

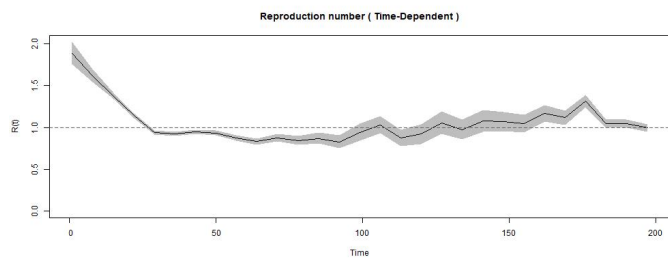
Reproduction number estimate using Time-Dependent method

Data is taken from the Department of Italian Civil Protection for key transmission parameters of an institutional outbreak during the 2020 SARS-Cov2 pandemic in Italy

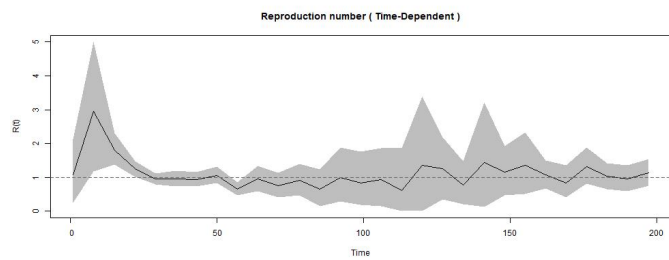
ID 1, Italy - $R_0(t) = 0.909$
ID 2, Abruzzo - $R_0(t) = 1.180$
ID 4, Calabria - $R_0(t) = 1.044$
ID 5, Campania - $R_0(t) = 1.016$
ID 6, EmiliaRomagna - $R_0(t) = 0.793$
ID 7, FriuliVeneziaGiulia - $R_0(t) = 0.720$
ID 8, Lazio - $R_0(t) = 1.000$
ID 9, Liguria - $R_0(t) = 0.870$
ID 10, Lombardia - $R_0(t) = 0.809$
ID 11, Marche - $R_0(t) = 0.785$
ID 13, P.A.Bolzano - $R_0(t) = 0.798$
ID 14, P.A.Trento - $R_0(t) = 0.810$
ID 15, Piemonte - $R_0(t) = 0.894$
ID 16, Puglia - $R_0(t) = 0.871$
ID 17, Sardegna - $R_0(t) = 1.011$
ID 18, Sicilia - $R_0(t) = 0.969$
ID 19, Toscana - $R_0(t) = 0.912$
ID 20, Umbria - $R_0(t) = 0.854$
ID 22, Veneto - $R_0(t) = 0.894$
ID 25, Pescara - $R_0(t) = 1.337$
ID 36, Napoli - $R_0(t) = 1.130$
ID 39, Piacenza - $R_0(t) = 1.074$
ID 40, Parma - $R_0(t) = 0.860$
ID 41, ReggionellEmilia - $R_0(t) = 0.853$
ID 42, Modena - $R_0(t) = 0.945$
ID 43, Bologna - $R_0(t) = 0.920$
ID 44, Ferrara - $R_0(t) = 1.009$
ID 45, Ravenna - $R_0(t) = 0.846$
ID 46, ForliCesena - $R_0(t) = 0.864$
ID 47, Rimini - $R_0(t) = 0.690$
ID 54, Roma - $R_0(t) = 1.086$
ID 55, Latina - $R_0(t) = 1.406$
ID 57, Imperia - $R_0(t) = 0.910$
ID 58, Savona - $R_0(t) = 0.678$
ID 59, Genova - $R_0(t) = 1.260$
ID 60, LaSpezia - $R_0(t) = 0.844$
ID 61, Varese - $R_0(t) = 0.924$
ID 62, Como - $R_0(t) = 0.691$
ID 63, Sondrio - $R_0(t) = 1.665$
ID 64, Milano - $R_0(t) = 0.923$
ID 65, Bergamo - $R_0(t) = 0.962$
ID 66, Brescia - $R_0(t) = 0.908$
ID 67, Pavia - $R_0(t) = 1.194$
ID 68, Cremona - $R_0(t) = 0.469$
ID 69, Mantova - $R_0(t) = 0.802$
ID 70, Lecco - $R_0(t) = 0.834$
ID 71, Lodi - $R_0(t) = 0.744$
ID 72, MonzaedellaBrianza - $R_0(t) = 0.869$
ID 73, PesaroeUrbino - $R_0(t) = 0.685$

ID 80, Bolzano - $R_0(t) = 0.931$
ID 81, Trento - $R_0(t) = 0.975$
ID 82, Torino - $R_0(t) = 1.102$
ID 83, Vercelli - $R_0(t) = 1.070$
ID 84, Novara - $R_0(t) = 0.948$
ID 85, Cuneo - $R_0(t) = 0.928$
ID 87, Alessandria - $R_0(t) = 0.885$
ID 91, Bari - $R_0(t) = 0.889$
ID 102, Palermo - $R_0(t) = 1.301$
ID 113, Firenze - $R_0(t) = 1.136$
ID 119, Prato - $R_0(t) = 0.928$
ID 123, Verona - $R_0(t) = 1.014$
ID 124, Vicenza - $R_0(t) = 1.091$
ID 126, Treviso - $R_0(t) = 1.024$
ID 127, Venezia - $R_0(t) = 1.050$
ID 128, Padova - $R_0(t) = 1.345$

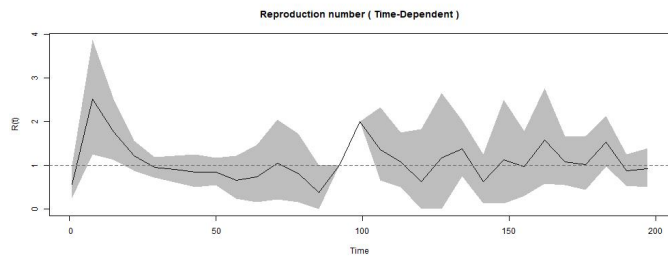
1, Italy



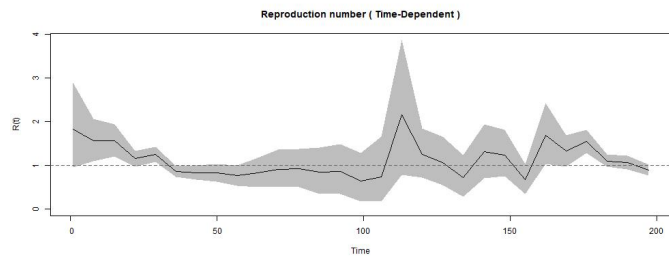
2, Abruzzo



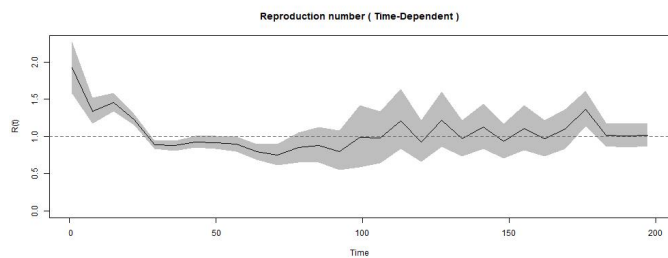
4, Calabria



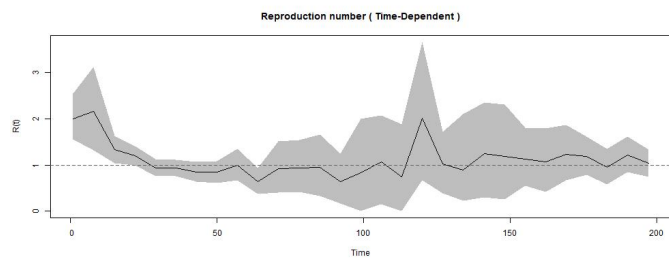
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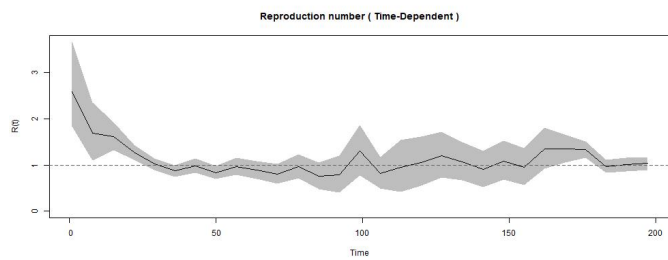
6, EmiliaRomagna



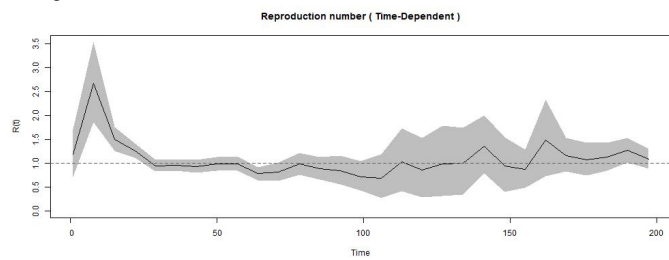
7, FriuliVeneziaGiulia



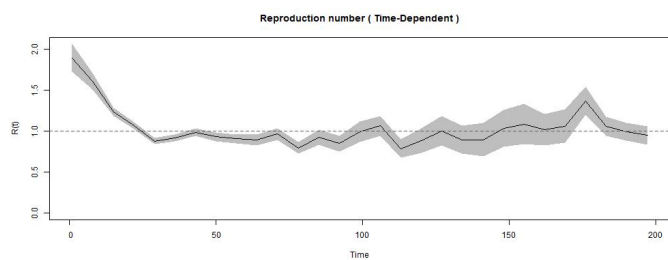
8, Lazio



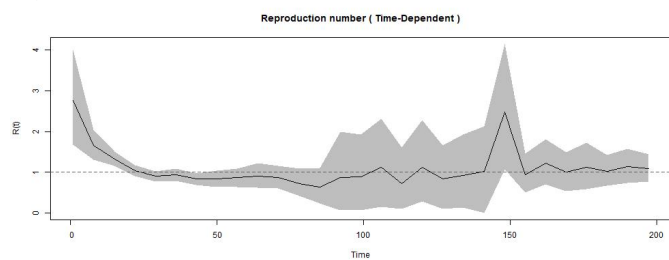
9, Liguria



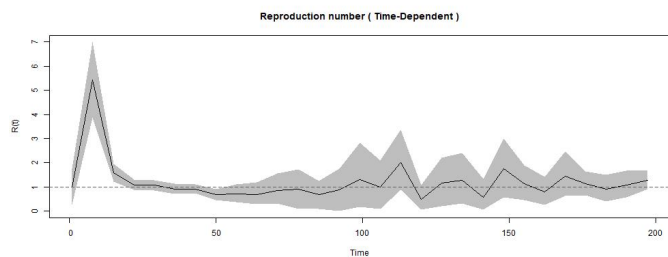
10, Lombardia



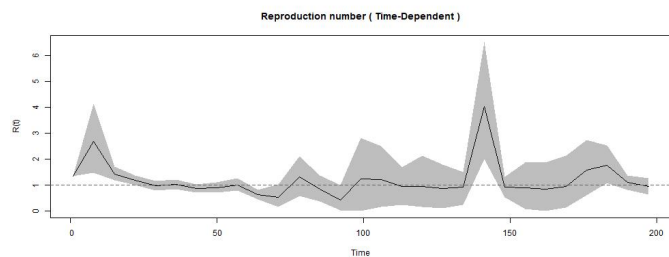
11, Marche



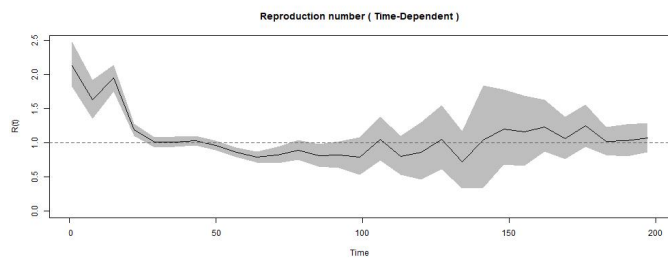
13, P.A.Bolzano



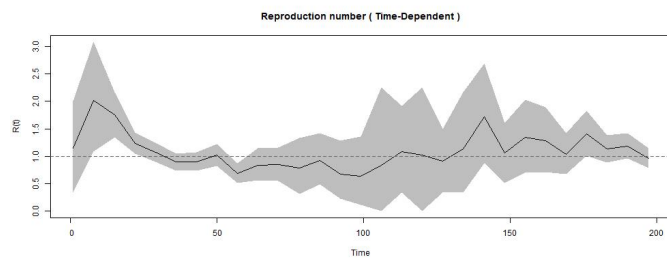
14, P.A.Trento



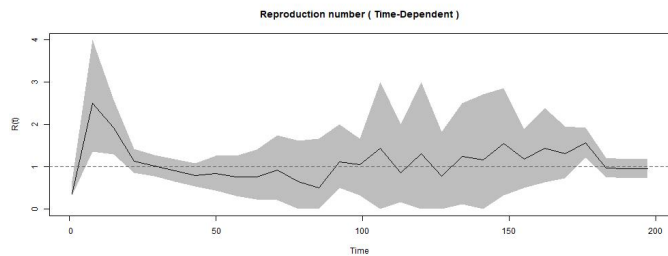
15, Piemonte



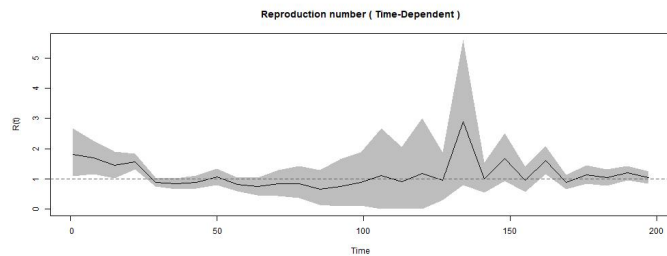
16, Puglia



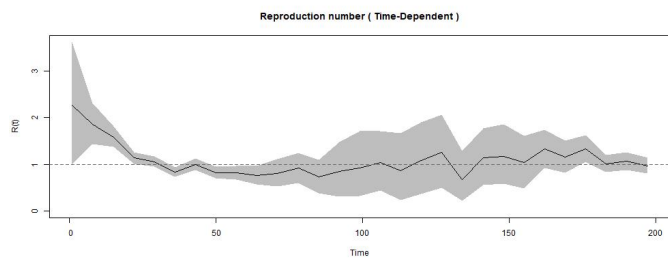
17, Sardegna



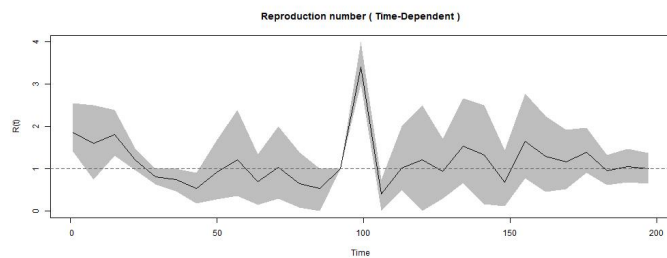
18, Sicilia



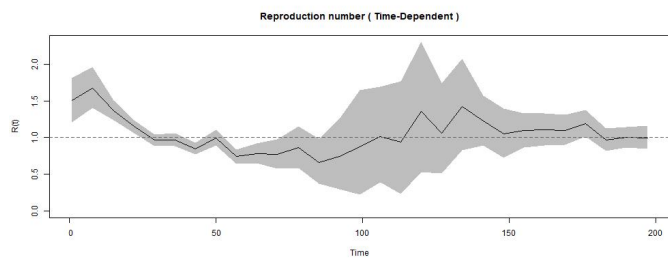
19, Toscana



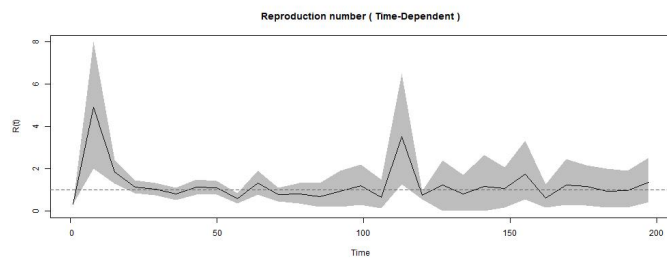
20, Umbria



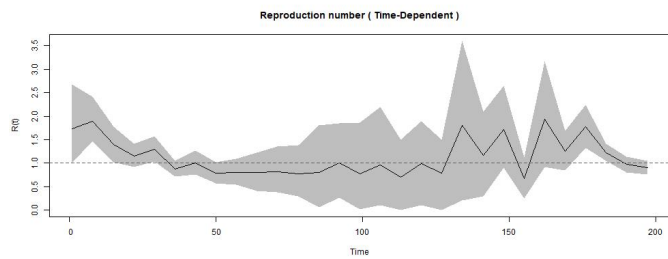
22, Veneto



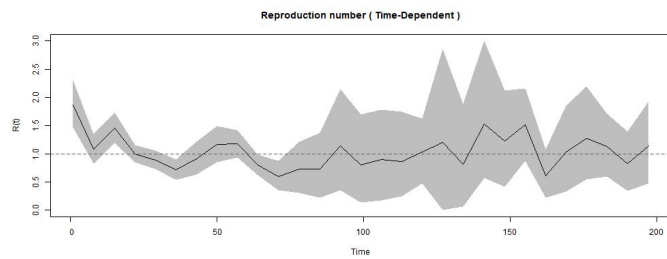
25, Pescara



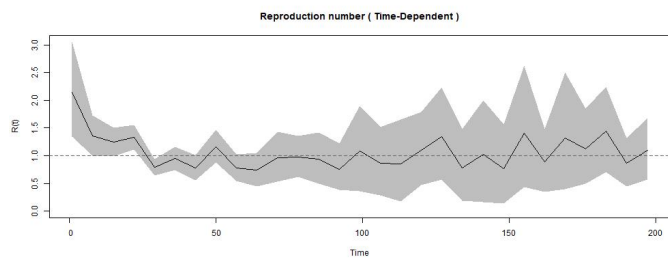
36, Napoli



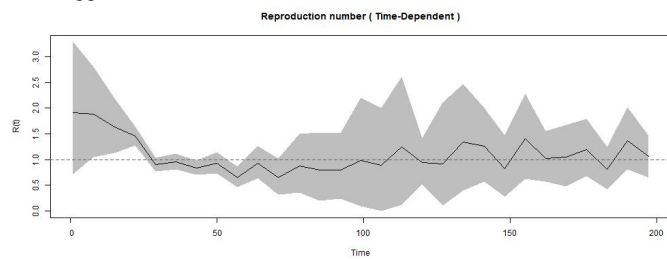
39, Piacenza



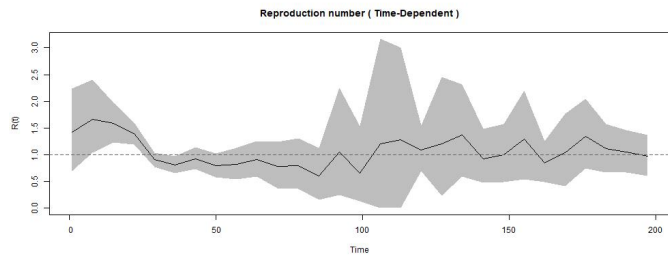
40, Parma



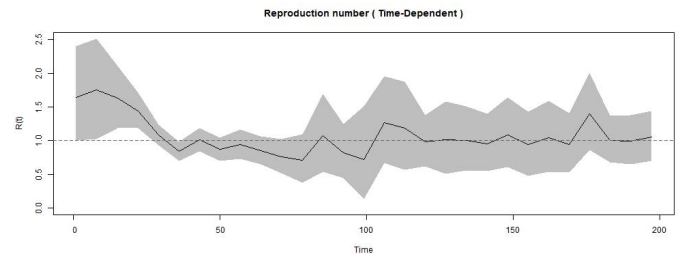
41, ReggionellEmilia



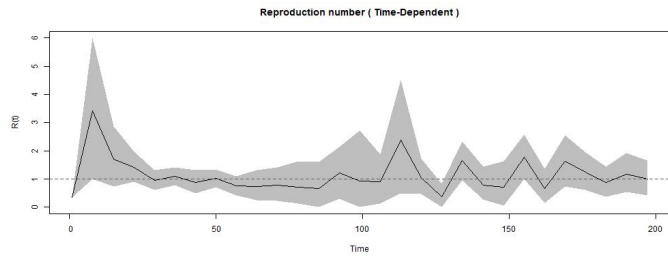
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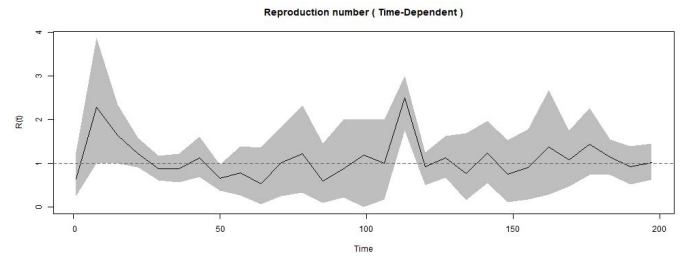
43, Bologna



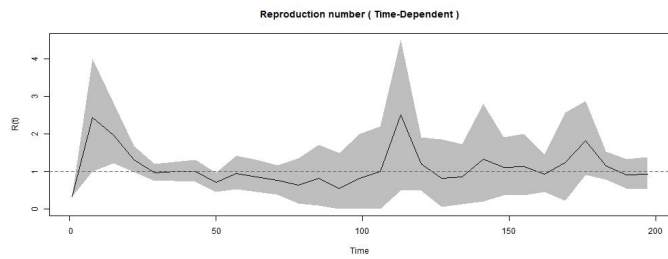
44, Ferrara



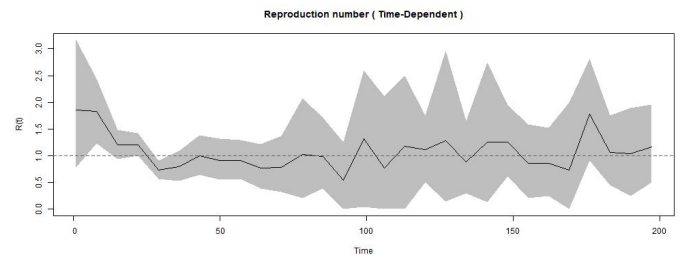
45, Ravenna



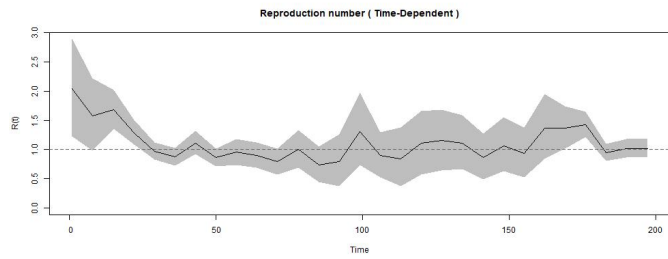
46, ForlìCesena



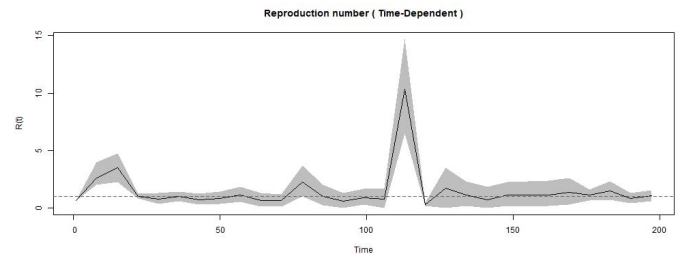
47, Rimini



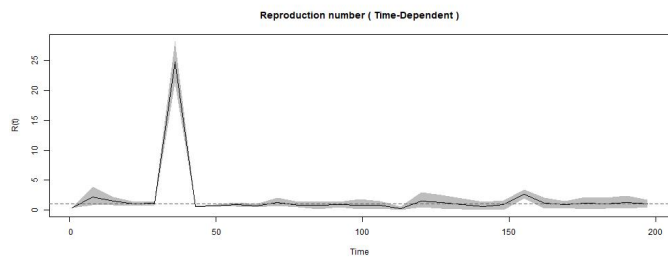
54, Roma



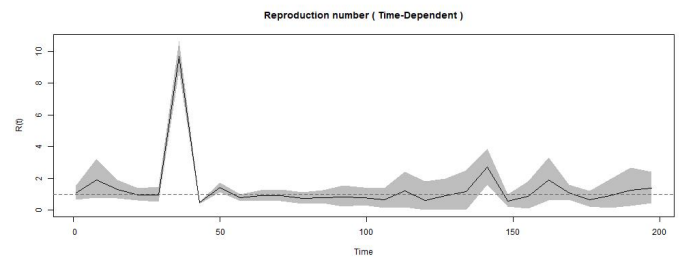
55, Latina



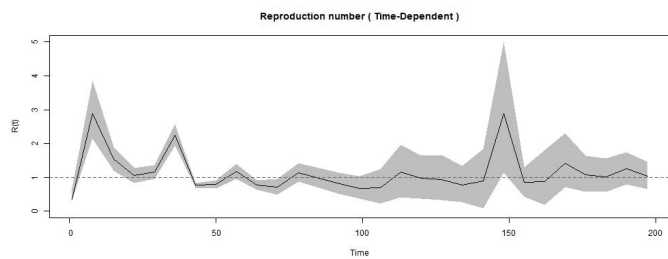
57, Imperia



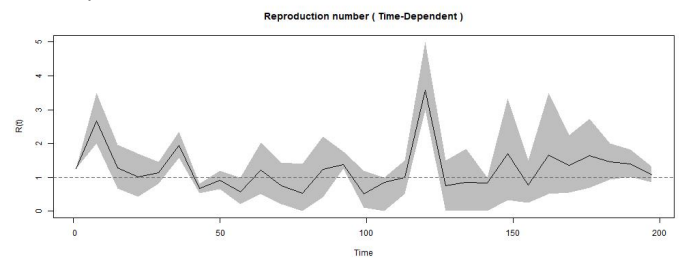
58, Savona



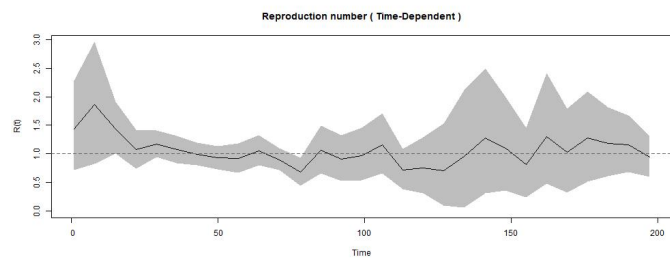
59, Genova



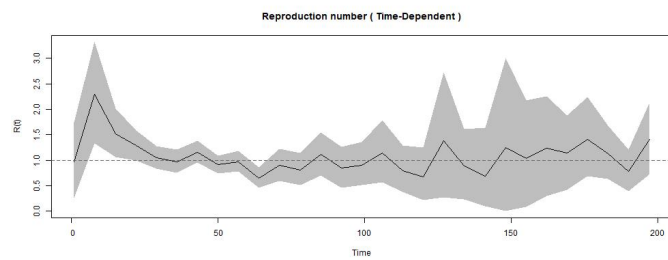
60, LaSpezia



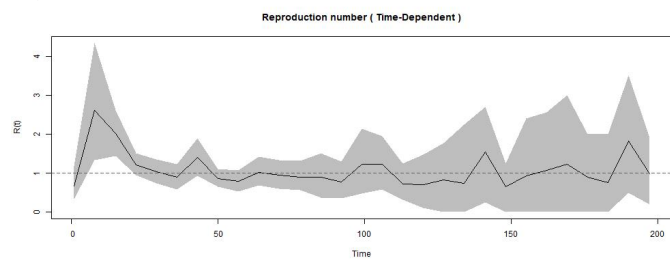
61, Varese



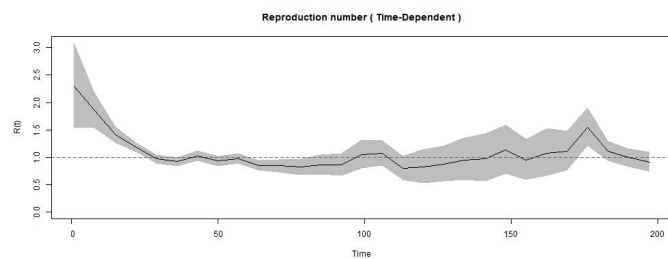
62, Como



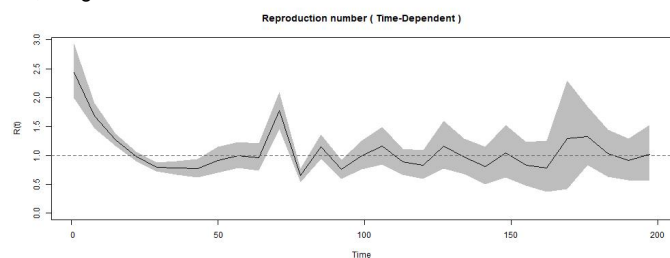
63, Sondrio



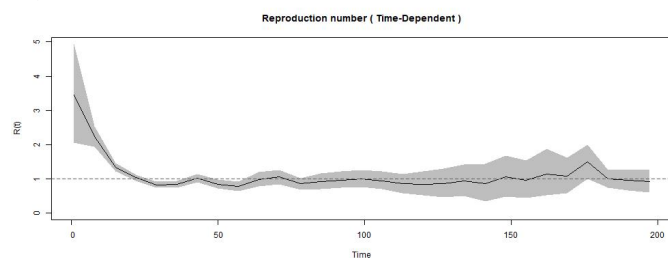
64, Milano



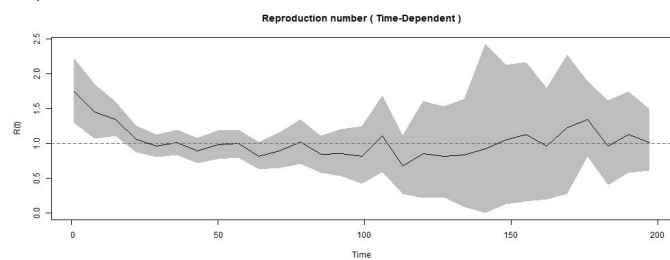
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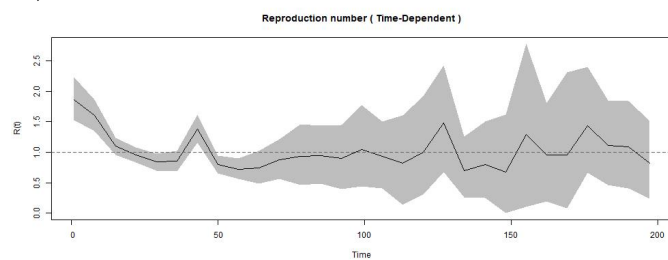
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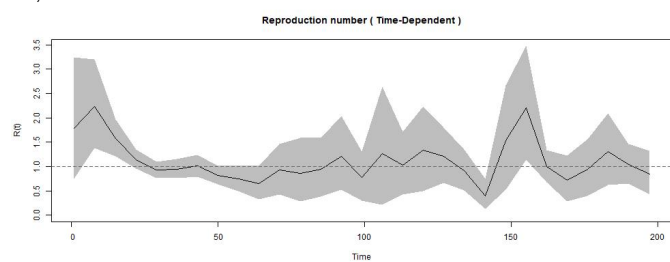
67, Pavia



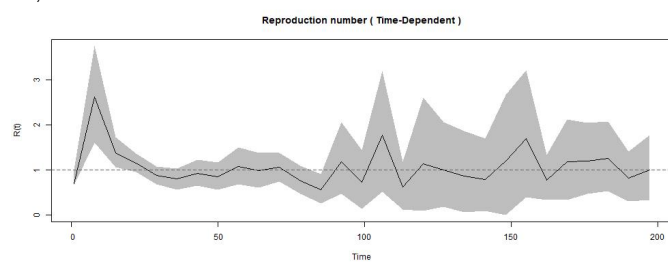
68, Cremona



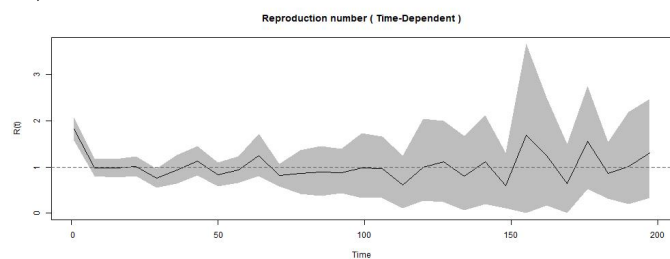
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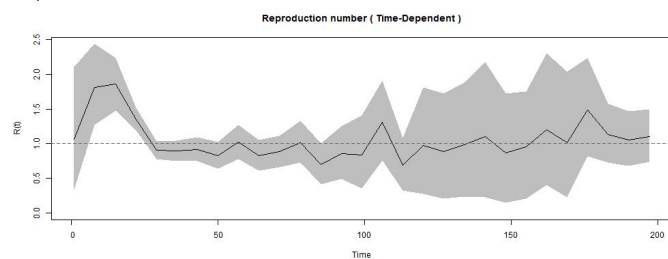
70, Lecco



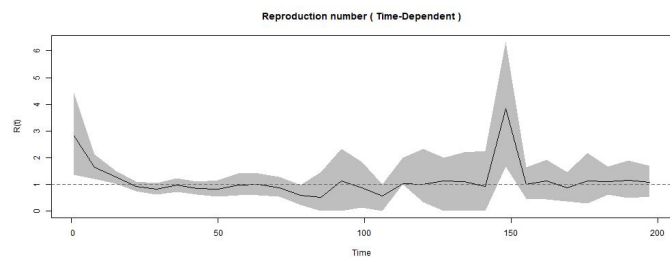
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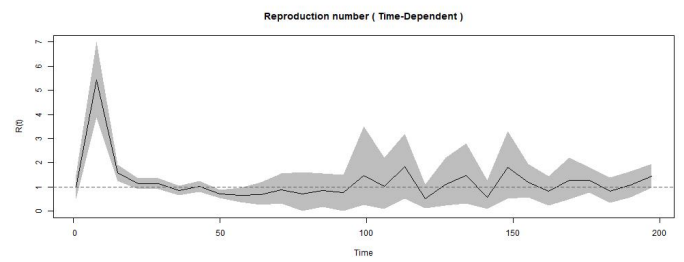
72, MonzaedellaBrianza



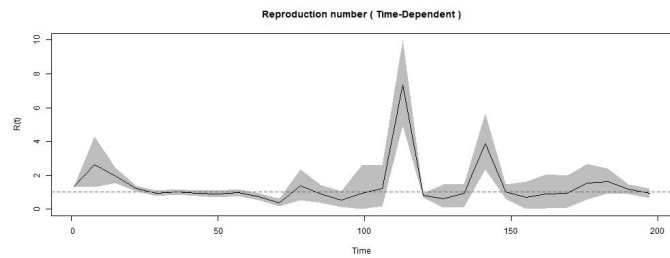
73, PesaroUrbino



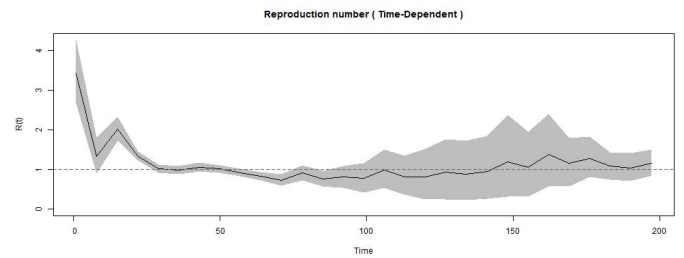
80, Bolzano



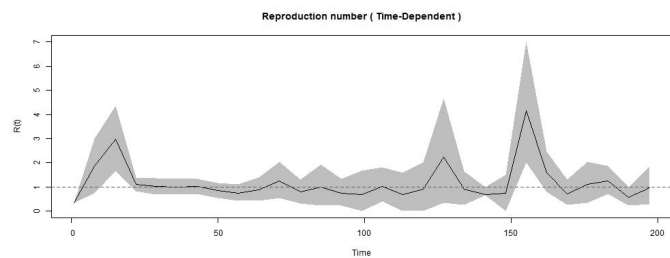
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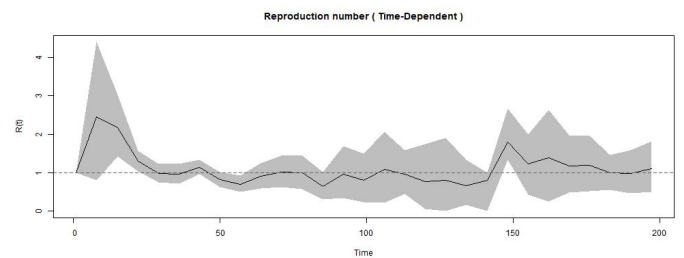
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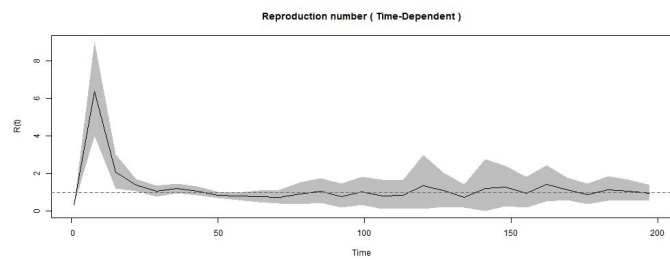
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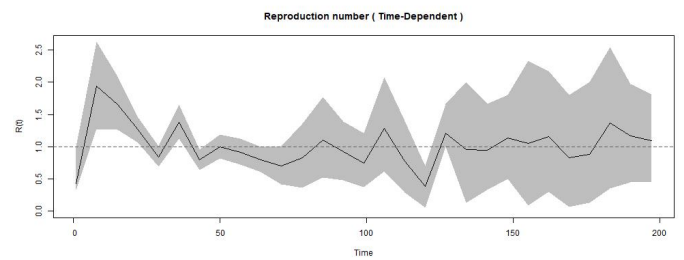
84, Novara



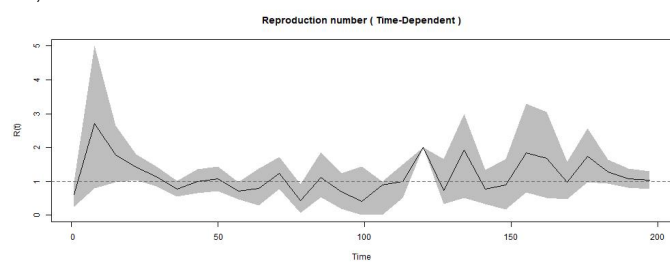
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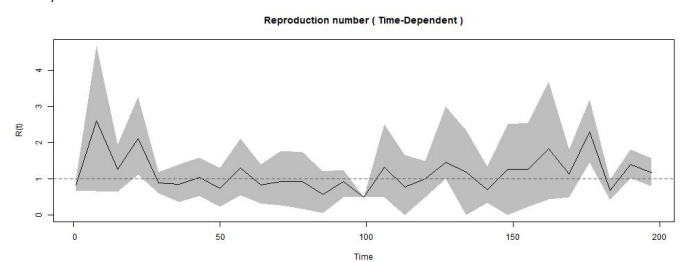
87, Alessandria



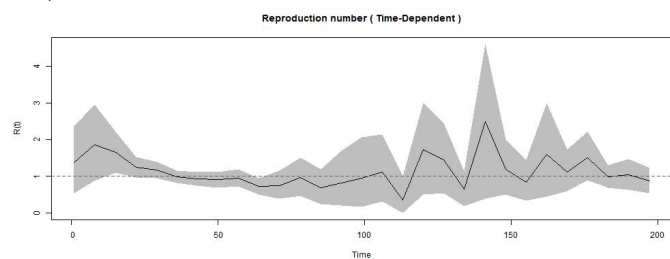
91, Bari



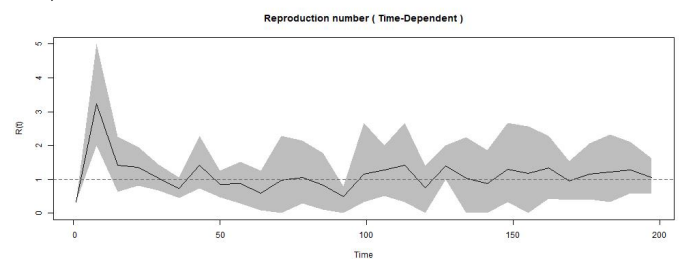
102, Palermo



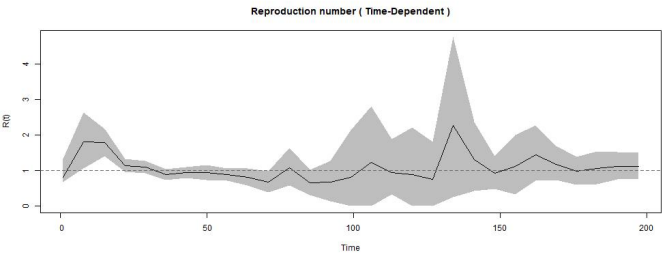
113, Firenze



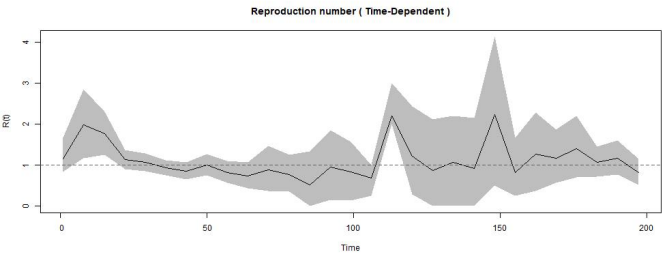
119, Prato



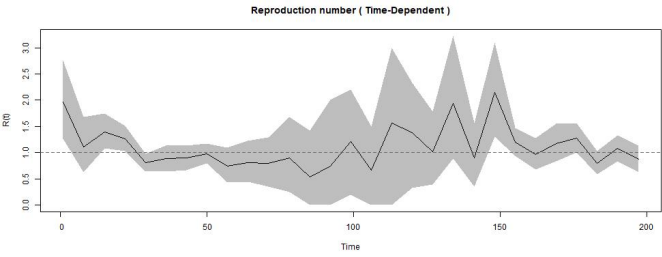
123, Verona



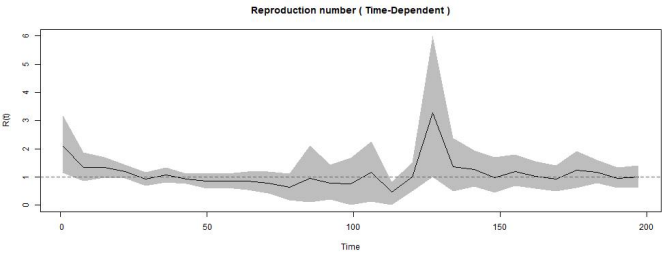
124, Vicenza



126, Treviso



127, Venezia



128, Padova

