

Supplementary Material

Table S1. CORINE land cover (CLC) categories and nomenclature, and our reclassification of the CLC into the six LULC new classes.

CLC categories	CLC nomenclature	LULC classes
111	Continuous urban fabric	Artificial surfaces
112	Discontinuous urban fabric	
121	Industrial or commercial units	
124	Airports	
133	Construction sites	
142	Sport and leisure facilities	
211	Non-irrigated arable land	Agriculture and agroforestry
212	Permanently irrigated land	
221	Vineyards	
222	Fruit trees and berry plantations	
241	Annual crops associated with permanent crops	
242	Complex cultivation patterns	
243	Land principally occupied by agriculture, with significant areas of natural vegetation	Pastures
231	Pastures	
321	Natural grassland	
311	Broad-leaved forest	Forest
312	Coniferous forest	
313	Mixed forest	
322	Moors and heathland	
323	Sclerophyllous vegetation	
324	Transitional woodland/shrub	Shrubland
332	Bare rock	
333	Sparsely vegetated areas	
334	Burnt areas	
512	Water bodies	Water bodies

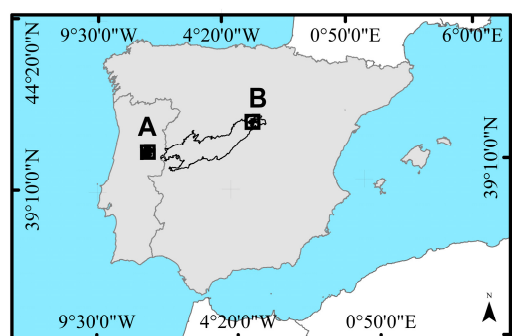
Source of CLC nomenclature: <https://land.copernicus.eu/user-corner/technical-library/corine-land-cover-nomenclature-guidelines/html/>.

Table S2. National Forest Inventories (NFI) nomenclatures and reclassification of the NFIs into the five Forest composition (FC) categories we analyzed.

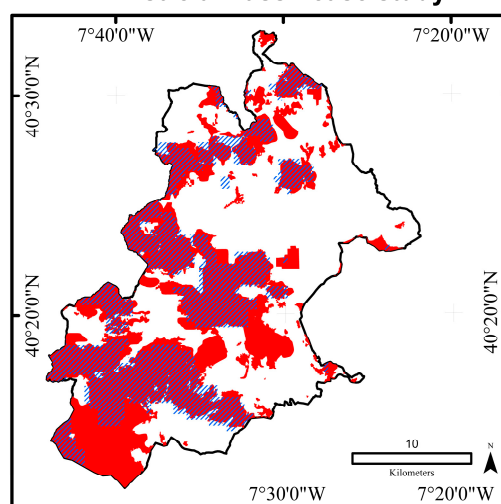
Portuguese NFIs nomenclature	Spanish NFIs nomenclature	FC categories
<i>Pinus pinaster</i>	<i>Pinus nigra</i>	<i>Pinus</i> sp.
	<i>Pinus nigra</i> (reforestation)	
	<i>Pinus pinaster</i>	
	<i>Pinus pinaster</i> (reforestation)	
	<i>Pinus sylvestris</i>	
Other softwoods	<i>Pinus uncinata</i>	Other conifers
	<i>Cedrus atlantica</i>	
	<i>Pseudotsuga menziesii</i>	
	<i>Larix x eurolepis</i>	
<i>Quercus</i> spp.	<i>Quercus ilex</i>	<i>Quercus</i> sp.

<i>Quercus ilex</i>	<i>Quercus pyrenaica</i> <i>Quercus petraea</i> <i>Quercus robur</i>	
<i>Arbutus unedo</i> L. <i>Castanea sativa</i> Mill. <i>Eucalyptus</i> spp. <i>Fraxinus</i> spp. Other hardwoods Non identified species Mixed forest species	<i>Acer negundo</i> <i>Alnus glutinosa</i> <i>Betula</i> spp. <i>Fagus sylvatica</i> <i>Populus nigra</i> <i>Salix</i> spp.	Other broadleaved + Mixed forest
	<i>Arctostaphylos uva-ursi</i> <i>Buxus balearica</i> <i>Cistus ladanifer</i> <i>Cotoneaster</i> spp. <i>Cytisus purgans</i> <i>Echium</i> sp. <i>Erica vagans</i> <i>Helianthemum</i> spp. <i>Cistus</i> spp. <i>Juniperus communis</i> <i>Juniperus sabina</i> <i>Lavandula stoechas</i> <i>Rhododendron</i> spp. <i>Rosa</i> spp. <i>Sambucus nigra</i> <i>Tamarix</i> spp. Xerophytic mixed shrubland Mixed shrubland Shrubs Calciphyte mixed shrubland Calciphyte mixed shrubland with thorny bushes	Shrubland
This category is not used for Estrela massif in this paper		
	Other than Forest categories	Other

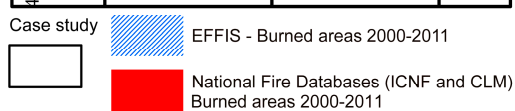
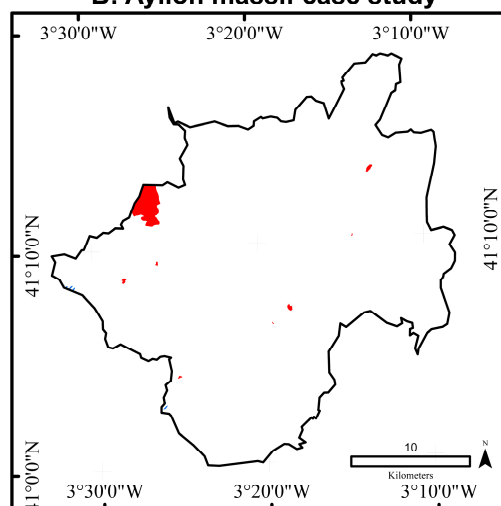
Source of NFI nomenclature: Centro de Ecologia Aplicada 'Prof. Baeta Neves' CEABN, not available online (Portugal), and <https://www.mapa.gob.es/es/desarrollo-rural/temas/politica-forestal/inventario-cartografia/inventario-forestal-nacional/default.aspx> (Spain)



A: Estrela massif case study



B: Ayllón massif case study



Case study	Total burned area 2000-2011		
	National Fire database	EFFIS	
Estrela massif	29,294	25,492	87%
Ayllón massif	587	44	7%

Figure S1. Comparison of National fire databases (fire records) with European Forest Fire database (EFFIS) (a satellite image-based database) in 2000-2011.

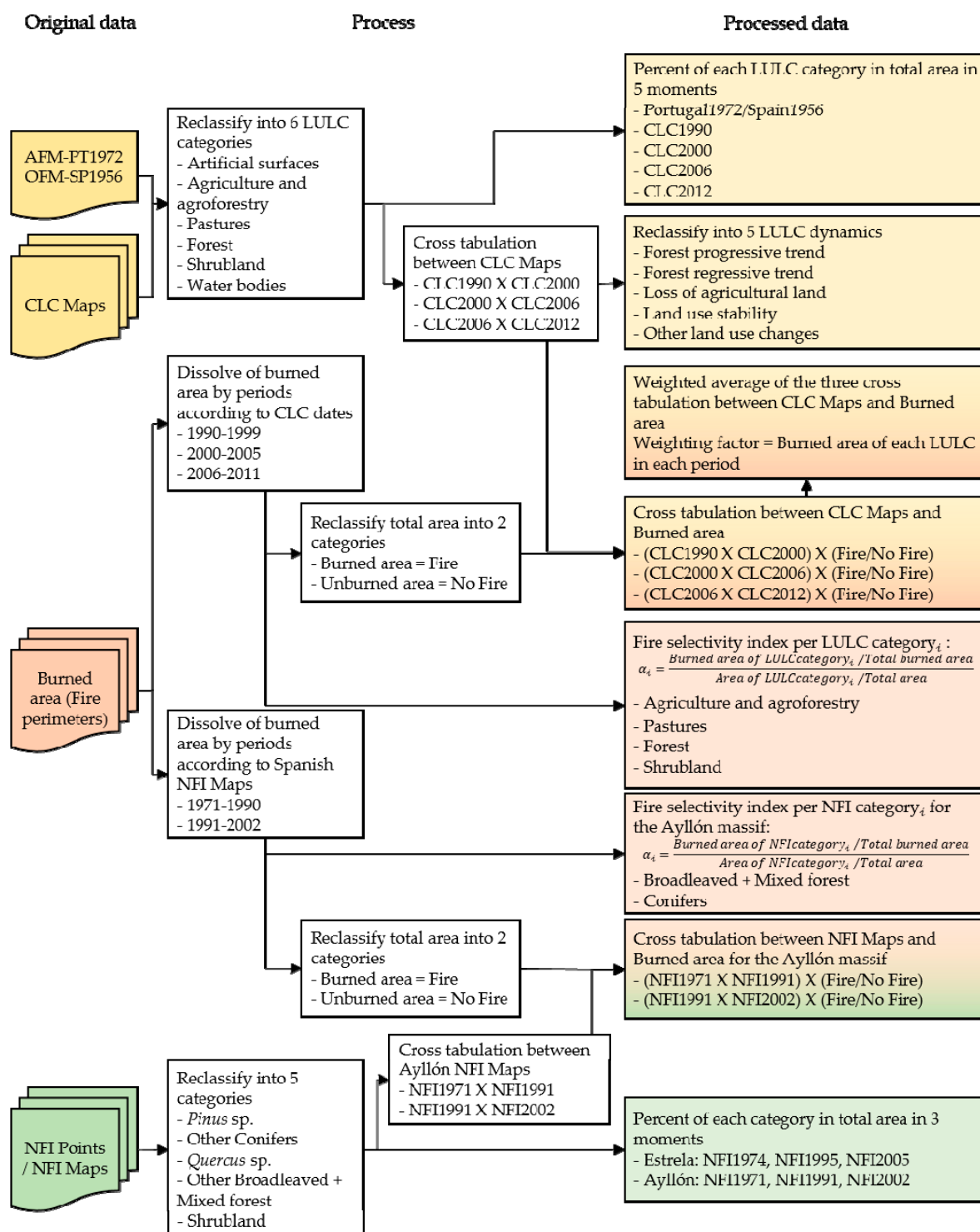


Figure S2. Methodology flowchart