

V&V Reference Report

L2 ASCDS Version : 10.4.1

Observation 17708 - L2 Version 1
Chandra X-Ray Center

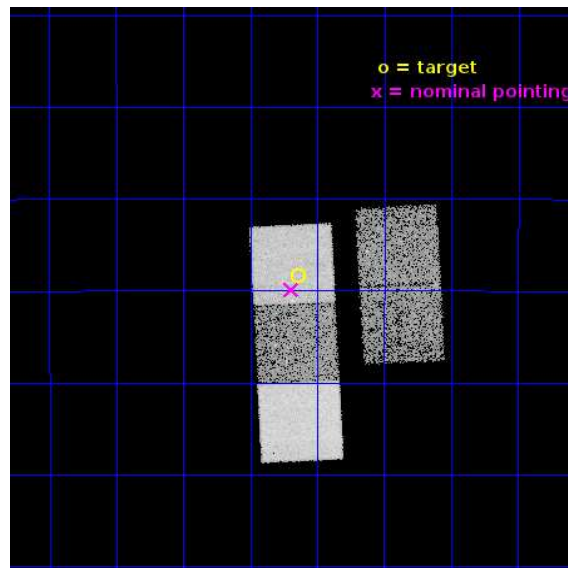
L2 Processing Date : Jul 30 2015

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1 Front

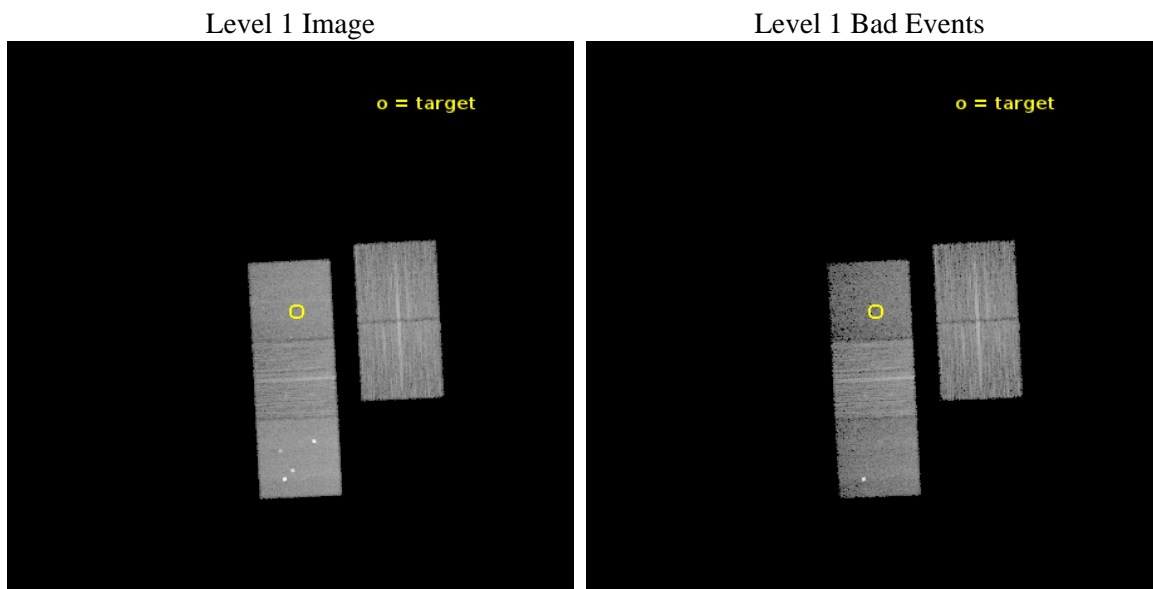
seq_num	100155	Sequence number
obs_id	17708	Observation id
title	Chandra Observations of Pluto's Escaping Atmosphere in Support of the New Horizons Encounter with Pluto	Proposal title
observer	Dr. Ralph McNutt, Jr.	Principal investigator
object	Pluto (134340)	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	284.4093	Observer's specified target RA [deg]
dec_targ	-20.8072	Observer's specified target Dec [deg]
ra_nom	284.4231526196	Nominal RA [deg]
dec_nom	-20.831521805364	Nominal Dec [deg]
roll_nom	267.15786165326	Nominal Roll [deg]
revision	1	Processing version of data
ontime	17595.600135446	Sum of GTIs [s]
livetime	17365.700665984	Livetime [s]
ontime2	17595.600135446	Sum of GTIs [s]
ontime3	17595.600135446	Sum of GTIs [s]
ontime5	17595.600135446	Sum of GTIs [s]
ontime6	17595.600135446	Sum of GTIs [s]
ontime7	17595.600135446	Sum of GTIs [s]
l2events	114637	Number of level 2 events



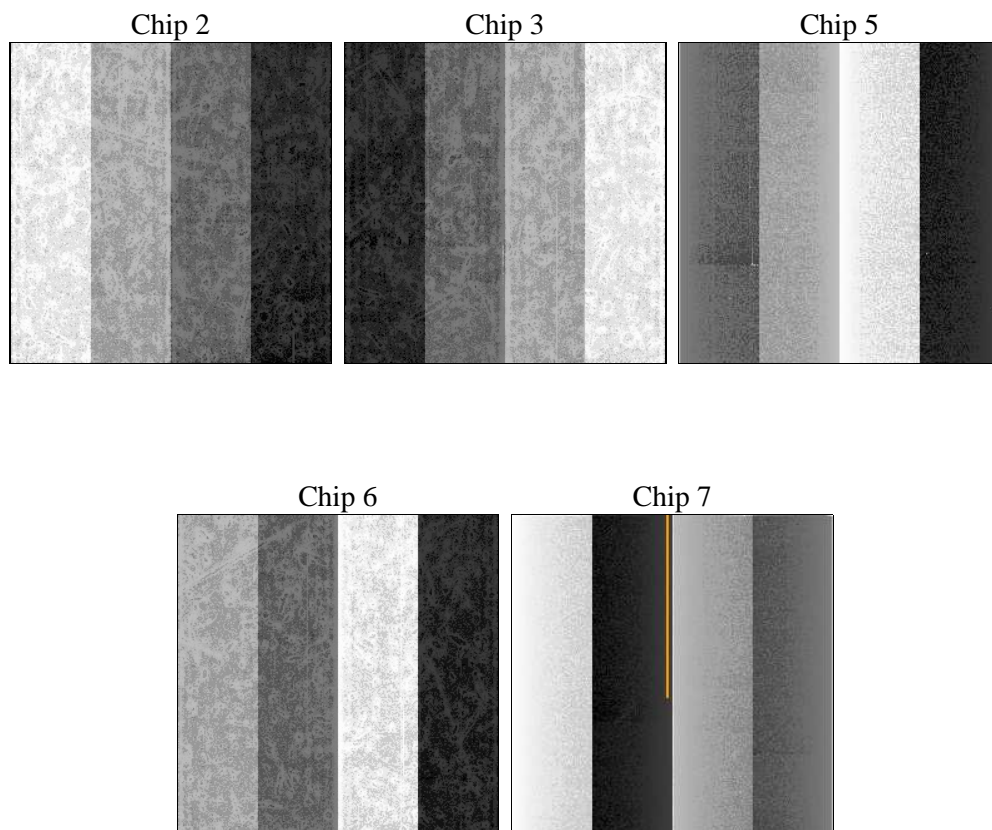
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	17500.000000	[s] Scheduled observation exposure time
ascdsver	10.4.1	Processing system revision	ontime	17595.600135446	Sum of GTIs [s]
caldsver	4.6.8	 	ontime2	17595.600135446	Sum of GTIs [s]
date	2015-07-31T02:04:58	Date and time of file creation	ontime3	17595.600135446	Sum of GTIs [s]
revision	1	Processing version of data	ontime5	17595.600135446	Sum of GTIs [s]
			ontime6	17595.600135446	Sum of GTIs [s]
			ontime7	17595.600135446	Sum of GTIs [s]
			l1events	429917	Number of level 1 events

2.1.4 Events

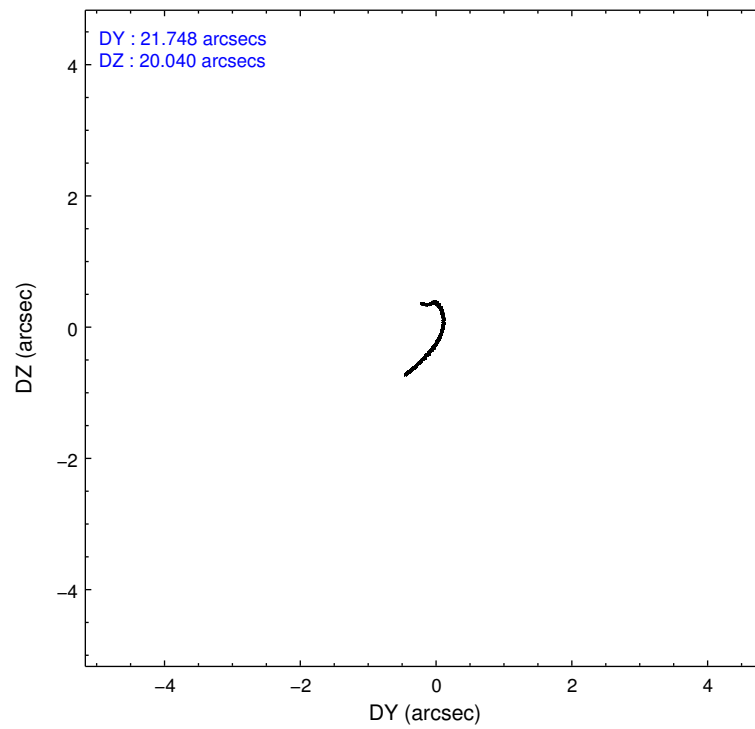
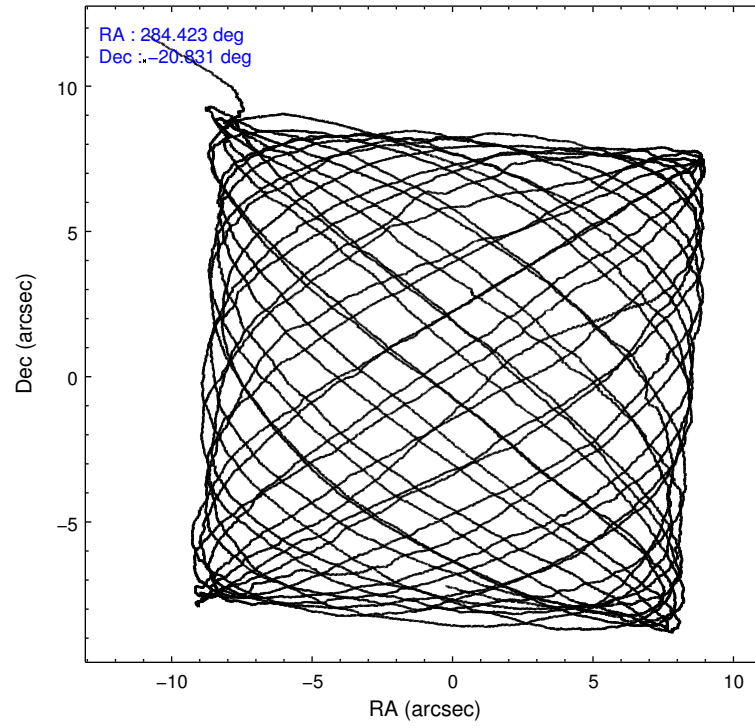
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
level 1 events	78852	76383	116894	80839	76949
rejected events	70383	68152	51155	71499	37811
rejected %	89%	89%	43%	88%	49%

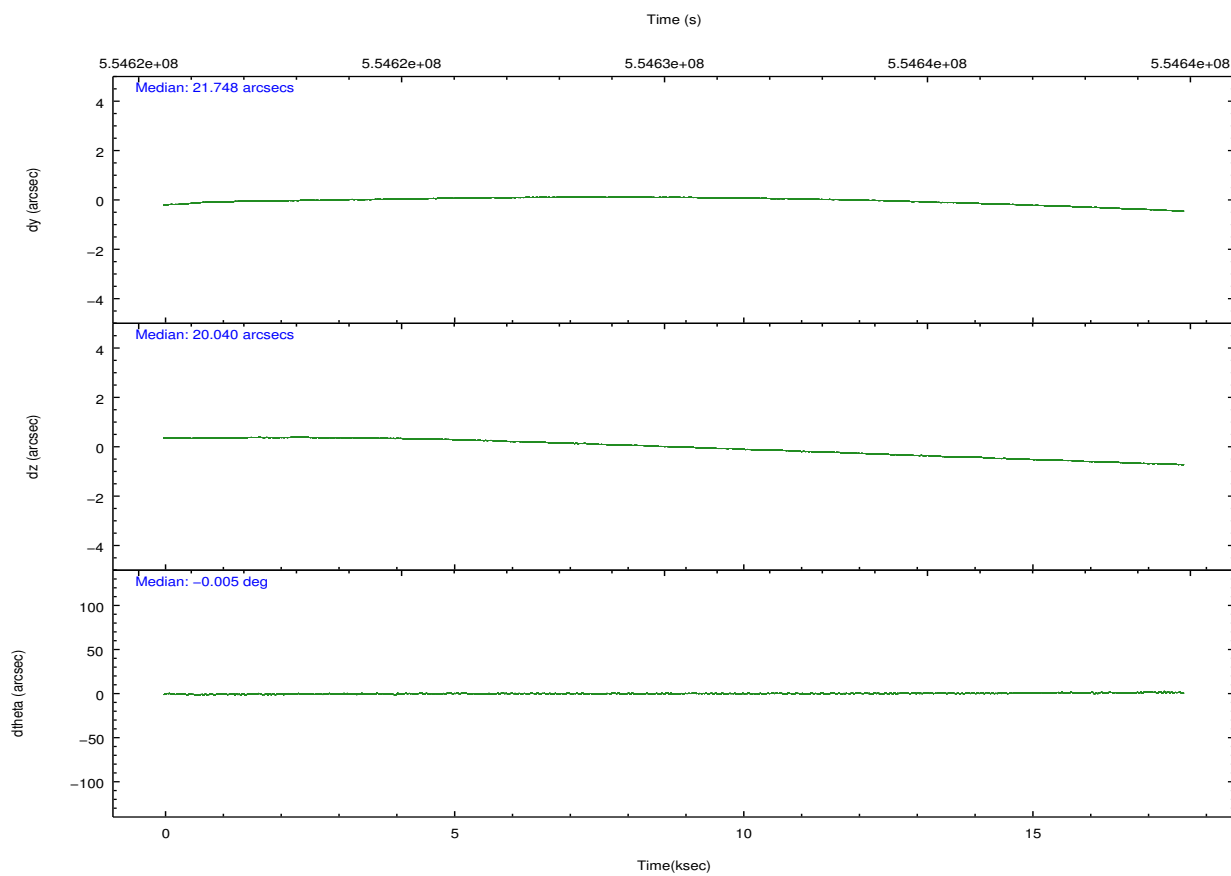
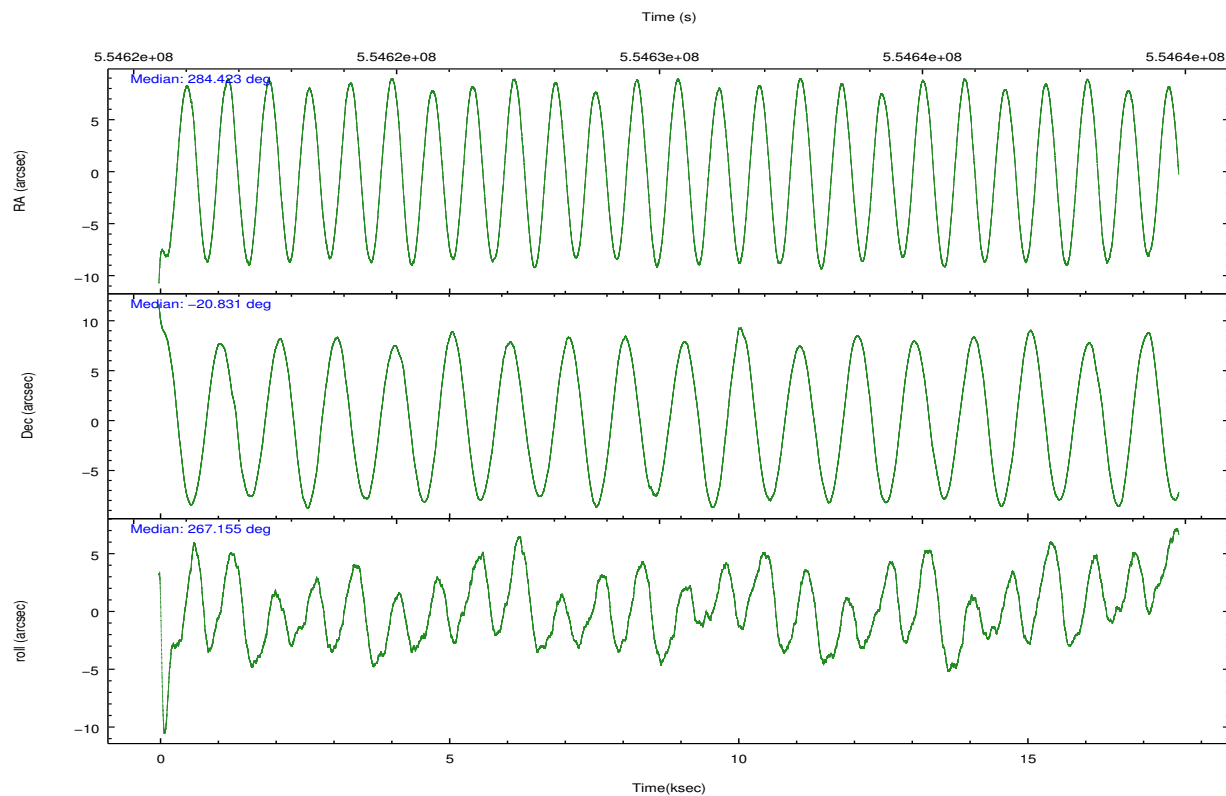
	ccd 2	ccd 3	ccd 5	ccd 6	ccd 7
grade 0 events	3281	3211	11366	3600	4374
	4%	4%	9%	4%	5%
grade 1 events	59	45	283	56	148
	0%	0%	0%	0%	0%
grade 2 events	2184	1800	21009	2095	9056
	2%	2%	17%	2%	11%
grade 3 events	805	799	2181	947	3514
	1%	1%	1%	1%	4%
grade 4 events	817	867	2085	888	3389
	1%	1%	1%	1%	4%
grade 5 events	2287	3018	8450	2943	8144
	2%	3%	7%	3%	10%
grade 6 events	1384	1556	29111	1812	18814
	1%	2%	24%	2%	24%
grade 7 events	68035	65087	42409	68498	29510
	86%	85%	36%	84%	38%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-23567	ACIS-23567	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	284.409399	284.423152619601	Subarray requested	NONE	NONE
[deg] Pointing Dec	-20.807275	-20.83152180536358	Alternating exposures requested	N	N
[deg] Pointing Roll	266.996335	267.1578616532629	[s] Primary exposure time	0.000000	3.1
[s] Window start time (MET)	553478468.184000	553478468.184000			
[s] Window stop time (MET)	555897668.184000	555897668.184000			
[mm] SIM focus pos	-0.684267	-0.6828225247311905			
[mm] SIM defocus	0	0.001444936568705701			
[mm] SIM translation stage pos	-190.132523	-190.1400660498719			
[mm] SIM translation stage offset	0	0.00754346686406393			
[s] Observation start time (MET)	554621484.184000	554620319.98218			
Observation start date	2015-07-30T05:30:16	2015-07-30T05:11:59			
[s] Observation end time (MET)	554638984.184000	554639339.37075			
Observation end date	2015-07-30T10:21:56	2015-07-30T10:28:59			
Read mode	TIMED	TIMED			

2.3 Aspect



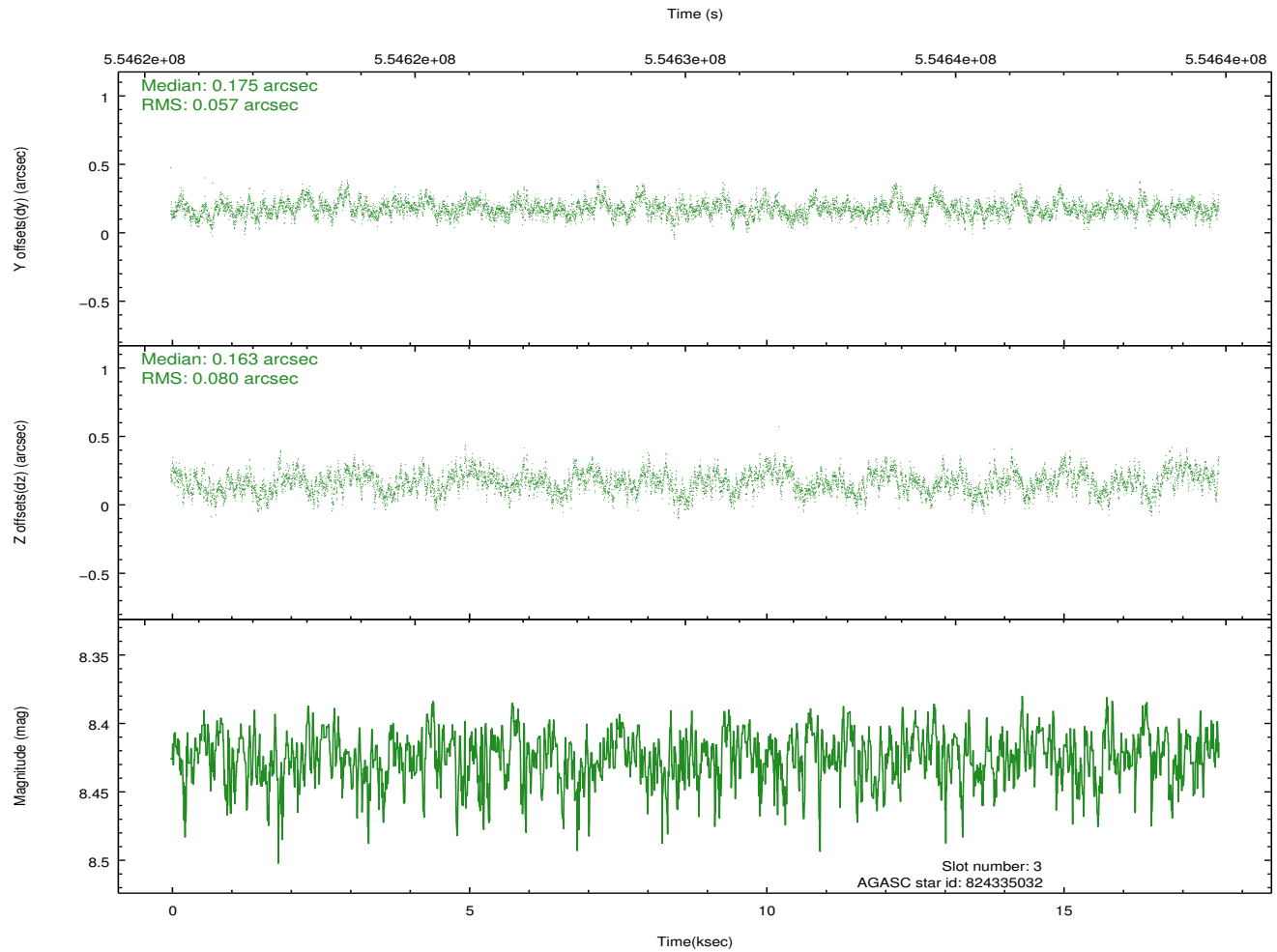
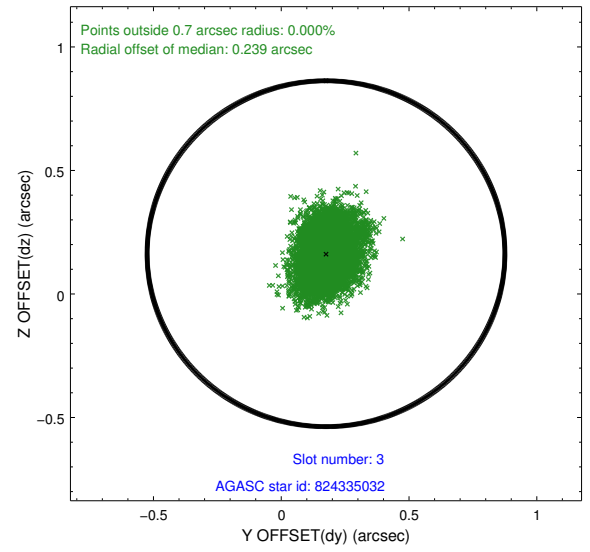
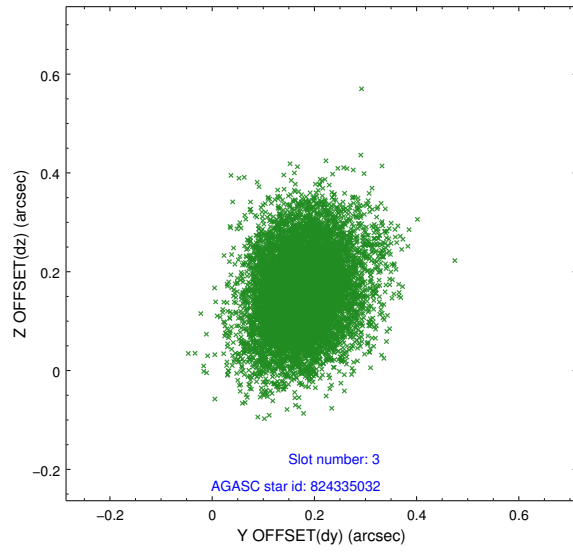


Slot Statistics

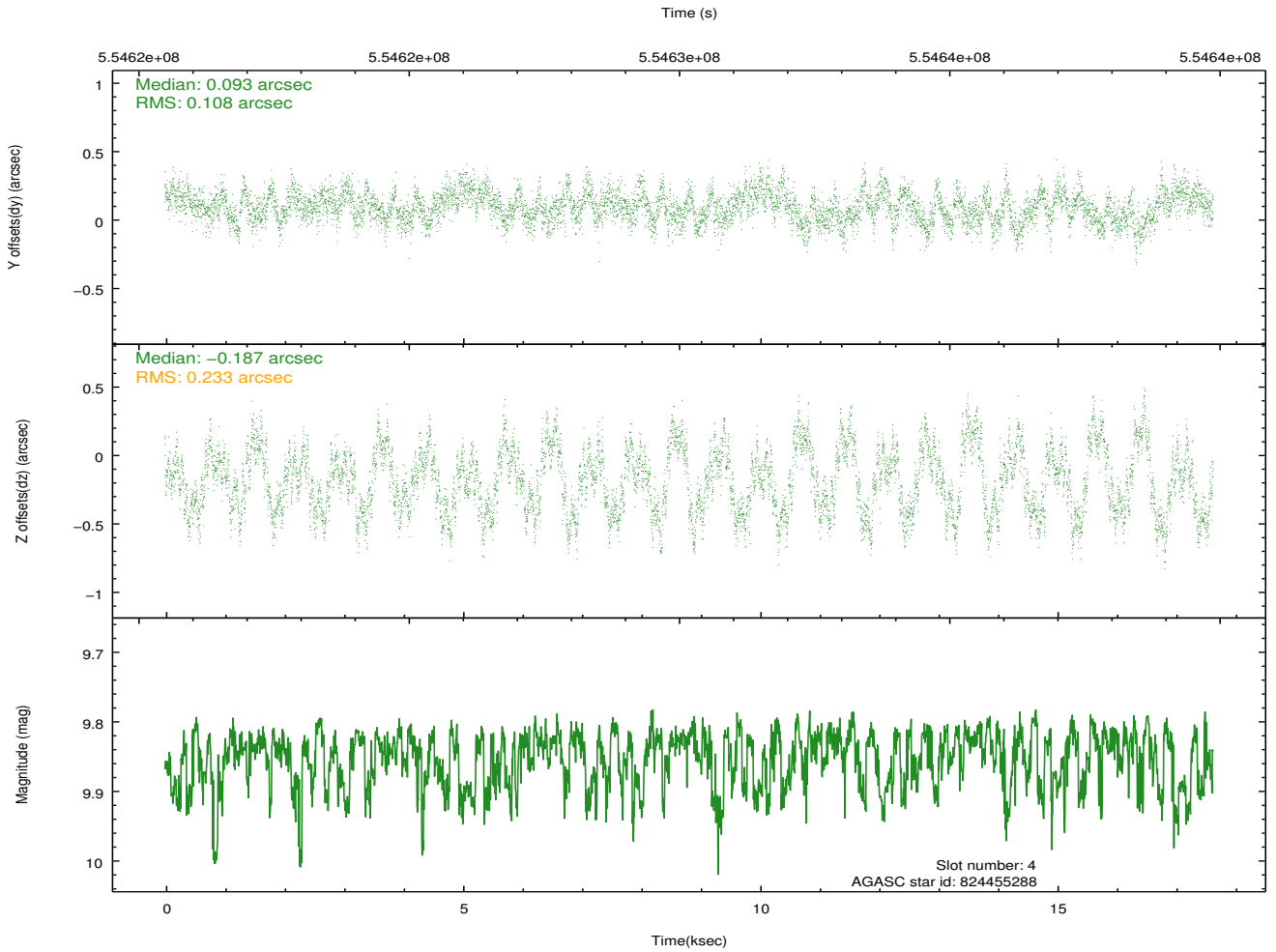
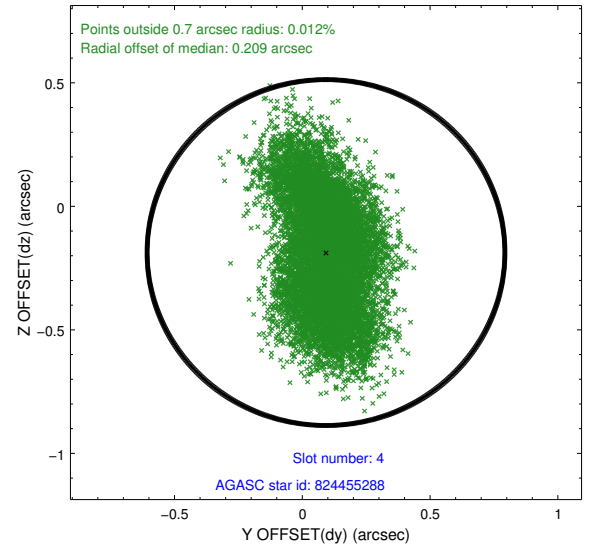
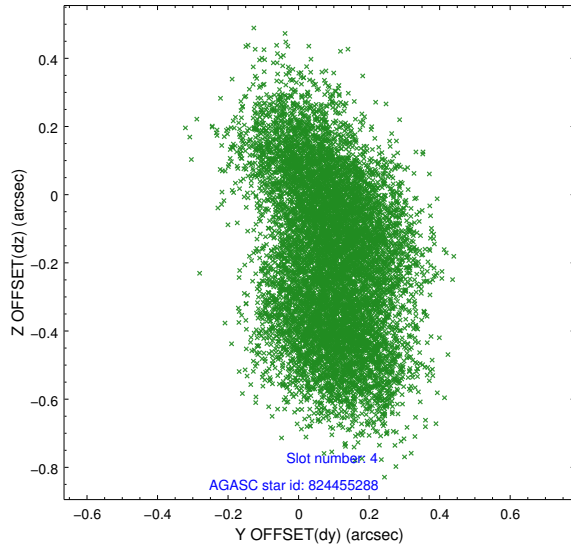
slot	status	used	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID		ACIS-S-2	6.94	4302	-0.149	-0.056	0.012	0.021	0.000000	0.000000	-774.99	-1741.57
1	FID		ACIS-S-4	7.04	4302	0.327	0.087	0.010	0.018	0.000000	0.000000	2138.64	166.85
2	FID		ACIS-S-5	7.05	4302	-0.208	-0.022	0.010	0.017	0.000000	0.000000	-1827.61	160.63
3	GUIDE	used	824335032	8.42	8604	0.175	0.163	0.104	0.174	283.798872	-20.256907	-1866.06	-2162.56
4	GUIDE	used	824455288	9.85	8595	0.093	-0.187	0.276	0.441	284.794931	-20.511833	-1128.46	1242.20
5	GUIDE	used	824843280	9.15	8600	0.108	0.184	0.170	0.268	283.875586	-20.688032	-331.03	-1817.18
6	GUIDE	used	824975200	8.71	8595	-0.242	0.061	0.114	0.180	284.028785	-21.446270	2365.80	-1152.91
7	GUIDE	used	824970200	9.52	8597	-0.139	-0.217	0.167	0.263	284.845750	-21.379569	1985.48	1567.55

2.4 Star Slots

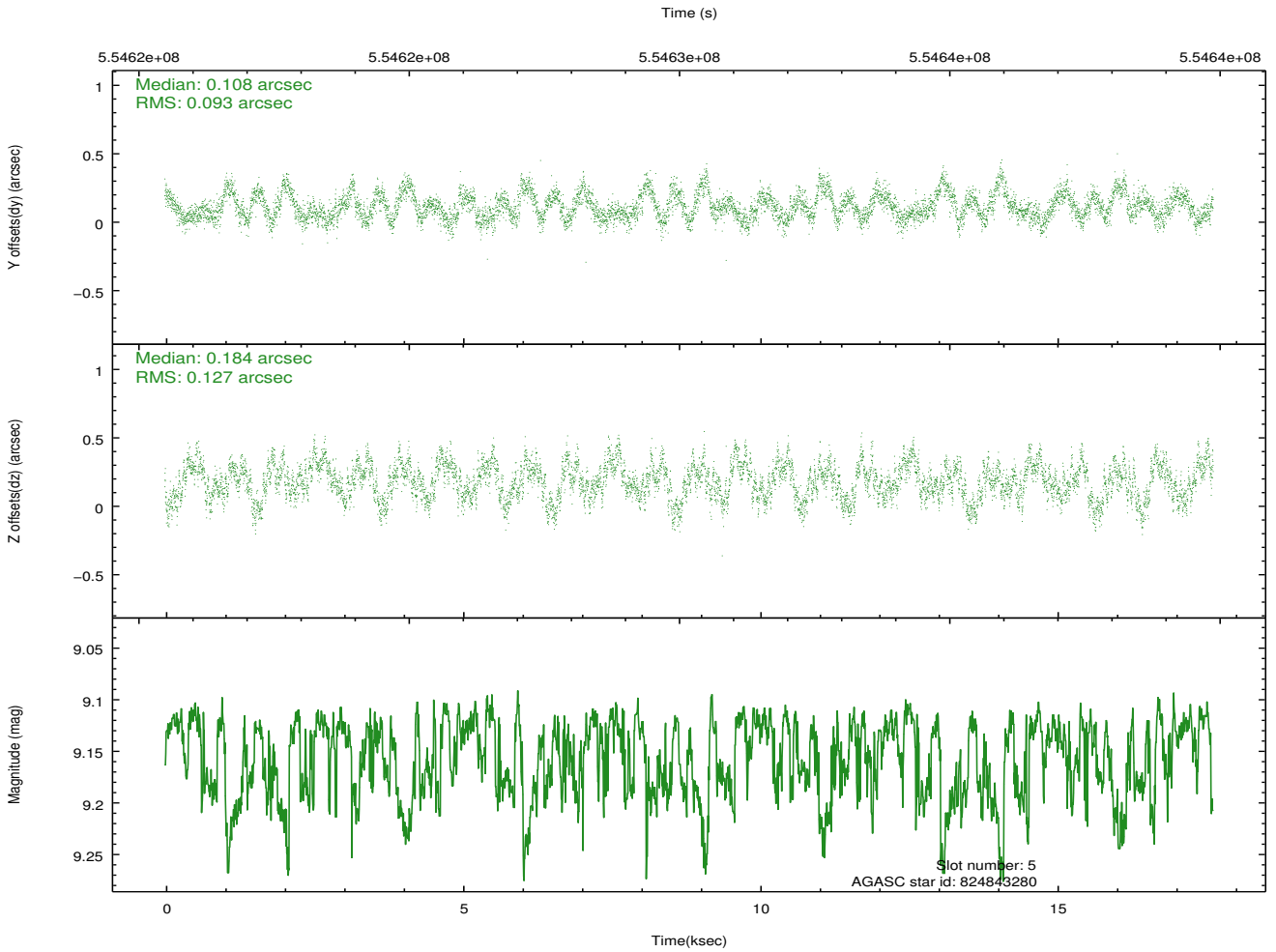
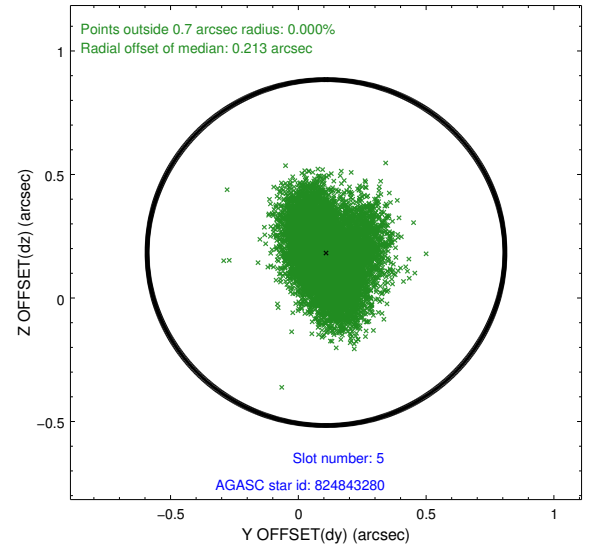
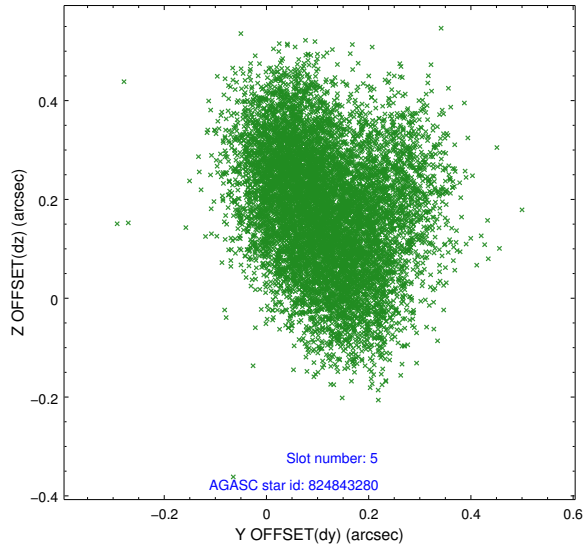
2.4.1 Slot 3



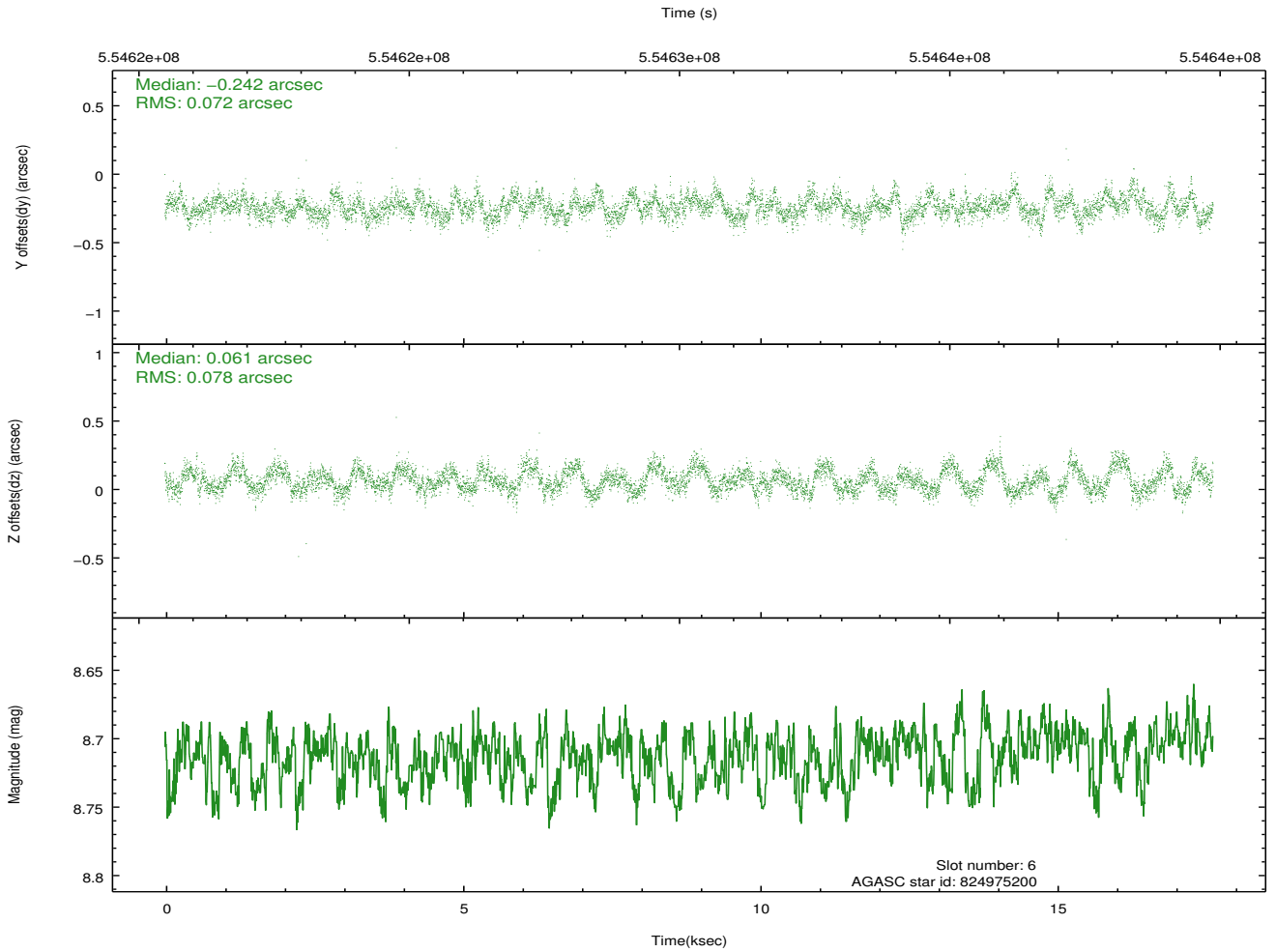
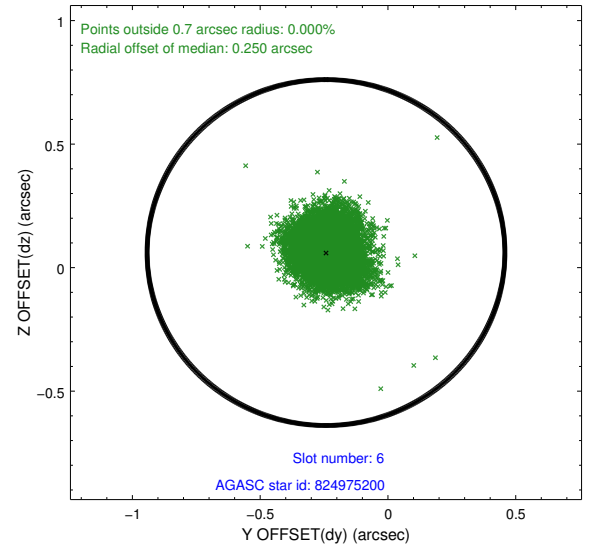
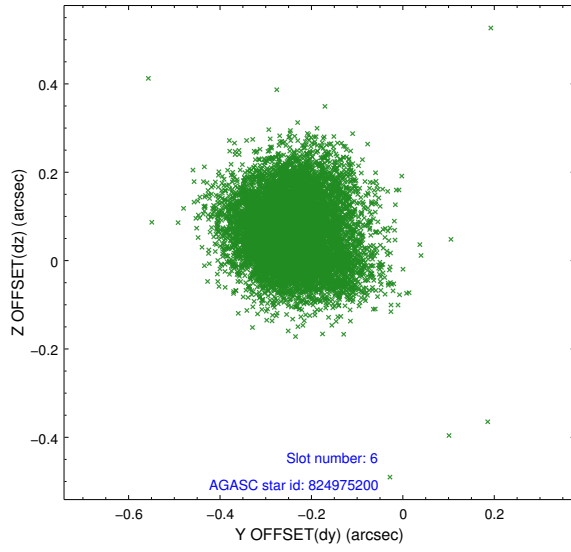
2.4.2 Slot 4



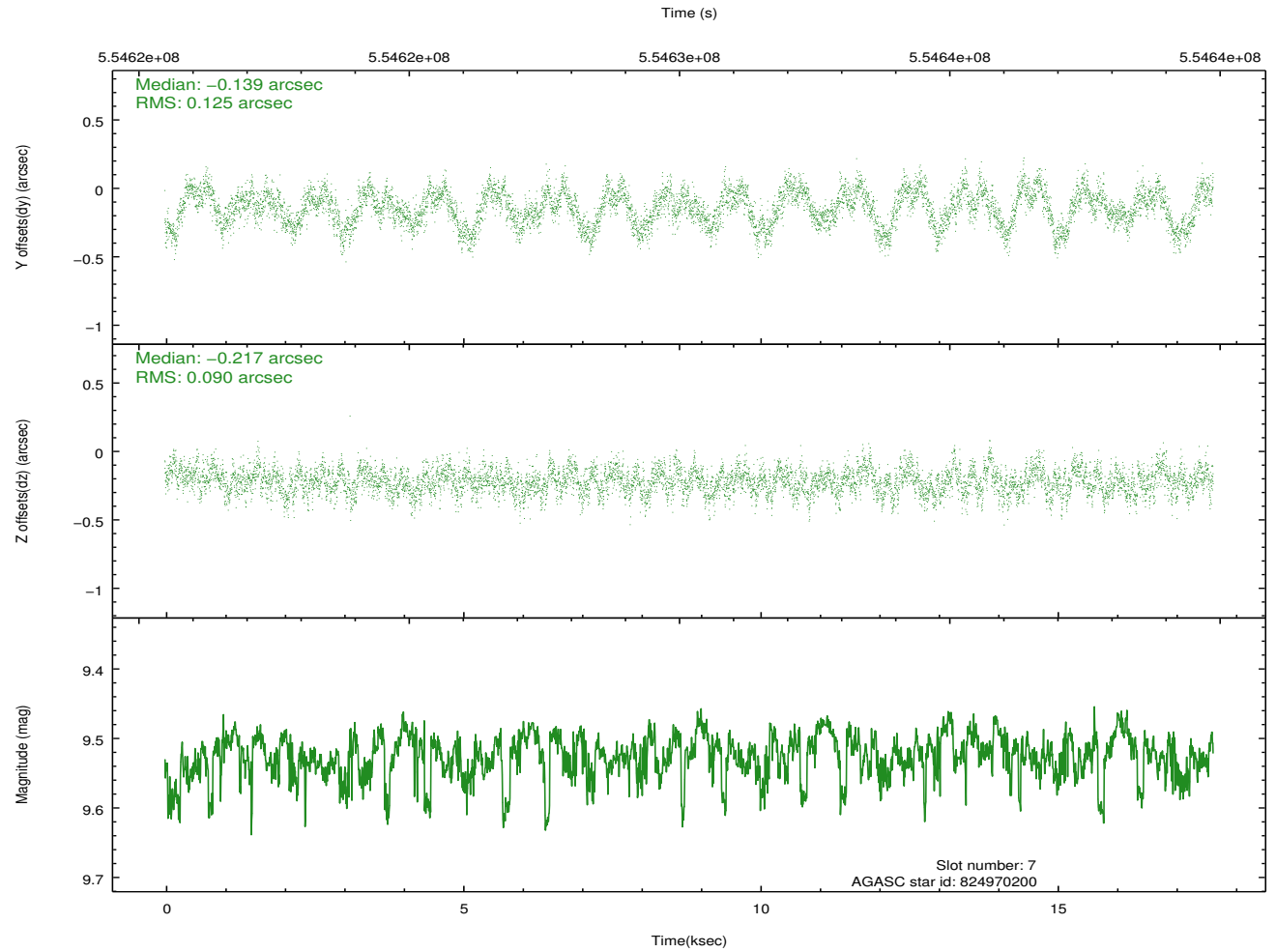
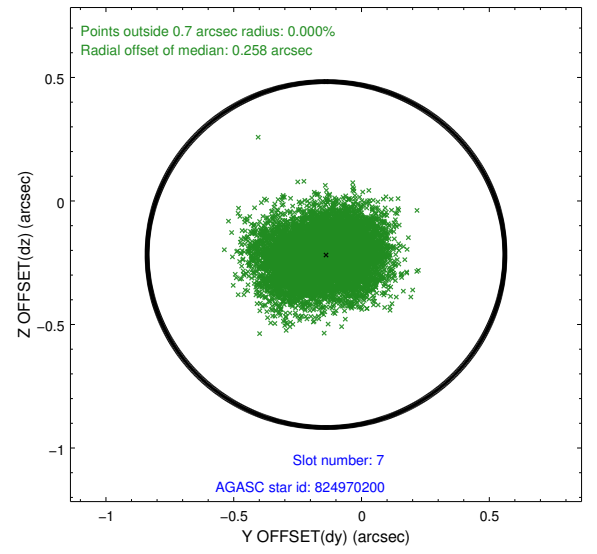
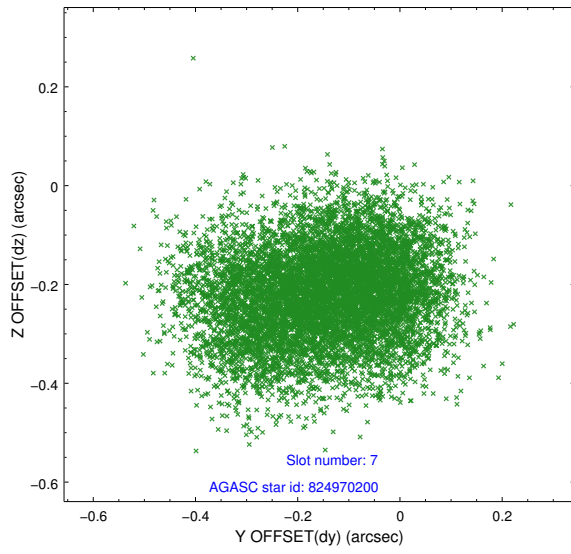
2.4.3 Slot 5



2.4.4 Slot 6

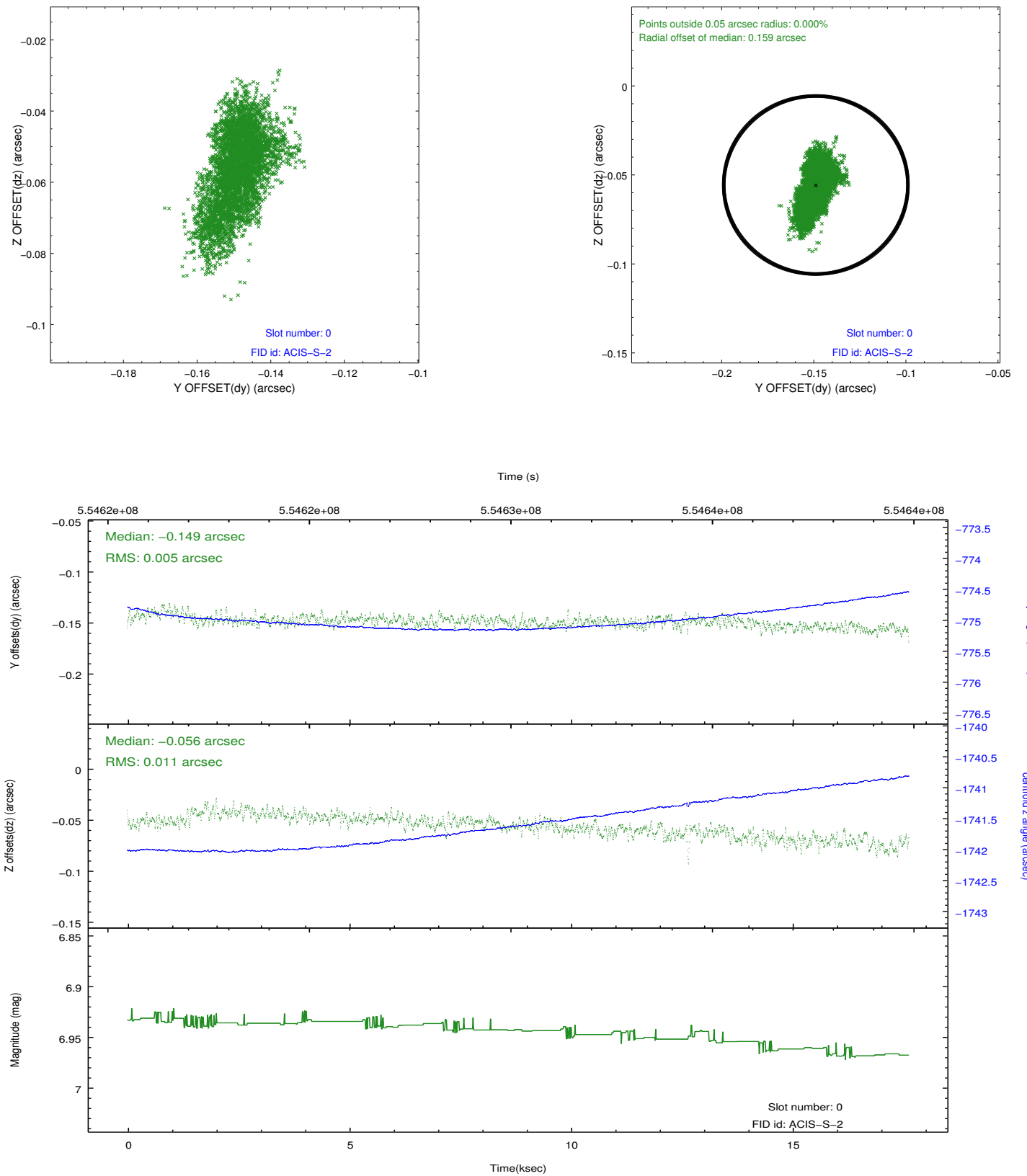


2.4.5 Slot 7

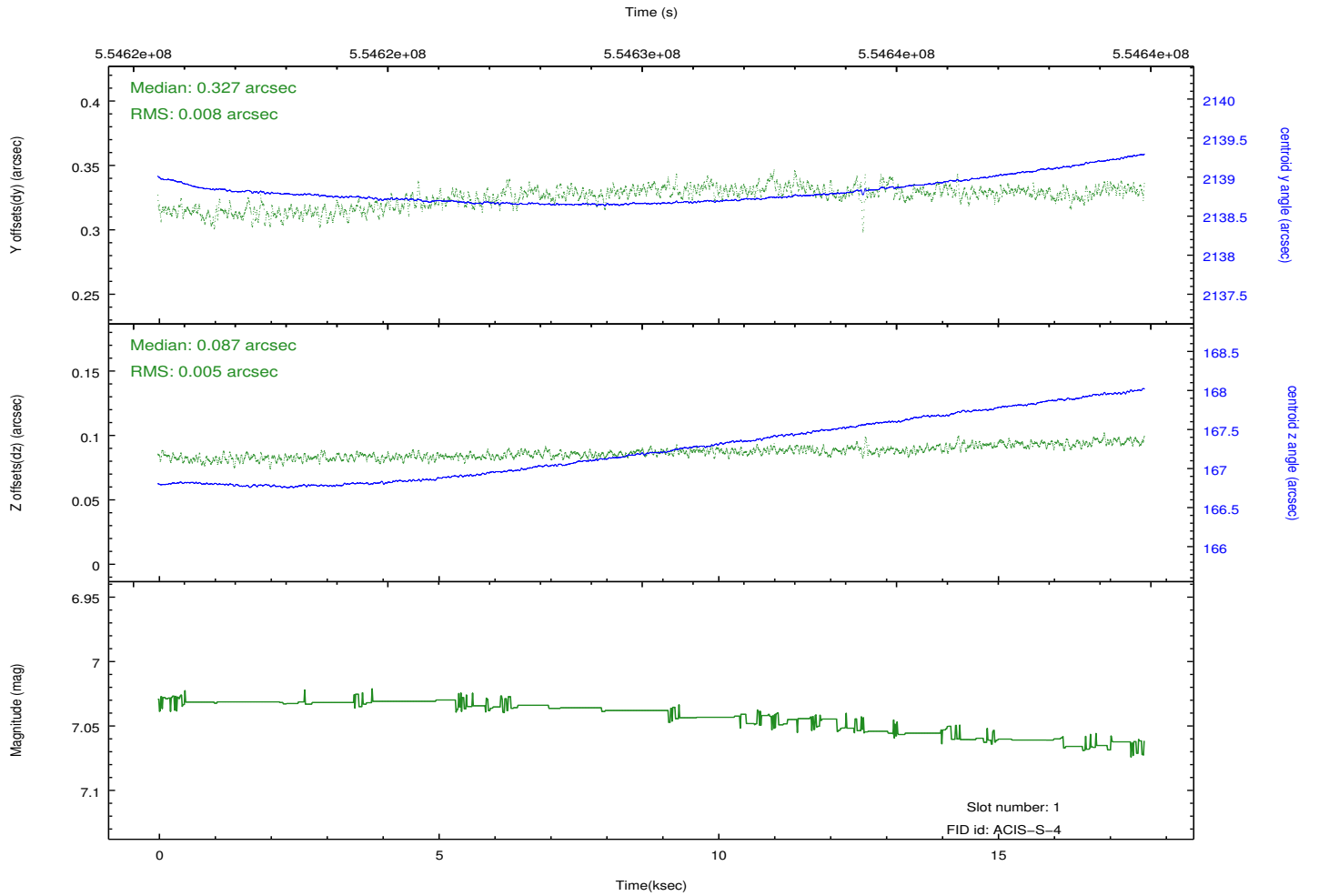
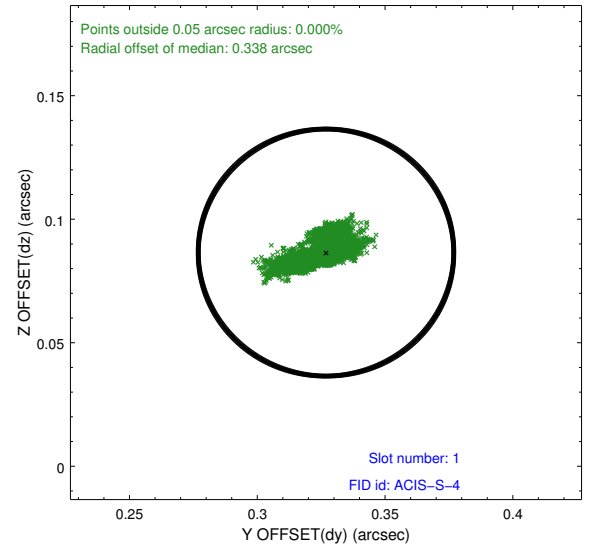
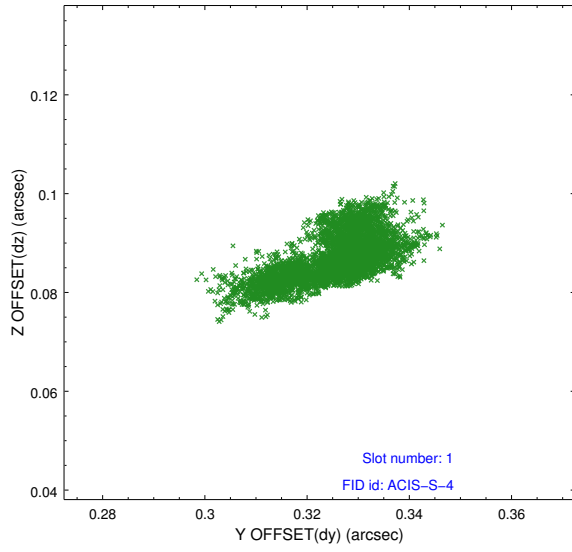


2.5 FID Slots

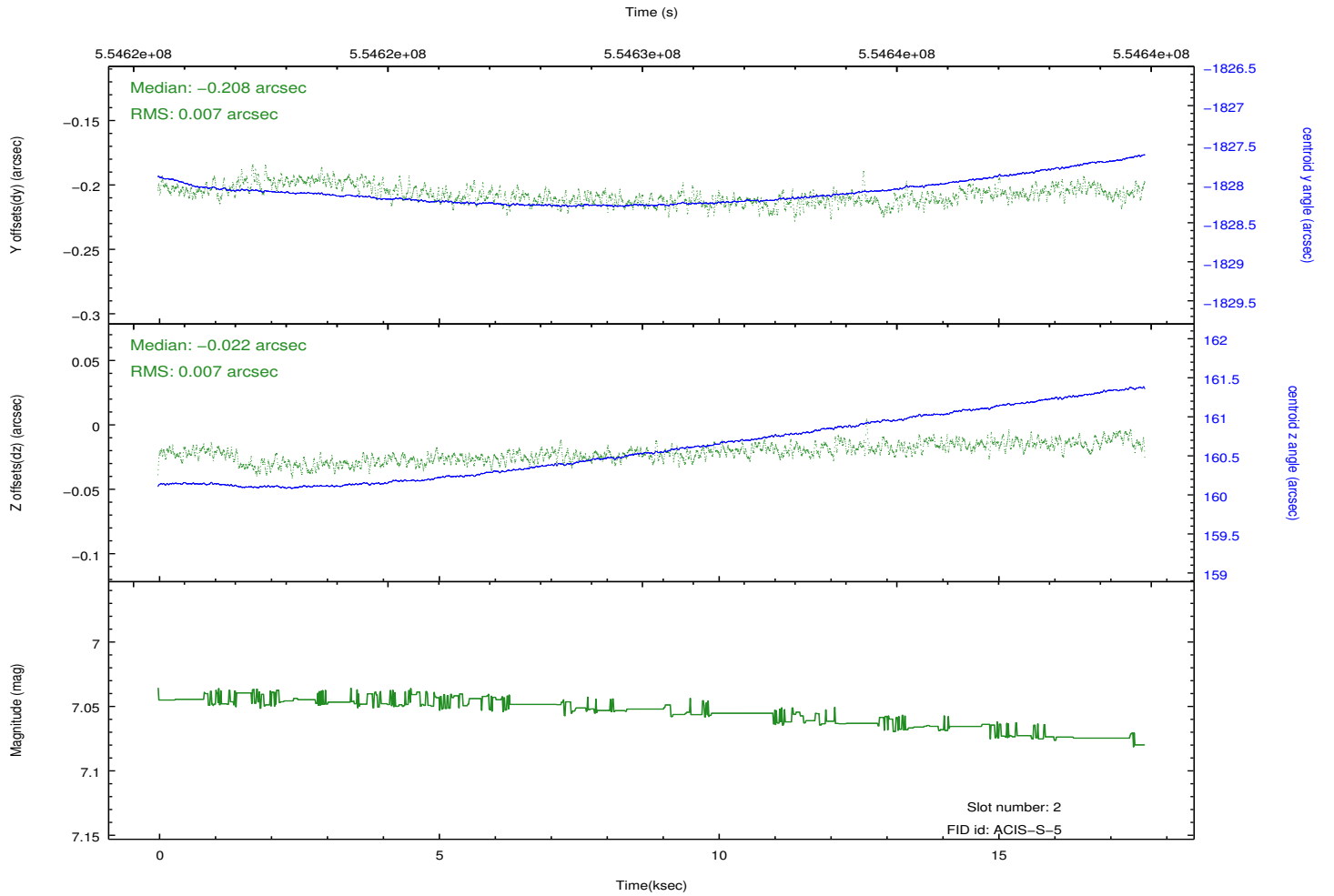
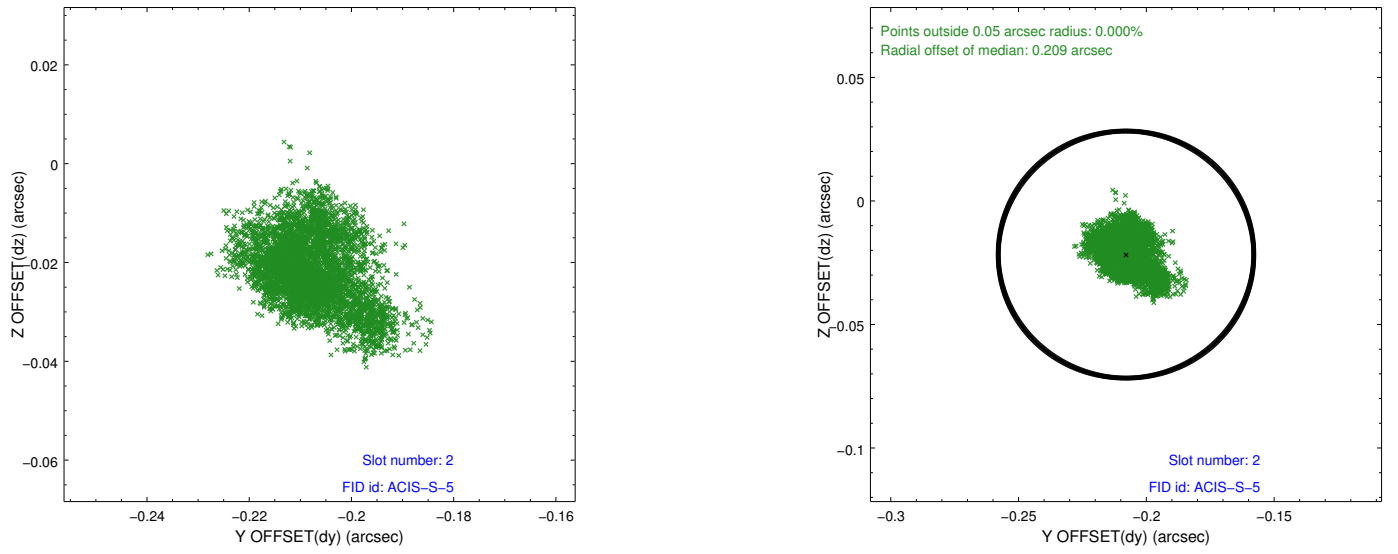
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2



A Summary

A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2015.07.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	17.595600135446

A.2 Comments

Window constraint met.

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This is a moving target. Users will need to run sso_freeze or similar software to position the events in the reference frame of the target.