

V&V Reference Report

L2 ASCDS Version : 10

Observation 14915 - L2 Version 2
Chandra X-Ray Center

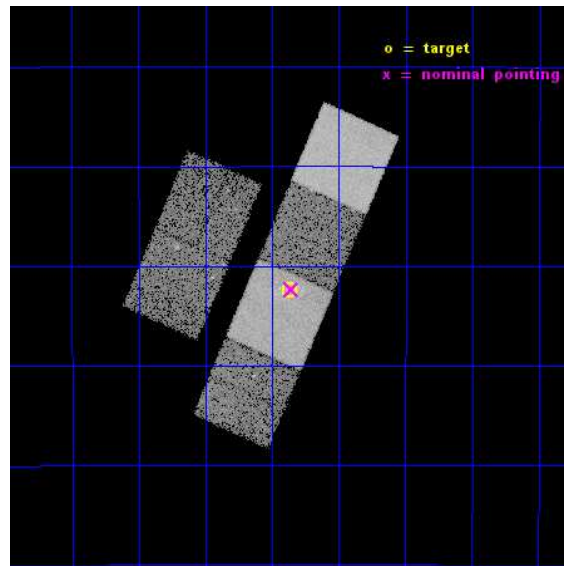
L2 Processing Date : Dec 6 2014

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

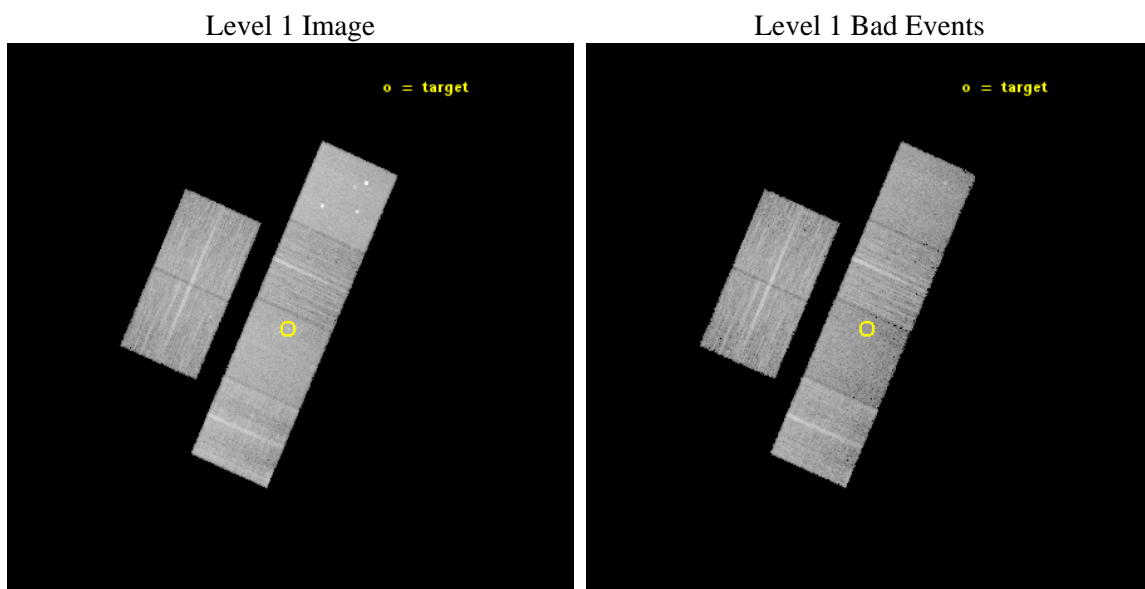
seq_num	601045	Sequence number
obs_id	14915	Observation id
title	Galaxies in Collision: NGC 2207 & IC 2163	Proposal title
observer	Prof. Saul Rappaport	Principal investigator
object	NGC 2207/IC 2163	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	94.092083	Observer's specified target RA [deg]
dec_targ	-21.372722	Observer's specified target Dec [deg]
ra_nom	94.08889895251	Nominal RA [deg]
dec_nom	-21.372262929685	Nominal Dec [deg]
roll_nom	113.55921451477	Nominal Roll [deg]
revision	2	Processing version of data
ontime	20099.158954859	Sum of GTIs [s]
livetime	19844.651301912	Livetime [s]
ontime2	20099.158954859	Sum of GTIs [s]
ontime3	20099.126553953	Sum of GTIs [s]
ontime5	20099.158954859	Sum of GTIs [s]
ontime6	20099.158954859	Sum of GTIs [s]
ontime7	20099.158954859	Sum of GTIs [s]
ontime8	20099.085513949	Sum of GTIs [s]
l2events	149924	Number of level 2 events



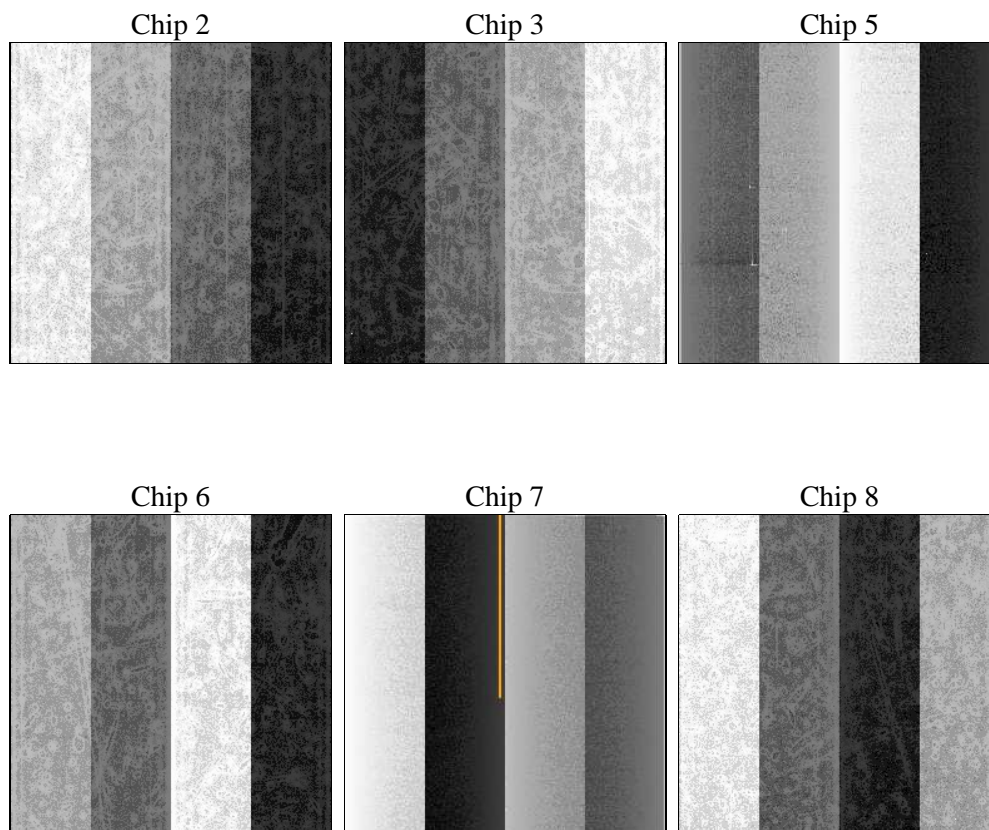
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	20135.416000	[s] Scheduled observation exposure time
ascdsver	10.3.1	Processing system revision	ontime	20099.158954859	Sum of GTIs [s]
caldsver	4.6.4	 	ontime2	20099.158954859	Sum of GTIs [s]
date	2014-12-06T05:20:57	Date and time of file creation	ontime3	20099.126553953	Sum of GTIs [s]
revision	2	Processing version of data	ontime5	20099.158954859	Sum of GTIs [s]
			ontime6	20099.158954859	Sum of GTIs [s]
			ontime7	20099.158954859	Sum of GTIs [s]
			ontime8	20099.085513949	Sum of GTIs [s]
			l1events	615384	Number of level 1 events

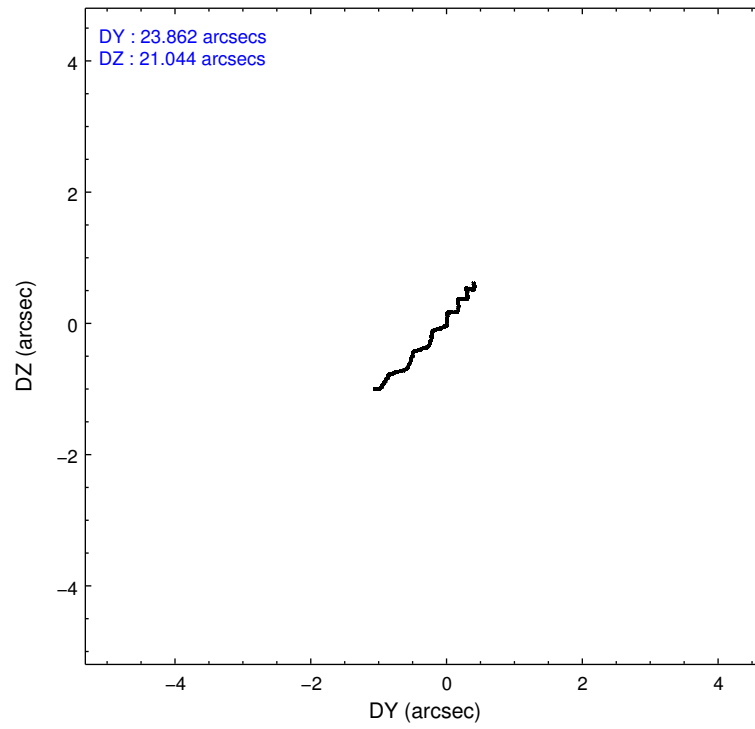
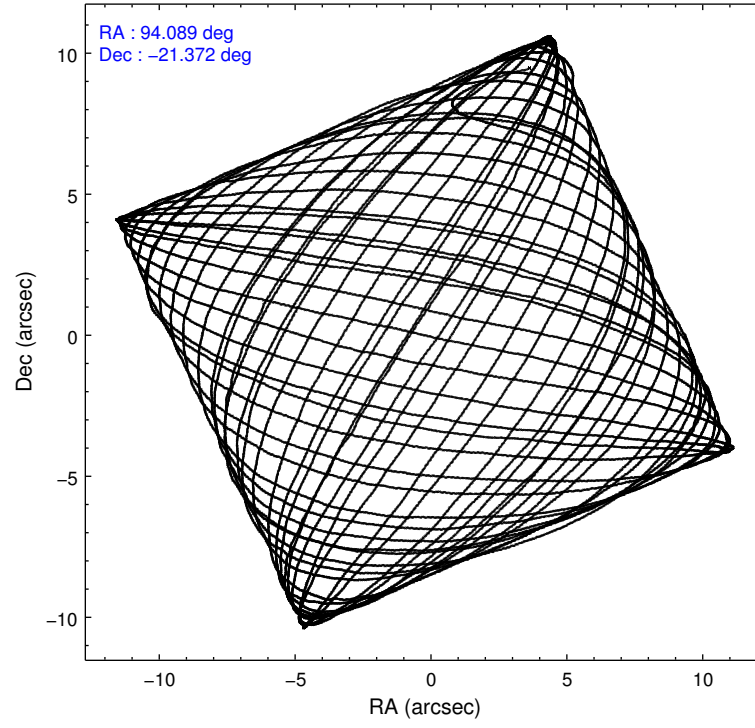
2.1.4 Events

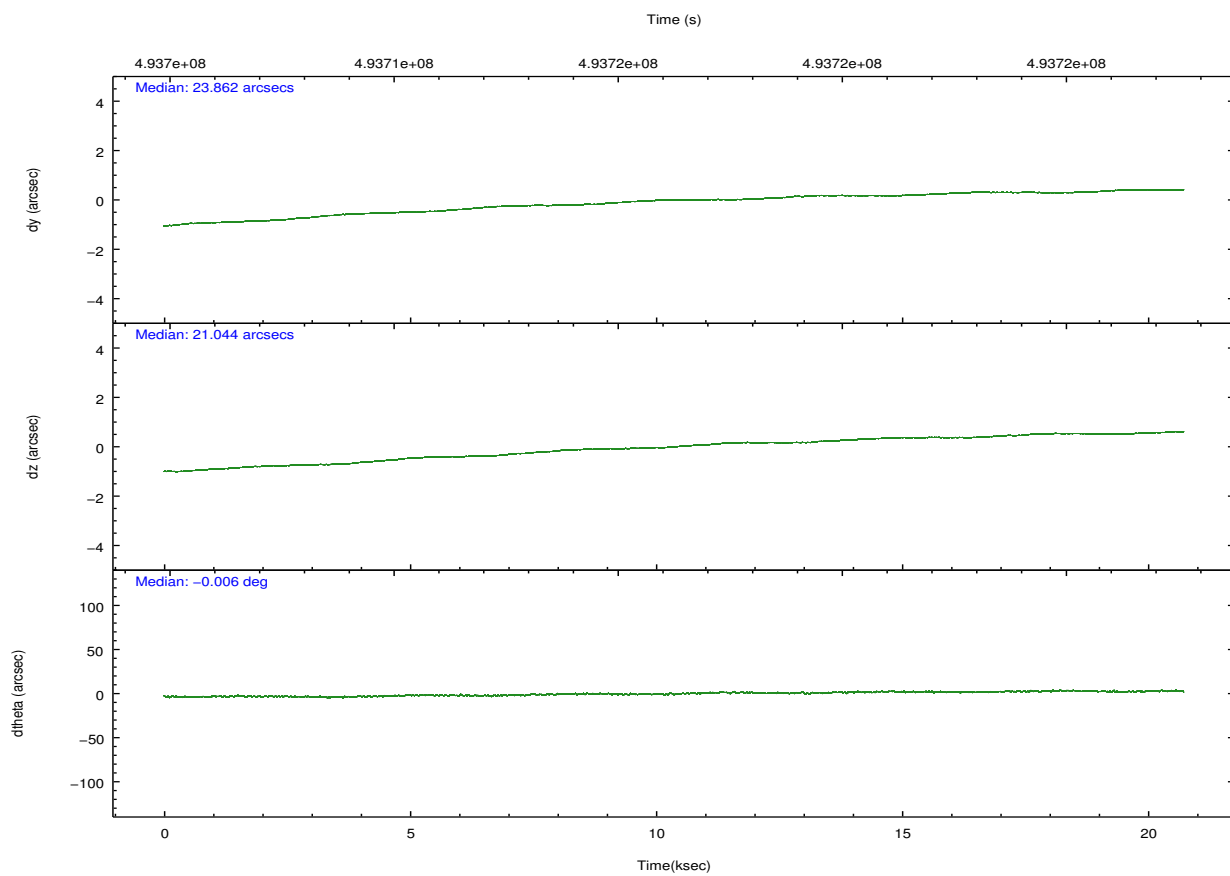
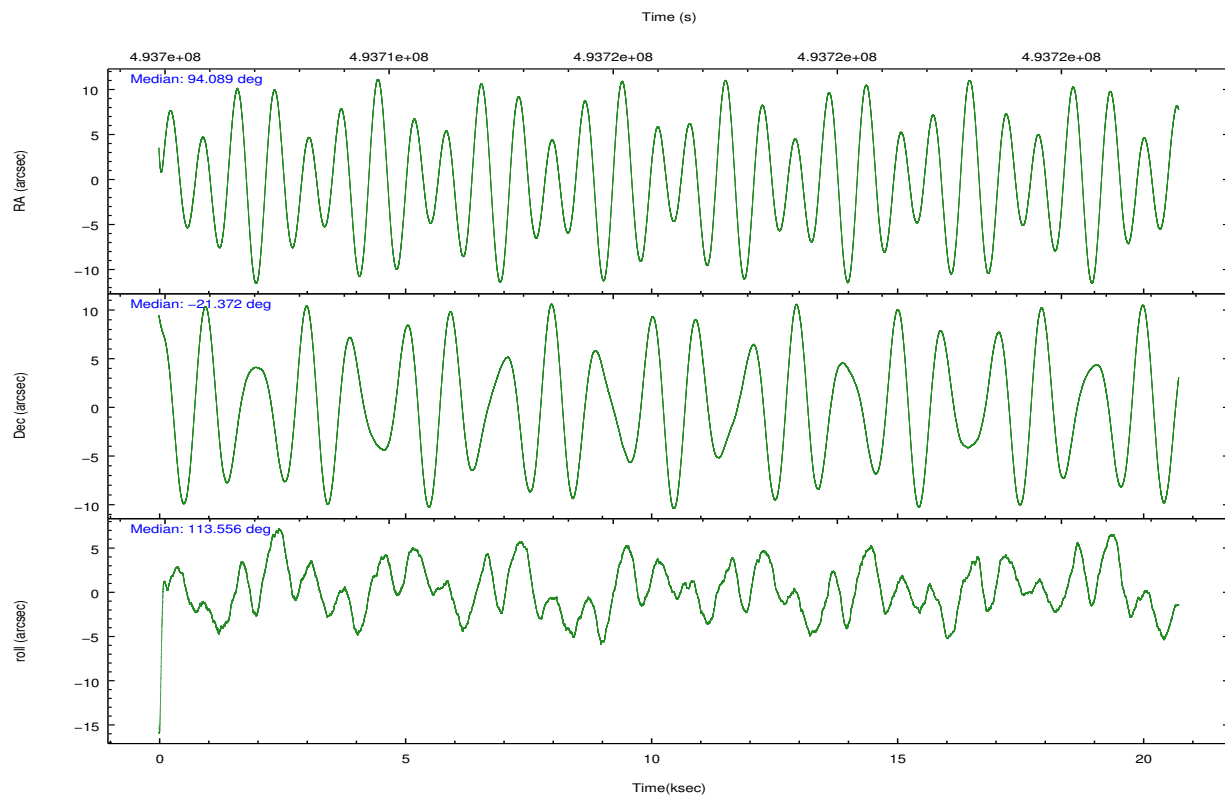
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8		ccd 2	ccd 3	ccd 5	ccd 6	ccd 7	ccd 8
level 1 events	90893	83969	135504	87763	103605	113650	grade 0 events	3732	3705	8944	3924	5186	8558
rejected events	80909	74177	64050	76970	53459	82701		4%	4%	6%	4%	5%	7%
rejected %	89%	88%	47%	87%	51%	72%	grade 1 events	55	53	454	43	154	98
								0%	0%	0%	0%	0%	0%
							grade 2 events	2476	2190	21515	2445	10837	7601
								2%	2%	15%	2%	10%	6%
							grade 3 events	958	991	2621	1102	4454	3301
								1%	1%	1%	1%	4%	2%
							grade 4 events	983	1035	2561	1054	4455	3029
								1%	1%	1%	1%	4%	2%
							grade 5 events	3338	3990	10506	3941	11105	5969
								3%	4%	7%	4%	10%	5%
							grade 6 events	1839	1872	35824	2270	25223	8483
								2%	2%	26%	2%	24%	7%
							grade 7 events	77512	70133	53079	72984	42191	76611
								85%	83%	39%	83%	40%	67%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-235678	ACIS-235678	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	94.112726	94.08889895251019	CCD I2 on	O3	Y
[deg] Pointing Dec	-21.388190	-21.37226292968469	CCD I3 on	O2	Y
[deg] Pointing Roll	113.411284	113.5592145147696	CCD S0 on	N	N
[mm] SIM focus pos	-0.684267	-0.6828225247311905	CCD S1 on	O1	Y
[mm] SIM defocus	0	0.001444936568705701	CCD S2 on	Y	Y
[mm] SIM translation stage pos	-190.132523	-190.1425803651734	CCD S3 on	Y	Y
[mm] SIM translation stage offset	0	0.01005778216563158	CCD S4 on	Y	Y
[s] Observation start time (MET)	493706464.184000	493705298.45505	CCD S5 on	N	N
Observation start date	2013-08-24T04:39:57	2013-08-24T04:21:38	Number of optional ACIS chips dropped	0	0
[s] Observation end time (MET)	493726600.184000	493726825.50623	On-chip summing requested	N	N
Observation end date	2013-08-24T10:15:33	2013-08-24T10:20:25	Subarray requested	NONE	NONE
Read mode	TIMED	TIMED	Alternating exposures requested	N	N
			[s] Primary exposure time	0.000000	3.2

2.3 Aspect



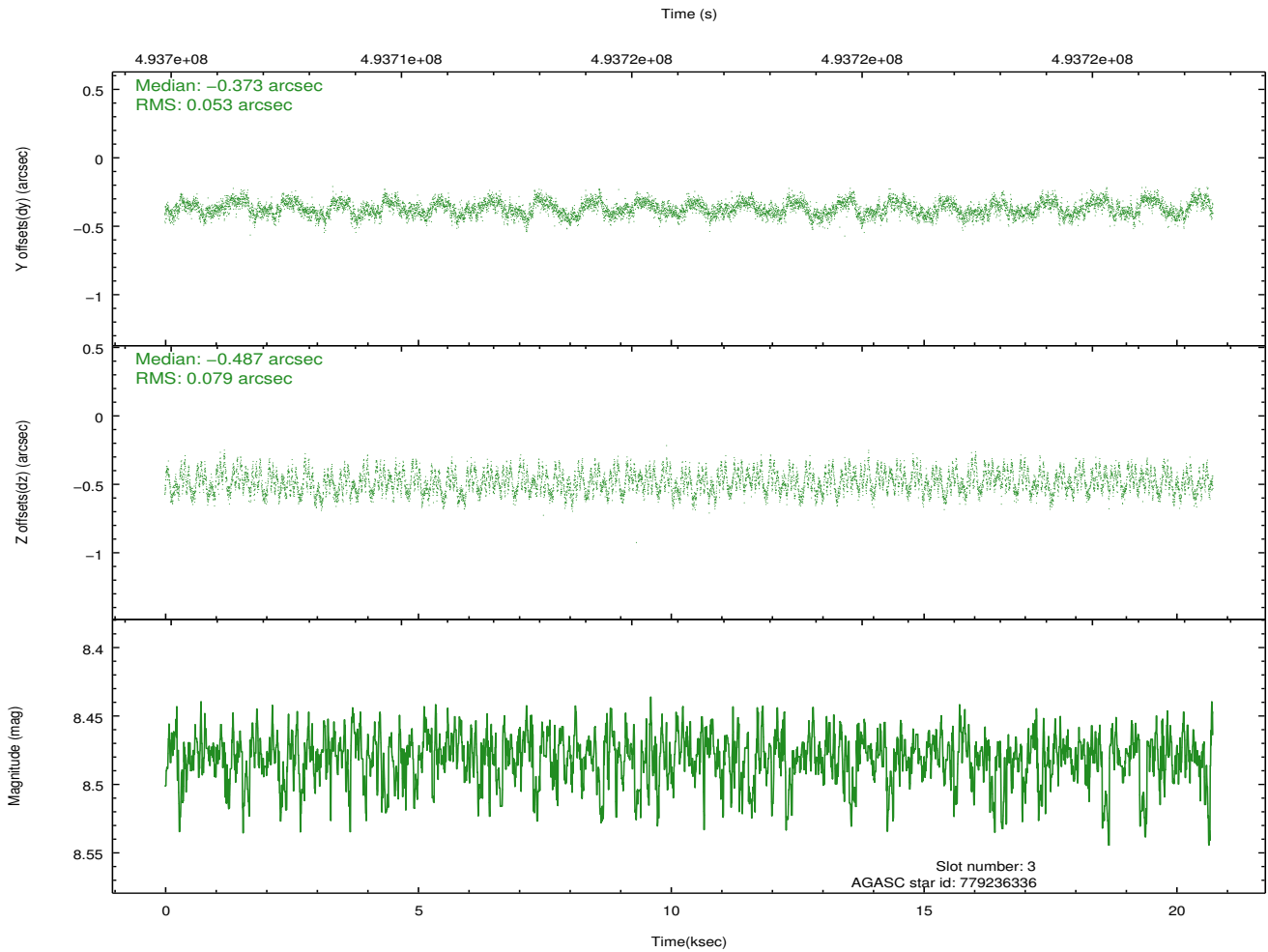
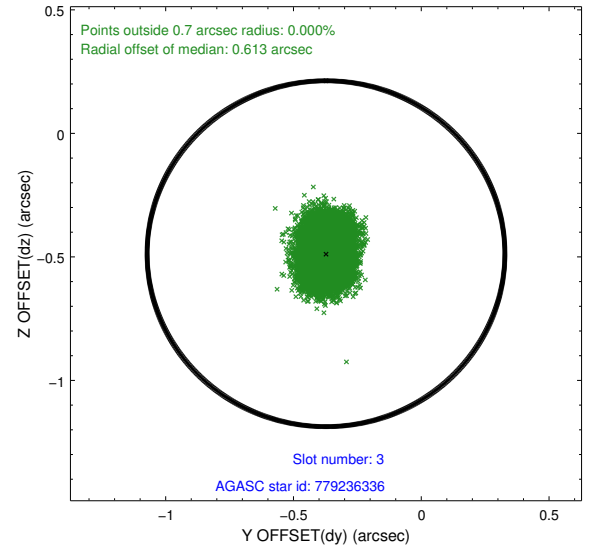
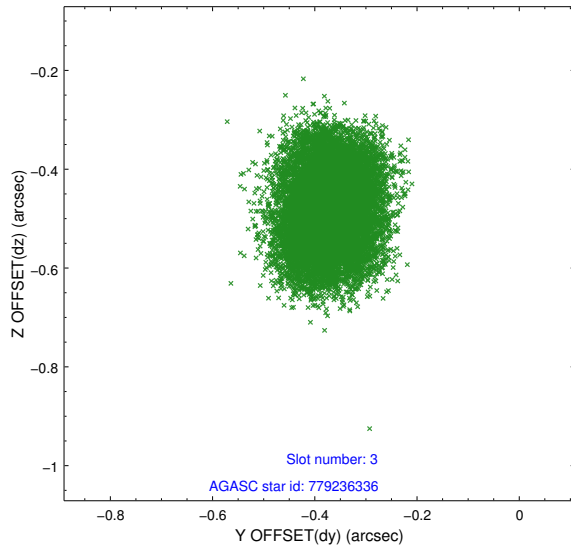


Slot Statistics

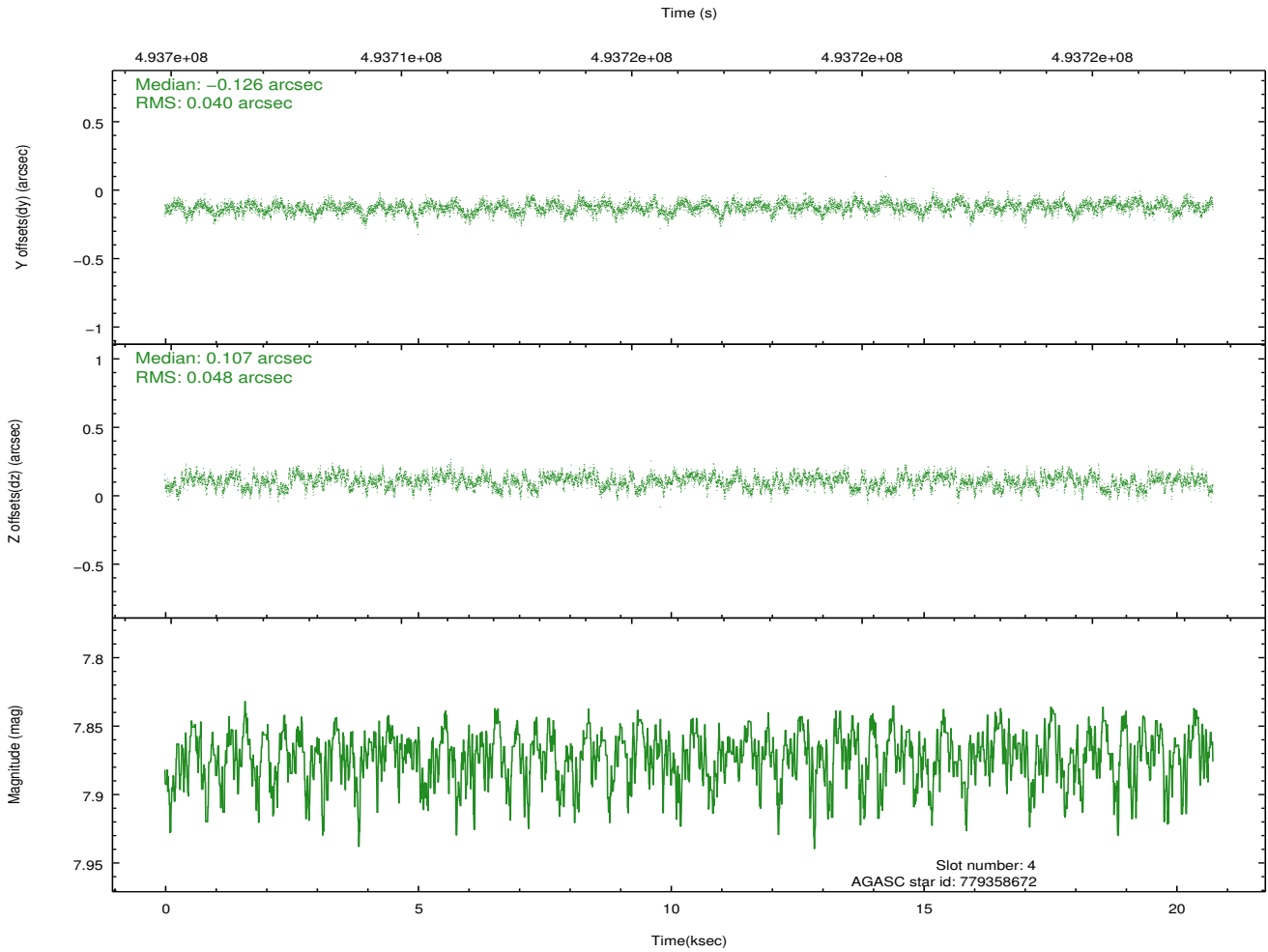
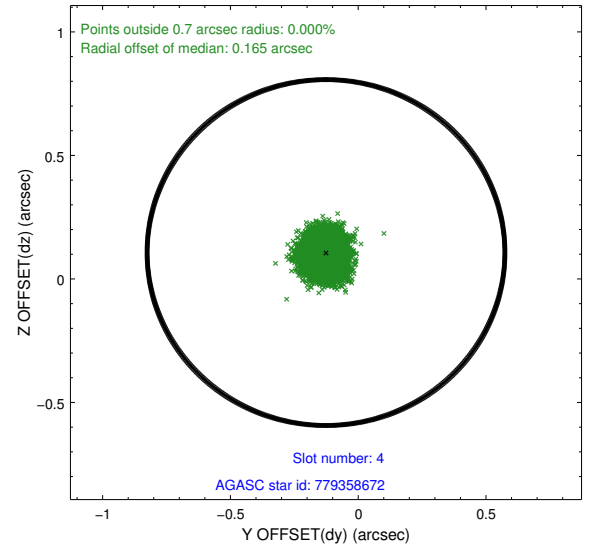
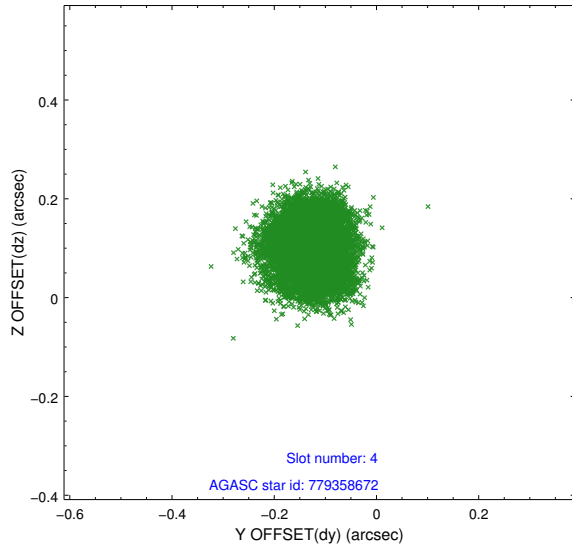
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-1	7.02	5055	0.172	-0.065	0.009	0.016	0.000000	0.000000	919.30	-1738.14
1	FID		ACIS-S-2	6.94	5055	-0.109	0.038	0.011	0.018	0.000000	0.000000	-776.78	-1742.80
2	FID		ACIS-S-5	7.05	5055	-0.086	0.034	0.010	0.017	0.000000	0.000000	-1830.22	159.29
3	GUIDE	used	779236336	8.48	10090	-0.373	-0.487	0.104	0.157	93.367583	-21.267018	1387.90	2122.80
4	GUIDE	used	779358672	7.87	10110	-0.126	0.107	0.067	0.106	94.260885	-21.171994	516.69	-765.12
5	GUIDE	used	779365616	9.21	10098	0.435	0.315	0.133	0.206	94.962102	-21.651961	-2006.90	-2227.53
6	GUIDE	used	779372064	8.58	10109	0.275	0.266	0.137	0.197	94.417701	-21.758407	-1629.46	-405.80
7	GUIDE	used	779238704	9.52	10075	-0.235	-0.200	0.198	0.294	93.385915	-20.960318	2379.01	1632.55

2.4 Star Slots

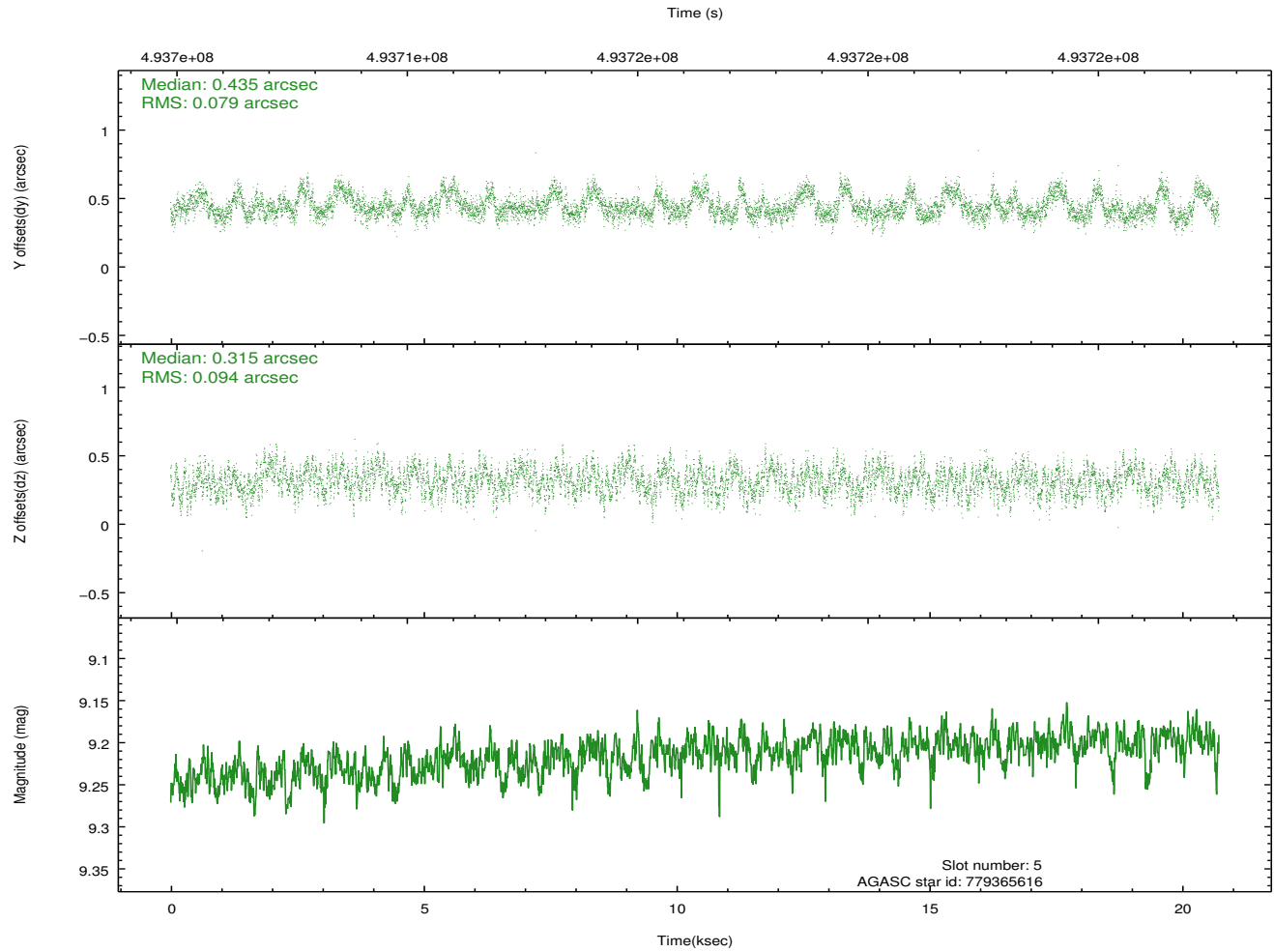
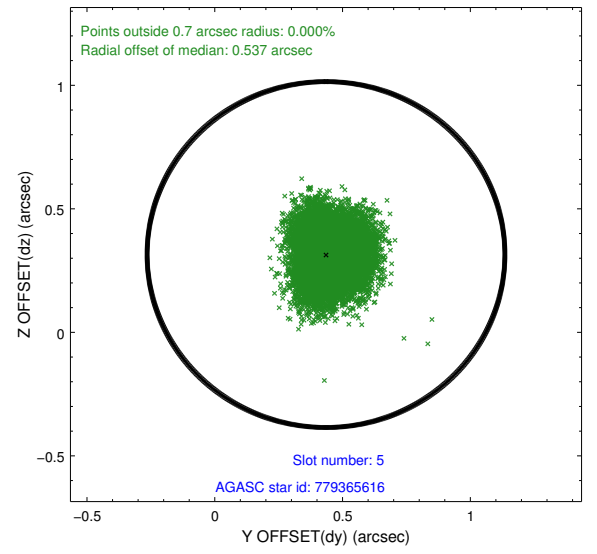
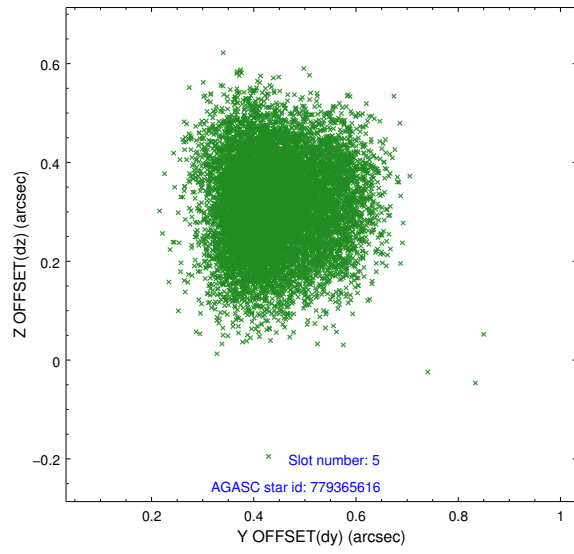
2.4.1 Slot 3



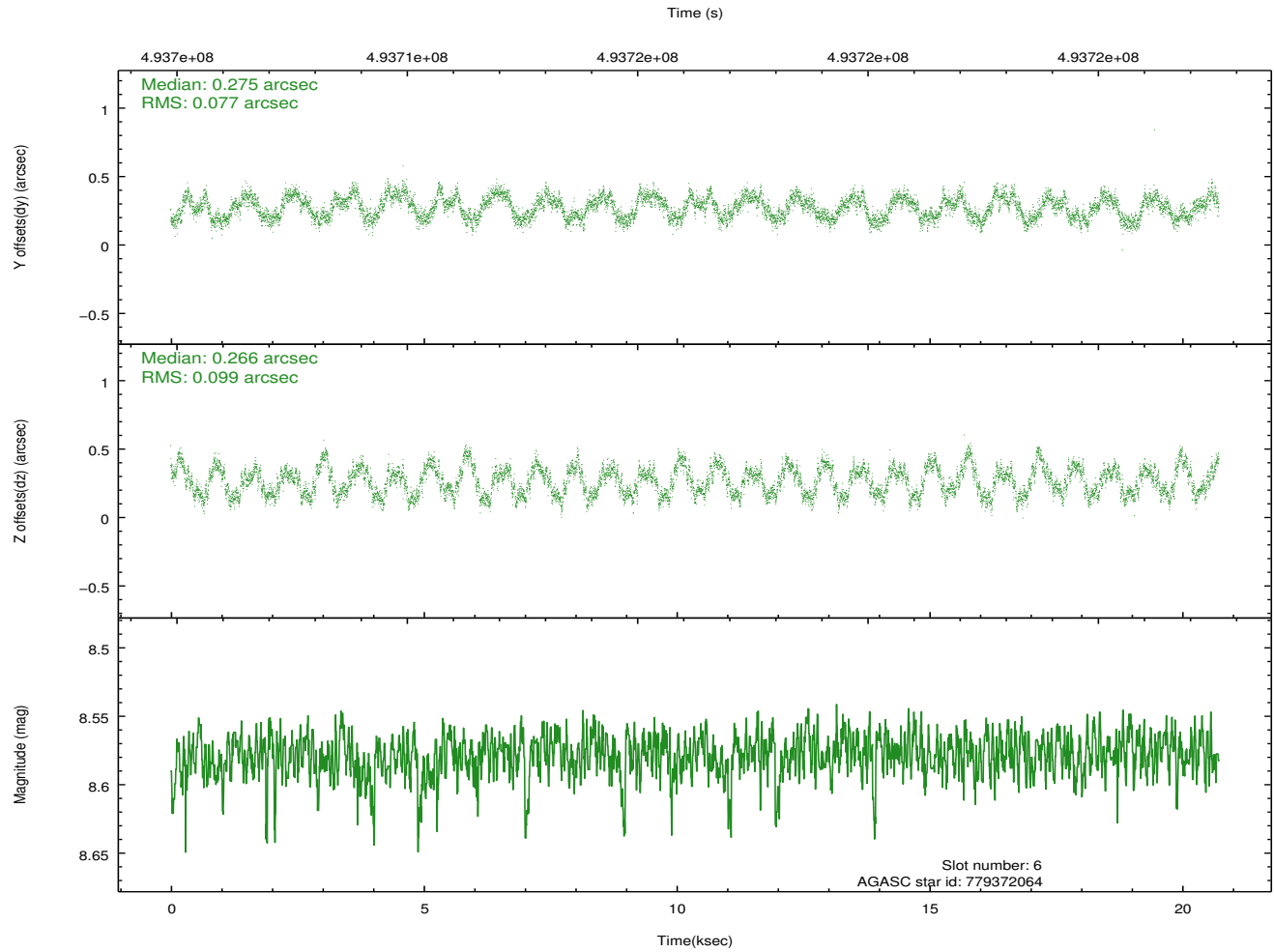
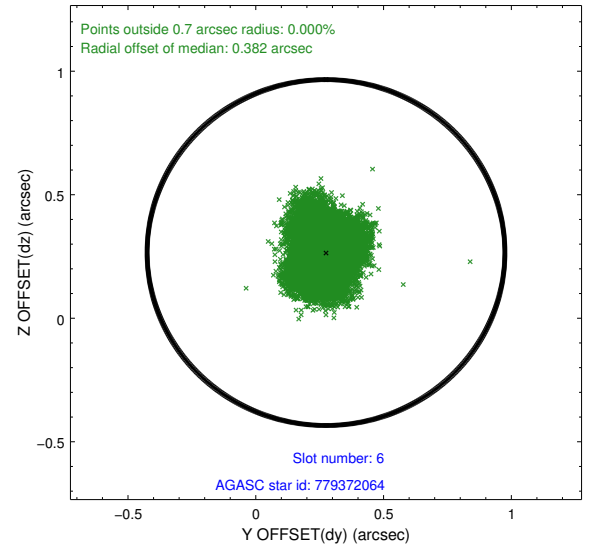
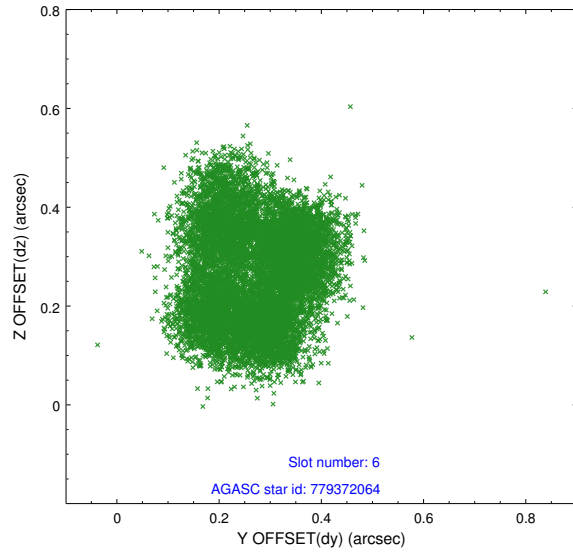
2.4.2 Slot 4



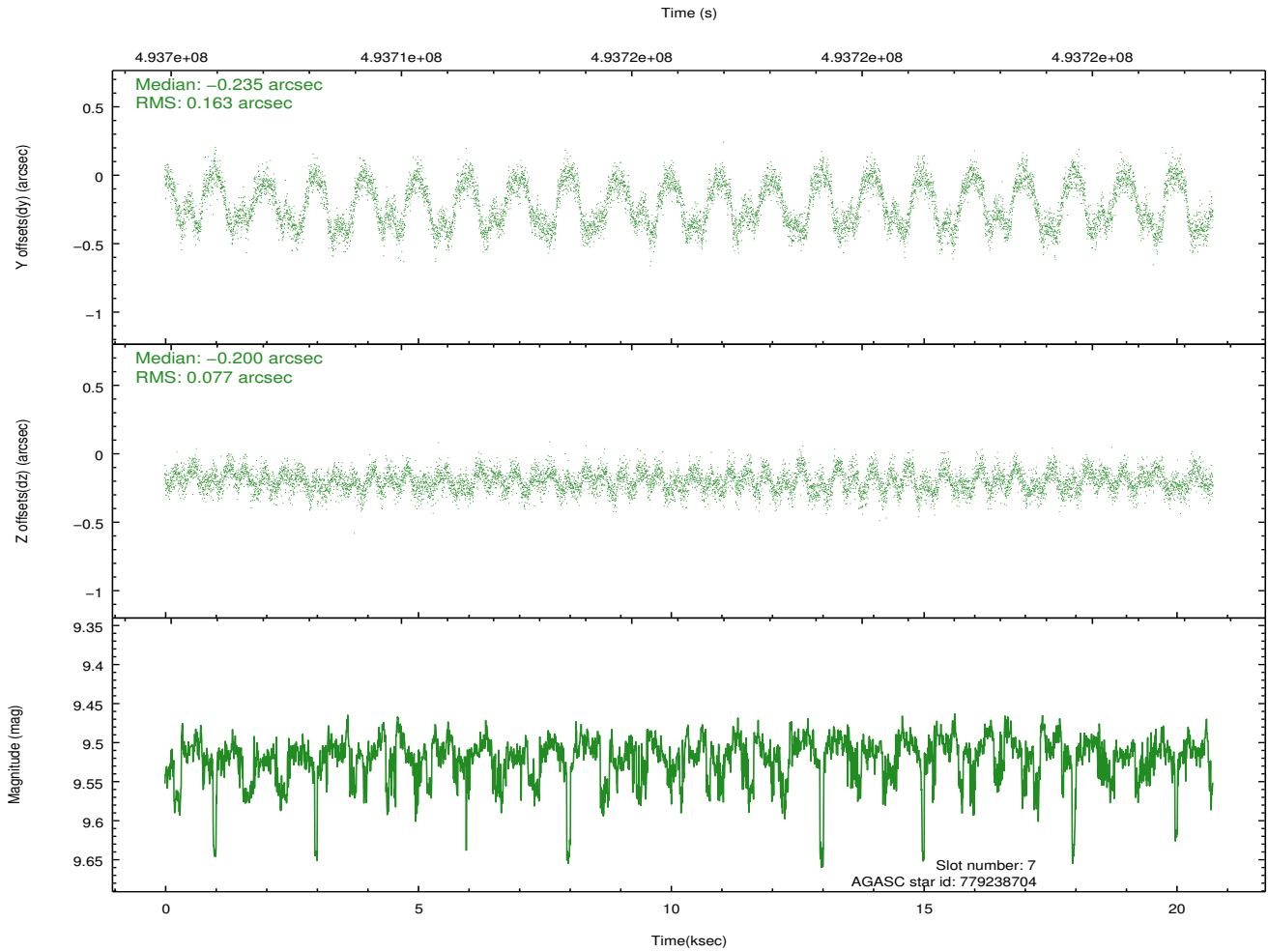
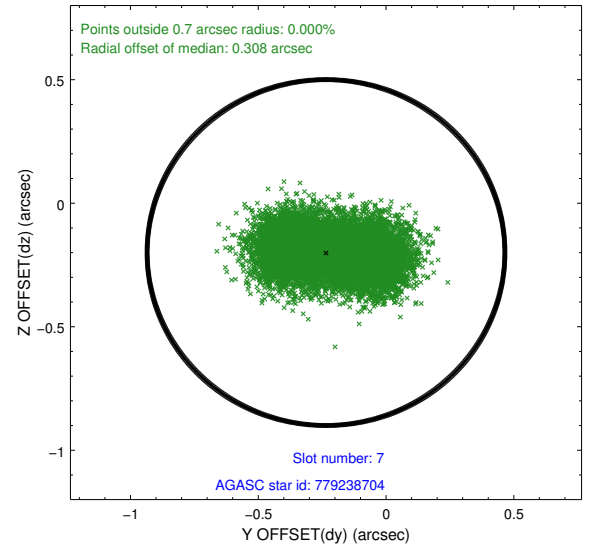
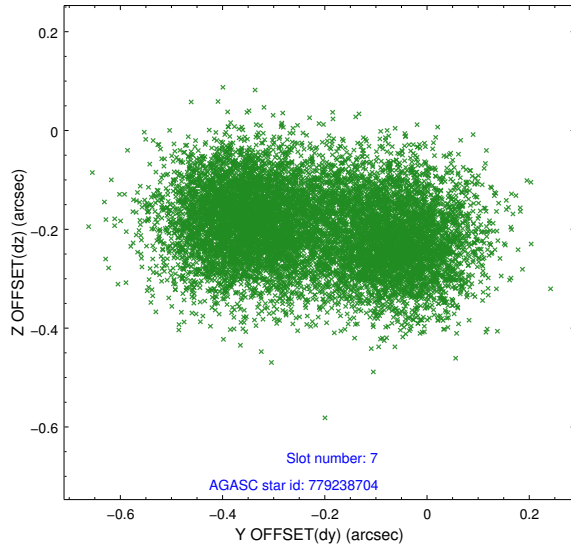
2.4.3 Slot 5



2.4.4 Slot 6

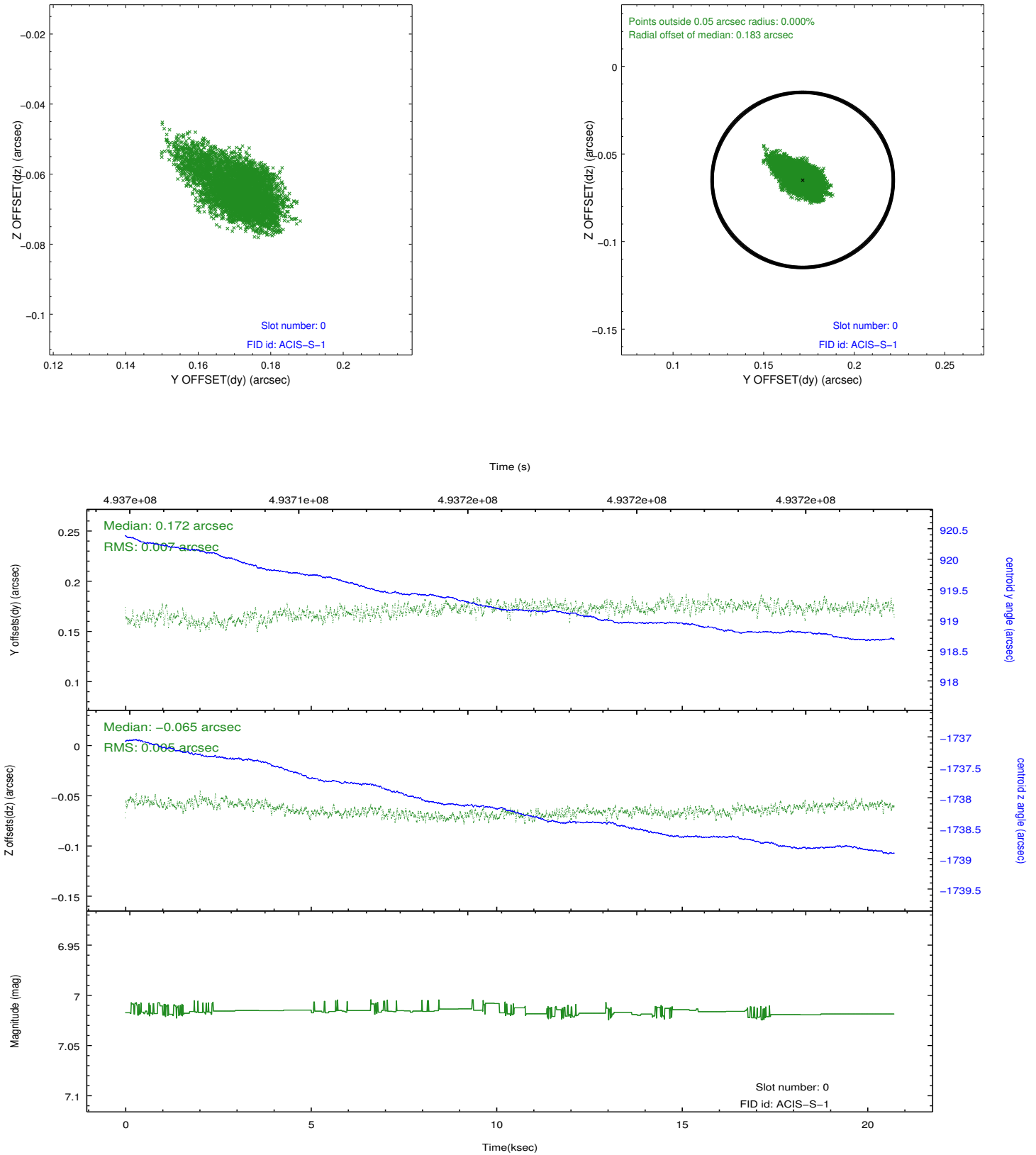


2.4.5 Slot 7

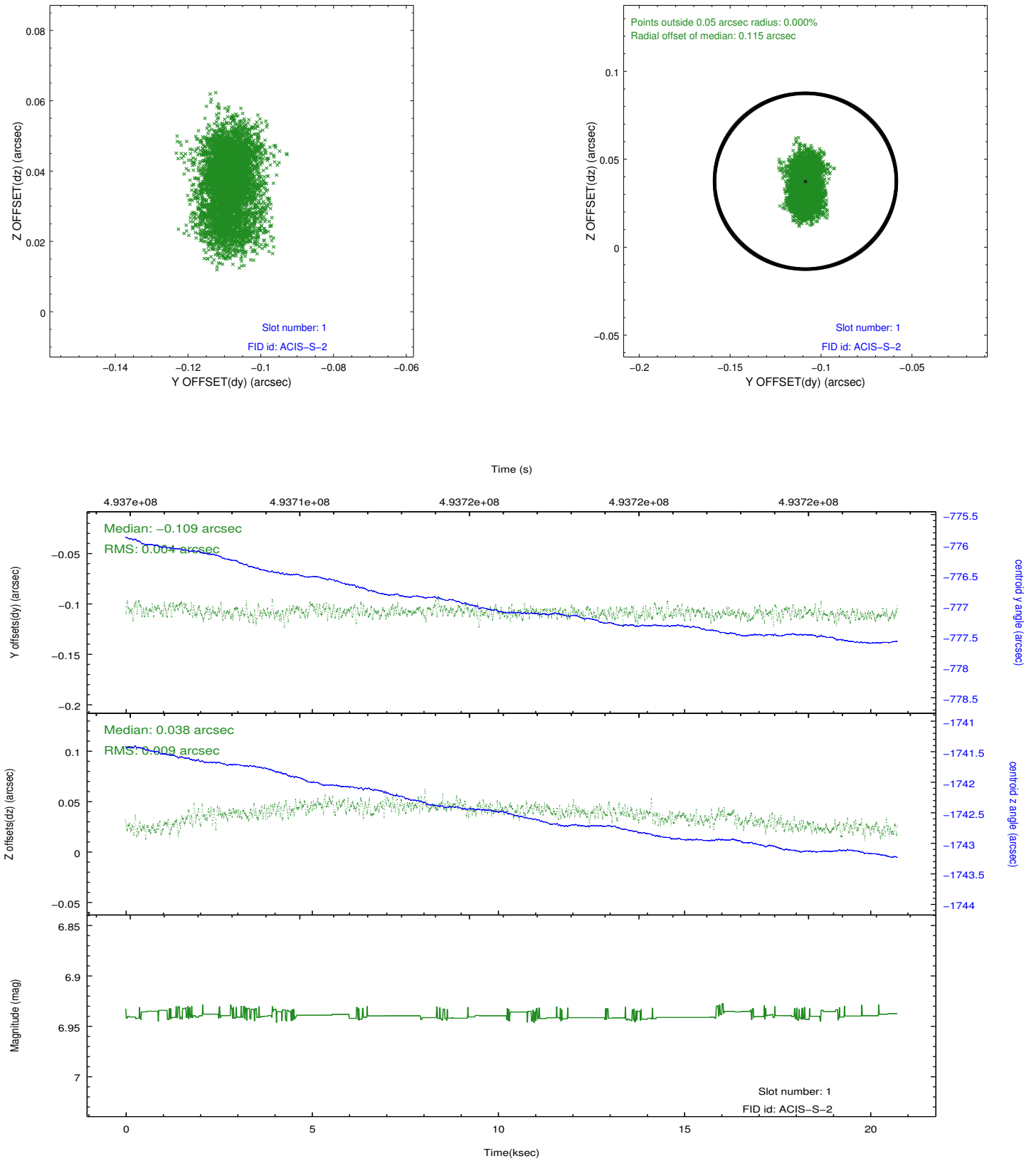


2.5 FID Slots

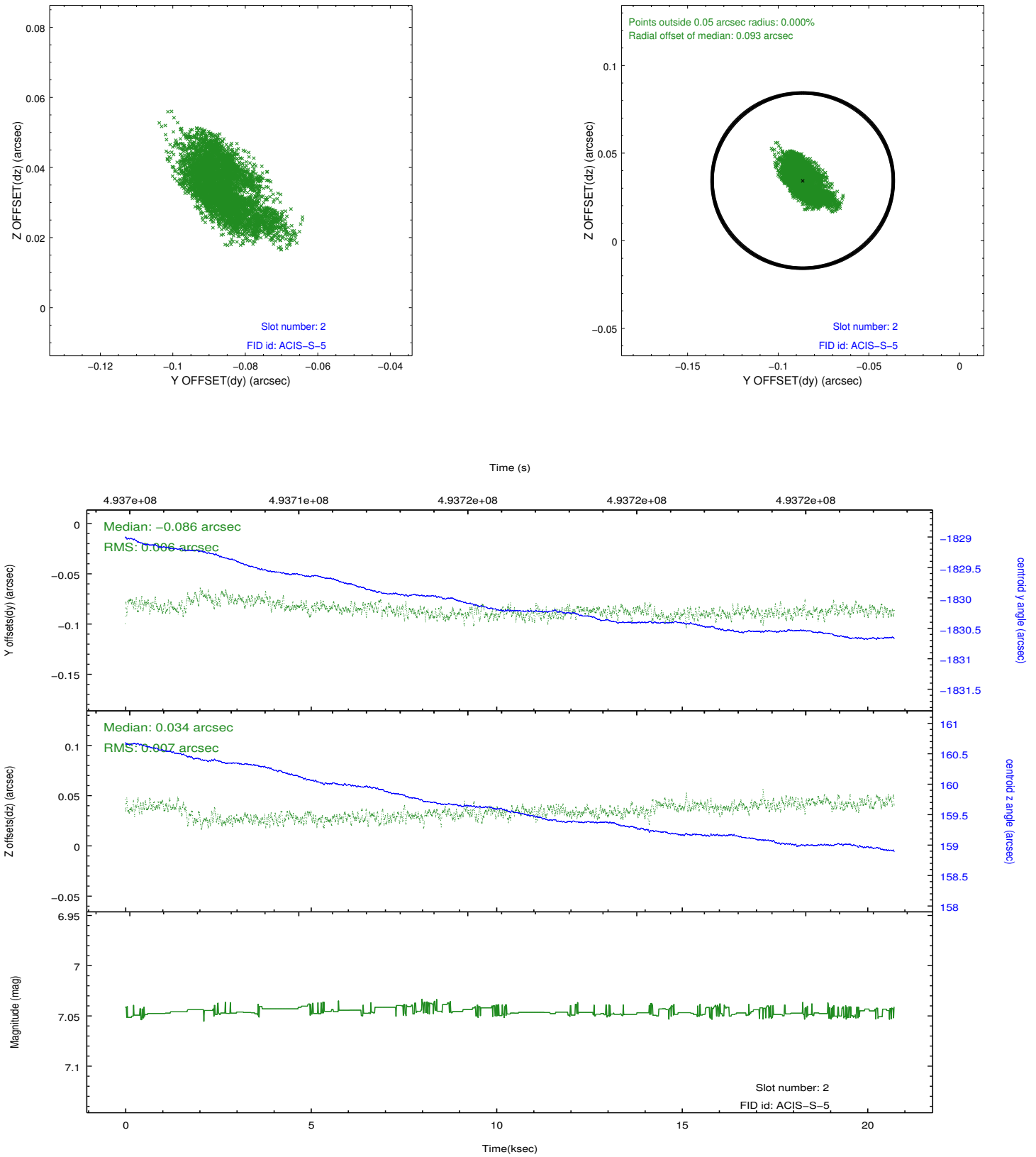
2.5.1 Slot 0



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)	2014.12.11
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	20.099158954859

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.