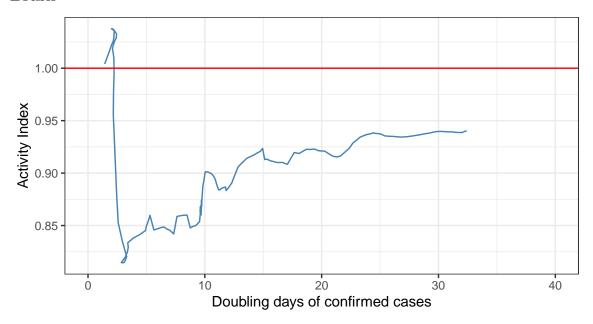
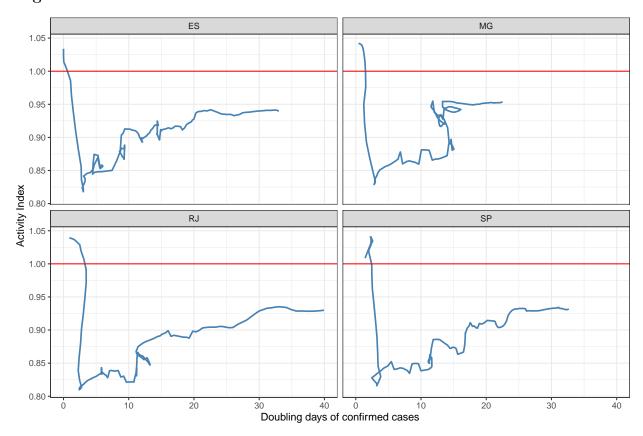
Atividade x COVID

Usando dados de mobilidade

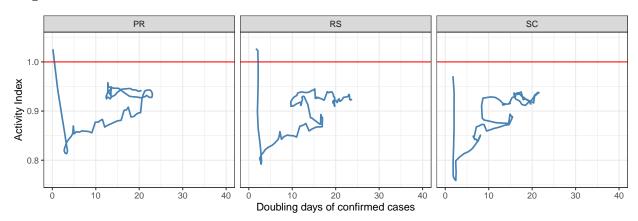
Brasil



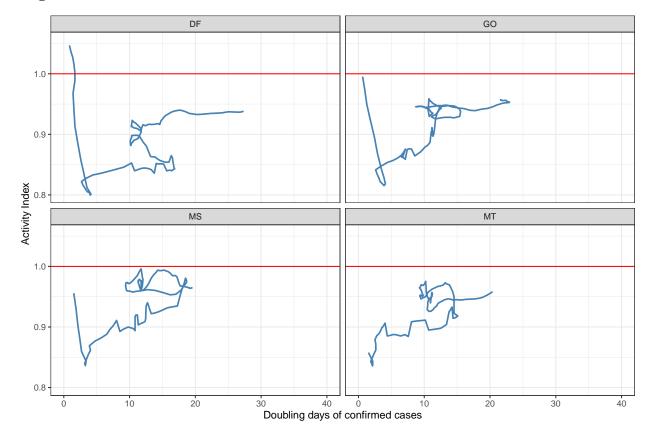
Região Sudeste



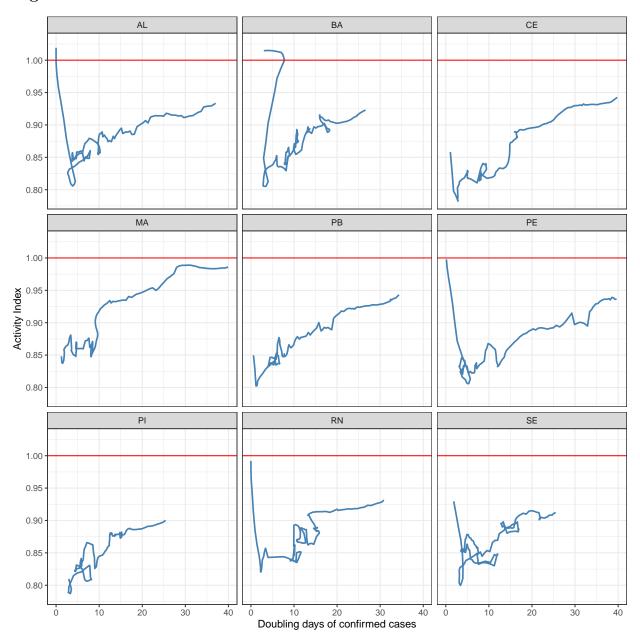
Região Sul



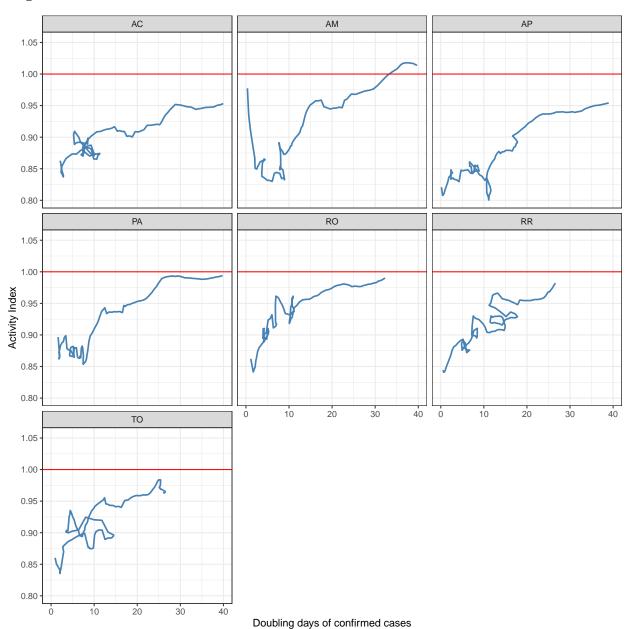
Região Centro-Oeste



Região Nordeste



Região Norte



Usando dados de energia

Trocando os dados de mobilidade pela diferença percentual entre o consumo de energia atual e o esperado.

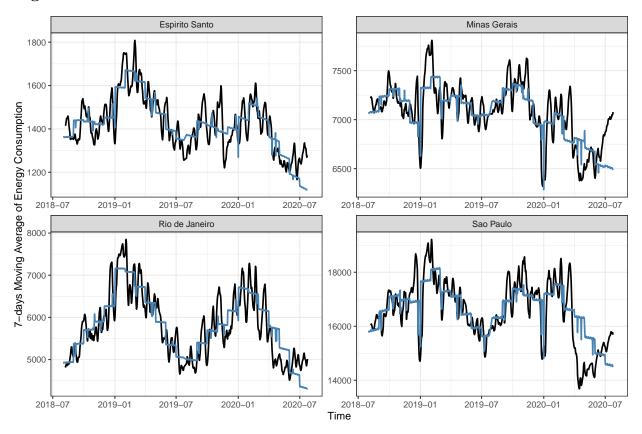
Para definir o contrafactual, fazemos uma regressão para cada estado, com os dados de 08/2018 até 02/2020, da seguinte forma:

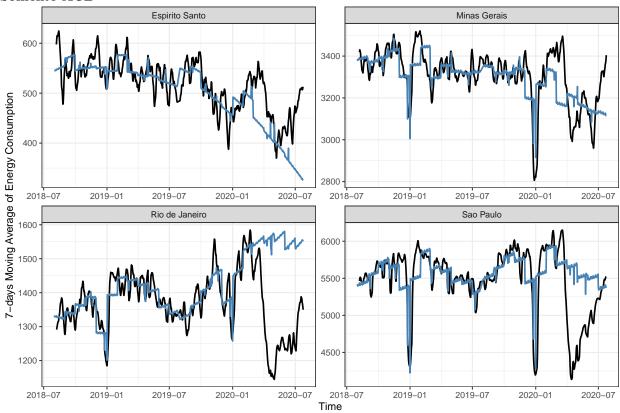
Média Móvel de 7 dias do Consumo Diario
$$_t = \beta_0 + \sum_{i=2}^3 \psi_i D_{\mathrm{ano}_{it}} + \sum_{i=2}^{12} \delta_i D_{\mathrm{m\hat{e}s}_{it}} + \sum_{i=2}^7 \lambda_i D_{\mathrm{dia\ da\ semana}_{it}} + \sum_{i=2}^k \theta_i D_{\mathrm{feriado}_{it}} + \phi_1 t + \phi_2 t^2 + \epsilon_t$$
 (1)

A partir de 1, usamos os valores preditos para os dados a partir de Março de 2020 como o esperado para o consumo de energia. A diferença percentual mostrada nos gráficos abaixo se baseia nesses valores.

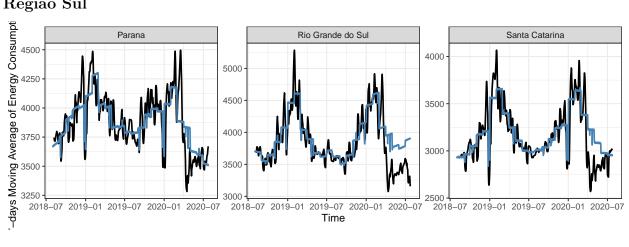
Testando o fit

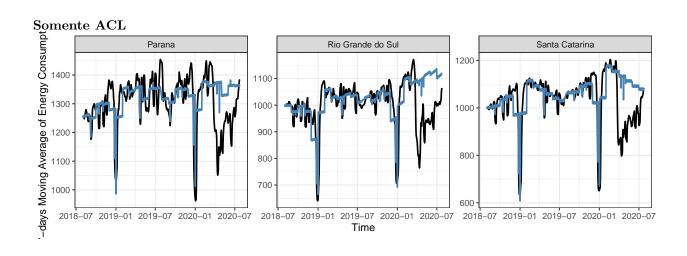
Região Sudeste



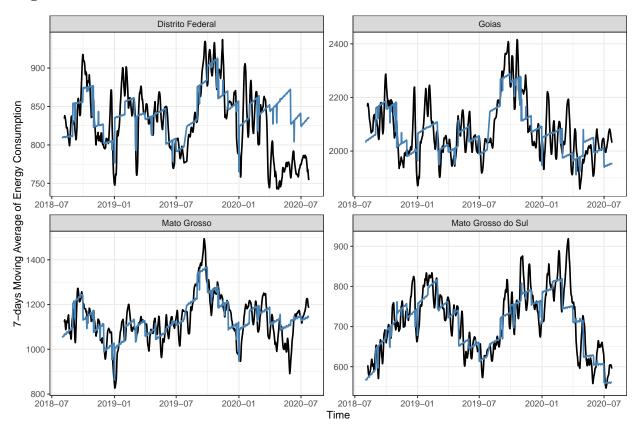


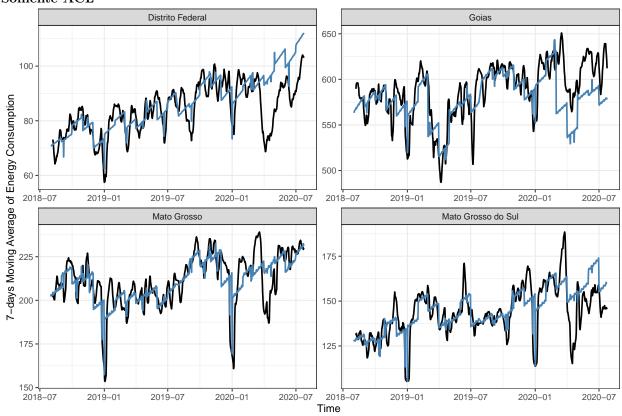
Região Sul



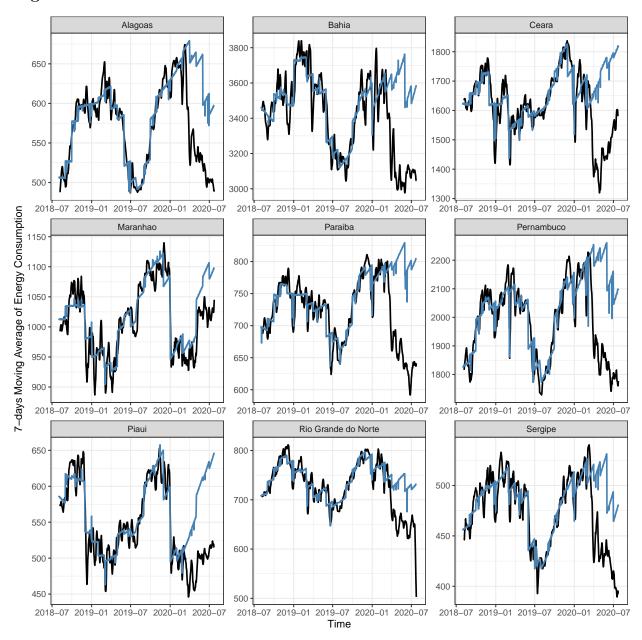


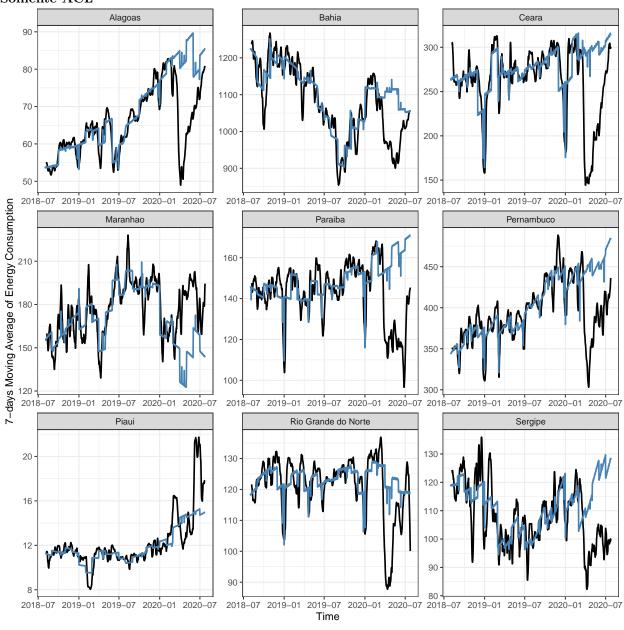
Região Centro-Oeste



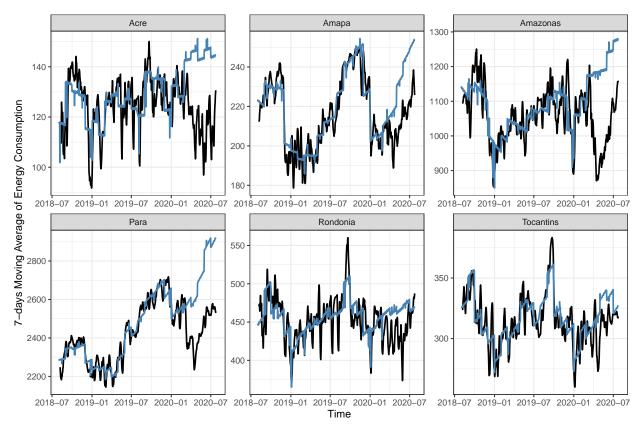


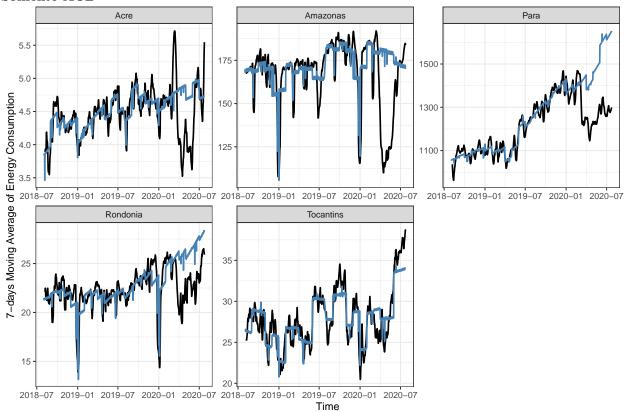
Região Nordeste





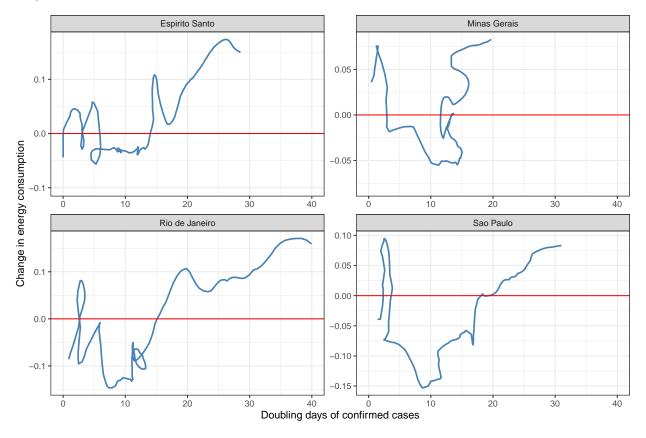
Região Norte

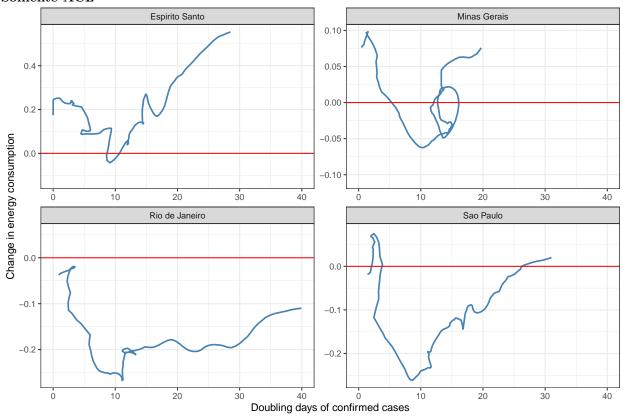




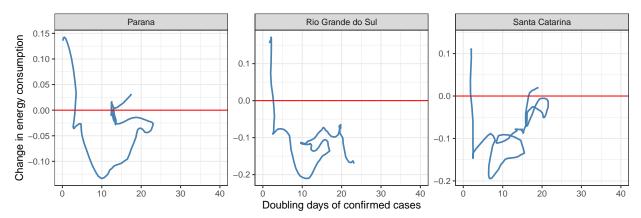
Mudança para o previsto

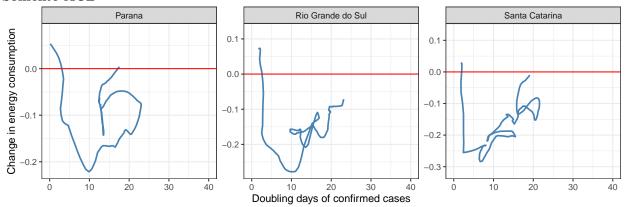
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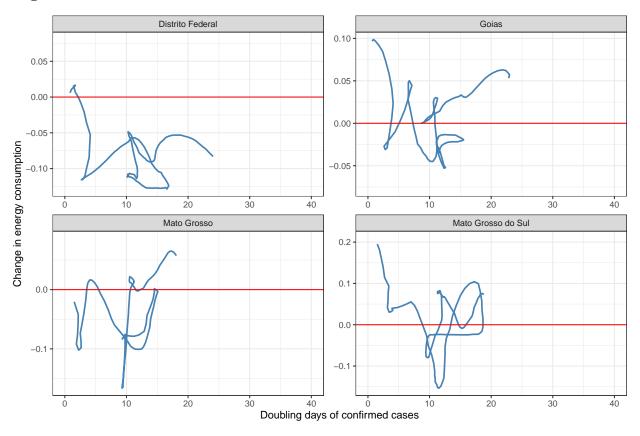


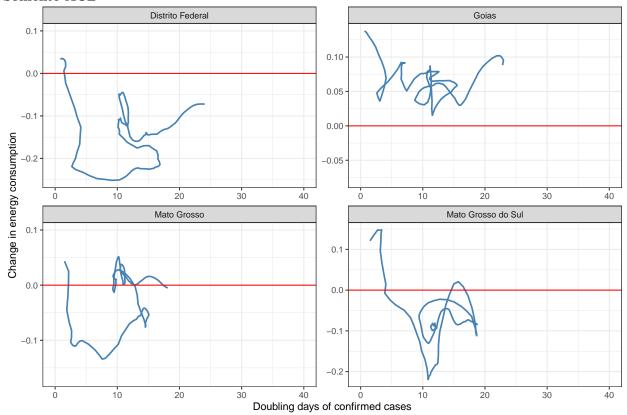
Região Sul



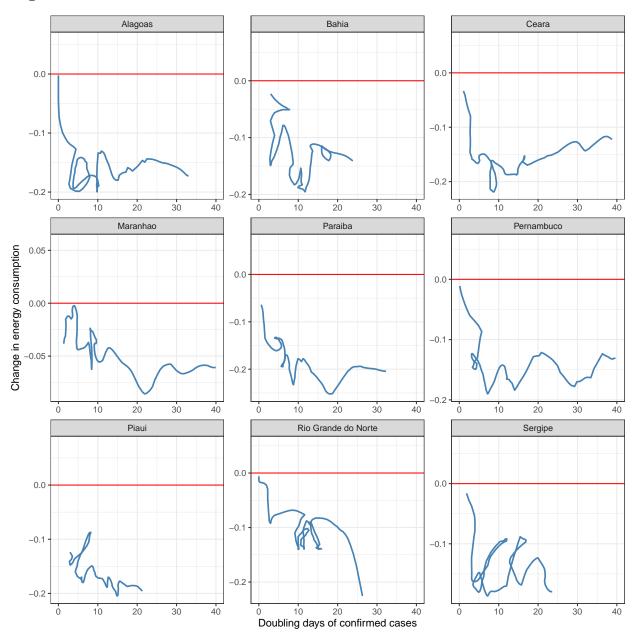


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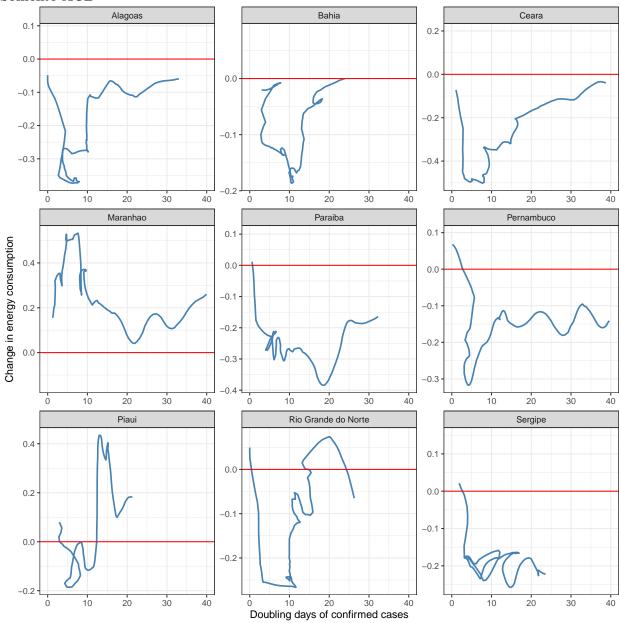




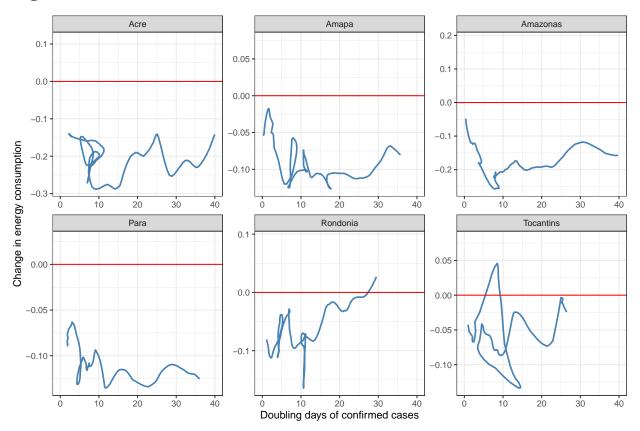
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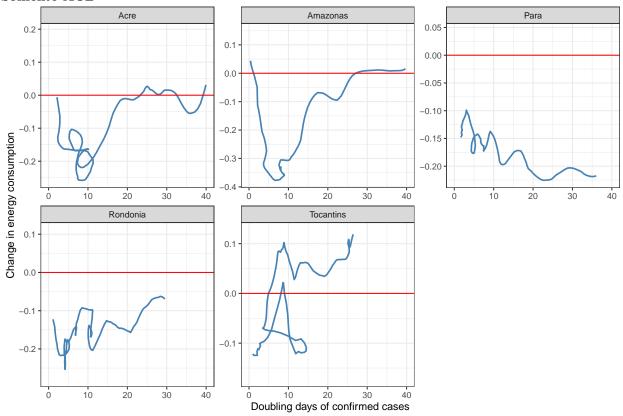






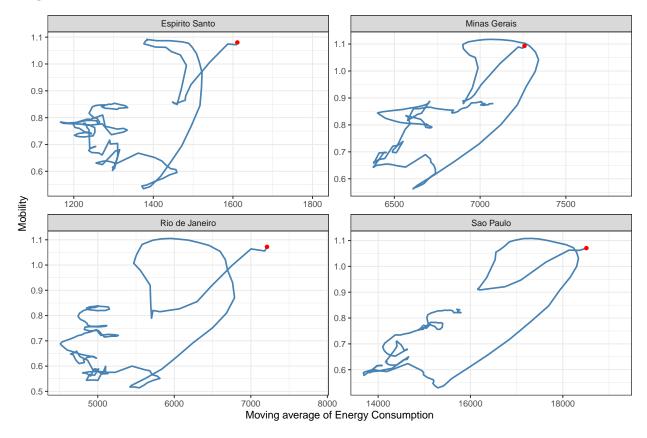
Região Norte

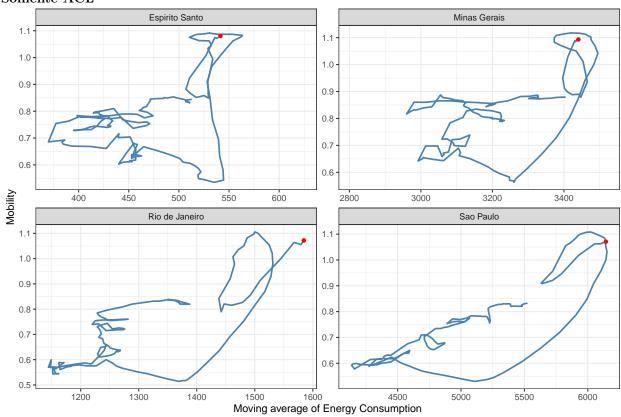




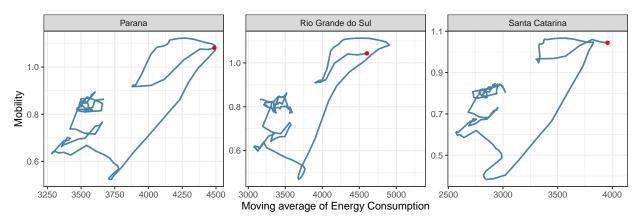
Relação Mobilidade x Consumo de Energia

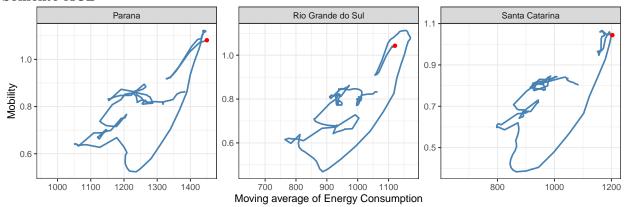
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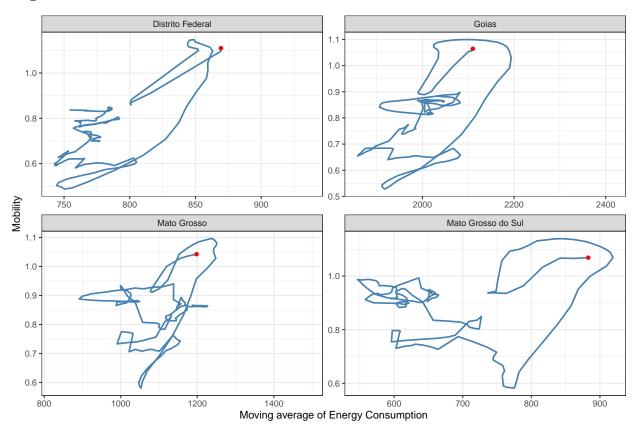


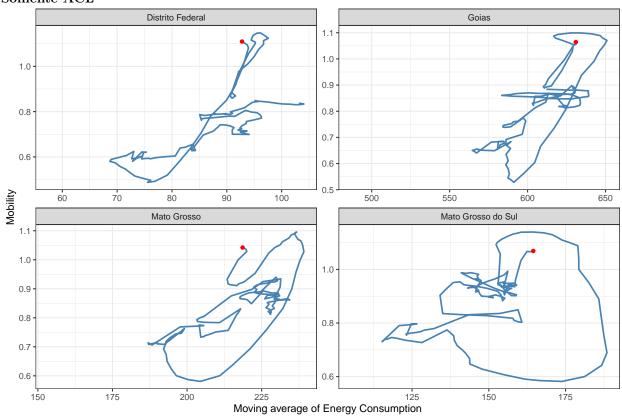
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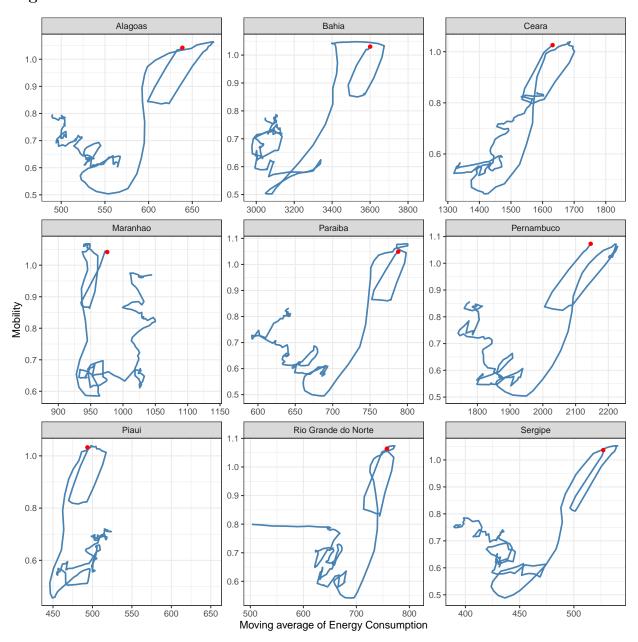


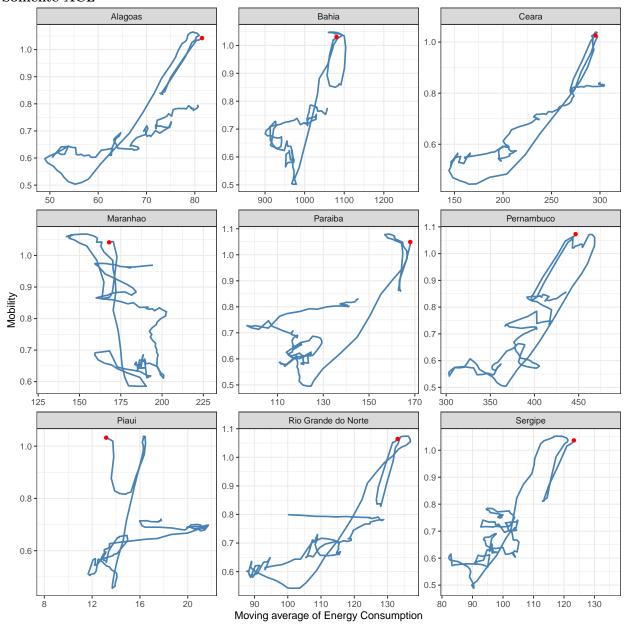
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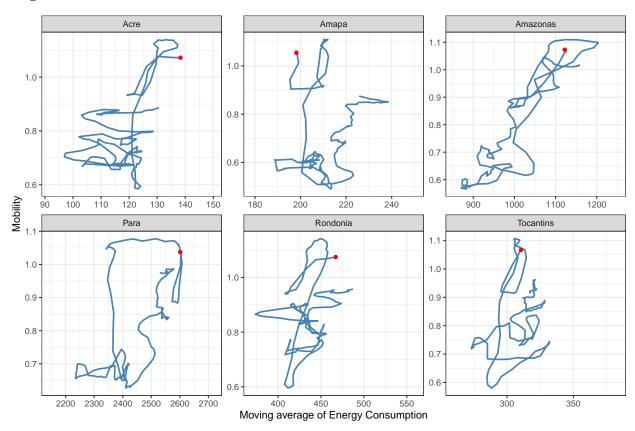


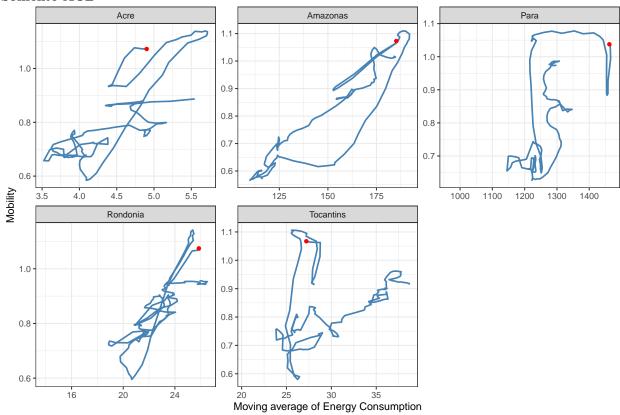
Região Nordeste



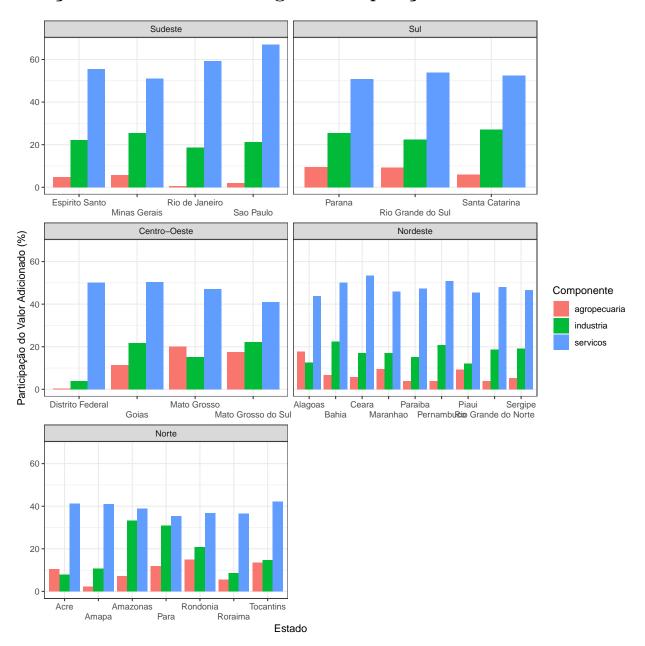


Região Norte



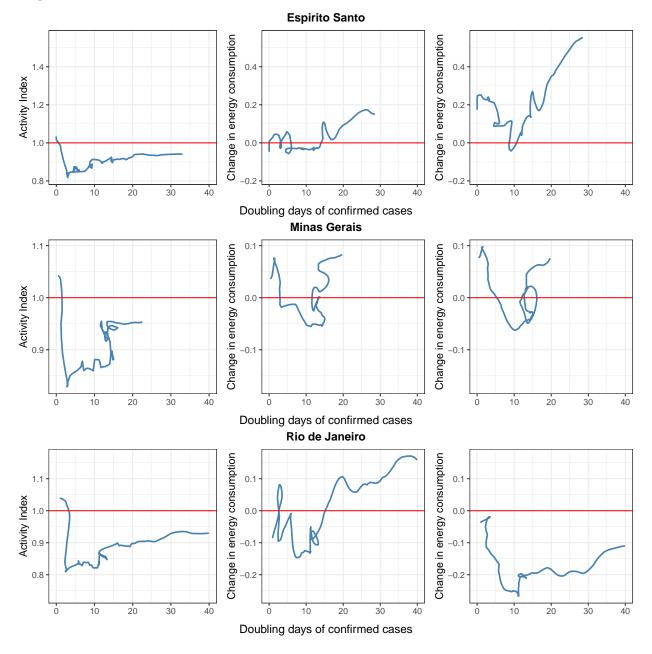


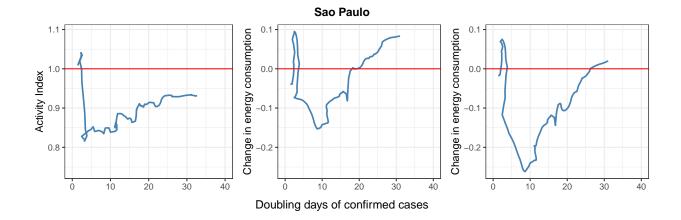
Relação entre Série de Energia e Composição do PIB?



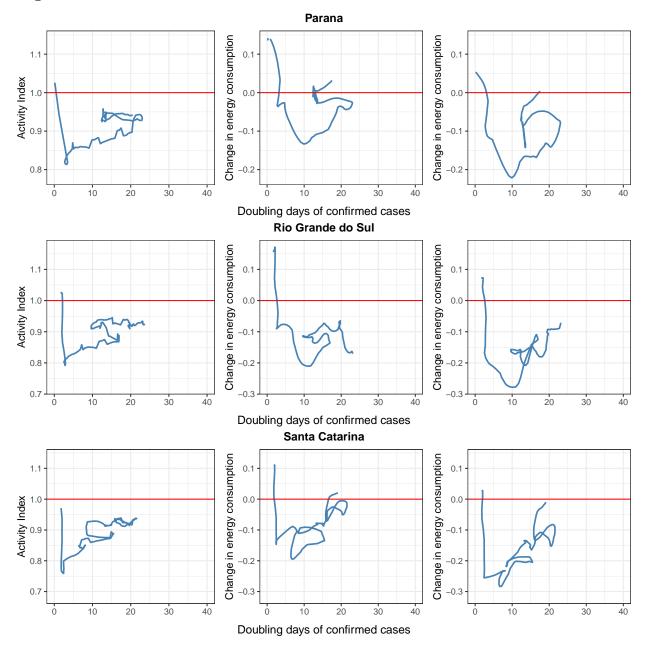
Comparação entre Índice de Atividade Calculado com Mobilidade e com dados de energia:

Região Sudeste

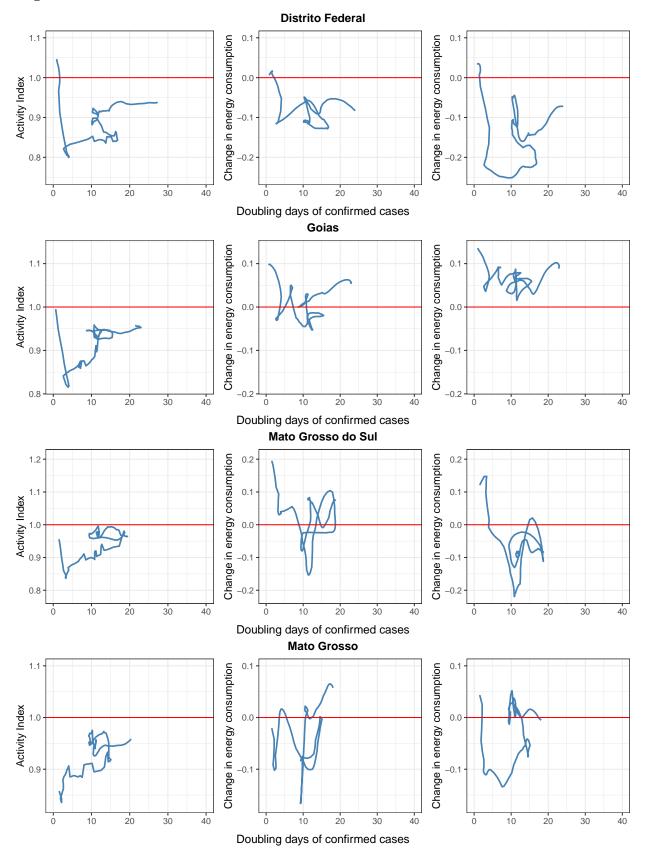




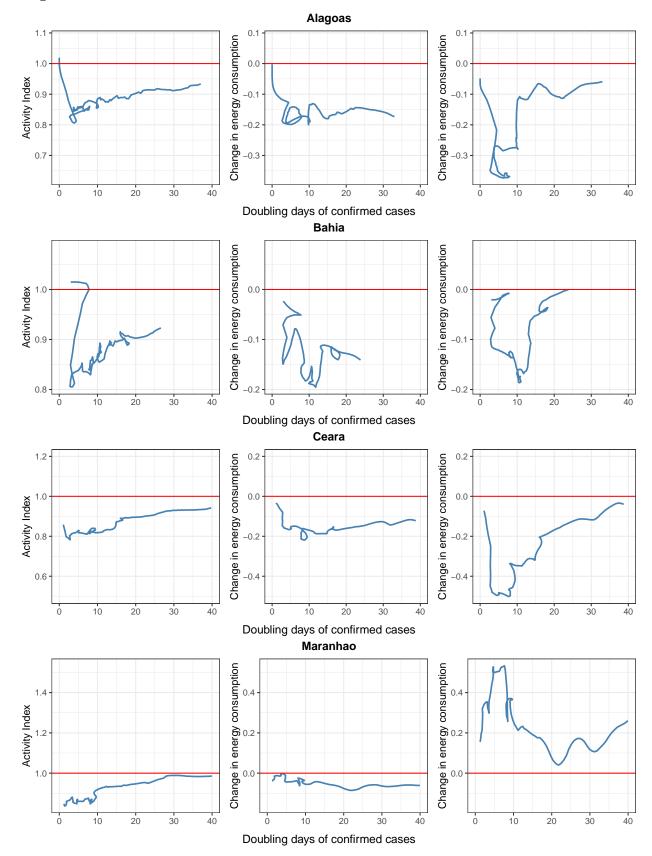
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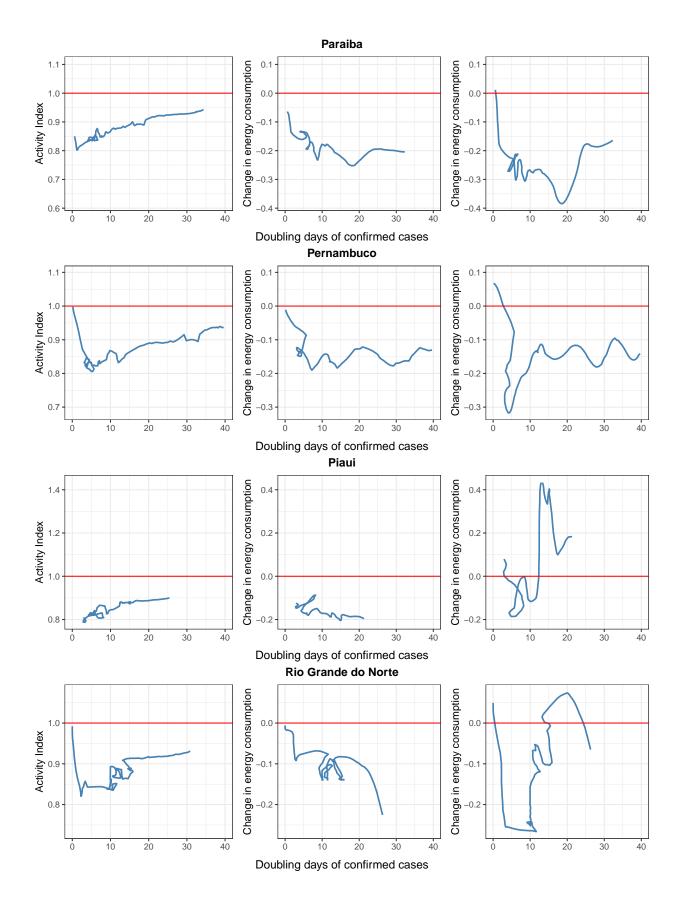


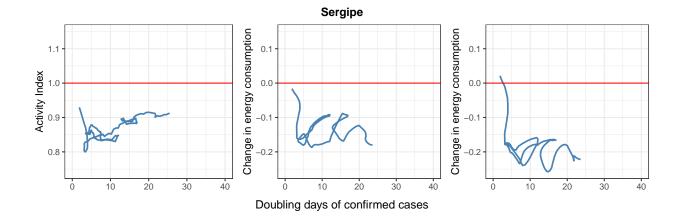
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