

Abstract template for the conference “A century of national forest inventories – informing past, present and future decisions”

Dear author. This is a two-page template that in the first page will ask for information on presenter name, topic, and preferred presentation form.

On page two, you are asked to fill in your abstract in the format and font size indicated. Please remember to include authors affiliation information in the footer section of page two. The length of the abstract may not be more than one page including references.

Abstract title:		Characterisation of forest types in Iberian Peninsula
Take-home message:		<i>Characterization of vegetation in a large scale area is important to support ecological, bioeconomic or risk assessment analysis. This study used harmonise data of stands vertical structure, based on National Forest Inventory data from Portugal and Spain, and identified the main forest types in the Iberian Peninsula and their distribution. The vegetation model established can help fire prevention planning and assist the management of fire fighting in the field.</i>
Presenter name:		
Presenter contact info:		
General topic, see website: <small>(please double click on the check box and activate the relevant one)</small>	<input type="checkbox"/>	Improving future NFIs by learning from the past
	<input checked="" type="checkbox"/>	NFIs today and in the future
	<input type="checkbox"/>	Cutting edge and futuristic inventory techniques and technologies
Preferred presentation form:	<input checked="" type="checkbox"/>	Oral presentation
	<input type="checkbox"/>	Poster
<i>Abstracts will be reviewed by members of our scientific committee and you will be given information on decisions in due time after the submission deadline has passed.</i>		

Characterisation of Forest Types in Iberian Peninsula

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Introduction: National Forest Inventories collect and provide a large amount of information regarding the state of wood and carbon stocks as well as forest vitality, biodiversity and non-wood forest products. This data is essential to support managing forestlands at national scale and at the same time it is extremely interesting to develop harmonized forest descriptions at more than national scale. The main object of this study was to develop vegetation models using vertical structure of forests based on the National Forest Inventories of Portugal and Spain in order to characterize the forest types in the Iberian Peninsula providing a useful tool for making decision in forest fire prevention and fight.

Materials and methods: For this purpose, harmonised data from National Forest Inventories of Portugal (PTNFI 2005/2006) and Spain (SPNFI 1997-2007) were used to assess the composition of species and the vertical structure of all forest formations in Iberian Peninsula. Using the “K-means” clustering algorithm was possible to define a set of vegetation models which have been georeferenced using forest polygons detected in land use maps of Portugal and Spain.

Results: The result is a detailed characterization of all the study area supported by a complete visualization of the model’s distribution. Each forest area has been described through one of the 28 vegetation models, each one consisting in a description of the composition of species (in terms of percentage of cover for each species) in a vertical space defined by 7 layers.

Conclusion: The final description and cartography represent a powerful homogenously multi-use tool describing the Iberian Peninsula’s forestlands. This information can be used for comparisons matters in a larger scale of analysis to have cross-border and integrated data about wildfires. That will potentially assist in fighting fires in both countries or even help in the conservation status assessment, common to both countries, of the Natura 2000 network.

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