

## Short Database Report

# FLOREM -- a floristic database on mountain ecosystems

Thomas Spiegelberger & Claude Bernard-Brunet

**Abstract:** FlorEM is a database restricted to the flora of the montane and subalpine zones of the French Alps and Pyrenees. More than 5000 line transects and plot data with the abundance of each species are inventoried since the 1970ies, of which a part is precisely geolocalized by GPS. The metadata of each relevés includes information on abiotic (exposition, altitude, etc), biotic (bed rocks, physical-chemical soil analyses, etc) and agronomic variables (productivity, type of cattle, stocking rates, etc). The majority of the relevés are located in the Northern French Alps (27%, in particular in Vanoise, Beaufortin, Oisans and Maurienne), the Southern French Alps (50%, Vercors, Briançonnais) and in the Pyrenees (13%). Approximately half of the relevés are located above 2000 m, 1/4 between 1500 - 2000 m, and 1/4 below 1500 m. Two sites in the Department of Isere have been equipped with 12 paired plots, one grazed and the other not grazed for more than 20 years (Haut-Plateaux du Vercors) or 30 years (Alpe d'Huez). The vegetation was sampled regularly in time. These plots constitute an asset of first importance of FlorEM allowing to follow the interactions between climate change and change of pastoral management.

**Keywords:** French Alps, French Pyrenees, subalpin, montane, high elevation

<b>GIVD Database ID:</b> EU-FR-002		<b>Last update:</b> 2012-05-10
<b>FLOREM</b>		
<b>Scope:</b> FlorEM is a database on the montane and subalpine flora of the French Alps and Pyrenees. More than 5000 line transects and plot data with the abundance of each species are inventoried there since the 1970ies. The metadata of each relevé includes information on abiotic, biotic and agronomic variables. App. half of the relevés are located above 2000 m, 1/4 between 1500 - 2000 m, and 1/4 below 1500 m.		
<b>Status:</b> ongoing capture	<b>Period:</b> 1970-2012	
<b>Database manager(s):</b> Claude Bernard-Brunet (claude.bernard-brunet@irstea.fr)		
<b>Owner:</b> Irstea		
<b>Web address:</b> [NA]		
<b>Availability:</b> according to a specific agreement	<b>Online upload:</b> no	<b>Online search:</b> no
<b>Database format(s):</b> MySQL	<b>Export format(s):</b> SQL, Excel, Open Document, PDF, CSV file, plain text file	
<b>Publication:</b> [NA]		
<b>Plot type(s):</b> normal plots; time series	<b>Plot-size range:</b> 0.25-100 m <sup>2</sup>	
<b>Non-overlapping plots:</b> 2,000	<b>Estimate of existing plots:</b> 0	<b>Completeness:</b> [NA]
<b>Total plot observations:</b> 2,000	<b>Number of sources:</b> [NA]	<b>Valid taxa:</b> [NA]
<b>Countries:</b> FR: 100.0%		
<b>Forest:</b> [NA] — <b>Non-forest:</b> [NA]		
<b>Guilds:</b> all vascular plants: 100%		
<b>Environmental data:</b> altitude: 100%; slope aspect: 100%; slope inclination: 100%; surface cover other than plants (open soil, litter, bare rock etc.): 40%; land use categories: 100%		
<b>Performance measure(s):</b> cover: 100%; biomass: 40%		
<b>Geographic localisation:</b> GPS coordinates (precision 25 m or less): 20%; small grid (not coarser than 10 km): 80%		
<b>Sampling periods:</b> 1970-1979: 25.0%; 1980-1989: 25.0%; 1990-1999: 8.0%; 2000-2009: 40.0%; 2010-2019: 2.0%		
<b>Information as of 2012-07-16; further details and future updates available from <a href="http://www.givd.info/ID/EU-FR-002">http://www.givd.info/ID/EU-FR-002</a></b>		

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