

Table S5: Variant effect on Ct value for each capital and at the national level using a linear regression model ( $\beta$ ). Two distinct viral targets (N and ORF1ab) and an internal process control (MS2) were analyzed. Positive  $\beta$  values indicate an increase in the Ct score in the period dominated by the Omicron VOC.

Capital	Number of Samples	N gene			ORF1ab gene			MS2 control		
		$\beta$	95% CI	p-value	$\beta$	95% CI	p-value	$\beta$	95% CI	p-value
Belém	2861	0.323	±0.757	0.403	0.468	±0.764	0.230	1.747	±1.506	6.47e-16*
Belo Horizonte	46266	1.077	±0.161	<2e-16*	1.172	±0.160	<2e-16*	0.123	±0.085	0.004*
Boa Vista	444	1.080	±2.584	0.413	1.021	±2.638	0.448	1.238	±1.332	0.069
Brasília	2976	0.448	±0.461	0.057	0.882	±0.454	0.00014*	0.621	±0.206	3.78e-09*
Fortaleza	337	-2.311	±2.985	0.130	-2.545	±3.006	0.098	-0.680	±1.258	0.290
Goiânia	3093	1.612	±0.702	6.98e-06*	1.756	±0.702	1.02e-06*	-0.480	±0.307	0.002*
Macapá	1027	2.108	±2.027	0.0418*	2.151	±2.057	0.0407*	0.008	±1.023	0.987
Manaus	565	-0.297	±2.207	0.792	-0.272	±2.246	0.813	2.129	±1.129	0.0002*
Palmas	1267	2.087	±0.767	1.15e-07*	2.148	±0.777	7.3e-08 *	1.333	±0.489	1.1e-07*
Porto Velho	2895	0.736	±0.784	0.066	0.886	±0.791	0.0281*	0.584	±0.421	0.007*
Rio de Janeiro	6383	1.382	±0.380	1.19e-12*	1.663	±0.383	<2e-16*	-0.178	±0.189	0.066
São Paulo	4771	3.318	±0.458	<2e-16*	3.645	±0.462	<2e-16*	0.495	±0.222	1.23e-05*
<b>Brazil</b>	<b>72885</b>	<b>1.114</b>	<b>±0.125</b>	<b>&lt;2e-16*</b>	<b>1.304</b>	<b>±0.124</b>	<b>&lt;2e-16*</b>	<b>0.267</b>	<b>±0.064</b>	<b>5.98e-16*</b>

\*Statistically significant values ( $\alpha = 0.05$ ).