

Annex 2: RUSLE C-Factor

The first column of the following table shows the land use classes, as they appear in the map files downloaded from DGT (Serviço de Descarregamento ATOM da Direção-Geral do Território³). The second column is the categorization of these classes in wider categories according to the Corine nomenclature (*CORINE Land Cover Nomenclature Conversion to Land Cover Classification System*, n.d.). The third column is the given C-factor for each class, for the unburned scenario. The C-factors are a product of the recommendations from Panagos et al. (2015) and Parente et al. (2022), mixed with rational estimations based on cover and management implied by each land use.

Description in Portuguese	Interpretation in English	C Factor (unburned)
1.1.1.01.1 Tecido urbano contínuo predominantemente vertical	Continuous urban fabric	0.005
1.1.1.02.1 Tecido urbano contínuo predominantemente horizontal	Continuous urban fabric	0.005
1.1.1.03.1 Áreas de estacionamento e logradouros	Continuous urban fabric	0.005
1.1.2.01.1 Tecido urbano descontínuo	Discontinuous urban fabric	0.010
1.1.2.02.1 Tecido urbano descontínuo esparso	Discontinuous urban fabric	0.010
1.2.1.01.1 Indústria	Industrial or commercial units	0.010
1.2.1.02.1 Comércio	Industrial or commercial units	0.010
1.2.1.03.1 Instalações agrícolas	Industrial or commercial units	0.010
1.2.1.04.1 Equipamentos públicos e privados	Industrial or commercial units	0.010
1.2.1.05.2 Infra-estruturas de produção de energia não renovável	Industrial or commercial units	0.010
1.2.1.06.1 Infra-estruturas de captação, tratamento e abastecimento de águas para consumo	Industrial or commercial units	0.010
1.2.1.07.1 Infra-estruturas de tratamento de resíduos e águas residuais	Industrial or commercial units	0.010
1.2.2.01.1 Rede viária e espaços associados	Road and rail networks and associated land	0.010
1.2.2.02.1 Rede ferroviária e espaços associados	Road and rail networks and associated land	0.010
1.2.3.02.1 Estaleiros navais e docas secas	Port areas	0.010
1.2.3.03.1 Marinas e docas pesca	Port areas	0.010
1.2.4.02.1 Aeródromos	Airports	0.010
1.3.1.02.1 Pedreiras	Mineral extraction sites	0.100
1.3.2.02.1 Lixeiras e Sucatas	Dump sites	0.100
1.3.3.01.1 Áreas em construção	Construction sites	0.100
1.3.3.02.1 Áreas abandonadas em territórios artificializados	Sport and leisure facilities	0.020
1.4.1.01.1 Parques e jardins	Green urban areas	0.020
1.4.1.02.1 Cemitérios	Green urban areas	0.020
1.4.2.01.1 Campos de golfe	Green urban areas	0.020
1.4.2.01.2 Outras instalações desportivas	Sport and leisure facilities	0.020
1.4.2.02.1 Parques de campismo	Sport and leisure facilities	0.020
1.4.2.02.2 Outros equipamentos de lazer	Sport and leisure facilities	0.020

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1.4.2.03.1 Equipamentos culturais e zonas históricas	Sport and leisure facilities	0.020
2.1.1.01.1 Culturas temporárias de sequeiro	Non-irrigated arable land	0.200
2.1.1.02.1 Estufas e Viveiros	Industrial or commercial units	0.010
2.1.2.01.1 Culturas temporárias de regadio	Permanently irrigated land	0.200
2.1.3.01.1 Arrozais	Rice fields	0.050
2.2.1.01.1 Vinhas	Vineyards	0.331
2.2.1.02.1 Vinhas com pomar	Vineyards	0.331
2.2.2.01.1 Pomares de frutos frescos	Fruit trees and berry plantations	0.221
2.2.2.01.2 Pomares de amendoeira	Fruit trees and berry plantations	0.221
2.2.2.01.4 Pomares de alfarrobeira	Fruit trees and berry plantations	0.221
2.2.2.01.5 Pomares de citrinos	Fruit trees and berry plantations	0.221
2.2.2.01.6 Outros pomares	Fruit trees and berry plantations	0.221
2.2.2.02.5 Pomares de citrinos com vinha	Fruit trees and berry plantations	0.221
2.2.2.03.1 Pomares de frutos frescos com olival	Fruit trees and berry plantations	0.221
2.2.2.03.2 Pomares de amendoeira com olival	Fruit trees and berry plantations	0.221
2.2.2.03.4 Pomares de alfarrobeira com olival	Fruit trees and berry plantations	0.221
2.2.2.03.5 Pomares de citrinos com olival	Fruit trees and berry plantations	0.221
2.2.3.01.1 Olivais	Olive groves	0.222
2.2.3.03.1 Olivais com pomar	Olive groves	0.222
2.3.1.01.1 Pastagens permanentes	Pastures	0.103
2.4.1.01.1 Culturas temporárias de sequeiro associadas a vinha	Non-irrigated arable land	0.200
2.4.1.01.2 Culturas temporárias de sequeiro associadas a pomar	Non-irrigated arable land	0.200
2.4.1.01.3 Culturas temporárias de sequeiro associadas a olival	Non-irrigated arable land	0.200
2.4.1.03.1 Pastagens associadas a vinha	Pastures	0.103
2.4.1.03.2 Pastagens associadas a pomar	Pastures	0.103
2.4.1.03.3 Pastagens associadas a olival	Pastures	0.103
2.4.2.01.1 Sistemas culturais e parcelares complexos	Complex cultivation patterns	0.143
2.4.3.01.1 Agricultura com espaços naturais e semi-naturais	Land principally occupied by agriculture, with significant areas of natural vegetation	0.143
2.4.4.01.1 SAF de sobreiro com culturas temporárias de sequeiro	Agroforestry-cork oak and non-irrigated crops	0.101
2.4.4.01.2 SAF de azinheira com culturas temporárias de sequeiro	Agroforestry-holm oak and non-irrigated crops	0.101
2.4.4.03.1 SAF de sobreiro com pastagens	Agroforestry-cork oak and pastures	0.053
2.4.4.03.2 SAF de azinheira com pastagens	Agroforestry-holm oak and pastures	0.053
2.4.4.03.4 SAF de pinheiro manso com pastagens	Agroforestry-pine and pastures	0.052
2.4.4.03.5 SAF de outras espécies com pastagens	Agroforestry-other species and pastures	0.053
2.4.4.03.6 SAF de sobreiro com azinheira com pastagens	Agroforestry-sclerophyllus and pastures	0.053
2.4.4.03.7 SAF de outras misturas com pastagens	Agroforestry-mixed	0.053
2.4.4.04.1 SAF de sobreiro com culturas permanentes	Agroforestry-cork oak with permanent crops	0.101

2.4.4.04.4 SAF de pinheiro manso com culturas permanentes	Agroforestry-pine with permanent crops	0.101
2.4.4.04.6 SAF de sobreiro com azinheira com culturas permanentes	Agroforestry-sclerophyllus with permanent crops	0.101
3.1.1.01.1 Florestas de sobreiro	Oak forest	0.002
3.1.1.01.2 Florestas de azinheira	Oak forest	0.002
3.1.1.01.4 Florestas de castanheiro	Chestnut forest	0.002
3.1.1.01.5 Florestas de eucalipto	Eucalyptus forest	0.003
3.1.1.01.6 Florestas de espécies invasoras	Forests of invasive species	0.003
3.1.1.01.7 Florestas de outras folhosas	Forests of other hardwoods	0.002
3.1.1.02.1 Florestas de sobreiro com folhosas	Mixed oak forest	0.002
3.1.1.02.5 Florestas de eucalipto com folhosas	Mixed eucalyptus forest	0.003
3.1.1.02.6 Florestas de espécies invasoras com folhosas	Forests of invasive species with hardwoods	0.003
3.1.2.01.1 Florestas de pinheiro bravo	Pine forest	0.001
3.1.2.01.2 Florestas de pinheiro manso	Pine forest	0.001
3.1.2.02.1 Florestas de pinheiro bravo com resinosas	Pine forest	0.001
3.1.2.02.2 Florestas de pinheiro manso com resinosas	Pine forest	0.001
3.1.3.01.1 Florestas de sobreiro com resinosas	Mixed pine and oak forest	0.001
3.1.3.01.5 Florestas de eucalipto com resinosas	Mixed eucalyptus an coniferous	0.003
3.1.3.01.6 Florestas de espécies invasoras com resinosas	Forests of invasive species with resinous	0.003
3.1.3.01.7 Florestas de outra folhosa com resinosas	Forests of another hardwood with resinous	0.002
3.1.3.02.1 Florestas de pinheiro bravo com folhosas	Mix of pine and broadleaf	0.001
3.1.3.02.2 Florestas de pinheiro manso com folhosas	Mix of pine and broadleaf	0.001
3.2.1.01.1 Vegetação herbácea natural	Natural grasslands	0.049
3.2.3.01.1 Vegetação esclerófita densa	Dense shrubland	0.001
3.2.3.02.1 Vegetação esclerófita pouco densa	Shrubland	0.002
3.2.4.01.1 Florestas abertas de sobreiro	Open forest-oak	0.003
3.2.4.01.2 Florestas abertas de azinheira	Open forest-oak	0.003
3.2.4.01.5 Florestas abertas de eucalipto	Open forest-eucalyptus	0.006
3.2.4.01.7 Florestas abertas de outras folhosas	Open forest-other	0.003
3.2.4.02.1 Florestas abertas de sobreiro com folhosas	Open forest-other	0.003
3.2.4.02.2 Florestas abertas de azinheira com folhosas	Open forest-other	0.003
3.2.4.02.5 Florestas abertas de eucalipto com folhosas	Open forest-other	0.006
3.2.4.02.7 Florestas abertas de outra folhosa com folhosas	Open forest-other	0.003
3.2.4.03.1 Florestas abertas de pinheiro bravo	Open forest-pine	0.002
3.2.4.03.2 Florestas abertas de pinheiro manso	Open forest-pine	0.002
3.2.4.03.3 Florestas abertas de outras resinosas	Open forest-pine	0.002
3.2.4.04.1 Florestas abertas de pinheiro bravo com resinosas	Open forest-pine	0.002

3.2.4.04.2 Florestas abertas de pinheiro manso com resinosas	Open forest-pine	0.002
3.2.4.05.1 Florestas abertas de sobreiro com resinosas	Open forest-other	0.003
3.2.4.05.2 Florestas abertas de azinheira com resinosas	Open forest-other	0.003
3.2.4.05.5 Florestas abertas de eucalipto com resinosas	Open forest-other	0.006
3.2.4.05.6 Florestas abertas de espécies invasoras com resinosas	Open forest-other	0.006
3.2.4.05.7 Florestas abertas de outra folhosa com resinosas	Open forest-other	0.003
3.2.4.05.8 Florestas abertas de misturas de folhosas com resinosas	Open forest-other	0.003
3.2.4.06.1 Florestas abertas de pinheiro bravo com folhosas	Open forest-other	0.002
3.2.4.06.2 Florestas abertas de pinheiro manso com folhosas	Open forest-other	0.002
3.2.4.08.5 Cortes rasos de florestas de eucalipto	Cut forest	0.006
3.2.4.08.7 Cortes rasos de florestas de outras folhosas	Cut forest	0.003
3.2.4.09.1 Cortes rasos de florestas de pinheiro bravo	Cut forest	0.002
3.2.4.10.1 Novas plantações de florestas de sobreiro	New plantations-sclerophyllus (considered as forested land because the land use map was created after the 2003 fire)	0.003
3.2.4.10.2 Novas plantações de florestas de azinheira	New plantations-sclerophyllus (considered as forested land because the land use map was created after the 2003 fire)	0.003
3.2.4.10.5 Novas plantações de florestas de eucalipto	New plantations-eucalyptus (considered as forested land because the land use map was created after the 2003 fire)	0.006
3.2.4.10.7 Novas plantações de florestas de outras folhosas	New plantations-other broadleaf (considered as forested land because the land use map was created after the 2003 fire)	0.003
3.2.4.11.1 Novas plantações de florestas de pinheiro bravo	New plantations-coniferous (considered as forested land because the land use map was created after the 2003 fire)	0.002
3.2.4.11.2 Novas plantações de florestas de pinheiro manso	New plantations-coniferous (considered as forested land because the land use map was created after the 2003 fire)	0.002
3.2.4.11.3 Novas plantações de florestas de outras resinosas	New plantations-coniferous (considered as forested land because the land use map was created after the 2003 fire)	0.002
3.2.4.12.1 Viveiros florestais	Nurseries (considered as forested land because the land use map was created after the 2003 fire)	0.030
3.2.4.13.1 Aceiros e/ou corta-fogos	Sparsely vegetated areas	0.001

3.3.1.01.1 Praias, dunas e areais interiores	Beaches, dunes, sands	0.050
3.3.1.02.1 Praias, dunas e areais costeiros	Beaches, dunes, sands	0.050
3.3.2.01.1 Rocha nua	Bare rocks	0.001
3.3.3.01.1 Vegetação esparsa	Sparsely vegetated areas	0.286
4.1.1.01.1 Paúis	Peat bogs	0.000
4.2.1.01.1 Sapais	Intertidal flats	0.005
4.2.2.01.1 Salinas	Salt marshes	0.005
4.2.2.02.1 Aquicultura litoral	Water bodies	0.000
5.1.1.01.1 Cursos de água naturais	Water courses	0.000
5.1.2.01.1 Lagos e lagoas interiores artificiais	Water bodies	0.000
5.1.2.01.2 Lagos e lagoas interiores naturais	Water bodies	0.000
5.1.2.02.1 Reservatórios de barragens	Water bodies	0.000
5.1.2.03.1 Reservatórios de represas ou de açudes	Water bodies	0.000
5.1.2.03.2 Charcas	Water bodies	0.000
5.2.1.01.1 Lagoas costeiras	Coastal lagoons	0.000
5.2.2.01.1 Desembocaduras fluviais	Estuaries	0.000