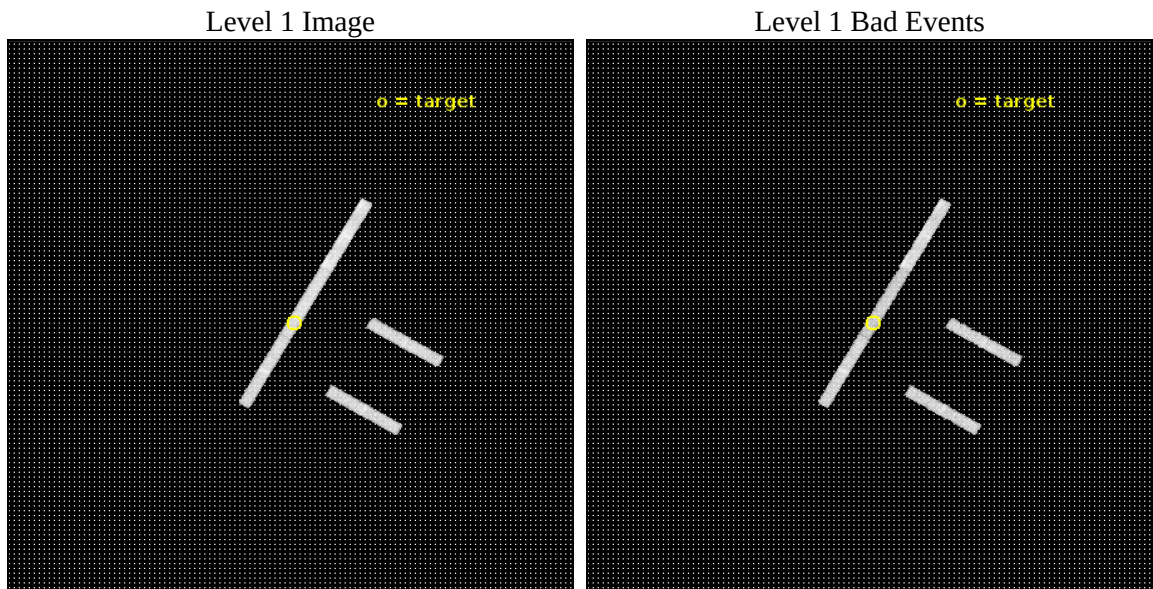
seq_num	703530	Sequence number
obs_id	20425	Observation id
title	X-ray detection of unexplored so far population of AGN	Proposal ti
observer	Magdalena Kunert-Bajraszewska	Principal investigator
object	VTC0345+0041	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	56.358333	Observer's specified target RA [deg]
dec_targ	0.698917	Observer's specified target Dec [deg]
ra_nom	56.365355499	Nominal RA [deg]
dec_nom	0.69691610560285	Nominal Dec [deg]
roll_nom	300.15657283247	Nominal Roll [deg]
revision	2	Processing version of data
ontime	15069.601026535	Sum of GTIs [s]
livetime	14235.022021179	Livetime [s]
ontime2	15069.601026535	Sum of GTIs [s]
ontime3	15069.601026535	Sum of GTIs [s]
ontime6	15069.601026535	Sum of GTIs [s]
ontime7	15069.601026535	Sum of GTIs [s]
ontime8	15069.601026535	Sum of GTIs [s]
l2events	15835	Number of level 2 events



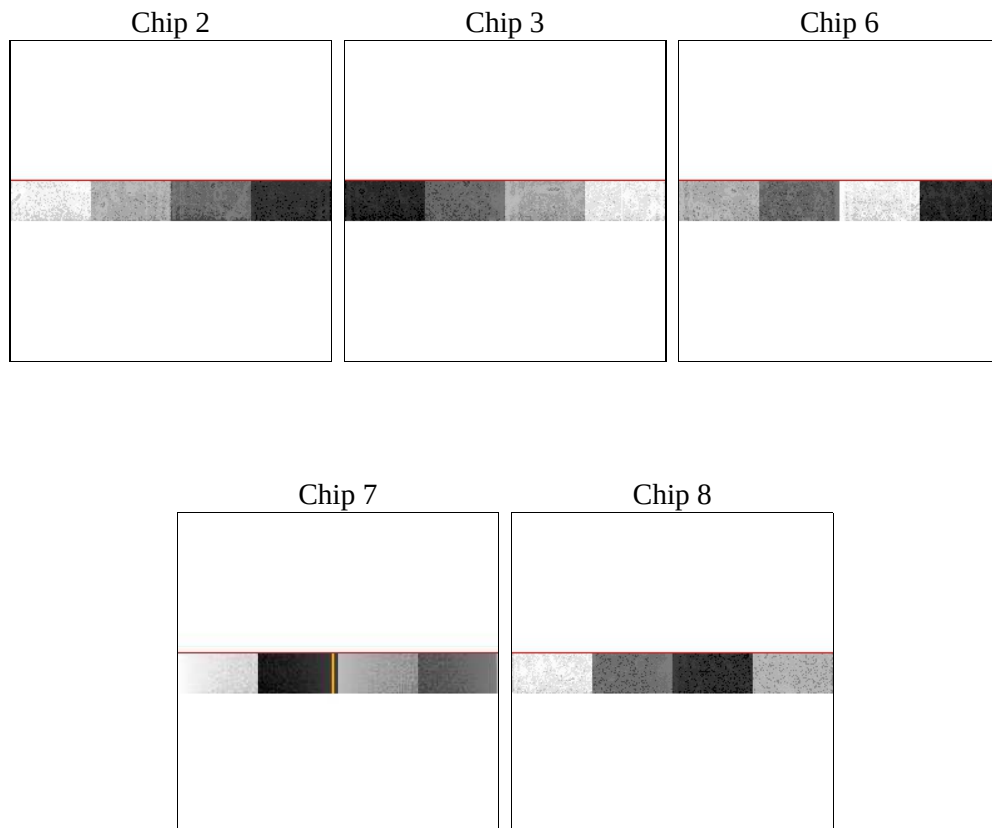
2 OBI

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	10.6	Processing system revision	ontime	15069.601026535	Sum of GTIs [s]
caldbver	4.7.7	 	ontime2	15069.601026535	Sum of GTIs [s]
date	2017-12-28T20:51:00	Date and time of file creation	ontime3	15069.601026535	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	15069.601026535	Sum of GTIs [s]
			ontime7	15069.601026535	Sum of GTIs [s]
			ontime8	15069.601026535	Sum of GTIs [s]
			l1events	100398	Number of level 1 events

2.1.4 Events

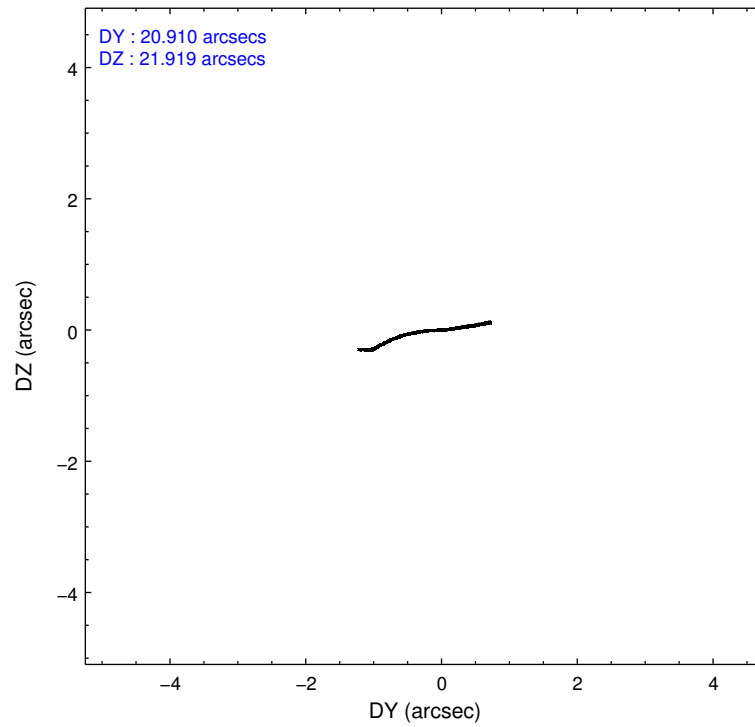
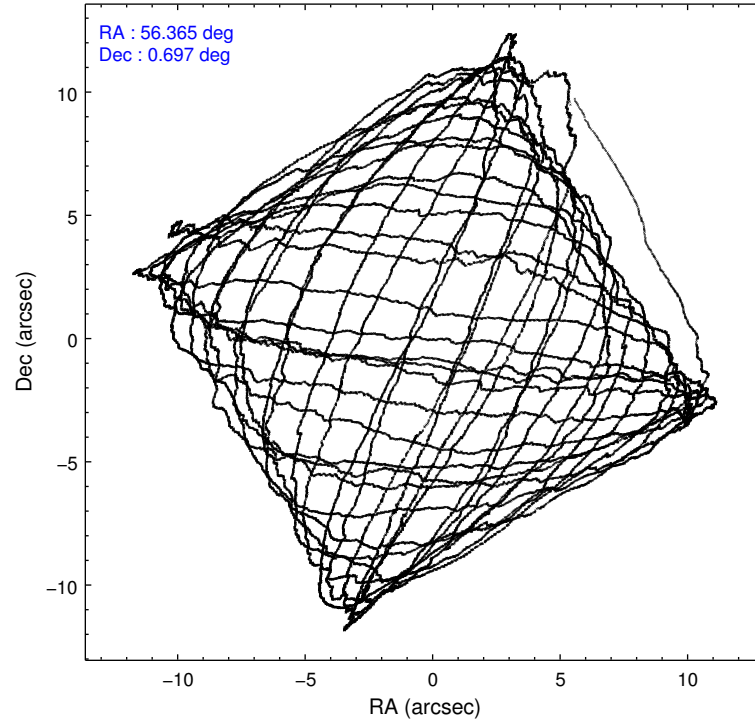
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	17010	17173	18364	20510	27341
rejected events	15107	15183	16157	11039	20974
rejected %	88%	88%	87%	53%	76%

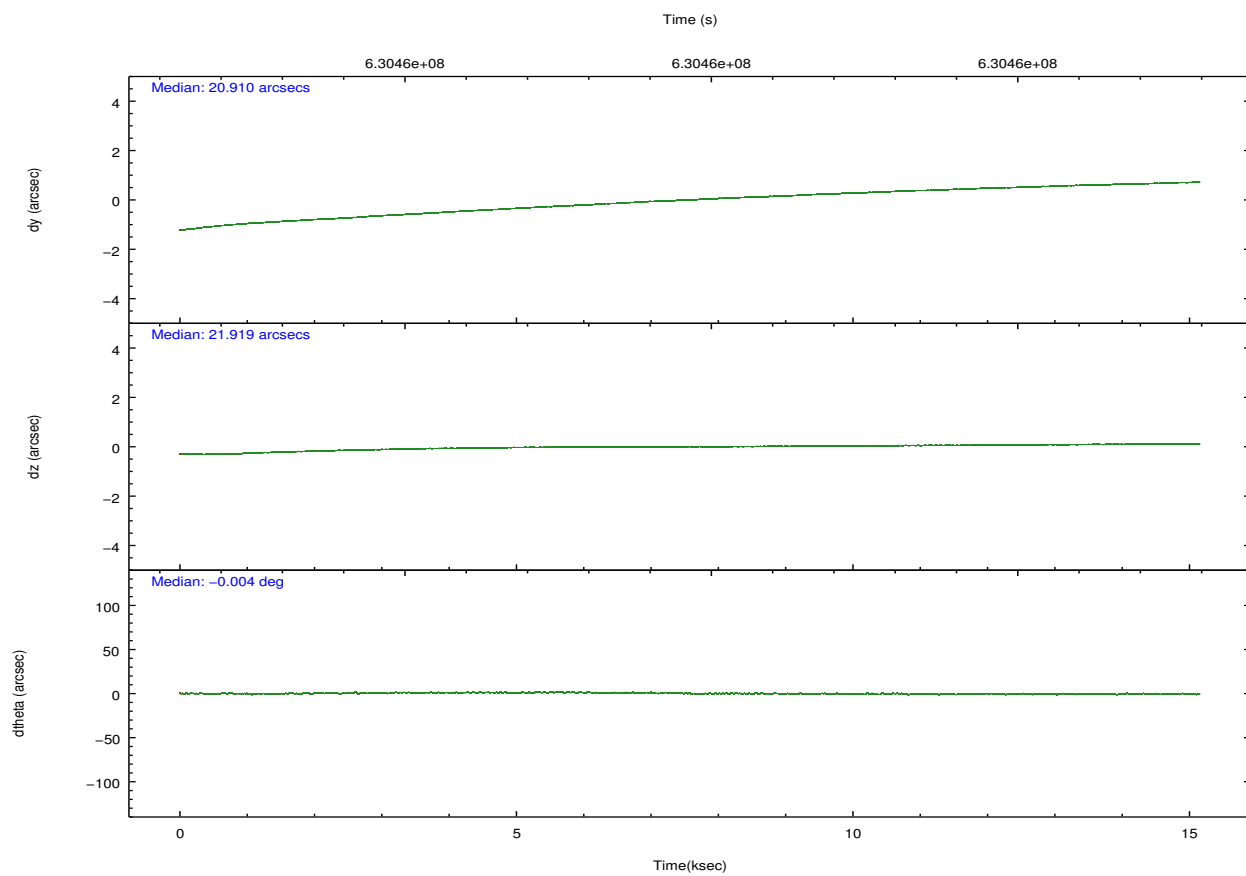
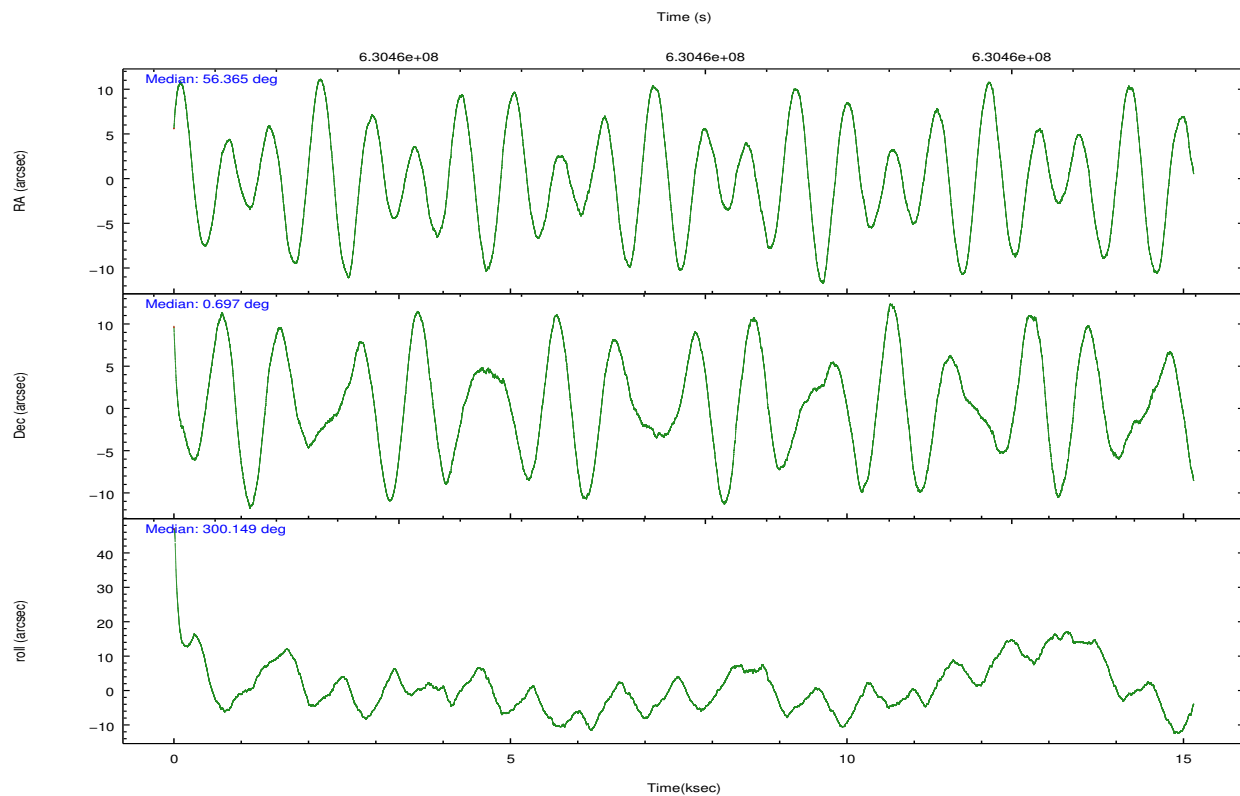
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	530	634	613	940	1500
	3%	3%	3%	4%	5%
grade 1 events	7	7	10	34	7
	0%	0%	0%	0%	0%
grade 2 events	439	389	445	1968	1425
	2%	2%	2%	9%	5%
grade 3 events	293	308	338	1076	697
	1%	1%	1%	5%	2%
grade 4 events	334	282	353	1017	658
	1%	1%	1%	4%	2%
grade 5 events	522	727	778	2124	1047
	3%	4%	4%	10%	3%
grade 6 events	307	378	458	4470	2087
	1%	2%	2%	21%	7%
grade 7 events	14578	14448	15369	8881	19920
	85%	84%	83%	43%	72%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23678	ACIS-23678	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	CCD I0 on	N	N
Observation mode	POINTING	POINTING	CCD I1 on	N	N
[deg] Pointing RA	56.341329	56.36535549899975	CCD I2 on	O1	Y
[deg] Pointing Dec	0.710248	0.6969161056028512	CCD I3 on	O2	Y
[deg] Pointing Roll	300.000210	300.1565728324736	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	N	N
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	O3	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	O4	Y
[s] Observation start time (MET)	630452216.184000	630451120.16083	CCD S5 on	N	N
Observation start date	2017-12-23T21:35:47	2017-12-23T21:18:40	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	630467216.184000	630468649.19936	On-chip summing requested	N	N
Observation end date	2017-12-24T01:45:47	2017-12-24T02:10:49	Subarray requested	CUSTOM	1/8
Read mode	TIMED	TIMED	Subarray start row	449	449
			Subarray row count	128	128
			Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	0.7

2.3 Aspect



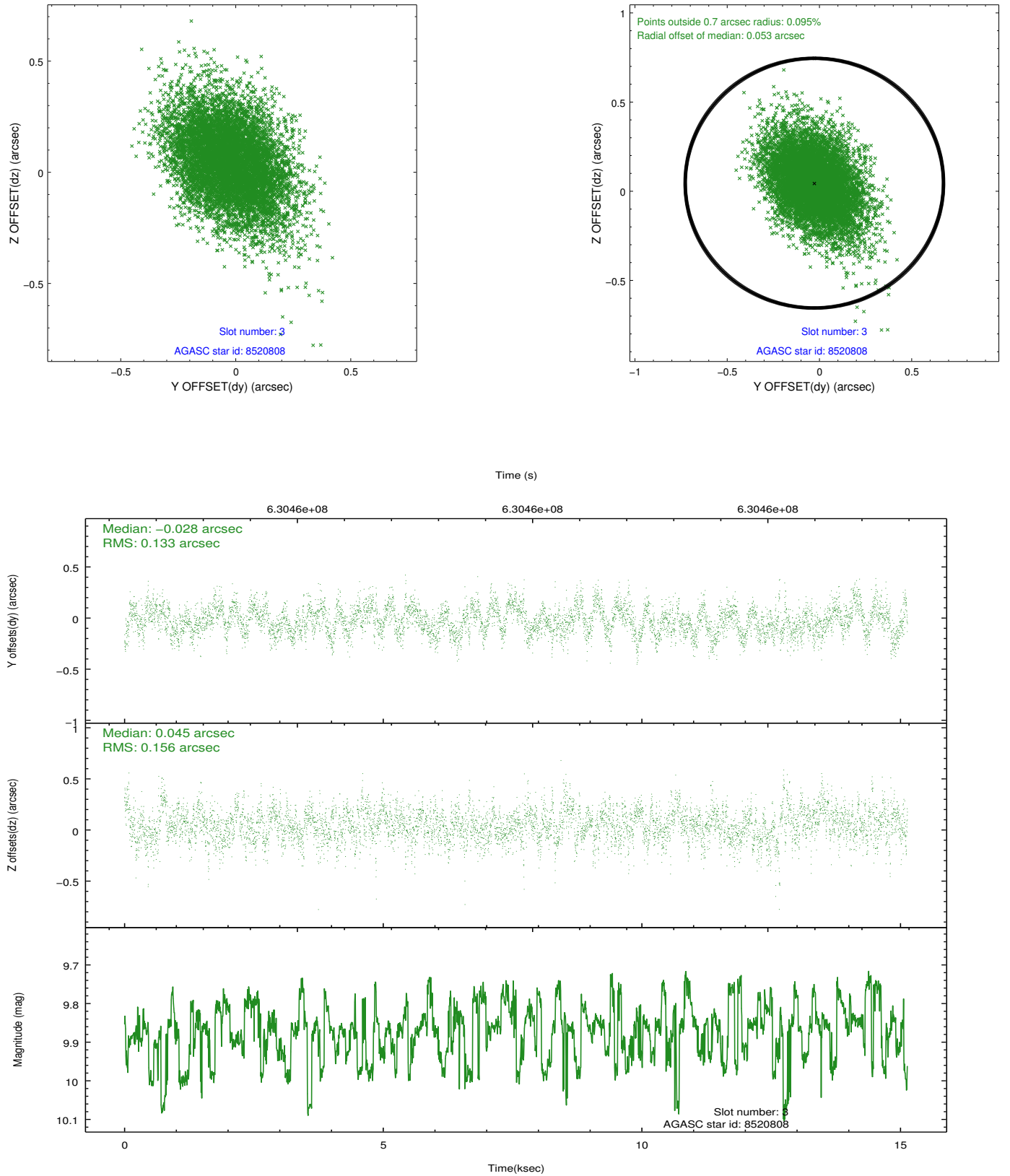


Slot Statistics

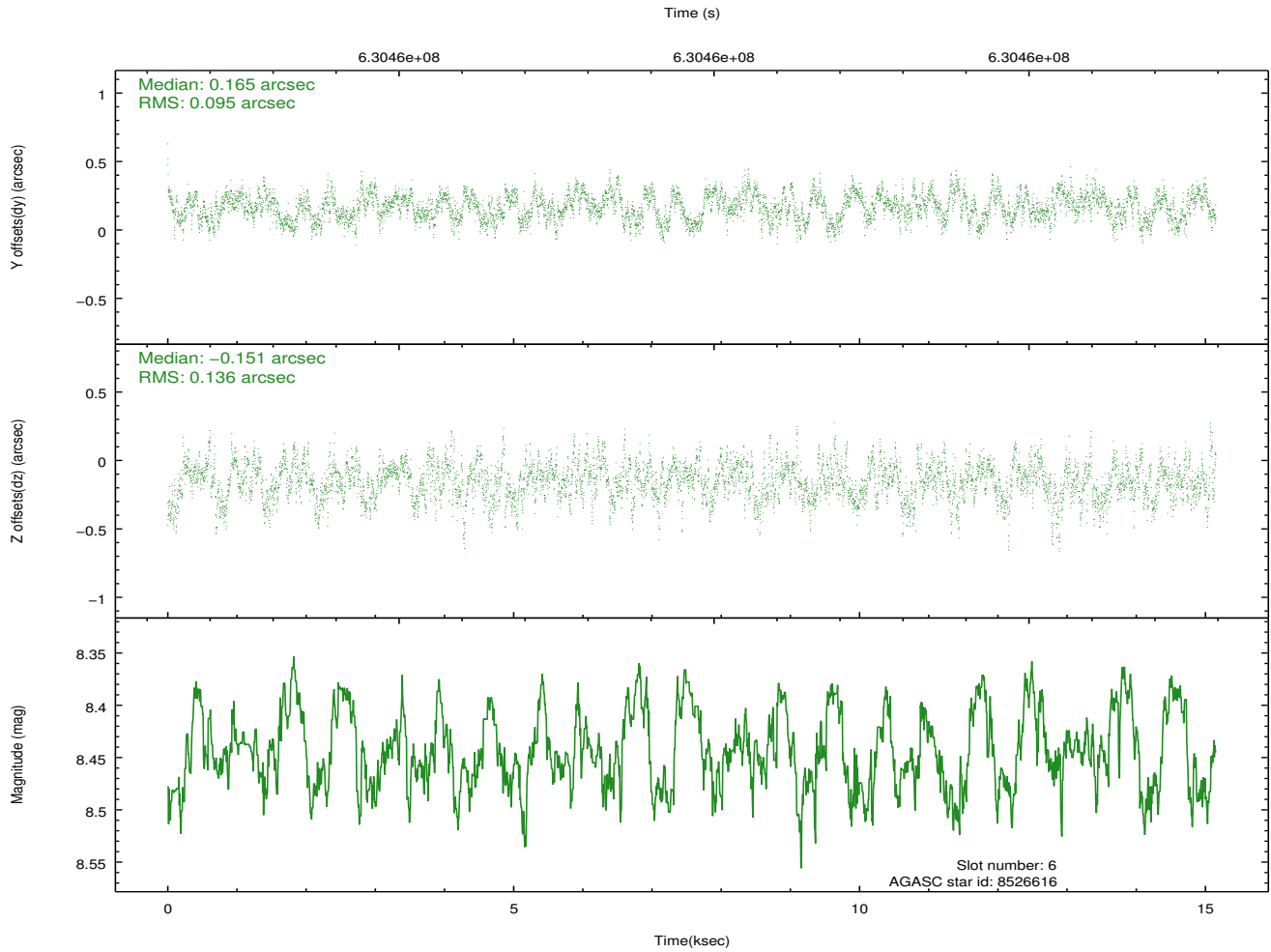
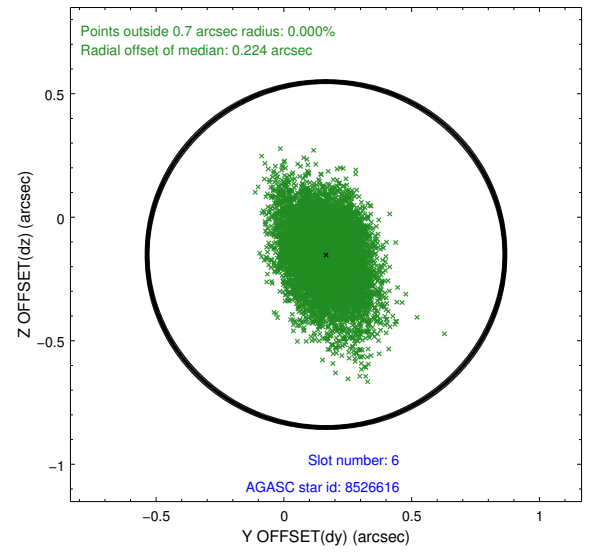
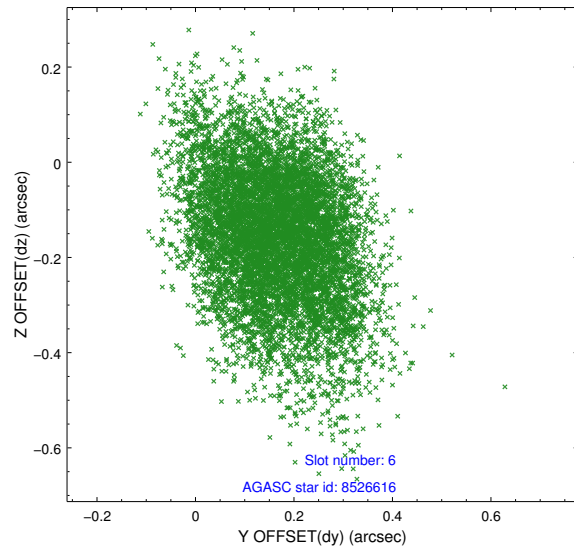
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.98	3696	-0.238	-0.142	0.014	0.021	0.000000	0.000000	-774.20	-1743.60
1	FID		ACIS-S-4	7.10	3695	0.510	0.153	0.008	0.019	0.000000	0.000000	2139.68	164.87
2	FID		ACIS-S-5	7.09	3696	-0.304	-0.001	0.013	0.020	0.000000	0.000000	-1826.74	158.72
3	GUIDE	used	8520808	9.87	7349	-0.028	0.045	0.213	0.362	56.520155	1.395112	-1813.26	1789.66
4	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
5	OMITTED			0.00	0	0.000	0.000	0.000	0.000	0.000000	0.000000	0.00	0.00
6	GUIDE	used	8526616	8.45	7389	0.165	-0.151	0.172	0.291	56.435556	0.617289	460.27	126.95
7	GUIDE	used	8528896	6.72	7391	-0.138	0.111	0.120	0.220	56.472790	0.222691	1756.82	-467.52

2.4 Star Slots

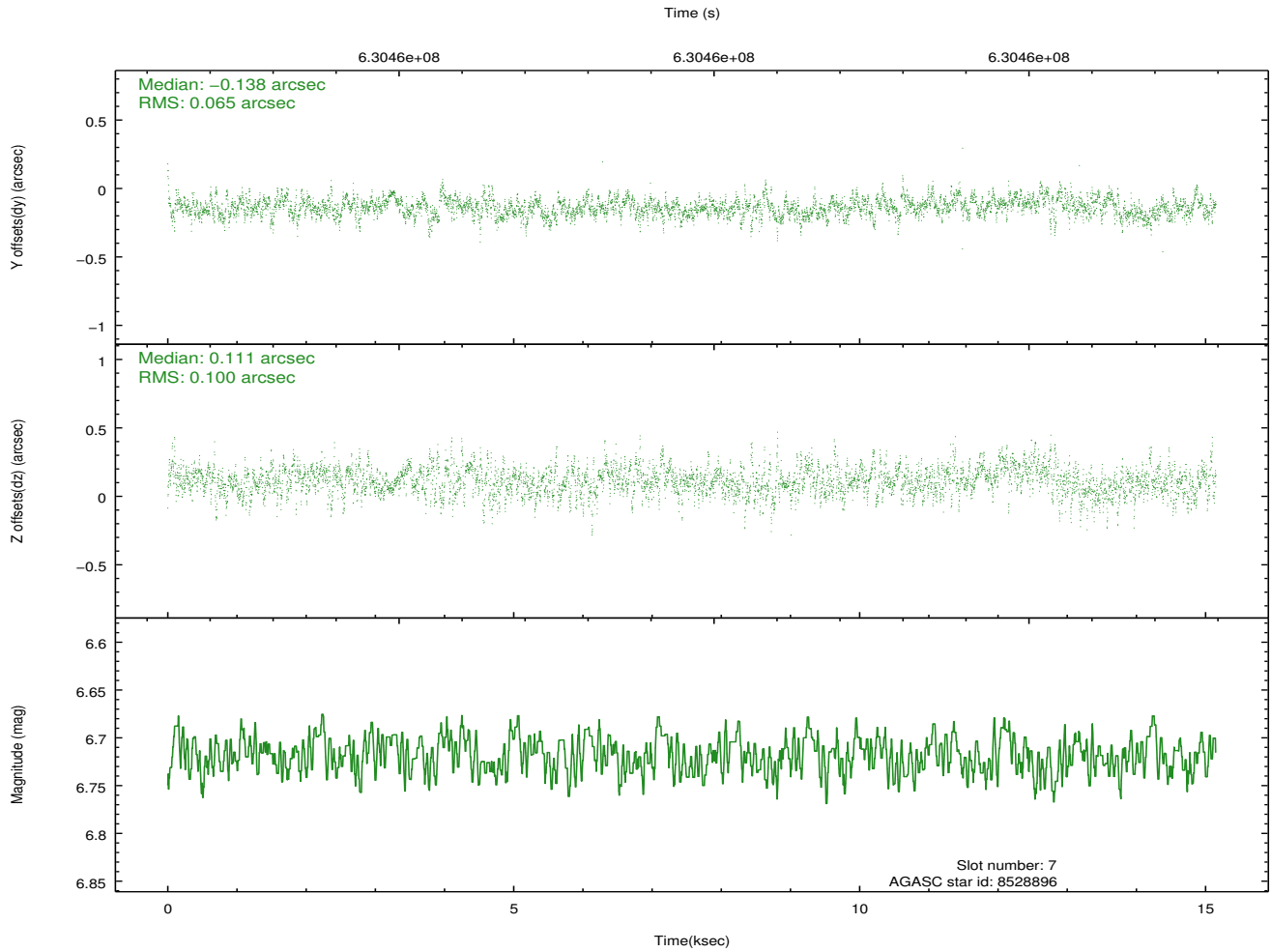
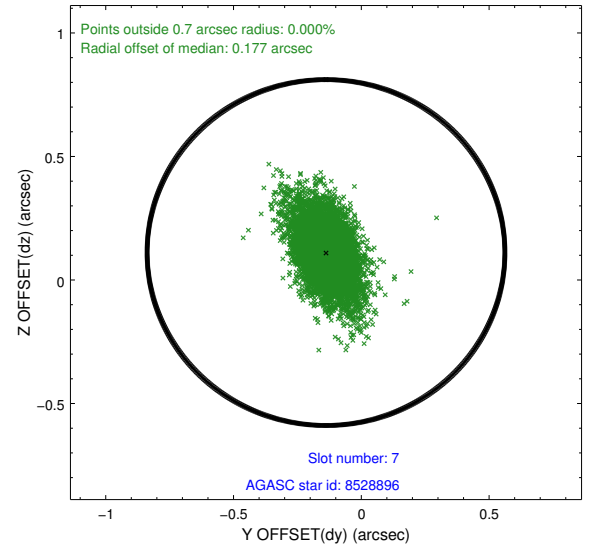
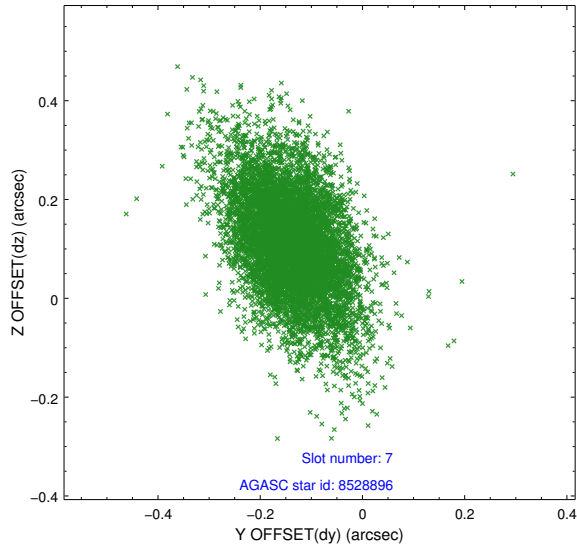
2.4.1 Slot 3



2.4.2 Slot 6

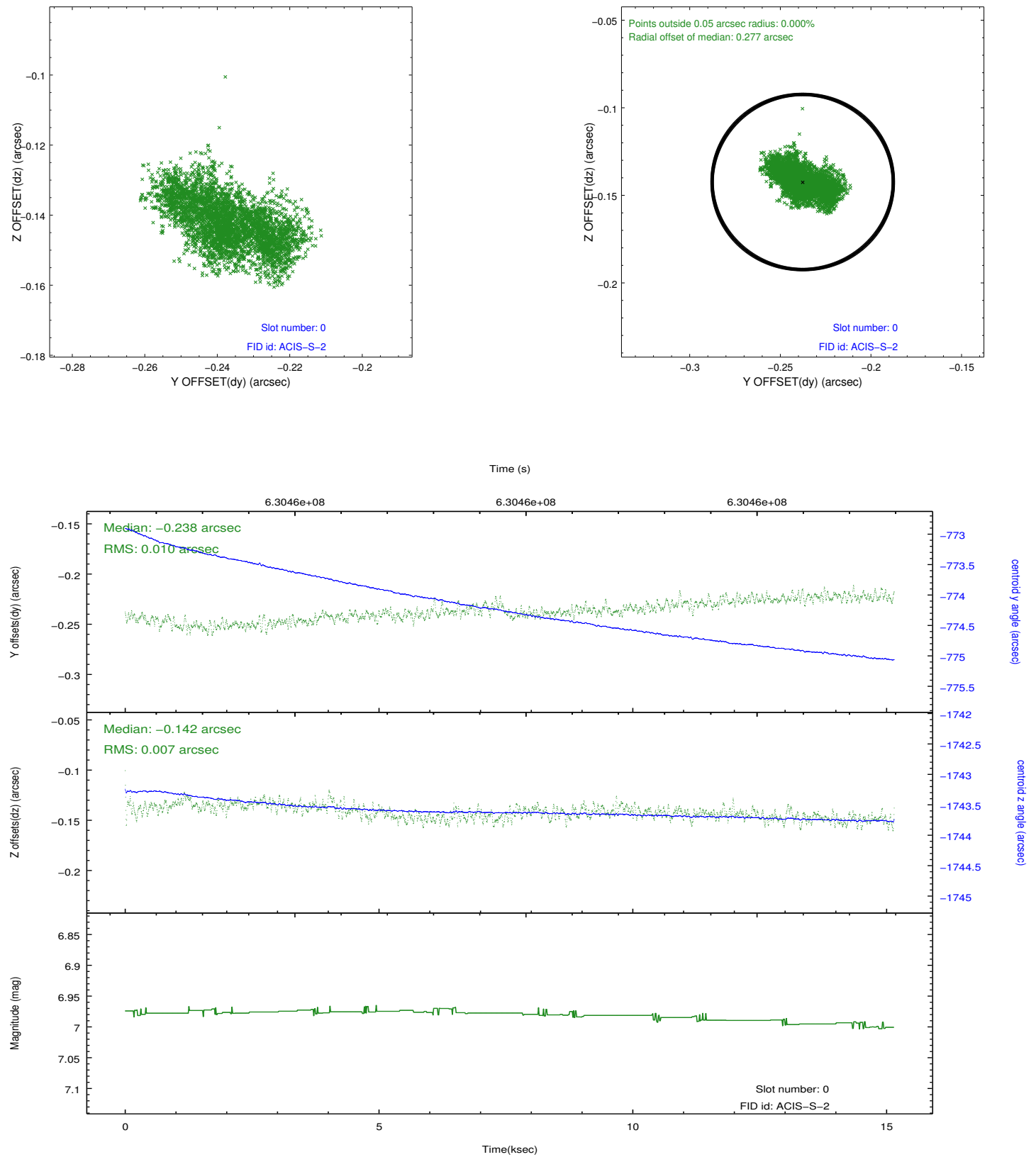


2.4.3 Slot 7

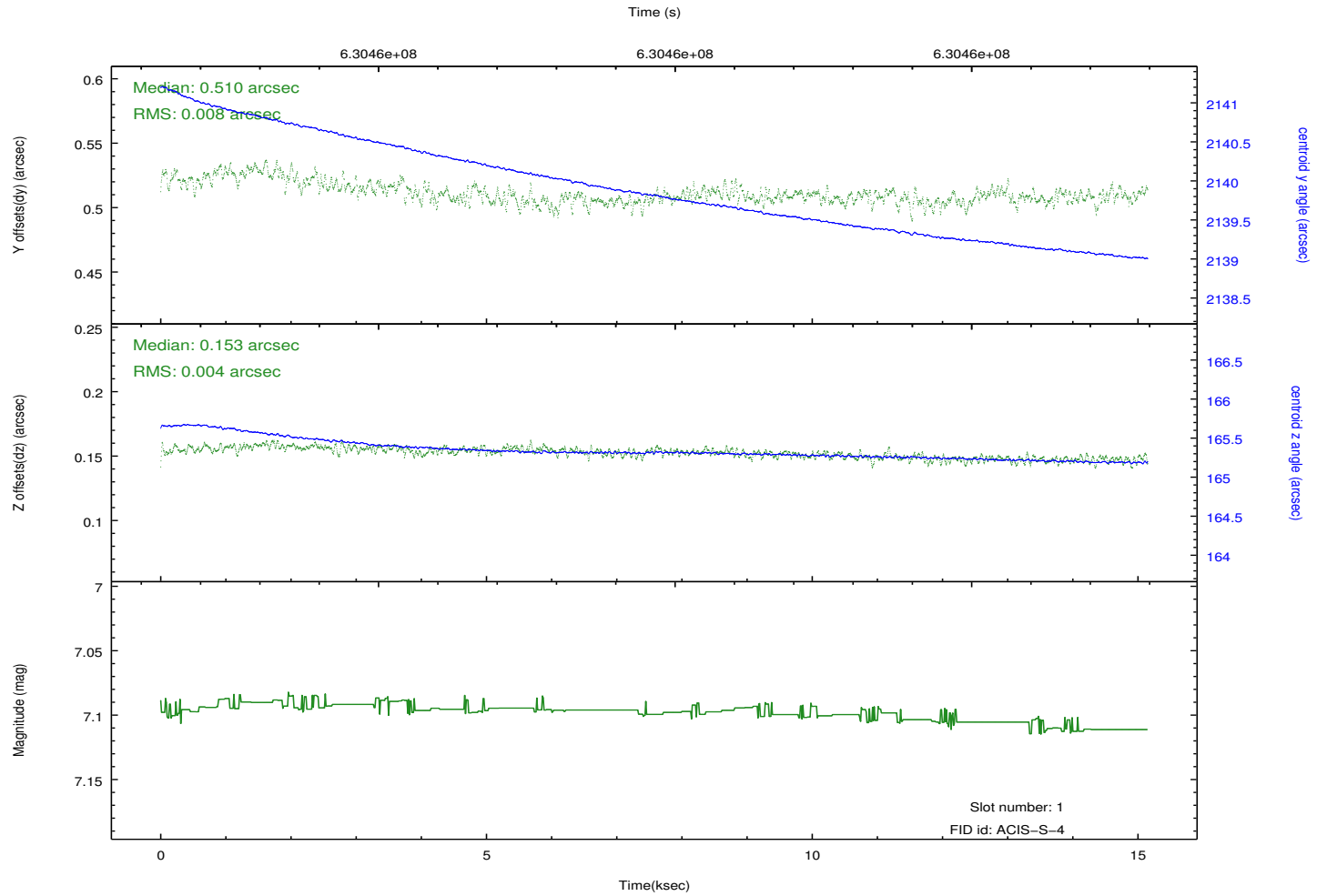
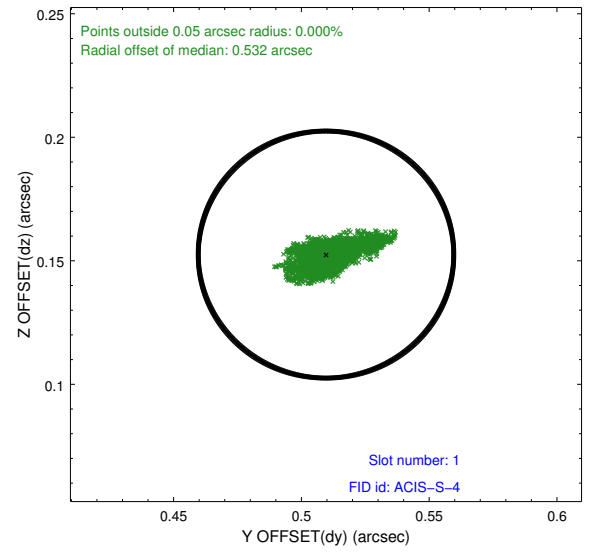
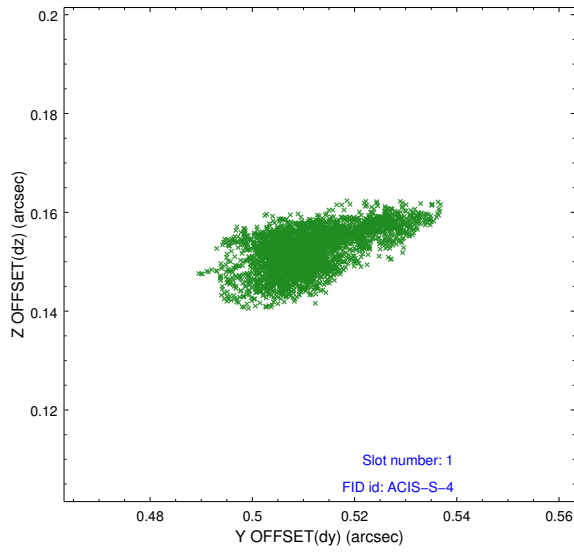


2.5 FID Slots

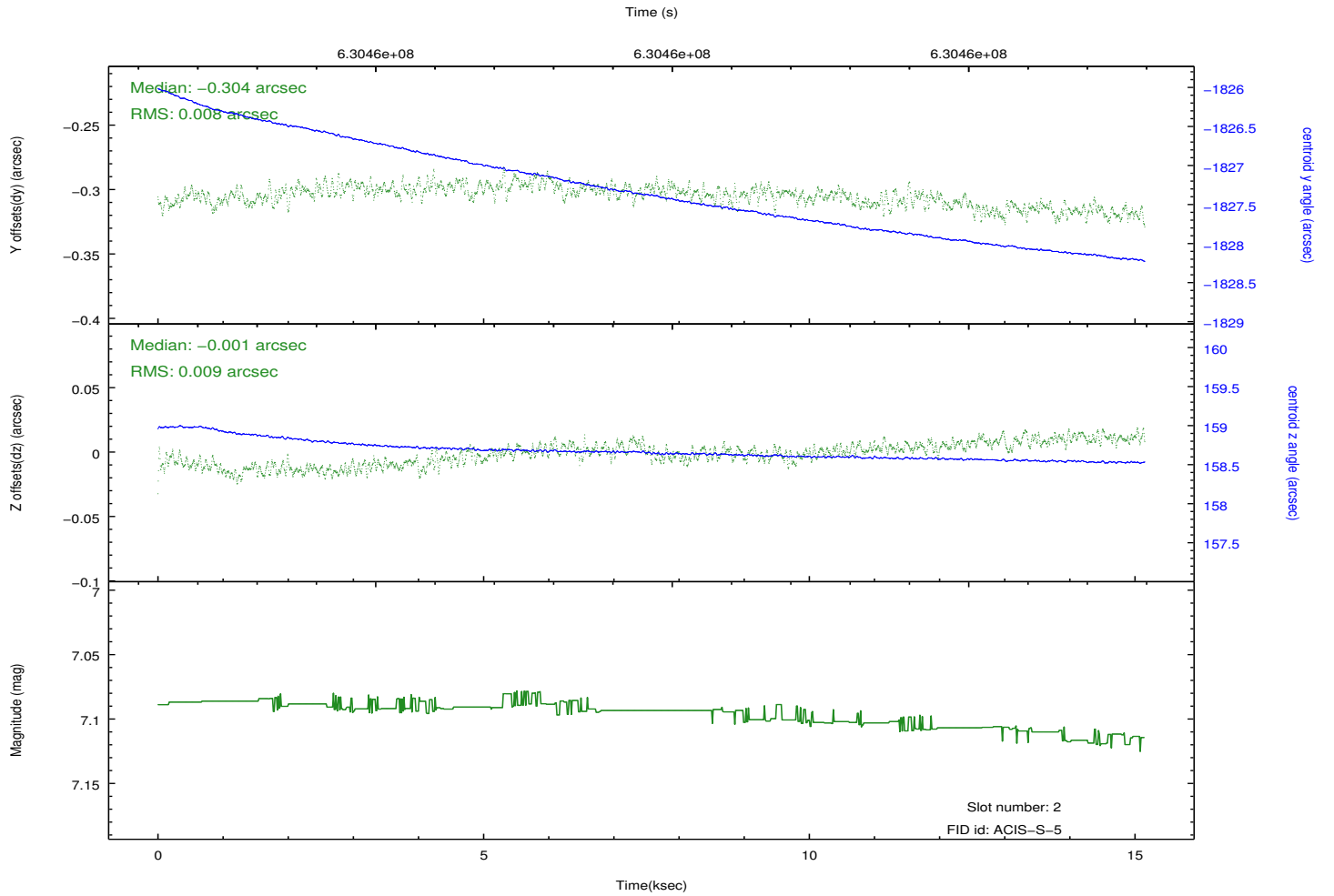
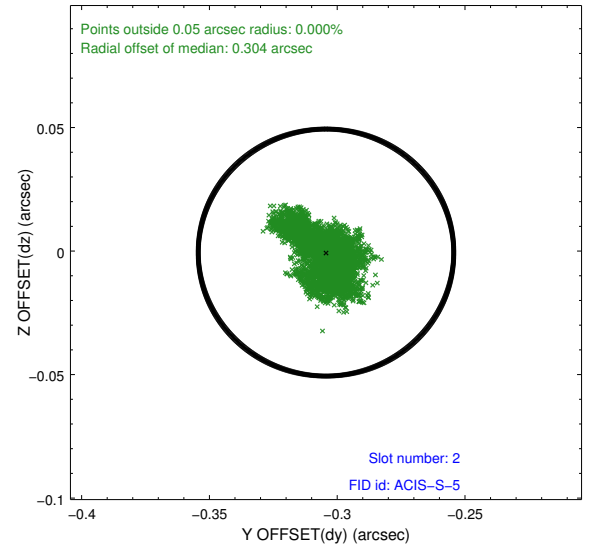
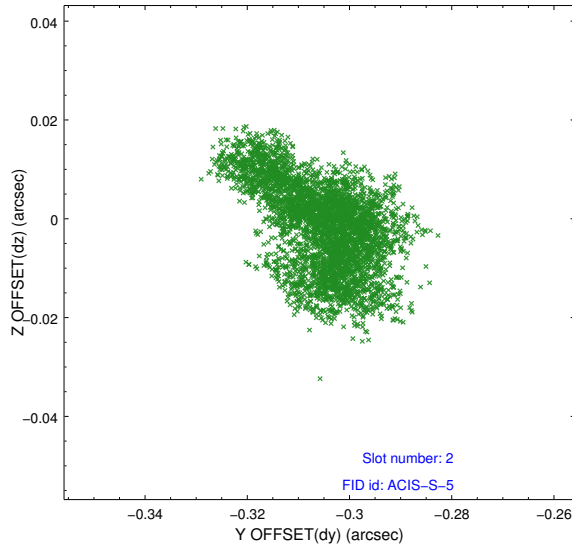
2.5.1 Slot 0



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)	2017.12.28
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	15.069601026535

A.2 Comments

The guide stars in slots 4 and 5 were removed from the aspect solution due to poor data quality. The aspect solution is improved by the removal of these slots from the solution.