

V&V Reference Report

L2 ASCDS Version : 8.1.2

Observation 211 - L2 Version 3

Chandra X-Ray Center

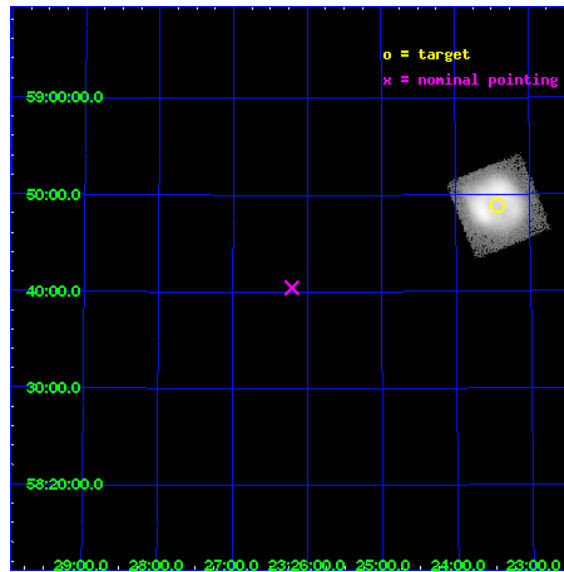
L2 Processing Date : Dec 16 2009

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1 Front

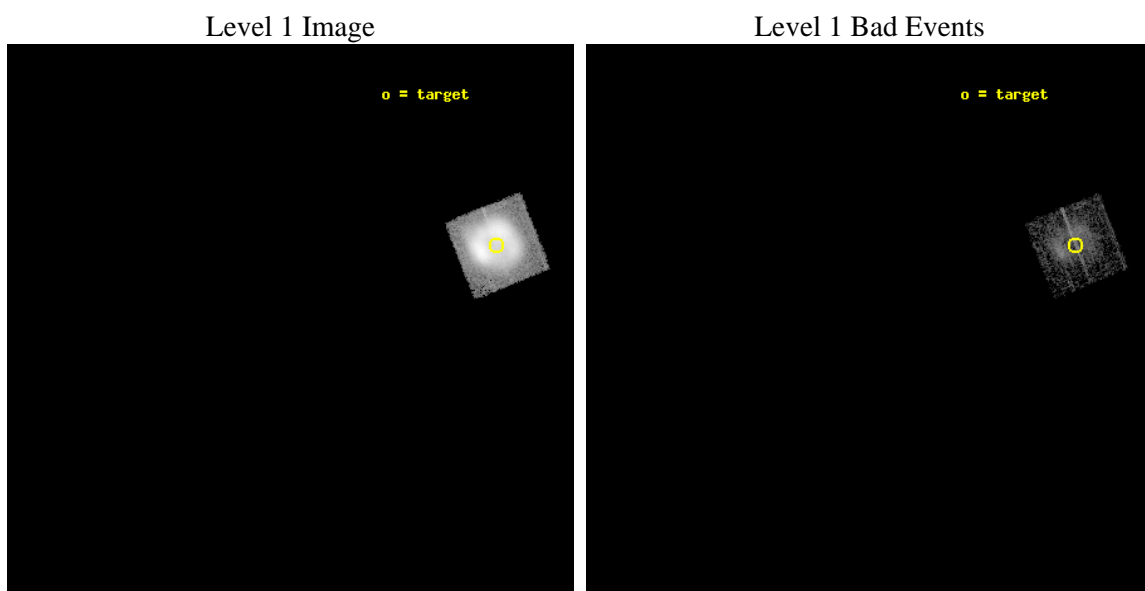
seq_num	590079	Sequence number
obs_id	211	Observation id
title	ACIS CHIP RESPONSE TO CAS A, JAN. 99	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	CAS A [Chip S0, T=100, Offsets=23,0,0 Eff Area]	Source name
dtcycle	0	
cycle	P	events from which exps? Prim/Second/Both
ra_targ	350.8575	Observer's specified target RA
dec_targ	58.814833	Observer's specified target Dec
ra_nom	351.55191343615	Nominal RA
dec_nom	58.67394438158	Nominal Dec
roll_nom	158.18344730537	Nominal Roll
revision	3	Processing version of data
ontime	1529.0569885373	Sum of GTIs [s]
livetime	1509.6951482609	Livetime [s]
ontime4	1529.0569885373	Sum of GTIs [s]
ontime5	1529.0980285332	Sum of GTIs [s]
ontime6	1528.9338685349	Sum of GTIs [s]
ontime7	1529.1390685365	Sum of GTIs [s]
ontime8	1529.015948534	Sum of GTIs [s]
ontime9	1528.9749085382	Sum of GTIs [s]
l2events	214488	Number of level 2 events



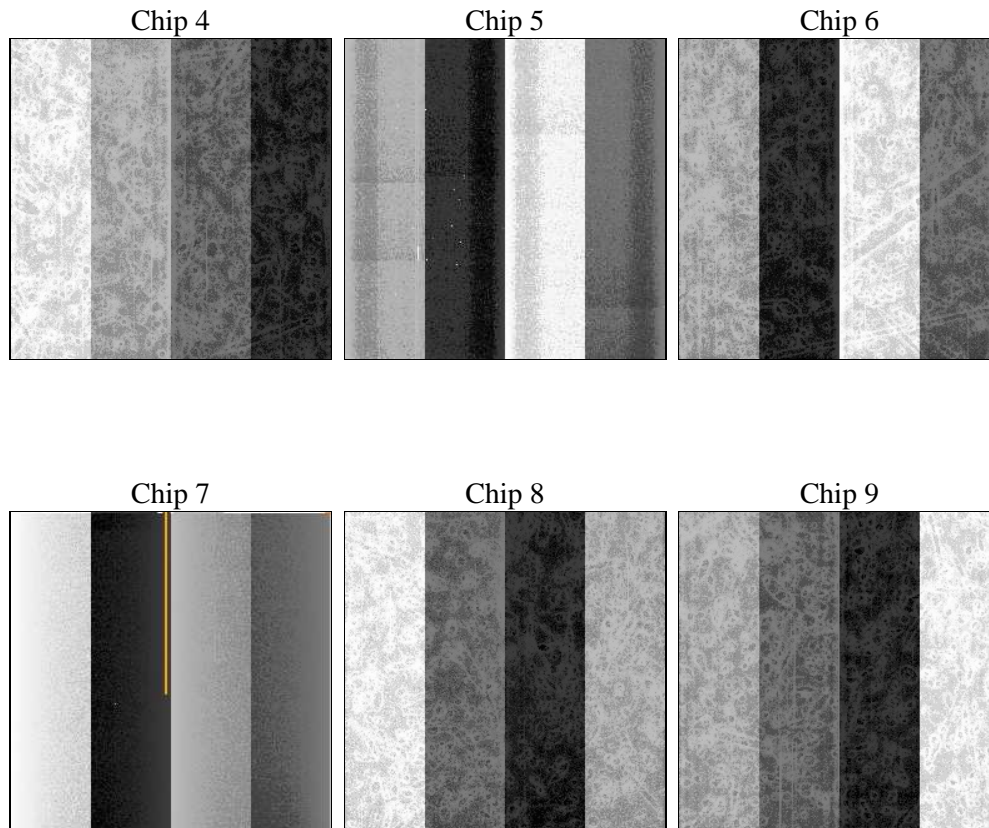
2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias



2.1.3 Parameters

obi_num	1	Obi number	sched_exp_time	2500.000000	Scheduled observation exposure time
ascdsver	8.1.2	ASCDS version number	ontime	1529.0569885373	Sum of GTIs [s]
caldbver	4.1.4	 	ontime4	1529.0569885373	Sum of GTIs [s]
date	2009-12-16T05:39:04	Date and time of file creation	ontime5	1529.0980285332	Sum of GTIs [s]
revision	3	Processing version of data	ontime6	1528.9338685349	Sum of GTIs [s]
			ontime7	1529.1390685365	Sum of GTIs [s]
			ontime8	1529.015948534	Sum of GTIs [s]
			ontime9	1528.9749085382	Sum of GTIs [s]
			l1events	238966	Number of level 1 events

2.1.4 Events

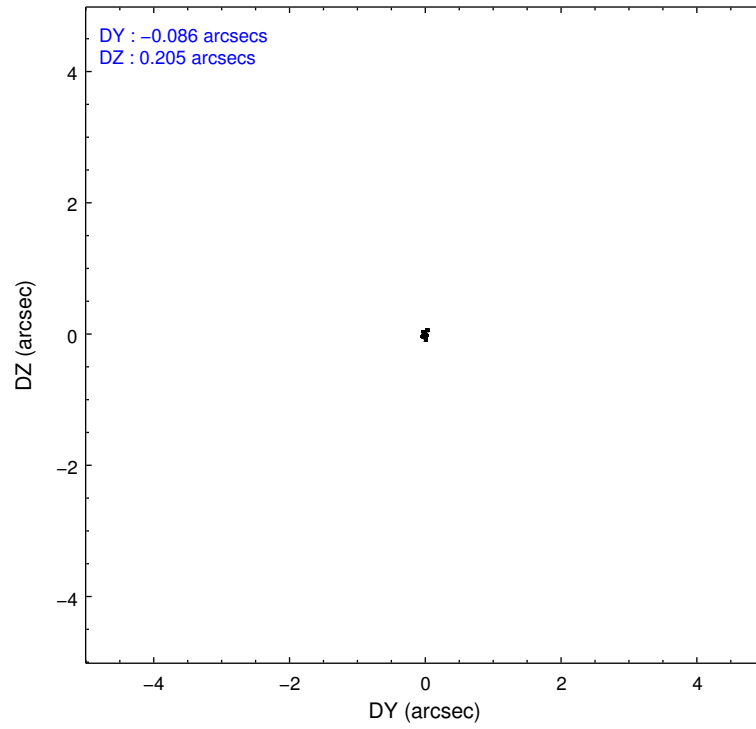
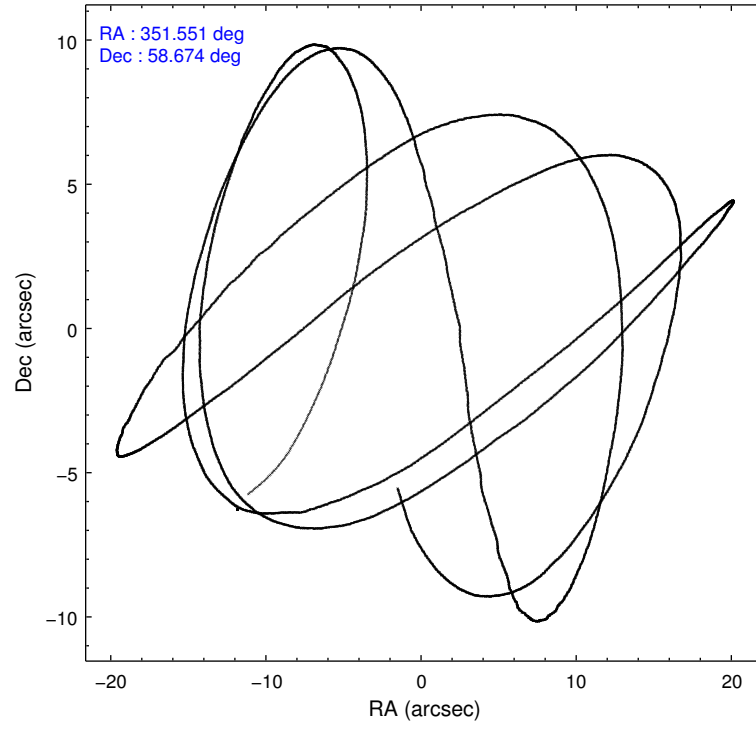
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	238966	0	0	0	0	0
rejected events	22762	0	0	0	0	0
rejected %	9%	0%	0%	0%	0%	0%

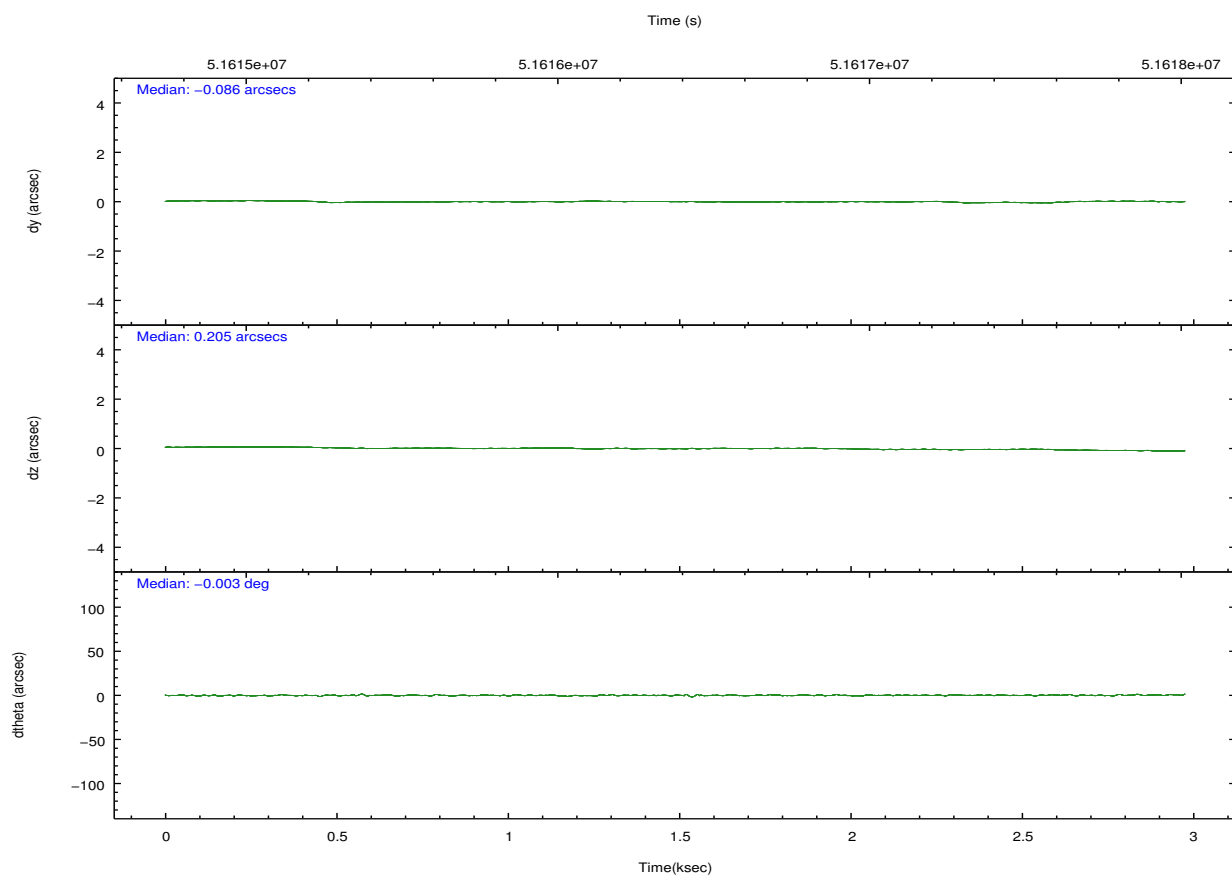
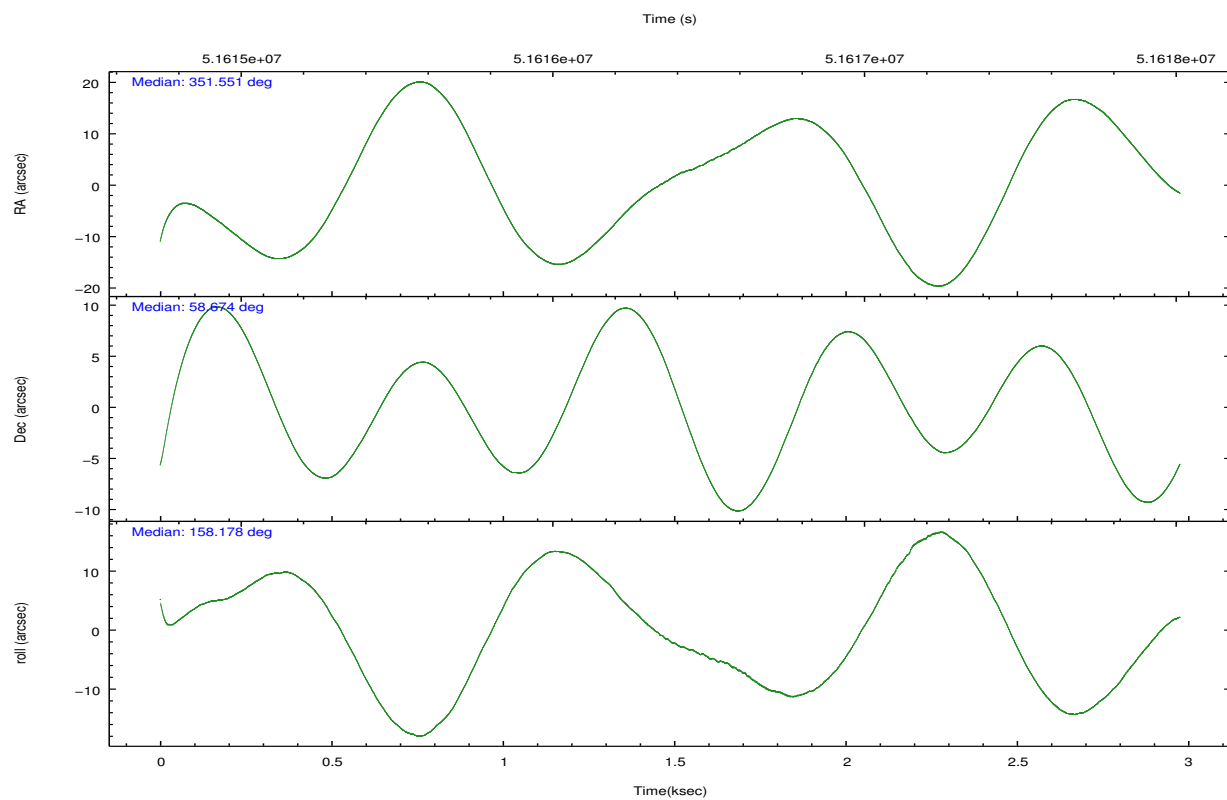
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	173123	0	0	0	0	0
	72%	0%	0%	0%	0%	0%
grade 1 events	1685	0	0	0	0	0
	0%	0%	0%	0%	0%	0%
grade 2 events	23869	0	0	0	0	0
	9%	0%	0%	0%	0%	0%
grade 3 events	7322	0	0	0	0	0
	3%	0%	0%	0%	0%	0%
grade 4 events	7317	0	0	0	0	0
	3%	0%	0%	0%	0%	0%
grade 5 events	1540	0	0	0	0	0
	0%	0%	0%	0%	0%	0%
grade 6 events	5019	0	0	0	0	0
	2%	0%	0%	0%	0%	0%
grade 7 events	19091	0	0	0	0	0
	7%	0%	0%	0%	0%	0%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-4	ACIS-456789	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
Pointing RA	351.604708	351.5519134361473	CCD I2 on	N	N
Pointing Dec	58.677436	58.67394438157983	CCD I3 on	N	N
Pointing Roll	157.981735	158.183447305366	CCD S0 on	Y	Y
Window start time	49852864.184000	49852864.184000	CCD S1 on	N	Y
Window stop time	55036864.184000	55036864.184000	CCD S2 on	N	Y
SIM focus pos (mm)	-0.684267	-0.865731118321573	CCD S3 on	N	Y
SIM defocus (mm)	0	-0.1814636570216768	CCD S4 on	N	Y
SIM translation stage pos (mm)	-190.132523	-190.1199515274594	CCD S5 on	N	Y
SIM translation stage offset (mm)	0	-0.012571055548392	Number of optional ACIS chips dropped	0	0
Observation start time	51615364.184000	51613961.704343	On-chip summing requested	N	N
Observation start date	1999-08-21T09:35:00	1999-08-21T09:12:41	Subarray requested	NONE	NONE
Observation end time	51617864.184000	51617989.954488	Alternating exposures requested	N	N
Observation end date	1999-08-21T10:16:40	1999-08-21T10:19:49	Primary exposure time	0.000000	3.2
Read mode	TIMED	TIMED			

2.3 Aspect



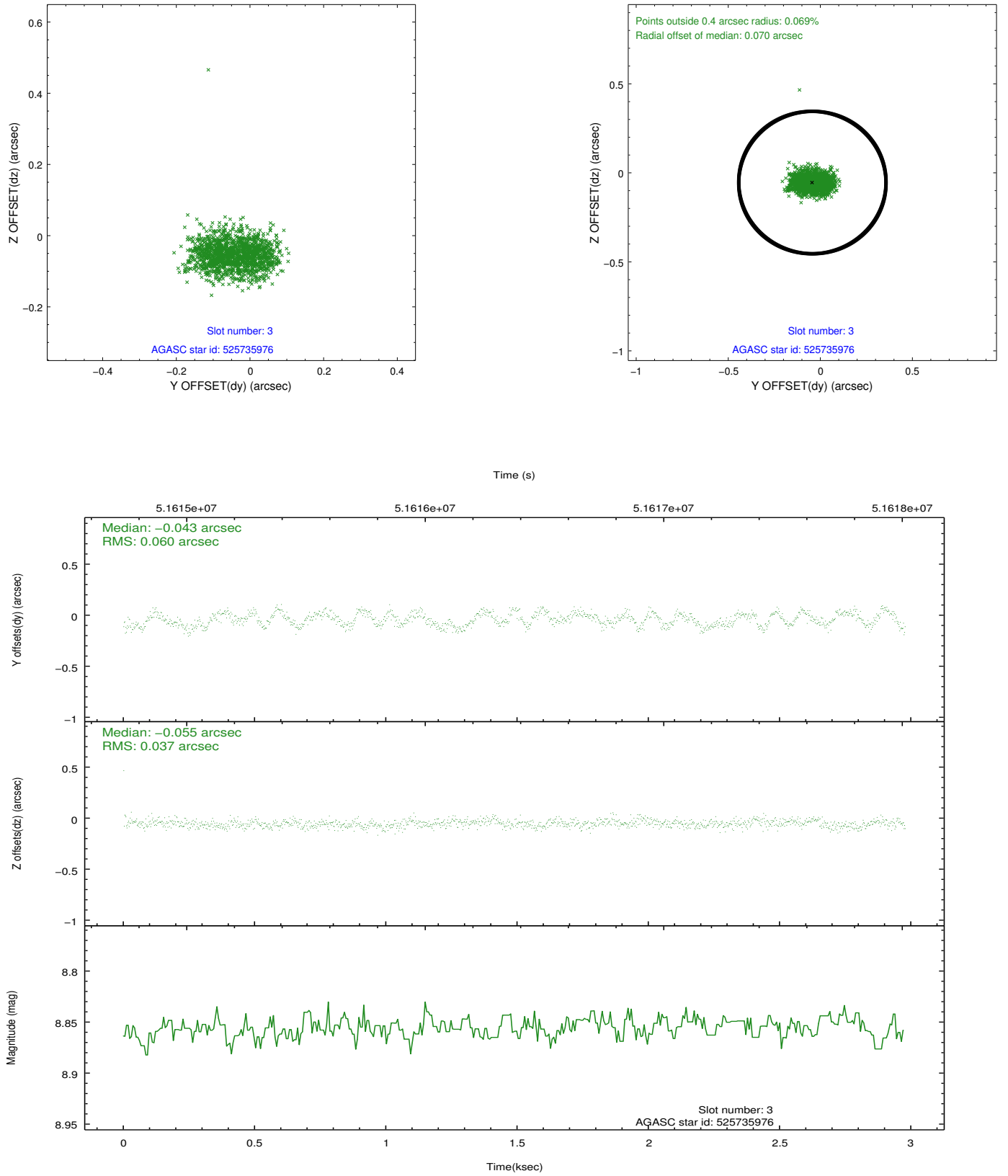


Slot Statistics

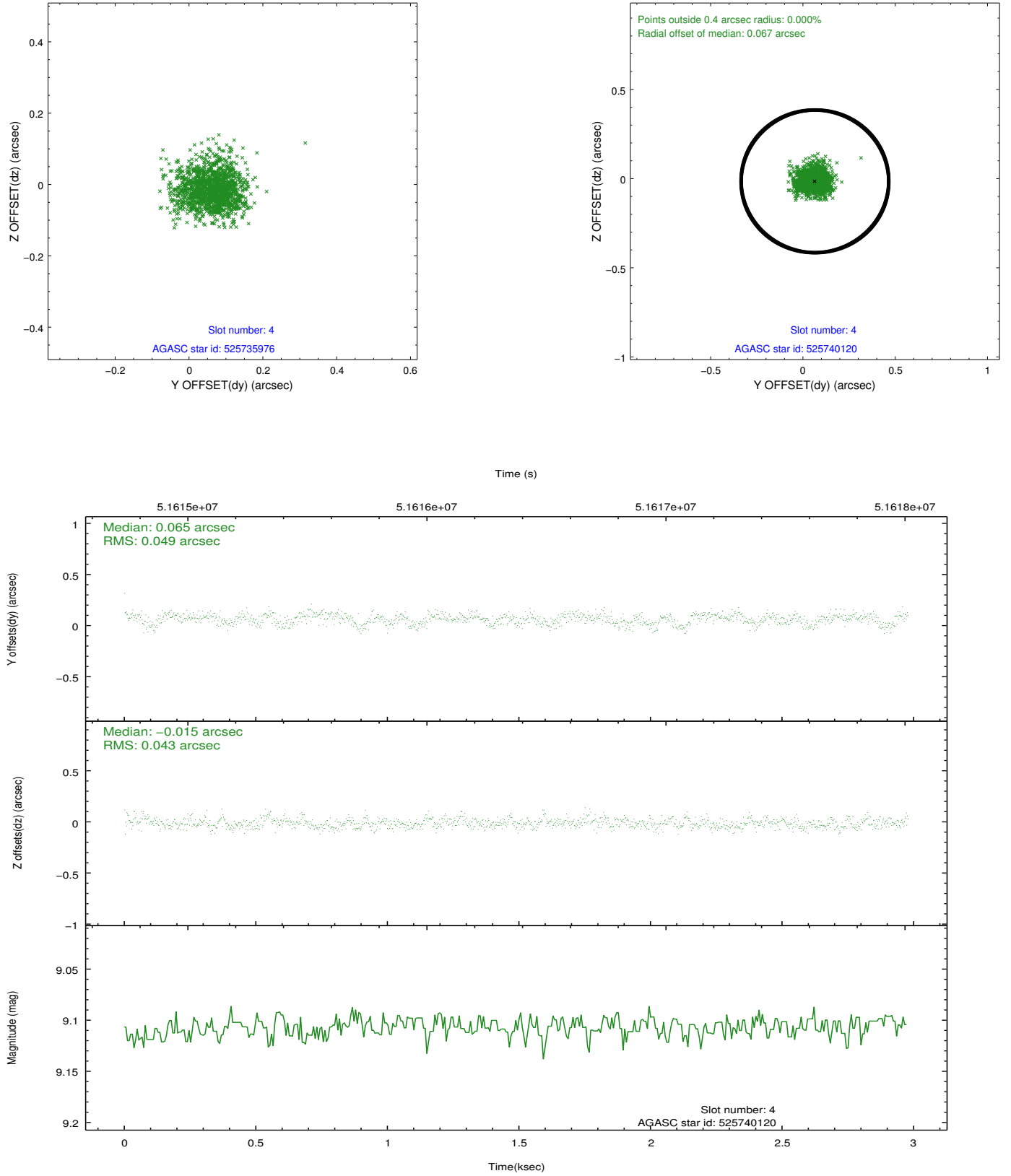
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-3	7.35	1453	-0.039	0.026	0.007	0.012	0.000000	0.000000	60.64	-1850.60
1	FID	ACIS-S-4	7.22	1452	0.140	0.010	0.006	0.010	0.000000	0.000000	2161.02	185.73
2	FID	ACIS-S-5	7.25	1453	-0.129	-0.026	0.007	0.011	0.000000	0.000000	-1804.12	180.69
3	GUIDE	525735976	8.86	1450	-0.043	-0.055	0.076	0.118	350.142956	58.277622	2035.46	2343.41
4	GUIDE	525740120	9.11	1452	0.065	-0.015	0.070	0.113	352.967106	58.769720	-2222.50	-1284.41
5	GUIDE	525735720	9.41	1453	0.163	0.088	0.084	0.133	352.906462	58.586631	-2380.22	-636.14
6	GUIDE	525732896	9.64	1452	-0.084	0.121	0.093	0.149	351.456486	59.410070	1238.25	-2344.32
7	GUIDE	525731640	9.89	1450	-0.100	-0.140	0.100	0.160	350.518982	58.216636	1292.41	2292.15

2.4 Star Slots

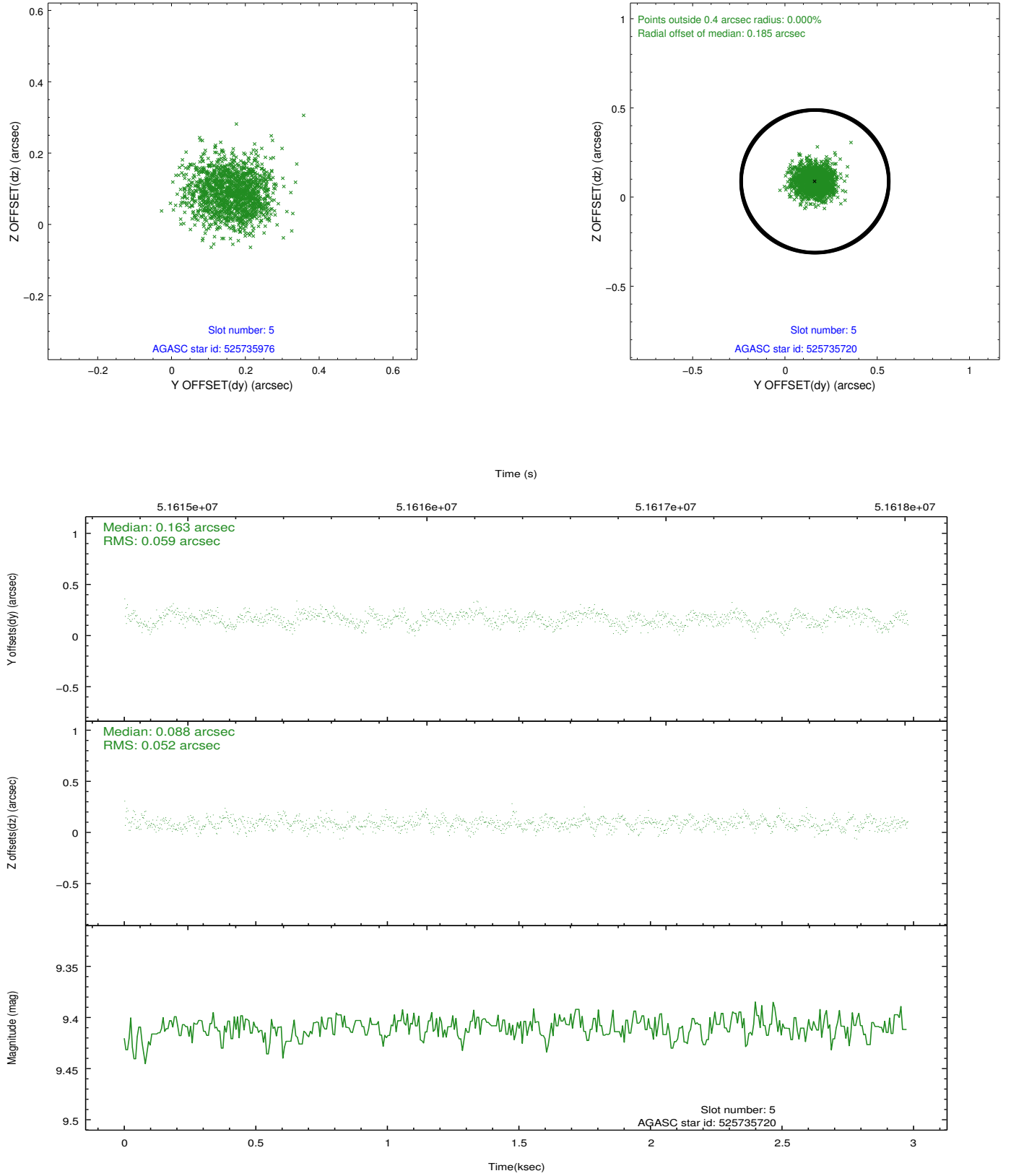
2.4.1 Slot 3



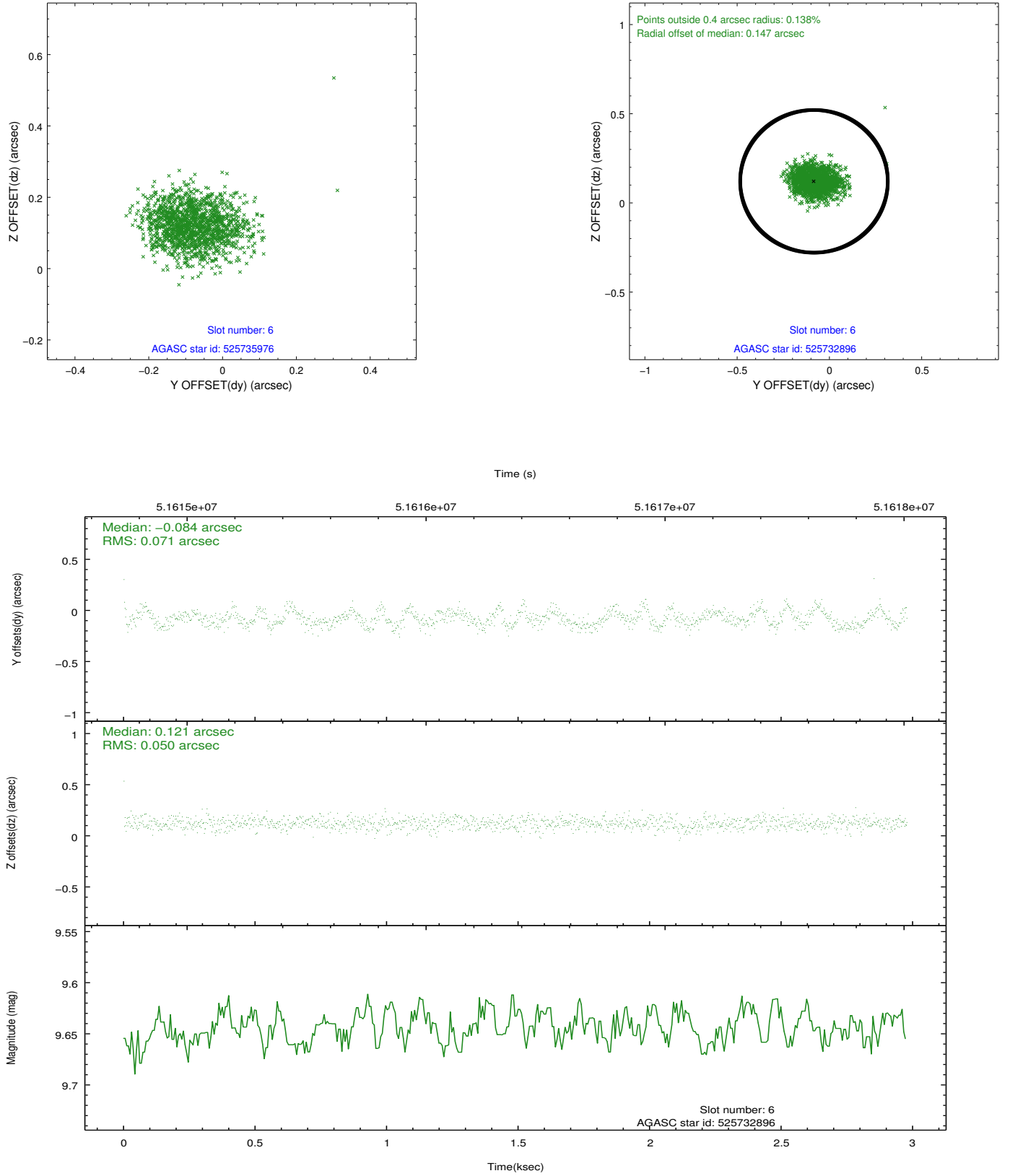
2.4.2 Slot 4



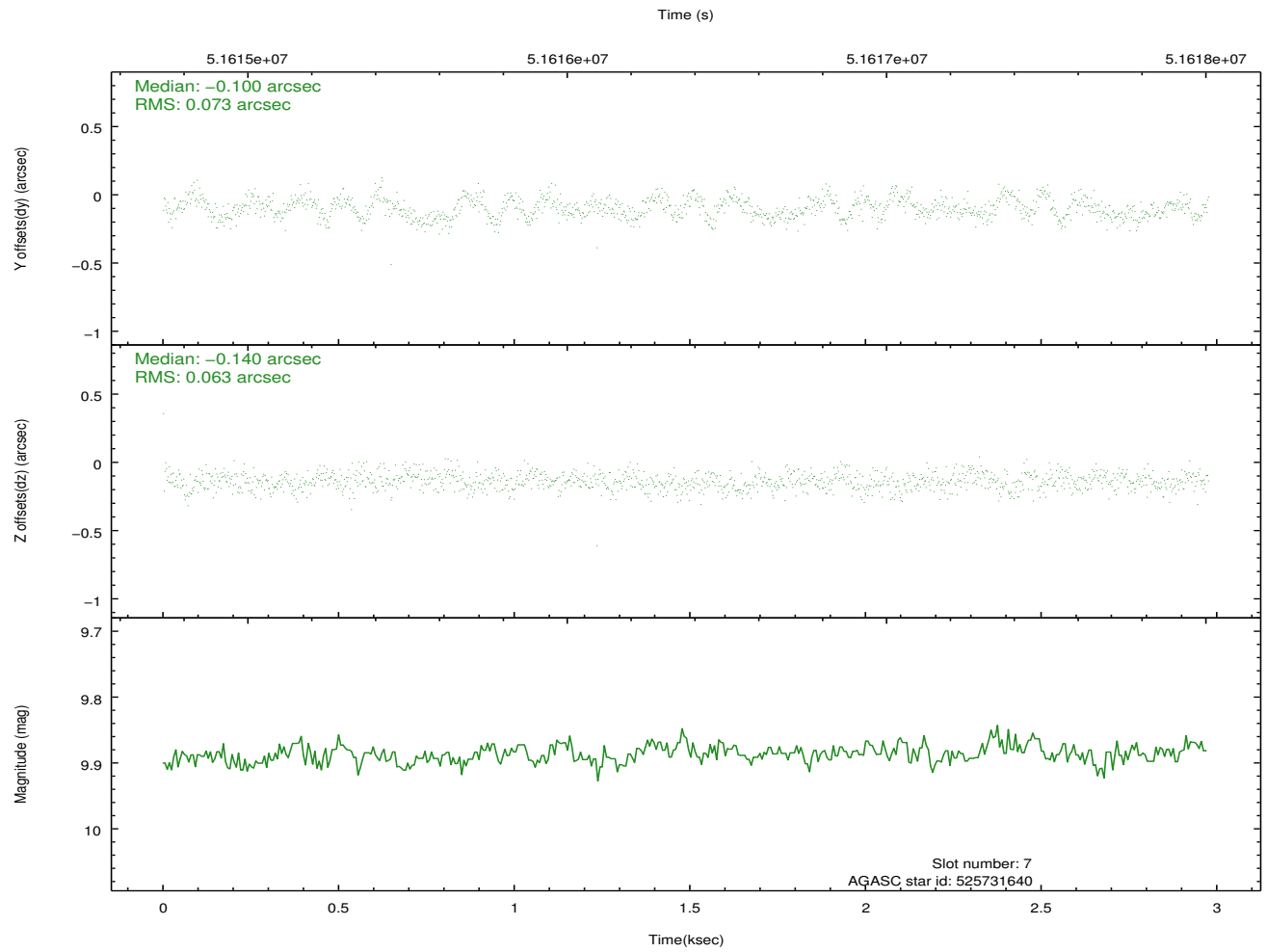
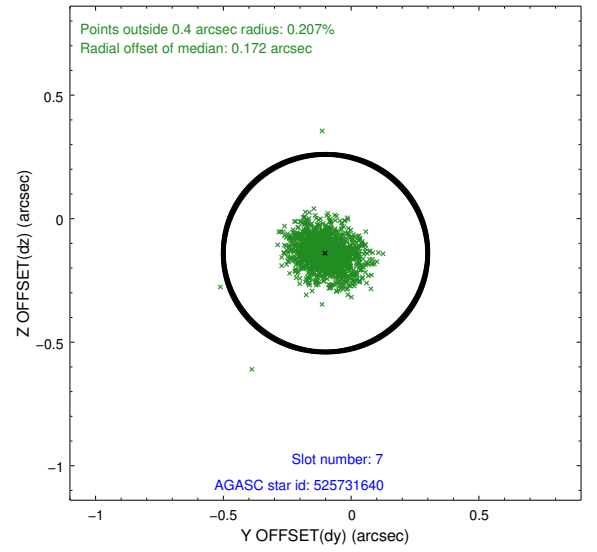
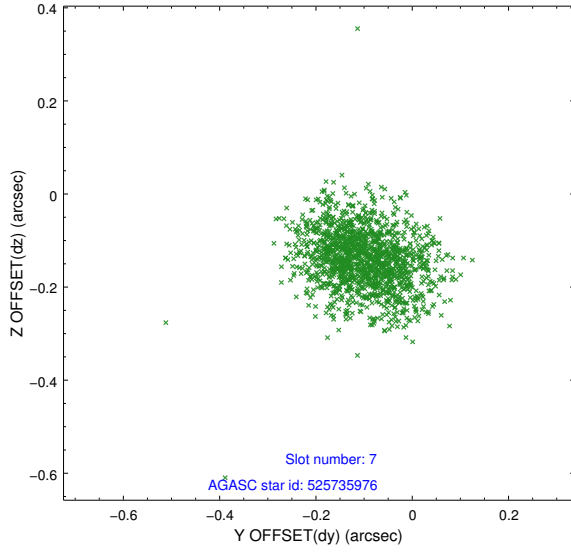
2.4.3 Slot 5



2.4.4 Slot 6

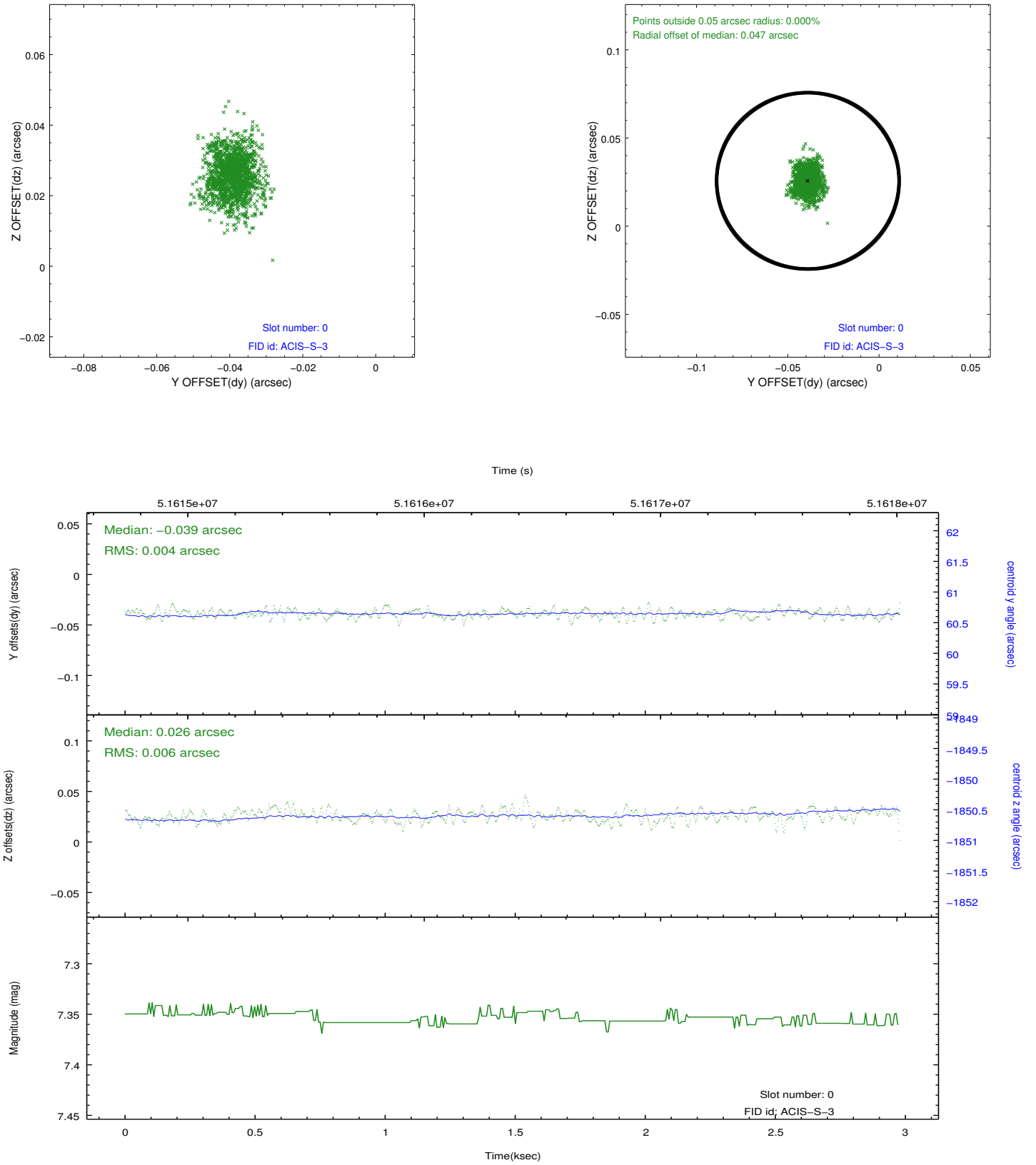


2.4.5 Slot 7

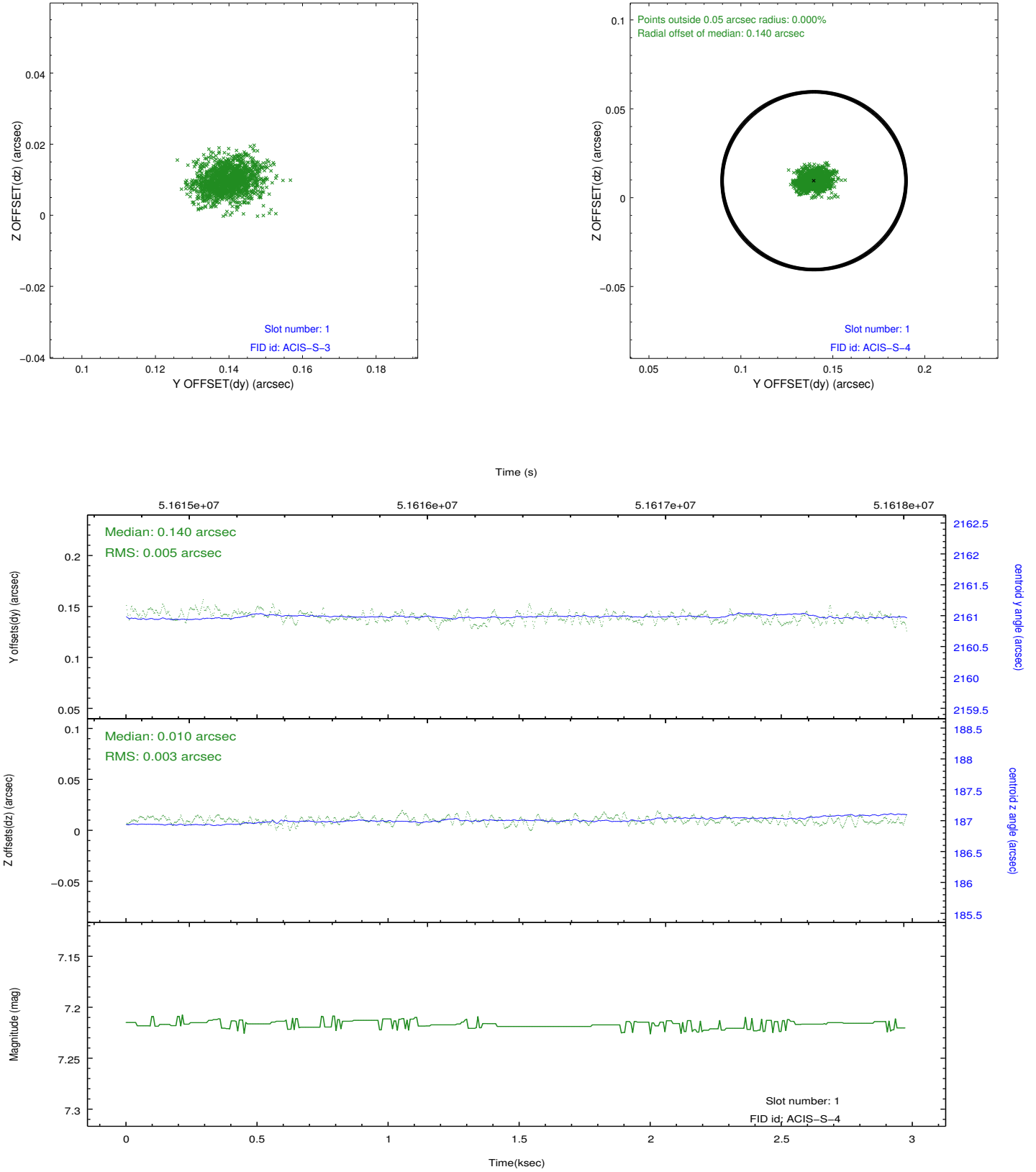


2.5 FID Slots

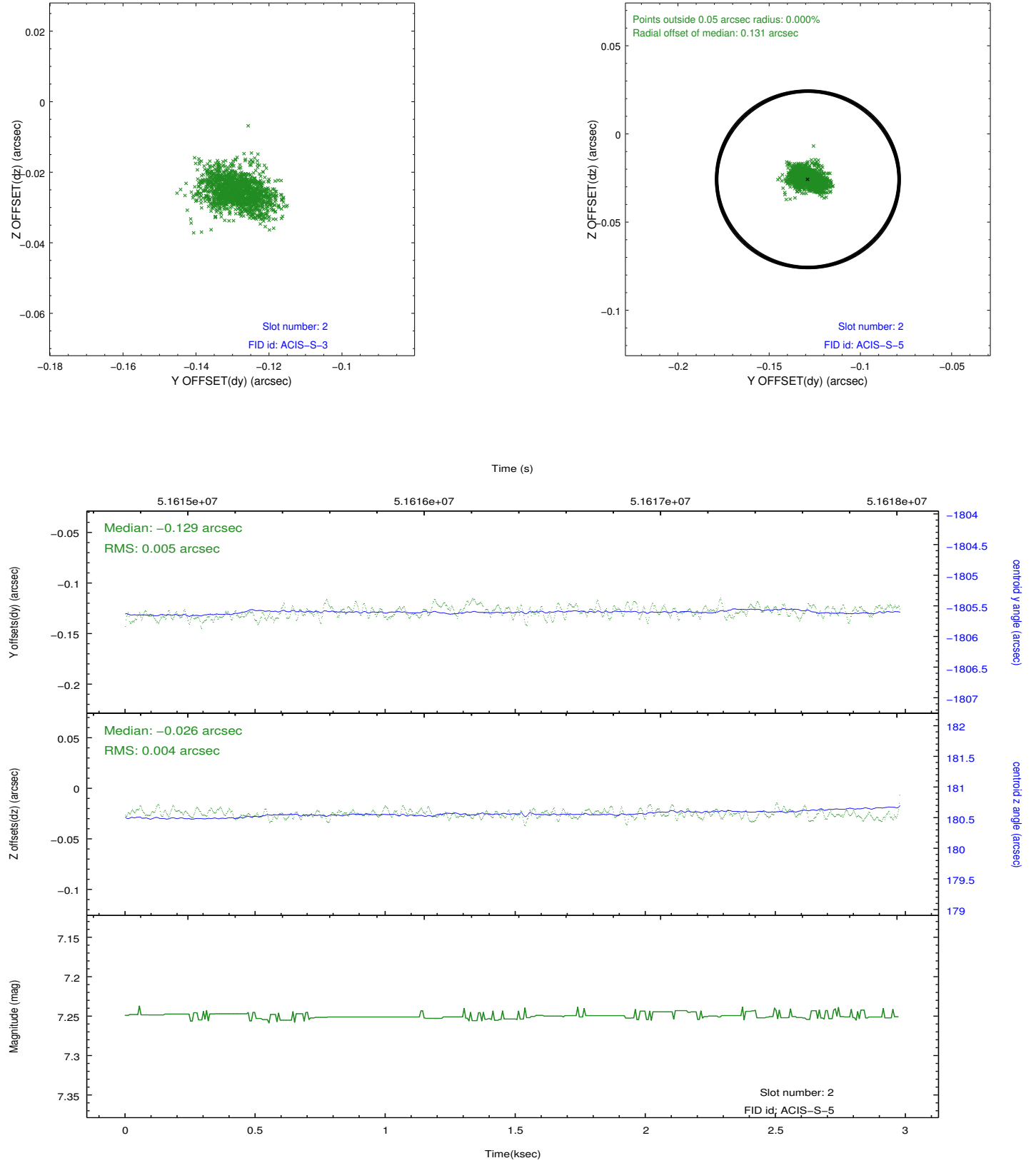
2.5.1 Slot 0



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)	2010.04.01
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	1.529

A.2 Comments

Off-axis ACIS effective area measurement of Cas A on chip S0. Only chip S0 has data.

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The focal plane temperature is approximately -100 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.