

1 Supplementary material for  
2 “Estimates of mpox effective  
3 reproduction number in Spain, April-  
4 August 2022”

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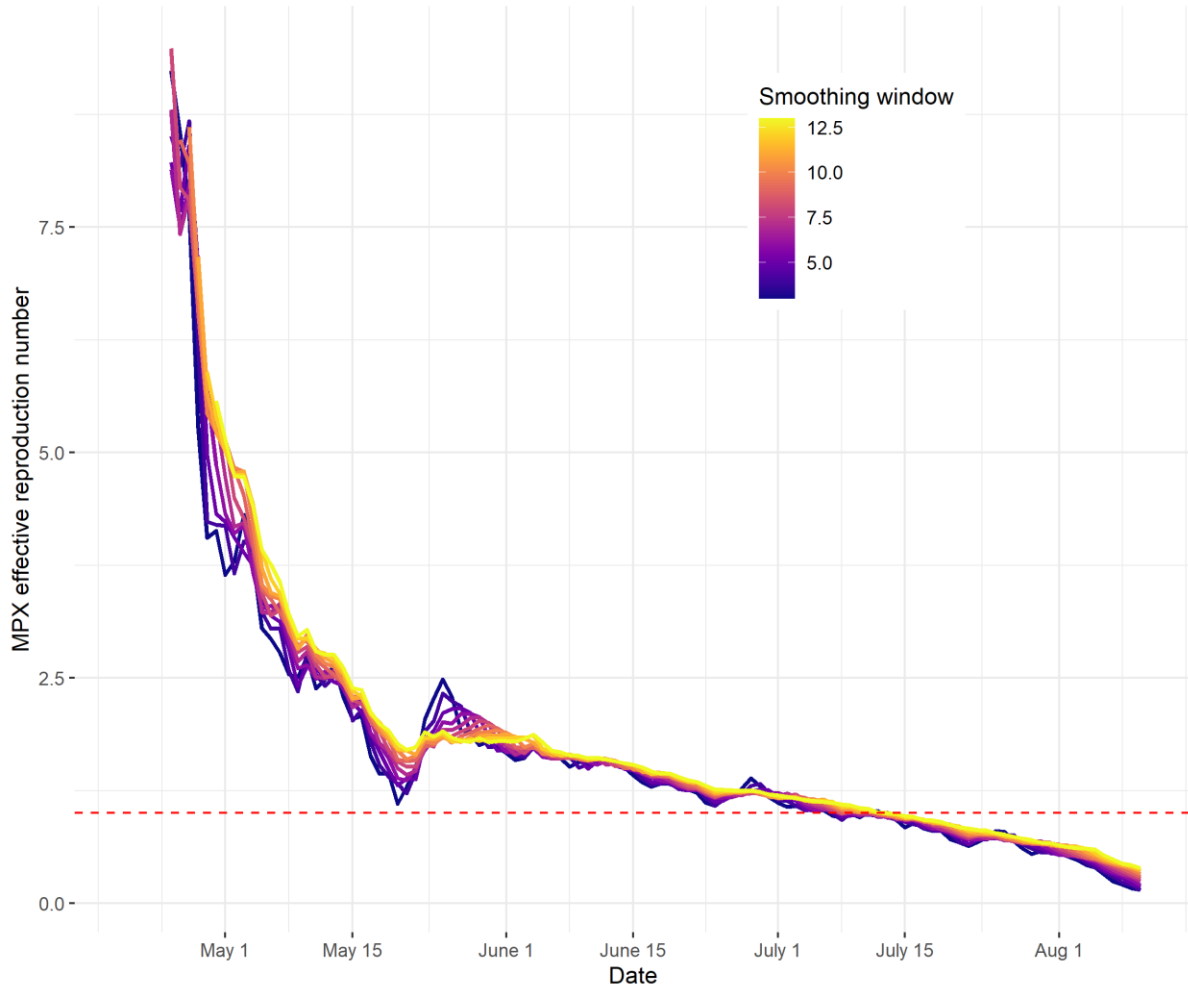
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19 **Sensitivity analysis**

20 Figure S1 shows the variations in  $R_t$  estimate for different choices of smoothing window. As  
21 expected, wider windows lead to smoother curves, while shorter curves yield noisier  
22 estimates.



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24 Figure S1.  $R_t$  curves resulting from a sensitivity analysis on the length of the smoothing  
25 window, ranging from a 3- to a 13-day long window.

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27 **Mobility-based communities**

28  $R_t$  estimates were computed for “communities” in Spain, based on a mobility-based analysis  
29 [30]. Table S1 shows the cumulative number of mpox cases reported at each of these  
30 communities during the study period. Figures S2 and S3 show the geographic distribution of  
31 the communities and their epidemic curves, respectively. Figure 4 shows  $R_t$  estimates for  
32 each of these communities, computed from the series of cases shown in Figure S3.

Community	Provinces	Number of MPX cases, April 25 – August 19, 2022
Canary Islands	Las Palmas, Santa Cruz de Tenerife	143
Central East	Albacete, Alicante, Ciudad Real, Cuenca, Guadalajara, Illes Balears, Madrid, Soria, Toledo, Valencia	2796
Central West	Asturias, Ávila, Cáceres, León, Palencia, Salamanca, Segovia, Valladolid, Zamora	113
North	Araba, Bizkaia, Burgos, Cantabria, Guipuzkoa, Navarra, La Rioja	264
Northeast	Barcelona, Castellón, Girona, Huesca, Lleida, Tarragona, Teruel, Zaragoza	1925
Northwest	A Coruña, Lugo, Orense, Pontevedra	98
South	Almería, Badajoz, Cádiz, Córdoba, Granada, Huelva, Jaén, Málaga, Murcia, Sevilla	824

33  
34 Table S1. Mobility-based communities in Spain, provinces in each of these communities, and  
35 cumulative number of MPX cases during April 25 – August 19, 2022.

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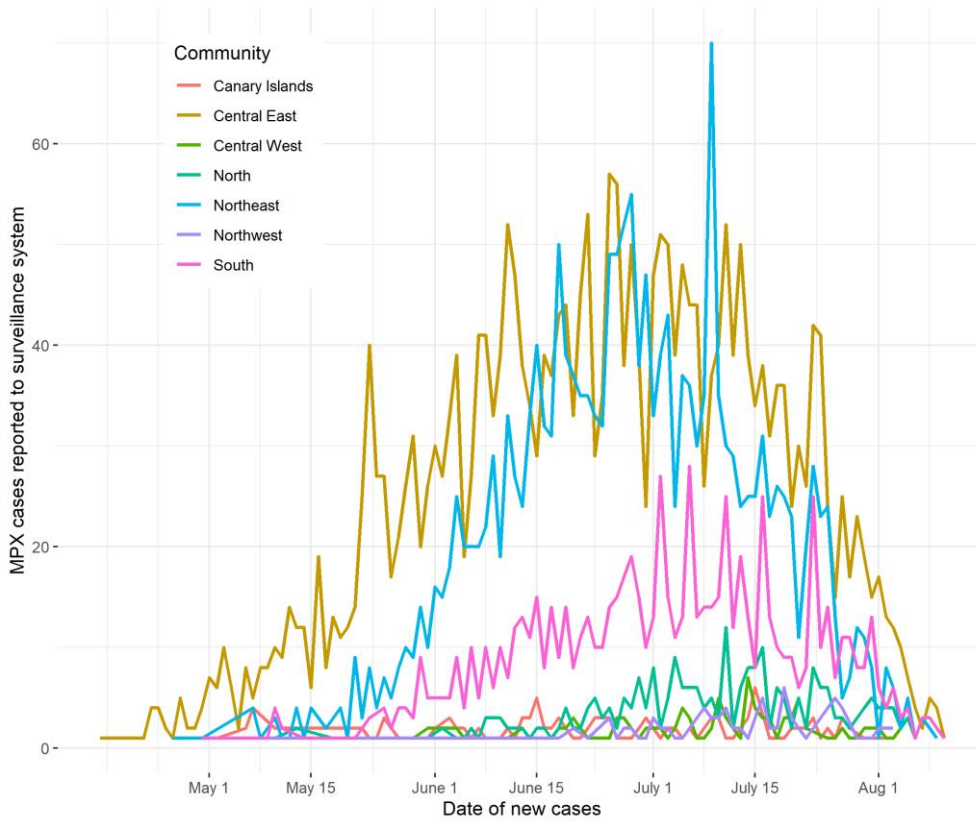
Mobility-based communities in Spain



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38 Figure S2. Mobility-based “communities” in Spain, based in the results in [30].

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41 Figure S3. MPX cases by mobility-based community in Spain, April 25 - August 19, 2022.

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