

V&V Reference Report

L2 ASCDS Version : 8.1.1

Observation 1438 - L2 Version 4

Chandra X-Ray Center

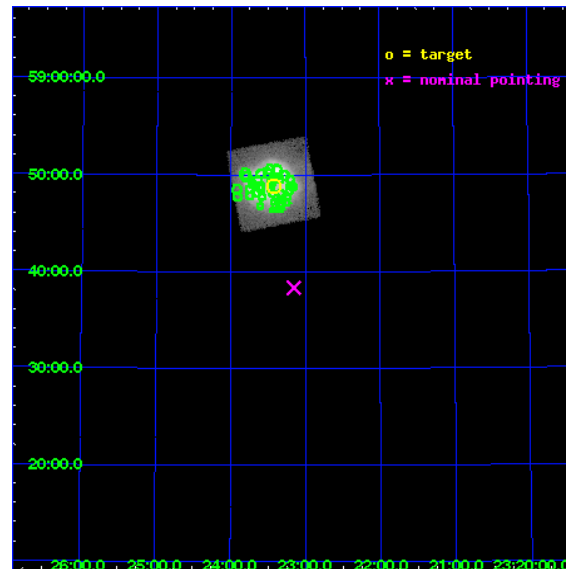
L2 Processing Date : Nov 24 2009

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1 Front

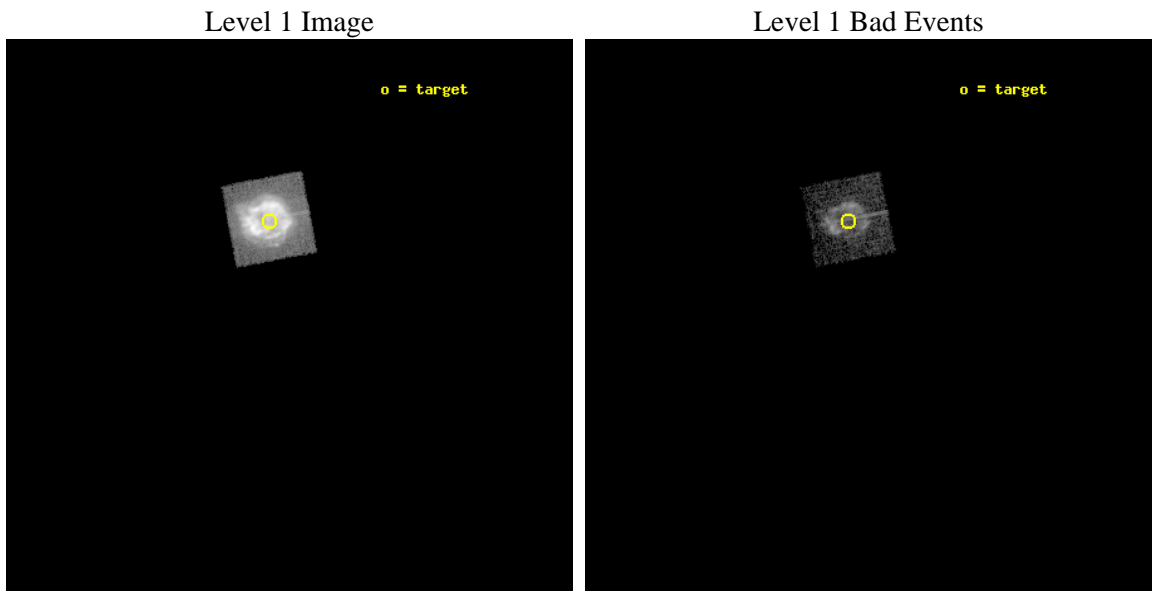
seq_num	580388	Sequence number
obs_id	1438	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S4, T=110, Offsets=-10,0,0]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	350.78836276463	Nominal RA
dec_nom	58.638887234162	Nominal Dec
roll_nom	259.27497575665	Nominal Roll
revision	4	Processing version of data
ontime	2328.7203958854	Sum of GTIs [s]
livetime	2299.2327360456	Livetime [s]
ontime4	2850.5556517541	Sum of GTIs [s]
ontime5	2850.59669175	Sum of GTIs [s]
ontime6	2850.4325317517	Sum of GTIs [s]
ontime7	2850.6377317533	Sum of GTIs [s]
ontime8	2328.7203958854	Sum of GTIs [s]
ontime9	2850.473571755	Sum of GTIs [s]
l2events	483609	Number of level 2 events



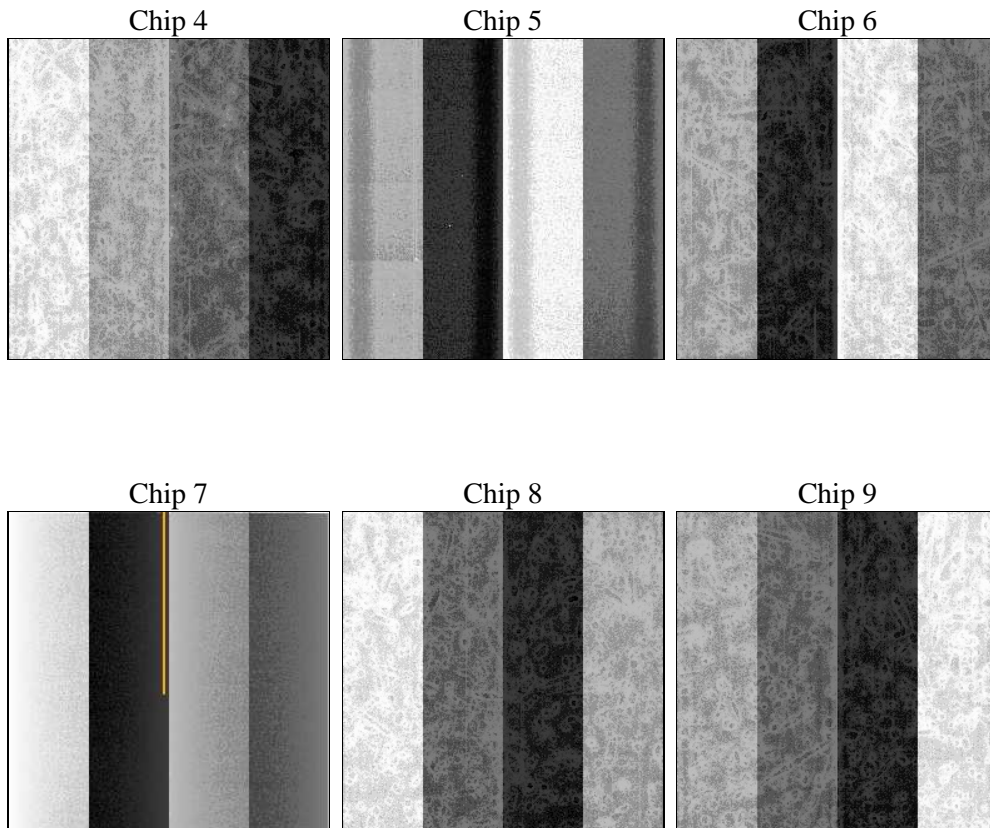
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	2500.000000	Scheduled observation exposure time
ascdsver	8.1.1	ASCDS version number	ontime	2328.7203958854	Sum of GTIs [s]
caldsver	4.1.4	 	ontime4	2850.5556517541	Sum of GTIs [s]
date	2009-11-24T12:43:37	Date and time of file creation	ontime5	2850.59669175	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	2850.4325317517	Sum of GTIs [s]
			ontime7	2850.6377317533	Sum of GTIs [s]
			ontime8	2328.7203958854	Sum of GTIs [s]
			ontime9	2850.473571755	Sum of GTIs [s]
			l1events	530924	Number of level 1 events

2.1.4 Events

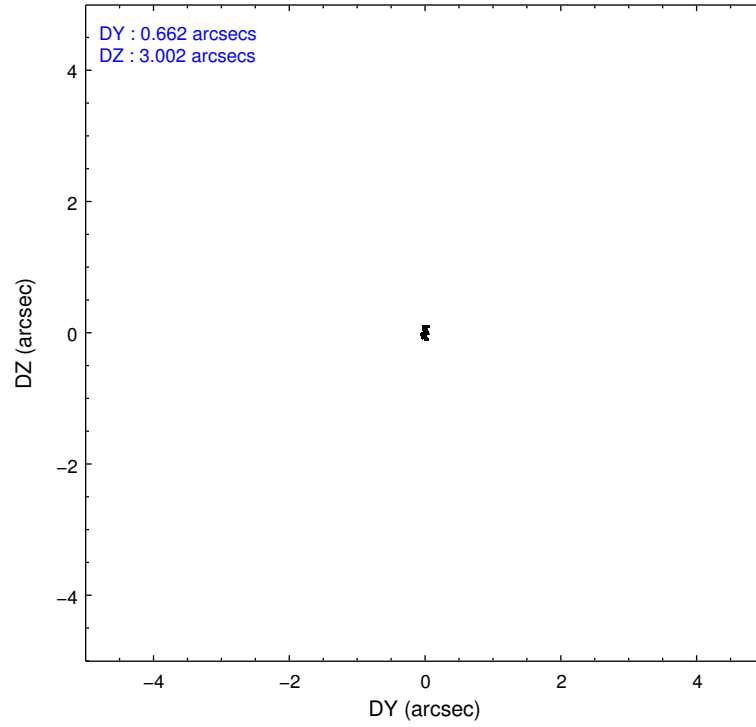
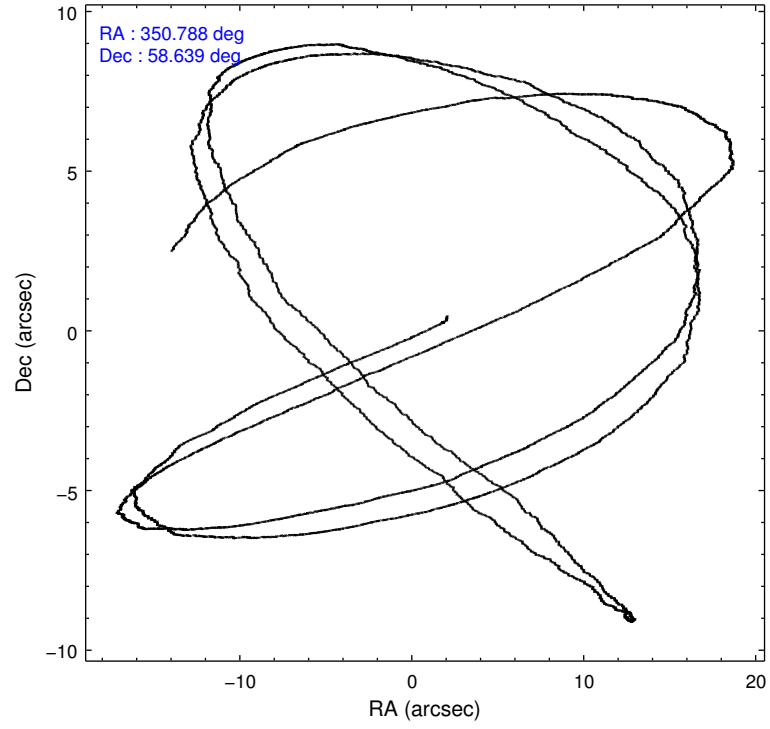
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	0	0	0	0	530924	0
rejected events	0	0	0	0	42138	0
rejected %	0%	0%	0%	0%	7%	0%

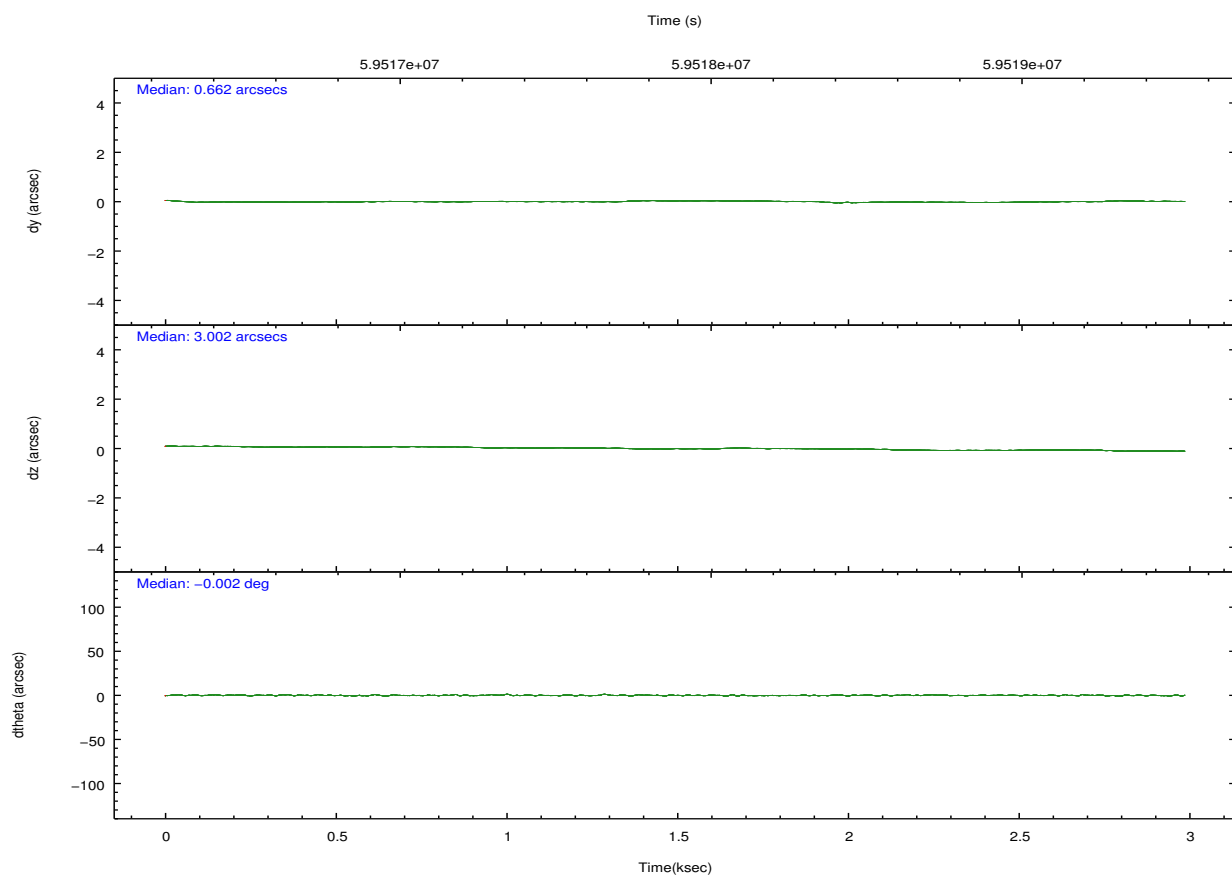
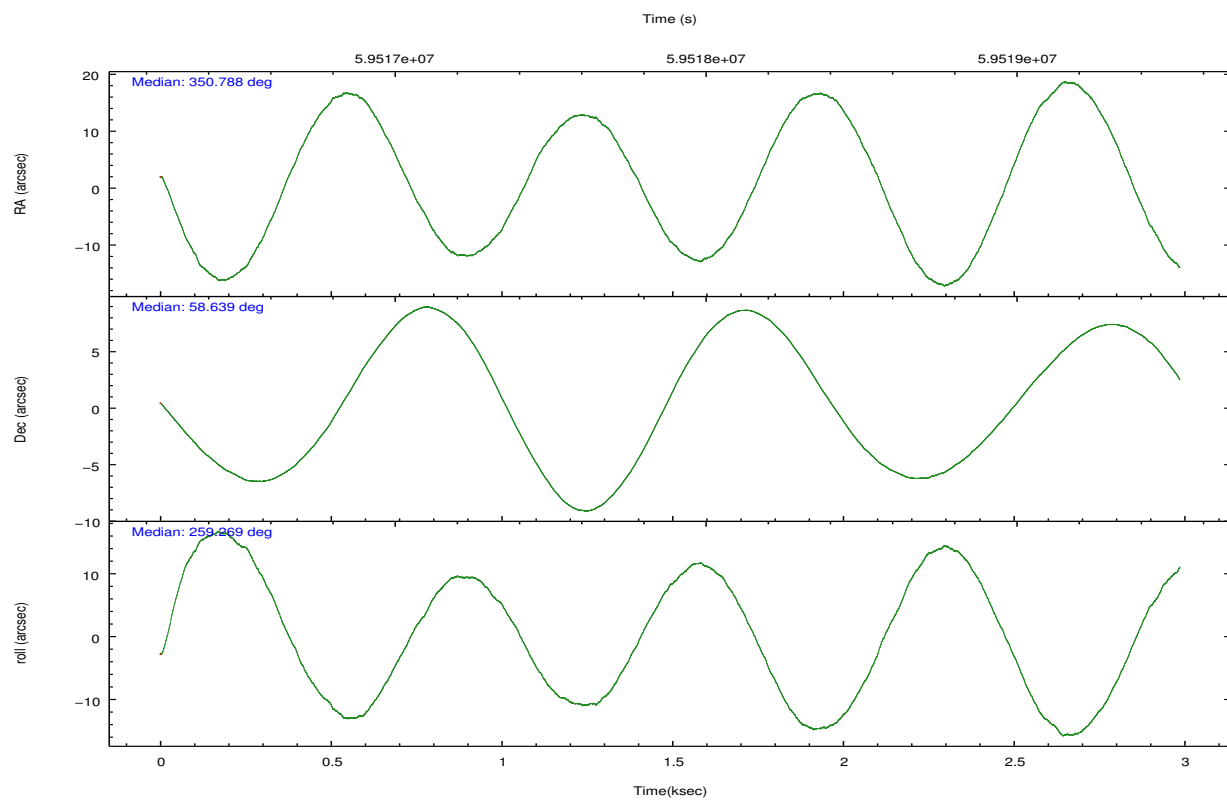
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	0	0	0	0	345943	0
	0%	0%	0%	0%	65%	0%
grade 1 events	0	0	0	0	4437	0
	0%	0%	0%	0%	0%	0%
grade 2 events	0	0	0	0	101532	0
	0%	0%	0%	0%	19%	0%
grade 3 events	0	0	0	0	13639	0
	0%	0%	0%	0%	2%	0%
grade 4 events	0	0	0	0	13506	0
	0%	0%	0%	0%	2%	0%
grade 5 events	0	0	0	0	4336	0
	0%	0%	0%	0%	0%	0%
grade 6 events	0	0	0	0	14849	0
	0%	0%	0%	0%	2%	0%
grade 7 events	0	0	0	0	32682	0
	0%	0%	0%	0%	6%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	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
Pointing RA	350.771098	350.7883627646262	Subarray requested	NONE	NONE
Pointing Dec	58.664947	58.63888723416241	Alternating exposures requested	N	N
Pointing Roll	259.133076	259.2749757566471	Primary exposure time	0.000000	3.2
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-190.132523	-190.1400660498719			
SIM translation stage offset (mm)	0	0.00754346686406393			
Observation start time	59516877.184000	59516211.7942			
Observation start date	1999-11-20T20:26:53	1999-11-20T20:16:51			
Observation end time	59519377.184000	59519511.269319			
Observation end date	1999-11-20T21:08:33	1999-11-20T21:11:51			
Read mode	TIMED	TIMED			

2.3 Aspect



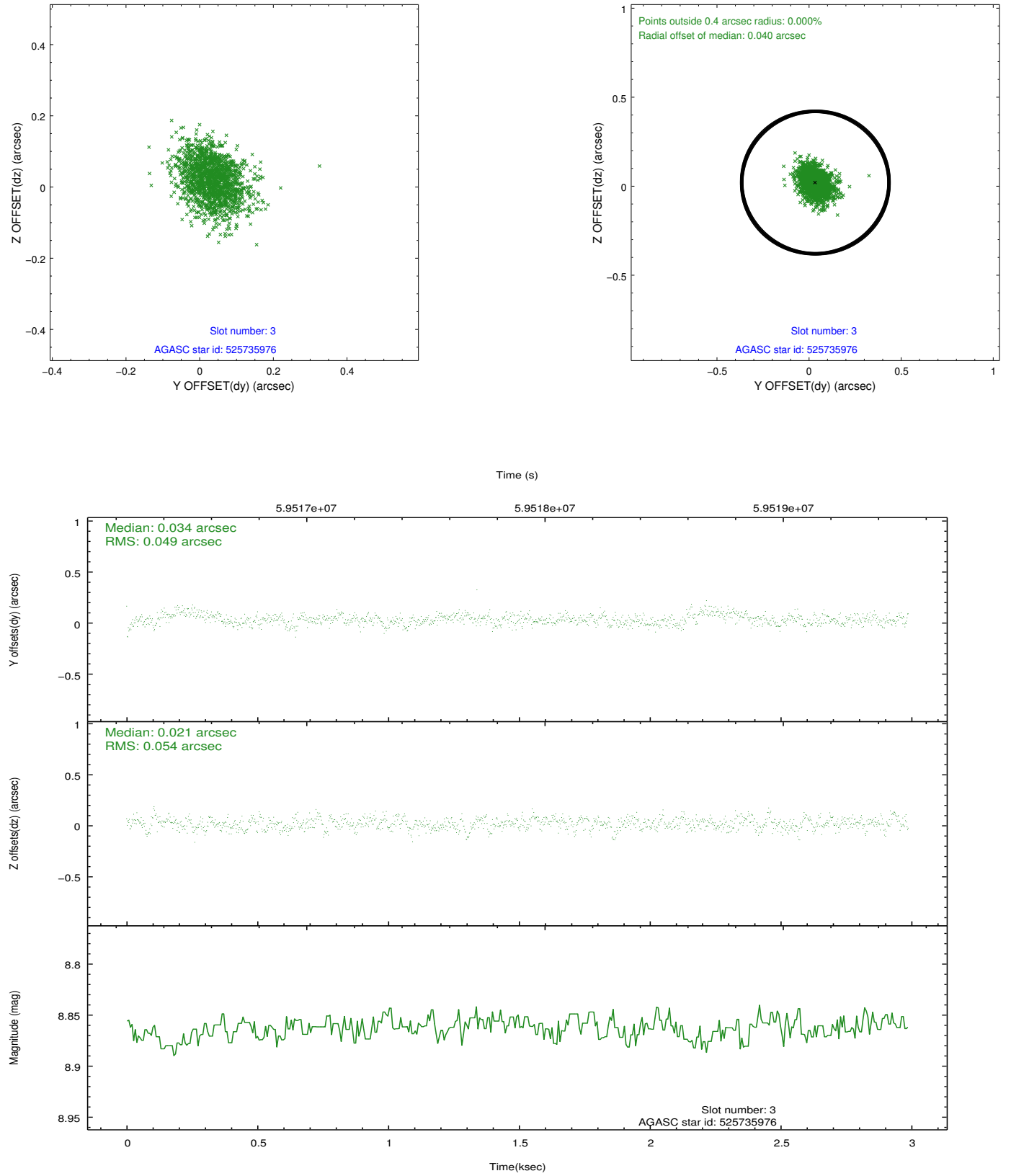


Slot Statistics

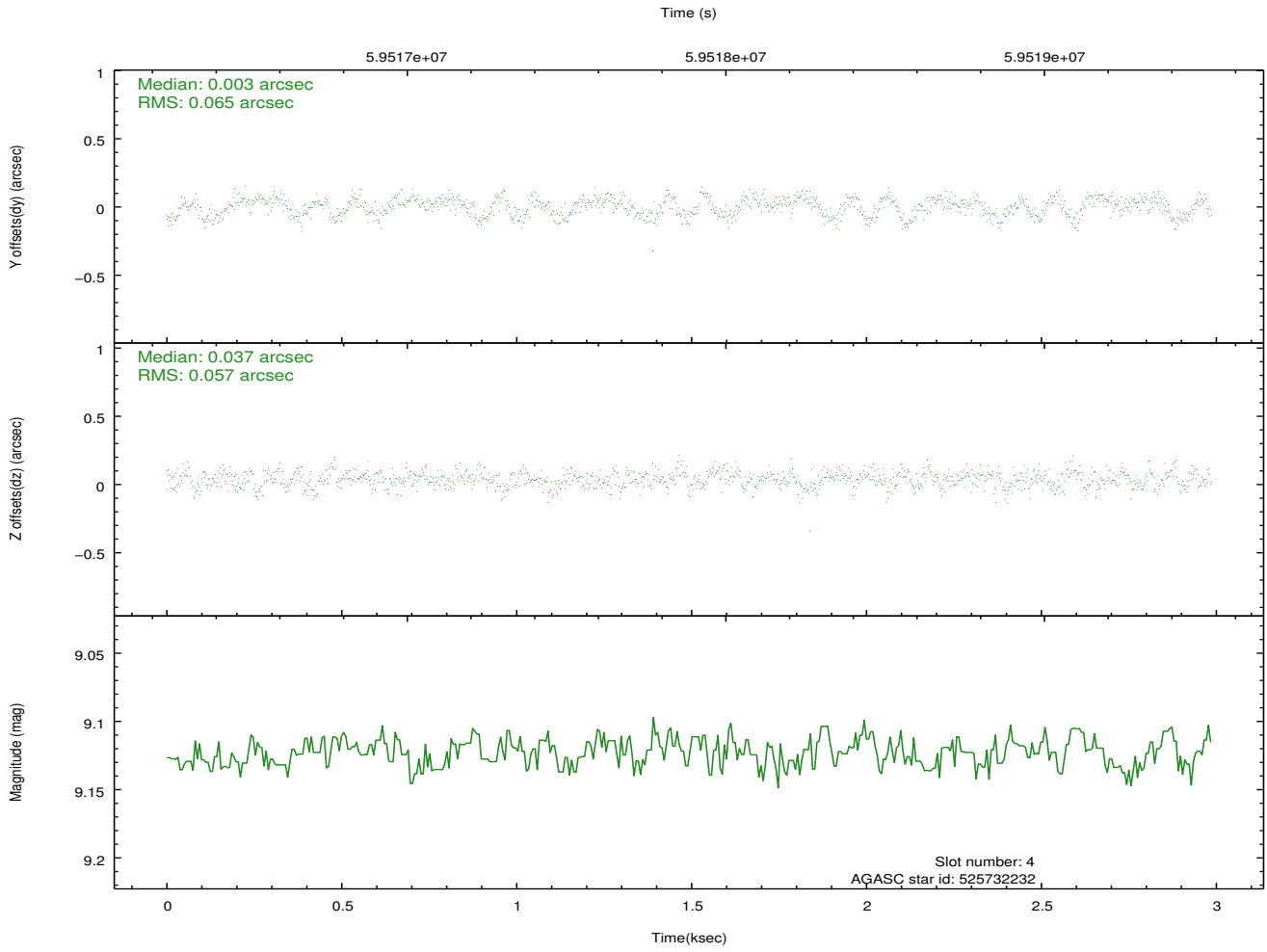
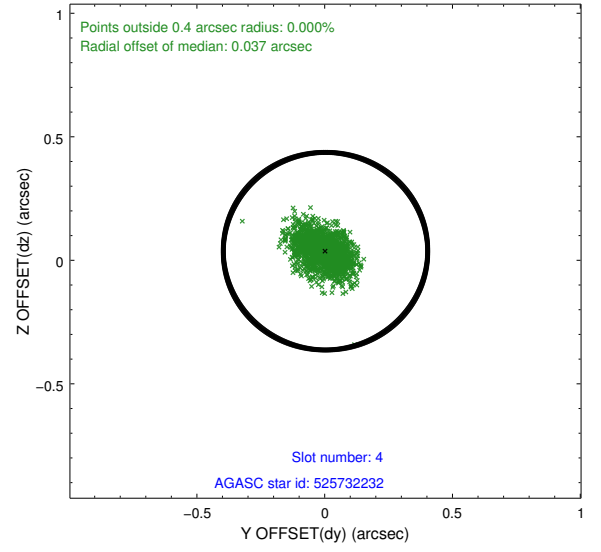
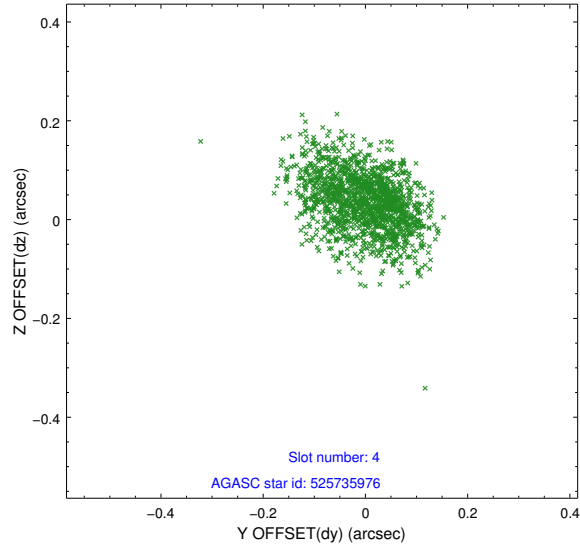
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-2	7.11	1458	0.010	-0.000	0.007	0.011	0.000000	0.000000	-753.30	-1724.03
1	FID	ACIS-S-4	7.21	1458	0.009	-0.005	0.006	0.011	0.000000	0.000000	2159.60	183.32
2	FID	ACIS-S-5	7.24	1458	-0.050	0.014	0.007	0.011	0.000000	0.000000	-1804.85	178.29
3	GUIDE	525735976	8.86	1457	0.034	0.021	0.076	0.127	350.142956	58.277622	1589.01	-905.28
4	GUIDE	525732232	9.12	1458	0.003	0.037	0.092	0.150	351.669550	58.757012	-651.11	1582.57
5	GUIDE	525606576	9.43	1458	-0.083	-0.008	0.107	0.179	349.543555	58.678895	363.65	-2267.83
6	GUIDE	525734296	9.49	1458	0.036	0.026	0.090	0.149	351.276372	58.418153	690.37	1101.30
7	GUIDE	525737880	9.75	1455	0.005	-0.076	0.100	0.162	351.070641	59.208299	-2025.03	173.97

2.4 Star Slots

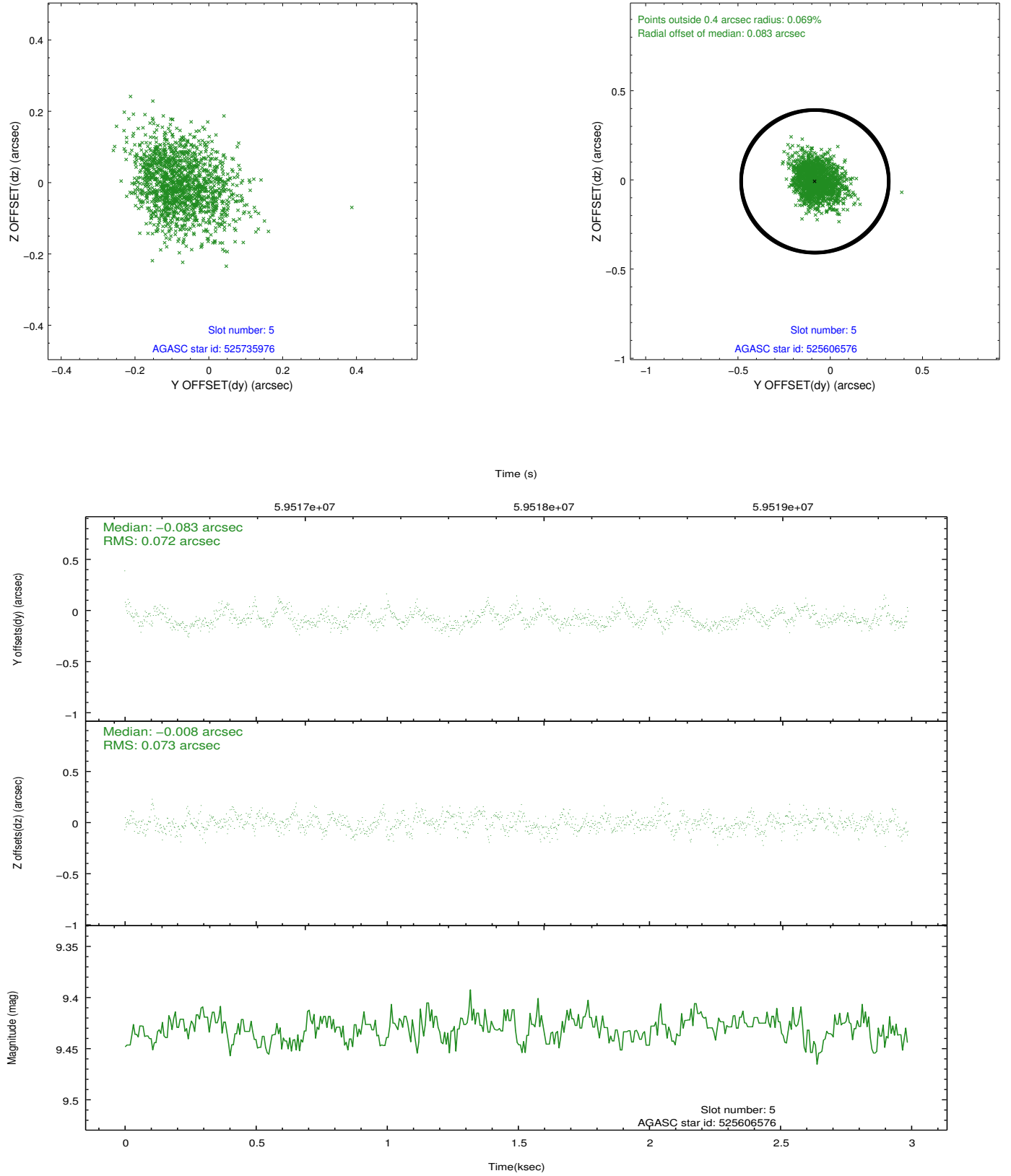
2.4.1 Slot 3



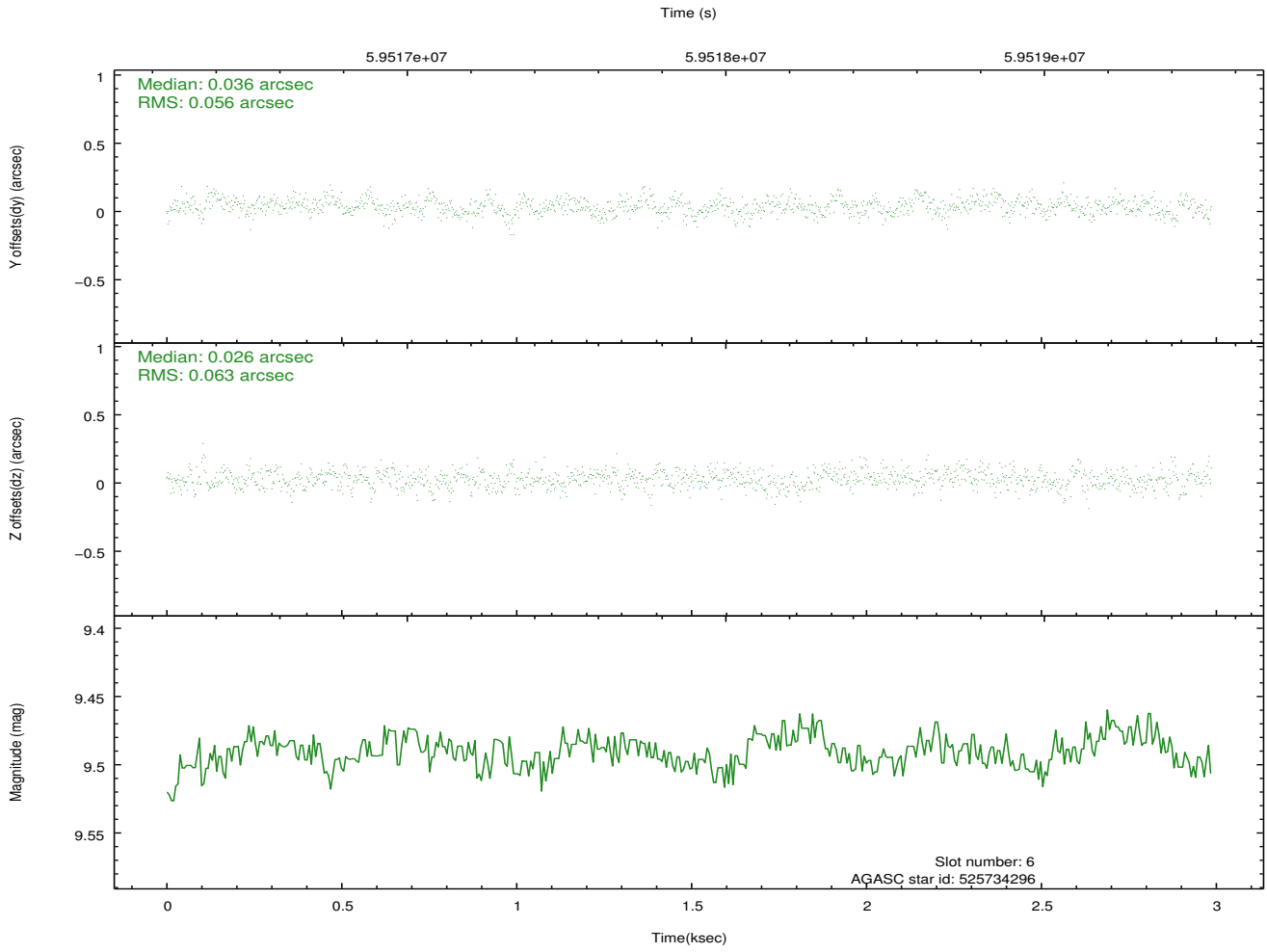
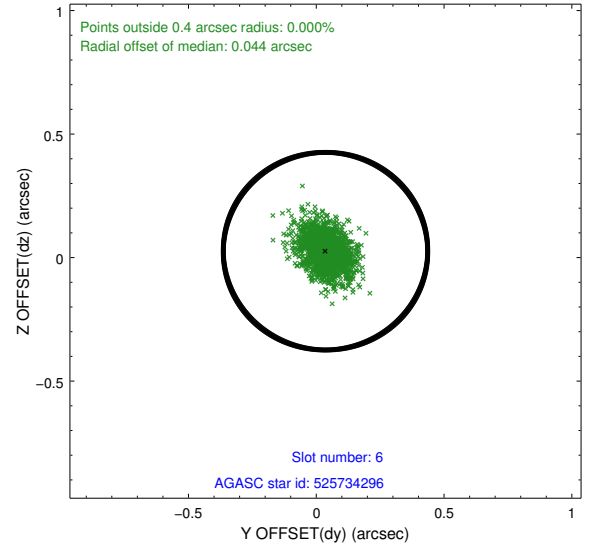
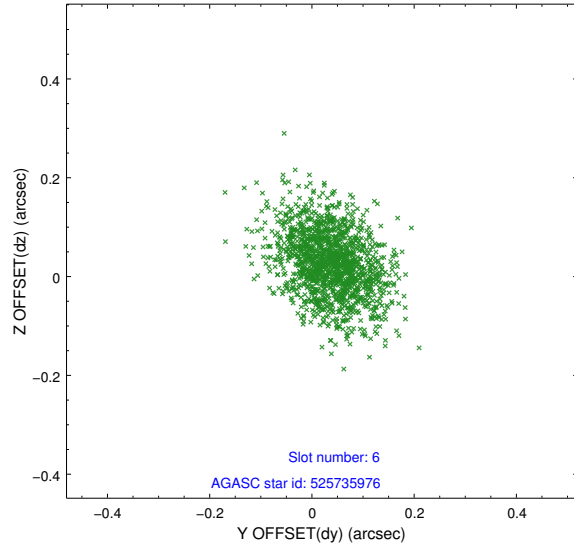
2.4.2 Slot 4



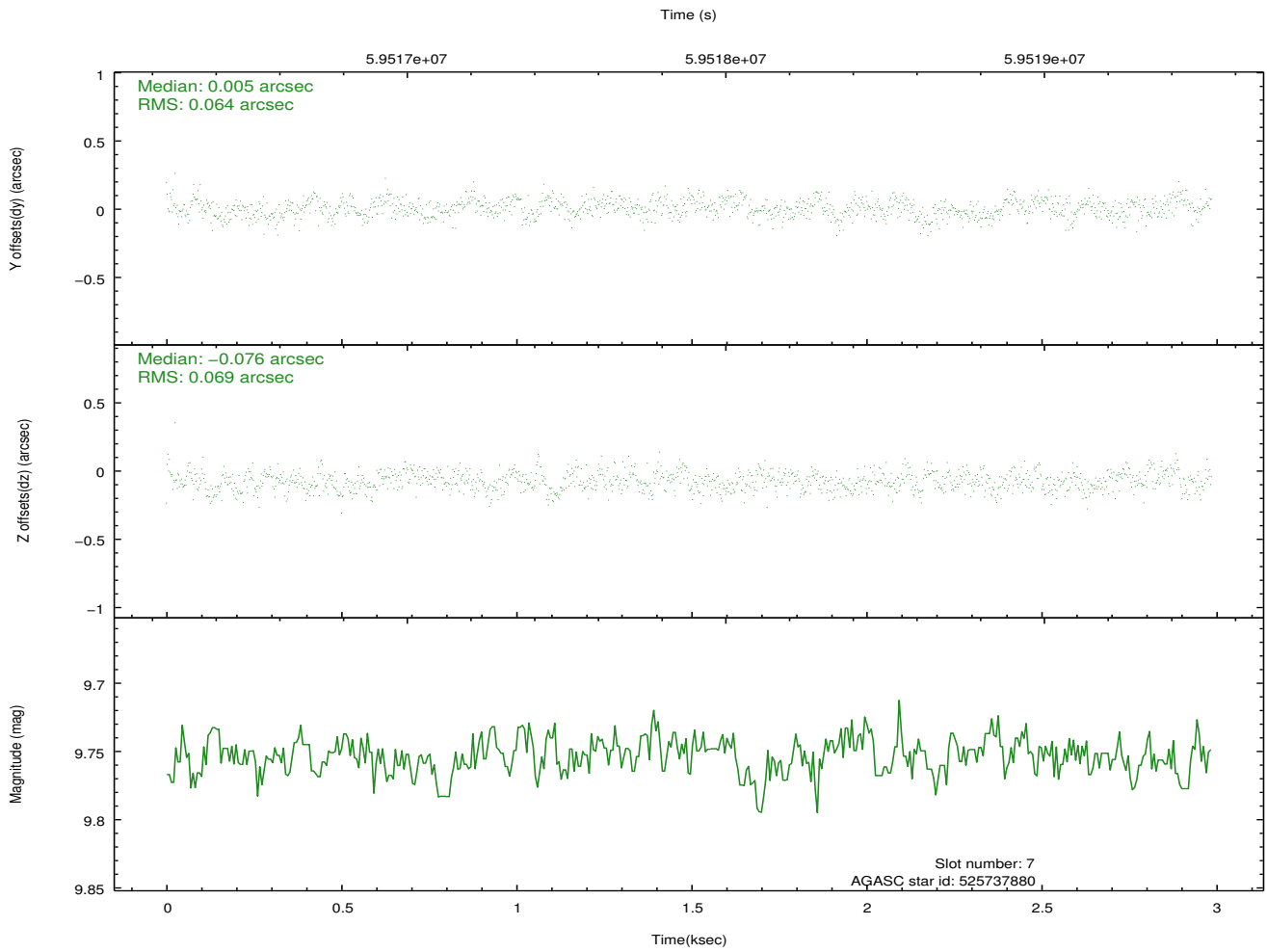
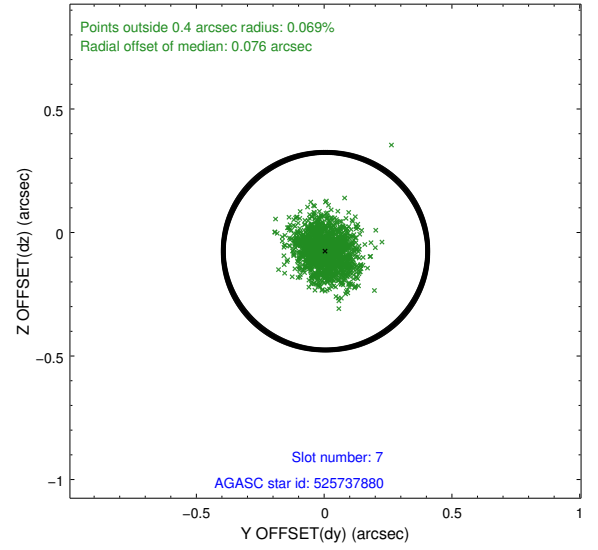
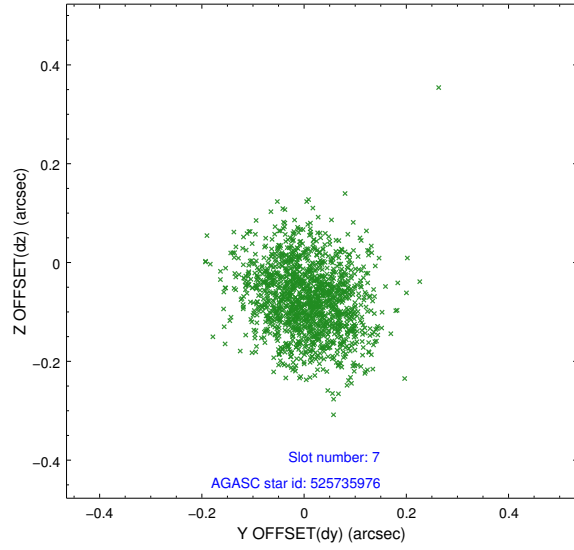
2.4.3 Slot 5



2.4.4 Slot 6

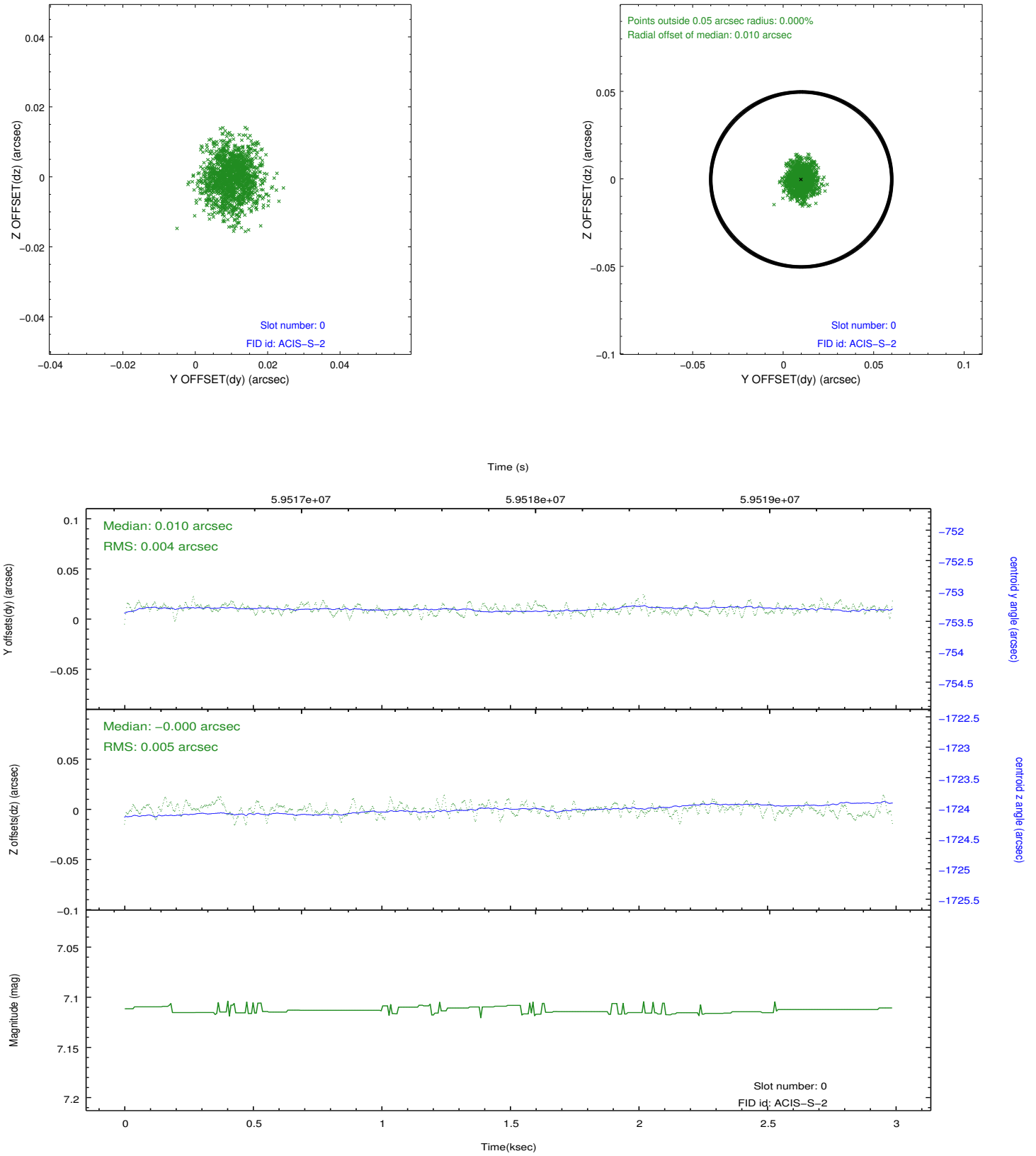


2.4.5 Slot 7

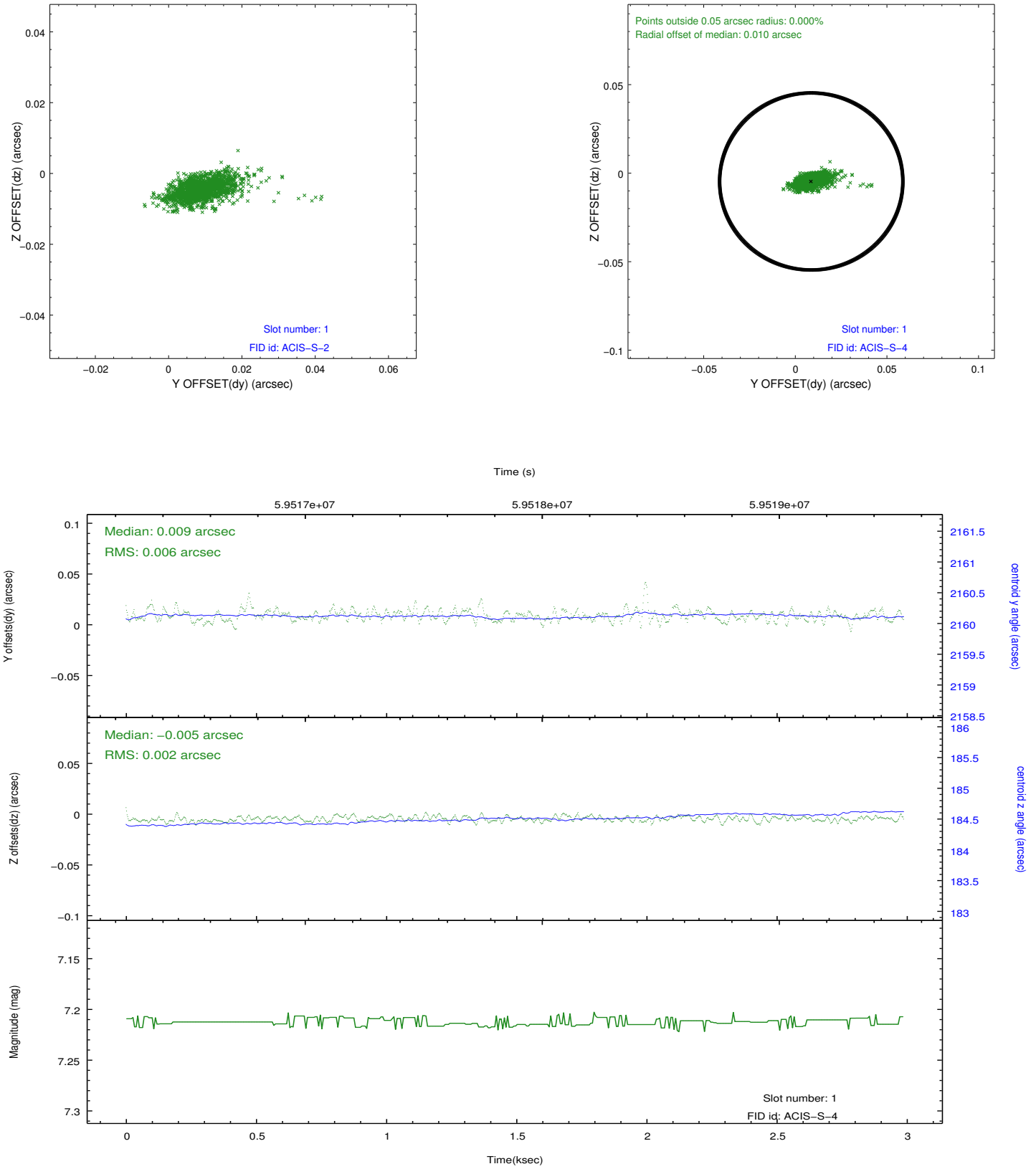


2.5 FID Slots

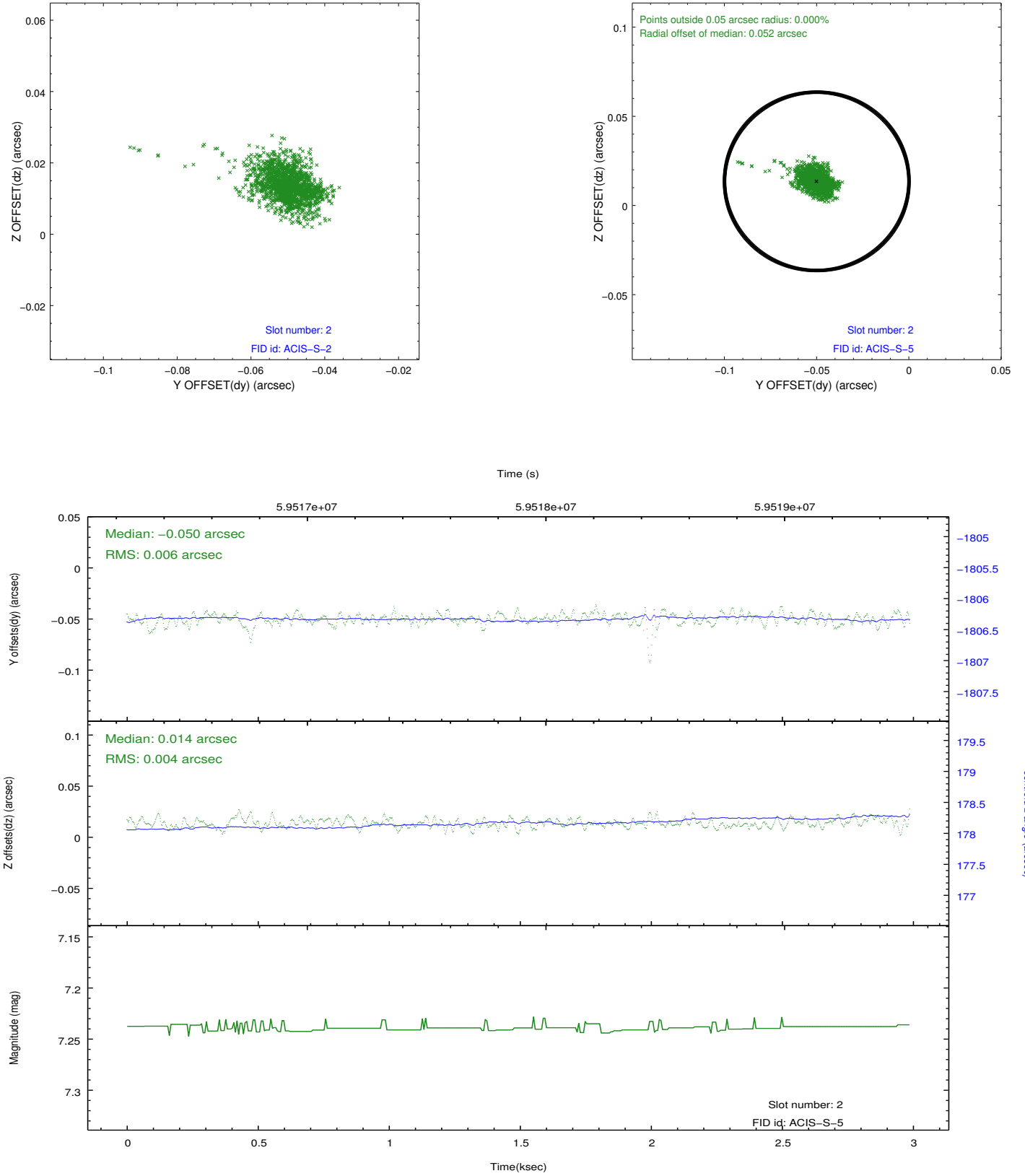
2.5.1 Slot 0



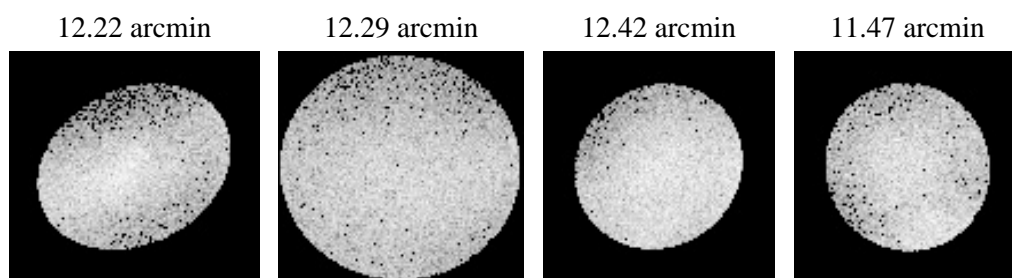
2.5.2 Slot 1



2.5.3 Slot 2



3 Point Sources



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2010.03.31
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	2.336

A.2 Comments

ACIS response to Cas A on chip S4. Only chip S4 was read out.

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Pileup through most of observation.

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Charge time for this ObsId remains at previous value of 2.336 ksec, although with the current processing the charge time would have been 2.328 ksec.

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The focal plane temperature is approximately -110 C during this observation. This reprocessing of the data applies no CTI correction because none is available for this temperature at present.

The ACIS CTI correction has not been calibrated at this temperature, because it was early in the mission, and ACIS had not yet been lowered to the standard -119.7 C. Both front and back illuminated chips are affected. However a T_GAIN correction has been applied to the BI chips (ACIS-5 and ACIS-7) data included here.

The ACIS spectral response calibration is less accurate at these warmer temperatures than it is at -119.7 C. Users whose science objectives depend on the most accurate spectral response (ie: fitting line-rich spectra) may notice an effect. Users whose science objectives do not depend on the most accurate spectral response should not notice an effect.

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