

V&V Reference Report

L2 ASCDS Version : 8.5.1.1

Observation 15610 - L2 Version 2
Chandra X-Ray Center

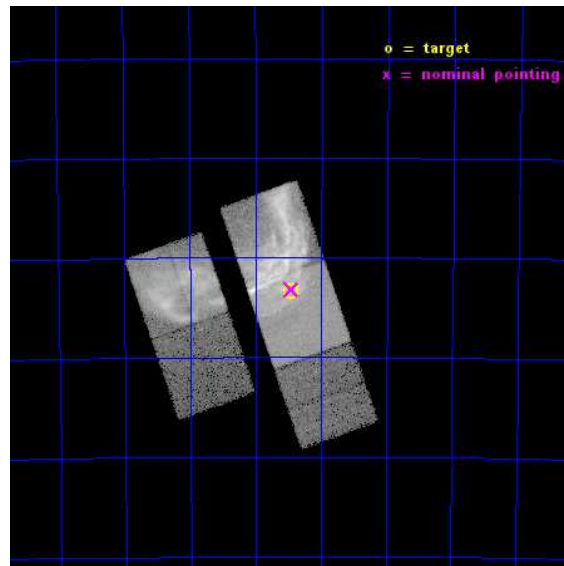
L2 Processing Date : Dec 1 2014

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

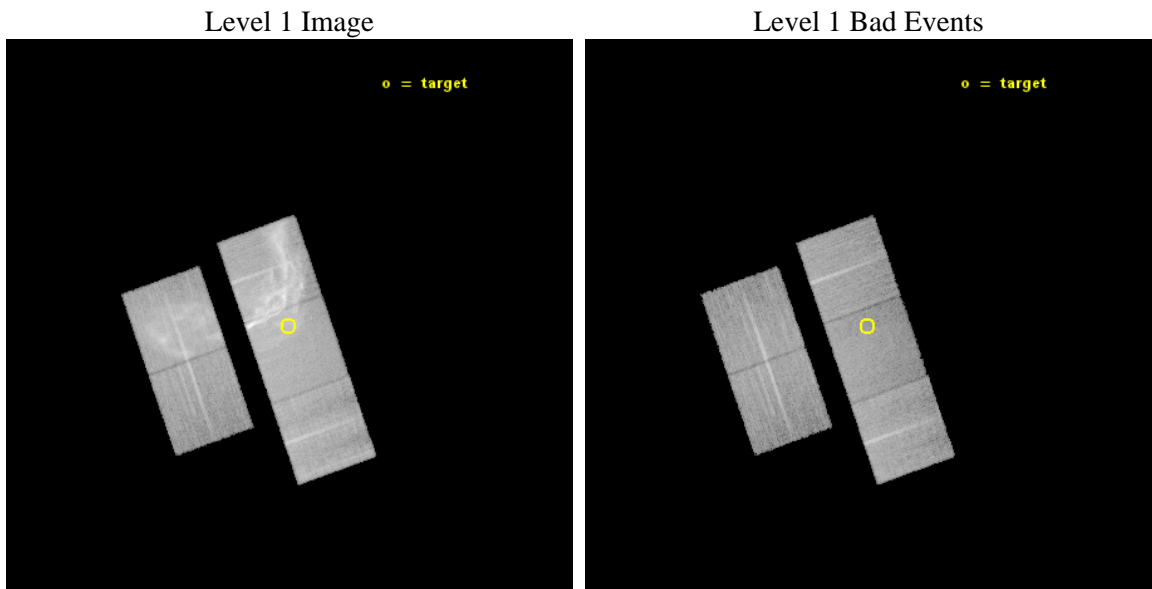
seq_num	501581	Sequence number
obs_id	15610	Observation id
title	Expansion Measurements of the Southwestern Rim of RCW86	Proposal t
observer	Dr. Satoru Katsuda	Principal investigator
object	RCW86	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	220.11798	Observer's specified target RA [deg]
dec_targ	-62.722094	Observer's specified target Dec [deg]
ra_nom	220.11389462525	Nominal RA [deg]
dec_nom	-62.719746439716	Nominal Dec [deg]
roll_nom	70.65300682777	Nominal Roll [deg]
revision	2	Processing version of data
ontime	23450.438945651	Sum of GTIs [s]
livetime	23144.041696864	Livetime [s]
ontime2	23450.274785638	Sum of GTIs [s]
ontime3	23450.356865644	Sum of GTIs [s]
ontime6	23450.397905648	Sum of GTIs [s]
ontime7	23450.438945651	Sum of GTIs [s]
ontime8	23450.315825641	Sum of GTIs [s]
l2events	424947	Number of level 2 events



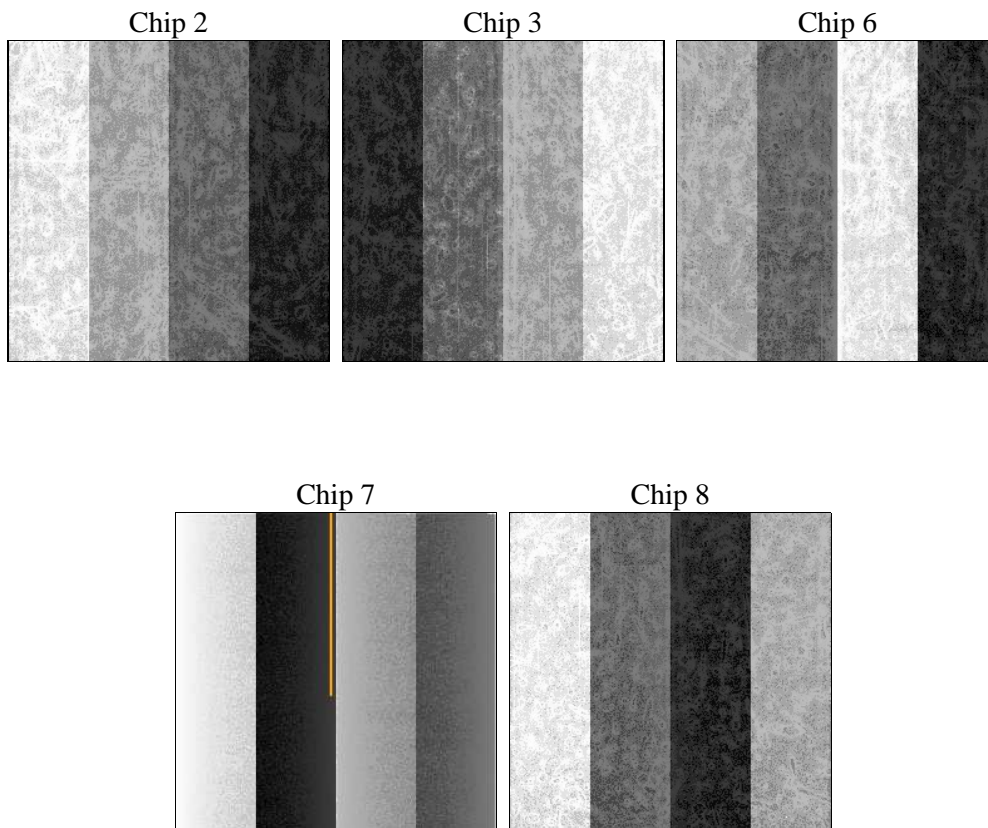
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	23382.813000	[s] Scheduled observation exposure time
ascdsver	10.3	Processing system revision	ontime	23450.438945651	Sum of GTIs [s]
caldbver	4.6.4	 	ontime2	23450.274785638	Sum of GTIs [s]
date	2014-12-01T13:28:33	Date and time of file creation	ontime3	23450.356865644	Sum of GTIs [s]
revision	2	Processing version of data	ontime6	23450.397905648	Sum of GTIs [s]
			ontime7	23450.438945651	Sum of GTIs [s]
			ontime8	23450.315825641	Sum of GTIs [s]
			l1events	1039800	Number of level 1 events

2.1.4 Events

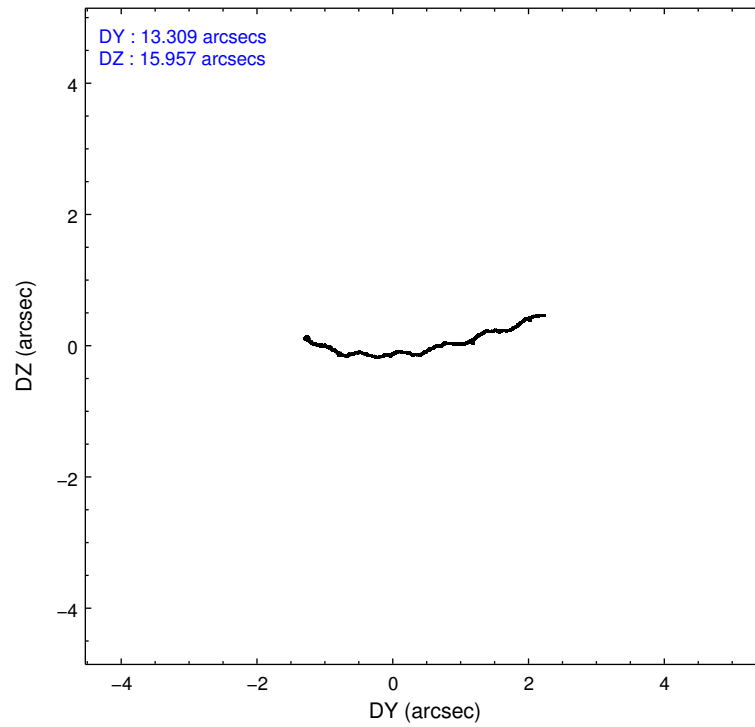
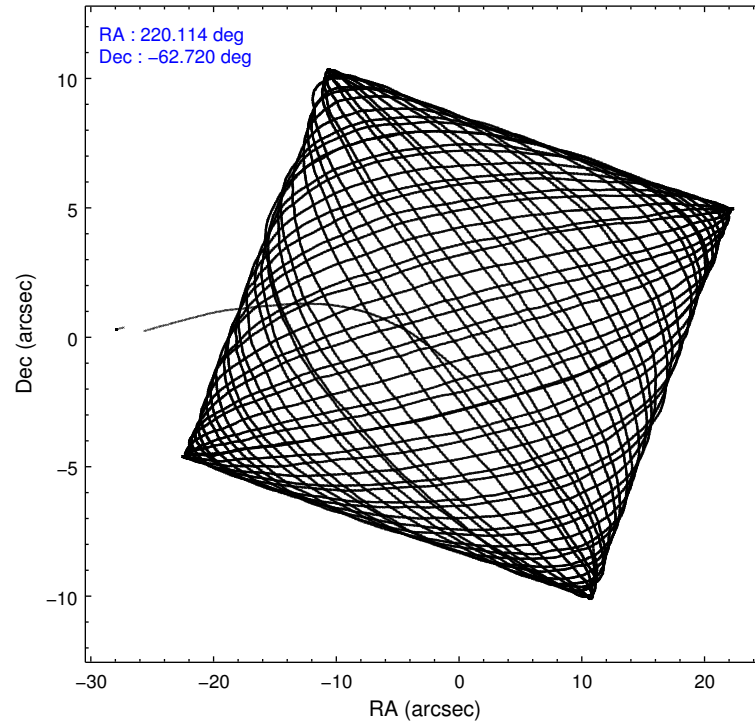
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
level 1 events	213310	120608	301360	225659	178863
rejected events	113108	104819	117359	97391	129916
rejected %	53%	86%	38%	43%	72%

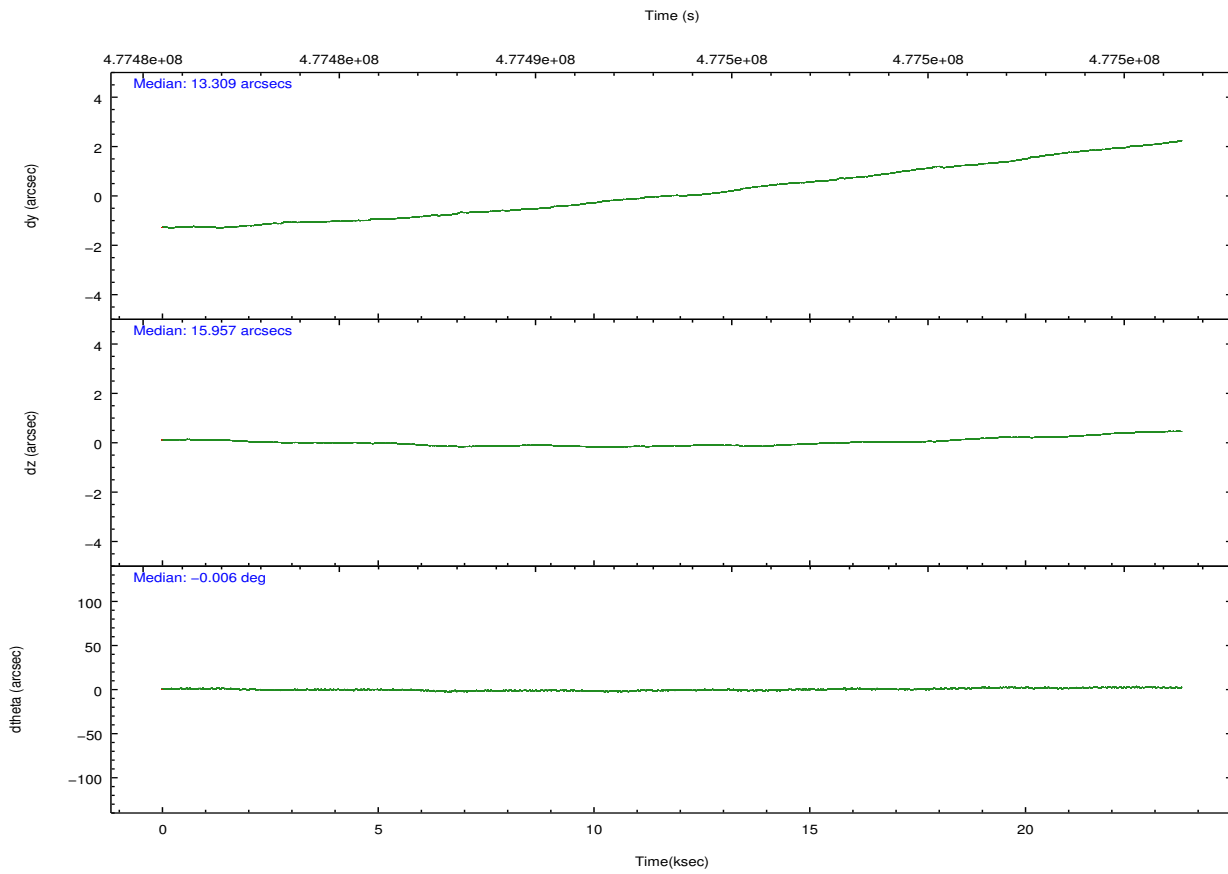
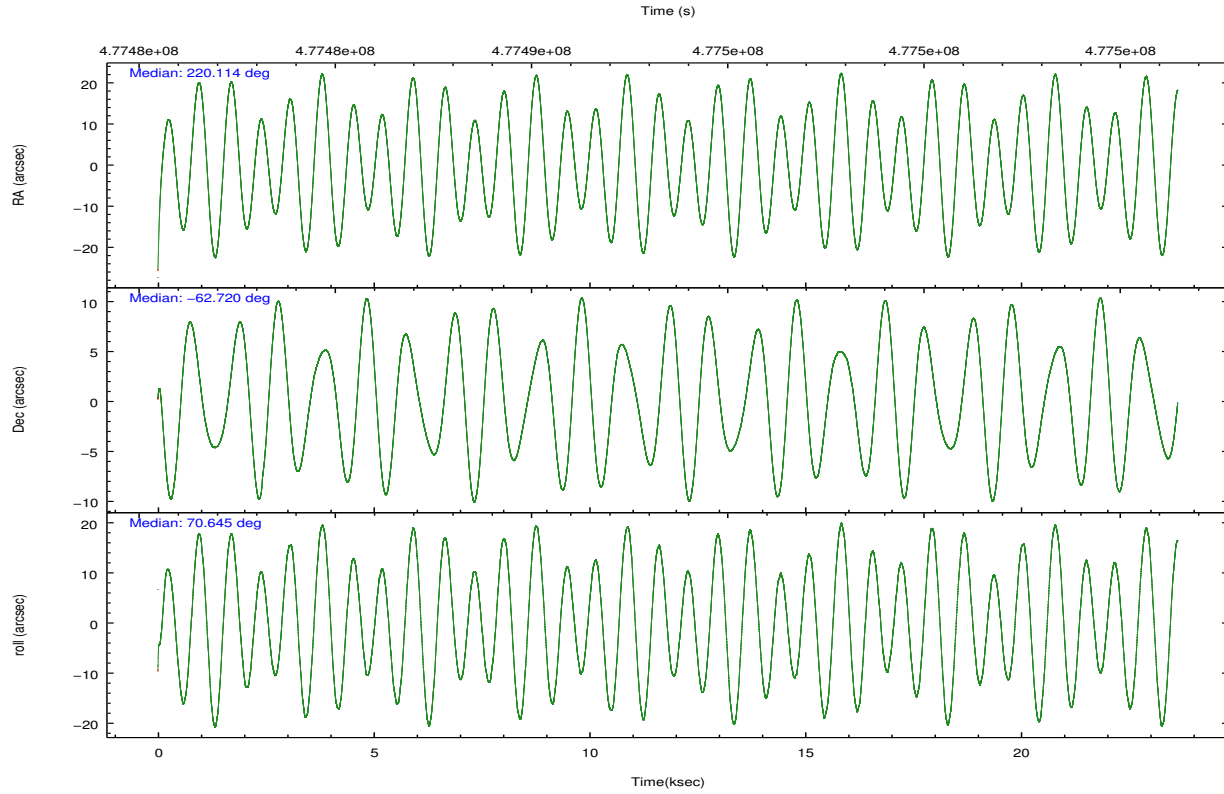
	ccd 2	ccd 3	ccd 6	ccd 7	ccd 8
grade 0 events	78145	6333	152955	23285	14611
	36%	5%	50%	10%	8%
grade 1 events	365	96	492	227	136
	0%	0%	0%	0%	0%
grade 2 events	10841	3264	16313	30192	11444
	5%	2%	5%	13%	6%
grade 3 events	3616	1574	4705	12671	4897
	1%	1%	1%	5%	2%
grade 4 events	3590	1583	4874	12470	4708
	1%	1%	1%	5%	2%
grade 5 events	5696	6593	7084	18457	9690
	2%	5%	2%	8%	5%
grade 6 events	4021	3035	5186	49668	13317
	1%	2%	1%	22%	7%
grade 7 events	107036	98130	109751	78689	120060
	50%	81%	36%	34%	67%

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	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	220.125752	220.1138946252528	Subarray requested	NONE	NONE
[deg] Pointing Dec	-62.746515	-62.71974643971631	Alternating exposures requested	N	N
[deg] Pointing Roll	70.506906	70.65300682777033	[s] Primary exposure time	0.000000	3.1
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1425803651734			
[mm] SIM translation stage offset	0	0.01005778216563158			
[s] Observation start time (MET)	477481900.184000	477480915.43727			
Observation start date	2013-02-17T09:50:33	2013-02-17T09:35:15			
[s] Observation end time (MET)	477505282.184000	477505508.7761			
Observation end date	2013-02-17T16:20:15	2013-02-17T16:25:08			
Read mode	TIMED	TIMED			

2.3 Aspect





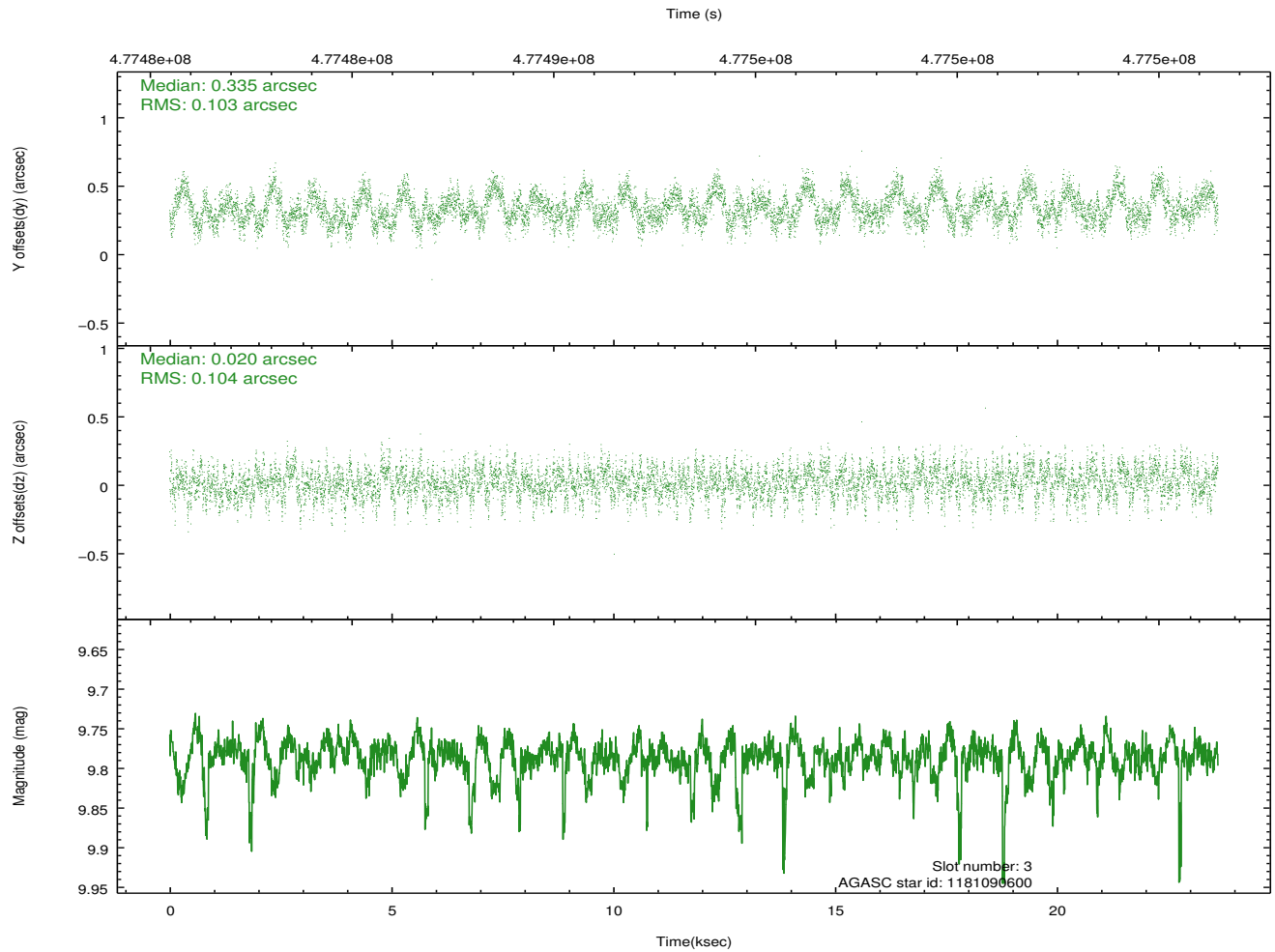
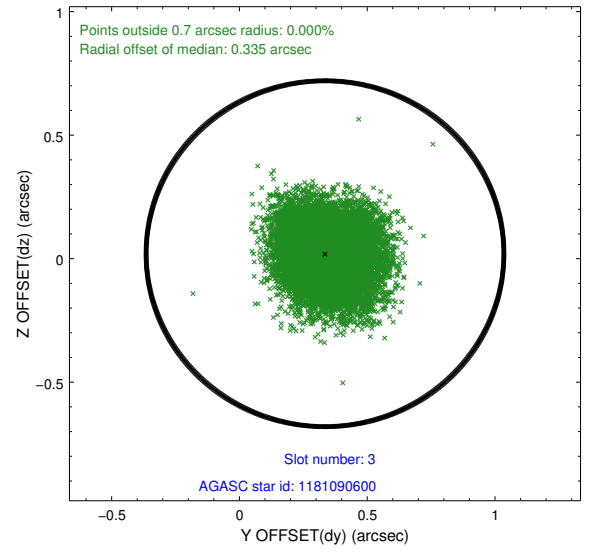
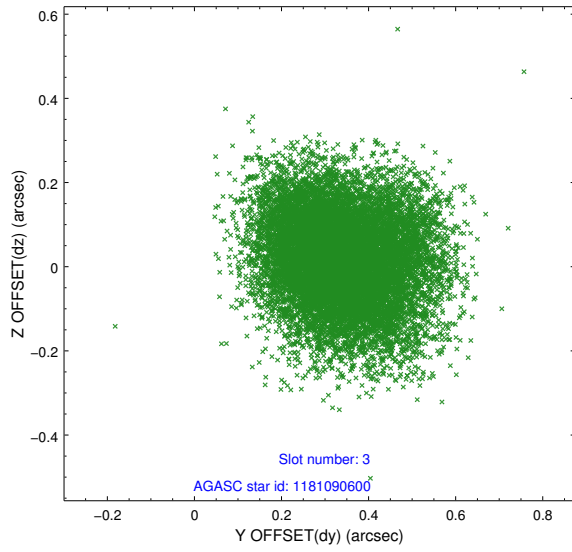
Slot Statistics

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	5764	0.083	-0.092	0.012	0.019	0.000000	0.000000	929.75	-1733.05
1	FID		ACIS-S-5	7.05	5763	-0.126	0.052	0.026	0.037	0.000000	0.000000	-1819.40	164.47
2	FID		ACIS-S-6	7.14	5764	0.022	0.053	0.025	0.038	0.000000	0.000000	395.06	808.62
3	GUIDE	used	1181090600	9.78	11513	0.335	0.020	0.158	0.250	220.510169	-63.034606	-769.15	-938.09
4	GUIDE	used	1181093336	9.58	11393	0.229	0.289	0.188	0.283	220.776875	-63.106347	-871.62	-1433.21
5	GUIDE	used	1181104896	6.47	11528	-0.395	-0.487	0.088	0.138	219.299869	-62.010896	2022.13	2196.10
6	GUIDE	used	1181107448	9.22	11520	0.055	-0.219	0.097	0.154	219.084809	-62.741785	-569.30	1619.10
7	GUIDE	used	1181109144	8.34	11522	-0.231	0.402	0.085	0.137	221.655127	-62.786083	678.20	-2429.90

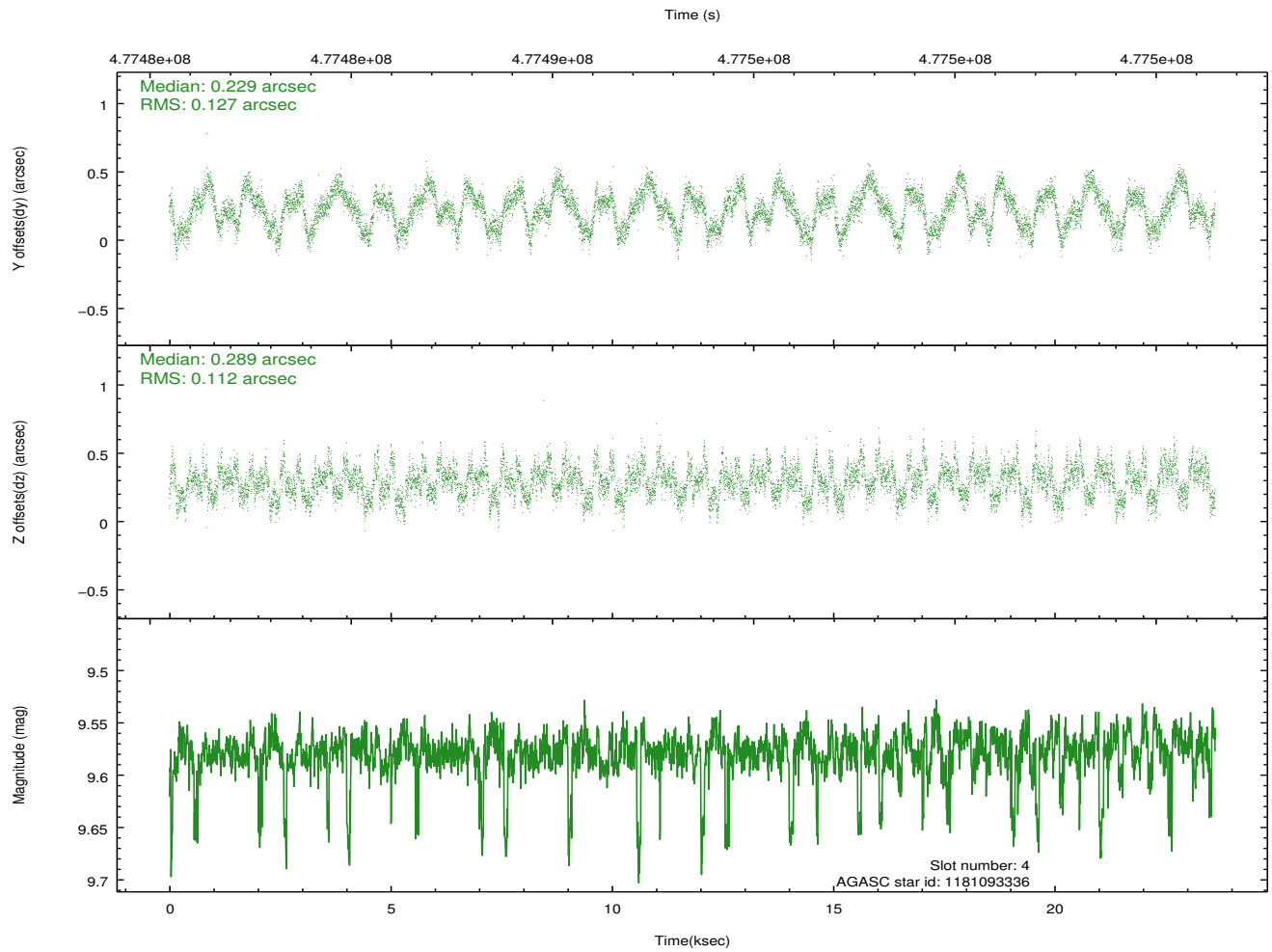
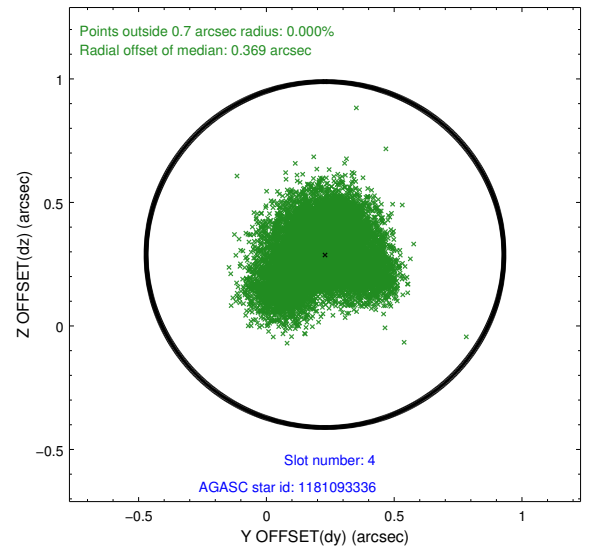
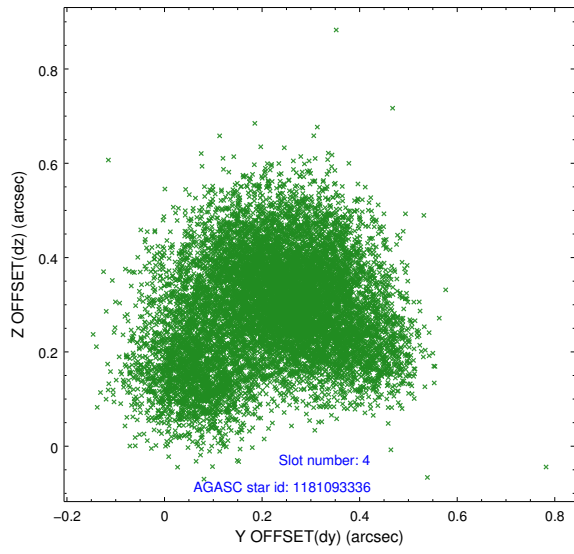
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2.4 Star Slots

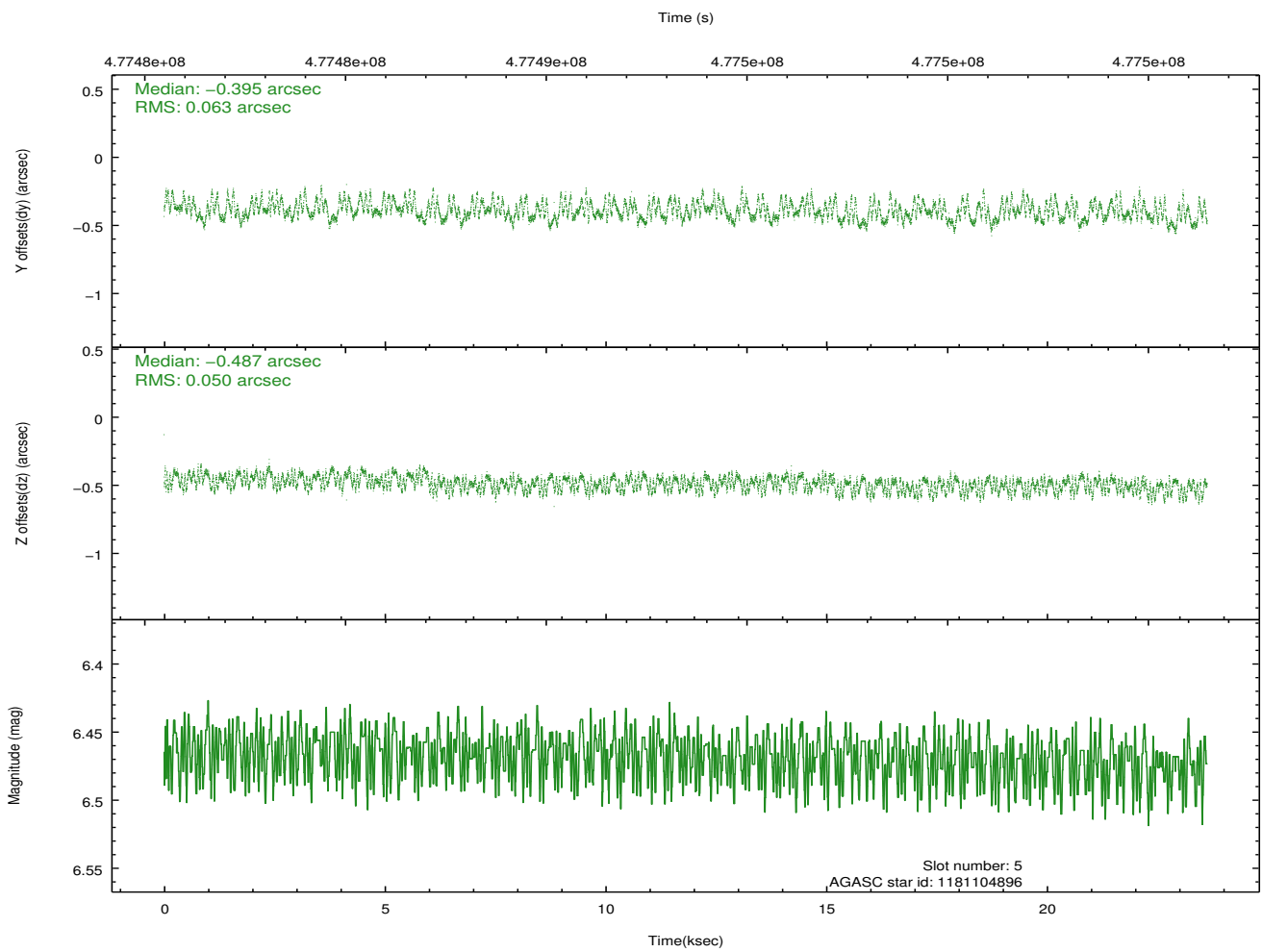
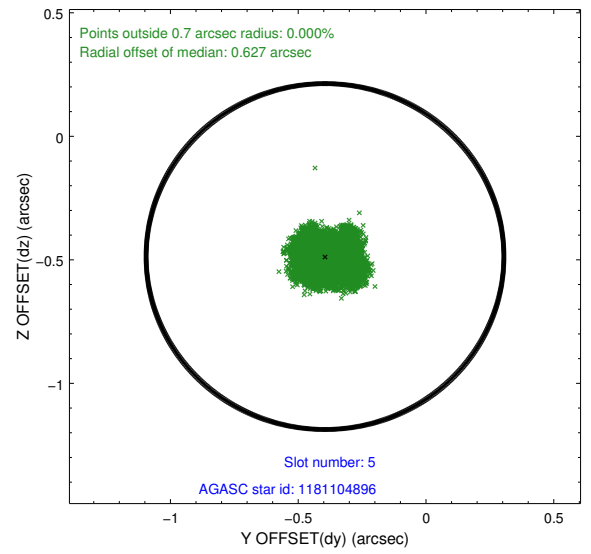
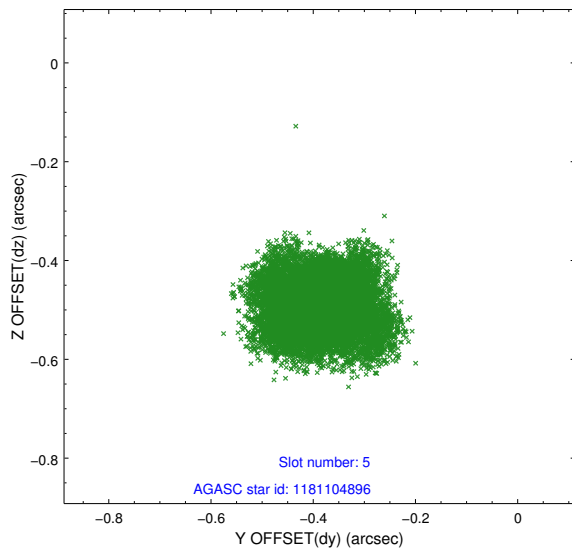
2.4.1 Slot 3



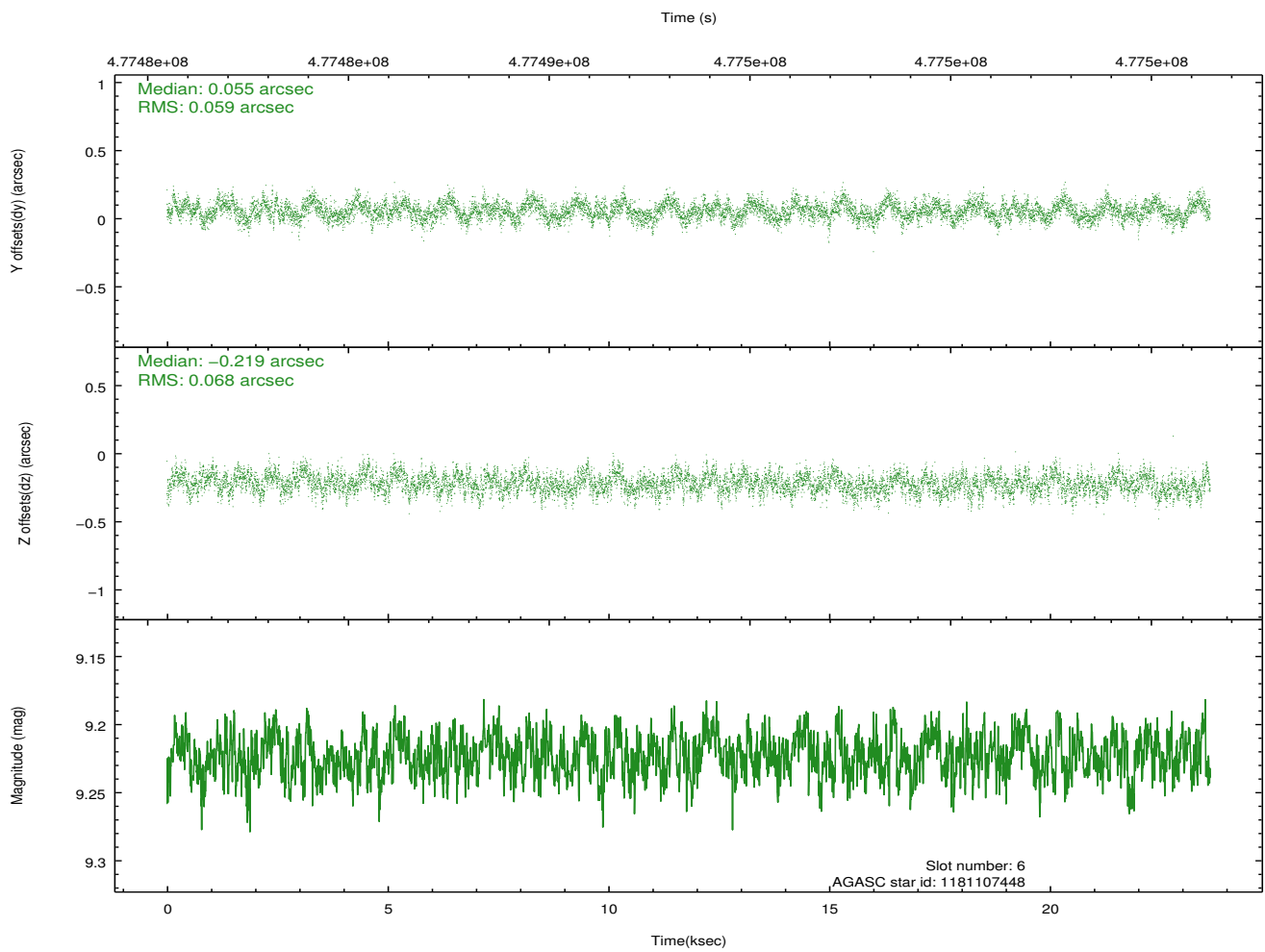
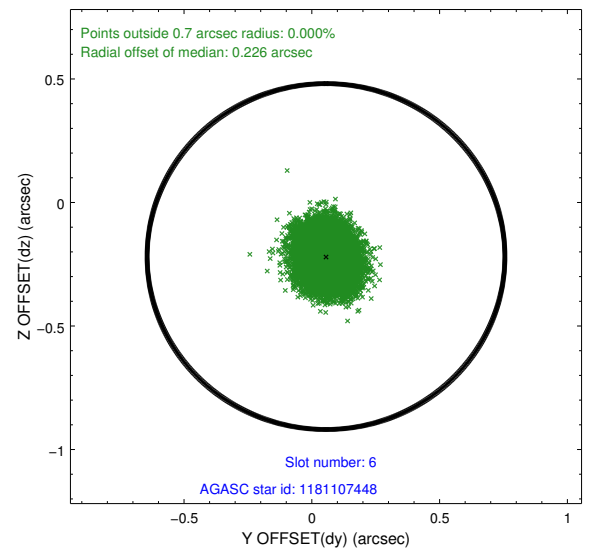
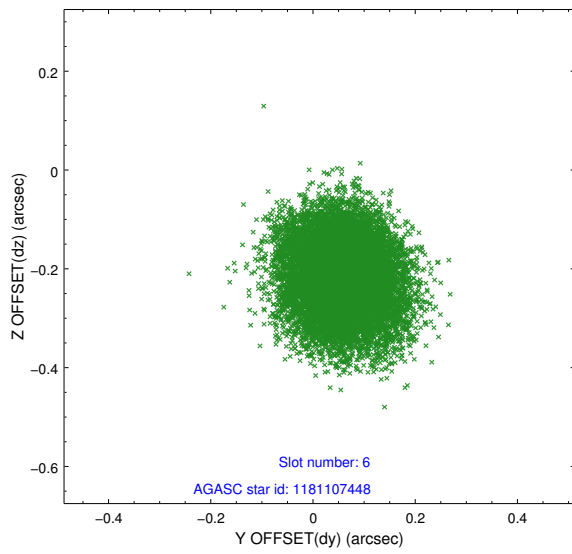
2.4.2 Slot 4



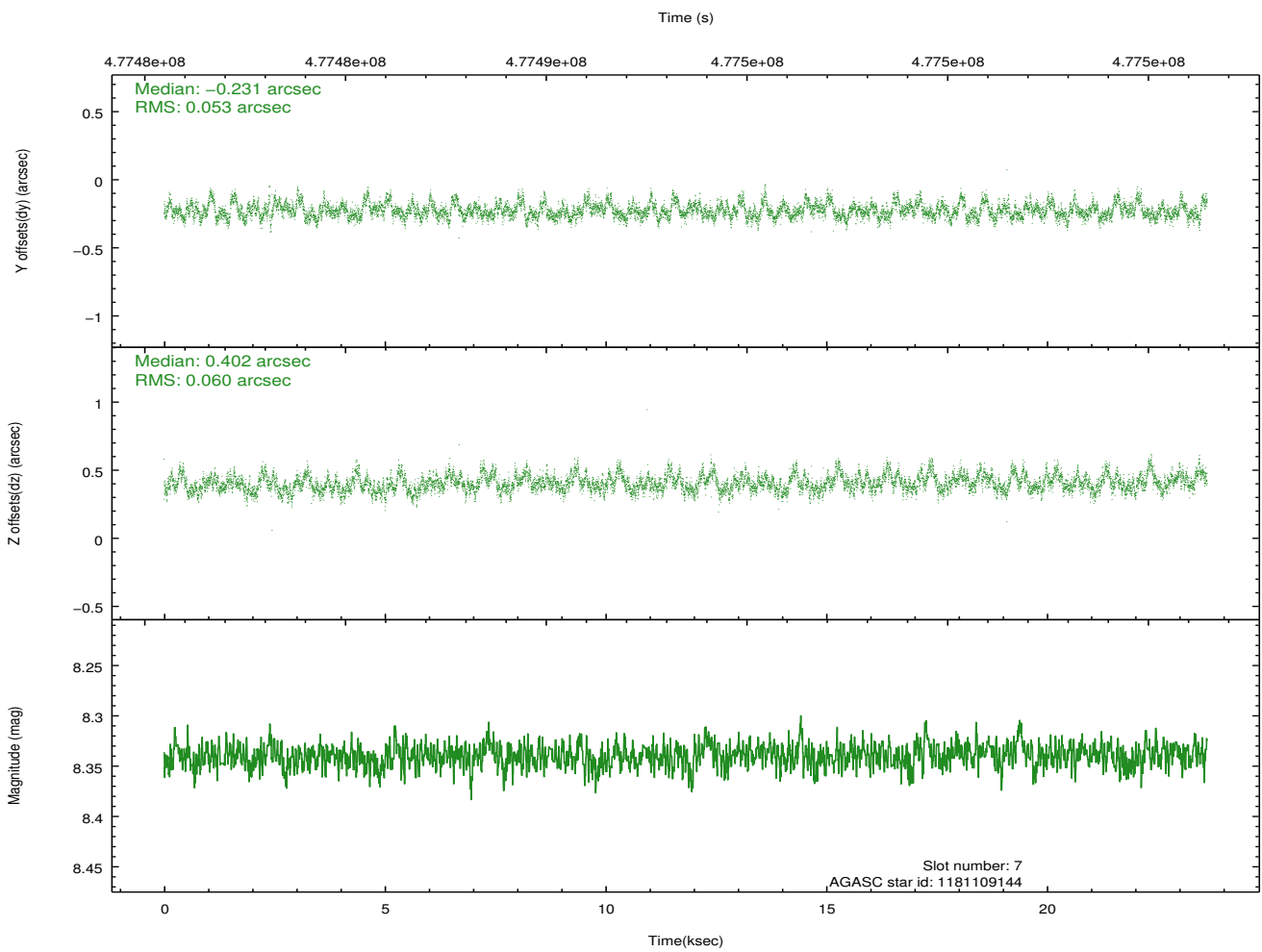
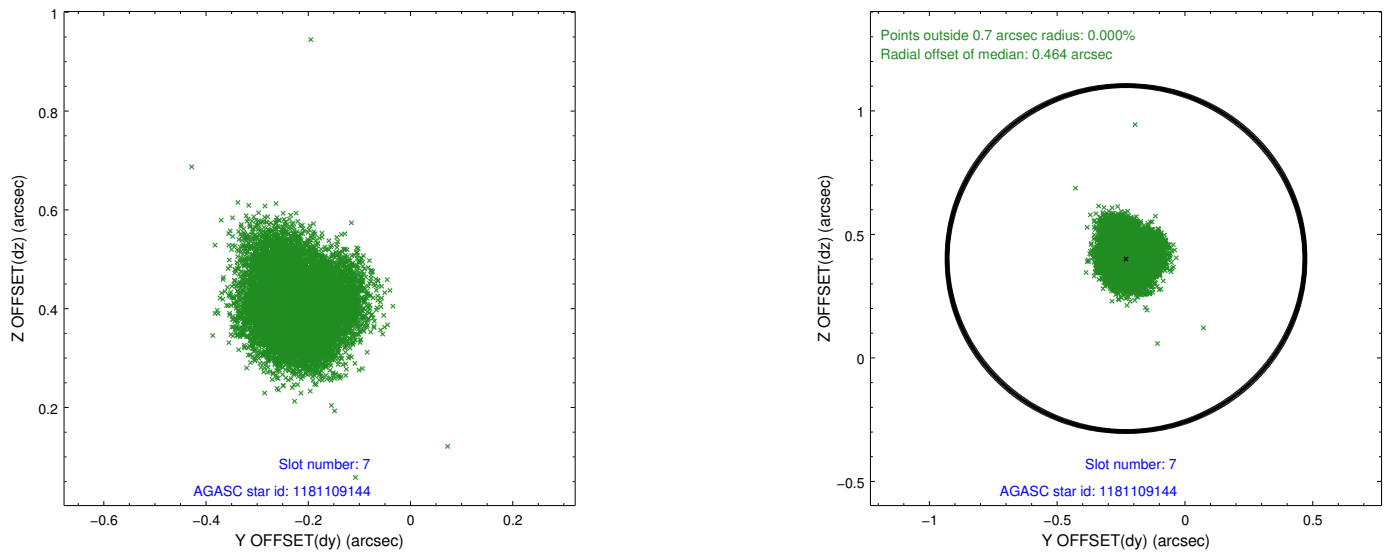
2.4.3 Slot 5



2.4.4 Slot 6

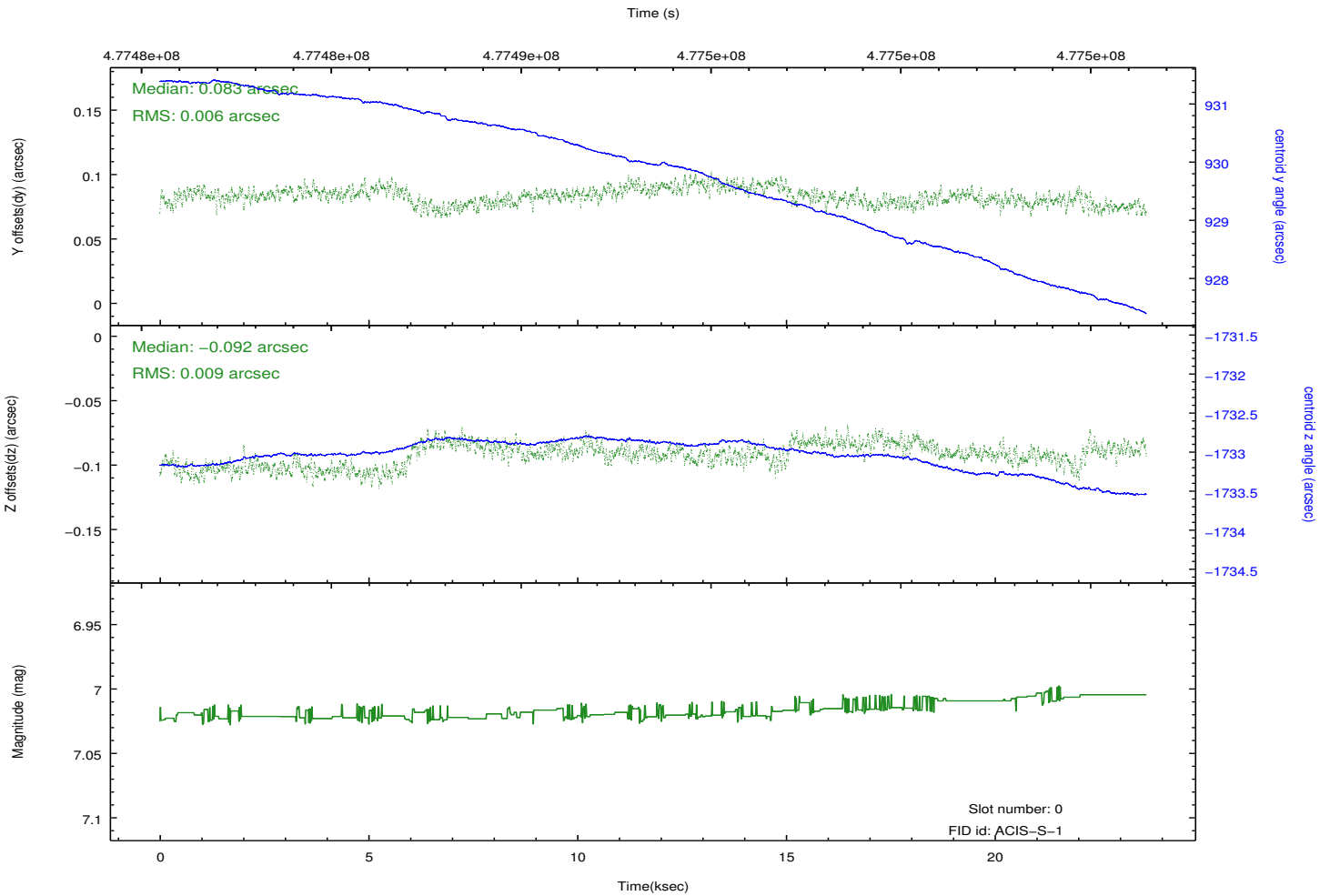
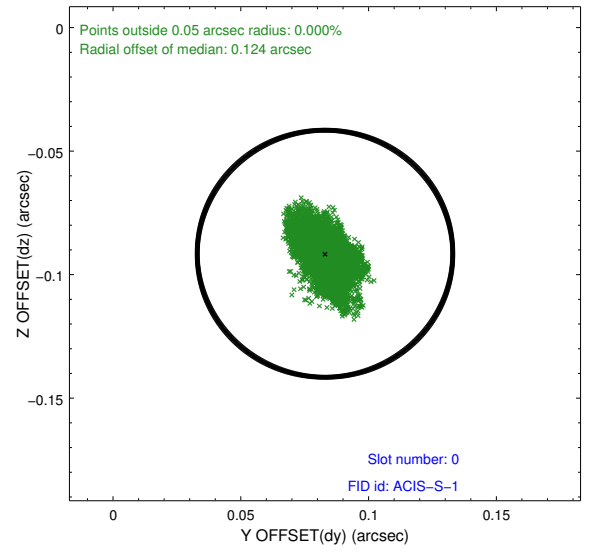
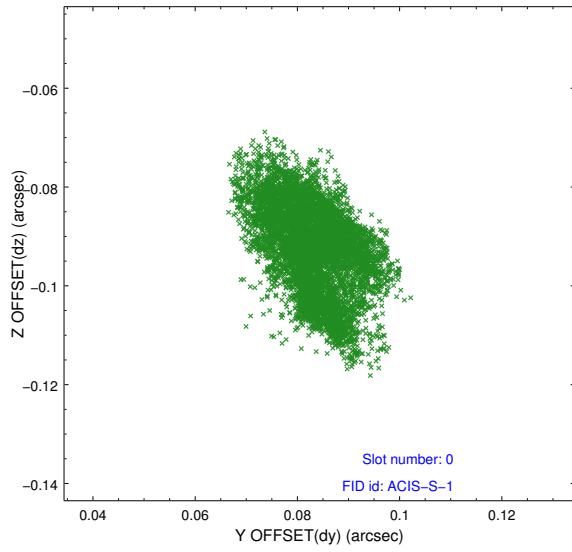


2.4.5 Slot 7

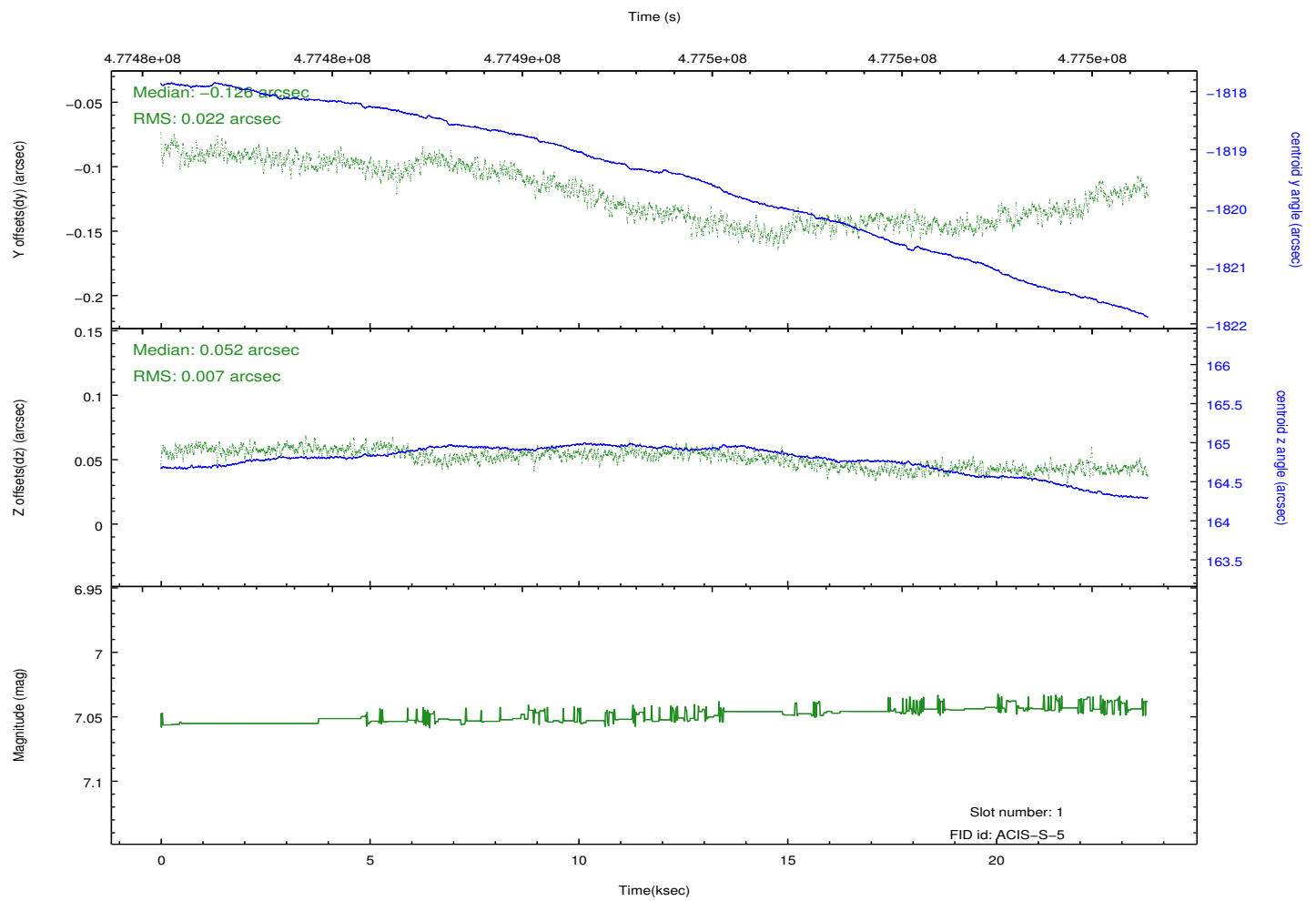
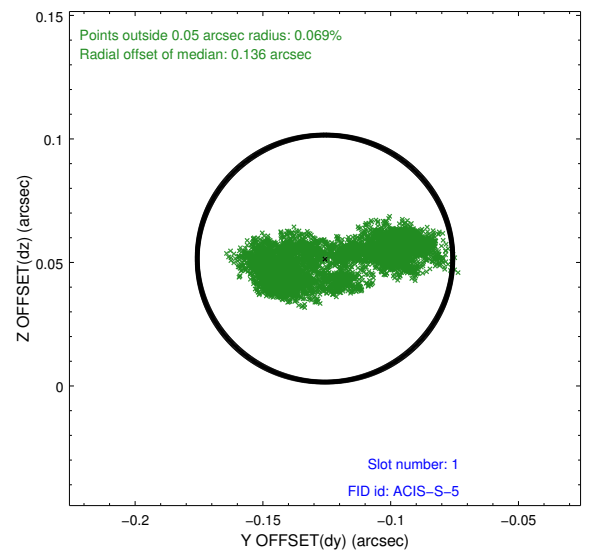
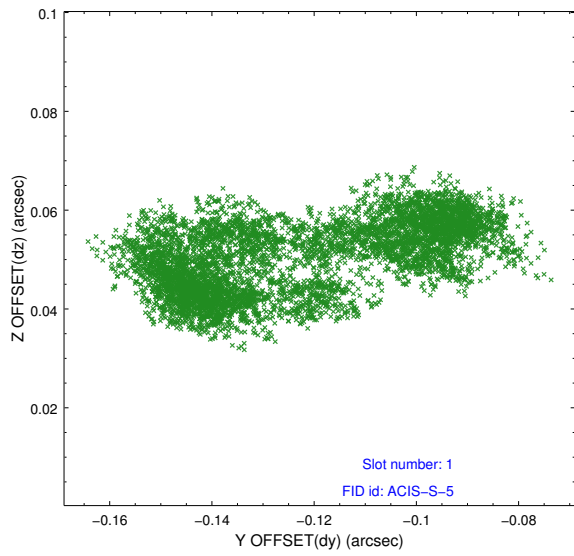


2.5 FID Slots

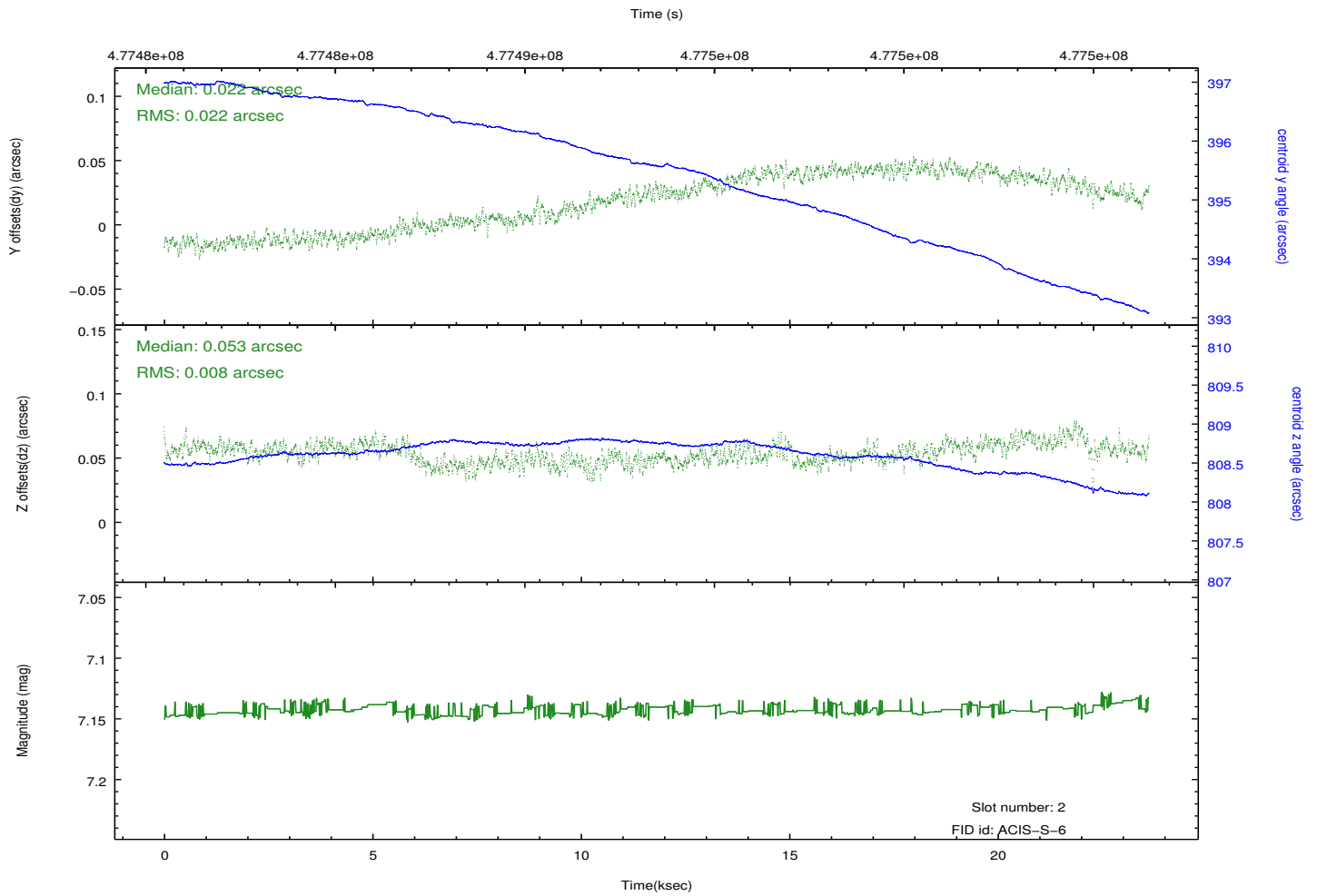
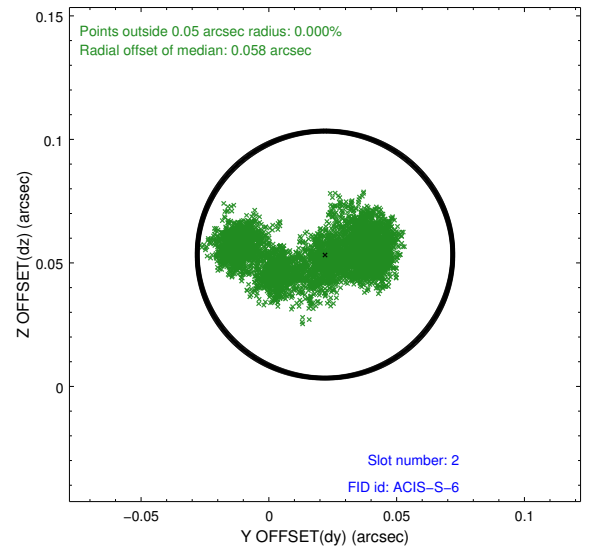
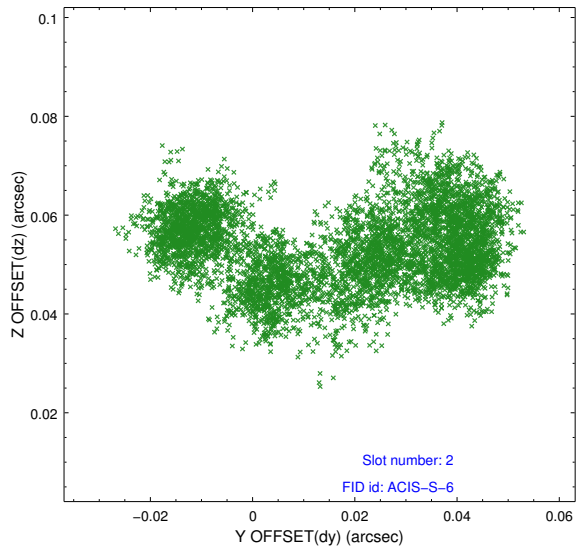
2.5.1 Slot 0



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	23.450438945651

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.