Covid-19 evolution, 15 most affected countries (data from JHU CSSE, 10/12/21) Growth rate (%) of confirmed  $\left(\frac{\Delta confirmed}{confirmed}\right)$ Total number of confirmed Total number of confirmed (log scale) 1e7 1.75 10<sup>8</sup> 1.50 1.25  $10^{7}$ 1.00 Brazil 0.75 0.50 0.25 0.00 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 01/04 01/07 01/10 01/01 Acceleration of confirmed  $\left(\frac{\Delta^2 confirmed}{(\Delta + 1)^2}\right)$ confirmed by day  $\left(\frac{\Delta confirmed}{\Delta t}\right)$ confirmed by day  $\left(\frac{\Delta confirmed}{\Delta t}\right)$  (log scale) 350000 10000 300000 250000 -5000 10<sup>5</sup> 200000 150000 100000 - $10^{4}$ -5000 50000 --10000

01/01

01/10

01/04

01/07

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