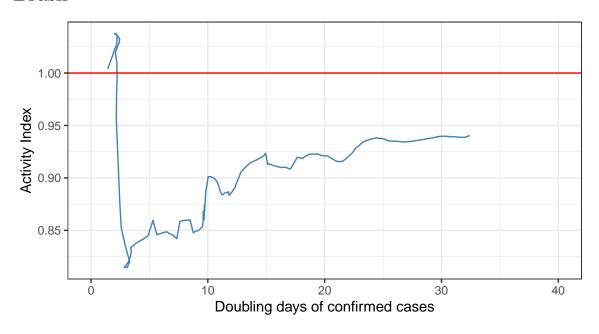
Atividade x COVID

Brasil



Usando dados de mobilidade e energia

Utilizamos os dados de mobilidade do Google para montar o índice de atividade, de forma que:

$$Atividade = 0.3886 \cdot Mobilidade + 0.61$$

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

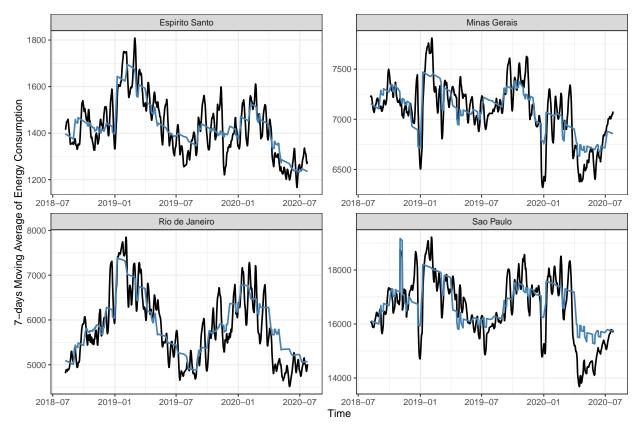
Consumo Diario_t =
$$\beta_0 + \sum_{i=2}^{3} \psi_i D_{\text{ano}_{it}} + \sum_{i=2}^{12} \delta_i D_{\text{mês}_{it}} + \sum_{i=2}^{7} \lambda_i D_{\text{dia da semana}_{it}} + \sum_{i=2}^{k} \rho_i D_{\text{ramo}_{it}} + \sum_{i=2}^{k} \theta_i D_{\text{feriado}_{it}} + \epsilon_t$$

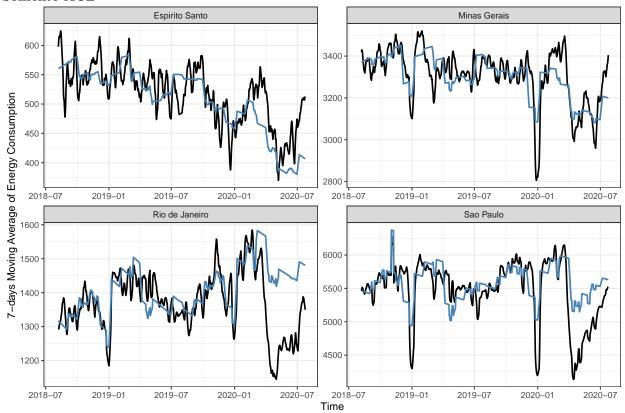
$$(1)$$

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.

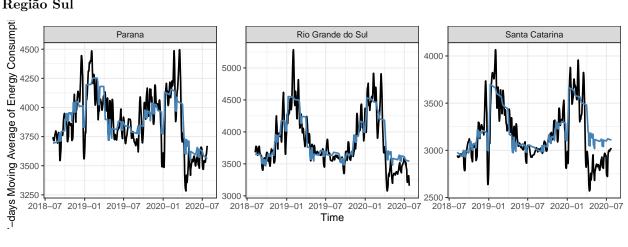
Testando o fit nos dados de energia

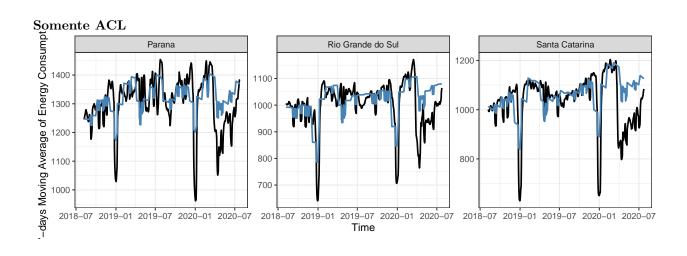
Região Sudeste



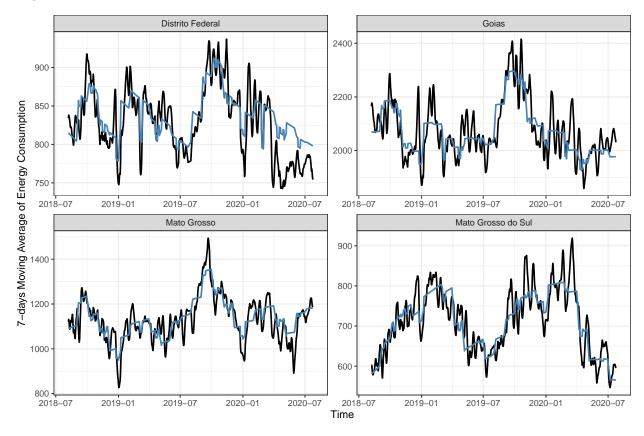


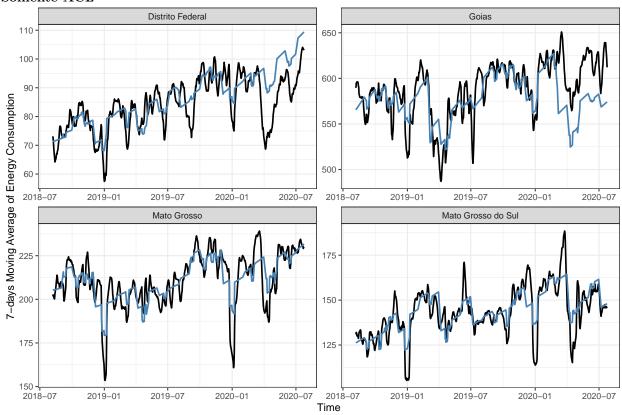
Região Sul



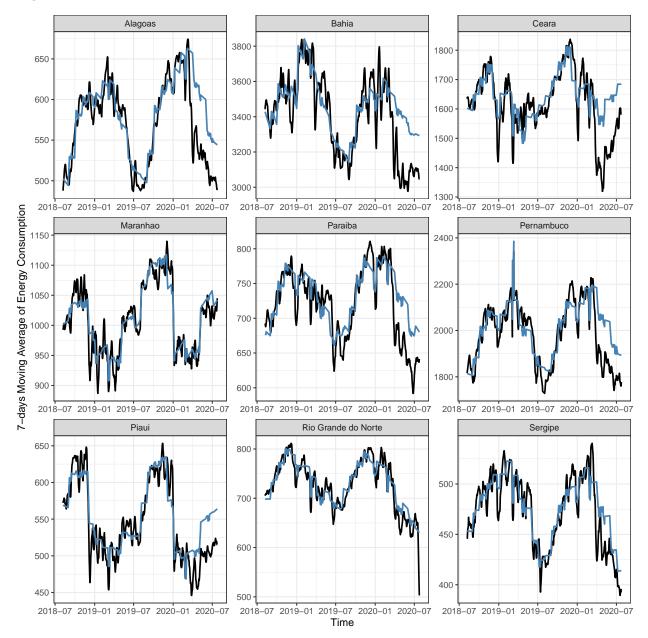


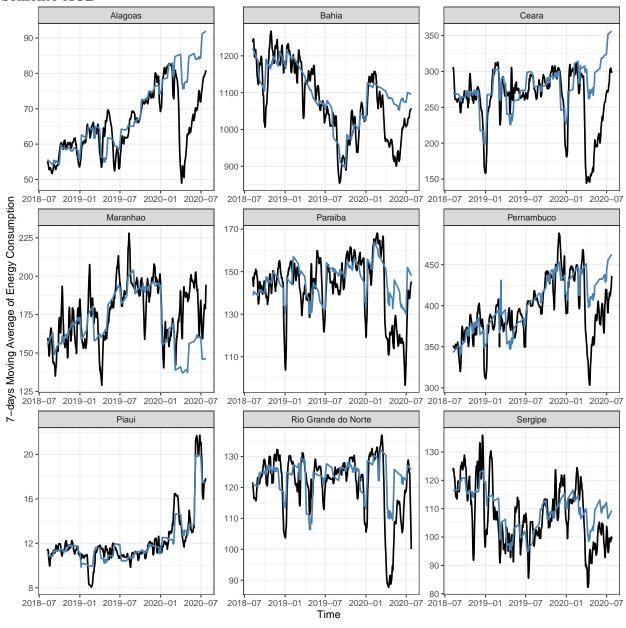
Região Centro-Oeste



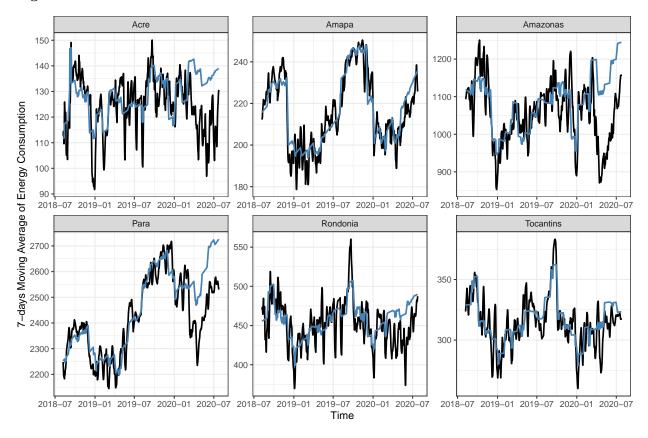


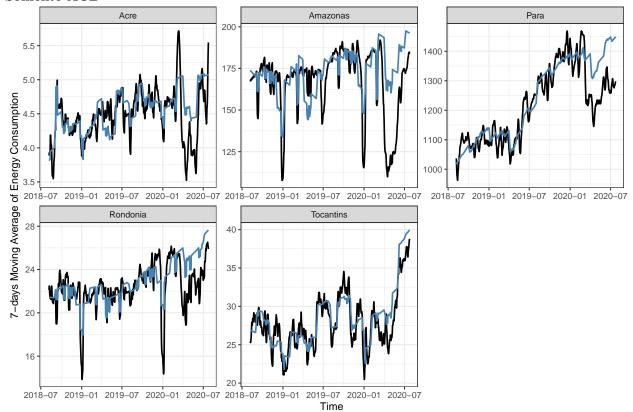
Região Nordeste





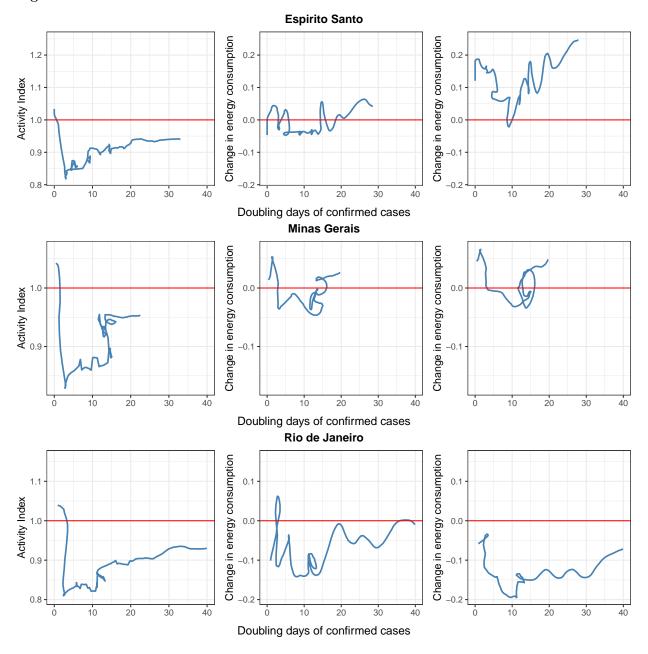
Região Norte

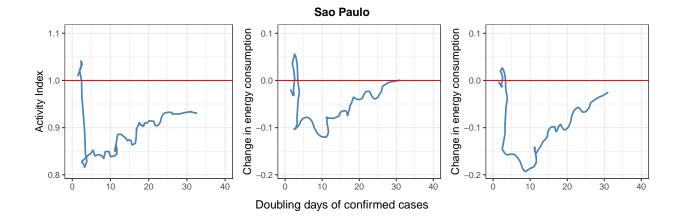




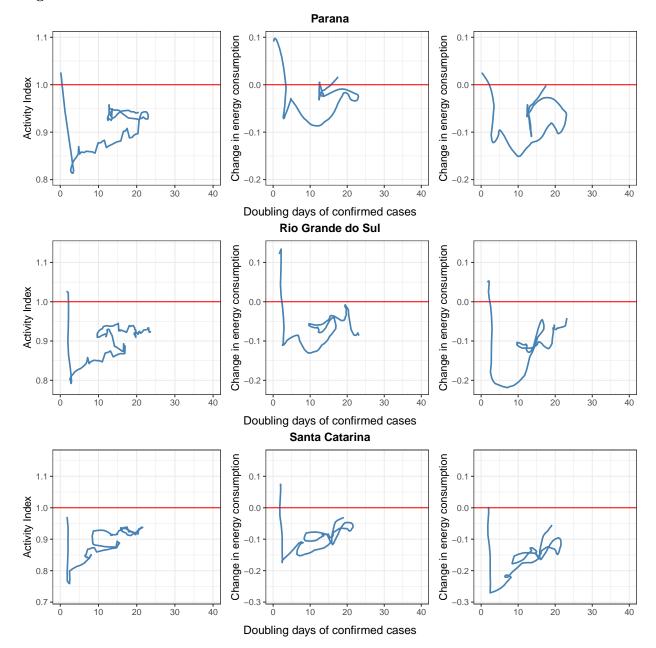
Atividade x COVID

Região Sudeste

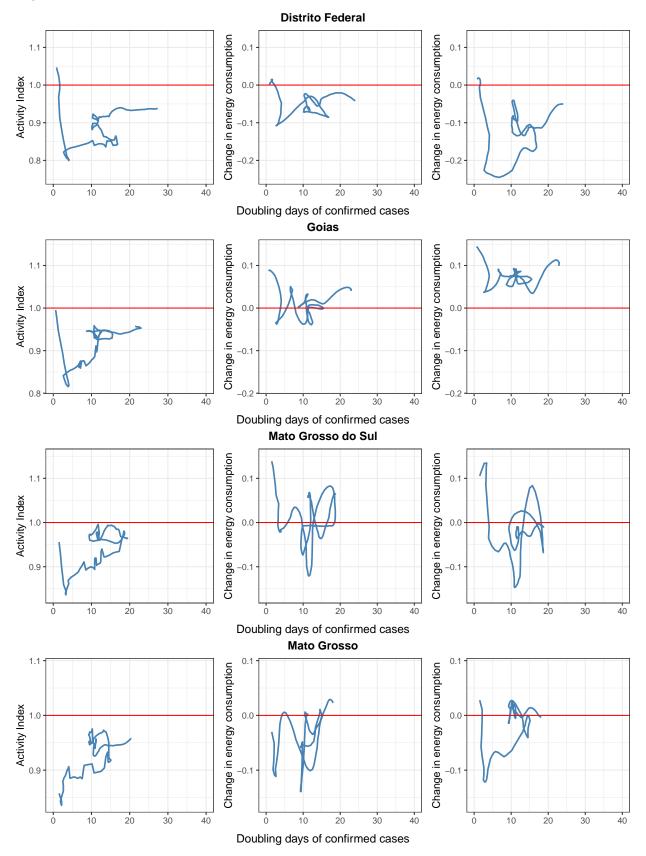




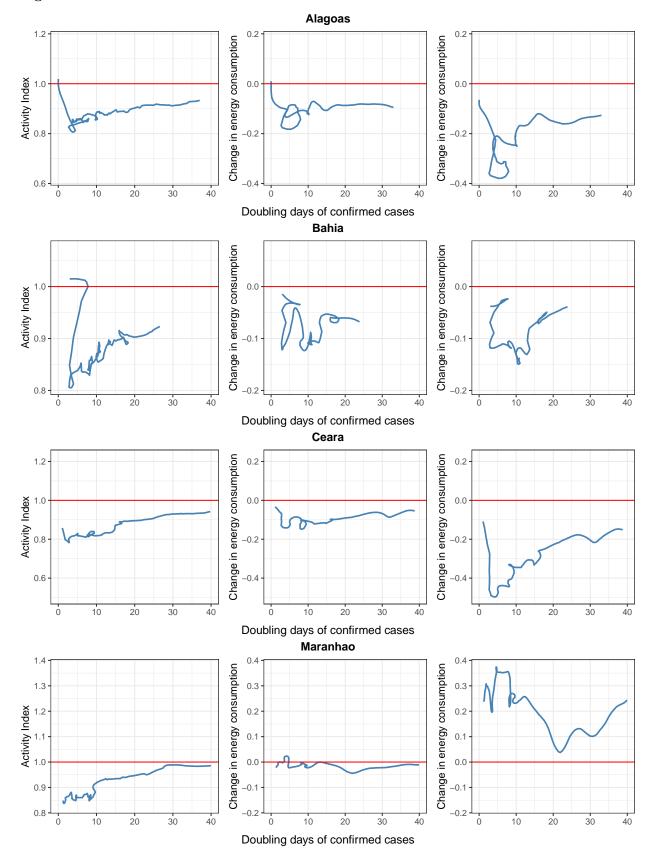
Região Sul

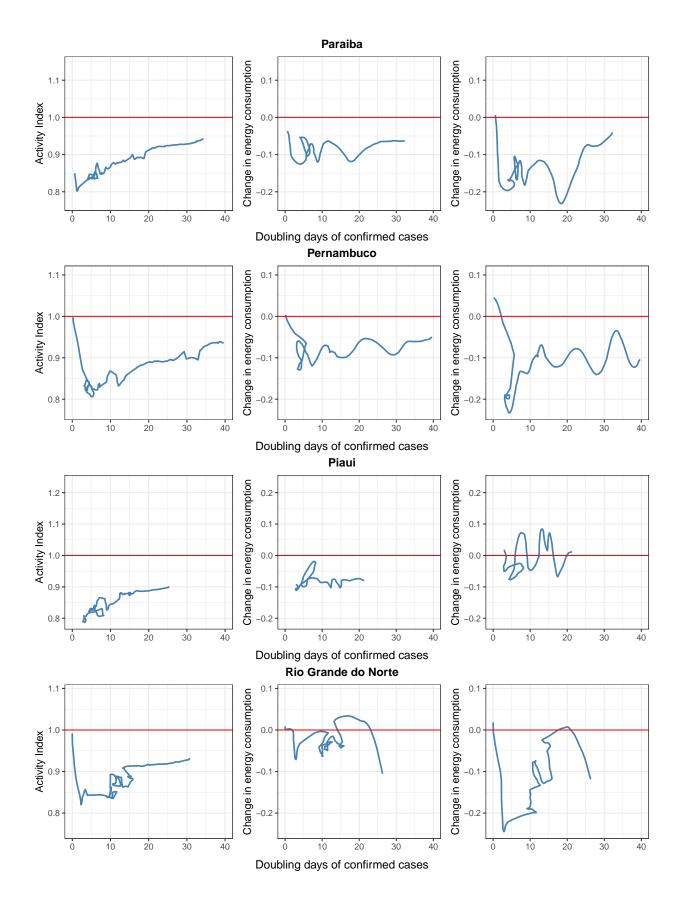


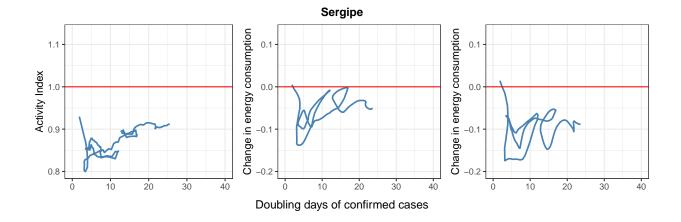
Região Centro-Oeste



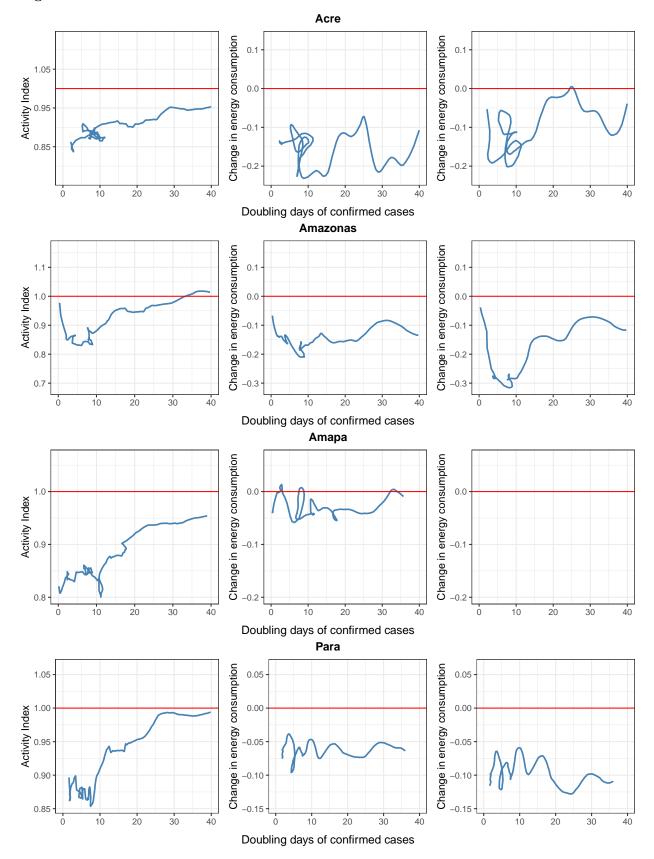
Região Nordeste

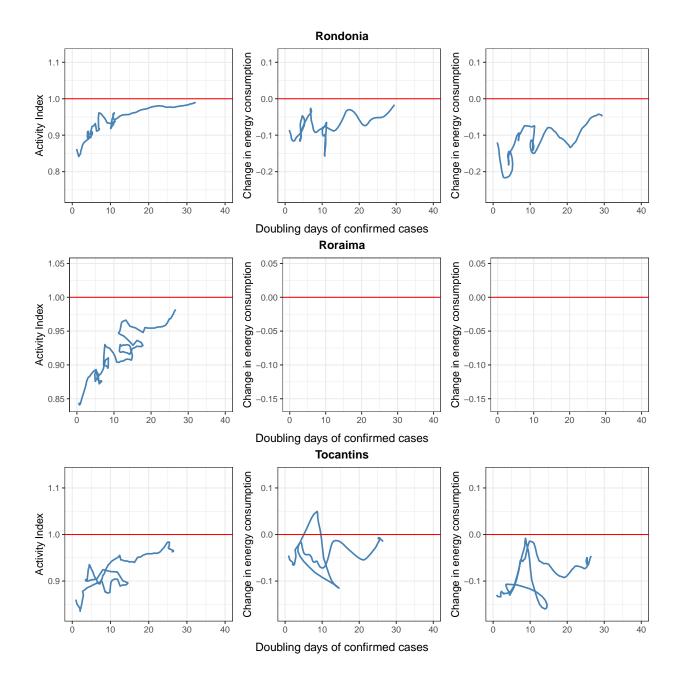






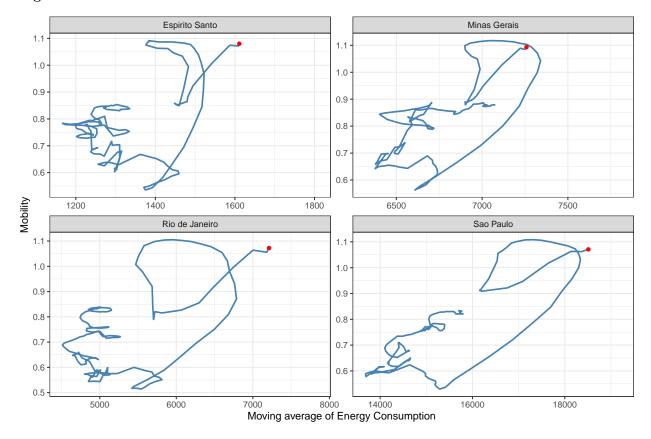
Região Norte

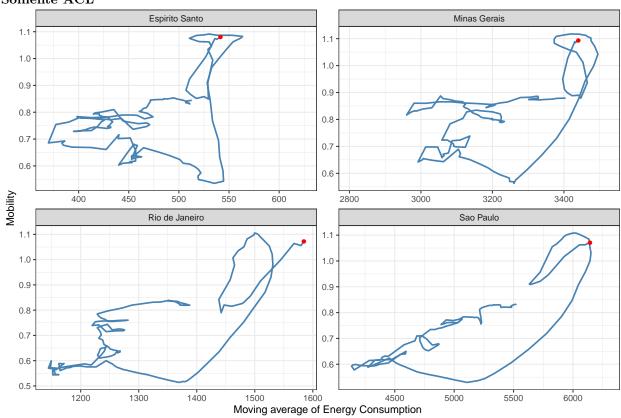




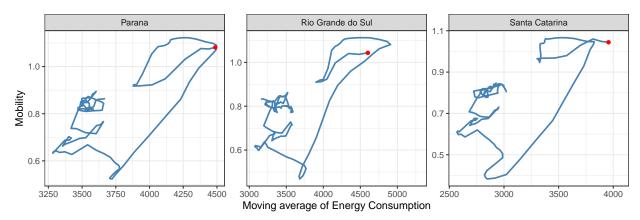
Relação Mobilidade x Consumo de Energia

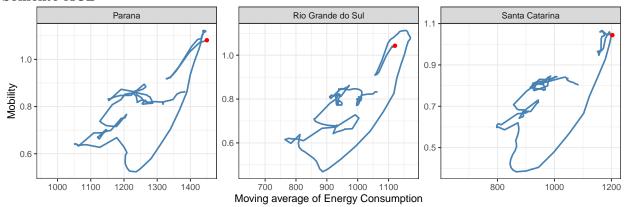
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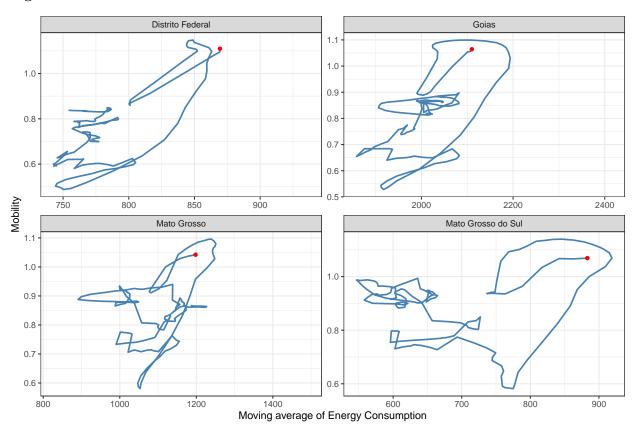


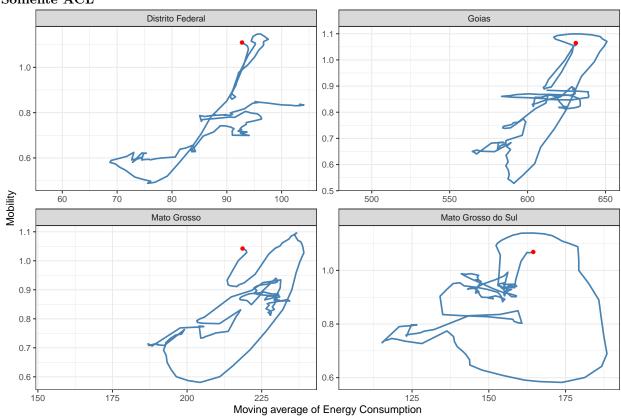
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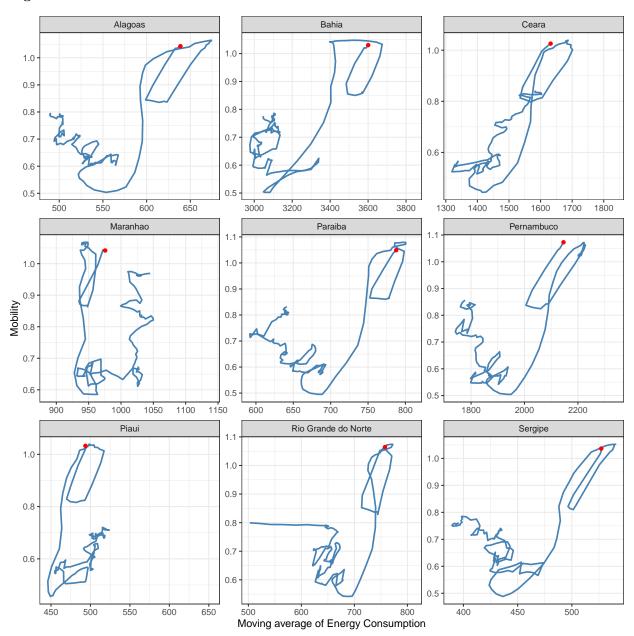


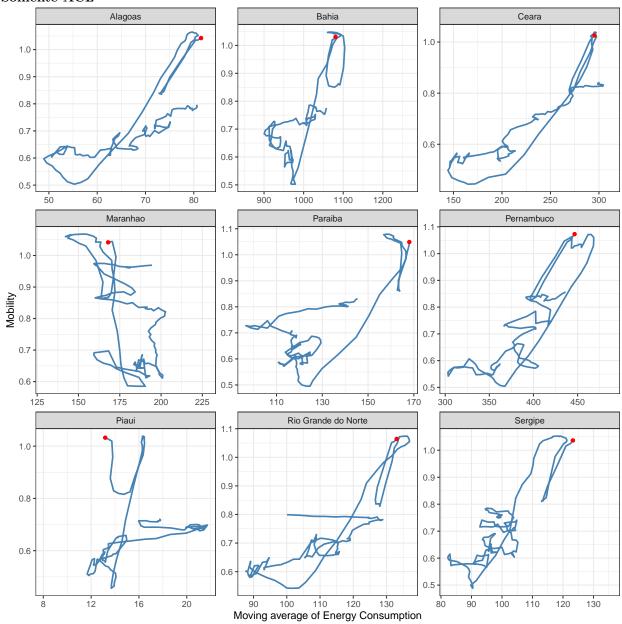
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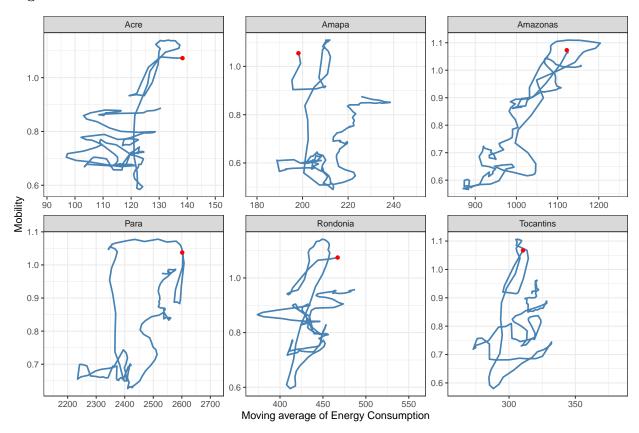


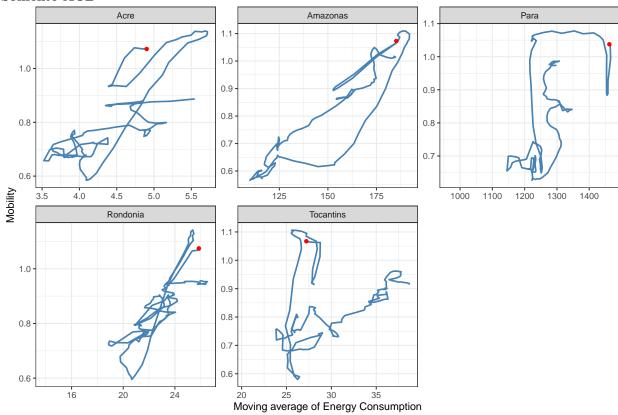
Região Nordeste



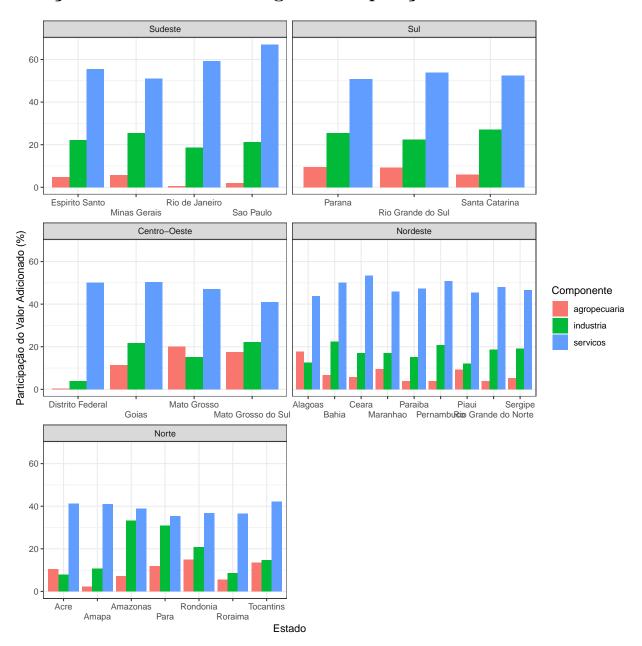


Região Norte



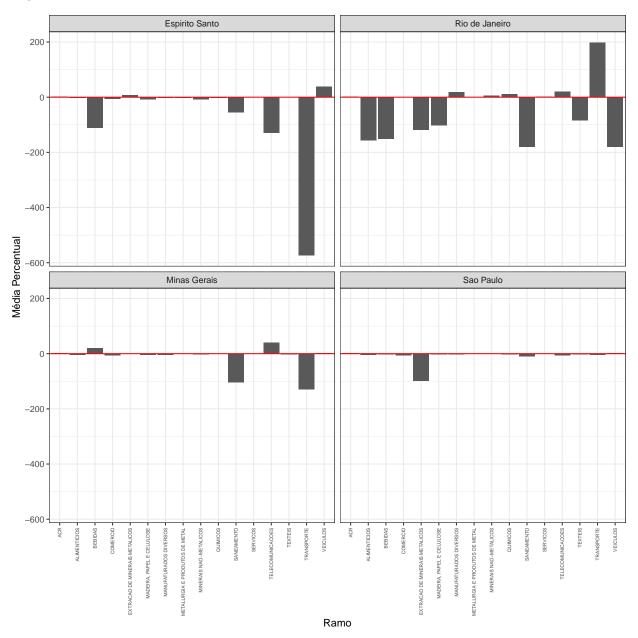


Relação entre Série de Energia e Composição do PIB?

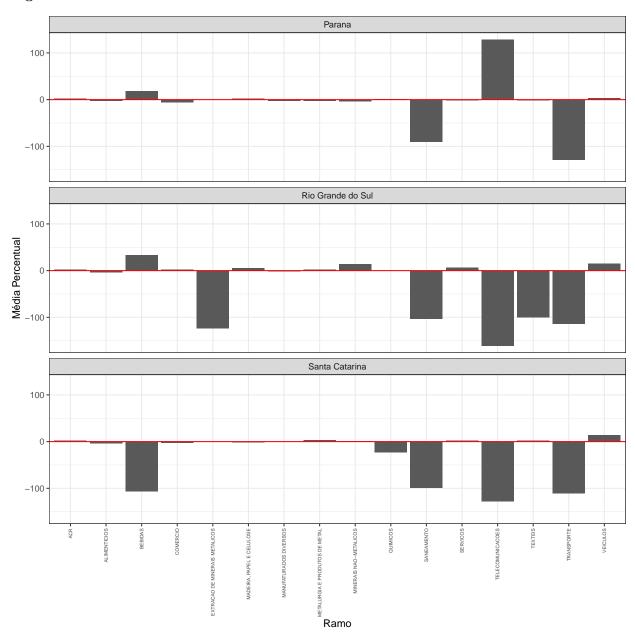


Alteração do nível de consumo por Ramo

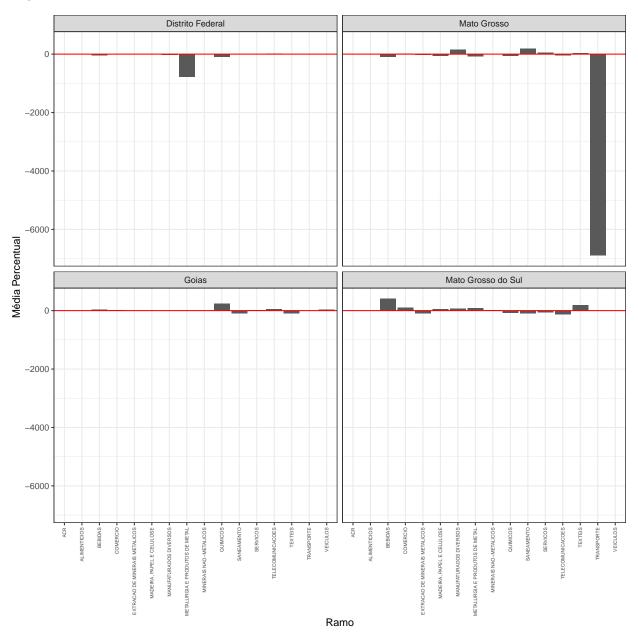
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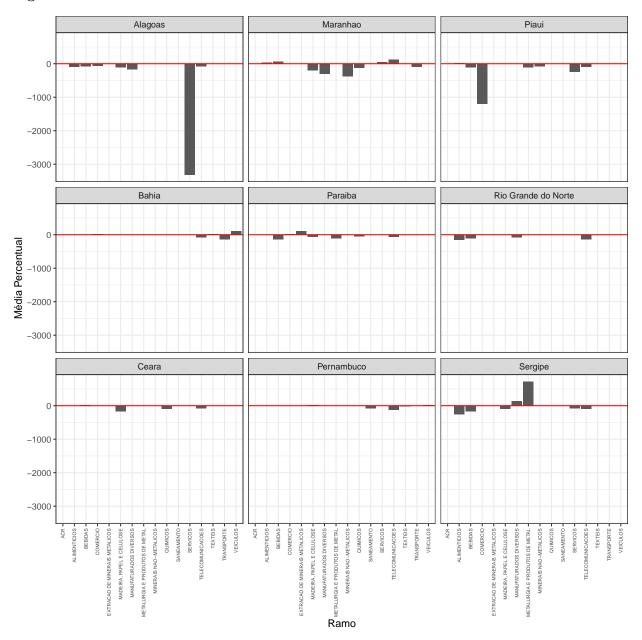
Região Sul



Região Centro-Oeste



Região Nordeste



Região Norte

